wwPDB EM Validation Summary Report (i)

Feb 9, 2026 – 05:16 PM JST

PDB ID	:	9LUU / pdb_00009luu
EMDB ID	:	EMD-63405
Title	:	PSI-4 LHCI dimer supercomplex from M. polymorpha
Authors	:	Tsai, P.-C.; La Rocca, R.; Shen, J.-R.; Akita, F.
Deposited on	:	2025-02-10
Resolution	:	2.52 Å(reported)

This is a wwPDB EM Validation Summary Report for a publicly released PDB entry.

We welcome your comments at *validation@mail.wwpdb.org*
A user guide is available at
https://www.wwpdb.org/validation/2017/EMValidationReportHelp
with specific help available everywhere you see the (i) symbol.

The types of validation reports are described at
http://www.wwpdb.org/validation/2017/FAQs#types.

The following versions of software and data (see references (i)) were used in the production of this report:

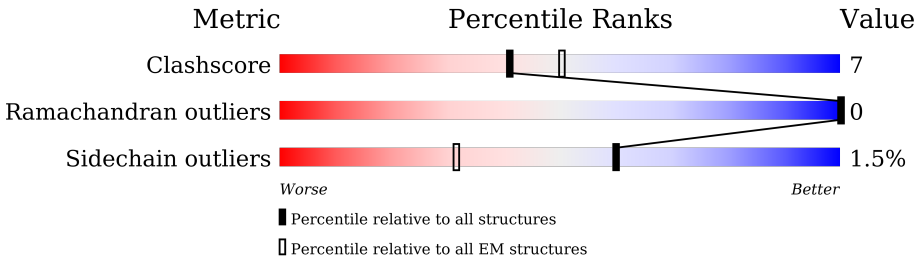
EMDB validation analysis	:	0.0.1.dev131
Mogul	:	1.8.5 (274361), CSD as541be (2020)
MolProbity	:	4-5-2 with Phenix2.0
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20231227.v01 (using entries in the PDB archive December 27th 2023)
EM percentile statistics	:	202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.48

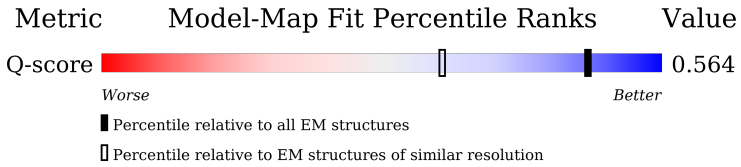
1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
ELECTRON MICROSCOPY

The reported resolution of this entry is 2.52 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.





Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	210492	15764	-
Ramachandran outliers	207382	16835	-
Sidechain outliers	206894	16415	-
Q-score	-	25397	7226 (2.02 - 3.02)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for >=3, 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions <=5% The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	B	734	90% 10%
1	b	734	91% 9%
2	C	81	89% 10%
2	c	81	89% 10%

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Mol	Chain	Length	Quality of chain
3	D	215	60% 5% 35%
3	d	215	60% 6% 35%
4	E	132	45% 52%
4	e	132	45% 52%
5	F	246	59% 6% 35%
5	f	246	59% 6% 35%
6	G	161	49% 6% 44%
6	g	161	48% 7% 44%
7	H	142	8% 51% 11% 37%
7	h	142	8% 54% 10% 37%
8	I	36	92% 6%
8	i	36	92% 6%
9	J	42	86% 12%
9	j	42	86% 12%
10	L	221	8% 66% 5% 29%
10	l	221	8% 66% 5% 29%
11	M	32	78% 19%
11	m	32	81% 16%
12	A	750	86% 12%
12	a	750	87% 11%
13	2a	267	5% 64% 8% 27%
13	2b	267	5% 64% 8% 27%
14	3a	279	10% 67% 9% 24%
14	3b	279	10% 68% 8% 24%
15	5a	249	6% 70% 7% 22%

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Mol	Chain	Length	Quality of chain
15	5b	249	5% 69% 7% 22%
16	6a	243	8% 71% 8% 21%
16	6b	243	7% 70% 9% 21%
17	K	135	7% 42% 5% 53%
17	k	135	7% 42% 5% 53%

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
18	CLA	2a	301	X	-	-	-
18	CLA	2a	302	X	-	-	-
18	CLA	2a	303	X	-	-	-
18	CLA	2a	307	X	-	-	-
18	CLA	2a	308	X	-	-	-
18	CLA	2a	309	X	-	-	-
18	CLA	2a	310	X	-	-	-
18	CLA	2a	312	X	-	-	-
18	CLA	2b	301	X	-	-	-
18	CLA	2b	302	X	-	-	-
18	CLA	2b	303	X	-	-	-
18	CLA	2b	307	X	-	-	-
18	CLA	2b	308	X	-	-	-
18	CLA	2b	309	X	-	-	-
18	CLA	2b	310	X	-	-	-
18	CLA	2b	312	X	-	-	-
18	CLA	3a	303	X	-	-	-
18	CLA	3a	304	X	-	-	-
18	CLA	3a	306	X	-	-	-
18	CLA	3a	308	X	-	-	-
18	CLA	3a	310	X	-	-	-
18	CLA	3a	311	X	-	-	-
18	CLA	3a	313	X	-	-	-
18	CLA	3a	314	X	-	-	-
18	CLA	3b	303	X	-	-	-
18	CLA	3b	304	X	-	-	-
18	CLA	3b	306	X	-	-	-
18	CLA	3b	308	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
18	CLA	3b	310	X	-	-	-
18	CLA	3b	311	X	-	-	-
18	CLA	3b	313	X	-	-	-
18	CLA	3b	314	X	-	-	-
18	CLA	5a	303	X	-	-	-
18	CLA	5a	308	X	-	-	-
18	CLA	5a	310	X	-	-	-
18	CLA	5a	311	X	-	-	-
18	CLA	5a	313	X	-	-	-
18	CLA	5b	303	X	-	-	-
18	CLA	5b	308	X	-	-	-
18	CLA	5b	310	X	-	-	-
18	CLA	5b	311	X	-	-	-
18	CLA	5b	313	X	-	-	-
18	CLA	6a	306	X	-	-	-
18	CLA	6a	308	X	-	-	-
18	CLA	6a	310	X	-	-	-
18	CLA	6a	311	X	-	-	-
18	CLA	6a	313	X	-	-	-
18	CLA	6a	314	X	-	-	-
18	CLA	6a	315	X	-	-	-
18	CLA	6a	317	X	-	-	-
18	CLA	6b	306	X	-	-	-
18	CLA	6b	308	X	-	-	-
18	CLA	6b	310	X	-	-	-
18	CLA	6b	311	X	-	-	-
18	CLA	6b	313	X	-	-	-
18	CLA	6b	314	X	-	-	-
18	CLA	6b	315	X	-	-	-
18	CLA	6b	317	X	-	-	-
18	CLA	A	803	X	-	-	-
18	CLA	A	804	X	-	-	-
18	CLA	A	805	X	-	-	-
18	CLA	A	806	X	-	-	-
18	CLA	A	807	X	-	-	-
18	CLA	A	808	X	-	-	-
18	CLA	A	809	X	-	-	-
18	CLA	A	811	X	-	-	-
18	CLA	A	812	X	-	-	-
18	CLA	A	813	X	-	-	-
18	CLA	A	814	X	-	-	-
18	CLA	A	817	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
18	CLA	A	818	X	-	-	-
18	CLA	A	822	X	-	-	-
18	CLA	A	824	X	-	-	-
18	CLA	A	825	X	-	-	-
18	CLA	A	826	X	-	-	-
18	CLA	A	827	X	-	-	-
18	CLA	A	831	X	-	-	-
18	CLA	A	832	X	-	-	-
18	CLA	A	835	X	-	-	-
18	CLA	A	836	X	-	-	-
18	CLA	A	837	X	-	-	-
18	CLA	A	838	X	-	-	-
18	CLA	A	840	X	-	-	-
18	CLA	A	841	X	-	-	-
18	CLA	B	801	X	-	-	-
18	CLA	B	802	X	-	-	-
18	CLA	B	803	X	-	-	-
18	CLA	B	804	X	-	-	-
18	CLA	B	805	X	-	-	-
18	CLA	B	807	X	-	-	-
18	CLA	B	808	X	-	-	-
18	CLA	B	809	X	-	-	-
18	CLA	B	812	X	-	-	-
18	CLA	B	816	X	-	-	-
18	CLA	B	817	X	-	-	-
18	CLA	B	819	X	-	-	-
18	CLA	B	821	X	-	-	-
18	CLA	B	823	X	-	-	-
18	CLA	B	824	X	-	-	-
18	CLA	B	825	X	-	-	-
18	CLA	B	826	X	-	-	-
18	CLA	B	830	X	-	-	-
18	CLA	B	831	X	-	-	-
18	CLA	B	833	X	-	-	-
18	CLA	B	834	X	-	-	-
18	CLA	B	835	X	-	-	-
18	CLA	B	836	X	-	-	-
18	CLA	B	837	X	-	-	-
18	CLA	B	840	X	-	-	-
18	CLA	B	853	X	-	-	-
18	CLA	B	854	X	-	-	-
18	CLA	F	302	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
18	CLA	F	303	X	-	-	-
18	CLA	F	305	X	-	-	-
18	CLA	G	202	X	-	-	-
18	CLA	G	203	X	-	-	-
18	CLA	J	101	X	-	-	-
18	CLA	K	201	X	-	-	-
18	CLA	L	301	X	-	-	-
18	CLA	L	303	X	-	-	-
18	CLA	a	803	X	-	-	-
18	CLA	a	804	X	-	-	-
18	CLA	a	805	X	-	-	-
18	CLA	a	806	X	-	-	-
18	CLA	a	807	X	-	-	-
18	CLA	a	808	X	-	-	-
18	CLA	a	809	X	-	-	-
18	CLA	a	811	X	-	-	-
18	CLA	a	812	X	-	-	-
18	CLA	a	813	X	-	-	-
18	CLA	a	814	X	-	-	-
18	CLA	a	817	X	-	-	-
18	CLA	a	818	X	-	-	-
18	CLA	a	822	X	-	-	-
18	CLA	a	824	X	-	-	-
18	CLA	a	825	X	-	-	-
18	CLA	a	826	X	-	-	-
18	CLA	a	827	X	-	-	-
18	CLA	a	831	X	-	-	-
18	CLA	a	832	X	-	-	-
18	CLA	a	835	X	-	-	-
18	CLA	a	836	X	-	-	-
18	CLA	a	837	X	-	-	-
18	CLA	a	838	X	-	-	-
18	CLA	a	840	X	-	-	-
18	CLA	a	841	X	-	-	-
18	CLA	b	801	X	-	-	-
18	CLA	b	802	X	-	-	-
18	CLA	b	803	X	-	-	-
18	CLA	b	804	X	-	-	-
18	CLA	b	805	X	-	-	-
18	CLA	b	807	X	-	-	-
18	CLA	b	808	X	-	-	-
18	CLA	b	809	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
18	CLA	b	812	X	-	-	-
18	CLA	b	816	X	-	-	-
18	CLA	b	817	X	-	-	-
18	CLA	b	819	X	-	-	-
18	CLA	b	821	X	-	-	-
18	CLA	b	823	X	-	-	-
18	CLA	b	824	X	-	-	-
18	CLA	b	825	X	-	-	-
18	CLA	b	826	X	-	-	-
18	CLA	b	830	X	-	-	-
18	CLA	b	831	X	-	-	-
18	CLA	b	833	X	-	-	-
18	CLA	b	834	X	-	-	-
18	CLA	b	835	X	-	-	-
18	CLA	b	836	X	-	-	-
18	CLA	b	837	X	-	-	-
18	CLA	b	840	X	-	-	-
18	CLA	b	853	X	-	-	-
18	CLA	b	854	X	-	-	-
18	CLA	f	302	X	-	-	-
18	CLA	f	303	X	-	-	-
18	CLA	f	305	X	-	-	-
18	CLA	g	202	X	-	-	-
18	CLA	g	203	X	-	-	-
18	CLA	j	101	X	-	-	-
18	CLA	k	201	X	-	-	-
18	CLA	l	301	X	-	-	-
18	CLA	l	303	X	-	-	-
29	CHL	2a	304	X	-	-	-
29	CHL	2a	305	X	-	-	-
29	CHL	2a	306	X	-	-	-
29	CHL	2a	313	X	-	-	-
29	CHL	2b	304	X	-	-	-
29	CHL	2b	305	X	-	-	-
29	CHL	2b	306	X	-	-	-
29	CHL	2b	313	X	-	-	-
29	CHL	3a	301	X	-	-	-
29	CHL	3a	307	X	-	-	-
29	CHL	3a	315	X	-	-	-
29	CHL	3b	301	X	-	-	-
29	CHL	3b	307	X	-	-	-
29	CHL	3b	315	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
29	CHL	5a	301	X	-	-	-
29	CHL	5a	305	X	-	-	-
29	CHL	5a	306	X	-	-	-
29	CHL	5a	307	X	-	-	-
29	CHL	5a	314	X	-	-	-
29	CHL	5b	301	X	-	-	-
29	CHL	5b	305	X	-	-	-
29	CHL	5b	306	X	-	-	-
29	CHL	5b	307	X	-	-	-
29	CHL	5b	314	X	-	-	-
29	CHL	6a	304	X	-	-	-
29	CHL	6a	309	X	-	-	-
29	CHL	6b	304	X	-	-	-
29	CHL	6b	309	X	-	-	-

2 Entry composition (i)

There are 29 unique types of molecules in this entry. The entry contains 70242 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the AltConf column contains the number of residues with at least one atom in alternate conformation and the Trace column contains the number of residues modelled with at most 2 atoms.

- Molecule 1 is a protein called Photosystem I P700 chlorophyll a apoprotein A2.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	B	733	Total	C	N	O	S	0	0
			5854	3839	998	1003	14		
1	b	733	Total	C	N	O	S	0	0
			5854	3839	998	1003	14		

- Molecule 2 is a protein called Photosystem I iron-sulfur center.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	C	80	Total	C	N	O	S	0	0
			602	368	104	119	11		
2	c	80	Total	C	N	O	S	0	0
			602	368	104	119	11		

- Molecule 3 is a protein called Photosystem I reaction center subunit II, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	D	140	Total	C	N	O	S	0	0
			1094	706	189	196	3		
3	d	140	Total	C	N	O	S	0	0
			1094	706	189	196	3		

- Molecule 4 is a protein called Photosystem I reaction centre subunit IV.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	E	63	Total	C	N	O	S	0	0
			495	314	85	94	2		
4	e	63	Total	C	N	O	S	0	0
			495	314	85	94	2		

- Molecule 5 is a protein called Photosystem I reaction center subunit III.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	F	161	Total	C	N	O	S	0	0
			1248	809	212	225	2		
5	f	161	Total	C	N	O	S	0	0
			1248	809	212	225	2		

- Molecule 6 is a protein called Photosystem I reaction center subunit V, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	G	90	Total	C	N	O	S	0	0
			673	432	117	123	1		
6	g	90	Total	C	N	O	S	0	0
			673	432	117	123	1		

- Molecule 7 is a protein called Photosystem I reaction center subunit VI, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	H	90	Total	C	N	O	S	0	0
			680	438	113	127	2		
7	h	90	Total	C	N	O	S	0	0
			680	438	113	127	2		

- Molecule 8 is a protein called Photosystem I reaction center subunit VIII.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	I	35	Total	C	N	O	S	0	0
			274	187	36	49	2		
8	i	35	Total	C	N	O	S	0	0
			274	187	36	49	2		

- Molecule 9 is a protein called Photosystem I reaction center subunit IX.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	J	41	Total	C	N	O	S	0	0
			328	225	48	54	1		
9	j	41	Total	C	N	O	S	0	0
			328	225	48	54	1		

- Molecule 10 is a protein called PSI subunit V.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	L	158	Total	C	N	O	S	0	0
			1180	781	188	209	2		

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Mol	Chain	Residues	Atoms					AltConf	Trace
10	l	158	Total	C	N	O	S	0	0
			1180	781	188	209	2		

- Molecule 11 is a protein called Photosystem I reaction center subunit XII.

Mol	Chain	Residues	Atoms				AltConf	Trace
11	M	31	Total	C	N	O	0	0
			242	159	37	46		
11	m	31	Total	C	N	O	0	0
			242	159	37	46		

- Molecule 12 is a protein called Photosystem I P700 chlorophyll a apoprotein A1.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	A	737	Total	C	N	O	S	0	0
			5810	3818	983	992	17		
12	a	737	Total	C	N	O	S	0	0
			5810	3818	983	992	17		

- Molecule 13 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	2a	194	Total	C	N	O	S	0	0
			1520	1003	245	267	5		
13	2b	194	Total	C	N	O	S	0	0
			1520	1003	245	267	5		

- Molecule 14 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	3a	212	Total	C	N	O	S	0	0
			1633	1072	261	294	6		
14	3b	212	Total	C	N	O	S	0	0
			1633	1072	261	294	6		

- Molecule 15 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	5a	193	Total	C	N	O	S	0	0
			1516	1001	242	269	4		
15	5b	193	Total	C	N	O	S	0	0
			1516	1001	242	269	4		

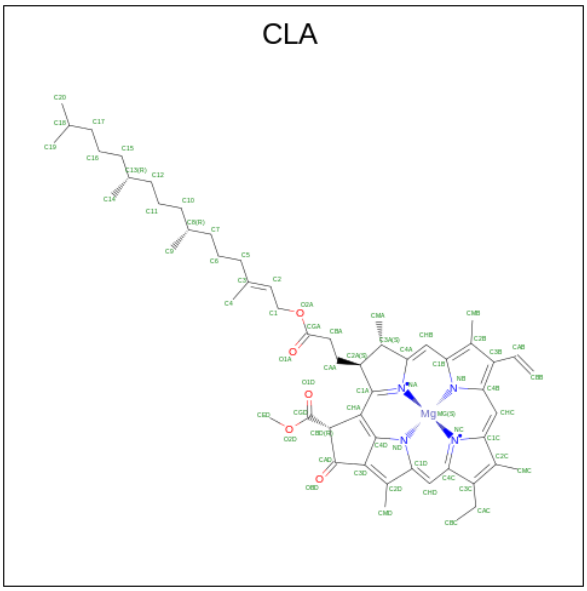
- Molecule 16 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	6a	193	Total	C	N	O	S	0	0
			1491	973	249	266	3		
16	6b	193	Total	C	N	O	S	0	0
			1491	973	249	266	3		

- Molecule 17 is a protein called PSI-K.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	K	64	Total	C	N	O	S	0	0
			441	280	73	84	4		
17	k	64	Total	C	N	O	S	0	0
			441	280	73	84	4		

- Molecule 18 is CHLOROPHYLL A (CCD ID: CLA) (formula: $C_{55}H_{72}MgN_4O_5$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			62	52	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
18	B	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	F	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	F	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
18	F	1	Total	C	Mg	N	O	0
			60	50	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
18	G	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	G	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	J	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	L	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	L	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	L	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			57	47	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
18	b	1	Total	C	Mg	N	O	0
			62	52	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms	AltConf
18	b	1	Total C Mg N O 47 37 1 4 5	0
18	b	1	Total C Mg N O 65 55 1 4 5	0
18	b	1	Total C Mg N O 65 55 1 4 5	0
18	b	1	Total C Mg N O 65 55 1 4 5	0
18	b	1	Total C Mg N O 65 55 1 4 5	0
18	b	1	Total C Mg N O 65 55 1 4 5	0
18	b	1	Total C Mg N O 65 55 1 4 5	0
18	f	1	Total C Mg N O 45 35 1 4 5	0
18	f	1	Total C Mg N O 41 33 1 4 3	0
18	f	1	Total C Mg N O 60 50 1 4 5	0
18	g	1	Total C Mg N O 50 40 1 4 5	0
18	g	1	Total C Mg N O 45 35 1 4 5	0
18	j	1	Total C Mg N O 45 35 1 4 5	0
18	l	1	Total C Mg N O 45 35 1 4 5	0
18	l	1	Total C Mg N O 60 50 1 4 5	0
18	l	1	Total C Mg N O 42 34 1 4 3	0
18	A	1	Total C Mg N O 52 42 1 4 5	0
18	A	1	Total C Mg N O 61 51 1 4 5	0
18	A	1	Total C Mg N O 55 45 1 4 5	0
18	A	1	Total C Mg N O 65 55 1 4 5	0
18	A	1	Total C Mg N O 65 55 1 4 5	0

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Mol	Chain	Residues	Atoms					AltConf
18	A	1	Total	C	Mg	N	O	0
			48	38	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	A	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
18	2a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	2a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	2a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	2a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	2a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
18	2a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	2a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	2a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	2a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	3a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	3a	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	3a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	3a	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
18	3a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	3a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	3a	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	3a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	3a	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	3a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	3a	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	3a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	5a	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
18	5a	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	5a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	5a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	5a	1	Total	C	Mg	N	O	0
			51	41	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
18	5a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	5a	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
18	5a	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
18	5a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	5a	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
18	6a	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
18	6a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	6a	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
18	6a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	6a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	6a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	6a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	6a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	6a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	6a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	6a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	6a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	K	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			48	38	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	a	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
18	2b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	2b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	2b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
18	2b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	2b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	2b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	2b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	2b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	2b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	3b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	3b	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	3b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	3b	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
18	3b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	3b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	3b	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	3b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	3b	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
18	3b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
18	3b	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
18	3b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
18	5b	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
18	5b	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
18	5b	1	Total	C	Mg	N	O	0
			45	35	1	4	5	

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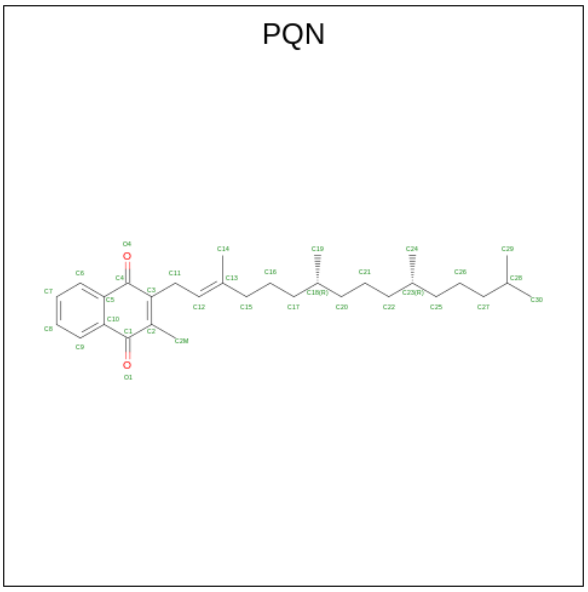
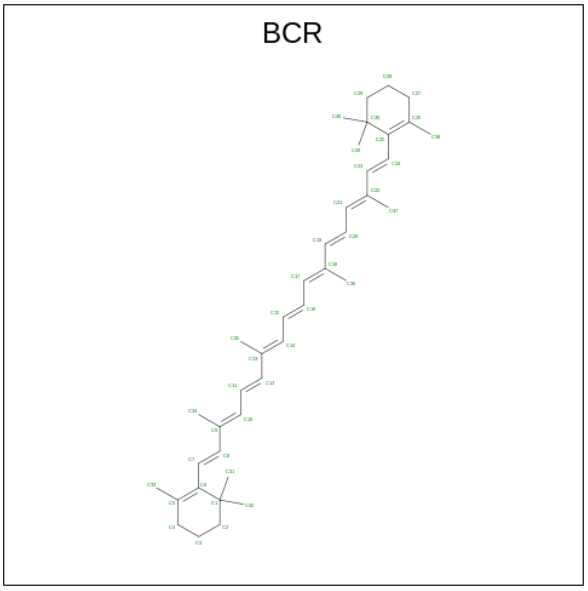
Mol	Chain	Residues	Atoms					AltConf
18	5b	1	Total 45	C 35	Mg 1	N 4	O 5	0
18	5b	1	Total 51	C 41	Mg 1	N 4	O 5	0
18	5b	1	Total 45	C 35	Mg 1	N 4	O 5	0
18	5b	1	Total 44	C 34	Mg 1	N 4	O 5	0
18	5b	1	Total 52	C 42	Mg 1	N 4	O 5	0
18	5b	1	Total 45	C 35	Mg 1	N 4	O 5	0
18	5b	1	Total 46	C 36	Mg 1	N 4	O 5	0
18	6b	1	Total 61	C 51	Mg 1	N 4	O 5	0
18	6b	1	Total 55	C 45	Mg 1	N 4	O 5	0
18	6b	1	Total 49	C 39	Mg 1	N 4	O 5	0
18	6b	1	Total 45	C 35	Mg 1	N 4	O 5	0
18	6b	1	Total 45	C 35	Mg 1	N 4	O 5	0
18	6b	1	Total 45	C 35	Mg 1	N 4	O 5	0
18	6b	1	Total 55	C 45	Mg 1	N 4	O 5	0
18	6b	1	Total 45	C 35	Mg 1	N 4	O 5	0
18	6b	1	Total 45	C 35	Mg 1	N 4	O 5	0
18	6b	1	Total 55	C 45	Mg 1	N 4	O 5	0
18	6b	1	Total 45	C 35	Mg 1	N 4	O 5	0
18	6b	1	Total 45	C 35	Mg 1	N 4	O 5	0
18	k	1	Total 44	C 34	Mg 1	N 4	O 5	0

- Molecule 19 is PHYLLOQUINONE (CCD ID: PQN) (formula: $C_{31}H_{46}O_2$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
19	B	1	Total C O 33 31 2	0
19	b	1	Total C O 33 31 2	0
19	A	1	Total C O 33 31 2	0
19	a	1	Total C O 33 31 2	0

- Molecule 20 is BETA-CAROTENE (CCD ID: BCR) (formula: $C_{40}H_{56}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
20	B	1	Total C 40 40	0
20	B	1	Total C 40 40	0
20	B	1	Total C 40 40	0
20	B	1	Total C 40 40	0
20	B	1	Total C 40 40	0
20	B	1	Total C 40 40	0
20	B	1	Total C 40 40	0
20	F	1	Total C 40 40	0
20	F	1	Total C 40 40	0
20	G	1	Total C 40 40	0
20	G	1	Total C 40 40	0
20	I	1	Total C 40 40	0
20	J	1	Total C 40 40	0
20	L	1	Total C 40 40	0
20	M	1	Total C 40 40	0
20	b	1	Total C 40 40	0
20	b	1	Total C 40 40	0
20	b	1	Total C 40 40	0
20	b	1	Total C 40 40	0
20	b	1	Total C 40 40	0
20	b	1	Total C 40 40	0
20	b	1	Total C 40 40	0

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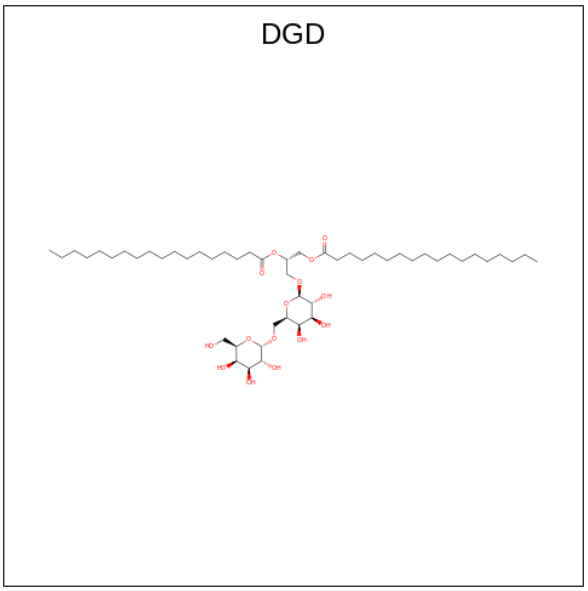
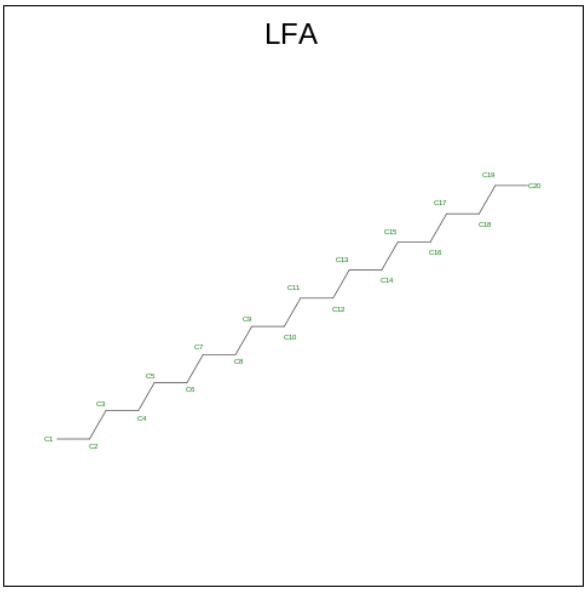
Mol	Chain	Residues	Atoms	AltConf
20	f	1	Total C 40 40	0
20	f	1	Total C 40 40	0
20	g	1	Total C 40 40	0
20	g	1	Total C 40 40	0
20	i	1	Total C 40 40	0
20	j	1	Total C 40 40	0
20	l	1	Total C 40 40	0
20	m	1	Total C 40 40	0
20	A	1	Total C 40 40	0
20	A	1	Total C 40 40	0
20	A	1	Total C 40 40	0
20	A	1	Total C 40 40	0
20	A	1	Total C 40 40	0
20	K	1	Total C 40 40	0
20	a	1	Total C 40 40	0
20	a	1	Total C 40 40	0
20	a	1	Total C 40 40	0
20	a	1	Total C 40 40	0
20	a	1	Total C 40 40	0
20	k	1	Total C 40 40	0

- Molecule 21 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (CCD ID: DGD) (formula: $C_{51}H_{96}O_{15}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			AltConf
21	B	1	Total	C	O	0
			59	44	15	
21	b	1	Total	C	O	0
			59	44	15	

- Molecule 22 is EICOSANE (CCD ID: LFA) (formula: $C_{20}H_{42}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms		AltConf
22	B	1	Total	C	0
			12	12	

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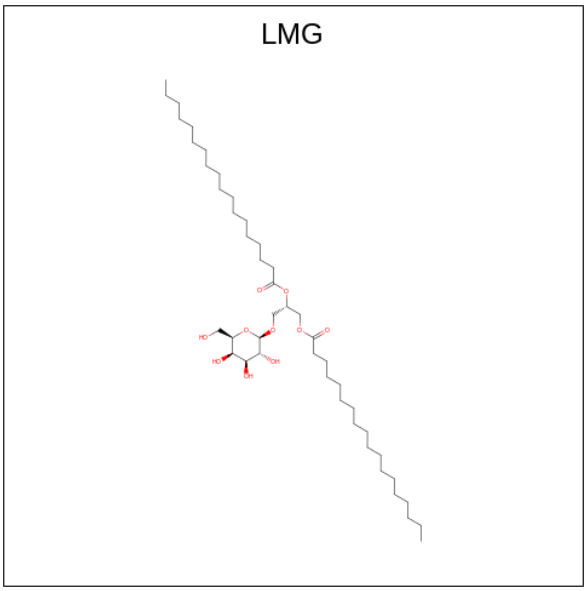
Mol	Chain	Residues	Atoms	AltConf
22	M	1	Total C 12 12	0
22	b	1	Total C 12 12	0
22	m	1	Total C 12 12	0

- Molecule 23 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: $C_{45}H_{86}O_{10}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
23	B	1	Total C O 42 32 10	0
23	I	1	Total C O 31 21 10	0
23	J	1	Total C O 30 20 10	0
23	J	1	Total C O 41 31 10	0
23	b	1	Total C O 42 32 10	0
23	i	1	Total C O 31 21 10	0
23	j	1	Total C O 30 20 10	0
23	j	1	Total C O 41 31 10	0

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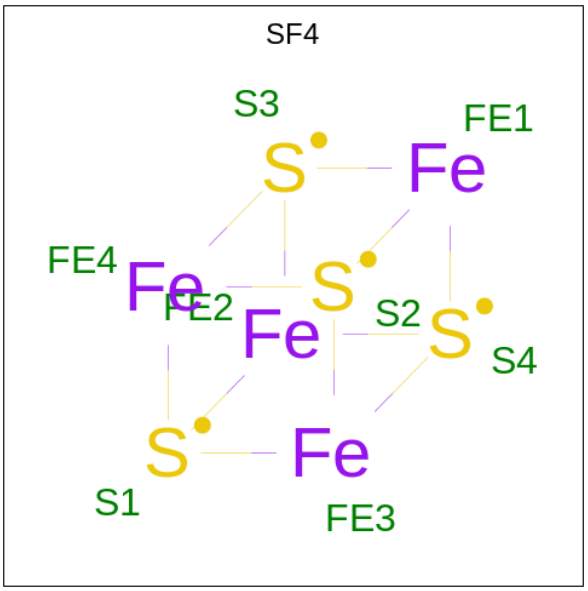
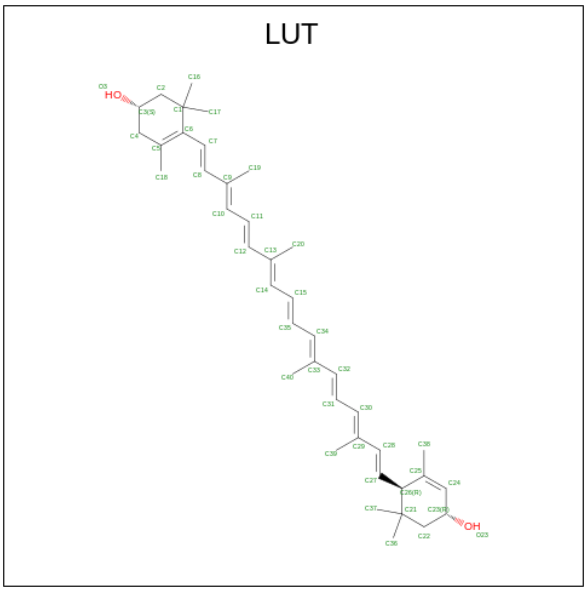
Mol	Chain	Residues	Atoms	AltConf
23	5a	1	Total C O 35 25 10	0
23	5b	1	Total C O 35 25 10	0

- Molecule 24 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
24	C	1	Total Fe S 8 4 4	0
24	C	1	Total Fe S 8 4 4	0
24	c	1	Total Fe S 8 4 4	0
24	c	1	Total Fe S 8 4 4	0
24	A	1	Total Fe S 8 4 4	0
24	a	1	Total Fe S 8 4 4	0

- Molecule 25 is (3R,3'R,6S)-4,5-DIDEHYDRO-5,6-DIHYDRO-BETA,BETA-CAROTENE-3,3'-DIOL (CCD ID: LUT) (formula: $C_{40}H_{56}O_2$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
25	J	1	Total C O 42 40 2	0
25	j	1	Total C O 42 40 2	0
25	2a	1	Total C O 42 40 2	0
25	2a	1	Total C O 42 40 2	0
25	3a	1	Total C O 42 40 2	0
25	3a	1	Total C O 42 40 2	0
25	5a	1	Total C O 42 40 2	0
25	5a	1	Total C O 42 40 2	0
25	6a	1	Total C O 42 40 2	0
25	6a	1	Total C O 42 40 2	0
25	6a	1	Total C O 42 40 2	0
25	2b	1	Total C O 42 40 2	0
25	2b	1	Total C O 42 40 2	0
25	3b	1	Total C O 42 40 2	0

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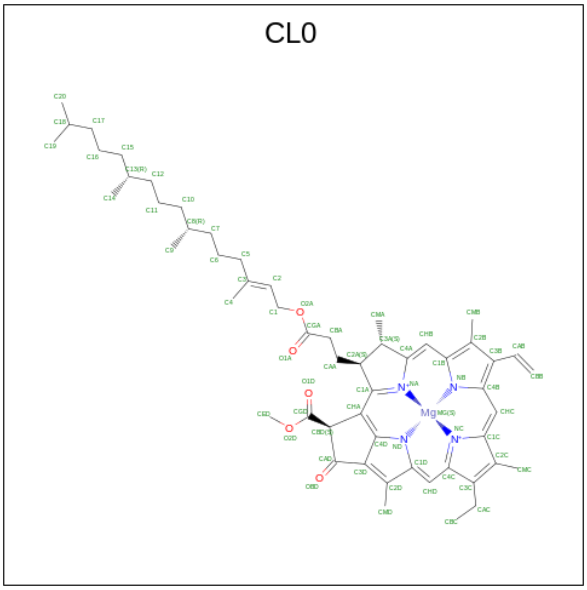
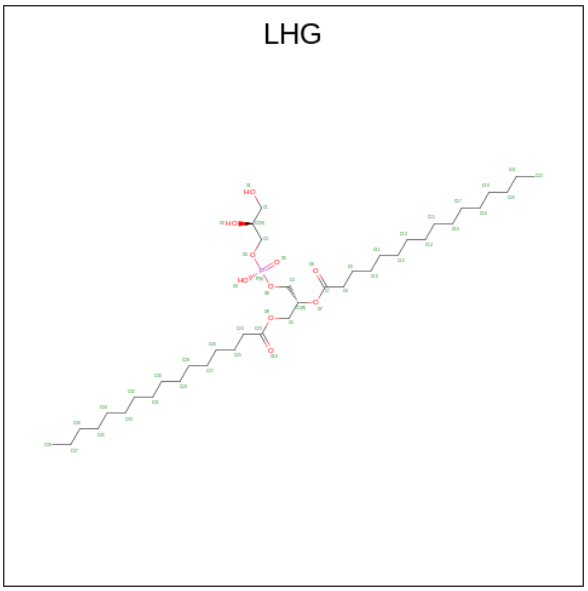
Mol	Chain	Residues	Atoms	AltConf
25	3b	1	Total C O 42 40 2	0
25	5b	1	Total C O 42 40 2	0
25	5b	1	Total C O 42 40 2	0
25	6b	1	Total C O 42 40 2	0
25	6b	1	Total C O 42 40 2	0
25	6b	1	Total C O 42 40 2	0

- Molecule 26 is CHLOROPHYLL A ISOMER (CCD ID: CL0) (formula: $C_{55}H_{72}MgN_4O_5$) (labeled as "Ligand of Interest" by depositor).



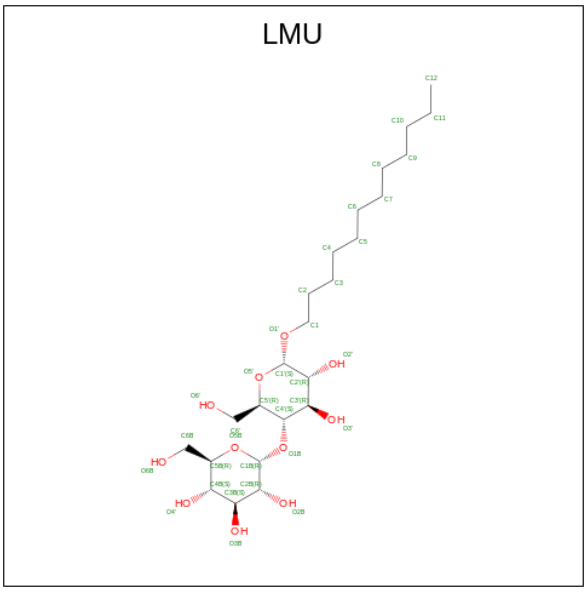
Mol	Chain	Residues	Atoms	AltConf
26	A	1	Total C Mg N O 65 55 1 4 5	0
26	a	1	Total C Mg N O 65 55 1 4 5	0

- Molecule 27 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: $C_{38}H_{75}O_{10}P$) (labeled as "Ligand of Interest" by depositor).



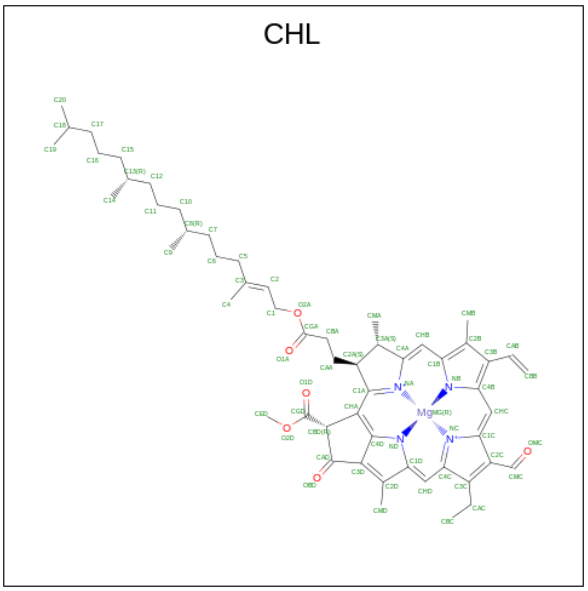
Mol	Chain	Residues	Atoms				AltConf
27	A	1	Total 49	C 38	O 10	P 1	0
27	A	1	Total 34	C 23	O 10	P 1	0
27	2a	1	Total 32	C 21	O 10	P 1	0
27	5a	1	Total 32	C 21	O 10	P 1	0
27	5a	1	Total 37	C 26	O 10	P 1	0
27	6a	1	Total 39	C 28	O 10	P 1	0
27	a	1	Total 49	C 38	O 10	P 1	0
27	a	1	Total 34	C 23	O 10	P 1	0
27	2b	1	Total 32	C 21	O 10	P 1	0
27	5b	1	Total 32	C 21	O 10	P 1	0
27	5b	1	Total 37	C 26	O 10	P 1	0
27	6b	1	Total 39	C 28	O 10	P 1	0

- Molecule 28 is DODECYL-ALPHA-D-MALTOSIDE (CCD ID: LMU) (formula: $C_{24}H_{46}O_{11}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
28	A	1	Total C O 35 24 11	0
28	6a	1	Total C O 35 24 11	0
28	6a	1	Total C O 33 22 11	0
28	a	1	Total C O 35 24 11	0
28	6b	1	Total C O 35 24 11	0
28	6b	1	Total C O 33 22 11	0

- Molecule 29 is CHLOROPHYLL B (CCD ID: CHL) (formula: $C_{55}H_{70}MgN_4O_6$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms					AltConf
29	2a	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	2a	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
29	2a	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	2a	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	3a	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	3a	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	3a	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	5a	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	5a	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	5a	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
29	5a	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	5a	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
29	6a	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	6a	1	Total	C	Mg	N	O	0
			41	32	1	4	4	

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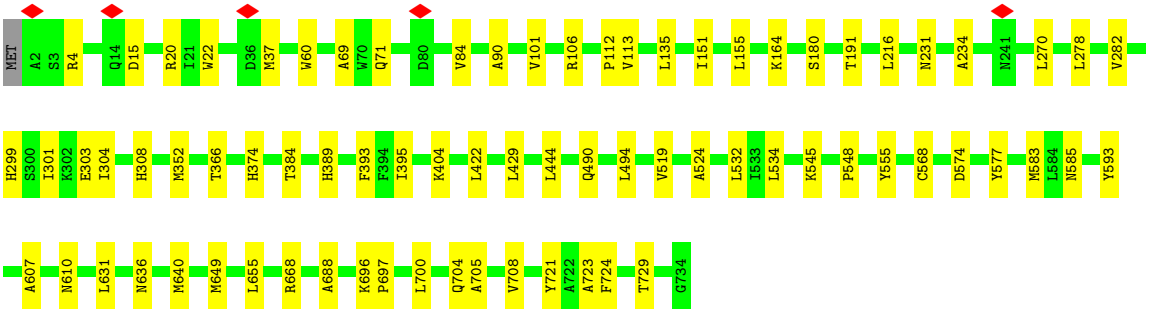
Mol	Chain	Residues	Atoms					AltConf
29	2b	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	2b	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
29	2b	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	2b	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	3b	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	3b	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	3b	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	5b	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	5b	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	5b	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
29	5b	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	5b	1	Total	C	Mg	N	O	0
			43	34	1	4	4	
29	6b	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
29	6b	1	Total	C	Mg	N	O	0
			41	32	1	4	4	

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

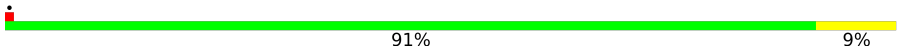
• Molecule 1: Photosystem I P700 chlorophyll a apoprotein A2

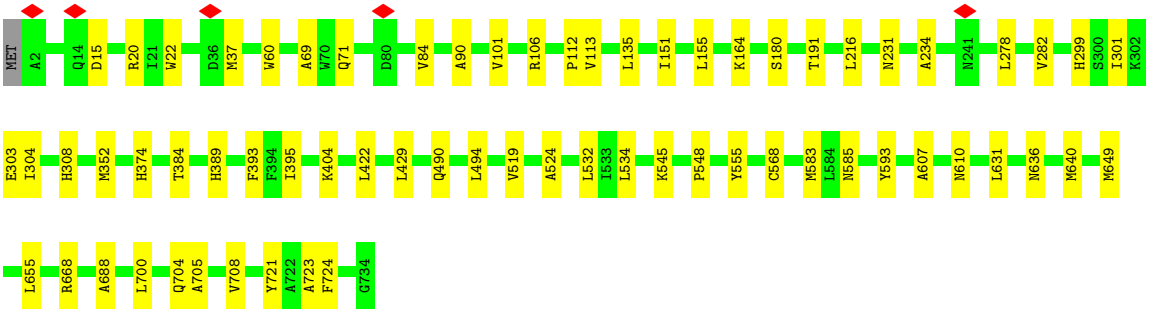
Chain B:



• Molecule 1: Photosystem I P700 chlorophyll a apoprotein A2

Chain b:



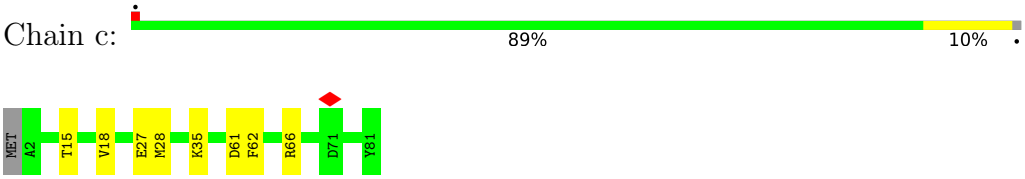


• Molecule 2: Photosystem I iron-sulfur center

Chain C:

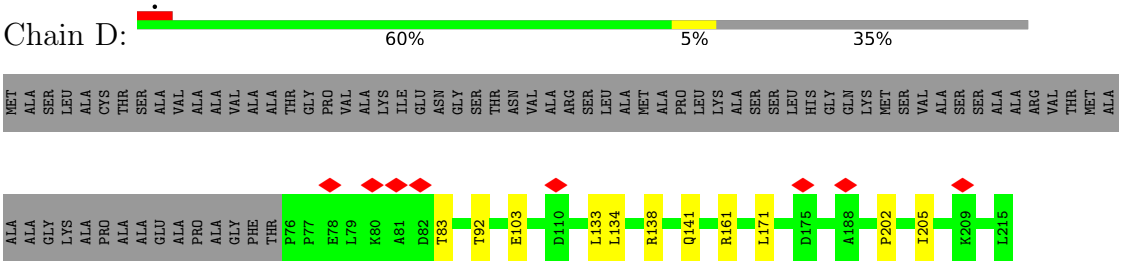
• Molecule 2: Photosystem I iron-sulfur center

Chain c:



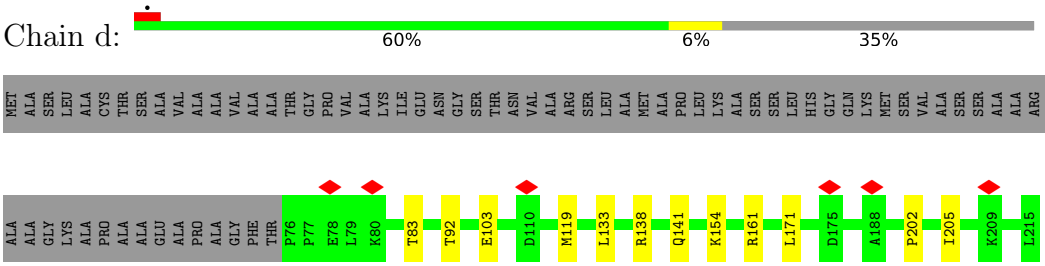
• Molecule 3: Photosystem I reaction center subunit II, chloroplastic

Chain D:



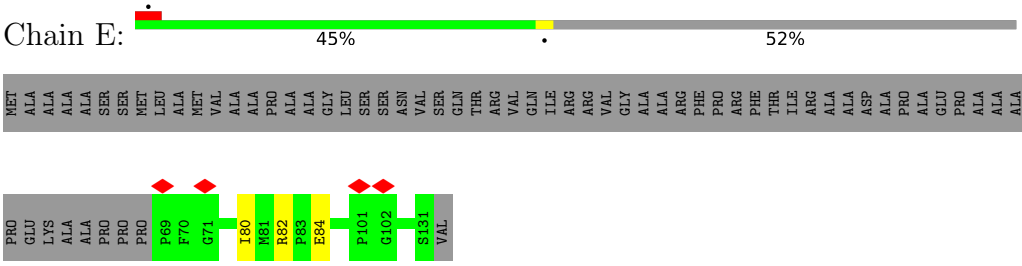
• Molecule 3: Photosystem I reaction center subunit II, chloroplastic

Chain d:



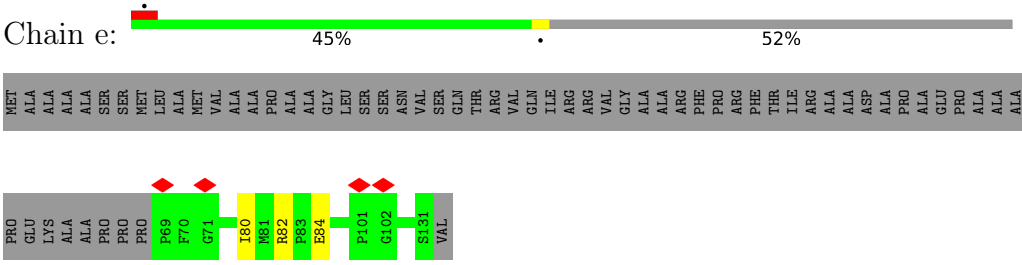
• Molecule 4: Photosystem I reaction centre subunit IV

Chain E:



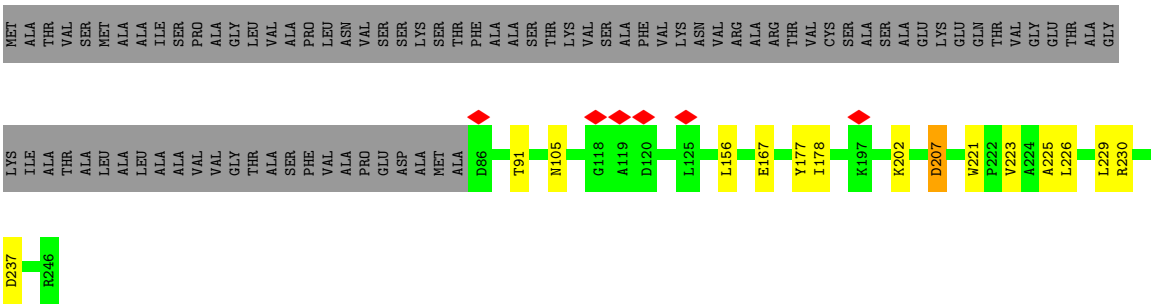
• Molecule 4: Photosystem I reaction centre subunit IV

Chain e:

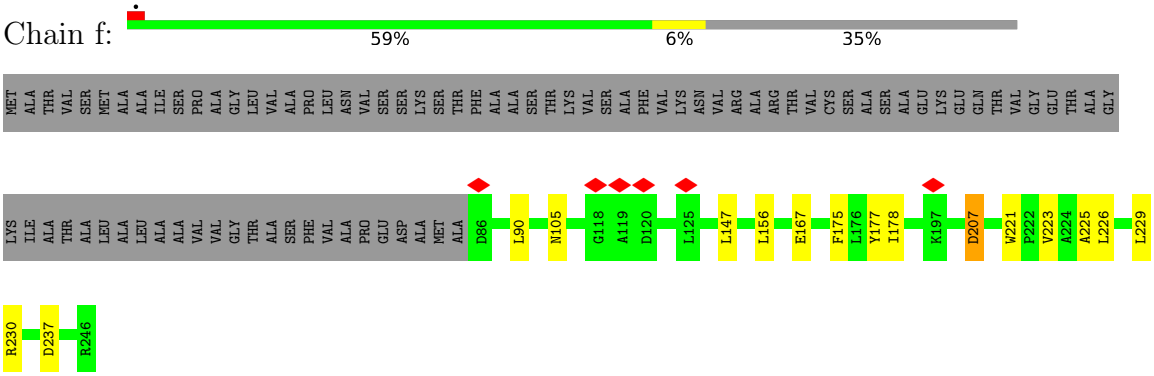


• Molecule 5: Photosystem I reaction center subunit III

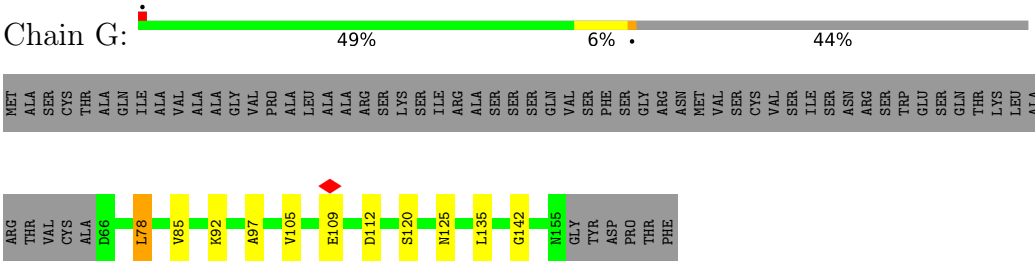
Chain F:



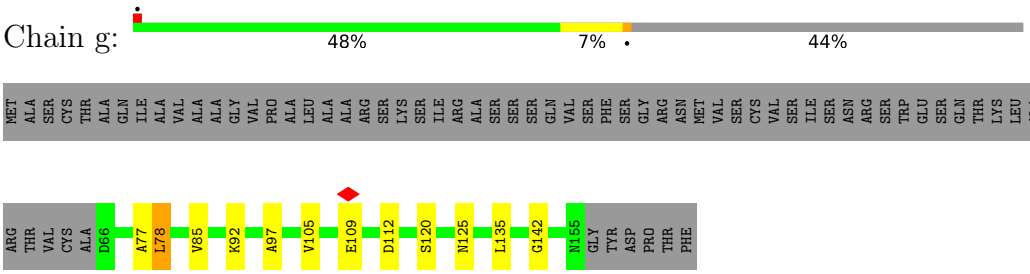
• Molecule 5: Photosystem I reaction center subunit III



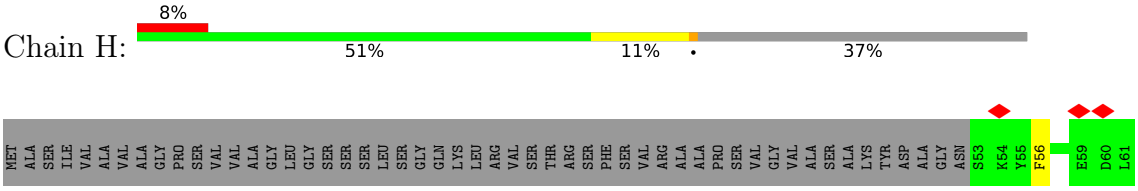
• Molecule 6: Photosystem I reaction center subunit V, chloroplastic

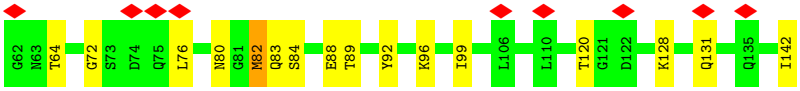


• Molecule 6: Photosystem I reaction center subunit V, chloroplastic



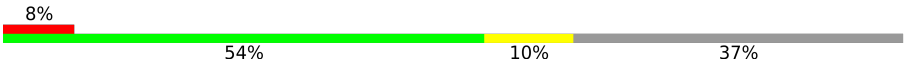
• Molecule 7: Photosystem I reaction center subunit VI, chloroplastic

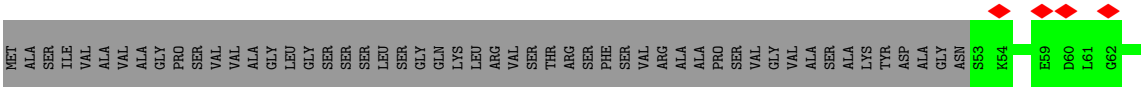


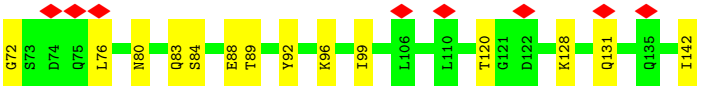


• Molecule 7: Photosystem I reaction center subunit VI, chloroplastic

Chain h:

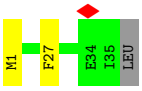






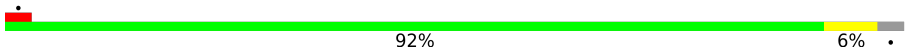
• Molecule 8: Photosystem I reaction center subunit VIII

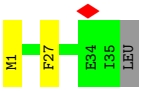
Chain I:



• Molecule 8: Photosystem I reaction center subunit VIII

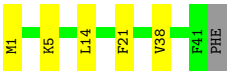
Chain i:





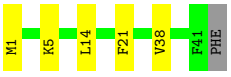
• Molecule 9: Photosystem I reaction center subunit IX

Chain J:



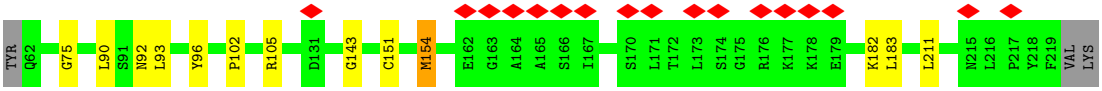
• Molecule 9: Photosystem I reaction center subunit IX

Chain j:



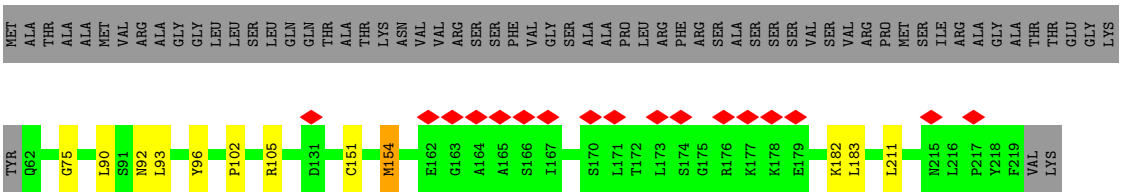
• Molecule 10: PSI subunit V

Chain L:



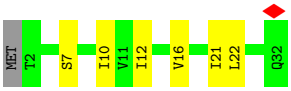
• Molecule 10: PSI subunit V

Chain l:



• Molecule 11: Photosystem I reaction center subunit XII

Chain M:

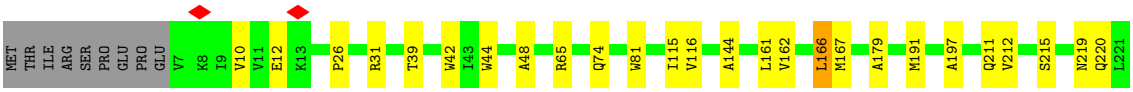


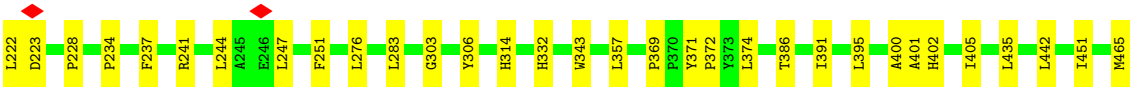
• Molecule 11: Photosystem I reaction center subunit XII

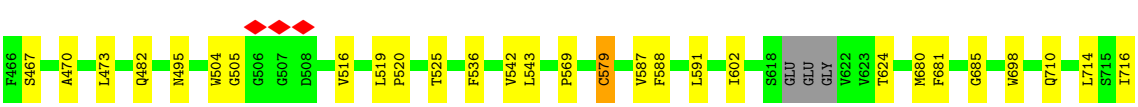
Chain m:

• Molecule 12: Photosystem I P700 chlorophyll a apoprotein A1

Chain A:

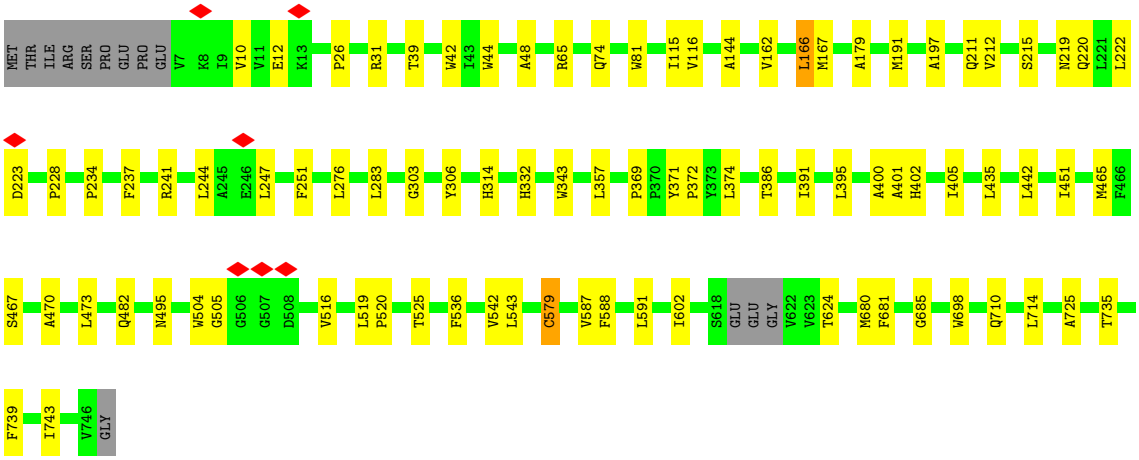






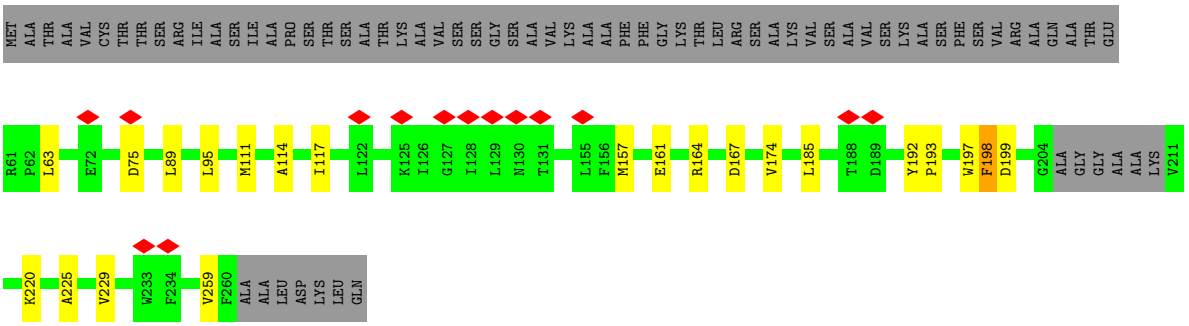
• Molecule 12: Photosystem I P700 chlorophyll a apoprotein A1

Chain a:



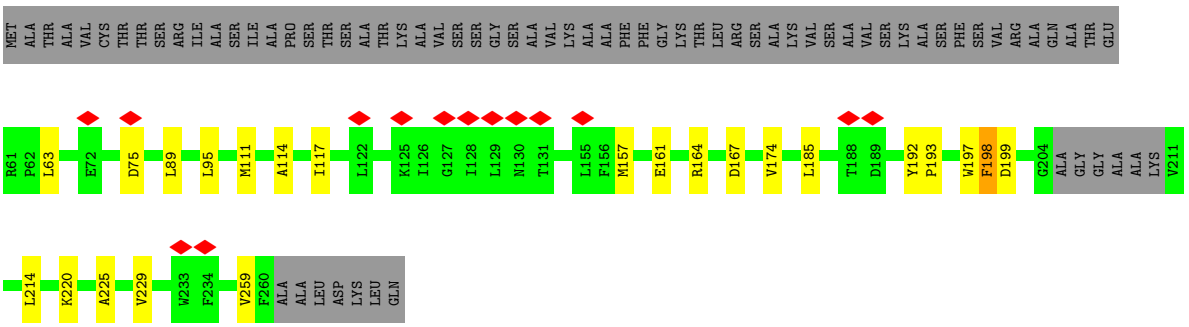
• Molecule 13: Chlorophyll a-b binding protein, chloroplastic

Chain 2a:



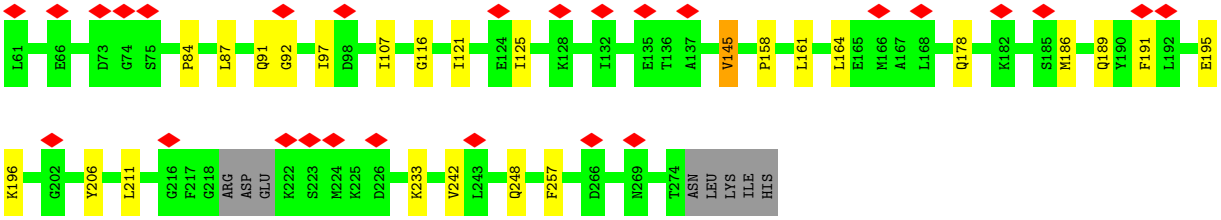
• Molecule 13: Chlorophyll a-b binding protein, chloroplastic

Chain 2b:

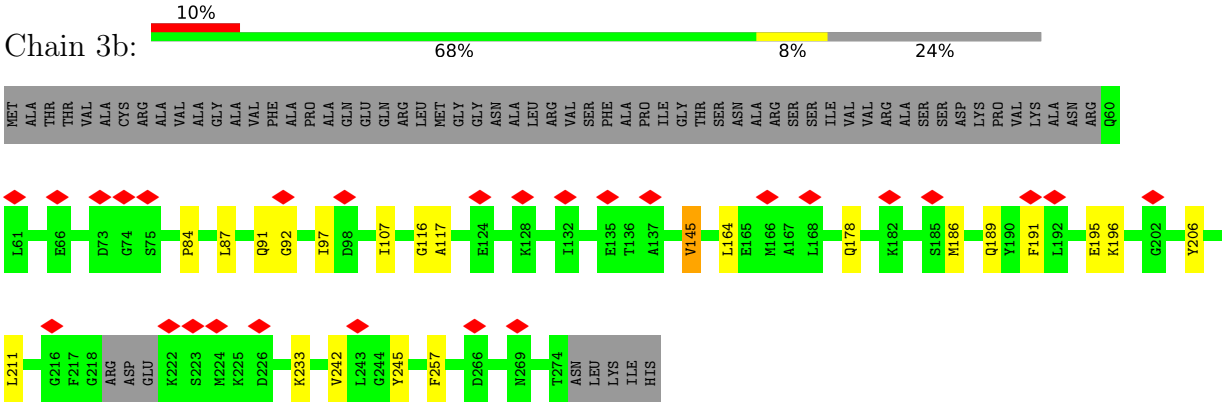


• Molecule 14: Chlorophyll a-b binding protein, chloroplastic

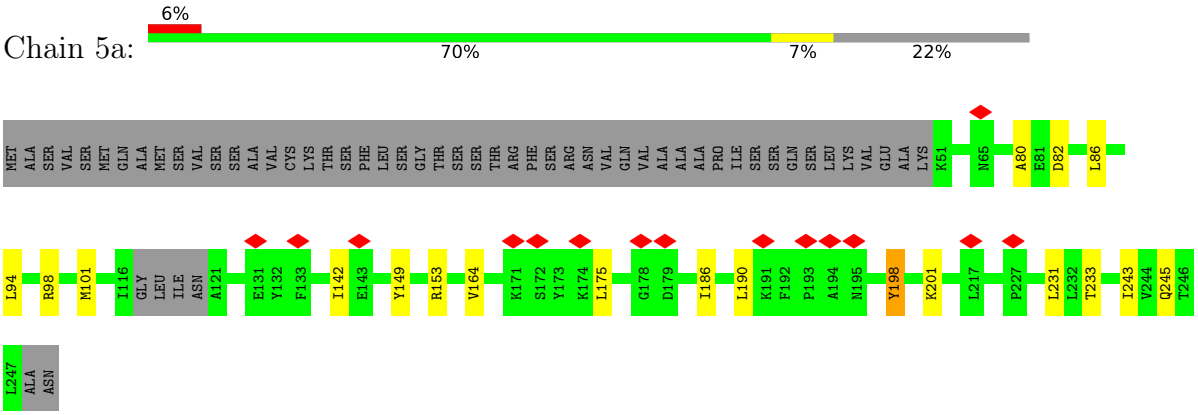
Chain 3a:



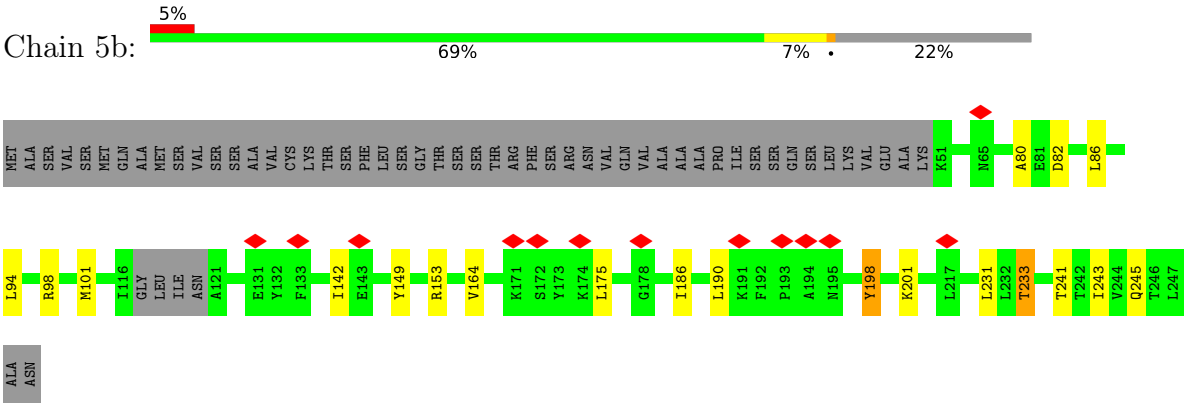
• Molecule 14: Chlorophyll a-b binding protein, chloroplastic



• Molecule 15: Chlorophyll a-b binding protein, chloroplastic

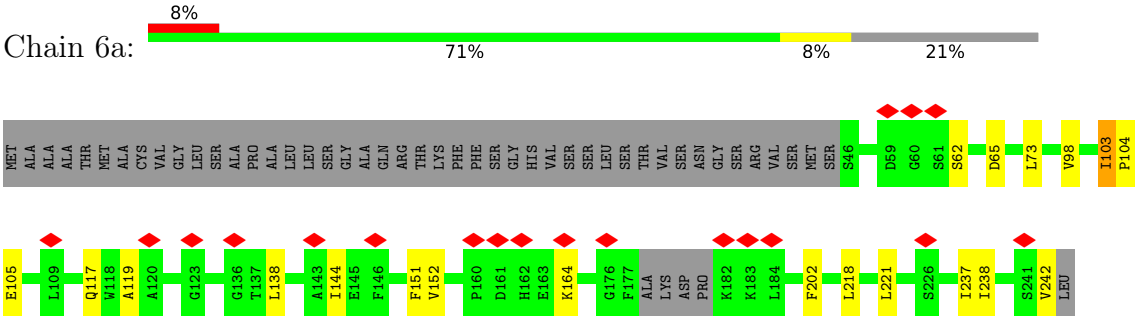


• Molecule 15: Chlorophyll a-b binding protein, chloroplastic



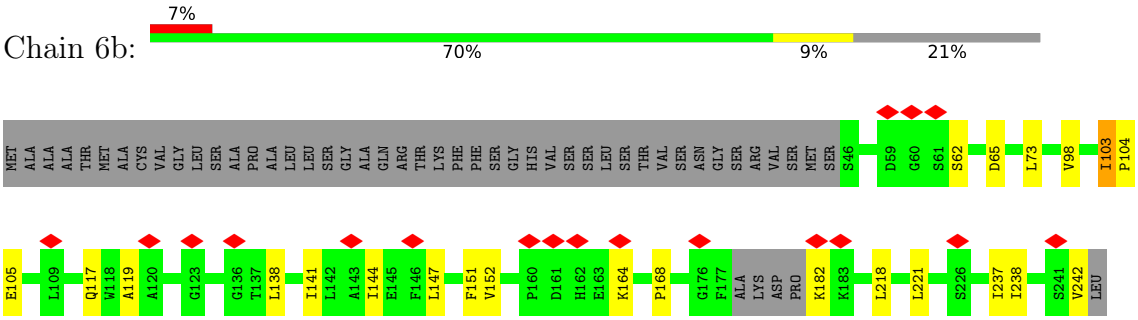
• Molecule 16: Chlorophyll a-b binding protein, chloroplastic

Chain 6a:



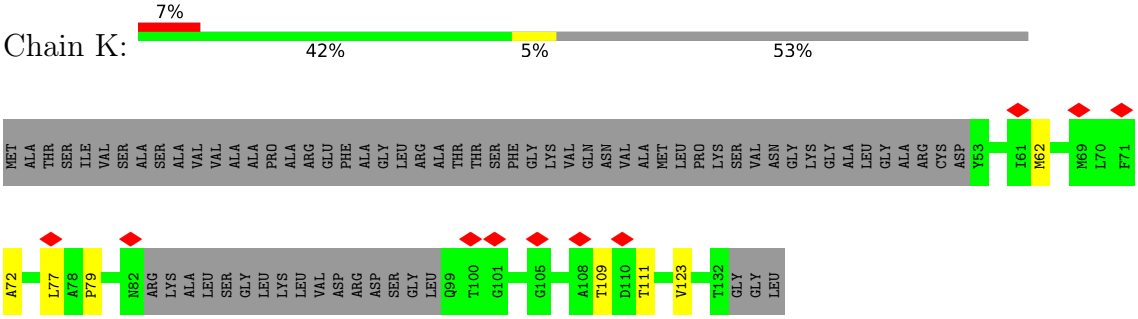
• Molecule 16: Chlorophyll a-b binding protein, chloroplastic

Chain 6b:



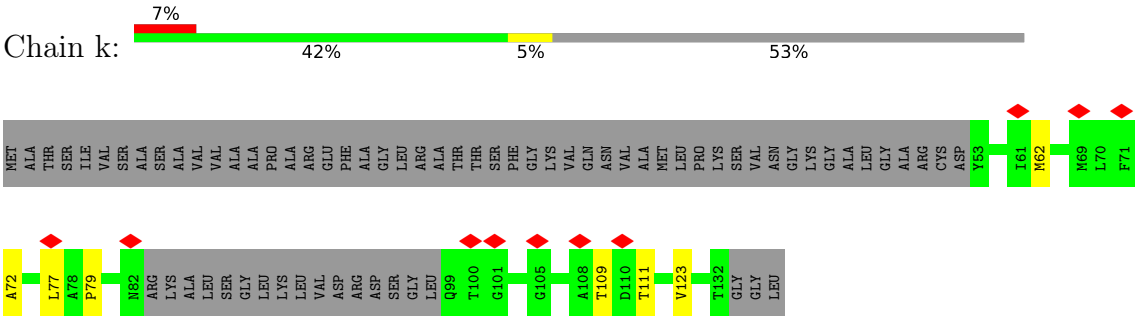
• Molecule 17: PSI-K

Chain K:



• Molecule 17: PSI-K

Chain k:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	27750	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	50	Depositor
Minimum defocus (nm)	600	Depositor
Maximum defocus (nm)	1800	Depositor
Magnification	Not provided	
Image detector	FEI FALCON IV (4k x 4k)	Depositor
Maximum map value	0.232	Depositor
Minimum map value	-0.087	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	0.006	Depositor
Recommended contour level	0.04	Depositor
Map size (Å)	465.28, 465.28, 465.28	wwPDB
Map dimensions	640, 640, 640	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.727, 0.727, 0.727	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: LMG, LUT, CHL, DGD, CL0, LFA, LHG, SF4, LMU, BCR, CLA, PQN

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#$\|Z\|$ >5	RMSZ	#$\|Z\|$ >5
1	B	0.21	0/6066	0.44	0/8277
1	b	0.21	0/6066	0.44	0/8277
2	C	0.23	0/612	0.56	0/829
2	c	0.23	0/612	0.56	0/829
3	D	0.21	0/1122	0.56	0/1511
3	d	0.21	0/1122	0.56	0/1511
4	E	0.21	0/508	0.49	0/691
4	e	0.22	0/508	0.49	0/691
5	F	0.21	0/1275	0.47	2/1725 (0.1%)
5	f	0.21	0/1275	0.47	2/1725 (0.1%)
6	G	0.25	0/686	0.51	0/931
6	g	0.26	0/686	0.51	0/931
7	H	0.22	0/696	0.55	0/939
7	h	0.22	0/696	0.55	0/939
8	I	0.31	0/281	0.70	0/384
8	i	0.31	0/281	0.70	0/384
9	J	0.24	0/338	0.57	0/462
9	j	0.24	0/338	0.57	0/462
10	L	0.23	0/1215	0.58	0/1660
10	l	0.23	0/1215	0.58	0/1660
11	M	0.30	0/243	0.56	0/327
11	m	0.30	0/243	0.56	0/327
12	A	0.21	0/6007	0.46	2/8198 (0.0%)
12	a	0.21	0/6007	0.46	2/8198 (0.0%)
13	2a	0.21	0/1574	0.56	2/2151 (0.1%)
13	2b	0.21	0/1574	0.56	2/2151 (0.1%)
14	3a	0.24	0/1682	0.59	0/2281
14	3b	0.24	0/1682	0.59	0/2281
15	5a	0.19	0/1566	0.49	1/2137 (0.0%)
15	5b	0.19	0/1566	0.49	1/2137 (0.0%)
16	6a	0.22	0/1539	0.56	2/2100 (0.1%)
16	6b	0.23	0/1539	0.56	2/2100 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\|>5$	RMSZ	$\#\|Z\|>5$
17	K	0.26	0/446	0.58	0/604
17	k	0.26	0/446	0.58	0/604
All	All	0.22	0/51712	0.51	18/70414 (0.0%)

There are no bond length outliers.

The worst 5 of 18 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
13	2a	198	PHE	CA-CB-CG	-6.88	106.92	113.80
13	2b	198	PHE	CA-CB-CG	-6.88	106.92	113.80
5	F	207	ASP	CA-C-N	6.41	124.28	120.24
5	F	207	ASP	C-N-CA	6.41	124.28	120.24
5	f	207	ASP	CA-C-N	6.41	124.28	120.24

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry-related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	B	5854	0	5632	55	0
1	b	5854	0	5632	50	0
2	C	602	0	575	6	0
2	c	602	0	575	6	0
3	D	1094	0	1113	6	0
3	d	1094	0	1113	7	0
4	E	495	0	481	2	0
4	e	495	0	481	2	0
5	F	1248	0	1291	10	0
5	f	1248	0	1291	11	0
6	G	673	0	678	17	0
6	g	673	0	678	18	0
7	H	680	0	680	20	0
7	h	680	0	680	18	0
8	I	274	0	285	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
8	i	274	0	285	2	0
9	J	328	0	339	3	0
9	j	328	0	339	3	0
10	L	1180	0	1186	12	0
10	l	1180	0	1186	12	0
11	M	242	0	266	6	0
11	m	242	0	266	5	0
12	A	5810	0	5687	61	0
12	a	5810	0	5687	59	0
13	2a	1520	0	1470	18	0
13	2b	1520	0	1470	18	0
14	3a	1633	0	1594	17	0
14	3b	1633	0	1594	14	0
15	5a	1516	0	1491	12	0
15	5b	1516	0	1491	13	0
16	6a	1491	0	1471	13	0
16	6b	1491	0	1471	16	0
17	K	441	0	446	4	0
17	k	441	0	446	4	0
18	2a	425	0	329	14	0
18	2b	425	0	329	14	0
18	3a	566	0	438	13	0
18	3b	566	0	438	11	0
18	5a	479	0	367	14	0
18	5b	479	0	367	14	0
18	6a	590	0	478	21	0
18	6b	590	0	478	22	0
18	A	2387	0	2303	72	0
18	B	2483	0	2431	80	0
18	F	146	0	121	6	0
18	G	95	0	72	4	0
18	J	45	0	33	2	0
18	K	44	0	30	0	0
18	L	147	0	123	5	0
18	a	2387	0	2303	72	0
18	b	2483	0	2431	84	0
18	f	146	0	121	6	0
18	g	95	0	72	4	0
18	j	45	0	33	2	0
18	k	44	0	30	0	0
18	l	147	0	123	5	0
19	A	33	0	46	1	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
19	B	33	0	46	3	0
19	a	33	0	46	1	0
19	b	33	0	46	3	0
20	A	200	0	280	15	0
20	B	280	0	392	19	0
20	F	80	0	112	3	0
20	G	80	0	112	5	0
20	I	40	0	56	3	0
20	J	40	0	56	4	0
20	K	40	0	56	3	0
20	L	40	0	56	2	0
20	M	40	0	56	4	0
20	a	200	0	280	16	0
20	b	280	0	392	18	0
20	f	80	0	112	5	0
20	g	80	0	112	6	0
20	i	40	0	56	3	0
20	j	40	0	56	5	0
20	k	40	0	56	2	0
20	l	40	0	56	2	0
20	m	40	0	56	3	0
21	B	59	0	79	3	0
21	b	59	0	79	3	0
22	B	12	0	23	0	0
22	M	12	0	23	0	0
22	b	12	0	23	0	0
22	m	12	0	23	0	0
23	5a	35	0	40	1	0
23	5b	35	0	40	1	0
23	B	42	0	54	1	0
23	I	31	0	32	1	0
23	J	71	0	85	2	0
23	b	42	0	54	1	0
23	i	31	0	32	1	0
23	j	71	0	85	2	0
24	A	8	0	0	1	0
24	C	16	0	0	0	0
24	a	8	0	0	1	0
24	c	16	0	0	0	0
25	2a	84	0	112	11	0
25	2b	84	0	112	11	0
25	3a	84	0	112	8	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
25	3b	84	0	112	8	0
25	5a	84	0	112	8	0
25	5b	84	0	112	5	0
25	6a	126	0	168	14	0
25	6b	126	0	168	12	0
25	J	42	0	56	4	0
25	j	42	0	56	3	0
26	A	65	0	72	3	0
26	a	65	0	72	3	0
27	2a	32	0	34	0	0
27	2b	32	0	34	0	0
27	5a	69	0	78	3	0
27	5b	69	0	78	3	0
27	6a	39	0	51	1	0
27	6b	39	0	51	1	0
27	A	83	0	112	7	0
27	a	83	0	112	7	0
28	6a	68	0	85	0	0
28	6b	68	0	85	0	0
28	A	35	0	46	0	0
28	a	35	0	46	0	0
29	2a	181	0	122	9	0
29	2b	181	0	122	8	0
29	3a	138	0	93	4	0
29	3b	138	0	93	4	0
29	5a	224	0	151	6	0
29	5b	224	0	151	6	0
29	6a	87	0	55	3	0
29	6b	87	0	55	3	0
All	All	70242	0	68946	937	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 7.

The worst 5 of 937 close contacts within the same asymmetric unit are listed below, sorted by their clash magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
7:H:92:TYR:CD1	6:g:125:ASN:ND2	1.83	1.41
6:G:125:ASN:ND2	7:h:92:TYR:CD1	1.81	1.40
7:H:92:TYR:CE1	6:g:125:ASN:ND2	1.83	1.39
6:G:125:ASN:ND2	7:h:92:TYR:CE1	1.83	1.37

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
6:G:120:SER:HB2	7:h:96:LYS:HE2	1.41	1.00

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	B	731/734 (100%)	708 (97%)	23 (3%)	0	100	100
1	b	731/734 (100%)	708 (97%)	23 (3%)	0	100	100
2	C	78/81 (96%)	74 (95%)	4 (5%)	0	100	100
2	c	78/81 (96%)	74 (95%)	4 (5%)	0	100	100
3	D	138/215 (64%)	132 (96%)	6 (4%)	0	100	100
3	d	138/215 (64%)	132 (96%)	6 (4%)	0	100	100
4	E	61/132 (46%)	57 (93%)	4 (7%)	0	100	100
4	e	61/132 (46%)	57 (93%)	4 (7%)	0	100	100
5	F	159/246 (65%)	157 (99%)	2 (1%)	0	100	100
5	f	159/246 (65%)	157 (99%)	2 (1%)	0	100	100
6	G	88/161 (55%)	86 (98%)	2 (2%)	0	100	100
6	g	88/161 (55%)	86 (98%)	2 (2%)	0	100	100
7	H	88/142 (62%)	84 (96%)	4 (4%)	0	100	100
7	h	88/142 (62%)	84 (96%)	4 (4%)	0	100	100
8	I	33/36 (92%)	32 (97%)	1 (3%)	0	100	100
8	i	33/36 (92%)	32 (97%)	1 (3%)	0	100	100
9	J	39/42 (93%)	37 (95%)	2 (5%)	0	100	100
9	j	39/42 (93%)	37 (95%)	2 (5%)	0	100	100
10	L	156/221 (71%)	147 (94%)	9 (6%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
10	l	156/221 (71%)	147 (94%)	9 (6%)	0	100	100
11	M	29/32 (91%)	29 (100%)	0	0	100	100
11	m	29/32 (91%)	29 (100%)	0	0	100	100
12	A	733/750 (98%)	716 (98%)	17 (2%)	0	100	100
12	a	733/750 (98%)	716 (98%)	17 (2%)	0	100	100
13	2a	190/267 (71%)	182 (96%)	8 (4%)	0	100	100
13	2b	190/267 (71%)	182 (96%)	8 (4%)	0	100	100
14	3a	208/279 (75%)	200 (96%)	8 (4%)	0	100	100
14	3b	208/279 (75%)	200 (96%)	8 (4%)	0	100	100
15	5a	189/249 (76%)	184 (97%)	5 (3%)	0	100	100
15	5b	189/249 (76%)	184 (97%)	5 (3%)	0	100	100
16	6a	189/243 (78%)	180 (95%)	9 (5%)	0	100	100
16	6b	189/243 (78%)	180 (95%)	9 (5%)	0	100	100
17	K	60/135 (44%)	58 (97%)	2 (3%)	0	100	100
17	k	60/135 (44%)	58 (97%)	2 (3%)	0	100	100
All	All	6338/7930 (80%)	6126 (97%)	212 (3%)	0	100	100

There are no Ramachandran outliers to report.

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	B	597/598 (100%)	593 (99%)	4 (1%)	81	92
1	b	597/598 (100%)	593 (99%)	4 (1%)	81	92
2	C	68/69 (99%)	67 (98%)	1 (2%)	60	80
2	c	68/69 (99%)	67 (98%)	1 (2%)	60	80
3	D	114/161 (71%)	113 (99%)	1 (1%)	75	89
3	d	114/161 (71%)	113 (99%)	1 (1%)	75	89

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	E	56/99 (57%)	56 (100%)	0	100	100
4	e	56/99 (57%)	56 (100%)	0	100	100
5	F	129/189 (68%)	126 (98%)	3 (2%)	45	70
5	f	129/189 (68%)	127 (98%)	2 (2%)	58	79
6	G	70/125 (56%)	69 (99%)	1 (1%)	62	82
6	g	70/125 (56%)	69 (99%)	1 (1%)	62	82
7	H	70/107 (65%)	67 (96%)	3 (4%)	25	45
7	h	70/107 (65%)	68 (97%)	2 (3%)	37	62
8	I	31/32 (97%)	31 (100%)	0	100	100
8	i	31/32 (97%)	31 (100%)	0	100	100
9	J	35/36 (97%)	33 (94%)	2 (6%)	17	33
9	j	35/36 (97%)	33 (94%)	2 (6%)	17	33
10	L	121/169 (72%)	120 (99%)	1 (1%)	79	91
10	l	121/169 (72%)	120 (99%)	1 (1%)	79	91
11	M	29/30 (97%)	29 (100%)	0	100	100
11	m	29/30 (97%)	29 (100%)	0	100	100
12	A	600/611 (98%)	595 (99%)	5 (1%)	79	91
12	a	600/611 (98%)	595 (99%)	5 (1%)	79	91
13	2a	154/204 (76%)	152 (99%)	2 (1%)	65	83
13	2b	154/204 (76%)	152 (99%)	2 (1%)	65	83
14	3a	165/216 (76%)	158 (96%)	7 (4%)	25	46
14	3b	165/216 (76%)	158 (96%)	7 (4%)	25	46
15	5a	156/202 (77%)	151 (97%)	5 (3%)	34	58
15	5b	156/202 (77%)	151 (97%)	5 (3%)	34	58
16	6a	152/190 (80%)	149 (98%)	3 (2%)	50	74
16	6b	152/190 (80%)	149 (98%)	3 (2%)	50	74
17	K	45/96 (47%)	44 (98%)	1 (2%)	47	71
17	k	45/96 (47%)	44 (98%)	1 (2%)	47	71
All	All	5184/6268 (83%)	5108 (98%)	76 (2%)	60	80

5 of 76 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
12	a	624	THR
15	5b	233	THR
13	2b	259	VAL
14	3b	233	LYS
17	k	111	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 61 such sidechains are listed below:

Mol	Chain	Res	Type
5	f	164	HIS
13	2b	221	ASN
10	l	129	ASN
13	2b	183	ASN
15	5b	240	HIS

5.3.3 RNA (i)

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains (i)

There are no non-standard protein/DNA/RNA residues in this entry.

5.5 Carbohydrates (i)

There are no oligosaccharides in this entry.

5.6 Ligand geometry (i)

412 ligands are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	a	836	12	51,59,73	1.54	7 (13%)	59,96,113	1.10	4 (6%)
18	CLA	b	833	1	65,73,73	1.24	6 (9%)	76,113,113	0.97	4 (5%)
18	CLA	A	837	12	55,63,73	1.36	7 (12%)	64,101,113	1.15	6 (9%)
18	CLA	A	828	12	65,73,73	1.40	7 (10%)	76,113,113	0.91	4 (5%)
18	CLA	b	820	1	45,53,73	1.54	7 (15%)	52,89,113	1.11	3 (5%)
18	CLA	2a	302	13	45,53,73	1.56	7 (15%)	52,89,113	1.08	4 (7%)
18	CLA	A	841	-	65,73,73	1.26	8 (12%)	76,113,113	0.98	4 (5%)
18	CLA	2b	301	13	55,63,73	1.35	7 (12%)	64,101,113	1.08	5 (7%)
18	CLA	B	814	1	50,58,73	1.45	6 (12%)	58,95,113	1.05	3 (5%)
25	LUT	j	105	-	42,43,43	1.68	7 (16%)	51,60,60	2.91	19 (37%)
18	CLA	l	302	10	60,68,73	1.30	7 (11%)	70,107,113	0.97	4 (5%)
18	CLA	b	819	1	43,51,73	1.54	6 (13%)	49,86,113	1.13	4 (8%)
18	CLA	b	835	1	50,58,73	1.55	7 (14%)	58,95,113	1.10	3 (5%)
22	LFA	M	102	-	11,11,19	0.09	0	10,10,18	0.12	0
18	CLA	A	810	12	65,73,73	1.28	6 (9%)	76,113,113	0.91	3 (3%)
20	BCR	a	848	-	41,41,41	1.73	8 (19%)	56,56,56	1.77	15 (26%)
18	CLA	a	815	-	45,53,73	1.51	5 (11%)	52,89,113	1.24	5 (9%)
25	LUT	6a	320	-	42,43,43	1.65	8 (19%)	51,60,60	1.74	13 (25%)
18	CLA	b	802	-	65,73,73	1.23	6 (9%)	76,113,113	0.99	5 (6%)
18	CLA	b	838	-	65,73,73	1.24	6 (9%)	76,113,113	1.03	5 (6%)
18	CLA	a	810	12	65,73,73	1.28	6 (9%)	76,113,113	0.91	3 (3%)
18	CLA	b	804	1	65,73,73	1.27	6 (9%)	76,113,113	0.96	3 (3%)
18	CLA	5b	302	15	56,64,73	1.32	6 (10%)	65,102,113	1.12	5 (7%)
18	CLA	2b	311	13	45,53,73	1.54	7 (15%)	52,89,113	1.15	5 (9%)
18	CLA	B	822	1	45,53,73	1.51	6 (13%)	52,89,113	1.13	4 (7%)
29	CHL	2a	305	-	43,51,74	1.48	8 (18%)	45,86,114	1.21	5 (11%)
18	CLA	b	801	1	65,73,73	1.31	7 (10%)	76,113,113	0.84	4 (5%)
20	BCR	G	201	-	41,41,41	1.70	8 (19%)	56,56,56	1.79	16 (28%)
18	CLA	6b	311	16	45,53,73	1.50	6 (13%)	52,89,113	1.14	3 (5%)
23	LMG	j	103	-	30,30,55	0.63	0	38,38,63	0.75	0
18	CLA	6b	310	-	45,53,73	1.55	7 (15%)	52,89,113	1.11	3 (5%)
18	CLA	6a	314	16	45,53,73	1.56	7 (15%)	52,89,113	1.12	3 (5%)
25	LUT	6b	318	-	42,43,43	1.67	8 (19%)	51,60,60	1.81	11 (21%)
18	CLA	6b	315	16	55,63,73	1.40	7 (12%)	64,101,113	1.05	4 (6%)
23	LMG	I	201	-	31,31,55	0.59	0	39,39,63	0.84	1 (2%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
24	SF4	c	101	2	0,12,12	-	-	-		
18	CLA	2a	310	-	45,53,73	1.53	8 (17%)	52,89,113	1.23	4 (7%)
20	BCR	I	202	-	41,41,41	1.69	8 (19%)	56,56,56	1.67	13 (23%)
18	CLA	G	203	6	45,53,73	1.53	7 (15%)	52,89,113	1.09	4 (7%)
18	CLA	A	833	12	65,73,73	1.28	7 (10%)	76,113,113	0.93	3 (3%)
20	BCR	a	851	-	41,41,41	1.76	8 (19%)	56,56,56	1.82	14 (25%)
18	CLA	A	822	12	45,53,73	1.55	7 (15%)	52,89,113	1.19	6 (11%)
29	CHL	6a	309	16	40,49,74	1.59	8 (20%)	41,84,114	1.34	7 (17%)
18	CLA	3a	302	14	55,63,73	1.33	7 (12%)	64,101,113	1.06	4 (6%)
28	LMU	6b	302	-	36,36,36	0.26	0	47,47,47	0.65	0
18	CLA	B	805	1	65,73,73	1.31	7 (10%)	76,113,113	0.95	3 (3%)
18	CLA	a	830	12	50,58,73	1.49	7 (14%)	58,95,113	1.19	5 (8%)
18	CLA	b	809	1	65,73,73	1.26	7 (10%)	76,113,113	0.92	3 (3%)
20	BCR	B	842	-	41,41,41	1.72	8 (19%)	56,56,56	1.86	17 (30%)
18	CLA	b	840	27	65,73,73	1.23	7 (10%)	76,113,113	1.13	7 (9%)
18	CLA	3b	305	14	46,54,73	1.49	7 (15%)	53,90,113	1.22	6 (11%)
20	BCR	J	102	-	41,41,41	1.79	7 (17%)	56,56,56	2.20	21 (37%)
25	LUT	3a	316	-	42,43,43	1.60	8 (19%)	51,60,60	1.83	15 (29%)
18	CLA	6b	312	16	55,63,73	1.37	7 (12%)	64,101,113	1.18	6 (9%)
20	BCR	A	847	-	41,41,41	1.74	9 (21%)	56,56,56	1.90	17 (30%)
18	CLA	B	809	1	65,73,73	1.26	7 (10%)	76,113,113	0.92	3 (3%)
18	CLA	5a	315	15	46,54,73	1.54	7 (15%)	53,90,113	1.06	3 (5%)
18	CLA	3a	311	14	43,51,73	1.59	7 (16%)	49,86,113	1.17	4 (8%)
18	CLA	b	817	1	65,73,73	1.22	6 (9%)	76,113,113	1.01	5 (6%)
18	CLA	2b	303	-	45,53,73	1.53	7 (15%)	52,89,113	1.17	5 (9%)
18	CLA	5a	302	15	56,64,73	1.32	6 (10%)	65,102,113	1.12	5 (7%)
18	CLA	B	807	1	61,69,73	1.27	7 (11%)	71,108,113	1.04	4 (5%)
20	BCR	f	301	-	41,41,41	1.71	8 (19%)	56,56,56	1.82	16 (28%)
18	CLA	b	853	-	65,73,73	1.25	7 (10%)	76,113,113	1.02	3 (3%)
18	CLA	B	826	1	58,66,73	1.33	7 (12%)	67,104,113	1.02	3 (4%)
18	CLA	A	835	12	45,53,73	1.49	6 (13%)	52,89,113	1.20	4 (7%)
25	LUT	J	105	-	42,43,43	1.69	7 (16%)	51,60,60	2.91	19 (37%)
29	CHL	5a	314	15	43,51,74	1.53	8 (18%)	45,86,114	1.26	5 (11%)
18	CLA	a	804	12	55,63,73	1.39	7 (12%)	64,101,113	1.07	4 (6%)
18	CLA	B	825	1	65,73,73	1.33	7 (10%)	76,113,113	0.92	4 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	b	834	-	45,53,73	1.51	7 (15%)	52,89,113	1.22	6 (11%)
18	CLA	a	811	12	45,53,73	1.47	6 (13%)	52,89,113	1.17	5 (9%)
18	CLA	g	203	6	45,53,73	1.52	7 (15%)	52,89,113	1.09	4 (7%)
18	CLA	a	801	12	52,60,73	1.41	6 (11%)	60,97,113	1.08	4 (6%)
19	PQN	B	841	-	34,34,34	0.43	0	42,45,45	0.67	0
18	CLA	2b	302	13	45,53,73	1.56	7 (15%)	52,89,113	1.08	4 (7%)
18	CLA	b	808	1	47,55,73	1.48	7 (14%)	54,91,113	1.21	5 (9%)
23	LMG	5b	319	-	35,35,55	0.58	0	43,43,63	0.72	0
25	LUT	6a	318	-	42,43,43	1.67	8 (19%)	51,60,60	1.81	11 (21%)
25	LUT	2b	315	-	42,43,43	1.80	8 (19%)	51,60,60	2.43	11 (21%)
18	CLA	A	838	12	50,58,73	1.50	7 (14%)	58,95,113	1.05	3 (5%)
28	LMU	6b	303	-	34,34,36	0.29	0	45,45,47	0.50	0
18	CLA	A	804	12	55,63,73	1.39	7 (12%)	64,101,113	1.07	4 (6%)
18	CLA	3a	313	14	42,50,73	1.61	7 (16%)	48,85,113	1.16	4 (8%)
27	LHG	A	846	-	33,33,48	0.33	0	36,39,54	0.47	0
20	BCR	B	851	-	41,41,41	1.71	9 (21%)	56,56,56	1.82	15 (26%)
18	CLA	3b	308	14	45,53,73	1.49	7 (15%)	52,89,113	1.13	4 (7%)
18	CLA	B	854	-	65,73,73	1.32	7 (10%)	76,113,113	1.00	5 (6%)
18	CLA	b	839	1	65,73,73	1.34	7 (10%)	76,113,113	0.97	5 (6%)
18	CLA	b	832	1	60,68,73	1.30	7 (11%)	70,107,113	1.15	6 (8%)
29	CHL	5b	306	-	43,51,74	1.49	8 (18%)	45,86,114	1.36	8 (17%)
22	LFA	B	849	-	11,11,19	0.09	0	10,10,18	0.07	0
18	CLA	3b	313	14	42,50,73	1.61	7 (16%)	48,85,113	1.16	4 (8%)
18	CLA	a	816	12	60,68,73	1.36	7 (11%)	70,107,113	1.10	5 (7%)
18	CLA	6a	308	16	45,53,73	1.63	7 (15%)	52,89,113	1.04	3 (5%)
18	CLA	b	837	1	47,55,73	1.47	7 (14%)	54,91,113	1.16	5 (9%)
18	CLA	3b	310	-	45,53,73	1.51	6 (13%)	52,89,113	1.13	4 (7%)
18	CLA	B	803	1	45,53,73	1.52	7 (15%)	52,89,113	1.18	5 (9%)
18	CLA	F	303	5	41,49,73	1.62	7 (17%)	47,84,113	1.22	4 (8%)
18	CLA	5b	310	-	45,53,73	1.54	7 (15%)	52,89,113	1.12	3 (5%)
18	CLA	B	819	1	43,51,73	1.54	6 (13%)	49,86,113	1.13	4 (8%)
18	CLA	A	821	12	45,53,73	1.53	7 (15%)	52,89,113	1.11	4 (7%)
18	CLA	A	836	12	51,59,73	1.54	7 (13%)	59,96,113	1.10	4 (6%)
18	CLA	3b	303	14	50,58,73	1.53	7 (14%)	58,95,113	1.11	5 (8%)
20	BCR	i	202	-	41,41,41	1.69	8 (19%)	56,56,56	1.67	13 (23%)
28	LMU	6a	302	-	36,36,36	0.26	0	47,47,47	0.65	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
24	SF4	A	844	12,1	0,12,12	-	-	-		
18	CLA	5a	308	15	45,53,73	1.48	6 (13%)	52,89,113	1.19	4 (7%)
18	CLA	2b	310	-	45,53,73	1.53	8 (17%)	52,89,113	1.23	4 (7%)
25	LUT	3a	317	-	42,43,43	1.75	8 (19%)	51,60,60	2.02	12 (23%)
18	CLA	B	853	-	65,73,73	1.25	7 (10%)	76,113,113	1.02	3 (3%)
25	LUT	6a	319	-	42,43,43	1.77	8 (19%)	51,60,60	2.54	18 (35%)
18	CLA	6b	313	-	45,53,73	1.50	6 (13%)	52,89,113	1.13	3 (5%)
18	CLA	3b	302	14	55,63,73	1.33	7 (12%)	64,101,113	1.06	4 (6%)
29	CHL	3a	307	-	46,54,74	1.44	8 (17%)	49,90,114	1.44	9 (18%)
28	LMU	A	852	-	36,36,36	0.29	0	47,47,47	0.70	1 (2%)
18	CLA	A	824	-	65,73,73	1.32	7 (10%)	76,113,113	1.00	5 (6%)
18	CLA	5a	313	15	45,53,73	1.53	7 (15%)	52,89,113	1.05	3 (5%)
18	CLA	b	818	-	53,61,73	1.43	7 (13%)	61,98,113	1.04	3 (4%)
18	CLA	J	101	-	45,53,73	1.53	7 (15%)	52,89,113	1.13	4 (7%)
18	CLA	3a	314	-	45,53,73	1.51	6 (13%)	52,89,113	1.11	4 (7%)
18	CLA	6a	315	16	55,63,73	1.40	7 (12%)	64,101,113	1.05	4 (6%)
18	CLA	B	840	27	65,73,73	1.23	7 (10%)	76,113,113	1.13	7 (9%)
25	LUT	2a	315	-	42,43,43	1.80	8 (19%)	51,60,60	2.43	11 (21%)
18	CLA	b	812	1	65,73,73	1.25	7 (10%)	76,113,113	0.99	5 (6%)
20	BCR	A	850	-	41,41,41	1.69	9 (21%)	56,56,56	1.72	15 (26%)
18	CLA	b	816	1	62,70,73	1.35	7 (11%)	72,109,113	1.09	6 (8%)
20	BCR	b	848	-	41,41,41	1.72	8 (19%)	56,56,56	2.24	22 (39%)
18	CLA	b	815	1	57,65,73	1.41	8 (14%)	66,103,113	1.02	4 (6%)
18	CLA	A	825	-	55,63,73	1.34	7 (12%)	64,101,113	1.08	5 (7%)
18	CLA	2a	308	13	55,63,73	1.34	6 (10%)	64,101,113	1.04	4 (6%)
28	LMU	6a	303	-	34,34,36	0.29	0	45,45,47	0.50	0
27	LHG	a	846	-	33,33,48	0.33	0	36,39,54	0.47	0
20	BCR	a	847	-	41,41,41	1.75	9 (21%)	56,56,56	1.90	17 (30%)
18	CLA	B	815	1	57,65,73	1.41	8 (14%)	66,103,113	1.02	4 (6%)
18	CLA	A	834	12	60,68,73	1.31	6 (10%)	70,107,113	0.95	3 (4%)
28	LMU	a	852	-	36,36,36	0.29	0	47,47,47	0.70	1 (2%)
18	CLA	3a	312	14	55,63,73	1.37	6 (10%)	64,101,113	1.14	6 (9%)
18	CLA	6b	306	16	55,63,73	1.39	7 (12%)	64,101,113	1.03	5 (7%)
29	CHL	3a	301	13	46,54,74	1.49	8 (17%)	49,90,114	1.16	5 (10%)
18	CLA	B	829	1	45,53,73	1.53	6 (13%)	52,89,113	1.17	4 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	A	829	12	65,73,73	1.31	7 (10%)	76,113,113	0.96	4 (5%)
18	CLA	a	806	12	65,73,73	1.26	7 (10%)	76,113,113	0.97	4 (5%)
29	CHL	2b	304	-	46,54,74	1.48	8 (17%)	49,90,114	1.11	4 (8%)
24	SF4	c	102	2	0,12,12	-	-	-		
27	LHG	6b	301	18	38,38,48	0.29	0	41,44,54	0.37	0
18	CLA	f	302	-	45,53,73	1.53	6 (13%)	52,89,113	1.11	3 (5%)
18	CLA	B	833	1	65,73,73	1.23	6 (9%)	76,113,113	0.97	4 (5%)
18	CLA	A	830	12	50,58,73	1.48	7 (14%)	58,95,113	1.18	5 (8%)
18	CLA	3a	305	14	46,54,73	1.49	7 (15%)	53,90,113	1.21	6 (11%)
23	LMG	b	850	-	42,42,55	0.54	0	50,50,63	0.68	0
18	CLA	b	811	1	45,53,73	1.53	6 (13%)	52,89,113	1.11	4 (7%)
18	CLA	5b	313	15	45,53,73	1.54	7 (15%)	52,89,113	1.05	3 (5%)
18	CLA	B	837	1	47,55,73	1.47	7 (14%)	54,91,113	1.17	5 (9%)
18	CLA	B	834	-	45,53,73	1.51	7 (15%)	52,89,113	1.23	6 (11%)
18	CLA	2b	312	13	45,53,73	1.54	7 (15%)	52,89,113	1.16	5 (9%)
18	CLA	K	201	17	44,52,73	1.58	8 (18%)	55,88,113	1.13	4 (7%)
18	CLA	b	822	1	45,53,73	1.51	7 (15%)	52,89,113	1.13	4 (7%)
27	LHG	5a	320	-	36,36,48	0.31	0	39,42,54	0.46	0
18	CLA	a	818	12	65,73,73	1.27	5 (7%)	76,113,113	1.03	4 (5%)
18	CLA	B	827	1	60,68,73	1.32	7 (11%)	69,106,113	1.02	5 (7%)
18	CLA	6a	313	-	45,53,73	1.50	6 (13%)	52,89,113	1.13	3 (5%)
20	BCR	g	201	-	41,41,41	1.70	8 (19%)	56,56,56	1.79	16 (28%)
18	CLA	a	825	-	55,63,73	1.34	7 (12%)	64,101,113	1.08	5 (7%)
29	CHL	6b	309	16	40,49,74	1.60	8 (20%)	41,84,114	1.34	7 (17%)
18	CLA	L	303	-	42,50,73	1.55	7 (16%)	48,85,113	1.26	5 (10%)
18	CLA	b	821	1	55,63,73	1.35	7 (12%)	64,101,113	1.03	6 (9%)
18	CLA	b	836	1	65,73,73	1.23	6 (9%)	76,113,113	1.06	6 (7%)
23	LMG	5a	319	-	35,35,55	0.58	0	43,43,63	0.72	0
24	SF4	a	844	12,1	0,12,12	-	-	-		
18	CLA	6b	308	16	45,53,73	1.62	7 (15%)	52,89,113	1.04	3 (5%)
18	CLA	A	815	-	45,53,73	1.51	5 (11%)	52,89,113	1.24	5 (9%)
18	CLA	B	835	1	50,58,73	1.55	7 (14%)	58,95,113	1.10	3 (5%)
20	BCR	f	304	-	41,41,41	1.72	8 (19%)	56,56,56	1.81	15 (26%)
18	CLA	5b	303	15	50,58,73	1.51	7 (14%)	58,95,113	1.05	4 (6%)
29	CHL	5a	306	-	43,51,74	1.49	8 (18%)	45,86,114	1.36	8 (17%)
29	CHL	5b	305	-	46,54,74	1.46	8 (17%)	49,90,114	1.18	5 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
20	BCR	B	848	-	41,41,41	1.72	8 (19%)	56,56,56	2.24	22 (39%)
18	CLA	a	823	12	65,73,73	1.29	7 (10%)	76,113,113	1.05	5 (6%)
18	CLA	B	804	1	65,73,73	1.26	6 (9%)	76,113,113	0.96	3 (3%)
18	CLA	6b	317	16	45,53,73	1.54	7 (15%)	52,89,113	1.10	3 (5%)
20	BCR	F	304	-	41,41,41	1.72	8 (19%)	56,56,56	1.81	15 (26%)
18	CLA	A	811	12	45,53,73	1.47	6 (13%)	52,89,113	1.17	5 (9%)
29	CHL	5a	307	-	46,54,74	1.36	7 (15%)	49,90,114	1.31	6 (12%)
18	CLA	A	826	12	65,73,73	1.29	7 (10%)	76,113,113	0.97	4 (5%)
18	CLA	2b	307	13	45,53,73	1.52	6 (13%)	52,89,113	1.12	3 (5%)
18	CLA	a	829	12	65,73,73	1.30	7 (10%)	76,113,113	0.96	4 (5%)
18	CLA	6a	306	16	55,63,73	1.39	7 (12%)	64,101,113	1.03	5 (7%)
18	CLA	5b	309	15	51,59,73	1.40	7 (13%)	59,96,113	1.13	3 (5%)
18	CLA	3a	304	-	45,53,73	1.48	7 (15%)	52,89,113	1.21	6 (11%)
18	CLA	2a	311	13	45,53,73	1.53	7 (15%)	52,89,113	1.15	5 (9%)
18	CLA	a	833	12	65,73,73	1.28	7 (10%)	76,113,113	0.93	3 (3%)
25	LUT	3b	317	-	42,43,43	1.75	8 (19%)	51,60,60	2.02	12 (23%)
20	BCR	b	845	-	41,41,41	1.73	9 (21%)	56,56,56	1.82	16 (28%)
18	CLA	6b	314	16	45,53,73	1.56	7 (15%)	52,89,113	1.12	3 (5%)
19	PQN	A	843	-	34,34,34	0.36	0	42,45,45	0.61	1 (2%)
27	LHG	5a	318	-	31,31,48	0.32	0	34,37,54	0.41	0
29	CHL	3b	301	13	46,54,74	1.49	8 (17%)	49,90,114	1.16	5 (10%)
29	CHL	2a	306	-	46,54,74	1.49	8 (17%)	49,90,114	1.10	5 (10%)
18	CLA	5b	311	15	44,52,73	1.54	7 (15%)	51,88,113	1.15	4 (7%)
26	CL0	A	802	12	65,73,73	1.55	8 (12%)	76,113,113	0.82	3 (3%)
18	CLA	a	822	12	45,53,73	1.55	7 (15%)	52,89,113	1.19	6 (11%)
18	CLA	B	812	1	65,73,73	1.25	7 (10%)	76,113,113	0.99	5 (6%)
27	LHG	5b	320	-	36,36,48	0.31	0	39,42,54	0.46	0
18	CLA	a	838	12	50,58,73	1.50	7 (14%)	58,95,113	1.05	3 (5%)
18	CLA	A	819	12	45,53,73	1.52	6 (13%)	52,89,113	1.07	4 (7%)
18	CLA	3a	308	14	45,53,73	1.50	7 (15%)	52,89,113	1.12	4 (7%)
18	CLA	a	837	12	55,63,73	1.36	7 (12%)	64,101,113	1.15	6 (9%)
18	CLA	B	816	1	62,70,73	1.35	7 (11%)	72,109,113	1.09	6 (8%)
18	CLA	5a	309	15	51,59,73	1.40	7 (13%)	59,96,113	1.13	3 (5%)
18	CLA	5b	312	15	52,60,73	1.40	6 (11%)	60,97,113	1.21	6 (10%)
18	CLA	B	821	1	55,63,73	1.35	7 (12%)	64,101,113	1.04	6 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	A	807	12	48,56,73	1.50	7 (14%)	55,92,113	1.07	3 (5%)
22	LFA	b	849	-	11,11,19	0.09	0	10,10,18	0.07	0
25	LUT	6b	319	-	42,43,43	1.77	8 (19%)	51,60,60	2.54	18 (35%)
29	CHL	2b	313	13	46,54,74	1.48	8 (17%)	49,90,114	1.11	4 (8%)
18	CLA	2a	301	13	55,63,73	1.35	7 (12%)	64,101,113	1.07	4 (6%)
18	CLA	5a	311	15	44,52,73	1.53	7 (15%)	51,88,113	1.15	4 (7%)
20	BCR	b	851	-	41,41,41	1.71	9 (21%)	56,56,56	1.82	15 (26%)
18	CLA	b	806	1	60,68,73	1.33	7 (11%)	70,107,113	1.05	4 (5%)
18	CLA	b	852	-	65,73,73	1.24	7 (10%)	76,113,113	0.96	6 (7%)
18	CLA	B	823	-	65,73,73	1.28	6 (9%)	76,113,113	1.08	5 (6%)
27	LHG	A	845	-	48,48,48	0.27	0	51,54,54	0.35	0
18	CLA	A	853	-	51,59,73	1.42	6 (11%)	59,96,113	1.08	5 (8%)
18	CLA	B	836	1	65,73,73	1.23	6 (9%)	76,113,113	1.06	6 (7%)
18	CLA	L	301	10	45,53,73	1.54	7 (15%)	52,89,113	1.21	5 (9%)
18	CLA	6a	317	16	45,53,73	1.54	7 (15%)	52,89,113	1.10	3 (5%)
18	CLA	A	813	12	50,58,73	1.39	5 (10%)	58,95,113	1.25	6 (10%)
18	CLA	A	816	12	60,68,73	1.36	7 (11%)	70,107,113	1.10	5 (7%)
24	SF4	C	102	2	0,12,12	-	-	-		
27	LHG	2a	316	18	31,31,48	0.33	0	34,37,54	0.45	0
23	LMG	J	104	-	41,41,55	0.54	0	49,49,63	0.63	0
18	CLA	2a	309	27	45,53,73	1.53	7 (15%)	52,89,113	1.04	3 (5%)
18	CLA	a	807	12	48,56,73	1.50	7 (14%)	55,92,113	1.07	3 (5%)
29	CHL	3b	307	-	46,54,74	1.44	8 (17%)	49,90,114	1.44	9 (18%)
18	CLA	b	805	1	65,73,73	1.31	7 (10%)	76,113,113	0.95	3 (3%)
25	LUT	2b	314	-	42,43,43	1.64	7 (16%)	51,60,60	2.32	16 (31%)
18	CLA	b	803	1	45,53,73	1.52	7 (15%)	52,89,113	1.18	5 (9%)
18	CLA	B	839	1	65,73,73	1.34	7 (10%)	76,113,113	0.98	5 (6%)
20	BCR	a	850	-	41,41,41	1.68	9 (21%)	56,56,56	1.71	15 (26%)
18	CLA	B	838	-	65,73,73	1.24	6 (9%)	76,113,113	1.03	5 (6%)
18	CLA	a	831	12	50,58,73	1.44	7 (14%)	58,95,113	1.06	5 (8%)
18	CLA	b	810	1	60,68,73	1.33	7 (11%)	70,107,113	1.01	4 (5%)
20	BCR	G	204	-	41,41,41	1.73	8 (19%)	56,56,56	1.74	13 (23%)
26	CL0	a	802	12	65,73,73	1.55	8 (12%)	76,113,113	0.82	3 (3%)
21	DGD	B	847	-	60,60,67	0.56	0	74,74,81	0.75	2 (2%)
18	CLA	A	814	12	42,50,73	1.52	7 (16%)	48,85,113	1.26	5 (10%)
25	LUT	5b	317	-	42,43,43	1.65	8 (19%)	51,60,60	1.84	13 (25%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	B	813	1	55,63,73	1.35	7 (12%)	64,101,113	1.04	4 (6%)
18	CLA	A	832	12	65,73,73	1.29	7 (10%)	76,113,113	0.94	3 (3%)
18	CLA	3a	310	-	45,53,73	1.51	6 (13%)	52,89,113	1.13	4 (7%)
20	BCR	B	843	-	41,41,41	1.78	8 (19%)	56,56,56	2.19	13 (23%)
20	BCR	b	844	-	41,41,41	1.72	8 (19%)	56,56,56	1.87	17 (30%)
20	BCR	m	101	-	41,41,41	1.74	8 (19%)	56,56,56	1.74	14 (25%)
24	SF4	C	101	2	0,12,12	-	-	-		
18	CLA	a	826	12	65,73,73	1.29	7 (10%)	76,113,113	0.96	4 (5%)
23	LMG	j	104	-	41,41,55	0.54	0	49,49,63	0.63	0
29	CHL	6b	304	16	46,54,74	1.44	7 (15%)	49,90,114	1.17	4 (8%)
18	CLA	3b	311	14	43,51,73	1.59	7 (16%)	49,86,113	1.17	4 (8%)
18	CLA	b	824	-	50,58,73	1.42	6 (12%)	58,95,113	1.09	4 (6%)
29	CHL	6a	304	16	46,54,74	1.44	7 (15%)	49,90,114	1.17	4 (8%)
29	CHL	2a	304	-	46,54,74	1.48	8 (17%)	49,90,114	1.10	4 (8%)
18	CLA	a	824	-	65,73,73	1.32	7 (10%)	76,113,113	1.00	5 (6%)
18	CLA	6a	312	16	55,63,73	1.37	7 (12%)	64,101,113	1.18	6 (9%)
18	CLA	a	828	12	65,73,73	1.40	7 (10%)	76,113,113	0.91	4 (5%)
27	LHG	6a	301	18	38,38,48	0.29	0	41,44,54	0.38	0
18	CLA	3a	306	14	45,53,73	1.51	7 (15%)	52,89,113	1.18	4 (7%)
18	CLA	B	820	1	45,53,73	1.54	7 (15%)	52,89,113	1.11	4 (7%)
20	BCR	F	301	-	41,41,41	1.71	8 (19%)	56,56,56	1.82	16 (28%)
18	CLA	B	801	1	65,73,73	1.31	7 (10%)	76,113,113	0.83	4 (5%)
18	CLA	B	824	-	50,58,73	1.42	6 (12%)	58,95,113	1.09	4 (6%)
29	CHL	5a	305	-	46,54,74	1.46	8 (17%)	49,90,114	1.18	5 (10%)
18	CLA	6a	310	-	45,53,73	1.54	7 (15%)	52,89,113	1.11	3 (5%)
19	PQN	a	843	-	34,34,34	0.36	0	42,45,45	0.61	1 (2%)
20	BCR	g	204	-	41,41,41	1.73	8 (19%)	56,56,56	1.74	13 (23%)
18	CLA	B	818	-	53,61,73	1.43	7 (13%)	61,98,113	1.04	3 (4%)
18	CLA	A	818	12	65,73,73	1.27	5 (7%)	76,113,113	1.03	4 (5%)
18	CLA	B	852	-	65,73,73	1.24	7 (10%)	76,113,113	0.97	6 (7%)
18	CLA	b	831	1	65,73,73	1.26	7 (10%)	76,113,113	1.12	5 (6%)
25	LUT	5b	316	-	42,43,43	1.62	8 (19%)	51,60,60	1.61	11 (21%)
18	CLA	2b	308	13	55,63,73	1.34	6 (10%)	64,101,113	1.04	4 (6%)
29	CHL	5b	301	15	46,54,74	1.50	8 (17%)	49,90,114	1.11	4 (8%)
18	CLA	6b	307	-	49,57,73	1.46	7 (14%)	55,93,113	1.09	5 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	b	830	1	60,68,73	1.31	7 (11%)	70,107,113	1.16	6 (8%)
18	CLA	B	802	-	65,73,73	1.22	6 (9%)	76,113,113	0.99	5 (6%)
18	CLA	3b	314	-	45,53,73	1.51	6 (13%)	52,89,113	1.11	4 (7%)
20	BCR	a	849	-	41,41,41	1.74	8 (19%)	56,56,56	1.77	14 (25%)
18	CLA	2a	307	13	45,53,73	1.51	6 (13%)	52,89,113	1.12	3 (5%)
18	CLA	3b	304	-	45,53,73	1.48	7 (15%)	52,89,113	1.21	5 (9%)
18	CLA	5a	303	15	50,58,73	1.51	7 (14%)	58,95,113	1.04	4 (6%)
20	BCR	B	846	-	41,41,41	1.72	8 (19%)	56,56,56	1.72	13 (23%)
18	CLA	a	803	12	61,69,73	1.29	6 (9%)	71,108,113	1.03	4 (5%)
18	CLA	a	840	12	65,73,73	1.29	7 (10%)	76,113,113	0.91	3 (3%)
18	CLA	a	814	12	42,50,73	1.52	7 (16%)	48,85,113	1.26	5 (10%)
18	CLA	B	831	1	65,73,73	1.26	7 (10%)	76,113,113	1.12	5 (6%)
18	CLA	6b	316	16	45,53,73	1.51	6 (13%)	52,89,113	1.14	4 (7%)
27	LHG	a	845	-	48,48,48	0.27	0	51,54,54	0.35	0
29	CHL	5a	301	15	46,54,74	1.50	8 (17%)	49,90,114	1.11	4 (8%)
18	CLA	a	841	-	65,73,73	1.26	8 (12%)	76,113,113	0.98	4 (5%)
18	CLA	3b	309	14	50,58,73	1.40	7 (14%)	58,95,113	1.11	4 (6%)
18	CLA	L	302	10	60,68,73	1.30	7 (11%)	70,107,113	0.97	4 (5%)
18	CLA	A	803	12	61,69,73	1.29	6 (9%)	71,108,113	1.03	4 (5%)
18	CLA	B	811	1	45,53,73	1.53	6 (13%)	52,89,113	1.11	4 (7%)
18	CLA	F	305	-	60,68,73	1.31	7 (11%)	70,107,113	1.11	8 (11%)
29	CHL	5b	307	-	46,54,74	1.36	7 (15%)	49,90,114	1.31	6 (12%)
18	CLA	a	813	12	50,58,73	1.39	5 (10%)	58,95,113	1.26	6 (10%)
18	CLA	5a	304	-	45,53,73	1.60	8 (17%)	52,89,113	1.13	4 (7%)
25	LUT	5a	316	-	42,43,43	1.62	8 (19%)	51,60,60	1.61	11 (21%)
18	CLA	2a	303	-	45,53,73	1.53	7 (15%)	52,89,113	1.17	5 (9%)
29	CHL	2b	305	-	43,51,74	1.48	8 (18%)	45,86,114	1.21	5 (11%)
18	CLA	A	812	12	65,73,73	1.25	7 (10%)	76,113,113	0.98	4 (5%)
20	BCR	B	845	-	41,41,41	1.73	9 (21%)	56,56,56	1.81	16 (28%)
18	CLA	3a	303	14	50,58,73	1.53	7 (14%)	58,95,113	1.11	5 (8%)
20	BCR	j	102	-	41,41,41	1.79	8 (19%)	56,56,56	2.20	21 (37%)
18	CLA	A	817	12	57,65,73	1.37	7 (12%)	66,103,113	0.98	3 (4%)
18	CLA	A	831	12	50,58,73	1.44	7 (14%)	58,95,113	1.06	5 (8%)
21	DGD	b	847	-	60,60,67	0.56	0	74,74,81	0.75	2 (2%)
20	BCR	M	101	-	41,41,41	1.74	8 (19%)	56,56,56	1.74	14 (25%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	B	830	1	60,68,73	1.31	7 (11%)	70,107,113	1.16	6 (8%)
18	CLA	A	842	-	45,53,73	1.50	8 (17%)	52,89,113	1.23	5 (9%)
25	LUT	3b	316	-	42,43,43	1.60	8 (19%)	51,60,60	1.83	15 (29%)
20	BCR	b	842	-	41,41,41	1.73	8 (19%)	56,56,56	1.86	18 (32%)
18	CLA	f	303	5	41,49,73	1.62	7 (17%)	47,84,113	1.22	4 (8%)
18	CLA	b	807	1	61,69,73	1.27	7 (11%)	71,108,113	1.04	4 (5%)
18	CLA	G	202	6	50,58,73	1.48	7 (14%)	58,95,113	1.08	4 (6%)
18	CLA	b	854	-	65,73,73	1.32	8 (12%)	76,113,113	1.00	5 (6%)
18	CLA	a	839	12	65,73,73	1.27	7 (10%)	76,113,113	0.98	4 (5%)
18	CLA	6a	311	16	45,53,73	1.50	6 (13%)	52,89,113	1.14	3 (5%)
20	BCR	A	851	-	41,41,41	1.76	8 (19%)	56,56,56	1.82	14 (25%)
18	CLA	B	808	1	47,55,73	1.48	7 (14%)	54,91,113	1.21	5 (9%)
18	CLA	A	820	-	65,73,73	1.29	6 (9%)	76,113,113	0.97	3 (3%)
18	CLA	A	801	12	52,60,73	1.40	6 (11%)	60,97,113	1.08	4 (6%)
18	CLA	a	820	-	65,73,73	1.30	6 (9%)	76,113,113	0.97	3 (3%)
18	CLA	j	101	-	45,53,73	1.53	7 (15%)	52,89,113	1.13	4 (7%)
18	CLA	b	825	1	65,73,73	1.33	7 (10%)	76,113,113	0.92	4 (5%)
18	CLA	5a	310	-	45,53,73	1.54	7 (15%)	52,89,113	1.12	3 (5%)
18	CLA	B	817	1	65,73,73	1.22	6 (9%)	76,113,113	1.01	5 (6%)
23	LMG	i	201	-	31,31,55	0.59	0	39,39,63	0.84	1 (2%)
29	CHL	2a	313	13	46,54,74	1.47	8 (17%)	49,90,114	1.11	4 (8%)
29	CHL	3a	315	14	46,54,74	1.53	8 (17%)	49,90,114	1.08	3 (6%)
18	CLA	a	835	12	45,53,73	1.49	6 (13%)	52,89,113	1.20	4 (7%)
20	BCR	b	846	-	41,41,41	1.71	8 (19%)	56,56,56	1.71	13 (23%)
18	CLA	3b	306	14	45,53,73	1.51	7 (15%)	52,89,113	1.18	4 (7%)
18	CLA	6b	305	16	61,69,73	1.26	6 (9%)	71,108,113	1.09	5 (7%)
20	BCR	B	844	-	41,41,41	1.72	8 (19%)	56,56,56	1.87	17 (30%)
18	CLA	3b	312	14	55,63,73	1.37	6 (10%)	64,101,113	1.14	6 (9%)
18	CLA	F	302	-	45,53,73	1.53	6 (13%)	52,89,113	1.11	3 (5%)
18	CLA	a	805	12	65,73,73	1.22	6 (9%)	76,113,113	1.04	5 (6%)
18	CLA	k	201	17	44,52,73	1.59	8 (18%)	55,88,113	1.13	4 (7%)
25	LUT	6b	320	-	42,43,43	1.65	8 (19%)	51,60,60	1.74	13 (25%)
29	CHL	3b	315	14	46,54,74	1.53	8 (17%)	49,90,114	1.08	3 (6%)
18	CLA	l	301	10	45,53,73	1.54	7 (15%)	52,89,113	1.22	5 (9%)
18	CLA	a	809	12	55,63,73	1.40	7 (12%)	64,101,113	1.19	6 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	b	823	-	65,73,73	1.27	5 (7%)	76,113,113	1.07	5 (6%)
29	CHL	5b	314	15	43,51,74	1.53	8 (18%)	45,86,114	1.25	5 (11%)
18	CLA	5b	304	-	45,53,73	1.60	8 (17%)	52,89,113	1.13	4 (7%)
18	CLA	A	805	12	65,73,73	1.22	6 (9%)	76,113,113	1.03	5 (6%)
18	CLA	a	812	12	65,73,73	1.25	7 (10%)	76,113,113	0.98	4 (5%)
18	CLA	b	828	1	55,63,73	1.41	7 (12%)	64,101,113	1.06	4 (6%)
22	LFA	m	102	-	11,11,19	0.09	0	10,10,18	0.12	0
23	LMG	J	103	-	30,30,55	0.63	0	38,38,63	0.75	0
20	BCR	A	849	-	41,41,41	1.75	8 (19%)	56,56,56	1.77	14 (25%)
25	LUT	5a	317	-	42,43,43	1.65	8 (19%)	51,60,60	1.84	13 (25%)
18	CLA	5b	308	15	45,53,73	1.48	6 (13%)	52,89,113	1.19	4 (7%)
18	CLA	B	832	1	60,68,73	1.31	7 (11%)	70,107,113	1.15	6 (8%)
18	CLA	A	839	12	65,73,73	1.27	7 (10%)	76,113,113	0.98	4 (5%)
18	CLA	a	853	-	51,59,73	1.42	6 (11%)	59,96,113	1.08	5 (8%)
25	LUT	2a	314	-	42,43,43	1.64	7 (16%)	51,60,60	2.31	16 (31%)
20	BCR	L	304	-	41,41,41	1.74	9 (21%)	56,56,56	1.96	16 (28%)
19	PQN	b	841	-	34,34,34	0.43	0	42,45,45	0.67	0
29	CHL	2b	306	-	46,54,74	1.48	8 (17%)	49,90,114	1.10	5 (10%)
18	CLA	B	806	1	60,68,73	1.32	7 (11%)	70,107,113	1.05	4 (5%)
18	CLA	3a	309	14	50,58,73	1.40	7 (14%)	58,95,113	1.11	4 (6%)
18	CLA	B	810	1	60,68,73	1.33	7 (11%)	70,107,113	1.01	4 (5%)
18	CLA	5b	315	15	46,54,73	1.54	7 (15%)	53,90,113	1.06	3 (5%)
18	CLA	a	842	-	45,53,73	1.50	8 (17%)	52,89,113	1.23	5 (9%)
18	CLA	b	827	1	60,68,73	1.32	7 (11%)	69,106,113	1.02	5 (7%)
18	CLA	b	829	1	45,53,73	1.54	6 (13%)	52,89,113	1.17	4 (7%)
18	CLA	6a	316	16	45,53,73	1.51	6 (13%)	52,89,113	1.14	4 (7%)
27	LHG	5b	318	-	31,31,48	0.32	0	34,37,54	0.41	0
18	CLA	A	808	12	65,73,73	1.19	6 (9%)	76,113,113	1.00	5 (6%)
18	CLA	g	202	6	50,58,73	1.48	7 (14%)	58,95,113	1.08	4 (6%)
20	BCR	b	843	-	41,41,41	1.78	8 (19%)	56,56,56	2.19	13 (23%)
18	CLA	a	832	12	65,73,73	1.30	7 (10%)	76,113,113	0.94	3 (3%)
18	CLA	A	823	12	65,73,73	1.29	7 (10%)	76,113,113	1.05	5 (6%)
18	CLA	a	817	12	57,65,73	1.37	7 (12%)	66,103,113	0.98	3 (4%)
18	CLA	5a	312	15	52,60,73	1.40	6 (11%)	60,97,113	1.21	6 (10%)
18	CLA	B	828	1	55,63,73	1.41	7 (12%)	64,101,113	1.06	4 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	CLA	b	813	1	55,63,73	1.35	7 (12%)	64,101,113	1.04	4 (6%)
18	CLA	A	809	12	55,63,73	1.40	7 (12%)	64,101,113	1.19	6 (9%)
18	CLA	A	840	12	65,73,73	1.29	7 (10%)	76,113,113	0.91	3 (3%)
18	CLA	a	819	12	45,53,73	1.53	6 (13%)	52,89,113	1.07	4 (7%)
18	CLA	2b	309	27	45,53,73	1.53	7 (15%)	52,89,113	1.04	3 (5%)
18	CLA	6a	307	-	49,57,73	1.47	7 (14%)	55,93,113	1.10	5 (9%)
18	CLA	A	806	12	65,73,73	1.26	7 (10%)	76,113,113	0.97	4 (5%)
27	LHG	2b	316	18	31,31,48	0.33	0	34,37,54	0.45	0
20	BCR	A	848	-	41,41,41	1.73	8 (19%)	56,56,56	1.77	15 (26%)
18	CLA	a	821	12	45,53,73	1.53	7 (15%)	52,89,113	1.11	4 (7%)
18	CLA	a	834	12	60,68,73	1.31	6 (10%)	70,107,113	0.96	3 (4%)
18	CLA	6a	305	16	61,69,73	1.27	6 (9%)	71,108,113	1.09	5 (7%)
20	BCR	l	304	-	41,41,41	1.75	9 (21%)	56,56,56	1.96	16 (28%)
18	CLA	l	303	-	42,50,73	1.55	7 (16%)	48,85,113	1.26	5 (10%)
23	LMG	B	850	-	42,42,55	0.54	0	50,50,63	0.68	0
18	CLA	a	808	12	65,73,73	1.19	6 (9%)	76,113,113	1.00	5 (6%)
18	CLA	b	814	1	50,58,73	1.45	6 (12%)	58,95,113	1.05	3 (5%)
18	CLA	b	826	1	58,66,73	1.33	7 (12%)	67,104,113	1.02	3 (4%)
20	BCR	k	202	-	41,41,41	1.71	8 (19%)	56,56,56	1.83	16 (28%)
20	BCR	K	202	-	41,41,41	1.72	8 (19%)	56,56,56	1.84	16 (28%)
18	CLA	f	305	-	60,68,73	1.31	7 (11%)	70,107,113	1.12	8 (11%)
18	CLA	A	827	12	65,73,73	1.28	7 (10%)	76,113,113	1.02	4 (5%)
18	CLA	a	827	12	65,73,73	1.27	7 (10%)	76,113,113	1.03	4 (5%)
18	CLA	2a	312	13	45,53,73	1.54	7 (15%)	52,89,113	1.16	5 (9%)

In the following table, the Chirals column lists the number of chiral outliers, the number of chiral centers analysed, the number of these observed in the model and the number defined in the Chemical Component Dictionary. Similar counts are reported in the Torsion and Rings columns. '-' means no outliers of that kind were identified.

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	a	836	12	1/1/12/20	4/21/99/115	-
18	CLA	b	833	1	1/1/15/20	7/37/115/115	-
18	CLA	A	837	12	1/1/13/20	3/25/103/115	-
18	CLA	A	828	12	-	4/37/115/115	-
18	CLA	b	820	1	-	1/13/91/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	2a	302	13	1/1/11/20	4/13/91/115	-
18	CLA	A	841	-	1/1/15/20	7/37/115/115	-
18	CLA	2b	301	13	1/1/13/20	5/25/103/115	-
18	CLA	B	814	1	-	1/19/97/115	-
25	LUT	j	105	-	-	9/29/67/67	0/2/2/2
18	CLA	l	302	10	-	1/31/109/115	-
18	CLA	b	819	1	1/1/10/20	1/11/89/115	-
18	CLA	b	835	1	1/1/12/20	1/19/97/115	-
22	LFA	M	102	-	-	0/9/9/17	-
18	CLA	A	810	12	-	3/37/115/115	-
20	BCR	a	848	-	-	3/29/63/63	0/2/2/2
18	CLA	a	815	-	-	5/13/91/115	-
25	LUT	6a	320	-	-	3/29/67/67	0/2/2/2
18	CLA	b	802	-	1/1/15/20	3/37/115/115	-
18	CLA	b	838	-	-	6/37/115/115	-
18	CLA	a	810	12	-	3/37/115/115	-
18	CLA	b	804	1	1/1/15/20	4/37/115/115	-
18	CLA	5b	302	15	-	7/27/105/115	-
18	CLA	2b	311	13	-	4/13/91/115	-
18	CLA	B	822	1	-	4/13/91/115	-
29	CHL	2a	305	-	3/3/15/26	1/12/110/137	-
18	CLA	b	801	1	1/1/15/20	9/37/115/115	-
20	BCR	G	201	-	-	4/29/63/63	0/2/2/2
18	CLA	6b	311	16	1/1/11/20	0/13/91/115	-
23	LMG	j	103	-	-	7/25/45/70	0/1/1/1
18	CLA	6b	310	-	1/1/11/20	3/13/91/115	-
18	CLA	6a	314	16	1/1/11/20	2/13/91/115	-
25	LUT	6b	318	-	-	3/29/67/67	0/2/2/2
18	CLA	6b	315	16	1/1/13/20	2/25/103/115	-
23	LMG	I	201	-	-	16/26/46/70	0/1/1/1
24	SF4	c	101	2	-	-	0/6/5/5
18	CLA	2a	310	-	1/1/11/20	3/13/91/115	-
20	BCR	I	202	-	-	3/29/63/63	0/2/2/2
18	CLA	G	203	6	1/1/11/20	3/13/91/115	-
18	CLA	A	833	12	-	5/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	BCR	a	851	-	-	8/29/63/63	0/2/2/2
18	CLA	A	822	12	1/1/11/20	2/13/91/115	-
29	CHL	6a	309	16	3/3/15/26	2/8/106/137	-
18	CLA	3a	302	14	-	3/25/103/115	-
28	LMU	6b	302	-	-	8/21/61/61	0/2/2/2
18	CLA	B	805	1	1/1/15/20	10/37/115/115	-
18	CLA	a	830	12	-	6/19/97/115	-
18	CLA	b	809	1	1/1/15/20	9/37/115/115	-
20	BCR	B	842	-	-	2/29/63/63	0/2/2/2
18	CLA	b	840	27	1/1/15/20	13/37/115/115	-
18	CLA	3b	305	14	-	3/15/93/115	-
20	BCR	J	102	-	-	6/29/63/63	0/2/2/2
25	LUT	3a	316	-	-	0/29/67/67	0/2/2/2
18	CLA	6b	312	16	-	4/25/103/115	-
20	BCR	A	847	-	-	3/29/63/63	0/2/2/2
18	CLA	B	809	1	1/1/15/20	9/37/115/115	-
18	CLA	5a	315	15	-	4/15/93/115	-
18	CLA	3a	311	14	1/1/10/20	3/11/89/115	-
18	CLA	b	817	1	1/1/15/20	4/37/115/115	-
18	CLA	2b	303	-	1/1/11/20	2/13/91/115	-
18	CLA	5a	302	15	-	7/27/105/115	-
18	CLA	B	807	1	1/1/14/20	0/33/111/115	-
20	BCR	f	301	-	-	3/29/63/63	0/2/2/2
18	CLA	b	853	-	1/1/15/20	4/37/115/115	-
18	CLA	B	826	1	1/1/13/20	1/29/107/115	-
18	CLA	A	835	12	1/1/11/20	4/13/91/115	-
25	LUT	J	105	-	-	9/29/67/67	0/2/2/2
29	CHL	5a	314	15	3/3/15/26	3/12/110/137	-
18	CLA	a	804	12	1/1/13/20	4/25/103/115	-
18	CLA	B	825	1	1/1/15/20	0/37/115/115	-
18	CLA	b	834	-	1/1/11/20	1/13/91/115	-
18	CLA	a	811	12	1/1/11/20	4/13/91/115	-
18	CLA	g	203	6	1/1/11/20	3/13/91/115	-
18	CLA	a	801	12	-	3/22/100/115	-
19	PQN	B	841	-	-	0/23/43/43	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	2b	302	13	1/1/11/20	4/13/91/115	-
18	CLA	b	808	1	1/1/11/20	2/16/94/115	-
23	LMG	5b	319	-	-	5/30/50/70	0/1/1/1
25	LUT	6a	318	-	-	3/29/67/67	0/2/2/2
25	LUT	2b	315	-	-	4/29/67/67	0/2/2/2
18	CLA	A	838	12	1/1/12/20	2/19/97/115	-
28	LMU	6b	303	-	-	4/19/59/61	0/2/2/2
18	CLA	A	804	12	1/1/13/20	4/25/103/115	-
18	CLA	3a	313	14	1/1/10/20	1/10/88/115	-
27	LHG	A	846	-	-	13/38/38/53	-
18	CLA	3b	308	14	1/1/11/20	0/13/91/115	-
20	BCR	B	851	-	-	8/29/63/63	0/2/2/2
18	CLA	B	854	-	1/1/15/20	7/37/115/115	-
18	CLA	b	839	1	-	3/37/115/115	-
18	CLA	b	832	1	-	9/31/109/115	-
29	CHL	5b	306	-	3/3/15/26	2/12/110/137	-
22	LFA	B	849	-	-	1/9/9/17	-
18	CLA	3b	313	14	1/1/10/20	1/10/88/115	-
18	CLA	a	816	12	-	6/31/109/115	-
18	CLA	6a	308	16	1/1/11/20	2/13/91/115	-
18	CLA	b	837	1	1/1/11/20	0/16/94/115	-
18	CLA	3b	310	-	1/1/11/20	4/13/91/115	-
18	CLA	B	803	1	1/1/11/20	2/13/91/115	-
18	CLA	F	303	5	1/1/10/20	2/8/86/115	-
18	CLA	5b	310	-	1/1/11/20	5/13/91/115	-
18	CLA	B	819	1	1/1/10/20	1/11/89/115	-
18	CLA	A	821	12	-	2/13/91/115	-
18	CLA	A	836	12	1/1/12/20	4/21/99/115	-
18	CLA	3b	303	14	1/1/12/20	4/19/97/115	-
20	BCR	i	202	-	-	3/29/63/63	0/2/2/2
28	LMU	6a	302	-	-	8/21/61/61	0/2/2/2
24	SF4	A	844	12,1	-	-	0/6/5/5
18	CLA	5a	308	15	1/1/11/20	2/13/91/115	-
18	CLA	2b	310	-	1/1/11/20	3/13/91/115	-
25	LUT	3a	317	-	-	4/29/67/67	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	B	853	-	1/1/15/20	4/37/115/115	-
25	LUT	6a	319	-	-	14/29/67/67	0/2/2/2
18	CLA	6b	313	-	1/1/11/20	4/13/91/115	-
18	CLA	3b	302	14	-	3/25/103/115	-
29	CHL	3a	307	-	3/3/16/26	3/15/113/137	-
28	LMU	A	852	-	-	3/21/61/61	0/2/2/2
18	CLA	A	824	-	1/1/15/20	4/37/115/115	-
18	CLA	5a	313	15	1/1/11/20	1/13/91/115	-
18	CLA	b	818	-	-	0/23/101/115	-
18	CLA	J	101	-	1/1/11/20	3/13/91/115	-
18	CLA	3a	314	-	1/1/11/20	5/13/91/115	-
18	CLA	6a	315	16	1/1/13/20	2/25/103/115	-
18	CLA	B	840	27	1/1/15/20	13/37/115/115	-
25	LUT	2a	315	-	-	4/29/67/67	0/2/2/2
18	CLA	b	812	1	1/1/15/20	6/37/115/115	-
20	BCR	A	850	-	-	0/29/63/63	0/2/2/2
18	CLA	b	816	1	1/1/14/20	5/34/112/115	-
20	BCR	b	848	-	-	6/29/63/63	0/2/2/2
18	CLA	b	815	1	-	2/28/106/115	-
18	CLA	A	825	-	1/1/13/20	1/25/103/115	-
18	CLA	2a	308	13	1/1/13/20	8/25/103/115	-
28	LMU	6a	303	-	-	4/19/59/61	0/2/2/2
27	LHG	a	846	-	-	13/38/38/53	-
20	BCR	a	847	-	-	3/29/63/63	0/2/2/2
18	CLA	B	815	1	-	2/28/106/115	-
18	CLA	A	834	12	-	4/31/109/115	-
28	LMU	a	852	-	-	3/21/61/61	0/2/2/2
18	CLA	3a	312	14	-	5/25/103/115	-
18	CLA	6b	306	16	1/1/13/20	4/25/103/115	-
29	CHL	3a	301	13	3/3/16/26	0/15/113/137	-
18	CLA	B	829	1	-	2/13/91/115	-
18	CLA	A	829	12	-	5/37/115/115	-
18	CLA	a	806	12	1/1/15/20	10/37/115/115	-
29	CHL	2b	304	-	3/3/16/26	2/15/113/137	-
27	LHG	6b	301	18	-	12/43/43/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	SF4	c	102	2	-	-	0/6/5/5
18	CLA	f	302	-	1/1/11/20	2/13/91/115	-
18	CLA	B	833	1	1/1/15/20	7/37/115/115	-
18	CLA	A	830	12	-	6/19/97/115	-
18	CLA	3a	305	14	-	3/15/93/115	-
23	LMG	b	850	-	-	18/37/57/70	0/1/1/1
18	CLA	b	811	1	-	3/13/91/115	-
18	CLA	5b	313	15	1/1/11/20	1/13/91/115	-
18	CLA	B	837	1	1/1/11/20	0/16/94/115	-
18	CLA	B	834	-	1/1/11/20	1/13/91/115	-
18	CLA	2b	312	13	1/1/11/20	2/13/91/115	-
18	CLA	K	201	17	1/1/11/20	3/13/89/115	-
18	CLA	b	822	1	-	4/13/91/115	-
27	LHG	5a	320	-	-	5/41/41/53	-
18	CLA	a	818	12	1/1/15/20	4/37/115/115	-
18	CLA	B	827	1	-	0/31/109/115	-
18	CLA	6a	313	-	1/1/11/20	4/13/91/115	-
20	BCR	g	201	-	-	4/29/63/63	0/2/2/2
18	CLA	a	825	-	1/1/13/20	1/25/103/115	-
29	CHL	6b	309	16	3/3/15/26	2/8/106/137	-
18	CLA	L	303	-	1/1/10/20	1/10/88/115	-
18	CLA	b	821	1	1/1/13/20	5/25/103/115	-
18	CLA	b	836	1	1/1/15/20	7/37/115/115	-
23	LMG	5a	319	-	-	5/30/50/70	0/1/1/1
24	SF4	a	844	12,1	-	-	0/6/5/5
18	CLA	6b	308	16	1/1/11/20	2/13/91/115	-
18	CLA	A	815	-	-	5/13/91/115	-
18	CLA	B	835	1	1/1/12/20	1/19/97/115	-
29	CHL	5b	305	-	3/3/16/26	3/15/113/137	-
18	CLA	5b	303	15	1/1/12/20	6/19/97/115	-
29	CHL	5a	306	-	3/3/15/26	2/12/110/137	-
20	BCR	f	304	-	-	5/29/63/63	0/2/2/2
20	BCR	B	848	-	-	6/29/63/63	0/2/2/2
18	CLA	a	823	12	-	3/37/115/115	-
18	CLA	B	804	1	1/1/15/20	4/37/115/115	-
18	CLA	6b	317	16	1/1/11/20	5/13/91/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	BCR	F	304	-	-	5/29/63/63	0/2/2/2
18	CLA	A	811	12	1/1/11/20	4/13/91/115	-
29	CHL	5a	307	-	2/2/16/26	7/15/113/137	-
18	CLA	A	826	12	1/1/15/20	3/37/115/115	-
18	CLA	2b	307	13	1/1/11/20	2/13/91/115	-
18	CLA	a	829	12	-	5/37/115/115	-
18	CLA	6a	306	16	1/1/13/20	4/25/103/115	-
18	CLA	5b	309	15	-	2/21/99/115	-
18	CLA	3a	304	-	1/1/11/20	0/13/91/115	-
18	CLA	2a	311	13	-	3/13/91/115	-
18	CLA	a	833	12	-	5/37/115/115	-
25	LUT	3b	317	-	-	4/29/67/67	0/2/2/2
18	CLA	6b	314	16	1/1/11/20	2/13/91/115	-
19	PQN	A	843	-	-	4/23/43/43	0/2/2/2
20	BCR	b	845	-	-	4/29/63/63	0/2/2/2
27	LHG	5a	318	-	-	8/36/36/53	-
29	CHL	3b	301	13	3/3/16/26	0/15/113/137	-
29	CHL	2a	306	-	2/2/16/26	9/15/113/137	-
18	CLA	5b	311	15	1/1/11/20	2/11/89/115	-
26	CL0	A	802	12	-	6/37/135/135	-
18	CLA	a	822	12	1/1/11/20	2/13/91/115	-
18	CLA	B	812	1	1/1/15/20	6/37/115/115	-
27	LHG	5b	320	-	-	5/41/41/53	-
18	CLA	a	838	12	1/1/12/20	2/19/97/115	-
18	CLA	3a	308	14	1/1/11/20	0/13/91/115	-
18	CLA	a	837	12	1/1/13/20	3/25/103/115	-
18	CLA	A	819	12	-	1/13/91/115	-
18	CLA	B	816	1	1/1/14/20	5/34/112/115	-
18	CLA	5a	309	15	-	2/21/99/115	-
18	CLA	5b	312	15	-	5/22/100/115	-
18	CLA	B	821	1	1/1/13/20	5/25/103/115	-
18	CLA	A	807	12	1/1/11/20	1/17/95/115	-
22	LFA	b	849	-	-	1/9/9/17	-
25	LUT	6b	319	-	-	14/29/67/67	0/2/2/2
29	CHL	2b	313	13	3/3/16/26	6/15/113/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	2a	301	13	1/1/13/20	5/25/103/115	-
18	CLA	5a	311	15	1/1/11/20	2/11/89/115	-
20	BCR	b	851	-	-	8/29/63/63	0/2/2/2
18	CLA	b	806	1	-	2/31/109/115	-
18	CLA	b	852	-	-	5/37/115/115	-
18	CLA	B	823	-	1/1/15/20	9/37/115/115	-
27	LHG	A	845	-	-	5/53/53/53	-
18	CLA	A	853	-	-	0/21/99/115	-
18	CLA	B	836	1	1/1/15/20	7/37/115/115	-
18	CLA	L	301	10	1/1/11/20	5/13/91/115	-
18	CLA	6a	317	16	1/1/11/20	5/13/91/115	-
18	CLA	A	813	12	1/1/12/20	0/19/97/115	-
18	CLA	A	816	12	-	6/31/109/115	-
24	SF4	C	102	2	-	-	0/6/5/5
27	LHG	2a	316	18	-	5/36/36/53	-
23	LMG	J	104	-	-	7/36/56/70	0/1/1/1
18	CLA	2a	309	27	1/1/11/20	4/13/91/115	-
18	CLA	a	807	12	1/1/11/20	1/17/95/115	-
29	CHL	3b	307	-	3/3/16/26	3/15/113/137	-
18	CLA	b	805	1	1/1/15/20	10/37/115/115	-
25	LUT	2b	314	-	-	8/29/67/67	0/2/2/2
18	CLA	b	803	1	1/1/11/20	2/13/91/115	-
18	CLA	B	839	1	-	3/37/115/115	-
20	BCR	a	850	-	-	0/29/63/63	0/2/2/2
18	CLA	a	831	12	1/1/12/20	0/19/97/115	-
18	CLA	B	838	-	-	6/37/115/115	-
18	CLA	b	810	1	-	6/31/109/115	-
20	BCR	G	204	-	-	2/29/63/63	0/2/2/2
26	CL0	a	802	12	-	6/37/135/135	-
21	DGD	B	847	-	-	19/48/88/95	0/2/2/2
18	CLA	A	814	12	1/1/10/20	1/10/88/115	-
25	LUT	5b	317	-	-	2/29/67/67	0/2/2/2
18	CLA	B	813	1	-	1/25/103/115	-
18	CLA	A	832	12	1/1/15/20	3/37/115/115	-
18	CLA	3a	310	-	1/1/11/20	4/13/91/115	-
20	BCR	B	843	-	-	11/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	BCR	b	844	-	-	3/29/63/63	0/2/2/2
20	BCR	m	101	-	-	4/29/63/63	0/2/2/2
24	SF4	C	101	2	-	-	0/6/5/5
18	CLA	a	826	12	1/1/15/20	3/37/115/115	-
23	LMG	j	104	-	-	7/36/56/70	0/1/1/1
29	CHL	6b	304	16	3/3/16/26	5/15/113/137	-
18	CLA	3b	311	14	1/1/10/20	3/11/89/115	-
18	CLA	b	824	-	1/1/12/20	2/19/97/115	-
29	CHL	6a	304	16	3/3/16/26	5/15/113/137	-
29	CHL	2a	304	-	3/3/16/26	2/15/113/137	-
18	CLA	a	824	-	1/1/15/20	4/37/115/115	-
18	CLA	6a	312	16	-	4/25/103/115	-
18	CLA	a	828	12	-	4/37/115/115	-
27	LHG	6a	301	18	-	12/43/43/53	-
18	CLA	3a	306	14	1/1/11/20	2/13/91/115	-
18	CLA	B	820	1	-	1/13/91/115	-
20	BCR	F	301	-	-	3/29/63/63	0/2/2/2
18	CLA	B	801	1	1/1/15/20	9/37/115/115	-
18	CLA	B	824	-	1/1/12/20	2/19/97/115	-
29	CHL	5a	305	-	3/3/16/26	3/15/113/137	-
18	CLA	6a	310	-	1/1/11/20	3/13/91/115	-
19	PQN	a	843	-	-	4/23/43/43	0/2/2/2
20	BCR	g	204	-	-	2/29/63/63	0/2/2/2
18	CLA	B	818	-	-	0/23/101/115	-
18	CLA	A	818	12	1/1/15/20	4/37/115/115	-
18	CLA	B	852	-	-	5/37/115/115	-
18	CLA	b	831	1	1/1/15/20	4/37/115/115	-
25	LUT	5b	316	-	-	0/29/67/67	0/2/2/2
18	CLA	2b	308	13	1/1/13/20	8/25/103/115	-
29	CHL	5b	301	15	3/3/16/26	3/15/113/137	-
18	CLA	6b	307	-	-	3/18/96/115	-
18	CLA	b	830	1	1/1/14/20	11/31/109/115	-
18	CLA	B	802	-	1/1/15/20	3/37/115/115	-
18	CLA	3b	314	-	1/1/11/20	5/13/91/115	-
20	BCR	a	849	-	-	3/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	2a	307	13	1/1/11/20	2/13/91/115	-
18	CLA	3b	304	-	1/1/11/20	0/13/91/115	-
18	CLA	5a	303	15	1/1/12/20	6/19/97/115	-
20	BCR	B	846	-	-	1/29/63/63	0/2/2/2
18	CLA	a	803	12	1/1/14/20	4/33/111/115	-
18	CLA	a	840	12	1/1/15/20	1/37/115/115	-
18	CLA	a	814	12	1/1/10/20	1/10/88/115	-
18	CLA	B	831	1	1/1/15/20	4/37/115/115	-
18	CLA	6b	316	16	-	4/13/91/115	-
27	LHG	a	845	-	-	5/53/53/53	-
29	CHL	5a	301	15	3/3/16/26	3/15/113/137	-
18	CLA	a	841	-	1/1/15/20	7/37/115/115	-
18	CLA	3b	309	14	-	1/19/97/115	-
18	CLA	L	302	10	-	1/31/109/115	-
18	CLA	A	803	12	1/1/14/20	4/33/111/115	-
18	CLA	B	811	1	-	3/13/91/115	-
18	CLA	F	305	-	1/1/14/20	2/31/109/115	-
29	CHL	5b	307	-	2/2/16/26	7/15/113/137	-
18	CLA	a	813	12	1/1/12/20	0/19/97/115	-
18	CLA	5a	304	-	-	2/13/91/115	-
25	LUT	5a	316	-	-	0/29/67/67	0/2/2/2
18	CLA	2a	303	-	1/1/11/20	2/13/91/115	-
29	CHL	2b	305	-	3/3/15/26	1/12/110/137	-
18	CLA	A	812	12	1/1/15/20	6/37/115/115	-
20	BCR	B	845	-	-	4/29/63/63	0/2/2/2
18	CLA	3a	303	14	1/1/12/20	4/19/97/115	-
20	BCR	j	102	-	-	6/29/63/63	0/2/2/2
18	CLA	A	817	12	1/1/13/20	8/28/106/115	-
18	CLA	A	831	12	1/1/12/20	0/19/97/115	-
21	DGD	b	847	-	-	19/48/88/95	0/2/2/2
20	BCR	M	101	-	-	4/29/63/63	0/2/2/2
18	CLA	B	830	1	1/1/14/20	11/31/109/115	-
18	CLA	A	842	-	-	6/13/91/115	-
25	LUT	3b	316	-	-	0/29/67/67	0/2/2/2
20	BCR	b	842	-	-	2/29/63/63	0/2/2/2
18	CLA	f	303	5	1/1/10/20	2/8/86/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	b	807	1	1/1/14/20	0/33/111/115	-
18	CLA	G	202	6	1/1/12/20	2/19/97/115	-
18	CLA	b	854	-	1/1/15/20	7/37/115/115	-
18	CLA	a	839	12	-	7/37/115/115	-
18	CLA	6a	311	16	1/1/11/20	0/13/91/115	-
20	BCR	A	851	-	-	8/29/63/63	0/2/2/2
18	CLA	B	808	1	1/1/11/20	2/16/94/115	-
18	CLA	A	820	-	-	4/37/115/115	-
18	CLA	A	801	12	-	3/22/100/115	-
18	CLA	a	820	-	-	4/37/115/115	-
18	CLA	j	101	-	1/1/11/20	3/13/91/115	-
18	CLA	b	825	1	1/1/15/20	0/37/115/115	-
18	CLA	5a	310	-	1/1/11/20	5/13/91/115	-
18	CLA	B	817	1	1/1/15/20	4/37/115/115	-
23	LMG	i	201	-	-	16/26/46/70	0/1/1/1
29	CHL	2a	313	13	3/3/16/26	6/15/113/137	-
29	CHL	3a	315	14	3/3/16/26	2/15/113/137	-
18	CLA	a	835	12	1/1/11/20	4/13/91/115	-
20	BCR	b	846	-	-	1/29/63/63	0/2/2/2
18	CLA	3b	306	14	1/1/11/20	2/13/91/115	-
18	CLA	6b	305	16	-	3/33/111/115	-
20	BCR	B	844	-	-	3/29/63/63	0/2/2/2
18	CLA	3b	312	14	-	5/25/103/115	-
18	CLA	F	302	-	1/1/11/20	2/13/91/115	-
18	CLA	a	805	12	1/1/15/20	7/37/115/115	-
18	CLA	k	201	17	1/1/11/20	3/13/89/115	-
25	LUT	6b	320	-	-	3/29/67/67	0/2/2/2
29	CHL	3b	315	14	3/3/16/26	2/15/113/137	-
18	CLA	l	301	10	1/1/11/20	5/13/91/115	-
18	CLA	a	809	12	1/1/13/20	5/25/103/115	-
18	CLA	b	823	-	1/1/15/20	9/37/115/115	-
29	CHL	5b	314	15	3/3/15/26	3/12/110/137	-
18	CLA	5b	304	-	-	2/13/91/115	-
18	CLA	A	805	12	1/1/15/20	7/37/115/115	-
18	CLA	a	812	12	1/1/15/20	6/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	b	828	1	-	4/25/103/115	-
22	LFA	m	102	-	-	0/9/9/17	-
23	LMG	J	103	-	-	7/25/45/70	0/1/1/1
20	BCR	A	849	-	-	3/29/63/63	0/2/2/2
25	LUT	5a	317	-	-	2/29/67/67	0/2/2/2
18	CLA	5b	308	15	1/1/11/20	2/13/91/115	-
18	CLA	B	832	1	-	9/31/109/115	-
18	CLA	A	839	12	-	7/37/115/115	-
18	CLA	a	853	-	-	0/21/99/115	-
25	LUT	2a	314	-	-	8/29/67/67	0/2/2/2
29	CHL	2b	306	-	2/2/16/26	9/15/113/137	-
19	PQN	b	841	-	-	0/23/43/43	0/2/2/2
20	BCR	L	304	-	-	2/29/63/63	0/2/2/2
18	CLA	B	806	1	-	2/31/109/115	-
18	CLA	3a	309	14	-	1/19/97/115	-
18	CLA	B	810	1	-	6/31/109/115	-
18	CLA	5b	315	15	-	4/15/93/115	-
18	CLA	a	842	-	-	6/13/91/115	-
18	CLA	b	827	1	-	0/31/109/115	-
18	CLA	b	829	1	-	2/13/91/115	-
18	CLA	6a	316	16	-	4/13/91/115	-
27	LHG	5b	318	-	-	8/36/36/53	-
18	CLA	A	808	12	1/1/15/20	3/37/115/115	-
18	CLA	g	202	6	1/1/12/20	2/19/97/115	-
20	BCR	b	843	-	-	11/29/63/63	0/2/2/2
18	CLA	a	832	12	1/1/15/20	3/37/115/115	-
18	CLA	A	823	12	-	3/37/115/115	-
18	CLA	a	817	12	1/1/13/20	8/28/106/115	-
18	CLA	5a	312	15	-	5/22/100/115	-
18	CLA	A	809	12	1/1/13/20	5/25/103/115	-
18	CLA	B	828	1	-	5/25/103/115	-
18	CLA	b	813	1	-	1/25/103/115	-
18	CLA	A	840	12	1/1/15/20	1/37/115/115	-
18	CLA	a	819	12	-	1/13/91/115	-
18	CLA	2b	309	27	1/1/11/20	4/13/91/115	-
18	CLA	6a	307	-	-	3/18/96/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	CLA	A	806	12	1/1/15/20	10/37/115/115	-
27	LHG	2b	316	18	-	5/36/36/53	-
20	BCR	A	848	-	-	3/29/63/63	0/2/2/2
18	CLA	a	821	12	-	2/13/91/115	-
18	CLA	a	834	12	-	4/31/109/115	-
18	CLA	6a	305	16	-	3/33/111/115	-
20	BCR	l	304	-	-	2/29/63/63	0/2/2/2
18	CLA	l	303	-	1/1/10/20	1/10/88/115	-
23	LMG	B	850	-	-	18/37/57/70	0/1/1/1
18	CLA	a	808	12	1/1/15/20	3/37/115/115	-
18	CLA	b	826	1	1/1/13/20	1/29/107/115	-
18	CLA	b	814	1	-	1/19/97/115	-
20	BCR	k	202	-	-	3/29/63/63	0/2/2/2
20	BCR	K	202	-	-	3/29/63/63	0/2/2/2
18	CLA	f	305	-	1/1/14/20	2/31/109/115	-
18	CLA	A	827	12	1/1/15/20	5/37/115/115	-
18	CLA	a	827	12	1/1/15/20	5/37/115/115	-
18	CLA	2a	312	13	1/1/11/20	2/13/91/115	-

The worst 5 of 2596 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	A	802	CL0	MG-NA	5.57	2.19	2.06
26	a	802	CL0	MG-NA	5.57	2.19	2.06
26	A	802	CL0	MG-NC	5.47	2.19	2.06
26	a	802	CL0	MG-NC	5.47	2.19	2.06
25	2a	315	LUT	C14-C13	5.41	1.43	1.35

The worst 5 of 2290 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
25	2a	314	LUT	C15-C35-C34	9.94	143.83	123.47
25	2b	314	LUT	C15-C35-C34	9.94	143.83	123.47
20	B	843	BCR	C15-C16-C17	9.84	143.64	123.47
20	b	843	BCR	C15-C16-C17	9.83	143.60	123.47
25	J	105	LUT	C35-C15-C14	9.66	143.26	123.47

5 of 262 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
18	B	801	CLA	ND
18	B	802	CLA	ND
18	B	803	CLA	ND
18	B	804	CLA	ND
18	B	805	CLA	ND

5 of 1644 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
18	B	801	CLA	CHA-CBD-CGD-O1D
18	B	801	CLA	CHA-CBD-CGD-O2D
18	B	808	CLA	CBA-CGA-O2A-C1
18	B	808	CLA	O1A-CGA-O2A-C1
18	B	816	CLA	C1A-C2A-CAA-CBA

There are no ring outliers.

360 monomers are involved in 665 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
18	b	833	CLA	1	0
18	A	837	CLA	1	0
18	A	828	CLA	1	0
18	b	820	CLA	1	0
18	2a	302	CLA	1	0
18	A	841	CLA	5	0
18	2b	301	CLA	1	0
18	B	814	CLA	2	0
25	j	105	LUT	3	0
18	l	302	CLA	2	0
18	b	819	CLA	2	0
18	b	835	CLA	1	0
18	A	810	CLA	3	0
20	a	848	BCR	4	0
18	a	815	CLA	2	0
25	6a	320	LUT	5	0
18	b	802	CLA	1	0
18	b	838	CLA	4	0
18	a	810	CLA	3	0
18	b	804	CLA	3	0
18	5b	302	CLA	1	0
18	2b	311	CLA	1	0
18	B	822	CLA	1	0
18	b	801	CLA	7	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	G	201	BCR	3	0
18	6b	311	CLA	1	0
23	j	103	LMG	1	0
18	6b	310	CLA	3	0
18	6a	314	CLA	1	0
25	6b	318	LUT	3	0
18	6b	315	CLA	2	0
23	I	201	LMG	1	0
18	2a	310	CLA	2	0
20	I	202	BCR	3	0
18	G	203	CLA	3	0
18	A	833	CLA	2	0
20	a	851	BCR	4	0
18	A	822	CLA	1	0
29	6a	309	CHL	1	0
18	3a	302	CLA	1	0
18	B	805	CLA	2	0
18	b	809	CLA	3	0
20	B	842	BCR	2	0
18	b	840	CLA	3	0
20	J	102	BCR	4	0
25	3a	316	LUT	2	0
20	A	847	BCR	3	0
18	B	809	CLA	3	0
18	5a	315	CLA	2	0
18	3a	311	CLA	1	0
18	b	817	CLA	2	0
18	2b	303	CLA	1	0
18	5a	302	CLA	1	0
18	B	807	CLA	2	0
20	f	301	BCR	4	0
18	b	853	CLA	1	0
18	B	826	CLA	2	0
18	A	835	CLA	4	0
25	J	105	LUT	4	0
29	5a	314	CHL	1	0
18	a	804	CLA	1	0
18	B	825	CLA	1	0
18	g	203	CLA	3	0
18	a	801	CLA	2	0
19	B	841	PQN	3	0
18	2b	302	CLA	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
18	b	808	CLA	2	0
23	5b	319	LMG	1	0
25	6a	318	LUT	4	0
25	2b	315	LUT	6	0
18	A	838	CLA	1	0
18	A	804	CLA	1	0
18	3a	313	CLA	2	0
27	A	846	LHG	4	0
20	B	851	BCR	5	0
18	B	854	CLA	3	0
18	b	839	CLA	2	0
18	b	832	CLA	4	0
29	5b	306	CHL	1	0
18	3b	313	CLA	1	0
18	a	816	CLA	3	0
18	6a	308	CLA	3	0
18	3b	310	CLA	1	0
18	B	803	CLA	1	0
18	F	303	CLA	1	0
18	5b	310	CLA	1	0
18	B	819	CLA	2	0
18	A	821	CLA	2	0
18	A	836	CLA	1	0
18	3b	303	CLA	1	0
20	i	202	BCR	3	0
24	A	844	SF4	1	0
18	5a	308	CLA	2	0
18	2b	310	CLA	2	0
25	3a	317	LUT	6	0
18	B	853	CLA	1	0
25	6a	319	LUT	5	0
18	6b	313	CLA	3	0
18	3b	302	CLA	1	0
29	3a	307	CHL	2	0
18	A	824	CLA	2	0
18	5a	313	CLA	1	0
18	b	818	CLA	1	0
18	J	101	CLA	2	0
18	3a	314	CLA	1	0
18	6a	315	CLA	2	0
18	B	840	CLA	2	0
25	2a	315	LUT	5	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
18	b	812	CLA	2	0
20	A	850	BCR	3	0
18	b	816	CLA	1	0
20	b	848	BCR	1	0
18	b	815	CLA	3	0
18	2a	308	CLA	3	0
27	a	846	LHG	4	0
20	a	847	BCR	5	0
18	B	815	CLA	3	0
18	A	834	CLA	2	0
18	3a	312	CLA	2	0
18	6b	306	CLA	1	0
29	3a	301	CHL	1	0
18	B	829	CLA	1	0
18	A	829	CLA	2	0
18	a	806	CLA	4	0
29	2b	304	CHL	1	0
27	6b	301	LHG	1	0
18	f	302	CLA	3	0
18	B	833	CLA	1	0
23	b	850	LMG	1	0
18	b	811	CLA	1	0
18	5b	313	CLA	1	0
18	2b	312	CLA	2	0
18	b	822	CLA	2	0
27	5a	320	LHG	3	0
18	a	818	CLA	2	0
18	B	827	CLA	1	0
18	6a	313	CLA	3	0
20	g	201	BCR	2	0
29	6b	309	CHL	1	0
18	L	303	CLA	1	0
18	b	821	CLA	2	0
18	b	836	CLA	2	0
23	5a	319	LMG	1	0
24	a	844	SF4	1	0
18	6b	308	CLA	3	0
18	A	815	CLA	2	0
20	f	304	BCR	1	0
18	5b	303	CLA	3	0
29	5a	306	CHL	1	0
29	5b	305	CHL	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	B	848	BCR	3	0
18	a	823	CLA	5	0
18	B	804	CLA	4	0
18	6b	317	CLA	1	0
18	A	811	CLA	1	0
29	5a	307	CHL	2	0
18	2b	307	CLA	1	0
18	a	829	CLA	2	0
18	6a	306	CLA	1	0
18	5b	309	CLA	1	0
18	2a	311	CLA	1	0
18	a	833	CLA	2	0
25	3b	317	LUT	5	0
20	b	845	BCR	5	0
18	6b	314	CLA	1	0
19	A	843	PQN	1	0
29	3b	301	CHL	1	0
29	2a	306	CHL	6	0
18	5b	311	CLA	1	0
26	A	802	CL0	3	0
18	a	822	CLA	1	0
18	B	812	CLA	2	0
27	5b	320	LHG	3	0
18	a	838	CLA	1	0
18	A	819	CLA	2	0
18	a	837	CLA	1	0
18	B	816	CLA	1	0
18	5a	309	CLA	2	0
18	5b	312	CLA	3	0
18	B	821	CLA	3	0
18	A	807	CLA	1	0
25	6b	319	LUT	6	0
29	2b	313	CHL	2	0
18	2a	301	CLA	2	0
18	5a	311	CLA	1	0
20	b	851	BCR	5	0
18	b	806	CLA	7	0
18	b	852	CLA	1	0
18	B	823	CLA	3	0
27	A	845	LHG	3	0
18	A	853	CLA	1	0
18	B	836	CLA	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
18	L	301	CLA	2	0
18	6a	317	CLA	1	0
18	A	816	CLA	2	0
23	J	104	LMG	1	0
18	2a	309	CLA	1	0
18	a	807	CLA	1	0
29	3b	307	CHL	2	0
18	b	805	CLA	3	0
25	2b	314	LUT	5	0
18	b	803	CLA	1	0
18	B	839	CLA	2	0
20	a	850	BCR	3	0
18	B	838	CLA	4	0
18	a	831	CLA	4	0
18	b	810	CLA	2	0
20	G	204	BCR	3	0
26	a	802	CL0	3	0
21	B	847	DGD	3	0
18	A	814	CLA	1	0
25	5b	317	LUT	1	0
18	B	813	CLA	1	0
18	3a	310	CLA	1	0
20	B	843	BCR	1	0
20	b	844	BCR	3	0
20	m	101	BCR	3	0
23	j	104	LMG	1	0
29	6b	304	CHL	2	0
18	3b	311	CLA	1	0
18	b	824	CLA	2	0
29	6a	304	CHL	2	0
29	2a	304	CHL	1	0
18	a	824	CLA	2	0
18	a	828	CLA	1	0
27	6a	301	LHG	1	0
18	3a	306	CLA	2	0
18	B	820	CLA	1	0
20	F	301	BCR	3	0
18	B	801	CLA	8	0
18	B	824	CLA	2	0
29	5a	305	CHL	1	0
18	6a	310	CLA	2	0
19	a	843	PQN	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	g	204	BCR	5	0
18	B	818	CLA	1	0
18	A	818	CLA	2	0
18	B	852	CLA	1	0
18	b	831	CLA	3	0
25	5b	316	LUT	4	0
18	2b	308	CLA	4	0
29	5b	301	CHL	2	0
18	6b	307	CLA	2	0
18	b	830	CLA	3	0
18	B	802	CLA	2	0
18	3b	314	CLA	1	0
20	a	849	BCR	1	0
18	2a	307	CLA	1	0
18	5a	303	CLA	3	0
20	B	846	BCR	1	0
18	a	803	CLA	3	0
18	a	840	CLA	2	0
18	a	814	CLA	1	0
18	B	831	CLA	2	0
18	6b	316	CLA	2	0
27	a	845	LHG	3	0
29	5a	301	CHL	2	0
18	a	841	CLA	5	0
18	3b	309	CLA	2	0
18	L	302	CLA	2	0
18	A	803	CLA	3	0
18	B	811	CLA	2	0
18	F	305	CLA	2	0
29	5b	307	CHL	2	0
25	5a	316	LUT	5	0
18	2a	303	CLA	1	0
18	A	812	CLA	4	0
20	B	845	BCR	5	0
18	3a	303	CLA	2	0
20	j	102	BCR	5	0
18	A	817	CLA	4	0
18	A	831	CLA	4	0
21	b	847	DGD	3	0
20	M	101	BCR	4	0
18	B	830	CLA	3	0
25	3b	316	LUT	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	b	842	BCR	3	0
18	f	303	CLA	1	0
18	b	807	CLA	2	0
18	G	202	CLA	1	0
18	b	854	CLA	4	0
18	a	839	CLA	2	0
18	6a	311	CLA	1	0
20	A	851	BCR	5	0
18	B	808	CLA	1	0
18	A	820	CLA	2	0
18	A	801	CLA	2	0
18	a	820	CLA	3	0
18	j	101	CLA	2	0
18	b	825	CLA	1	0
18	5a	310	CLA	1	0
18	B	817	CLA	2	0
23	i	201	LMG	1	0
29	2a	313	CHL	2	0
29	3a	315	CHL	1	0
18	a	835	CLA	4	0
20	b	846	BCR	1	0
18	3b	306	CLA	2	0
18	6b	305	CLA	3	0
20	B	844	BCR	3	0
18	3b	312	CLA	1	0
18	F	302	CLA	3	0
18	a	805	CLA	5	0
25	6b	320	LUT	3	0
29	3b	315	CHL	1	0
18	l	301	CLA	2	0
18	a	809	CLA	1	0
18	b	823	CLA	3	0
29	5b	314	CHL	1	0
18	A	805	CLA	5	0
18	a	812	CLA	3	0
18	b	828	CLA	4	0
23	J	103	LMG	1	0
20	A	849	BCR	3	0
25	5a	317	LUT	3	0
18	5b	308	CLA	2	0
18	B	832	CLA	3	0
18	A	839	CLA	2	0

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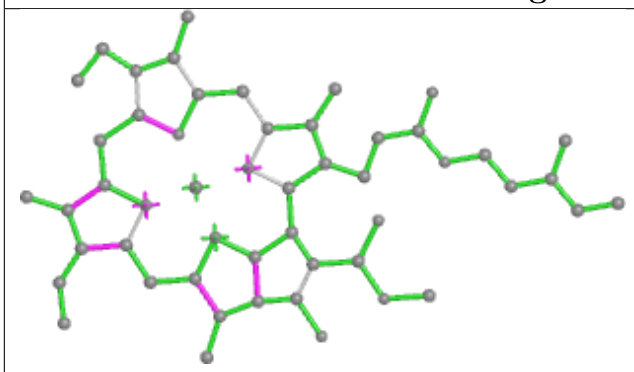
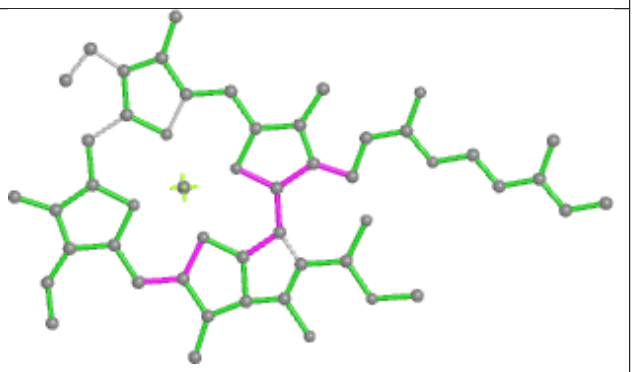
Mol	Chain	Res	Type	Clashes	Symm-Clashes
18	a	853	CLA	1	0
25	2a	314	LUT	6	0
20	L	304	BCR	2	0
19	b	841	PQN	3	0
29	2b	306	CHL	5	0
18	B	806	CLA	7	0
18	3a	309	CLA	2	0
18	B	810	CLA	2	0
18	5b	315	CLA	2	0
18	b	827	CLA	2	0
18	b	829	CLA	1	0
18	6a	316	CLA	2	0
18	A	808	CLA	3	0
18	g	202	CLA	1	0
20	b	843	BCR	1	0
18	A	823	CLA	5	0
18	a	817	CLA	4	0
18	5a	312	CLA	2	0
18	B	828	CLA	3	0
18	b	813	CLA	1	0
18	A	809	CLA	1	0
18	A	840	CLA	2	0
18	a	819	CLA	2	0
18	2b	309	CLA	1	0
18	6a	307	CLA	2	0
18	A	806	CLA	4	0
20	A	848	BCR	2	0
18	a	821	CLA	2	0
18	a	834	CLA	2	0
18	6a	305	CLA	3	0
20	l	304	BCR	2	0
18	l	303	CLA	1	0
23	B	850	LMG	1	0
18	a	808	CLA	3	0
18	b	814	CLA	2	0
18	b	826	CLA	2	0
20	k	202	BCR	2	0
20	K	202	BCR	3	0
18	f	305	CLA	2	0
18	A	827	CLA	1	0
18	a	827	CLA	1	0
18	2a	312	CLA	2	0

The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less then 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

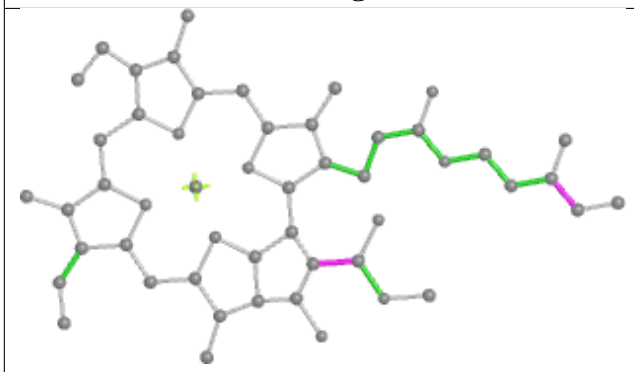
Ligand CLA a 836



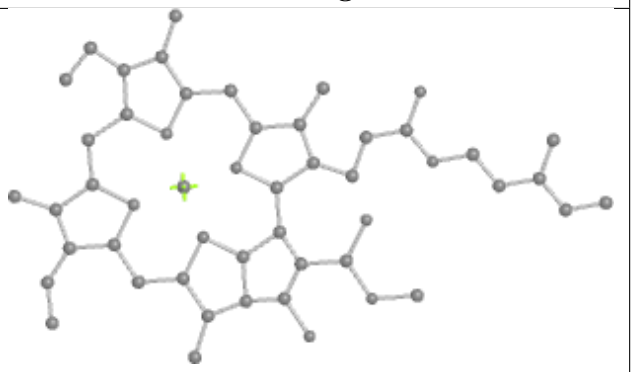
Bond lengths



Bond angles

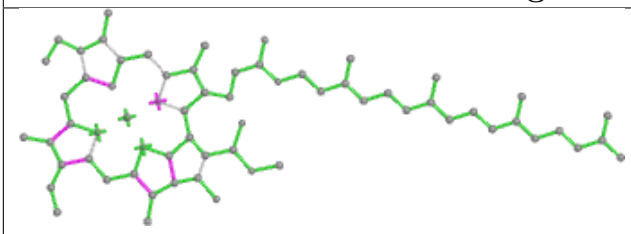


Torsions

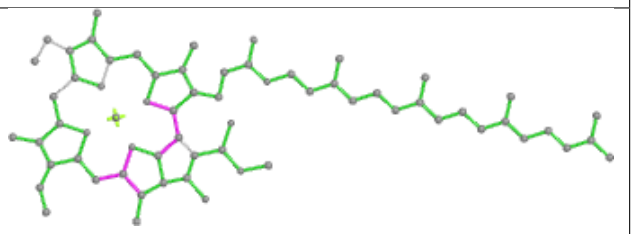


Rings

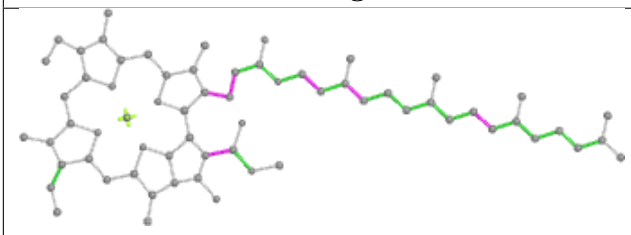
Ligand CLA b 833



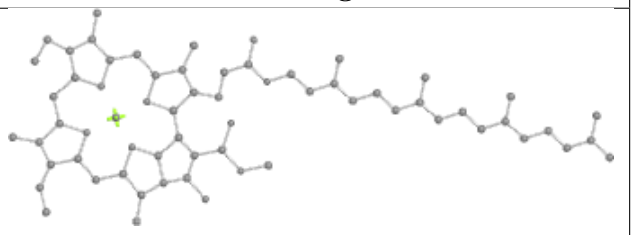
Bond lengths



Bond angles

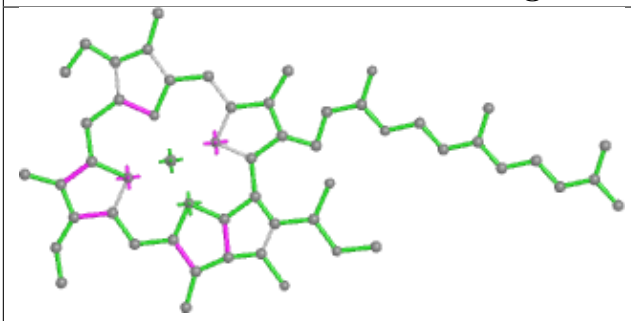


Torsions

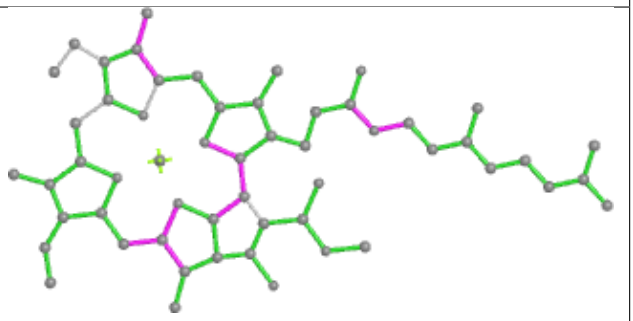


Rings

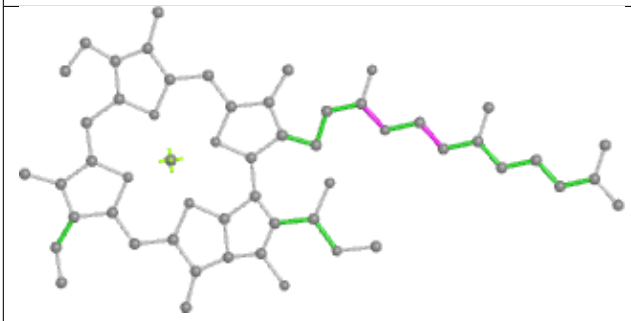
Ligand CLA A 837



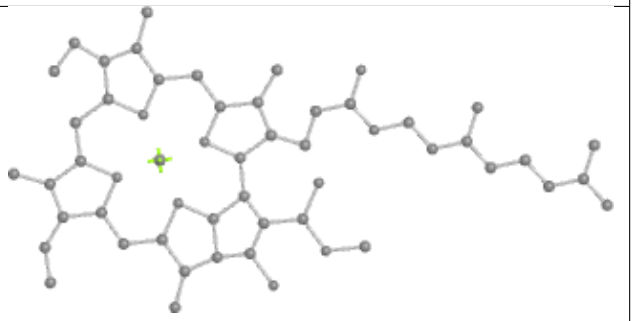
Bond lengths



Bond angles

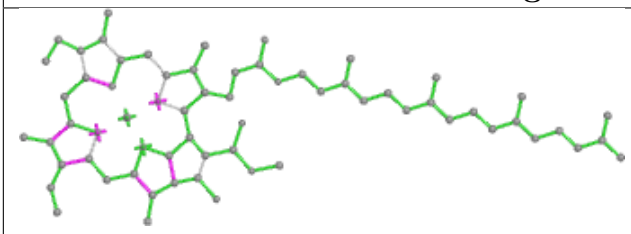


Torsions

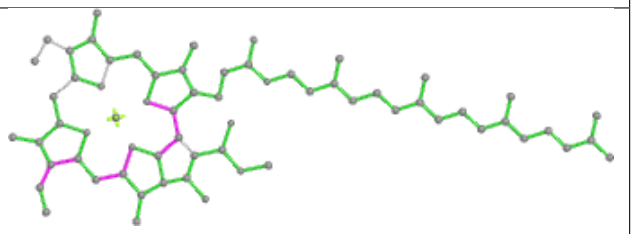


Rings

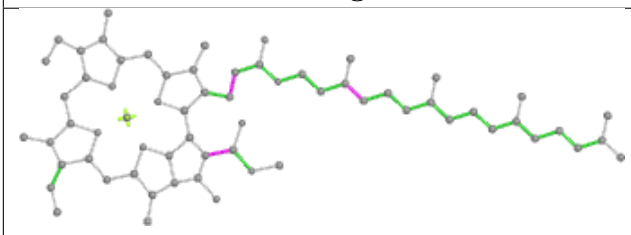
Ligand CLA A 828



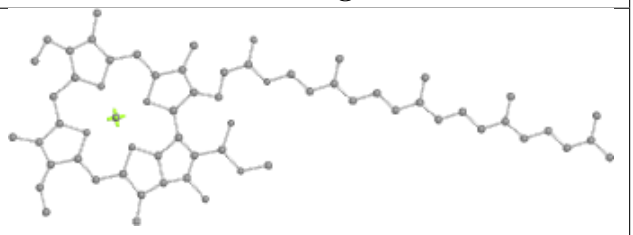
Bond lengths



Bond angles

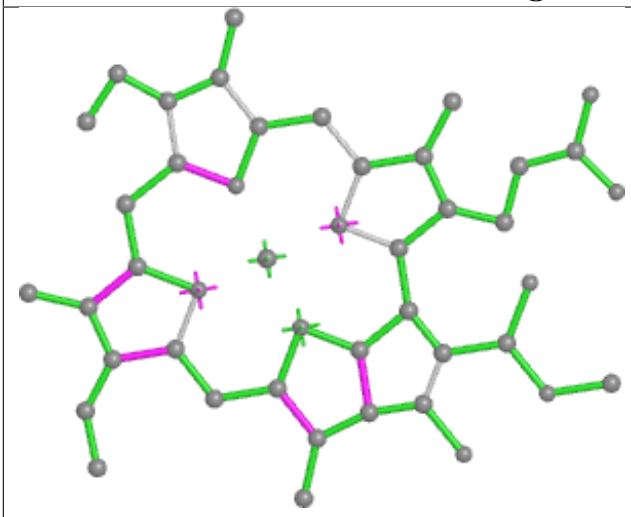


Torsions

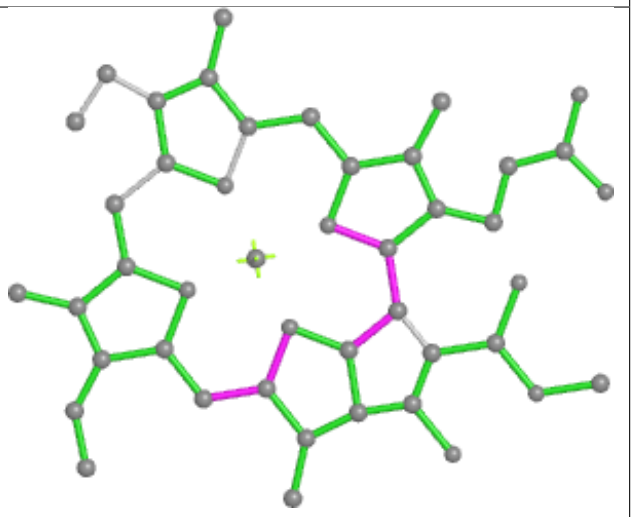


Rings

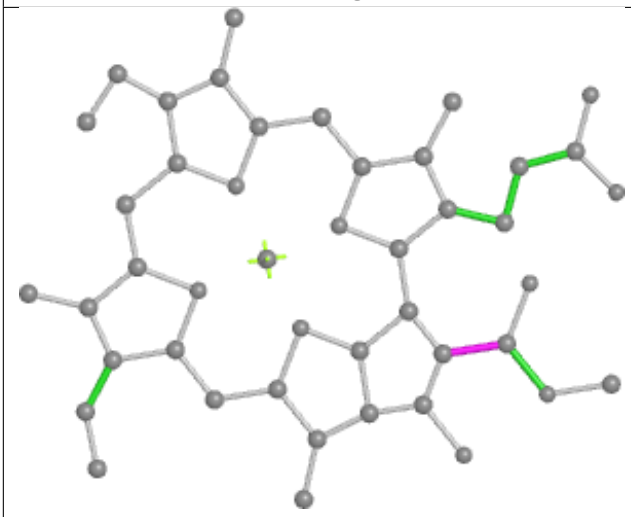
Ligand CLA b 820



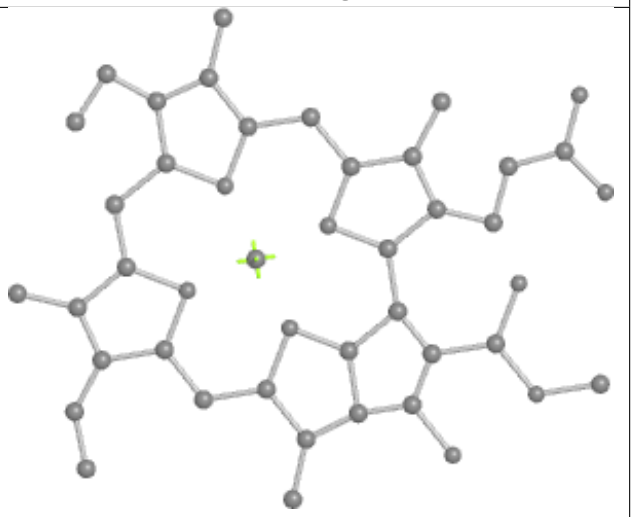
Bond lengths



Bond angles

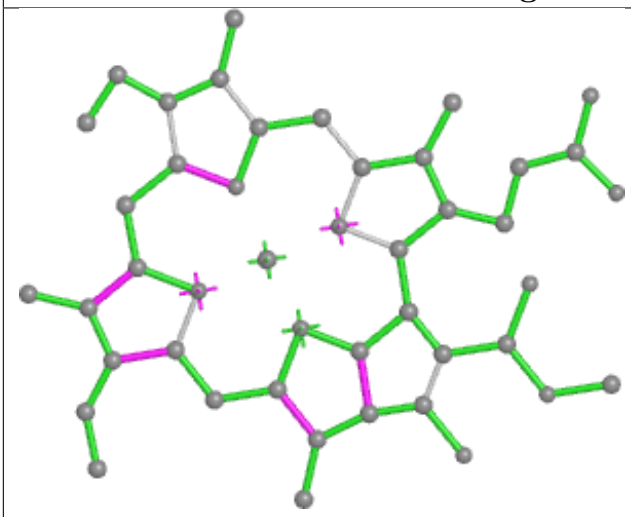


Torsions



Rings

Ligand CLA 2a 302



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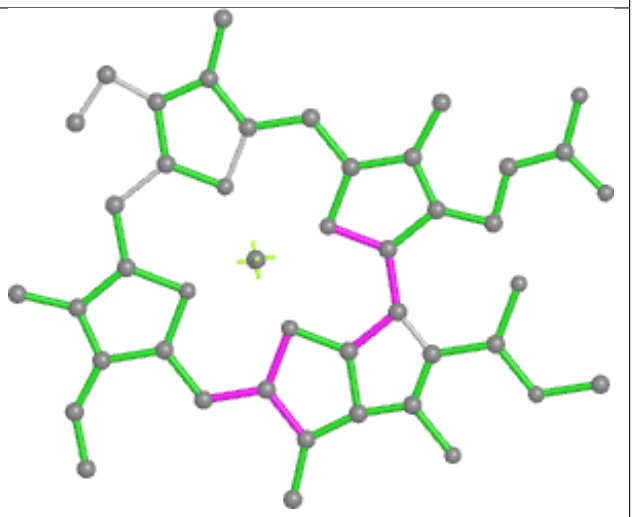
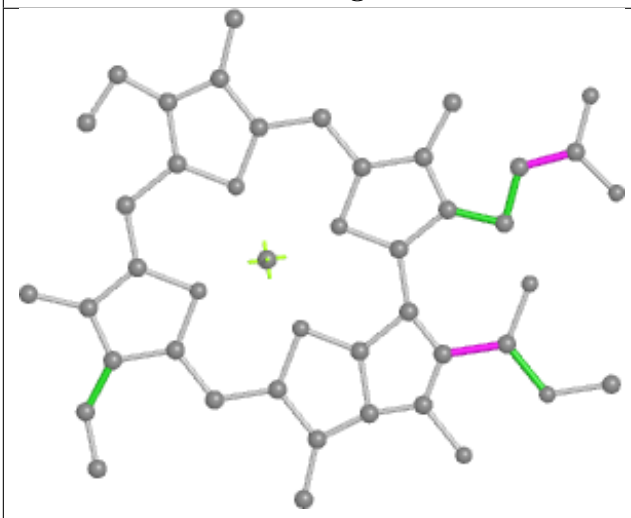
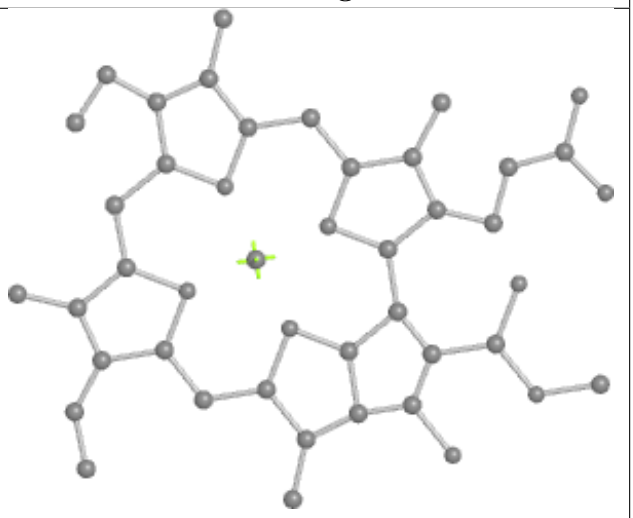


Bond angles

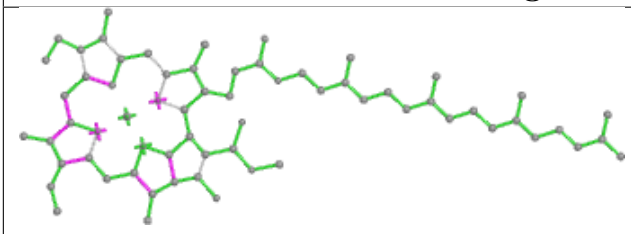


Torsions



Rings

Ligand CLA A 841



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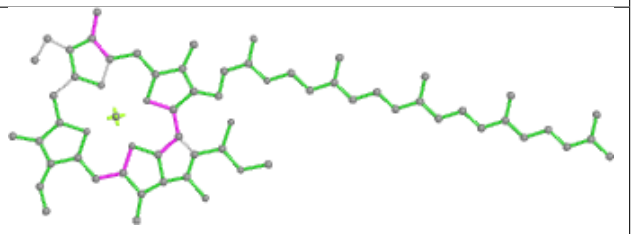
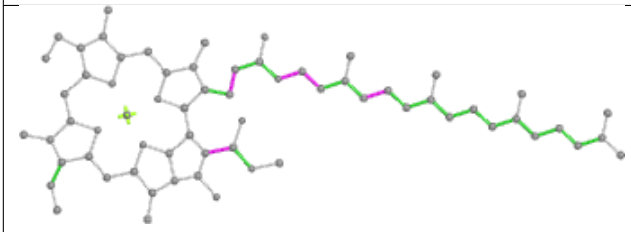
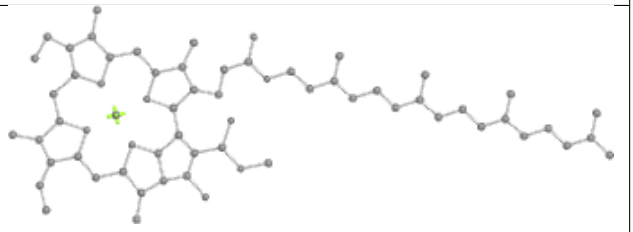


Bond angles

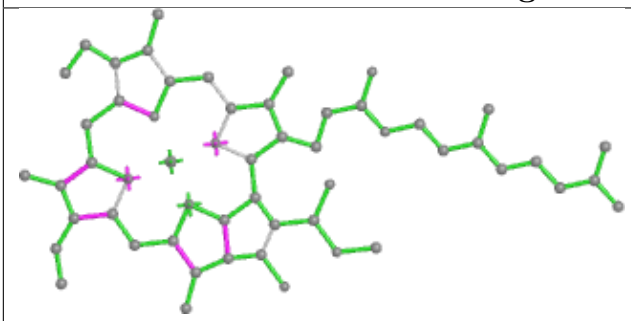


Torsions



Rings

Ligand CLA 2b 301



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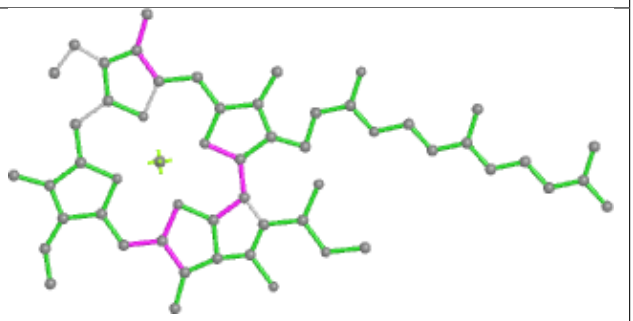
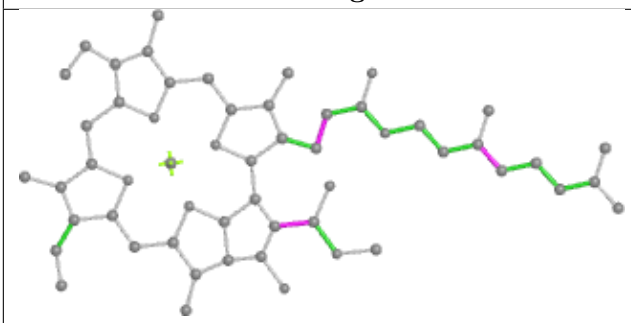
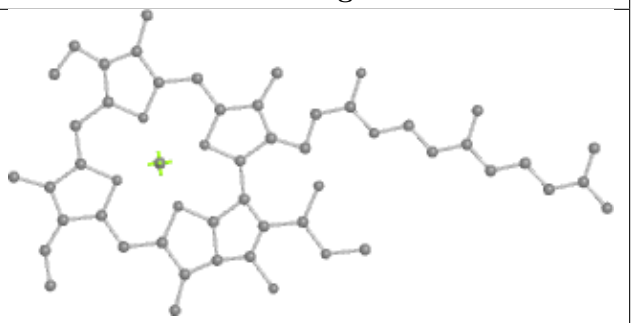


Bond angles

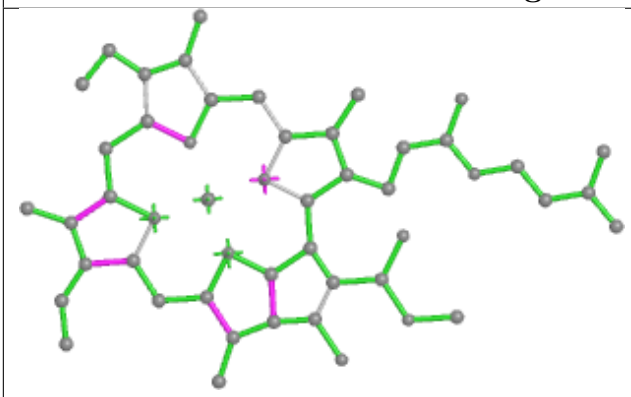


Torsions

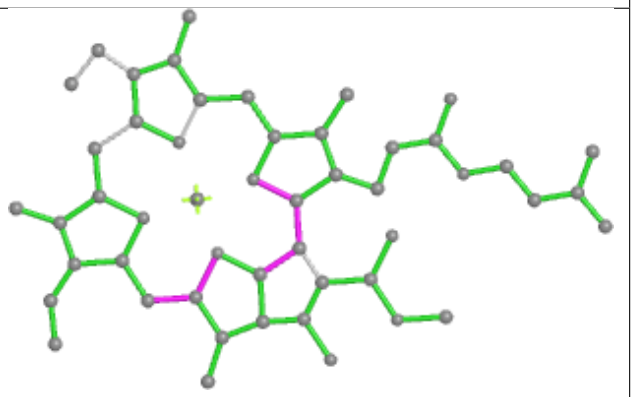


Rings

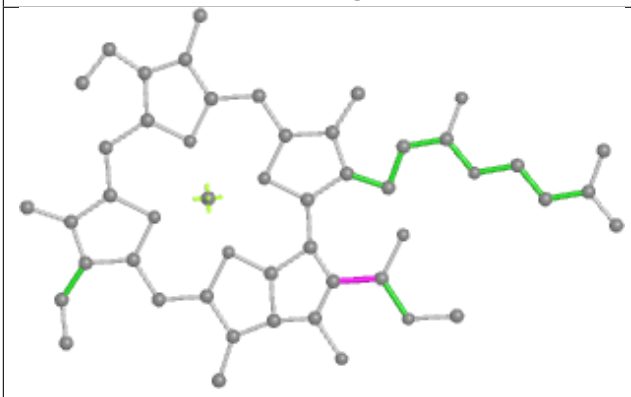
Ligand CLA B 814



Bond lengths



Bond angles



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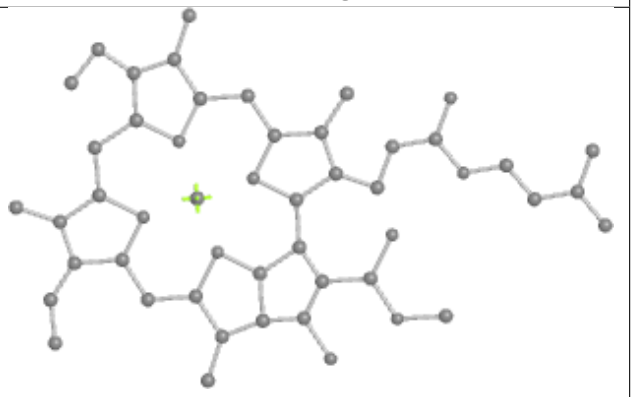
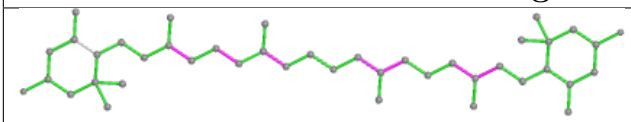


Rings

Ligand LUT j 105



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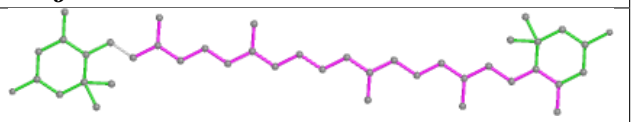
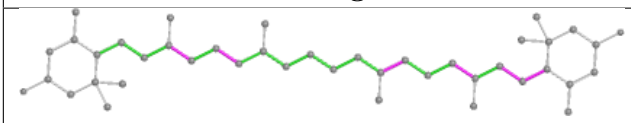


Bond angles



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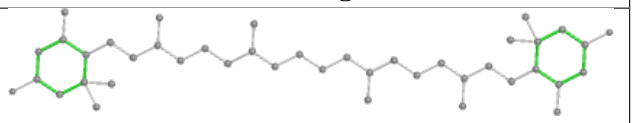
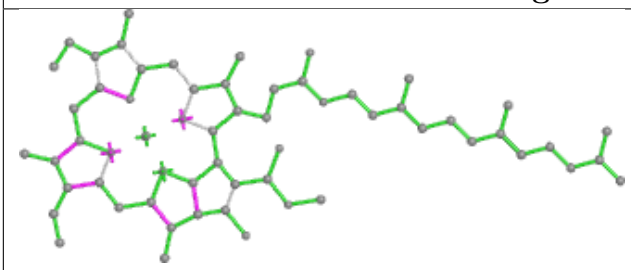


Rings

Ligand CLA l 302



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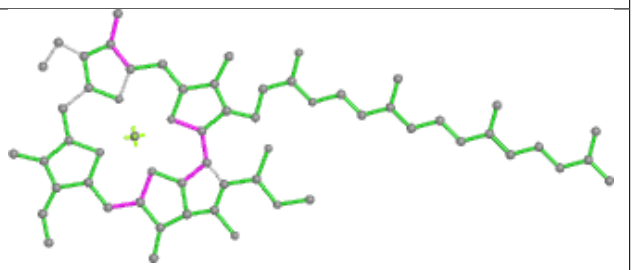
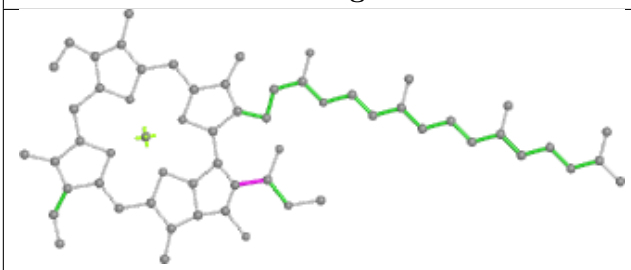


Bond angles



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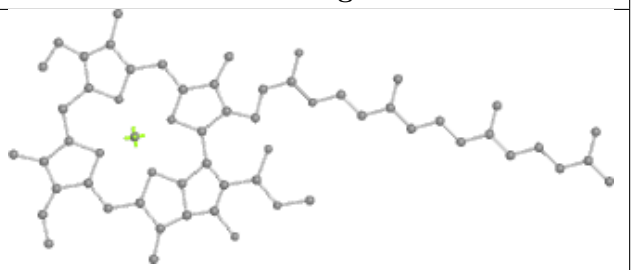
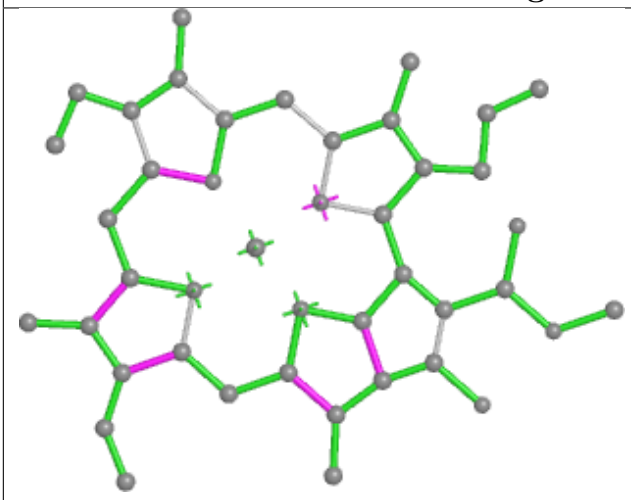


Rings

Ligand CLA b 819



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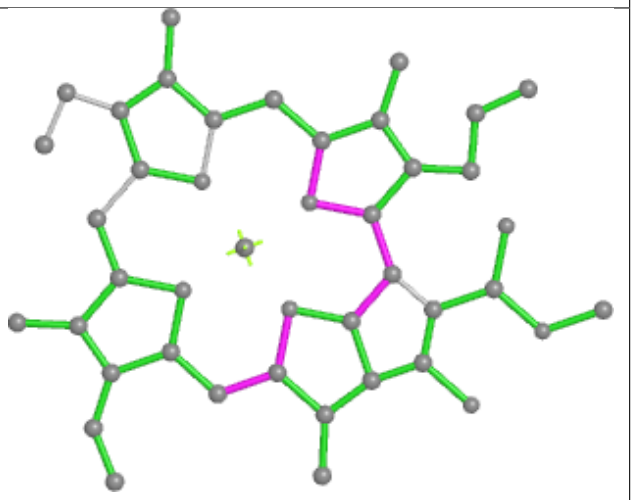
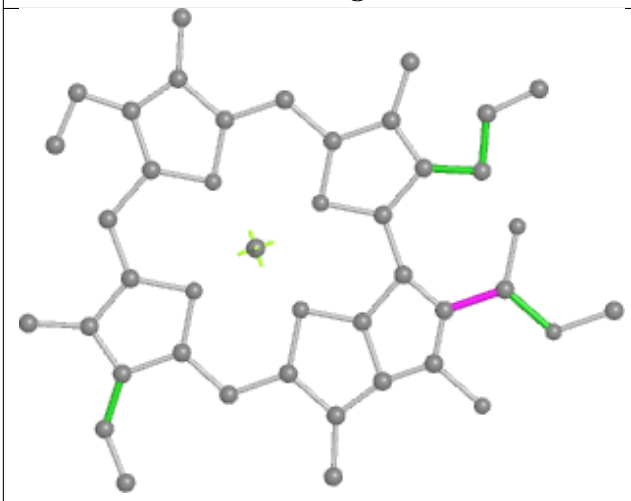


Bond angles



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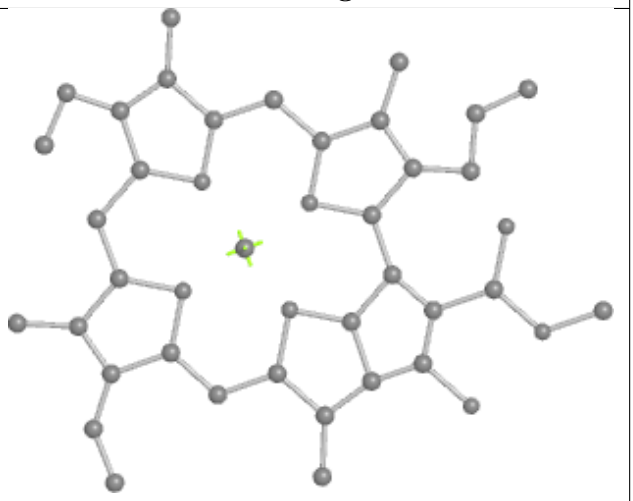
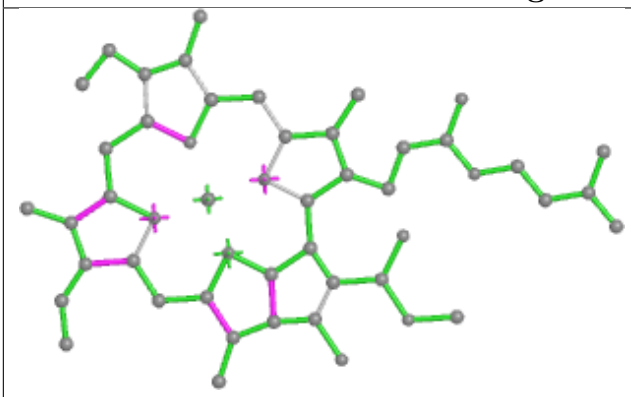
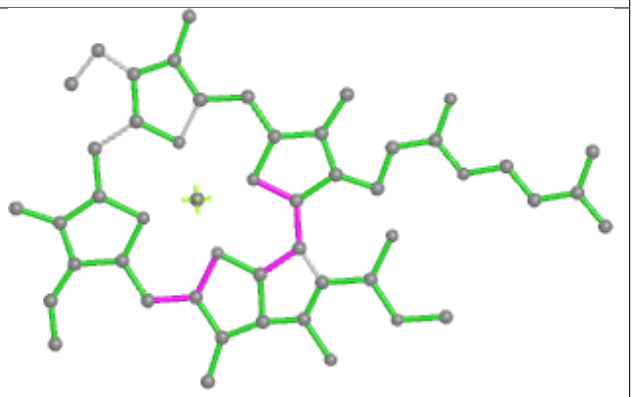


Rings

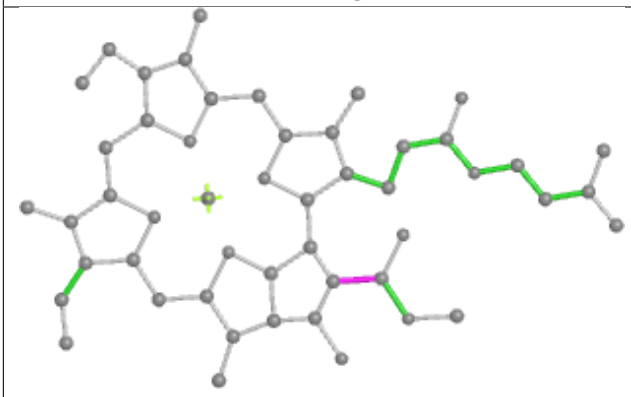
Ligand CLA b 835



Bond lengths



Bond angles



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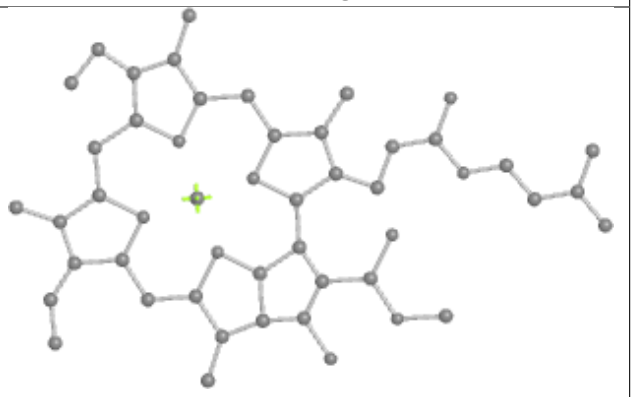
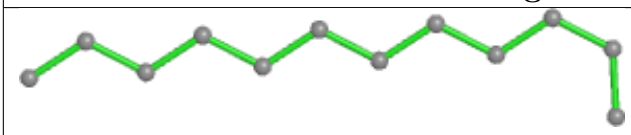


Rings

Ligand LFA M 102



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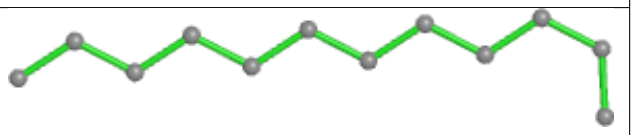
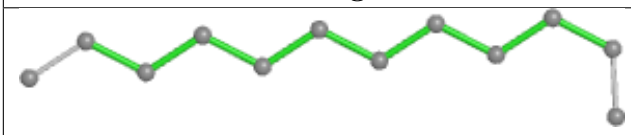


Bond angles



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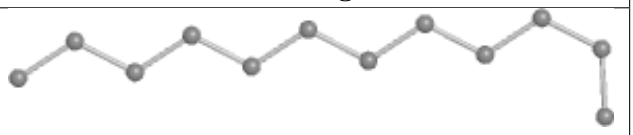
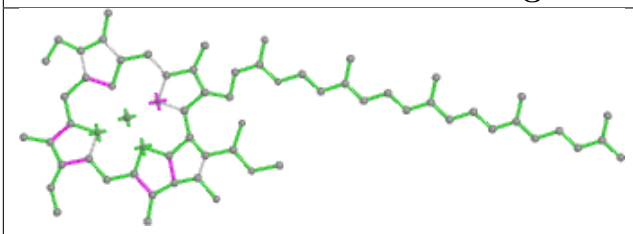


Rings

Ligand CLA A 810



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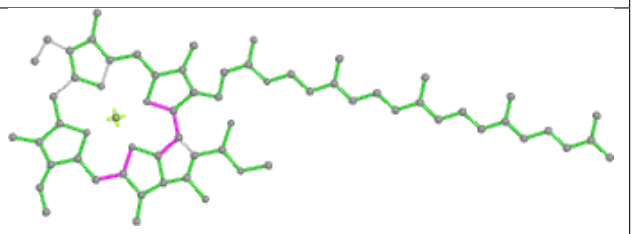
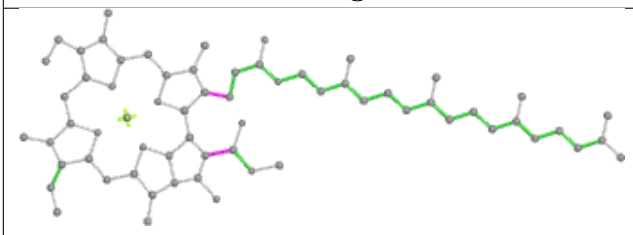


Bond angles



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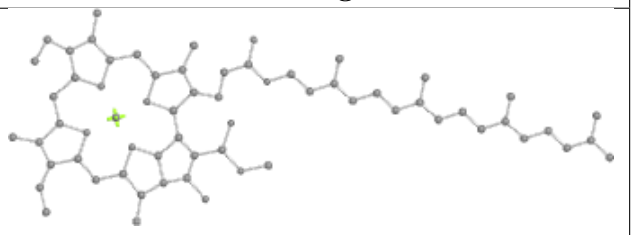
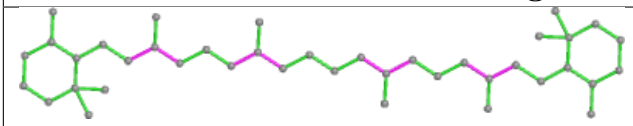


Rings

Ligand BCR a 848



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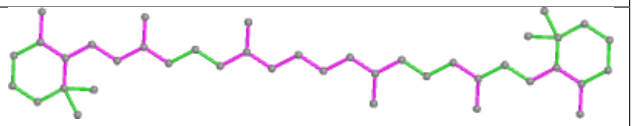
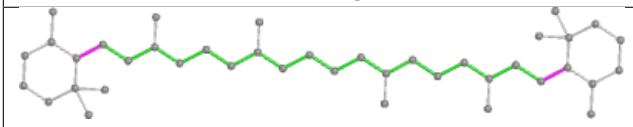


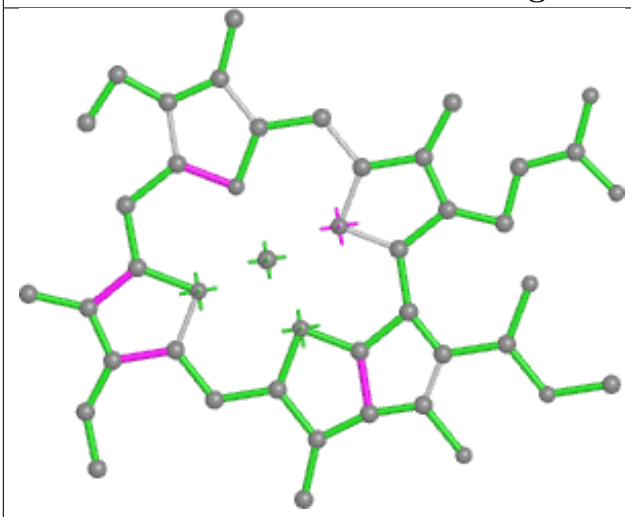
Bond angles



Torsions

Rings

Ligand CLA a 815



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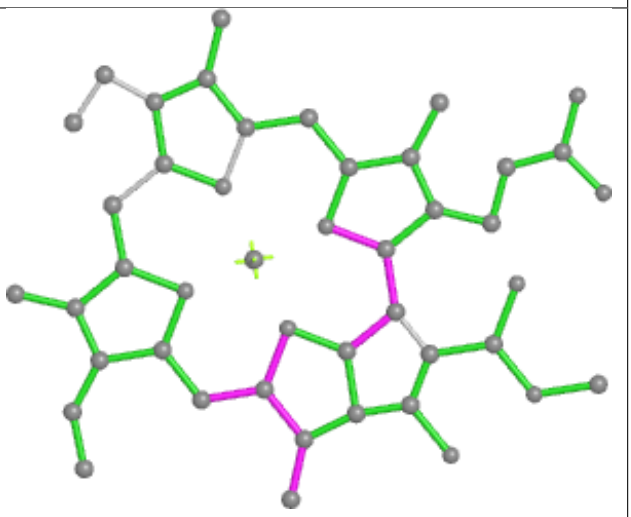
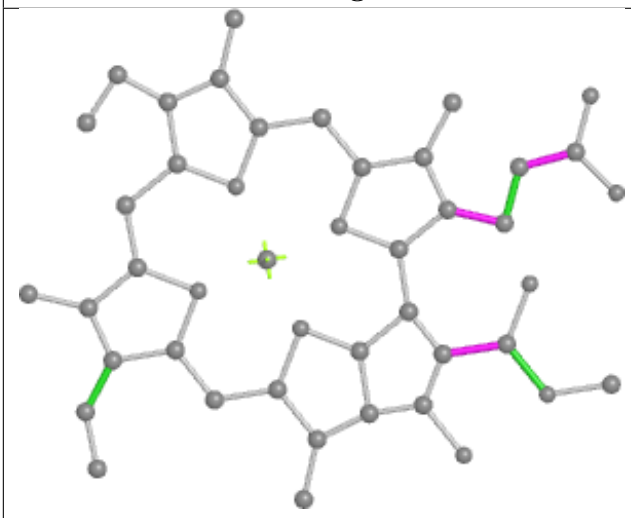
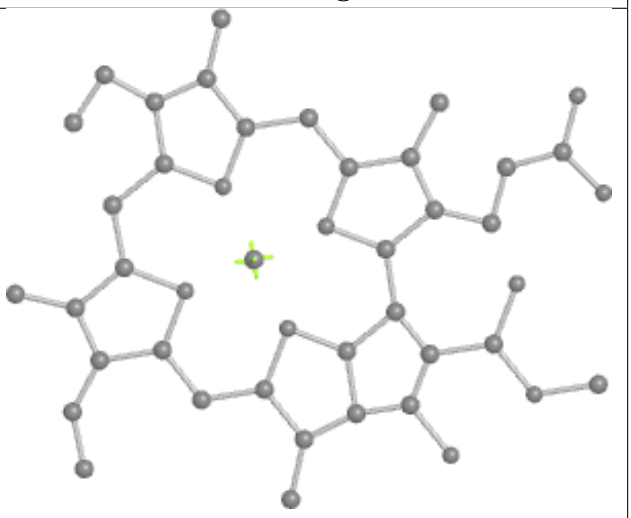


Bond angles

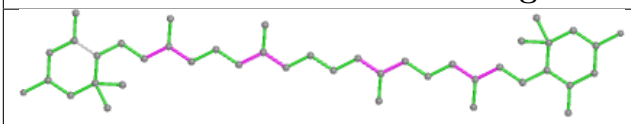


Torsions

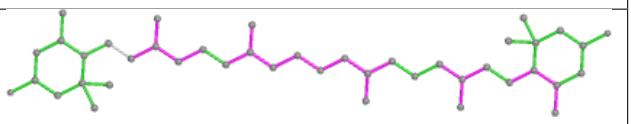


Rings

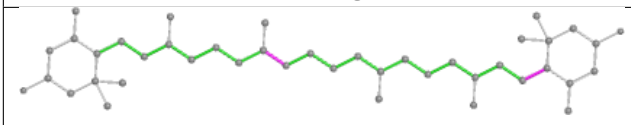
Ligand LUT 6a 320



Bond lengths



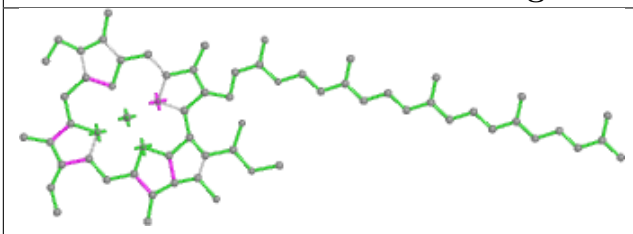
Bond angles



Torsions

Rings

Ligand CLA b 802



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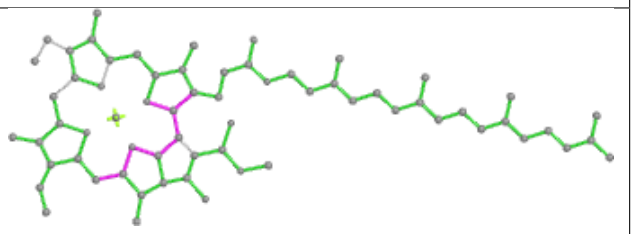
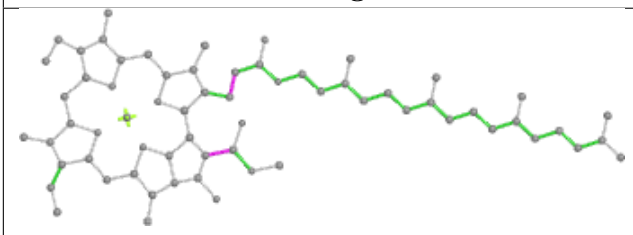
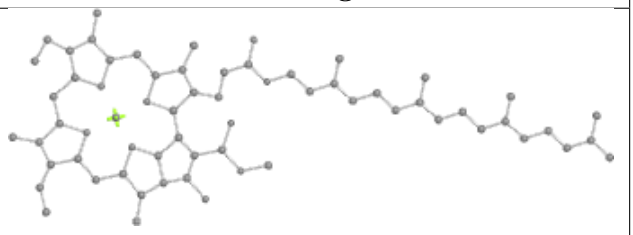


Bond angles

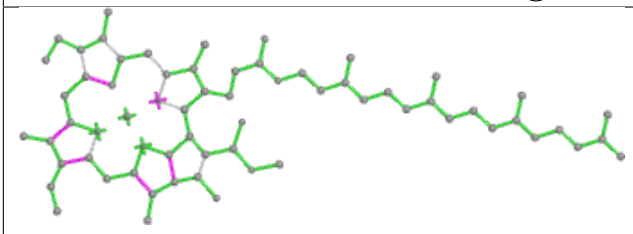


Torsions

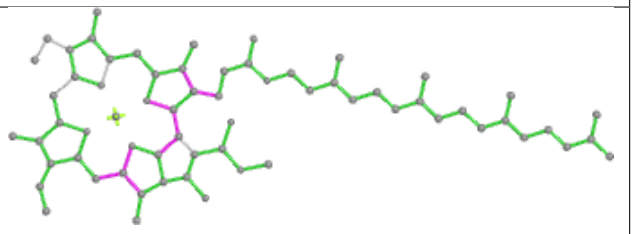


Rings

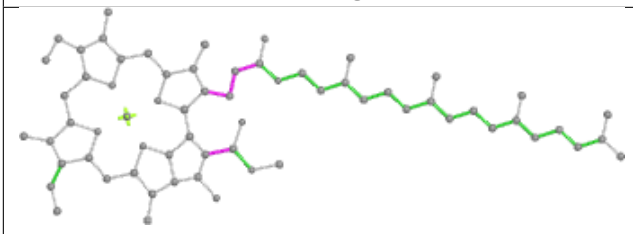
Ligand CLA b 838



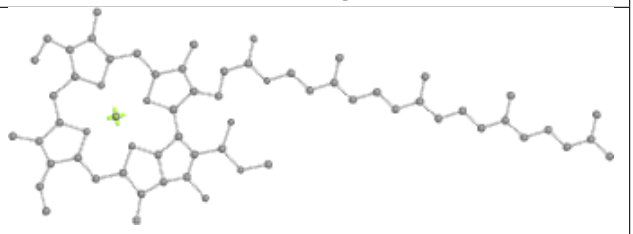
Bond lengths



Bond angles

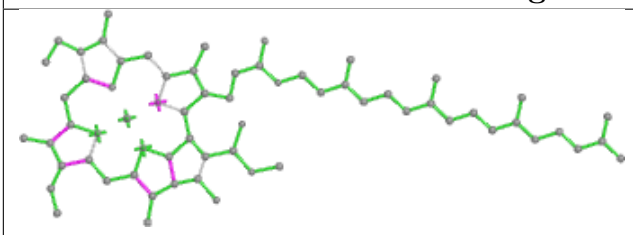


Torsions

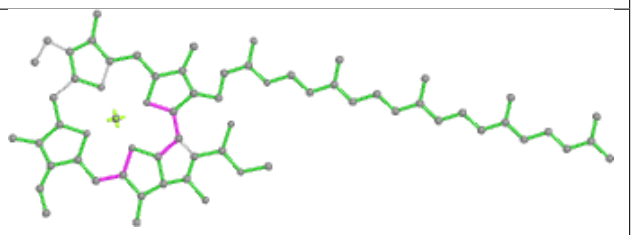


Rings

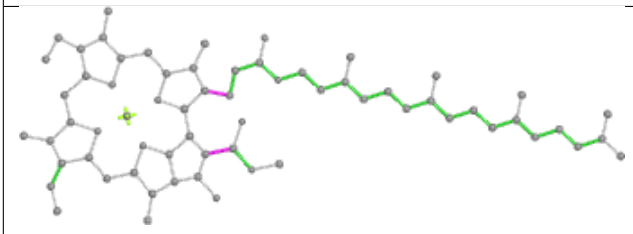
Ligand CLA a 810



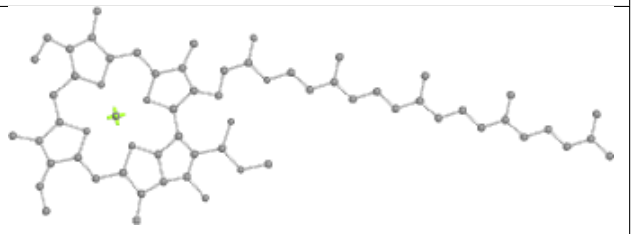
Bond lengths



Bond angles

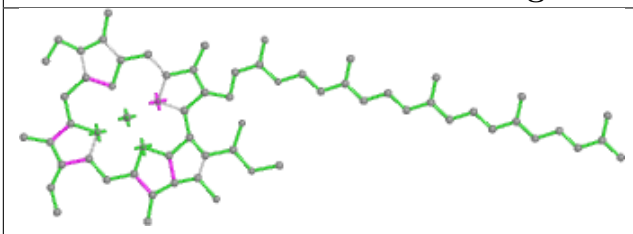


Torsions



Rings

Ligand CLA b 804



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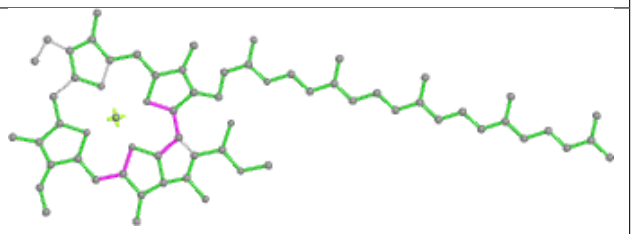
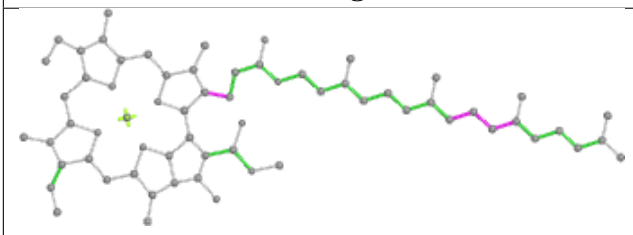
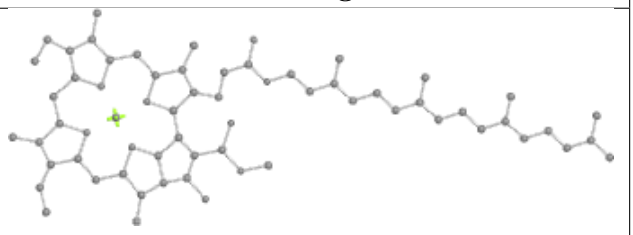


Bond angles

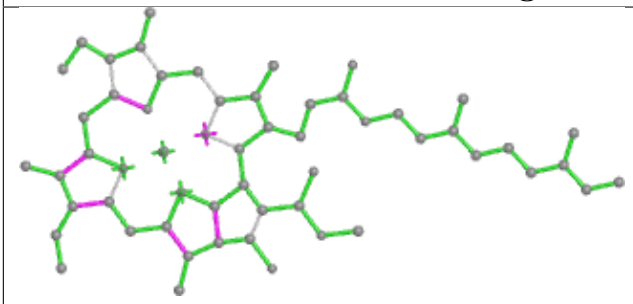


Torsions



Rings

Ligand CLA 5b 302



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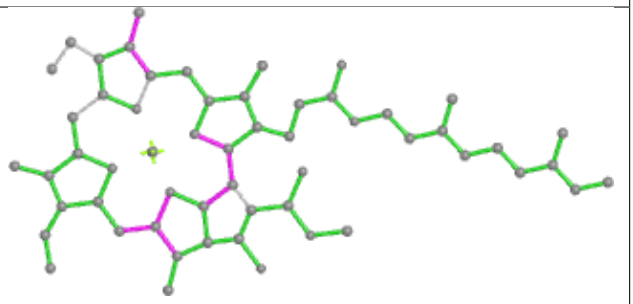
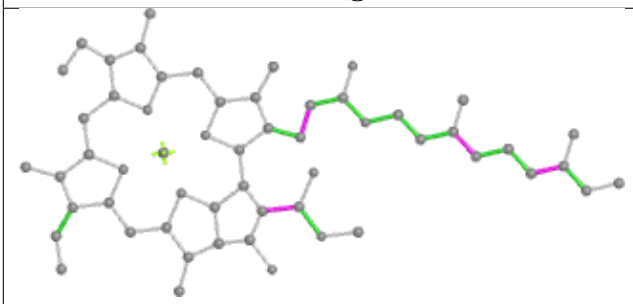


Bond angles



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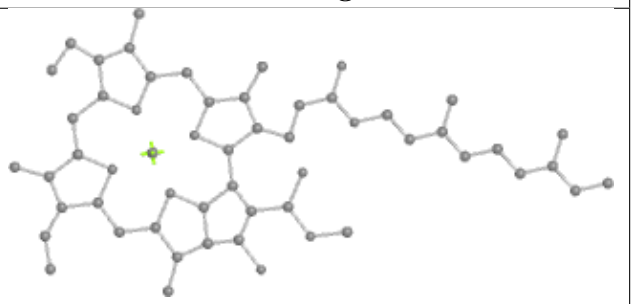
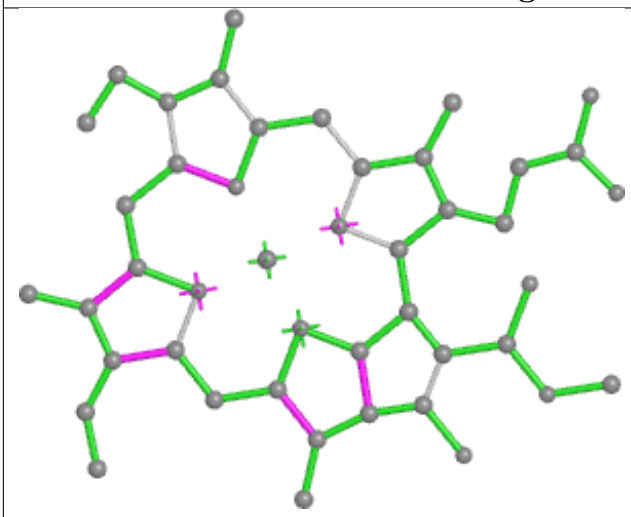


Rings

Ligand CLA 2b 311



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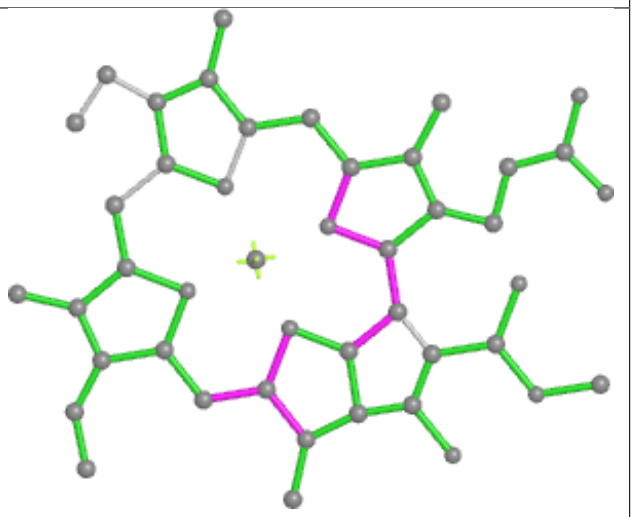

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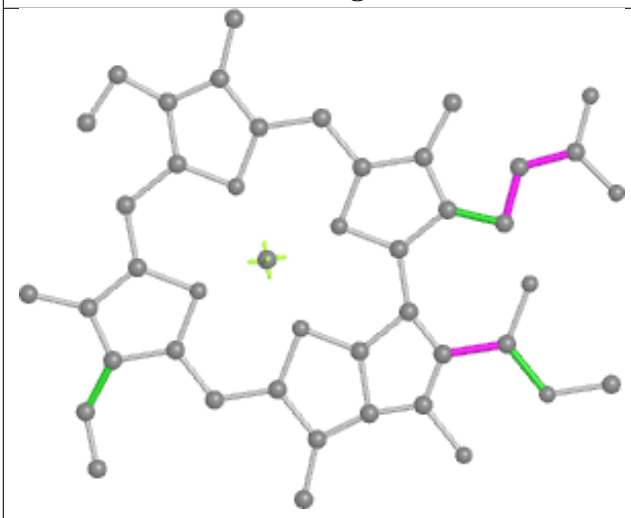

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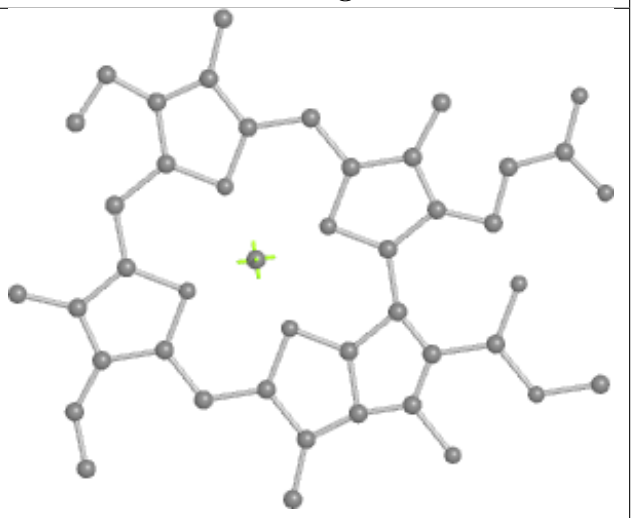
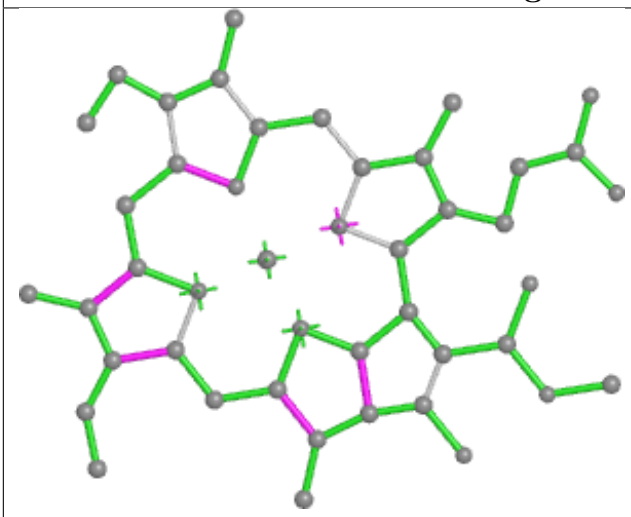


Rings

Ligand CLA B 822



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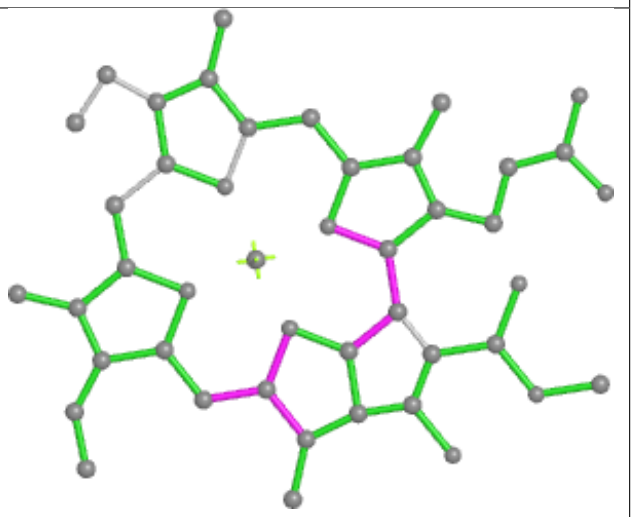
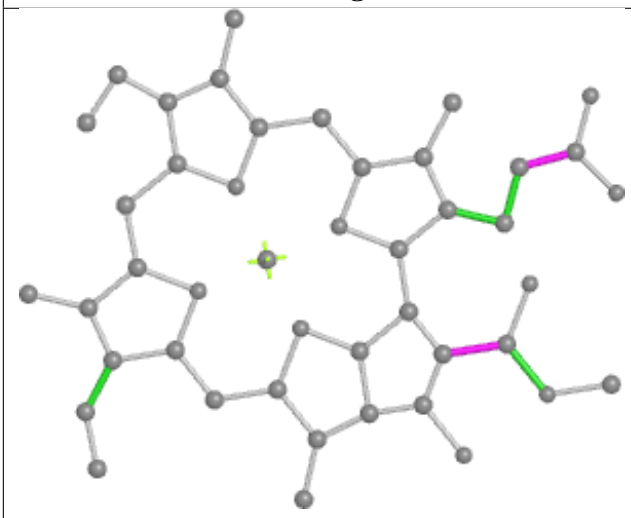


Bond angles



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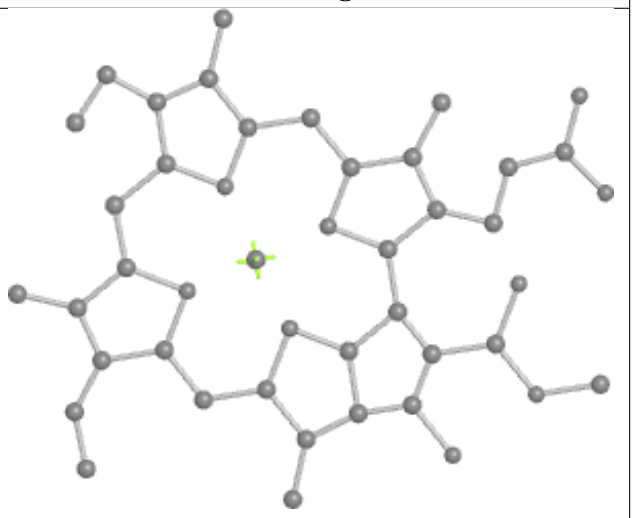
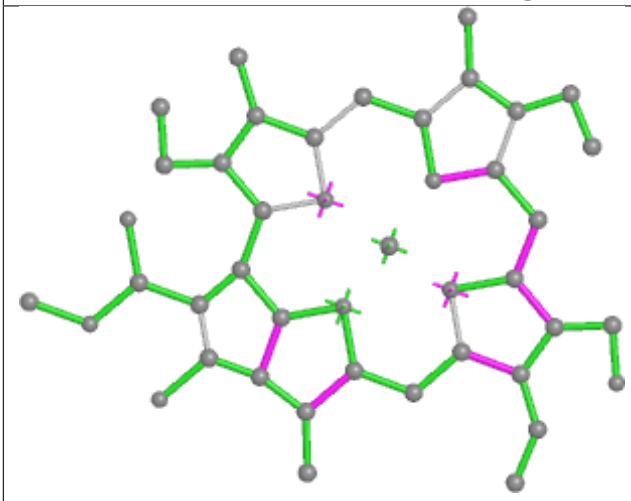


Rings

Ligand CHL 2a 305



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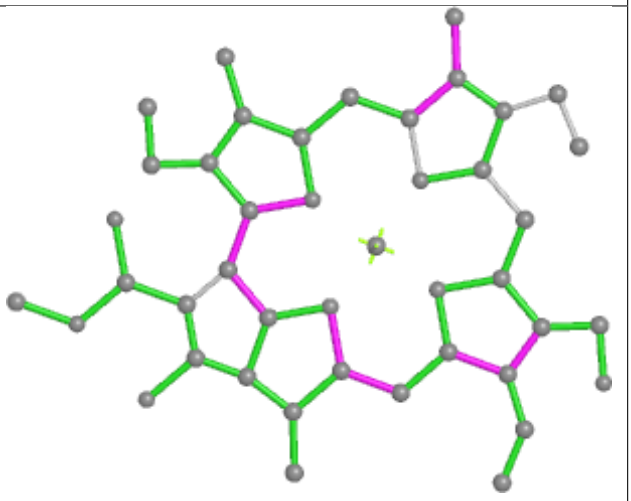
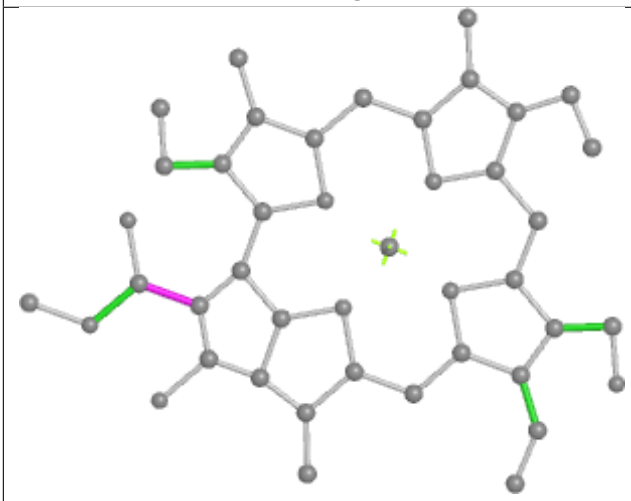


Bond angles



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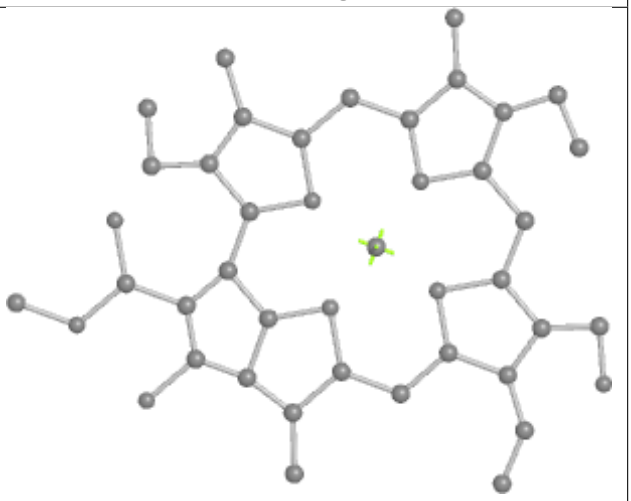
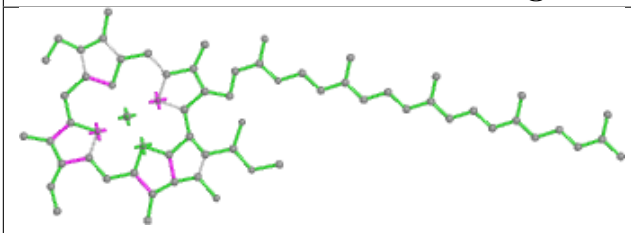


Rings

Ligand CLA b 801



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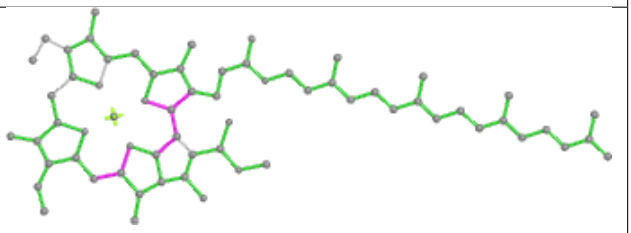
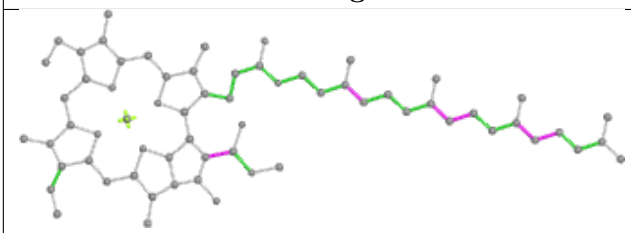


Bond angles



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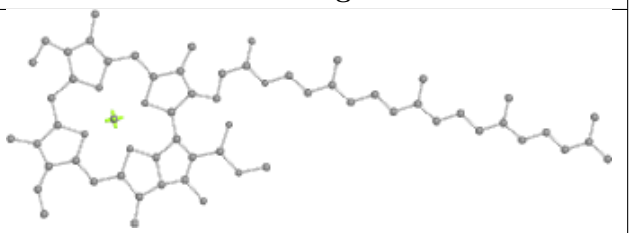
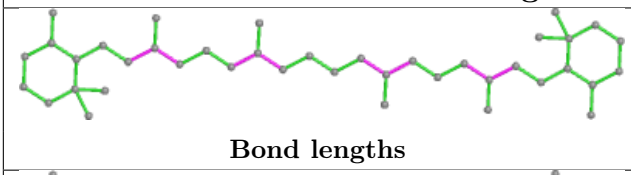
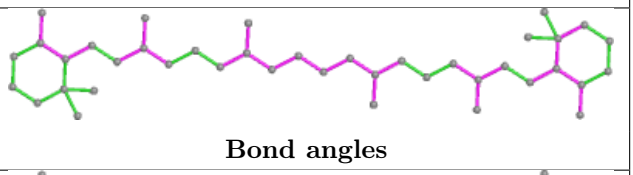


Rings

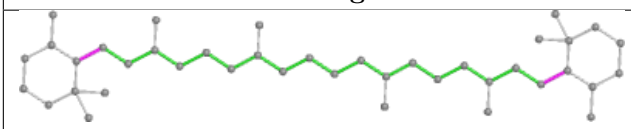
Ligand BCR G 201



Bond lengths



Bond angles



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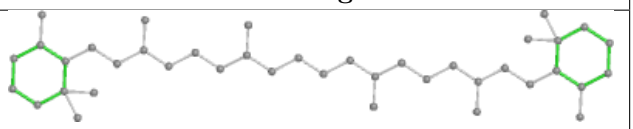
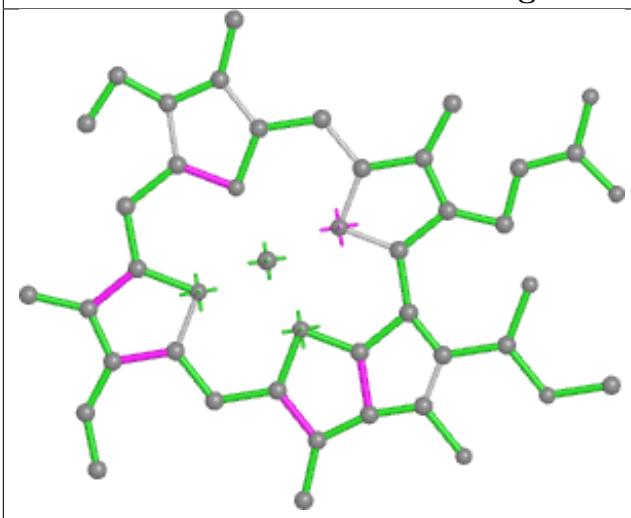


Rings

Ligand CLA 6b 311



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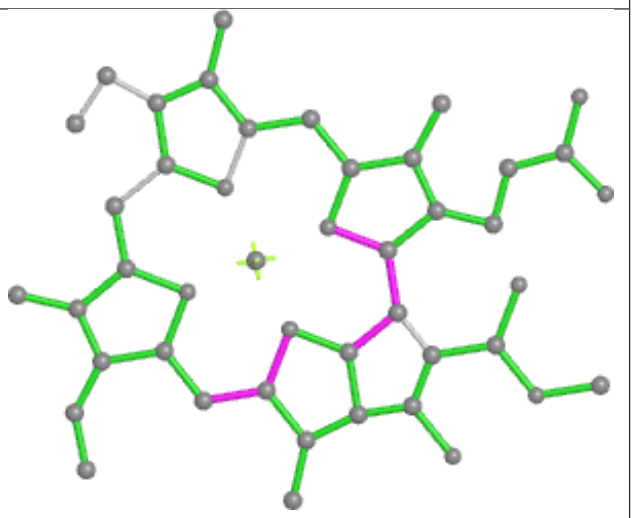
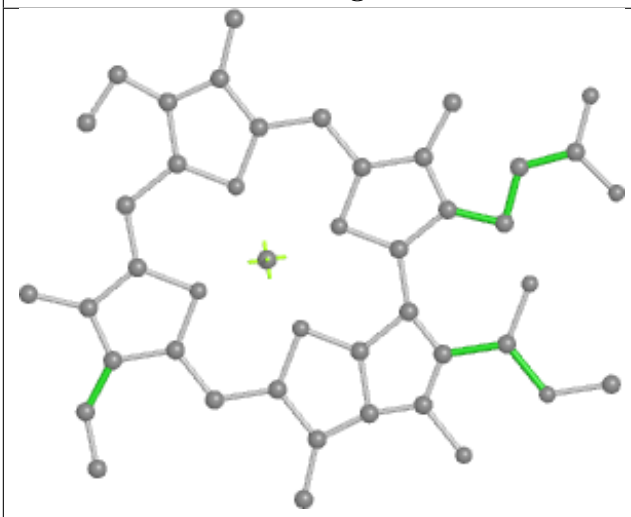


Bond angles



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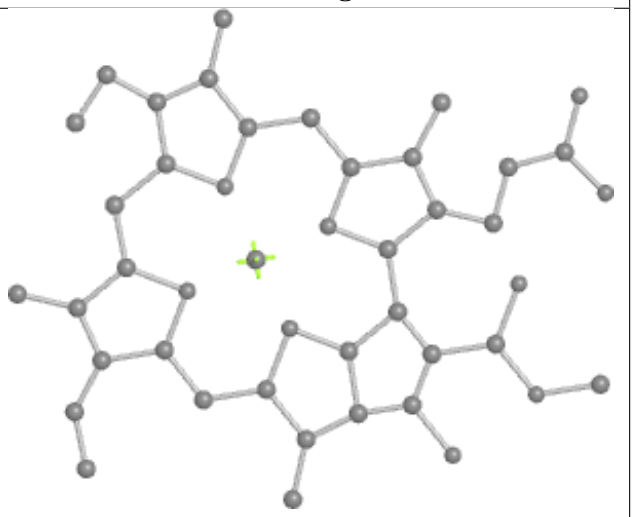
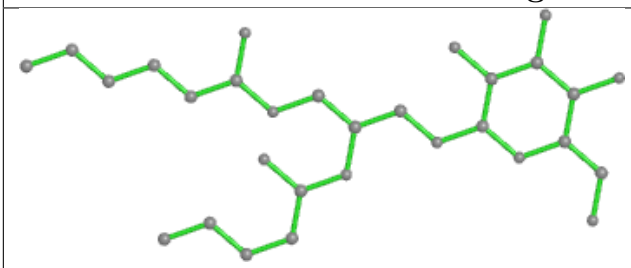


Rings

Ligand LMG j 103



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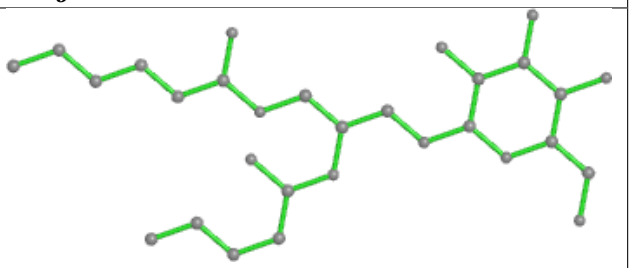
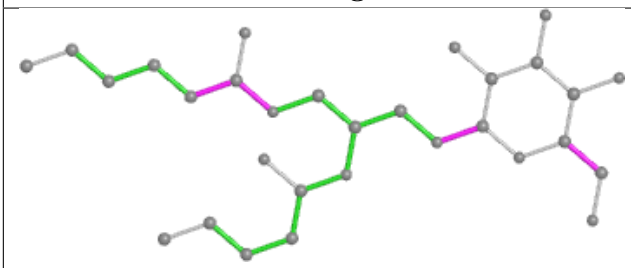


Bond angles



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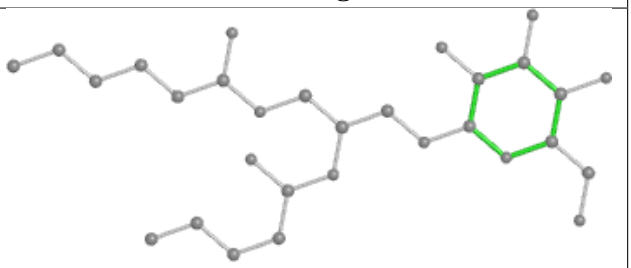
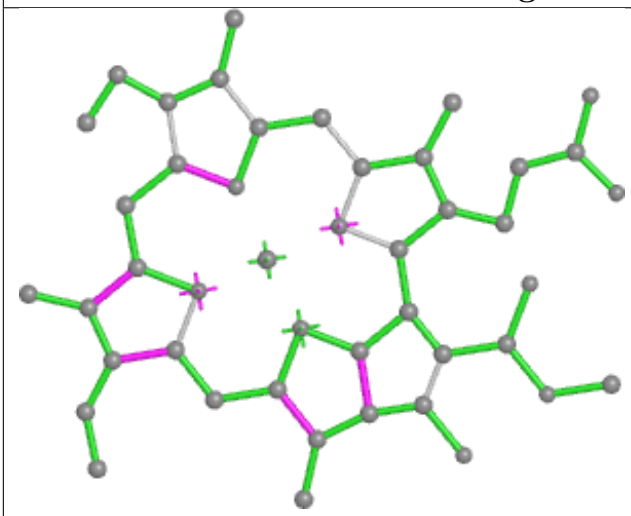


Rings

Ligand CLA 6b 310



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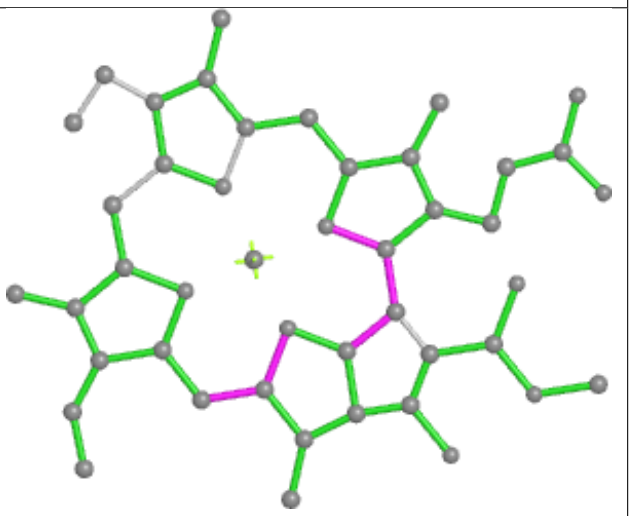
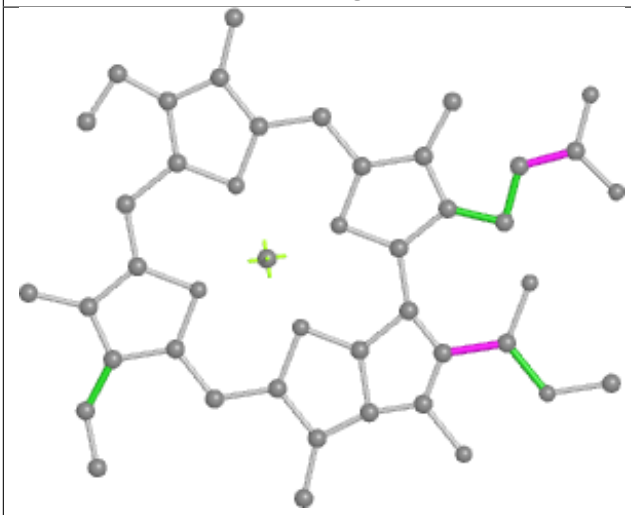


Bond angles



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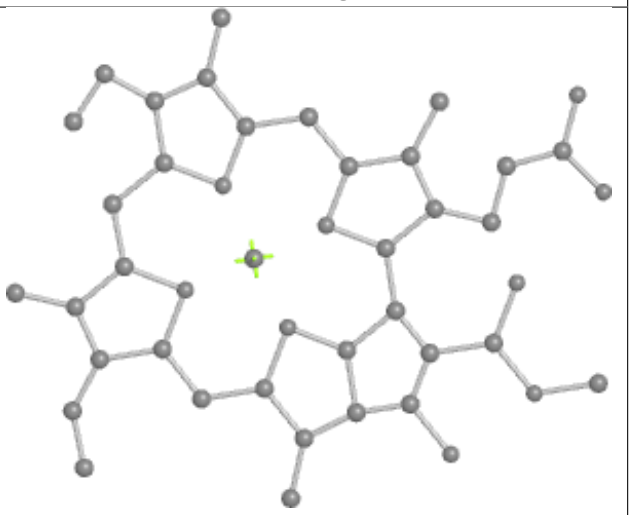
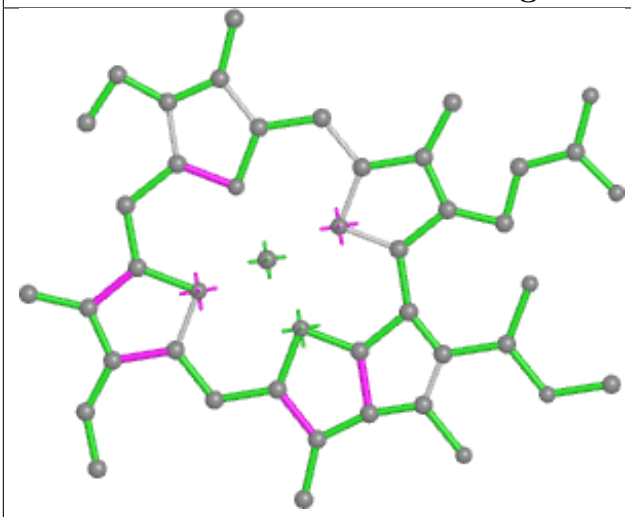


Rings

Ligand CLA 6a 314



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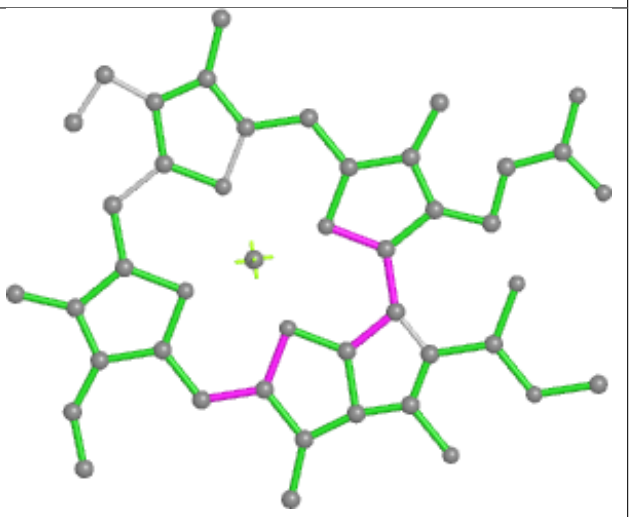
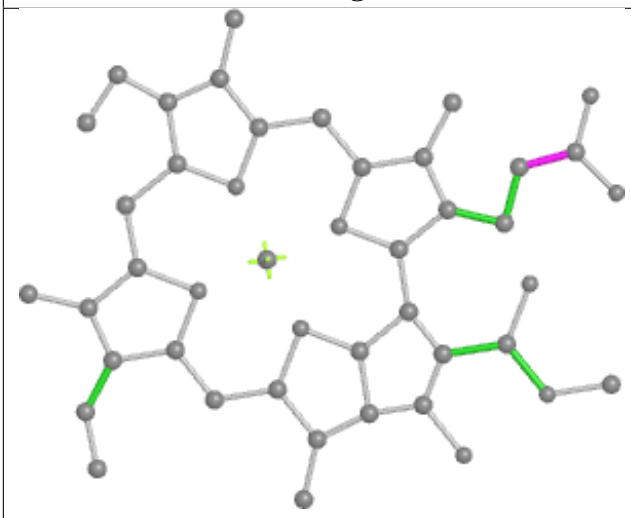


Bond angles



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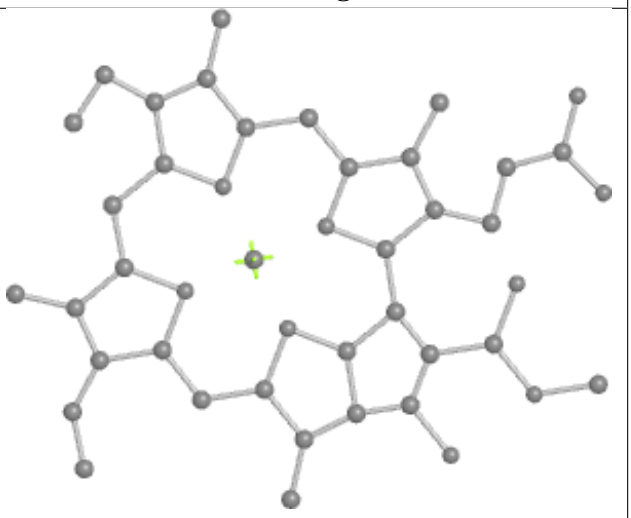
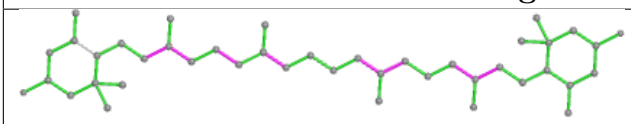


Rings

Ligand LUT 6b 318



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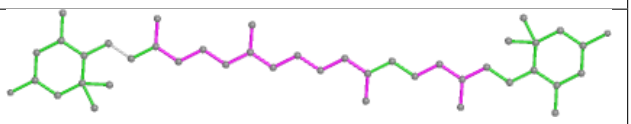
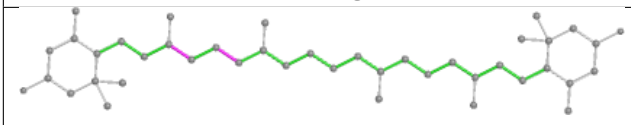


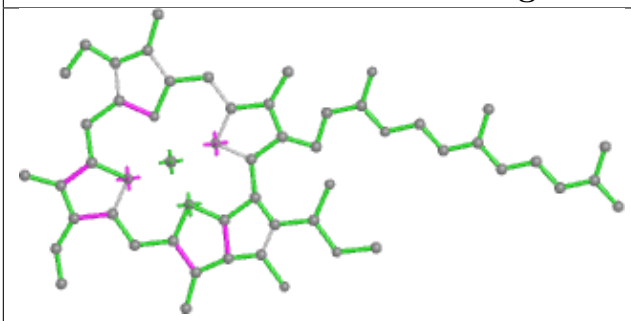
Bond angles



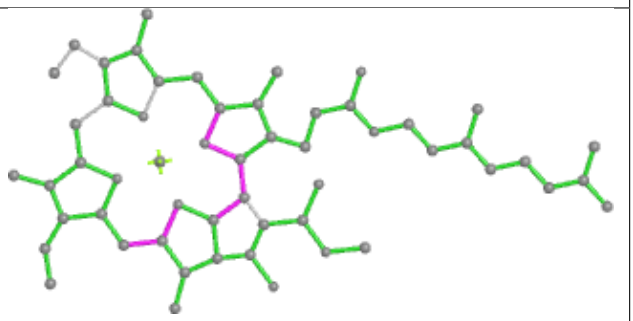
Torsions

Rings

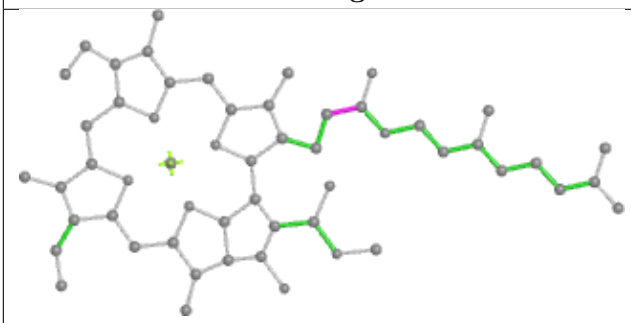
Ligand CLA 6b 315



Bond lengths



Bond angles



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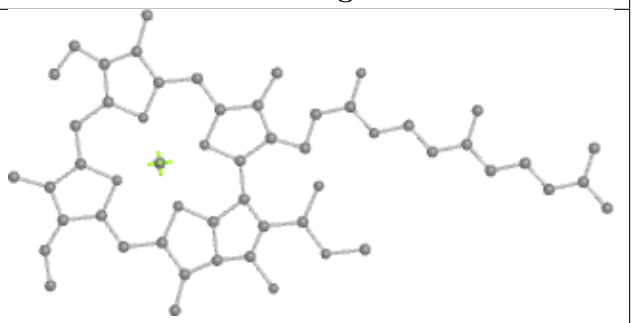
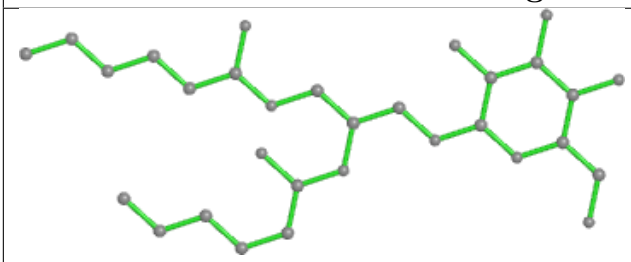
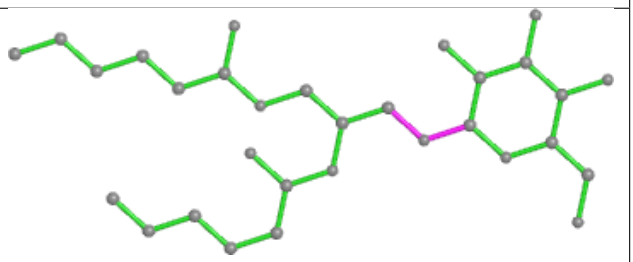


Rings

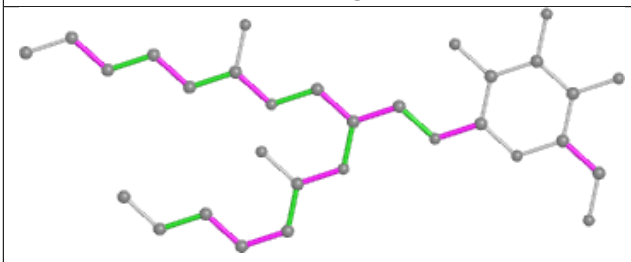
Ligand LMG I 201



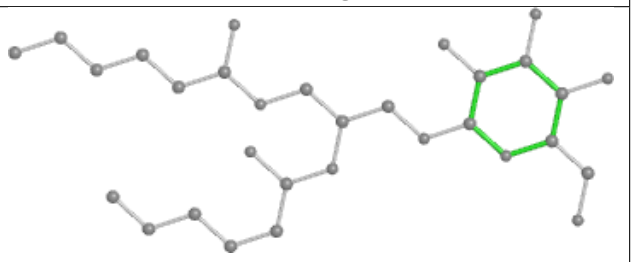
Bond lengths



Bond angles

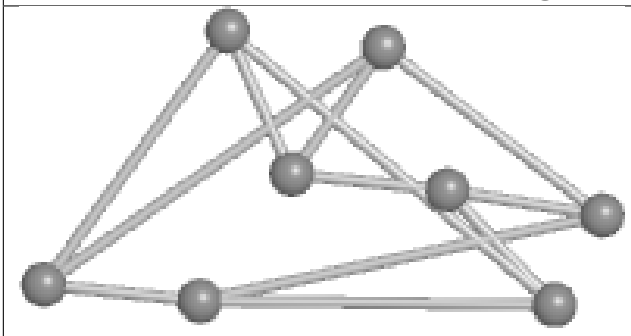


Torsions

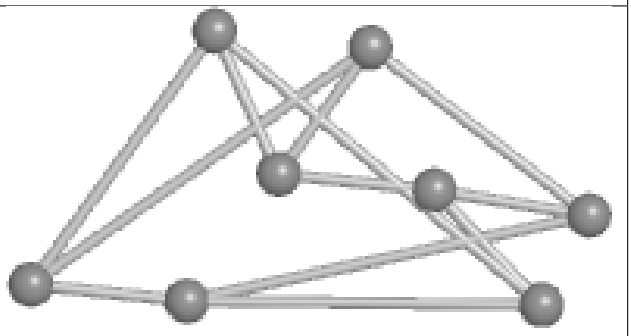


Rings

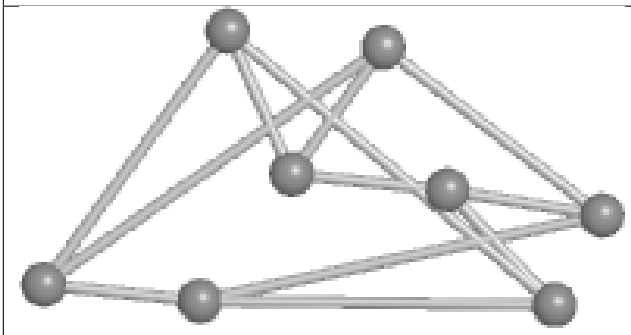
Ligand SF4 c 101



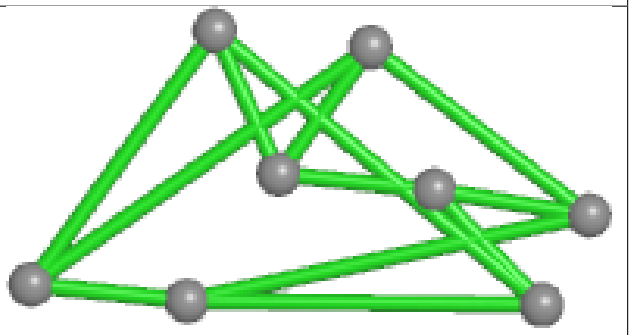
Bond lengths



Bond angles

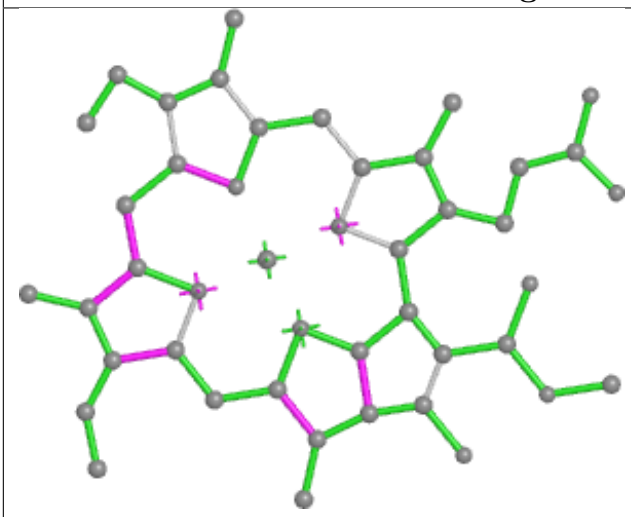


Torsions

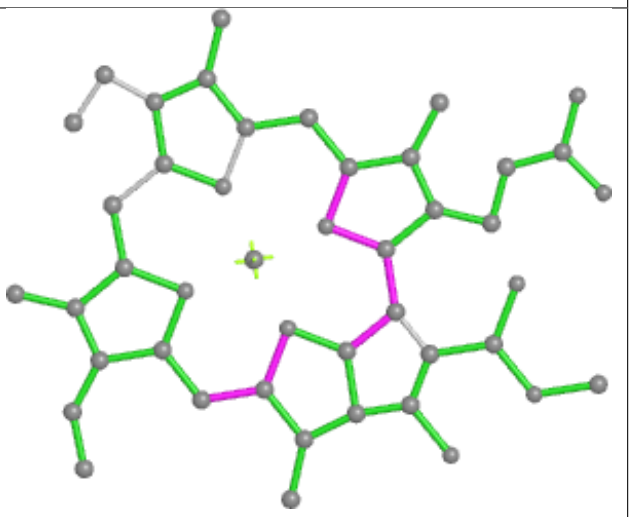


Rings

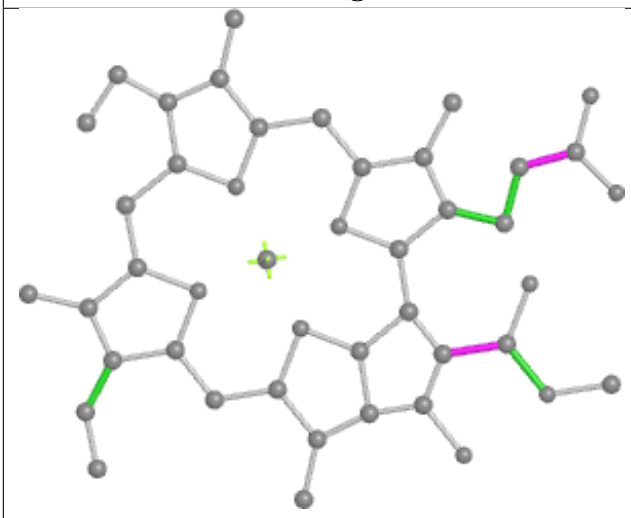
Ligand CLA 2a 310



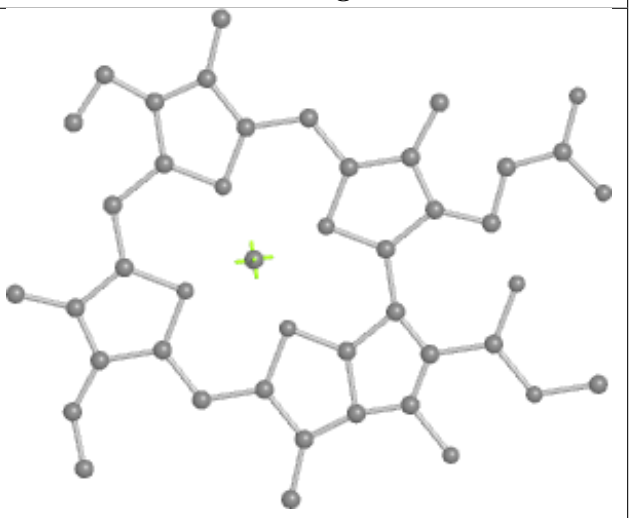
Bond lengths



Bond angles

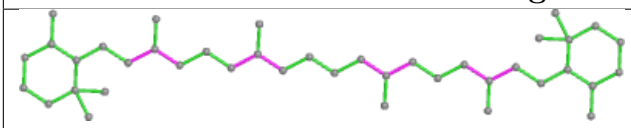


Torsions

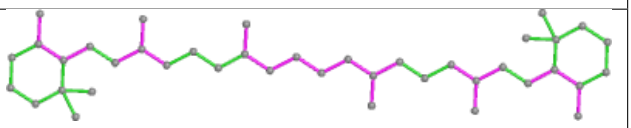


Rings

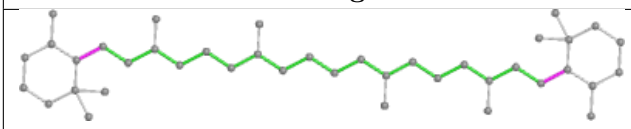
Ligand BCR I 202



Bond lengths



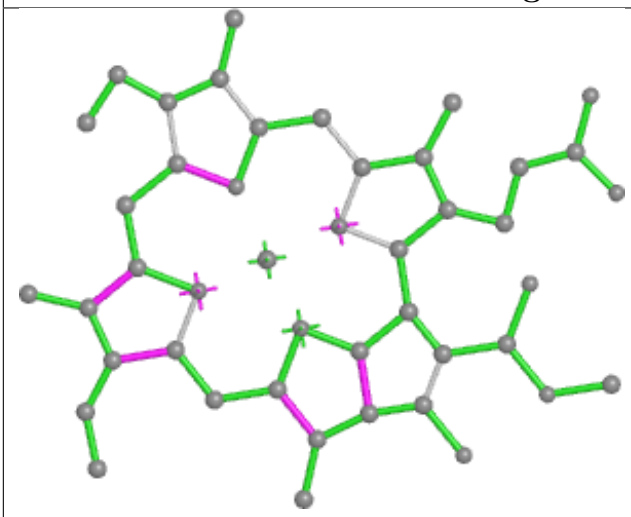
Bond angles



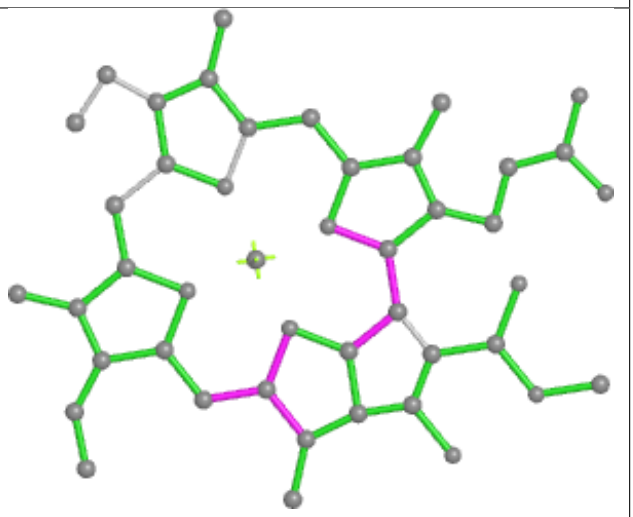
Torsions

Rings

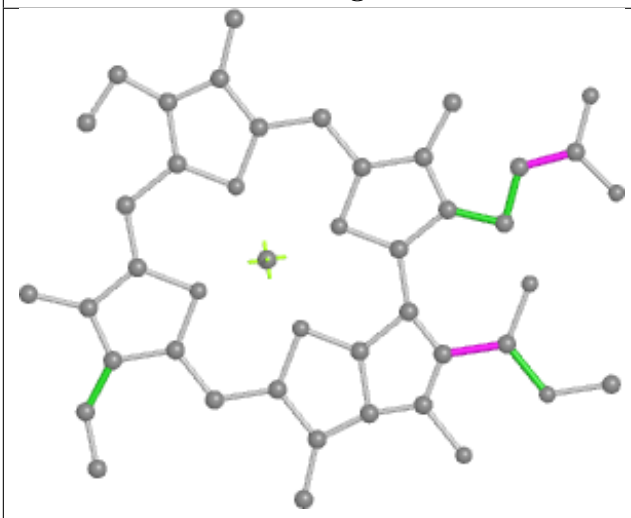
Ligand CLA G 203



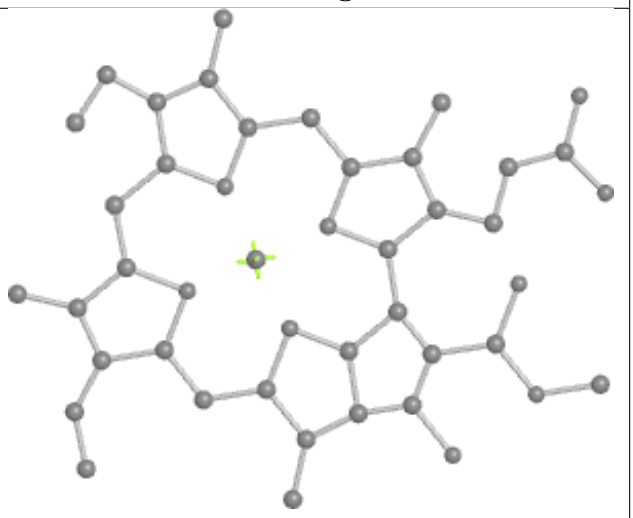
Bond lengths



Bond angles

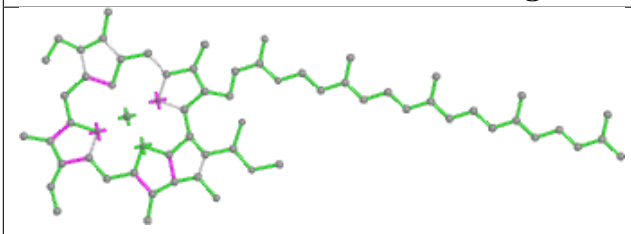


Torsions

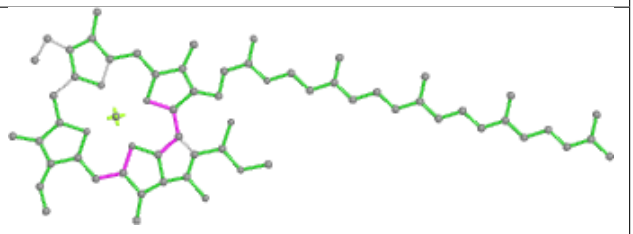


Rings

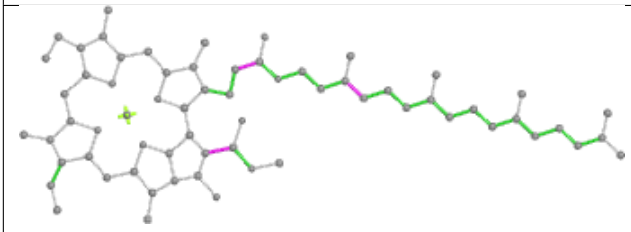
Ligand CLA A 833



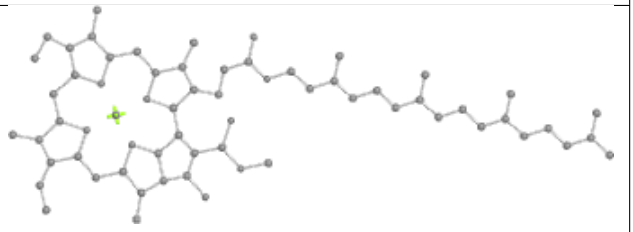
Bond lengths



Bond angles

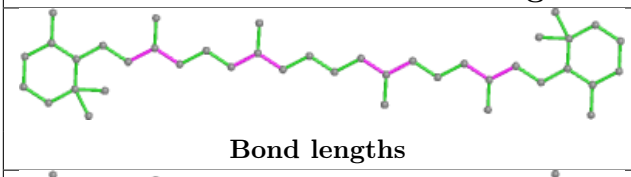


Torsions

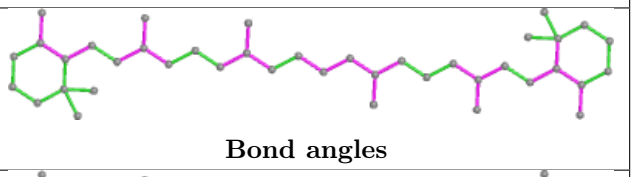


Rings

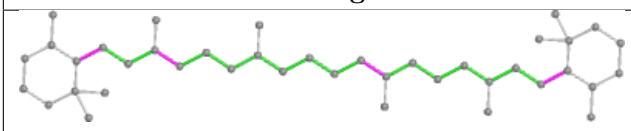
Ligand BCR a 851



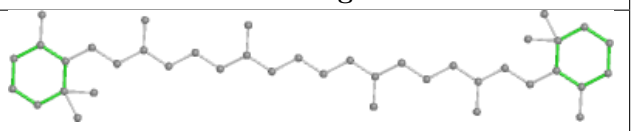
Bond lengths



Bond angles

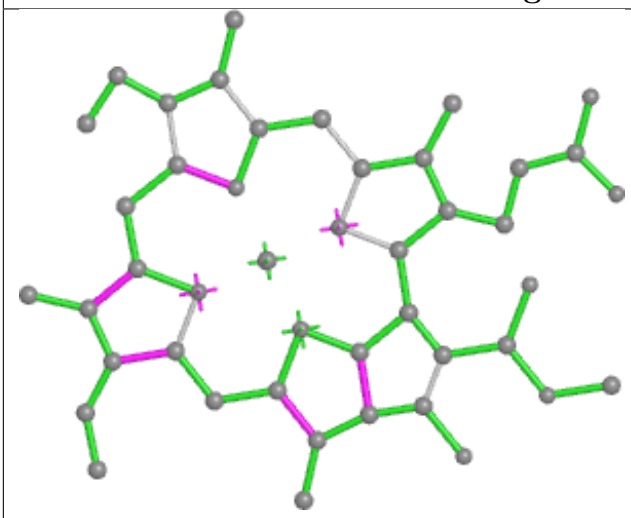


Torsions

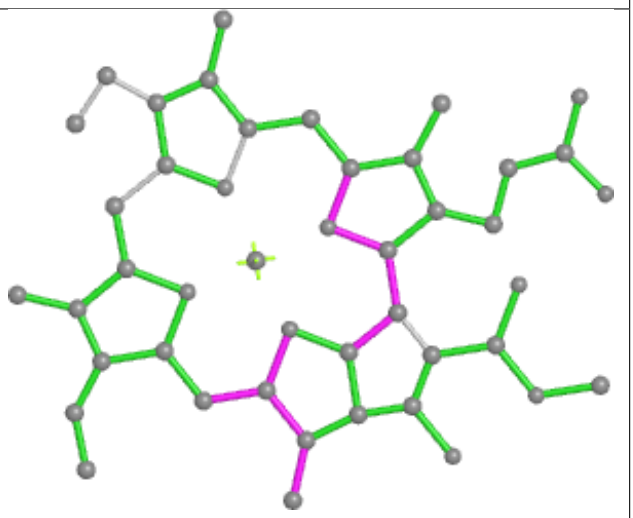


Rings

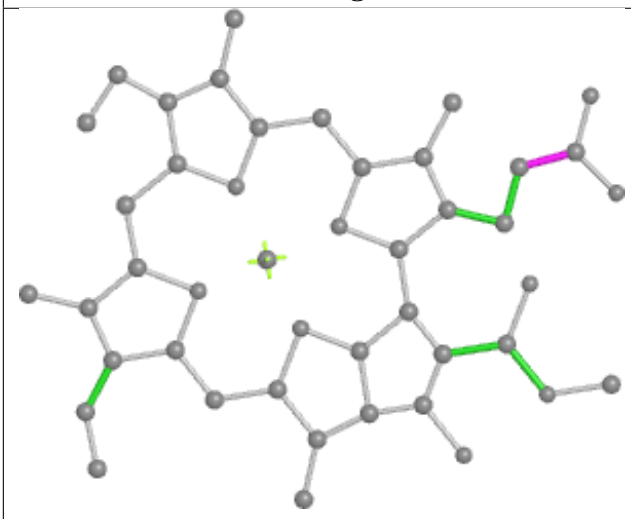
Ligand CLA A 822



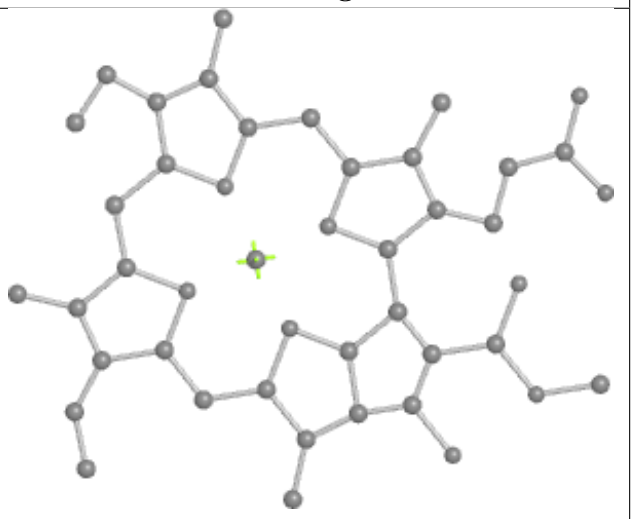
Bond lengths



Bond angles

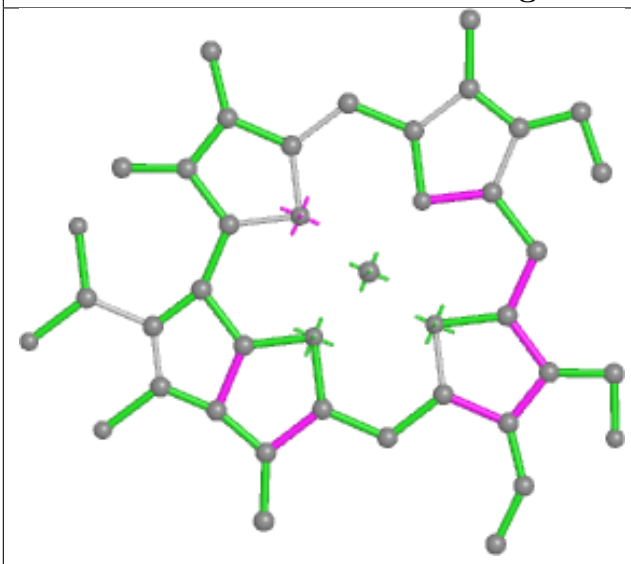


Torsions

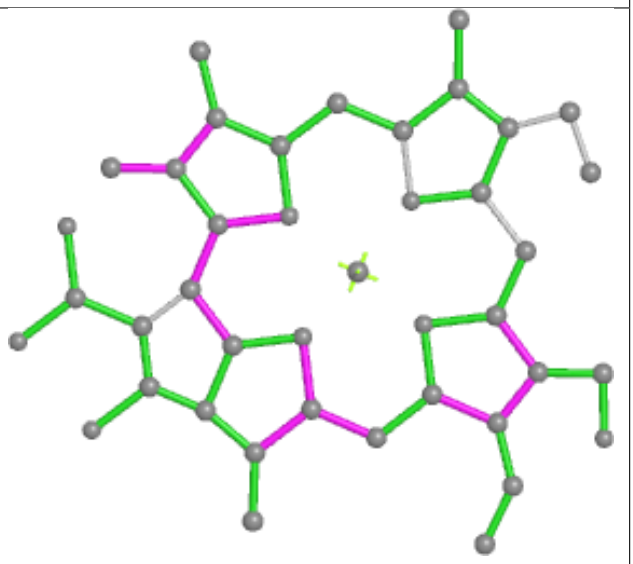


Rings

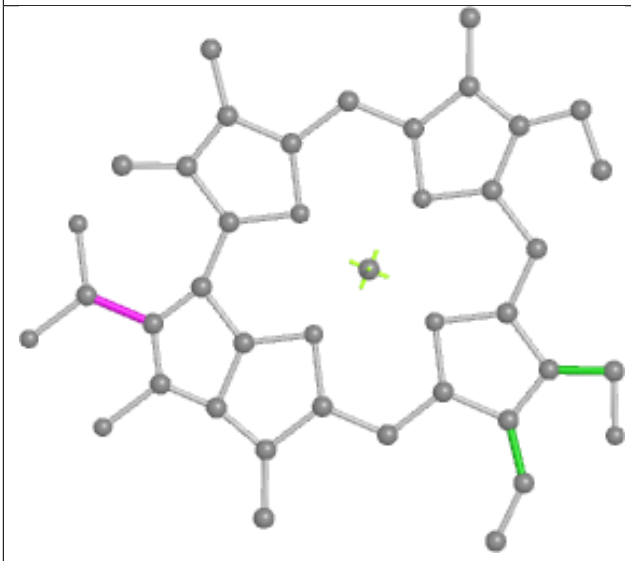
Ligand CHL 6a 309



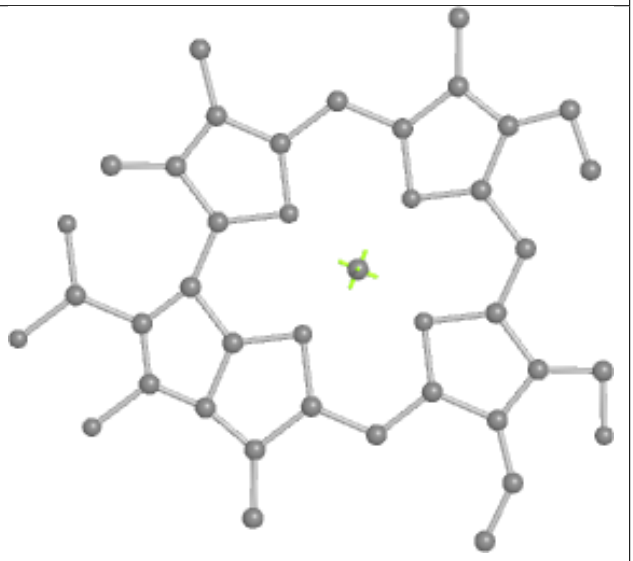
Bond lengths



Bond angles

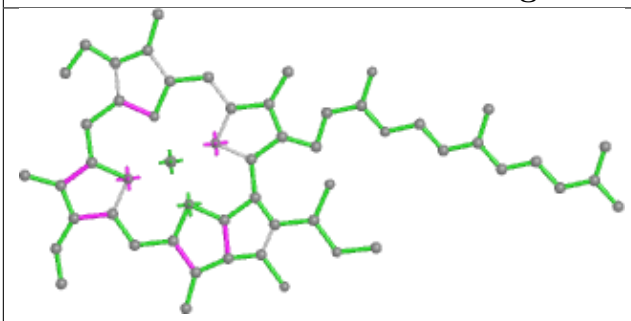


Torsions

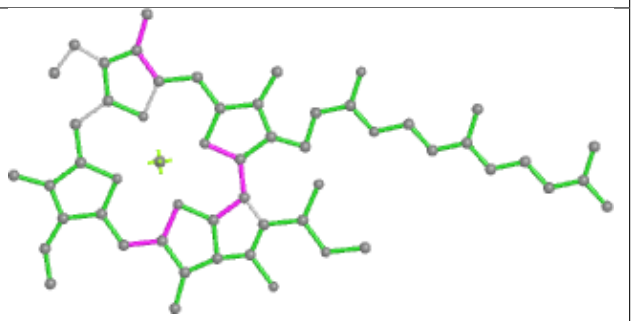


Rings

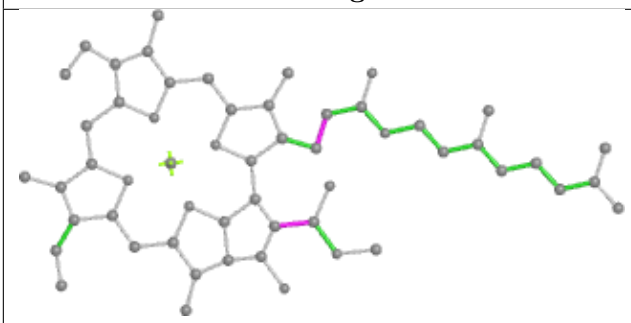
Ligand CLA 3a 302



Bond lengths



Bond angles



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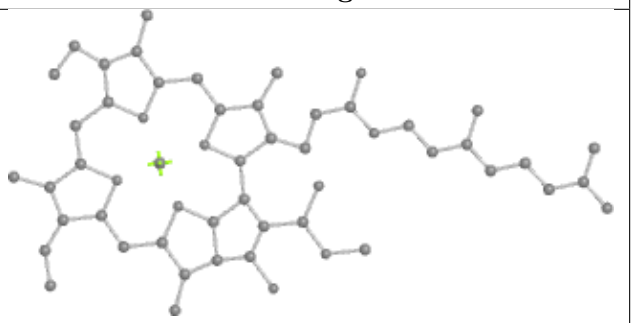
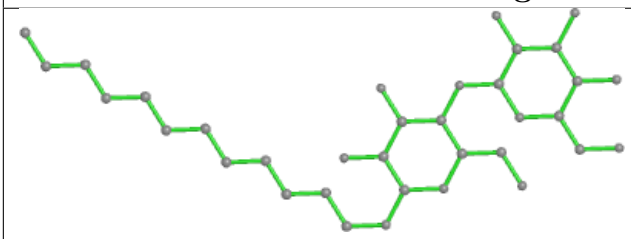


Rings

Ligand LMU 6b 302



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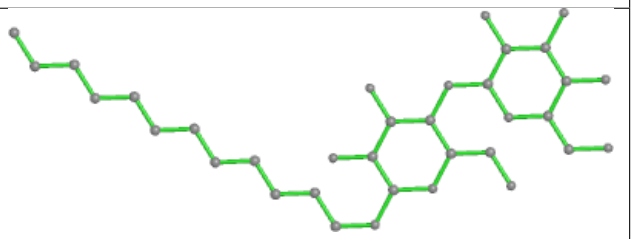
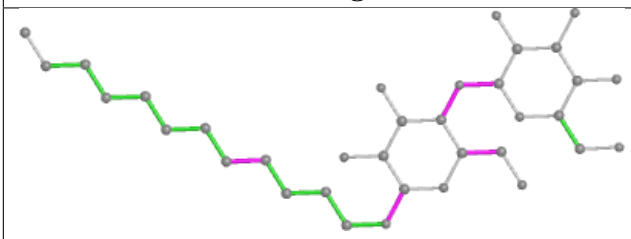
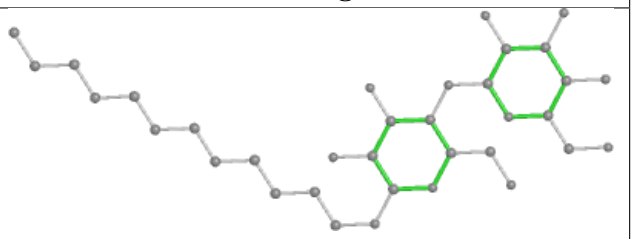


Bond angles

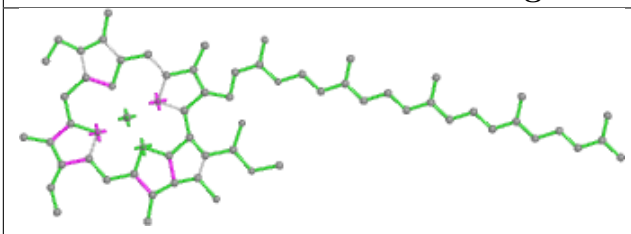


Torsions

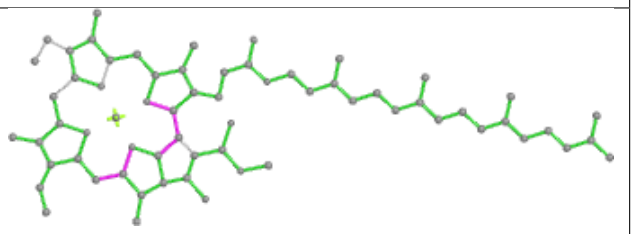


Rings

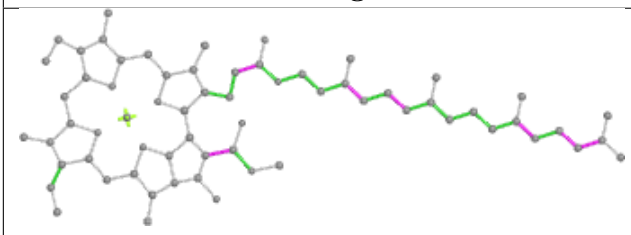
Ligand CLA B 805



Bond lengths



Bond angles



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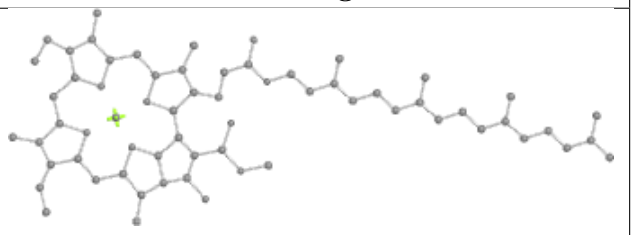
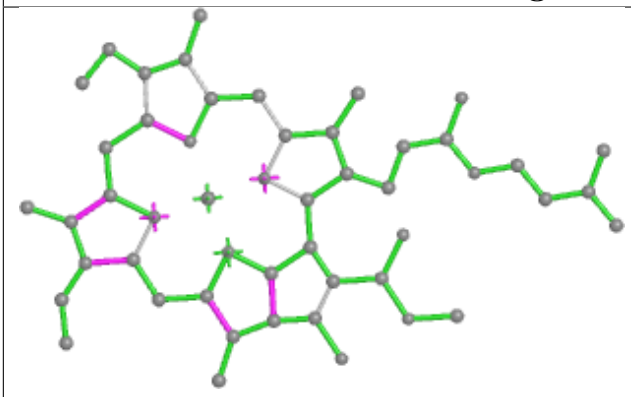
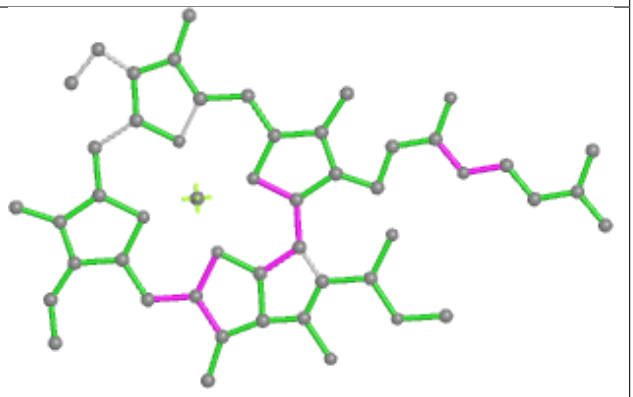


Rings

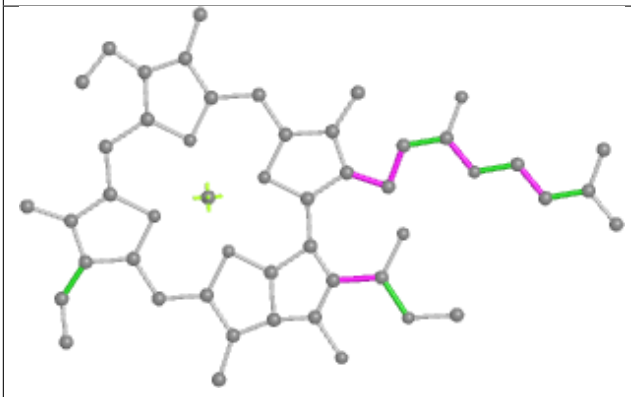
Ligand CLA a 830



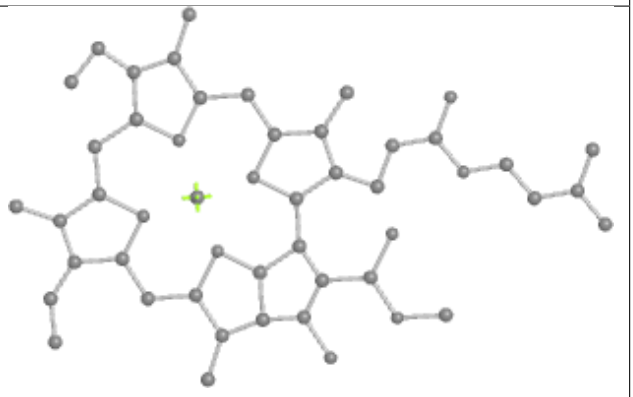
Bond lengths



Bond angles

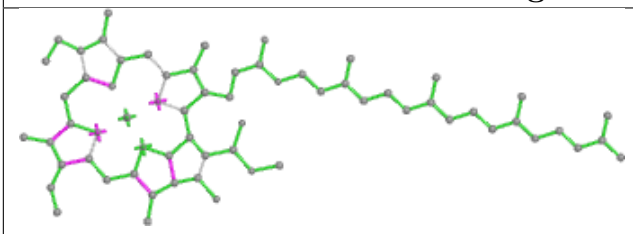


Torsions

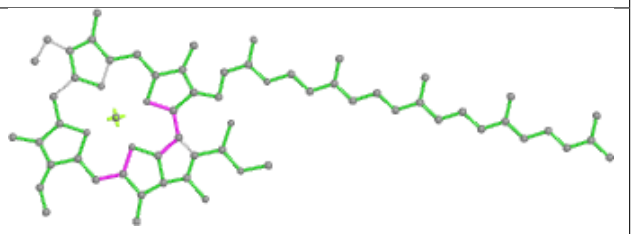


Rings

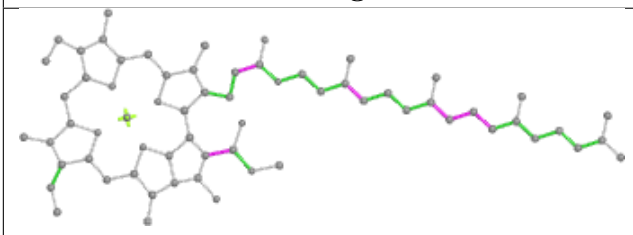
Ligand CLA b 809



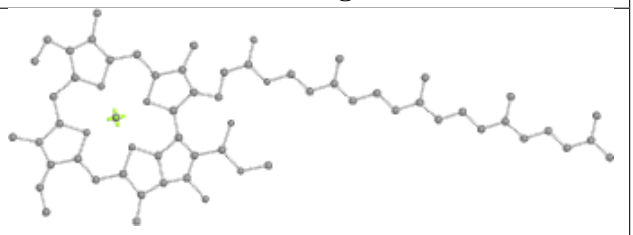
Bond lengths



Bond angles

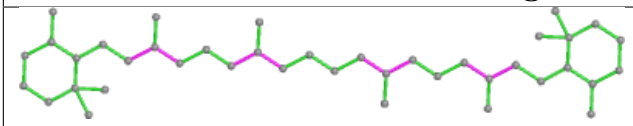


Torsions

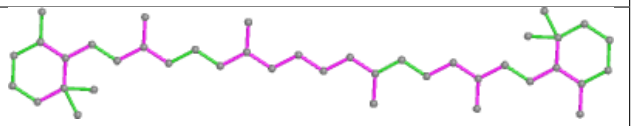


Rings

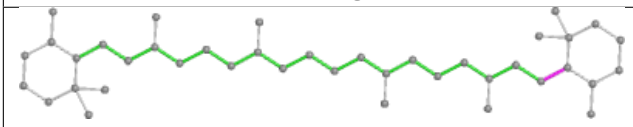
Ligand BCR B 842



Bond lengths



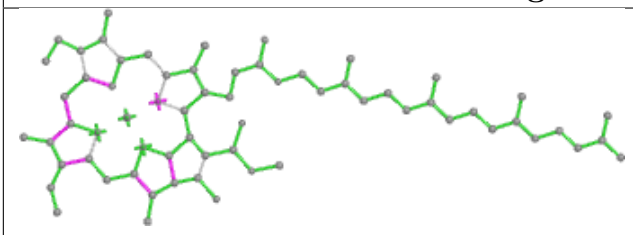
Bond angles



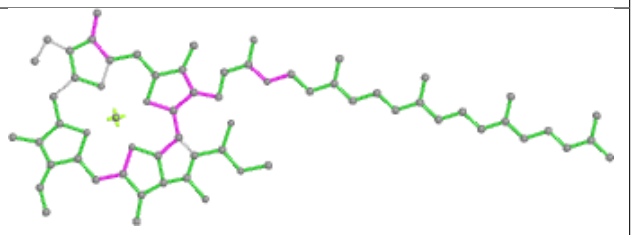
Torsions

Rings

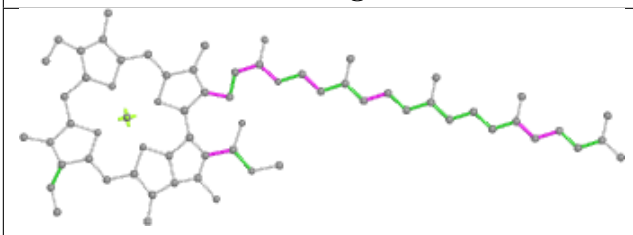
Ligand CLA b 840



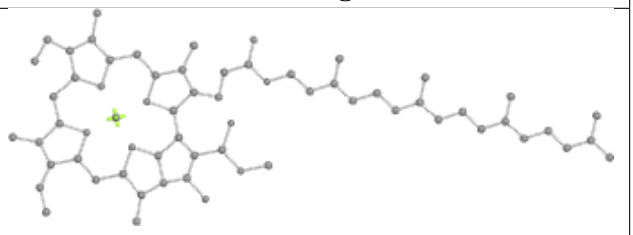
Bond lengths



Bond angles

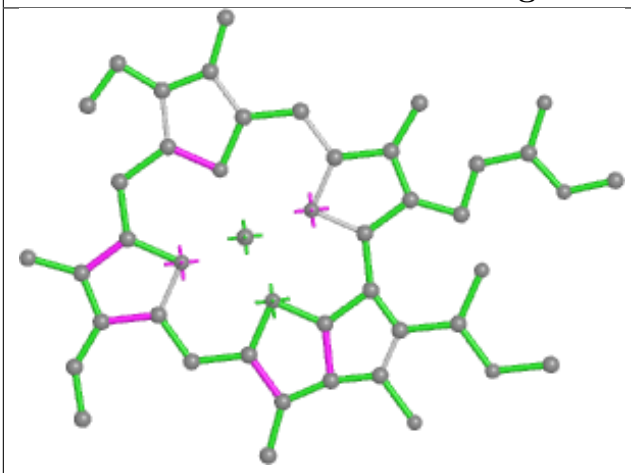


Torsions

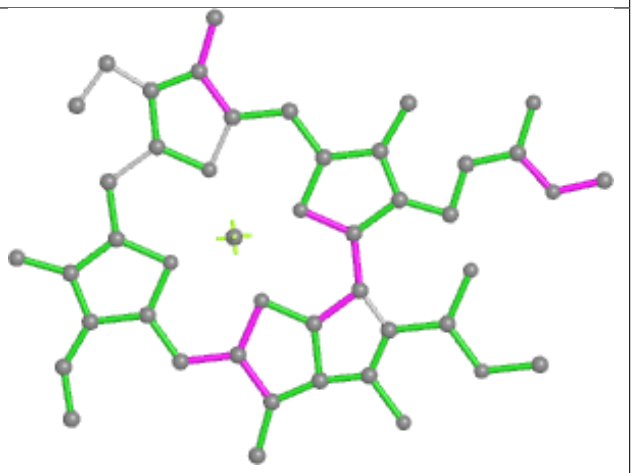


Rings

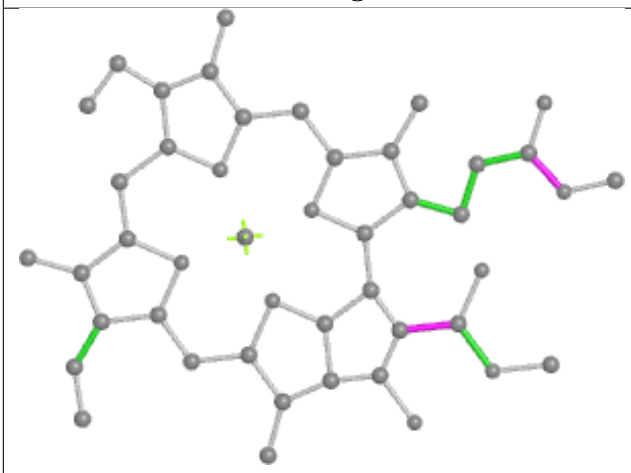
Ligand CLA 3b 305



Bond lengths



Bond angles



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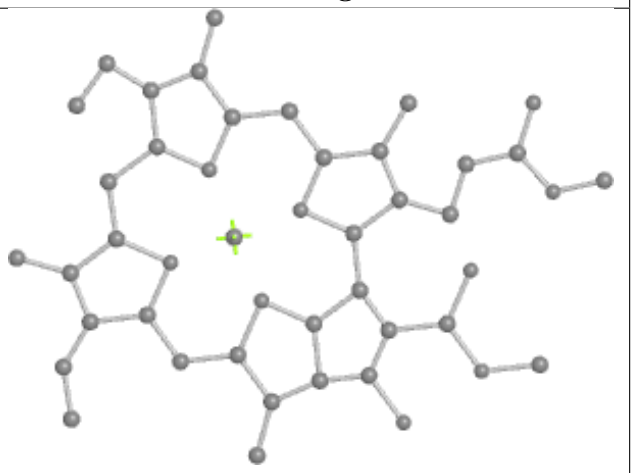
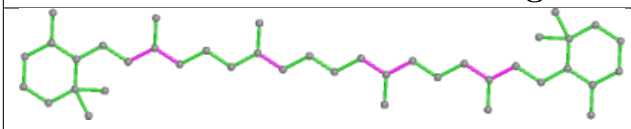
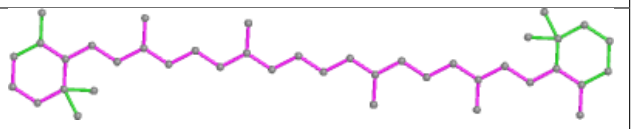


Rings

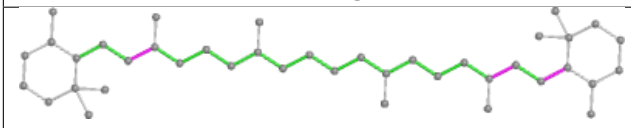
Ligand BCR J 102



Bond lengths



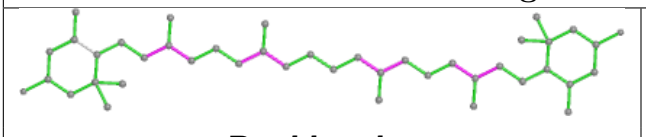
Bond angles



Torsions

Rings

Ligand LUT 3a 316



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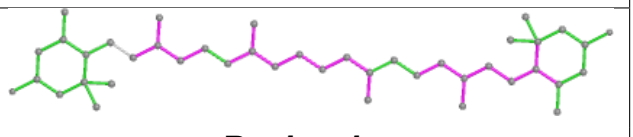
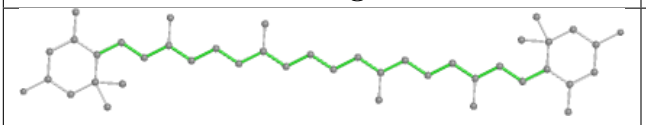


Bond angles



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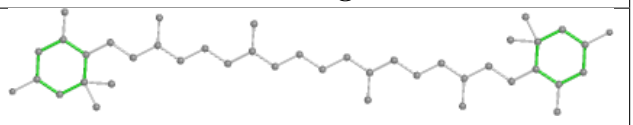
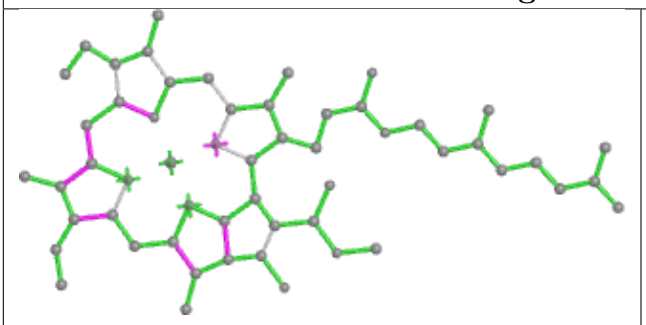


Rings

Ligand CLA 6b 312



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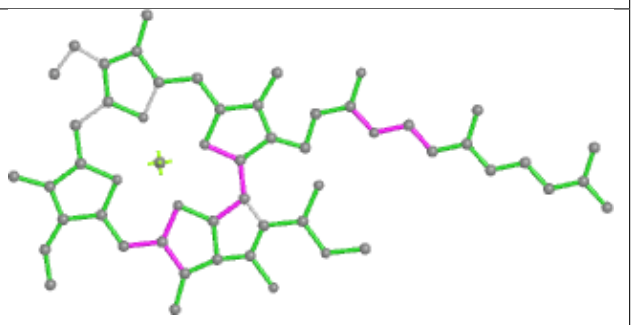
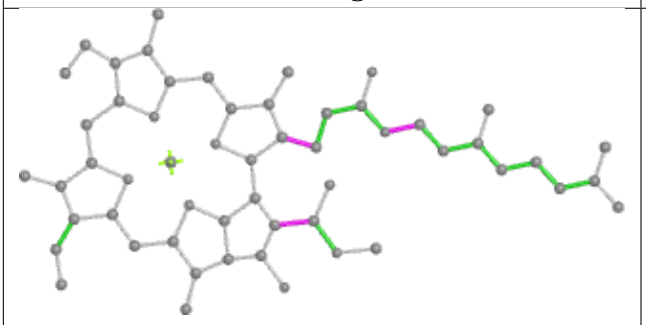


Bond angles



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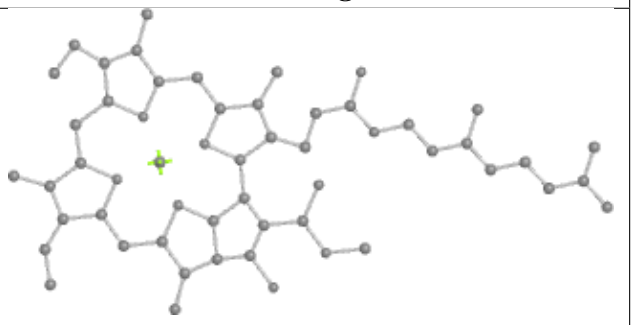
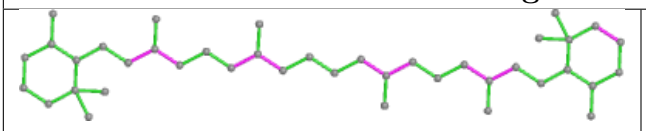


Rings

Ligand BCR A 847



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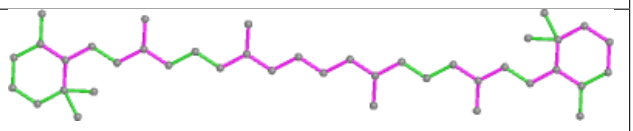
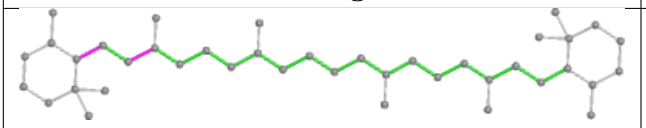


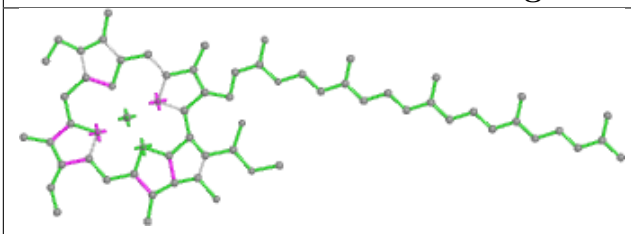
Bond angles



Torsions

Rings

Ligand CLA B 809



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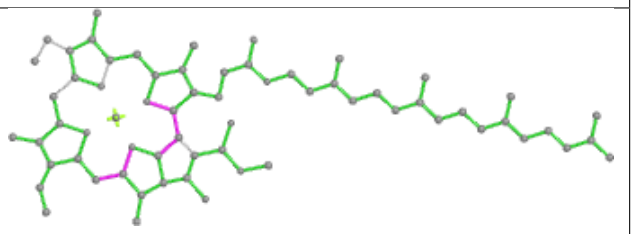
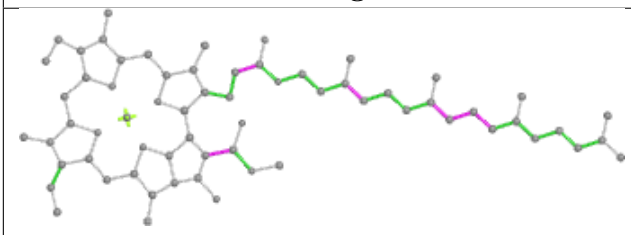


Bond angles



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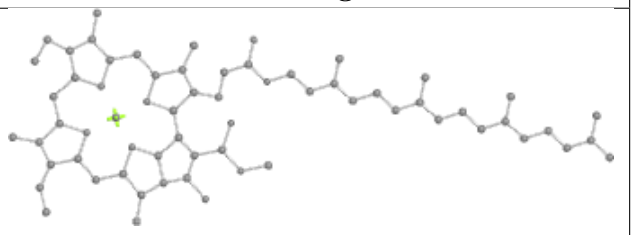
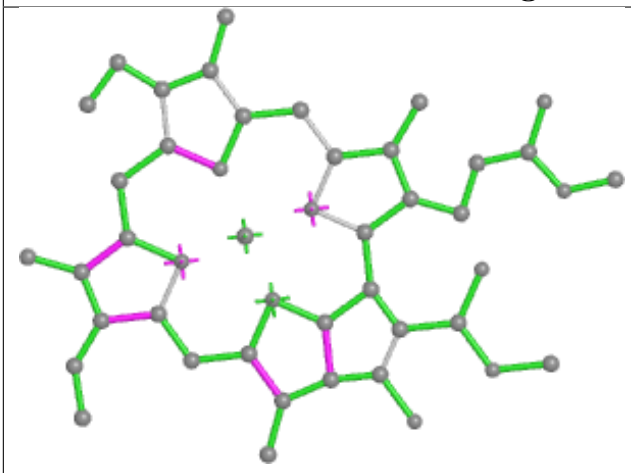


Rings

Ligand CLA 5a 315



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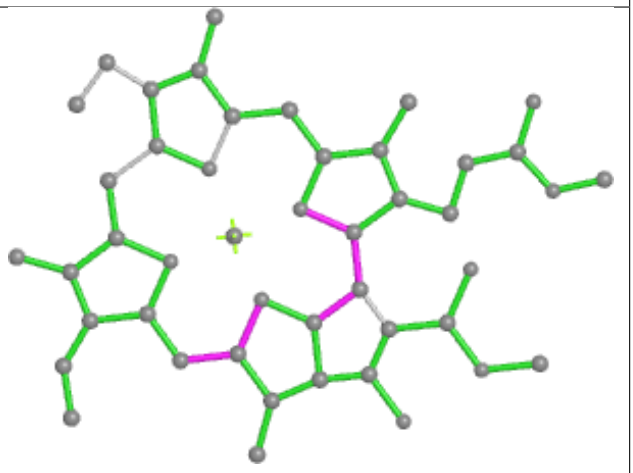
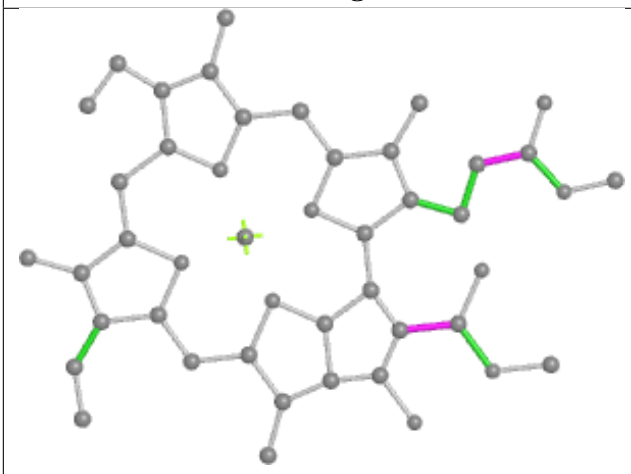


Bond angles



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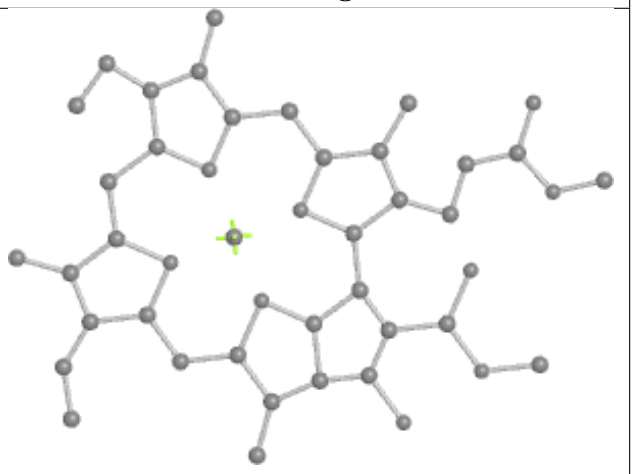
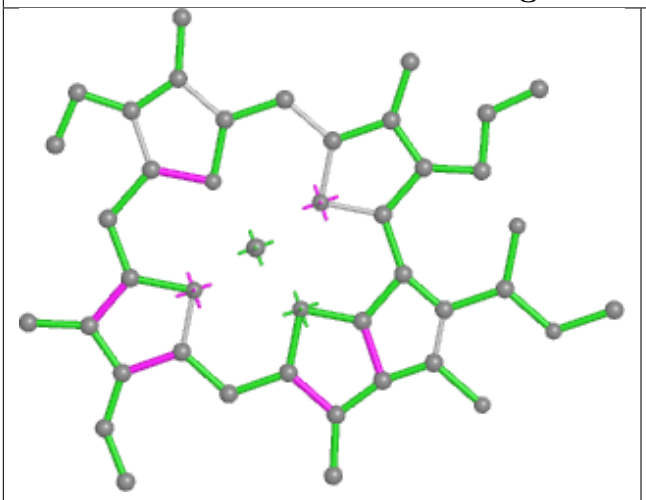


Rings

Ligand CLA 3a 311



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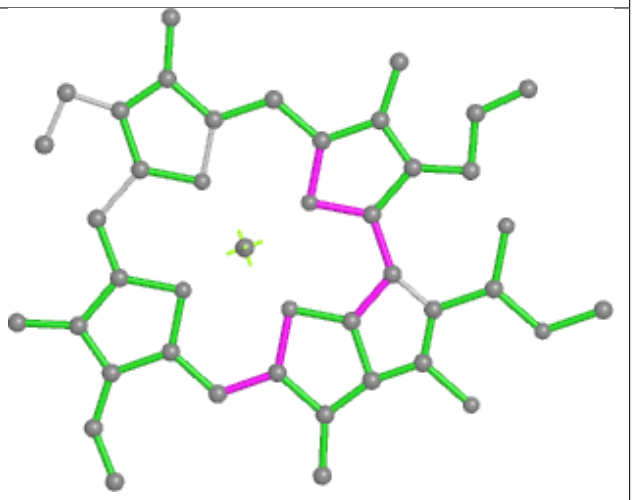
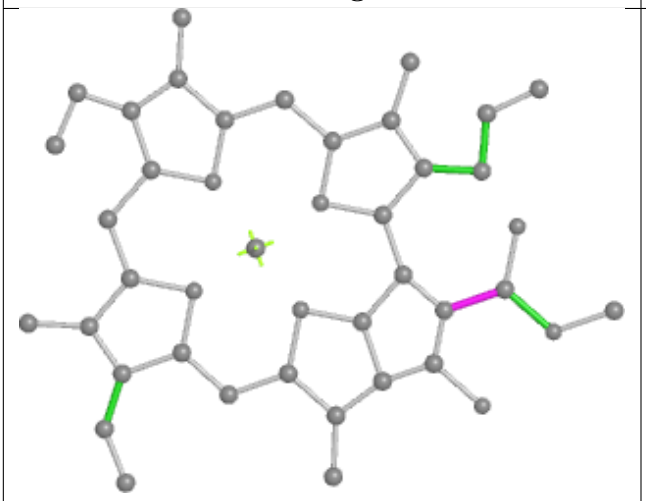


Bond angles



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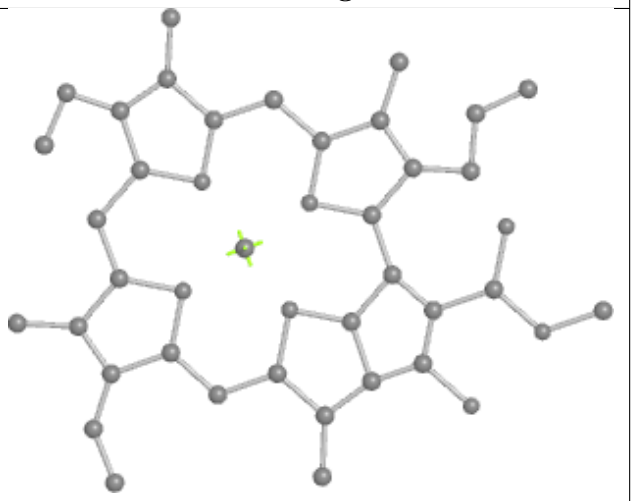
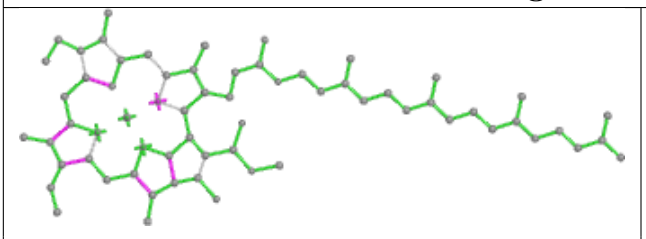
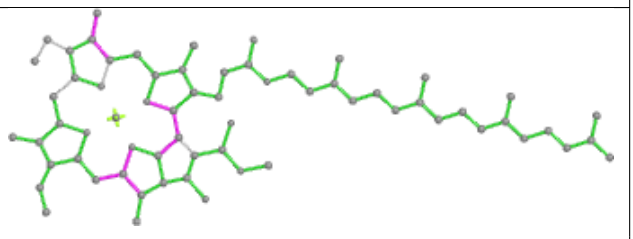


Rings

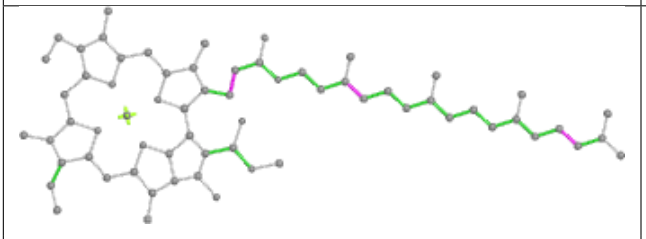
Ligand CLA b 817



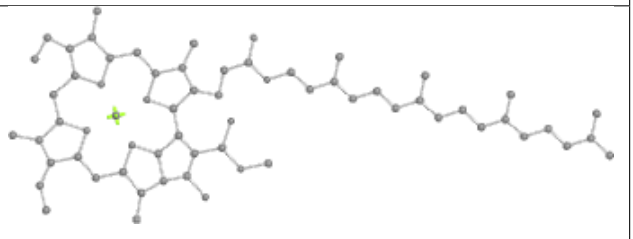
Bond lengths



Bond angles

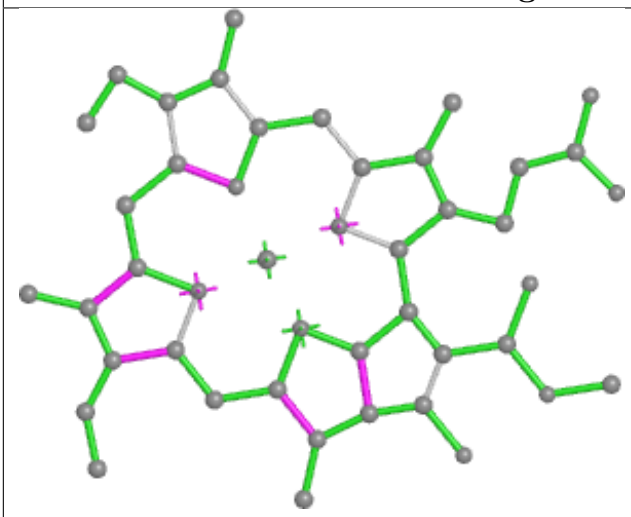


Torsions



Rings

Ligand CLA 2b 303



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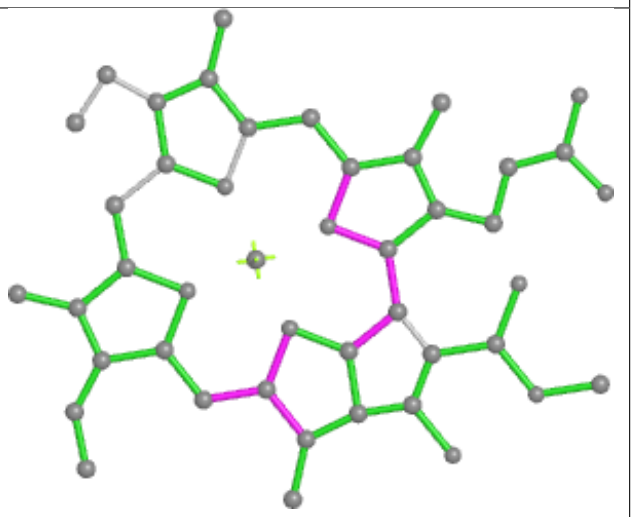
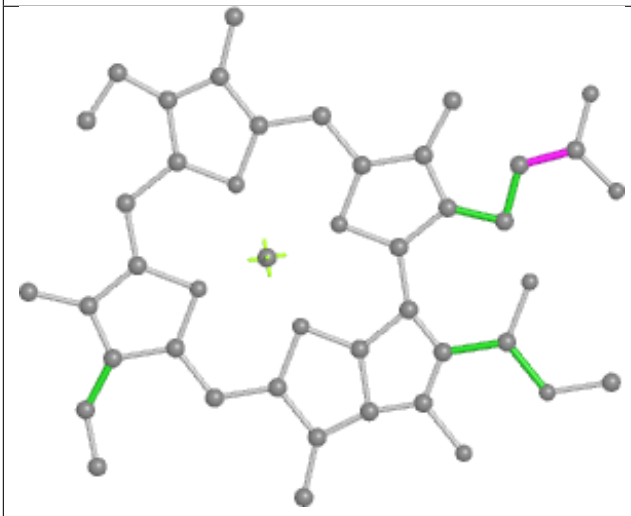


Bond angles



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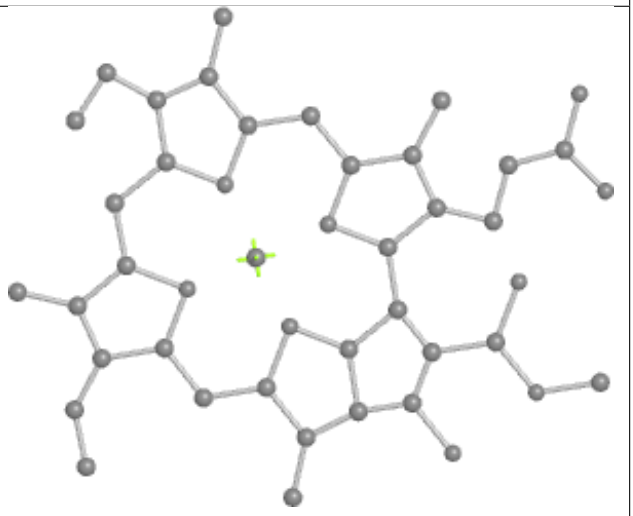
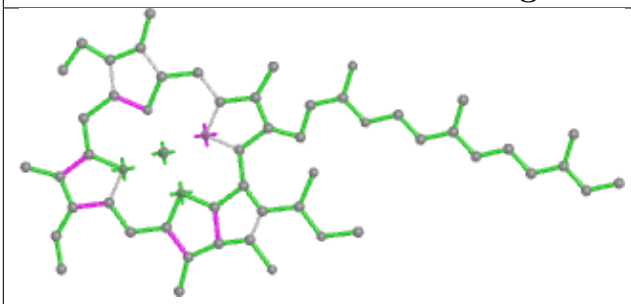


Rings

Ligand CLA 5a 302



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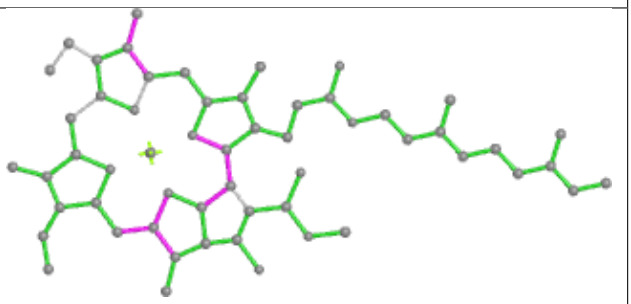
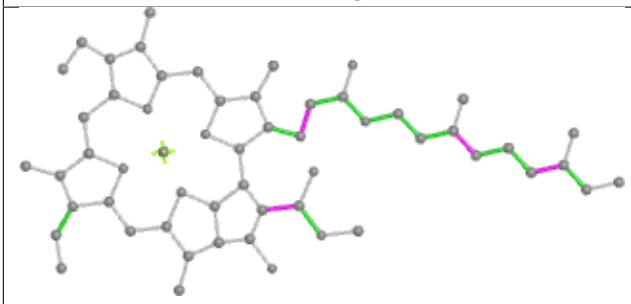


Bond angles



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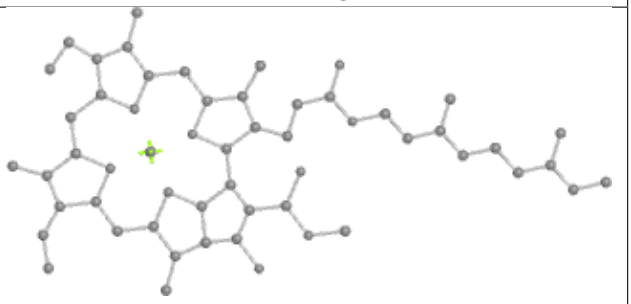
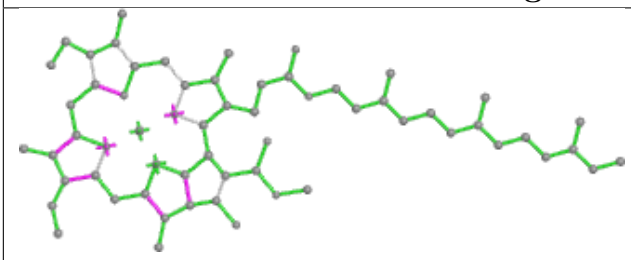


Rings

Ligand CLA B 807



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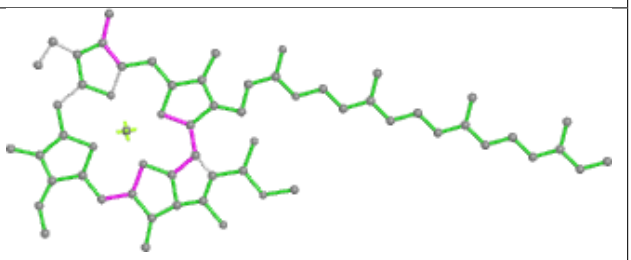
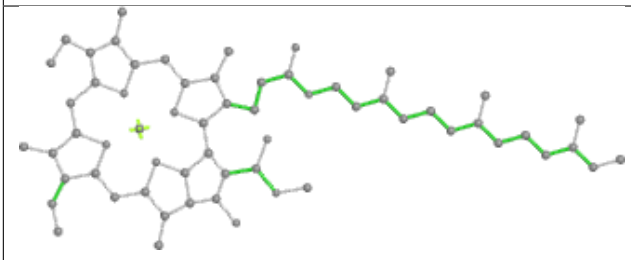


Bond angles



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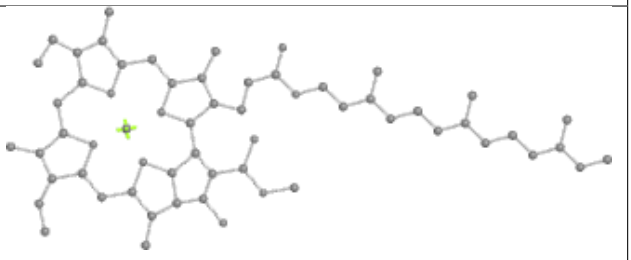
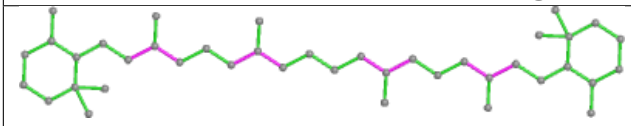
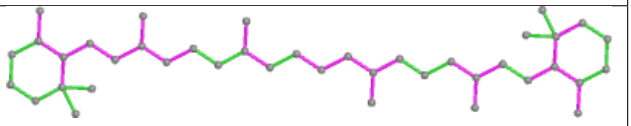


Rings

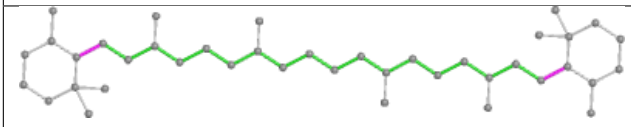
Ligand BCR f 301



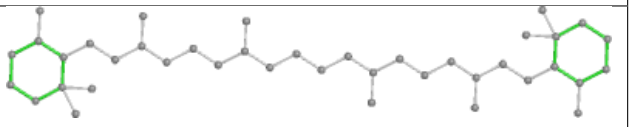
Bond lengths



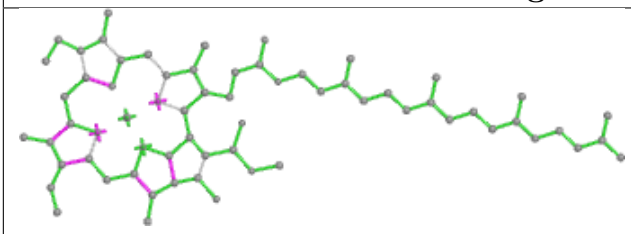
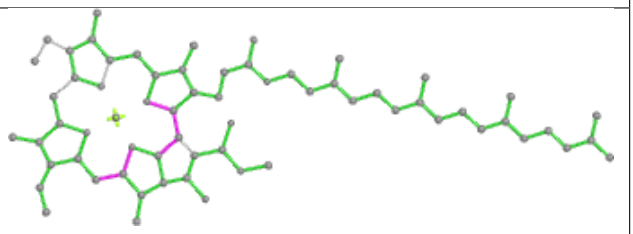
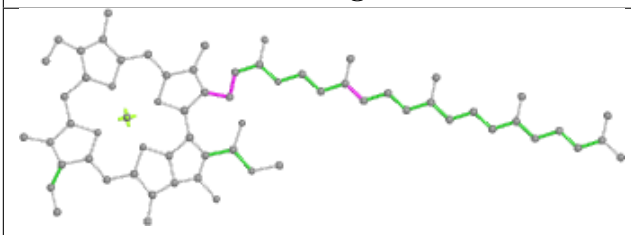
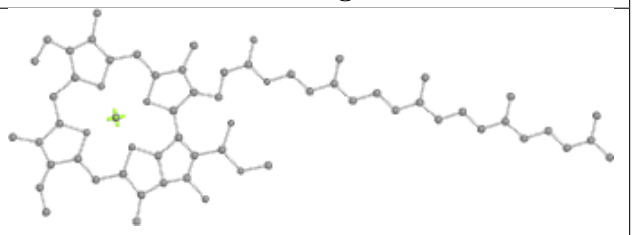
Bond angles

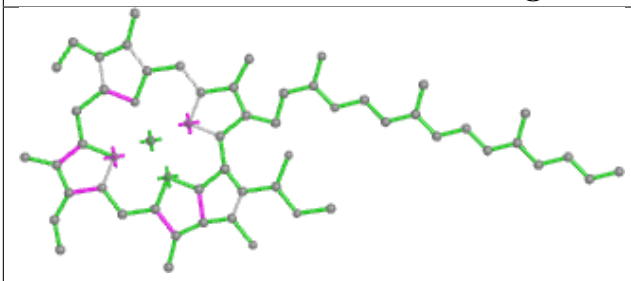
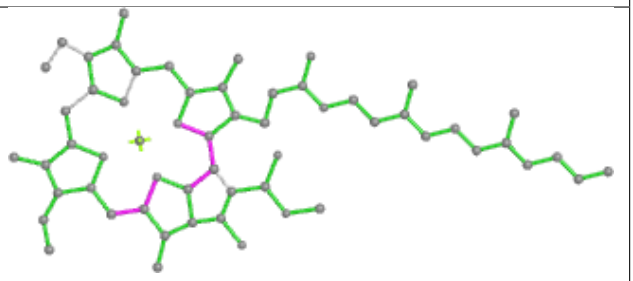
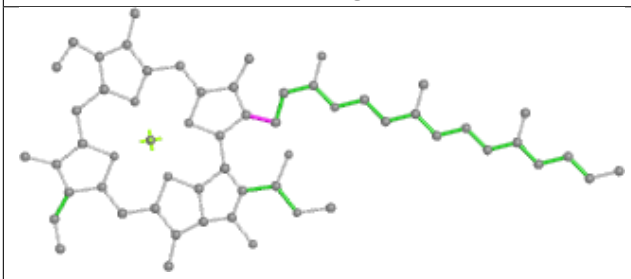
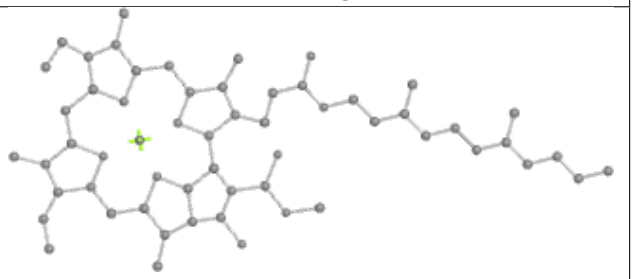


Torsions

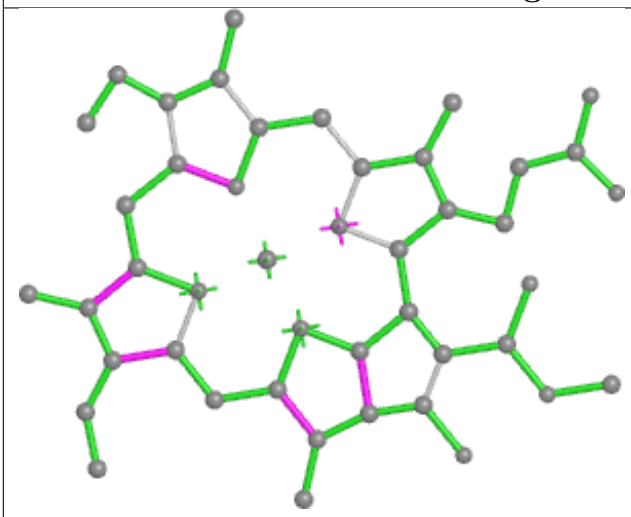


Rings

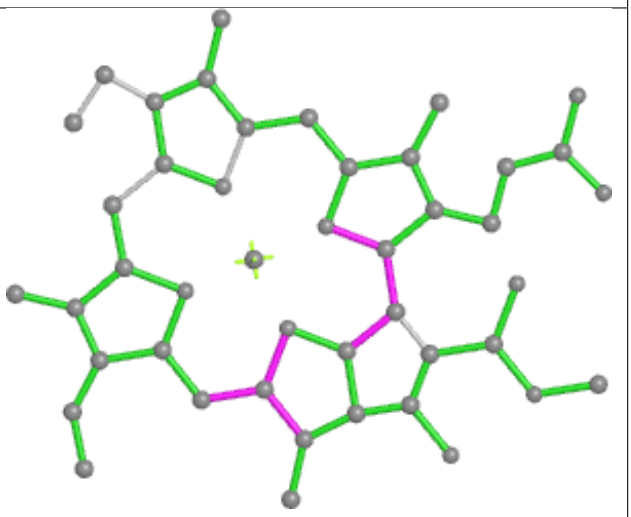
Ligand CLA b 853	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 826	
 Bond lengths	 Bond angles
 Torsions	 Rings

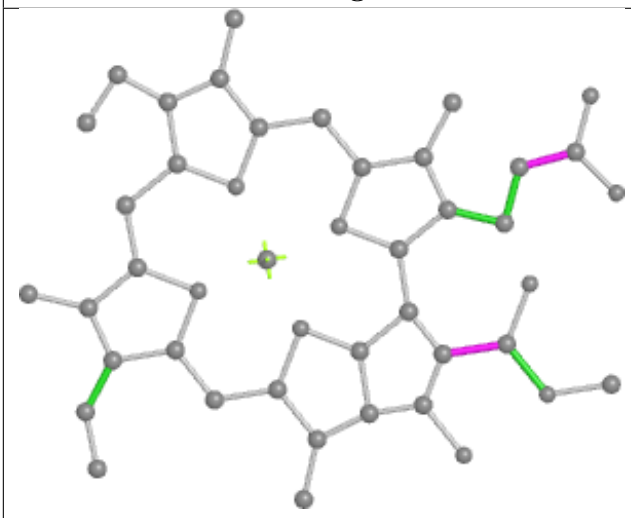
Ligand CLA A 835



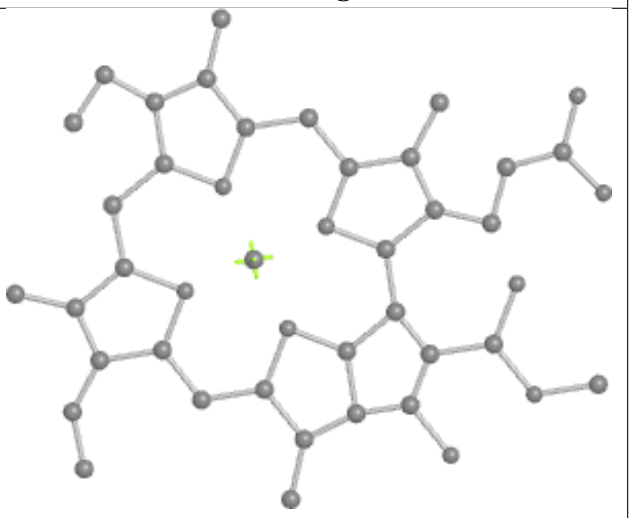
Bond lengths



Bond angles

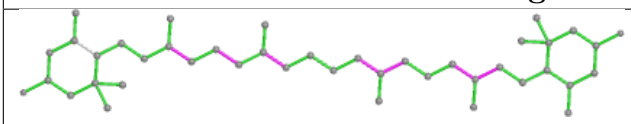


Torsions

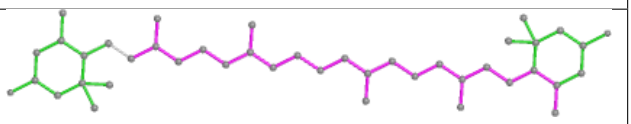


Rings

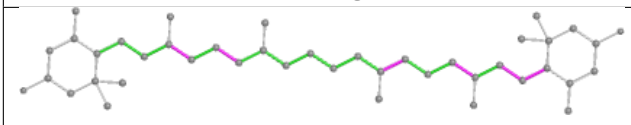
Ligand LUT J 105



Bond lengths



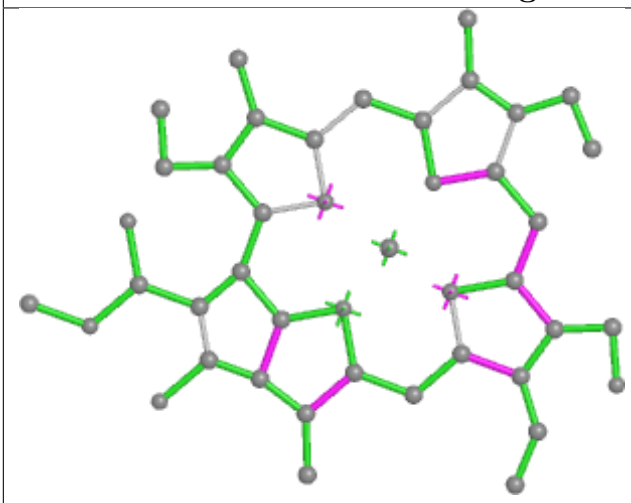
Bond angles



Torsions

Rings

Ligand CHL 5a 314



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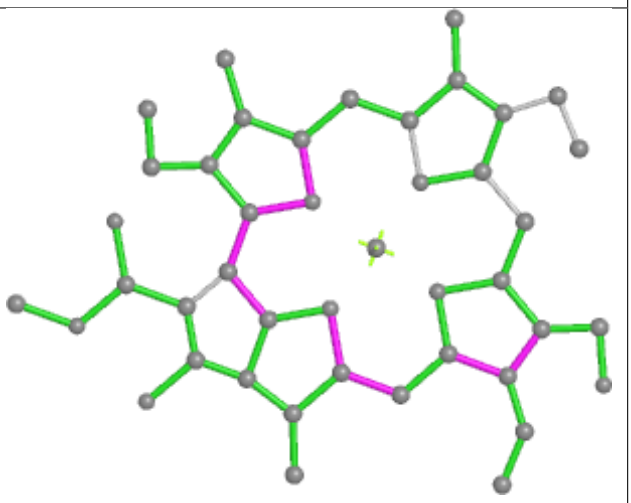

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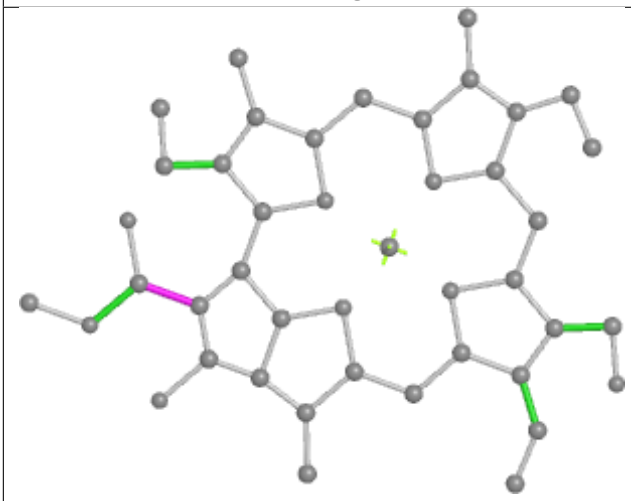

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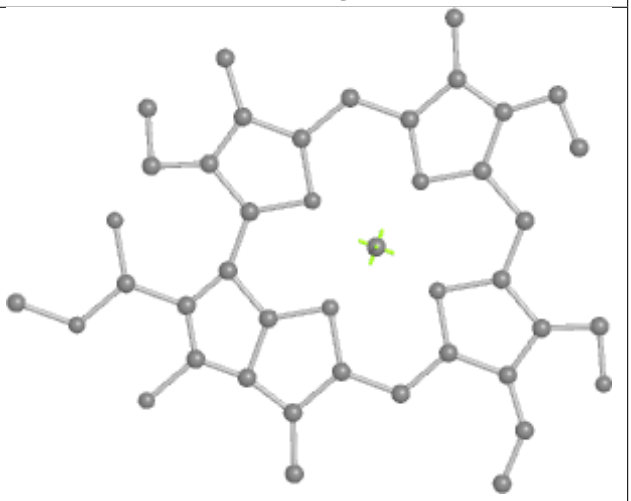
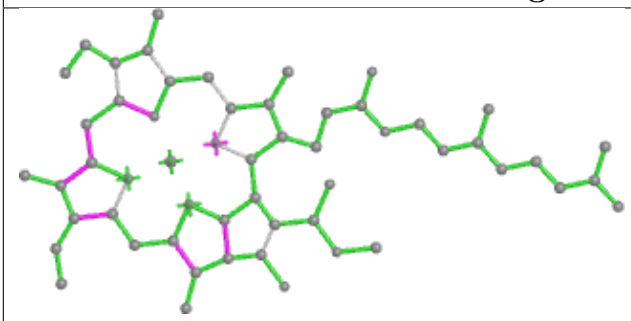
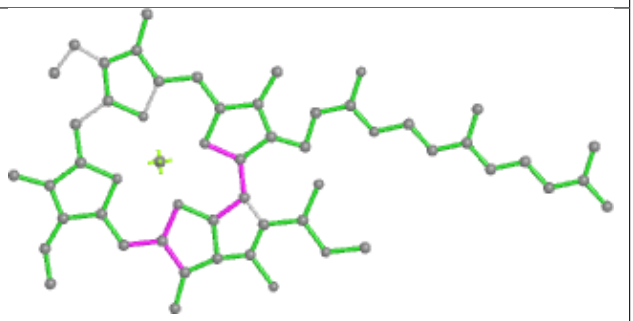
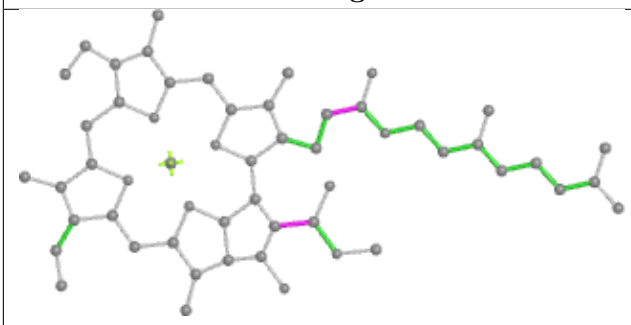
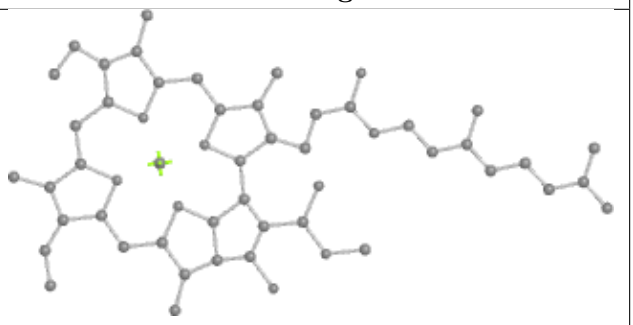
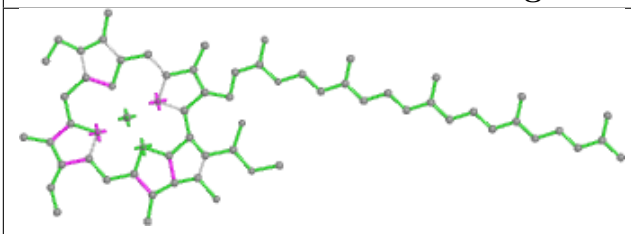
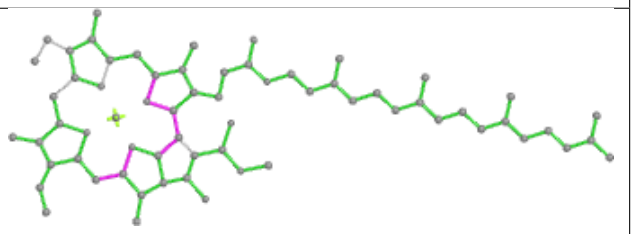
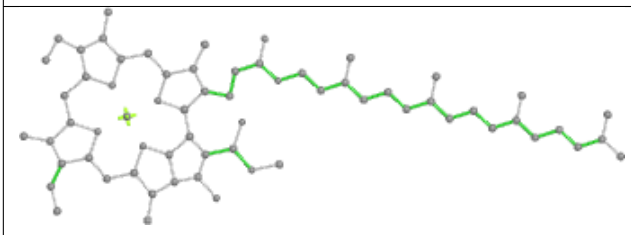
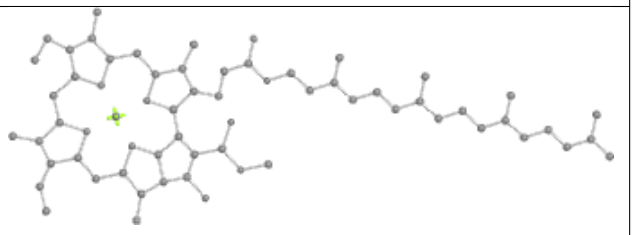
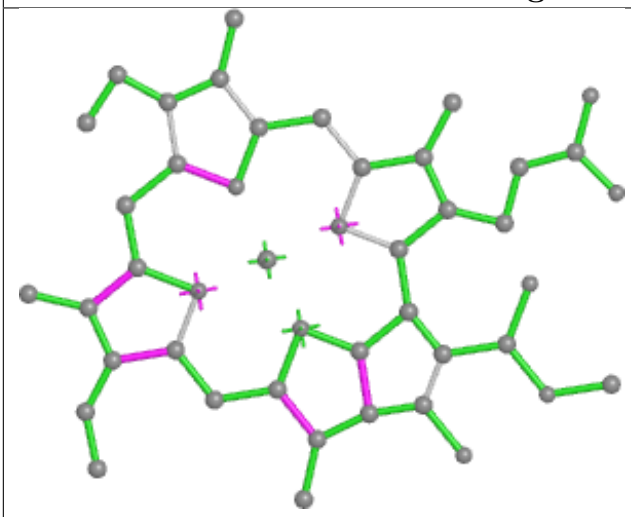


Rings

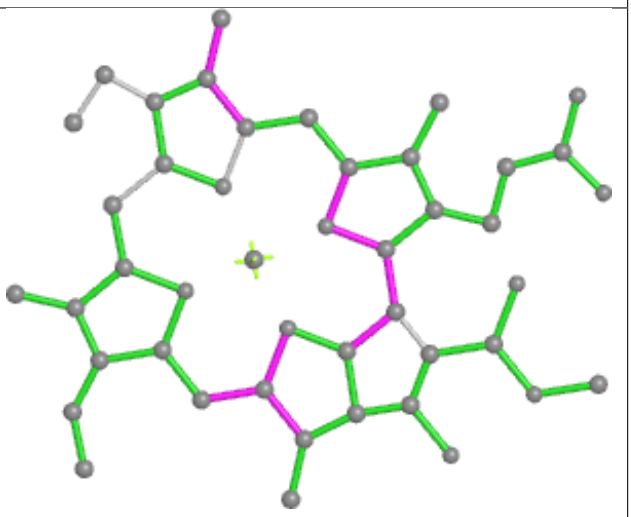
Ligand CLA a 804	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA B 825	
	
Bond lengths	Bond angles
	
Torsions	Rings

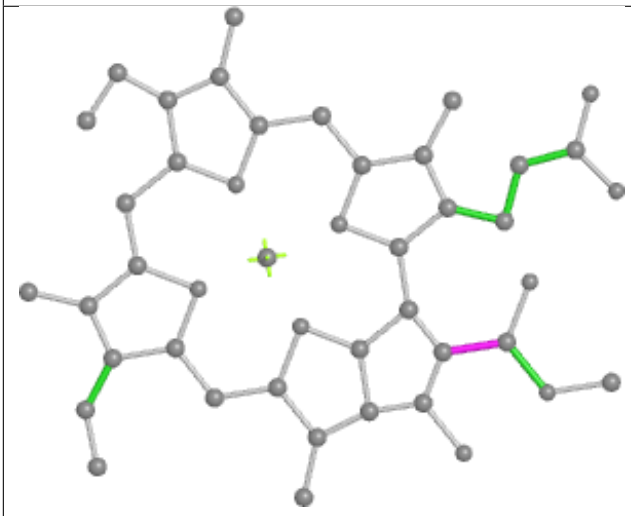
Ligand CLA b 834



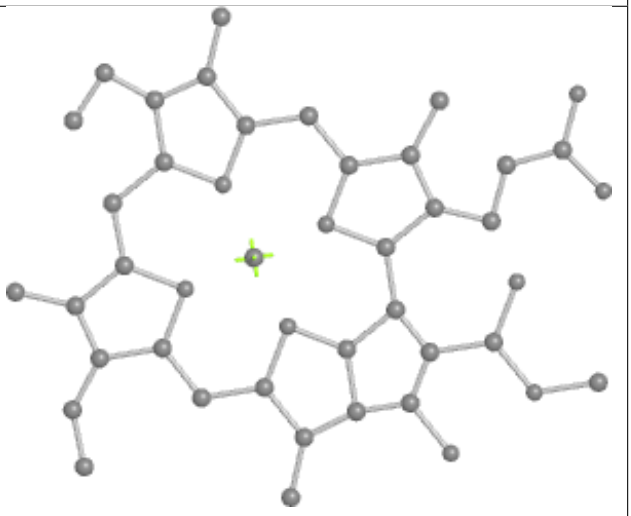
Bond lengths



Bond angles

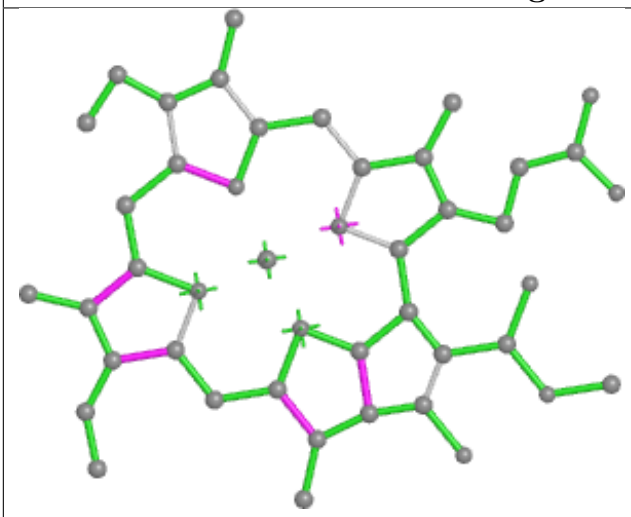


Torsions



Rings

Ligand CLA a 811



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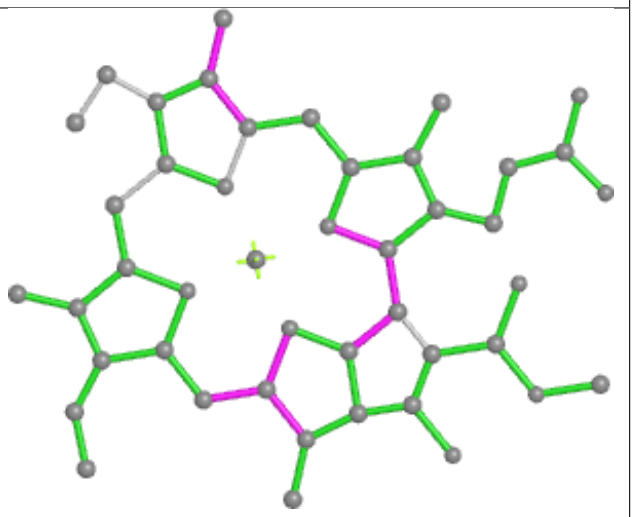
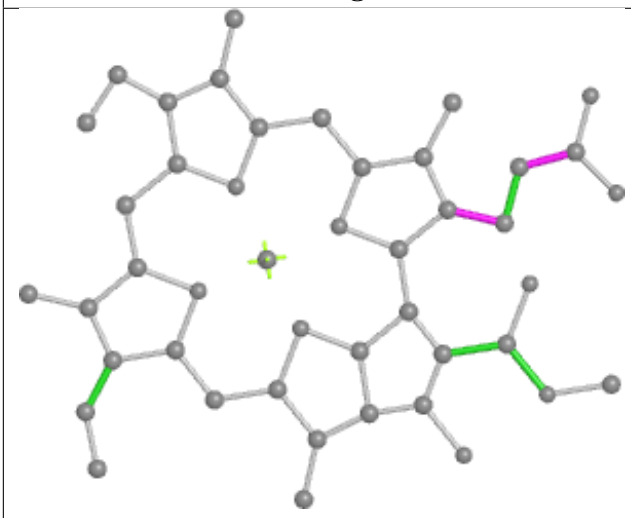
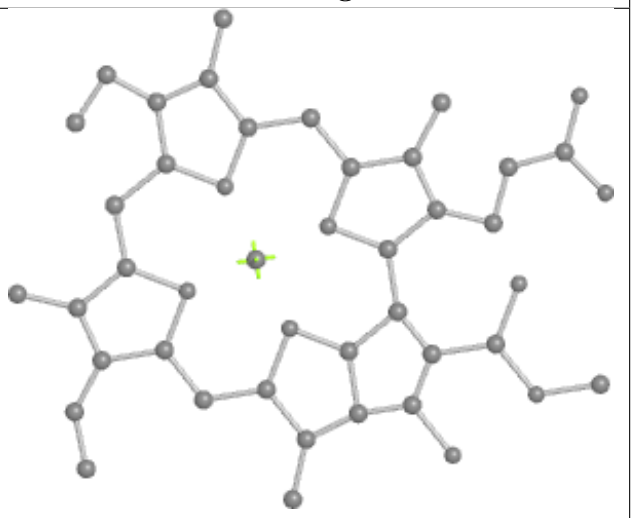


Bond angles

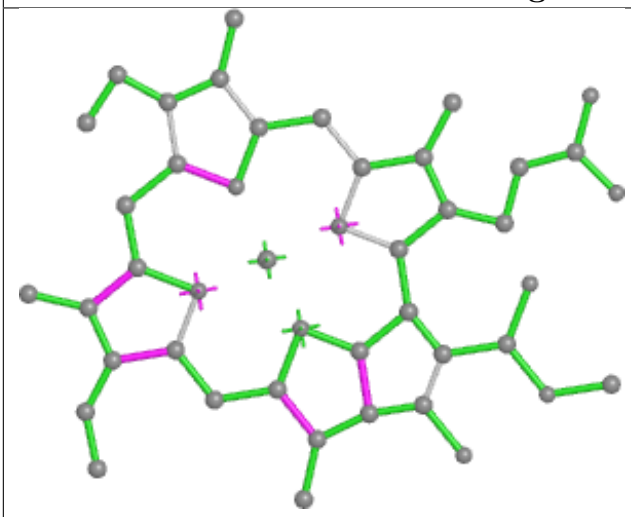


Torsions



Rings

Ligand CLA g 203



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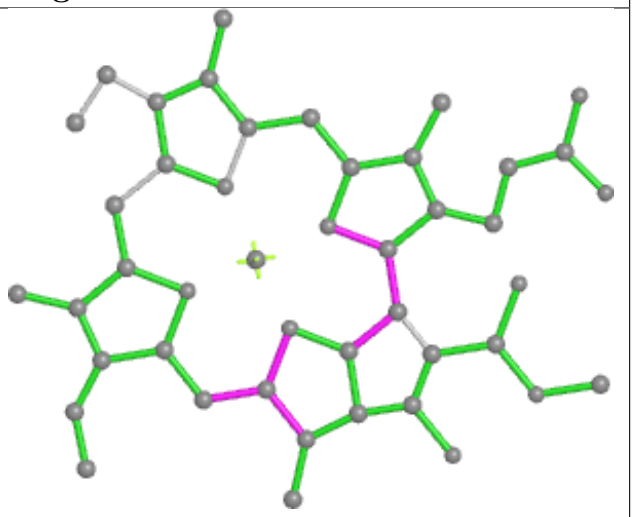
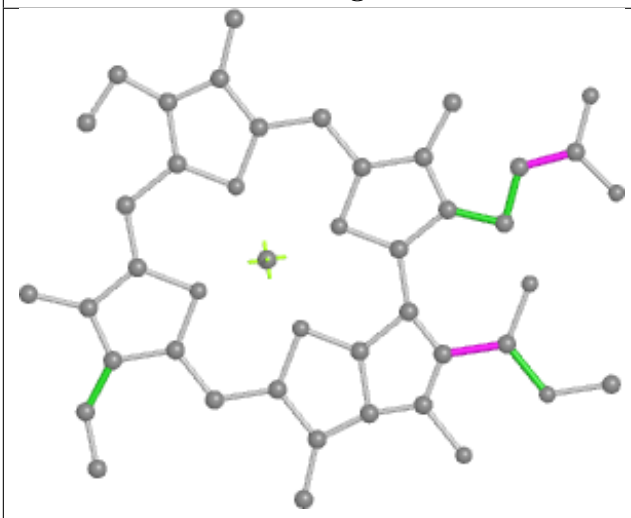


Bond angles



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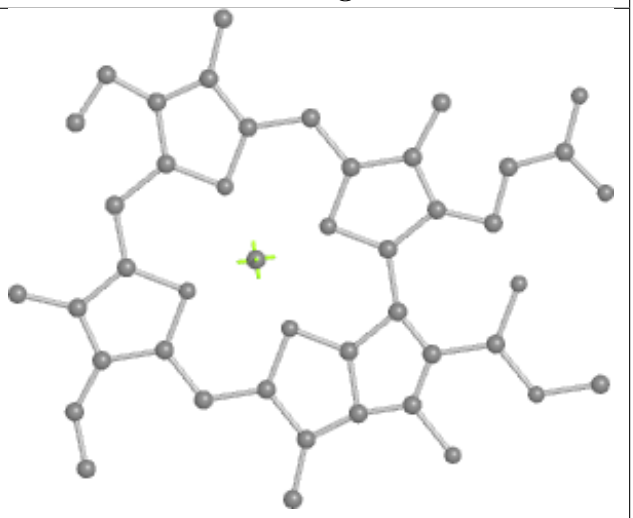
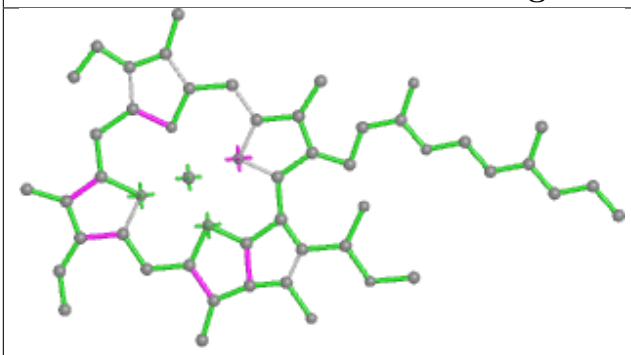
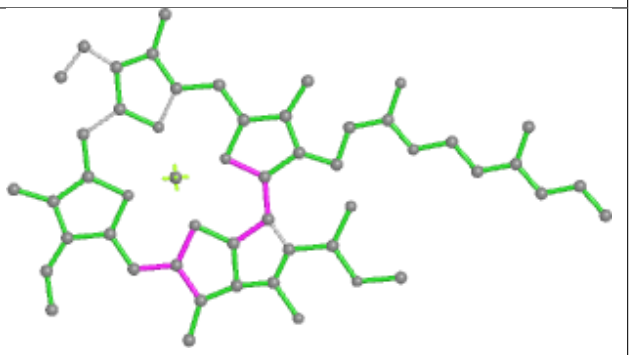


Rings

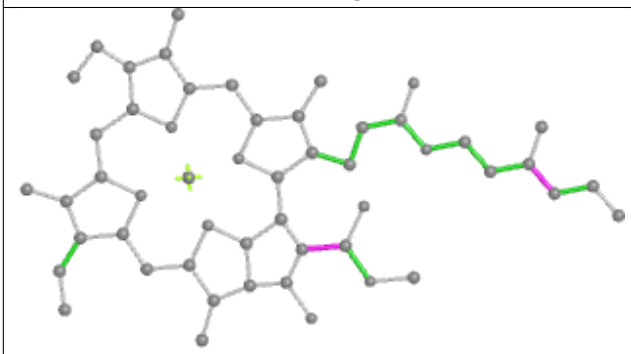
Ligand CLA a 801



Bond lengths



Bond angles



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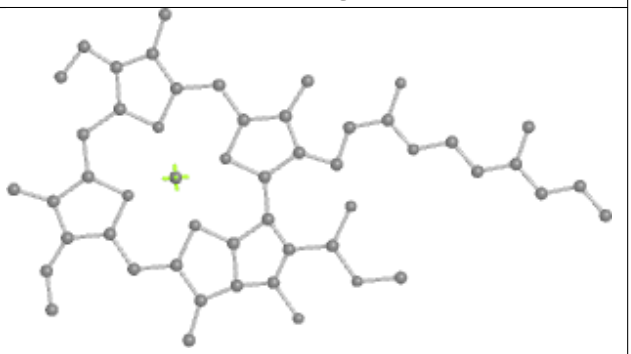
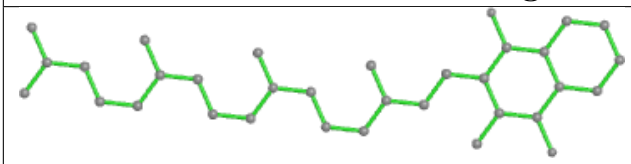


Rings

Ligand PQN B 841



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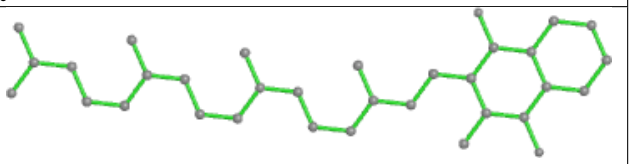
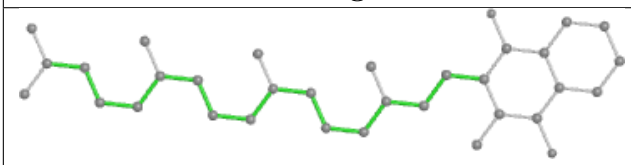


Bond angles



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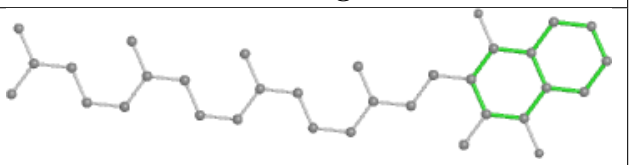
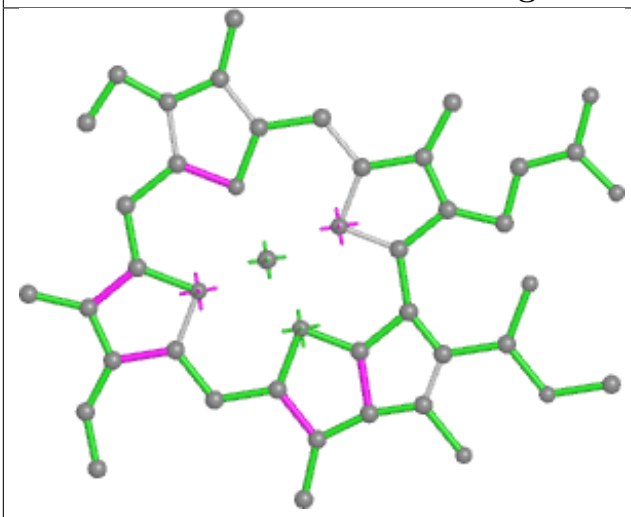
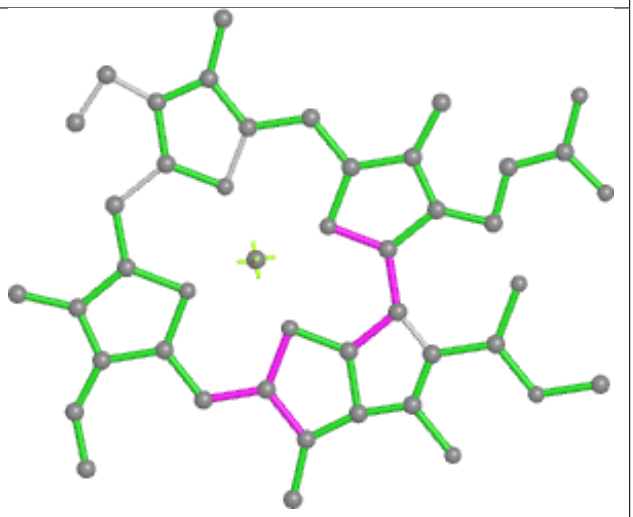


Rings

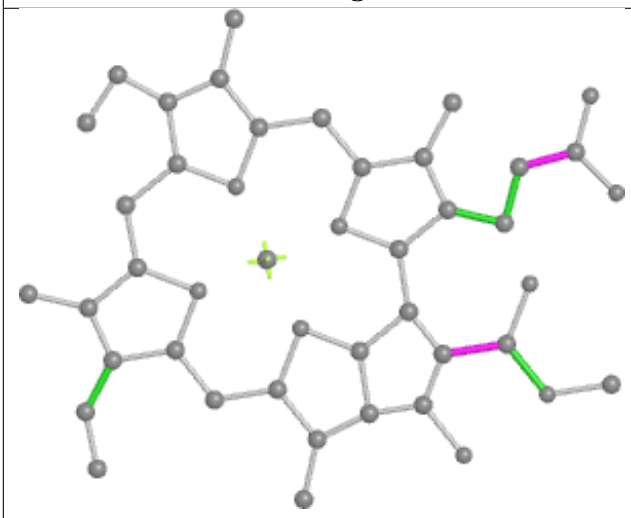
Ligand CLA 2b 302



Bond lengths



Bond angles



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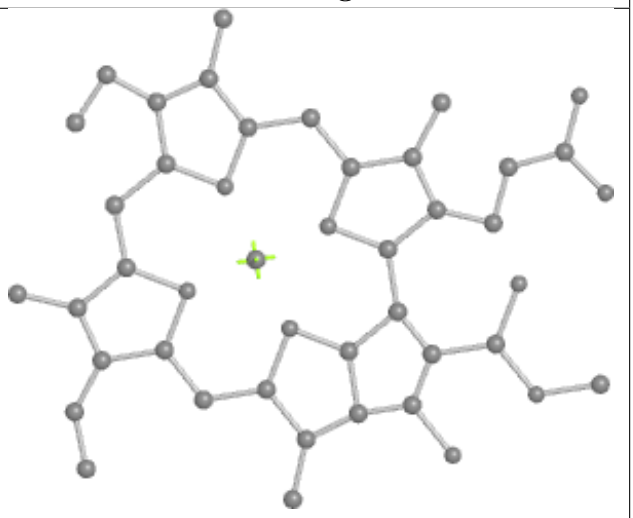
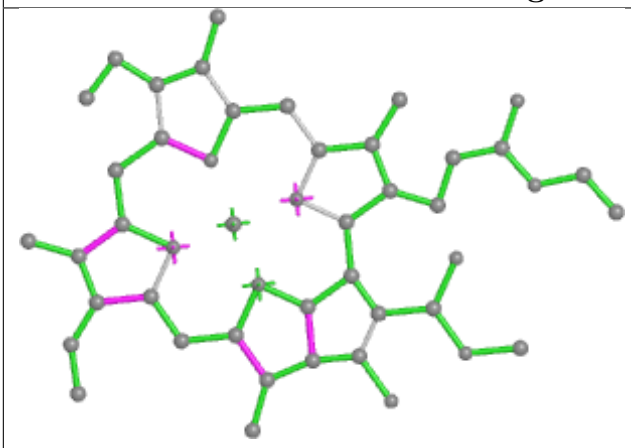
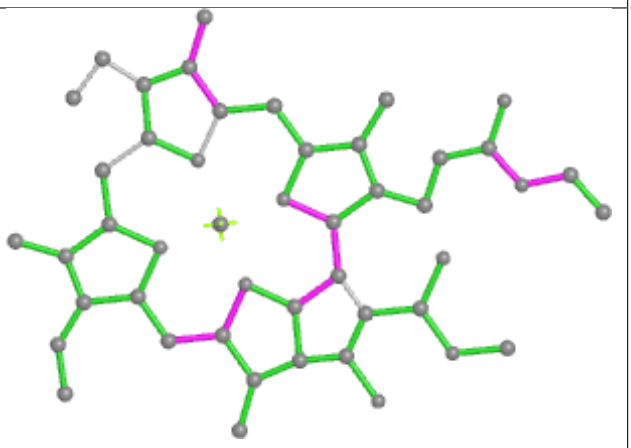


Rings

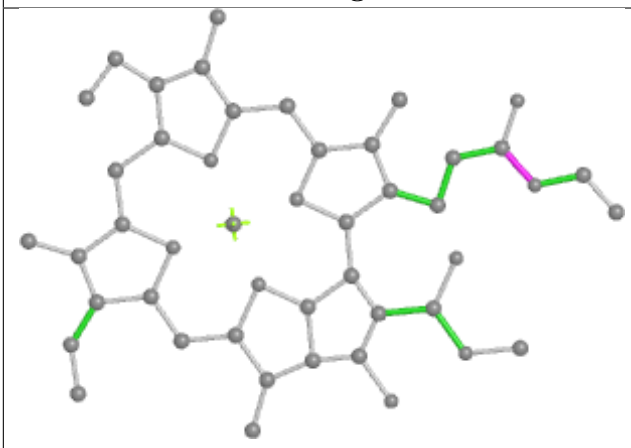
Ligand CLA b 808



Bond lengths



Bond angles



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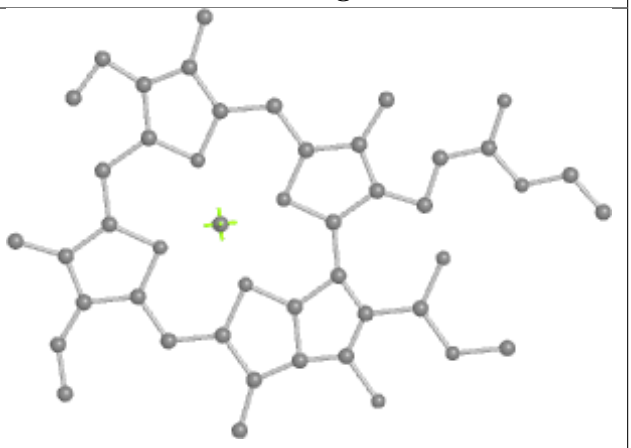
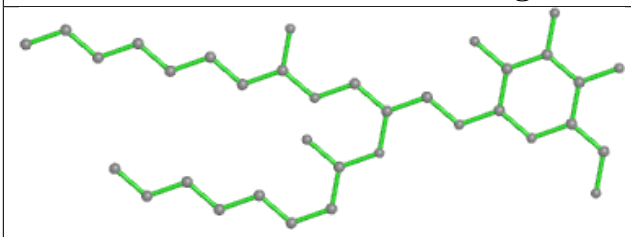
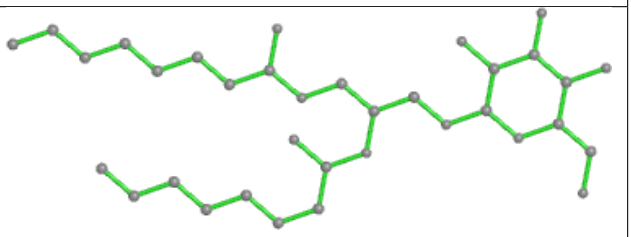


Rings

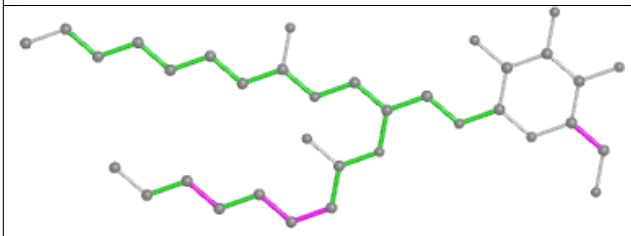
Ligand LMG 5b 319



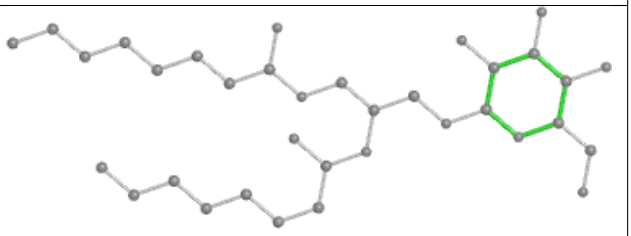
Bond lengths



Bond angles

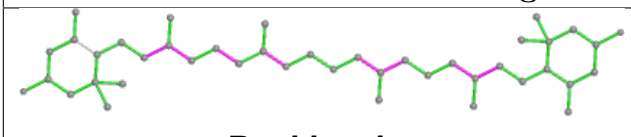


Torsions

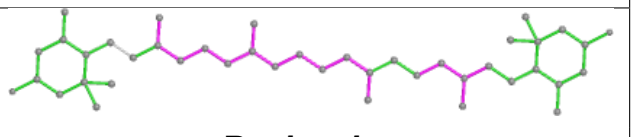


Rings

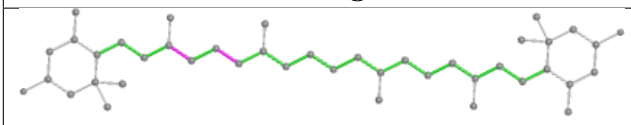
Ligand LUT 6a 318



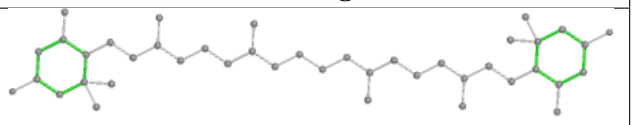
Bond lengths



Bond angles

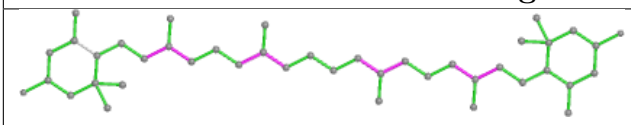


Torsions

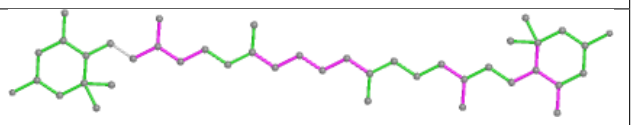


Rings

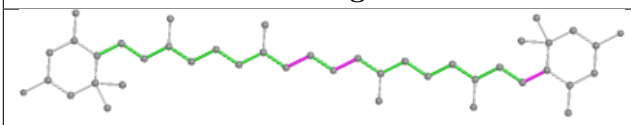
Ligand LUT 2b 315



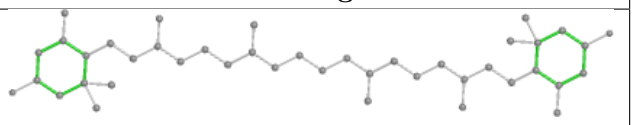
Bond lengths



Bond angles

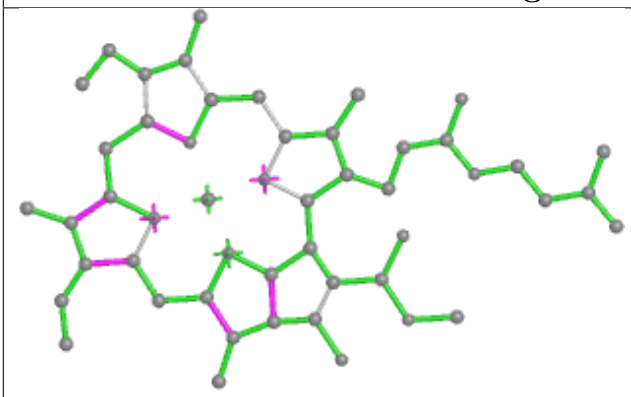


Torsions



Rings

Ligand CLA A 838



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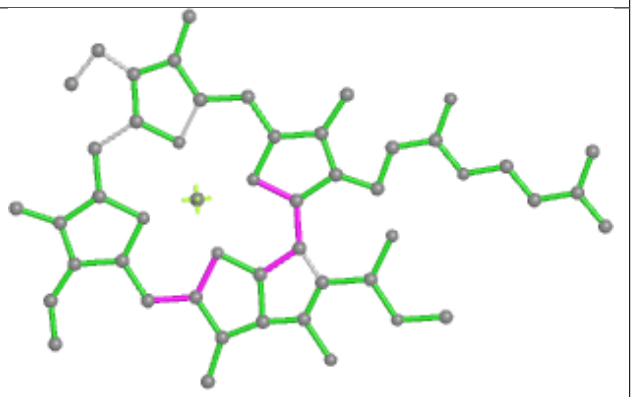
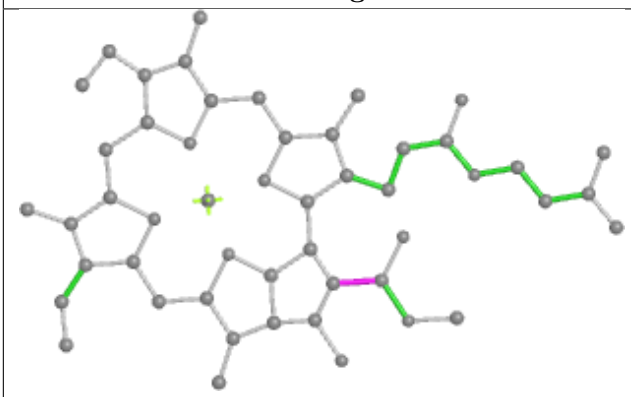


Bond angles



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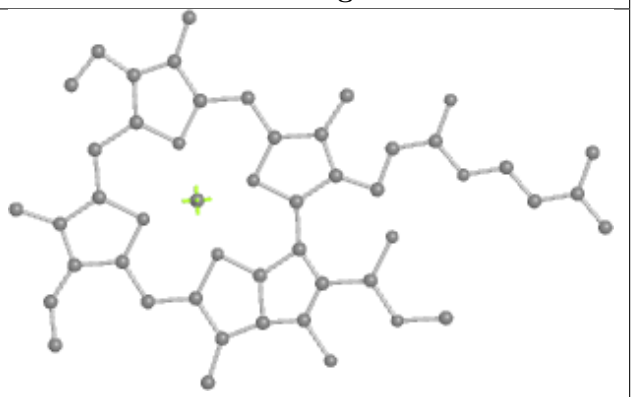
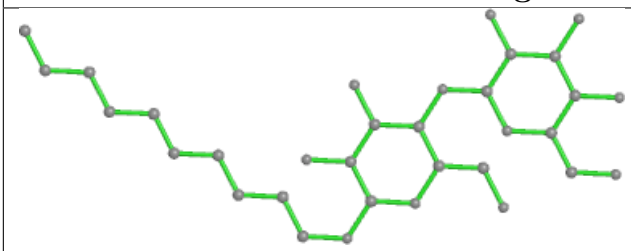


Rings

Ligand LMU 6b 303



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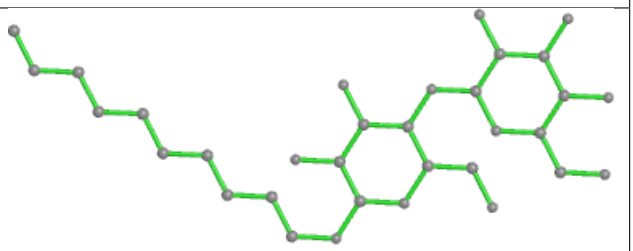
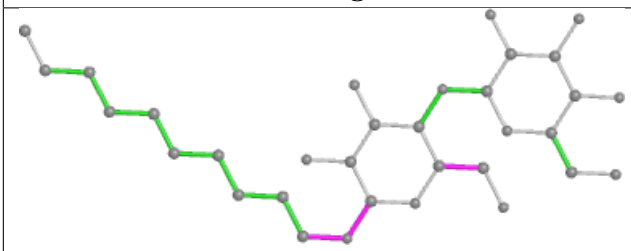
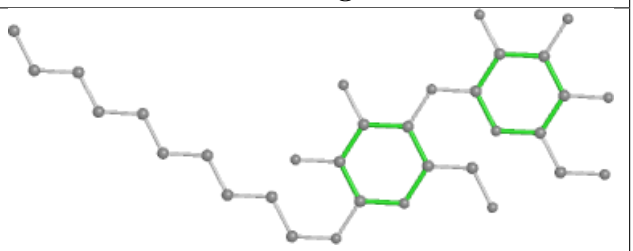


Bond angles

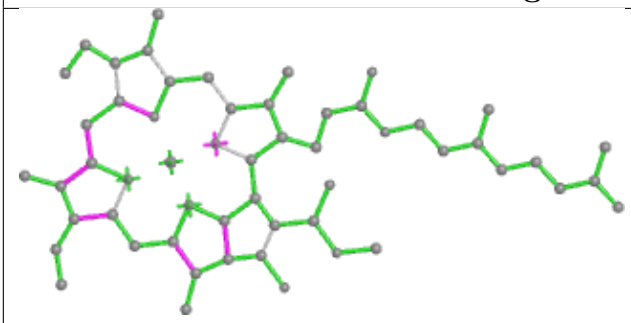


Torsions

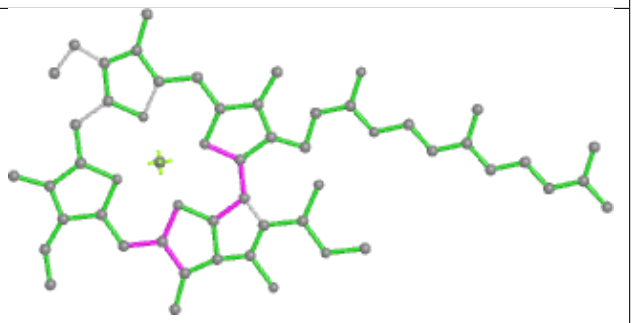


Rings

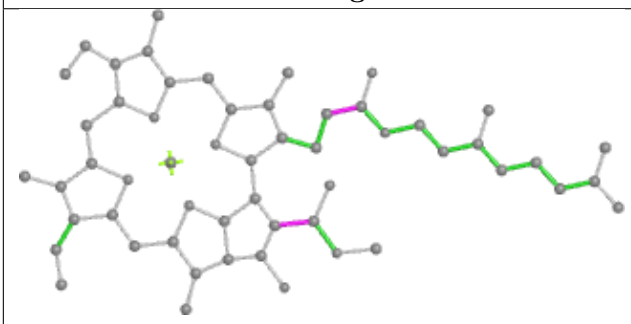
Ligand CLA A 804



Bond lengths



Bond angles



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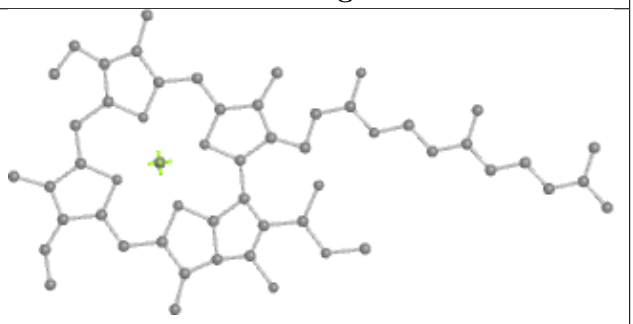
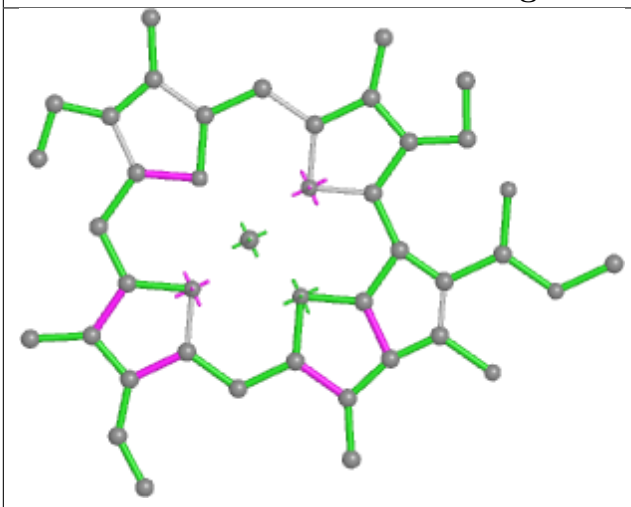


Rings

Ligand CLA 3a 313



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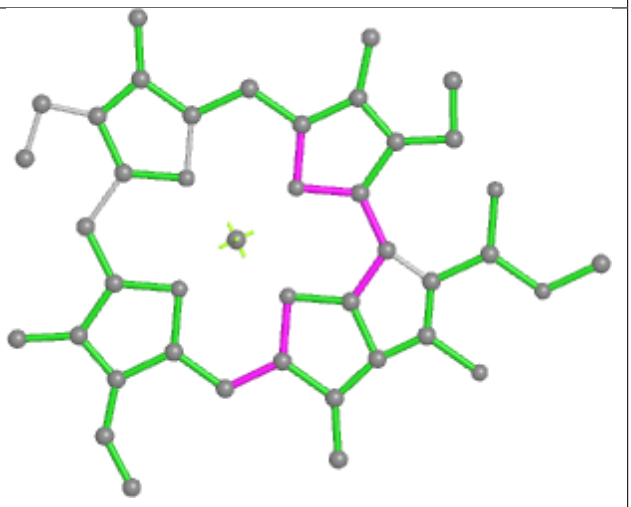
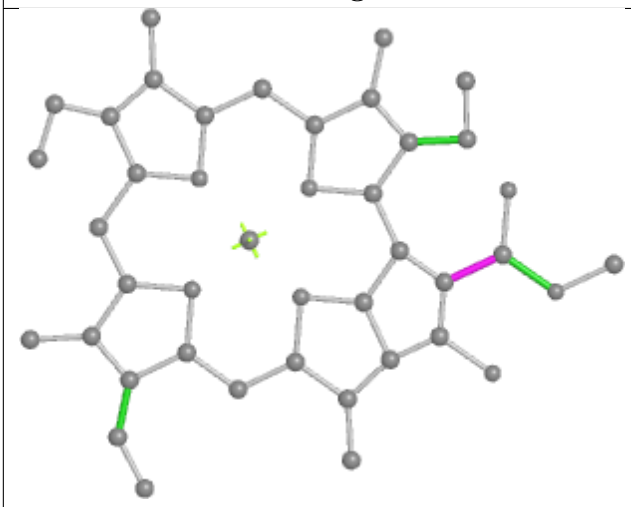


Bond angles



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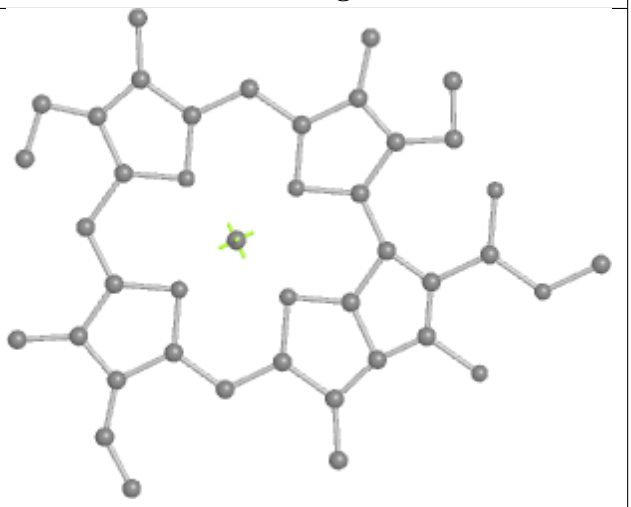
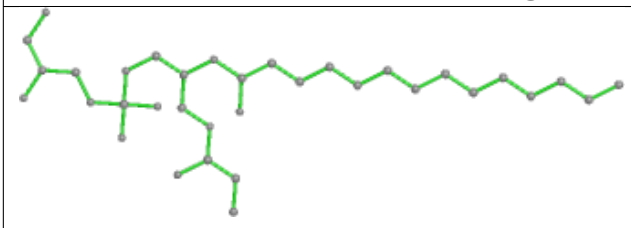


Rings

Ligand LHG A 846



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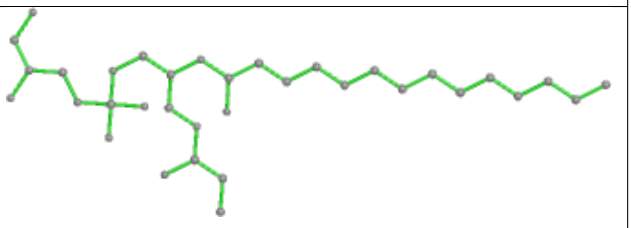
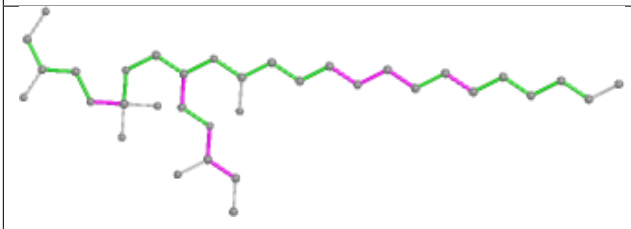
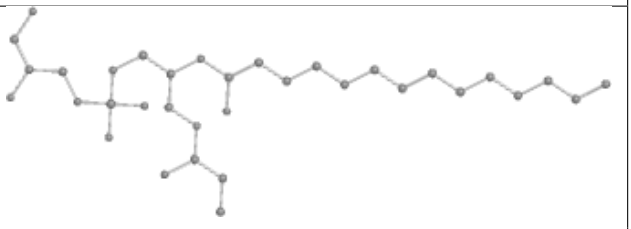


Bond angles

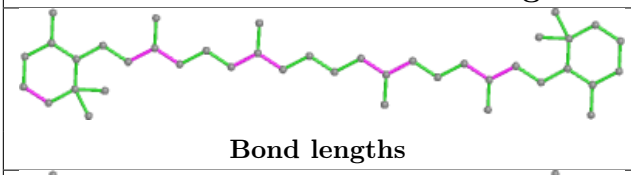


Torsions



Rings

Ligand BCR B 851



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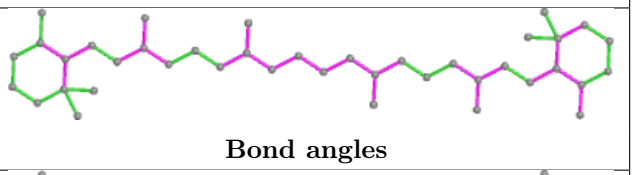
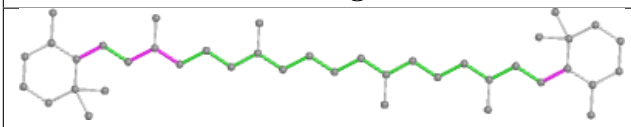


Bond angles



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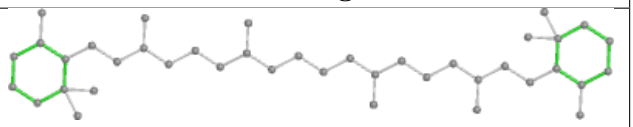
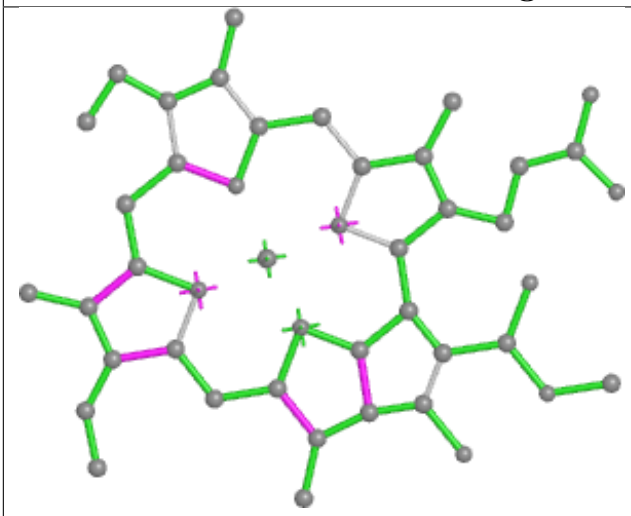
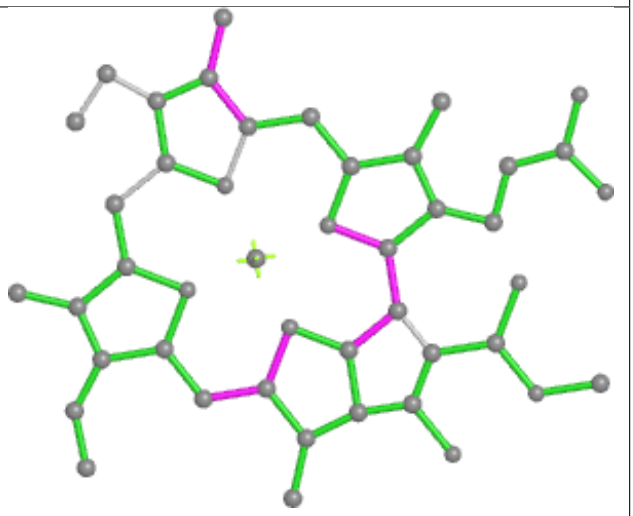


Rings

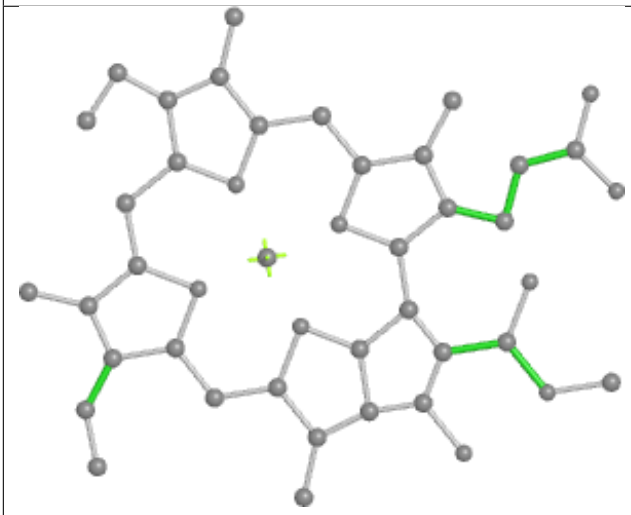
Ligand CLA 3b 308



Bond lengths



Bond angles



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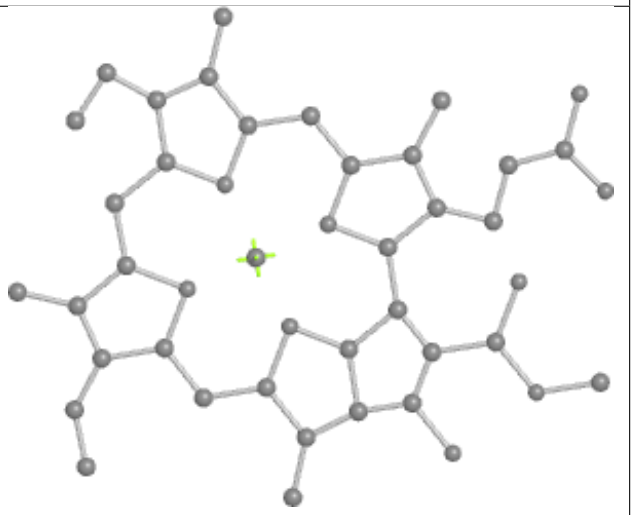
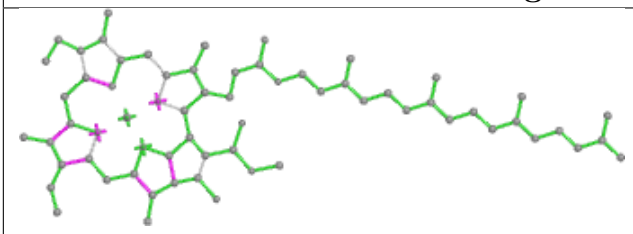
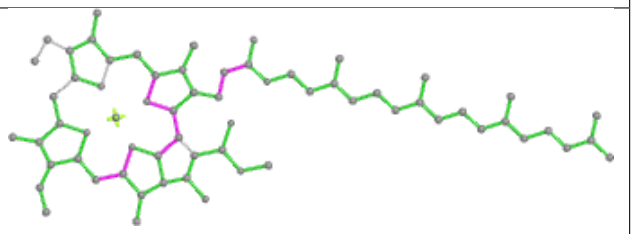


Rings

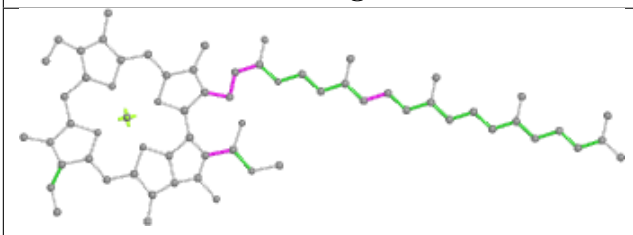
Ligand CLA B 854



Bond lengths



Bond angles



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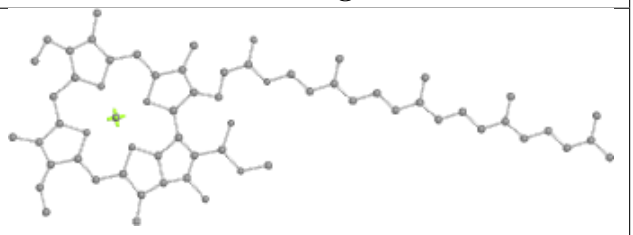
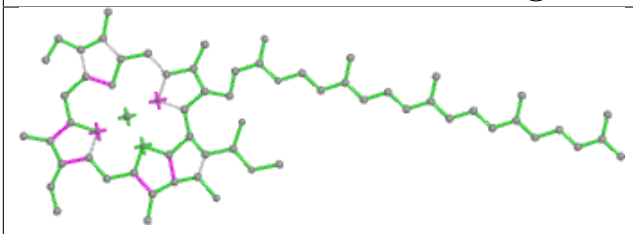


Rings

Ligand CLA b 839



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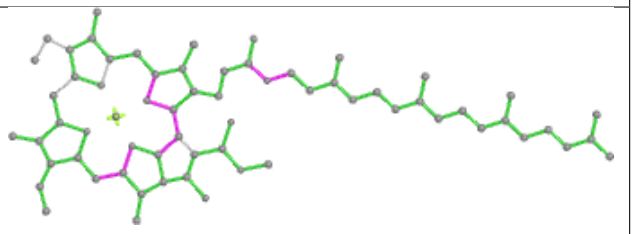
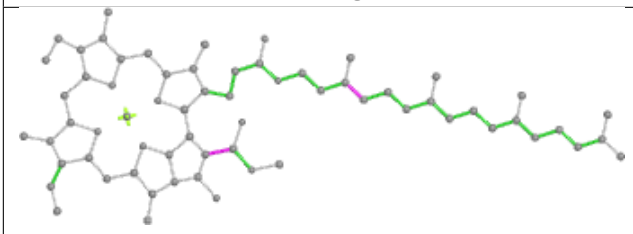


Bond angles



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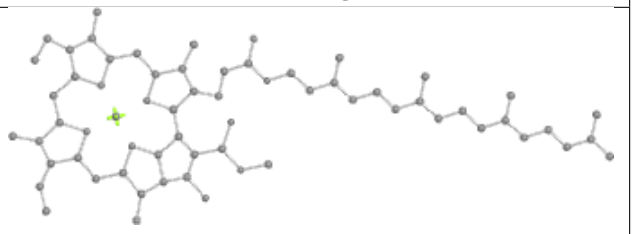
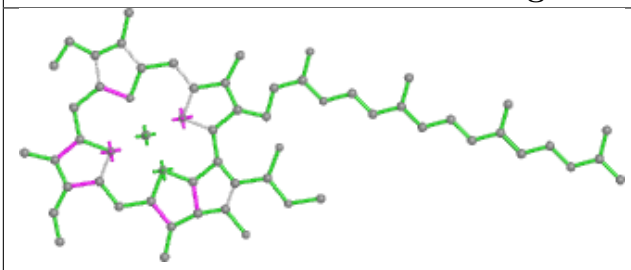


Rings

Ligand CLA b 832



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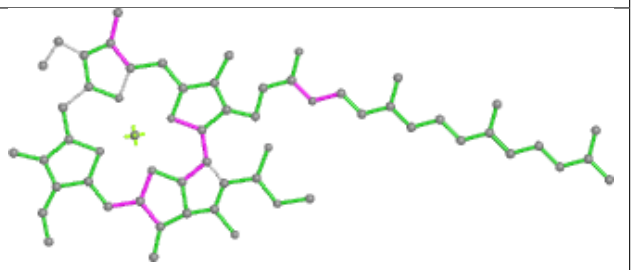
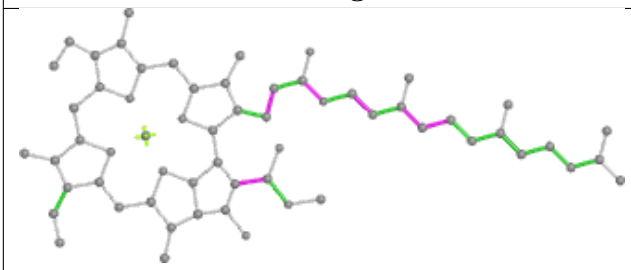


Bond angles



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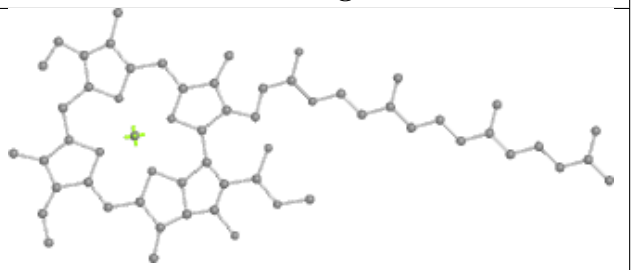
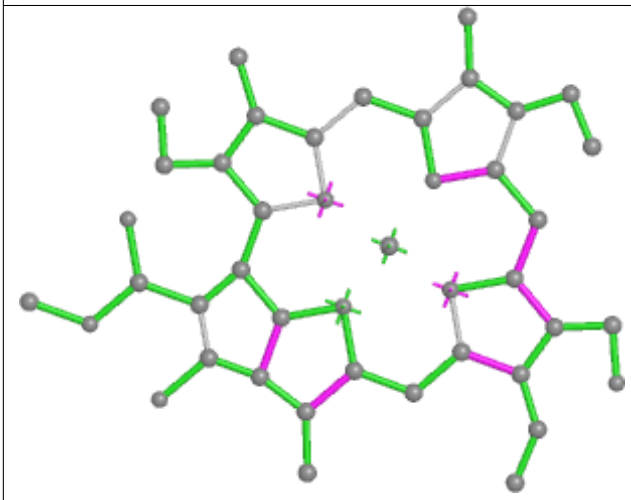


Rings

Ligand CHL 5b 306



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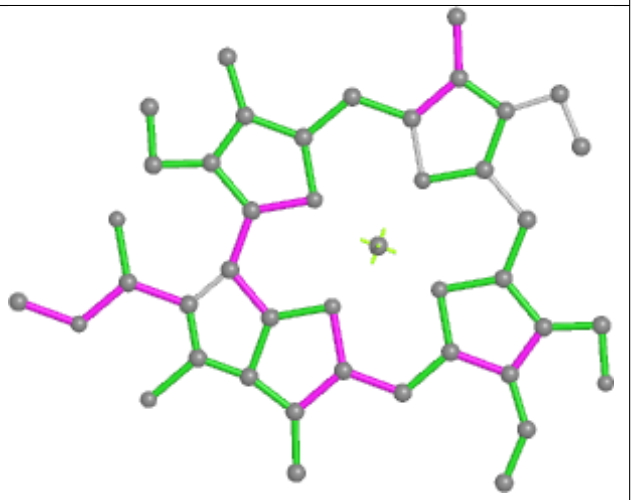
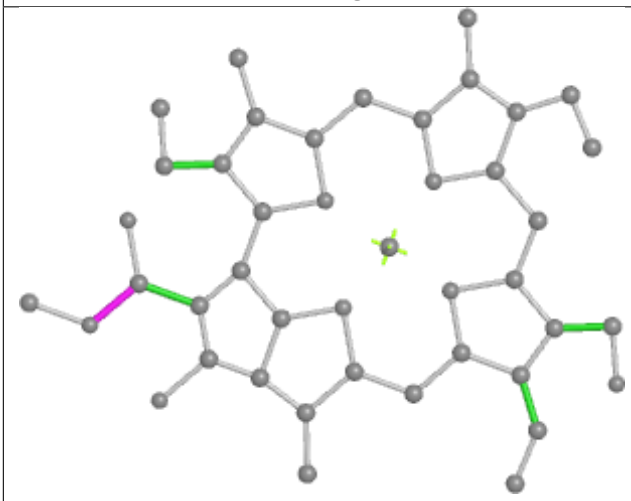
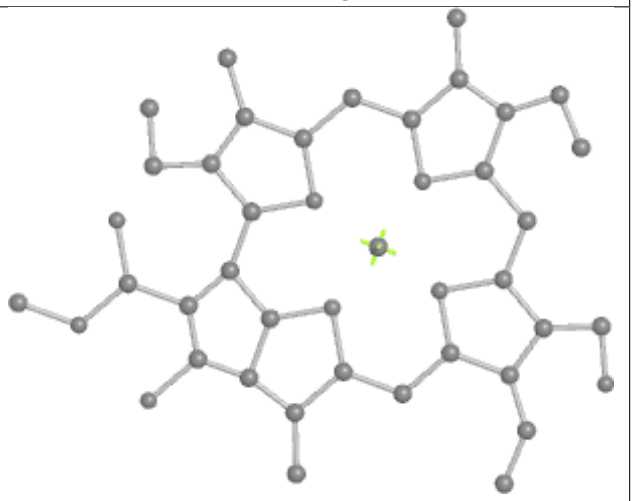


Bond angles

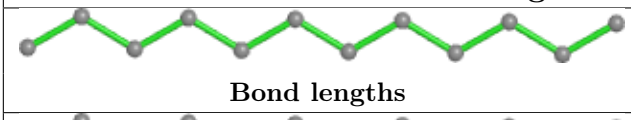


Torsions

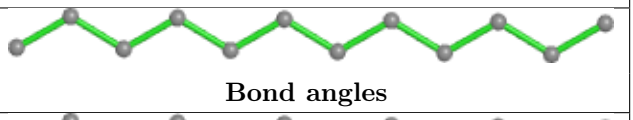


Rings

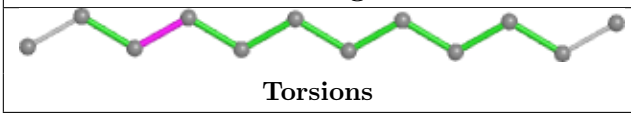
Ligand LFA B 849



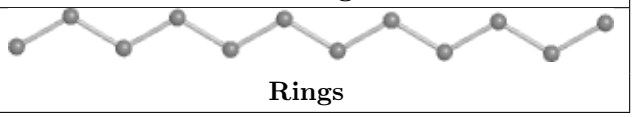
Bond lengths



Bond angles

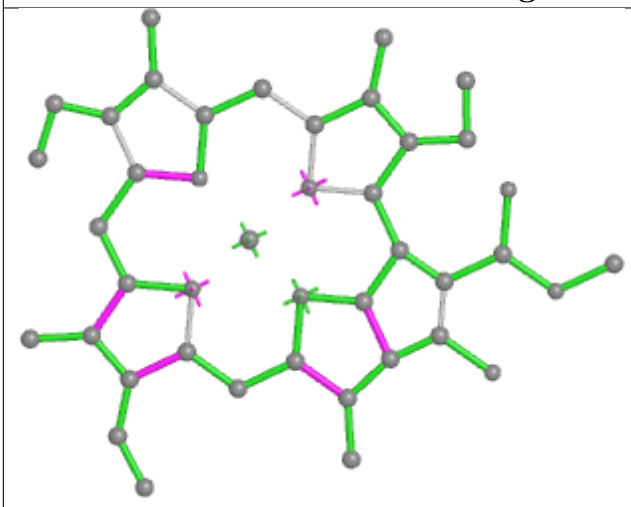


Torsions

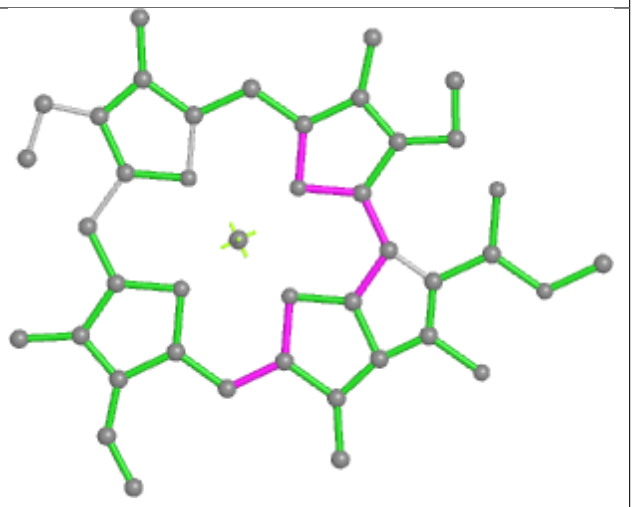


Rings

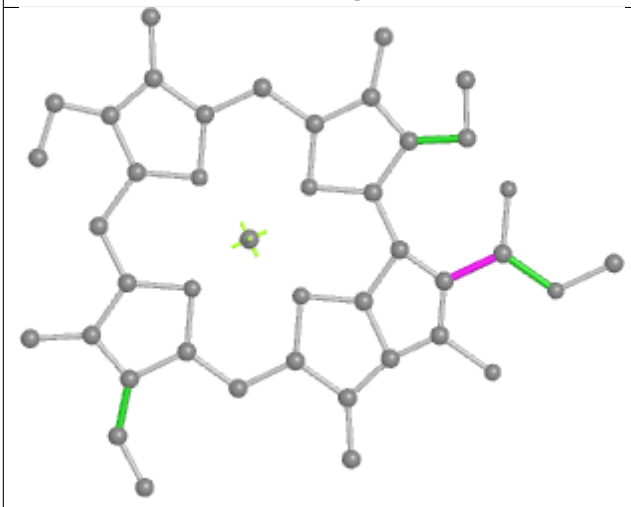
Ligand CLA 3b 313



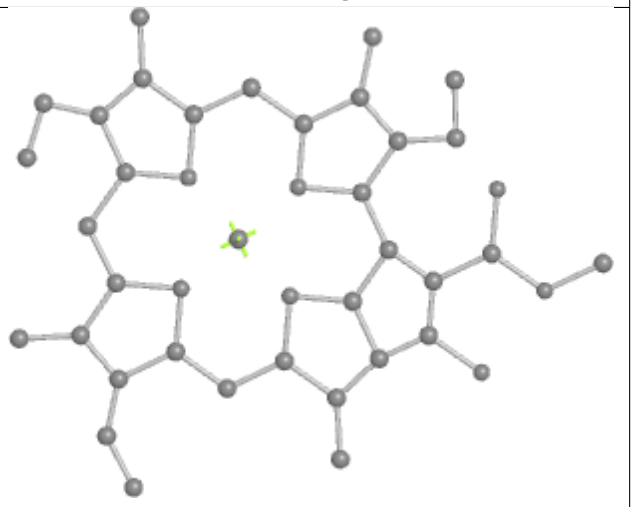
Bond lengths



Bond angles

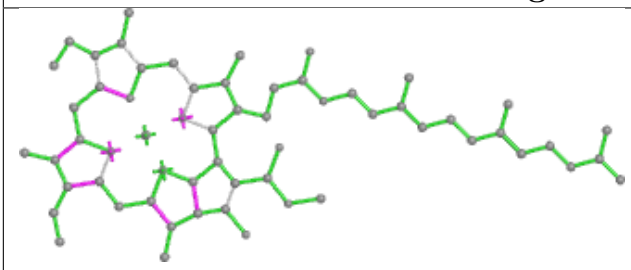


Torsions

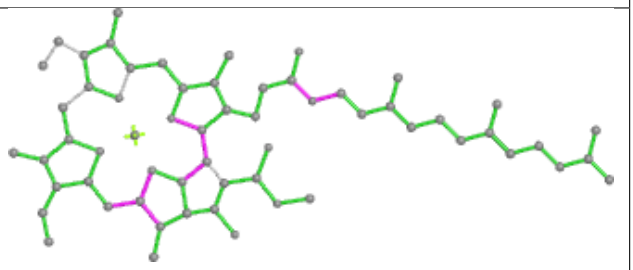


Rings

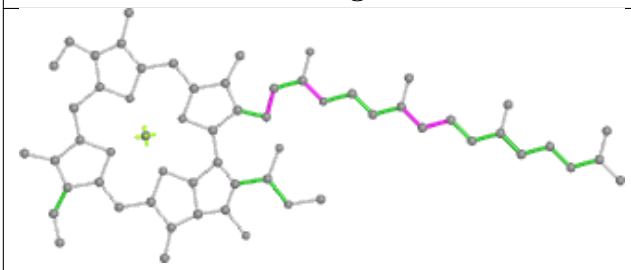
Ligand CLA a 816



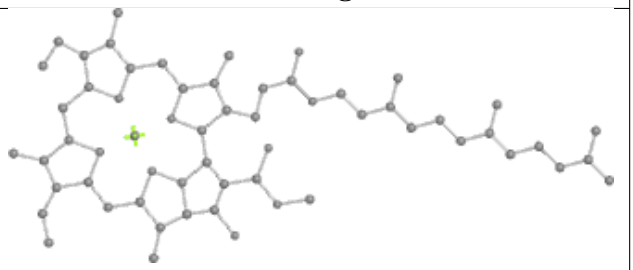
Bond lengths



Bond angles

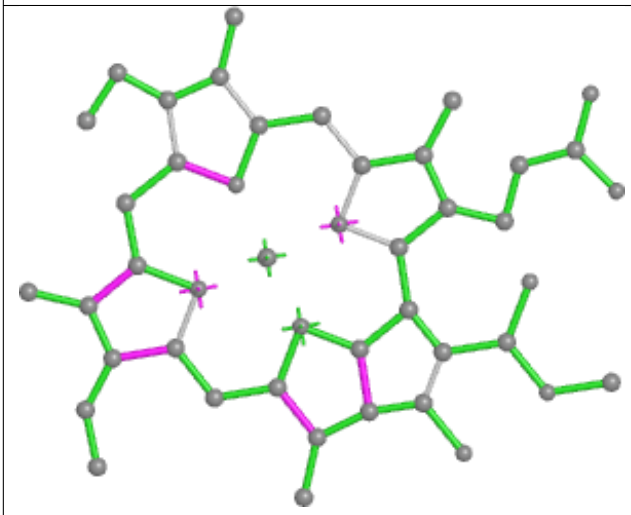


Torsions



Rings

Ligand CLA 6a 308



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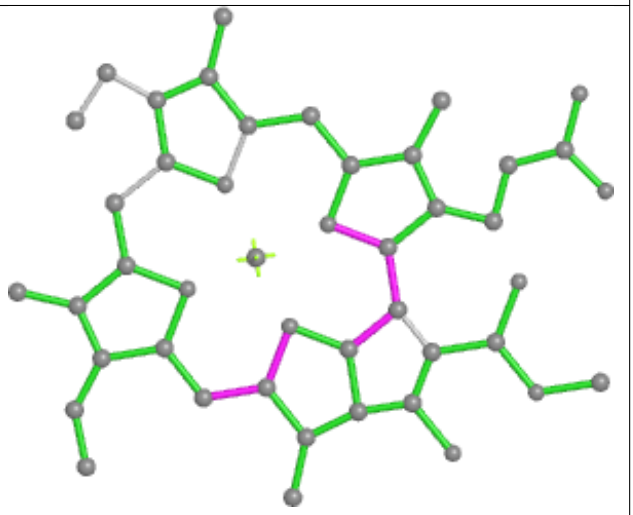
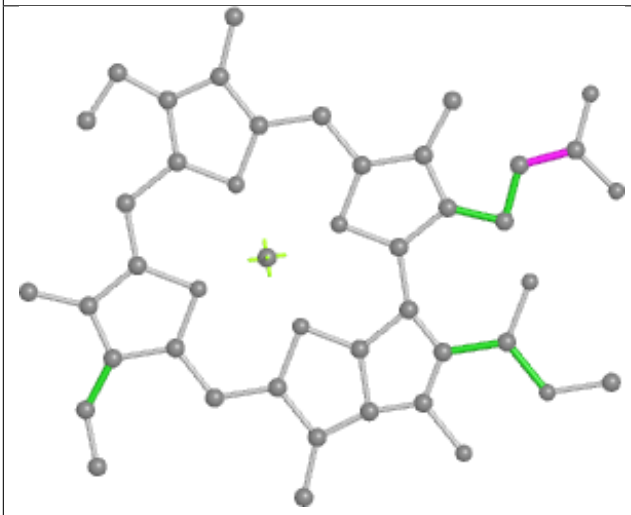


Bond angles



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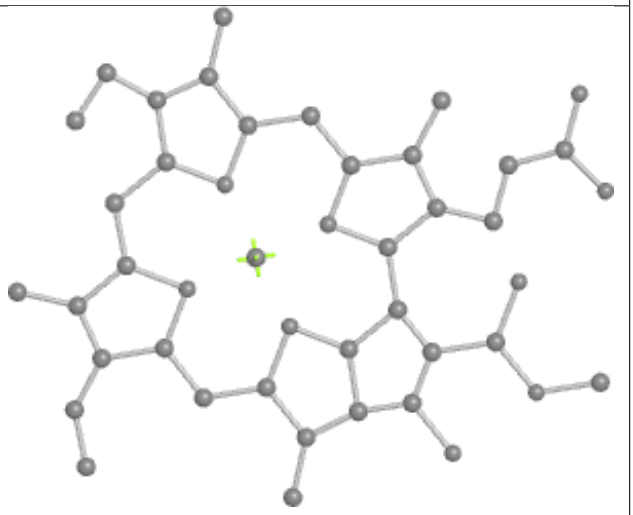
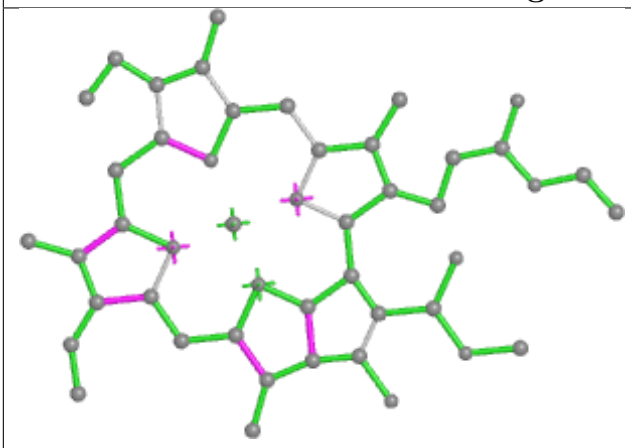


Rings

Ligand CLA b 837



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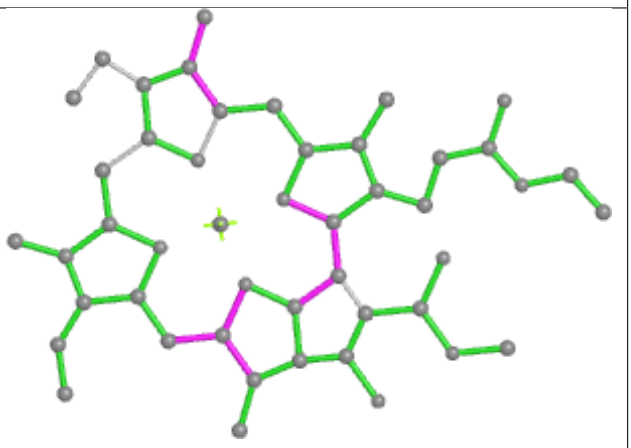
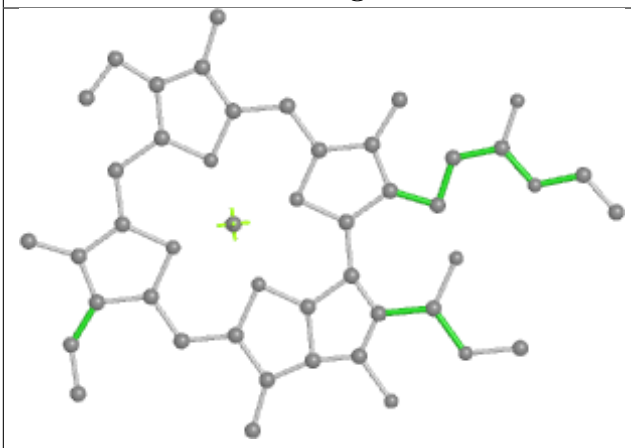


Bond angles



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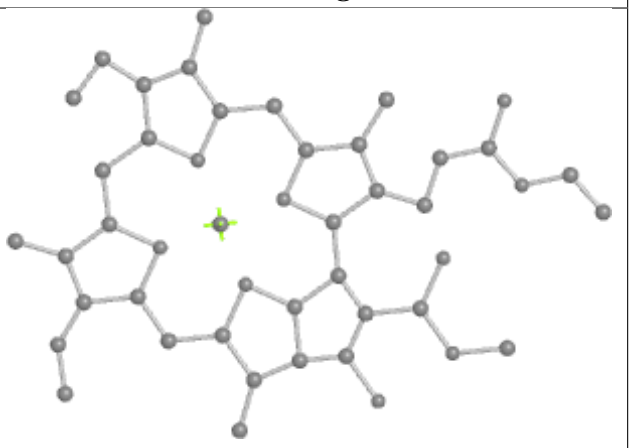
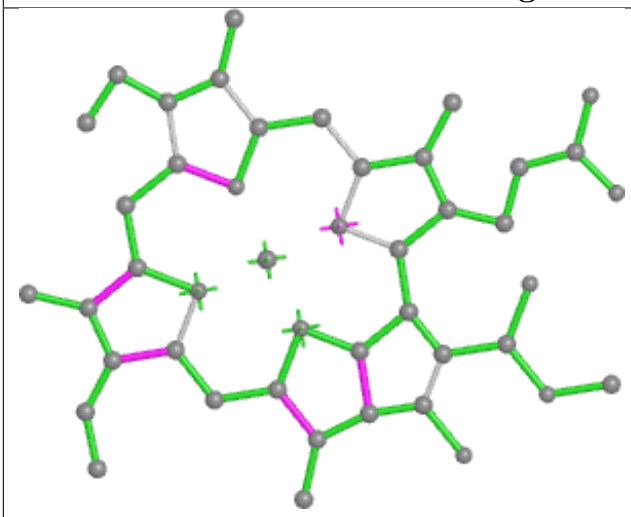


Rings

Ligand CLA 3b 310



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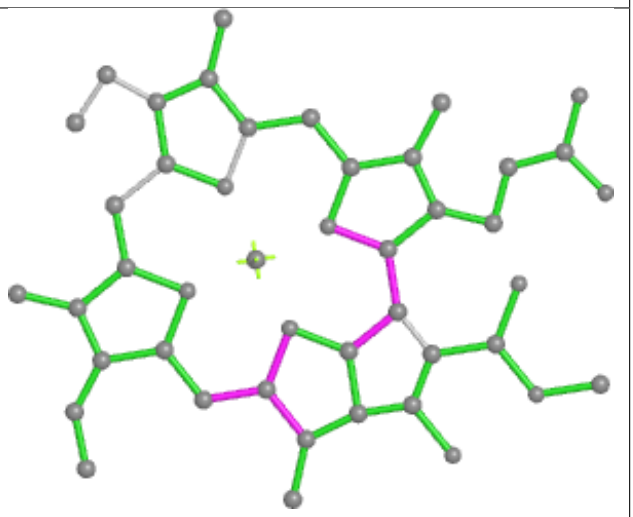
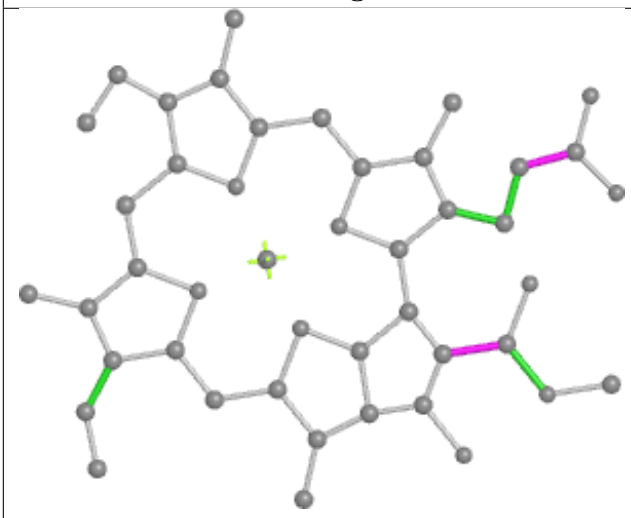


Bond angles



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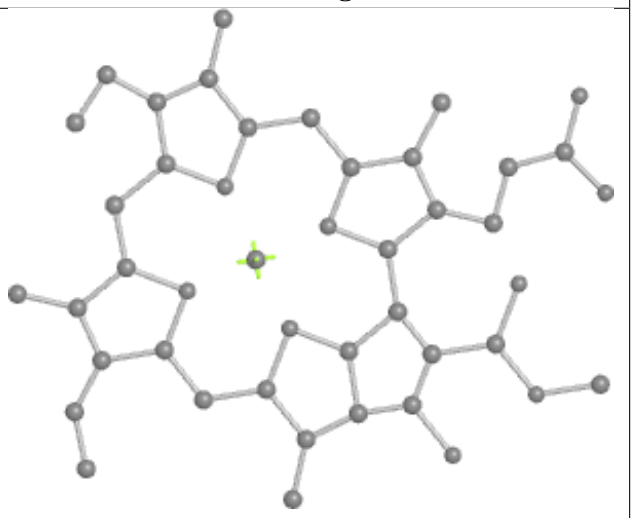
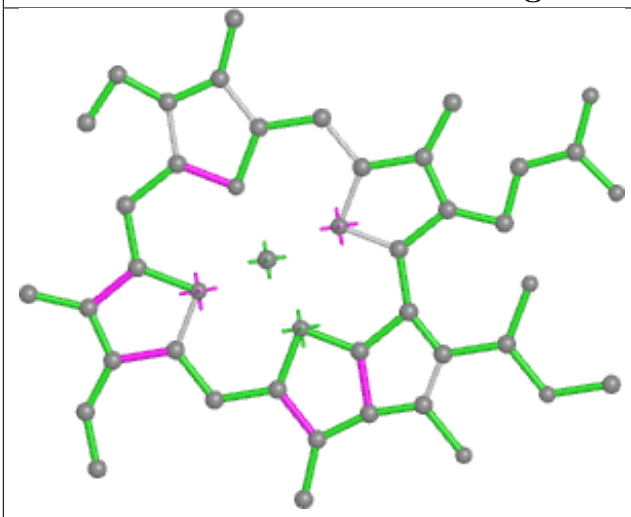


Rings

Ligand CLA B 803



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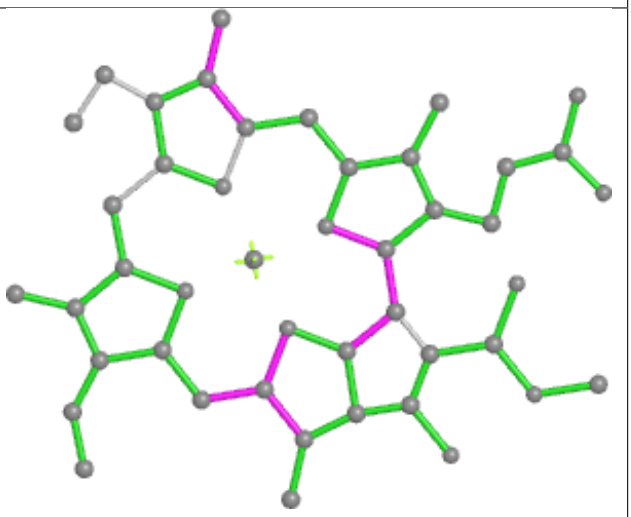
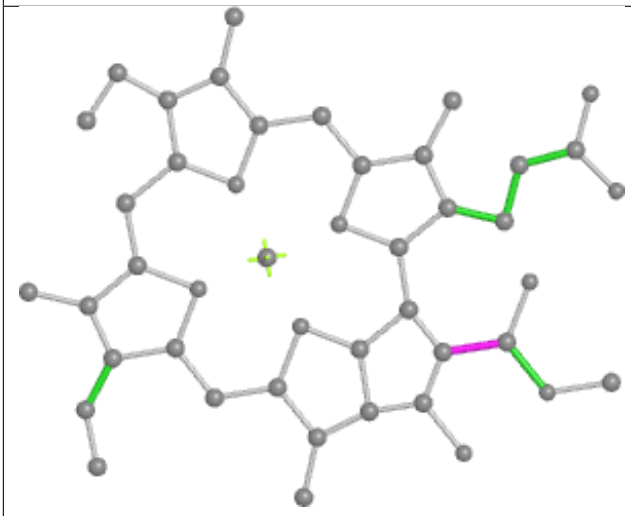


Bond angles



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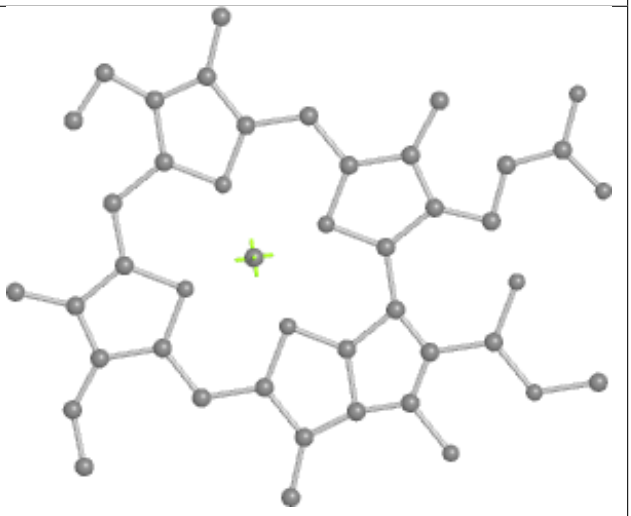
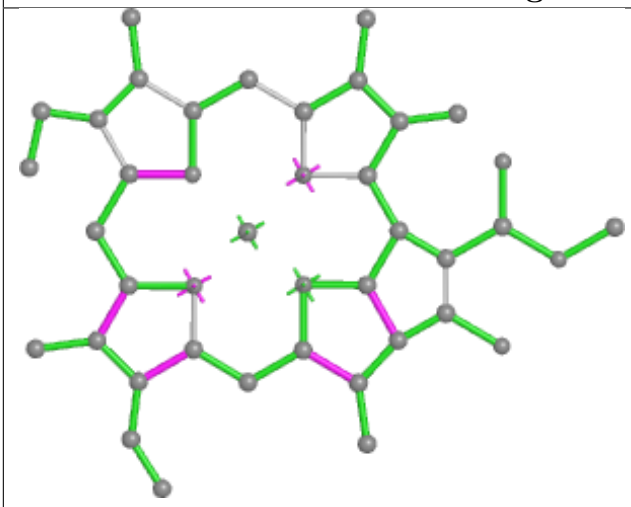


Rings

Ligand CLA F 303



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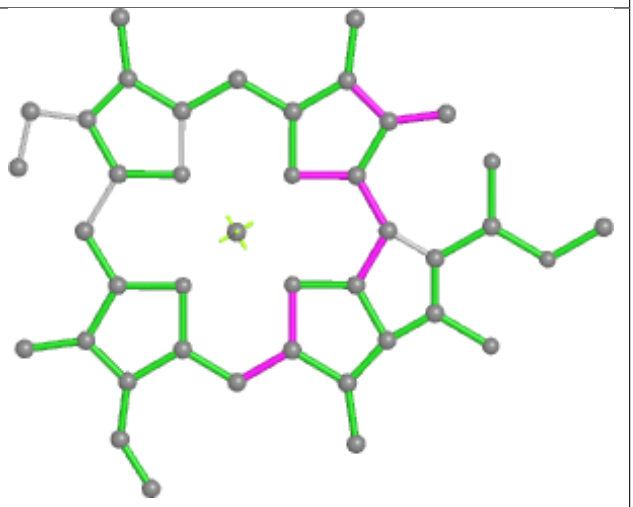
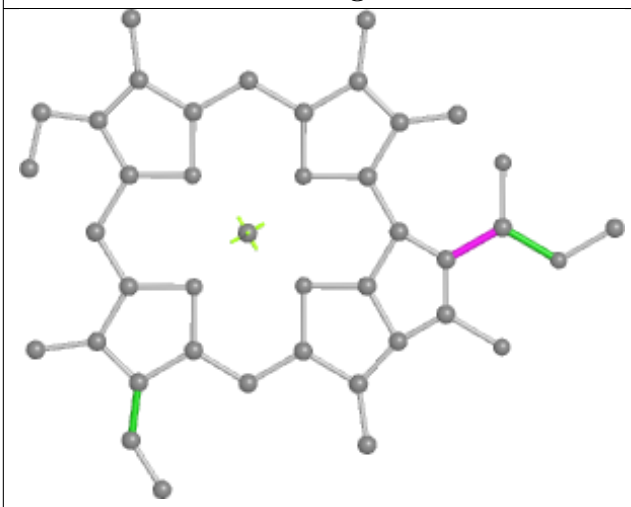


Bond angles



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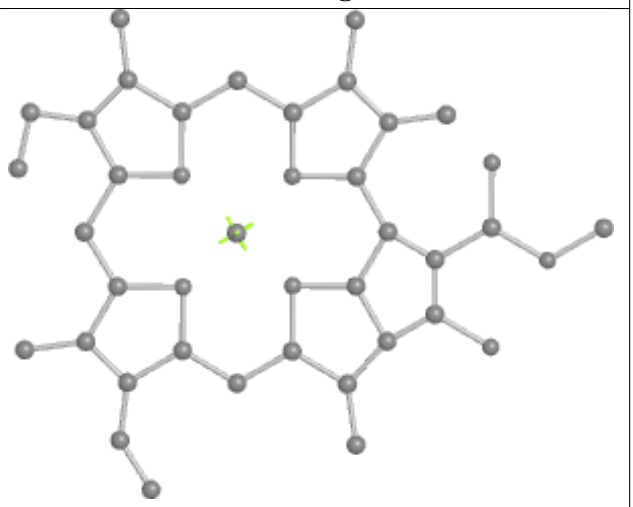
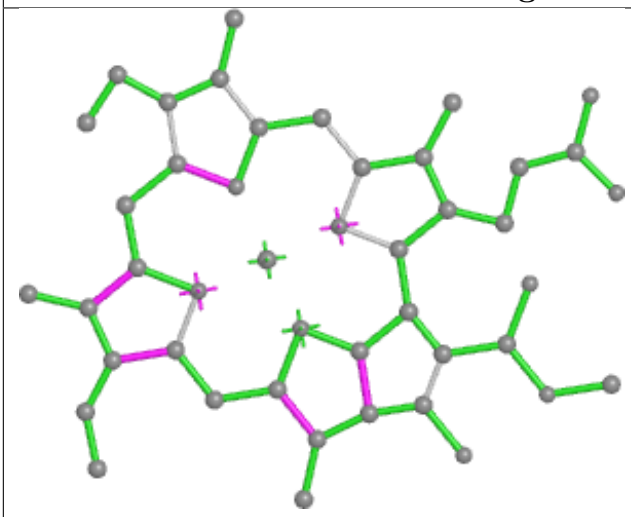


Rings

Ligand CLA 5b 310



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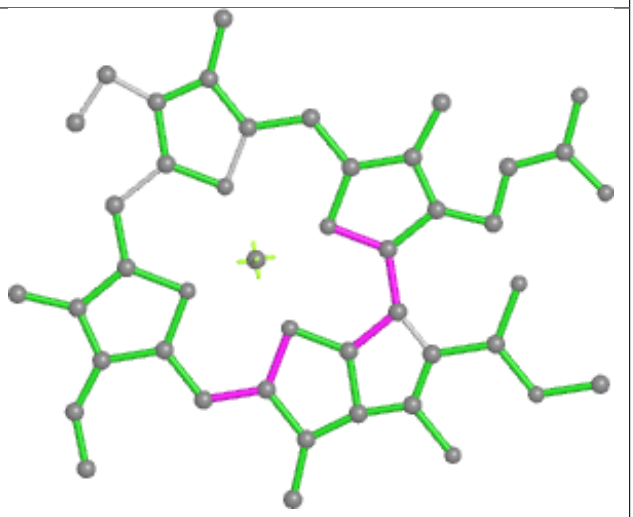
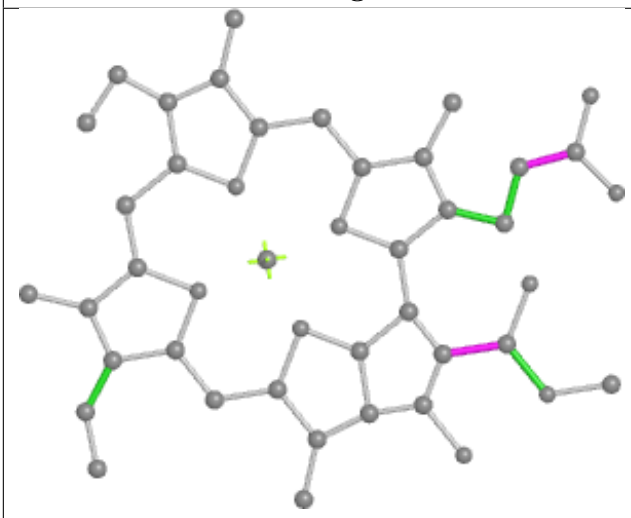


Bond angles



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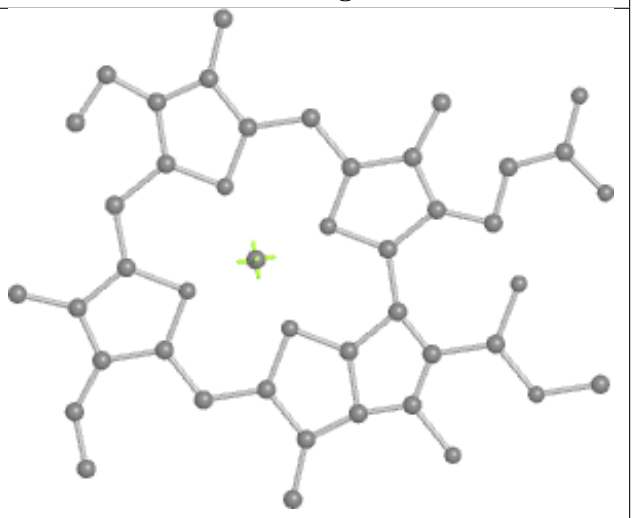
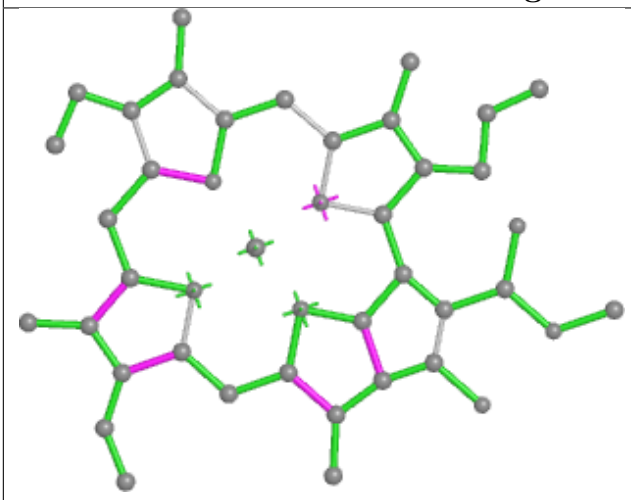


Rings

Ligand CLA B 819



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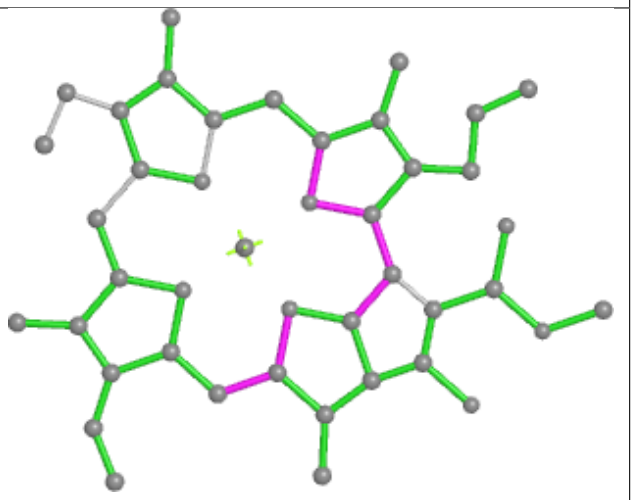
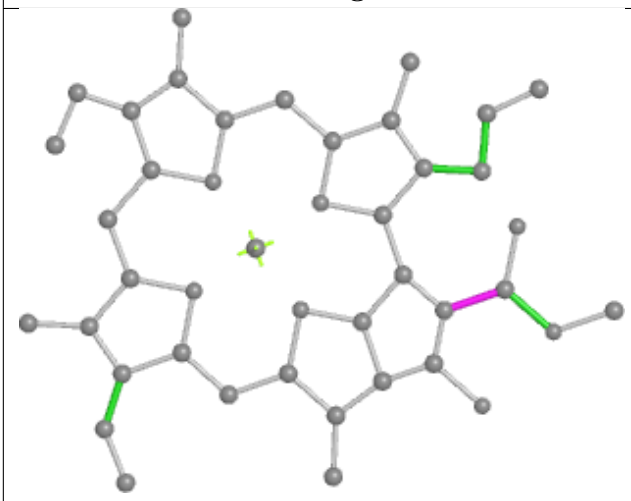


Bond angles



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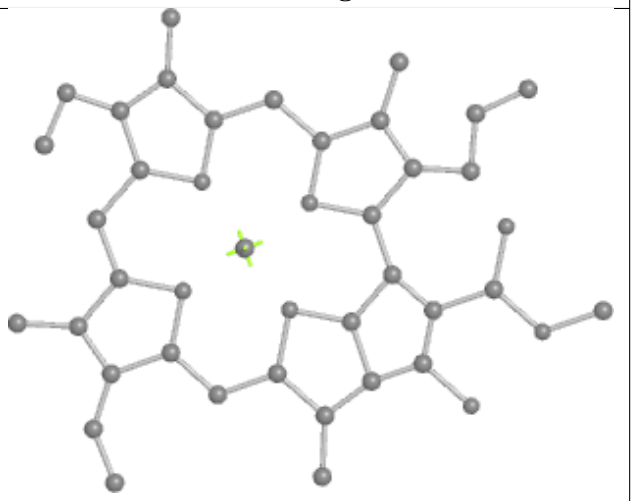
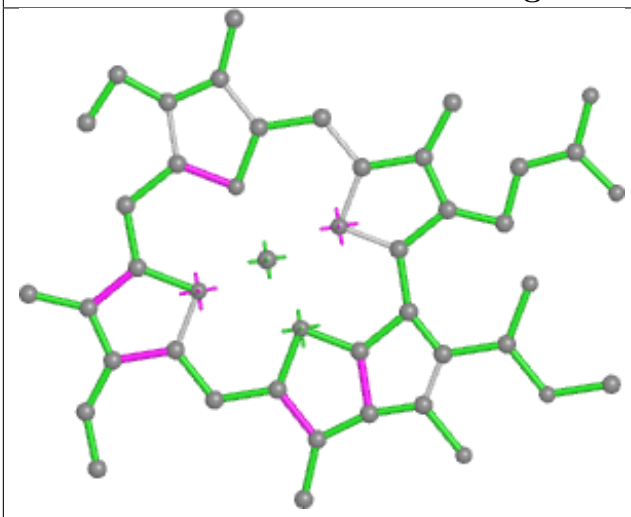


Rings

Ligand CLA A 821



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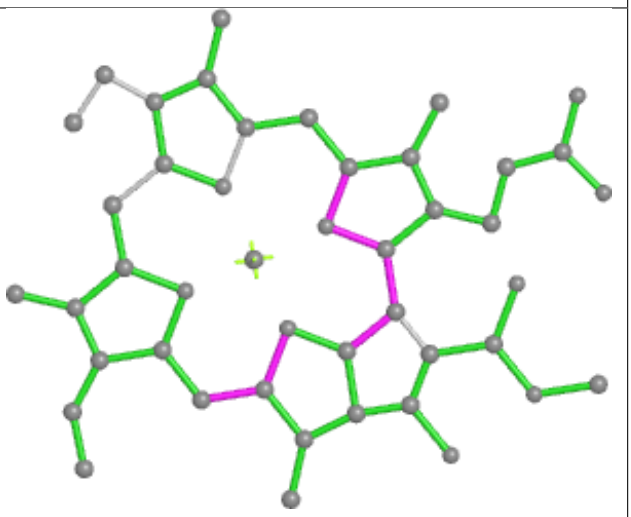
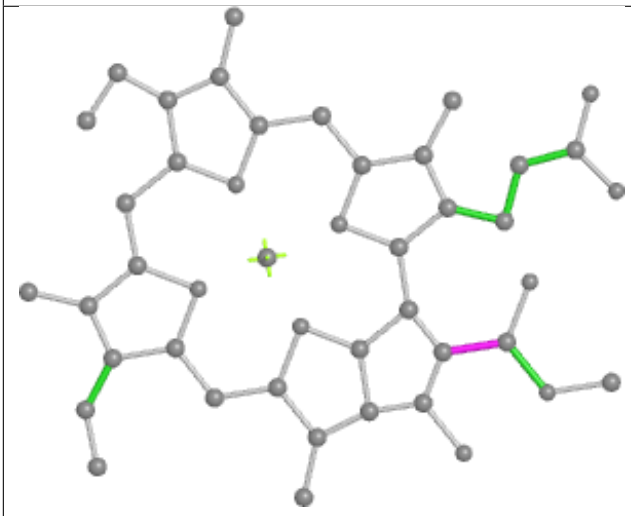


Bond angles



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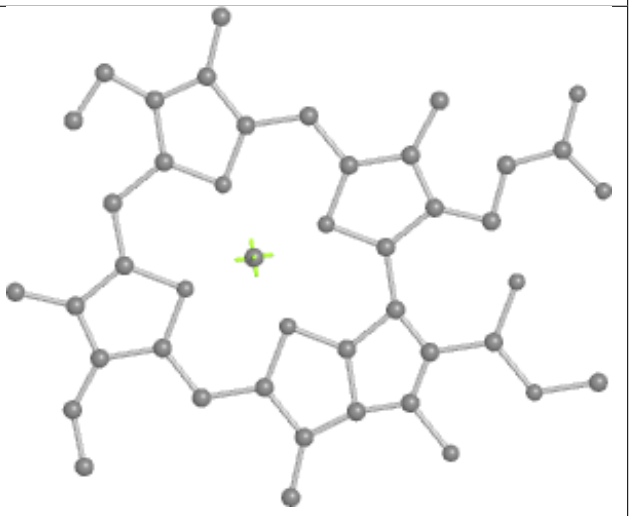
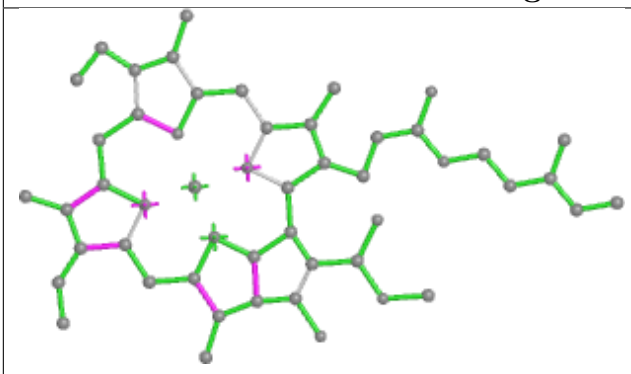


Rings

Ligand CLA A 836



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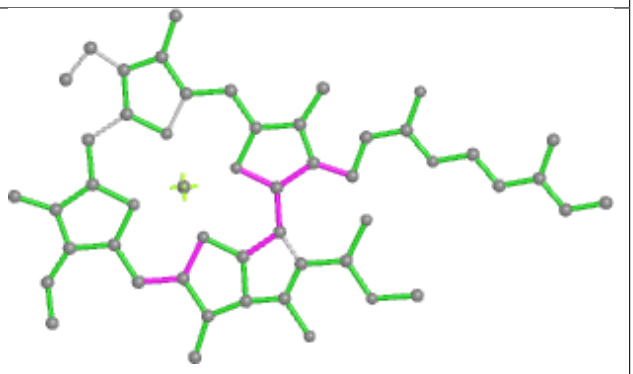

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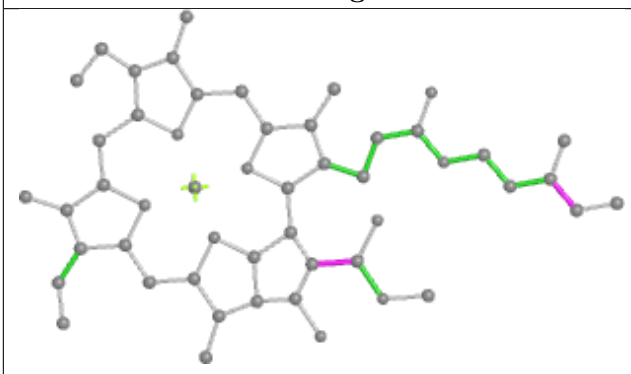

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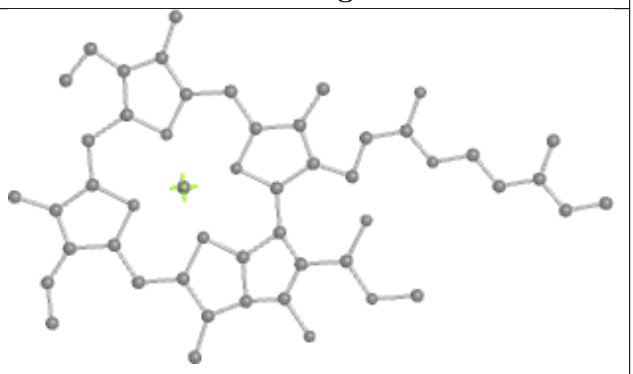
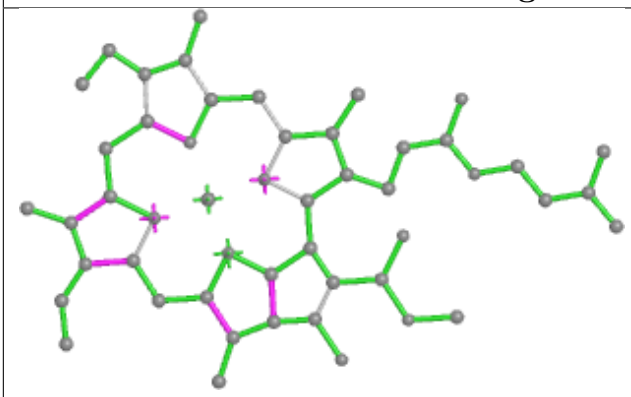


Rings

Ligand CLA 3b 303



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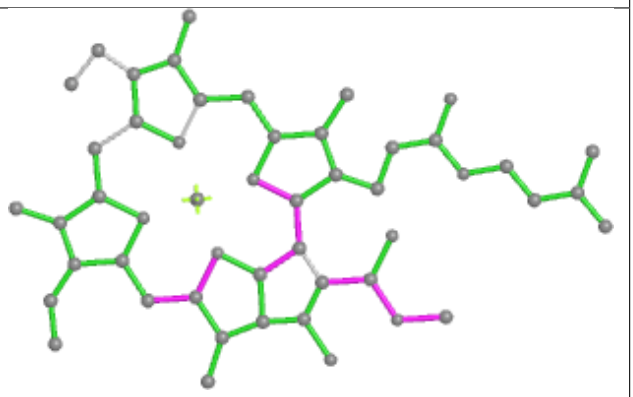
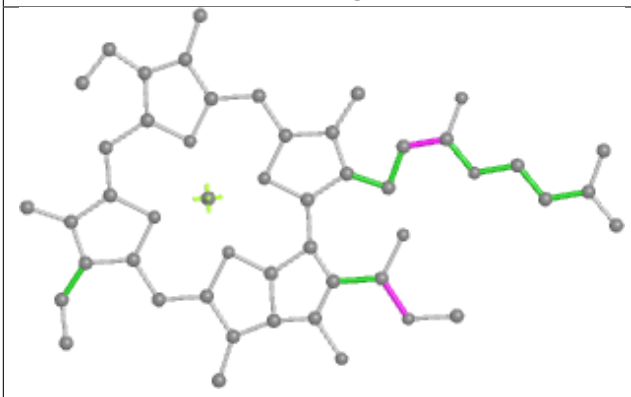


Bond angles



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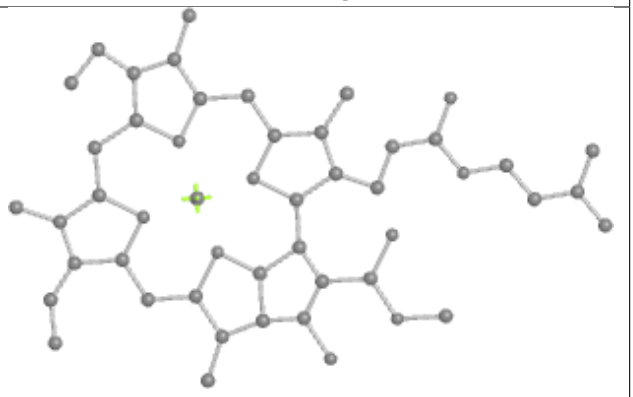
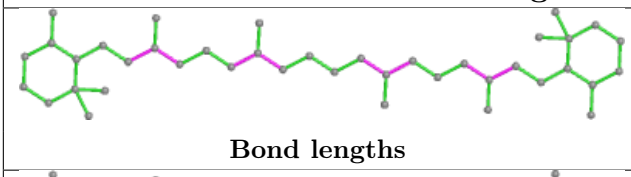


Rings

Ligand BCR i 202



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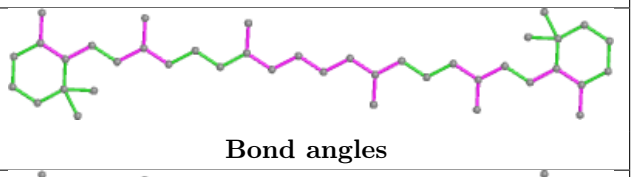
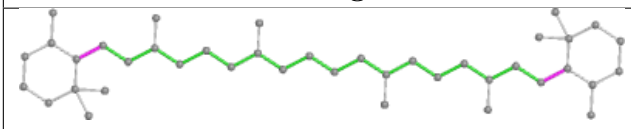


Bond angles



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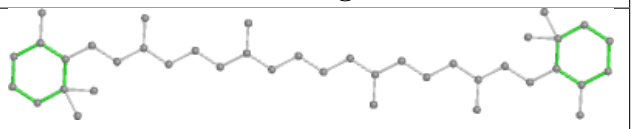
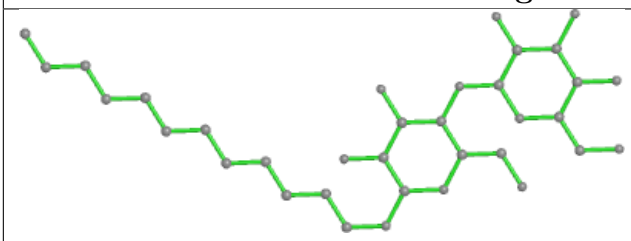
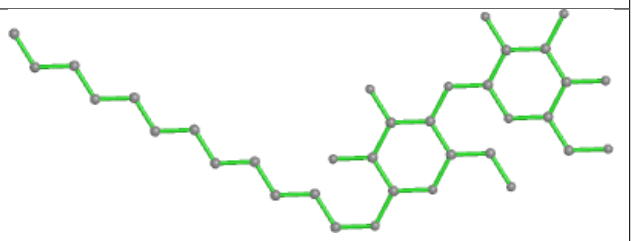


Rings

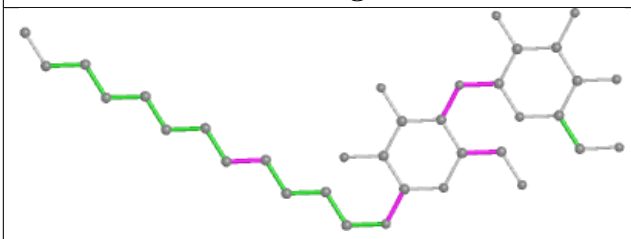
Ligand LMU 6a 302



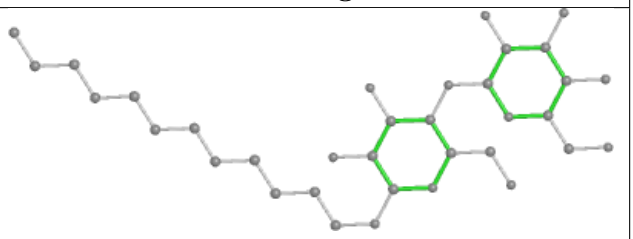
Bond lengths



Bond angles

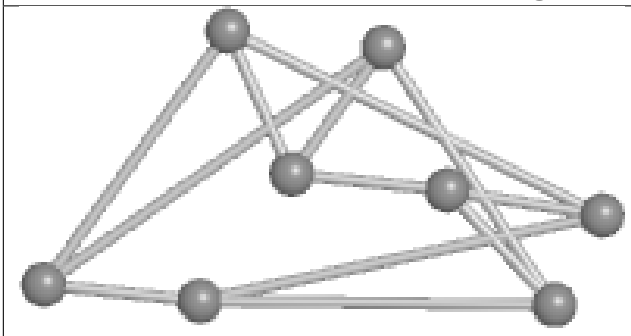


Torsions

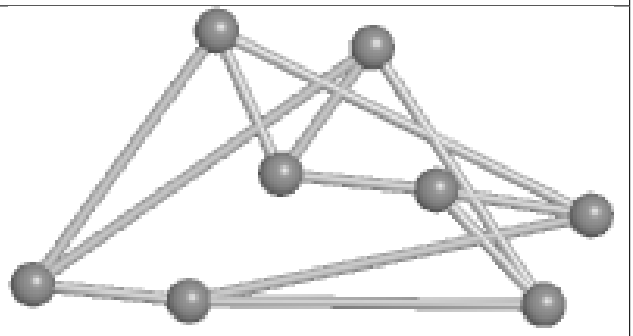


Rings

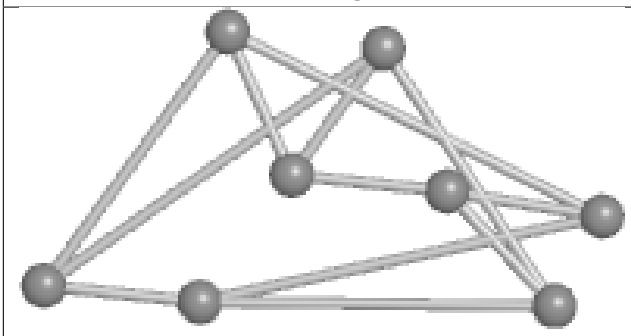
Ligand SF4 A 844



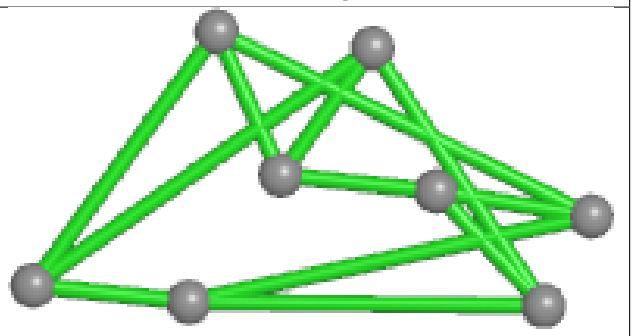
Bond lengths



Bond angles

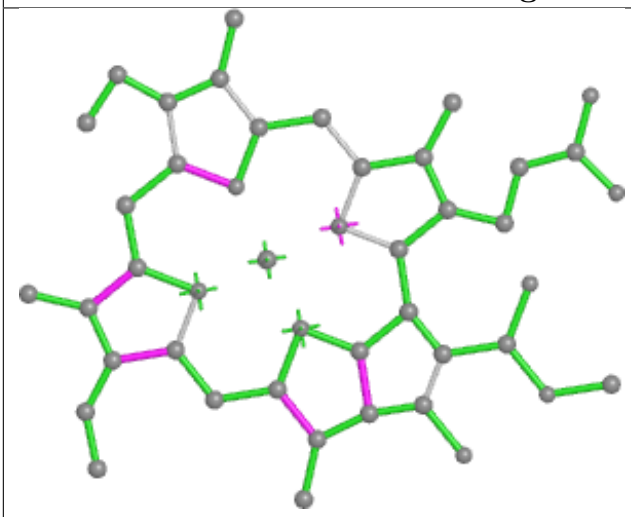


Torsions

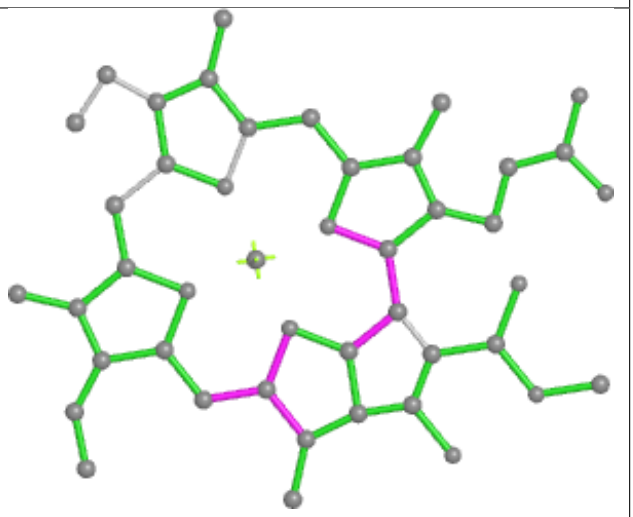


Rings

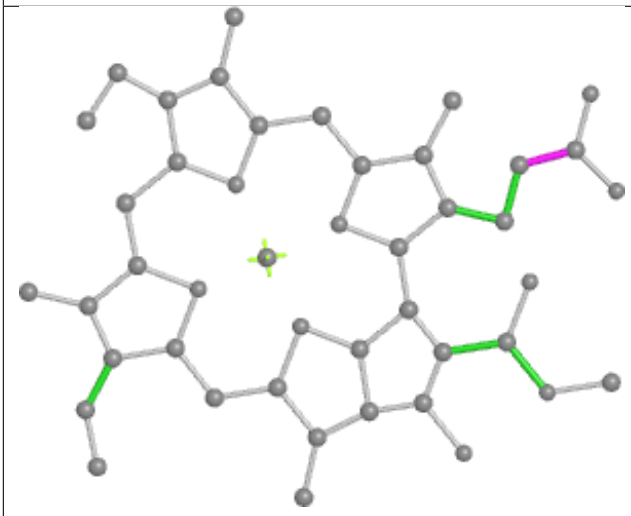
Ligand CLA 5a 308



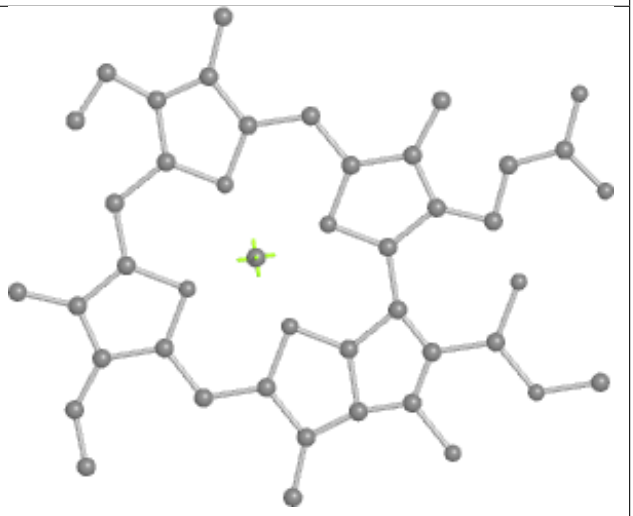
Bond lengths



Bond angles

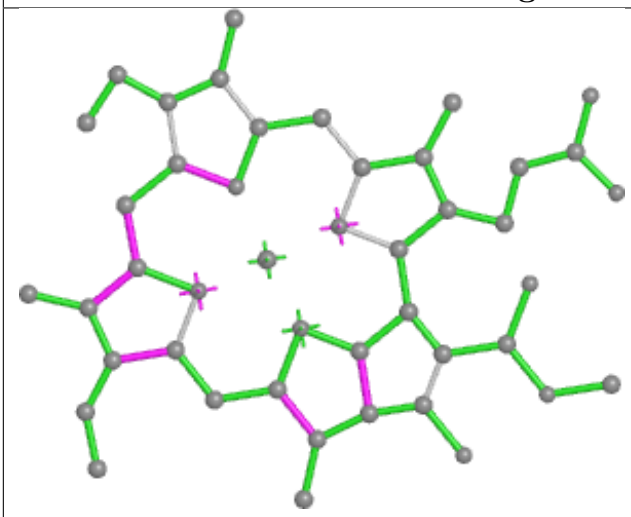


Torsions

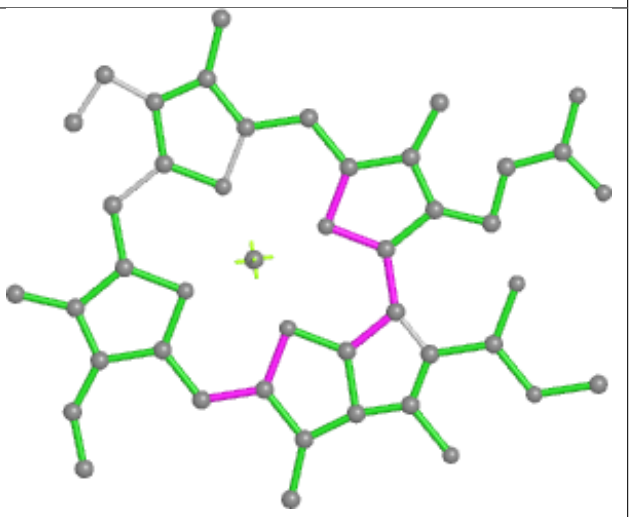


Rings

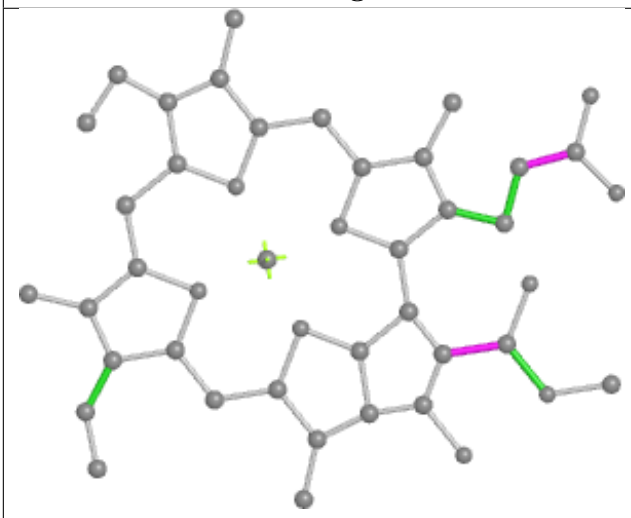
Ligand CLA 2b 310



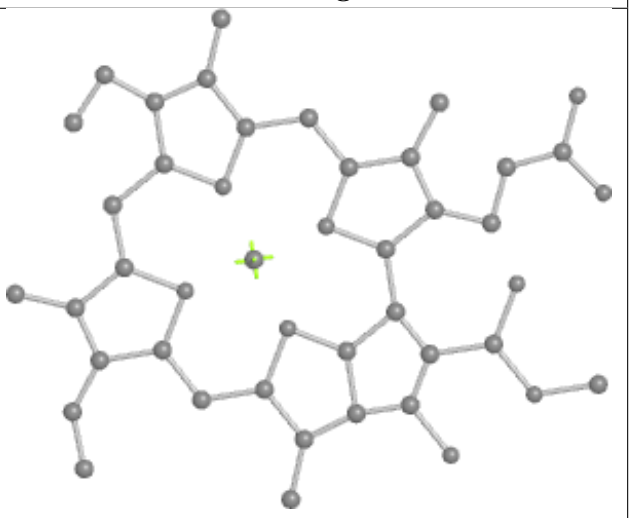
Bond lengths



Bond angles

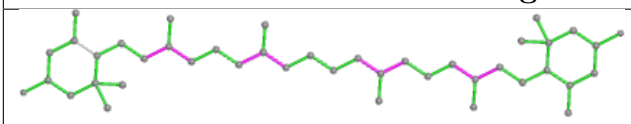


Torsions

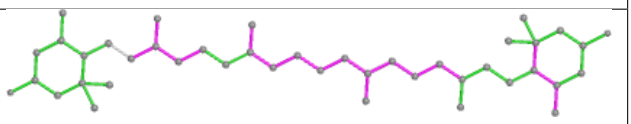


Rings

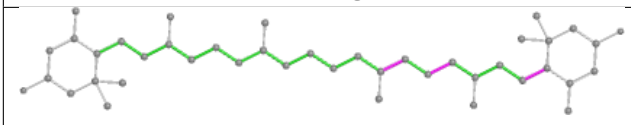
Ligand LUT 3a 317



Bond lengths



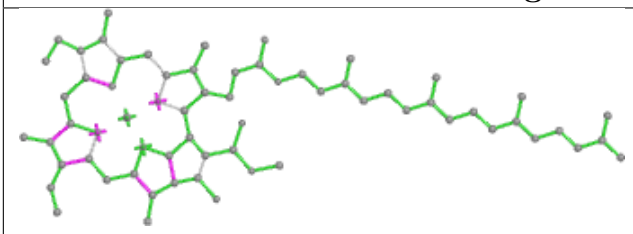
Bond angles



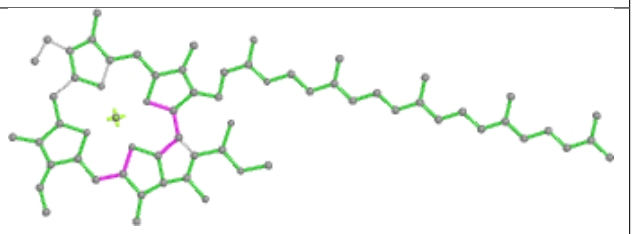
Torsions

Rings

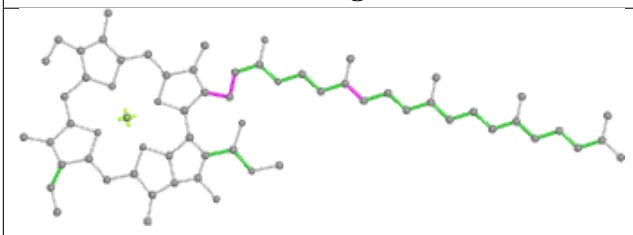
Ligand CLA B 853



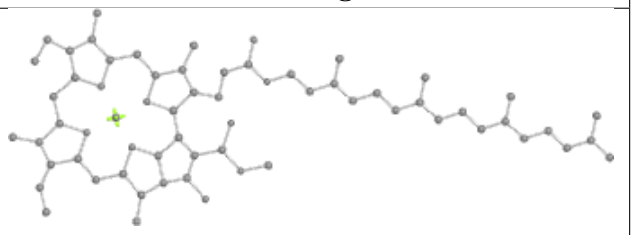
Bond lengths



Bond angles

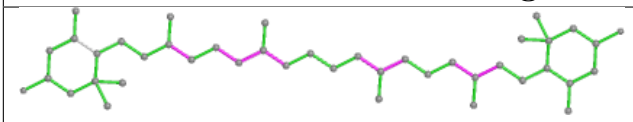


Torsions

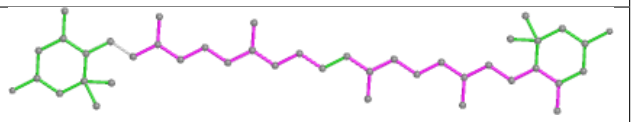


Rings

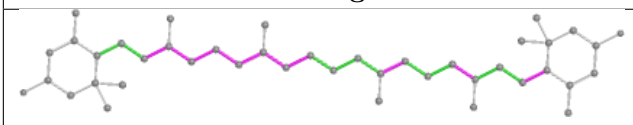
Ligand LUT 6a 319



Bond lengths



Bond angles



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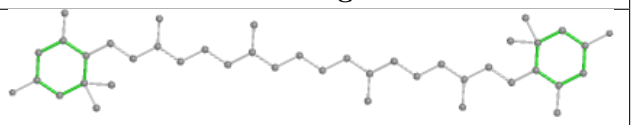
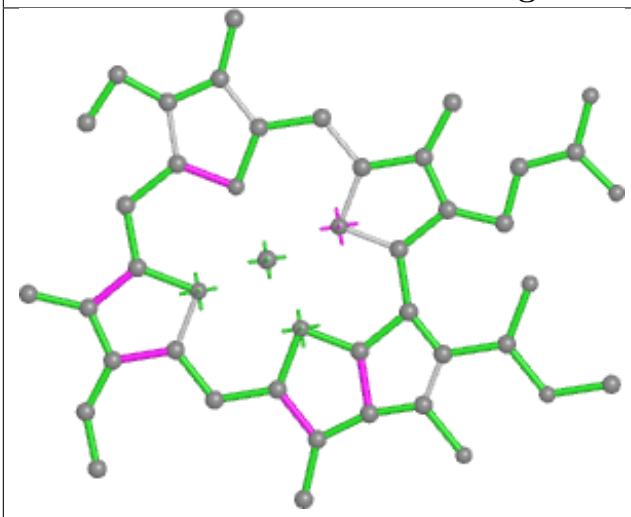
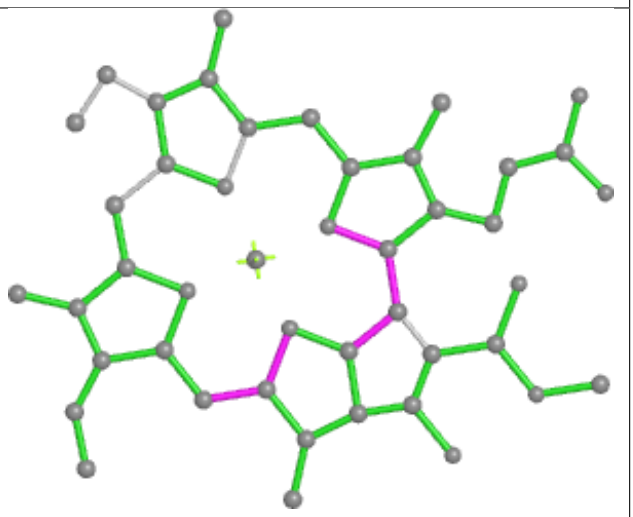


Rings

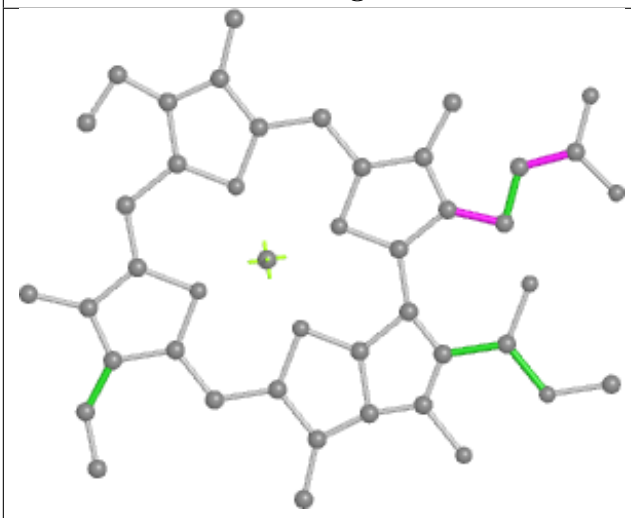
Ligand CLA 6b 313



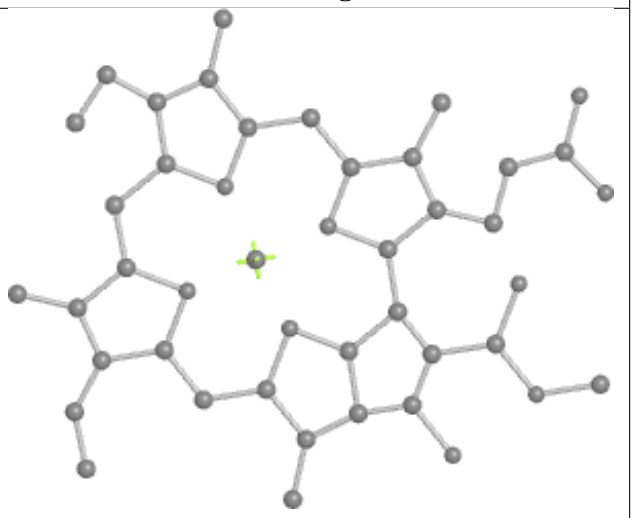
Bond lengths



Bond angles

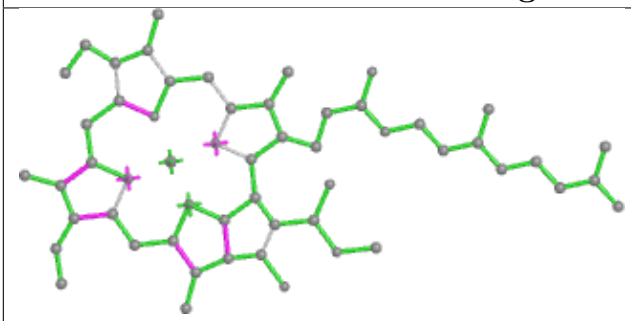


Torsions

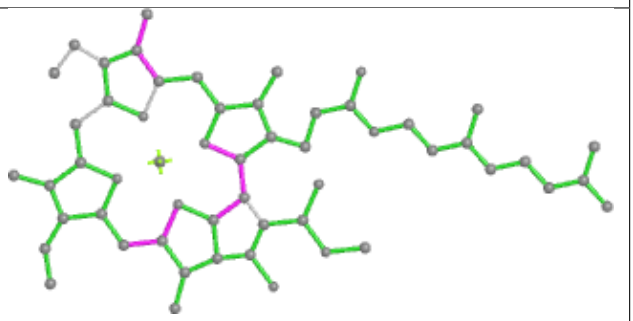


Rings

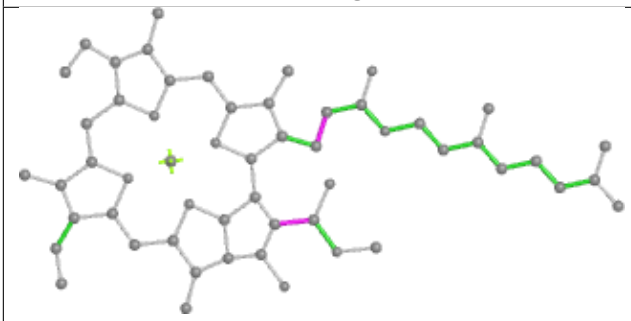
Ligand CLA 3b 302



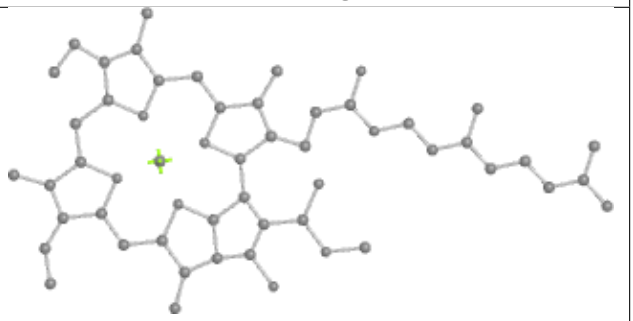
Bond lengths



Bond angles

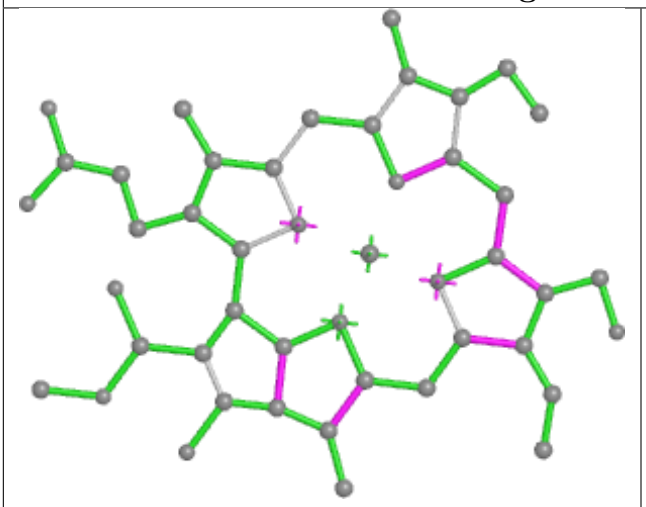


Torsions

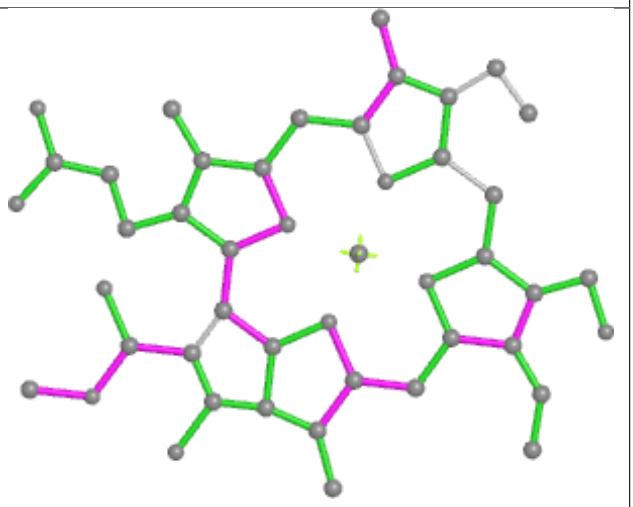


Rings

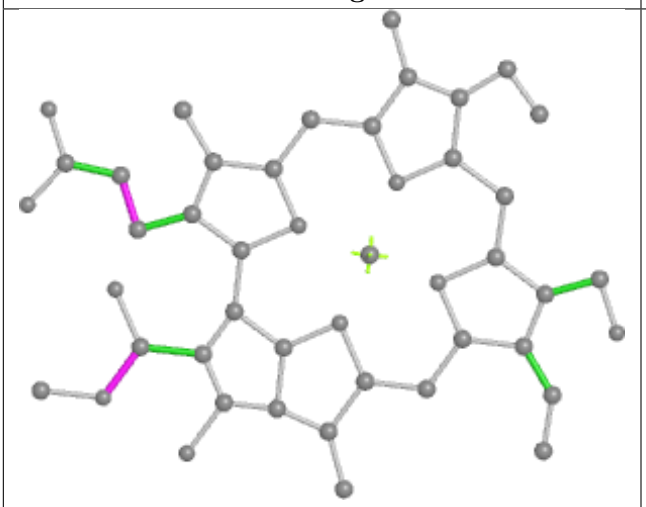
Ligand CHL 3a 307



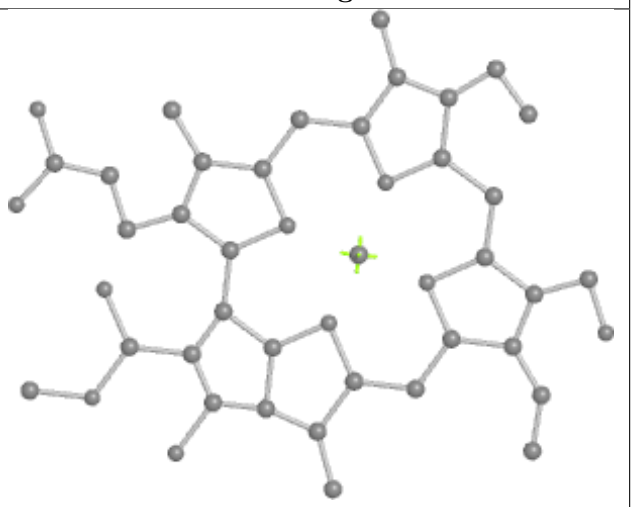
Bond lengths



Bond angles

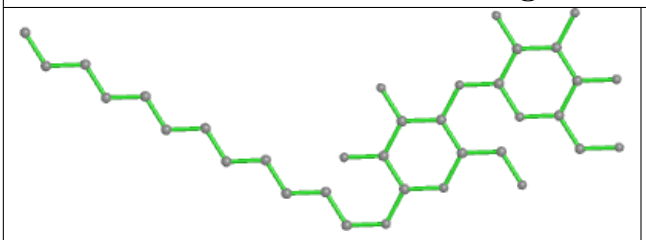


Torsions

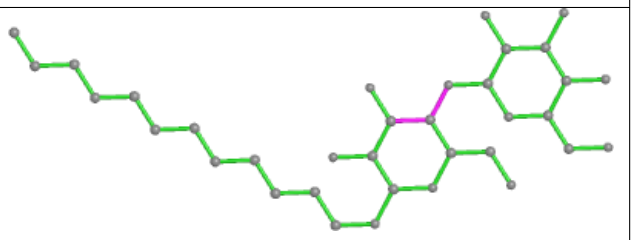


Rings

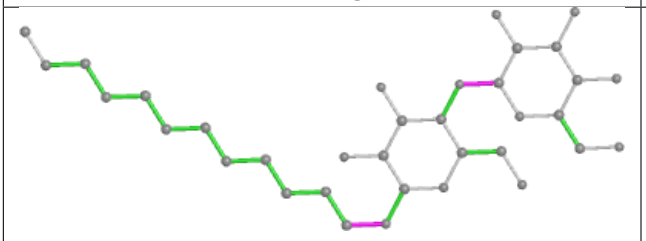
Ligand LMU A 852



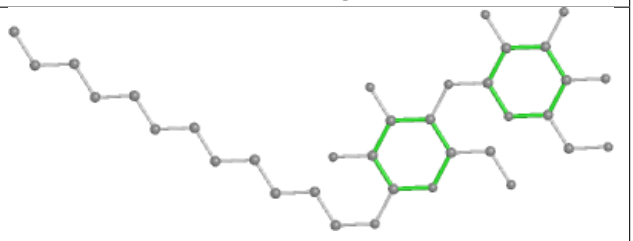
Bond lengths



Bond angles

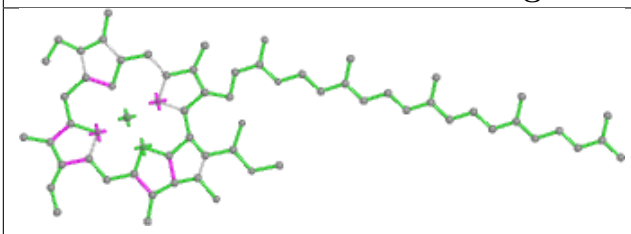


Torsions

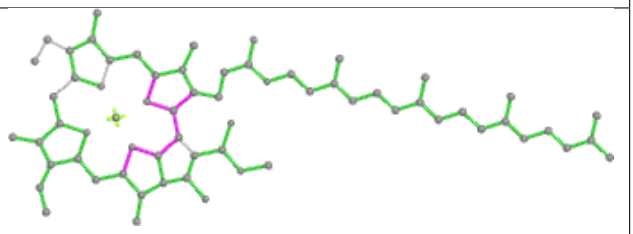


Rings

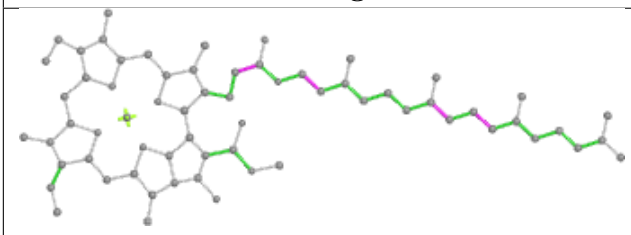
Ligand CLA A 824



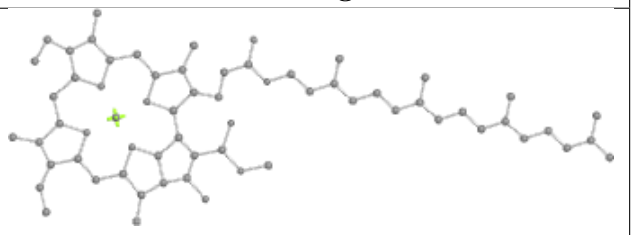
Bond lengths



Bond angles

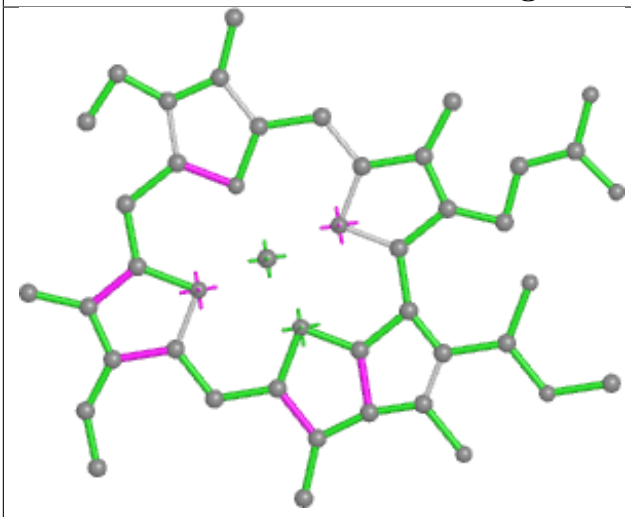


Torsions

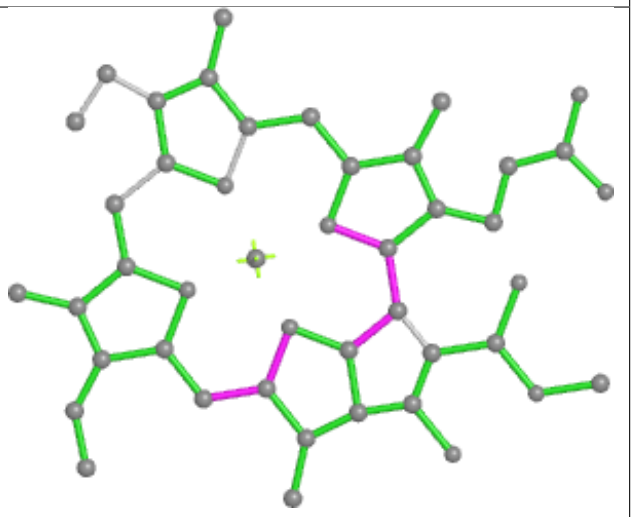


Rings

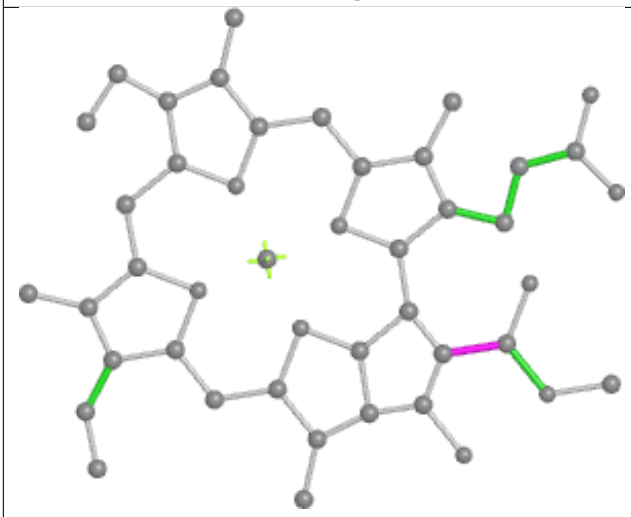
Ligand CLA 5a 313



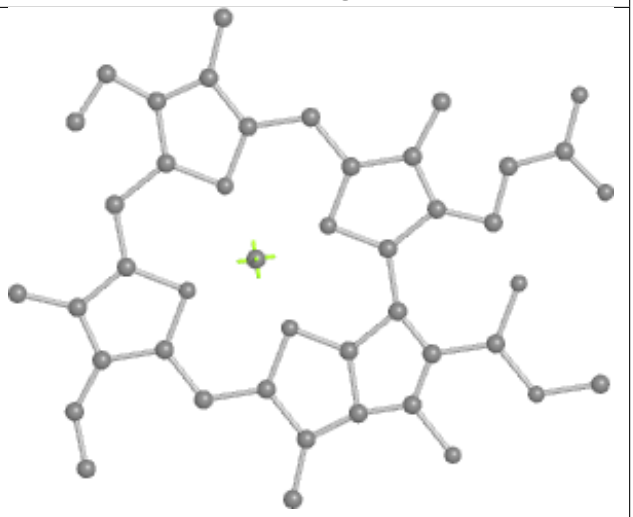
Bond lengths



Bond angles

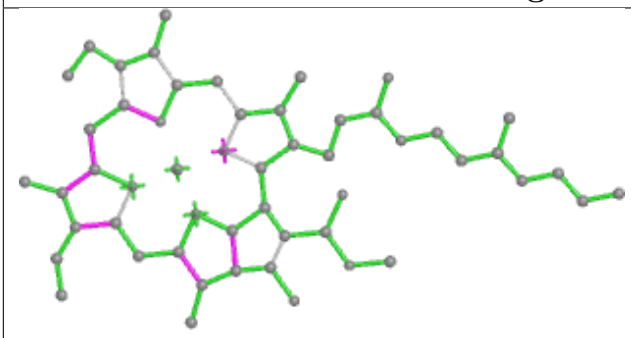


Torsions

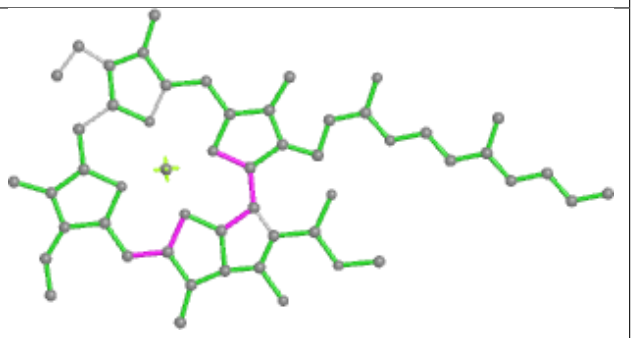


Rings

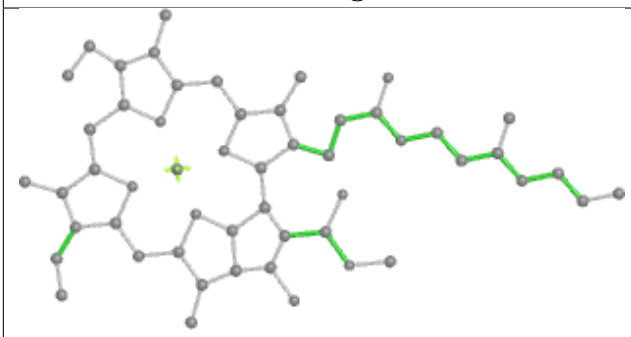
Ligand CLA b 818



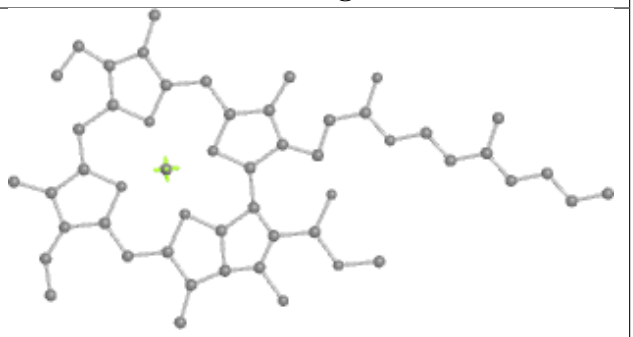
Bond lengths



Bond angles

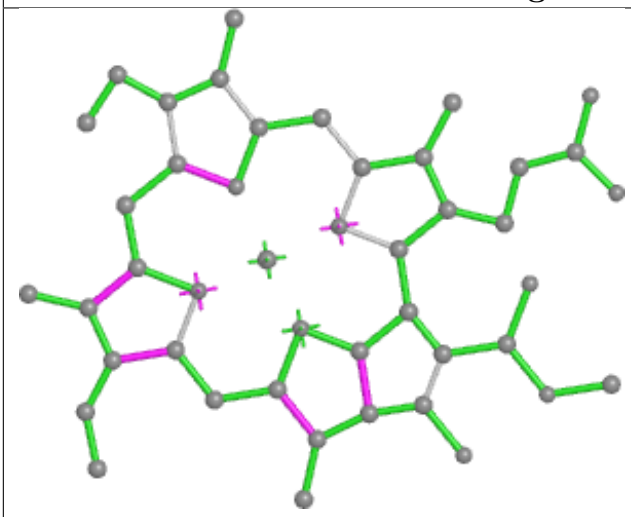


Torsions

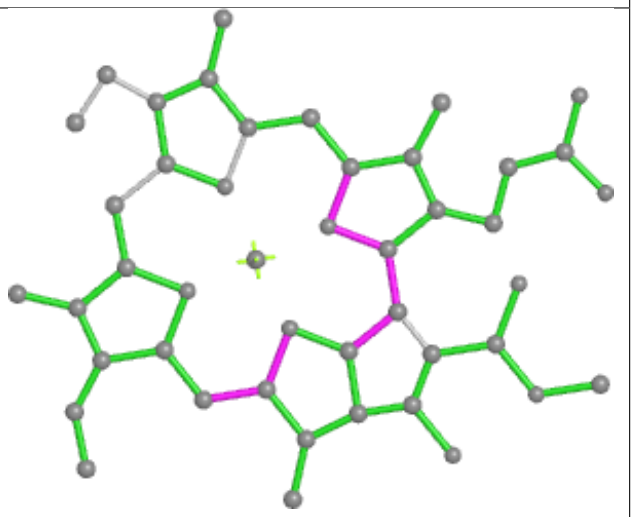


Rings

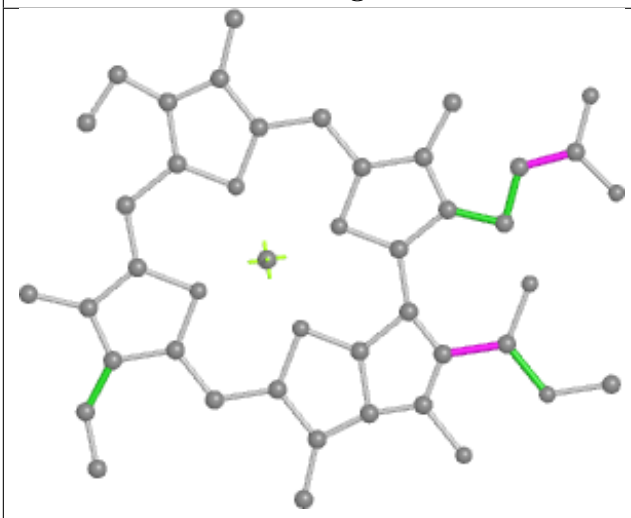
Ligand CLA J 101



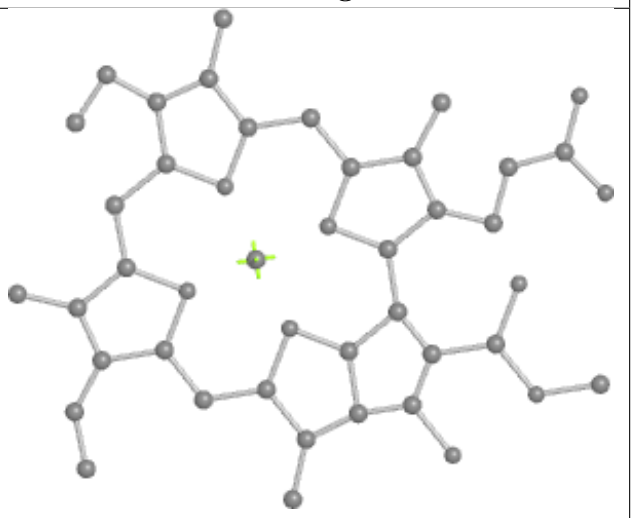
Bond lengths



Bond angles

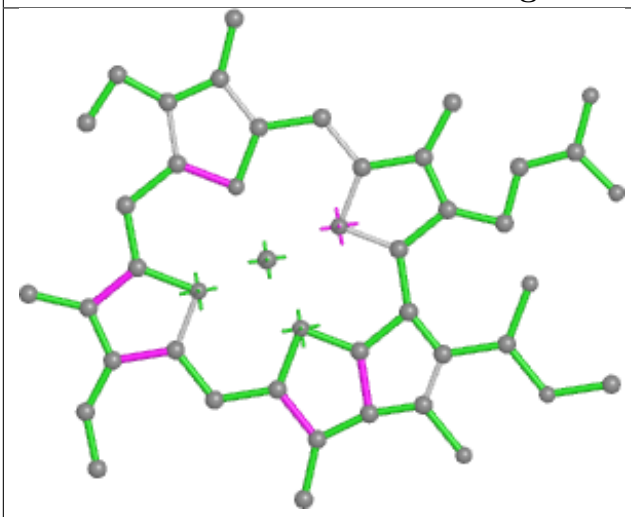


Torsions

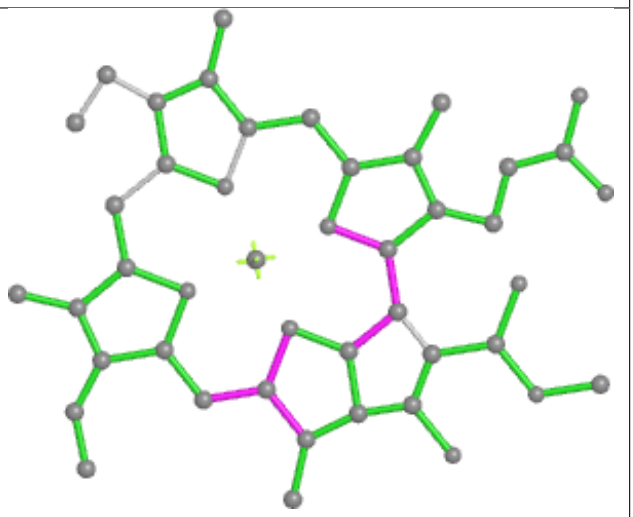


Rings

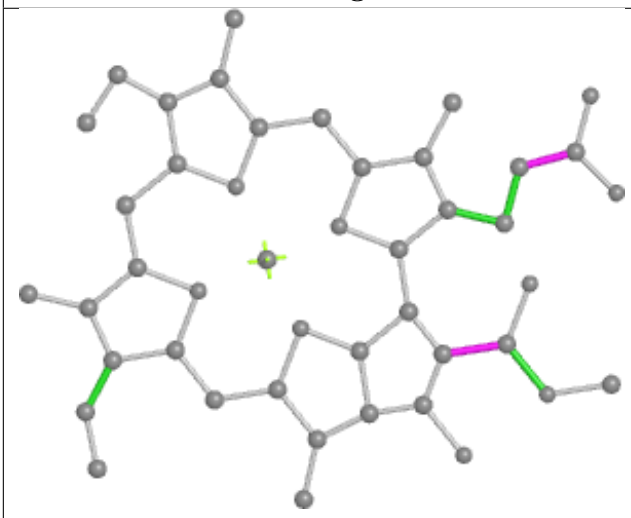
Ligand CLA 3a 314



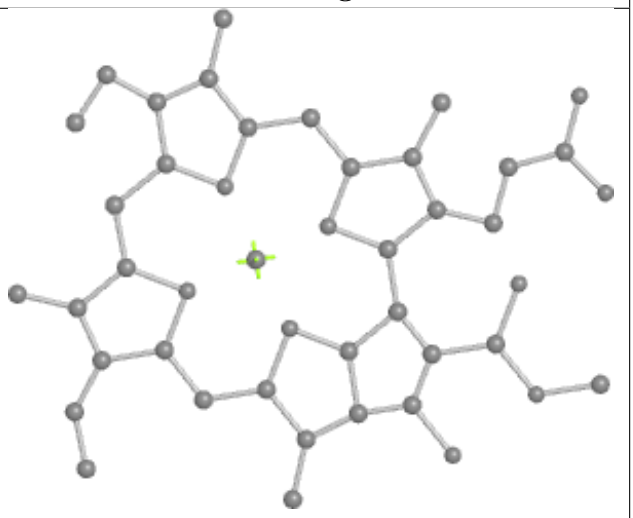
Bond lengths



Bond angles

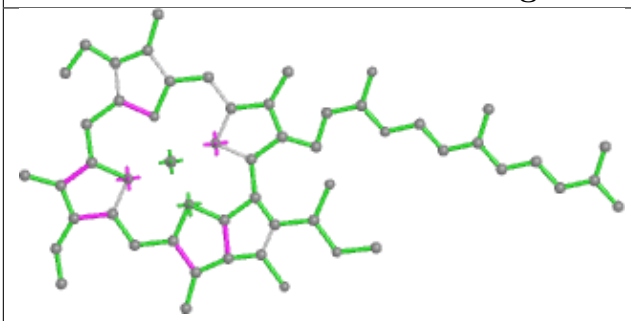


Torsions

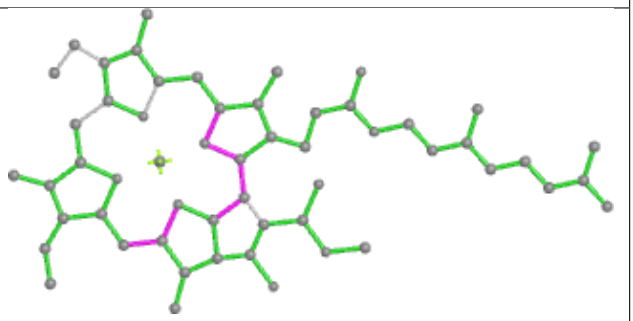


Rings

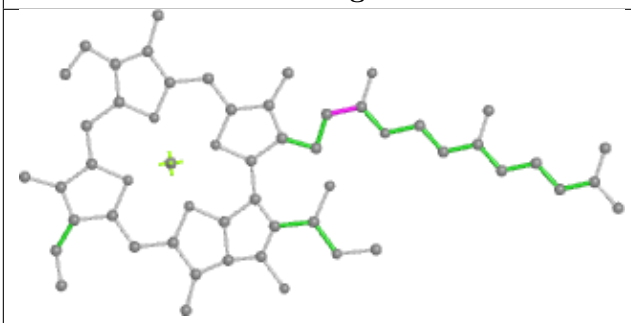
Ligand CLA 6a 315



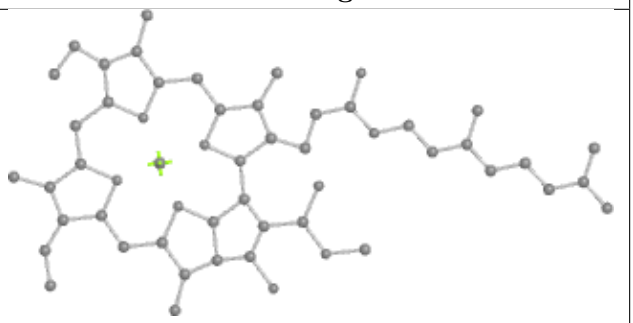
Bond lengths



Bond angles

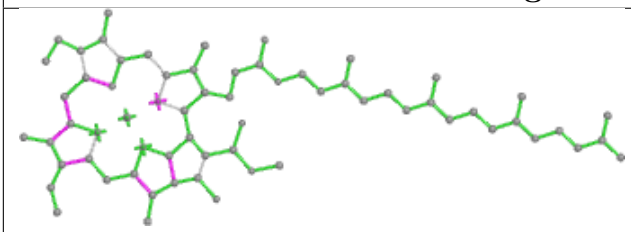


Torsions

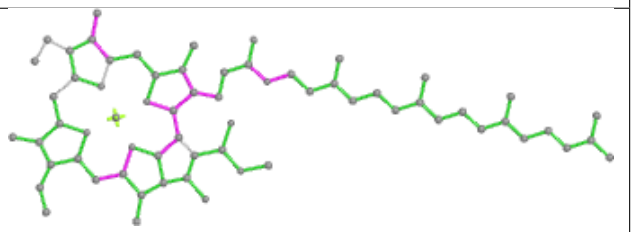


Rings

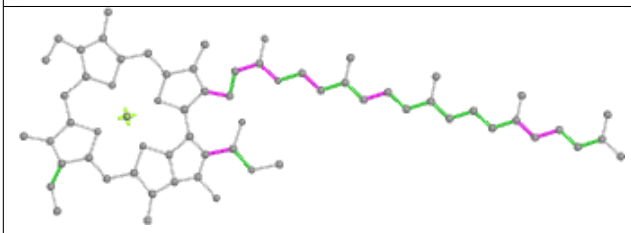
Ligand CLA B 840



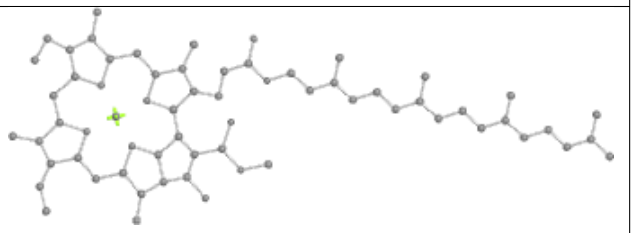
Bond lengths



Bond angles

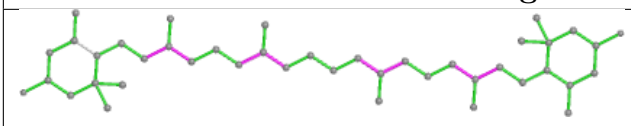


Torsions

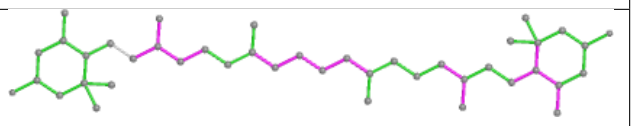


Rings

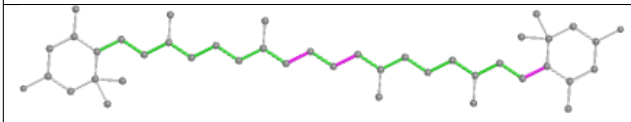
Ligand LUT 2a 315



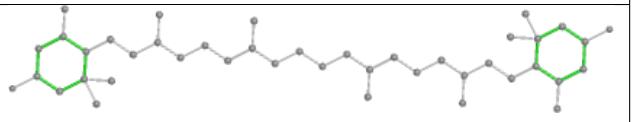
Bond lengths



Bond angles

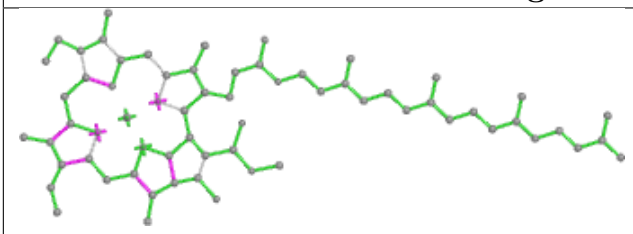


Torsions

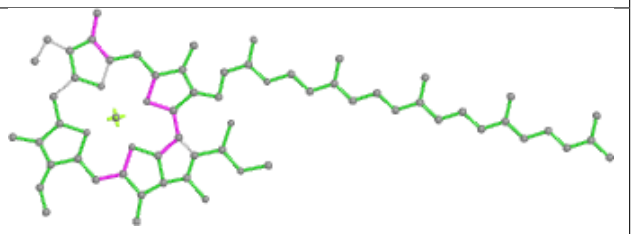


Rings

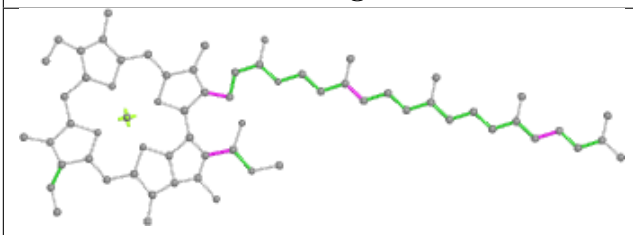
Ligand CLA b 812



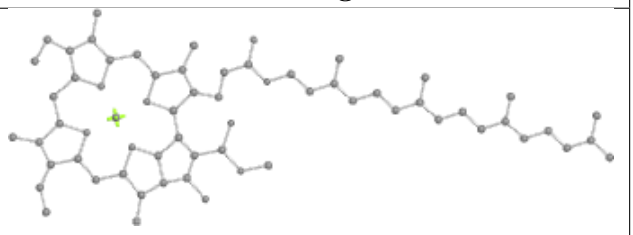
Bond lengths



Bond angles

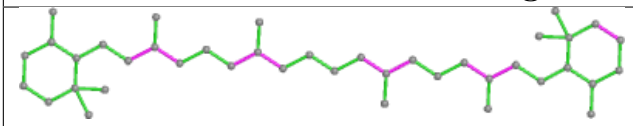


Torsions

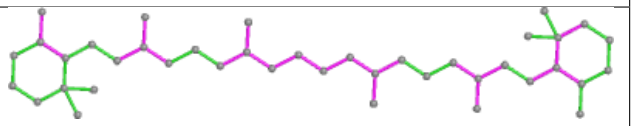


Rings

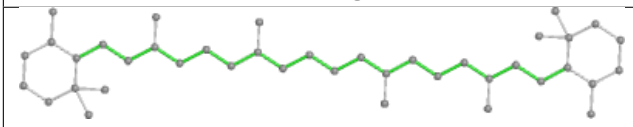
Ligand BCR A 850



Bond lengths



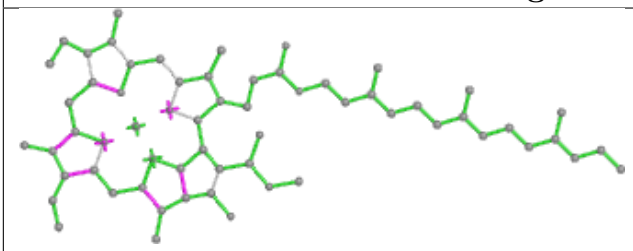
Bond angles



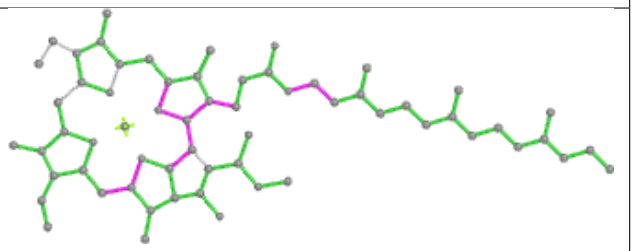
Torsions

Rings

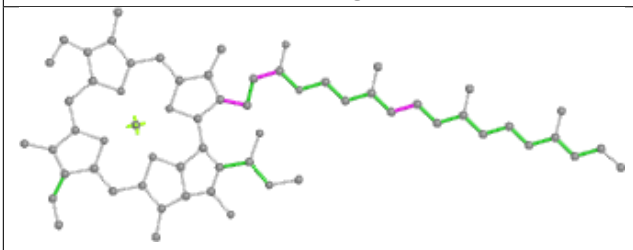
Ligand CLA b 816



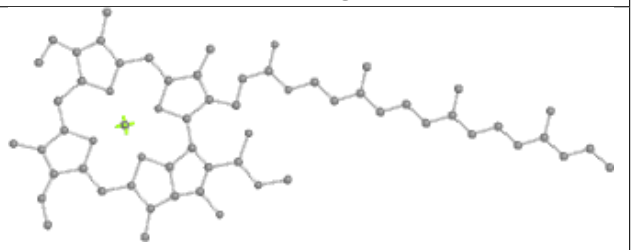
Bond lengths



Bond angles



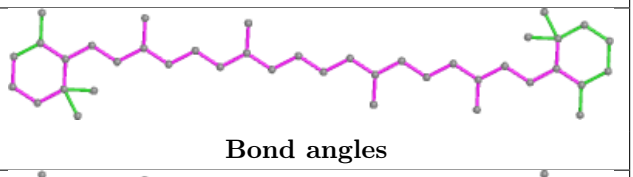
Torsions



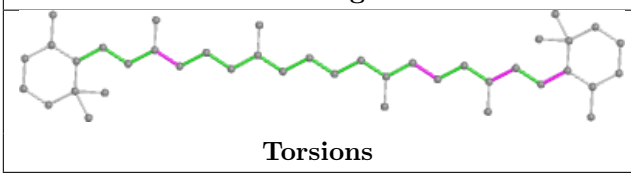
Rings

Ligand BCR b 848

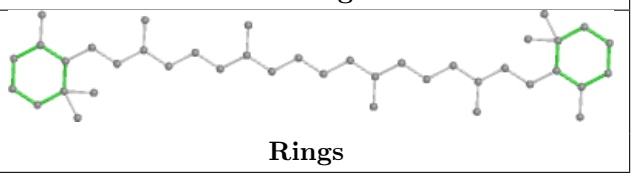
Bond lengths



Bond angles

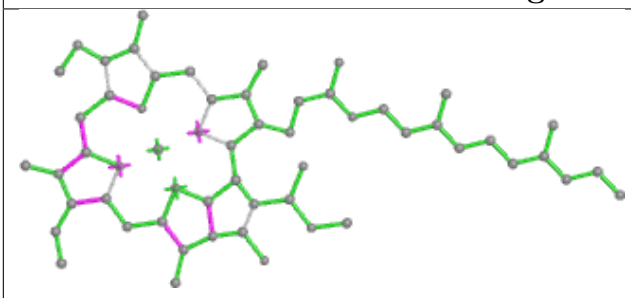


Torsions



Rings

Ligand CLA b 815



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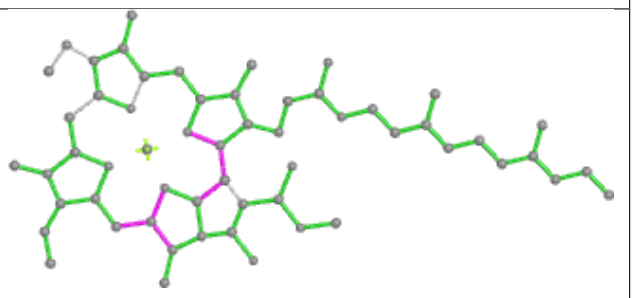
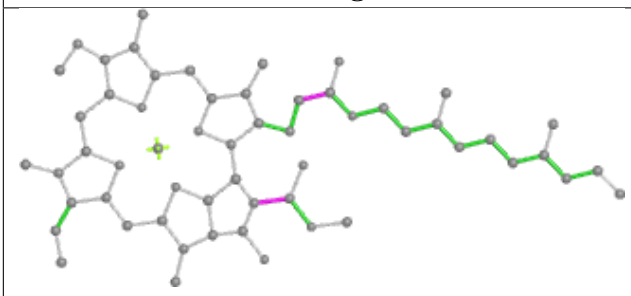
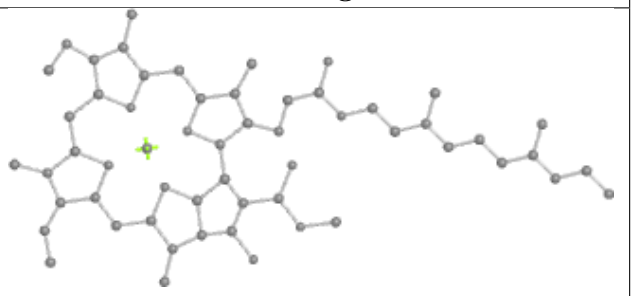


Bond angles

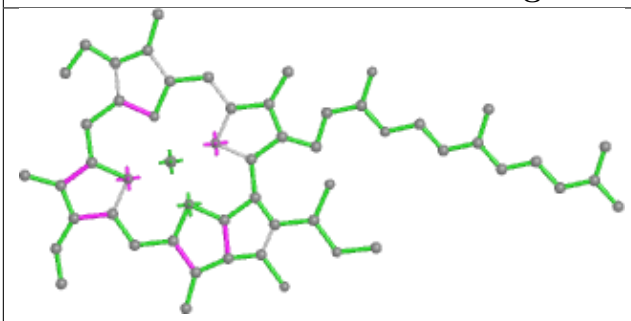


Torsions

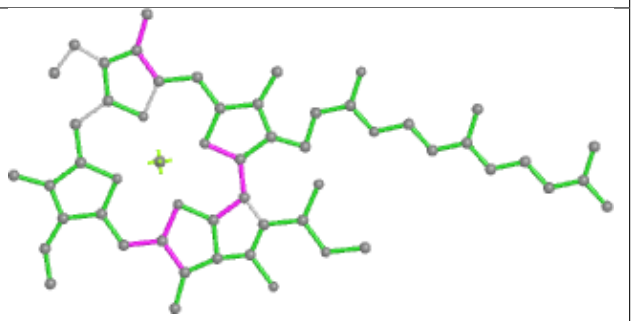


Rings

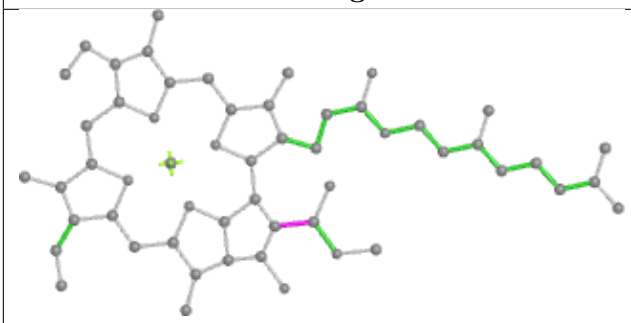
Ligand CLA A 825



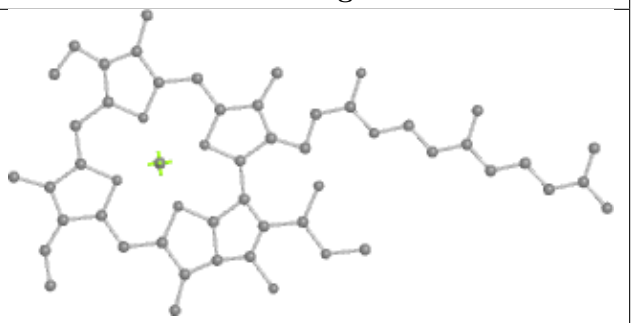
Bond lengths



Bond angles

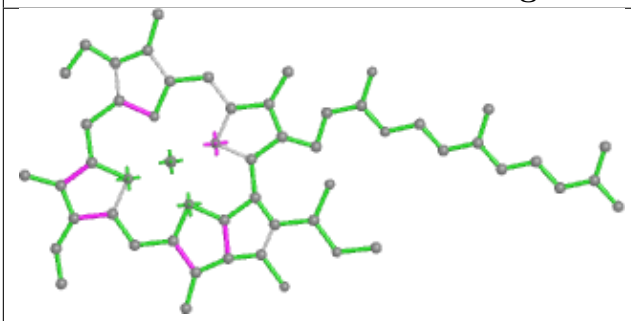


Torsions

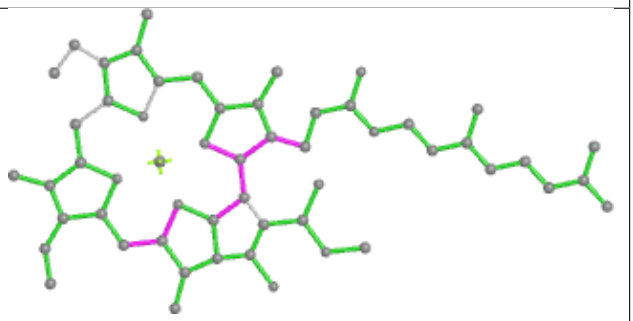


Rings

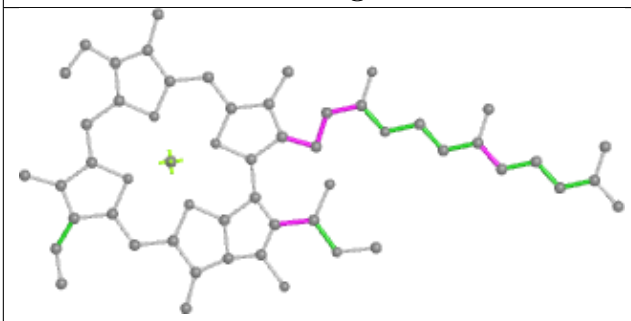
Ligand CLA 2a 308



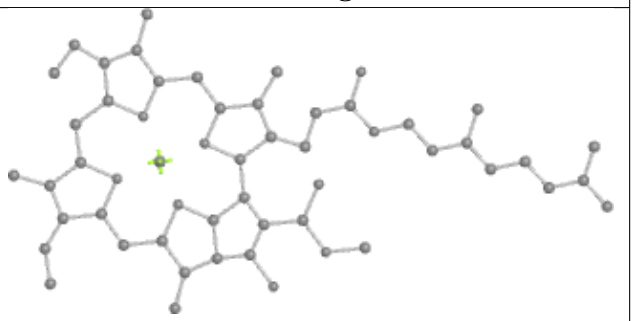
Bond lengths



Bond angles

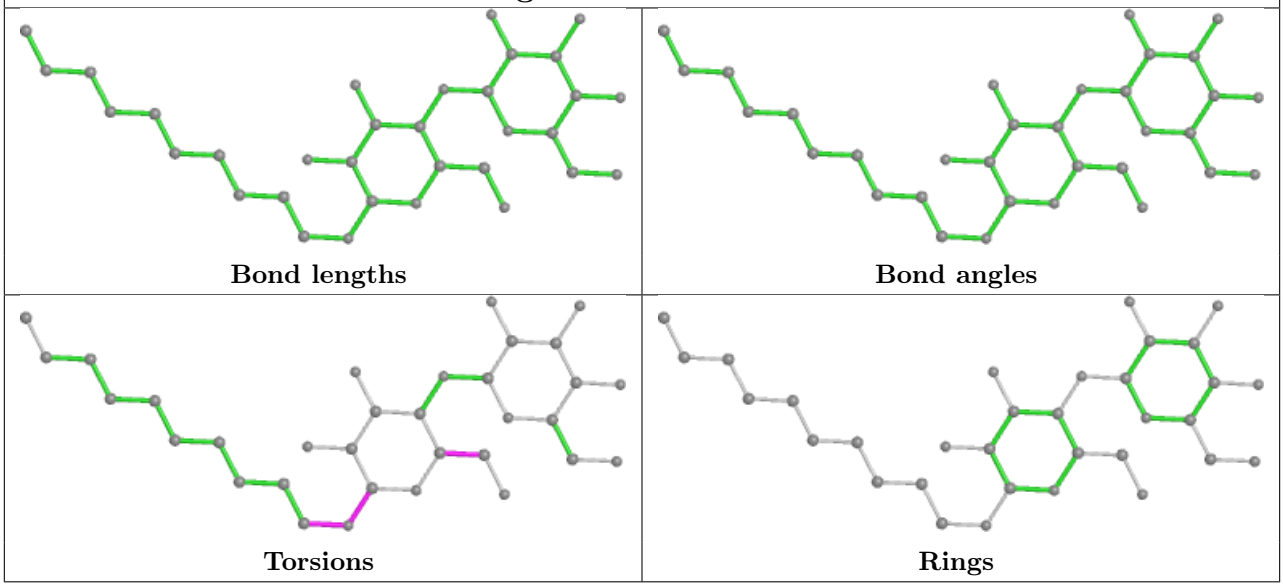


Torsions

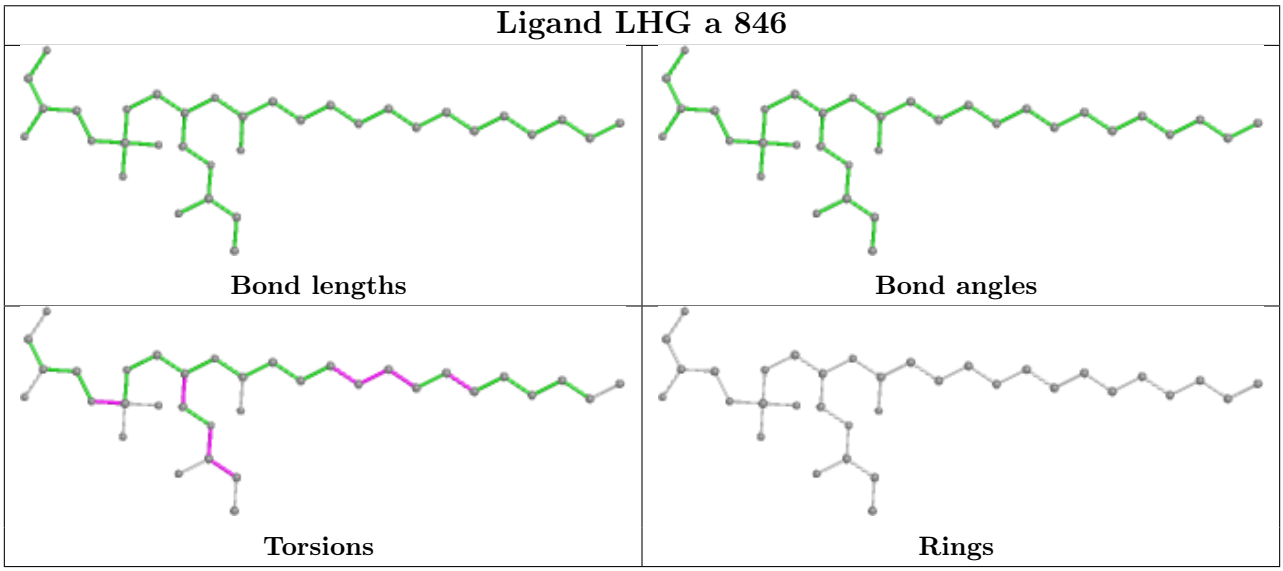


Rings

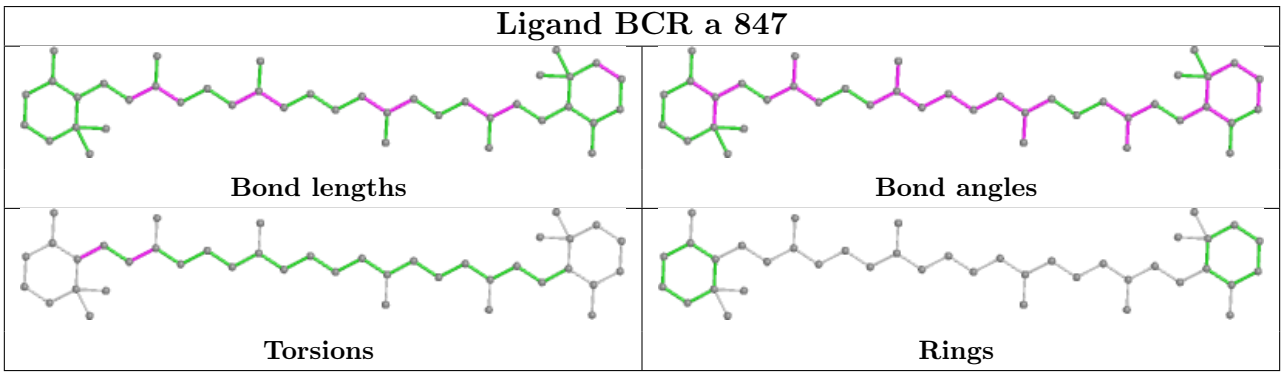
Ligand LMU 6a 303



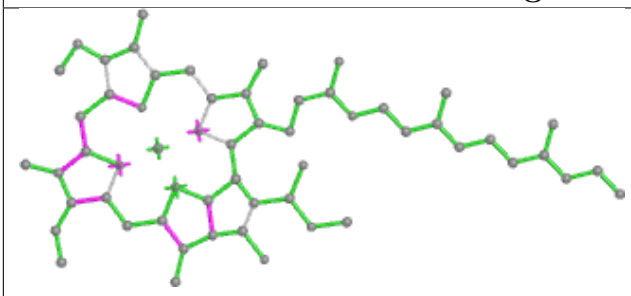
Ligand LHG a 846



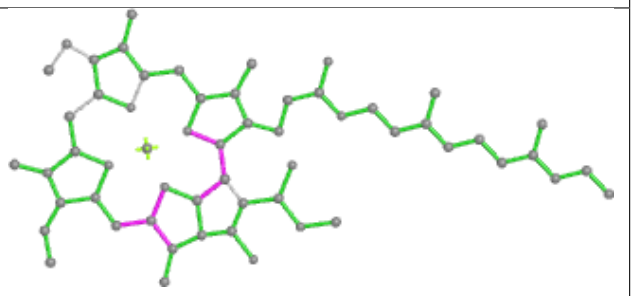
Ligand BCR a 847



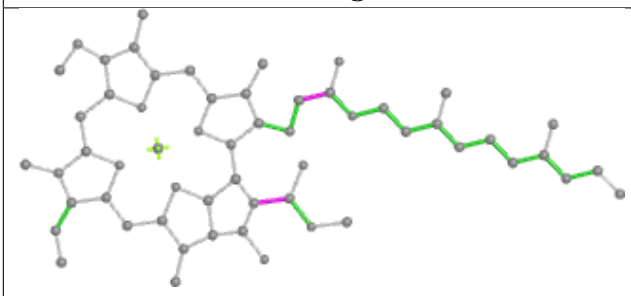
Ligand CLA B 815



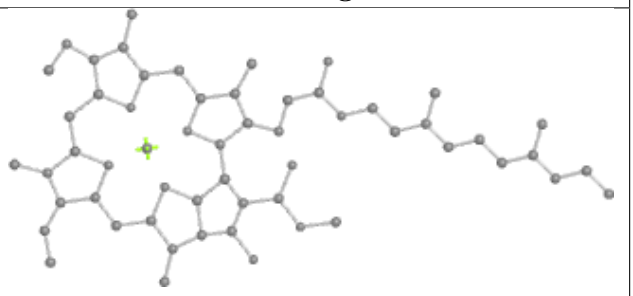
Bond lengths



Bond angles

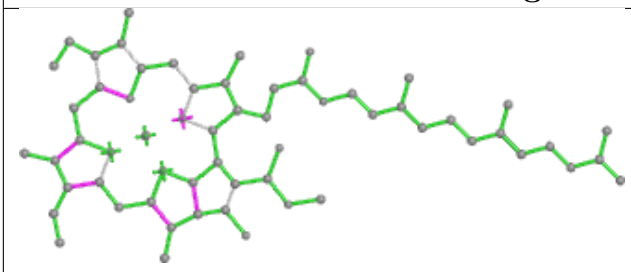


Torsions

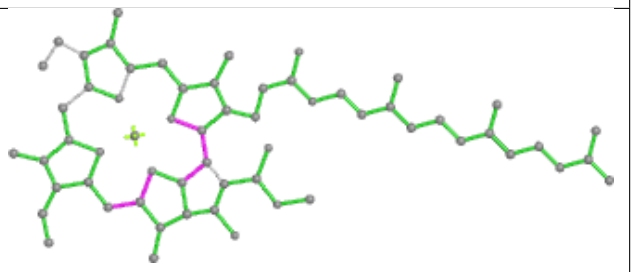


Rings

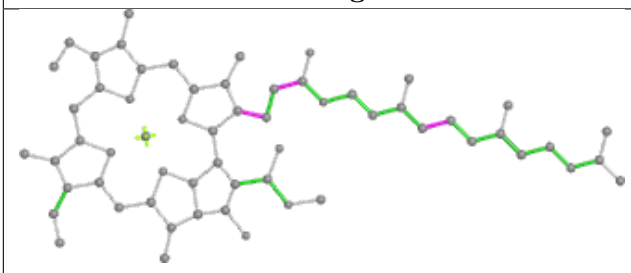
Ligand CLA A 834



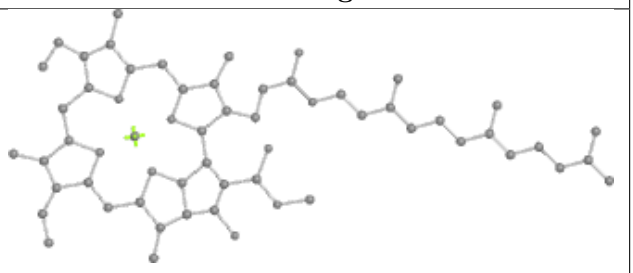
Bond lengths



Bond angles

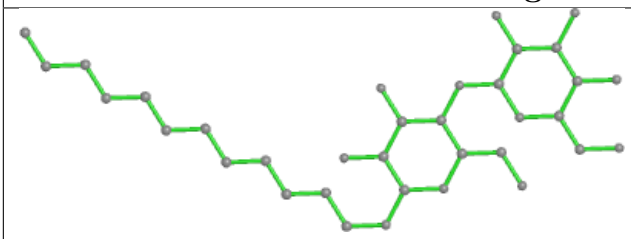


Torsions

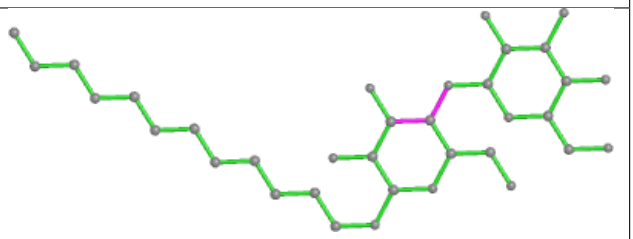


Rings

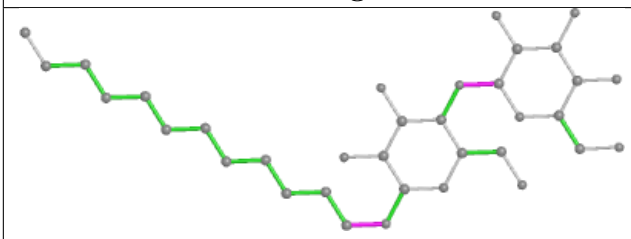
Ligand LMU a 852



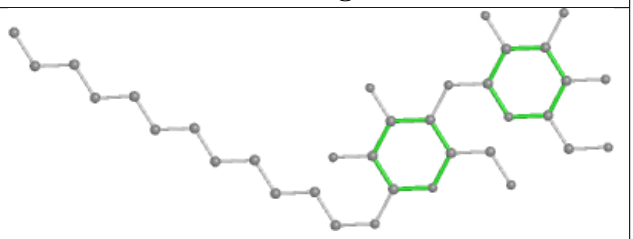
Bond lengths



Bond angles

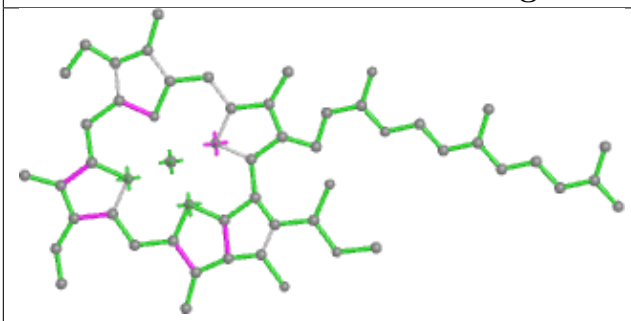


Torsions

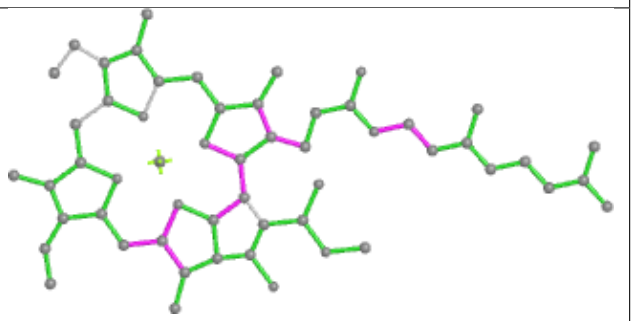


Rings

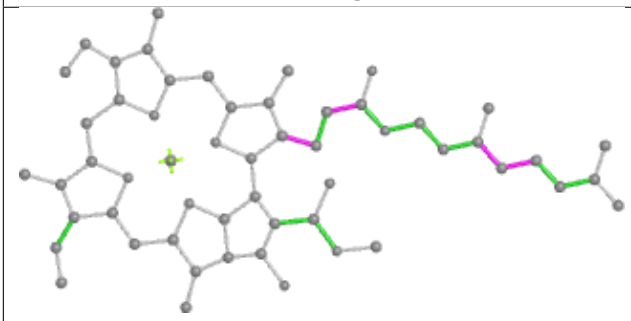
Ligand CLA 3a 312



Bond lengths



Bond angles



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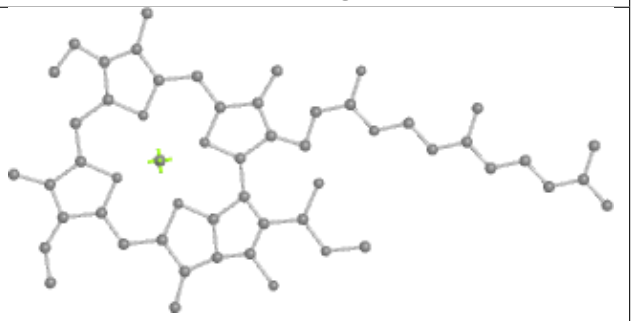
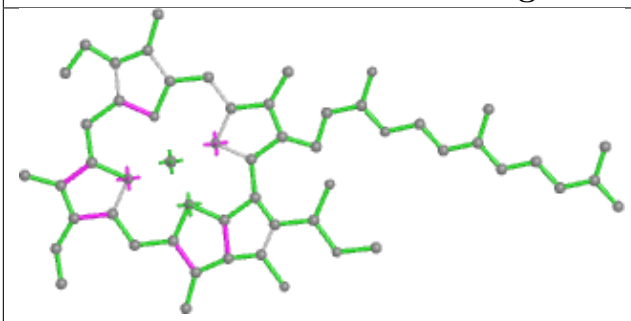
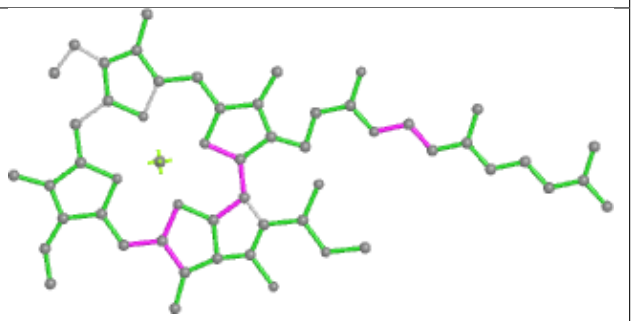


Rings

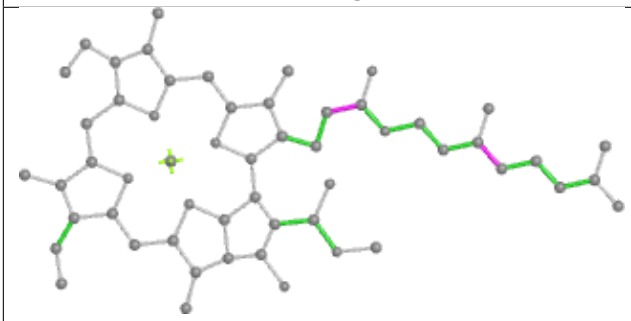
Ligand CLA 6b 306



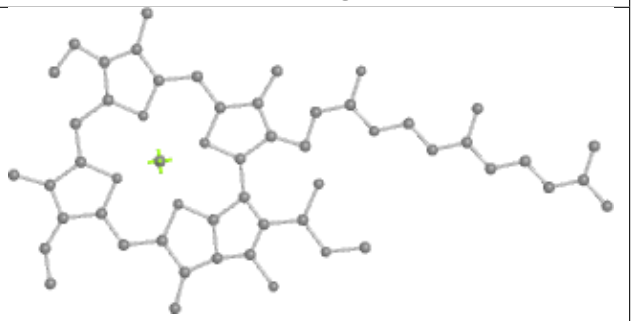
Bond lengths



Bond angles

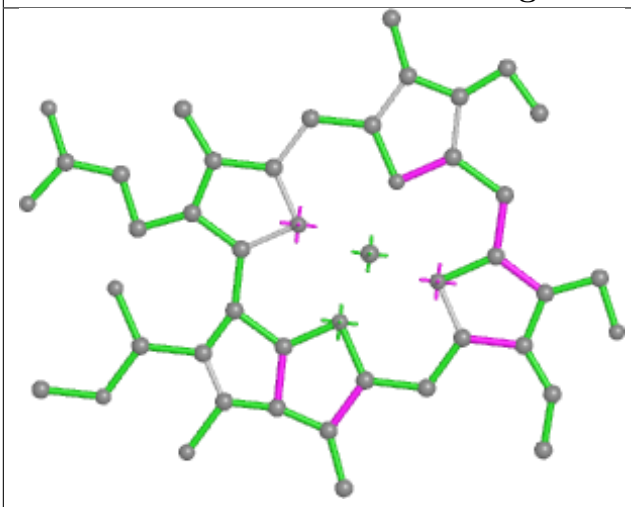


Torsions

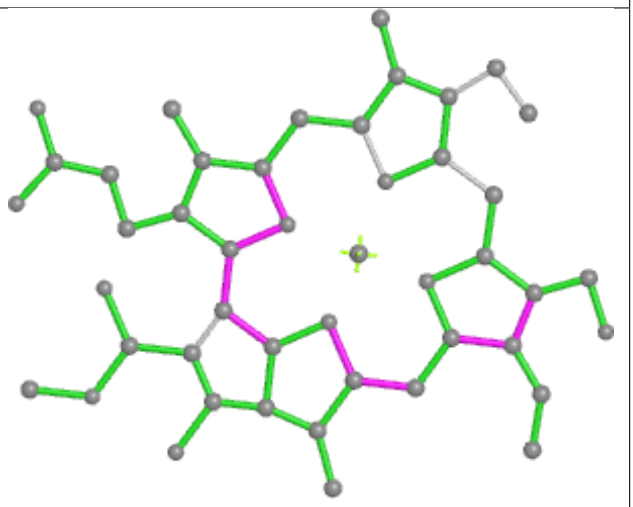


Rings

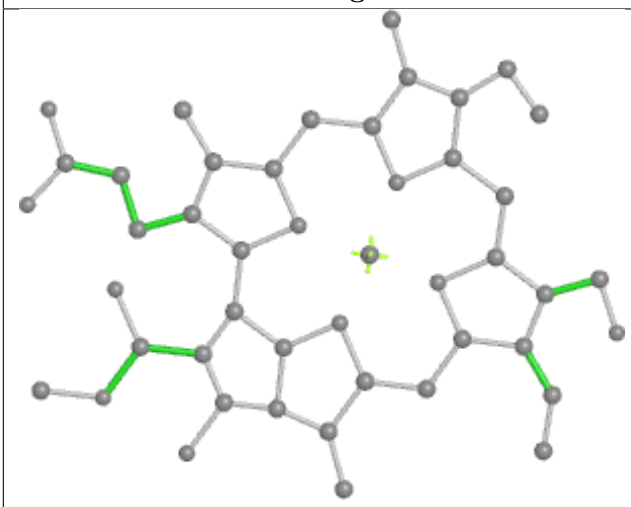
Ligand CHL 3a 301



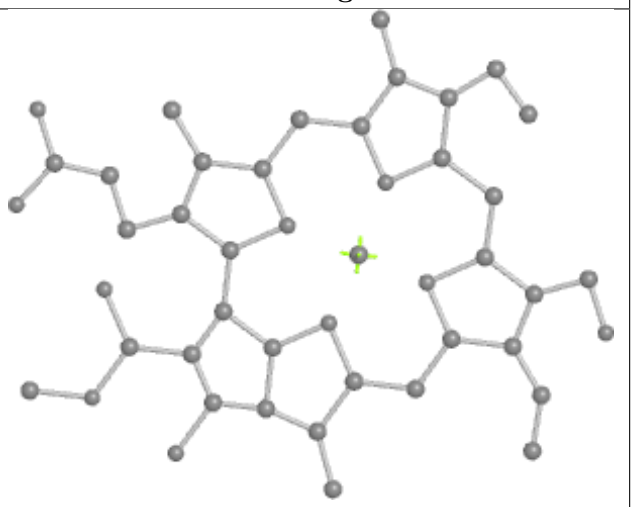
Bond lengths



Bond angles

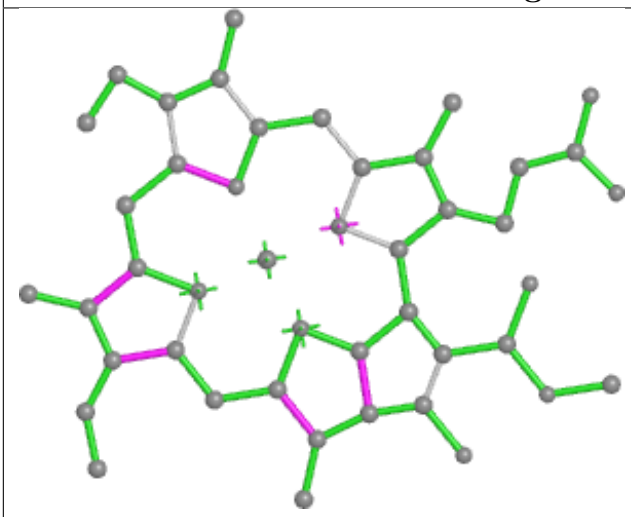


Torsions

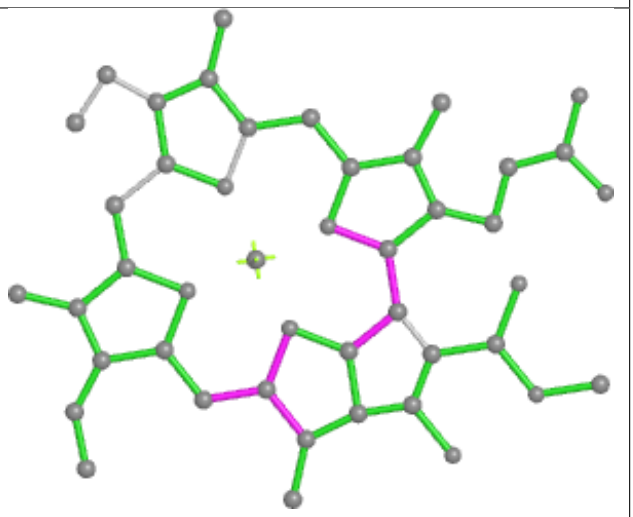


Rings

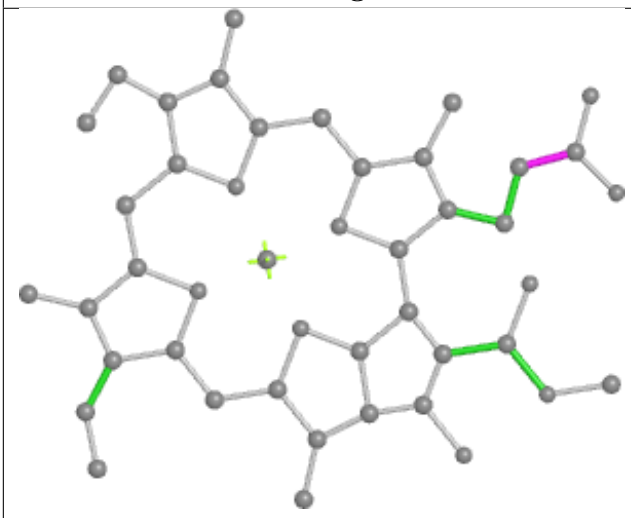
Ligand CLA B 829



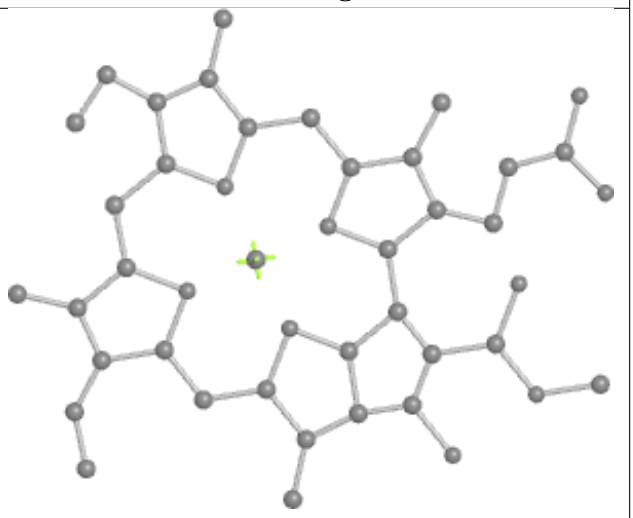
Bond lengths



Bond angles

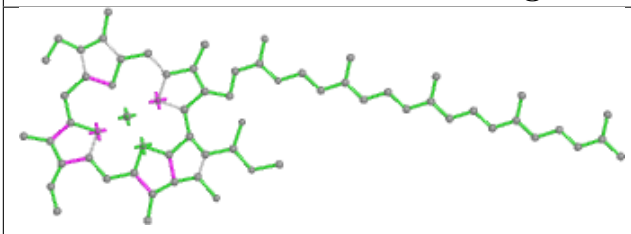


Torsions



Rings

Ligand CLA A 829



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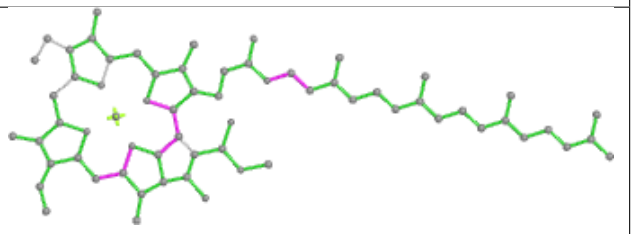
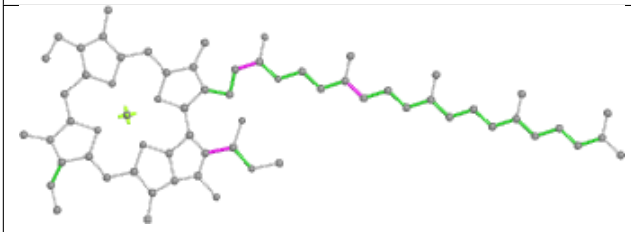
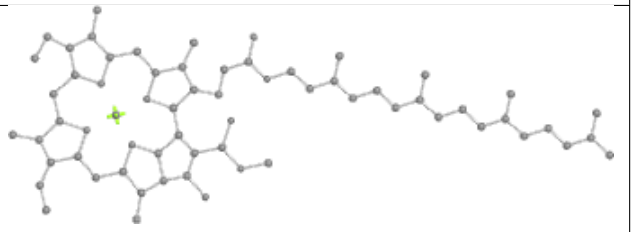


Bond angles

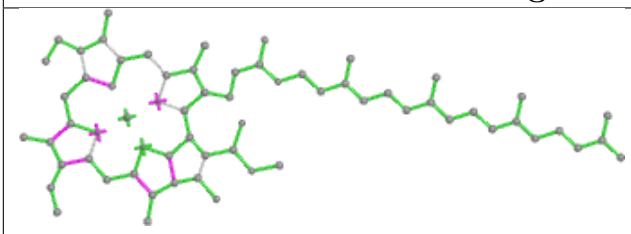


Torsions



Rings

Ligand CLA a 806



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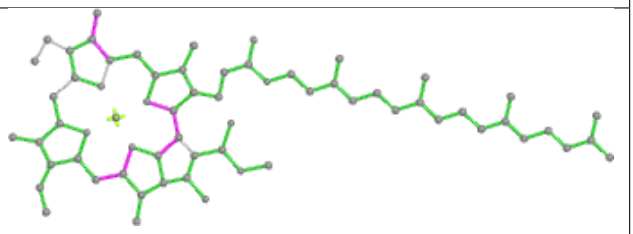
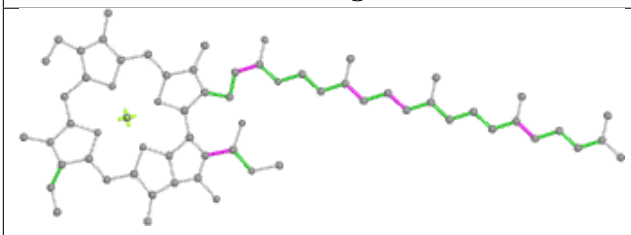
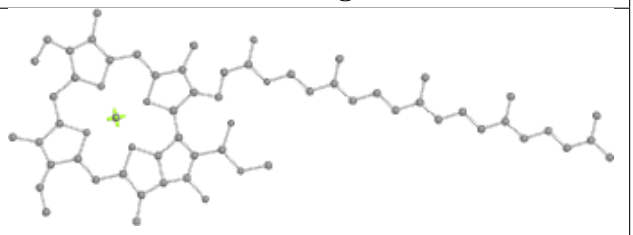


Bond angles

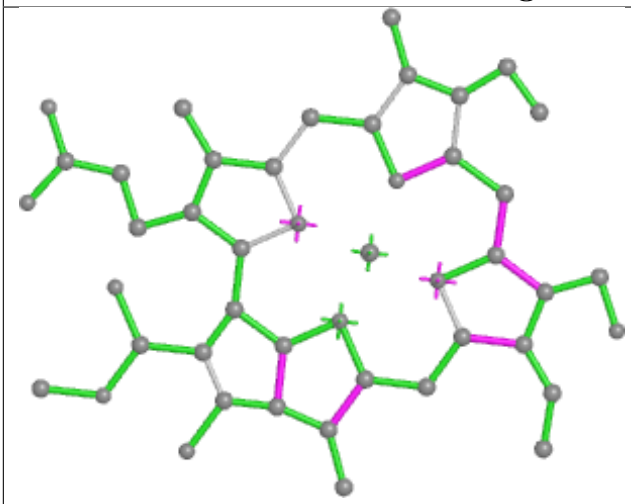


Torsions



Rings

Ligand CHL 2b 304



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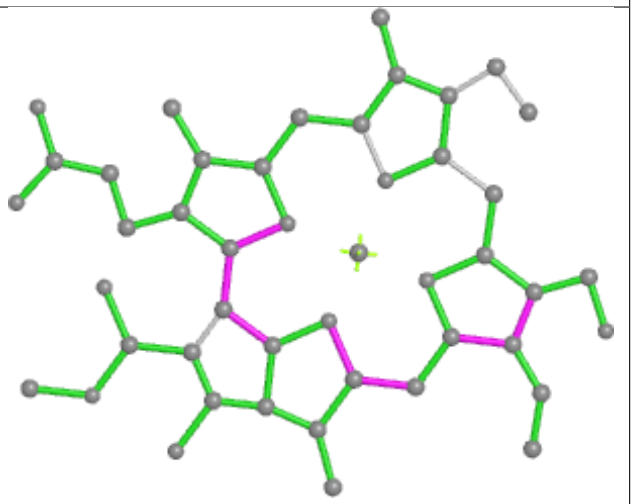
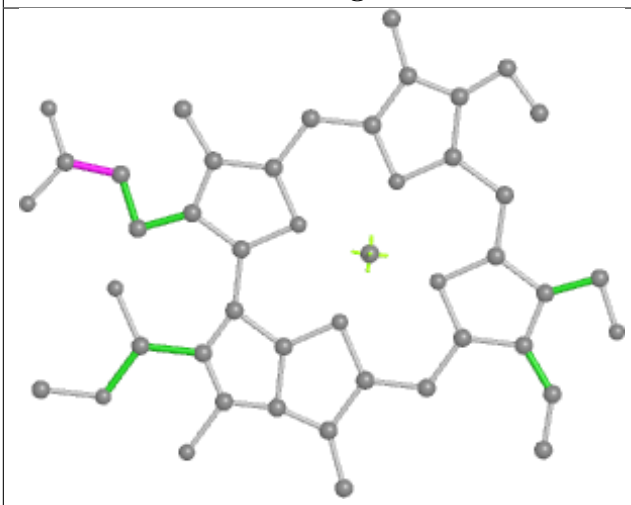
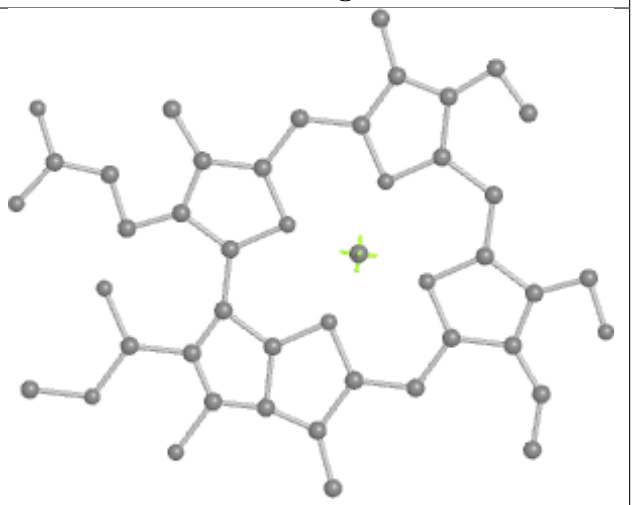


Bond angles

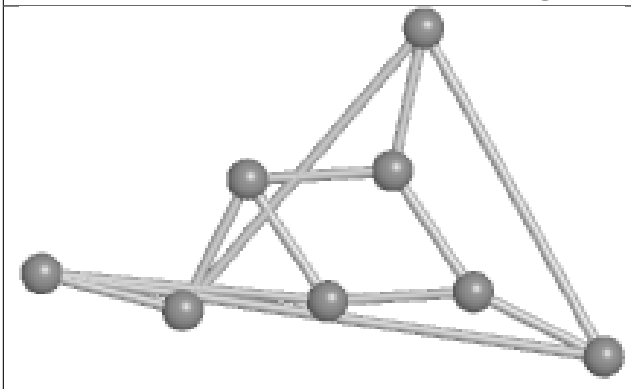


Torsions



Rings

Ligand SF4 c 102



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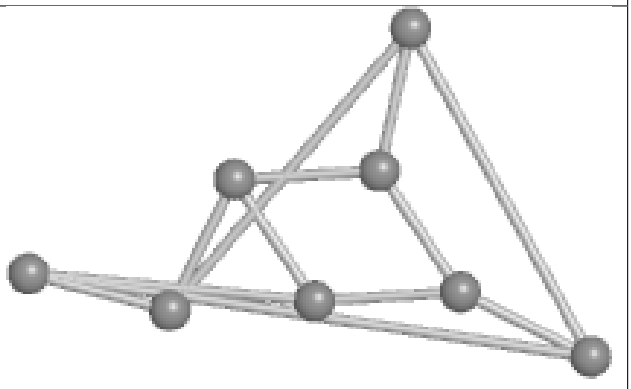
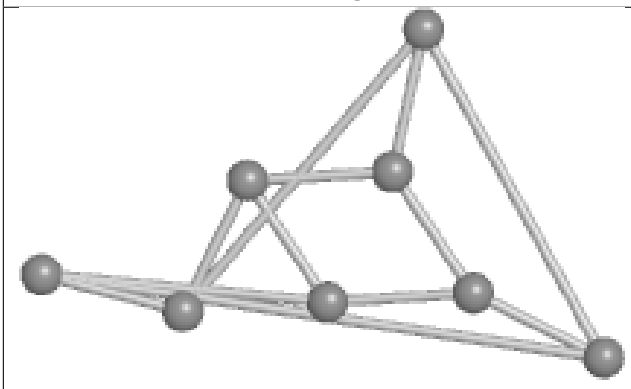
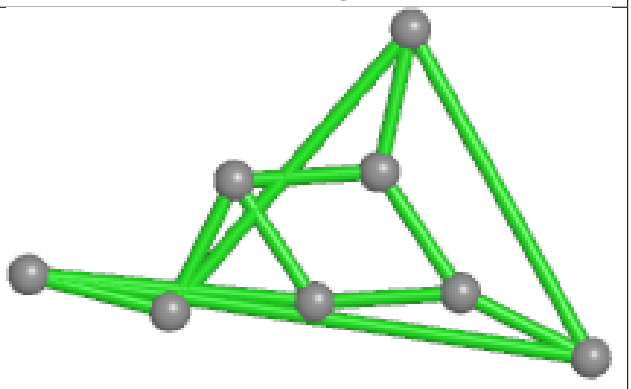


Bond angles

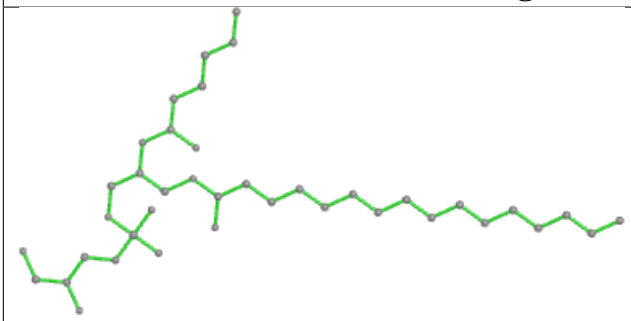


Torsions



Rings

Ligand LHG 6b 301



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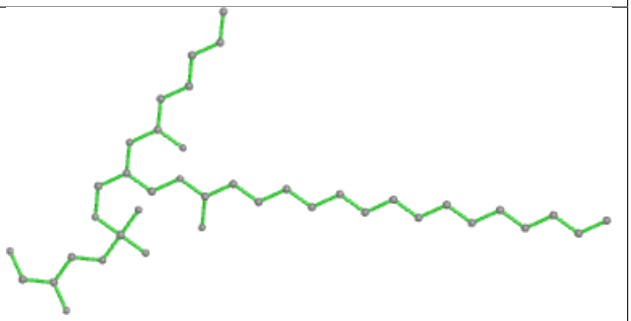
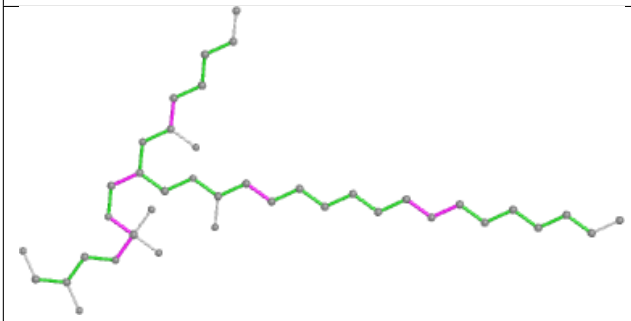


Bond angles



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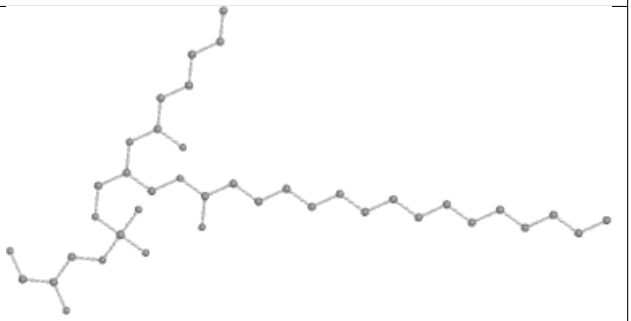
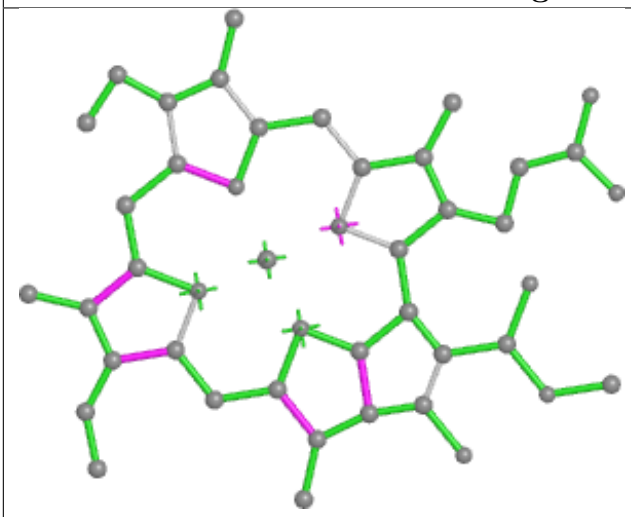


Rings

Ligand CLA f 302



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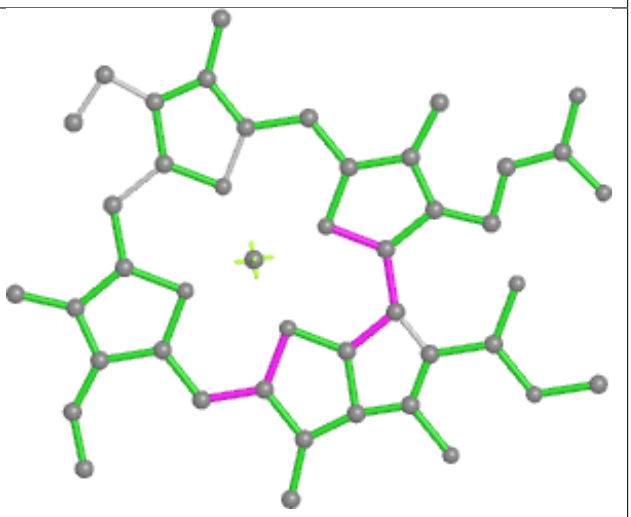
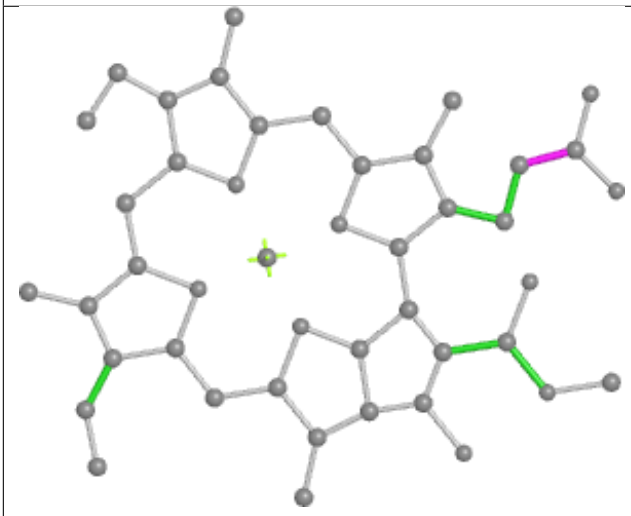


Bond angles



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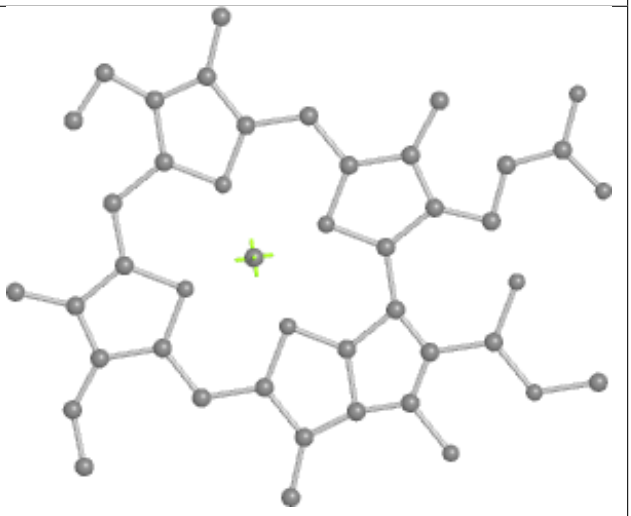
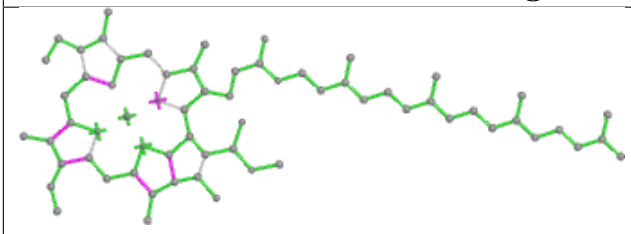


Rings

Ligand CLA B 833



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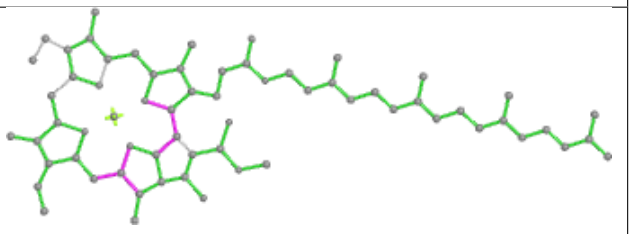
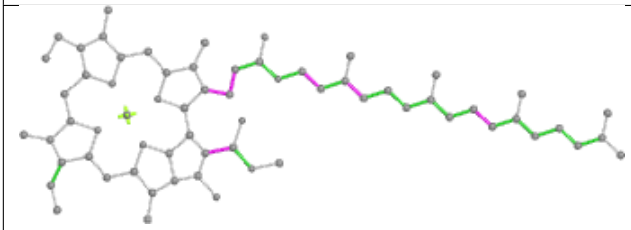
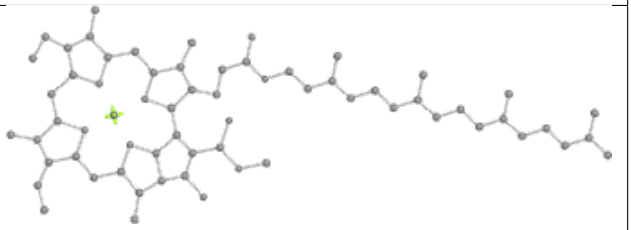


Bond angles

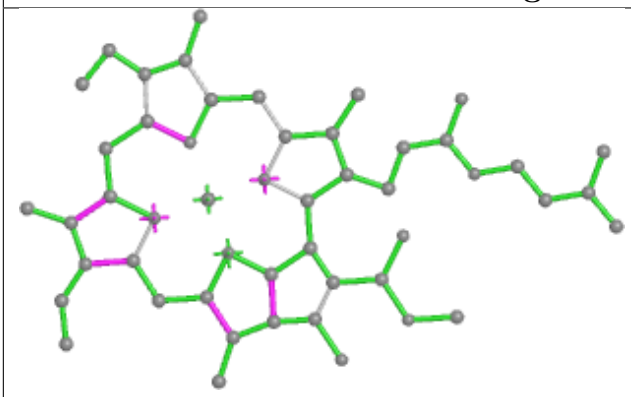


Torsions

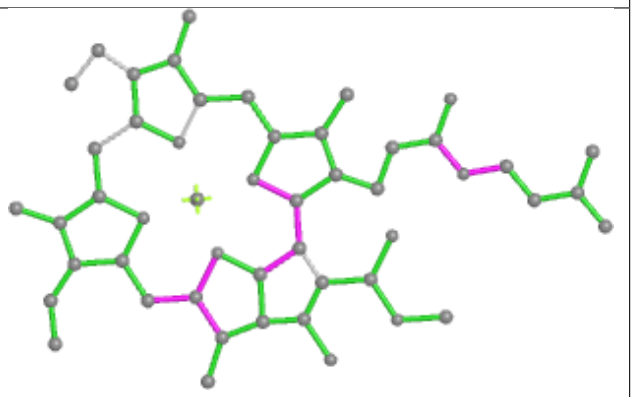


Rings

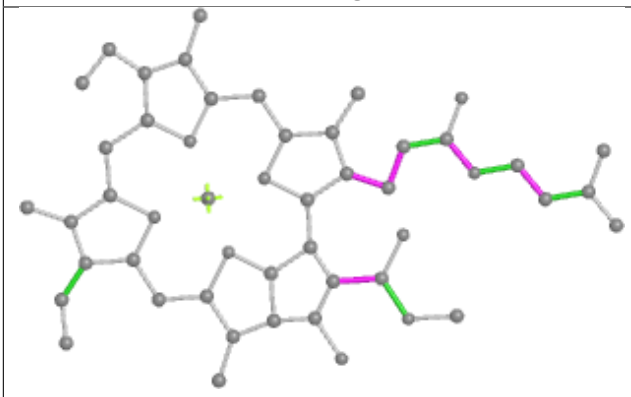
Ligand CLA A 830



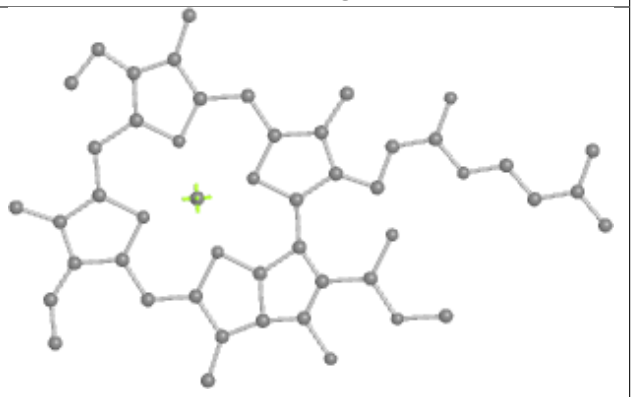
Bond lengths



Bond angles

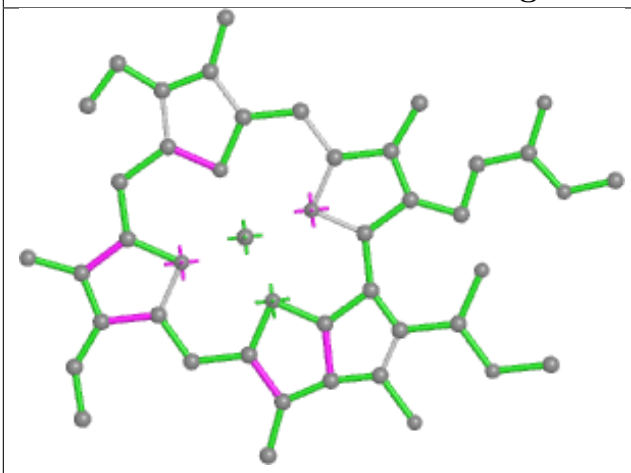


Torsions



Rings

Ligand CLA 3a 305



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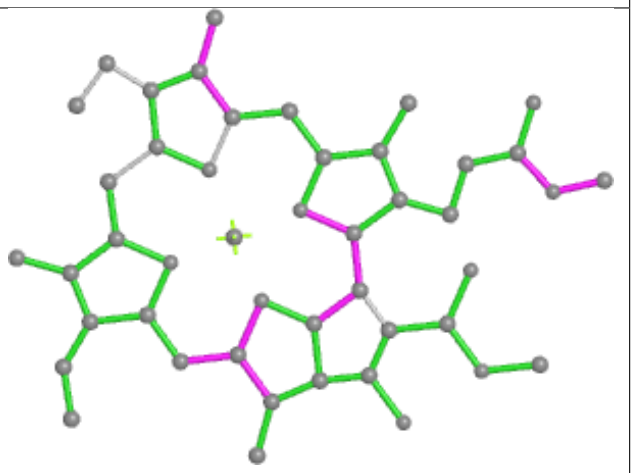
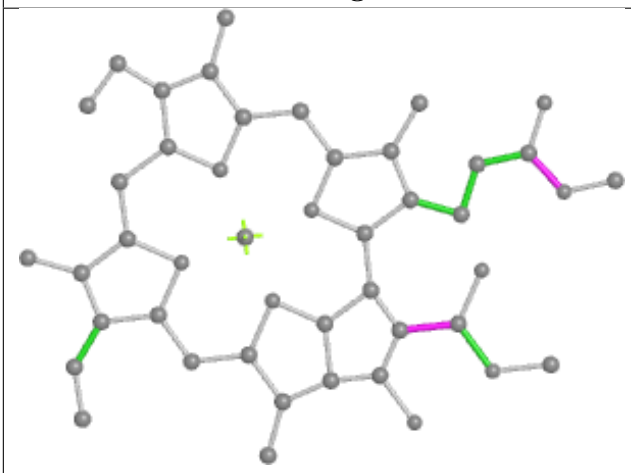
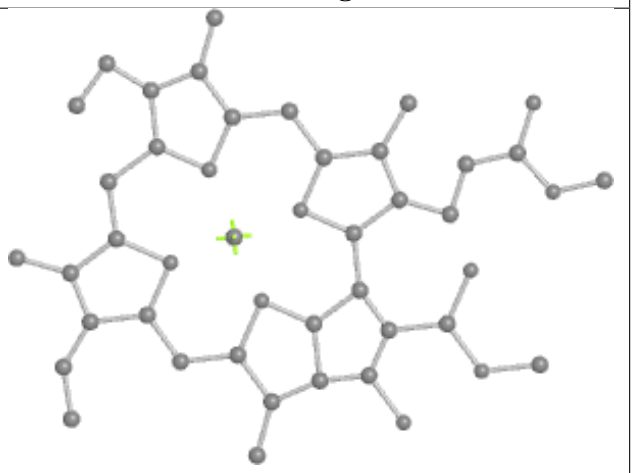


Bond angles

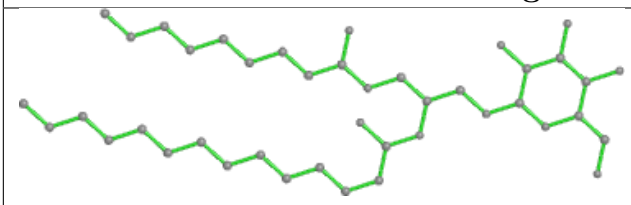


Torsions

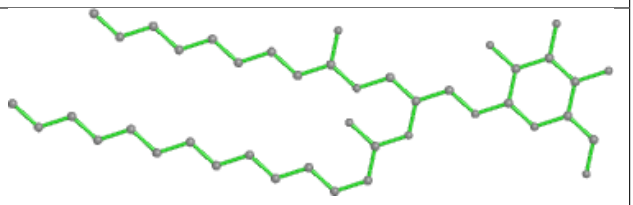


Rings

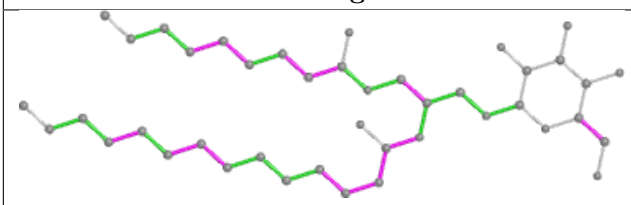
Ligand LMG b 850



Bond lengths



Bond angles



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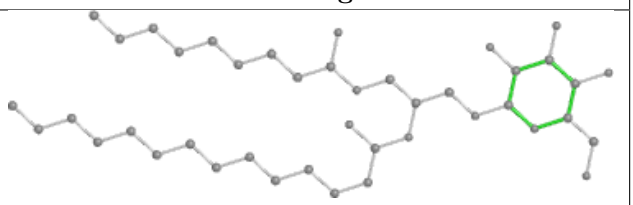
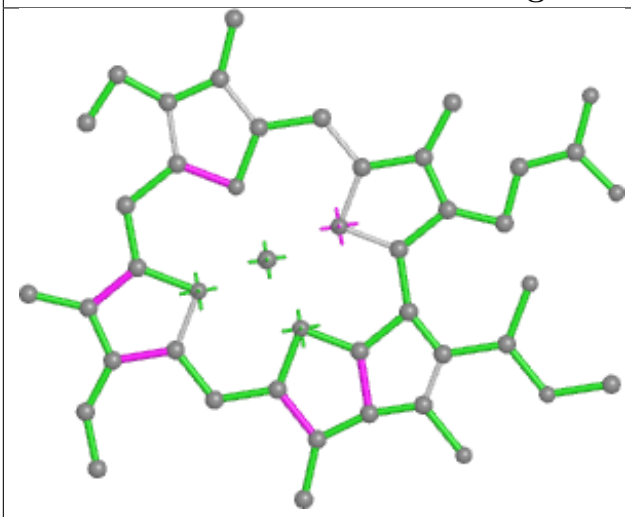
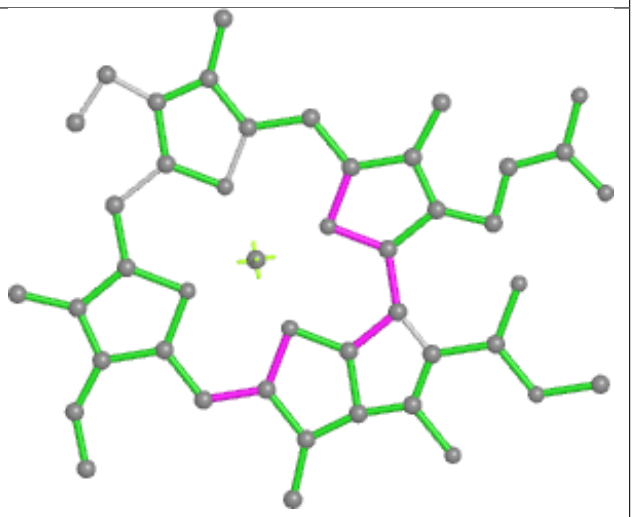


Rings

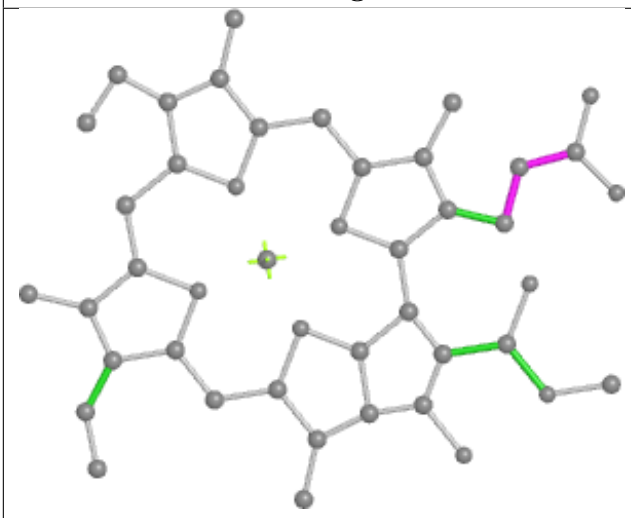
Ligand CLA b 811



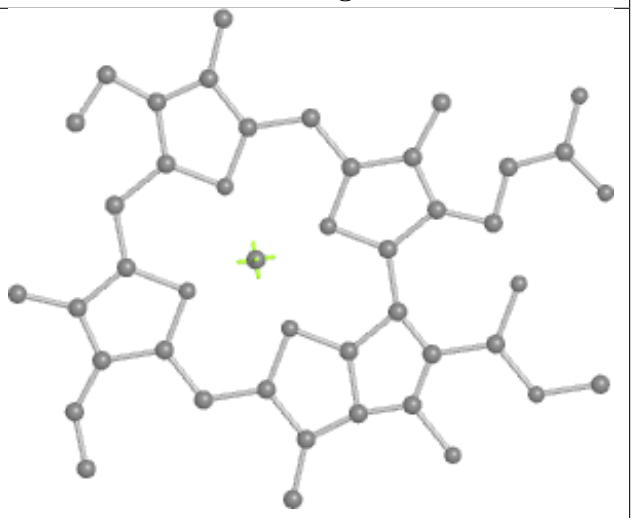
Bond lengths



Bond angles

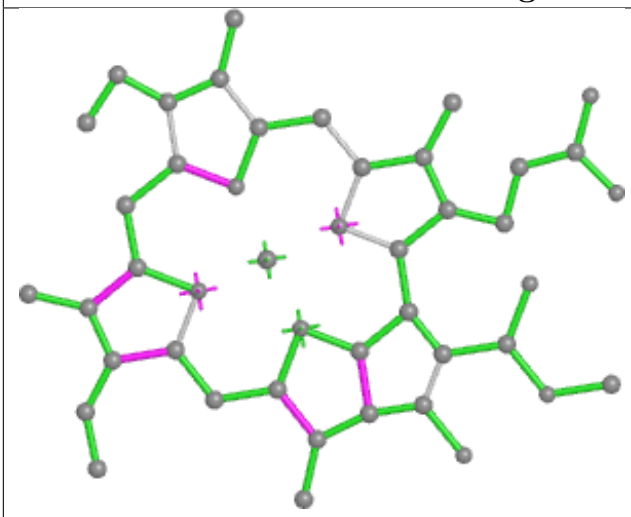


Torsions

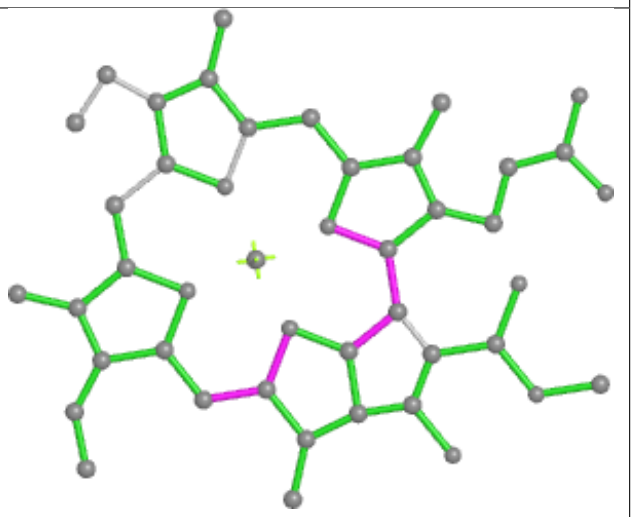


Rings

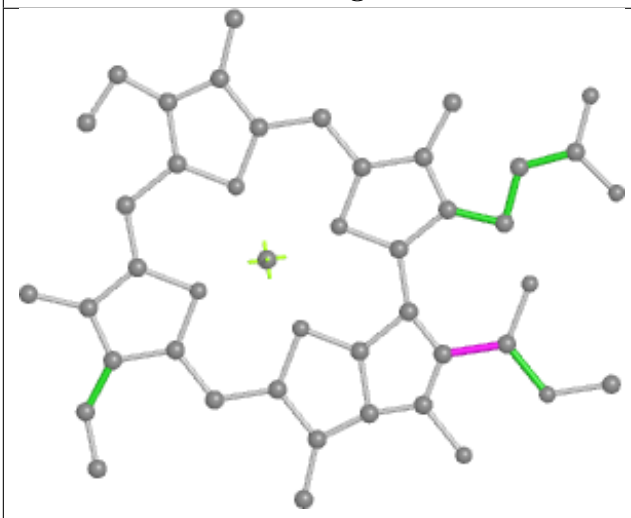
Ligand CLA 5b 313



Bond lengths



Bond angles



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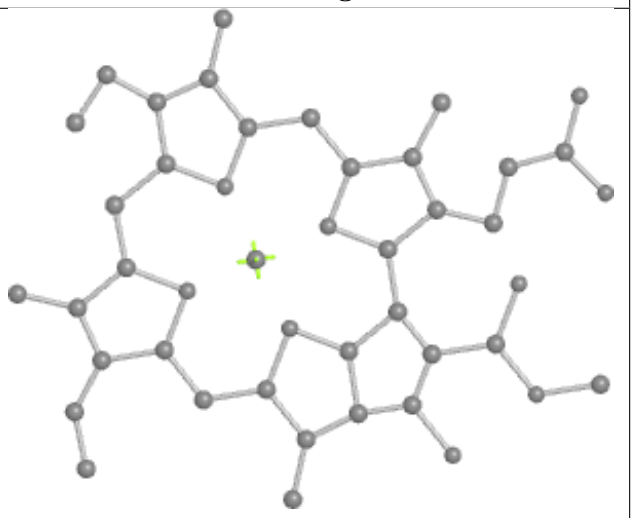
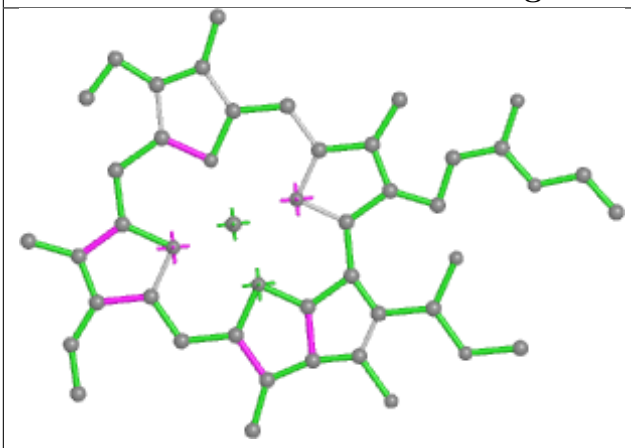
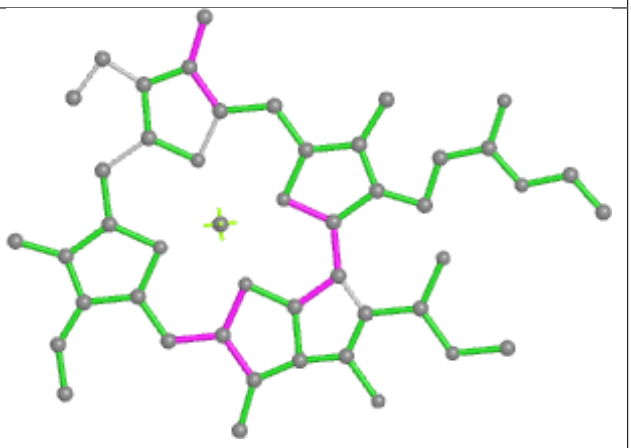


Rings

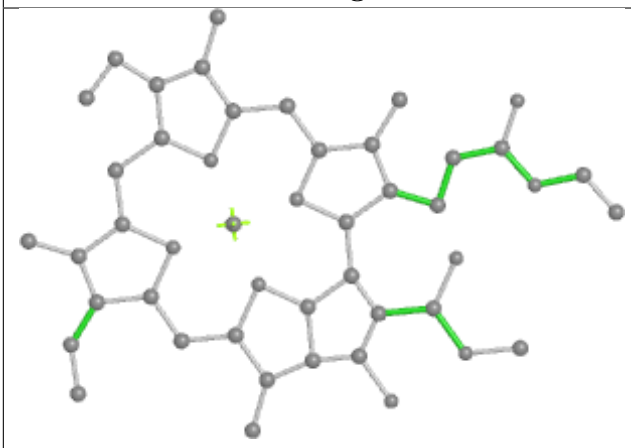
Ligand CLA B 837



Bond lengths



Bond angles



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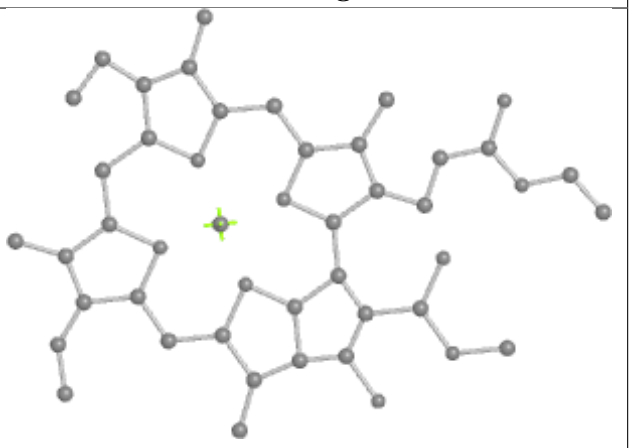
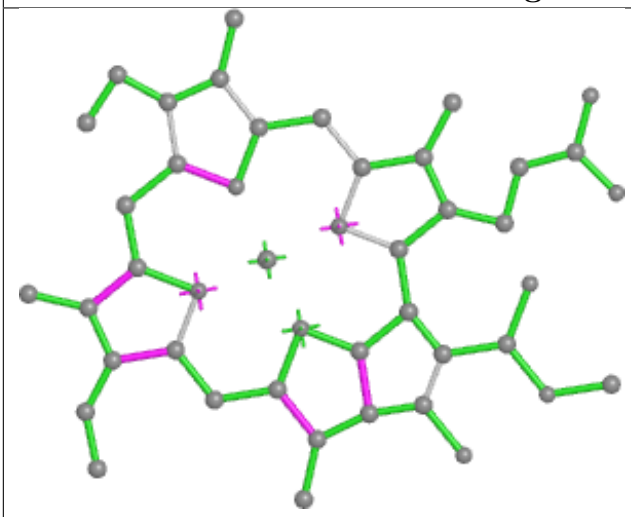
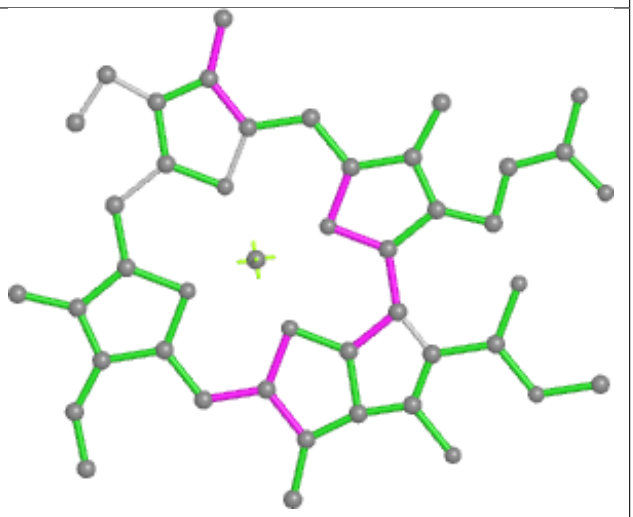


Rings

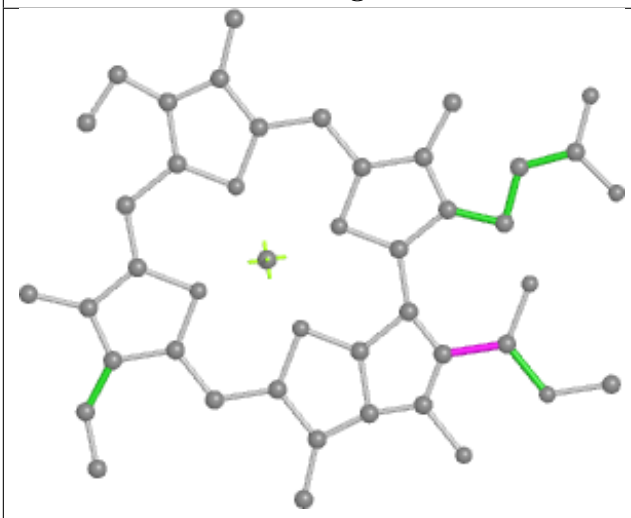
Ligand CLA B 834



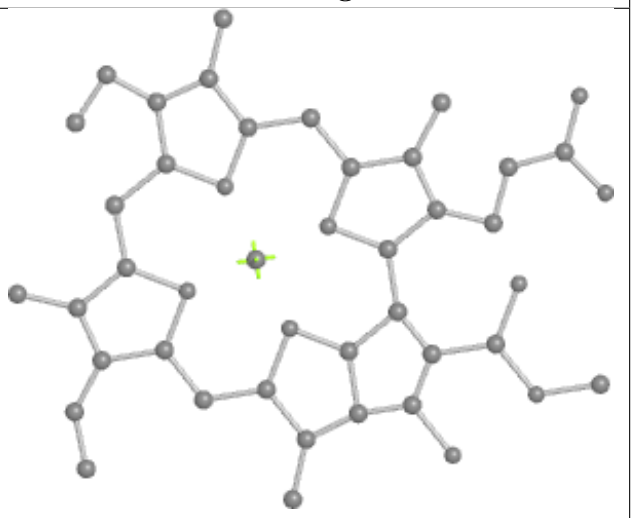
Bond lengths



Bond angles

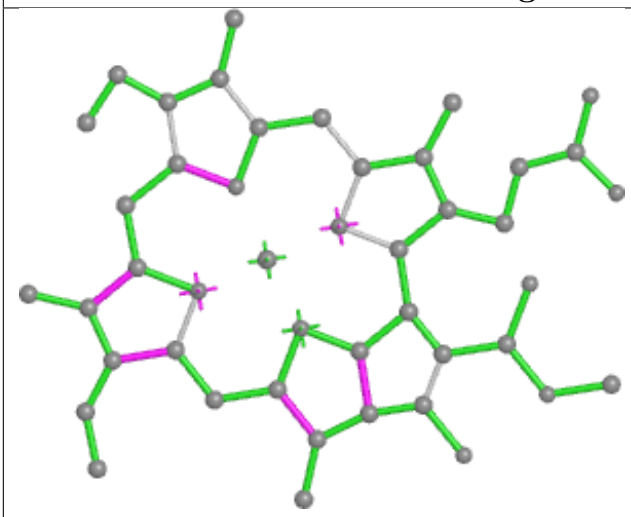


Torsions

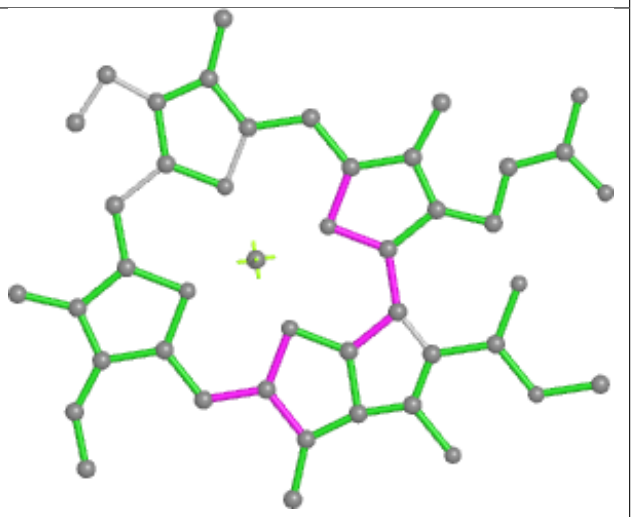


Rings

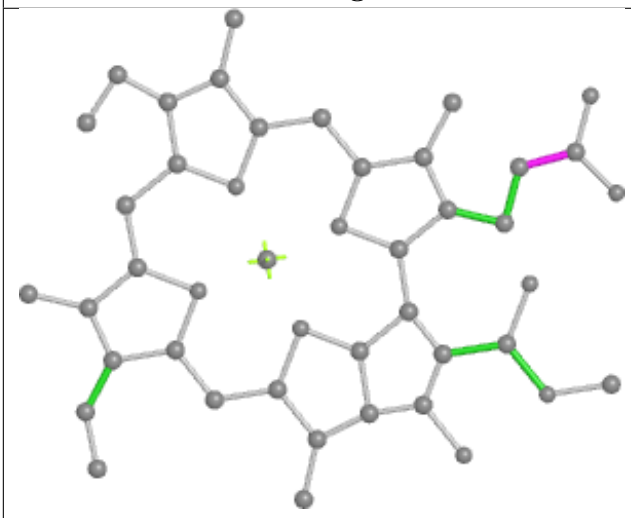
Ligand CLA 2b 312



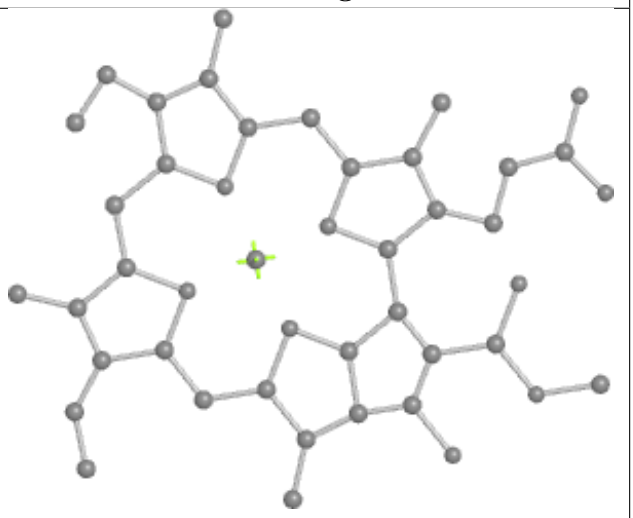
Bond lengths



Bond angles

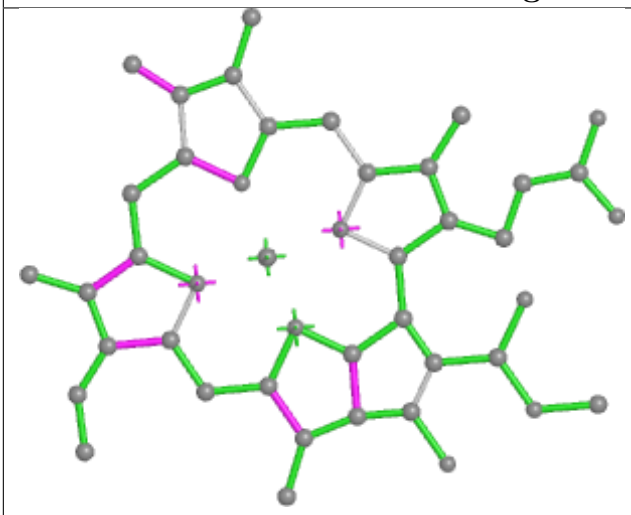


Torsions

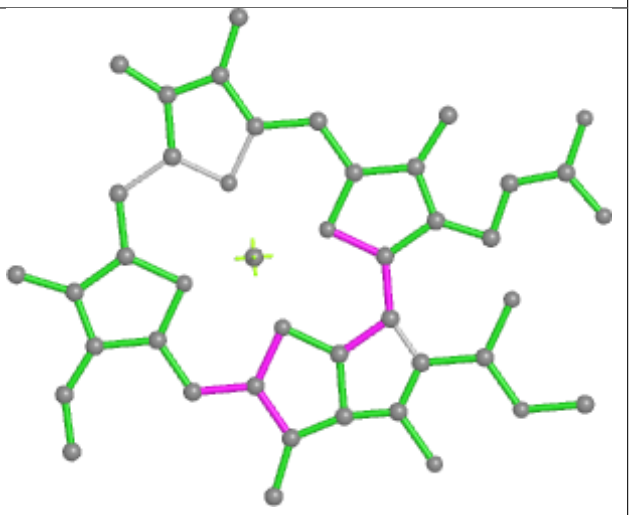


Rings

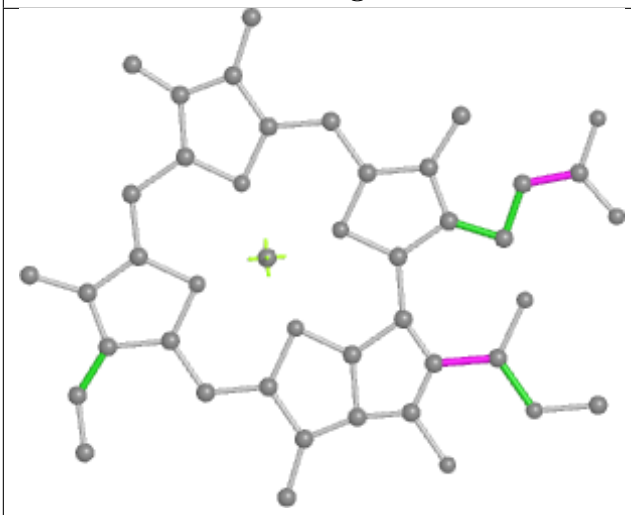
Ligand CLA K 201



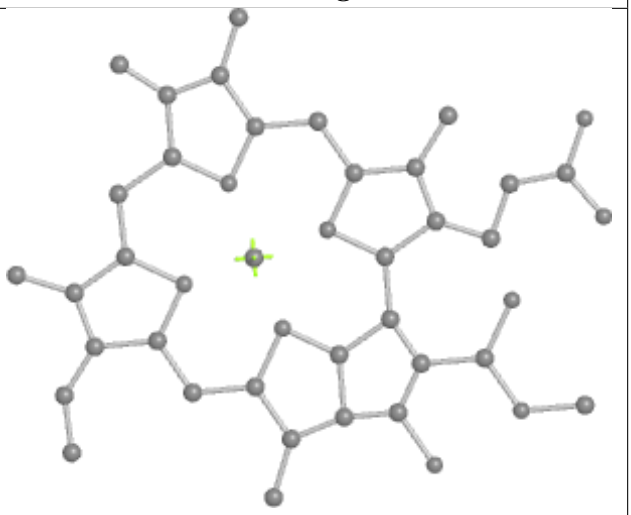
Bond lengths



Bond angles

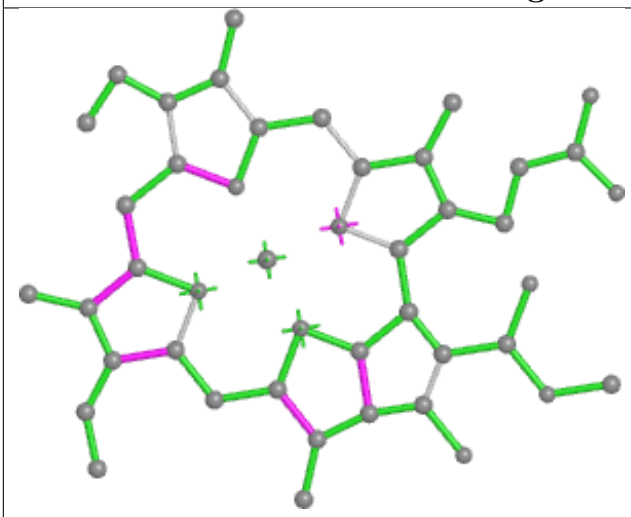


Torsions



Rings

Ligand CLA b 822



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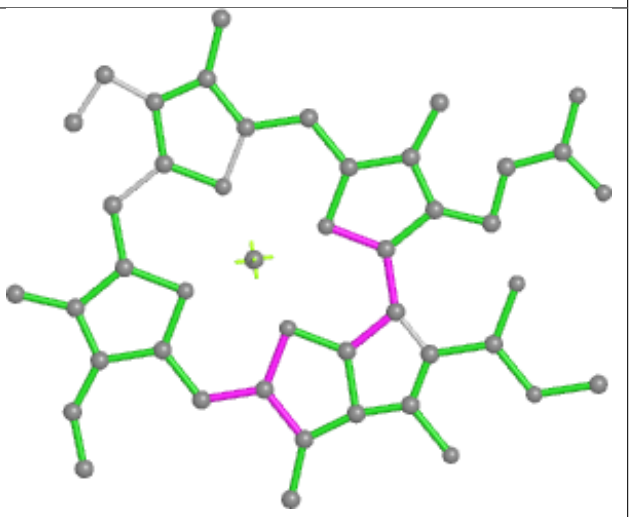
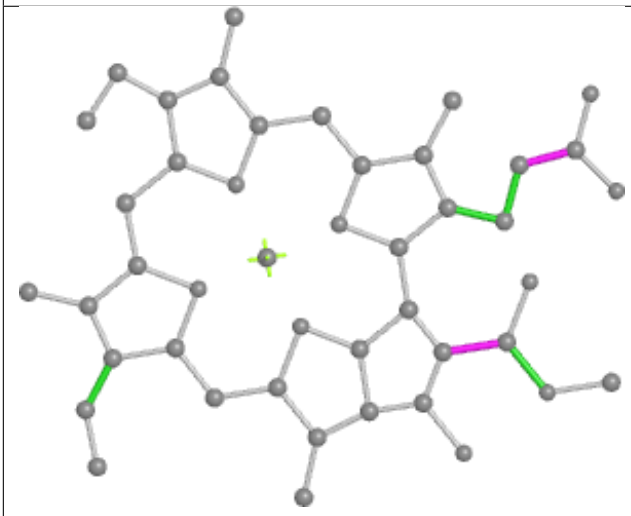
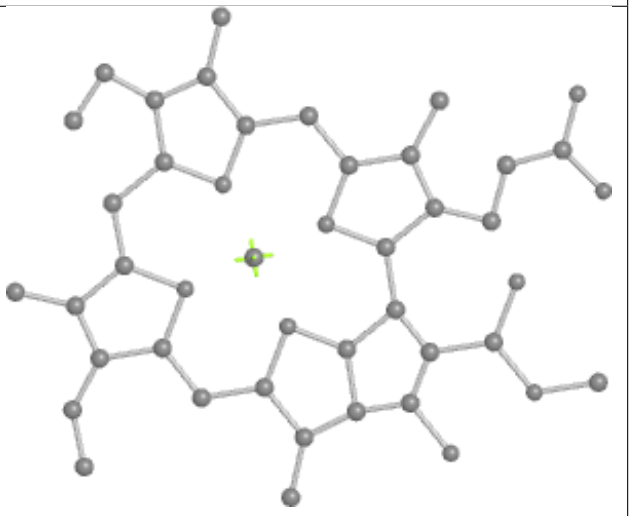


Bond angles

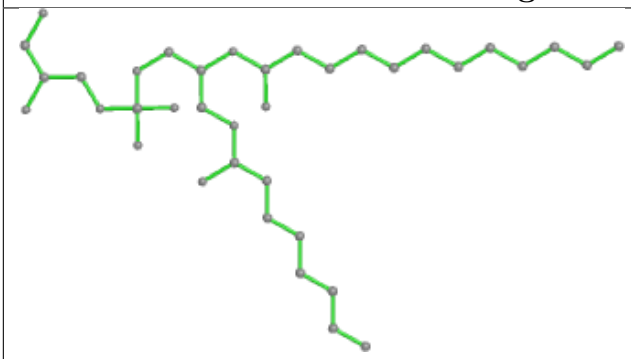


Torsions



Rings

Ligand LHG 5a 320



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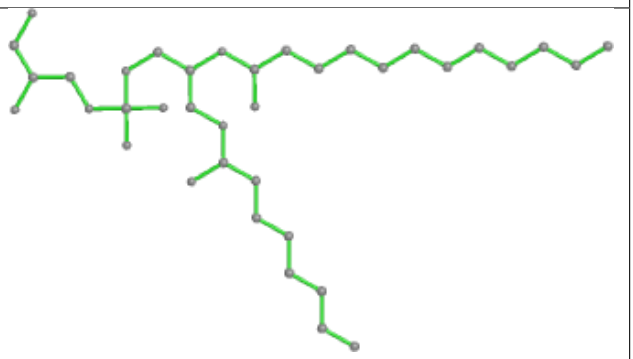
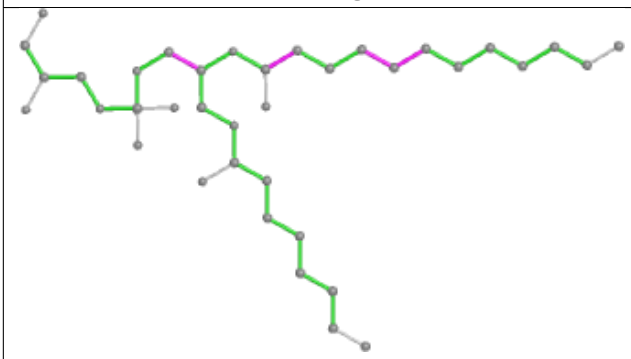
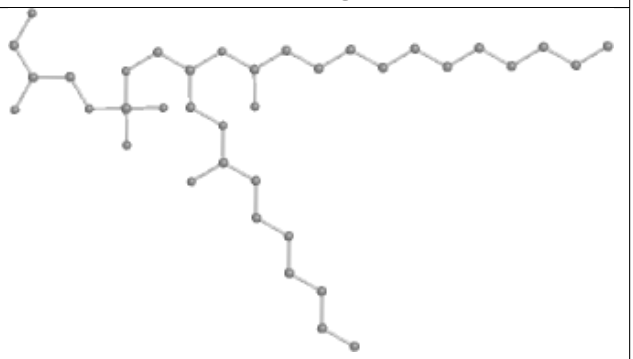


Bond angles

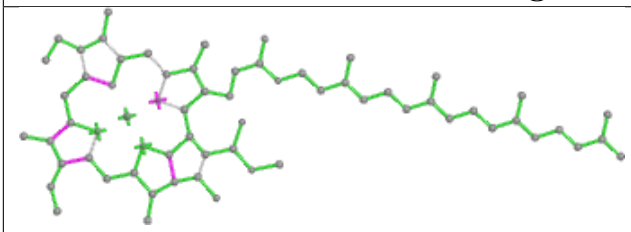


Torsions



Rings

Ligand CLA a 818



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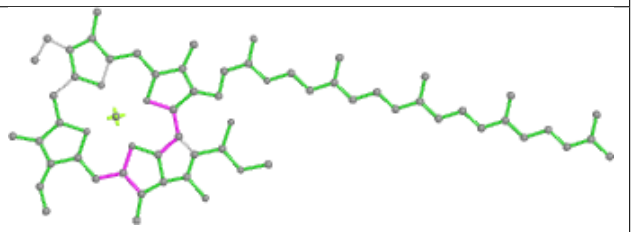
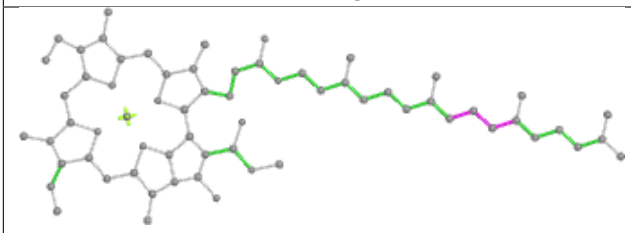


Bond angles



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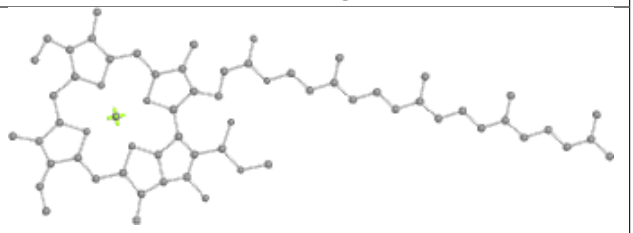
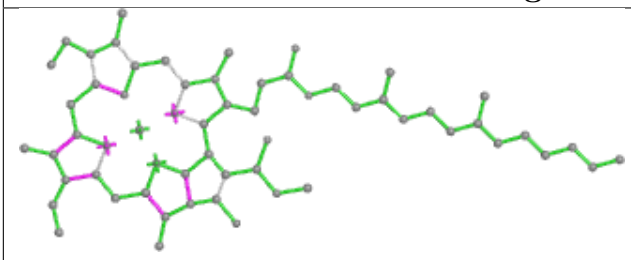
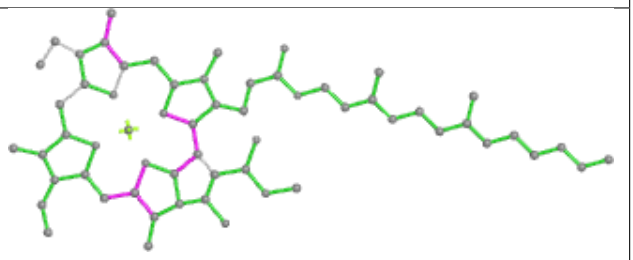


Rings

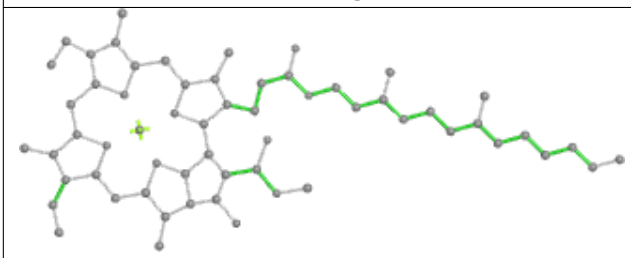
Ligand CLA B 827



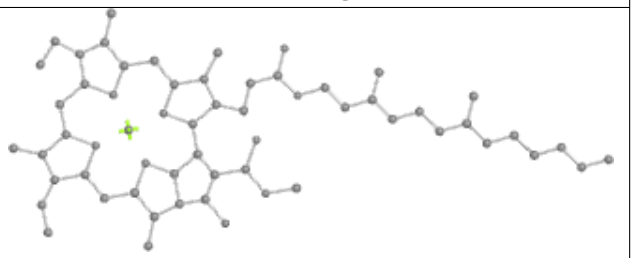
Bond lengths



Bond angles

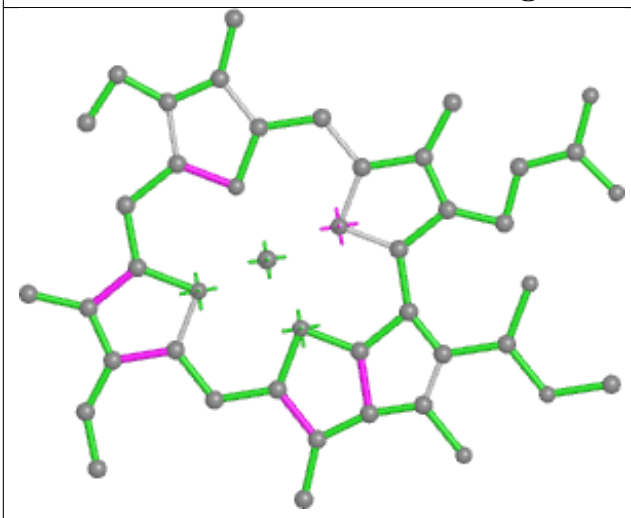


Torsions



Rings

Ligand CLA 6a 313



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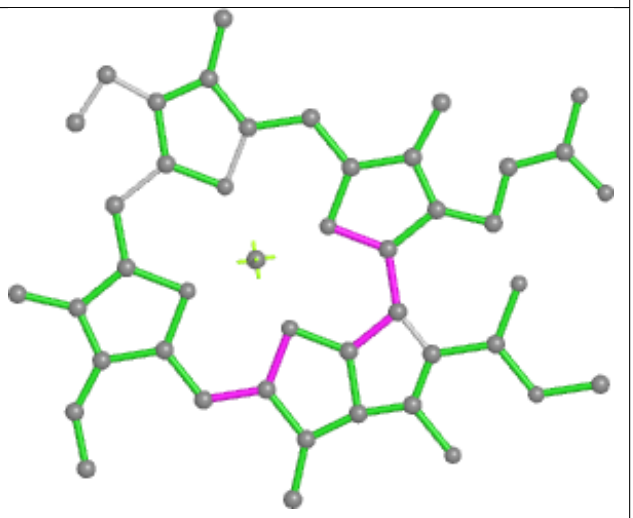
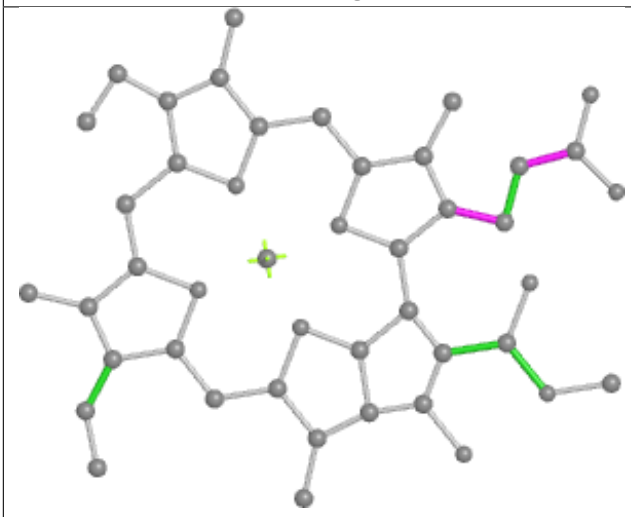


Bond angles



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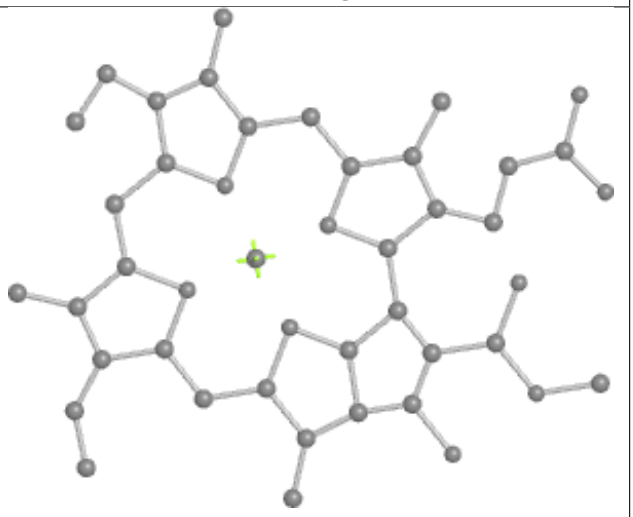
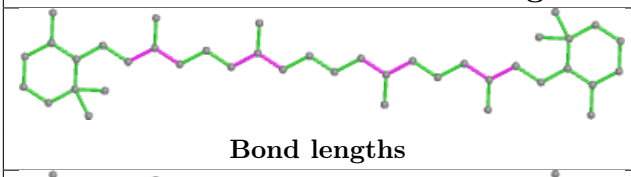
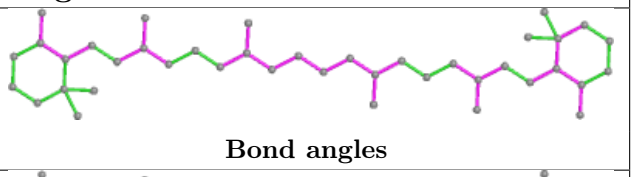


Rings

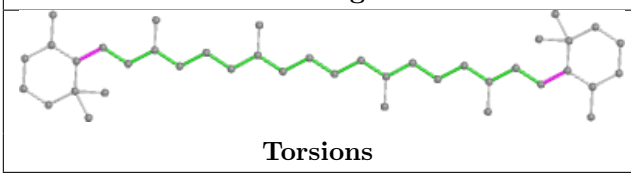
Ligand BCR g 201



Bond lengths



Bond angles



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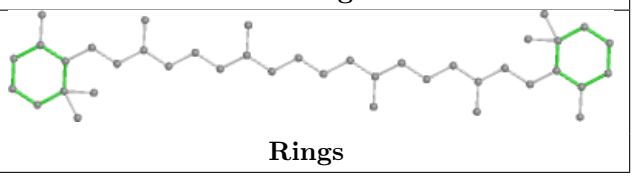
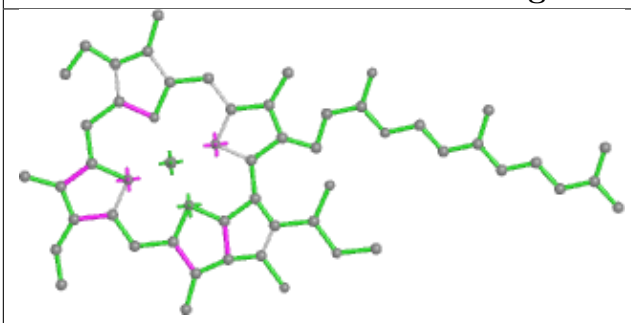
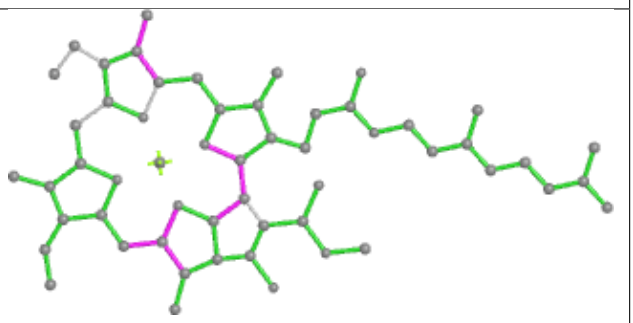


Rings

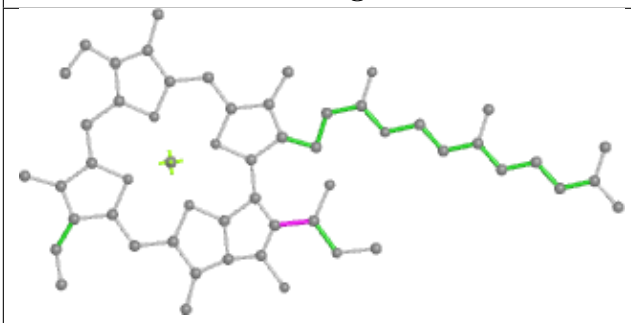
Ligand CLA a 825



Bond lengths



Bond angles



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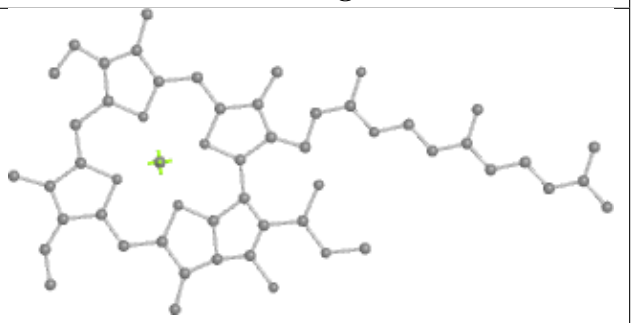
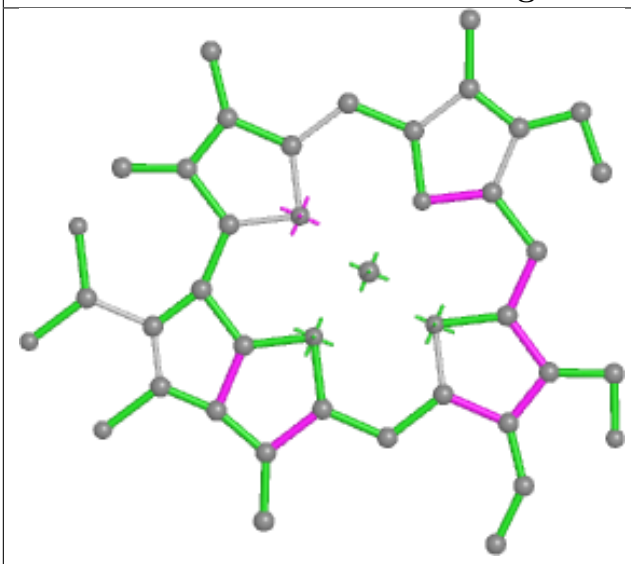
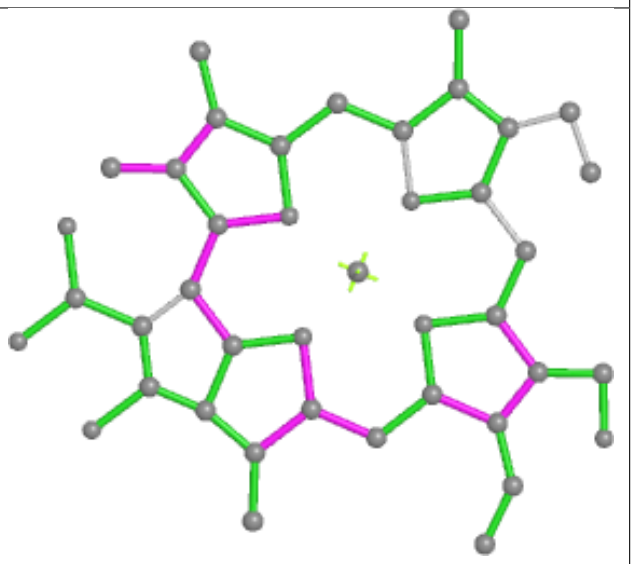


Rings

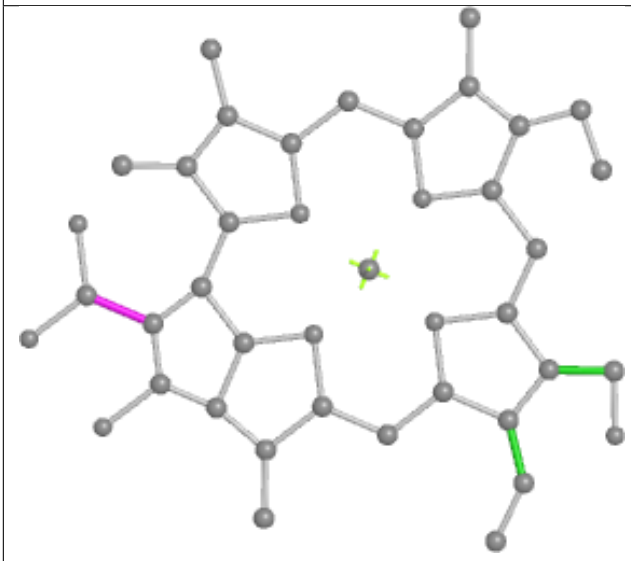
Ligand CHL 6b 309



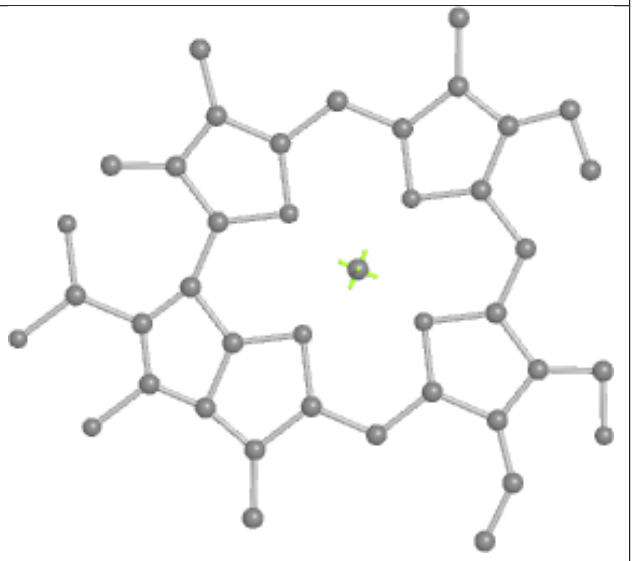
Bond lengths



Bond angles

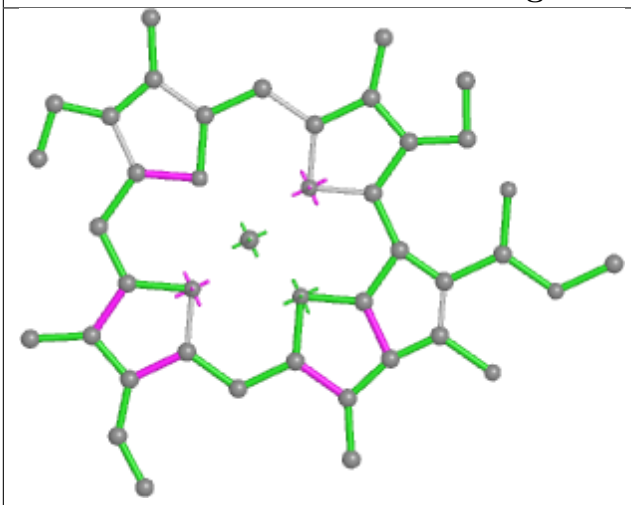


Torsions

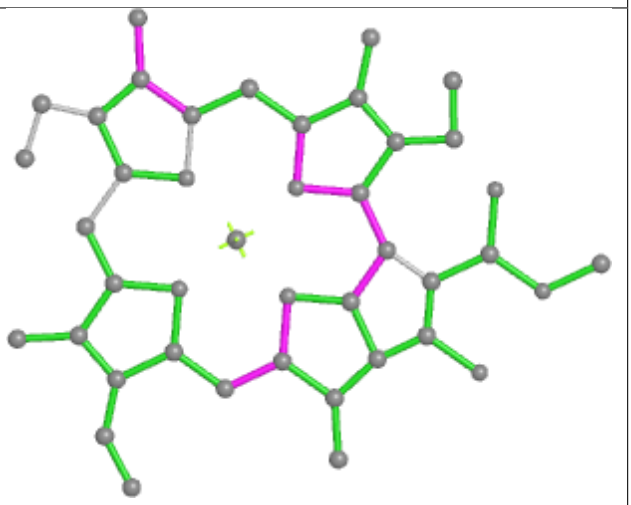


Rings

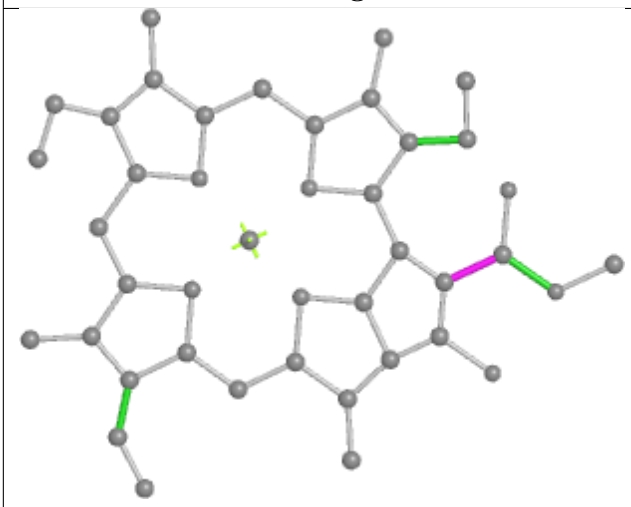
Ligand CLA L 303



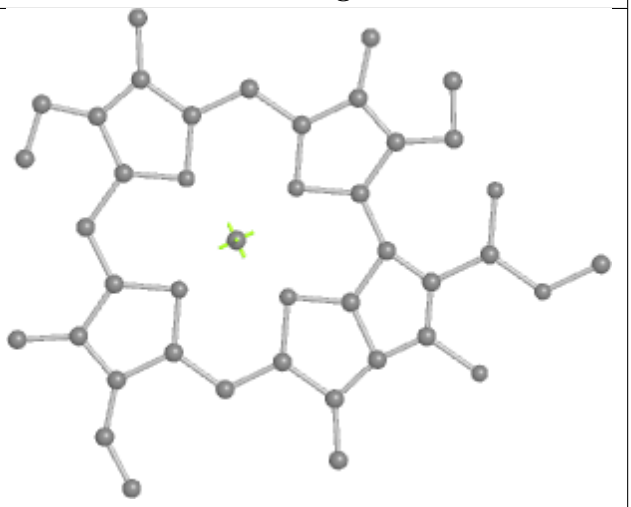
Bond lengths



Bond angles

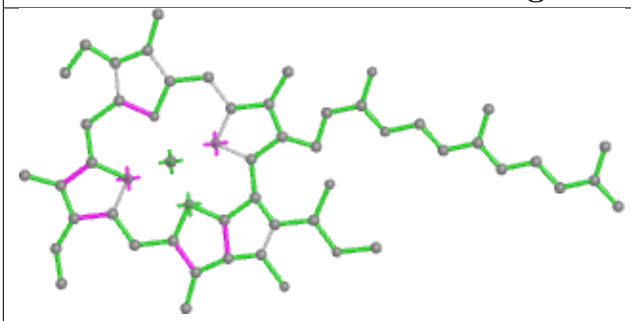


Torsions

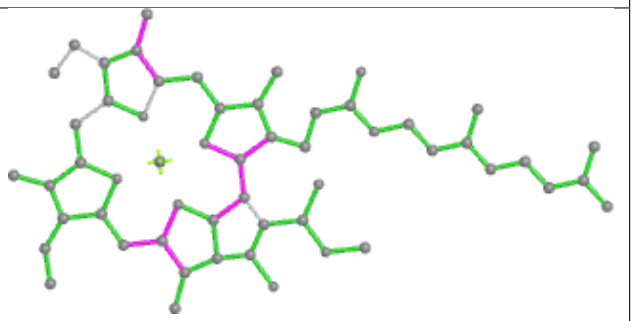


Rings

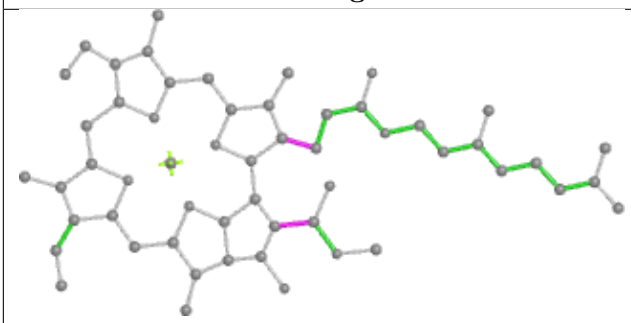
Ligand CLA b 821



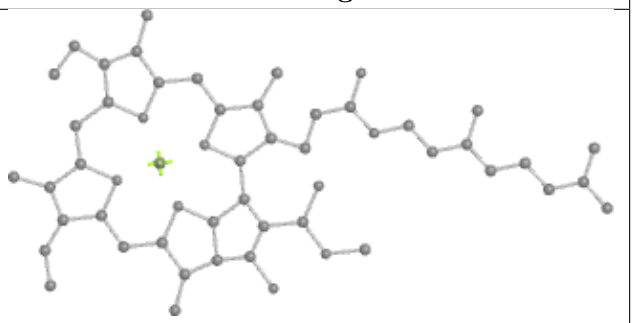
Bond lengths



Bond angles

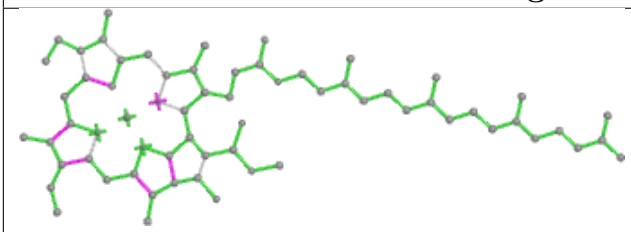


Torsions

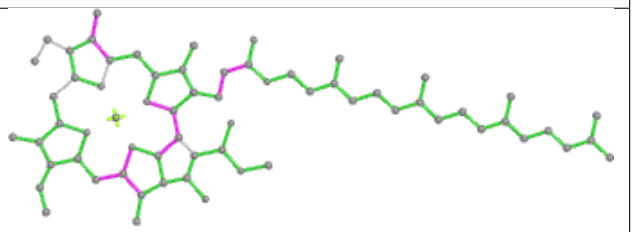


Rings

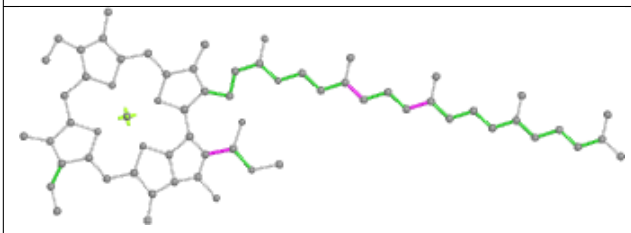
Ligand CLA b 836



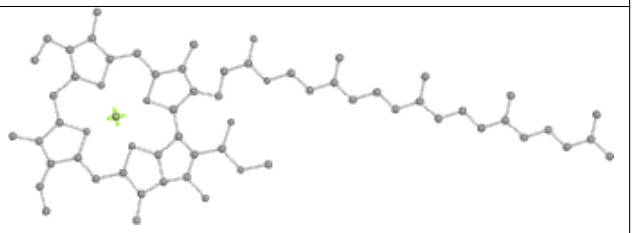
Bond lengths



Bond angles

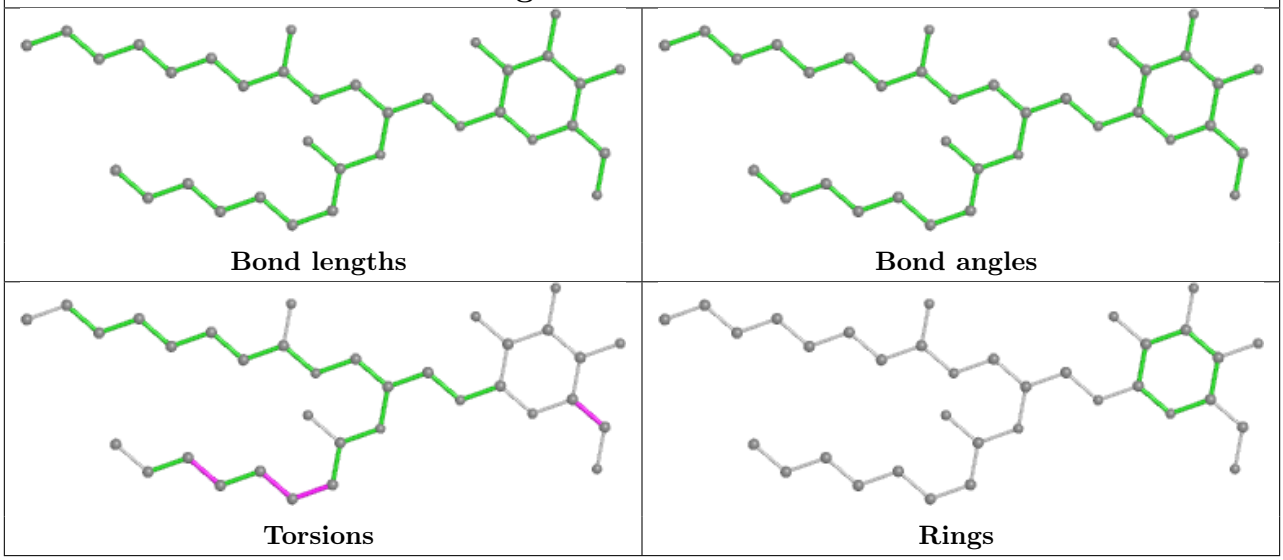


Torsions

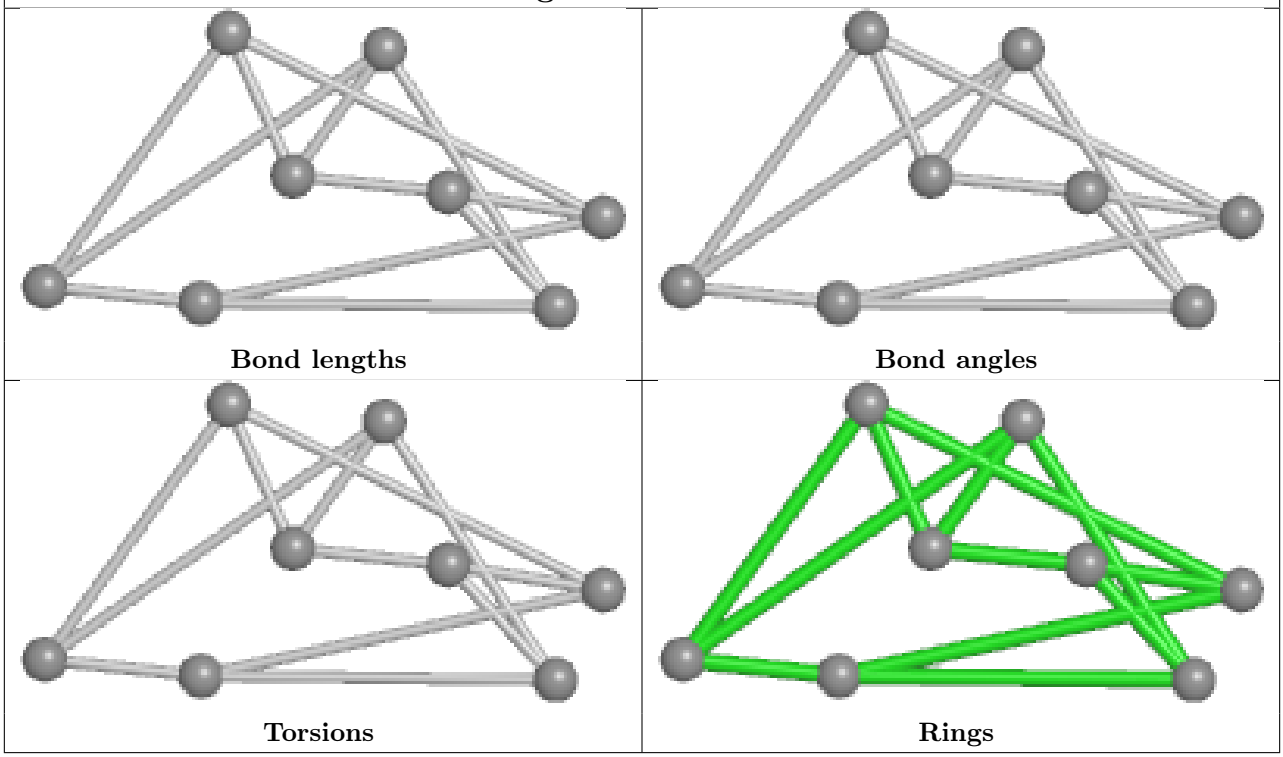


Rings

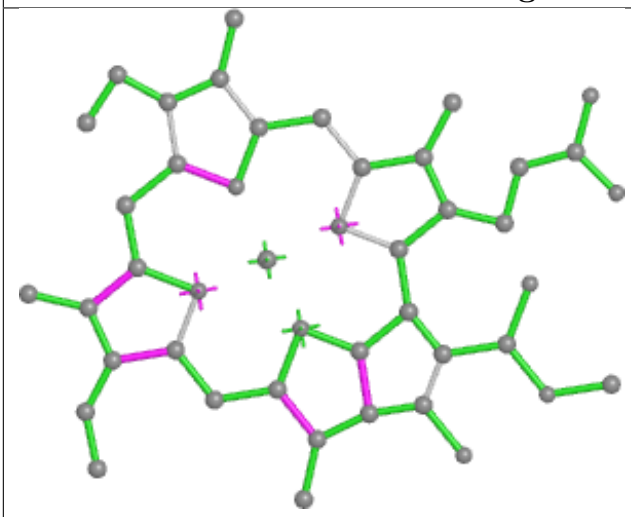
Ligand LMG 5a 319



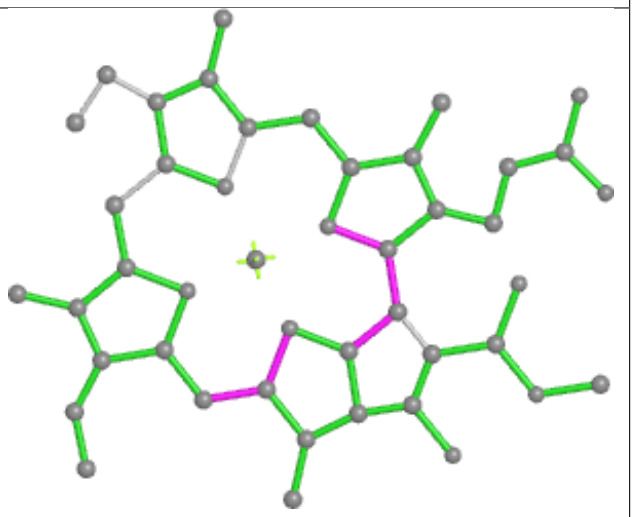
Ligand SF4 a 844



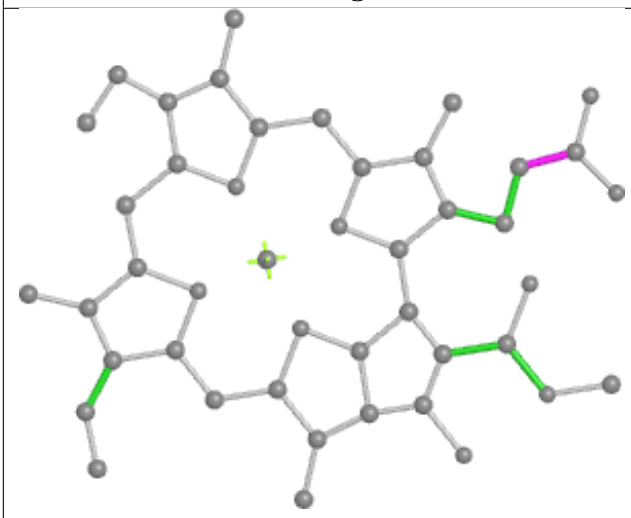
Ligand CLA 6b 308



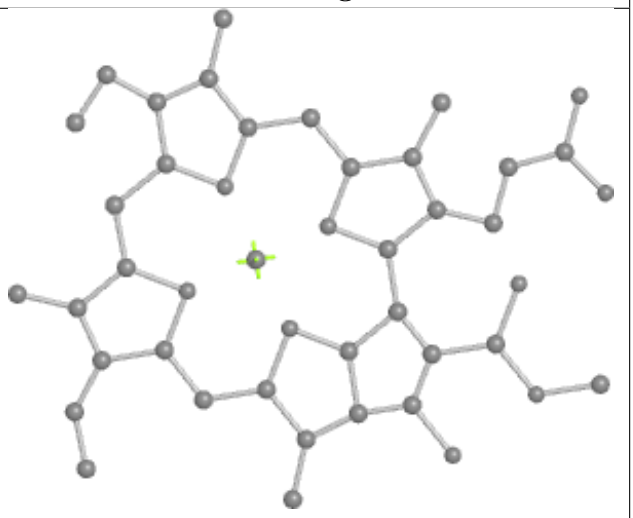
Bond lengths



Bond angles

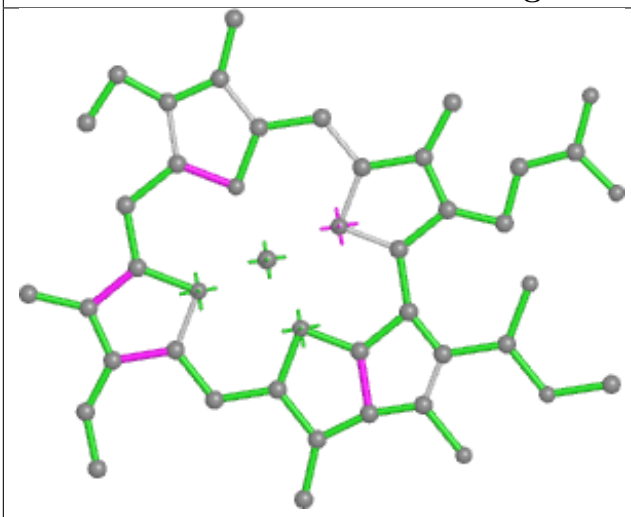


Torsions

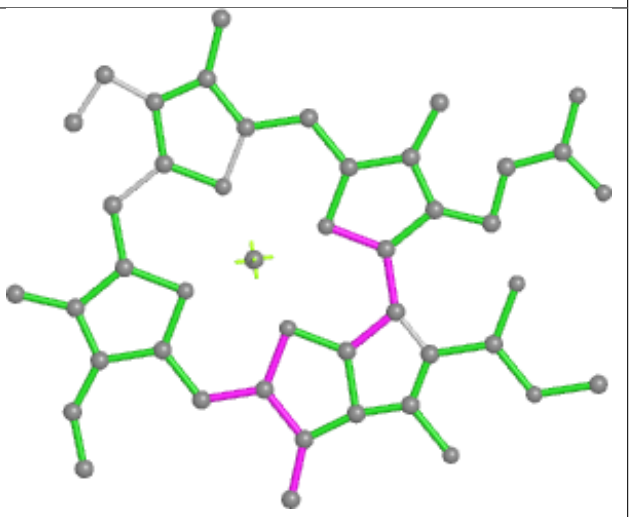


Rings

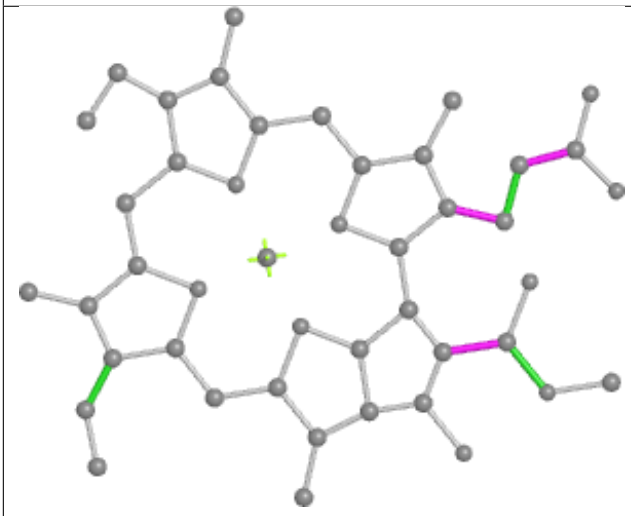
Ligand CLA A 815



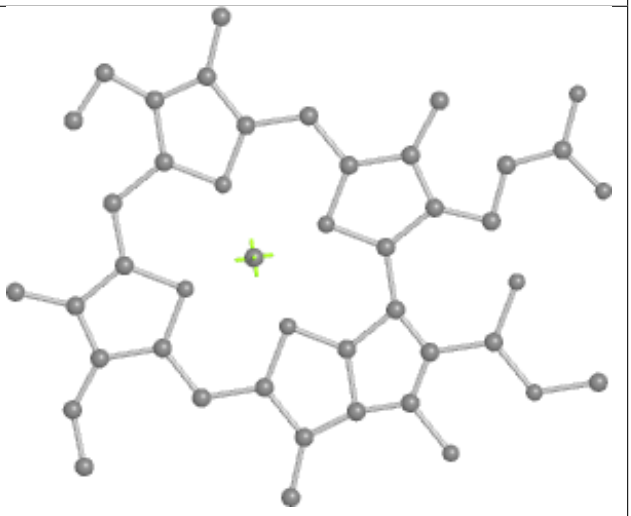
Bond lengths



Bond angles

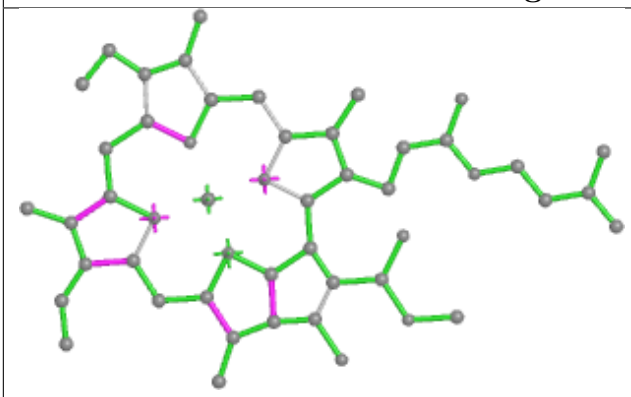


Torsions



Rings

Ligand CLA B 835



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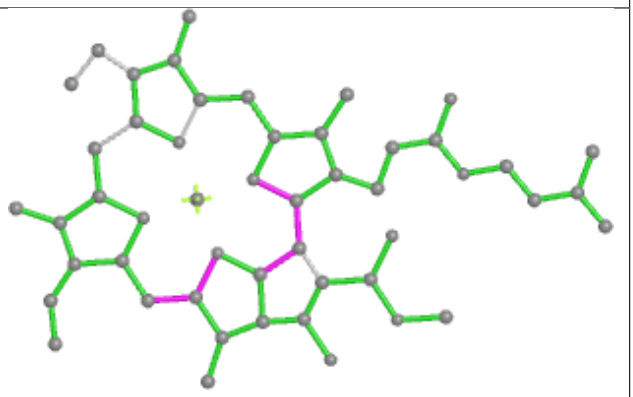
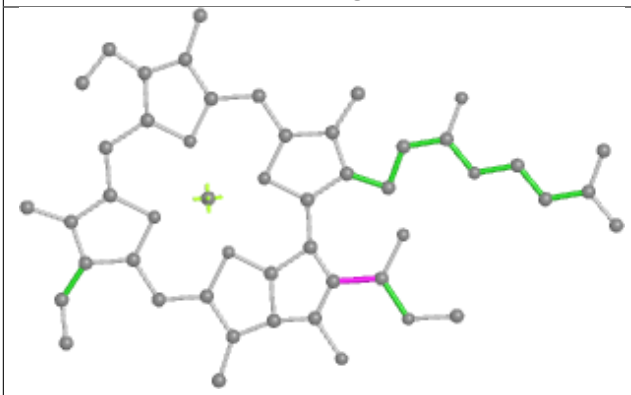
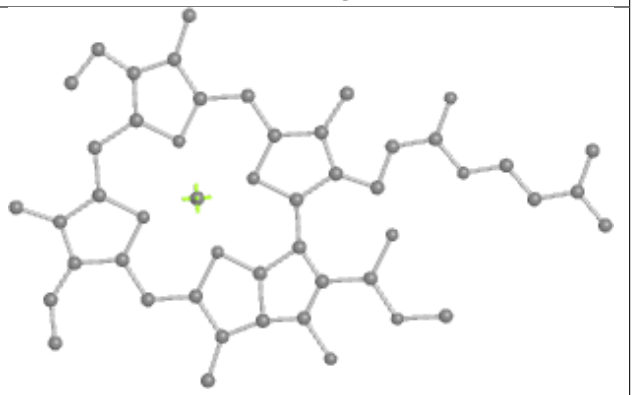


Bond angles

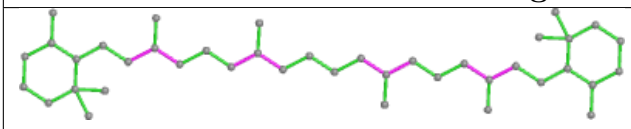


Torsions



Rings

Ligand BCR f 304



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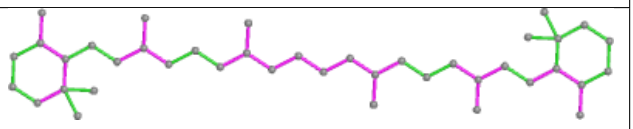
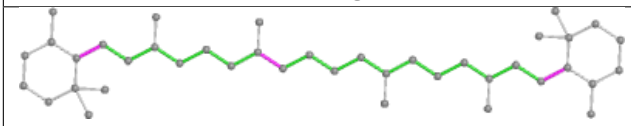
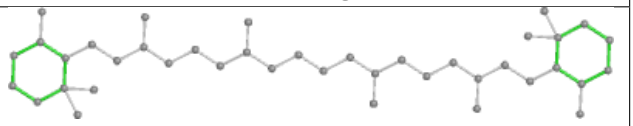


Bond angles

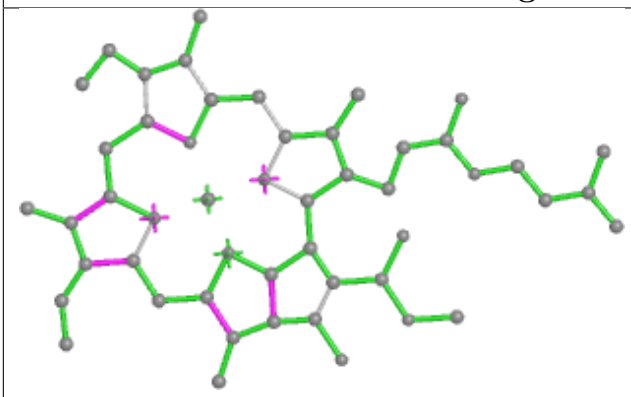


Torsions



Rings

Ligand CLA 5b 303



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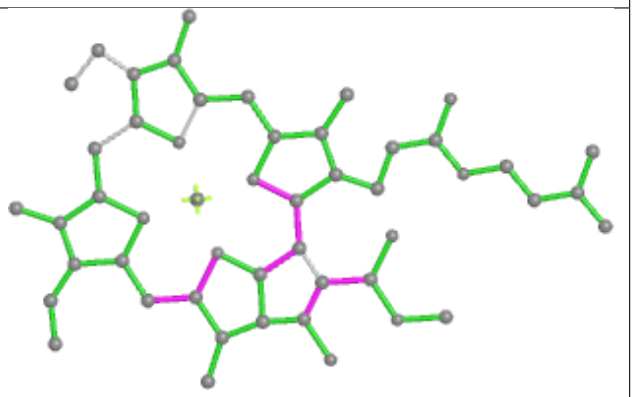
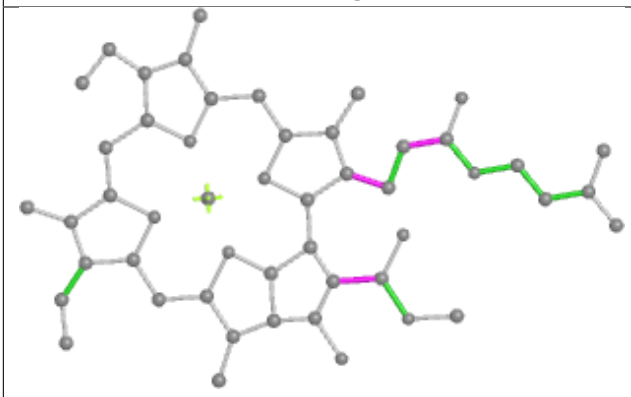


Bond angles



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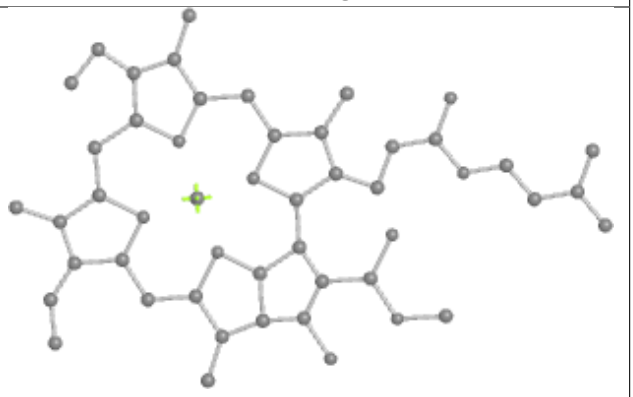
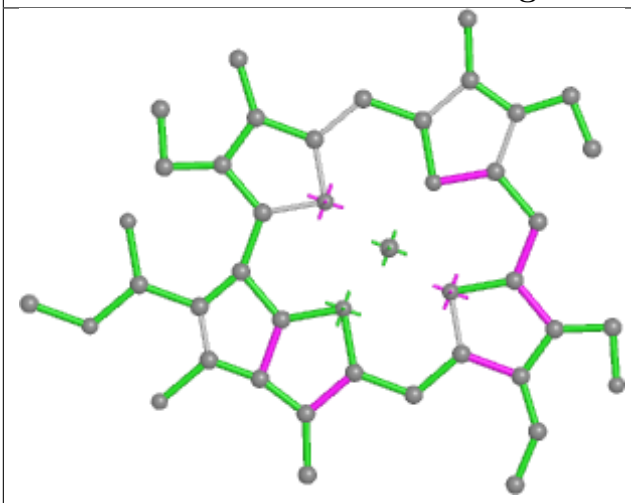


Rings

Ligand CHL 5a 306



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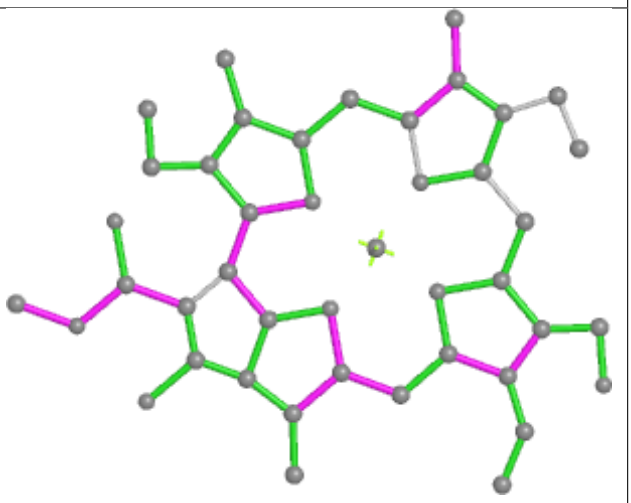
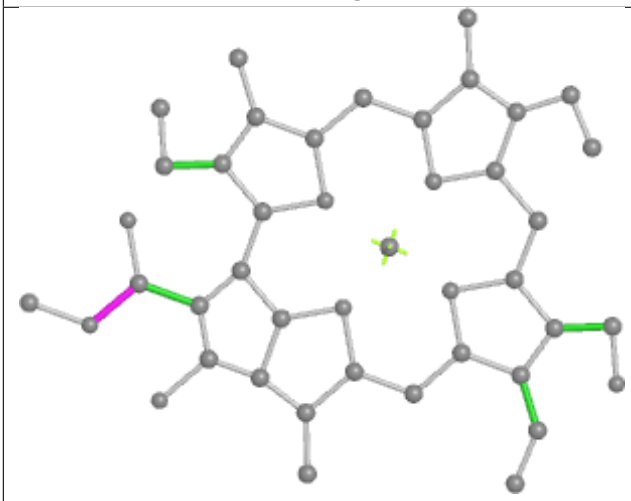


Bond angles



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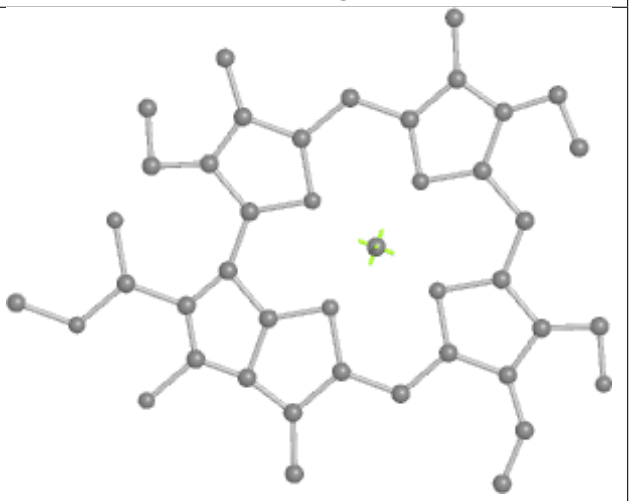
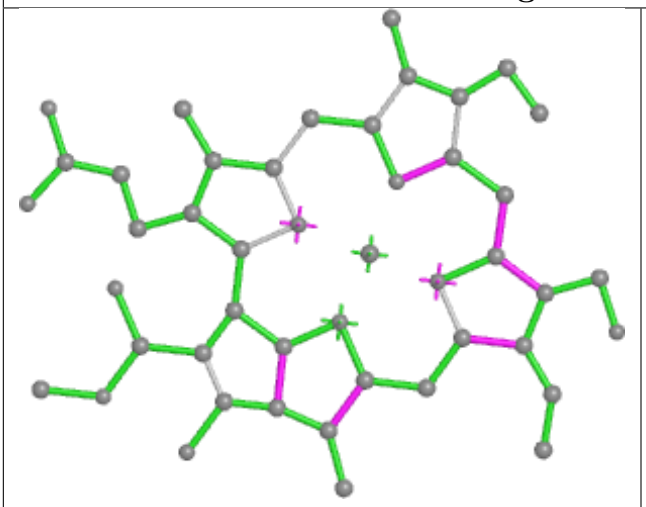


Rings

Ligand CHL 5b 305



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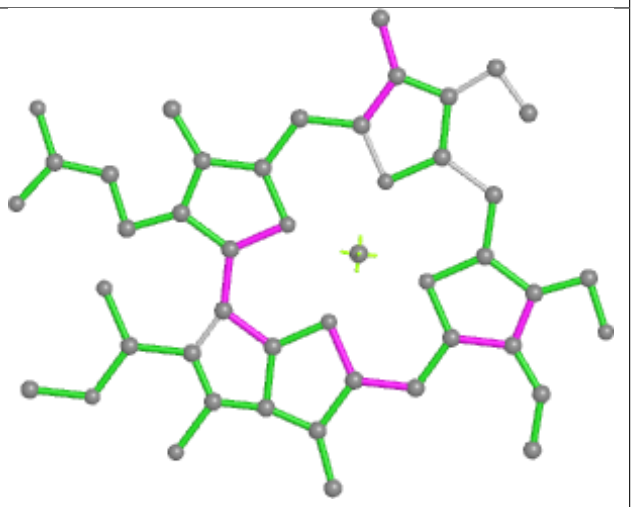
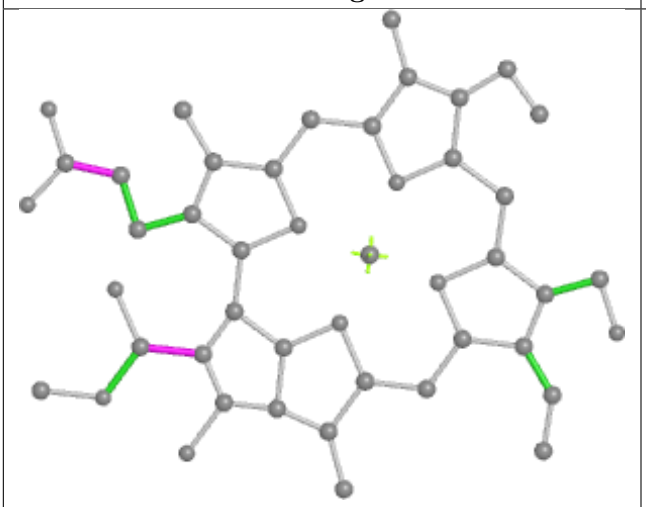


Bond angles



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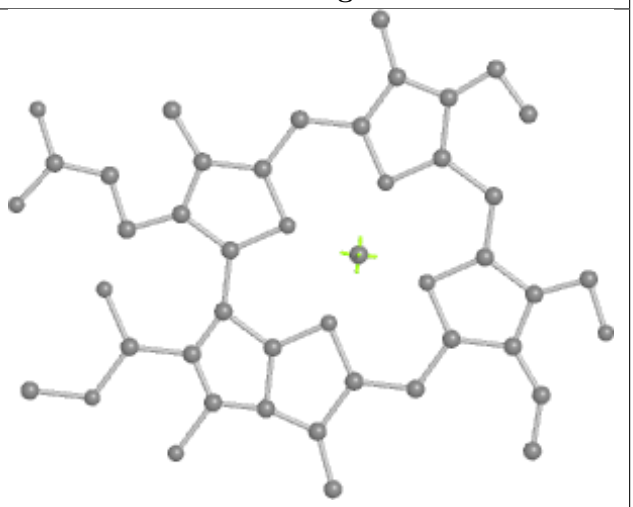
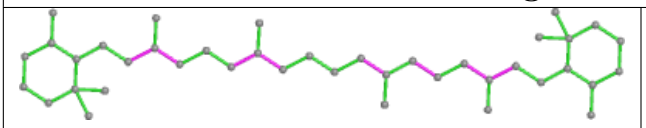


Rings

Ligand BCR B 848



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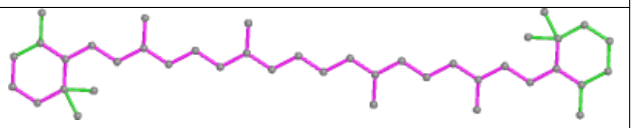
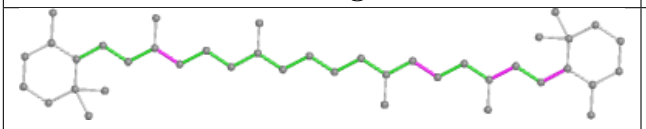


Bond angles



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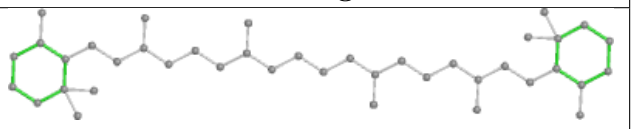
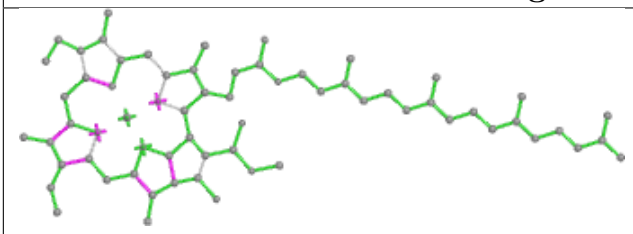


Rings

Ligand CLA a 823



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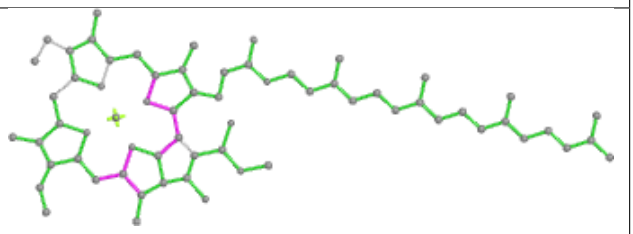
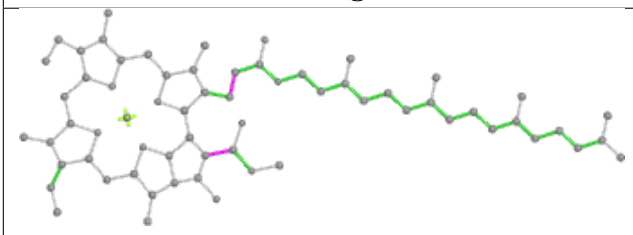
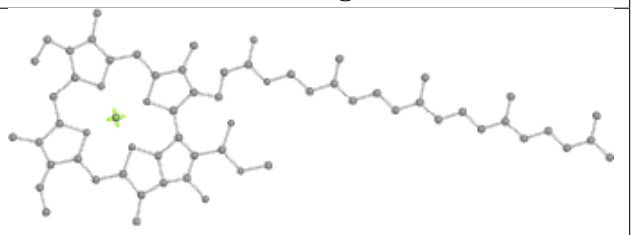


Bond angles

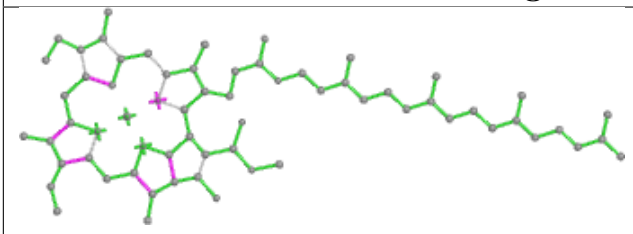


Torsions



Rings

Ligand CLA B 804



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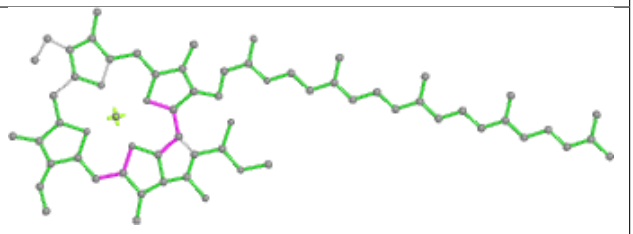
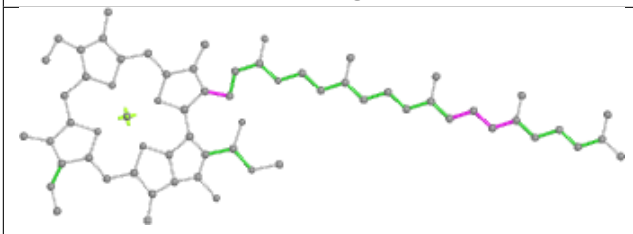


Bond angles



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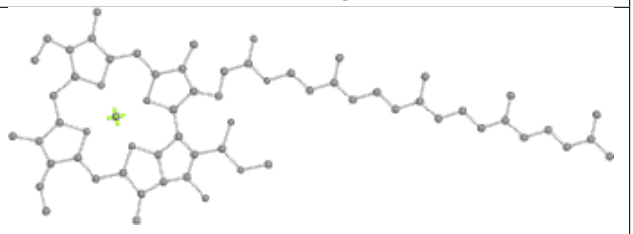
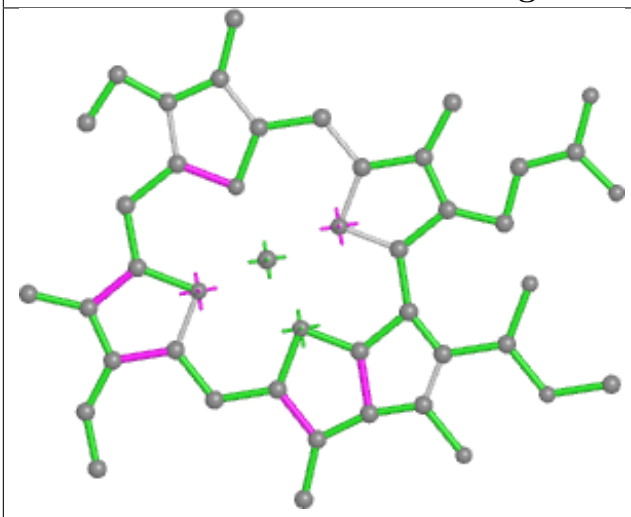


Rings

Ligand CLA 6b 317



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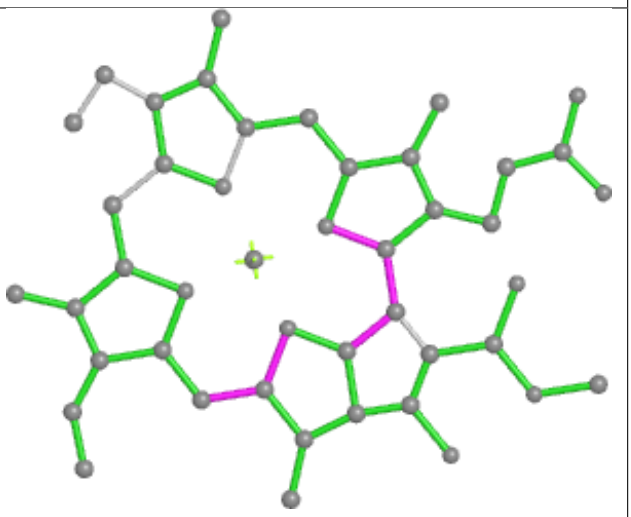
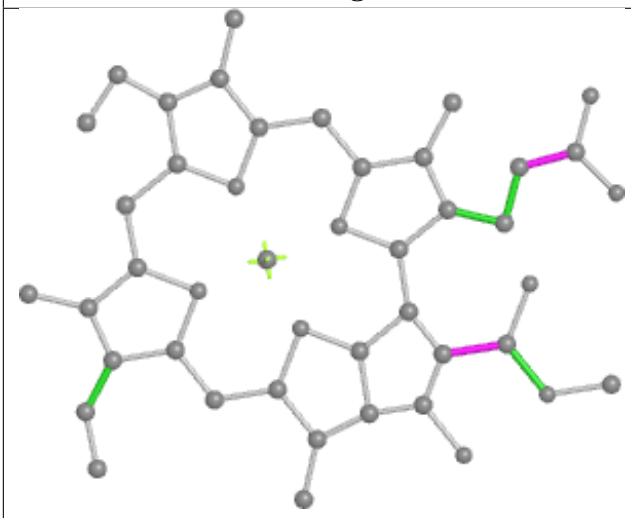


Bond angles



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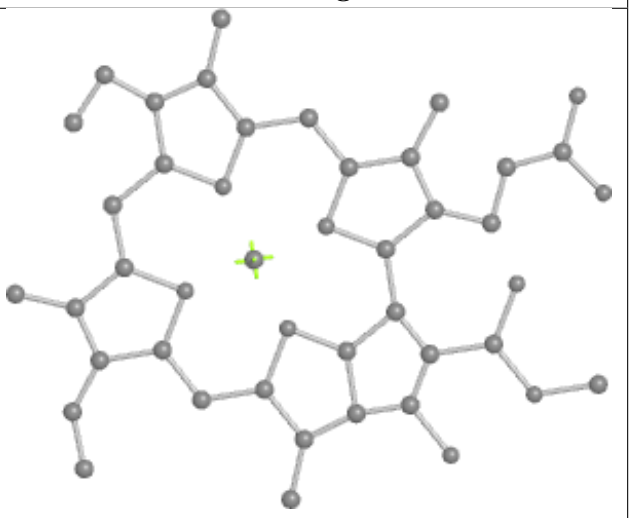
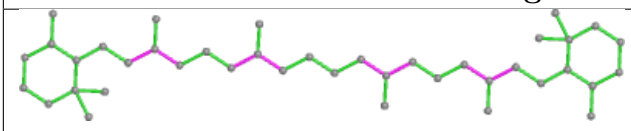


Rings

Ligand BCR F 304



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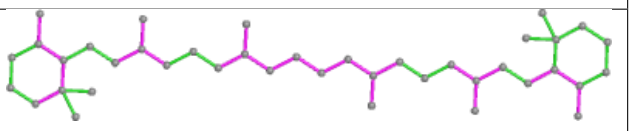
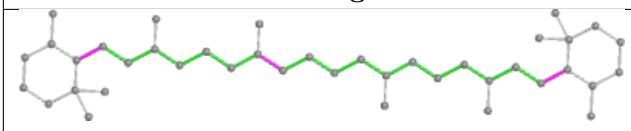


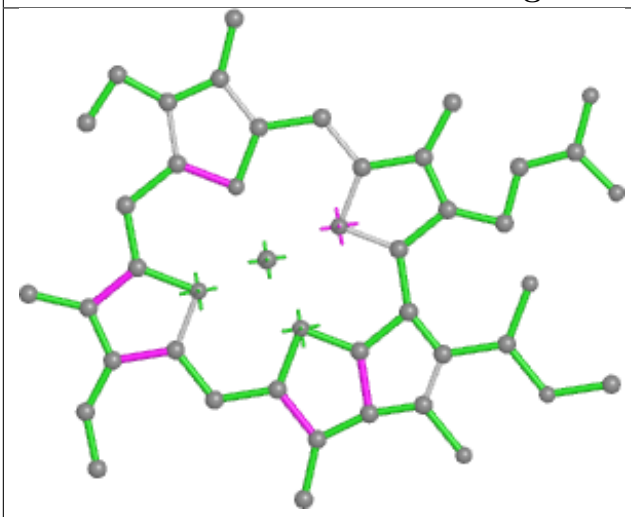
Bond angles



Torsions

Rings

Ligand CLA A 811



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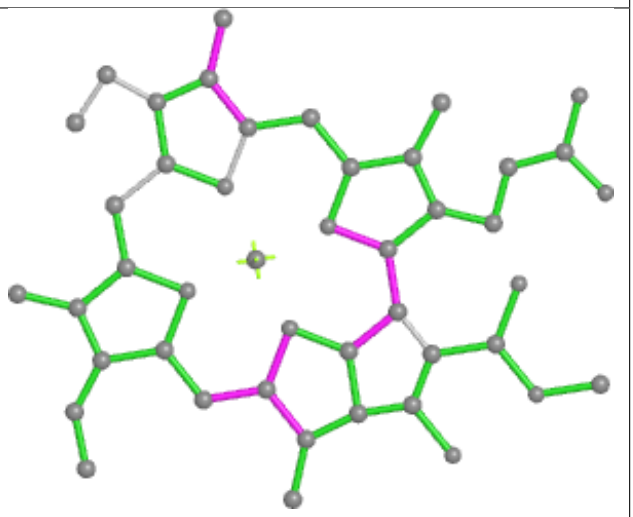
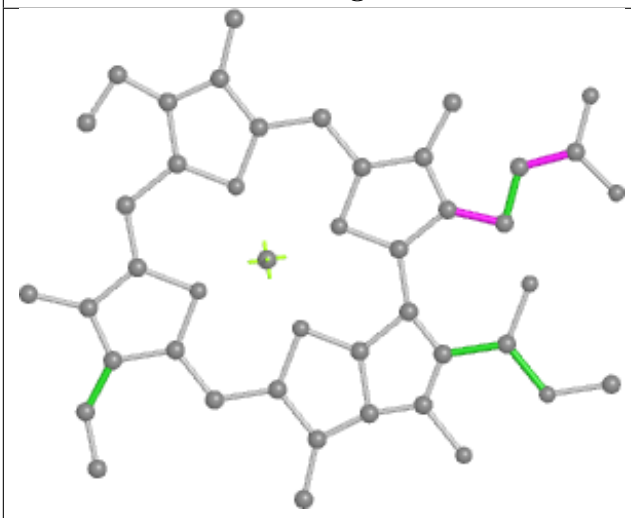
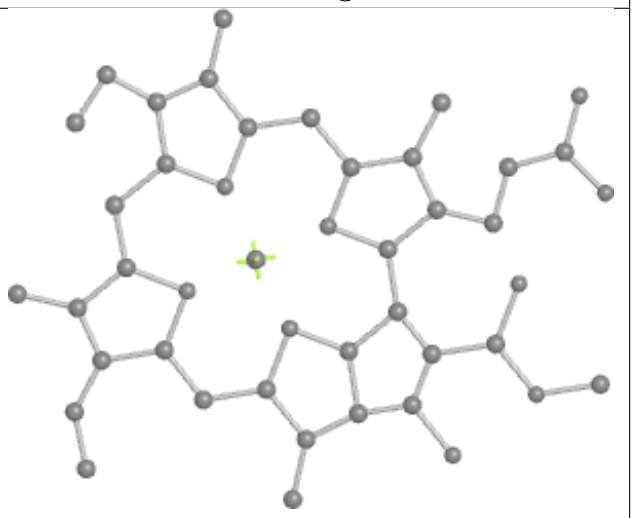


Bond angles

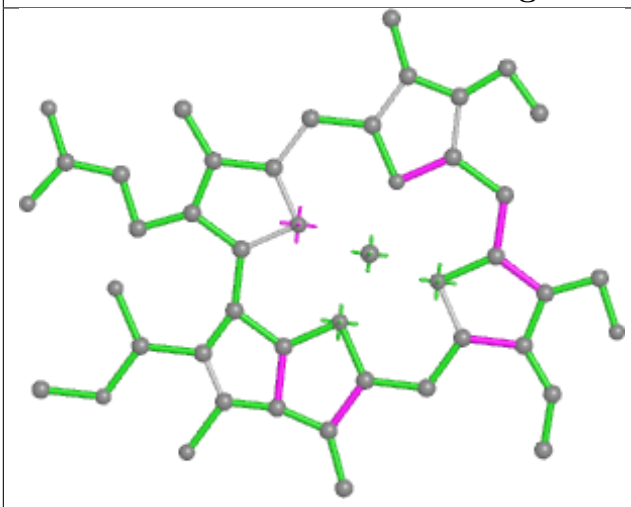


Torsions

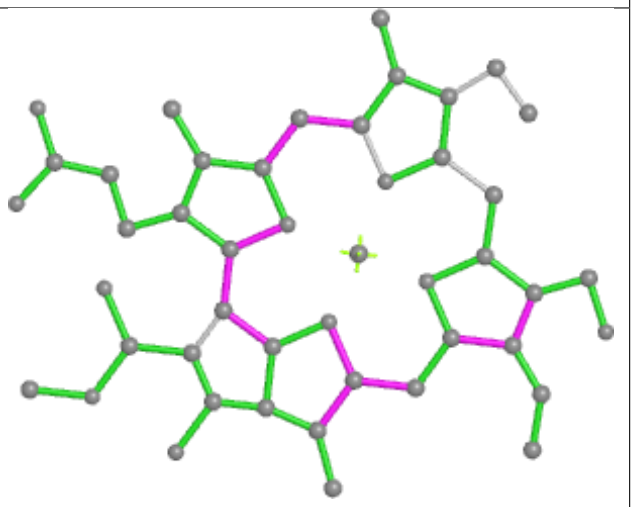


Rings

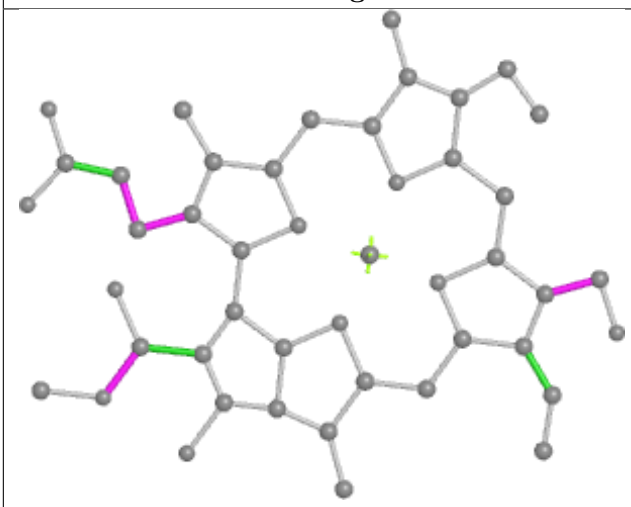
Ligand CHL 5a 307



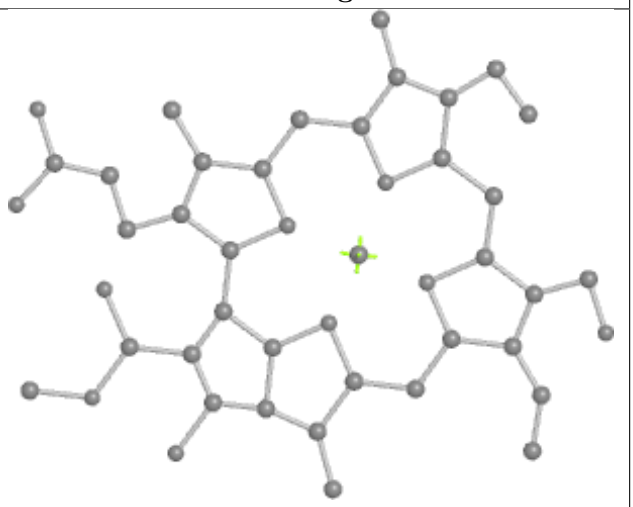
Bond lengths



Bond angles

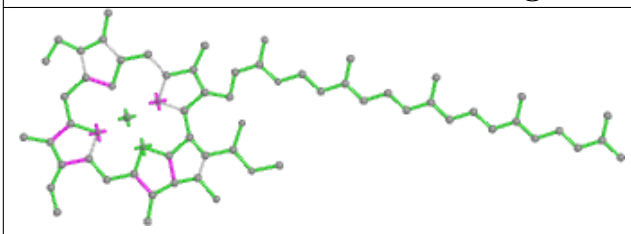


Torsions

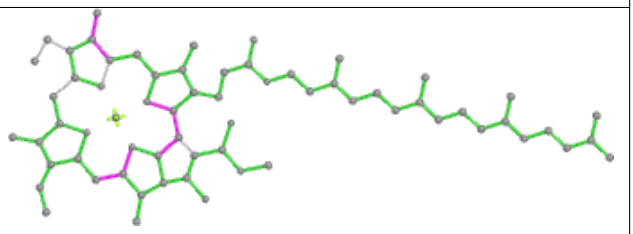


Rings

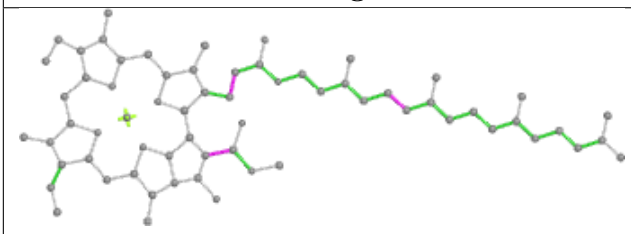
Ligand CLA A 826



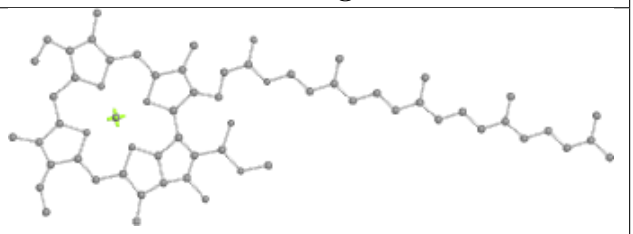
Bond lengths



Bond angles

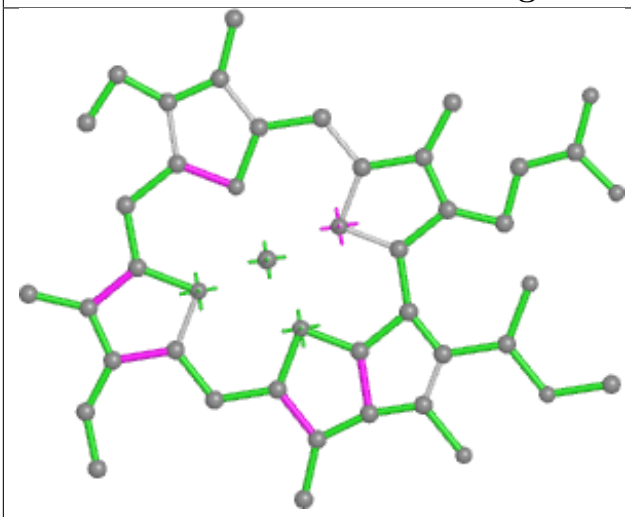


Torsions

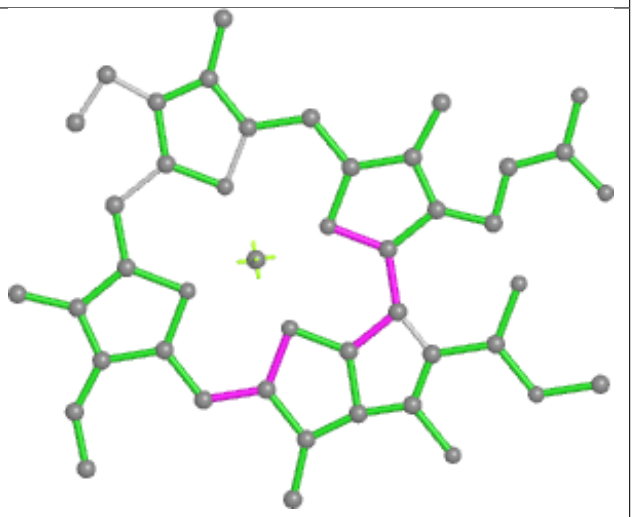


Rings

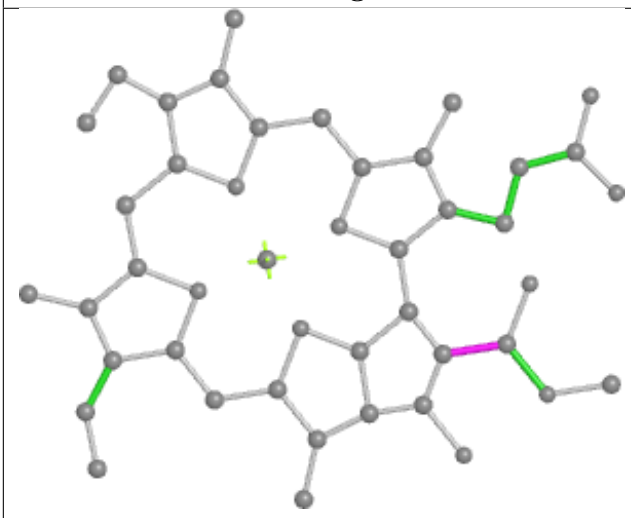
Ligand CLA 2b 307



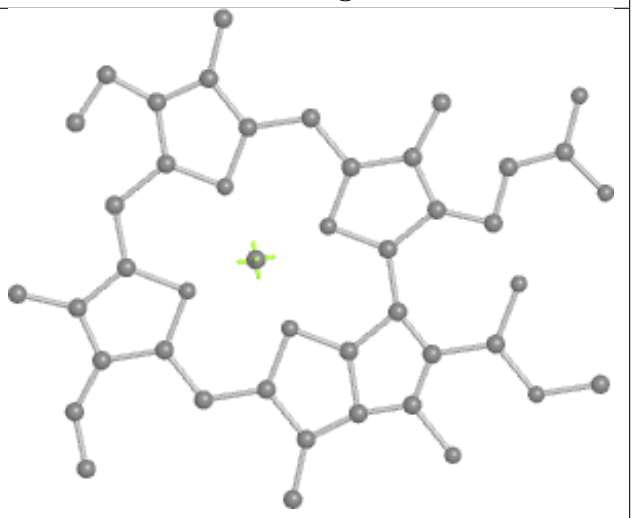
Bond lengths



Bond angles

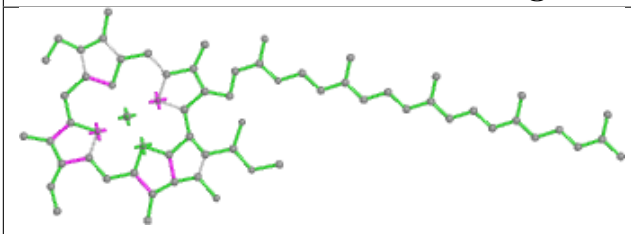


Torsions



Rings

Ligand CLA a 829



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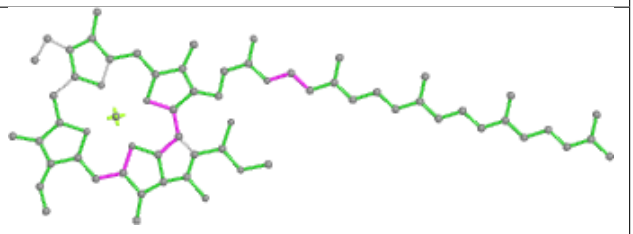
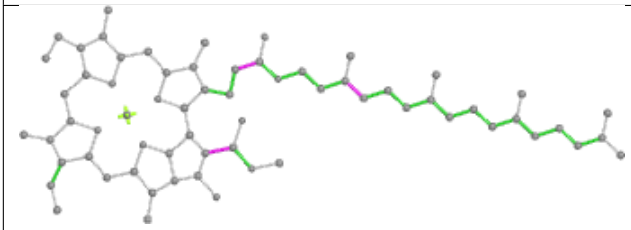
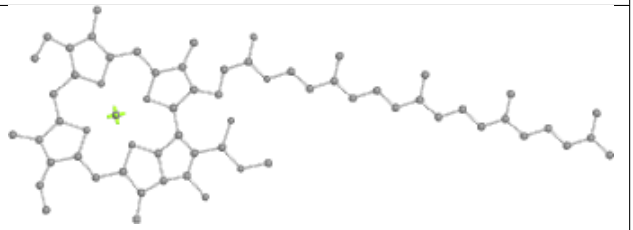


Bond angles

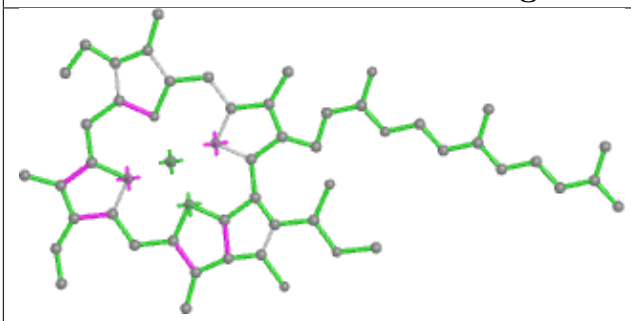


Torsions



Rings

Ligand CLA 6a 306



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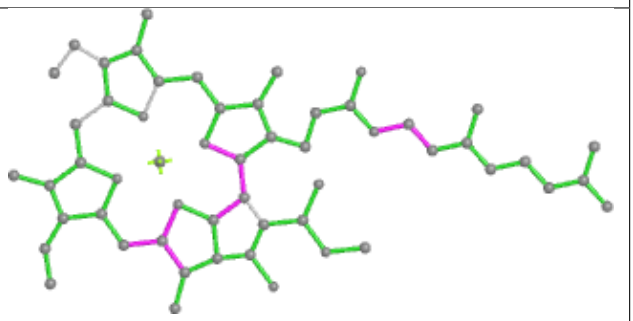
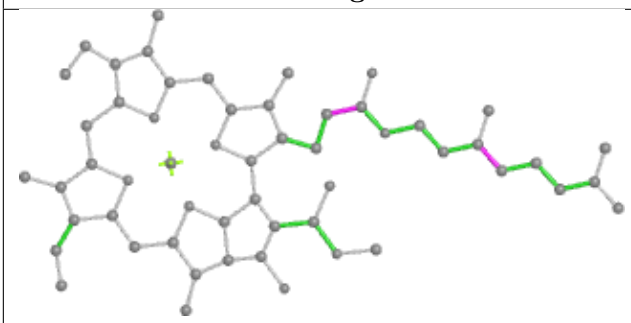


Bond angles



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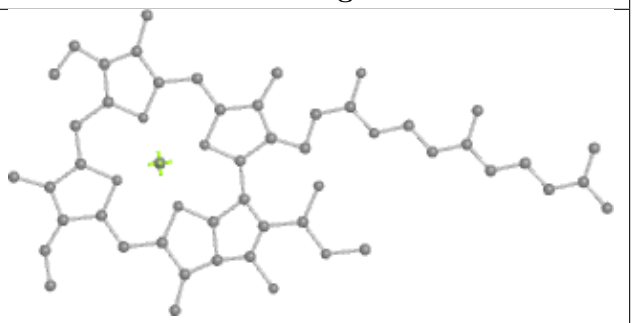
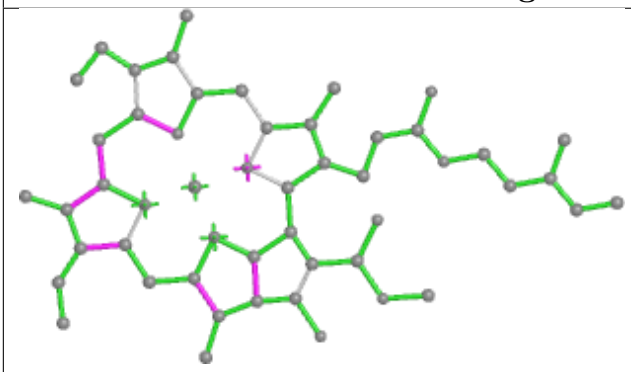


Rings

Ligand CLA 5b 309



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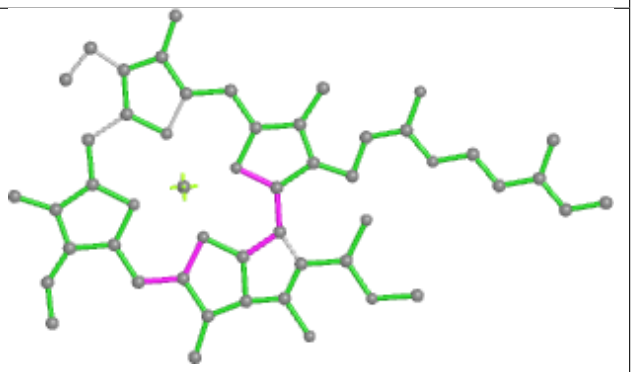
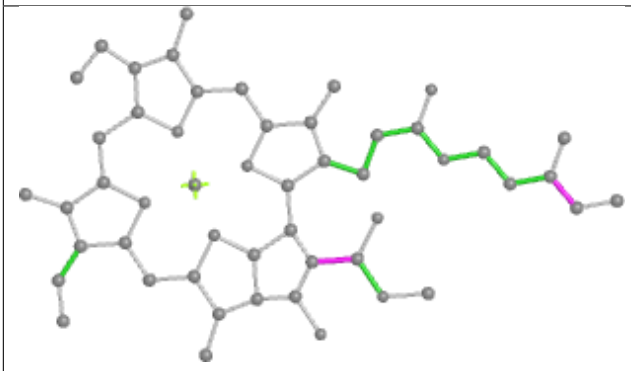


Bond angles



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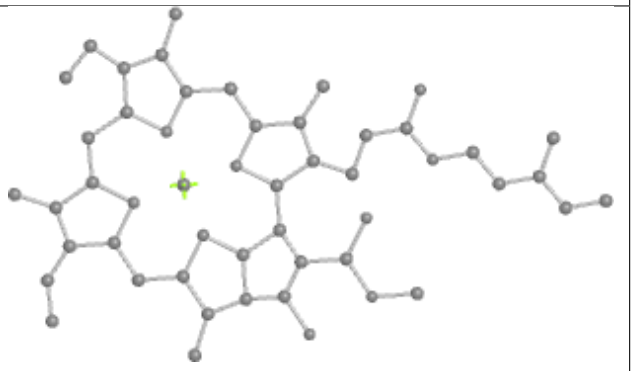
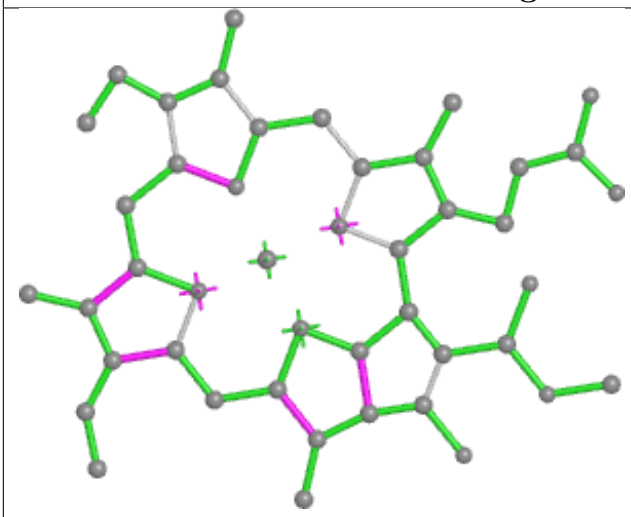


Rings

Ligand CLA 3a 304



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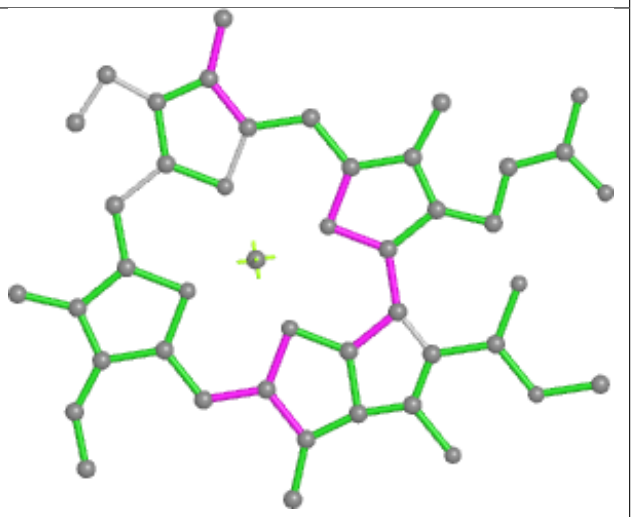

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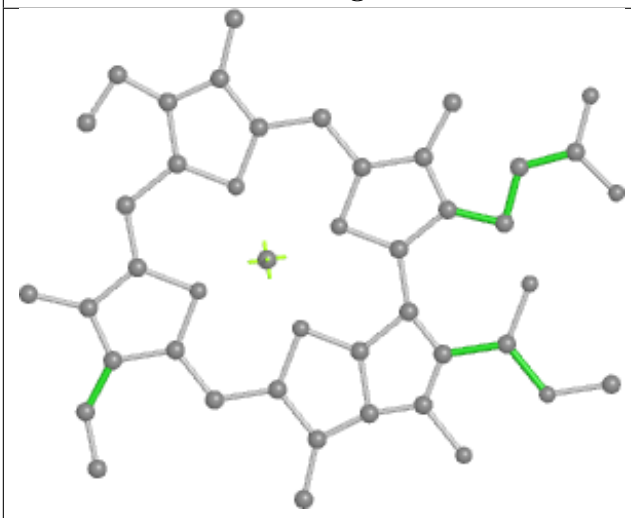

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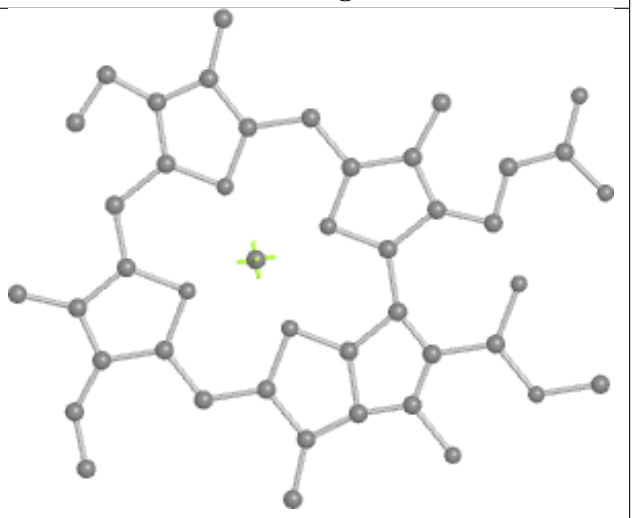
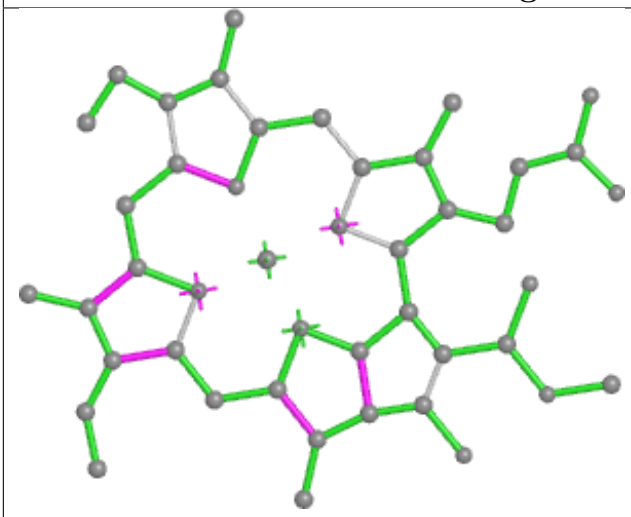


Rings

Ligand CLA 2a 311



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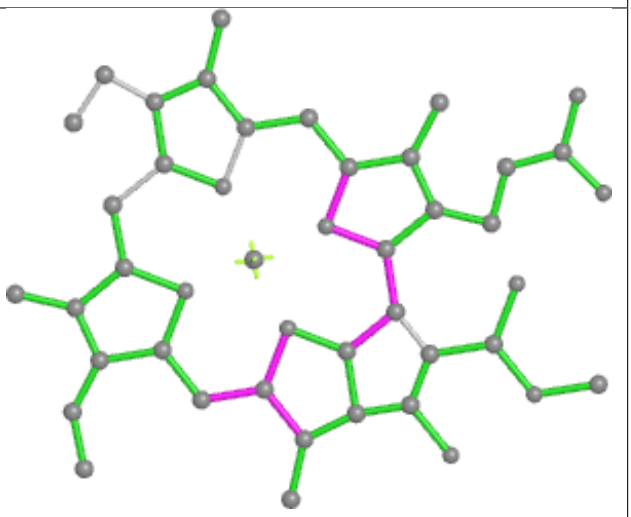
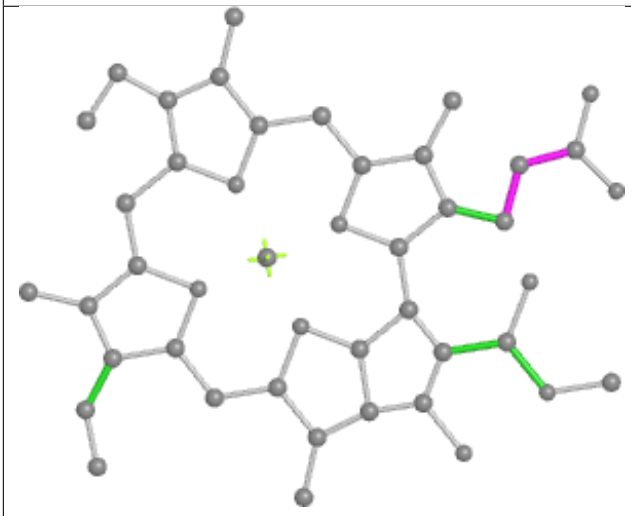


Bond angles



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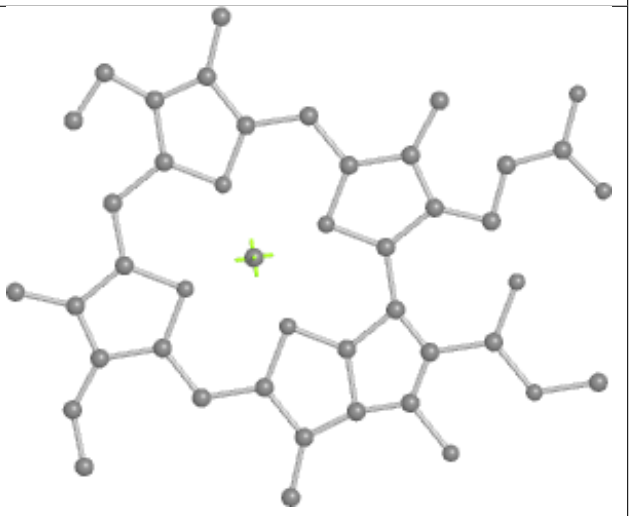
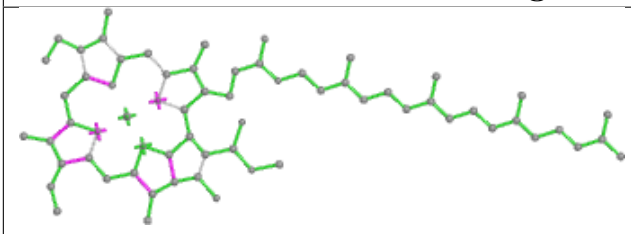


Rings

Ligand CLA a 833



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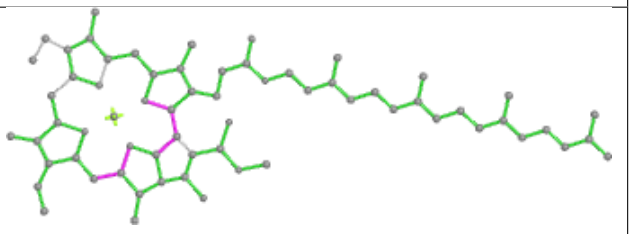
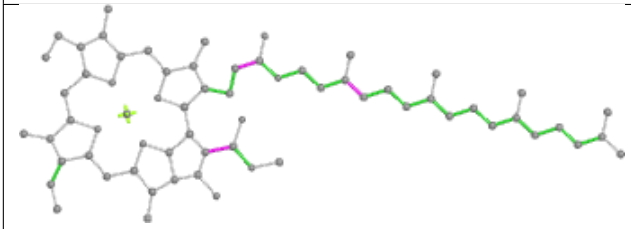


Bond angles



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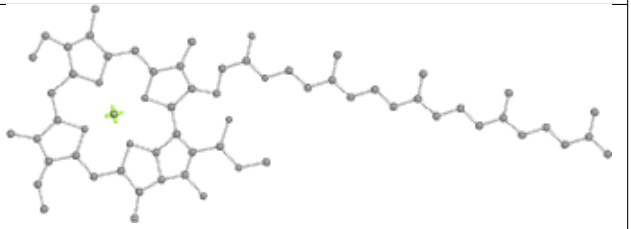
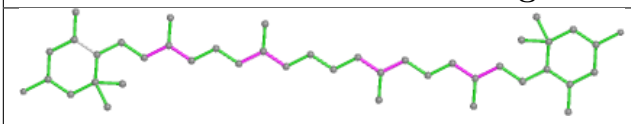
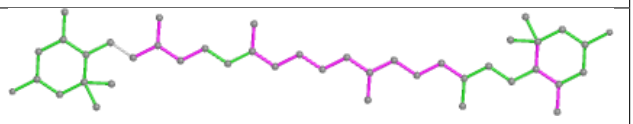
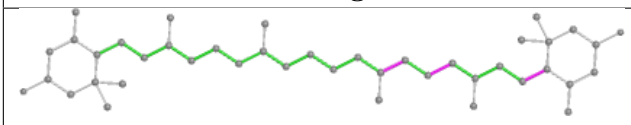
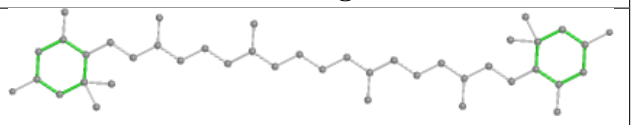
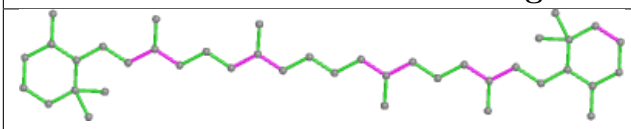
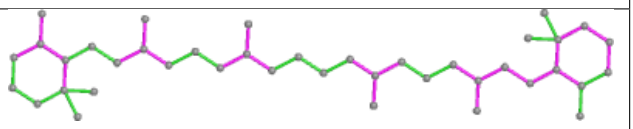
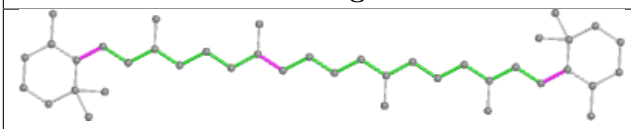
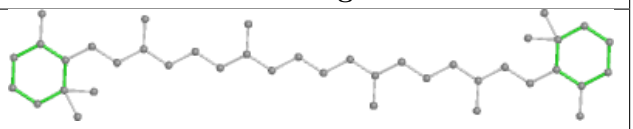
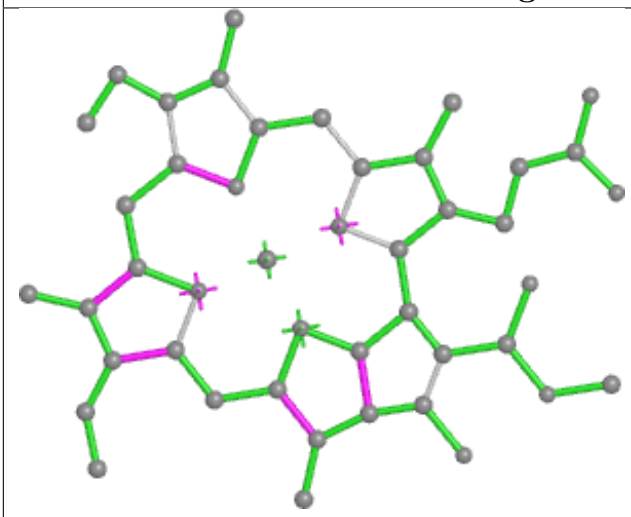


Rings

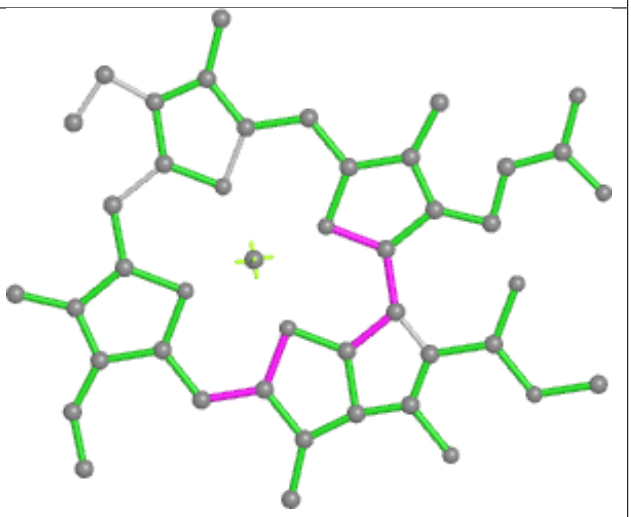
Ligand LUT 3b 317	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand BCR b 845	
 Bond lengths	 Bond angles
 Torsions	 Rings

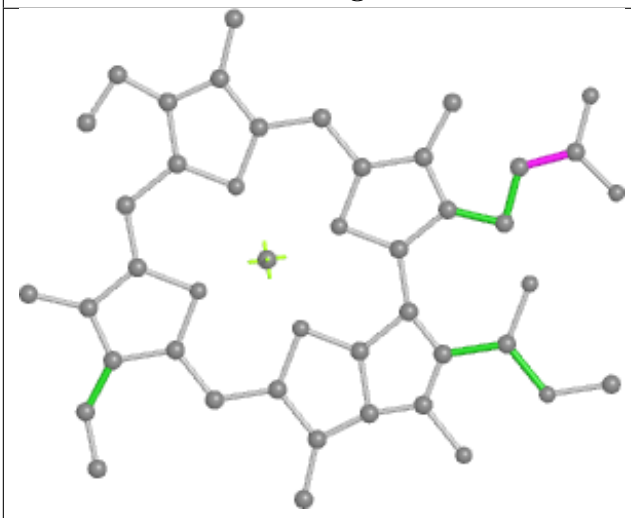
Ligand CLA 6b 314



Bond lengths



Bond angles



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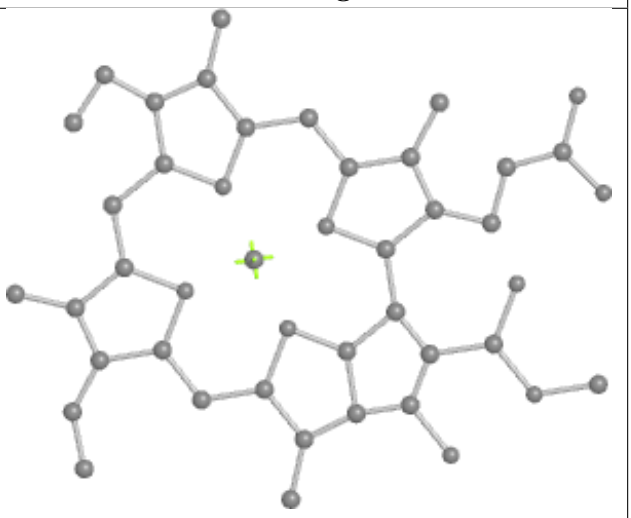
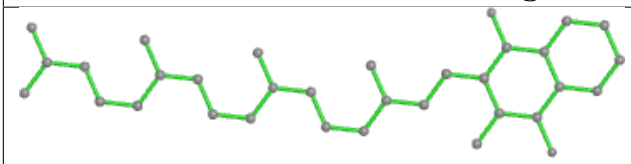
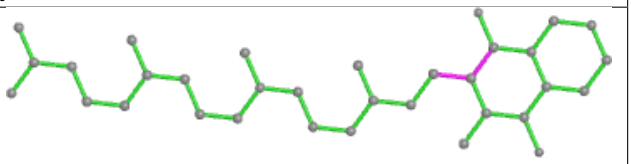


Rings

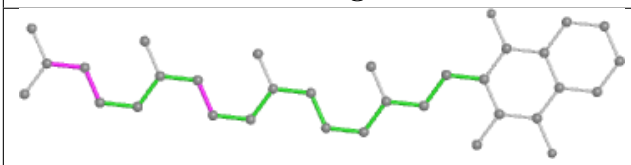
Ligand PQN A 843



Bond lengths



Bond angles



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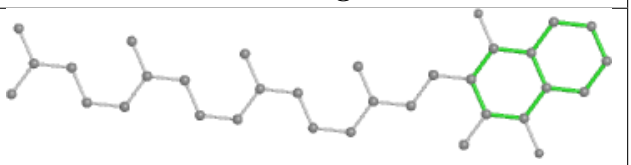
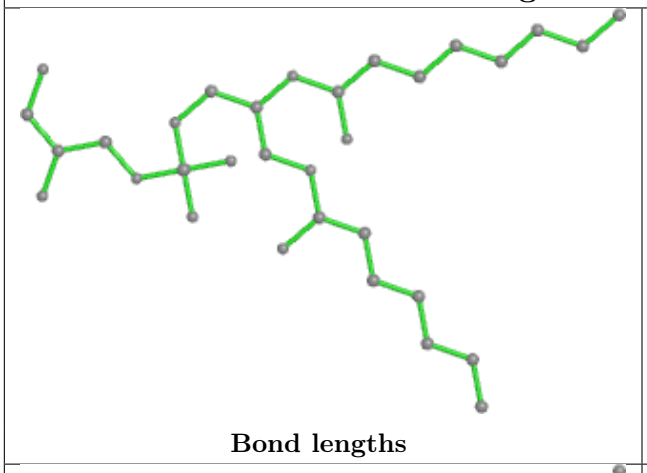


Rings

Ligand LHG 5a 318



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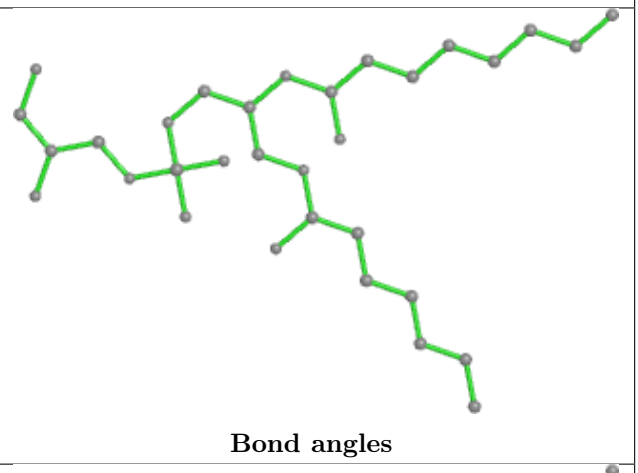
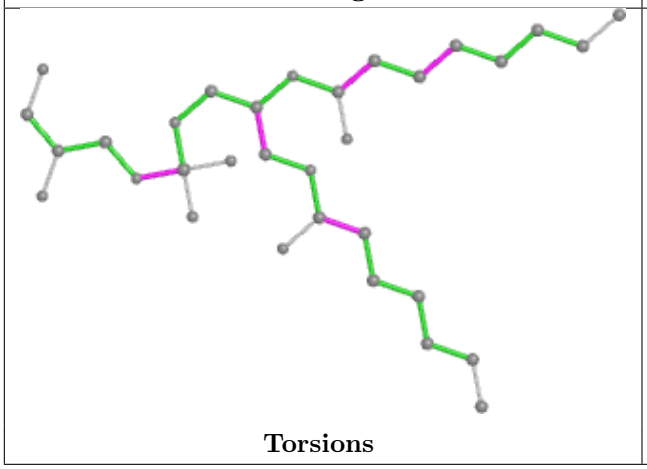


Bond angles



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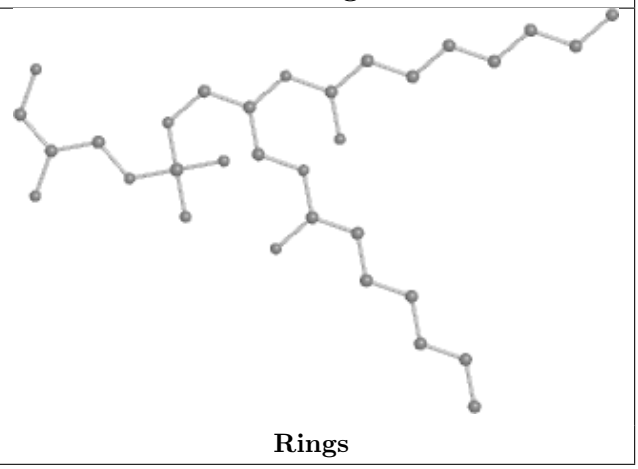
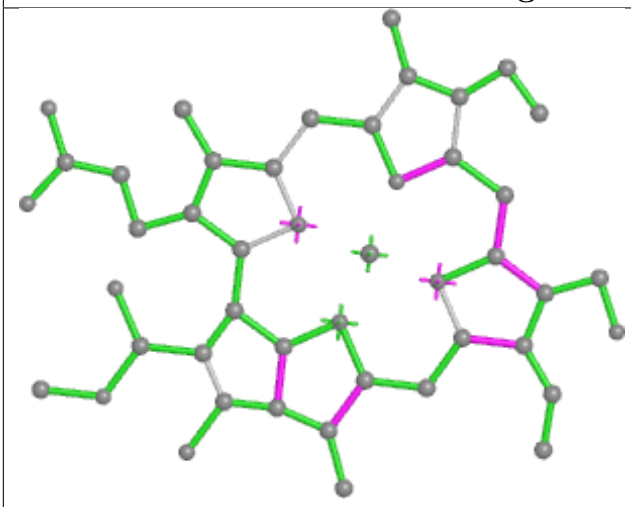
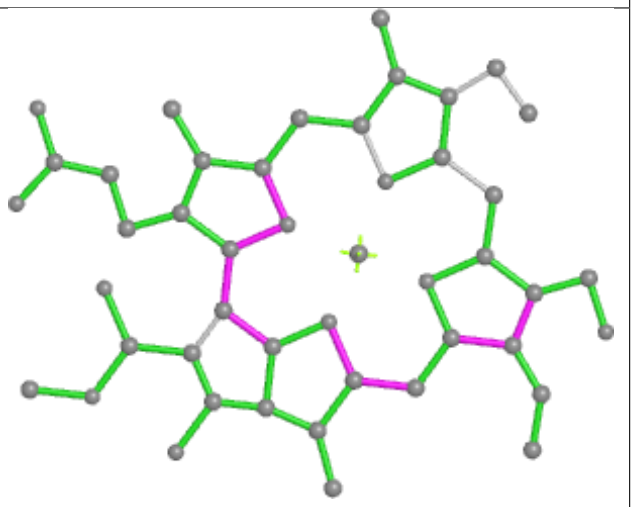


Rings

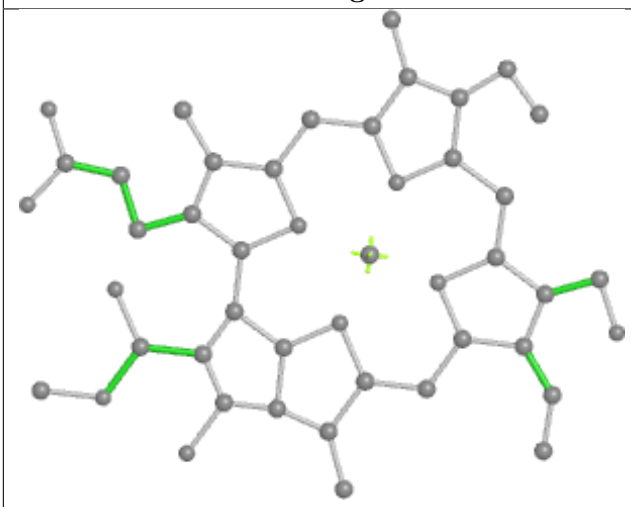
Ligand CHL 3b 301



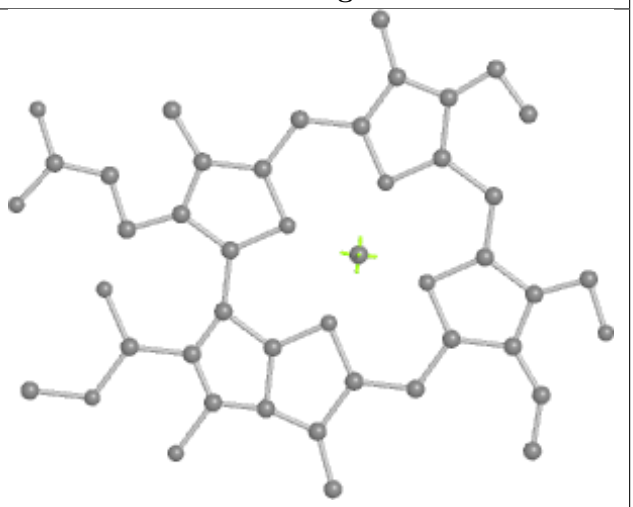
Bond lengths



Bond angles

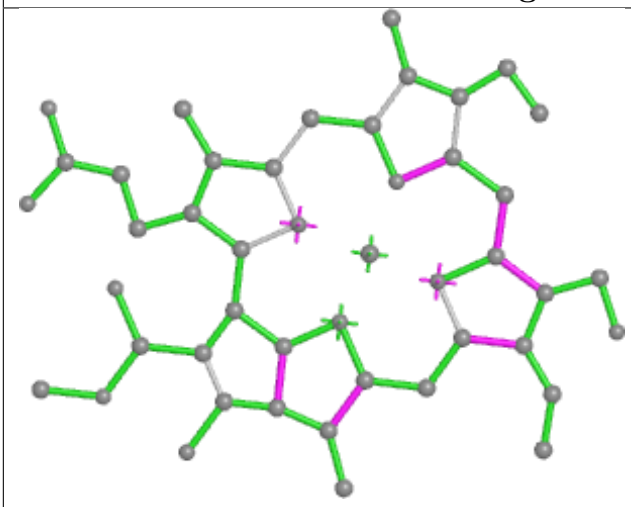


Torsions

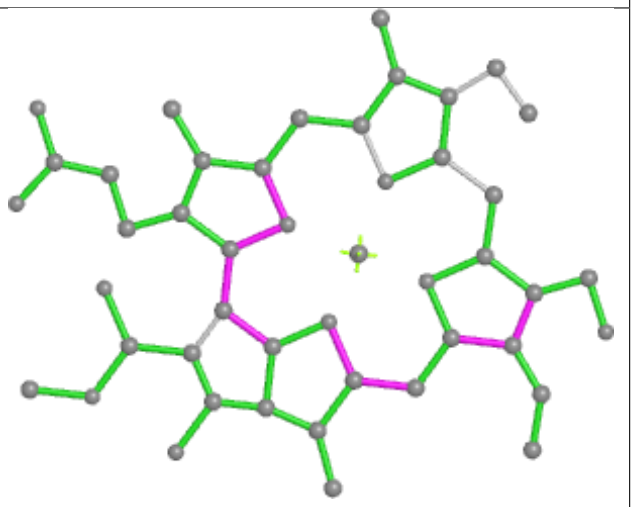


Rings

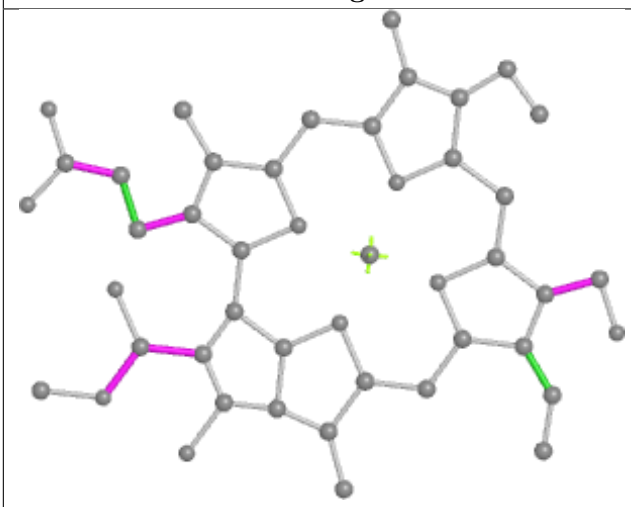
Ligand CHL 2a 306



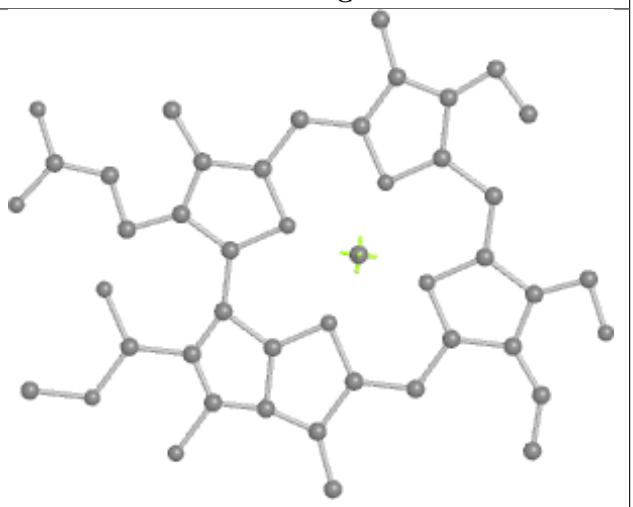
Bond lengths



Bond angles

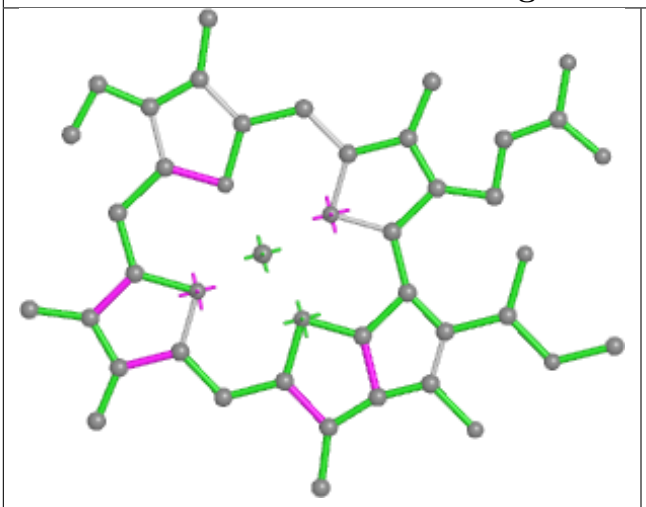


Torsions

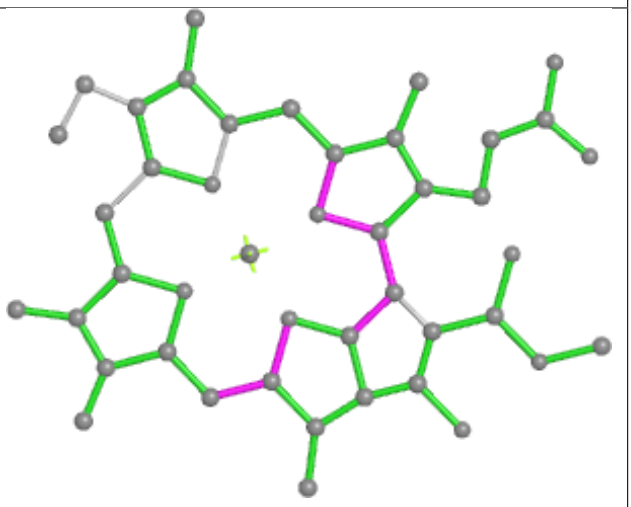


Rings

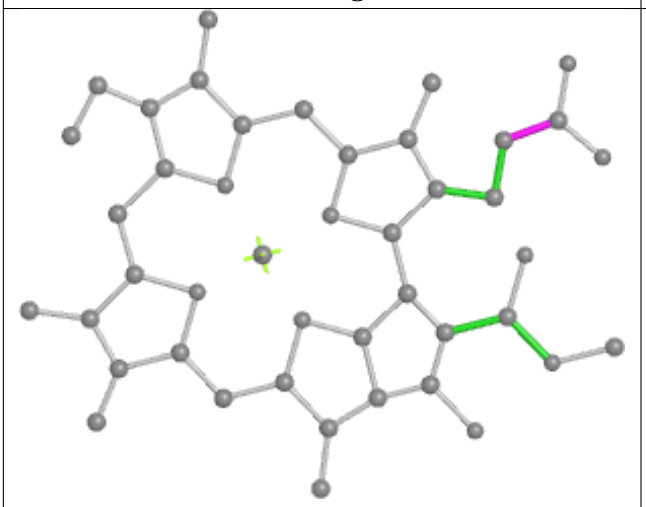
Ligand CLA 5b 311



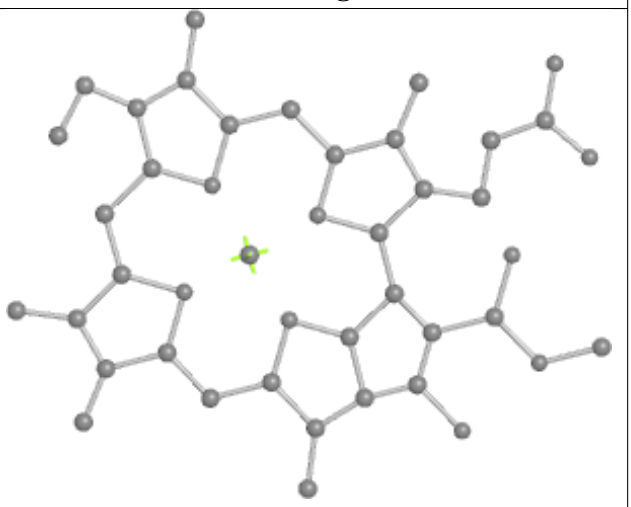
Bond lengths



Bond angles

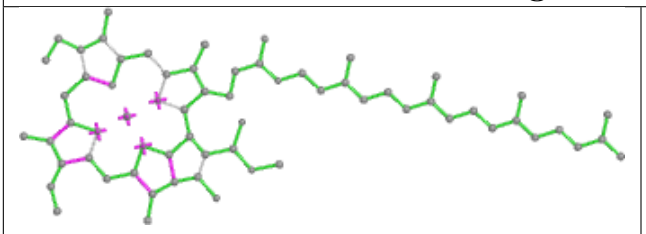


Torsions

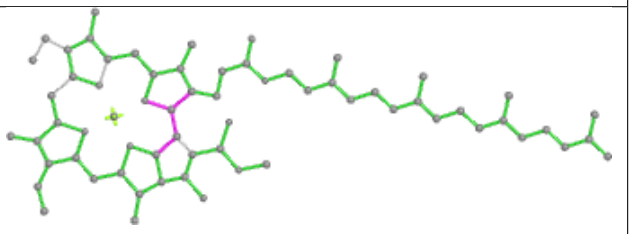


Rings

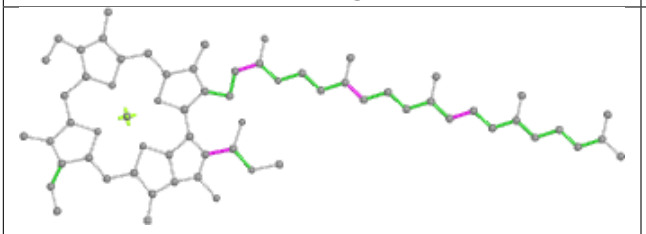
Ligand CL0 A 802



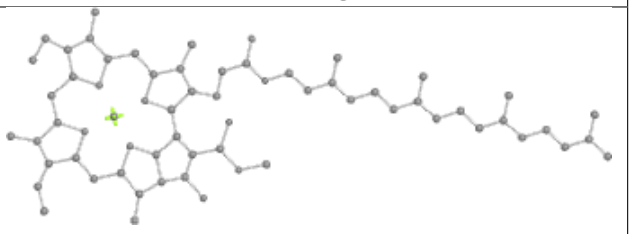
Bond lengths



Bond angles

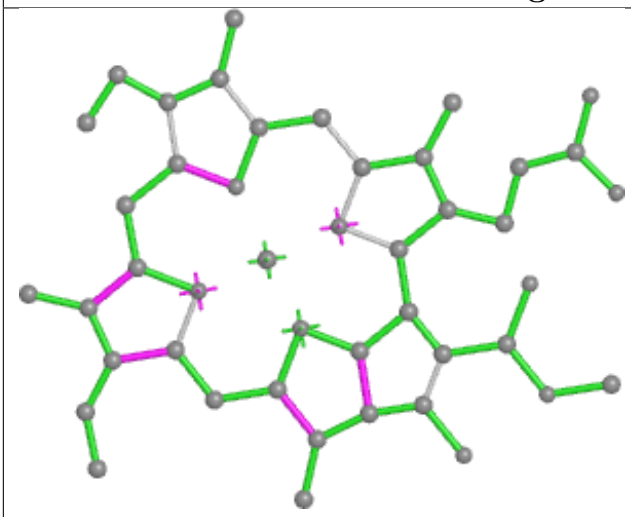


Torsions

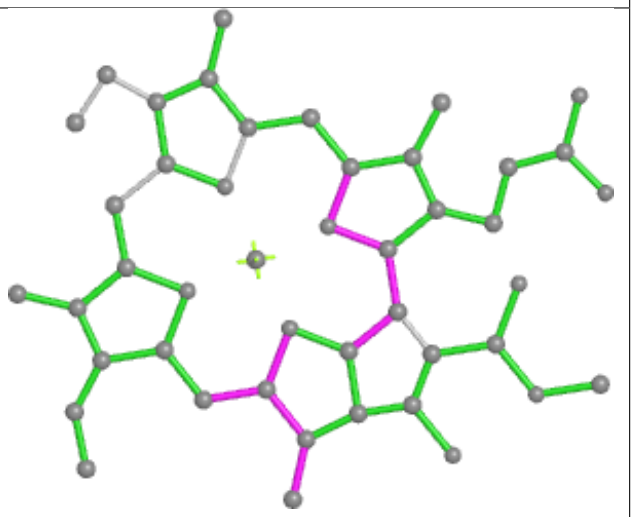


Rings

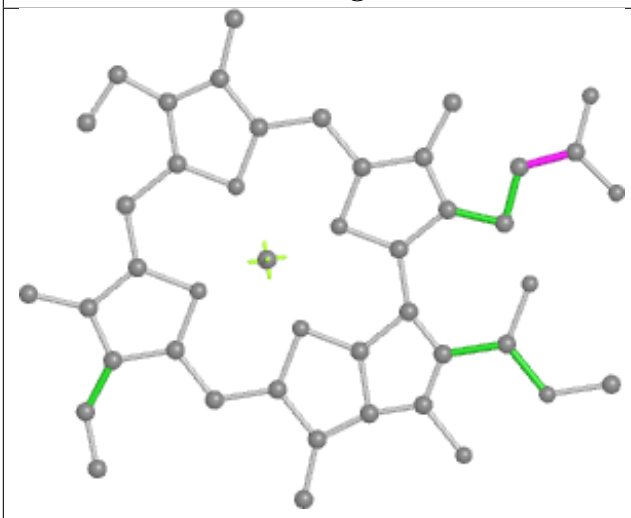
Ligand CLA a 822



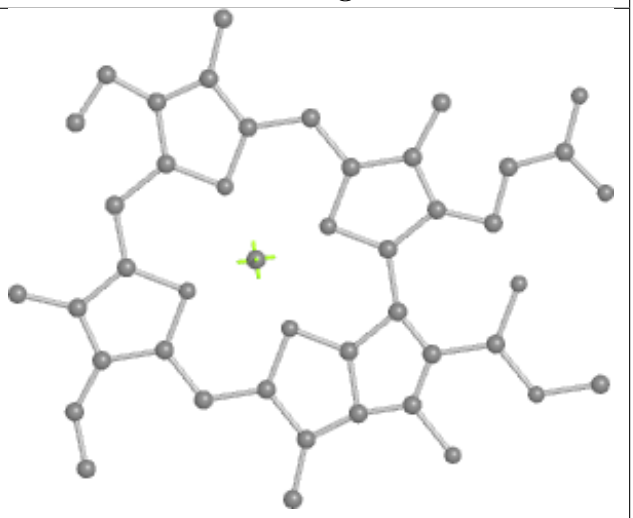
Bond lengths



Bond angles

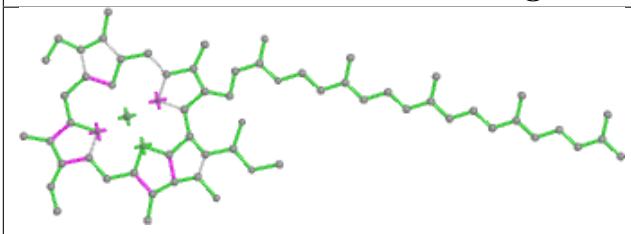


Torsions

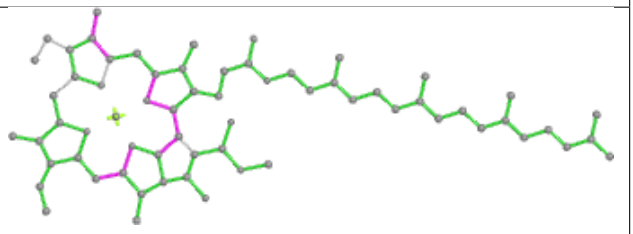


Rings

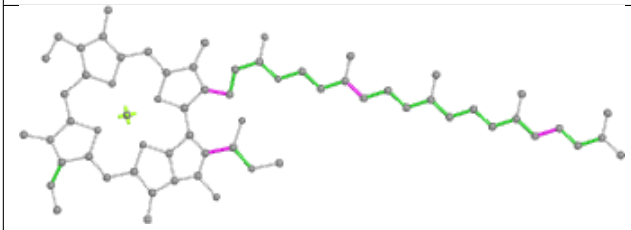
Ligand CLA B 812



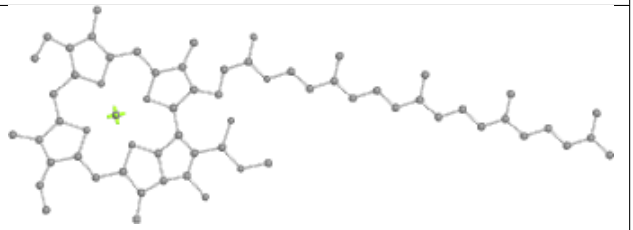
Bond lengths



Bond angles

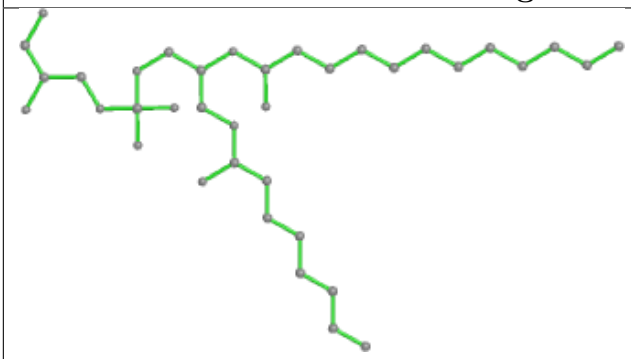


Torsions



Rings

Ligand LHG 5b 320



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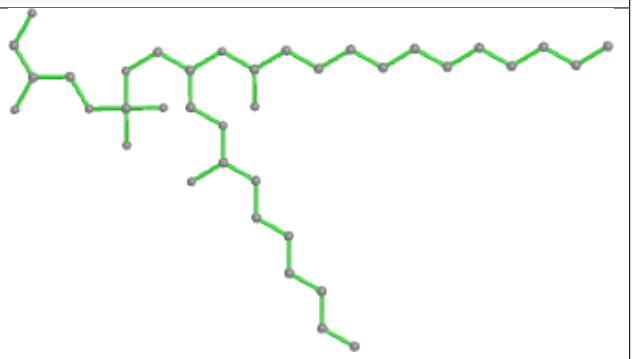
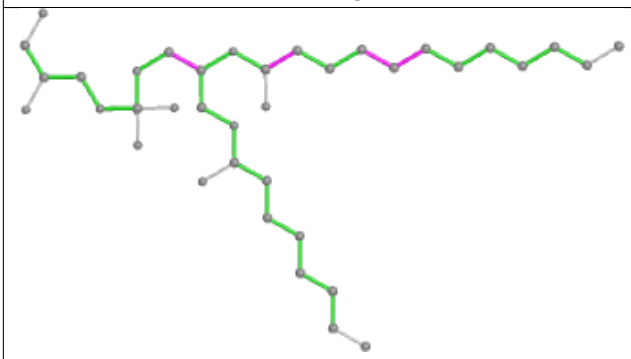
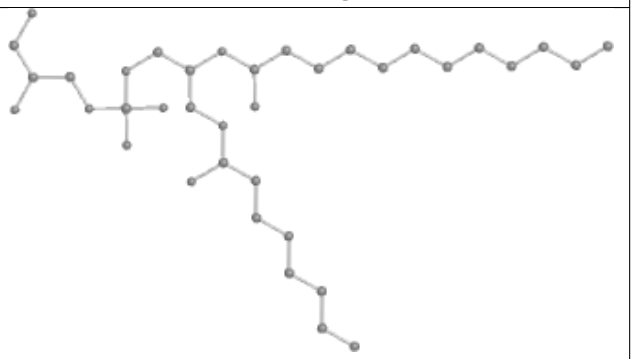


Bond angles

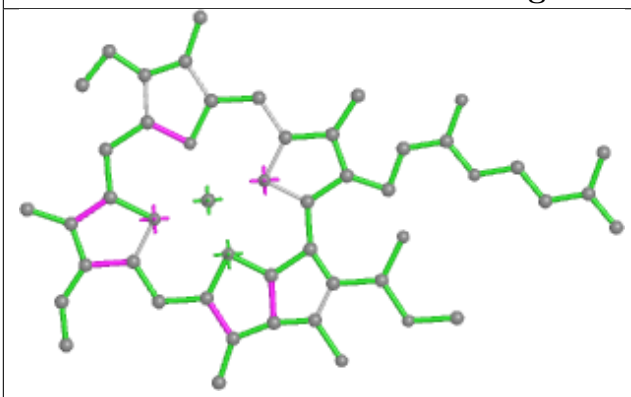


Torsions



Rings

Ligand CLA a 838



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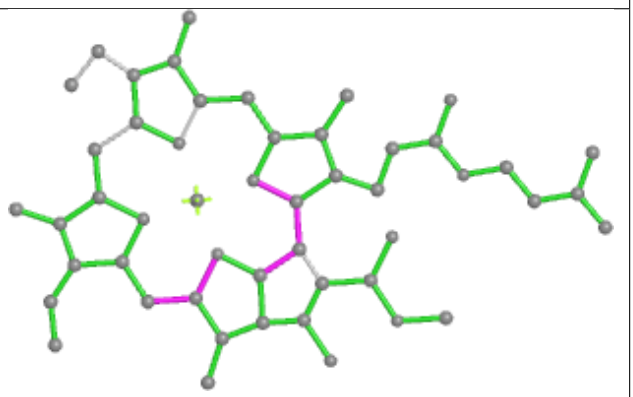
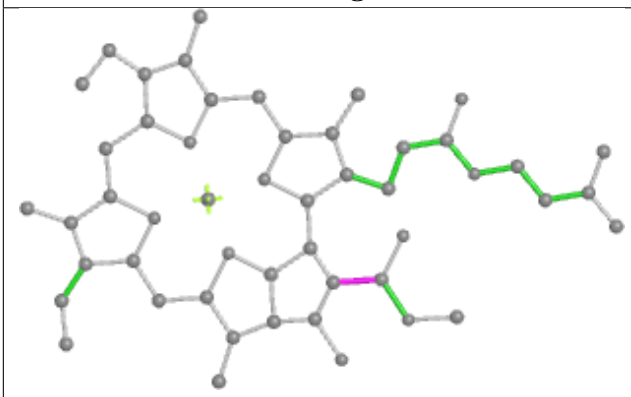


Bond angles



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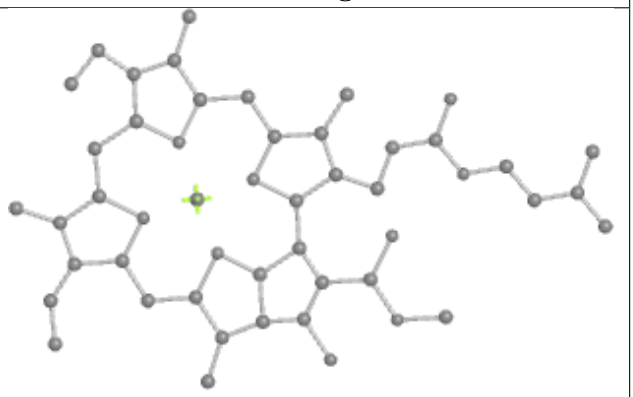
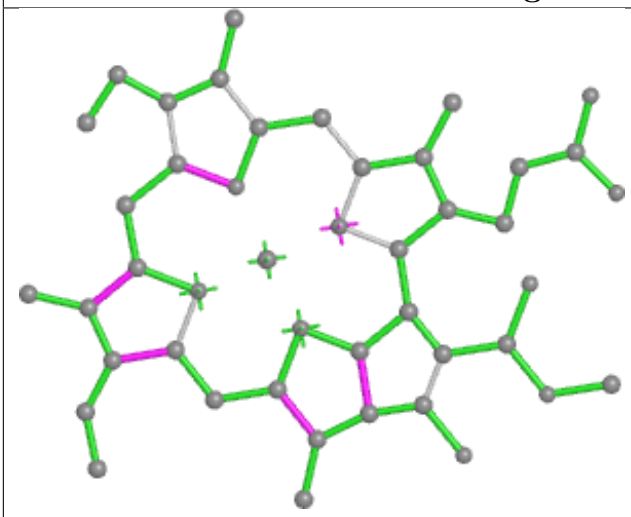
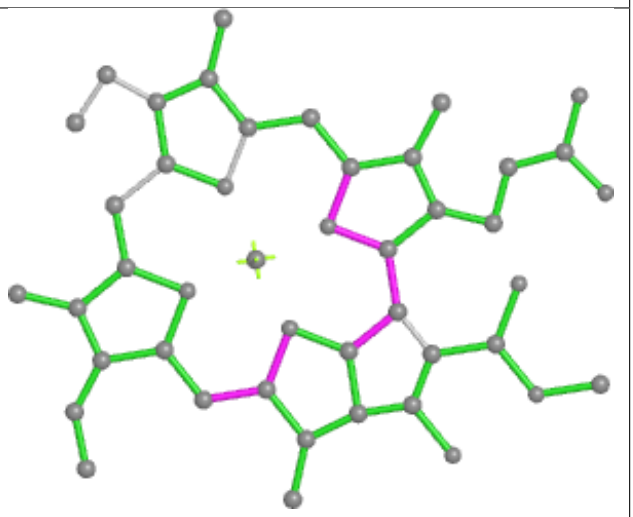


Rings

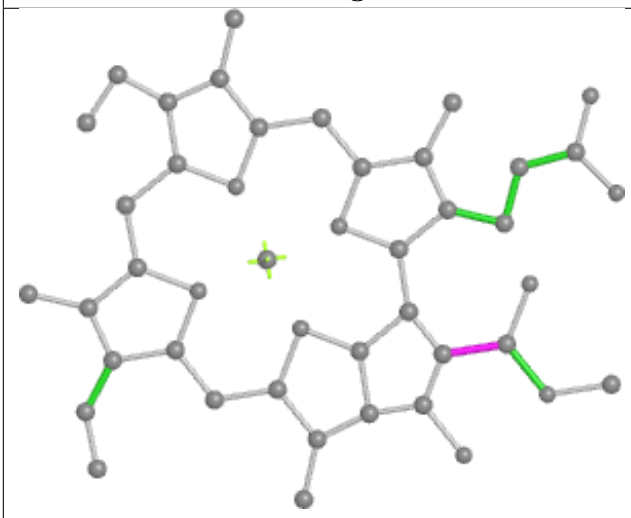
Ligand CLA A 819



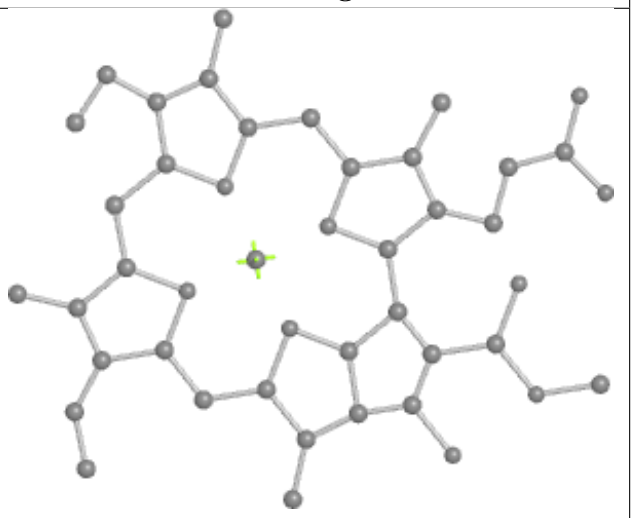
Bond lengths



Bond angles

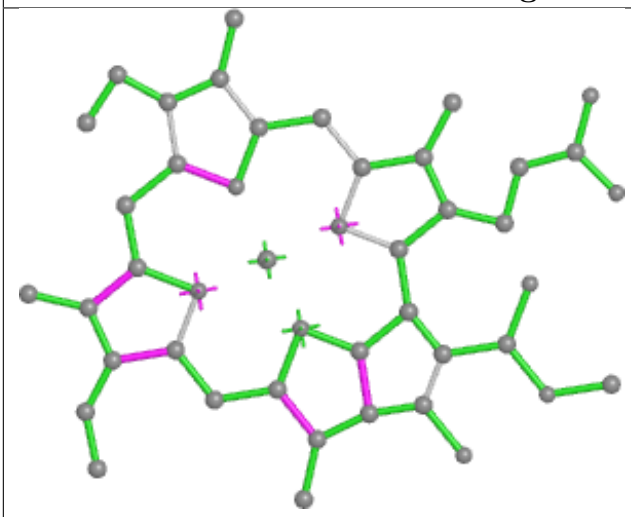


Torsions



Rings

Ligand CLA 3a 308



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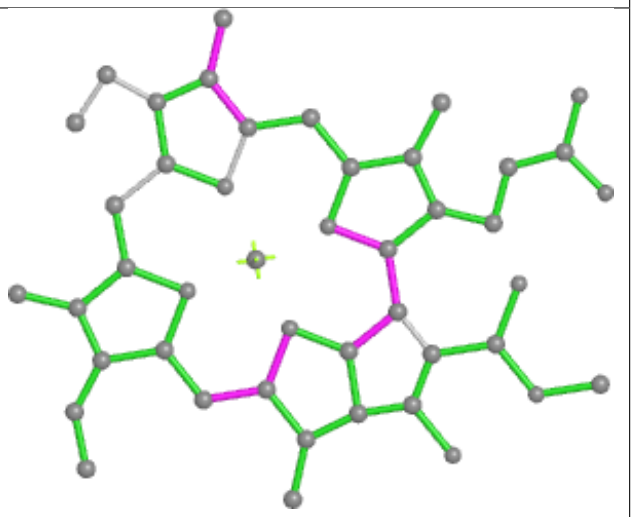
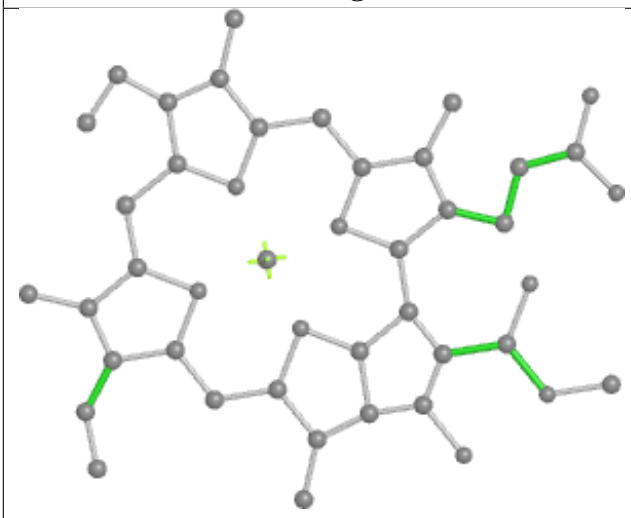


Bond angles



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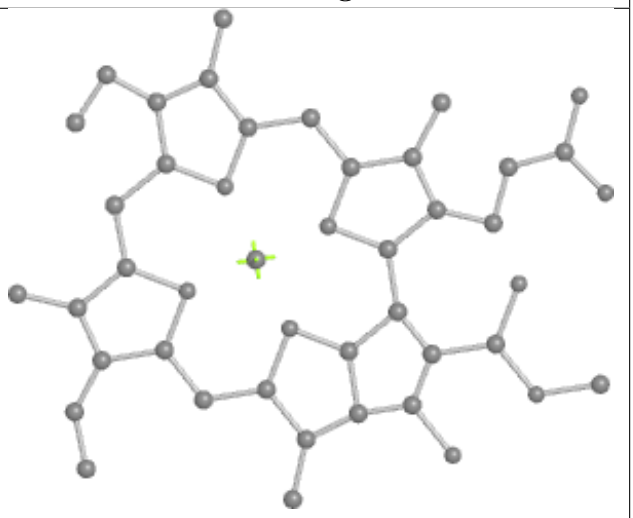
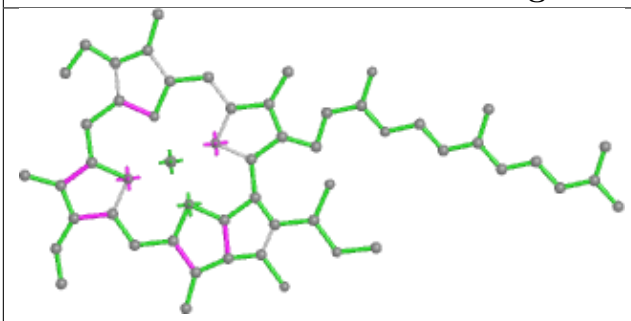


Rings

Ligand CLA a 837



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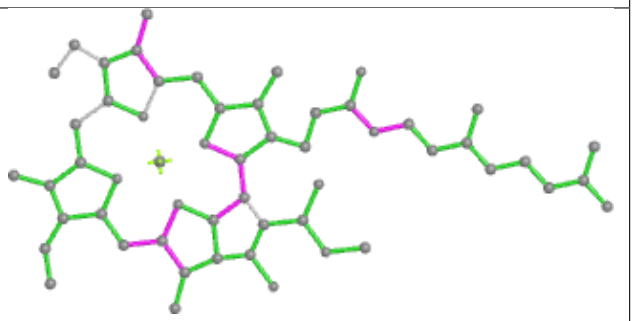
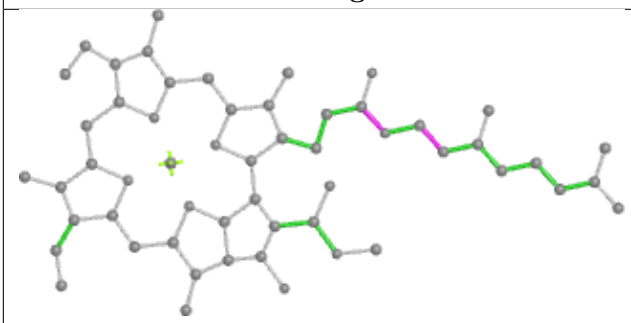
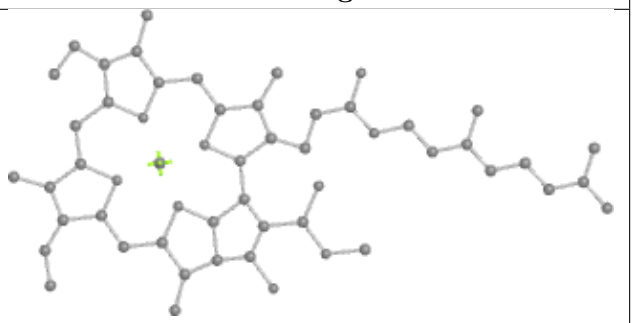


Bond angles

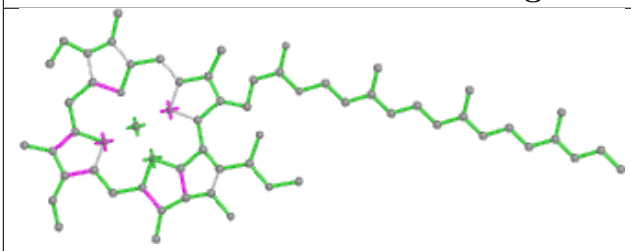


Torsions

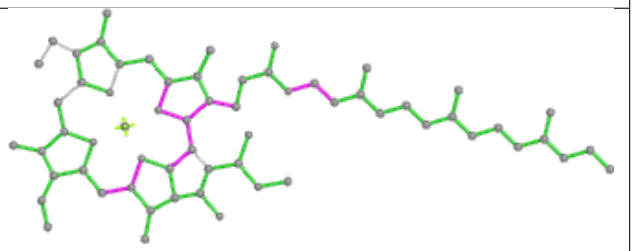


Rings

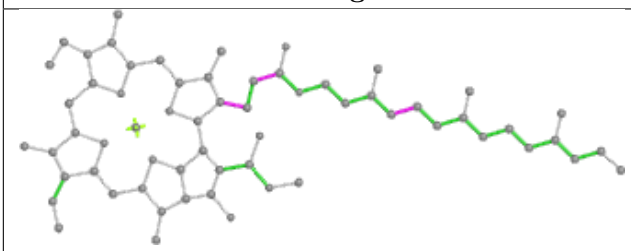
Ligand CLA B 816



Bond lengths



Bond angles



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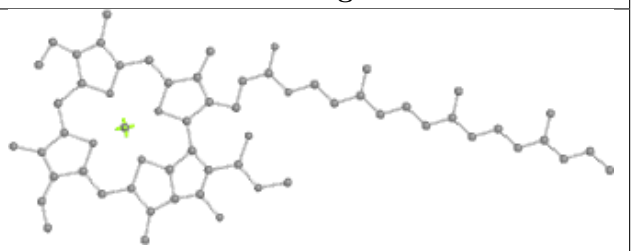
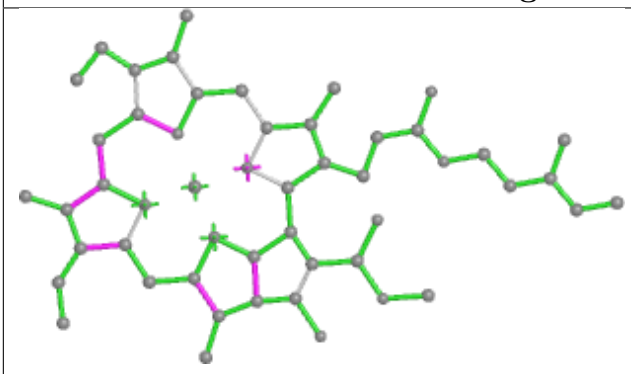


Rings

Ligand CLA 5a 309



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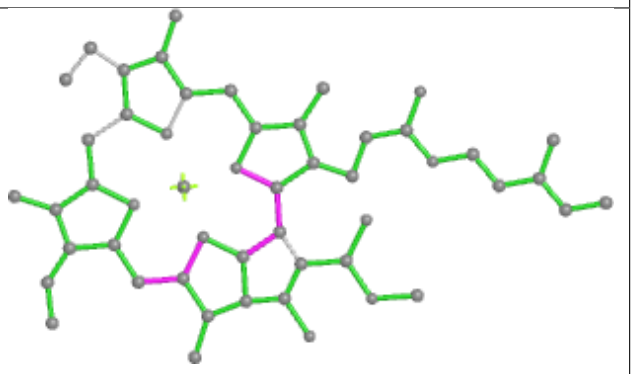
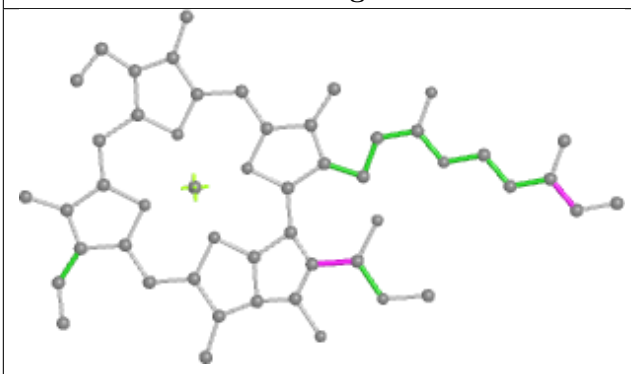


Bond angles



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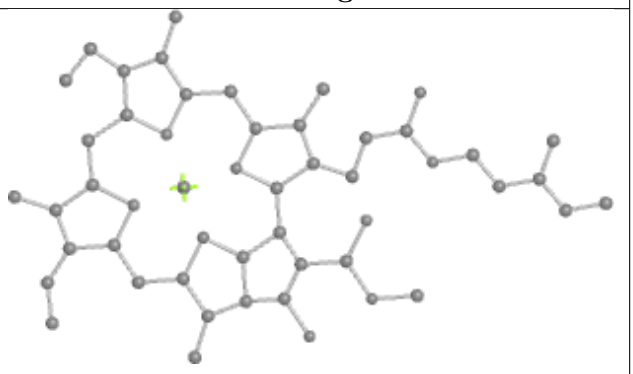
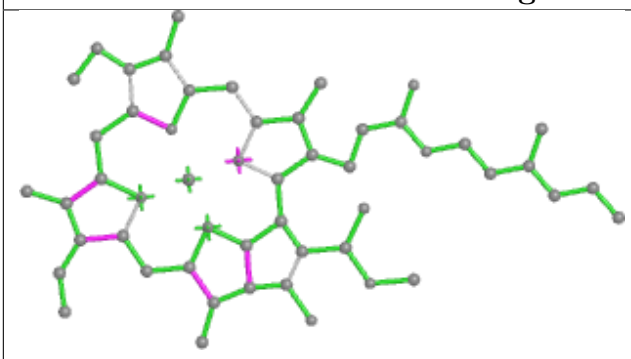


Rings

Ligand CLA 5b 312



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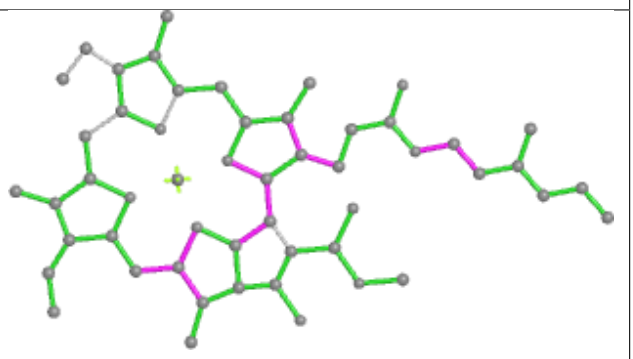
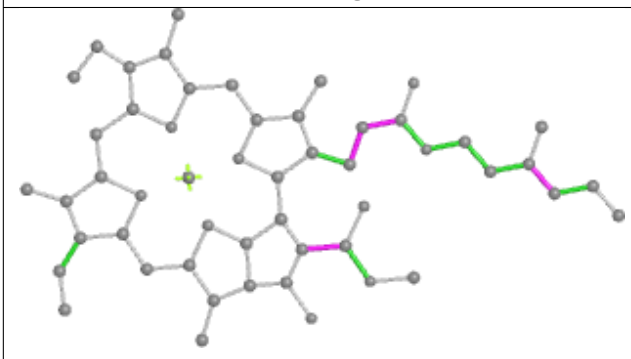


Bond angles



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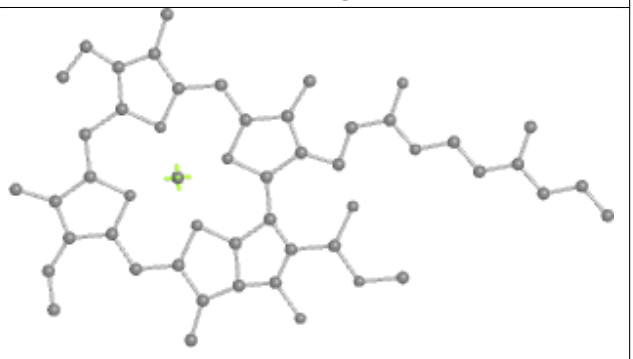
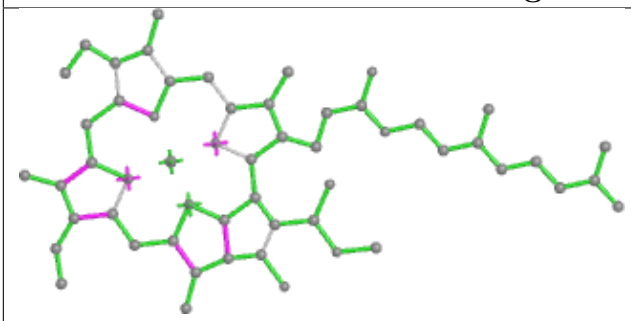
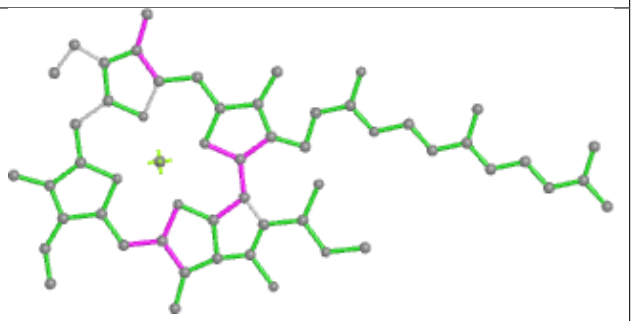


Rings

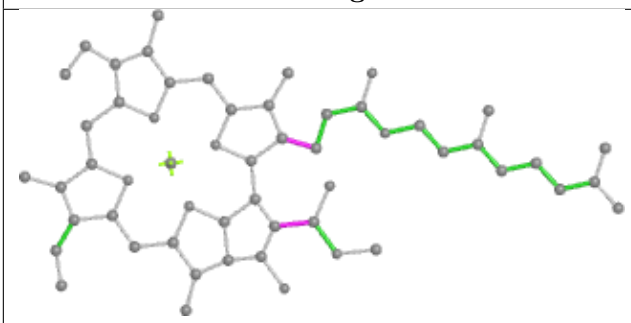
Ligand CLA B 821



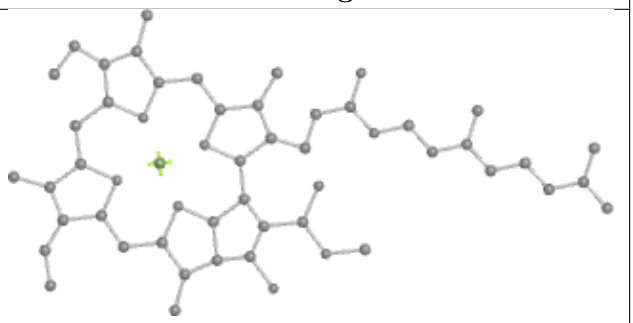
Bond lengths



Bond angles

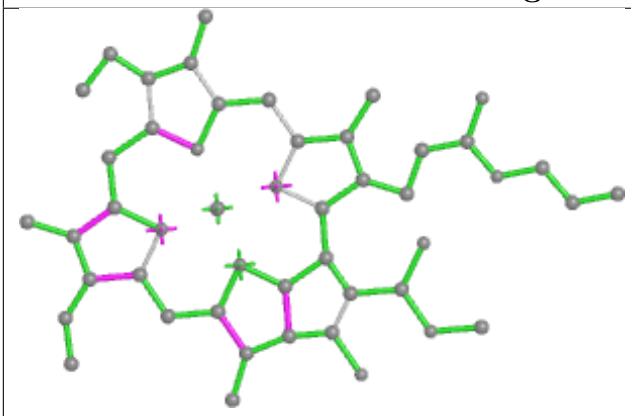


Torsions

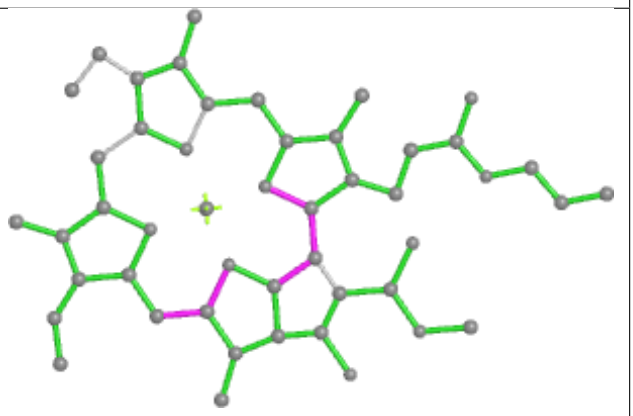


Rings

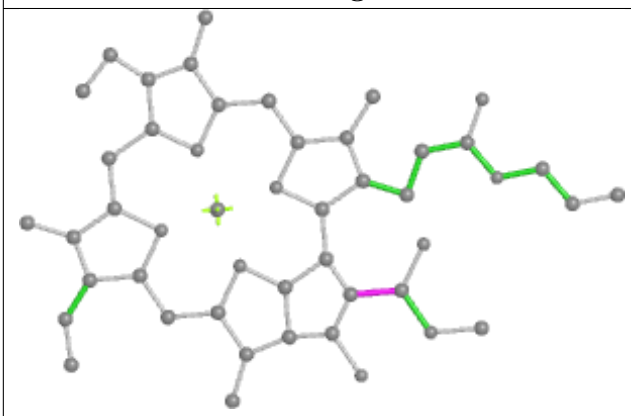
Ligand CLA A 807



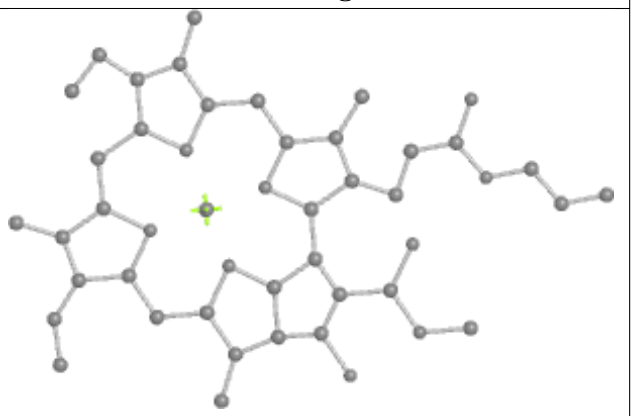
Bond lengths



Bond angles

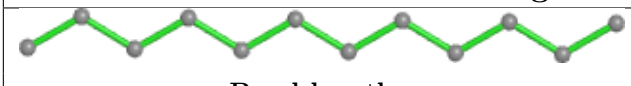


Torsions

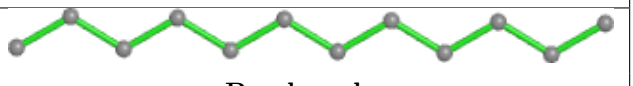


Rings

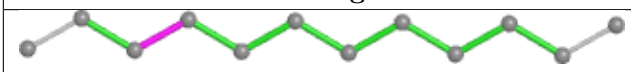
Ligand LFA b 849



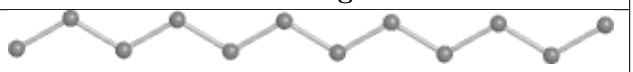
Bond lengths



Bond angles

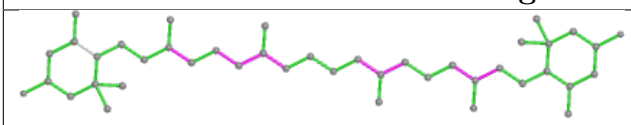


Torsions

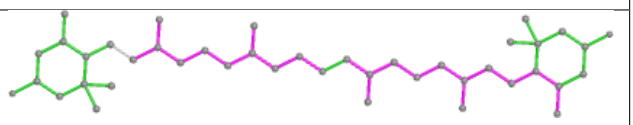


Rings

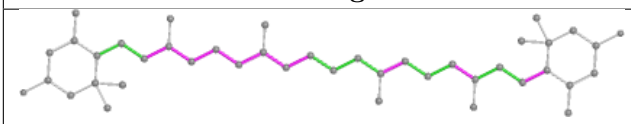
Ligand LUT 6b 319



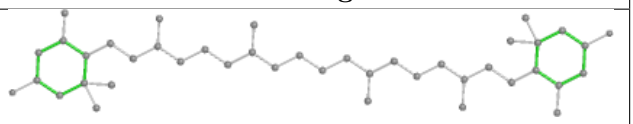
Bond lengths



Bond angles

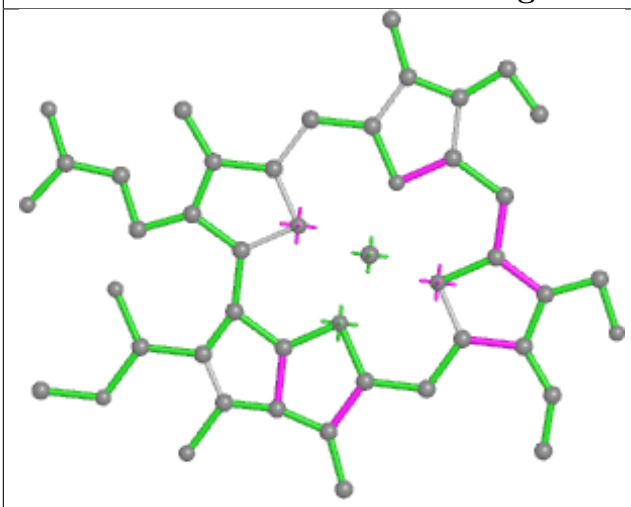


Torsions

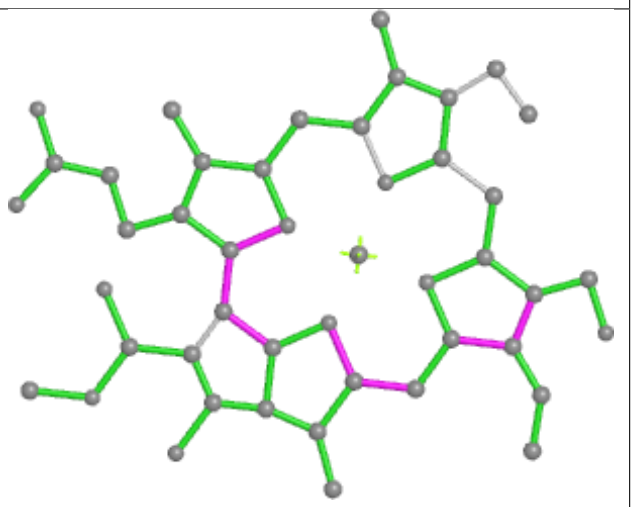


Rings

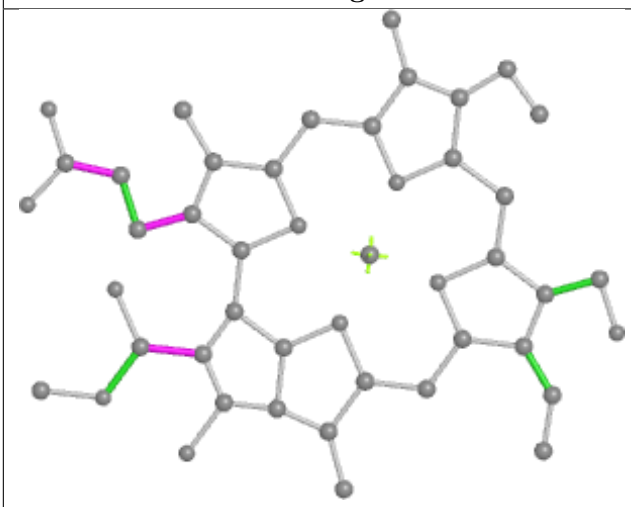
Ligand CHL 2b 313



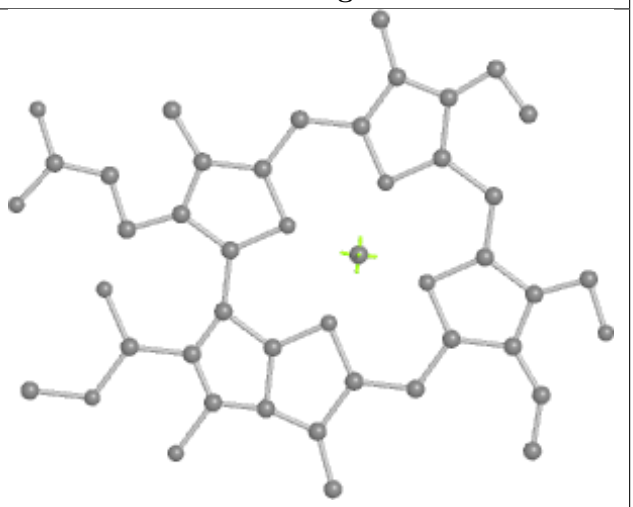
Bond lengths



Bond angles

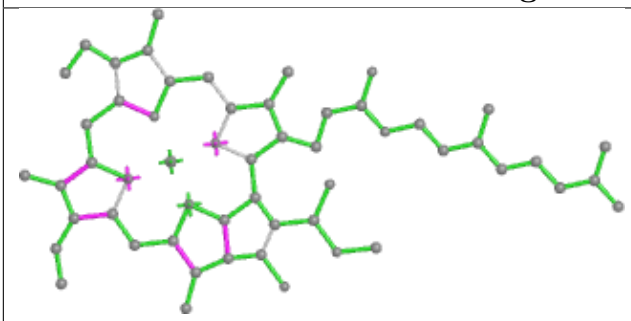


Torsions



Rings

Ligand CLA 2a 301



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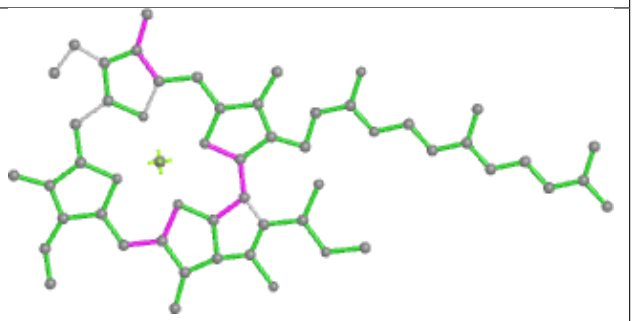
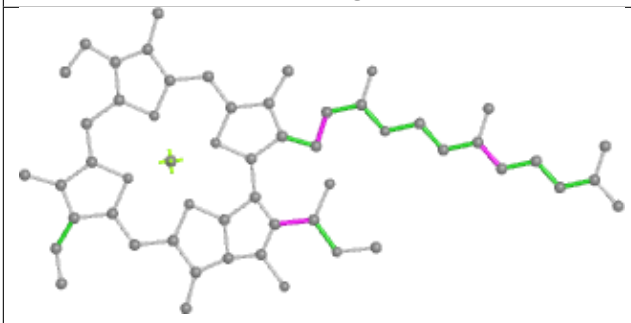
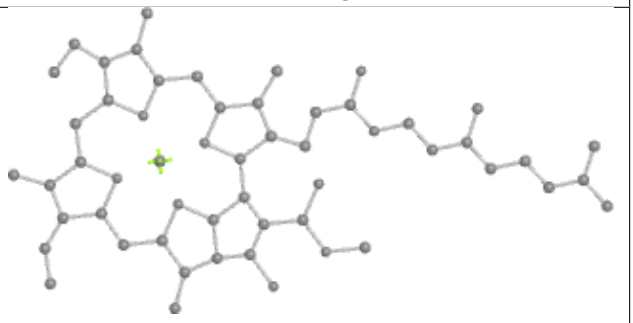


Bond angles

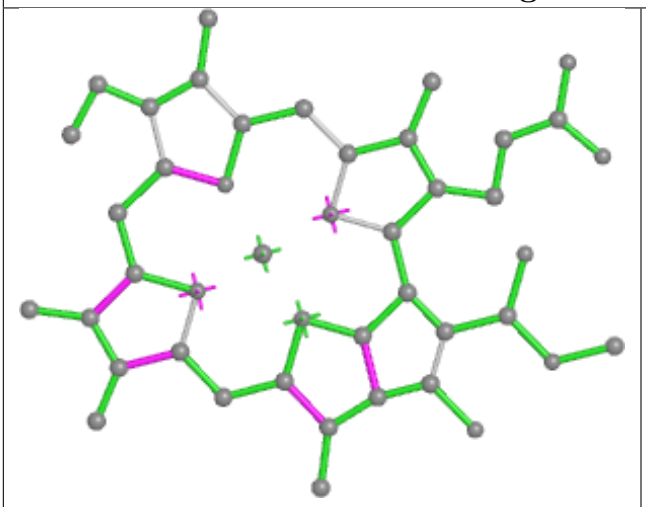


Torsions



Rings

Ligand CLA 5a 311



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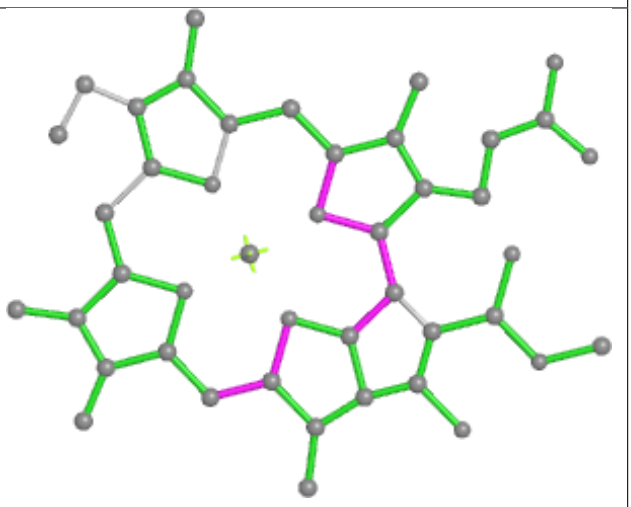
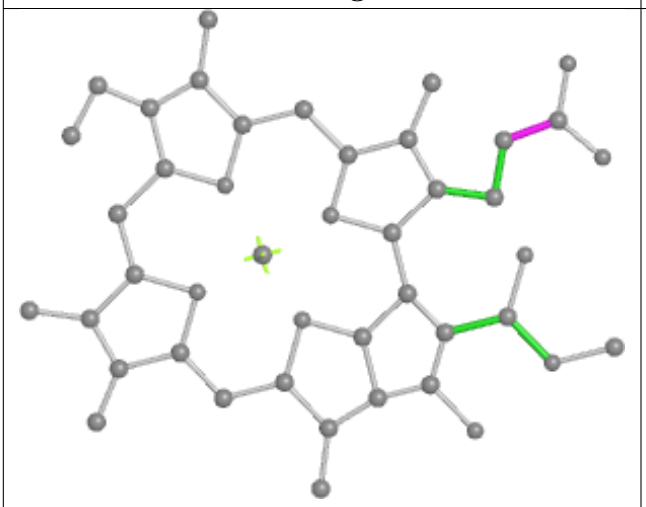
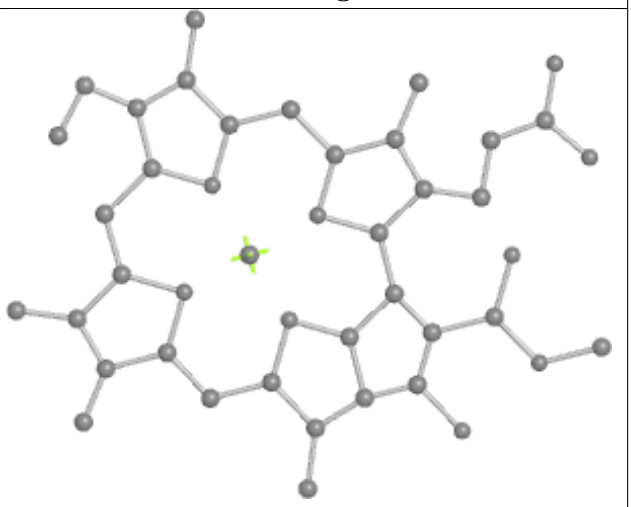


Bond angles

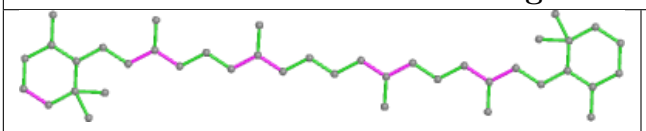


Torsions

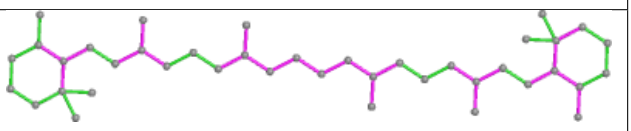


Rings

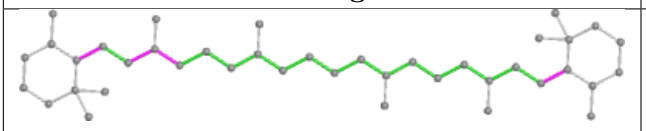
Ligand BCR b 851



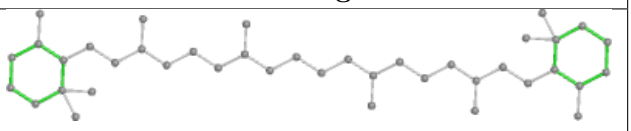
Bond lengths



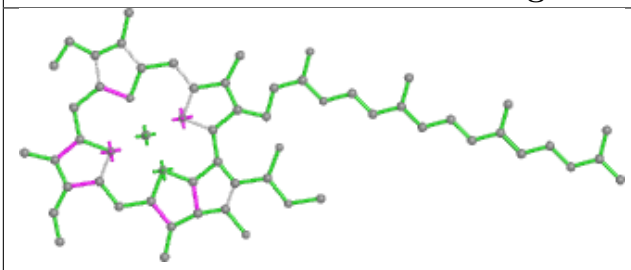
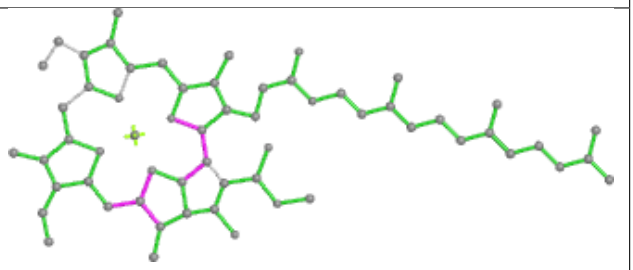
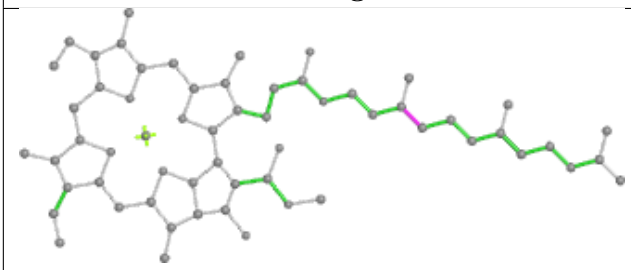
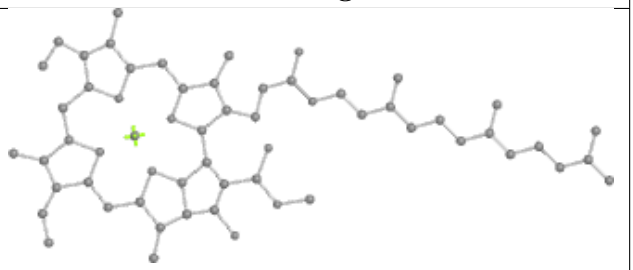
Bond angles

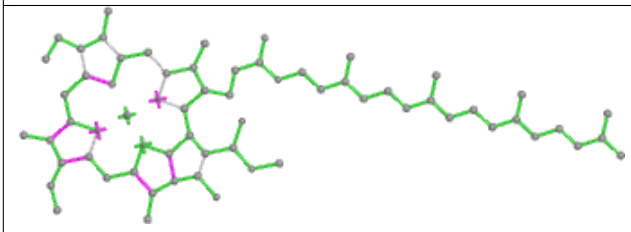
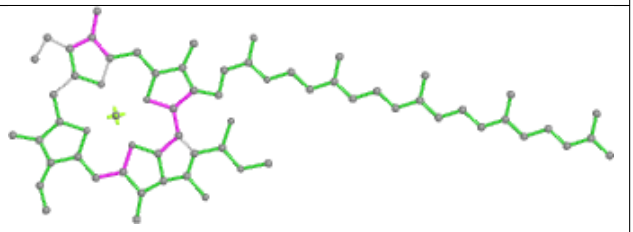
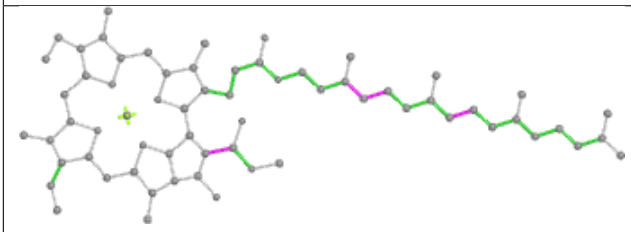
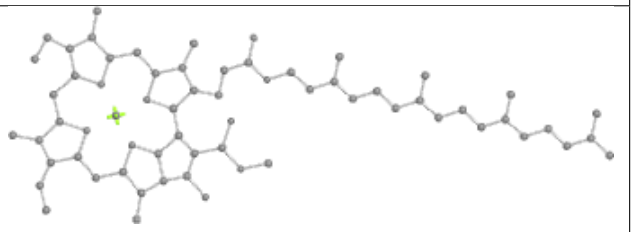


Torsions

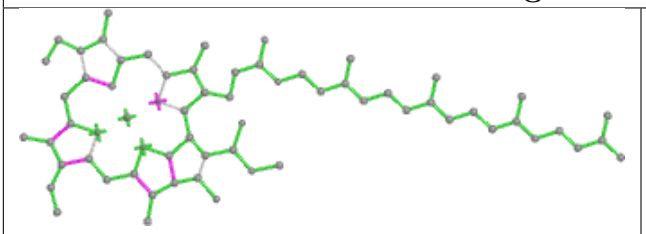


Rings

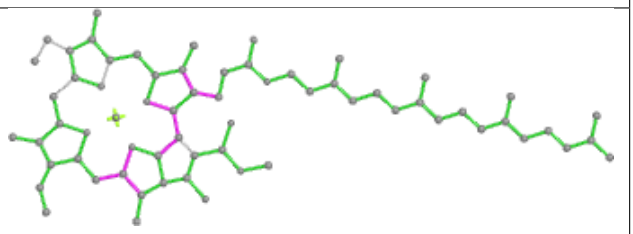
Ligand CLA b 806	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA b 852	
	
Bond lengths	Bond angles
	
Torsions	Rings

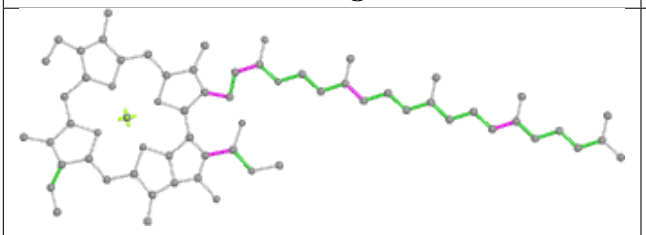
Ligand CLA B 823



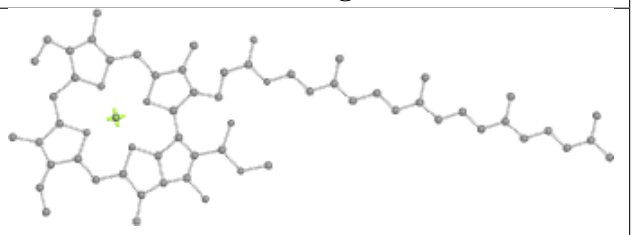
Bond lengths



Bond angles

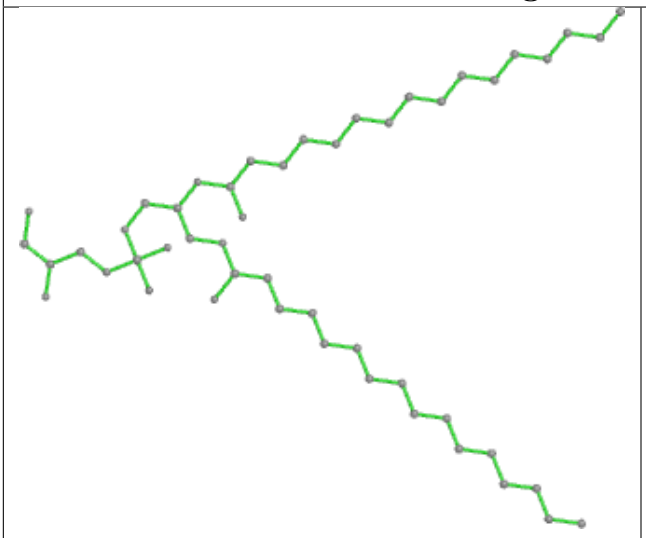


Torsions

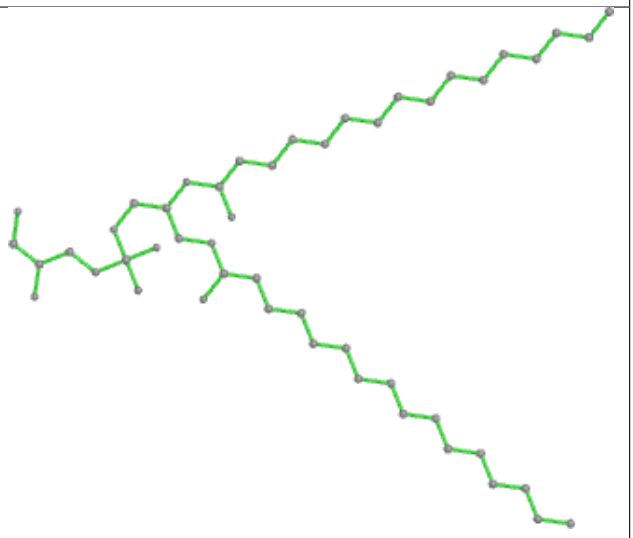


Rings

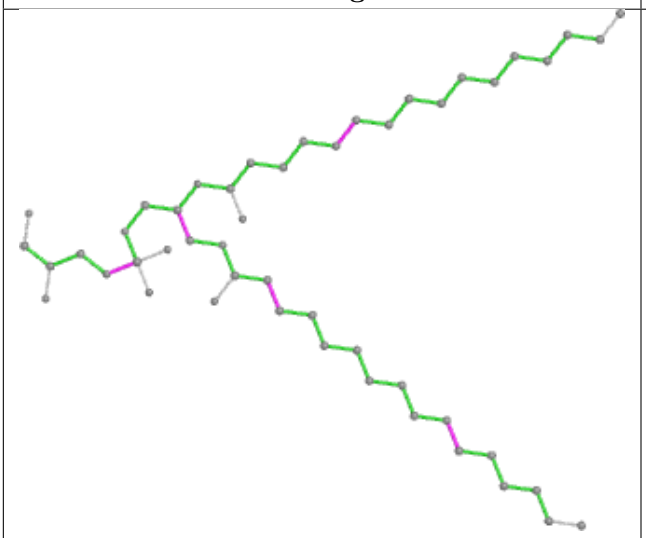
Ligand LHG A 845



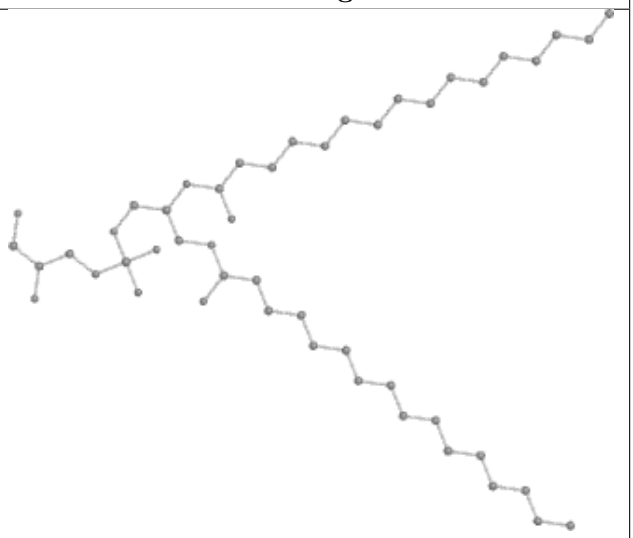
Bond lengths



Bond angles

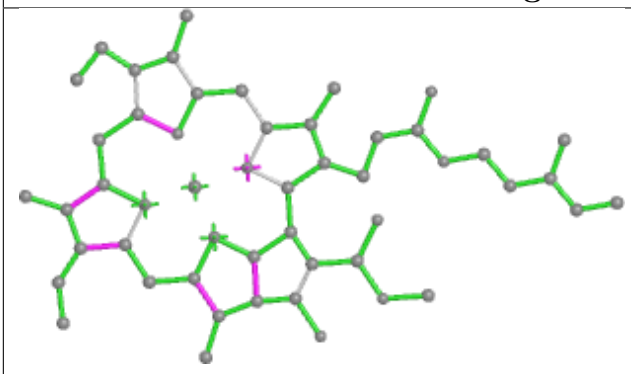


Torsions

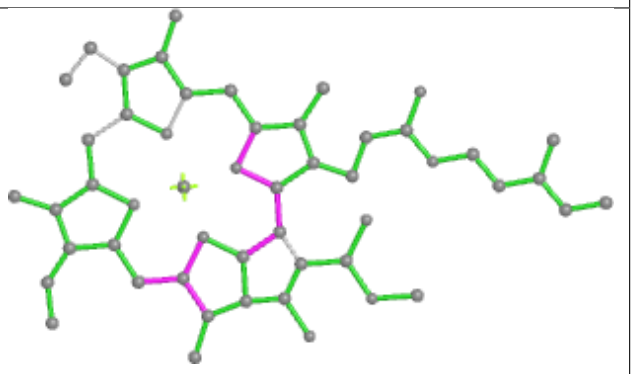


Rings

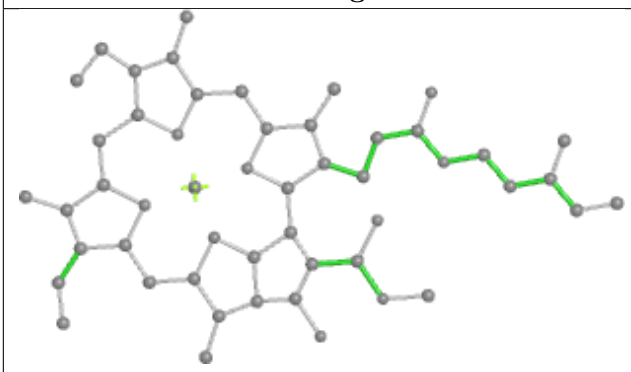
Ligand CLA A 853



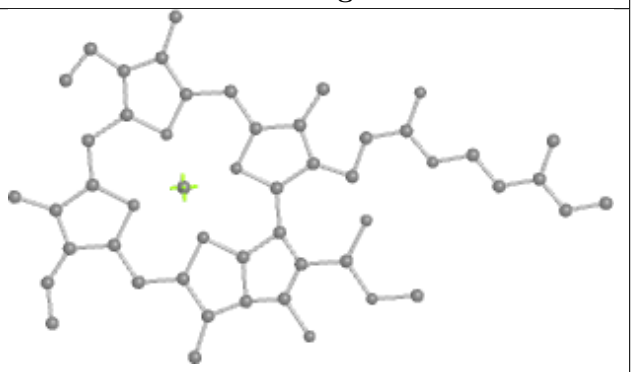
Bond lengths



Bond angles

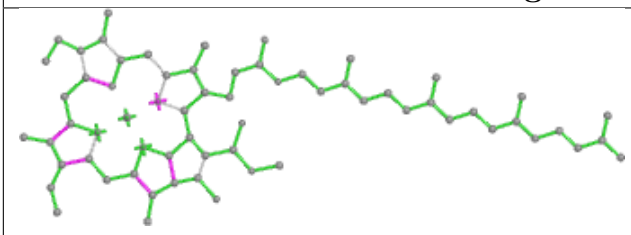


Torsions

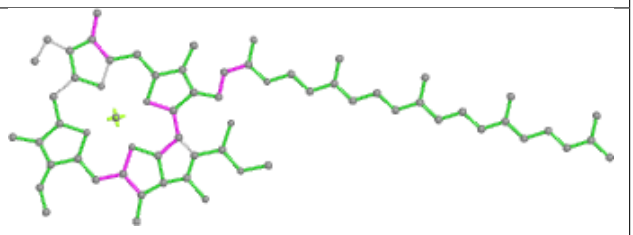


Rings

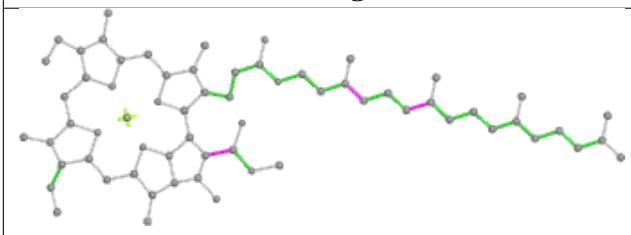
Ligand CLA B 836



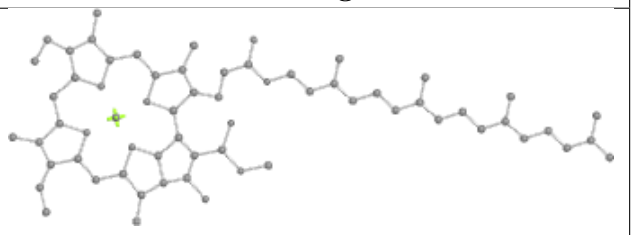
Bond lengths



Bond angles

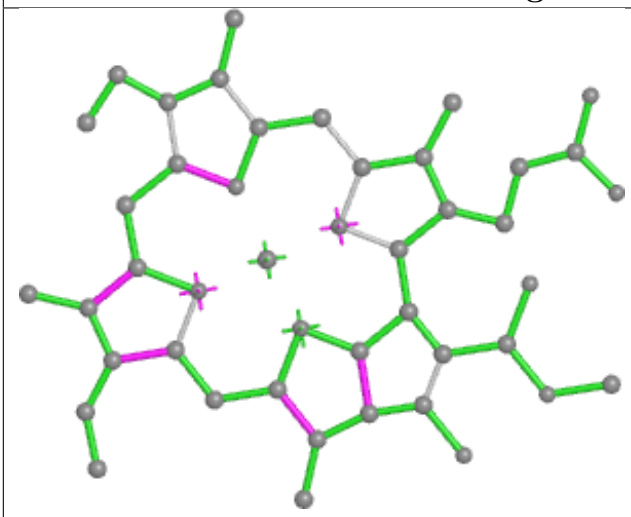


Torsions



Rings

Ligand CLA L 301



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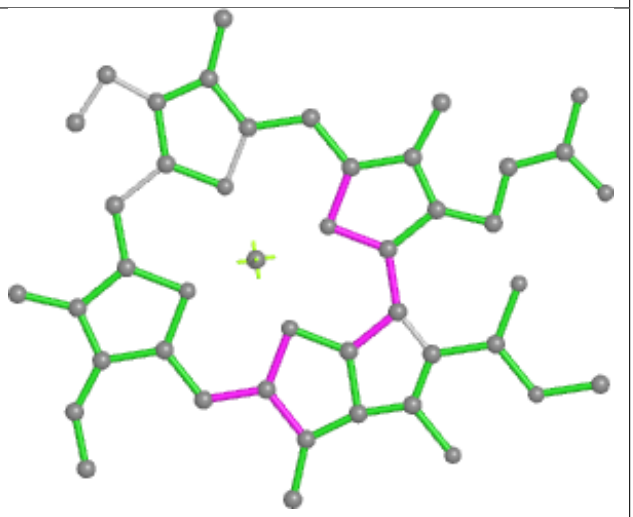
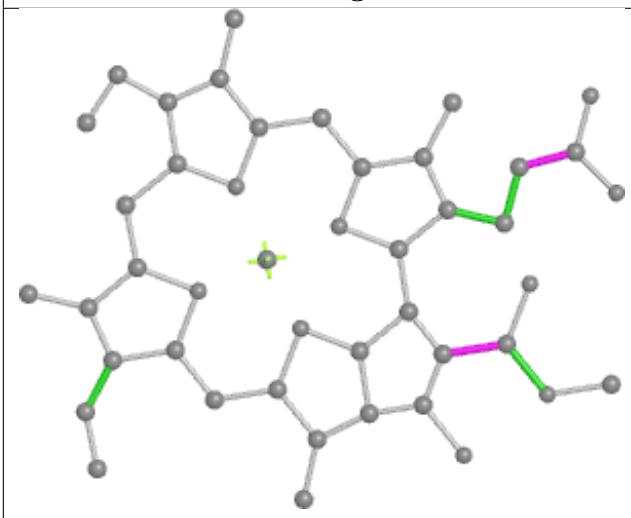
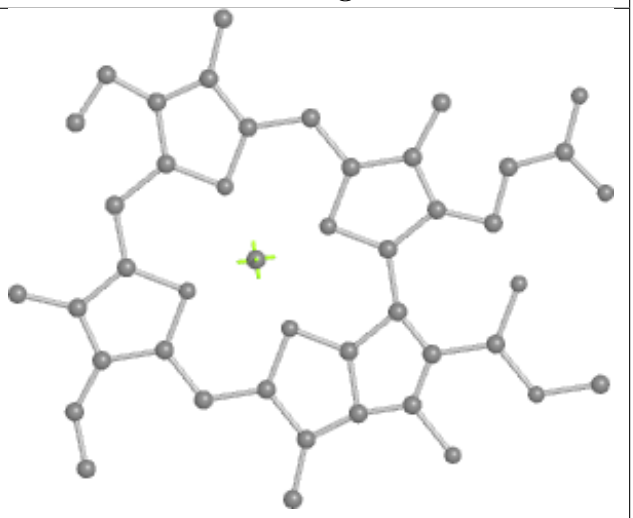


Bond angles

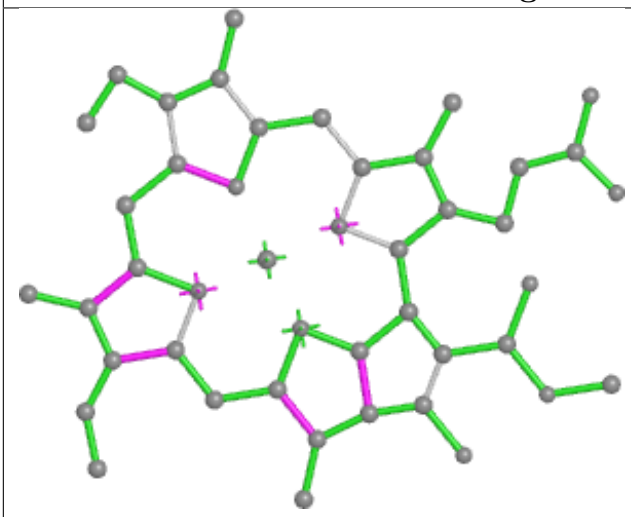


Torsions

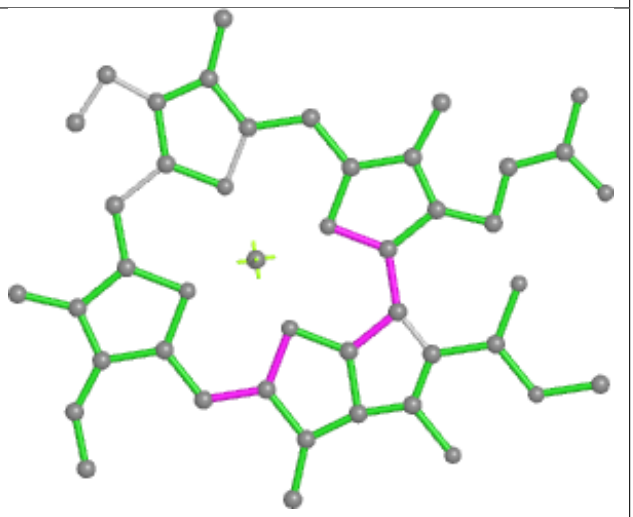


Rings

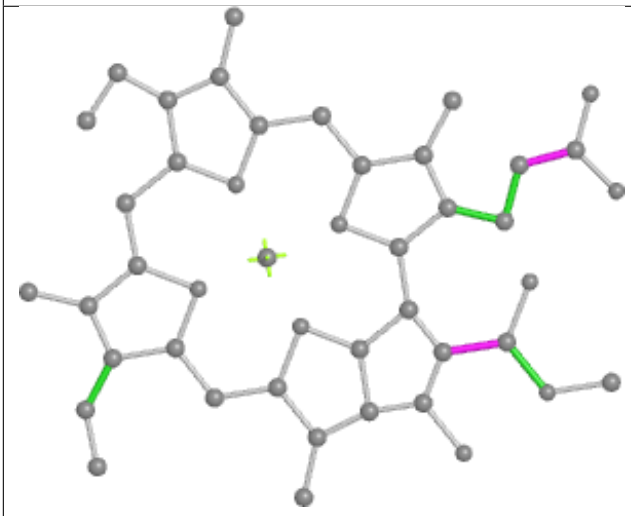
Ligand CLA 6a 317



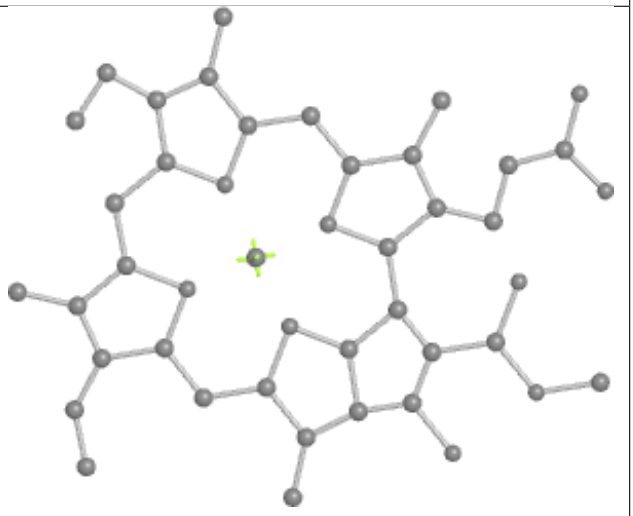
Bond lengths



Bond angles

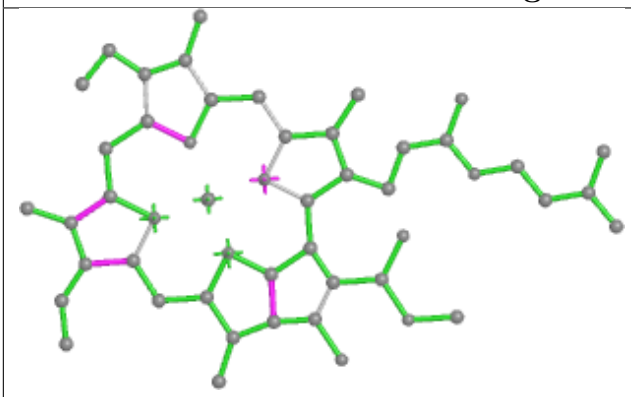


Torsions

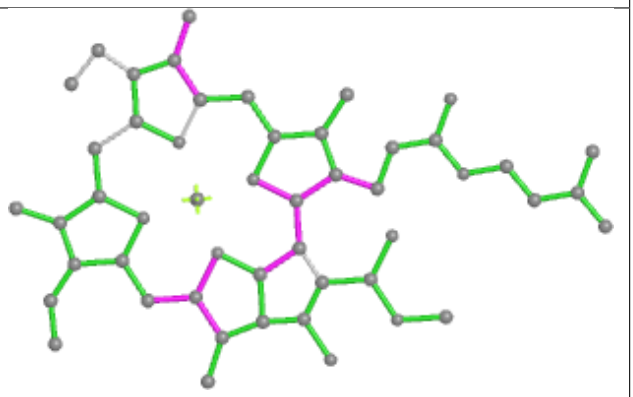


Rings

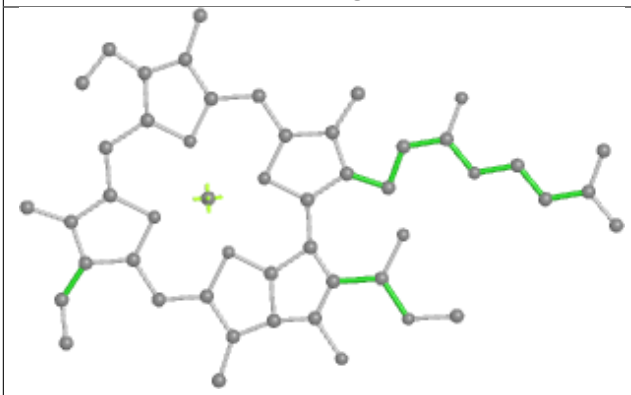
Ligand CLA A 813



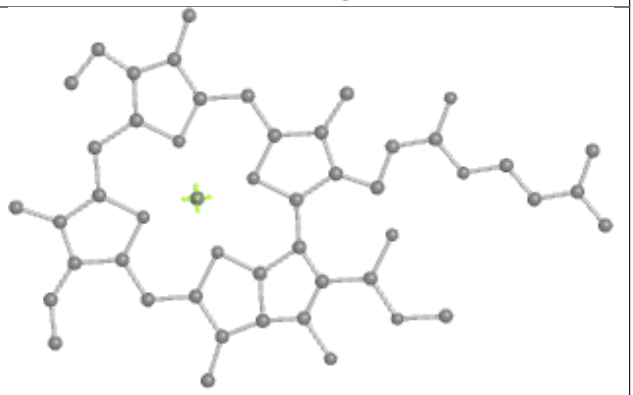
Bond lengths



Bond angles

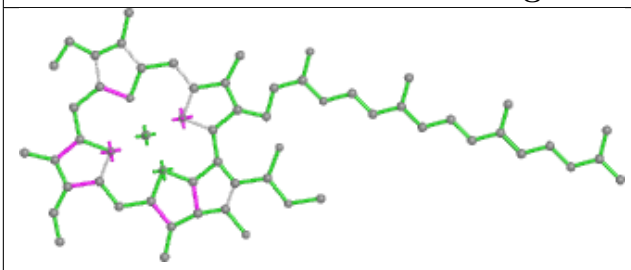


Torsions

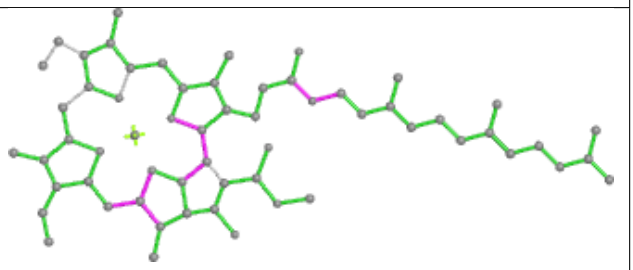


Rings

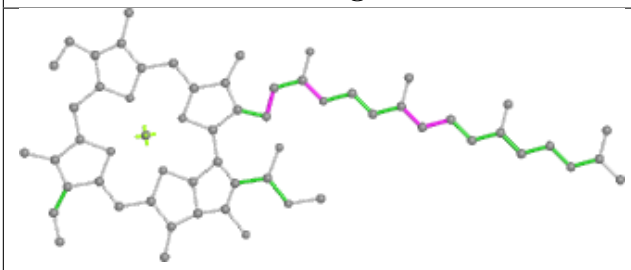
Ligand CLA A 816



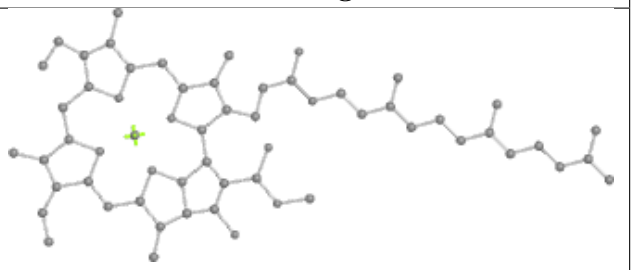
Bond lengths



Bond angles

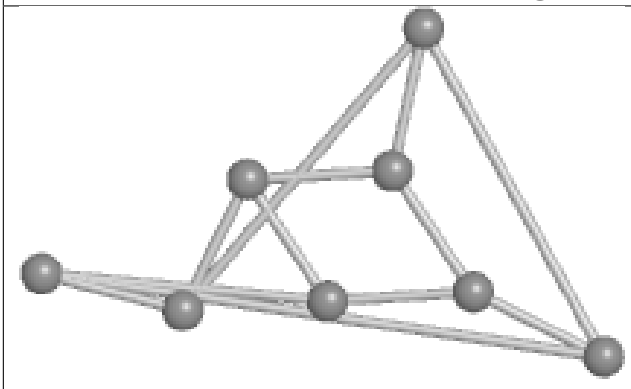


Torsions

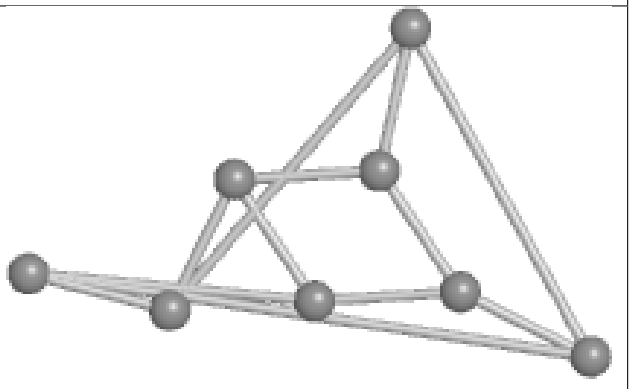


Rings

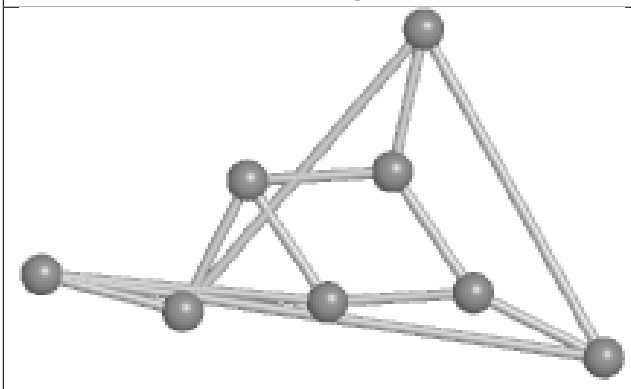
Ligand SF4 C 102



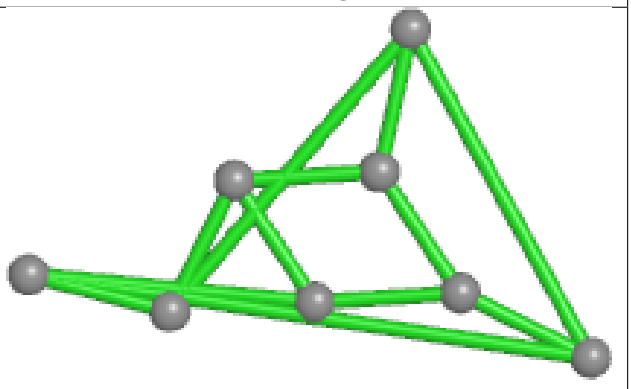
Bond lengths



Bond angles

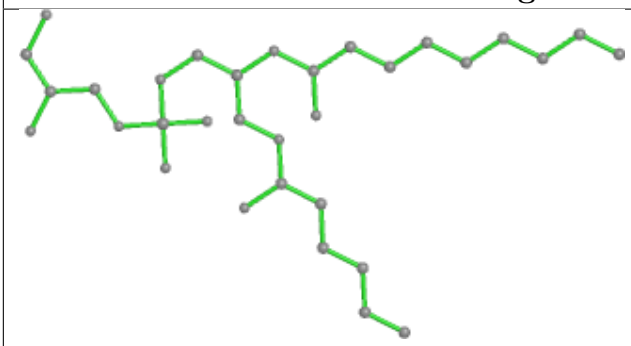


Torsions



Rings

Ligand LHG 2a 316



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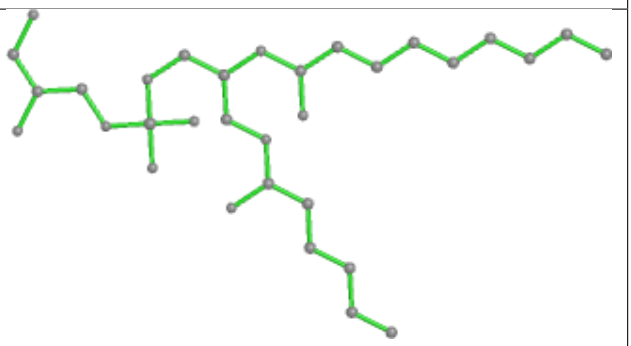
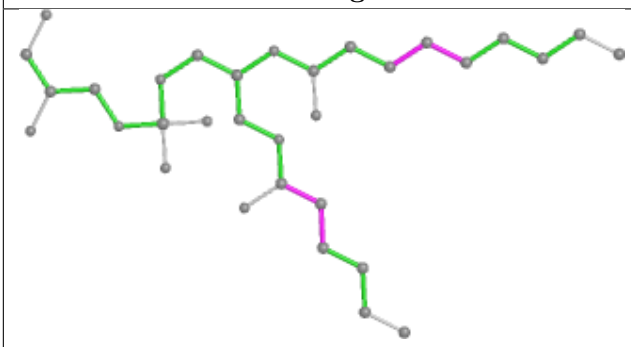


Bond angles



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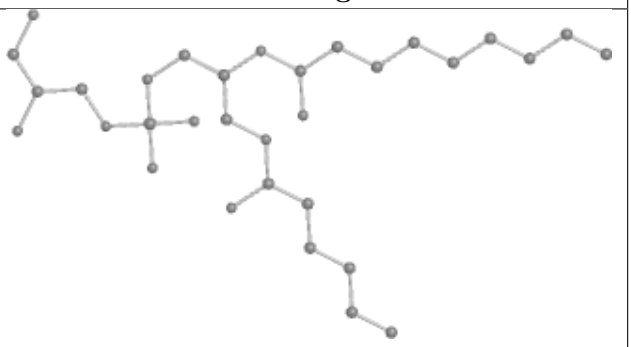
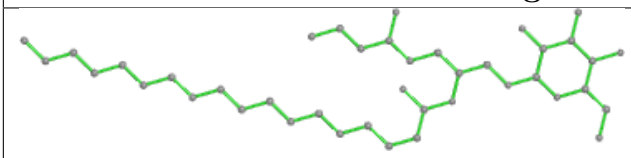


Rings

Ligand LMG J 104



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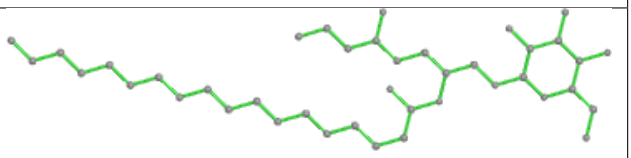
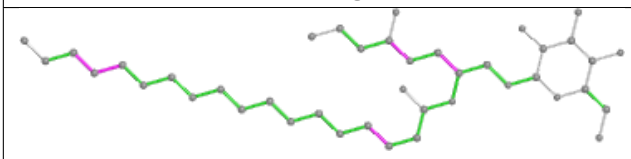
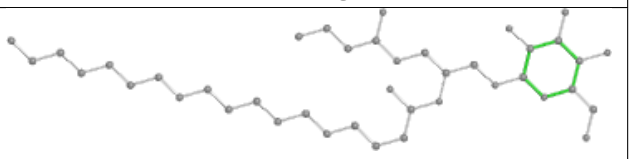


Bond angles

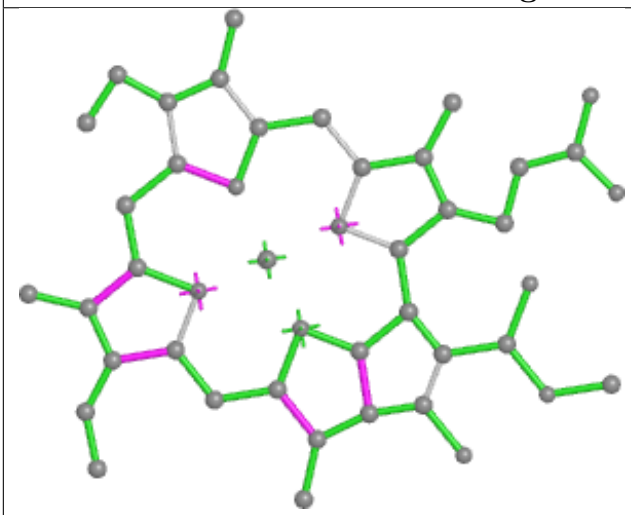


Torsions



Rings

Ligand CLA 2a 309



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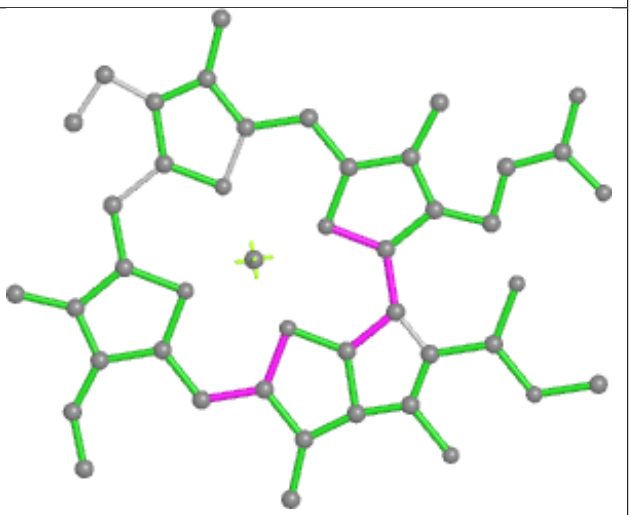
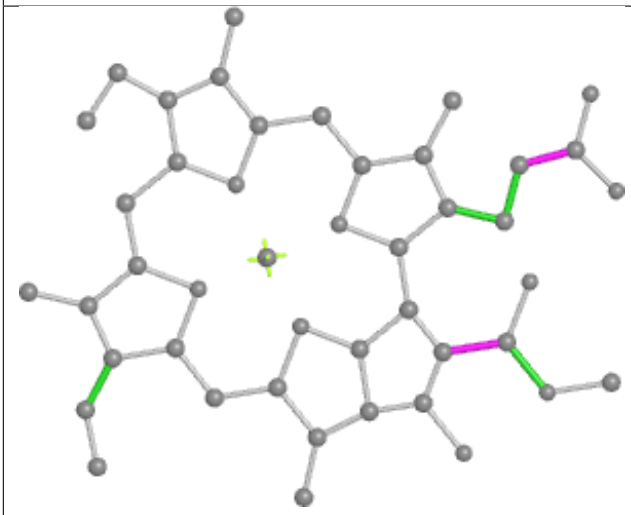


Bond angles



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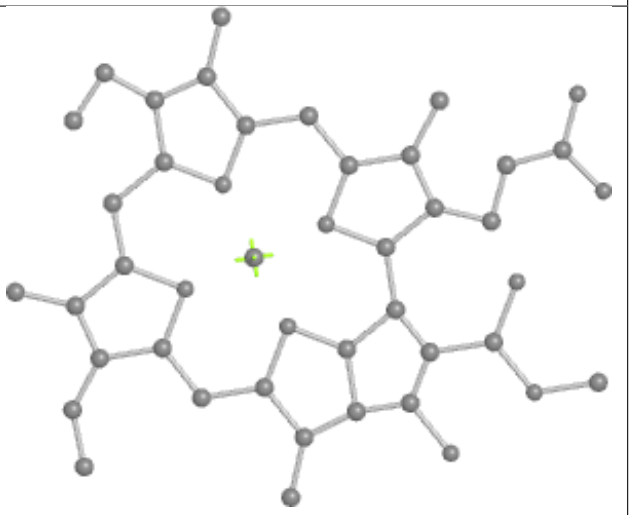
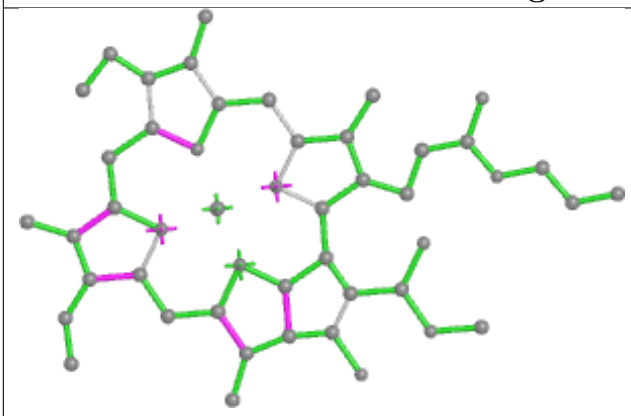
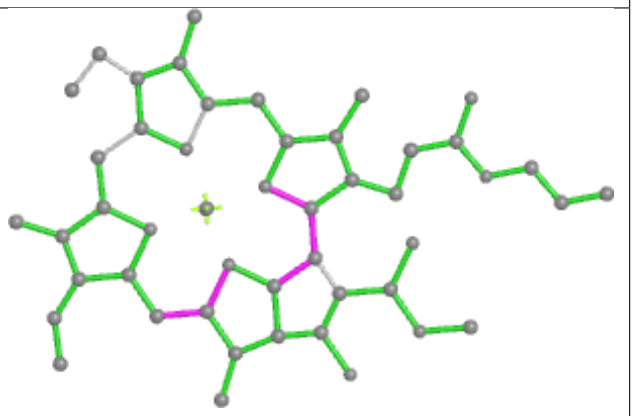


Rings

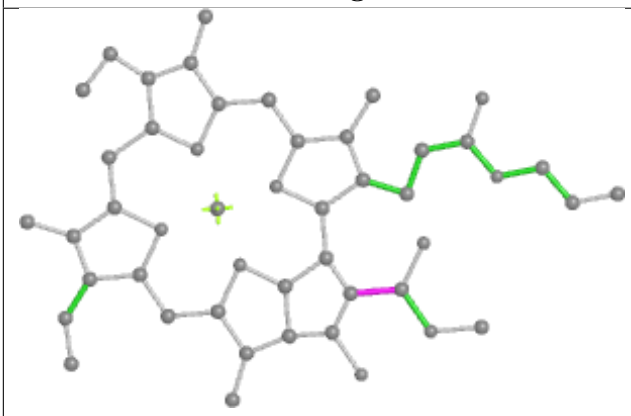
Ligand CLA a 807



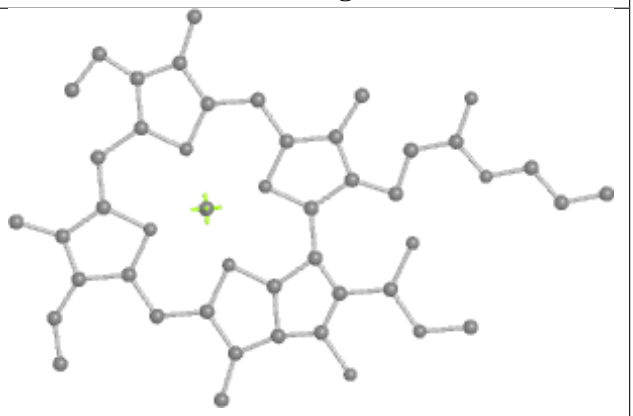
Bond lengths



Bond angles

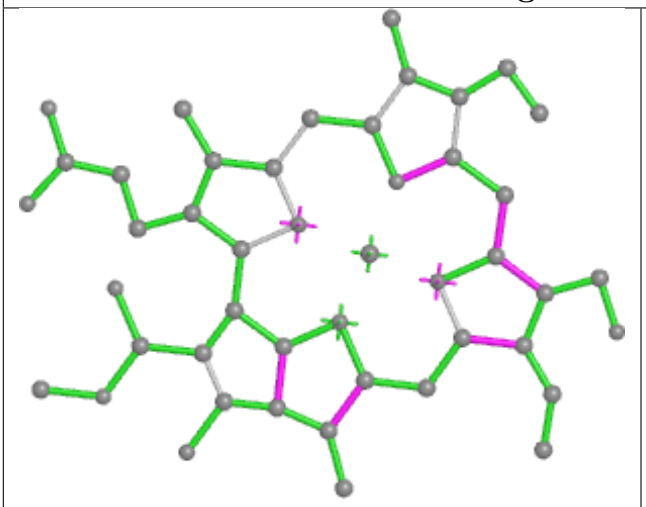


Torsions



Rings

Ligand CHL 3b 307



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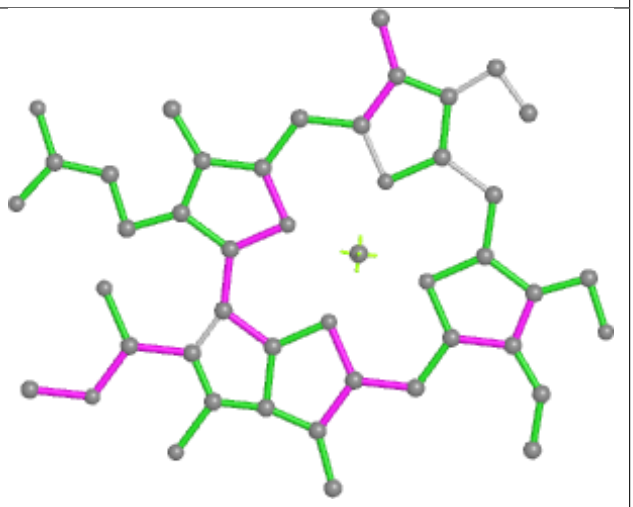
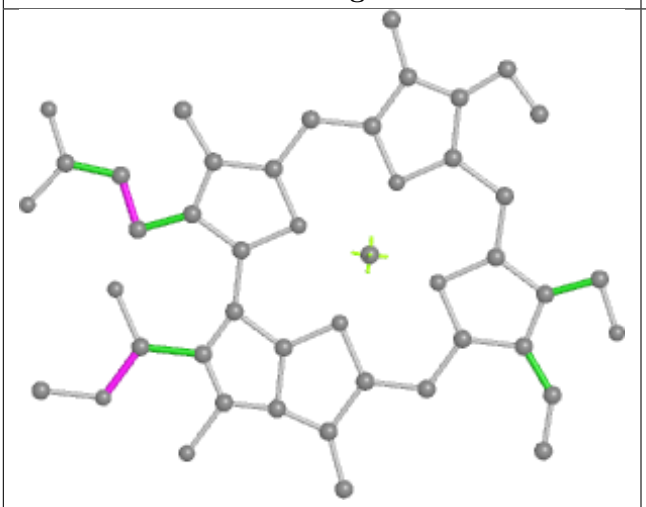


Bond angles



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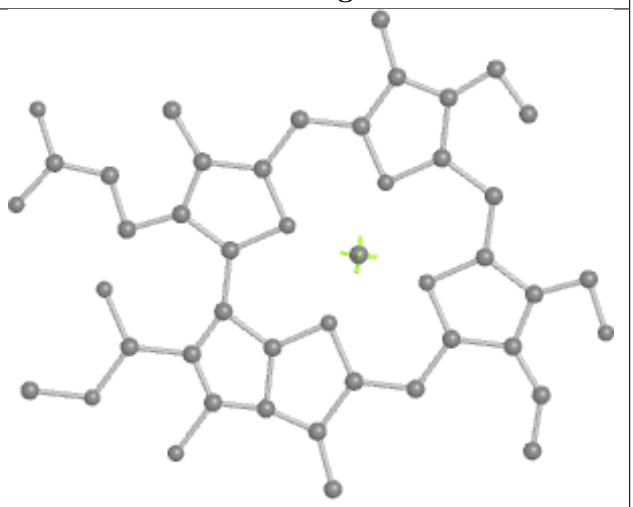
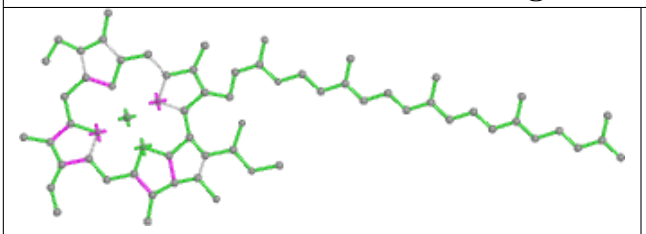


Rings

Ligand CLA b 805



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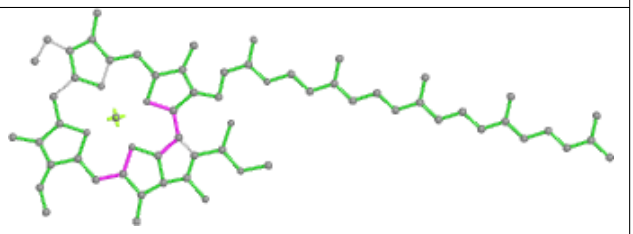
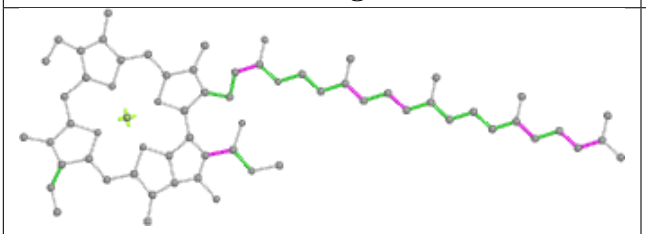


Bond angles



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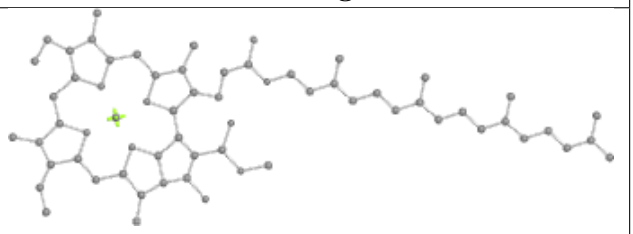
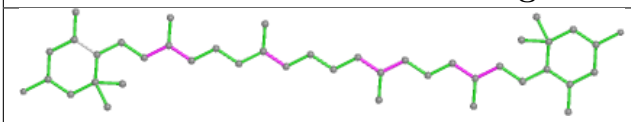
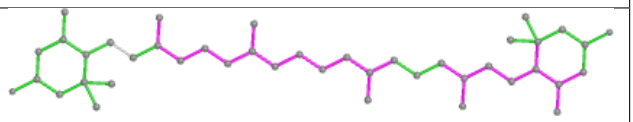


Rings

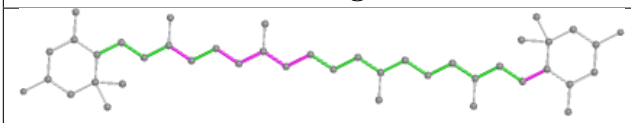
Ligand LUT 2b 314



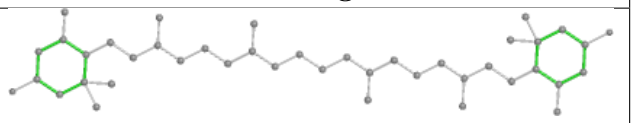
Bond lengths



Bond angles

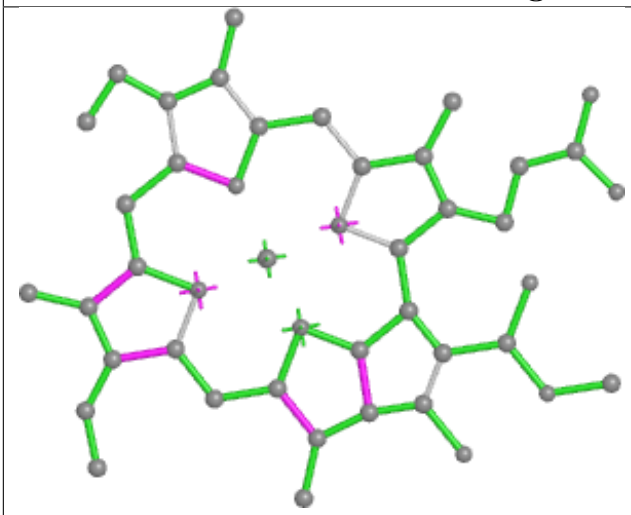


Torsions



Rings

Ligand CLA b 803



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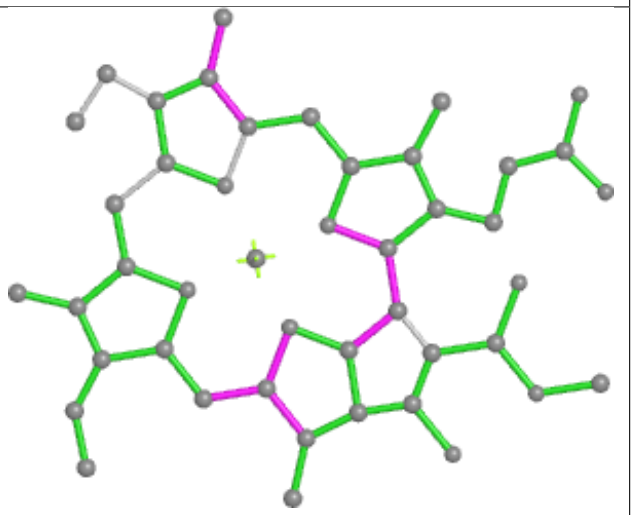
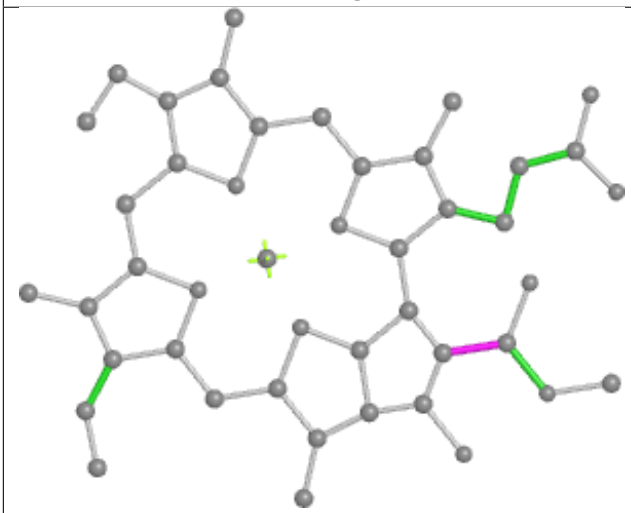


Bond angles



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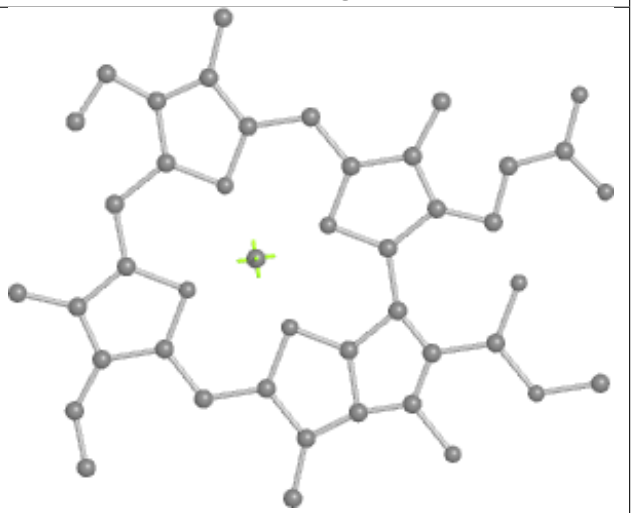
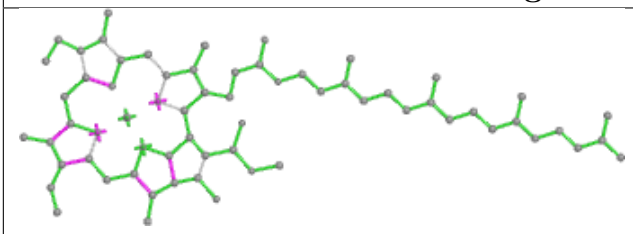


Rings

Ligand CLA B 839



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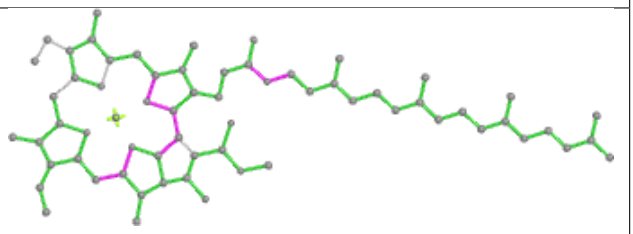
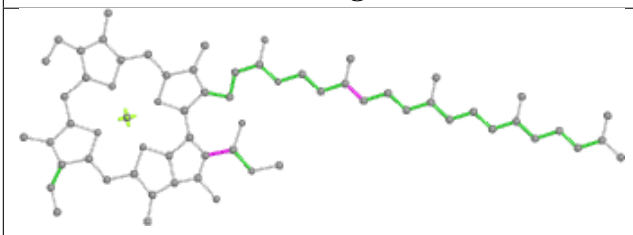


Bond angles



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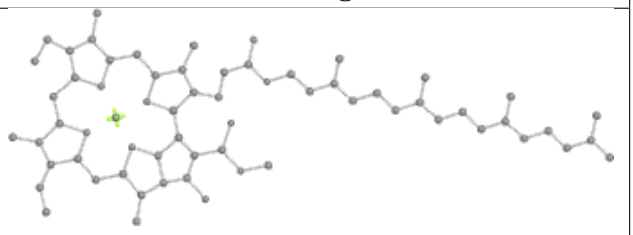
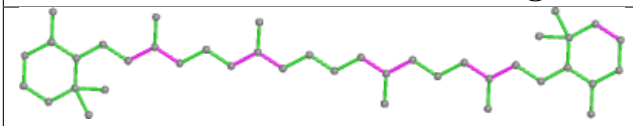


Rings

Ligand BCR a 850



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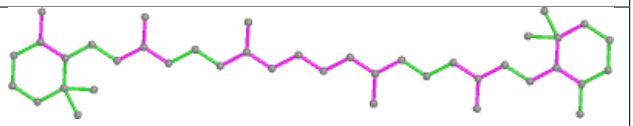
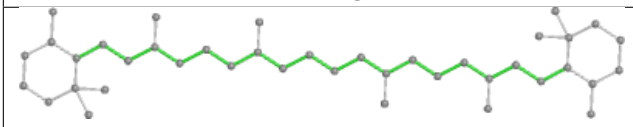


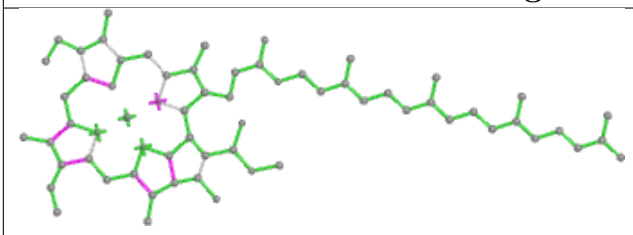
Bond angles



Torsions

Rings

Ligand CLA B 838



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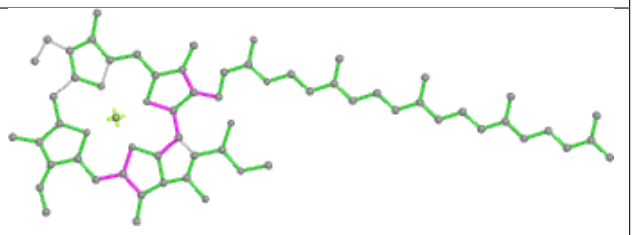
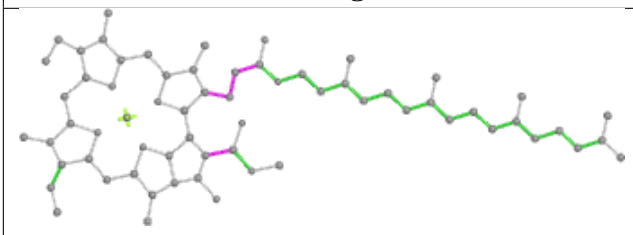


Bond angles



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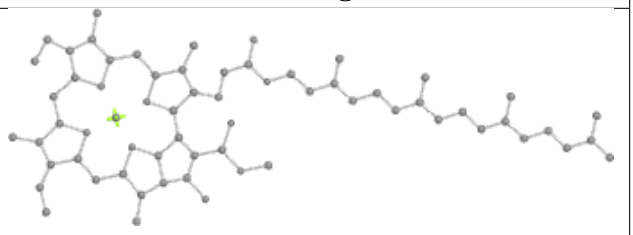
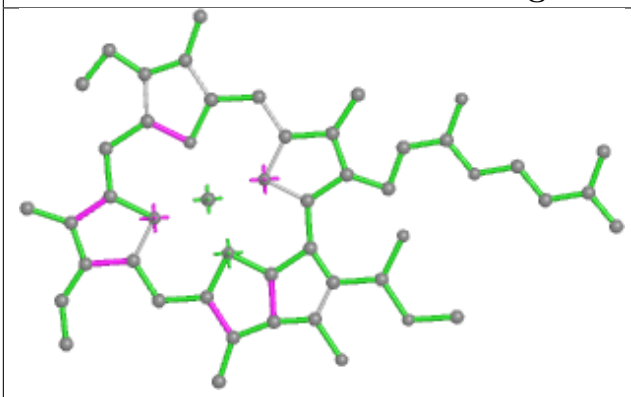


Rings

Ligand CLA a 831



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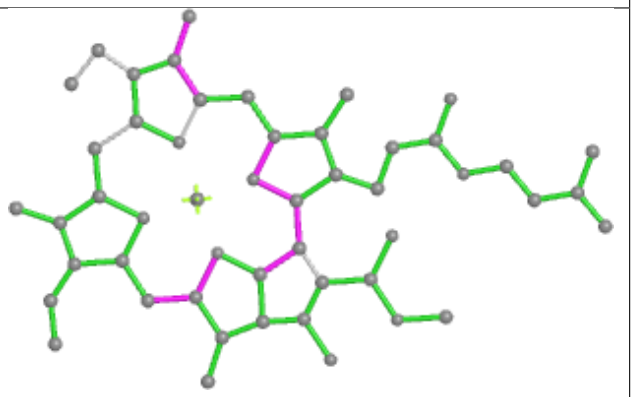
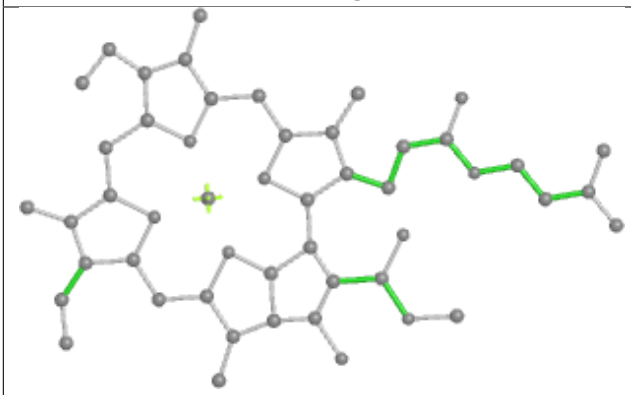


Bond angles



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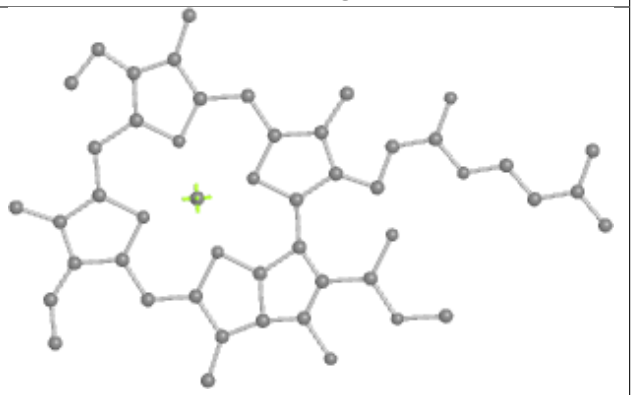
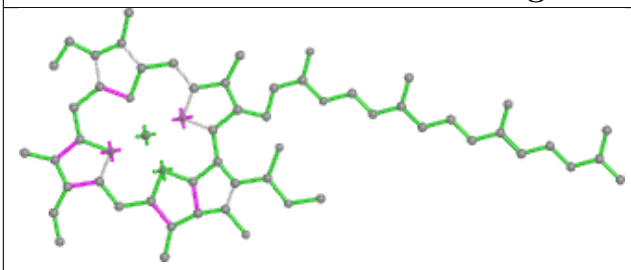
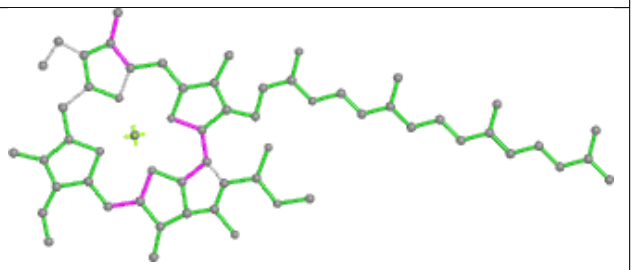


Rings

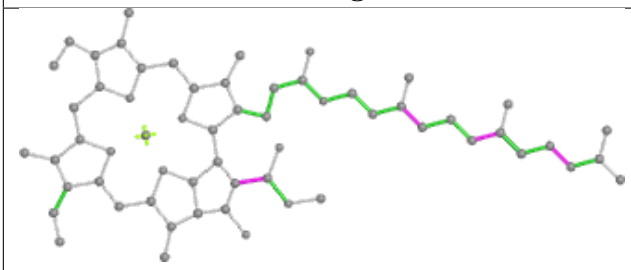
Ligand CLA b 810



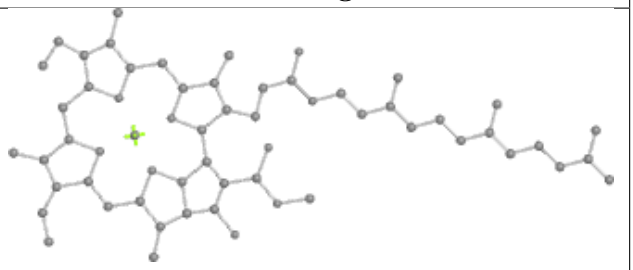
Bond lengths



Bond angles

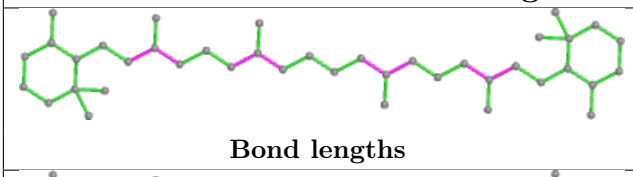


Torsions

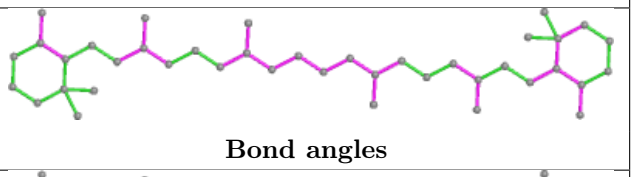


Rings

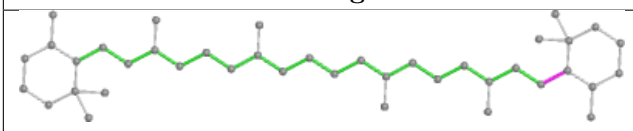
Ligand BCR G 204



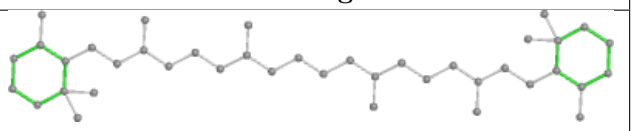
Bond lengths



Bond angles

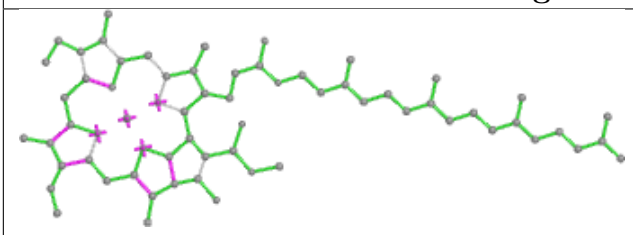


Torsions



Rings

Ligand CL0 a 802



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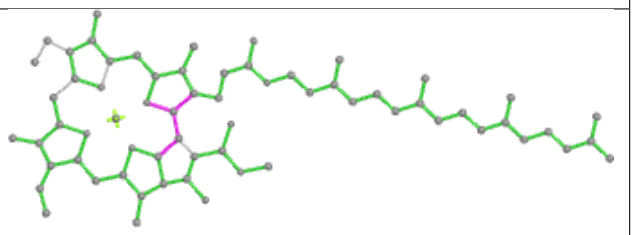
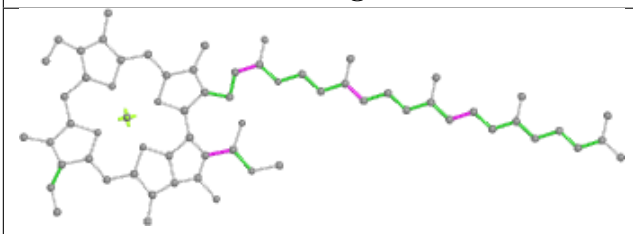
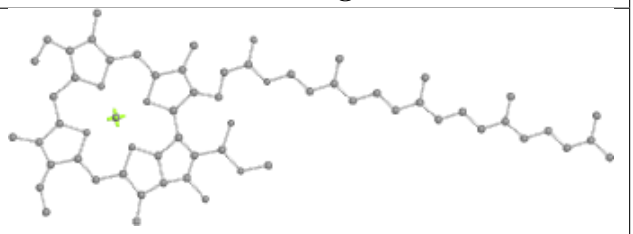


Bond angles

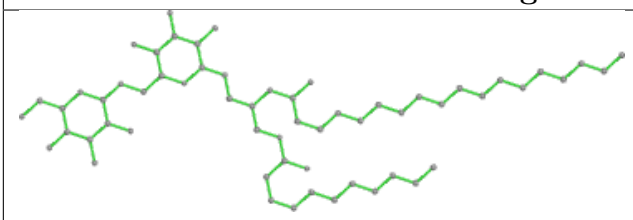


Torsions



Rings

Ligand DGD B 847



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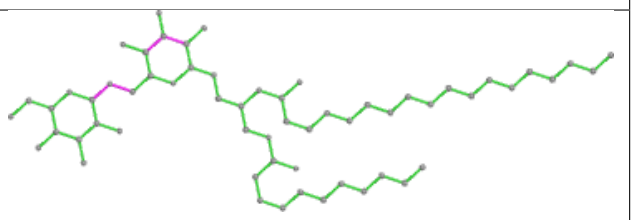
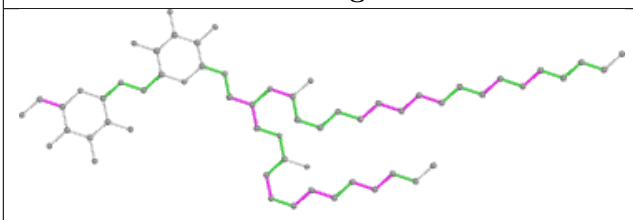
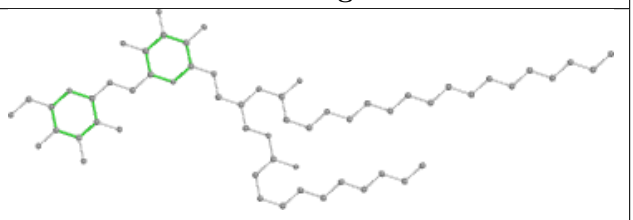


Bond angles

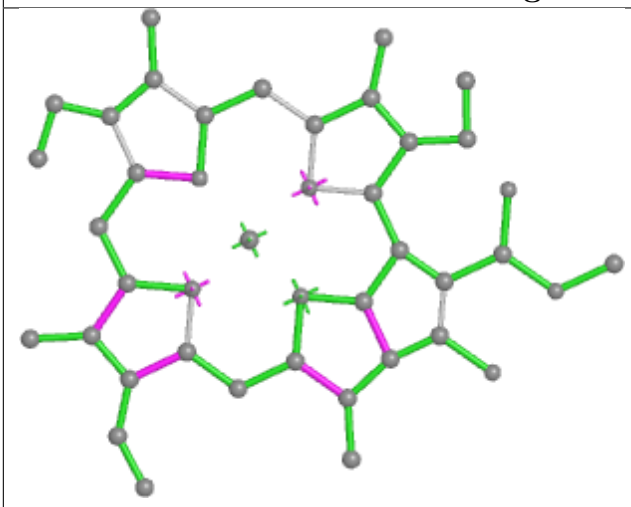


Torsions



Rings

Ligand CLA A 814



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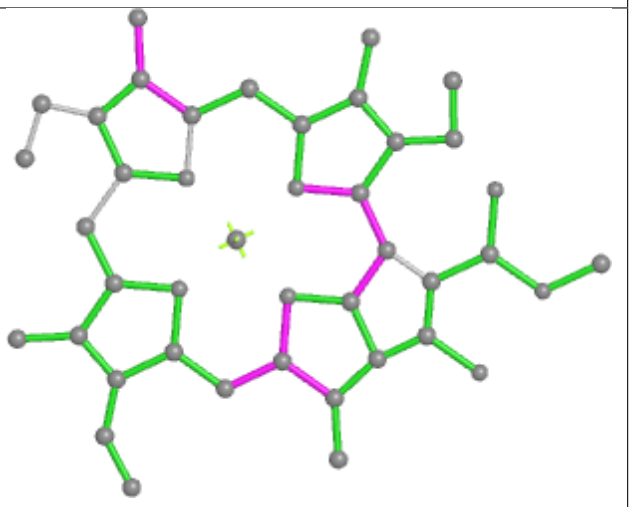
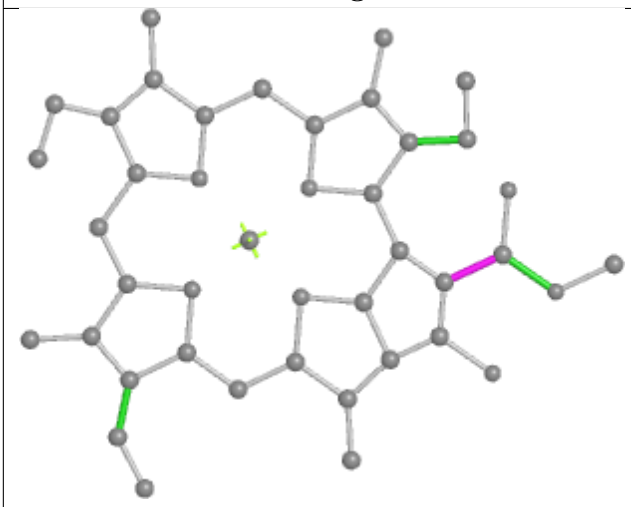


Bond angles



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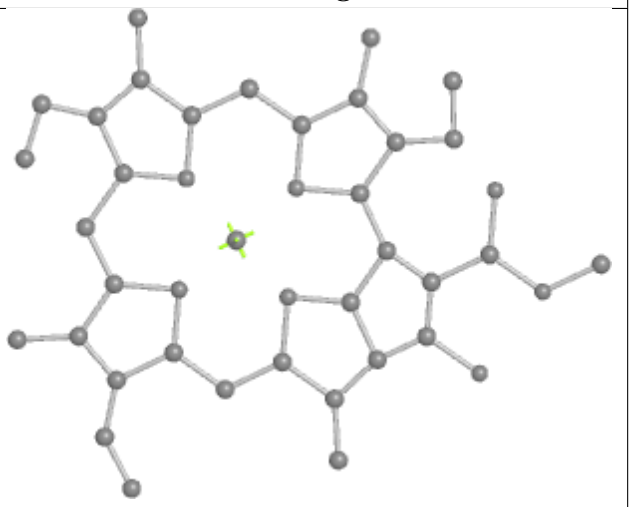
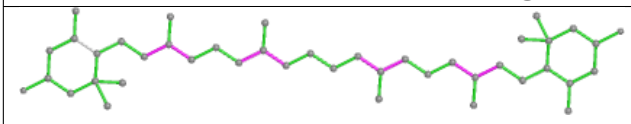


Rings

Ligand LUT 5b 317



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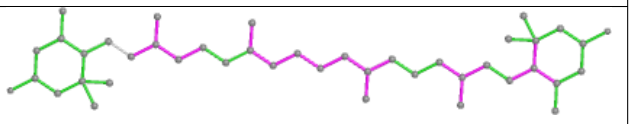
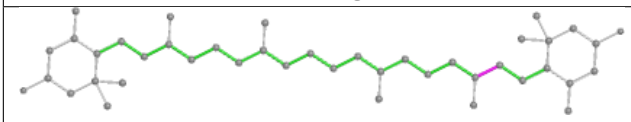


Bond angles



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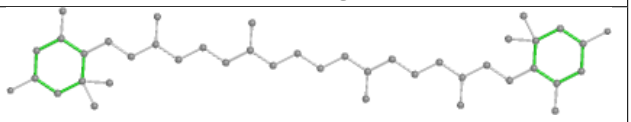
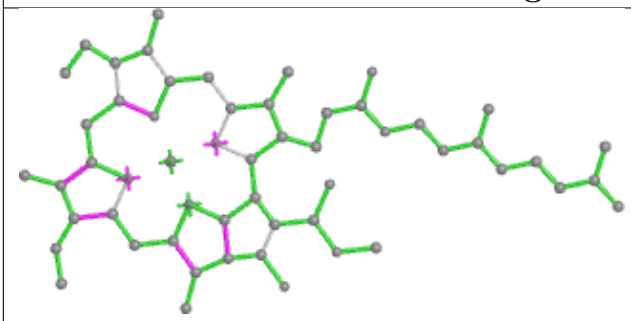


Rings

Ligand CLA B 813



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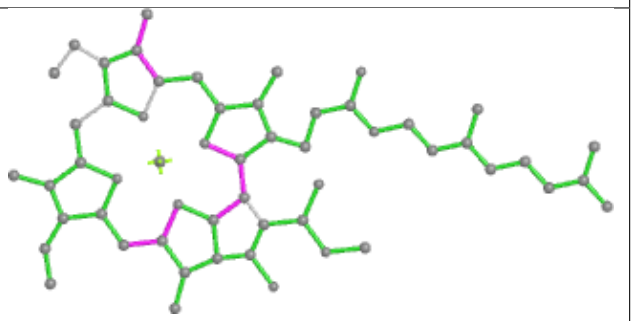

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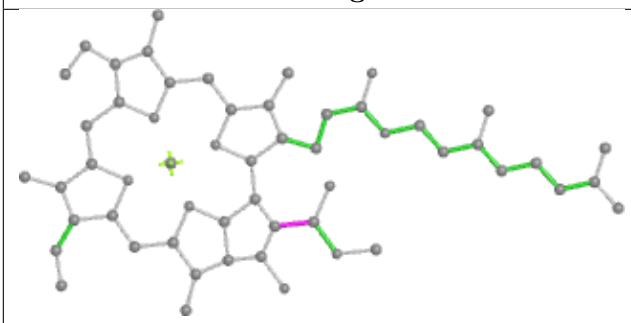

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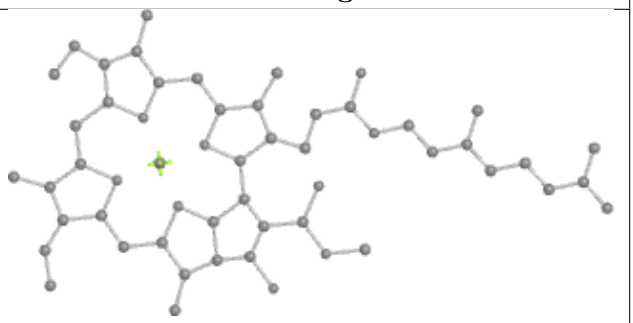
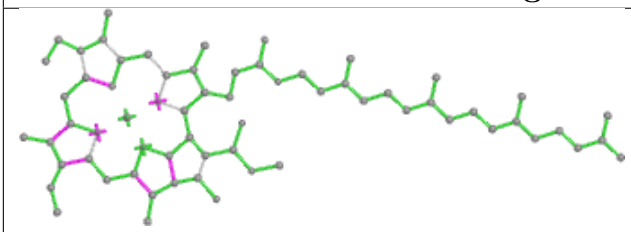


Rings

Ligand CLA A 832



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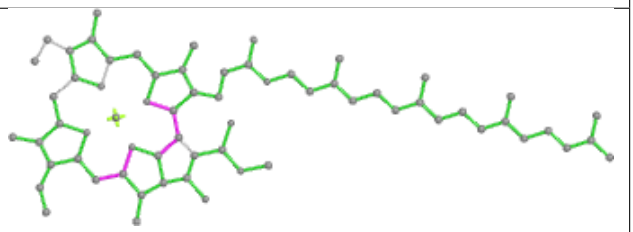
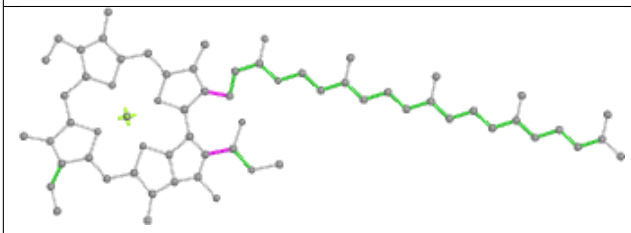


Bond angles



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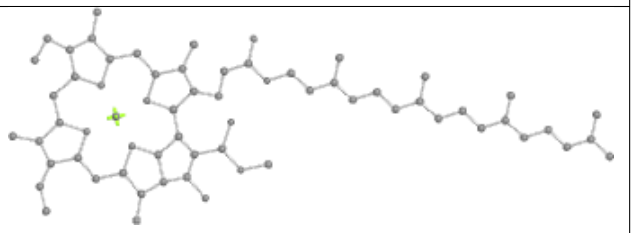
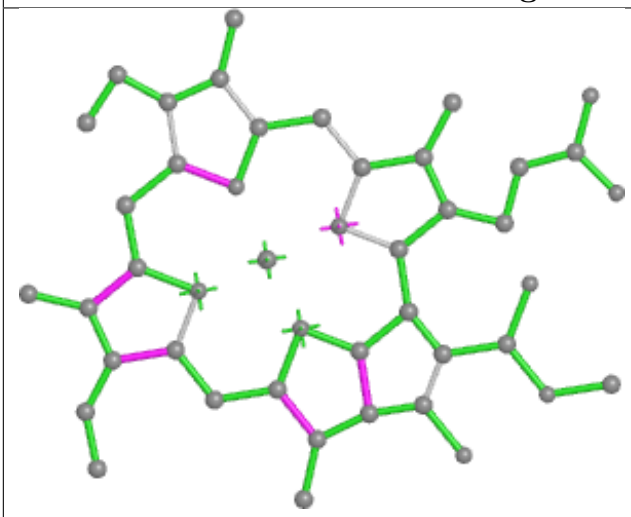


Rings

Ligand CLA 3a 310



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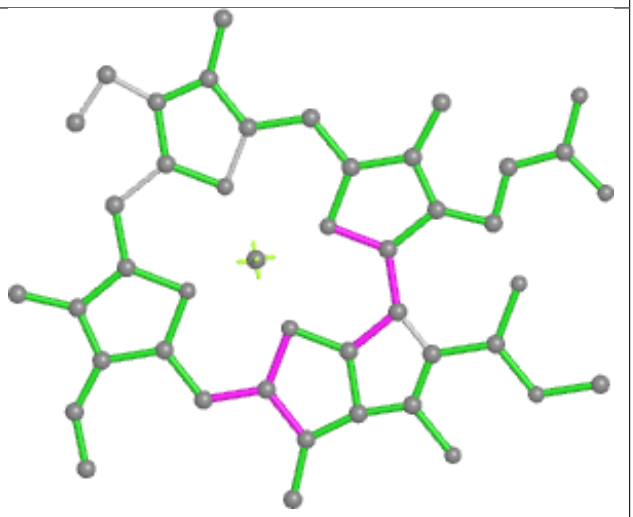
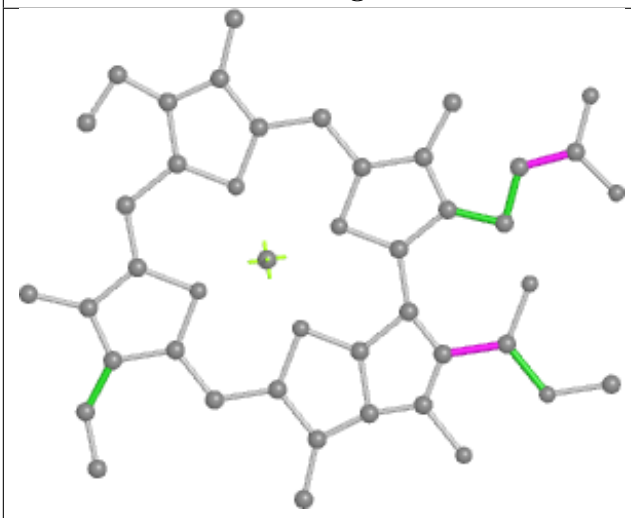


Bond angles



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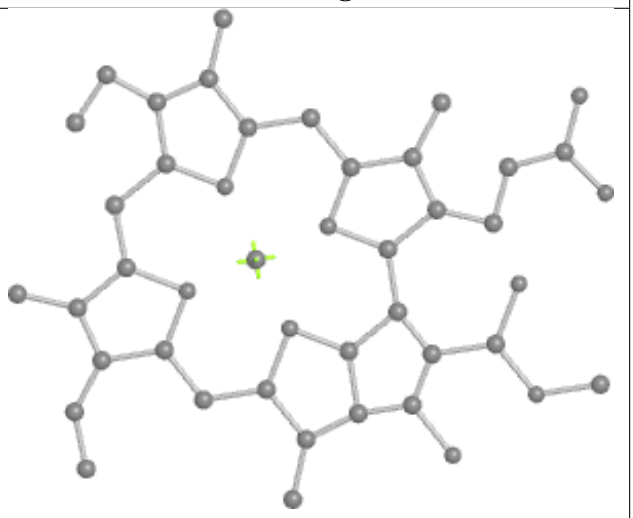
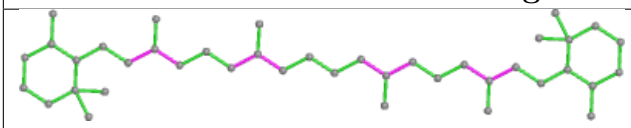


Rings

Ligand BCR B 843



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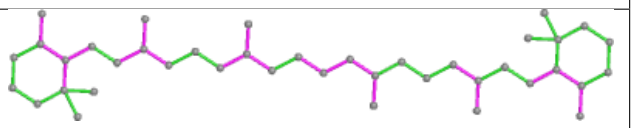
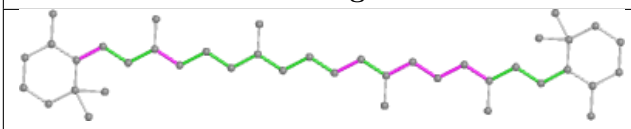


Bond angles



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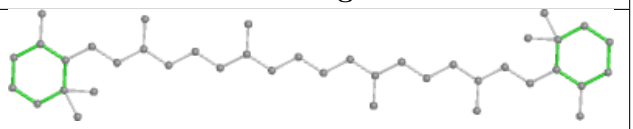
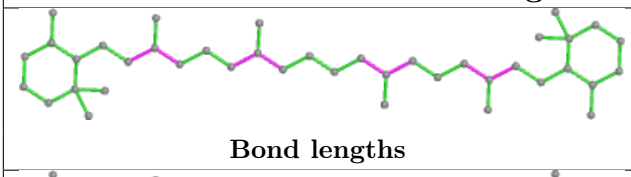
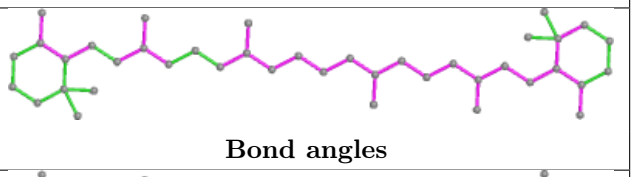


Rings

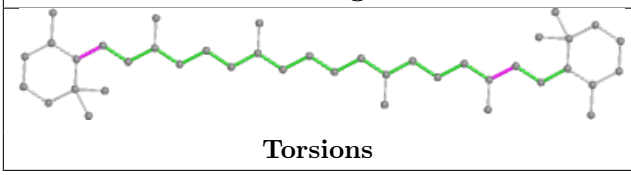
Ligand BCR b 844



Bond lengths



Bond angles



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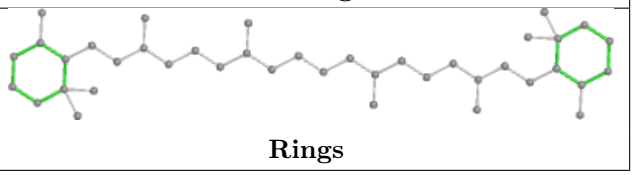
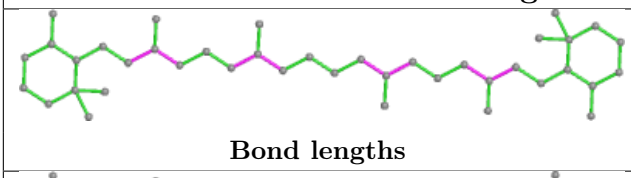


Rings

Ligand BCR m 101



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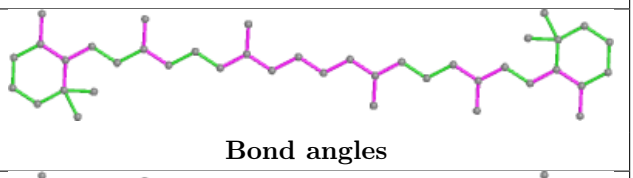
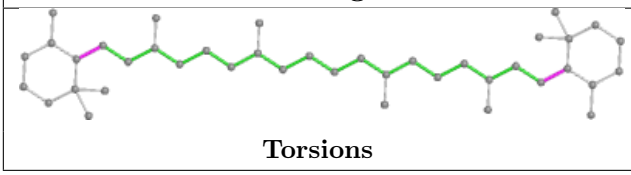


Bond angles



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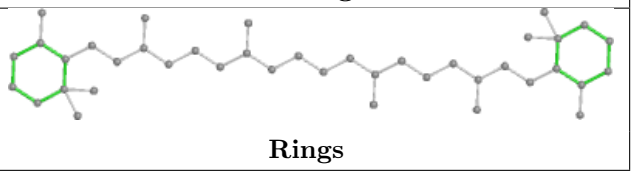
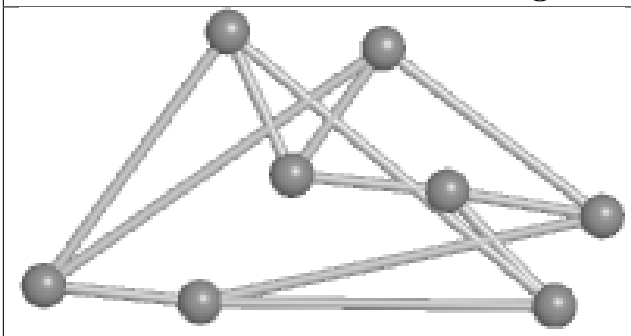
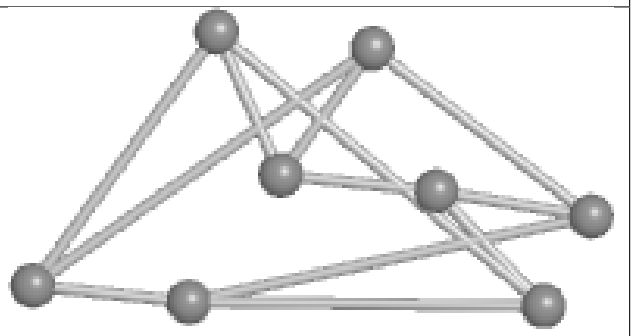


Rings

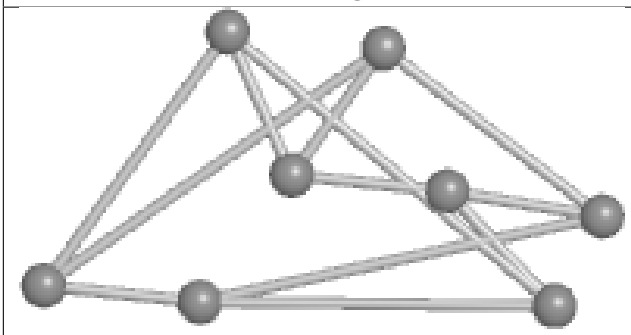
Ligand SF4 C 101



Bond lengths



Bond angles



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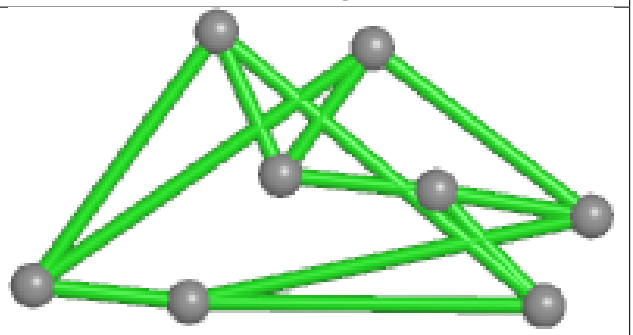
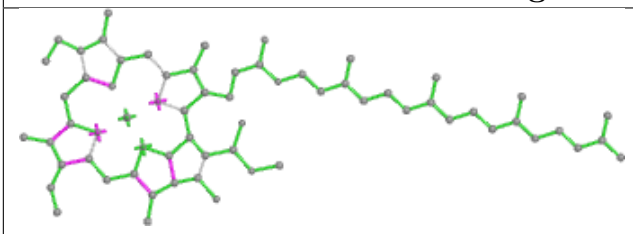
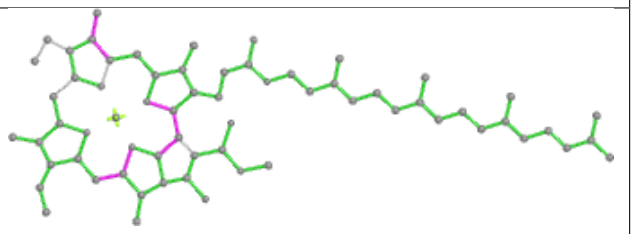


Rings

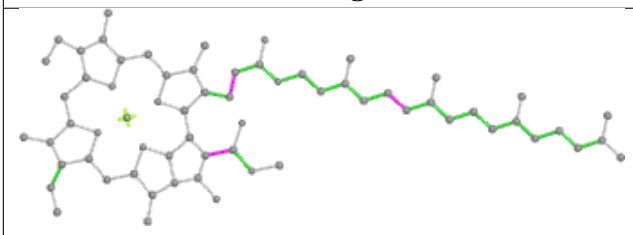
Ligand CLA a 826



Bond lengths



Bond angles



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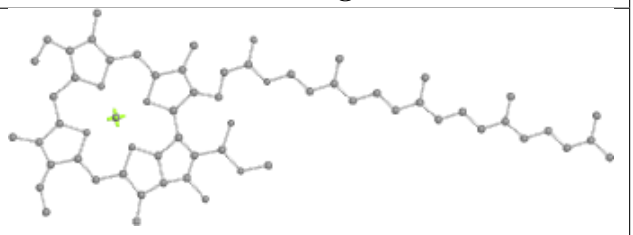
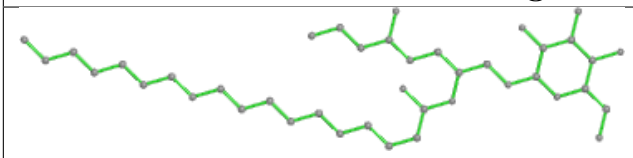


Rings

Ligand LMG j 104



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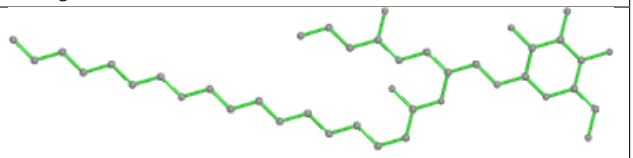
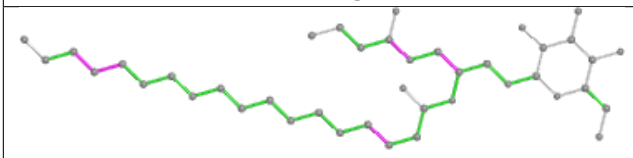


Bond angles



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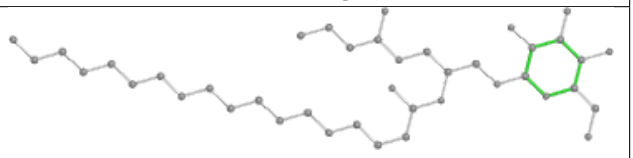
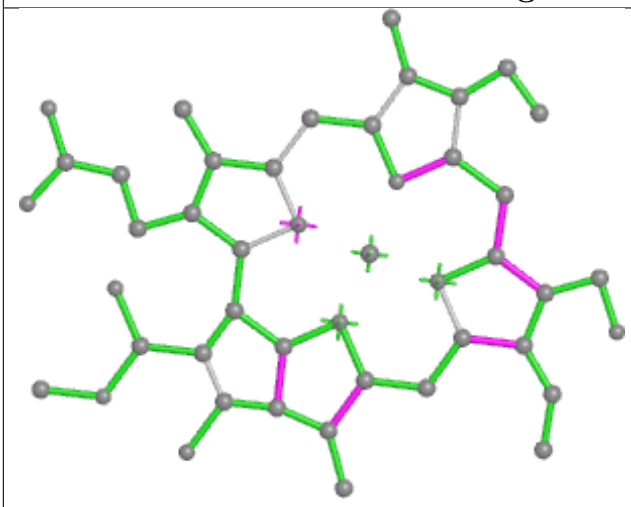
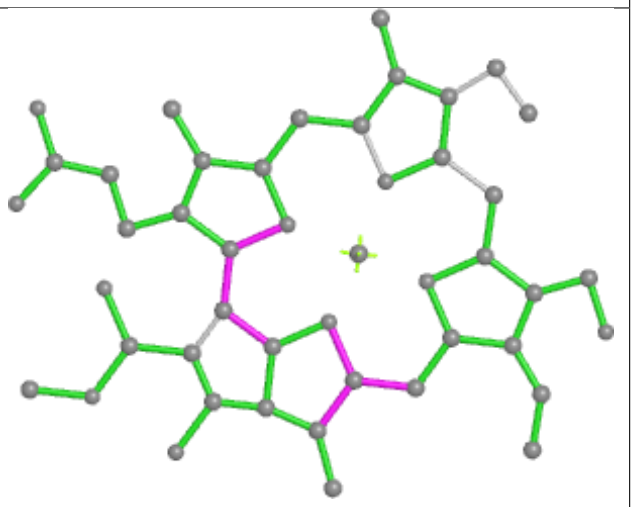


Rings

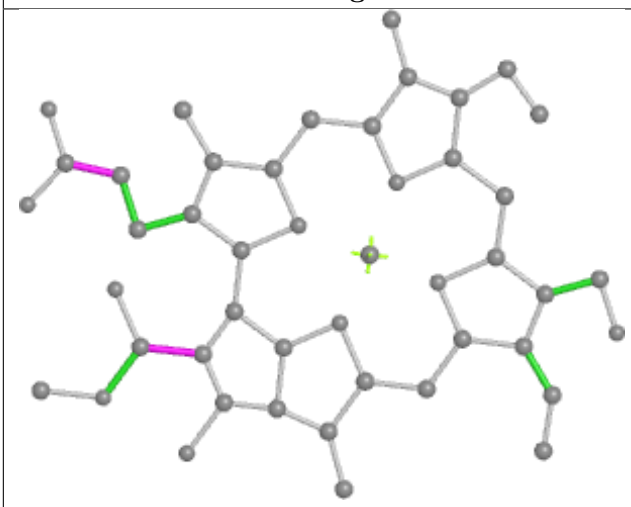
Ligand CHL 6b 304



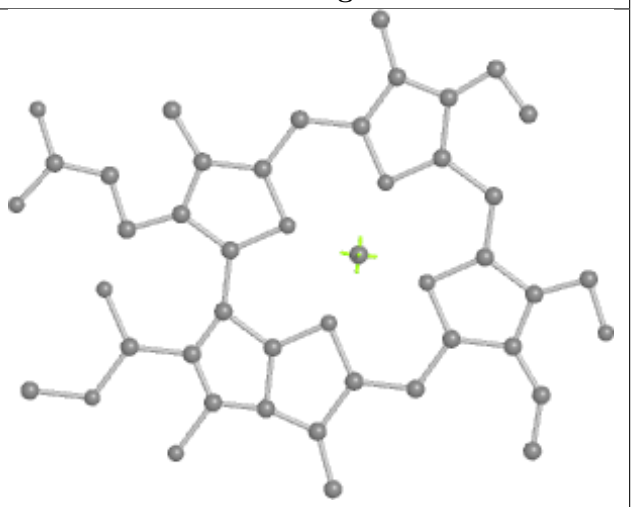
Bond lengths



Bond angles

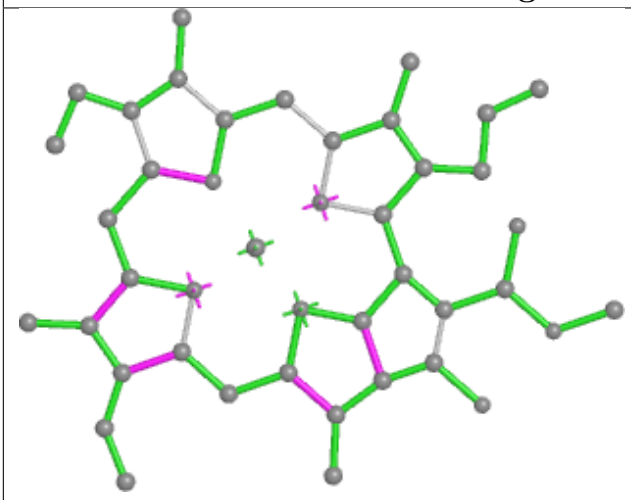


Torsions

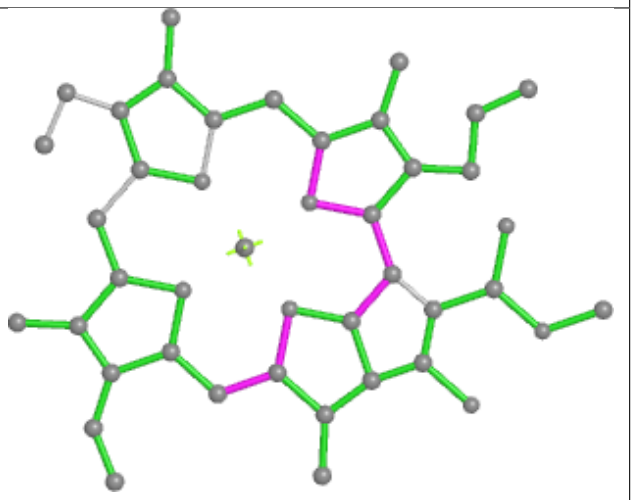


Rings

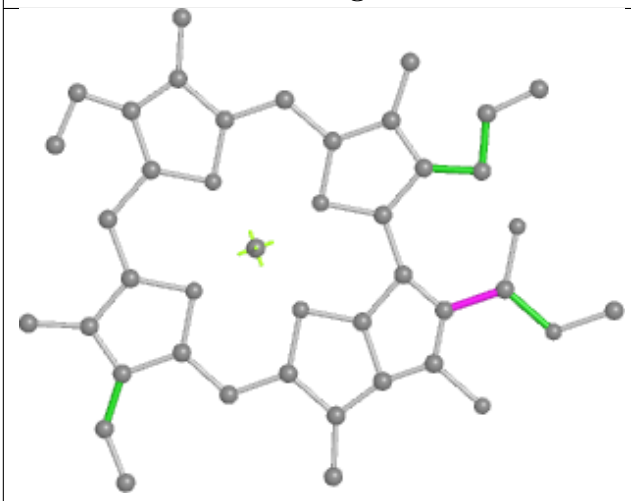
Ligand CLA 3b 311



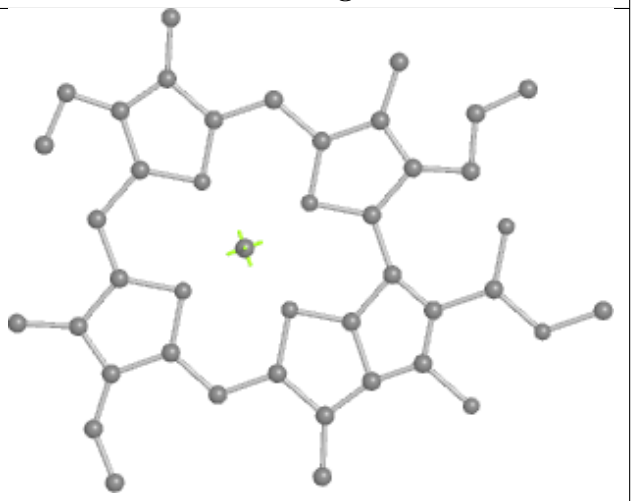
Bond lengths



Bond angles

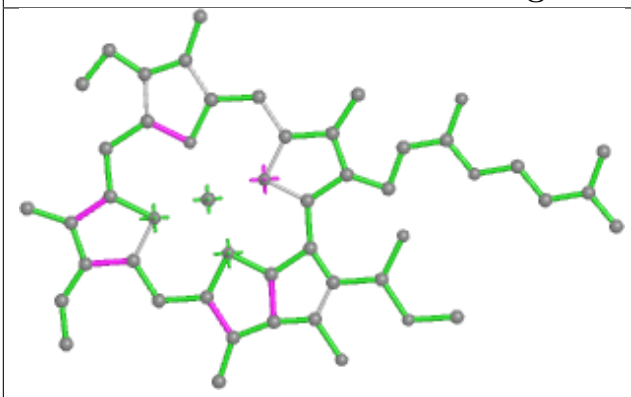


Torsions



Rings

Ligand CLA b 824



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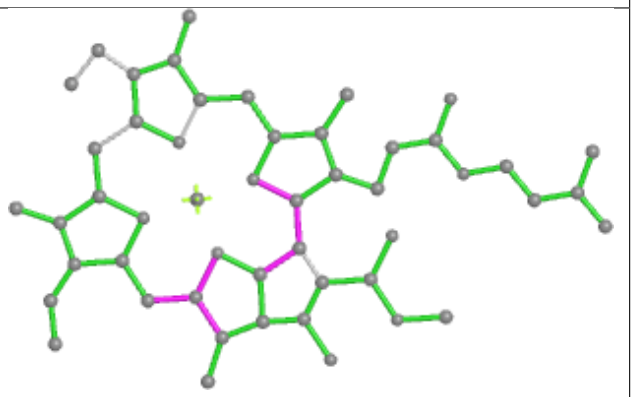
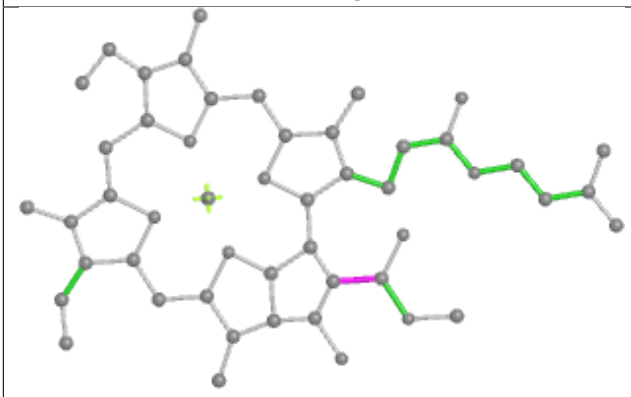


Bond angles



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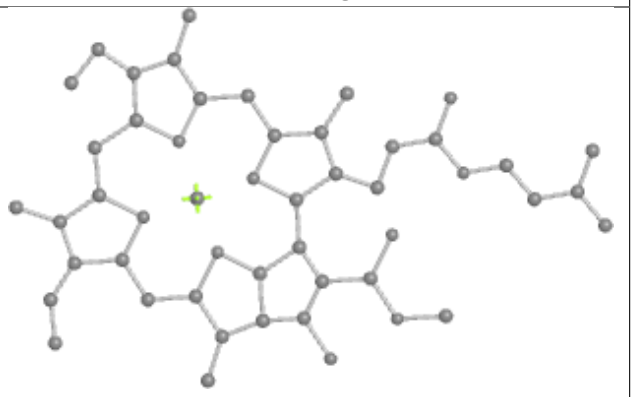
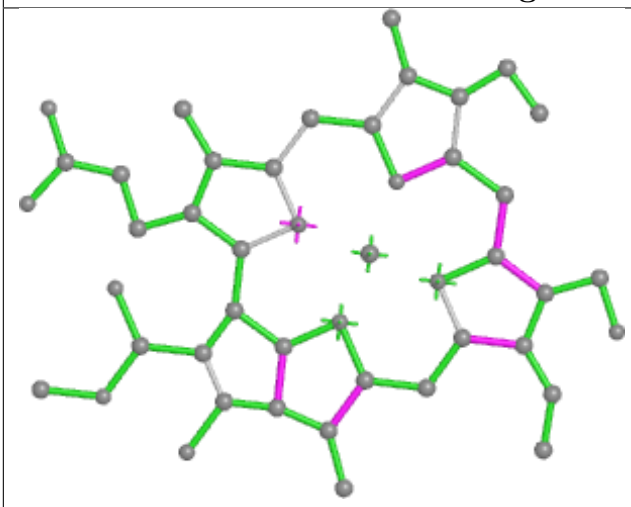


Rings

Ligand CHL 6a 304



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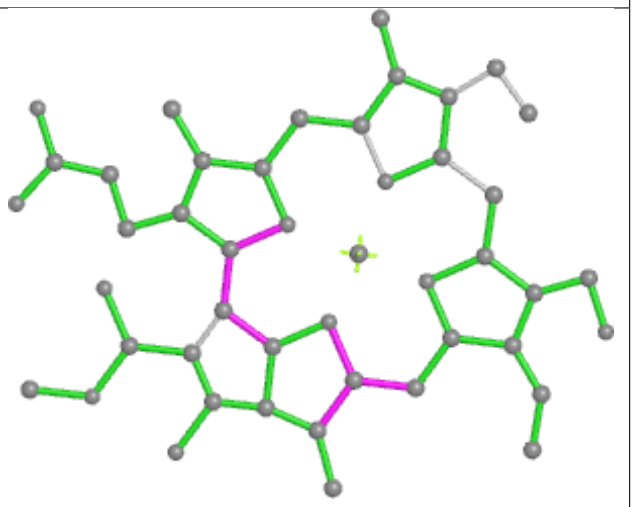
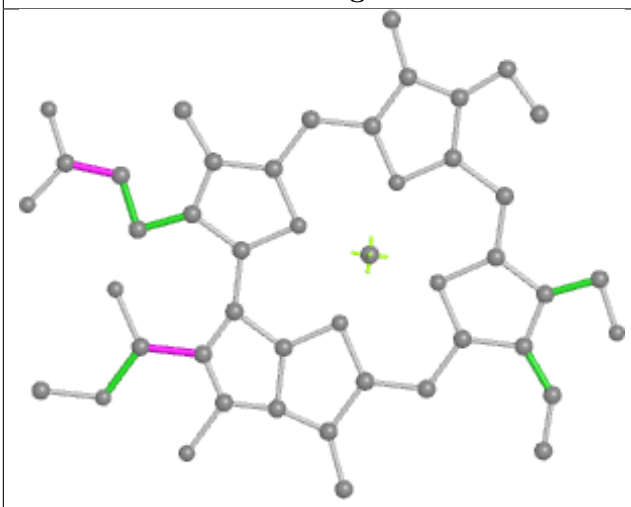


Bond angles



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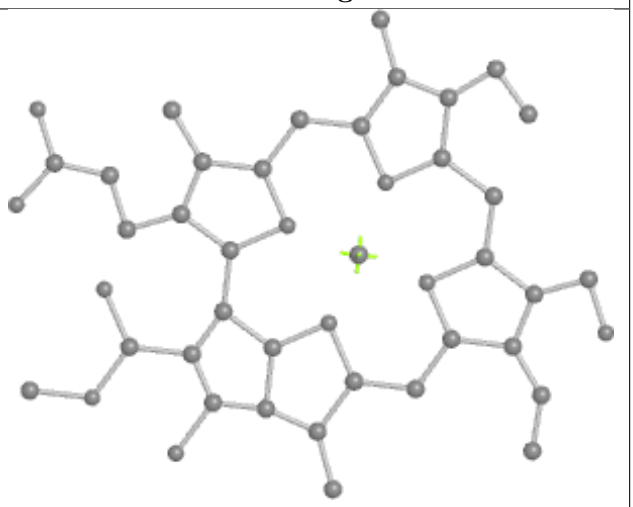
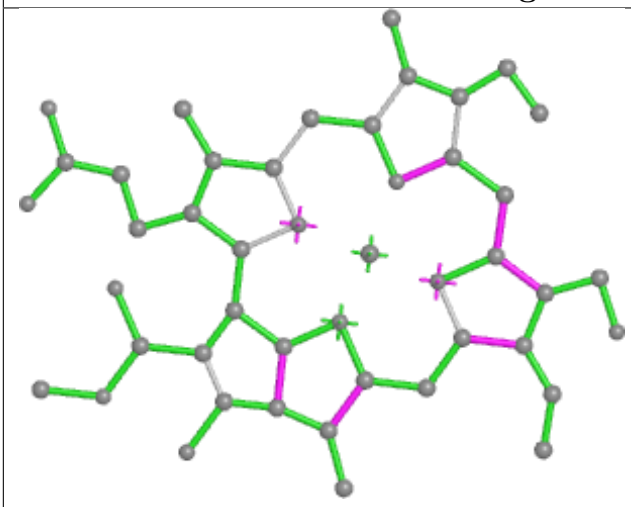


Rings

Ligand CHL 2a 304



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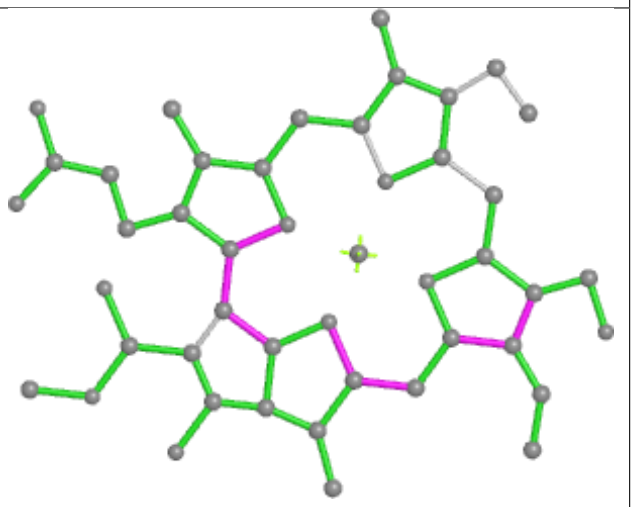
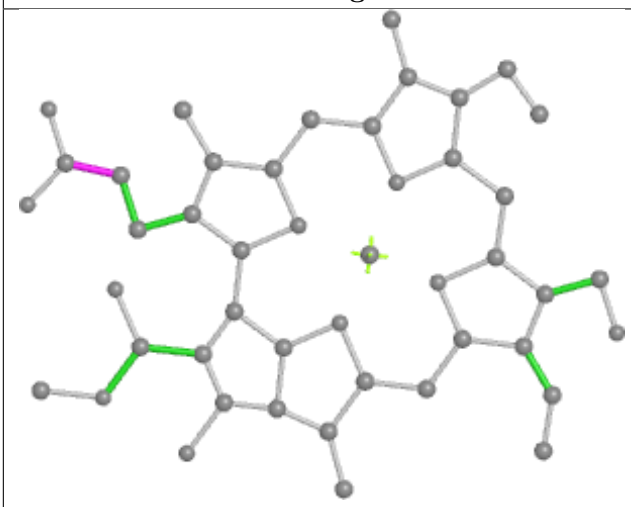


Bond angles



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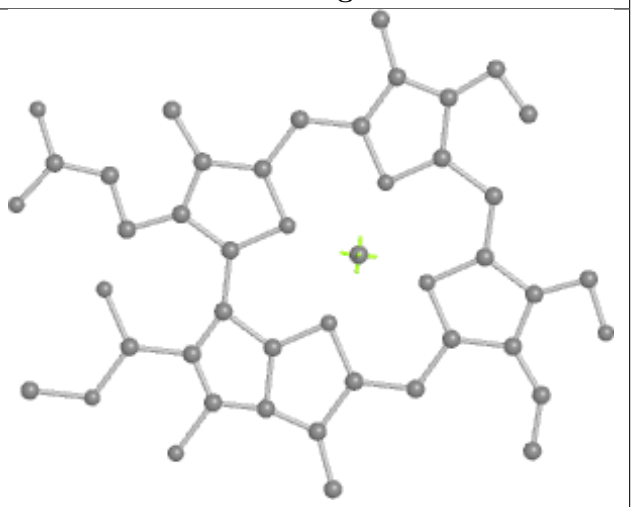
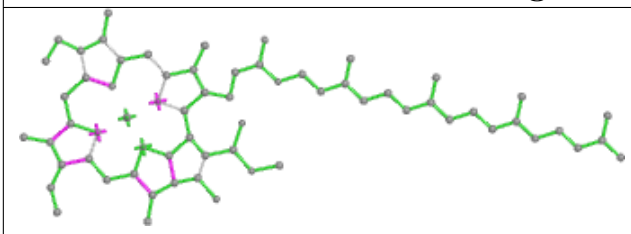


Rings

Ligand CLA a 824



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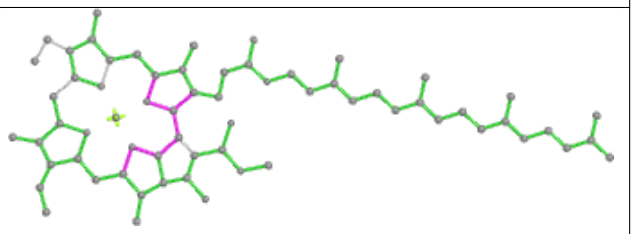
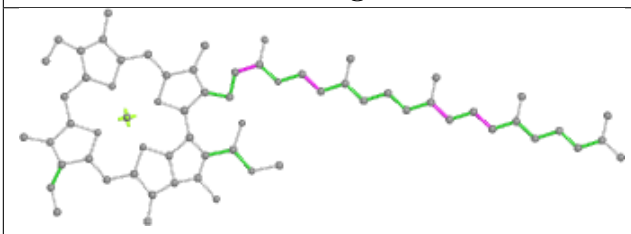


Bond angles



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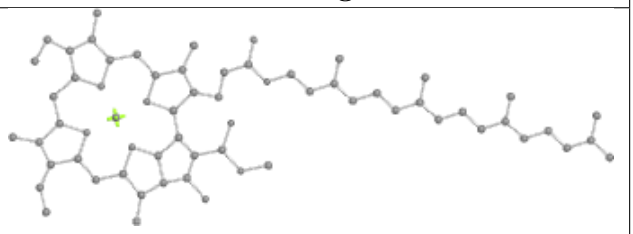
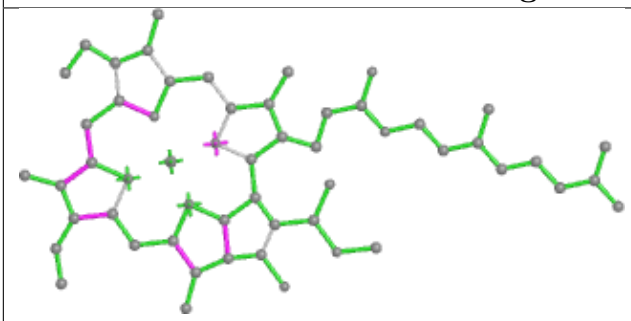


Rings

Ligand CLA 6a 312



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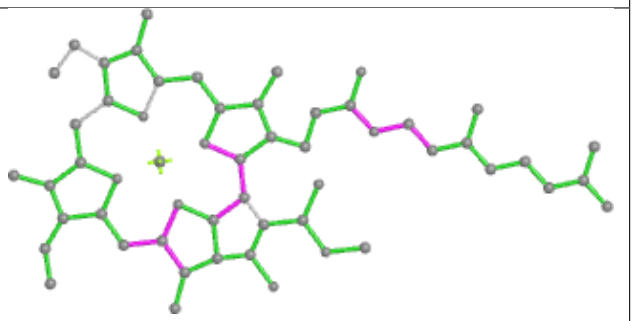
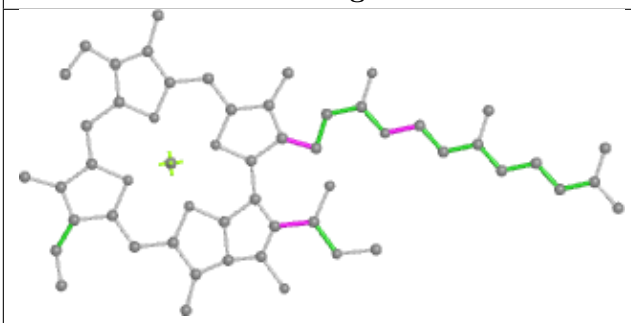


Bond angles



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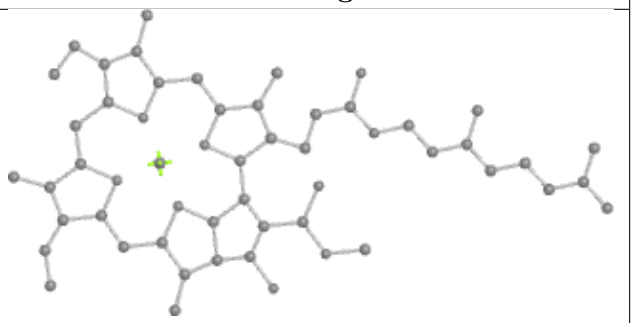
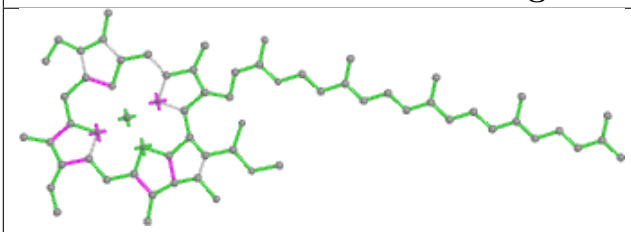


Rings

Ligand CLA a 828



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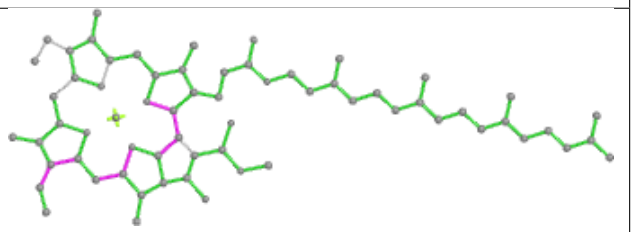
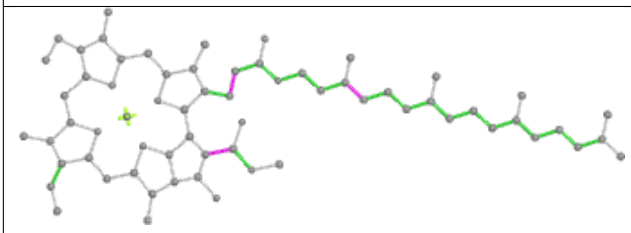


Bond angles



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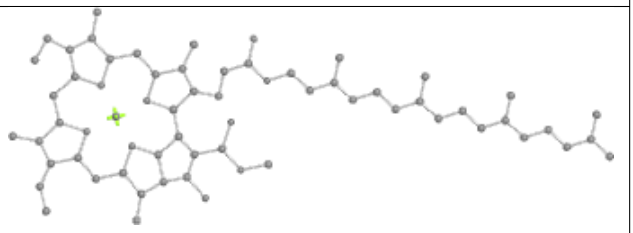
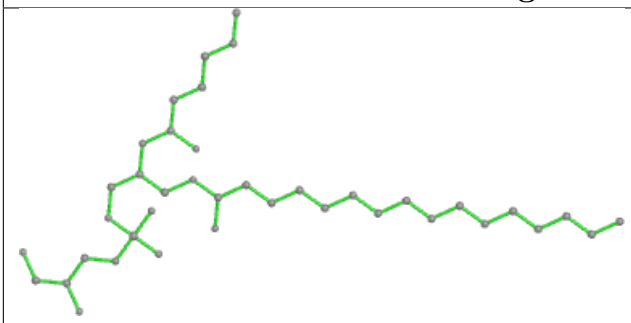


Rings

Ligand LHG 6a 301



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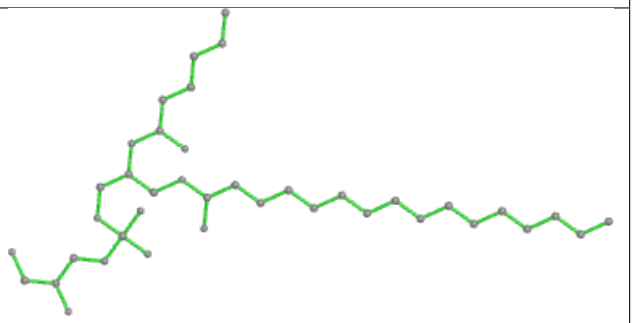
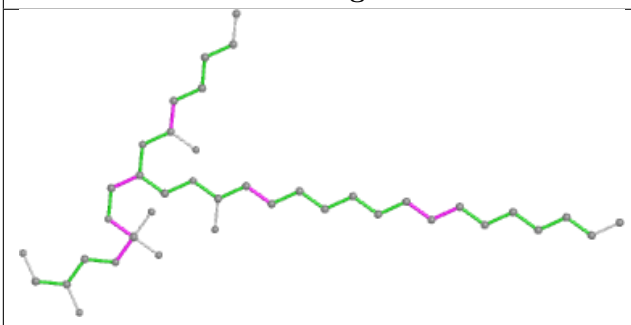


Bond angles



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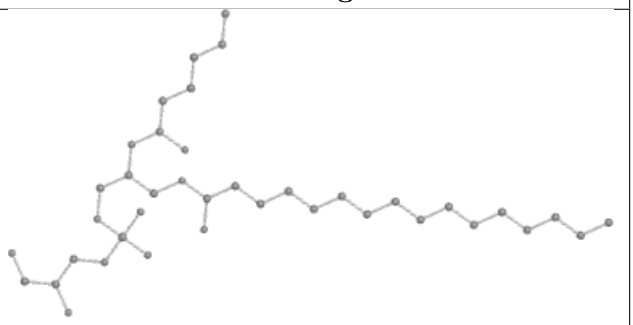
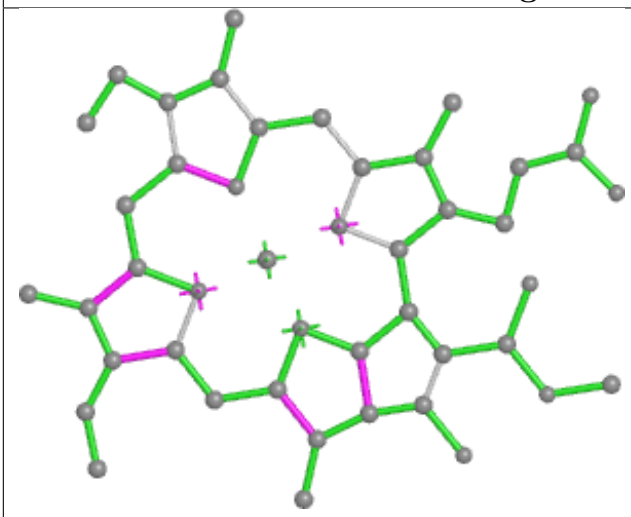


Rings

Ligand CLA 3a 306



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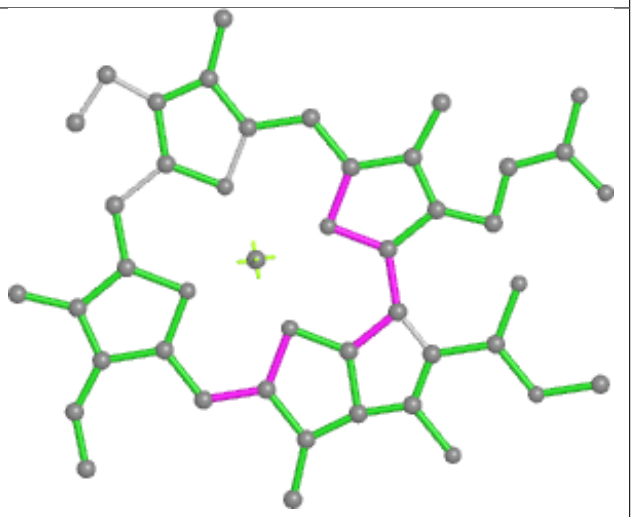
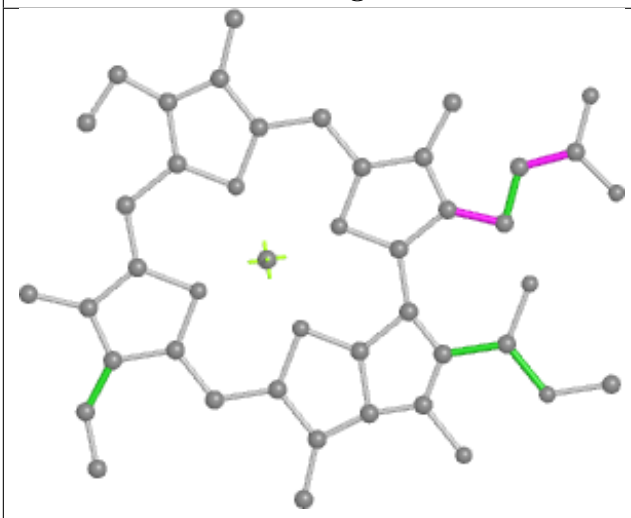
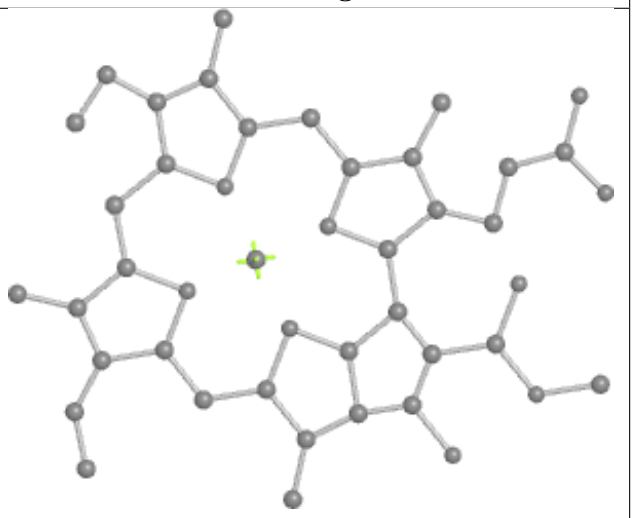


Bond angles

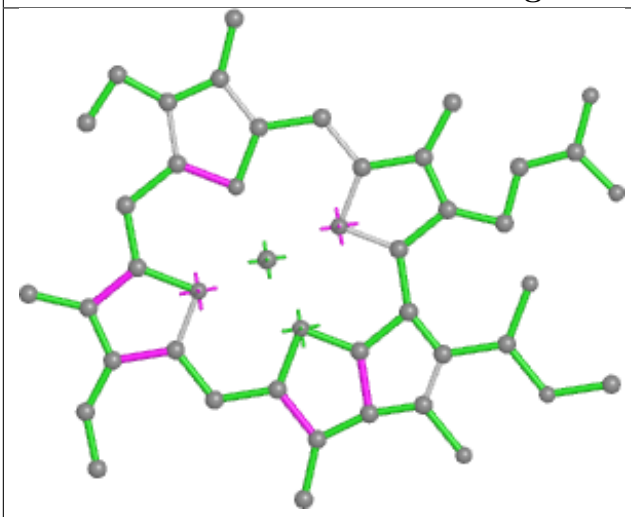


Torsions



Rings

Ligand CLA B 820



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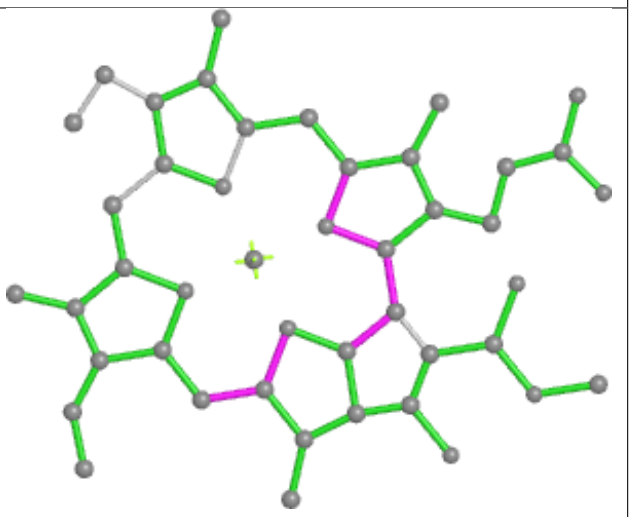

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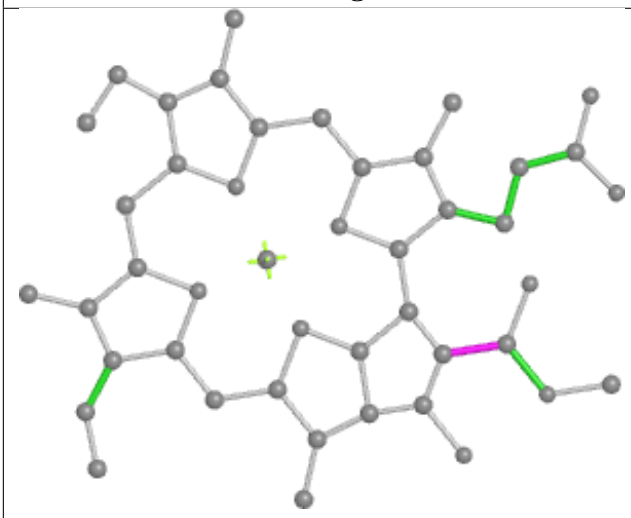

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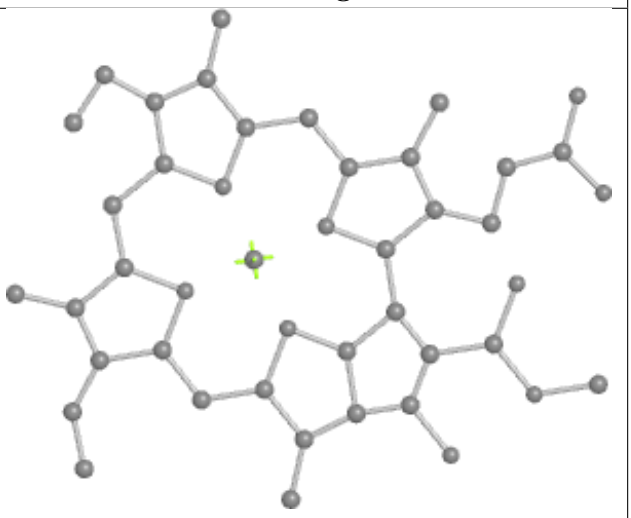
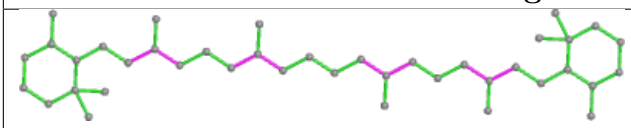


Rings

Ligand BCR F 301



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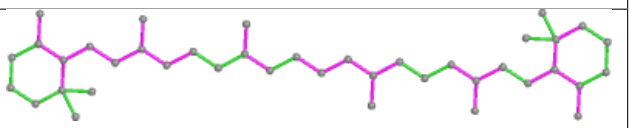
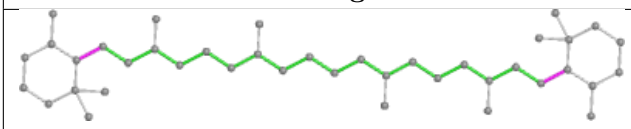


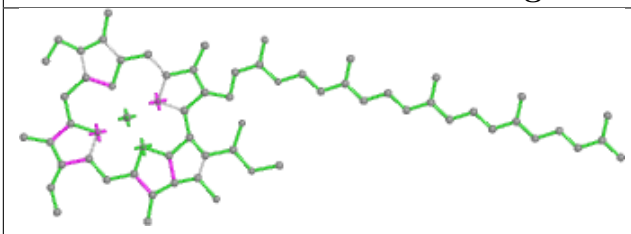
Bond angles



Torsions

Rings

Ligand CLA B 801



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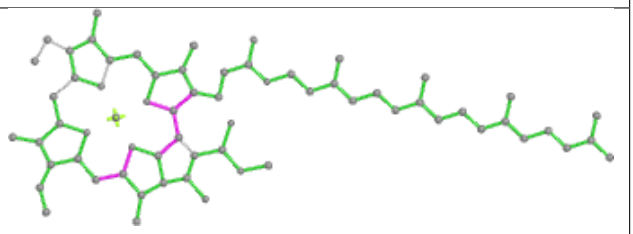
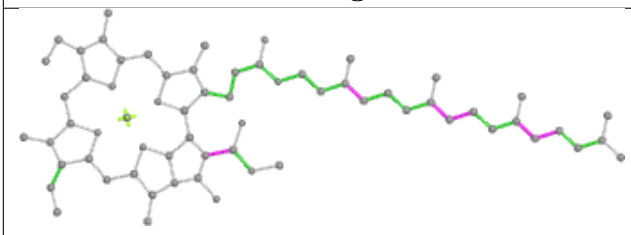


Bond angles



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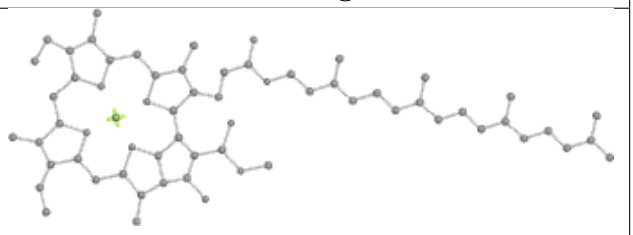
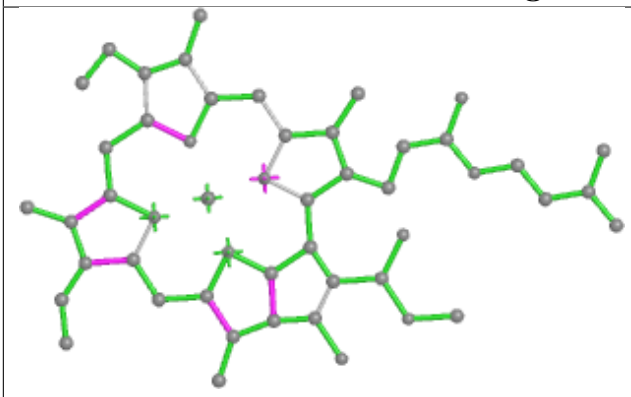


Rings

Ligand CLA B 824



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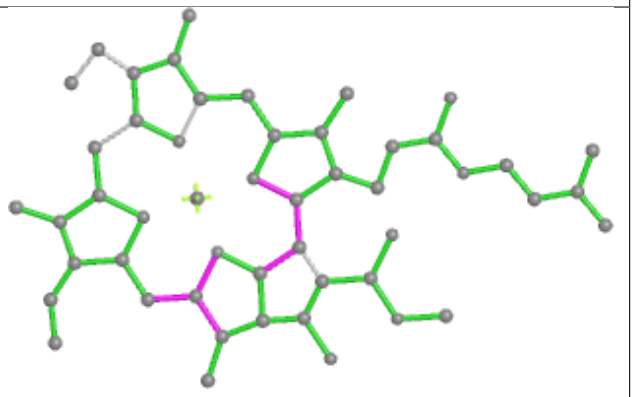
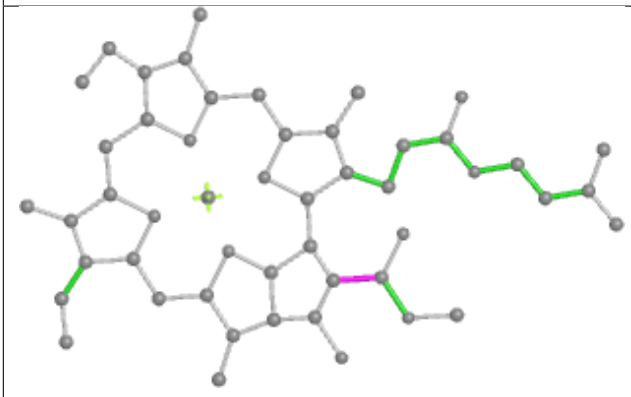


Bond angles



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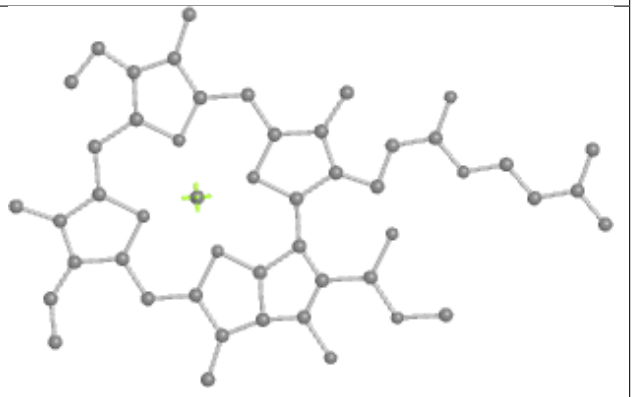
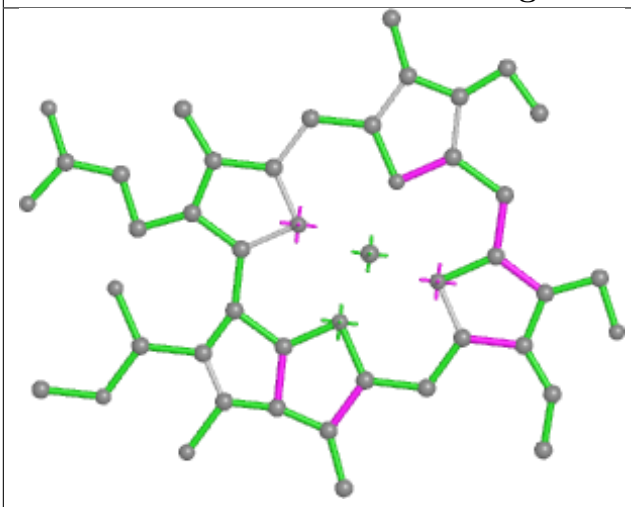
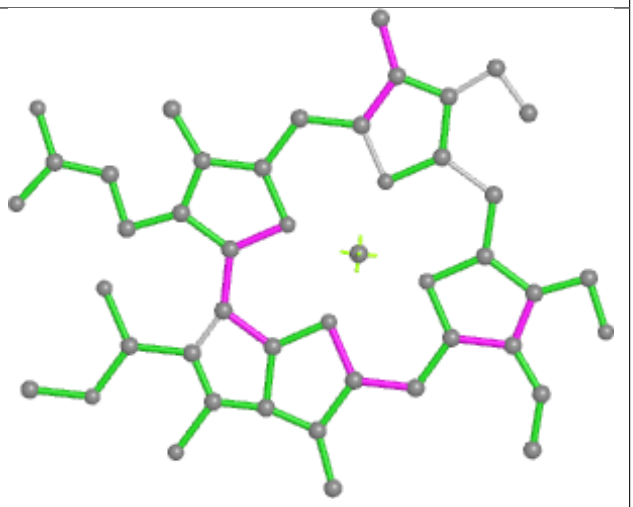


Rings

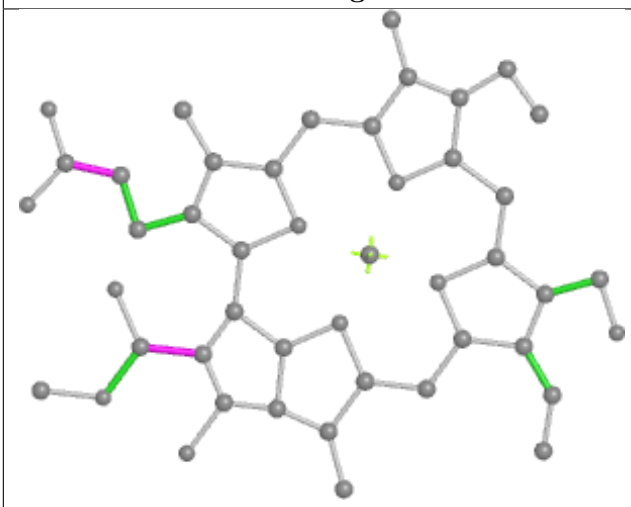
Ligand CHL 5a 305



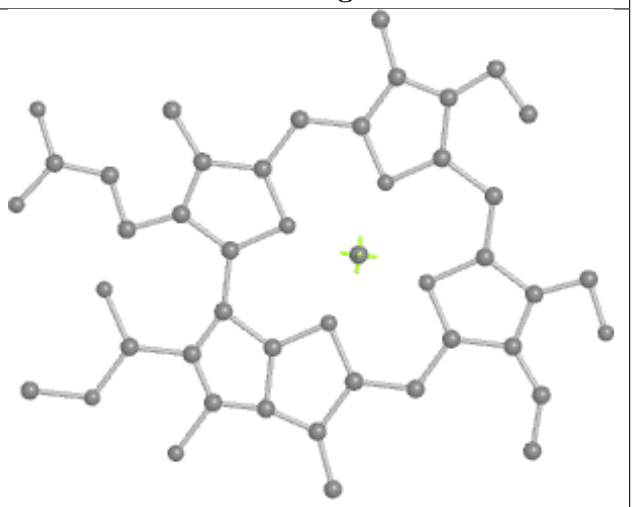
Bond lengths



Bond angles

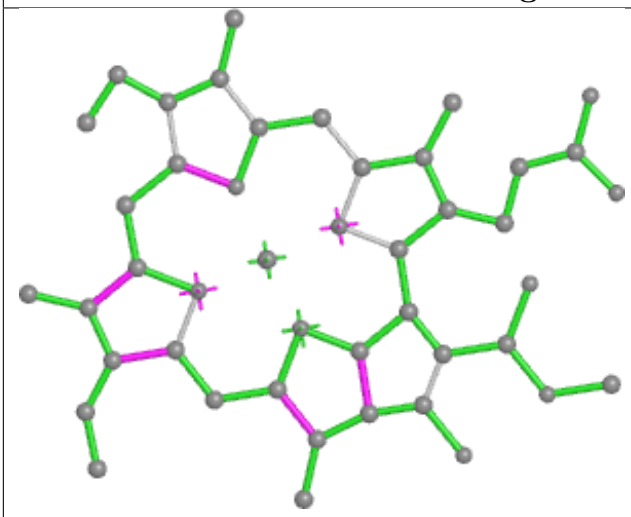


Torsions

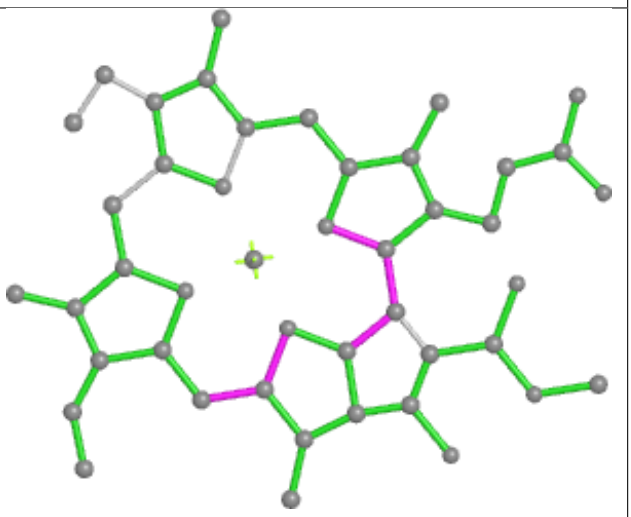


Rings

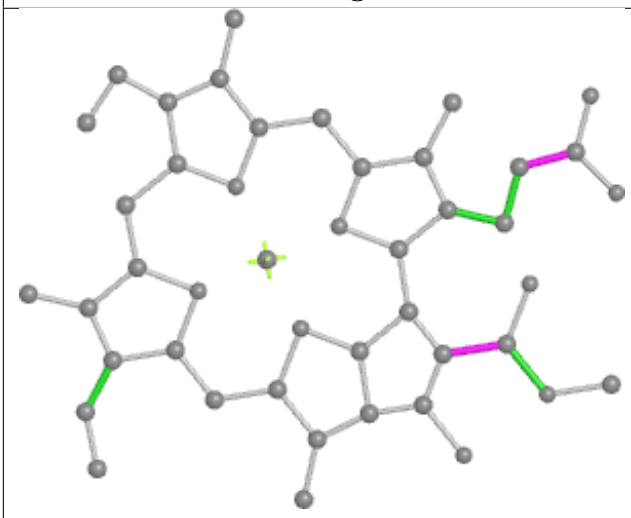
Ligand CLA 6a 310



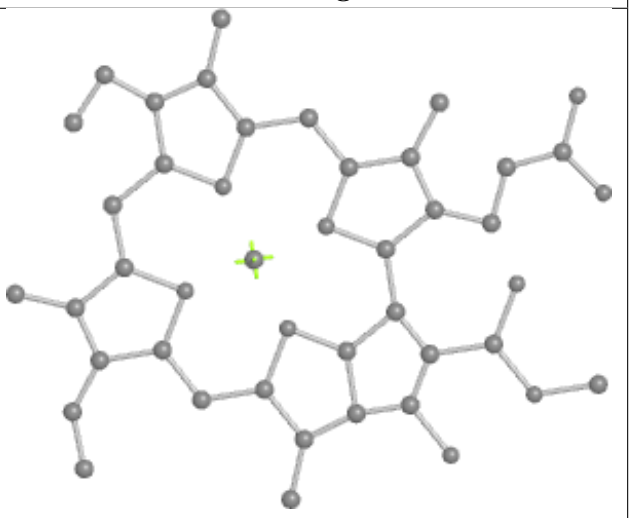
Bond lengths



Bond angles

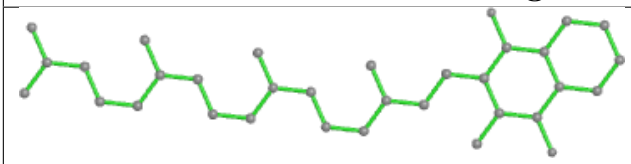


Torsions

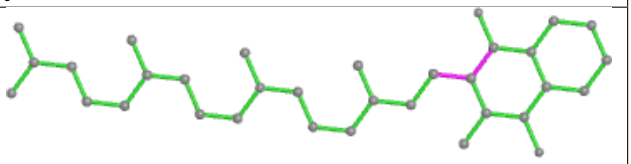


Rings

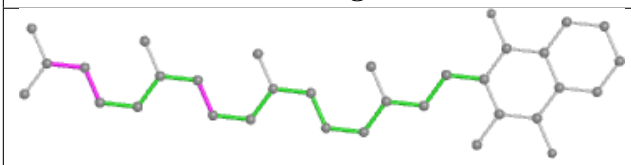
Ligand PQN a 843



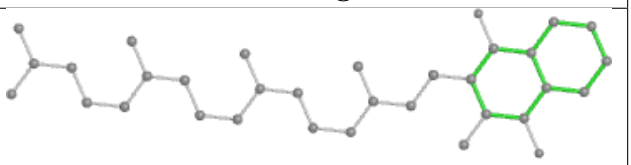
Bond lengths



Bond angles

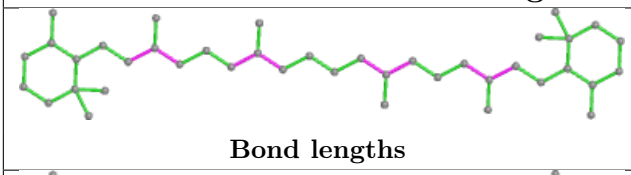


Torsions



Rings

Ligand BCR g 204



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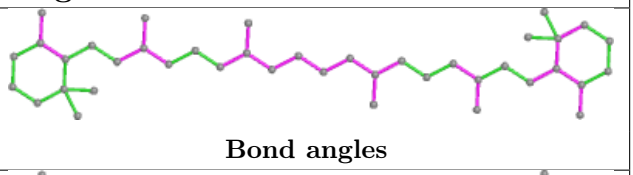

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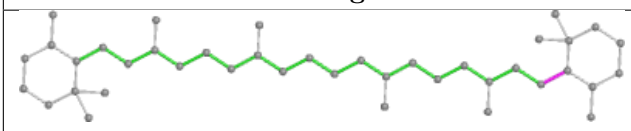

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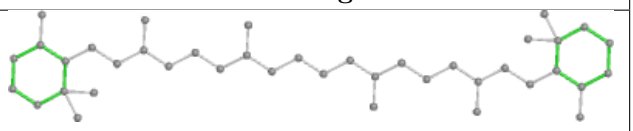
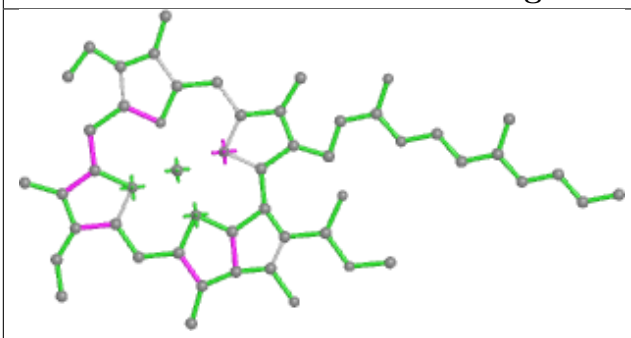


Rings

Ligand CLA B 818



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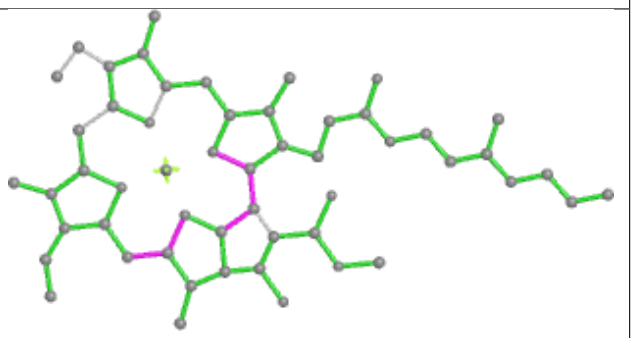
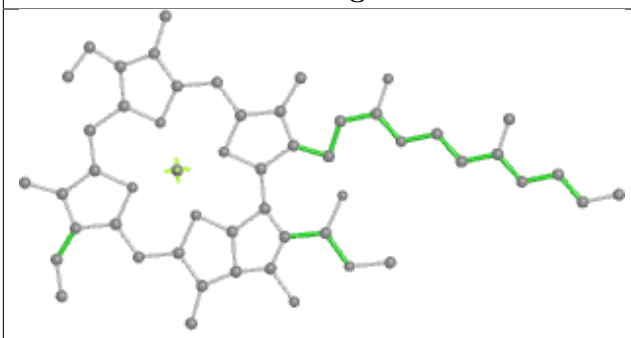


Bond angles



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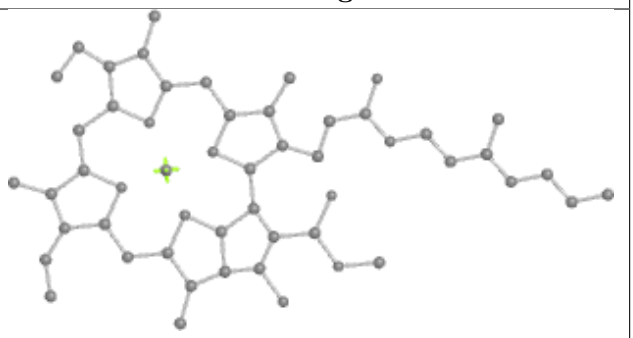
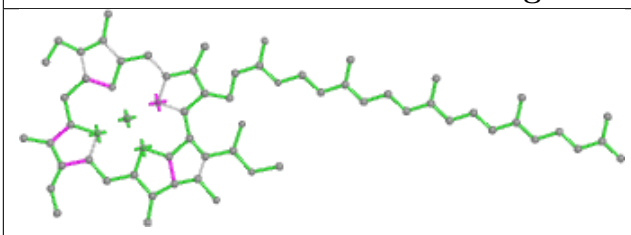


Rings

Ligand CLA A 818



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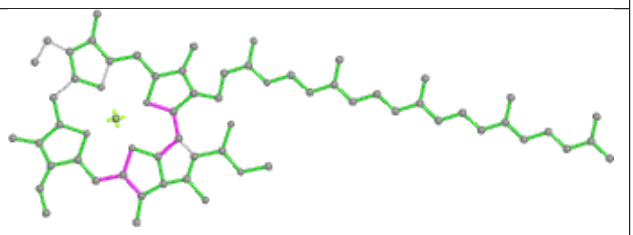
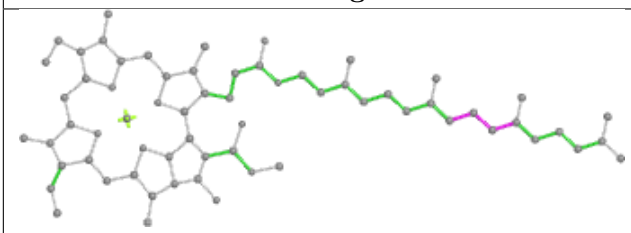


Bond angles



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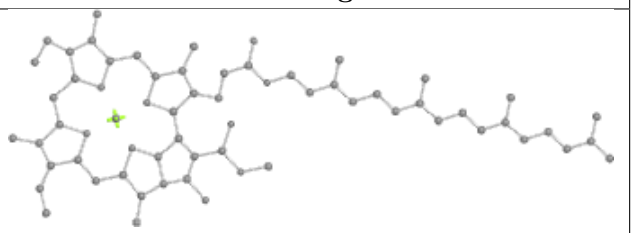
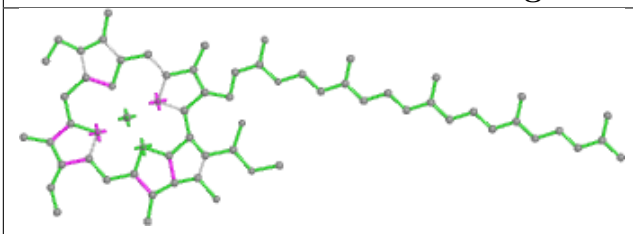


Rings

Ligand CLA B 852



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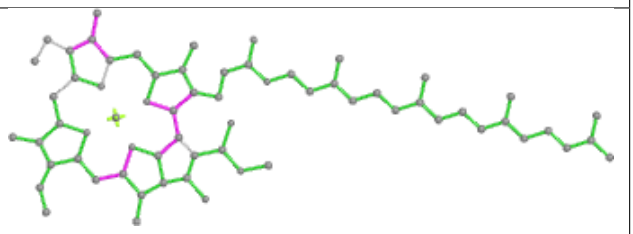

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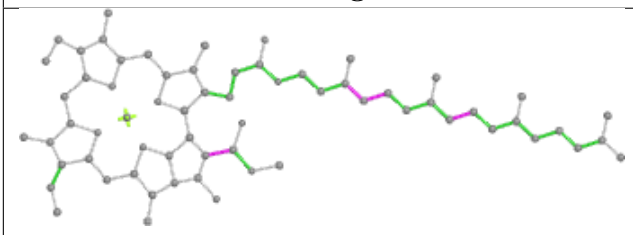

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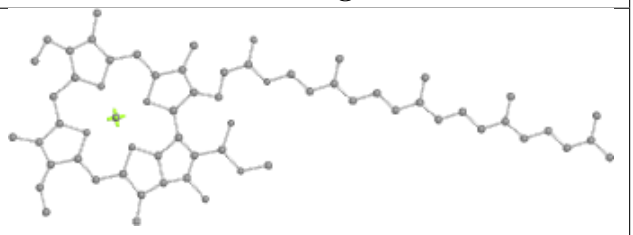
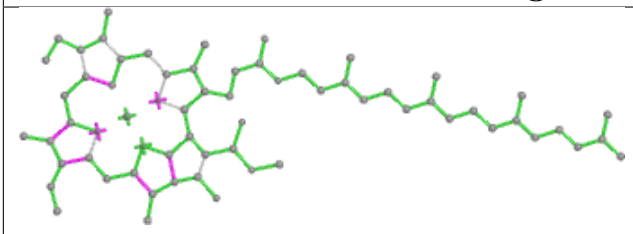


Rings

Ligand CLA b 831



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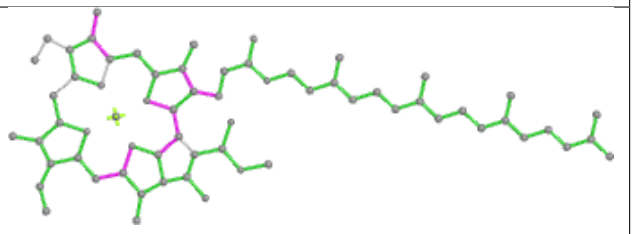
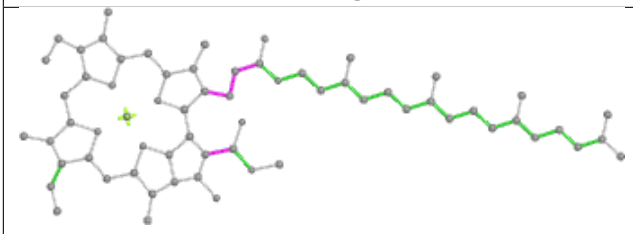


Bond angles



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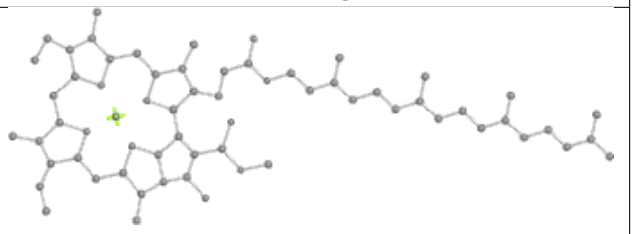
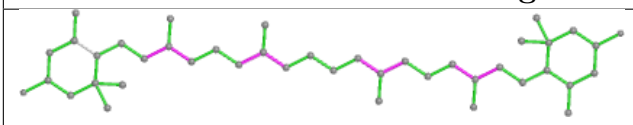


Rings

Ligand LUT 5b 316



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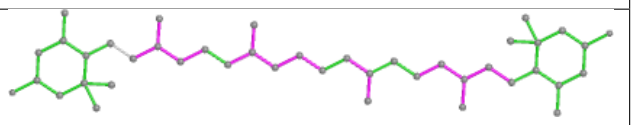
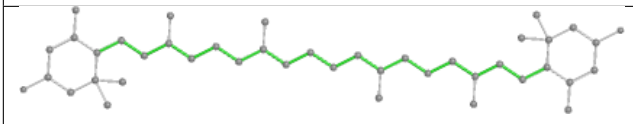


Bond angles



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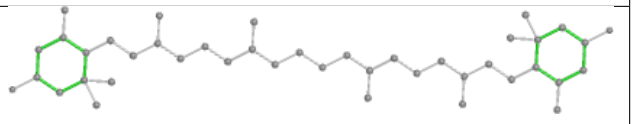
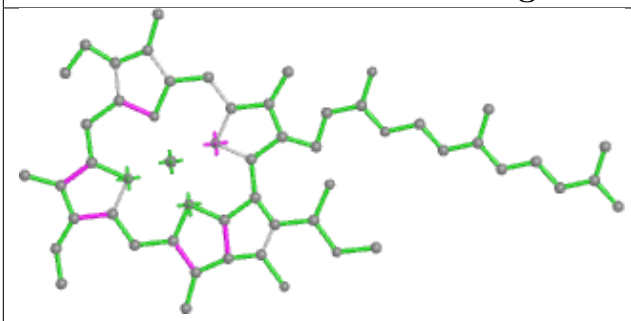


Rings

Ligand CLA 2b 308



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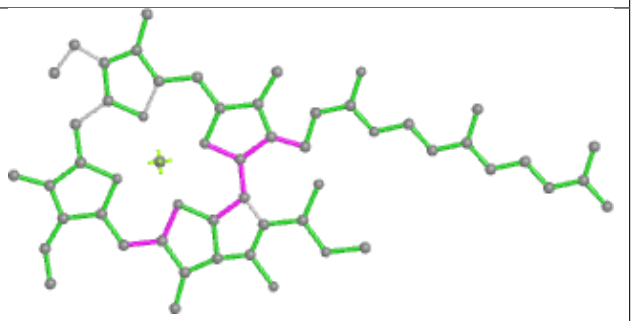
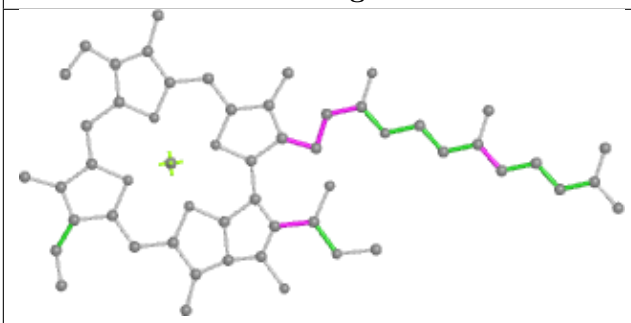


Bond angles



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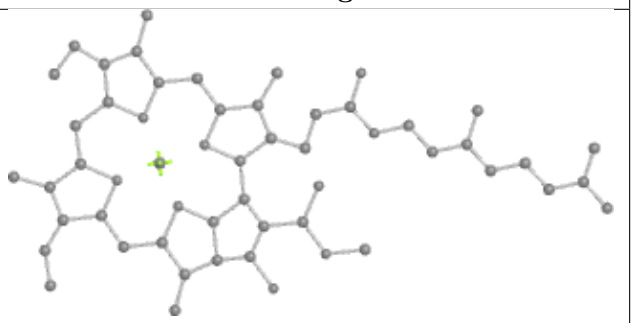
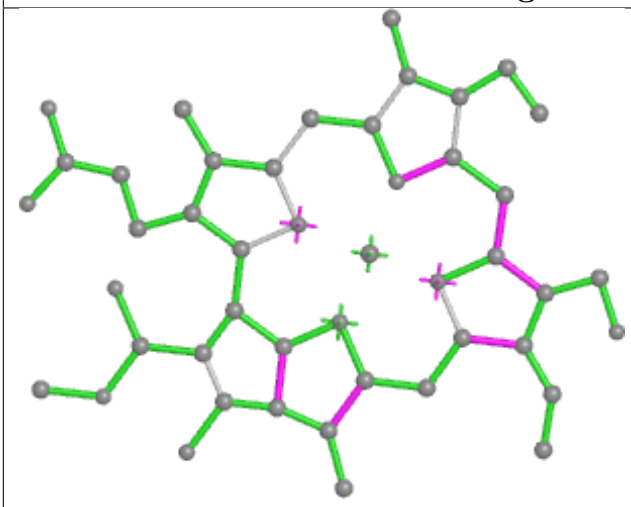
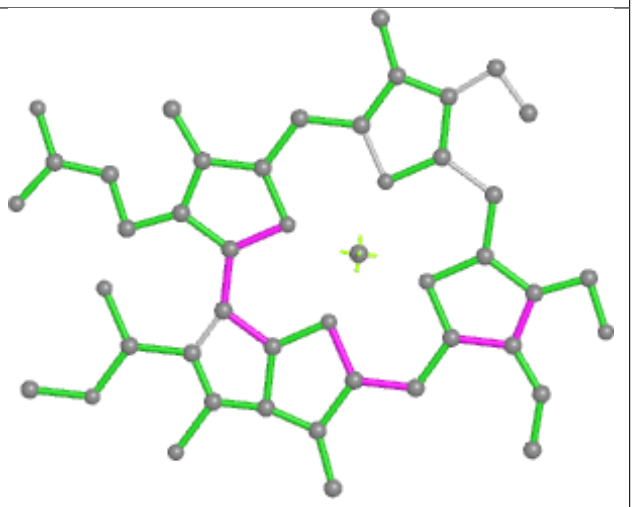


Rings

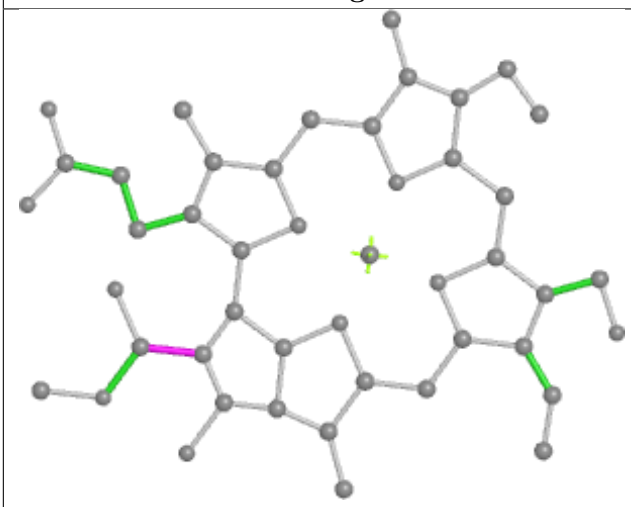
Ligand CHL 5b 301



Bond lengths



Bond angles



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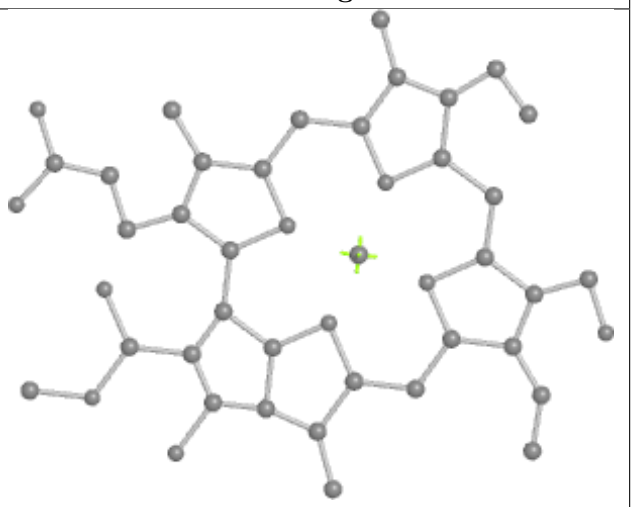
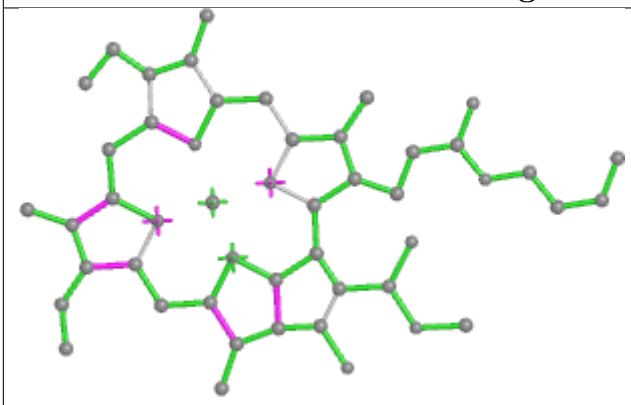


Rings

Ligand CLA 6b 307



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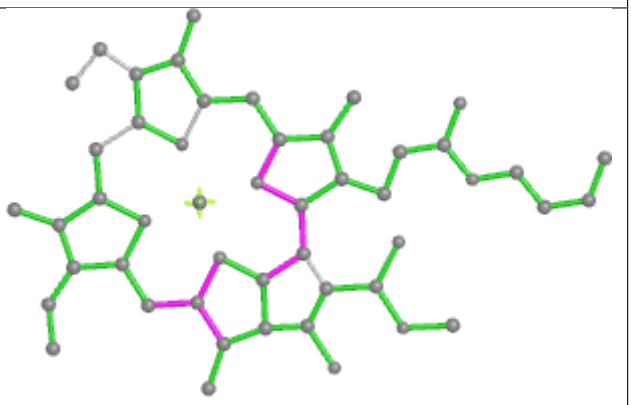

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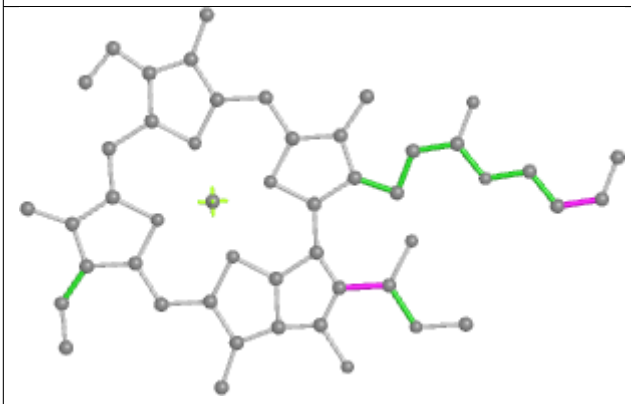

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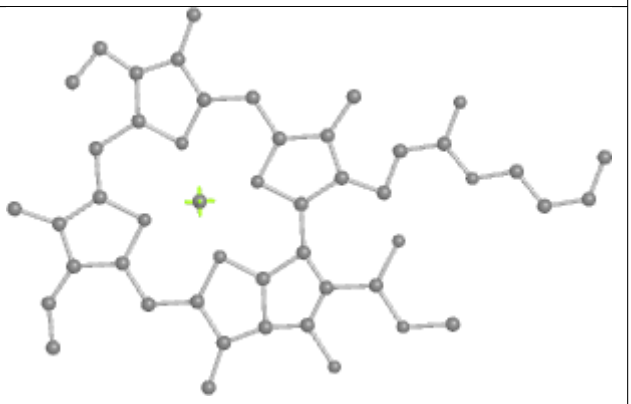
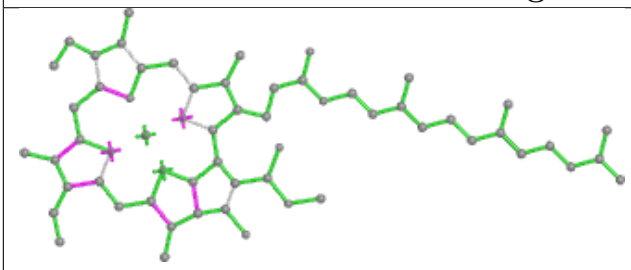


Rings

Ligand CLA b 830



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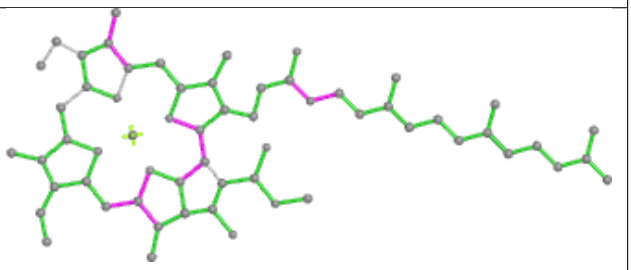
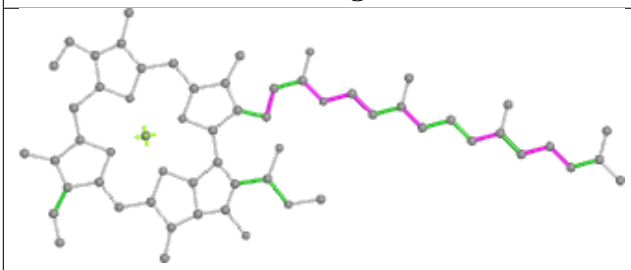


Bond angles



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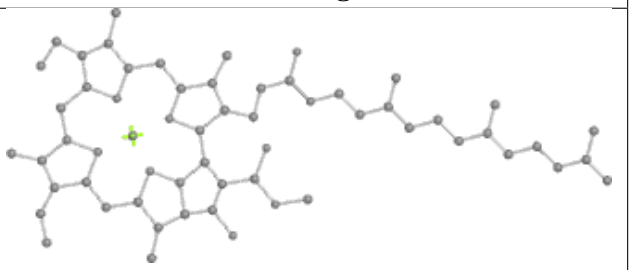
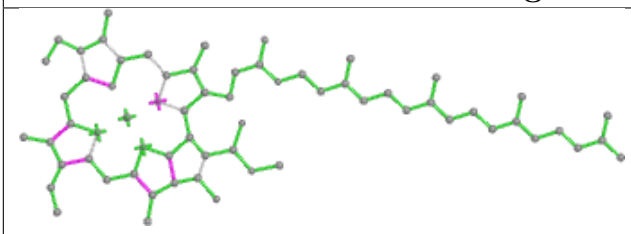


Rings

Ligand CLA B 802



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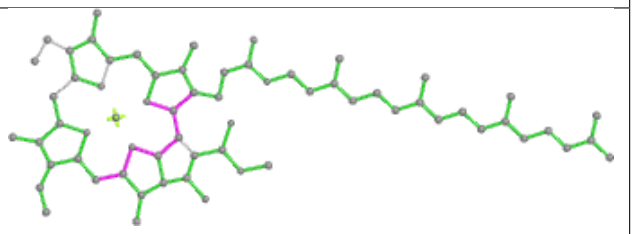
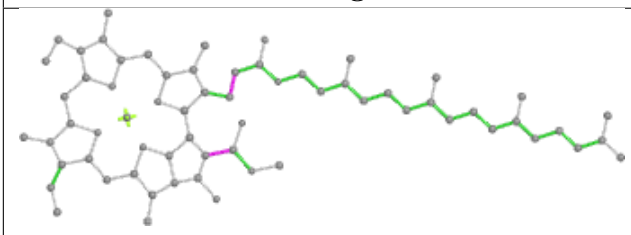


Bond angles



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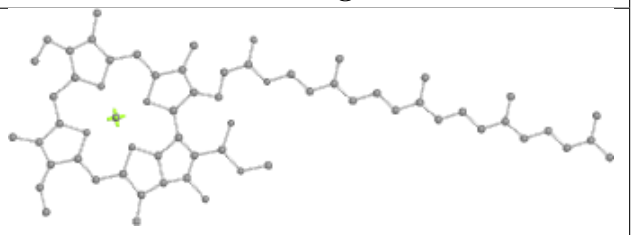
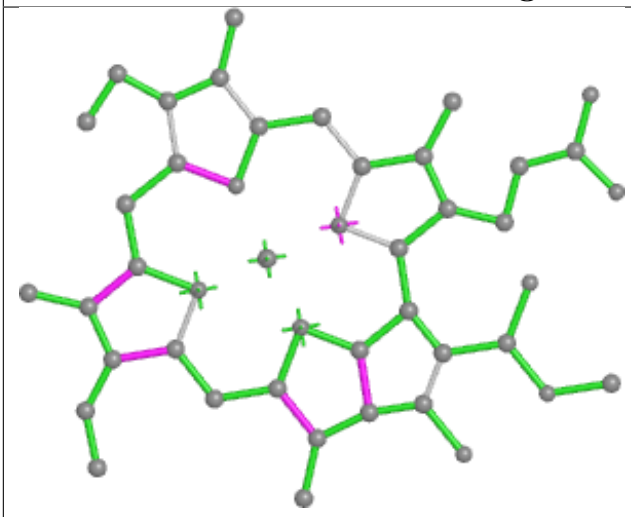
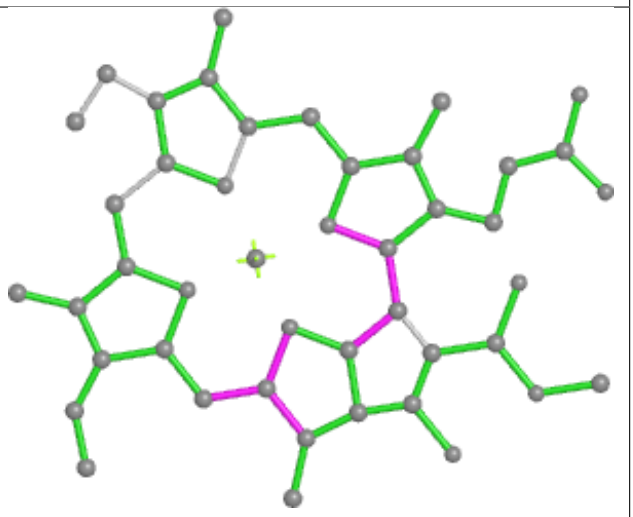


Rings

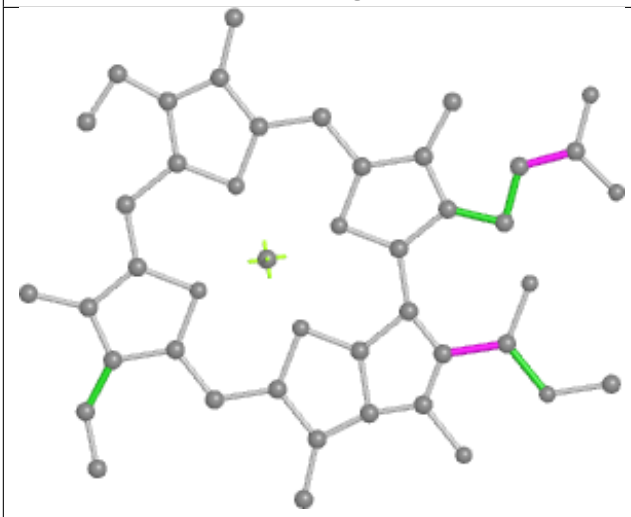
Ligand CLA 3b 314



Bond lengths



Bond angles



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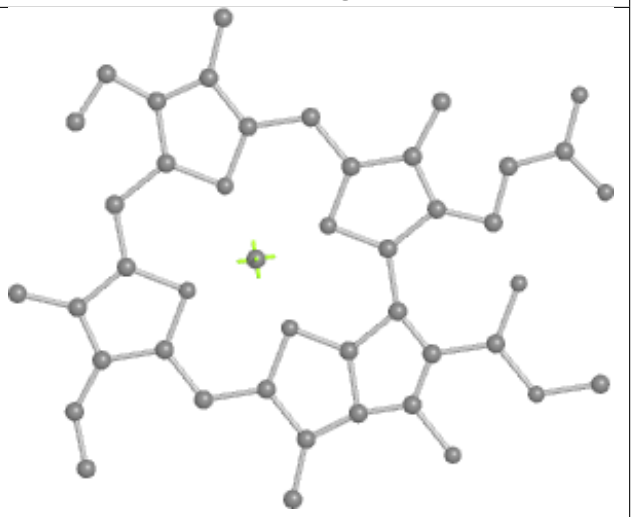
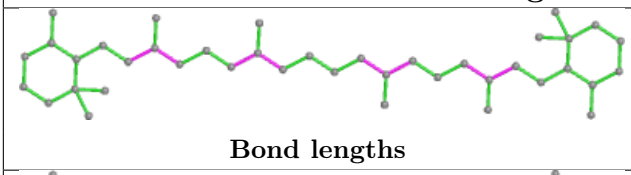
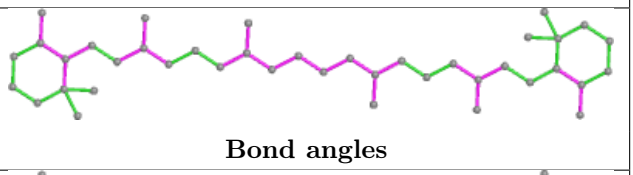


Rings

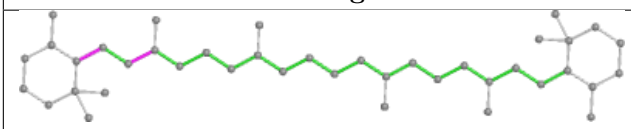
Ligand BCR a 849



Bond lengths



Bond angles



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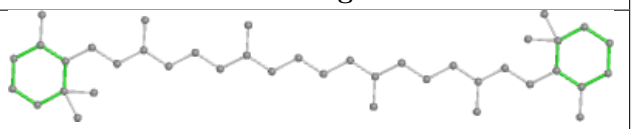
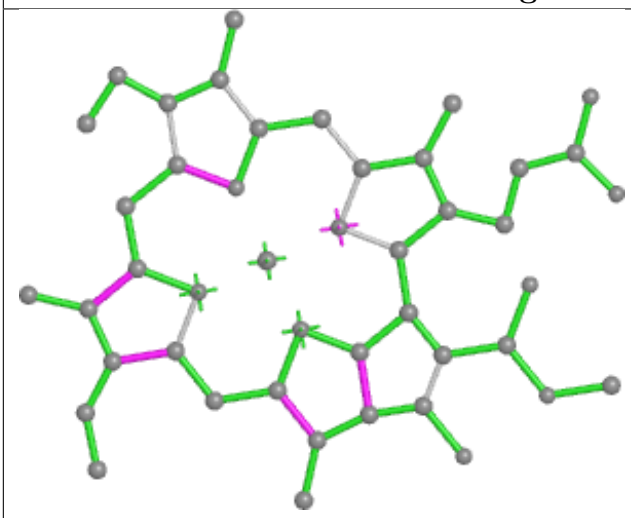
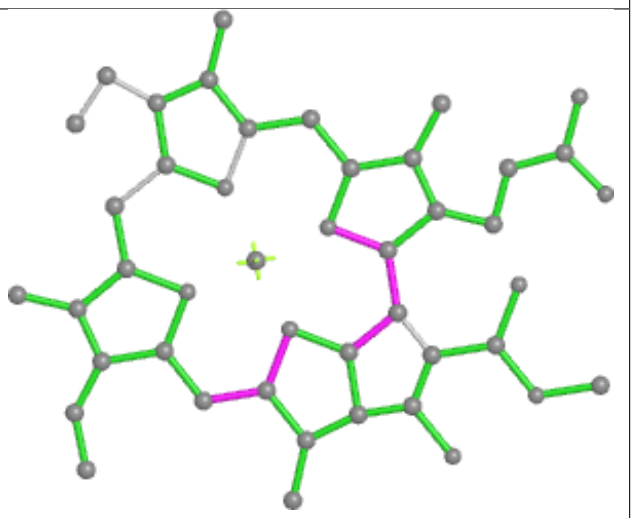


Rings

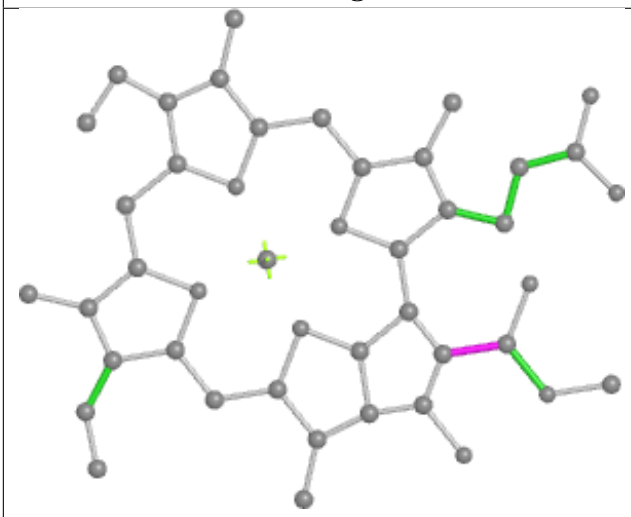
Ligand CLA 2a 307



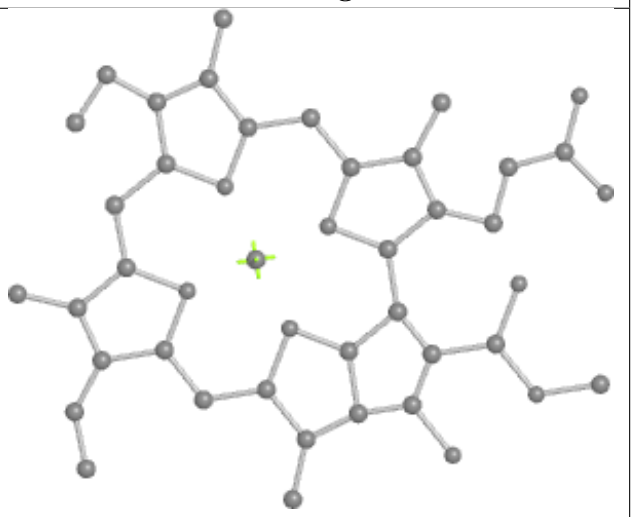
Bond lengths



Bond angles

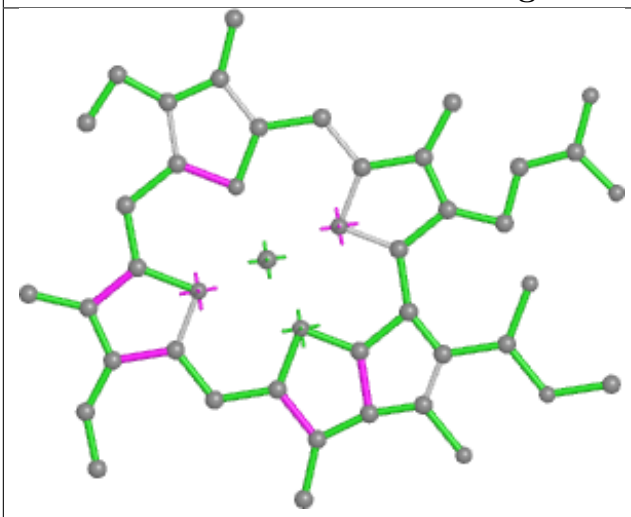


Torsions

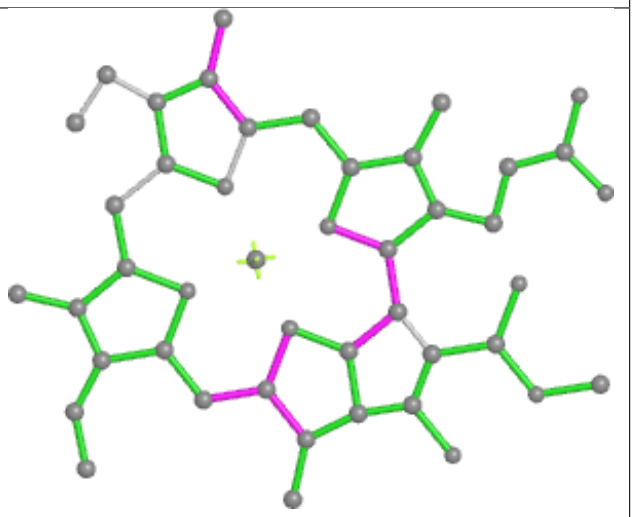


Rings

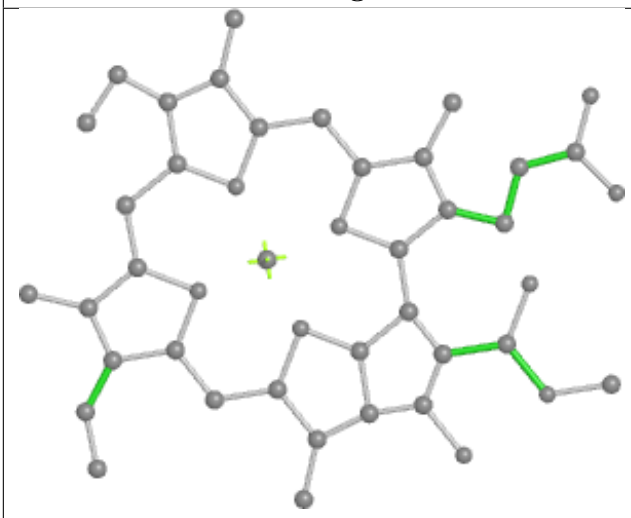
Ligand CLA 3b 304



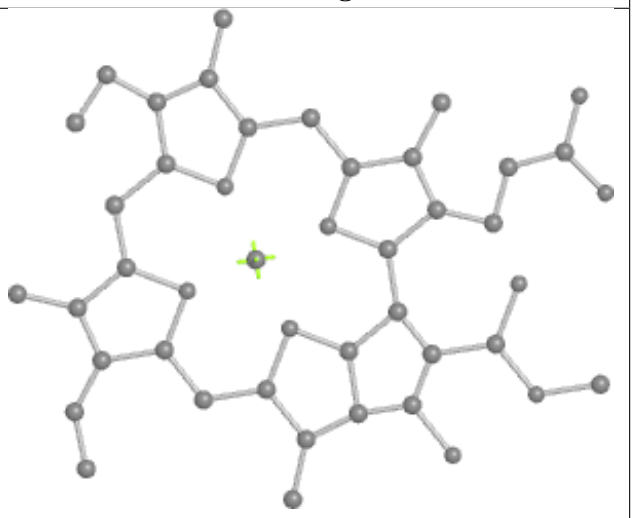
Bond lengths



Bond angles

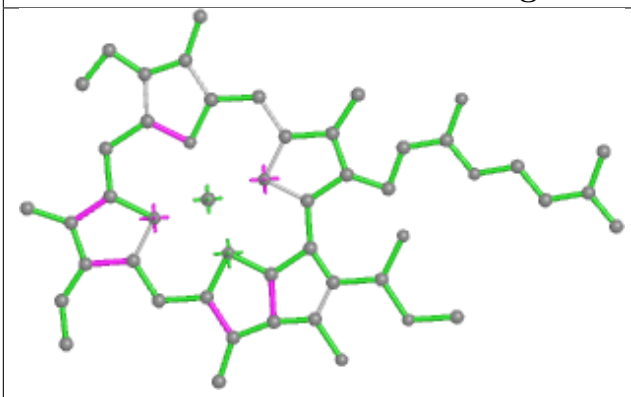


Torsions

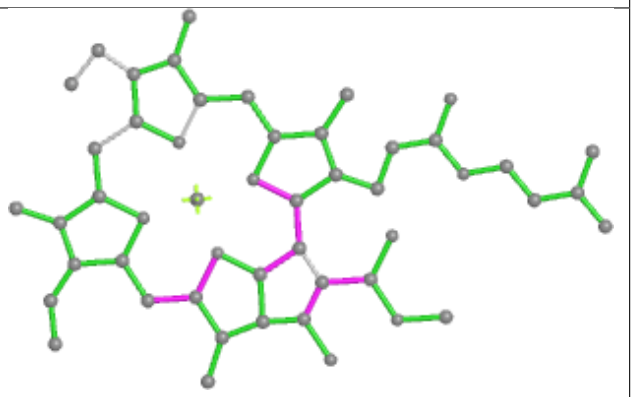


Rings

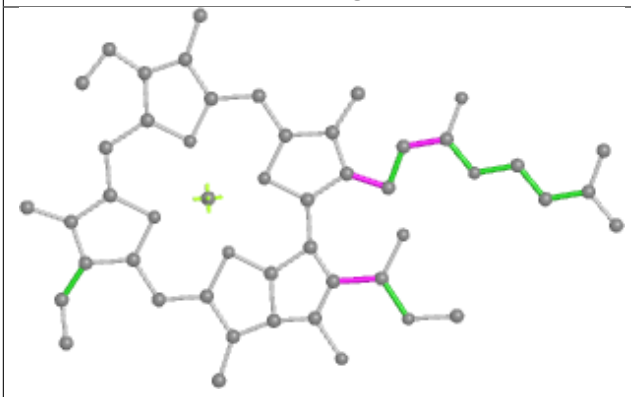
Ligand CLA 5a 303



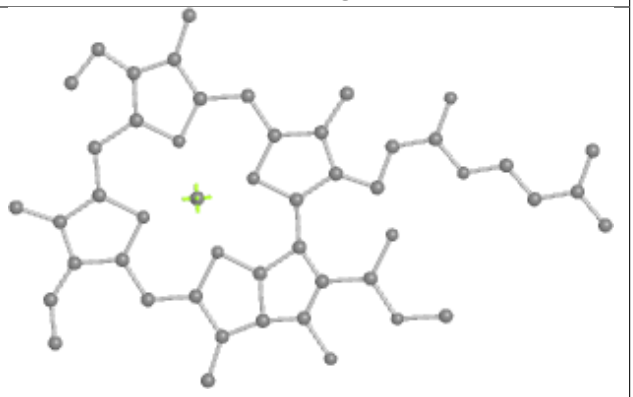
Bond lengths



Bond angles

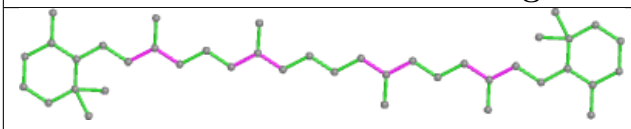


Torsions

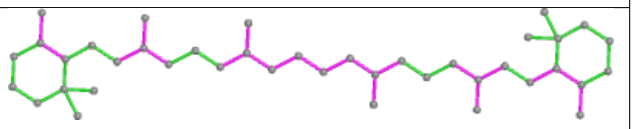


Rings

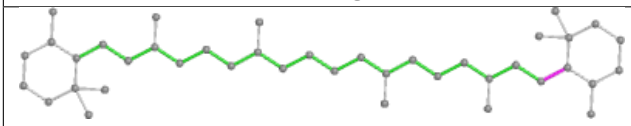
Ligand BCR B 846



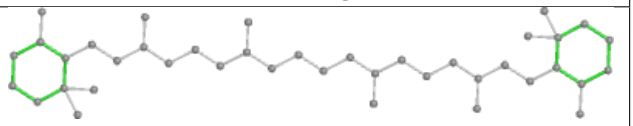
Bond lengths



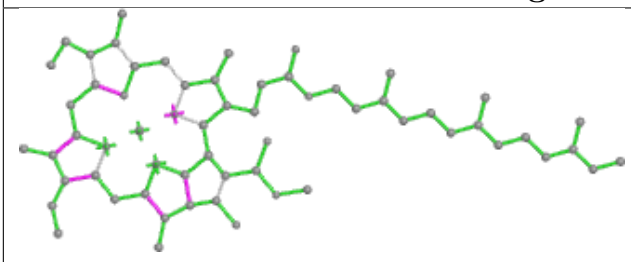
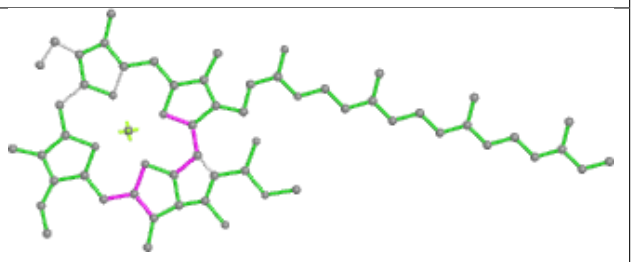
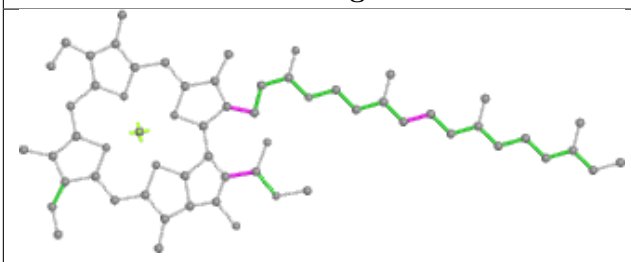
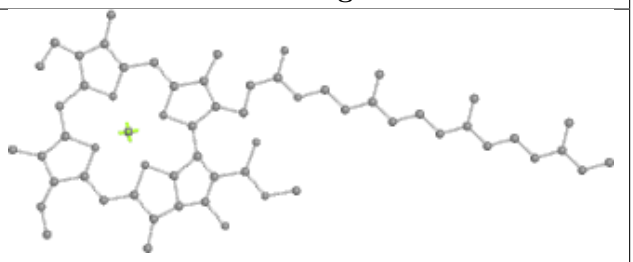
Bond angles

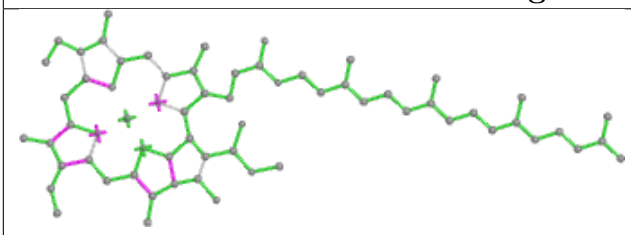
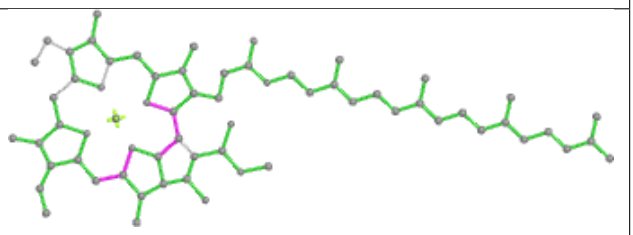
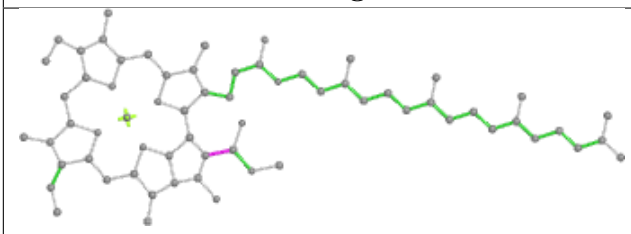
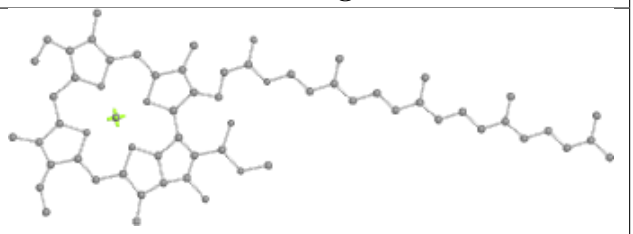


Torsions

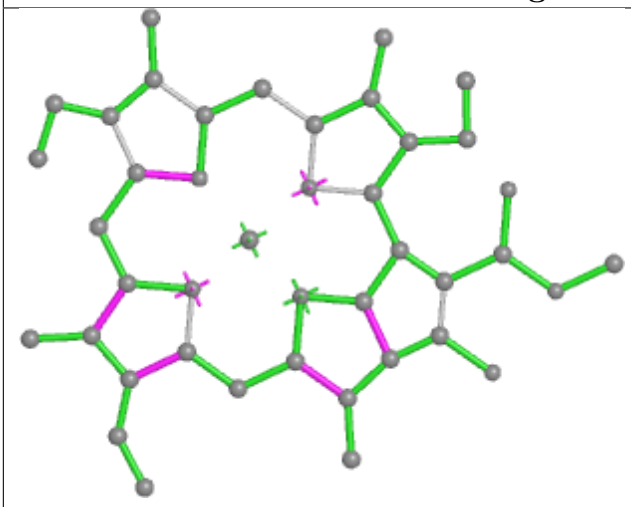


Rings

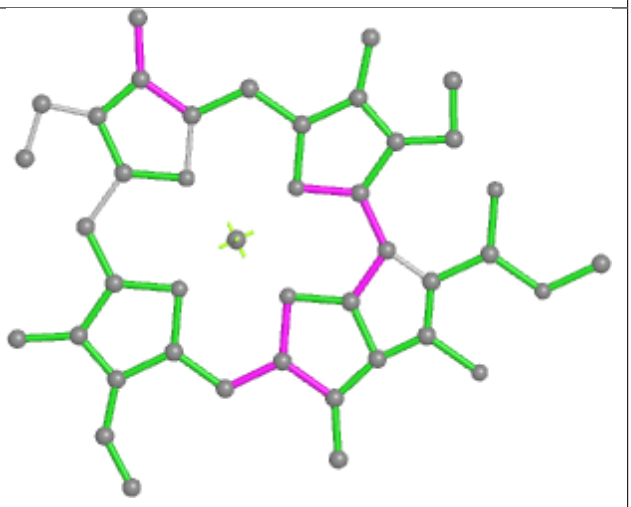
Ligand CLA a 803	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA a 840	
 Bond lengths	 Bond angles
 Torsions	 Rings

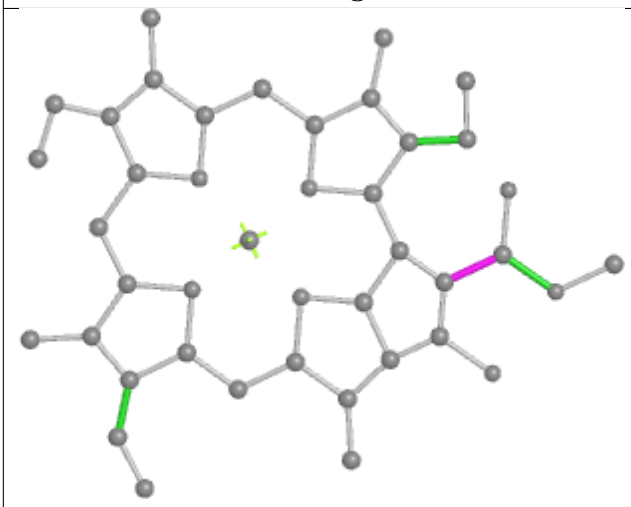
Ligand CLA a 814



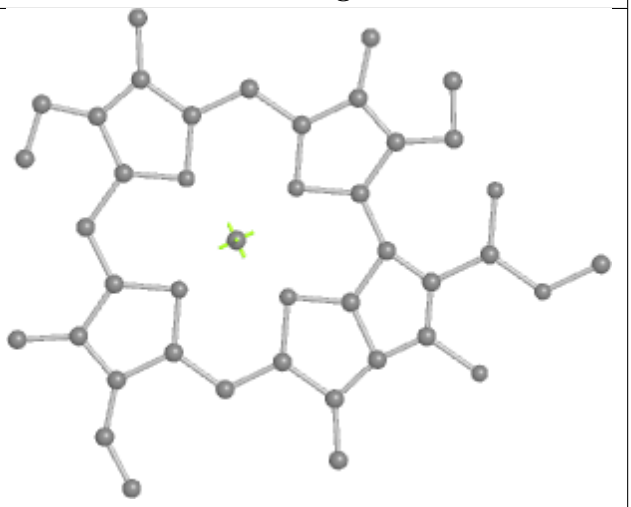
Bond lengths



Bond angles

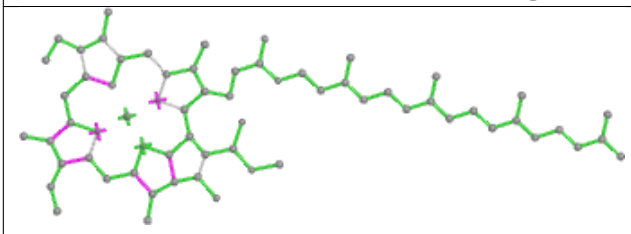


Torsions

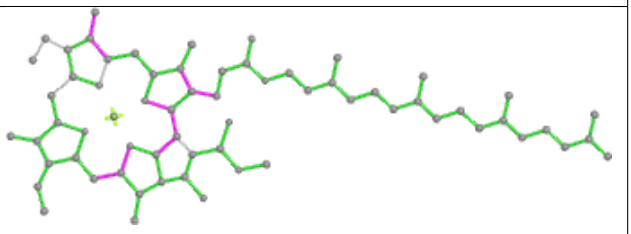


Rings

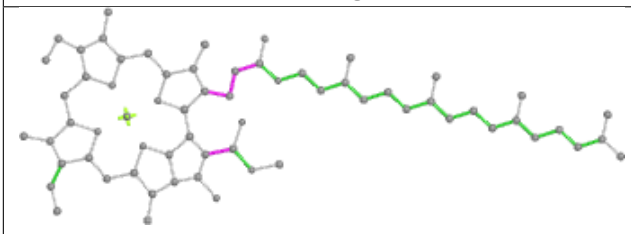
Ligand CLA B 831



Bond lengths



Bond angles



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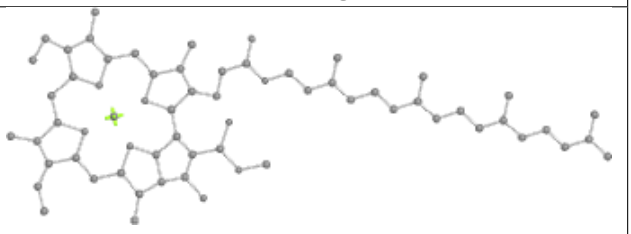
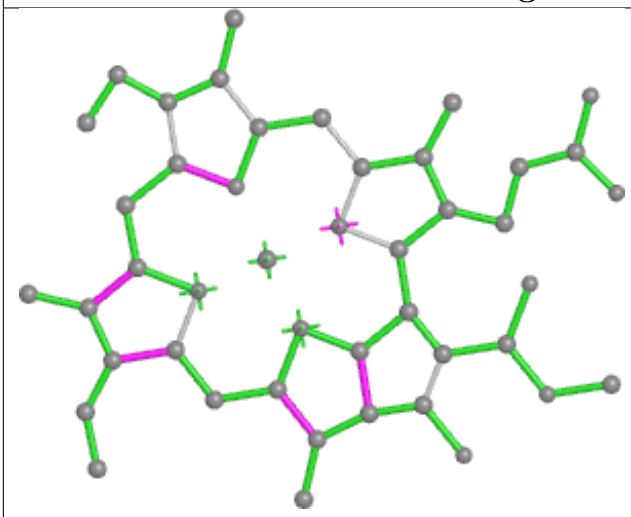
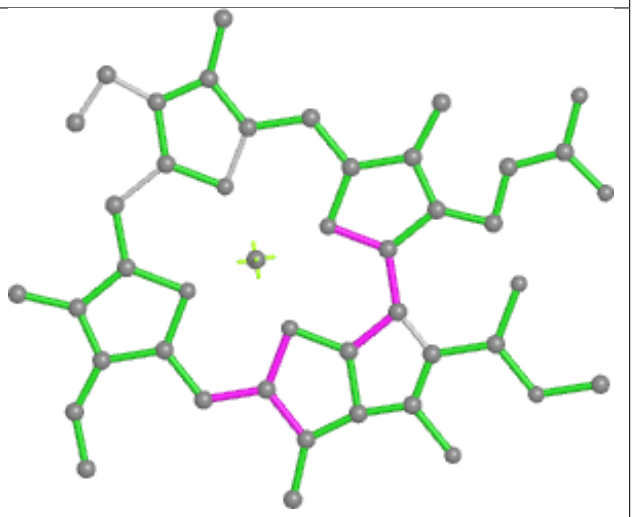


Rings

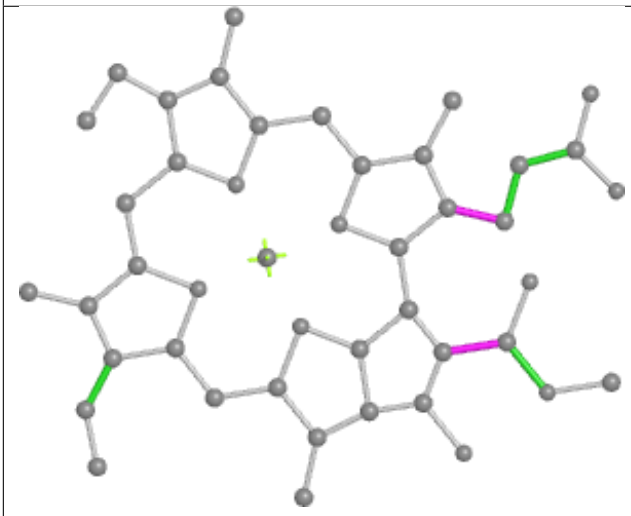
Ligand CLA 6b 316



Bond lengths



Bond angles



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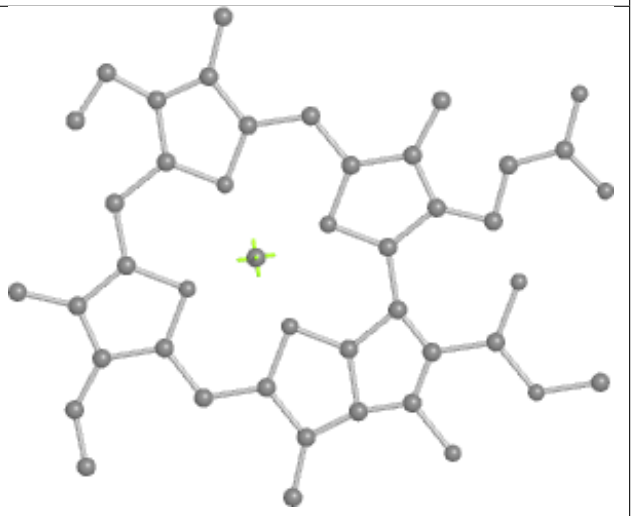
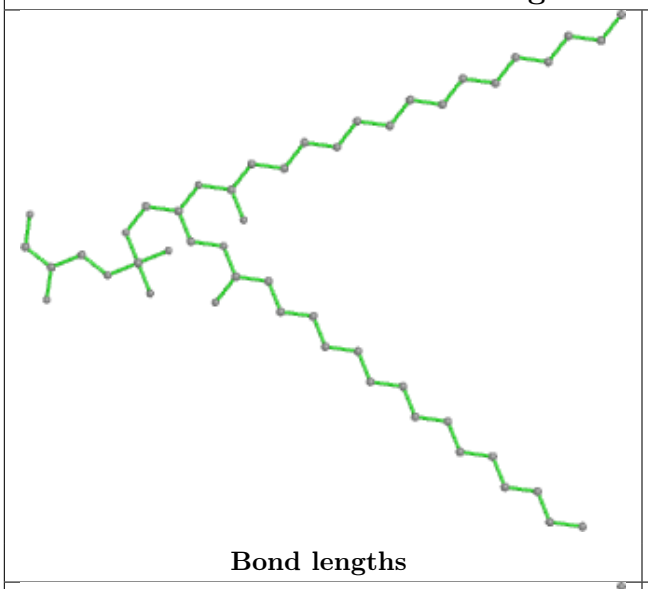
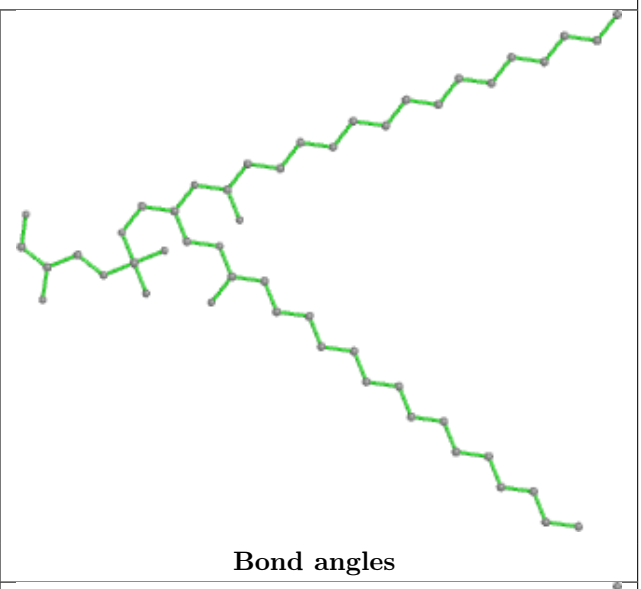


Rings

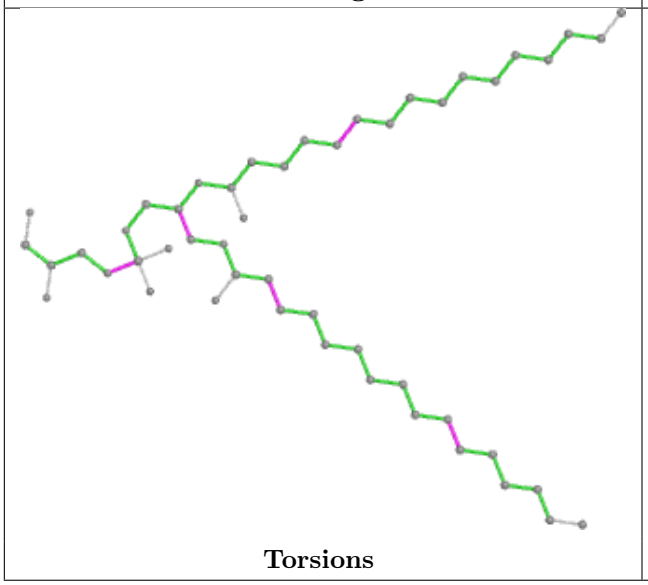
Ligand LHG a 845



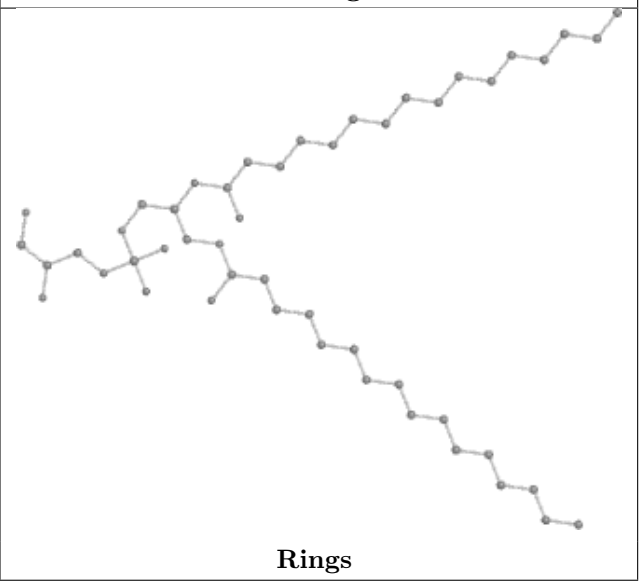
Bond lengths



Bond angles

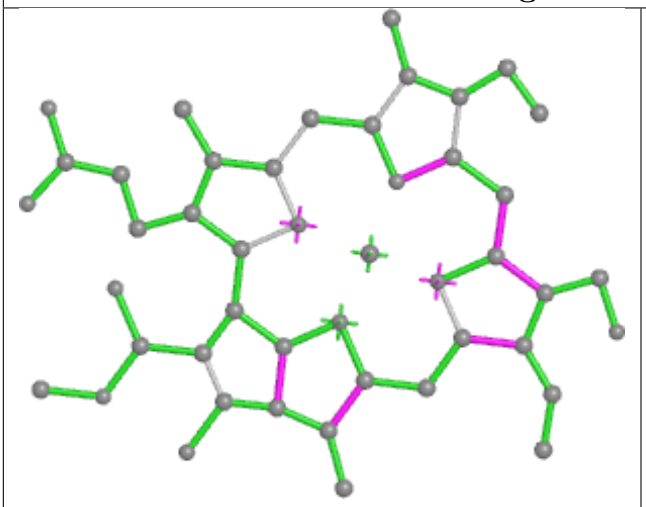


Torsions



Rings

Ligand CHL 5a 301



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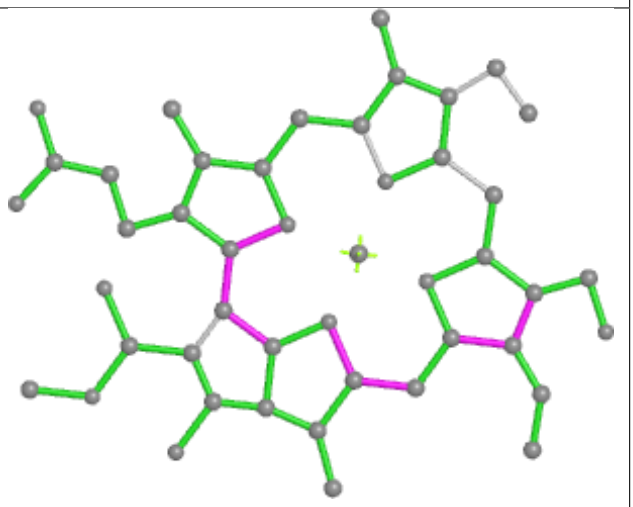

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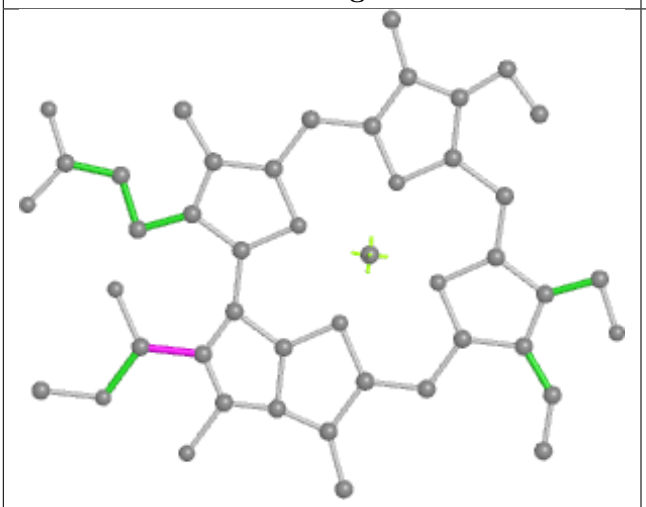

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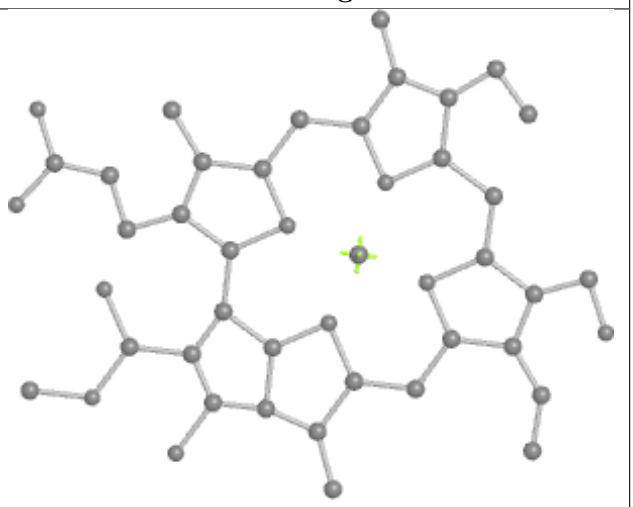
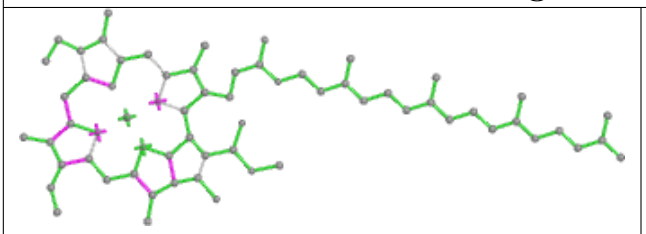


Rings

Ligand CLA a 841



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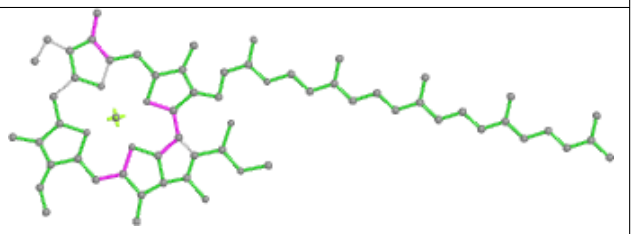
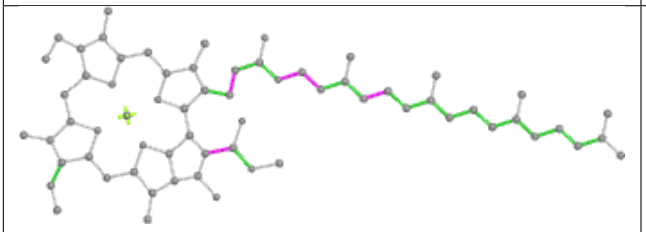
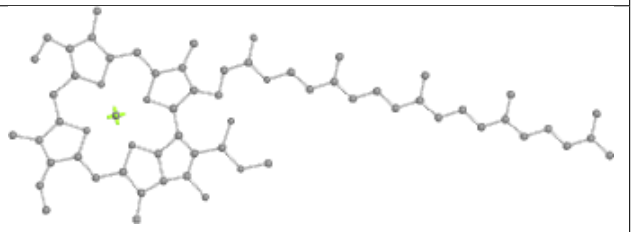


Bond angles

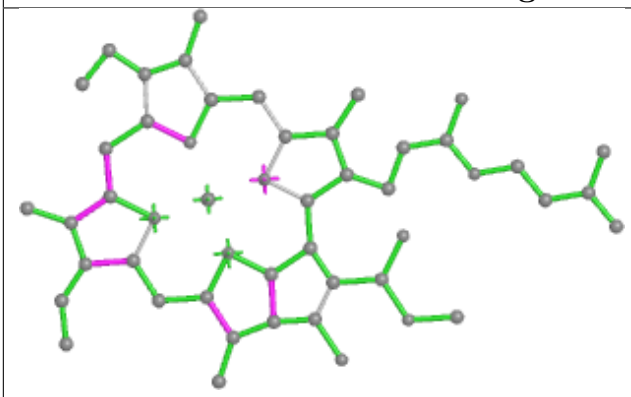


Torsions

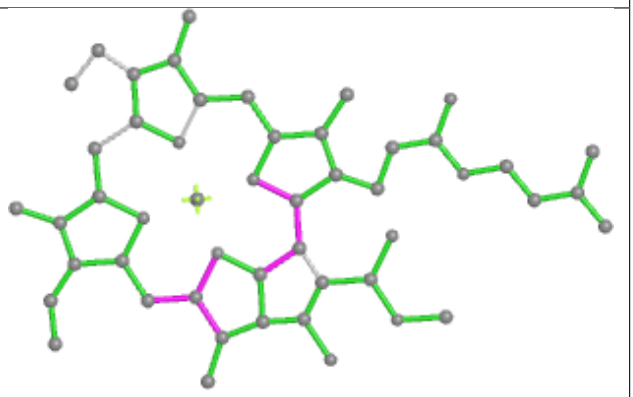


Rings

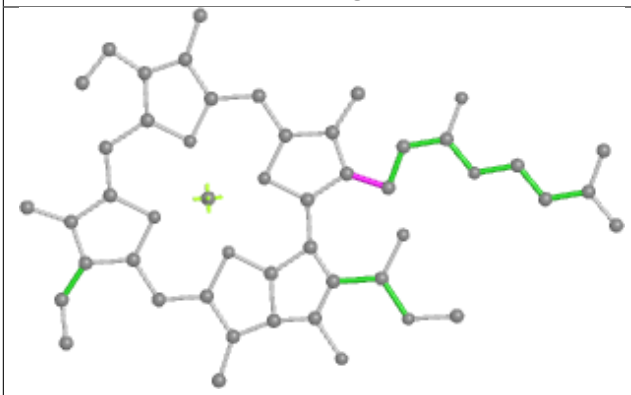
Ligand CLA 3b 309



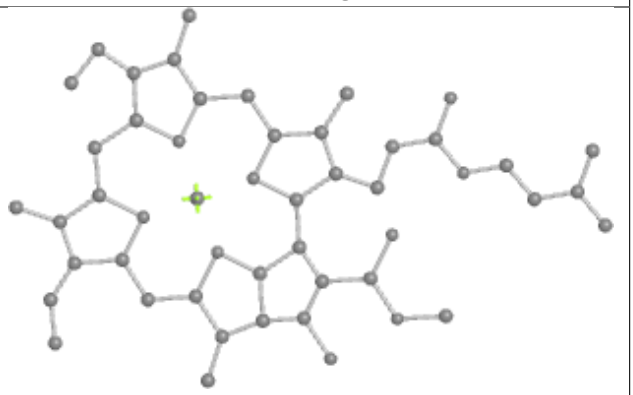
Bond lengths



Bond angles

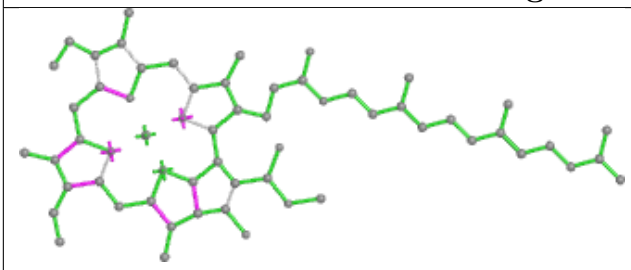


Torsions

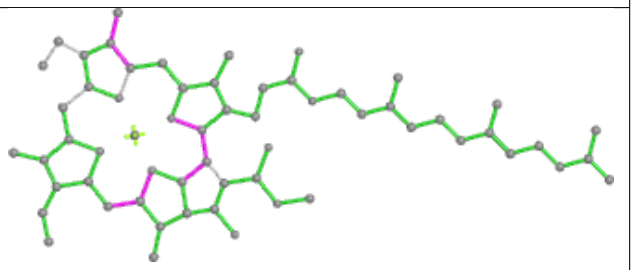


Rings

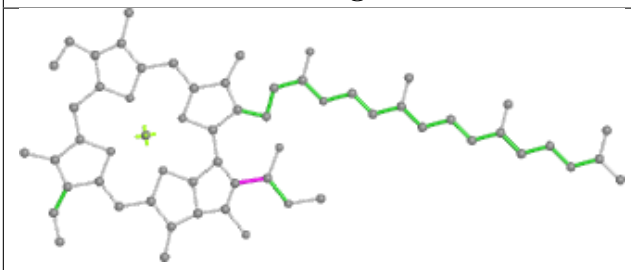
Ligand CLA L 302



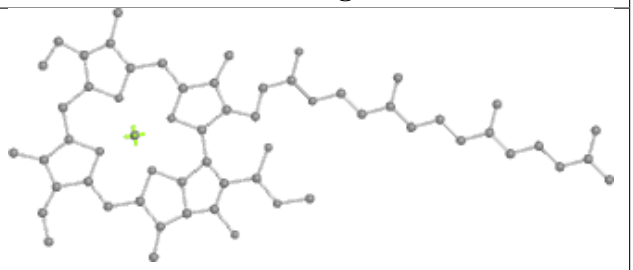
Bond lengths



Bond angles

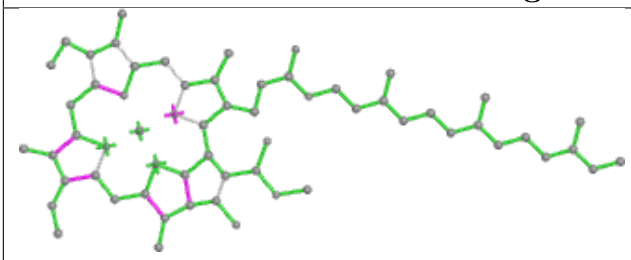


Torsions

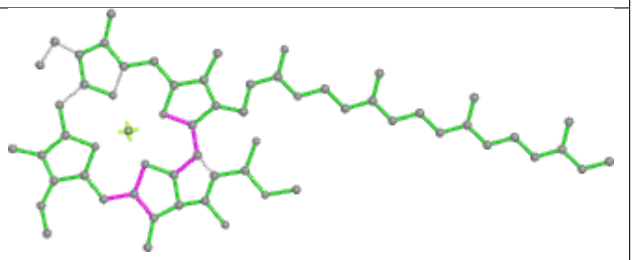


Rings

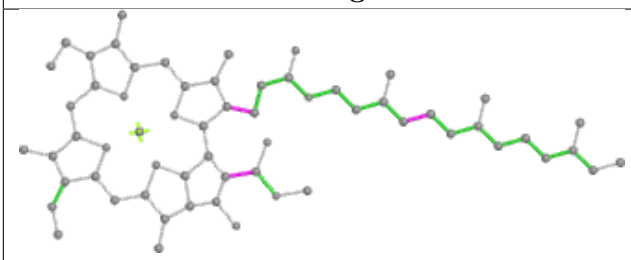
Ligand CLA A 803



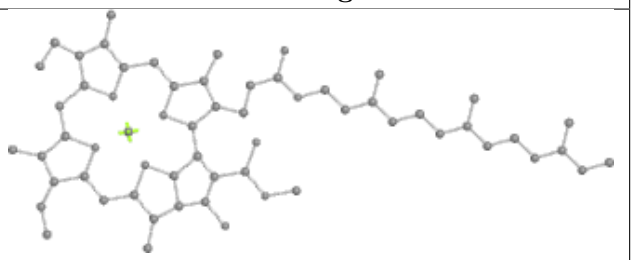
Bond lengths



Bond angles

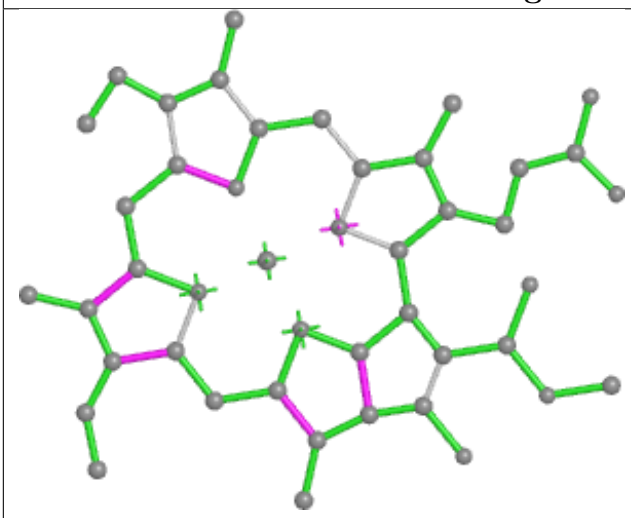


Torsions

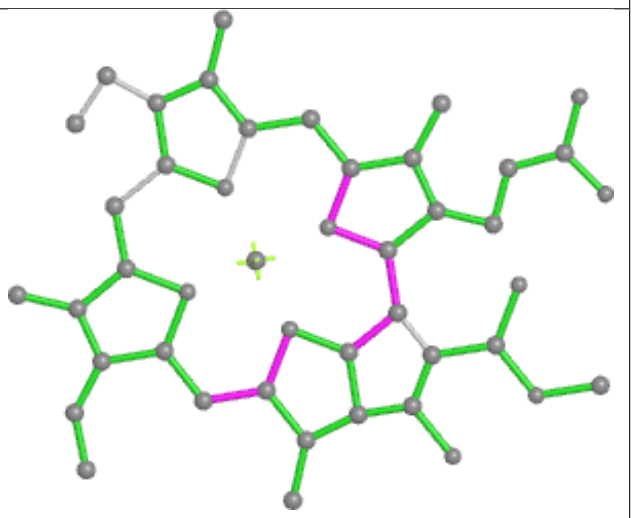


Rings

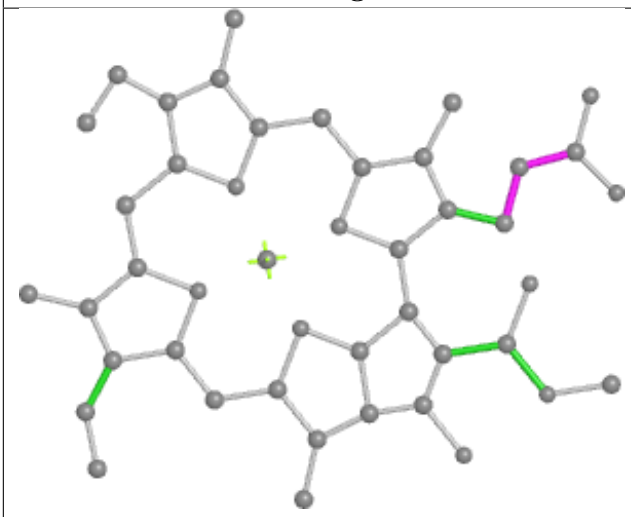
Ligand CLA B 811



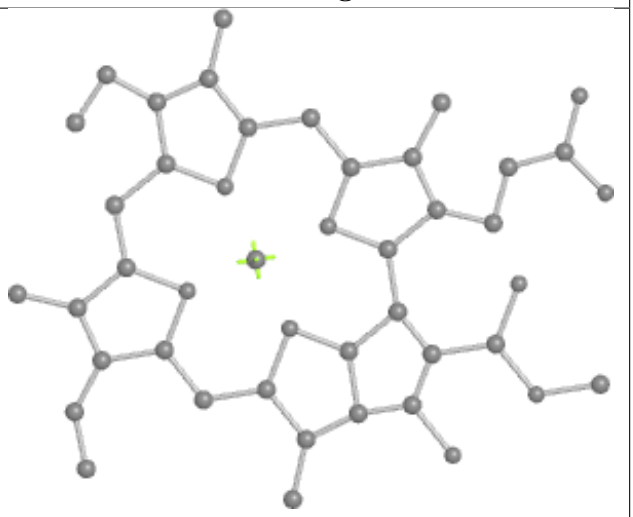
Bond lengths



Bond angles

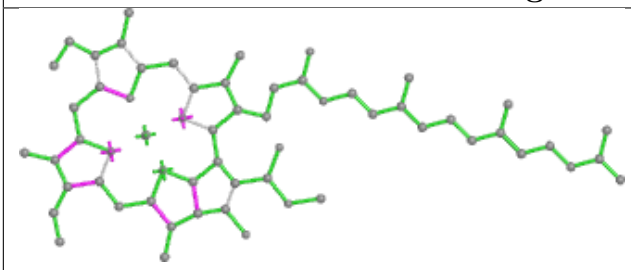


Torsions

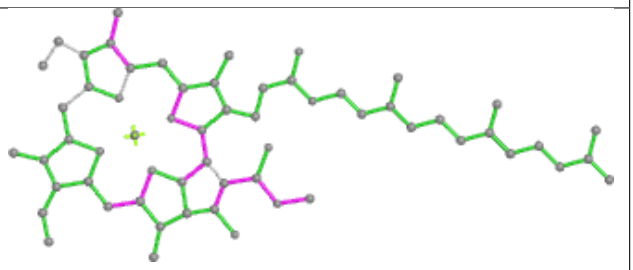


Rings

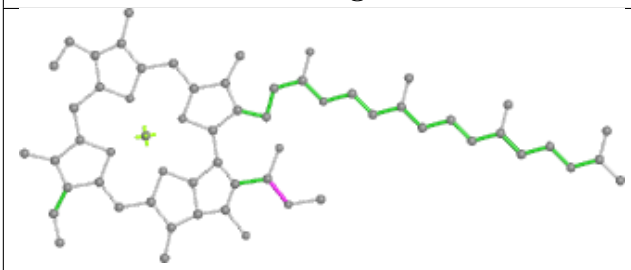
Ligand CLA F 305



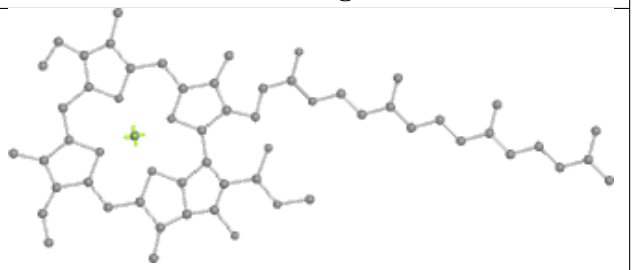
Bond lengths



Bond angles

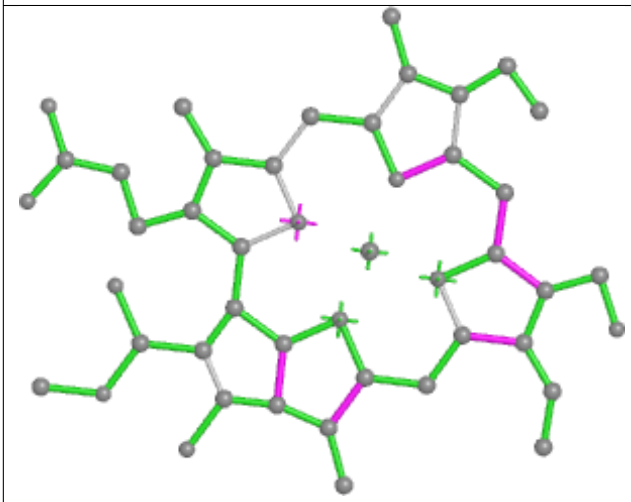


Torsions



Rings

Ligand CHL 5b 307



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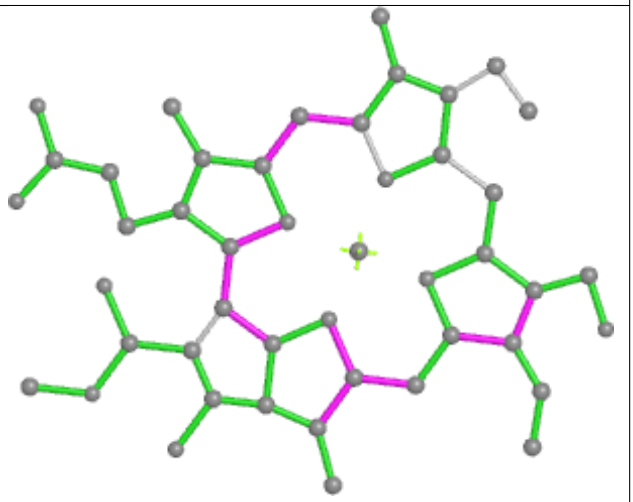
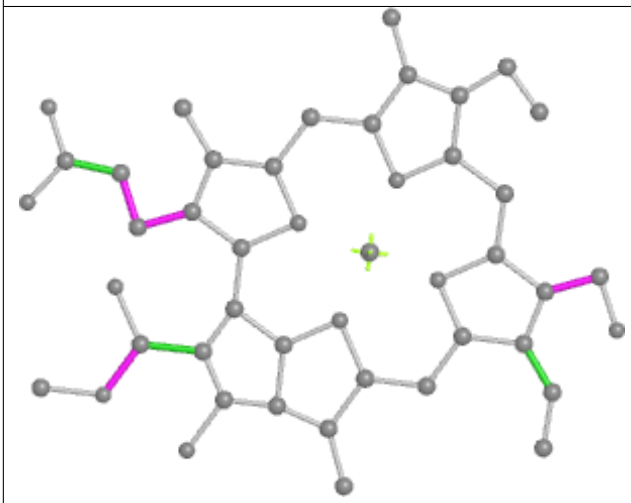
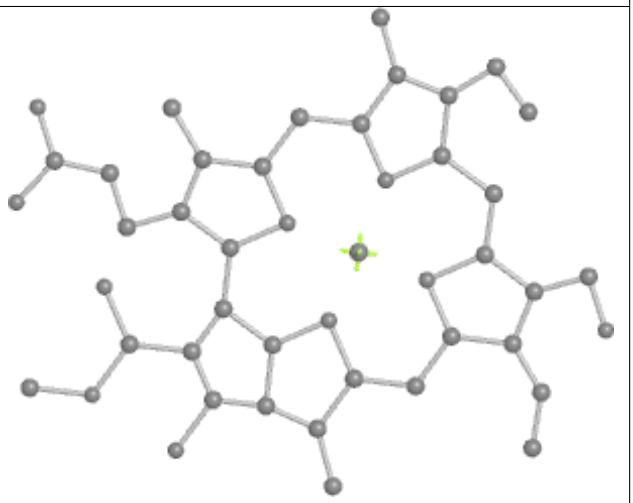


Bond angles

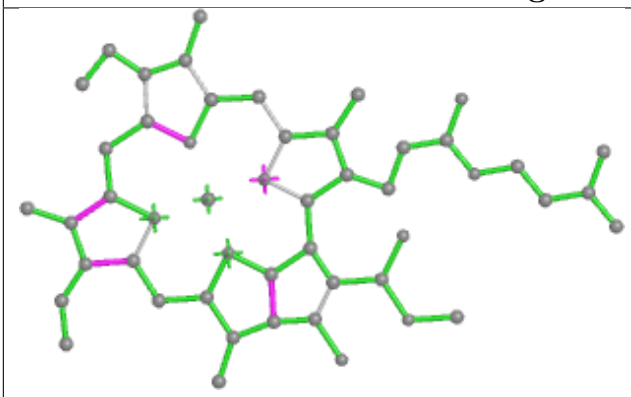


Torsions



Rings

Ligand CLA a 813



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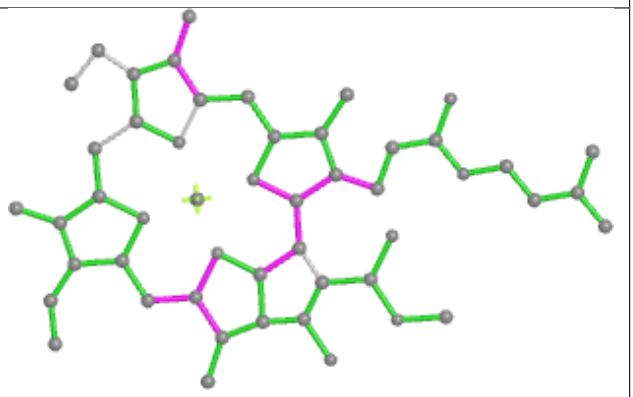
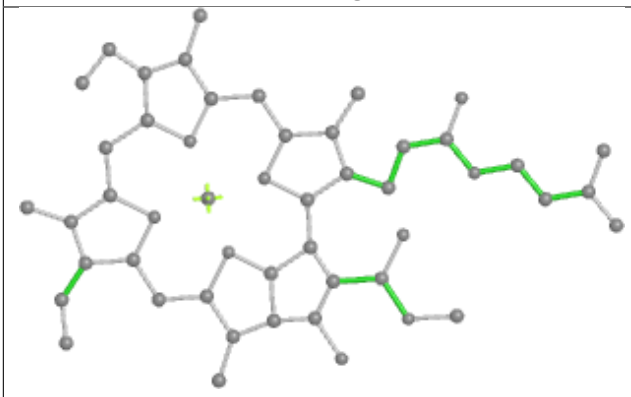
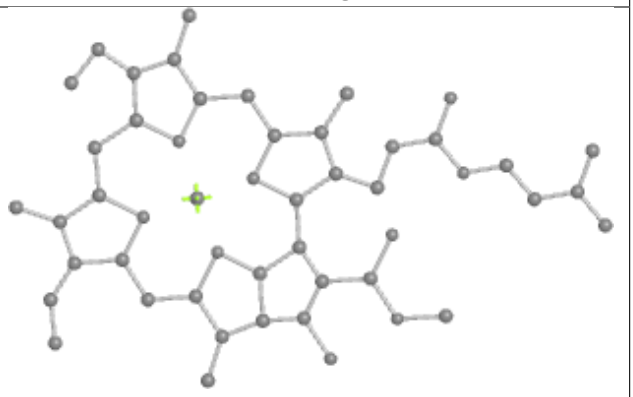


Bond angles

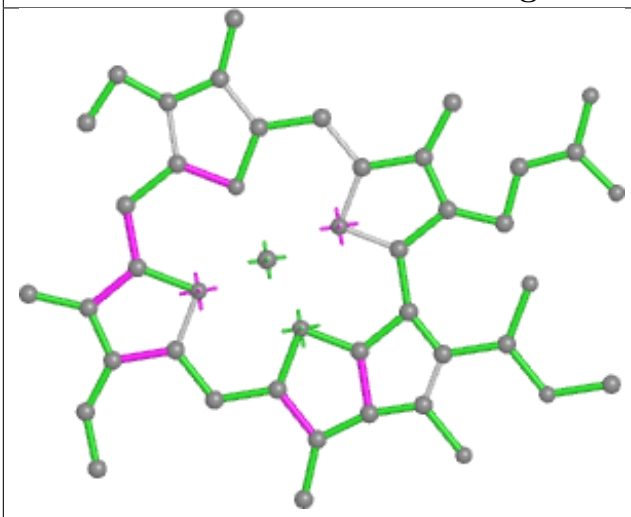


Torsions

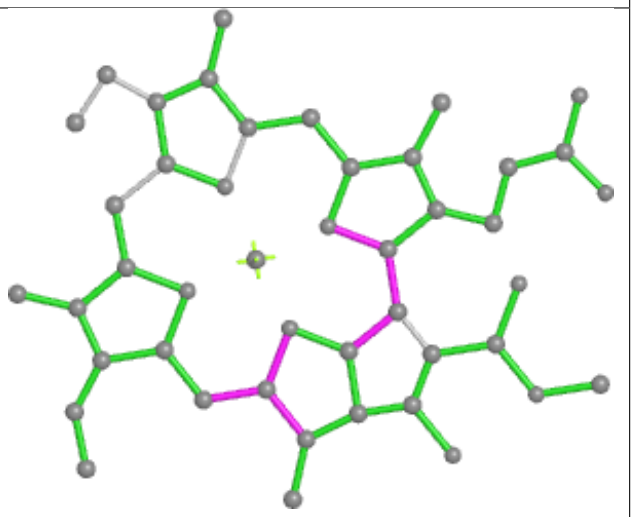


Rings

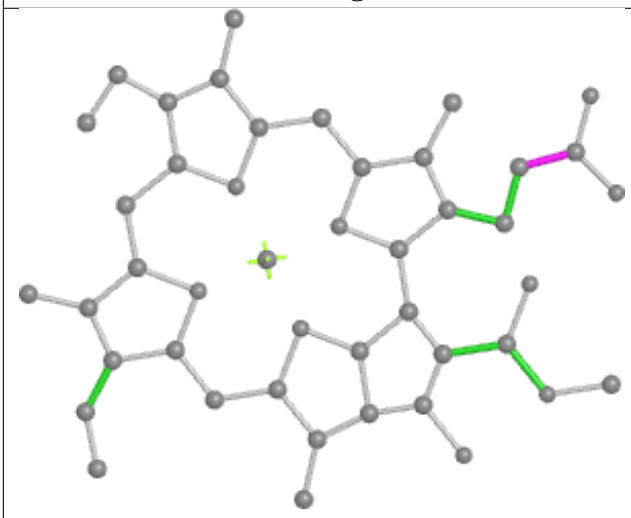
Ligand CLA 5a 304



Bond lengths



Bond angles



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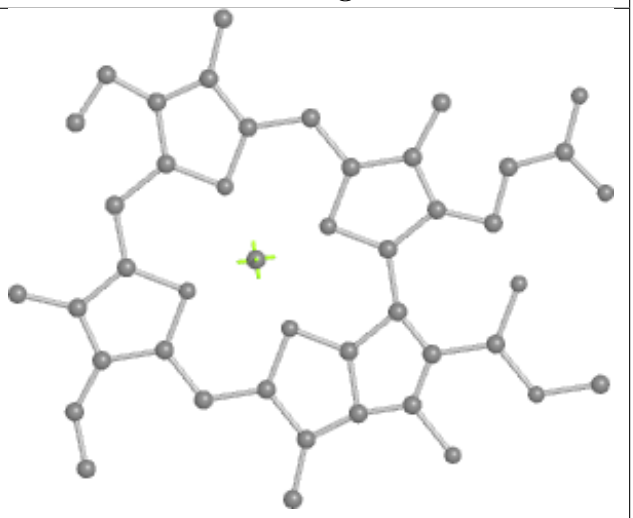
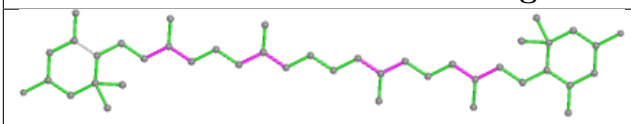
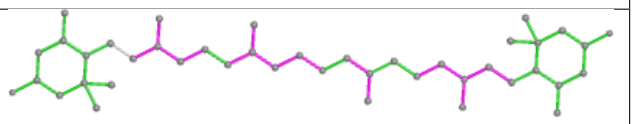


Rings

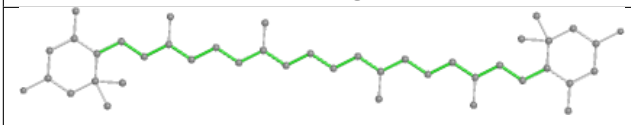
Ligand LUT 5a 316



Bond lengths



Bond angles



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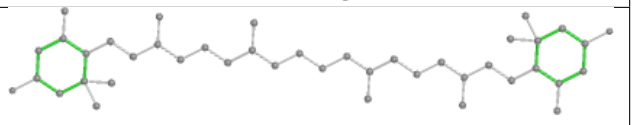
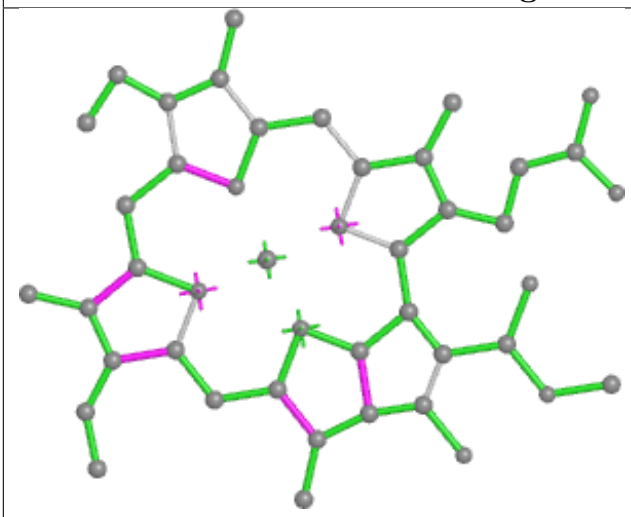


Rings

Ligand CLA 2a 303



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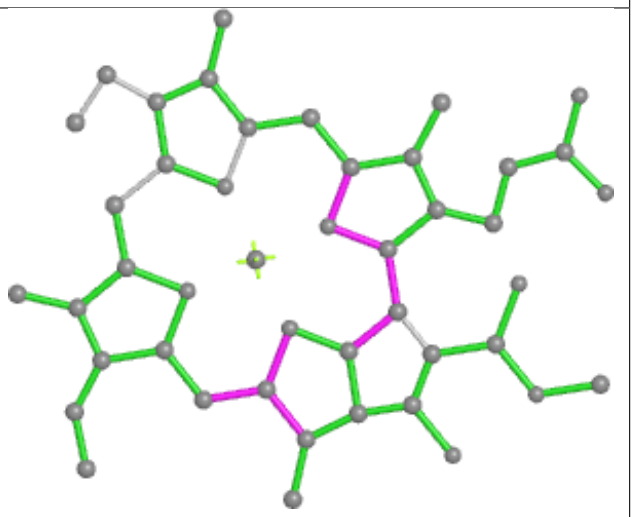
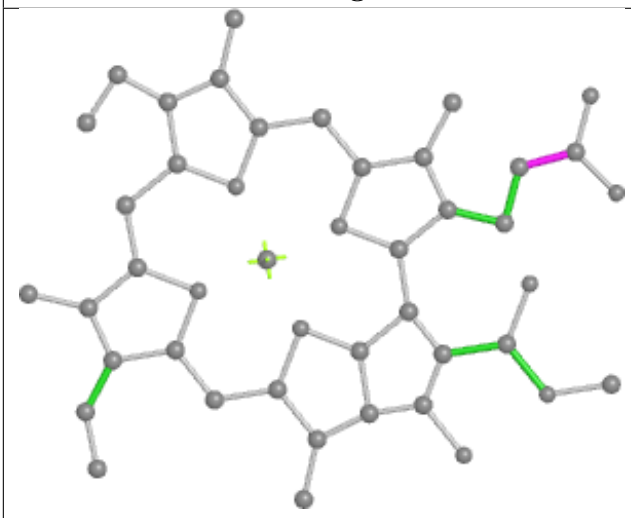


Bond angles



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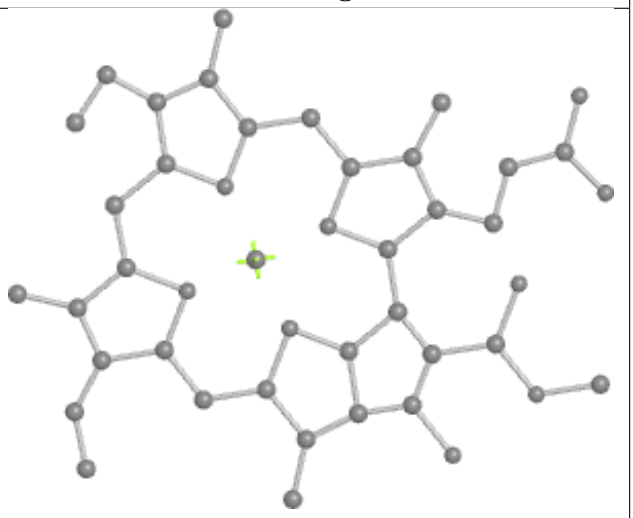
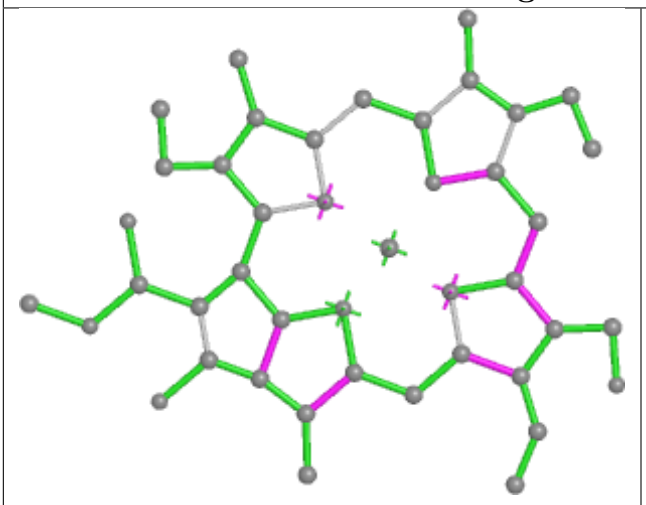


Rings

Ligand CHL 2b 305



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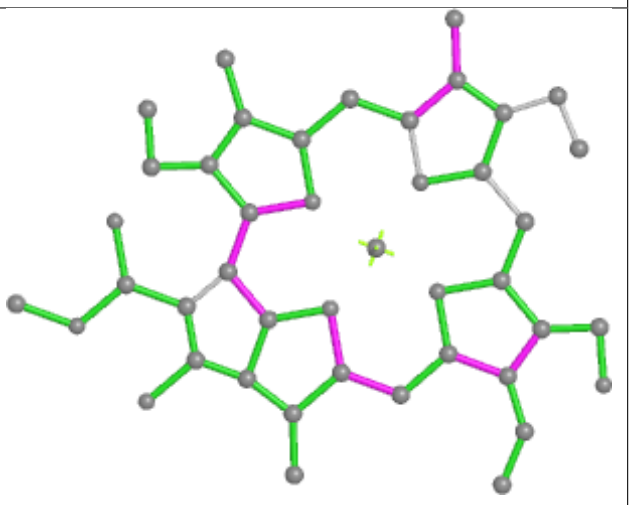
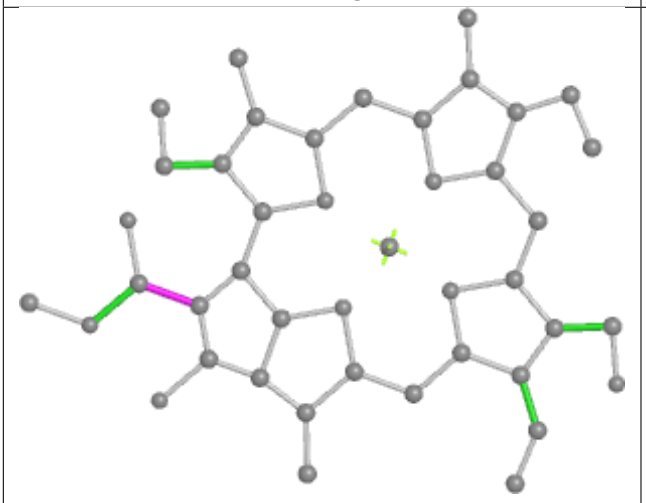
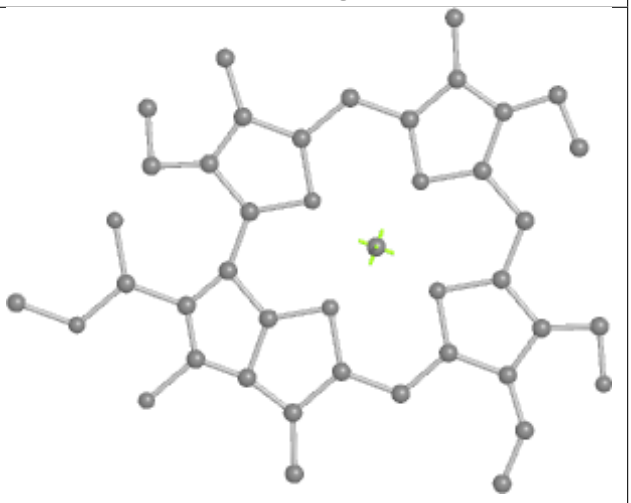


Bond angles

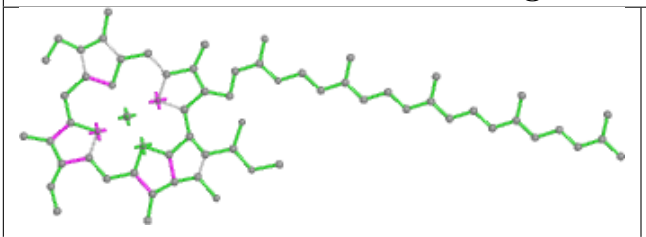


Torsions



Rings

Ligand CLA A 812



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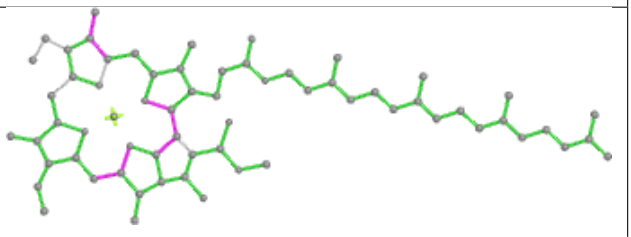
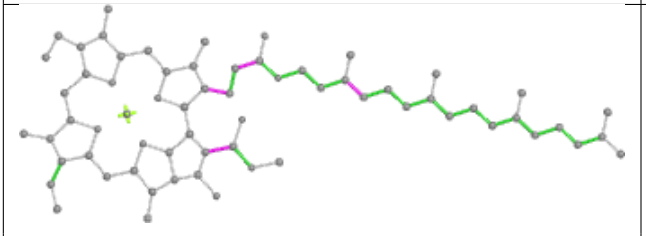
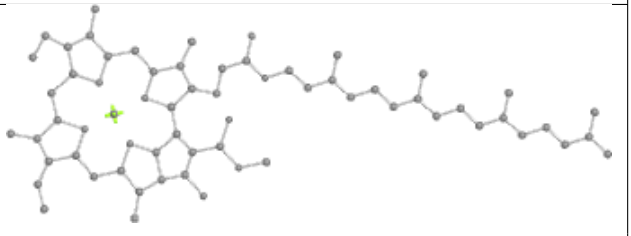


Bond angles

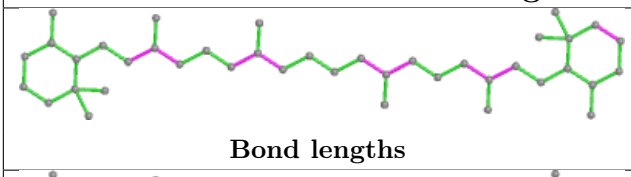


Torsions



Rings

Ligand BCR B 845



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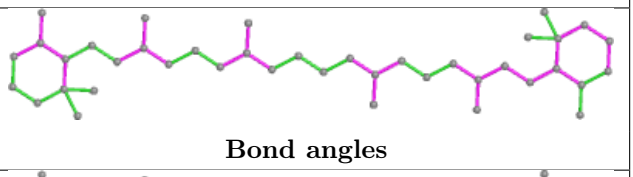
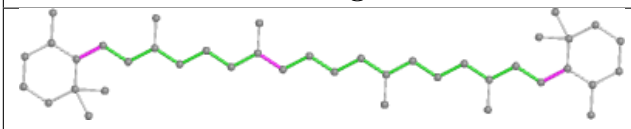
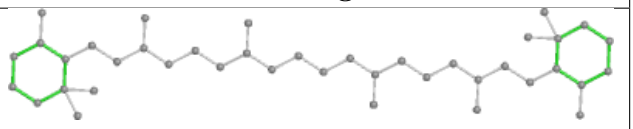


Bond angles

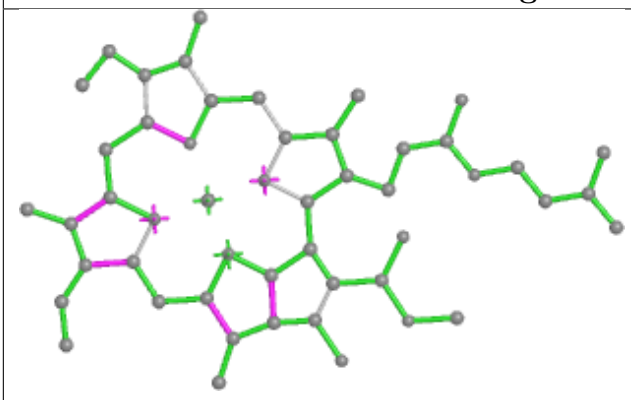


Torsions



Rings

Ligand CLA 3a 303



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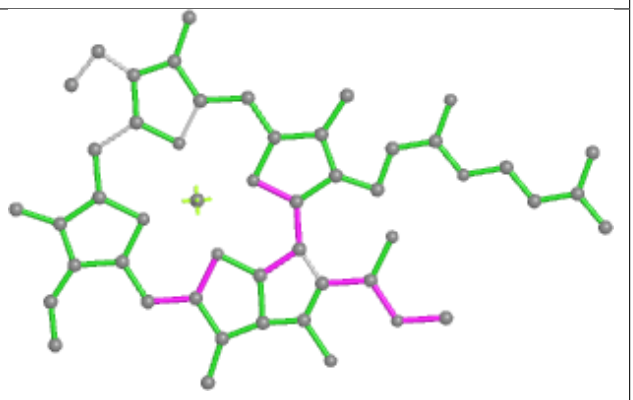
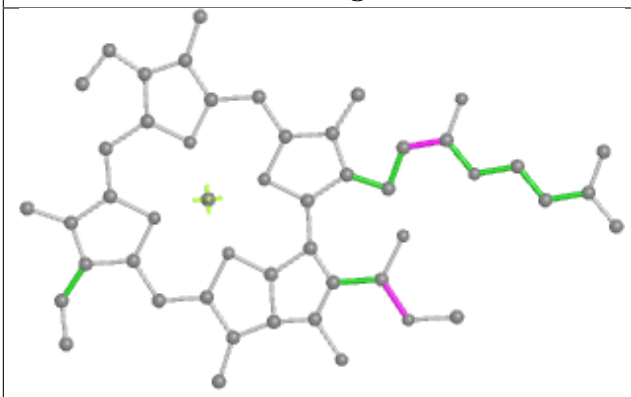
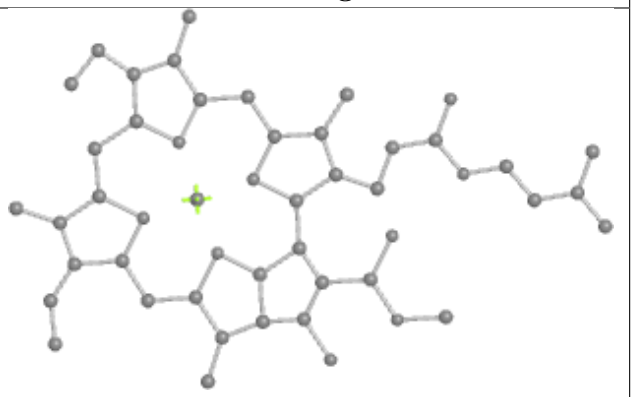


Bond angles

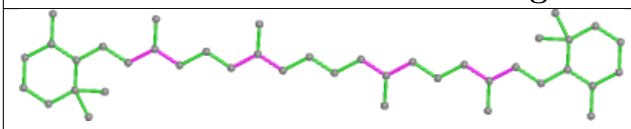


Torsions

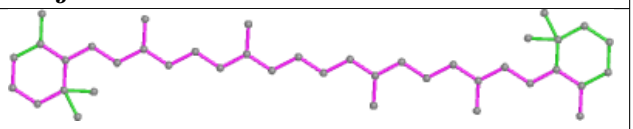


Rings

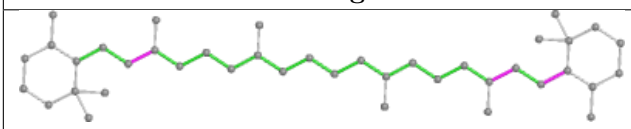
Ligand BCR j 102



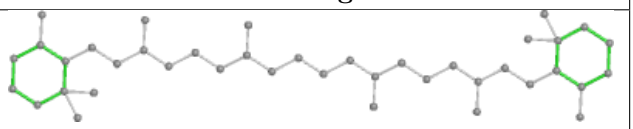
Bond lengths



Bond angles

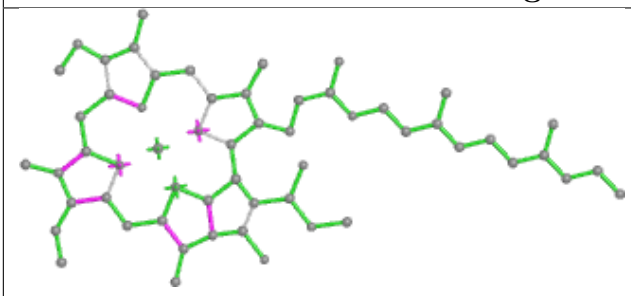


Torsions

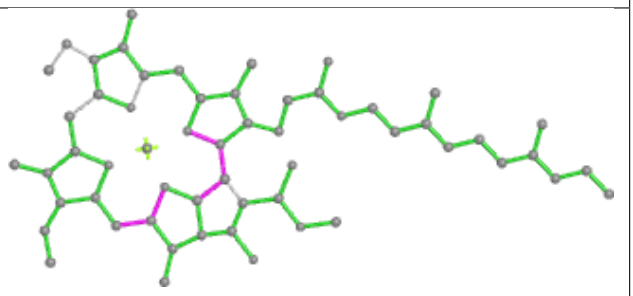


Rings

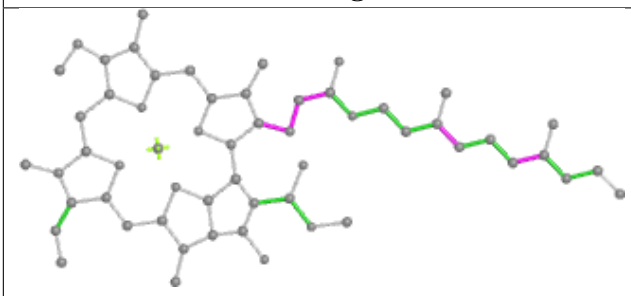
Ligand CLA A 817



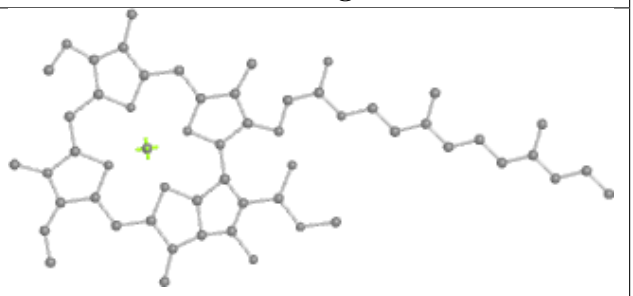
Bond lengths



Bond angles

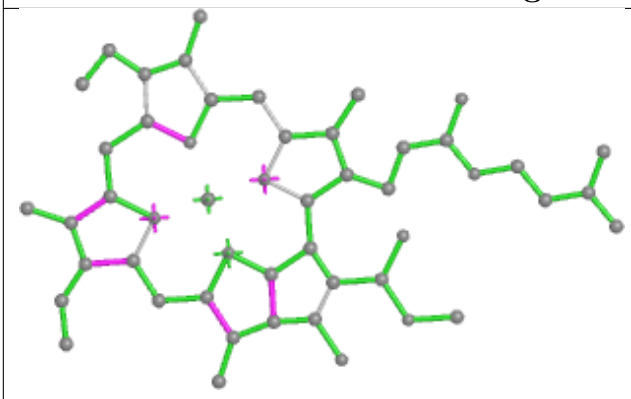


Torsions

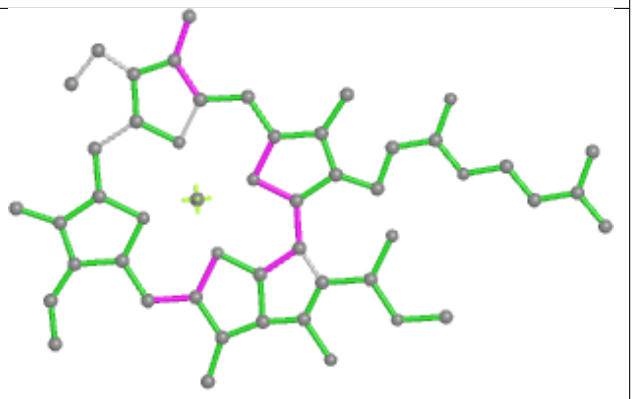


Rings

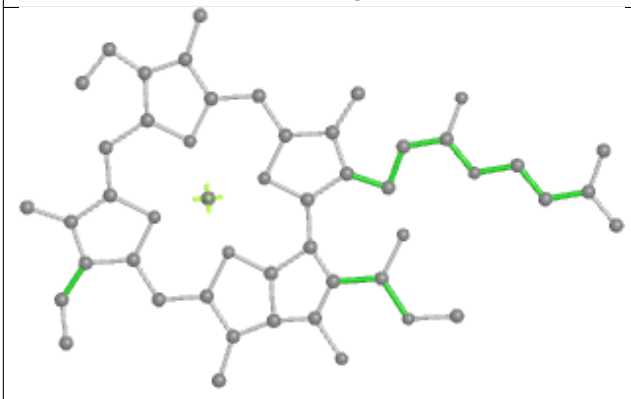
Ligand CLA A 831



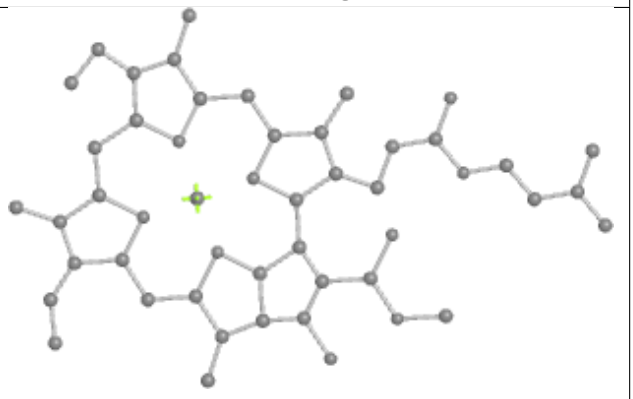
Bond lengths



Bond angles

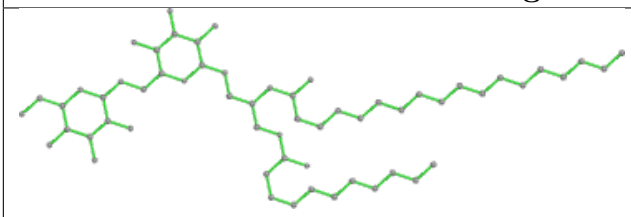


Torsions

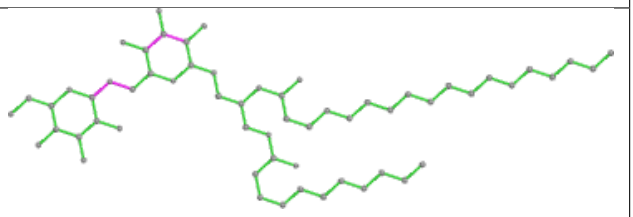


Rings

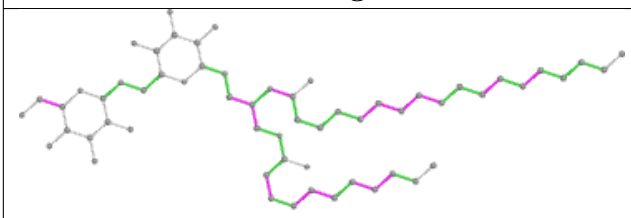
Ligand DGD b 847



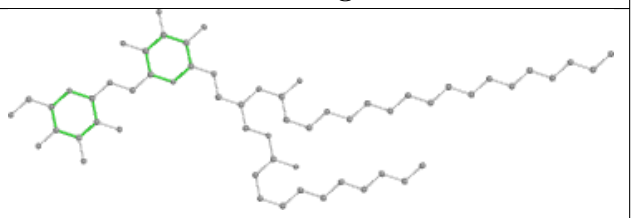
Bond lengths



Bond angles

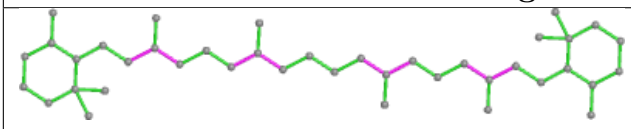


Torsions

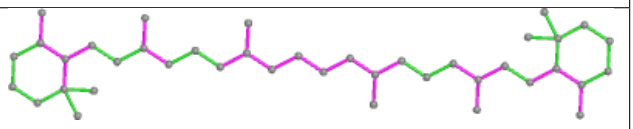


Rings

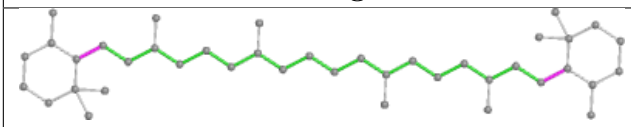
Ligand BCR M 101



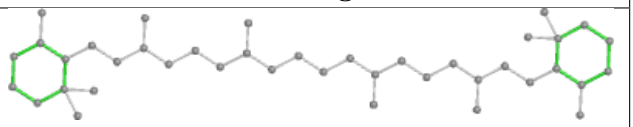
Bond lengths



Bond angles

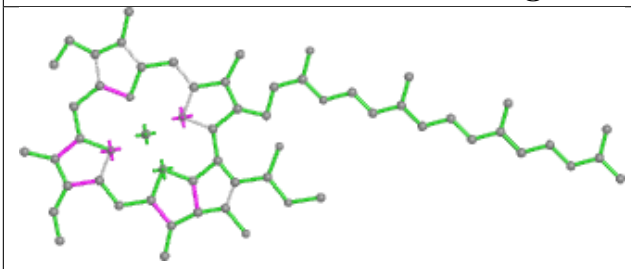


Torsions



Rings

Ligand CLA B 830



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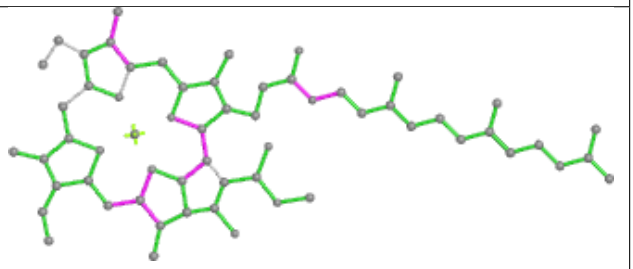
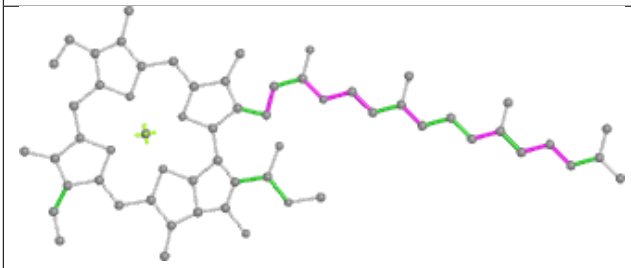
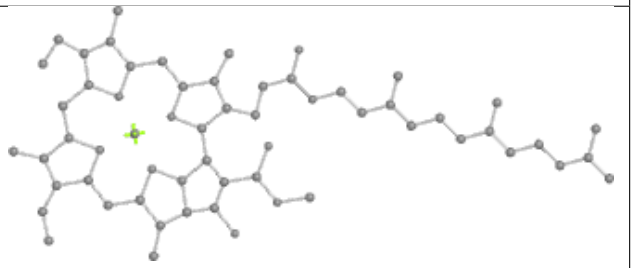


Bond angles

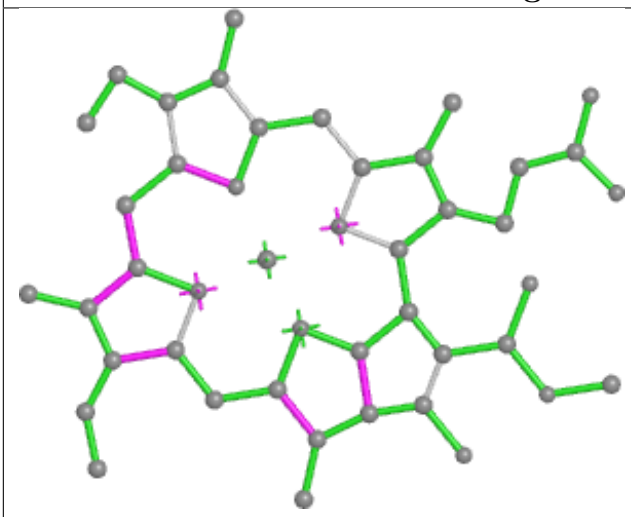


Torsions

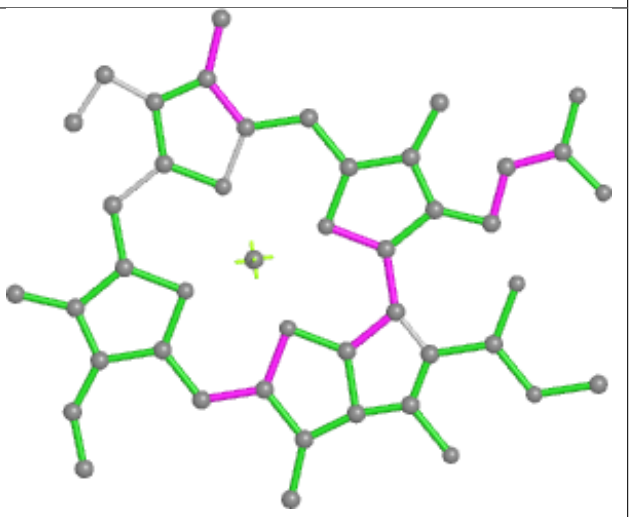


Rings

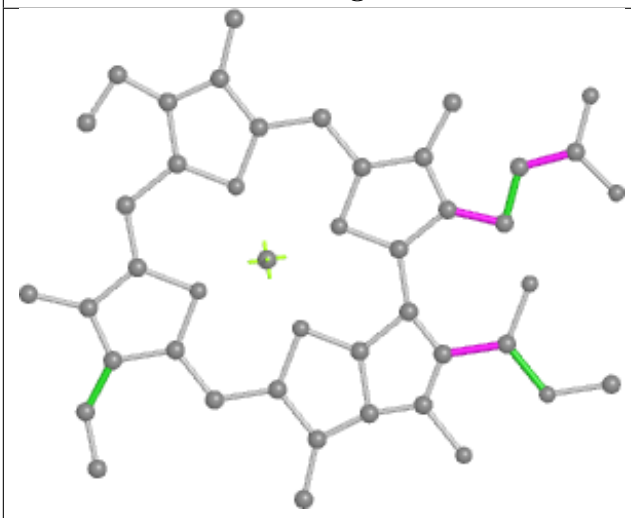
Ligand CLA A 842



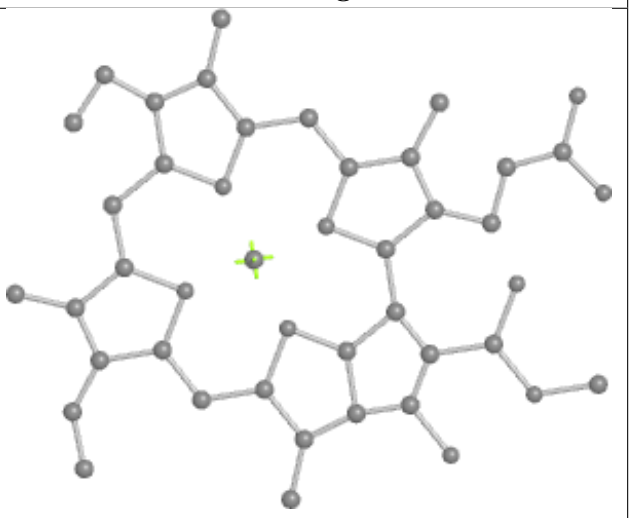
Bond lengths



Bond angles

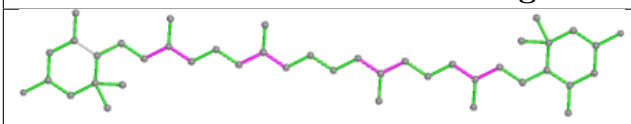


Torsions

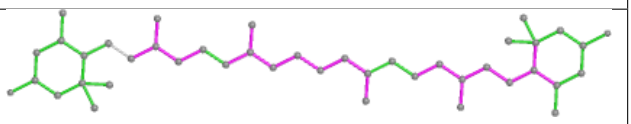


Rings

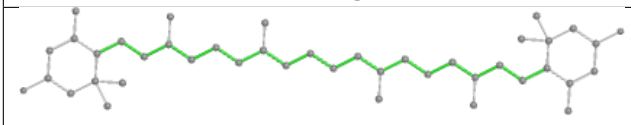
Ligand LUT 3b 316



Bond lengths



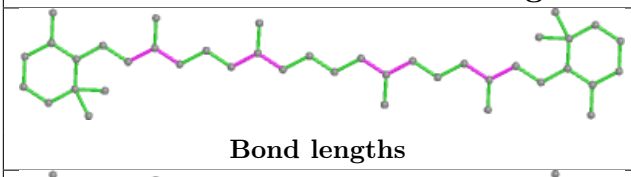
Bond angles



Torsions

Rings

Ligand BCR b 842



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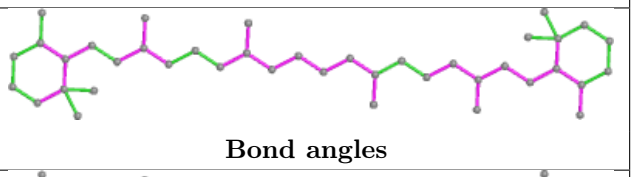
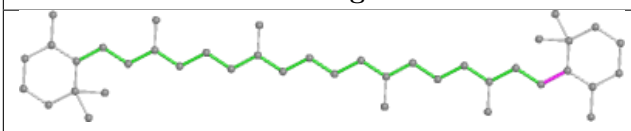
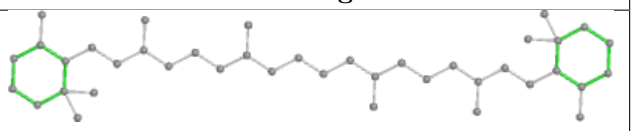


Bond angles

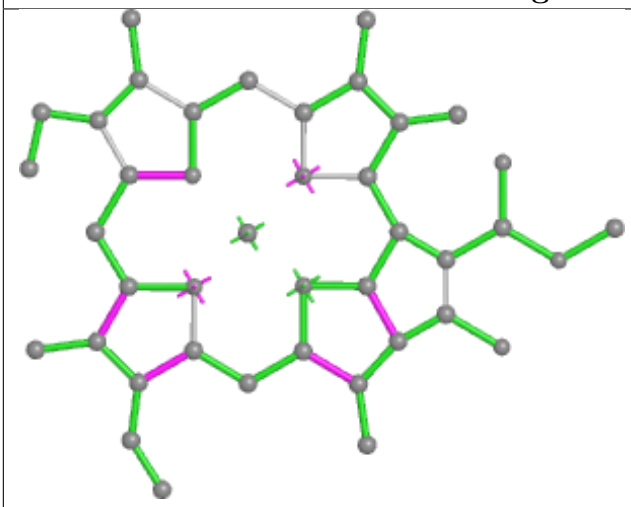


Torsions



Rings

Ligand CLA f 303



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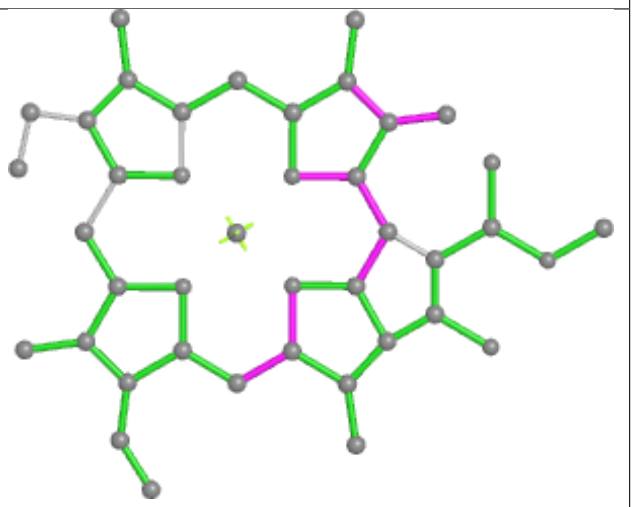
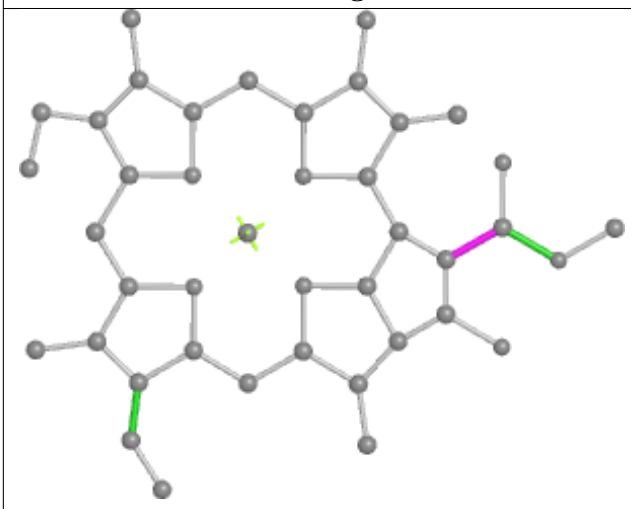


Bond angles



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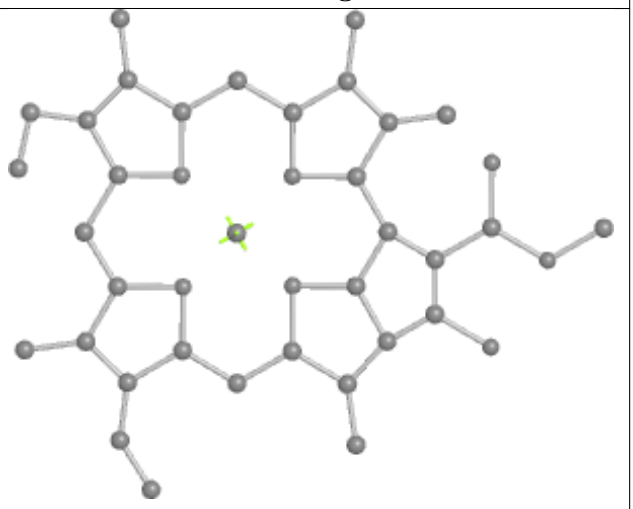
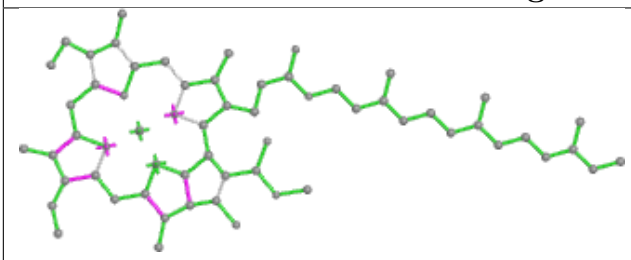
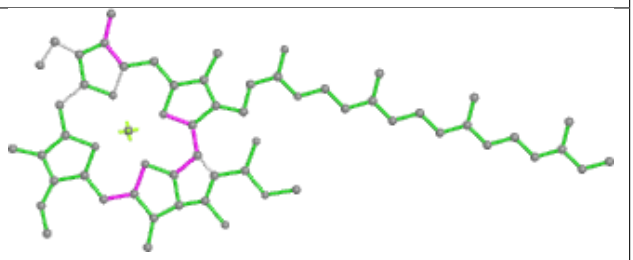


Rings

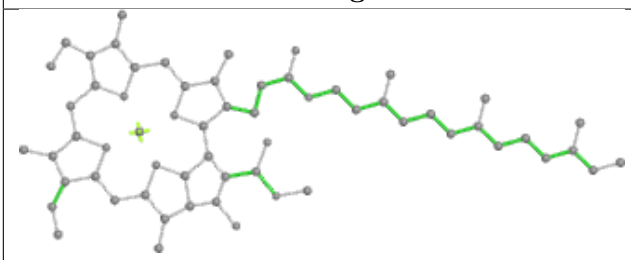
Ligand CLA b 807



Bond lengths



Bond angles



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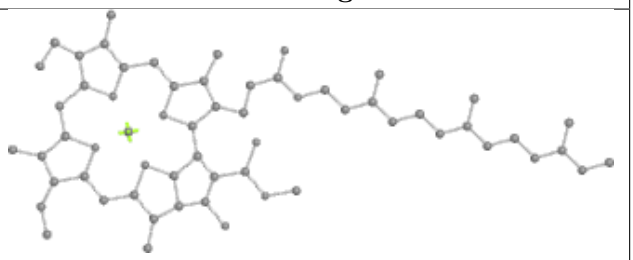
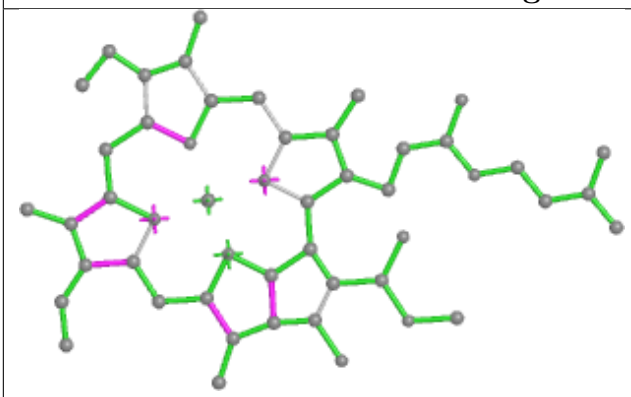
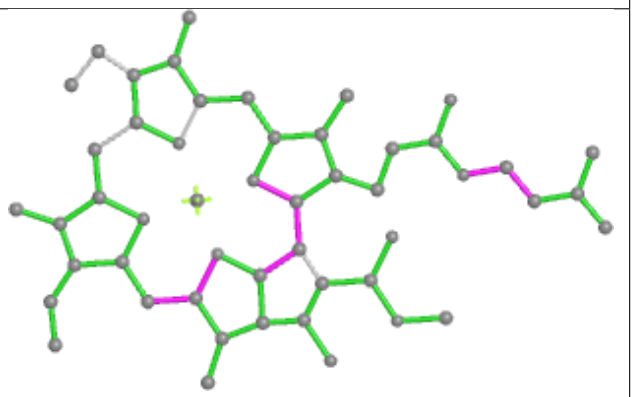


Rings

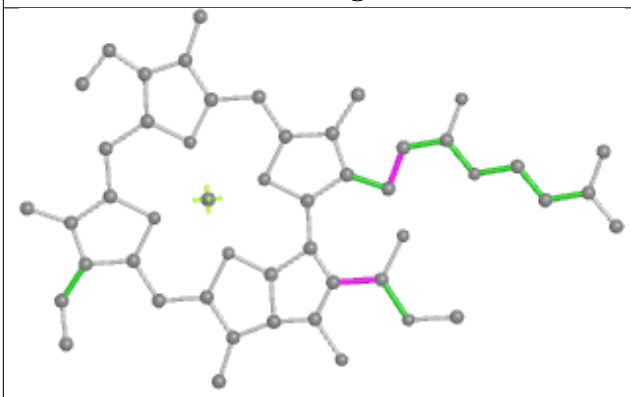
Ligand CLA G 202



Bond lengths



Bond angles



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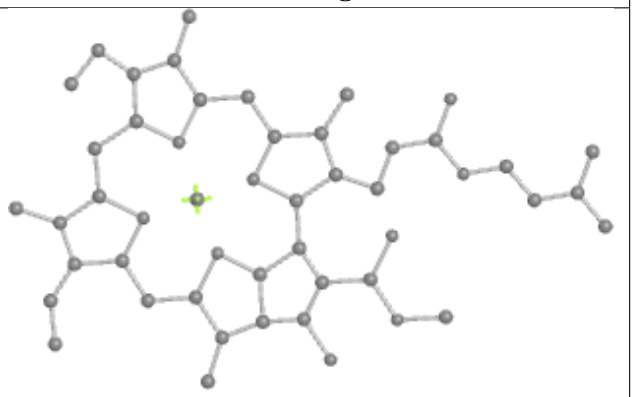
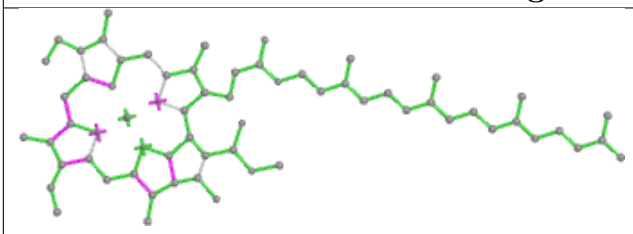
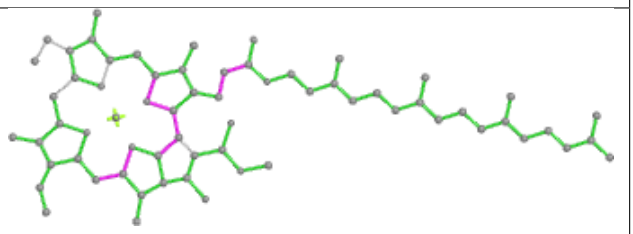


Rings

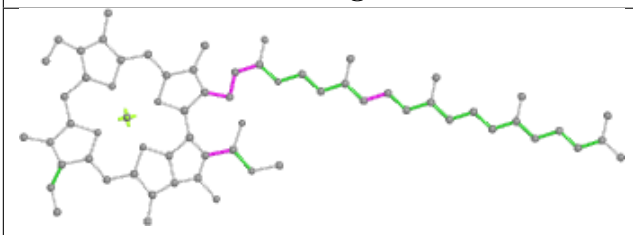
Ligand CLA b 854



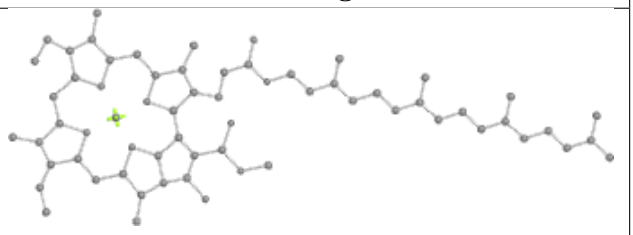
Bond lengths



Bond angles

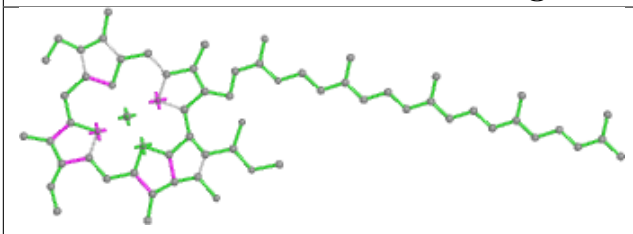


Torsions

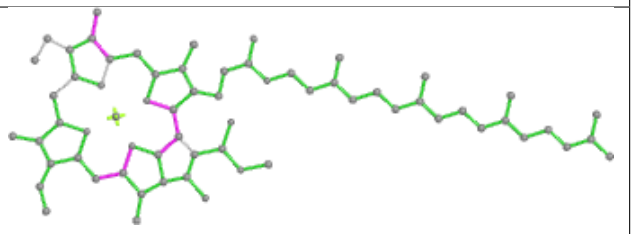


Rings

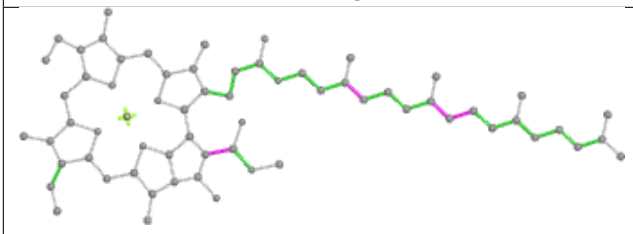
Ligand CLA a 839



Bond lengths



Bond angles



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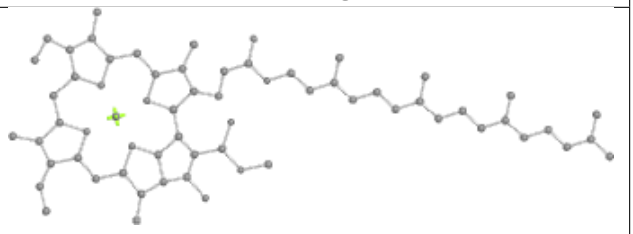
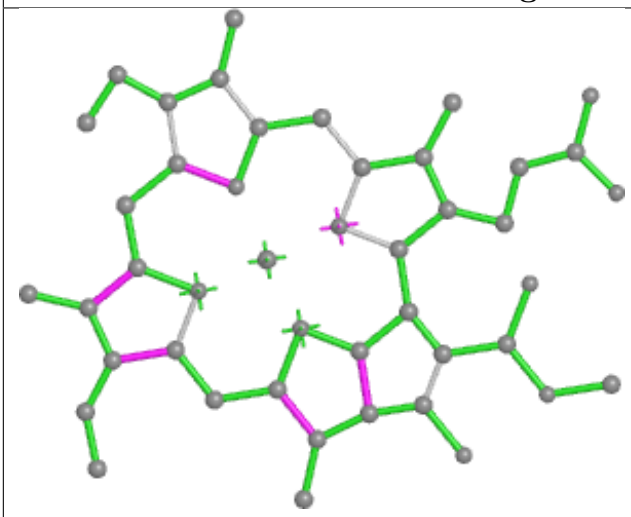
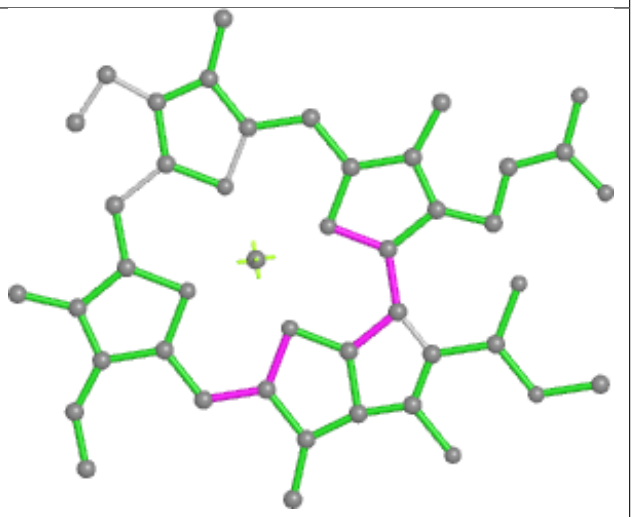


Rings

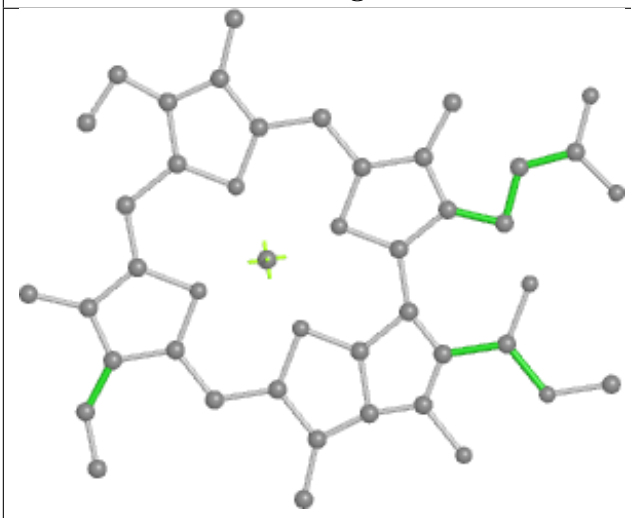
Ligand CLA 6a 311



Bond lengths



Bond angles



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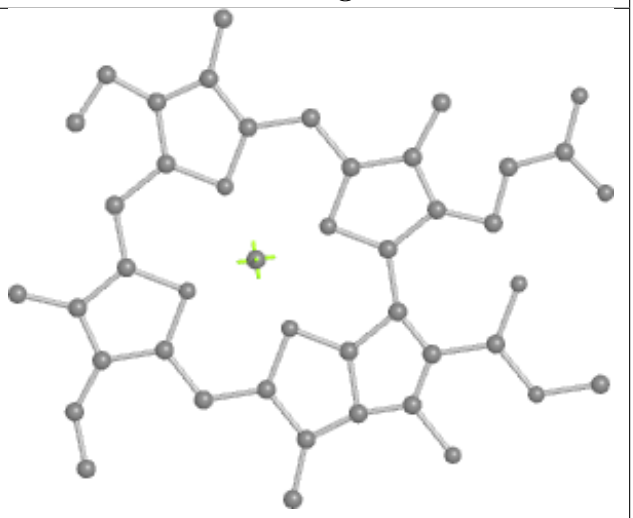
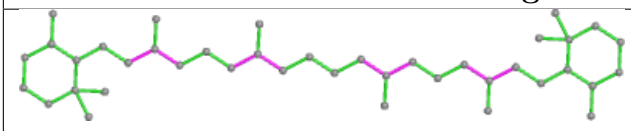


Rings

Ligand BCR A 851



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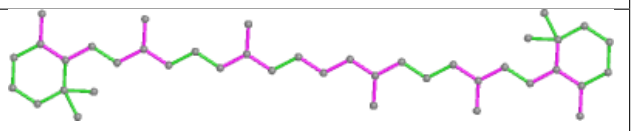
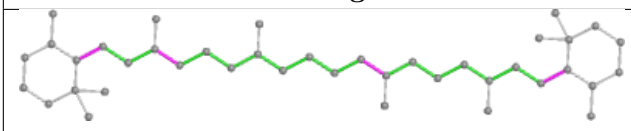
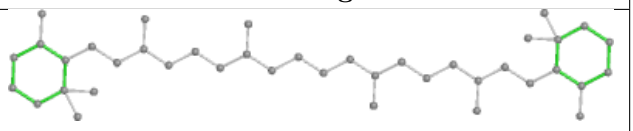


Bond angles

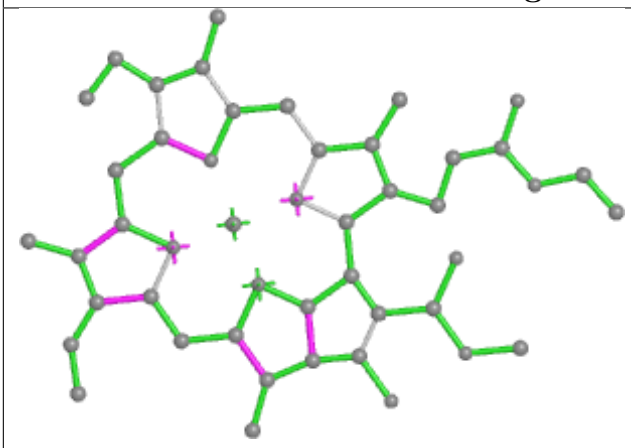


Torsions

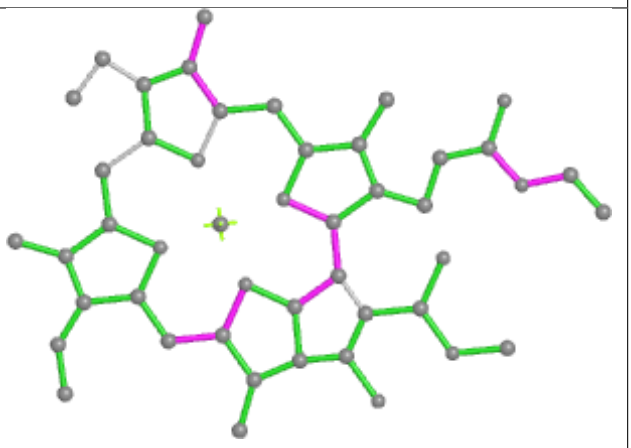


Rings

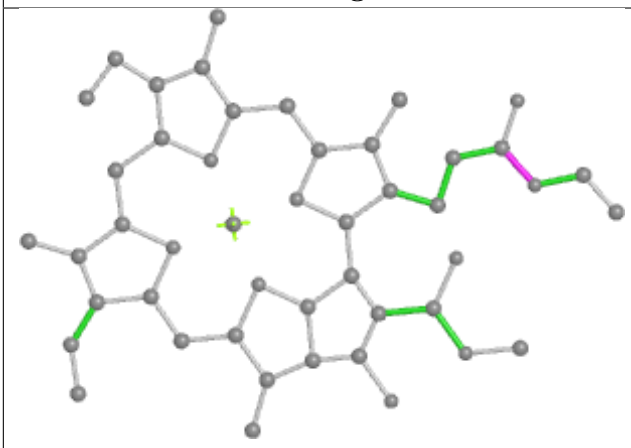
Ligand CLA B 808



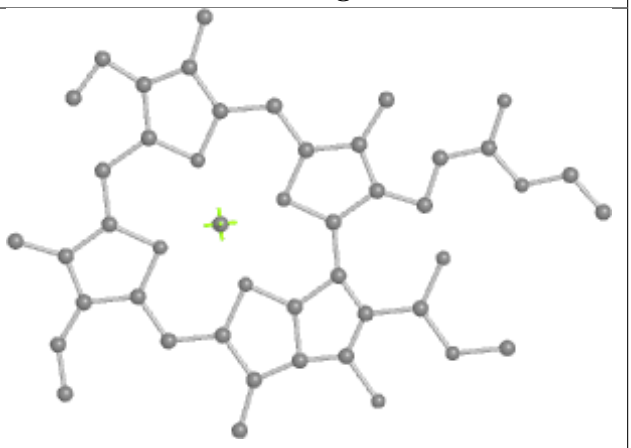
Bond lengths



Bond angles

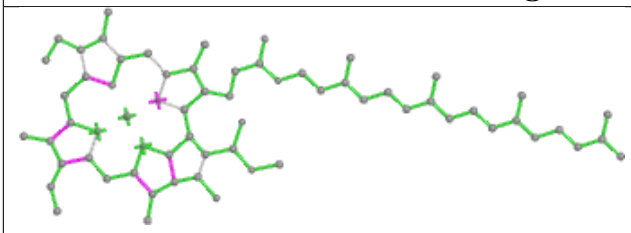


Torsions

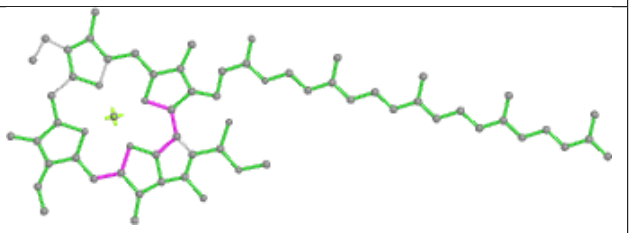


Rings

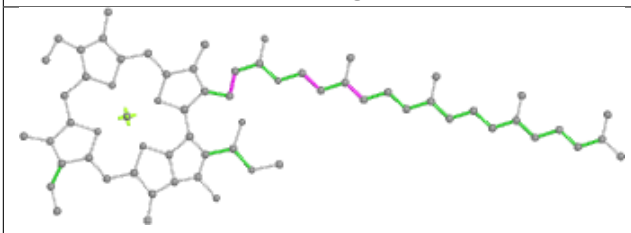
Ligand CLA A 820



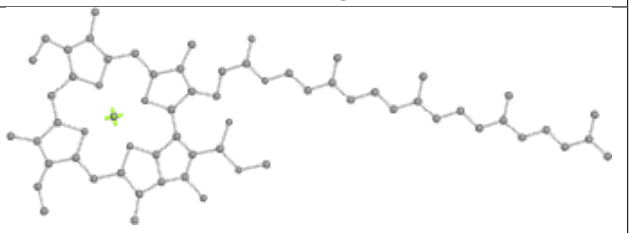
Bond lengths



Bond angles

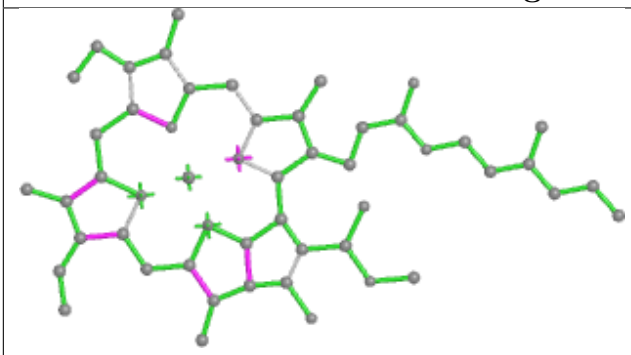


Torsions

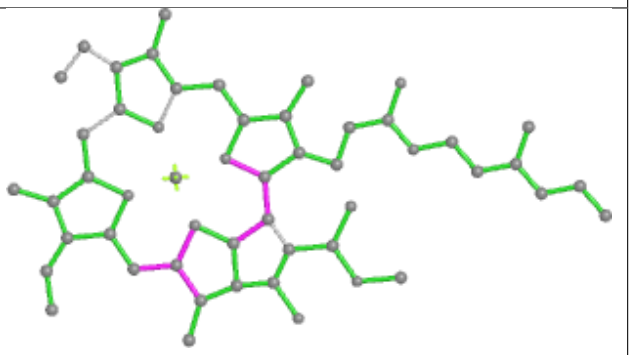


Rings

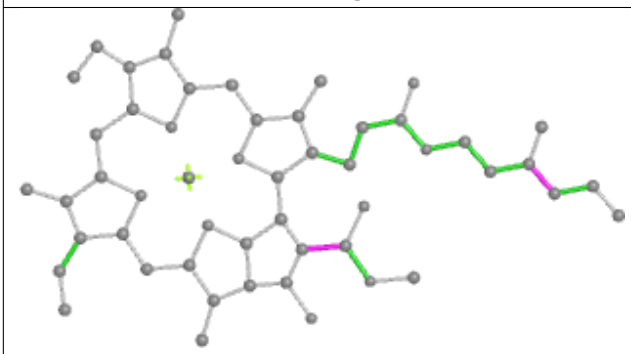
Ligand CLA A 801



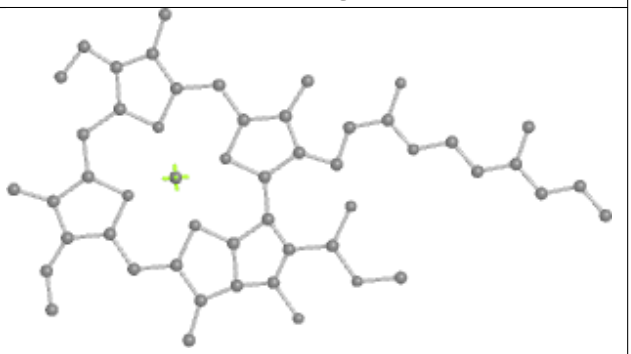
Bond lengths



Bond angles

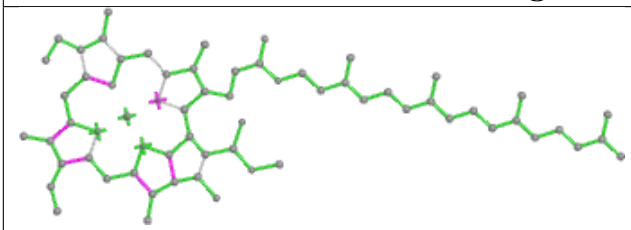


Torsions

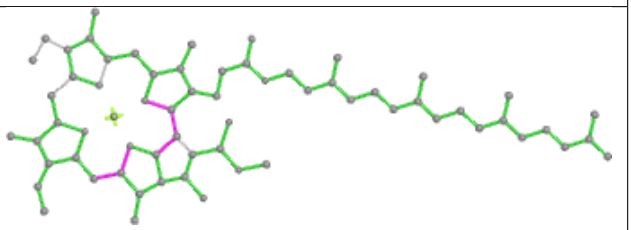


Rings

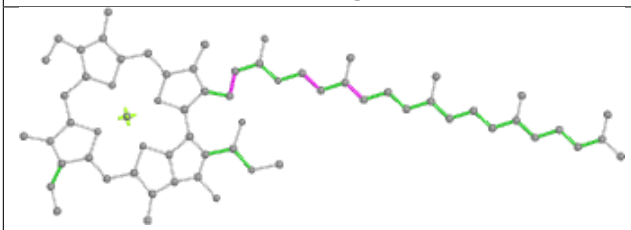
Ligand CLA a 820



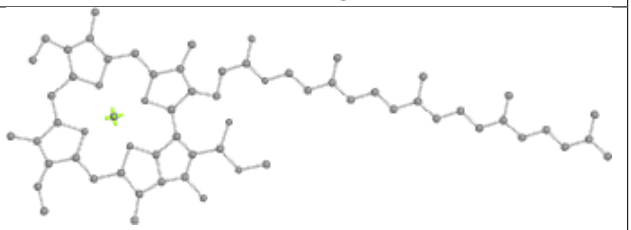
Bond lengths



Bond angles

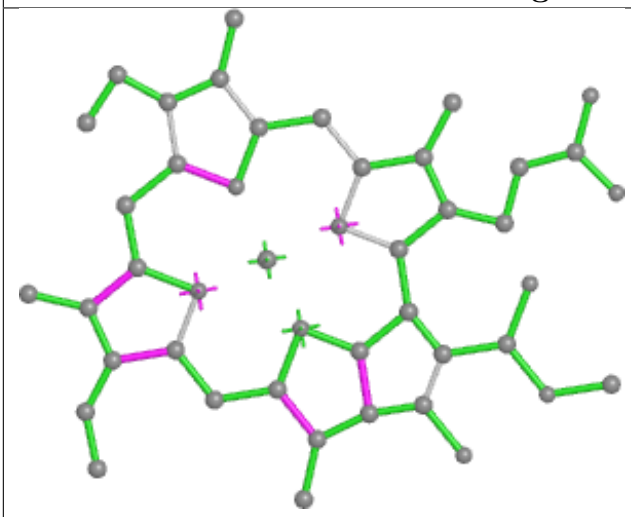


Torsions

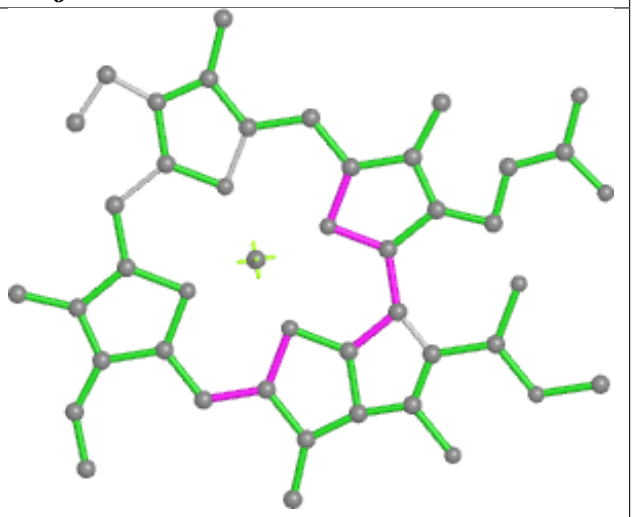


Rings

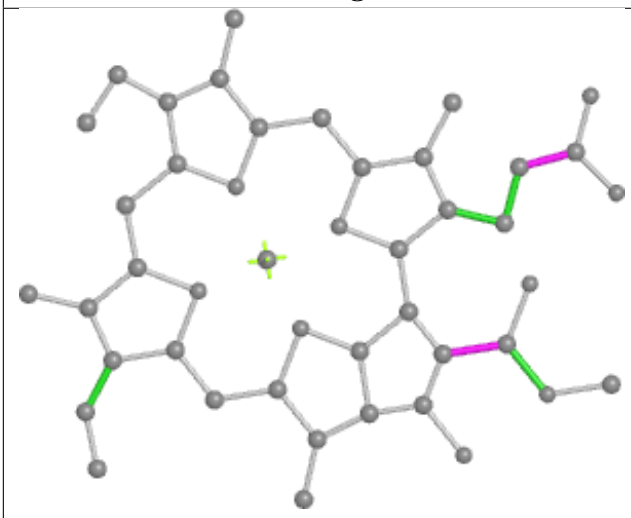
Ligand CLA j 101



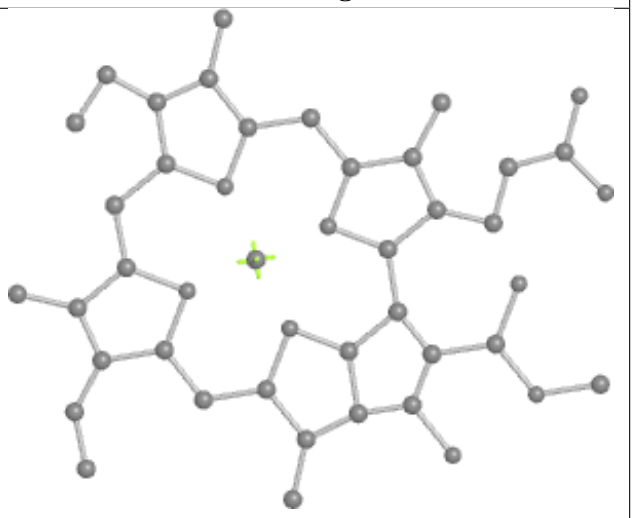
Bond lengths



Bond angles

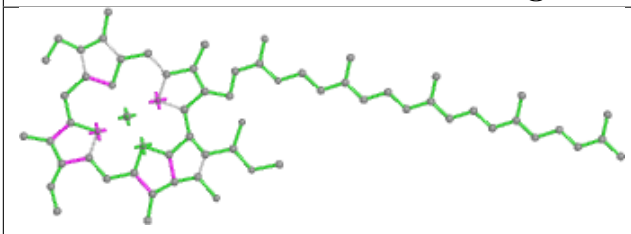


Torsions

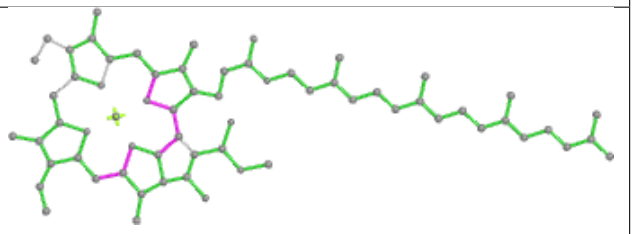


Rings

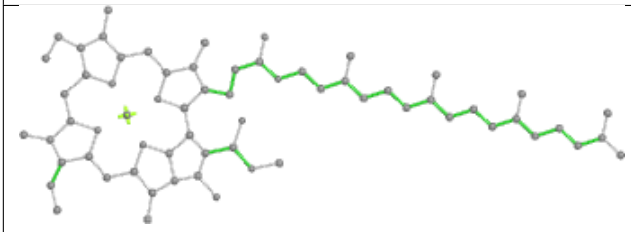
Ligand CLA b 825



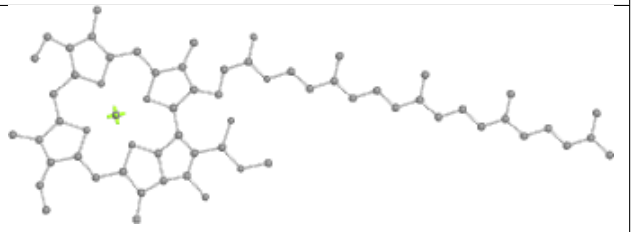
Bond lengths



Bond angles

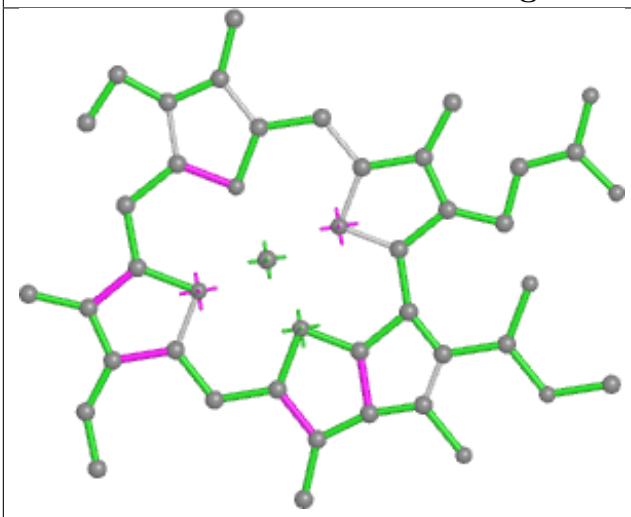


Torsions

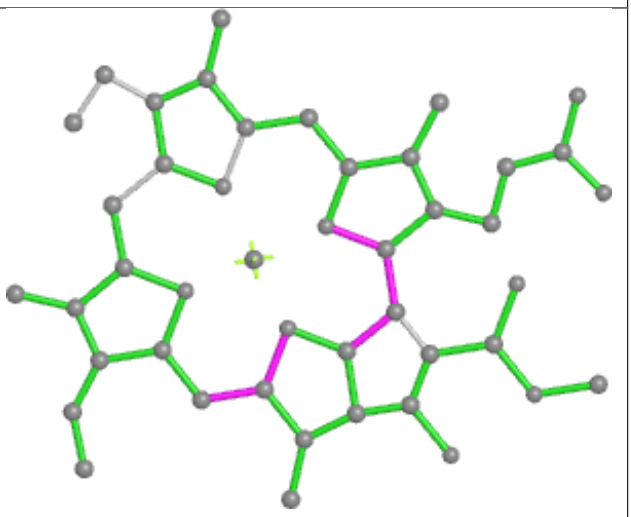


Rings

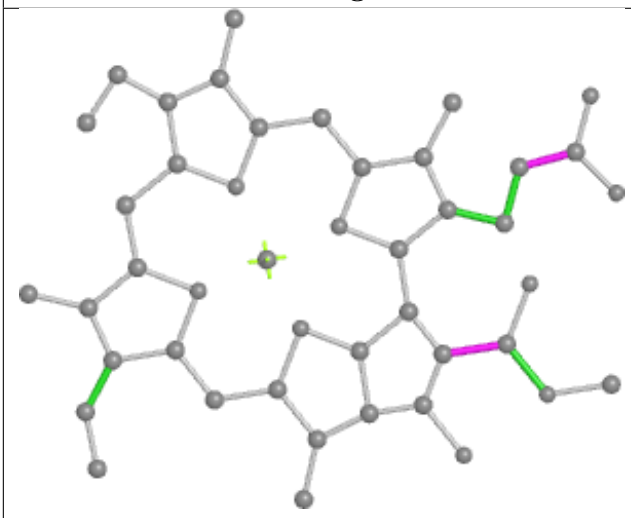
Ligand CLA 5a 310



Bond lengths



Bond angles



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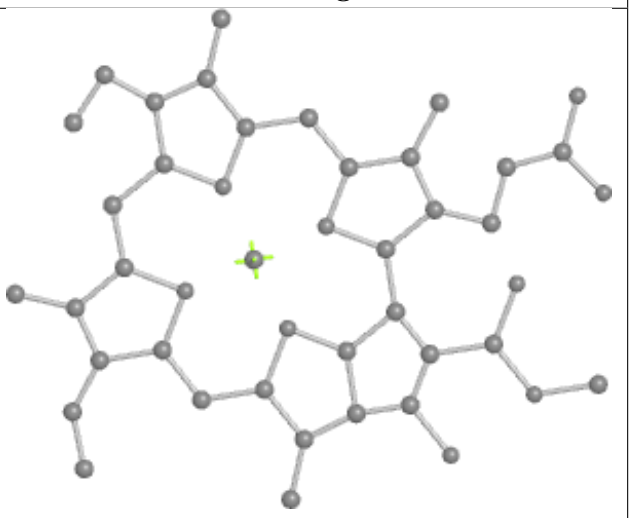
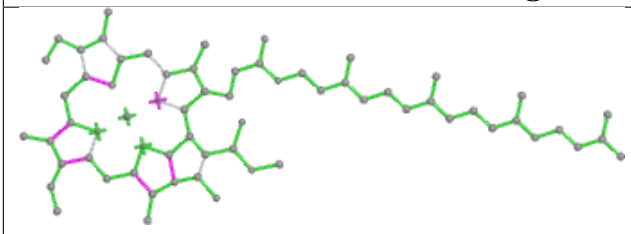
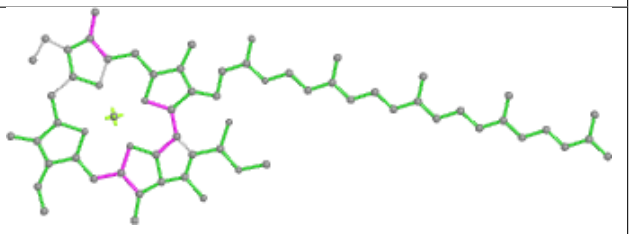


Rings

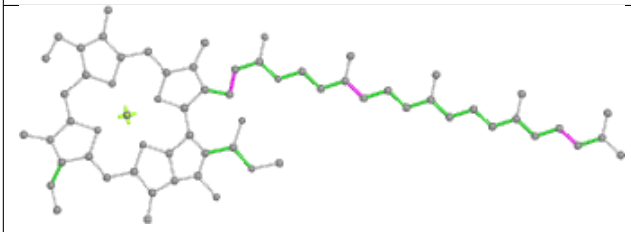
Ligand CLA B 817



Bond lengths



Bond angles



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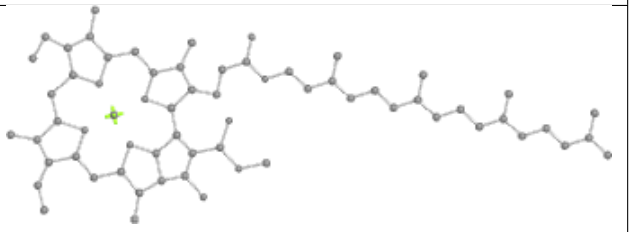
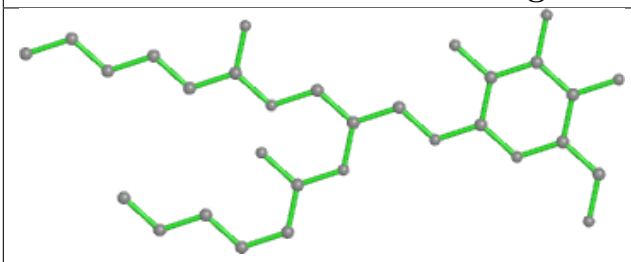
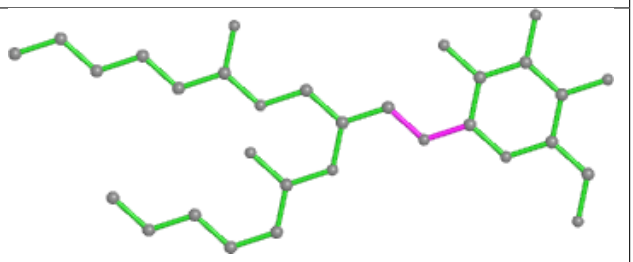


Rings

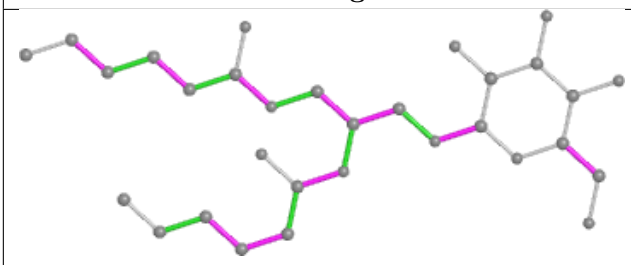
Ligand LMG i 201



Bond lengths



Bond angles



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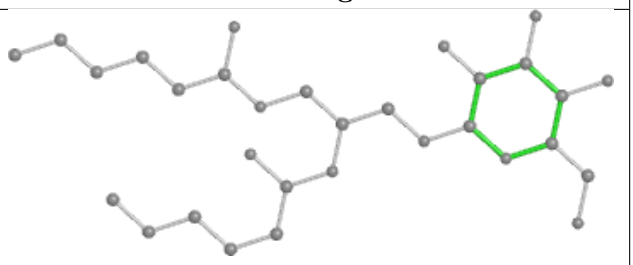
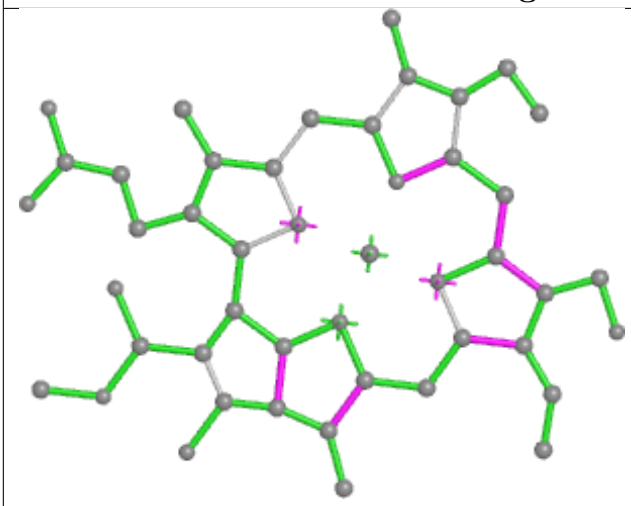


Rings

Ligand CHL 2a 313



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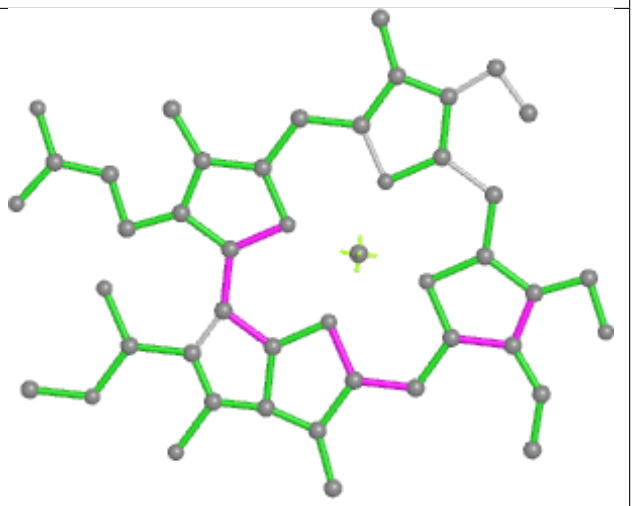
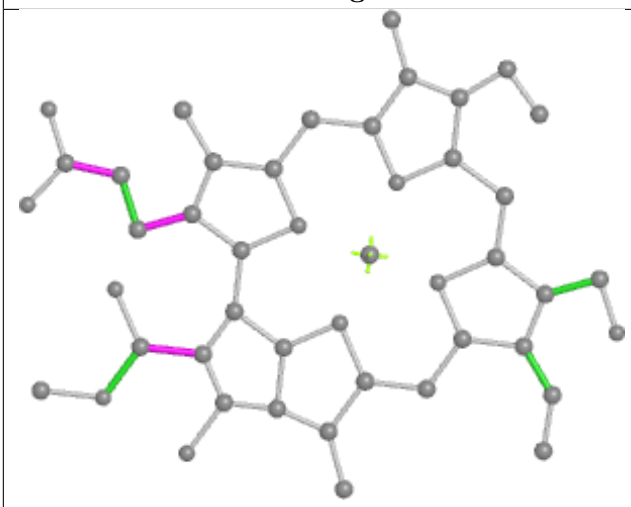


Bond angles



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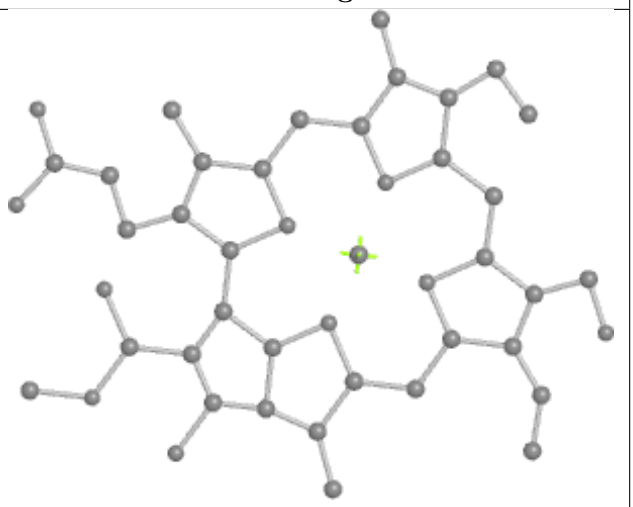
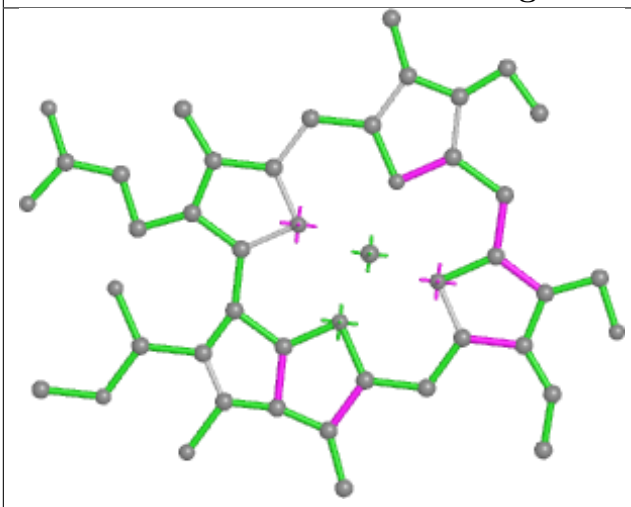
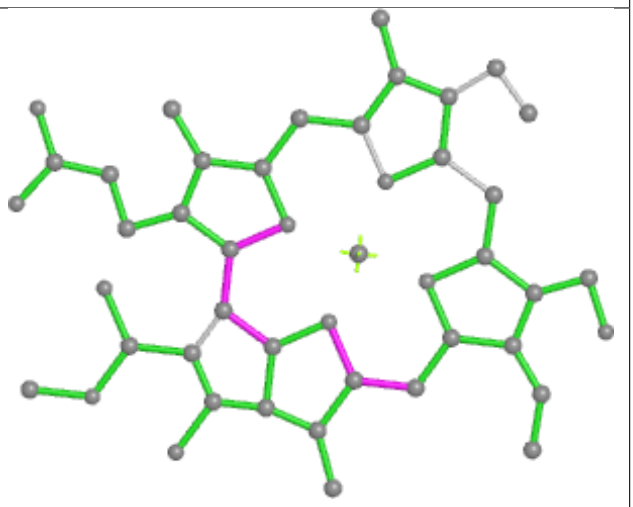


Rings

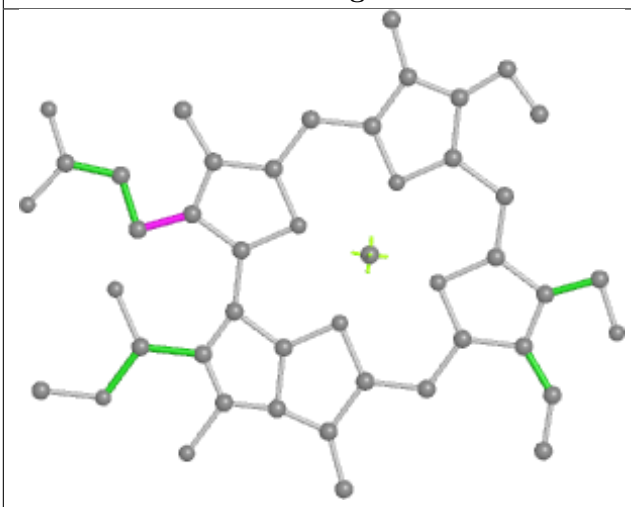
Ligand CHL 3a 315



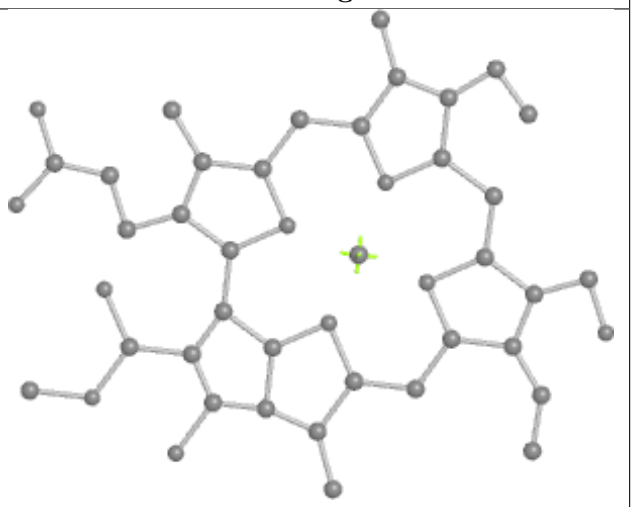
Bond lengths



Bond angles

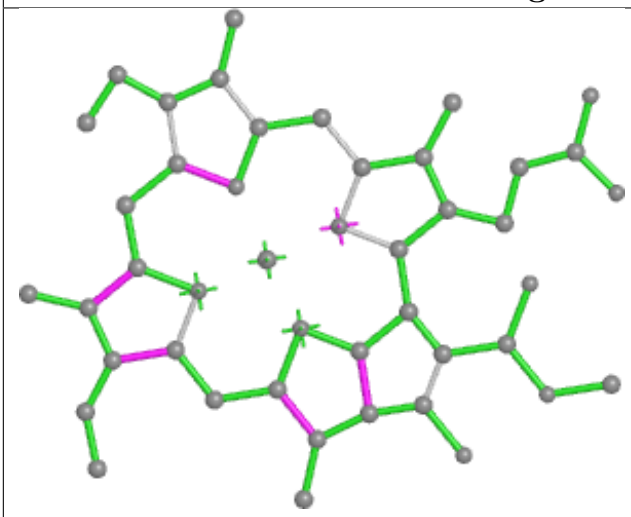


Torsions

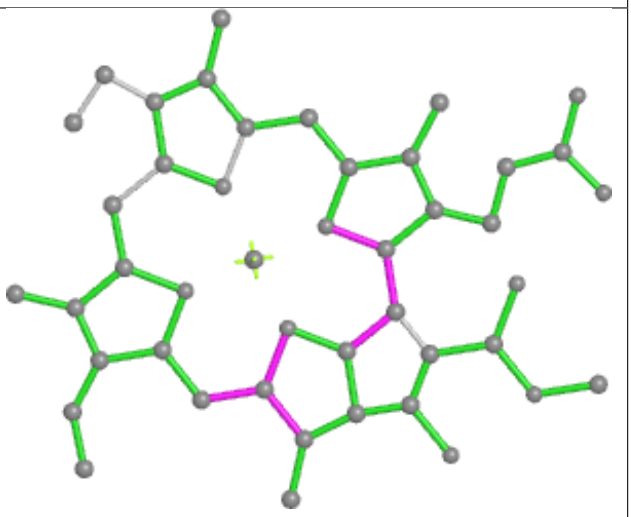


Rings

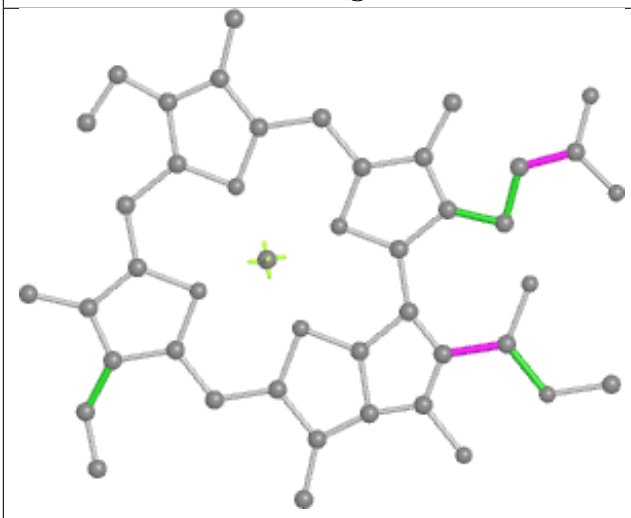
Ligand CLA a 835



Bond lengths



Bond angles



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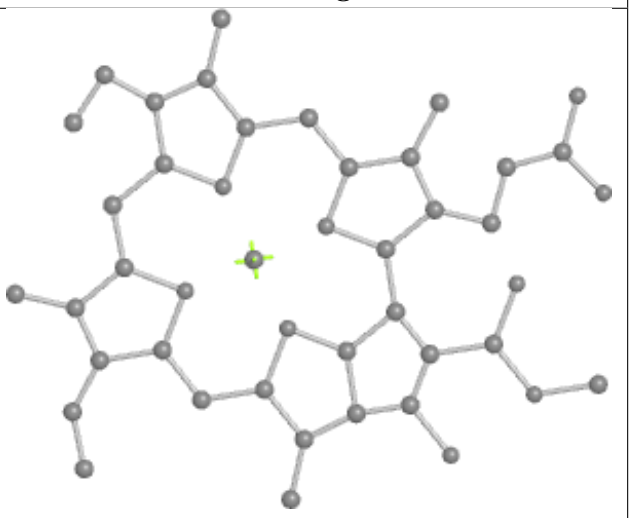
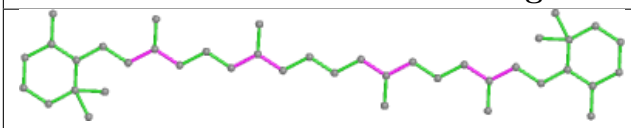


Rings

Ligand BCR b 846



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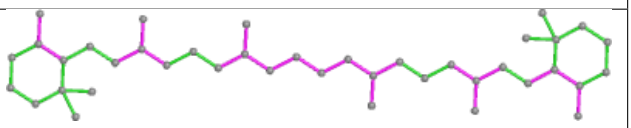
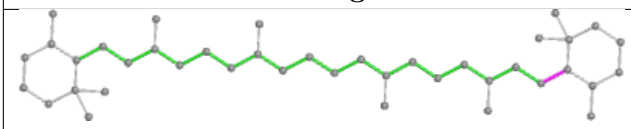


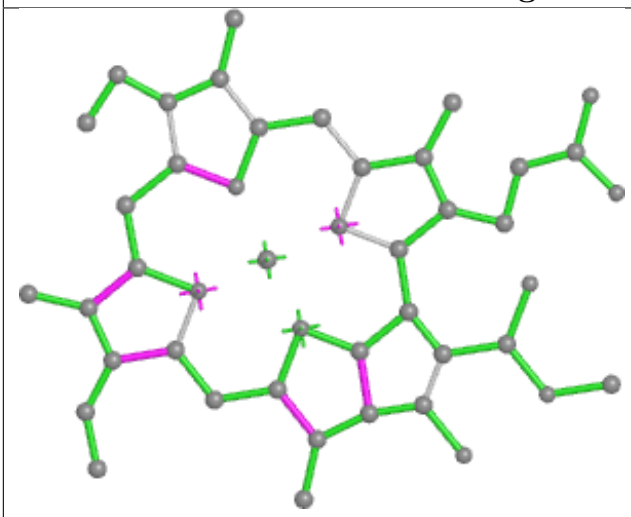
Bond angles



Torsions

Rings

Ligand CLA 3b 306



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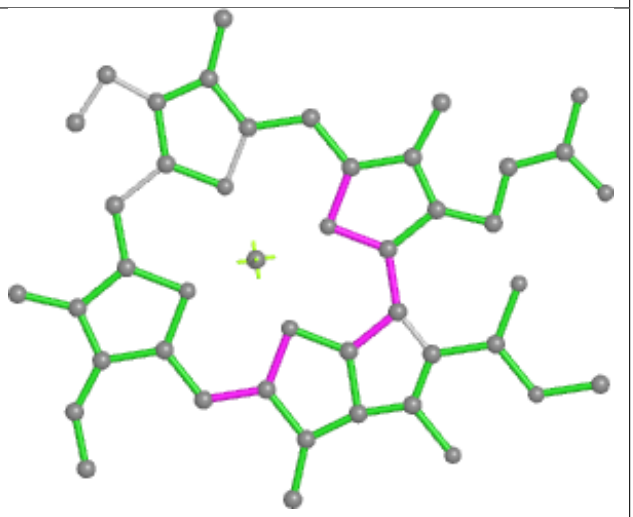
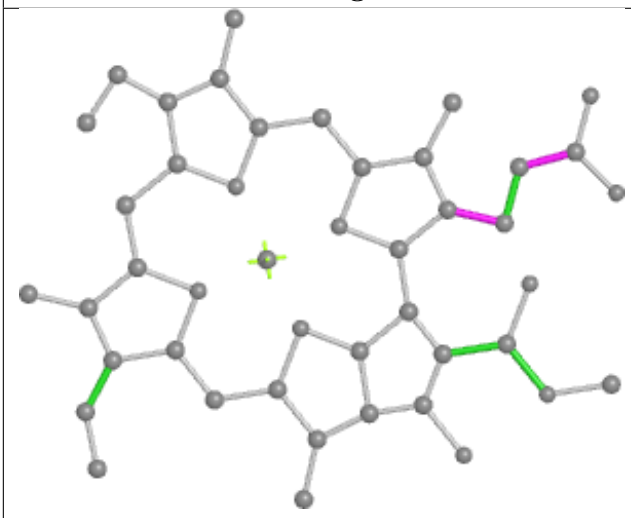
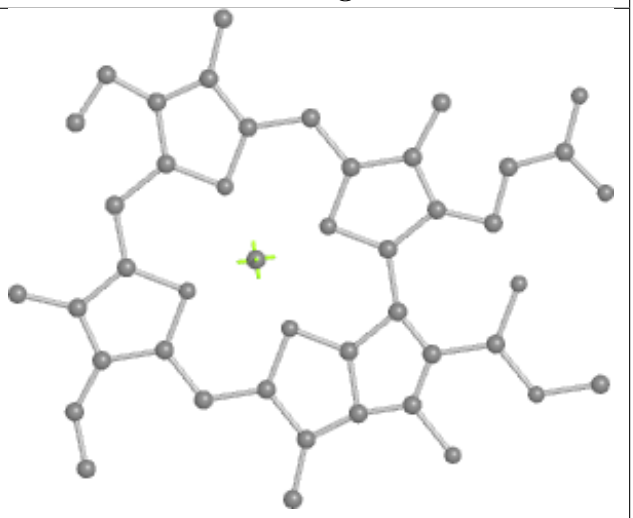


Bond angles

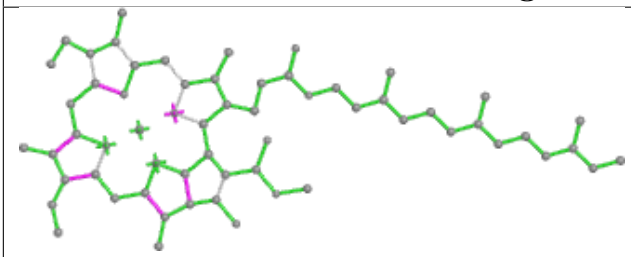


Torsions

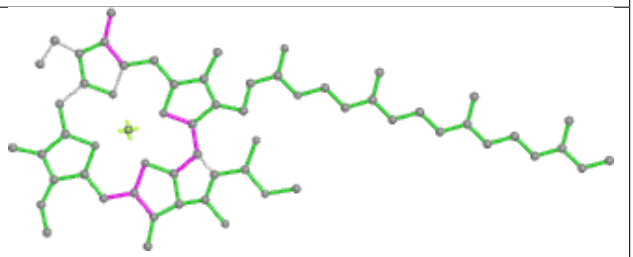


Rings

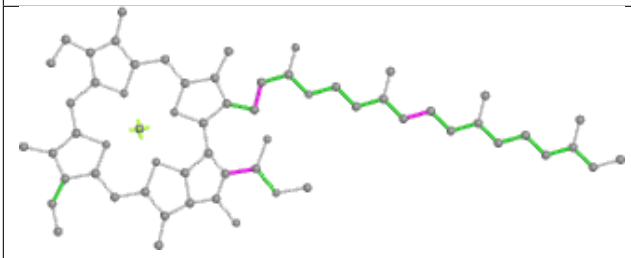
Ligand CLA 6b 305



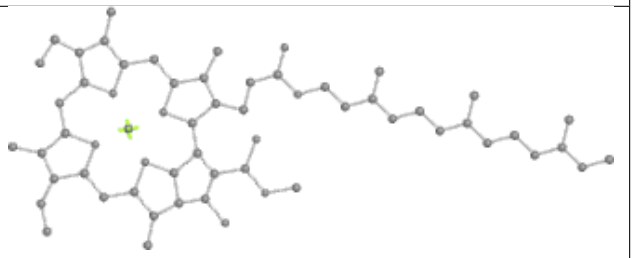
Bond lengths



Bond angles

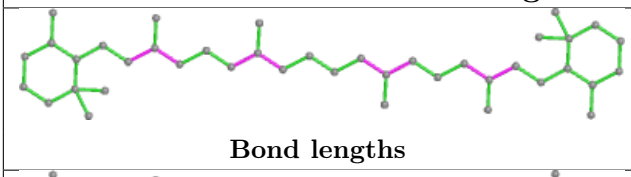


Torsions

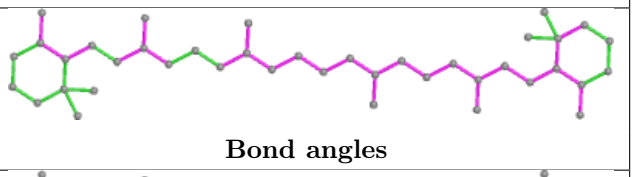


Rings

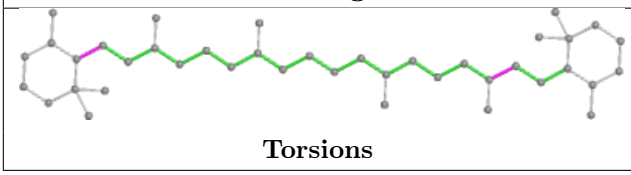
Ligand BCR B 844



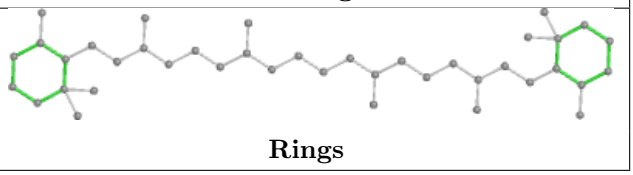
Bond lengths



Bond angles

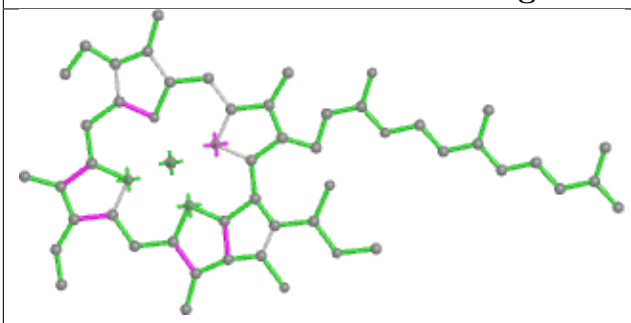


Torsions

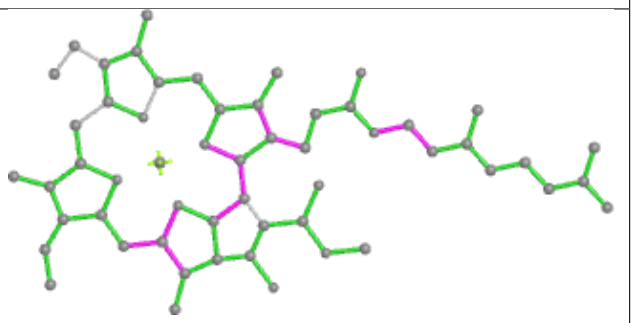


Rings

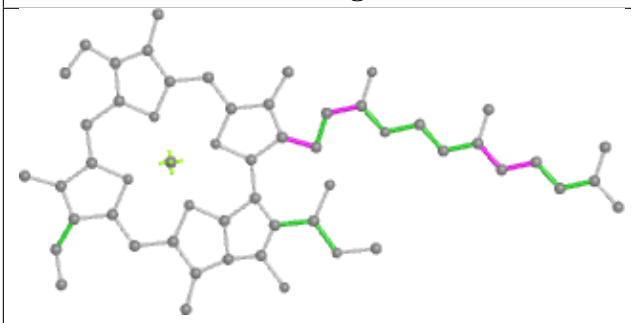
Ligand CLA 3b 312



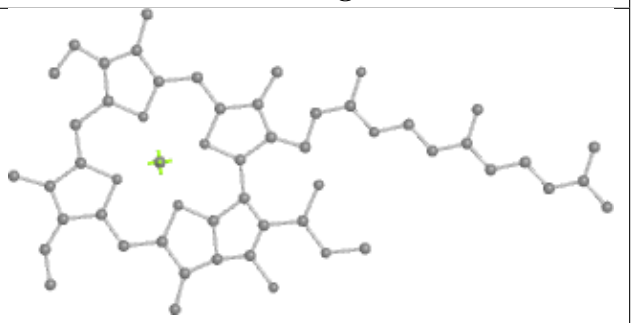
Bond lengths



Bond angles

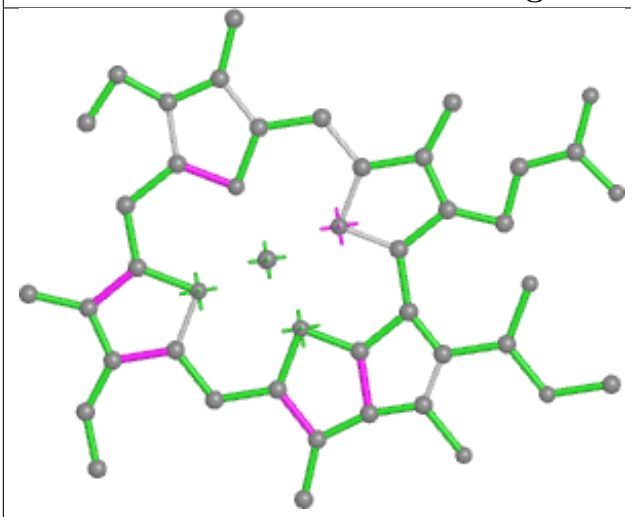


Torsions

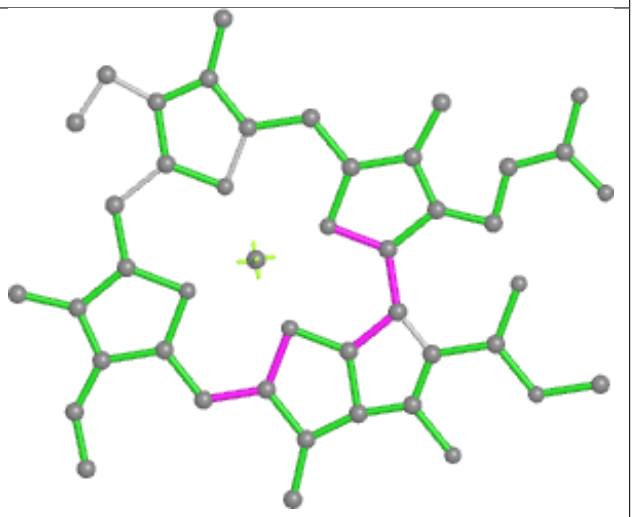


Rings

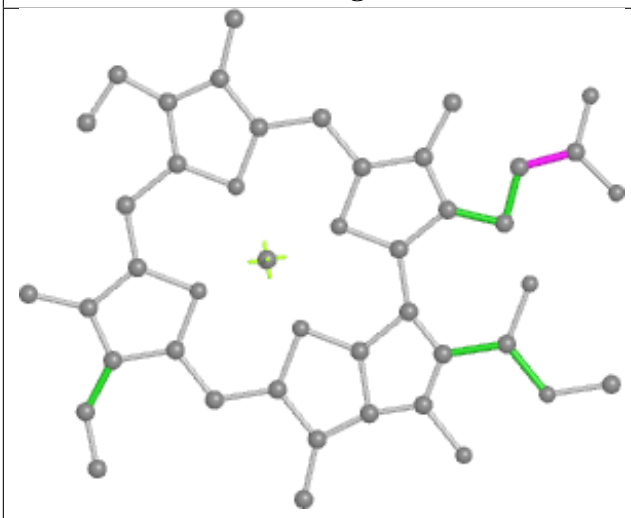
Ligand CLA F 302



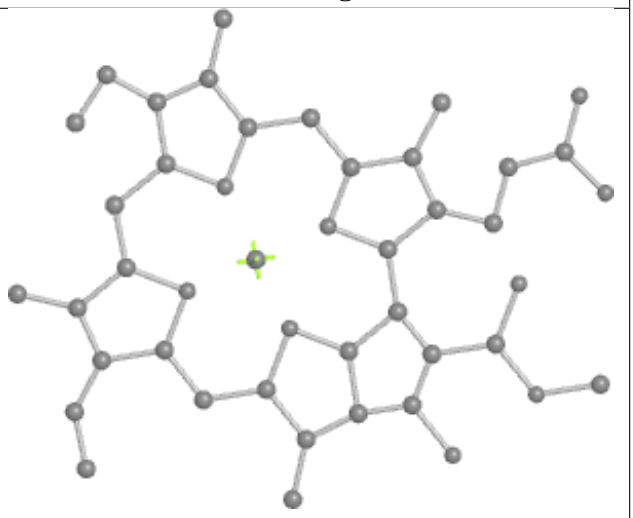
Bond lengths



Bond angles

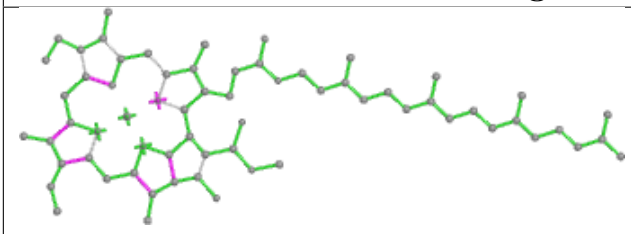


Torsions



Rings

Ligand CLA a 805



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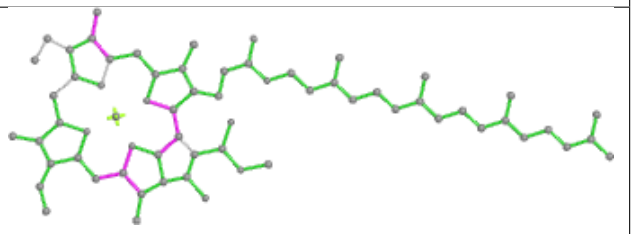
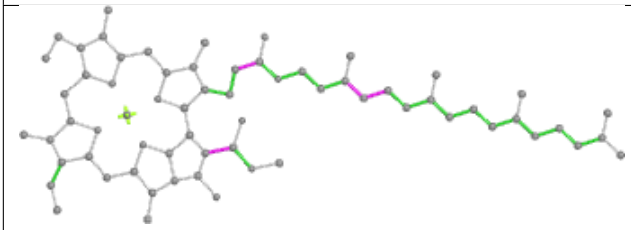
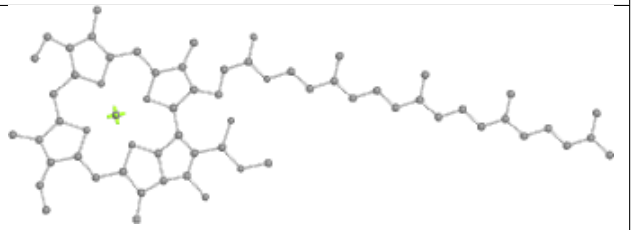


Bond angles

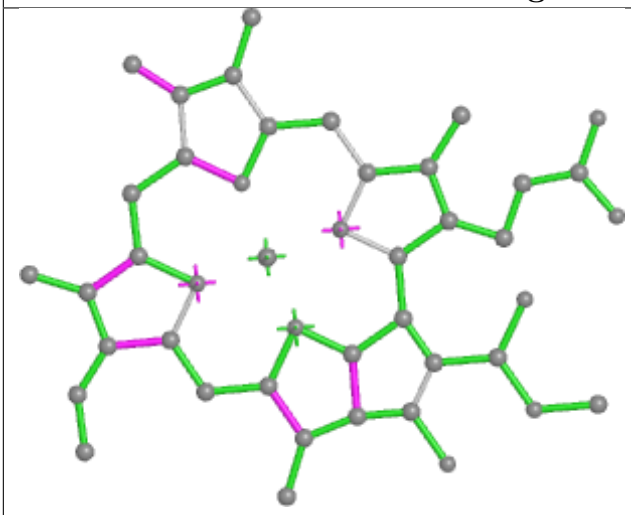


Torsions



Rings

Ligand CLA k 201



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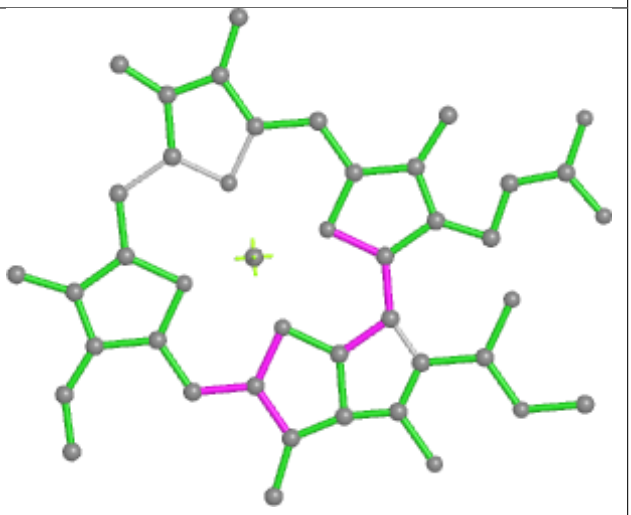
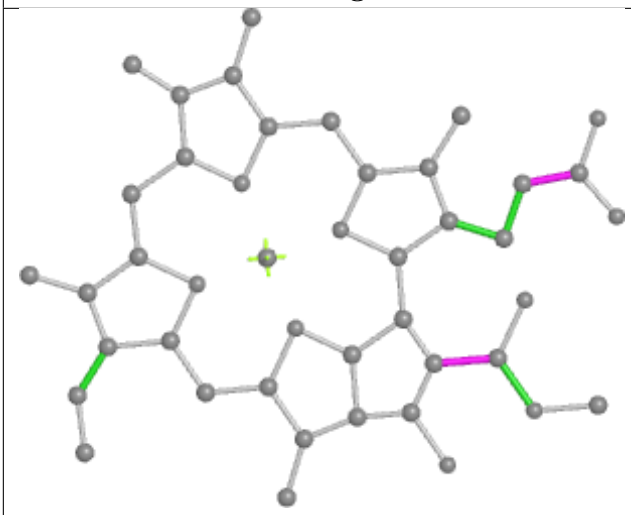
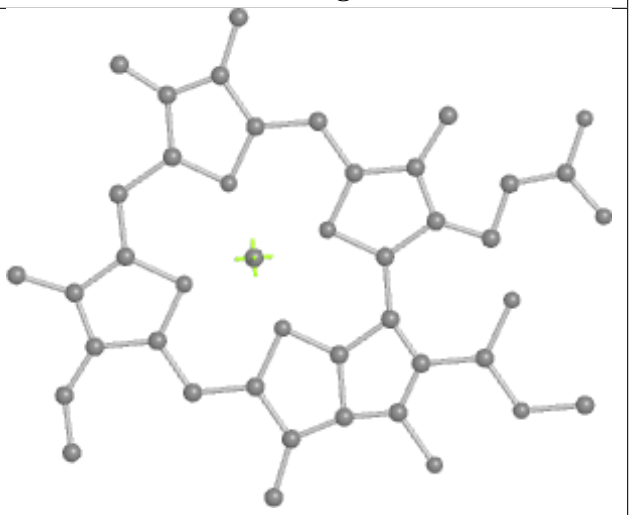


Bond angles

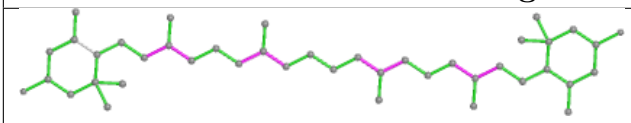


Torsions



Rings

Ligand LUT 6b 320



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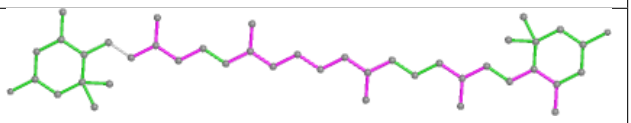
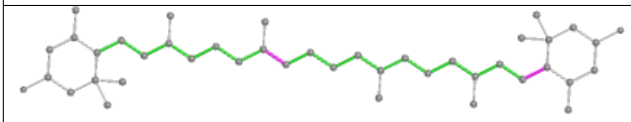


Bond angles



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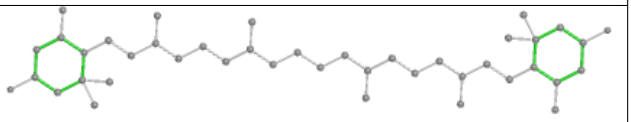
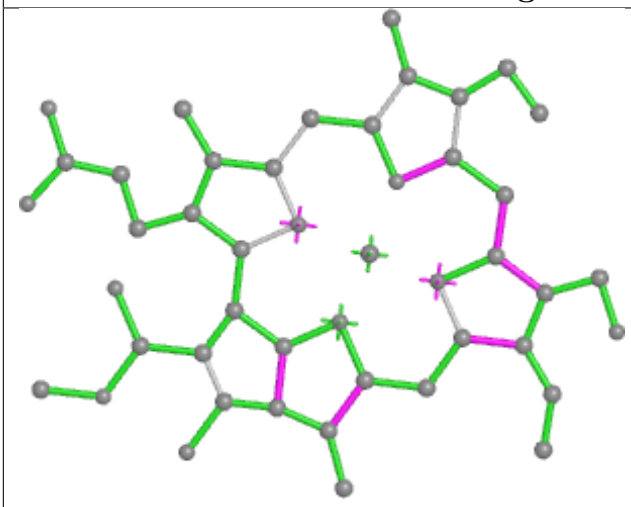


Rings

Ligand CHL 3b 315



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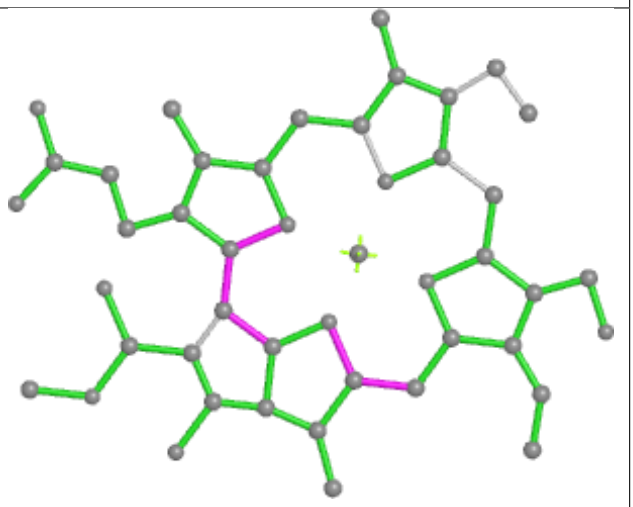
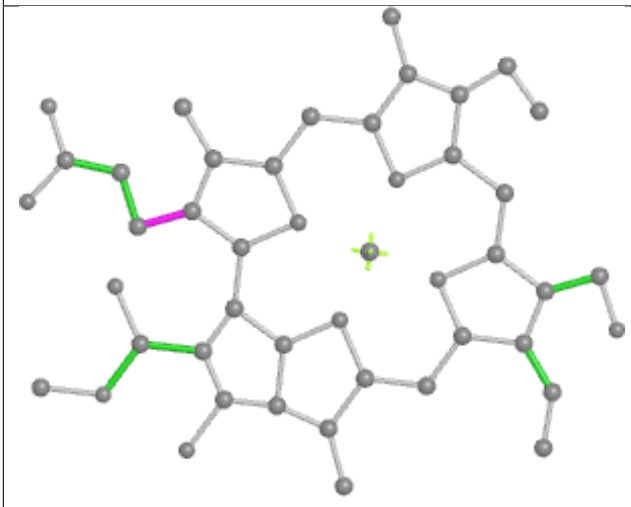


Bond angles



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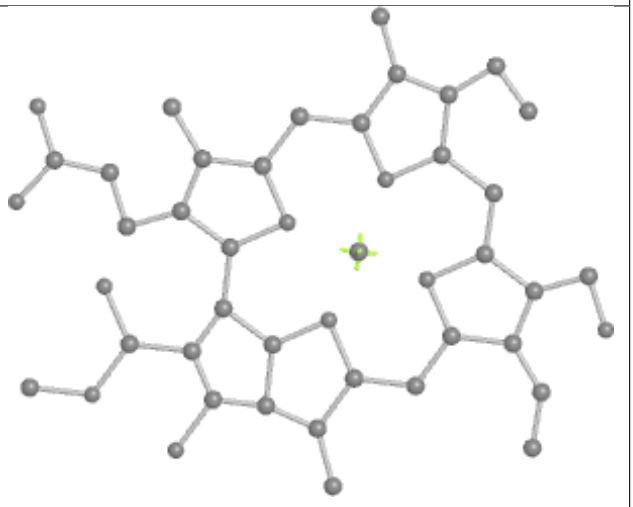
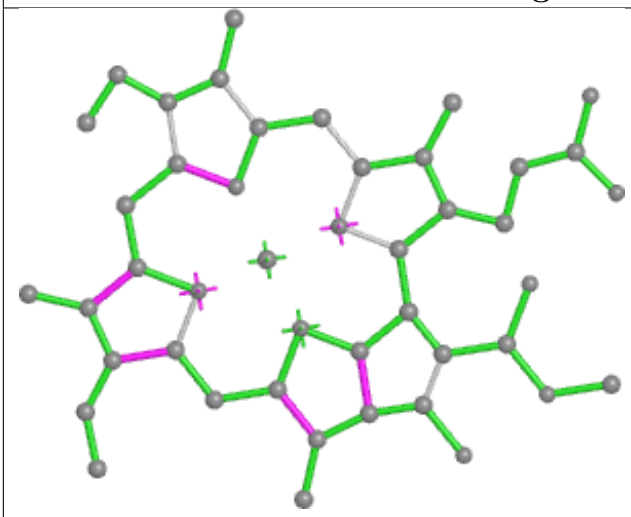


Rings

Ligand CLA l 301



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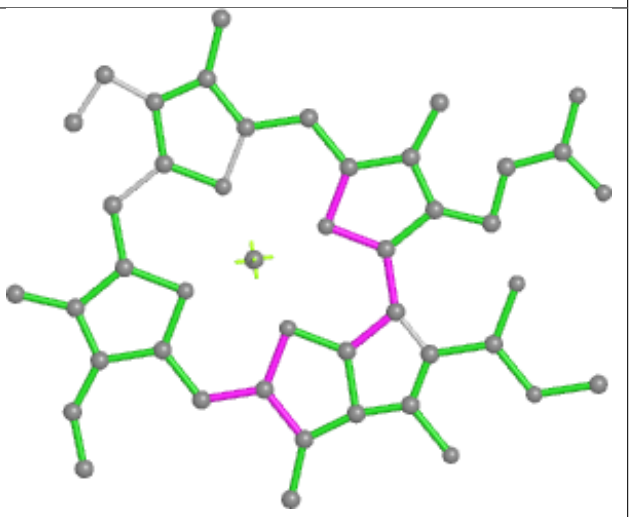
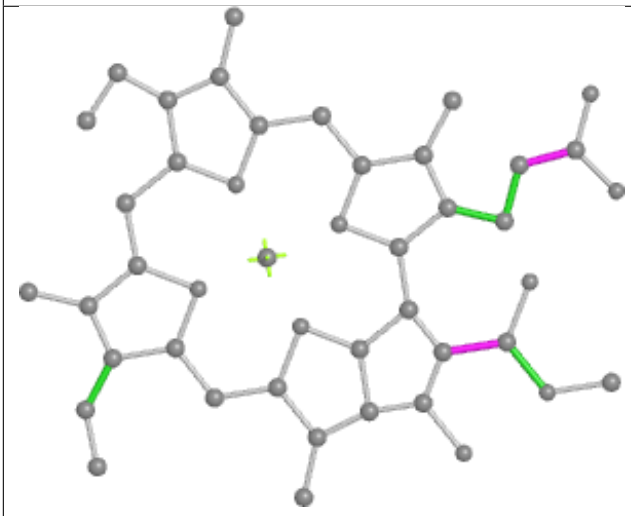


Bond angles



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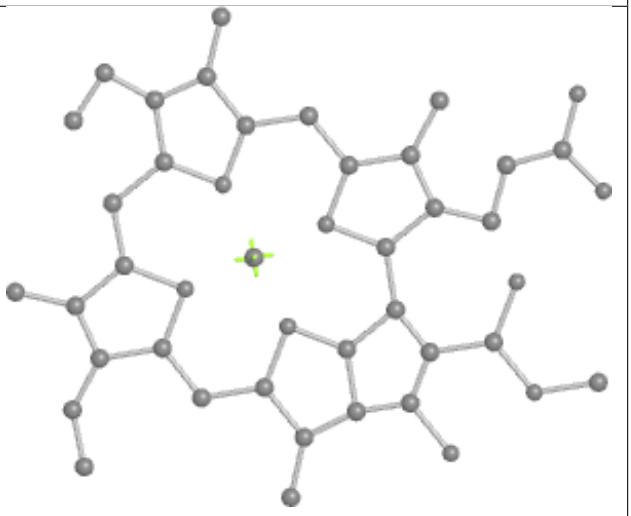
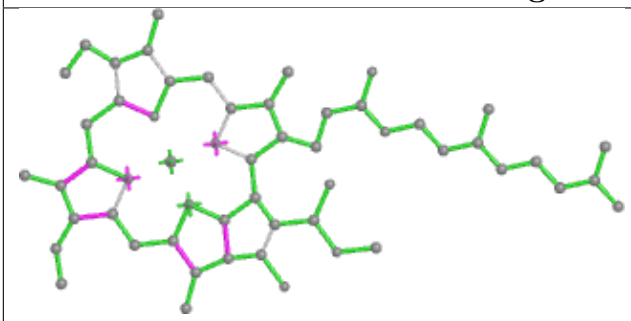
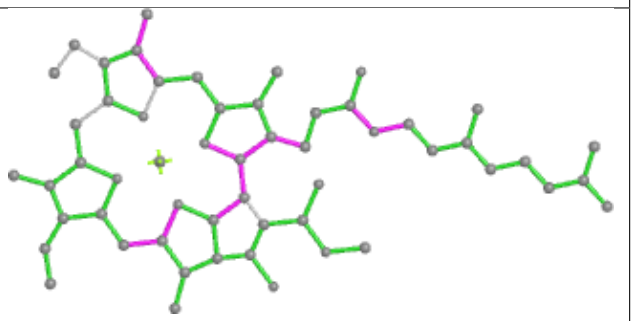


Rings

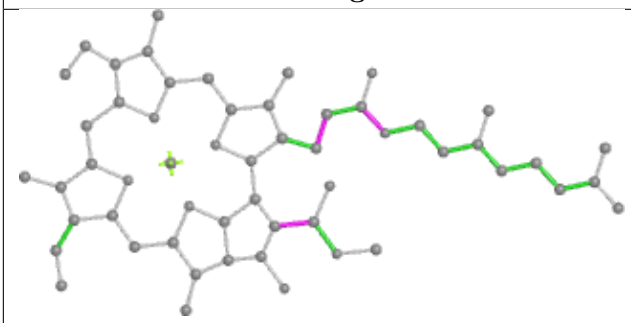
Ligand CLA a 809



Bond lengths



Bond angles



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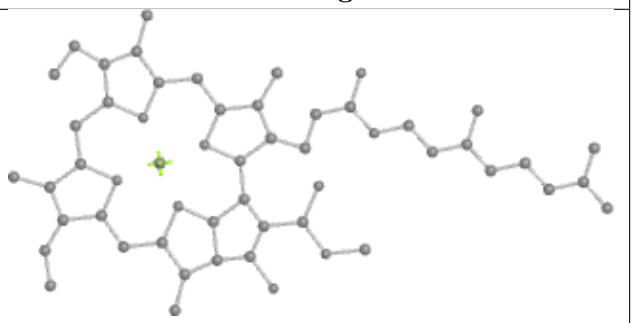
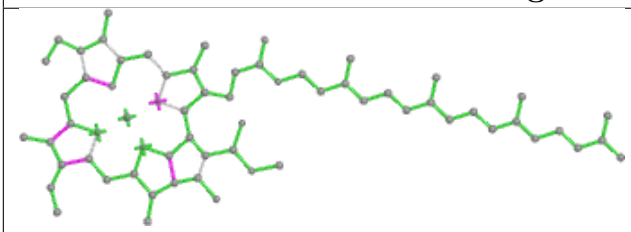


Rings

Ligand CLA b 823



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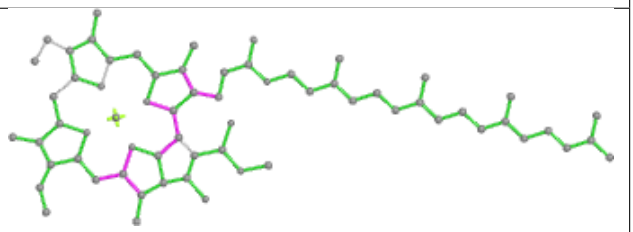
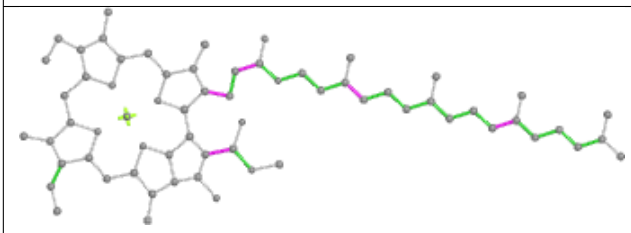


Bond angles



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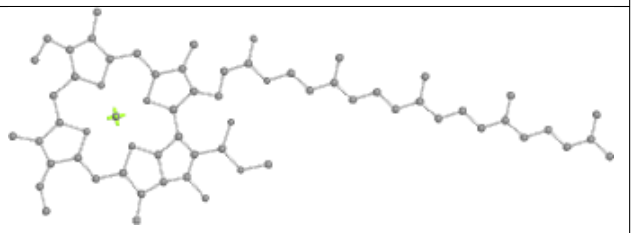
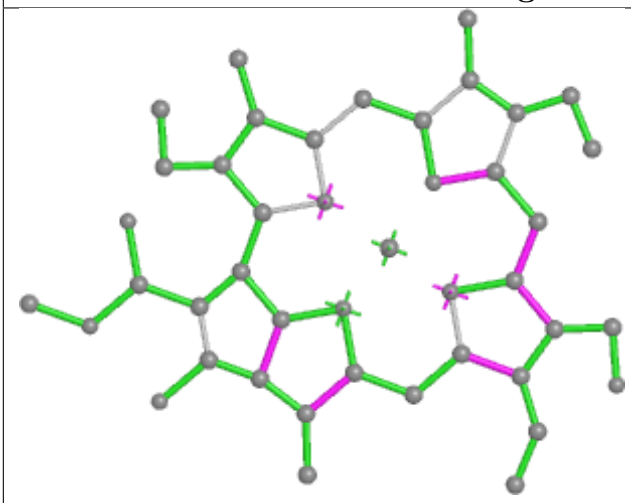


Rings

Ligand CHL 5b 314



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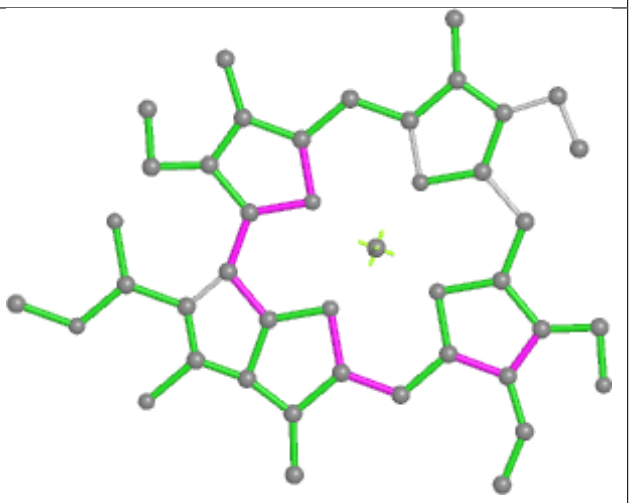
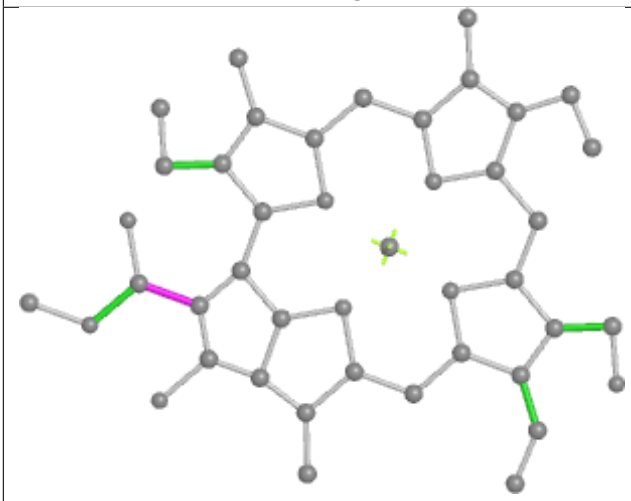
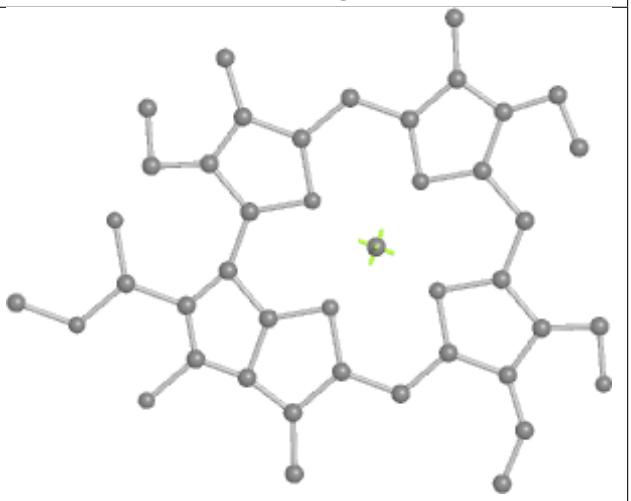


Bond angles

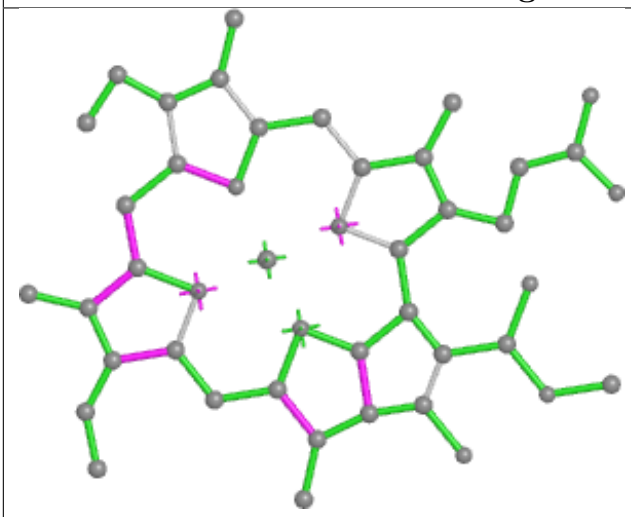


Torsions

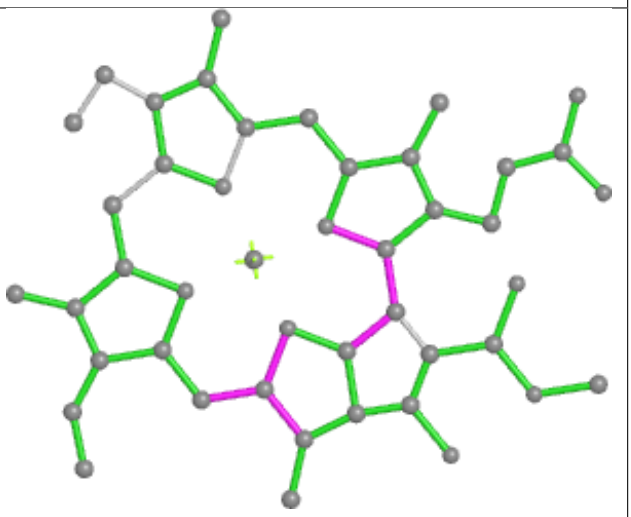


Rings

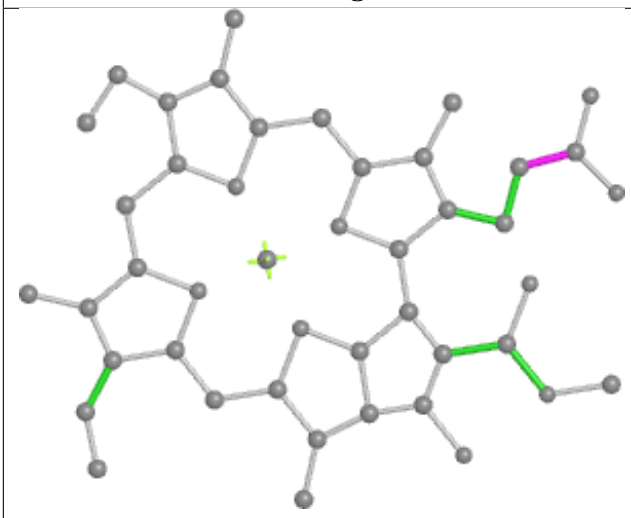
Ligand CLA 5b 304



Bond lengths



Bond angles



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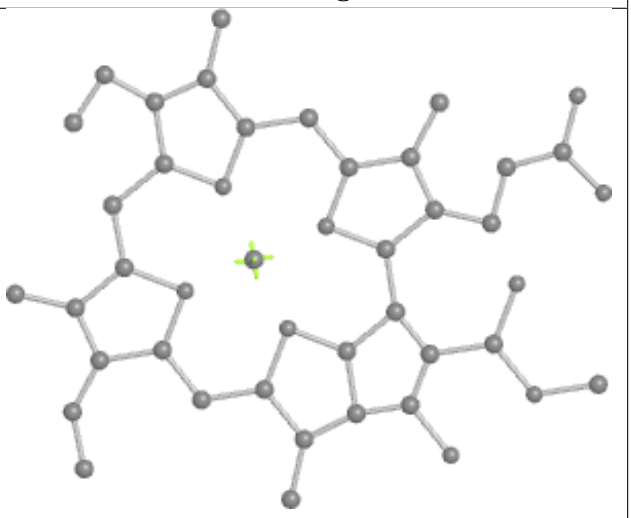
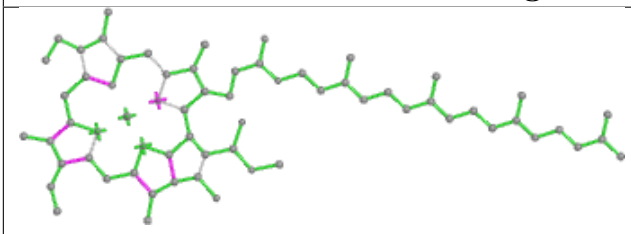


Rings

Ligand CLA A 805



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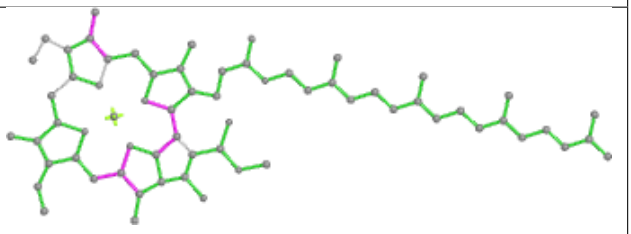
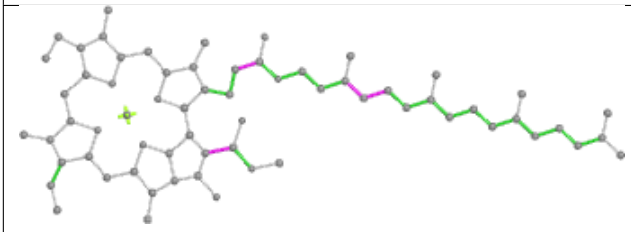
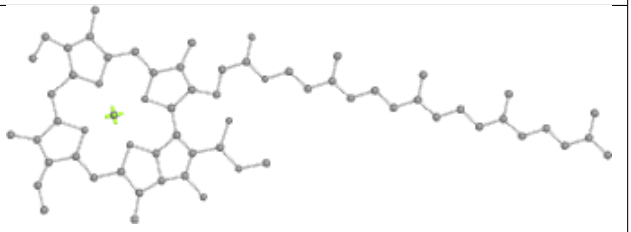


Bond angles

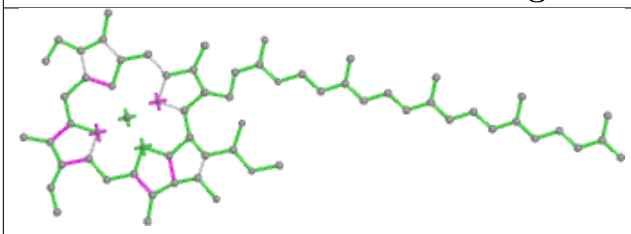


Torsions



Rings

Ligand CLA a 812



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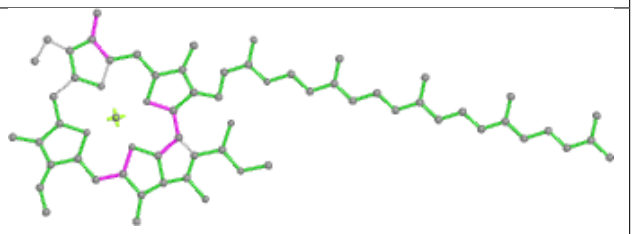
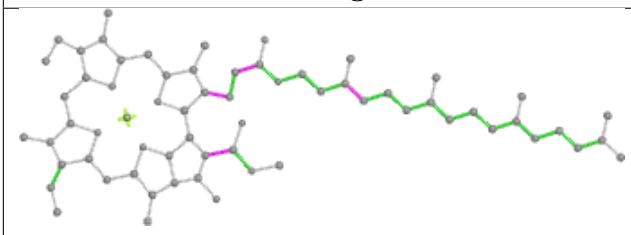
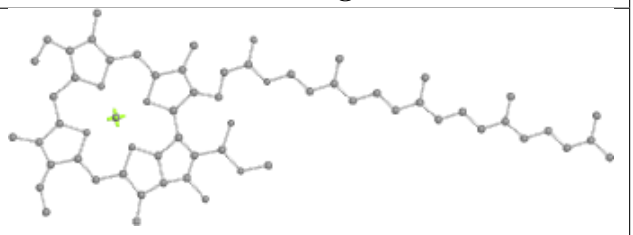


Bond angles

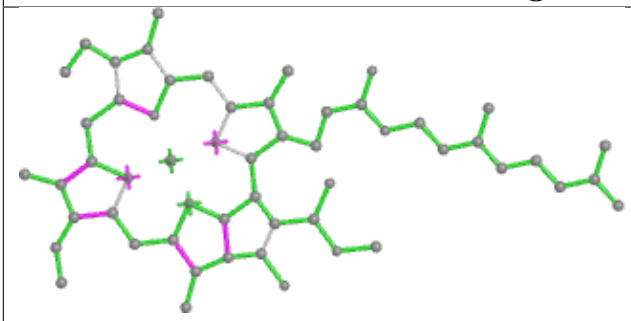


Torsions



Rings

Ligand CLA b 828



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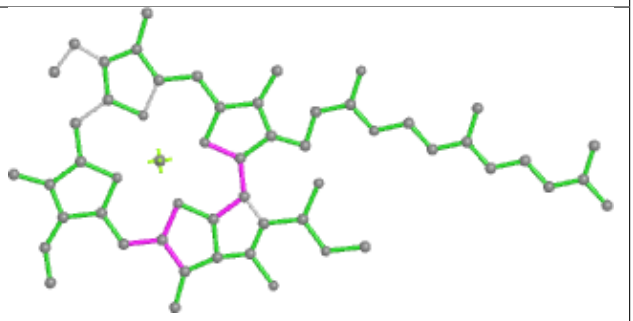
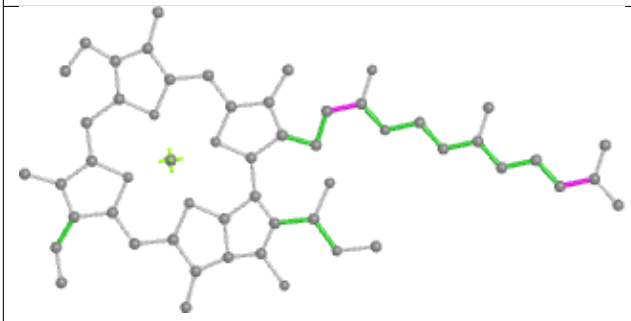
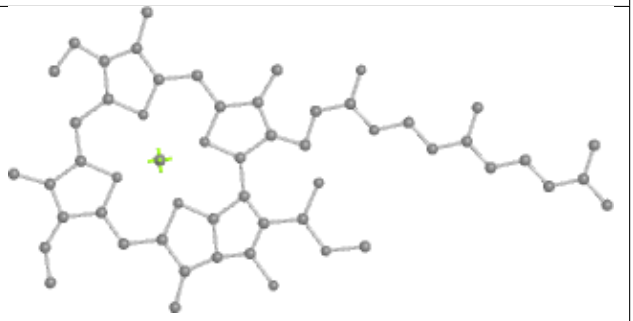


Bond angles

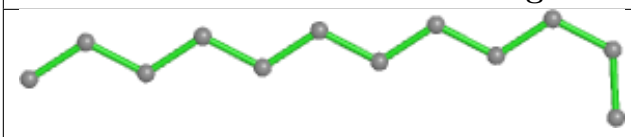


Torsions

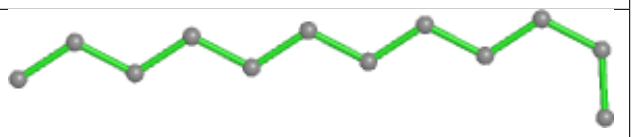


Rings

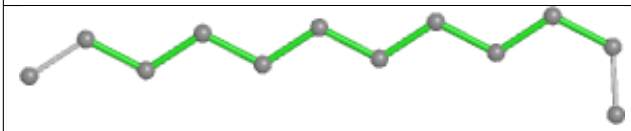
Ligand LFA m 102



Bond lengths



Bond angles



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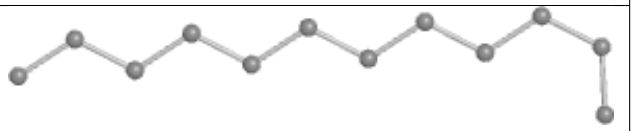
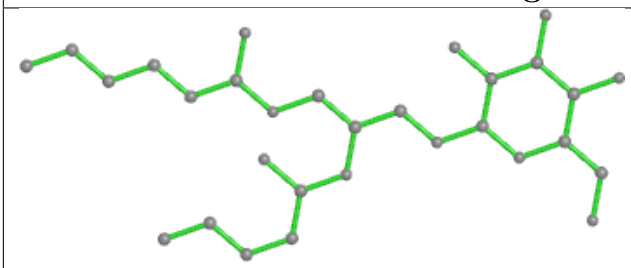
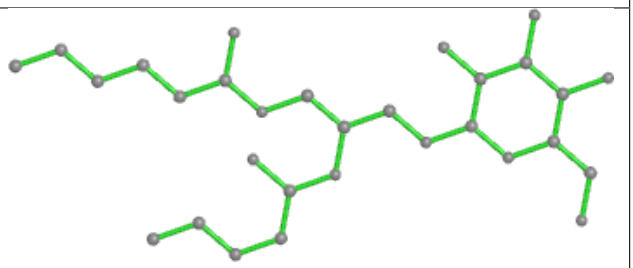


Rings

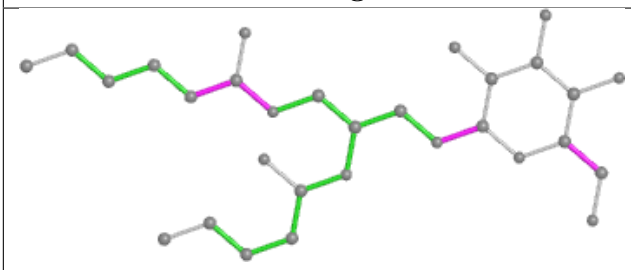
Ligand LMG J 103



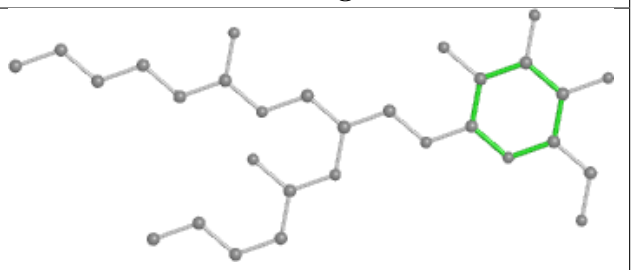
Bond lengths



Bond angles

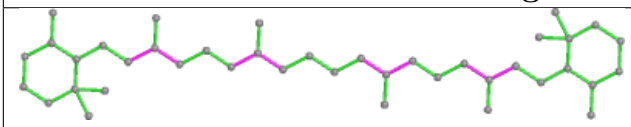


Torsions

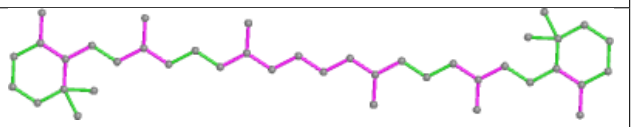


Rings

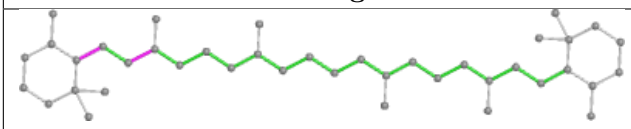
Ligand BCR A 849



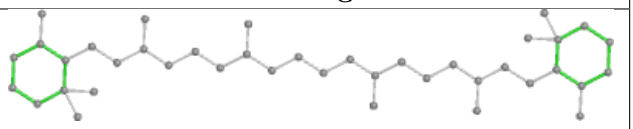
Bond lengths



Bond angles

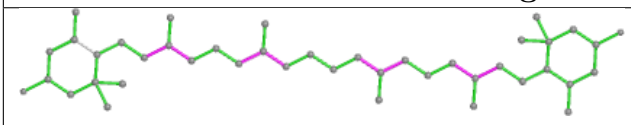


Torsions

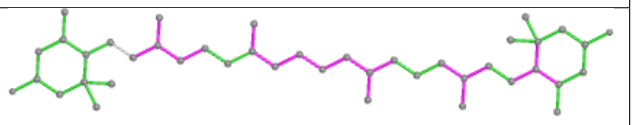


Rings

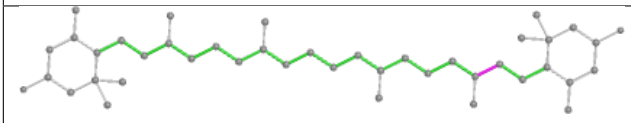
Ligand LUT 5a 317



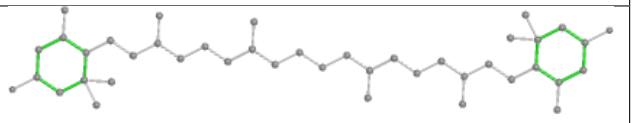
Bond lengths



Bond angles

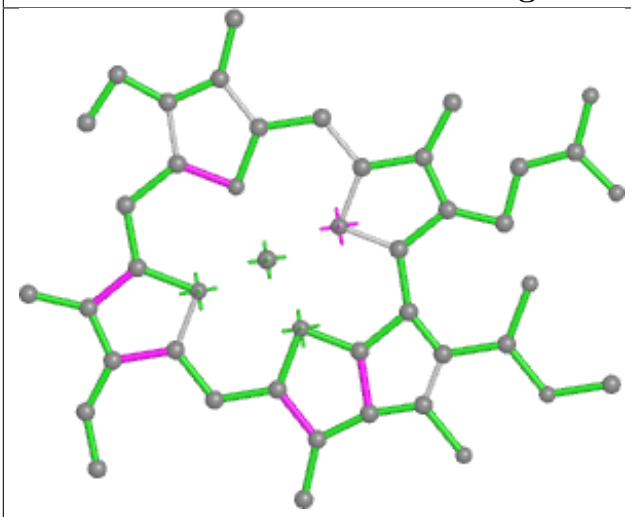


Torsions

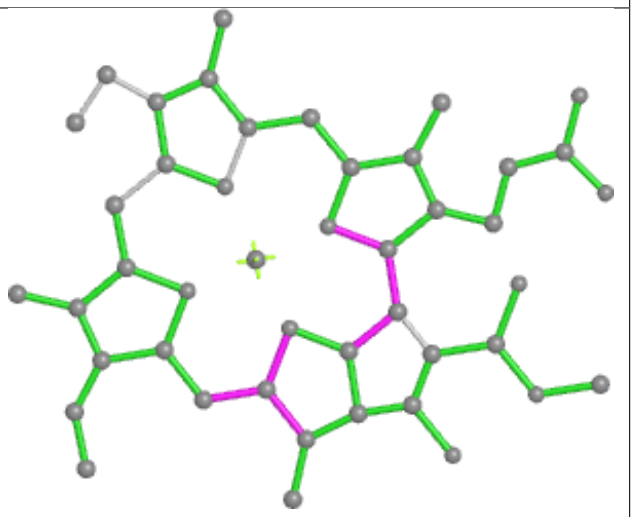


Rings

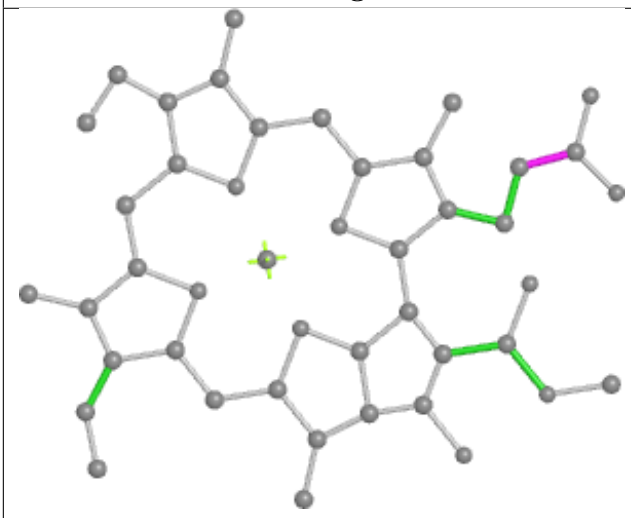
Ligand CLA 5b 308



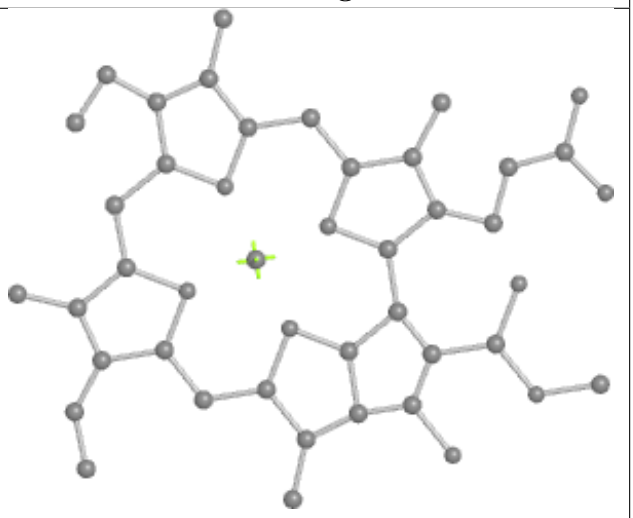
Bond lengths



Bond angles

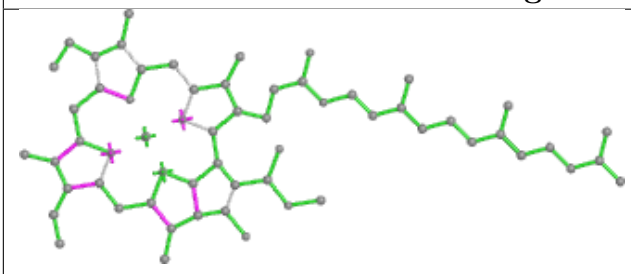


Torsions

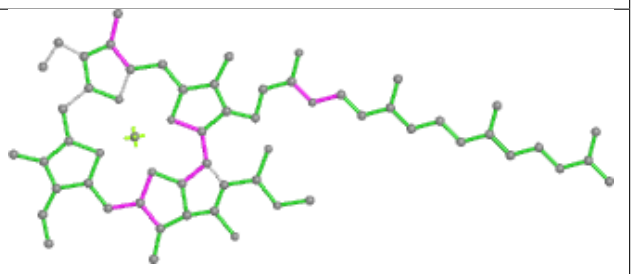


Rings

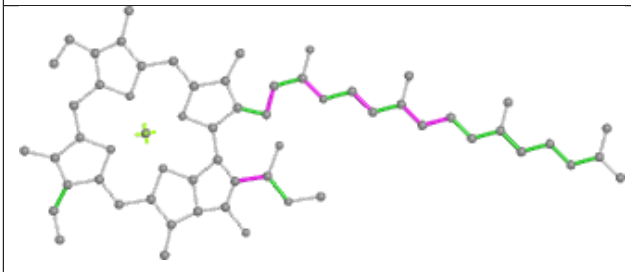
Ligand CLA B 832



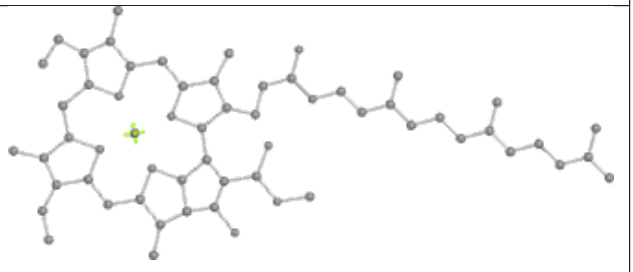
Bond lengths



Bond angles

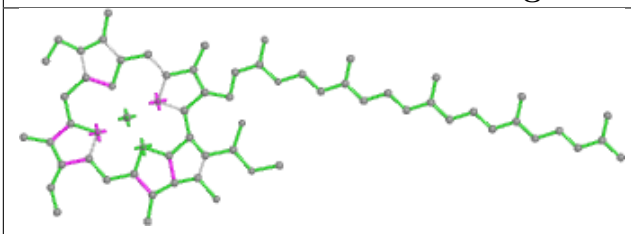


Torsions

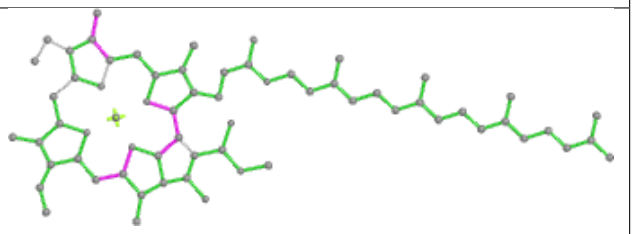


Rings

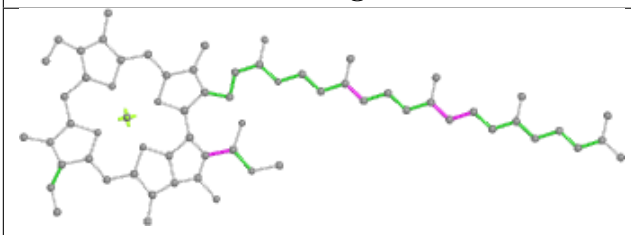
Ligand CLA A 839



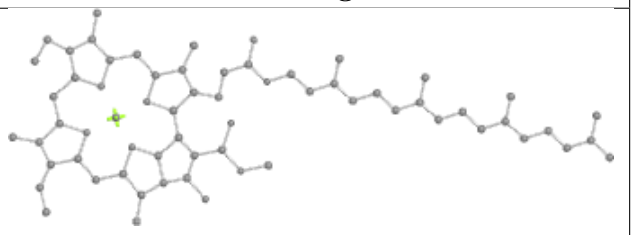
Bond lengths



Bond angles

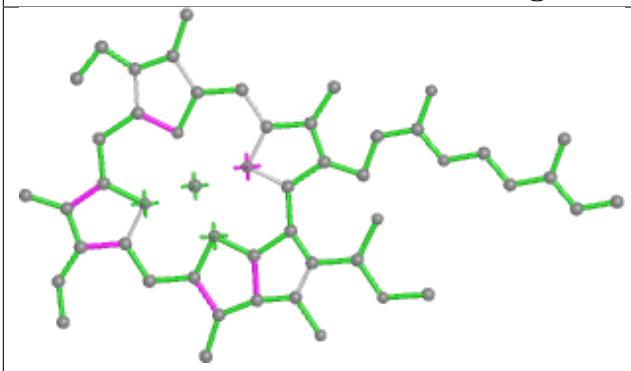


Torsions

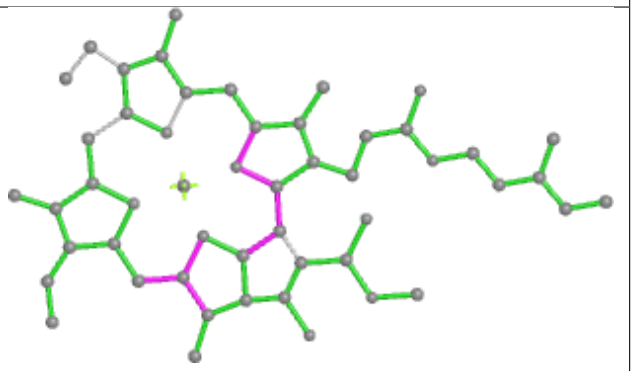


Rings

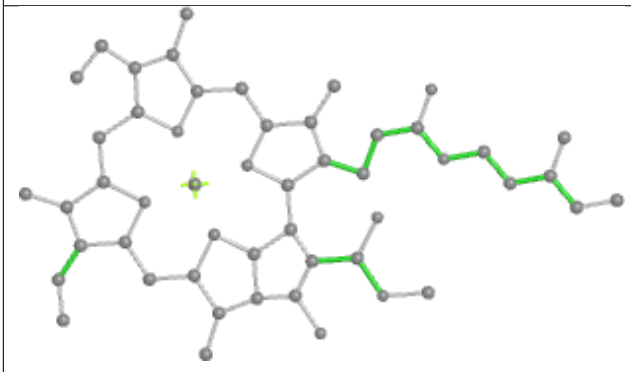
Ligand CLA a 853



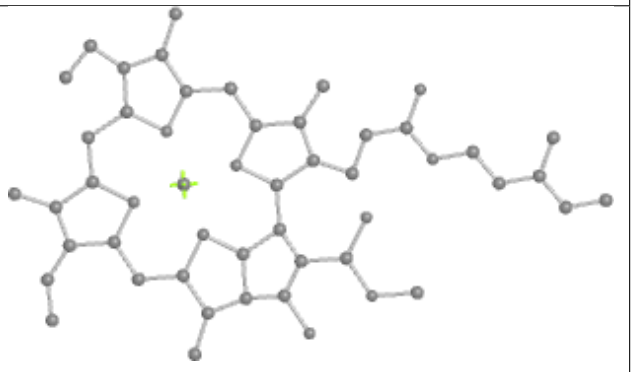
Bond lengths



Bond angles

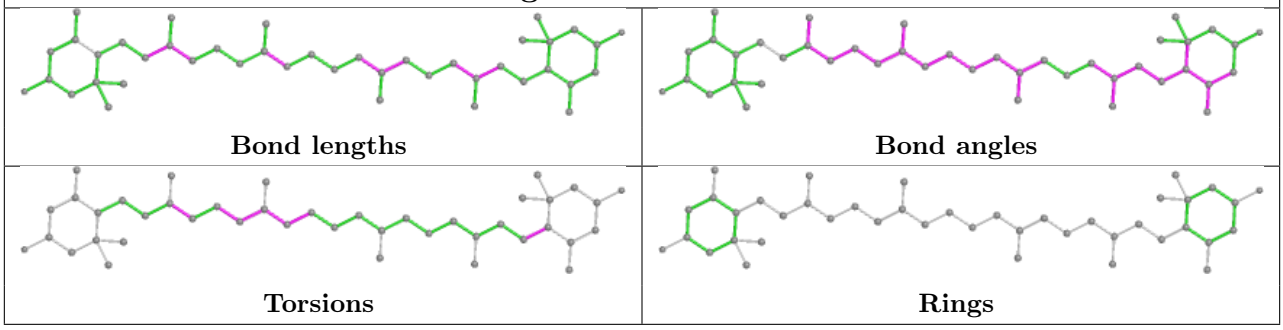


Torsions

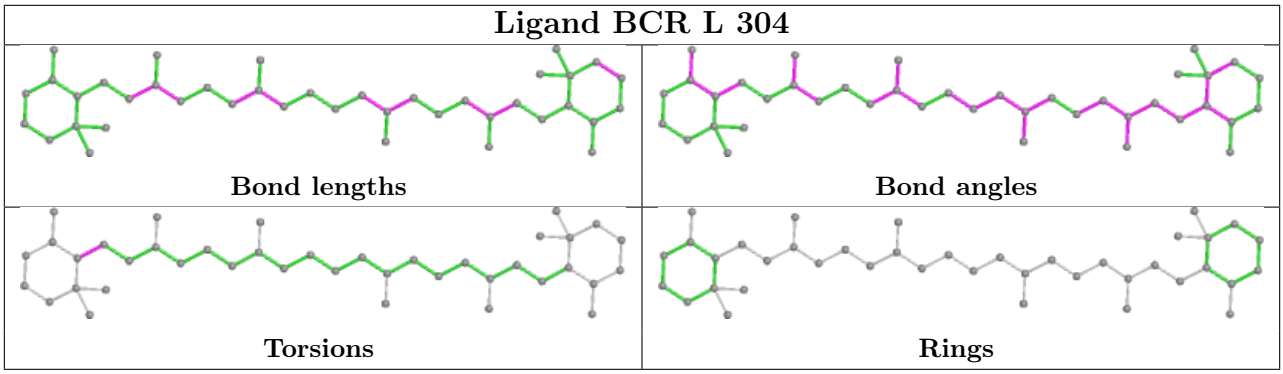


Rings

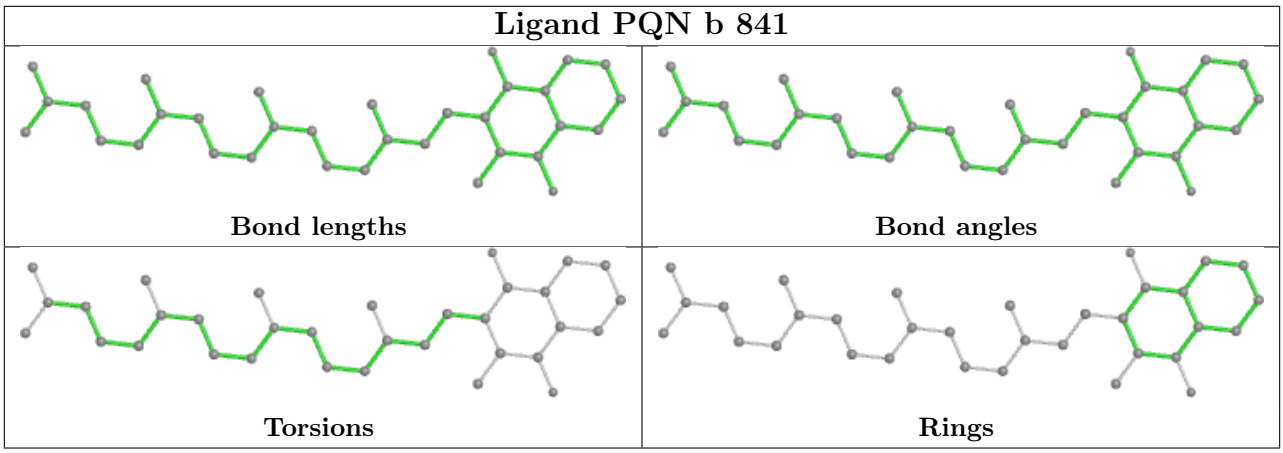
Ligand LUT 2a 314



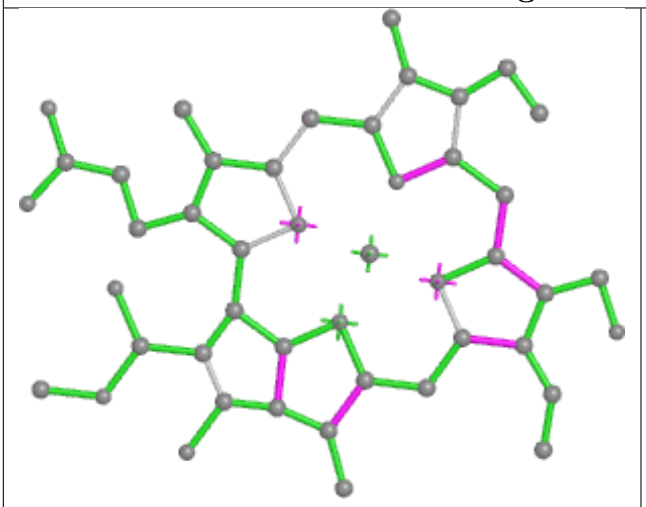
Ligand BCR L 304



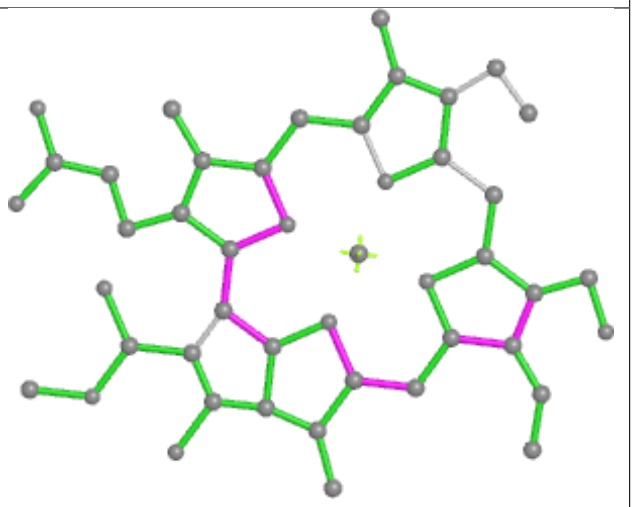
Ligand PQN b 841



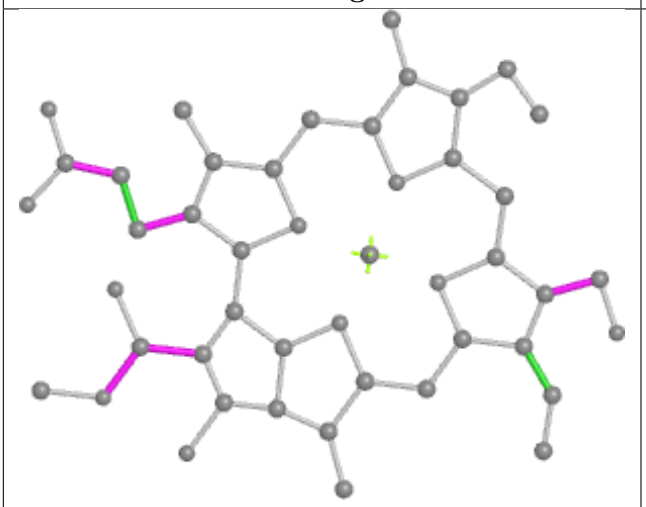
Ligand CHL 2b 306



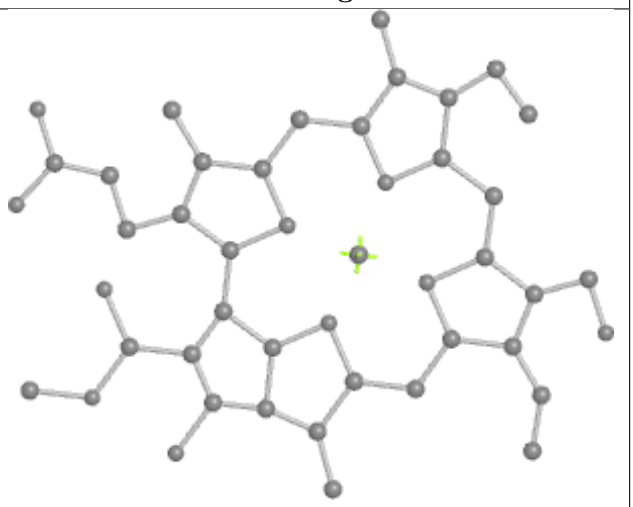
Bond lengths



Bond angles

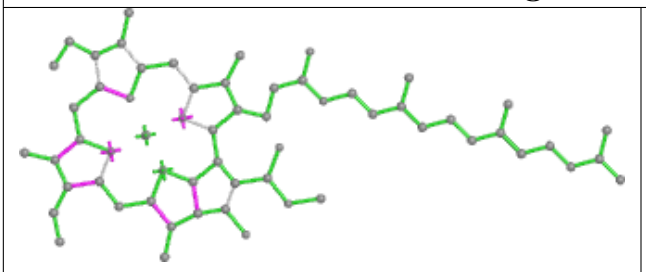


Torsions

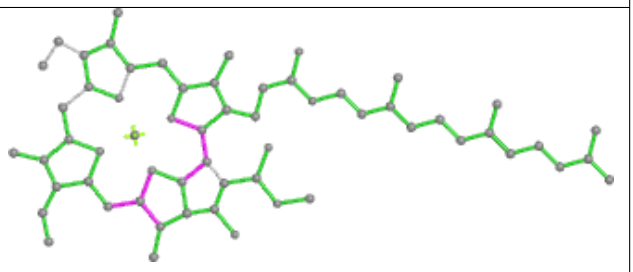


Rings

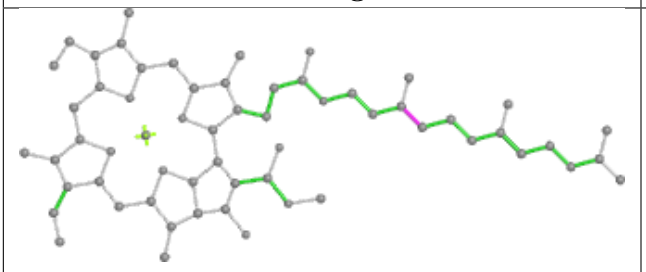
Ligand CLA B 806



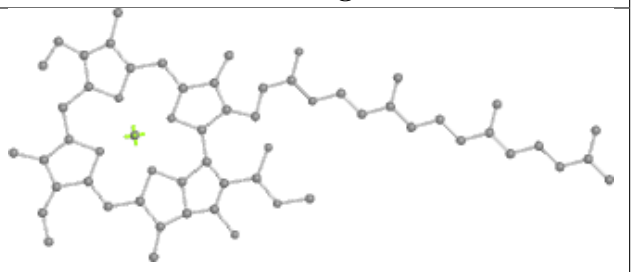
Bond lengths



Bond angles

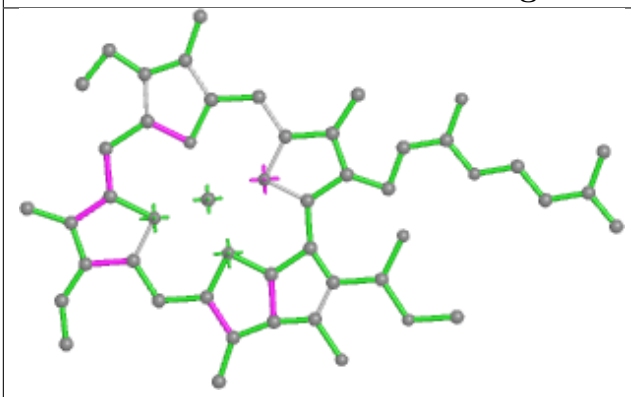


Torsions

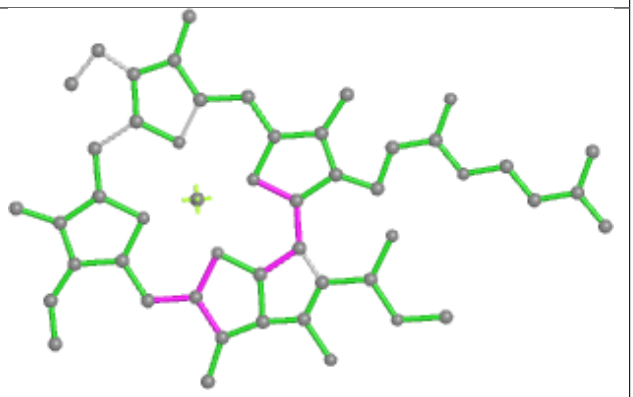


Rings

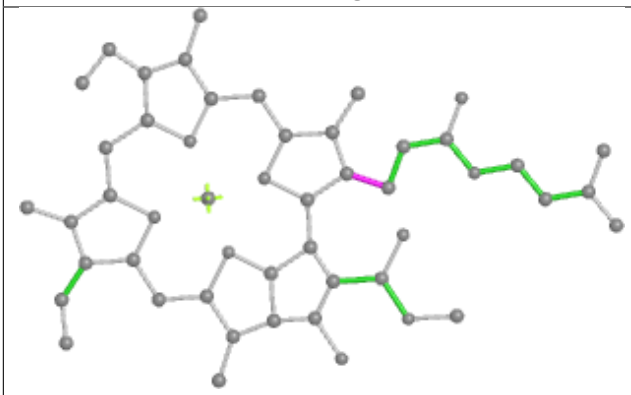
Ligand CLA 3a 309



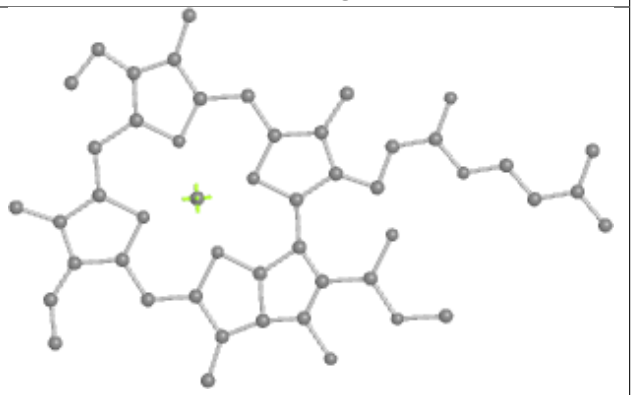
Bond lengths



Bond angles

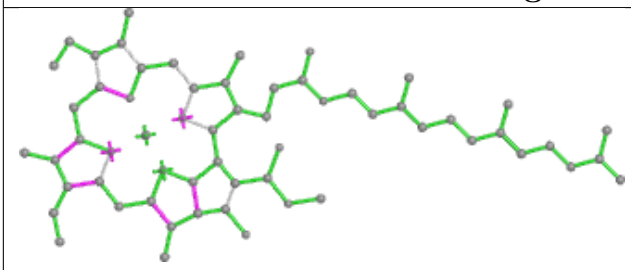


Torsions

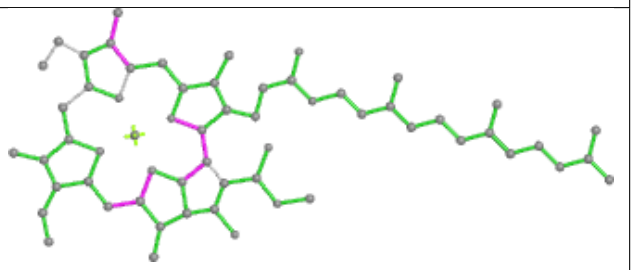


Rings

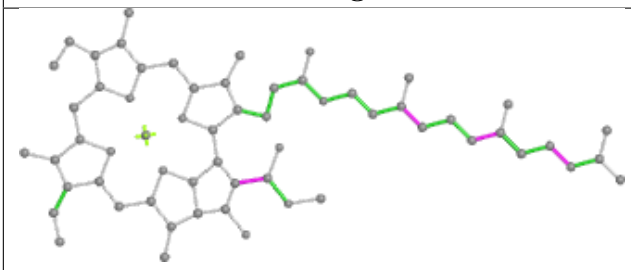
Ligand CLA B 810



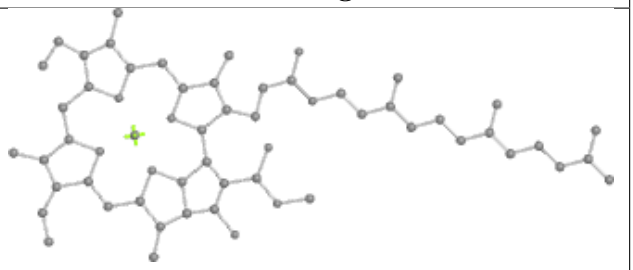
Bond lengths



Bond angles

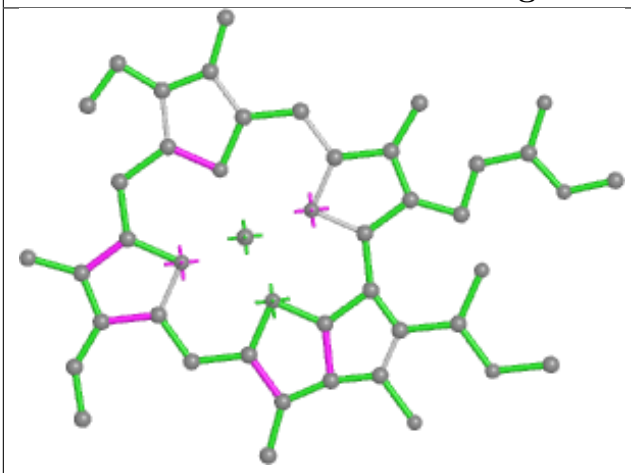


Torsions

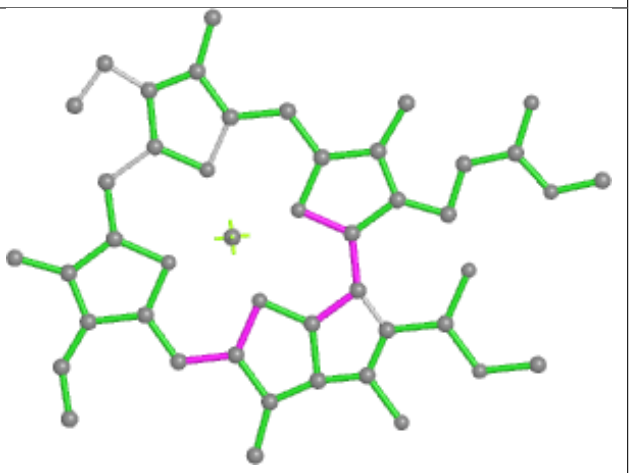


Rings

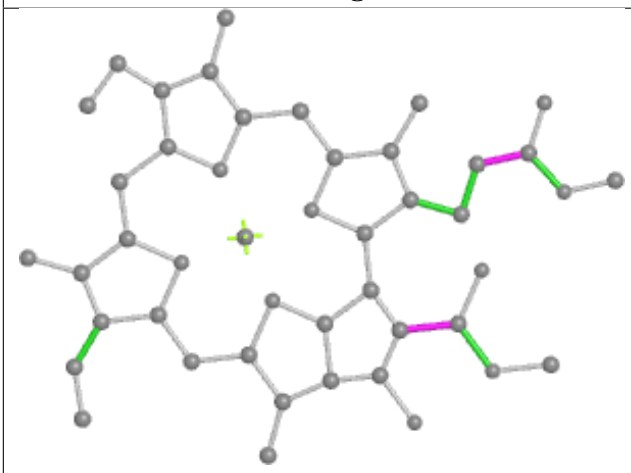
Ligand CLA 5b 315



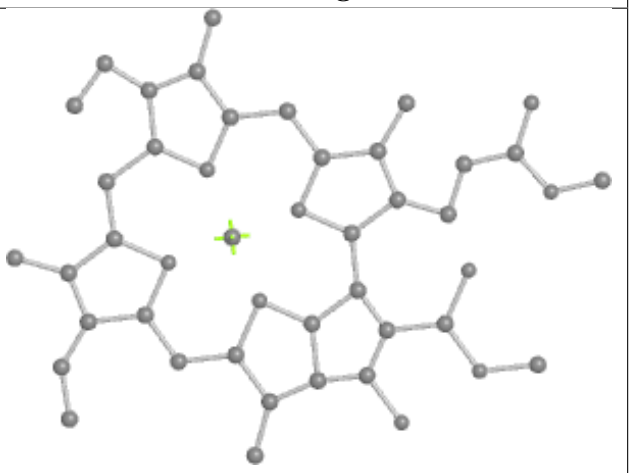
Bond lengths



Bond angles

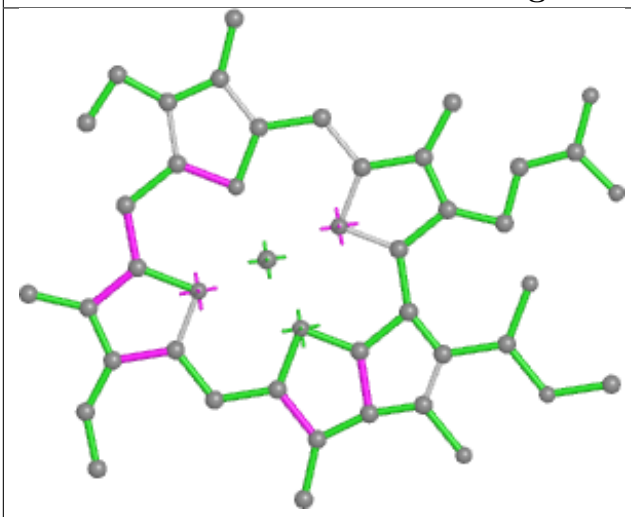


Torsions

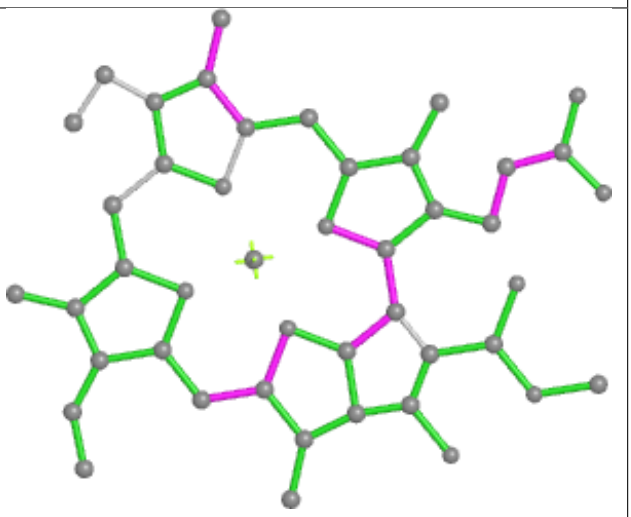


Rings

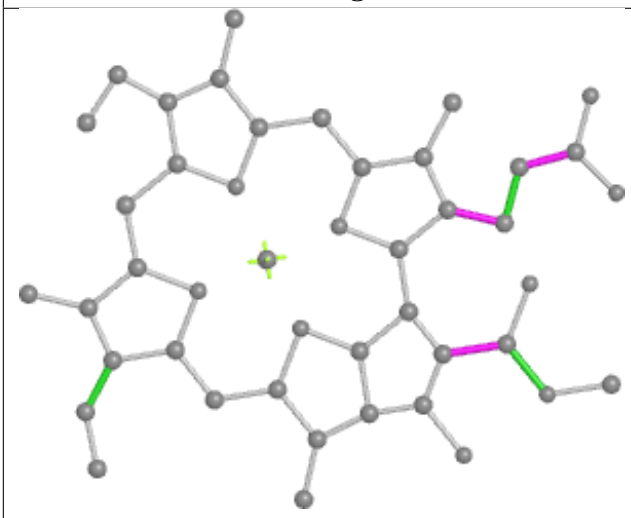
Ligand CLA a 842



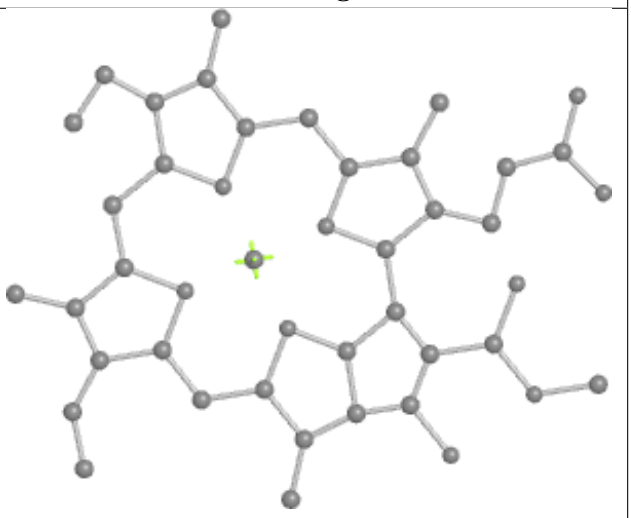
Bond lengths



Bond angles

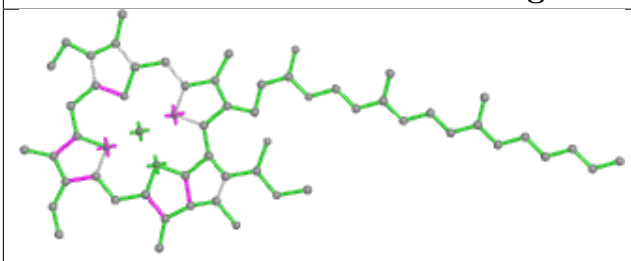


Torsions

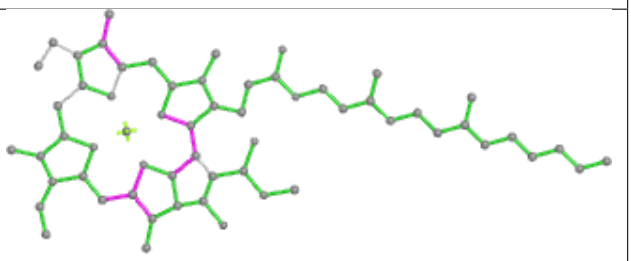


Rings

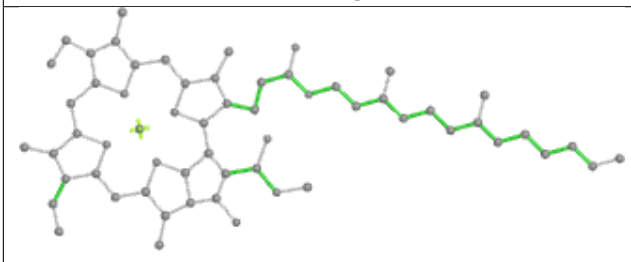
Ligand CLA b 827



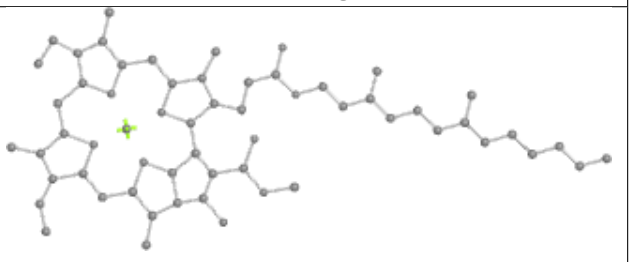
Bond lengths



Bond angles

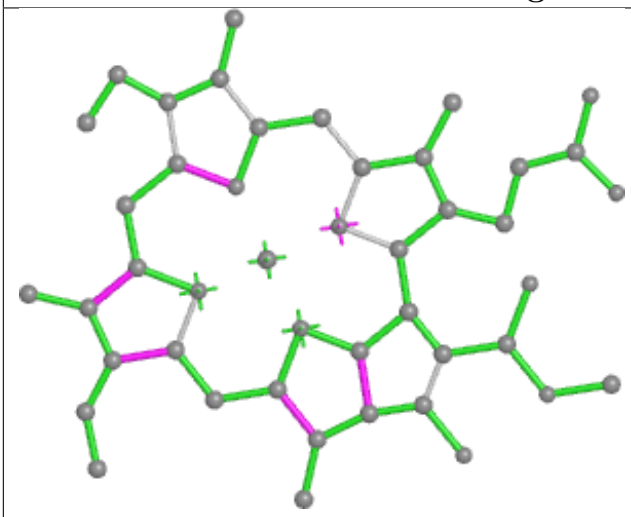


Torsions

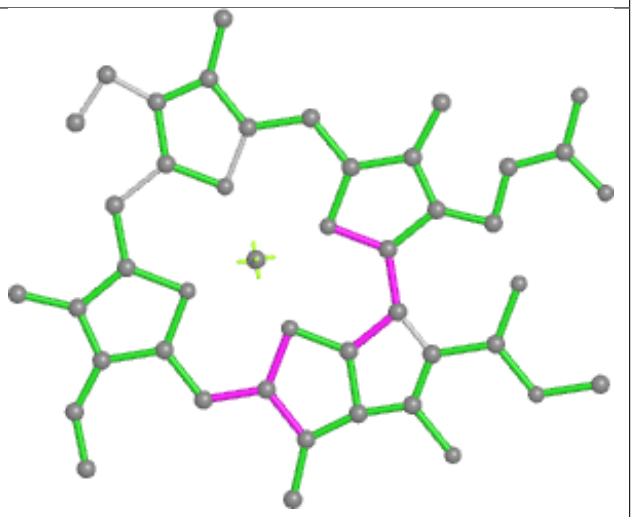


Rings

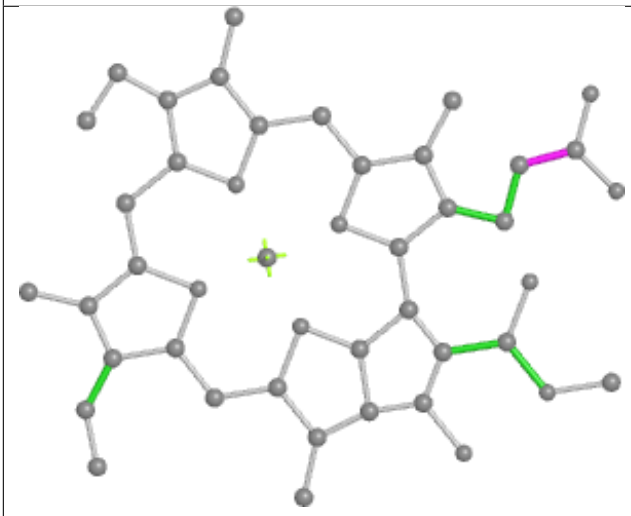
Ligand CLA b 829



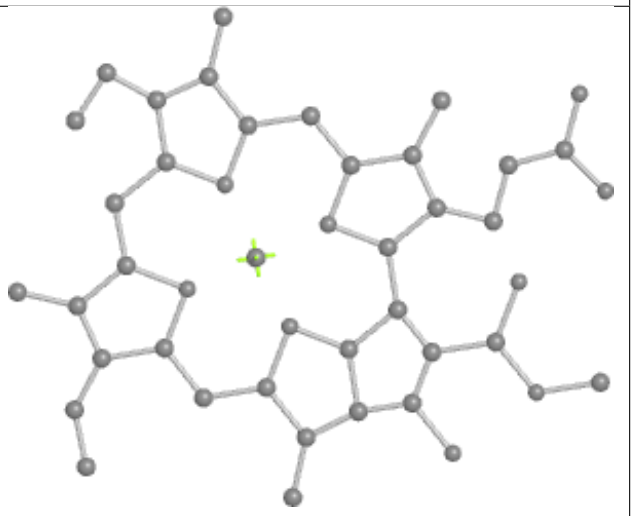
Bond lengths



Bond angles

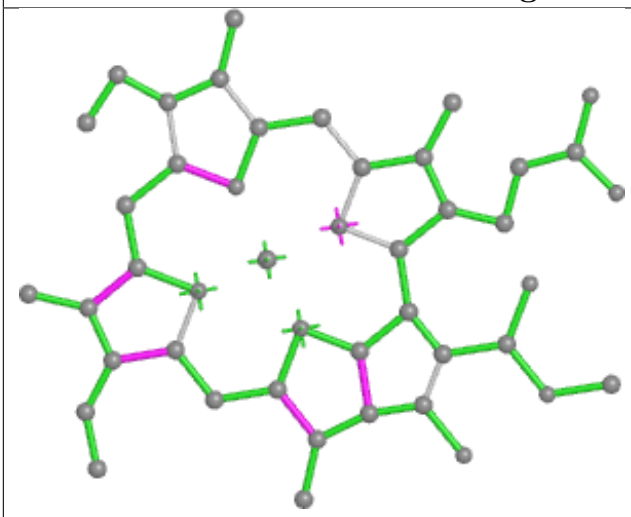


Torsions

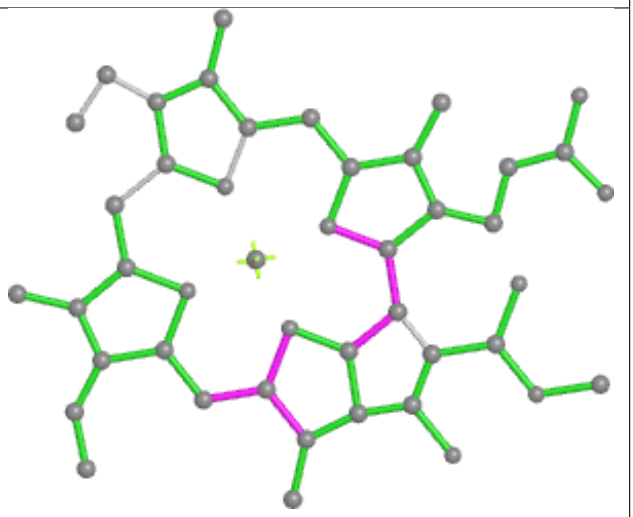


Rings

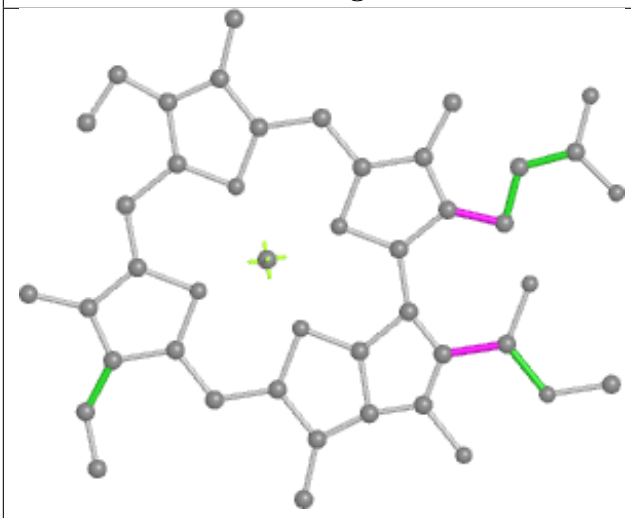
Ligand CLA 6a 316



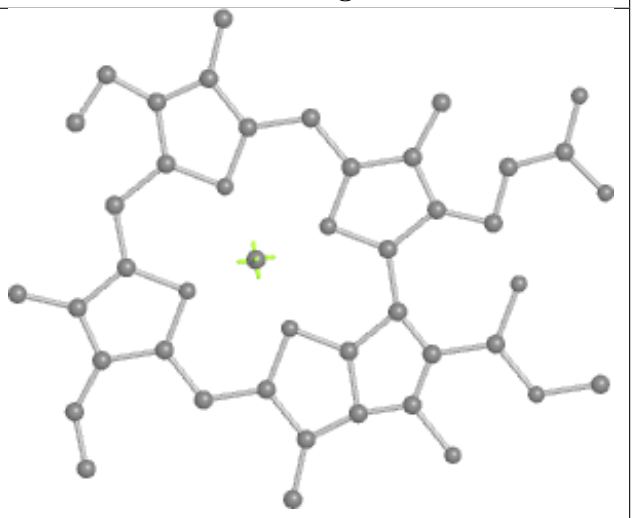
Bond lengths



Bond angles

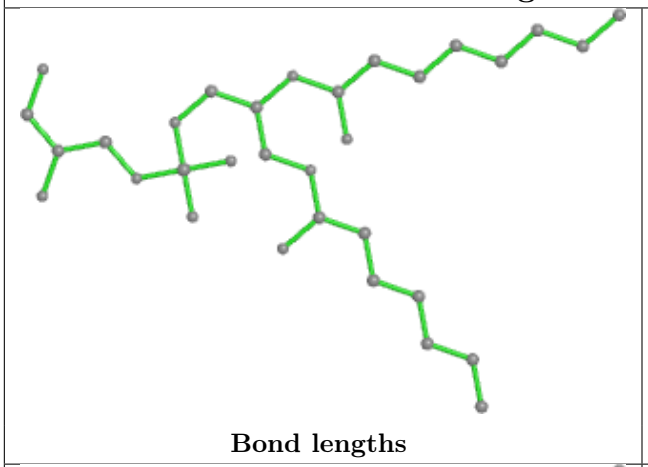


Torsions

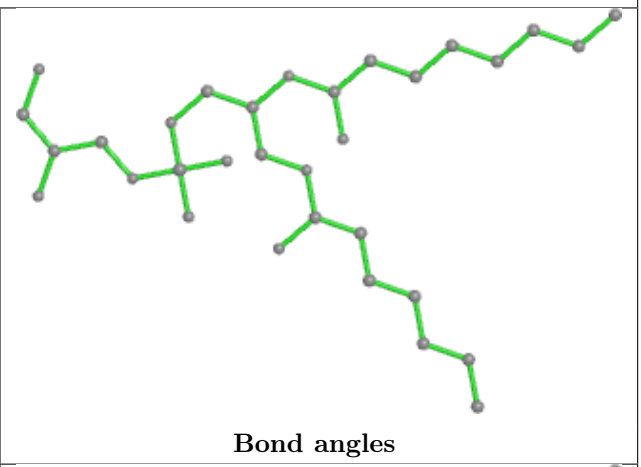


Rings

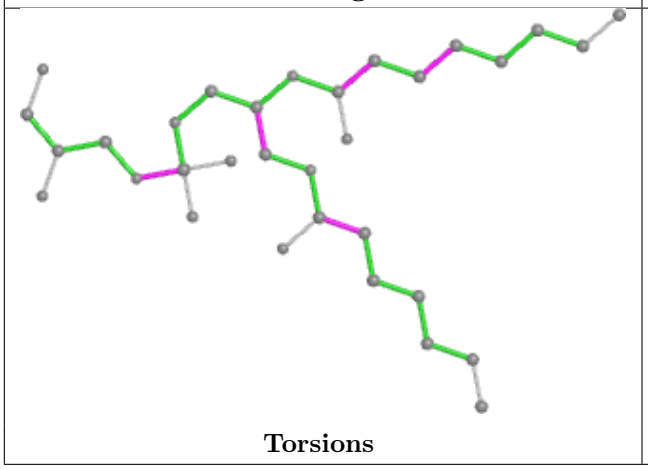
Ligand LHG 5b 318



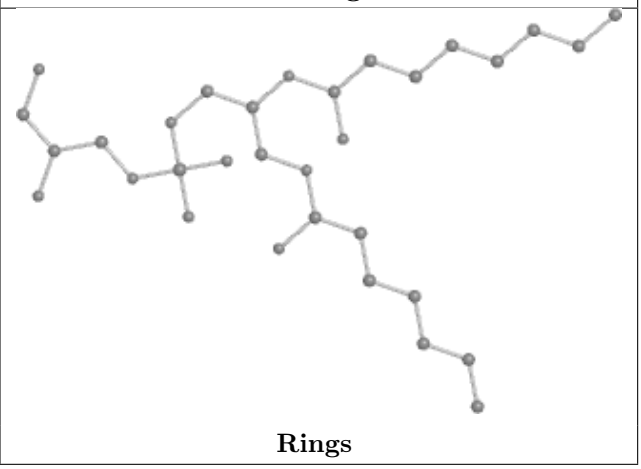
Bond lengths



Bond angles

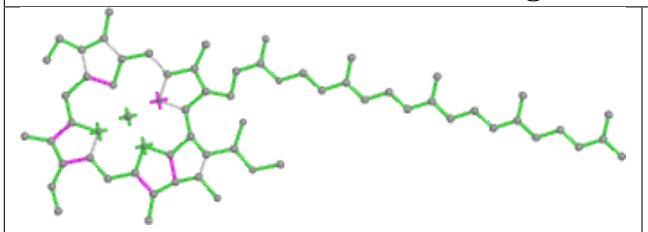


Torsions



Rings

Ligand CLA A 808



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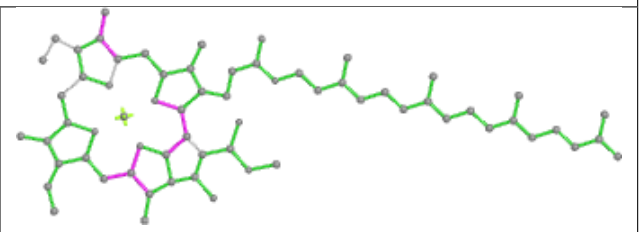
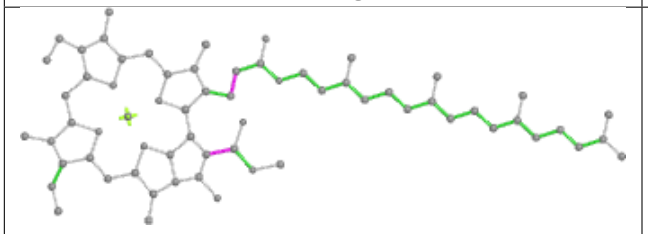
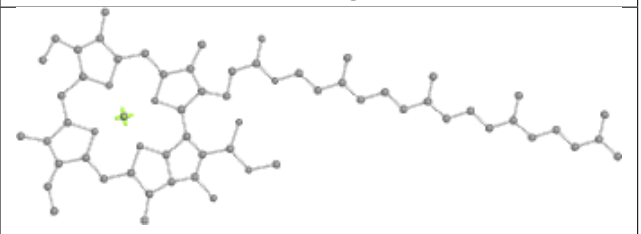


Bond angles

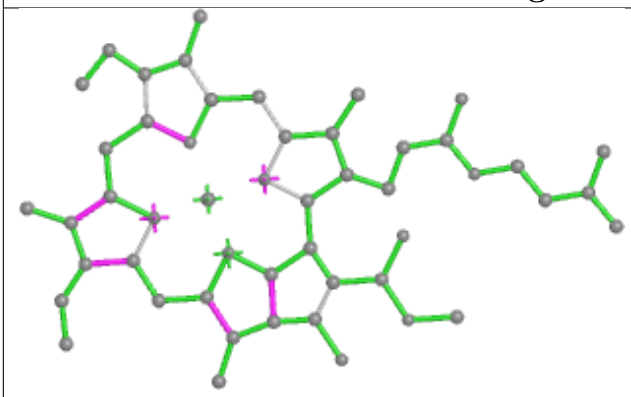


Torsions

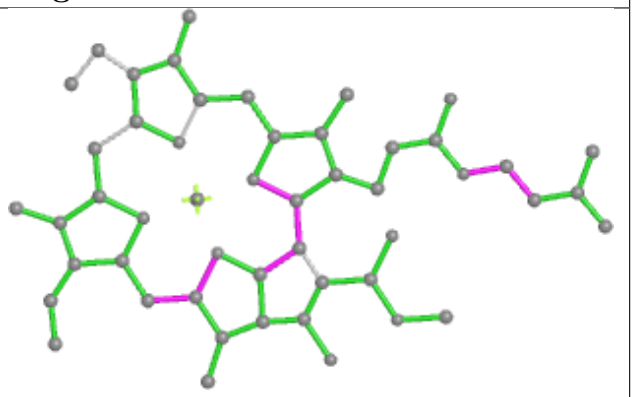


Rings

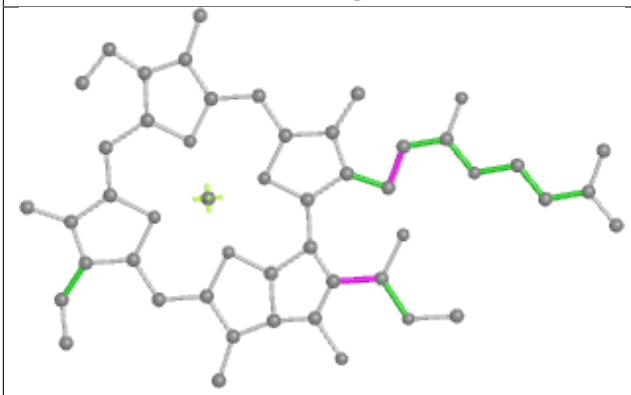
Ligand CLA g 202



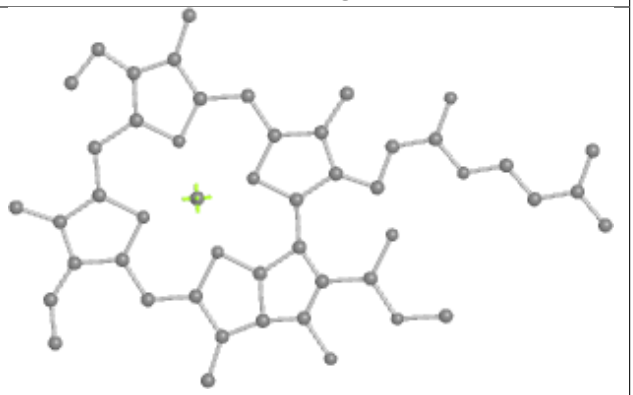
Bond lengths



Bond angles

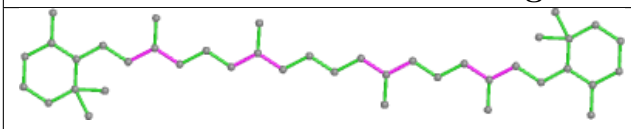


Torsions



Rings

Ligand BCR b 843



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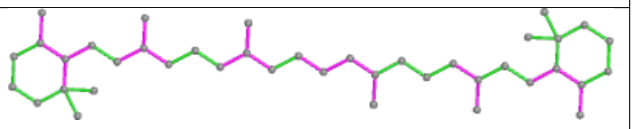
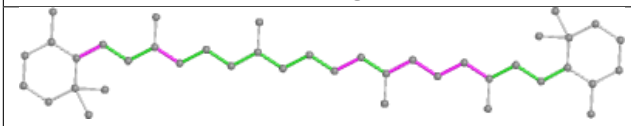


Bond angles



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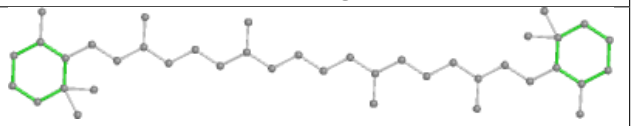
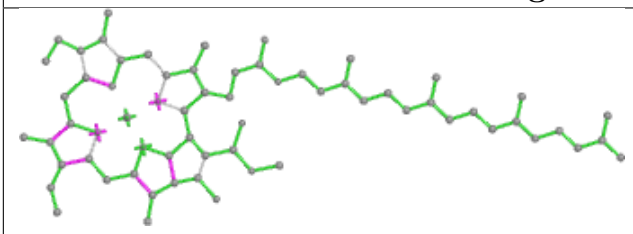


Rings

Ligand CLA a 832



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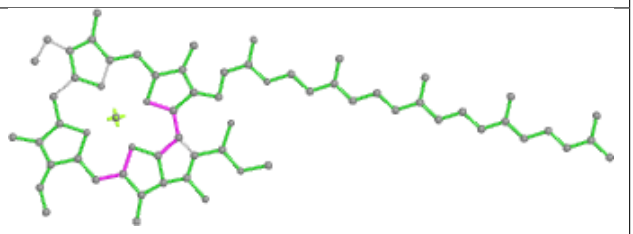
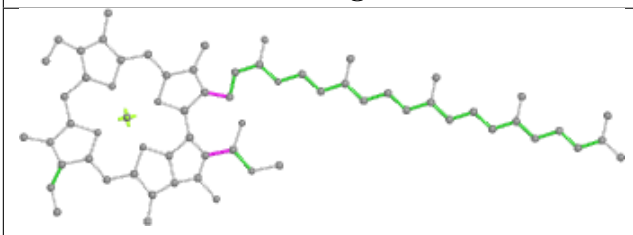


Bond angles



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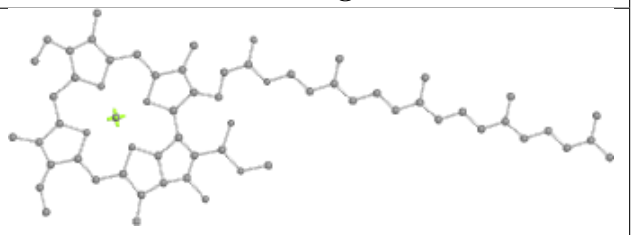
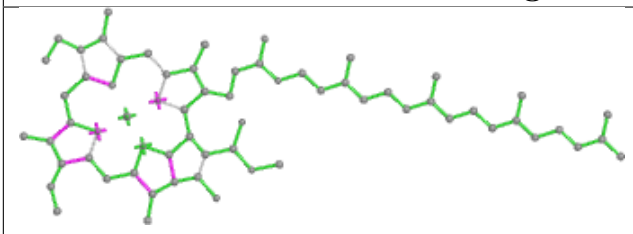


Rings

Ligand CLA A 823



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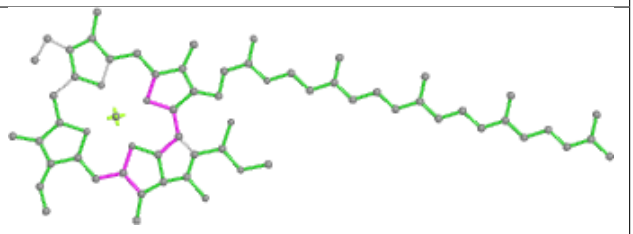
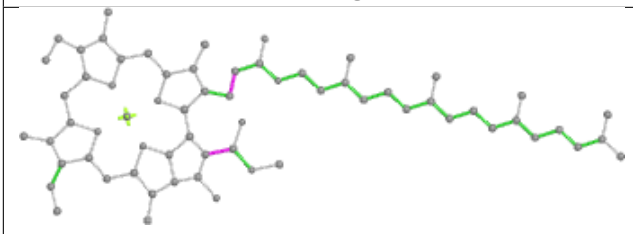


Bond angles



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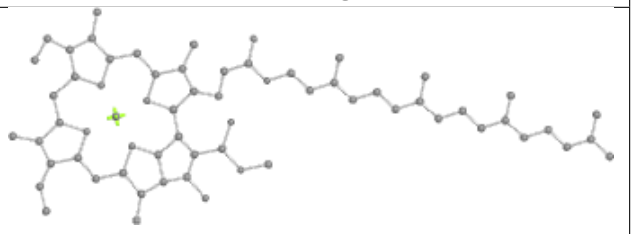
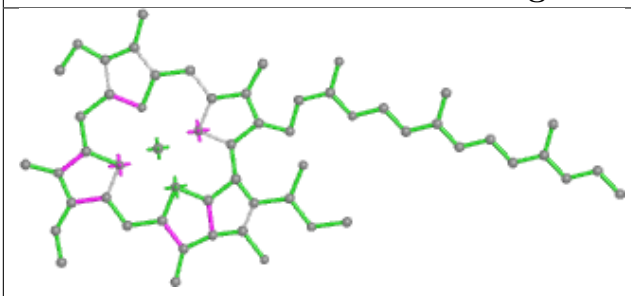


Rings

Ligand CLA a 817



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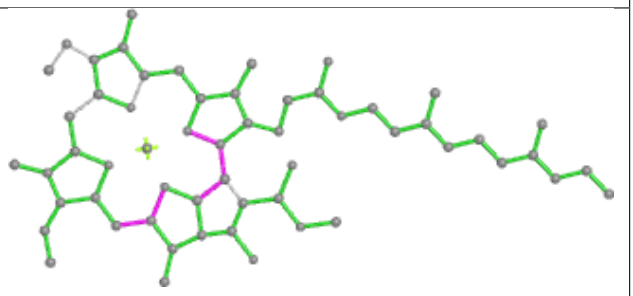
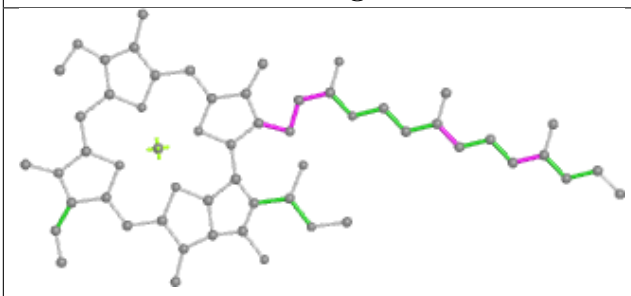


Bond angles



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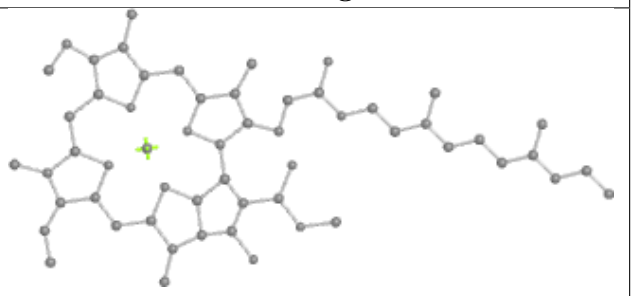
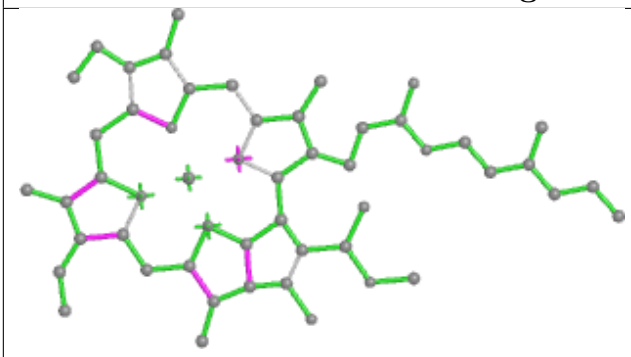


Rings

Ligand CLA 5a 312



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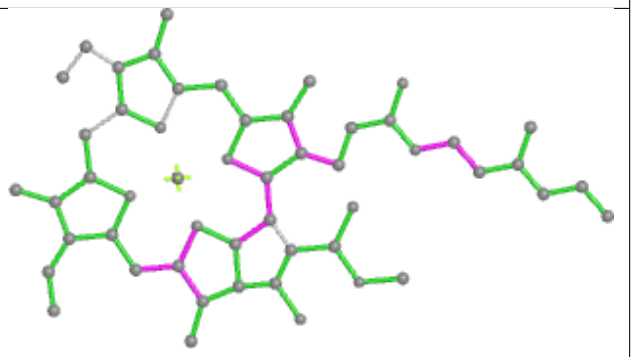
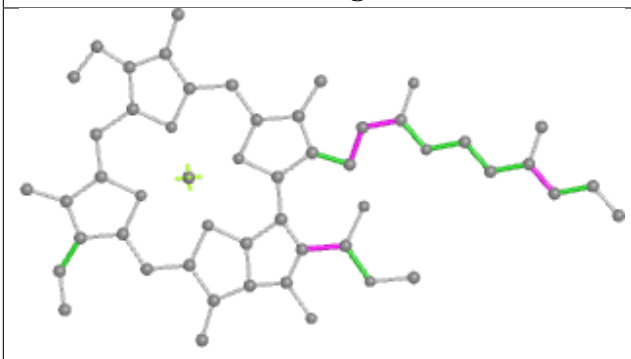


Bond angles



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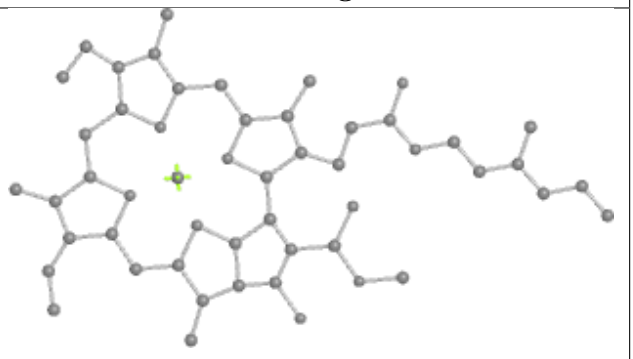
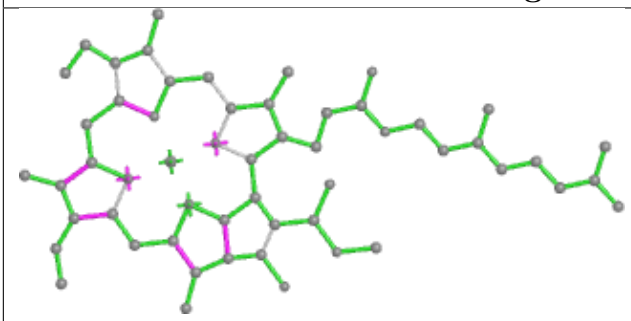


Rings

Ligand CLA B 828



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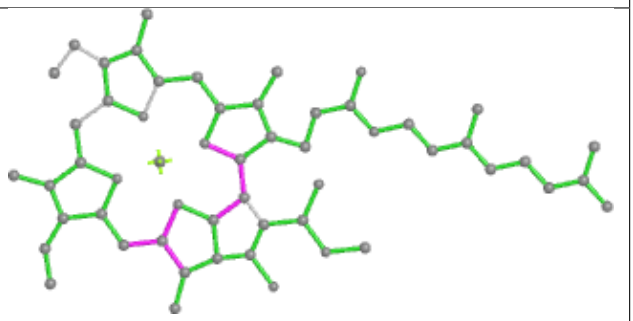
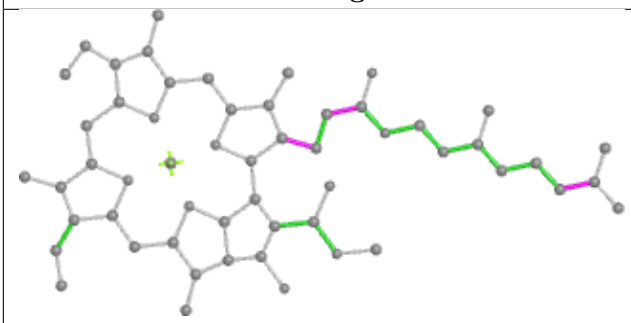


Bond angles



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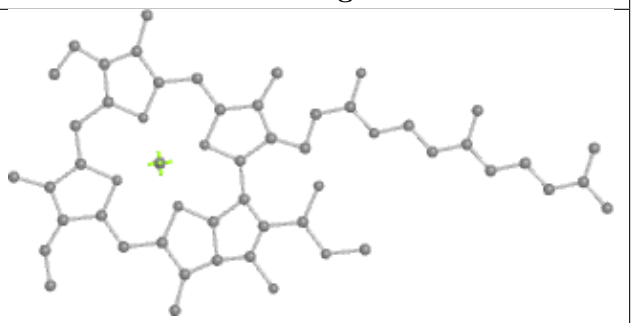
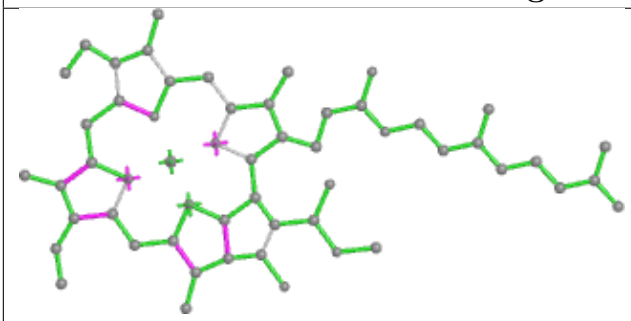


Rings

Ligand CLA b 813



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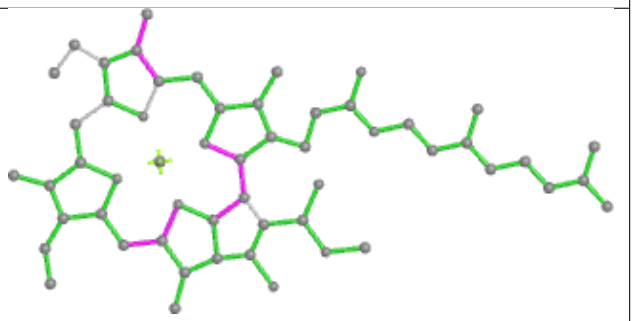
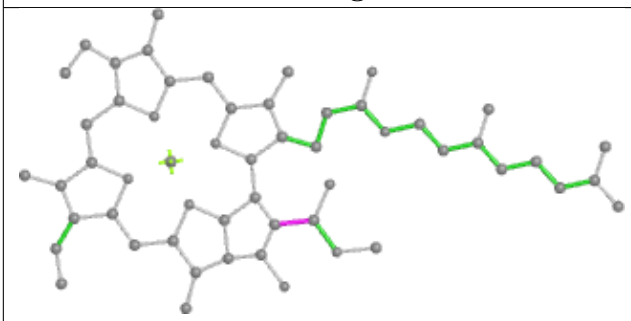
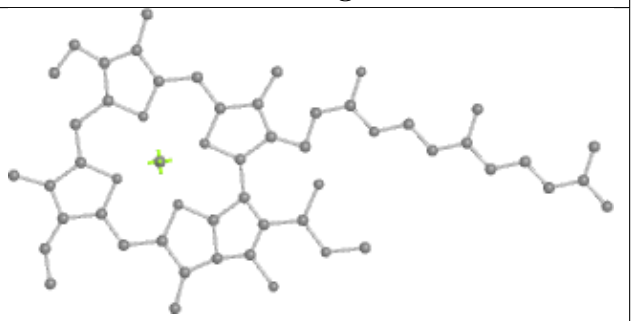


Bond angles

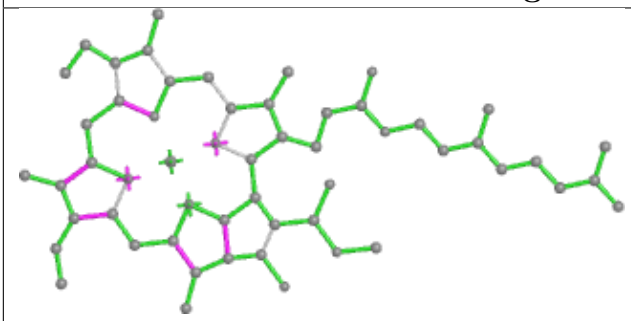


Torsions



Rings

Ligand CLA A 809



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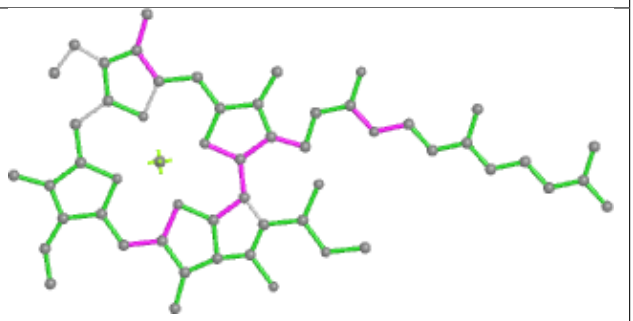
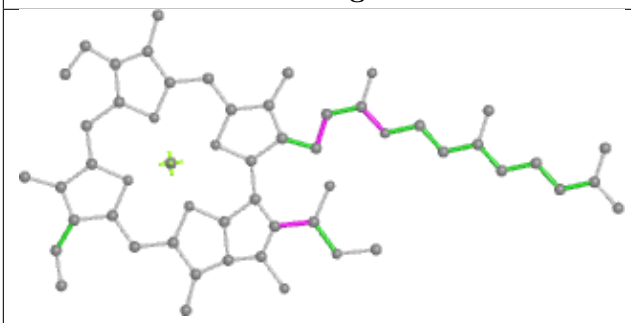
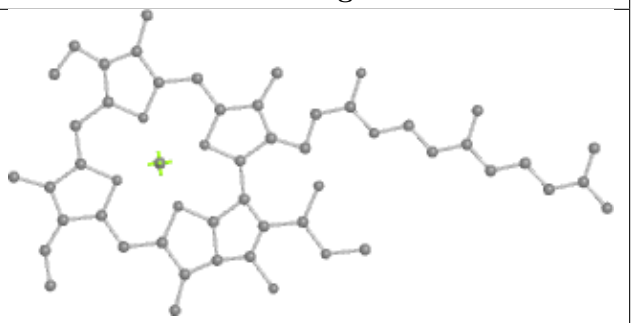


Bond angles

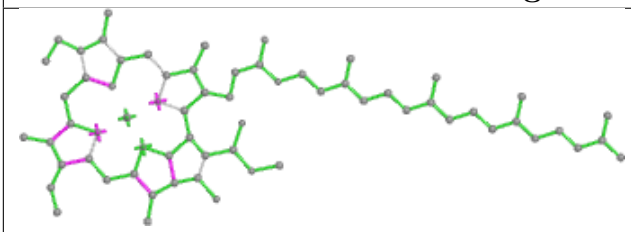


Torsions

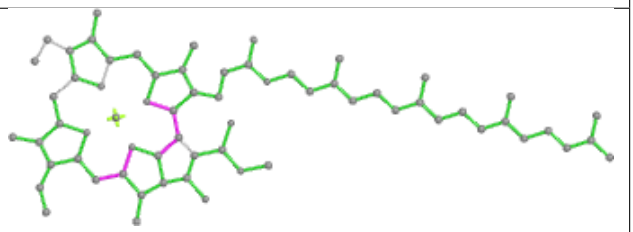


Rings

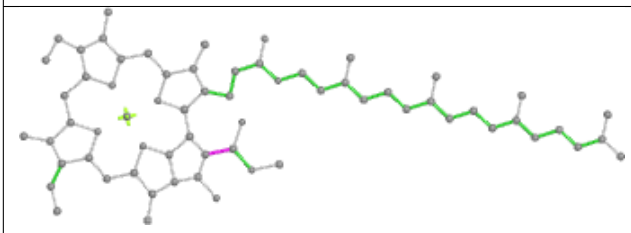
Ligand CLA A 840



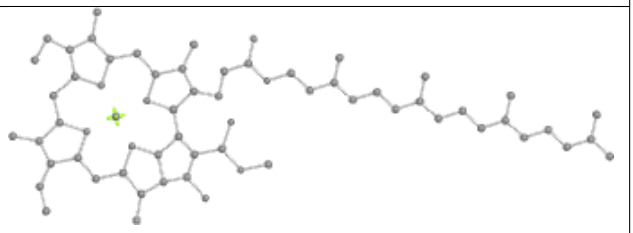
Bond lengths



Bond angles

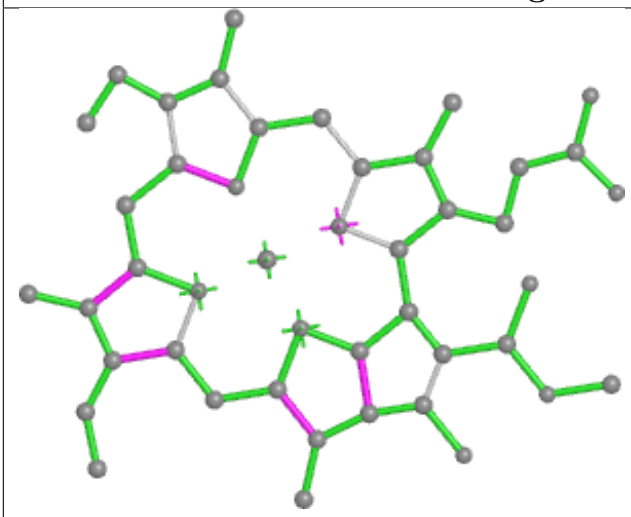


Torsions

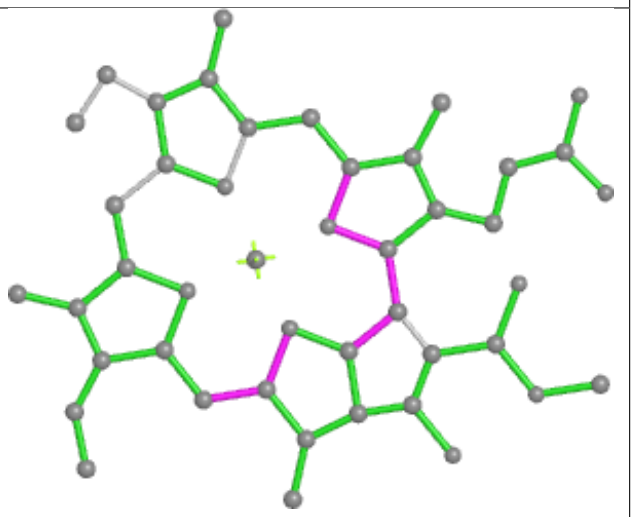


Rings

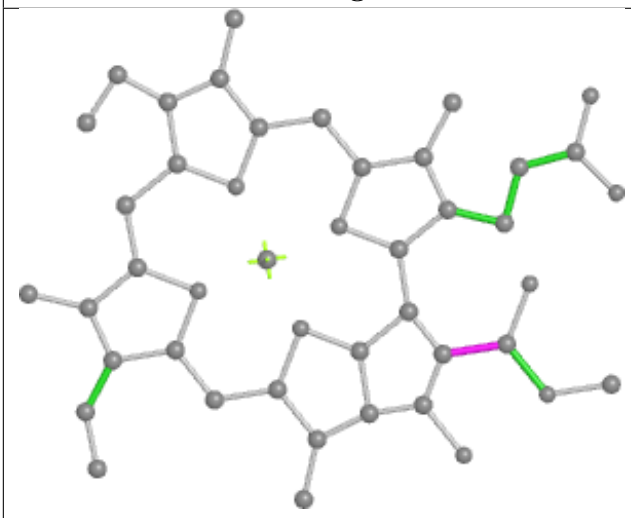
Ligand CLA a 819



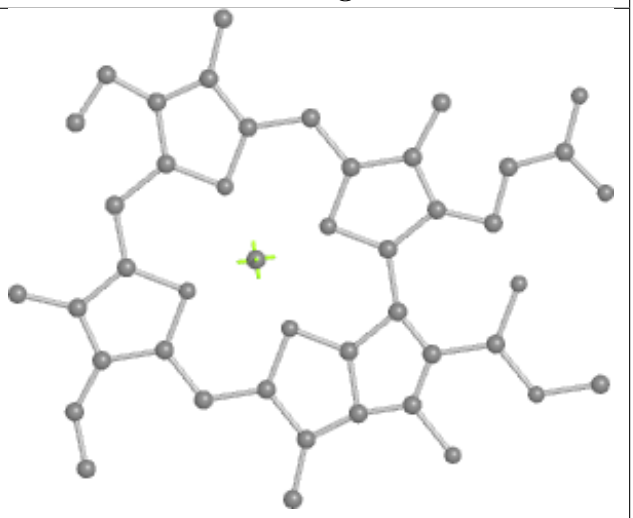
Bond lengths



Bond angles

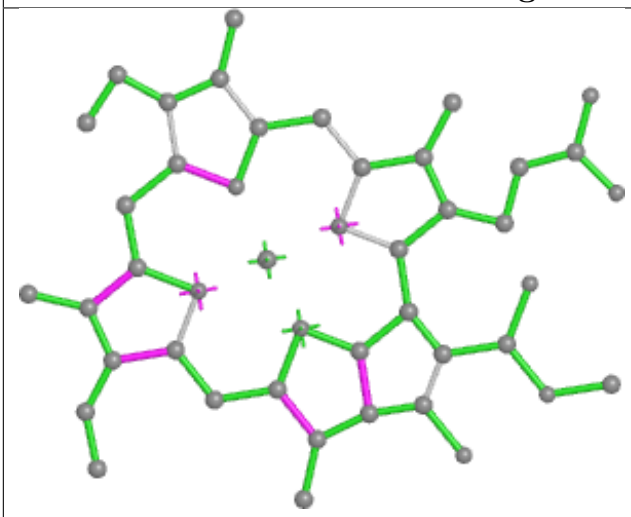


Torsions

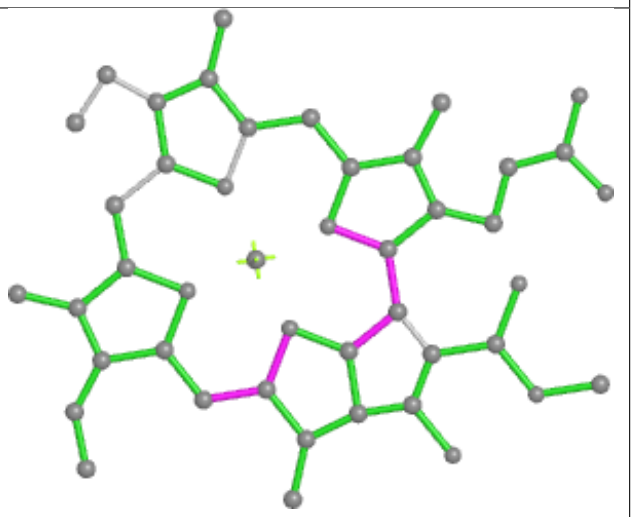


Rings

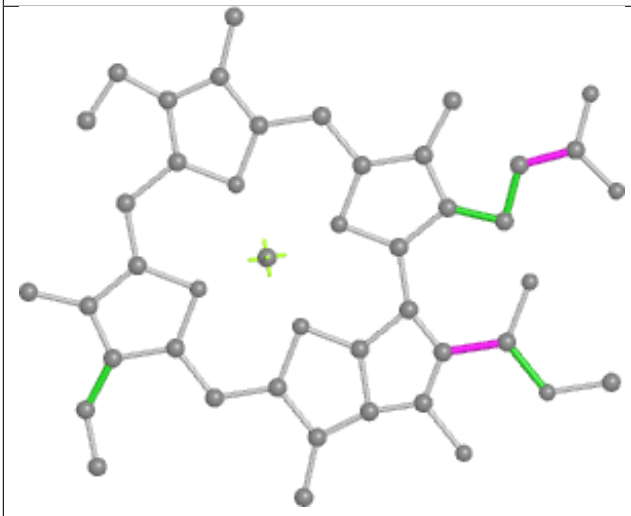
Ligand CLA 2b 309



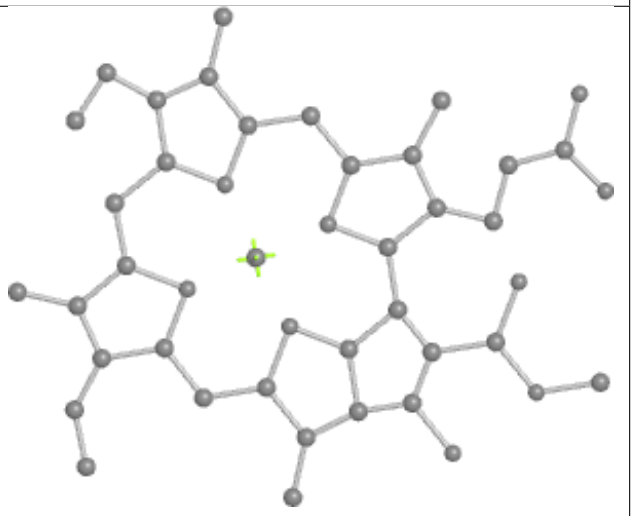
Bond lengths



Bond angles

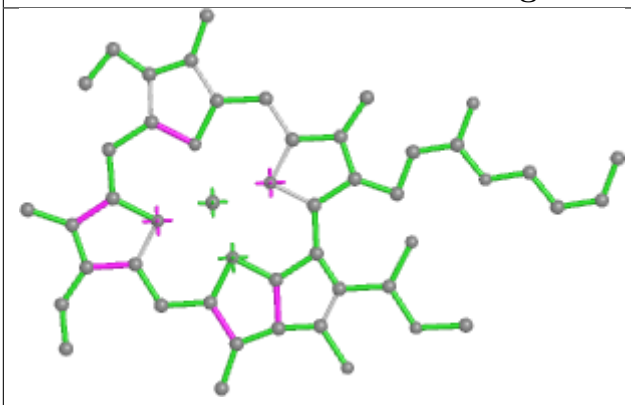


Torsions

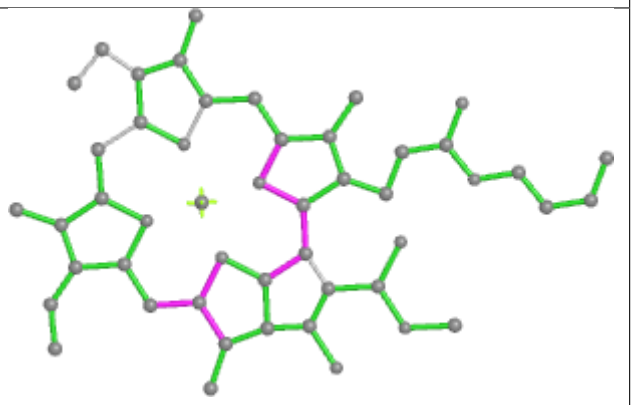


Rings

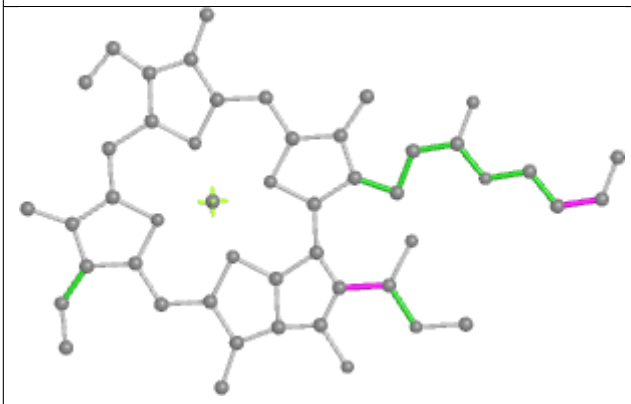
Ligand CLA 6a 307



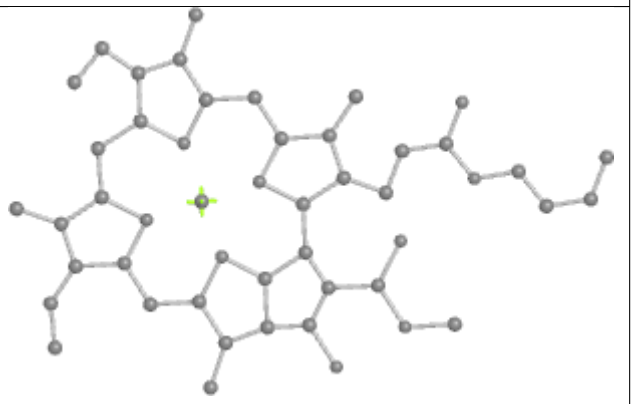
Bond lengths



Bond angles

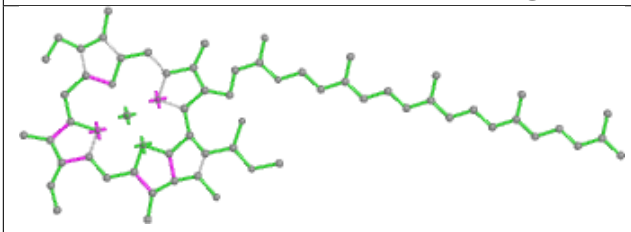


Torsions

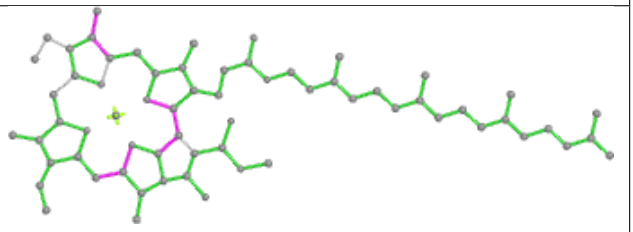


Rings

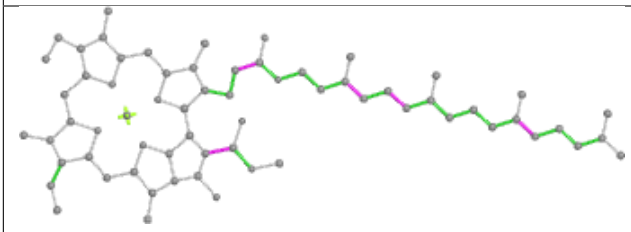
Ligand CLA A 806



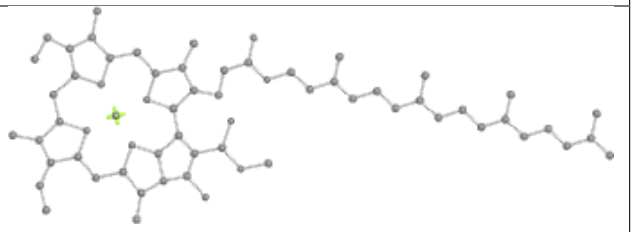
Bond lengths



Bond angles

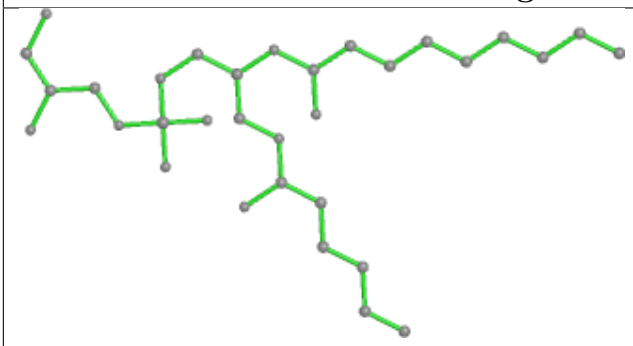


Torsions

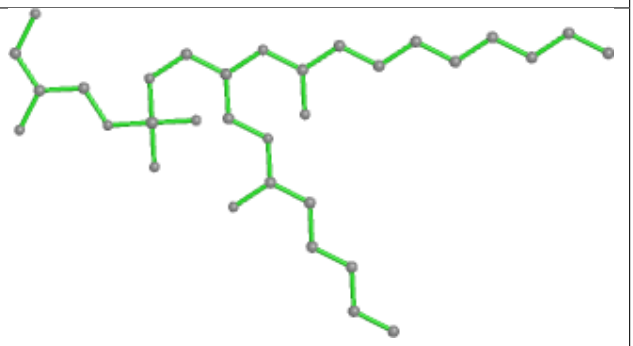


Rings

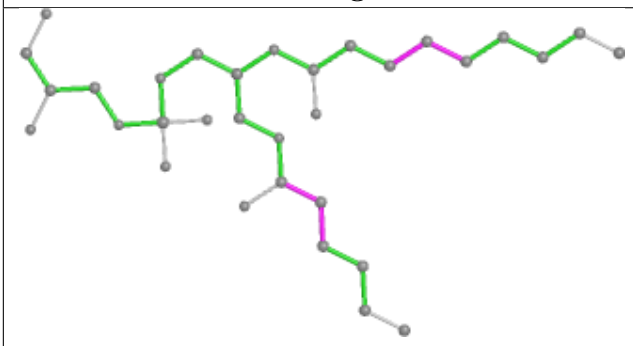
Ligand LHG 2b 316



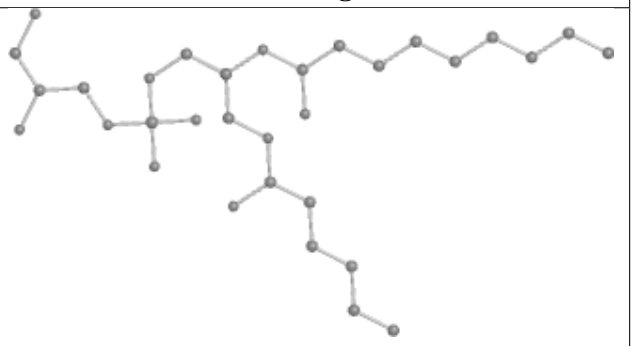
Bond lengths



Bond angles

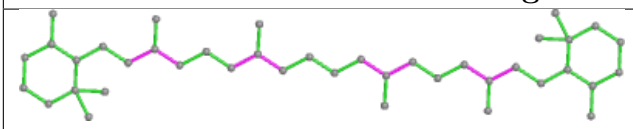


Torsions



Rings

Ligand BCR A 848



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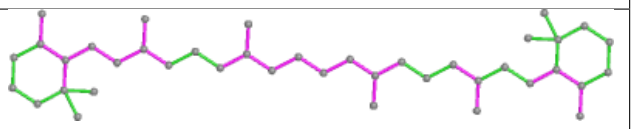
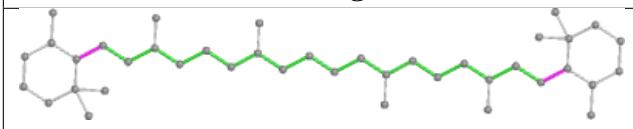


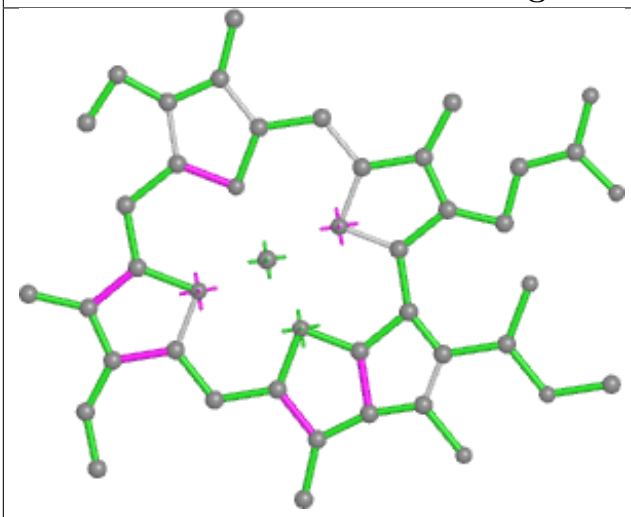
Bond angles



Torsions

Rings

Ligand CLA a 821



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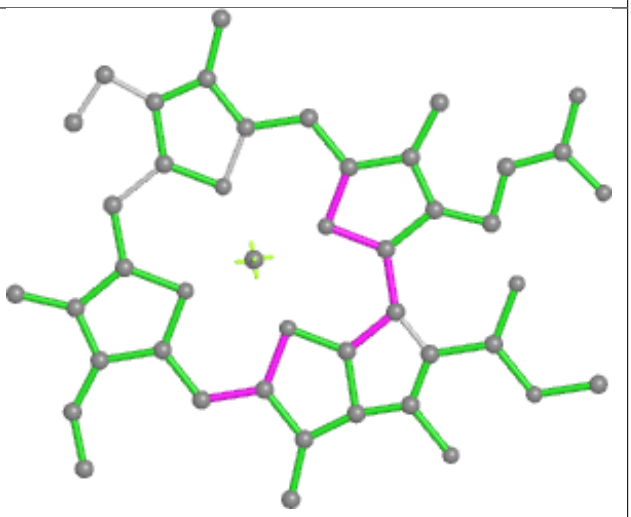
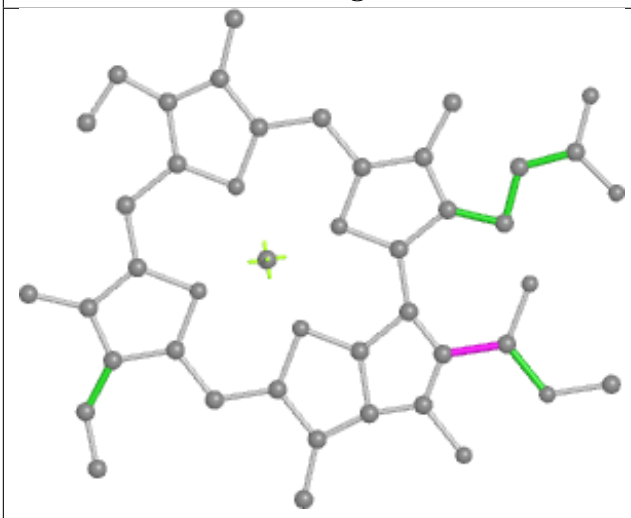


Bond angles



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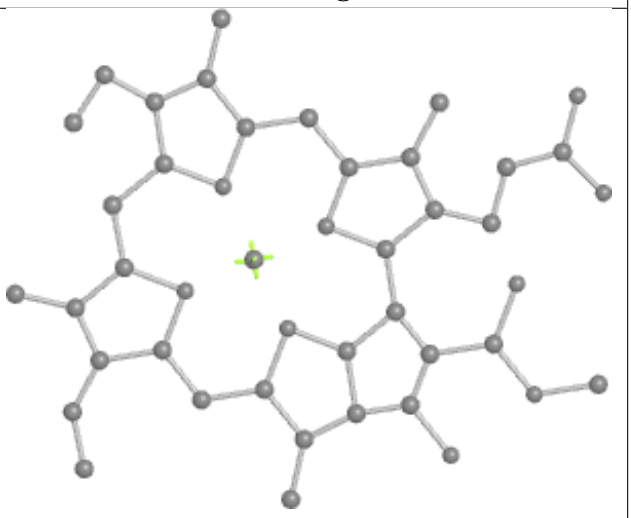
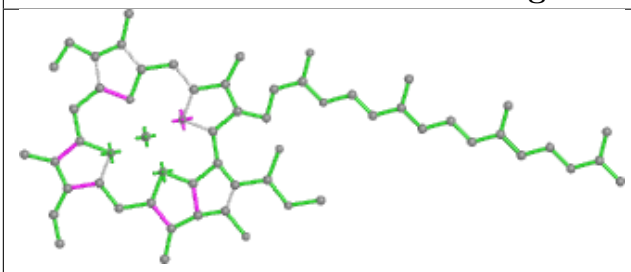


Rings

Ligand CLA a 834



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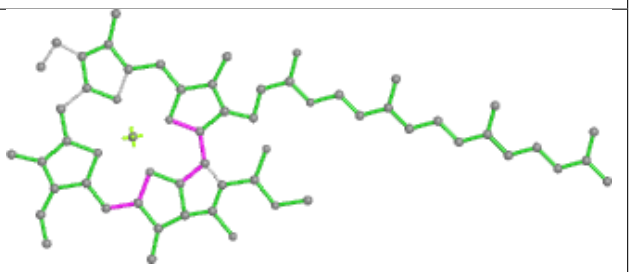
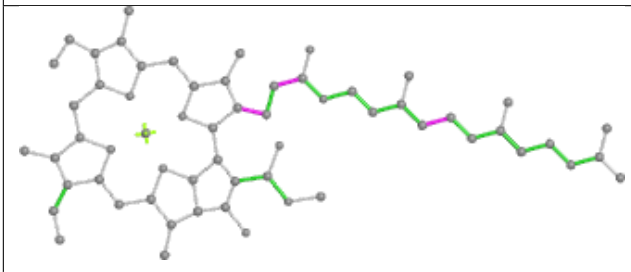


Bond angles



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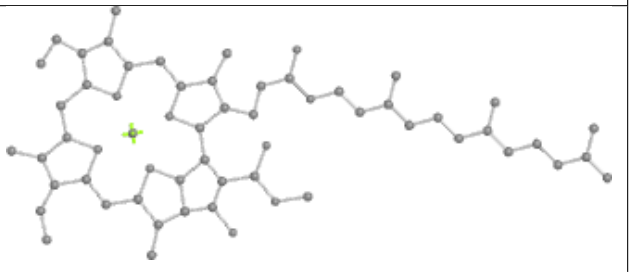
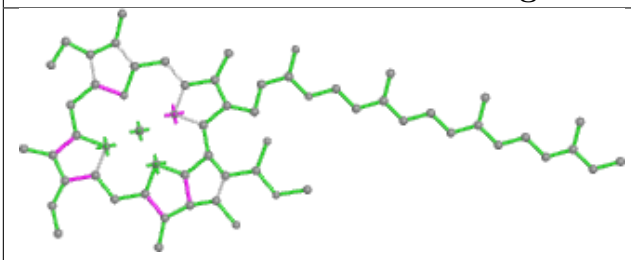
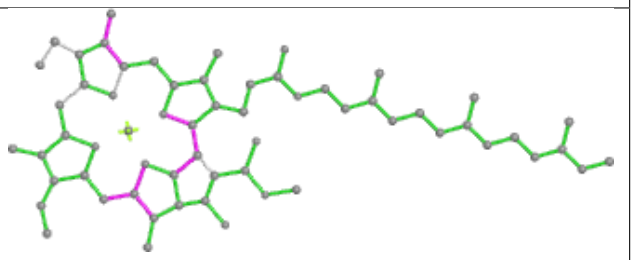


Rings

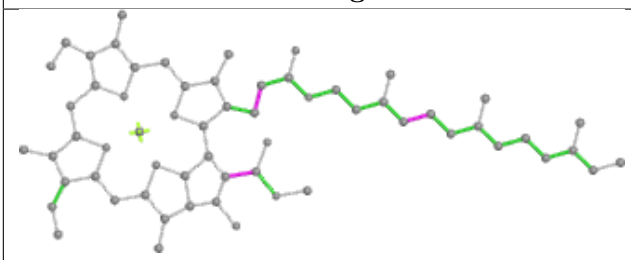
Ligand CLA 6a 305



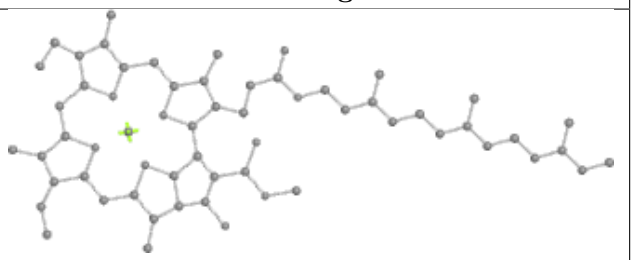
Bond lengths



Bond angles

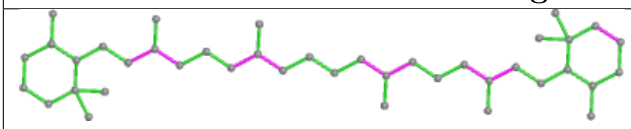


Torsions

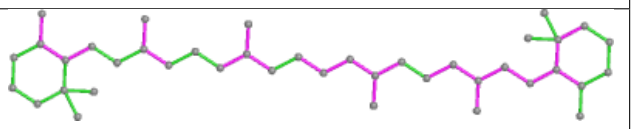


Rings

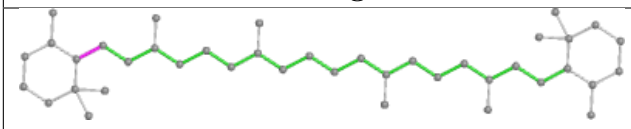
Ligand BCR l 304



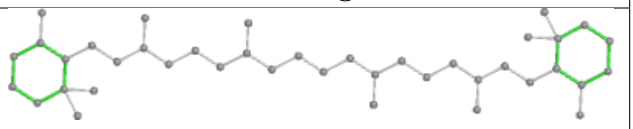
Bond lengths



Bond angles

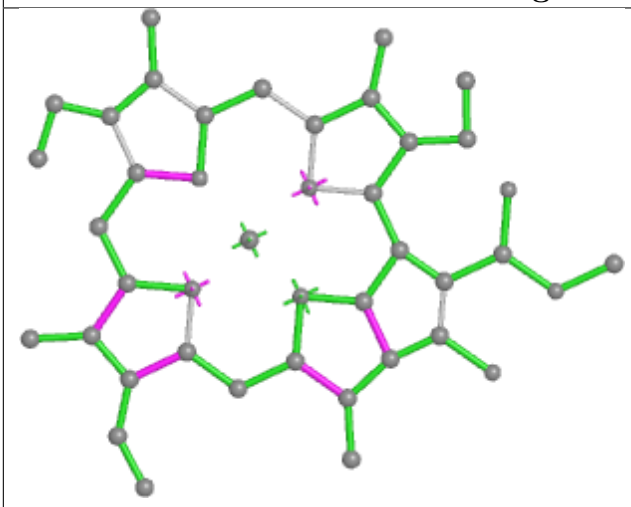


Torsions

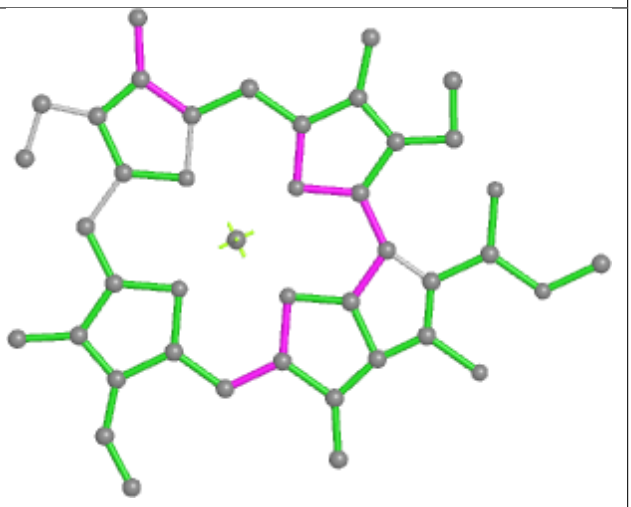


Rings

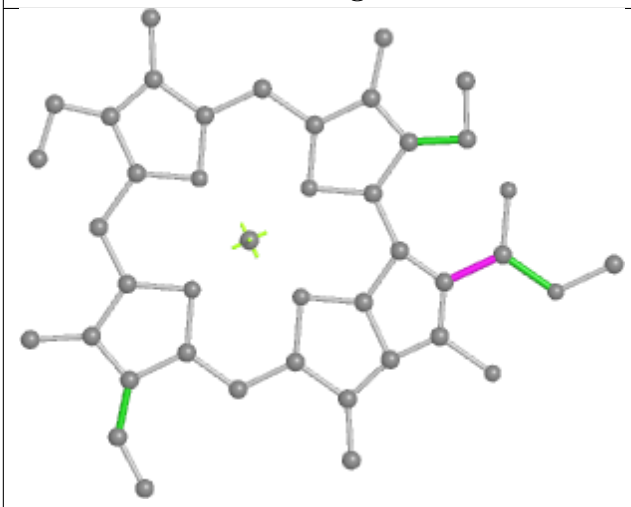
Ligand CLA l 303



Bond lengths



Bond angles



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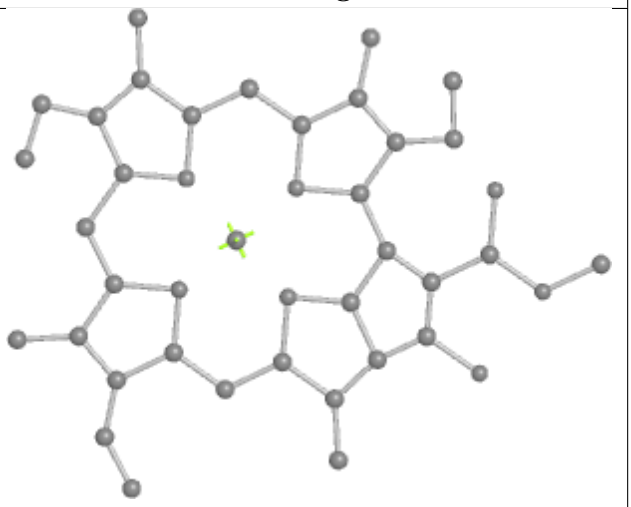
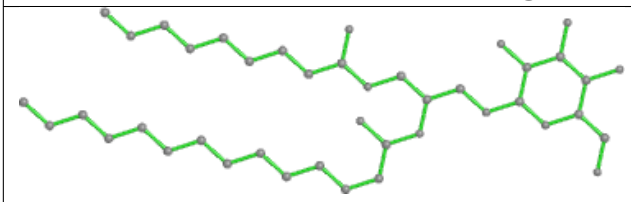


Rings

Ligand LMG B 850



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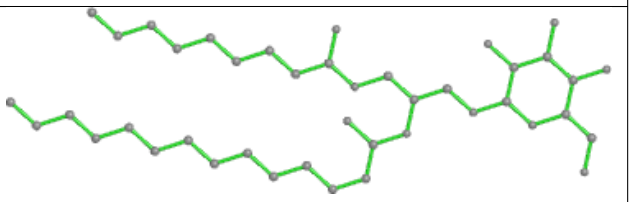
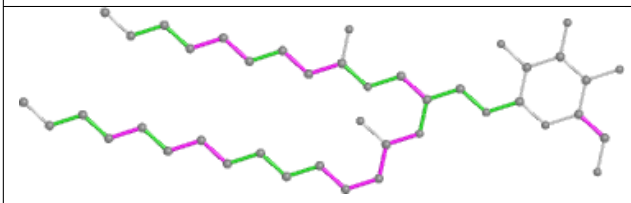
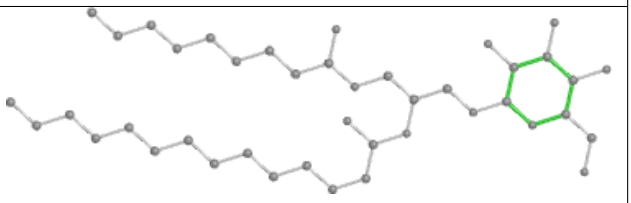


Bond angles

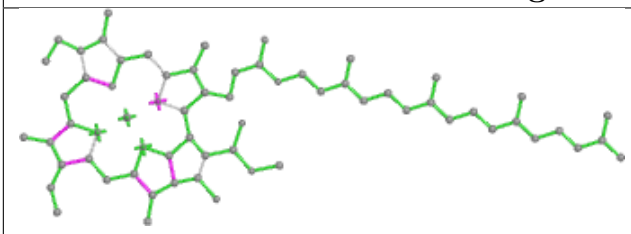


Torsions



Rings

Ligand CLA a 808



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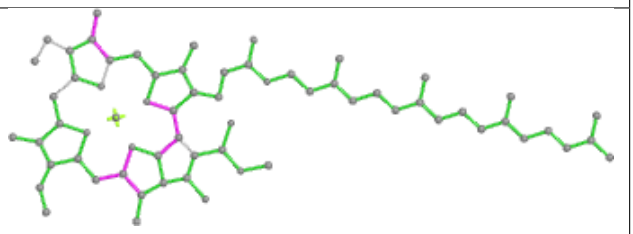
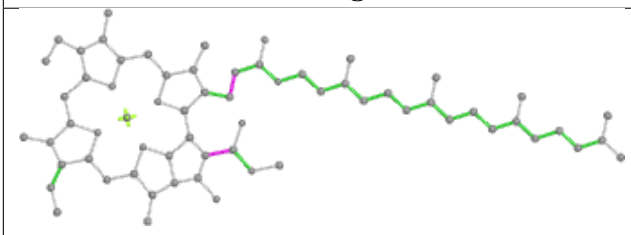
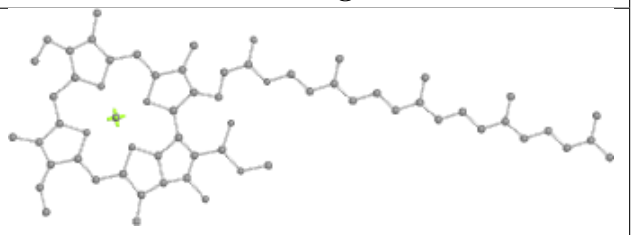


Bond angles

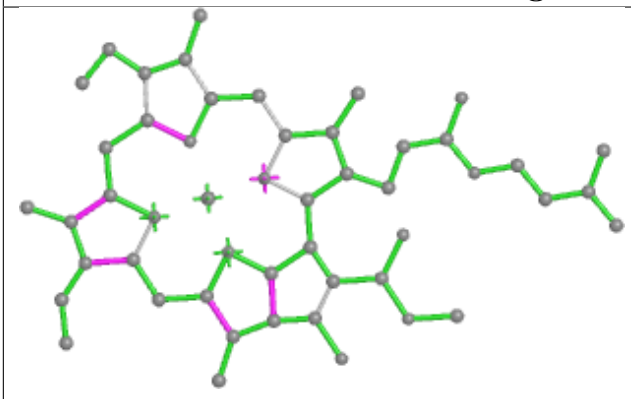


Torsions

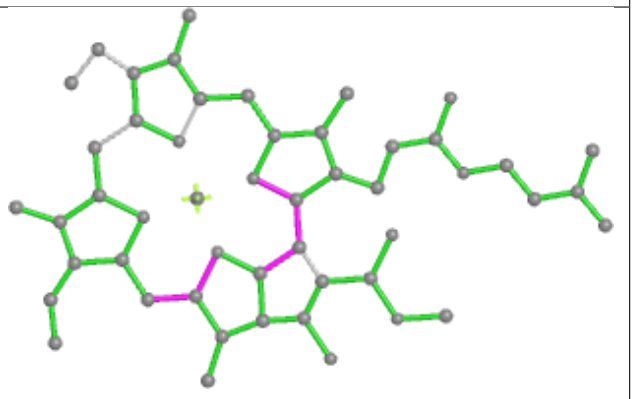


Rings

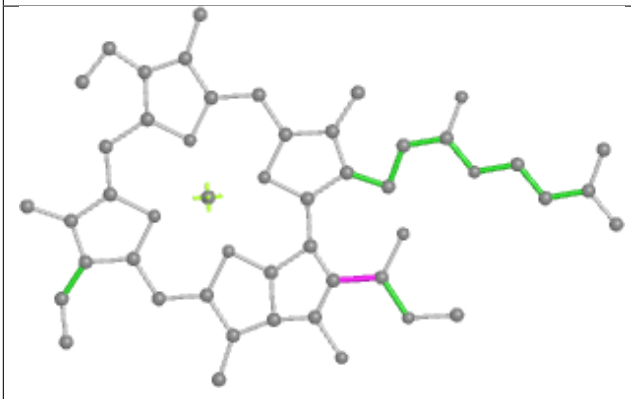
Ligand CLA b 814



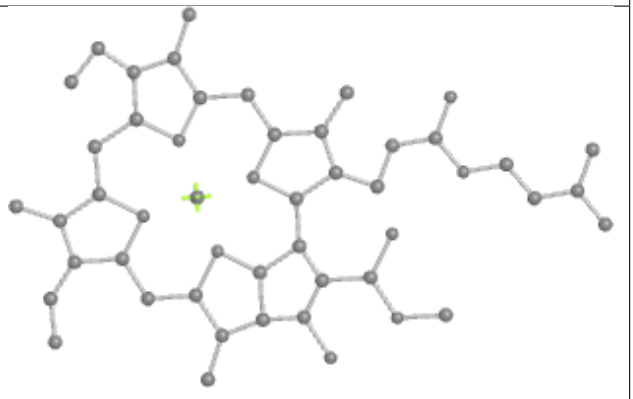
Bond lengths



Bond angles

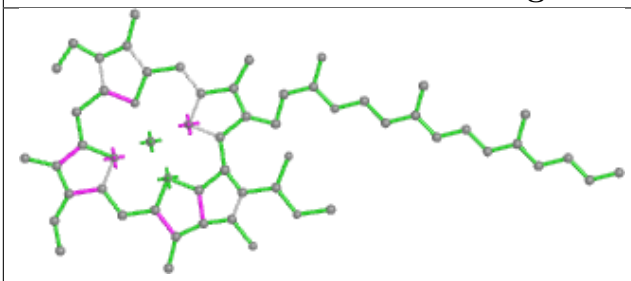


Torsions

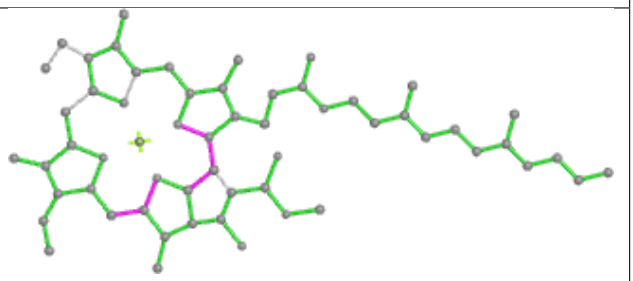


Rings

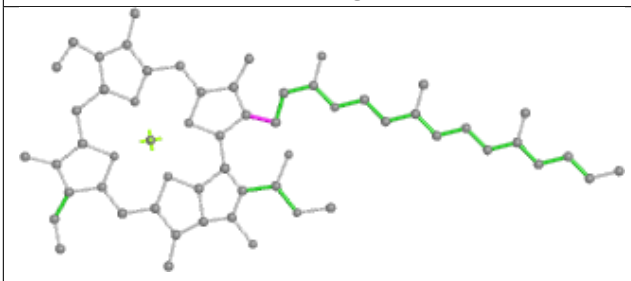
Ligand CLA b 826



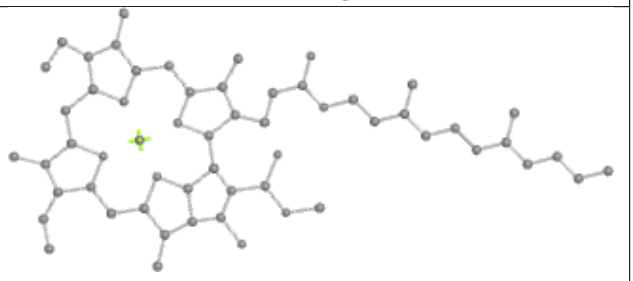
Bond lengths



Bond angles

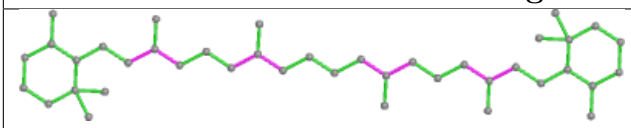


Torsions

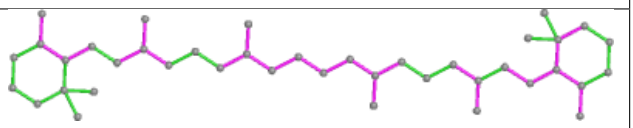


Rings

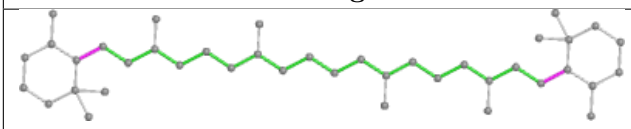
Ligand BCR k 202



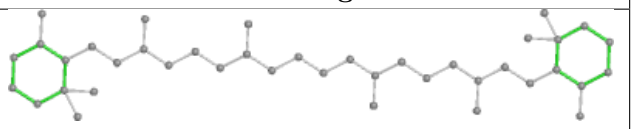
Bond lengths



Bond angles

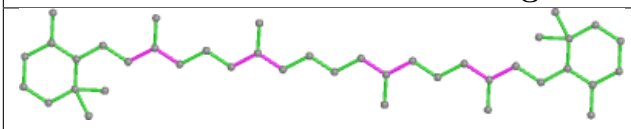


Torsions

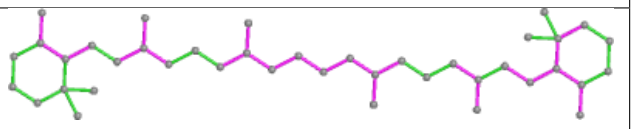


Rings

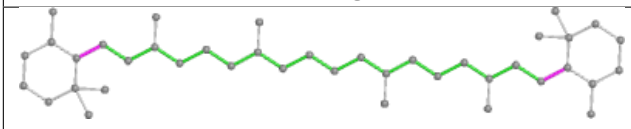
Ligand BCR K 202



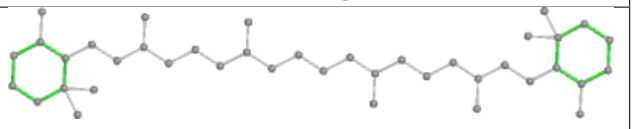
Bond lengths



Bond angles

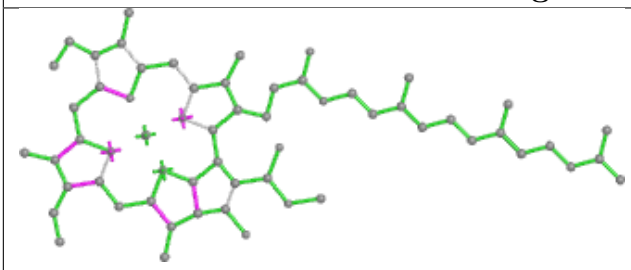


Torsions

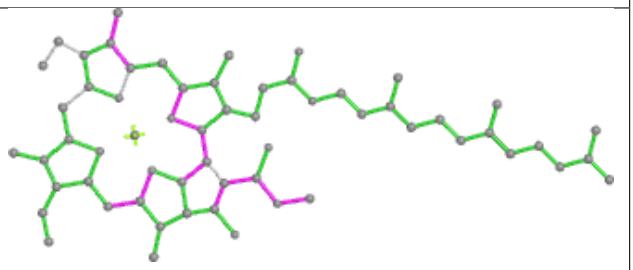


Rings

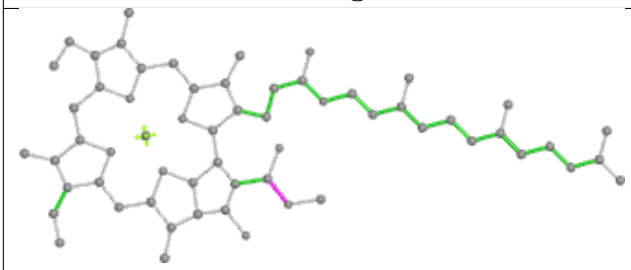
Ligand CLA f 305



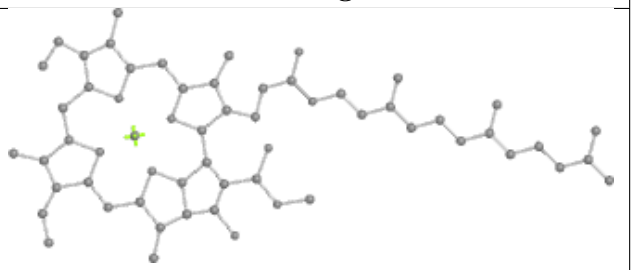
Bond lengths



Bond angles

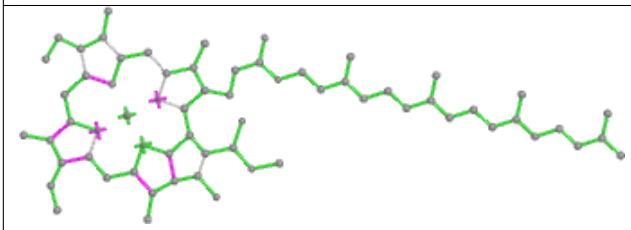


Torsions

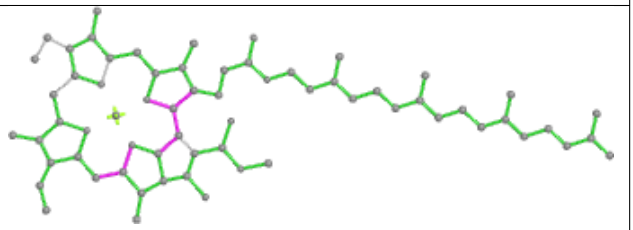


Rings

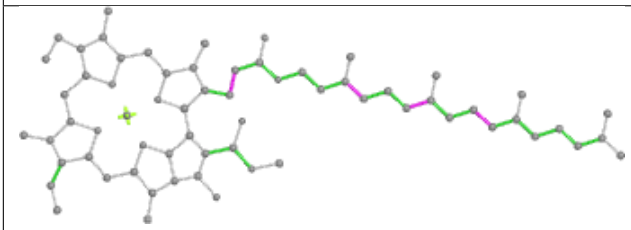
Ligand CLA A 827



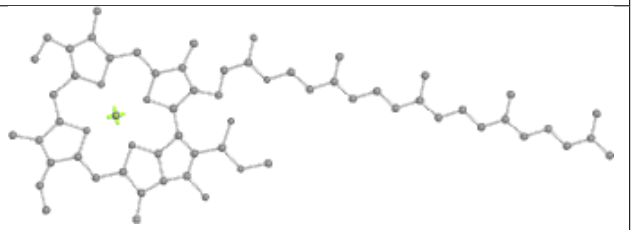
Bond lengths



Bond angles

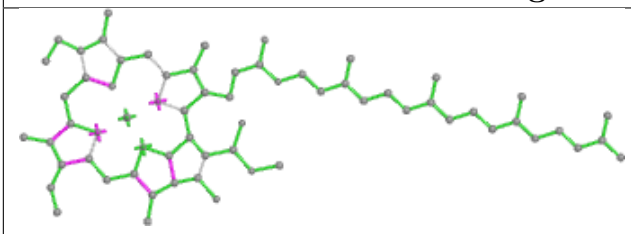


Torsions

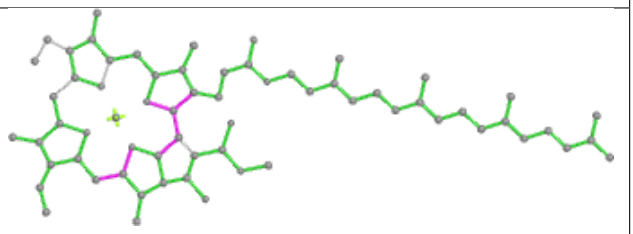


Rings

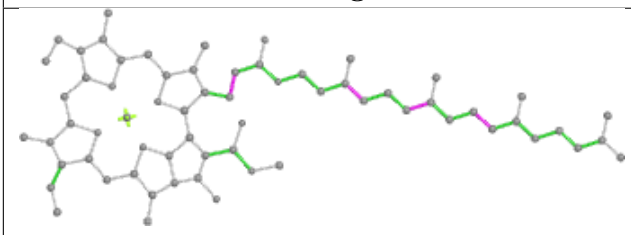
Ligand CLA a 827



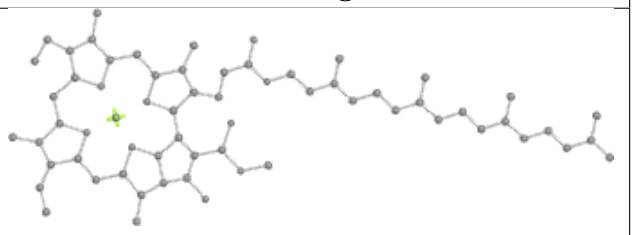
Bond lengths



Bond angles

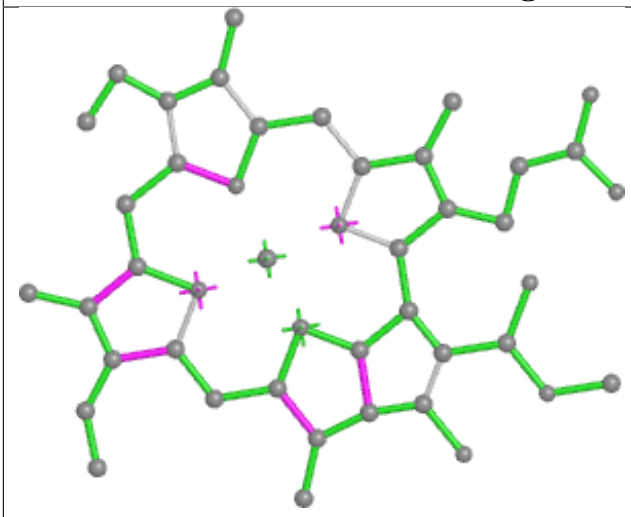


Torsions

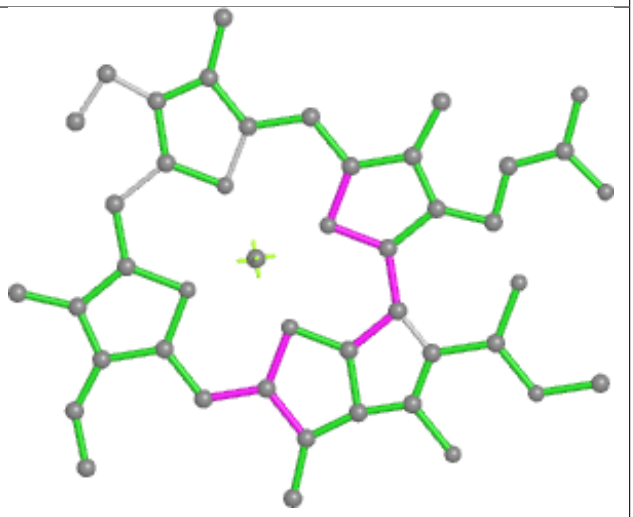


Rings

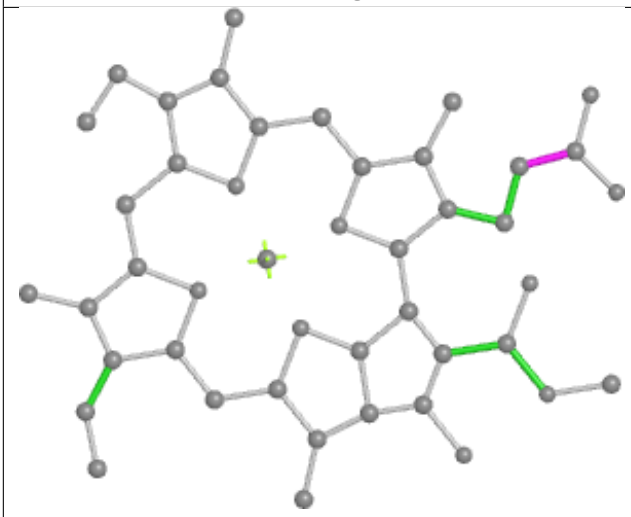
Ligand CLA 2a 312



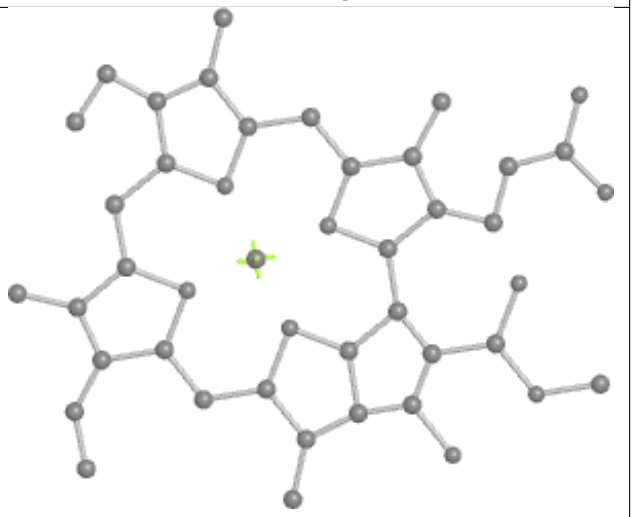
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

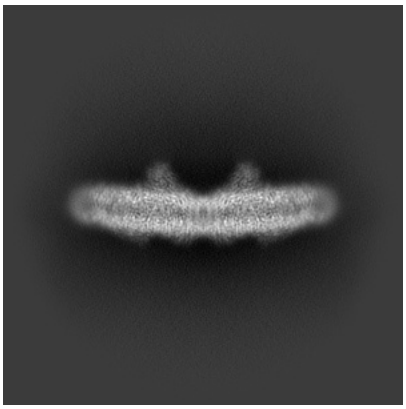
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-63405. These allow visual inspection of the internal detail of the map and identification of artifacts.

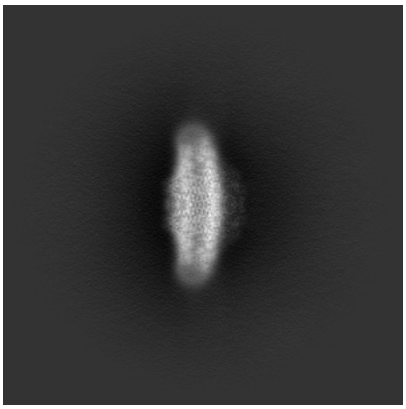
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

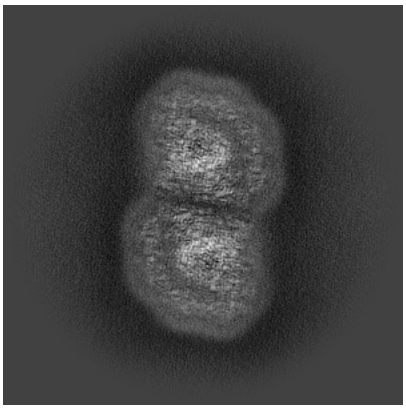
6.1.1 Primary map



X

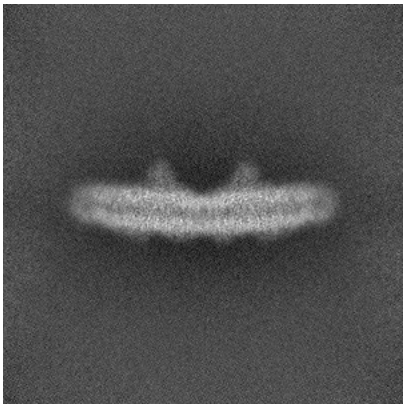


Y

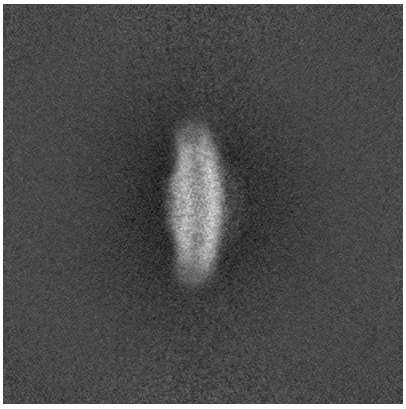


Z

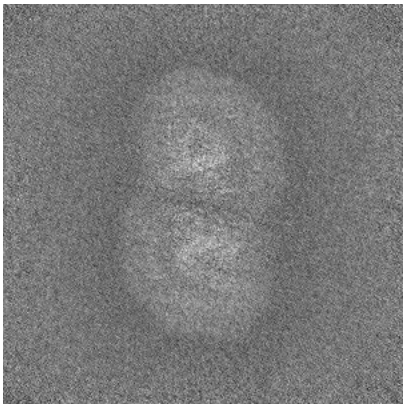
6.1.2 Raw map



X



Y

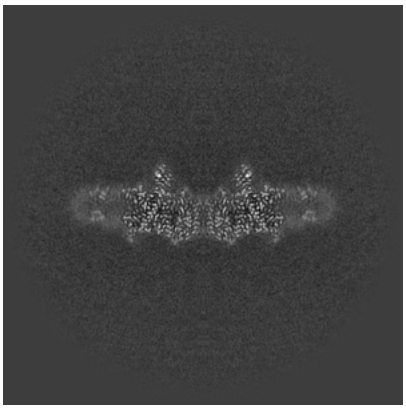


Z

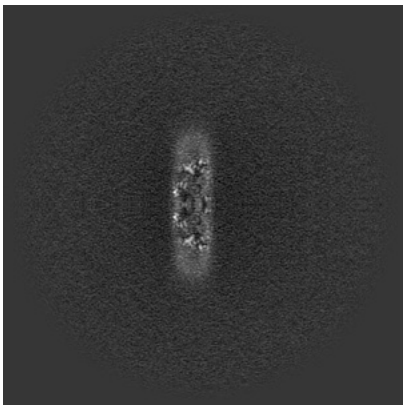
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

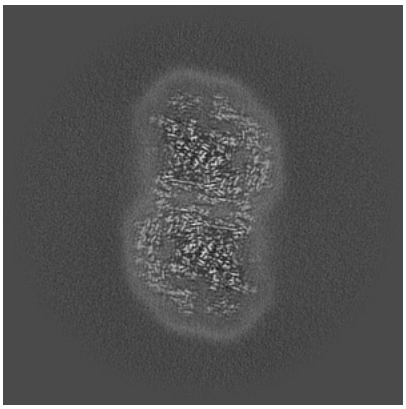
6.2.1 Primary map



X Index: 320

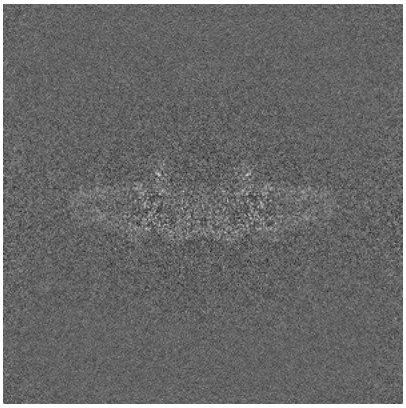


Y Index: 320

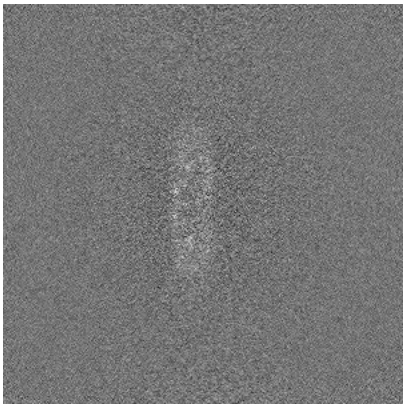


Z Index: 320

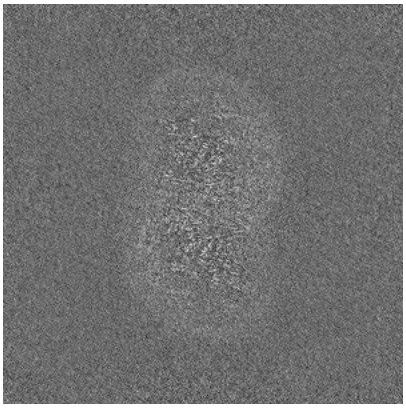
6.2.2 Raw map



X Index: 320



Y Index: 320

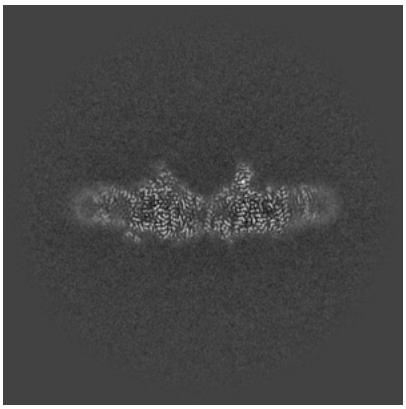


Z Index: 320

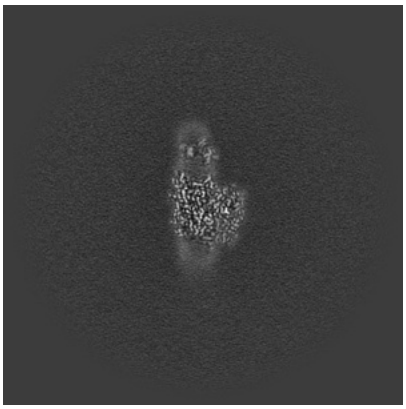
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

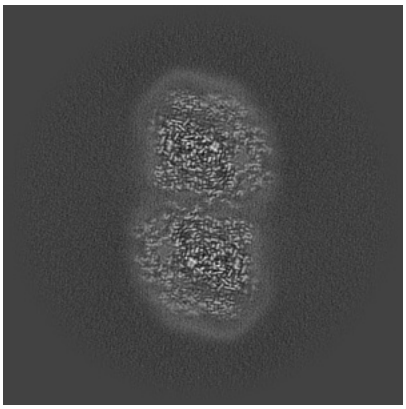
6.3.1 Primary map



X Index: 308

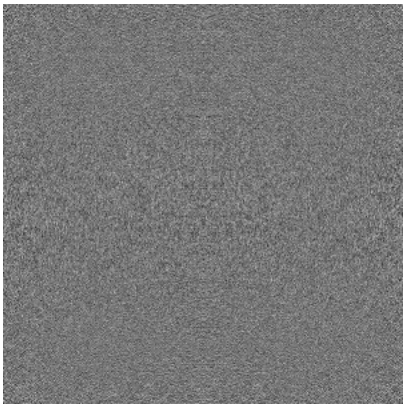


Y Index: 385

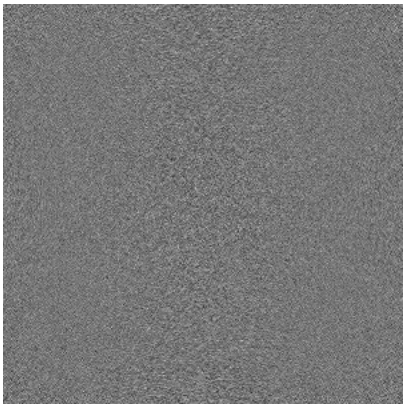


Z Index: 330

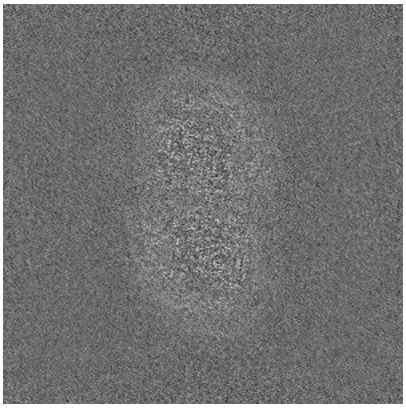
6.3.2 Raw map



X Index: 0



Y Index: 0

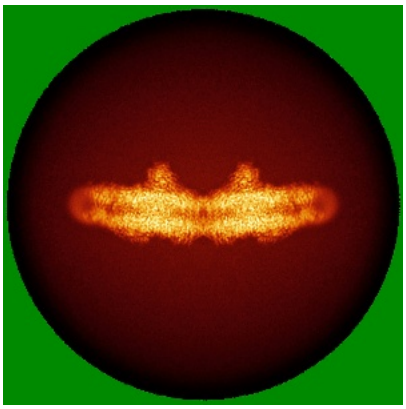


Z Index: 329

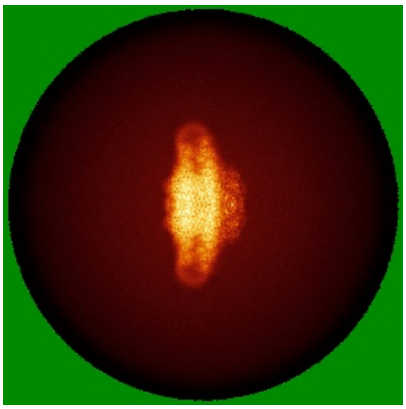
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

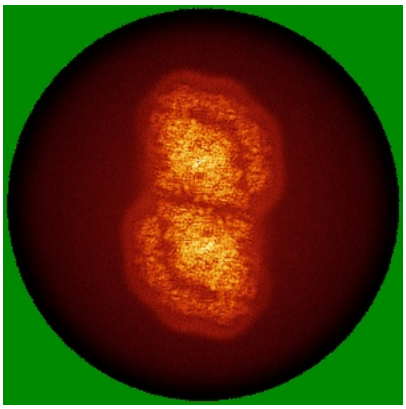
6.4.1 Primary map



X

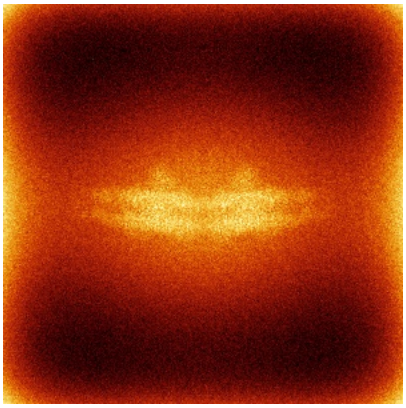


Y

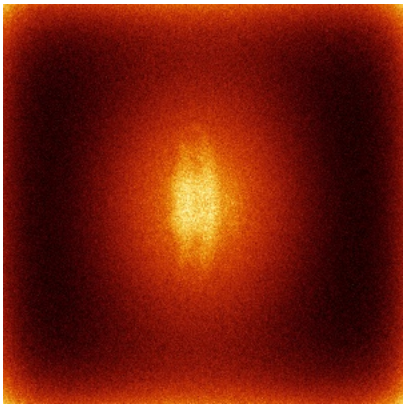


Z

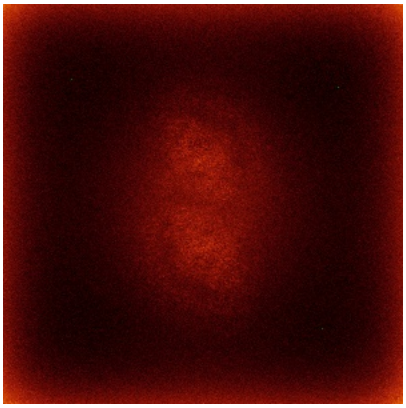
6.4.2 Raw map



X



Y



Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

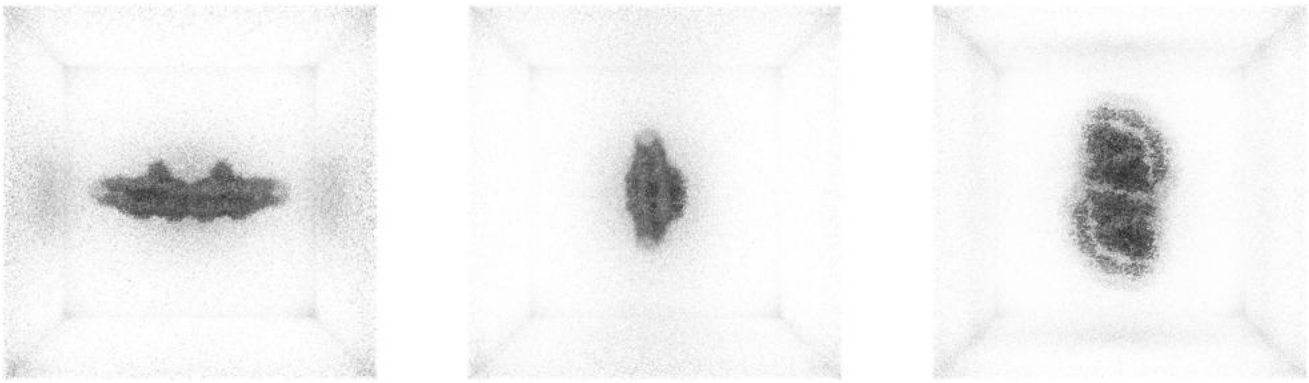
6.5 Orthogonal surface views (i)

6.5.1 Primary map

X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.04. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



X Y Z

These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

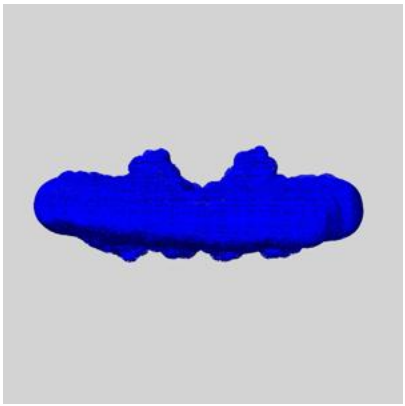
6.6 Mask visualisation

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

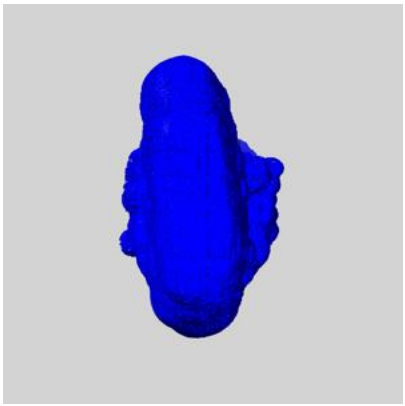
A mask typically either:

- Encompasses the whole structure
- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

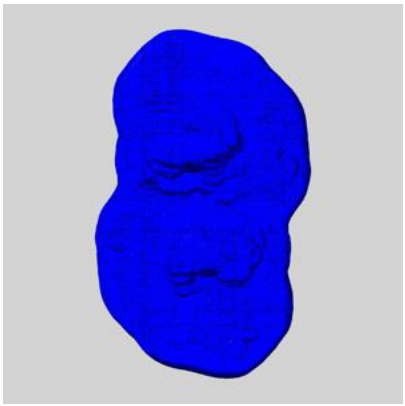
6.6.1 emd_63405_msk_1.map



X



Y

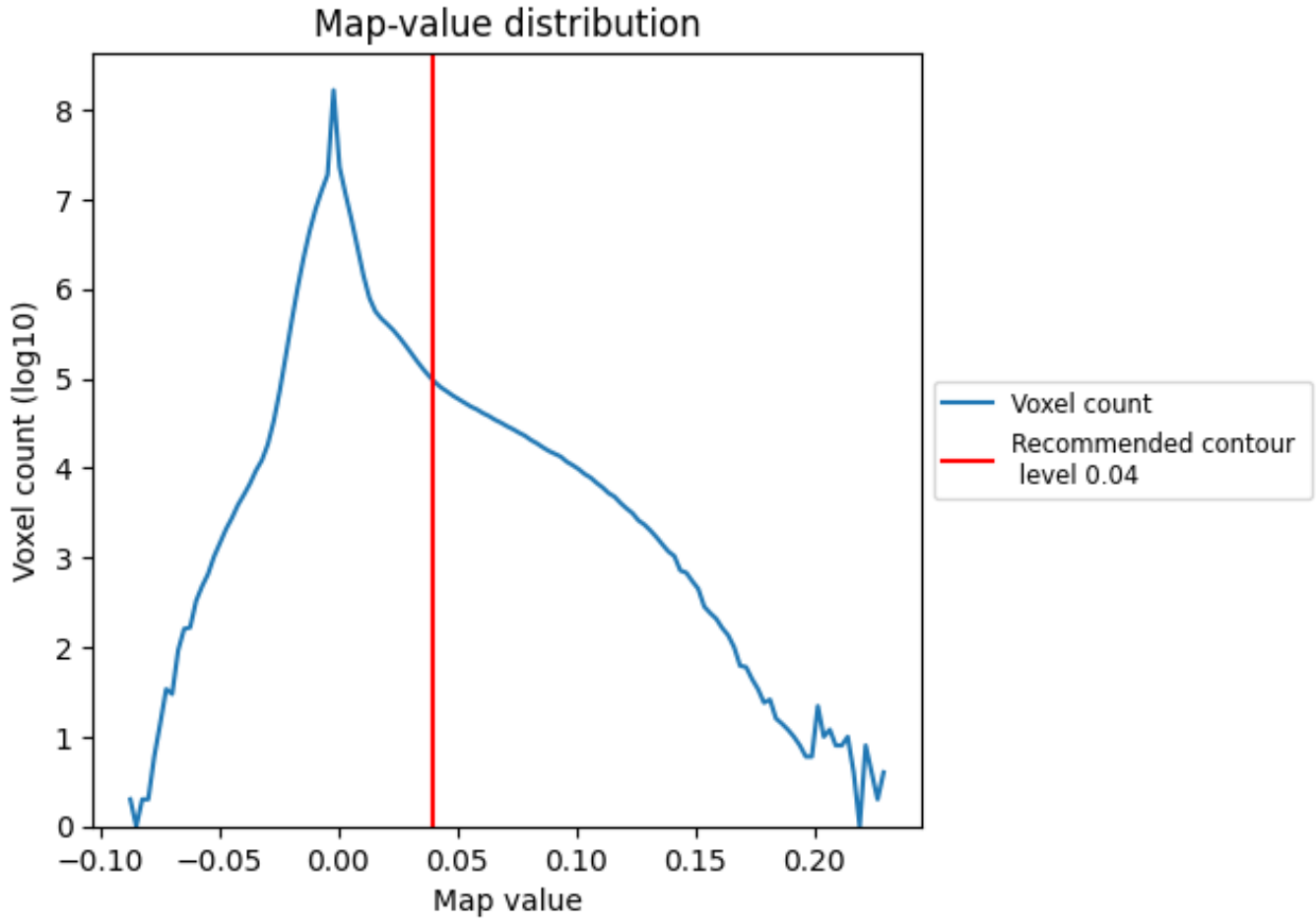


Z

7 Map analysis

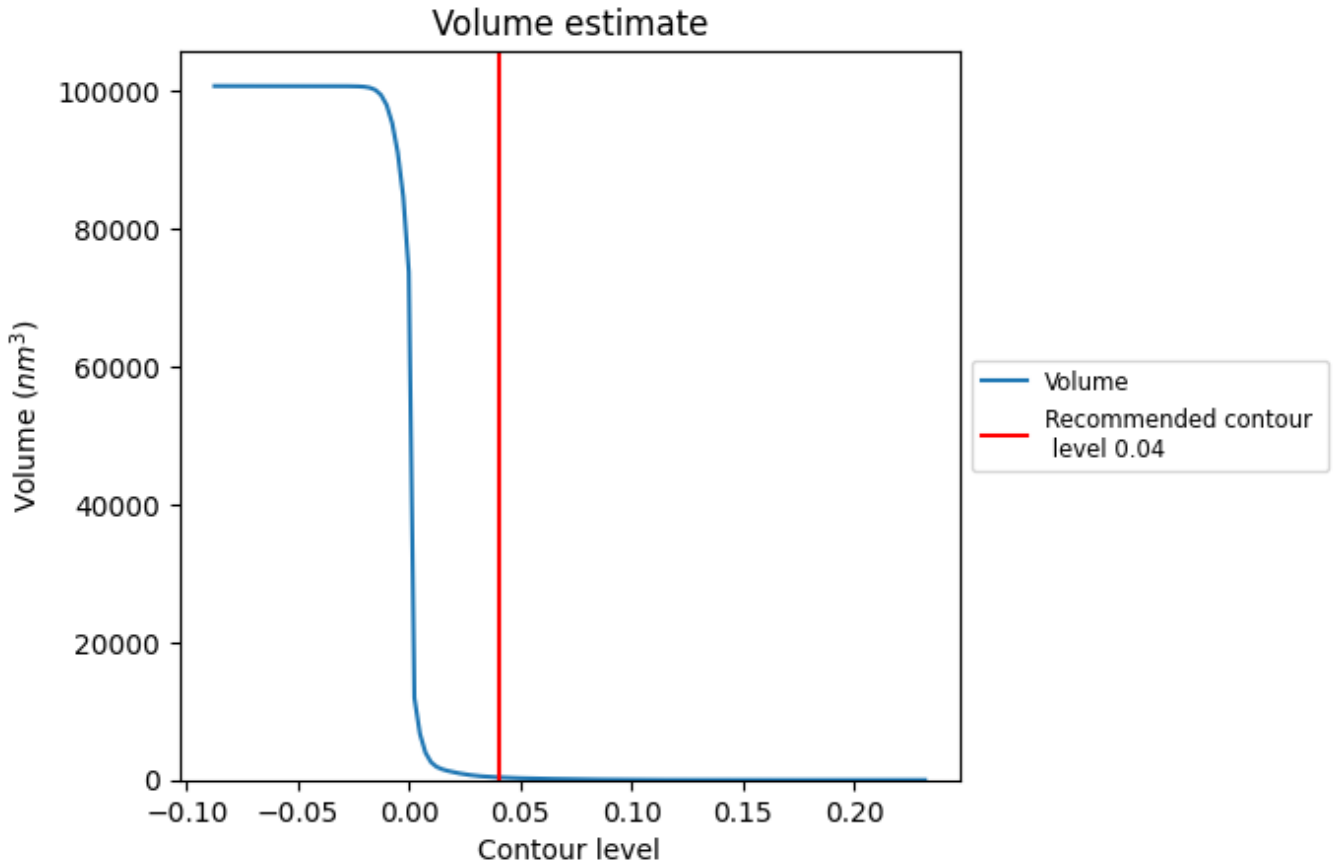
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

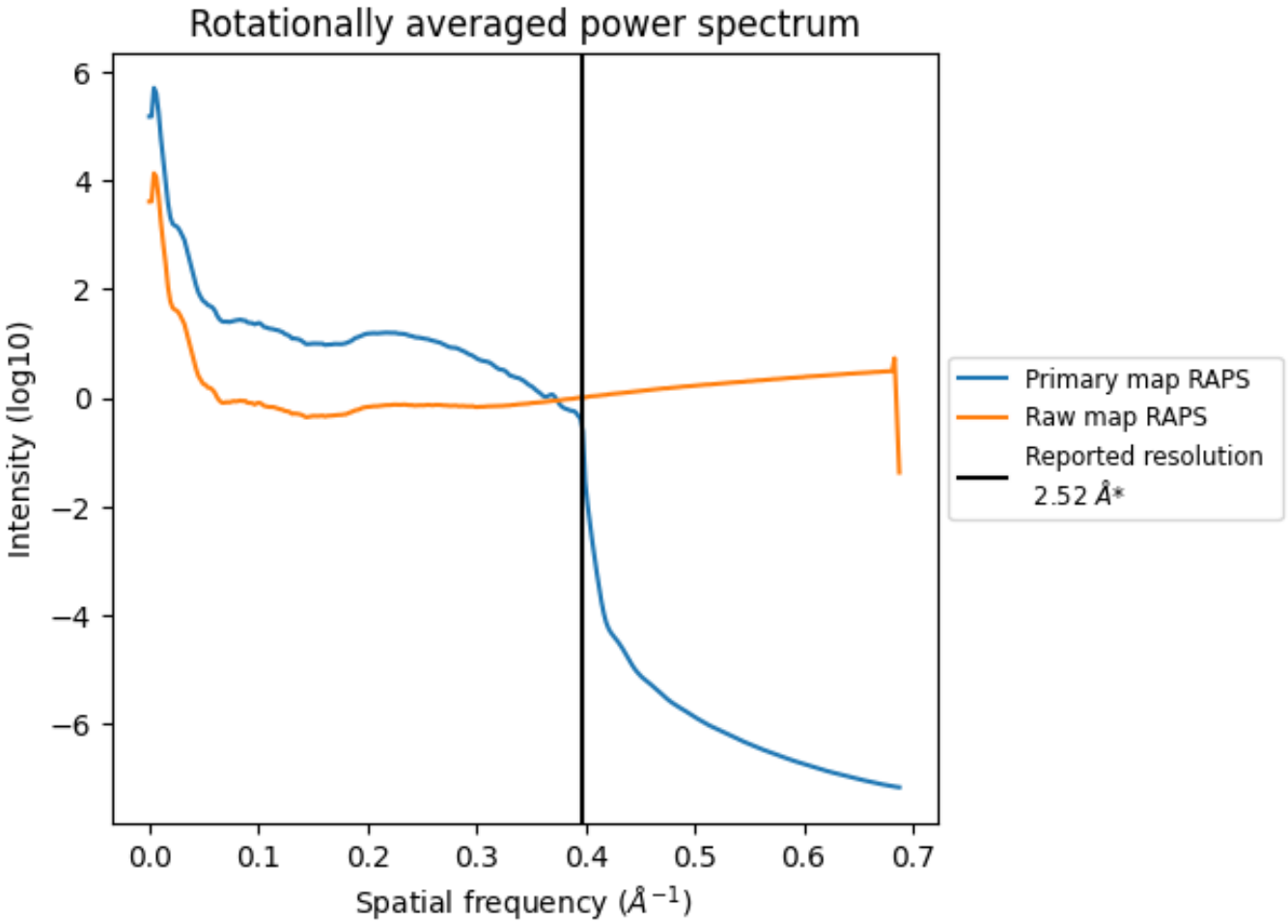
7.2 Volume estimate



The volume at the recommended contour level is 380 nm^3; this corresponds to an approximate mass of 343 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)

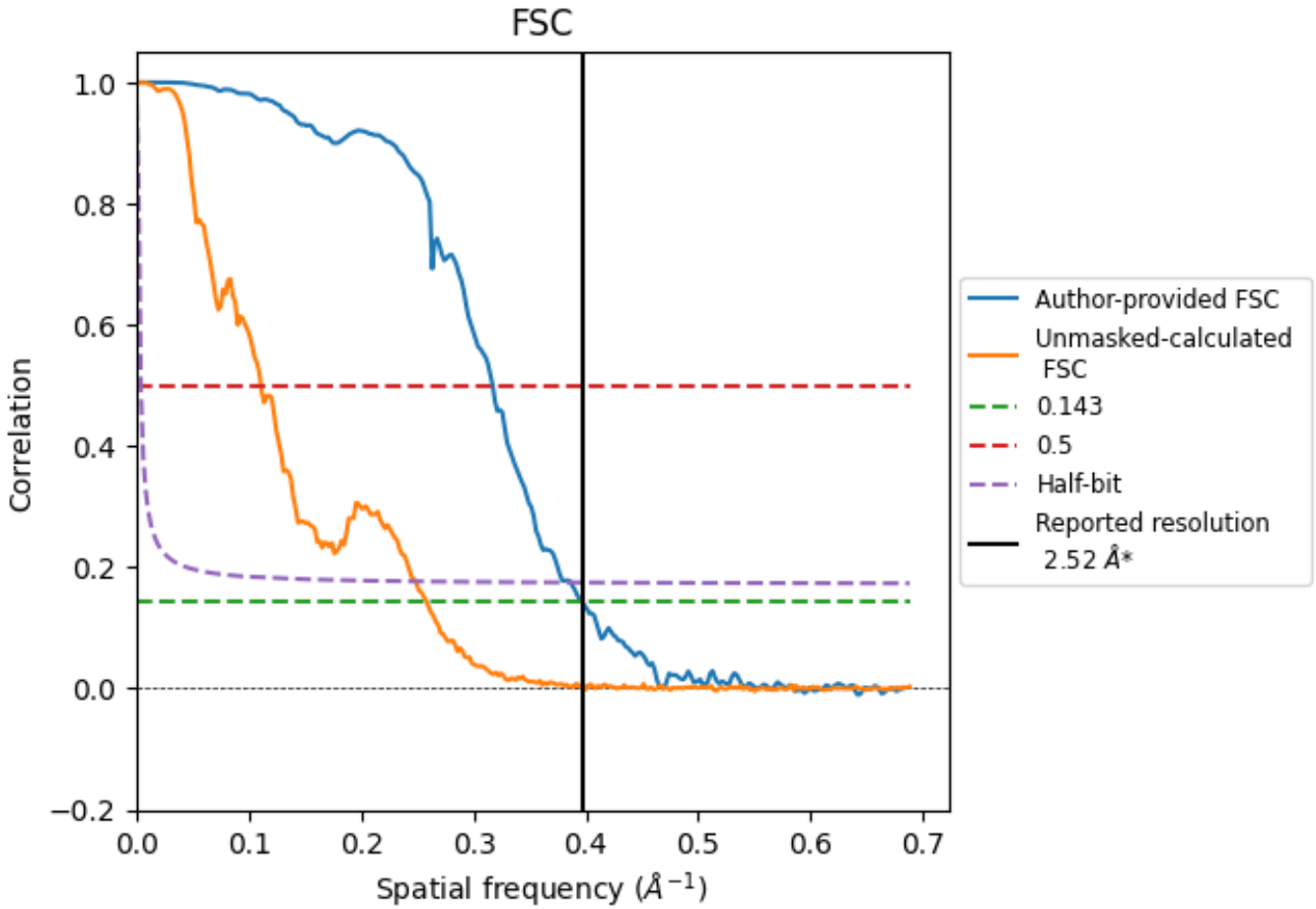


*Reported resolution corresponds to spatial frequency of 0.397 Å^{-1}

8 Fourier-Shell correlation

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC



*Reported resolution corresponds to spatial frequency of 0.397 Å^{-1}

8.2 Resolution estimates (i)

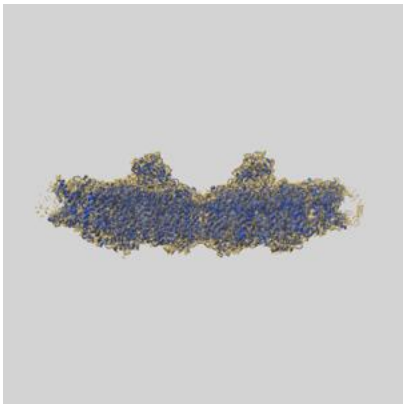
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.52	-	-
Author-provided FSC curve	2.52	3.15	2.59
Unmasked-calculated*	3.87	9.01	4.03

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 3.87 differs from the reported value 2.52 by more than 10 %

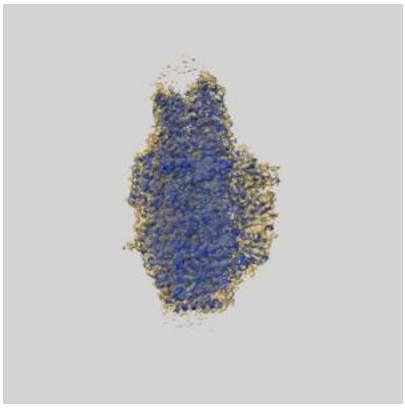
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-63405 and PDB model 9LUU. Per-residue inclusion information can be found in section 3 on page 39.

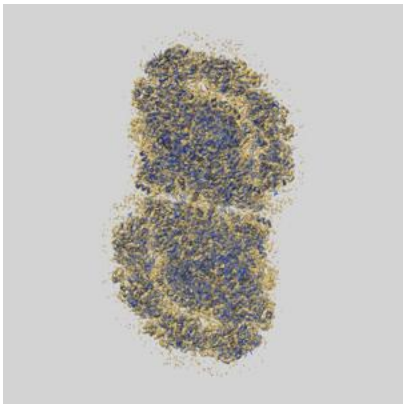
9.1 Map-model overlay



X



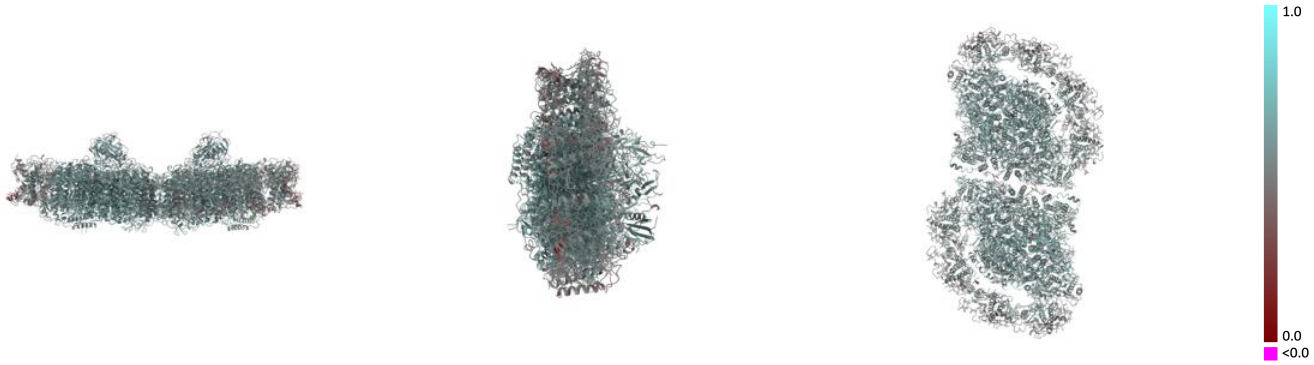
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.04 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

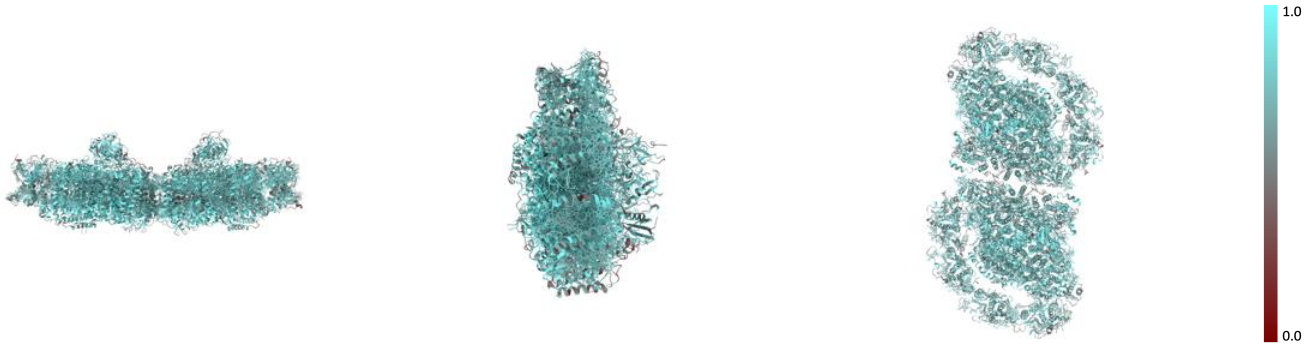
9.2 Q-score mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

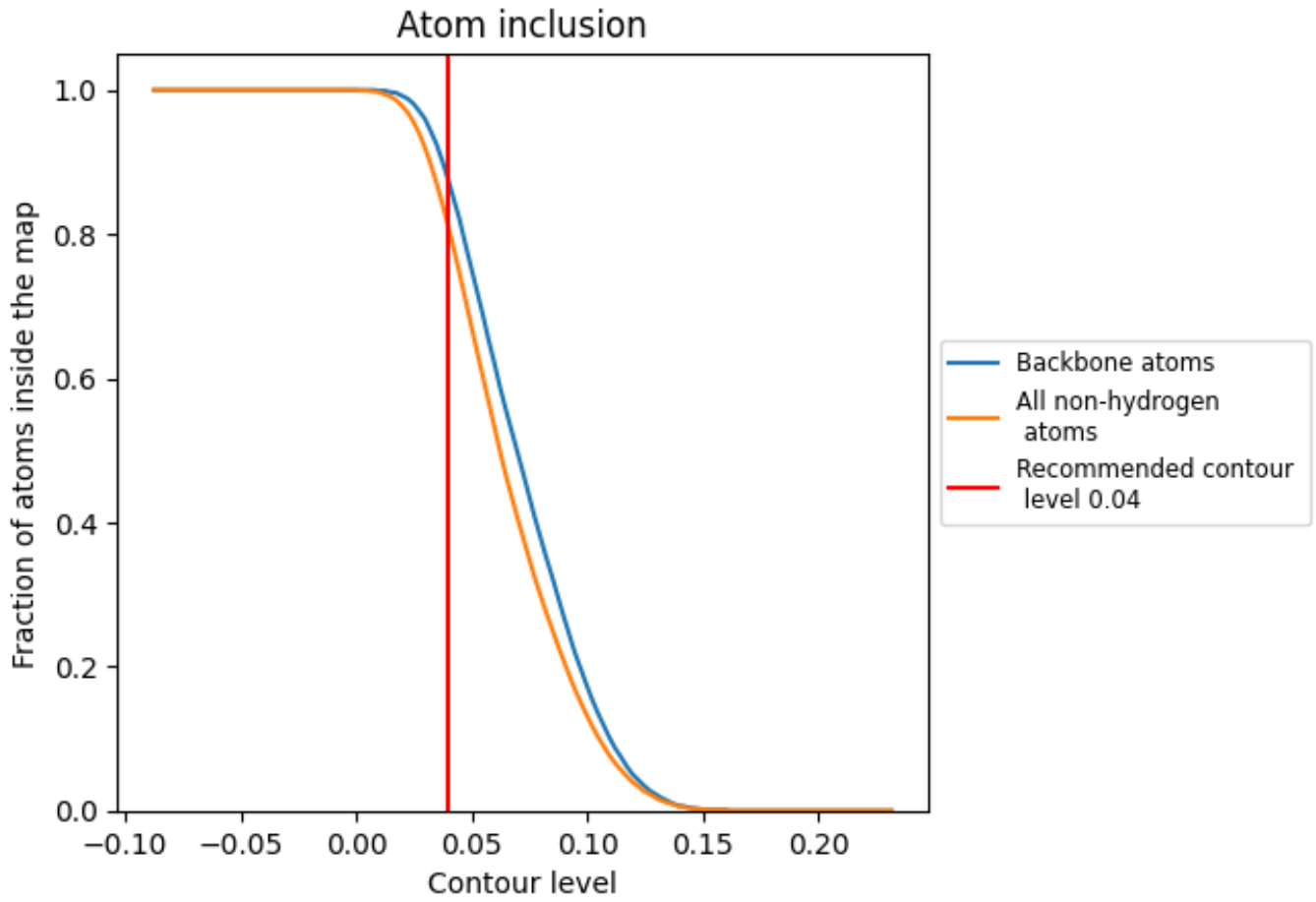
9.3 Atom inclusion mapped to coordinate model



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.04).

9.4 Atom inclusion (i)



At the recommended contour level, 87% of all backbone atoms, 81% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.04) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8090	0.5640
2a	0.7070	0.4850
2b	0.7070	0.4870
3a	0.6950	0.4870
3b	0.6940	0.4880
5a	0.7140	0.4950
5b	0.7150	0.4950
6a	0.7250	0.5070
6b	0.7260	0.5080
A	0.8850	0.6030
B	0.8810	0.6040
C	0.8490	0.5870
D	0.7440	0.5700
E	0.7300	0.5650
F	0.8140	0.5760
G	0.7850	0.5660
H	0.6830	0.5330
I	0.7670	0.5560
J	0.8440	0.5740
K	0.6270	0.4780
L	0.7730	0.5640
M	0.7350	0.5420
a	0.8850	0.6030
b	0.8810	0.6040
c	0.8480	0.5880
d	0.7440	0.5710
e	0.7320	0.5630
f	0.8120	0.5750
g	0.7830	0.5670
h	0.6850	0.5350
i	0.7670	0.5520
j	0.8460	0.5740
k	0.6270	0.4800
l	0.7740	0.5650
m	0.7350	0.5450