



wwPDB X-ray Structure Validation Summary Report ⓘ

Apr 2, 2025 – 12:51 am BST

PDB ID : 2WSF / pdb_00002wsf
Title : Improved Model of Plant Photosystem I
Authors : Amunts, A.; Toporik, H.; Borovikov, A.; Nelson, N.
Deposited on : 2009-09-05
Resolution : 3.48 Å(reported)

This is a wwPDB X-ray Structure 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/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ 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 ⓘ](#)) were used in the production of this report:

MolProbity : 4.02b-467
Mogul : 1.8.4, CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 3.0
buster-report : 1.1.7 (2018)
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
CCP4 : 9.0.003 (Gargrove)
Density-Fitness : 1.0.11
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.42

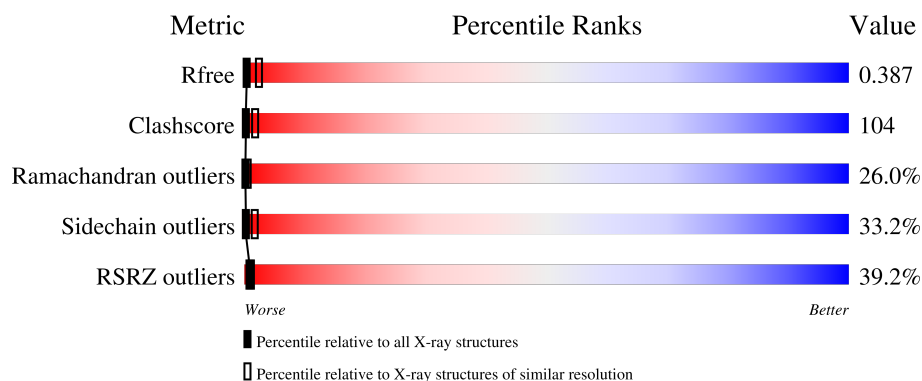
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 3.48 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)	Similar resolution (#Entries, resolution range(Å))
R_{free}	164625	1099 (3.54-3.42)
Clashscore	180529	1048 (3.52-3.44)
Ramachandran outliers	177936	1033 (3.52-3.44)
Sidechain outliers	177891	1034 (3.52-3.44)
RSRZ outliers	164620	1098 (3.54-3.42)

The table below summarises the geometric issues observed across the polymeric chains and their fit to the electron density. The red, orange, yellow and green segments of the lower 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 $\leq 5\%$. The upper red bar (where present) indicates the fraction of residues that have poor fit to the electron density. The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	1	241	
2	2	269	
3	3	276	
4	4	251	
5	A	758	

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Mol	Chain	Length	Quality of chain
6	B	734	
7	C	81	
8	D	212	
9	E	143	
10	F	231	
11	G	167	
12	H	144	
13	I	40	
14	J	44	
15	K	131	
16	L	216	
17	N	170	
18	R	53	
19	M	2	
19	O	2	
19	P	2	
19	Q	2	
19	S	2	
19	T	2	
19	U	2	
19	V	2	
19	W	2	
19	X	2	
19	Y	2	
19	Z	2	

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Mol	Chain	Length	Quality of chain
19	a	2	

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
19	FRU	M	2	X	-	-	-
19	GLC	O	1	-	-	X	-
19	FRU	O	2	X	-	-	-
19	GLC	P	1	-	-	X	-
19	FRU	P	2	X	-	X	-
19	FRU	Q	2	X	-	X	-
19	FRU	S	2	X	-	-	-
19	FRU	T	2	X	-	-	-
19	FRU	U	2	X	-	-	-
19	FRU	V	2	X	-	-	-
19	FRU	W	2	X	-	-	-
19	FRU	X	2	X	-	-	-
19	GLC	Y	1	-	-	X	-
19	FRU	Y	2	X	-	X	-
19	FRU	Z	2	X	-	X	-
19	FRU	a	2	X	-	-	-
20	CLA	1	201	X	-	-	-
20	CLA	1	202	X	-	-	-
20	CLA	1	203	X	-	-	-
20	CLA	1	204	X	-	-	-
20	CLA	1	205	X	-	-	-
20	CLA	1	206	X	-	-	-
20	CLA	1	207	X	-	-	-
20	CLA	1	208	X	-	-	-
20	CLA	1	209	X	-	-	-
20	CLA	1	210	X	-	-	-
20	CLA	1	211	X	-	-	-
20	CLA	1	212	X	-	-	-
20	CLA	1	213	X	-	-	-
20	CLA	1	214	X	-	-	-
20	CLA	1	215	X	-	-	-
20	CLA	2	301	X	-	-	-
20	CLA	2	302	X	-	-	-
20	CLA	2	303	X	-	X	-
20	CLA	2	304	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
20	CLA	2	305	X	-	-	-
20	CLA	2	306	X	-	-	-
20	CLA	2	307	X	-	X	-
20	CLA	2	308	X	-	-	-
20	CLA	2	309	X	-	-	-
20	CLA	2	310	X	-	X	-
20	CLA	2	311	X	-	-	-
20	CLA	2	312	X	-	-	-
20	CLA	2	315	X	-	-	-
20	CLA	2	316	X	-	-	-
20	CLA	2	317	X	-	-	-
20	CLA	3	301	X	-	-	-
20	CLA	3	302	X	-	-	-
20	CLA	3	303	X	-	-	-
20	CLA	3	304	X	-	-	-
20	CLA	3	305	X	-	-	-
20	CLA	3	306	X	-	-	-
20	CLA	3	307	X	-	-	-
20	CLA	3	308	X	-	-	-
20	CLA	3	309	X	-	-	-
20	CLA	3	310	X	-	-	-
20	CLA	3	311	X	-	-	-
20	CLA	3	313	X	-	-	-
20	CLA	3	314	X	-	-	-
20	CLA	3	315	X	-	-	-
20	CLA	3	316	X	-	-	-
20	CLA	3	317	X	-	-	-
20	CLA	3	318	X	-	-	-
20	CLA	4	301	X	-	X	-
20	CLA	4	302	X	-	-	-
20	CLA	4	303	X	-	-	-
20	CLA	4	304	X	-	X	-
20	CLA	4	305	X	-	-	-
20	CLA	4	306	X	-	-	-
20	CLA	4	307	X	-	-	-
20	CLA	4	308	X	-	-	-
20	CLA	4	309	X	-	-	-
20	CLA	4	310	X	-	X	-
20	CLA	4	311	X	-	-	-
20	CLA	4	312	X	-	-	-
20	CLA	4	313	X	-	-	-
20	CLA	4	314	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
20	CLA	4	315	X	-	-	-
20	CLA	4	317	X	-	-	-
20	CLA	4	318	X	-	-	-
20	CLA	A	801	X	-	-	-
20	CLA	A	802	X	-	-	-
20	CLA	A	803	X	-	-	-
20	CLA	A	804	X	-	X	-
20	CLA	A	805	X	-	-	-
20	CLA	A	806	X	-	-	-
20	CLA	A	807	X	-	X	-
20	CLA	A	808	X	-	X	-
20	CLA	A	809	X	-	X	-
20	CLA	A	810	X	-	-	-
20	CLA	A	811	X	-	X	-
20	CLA	A	812	X	-	-	-
20	CLA	A	813	X	-	X	-
20	CLA	A	814	X	-	-	-
20	CLA	A	815	X	-	-	-
20	CLA	A	816	X	-	X	-
20	CLA	A	817	X	-	-	-
20	CLA	A	818	X	-	X	-
20	CLA	A	819	X	-	X	-
20	CLA	A	820	X	-	-	-
20	CLA	A	821	X	-	-	-
20	CLA	A	822	X	-	-	-
20	CLA	A	823	X	-	-	-
20	CLA	A	824	X	-	X	-
20	CLA	A	825	X	-	X	-
20	CLA	A	826	X	-	X	-
20	CLA	A	827	X	-	-	-
20	CLA	A	828	X	-	-	-
20	CLA	A	829	X	-	-	-
20	CLA	A	830	X	-	X	-
20	CLA	A	831	X	-	X	-
20	CLA	A	832	X	-	-	-
20	CLA	A	833	X	-	-	-
20	CLA	A	834	X	-	-	-
20	CLA	A	835	X	-	-	-
20	CLA	A	836	X	-	-	-
20	CLA	A	837	X	-	-	-
20	CLA	A	838	X	-	X	-
20	CLA	A	839	X	-	X	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
20	CLA	A	840	X	-	-	-
20	CLA	A	841	X	-	-	-
20	CLA	A	849	X	-	X	-
20	CLA	A	850	X	-	X	-
20	CLA	A	851	X	-	X	-
20	CLA	B	802	X	-	-	-
20	CLA	B	803	X	-	X	-
20	CLA	B	806	X	-	X	-
20	CLA	B	807	X	-	-	-
20	CLA	B	808	X	-	X	-
20	CLA	B	809	X	-	X	-
20	CLA	B	810	X	-	-	-
20	CLA	B	811	X	-	-	-
20	CLA	B	812	X	-	-	-
20	CLA	B	813	X	-	-	-
20	CLA	B	814	X	-	X	-
20	CLA	B	815	X	-	-	-
20	CLA	B	816	X	-	-	-
20	CLA	B	817	X	-	-	-
20	CLA	B	818	X	-	-	-
20	CLA	B	819	X	-	-	-
20	CLA	B	820	X	-	-	-
20	CLA	B	821	X	-	-	-
20	CLA	B	822	X	-	-	-
20	CLA	B	823	X	-	-	-
20	CLA	B	824	X	-	X	-
20	CLA	B	825	X	-	X	-
20	CLA	B	826	X	-	X	-
20	CLA	B	827	X	-	X	-
20	CLA	B	828	X	-	-	-
20	CLA	B	829	X	-	X	-
20	CLA	B	830	X	-	X	-
20	CLA	B	831	X	-	-	-
20	CLA	B	832	X	-	X	-
20	CLA	B	833	X	-	-	-
20	CLA	B	834	X	-	X	-
20	CLA	B	835	X	-	X	-
20	CLA	B	836	X	-	-	-
20	CLA	B	837	X	-	-	-
20	CLA	B	838	X	-	X	-
20	CLA	B	839	X	-	X	-
20	CLA	B	840	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
20	CLA	B	841	X	-	-	-
20	CLA	B	842	X	-	-	-
20	CLA	B	850	X	-	-	-
20	CLA	F	201	X	-	X	-
20	CLA	F	205	X	-	-	-
20	CLA	F	206	X	-	-	-
20	CLA	F	207	X	-	-	-
20	CLA	G	105	X	-	-	-
20	CLA	H	101	X	-	-	-
20	CLA	H	102	X	-	-	-
20	CLA	H	111	X	-	X	-
20	CLA	H	112	X	-	-	-
20	CLA	I	102	X	-	-	-
20	CLA	J	101	X	-	-	-
20	CLA	J	103	X	-	-	-
20	CLA	K	101	X	-	-	-
20	CLA	K	102	X	-	X	-
20	CLA	K	103	X	-	-	-
20	CLA	K	104	X	-	-	-
20	CLA	L	201	X	-	X	-
20	CLA	L	202	X	-	-	-
20	CLA	L	203	X	-	X	-
20	CLA	L	204	X	-	-	-
20	CLA	L	208	X	-	-	-
20	CLA	L	209	X	-	X	-
20	CLA	L	210	X	-	-	-
20	CLA	R	107	X	-	-	-
20	CLA	R	108	X	-	-	-
21	LMU	2	313	-	-	X	-
21	LMU	A	853	-	-	X	-
21	LMU	G	101	-	-	X	-
21	LMU	K	107	-	-	X	-
22	BCR	A	843	-	-	X	-
22	BCR	A	844	-	-	X	-
22	BCR	A	845	-	-	X	-
22	BCR	B	801	-	-	X	-
22	BCR	B	846	-	-	X	-
22	BCR	B	847	-	-	X	-
22	BCR	F	203	-	-	X	-
22	BCR	F	204	-	-	X	-
22	BCR	I	103	-	-	X	-
22	BCR	J	102	-	-	X	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
22	BCR	L	211	-	-	X	-
23	PQN	A	842	X	-	-	-
23	PQN	B	843	X	-	X	-
24	SF4	A	856	-	-	X	-
24	SF4	C	102	-	-	X	-

2 Entry composition

There are 26 unique types of molecules in this entry. The entry contains 36033 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, the ZeroOcc column contains the number of atoms modelled with zero occupancy, 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 AT3G54890.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	1	165	Total	C	N	O	S	0	0	0
			1264	822	208	230	4			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
1	-33	ILE	LYS	conflict	UNP Q9C5R7
1	-1	ARG	LYS	conflict	UNP Q9C5R7

- Molecule 2 is a protein called TYPE II CHLOROPHYLL A/B BINDING PROTEIN FROM PHOTOSYSTEM I.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	2	176	Total	C	N	O	S	0	0	0
			1374	899	226	245	4			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
2	195	ALA	-	insertion	UNP Q41038
2	?	-	GLY	deletion	UNP Q41038

- Molecule 3 is a protein called LHCA3.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	3	153	Total	C	N	O	S	0	0	0
			1186	781	193	207	5			

- Molecule 4 is a protein called CHLOROPHYLL A-B BINDING PROTEIN P4, CHLOROPLASTIC.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	4	166	Total	C	N	O	S	0	0	0
			1319	861	219	236	3			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
4	?	-	ALA	deletion	UNP Q9SQL2

- Molecule 5 is a protein called PHOTOSYSTEM I P700 CHLOROPHYLL A APOPROTEIN A1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	A	730	Total	C	N	O	S	0	0	0
			5745	3766	974	987	18			

- Molecule 6 is a protein called PHOTOSYSTEM I P700 CHLOROPHYLL A APOPROTEIN A2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	B	733	Total	C	N	O	S	0	0	0
			5848	3843	997	995	13			

- Molecule 7 is a protein called PHOTOSYSTEM I IRON-SULFUR CENTER.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	C	81	Total	C	N	O	S	0	0	0
			619	384	108	115	12			

- Molecule 8 is a protein called PHOTOSYSTEM I REACTION CENTER SUBUNIT II, CHLOROPLASTIC.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	D	138	Total	C	N	O	S	0	0	0
			1095	704	189	198	4			

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
D	-52	GLY	ALA	conflict	UNP P12353
D	-50	PRO	GLN	conflict	UNP P12353
D	-44	ARG	PRO	conflict	UNP P12353
D	-34	GLU	ASP	conflict	UNP P12353
D	-11	LEU	HIS	conflict	UNP P12353

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Chain	Residue	Modelled	Actual	Comment	Reference
D	-9	THR	SER	conflict	UNP P12353
D	12	THR	PRO	conflict	UNP P12353
D	14	ALA	GLY	conflict	UNP P12353

- Molecule 9 is a protein called PHOTOSYSTEM I REACTION CENTER SUBUNIT IV A, CHLOROPLASTIC.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
9	E	65	Total	C	N	O	0	0	0
			520	332	93	95			

- Molecule 10 is a protein called PHOTOSYSTEM I REACTION CENTER SUBUNIT III, CHLOROPLASTIC.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	F	154	Total	C	N	O	S	0	0	0
			1221	794	207	217	3			

- Molecule 11 is a protein called PHOTOSYSTEM I REACTION CENTER SUBUNIT V, CHLOROPLASTIC.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	G	95	Total	C	N	O	S	0	0	0
			740	481	120	137	2			

- Molecule 12 is a protein called PHOTOSYSTEM I REACTION CENTER SUBUNIT VI, CHLOROPLASTIC.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
12	H	69	Total	C	N	O	0	0	0
			529	344	82	103			

- Molecule 13 is a protein called PHOTOSYSTEM I REACTION CENTER SUBUNIT VIII.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	I	30	Total	C	N	O	S	0	0	0
			229	158	34	35	2			

- Molecule 14 is a protein called PHOTOSYSTEM I REACTION CENTER SUBUNIT IX.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	J	42	Total	C	N	O	S	0	0	0
			338	230	51	56	1			

- Molecule 15 is a protein called PHOTOSYSTEM I REACTION CENTER SUBUNIT PSAK, CHLOROPLASTIC.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
15	K	84	Total	C	N	O	S	0	0	0
			593	374	102	113	4			

- Molecule 16 is a protein called PHOTOSYSTEM I REACTION CENTER SUBUNIT XI, CHLOROPLASTIC.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	L	162	Total	C	N	O	S	0	0	0
			1215	800	194	216	5			

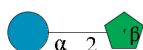
- Molecule 17 is a protein called PHOTOSYSTEM I-N SUBUNIT.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	N	85	Total	C	N	O	S	0	0	0
			685	436	113	132	4			

- Molecule 18 is a protein called PHOTOSYSTEM I-N SUBUNIT.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	R	53	Total	C	N	O	0	0	0
			265	159	53	53			

- Molecule 19 is an oligosaccharide called beta-D-fructofuranose-(2-1)-alpha-D-glucopyranose.



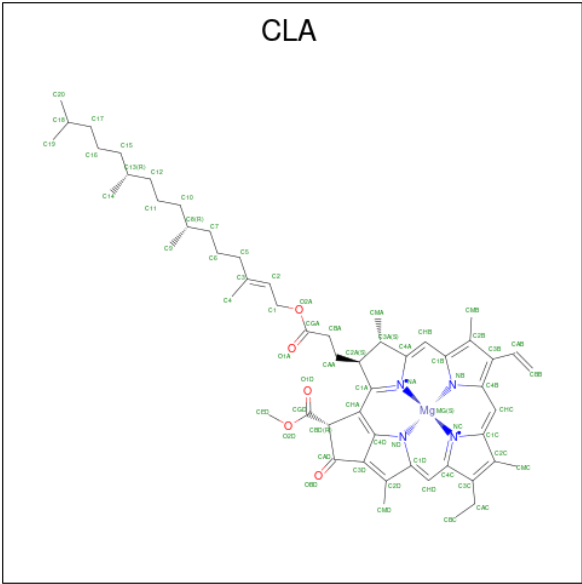
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf	Trace
19	M	2	Total	C	O	0	0	0
			23	12	11			
19	O	2	Total	C	O	0	0	0
			22	12	10			
19	P	2	Total	C	O	0	0	0
			23	12	11			

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf	Trace
19	Q	2	Total	C	O	0	0	0
			23	12	11			
19	S	2	Total	C	O	0	0	0
			23	12	11			
19	T	2	Total	C	O	0	0	0
			23	12	11			
19	U	2	Total	C	O	0	0	0
			23	12	11			
19	V	2	Total	C	O	0	0	0
			23	12	11			
19	W	2	Total	C	O	0	0	0
			23	12	11			
19	X	2	Total	C	O	0	0	0
			22	12	10			
19	Y	2	Total	C	O	0	0	0
			23	12	11			
19	Z	2	Total	C	O	0	0	0
			23	12	11			
19	a	2	Total	C	O	0	0	0
			23	12	11			

- Molecule 20 is CHLOROPHYLL A (CCD ID: CLA) (formula: C₅₅H₇₂MgN₄O₅).



Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
20	1	1	Total	C	Mg	N	O	0	0
			46	36	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
20	1	1	Total	C	Mg	N	O	0	0
			41	33	1	4	3		
20	1	1	Total	C	Mg	N	O	0	0
			47	37	1	4	5		
20	1	1	Total	C	Mg	N	O	0	0
			46	36	1	4	5		
20	1	1	Total	C	Mg	N	O	0	0
			36	30	1	4	1		
20	1	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
20	1	1	Total	C	Mg	N	O	0	0
			51	41	1	4	5		
20	1	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	1	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	1	1	Total	C	Mg	N	O	0	0
			36	30	1	4	1		
20	1	1	Total	C	Mg	N	O	0	0
			51	41	1	4	5		
20	1	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	1	1	Total	C	Mg	N	O	0	0
			51	41	1	4	5		
20	1	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	1	1	Total	C	Mg	N	O	0	0
			51	41	1	4	5		
20	2	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	2	1	Total	C	Mg	N	O	0	0
			51	41	1	4	5		
20	2	1	Total	C	Mg	N	O	0	0
			58	48	1	4	5		
20	2	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	2	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	2	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	
20	2	1	Total 25	C 20	Mg 1	N 4	0	0	
20	2	1	Total 25	C 20	Mg 1	N 4	0	0	
20	2	1	Total 50	C 40	Mg 1	N 4	O 5	0	0
20	2	1	Total 50	C 40	Mg 1	N 4	O 5	0	0
20	2	1	Total 61	C 51	Mg 1	N 4	O 5	0	0
20	2	1	Total 50	C 40	Mg 1	N 4	O 5	0	0
20	2	1	Total 25	C 20	Mg 1	N 4		0	0
20	2	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
20	3	1	Total 36	C 30	Mg 1	N 4	O 1	0	0
20	3	1	Total 25	C 20	Mg 1	N 4		0	0
20	3	1	Total 36	C 30	Mg 1	N 4	O 1	0	0
20	3	1	Total 25	C 20	Mg 1	N 4		0	0
20	3	1	Total 25	C 20	Mg 1	N 4		0	0
20	3	1	Total 25	C 20	Mg 1	N 4		0	0
20	3	1	Total 42	C 34	Mg 1	N 4	O 3	0	0
20	3	1	Total 25	C 20	Mg 1	N 4		0	0
20	3	1	Total 25	C 20	Mg 1	N 4		0	0
20	3	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
20	3	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
20	3	1	Total 25	C 20	Mg 1	N 4		0	0
20	3	1	Total 50	C 40	Mg 1	N 4	O 5	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
20	3	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	3	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	3	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	3	1	Total	C	Mg	N	O	0	0
			36	30	1	4	1		
20	4	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
20	4	1	Total	C	Mg	N	O	0	0
			36	30	1	4	1		
20	4	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	4	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
20	4	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	4	1	Total	C	Mg	N	O	0	0
			52	42	1	4	5		
20	4	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	4	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	4	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	4	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	4	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	4	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	4	1	Total	C	Mg	N	O	0	0
			36	30	1	4	1		
20	4	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	4	1	Total	C	Mg	N	O	0	0
			46	36	1	4	5		
20	4	1	Total	C	Mg	N	O	0	0
			52	42	1	4	5		
20	4	1	Total	C	Mg	N	O	0	0
			47	37	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
20	A	1	Total	C	Mg	N	O	0	0
			46	36	1	4	5		
20	A	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	A	1	Total	C	Mg	N	O	0	0
			46	36	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			56	46	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			46	36	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			52	42	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			45	35	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	A	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	A	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			52	42	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			58	48	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			51	41	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			42	34	1	4	3		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
20	A	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			58	48	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			59	49	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			45	35	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			46	36	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			47	37	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			51	41	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			59	49	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
20	A	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
20	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			45	35	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
20	B	1	Total	C	Mg	N		0	0
			25	20	1	4			
20	B	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			46	36	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			53	43	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			41	33	1	4	3		
20	B	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			46	36	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
20	B	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			58	48	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			59	49	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			45	35	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			45	35	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			51	41	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			47	37	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			36	30	1	4	1		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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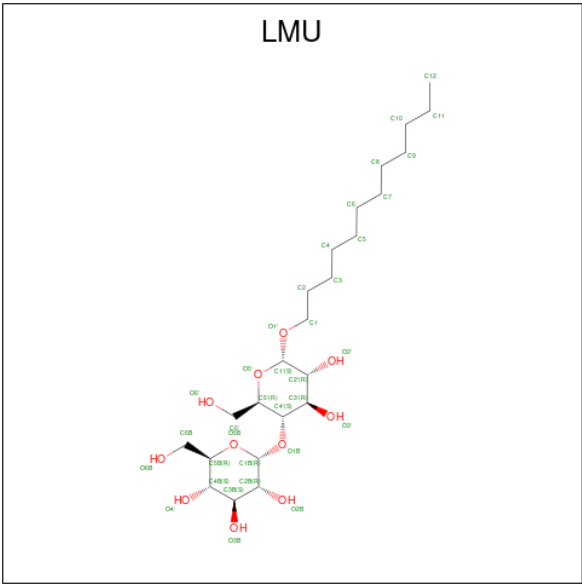
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
20	F	1	Total 50	C 40	Mg 1	N 4	O 5	0	0
20	F	1	Total 36	C 30	Mg 1	N 4	O 1	0	0
20	F	1	Total 41	C 33	Mg 1	N 4	O 3	0	0
20	F	1	Total 53	C 43	Mg 1	N 4	O 5	0	0
20	G	1	Total 51	C 41	Mg 1	N 4	O 5	0	0
20	H	1	Total 55	C 45	Mg 1	N 4	O 5	0	0
20	H	1	Total 55	C 45	Mg 1	N 4	O 5	0	0
20	H	1	Total 58	C 48	Mg 1	N 4	O 5	0	0
20	H	1	Total 55	C 45	Mg 1	N 4	O 5	0	0
20	I	1	Total 60	C 50	Mg 1	N 4	O 5	0	0
20	J	1	Total 48	C 38	Mg 1	N 4	O 5	0	0
20	J	1	Total 61	C 51	Mg 1	N 4	O 5	0	0
20	K	1	Total 46	C 36	Mg 1	N 4	O 5	0	0
20	K	1	Total 50	C 40	Mg 1	N 4	O 5	0	0
20	K	1	Total 50	C 40	Mg 1	N 4	O 5	0	0
20	K	1	Total 56	C 46	Mg 1	N 4	O 5	0	0
20	L	1	Total 60	C 50	Mg 1	N 4	O 5	0	0
20	L	1	Total 55	C 45	Mg 1	N 4	O 5	0	0
20	L	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
20	L	1	Total 55	C 45	Mg 1	N 4	O 5	0	0
20	L	1	Total 50	C 40	Mg 1	N 4	O 5	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
20	L	1	Total	C	Mg	N	O	0	0
			47	37	1	4	5		
20	L	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	R	1	Total	C	Mg	N	O	0	0
			57	47	1	4	5		
20	R	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

- Molecule 21 is DODECYL-ALPHA-D-MALTOSIDE (CCD ID: LMU) (formula: C₂₄H₄₆O₁₁).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
21	1	1	Total	C	O	0	0
			35	24	11		
21	1	1	Total	C	O	0	0
			35	24	11		
21	1	1	Total	C	O	0	0
			35	24	11		
21	2	1	Total	C	O	0	0
			35	24	11		
21	2	1	Total	C	O	0	0
			35	24	11		
21	2	1	Total	C	O	0	0
			35	24	11		
21	2	1	Total	C	O	0	0
			35	24	11		

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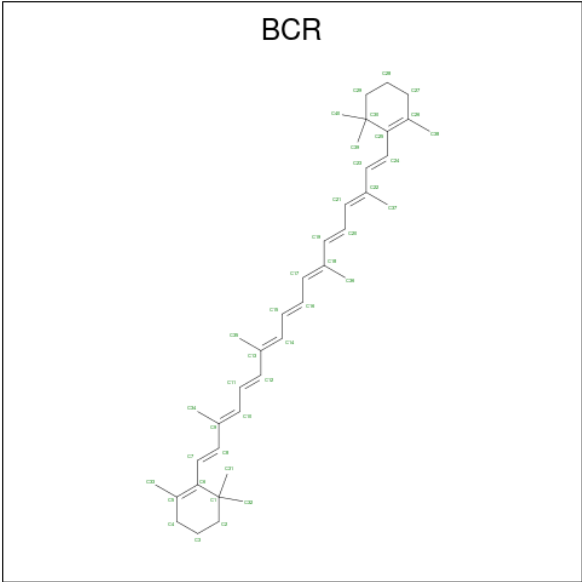
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
21	2	1	Total	C	O	0	0
			35	24	11		
21	3	1	Total	C	O	0	0
			35	24	11		
21	3	1	Total	C	O	0	0
			35	24	11		
21	4	1	Total	C	O	0	0
			35	24	11		
21	4	1	Total	C	O	0	0
			34	23	11		
21	4	1	Total	C	O	0	0
			35	24	11		
21	4	1	Total	C	O	0	0
			35	24	11		
21	A	1	Total	C	O	0	0
			35	24	11		
21	A	1	Total	C	O	0	0
			35	24	11		
21	A	1	Total	C	O	0	0
			35	24	11		
21	A	1	Total	C	O	0	0
			35	24	11		
21	A	1	Total	C	O	0	0
			35	24	11		
21	A	1	Total	C	O	0	0
			35	24	11		
21	A	1	Total	C	O	0	0
			35	24	11		
21	B	1	Total	C	O	0	0
			35	24	11		
21	B	1	Total	C	O	0	0
			35	24	11		
21	B	1	Total	C	O	0	0
			25	14	11		
21	C	1	Total	C	O	0	0
			35	24	11		
21	D	1	Total	C	O	0	0
			35	24	11		
21	E	1	Total	C	O	0	0
			35	24	11		
21	F	1	Total	C	O	0	0
			34	23	11		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
21	G	1	Total	C	O	0	0
			35	24	11		
21	G	1	Total	C	O	0	0
			35	24	11		
21	G	1	Total	C	O	0	0
			35	24	11		
21	H	1	Total	C	O	0	0
			35	24	11		
21	H	1	Total	C	O	0	0
			35	24	11		
21	H	1	Total	C	O	0	0
			35	24	11		
21	H	1	Total	C	O	0	0
			35	24	11		
21	K	1	Total	C	O	0	0
			35	24	11		
21	K	1	Total	C	O	0	0
			35	24	11		
21	K	1	Total	C	O	0	0
			35	24	11		
21	L	1	Total	C	O	0	0
			35	24	11		
21	L	1	Total	C	O	0	0
			35	24	11		
21	L	1	Total	C	O	0	0
			35	24	11		
21	R	1	Total	C	O	0	0
			35	24	11		
21	R	1	Total	C	O	0	0
			35	24	11		
21	R	1	Total	C	O	0	0
			35	24	11		
21	R	1	Total	C	O	0	0
			35	24	11		
21	R	1	Total	C	O	0	0
			35	24	11		
21	R	1	Total	C	O	0	0
			35	24	11		

- Molecule 22 is BETA-CAROTENE (CCD ID: BCR) (formula: C₄₀H₅₆).



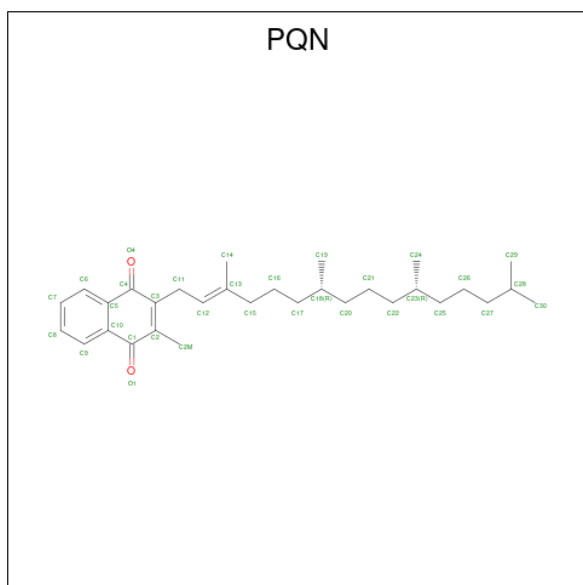
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
22	2	1	Total C 40 40	0	0
22	A	1	Total C 40 40	0	0
22	A	1	Total C 40 40	0	0
22	A	1	Total C 40 40	0	0
22	B	1	Total C 40 40	0	0
22	B	1	Total C 40 40	0	0
22	B	1	Total C 40 40	0	0
22	B	1	Total C 40 40	0	0
22	B	1	Total C 40 40	0	0
22	F	1	Total C 40 40	0	0
22	F	1	Total C 40 40	0	0
22	G	1	Total C 40 40	0	0
22	I	1	Total C 39 39	0	0
22	I	1	Total C 40 40	0	0

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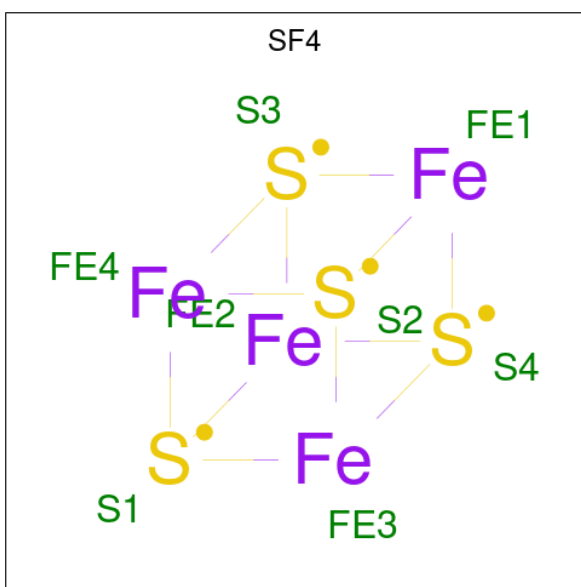
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
22	J	1	Total C 40 40	0	0
22	L	1	Total C 40 40	0	0

- Molecule 23 is PHYLLOQUINONE (CCD ID: PQN) (formula: $C_{31}H_{46}O_2$).



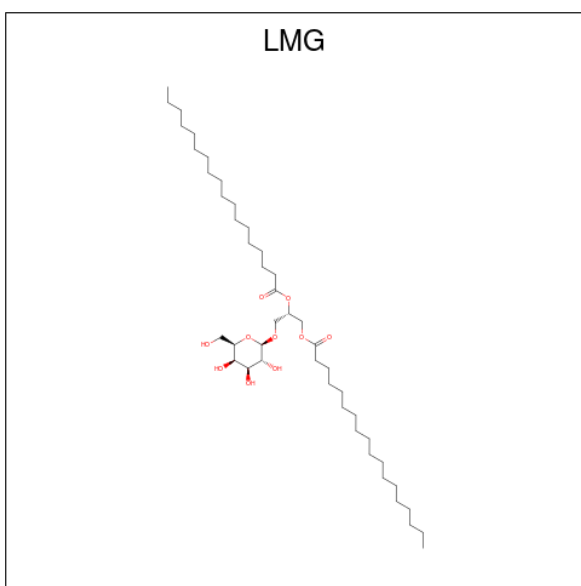
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
23	A	1	Total C O 33 31 2	0	0
23	B	1	Total C O 33 31 2	0	0

- Molecule 24 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4).



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

- Molecule 25 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: $C_{45}H_{86}O_{10}$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
25	B	1	Total	C	O	0	0
			49	39	10		

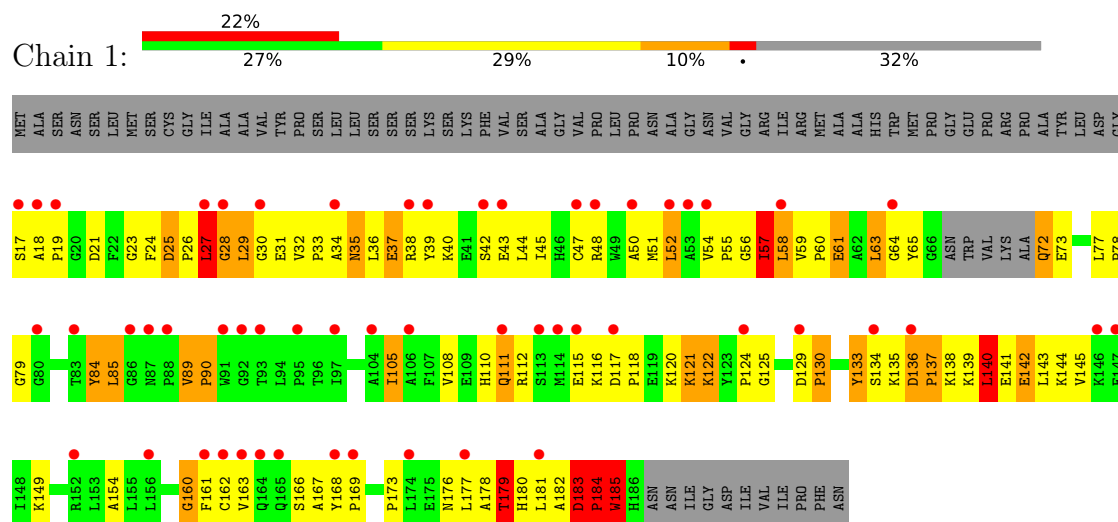
- Molecule 26 is UNKNOWN LIGAND (CCD ID: UNL) (formula:).

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
26	H	1	Total	C	O	0	0
			23	12	11		

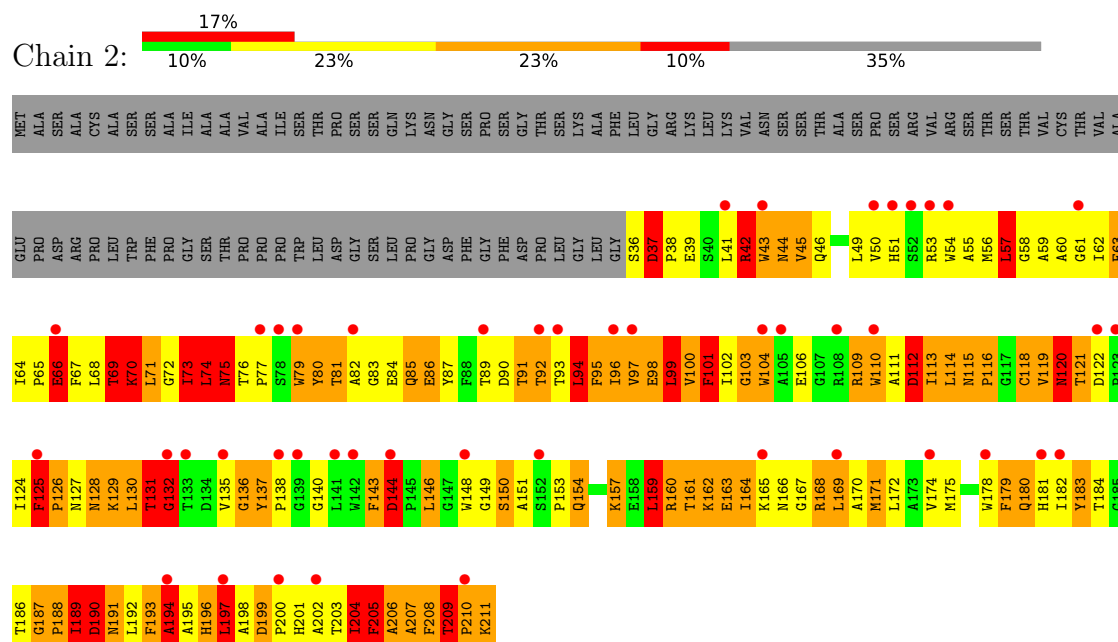
3 Residue-property plots

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 electron 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 dot above a residue indicates a poor fit to the electron density ($RSRZ > 2$). 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.

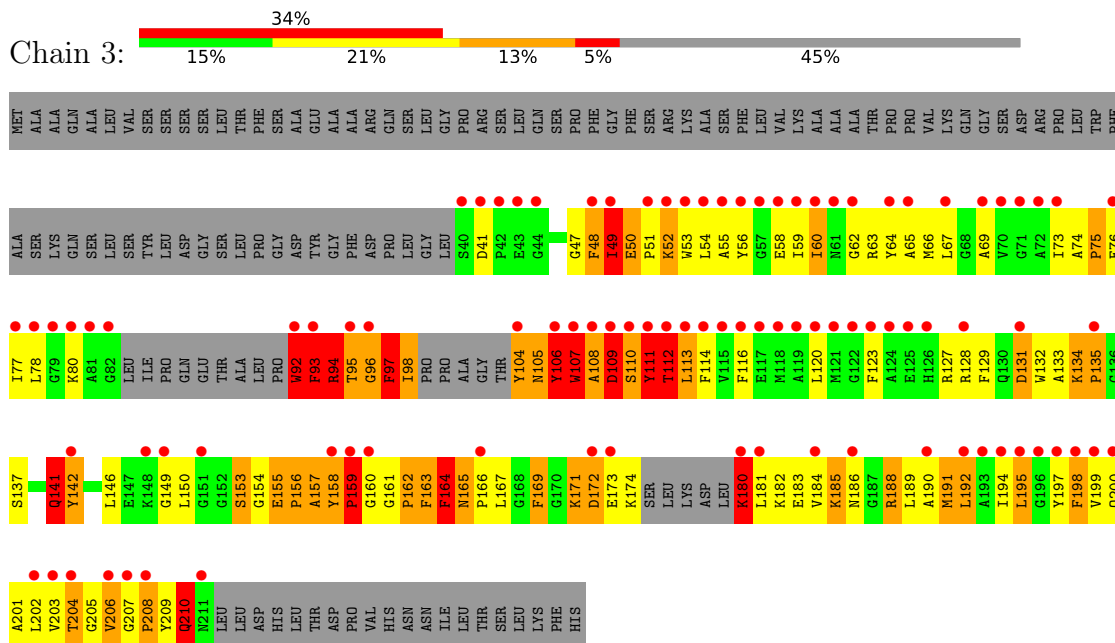
• Molecule 1: AT3G54890



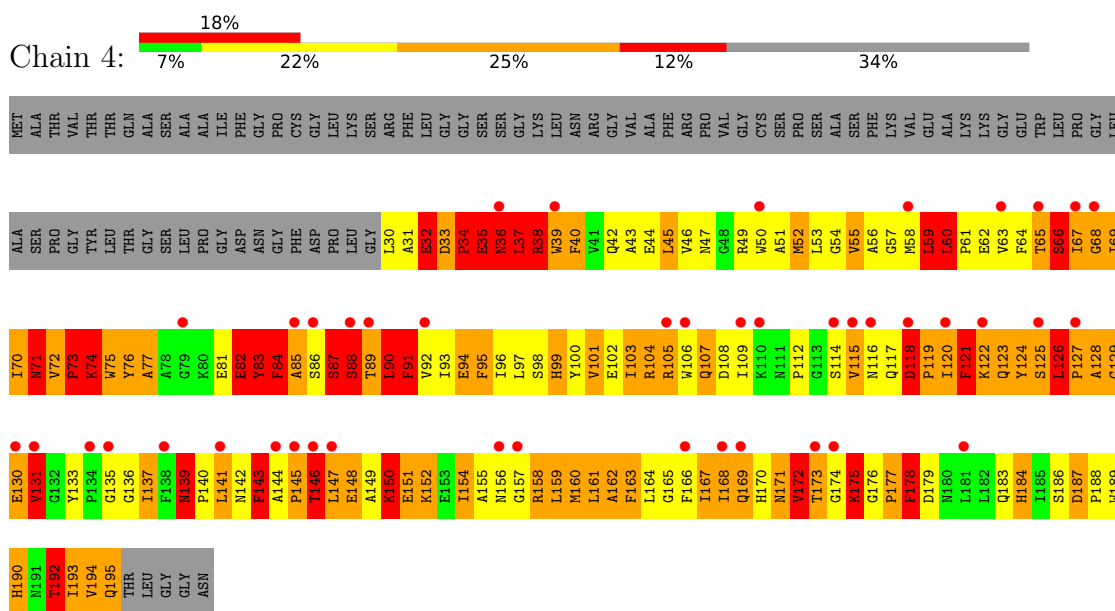
• Molecule 2: TYPE II CHLOROPHYLL A/B BINDING PROTEIN FROM PHOTOSYSTEM I



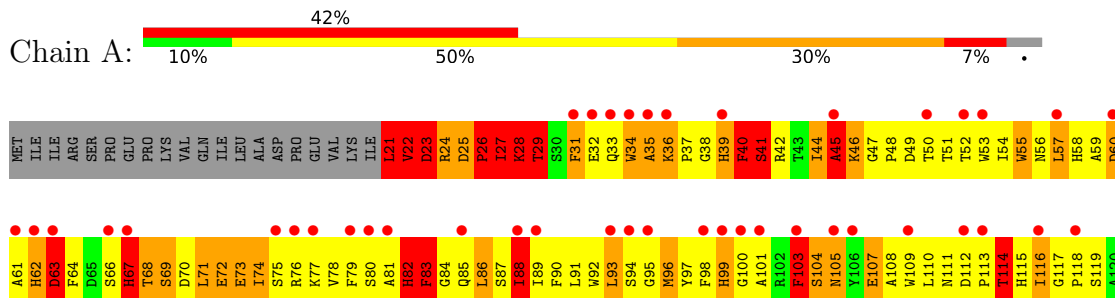
- Molecule 3: LHCA3

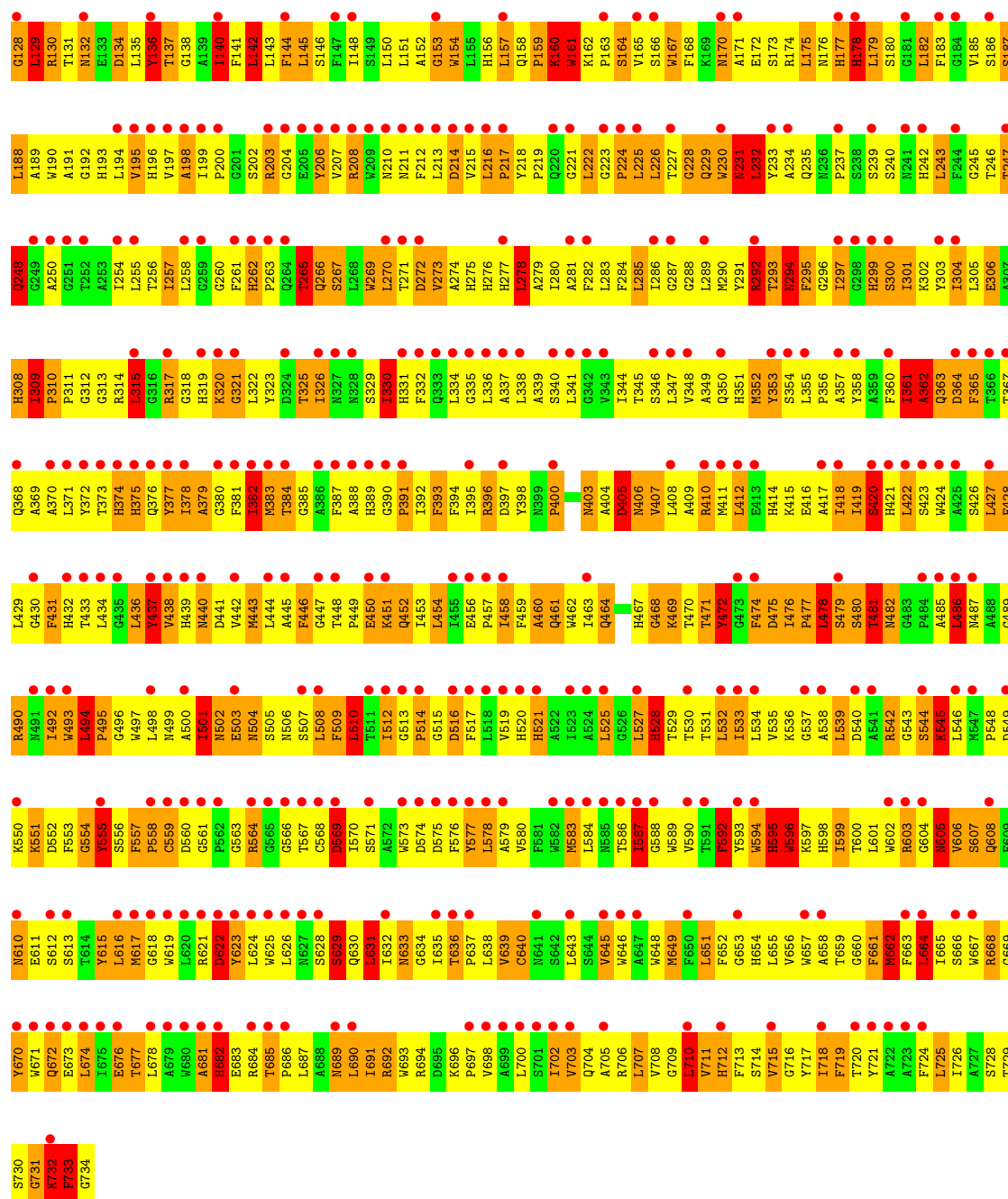


- Molecule 4: CHLOROPHYLL A-B BINDING PROTEIN P4, CHLOROPLASTIC



- Molecule 5: PHOTOSYSTEM I P700 CHLOROPHYLL A APOPROTEIN A1

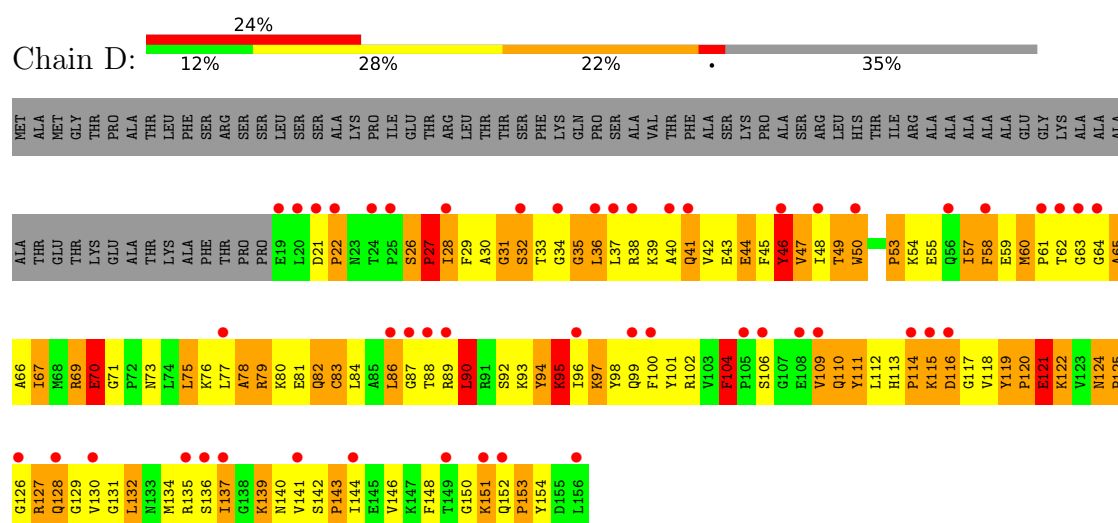




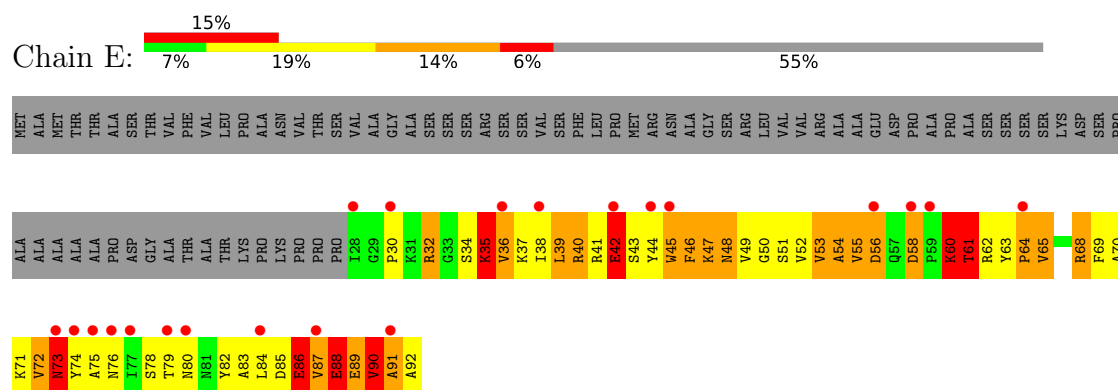
● Molecule 7: PHOTOSYSTEM I IRON-SULFUR CENTER



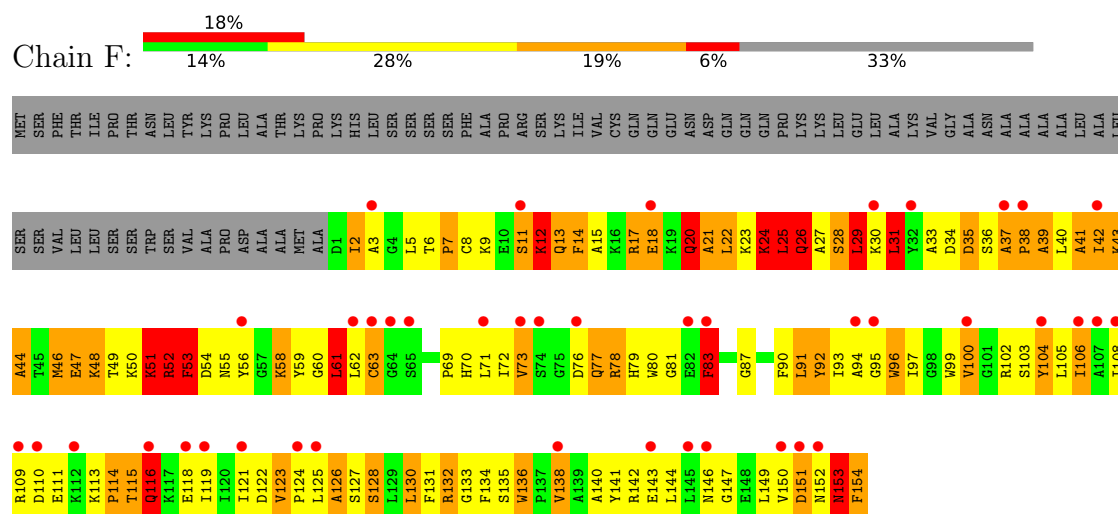
● Molecule 8: PHOTOSYSTEM I REACTION CENTER SUBUNIT II, CHLOROPLASTIC



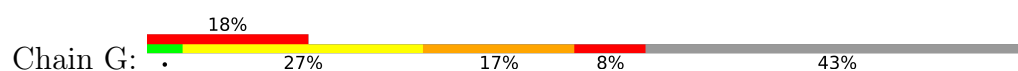
- Molecule 9: PHOTOSYSTEM I REACTION CENTER SUBUNIT IV A, CHLOROPLASTIC

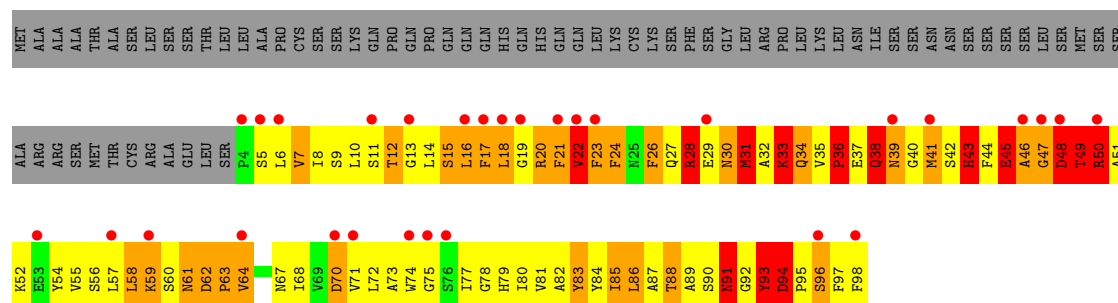


- Molecule 10: PHOTOSYSTEM I REACTION CENTER SUBUNIT III, CHLOROPLASTIC

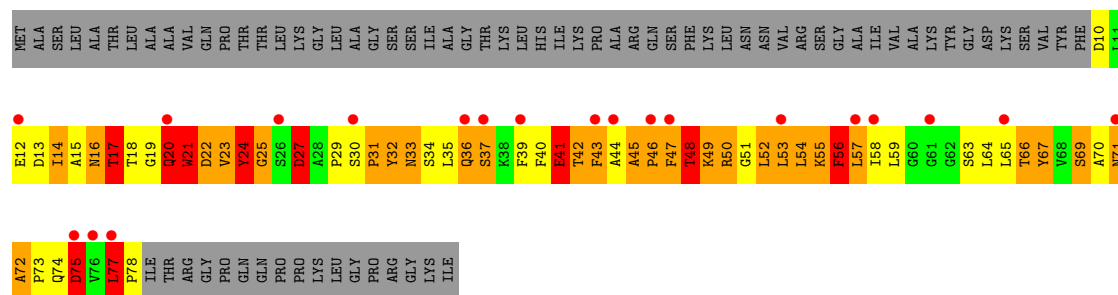
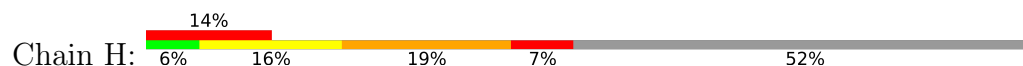


- Molecule 11: PHOTOSYSTEM I REACTION CENTER SUBUNIT V, CHLOROPLASTIC

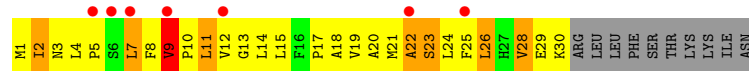




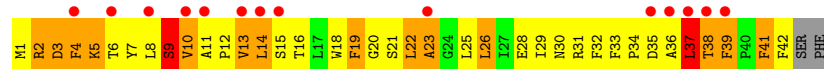
• Molecule 12: PHOTOSYSTEM I REACTION CENTER SUBUNIT VI, CHLOROPLASTIC



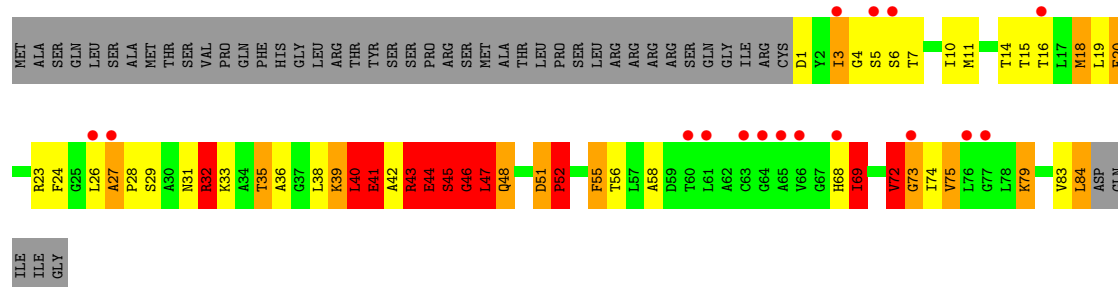
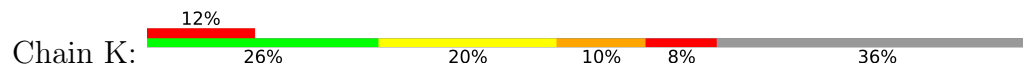
• Molecule 13: PHOTOSYSTEM I REACTION CENTER SUBUNIT VIII



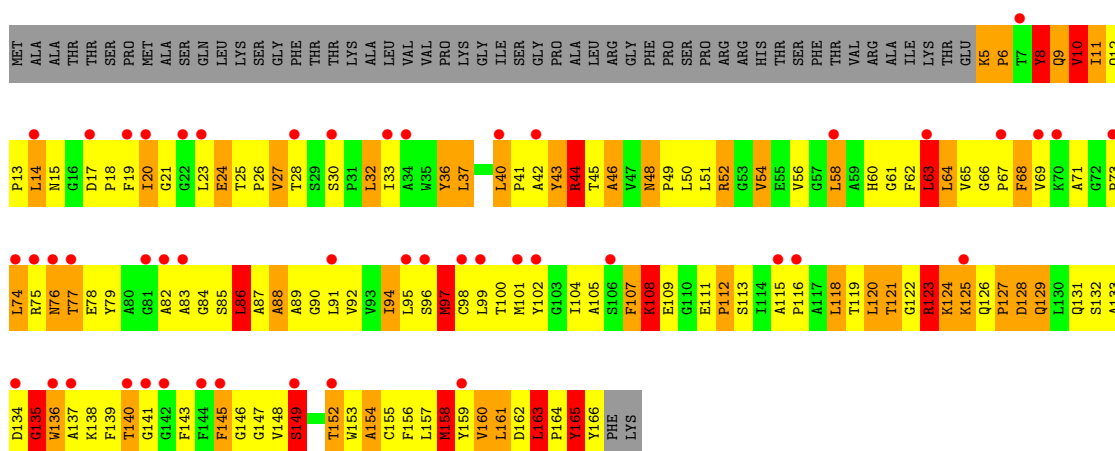
• Molecule 14: PHOTOSYSTEM I REACTION CENTER SUBUNIT IX



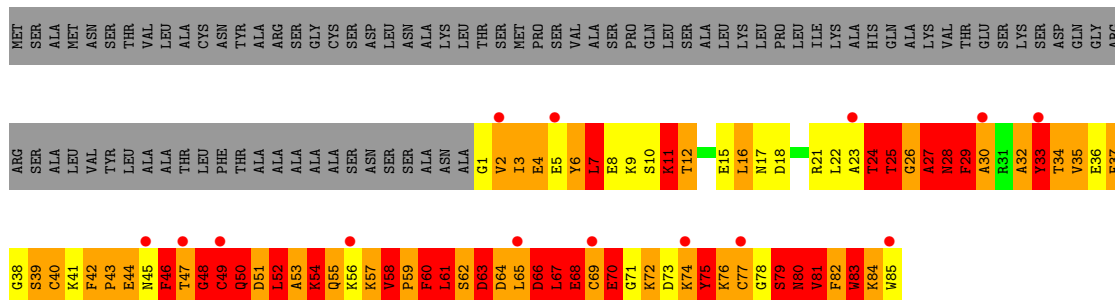
• Molecule 15: PHOTOSYSTEM I REACTION CENTER SUBUNIT PSAK, CHLOROPLASTIC



Chain L:



Chain N:



Chain R: 30% 43% 26%



Chain M: 50% 50%



Chain 0: 100%



- Molecule 19: beta-D-fructofuranose-(2-1)-alpha-D-glucopyranose

Chain P:  100%

GLC1
FRU2

- Molecule 19: beta-D-fructofuranose-(2-1)-alpha-D-glucopyranose

Chain Q:  100%

GLC1
FRU2

- Molecule 19: beta-D-fructofuranose-(2-1)-alpha-D-glucopyranose

Chain S:  50% 50%

GLC1
FRU2

- Molecule 19: beta-D-fructofuranose-(2-1)-alpha-D-glucopyranose

Chain T:  100%

GLC1
FRU2

- Molecule 19: beta-D-fructofuranose-(2-1)-alpha-D-glucopyranose

Chain U:  100%

GLC1
FRU2

- Molecule 19: beta-D-fructofuranose-(2-1)-alpha-D-glucopyranose

Chain V:  100%

GLC1
FRU2

- Molecule 19: beta-D-fructofuranose-(2-1)-alpha-D-glucopyranose

Chain W:  50% 50%

GLC1
FRU2

- Molecule 19: beta-D-fructofuranose-(2-1)-alpha-D-glucopyranose

Chain X:  50% 50%



- Molecule 19: beta-D-fructofuranose-(2-1)-alpha-D-glucopyranose

Chain Y:  100%



- Molecule 19: beta-D-fructofuranose-(2-1)-alpha-D-glucopyranose

Chain Z:  50% 50%



- Molecule 19: beta-D-fructofuranose-(2-1)-alpha-D-glucopyranose

Chain a:  50% 50%



4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, α , β , γ	120.20Å 190.20Å 130.30Å 90.00° 91.53° 90.00°	Depositor
Resolution (Å)	50.00 – 3.48 50.00 – 3.48	Depositor EDS
% Data completeness (in resolution range)	96.4 (50.00-3.48) 96.6 (50.00-3.48)	Depositor EDS
R_{merge}	0.13	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	2.61 (at 3.48Å)	Xtriage
Refinement program	REFMAC 5.5.0072	Depositor
R, R_{free}	0.391 , 0.425 0.383 , 0.387	Depositor DCC
R_{free} test set	1456 reflections (2.01%)	wwPDB-VP
Wilson B-factor (Å ²)	81.0	Xtriage
Anisotropy	0.408	Xtriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.10 , 14.2	EDS
L-test for twinning ²	$\langle L \rangle = 0.48$, $\langle L^2 \rangle = 0.31$	Xtriage
Estimated twinning fraction	0.016 for h,-k,-l	Xtriage
F_o, F_c correlation	0.74	EDS
Total number of atoms	36033	wwPDB-VP
Average B, all atoms (Å ²)	26.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.96% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

²Theoretical values of $\langle |L| \rangle$, $\langle L^2 \rangle$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

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: GLC, PQN, SF4, CLA, FRU, LMU, BCR, UNL, LMG

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	1	0.55	1/1303 (0.1%)	0.73	1/1774 (0.1%)
2	2	0.67	0/1420	1.10	7/1943 (0.4%)
3	3	0.60	0/1221	0.91	2/1642 (0.1%)
4	4	0.77	0/1359	1.12	10/1851 (0.5%)
5	A	0.61	1/5938 (0.0%)	0.88	9/8104 (0.1%)
6	B	0.58	0/6058	0.86	8/8278 (0.1%)
7	C	0.78	0/632	1.05	1/856 (0.1%)
8	D	0.71	0/1122	0.91	0/1514
9	E	0.70	0/530	0.95	1/718 (0.1%)
10	F	0.67	0/1250	0.88	0/1687
11	G	0.84	1/760 (0.1%)	1.20	7/1031 (0.7%)
12	H	0.70	0/543	1.02	0/741
13	I	0.62	0/235	0.80	0/320
14	J	0.65	0/349	0.91	0/475
15	K	0.65	1/599 (0.2%)	0.88	1/810 (0.1%)
16	L	0.69	1/1251 (0.1%)	0.94	2/1709 (0.1%)
17	N	0.89	0/699	1.22	5/936 (0.5%)
All	All	0.65	5/25269 (0.0%)	0.93	54/34389 (0.2%)

Chiral center outliers are detected by calculating the chiral volume of a chiral center and verifying if the center is modelled as a planar moiety or with the opposite hand. A planarity outlier is detected by checking planarity of atoms in a peptide group, atoms in a mainchain group or atoms of a sidechain that are expected to be planar.

Mol	Chain	#Chirality outliers	#Planarity outliers
1	1	0	3
2	2	0	17
3	3	0	17
4	4	0	20
5	A	0	20
6	B	0	12

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Mol	Chain	#Chirality outliers	#Planarity outliers
7	C	0	1
8	D	0	1
9	E	0	3
10	F	0	7
11	G	1	13
12	H	0	9
15	K	0	6
16	L	0	2
17	N	0	22
18	R	0	16
All	All	1	169

All (5) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
16	L	165	TYR	CE2-CZ	-6.04	1.30	1.38
11	G	15	SER	CB-OG	5.83	1.49	1.42
1	1	185	TRP	CB-CG	-5.34	1.40	1.50
15	K	41	GLU	CG-CD	5.15	1.59	1.51
5	A	22	VAL	CA-CB	-5.05	1.44	1.54

The worst 5 of 54 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
3	3	180	LYS	C-N-CA	-10.34	95.85	121.70
11	G	46	ALA	N-CA-C	-10.20	83.47	111.00
6	B	731	GLY	N-CA-C	-7.75	93.73	113.10
11	G	16	LEU	CA-CB-CG	7.25	131.98	115.30
6	B	315	LEU	CA-CB-CG	7.00	131.41	115.30

All (1) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
11	G	21	PHE	CA

5 of 169 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	1	184	PRO	Peptide
1	1	185	TRP	Peptide
1	1	72	GLN	Peptide

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Mol	Chain	Res	Type	Group
2	2	42	ARG	Peptide
2	2	73	ILE	Peptide

5.2 Too-close contacts

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	1	1264	0	1229	137	3
2	2	1374	0	1331	301	2
3	3	1186	0	1147	293	16
4	4	1319	0	1282	610	5
5	A	5745	0	5597	1351	0
6	B	5848	0	5655	1211	15
7	C	619	0	608	204	0
8	D	1095	0	1112	189	0
9	E	520	0	528	129	0
10	F	1221	0	1249	201	0
11	G	740	0	708	191	1
12	H	529	0	514	106	0
13	I	229	0	252	55	0
14	J	338	0	340	64	0
15	K	593	0	619	110	0
16	L	1215	0	1222	311	5
17	N	685	0	668	321	1
18	R	265	0	68	78	0
19	M	23	0	21	0	0
19	O	22	0	18	10	0
19	P	23	0	21	10	0
19	Q	23	0	21	6	0
19	S	23	0	21	1	0
19	T	23	0	21	3	0
19	U	23	0	21	1	0
19	V	23	0	21	4	0
19	W	23	0	21	3	0
19	X	22	0	18	3	0
19	Y	23	0	21	1	41
19	Z	23	0	21	14	0
19	a	23	0	21	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
20	1	617	0	388	89	1
20	2	650	0	465	147	0
20	3	620	0	362	75	0
20	4	694	0	443	167	0
20	A	2346	0	2062	726	0
20	B	2226	0	2061	684	0
20	F	180	0	123	46	0
20	G	51	0	40	4	0
20	H	223	0	197	57	0
20	I	60	0	58	12	0
20	J	109	0	95	26	0
20	K	202	0	158	54	1
20	L	382	0	335	103	0
20	R	122	0	123	14	0
21	1	105	0	137	32	0
21	2	175	0	230	45	0
21	3	70	0	92	16	0
21	4	139	0	179	24	3
21	A	245	0	322	53	0
21	B	95	0	115	11	0
21	C	35	0	46	0	0
21	D	35	0	46	3	0
21	E	35	0	46	11	0
21	F	34	0	41	8	0
21	G	105	0	138	27	41
21	H	140	0	184	42	0
21	K	105	0	138	41	0
21	L	105	0	138	2	0
21	R	245	0	322	43	3
22	2	40	0	54	9	0
22	A	120	0	162	103	0
22	B	200	0	270	114	0
22	F	80	0	108	60	0
22	G	40	0	54	5	0
22	I	79	0	105	46	0
22	J	40	0	54	36	0
22	L	40	0	54	36	0
23	A	33	0	46	7	0
23	B	33	0	46	28	0
24	A	8	0	0	18	0
24	C	16	0	0	5	0
25	B	49	0	71	17	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
26	H	23	0	0	1	0
All	All	36033	0	34504	7353	69

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 104.

The worst 5 of 7353 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)
4:4:160:MET:CE	20:4:306:CLA:HBB2	1.18	1.65
4:4:69:ILE:HD11	4:4:175:LYS:CB	1.26	1.65
3:3:97:PHE:CD2	3:3:98:ILE:HG23	1.33	1.62
1:1:185:TRP:CH2	20:1:213:CLA:H12	1.38	1.59
3:3:97:PHE:CE2	3:3:98:ILE:HD13	1.42	1.55

The worst 5 of 69 symmetry-related close contacts are listed below. The label for Atom-2 includes the symmetry operator and encoded unit-cell translations to be applied.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:Y:2:FRU:O2	21:G:101:LMU:C5B[1_456]	0.08	2.12
3:3:180:LYS:CD	6:B:490:ARG:CZ[1_556]	0.31	1.89
3:3:180:LYS:NZ	6:B:490:ARG:CD[1_556]	0.56	1.64
19:Y:1:GLC:O2	21:G:101:LMU:O4'[1_456]	1.01	1.19
3:3:180:LYS:CG	6:B:490:ARG:NE[1_556]	1.05	1.15

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 X-ray entries followed by that with respect to entries of similar resolution.

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	1	161/241 (67%)	84 (52%)	39 (24%)	38 (24%)	0 0
2	2	174/269 (65%)	67 (38%)	51 (29%)	56 (32%)	0 0

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
3	3	145/276 (52%)	76 (52%)	36 (25%)	33 (23%)	0	1
4	4	164/251 (65%)	57 (35%)	44 (27%)	63 (38%)	0	0
5	A	726/758 (96%)	366 (50%)	187 (26%)	173 (24%)	0	0
6	B	731/734 (100%)	379 (52%)	204 (28%)	148 (20%)	0	1
7	C	79/81 (98%)	23 (29%)	31 (39%)	25 (32%)	0	0
8	D	136/212 (64%)	47 (35%)	48 (35%)	41 (30%)	0	0
9	E	63/143 (44%)	30 (48%)	15 (24%)	18 (29%)	0	0
10	F	152/231 (66%)	71 (47%)	40 (26%)	41 (27%)	0	0
11	G	93/167 (56%)	38 (41%)	27 (29%)	28 (30%)	0	0
12	H	67/144 (46%)	30 (45%)	16 (24%)	21 (31%)	0	0
13	I	28/40 (70%)	11 (39%)	10 (36%)	7 (25%)	0	0
14	J	40/44 (91%)	19 (48%)	11 (28%)	10 (25%)	0	0
15	K	82/131 (63%)	50 (61%)	13 (16%)	19 (23%)	0	0
16	L	160/216 (74%)	72 (45%)	49 (31%)	39 (24%)	0	0
17	N	83/170 (49%)	21 (25%)	19 (23%)	43 (52%)	0	0
All	All	3084/4108 (75%)	1441 (47%)	840 (27%)	803 (26%)	0	0

5 of 803 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	1	25	ASP
1	1	30	GLY
1	1	35	ASN
1	1	58	LEU
1	1	73	GLU

5.3.2 Protein sidechains ⓘ

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

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	1	127/190 (67%)	100 (79%)	27 (21%)	1 4

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
2	2	140/216 (65%)	81 (58%)	59 (42%)	0	0
3	3	112/215 (52%)	76 (68%)	36 (32%)	0	2
4	4	138/201 (69%)	85 (62%)	53 (38%)	0	1
5	A	592/618 (96%)	410 (69%)	182 (31%)	0	2
6	B	598/600 (100%)	397 (66%)	201 (34%)	0	1
7	C	70/70 (100%)	41 (59%)	29 (41%)	0	0
8	D	118/173 (68%)	82 (70%)	36 (30%)	0	2
9	E	56/114 (49%)	38 (68%)	18 (32%)	0	2
10	F	127/190 (67%)	80 (63%)	47 (37%)	0	1
11	G	79/144 (55%)	53 (67%)	26 (33%)	0	2
12	H	57/115 (50%)	30 (53%)	27 (47%)	0	0
13	I	26/36 (72%)	22 (85%)	4 (15%)	2	13
14	J	36/39 (92%)	25 (69%)	11 (31%)	0	2
15	K	61/102 (60%)	43 (70%)	18 (30%)	0	2
16	L	125/169 (74%)	88 (70%)	37 (30%)	0	2
17	N	74/139 (53%)	43 (58%)	31 (42%)	0	0
All	All	2536/3331 (76%)	1694 (67%)	842 (33%)	0	2

5 of 842 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
6	B	420	SER
7	C	54	CYS
16	L	120	LEU
6	B	452	GLN
6	B	419	ILE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 103 such sidechains are listed below:

Mol	Chain	Res	Type
6	B	333	GLN
6	B	630	GLN
16	L	48	ASN
6	B	403	ASN
6	B	521	HIS

5.3.3 RNA ⓘ

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates ⓘ

26 monosaccharides 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	$\# Z > 2$
19	GLC	M	1	19	11,11,12	0.54	0	15,15,17	2.23	2 (13%)
19	FRU	M	2	19	11,12,12	0.71	0	10,18,18	0.74	0
19	GLC	O	1	19	10,10,12	0.91	0	14,14,17	2.46	4 (28%)
19	FRU	O	2	19	11,12,12	0.62	0	10,18,18	1.15	1 (10%)
19	GLC	P	1	19	11,11,12	0.52	0	15,15,17	1.77	4 (26%)
19	FRU	P	2	19	11,12,12	0.70	0	10,18,18	1.23	2 (20%)
19	GLC	Q	1	19	11,11,12	0.60	0	15,15,17	2.44	5 (33%)
19	FRU	Q	2	19	11,12,12	0.78	0	10,18,18	1.18	1 (10%)
19	GLC	S	1	19	11,11,12	0.63	0	15,15,17	1.10	1 (6%)
19	FRU	S	2	19	11,12,12	0.79	0	10,18,18	1.56	2 (20%)
19	GLC	T	1	19	11,11,12	0.51	0	15,15,17	0.79	1 (6%)
19	FRU	T	2	19	11,12,12	0.64	0	10,18,18	1.26	1 (10%)
19	GLC	U	1	19	11,11,12	0.64	0	15,15,17	2.64	4 (26%)
19	FRU	U	2	19	11,12,12	0.65	0	10,18,18	1.39	3 (30%)
19	GLC	V	1	19	11,11,12	0.57	0	15,15,17	1.97	4 (26%)
19	FRU	V	2	19	11,12,12	0.76	0	10,18,18	1.22	1 (10%)
19	GLC	W	1	19	11,11,12	0.59	0	15,15,17	1.01	2 (13%)
19	FRU	W	2	19	11,12,12	0.55	0	10,18,18	1.18	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
19	GLC	X	1	19	10,10,12	0.91	0	14,14,17	2.11	5 (35%)
19	FRU	X	2	19	11,12,12	0.57	0	10,18,18	0.64	0
19	GLC	Y	1	19	11,11,12	1.69	3 (27%)	15,15,17	2.66	6 (40%)
19	FRU	Y	2	19	11,12,12	1.41	1 (9%)	10,18,18	1.43	2 (20%)
19	GLC	Z	1	19	11,11,12	0.43	0	15,15,17	1.12	2 (13%)
19	FRU	Z	2	19	11,12,12	0.68	0	10,18,18	1.12	0
19	GLC	a	1	19	11,11,12	0.78	0	15,15,17	1.58	2 (13%)
19	FRU	a	2	19	11,12,12	0.42	0	10,18,18	1.12	0

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
19	GLC	M	1	19	-	2/2/19/22	0/1/1/1
19	FRU	M	2	19	1/1/4/4	1/5/24/24	0/1/1/1
19	GLC	O	1	19	-	-	0/1/1/1
19	FRU	O	2	19	1/1/4/4	0/5/24/24	0/1/1/1
19	GLC	P	1	19	-	0/2/19/22	0/1/1/1
19	FRU	P	2	19	1/1/4/4	3/5/24/24	0/1/1/1
19	GLC	Q	1	19	-	2/2/19/22	0/1/1/1
19	FRU	Q	2	19	1/1/4/4	5/5/24/24	0/1/1/1
19	GLC	S	1	19	-	2/2/19/22	0/1/1/1
19	FRU	S	2	19	1/1/4/4	0/5/24/24	0/1/1/1
19	GLC	T	1	19	-	2/2/19/22	0/1/1/1
19	FRU	T	2	19	1/1/4/4	2/5/24/24	0/1/1/1
19	GLC	U	1	19	-	1/2/19/22	0/1/1/1
19	FRU	U	2	19	1/1/4/4	0/5/24/24	0/1/1/1
19	GLC	V	1	19	-	2/2/19/22	0/1/1/1
19	FRU	V	2	19	1/1/4/4	3/5/24/24	0/1/1/1
19	GLC	W	1	19	-	2/2/19/22	0/1/1/1
19	FRU	W	2	19	1/1/4/4	3/5/24/24	0/1/1/1
19	GLC	X	1	19	-	-	0/1/1/1
19	FRU	X	2	19	1/1/4/4	5/5/24/24	0/1/1/1
19	GLC	Y	1	19	-	0/2/19/22	0/1/1/1
19	FRU	Y	2	19	1/1/4/4	3/5/24/24	0/1/1/1
19	GLC	Z	1	19	-	1/2/19/22	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
19	FRU	Z	2	19	1/1/4/4	0/5/24/24	0/1/1/1
19	GLC	a	1	19	-	0/2/19/22	0/1/1/1
19	FRU	a	2	19	1/1/4/4	4/5/24/24	0/1/1/1

All (4) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Y	2	FRU	O2-C2	4.27	1.48	1.40
19	Y	1	GLC	C1-C2	3.36	1.59	1.52
19	Y	1	GLC	C2-C3	2.99	1.56	1.52
19	Y	1	GLC	O2-C2	2.25	1.48	1.43

The worst 5 of 55 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	M	1	GLC	C1-O5-C5	7.84	122.82	112.19
19	U	1	GLC	C1-O5-C5	7.72	122.65	112.19
19	O	1	GLC	C1-C2-C3	7.09	118.38	109.67
19	Y	1	GLC	C6-C5-C4	5.98	127.01	113.00
19	V	1	GLC	C1-O5-C5	4.74	118.61	112.19

5 of 13 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
19	M	2	FRU	C2
19	O	2	FRU	C2
19	P	2	FRU	C2
19	Q	2	FRU	C2
19	S	2	FRU	C2

5 of 43 torsion outliers are listed below:

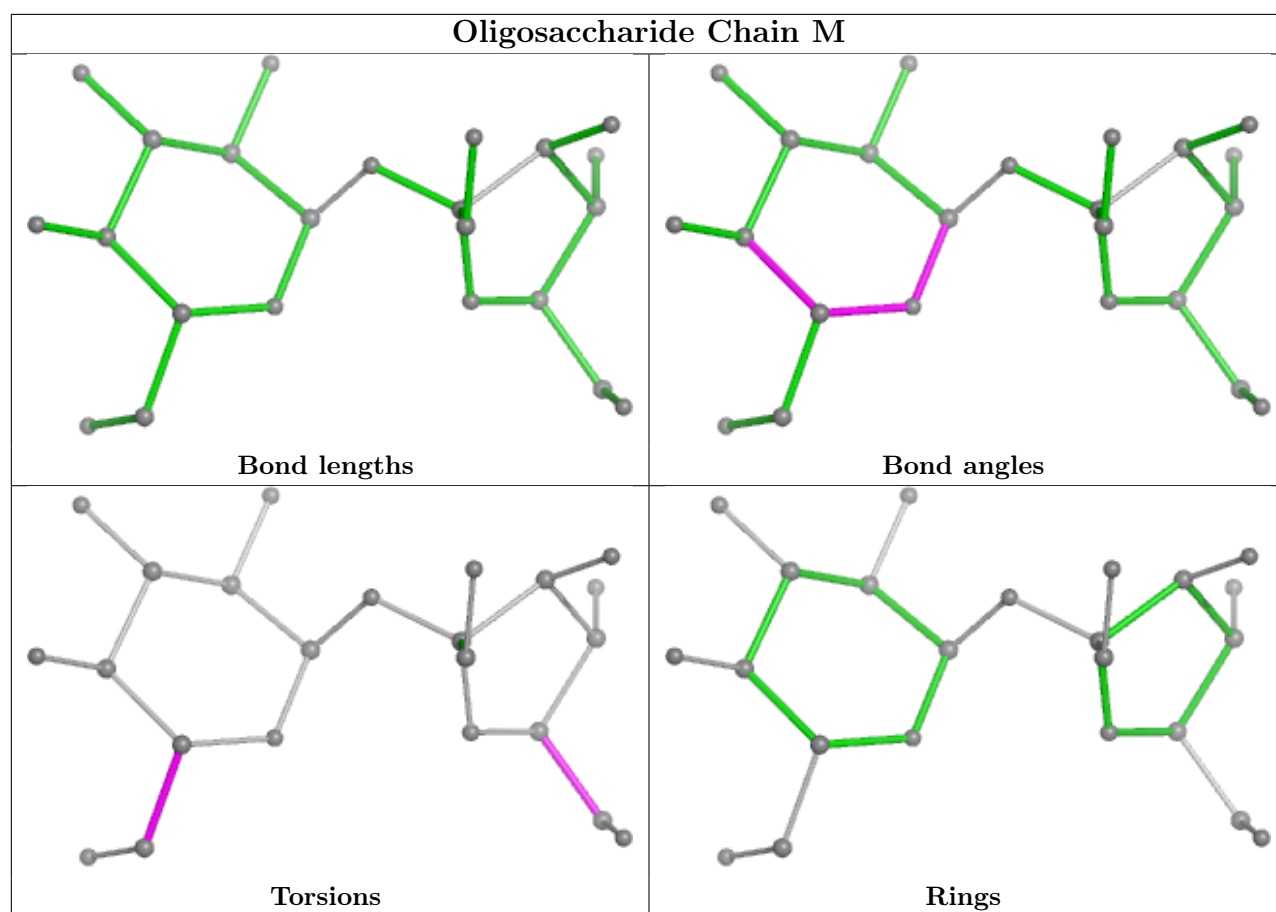
Mol	Chain	Res	Type	Atoms
19	P	2	FRU	C4-C5-C6-O6
19	P	2	FRU	O5-C5-C6-O6
19	Q	2	FRU	O1-C1-C2-C3
19	Q	2	FRU	O1-C1-C2-O2
19	V	2	FRU	O1-C1-C2-C3

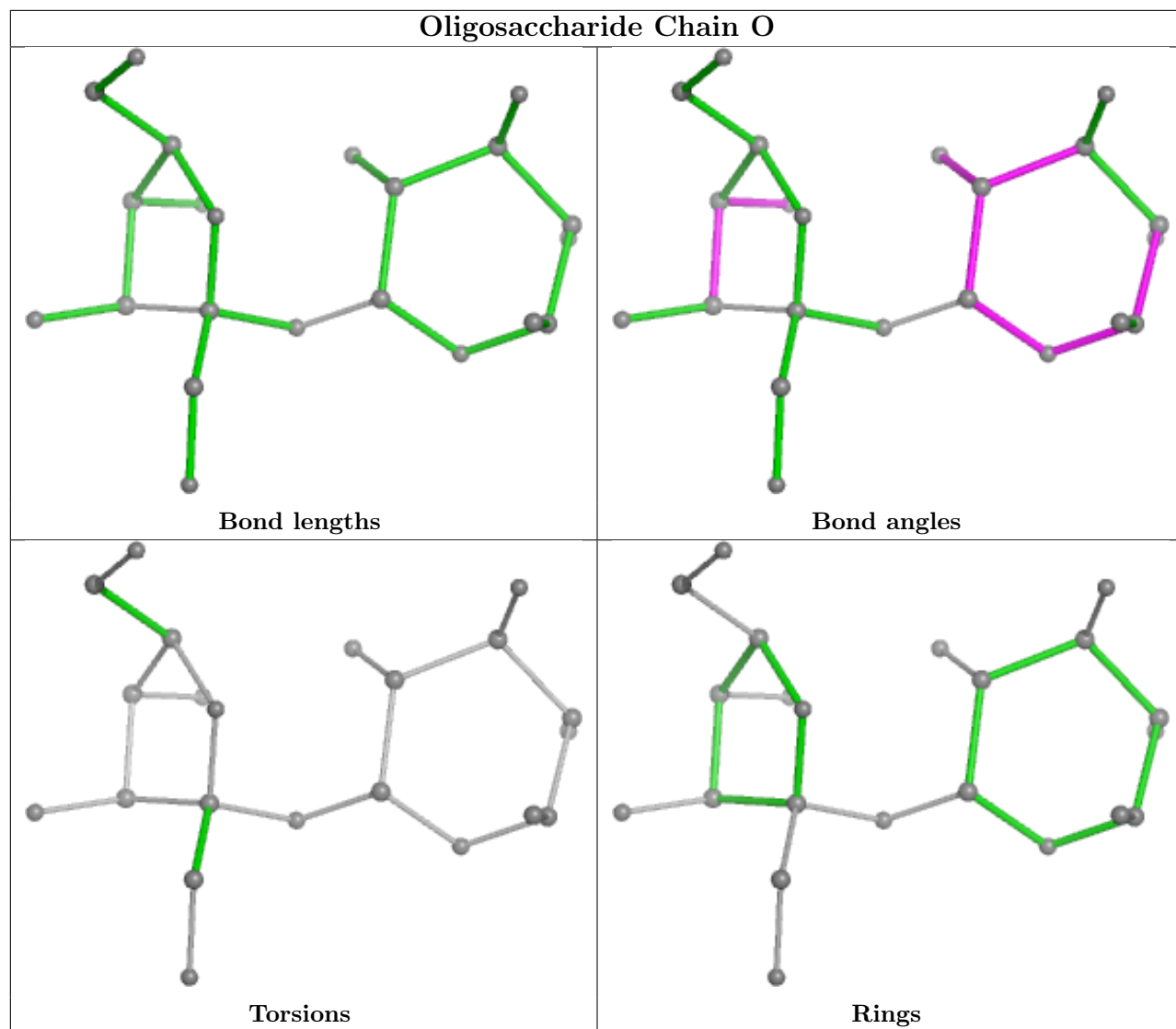
There are no ring outliers.

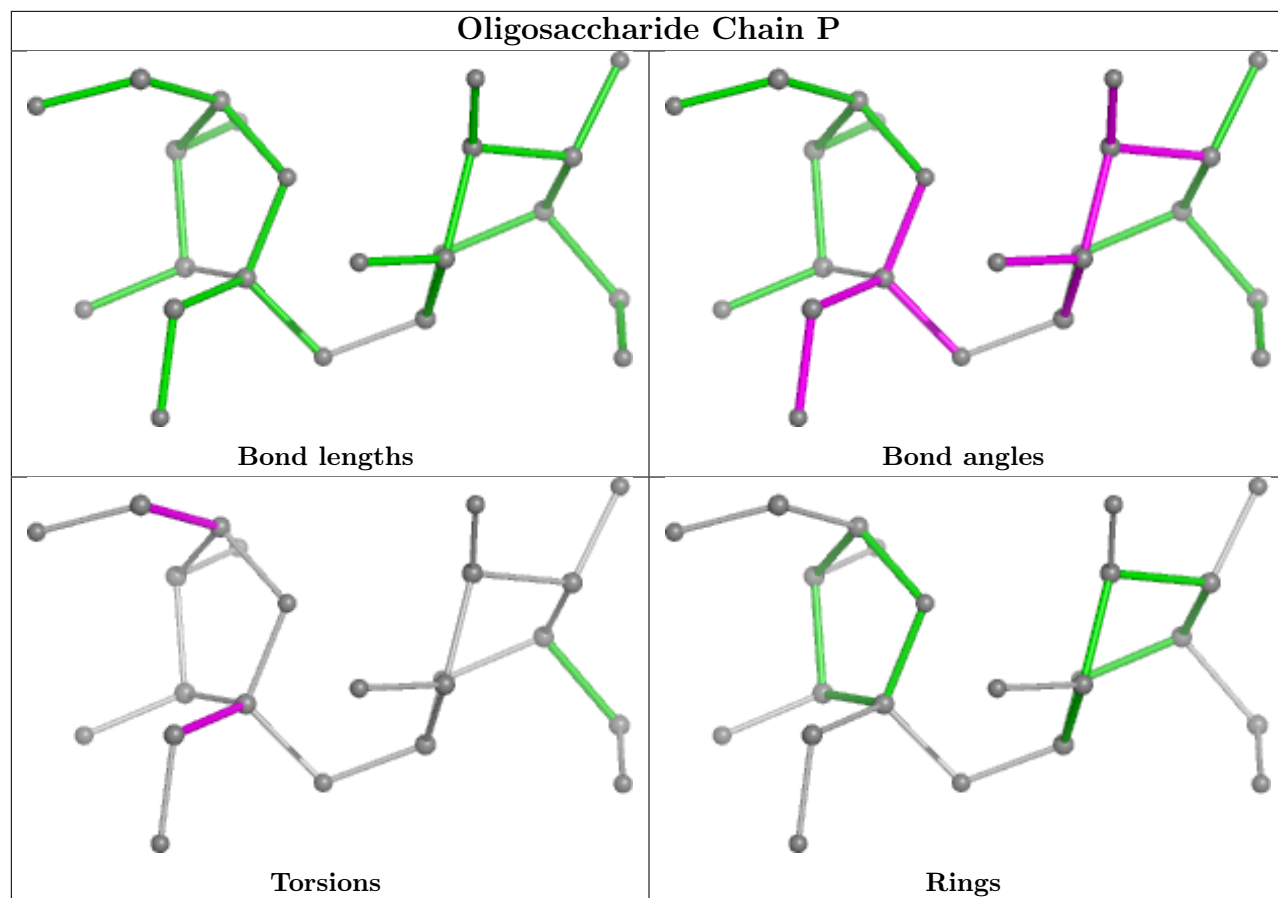
21 monomers are involved in 97 short contacts:

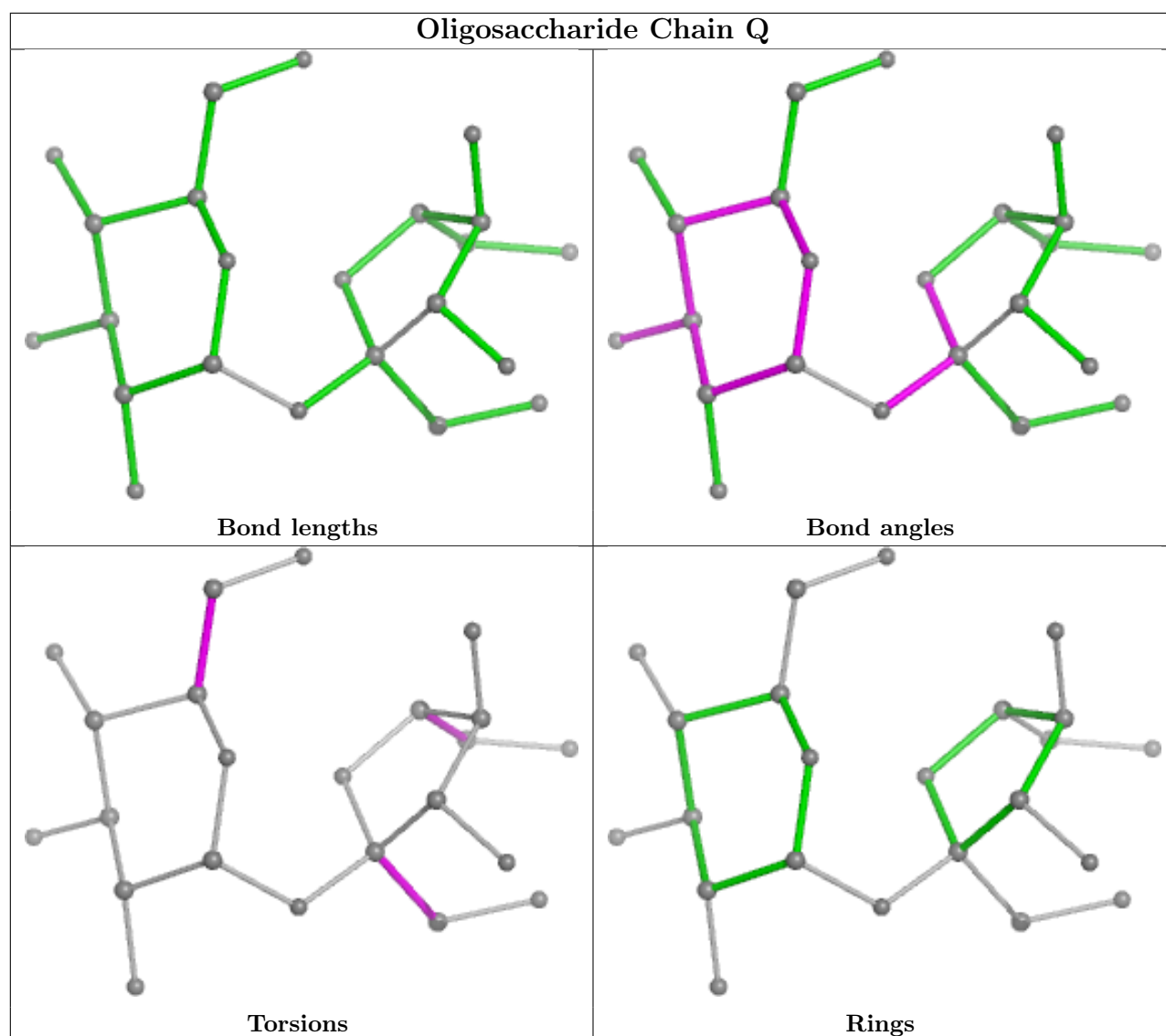
Mol	Chain	Res	Type	Clashes	Symm-Clashes
19	Y	1	GLC	0	22
19	P	2	FRU	9	0
19	S	2	FRU	1	0
19	V	2	FRU	4	0
19	U	2	FRU	1	0
19	Z	2	FRU	13	0
19	Q	2	FRU	6	0
19	X	2	FRU	3	0
19	T	1	GLC	3	0
19	Y	2	FRU	1	19
19	U	1	GLC	1	0
19	O	1	GLC	10	0
19	X	1	GLC	3	0
19	T	2	FRU	3	0
19	O	2	FRU	3	0
19	P	1	GLC	8	0
19	W	1	GLC	3	0
19	V	1	GLC	3	0
19	Q	1	GLC	3	0
19	W	2	FRU	3	0
19	Z	1	GLC	1	0

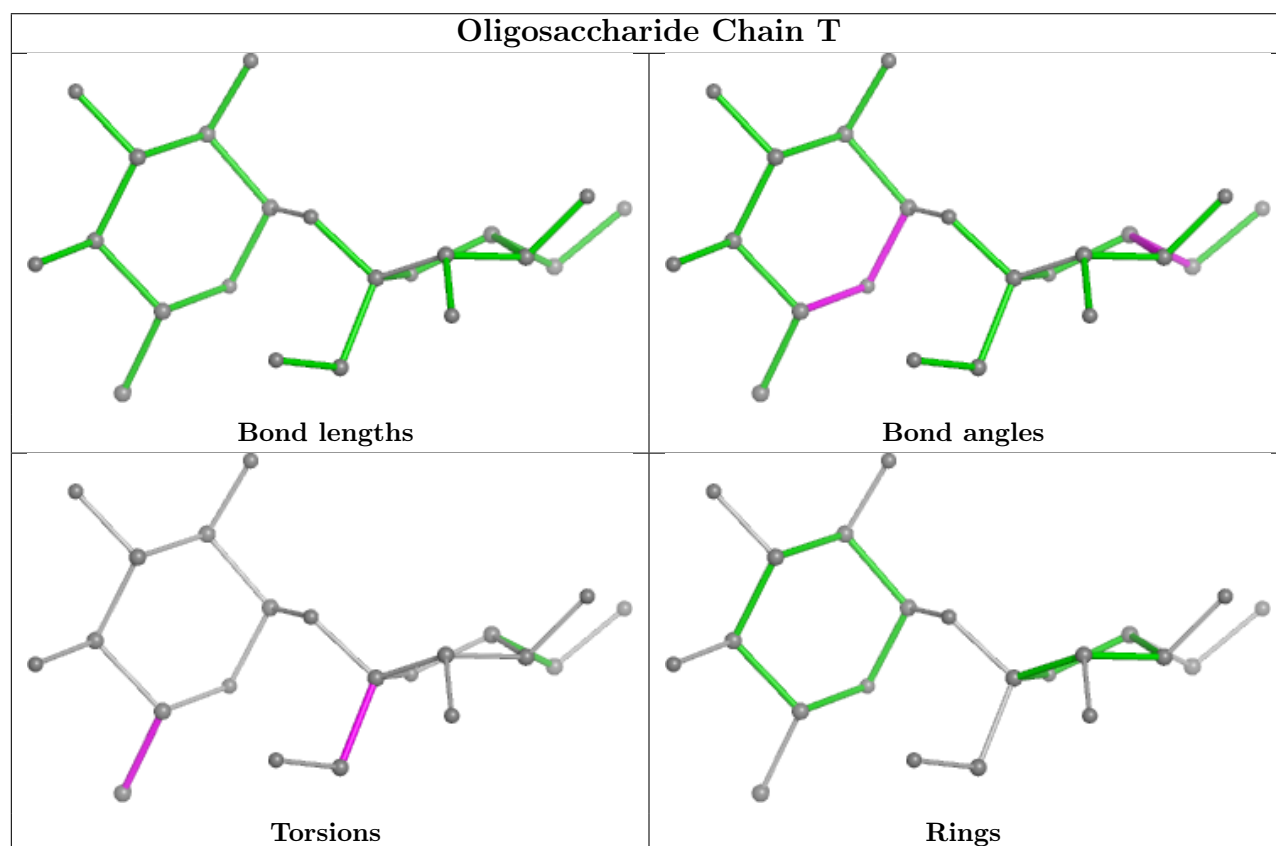
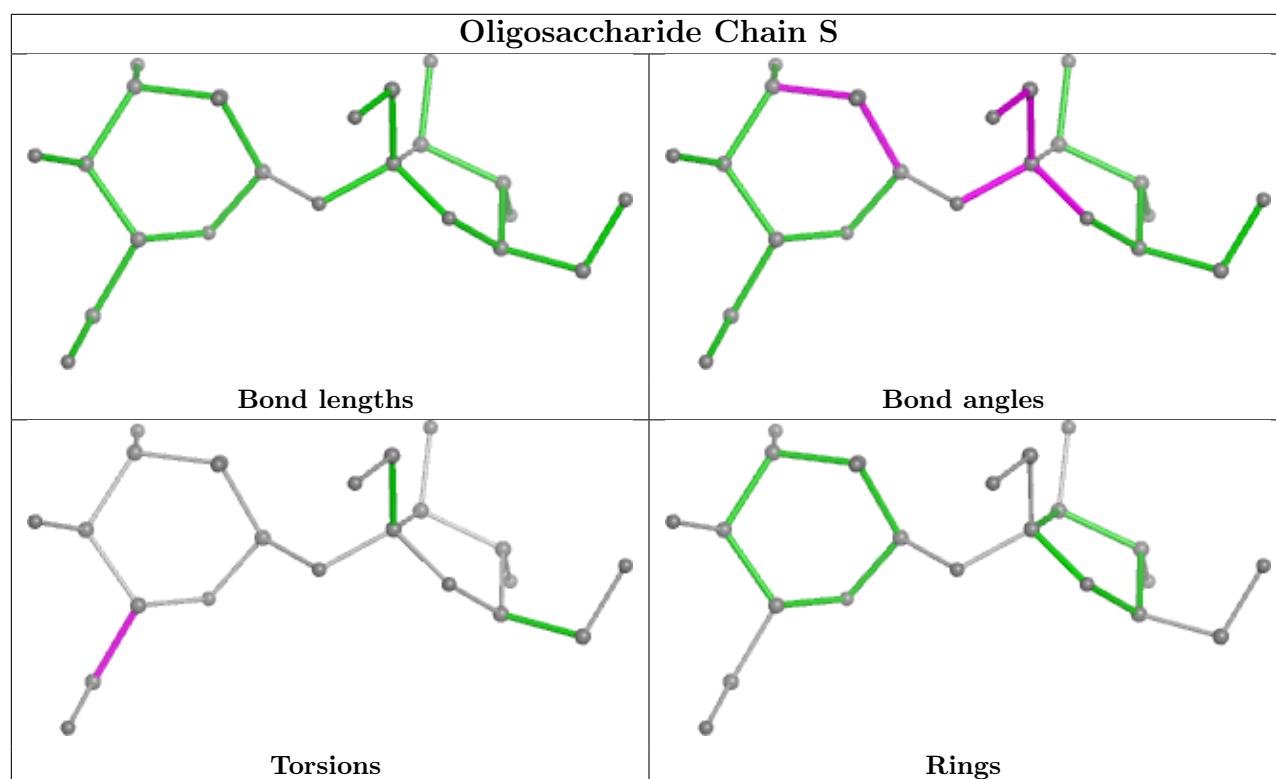
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for oligosaccharide.

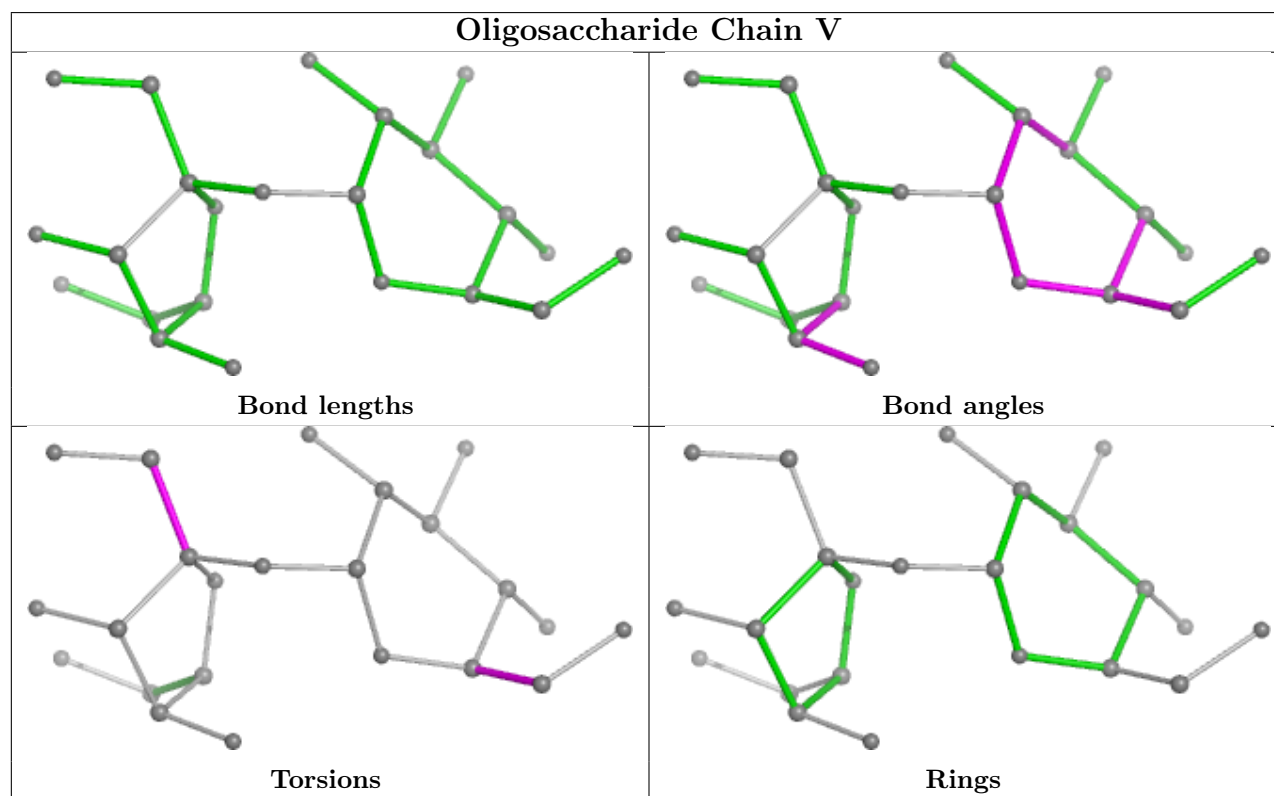
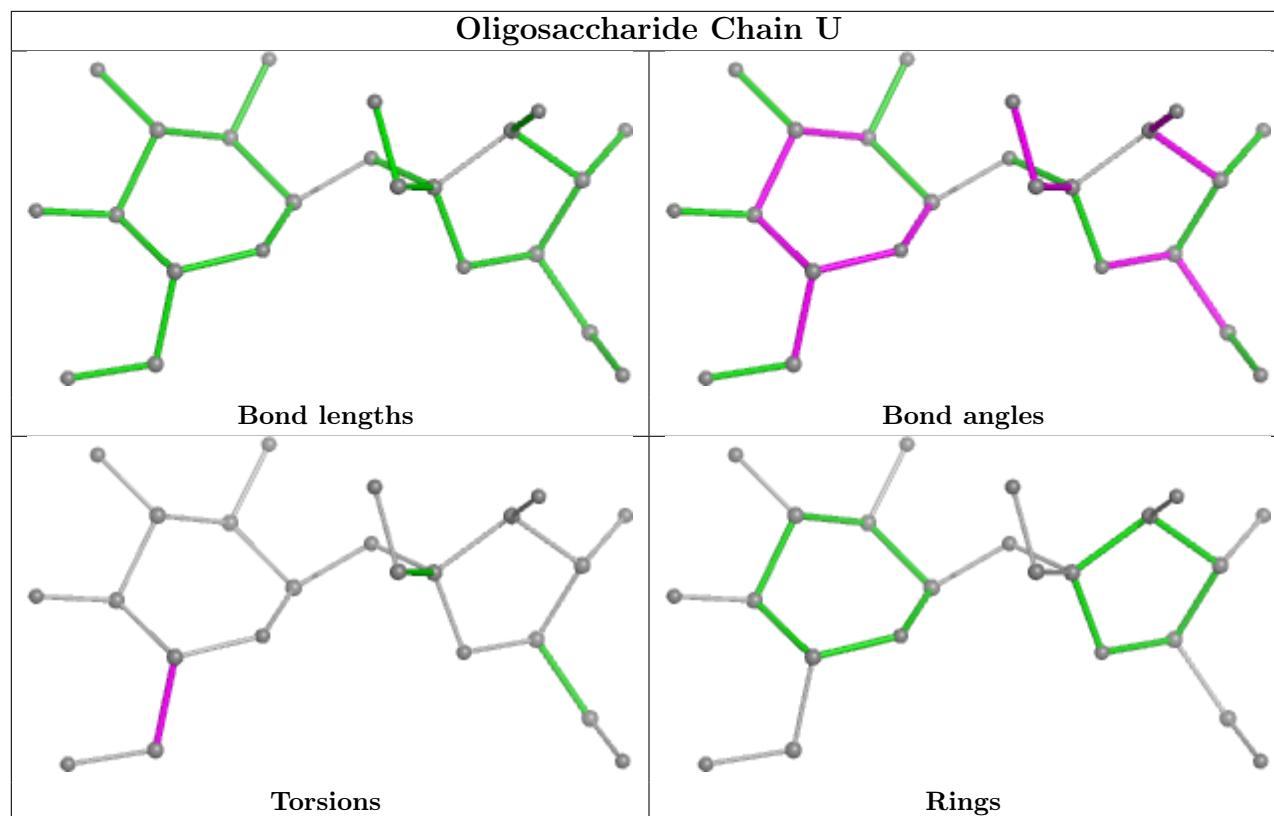


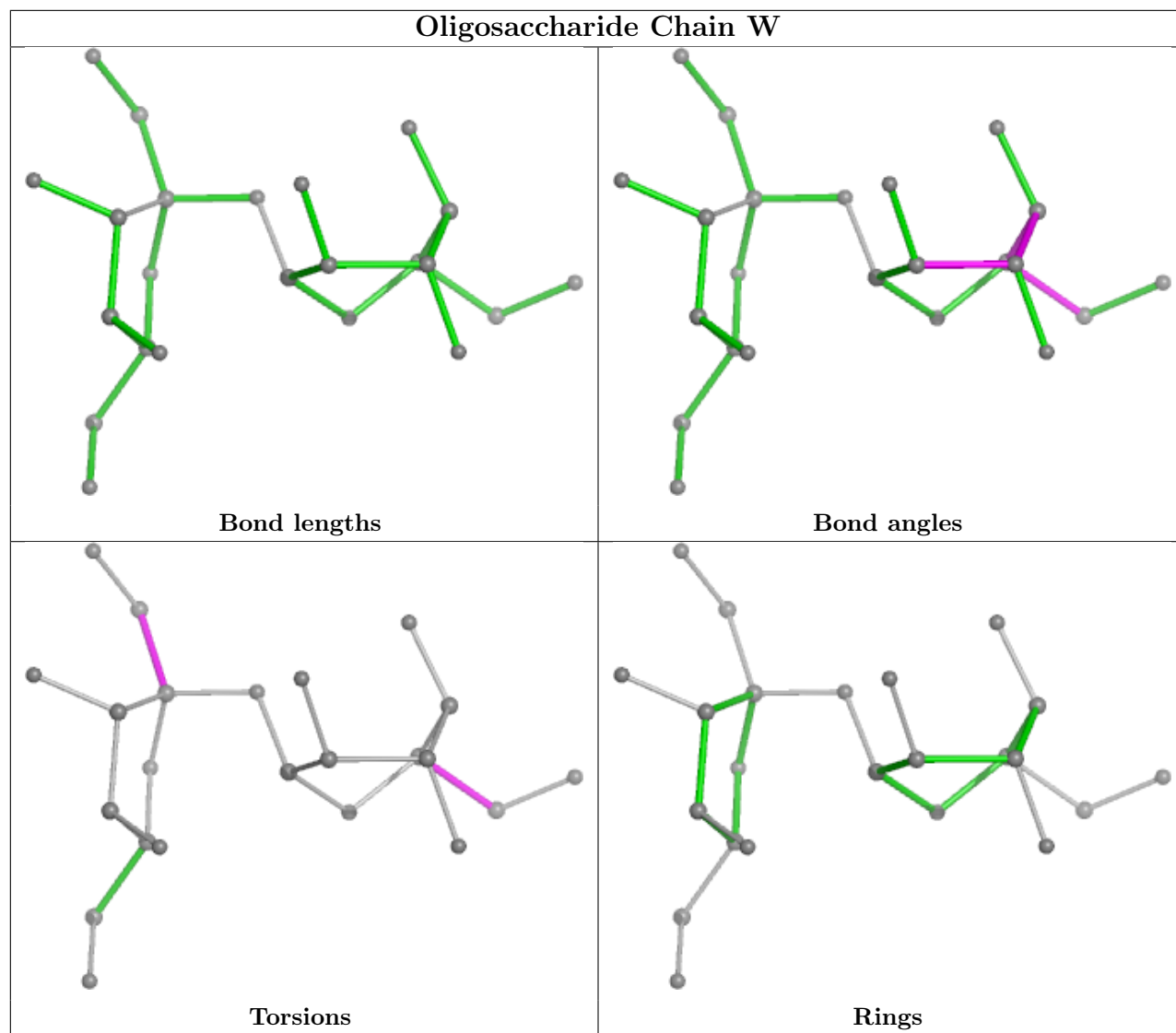


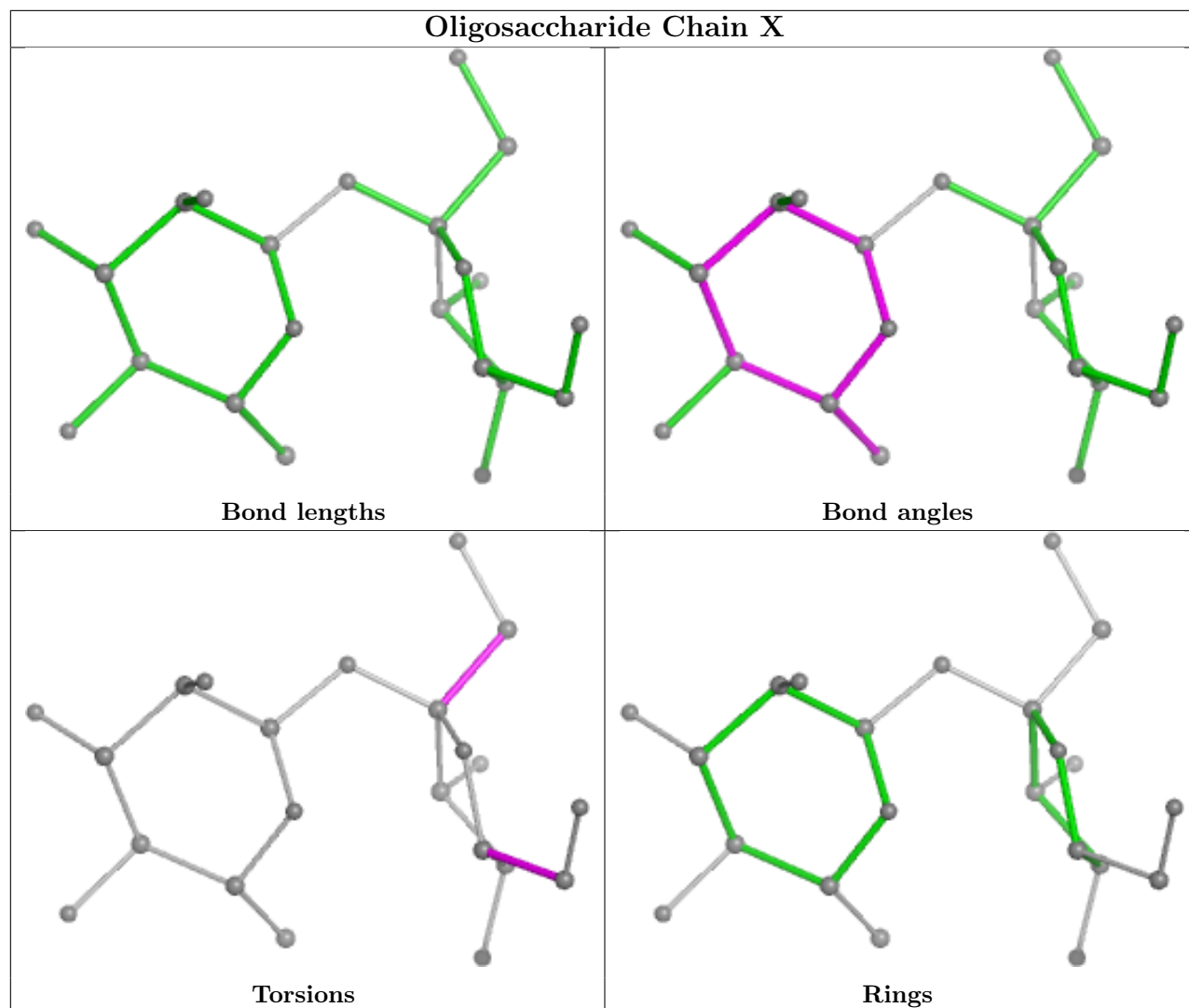


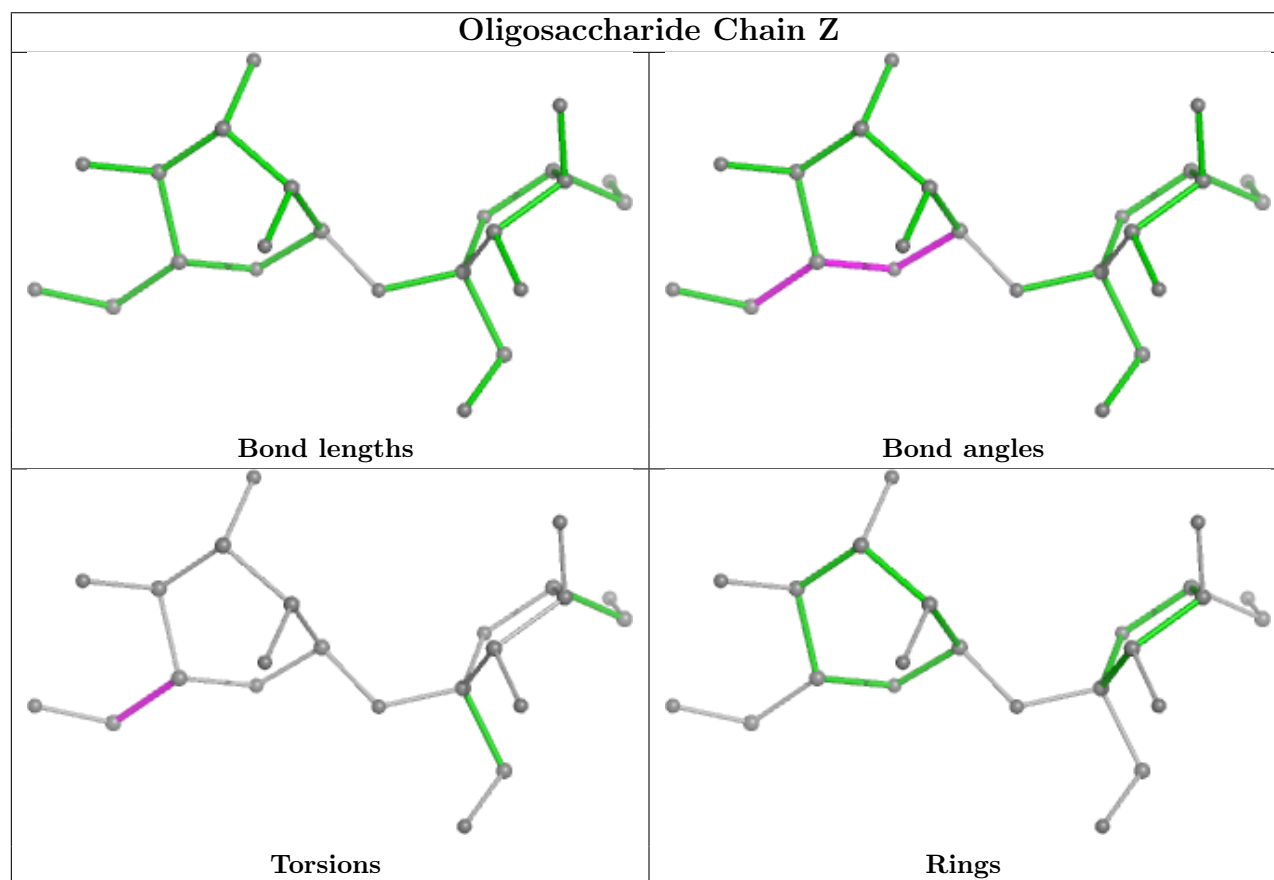
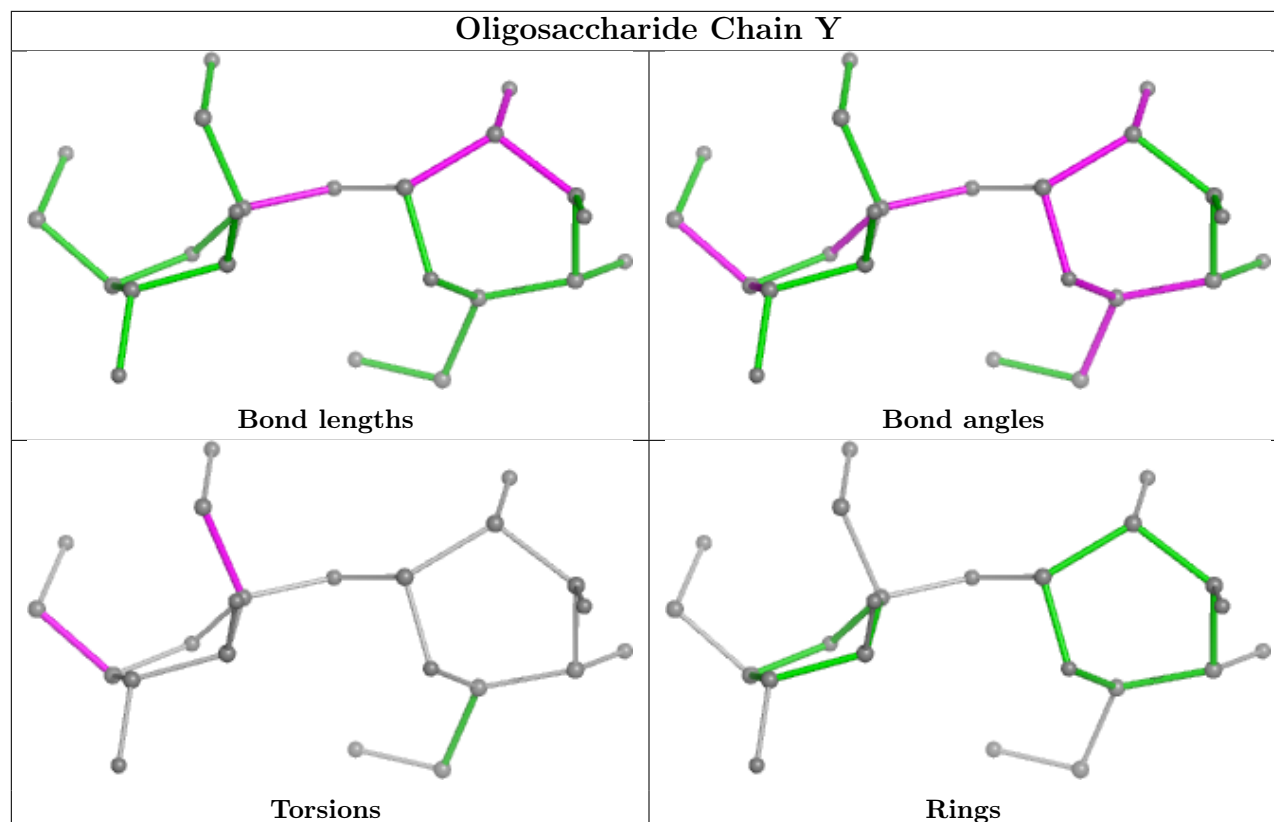


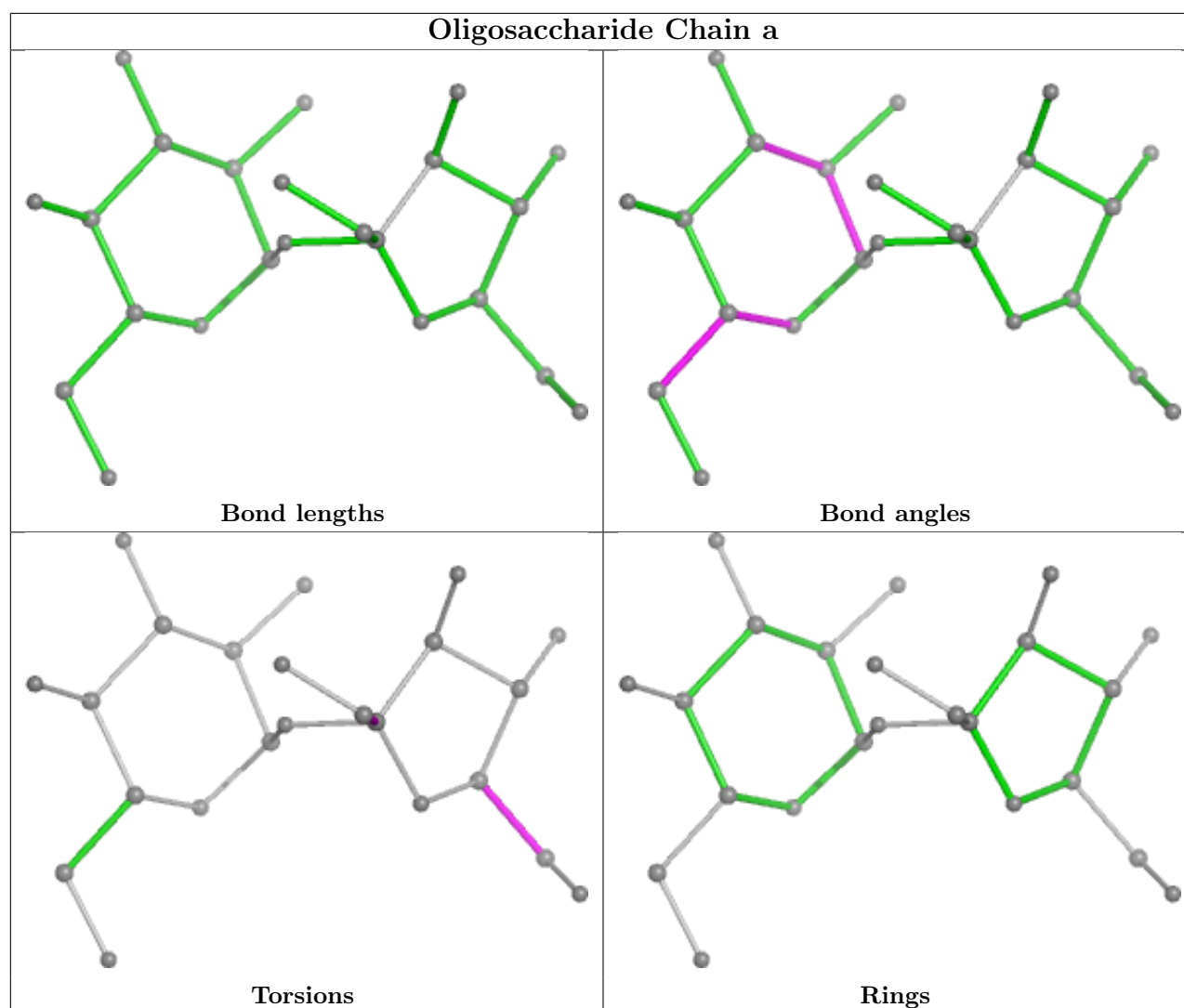












5.6 Ligand geometry [i](#)

Of 244 ligands modelled in this entry, 1 is unknown - leaving 243 for Mogul analysis.

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	$\# Z > 2$
20	CLA	B	836	-	51,59,73	2.50	16 (31%)	59,96,113	2.78	19 (32%)
20	CLA	R	108	-	65,73,73	2.19	12 (18%)	76,113,113	2.22	21 (27%)
20	CLA	3	308	-	27,32,73	2.11	8 (29%)	30,54,113	3.27	18 (60%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
20	CLA	B	802	-	54,62,73	2.37	13 (24%)	62,99,113	2.60	20 (32%)
22	BCR	A	843	-	41,41,41	1.95	3 (7%)	56,56,56	5.48	21 (37%)
20	CLA	A	811	20	65,73,73	2.22	13 (20%)	76,113,113	2.26	22 (28%)
20	CLA	B	834	-	45,53,73	2.66	13 (28%)	52,89,113	2.57	14 (26%)
20	CLA	A	851	-	65,73,73	2.26	13 (20%)	76,113,113	2.33	22 (28%)
20	CLA	B	816	-	60,68,73	2.23	12 (20%)	70,107,113	2.17	19 (27%)
21	LMU	B	804	-	36,36,36	0.70	0	47,47,47	1.75	12 (25%)
20	CLA	1	208	-	27,32,73	2.03	7 (25%)	30,54,113	3.04	19 (63%)
21	LMU	F	202	-	35,35,36	0.57	0	46,46,47	1.36	5 (10%)
20	CLA	B	822	-	46,54,73	2.50	12 (26%)	53,90,113	2.74	16 (30%)
20	CLA	A	802	-	27,32,73	2.20	8 (29%)	30,54,113	3.16	19 (63%)
20	CLA	4	307	-	27,32,73	2.22	9 (33%)	30,54,113	3.06	18 (60%)
20	CLA	A	816	-	54,62,73	2.44	18 (33%)	62,99,113	2.65	23 (37%)
20	CLA	B	810	-	60,68,73	2.32	14 (23%)	70,107,113	2.41	20 (28%)
20	CLA	K	102	-	50,58,73	2.49	14 (28%)	58,95,113	2.61	19 (32%)
20	CLA	A	841	-	27,32,73	2.28	10 (37%)	30,54,113	3.15	20 (66%)
20	CLA	3	301	-	35,44,73	2.78	12 (34%)	46,78,113	3.53	16 (34%)
20	CLA	A	834	-	46,54,73	2.59	14 (30%)	53,90,113	2.54	18 (33%)
20	CLA	1	207	-	51,59,73	2.53	16 (31%)	59,96,113	3.08	21 (35%)
20	CLA	3	307	-	42,50,73	2.76	14 (33%)	48,85,113	2.94	21 (43%)
20	CLA	4	312	-	27,32,73	2.19	7 (25%)	30,54,113	3.17	19 (63%)
20	CLA	B	809	-	65,73,73	2.23	13 (20%)	76,113,113	2.51	23 (30%)
20	CLA	A	819	-	58,66,73	2.30	12 (20%)	67,104,113	2.46	22 (32%)
21	LMU	2	319	-	36,36,36	0.56	0	47,47,47	0.68	0
20	CLA	L	209	-	47,55,73	2.55	11 (23%)	54,91,113	2.78	20 (37%)
20	CLA	L	201	-	60,68,73	2.29	13 (21%)	70,107,113	2.24	21 (30%)
21	LMU	R	105	-	36,36,36	0.75	1 (2%)	47,47,47	1.39	8 (17%)
21	LMU	R	102	-	36,36,36	0.57	0	47,47,47	1.51	9 (19%)
20	CLA	2	303	-	58,66,73	2.46	18 (31%)	67,104,113	2.81	22 (32%)
20	CLA	F	207	-	53,61,73	2.71	23 (43%)	61,98,113	2.85	25 (40%)
20	CLA	B	812	-	54,62,73	2.66	20 (37%)	67,100,113	3.33	23 (34%)
20	CLA	H	102	-	55,63,73	2.33	12 (21%)	64,101,113	2.49	19 (29%)
21	LMU	R	103	-	36,36,36	0.70	1 (2%)	47,47,47	1.46	6 (12%)
20	CLA	4	318	-	47,55,73	2.61	16 (34%)	54,91,113	2.87	22 (40%)
20	CLA	B	842	-	35,44,73	2.83	12 (34%)	46,78,113	3.53	20 (43%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
20	CLA	A	805	-	54,62,73	2.34	13 (24%)	62,99,113	2.51	18 (29%)
20	CLA	4	313	-	35,44,73	2.76	11 (31%)	46,78,113	3.54	19 (41%)
21	LMU	A	846	-	36,36,36	0.70	0	47,47,47	1.27	7 (14%)
20	CLA	A	824	-	59,67,73	2.28	13 (22%)	68,105,113	2.43	22 (32%)
21	LMU	2	320	-	36,36,36	0.82	1 (2%)	47,47,47	1.56	11 (23%)
20	CLA	3	304	-	27,32,73	2.21	11 (40%)	30,54,113	3.20	17 (56%)
20	CLA	B	818	-	53,61,73	2.40	13 (24%)	61,98,113	2.37	17 (27%)
22	BCR	F	204	-	41,41,41	2.16	5 (12%)	56,56,56	5.75	24 (42%)
20	CLA	A	829	-	50,58,73	2.51	13 (26%)	58,95,113	2.55	18 (31%)
20	CLA	4	317	-	52,60,73	2.50	15 (28%)	60,97,113	2.78	23 (38%)
20	CLA	B	825	-	54,62,73	2.42	15 (27%)	62,99,113	2.40	19 (30%)
20	CLA	2	317	-	65,73,73	2.32	20 (30%)	76,113,113	2.51	22 (28%)
20	CLA	B	839	-	47,55,73	2.79	20 (42%)	54,91,113	3.26	19 (35%)
20	CLA	B	833	-	50,58,73	2.49	15 (30%)	58,95,113	2.68	19 (32%)
20	CLA	A	804	20	55,63,73	2.42	13 (23%)	64,101,113	2.42	21 (32%)
20	CLA	1	214	-	27,32,73	2.17	8 (29%)	30,54,113	3.27	18 (60%)
21	LMU	H	106	-	36,36,36	0.60	1 (2%)	47,47,47	1.58	11 (23%)
20	CLA	2	308	-	27,32,73	2.32	14 (51%)	30,54,113	3.39	18 (60%)
25	LMG	B	848	-	49,49,55	0.99	2 (4%)	57,57,63	1.08	3 (5%)
20	CLA	1	201	-	46,54,73	2.57	16 (34%)	53,90,113	3.09	23 (43%)
20	CLA	A	806	-	56,64,73	2.31	13 (23%)	65,102,113	2.43	20 (30%)
22	BCR	G	104	-	41,41,41	1.87	3 (7%)	56,56,56	5.73	17 (30%)
24	SF4	A	856	5,6	0,12,12	-	-	-	-	-
20	CLA	1	202	-	41,49,73	2.70	12 (29%)	47,84,113	2.69	16 (34%)
20	CLA	A	801	-	46,54,73	2.69	14 (30%)	57,90,113	3.79	25 (43%)
20	CLA	2	310	2	50,58,73	2.67	15 (30%)	58,95,113	2.73	22 (37%)
20	CLA	B	814	-	65,73,73	2.19	14 (21%)	76,113,113	2.20	22 (28%)
20	CLA	2	312	-	61,69,73	2.29	15 (24%)	71,108,113	2.57	27 (38%)
20	CLA	A	836	-	47,55,73	2.57	13 (27%)	54,91,113	2.29	15 (27%)
22	BCR	L	211	-	41,41,41	2.00	4 (9%)	56,56,56	5.64	17 (30%)
20	CLA	A	807	-	46,54,73	2.54	13 (28%)	53,90,113	2.54	20 (37%)
20	CLA	B	820	-	61,69,73	2.16	14 (22%)	71,108,113	2.38	20 (28%)
21	LMU	A	847	-	36,36,36	0.68	1 (2%)	47,47,47	1.42	7 (14%)
20	CLA	B	806	-	65,73,73	2.20	15 (23%)	76,113,113	2.17	20 (26%)
20	CLA	B	830	-	65,73,73	2.19	15 (23%)	76,113,113	2.37	21 (27%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
20	CLA	B	808	-	61,69,73	2.27	18 (29%)	71,108,113	2.33	22 (30%)
20	CLA	A	850	-	65,73,73	2.19	13 (20%)	76,113,113	2.26	20 (26%)
20	CLA	1	212	-	27,32,73	2.14	8 (29%)	30,54,113	3.08	18 (60%)
20	CLA	A	815	-	50,58,73	2.51	12 (24%)	58,95,113	2.47	23 (39%)
20	CLA	B	827	-	65,73,73	2.15	13 (20%)	76,113,113	2.25	20 (26%)
21	LMU	R	101	-	36,36,36	0.86	2 (5%)	47,47,47	2.08	11 (23%)
22	BCR	B	801	-	41,41,41	2.52	6 (14%)	56,56,56	6.08	21 (37%)
21	LMU	K	105	-	36,36,36	0.68	1 (2%)	47,47,47	1.54	8 (17%)
20	CLA	B	837	-	60,68,73	2.23	12 (20%)	70,107,113	2.38	15 (21%)
20	CLA	A	813	-	50,58,73	2.43	13 (26%)	58,95,113	2.51	20 (34%)
20	CLA	2	305	-	50,58,73	2.47	12 (24%)	58,95,113	2.32	19 (32%)
20	CLA	A	823	-	58,66,73	2.25	12 (20%)	67,104,113	2.25	19 (28%)
20	CLA	A	810	-	45,53,73	2.68	14 (31%)	52,89,113	2.72	19 (36%)
20	CLA	3	303	-	35,44,73	2.84	10 (28%)	46,78,113	3.31	19 (41%)
21	LMU	1	216	-	36,36,36	0.45	0	47,47,47	1.38	6 (12%)
20	CLA	1	203	-	47,55,73	2.67	17 (36%)	54,91,113	3.07	22 (40%)
20	CLA	A	822	-	50,58,73	2.47	13 (26%)	58,95,113	2.46	19 (32%)
20	CLA	B	828	-	65,73,73	2.24	13 (20%)	76,113,113	2.41	21 (27%)
20	CLA	A	839	-	59,67,73	2.53	19 (32%)	68,105,113	2.67	24 (35%)
20	CLA	A	820	-	51,59,73	2.47	13 (25%)	59,96,113	2.63	17 (28%)
21	LMU	L	212	-	36,36,36	0.71	1 (2%)	47,47,47	1.29	4 (8%)
21	LMU	H	104	-	36,36,36	0.60	0	47,47,47	1.63	7 (14%)
20	CLA	2	315	-	50,58,73	2.57	17 (34%)	58,95,113	2.83	17 (29%)
20	CLA	G	105	-	51,59,73	2.51	16 (31%)	59,96,113	2.75	17 (28%)
20	CLA	L	210	-	50,58,73	2.50	14 (28%)	58,95,113	2.79	18 (31%)
22	BCR	F	203	-	41,41,41	2.01	3 (7%)	56,56,56	5.47	19 (33%)
21	LMU	H	103	-	36,36,36	0.86	1 (2%)	47,47,47	2.09	12 (25%)
20	CLA	1	215	-	51,59,73	2.52	20 (39%)	59,96,113	2.91	19 (32%)
20	CLA	A	831	-	65,73,73	2.32	22 (33%)	76,113,113	2.73	25 (32%)
20	CLA	B	826	-	58,66,73	2.32	13 (22%)	67,104,113	2.35	17 (25%)
20	CLA	2	304	-	27,32,73	2.17	12 (44%)	30,54,113	3.12	18 (60%)
20	CLA	B	829	-	65,73,73	2.17	16 (24%)	76,113,113	2.38	22 (28%)
20	CLA	B	832	-	59,67,73	2.34	13 (22%)	68,105,113	2.60	20 (29%)
20	CLA	2	302	-	51,59,73	2.63	18 (35%)	59,96,113	2.78	23 (38%)
21	LMU	4	316	-	36,36,36	0.72	1 (2%)	47,47,47	1.08	3 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
20	CLA	A	828	-	65,73,73	2.16	13 (20%)	76,113,113	2.33	21 (27%)
20	CLA	A	821	5	42,50,73	2.59	12 (28%)	48,85,113	2.87	15 (31%)
20	CLA	A	803	-	46,54,73	2.74	20 (43%)	53,90,113	3.07	17 (32%)
20	CLA	B	813	-	55,63,73	2.28	14 (25%)	64,101,113	2.44	18 (28%)
20	CLA	1	213	-	51,59,73	2.74	22 (43%)	59,96,113	2.95	26 (44%)
20	CLA	B	823	-	55,63,73	2.42	14 (25%)	64,101,113	2.29	20 (31%)
20	CLA	F	205	-	35,44,73	2.73	11 (31%)	46,78,113	3.16	21 (45%)
21	LMU	L	206	-	36,36,36	0.51	0	47,47,47	1.00	3 (6%)
22	BCR	B	847	-	41,41,41	1.95	3 (7%)	56,56,56	5.45	17 (30%)
20	CLA	K	101	-	46,54,73	2.61	15 (32%)	53,90,113	2.57	16 (30%)
20	CLA	A	817	-	52,60,73	2.44	13 (25%)	60,97,113	2.56	18 (30%)
20	CLA	1	206	-	61,69,73	2.23	14 (22%)	71,108,113	2.37	23 (32%)
20	CLA	I	102	-	60,68,73	2.25	12 (20%)	70,107,113	2.29	16 (22%)
21	LMU	B	849	-	26,26,36	0.77	1 (3%)	37,37,47	1.28	6 (16%)
20	CLA	B	838	-	65,73,73	2.13	12 (18%)	76,113,113	2.25	19 (25%)
21	LMU	E	101	-	36,36,36	0.61	0	47,47,47	1.88	13 (27%)
21	LMU	G	102	-	36,36,36	0.61	0	47,47,47	1.59	8 (17%)
21	LMU	G	103	-	36,36,36	0.50	0	47,47,47	0.93	1 (2%)
20	CLA	4	306	-	52,60,73	2.67	17 (32%)	60,97,113	3.08	32 (53%)
21	LMU	A	848	-	36,36,36	0.49	0	47,47,47	0.86	3 (6%)
20	CLA	B	815	-	60,68,73	2.29	13 (21%)	70,107,113	2.16	17 (24%)
20	CLA	2	301	-	27,32,73	2.19	9 (33%)	30,54,113	3.13	20 (66%)
20	CLA	4	301	-	55,63,73	2.38	13 (23%)	64,101,113	2.47	18 (28%)
21	LMU	1	217	-	36,36,36	0.57	0	47,47,47	0.98	1 (2%)
20	CLA	4	309	-	27,32,73	2.11	7 (25%)	30,54,113	3.15	16 (53%)
20	CLA	A	830	-	65,73,73	2.19	13 (20%)	76,113,113	2.20	16 (21%)
20	CLA	4	303	-	65,73,73	2.29	19 (29%)	76,113,113	2.74	27 (35%)
20	CLA	2	309	-	27,32,73	2.30	11 (40%)	30,54,113	3.08	17 (56%)
20	CLA	J	103	-	61,69,73	2.28	16 (26%)	71,108,113	2.18	19 (26%)
20	CLA	4	310	-	50,58,73	2.56	18 (36%)	58,95,113	2.92	18 (31%)
20	CLA	3	314	-	50,58,73	2.48	12 (24%)	58,95,113	2.32	20 (34%)
20	CLA	3	318	-	35,44,73	2.81	12 (34%)	46,78,113	3.43	19 (41%)
20	CLA	A	849	-	65,73,73	2.12	16 (24%)	76,113,113	2.22	21 (27%)
21	LMU	C	101	-	36,36,36	0.70	1 (2%)	47,47,47	1.26	4 (8%)
20	CLA	B	831	-	50,58,73	2.54	12 (24%)	58,95,113	2.36	19 (32%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
21	LMU	2	321	-	36,36,36	0.46	0	47,47,47	1.27	3 (6%)
20	CLA	B	840	-	65,73,73	2.17	13 (20%)	76,113,113	2.26	21 (27%)
21	LMU	4	320	-	36,36,36	0.77	1 (2%)	47,47,47	1.28	7 (14%)
22	BCR	B	845	-	41,41,41	1.76	3 (7%)	56,56,56	4.78	19 (33%)
20	CLA	1	209	-	27,32,73	2.32	9 (33%)	30,54,113	3.24	21 (70%)
20	CLA	2	316	-	27,32,73	2.15	10 (37%)	30,54,113	3.01	15 (50%)
22	BCR	B	846	-	41,41,41	1.98	4 (9%)	56,56,56	5.56	21 (37%)
20	CLA	A	812	-	54,62,73	2.33	13 (24%)	62,99,113	2.29	15 (24%)
20	CLA	B	835	-	45,53,73	2.65	15 (33%)	52,89,113	2.61	16 (30%)
21	LMU	B	805	-	36,36,36	0.67	1 (2%)	47,47,47	1.66	12 (25%)
20	CLA	B	824	-	65,73,73	2.44	21 (32%)	76,113,113	2.36	21 (27%)
22	BCR	A	845	-	41,41,41	2.01	4 (9%)	56,56,56	5.71	26 (46%)
21	LMU	R	106	-	36,36,36	0.52	0	47,47,47	1.23	4 (8%)
20	CLA	3	306	-	27,32,73	2.07	9 (33%)	30,54,113	3.14	18 (60%)
20	CLA	K	103	-	50,58,73	2.60	15 (30%)	58,95,113	2.69	23 (39%)
20	CLA	2	307	-	65,73,73	2.19	14 (21%)	76,113,113	2.44	22 (28%)
20	CLA	1	210	1	35,44,73	2.79	11 (31%)	46,78,113	3.42	16 (34%)
20	CLA	L	203	-	65,73,73	2.13	12 (18%)	76,113,113	2.33	22 (28%)
20	CLA	B	821	-	50,58,73	2.43	13 (26%)	58,95,113	2.57	21 (36%)
20	CLA	B	811	6	27,32,73	2.31	12 (44%)	30,54,113	2.86	17 (56%)
20	CLA	L	208	16	50,58,73	2.47	12 (24%)	58,95,113	2.48	21 (36%)
21	LMU	3	319	-	36,36,36	0.49	0	47,47,47	0.72	1 (2%)
20	CLA	A	825	-	65,73,73	2.15	13 (20%)	76,113,113	2.15	15 (19%)
21	LMU	K	106	-	36,36,36	0.37	0	47,47,47	1.06	4 (8%)
20	CLA	3	311	-	65,73,73	2.19	12 (18%)	76,113,113	2.31	19 (25%)
20	CLA	1	211	-	51,59,73	2.62	20 (39%)	59,96,113	3.14	22 (37%)
20	CLA	4	314	4	27,32,73	2.11	8 (29%)	30,54,113	2.98	19 (63%)
20	CLA	3	316	-	27,32,73	2.32	11 (40%)	30,54,113	3.22	20 (66%)
20	CLA	A	837	-	51,59,73	2.47	13 (25%)	59,96,113	2.67	19 (32%)
20	CLA	3	313	-	27,32,73	2.12	8 (29%)	30,54,113	3.11	19 (63%)
20	CLA	3	315	-	65,73,73	2.27	20 (30%)	76,113,113	2.55	21 (27%)
20	CLA	4	302	-	35,44,73	2.97	13 (37%)	46,78,113	3.58	19 (41%)
20	CLA	A	826	-	65,73,73	2.16	12 (18%)	76,113,113	2.31	21 (27%)
23	PQN	B	843	-	34,34,34	1.66	2 (5%)	42,45,45	1.35	6 (14%)
21	LMU	1	218	-	36,36,36	0.70	0	47,47,47	1.65	8 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
21	LMU	A	852	-	36,36,36	0.55	1 (2%)	47,47,47	0.85	1 (2%)
20	CLA	K	104	-	56,64,73	2.43	16 (28%)	65,102,113	2.73	20 (30%)
20	CLA	4	304	-	55,63,73	2.36	13 (23%)	64,101,113	2.49	19 (29%)
20	CLA	3	317	-	27,32,73	2.16	10 (37%)	30,54,113	3.24	17 (56%)
20	CLA	A	808	5	60,68,73	2.33	14 (23%)	70,107,113	2.40	22 (31%)
21	LMU	A	853	-	36,36,36	0.50	0	47,47,47	1.42	6 (12%)
20	CLA	4	305	-	50,58,73	2.57	19 (38%)	58,95,113	2.62	21 (36%)
21	LMU	3	320	-	36,36,36	0.44	0	47,47,47	1.12	4 (8%)
21	LMU	G	101	-	36,36,36	1.11	4 (11%)	47,47,47	2.03	11 (23%)
20	CLA	B	803	-	65,73,73	2.20	12 (18%)	76,113,113	2.27	20 (26%)
20	CLA	A	809	-	52,60,73	2.41	12 (23%)	60,97,113	2.53	24 (40%)
20	CLA	F	201	-	50,58,73	2.56	21 (42%)	58,95,113	2.73	19 (32%)
21	LMU	2	313	-	36,36,36	0.52	0	47,47,47	1.60	6 (12%)
21	LMU	D	201	-	36,36,36	0.47	0	47,47,47	1.44	6 (12%)
21	LMU	H	105	-	36,36,36	0.72	1 (2%)	47,47,47	1.66	9 (19%)
20	CLA	B	841	-	65,73,73	2.12	15 (23%)	76,113,113	2.13	18 (23%)
22	BCR	2	318	-	41,41,41	1.96	3 (7%)	56,56,56	5.70	19 (33%)
22	BCR	I	103	-	41,41,41	2.13	5 (12%)	56,56,56	6.16	28 (50%)
21	LMU	A	855	-	36,36,36	0.66	1 (2%)	47,47,47	1.38	7 (14%)
20	CLA	1	205	-	35,44,73	2.91	11 (31%)	46,78,113	3.25	16 (34%)
22	BCR	J	102	-	41,41,41	1.92	3 (7%)	56,56,56	5.54	18 (32%)
20	CLA	H	101	-	55,63,73	2.42	13 (23%)	64,101,113	2.49	21 (32%)
20	CLA	L	202	-	55,63,73	2.37	13 (23%)	64,101,113	2.48	20 (31%)
20	CLA	B	817	-	46,54,73	2.50	12 (26%)	53,90,113	2.64	20 (37%)
20	CLA	B	819	-	41,49,73	3.00	20 (48%)	47,84,113	3.06	18 (38%)
21	LMU	4	321	-	36,36,36	0.46	0	47,47,47	1.46	7 (14%)
23	PQN	A	842	-	34,34,34	1.69	2 (5%)	42,45,45	1.21	5 (11%)
20	CLA	H	112	-	55,63,73	2.37	12 (21%)	64,101,113	2.35	20 (31%)
22	BCR	A	844	-	41,41,41	2.02	3 (7%)	56,56,56	5.57	21 (37%)
20	CLA	2	306	-	27,32,73	2.11	10 (37%)	30,54,113	2.88	17 (56%)
20	CLA	A	832	-	50,58,73	2.47	13 (26%)	58,95,113	2.43	18 (31%)
20	CLA	A	838	-	65,73,73	2.20	14 (21%)	76,113,113	2.27	24 (31%)
20	CLA	A	840	-	55,63,73	2.33	14 (25%)	64,101,113	2.47	17 (26%)
20	CLA	A	833	5	45,53,73	2.66	13 (28%)	52,89,113	2.84	21 (40%)
20	CLA	R	107	-	57,65,73	2.32	12 (21%)	66,103,113	2.47	22 (33%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
20	CLA	A	827	-	55,63,73	2.36	14 (25%)	64,101,113	2.42	20 (31%)
20	CLA	B	807	-	45,53,73	2.65	13 (28%)	52,89,113	2.69	16 (30%)
21	LMU	R	104	-	36,36,36	0.57	0	47,47,47	1.29	5 (10%)
21	LMU	4	319	-	35,35,36	0.80	2 (5%)	46,46,47	1.81	11 (23%)
20	CLA	2	311	-	50,58,73	2.48	14 (28%)	58,95,113	2.65	22 (37%)
20	CLA	A	818	-	60,68,73	2.47	18 (30%)	70,107,113	2.70	25 (35%)
21	LMU	A	854	-	36,36,36	0.51	0	47,47,47	1.28	7 (14%)
20	CLA	F	206	-	41,49,73	2.72	13 (31%)	47,84,113	2.73	16 (34%)
20	CLA	H	111	-	58,66,73	2.54	20 (34%)	67,104,113	2.56	24 (35%)
20	CLA	A	835	-	65,73,73	2.25	14 (21%)	76,113,113	2.39	25 (32%)
20	CLA	B	850	-	65,73,73	2.18	16 (24%)	76,113,113	2.30	25 (32%)
20	CLA	4	311	-	27,32,73	2.08	10 (37%)	30,54,113	3.18	17 (56%)
21	LMU	L	205	-	36,36,36	0.65	0	47,47,47	1.92	13 (27%)
20	CLA	L	204	-	55,63,73	2.39	13 (23%)	64,101,113	2.41	22 (34%)
20	CLA	3	305	-	27,32,73	2.03	7 (25%)	30,54,113	3.02	16 (53%)
21	LMU	K	107	-	36,36,36	0.52	0	47,47,47	1.31	6 (12%)
22	BCR	B	844	-	41,41,41	1.86	3 (7%)	56,56,56	5.19	24 (42%)
20	CLA	3	310	-	65,73,73	2.23	19 (29%)	76,113,113	2.55	26 (34%)
24	SF4	C	102	7	0,12,12	-	-	-	-	-
20	CLA	4	308	-	27,32,73	2.28	12 (44%)	30,54,113	3.23	19 (63%)
24	SF4	C	103	7	0,12,12	-	-	-	-	-
20	CLA	1	204	-	46,54,73	2.77	16 (34%)	53,90,113	3.03	23 (43%)
20	CLA	4	315	-	46,54,73	2.55	16 (34%)	53,90,113	2.55	17 (32%)
22	BCR	I	101	-	39,40,41	1.67	3 (7%)	52,53,56	4.25	19 (36%)
21	LMU	2	322	-	36,36,36	0.82	1 (2%)	47,47,47	1.18	4 (8%)
21	LMU	R	109	-	36,36,36	0.49	0	47,47,47	0.82	1 (2%)
20	CLA	3	309	-	27,32,73	2.20	10 (37%)	30,54,113	3.26	17 (56%)
20	CLA	A	814	-	27,32,73	2.26	10 (37%)	30,54,113	3.15	16 (53%)
20	CLA	3	302	-	27,32,73	2.11	7 (25%)	30,54,113	3.03	16 (53%)
20	CLA	J	101	-	48,56,73	2.52	13 (27%)	55,92,113	2.56	15 (27%)

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
20	CLA	B	836	-	1/1/12/20	10/21/99/115	-
20	CLA	R	108	-	2/2/15/20	20/37/115/115	-
20	CLA	3	308	-	1/1/4/20	-	-
20	CLA	B	802	-	1/1/12/20	10/24/102/115	-
22	BCR	A	843	-	-	14/29/63/63	0/2/2/2
20	CLA	A	811	20	2/2/15/20	23/37/115/115	-
20	CLA	B	834	-	1/1/11/20	10/13/91/115	-
20	CLA	A	851	-	2/2/15/20	25/37/115/115	-
20	CLA	B	816	-	2/2/14/20	14/31/109/115	-
21	LMU	B	804	-	-	16/21/61/61	0/2/2/2
20	CLA	1	208	-	1/1/4/20	-	-
21	LMU	F	202	-	-	13/20/60/61	0/2/2/2
20	CLA	B	822	-	1/1/11/20	12/15/93/115	-
20	CLA	A	802	-	1/1/4/20	-	-
20	CLA	4	307	-	1/1/4/20	-	-
20	CLA	A	816	-	1/1/12/20	10/24/102/115	-
20	CLA	B	810	-	2/2/14/20	10/31/109/115	-
20	CLA	K	102	-	1/1/12/20	4/19/97/115	-
20	CLA	A	841	-	1/1/4/20	-	-
20	CLA	3	301	-	1/1/9/20	-	-
20	CLA	A	834	-	1/1/11/20	7/15/93/115	-
20	CLA	1	207	-	2/2/12/20	9/21/99/115	-
20	CLA	3	307	-	1/1/10/20	7/10/88/115	-
20	CLA	4	312	-	1/1/4/20	-	-
20	CLA	B	809	-	2/2/15/20	16/37/115/115	-
20	CLA	A	819	-	2/2/13/20	11/29/107/115	-
21	LMU	2	319	-	-	13/21/61/61	0/2/2/2
20	CLA	L	209	-	1/1/11/20	9/16/94/115	-
20	CLA	L	201	-	2/2/14/20	14/31/109/115	-
21	LMU	R	105	-	-	14/21/61/61	0/2/2/2
21	LMU	R	102	-	-	11/21/61/61	0/2/2/2
20	CLA	2	303	-	2/2/13/20	15/29/107/115	-
20	CLA	F	207	-	4/4/12/20	11/23/101/115	-
20	CLA	B	812	-	2/2/13/20	8/25/101/115	-
20	CLA	H	102	-	2/2/13/20	14/25/103/115	-
21	LMU	R	103	-	-	11/21/61/61	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	CLA	4	318	-	1/1/11/20	12/16/94/115	-
20	CLA	B	842	-	1/1/9/20	-	-
20	CLA	A	805	-	1/1/12/20	13/24/102/115	-
20	CLA	4	313	-	1/1/9/20	-	-
21	LMU	A	846	-	-	17/21/61/61	0/2/2/2
20	CLA	A	824	-	2/2/13/20	14/30/108/115	-
21	LMU	2	320	-	-	11/21/61/61	0/2/2/2
20	CLA	3	304	-	1/1/4/20	-	-
20	CLA	B	818	-	1/1/12/20	8/23/101/115	-
22	BCR	F	204	-	-	9/29/63/63	0/2/2/2
20	CLA	A	829	-	1/1/12/20	5/19/97/115	-
20	CLA	4	317	-	1/1/12/20	11/22/100/115	-
20	CLA	B	825	-	1/1/12/20	9/24/102/115	-
20	CLA	2	317	-	2/2/15/20	15/37/115/115	-
20	CLA	B	839	-	1/1/11/20	11/16/94/115	-
20	CLA	B	833	-	1/1/12/20	6/19/97/115	-
20	CLA	A	804	20	2/2/13/20	12/25/103/115	-
20	CLA	1	214	-	1/1/4/20	-	-
21	LMU	H	106	-	-	9/21/61/61	0/2/2/2
20	CLA	2	308	-	1/1/4/20	-	-
25	LMG	B	848	-	-	27/44/64/70	0/1/1/1
20	CLA	1	201	-	1/1/11/20	10/15/93/115	-
20	CLA	A	806	-	2/2/13/20	7/27/105/115	-
22	BCR	G	104	-	-	14/29/63/63	0/2/2/2
24	SF4	A	856	5,6	-	-	0/6/5/5
20	CLA	1	202	-	1/1/10/20	4/8/86/115	-
20	CLA	A	801	-	3/3/11/20	11/16/92/115	-
20	CLA	2	310	2	1/1/12/20	5/19/97/115	-
20	CLA	B	814	-	2/2/15/20	22/37/115/115	-
20	CLA	2	312	-	2/2/14/20	22/33/111/115	-
20	CLA	A	836	-	1/1/11/20	7/16/94/115	-
22	BCR	L	211	-	-	10/29/63/63	0/2/2/2
20	CLA	A	807	-	1/1/11/20	7/15/93/115	-
20	CLA	B	820	-	2/2/14/20	15/33/111/115	-
21	LMU	A	847	-	-	13/21/61/61	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	CLA	B	806	-	2/2/15/20	20/37/115/115	-
20	CLA	B	830	-	2/2/15/20	25/37/115/115	-
20	CLA	B	808	-	2/2/14/20	19/33/111/115	-
20	CLA	A	850	-	2/2/15/20	18/37/115/115	-
20	CLA	1	212	-	1/1/4/20	-	-
20	CLA	A	815	-	1/1/12/20	10/19/97/115	-
20	CLA	B	827	-	2/2/15/20	21/37/115/115	-
21	LMU	R	101	-	-	13/21/61/61	0/2/2/2
22	BCR	B	801	-	-	13/29/63/63	0/2/2/2
21	LMU	K	105	-	-	12/21/61/61	0/2/2/2
20	CLA	B	837	-	2/2/14/20	14/31/109/115	-
20	CLA	A	813	-	1/1/12/20	9/19/97/115	-
20	CLA	2	305	-	1/1/12/20	7/19/97/115	-
20	CLA	A	823	-	2/2/13/20	12/29/107/115	-
20	CLA	A	810	-	1/1/11/20	4/13/91/115	-
20	CLA	3	303	-	1/1/9/20	-	-
21	LMU	1	216	-	-	11/21/61/61	0/2/2/2
20	CLA	1	203	-	1/1/11/20	8/16/94/115	-
20	CLA	A	822	-	1/1/12/20	6/19/97/115	-
20	CLA	B	828	-	2/2/15/20	16/37/115/115	-
20	CLA	A	839	-	2/2/13/20	14/29/107/115	-
20	CLA	A	820	-	1/1/12/20	8/21/99/115	-
21	LMU	L	212	-	-	16/21/61/61	0/2/2/2
21	LMU	H	104	-	-	12/21/61/61	0/2/2/2
20	CLA	2	315	-	1/1/12/20	8/19/97/115	-
20	CLA	G	105	-	1/1/12/20	10/21/99/115	-
20	CLA	L	210	-	2/2/12/20	10/19/97/115	-
22	BCR	F	203	-	-	13/29/63/63	0/2/2/2
21	LMU	H	103	-	-	14/21/61/61	0/2/2/2
20	CLA	1	215	-	2/2/12/20	8/21/99/115	-
20	CLA	A	831	-	2/2/15/20	19/37/115/115	-
20	CLA	B	826	-	2/2/13/20	19/29/107/115	-
20	CLA	2	304	-	1/1/4/20	-	-
20	CLA	B	829	-	2/2/15/20	18/37/115/115	-
20	CLA	B	832	-	2/2/13/20	16/30/108/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	CLA	2	302	-	1/1/12/20	12/21/99/115	-
21	LMU	4	316	-	-	13/21/61/61	0/2/2/2
20	CLA	A	828	-	2/2/15/20	20/37/115/115	-
20	CLA	A	821	5	1/1/10/20	2/10/88/115	-
20	CLA	A	803	-	1/1/11/20	3/15/93/115	-
20	CLA	B	813	-	2/2/13/20	12/25/103/115	-
20	CLA	1	213	-	3/3/12/20	10/21/99/115	-
20	CLA	B	823	-	2/2/13/20	10/25/103/115	-
20	CLA	F	205	-	1/1/9/20	-	-
21	LMU	L	206	-	-	14/21/61/61	0/2/2/2
22	BCR	B	847	-	-	12/29/63/63	0/2/2/2
20	CLA	K	101	-	1/1/11/20	6/15/93/115	-
20	CLA	A	817	-	1/1/12/20	14/22/100/115	-
20	CLA	1	206	-	2/2/14/20	20/33/111/115	-
20	CLA	I	102	-	2/2/14/20	13/31/109/115	-
21	LMU	B	849	-	-	5/11/51/61	0/2/2/2
20	CLA	B	838	-	2/2/15/20	13/37/115/115	-
21	LMU	E	101	-	-	14/21/61/61	0/2/2/2
21	LMU	G	102	-	-	14/21/61/61	0/2/2/2
21	LMU	G	103	-	-	14/21/61/61	0/2/2/2
20	CLA	4	306	-	2/2/12/20	7/22/100/115	-
21	LMU	A	848	-	-	12/21/61/61	0/2/2/2
20	CLA	B	815	-	2/2/14/20	17/31/109/115	-
20	CLA	2	301	-	1/1/4/20	-	-
20	CLA	4	301	-	2/2/13/20	13/25/103/115	-
21	LMU	1	217	-	-	9/21/61/61	0/2/2/2
20	CLA	4	309	-	1/1/4/20	-	-
20	CLA	A	830	-	2/2/15/20	18/37/115/115	-
20	CLA	4	303	-	3/3/15/20	22/37/115/115	-
20	CLA	2	309	-	1/1/4/20	-	-
20	CLA	J	103	-	2/2/14/20	20/33/111/115	-
20	CLA	4	310	-	1/1/12/20	10/19/97/115	-
20	CLA	3	314	-	1/1/12/20	8/19/97/115	-
20	CLA	3	318	-	1/1/9/20	-	-
20	CLA	A	849	-	2/2/15/20	26/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
21	LMU	C	101	-	-	14/21/61/61	0/2/2/2
20	CLA	B	831	-	1/1/12/20	10/19/97/115	-
21	LMU	2	321	-	-	18/21/61/61	0/2/2/2
20	CLA	B	840	-	2/2/15/20	17/37/115/115	-
21	LMU	4	320	-	-	16/21/61/61	0/2/2/2
22	BCR	B	845	-	-	9/29/63/63	0/2/2/2
20	CLA	1	209	-	1/1/4/20	-	-
20	CLA	2	316	-	1/1/4/20	-	-
22	BCR	B	846	-	-	14/29/63/63	0/2/2/2
20	CLA	A	812	-	1/1/12/20	13/24/102/115	-
20	CLA	B	835	-	1/1/11/20	7/13/91/115	-
21	LMU	B	805	-	-	13/21/61/61	0/2/2/2
20	CLA	B	824	-	2/2/15/20	19/37/115/115	-
22	BCR	A	845	-	-	10/29/63/63	0/2/2/2
21	LMU	R	106	-	-	12/21/61/61	0/2/2/2
20	CLA	3	306	-	1/1/4/20	-	-
20	CLA	K	103	-	1/1/12/20	10/19/97/115	-
20	CLA	2	307	-	2/2/15/20	21/37/115/115	-
20	CLA	1	210	1	1/1/9/20	-	-
20	CLA	L	203	-	2/2/15/20	16/37/115/115	-
20	CLA	B	821	-	1/1/12/20	6/19/97/115	-
20	CLA	B	811	6	1/1/4/20	-	-
20	CLA	L	208	16	1/1/12/20	8/19/97/115	-
21	LMU	3	319	-	-	12/21/61/61	0/2/2/2
20	CLA	A	825	-	2/2/15/20	24/37/115/115	-
21	LMU	K	106	-	-	13/21/61/61	0/2/2/2
20	CLA	3	311	-	2/2/15/20	21/37/115/115	-
20	CLA	1	211	-	2/2/12/20	8/21/99/115	-
20	CLA	4	314	4	1/1/4/20	-	-
20	CLA	3	316	-	1/1/4/20	-	-
20	CLA	A	837	-	1/1/12/20	14/21/99/115	-
20	CLA	3	313	-	1/1/4/20	-	-
20	CLA	3	315	-	2/2/15/20	17/37/115/115	-
20	CLA	4	302	-	1/1/9/20	-	-
20	CLA	A	826	-	2/2/15/20	15/37/115/115	-
23	PQN	B	843	-	1/1/8/9	10/23/43/43	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
21	LMU	1	218	-	-	13/21/61/61	0/2/2/2
21	LMU	A	852	-	-	20/21/61/61	0/2/2/2
20	CLA	K	104	-	2/2/13/20	11/27/105/115	-
20	CLA	4	304	-	2/2/13/20	12/25/103/115	-
20	CLA	3	317	-	1/1/4/20	-	-
20	CLA	A	808	5	2/2/14/20	15/31/109/115	-
21	LMU	A	853	-	-	11/21/61/61	0/2/2/2
20	CLA	4	305	-	1/1/12/20	9/19/97/115	-
21	LMU	3	320	-	-	11/21/61/61	0/2/2/2
21	LMU	G	101	-	-	13/21/61/61	0/2/2/2
20	CLA	B	803	-	2/2/15/20	19/37/115/115	-
20	CLA	A	809	-	1/1/12/20	10/22/100/115	-
20	CLA	F	201	-	1/1/12/20	9/19/97/115	-
21	LMU	2	313	-	-	16/21/61/61	0/2/2/2
21	LMU	D	201	-	-	9/21/61/61	0/2/2/2
21	LMU	H	105	-	-	17/21/61/61	0/2/2/2
20	CLA	B	841	-	2/2/15/20	18/37/115/115	-
22	BCR	2	318	-	-	15/29/63/63	0/2/2/2
22	BCR	I	103	-	-	15/29/63/63	0/2/2/2
21	LMU	A	855	-	-	13/21/61/61	0/2/2/2
20	CLA	1	205	-	1/1/9/20	-	-
22	BCR	J	102	-	-	11/29/63/63	0/2/2/2
20	CLA	H	101	-	3/3/13/20	11/25/103/115	-
20	CLA	L	202	-	2/2/13/20	14/25/103/115	-
20	CLA	B	817	-	1/1/11/20	11/15/93/115	-
20	CLA	B	819	-	1/1/10/20	2/8/86/115	-
21	LMU	4	321	-	-	15/21/61/61	0/2/2/2
23	PQN	A	842	-	1/1/8/9	11/23/43/43	0/2/2/2
20	CLA	H	112	-	2/2/13/20	8/25/103/115	-
22	BCR	A	844	-	-	14/29/63/63	0/2/2/2
20	CLA	2	306	-	1/1/4/20	-	-
20	CLA	A	832	-	1/1/12/20	11/19/97/115	-
20	CLA	A	838	-	2/2/15/20	18/37/115/115	-
20	CLA	A	840	-	2/2/13/20	8/25/103/115	-
20	CLA	A	833	5	1/1/11/20	6/13/91/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	CLA	R	107	-	2/2/13/20	14/28/106/115	-
20	CLA	A	827	-	2/2/13/20	10/25/103/115	-
20	CLA	B	807	-	1/1/11/20	5/13/91/115	-
21	LMU	R	104	-	-	14/21/61/61	0/2/2/2
21	LMU	4	319	-	-	13/20/60/61	0/2/2/2
20	CLA	2	311	-	1/1/12/20	11/19/97/115	-
20	CLA	A	818	-	2/2/14/20	14/31/109/115	-
21	LMU	A	854	-	-	16/21/61/61	0/2/2/2
20	CLA	F	206	-	1/1/10/20	3/8/86/115	-
20	CLA	H	111	-	2/2/13/20	18/29/107/115	-
20	CLA	A	835	-	2/2/15/20	15/37/115/115	-
20	CLA	B	850	-	2/2/15/20	21/37/115/115	-
20	CLA	4	311	-	1/1/4/20	-	-
21	LMU	L	205	-	-	13/21/61/61	0/2/2/2
20	CLA	L	204	-	2/2/13/20	7/25/103/115	-
20	CLA	3	305	-	1/1/4/20	-	-
21	LMU	K	107	-	-	17/21/61/61	0/2/2/2
22	BCR	B	844	-	-	7/29/63/63	0/2/2/2
20	CLA	3	310	-	2/2/15/20	18/37/115/115	-
24	SF4	C	102	7	-	-	0/6/5/5
20	CLA	4	308	-	1/1/4/20	-	-
24	SF4	C	103	7	-	-	0/6/5/5
20	CLA	1	204	-	1/1/11/20	10/15/93/115	-
20	CLA	4	315	-	1/1/11/20	9/15/93/115	-
22	BCR	I	101	-	-	10/29/60/63	0/2/2/2
21	LMU	2	322	-	-	8/21/61/61	0/2/2/2
21	LMU	R	109	-	-	14/21/61/61	0/2/2/2
20	CLA	3	309	-	1/1/4/20	-	-
20	CLA	A	814	-	1/1/4/20	-	-
20	CLA	3	302	-	1/1/4/20	-	-
20	CLA	J	101	-	1/1/11/20	10/17/95/115	-

The worst 5 of 2443 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	801	BCR	C21-C22	-9.91	1.22	1.35
22	B	801	BCR	C20-C21	-9.21	1.14	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
20	1	205	CLA	CAB-C3B	-8.82	1.33	1.51
20	B	812	CLA	CAB-C3B	-8.73	1.33	1.51
20	4	302	CLA	CAB-C3B	-8.49	1.34	1.51

The worst 5 of 4072 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	G	104	BCR	C20-C21-C22	36.27	179.07	127.31
22	L	211	BCR	C20-C21-C22	35.78	178.38	127.31
22	A	845	BCR	C20-C21-C22	35.54	178.03	127.31
22	J	102	BCR	C20-C21-C22	35.47	177.93	127.31
22	B	846	BCR	C20-C21-C22	35.39	177.82	127.31

5 of 258 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
20	1	201	CLA	ND
20	1	202	CLA	ND
20	1	203	CLA	ND
20	1	204	CLA	ND
20	1	205	CLA	ND

5 of 2543 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
20	1	201	CLA	C1A-C2A-CAA-CBA
20	1	201	CLA	C3A-C2A-CAA-CBA
20	1	201	CLA	CBA-CGA-O2A-C1
20	1	201	CLA	CHA-CBD-CGD-O1D
20	1	201	CLA	CHA-CBD-CGD-O2D

There are no ring outliers.

224 monomers are involved in 2729 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	B	836	CLA	9	0
20	R	108	CLA	4	0
20	3	308	CLA	2	0
20	B	802	CLA	17	0
22	A	843	BCR	32	0
20	A	811	CLA	22	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	B	834	CLA	23	0
20	A	851	CLA	26	0
20	B	816	CLA	8	0
21	B	804	LMU	7	0
20	1	208	CLA	3	0
21	F	202	LMU	8	0
20	B	822	CLA	16	0
20	A	816	CLA	21	0
20	B	810	CLA	18	0
20	K	102	CLA	27	0
20	A	841	CLA	1	0
20	3	301	CLA	1	0
20	A	834	CLA	7	0
20	1	207	CLA	6	1
20	3	307	CLA	14	0
20	4	312	CLA	4	0
20	B	809	CLA	22	0
20	A	819	CLA	33	0
21	2	319	LMU	6	0
20	L	209	CLA	27	0
20	L	201	CLA	23	0
21	R	102	LMU	8	0
20	2	303	CLA	25	0
20	F	207	CLA	13	0
20	B	812	CLA	9	0
20	H	102	CLA	2	0
21	R	103	LMU	9	0
20	4	318	CLA	14	0
20	B	842	CLA	2	0
20	A	805	CLA	16	0
20	4	313	CLA	5	0
21	A	846	LMU	5	0
20	A	824	CLA	43	0
21	2	320	LMU	5	0
20	3	304	CLA	2	0
20	B	818	CLA	17	0
22	F	204	BCR	34	0
20	A	829	CLA	7	0
20	4	317	CLA	3	0
20	B	825	CLA	24	0
20	2	317	CLA	11	0
20	B	839	CLA	47	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	B	833	CLA	18	0
20	A	804	CLA	36	0
21	H	106	LMU	9	0
20	2	308	CLA	1	0
25	B	848	LMG	17	0
20	1	201	CLA	13	0
20	A	806	CLA	13	0
22	G	104	BCR	5	0
24	A	856	SF4	18	0
20	1	202	CLA	1	0
20	A	801	CLA	9	0
20	2	310	CLA	21	0
20	B	814	CLA	30	0
20	2	312	CLA	19	0
20	A	836	CLA	6	0
22	L	211	BCR	36	0
20	A	807	CLA	33	0
20	B	820	CLA	17	0
21	A	847	LMU	4	0
20	B	806	CLA	25	0
20	B	830	CLA	24	0
20	B	808	CLA	31	0
20	A	850	CLA	30	0
20	1	212	CLA	2	0
20	A	815	CLA	4	0
20	B	827	CLA	36	0
21	R	101	LMU	3	0
22	B	801	BCR	24	0
21	K	105	LMU	13	0
20	B	837	CLA	12	0
20	A	813	CLA	21	0
20	2	305	CLA	16	0
20	A	823	CLA	10	0
20	A	810	CLA	4	0
20	3	303	CLA	4	0
21	1	216	LMU	3	0
20	1	203	CLA	8	0
20	A	822	CLA	20	0
20	B	828	CLA	13	0
20	A	839	CLA	27	0
20	A	820	CLA	8	0
21	L	212	LMU	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
21	H	104	LMU	9	0
20	2	315	CLA	17	0
20	G	105	CLA	4	0
20	L	210	CLA	9	0
22	F	203	BCR	26	0
21	H	103	LMU	6	0
20	1	215	CLA	1	0
20	A	831	CLA	37	0
20	B	826	CLA	39	0
20	2	304	CLA	2	0
20	B	829	CLA	25	0
20	B	832	CLA	24	0
20	2	302	CLA	13	0
21	4	316	LMU	1	0
20	A	828	CLA	18	0
20	A	821	CLA	8	0
20	A	803	CLA	20	0
20	B	813	CLA	8	0
20	1	213	CLA	16	0
20	B	823	CLA	15	0
20	F	205	CLA	1	0
22	B	847	BCR	32	0
20	K	101	CLA	16	1
20	A	817	CLA	8	0
20	1	206	CLA	9	0
20	I	102	CLA	12	0
21	B	849	LMU	1	0
20	B	838	CLA	42	0
21	E	101	LMU	11	0
21	G	102	LMU	7	0
21	G	103	LMU	16	0
20	4	306	CLA	18	0
21	A	848	LMU	4	0
20	B	815	CLA	17	0
20	4	301	CLA	34	0
21	1	217	LMU	20	0
20	A	830	CLA	31	0
20	4	303	CLA	18	0
20	J	103	CLA	14	0
20	4	310	CLA	25	0
20	3	314	CLA	1	0
20	A	849	CLA	21	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	B	831	CLA	11	0
21	2	321	LMU	5	0
20	B	840	CLA	18	0
21	4	320	LMU	2	0
22	B	845	BCR	18	0
20	1	209	CLA	1	0
22	B	846	BCR	32	0
20	A	812	CLA	4	0
20	B	835	CLA	30	0
21	B	805	LMU	3	0
20	B	824	CLA	30	0
22	A	845	BCR	48	0
21	R	106	LMU	9	0
20	3	306	CLA	7	0
20	K	103	CLA	9	0
20	2	307	CLA	22	0
20	1	210	CLA	8	0
20	L	203	CLA	29	0
20	B	821	CLA	7	0
20	B	811	CLA	4	0
20	L	208	CLA	3	0
21	3	319	LMU	2	0
20	A	825	CLA	51	0
21	K	106	LMU	8	0
20	3	311	CLA	10	0
20	1	211	CLA	7	0
20	4	314	CLA	10	0
20	A	837	CLA	17	0
20	3	315	CLA	13	0
20	4	302	CLA	3	0
20	A	826	CLA	49	0
23	B	843	PQN	28	0
21	1	218	LMU	9	0
21	A	852	LMU	5	0
20	K	104	CLA	17	0
20	4	304	CLA	21	0
20	A	808	CLA	21	0
21	A	853	LMU	21	0
20	4	305	CLA	5	0
21	3	320	LMU	14	0
21	G	101	LMU	4	41
20	B	803	CLA	44	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	A	809	CLA	32	0
20	F	201	CLA	29	0
21	2	313	LMU	29	0
21	D	201	LMU	3	0
21	H	105	LMU	18	0
20	B	841	CLA	17	0
22	2	318	BCR	9	0
22	I	103	BCR	38	0
20	1	205	CLA	6	0
22	J	102	BCR	36	0
20	H	101	CLA	15	0
20	L	202	CLA	10	0
20	B	817	CLA	19	0
20	B	819	CLA	7	0
21	4	321	LMU	13	0
23	A	842	PQN	7	0
20	H	112	CLA	13	0
22	A	844	BCR	23	0
20	A	832	CLA	19	0
20	A	838	CLA	33	0
20	A	840	CLA	6	0
20	A	833	CLA	13	0
20	R	107	CLA	10	0
20	A	827	CLA	19	0
20	B	807	CLA	9	0
21	R	104	LMU	5	0
21	4	319	LMU	8	3
20	2	311	CLA	6	0
20	A	818	CLA	46	0
21	A	854	LMU	15	0
20	F	206	CLA	5	0
20	H	111	CLA	27	0
20	A	835	CLA	15	0
20	B	850	CLA	18	0
20	4	311	CLA	3	0
21	L	205	LMU	1	0
20	L	204	CLA	13	0
20	3	305	CLA	3	0
21	K	107	LMU	21	0
22	B	844	BCR	8	0
20	3	310	CLA	17	0
24	C	102	SF4	4	0

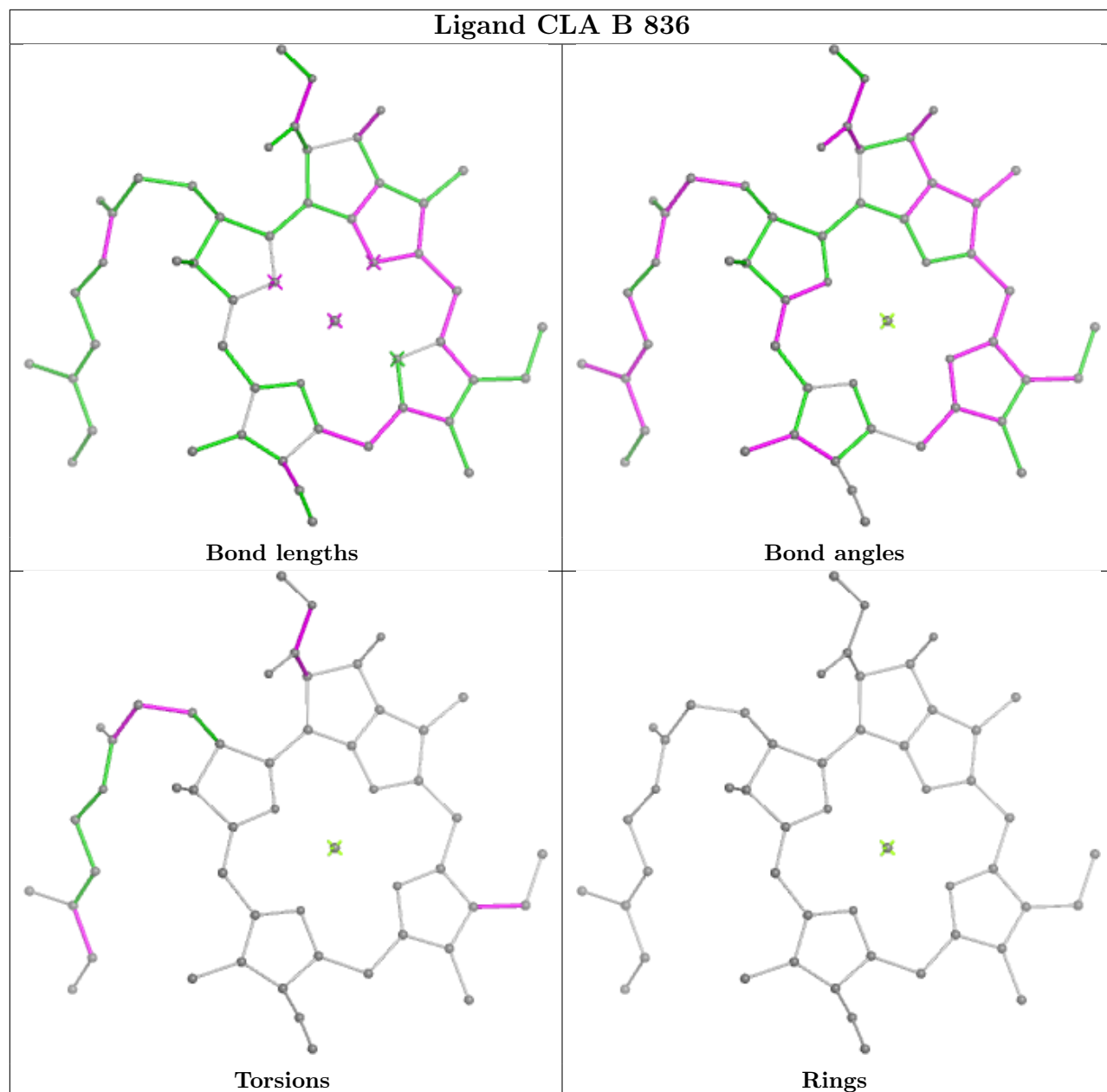
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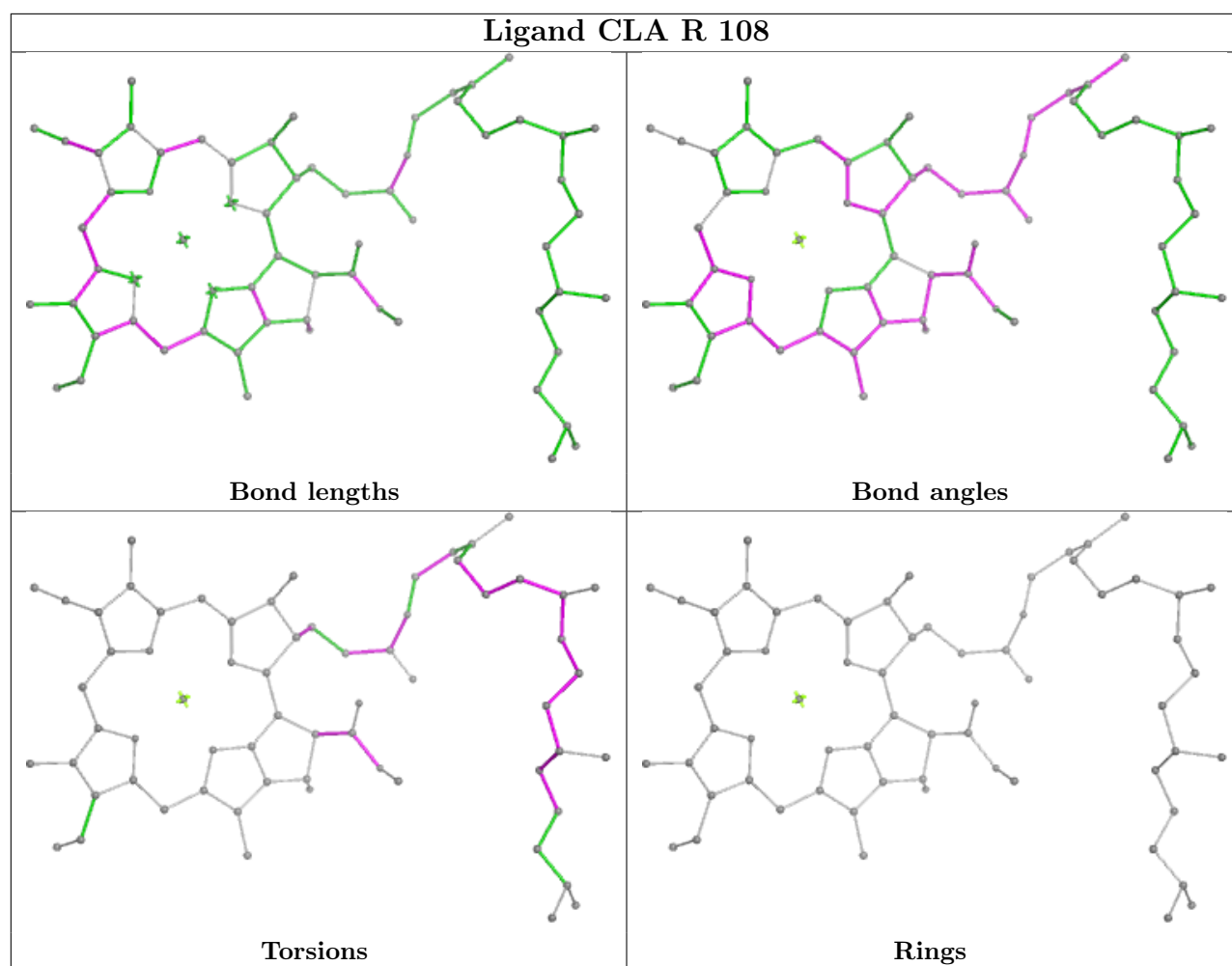
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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	C	103	SF4	1	0
20	1	204	CLA	15	0
20	4	315	CLA	5	0
22	I	101	BCR	9	0
21	R	109	LMU	9	3
20	3	309	CLA	1	0
20	A	814	CLA	14	0
20	J	101	CLA	12	0

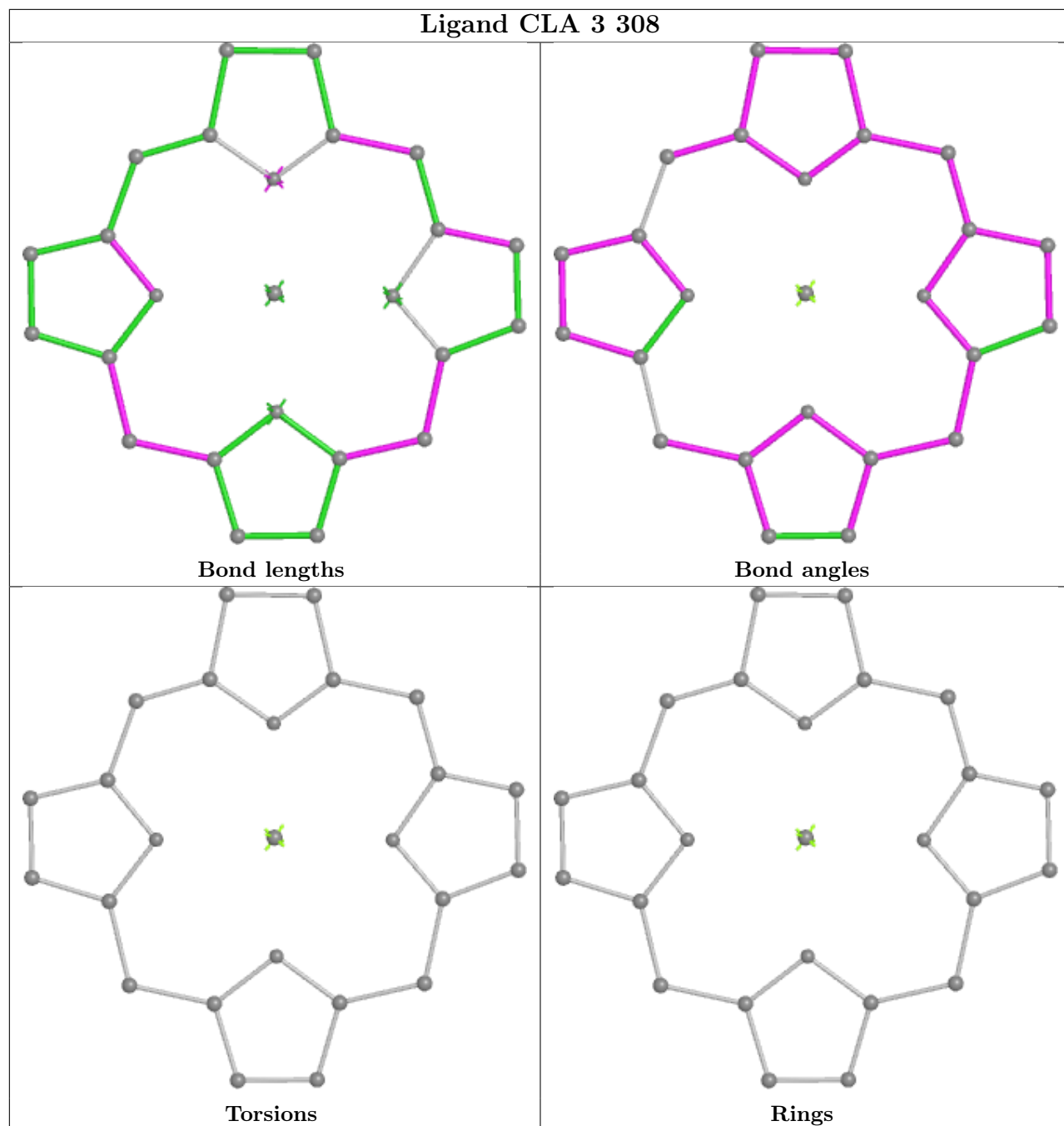
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 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 B 836

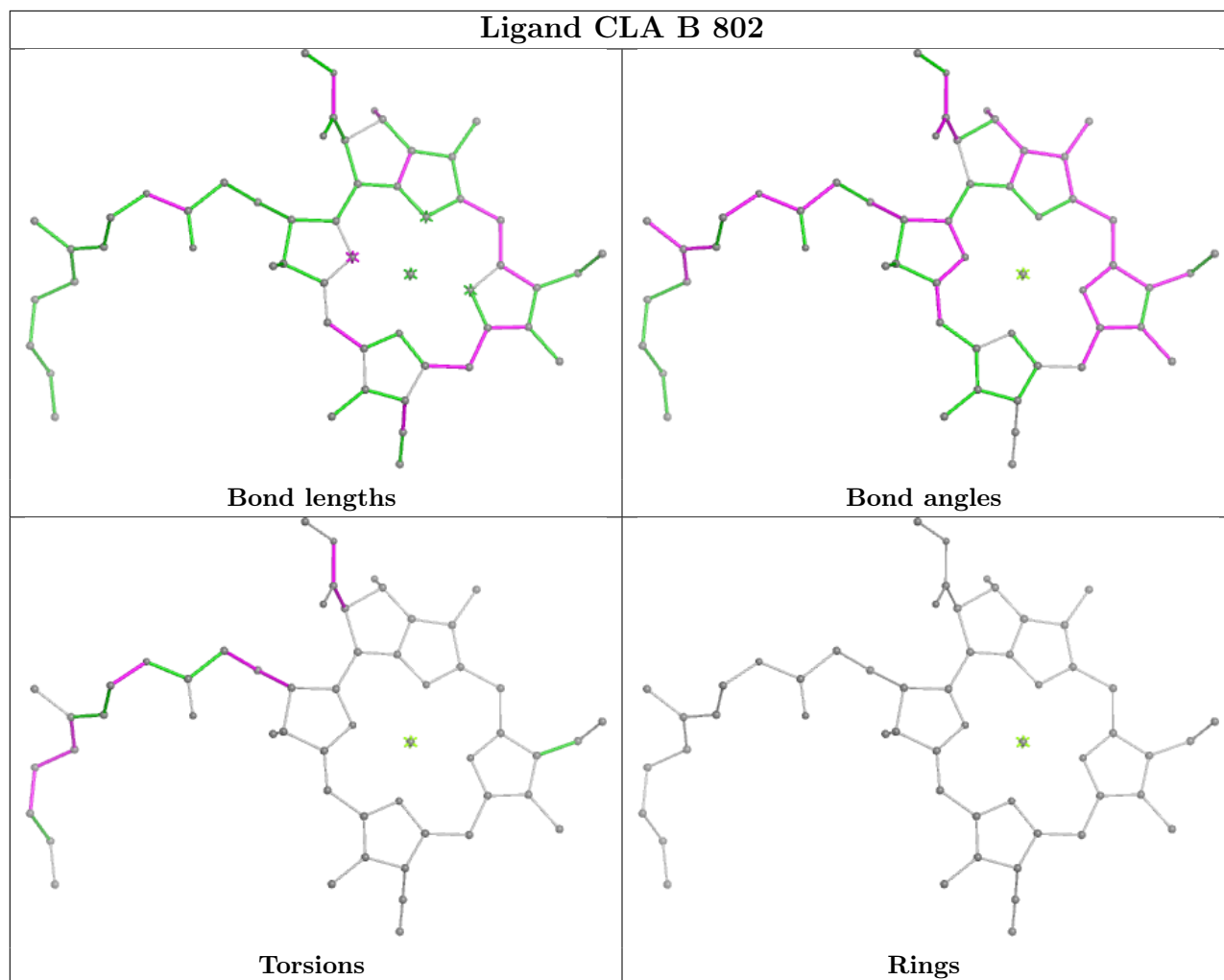




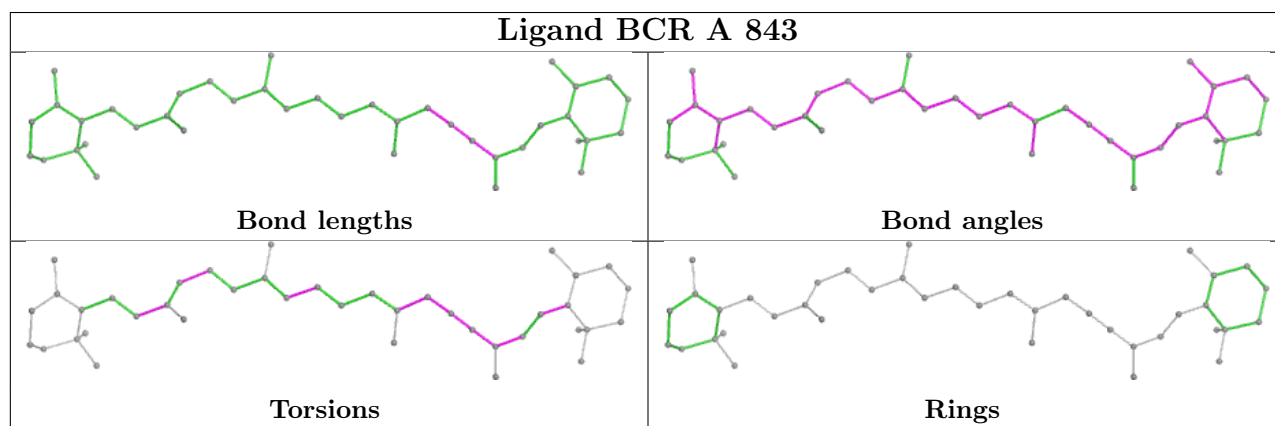
Ligand CLA 3 308

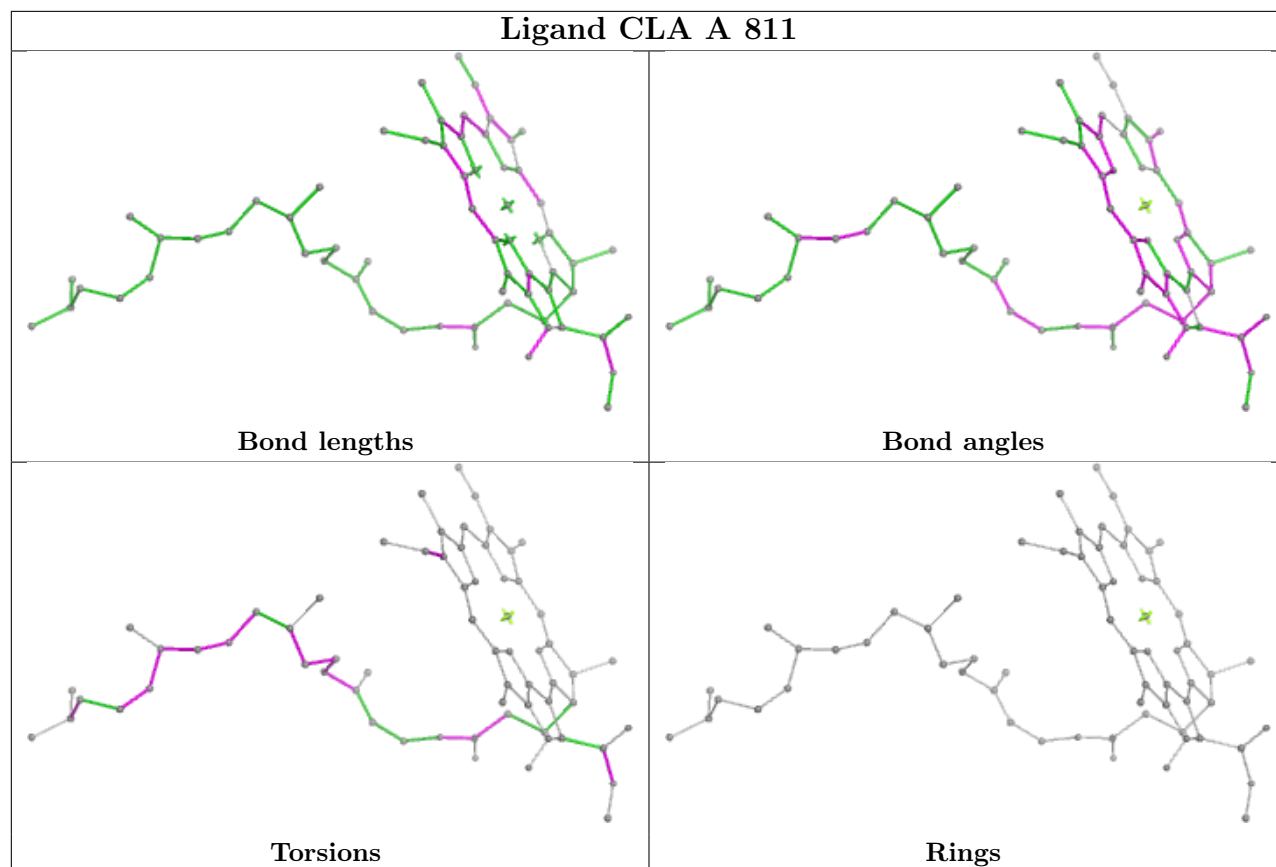


Ligand CLA B 802

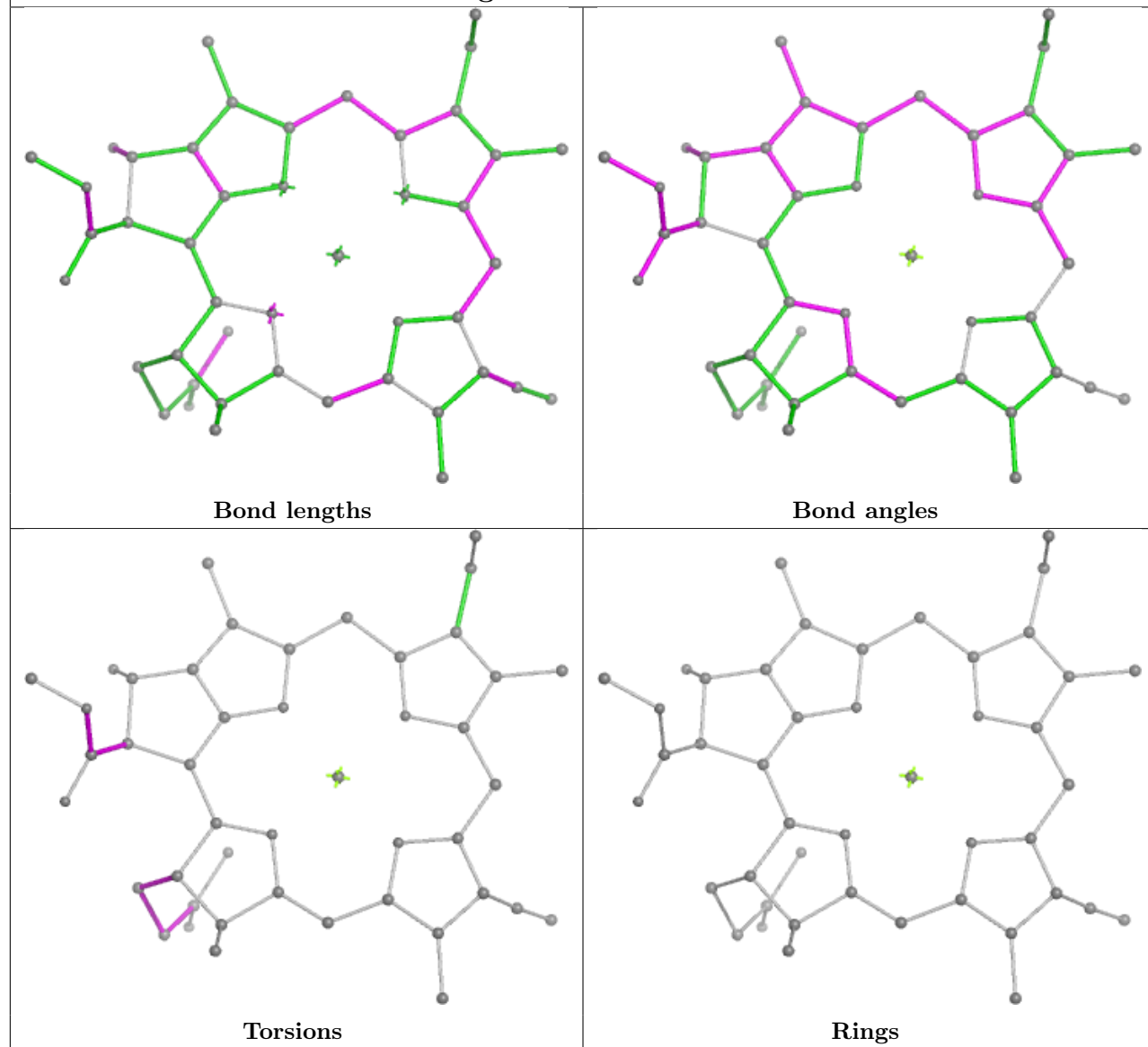


Ligand BCR A 843

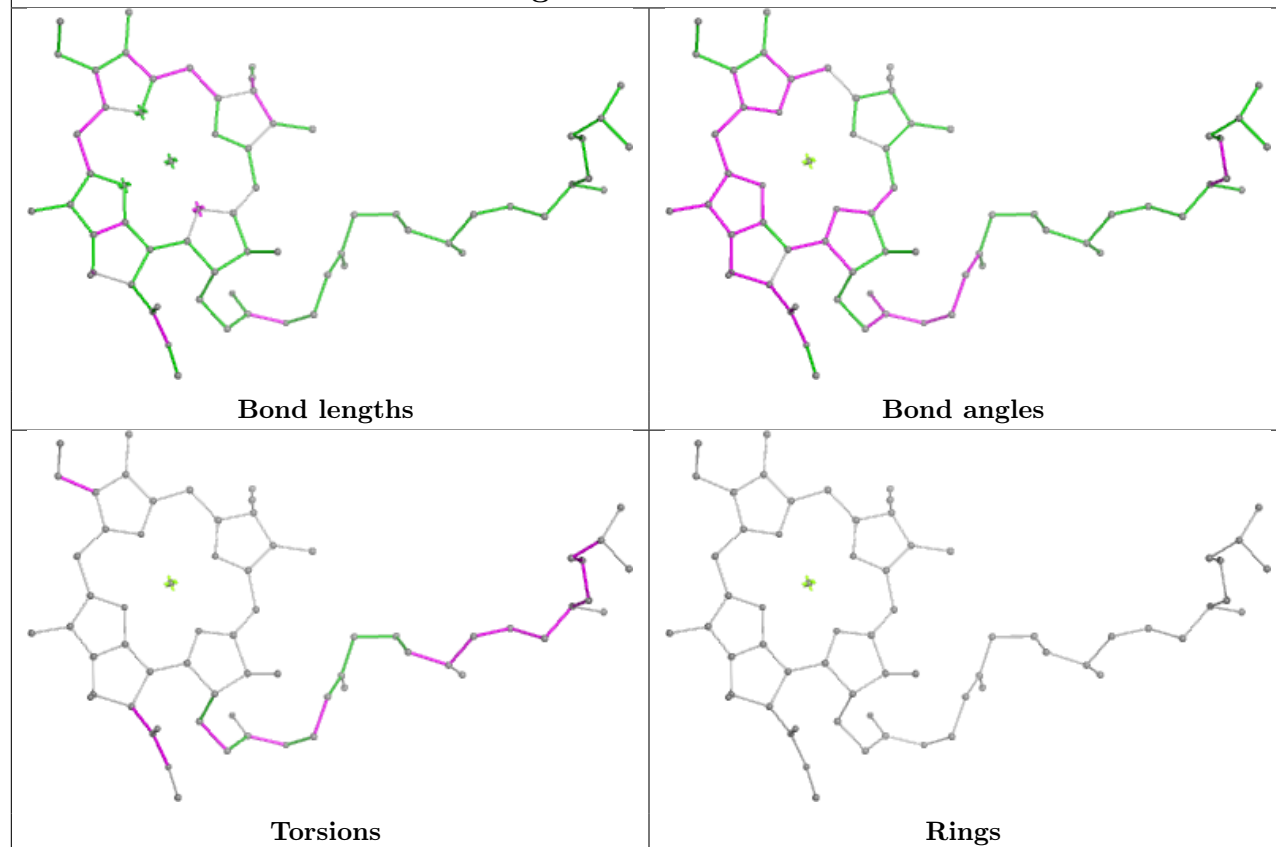




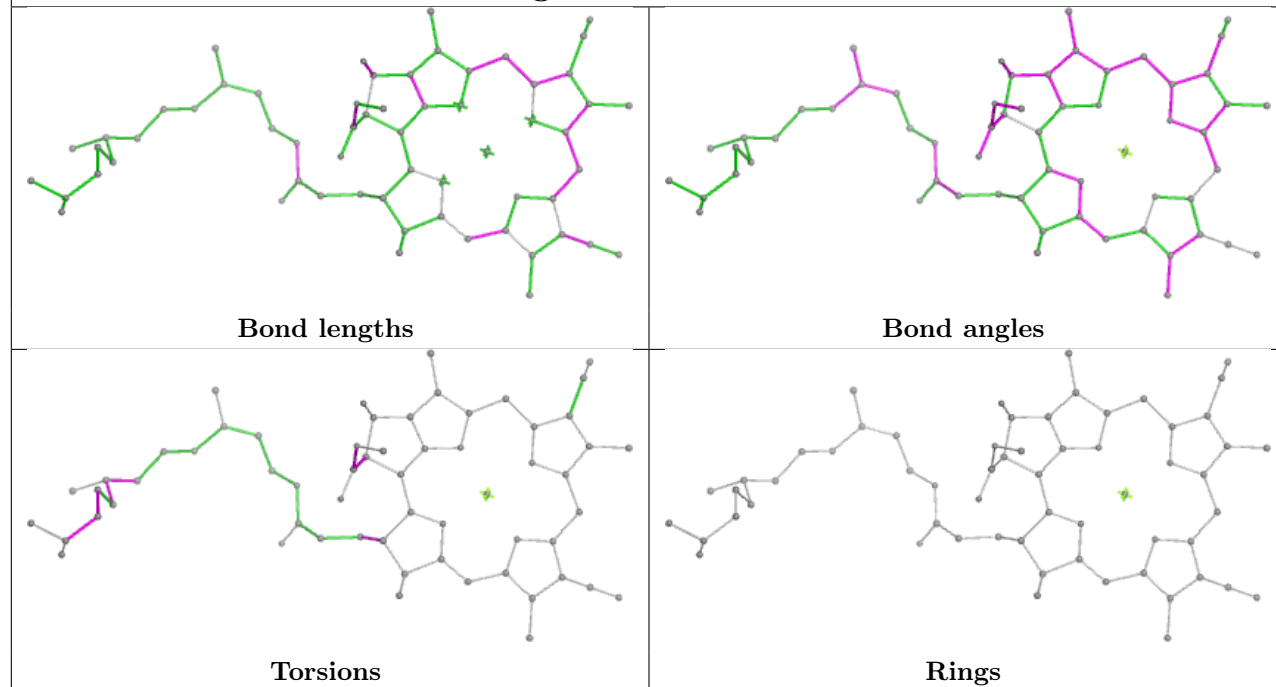
Ligand CLA B 834

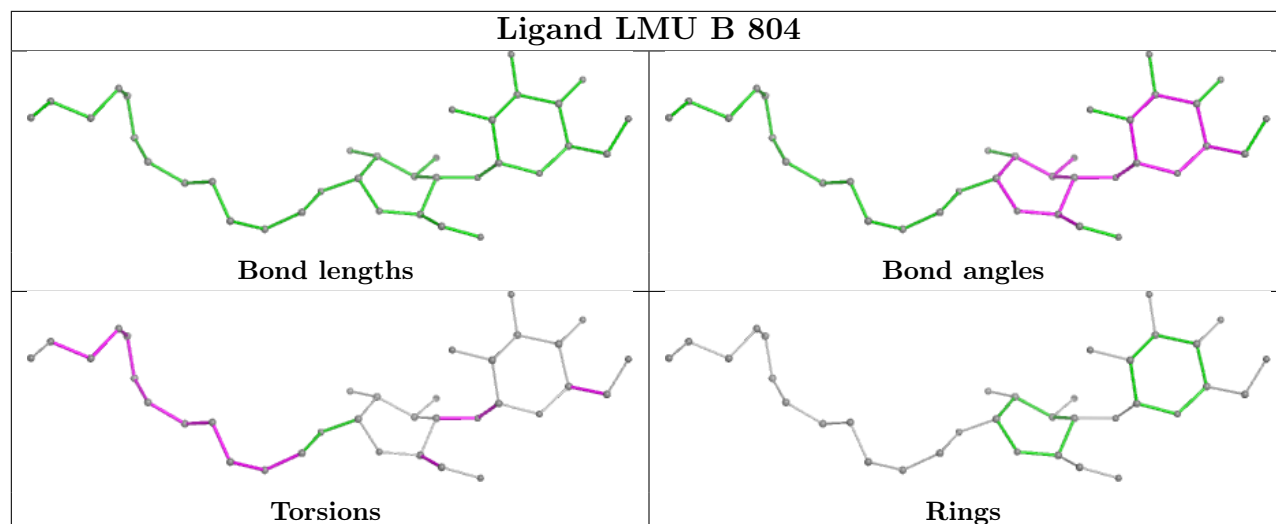


Ligand CLA A 851

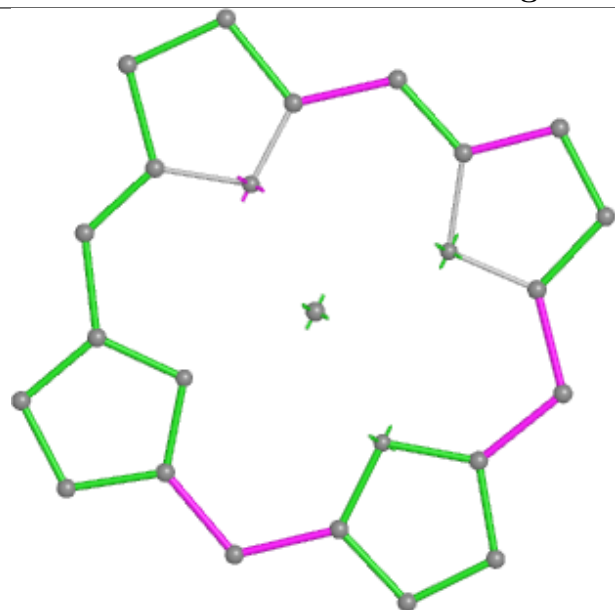


Ligand CLA B 816

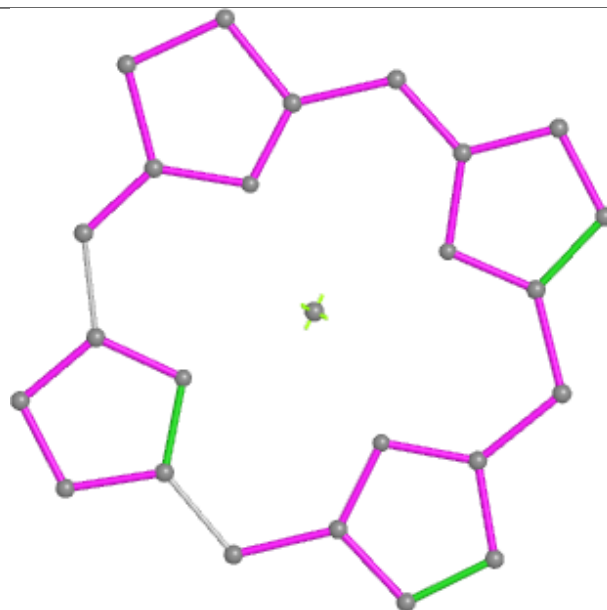




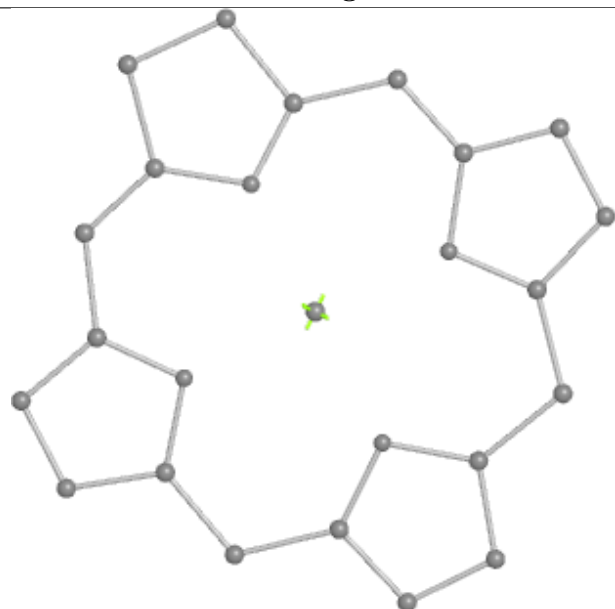
Ligand CLA 1 208



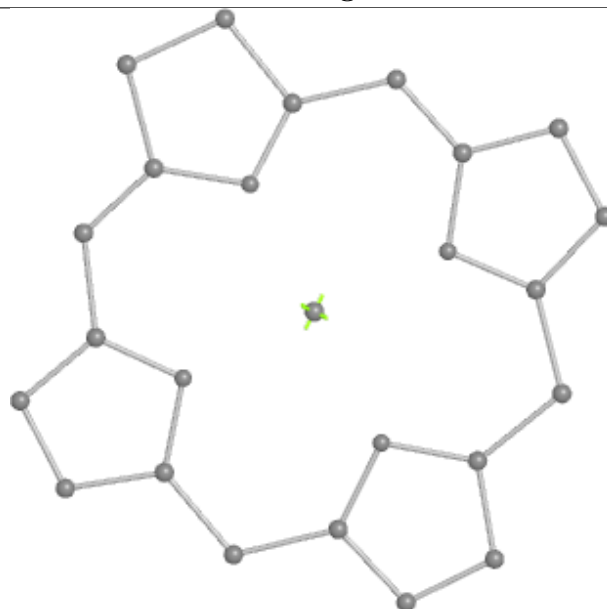
Bond lengths



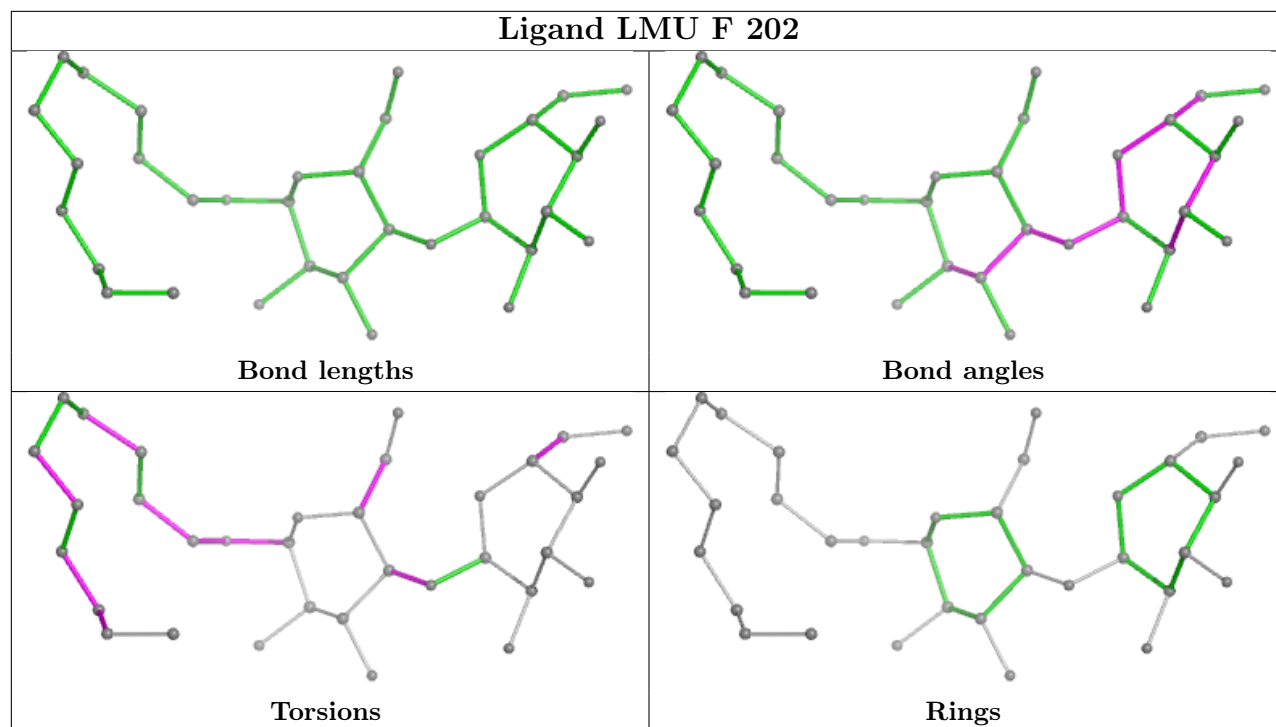
Bond angles



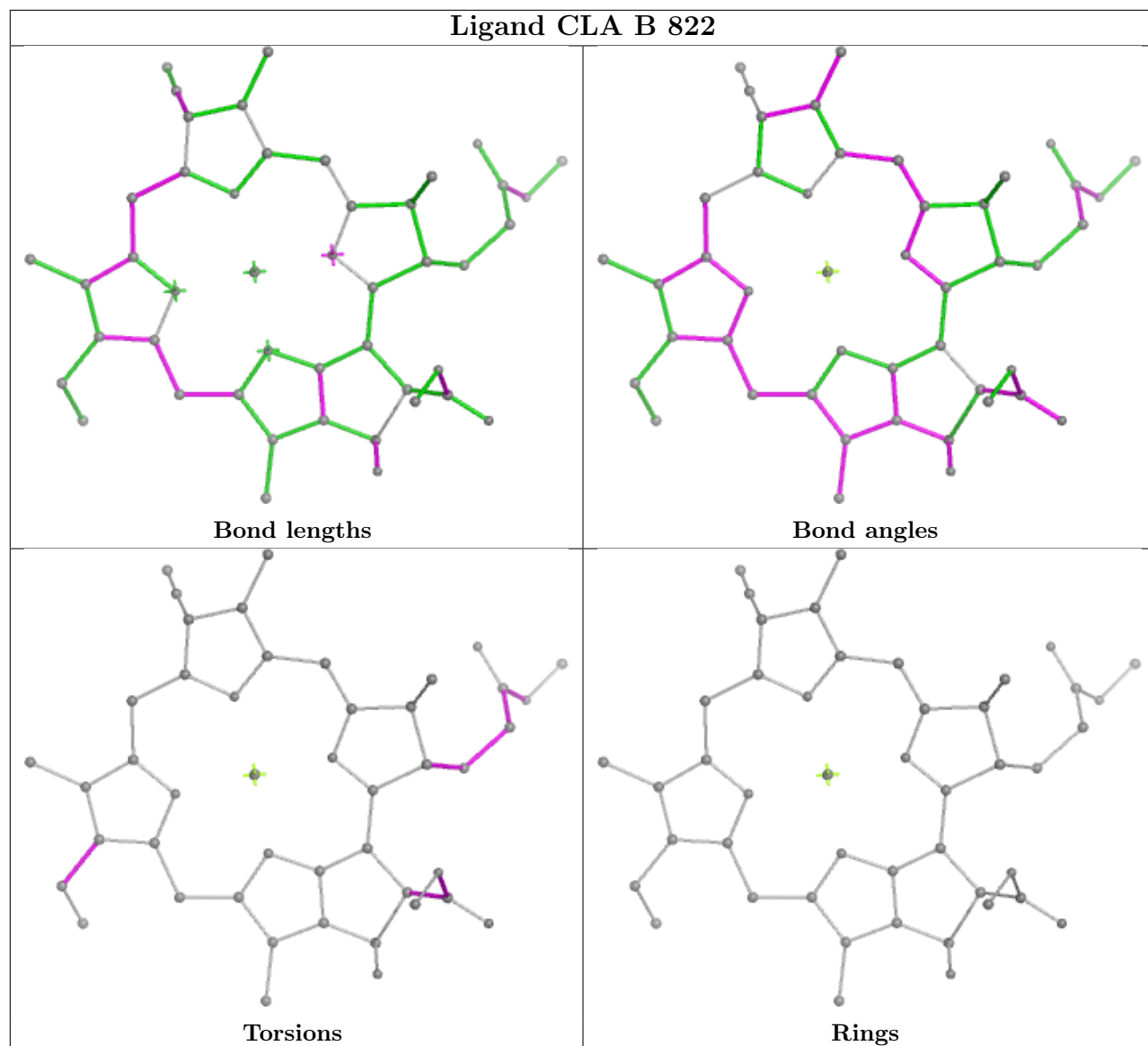
Torsions

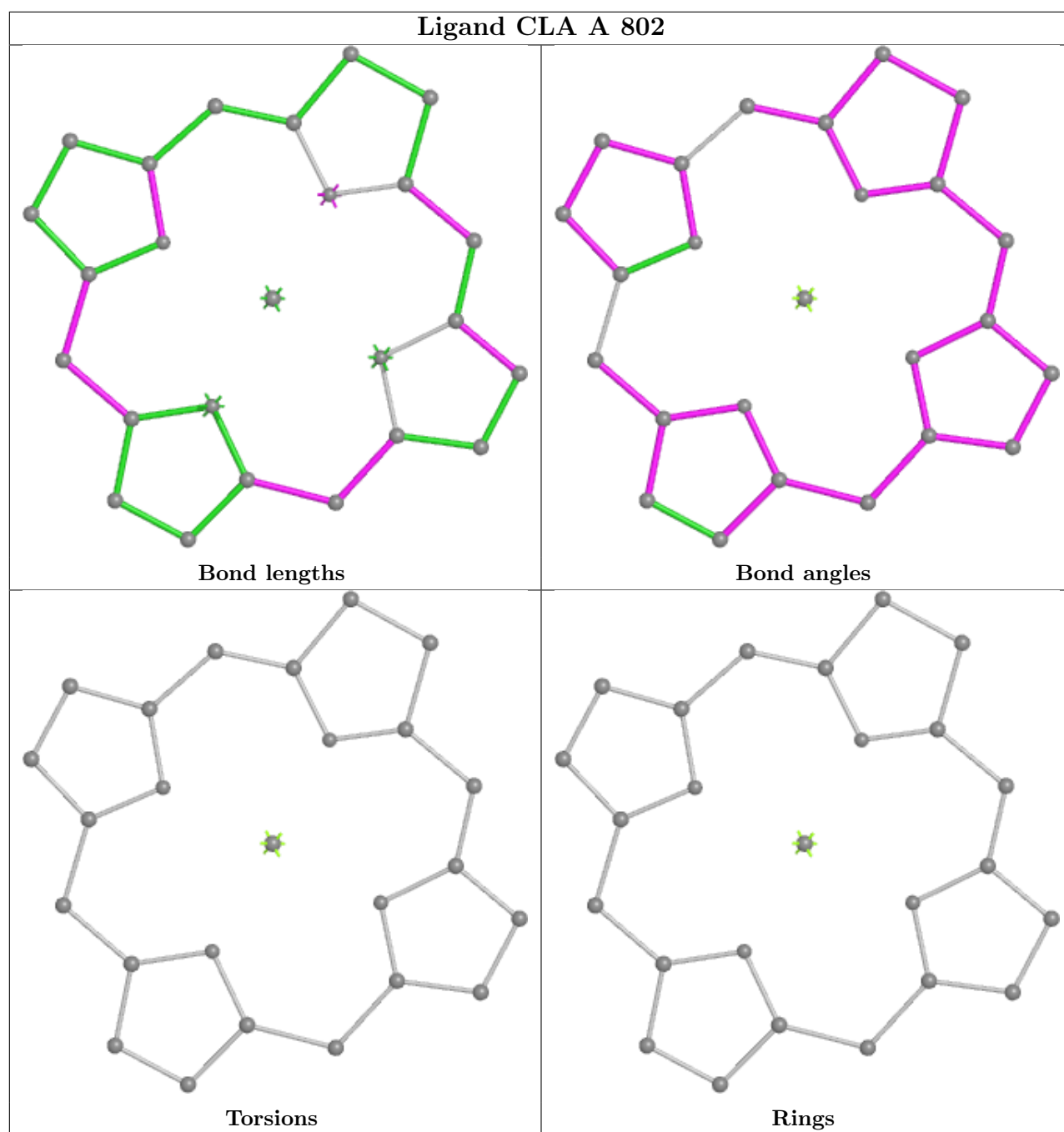


Rings

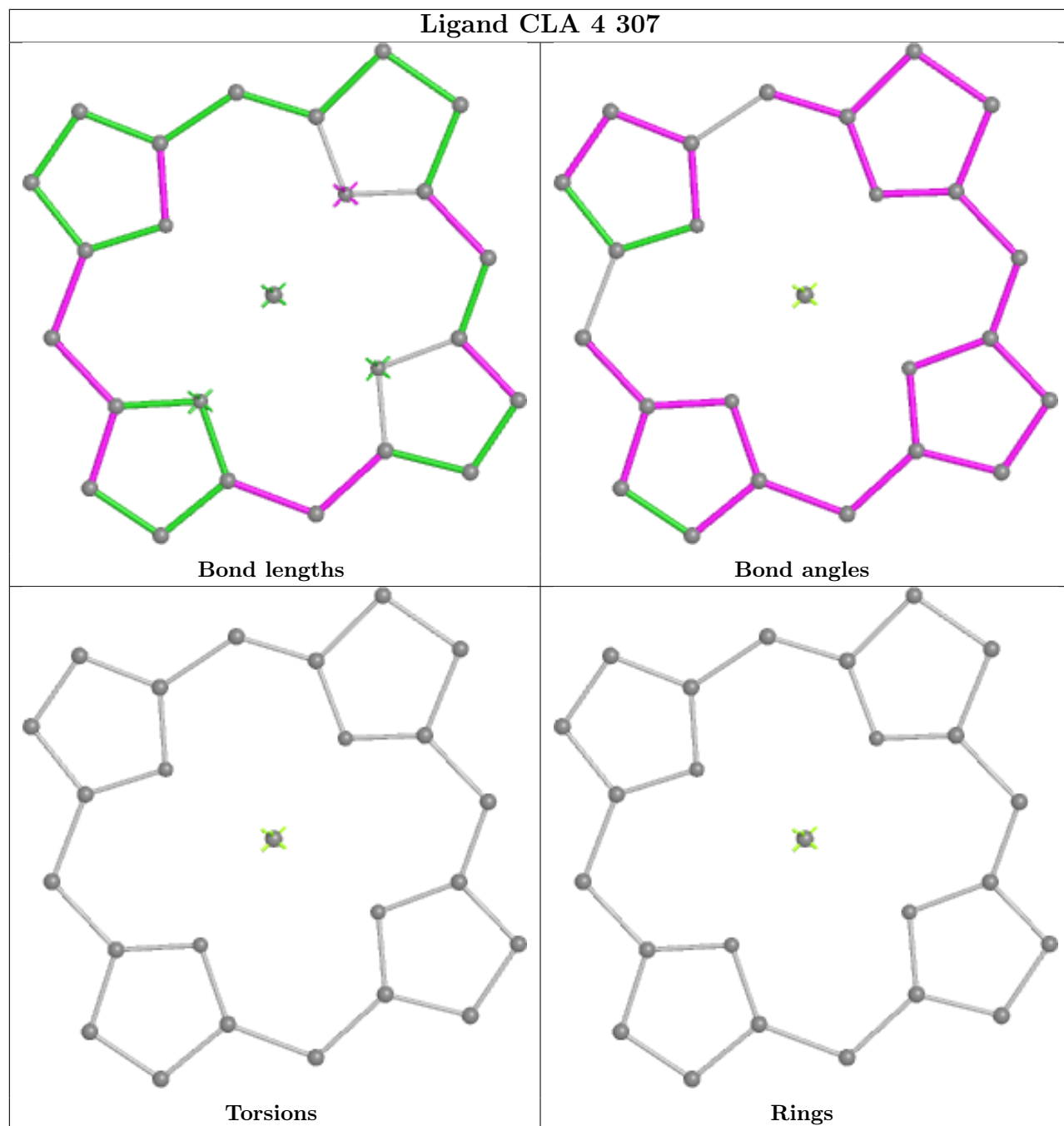


Ligand CLA B 822

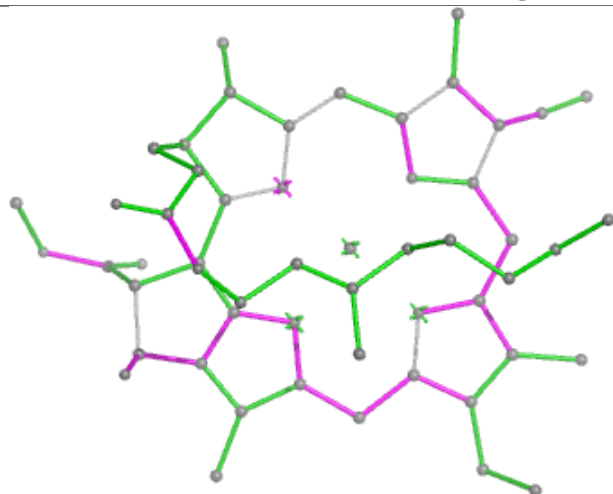




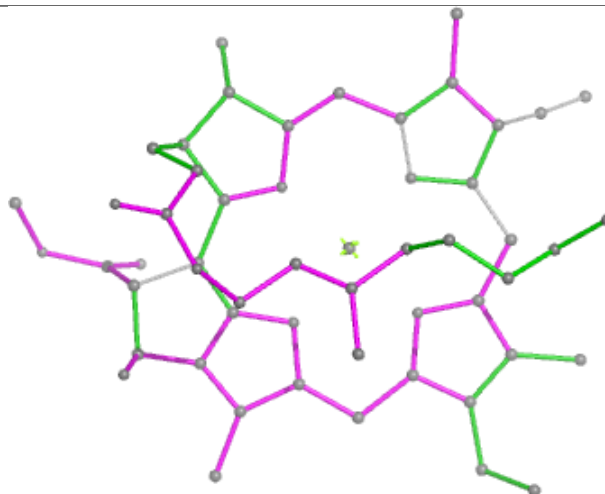
Ligand CLA 4 307



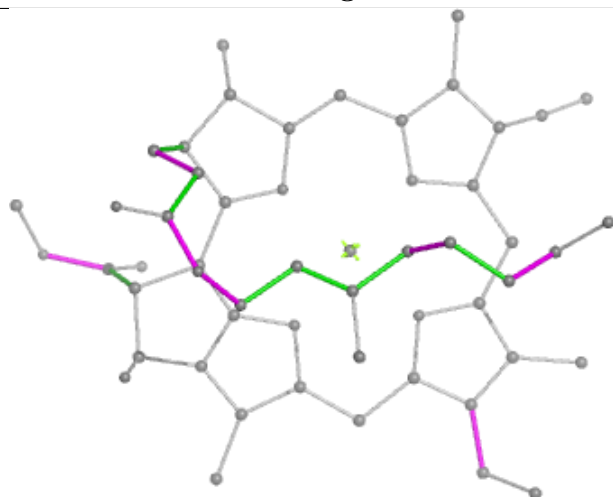
Ligand CLA A 816



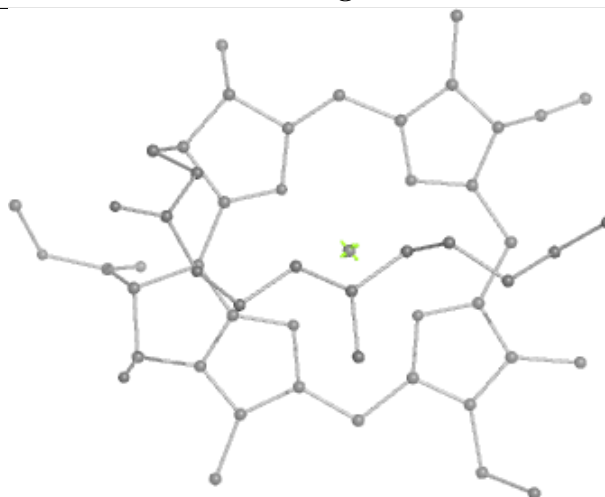
Bond lengths



Bond angles

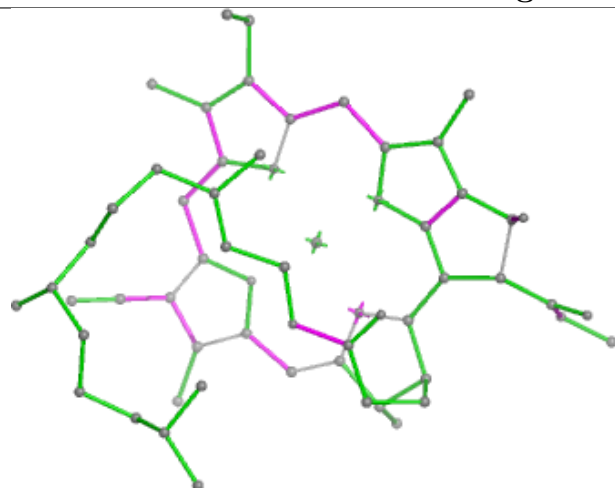


Torsions

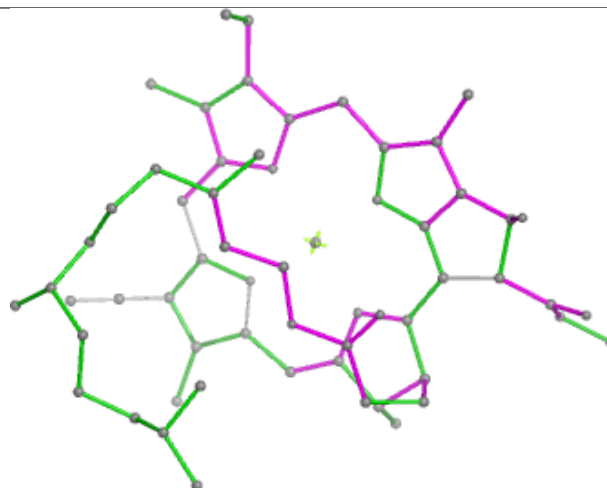


Rings

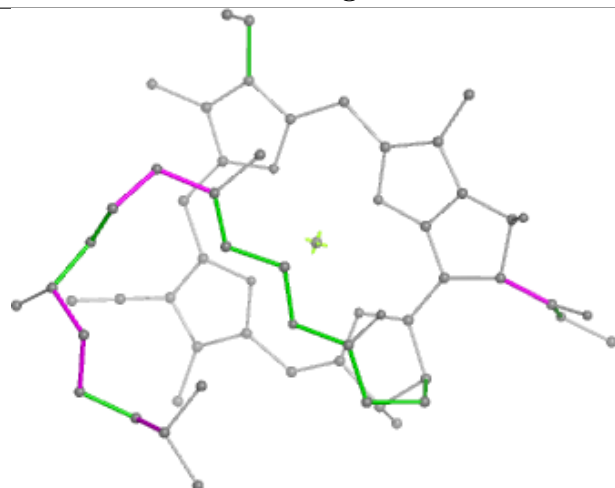
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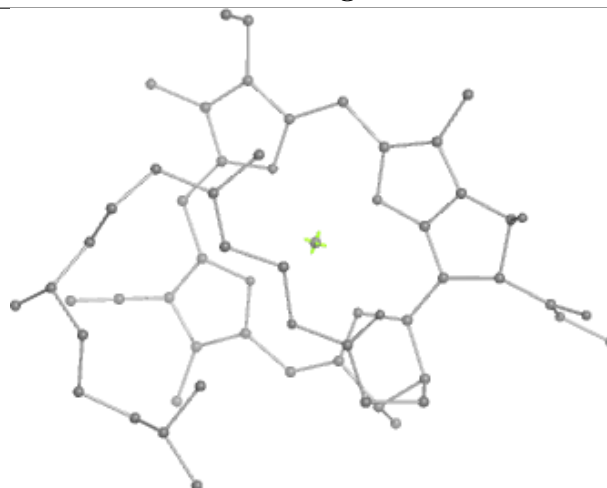
Bond lengths



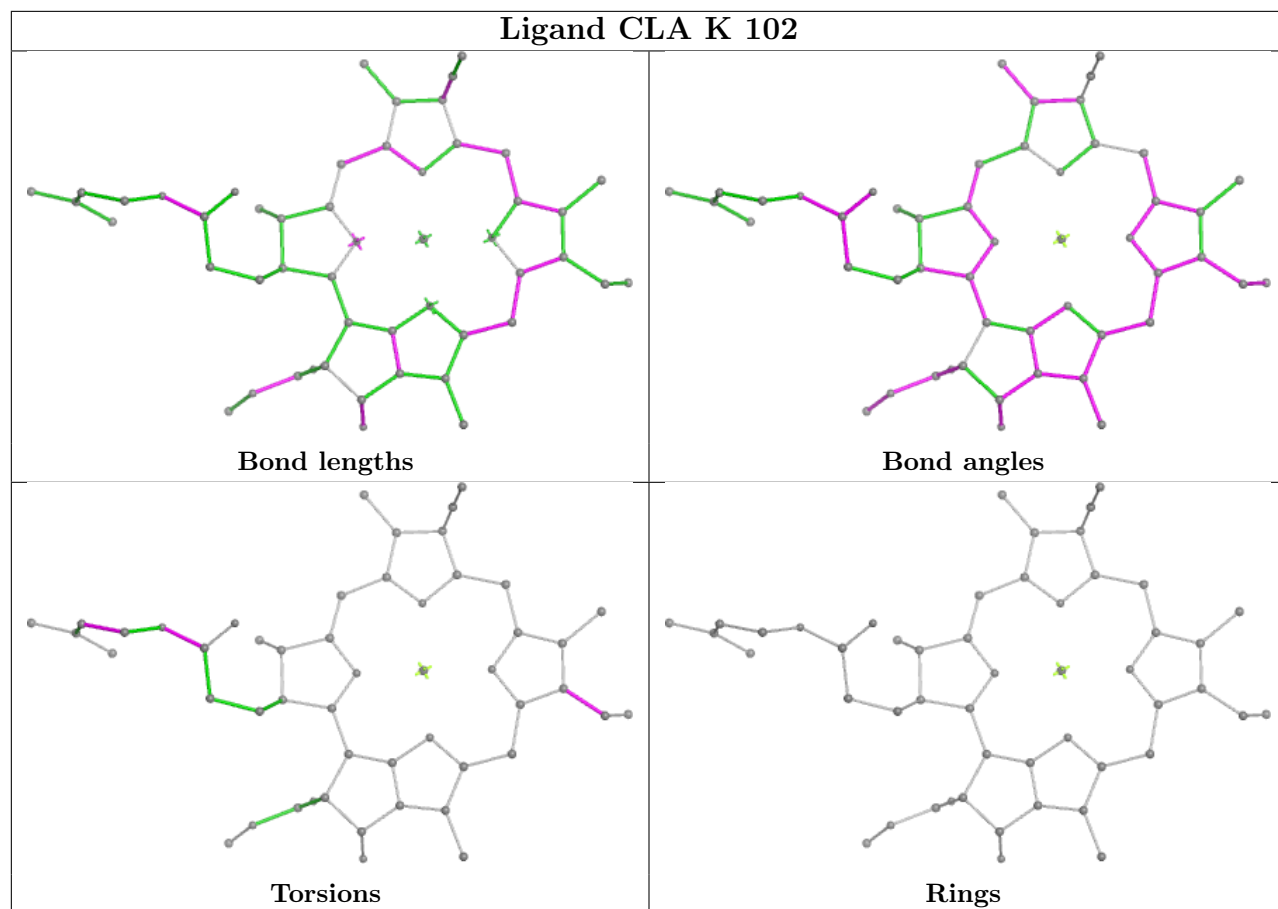
Bond angles



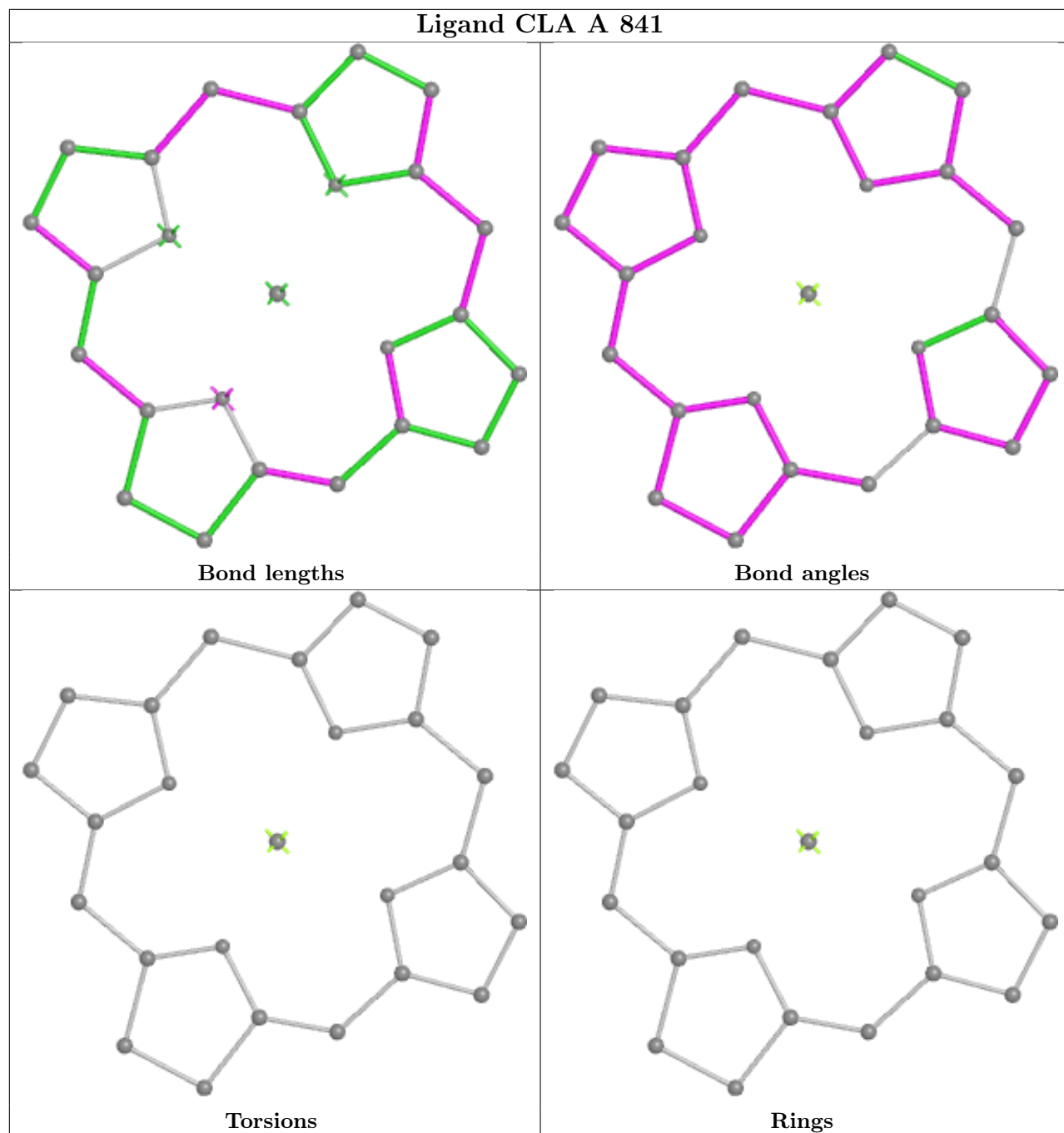
Torsions



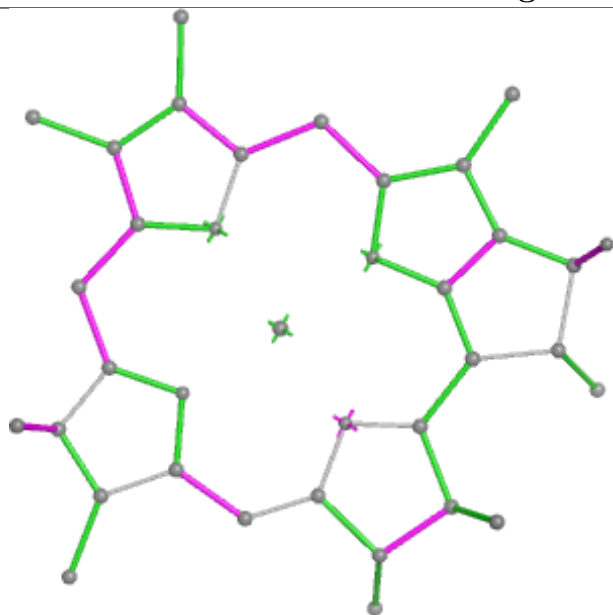
Rings



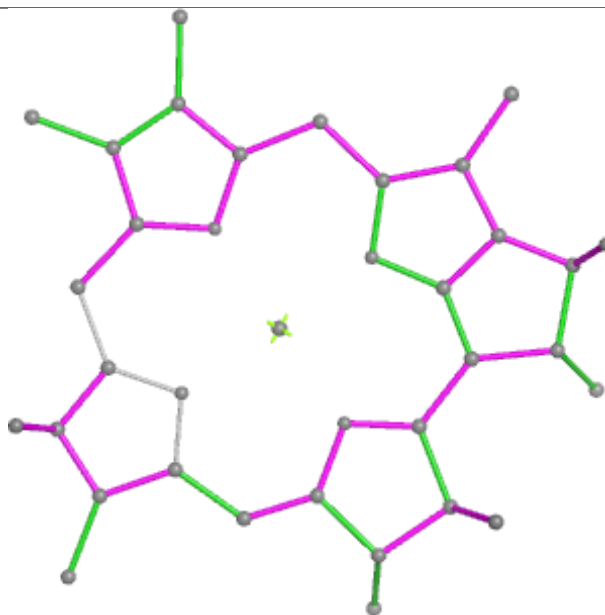
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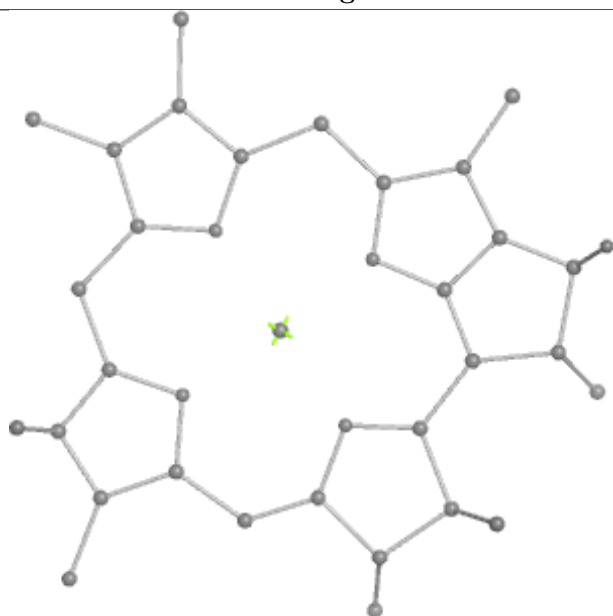
Ligand CLA 3 301



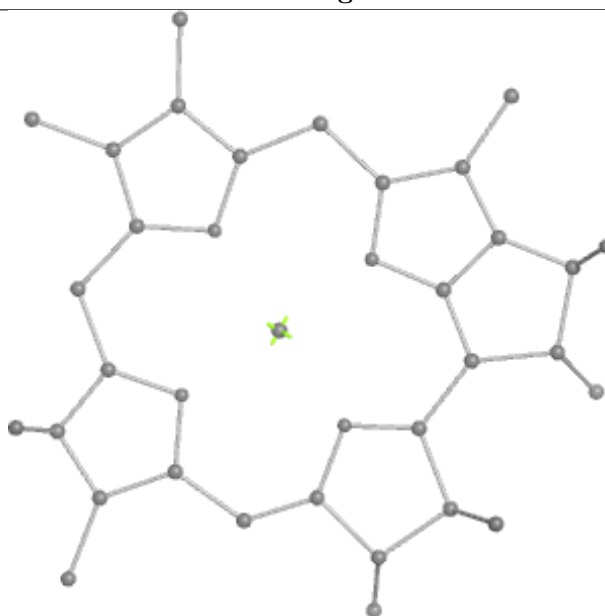
Bond lengths



Bond angles

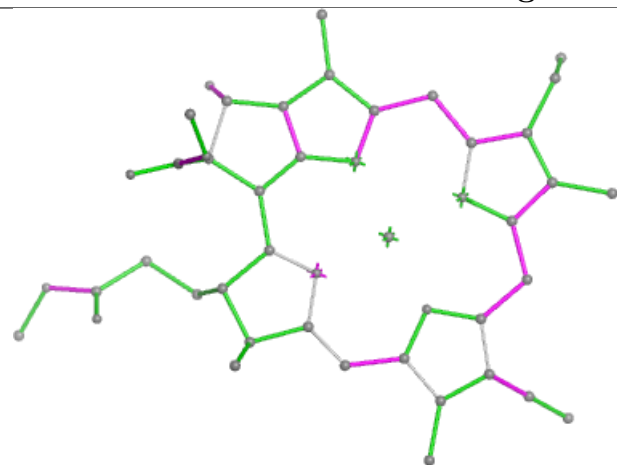


Torsions

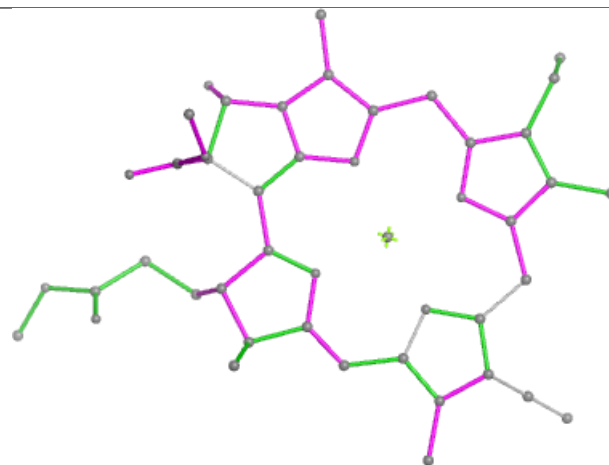


Rings

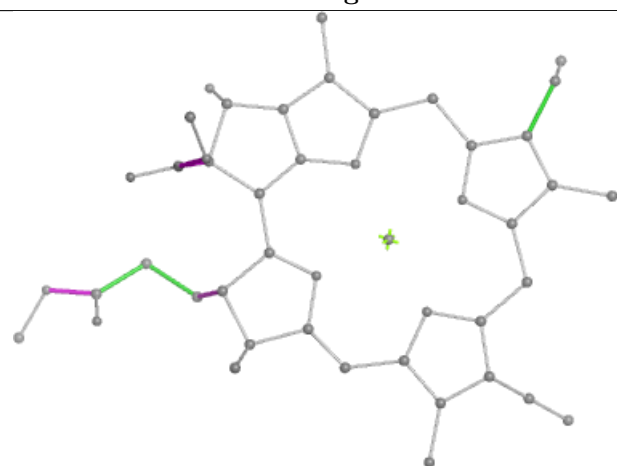
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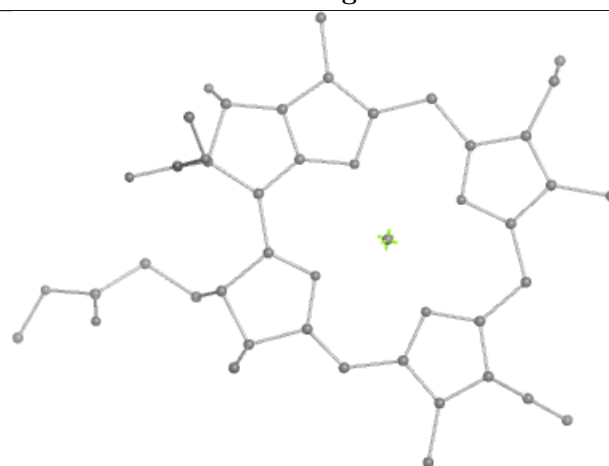
Bond lengths



Bond angles

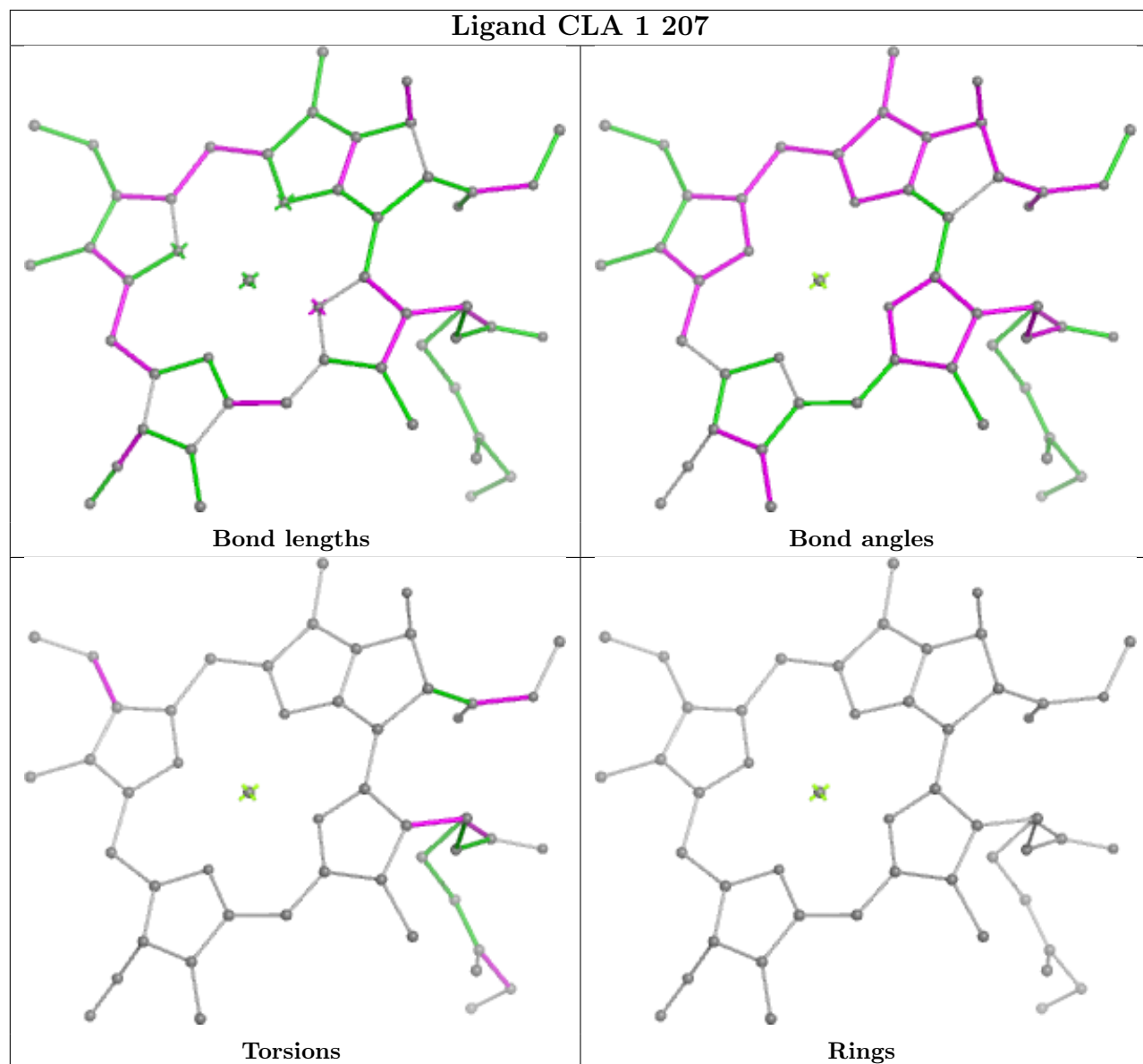


Torsions

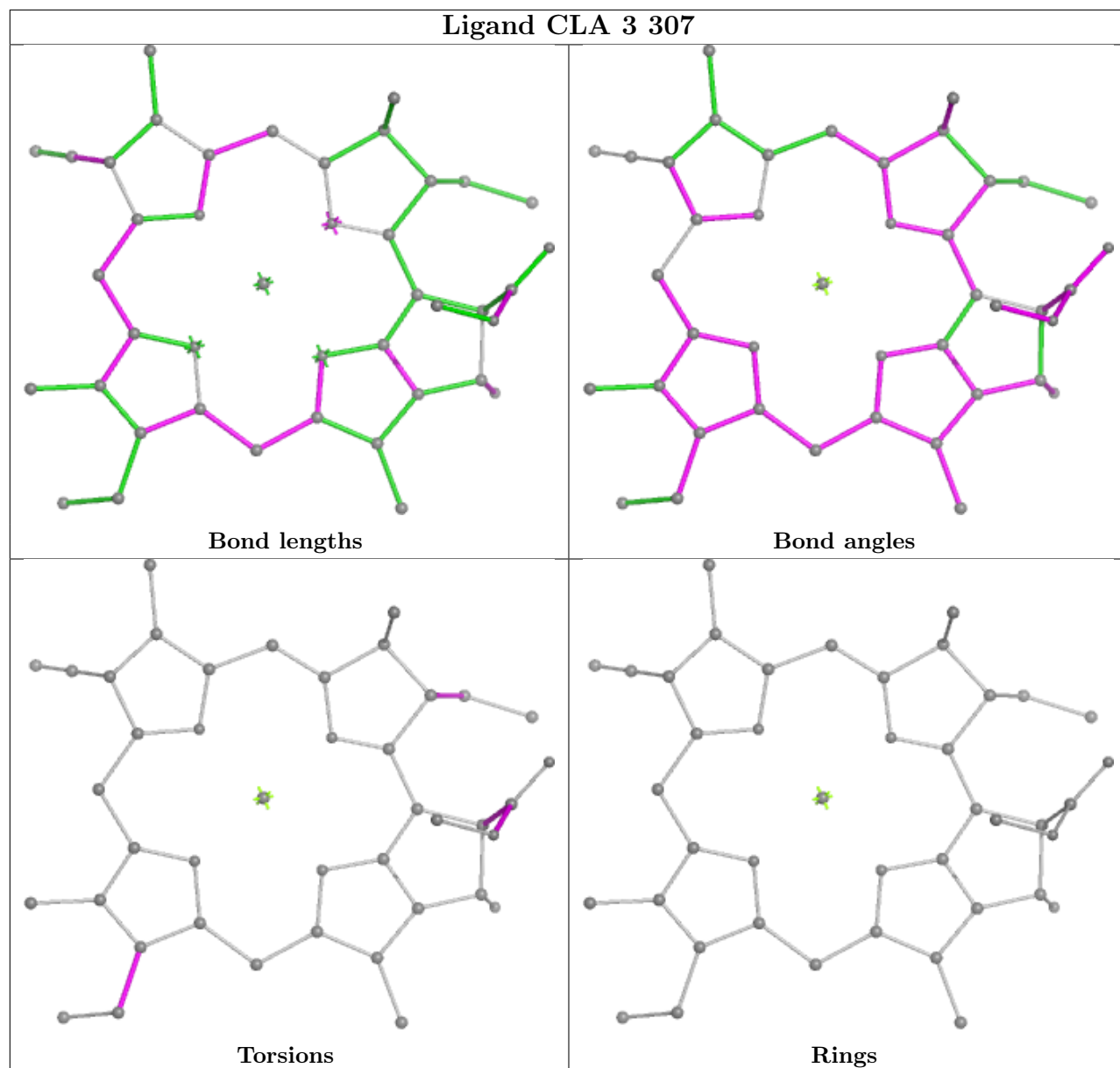


Rings

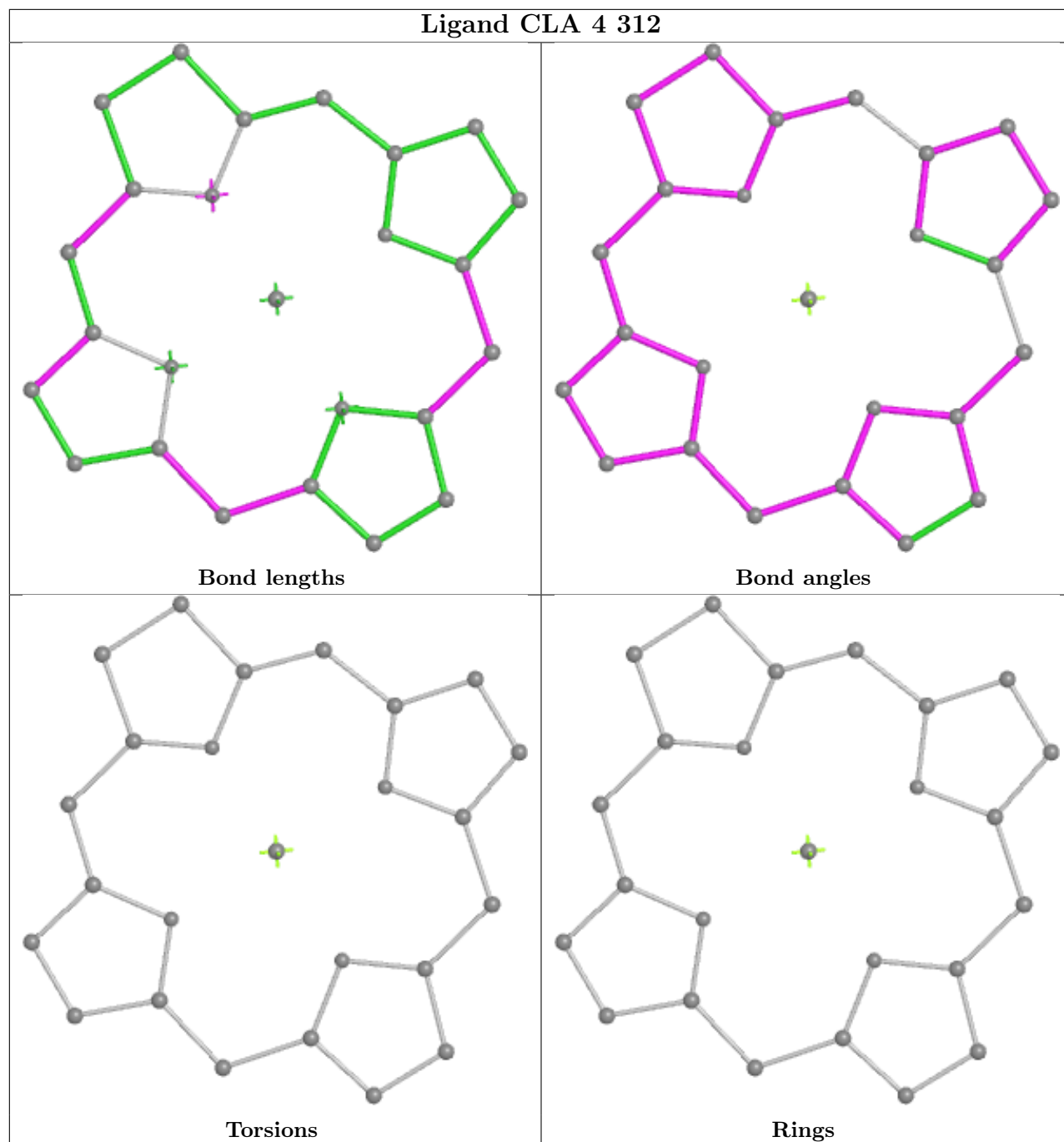
Ligand CLA 1 207



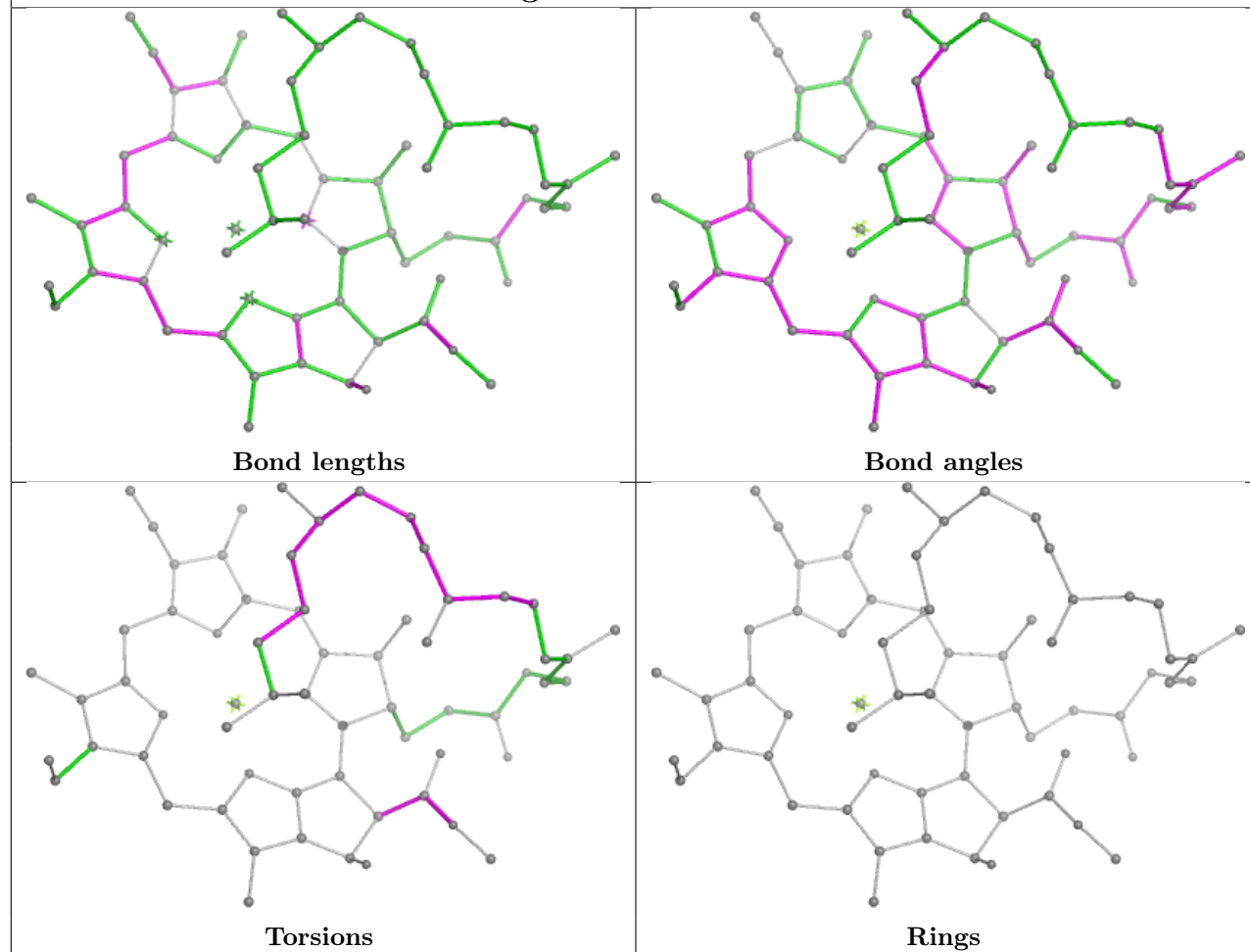
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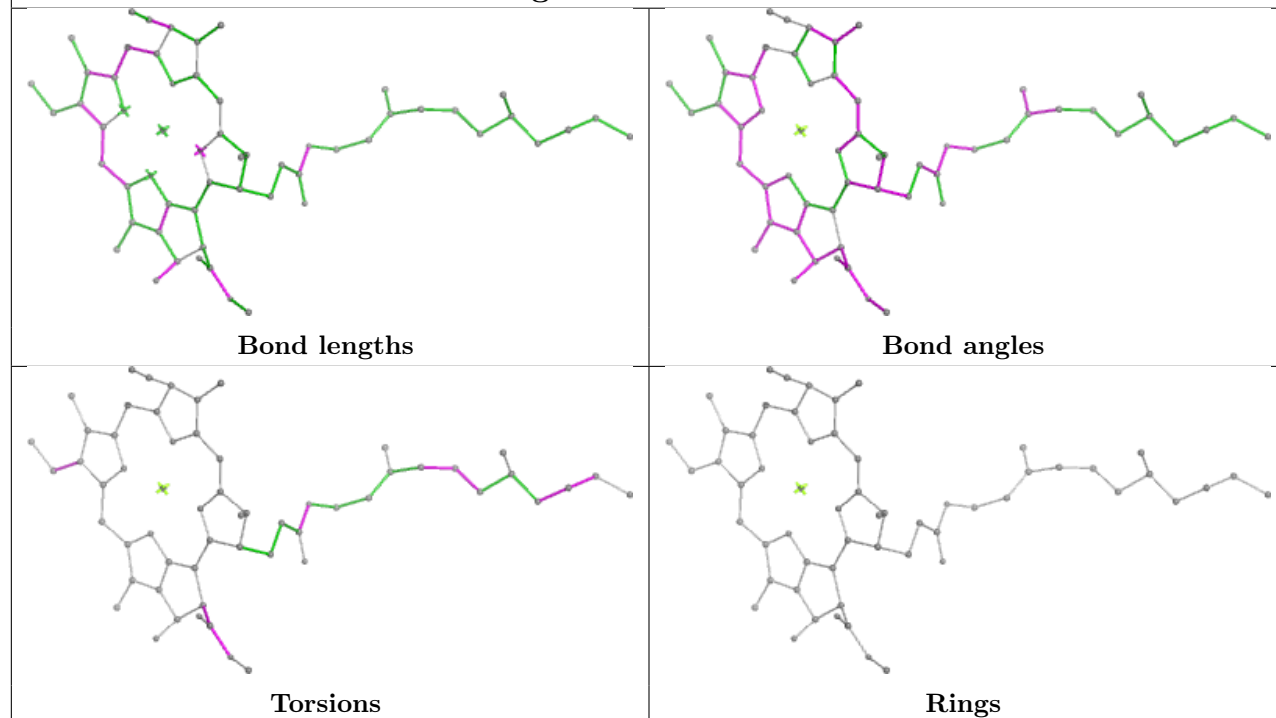
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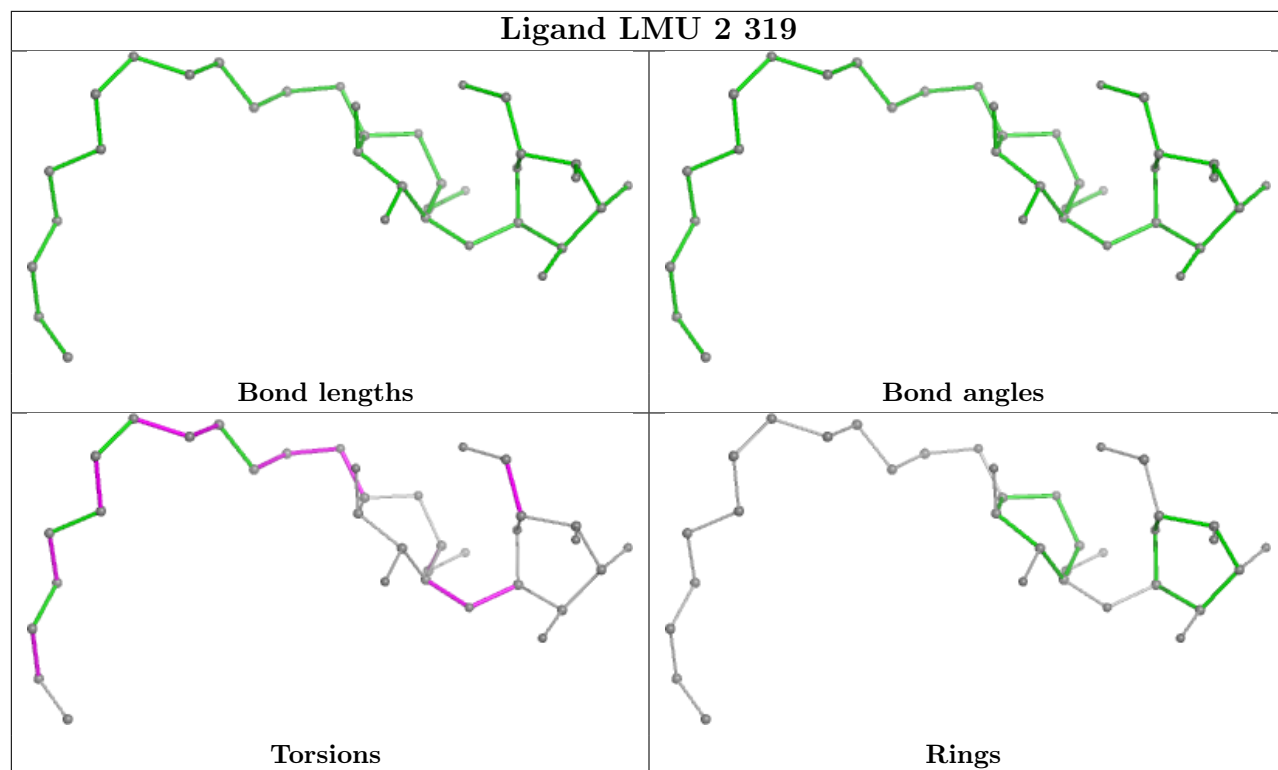


Ligand CLA B 809

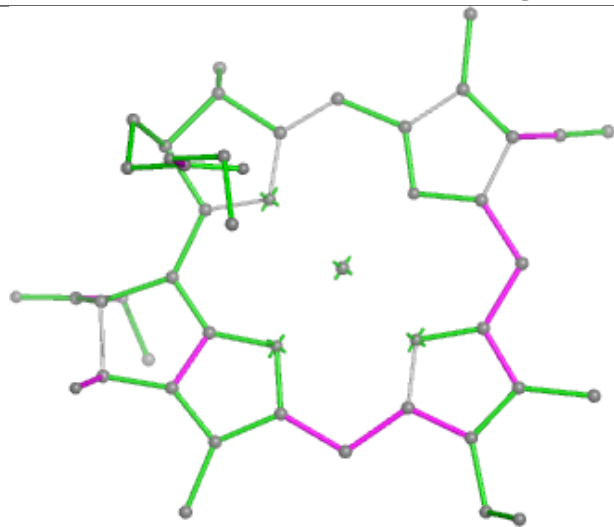


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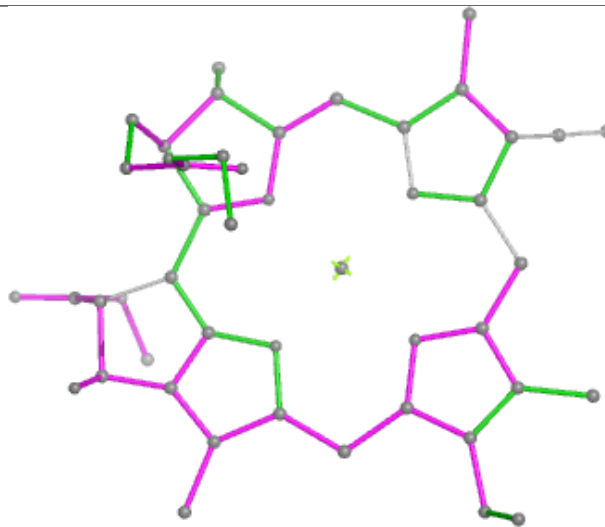




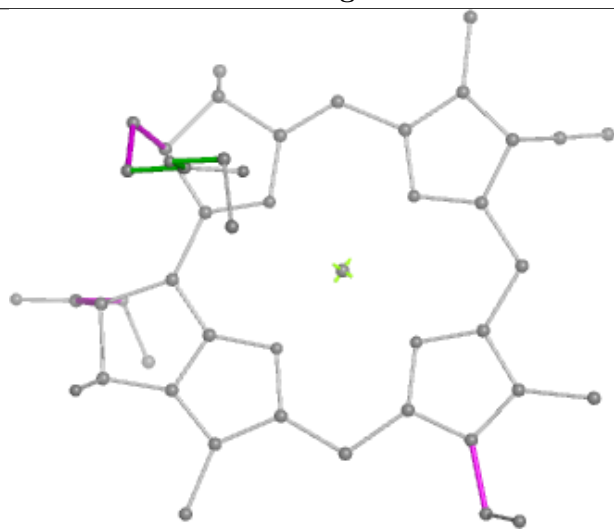
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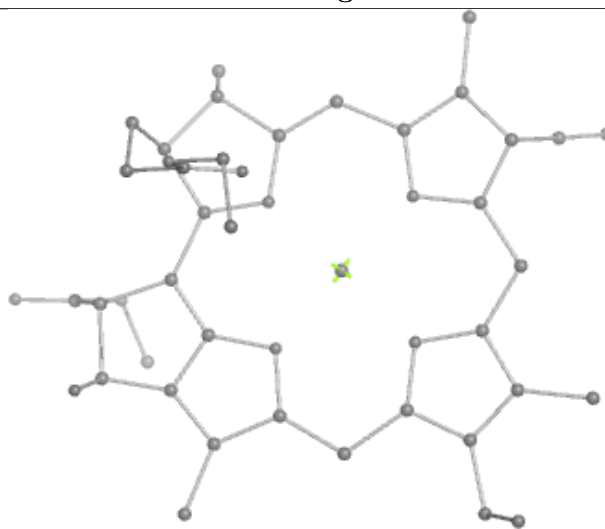
Bond lengths



Bond angles

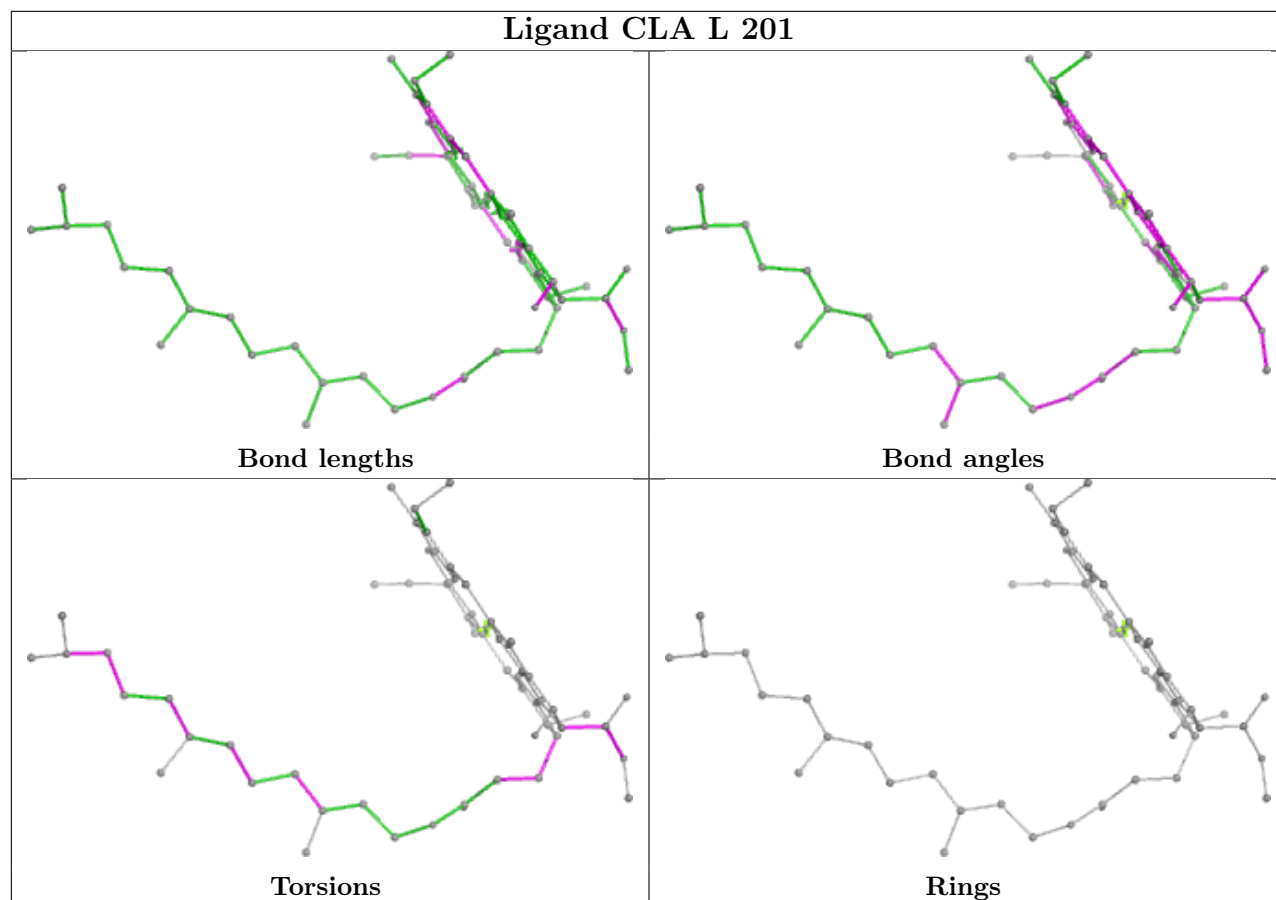


Torsions

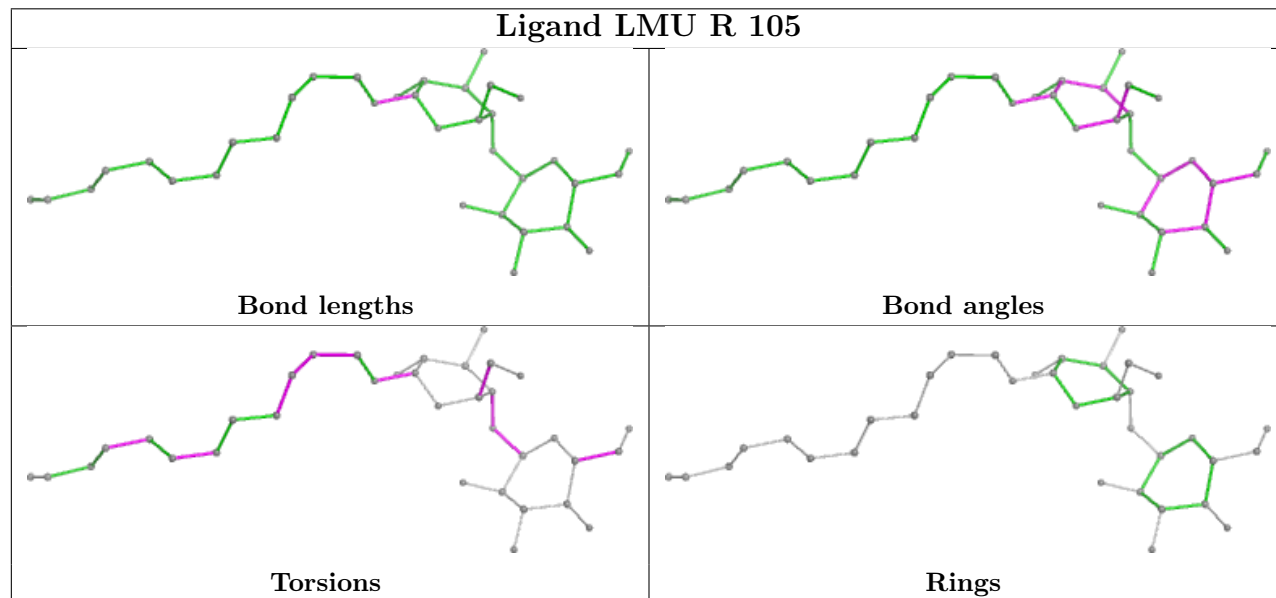


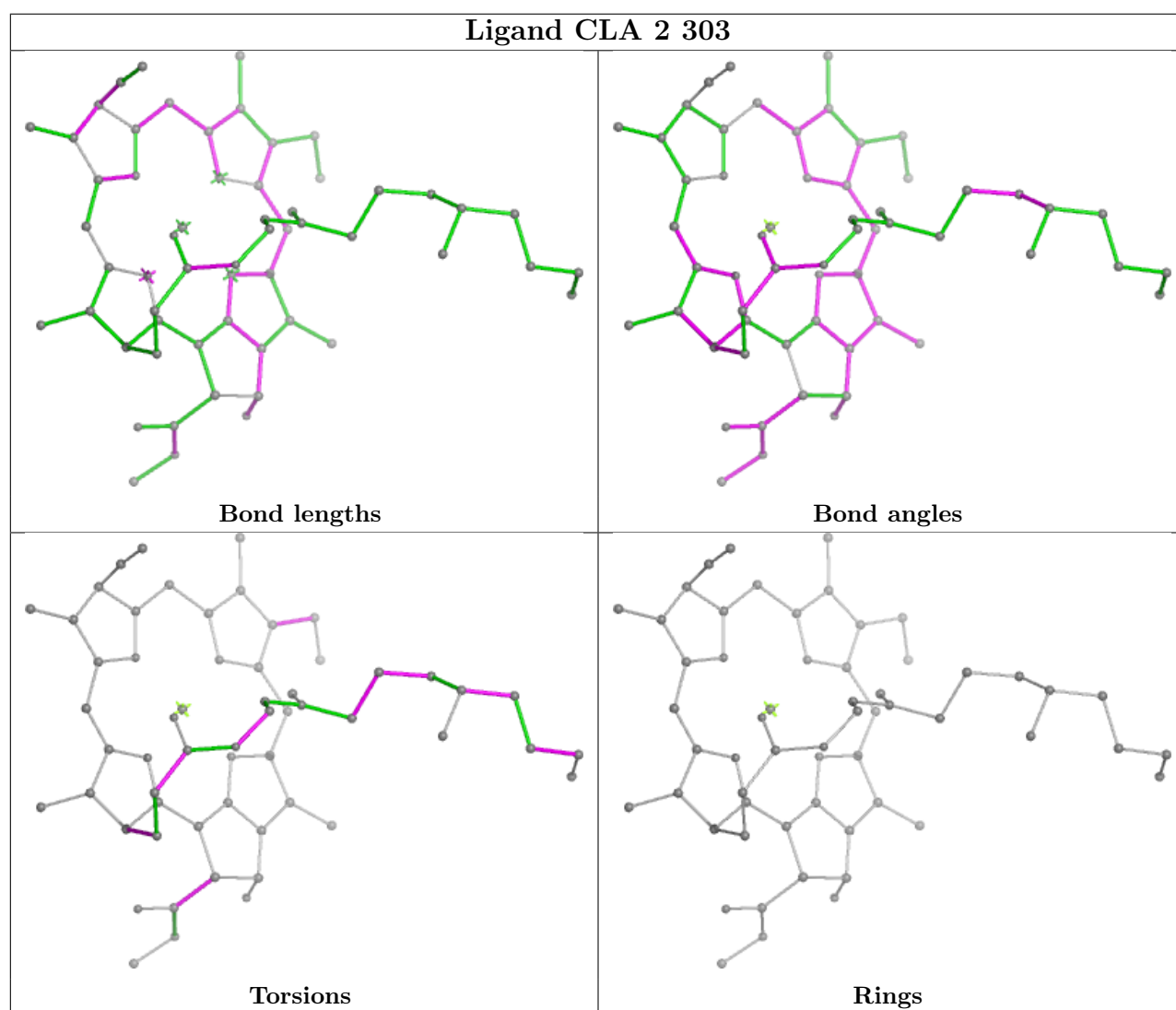
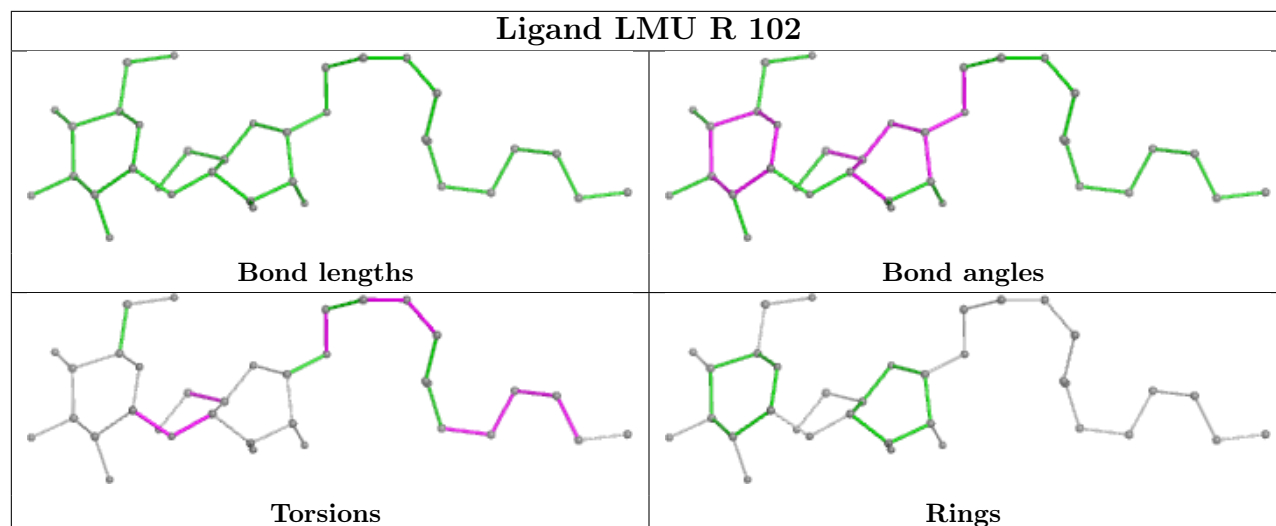
Rings

Ligand CLA L 201

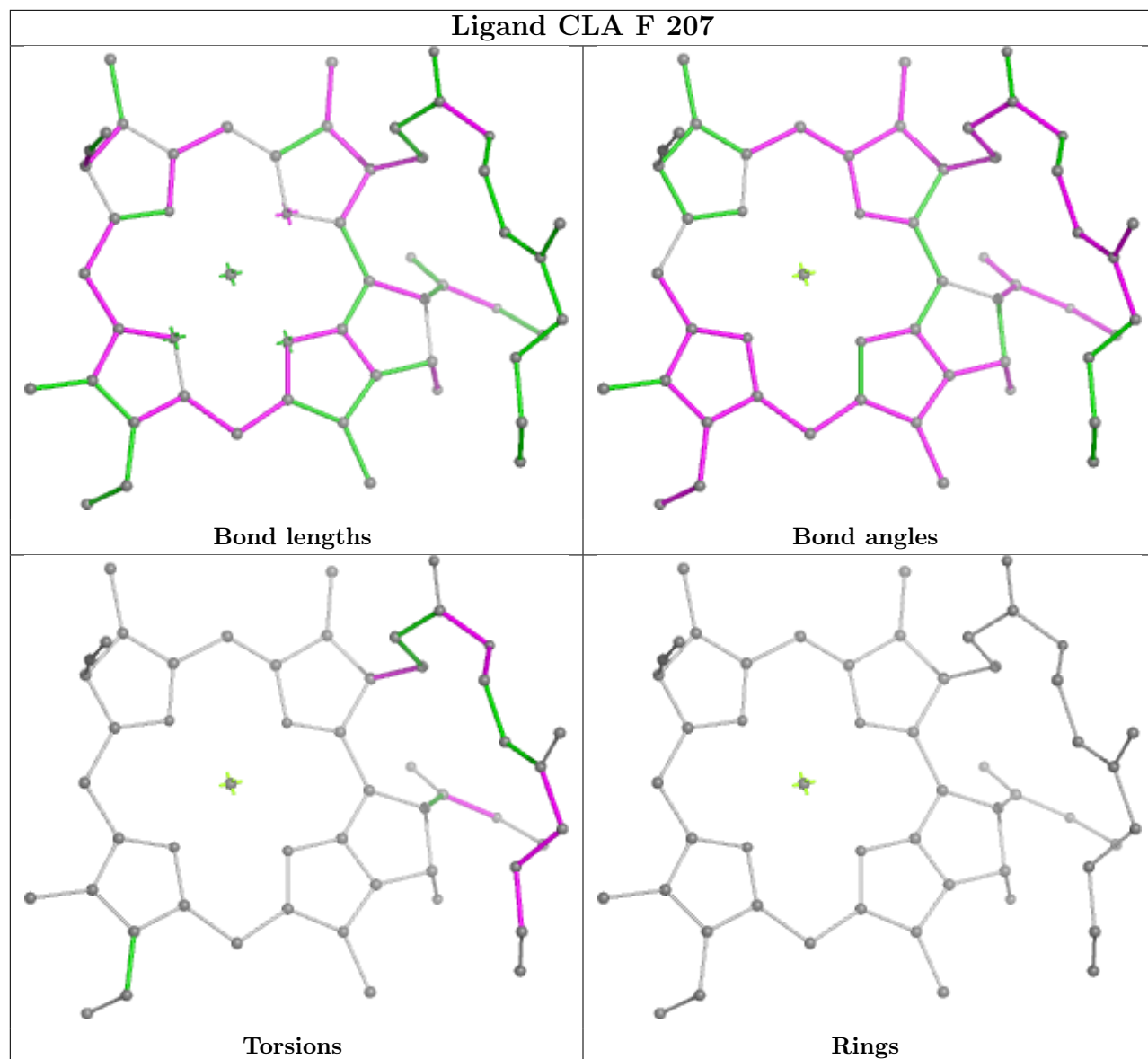


Ligand LMU R 105

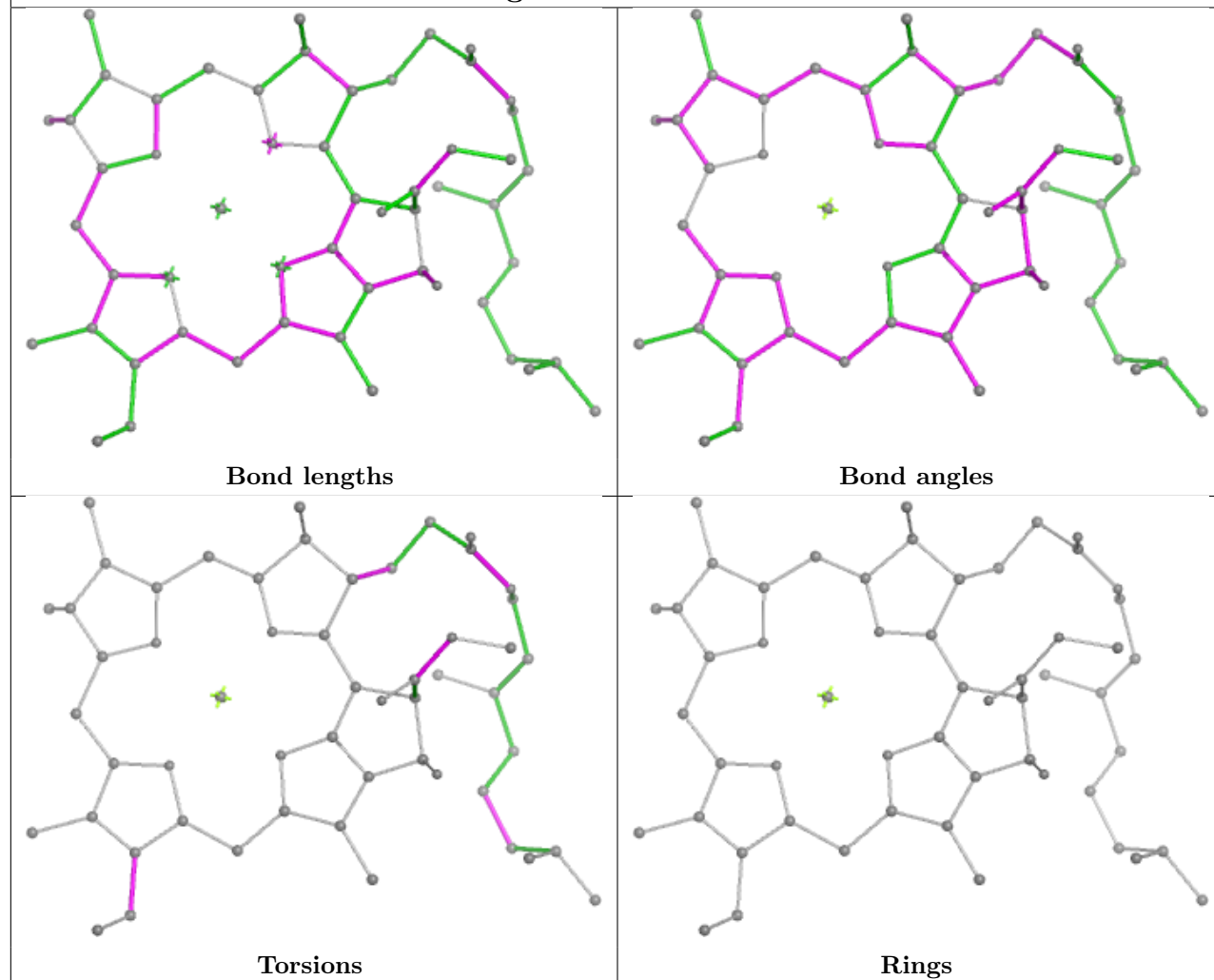


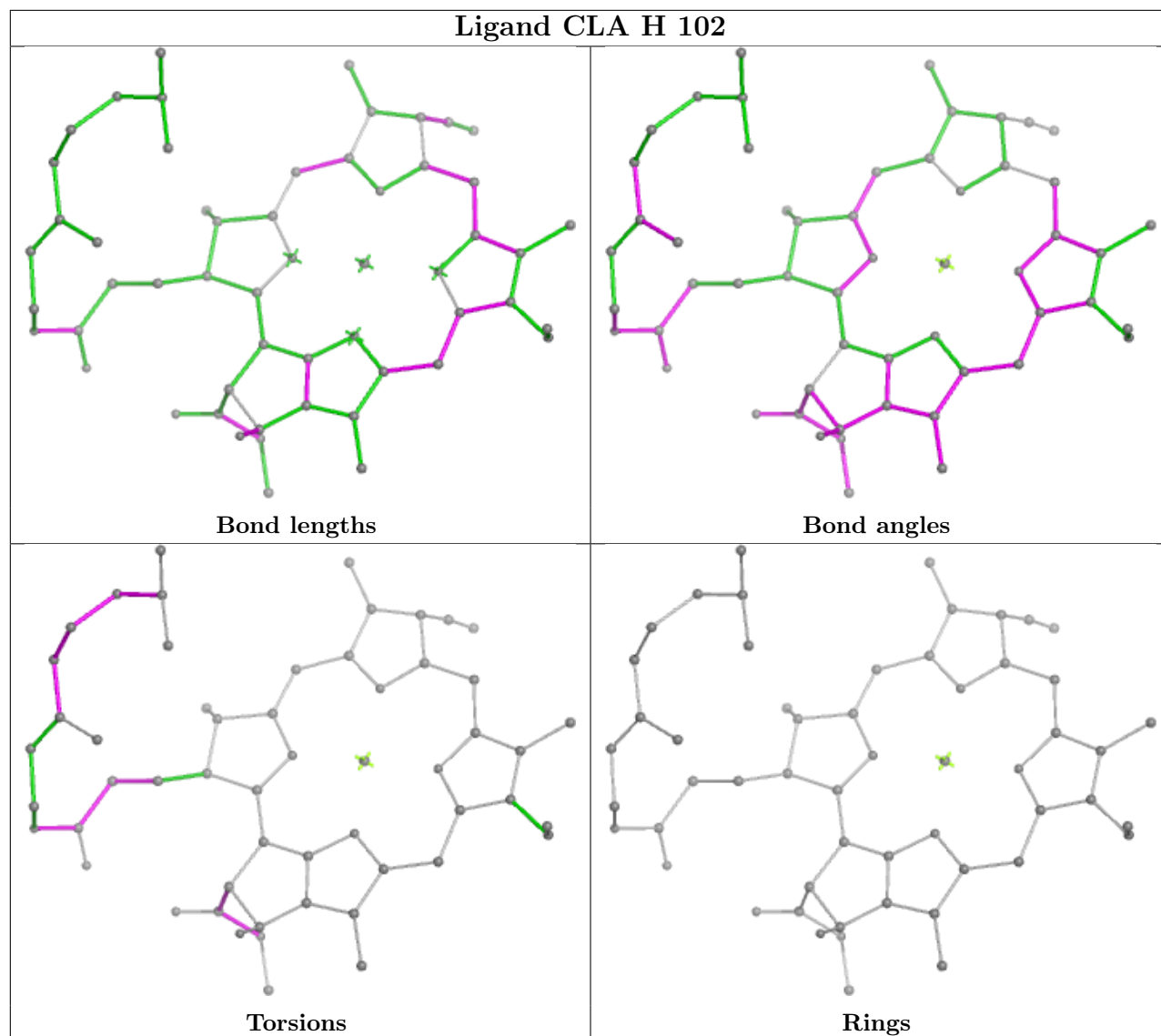


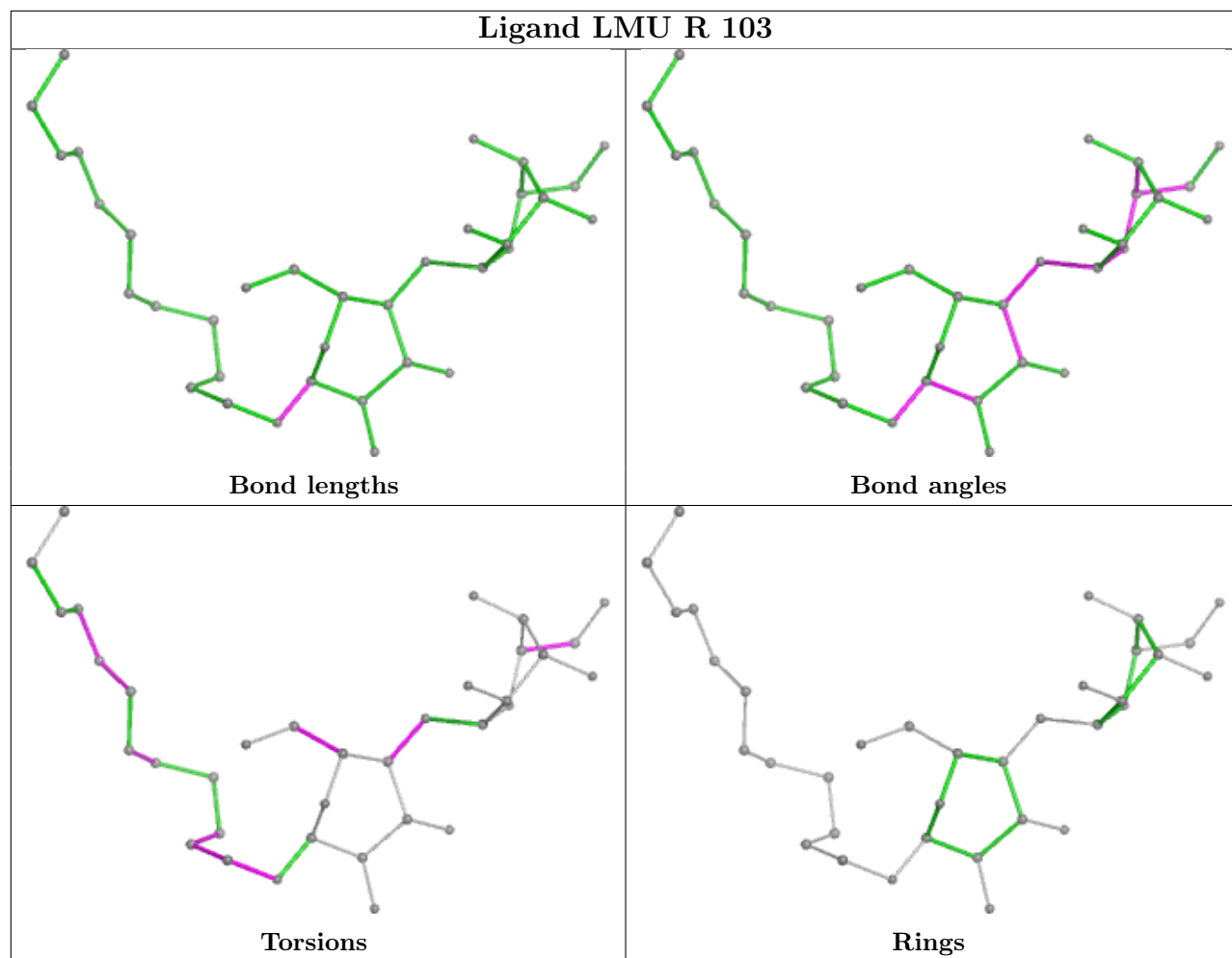
Ligand CLA F 207



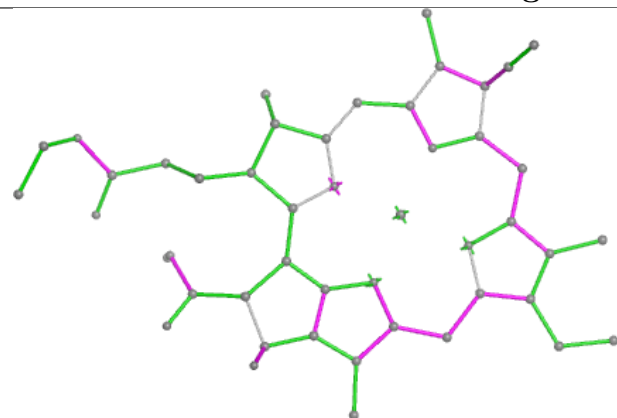
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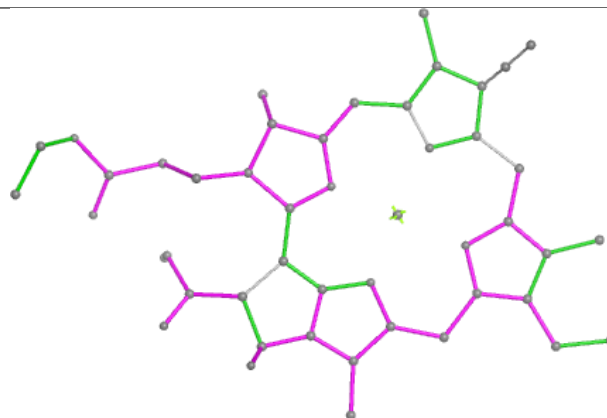




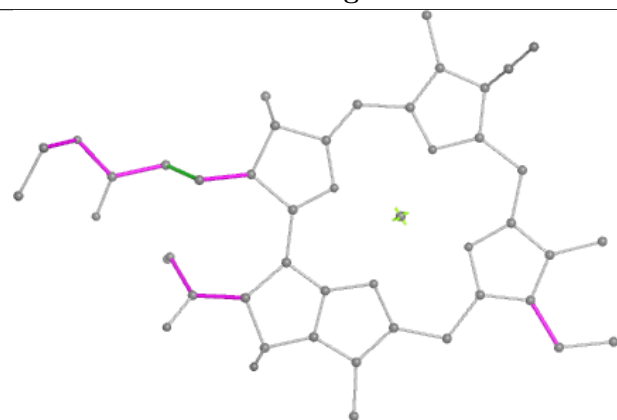
Ligand CLA 4 318



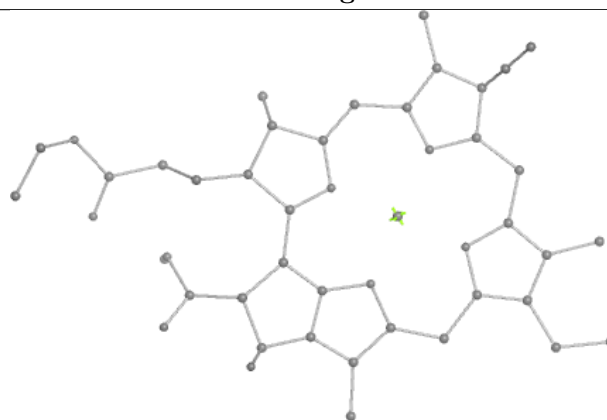
Bond lengths



Bond angles

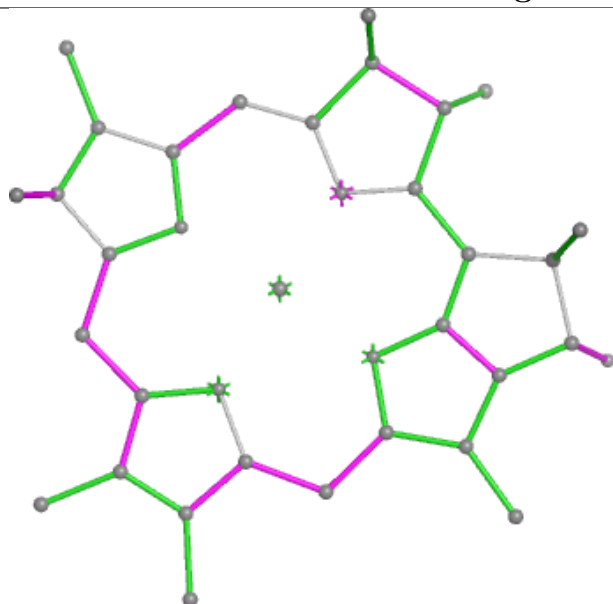


Torsions

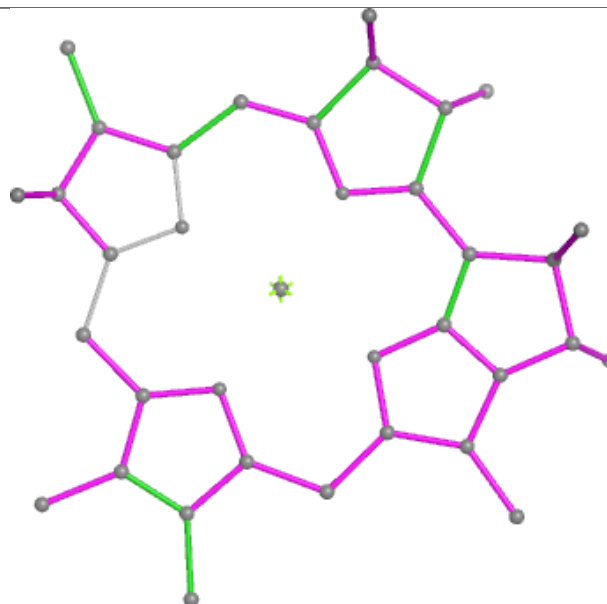


Rings

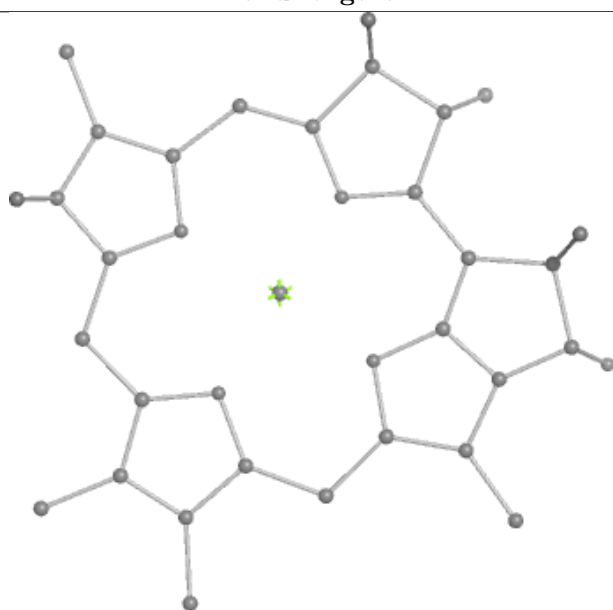
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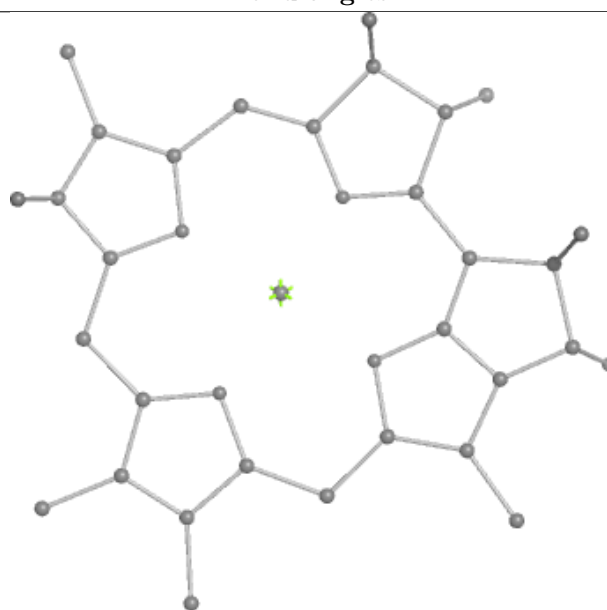
Bond lengths



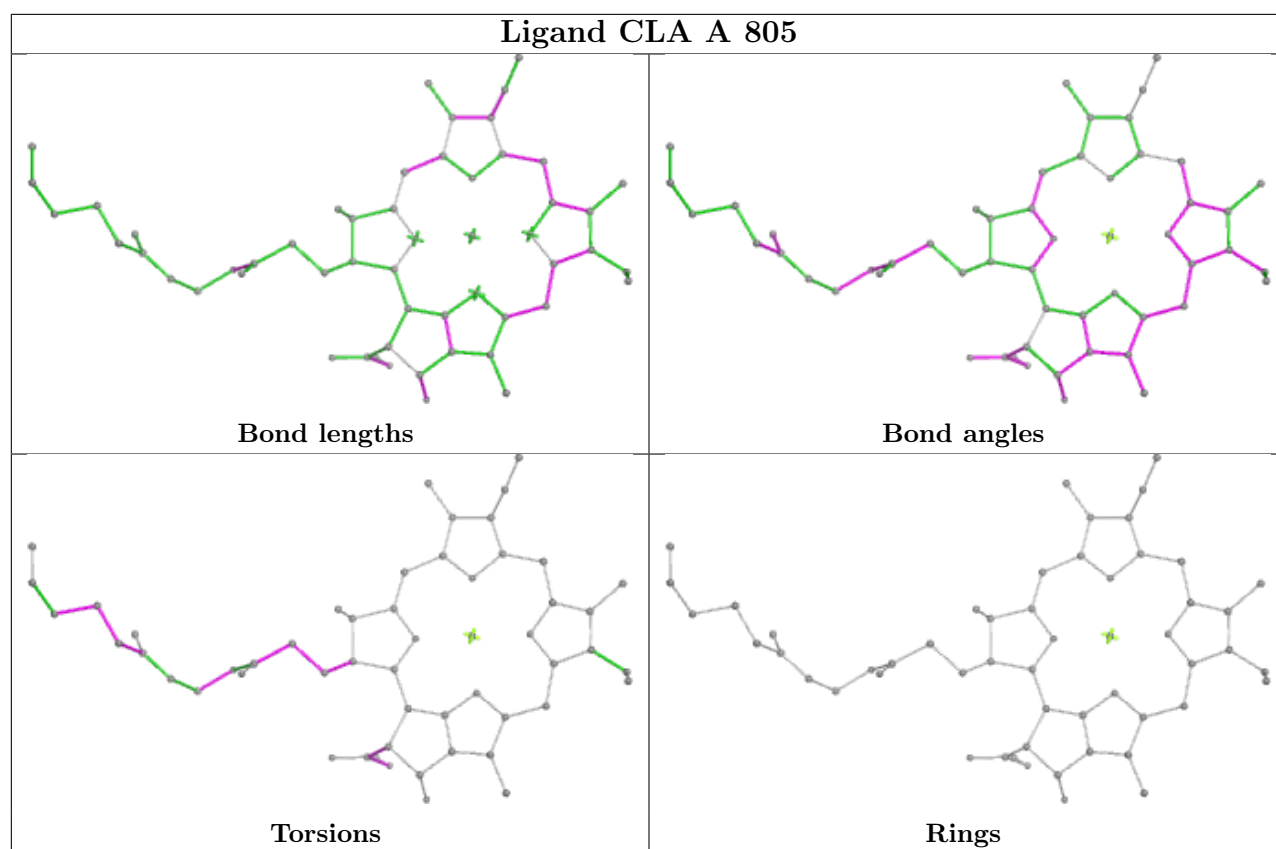
Bond angles



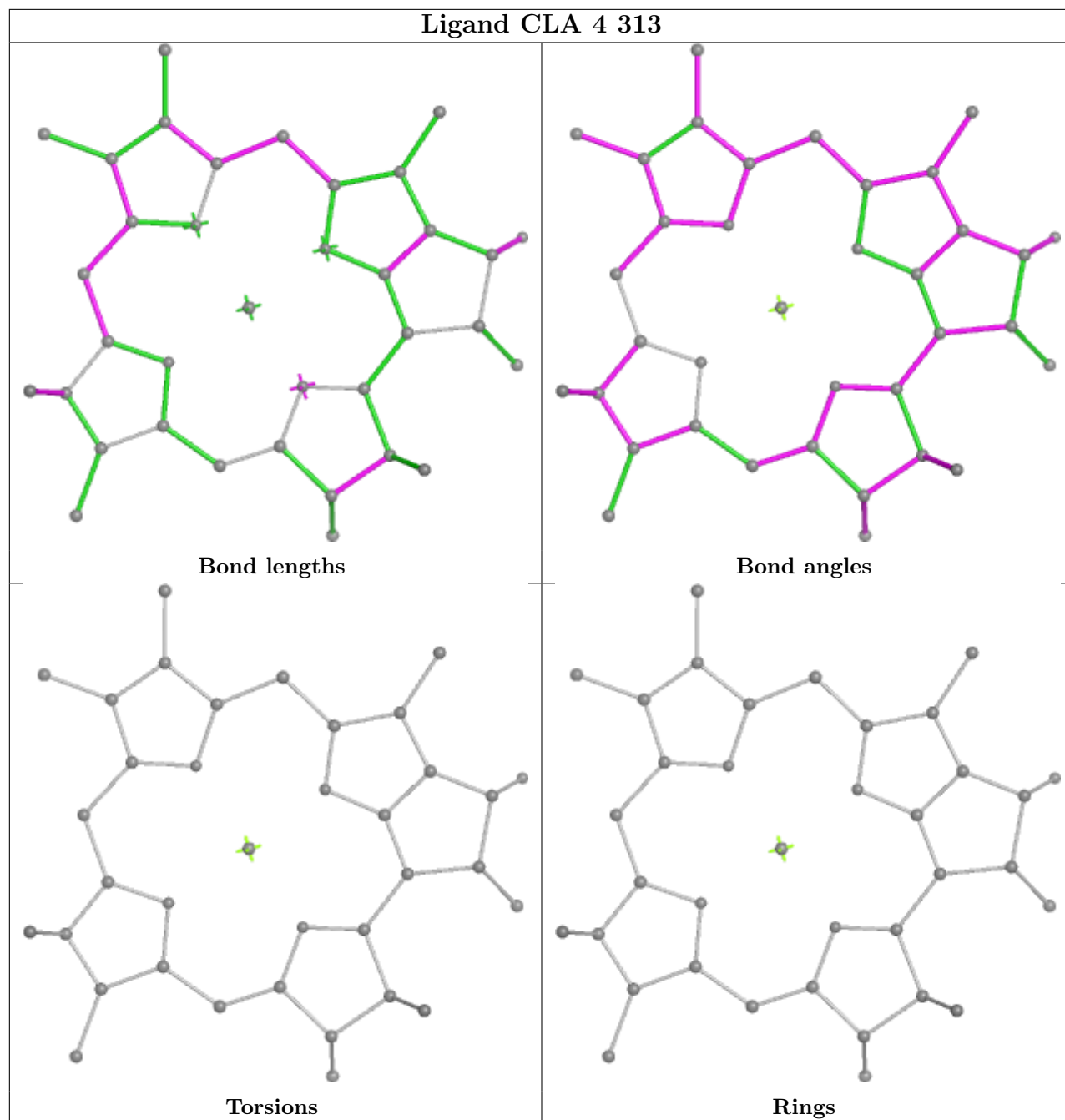
Torsions

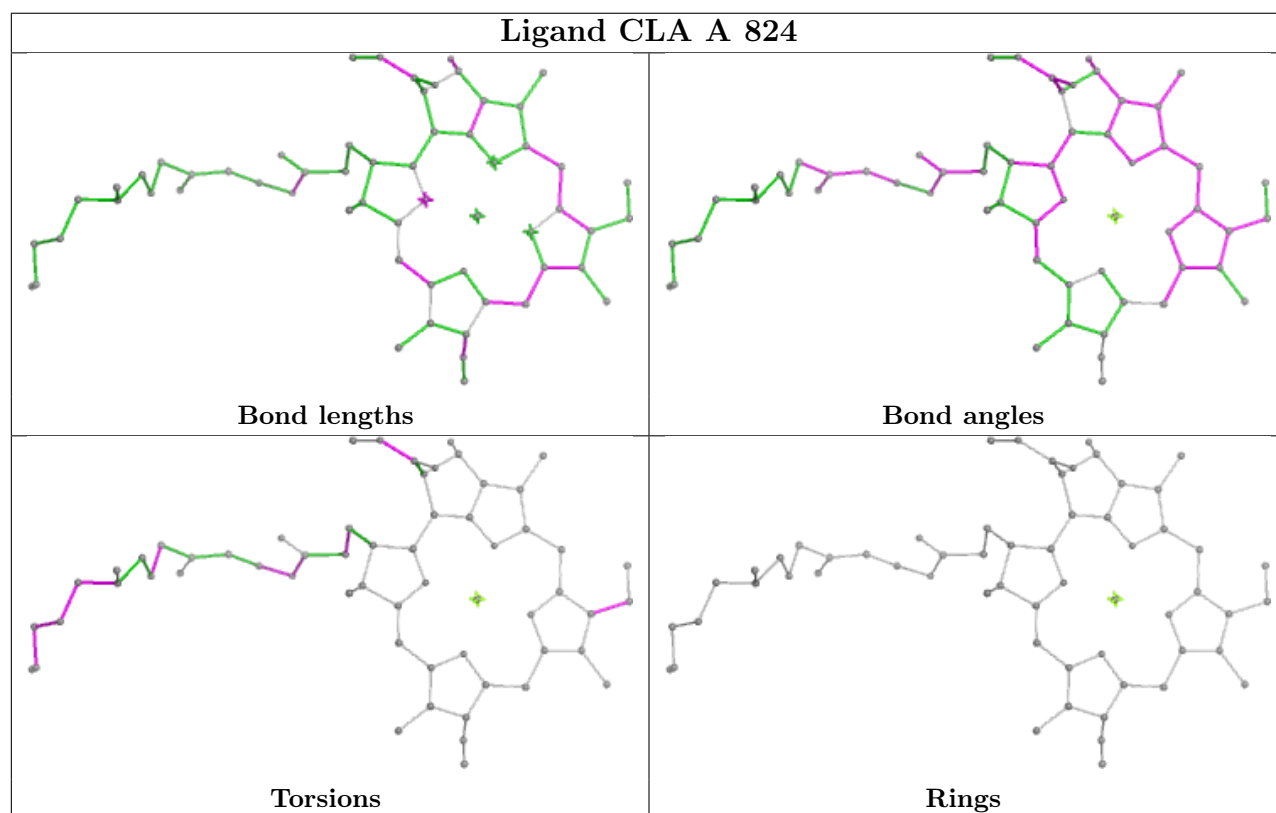
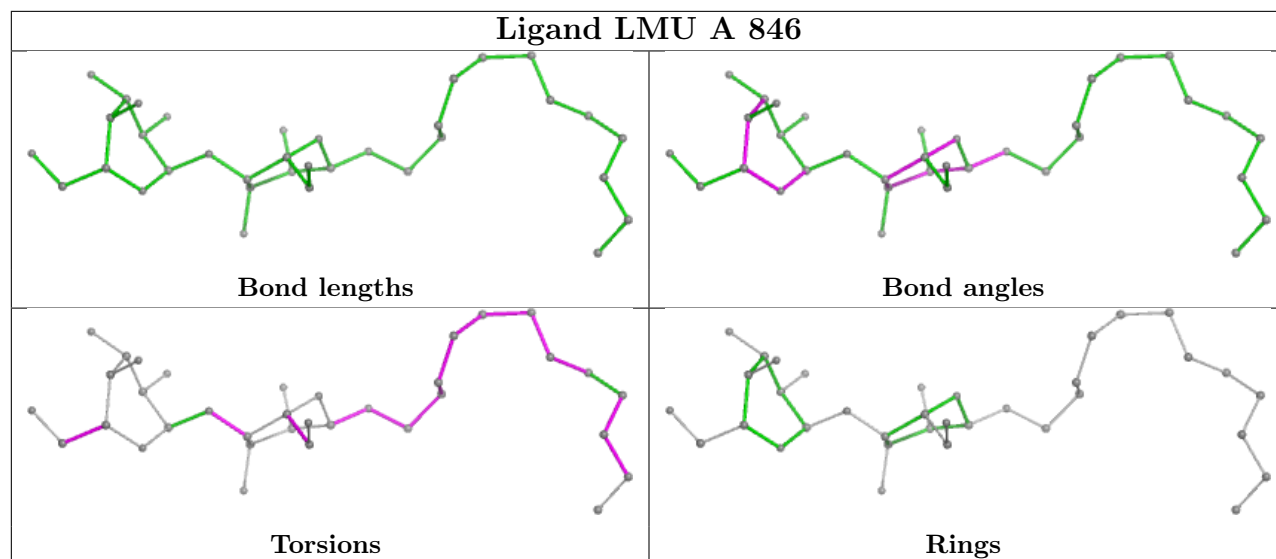


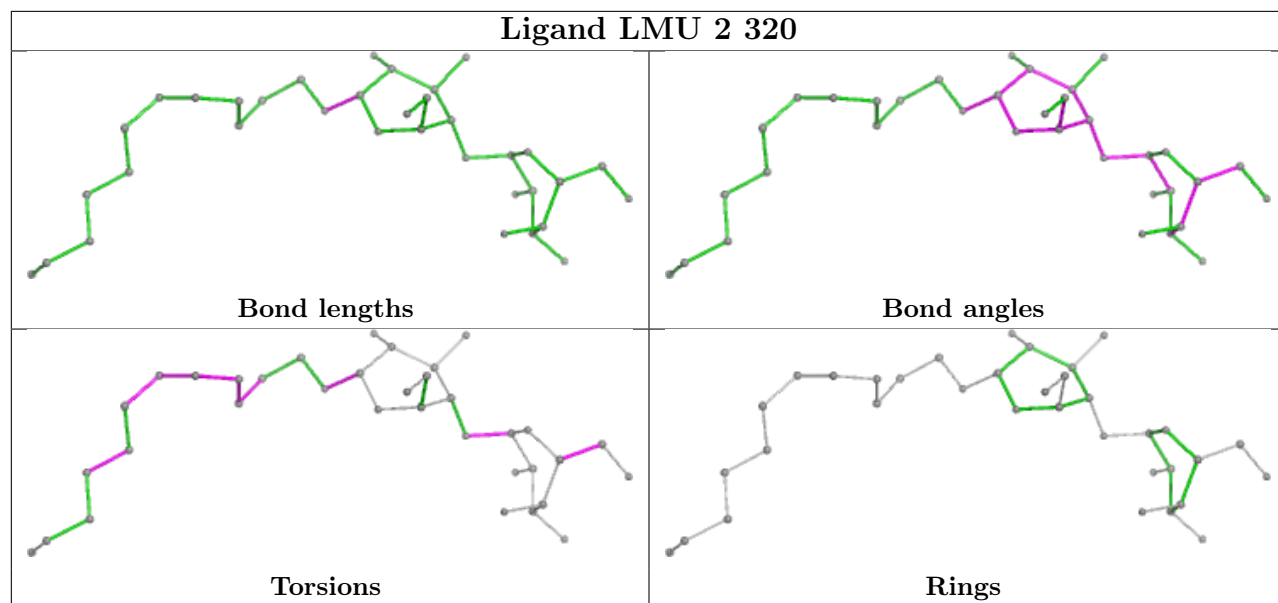
Rings



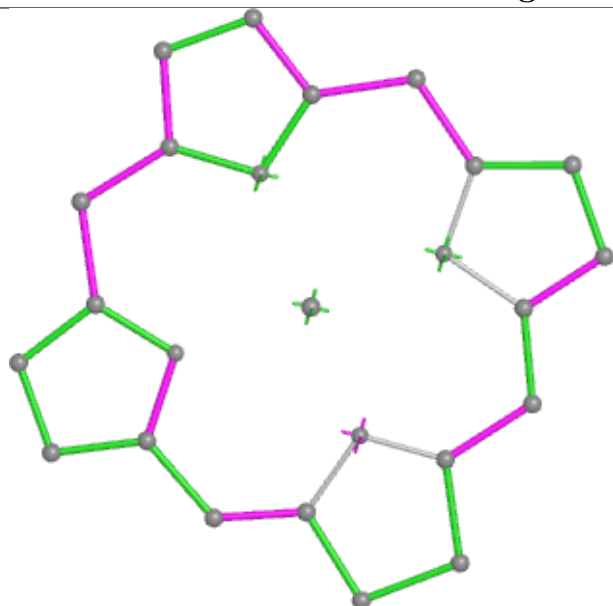
Ligand CLA 4 313



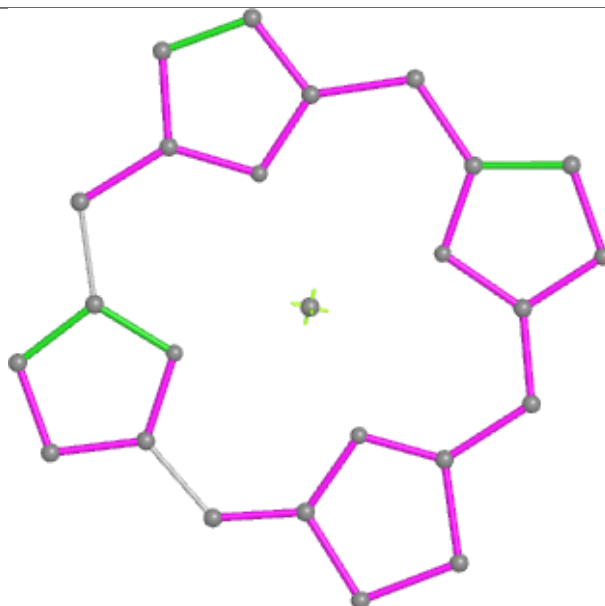




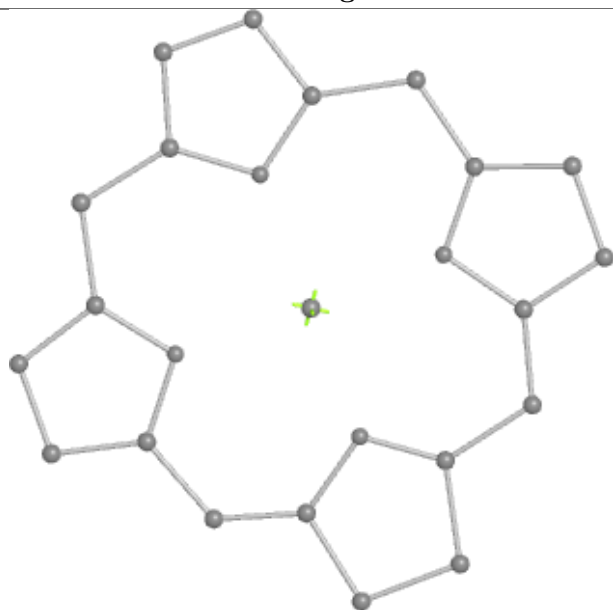
Ligand CLA 3 304



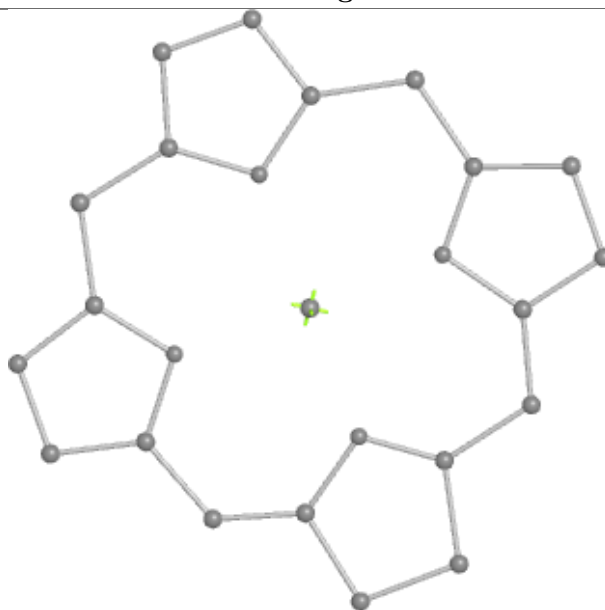
Bond lengths



Bond angles

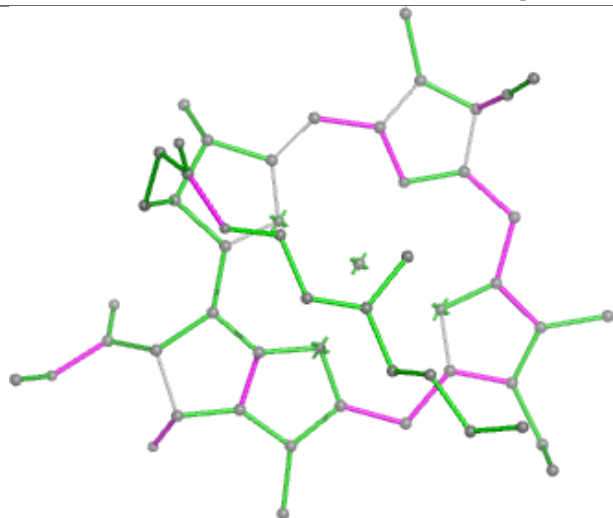


Torsions

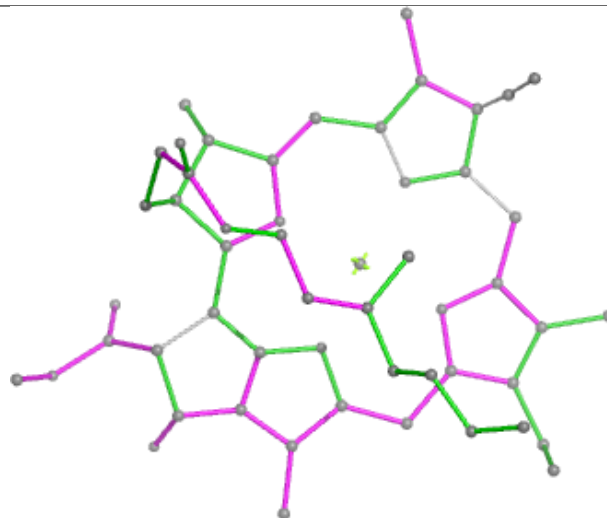


Rings

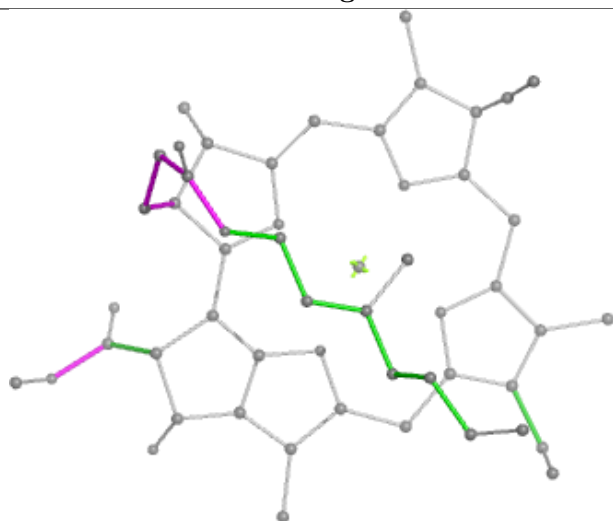
Ligand CLA B 818



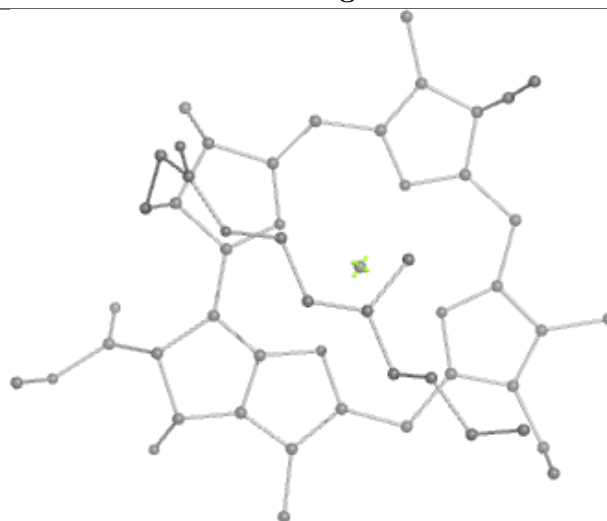
Bond lengths



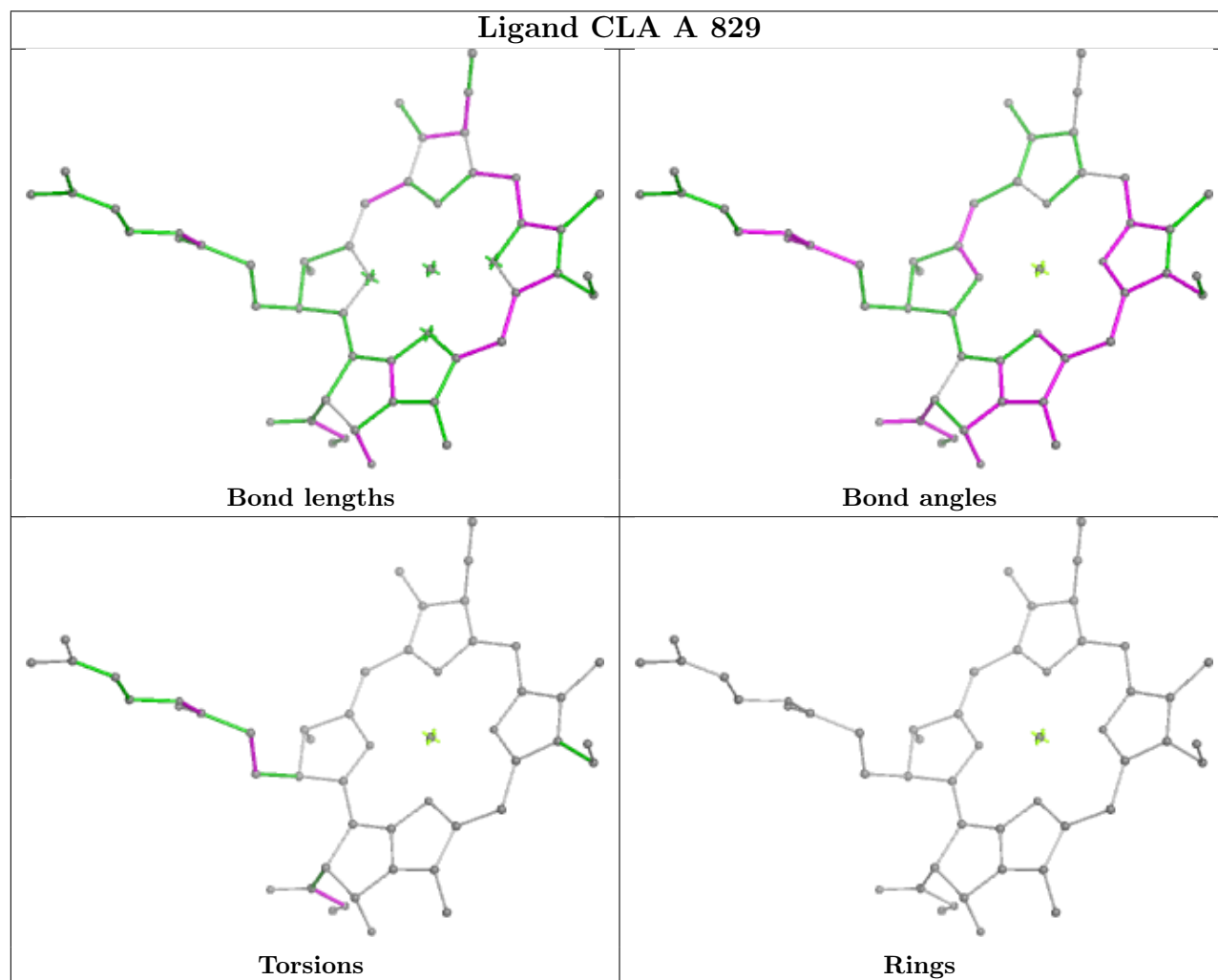
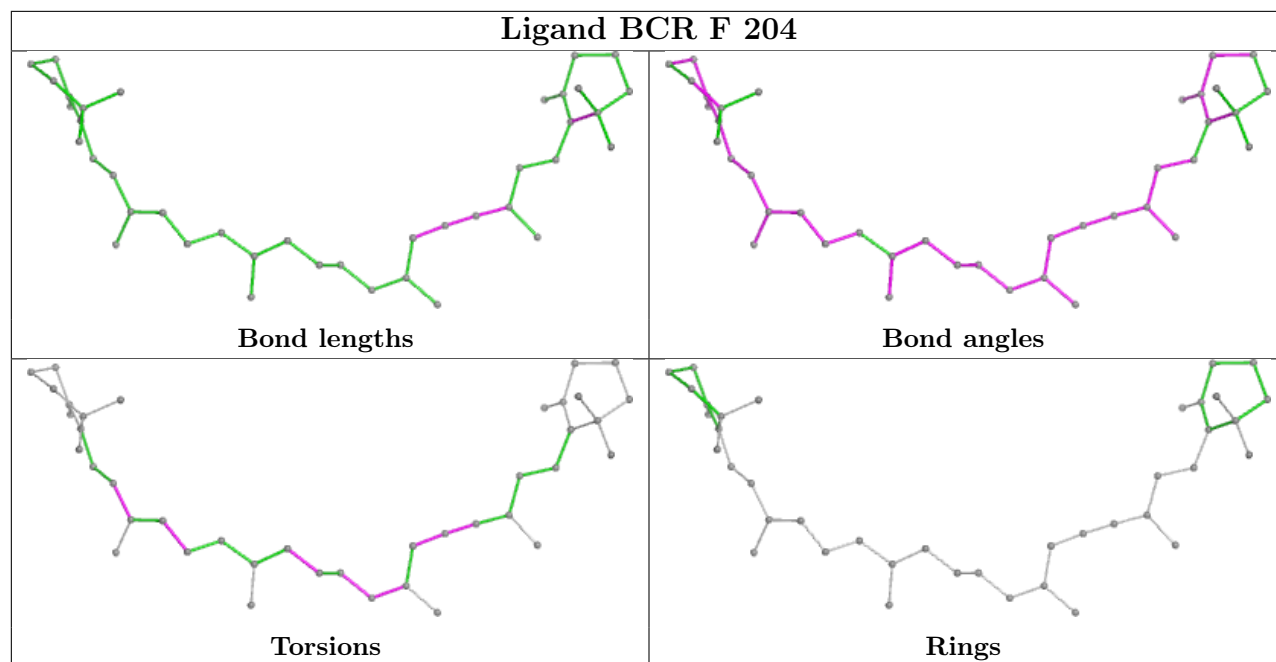
Bond angles



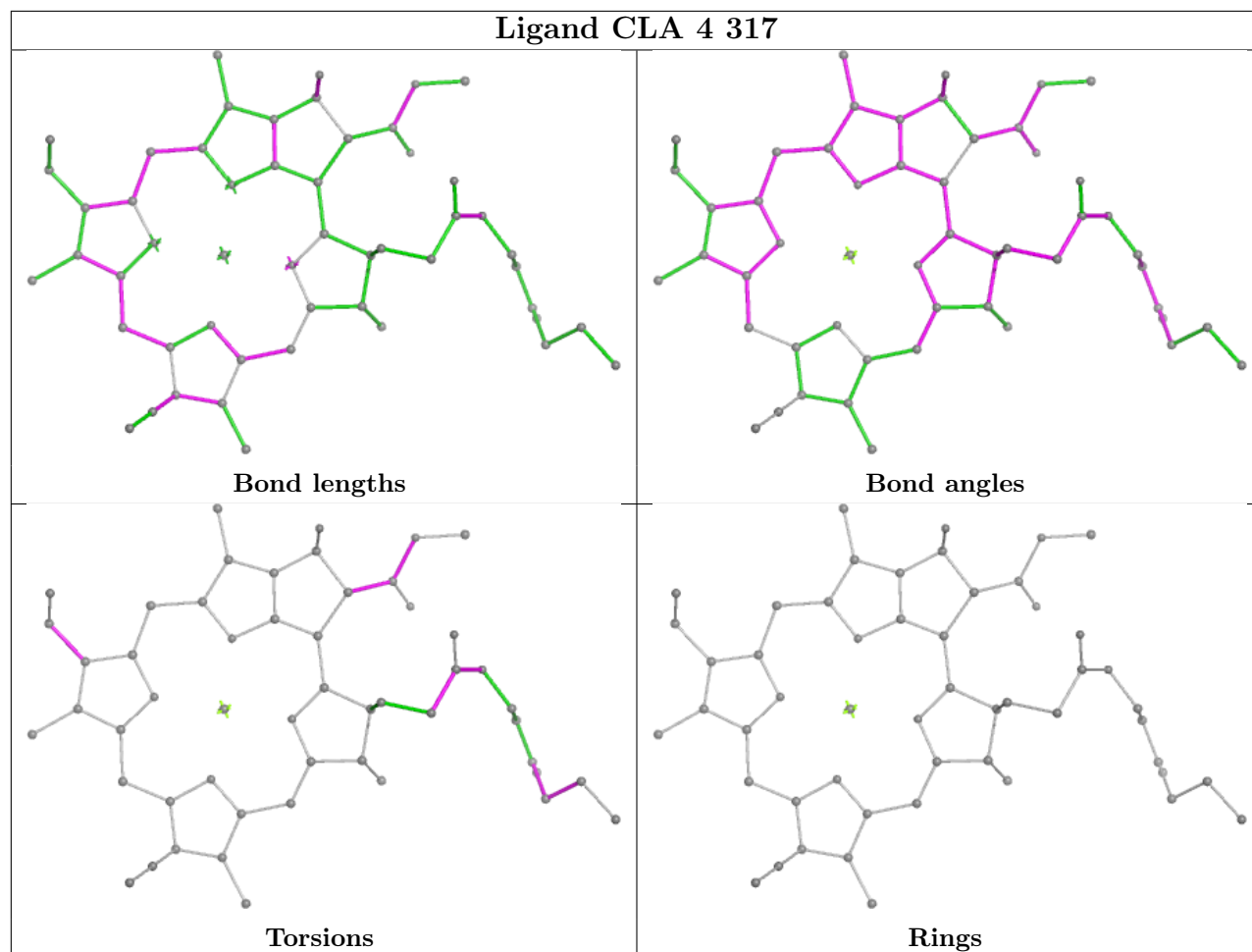
Torsions



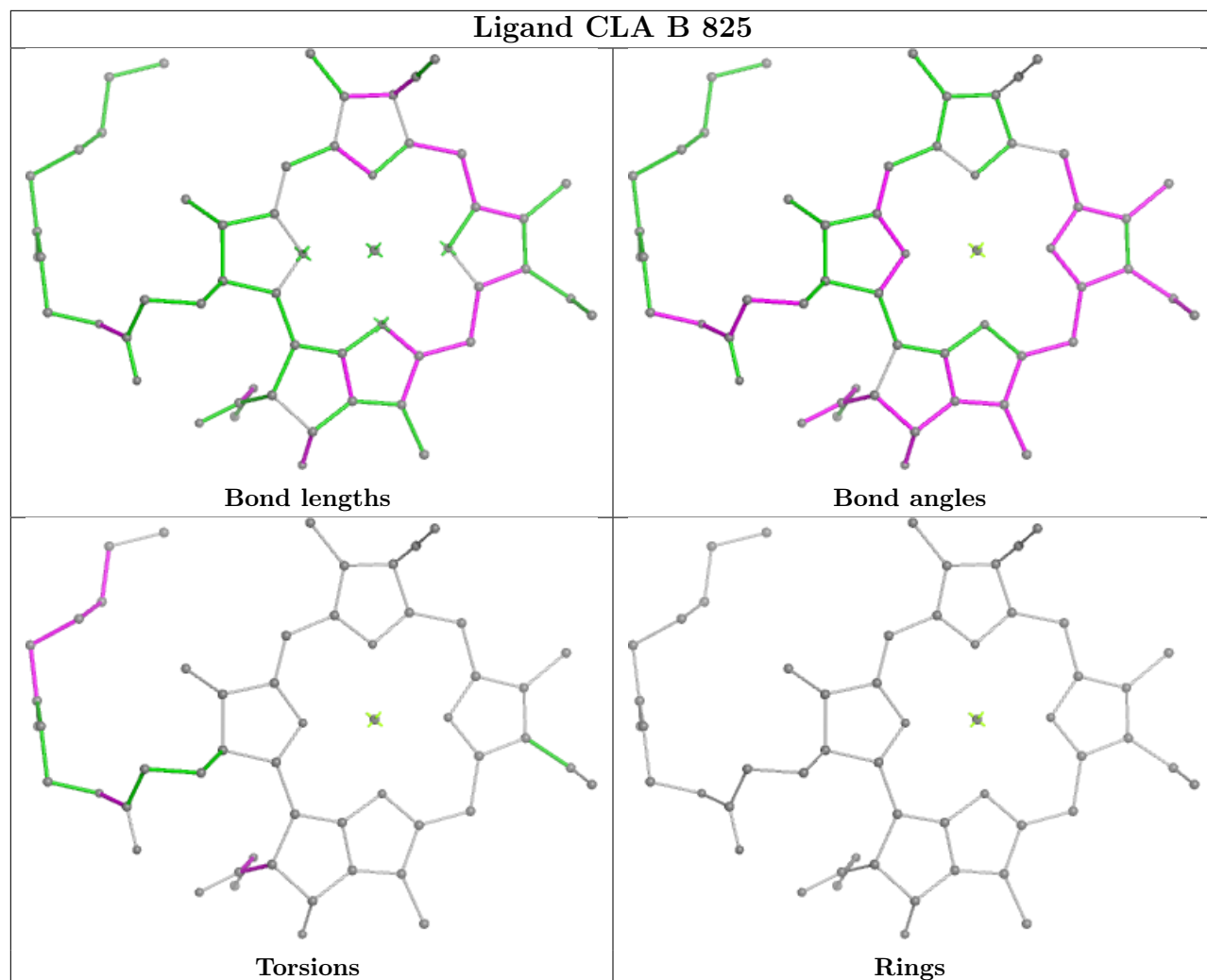
Rings



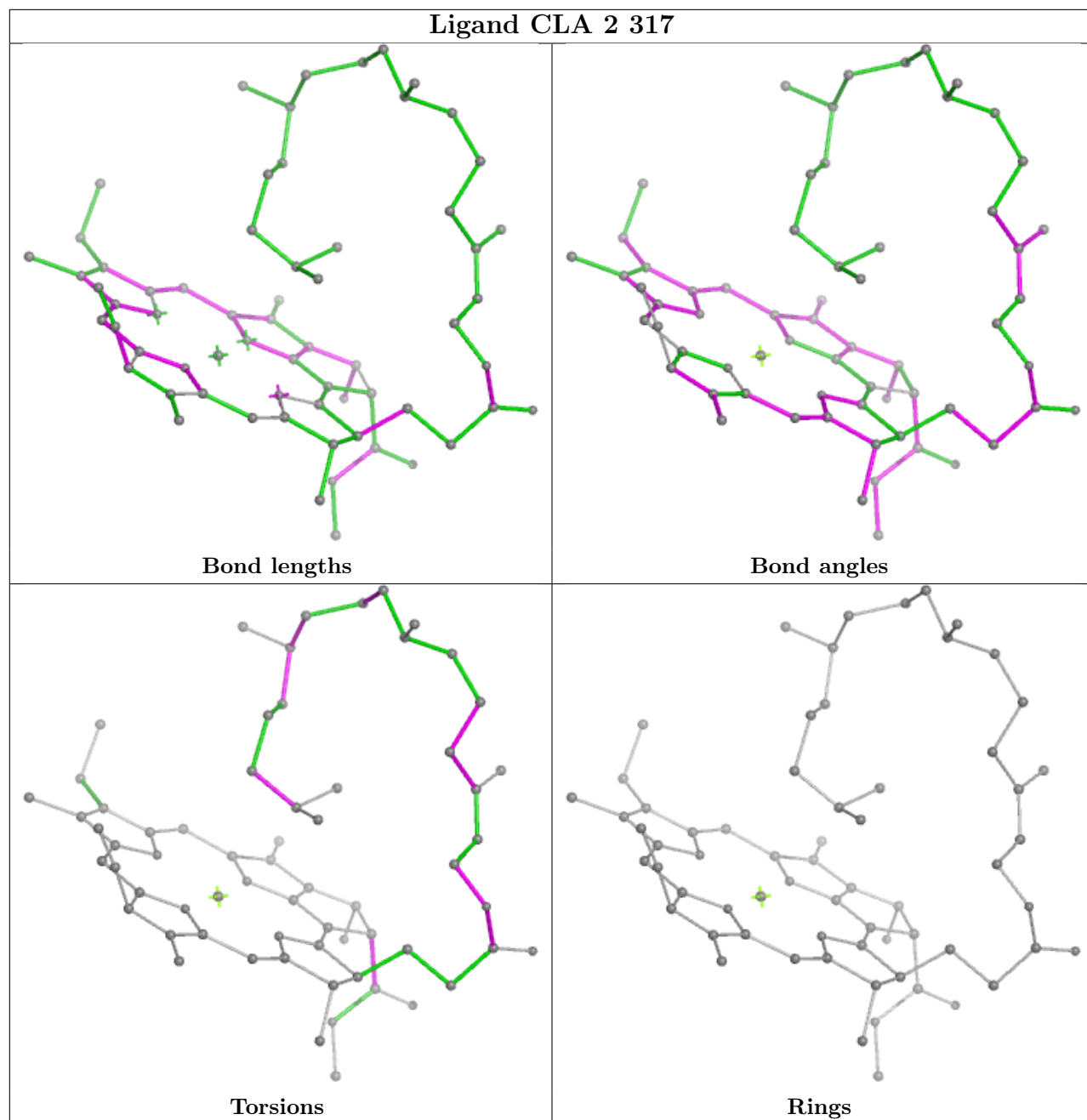
Ligand CLA 4 317



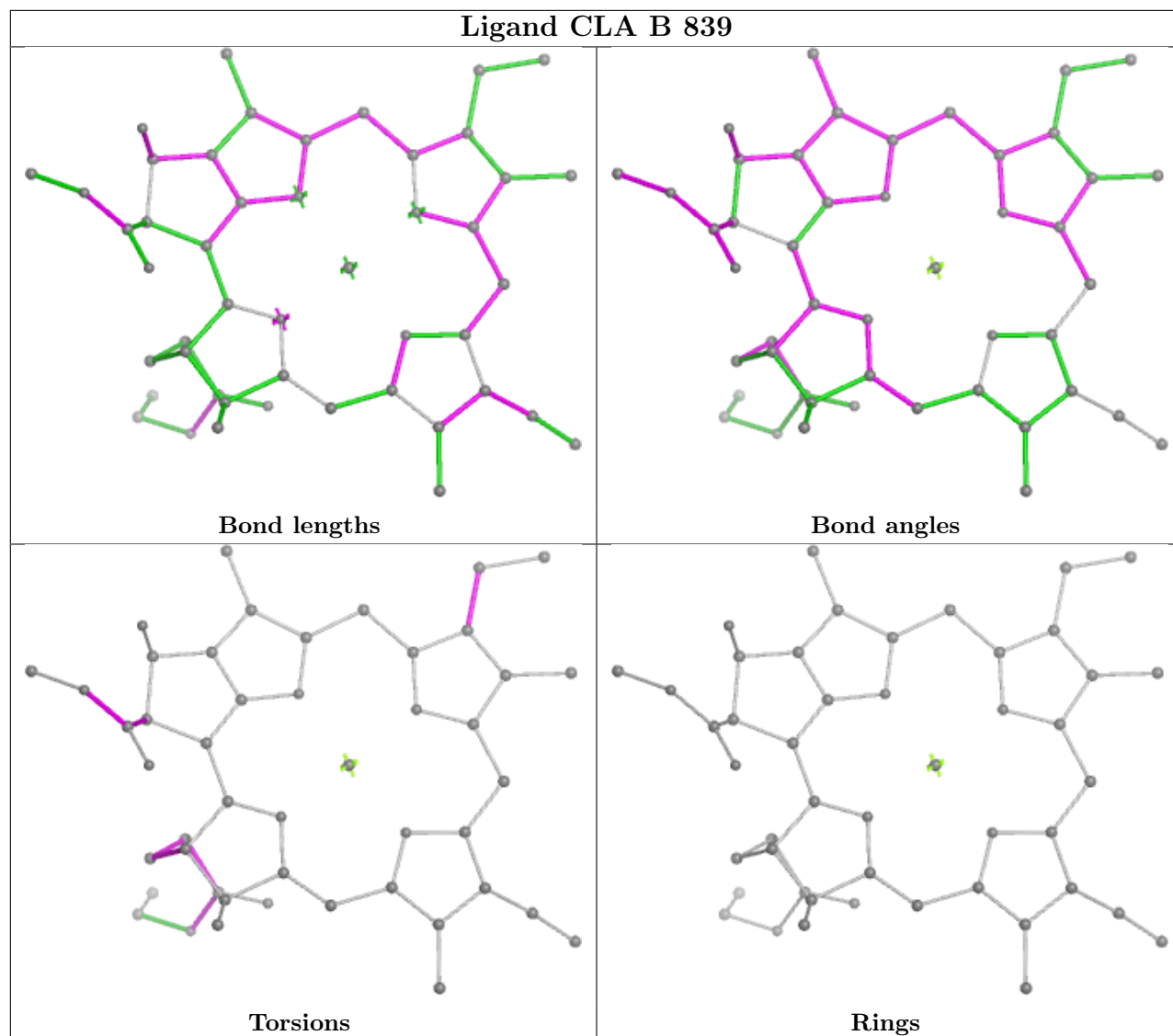
Ligand CLA B 825



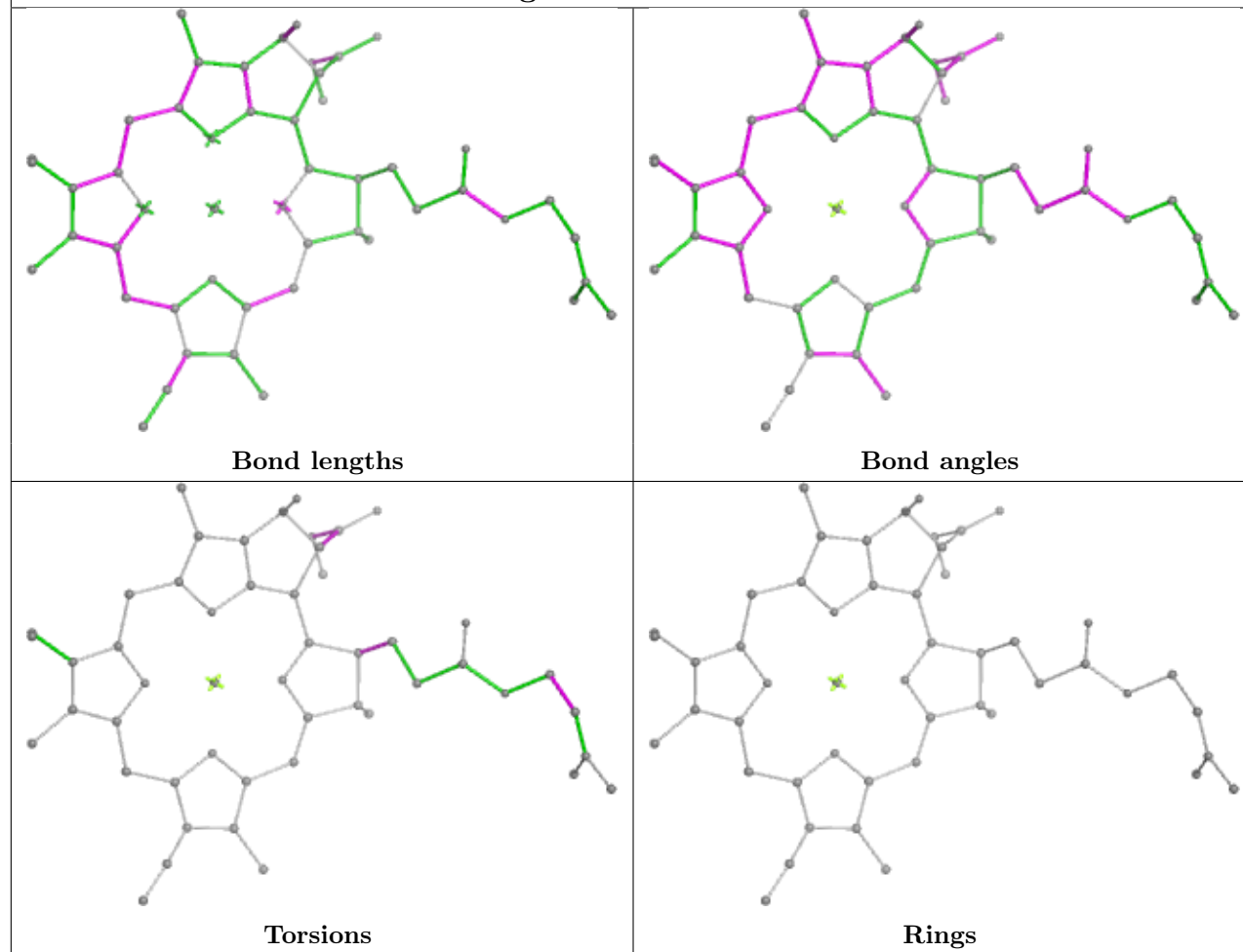
Ligand CLA 2 317

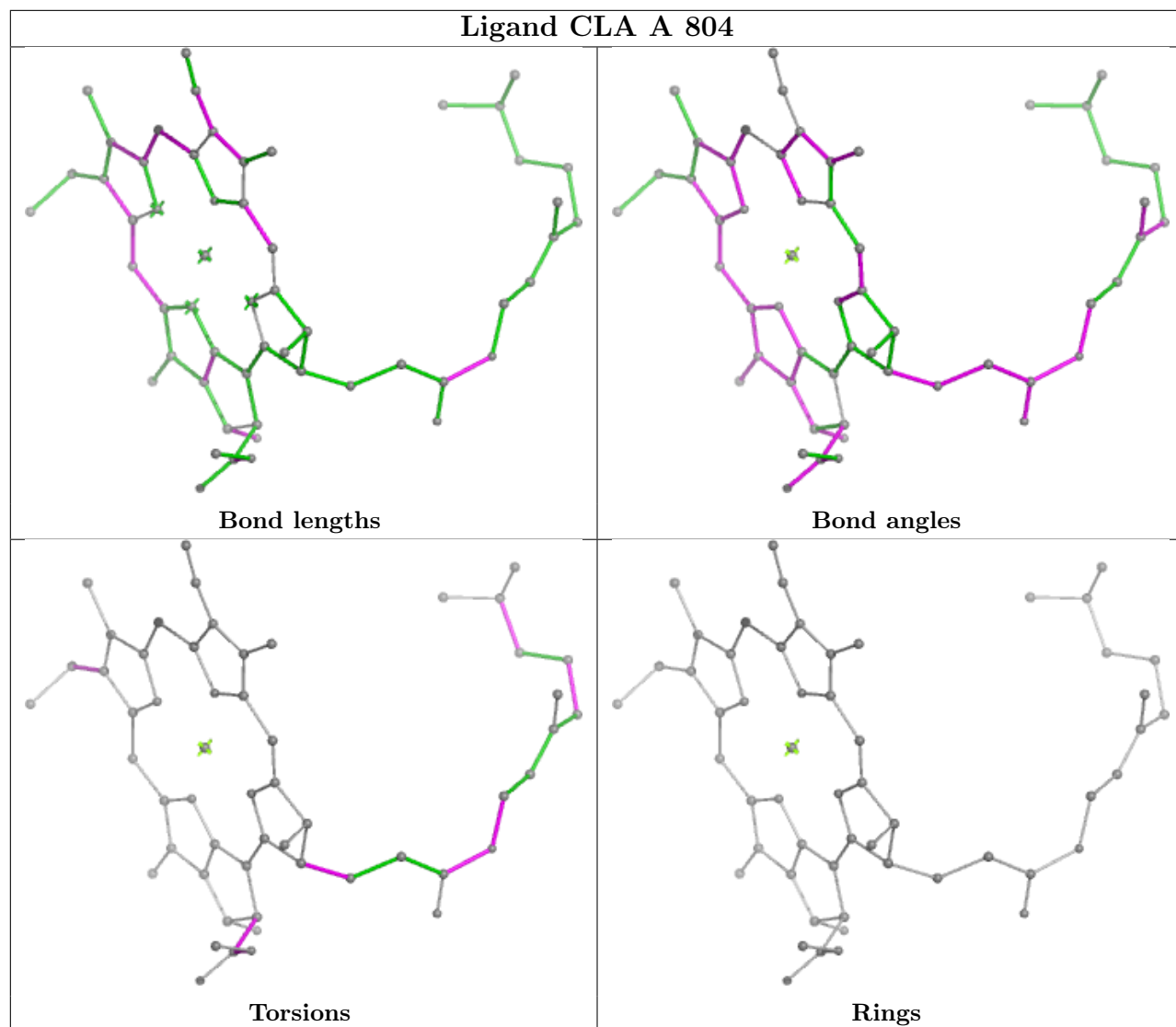


Ligand CLA B 839

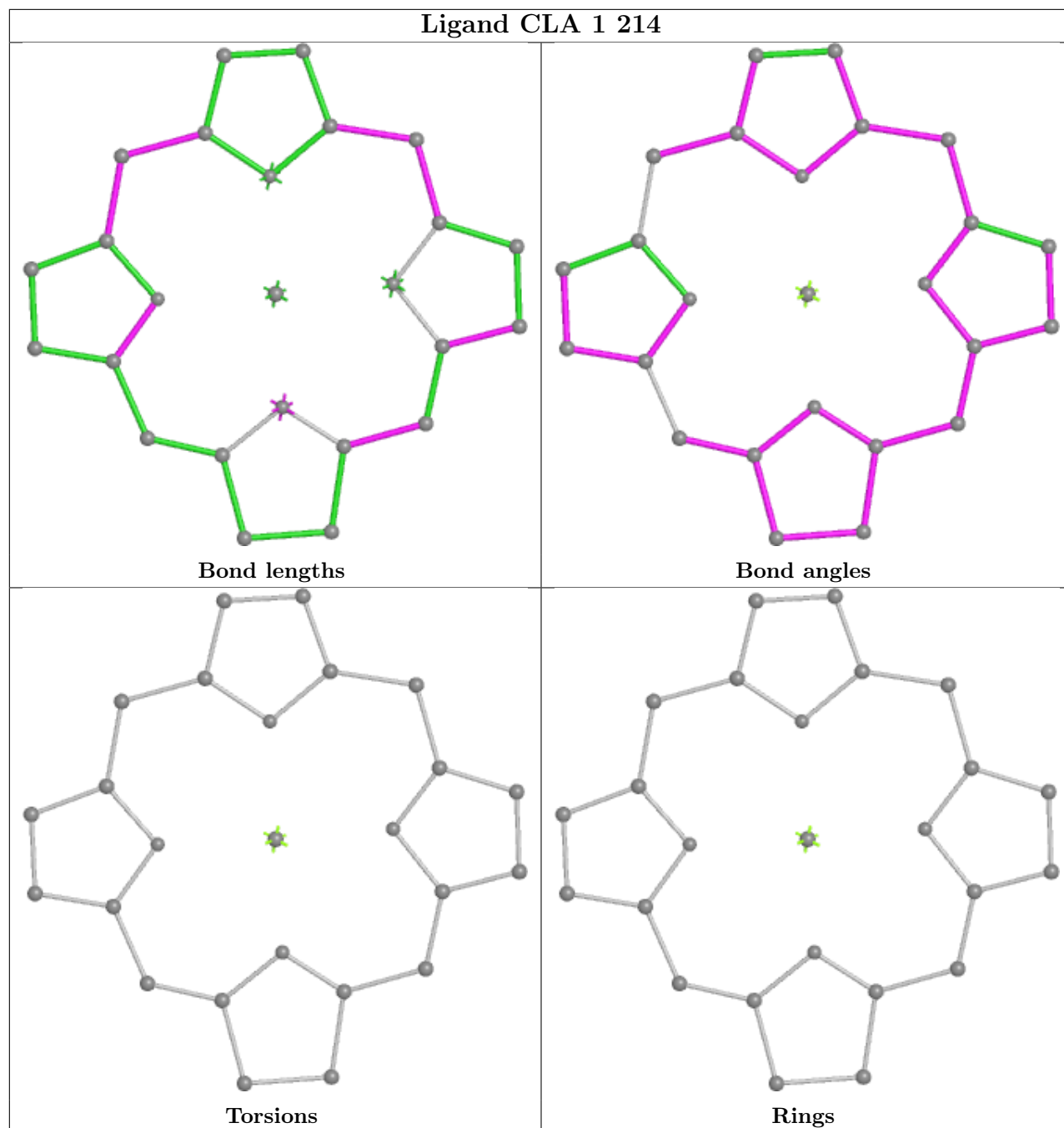


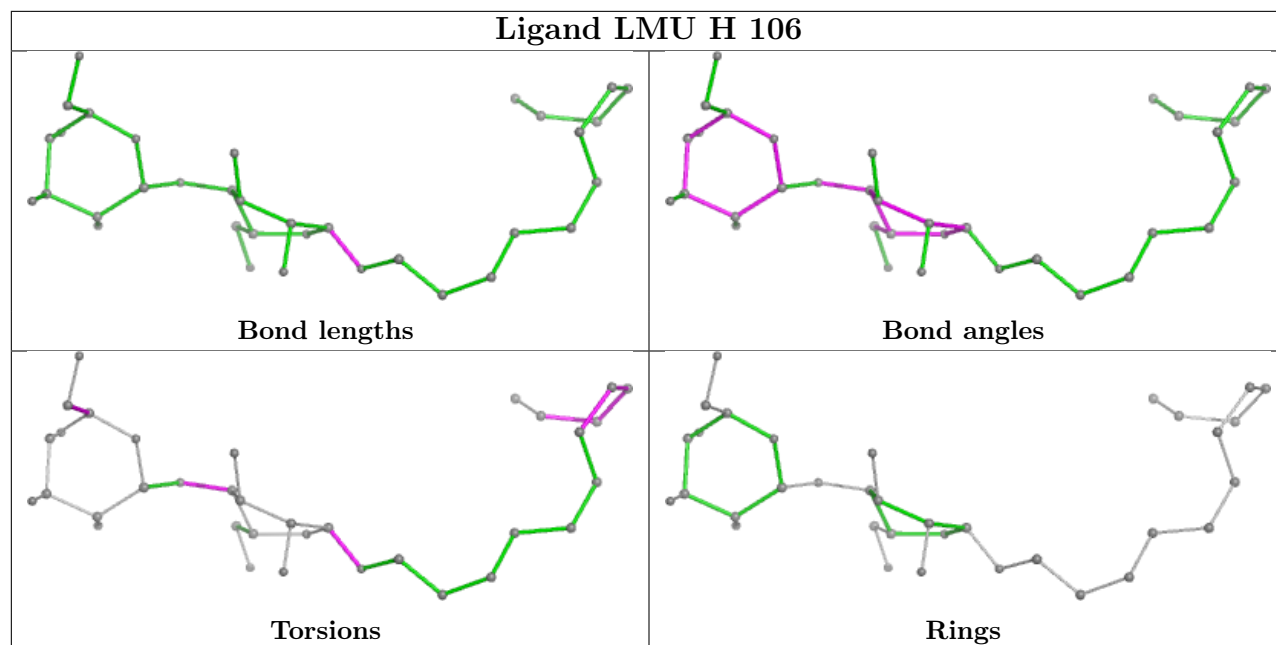
Ligand CLA B 833



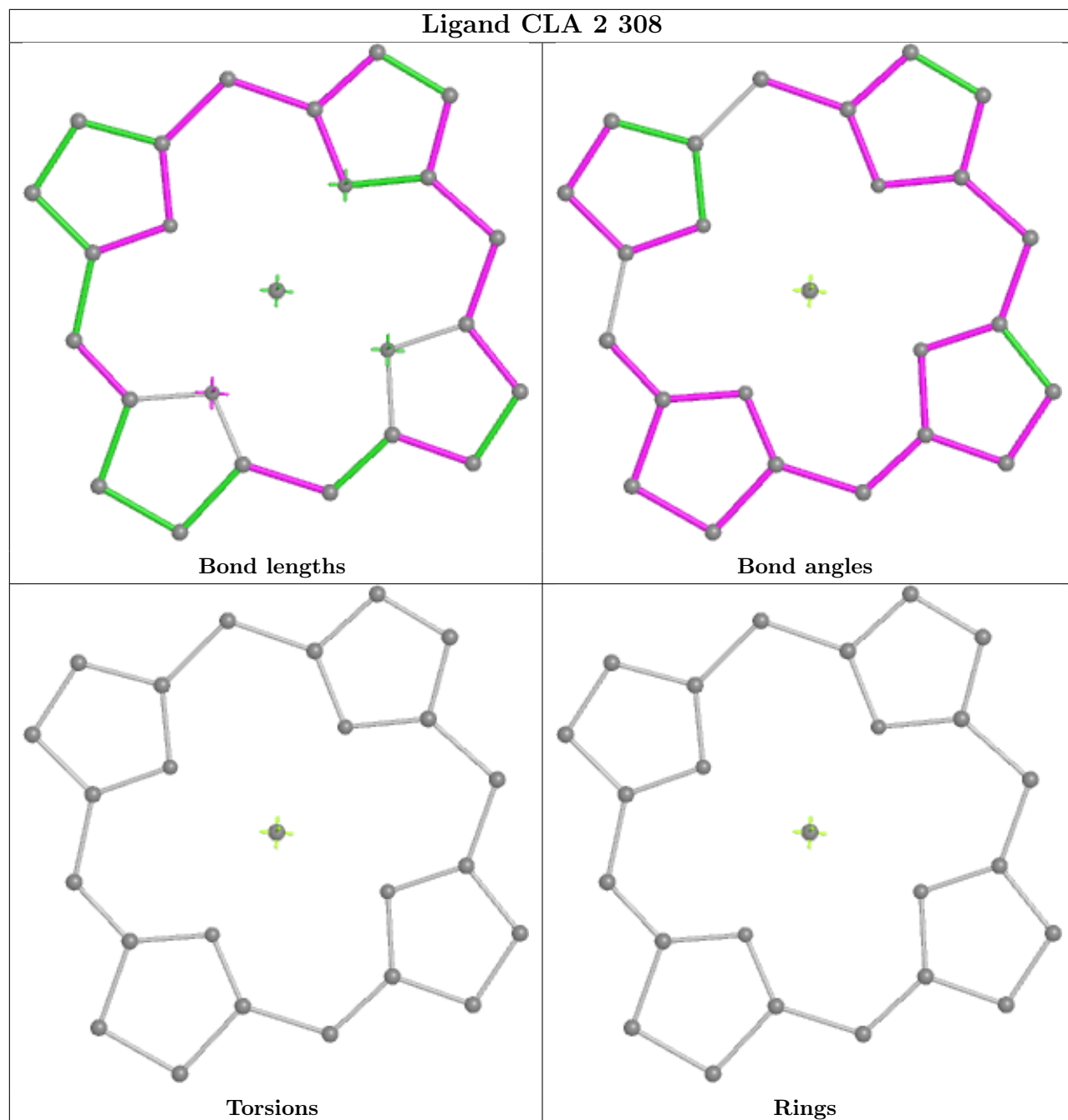


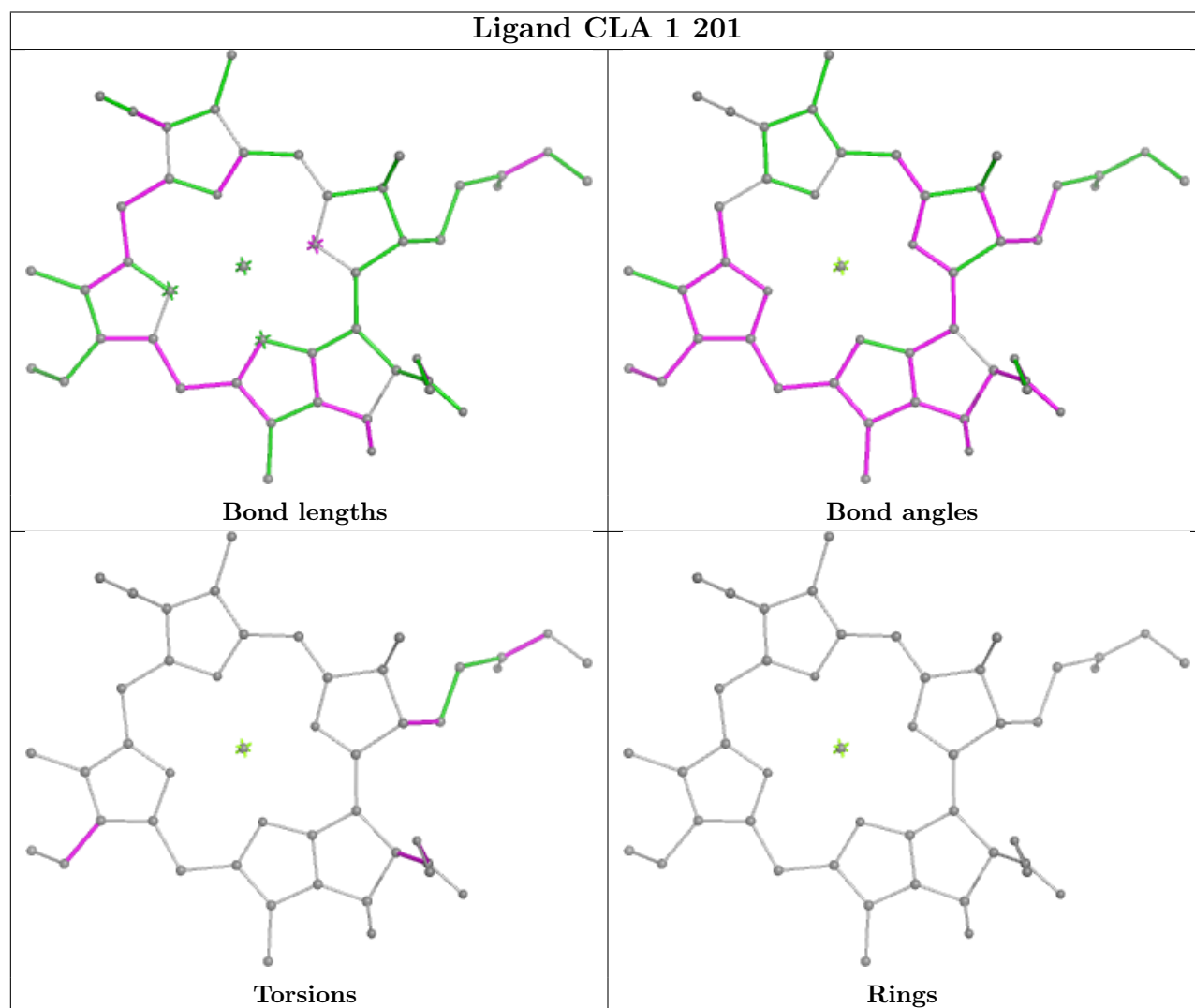
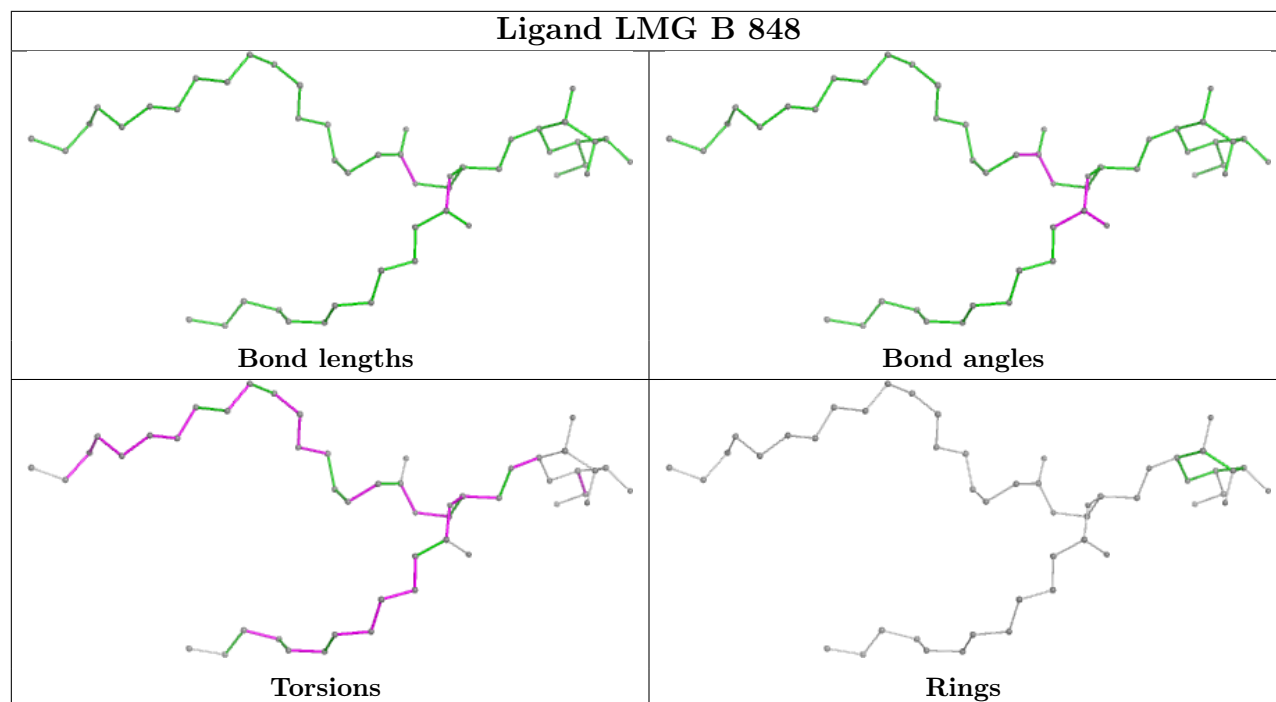
Ligand CLA 1 214



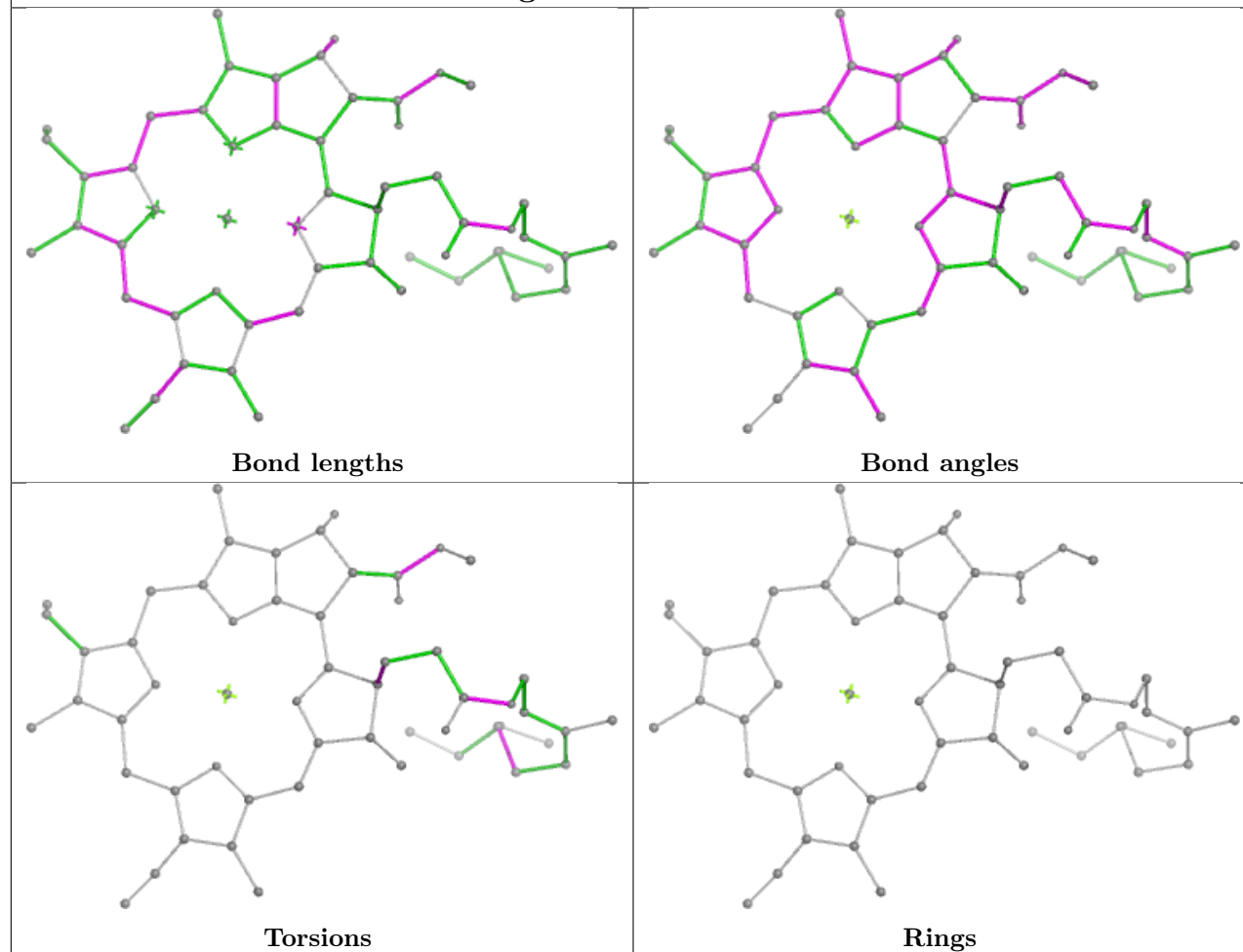


Ligand CLA 2 308

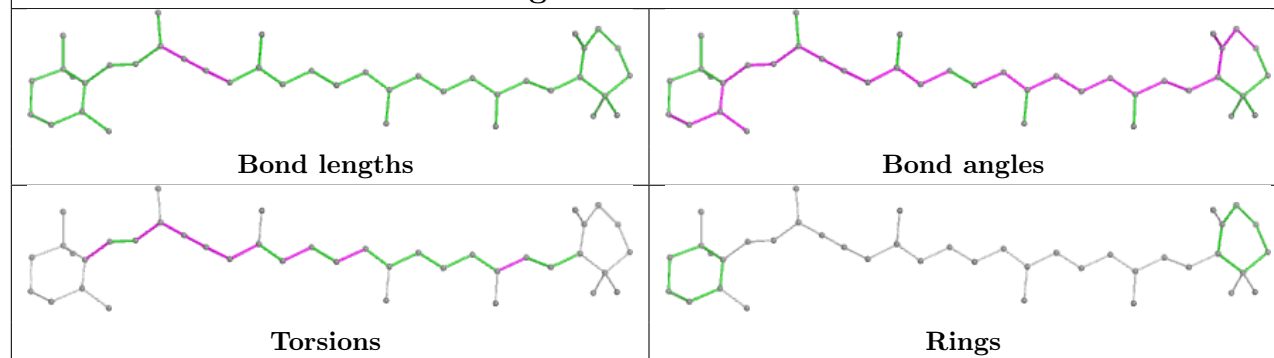




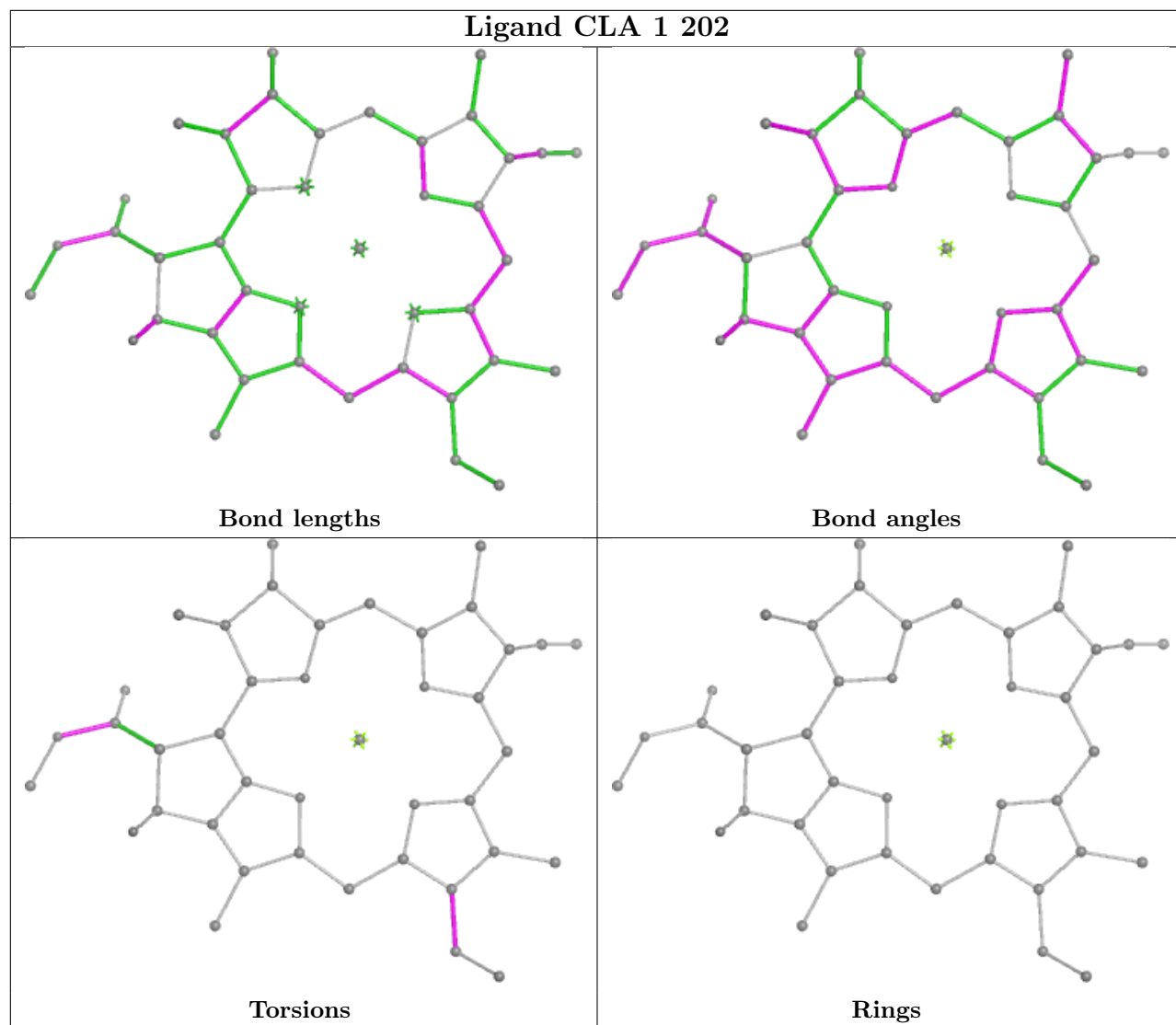
Ligand CLA A 806



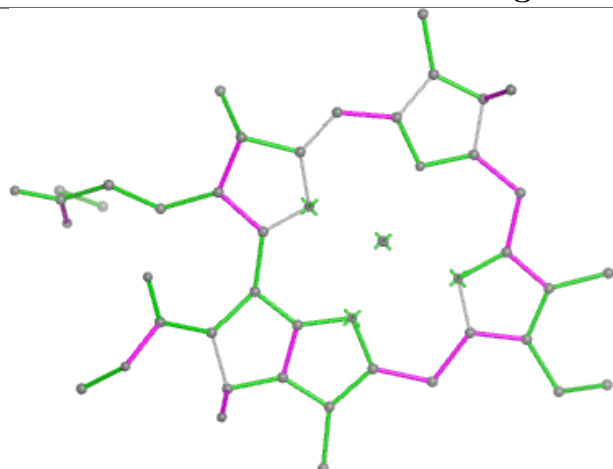
Ligand BCR G 104



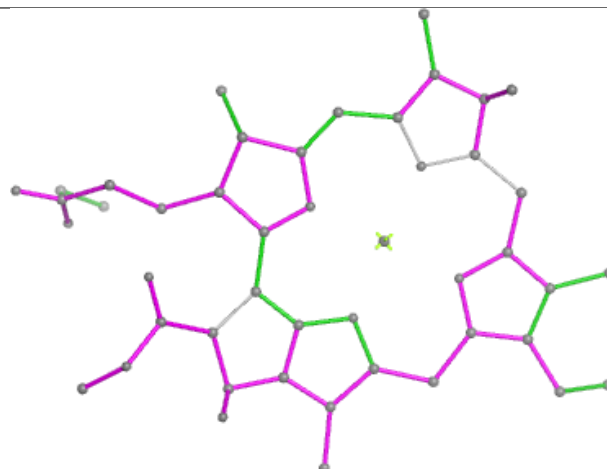
Ligand CLA 1 202



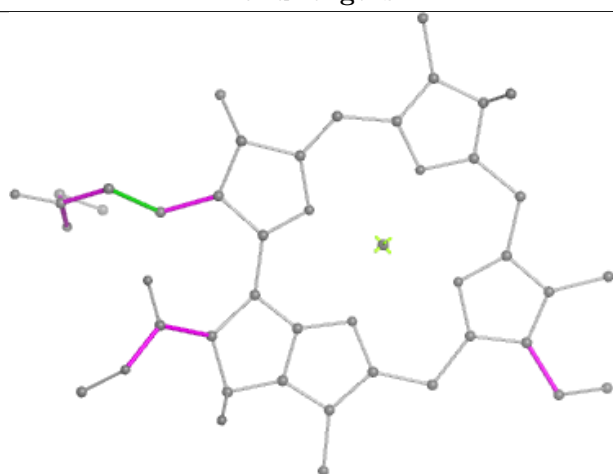
Ligand CLA A 801



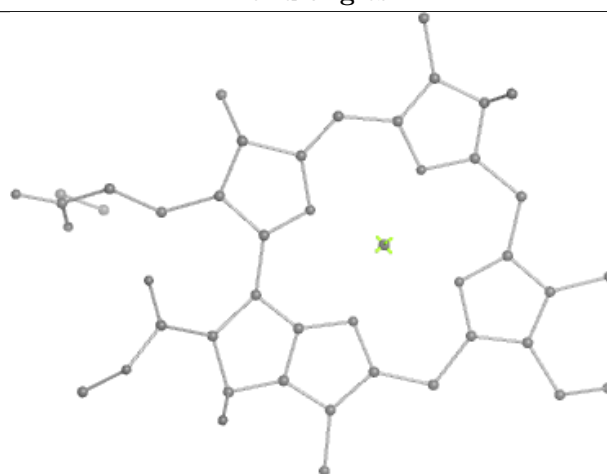
Bond lengths



Bond angles

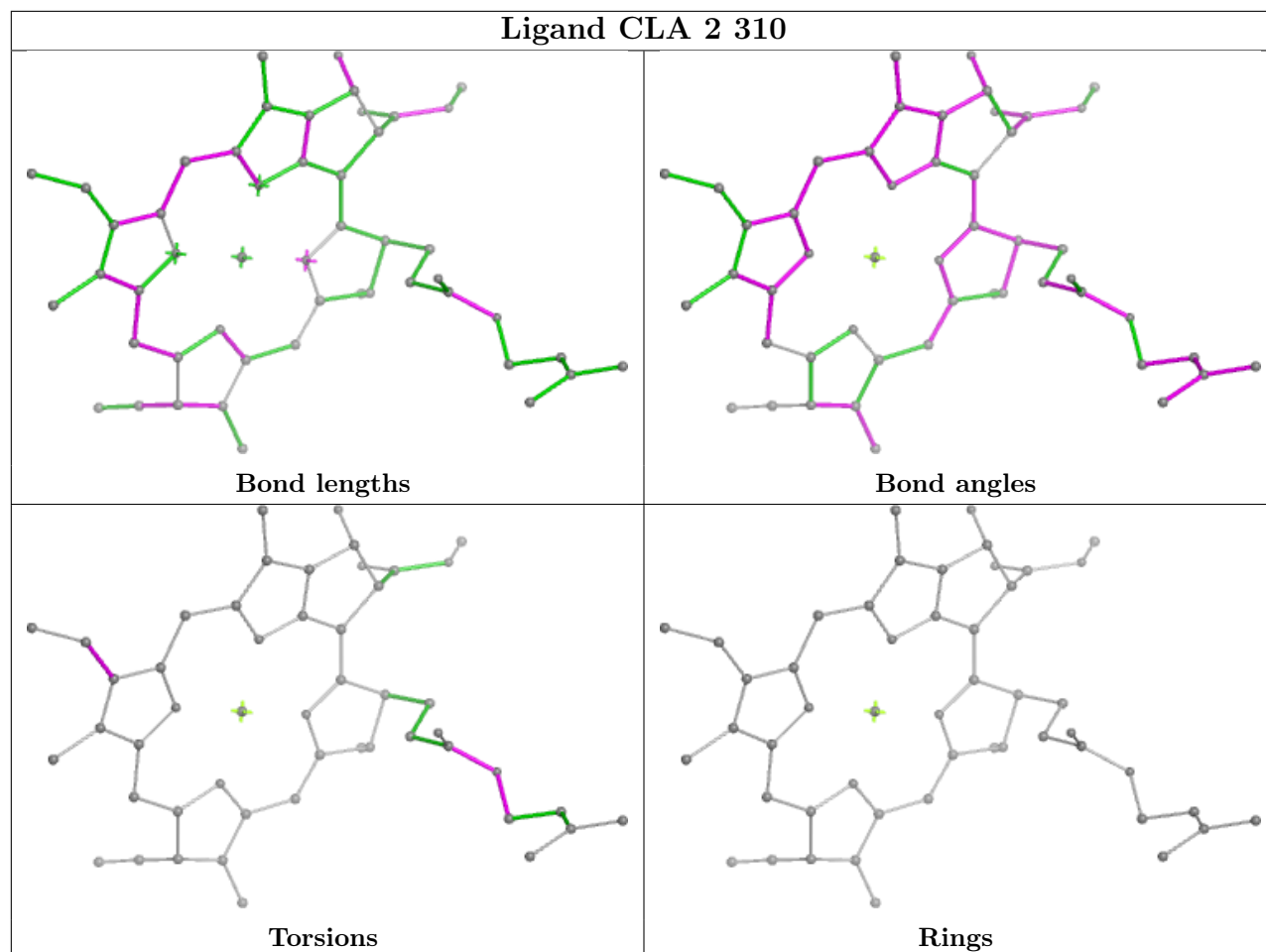


Torsions

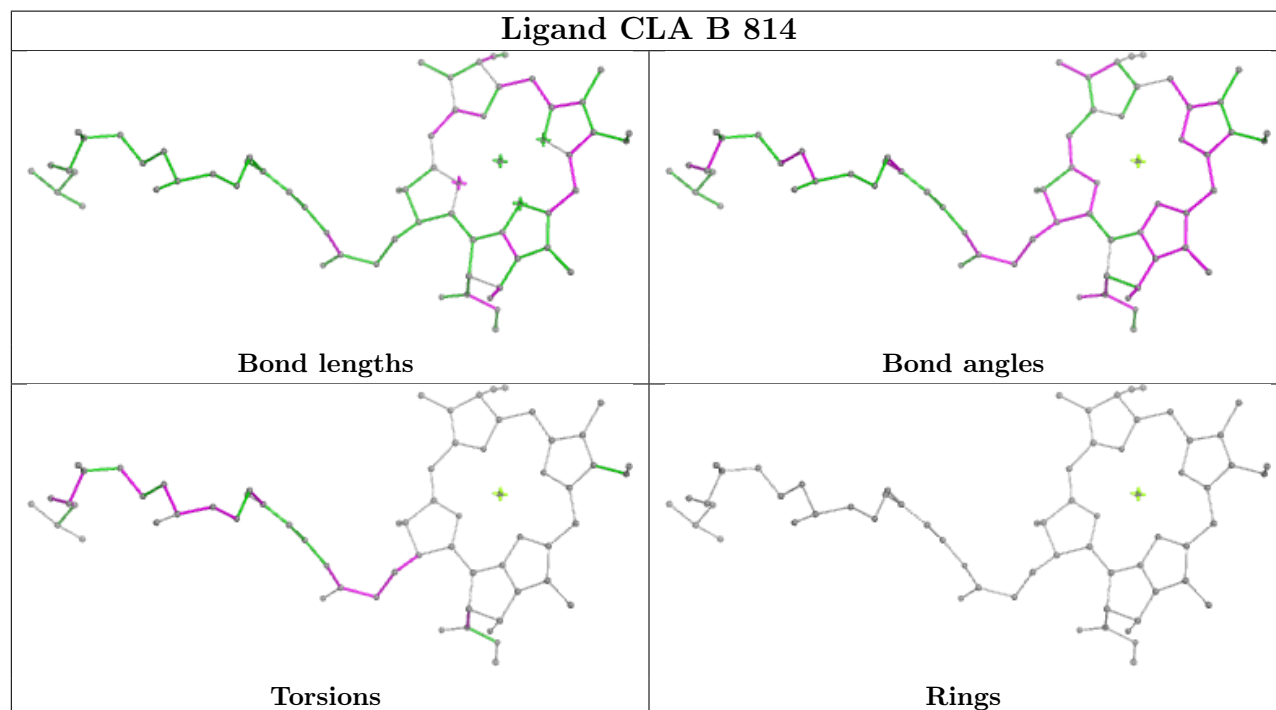


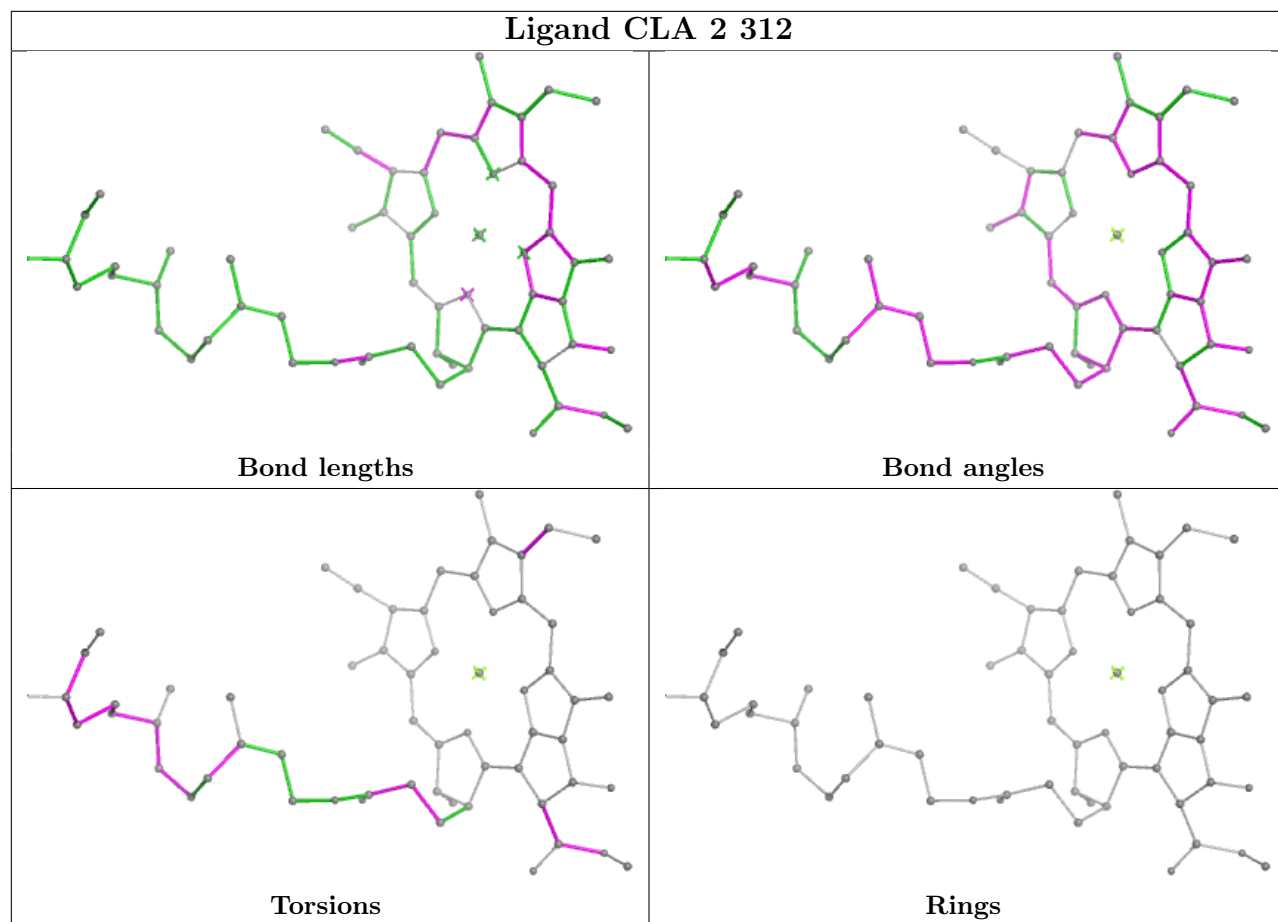
Rings

Ligand CLA 2 310

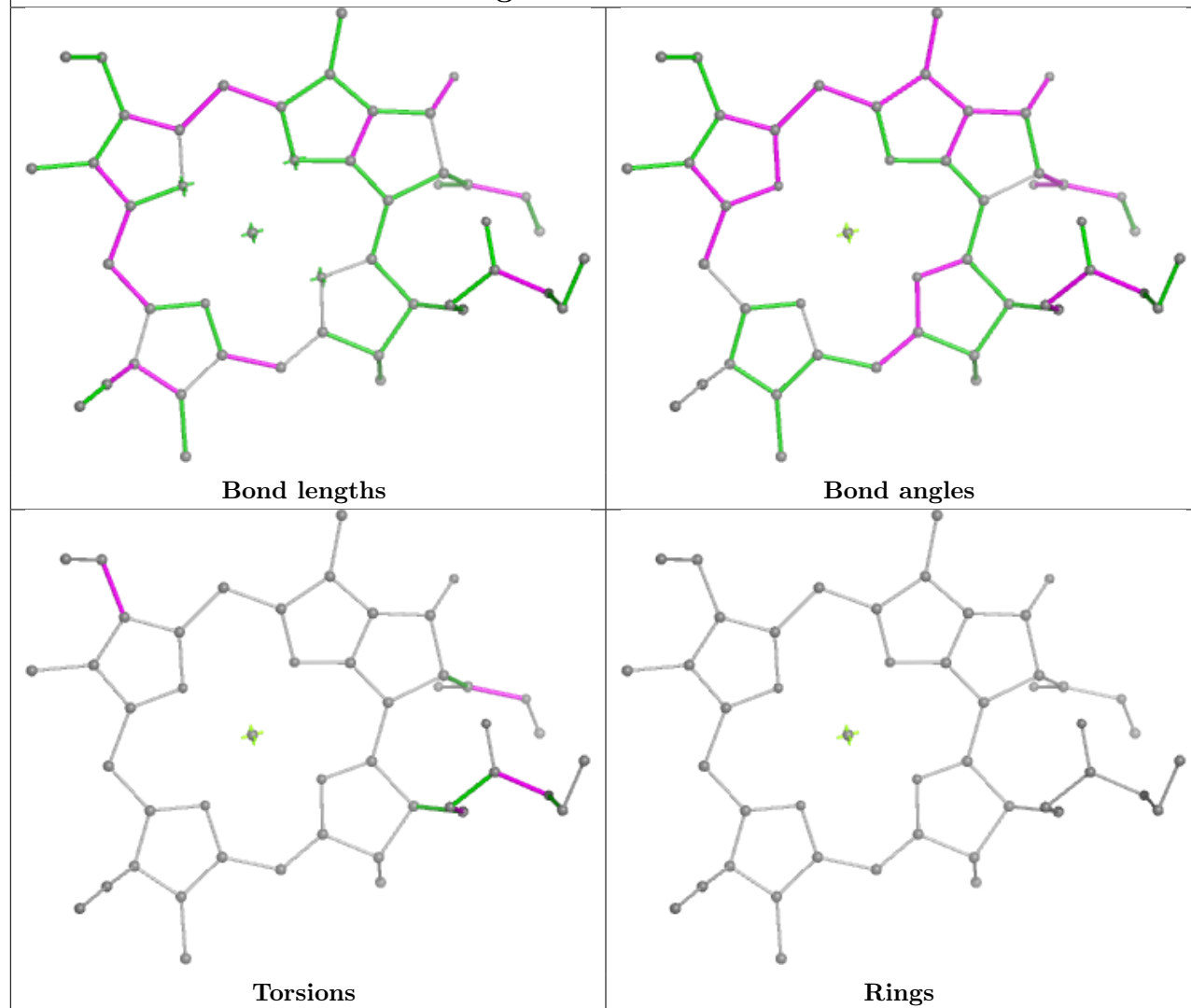


Ligand CLA B 814

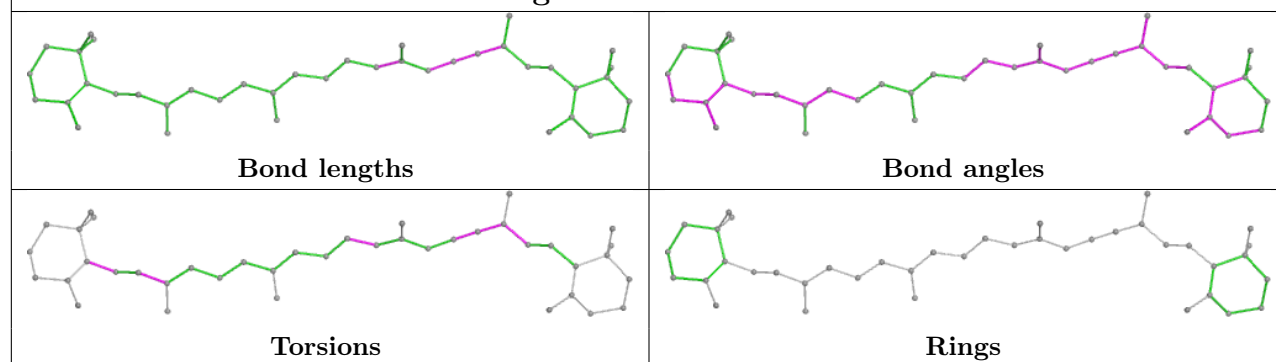




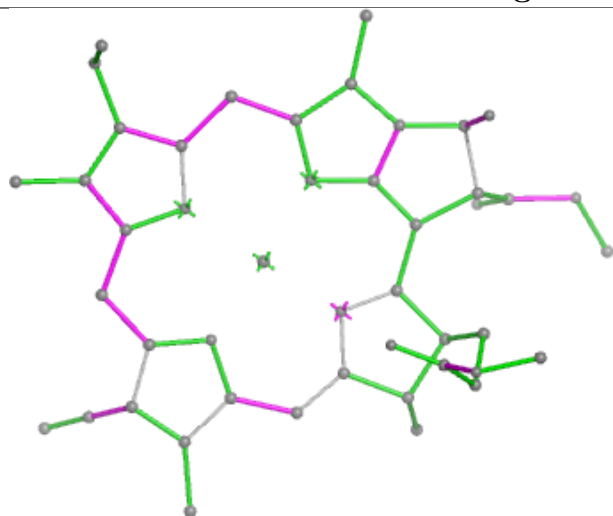
Ligand CLA A 836



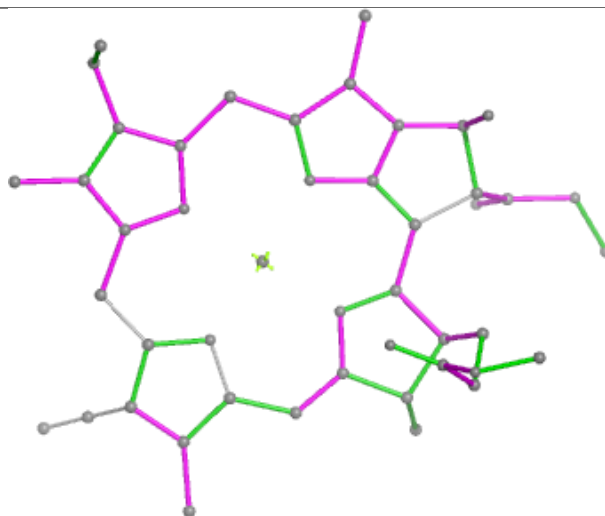
Ligand BCR L 211



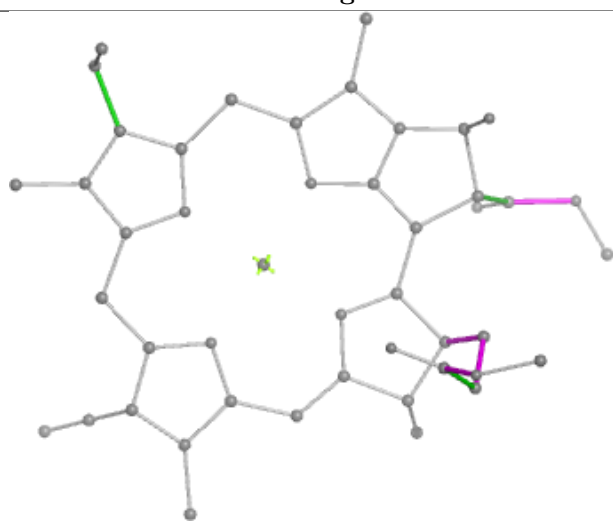
Ligand CLA A 807



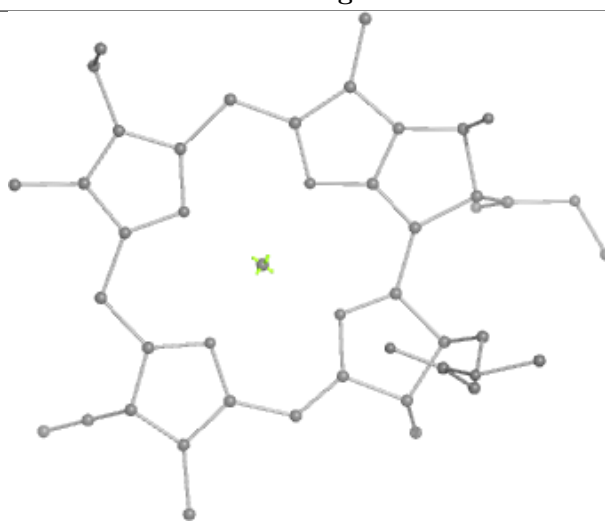
Bond lengths



Bond angles

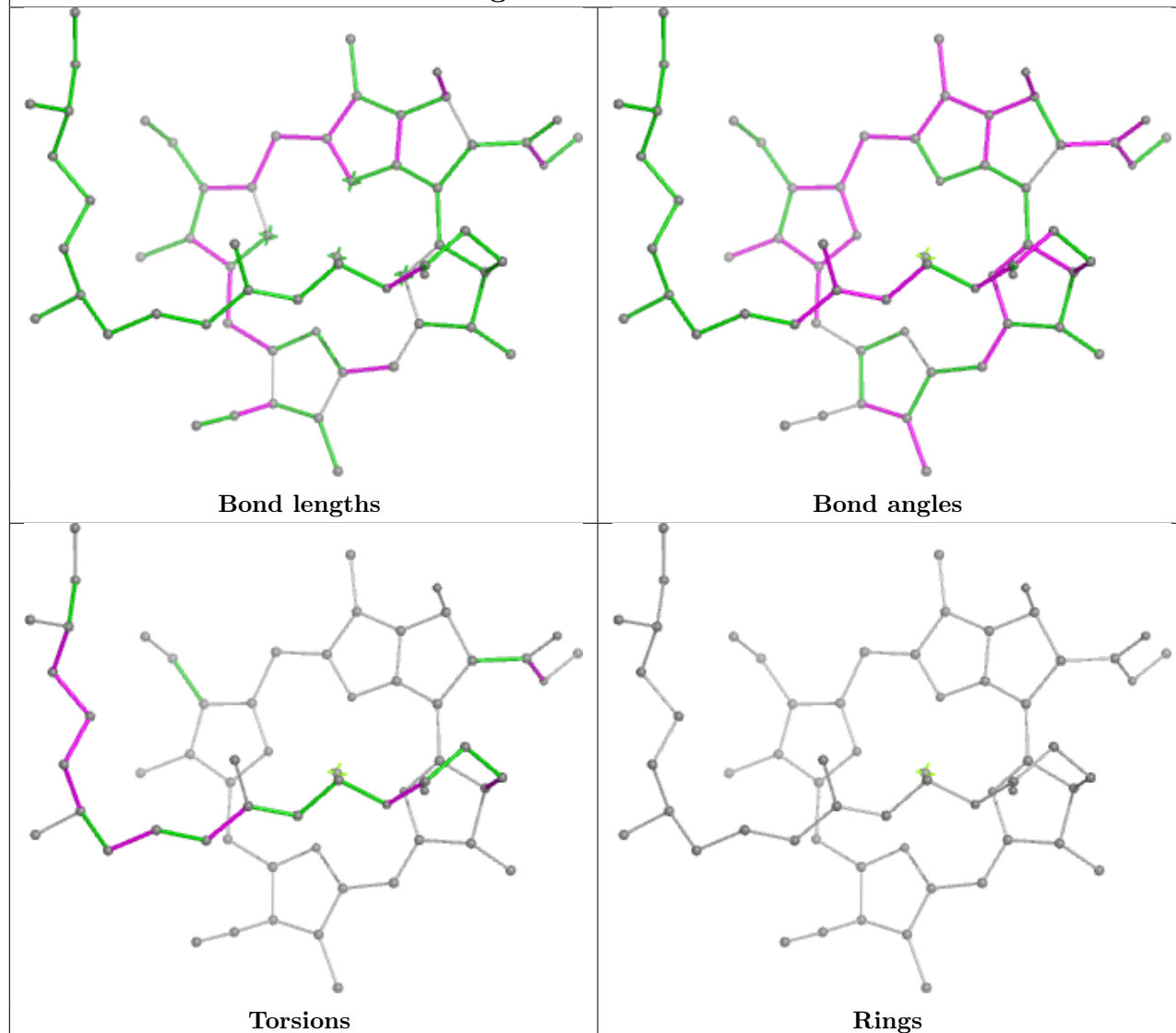


Torsions

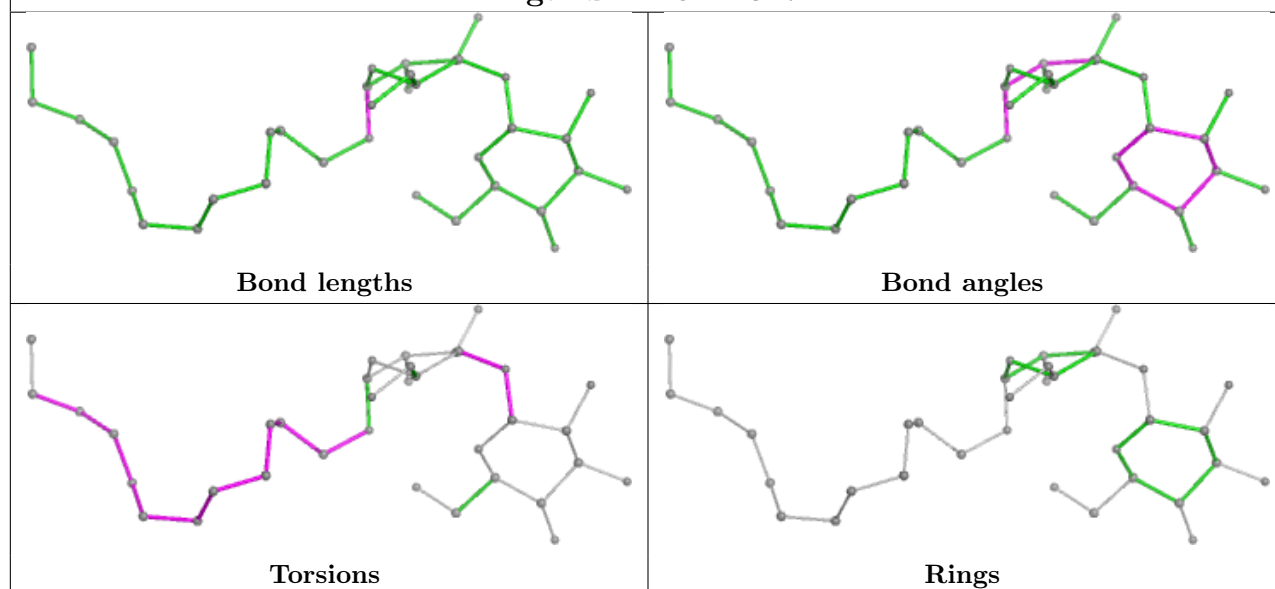


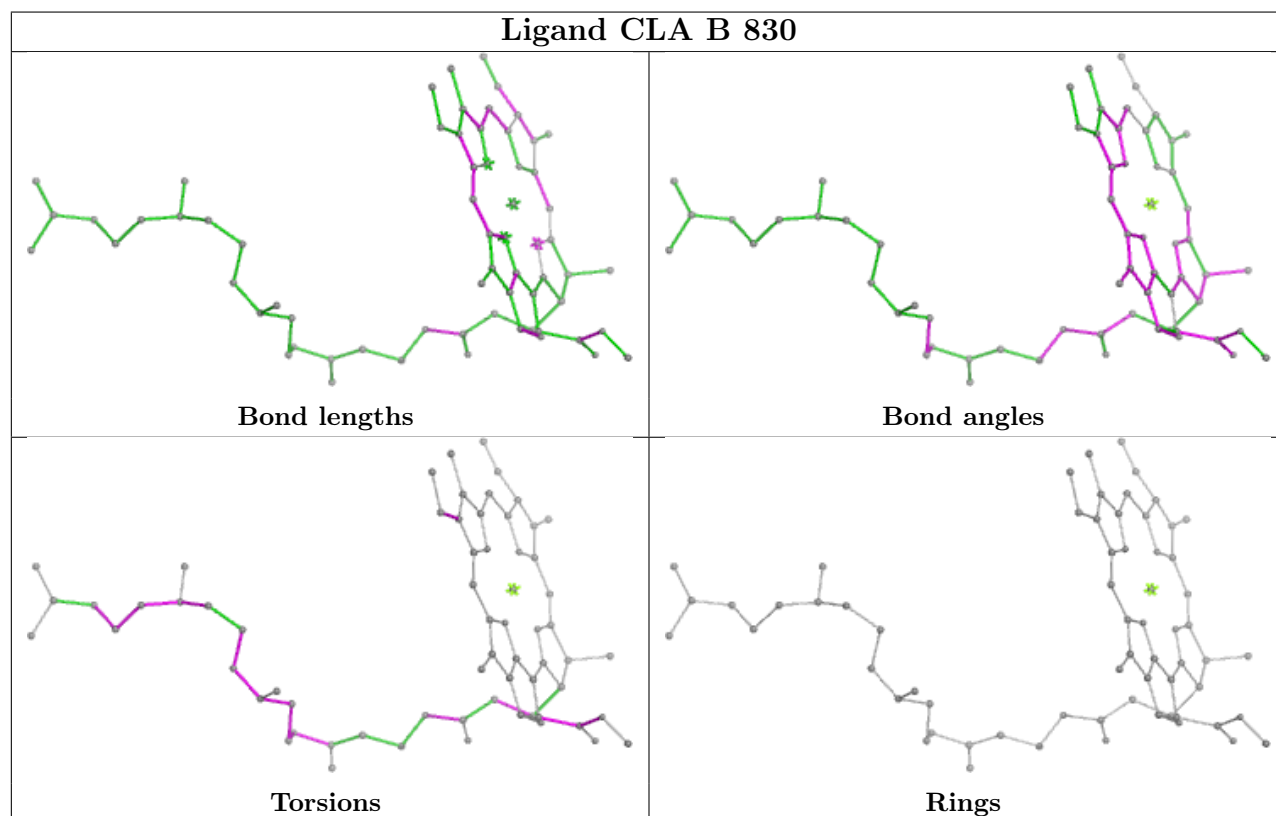
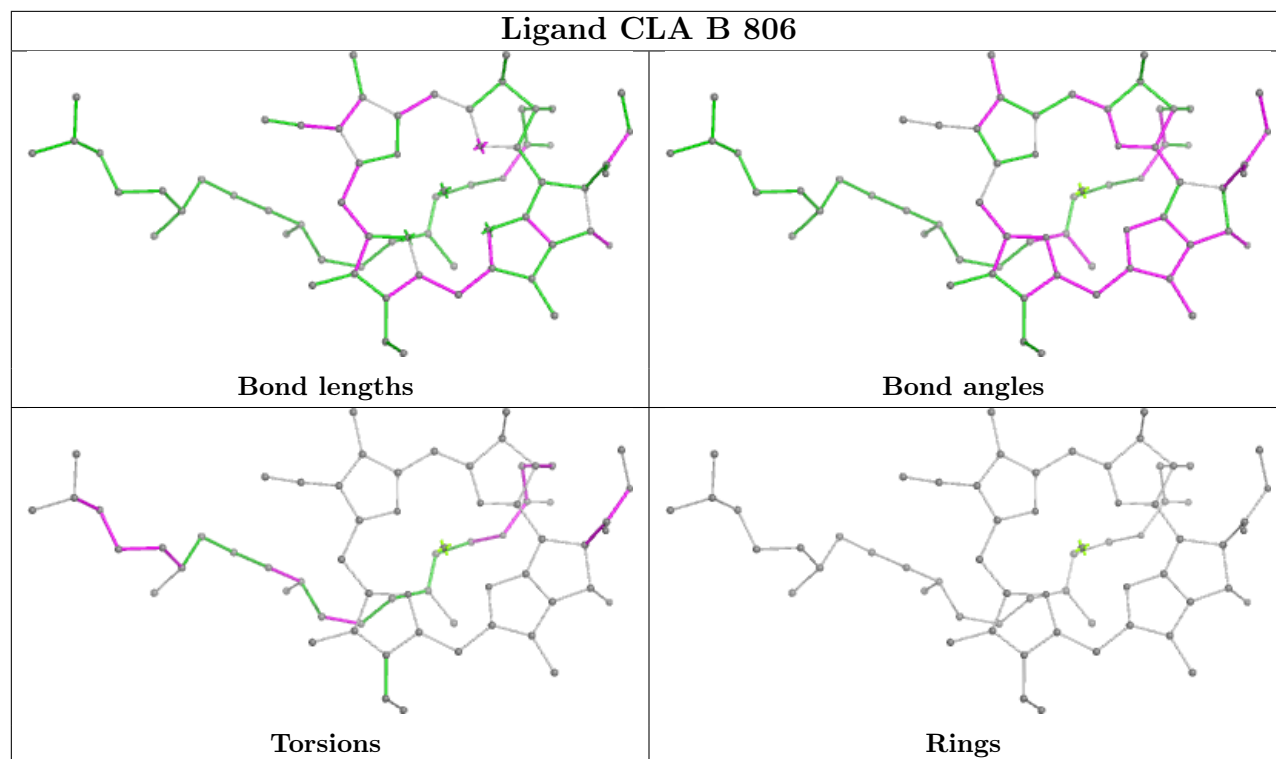
Rings

Ligand CLA B 820

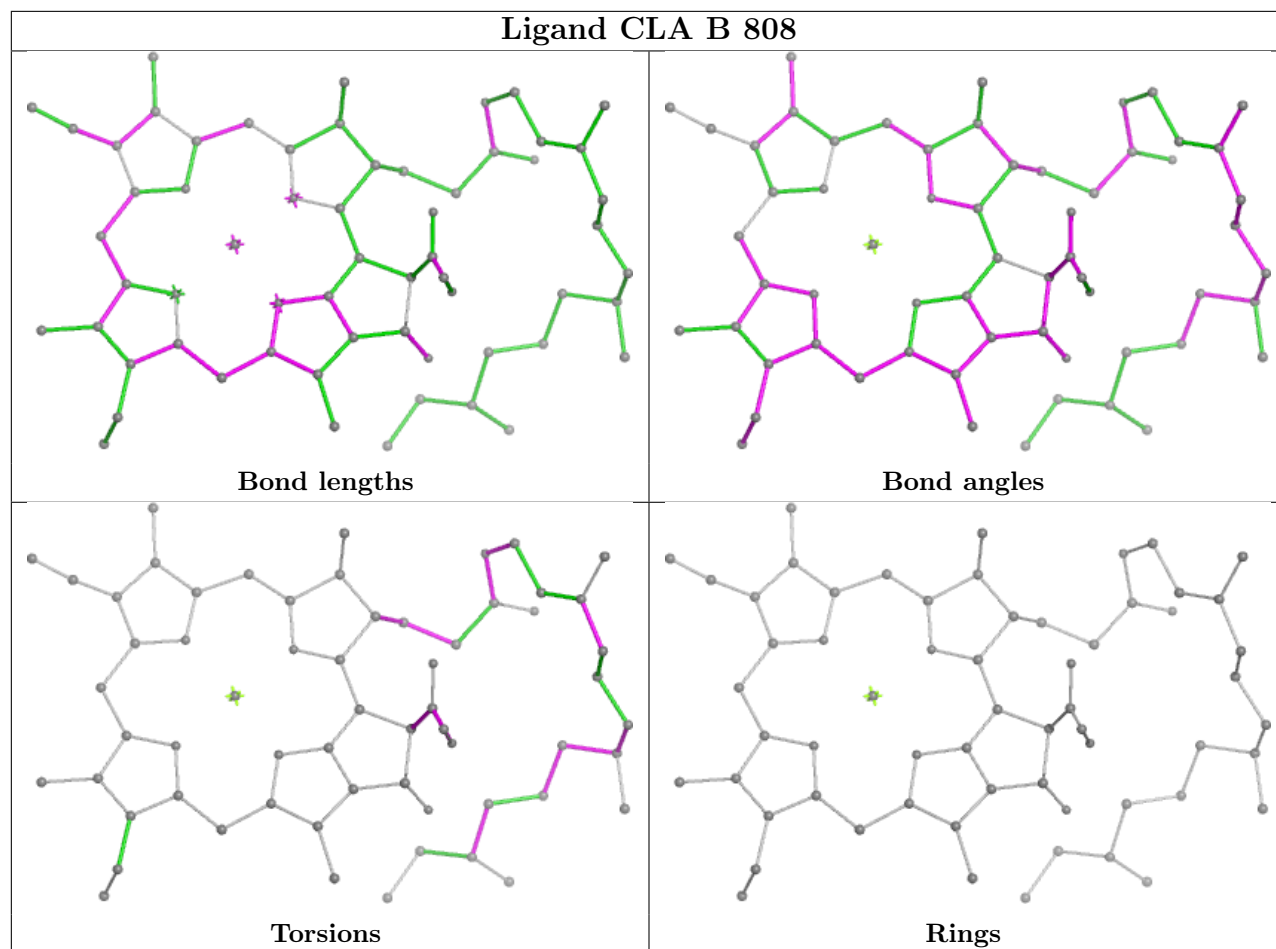


Ligand LMU A 847

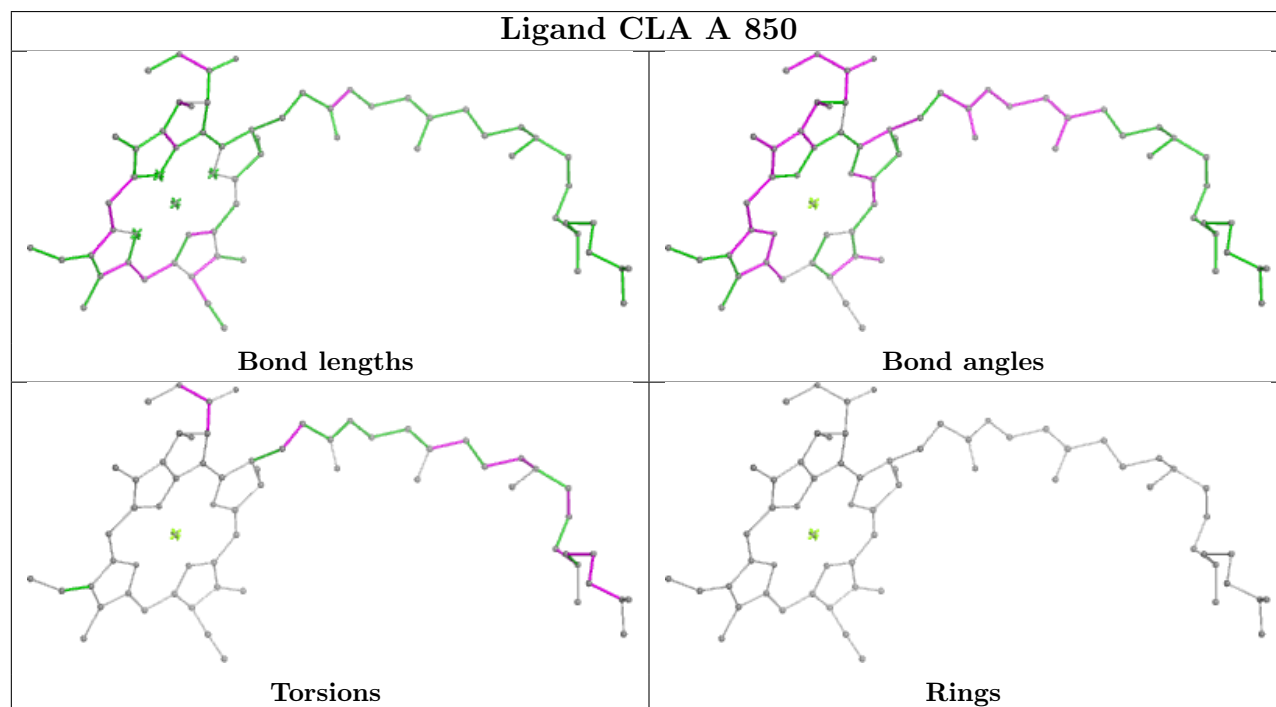




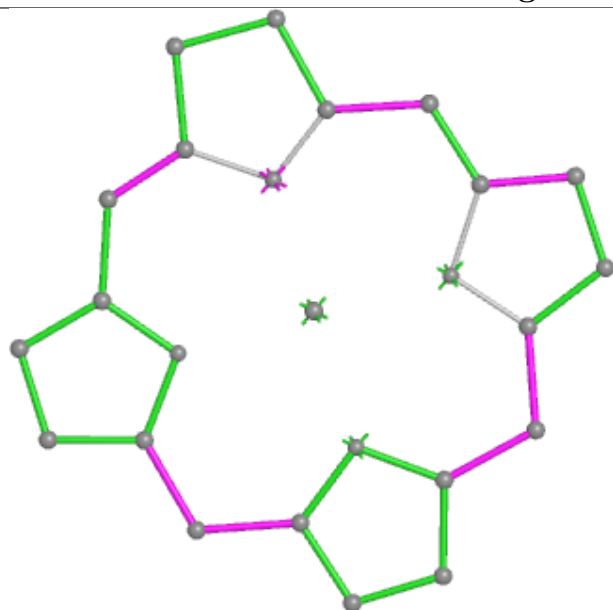
Ligand CLA B 808



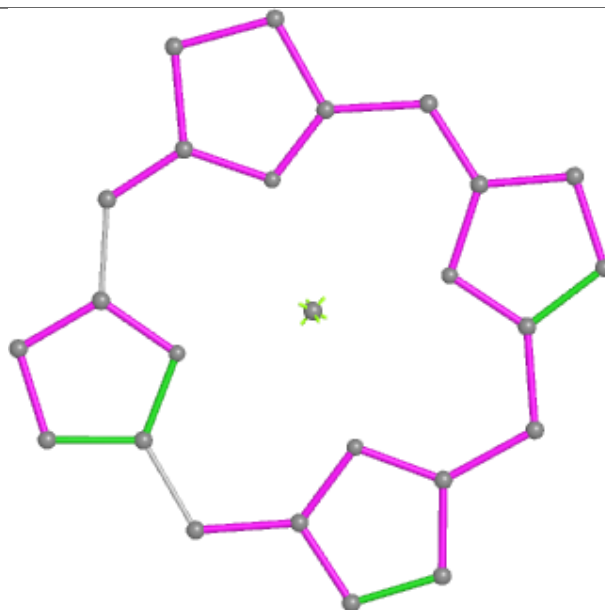
Ligand CLA A 850



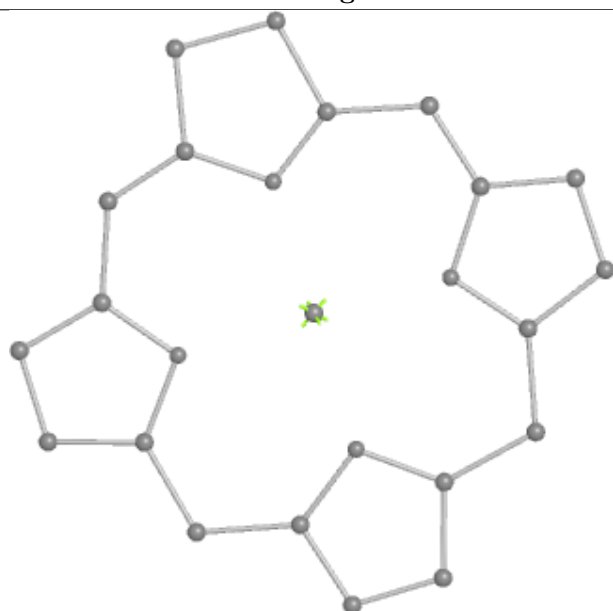
Ligand CLA 1 212



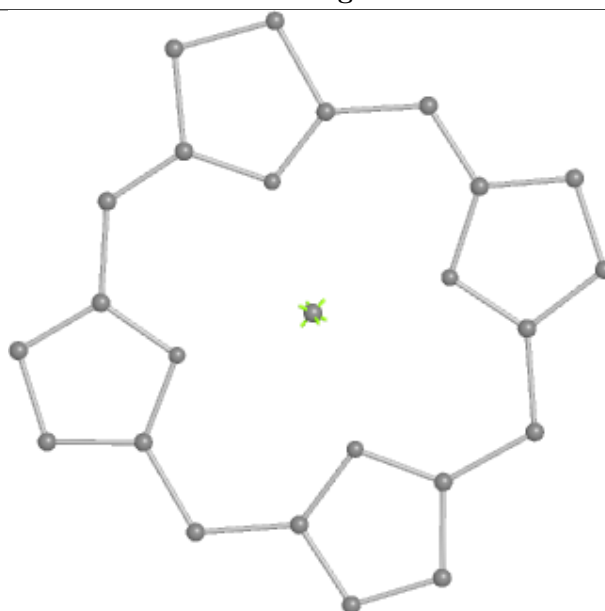
Bond lengths



Bond angles

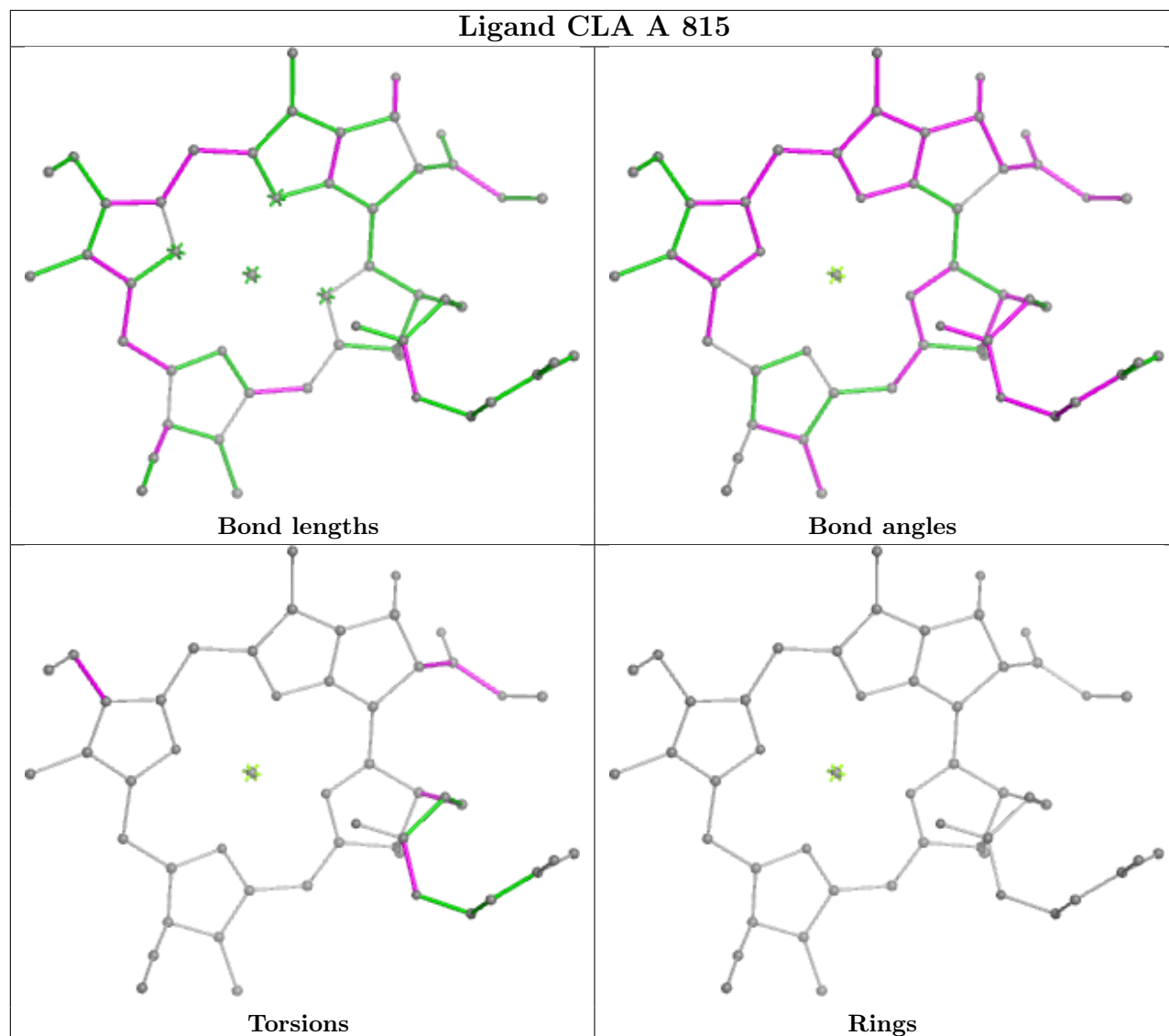


Torsions

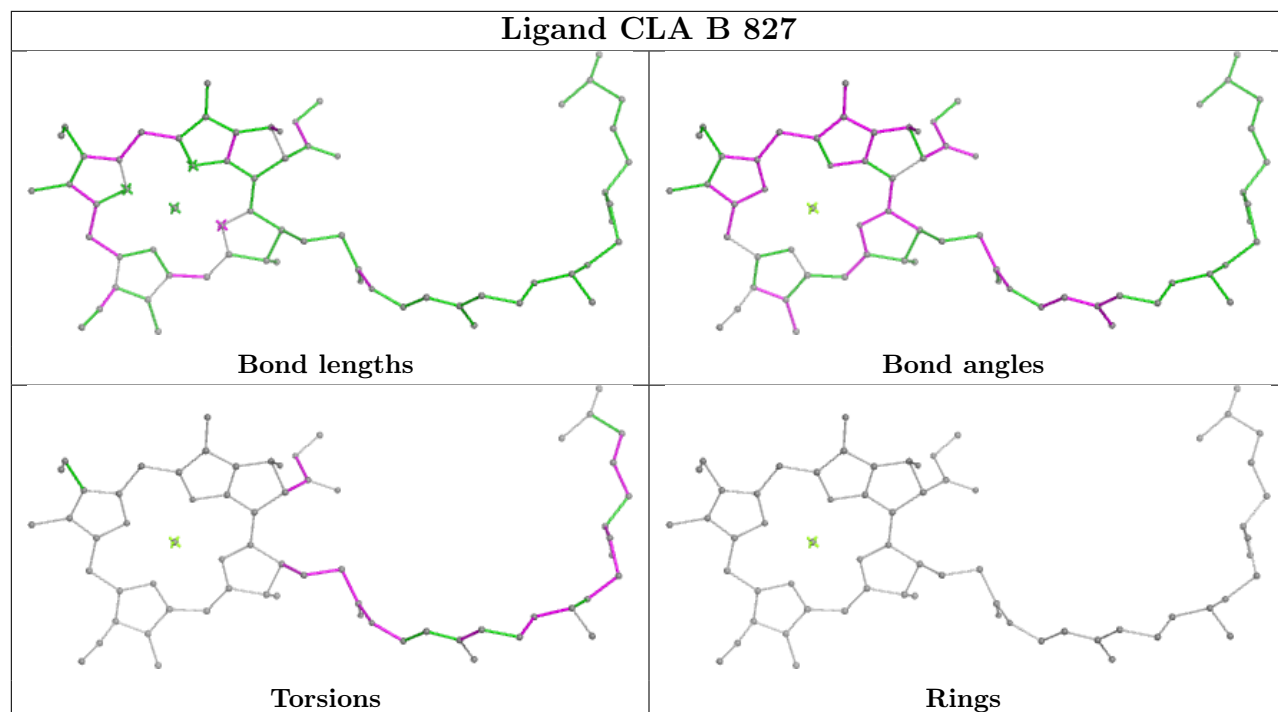


Rings

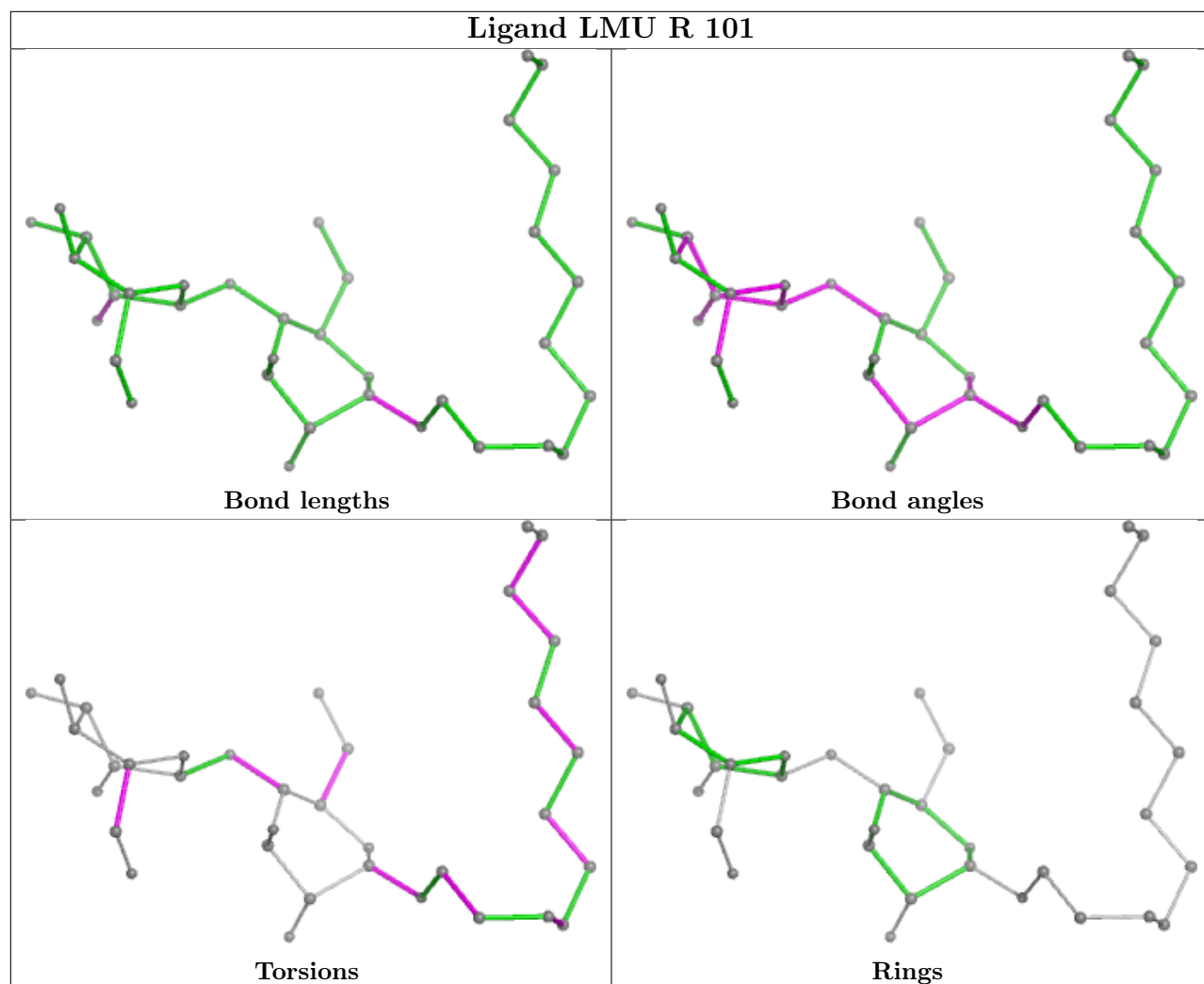
Ligand CLA A 815

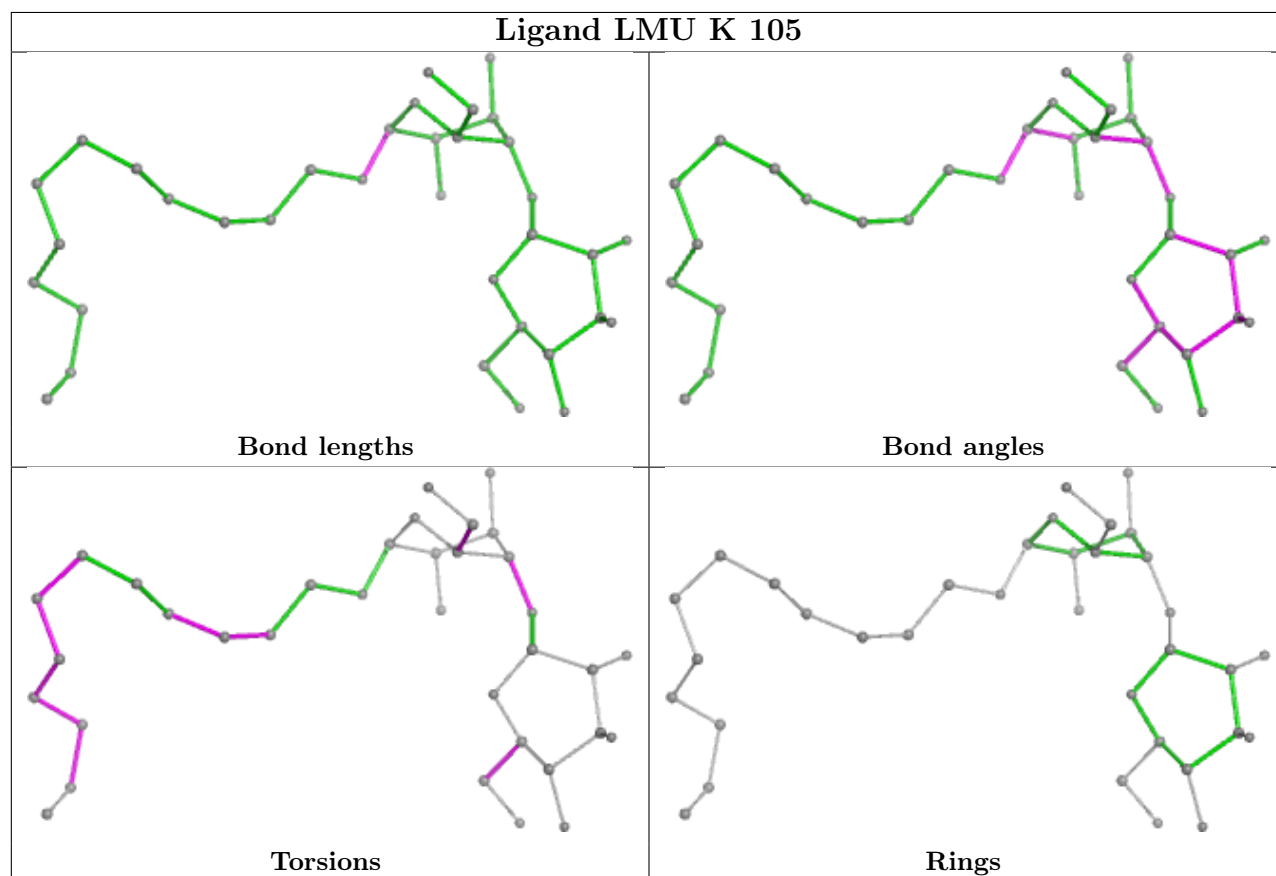
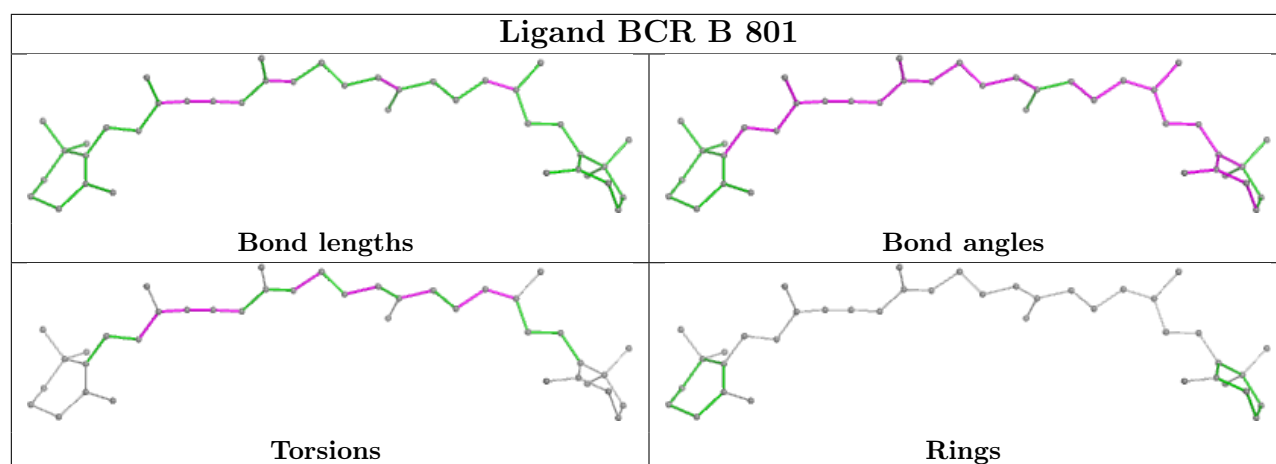


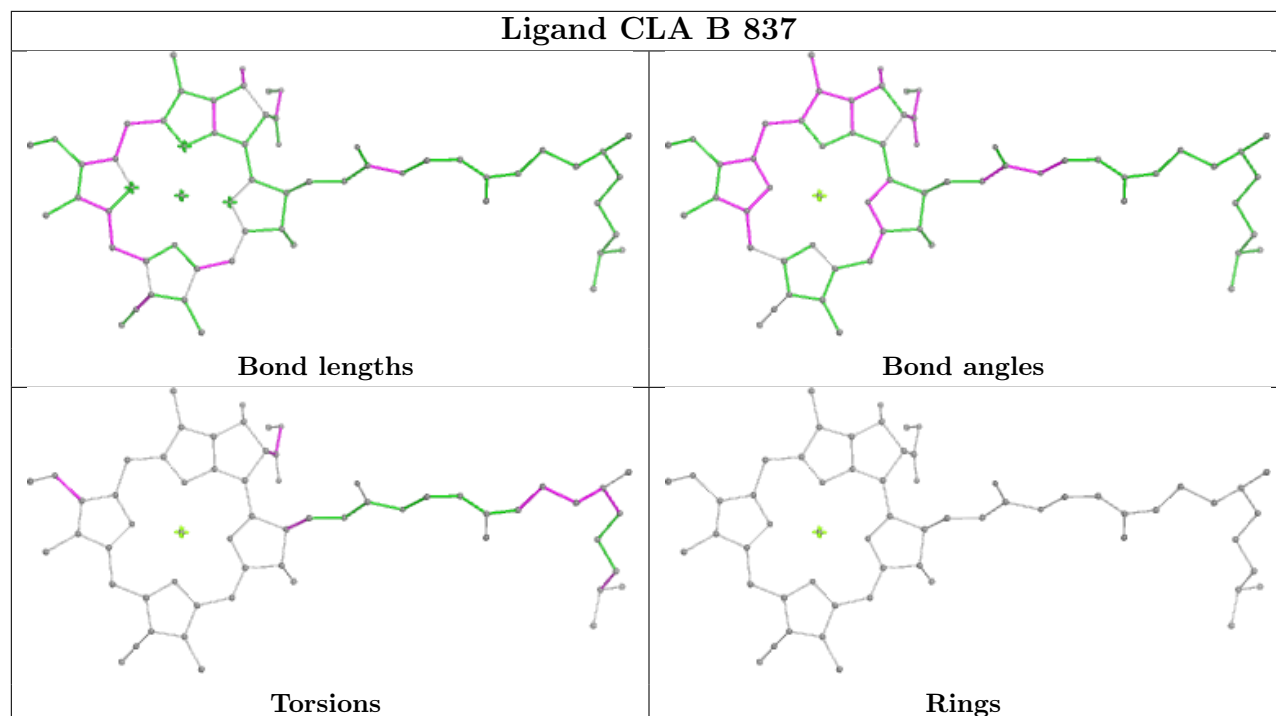
Ligand CLA B 827



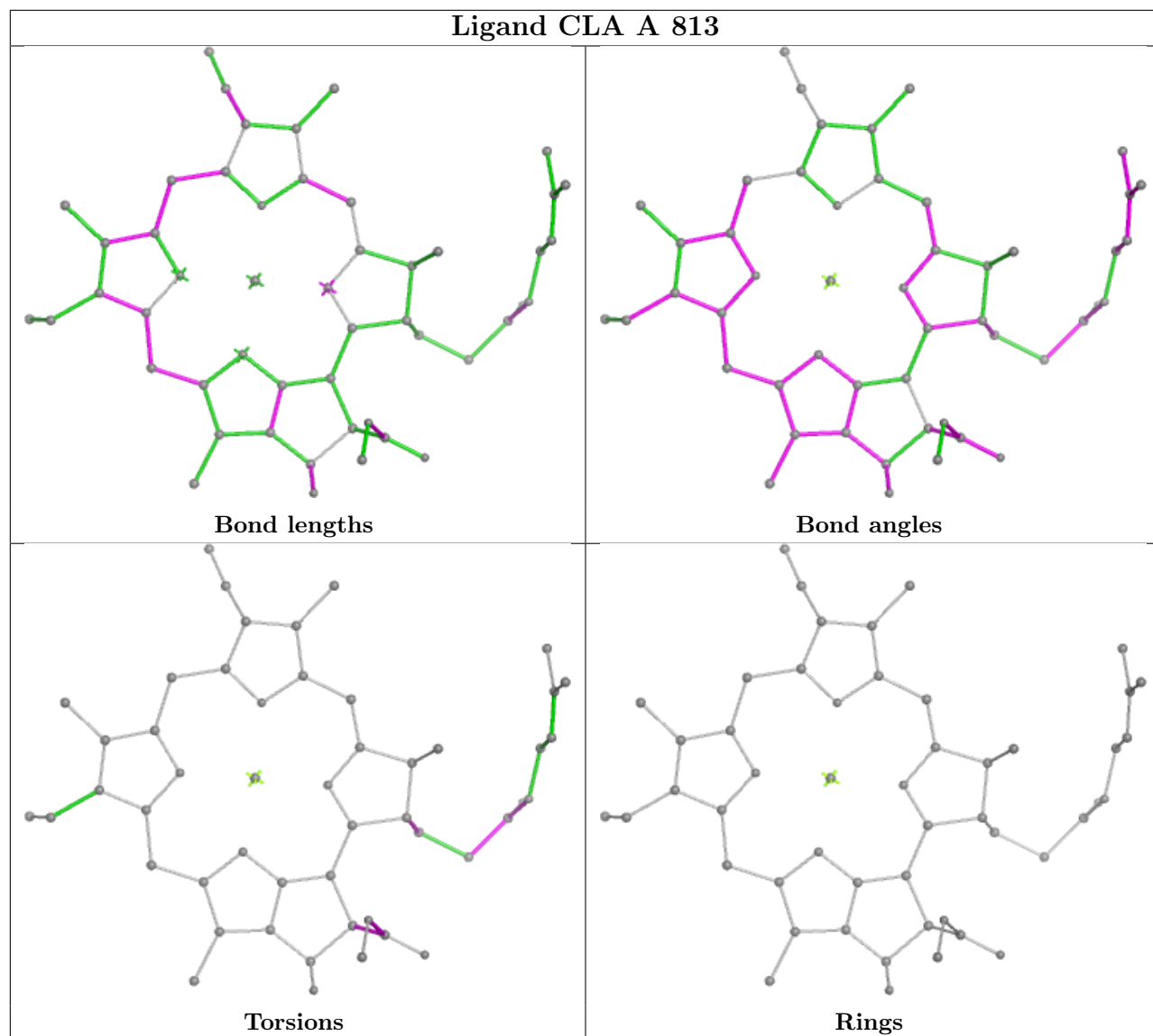
Ligand LMU R 101



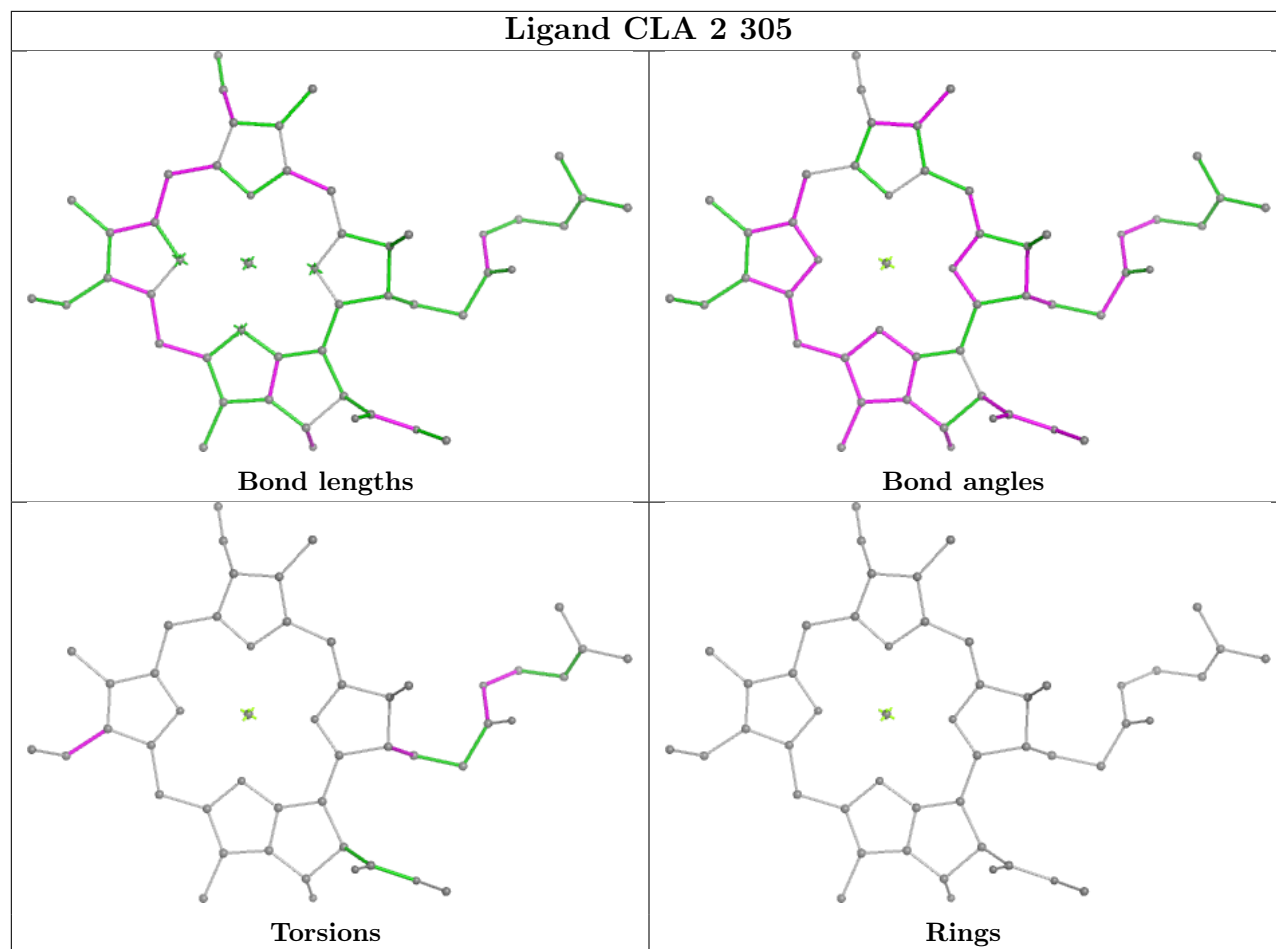


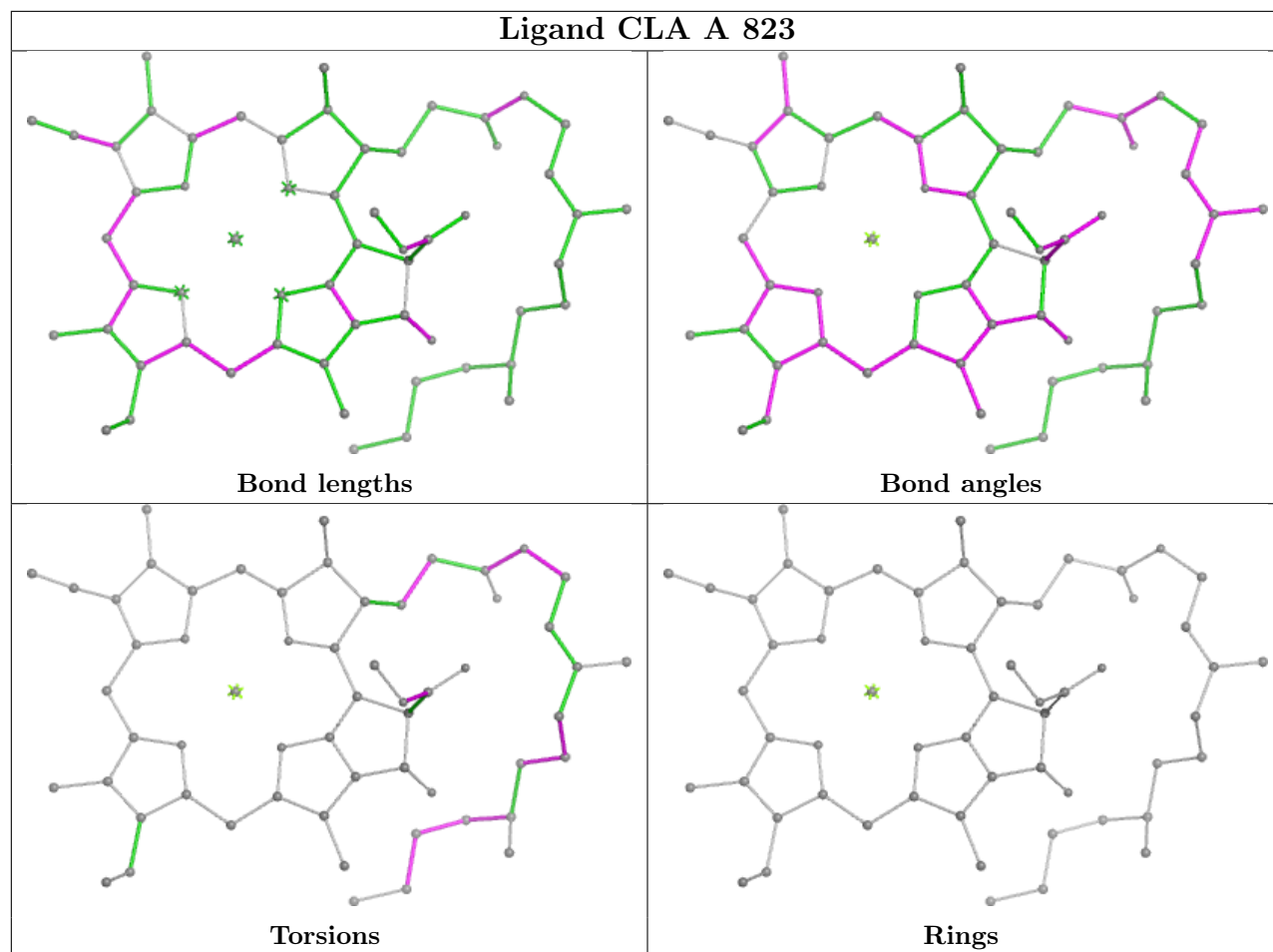


Ligand CLA A 813

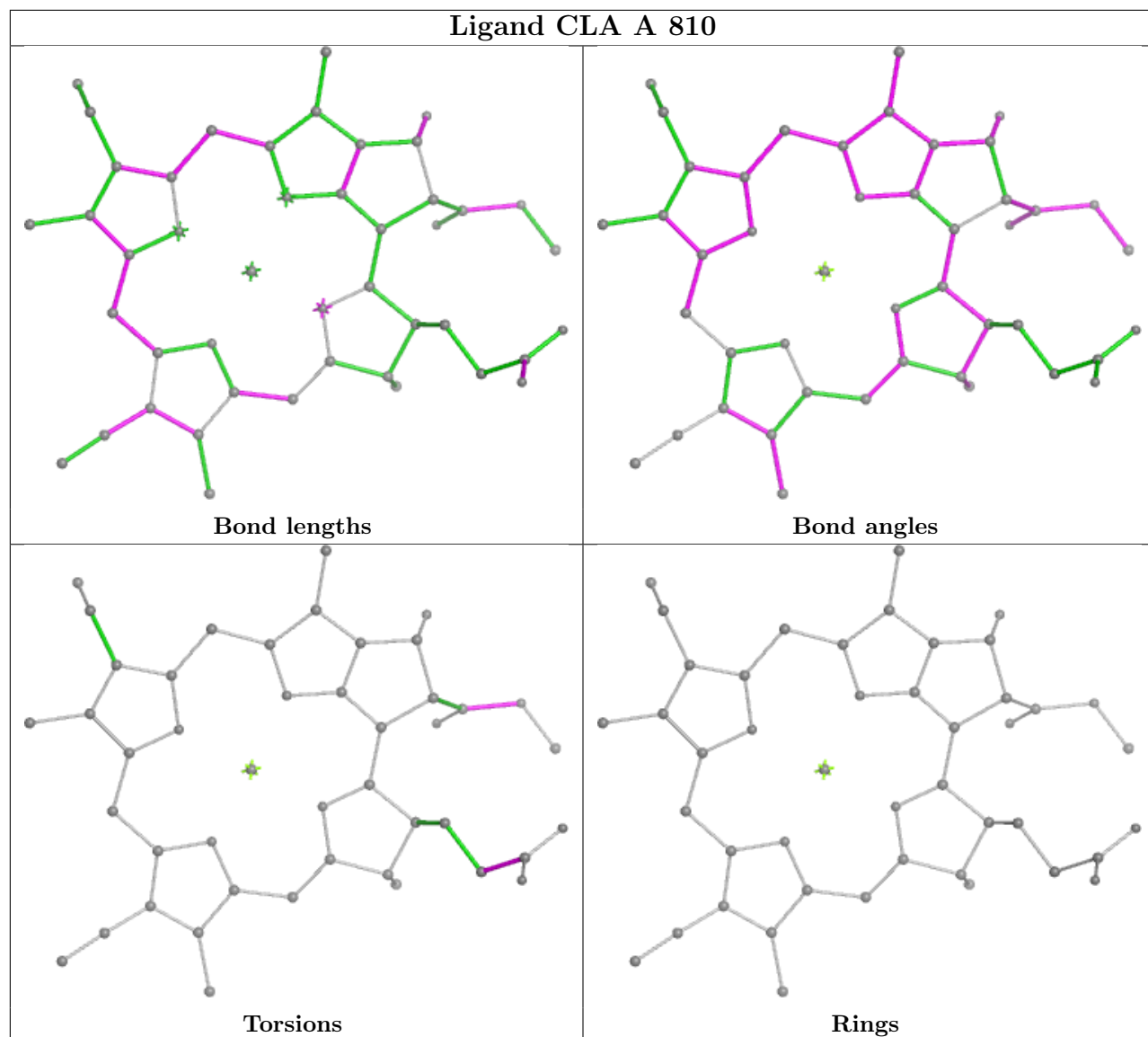


Ligand CLA 2 305

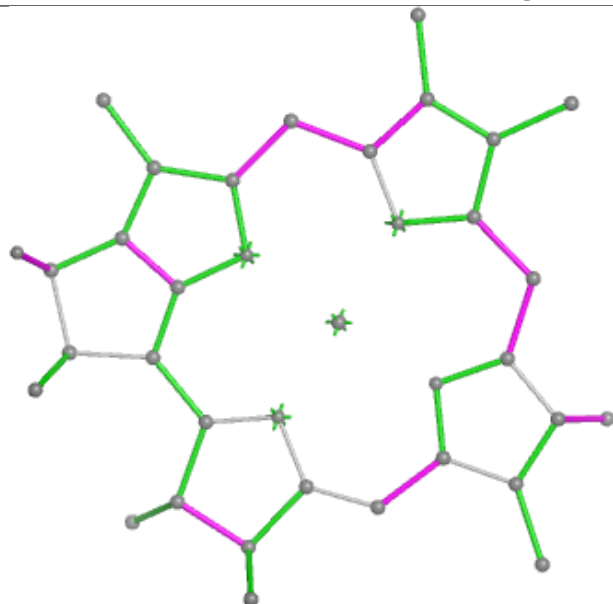




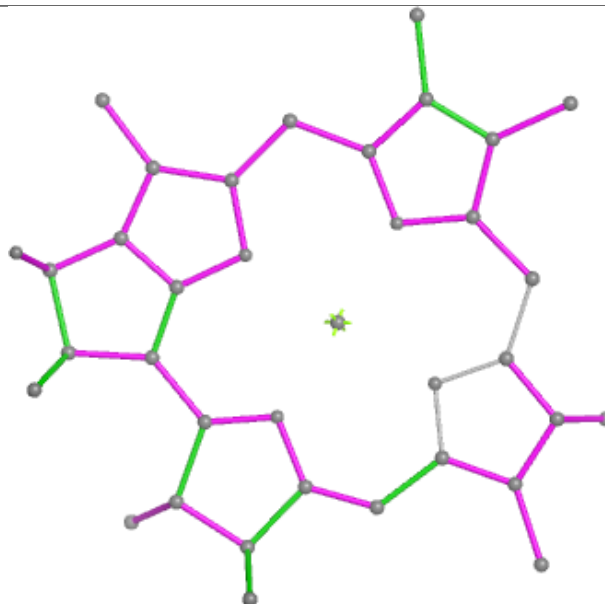
Ligand CLA A 810



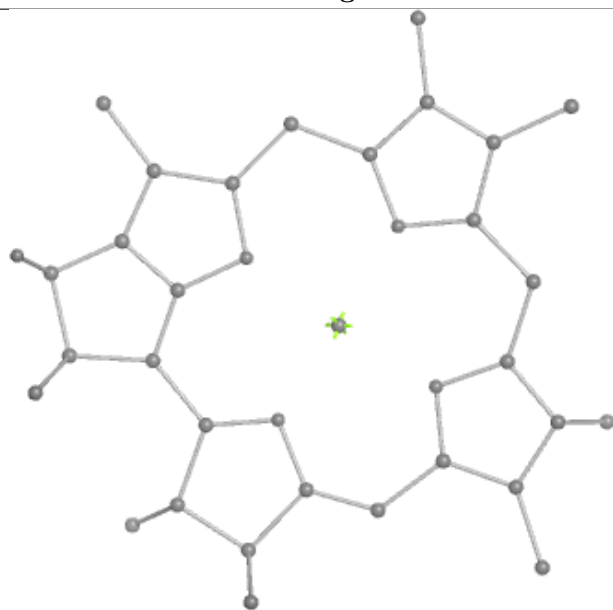
Ligand CLA 3 303



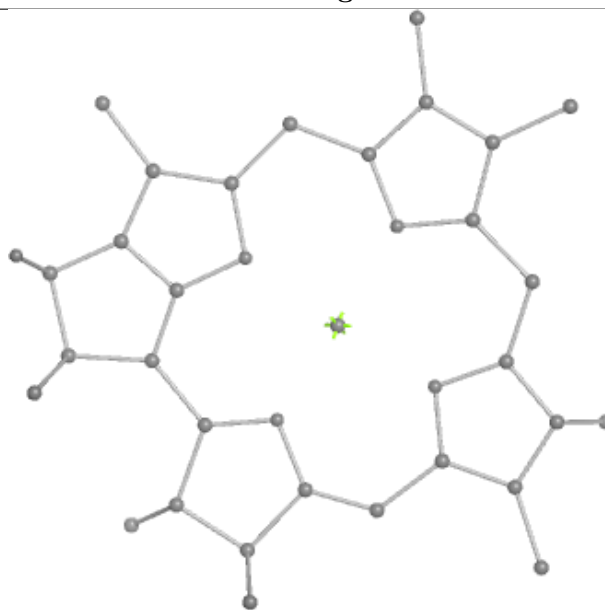
Bond lengths



Bond angles

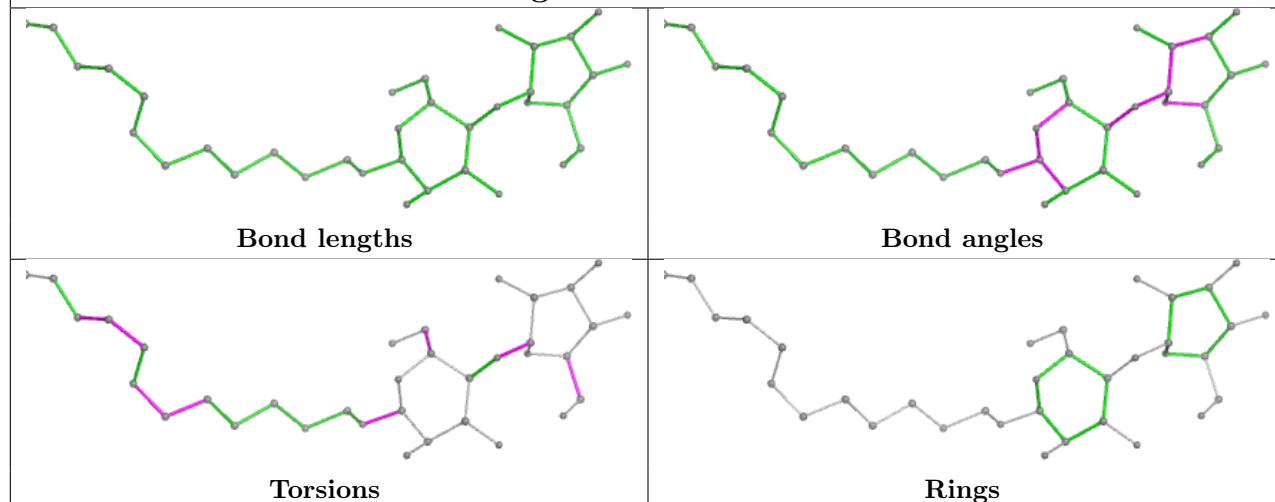


Torsions

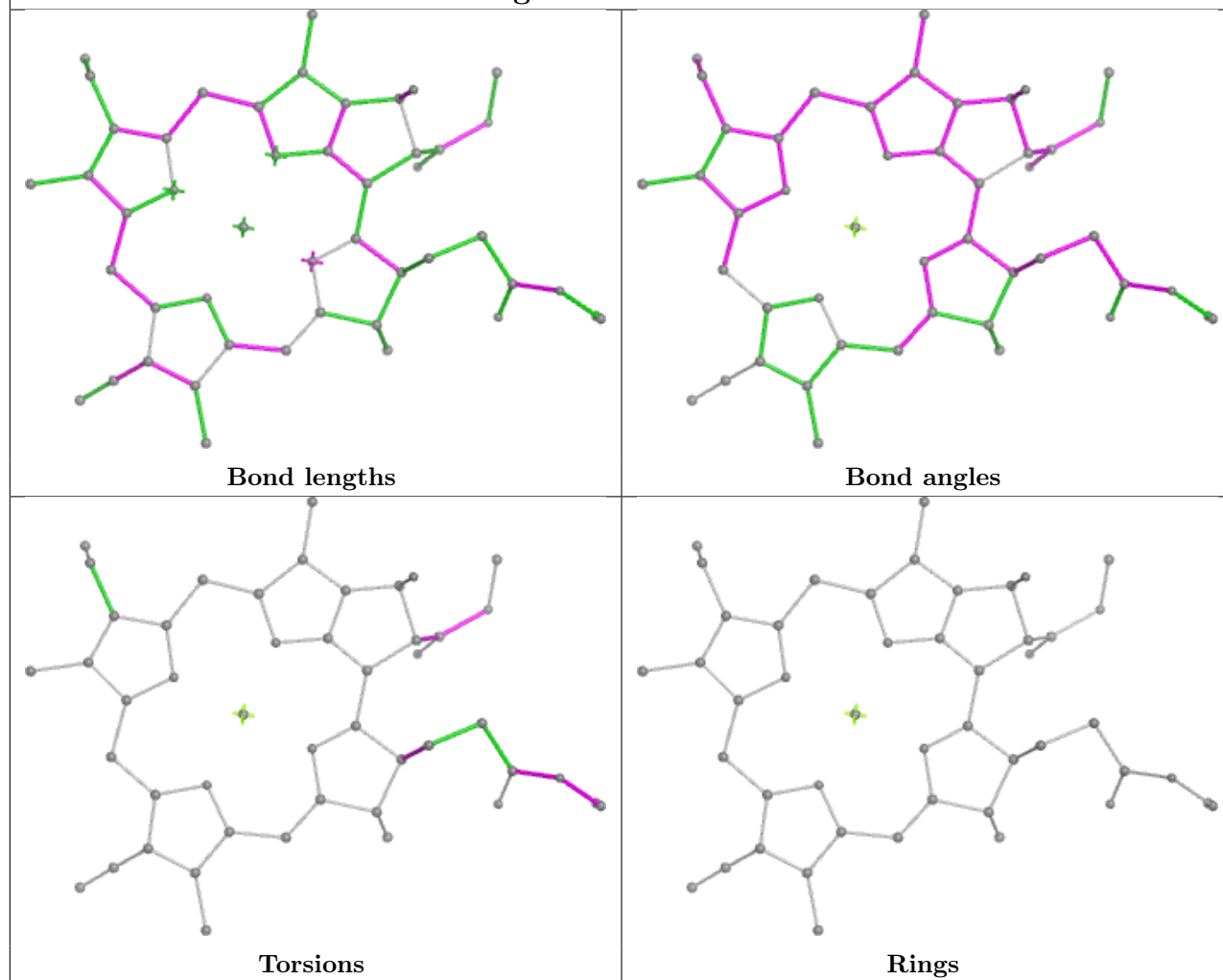


Rings

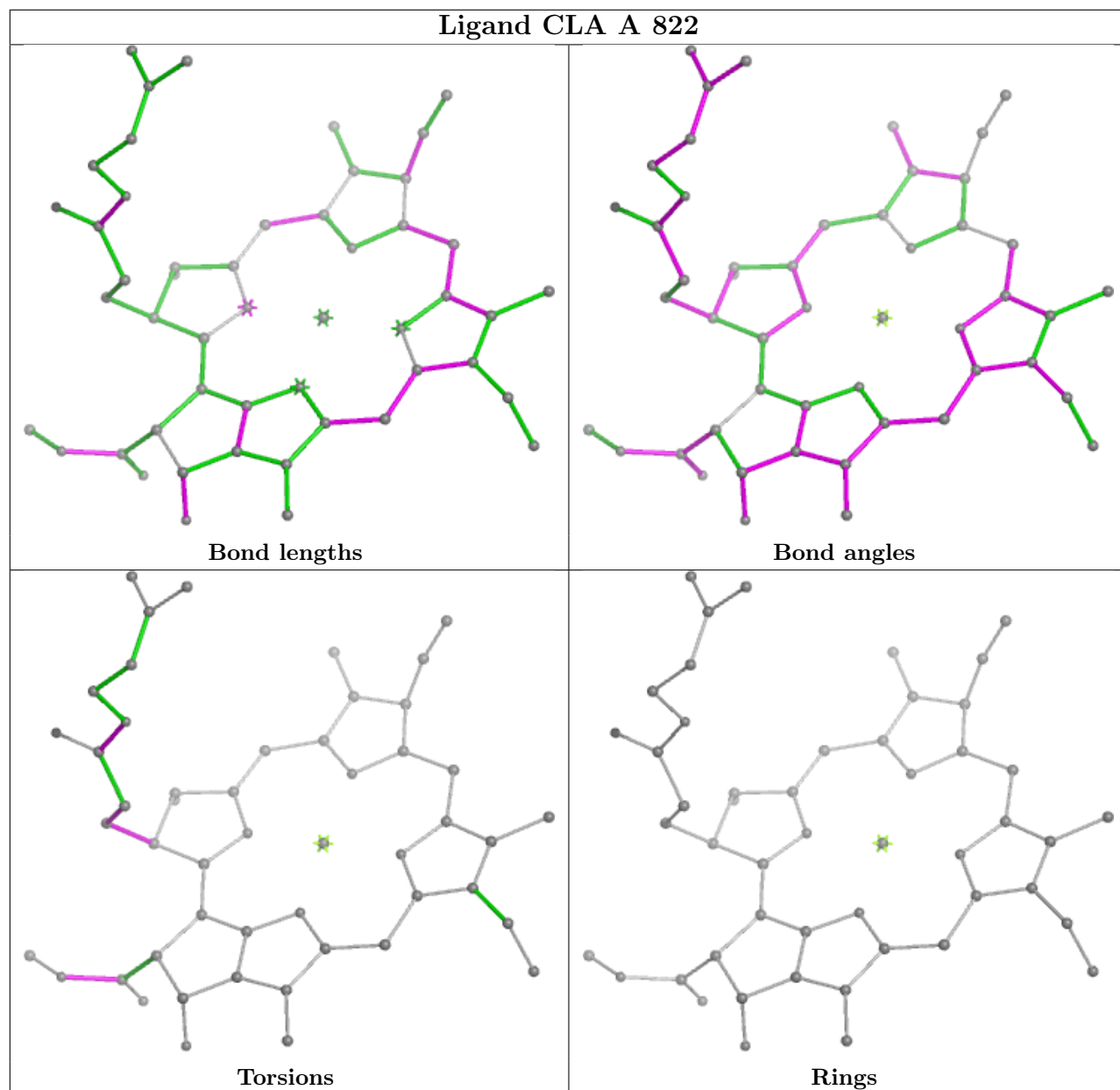
Ligand LMU 1 216



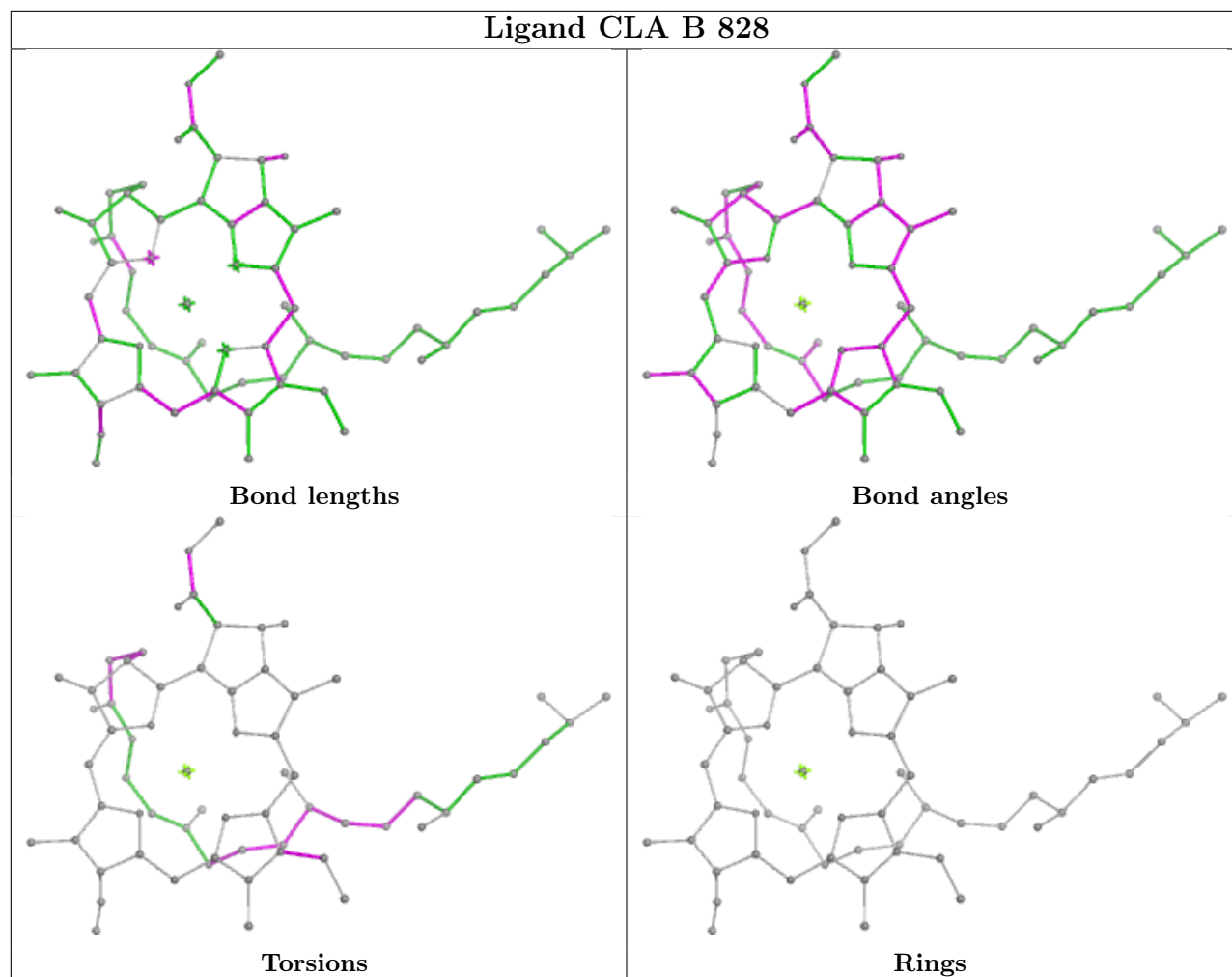
Ligand CLA 1 203



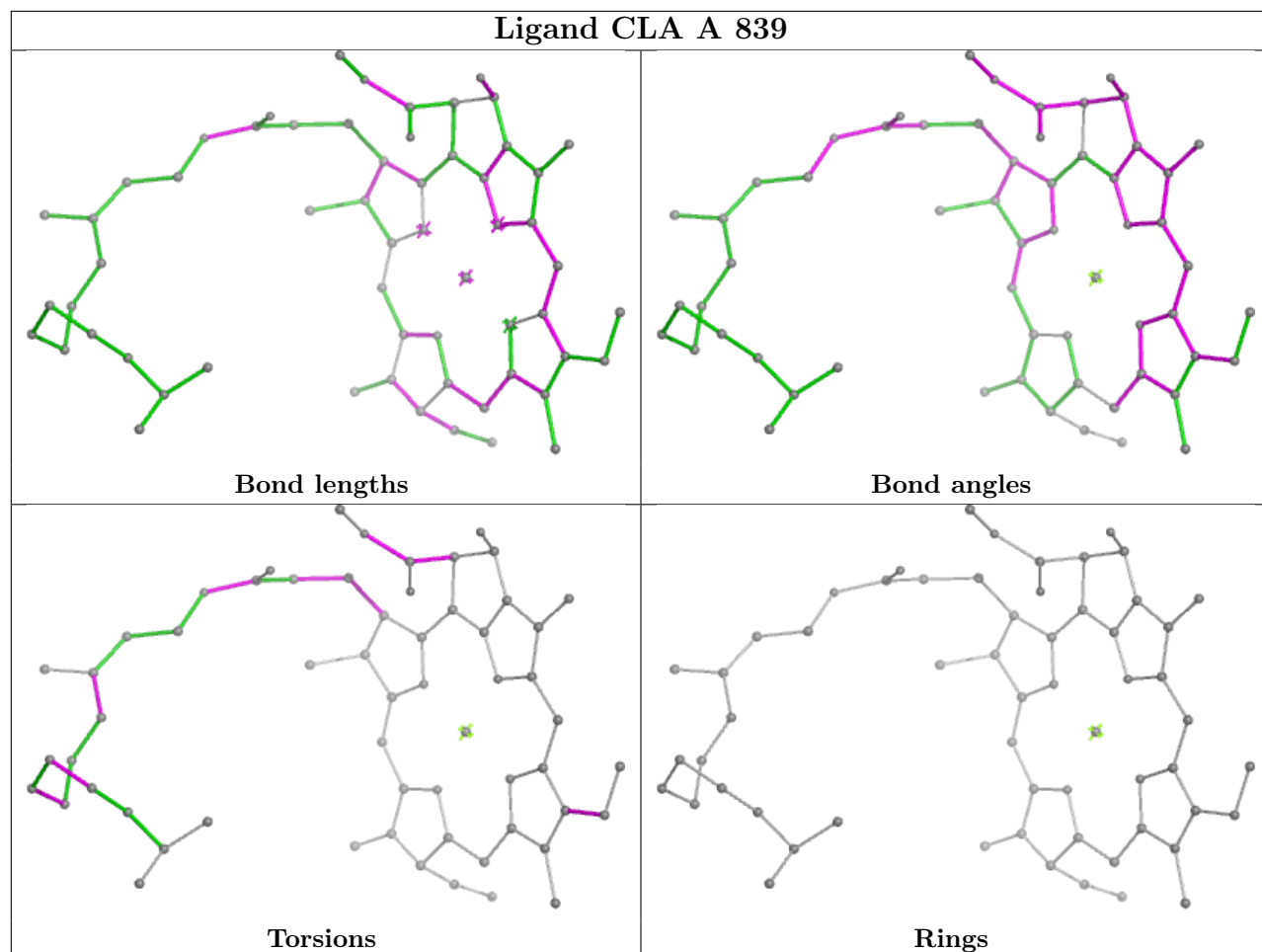
Ligand CLA A 822



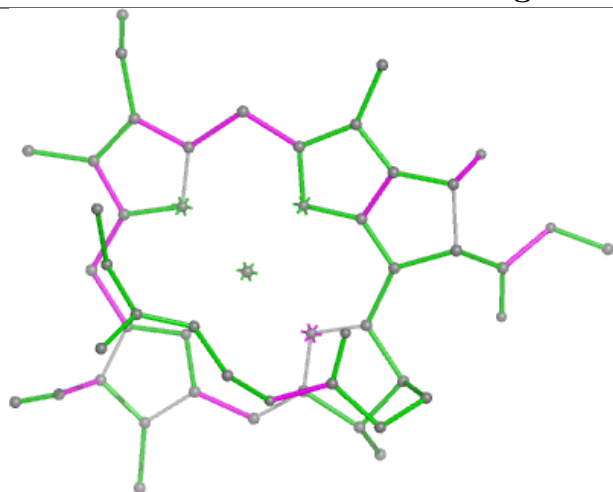
Ligand CLA B 828



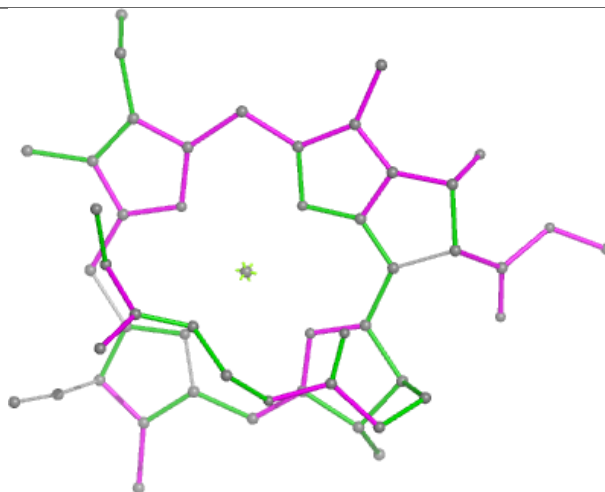
Ligand CLA A 839



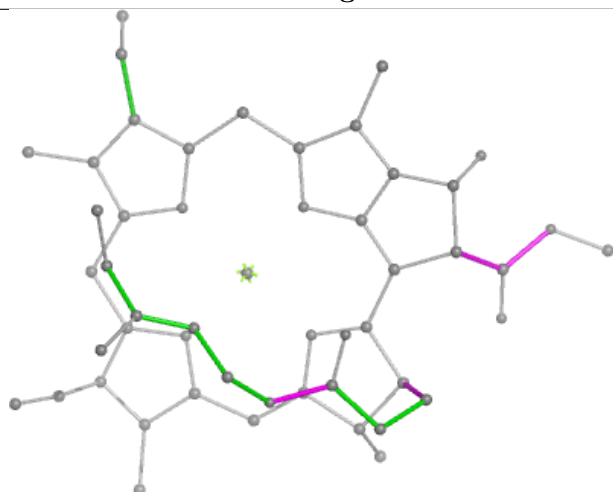
Ligand CLA A 820



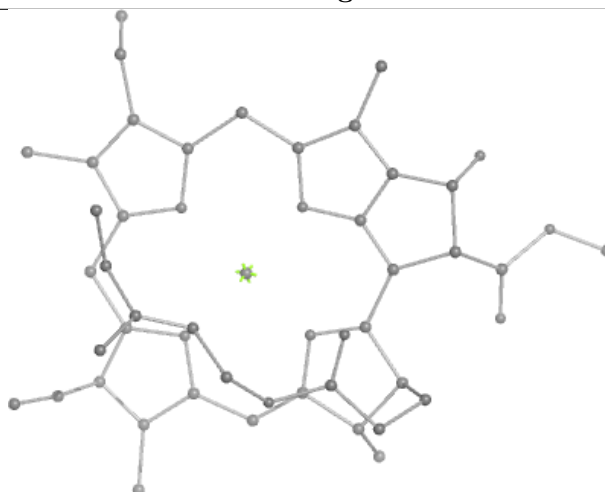
Bond lengths



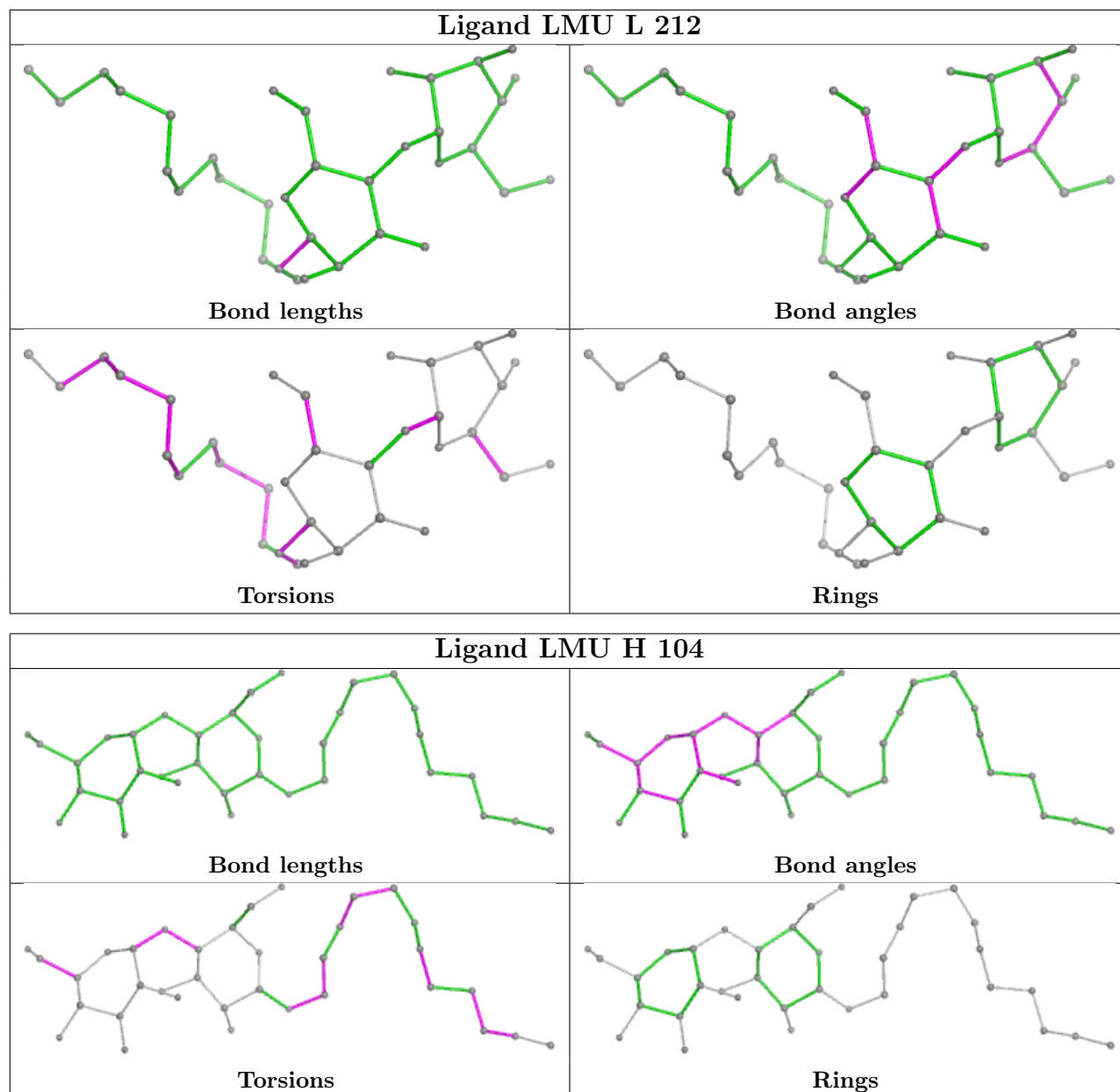
Bond angles



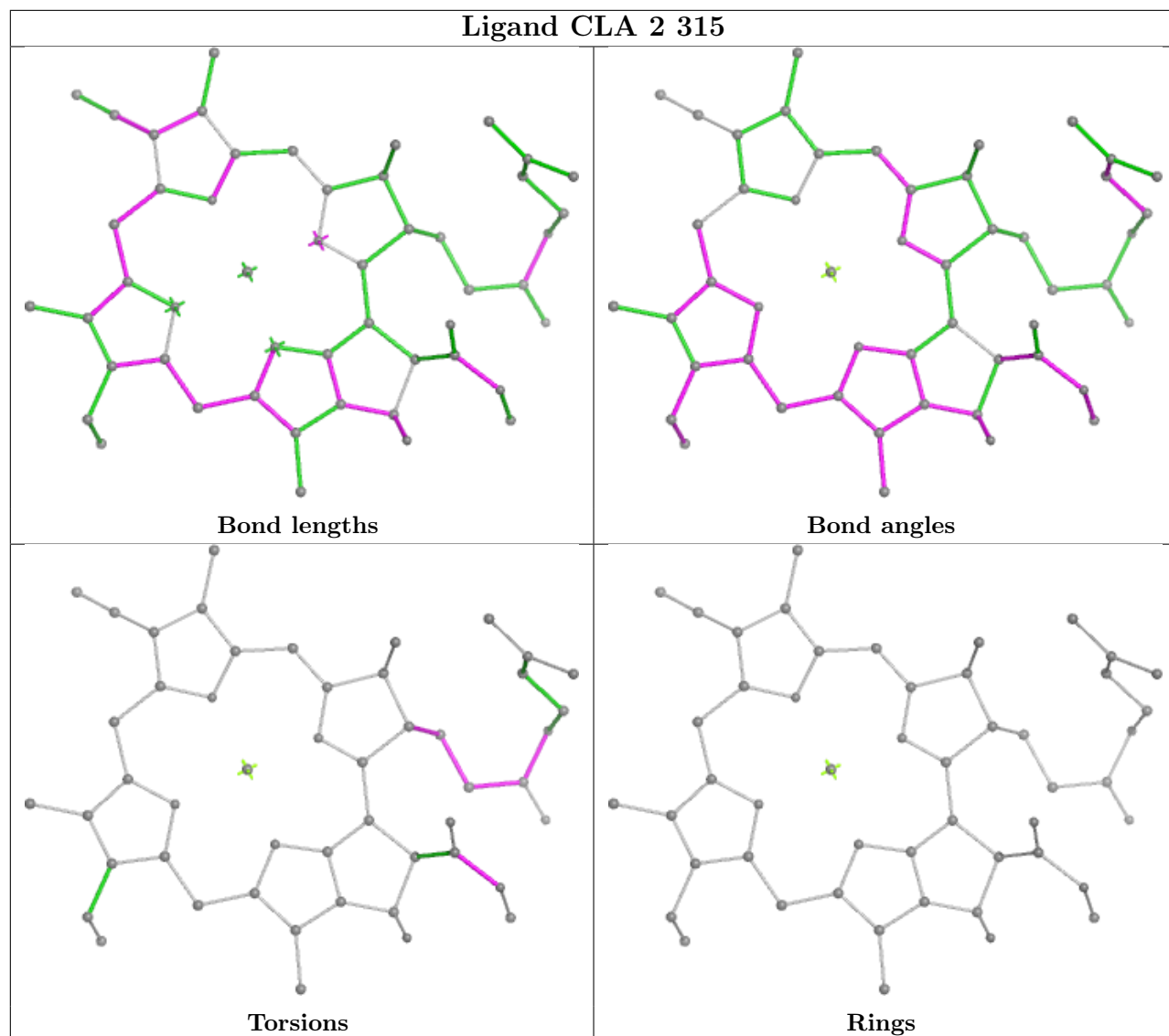
Torsions



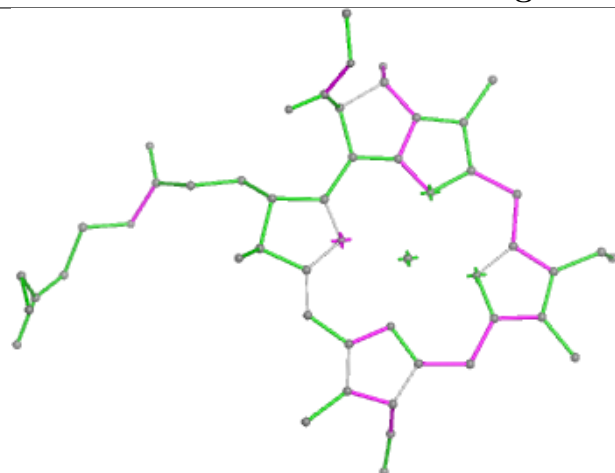
Rings



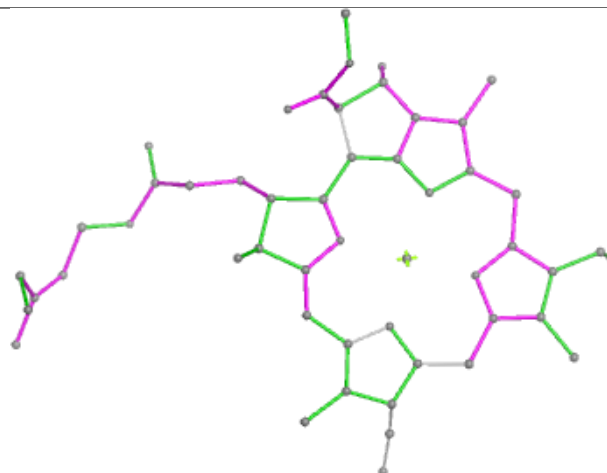
Ligand CLA 2 315



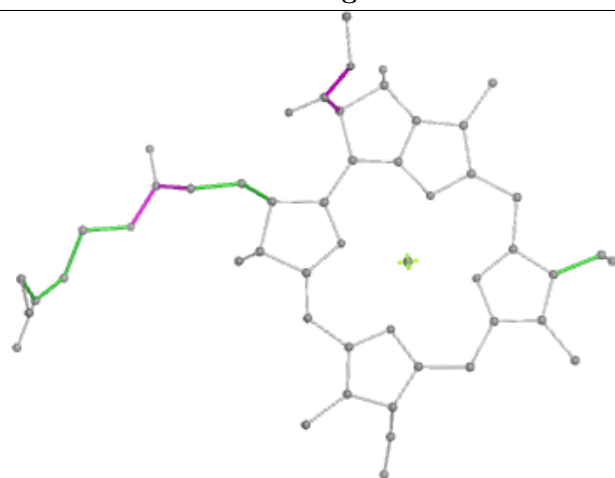
Ligand CLA G 105



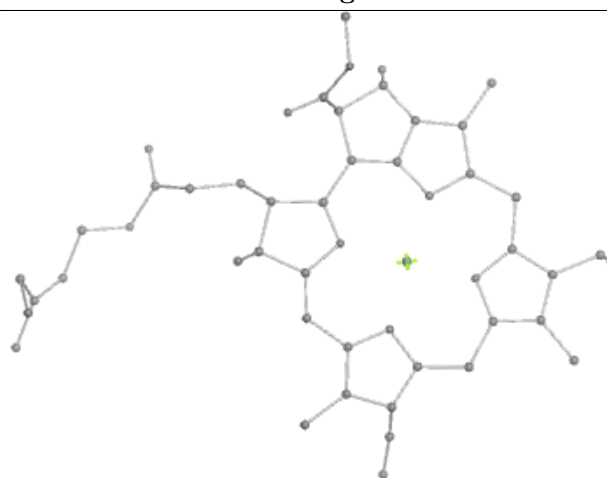
Bond lengths



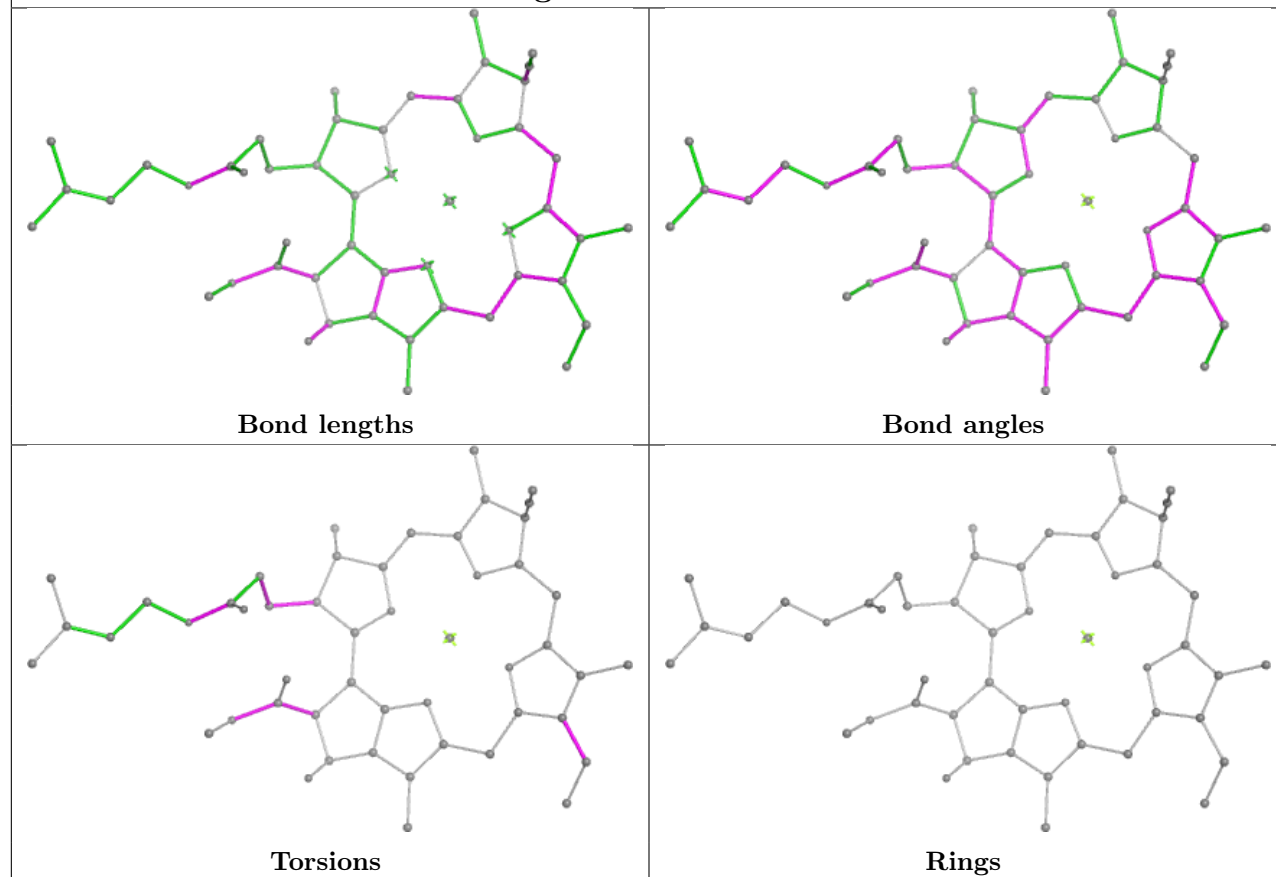
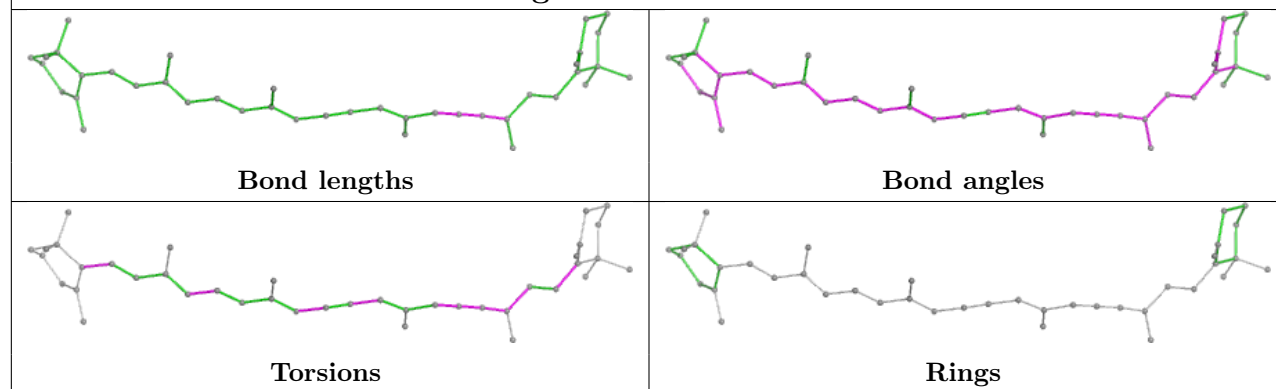
Bond angles

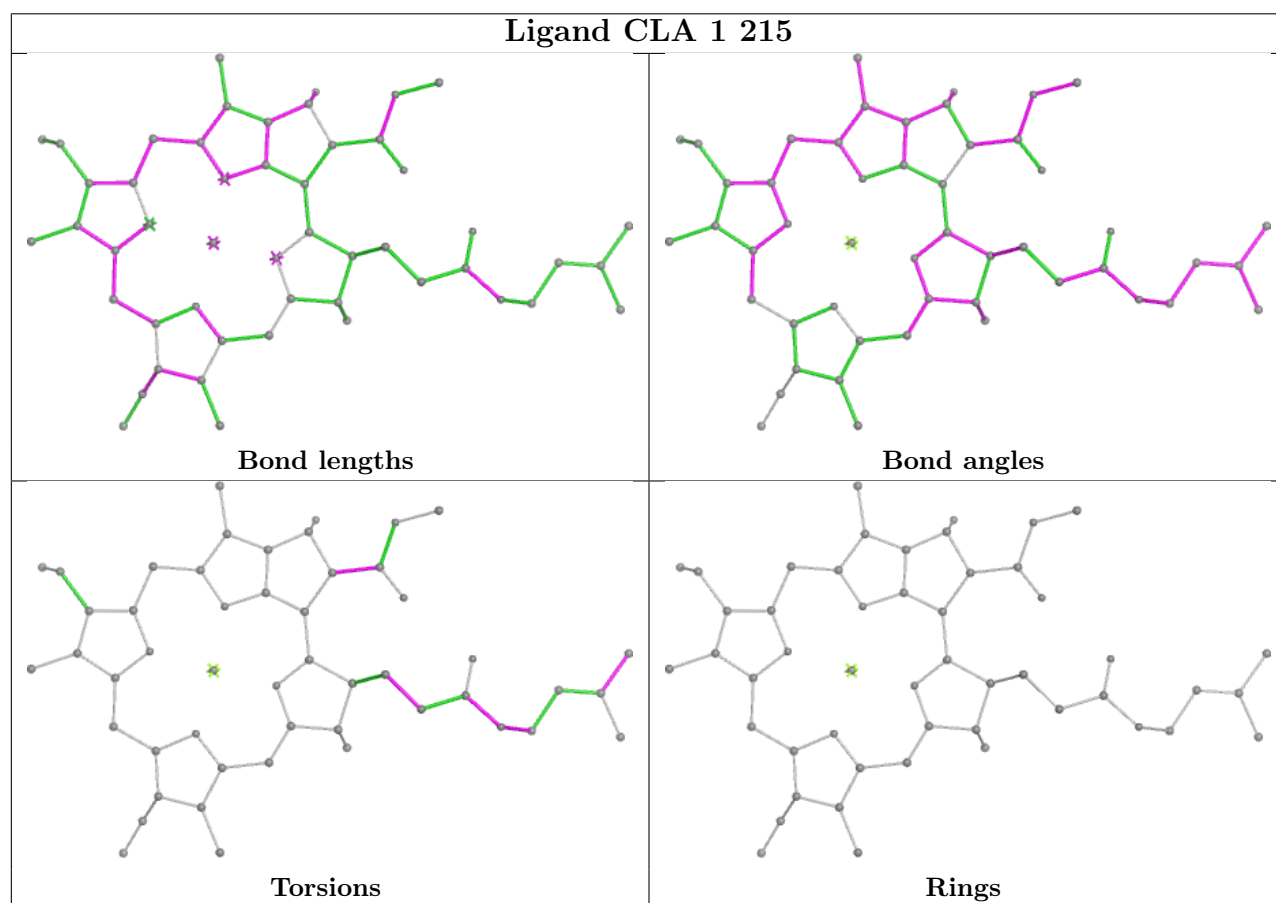
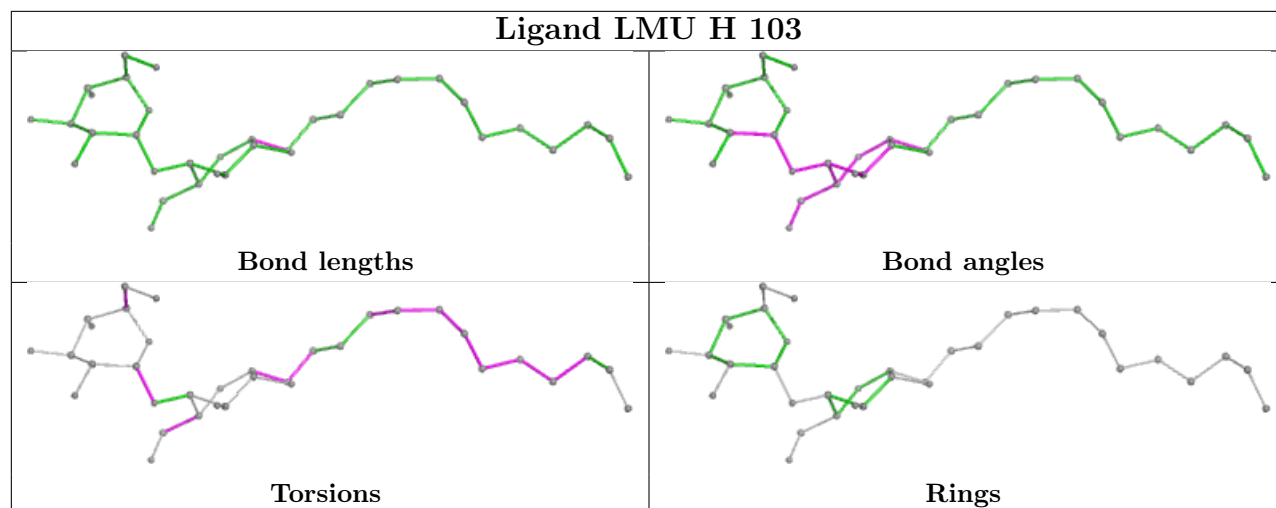


Torsions

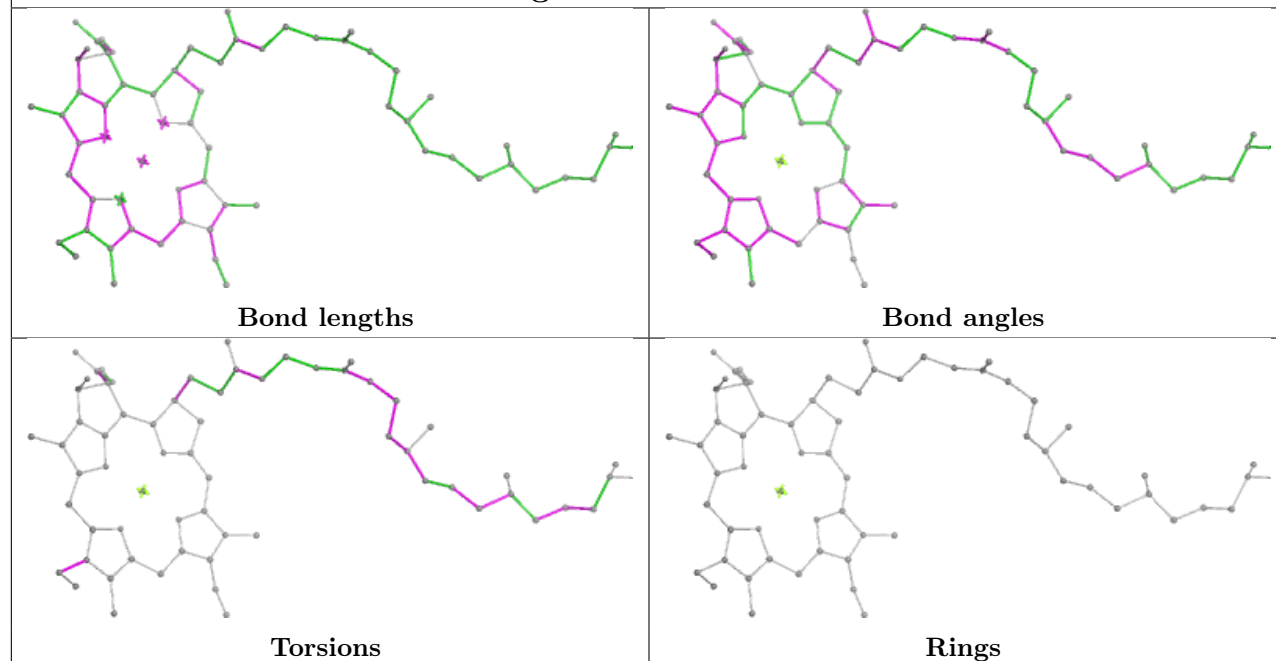


Rings

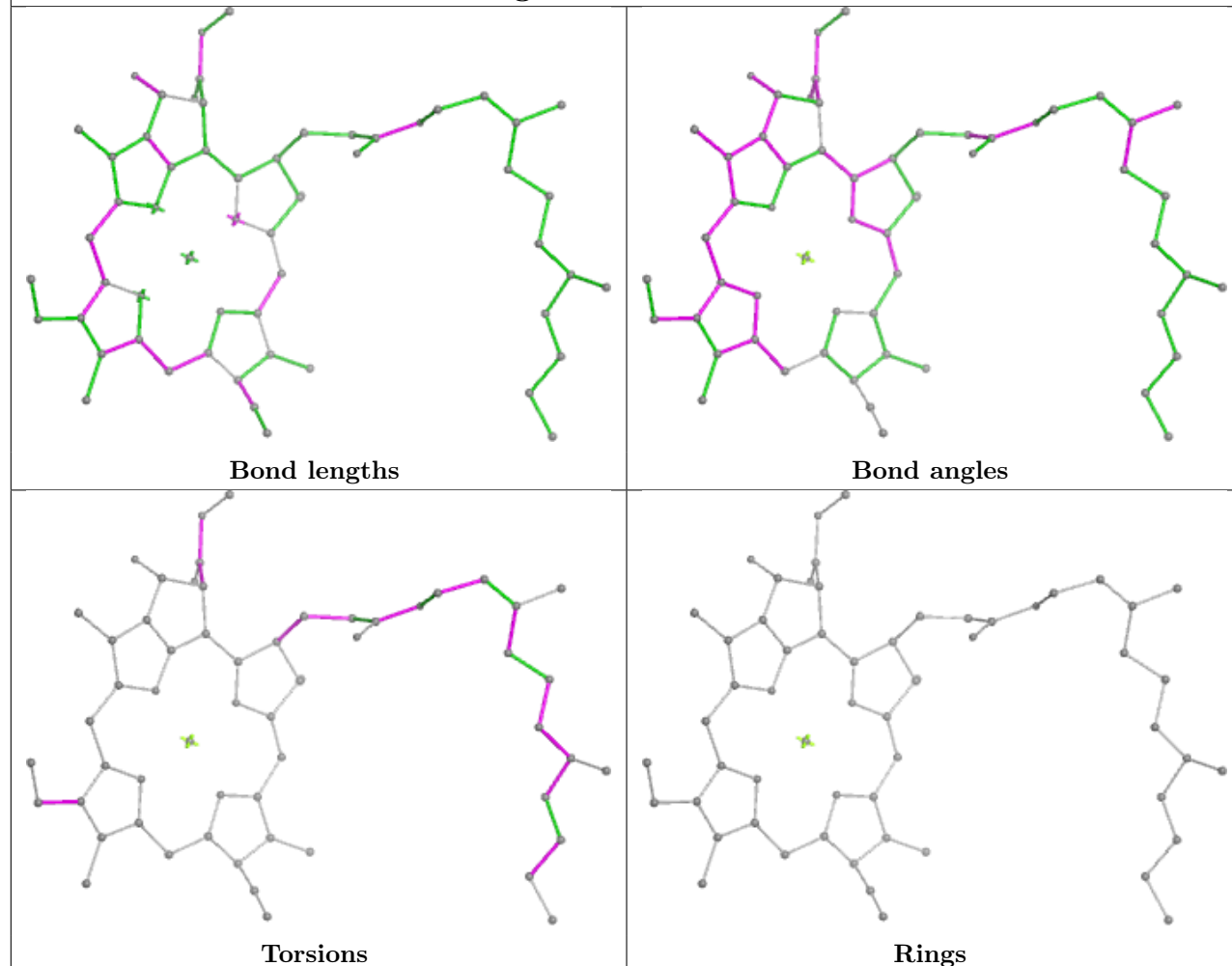
Ligand CLA L 210**Ligand BCR F 203**



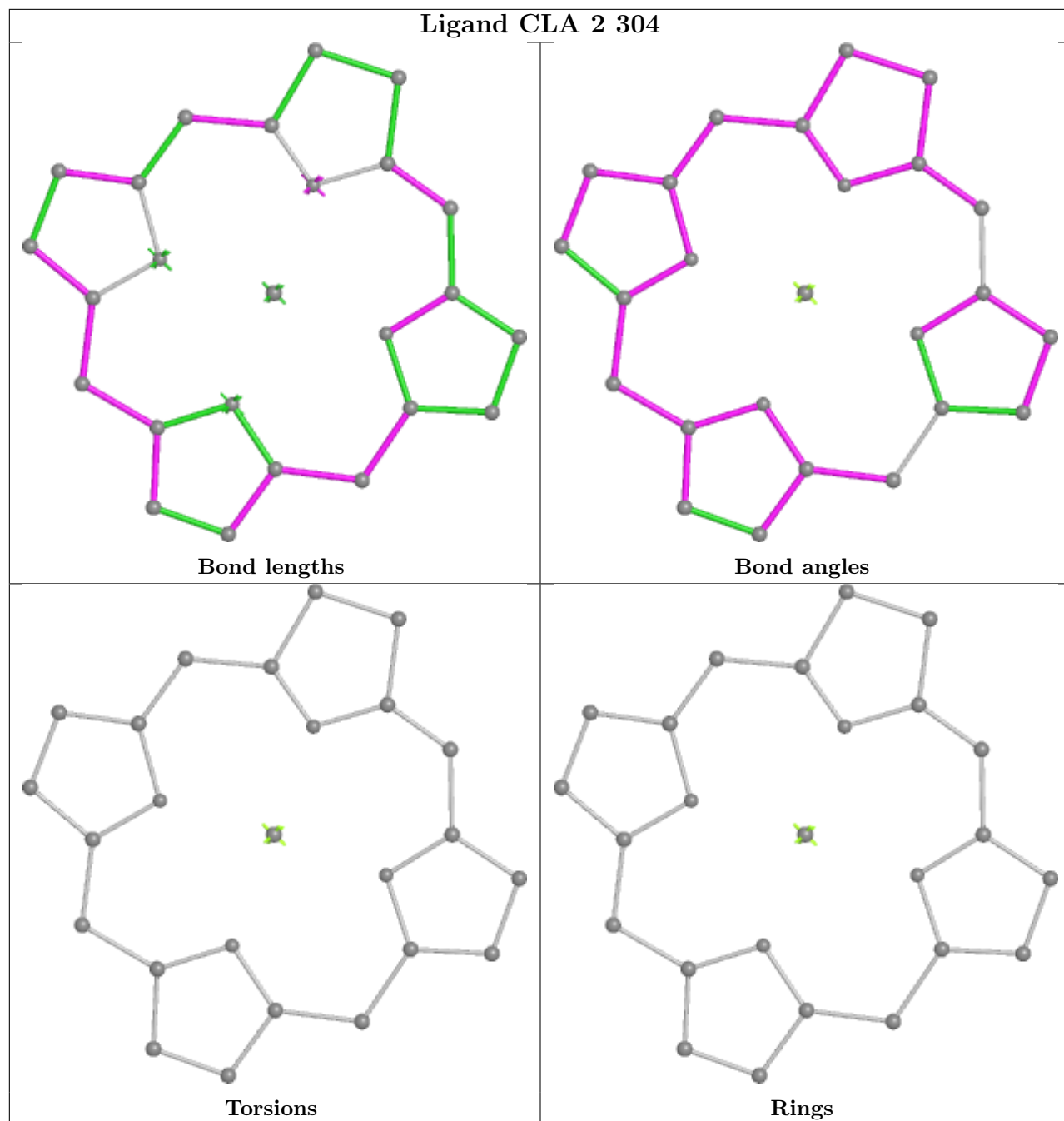
Ligand CLA A 831

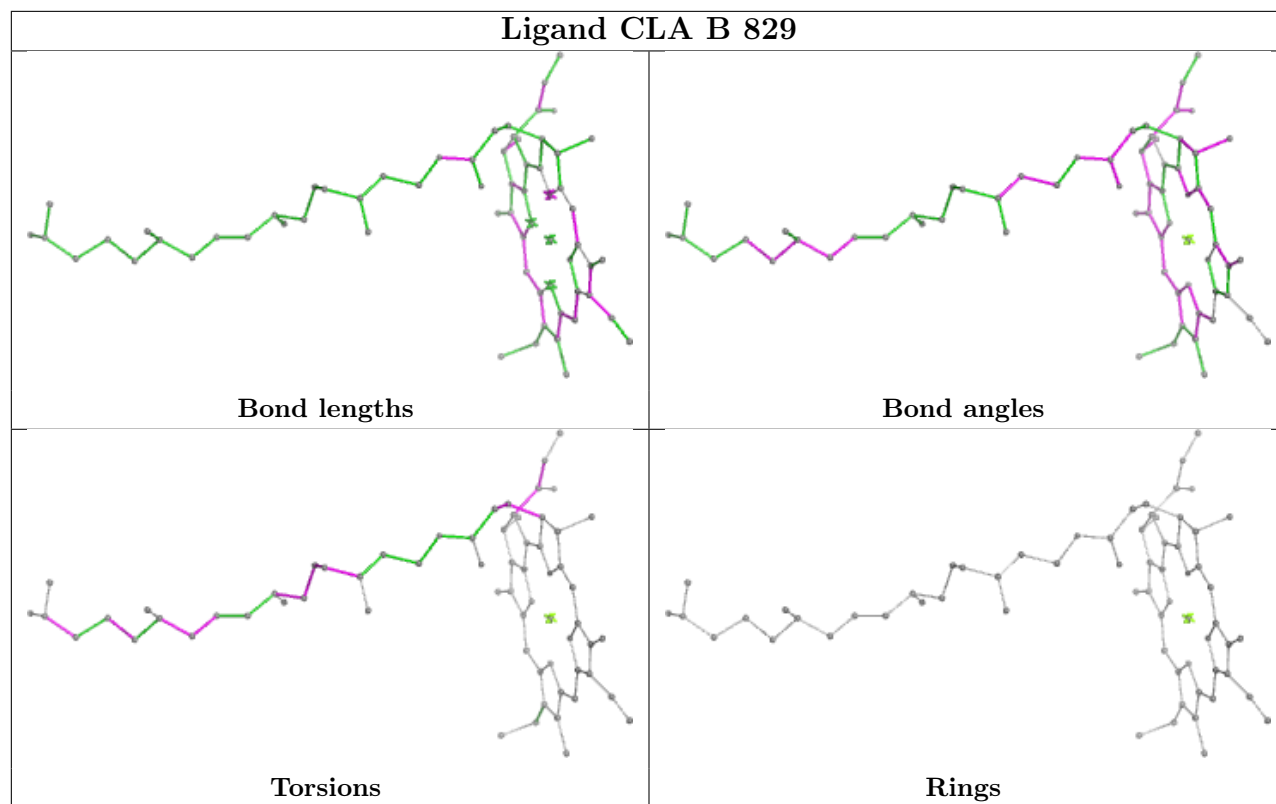


Ligand CLA B 826

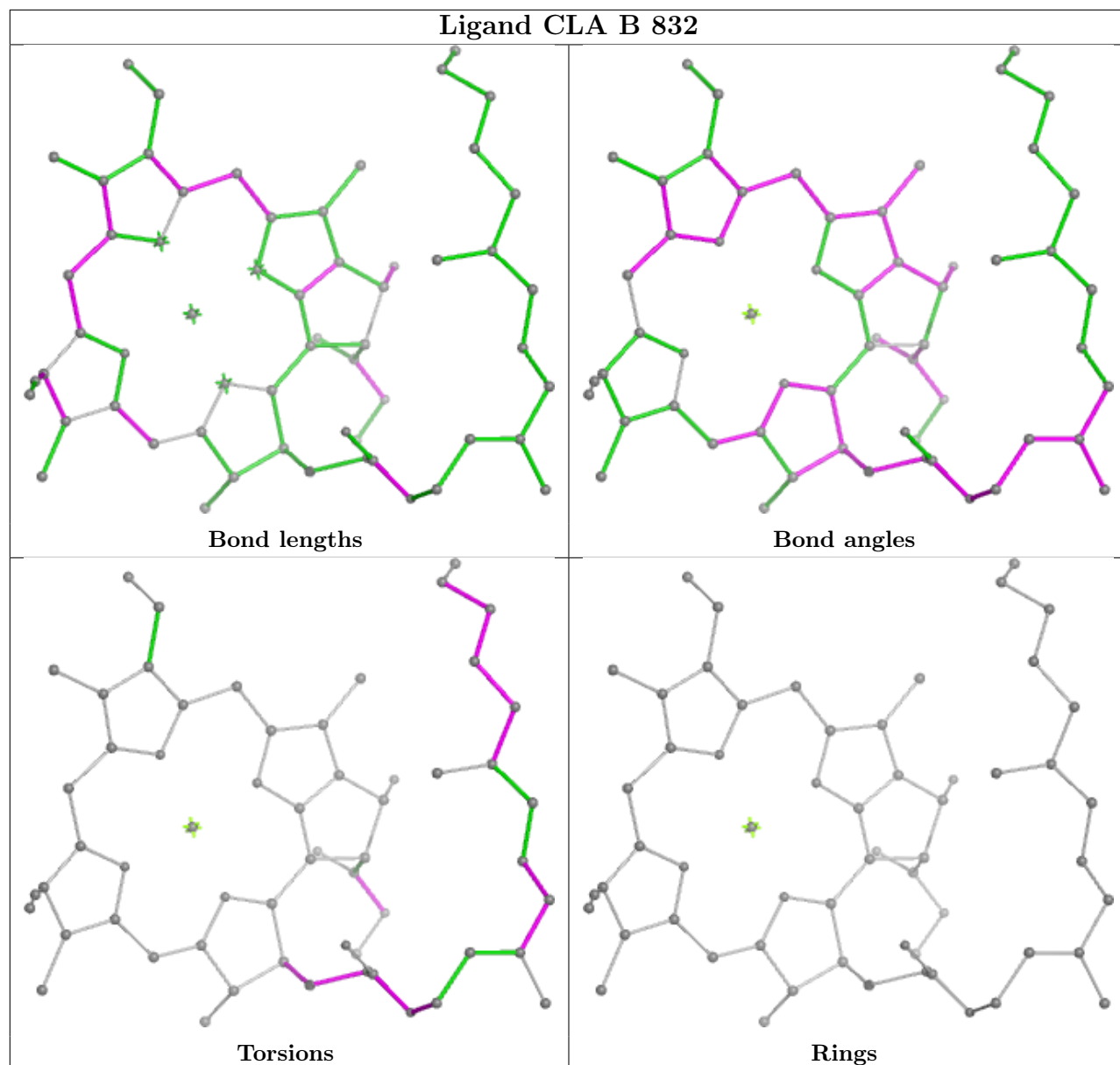


Ligand CLA 2 304

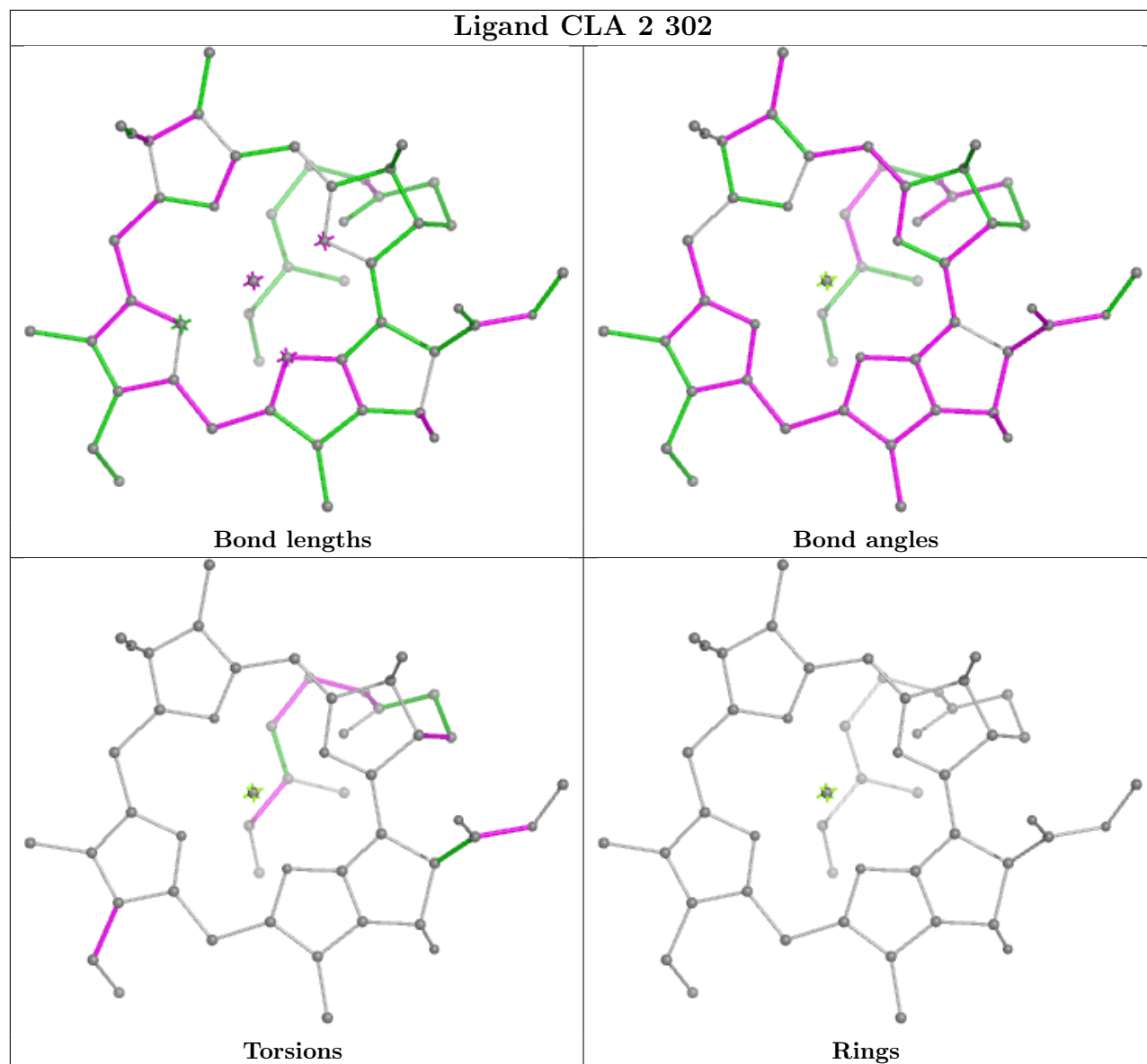




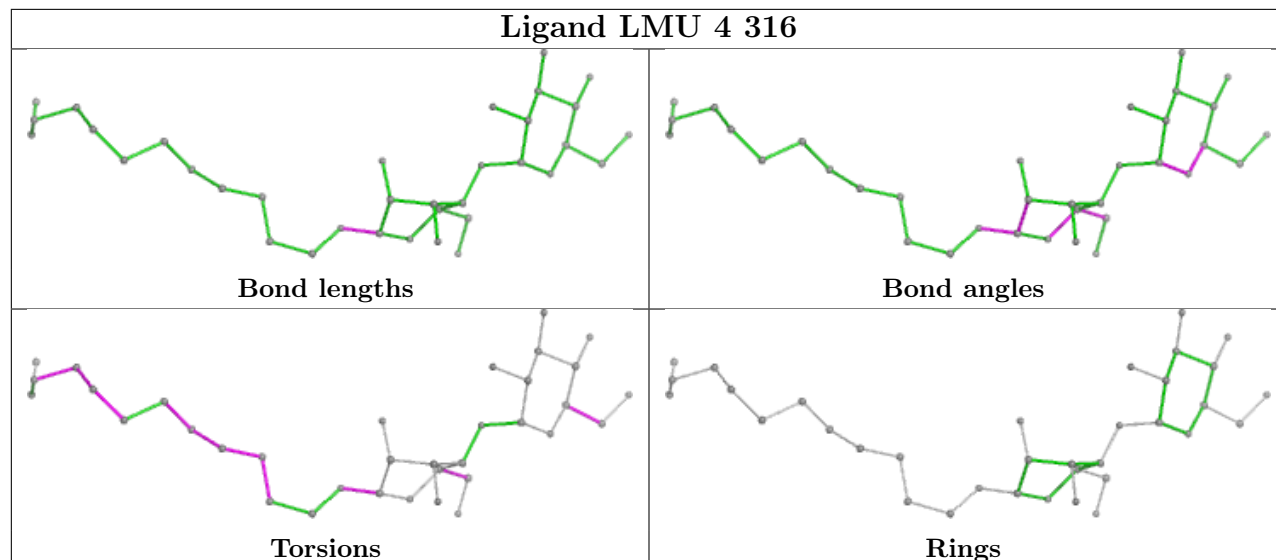
Ligand CLA B 832

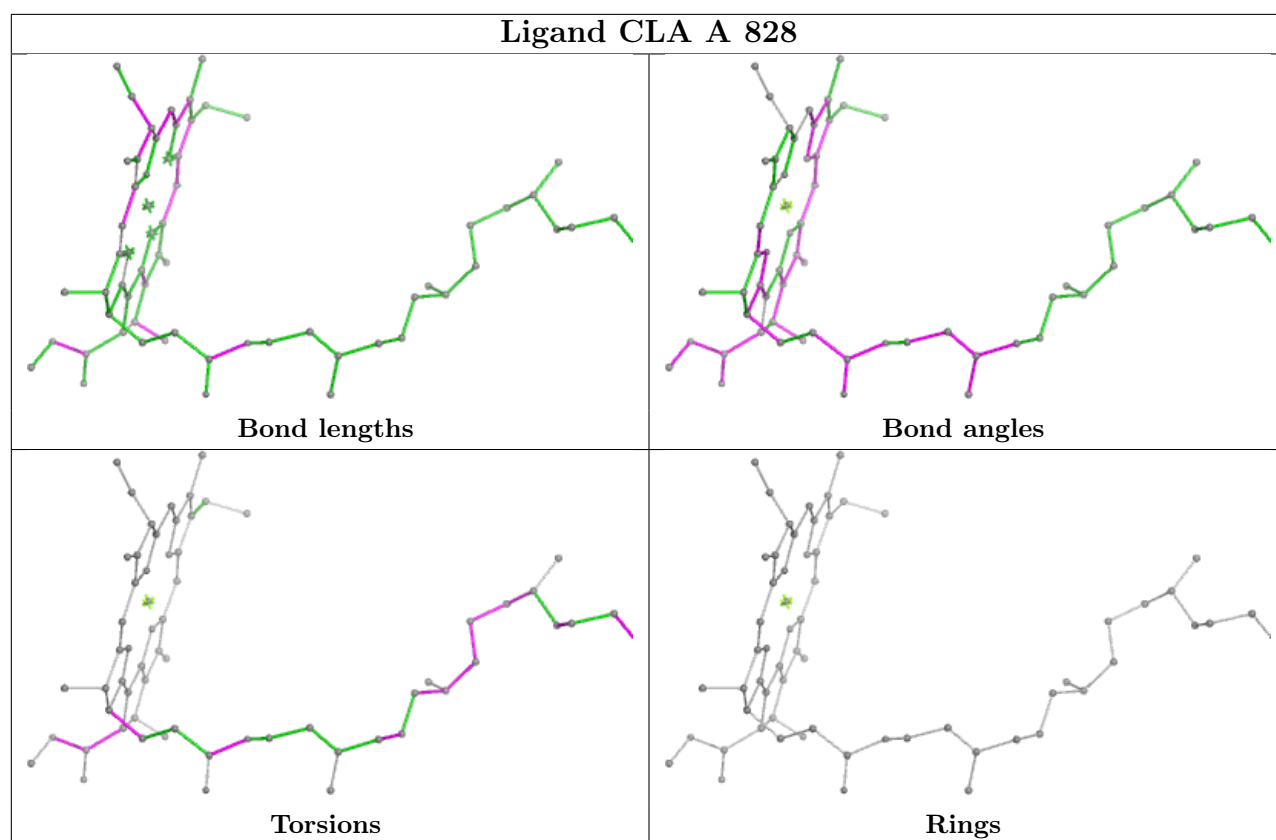


Ligand CLA 2 302

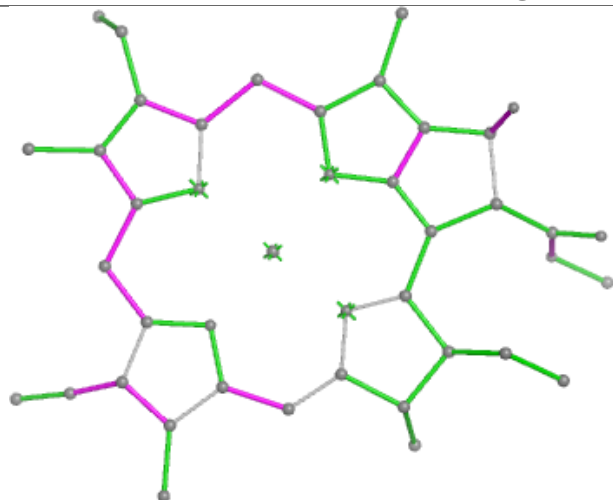


Ligand LMU 4 316

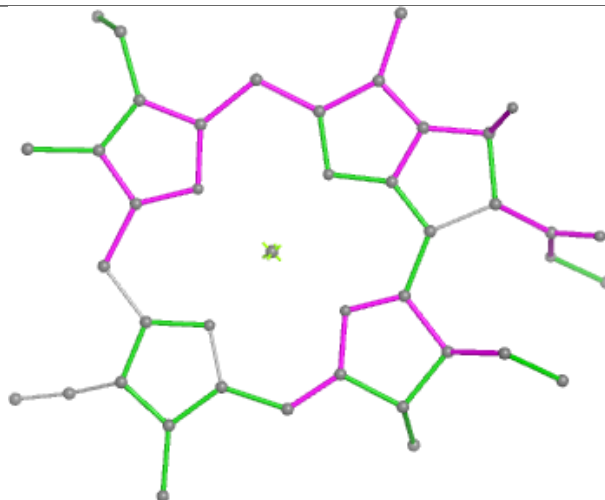




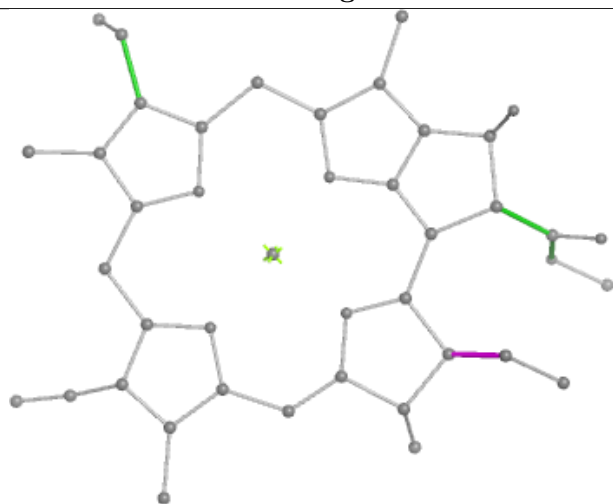
Ligand CLA A 821



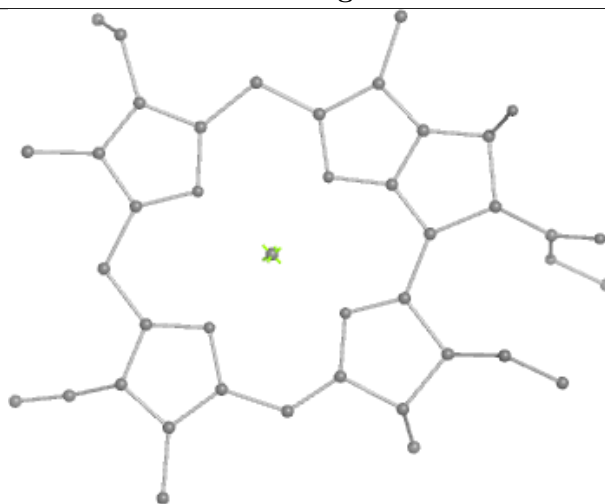
Bond lengths



Bond angles

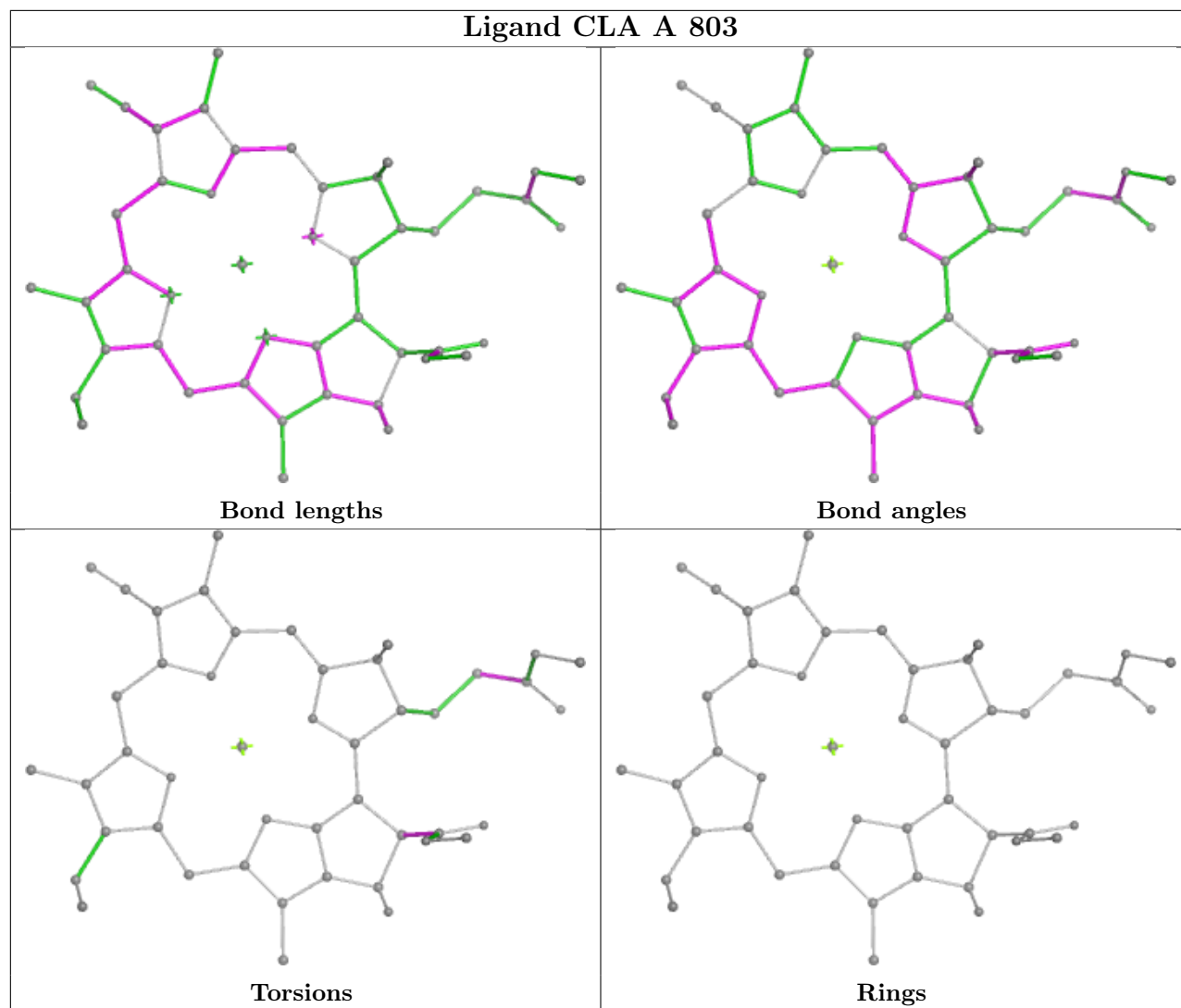


Torsions

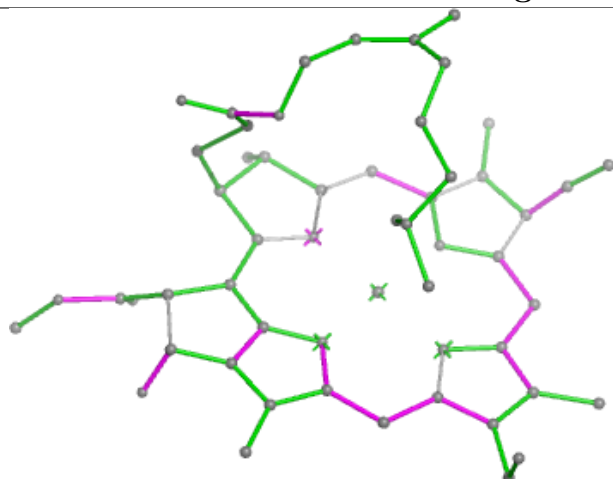


Rings

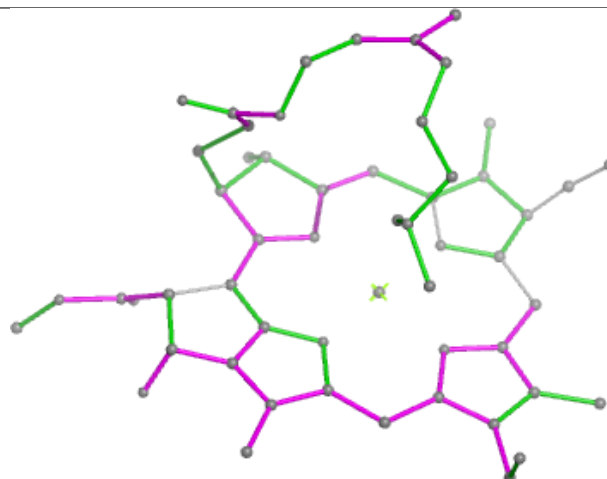
Ligand CLA A 803



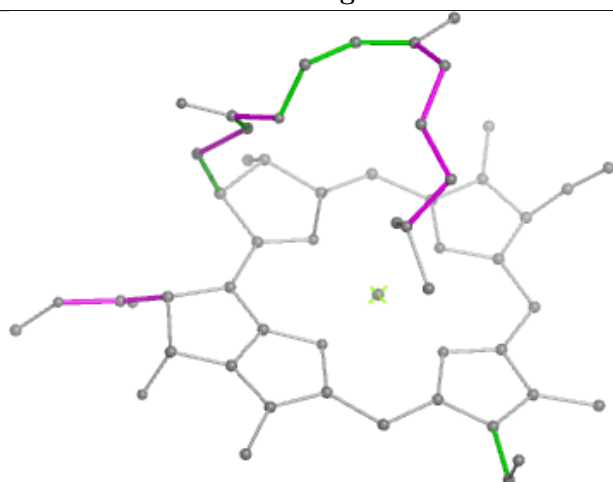
Ligand CLA B 813



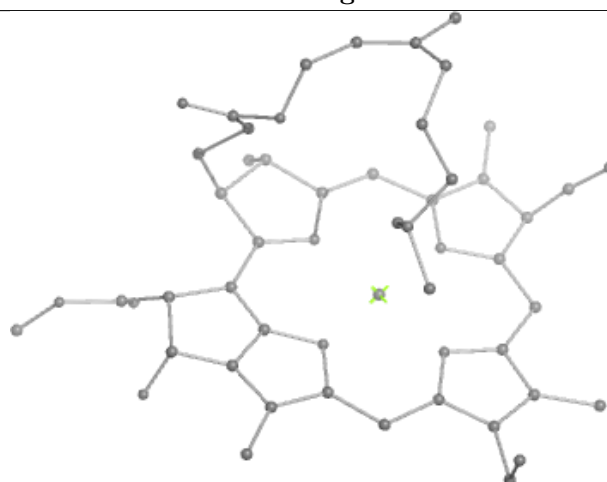
Bond lengths



Bond angles

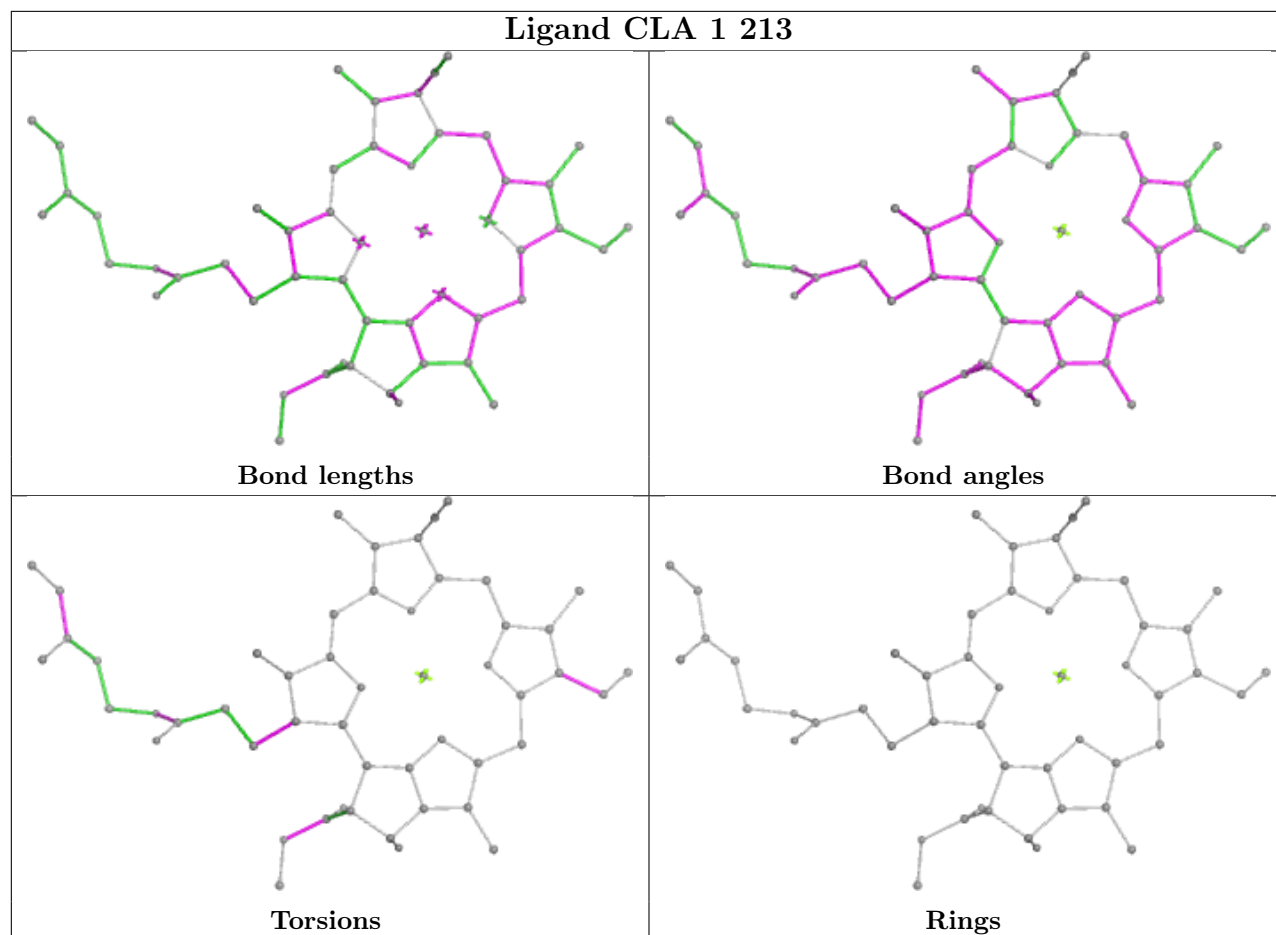


Torsions

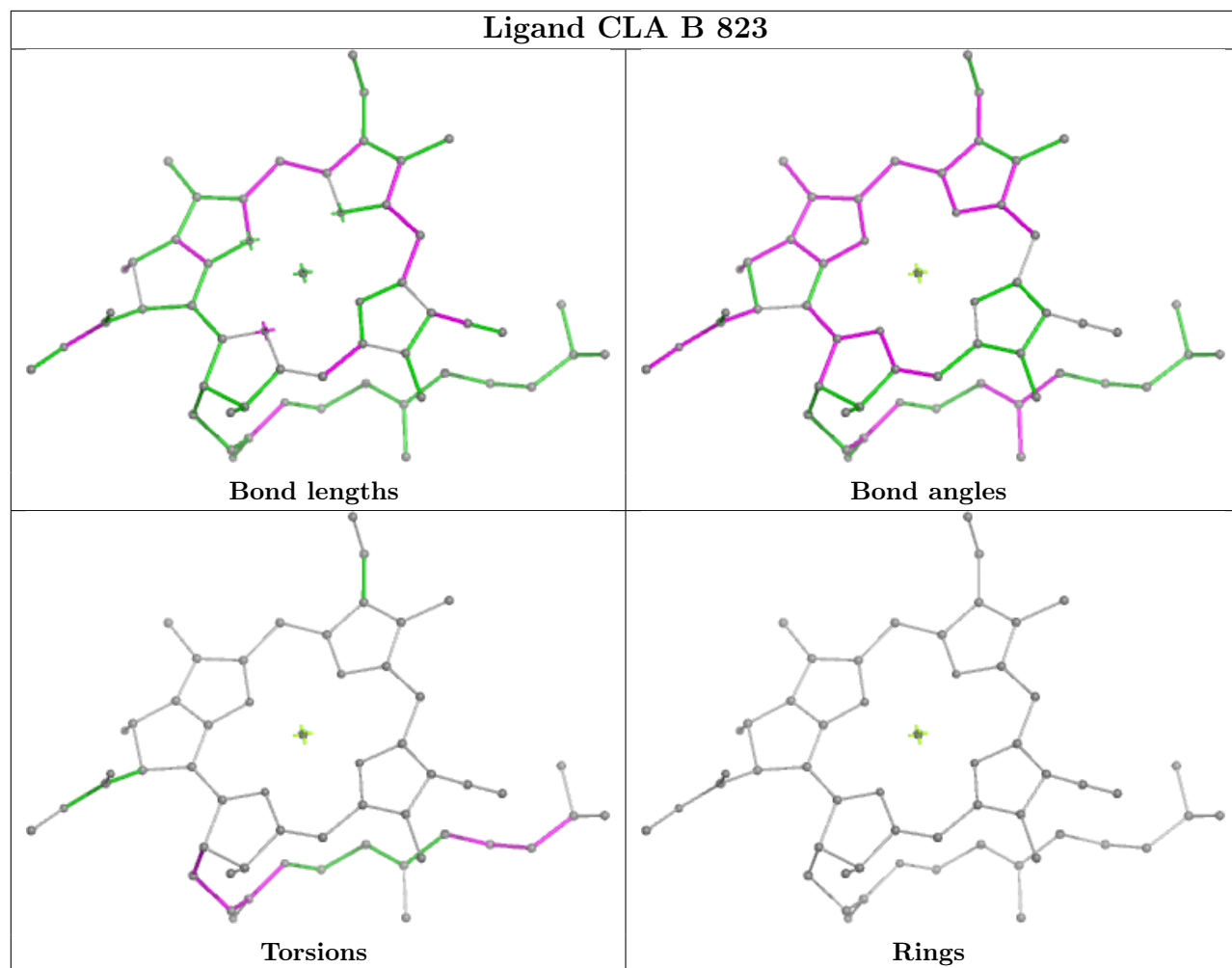


Rings

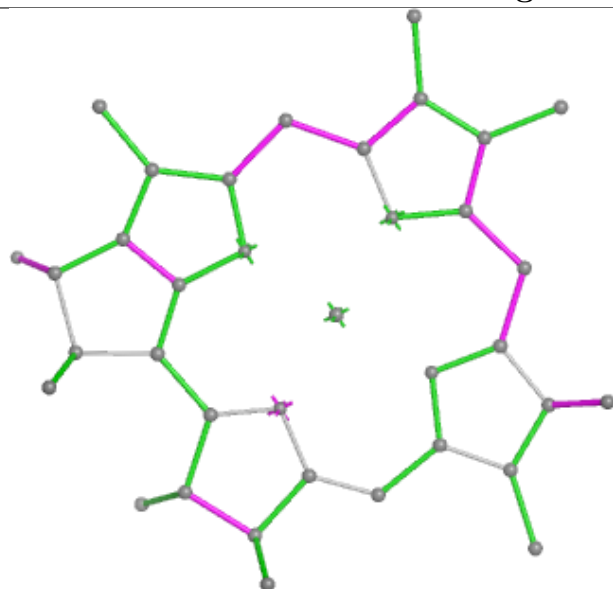
Ligand CLA 1 213



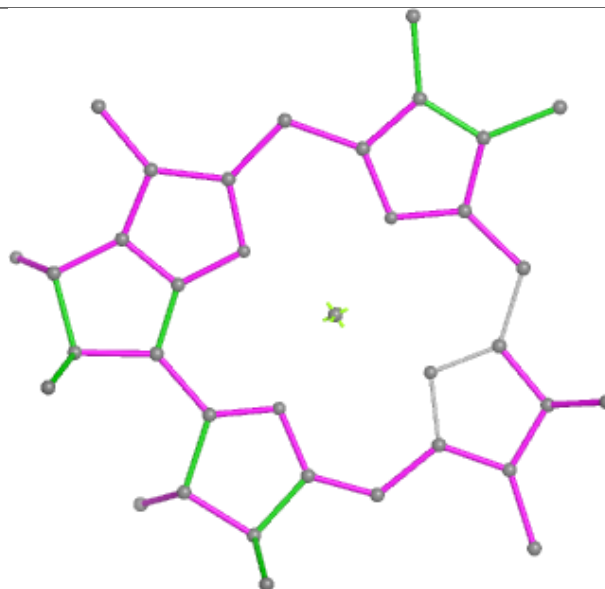
Ligand CLA B 823



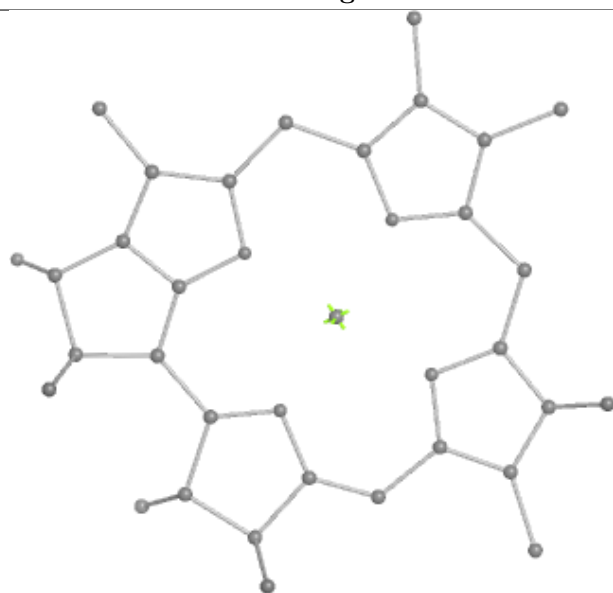
Ligand CLA F 205



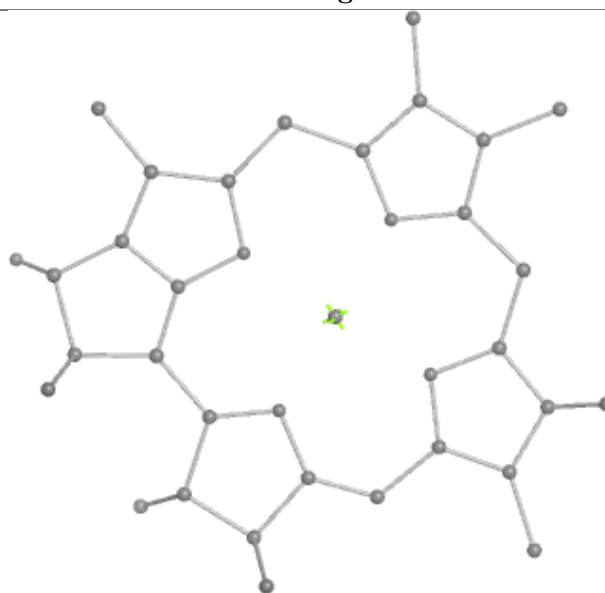
Bond lengths



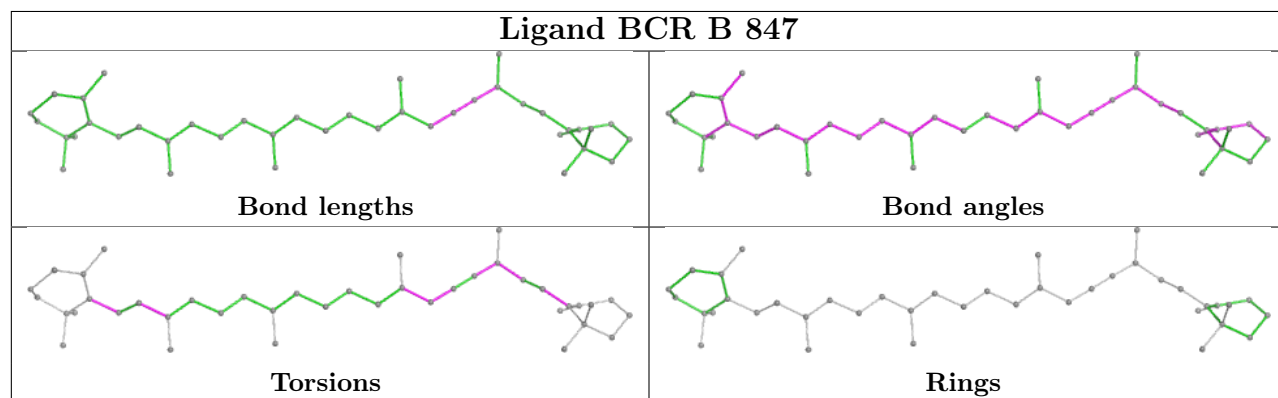
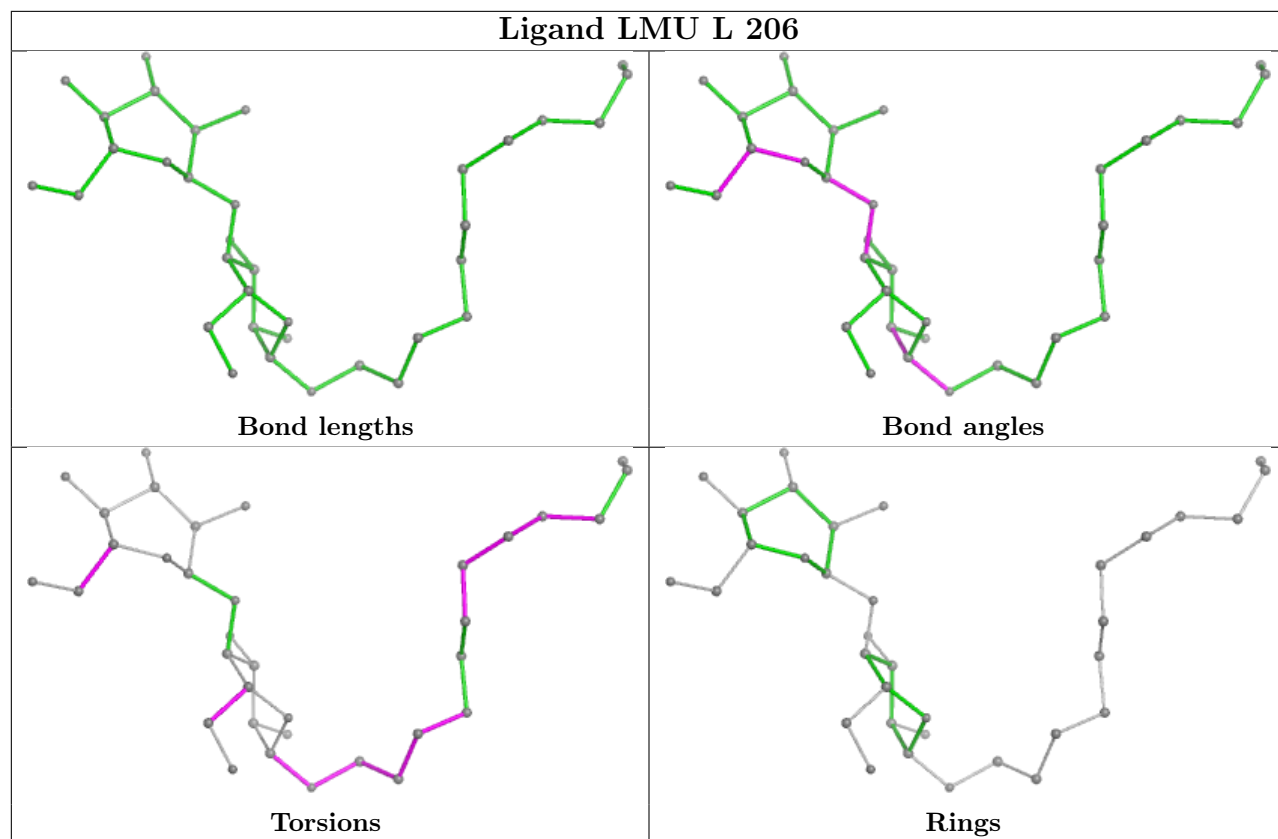
Bond angles



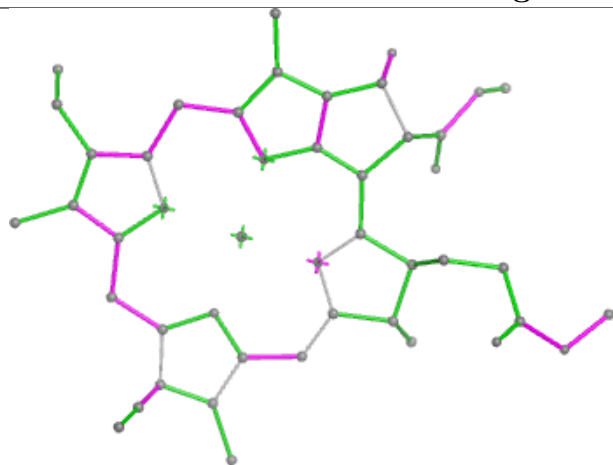
Torsions



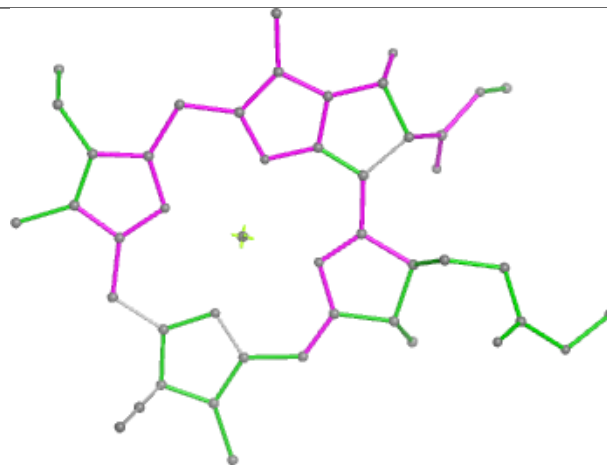
Rings



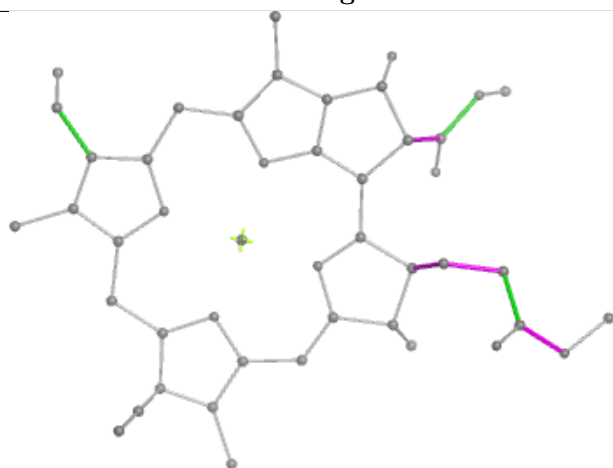
Ligand CLA K 101



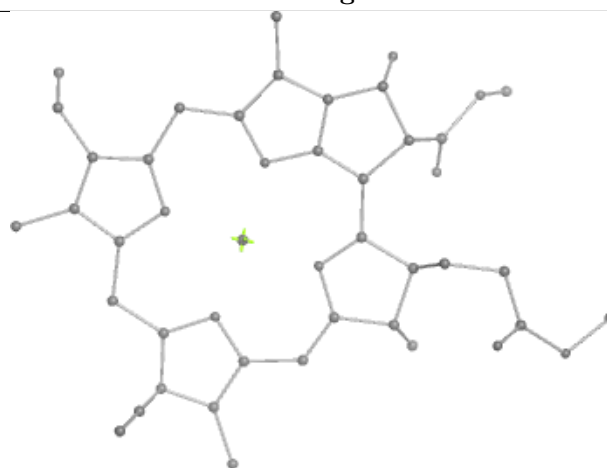
Bond lengths



Bond angles

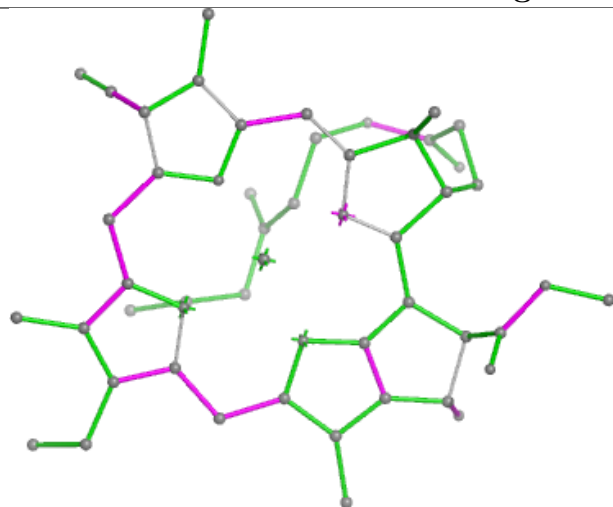


Torsions

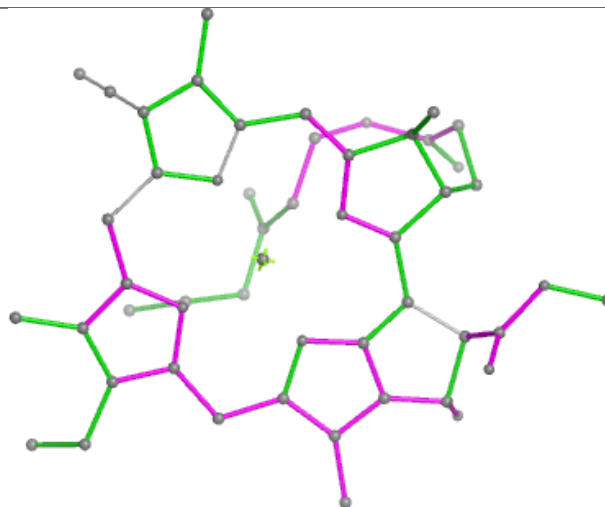


Rings

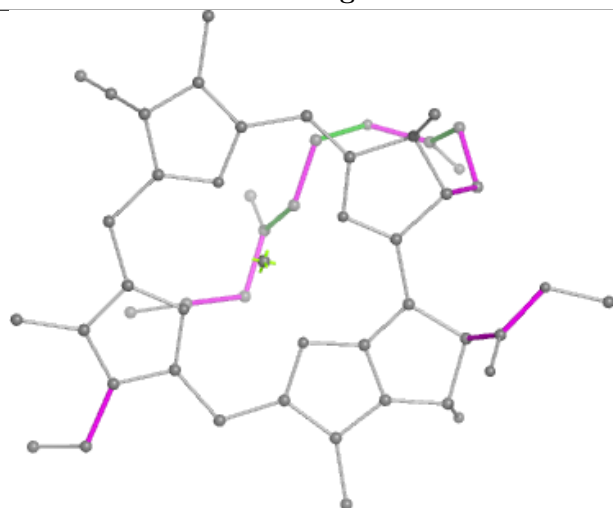
Ligand CLA A 817



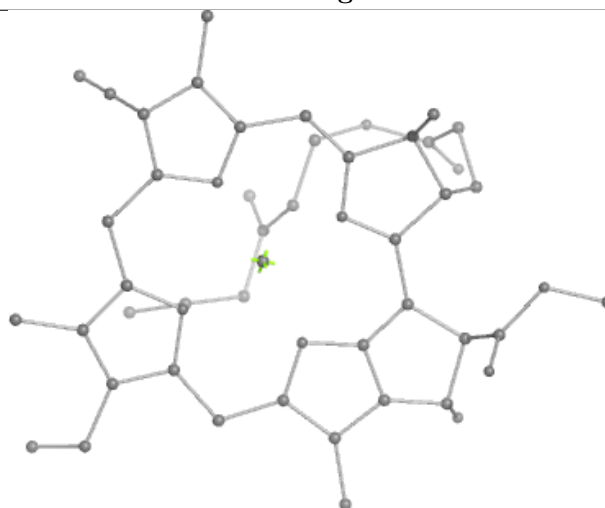
Bond lengths



Bond angles

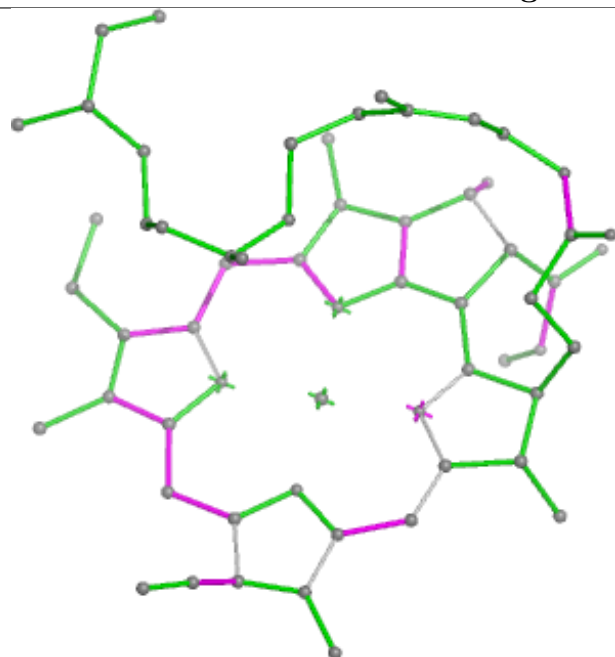


Torsions

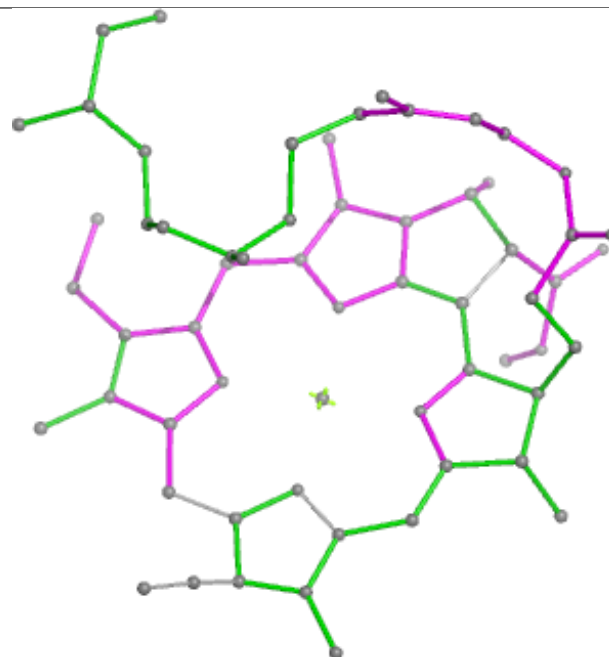


Rings

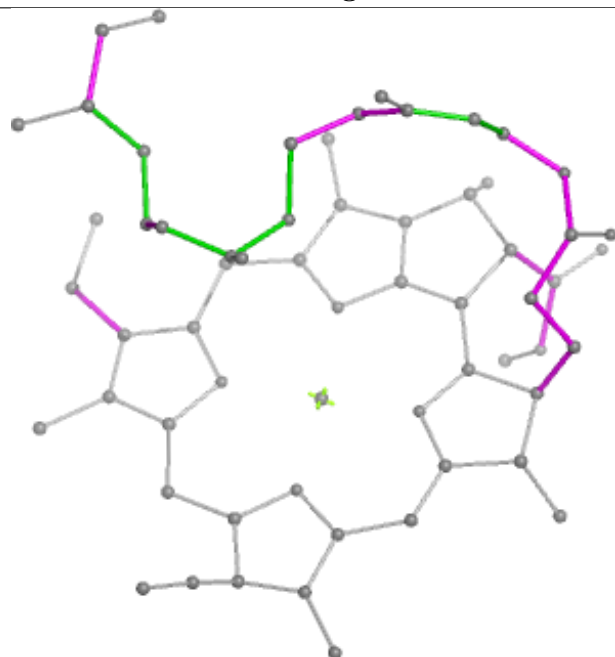
Ligand CLA 1 206



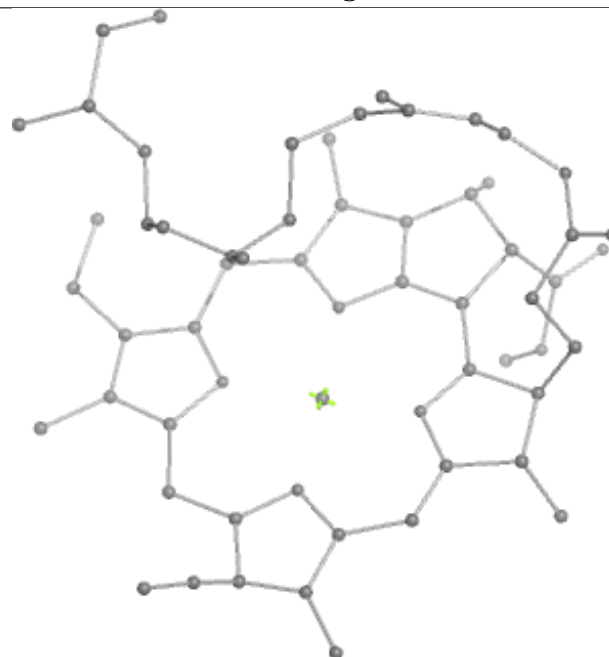
Bond lengths



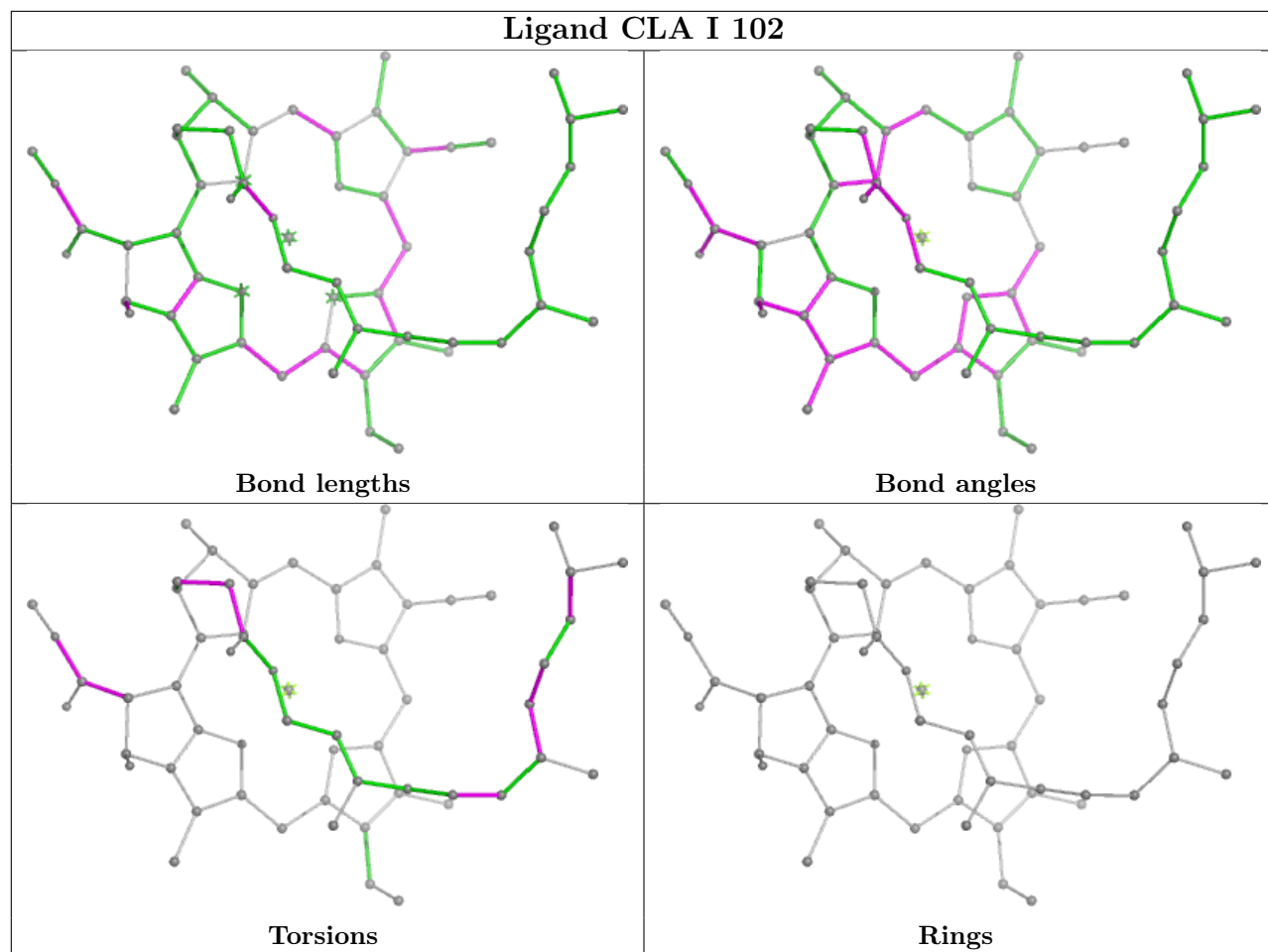
Bond angles

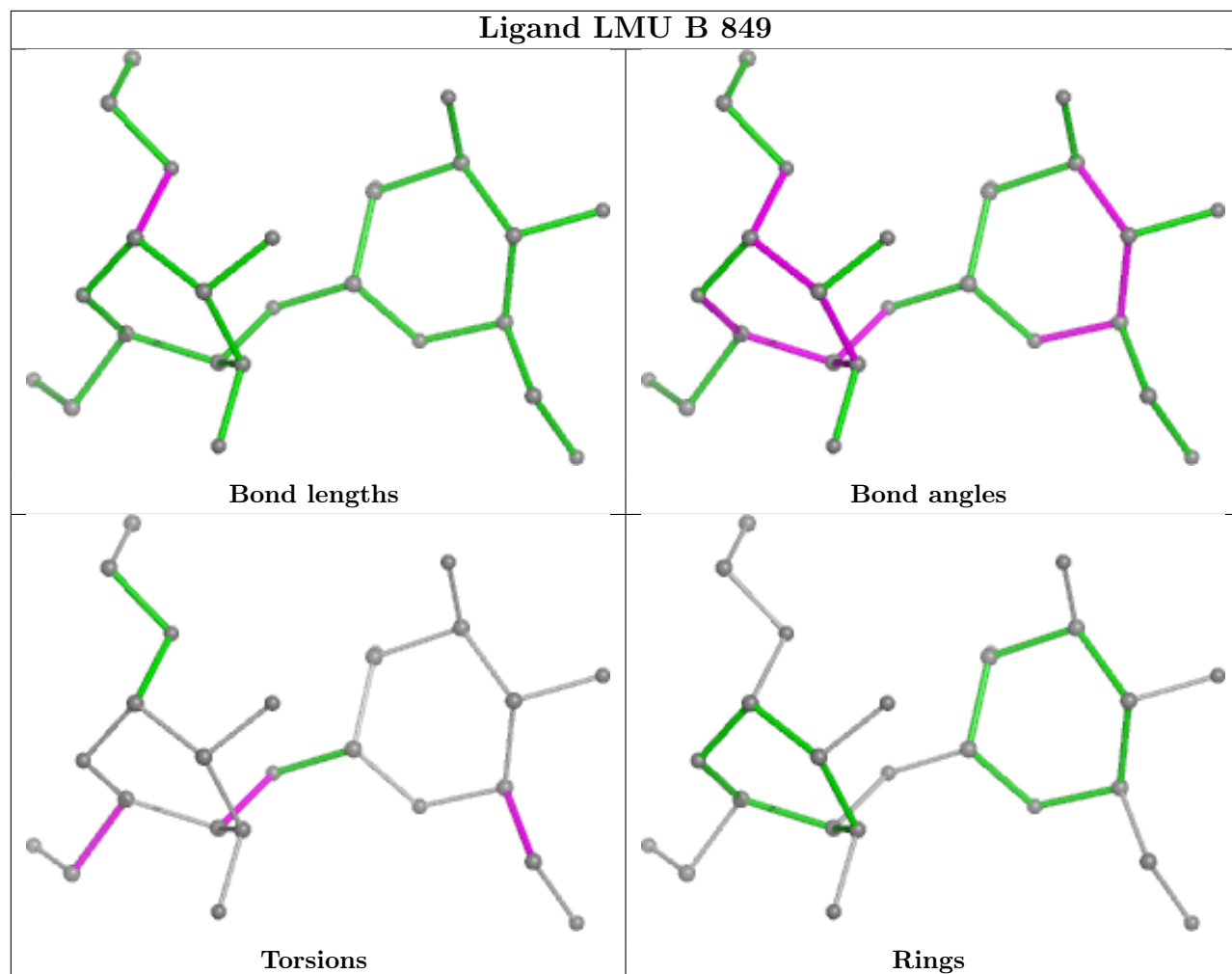


Torsions

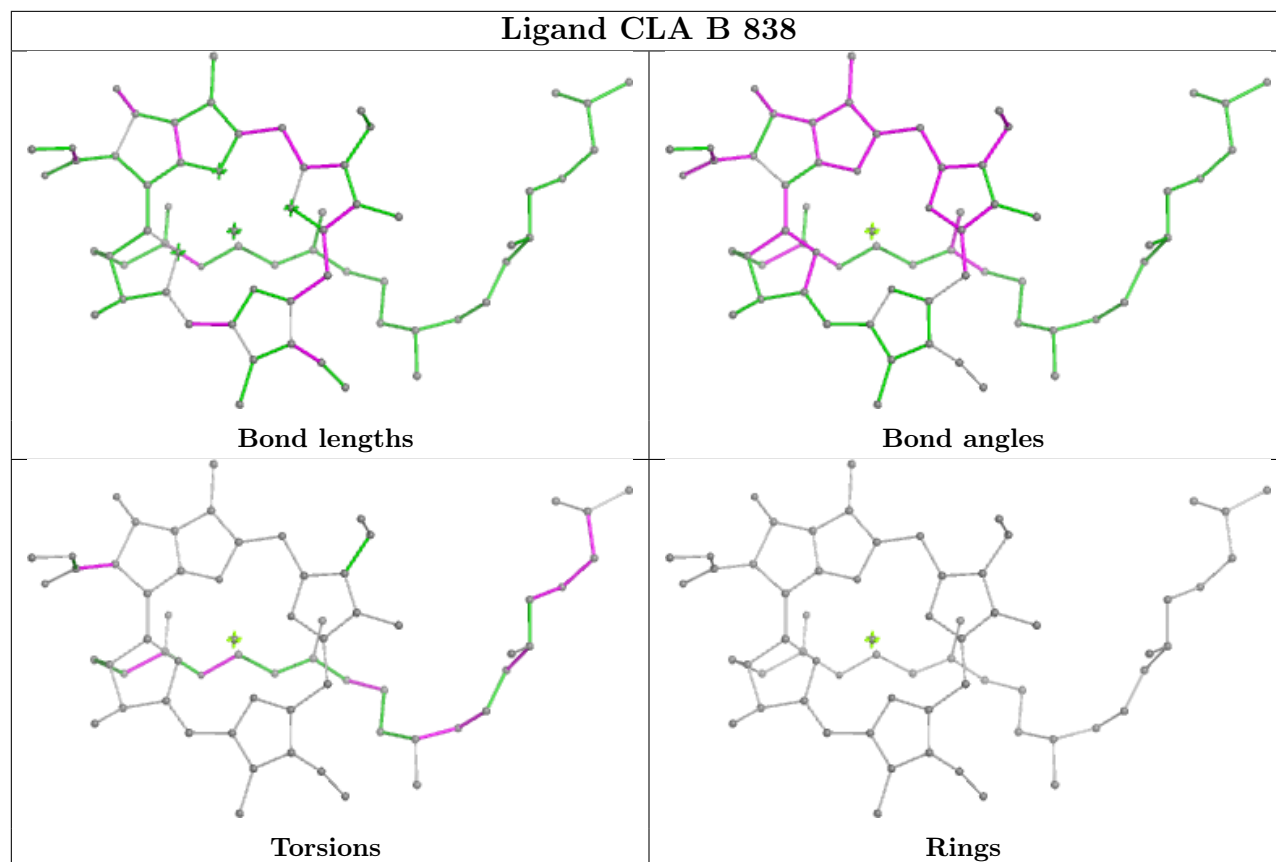


Rings

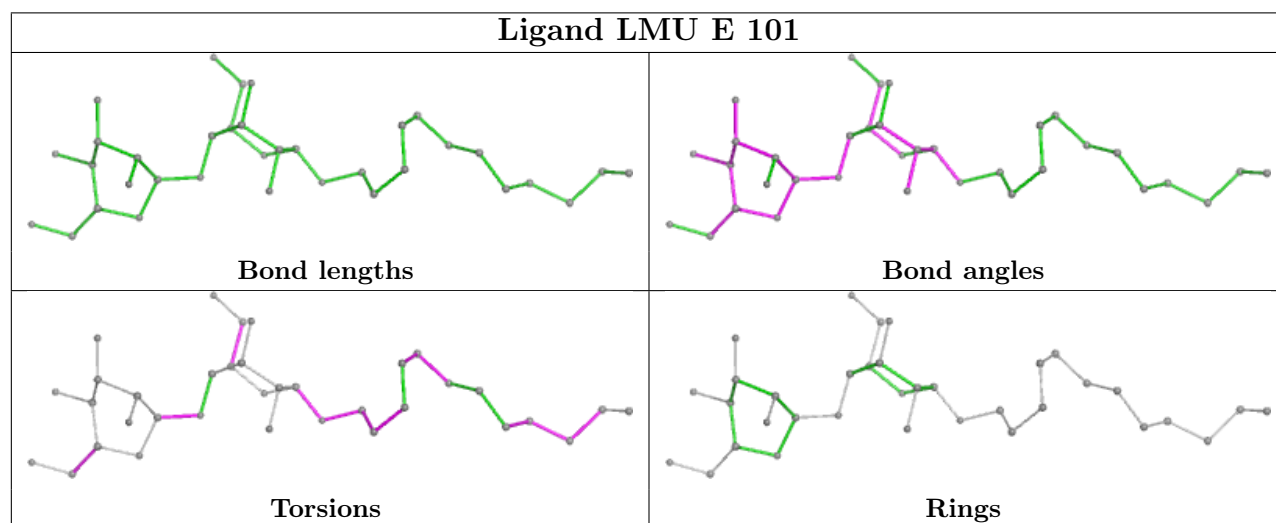


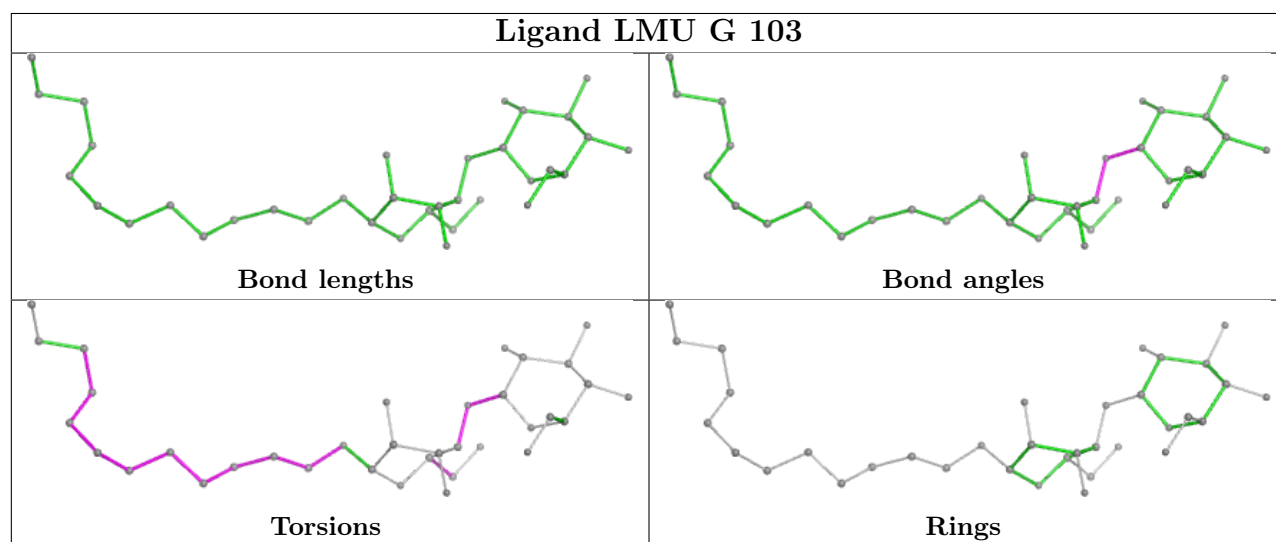
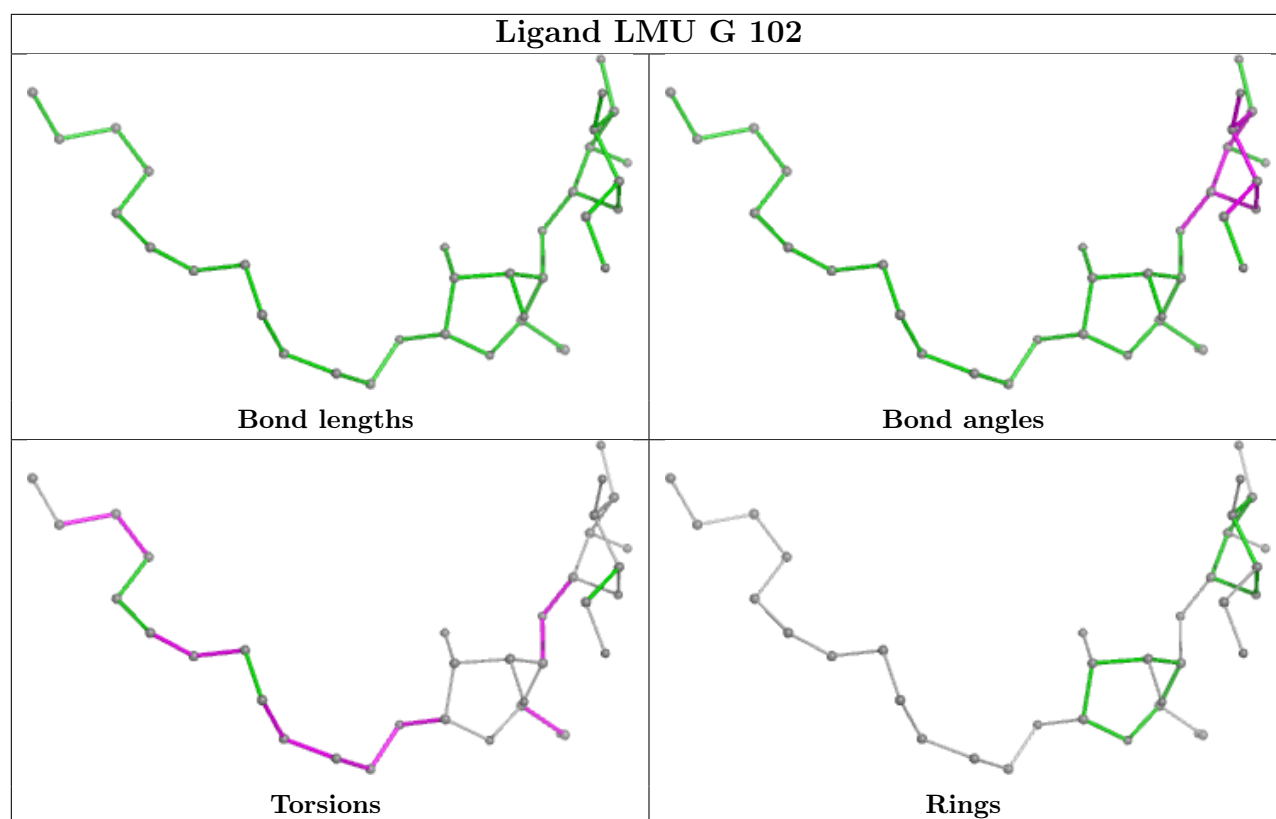


Ligand CLA B 838

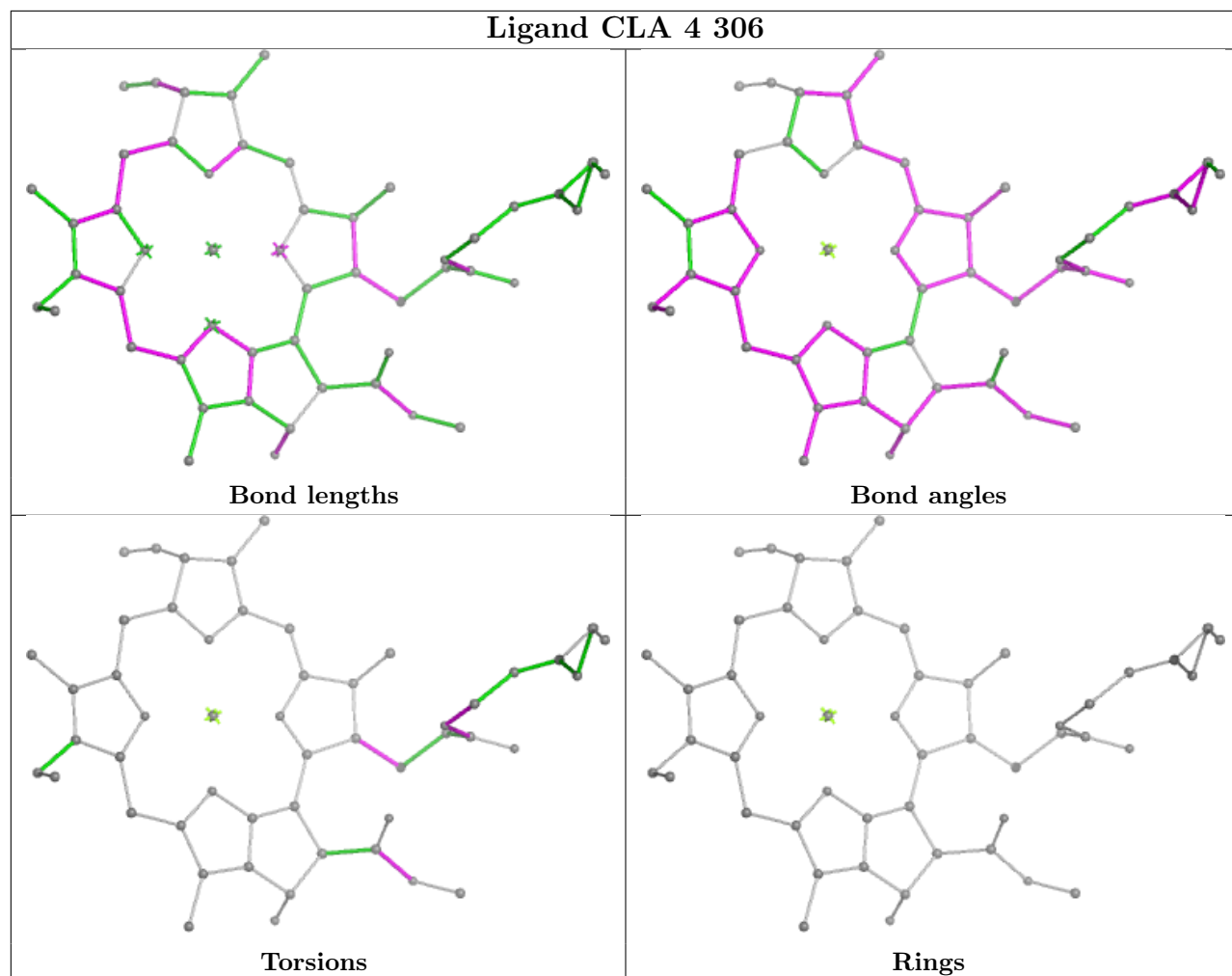


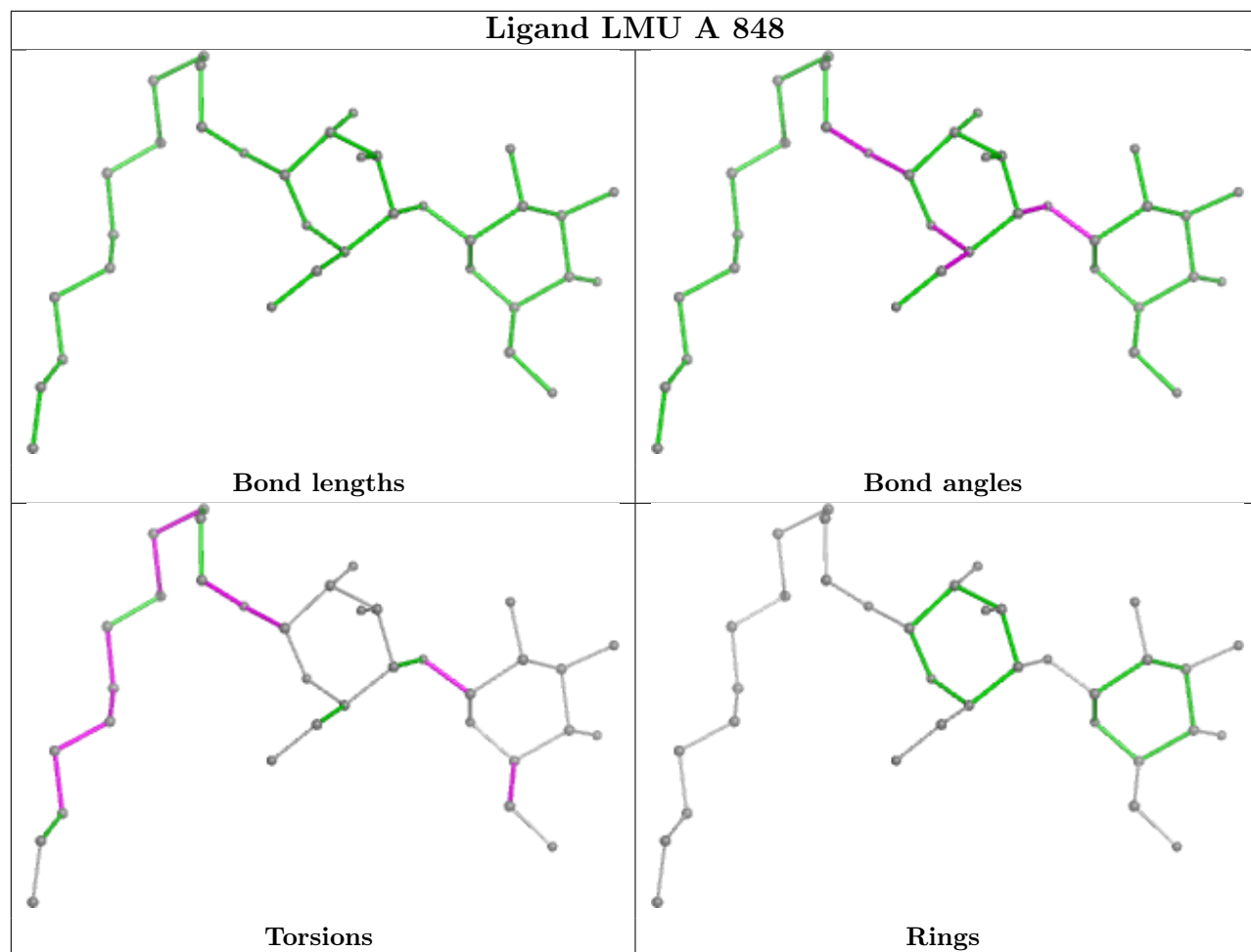
Ligand LMU E 101

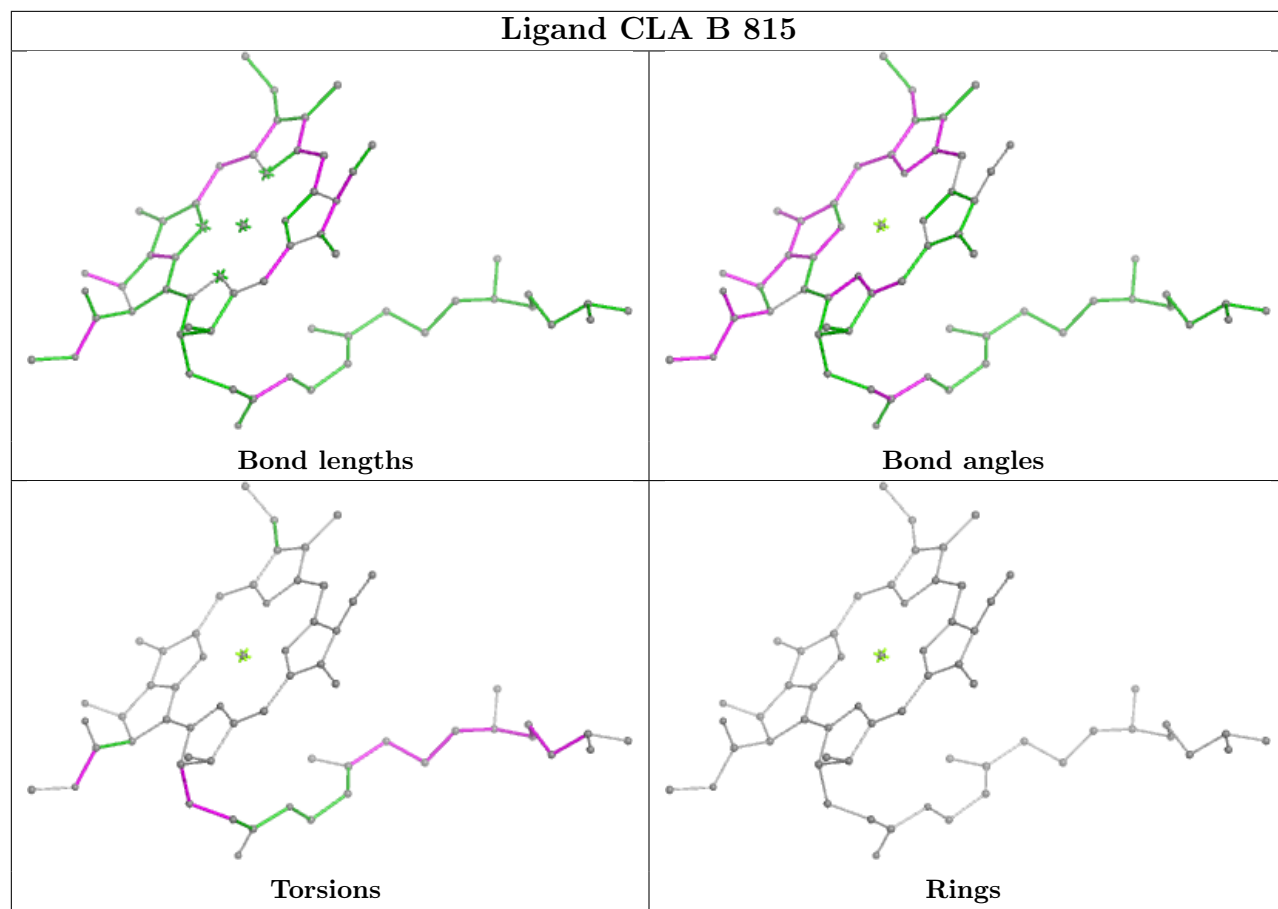




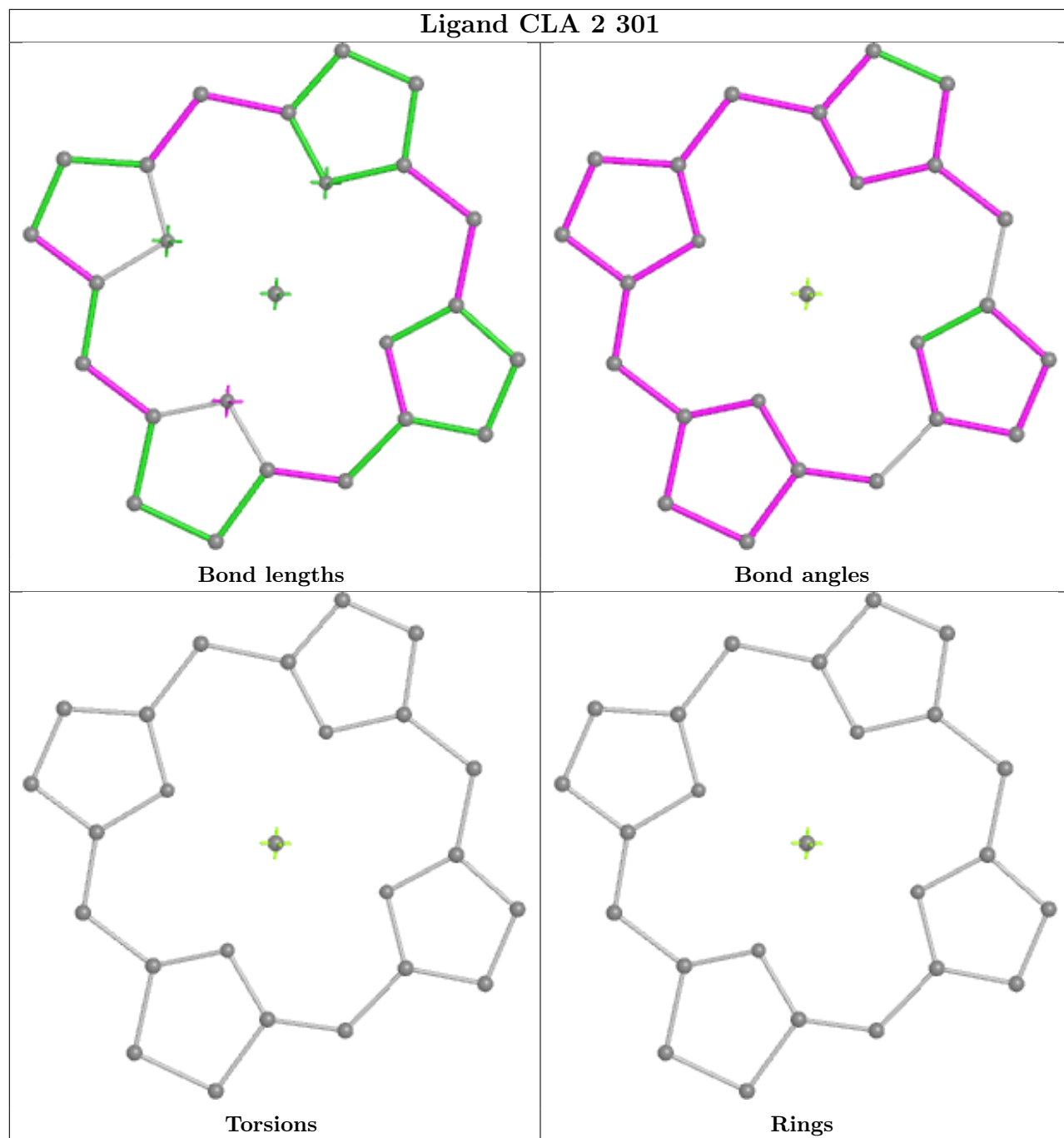
Ligand CLA 4 306



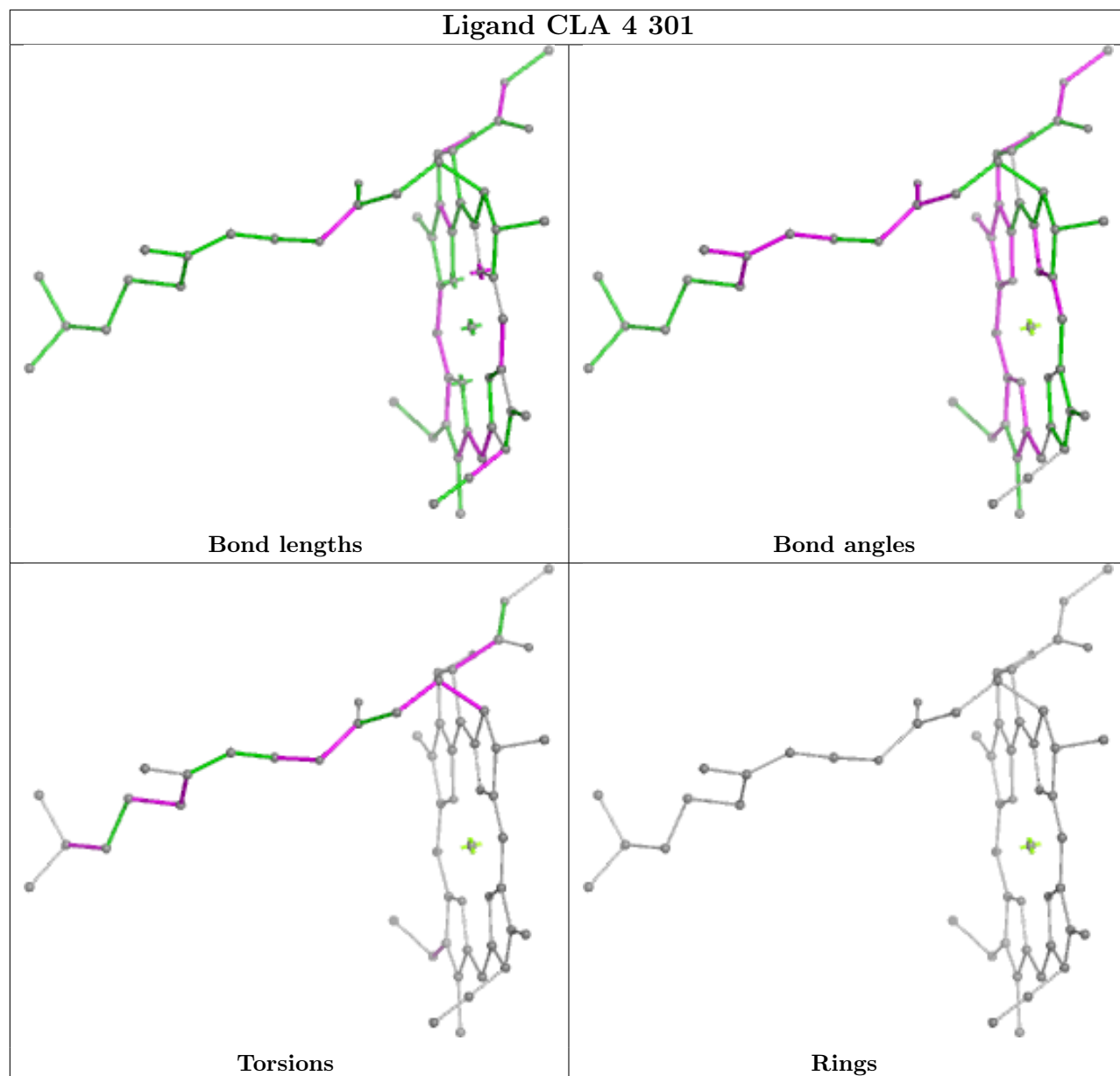


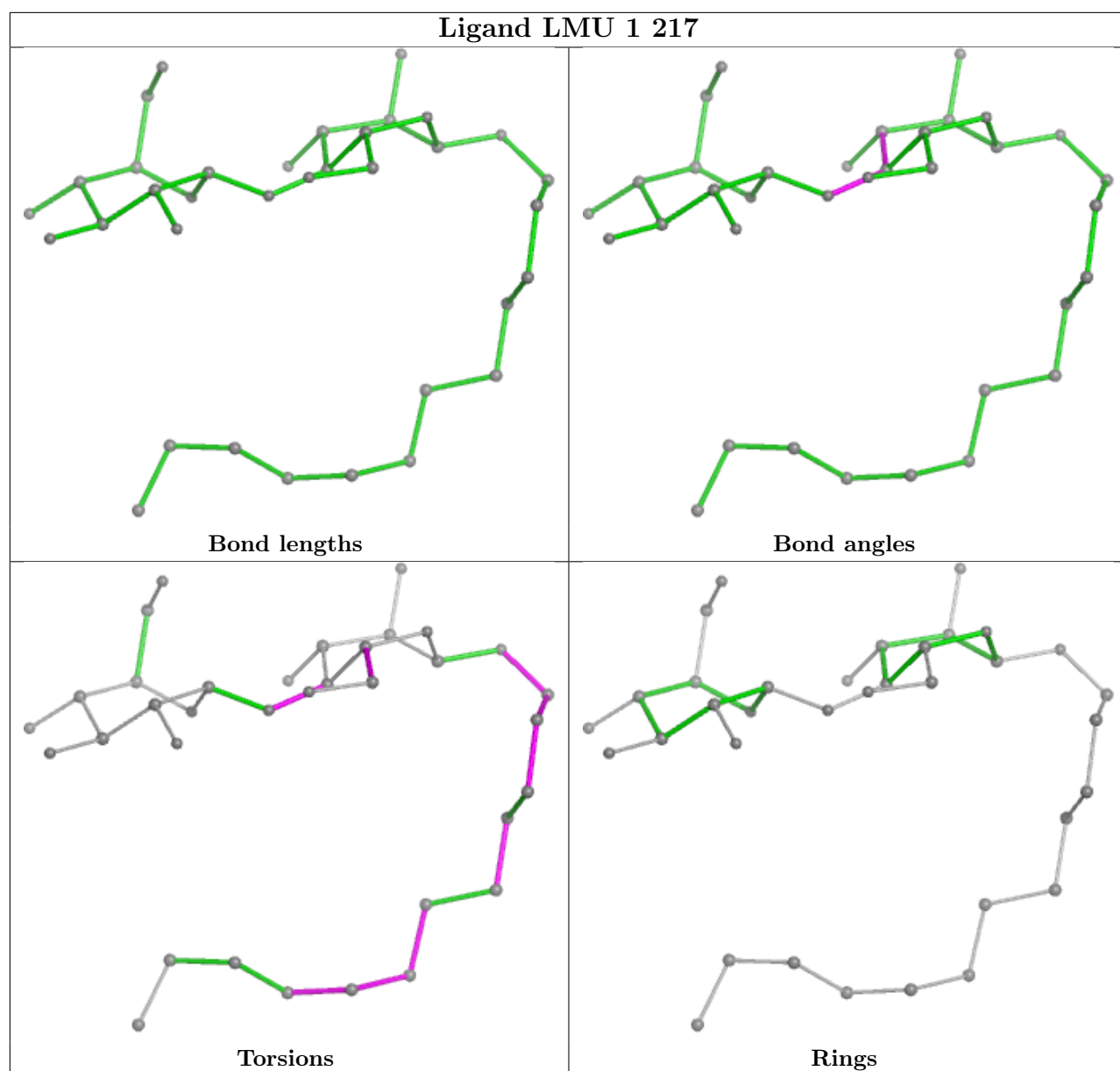


Ligand CLA 2 301

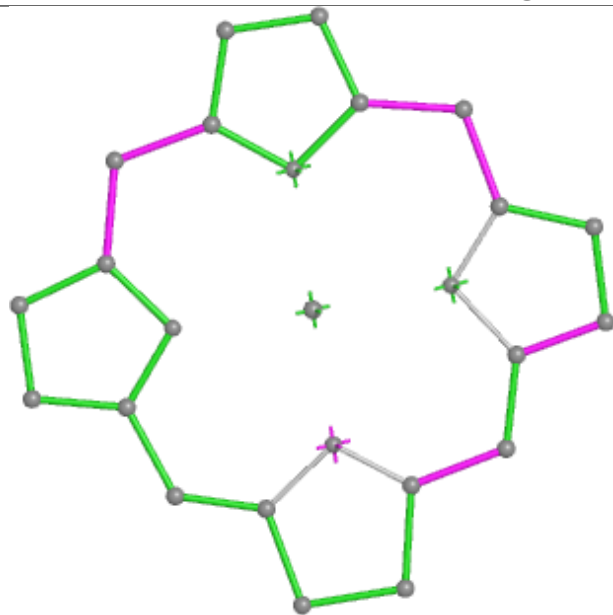


Ligand CLA 4 301

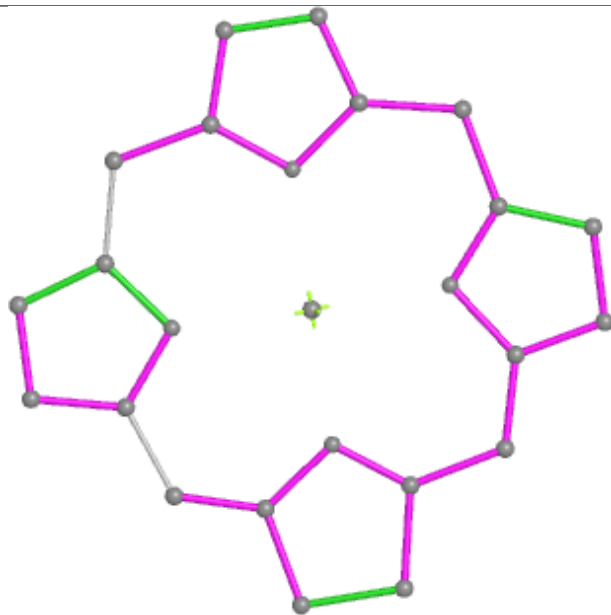




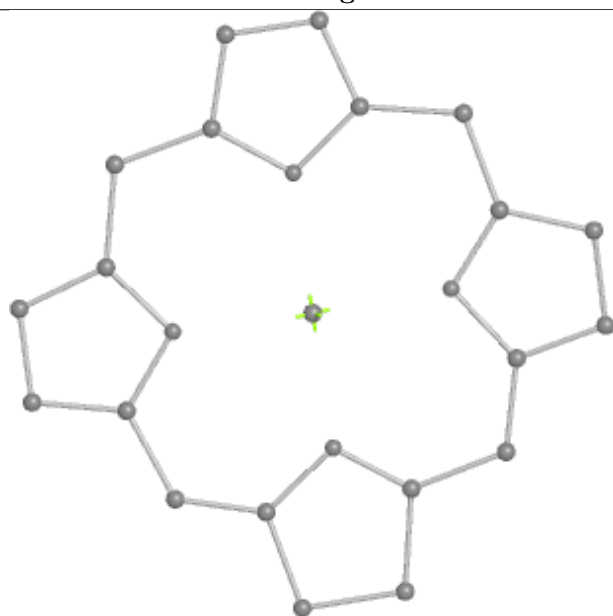
Ligand CLA 4 309



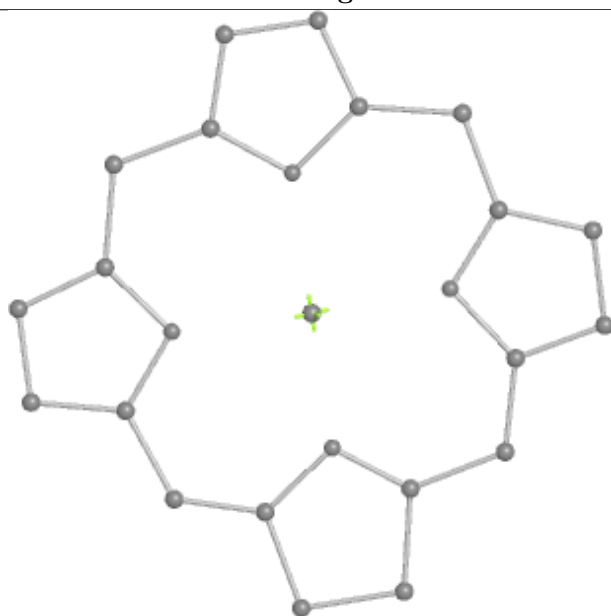
Bond lengths



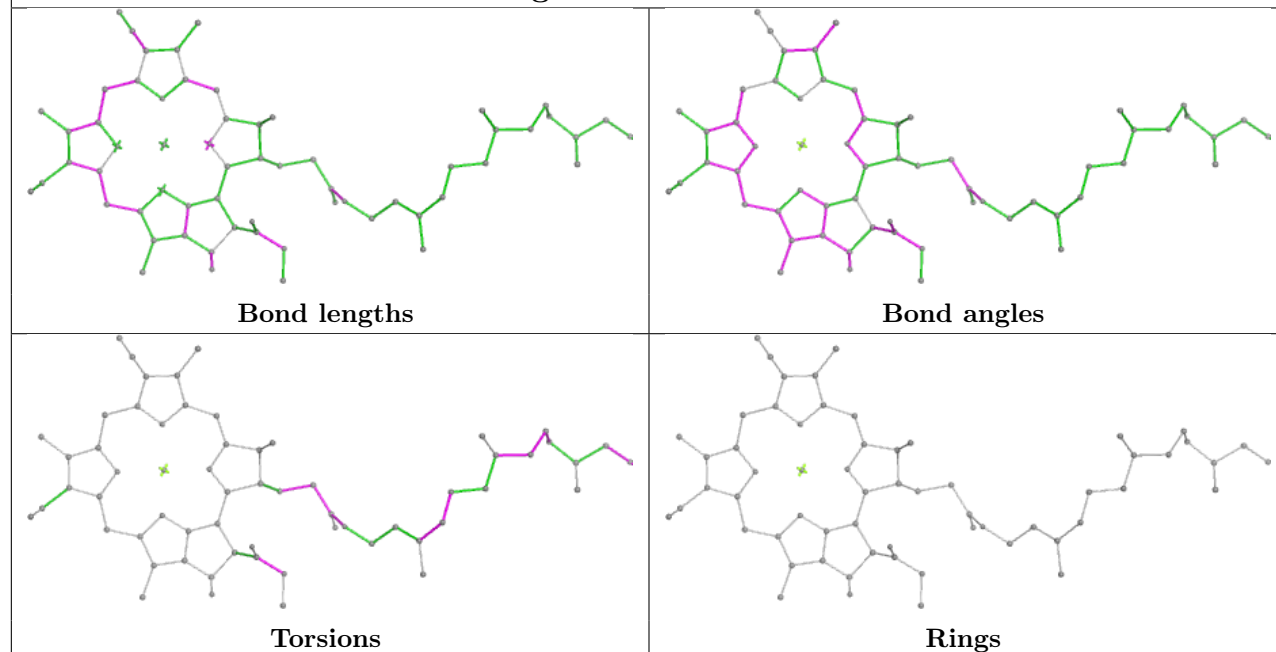
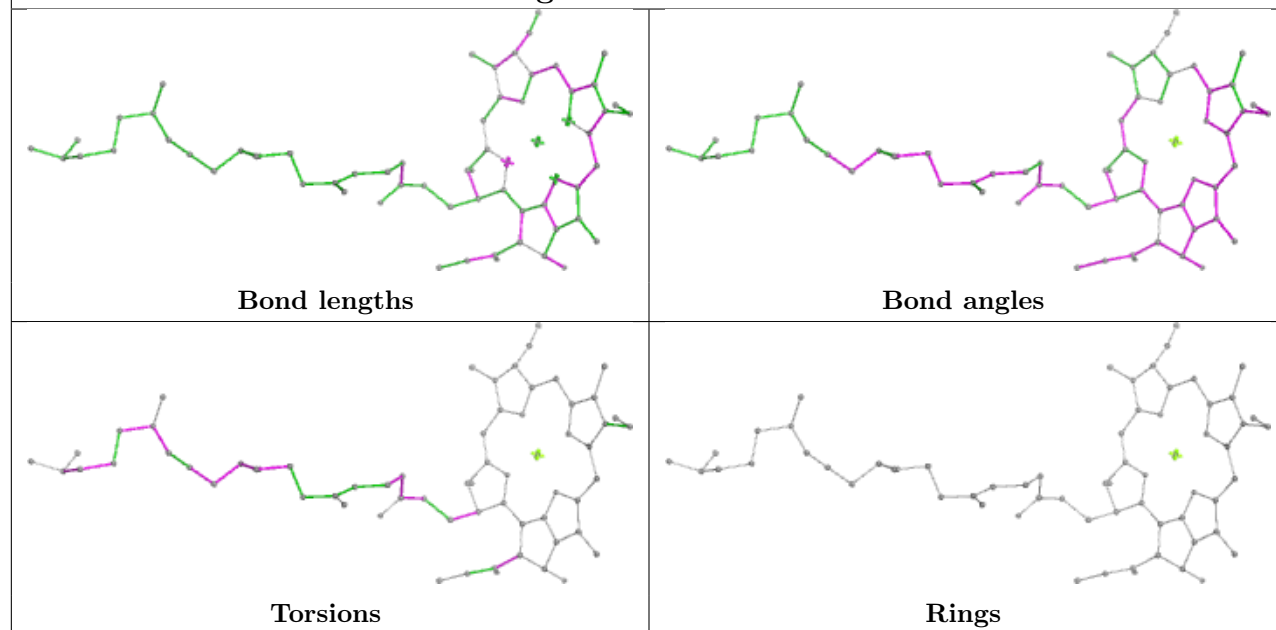
Bond angles



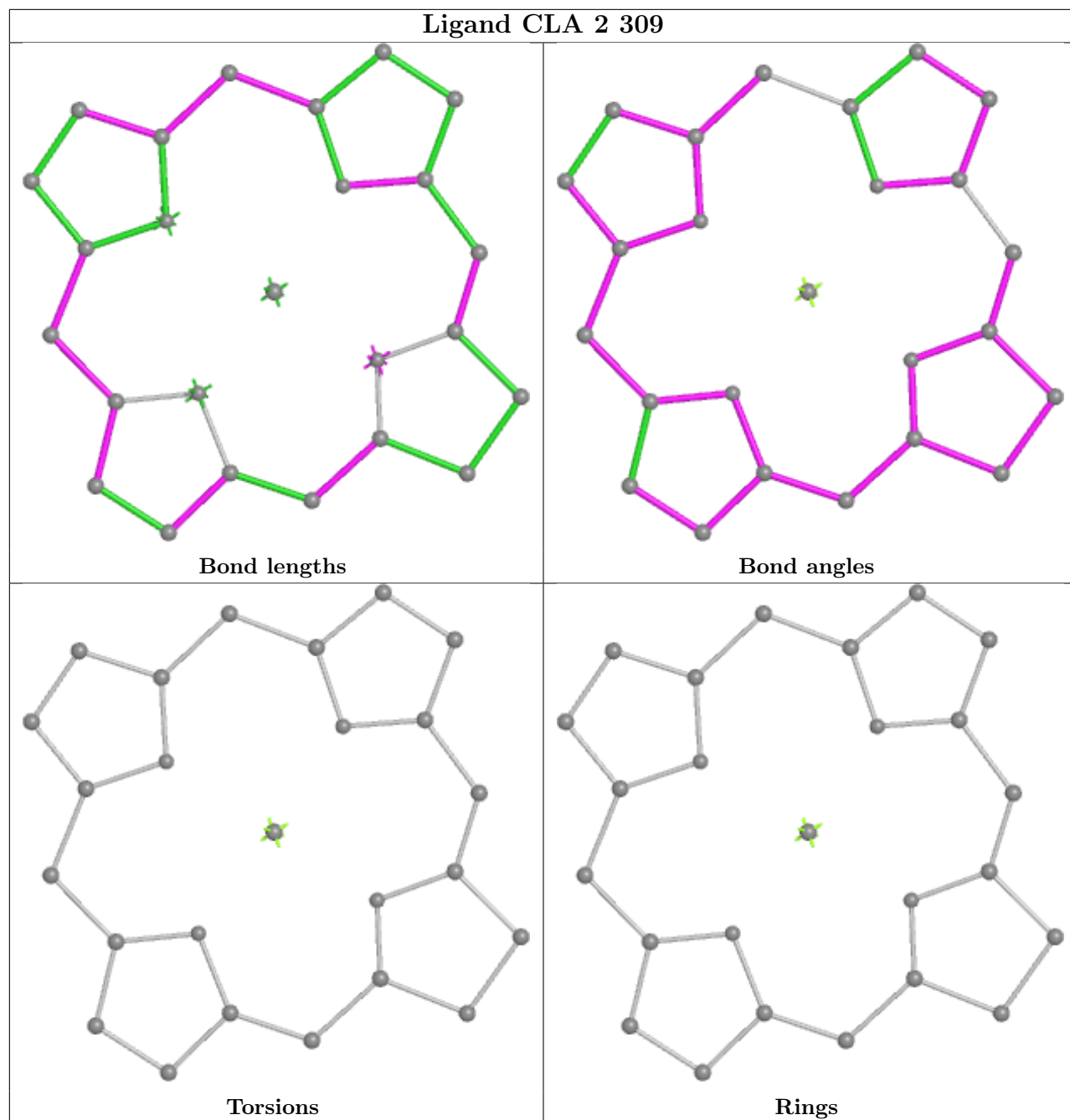
Torsions



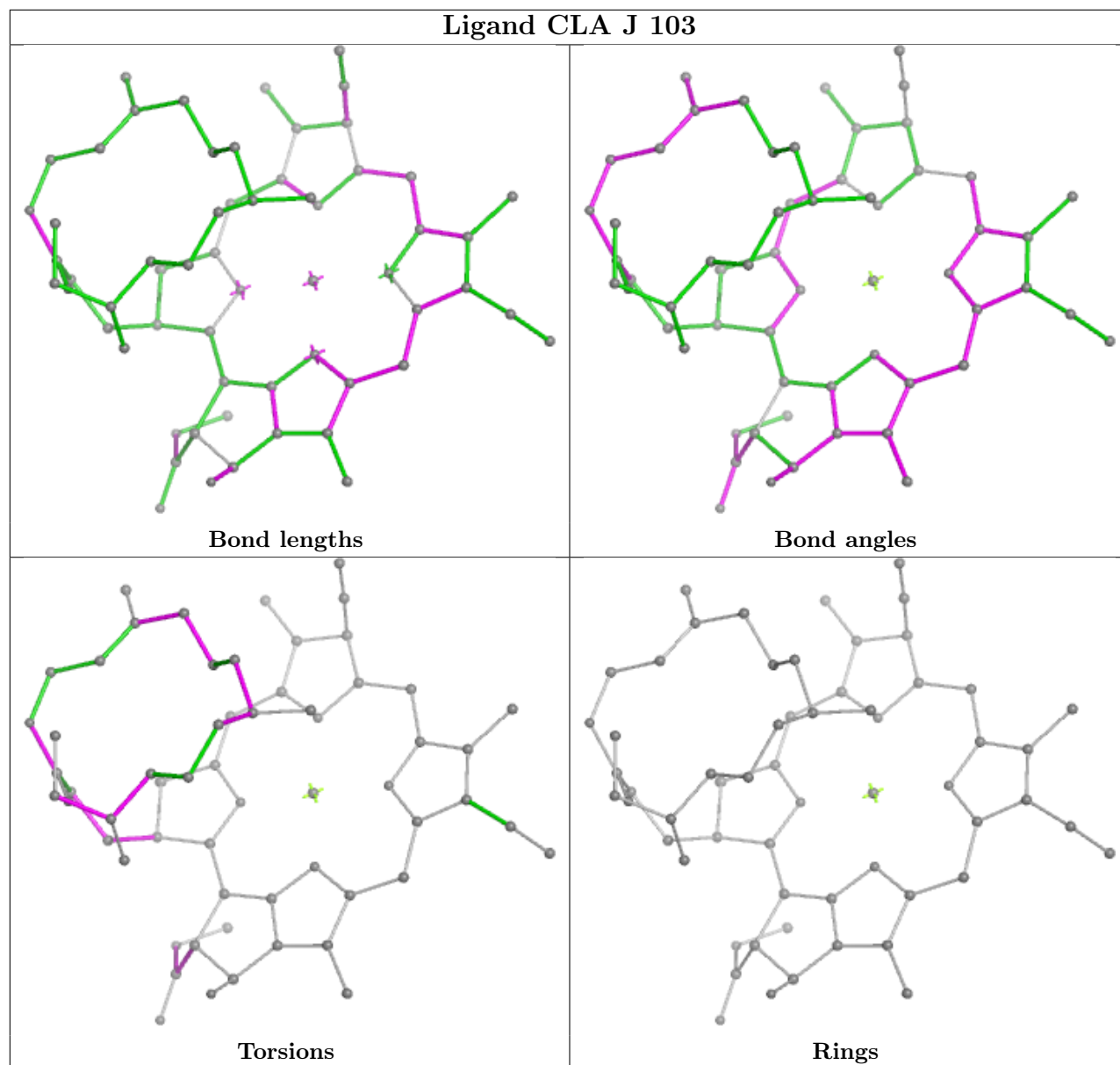
Rings

Ligand CLA A 830**Ligand CLA 4 303**

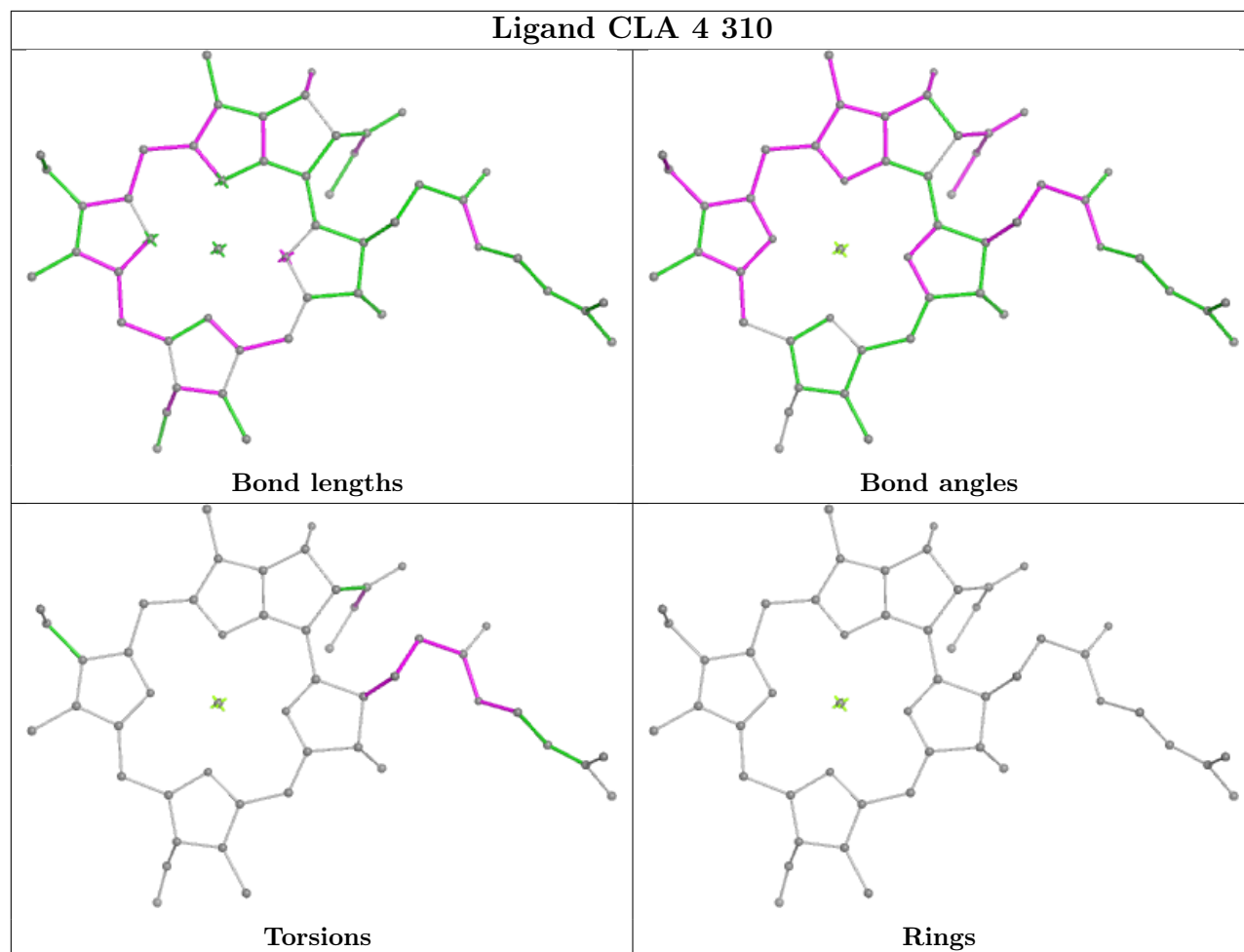
Ligand CLA 2 309



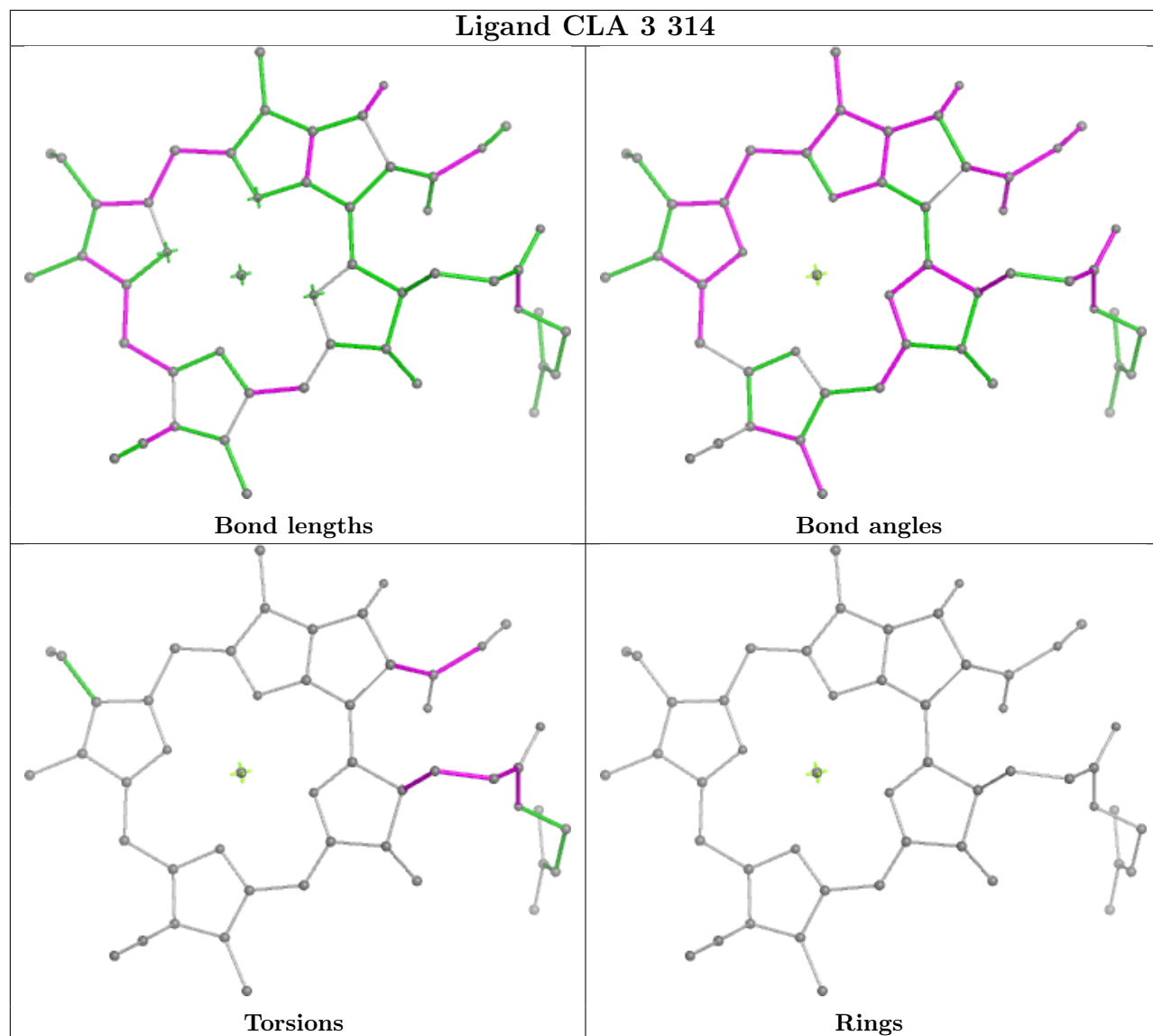
Ligand CLA J 103



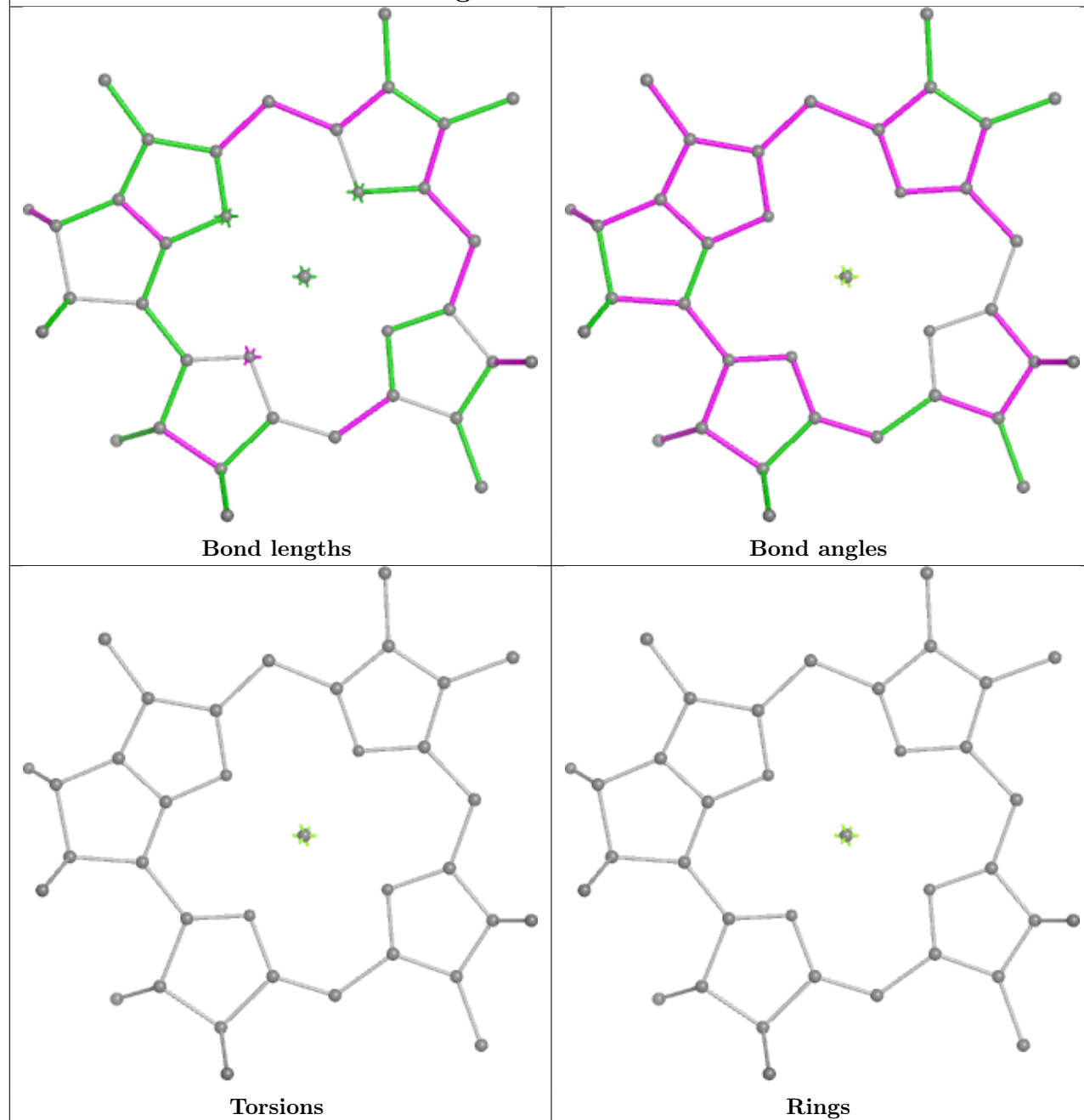
Ligand CLA 4 310



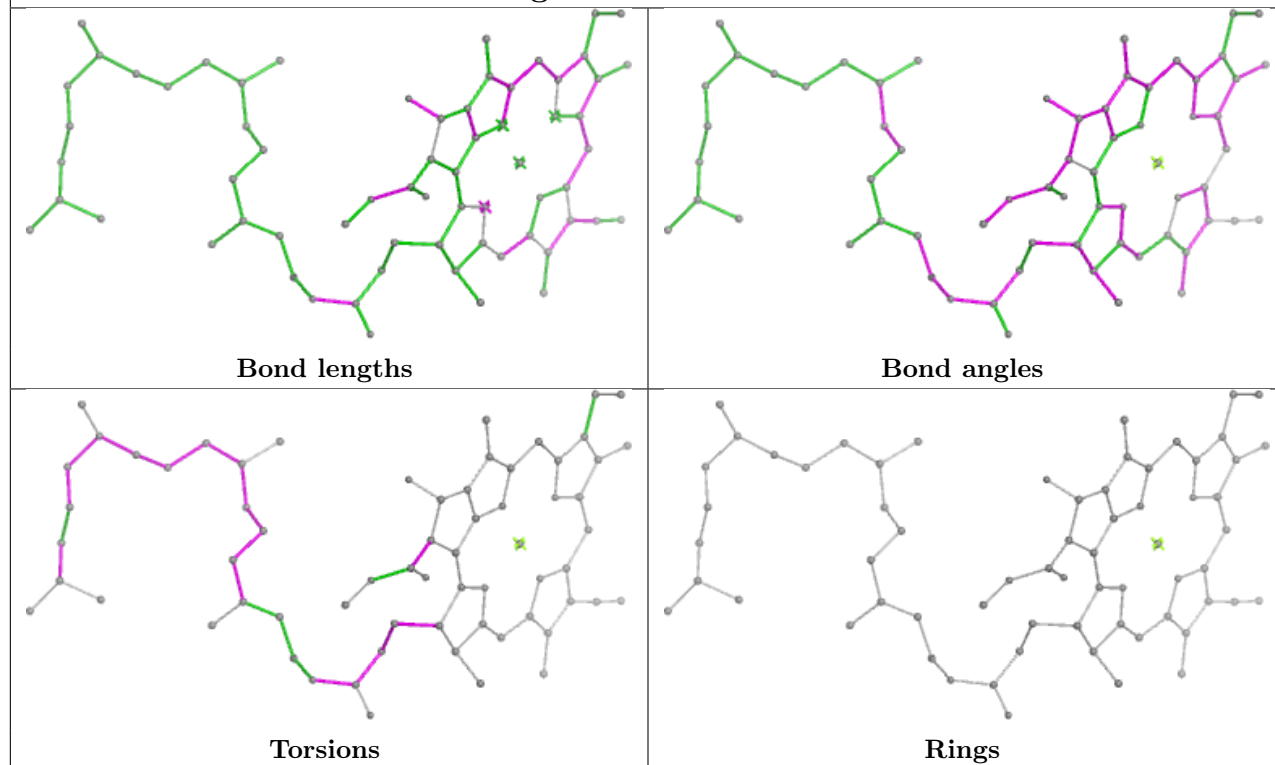
Ligand CLA 3 314



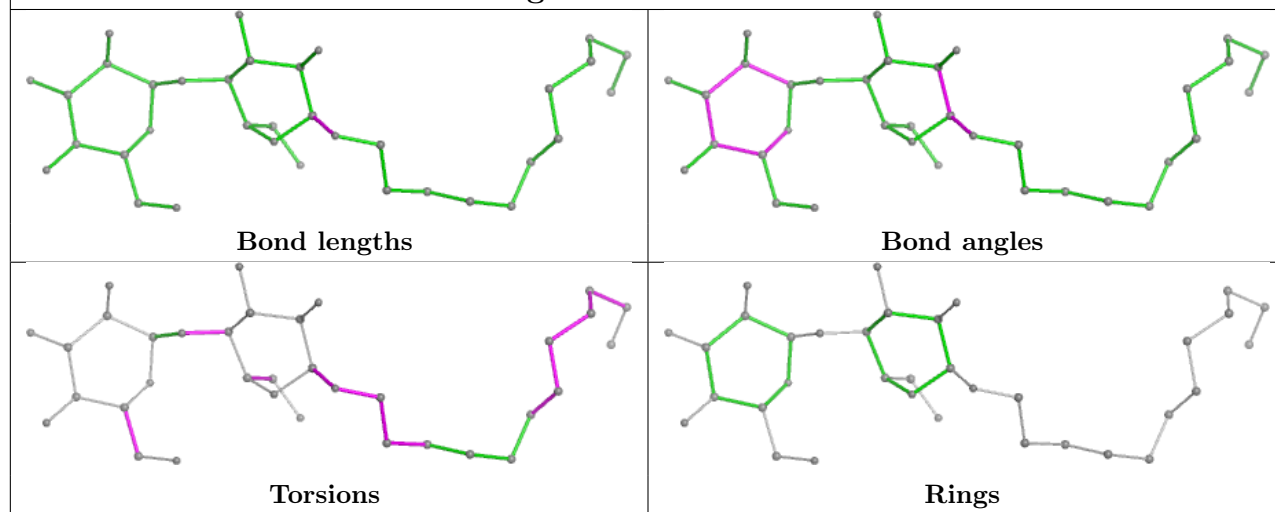
Ligand CLA 3 318



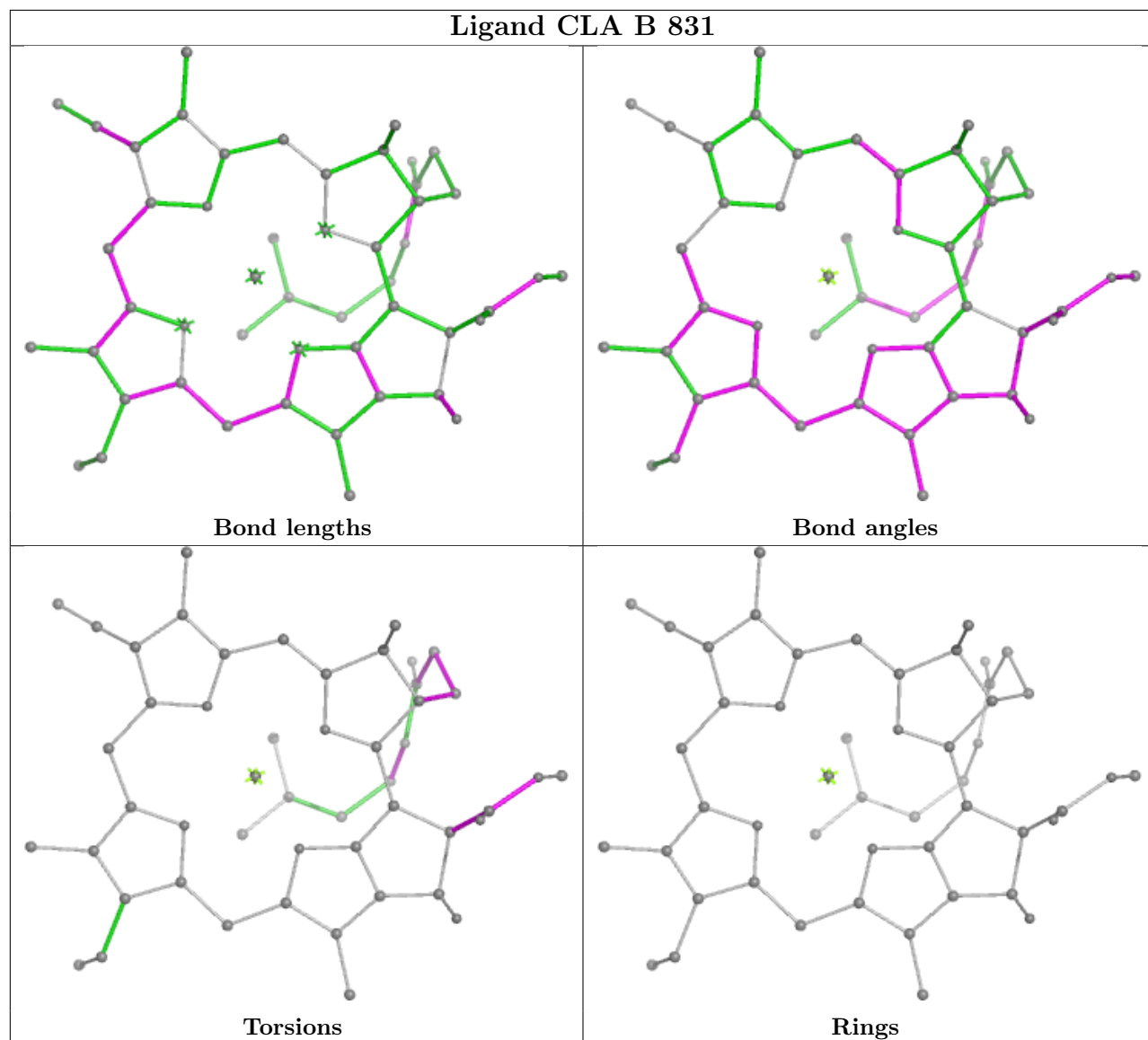
Ligand CLA A 849



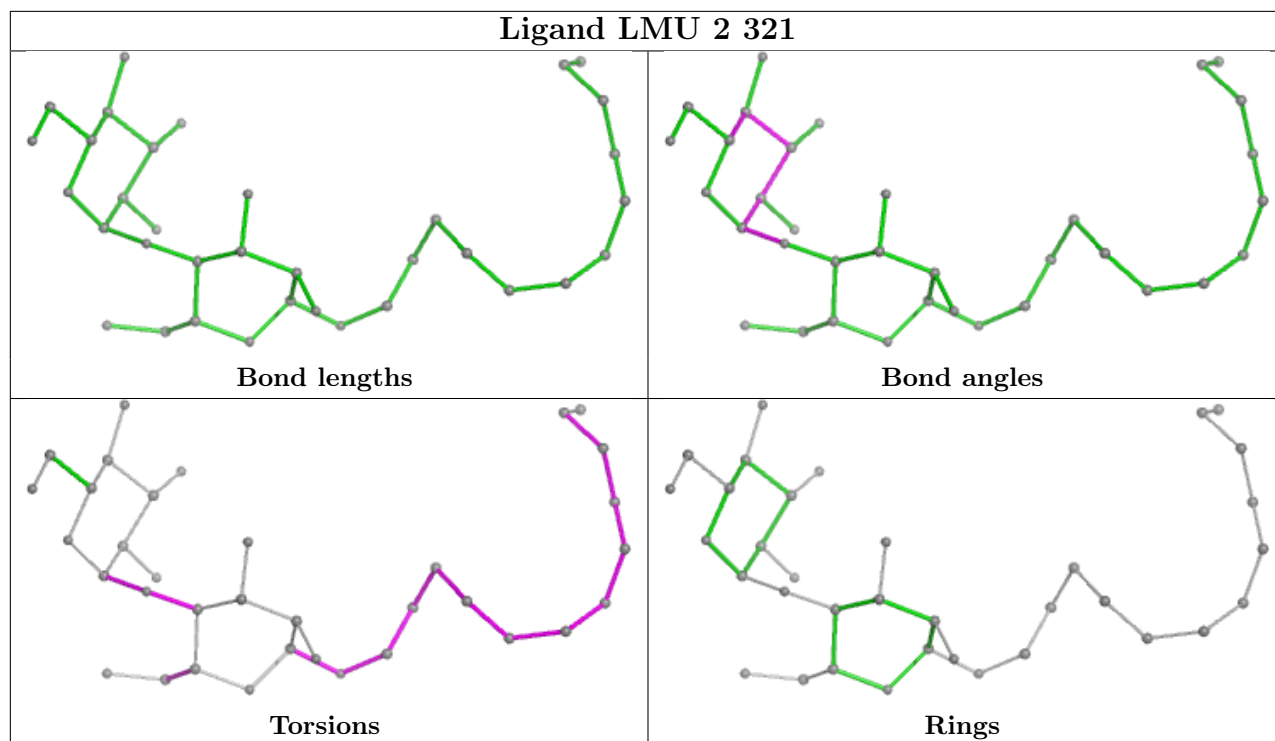
Ligand LMU C 101



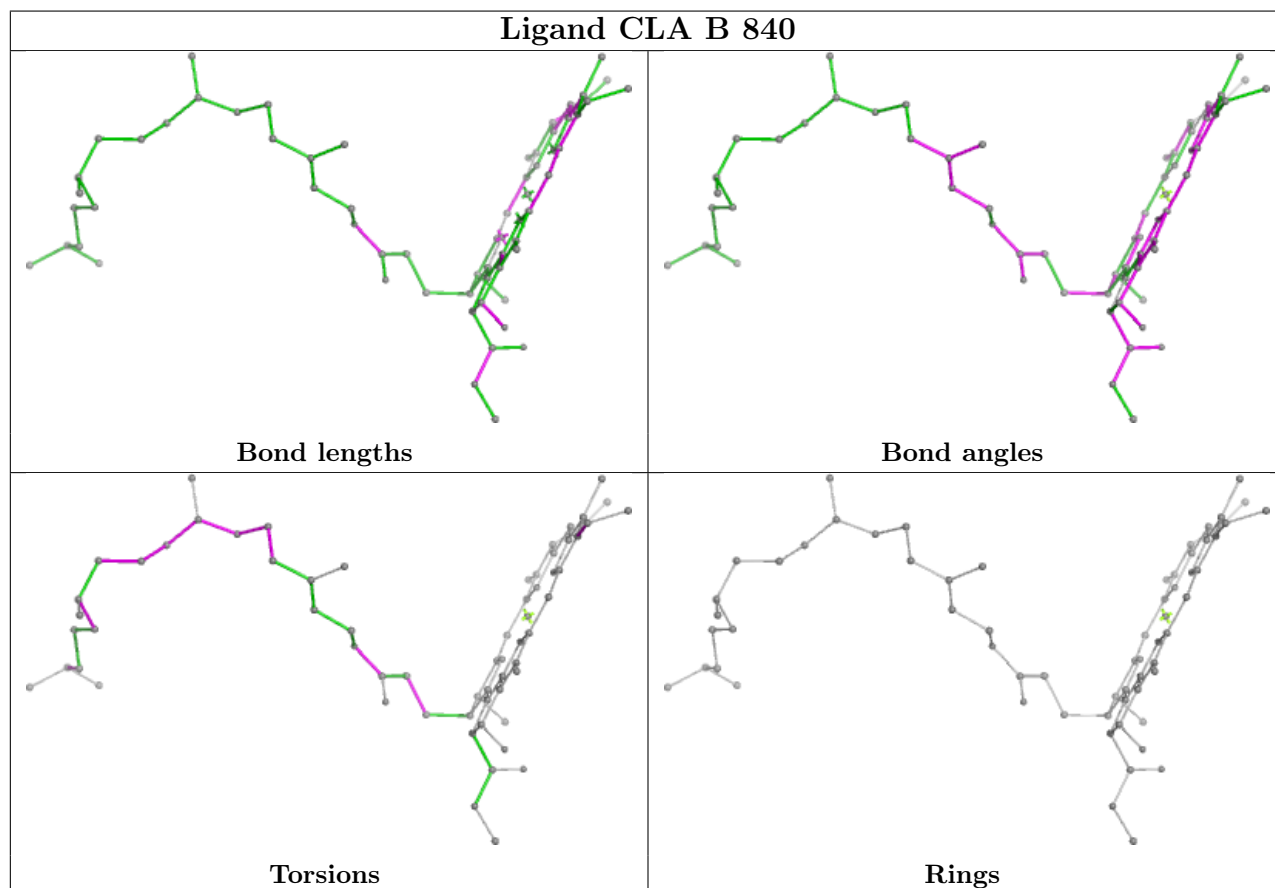
Ligand CLA B 831

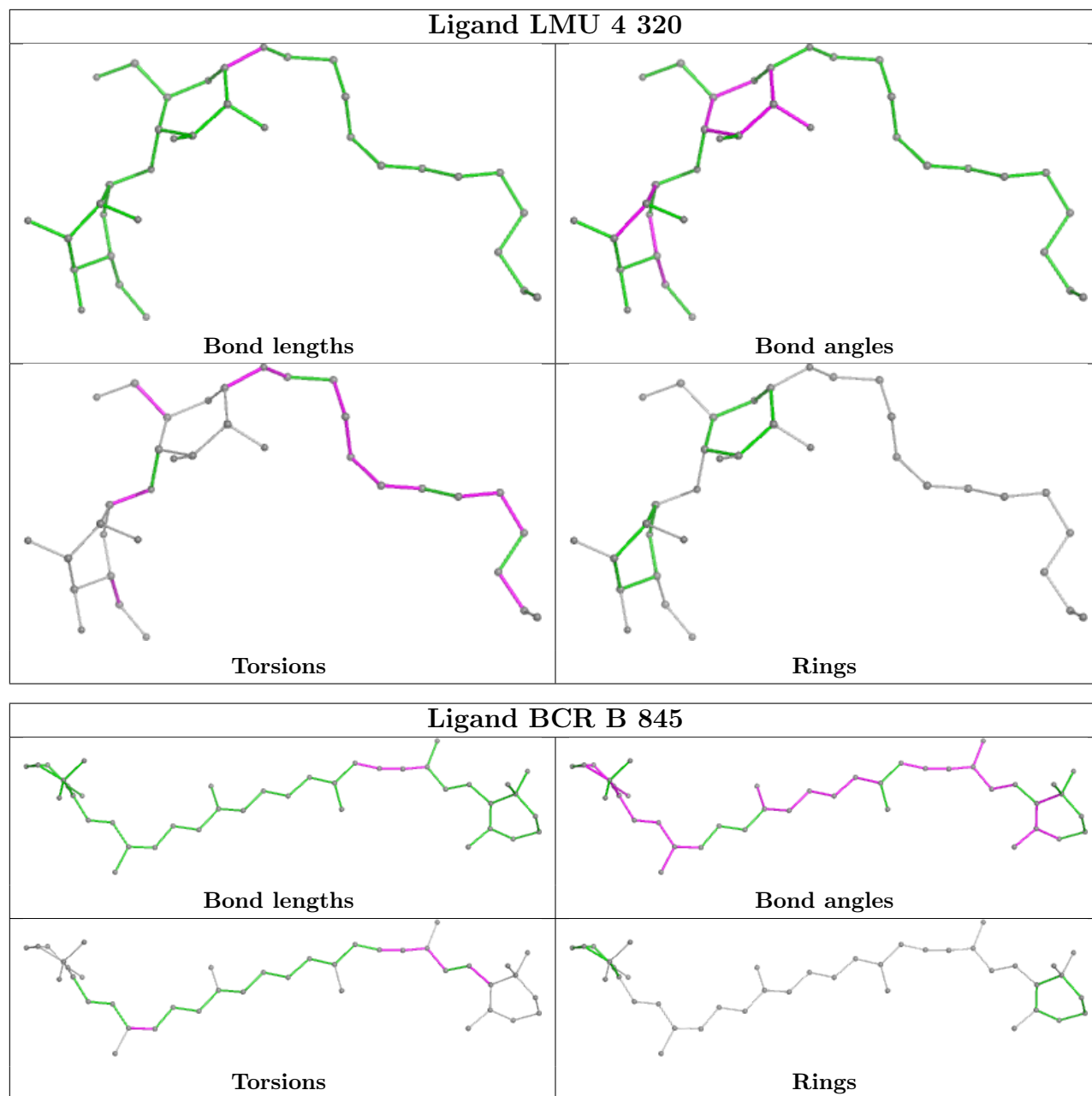


Ligand LMU 2 321

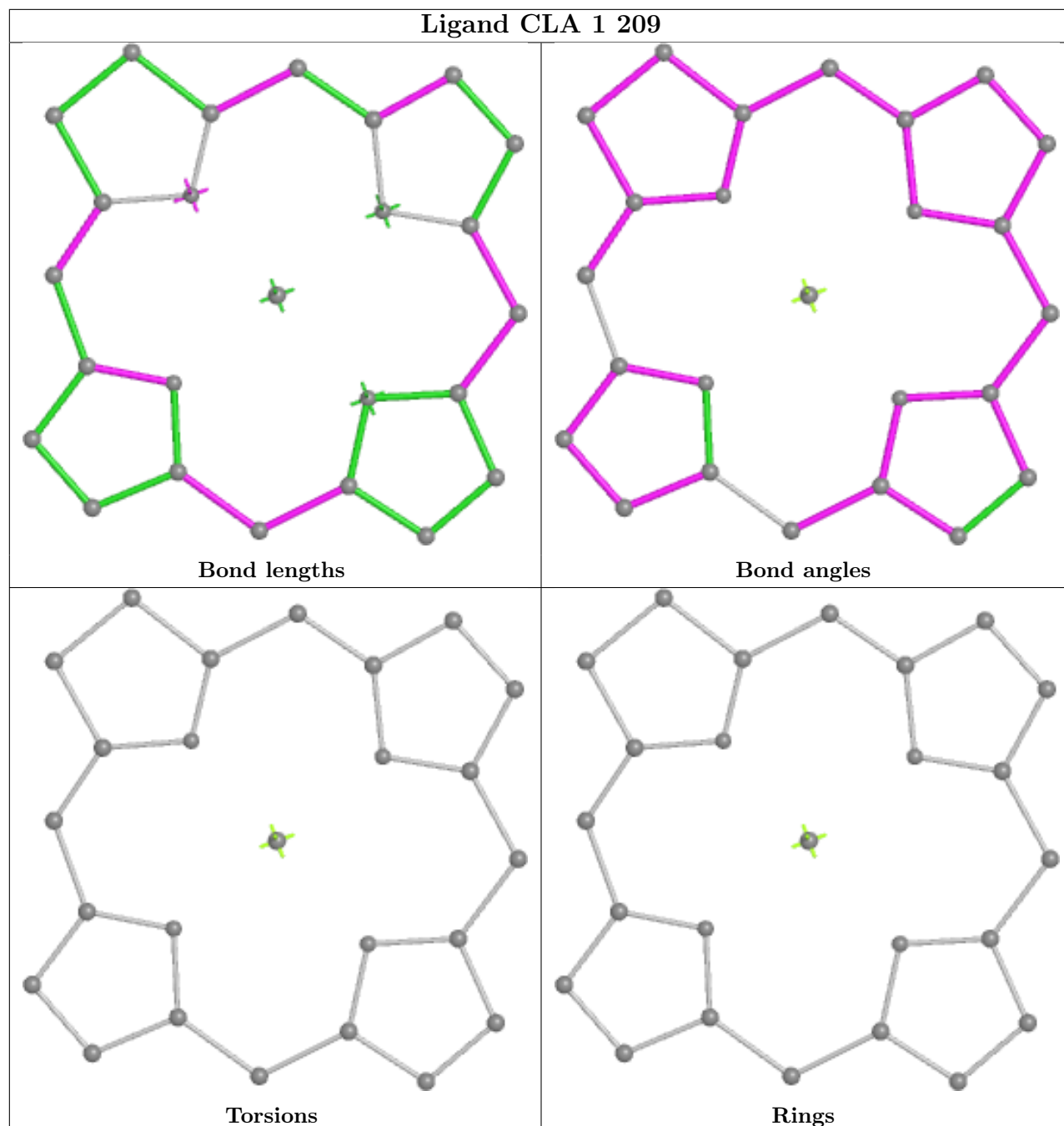


Ligand CLA B 840

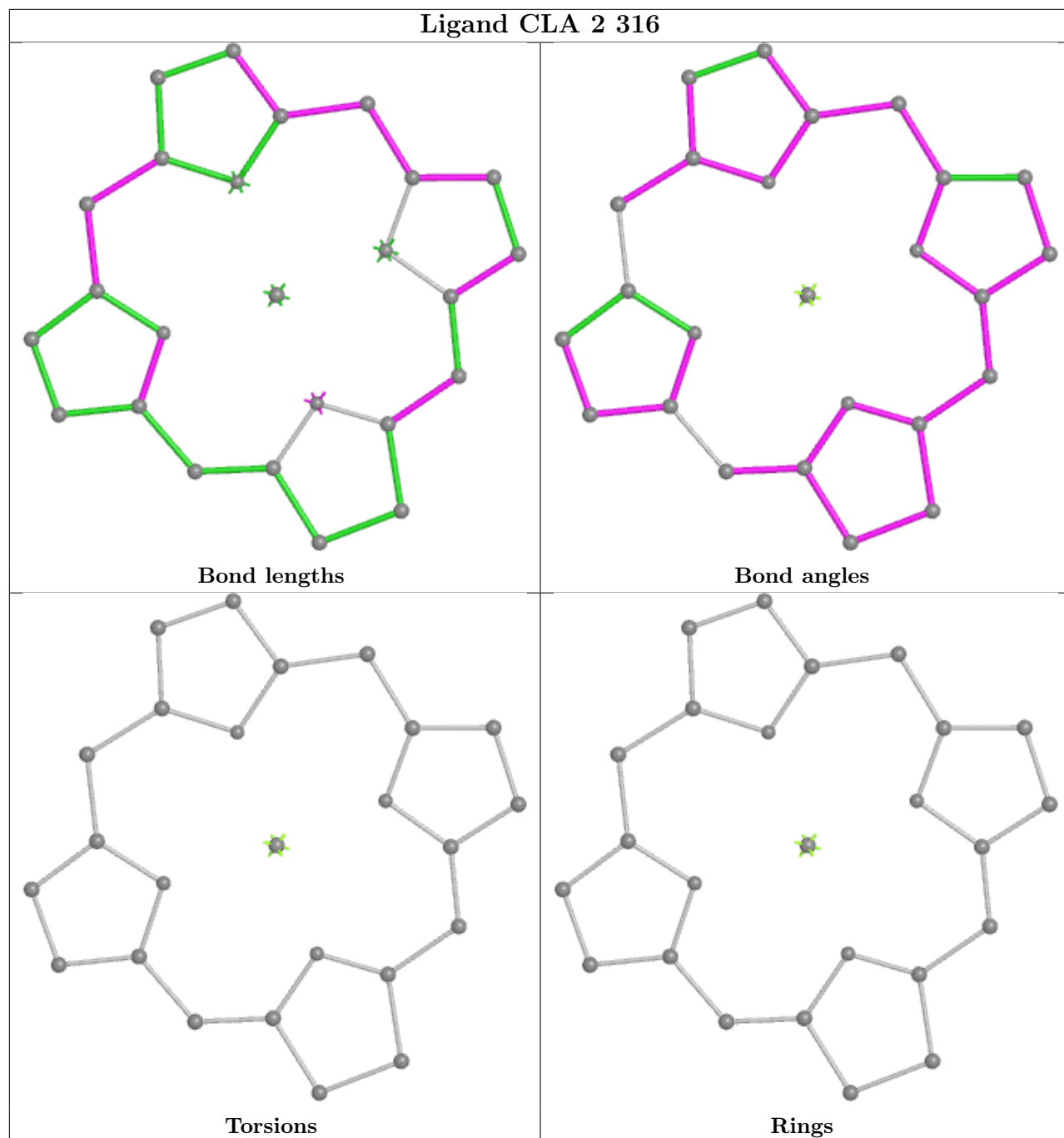




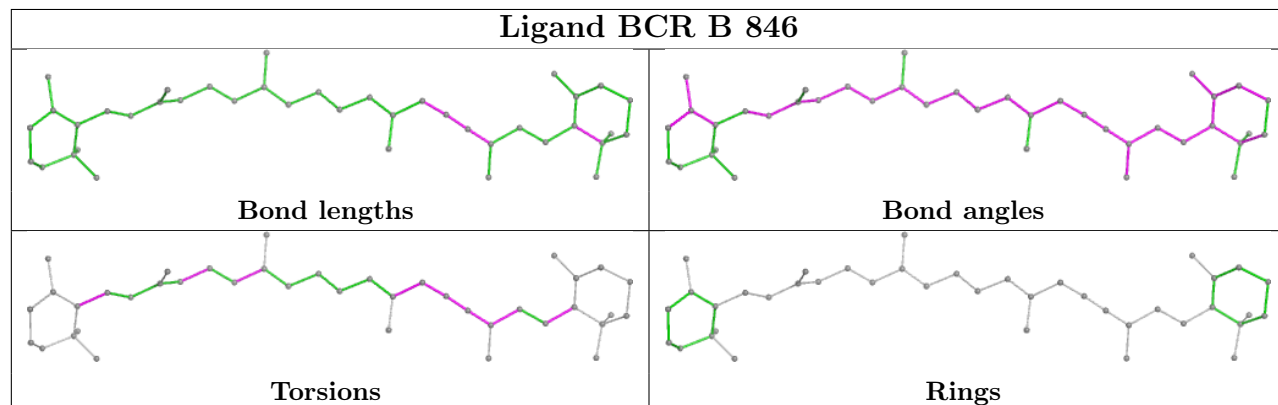
Ligand CLA 1 209



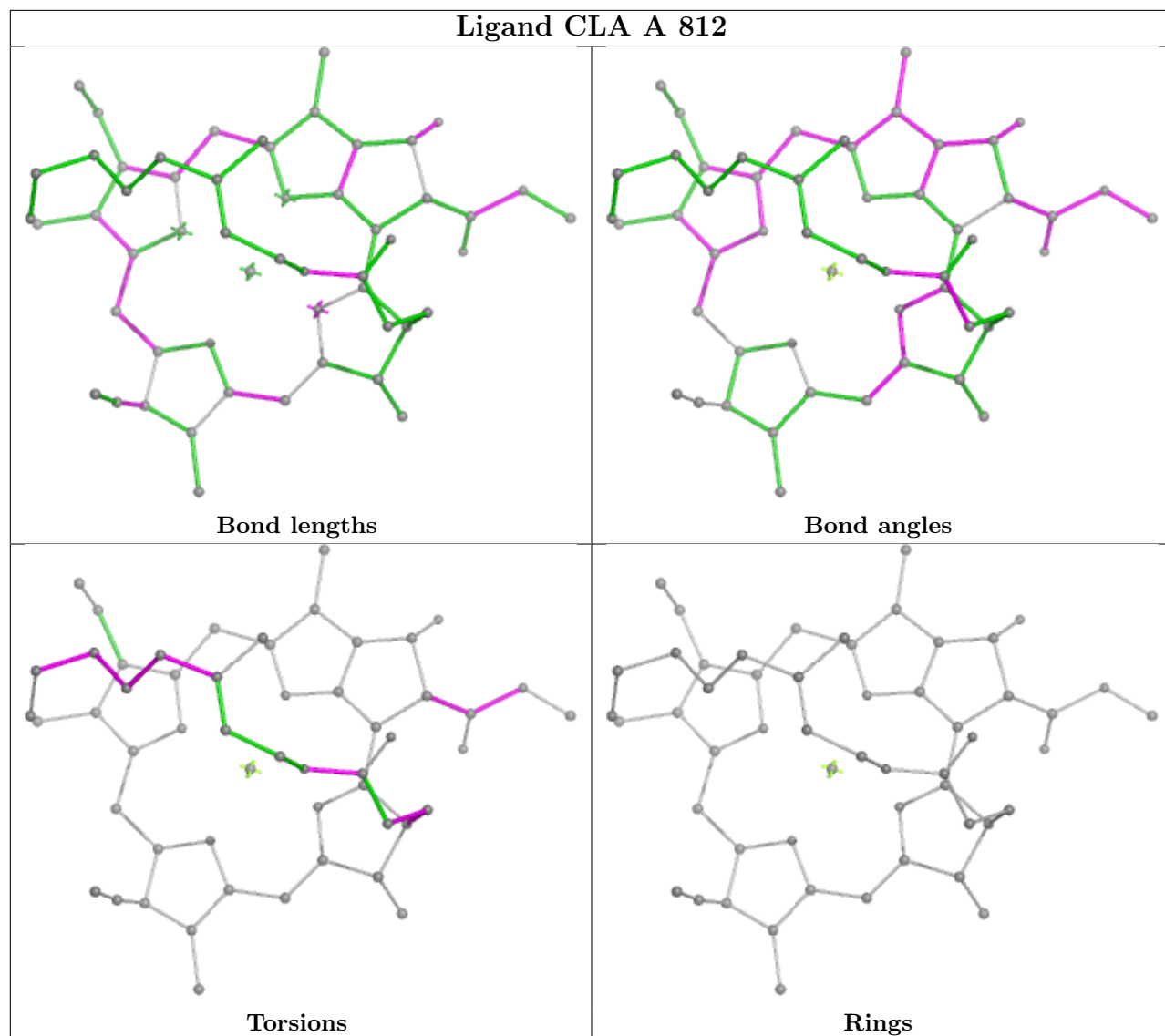
Ligand CLA 2 316



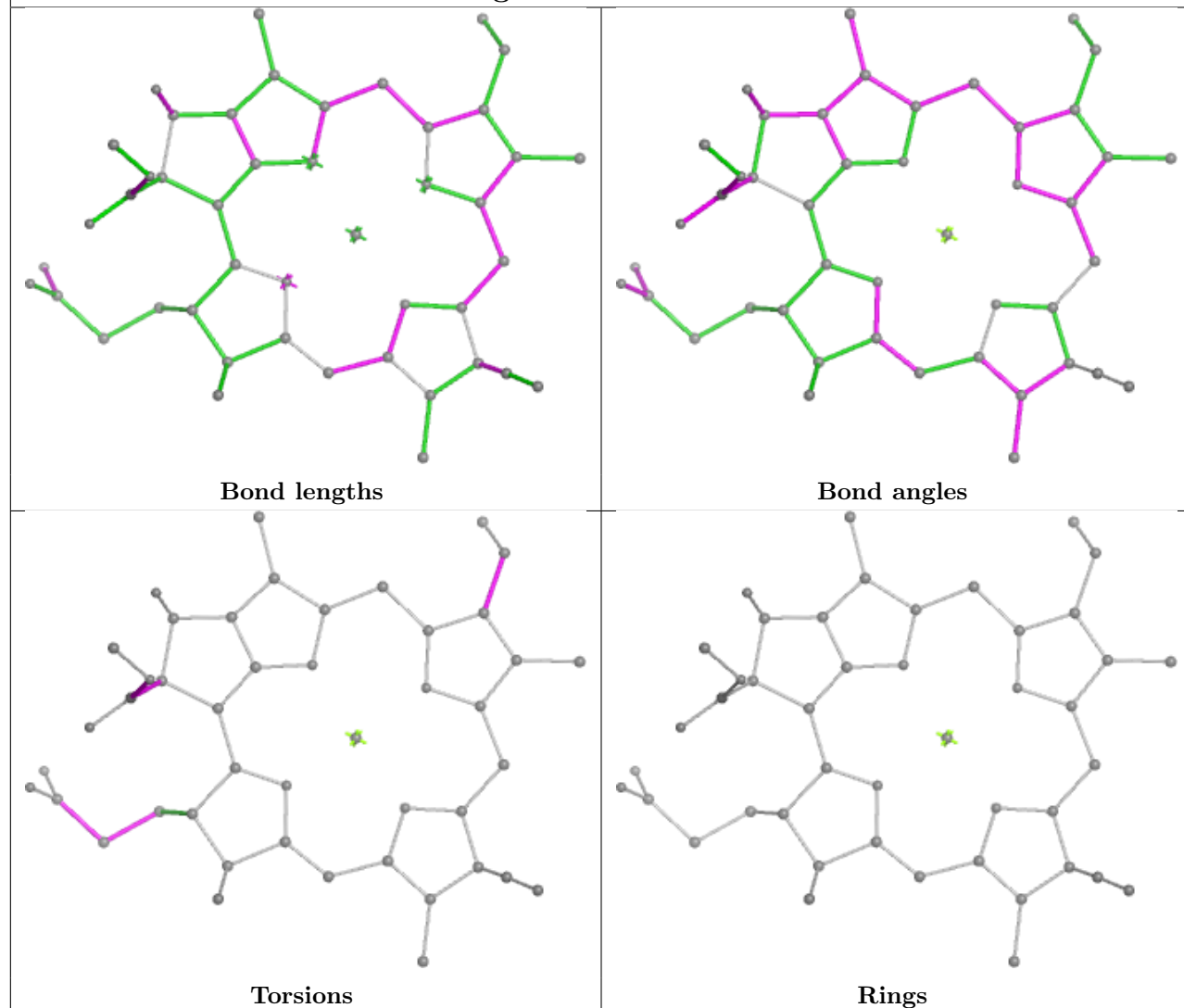
Ligand BCR B 846



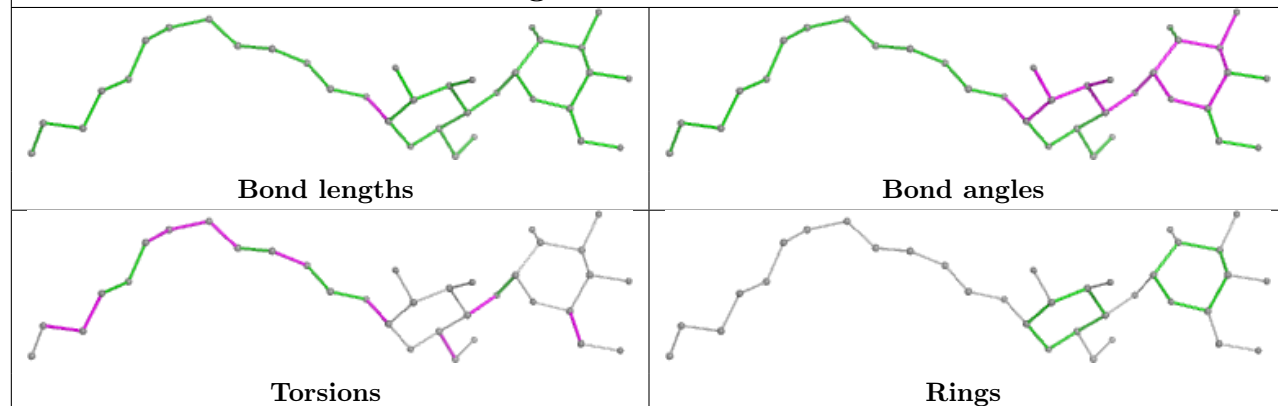
Ligand CLA A 812



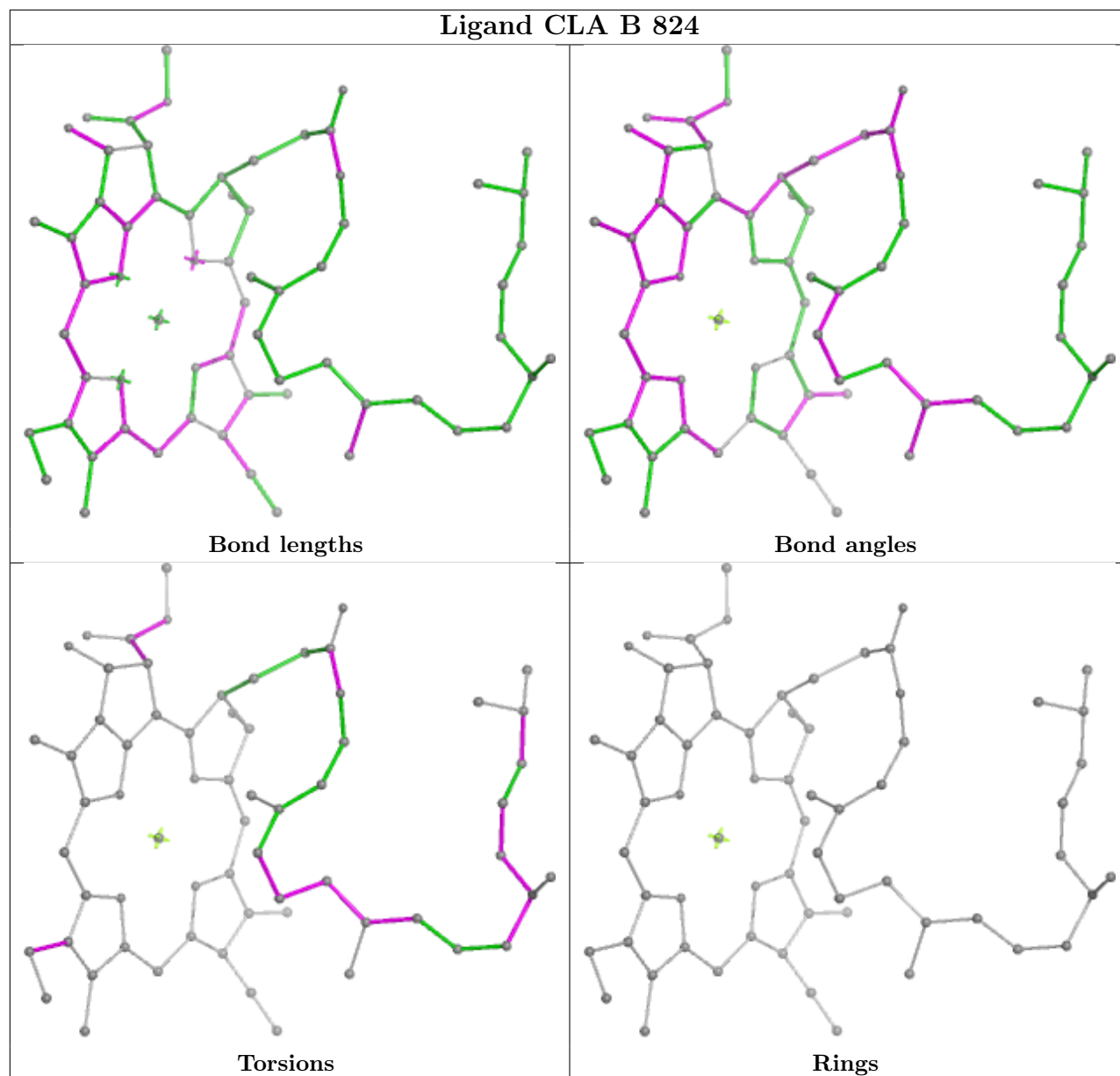
Ligand CLA B 835



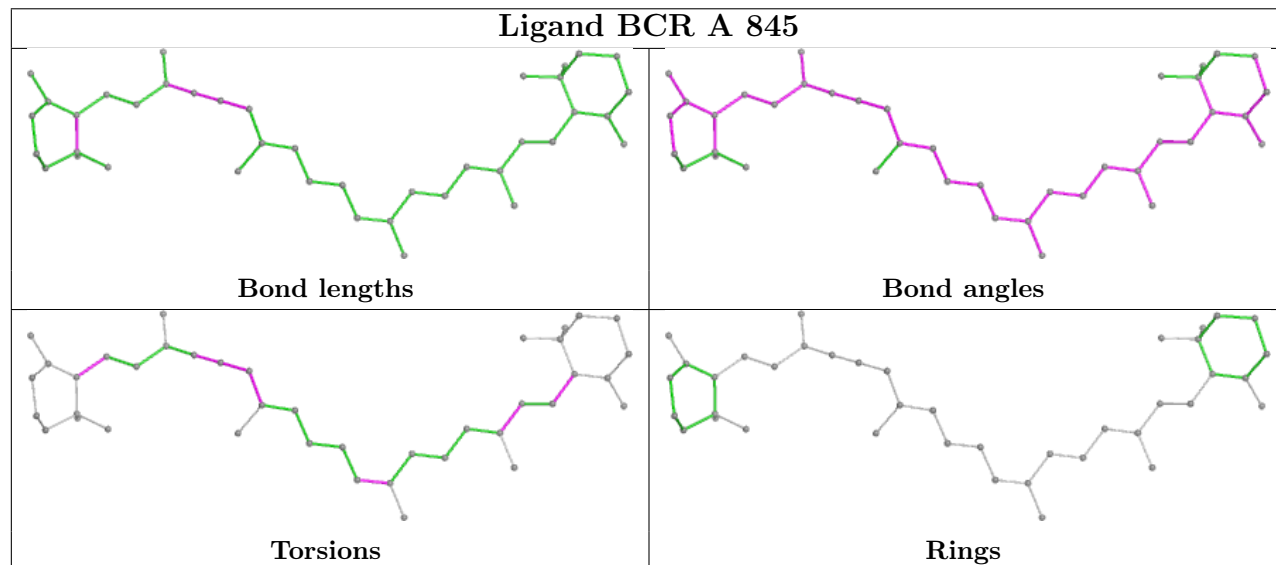
Ligand LMU B 805

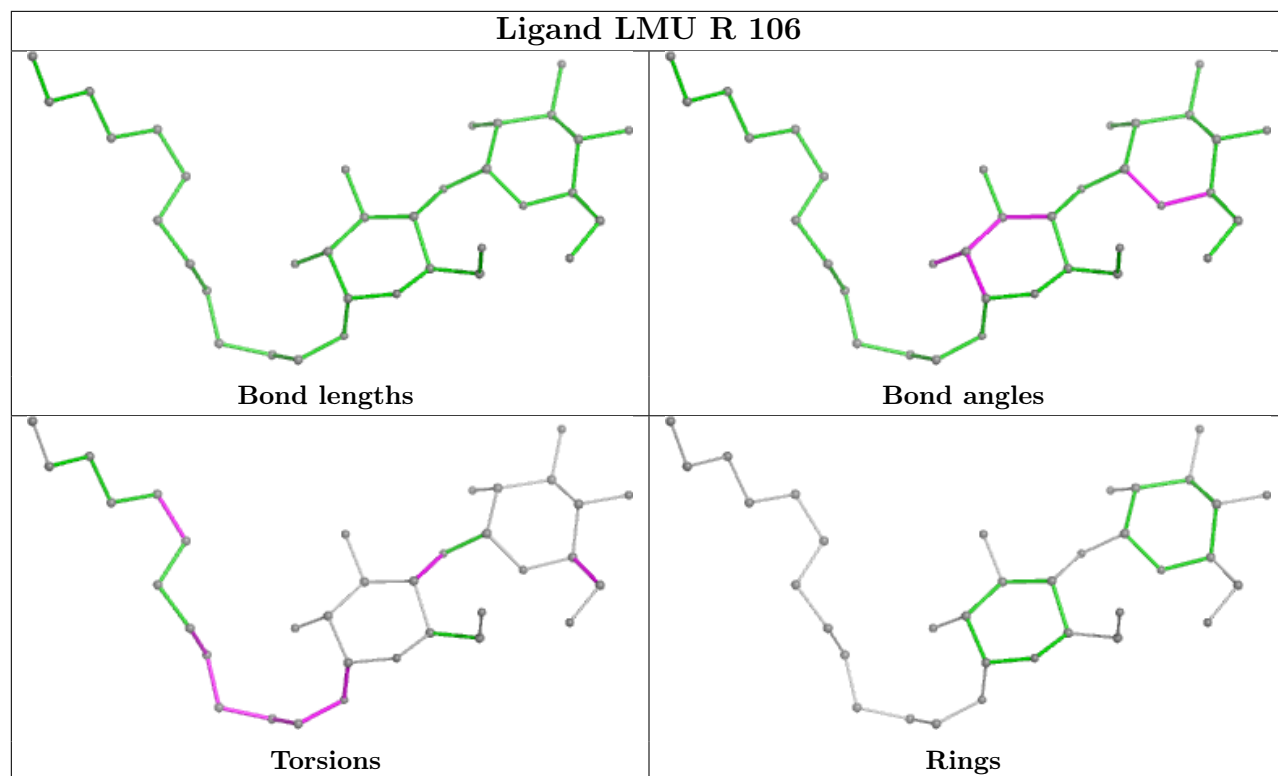


Ligand CLA B 824

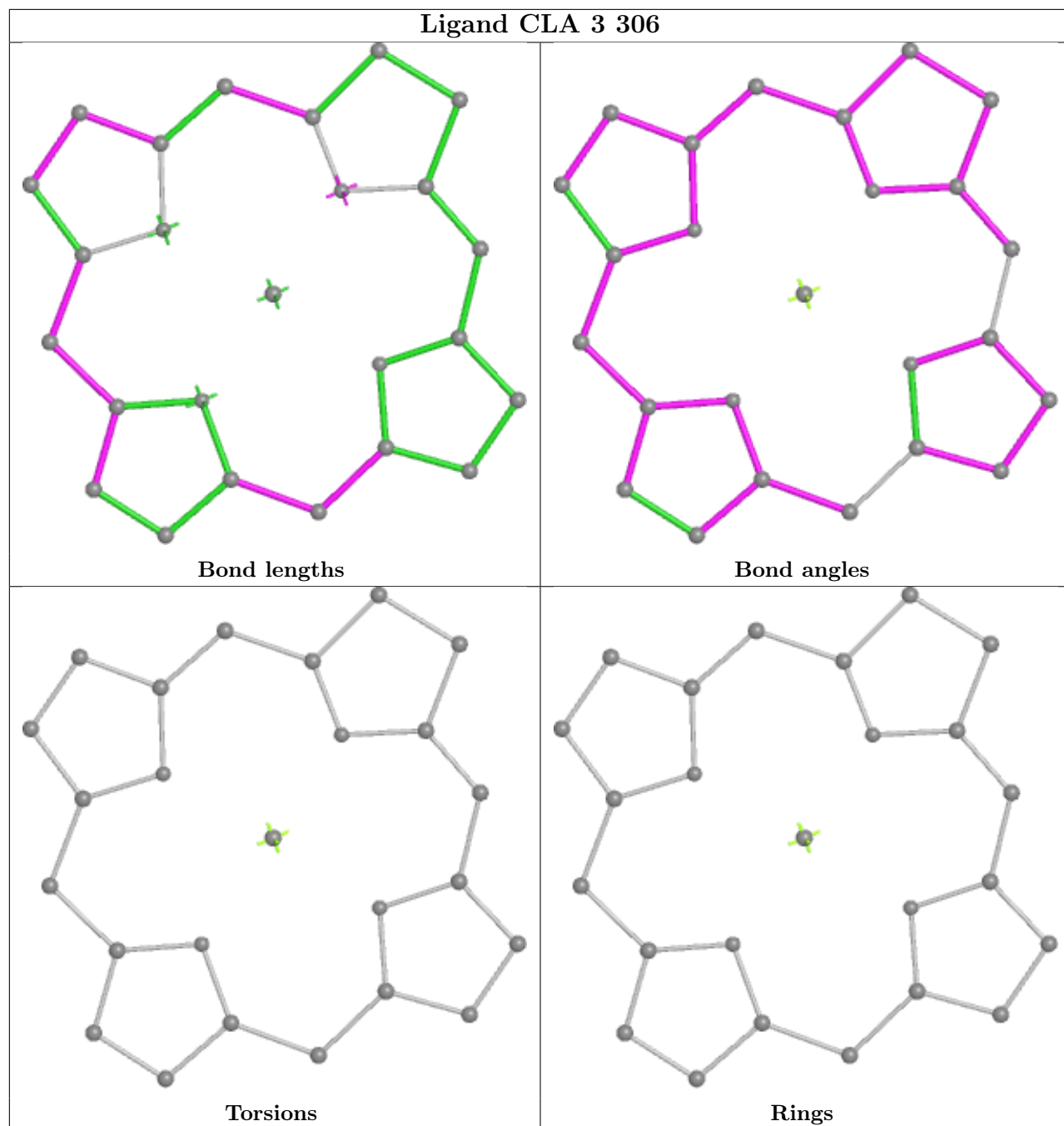


Ligand BCR A 845

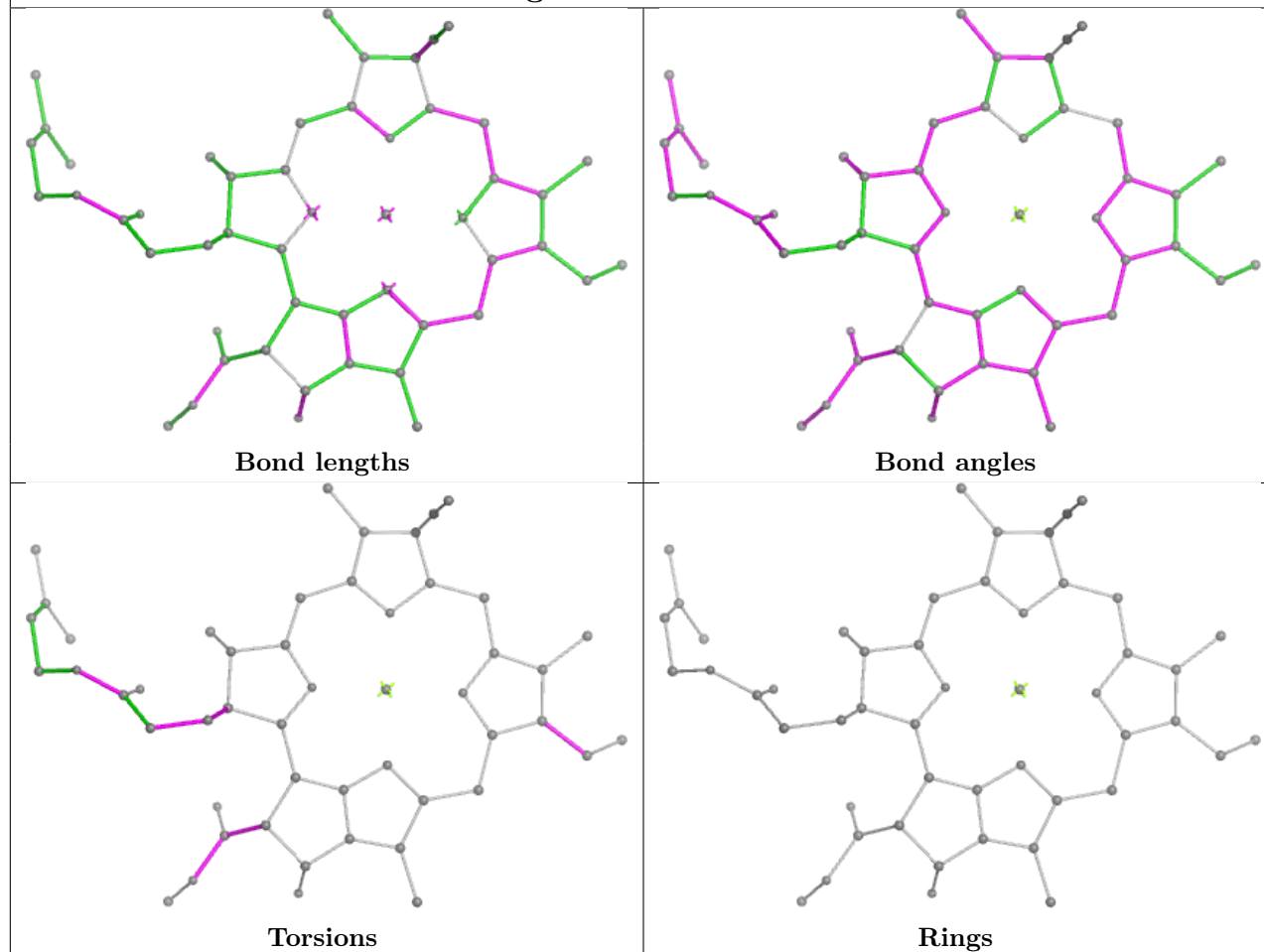




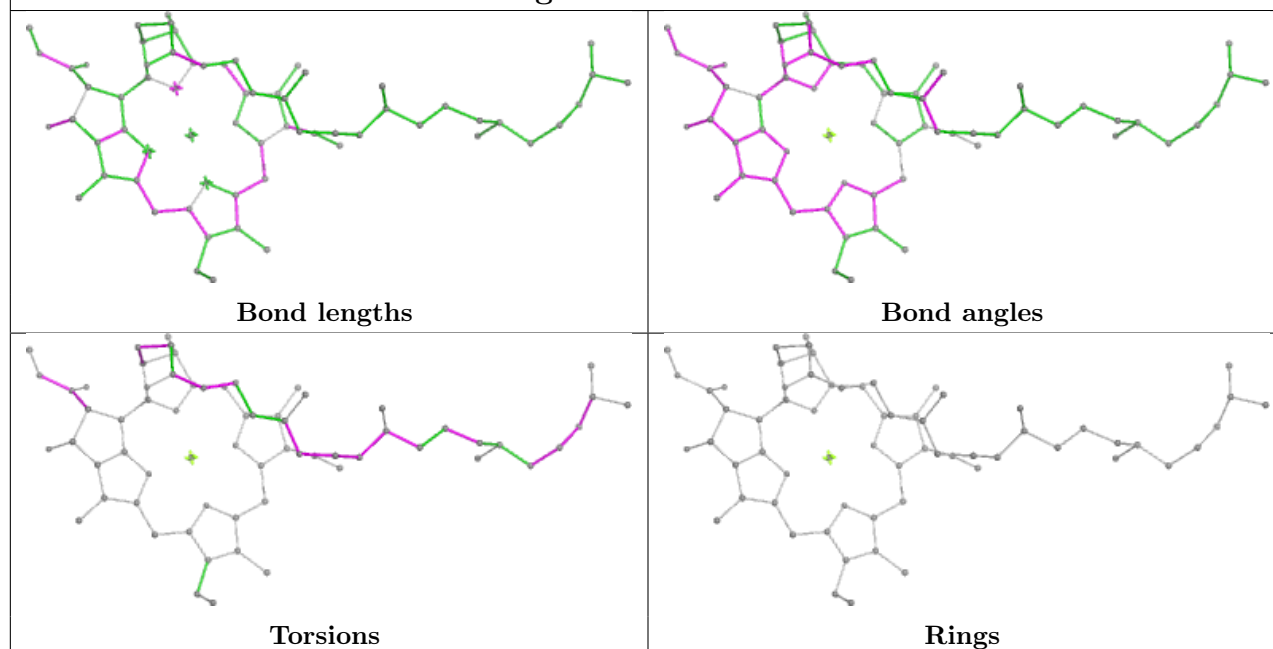
Ligand CLA 3 306



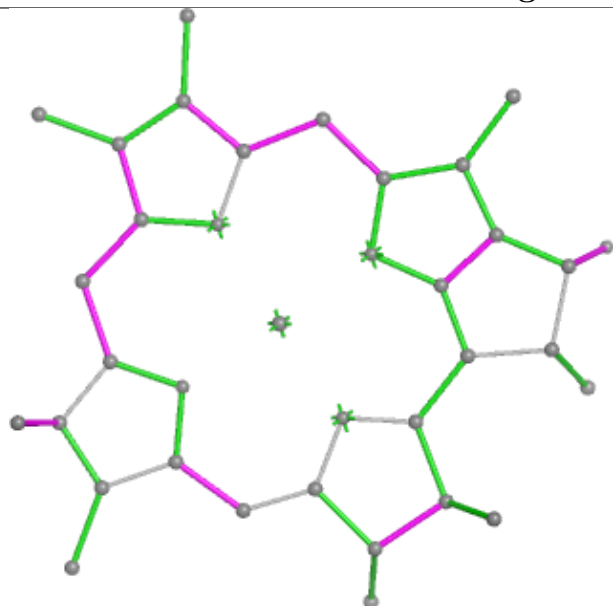
Ligand CLA K 103



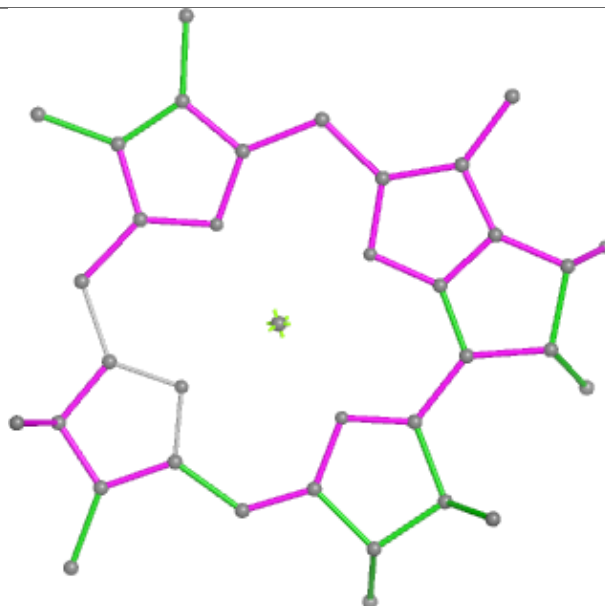
Ligand CLA 2 307



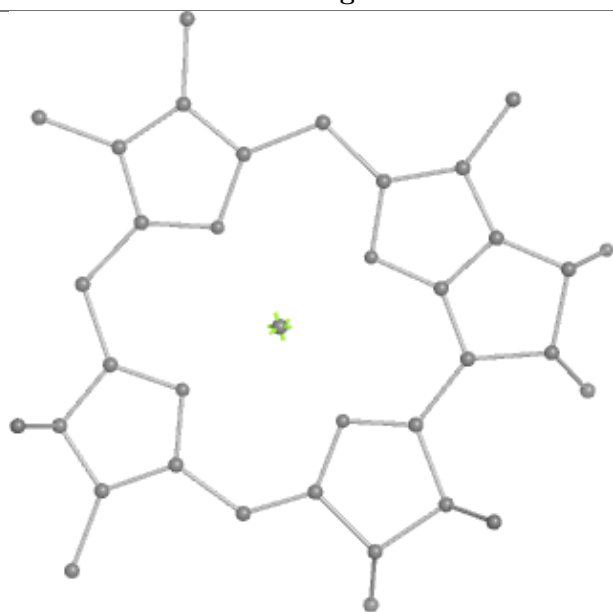
Ligand CLA 1 210



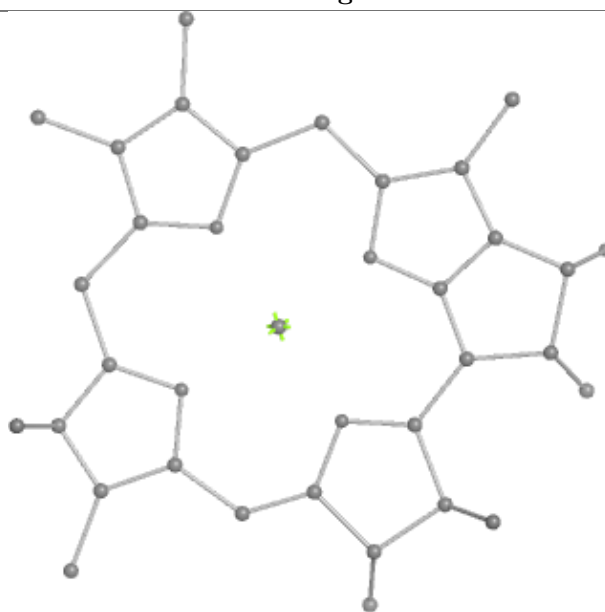
Bond lengths



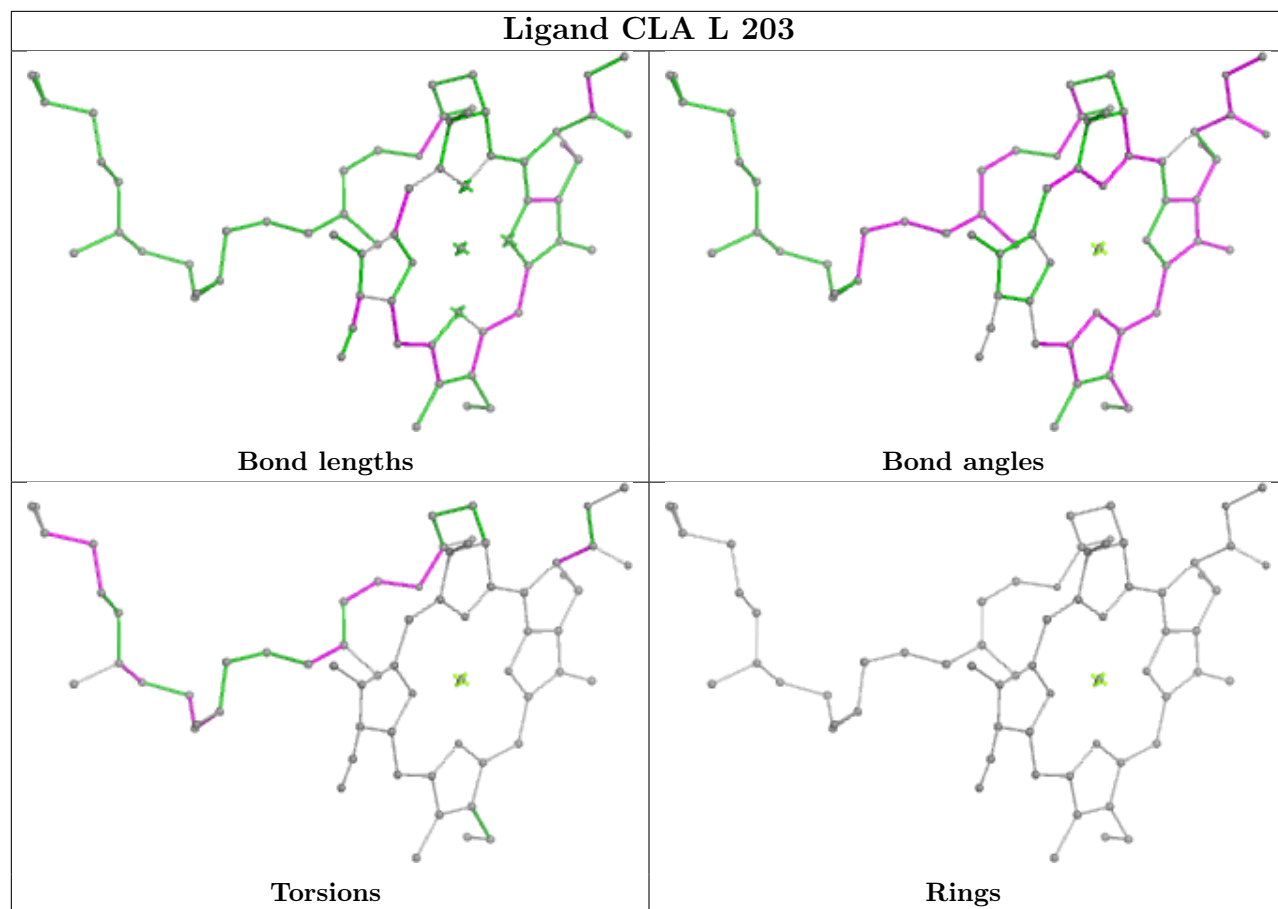
Bond angles



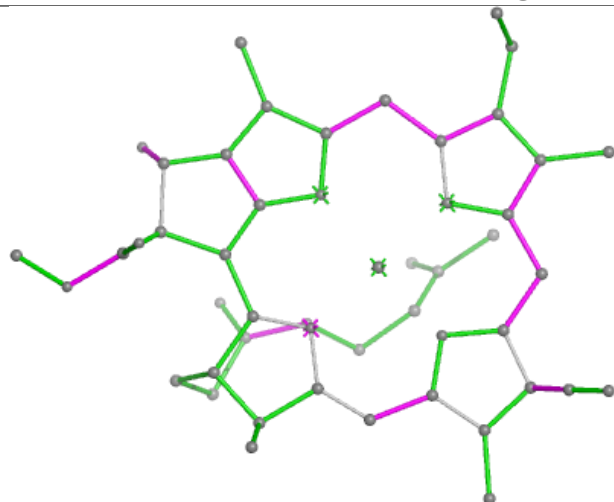
Torsions



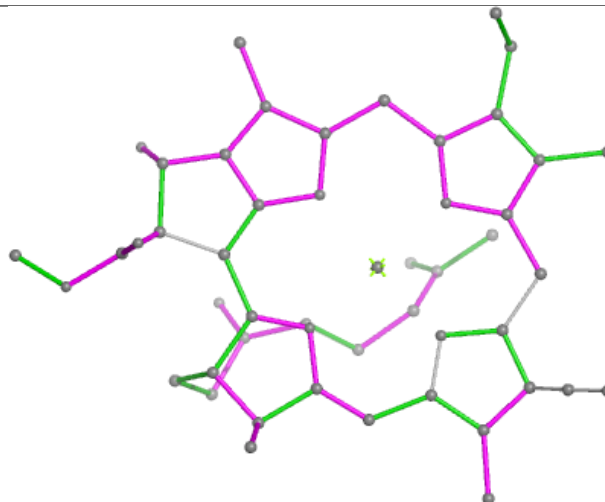
Rings



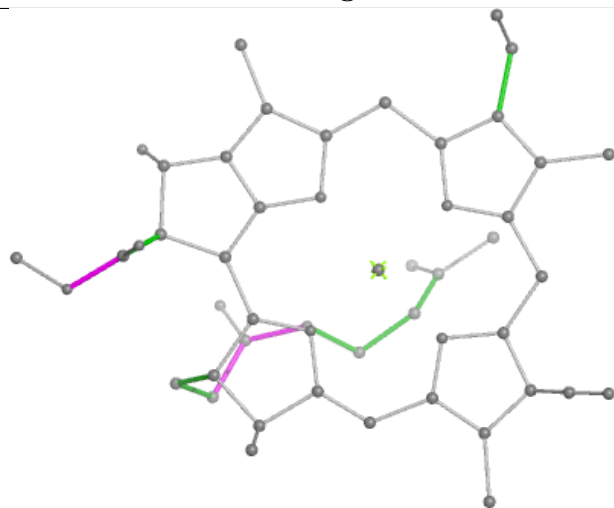
Ligand CLA B 821



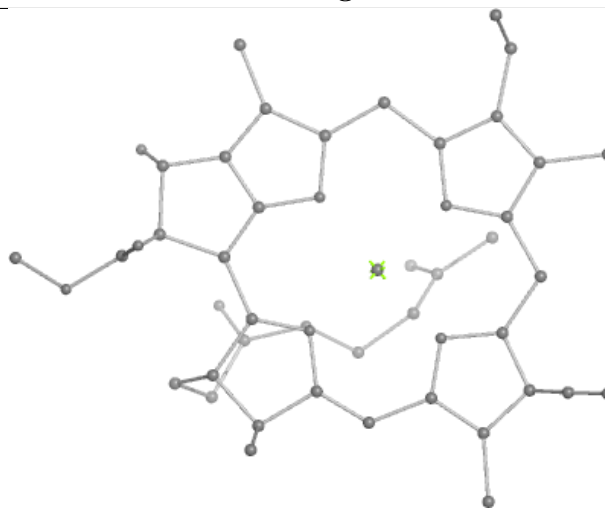
Bond lengths



Bond angles

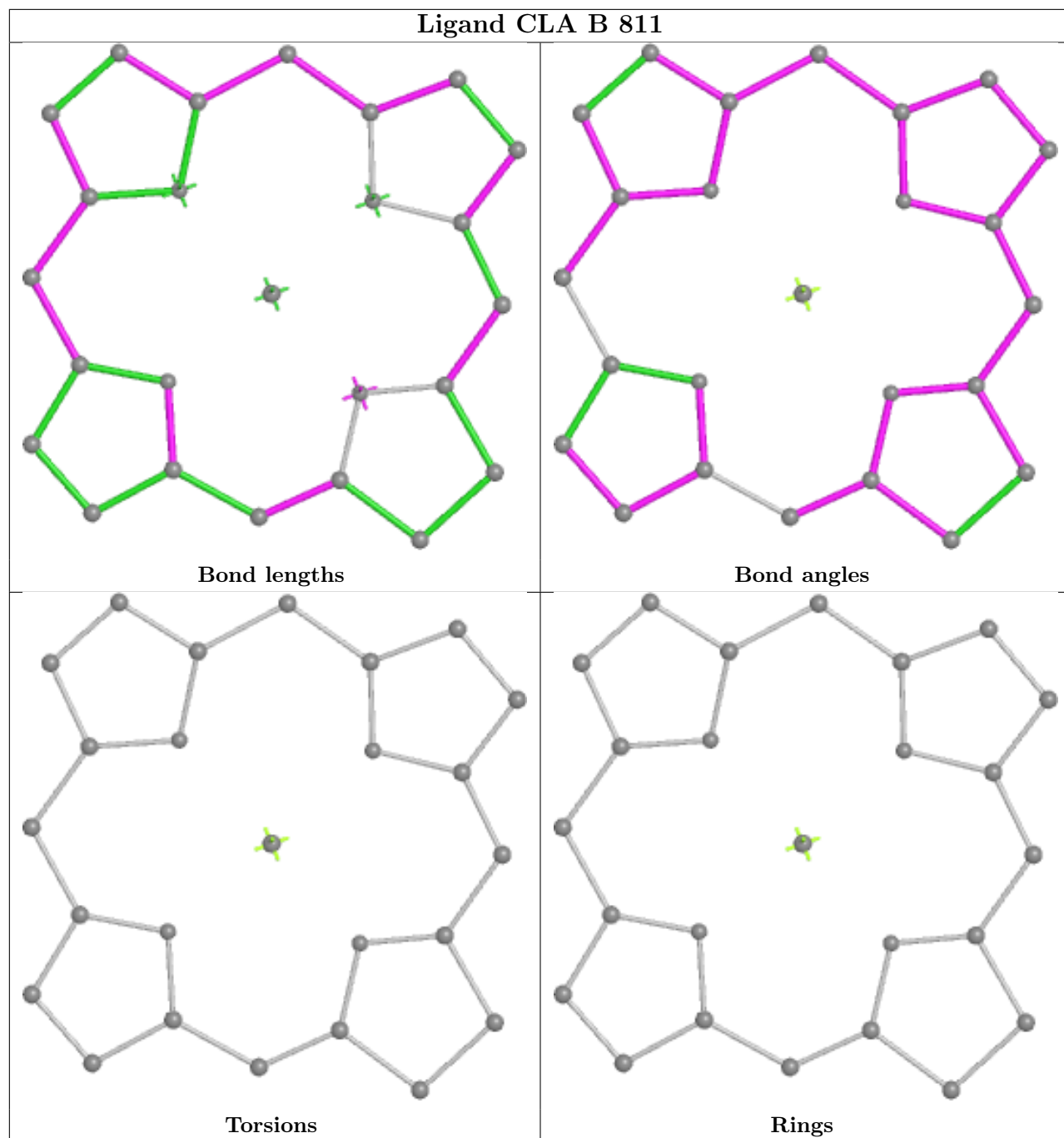


Torsions

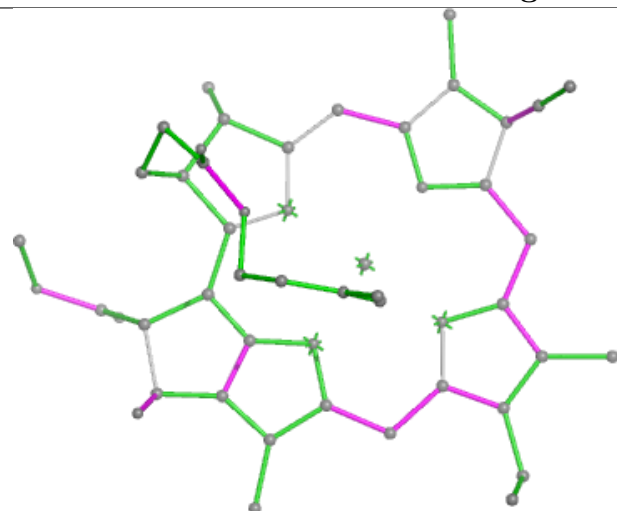


Rings

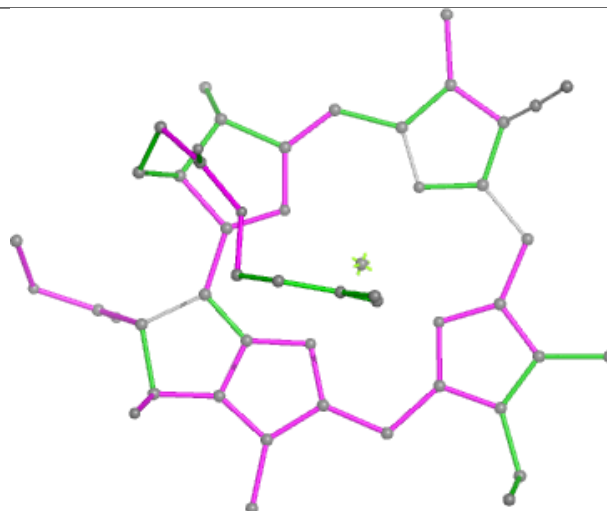
Ligand CLA B 811



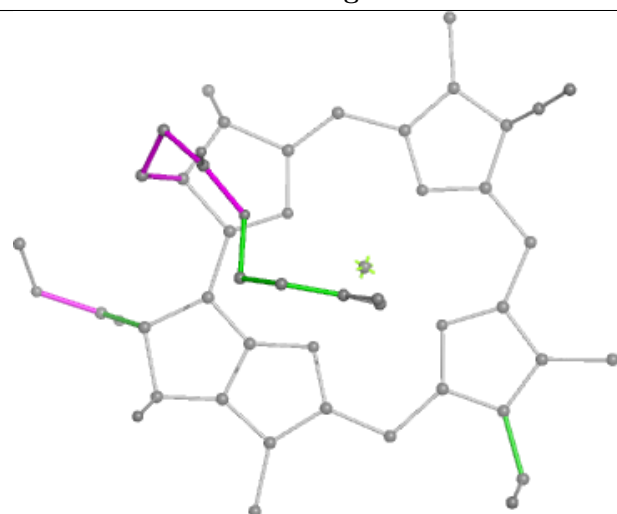
Ligand CLA L 208



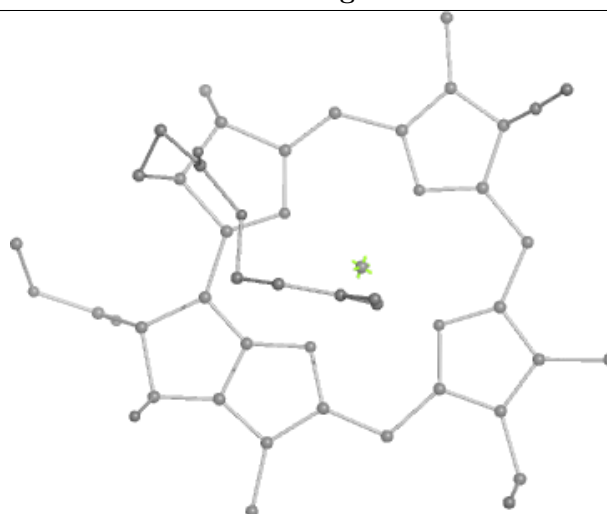
Bond lengths



Bond angles

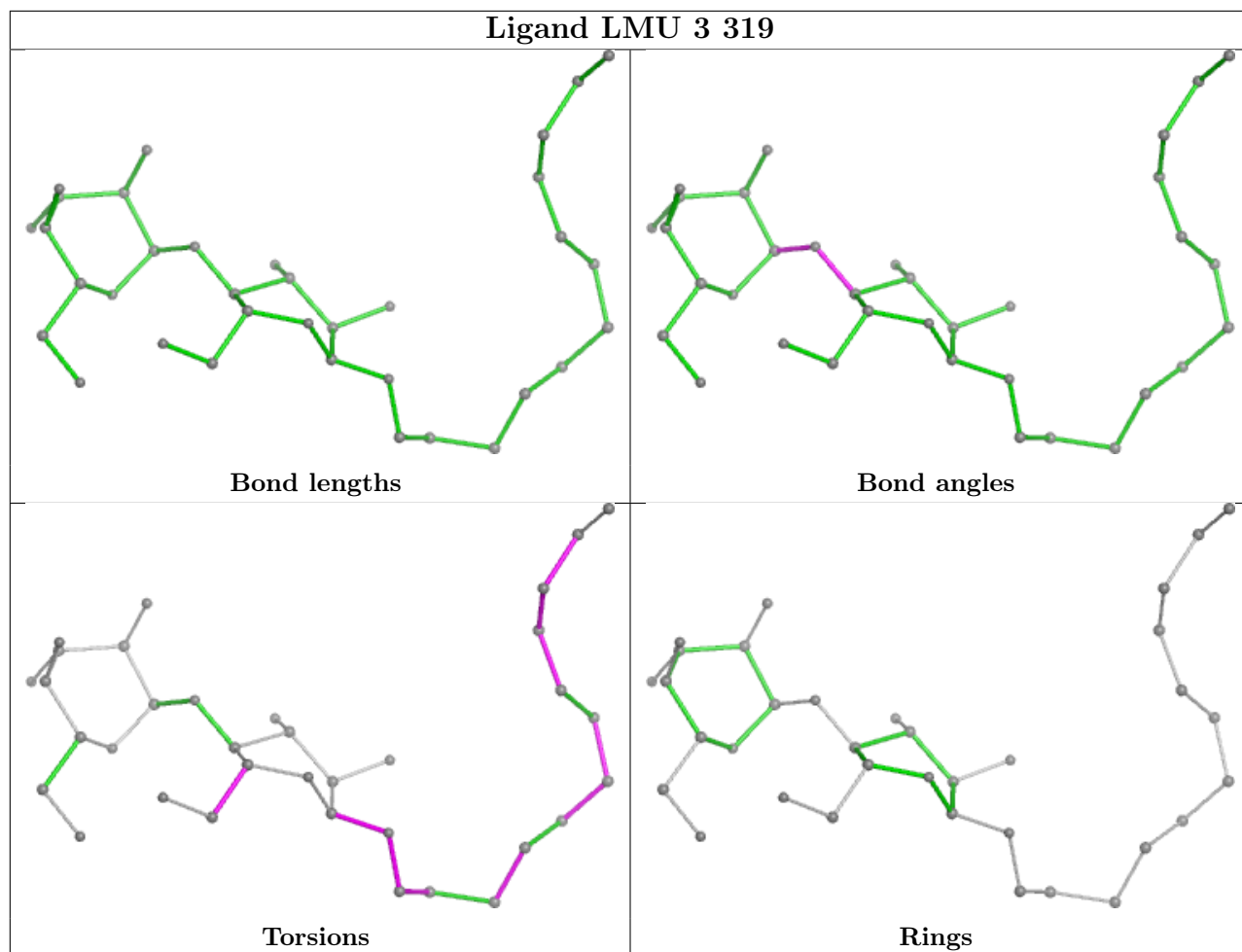


Torsions

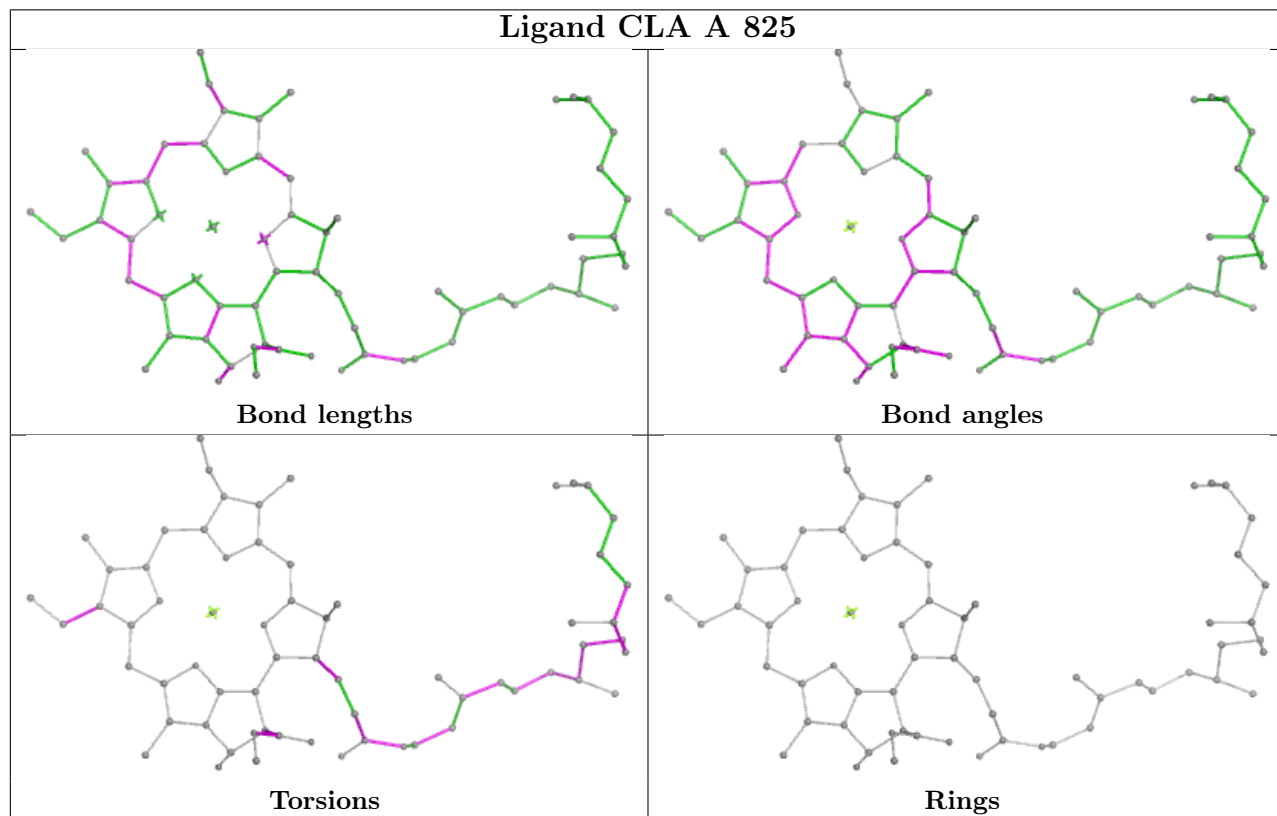


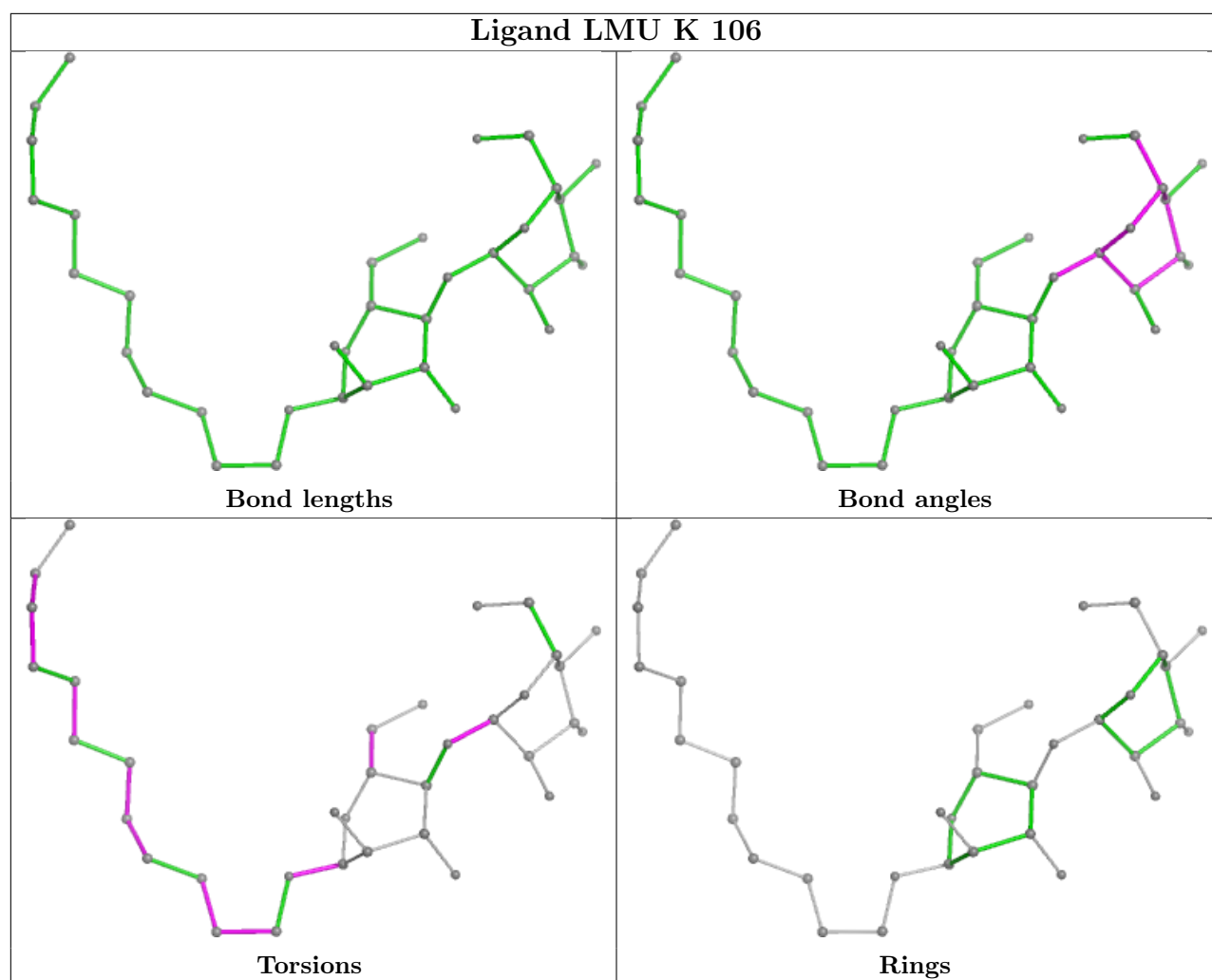
Rings

Ligand LMU 3 319

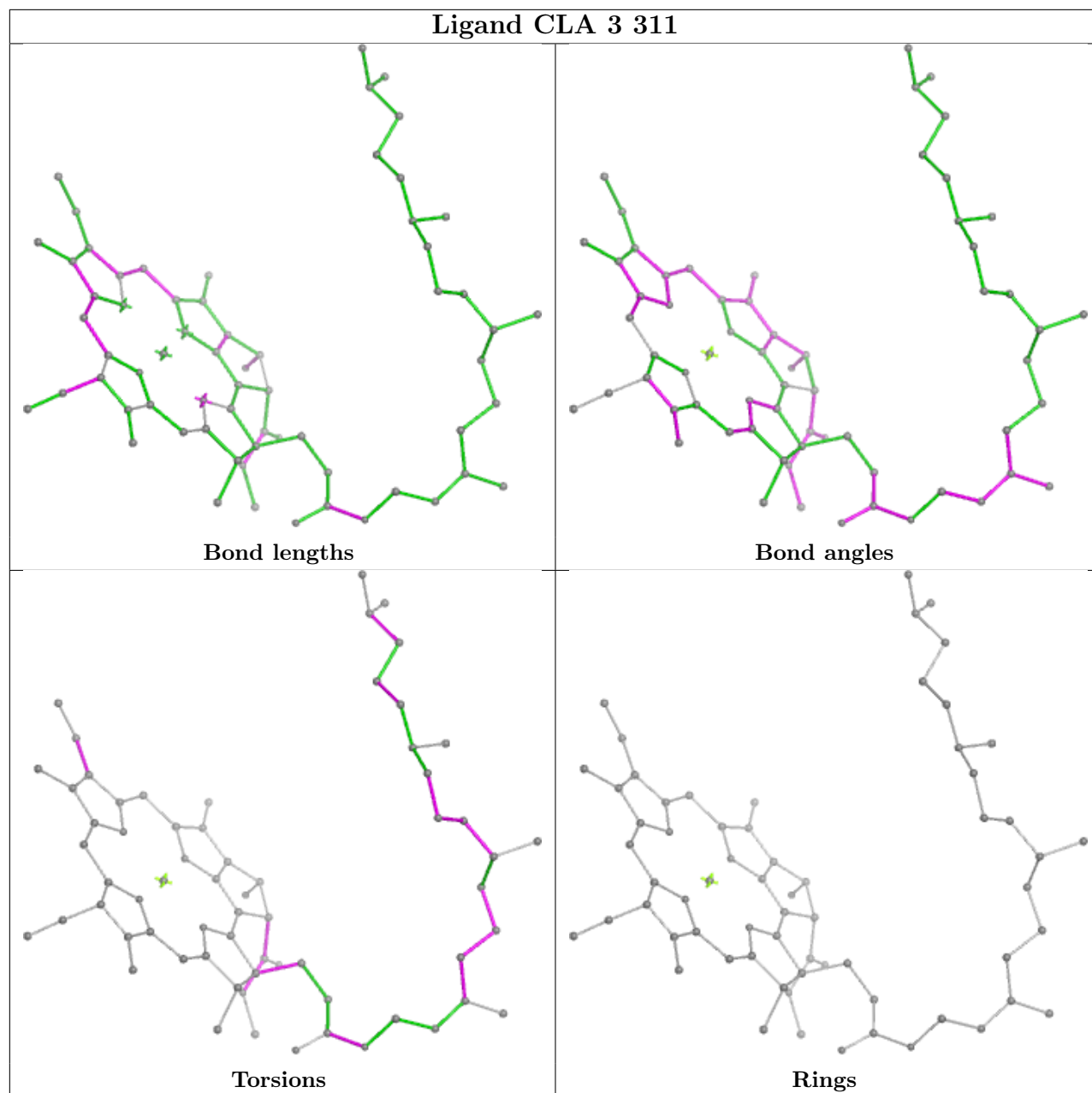


Ligand CLA A 825

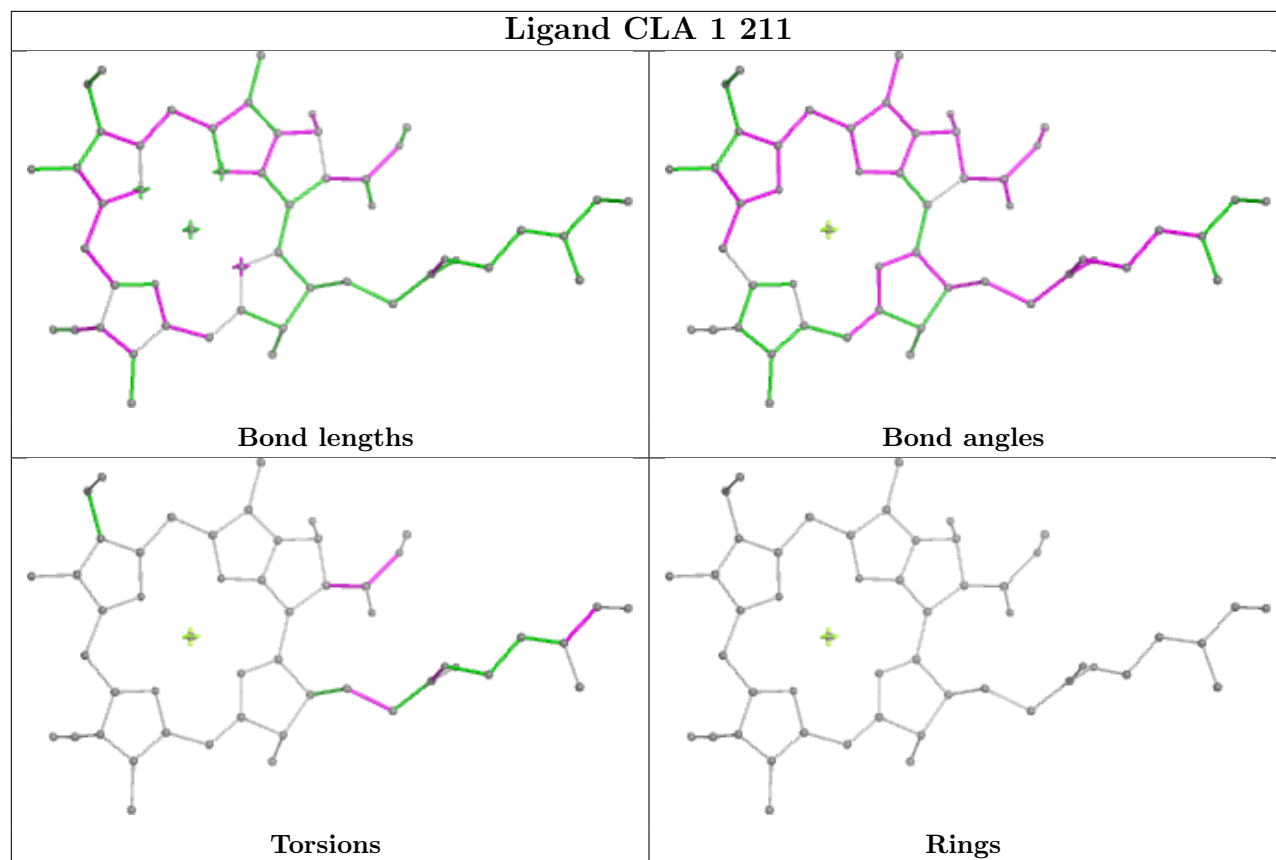




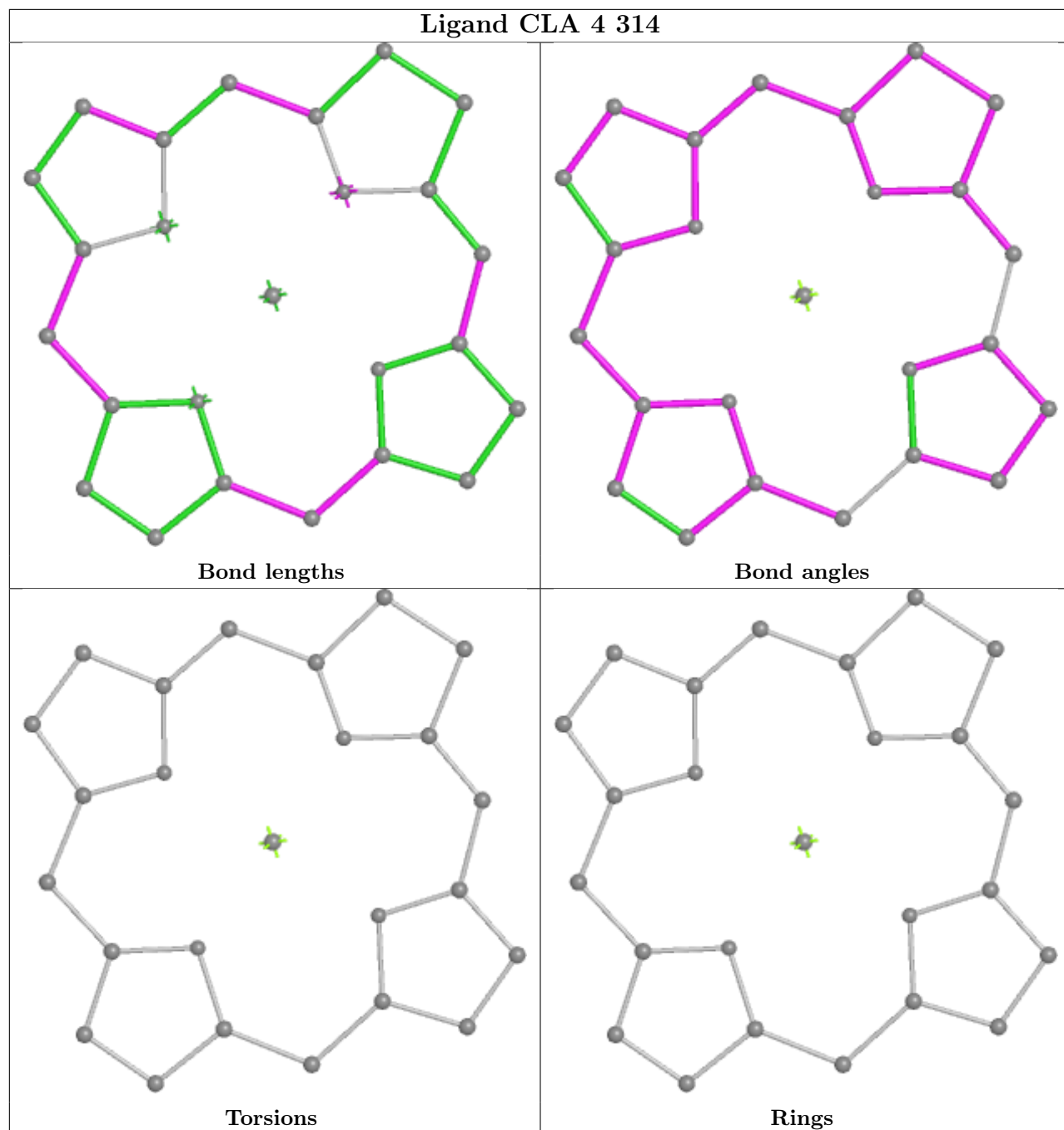
Ligand CLA 3 311



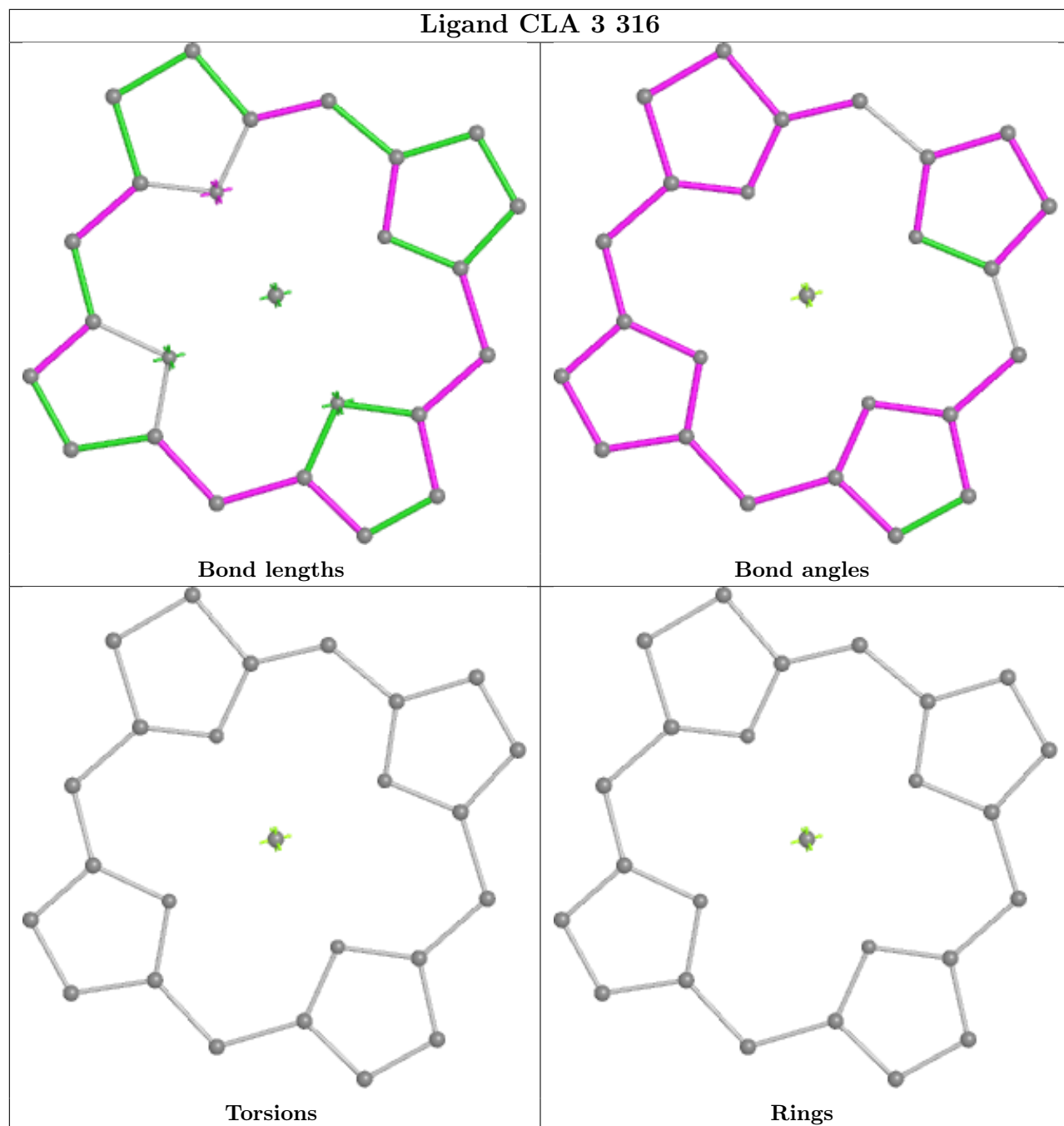
Ligand CLA 1 211



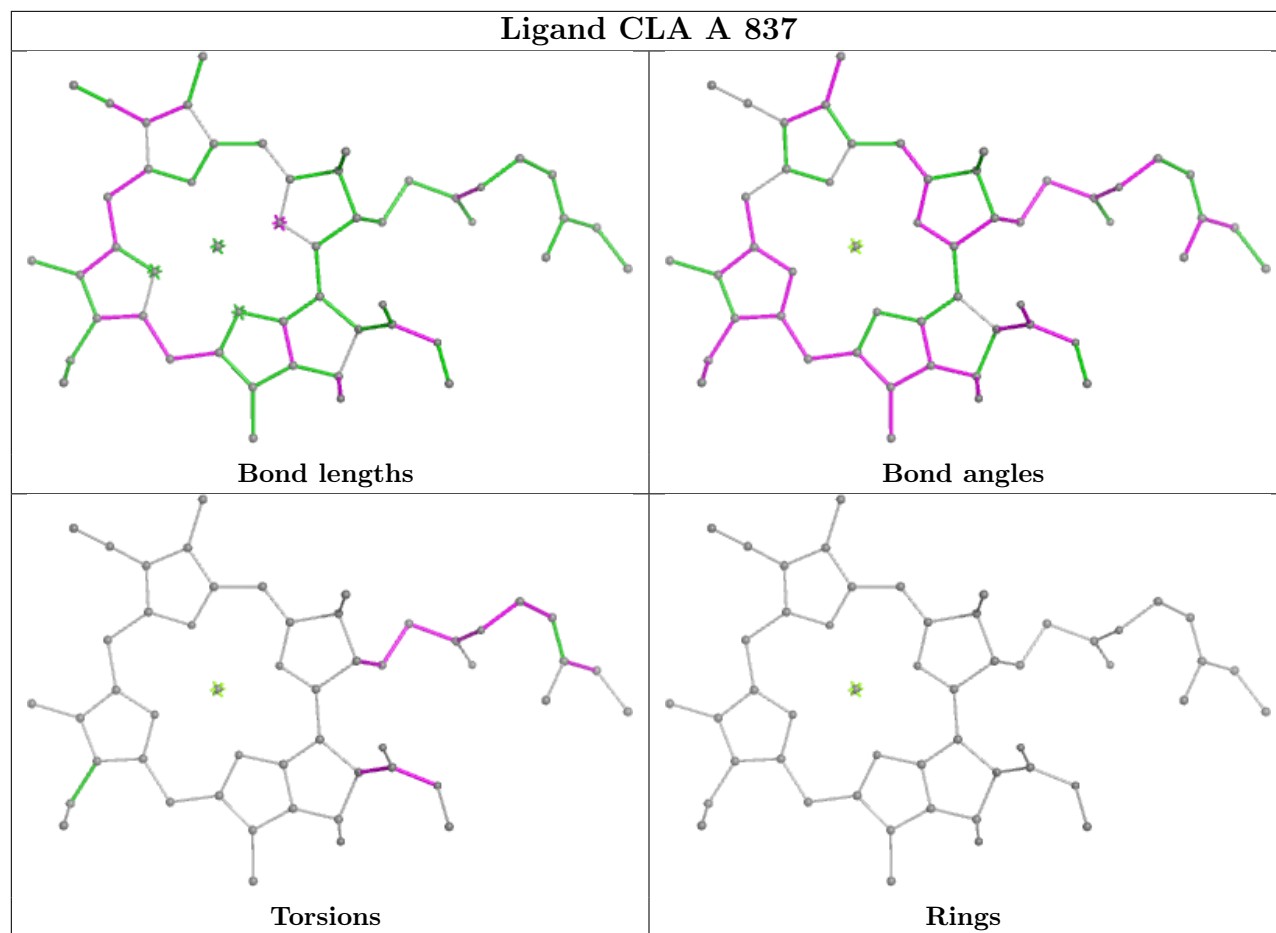
Ligand CLA 4 314



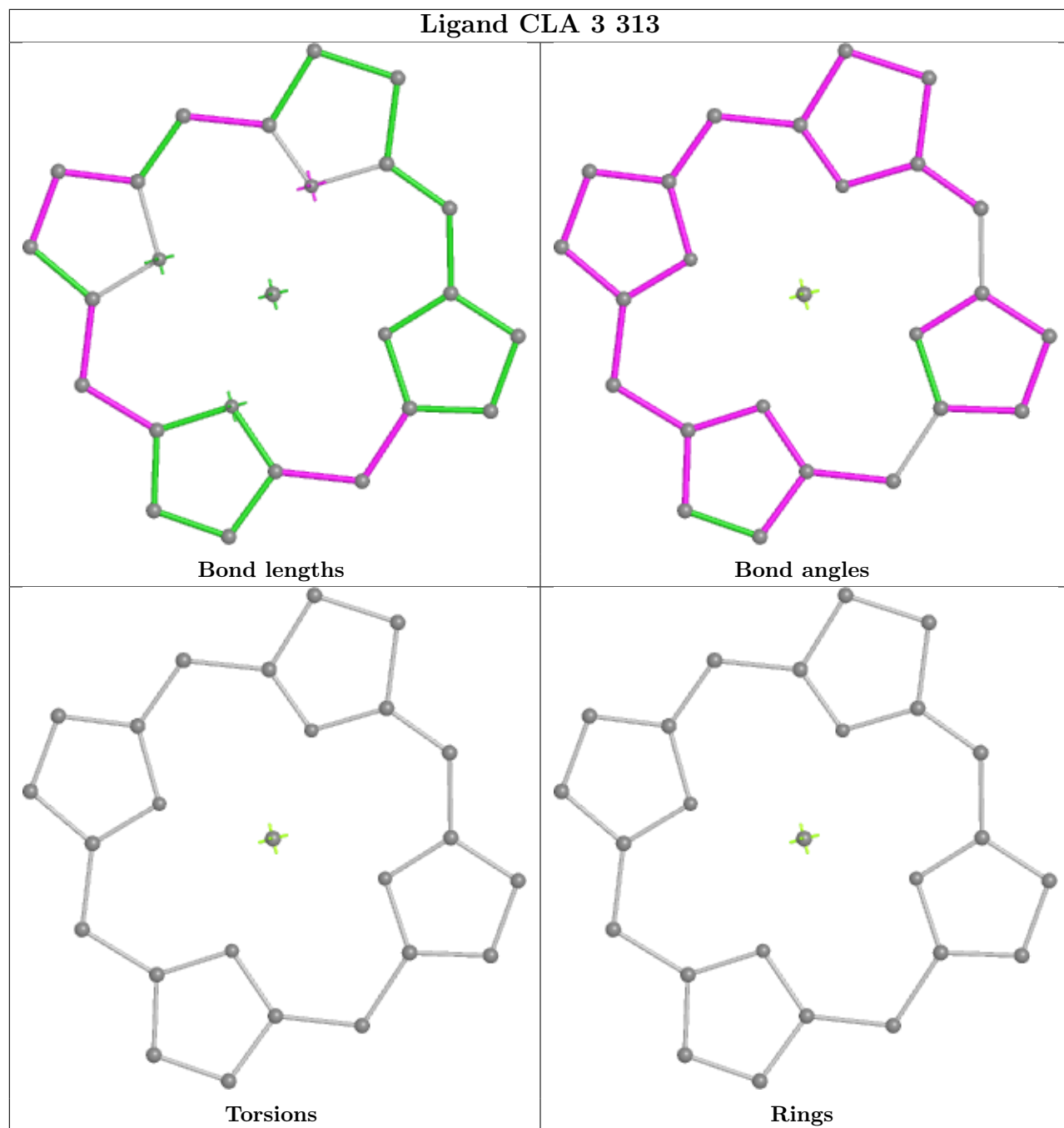
Ligand CLA 3 316

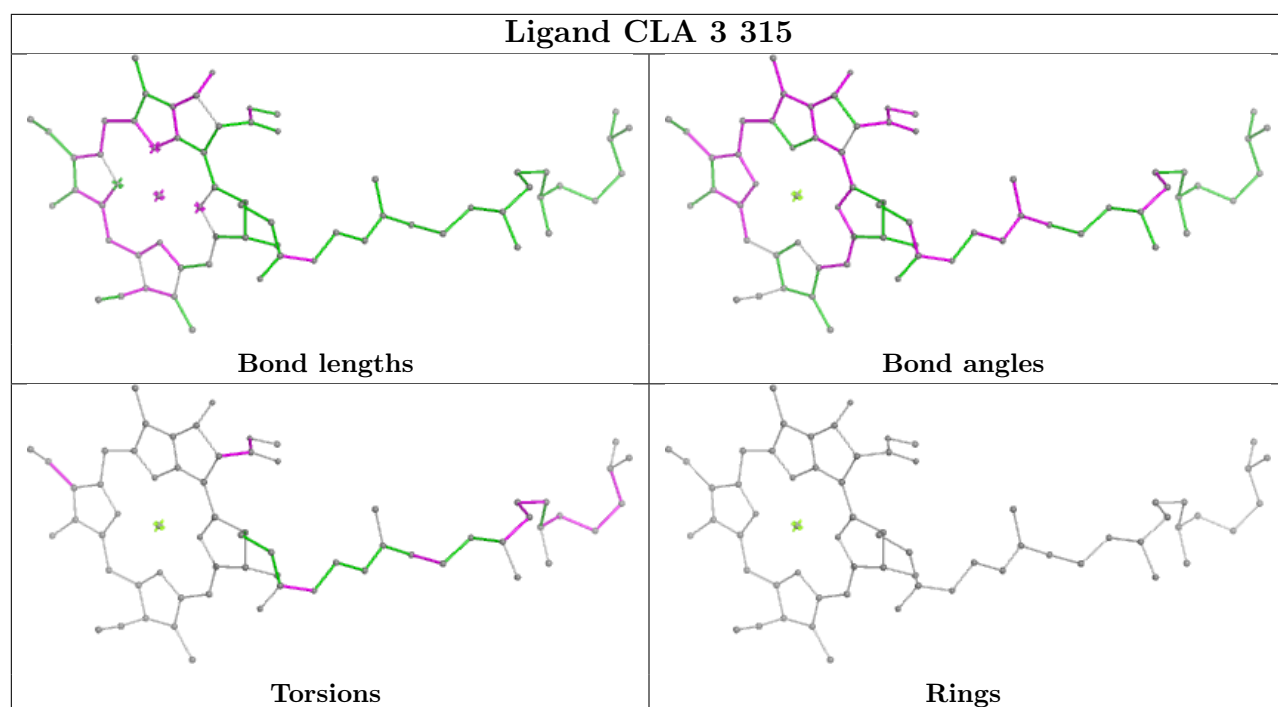


Ligand CLA A 837

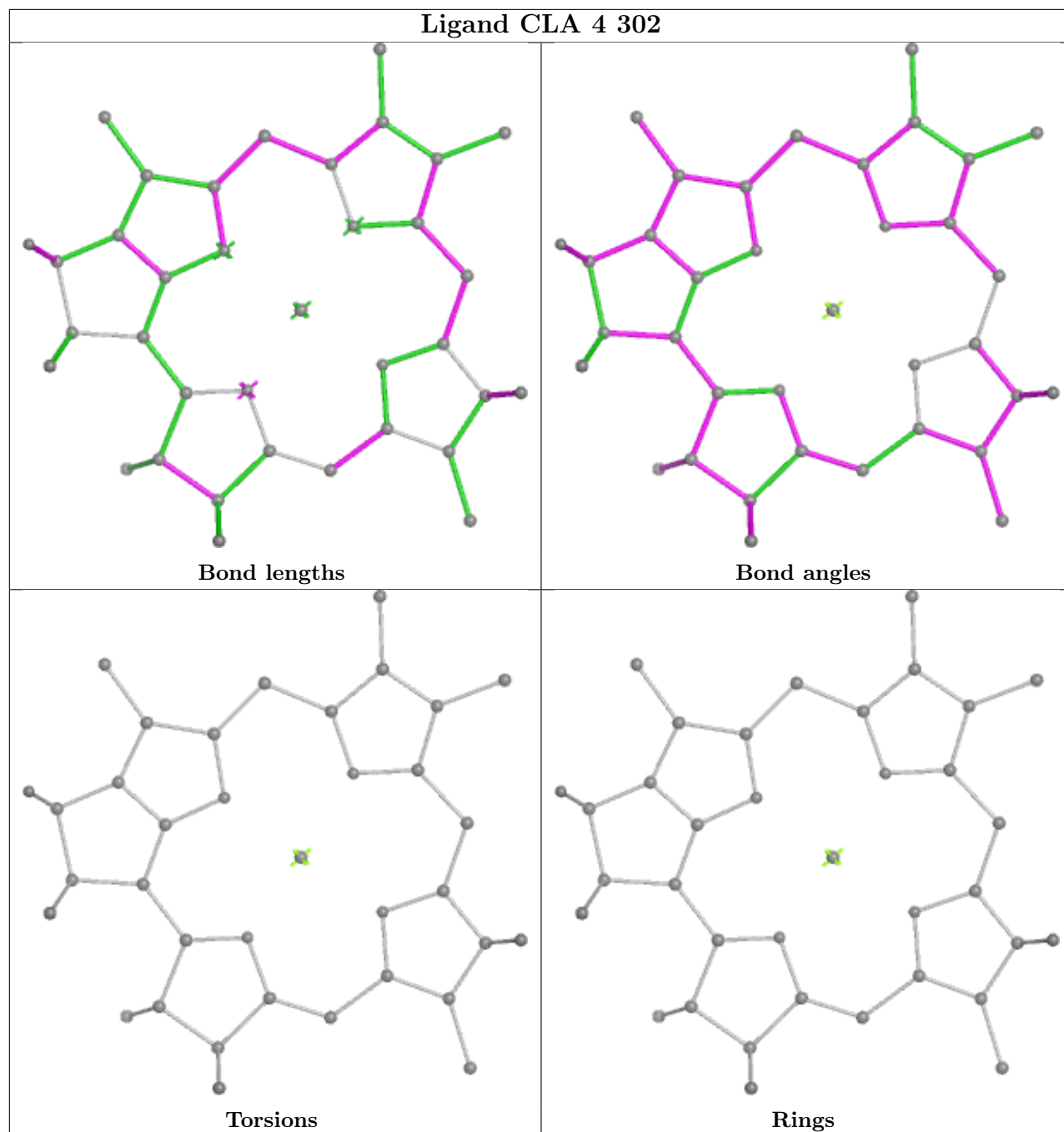


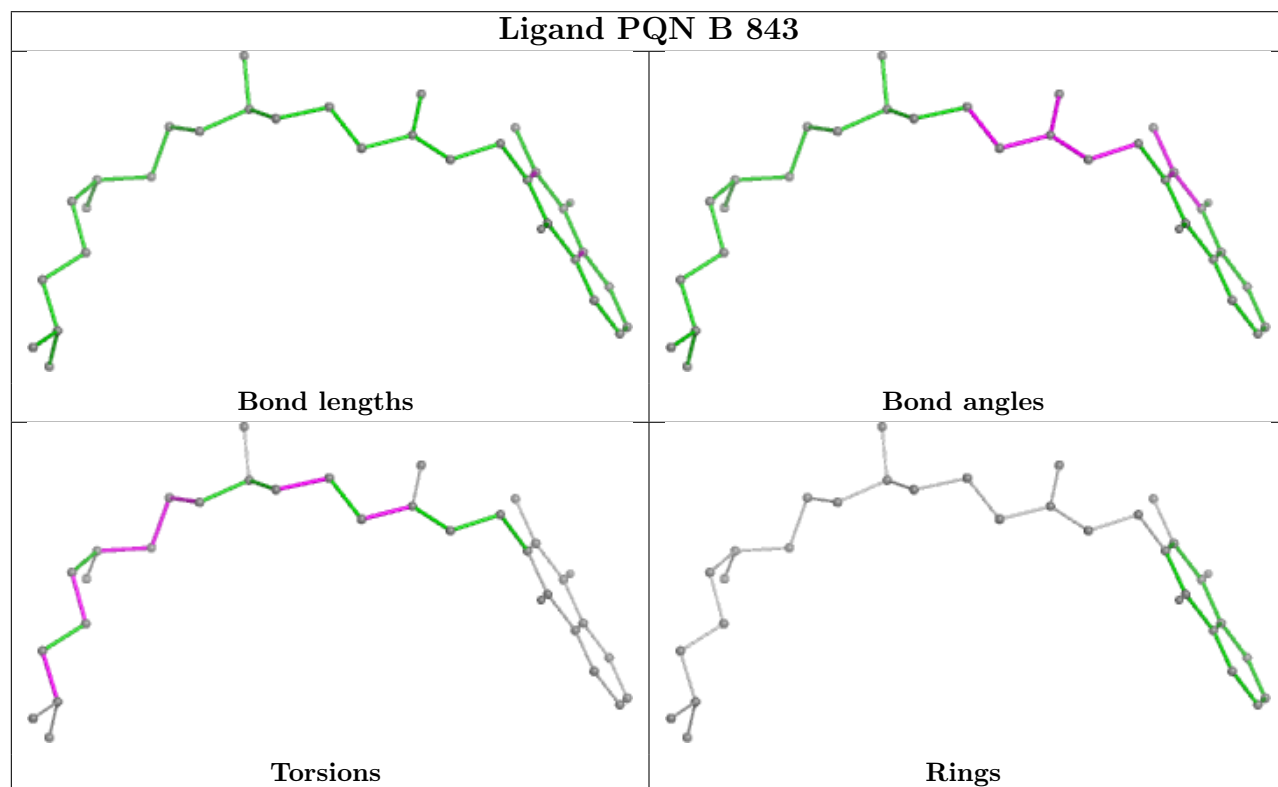
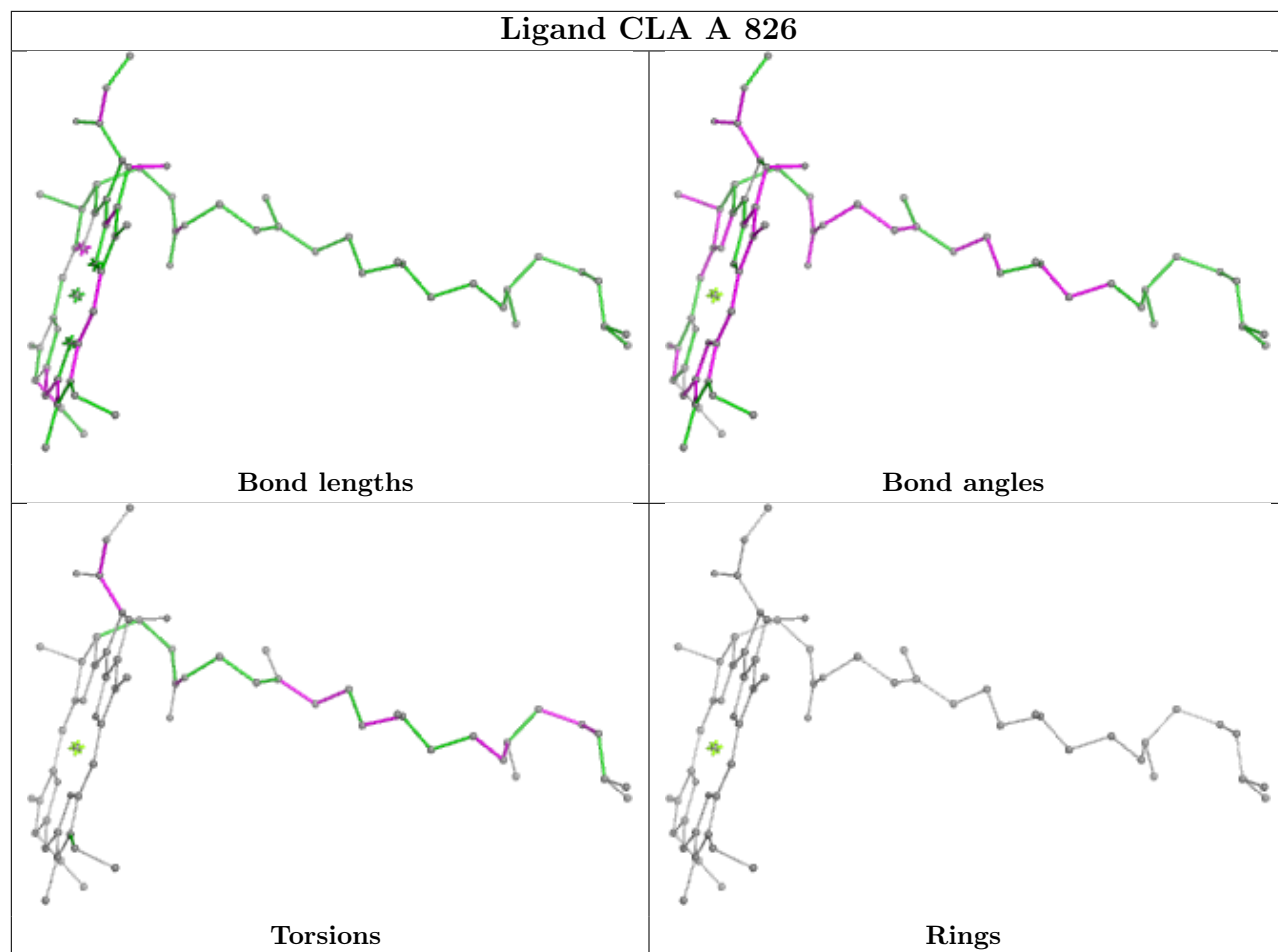
Ligand CLA 3 313

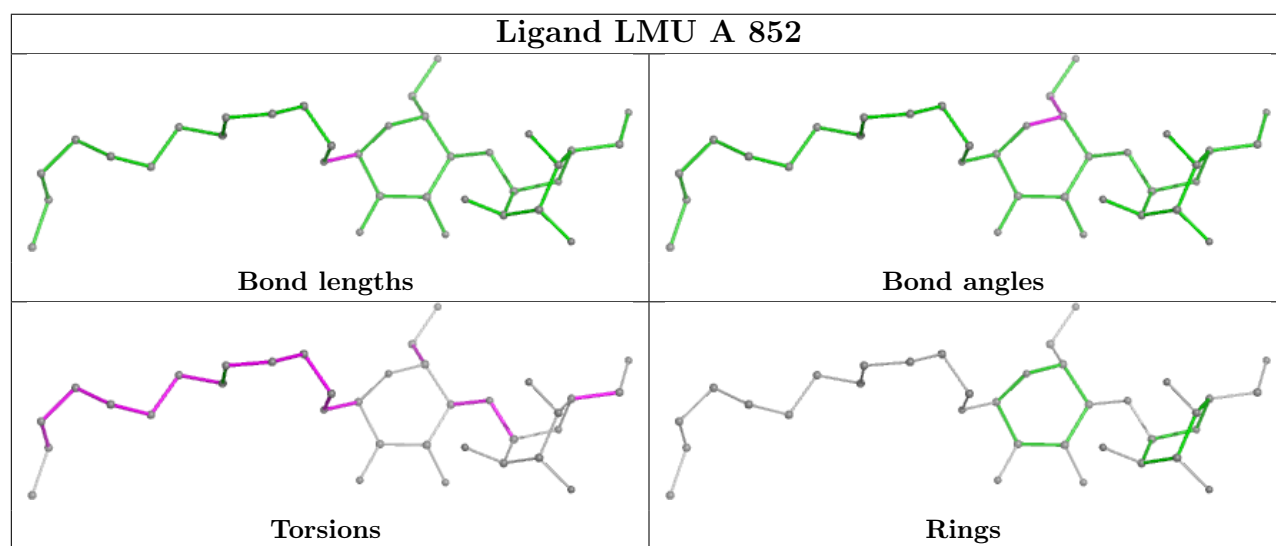
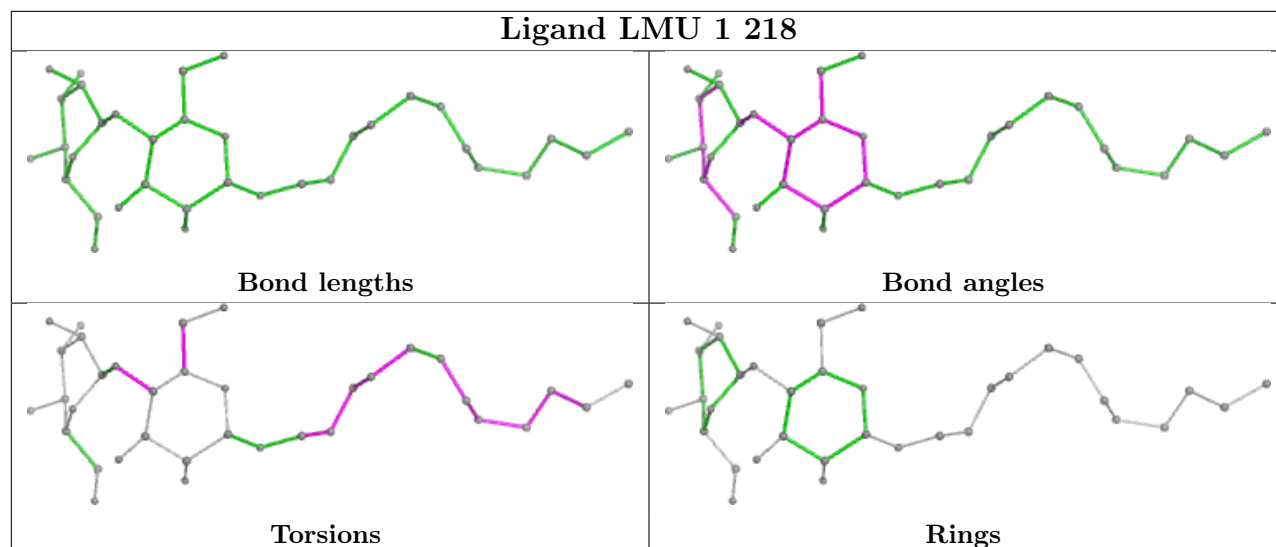


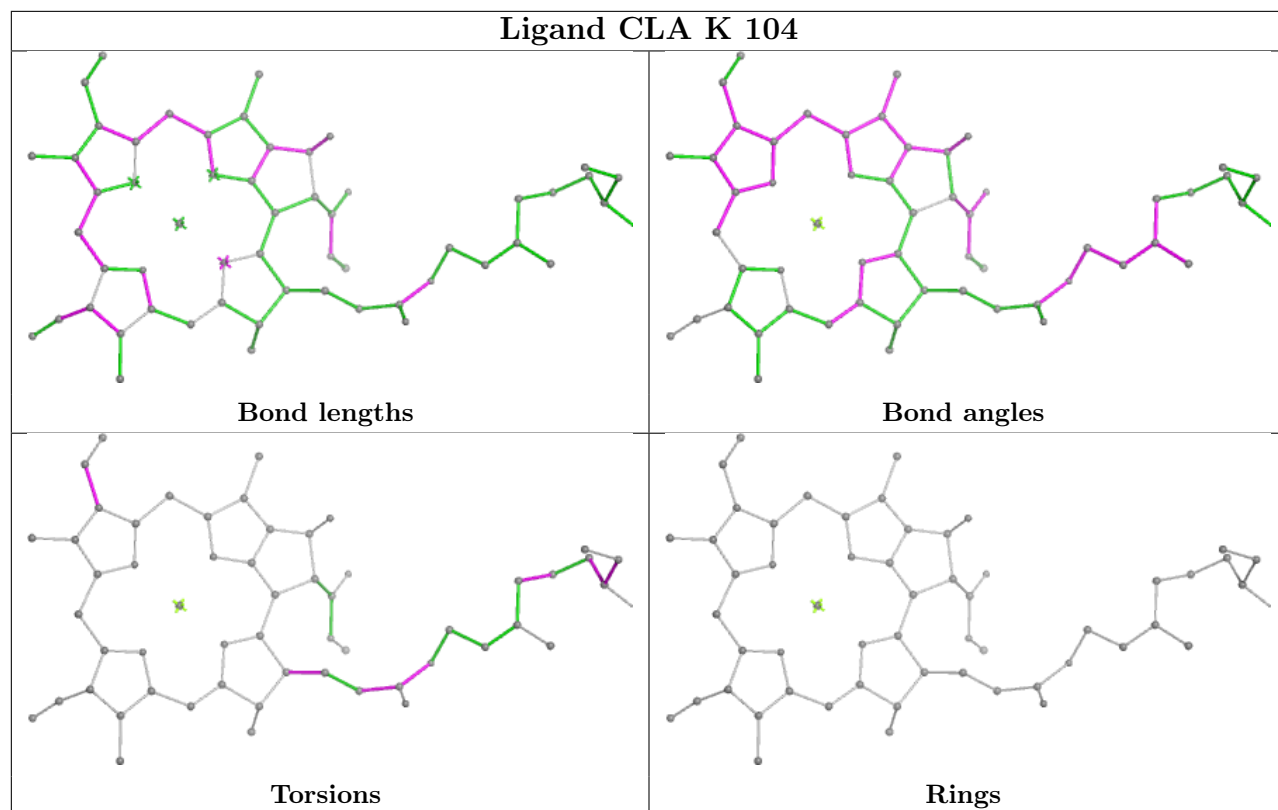


Ligand CLA 4 302

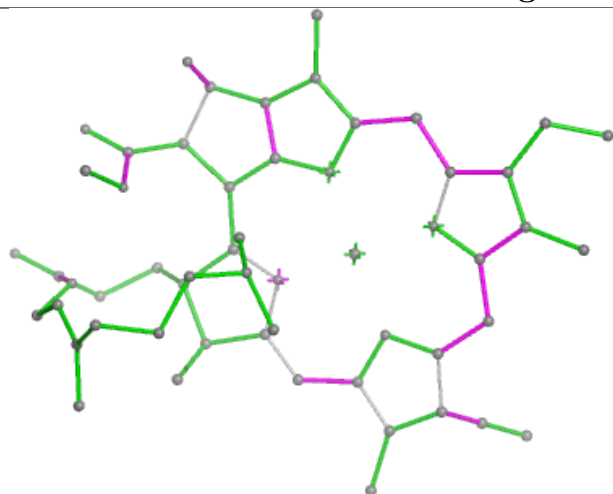




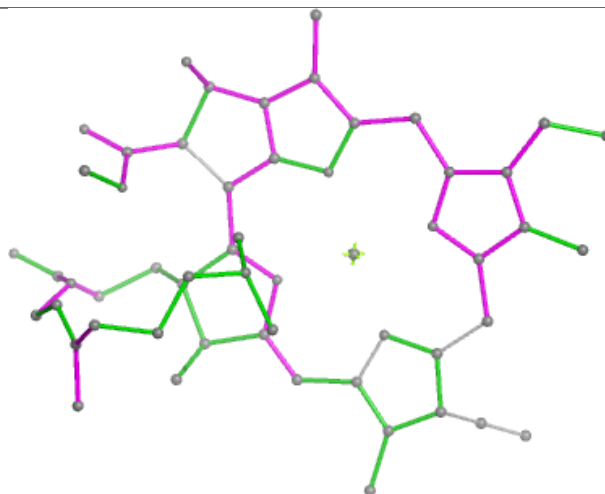




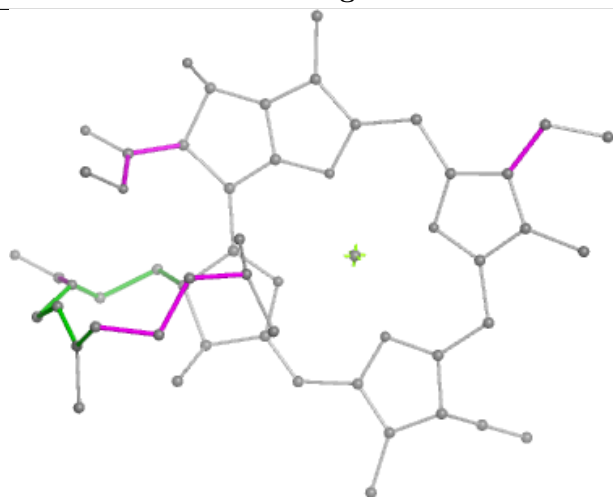
Ligand CLA 4 304



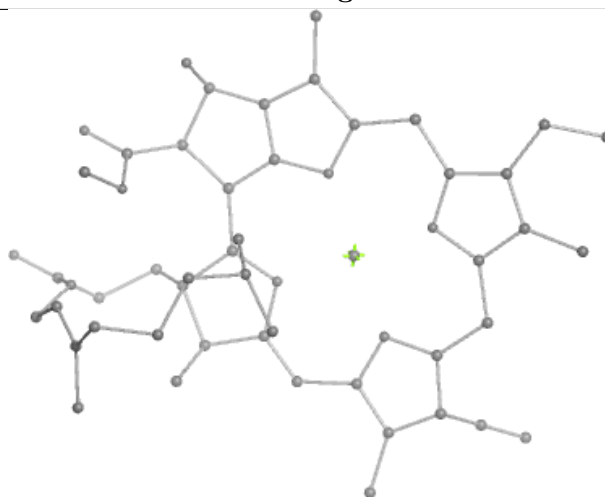
Bond lengths



Bond angles

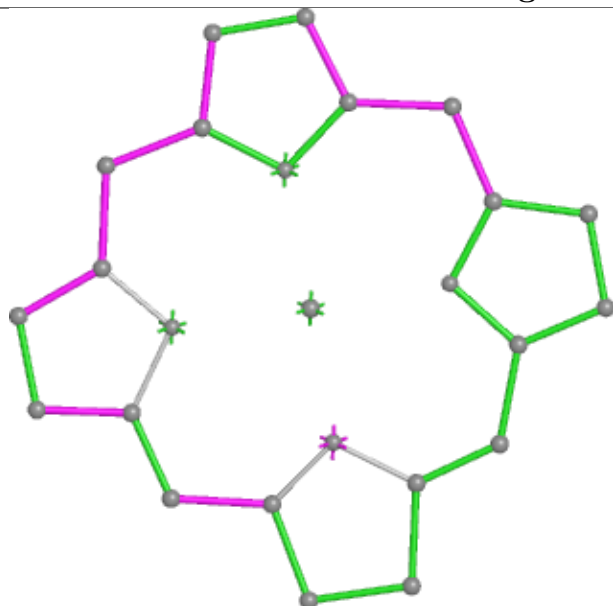


Torsions

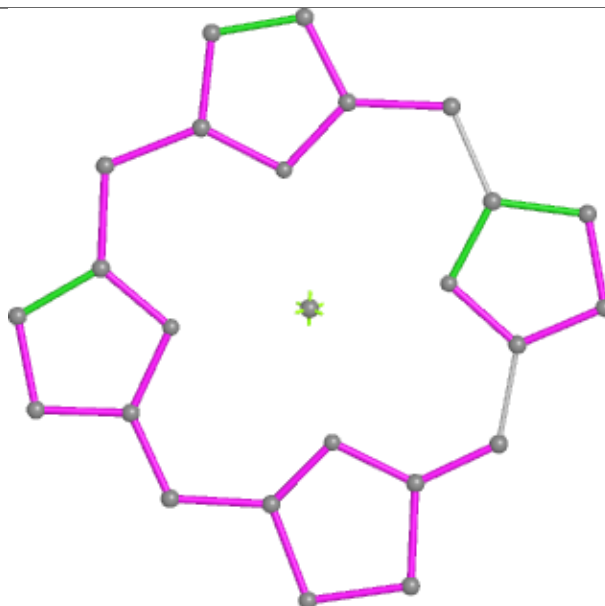


Rings

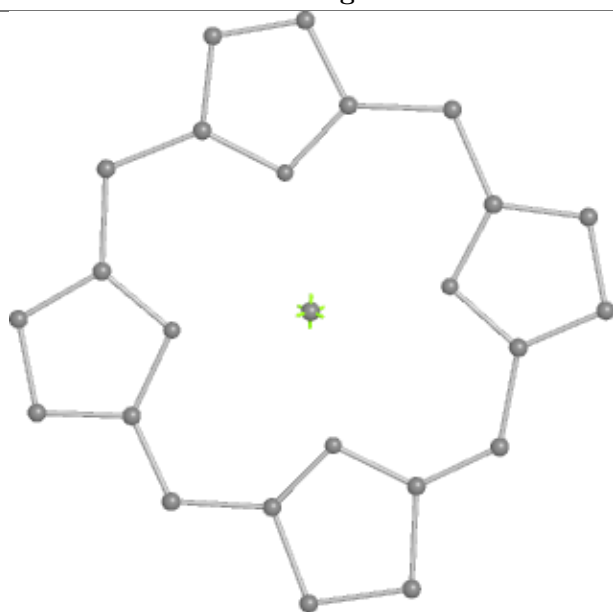
Ligand CLA 3 317



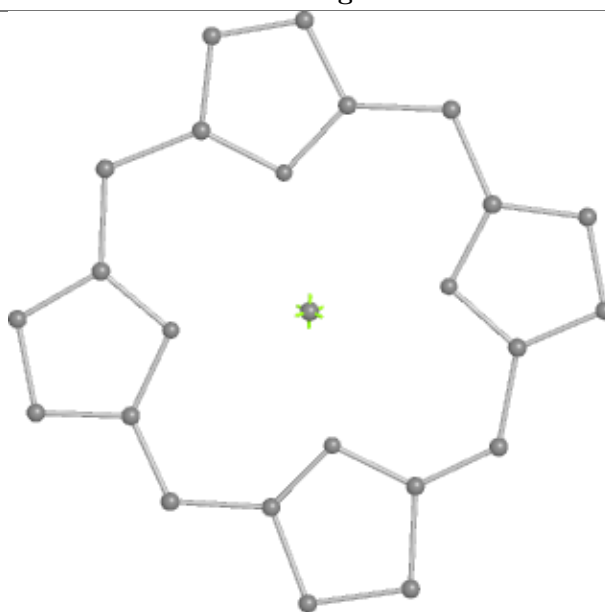
Bond lengths



Bond angles

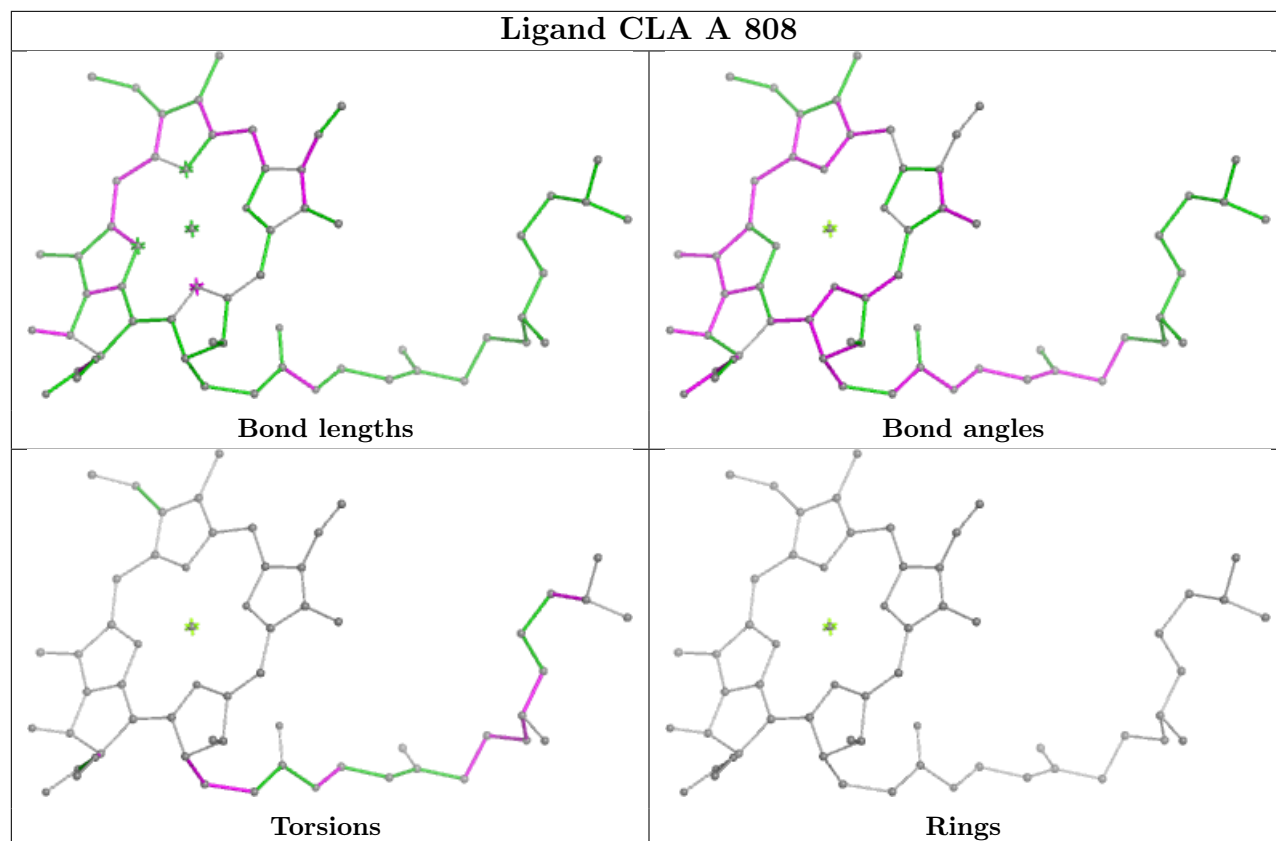


Torsions

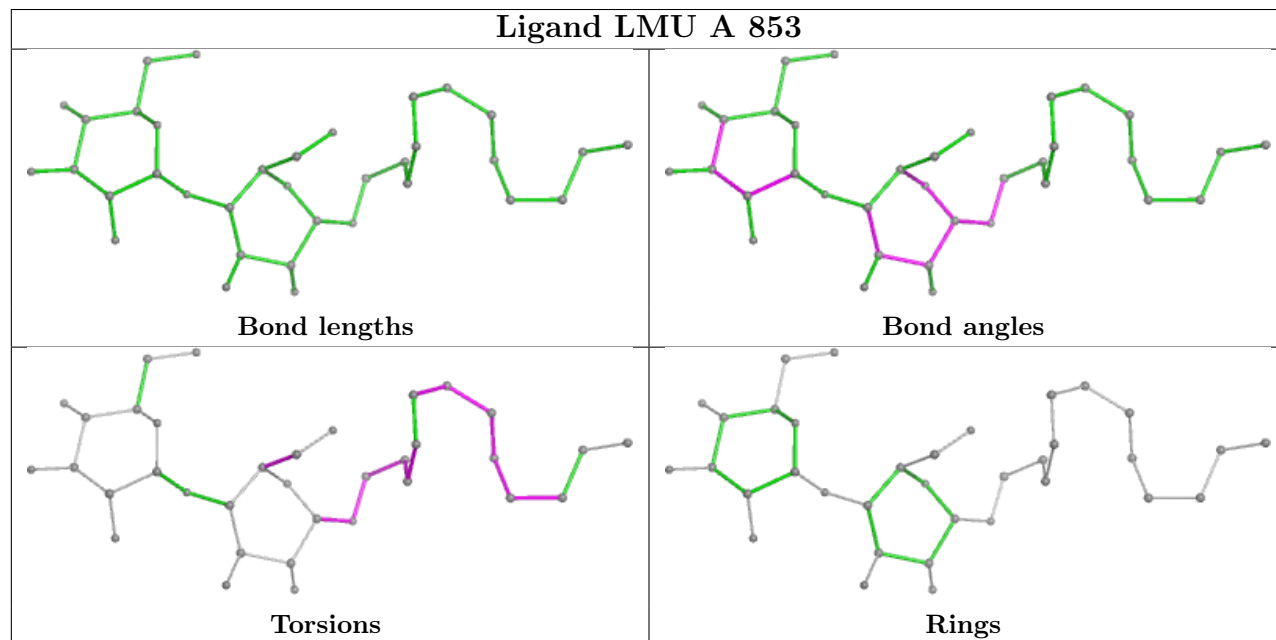


Rings

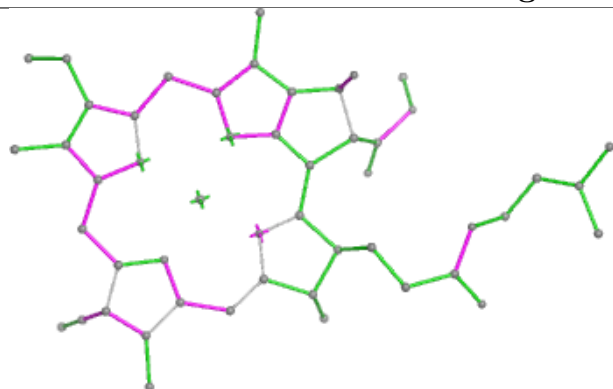
Ligand CLA A 808



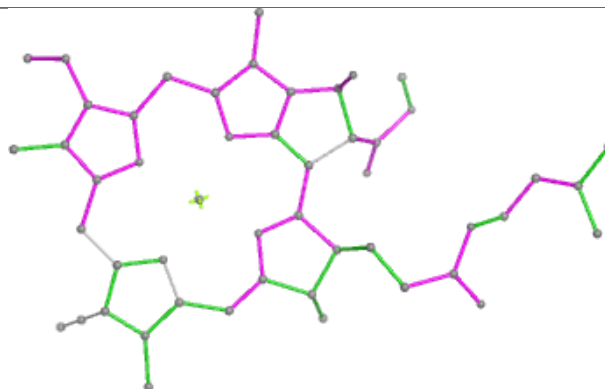
Ligand LMU A 853



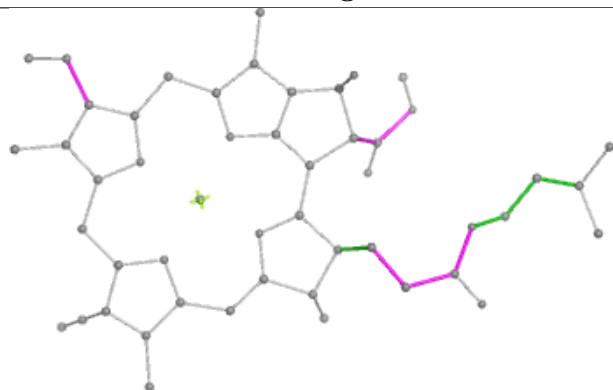
Ligand CLA 4 305



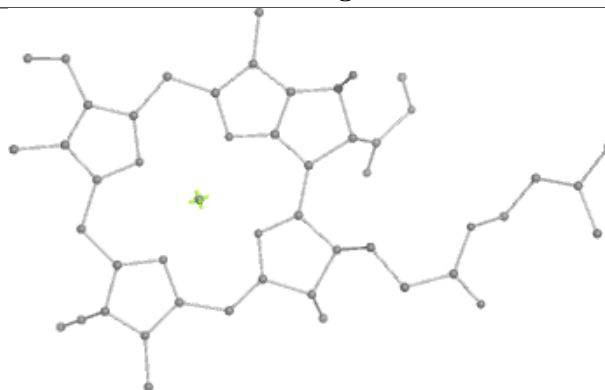
Bond lengths



Bond angles

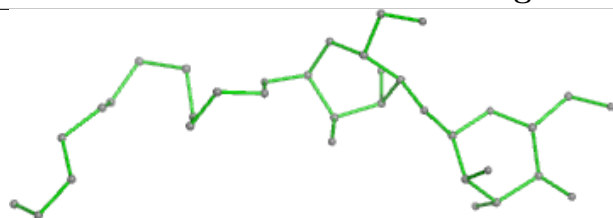


Torsions

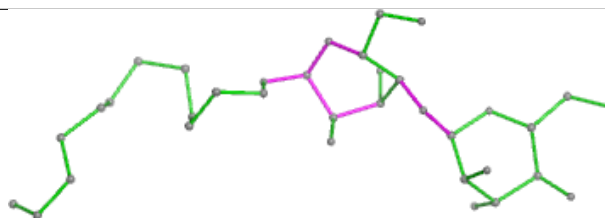


Rings

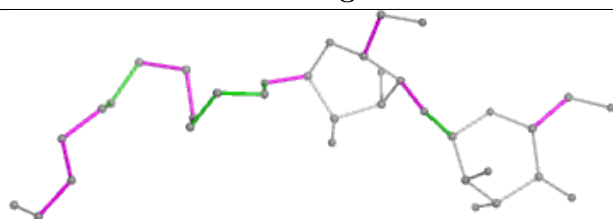
Ligand LMU 3 320



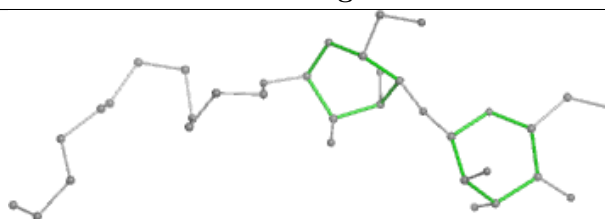
Bond lengths



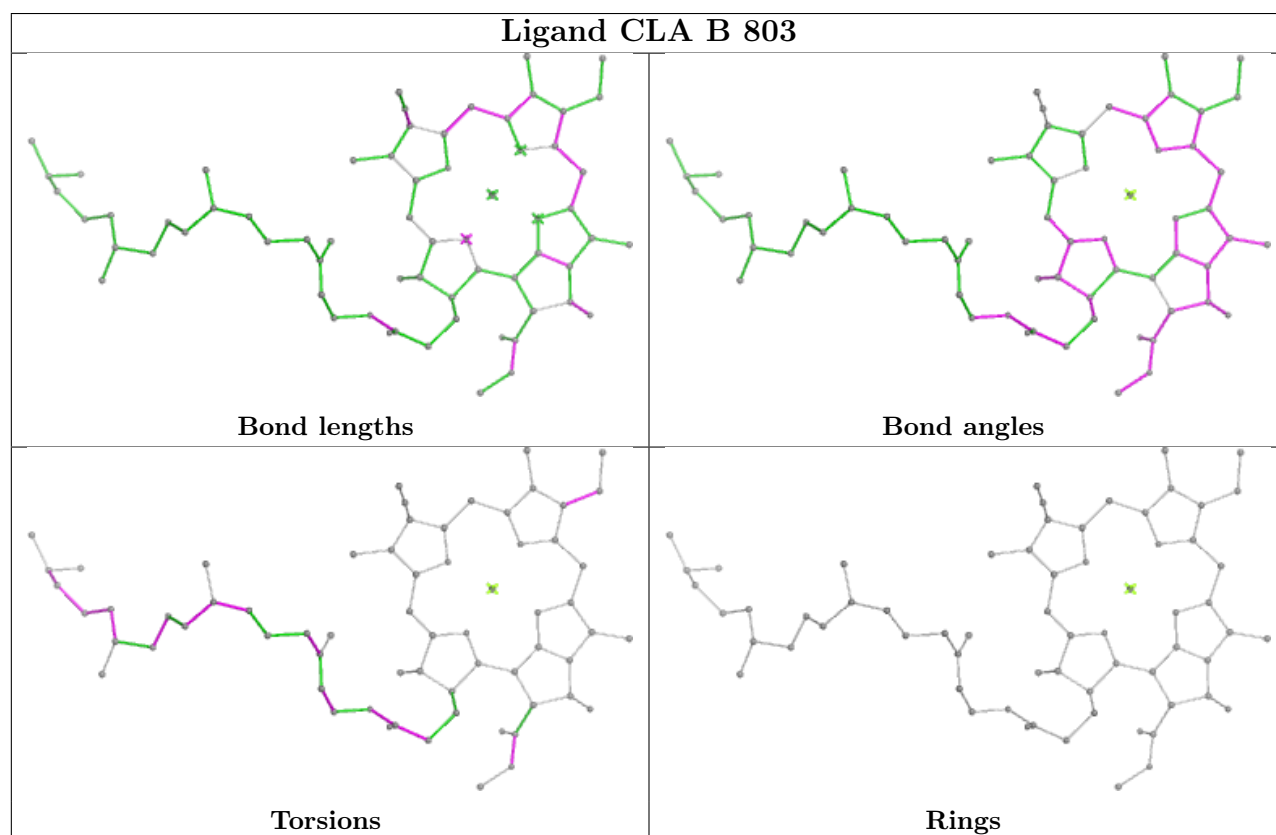
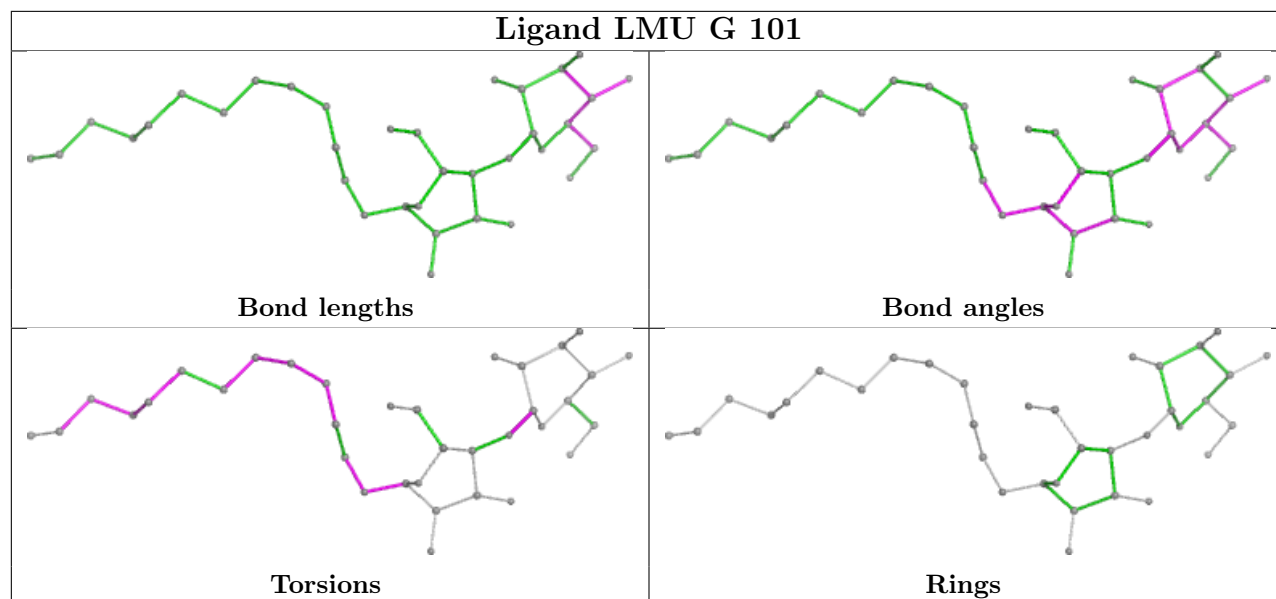
Bond angles



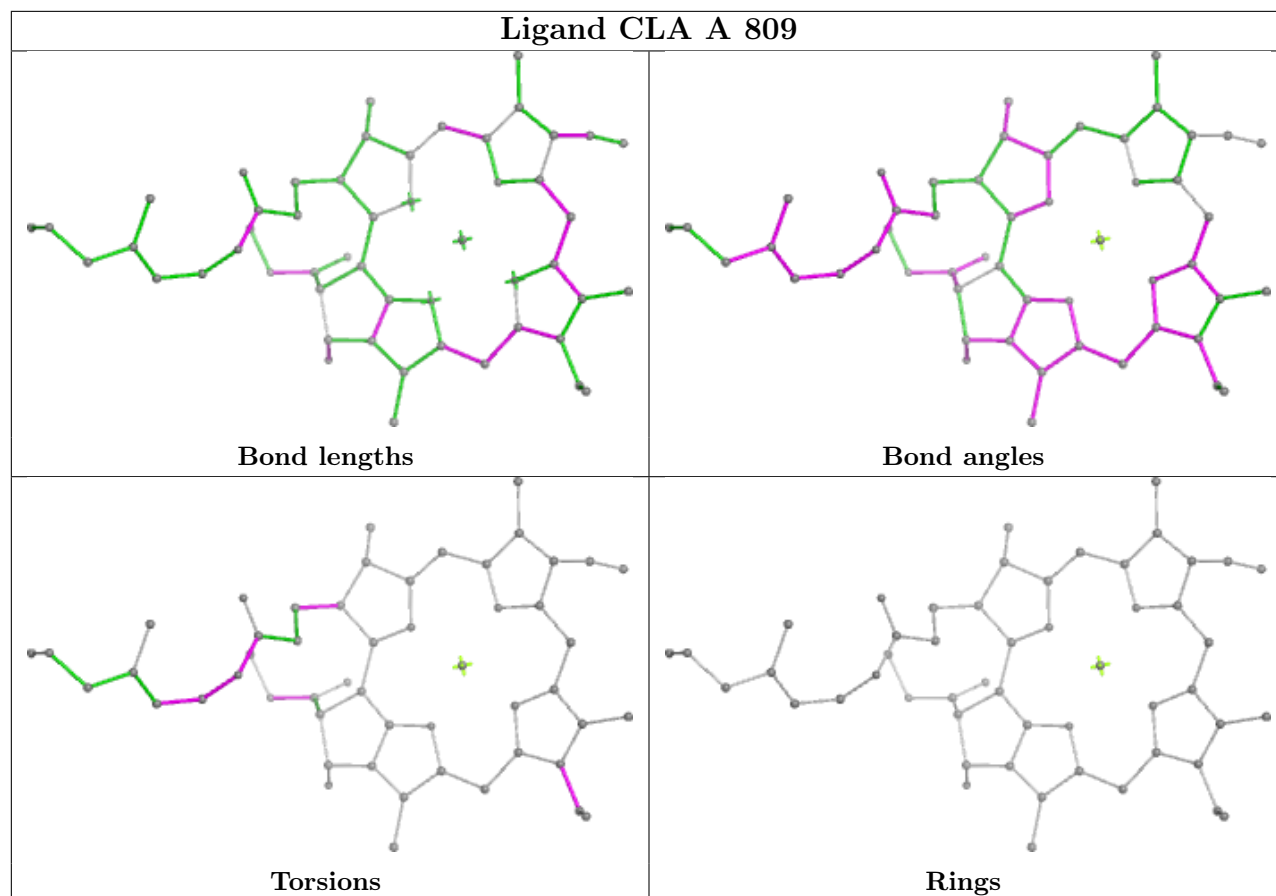
Torsions



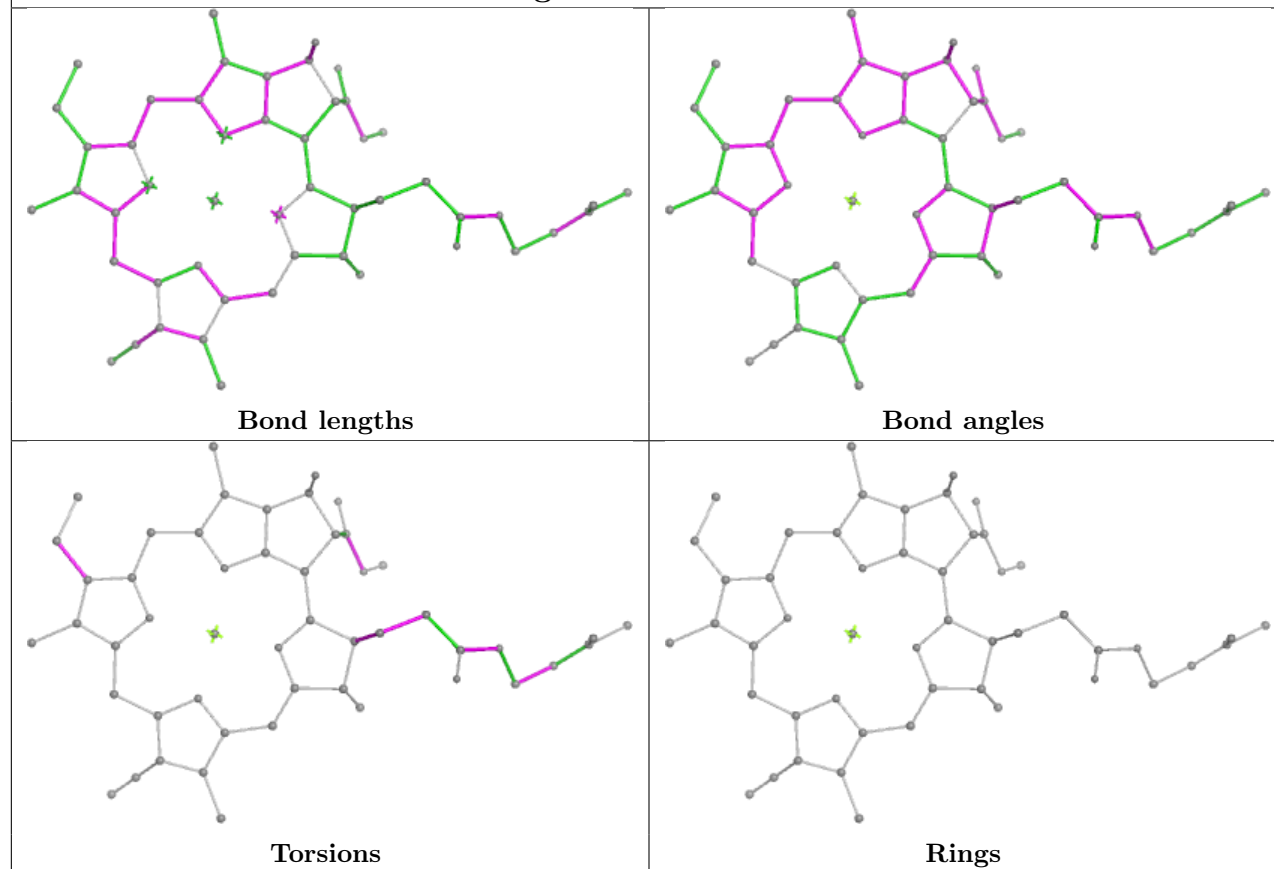
Rings



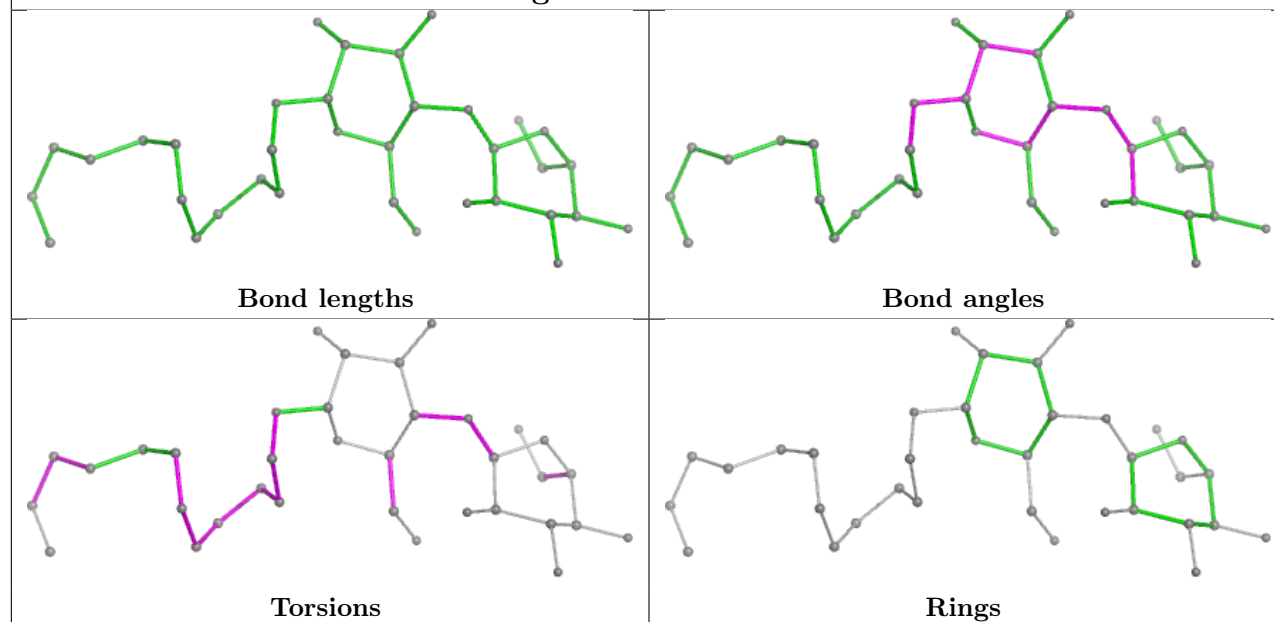
Ligand CLA A 809

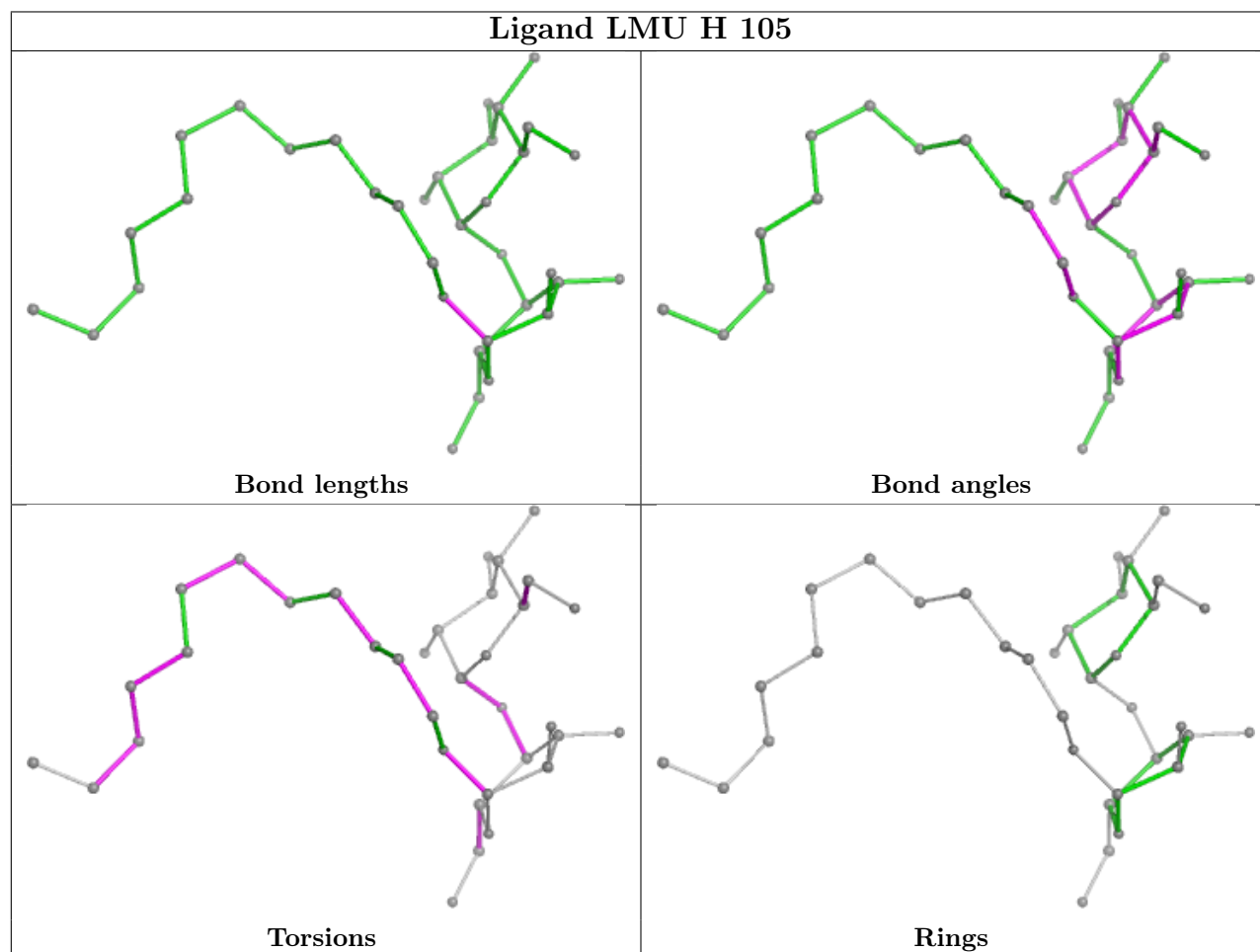
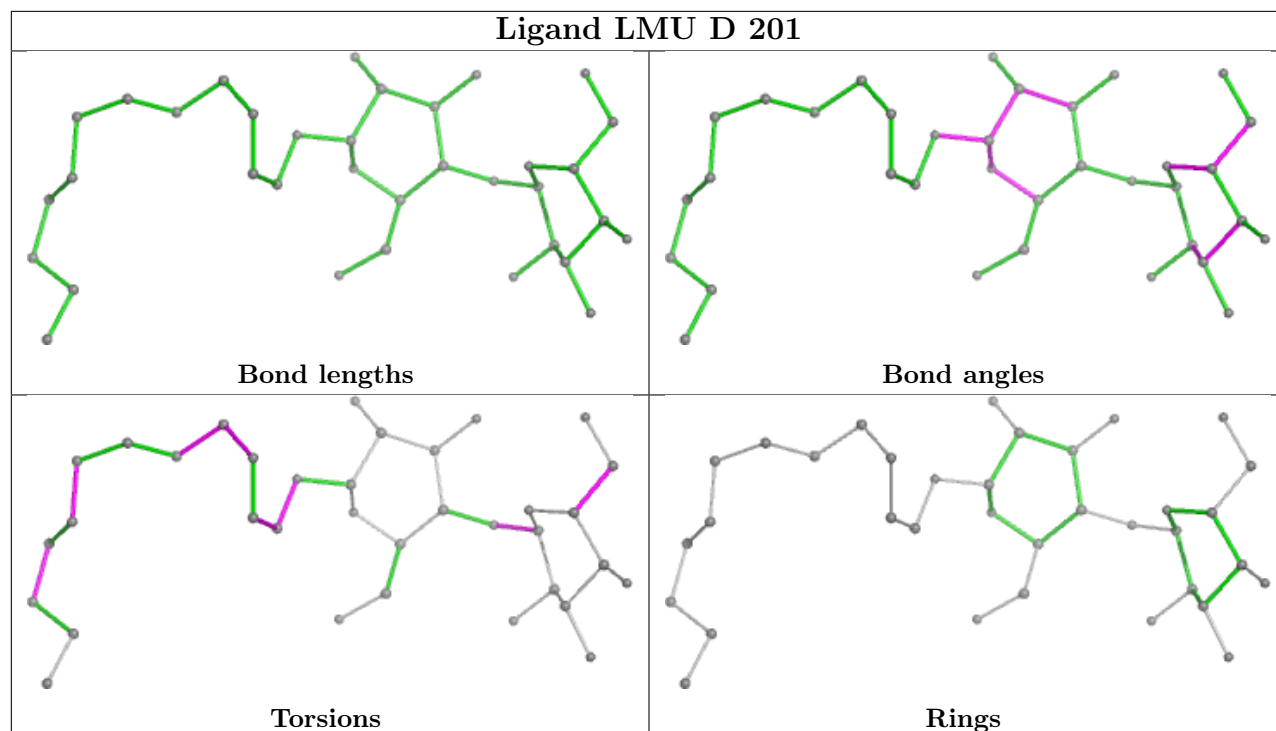


Ligand CLA F 201

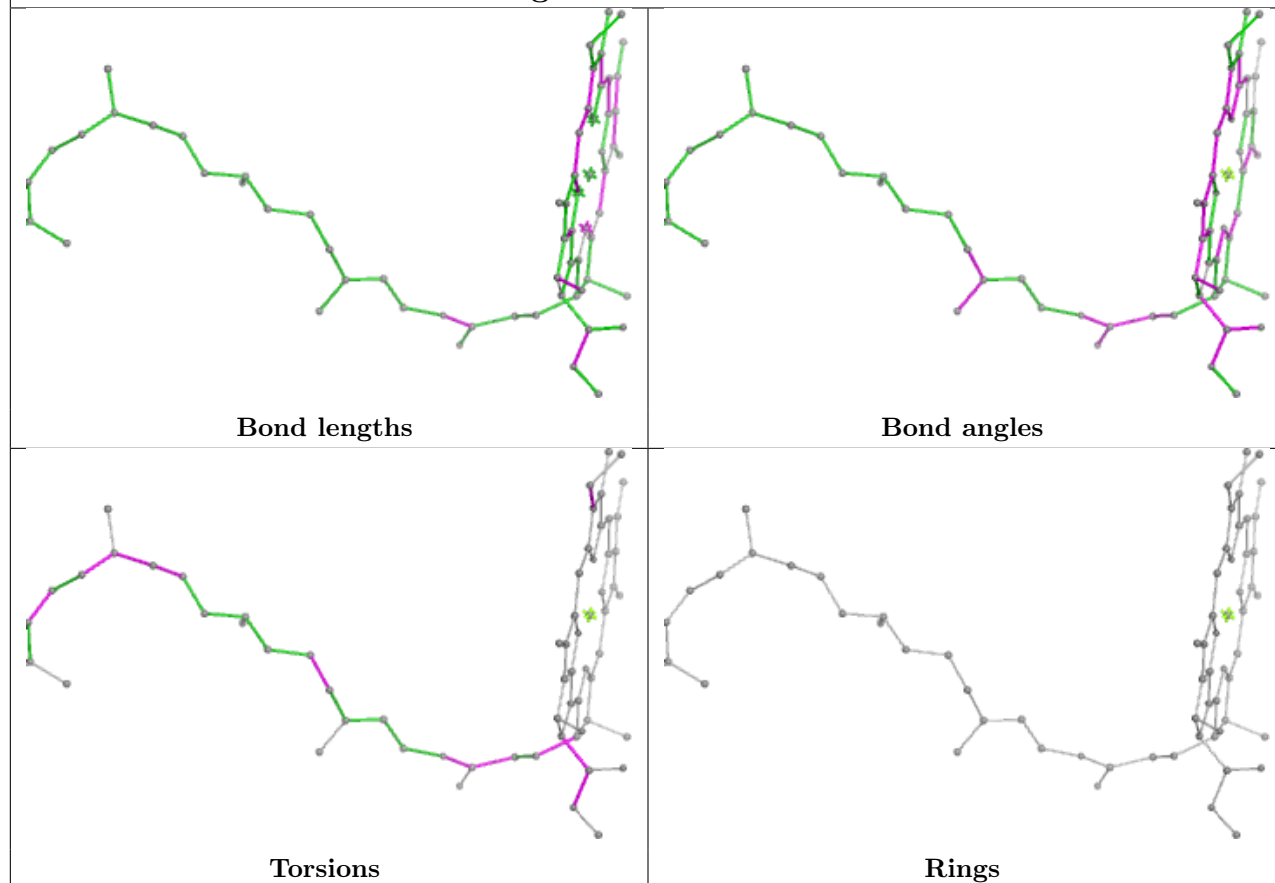


Ligand LMU 2 313

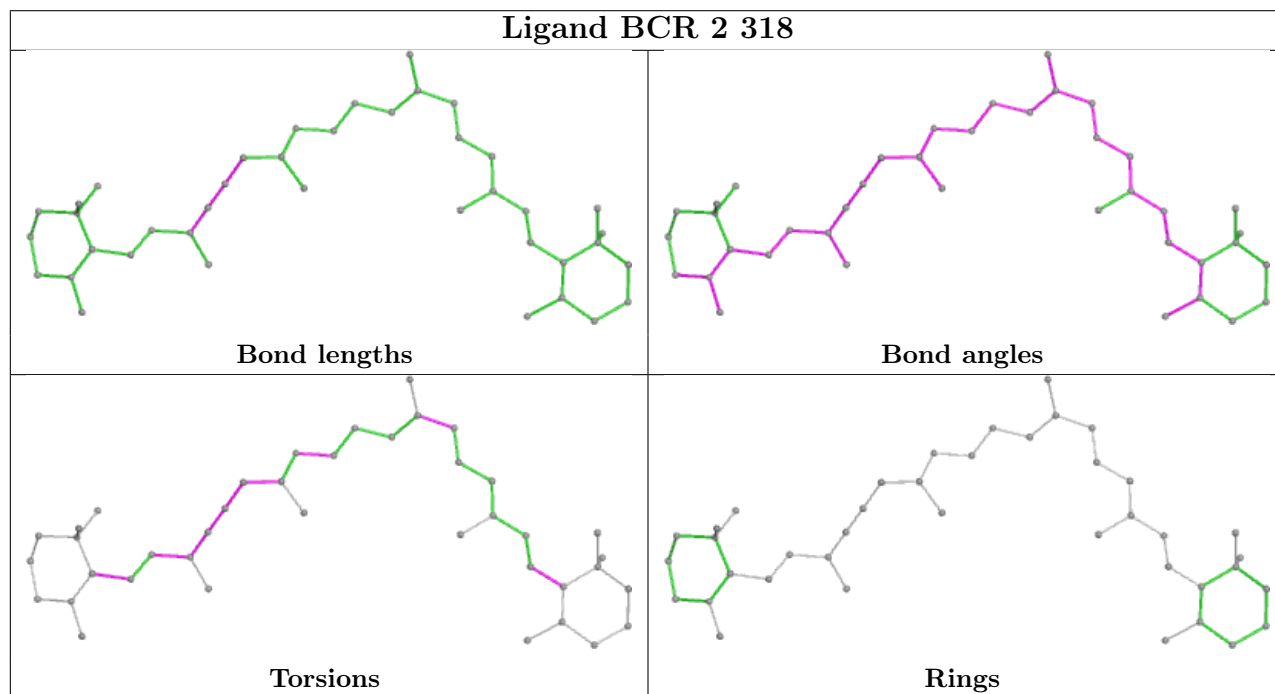


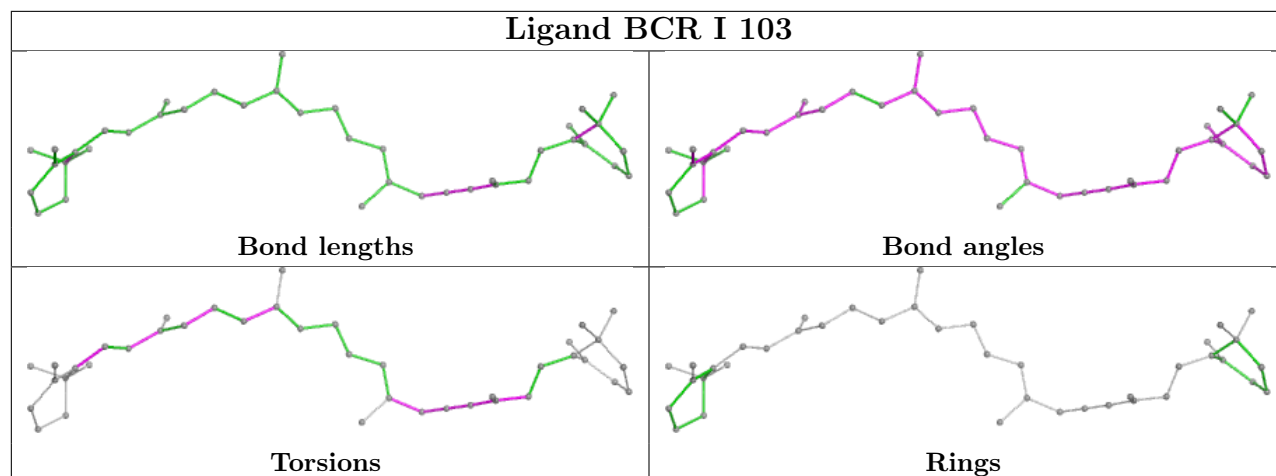
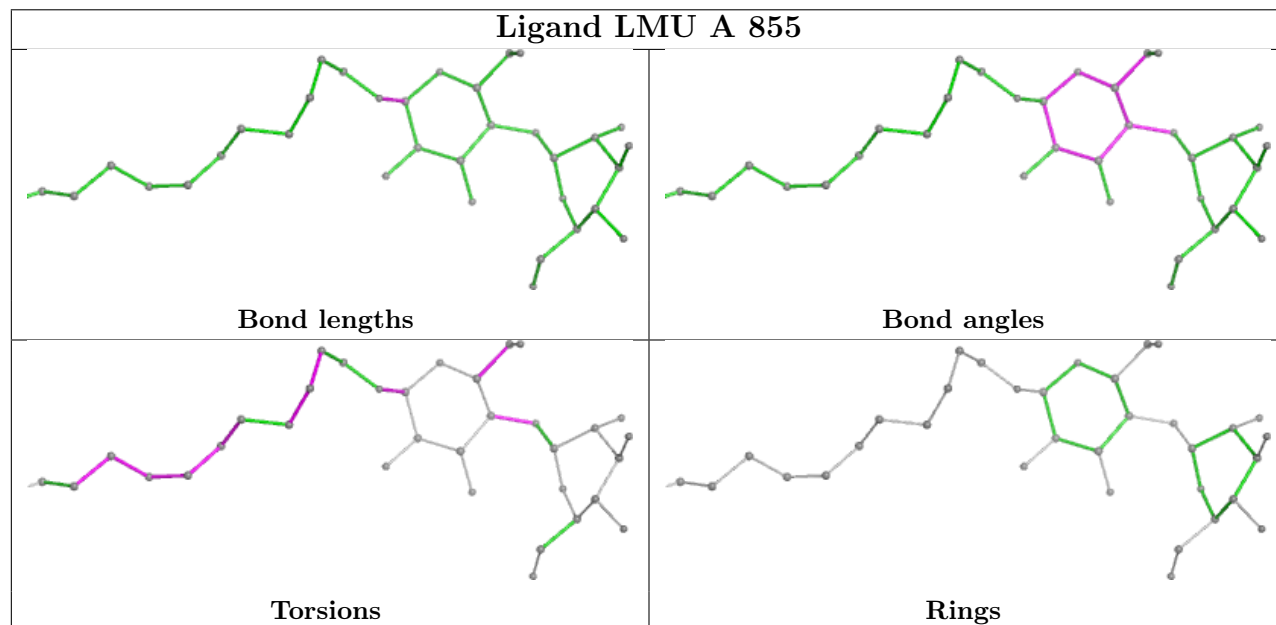


Ligand CLA B 841

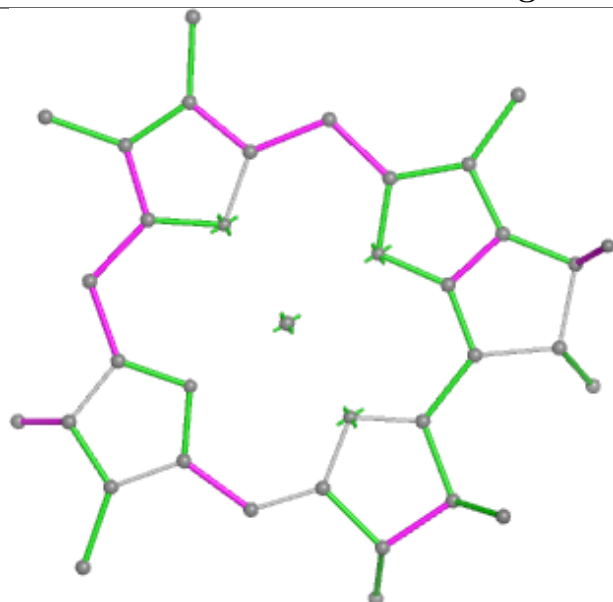


Ligand BCR 2 318

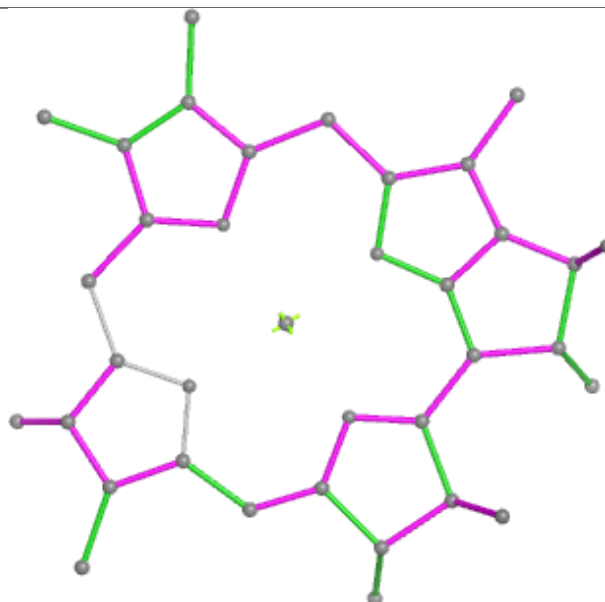


Ligand BCR I 103**Ligand LMU A 855**

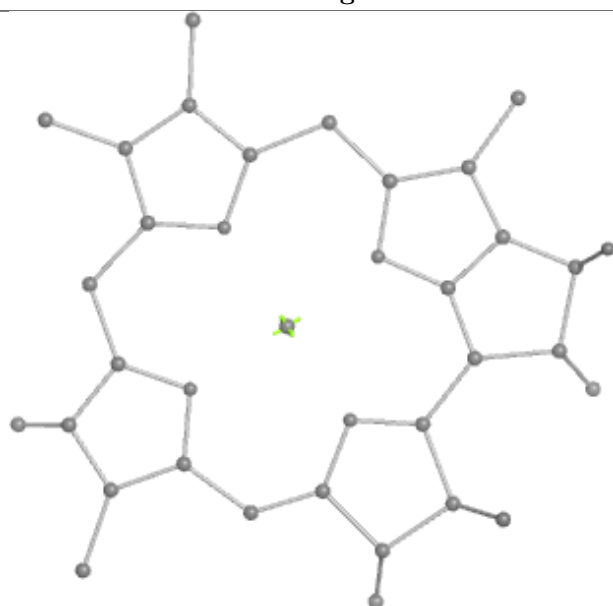
Ligand CLA 1 205



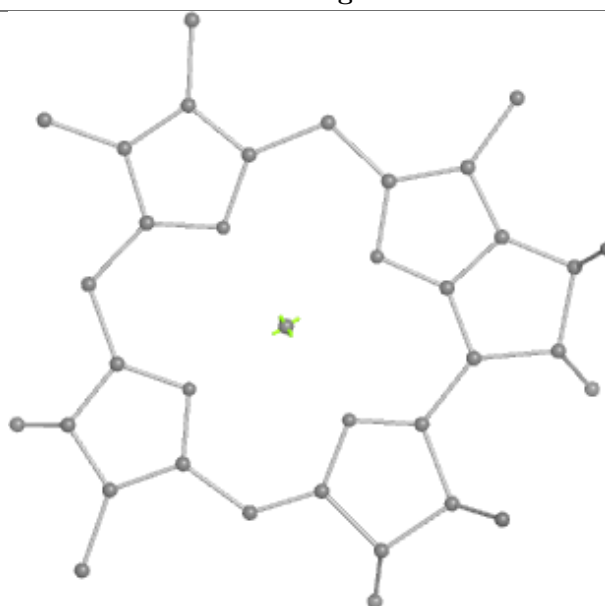
Bond lengths



Bond angles

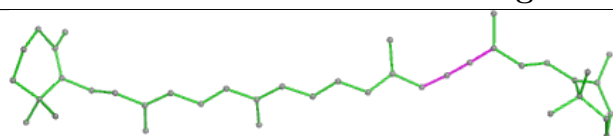


Torsions

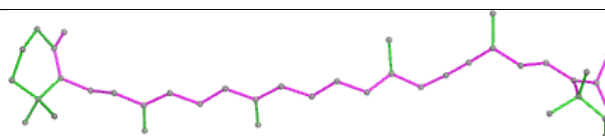


Rings

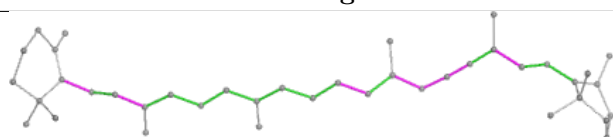
Ligand BCR J 102



Bond lengths



Bond angles

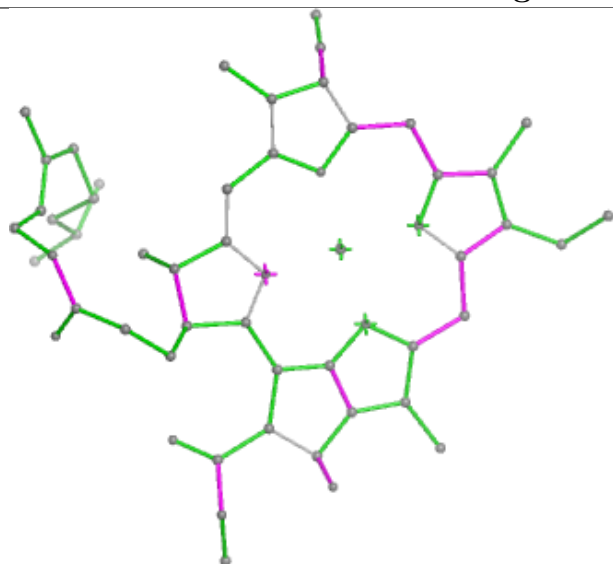


Torsions

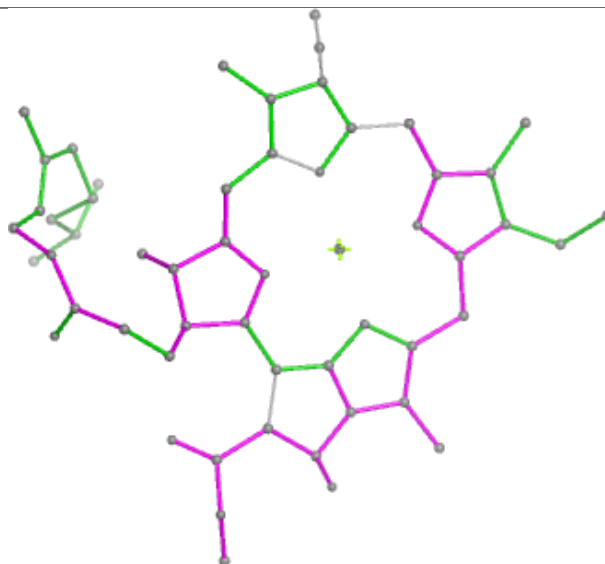


Rings

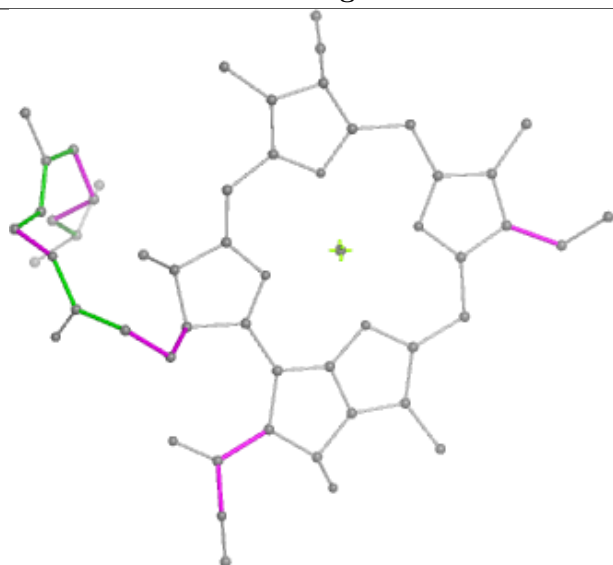
Ligand CLA H 101



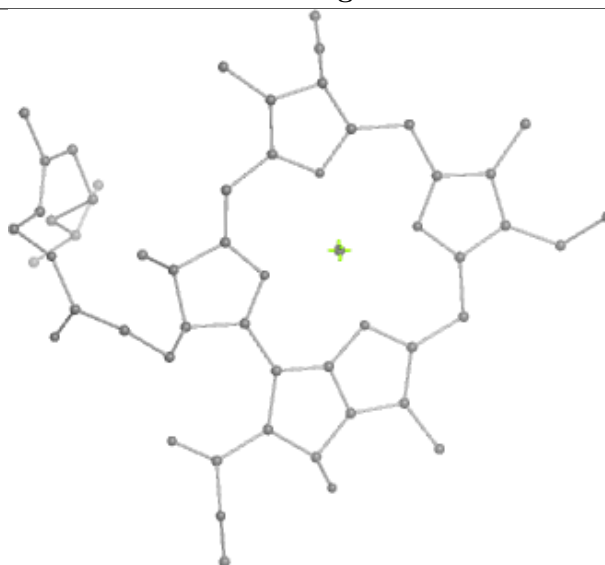
Bond lengths



Bond angles

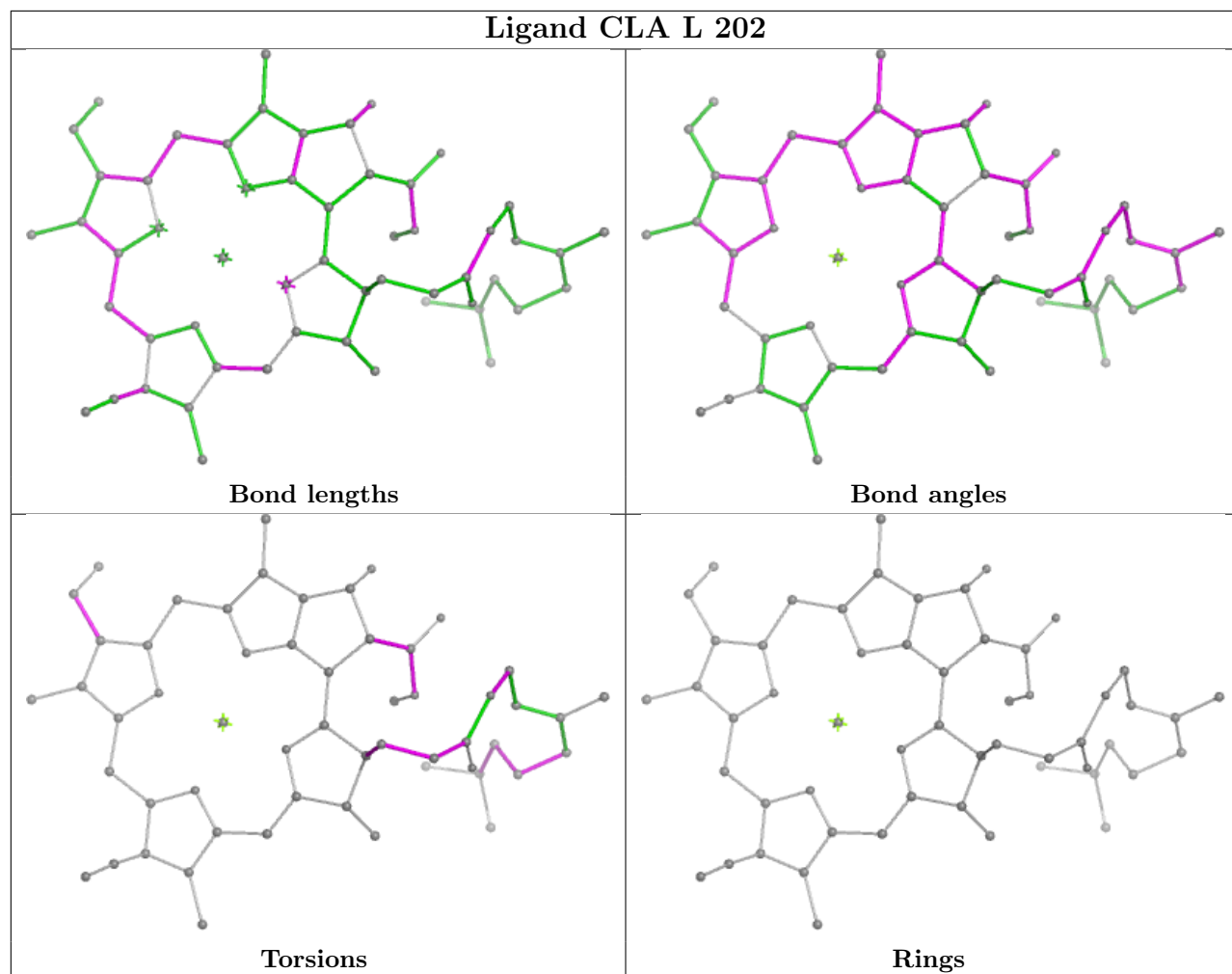


Torsions

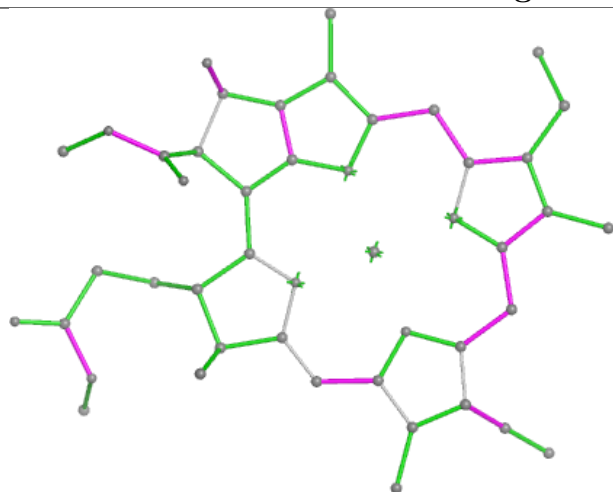


Rings

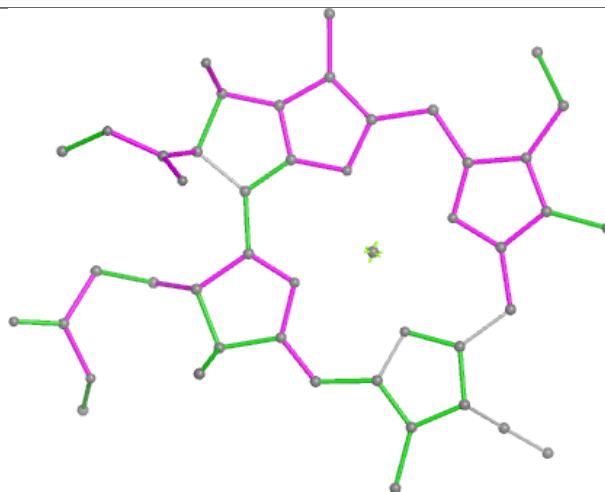
Ligand CLA L 202



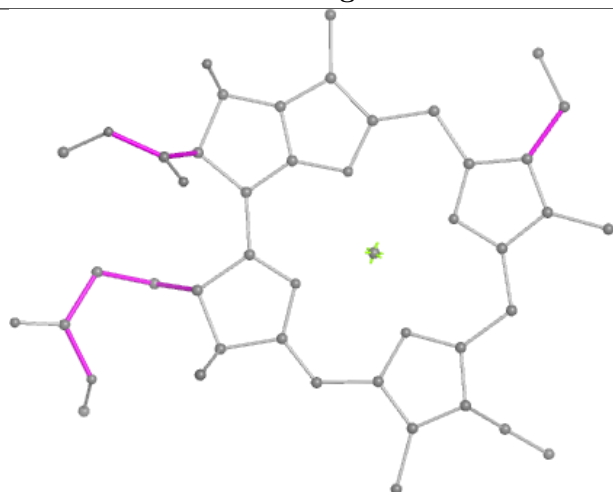
Ligand CLA B 817



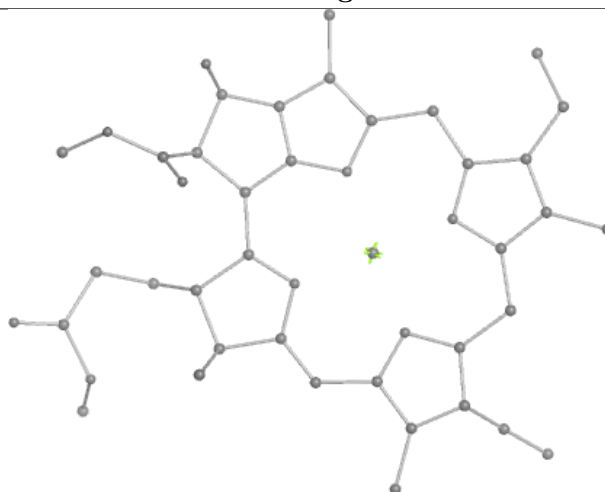
Bond lengths



Bond angles

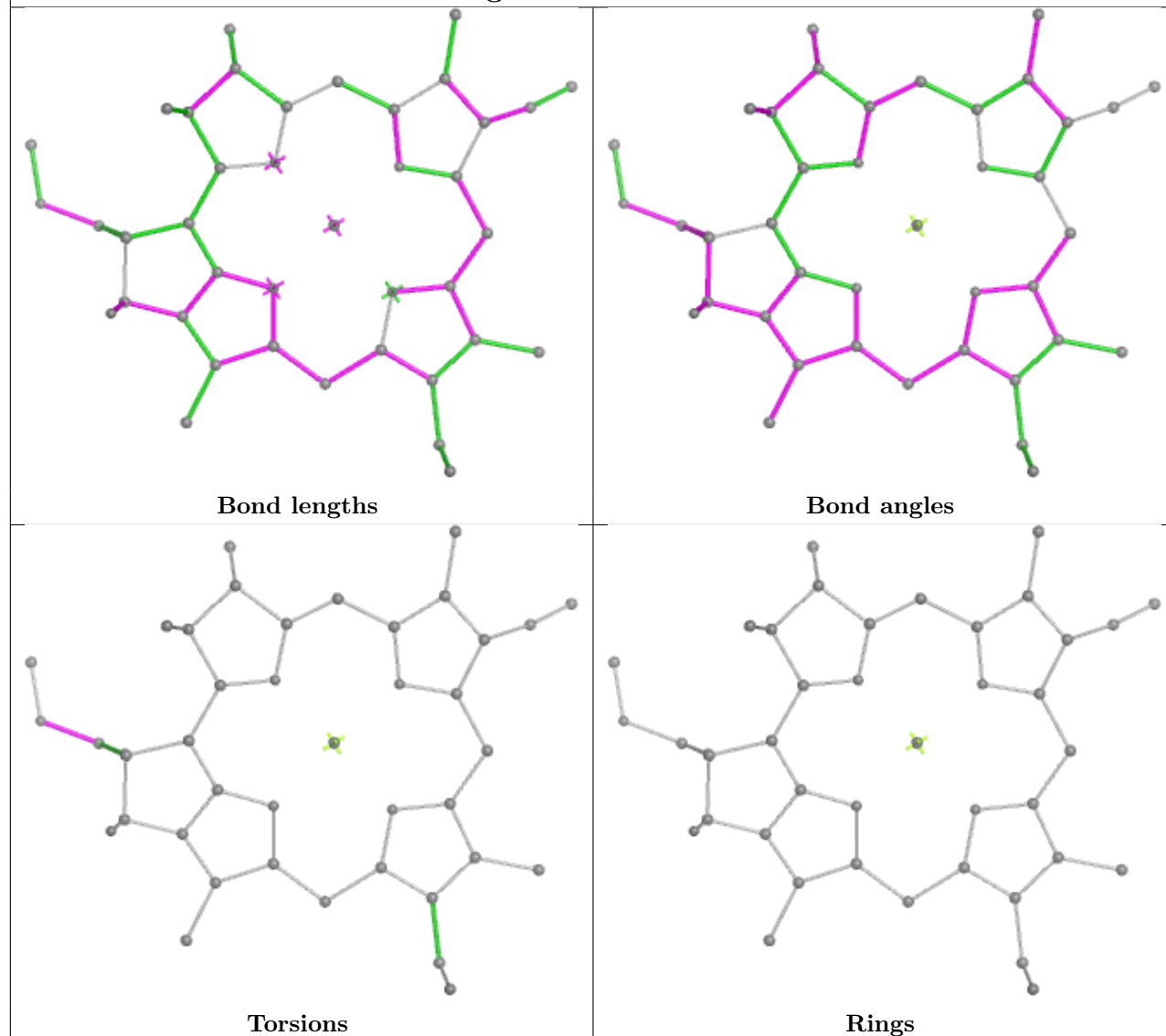


Torsions

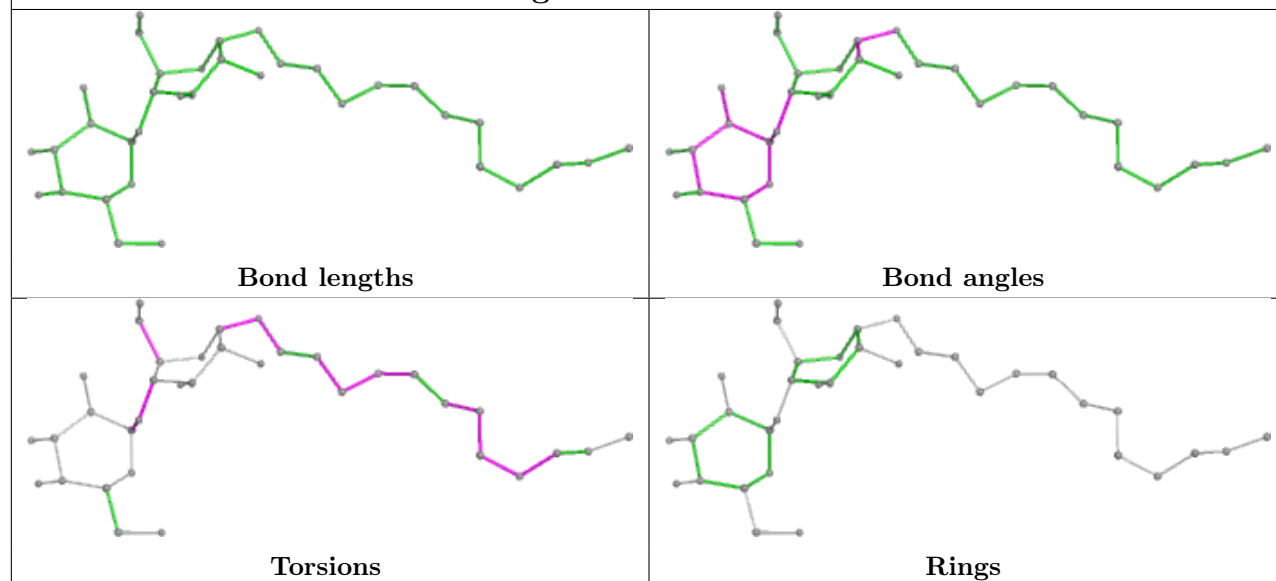


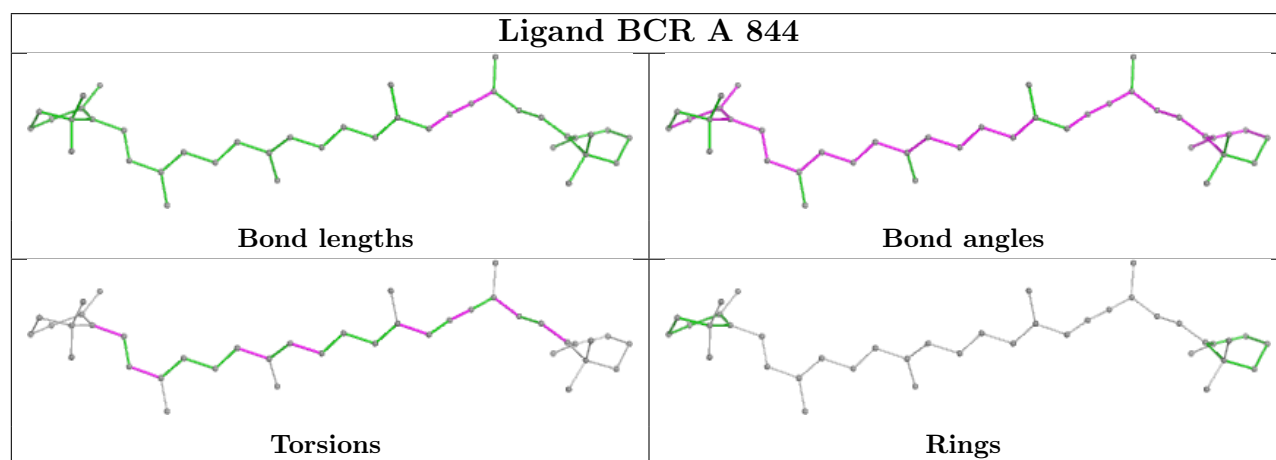
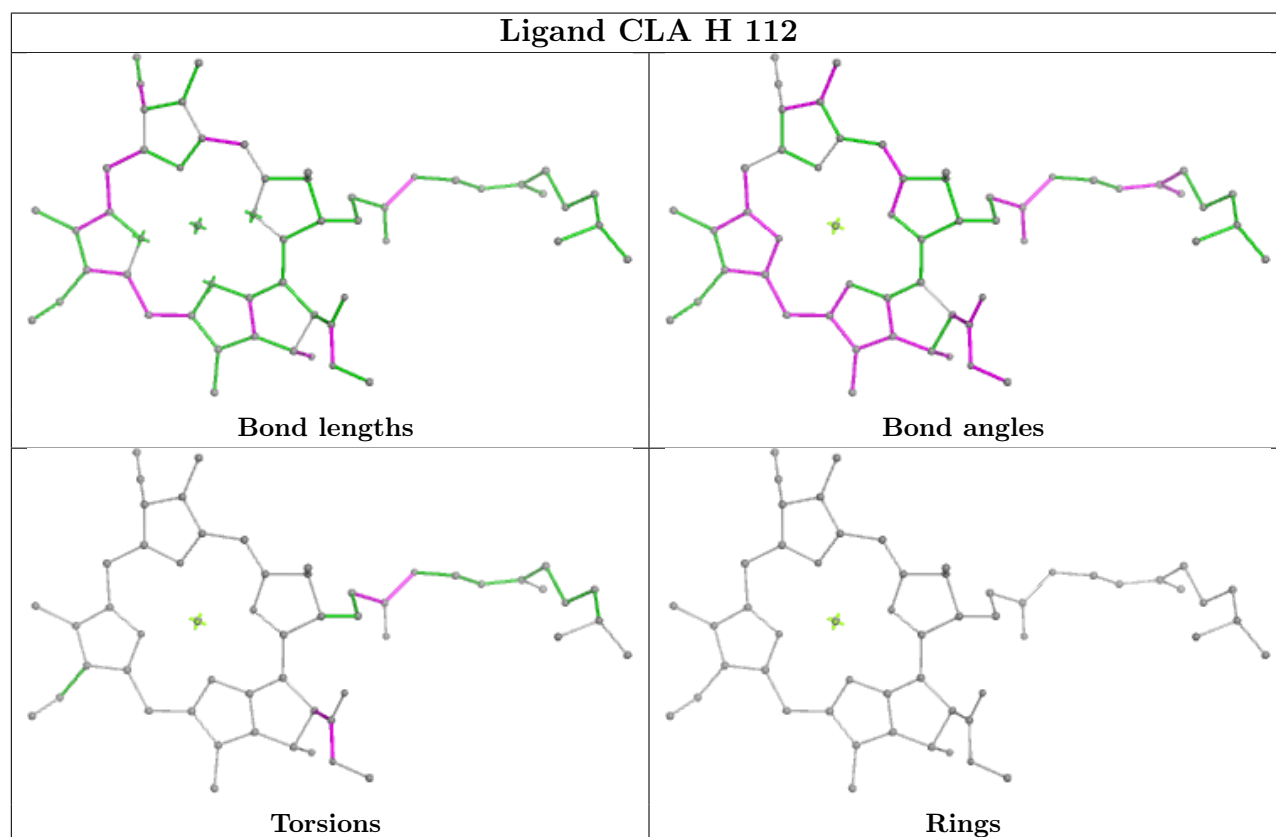
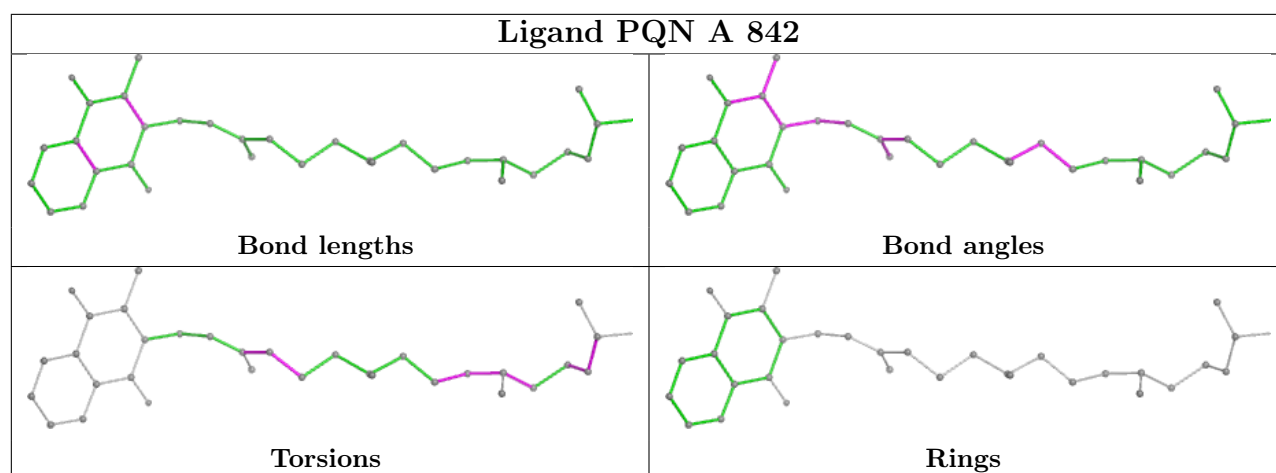
Rings

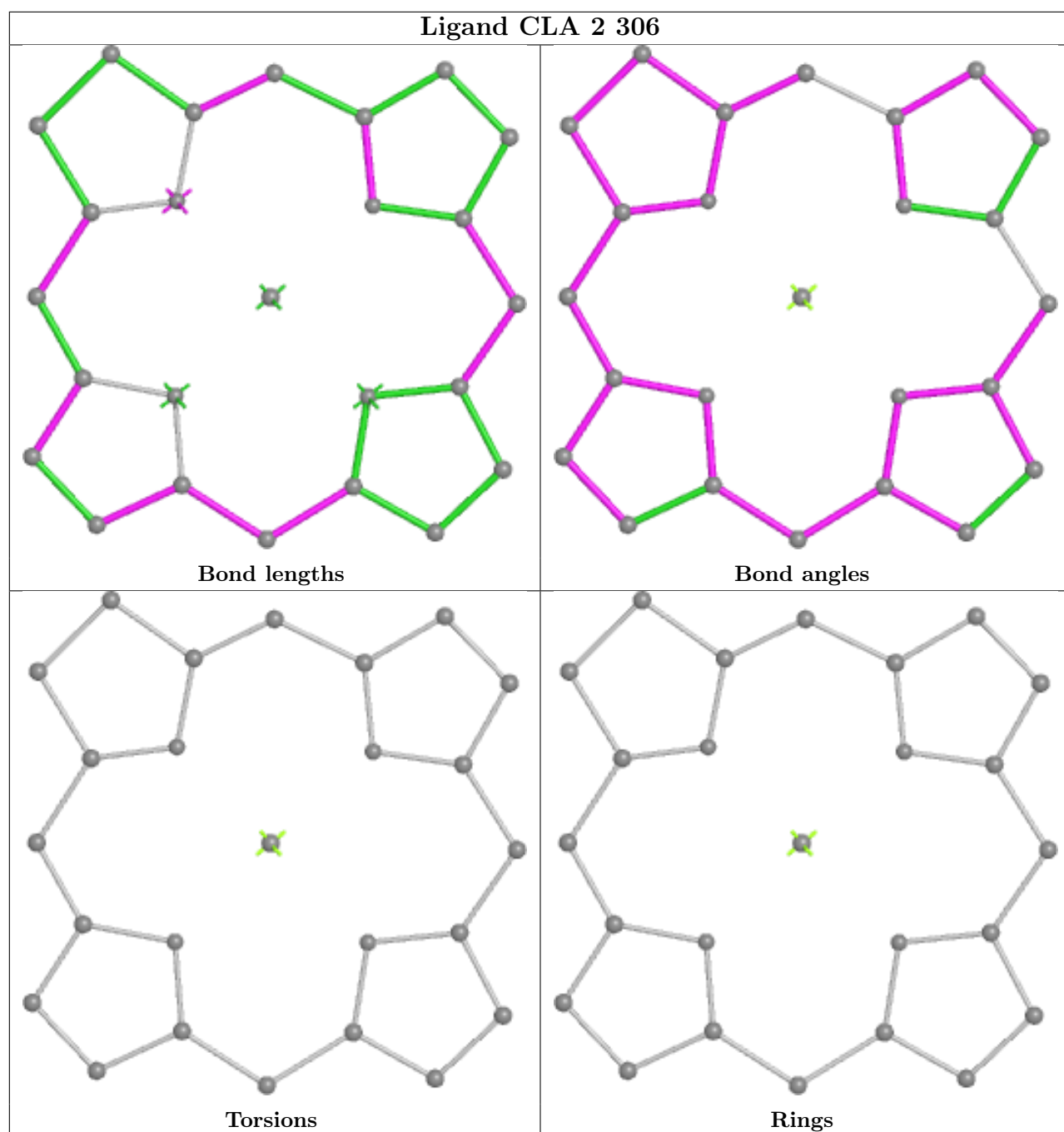
Ligand CLA B 819



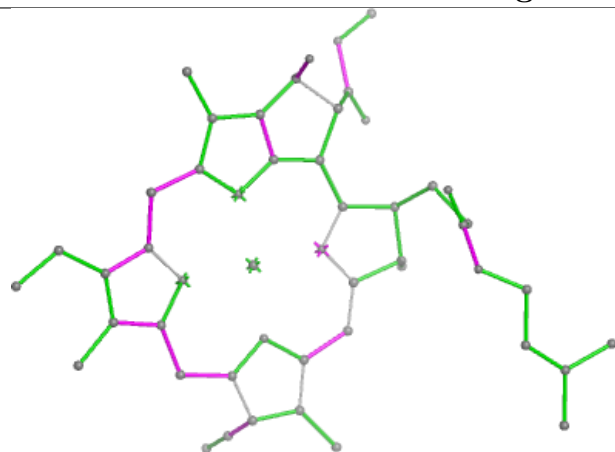
Ligand LMU 4 321



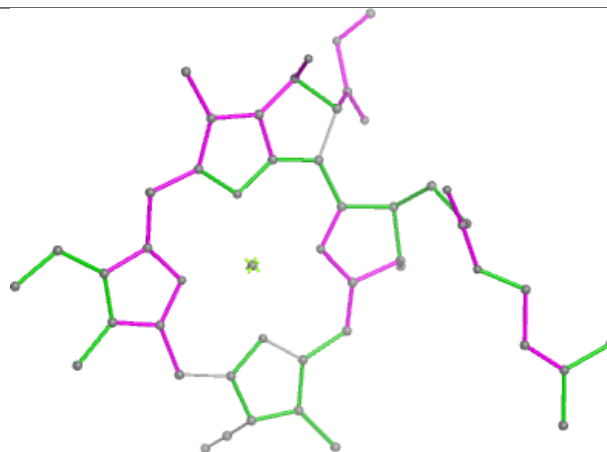




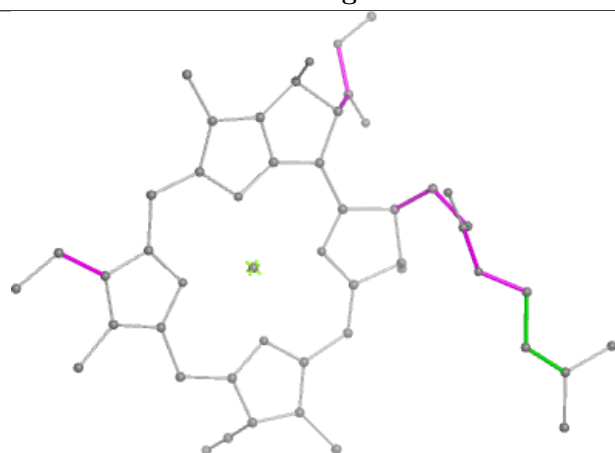
Ligand CLA A 832



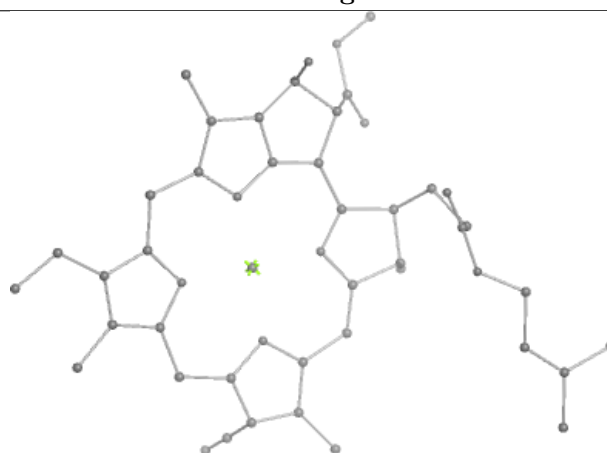
Bond lengths



Bond angles

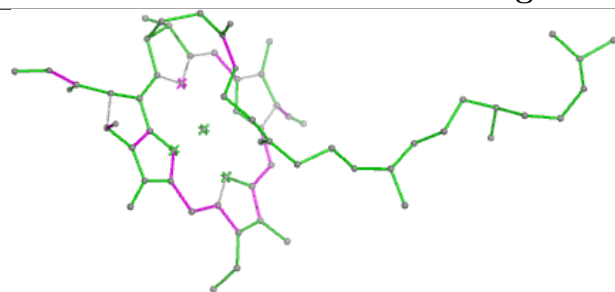


Torsions

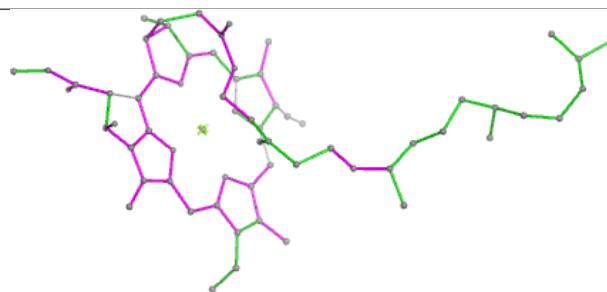


Rings

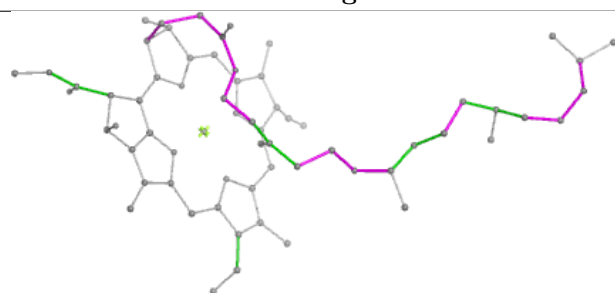
Ligand CLA A 838



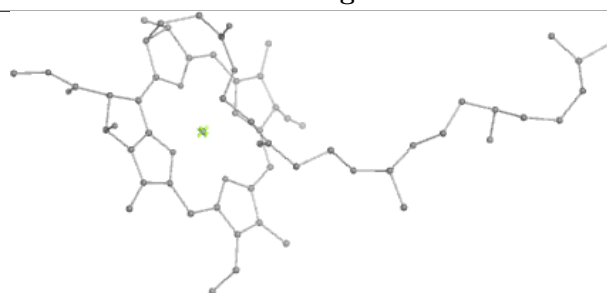
Bond lengths



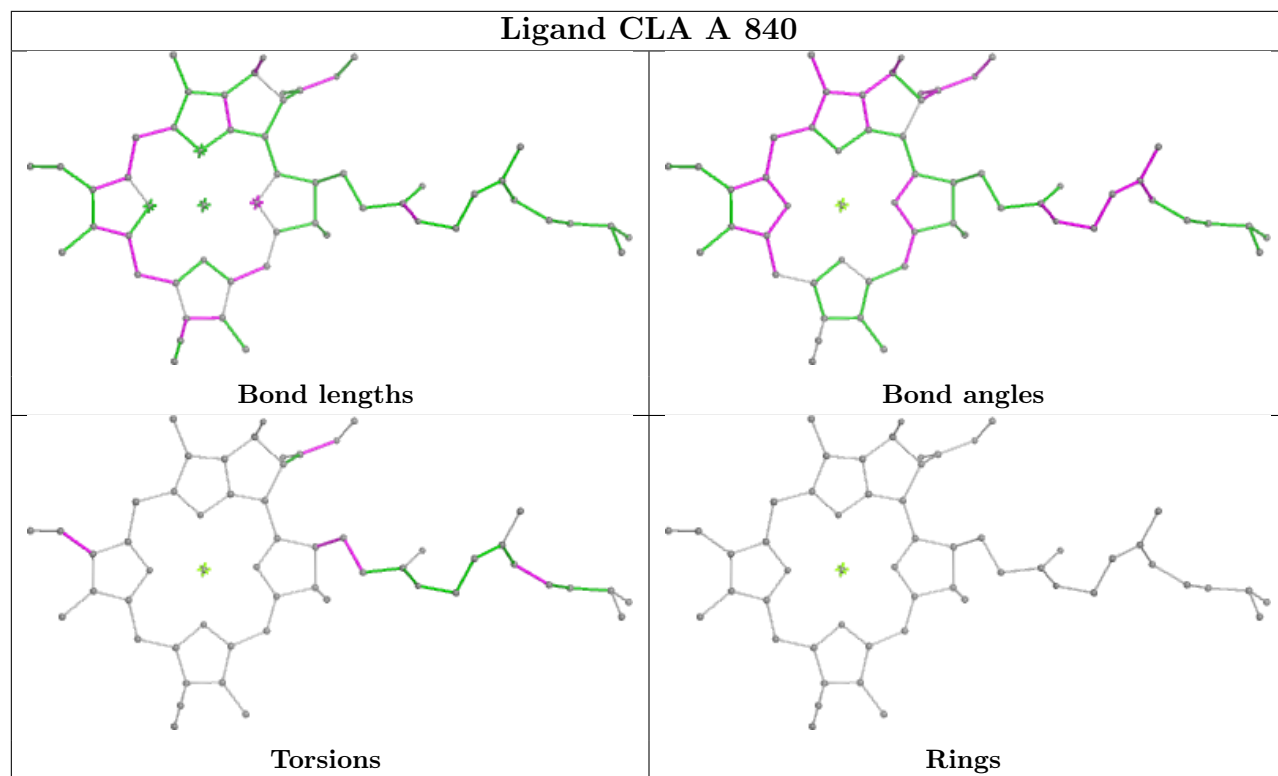
Bond angles



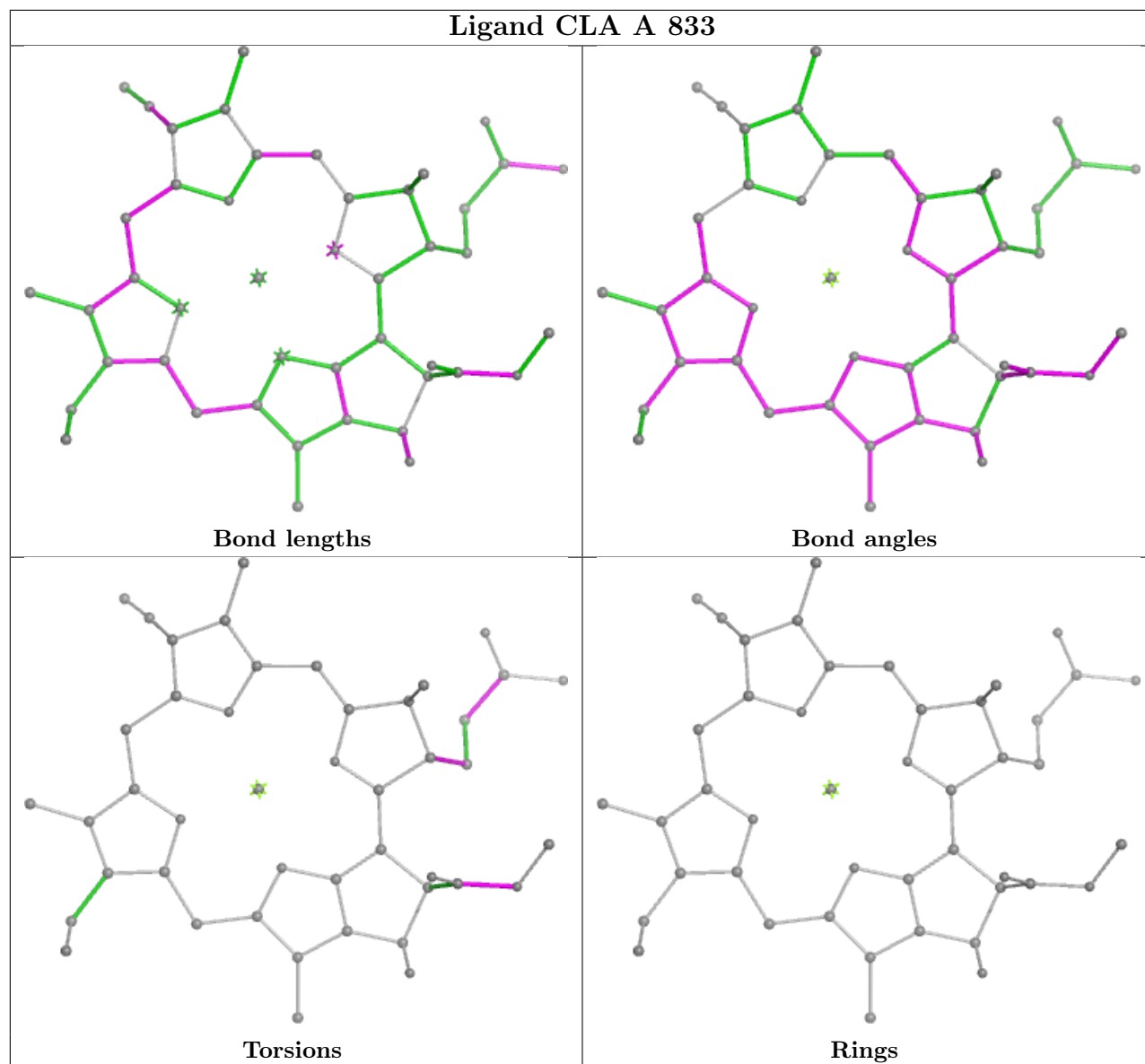
Torsions

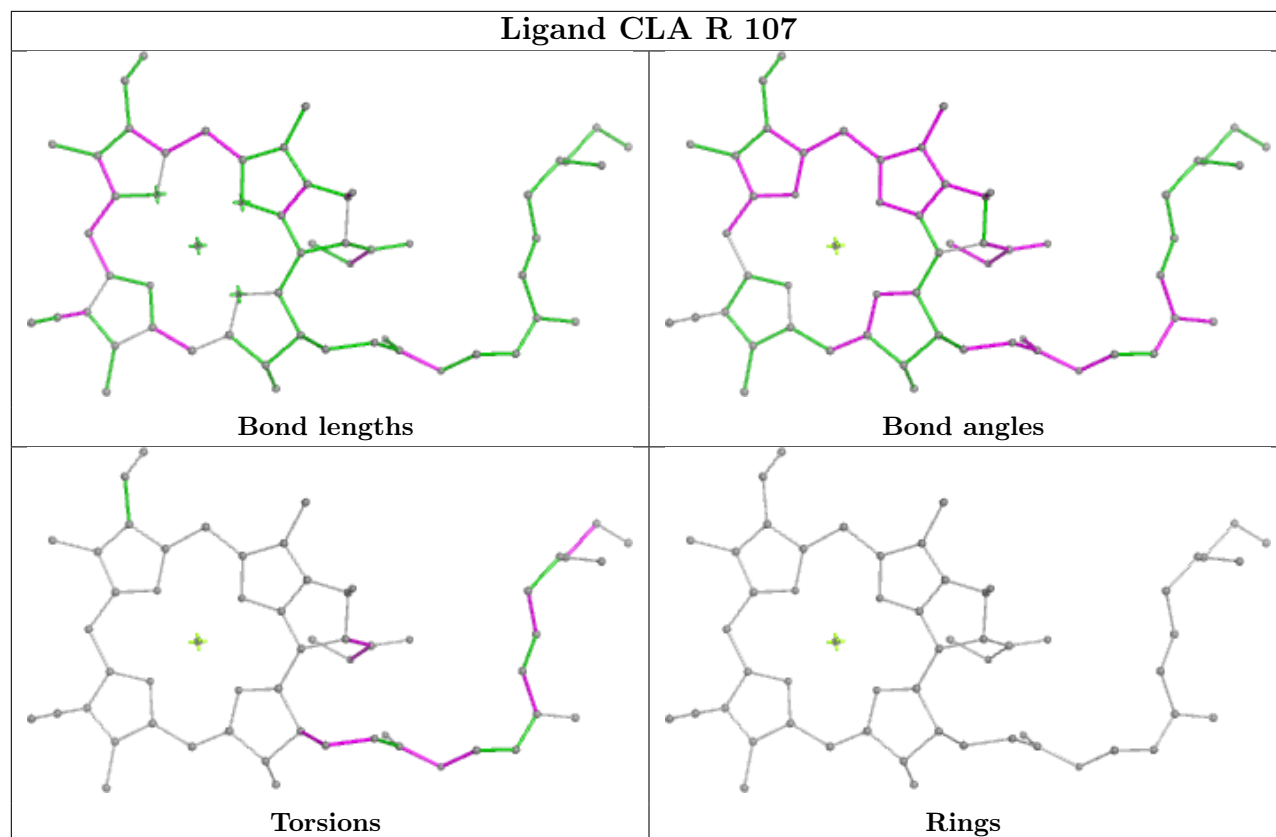


Rings

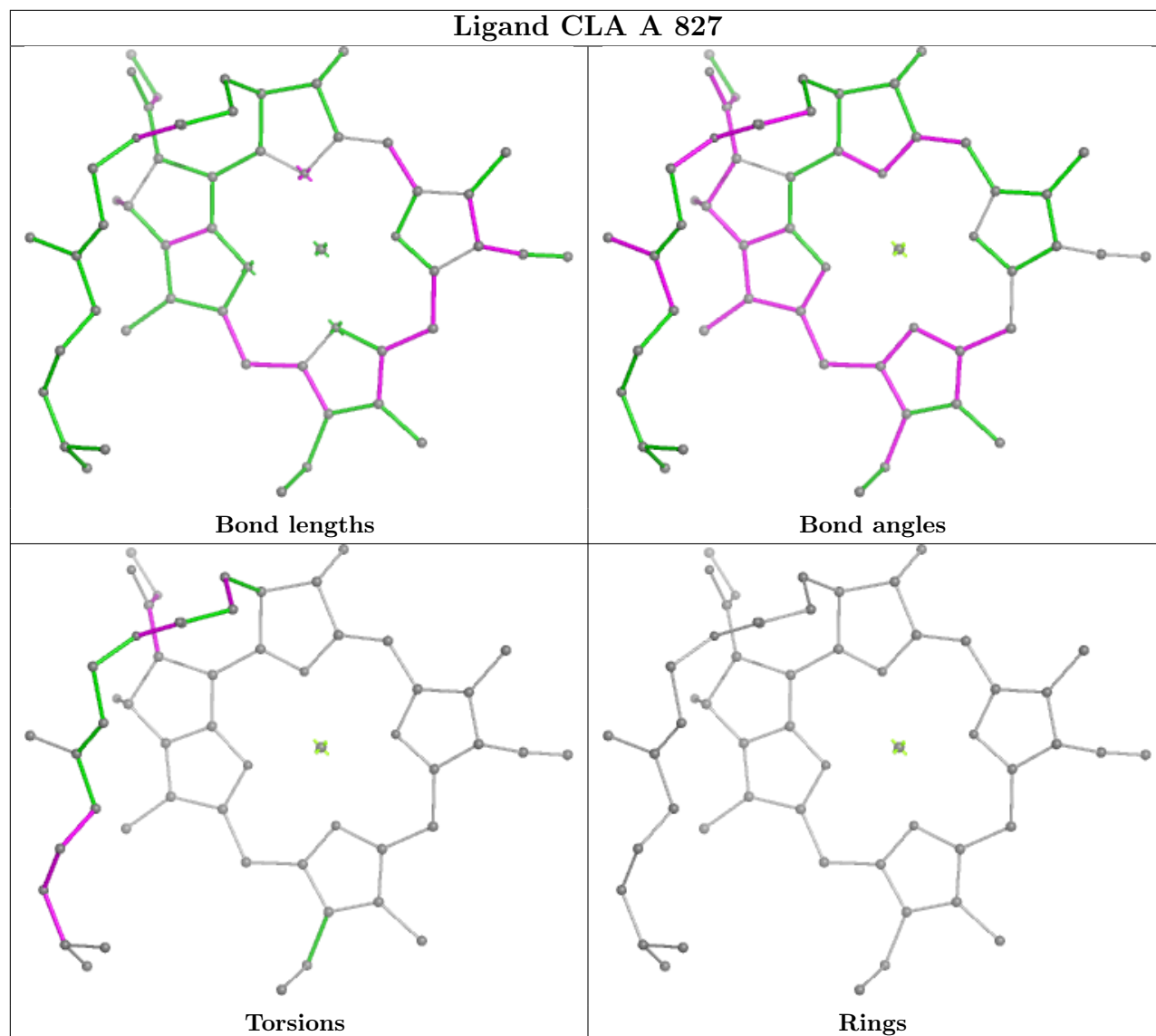


Ligand CLA A 833

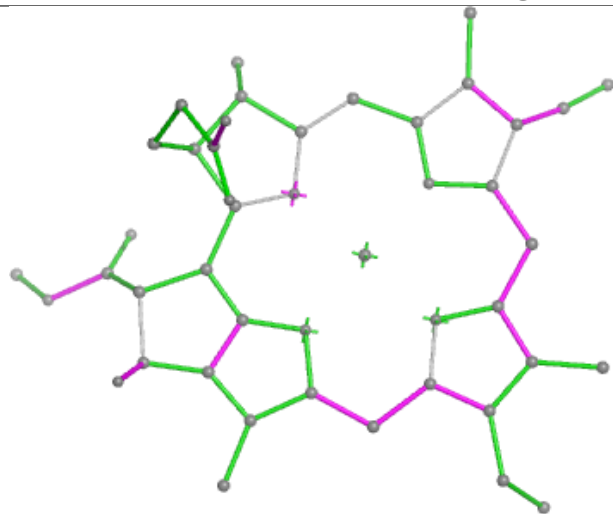




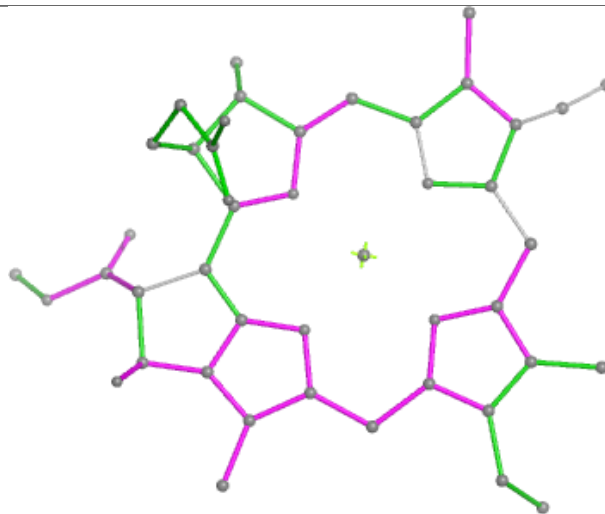
Ligand CLA A 827



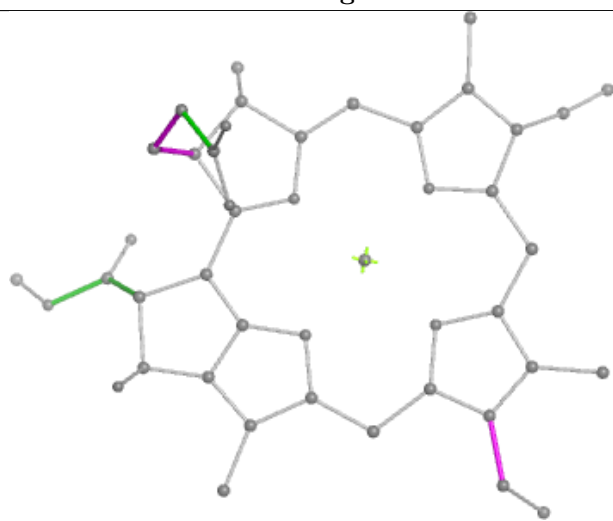
Ligand CLA B 807



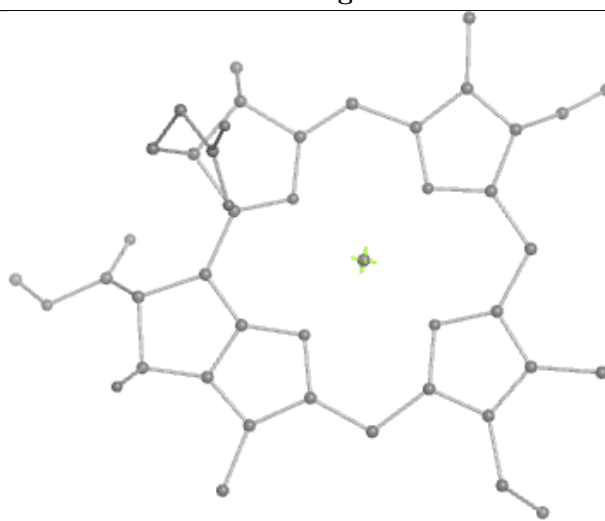
Bond lengths



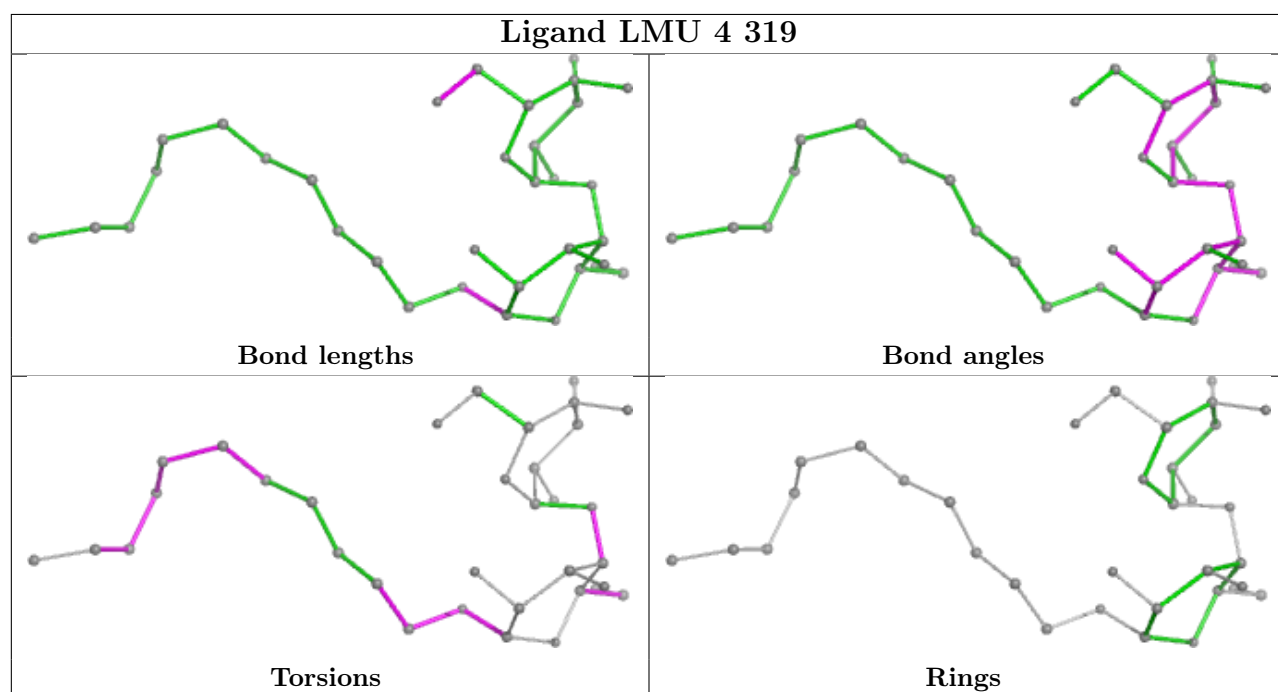
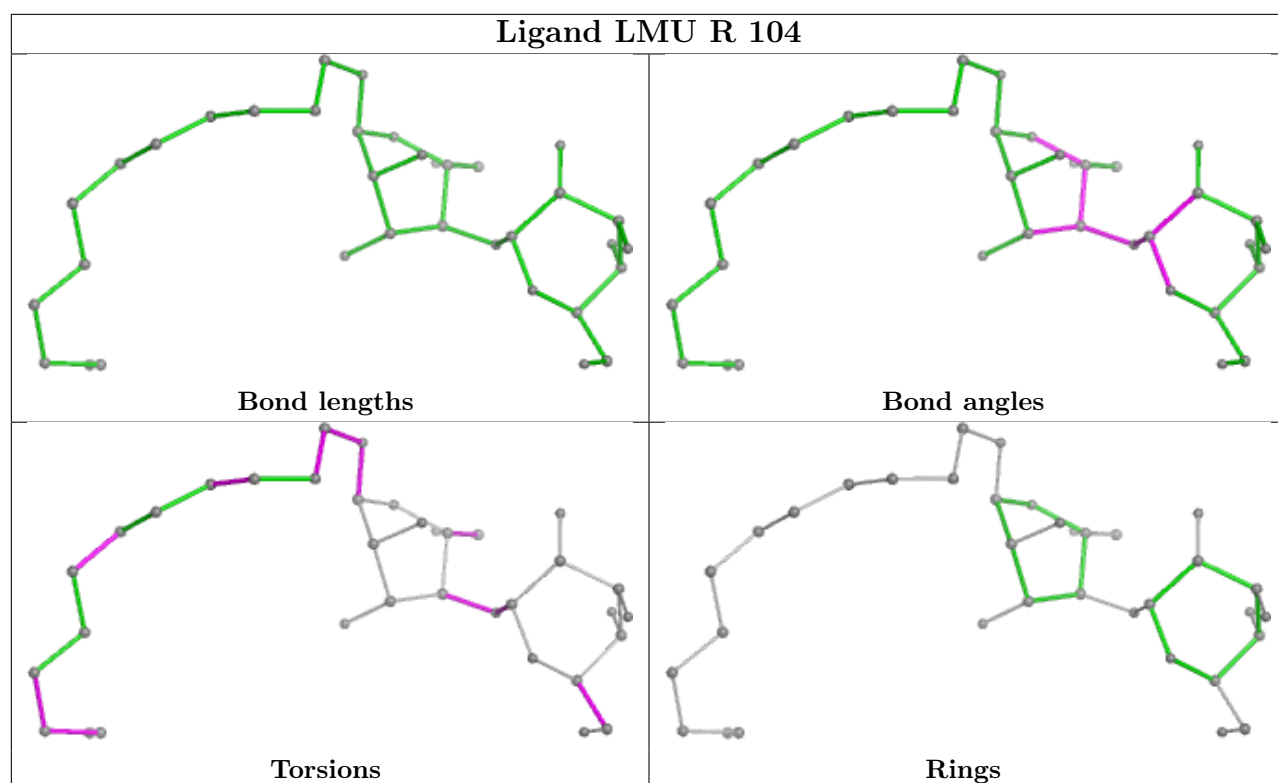
Bond angles



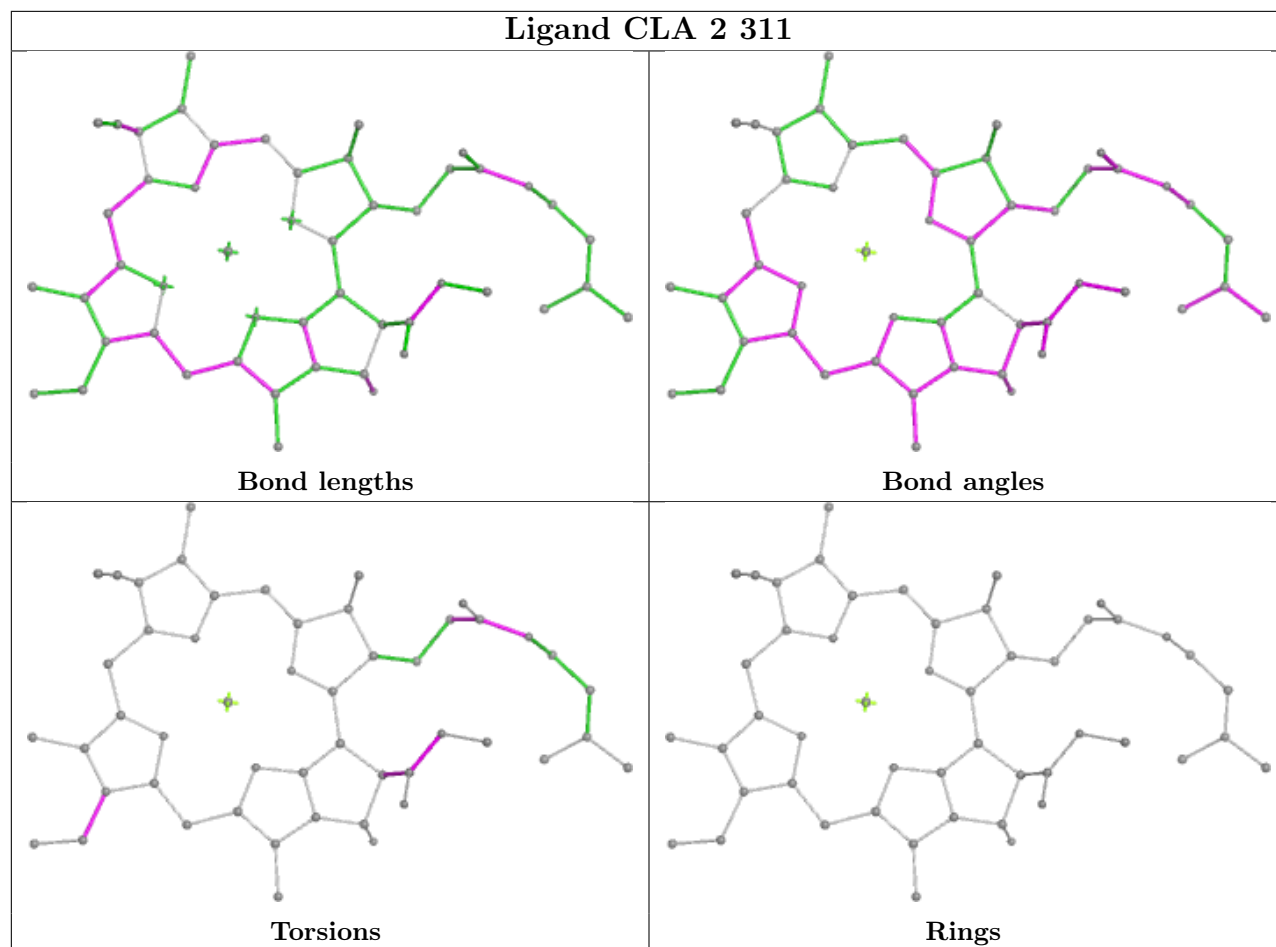
Torsions



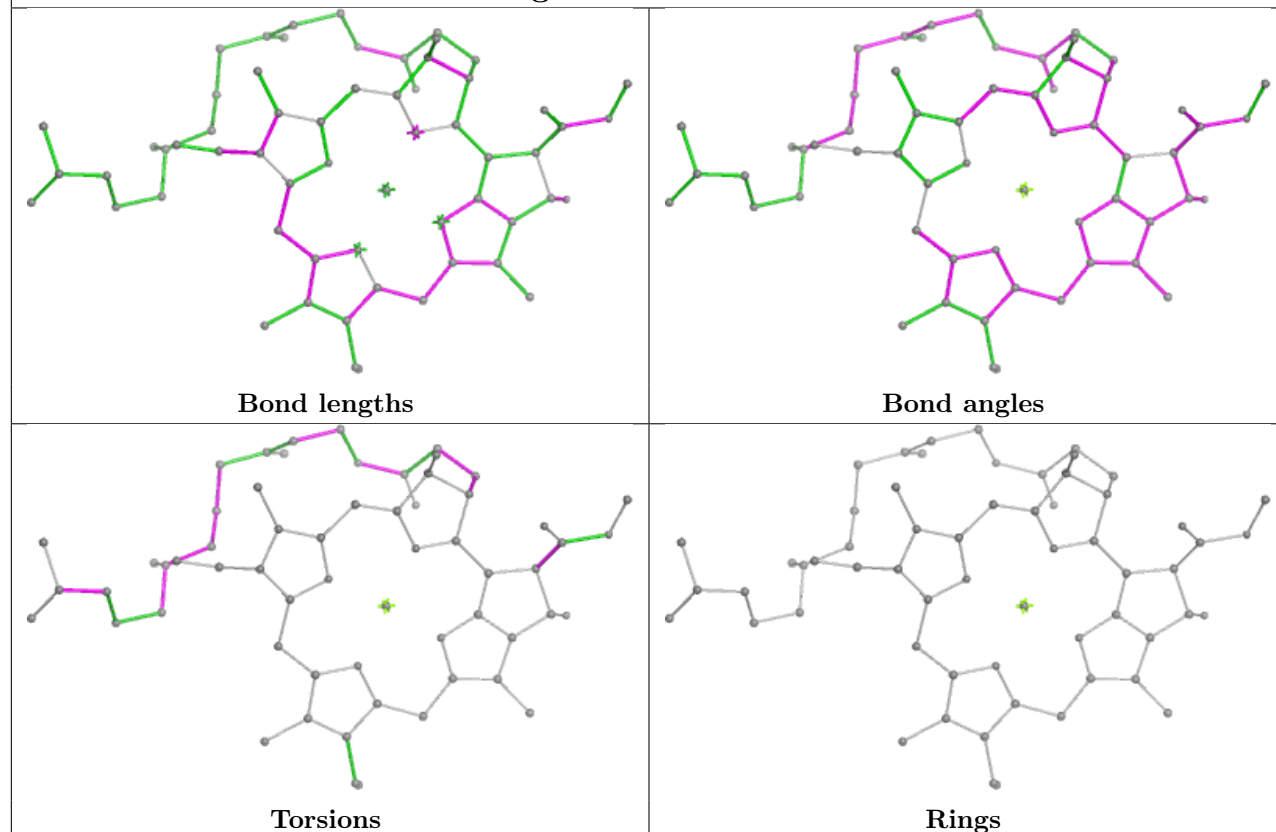
Rings



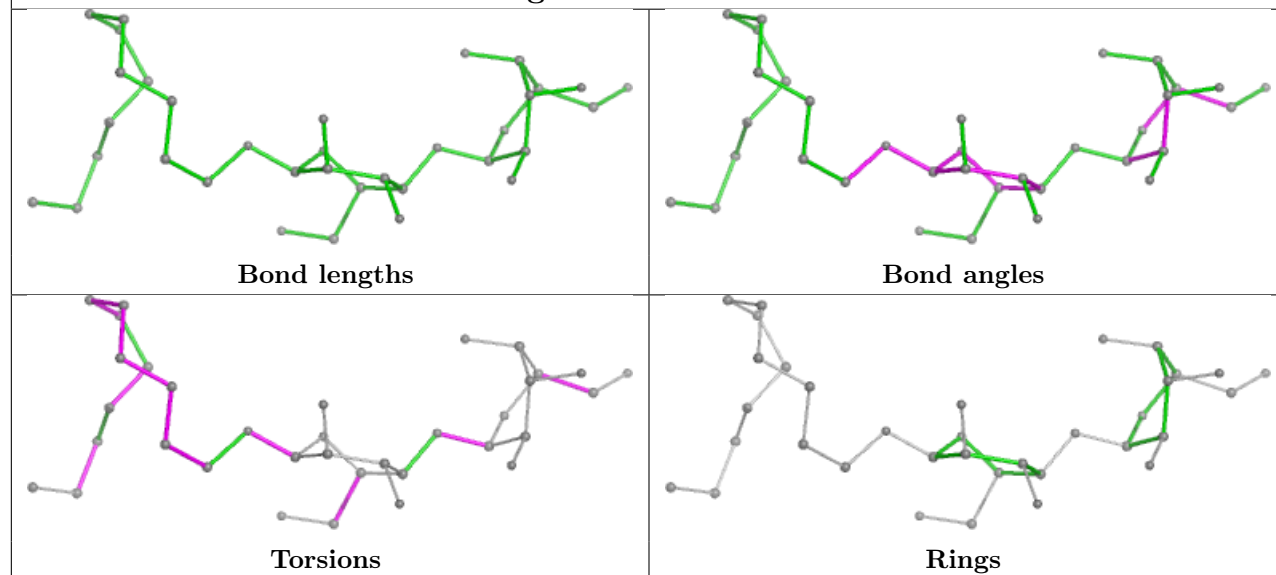
Ligand CLA 2 311



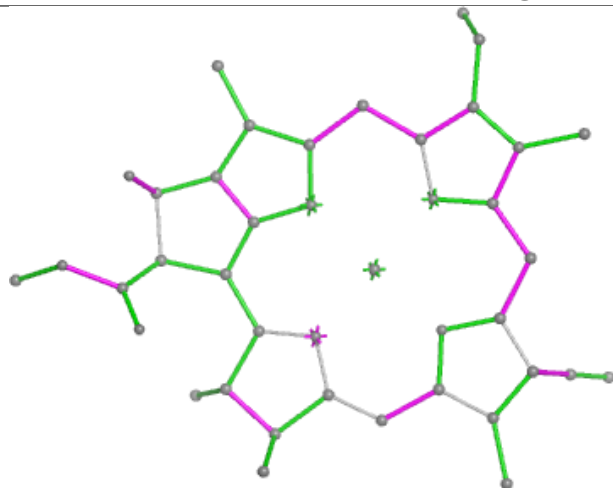
Ligand CLA A 818



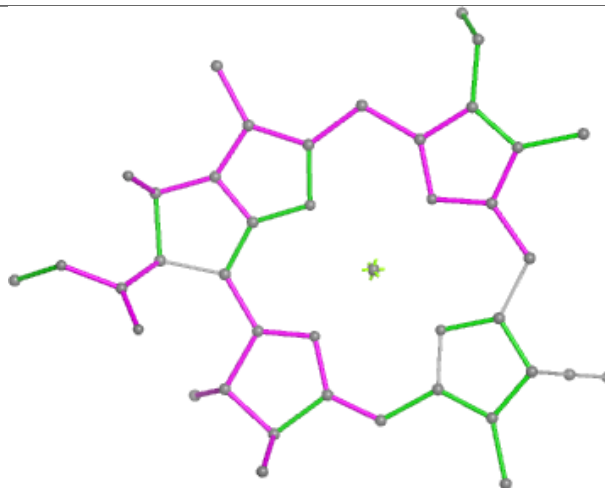
Ligand LMU A 854



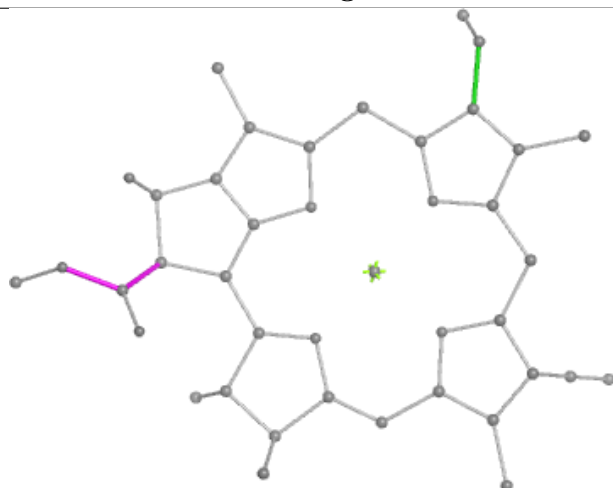
Ligand CLA F 206



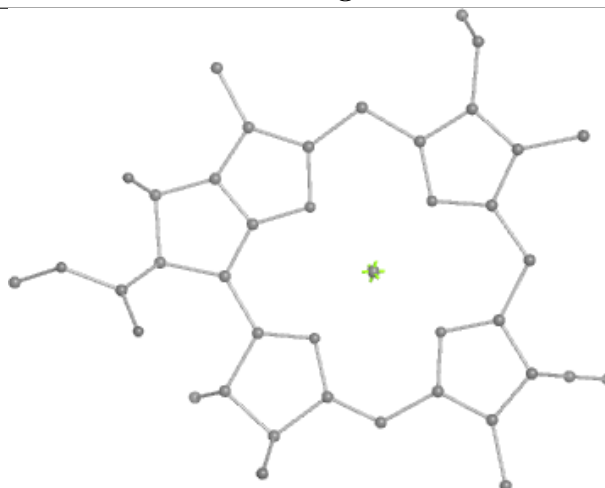
Bond lengths



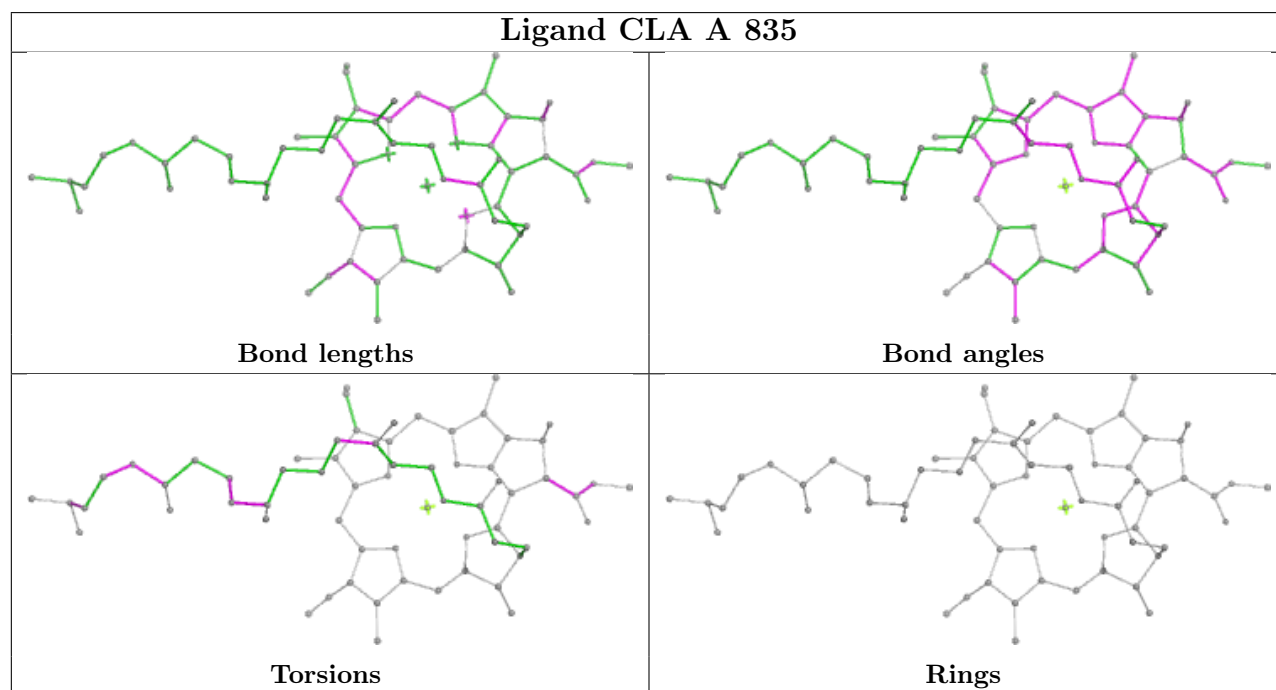
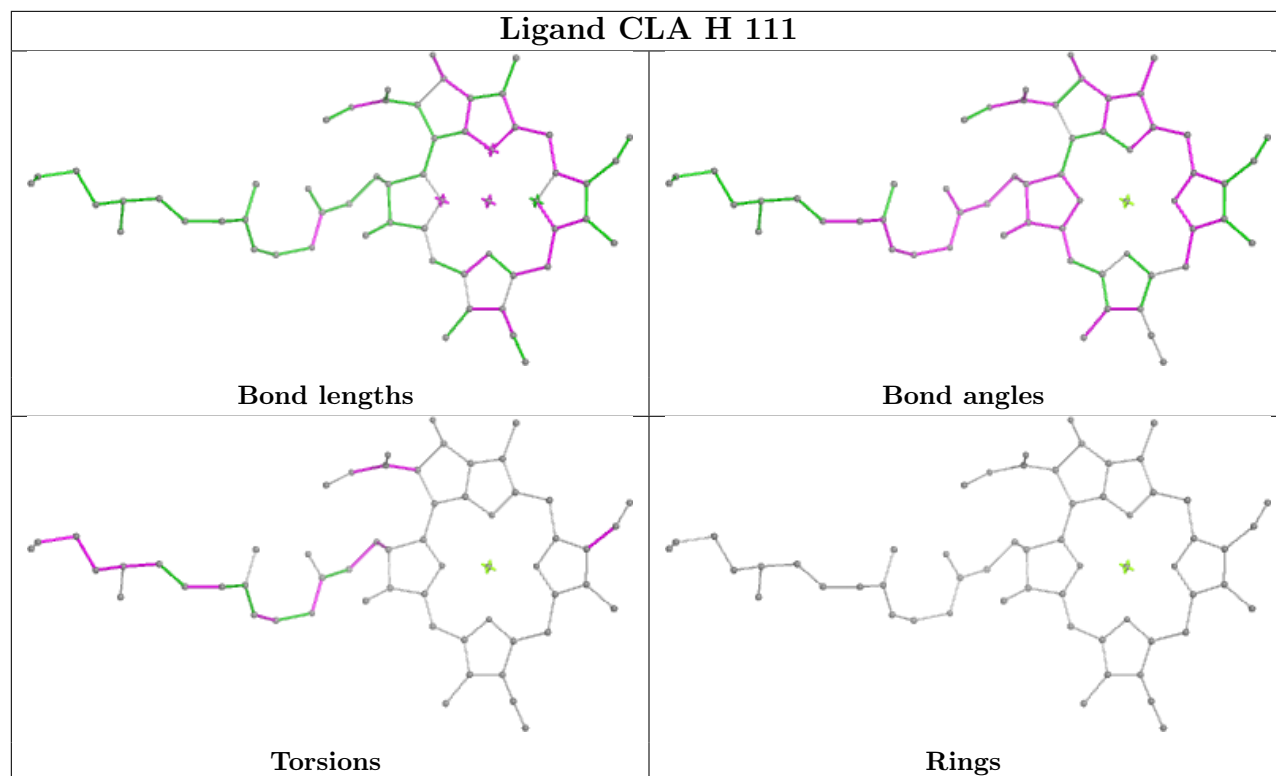
Bond angles

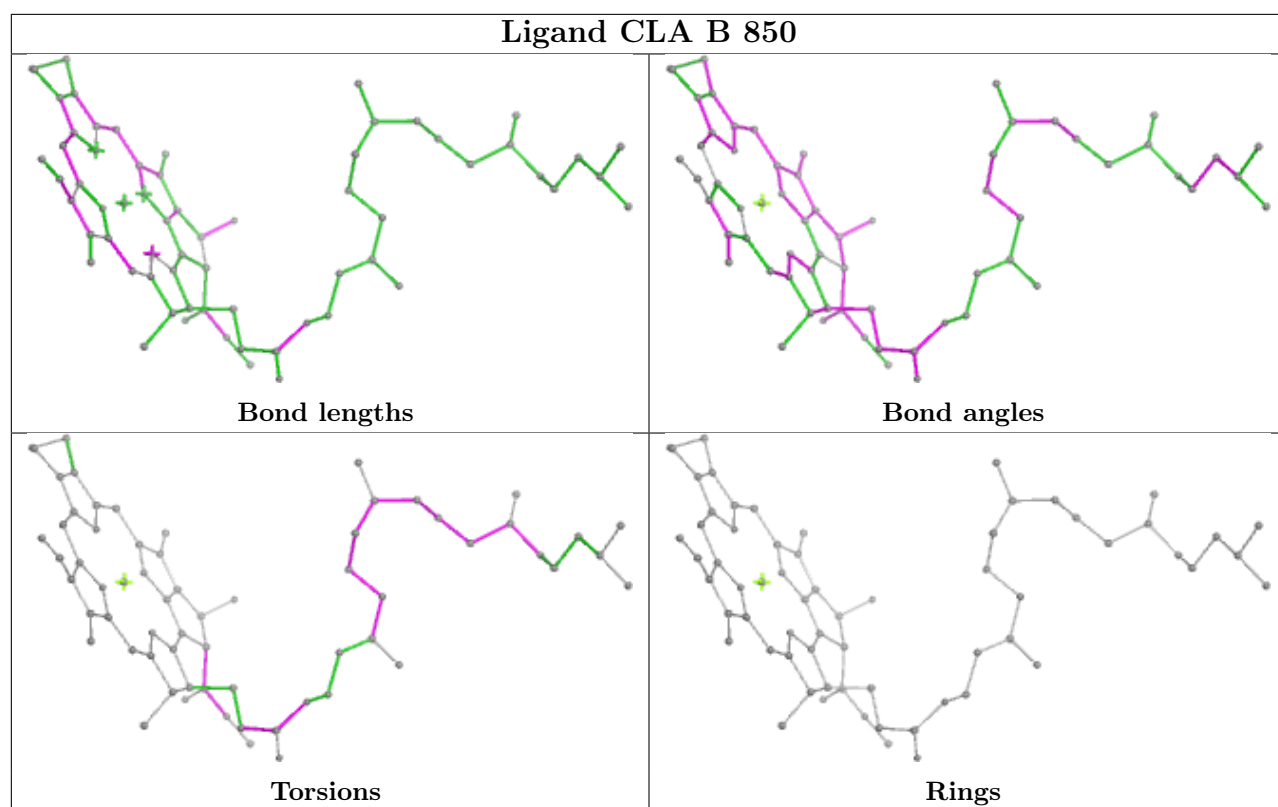


Torsions

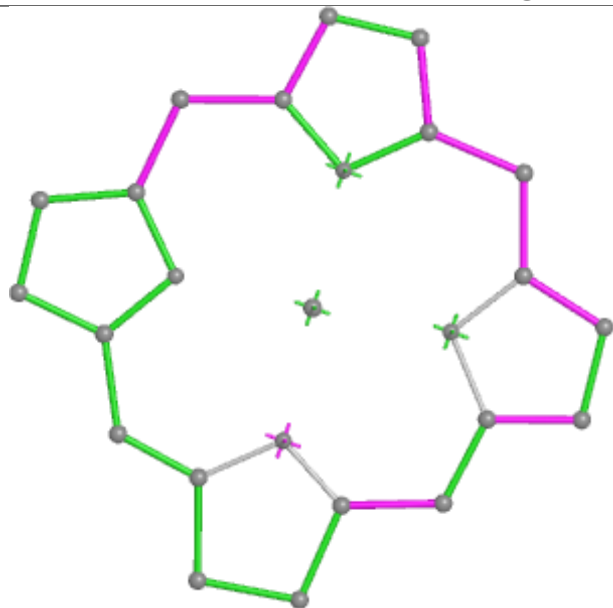


Rings

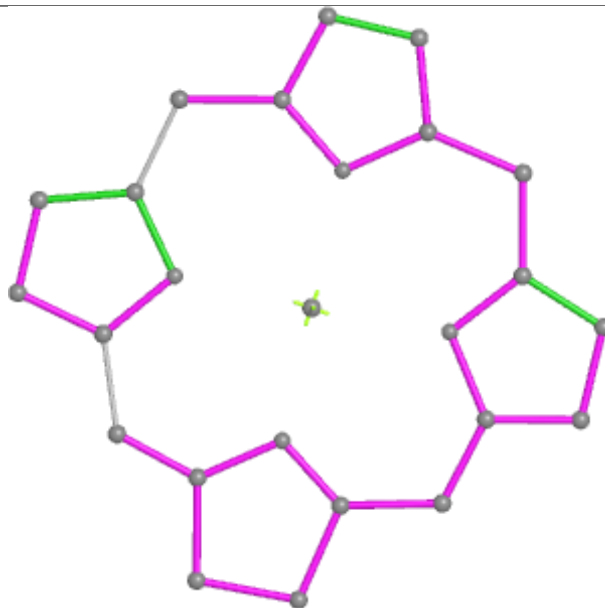




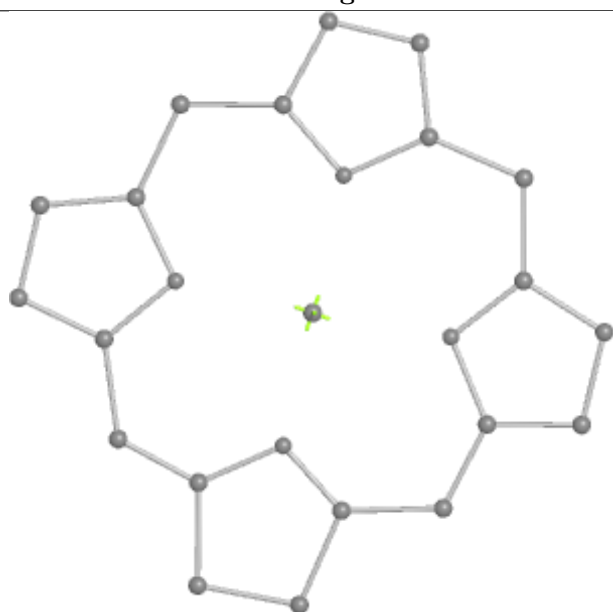
Ligand CLA 4 311



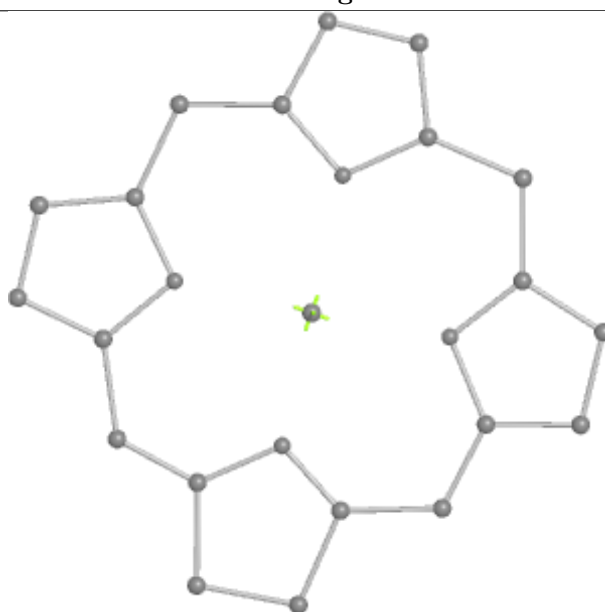
Bond lengths



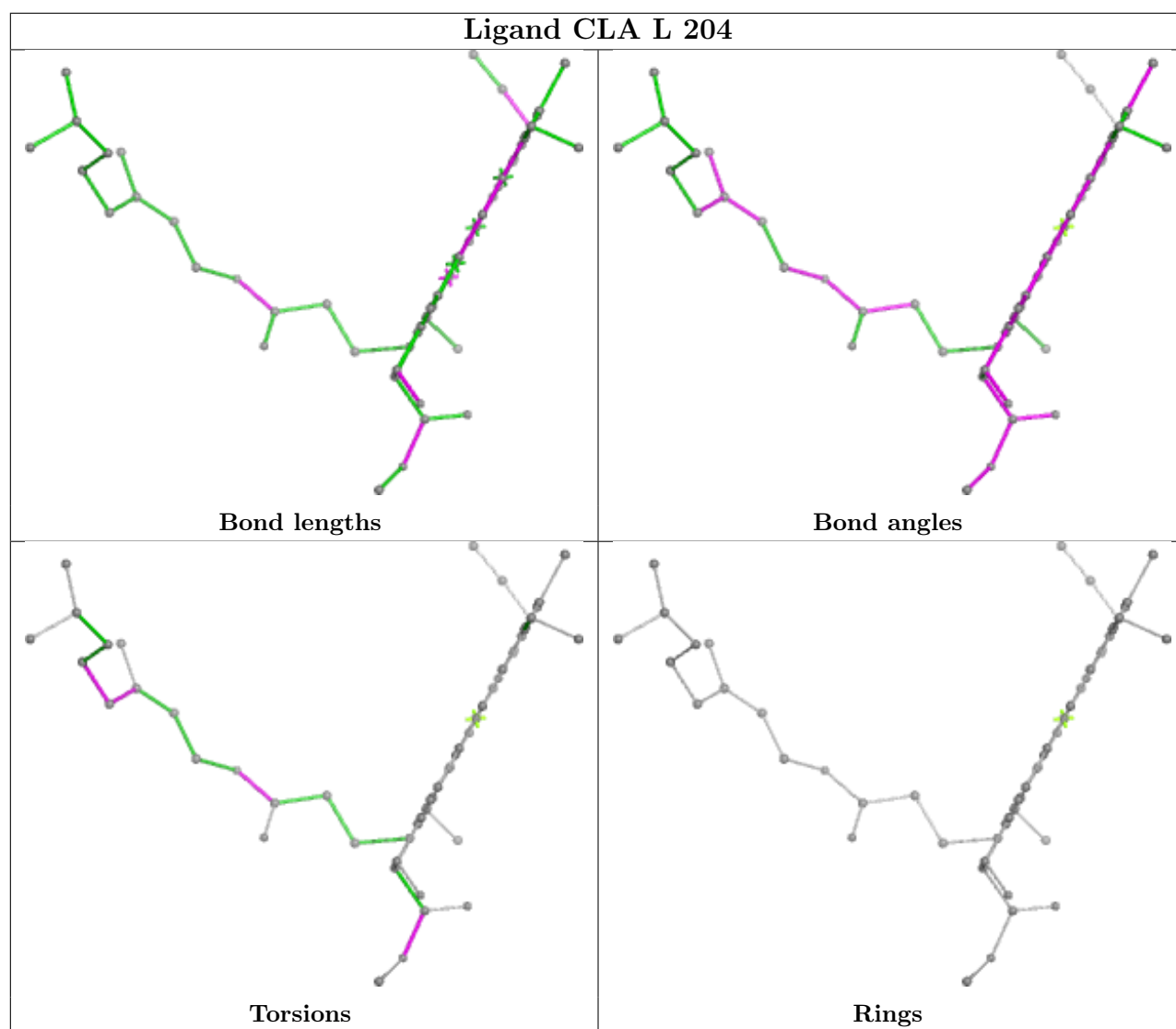
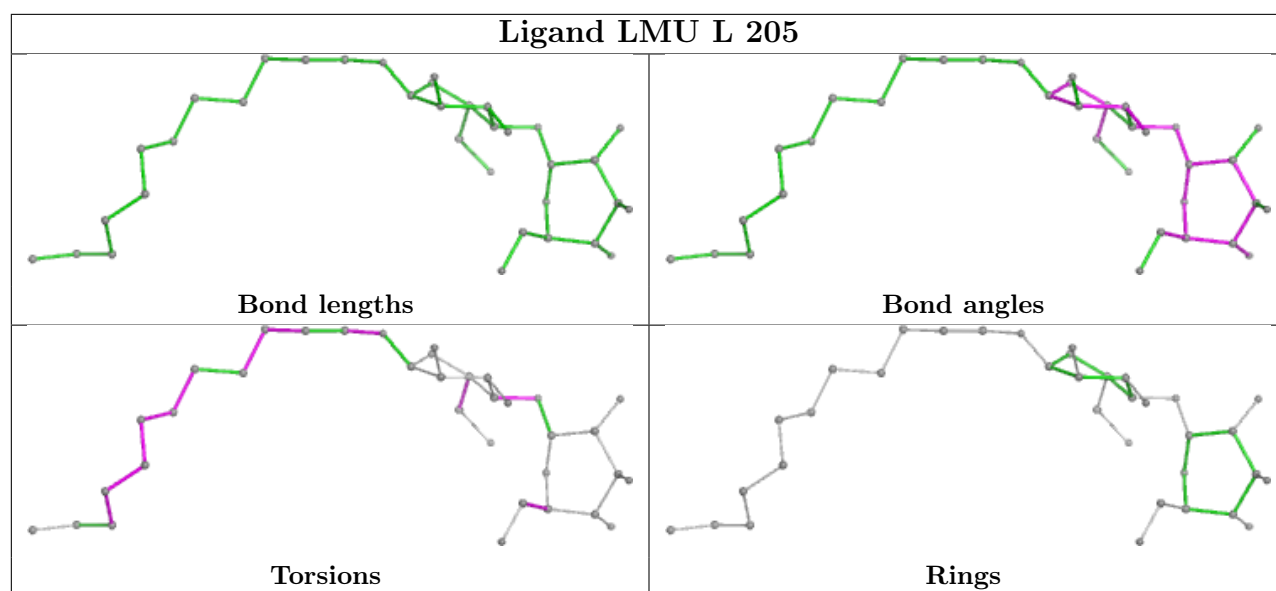
Bond angles



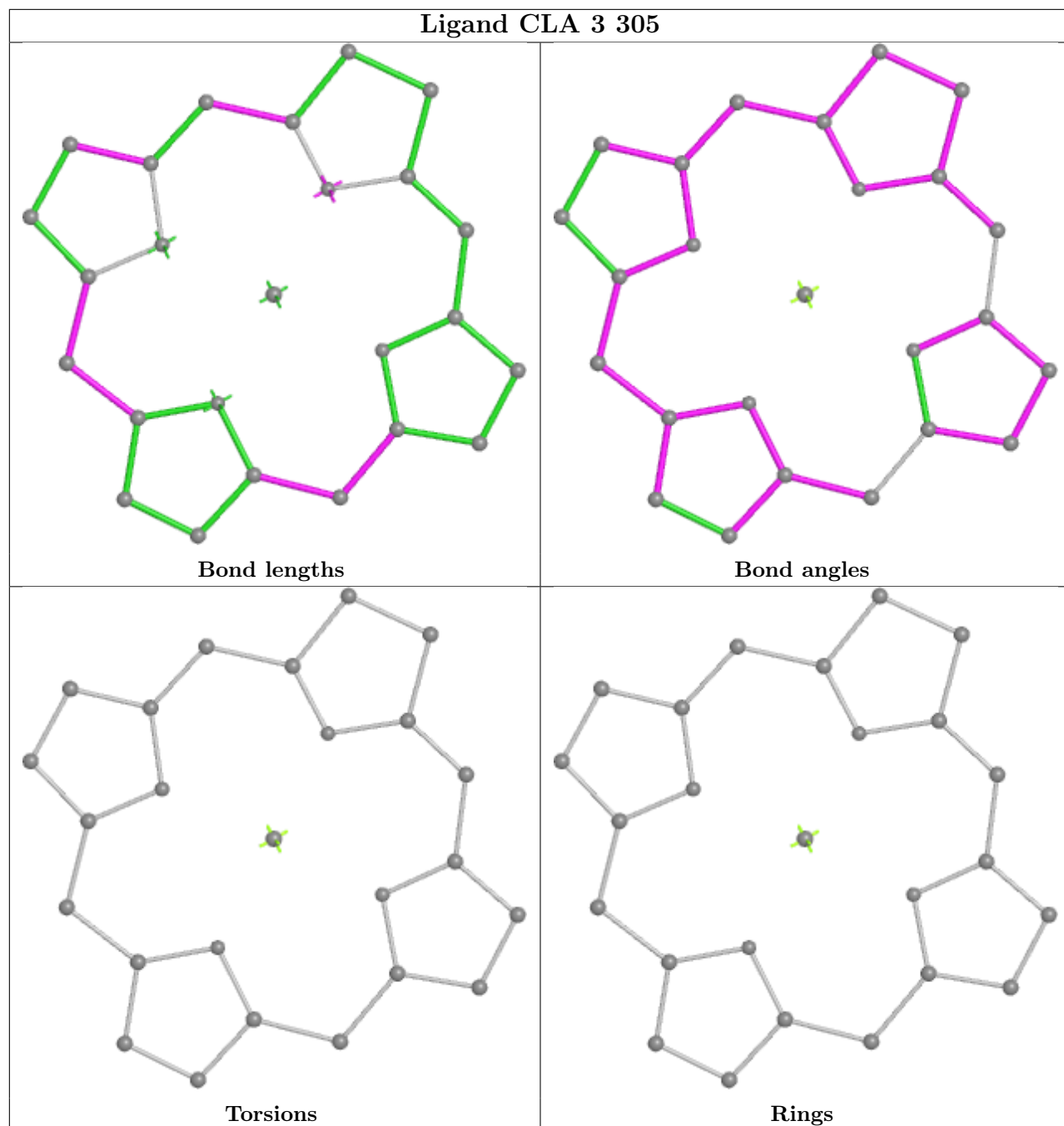
Torsions

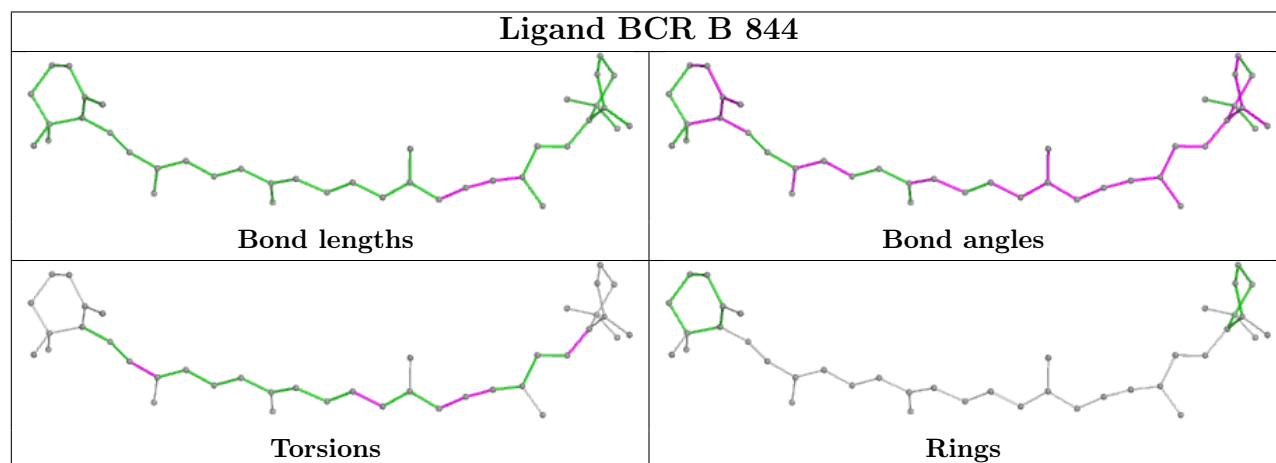
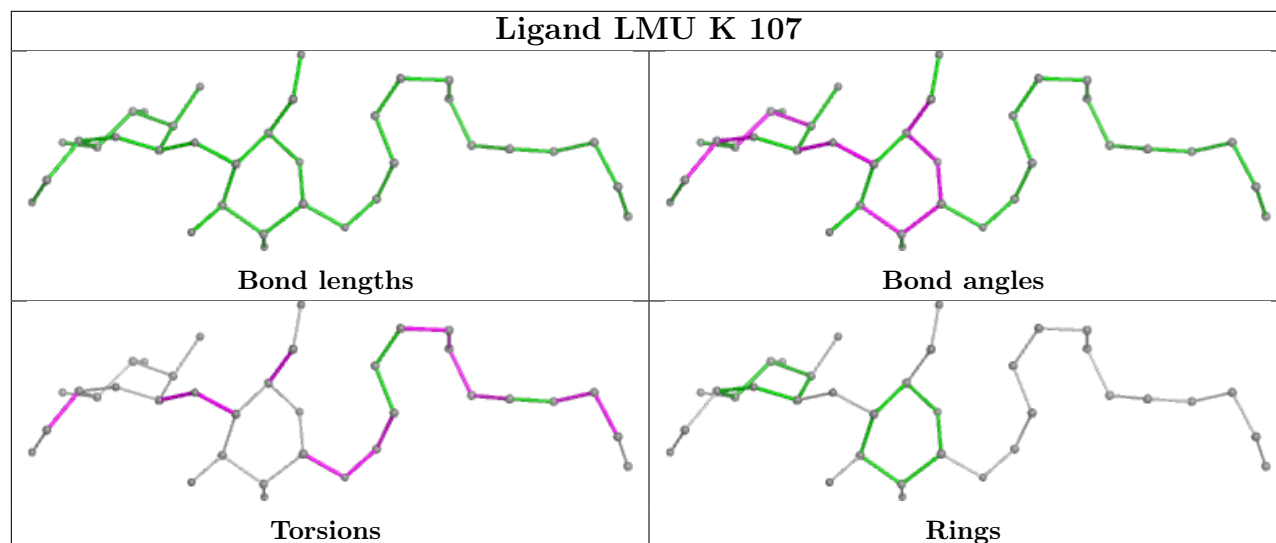


Rings

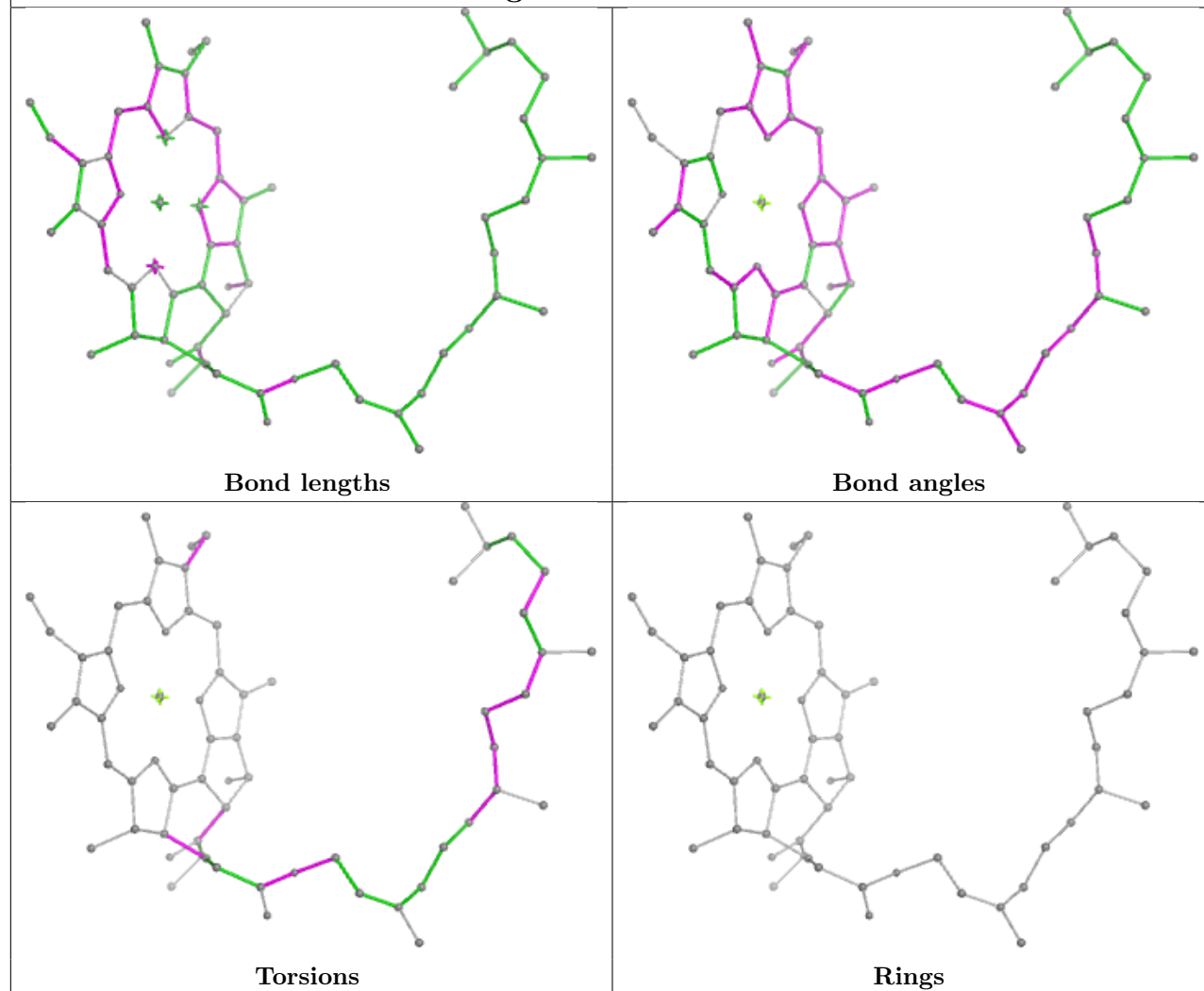


Ligand CLA 3 305

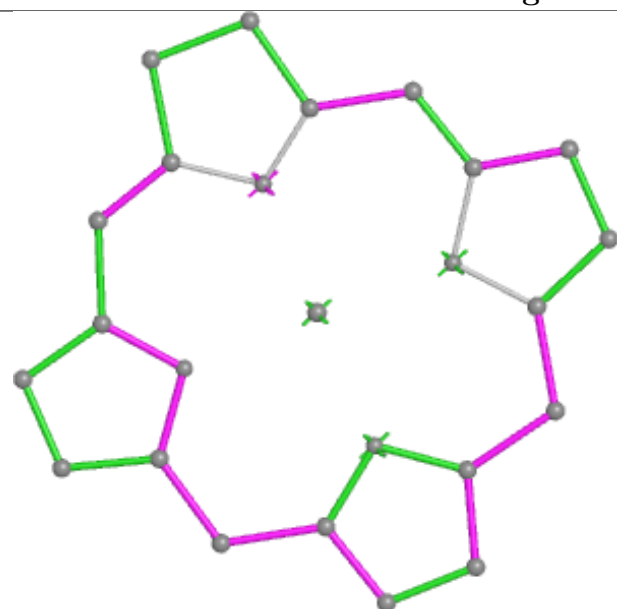




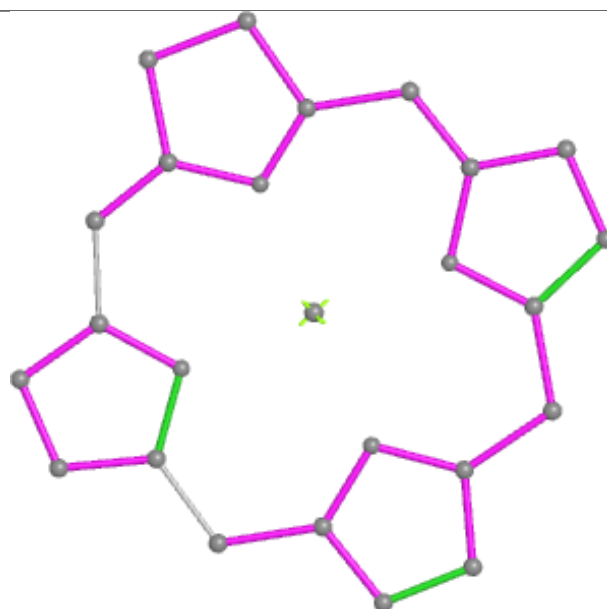
Ligand CLA 3 310



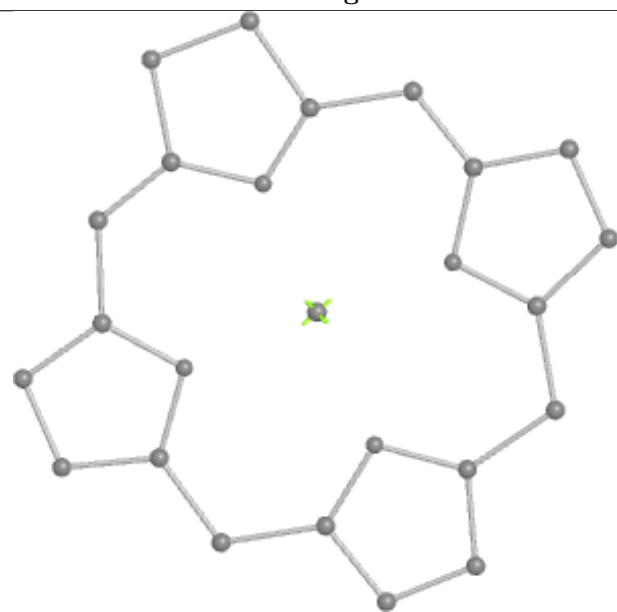
Ligand CLA 4 308



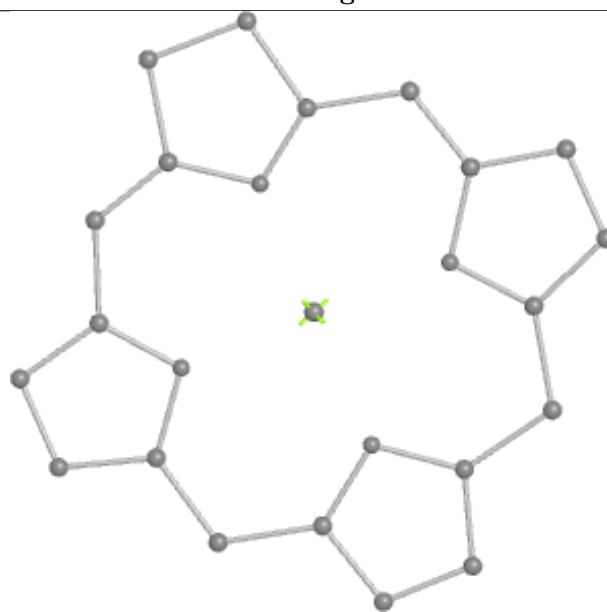
Bond lengths



Bond angles

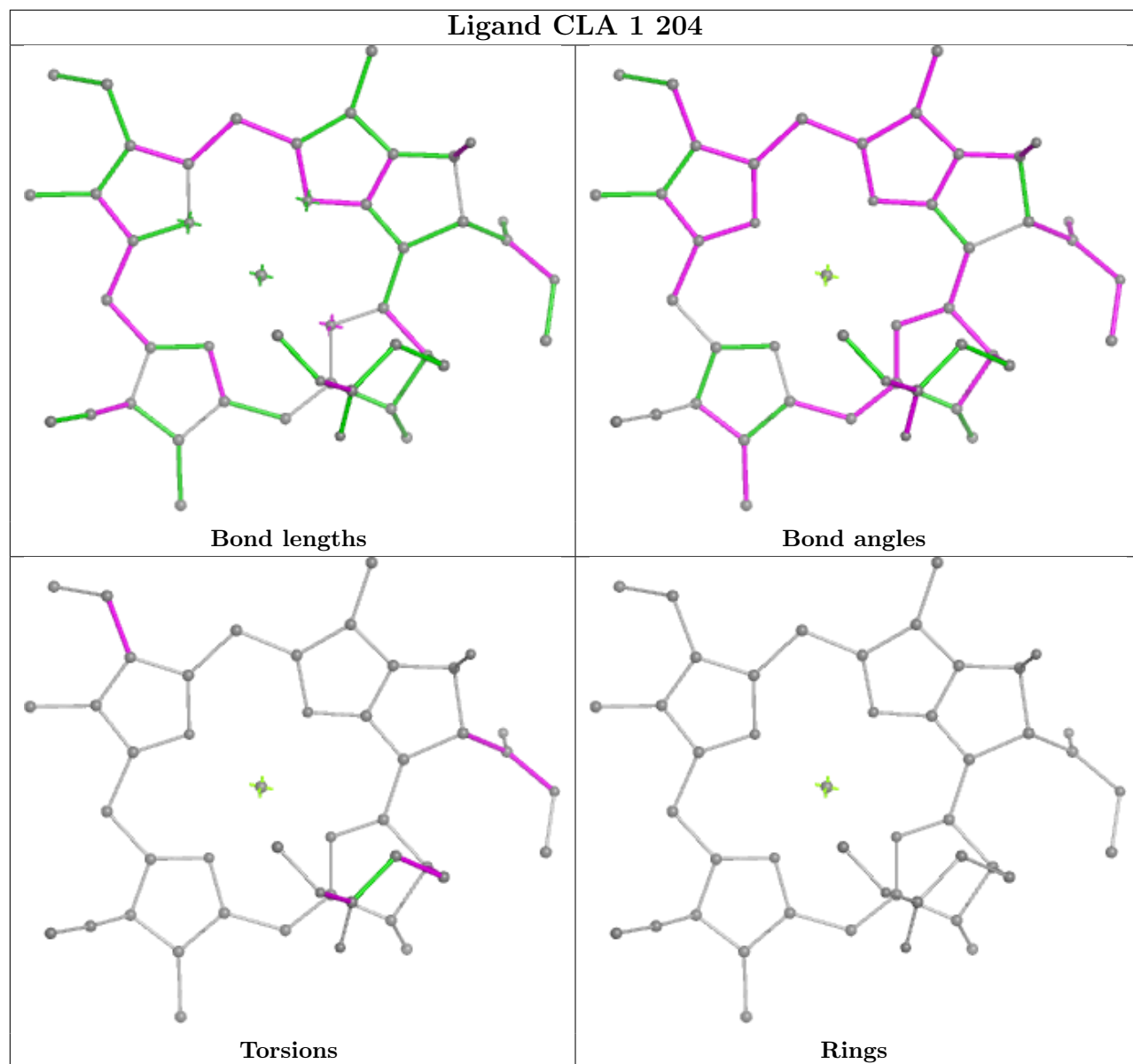


Torsions

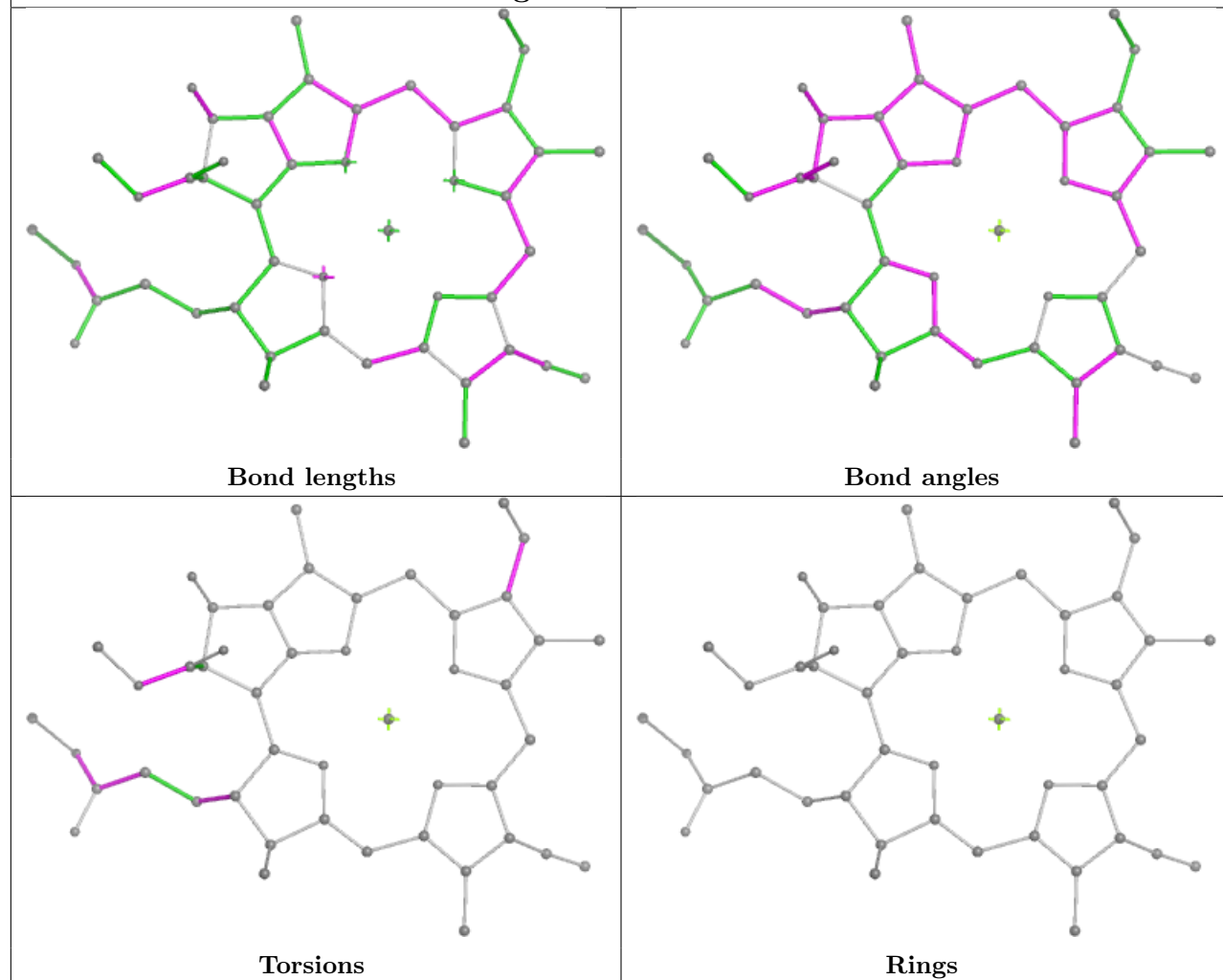


Rings

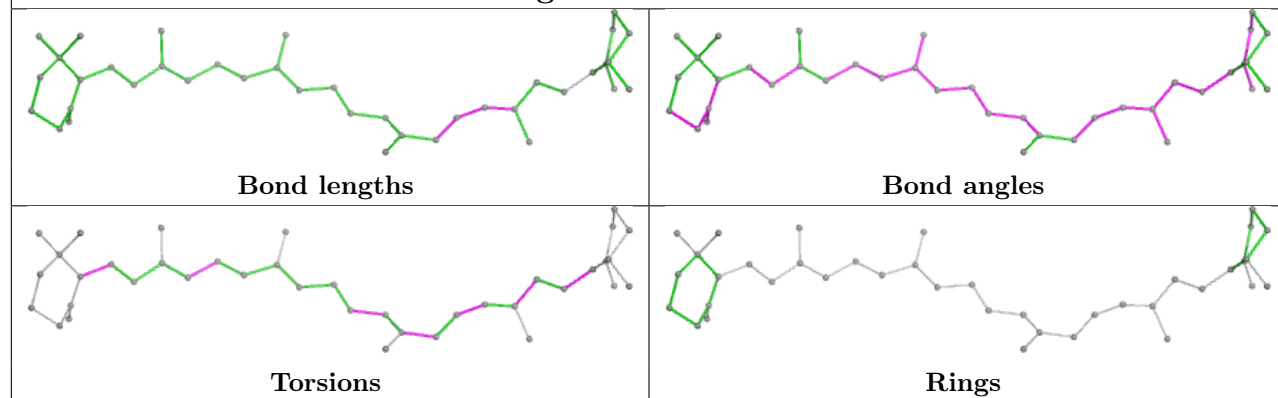
Ligand CLA 1 204

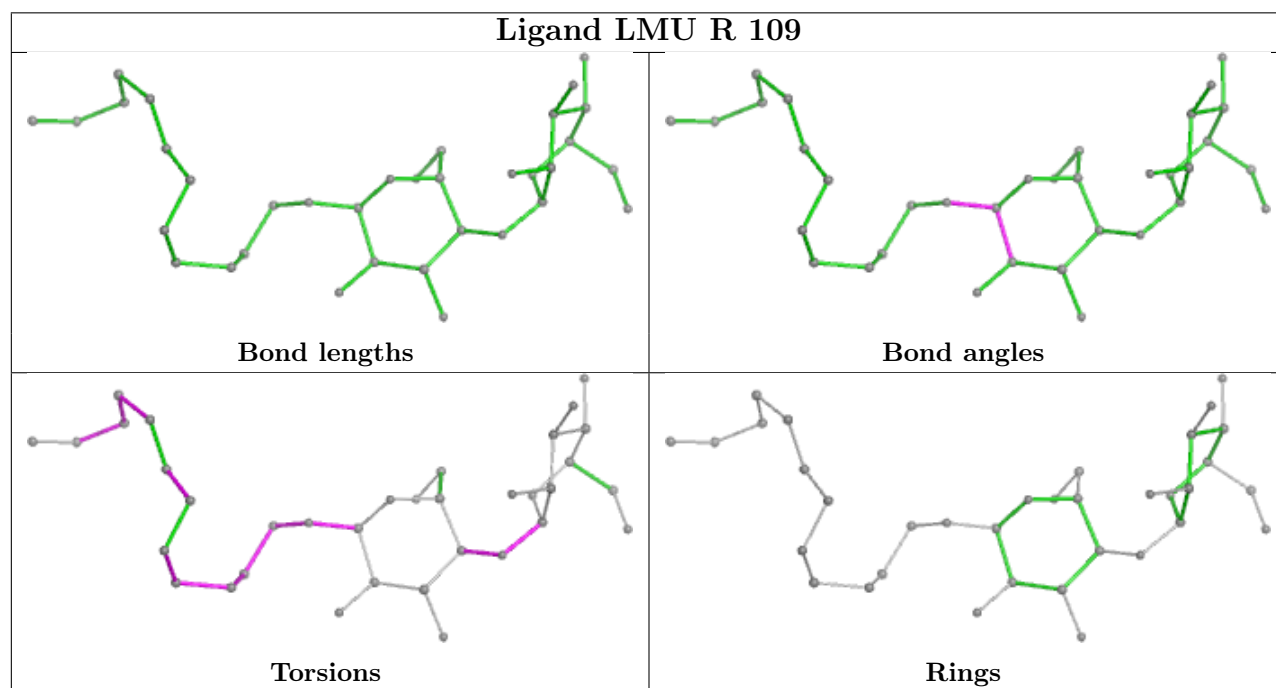
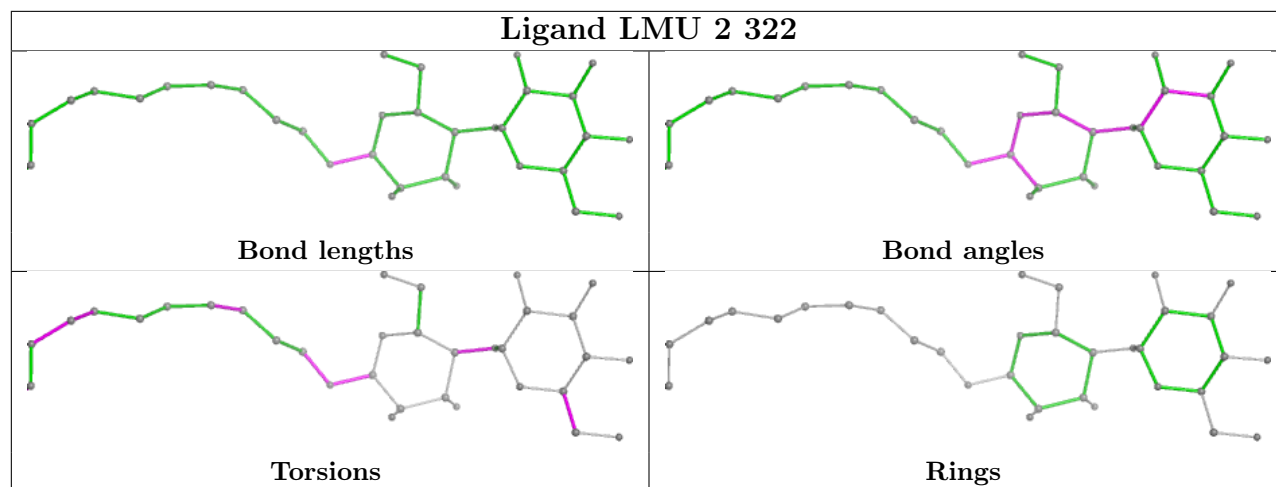


Ligand CLA 4 315

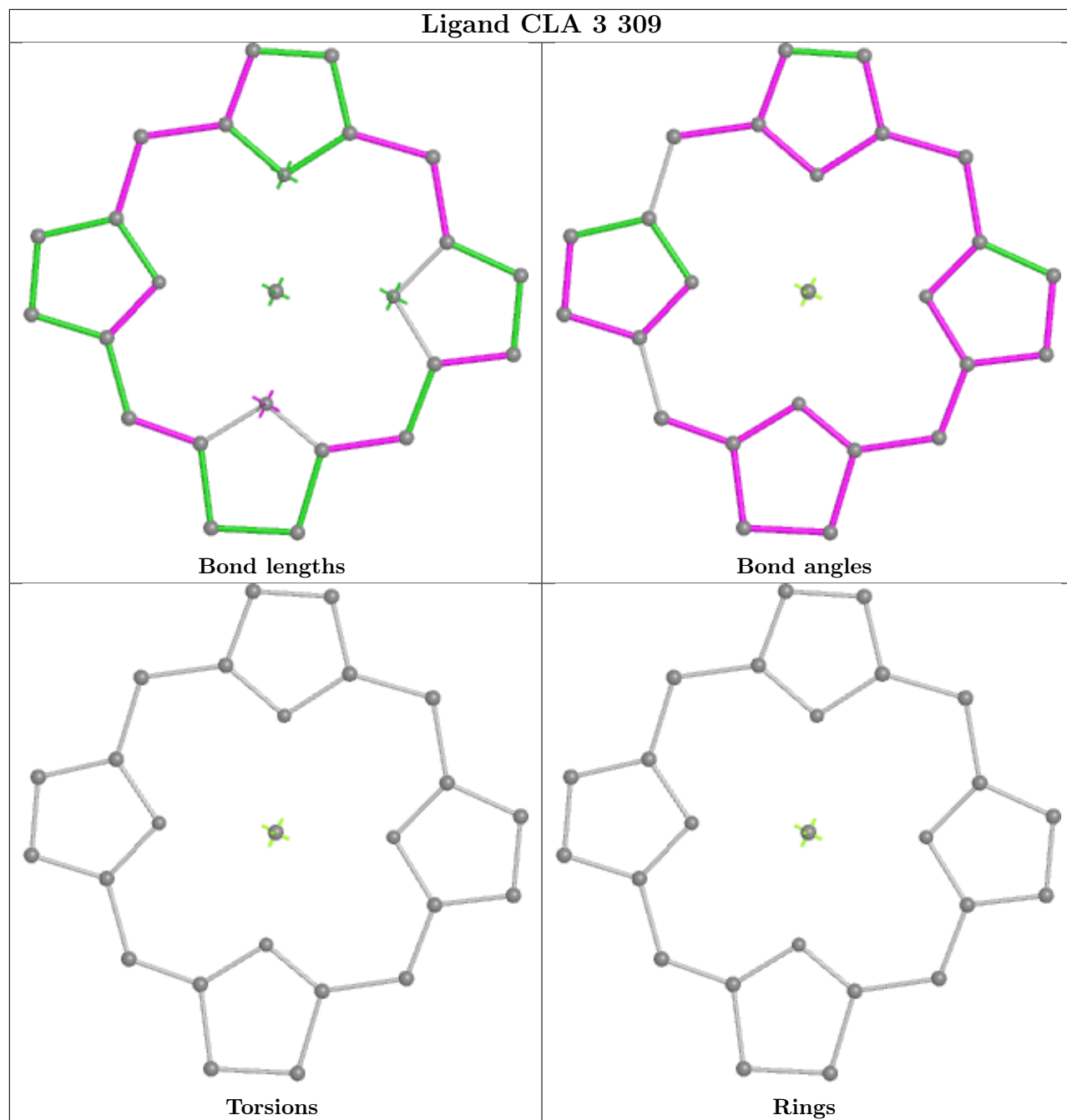


Ligand BCR I 101

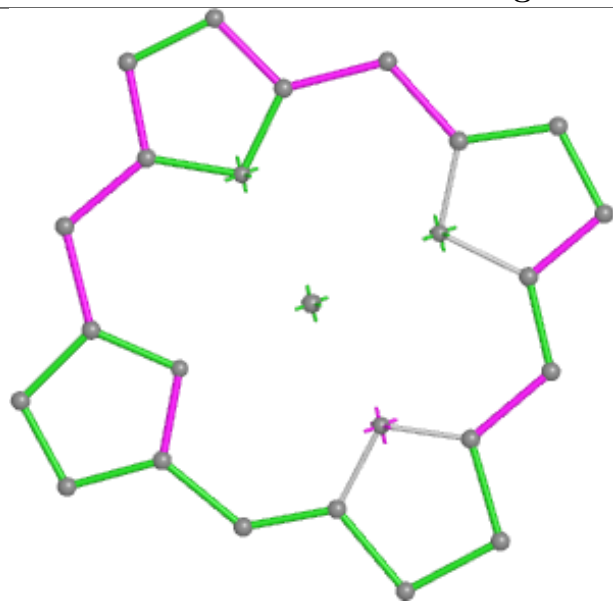




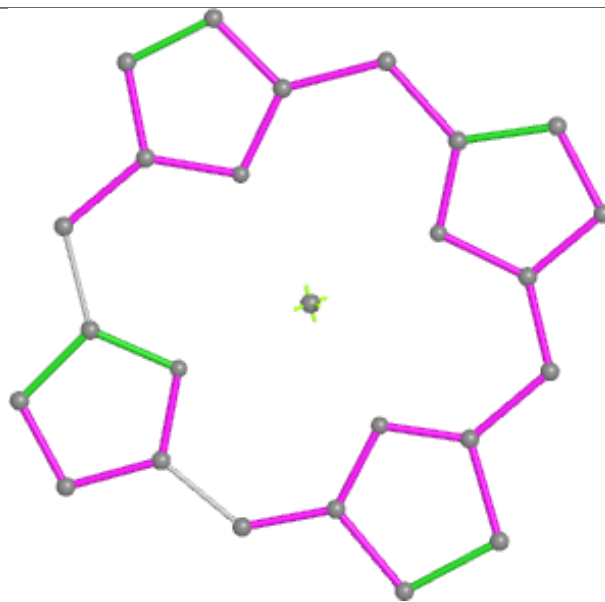
Ligand CLA 3 309



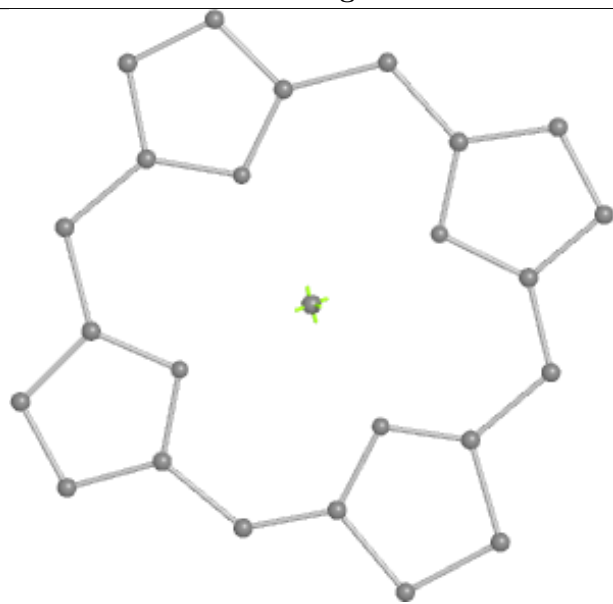
Ligand CLA A 814



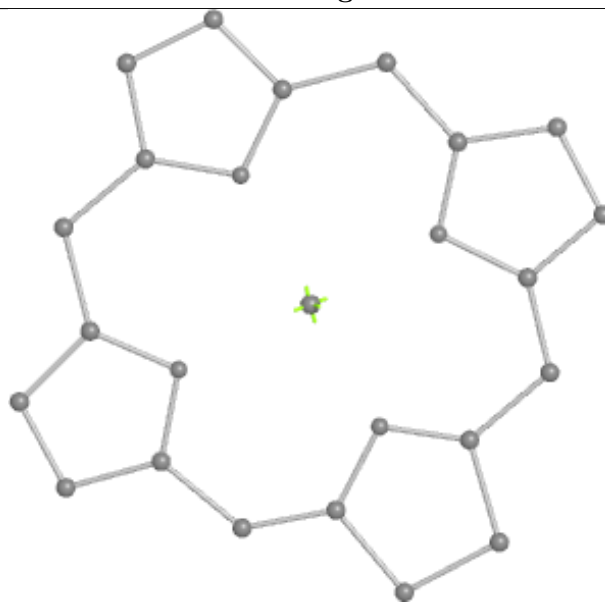
Bond lengths



Bond angles

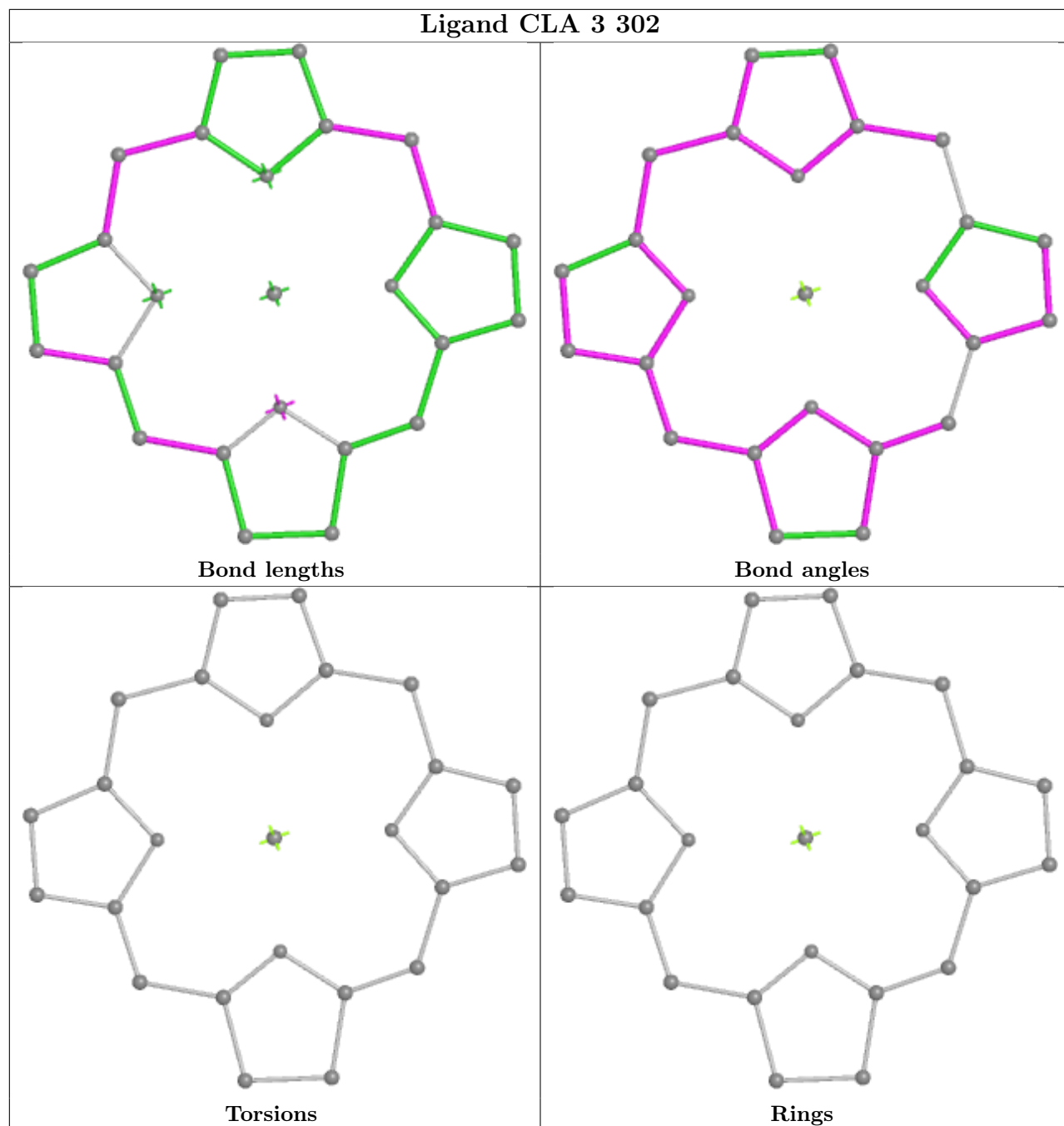


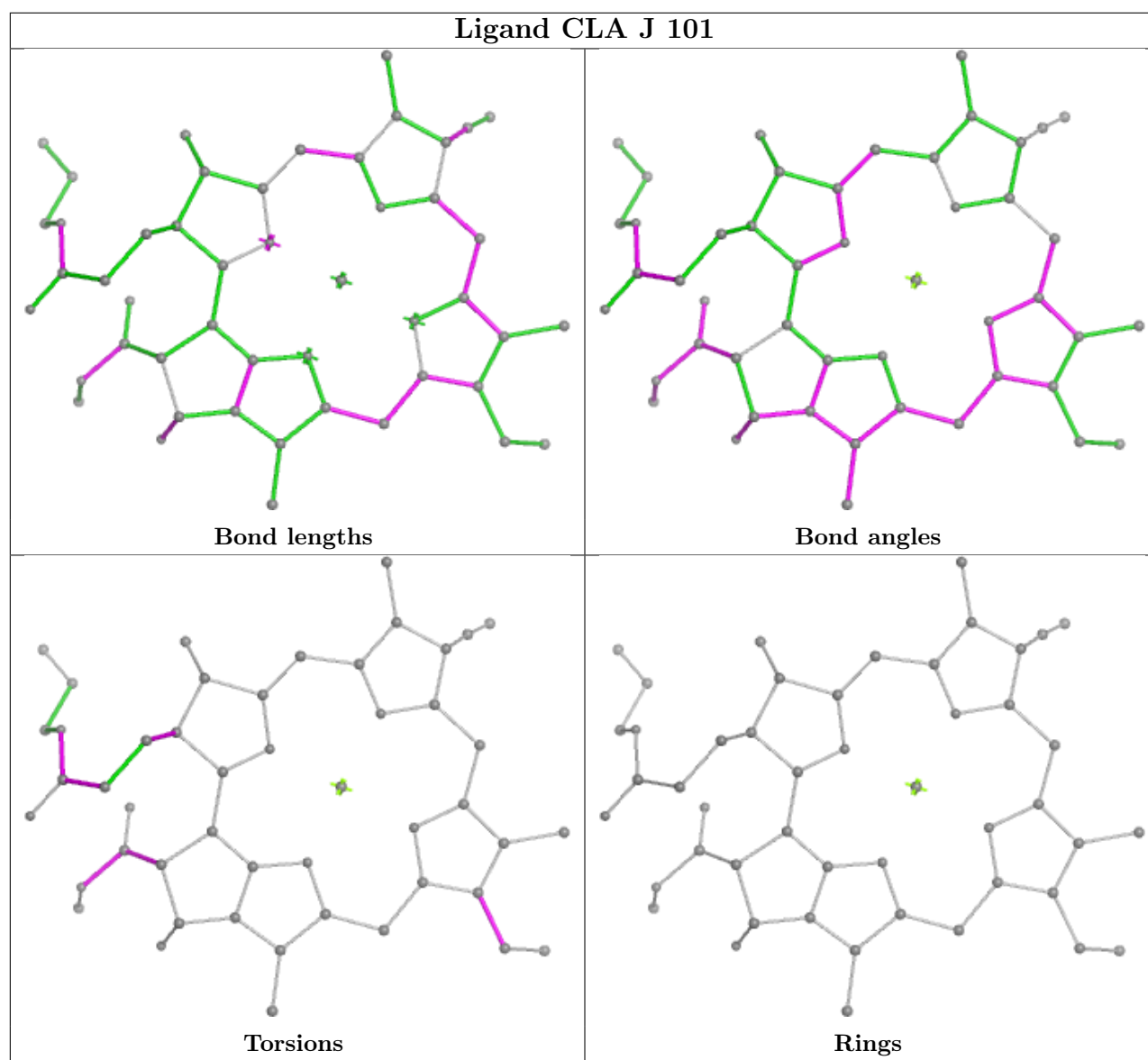
Torsions



Rings

Ligand CLA 3 302





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 Fit of model and data ⓘ

6.1 Protein, DNA and RNA chains ⓘ

In the following table, the column labelled ‘#RSRZ> 2’ contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled ‘Q< 0.9’ lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	1	165/241 (68%)	1.86	54 (32%) 1 1	21, 24, 25, 25	0
2	2	176/269 (65%)	1.45	46 (26%) 2 2	21, 23, 24, 25	0
3	3	153/276 (55%)	2.71	94 (61%) 0 0	49, 78, 110, 112	0
4	4	166/251 (66%)	1.51	44 (26%) 2 2	21, 23, 24, 25	0
5	A	730/758 (96%)	2.13	321 (43%) 1 1	20, 22, 23, 25	0
6	B	733/734 (99%)	2.23	367 (50%) 0 0	20, 22, 24, 25	0
7	C	81/81 (100%)	2.04	37 (45%) 1 1	21, 22, 23, 23	0
8	D	138/212 (65%)	1.78	50 (36%) 1 1	21, 23, 24, 25	0
9	E	65/143 (45%)	1.63	21 (32%) 1 1	21, 22, 24, 24	0
10	F	154/231 (66%)	1.58	42 (27%) 2 2	21, 22, 23, 24	0
11	G	95/167 (56%)	1.72	30 (31%) 1 1	21, 23, 24, 25	0
12	H	69/144 (47%)	1.38	20 (28%) 1 2	21, 23, 24, 25	0
13	I	30/40 (75%)	1.25	7 (23%) 2 3	21, 22, 23, 23	0
14	J	42/44 (95%)	1.70	14 (33%) 1 1	21, 23, 23, 24	0
15	K	84/131 (64%)	1.32	16 (19%) 4 4	21, 24, 24, 26	0
16	L	162/216 (75%)	1.78	48 (29%) 1 2	20, 23, 24, 25	0
17	N	85/170 (50%)	1.09	14 (16%) 5 5	22, 23, 24, 25	0
18	R	0/53	-	-	-	-
All	All	3128/4161 (75%)	1.93	1225 (39%) 1 1	20, 23, 25, 112	0

The worst 5 of 1225 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
6	B	204	GLY	10.3
16	L	141	GLY	10.1
5	A	130	GLU	10.0

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Mol	Chain	Res	Type	RSRZ
6	B	197	VAL	9.9
6	B	566	GLY	9.2

6.2 Non-standard residues in protein, DNA, RNA chains [i](#)

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

6.3 Carbohydrates [i](#)

SUGAR-RSR INFOmissingINFO

6.4 Ligands [i](#)

In the following table, the Atoms column lists the number of modelled atoms in the group and the number defined in the chemical component dictionary. The B-factors column lists the minimum, median, 95th percentile and maximum values of B factors of atoms in the group. The column labelled 'Q<0.9' lists the number of atoms with occupancy less than 0.9.

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
21	LMU	A	852	35/35	0.50	0.21	2,39,60,60	0
20	CLA	4	307	25/65	0.54	0.23	2,39,60,60	0
22	BCR	2	318	40/40	0.54	0.29	2,32,60,60	0
20	CLA	B	816	60/65	0.57	0.23	2,40,60,60	0
20	CLA	H	102	55/65	0.57	0.21	2,49,60,60	0
22	BCR	A	843	40/40	0.57	0.30	2,45,60,60	0
22	BCR	I	103	40/40	0.59	0.22	2,38,60,60	0
20	CLA	G	105	51/65	0.60	0.17	2,44,60,60	0
20	CLA	1	211	51/65	0.60	0.18	2,42,60,60	0
20	CLA	3	314	50/65	0.60	0.17	2,56,60,60	0
20	CLA	B	835	45/65	0.61	0.18	12,37,60,60	0
21	LMU	2	321	35/35	0.61	0.17	2,40,60,60	0
20	CLA	A	802	25/65	0.61	0.17	2,42,60,60	0
21	LMU	A	853	35/35	0.62	0.19	2,45,60,60	0
20	CLA	3	311	65/65	0.62	0.21	2,46,60,60	0
21	LMU	4	320	35/35	0.62	0.18	2,43,60,60	0
20	CLA	4	304	55/65	0.62	0.20	4,39,60,60	0
20	CLA	3	305	25/65	0.63	0.21	17,42,60,60	0
21	LMU	1	217	35/35	0.63	0.16	2,44,60,60	0
20	CLA	4	314	25/65	0.63	0.21	2,35,60,60	0
20	CLA	F	206	41/65	0.64	0.21	2,41,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
20	CLA	4	317	52/65	0.64	0.19	2,34,60,60	0
21	LMU	E	101	35/35	0.64	0.20	2,30,60,60	0
20	CLA	3	318	36/65	0.65	0.23	2,51,60,60	0
20	CLA	B	836	51/65	0.65	0.18	2,45,60,60	0
21	LMU	R	101	35/35	0.65	0.16	2,45,60,60	0
20	CLA	4	303	65/65	0.65	0.24	2,32,60,60	0
20	CLA	B	817	46/65	0.65	0.25	2,28,60,60	0
20	CLA	H	101	55/65	0.65	0.16	2,47,60,60	0
21	LMU	H	106	35/35	0.66	0.18	2,41,60,60	0
21	LMU	K	106	35/35	0.66	0.16	2,38,60,60	0
20	CLA	K	103	50/65	0.66	0.18	2,60,60,60	0
20	CLA	3	309	25/65	0.66	0.19	2,47,60,60	0
21	LMU	2	313	35/35	0.66	0.18	2,21,60,60	0
20	CLA	A	840	55/65	0.66	0.24	2,44,60,60	0
20	CLA	3	313	25/65	0.67	0.17	2,30,60,60	0
21	LMU	G	103	35/35	0.67	0.16	2,51,60,60	0
20	CLA	1	205	36/65	0.67	0.19	2,52,60,60	0
21	LMU	3	319	35/35	0.67	0.17	2,44,60,60	0
21	LMU	L	205	35/35	0.68	0.16	2,31,60,60	0
20	CLA	4	308	25/65	0.68	0.20	2,29,60,60	0
20	CLA	H	112	55/65	0.68	0.18	2,33,60,60	0
20	CLA	3	310	65/65	0.68	0.18	2,26,60,60	0
21	LMU	2	322	35/35	0.68	0.17	2,40,60,60	0
20	CLA	3	303	36/65	0.69	0.17	2,53,60,60	0
20	CLA	K	101	46/65	0.69	0.16	2,51,60,60	0
21	LMU	R	102	35/35	0.69	0.16	2,38,60,60	0
21	LMU	R	103	35/35	0.69	0.17	2,35,60,60	0
21	LMU	H	103	35/35	0.69	0.15	2,15,60,60	0
20	CLA	1	215	51/65	0.69	0.16	2,51,60,60	0
22	BCR	G	104	40/40	0.69	0.28	2,33,60,60	0
20	CLA	L	204	55/65	0.69	0.20	2,44,60,60	0
21	LMU	A	848	35/35	0.70	0.17	2,45,60,60	0
21	LMU	A	854	35/35	0.70	0.17	2,32,60,60	0
21	LMU	B	804	35/35	0.70	0.16	2,34,60,60	0
20	CLA	4	301	55/65	0.70	0.23	2,33,60,60	0
22	BCR	L	211	40/40	0.70	0.30	2,18,60,60	0
20	CLA	A	811	65/65	0.71	0.20	2,15,60,60	0
20	CLA	A	819	58/65	0.71	0.22	2,20,60,60	0
20	CLA	A	820	51/65	0.71	0.18	2,44,60,60	0
21	LMU	C	101	35/35	0.71	0.14	2,35,60,60	0
20	CLA	2	307	65/65	0.71	0.15	2,24,60,60	0
20	CLA	3	306	25/65	0.71	0.16	2,56,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
22	BCR	A	844	40/40	0.71	0.26	2,34,60,60	0
20	CLA	2	311	50/65	0.71	0.25	2,25,60,60	0
20	CLA	A	801	46/65	0.71	0.15	2,43,60,60	0
20	CLA	2	305	50/65	0.71	0.21	2,48,60,60	0
20	CLA	2	301	25/65	0.72	0.17	2,48,60,60	0
20	CLA	1	207	51/65	0.72	0.16	2,36,60,60	0
20	CLA	4	305	50/65	0.72	0.19	2,21,60,60	0
20	CLA	K	104	56/65	0.72	0.17	2,36,60,60	0
20	CLA	1	209	25/65	0.73	0.16	11,37,60,60	0
20	CLA	R	107	57/65	0.73	0.19	2,38,60,60	0
20	CLA	A	821	42/65	0.73	0.21	2,46,60,60	0
20	CLA	3	307	42/65	0.73	0.16	2,53,60,60	0
21	LMU	K	107	35/35	0.73	0.14	2,38,60,60	0
21	LMU	A	846	35/35	0.73	0.17	2,26,60,60	0
21	LMU	L	212	35/35	0.73	0.16	2,22,60,60	0
21	LMU	2	320	35/35	0.73	0.14	2,29,60,60	0
20	CLA	4	318	47/65	0.74	0.17	2,37,60,60	0
20	CLA	R	108	65/65	0.74	0.16	2,35,60,60	0
20	CLA	2	312	61/65	0.74	0.15	2,34,60,60	0
21	LMU	R	104	35/35	0.74	0.14	2,36,60,60	0
20	CLA	3	302	25/65	0.74	0.18	15,54,60,60	0
21	LMU	K	105	35/35	0.74	0.15	2,37,60,60	0
20	CLA	1	206	61/65	0.74	0.16	2,35,60,60	0
20	CLA	1	201	46/65	0.74	0.17	2,56,60,60	0
20	CLA	4	315	46/65	0.74	0.15	2,45,60,60	0
20	CLA	2	302	51/65	0.74	0.17	2,33,60,60	0
20	CLA	B	842	36/65	0.75	0.17	2,52,60,60	0
21	LMU	R	106	35/35	0.75	0.15	2,27,60,60	0
20	CLA	L	202	55/65	0.75	0.15	2,46,60,60	0
20	CLA	1	210	36/65	0.75	0.19	2,35,60,60	0
20	CLA	J	101	48/65	0.75	0.17	2,34,60,60	0
21	LMU	H	104	35/35	0.75	0.14	2,16,60,60	0
20	CLA	A	841	25/65	0.75	0.16	2,43,60,60	0
20	CLA	A	810	45/65	0.75	0.17	2,38,60,60	0
21	LMU	R	105	35/35	0.76	0.13	2,35,60,60	0
21	LMU	F	202	34/35	0.76	0.15	2,23,60,60	0
20	CLA	3	317	25/65	0.76	0.14	2,42,60,60	0
20	CLA	A	814	25/65	0.76	0.18	2,31,60,60	0
20	CLA	1	214	25/65	0.76	0.15	5,42,60,60	0
22	BCR	B	845	40/40	0.76	0.22	2,21,60,60	0
21	LMU	B	849	25/35	0.76	0.14	2,36,60,60	0
20	CLA	K	102	50/65	0.76	0.16	2,28,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
20	CLA	1	203	47/65	0.76	0.16	2,17,60,60	0
26	UNL	H	109	23/-	0.76	0.14	2,31,60,60	0
20	CLA	A	839	59/65	0.77	0.16	2,30,60,60	0
21	LMU	G	102	35/35	0.77	0.16	2,33,60,60	0
21	LMU	4	316	35/35	0.77	0.14	2,37,60,60	0
20	CLA	4	302	36/65	0.77	0.24	2,26,60,60	0
20	CLA	2	306	25/65	0.77	0.17	2,57,60,60	0
20	CLA	1	208	25/65	0.78	0.17	2,31,60,60	0
20	CLA	2	310	50/65	0.78	0.19	2,18,60,60	0
20	CLA	B	813	55/65	0.78	0.22	2,28,60,60	0
21	LMU	G	101	35/35	0.78	0.15	2,34,60,60	0
21	LMU	L	206	35/35	0.78	0.15	2,23,60,60	0
20	CLA	3	315	65/65	0.78	0.15	2,33,60,60	0
20	CLA	L	201	60/65	0.78	0.22	2,18,60,60	0
20	CLA	A	829	50/65	0.78	0.19	2,32,60,60	0
22	BCR	J	102	40/40	0.78	0.24	2,31,60,60	0
20	CLA	A	833	45/65	0.78	0.18	2,37,60,60	0
25	LMG	B	848	49/55	0.78	0.27	2,20,60,60	0
20	CLA	A	817	52/65	0.78	0.23	2,33,60,60	0
20	CLA	3	301	36/65	0.79	0.16	2,34,60,60	0
20	CLA	B	812	54/65	0.79	0.19	2,17,60,60	0
22	BCR	A	845	40/40	0.79	0.25	2,5,44,60	0
20	CLA	A	823	58/65	0.79	0.23	2,18,60,60	0
20	CLA	B	815	60/65	0.79	0.21	2,19,60,60	0
20	CLA	A	815	50/65	0.79	0.17	2,21,60,60	0
20	CLA	1	212	25/65	0.79	0.18	2,42,60,60	0
20	CLA	1	213	51/65	0.79	0.19	2,39,60,60	0
20	CLA	J	103	61/65	0.79	0.16	2,19,60,60	0
20	CLA	4	310	50/65	0.79	0.16	2,20,60,60	0
20	CLA	B	822	46/65	0.80	0.20	2,34,60,60	0
21	LMU	4	321	35/35	0.80	0.13	2,21,55,60	0
22	BCR	B	844	40/40	0.80	0.21	2,5,60,60	0
20	CLA	3	316	25/65	0.80	0.14	2,47,60,60	0
20	CLA	2	309	25/65	0.80	0.14	2,34,60,60	0
20	CLA	L	208	50/65	0.81	0.17	2,27,60,60	0
20	CLA	L	210	50/65	0.81	0.17	2,18,60,60	0
20	CLA	B	834	45/65	0.81	0.19	2,16,60,60	0
20	CLA	1	204	46/65	0.81	0.16	2,35,60,60	0
20	CLA	A	812	54/65	0.81	0.16	2,28,60,60	0
21	LMU	1	218	35/35	0.81	0.15	2,46,60,60	0
20	CLA	A	807	46/65	0.81	0.19	2,20,60,60	0
20	CLA	4	306	52/65	0.81	0.14	2,26,60,60	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
20	CLA	B	823	55/65	0.81	0.18	2,30,60,60	0
20	CLA	A	834	46/65	0.82	0.21	2,20,60,60	0
20	CLA	A	804	55/65	0.82	0.19	2,11,60,60	0
20	CLA	B	837	60/65	0.82	0.22	2,2,60,60	0
21	LMU	R	109	35/35	0.82	0.14	2,21,60,60	0
21	LMU	A	847	35/35	0.82	0.14	2,27,60,60	0
20	CLA	A	824	59/65	0.82	0.19	2,25,60,60	0
20	CLA	A	825	65/65	0.82	0.19	2,16,60,60	0
20	CLA	F	207	53/65	0.82	0.14	2,22,60,60	0
21	LMU	2	319	35/35	0.82	0.12	2,25,60,60	0
20	CLA	A	805	54/65	0.82	0.20	2,10,60,60	0
22	BCR	B	847	40/40	0.82	0.23	2,10,60,60	0
21	LMU	B	805	35/35	0.82	0.16	2,37,60,60	0
20	CLA	B	825	54/65	0.82	0.24	2,15,60,60	0
20	CLA	L	203	65/65	0.82	0.23	2,22,60,60	0
21	LMU	D	201	35/35	0.82	0.12	2,12,50,57	0
20	CLA	B	826	58/65	0.82	0.23	2,13,60,60	0
20	CLA	2	315	50/65	0.82	0.13	2,33,60,60	0
20	CLA	B	807	45/65	0.83	0.19	2,14,56,60	0
20	CLA	B	808	61/65	0.83	0.18	2,9,48,60	0
20	CLA	2	303	58/65	0.83	0.13	2,22,60,60	0
20	CLA	L	209	47/65	0.83	0.18	2,13,45,60	0
21	LMU	A	855	35/35	0.83	0.14	2,29,60,60	0
20	CLA	F	201	50/65	0.83	0.15	2,7,51,60	0
20	CLA	2	304	25/65	0.83	0.14	2,27,60,60	0
20	CLA	A	813	50/65	0.83	0.20	2,29,60,60	0
21	LMU	1	216	35/35	0.83	0.12	2,11,50,60	0
20	CLA	4	309	25/65	0.83	0.17	2,40,60,60	0
20	CLA	3	308	25/65	0.83	0.15	2,37,60,60	0
20	CLA	B	820	61/65	0.83	0.19	2,16,60,60	0
20	CLA	B	821	50/65	0.83	0.20	2,37,60,60	0
20	CLA	I	102	60/65	0.83	0.15	2,18,60,60	0
20	CLA	A	816	54/65	0.83	0.16	2,31,60,60	0
20	CLA	2	316	25/65	0.83	0.16	2,36,60,60	0
20	CLA	A	818	60/65	0.83	0.20	2,11,52,60	0
22	BCR	I	101	39/40	0.83	0.22	2,8,60,60	0
20	CLA	3	304	25/65	0.83	0.14	2,28,60,60	0
20	CLA	B	827	65/65	0.83	0.21	2,15,60,60	0
20	CLA	B	832	59/65	0.83	0.21	2,6,60,60	0
20	CLA	2	317	65/65	0.83	0.16	2,15,60,60	0
20	CLA	B	806	65/65	0.83	0.23	2,11,60,60	0
20	CLA	A	806	56/65	0.84	0.18	2,2,54,60	0

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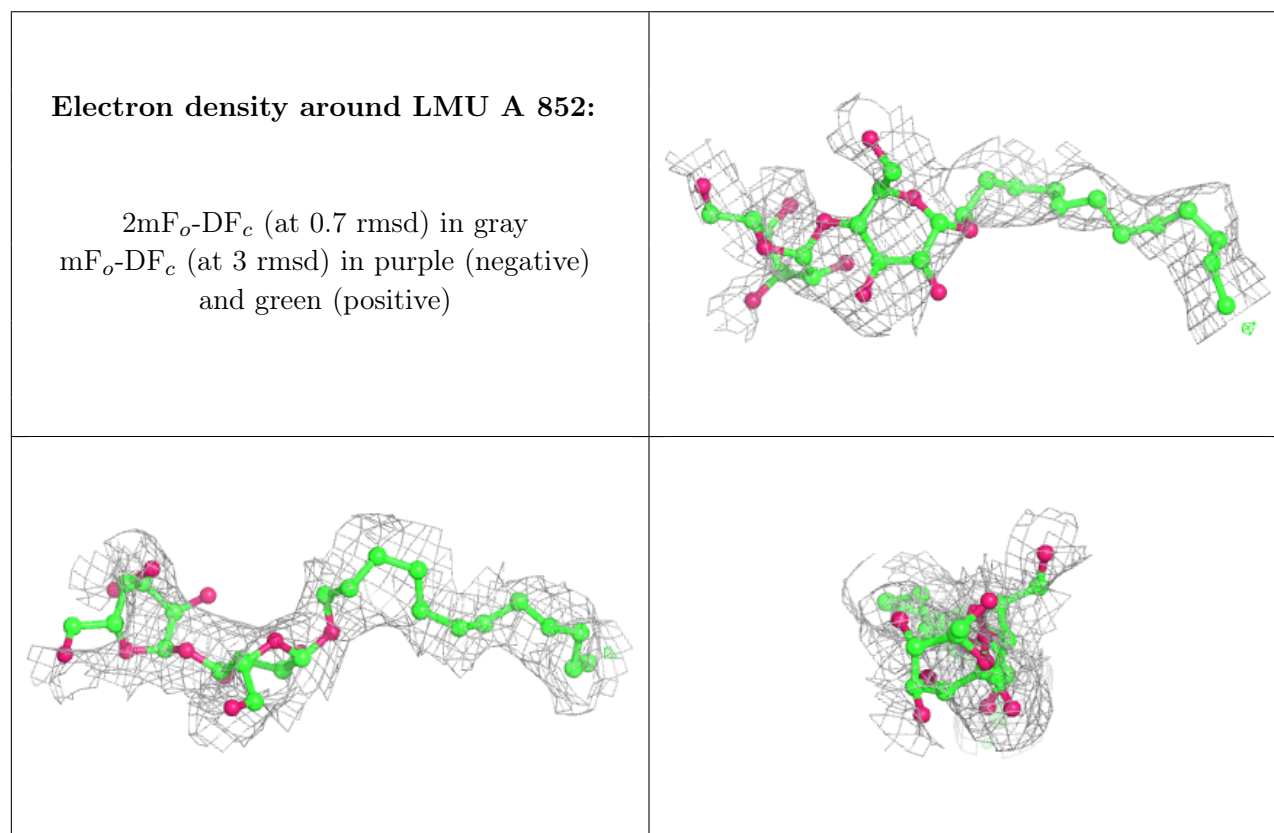
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
21	LMU	3	320	35/35	0.84	0.10	2,28,59,60	0
20	CLA	4	313	36/65	0.84	0.16	2,21,60,60	0
20	CLA	A	828	65/65	0.84	0.21	2,12,60,60	0
20	CLA	A	851	65/65	0.84	0.22	2,2,60,60	0
22	BCR	B	846	40/40	0.84	0.23	2,11,60,60	0
20	CLA	A	803	46/65	0.84	0.14	2,14,49,60	0
20	CLA	A	832	50/65	0.84	0.18	2,18,56,60	0
20	CLA	1	202	41/65	0.84	0.15	2,41,60,60	0
20	CLA	4	312	25/65	0.84	0.15	2,2,26,32	0
20	CLA	A	835	65/65	0.84	0.19	2,6,60,60	0
20	CLA	B	814	65/65	0.84	0.19	2,13,60,60	0
23	PQN	B	843	33/33	0.84	0.22	2,2,46,51	0
20	CLA	H	111	58/65	0.84	0.20	2,15,60,60	0
20	CLA	A	837	51/65	0.84	0.24	2,12,60,60	0
20	CLA	B	803	65/65	0.85	0.22	2,14,56,60	0
20	CLA	B	838	65/65	0.85	0.18	2,7,60,60	0
20	CLA	B	840	65/65	0.85	0.22	2,11,60,60	0
20	CLA	B	824	65/65	0.85	0.18	2,17,60,60	0
20	CLA	B	833	50/65	0.85	0.24	2,11,53,60	0
20	CLA	B	811	25/65	0.86	0.17	2,2,60,60	0
20	CLA	A	850	65/65	0.86	0.21	2,4,48,60	0
20	CLA	B	810	60/65	0.86	0.21	2,2,60,60	0
22	BCR	F	203	40/40	0.86	0.21	2,2,60,60	0
20	CLA	B	829	65/65	0.86	0.18	2,11,46,60	0
21	LMU	4	319	34/35	0.86	0.12	2,22,60,60	0
21	LMU	H	105	35/35	0.87	0.11	2,31,60,60	0
22	BCR	B	801	40/40	0.87	0.20	2,4,50,60	0
20	CLA	A	838	65/65	0.87	0.19	2,8,60,60	0
20	CLA	A	826	65/65	0.87	0.21	2,2,50,60	0
20	CLA	4	311	25/65	0.87	0.23	2,15,60,60	0
23	PQN	A	842	33/33	0.87	0.23	2,4,59,60	0
20	CLA	F	205	36/65	0.87	0.17	2,17,60,60	0
20	CLA	B	818	53/65	0.87	0.17	2,14,60,60	0
22	BCR	F	204	40/40	0.87	0.17	2,6,60,60	0
20	CLA	2	308	25/65	0.88	0.14	2,12,60,60	0
20	CLA	B	839	47/65	0.88	0.14	2,5,55,60	0
20	CLA	A	827	55/65	0.88	0.20	2,12,60,60	0
20	CLA	B	841	65/65	0.88	0.20	2,2,55,60	0
20	CLA	A	830	65/65	0.88	0.17	2,9,59,60	0
20	CLA	A	831	65/65	0.88	0.17	2,14,60,60	0
20	CLA	A	836	47/65	0.88	0.16	2,8,50,60	0
20	CLA	B	831	50/65	0.89	0.14	2,12,60,60	0

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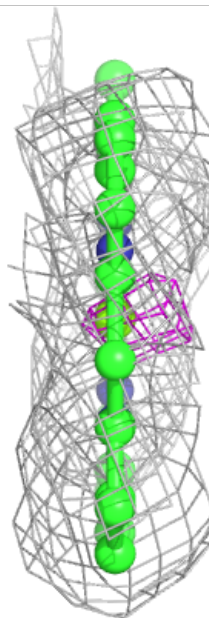
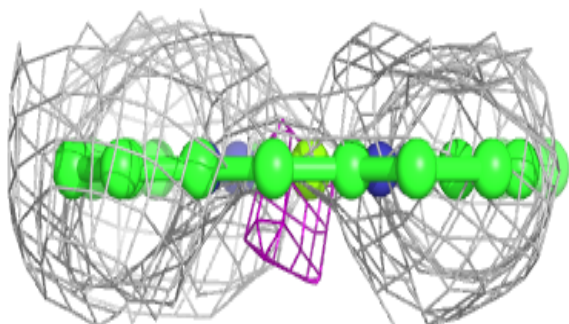
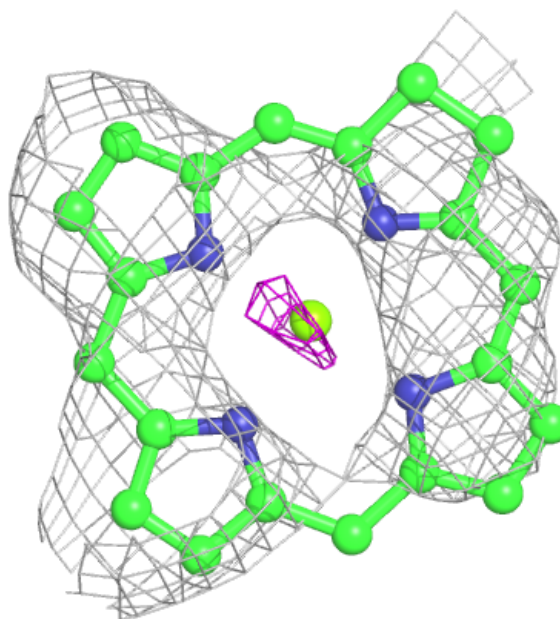
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors($\text{\AA}^2$)	Q<0.9
20	CLA	A	822	50/65	0.89	0.21	2,7,60,60	0
20	CLA	B	850	65/65	0.89	0.22	2,2,55,60	0
20	CLA	A	808	60/65	0.90	0.20	2,10,60,60	0
20	CLA	B	830	65/65	0.90	0.20	2,6,53,60	0
20	CLA	A	809	52/65	0.90	0.18	2,10,60,60	0
20	CLA	B	809	65/65	0.90	0.20	2,2,53,60	0
20	CLA	B	819	41/65	0.90	0.14	2,5,40,60	0
20	CLA	B	828	65/65	0.90	0.18	2,10,56,60	0
20	CLA	A	849	65/65	0.91	0.22	2,2,48,60	0
20	CLA	B	802	54/65	0.91	0.18	2,6,45,60	0
24	SF4	C	103	8/8	0.98	0.05	12,19,20,24	0
24	SF4	A	856	8/8	0.98	0.05	23,24,24,25	0
24	SF4	C	102	8/8	0.98	0.06	18,22,26,32	0

The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation to approximate a three-dimensional view.



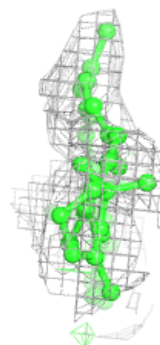
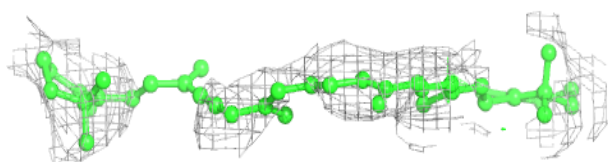
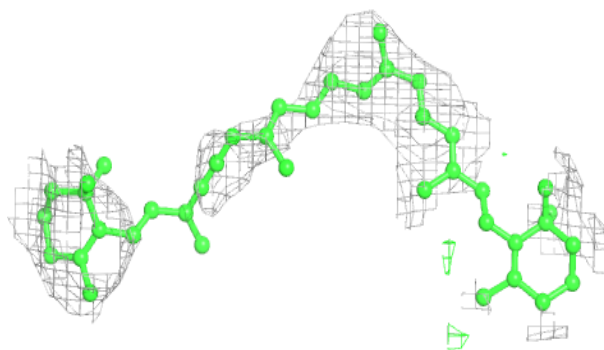
Electron density around CLA 4 307:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

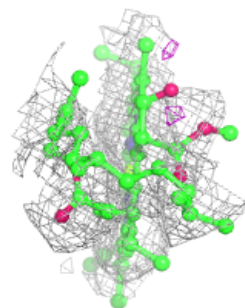
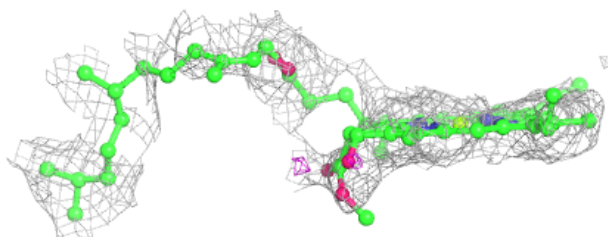
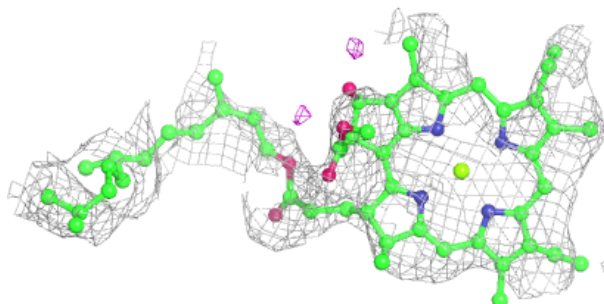


Electron density around BCR 2 318:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

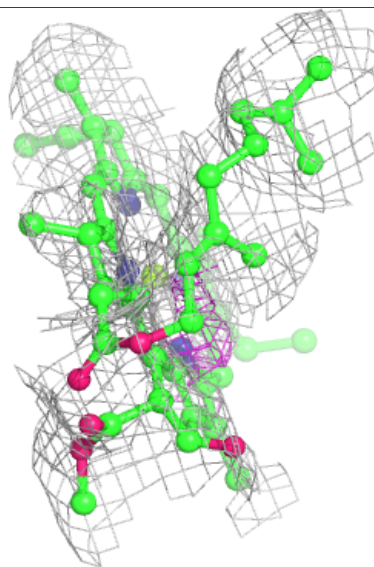
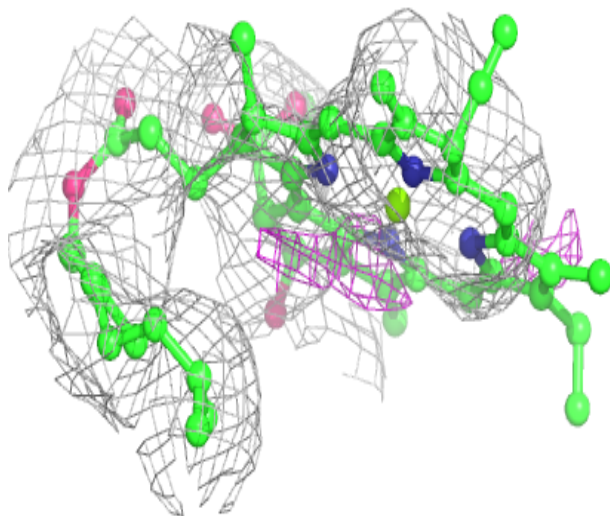
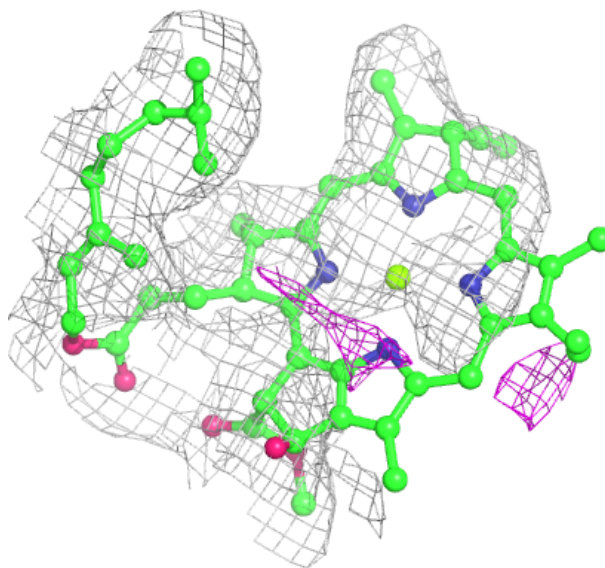
**Electron density around CLA B 816:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



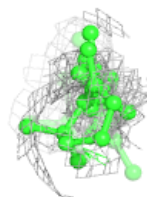
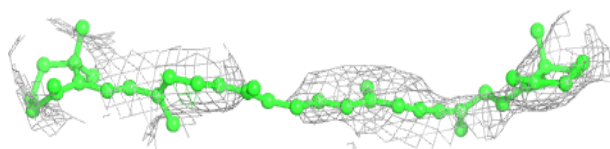
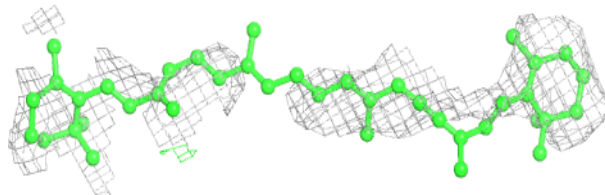
Electron density around CLA H 102:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

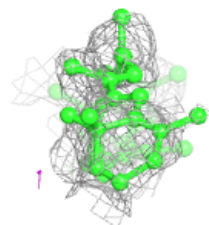
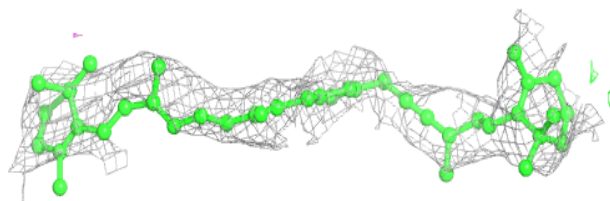
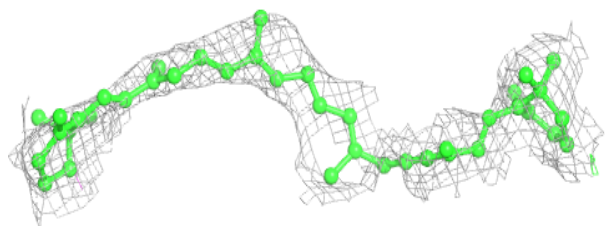


Electron density around BCR A 843:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

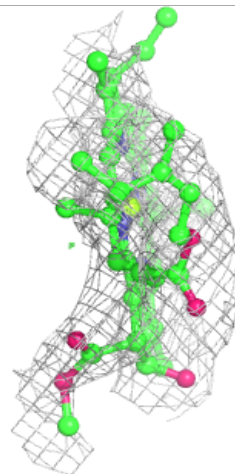
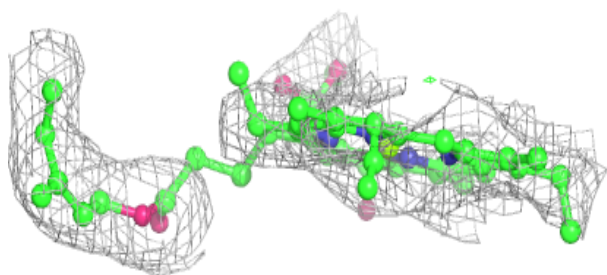
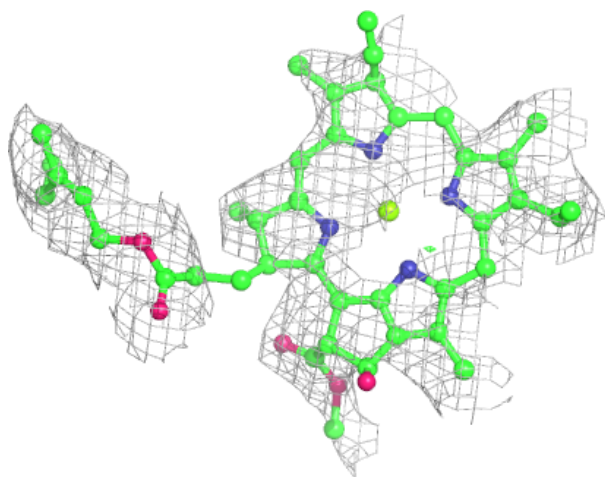
**Electron density around BCR I 103:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



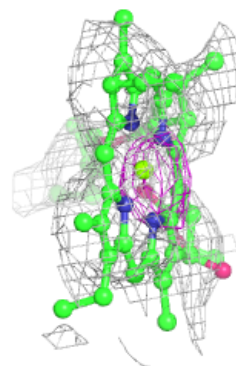
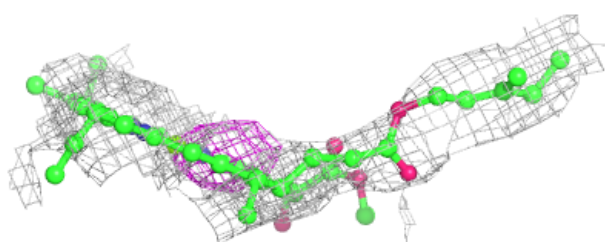
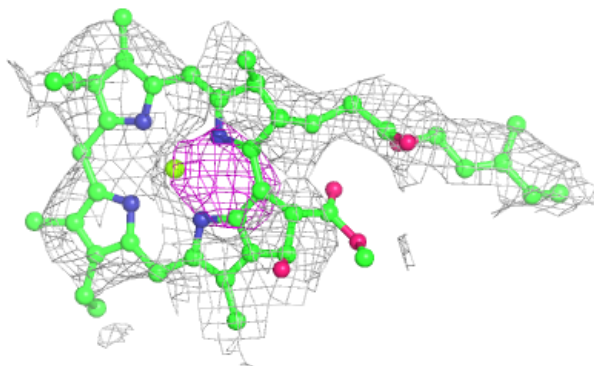
Electron density around CLA G 105:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



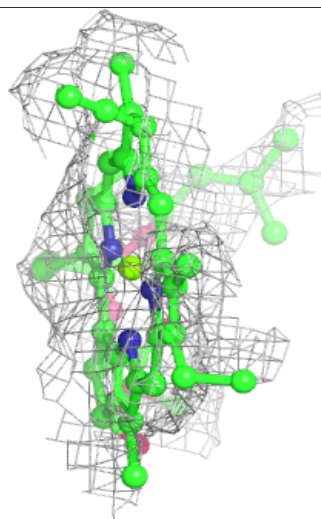
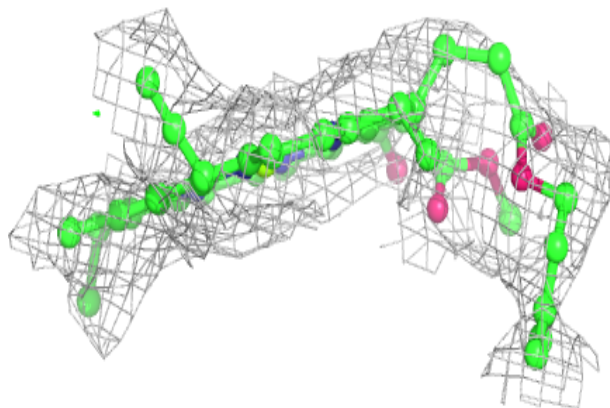
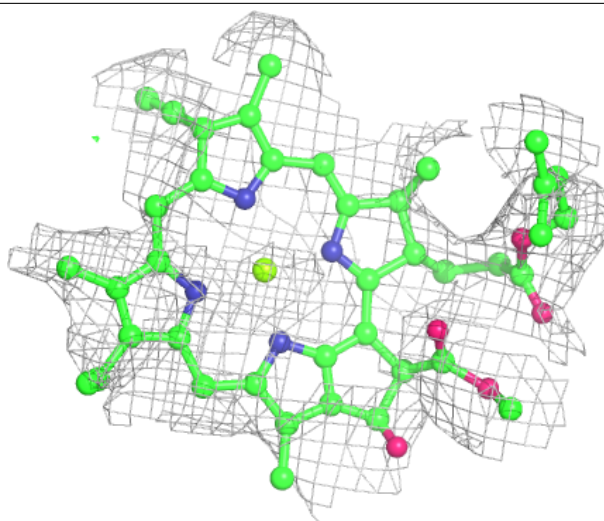
Electron density around CLA 1 211:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)



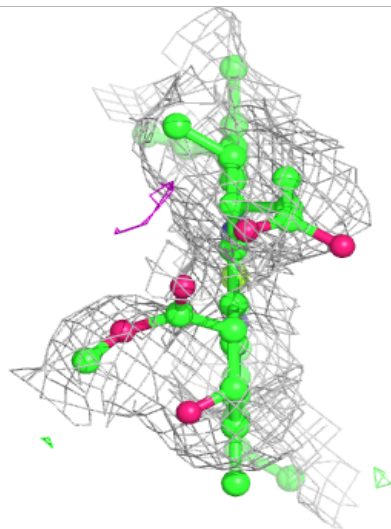
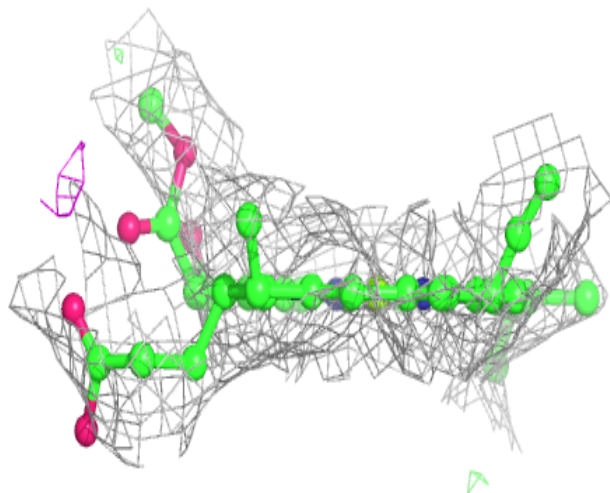
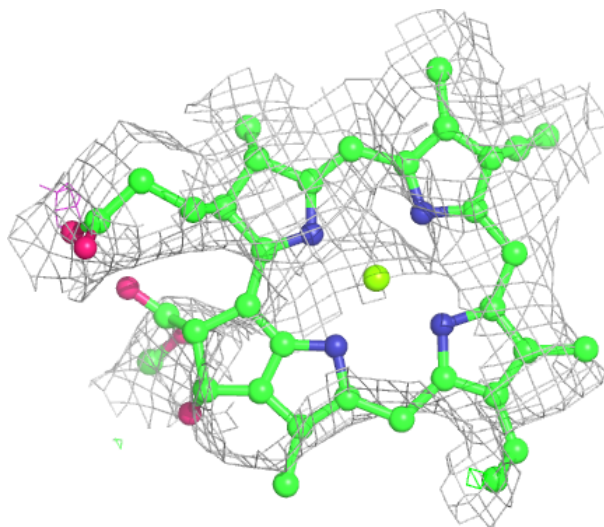
Electron density around CLA 3 314:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



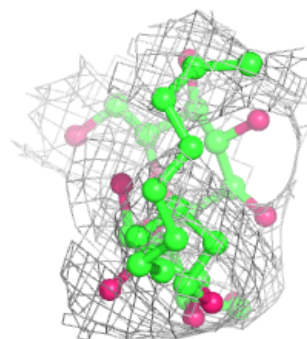
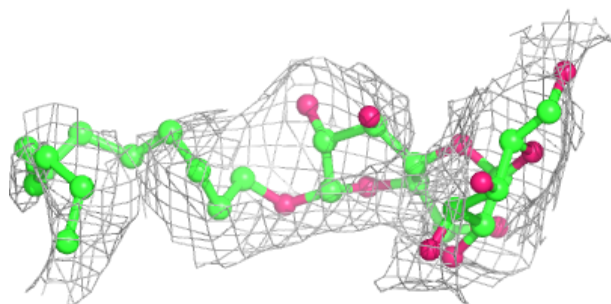
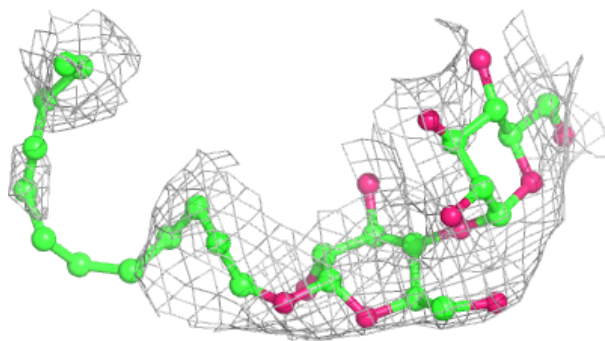
Electron density around CLA B 835:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



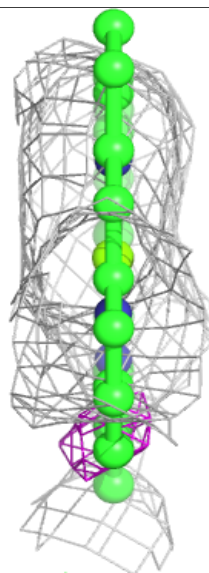
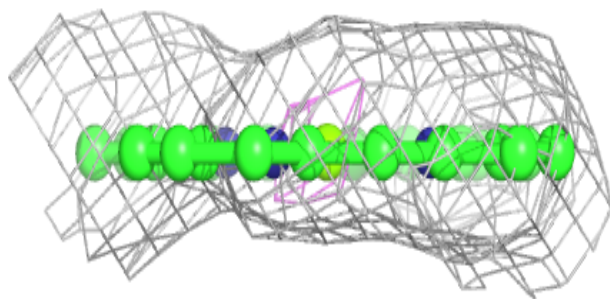
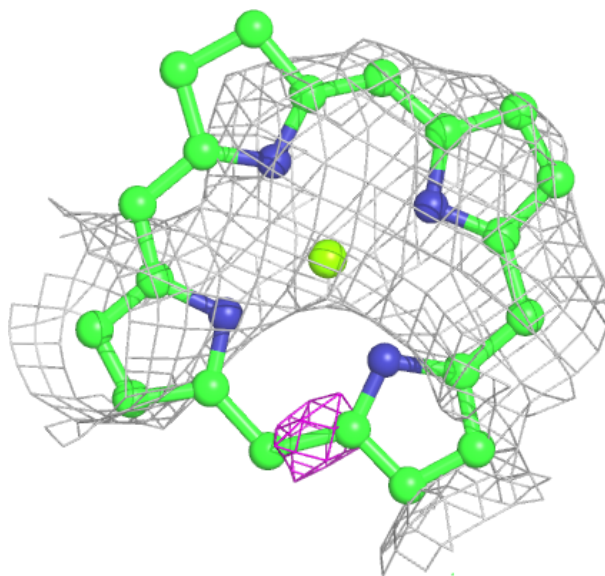
Electron density around LMU 2 321:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



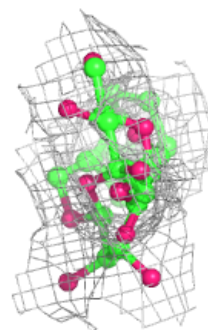
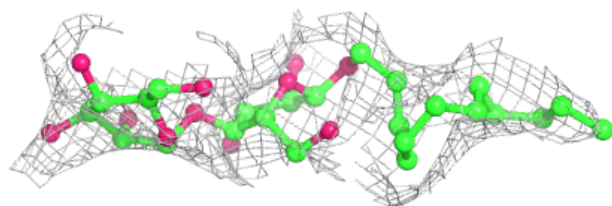
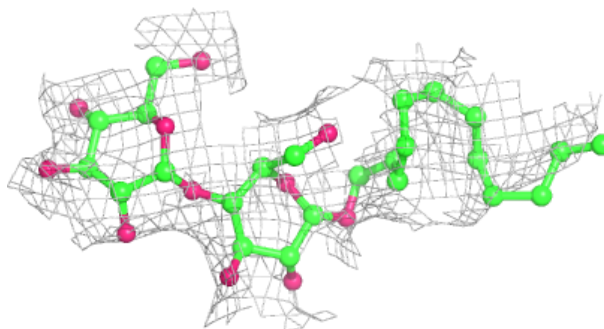
Electron density around CLA A 802:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



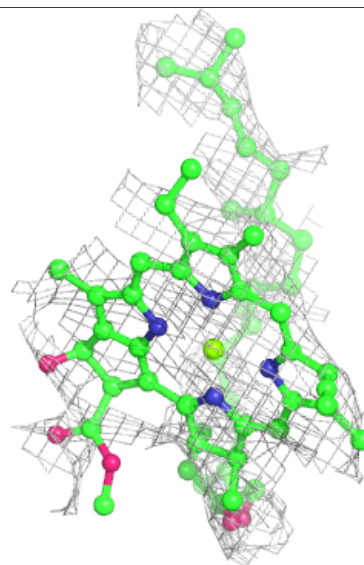
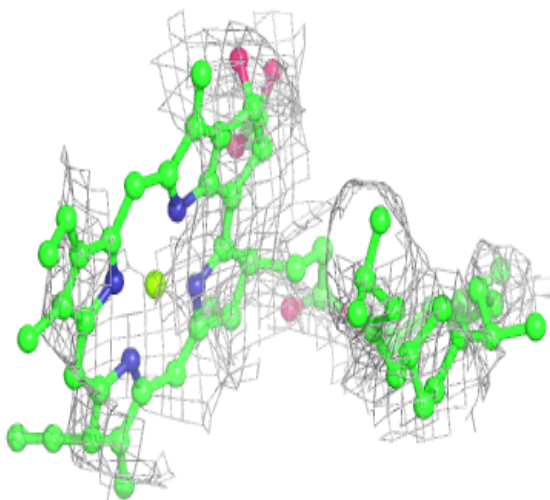
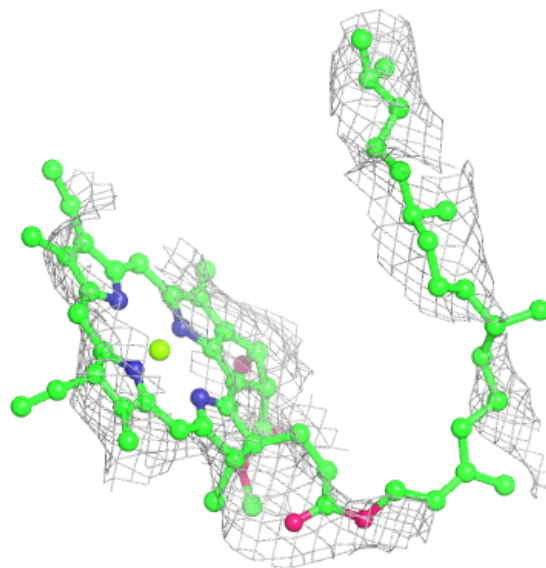
Electron density around LMU A 853:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)



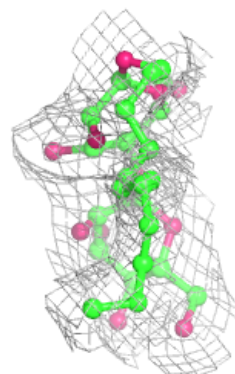
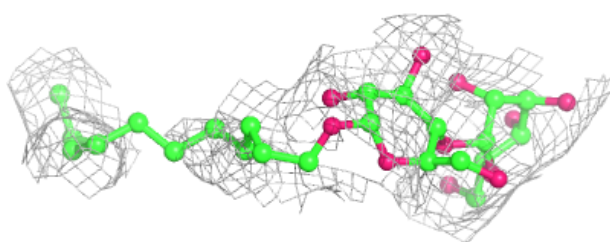
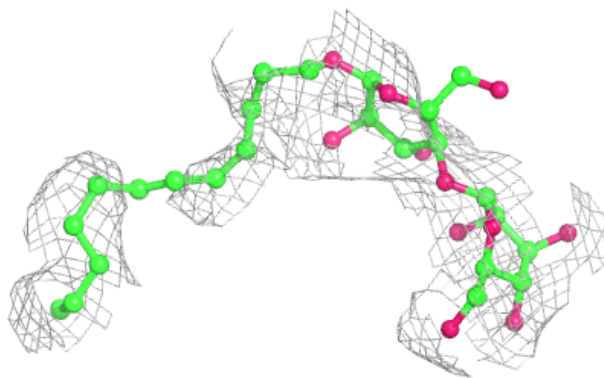
Electron density around CLA 3 311:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



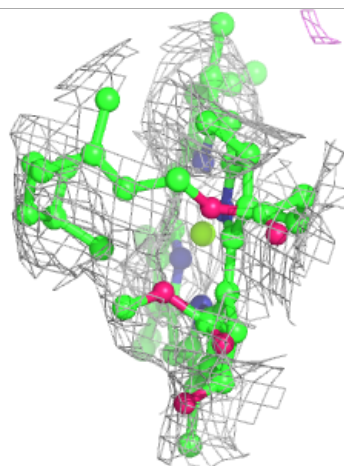
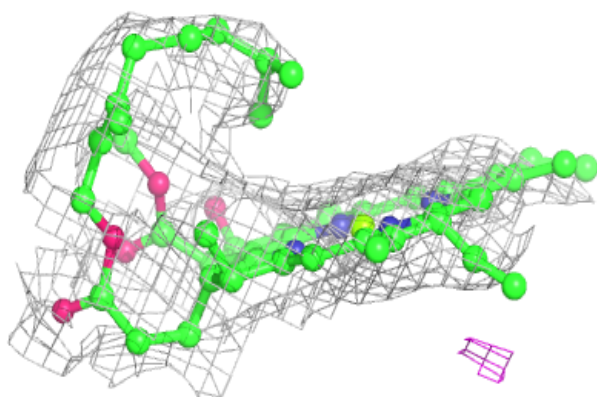
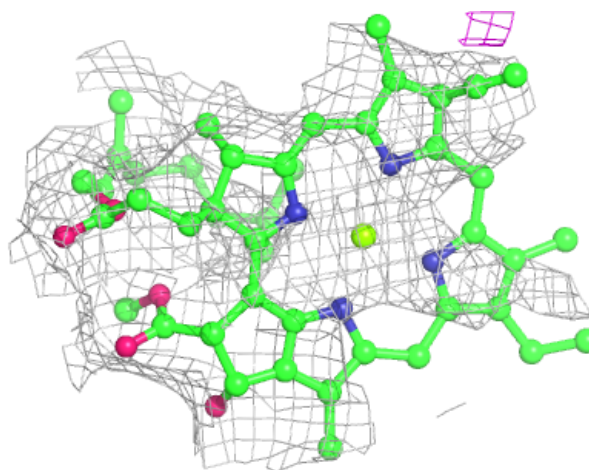
Electron density around LMU 4 320:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



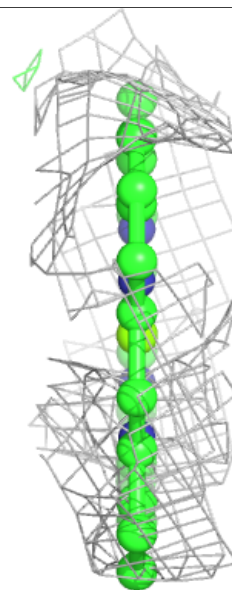
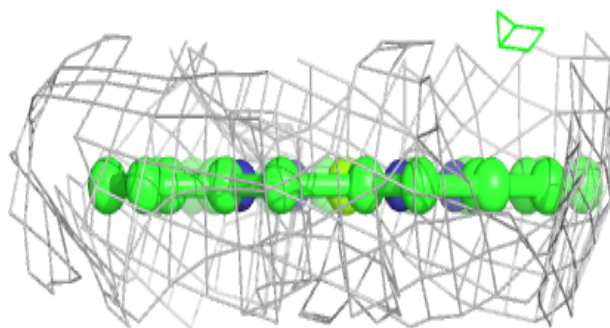
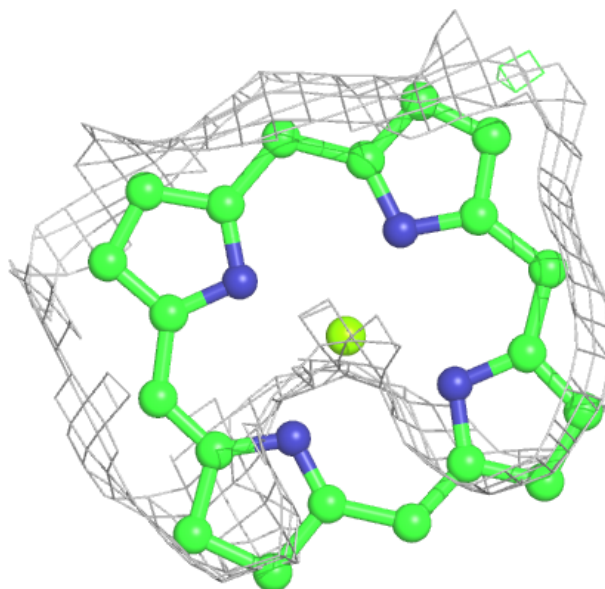
Electron density around CLA 4 304:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



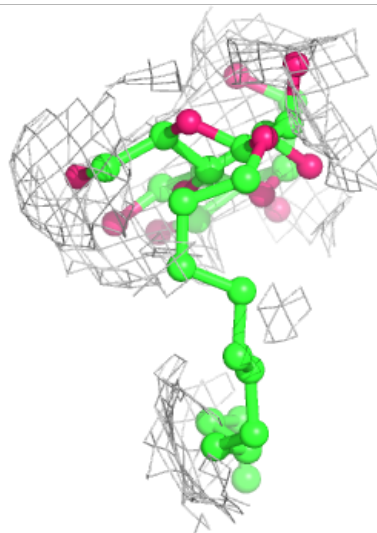
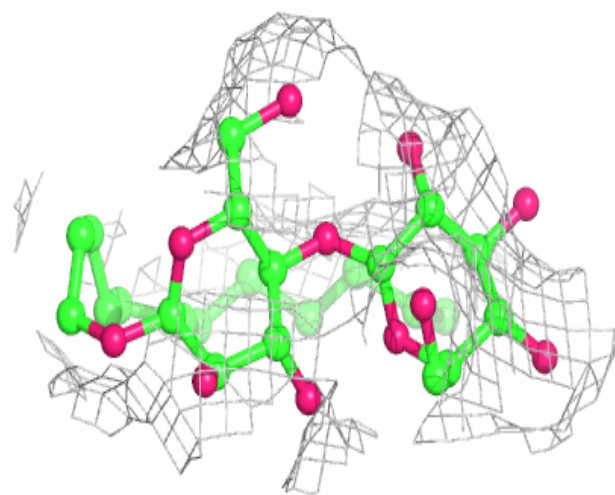
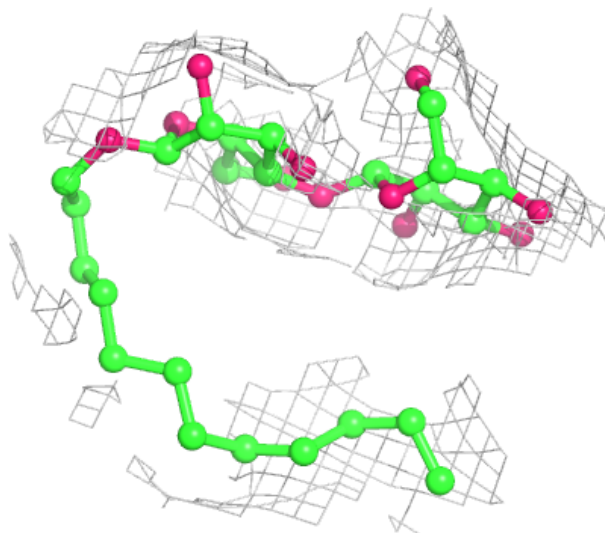
Electron density around CLA 3 305:

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 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



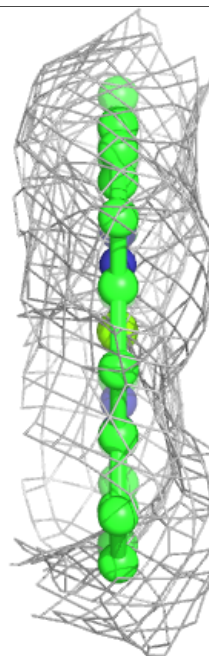
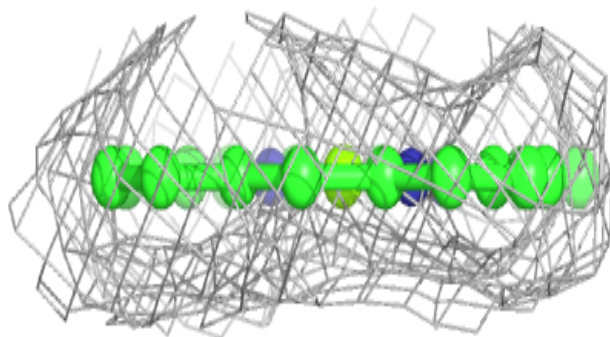
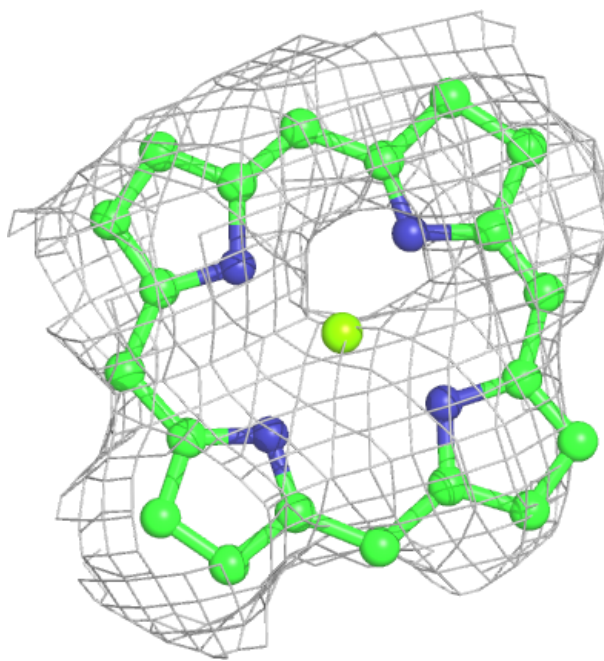
Electron density around LMU 1 217:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



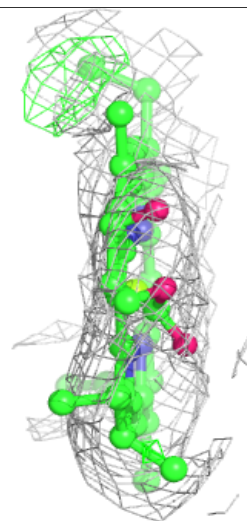
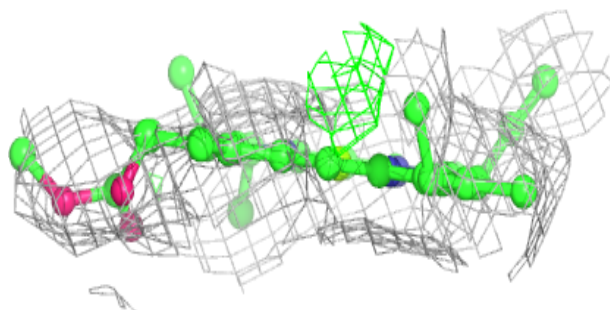
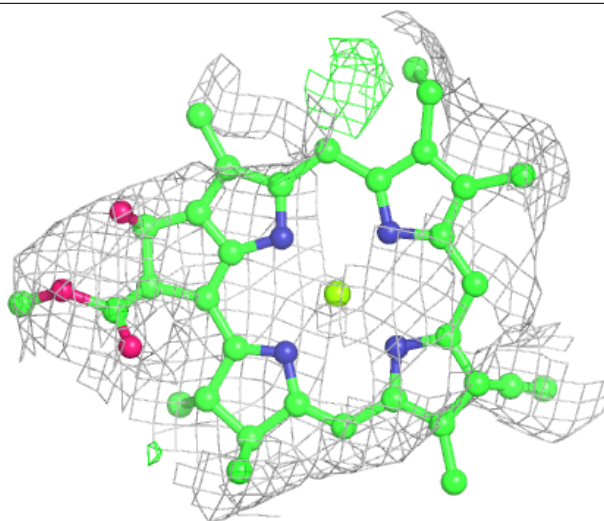
Electron density around CLA 4 314:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



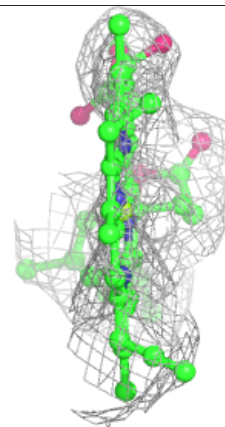
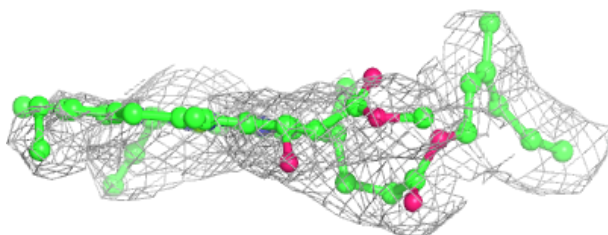
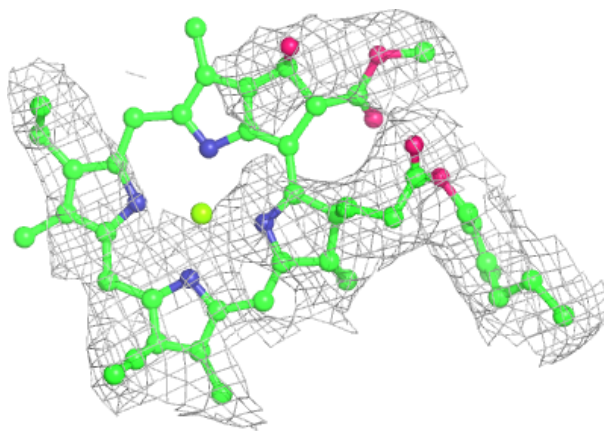
Electron density around CLA F 206:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

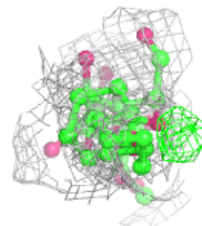
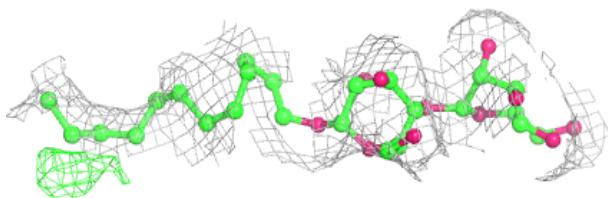
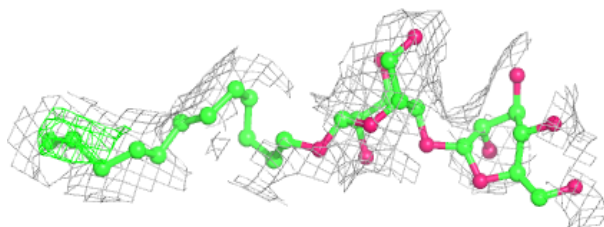


Electron density around CLA 4 317:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

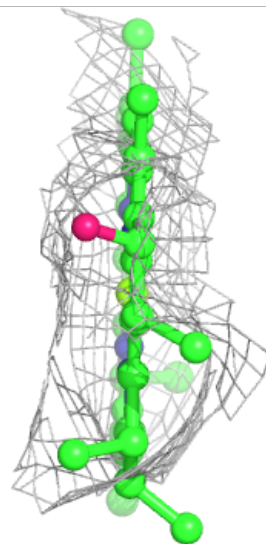
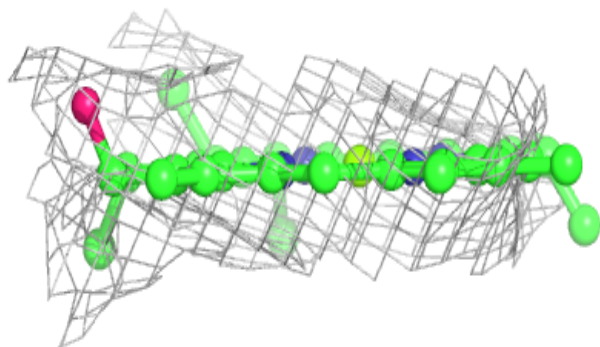
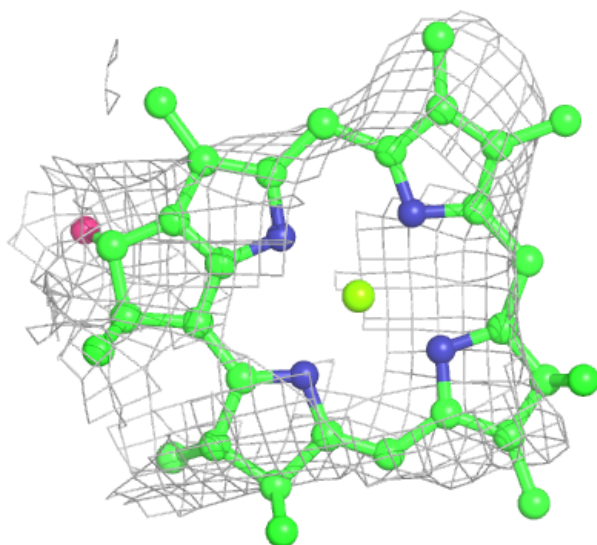
**Electron density around LMU E 101:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



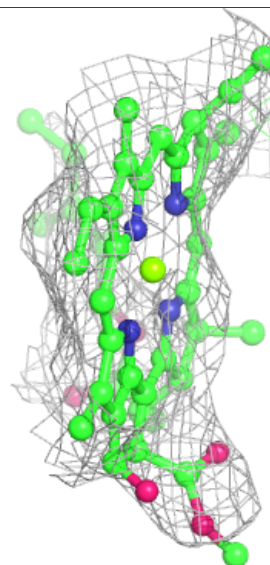
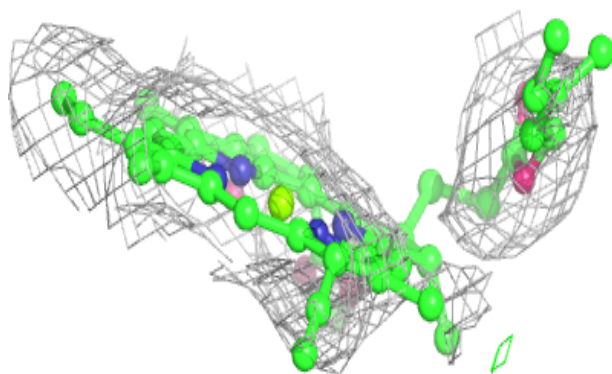
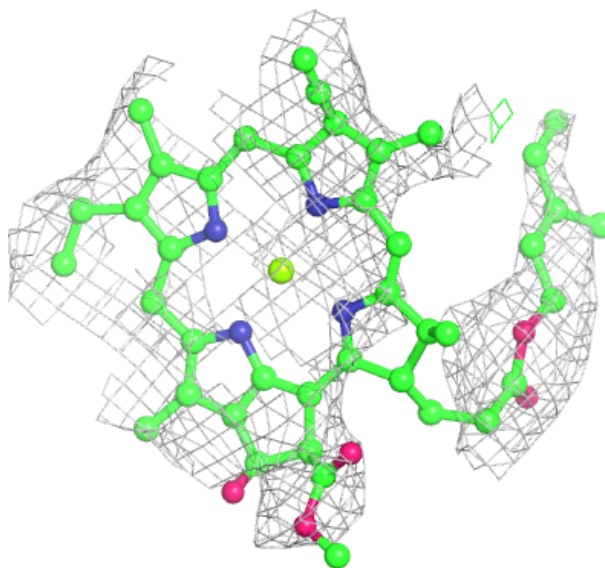
Electron density around CLA 3 318:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



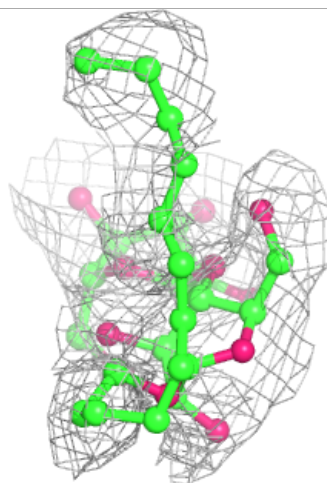
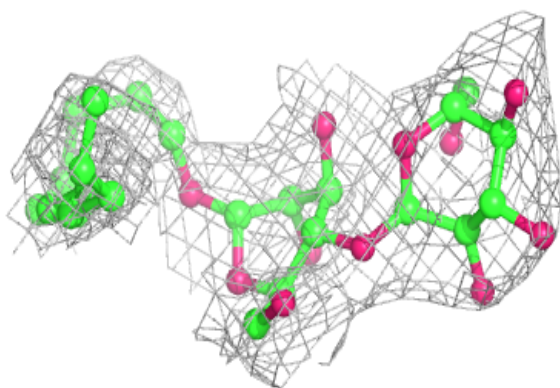
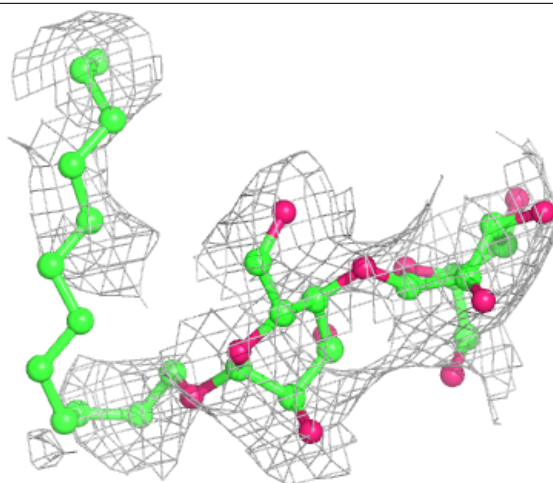
Electron density around CLA B 836:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



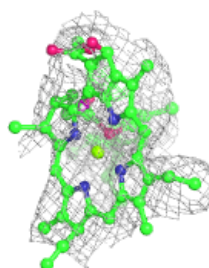
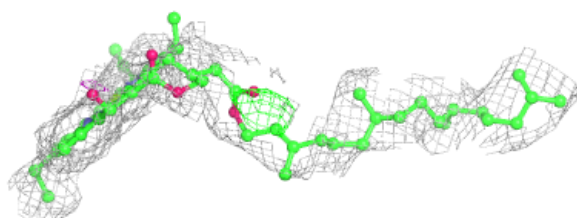
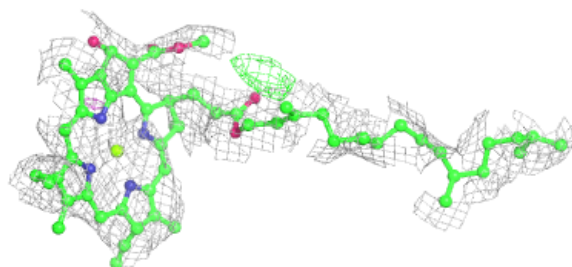
Electron density around LMU R 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



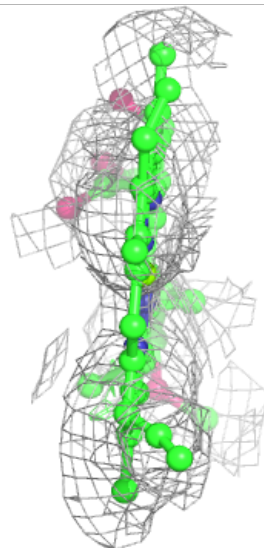
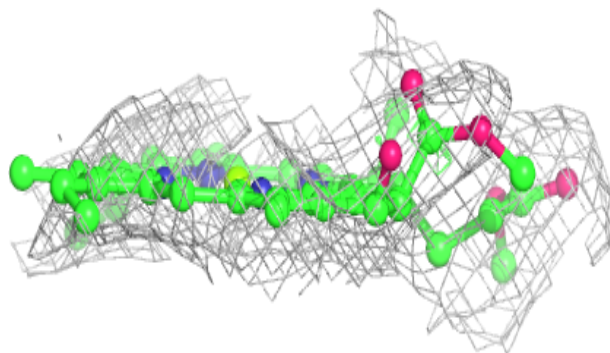
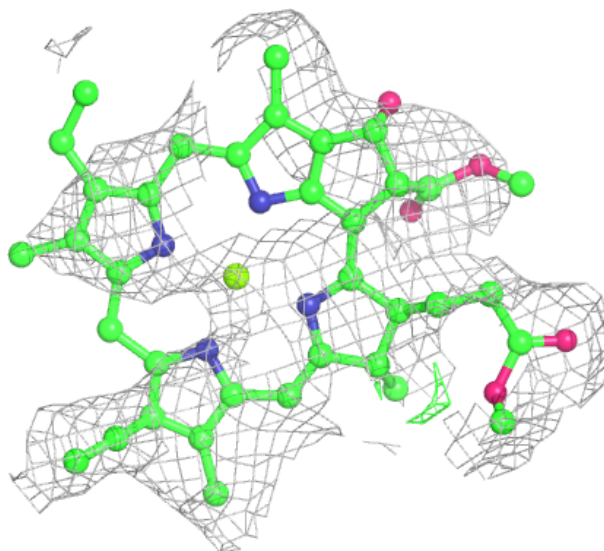
Electron density around CLA 4 303:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



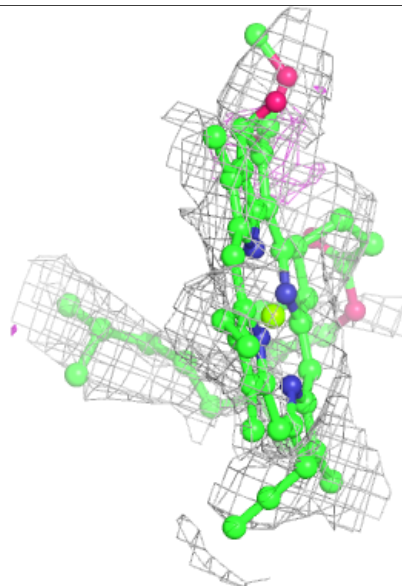
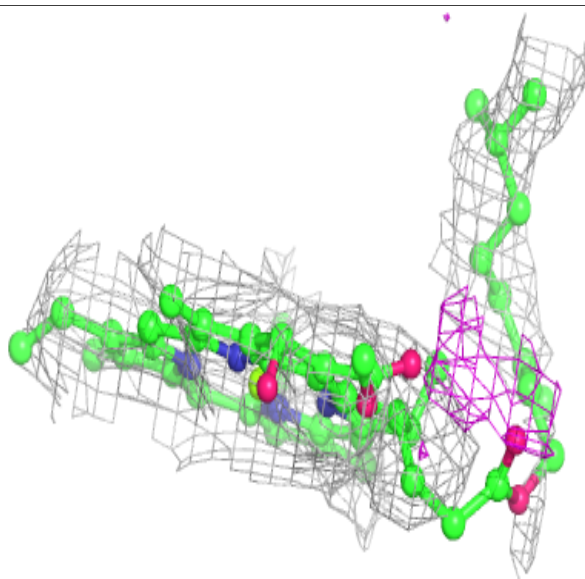
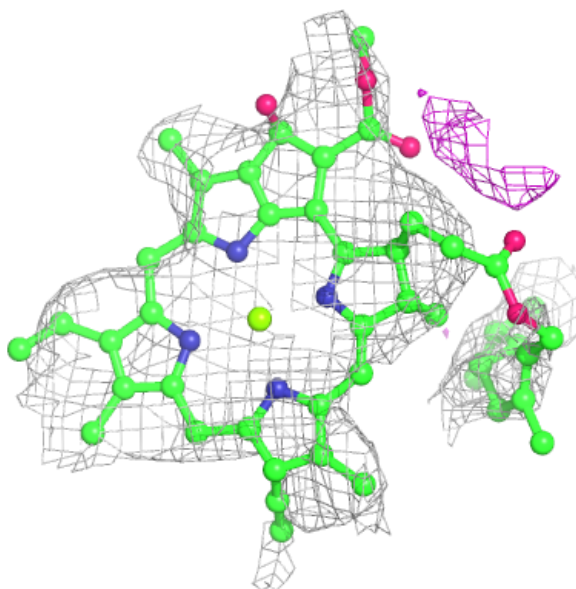
Electron density around CLA B 817:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



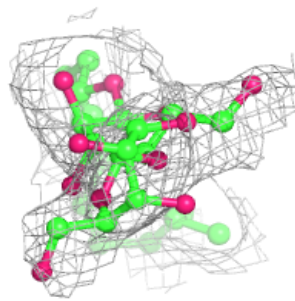
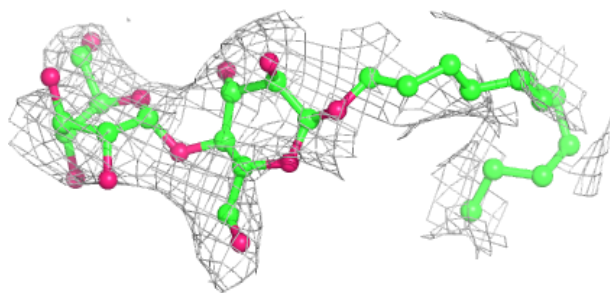
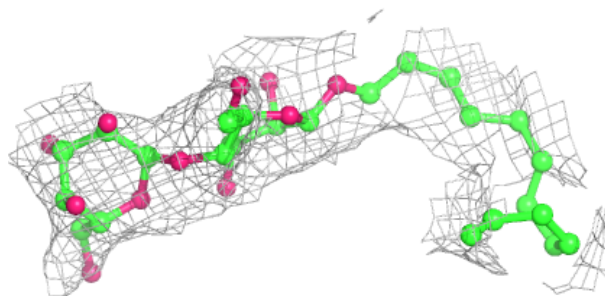
Electron density around CLA H 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



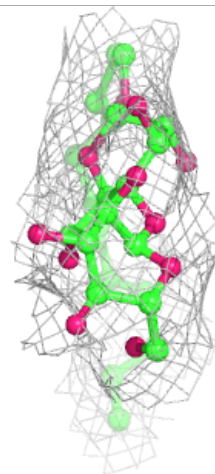
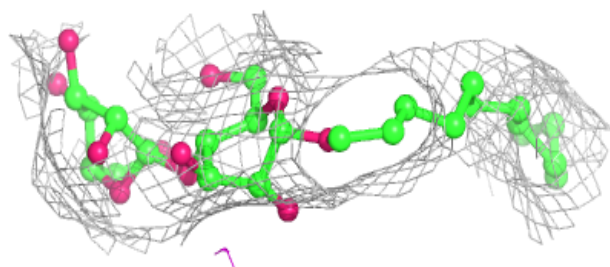
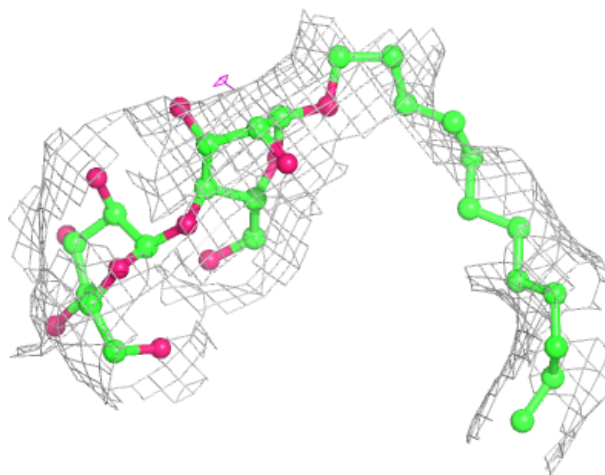
Electron density around LMU H 106:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



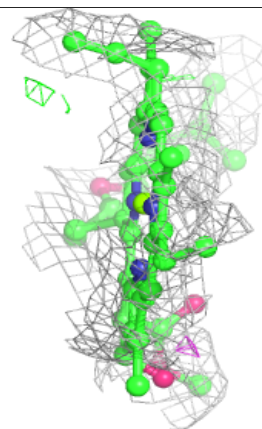
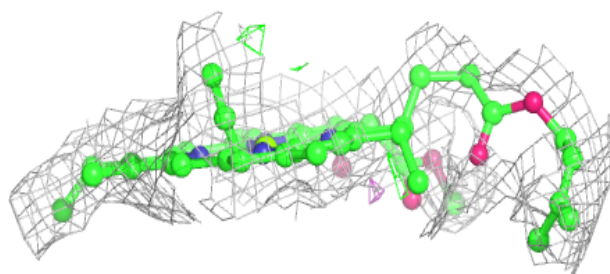
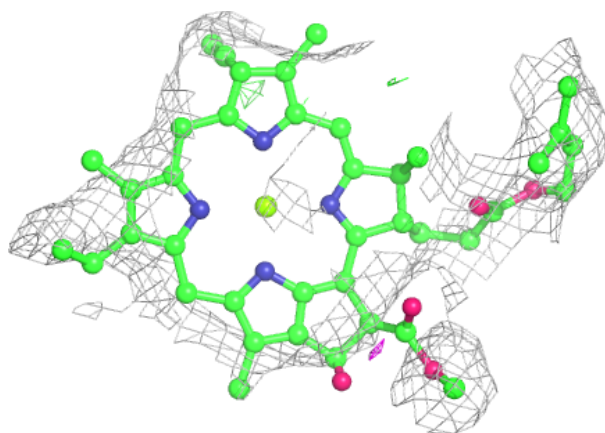
Electron density around LMU K 106:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



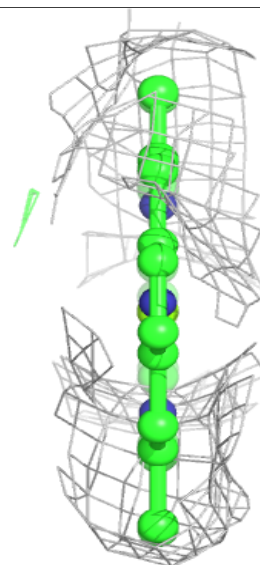
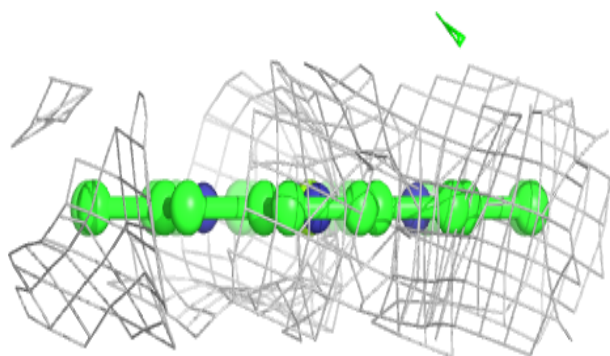
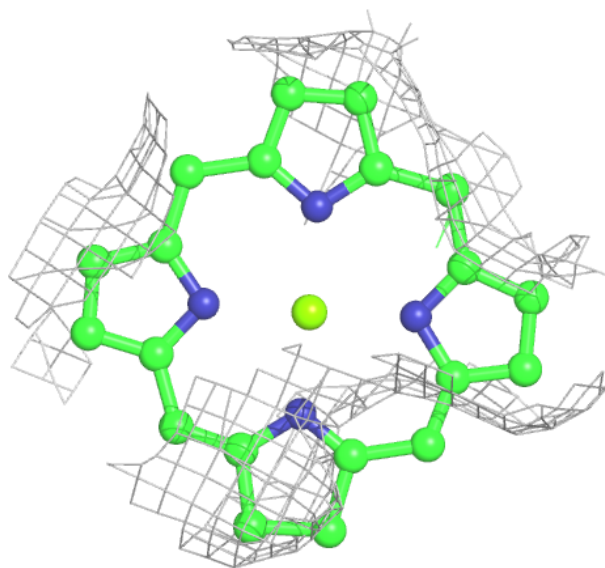
Electron density around CLA K 103:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



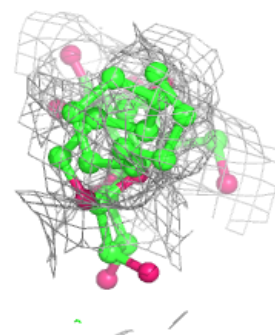
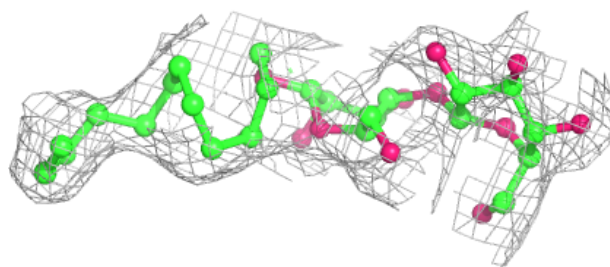
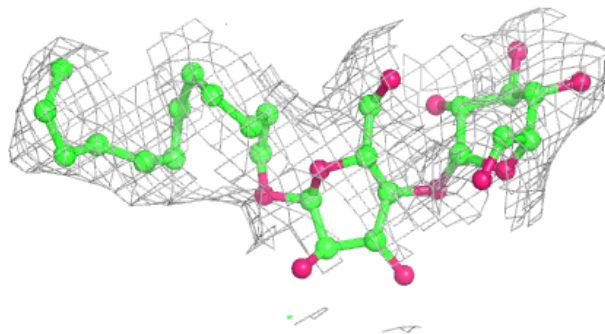
Electron density around CLA 3 309:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

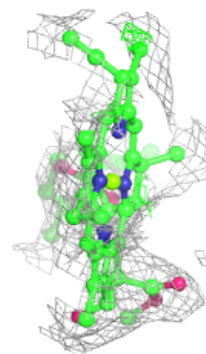
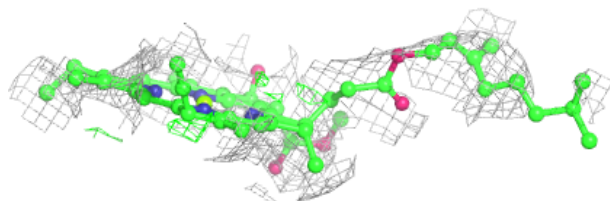
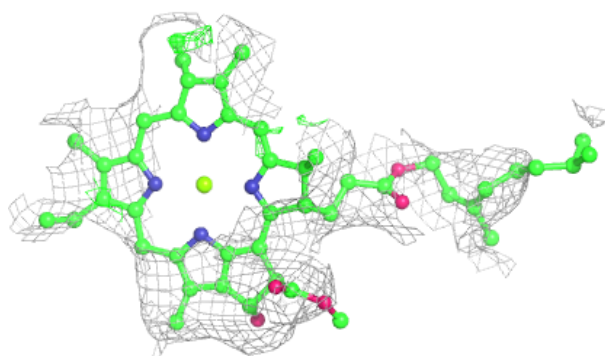


Electron density around LMU 2 313:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

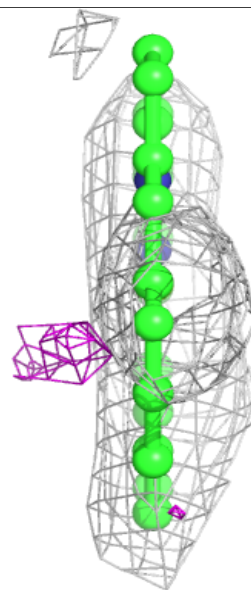
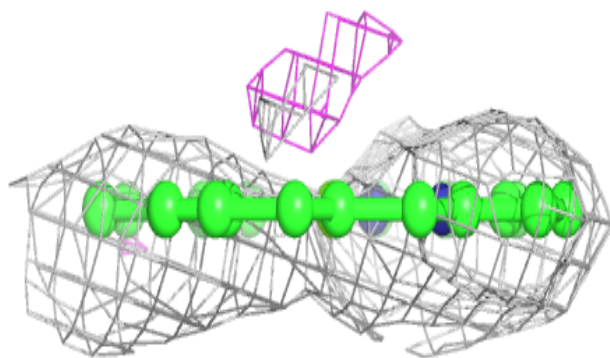
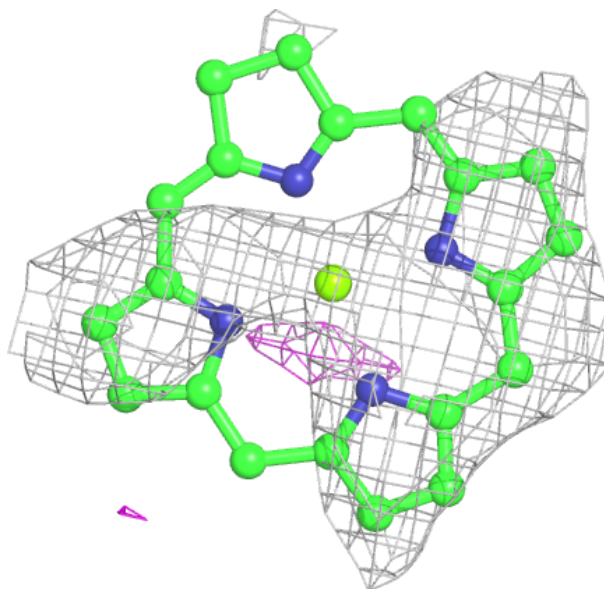
**Electron density around CLA A 840:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



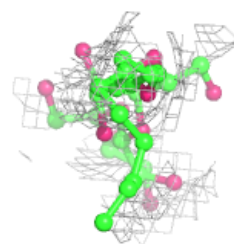
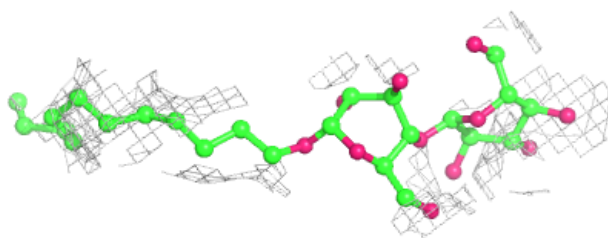
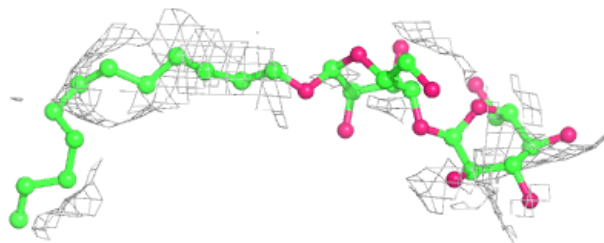
Electron density around CLA 3 313:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



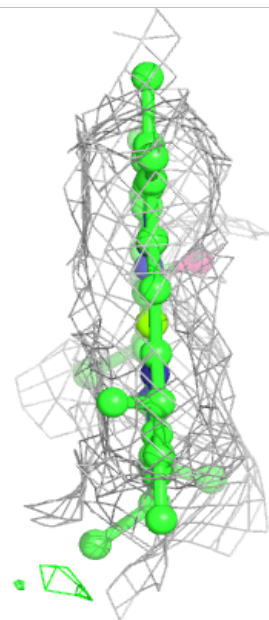
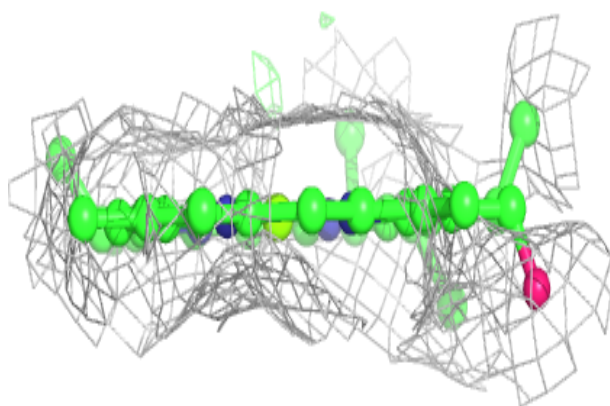
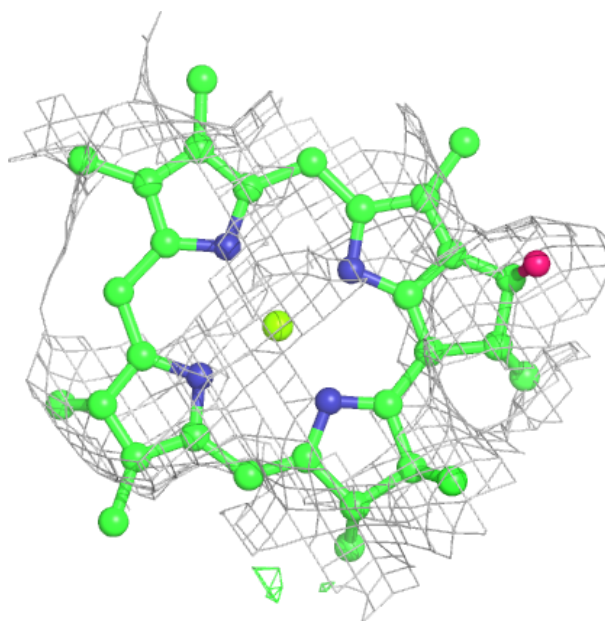
Electron density around LMU G 103:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)



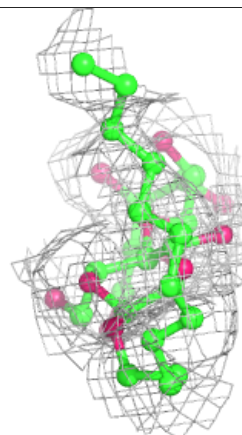
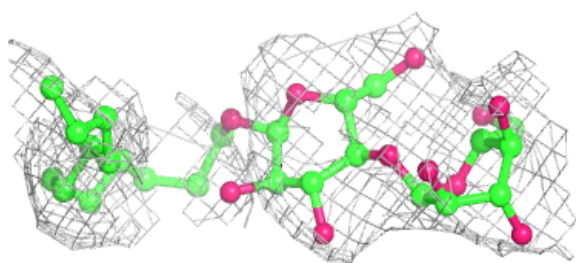
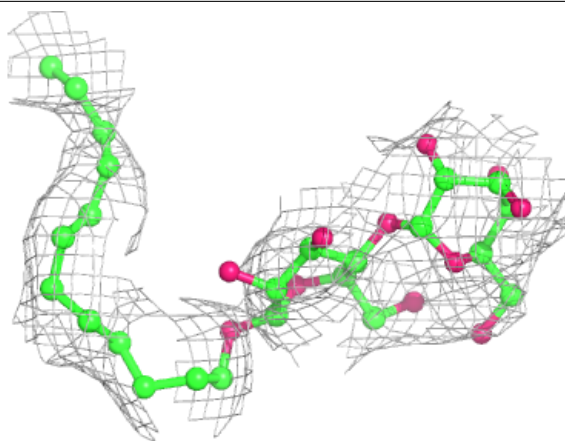
Electron density around CLA 1 205:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



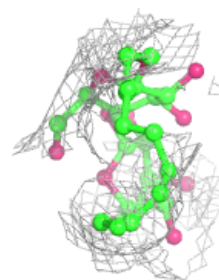
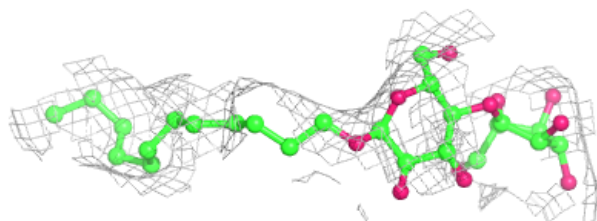
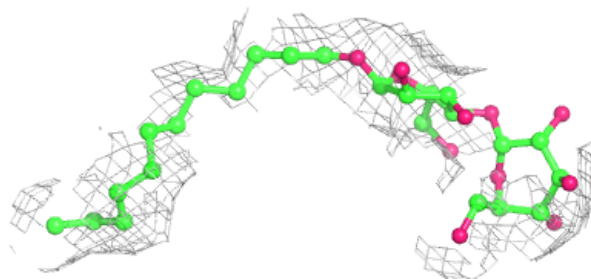
Electron density around LMU 3 319:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



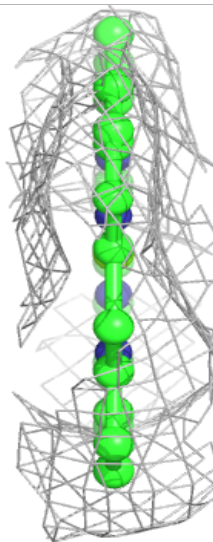
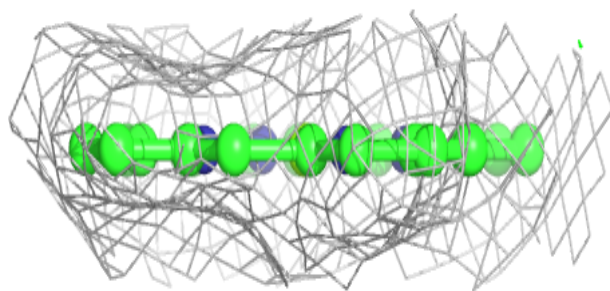
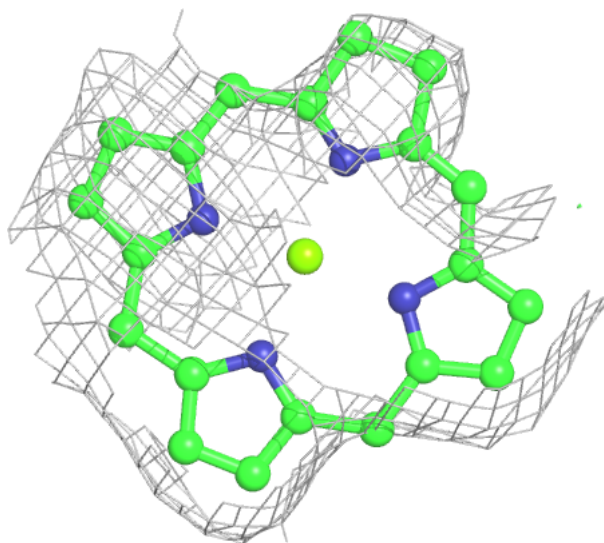
Electron density around LMU L 205:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)



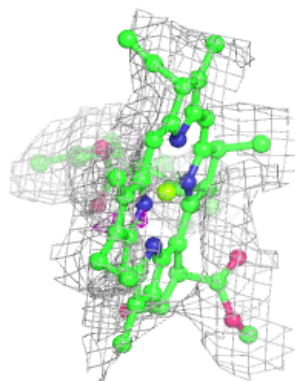
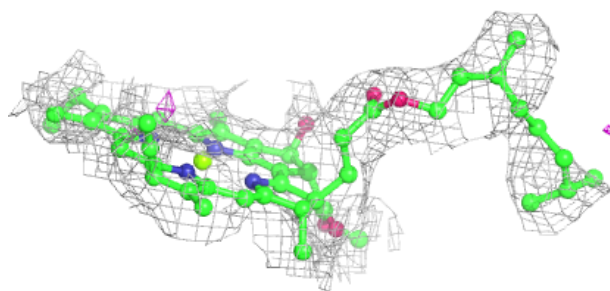
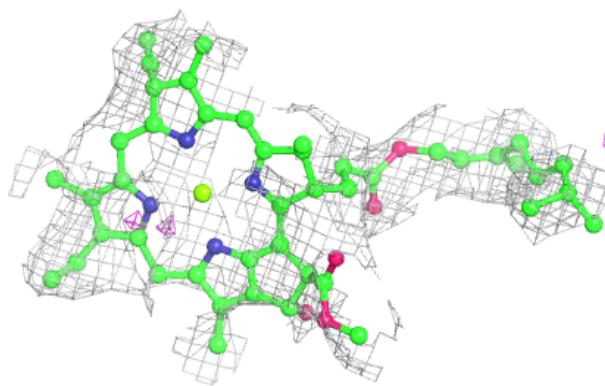
Electron density around CLA 4 308:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



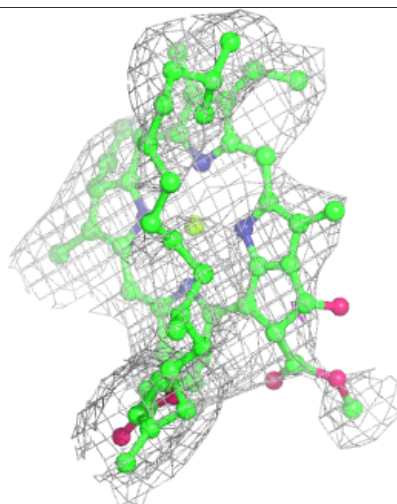
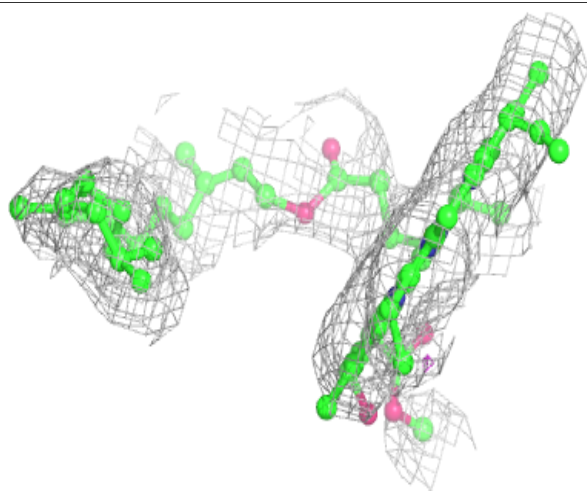
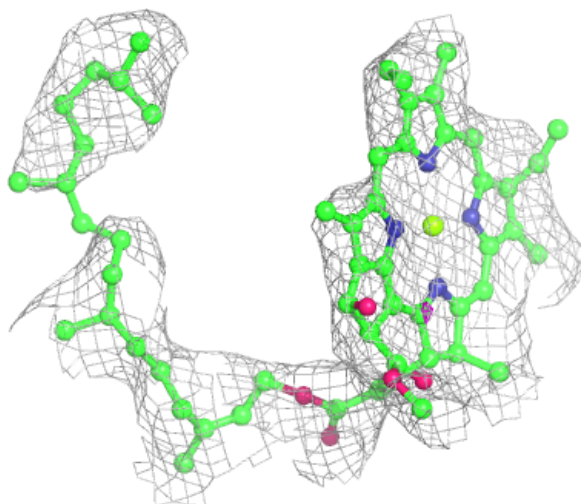
Electron density around CLA H 112:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



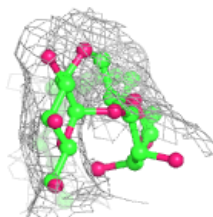
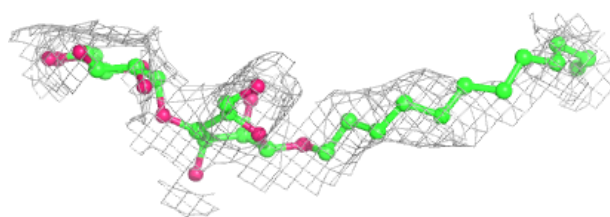
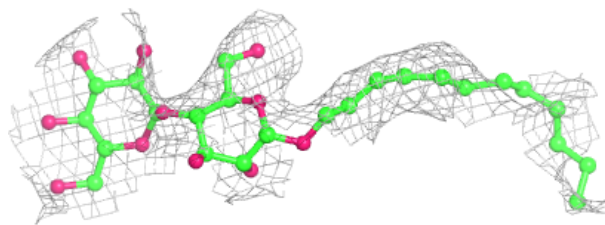
Electron density around CLA 3 310:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



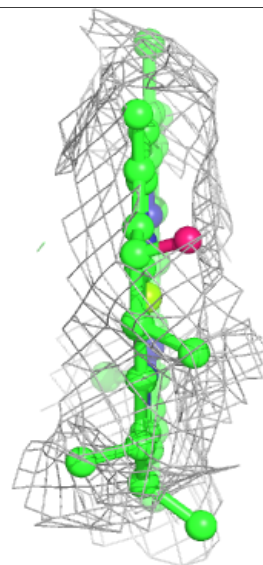
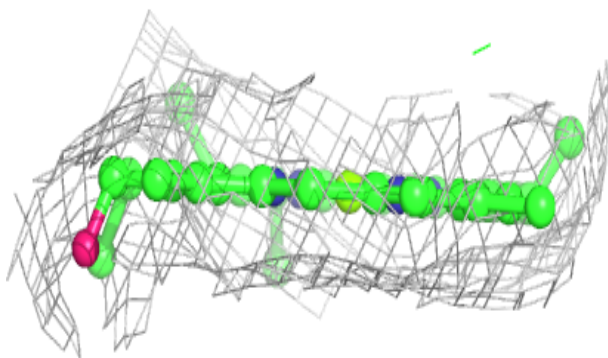
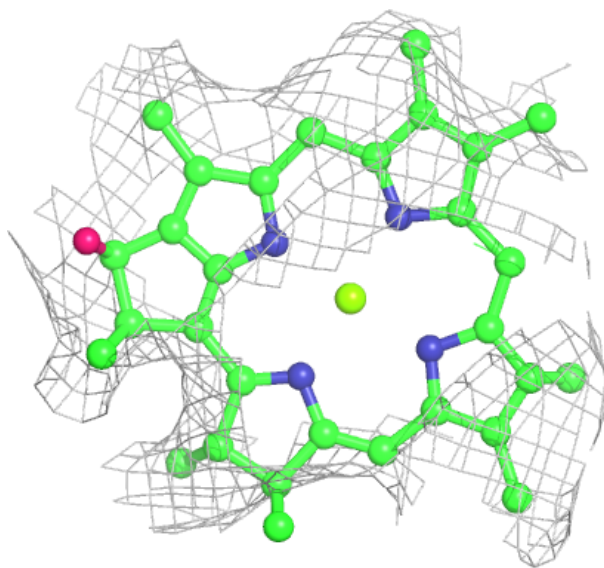
Electron density around LMU 2 322:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



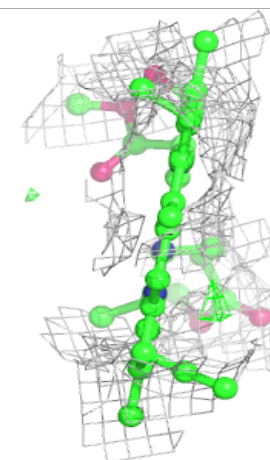
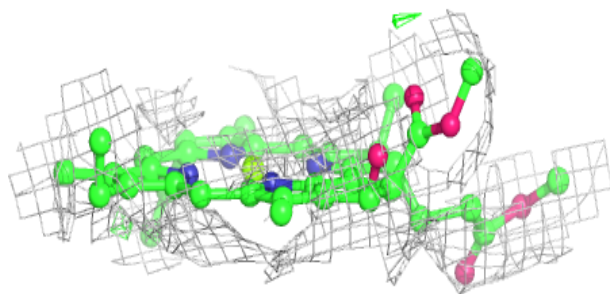
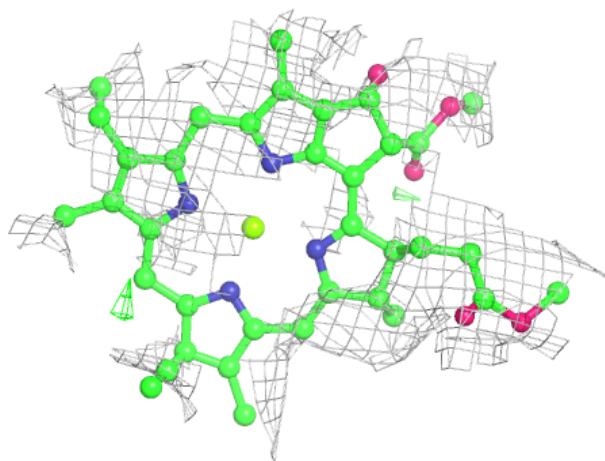
Electron density around CLA 3 303:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



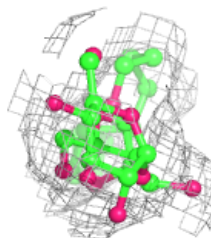
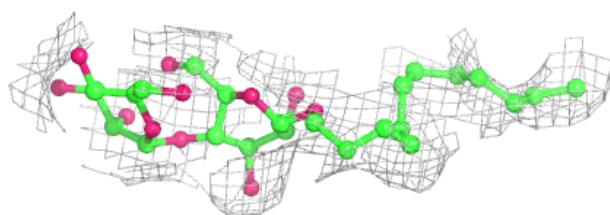
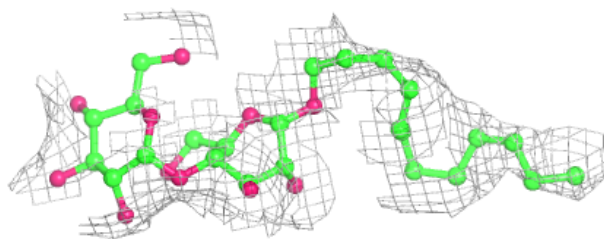
Electron density around CLA K 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



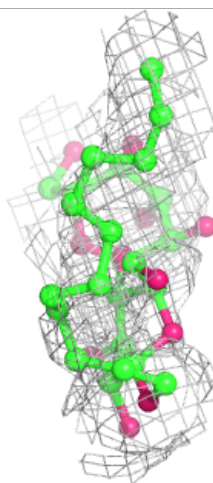
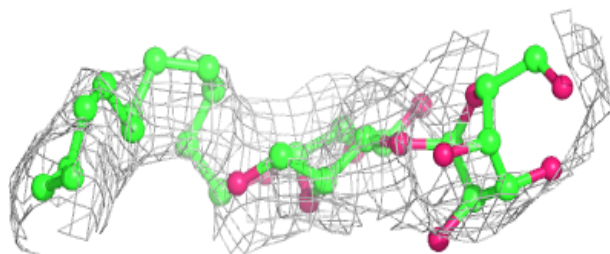
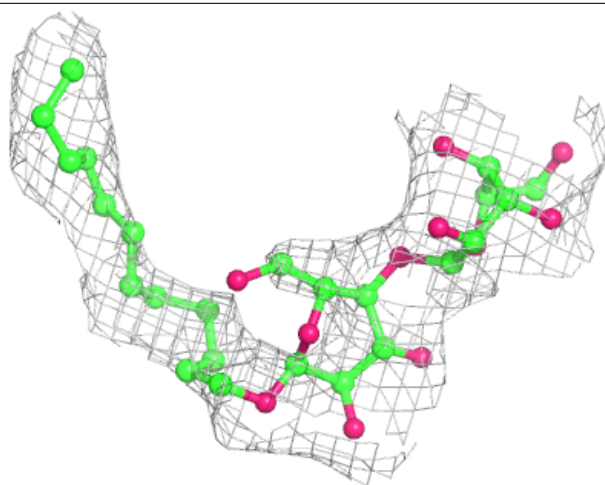
Electron density around LMU R 102:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



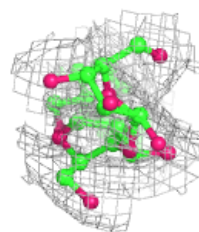
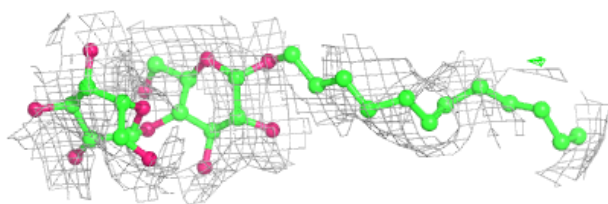
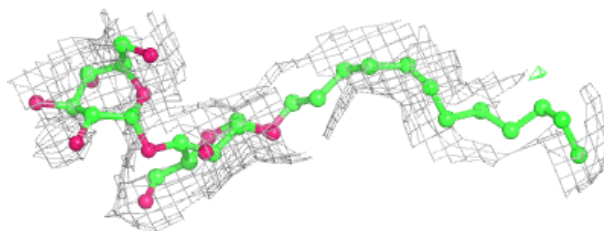
Electron density around LMU R 103:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

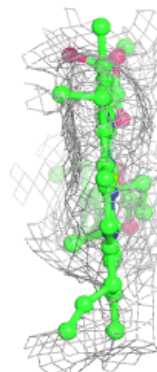
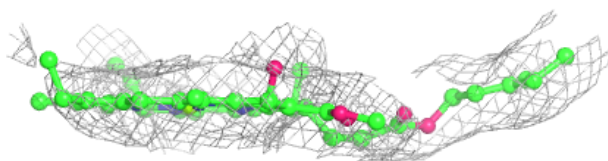
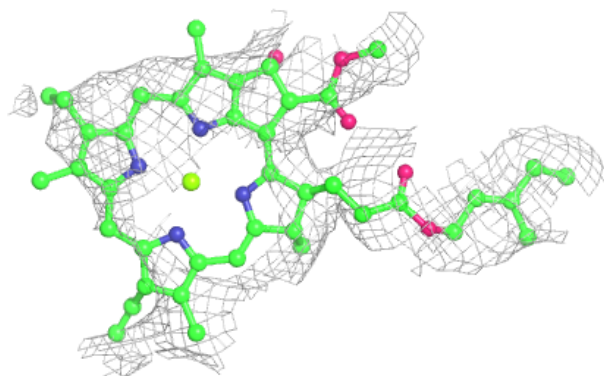


Electron density around LMU H 103:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)

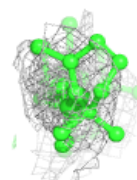
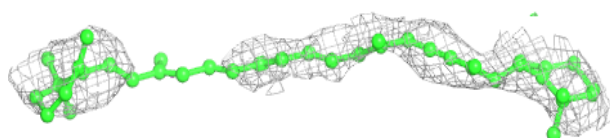
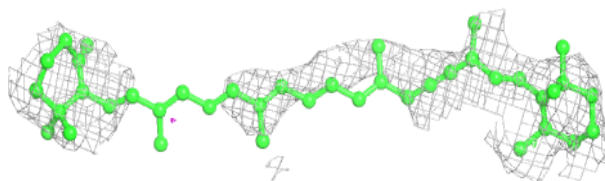
**Electron density around CLA 1 215:**

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)

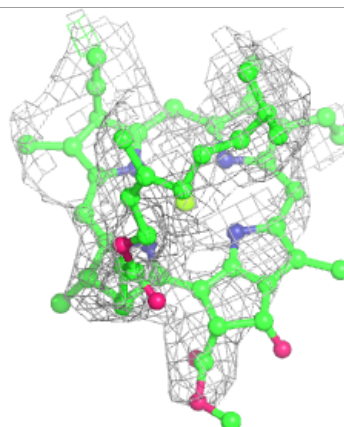
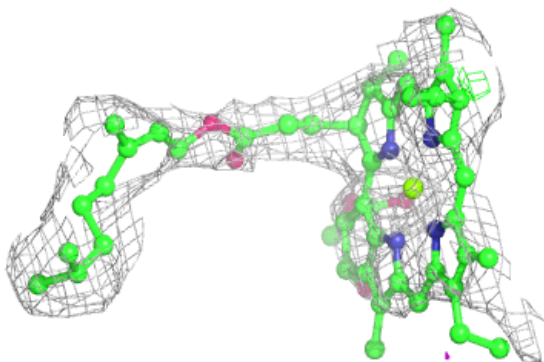
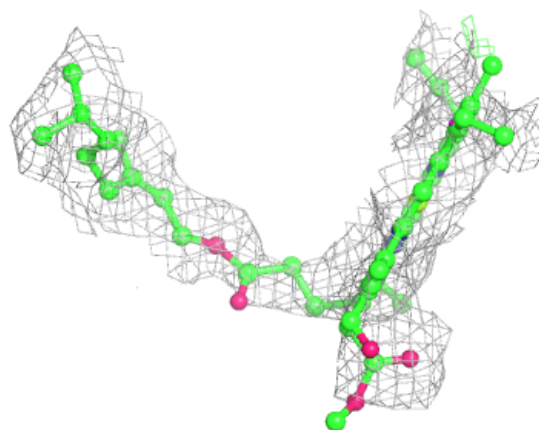


Electron density around BCR G 104:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

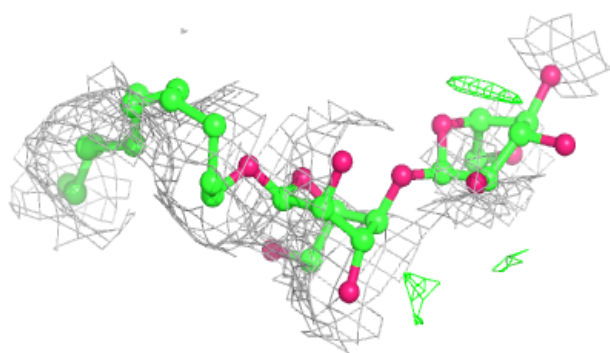
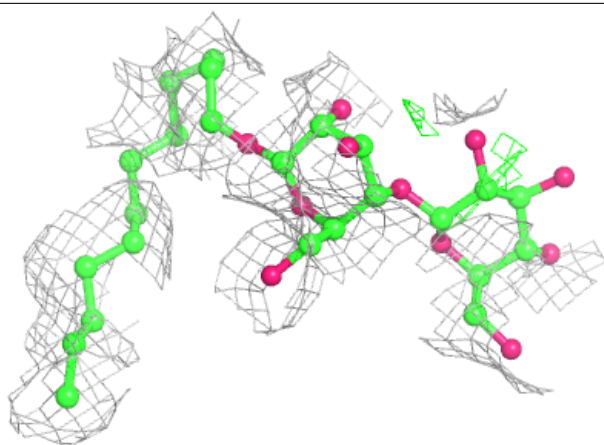
**Electron density around CLA L 204:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

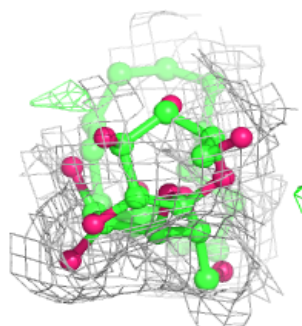
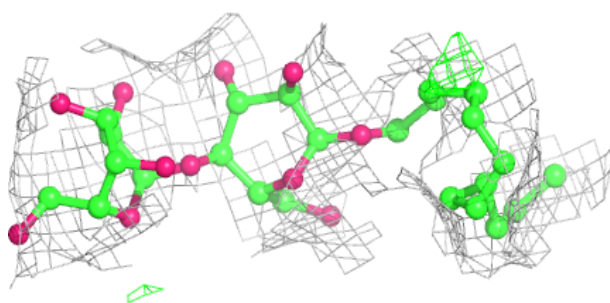
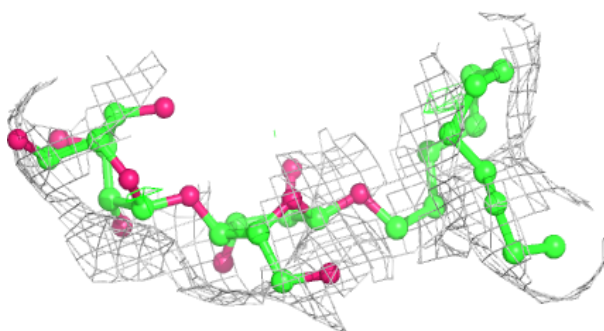


Electron density around LMU A 848:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

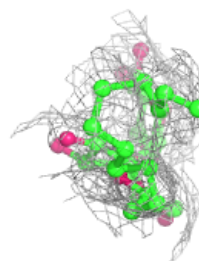
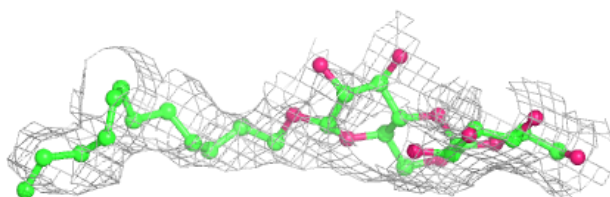
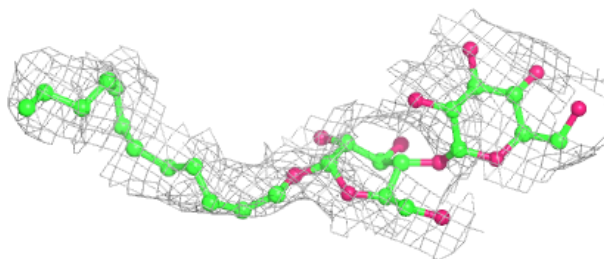
**Electron density around LMU A 854:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



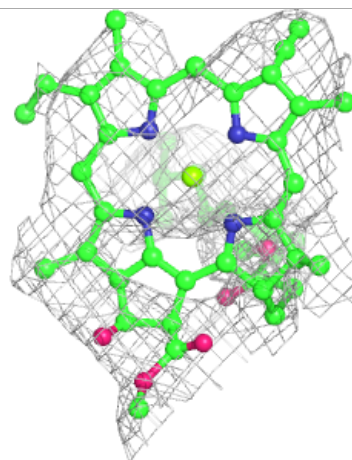
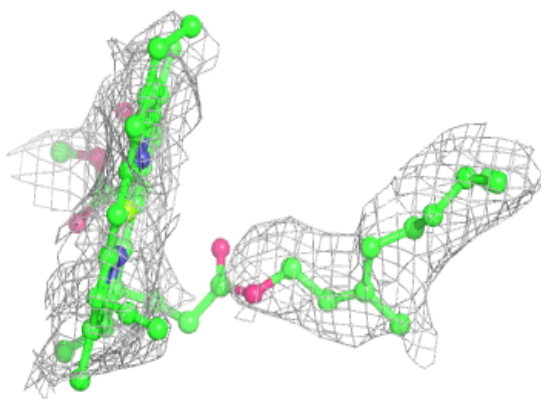
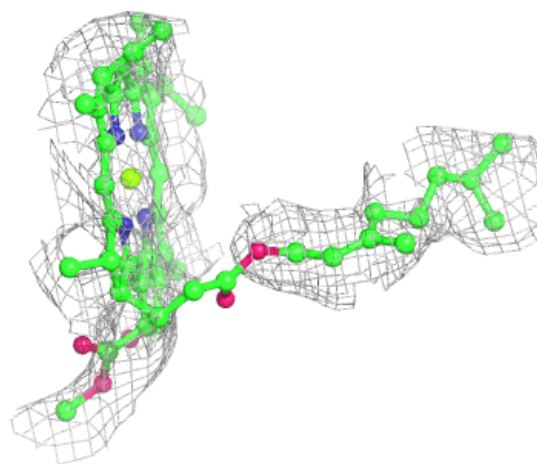
Electron density around LMU B 804:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



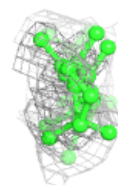
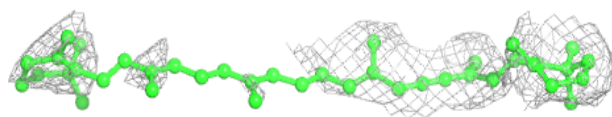
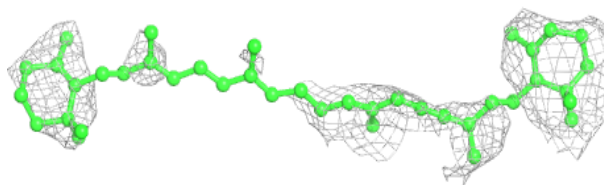
Electron density around CLA 4 301:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

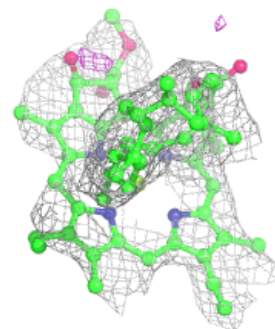
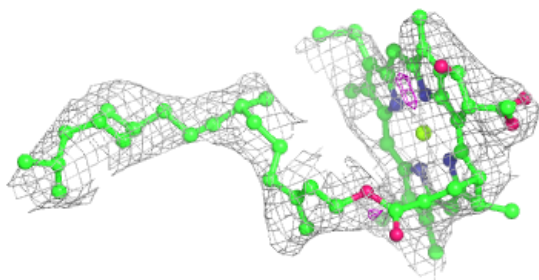
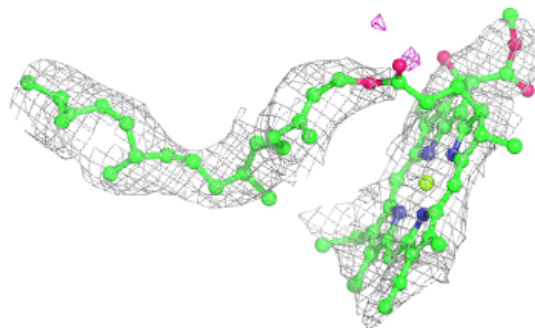


Electron density around BCR L 211:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

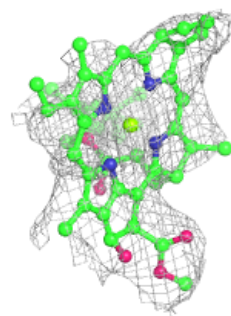
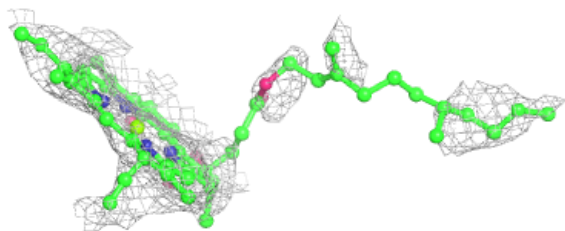
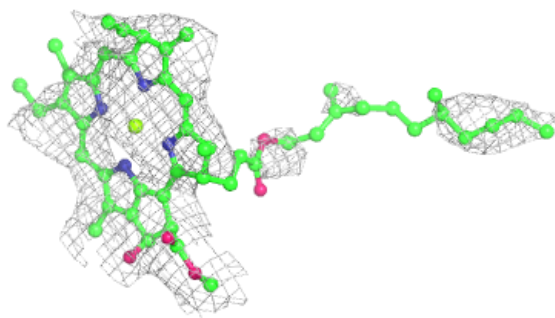
**Electron density around CLA A 811:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



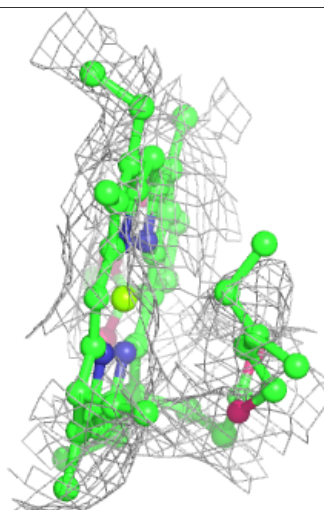
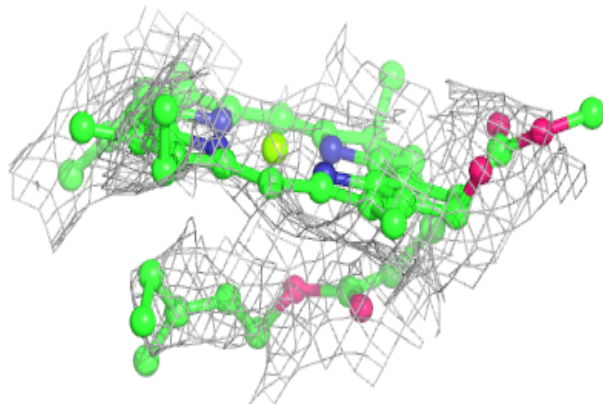
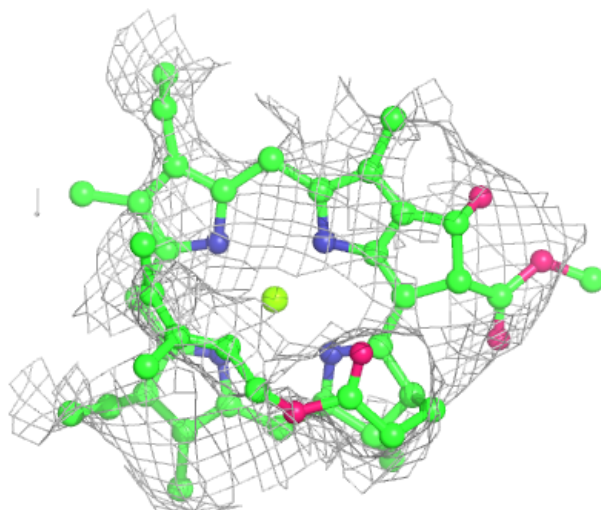
Electron density around CLA A 819:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



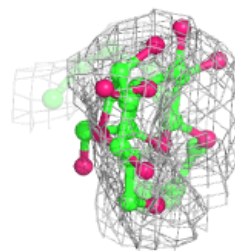
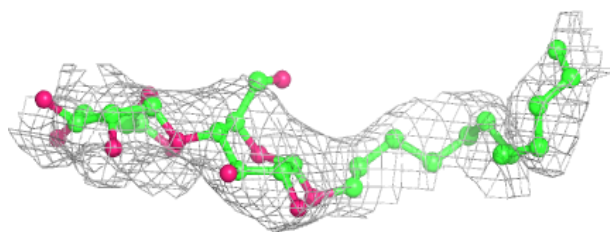
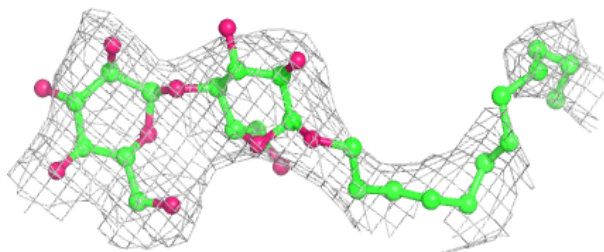
Electron density around CLA A 820:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

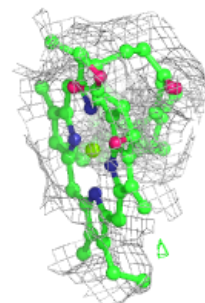
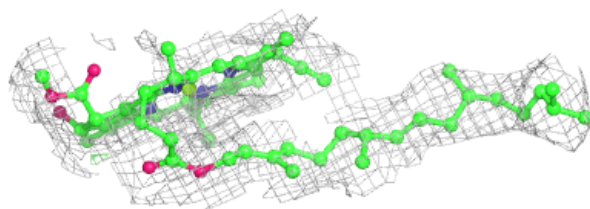
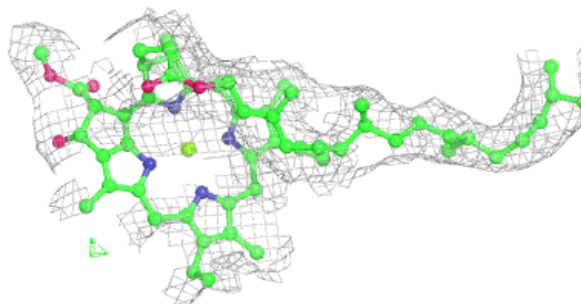


Electron density around LMU C 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

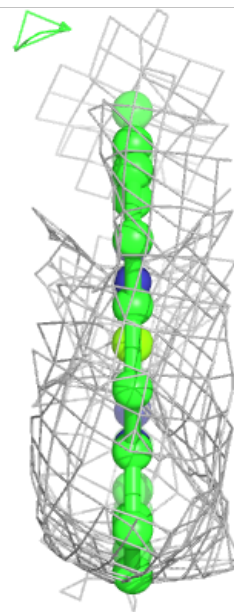
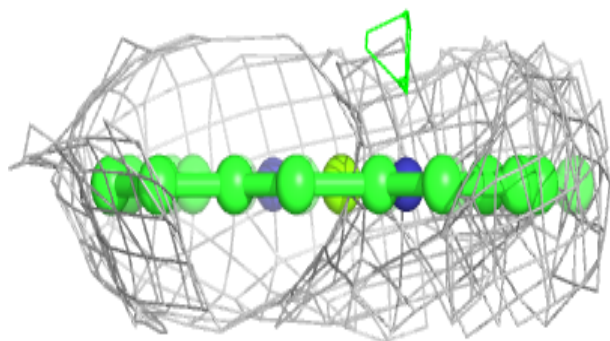
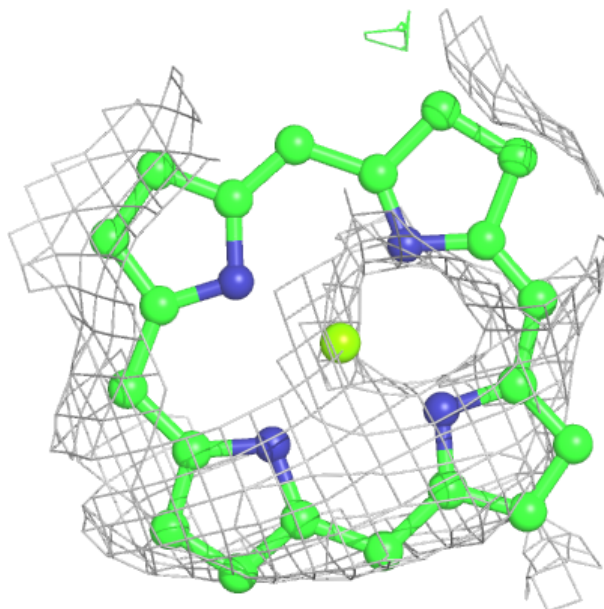
**Electron density around CLA 2 307:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



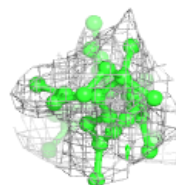
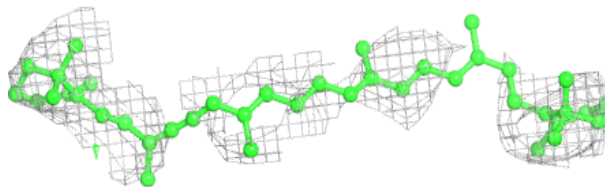
Electron density around CLA 3 306:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

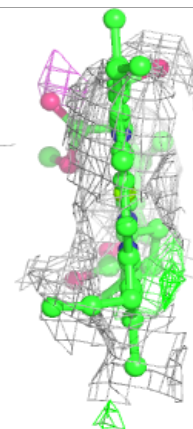
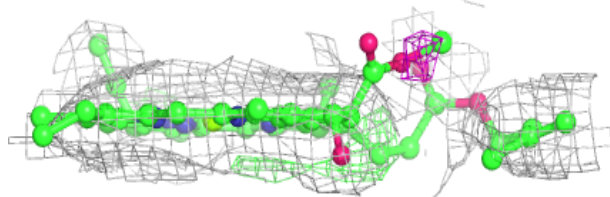
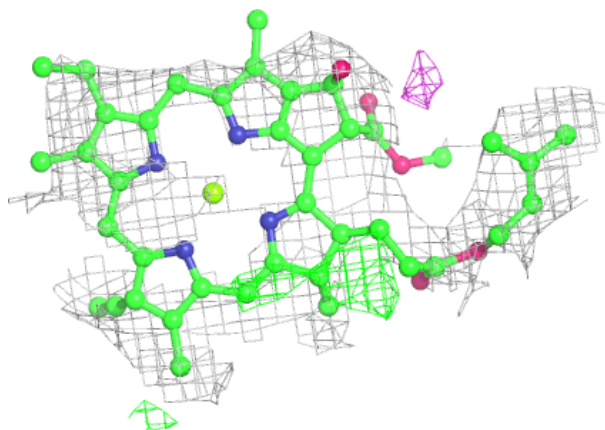


Electron density around BCR A 844:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

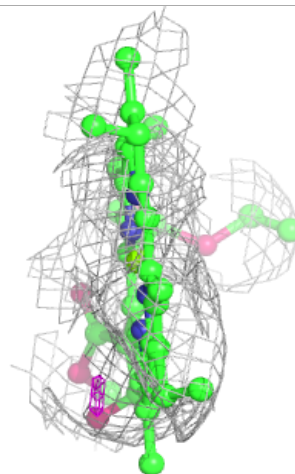
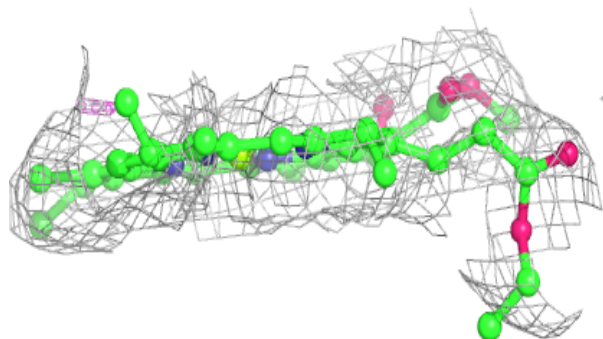
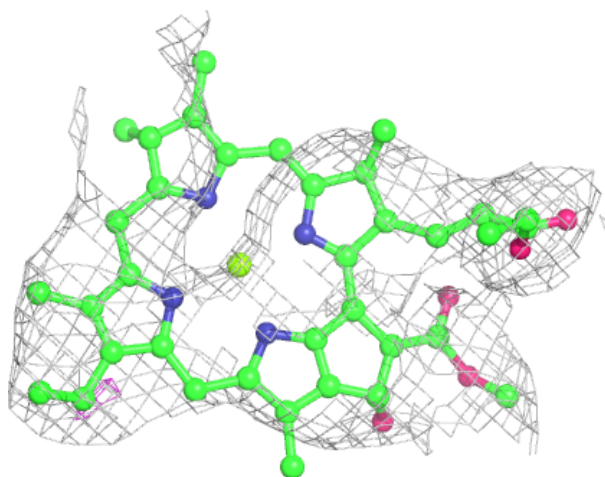
**Electron density around CLA 2 311:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



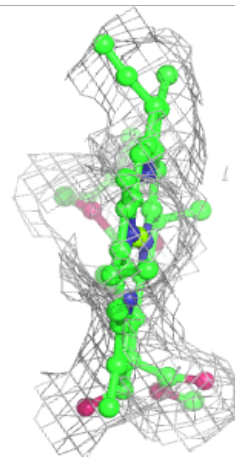
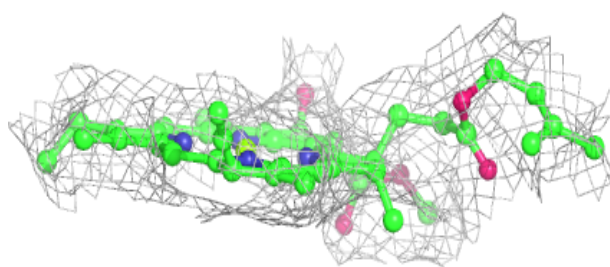
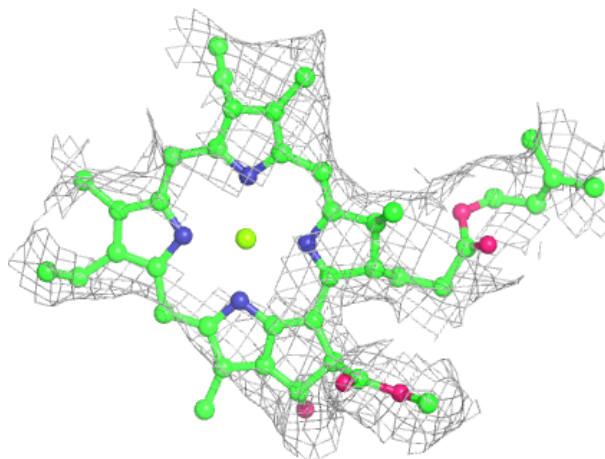
Electron density around CLA A 801:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



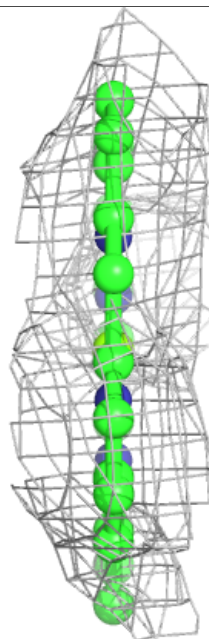
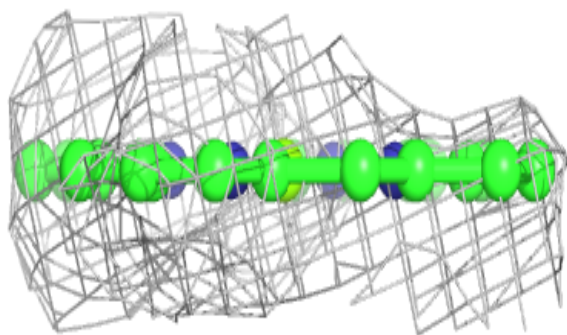
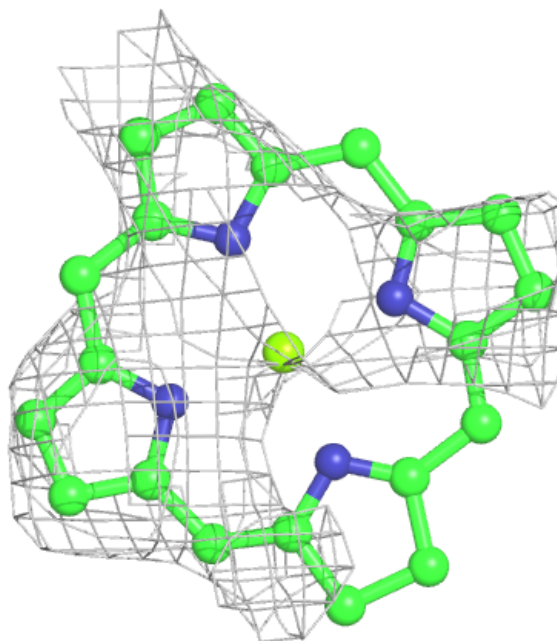
Electron density around CLA 2 305:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



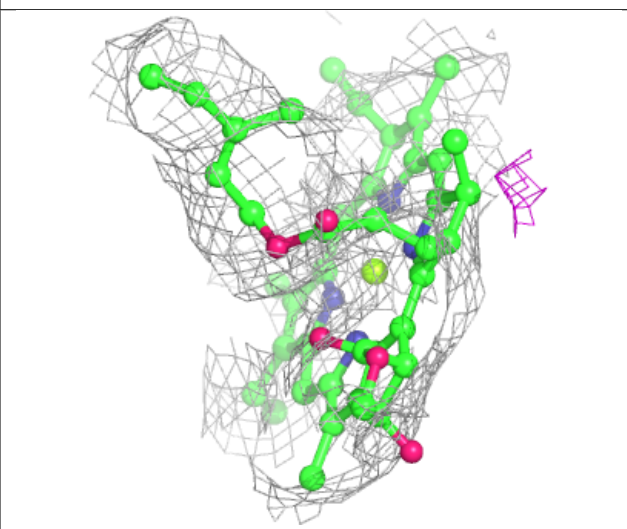
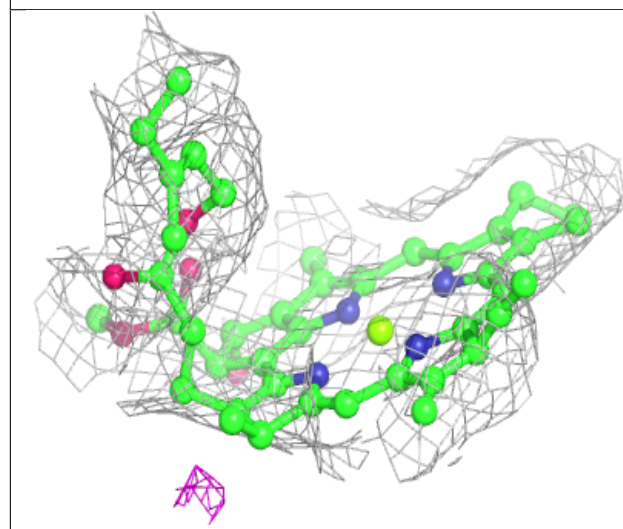
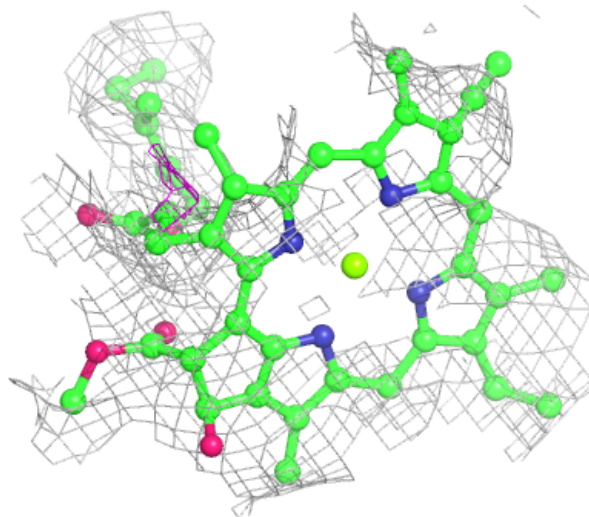
Electron density around CLA 2 301:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



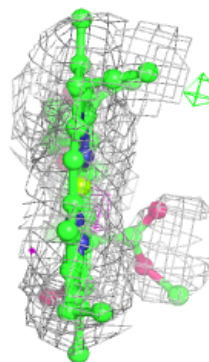
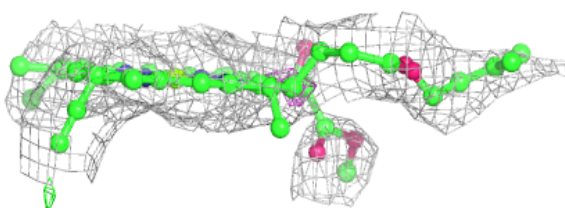
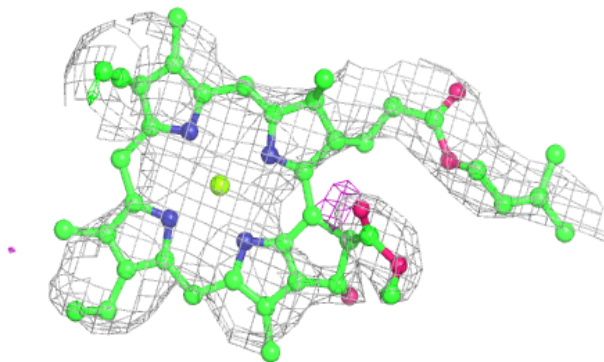
Electron density around CLA 1 207:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

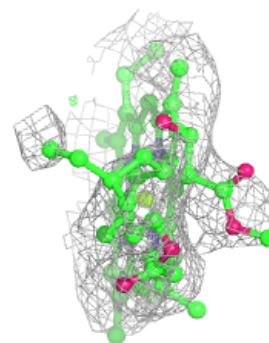
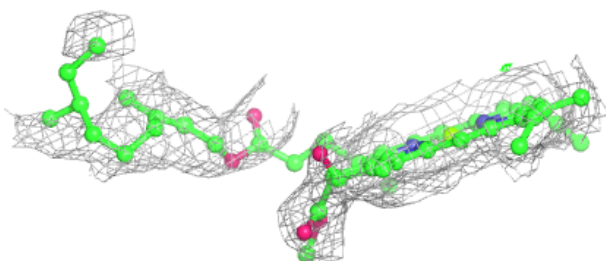
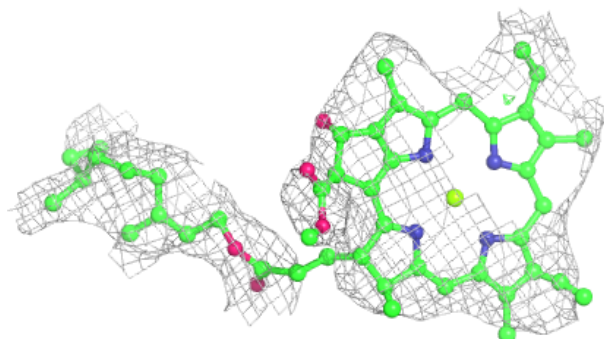


Electron density around CLA 4 305:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

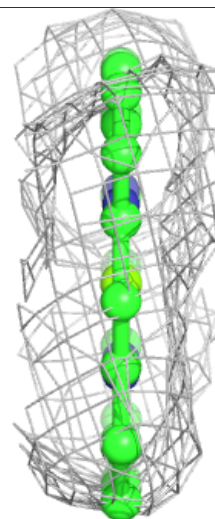
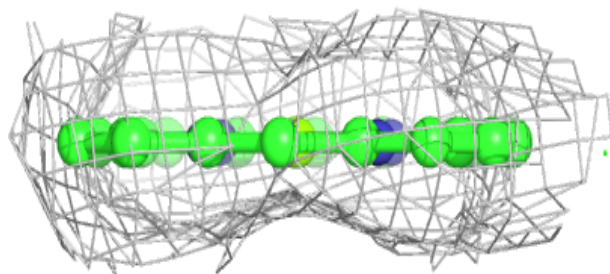
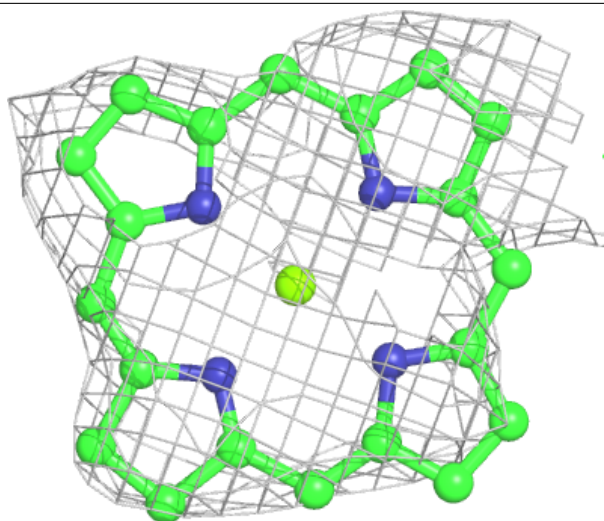
**Electron density around CLA K 104:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



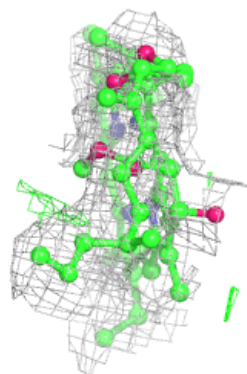
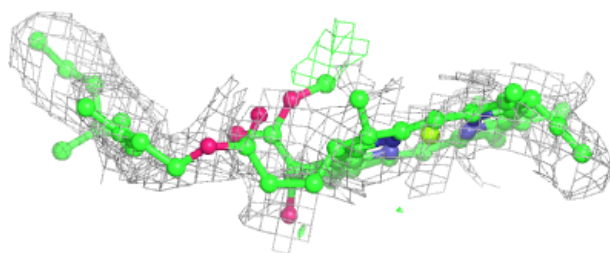
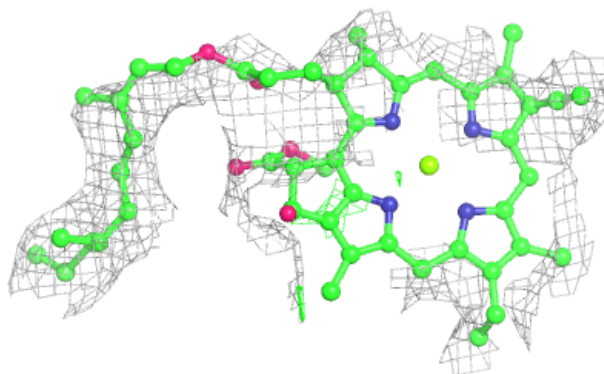
Electron density around CLA 1 209:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



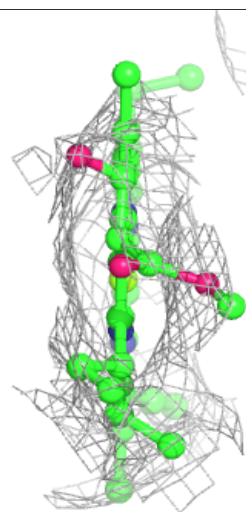
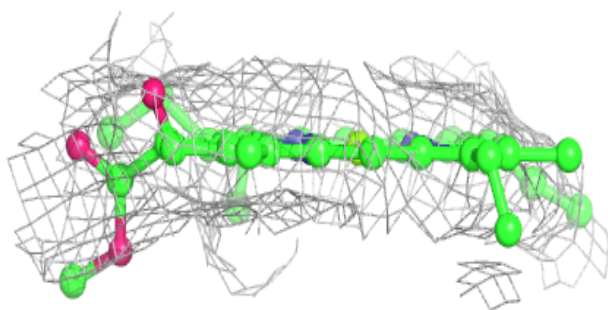
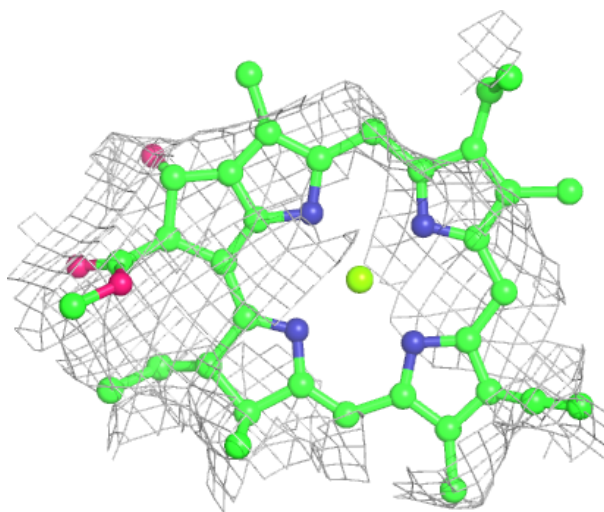
Electron density around CLA R 107:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



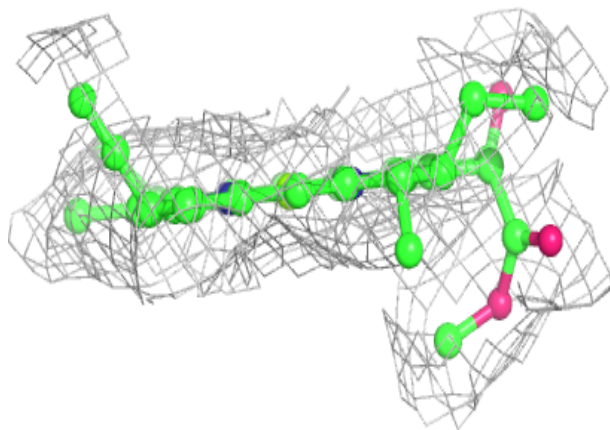
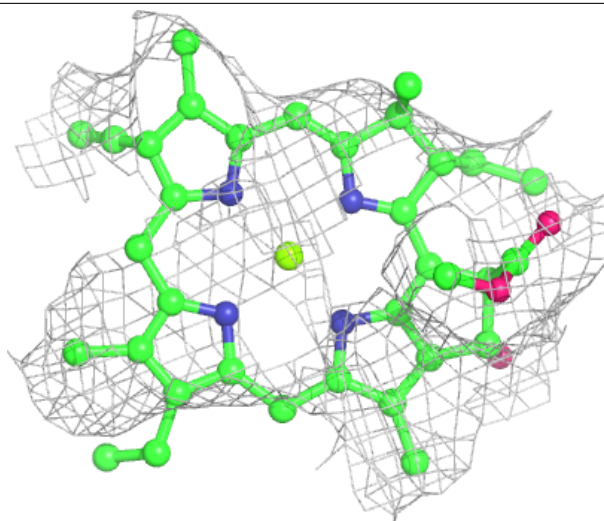
Electron density around CLA A 821:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



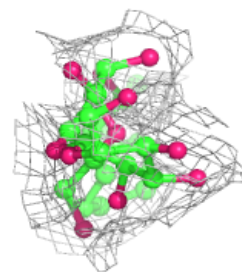
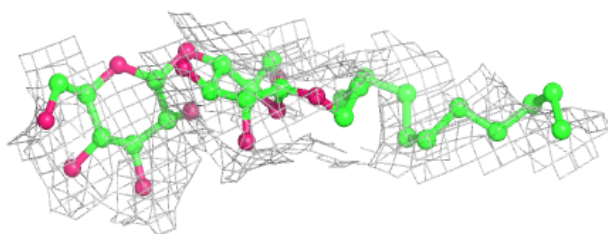
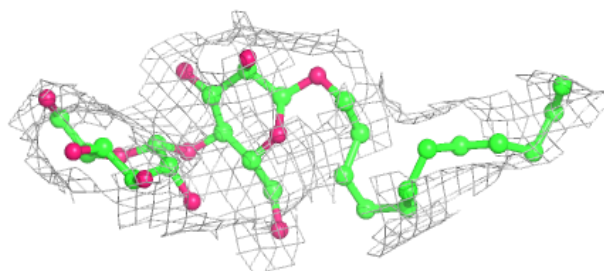
Electron density around CLA 3 307:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

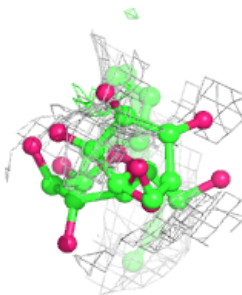
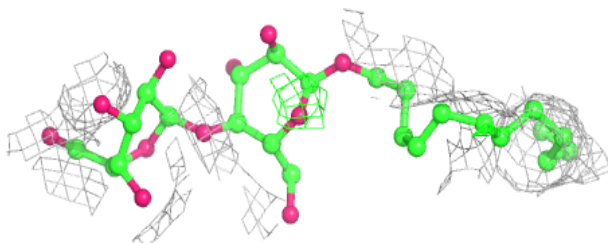
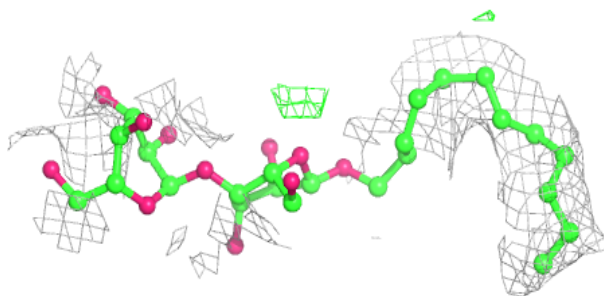


Electron density around LMU K 107:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

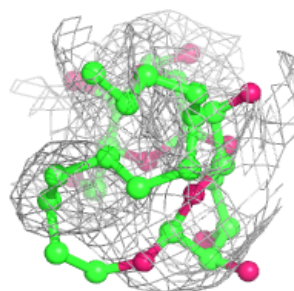
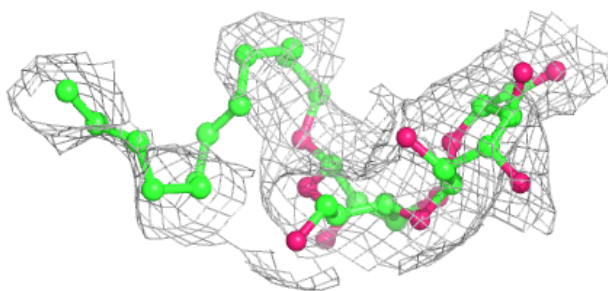
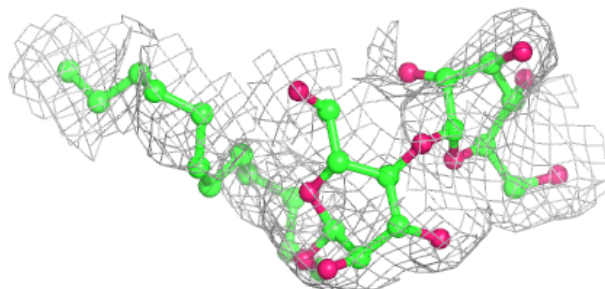
**Electron density around LMU A 846:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

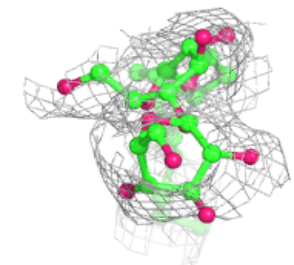
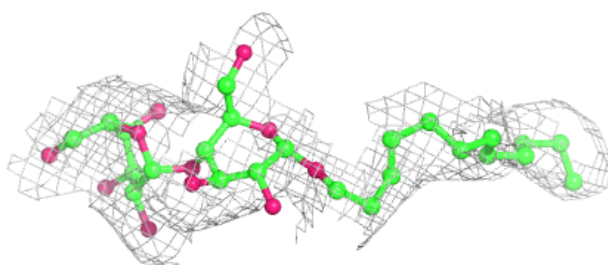
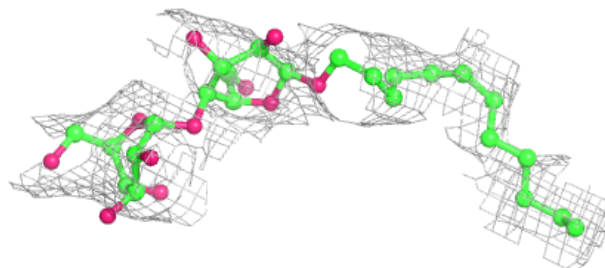


Electron density around LMU L 212:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

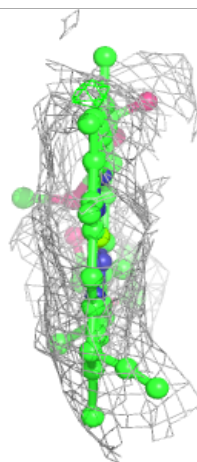
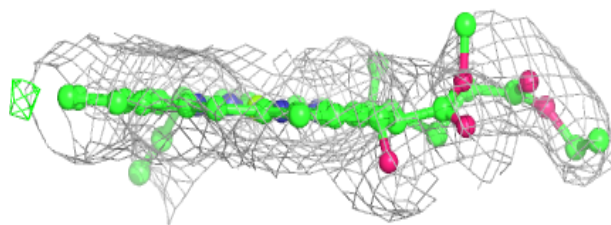
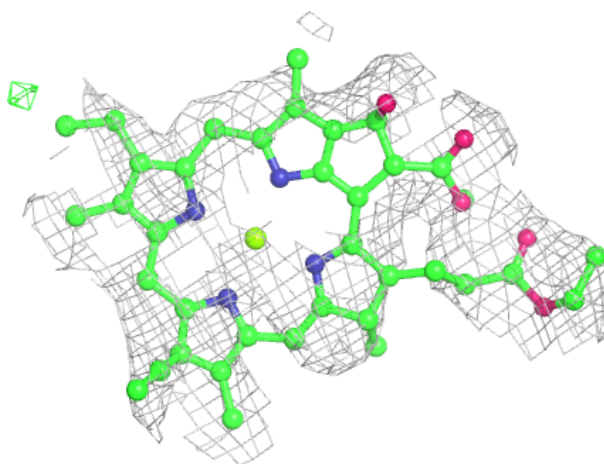
**Electron density around LMU 2 320:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



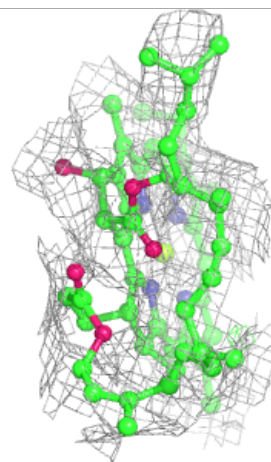
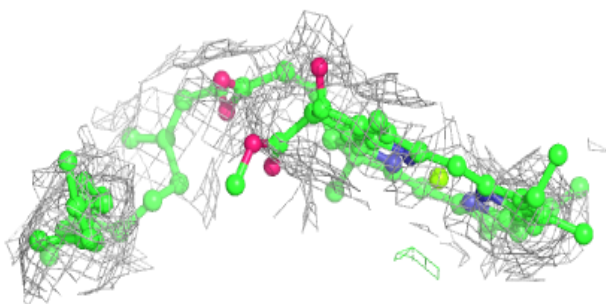
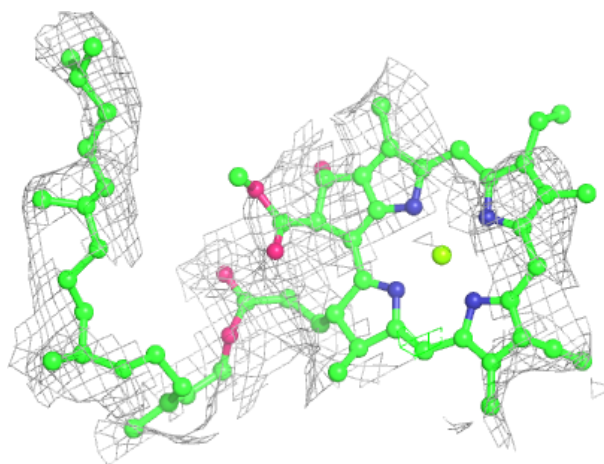
Electron density around CLA 4 318:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



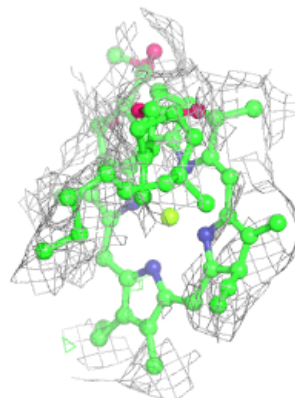
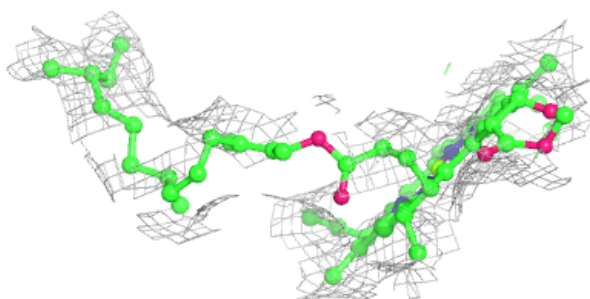
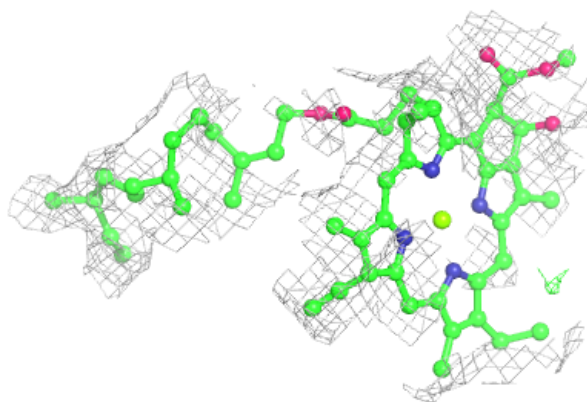
Electron density around CLA R 108:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

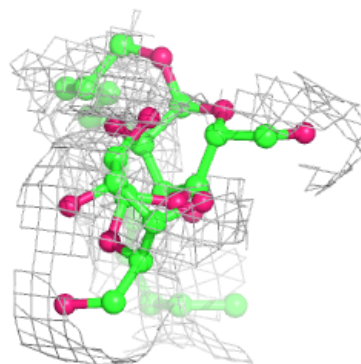
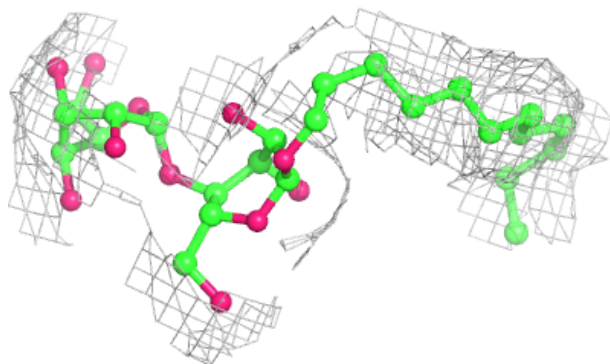


Electron density around CLA 2 312:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

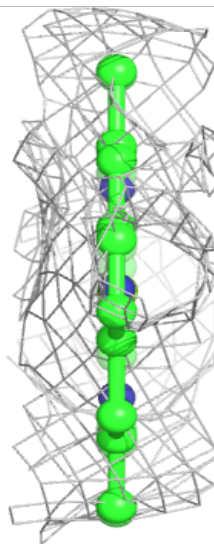
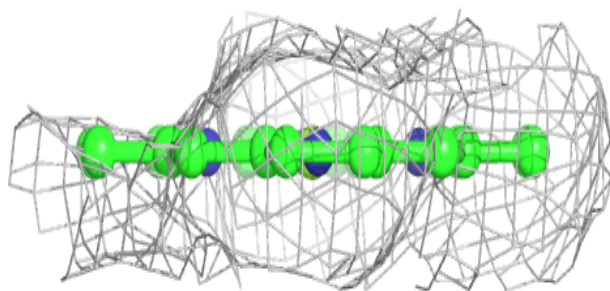
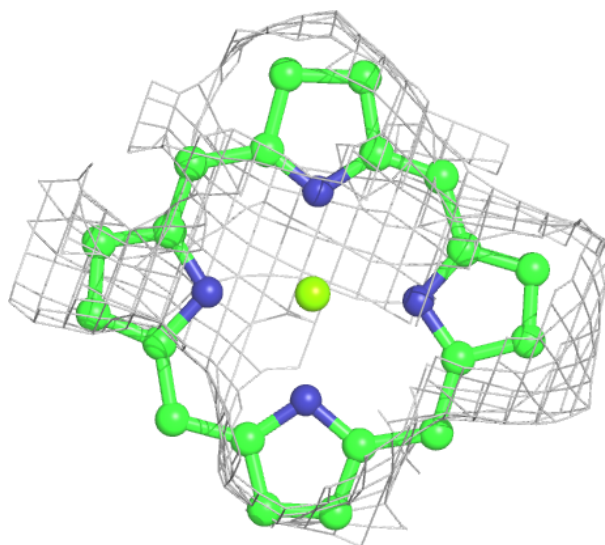
**Electron density around LMU R 104:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



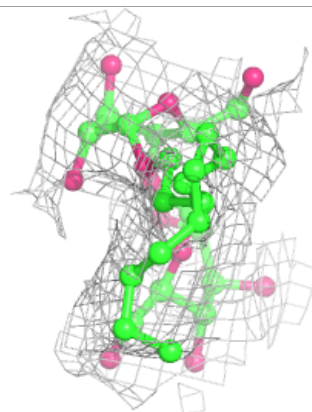
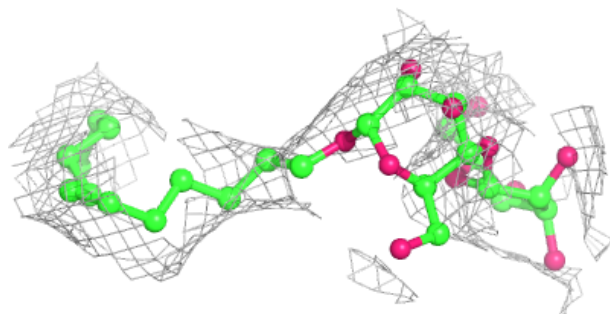
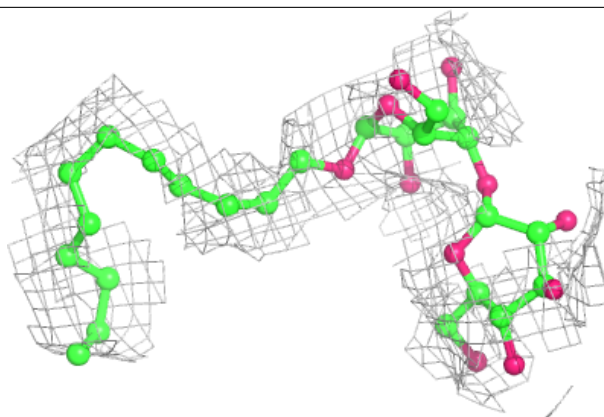
Electron density around CLA 3 302:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



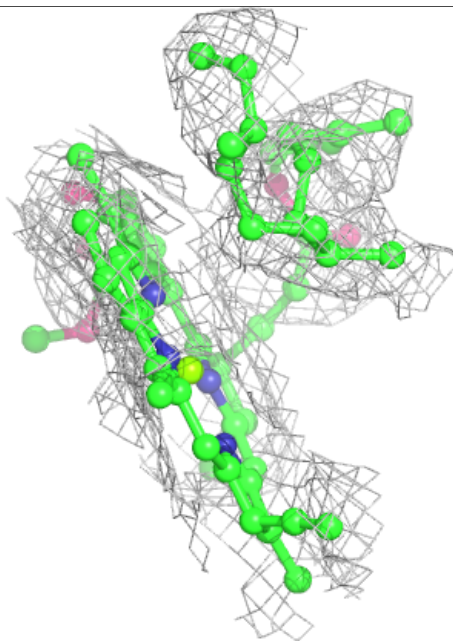
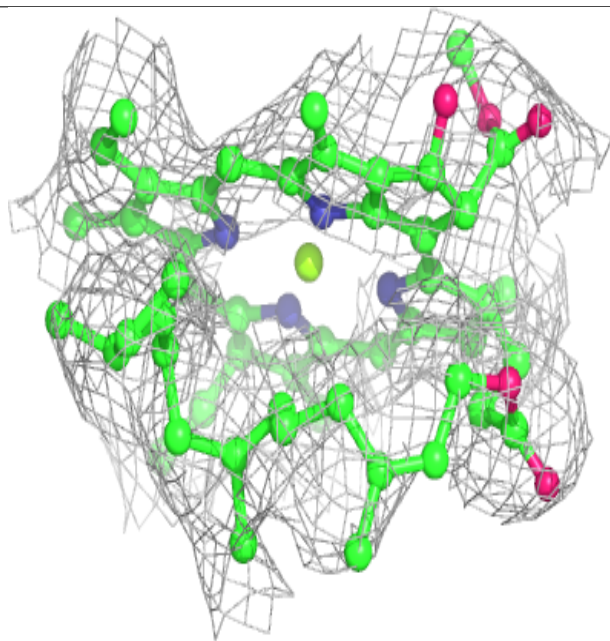
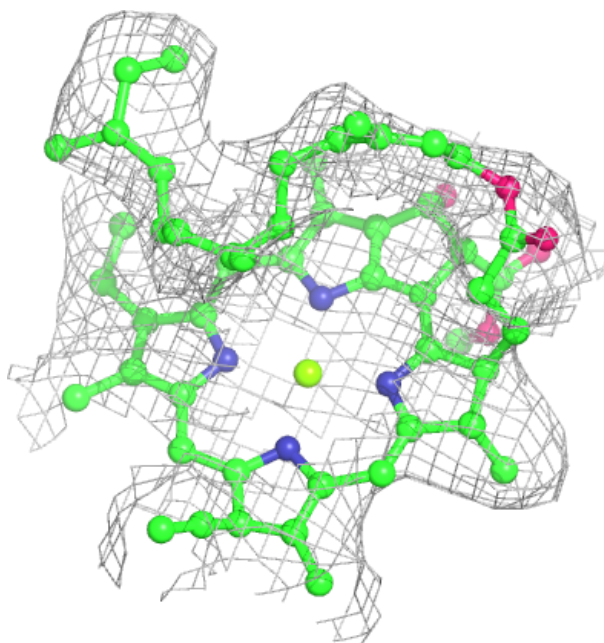
Electron density around LMU K 105:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)



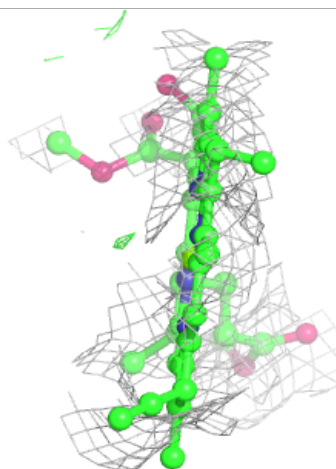
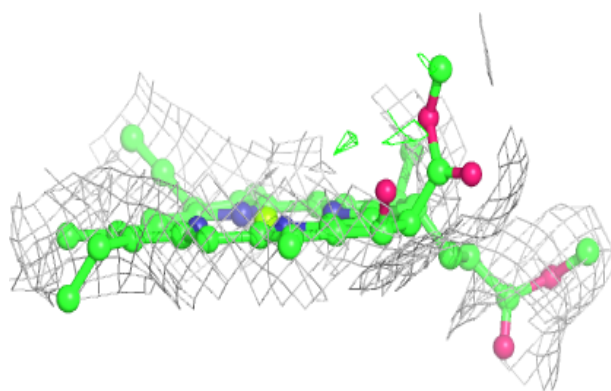
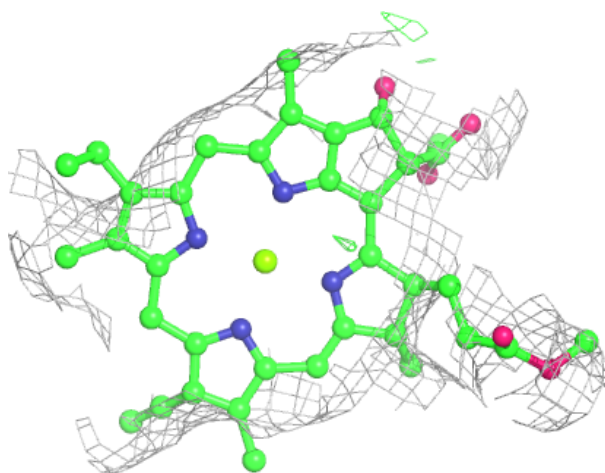
Electron density around CLA 1 206:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



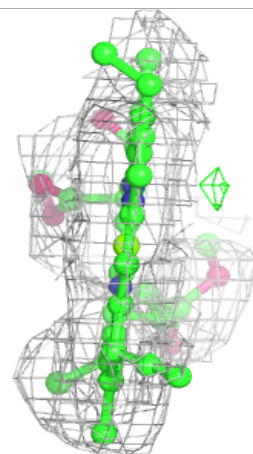
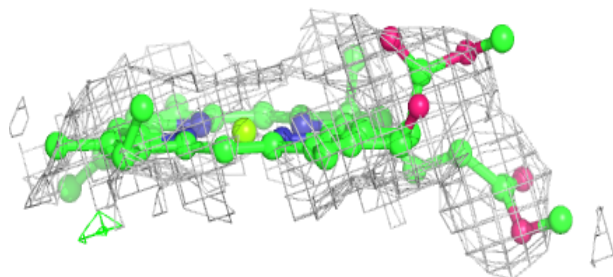
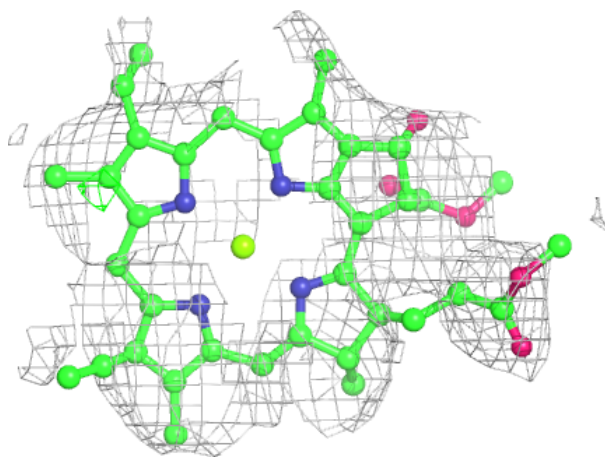
Electron density around CLA 1 201:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



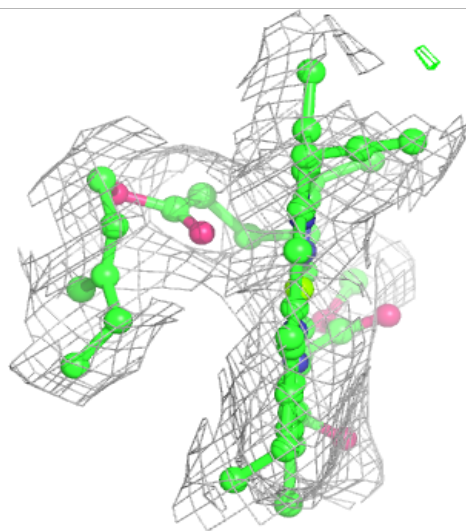
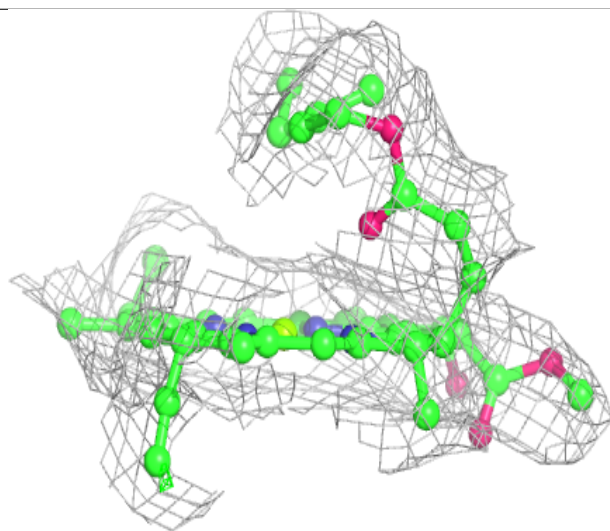
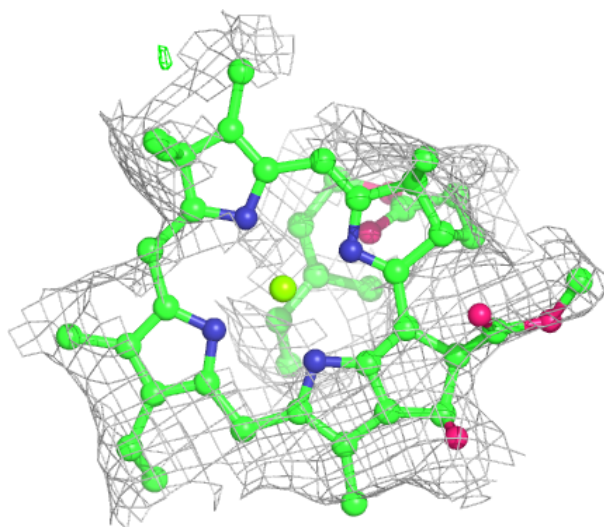
Electron density around CLA 4 315:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



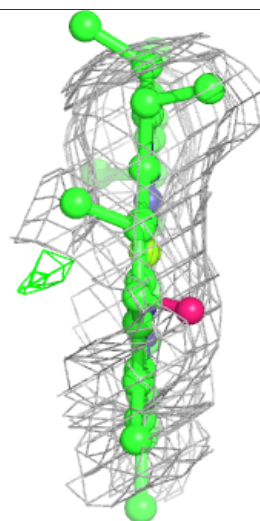
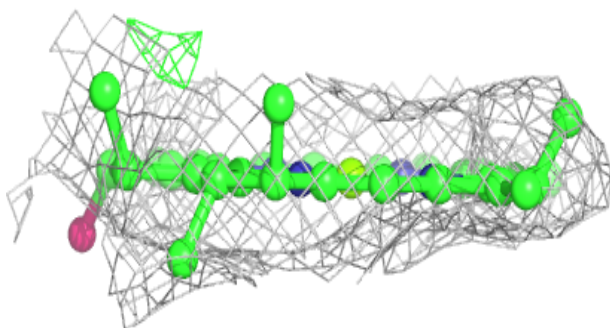
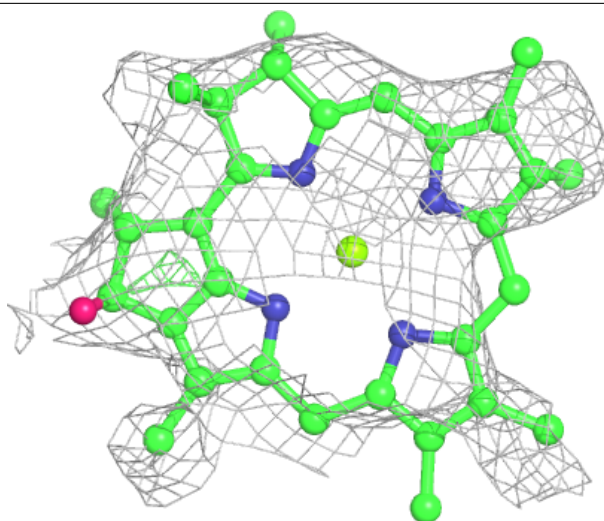
Electron density around CLA 2 302:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



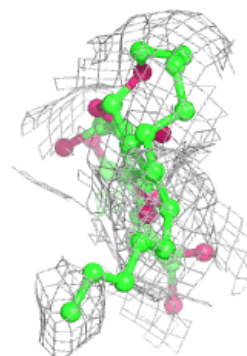
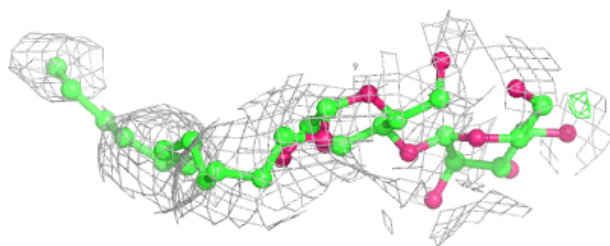
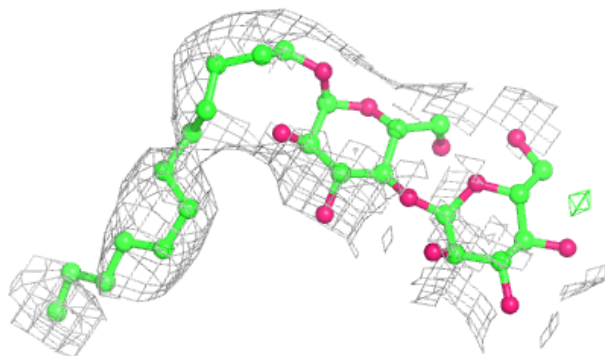
Electron density around CLA B 842:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

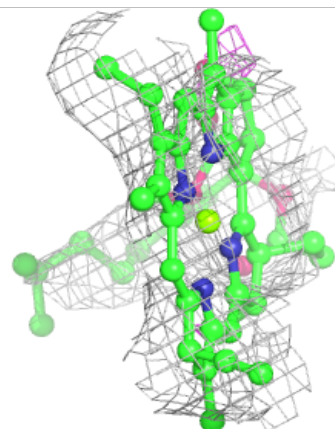
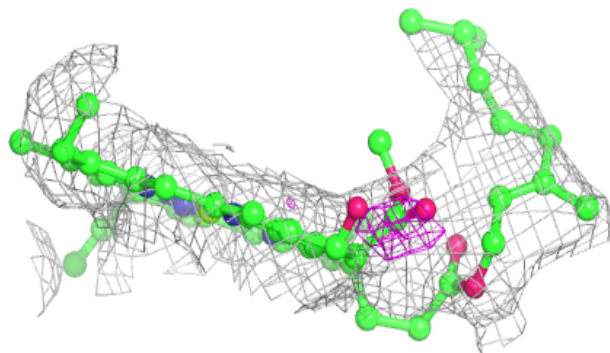
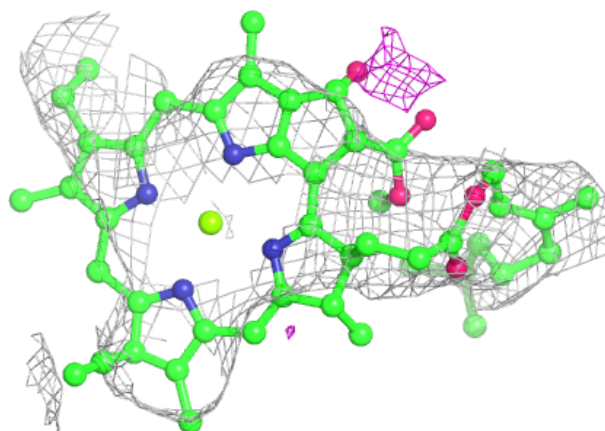


Electron density around LMU R 106:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

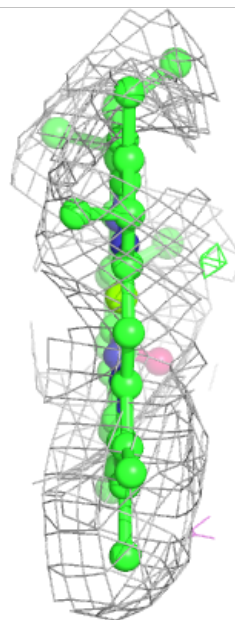
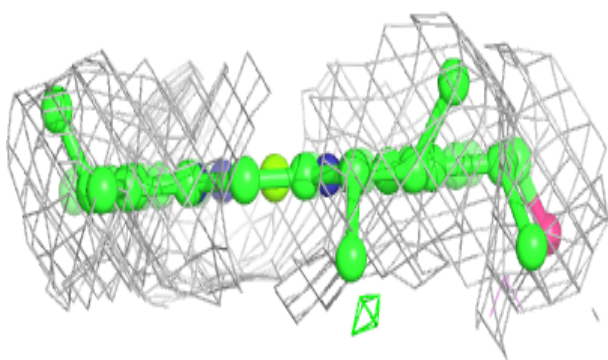
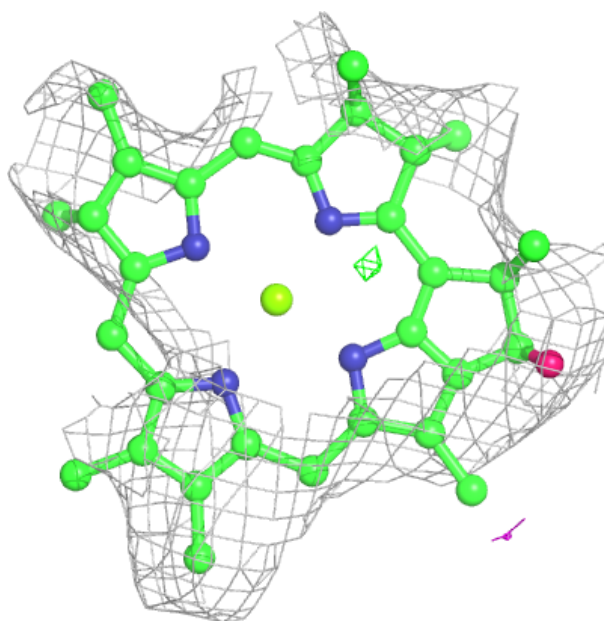
**Electron density around CLA L 202:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



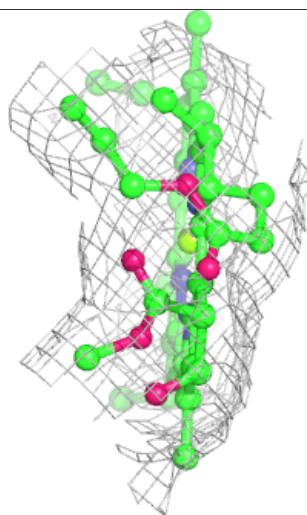
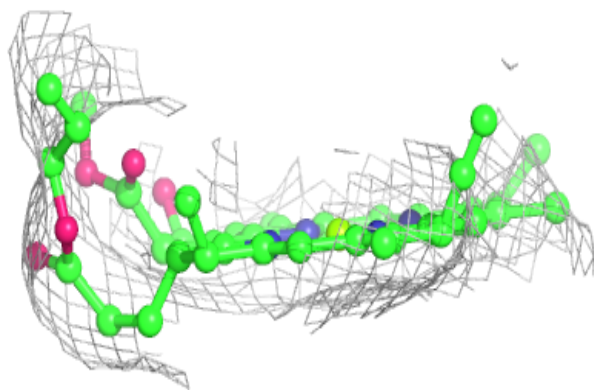
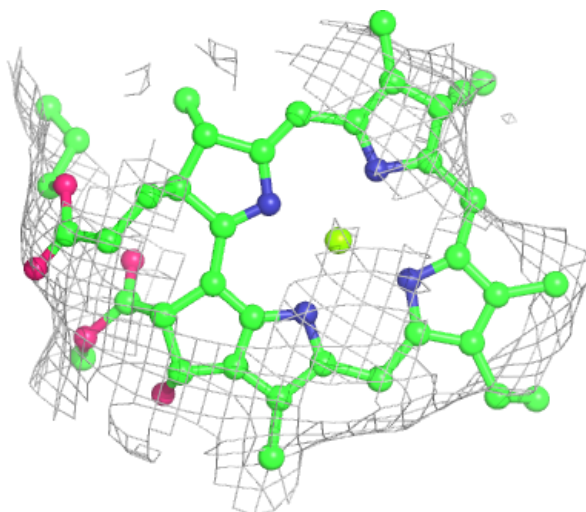
Electron density around CLA 1 210:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



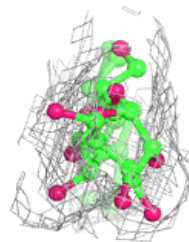
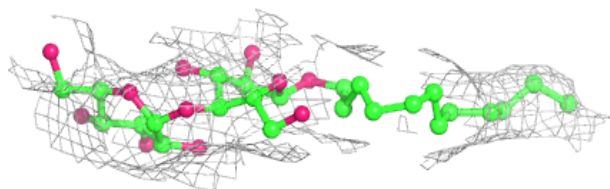
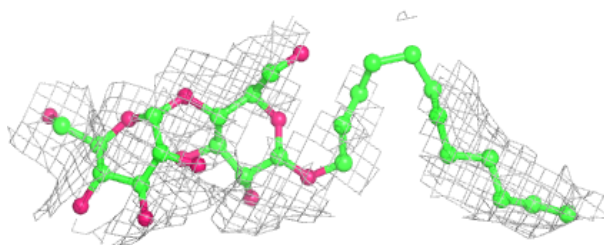
Electron density around CLA J 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



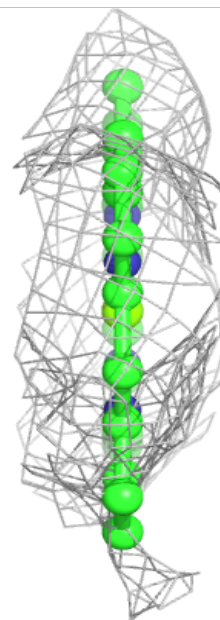
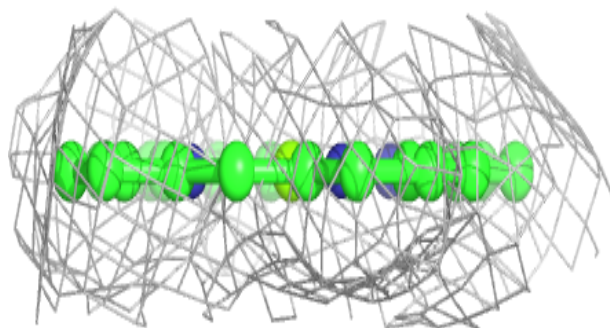
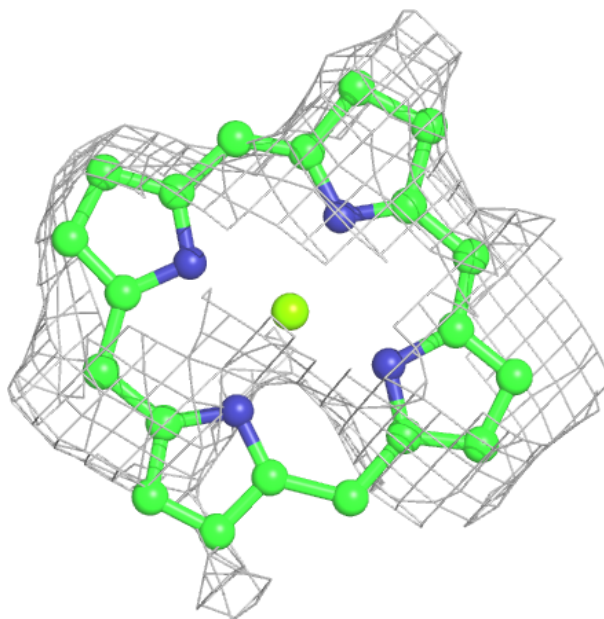
Electron density around LMU H 104:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)



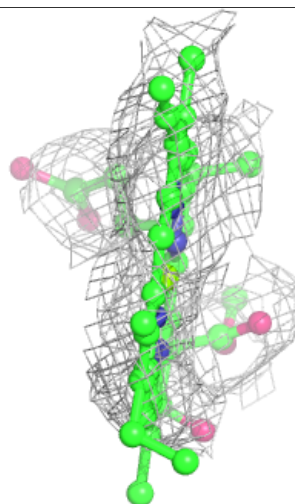
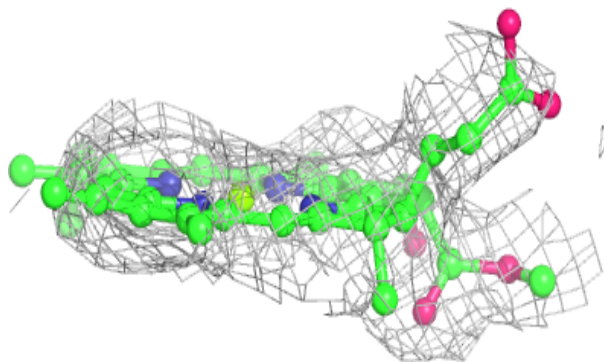
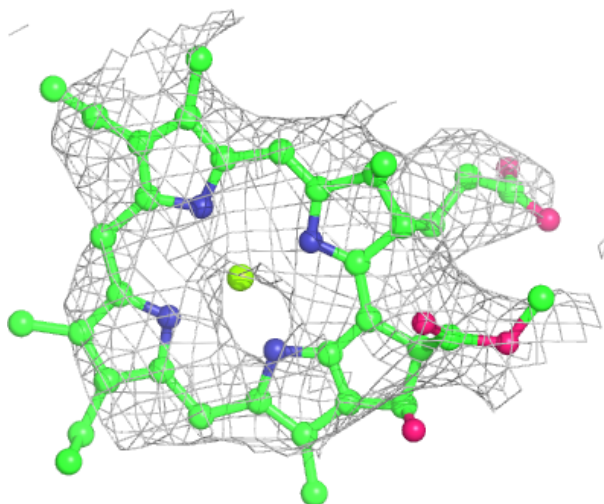
Electron density around CLA A 841:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



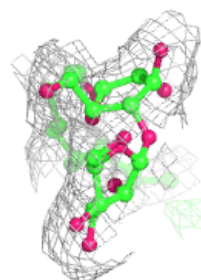
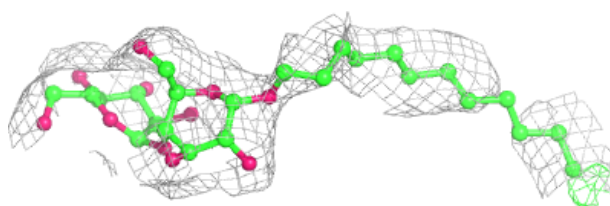
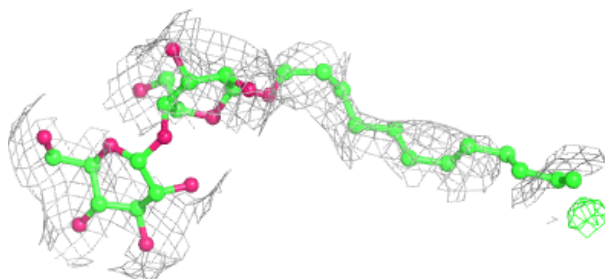
Electron density around CLA A 810:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

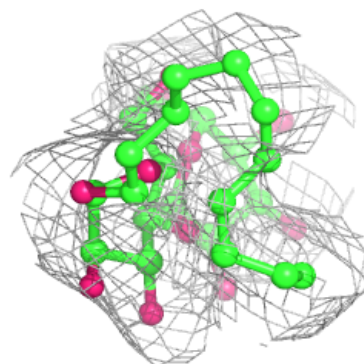
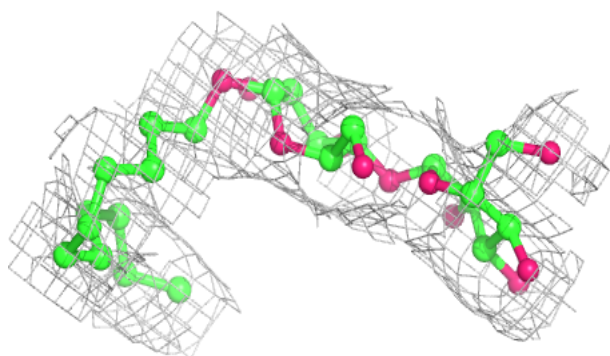
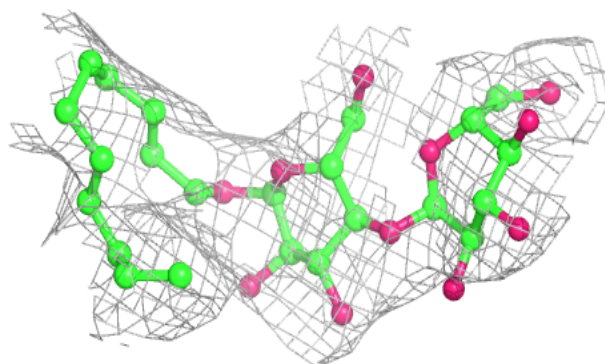


Electron density around LMU R 105:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

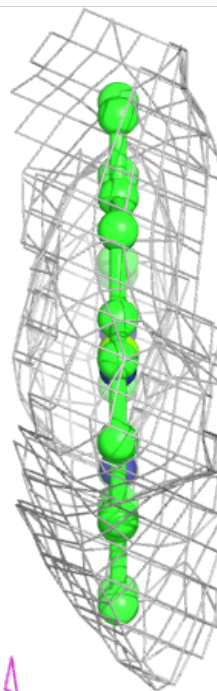
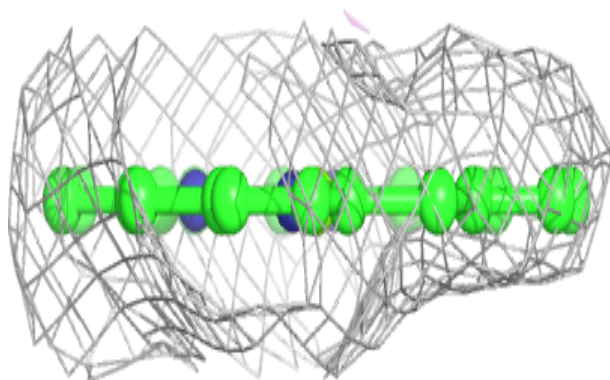
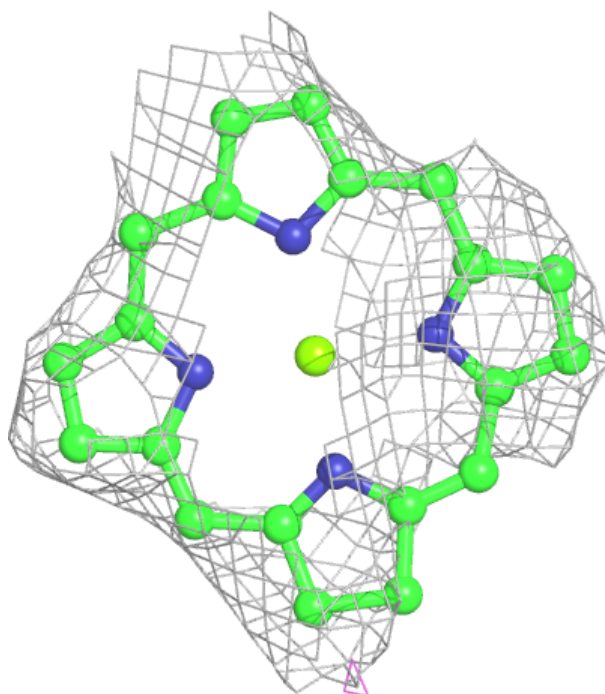
**Electron density around LMU F 202:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



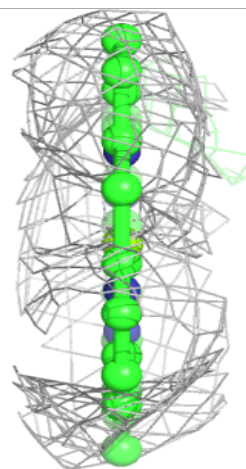
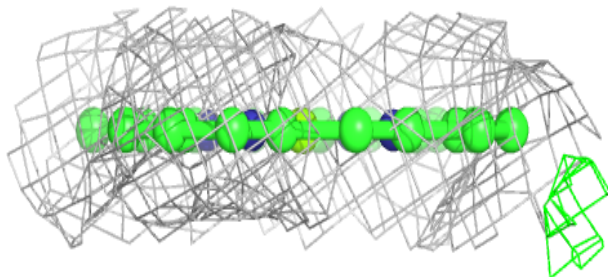
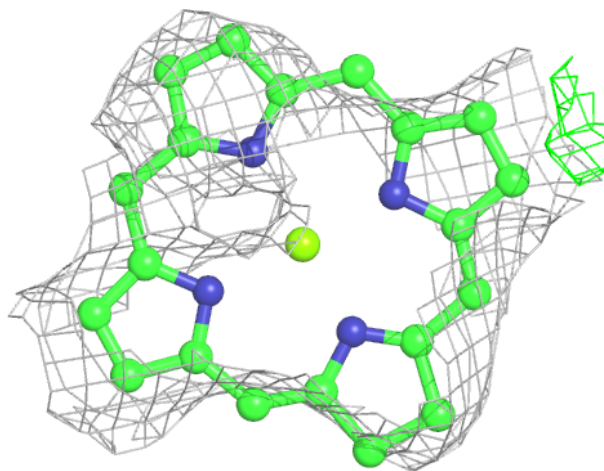
Electron density around CLA 3 317:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



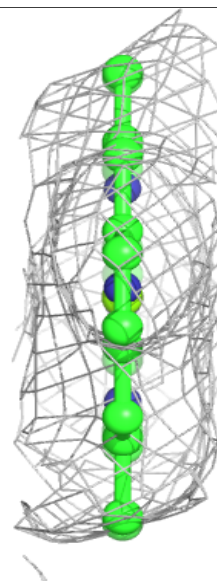
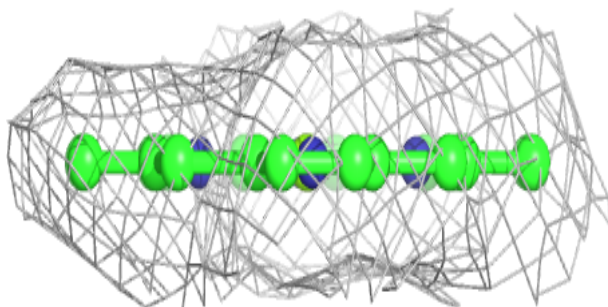
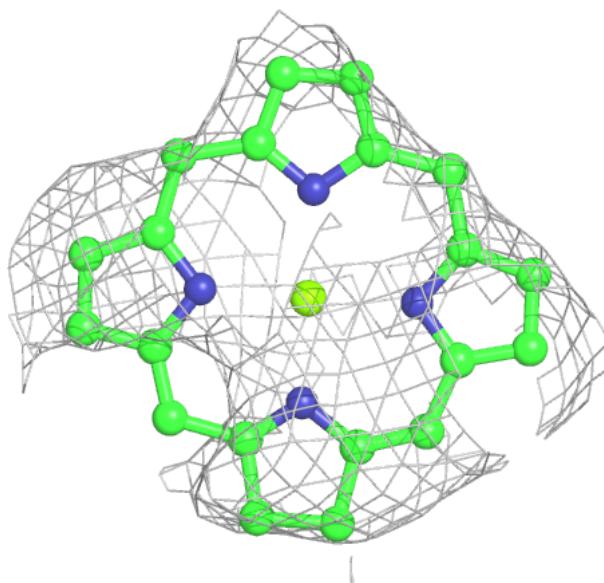
Electron density around CLA A 814:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



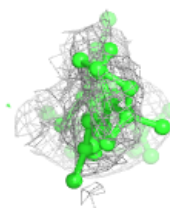
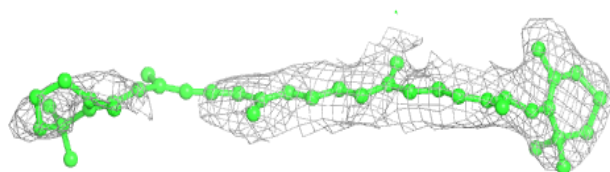
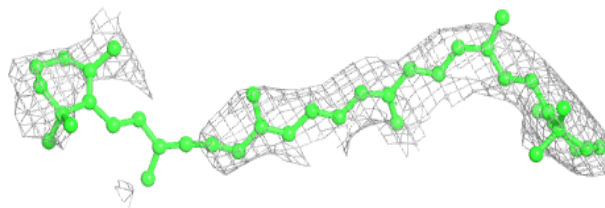
Electron density around CLA 1 214:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

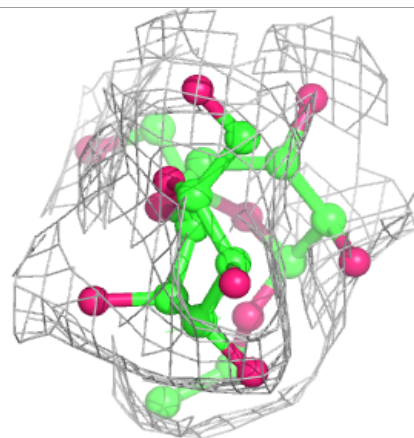
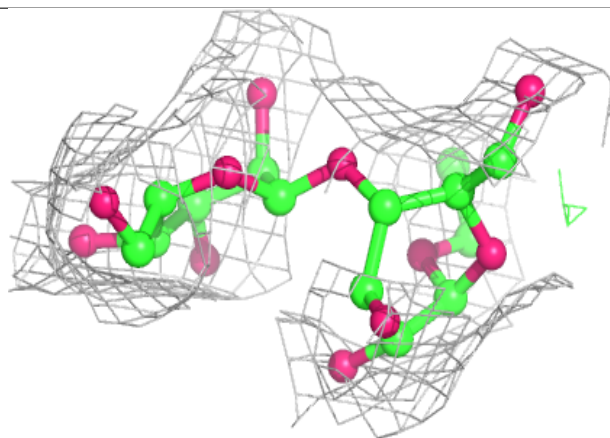
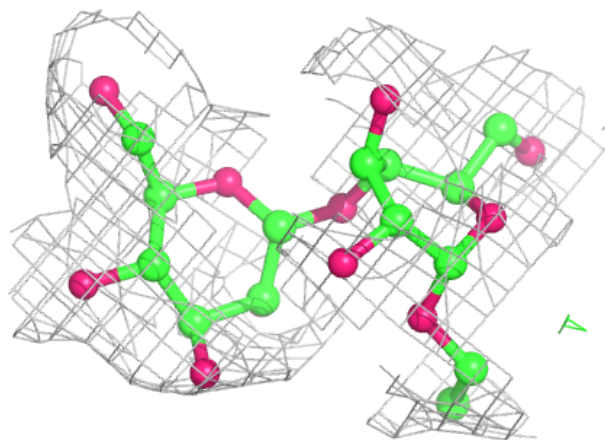


Electron density around BCR B 845:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

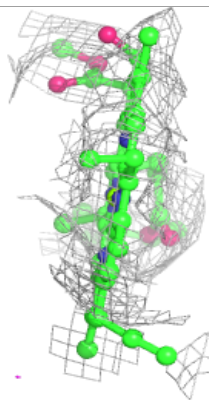
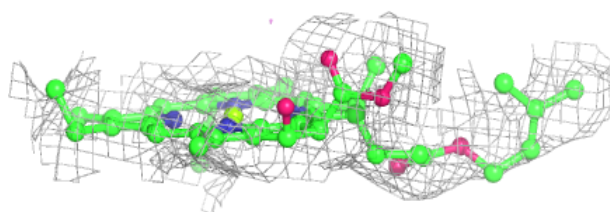
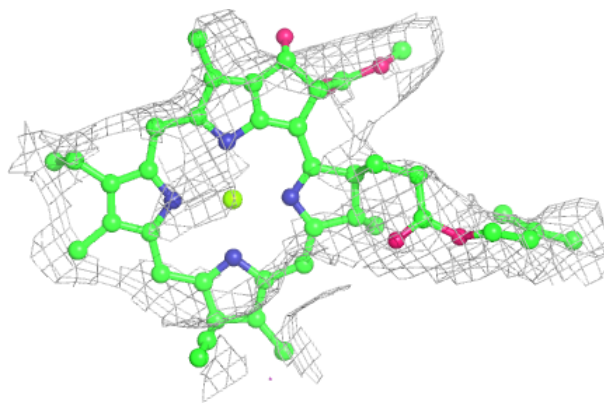
**Electron density around LMU B 849:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



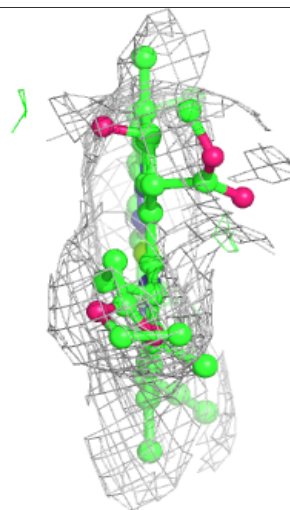
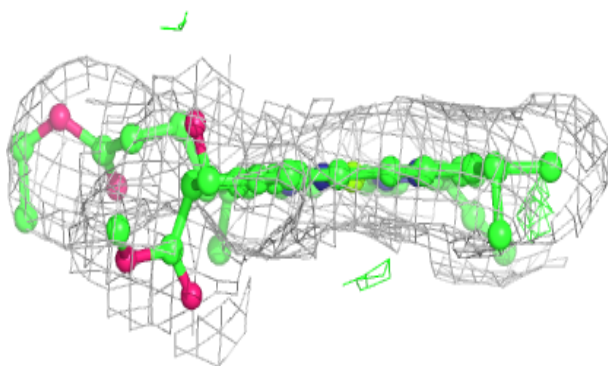
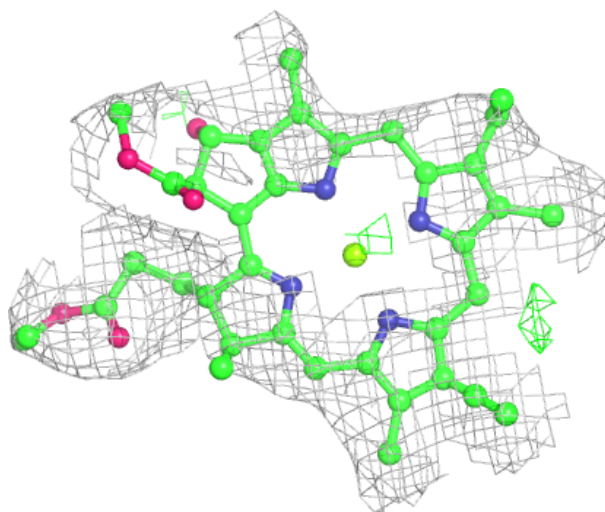
Electron density around CLA K 102:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



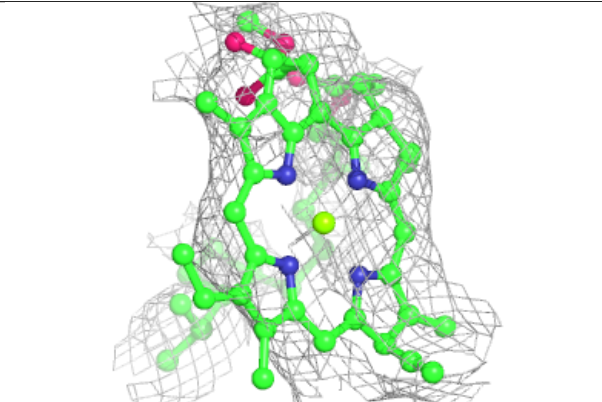
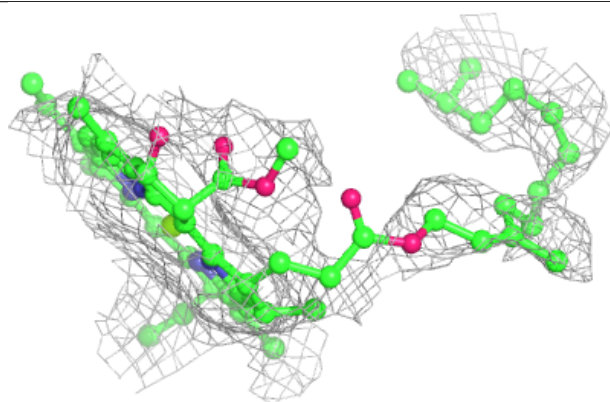
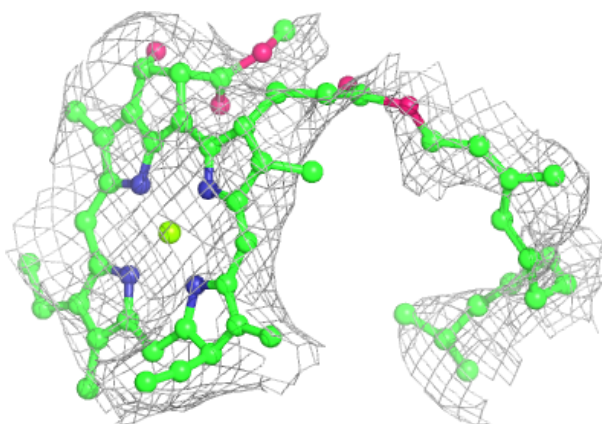
Electron density around CLA 1 203:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

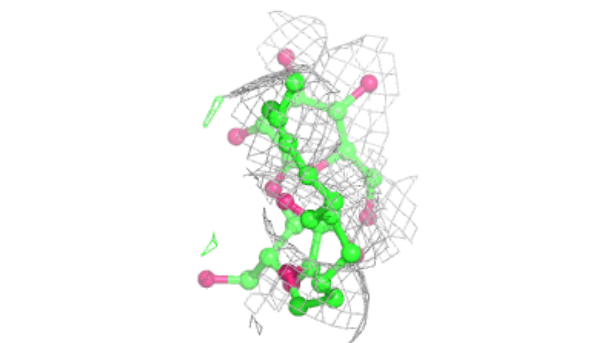
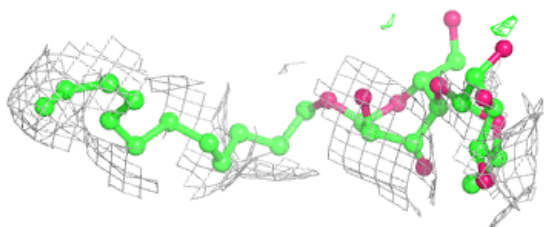
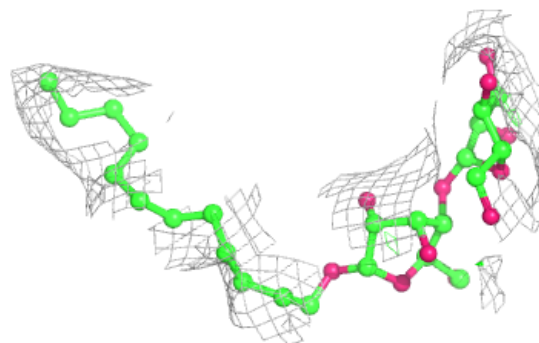


Electron density around CLA A 839:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

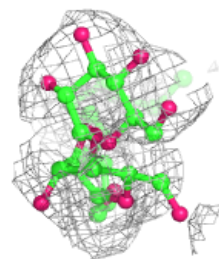
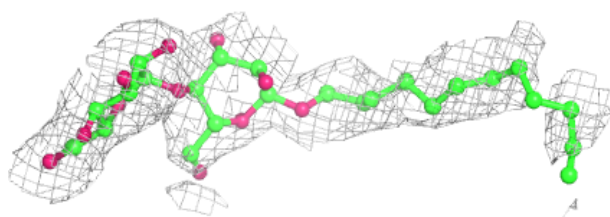
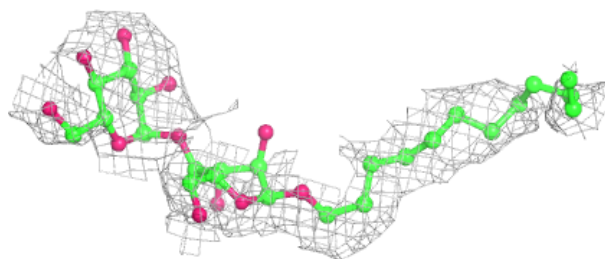
**Electron density around LMU G 102:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



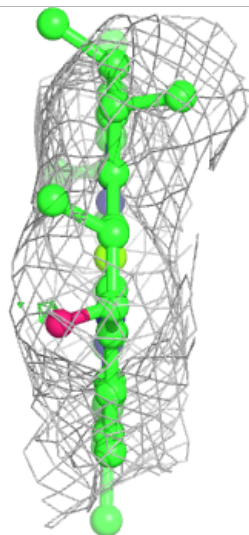
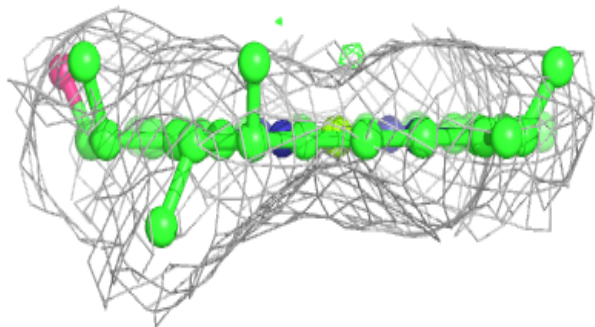
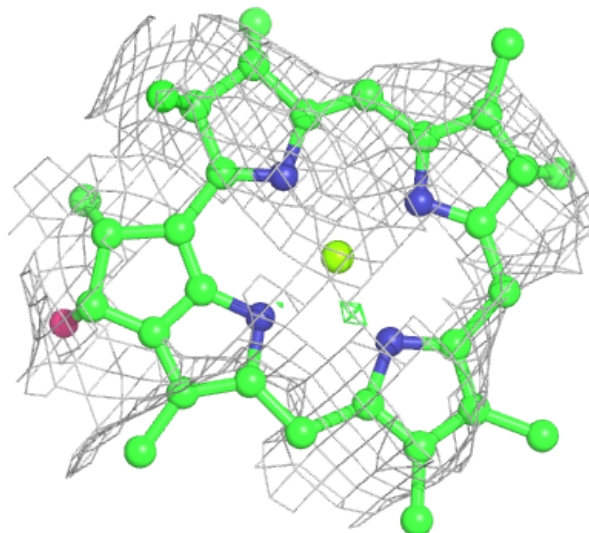
Electron density around LMU 4 316:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



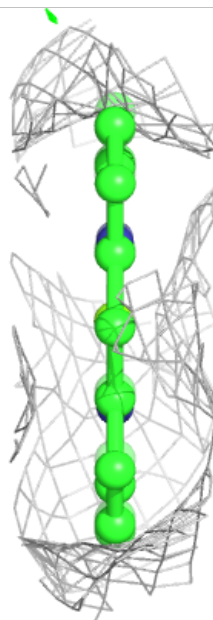
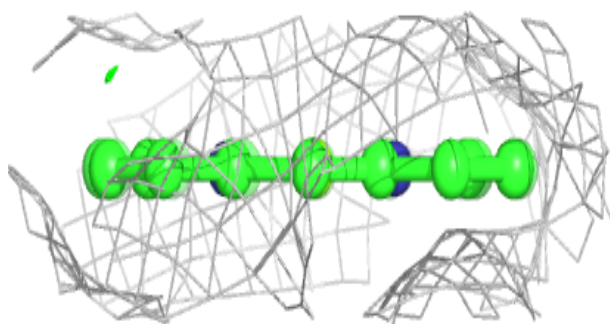
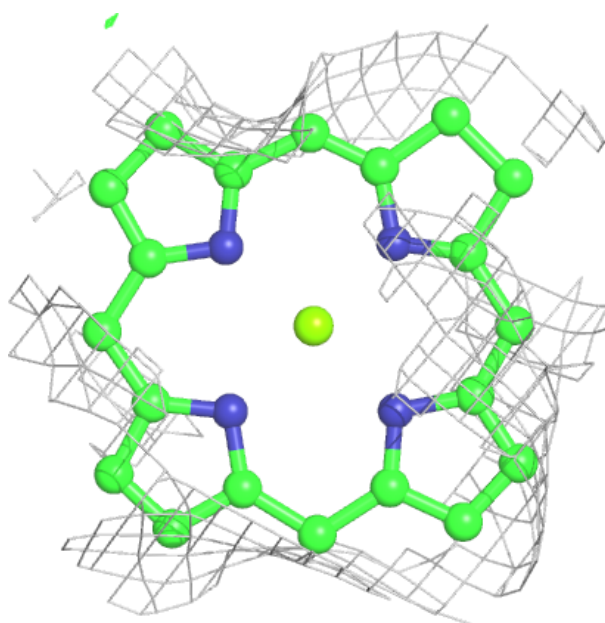
Electron density around CLA 4 302:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



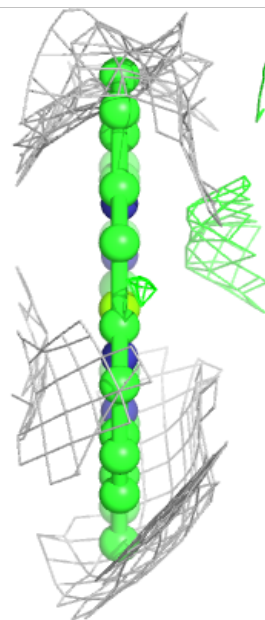
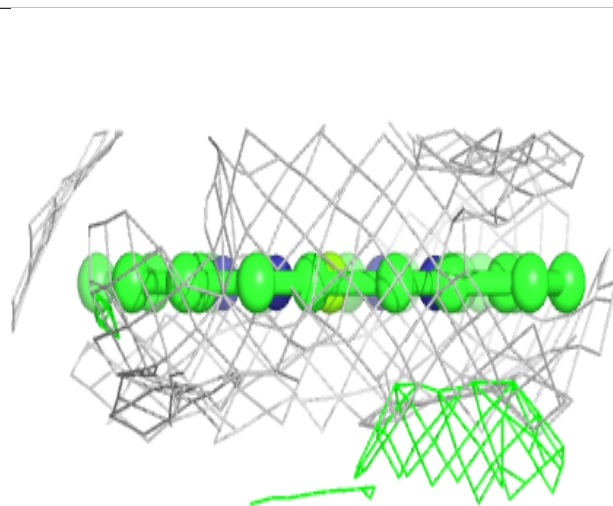
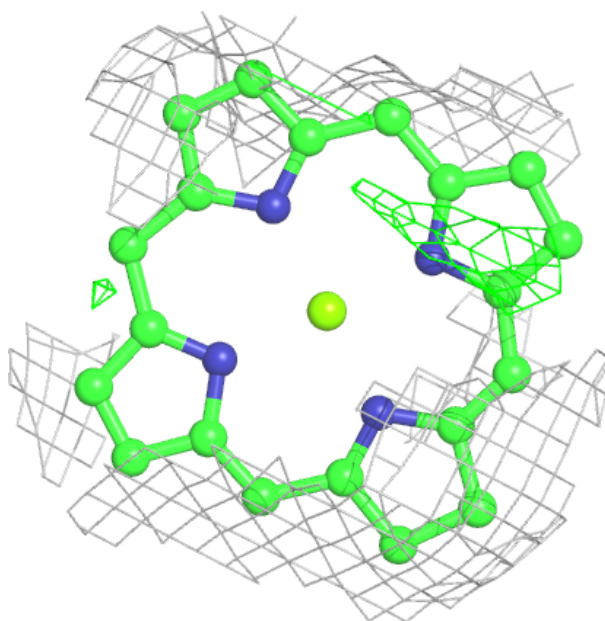
Electron density around CLA 2 306:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



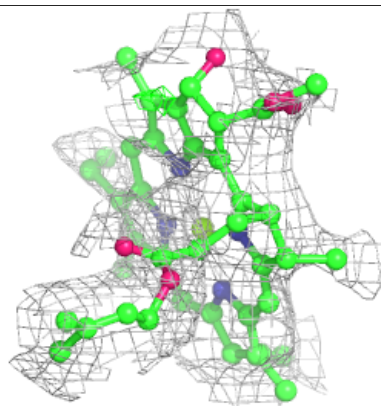
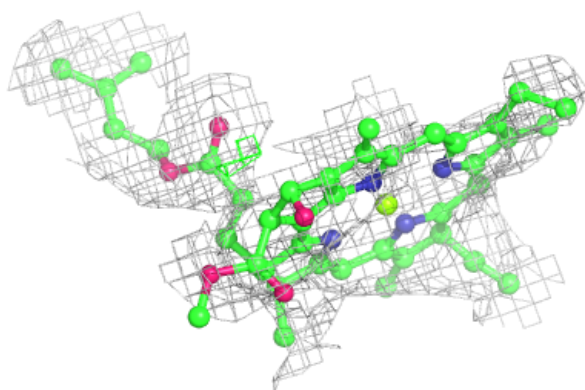
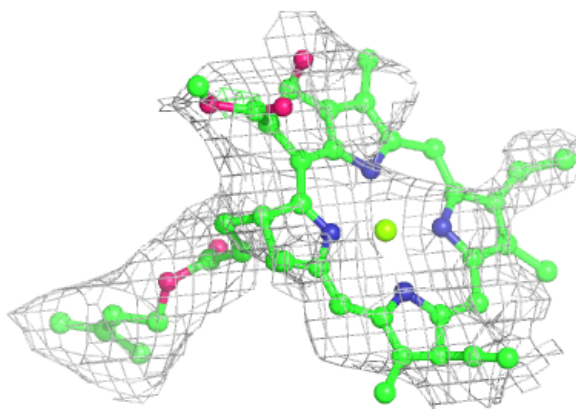
Electron density around CLA 1 208:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



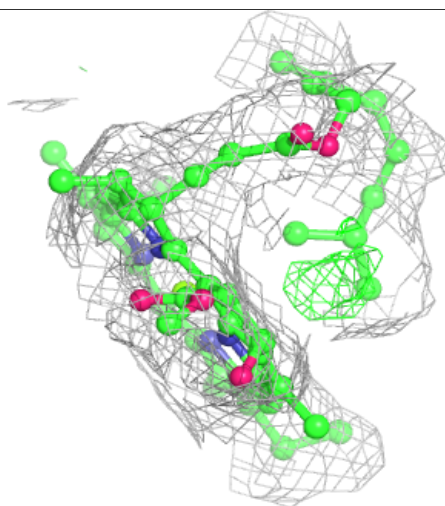
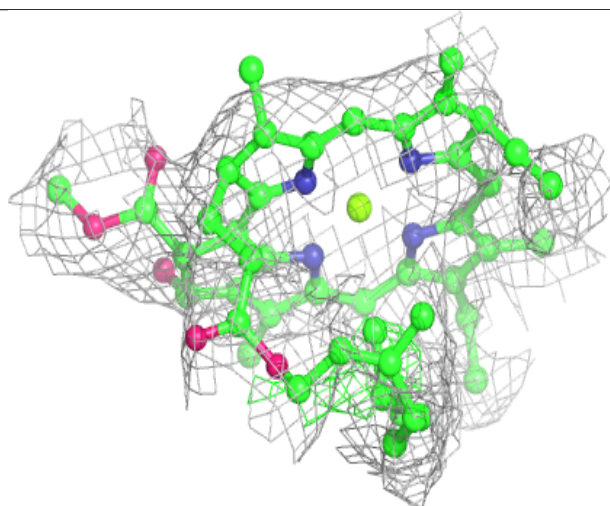
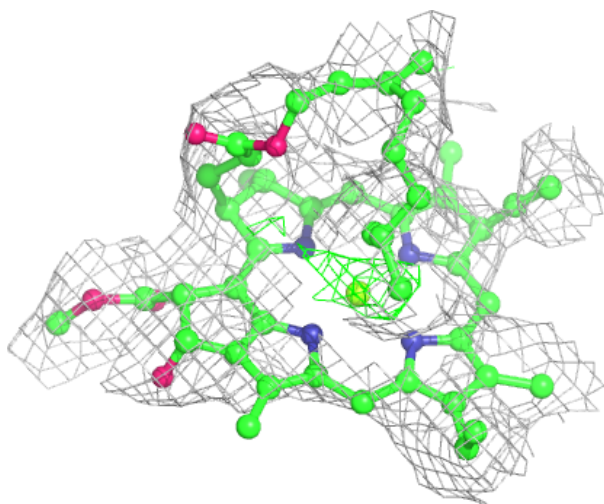
Electron density around CLA 2 310:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



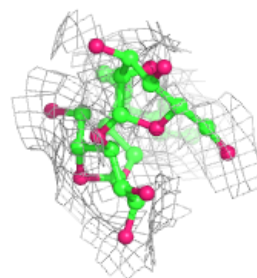
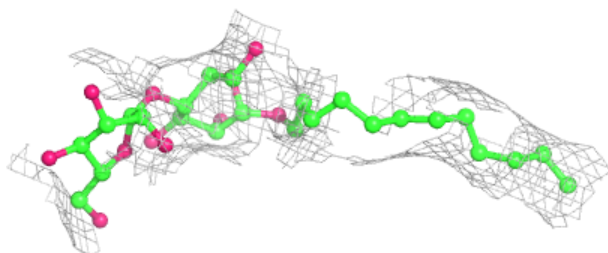
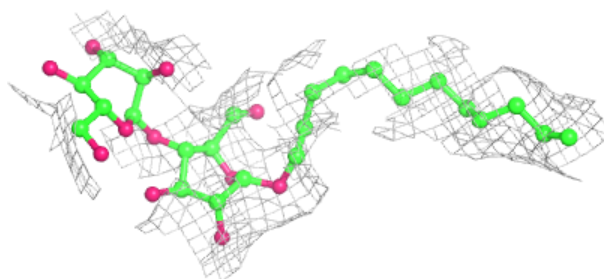
Electron density around CLA B 813:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

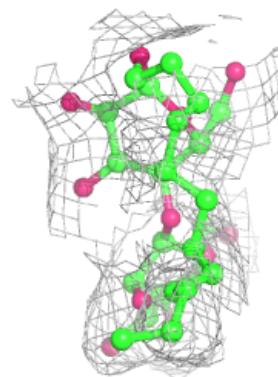
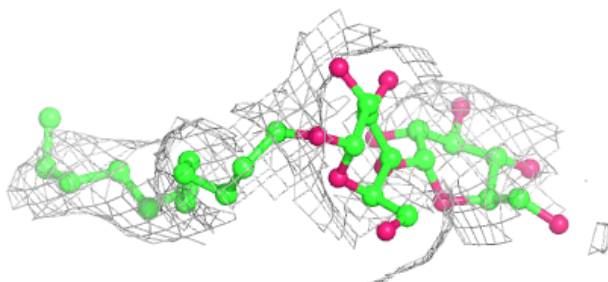
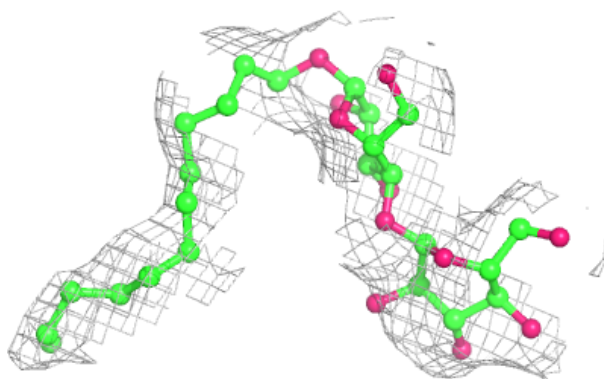


Electron density around LMU G 101:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

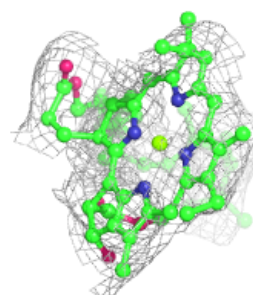
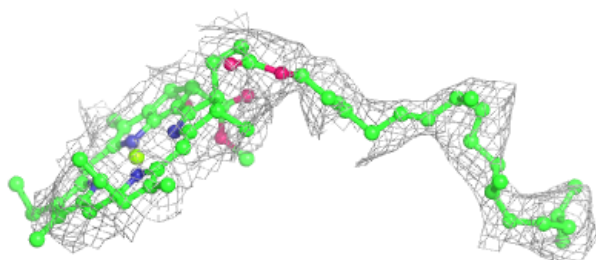
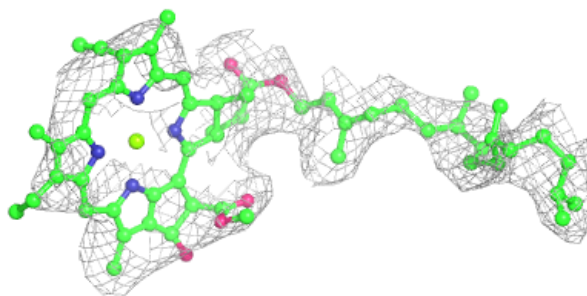
**Electron density around LMU L 206:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

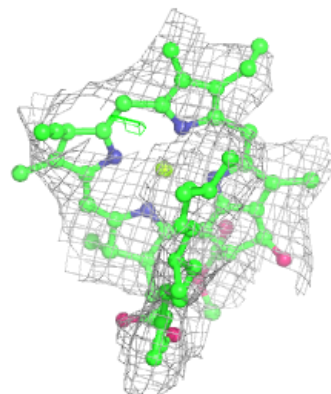
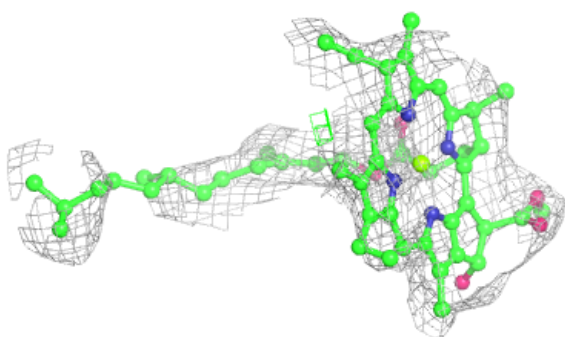
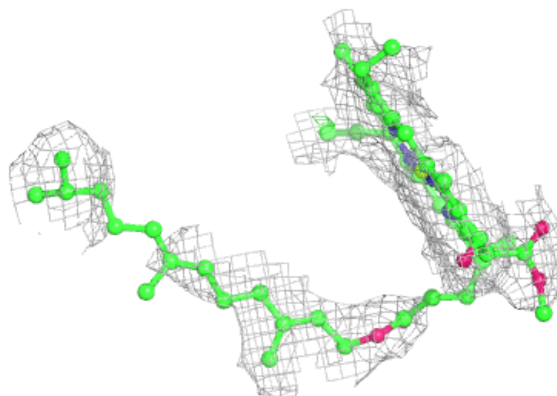


Electron density around CLA 3 315:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

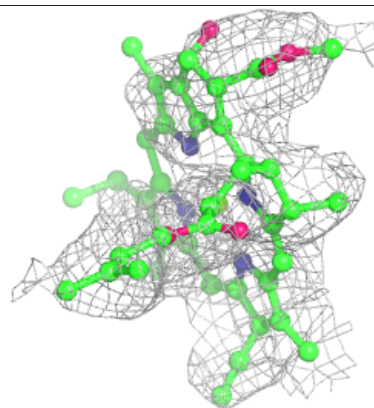
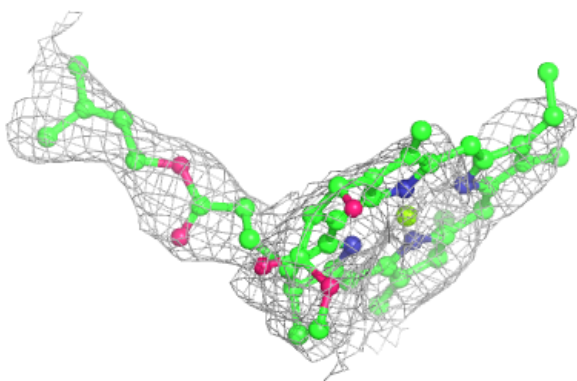
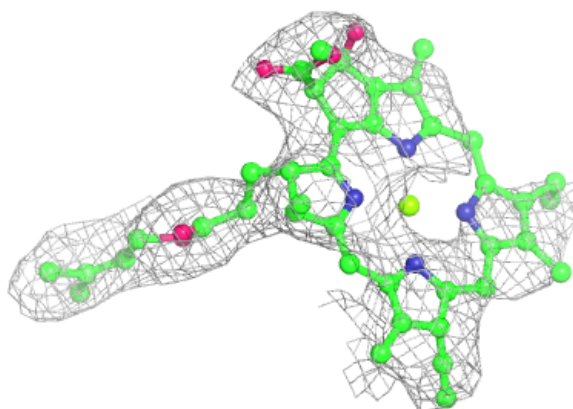
**Electron density around CLA L 201:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

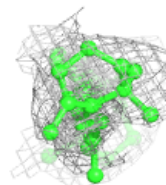
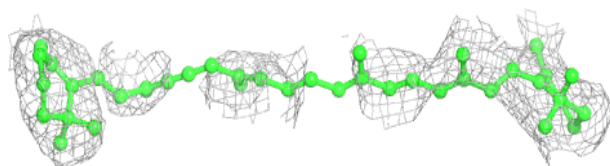
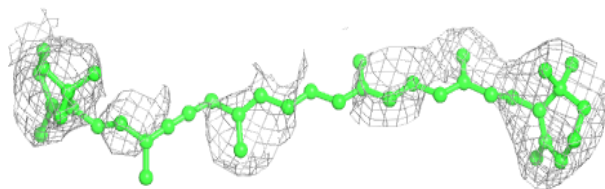


Electron density around CLA A 829:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

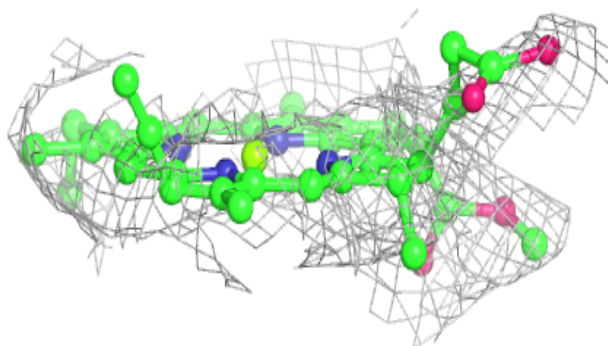
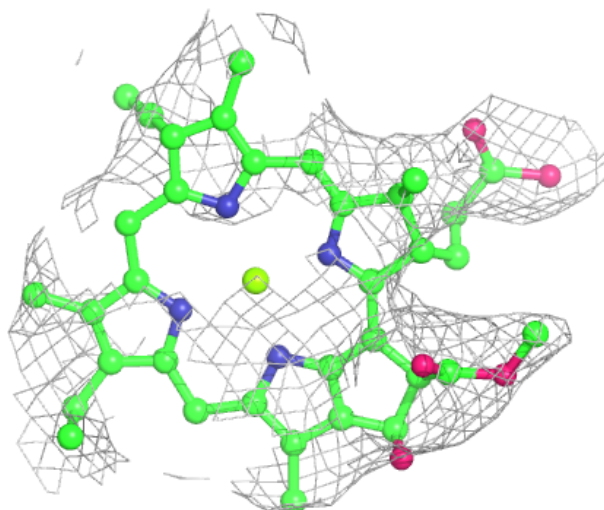
**Electron density around BCR J 102:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



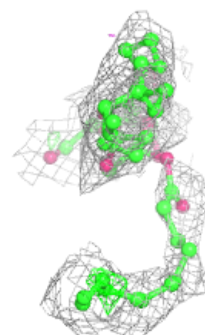
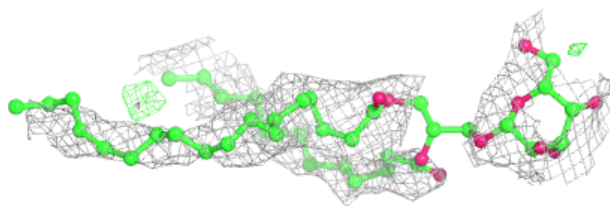
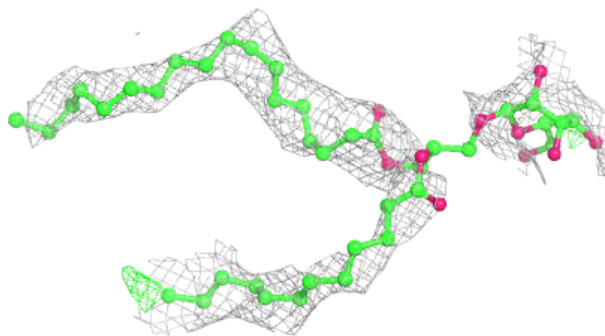
Electron density around CLA A 833:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



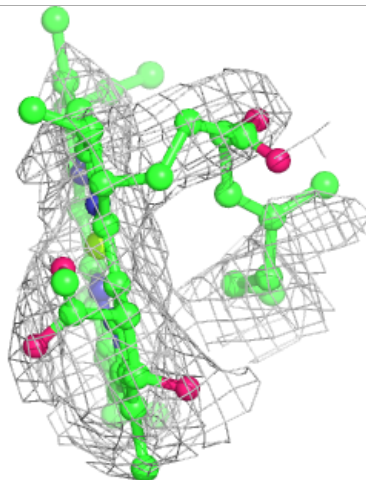
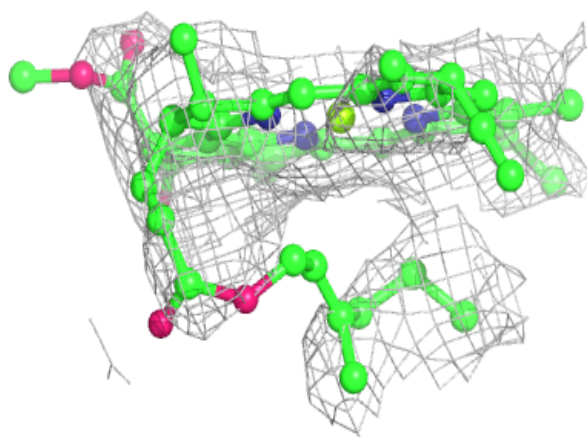
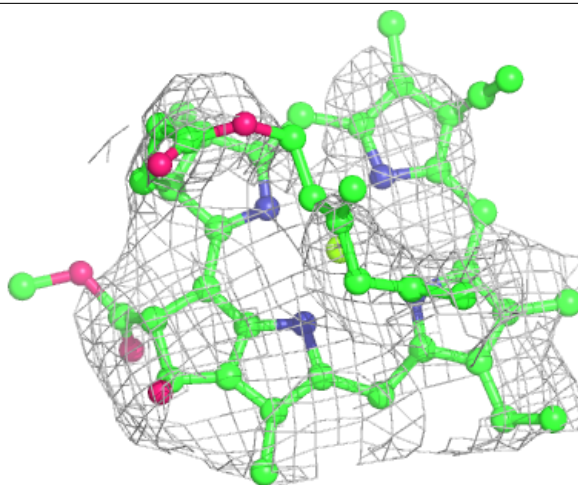
Electron density around LMG B 848:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



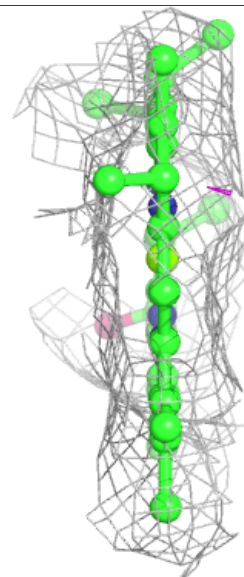
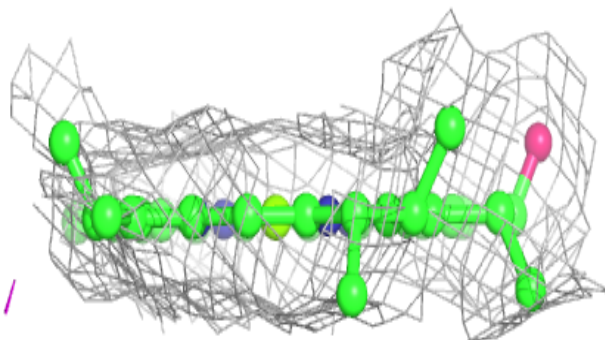
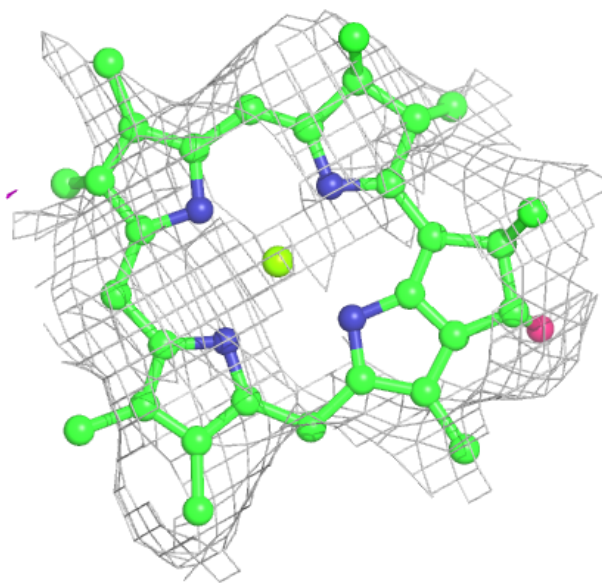
Electron density around CLA A 817:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



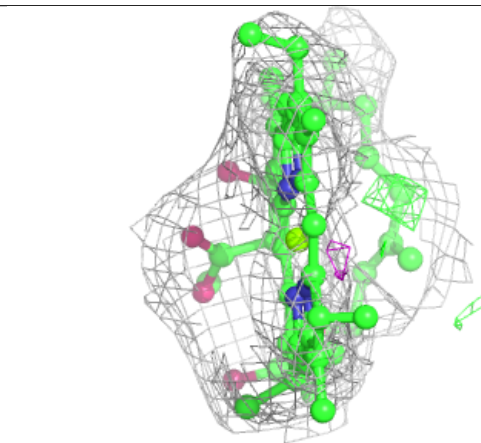
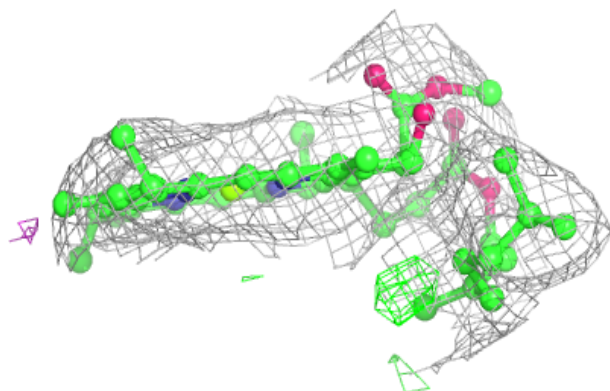
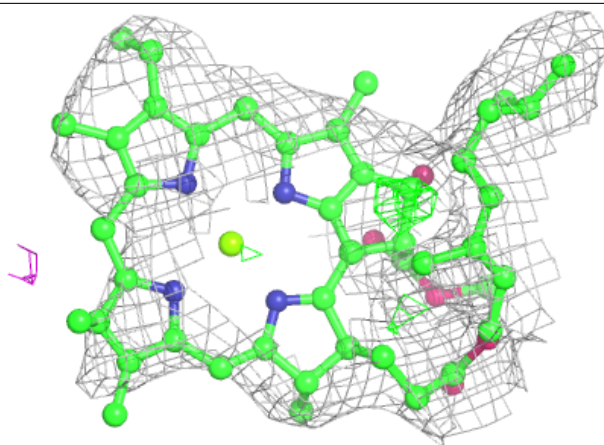
Electron density around CLA 3 301:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

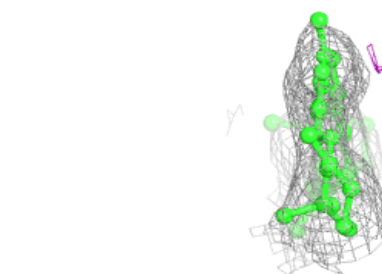
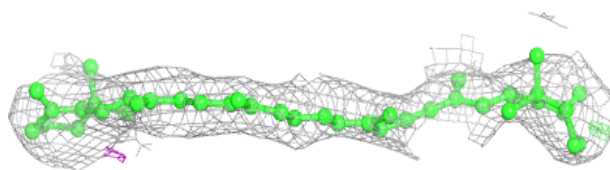
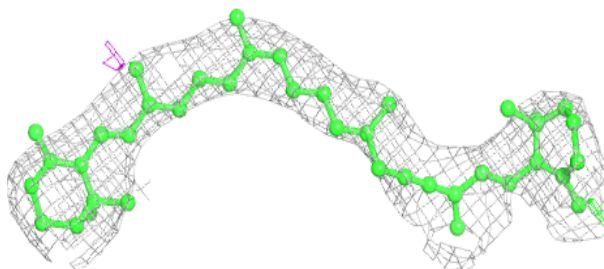


Electron density around CLA B 812:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

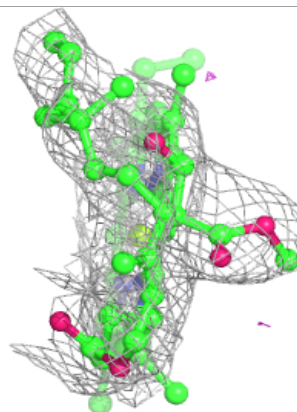
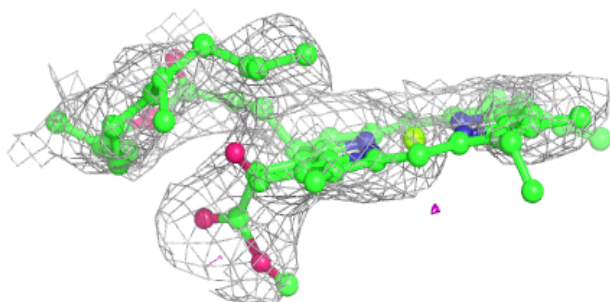
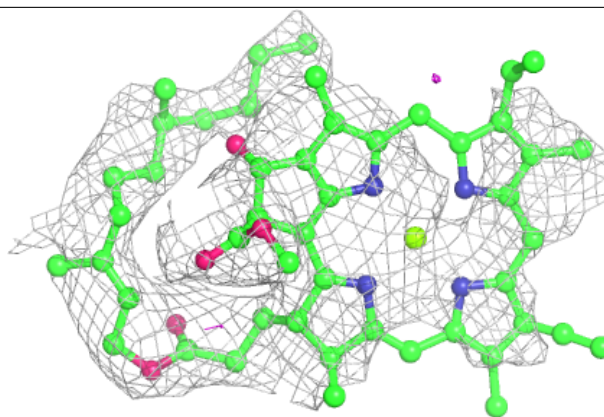
**Electron density around BCR A 845:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

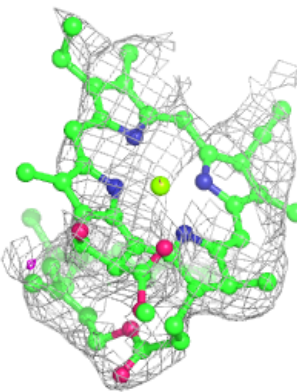
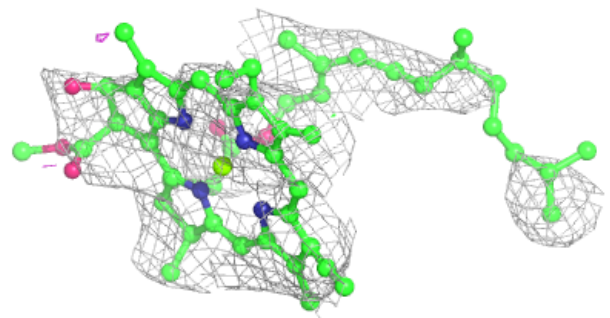
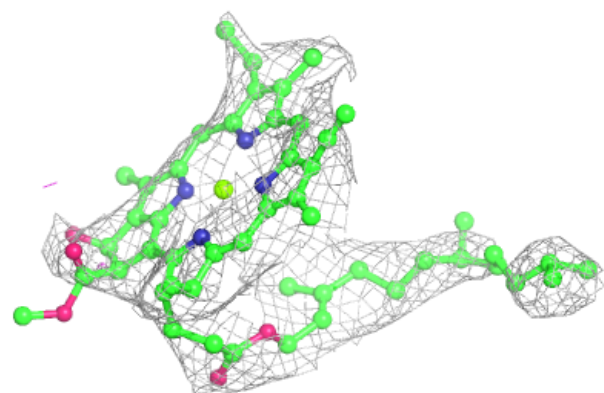


Electron density around CLA A 823:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

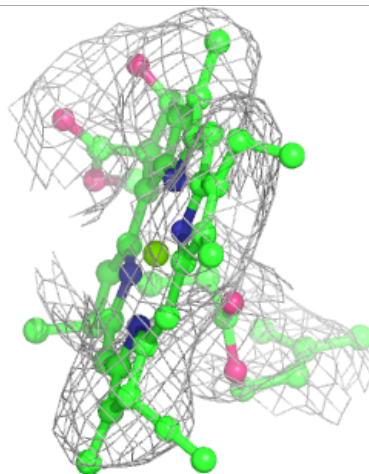
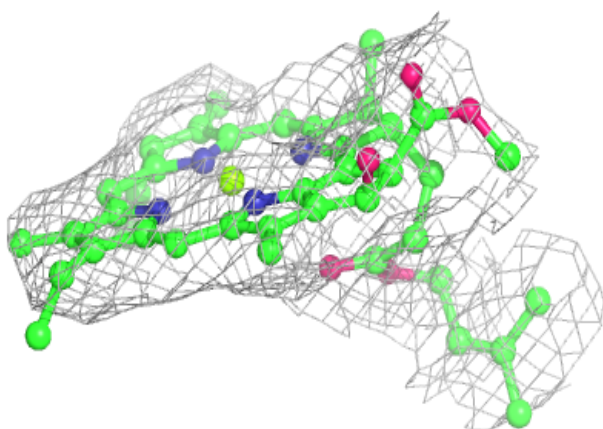
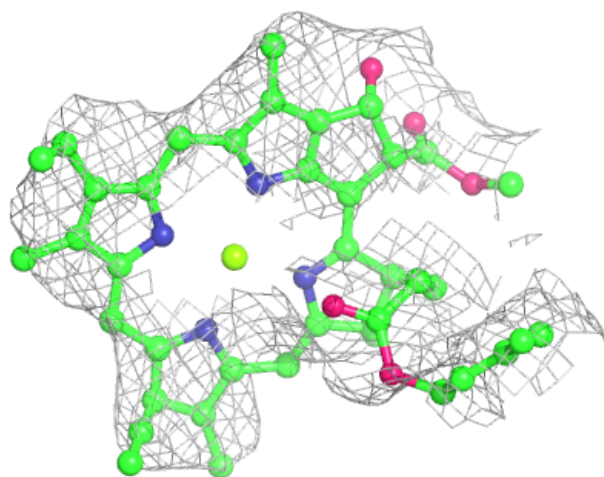
**Electron density around CLA B 815:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



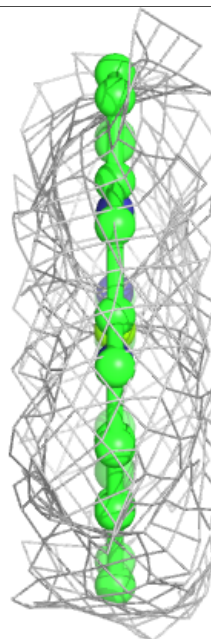
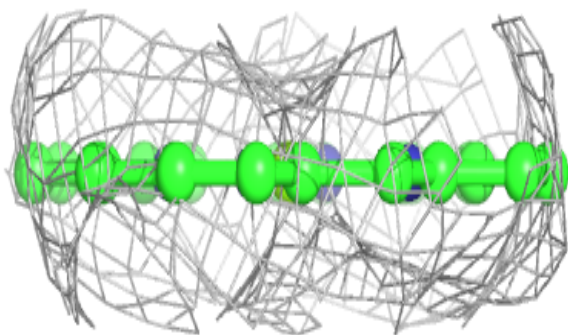
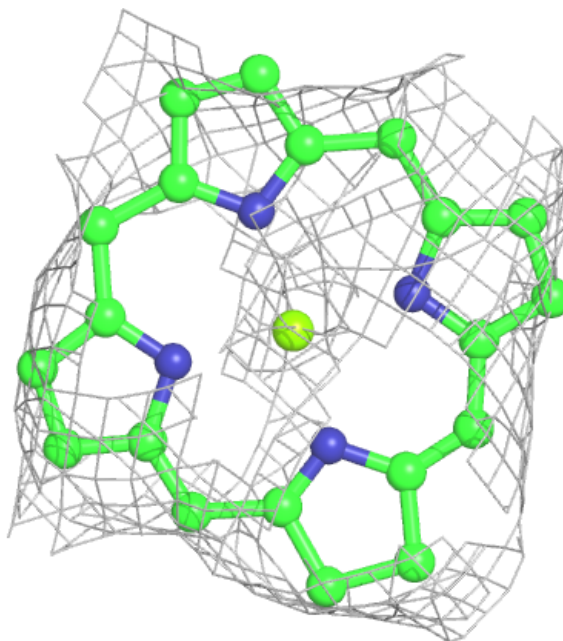
Electron density around CLA A 815:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



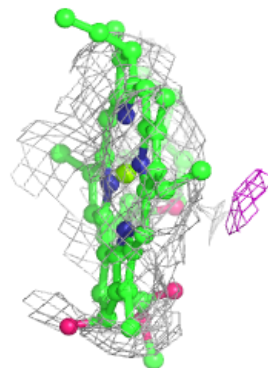
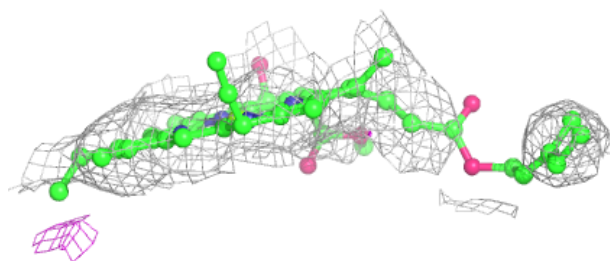
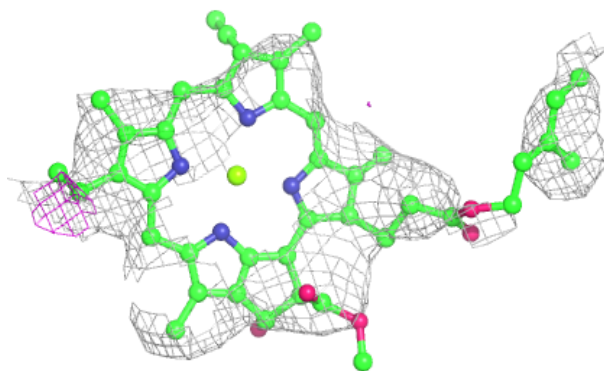
Electron density around CLA 1 212:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



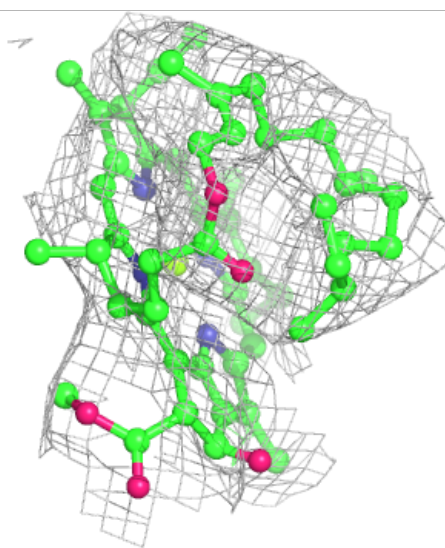
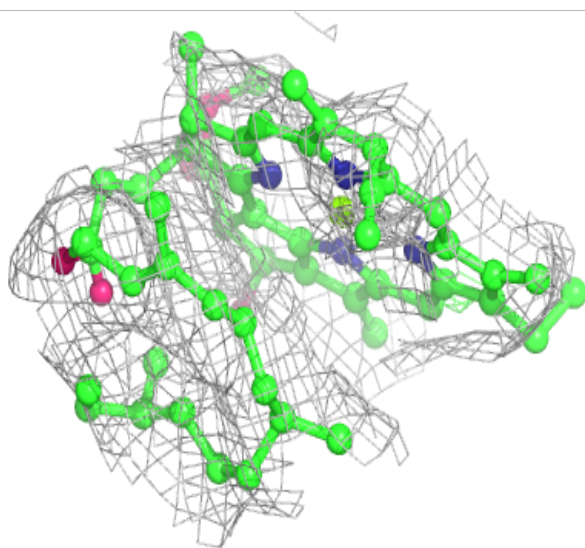
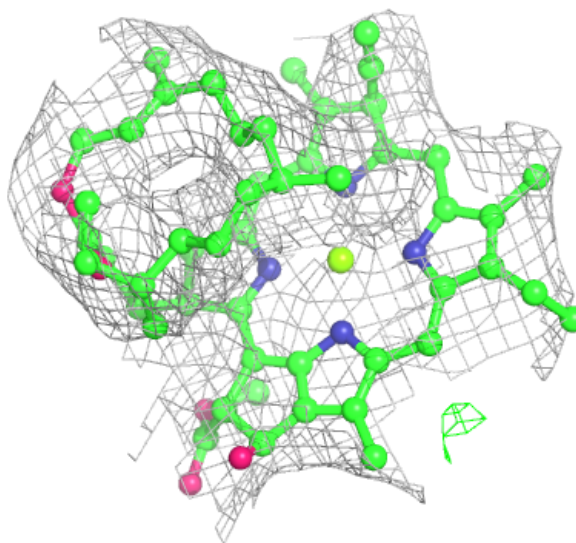
Electron density around CLA 1 213:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



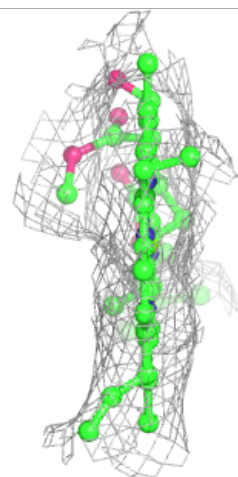
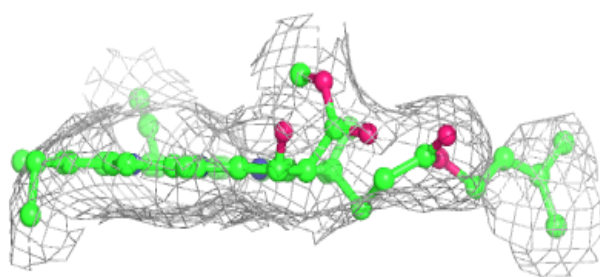
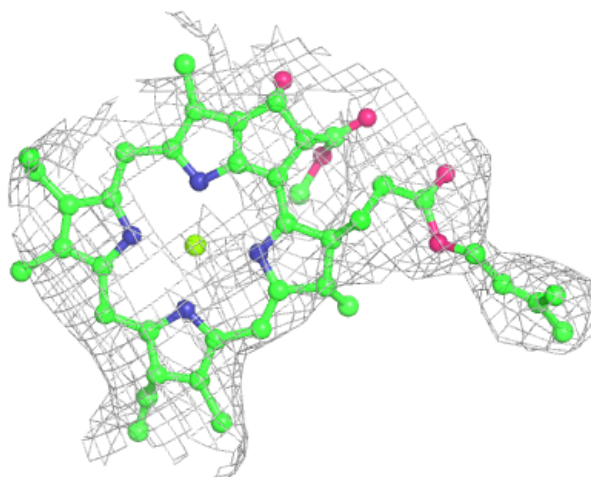
Electron density around CLA J 103:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



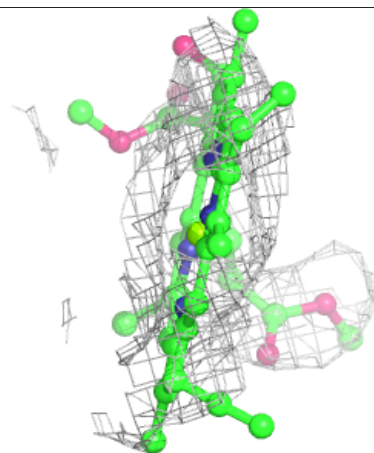
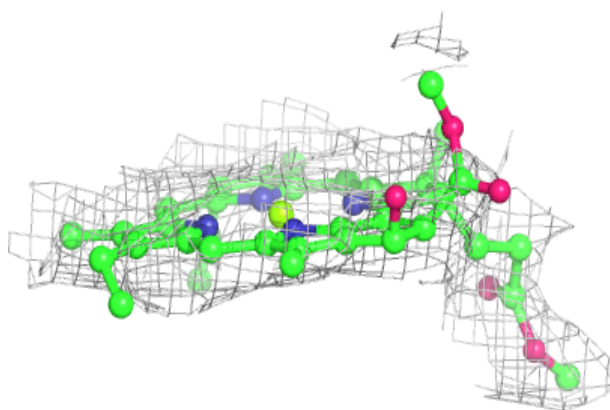
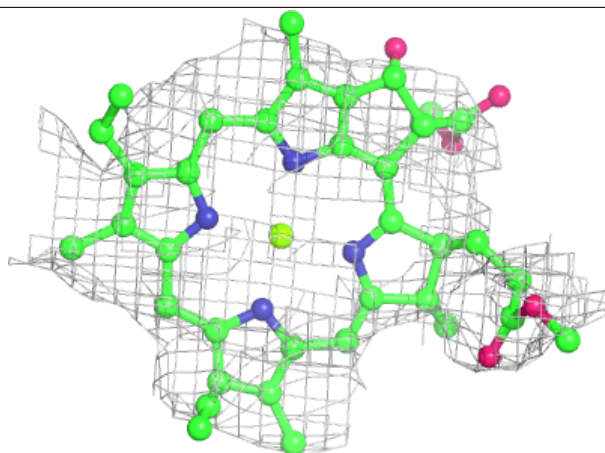
Electron density around CLA 4 310:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

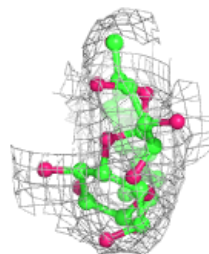
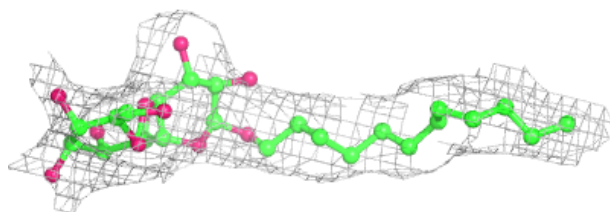
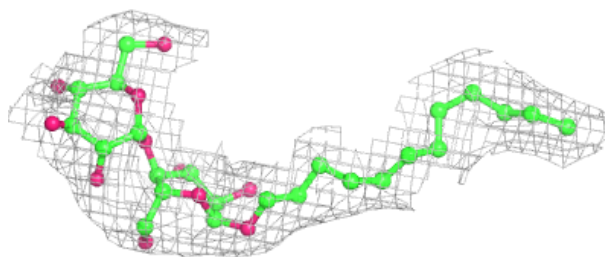


Electron density around CLA B 822:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

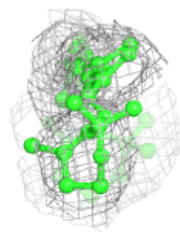
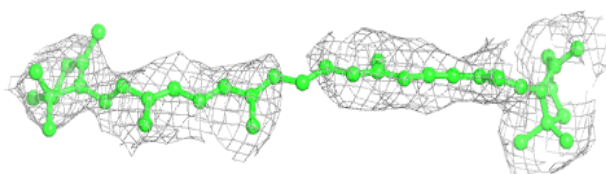
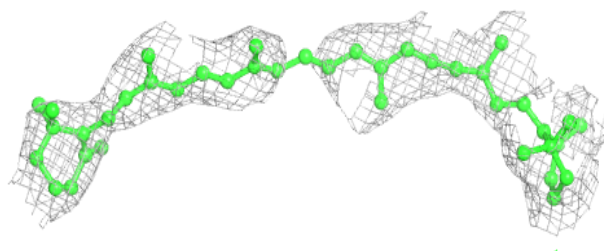
**Electron density around LMU 4 321:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



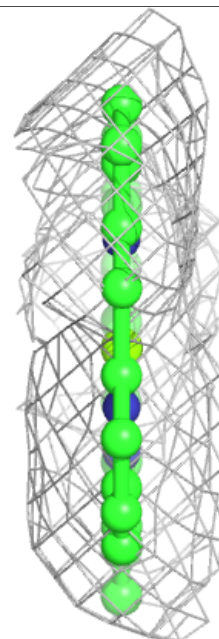
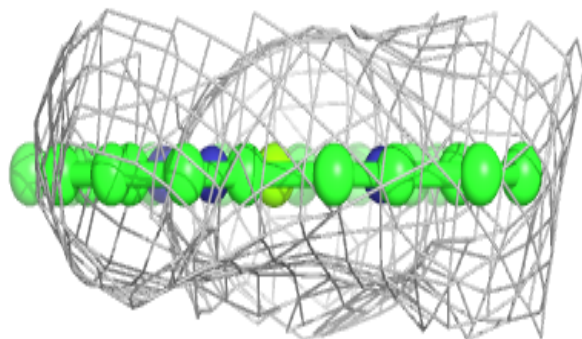
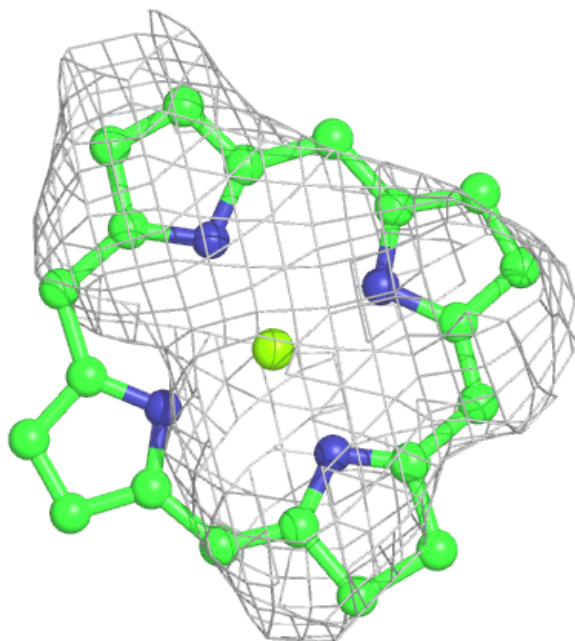
Electron density around BCR B 844:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



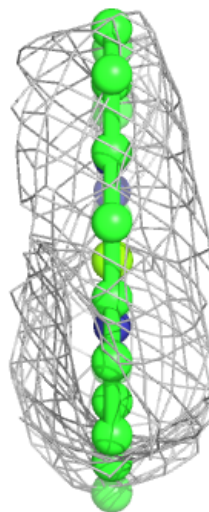
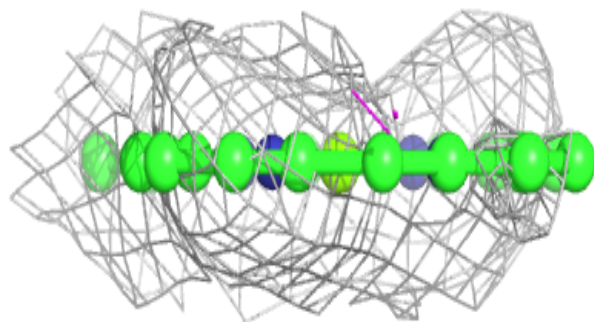
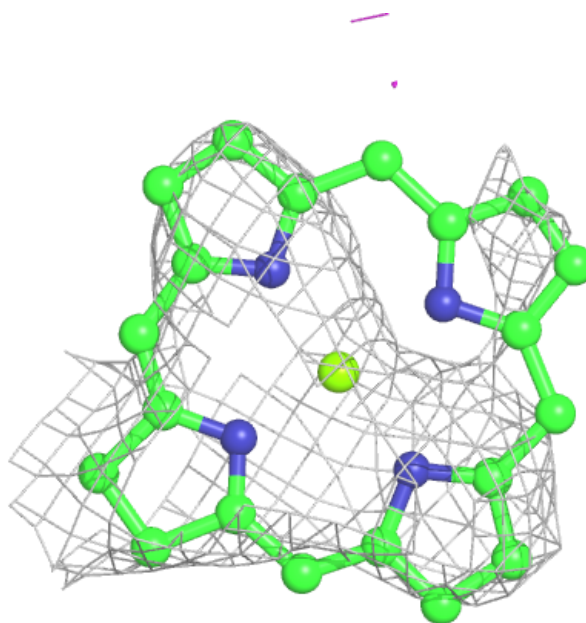
Electron density around CLA 3 316:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



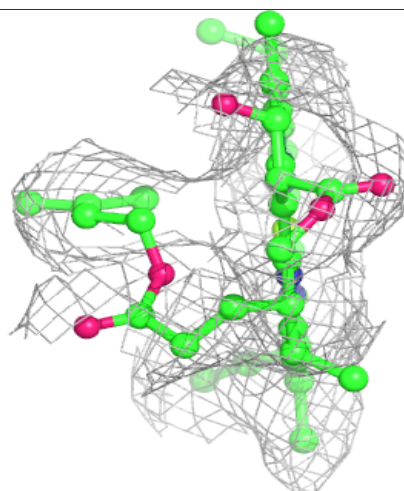
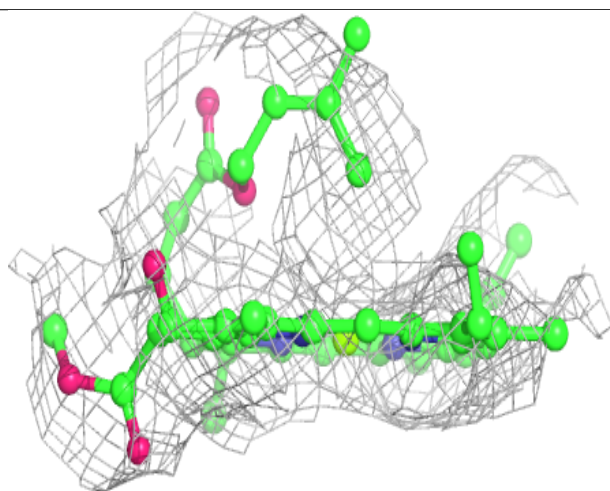
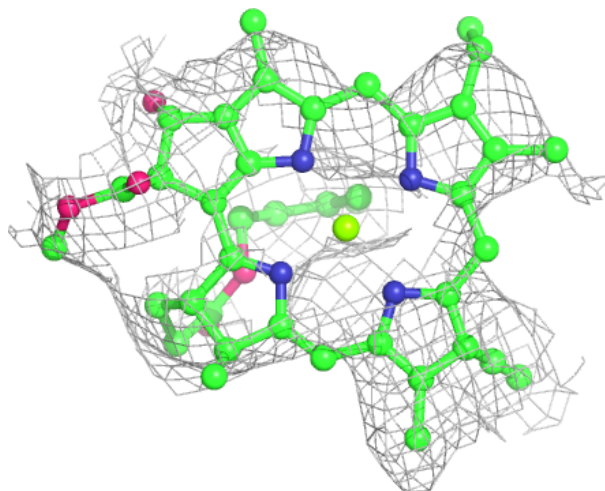
Electron density around CLA 2 309:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



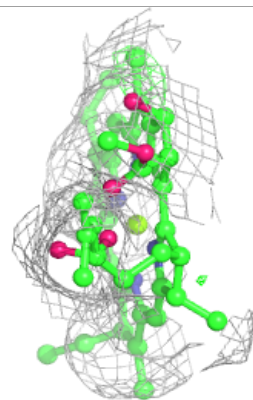
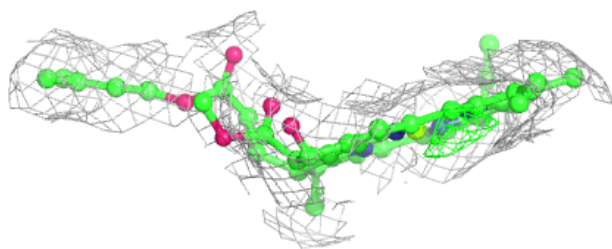
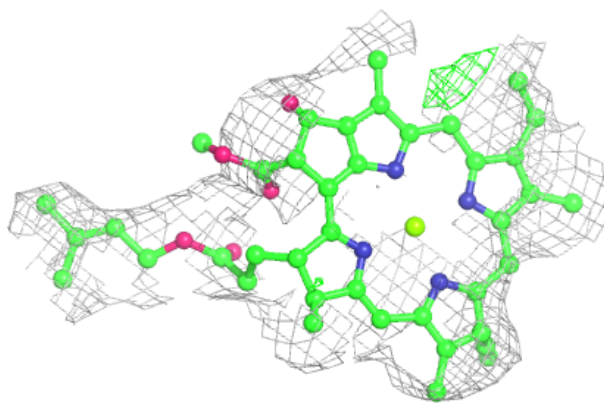
Electron density around CLA L 208:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



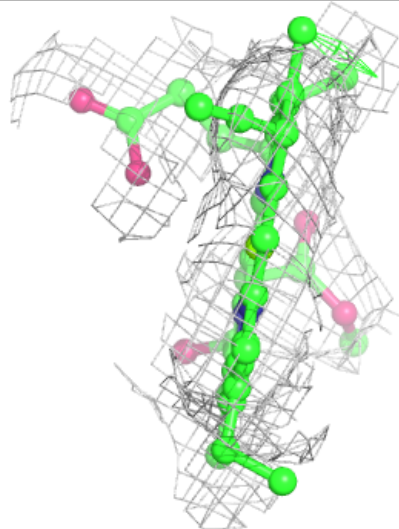
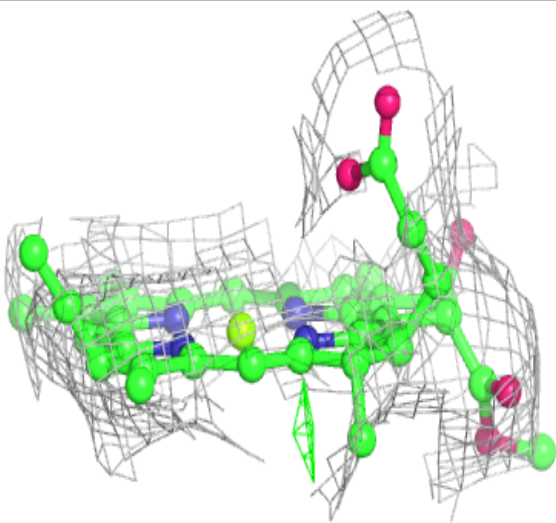
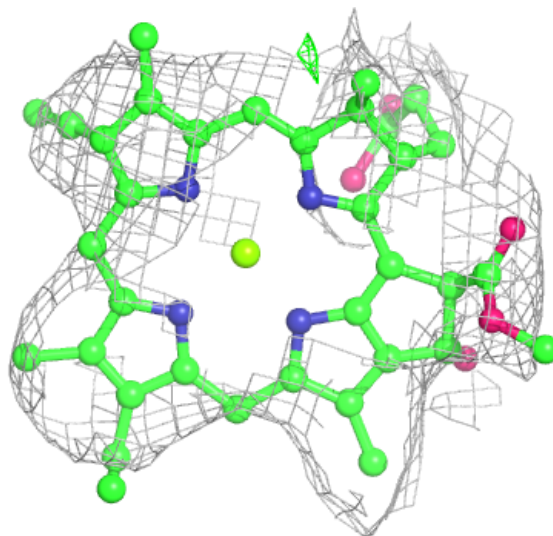
Electron density around CLA L 210:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



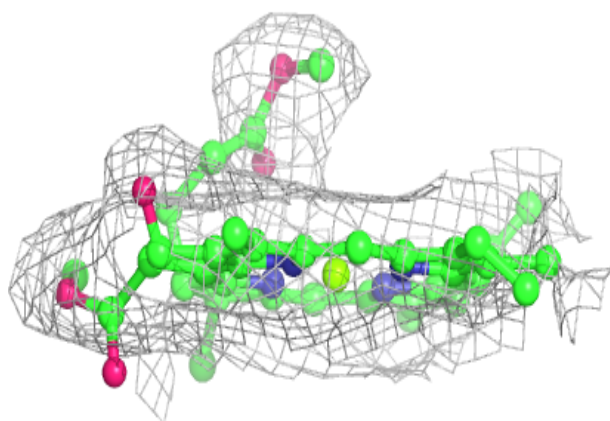
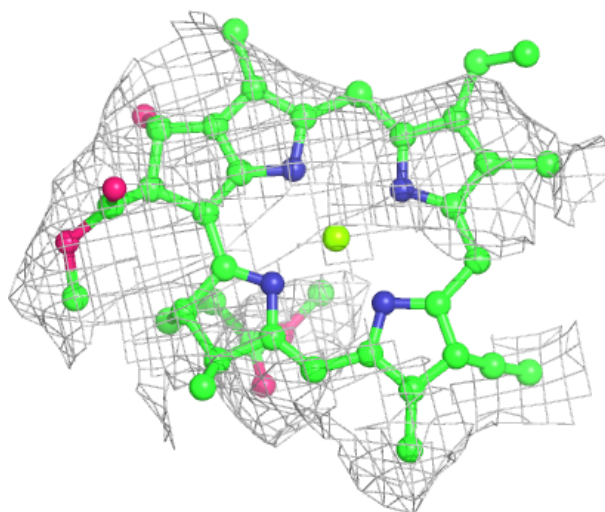
Electron density around CLA B 834:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



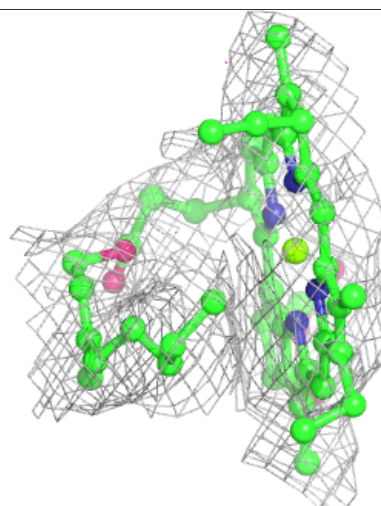
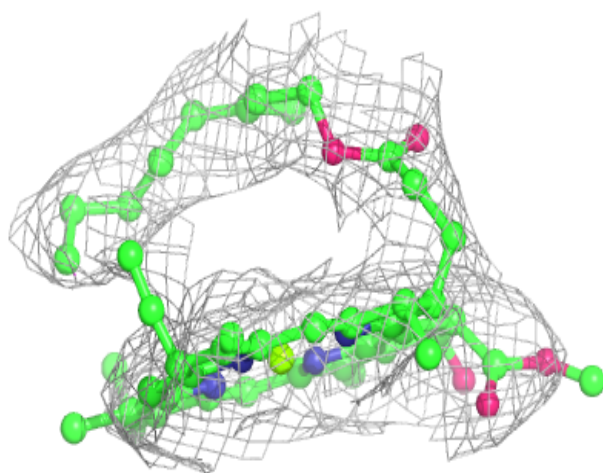
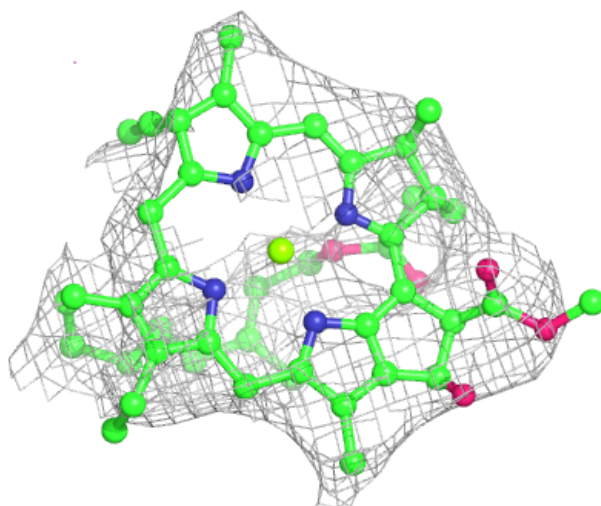
Electron density around CLA 1 204:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



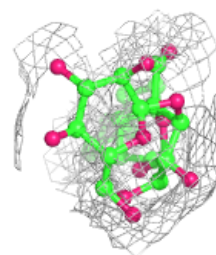
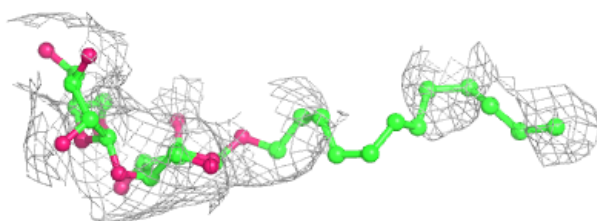
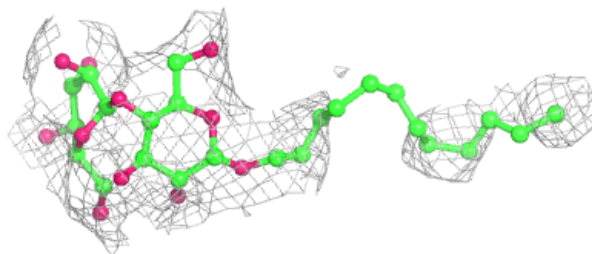
Electron density around CLA A 812:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



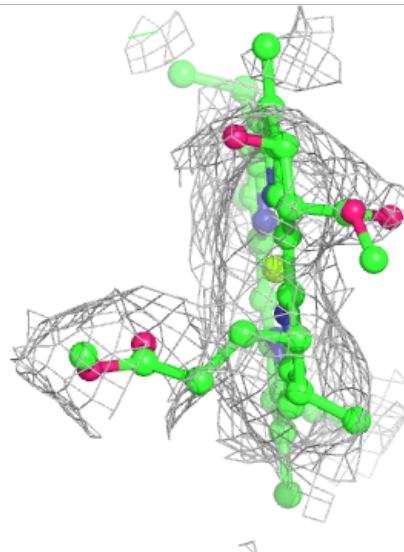
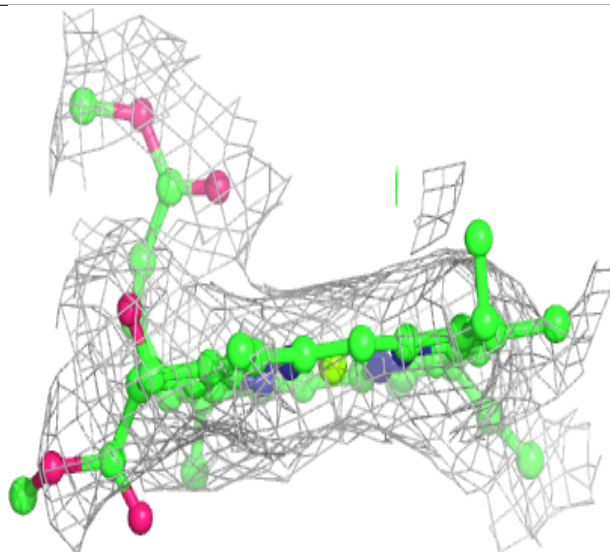
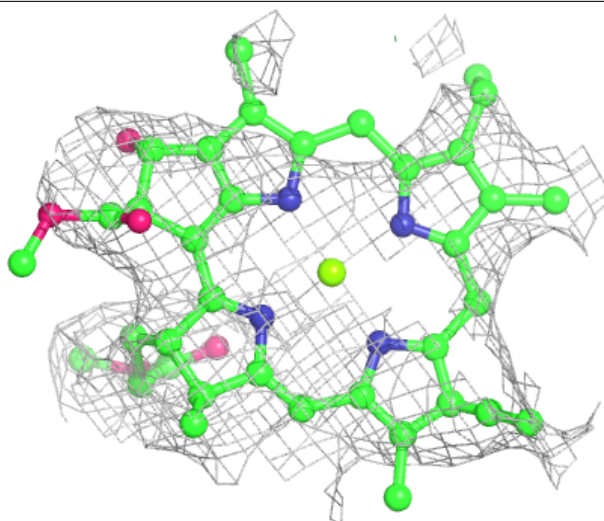
Electron density around LMU 1 218:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



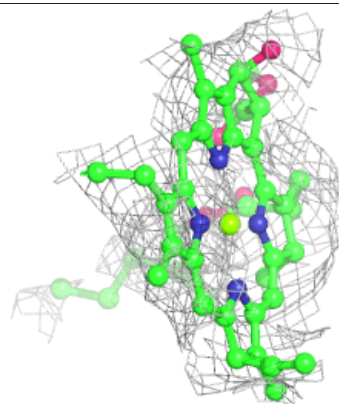
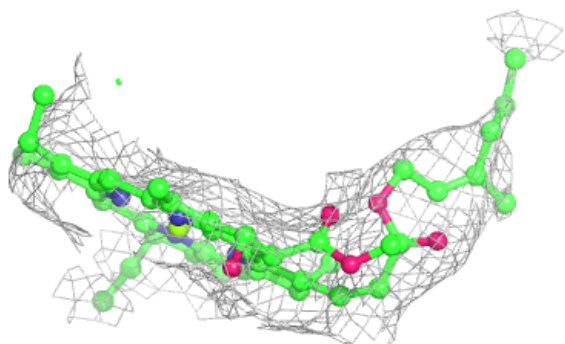
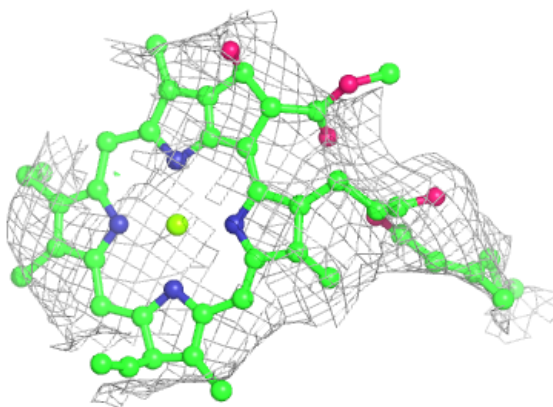
Electron density around CLA A 807:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



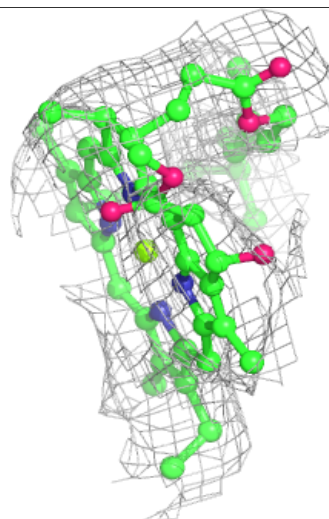
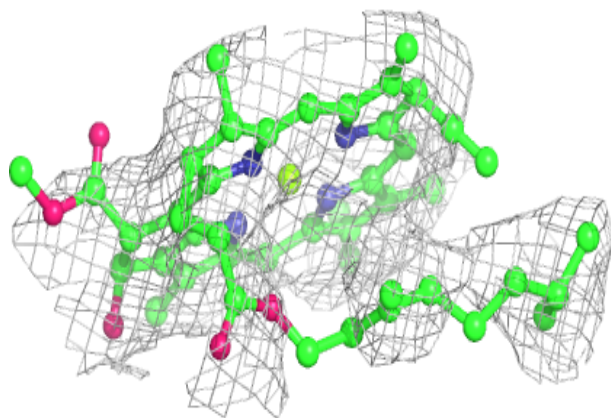
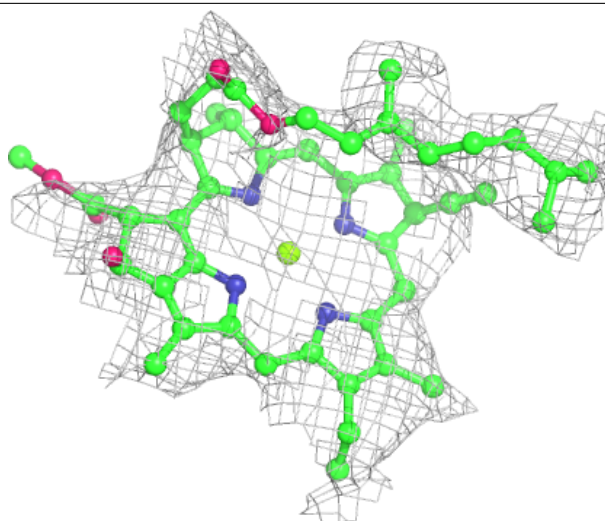
Electron density around CLA 4 306:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



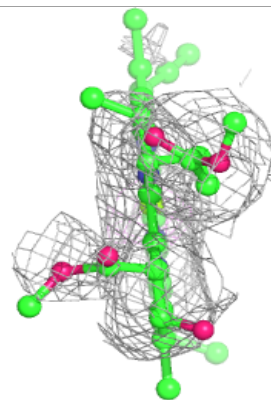
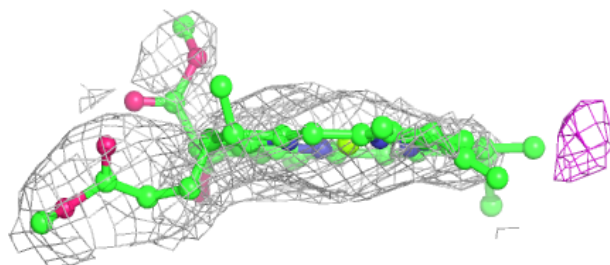
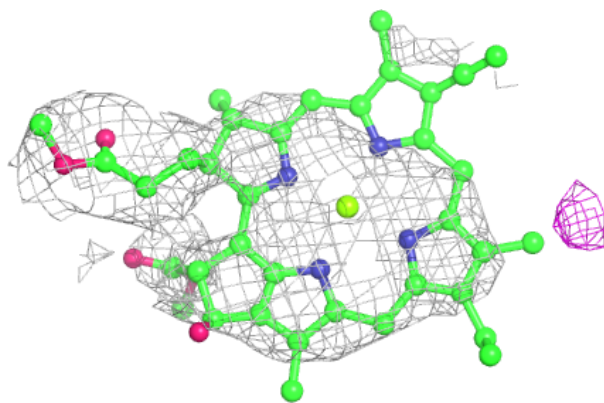
Electron density around CLA B 823:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



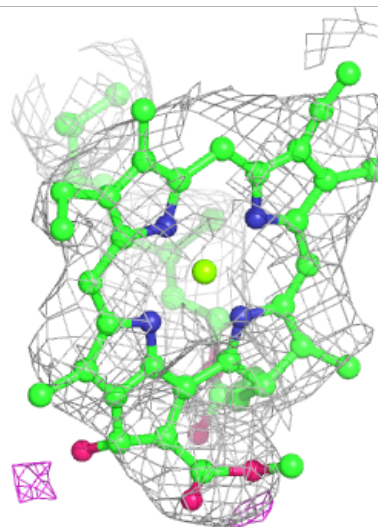
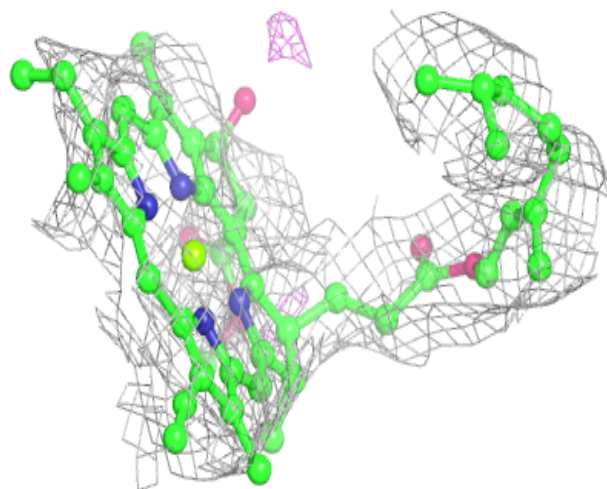
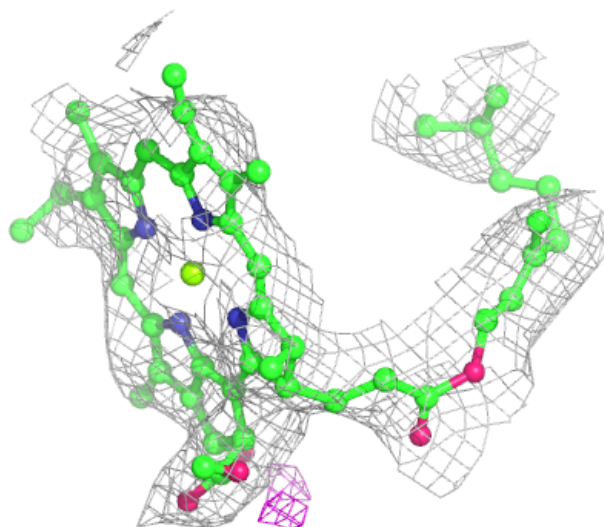
Electron density around CLA A 834:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



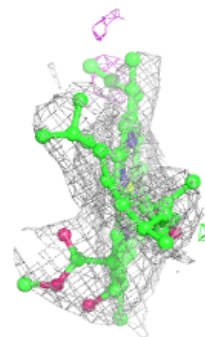
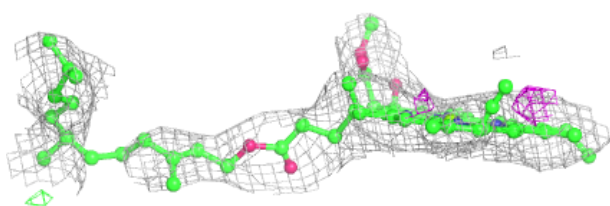
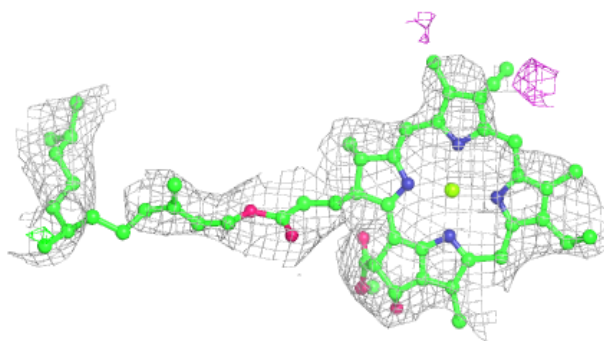
Electron density around CLA A 804:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

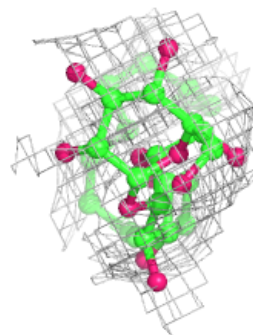
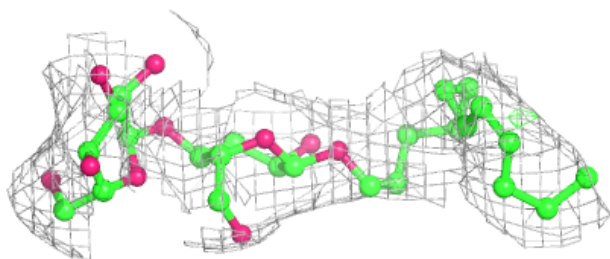
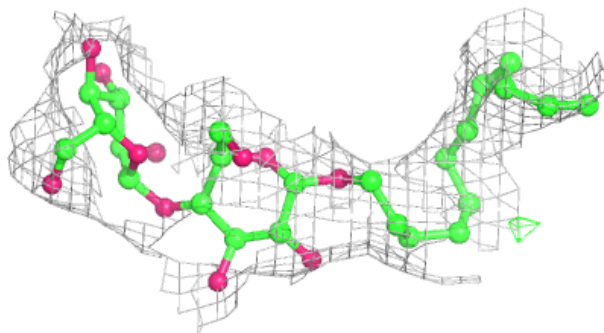


Electron density around CLA B 837:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

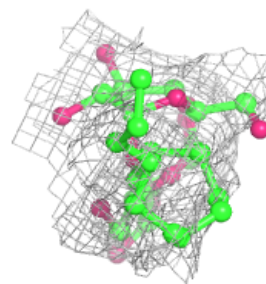
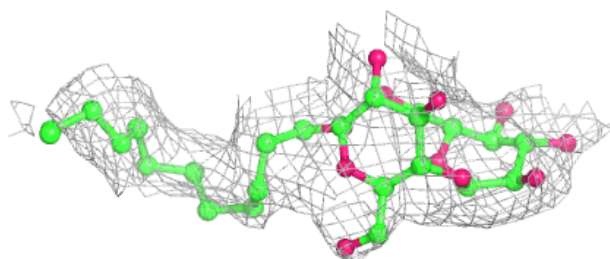
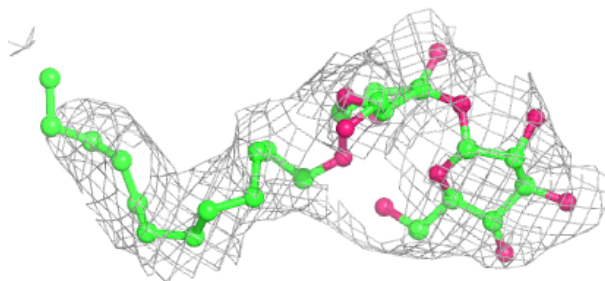
**Electron density around LMU R 109:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

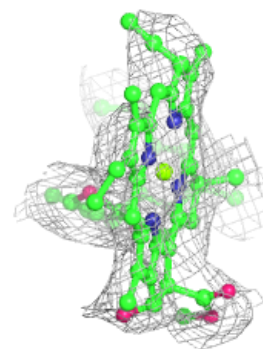
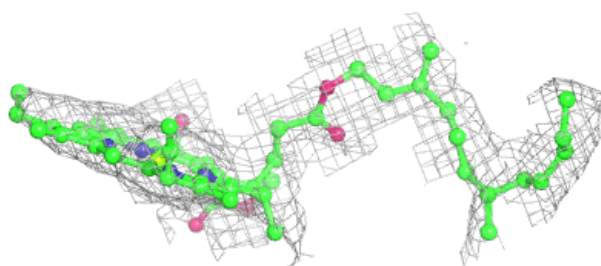
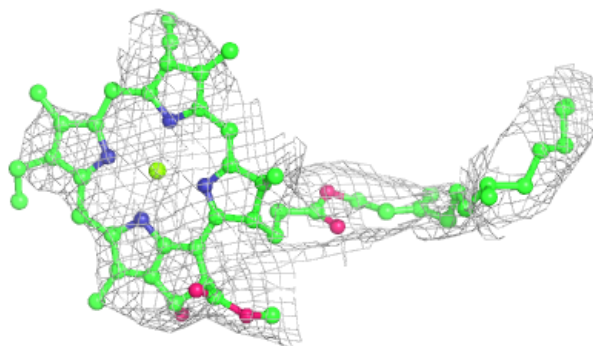


Electron density around LMU A 847:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

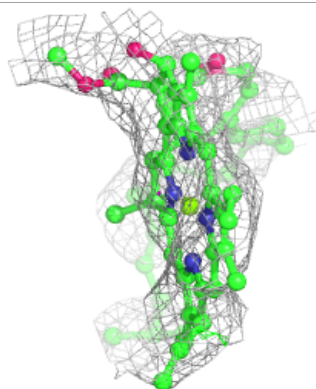
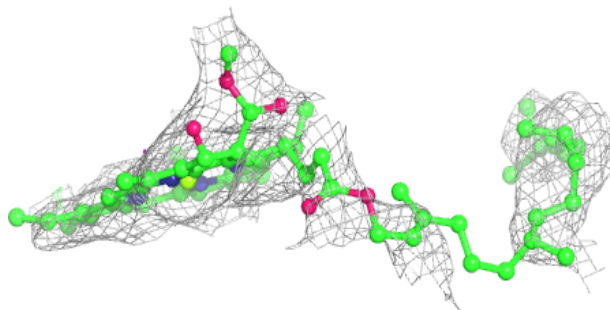
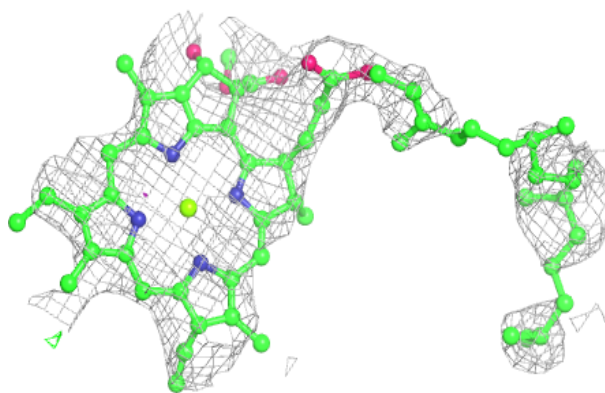
**Electron density around CLA A 824:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



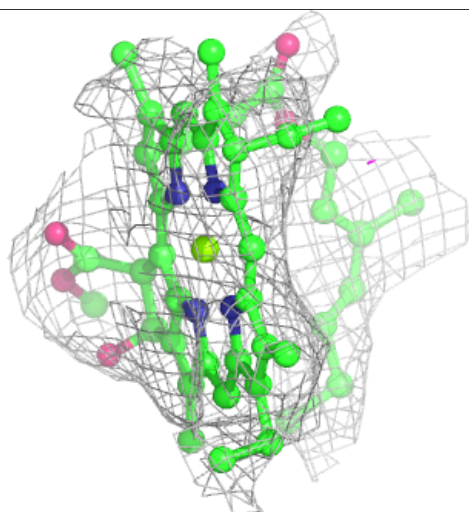
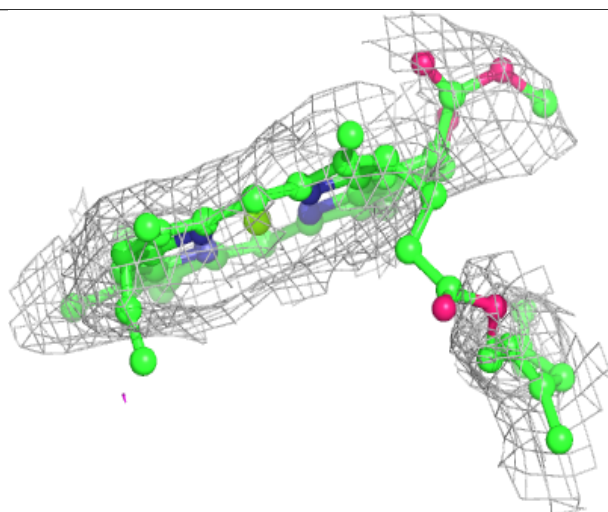
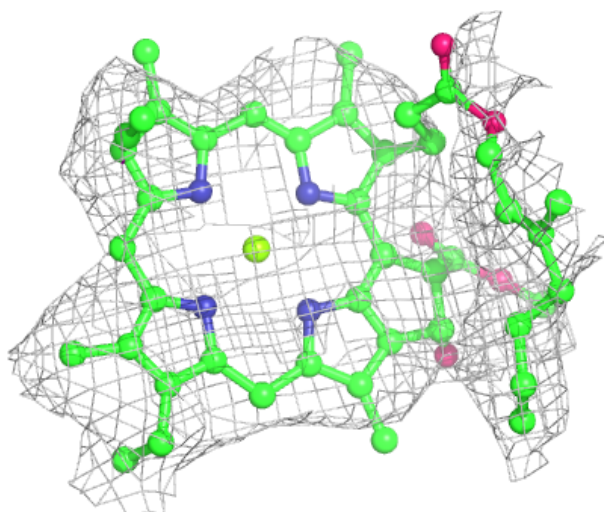
Electron density around CLA A 825:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



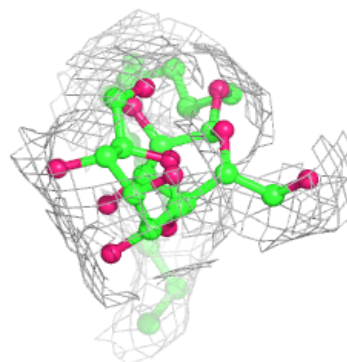
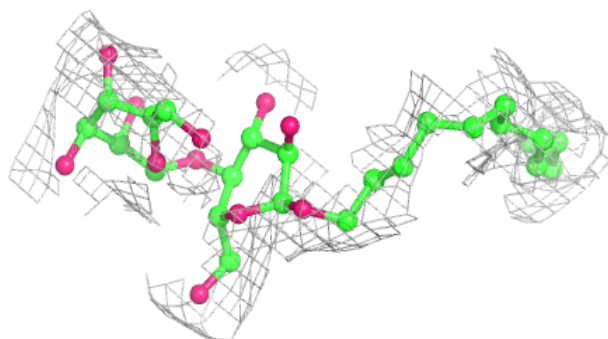
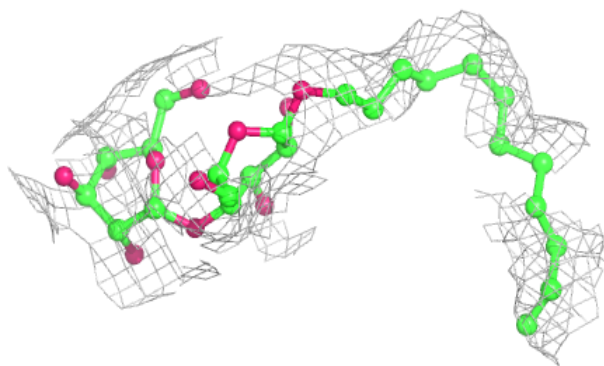
Electron density around CLA F 207:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

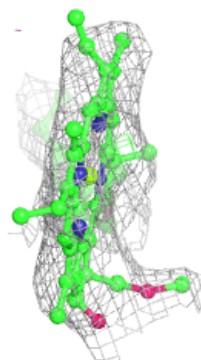
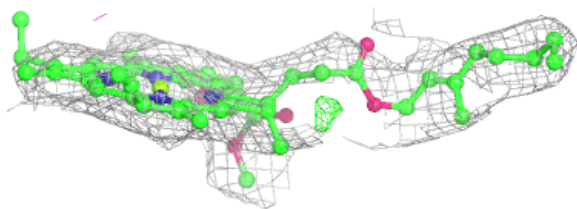
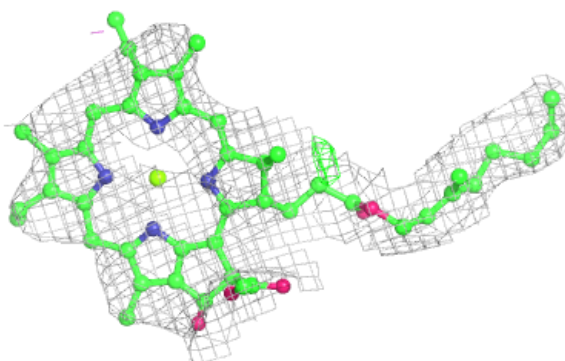


Electron density around LMU 2 319:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

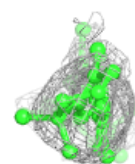
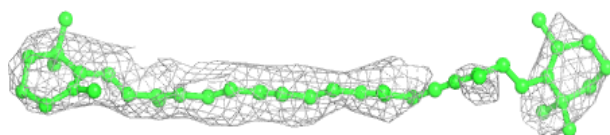
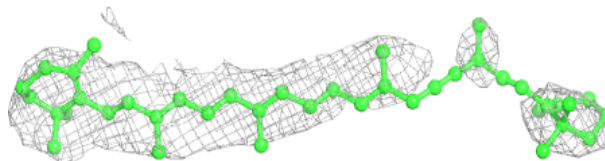
**Electron density around CLA A 805:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

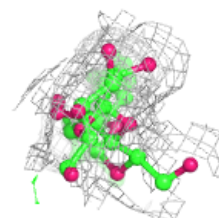
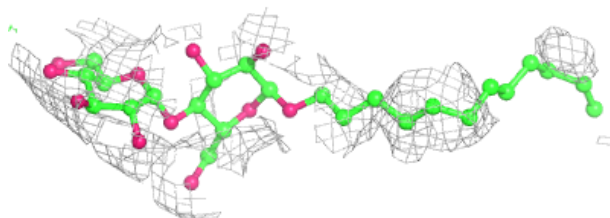
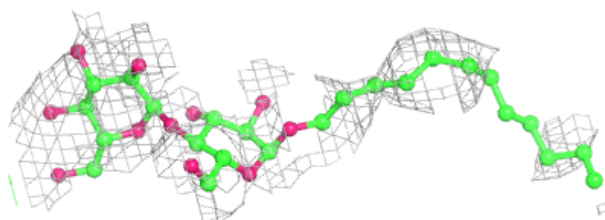


Electron density around BCR B 847:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

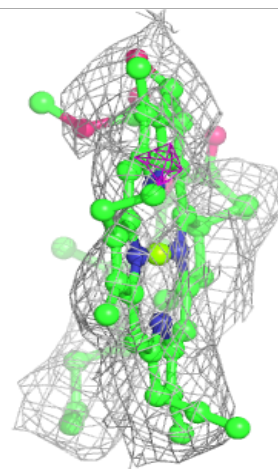
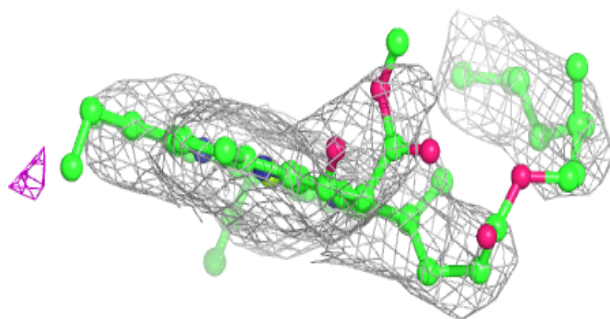
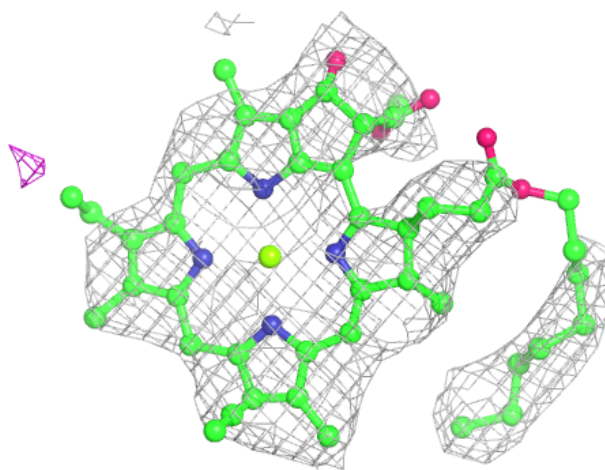
**Electron density around LMU B 805:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



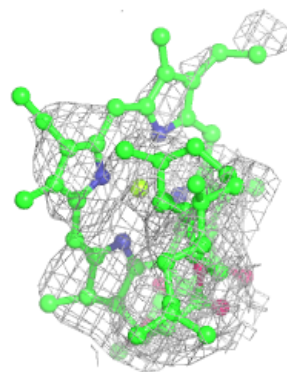
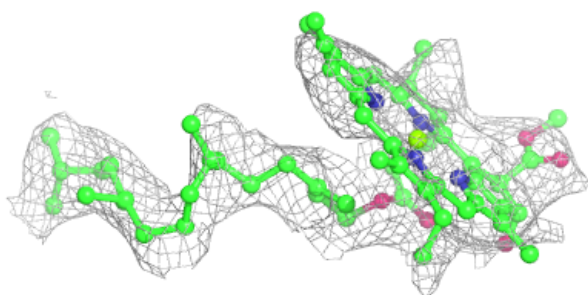
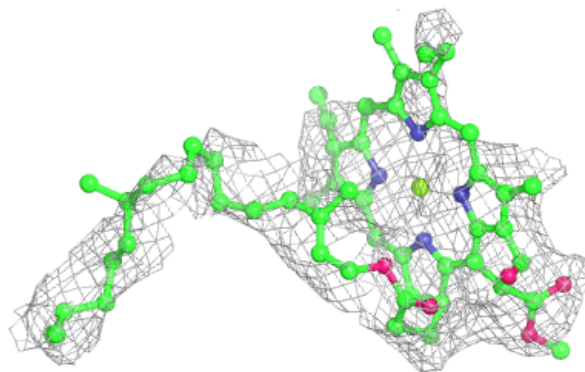
Electron density around CLA B 825:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

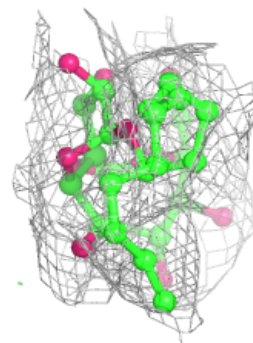
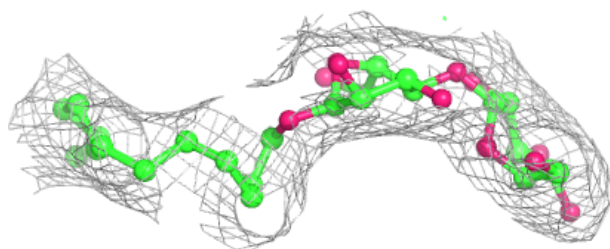
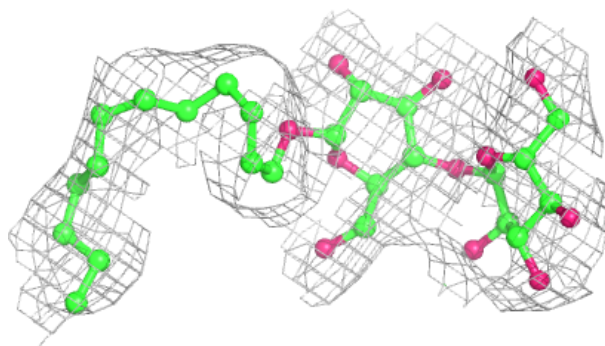


Electron density around CLA L 203:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

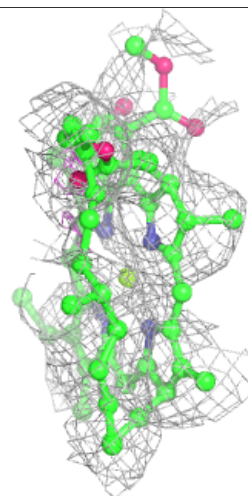
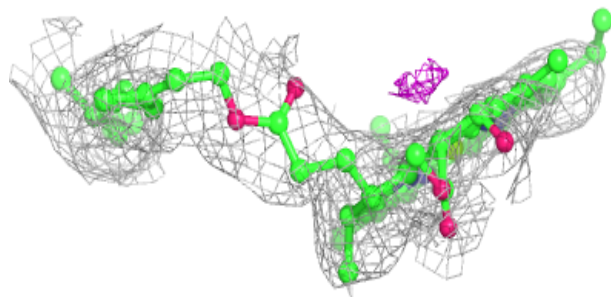
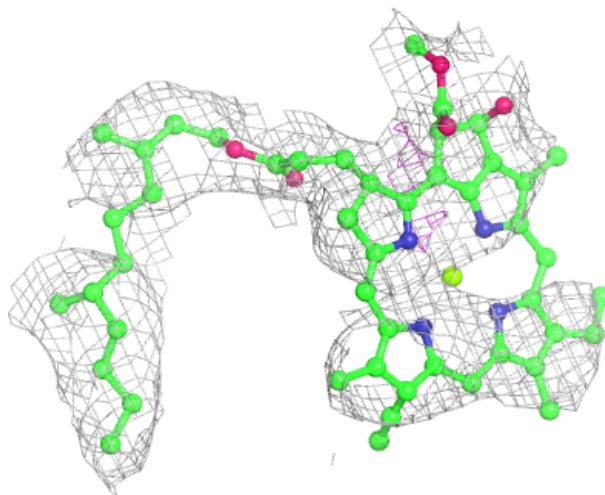
**Electron density around LMU D 201:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



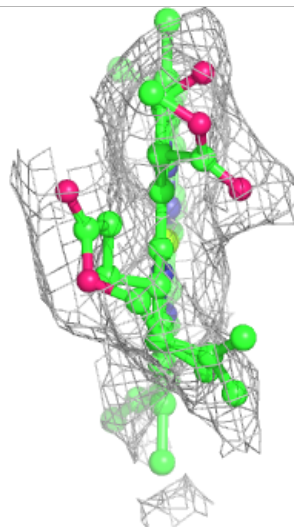
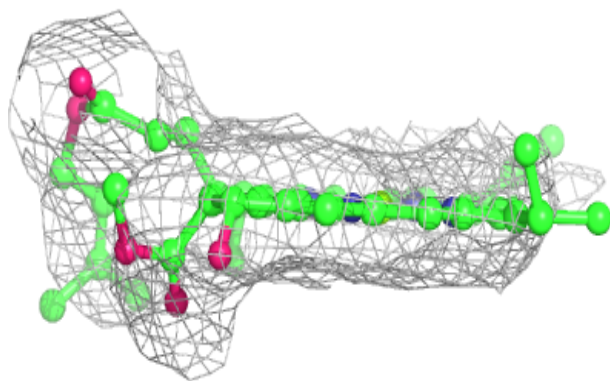
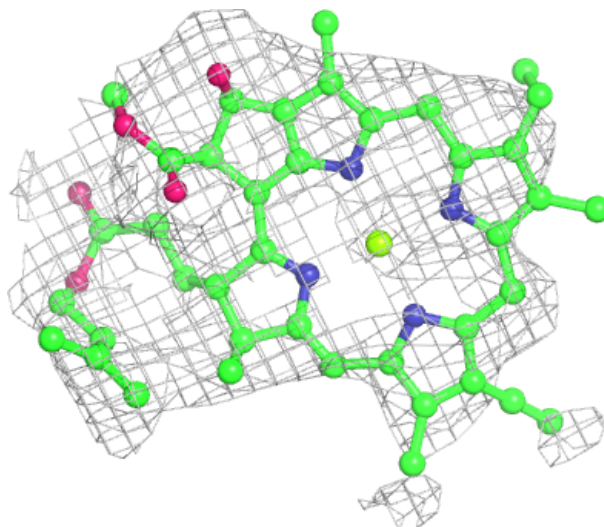
Electron density around CLA B 826:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



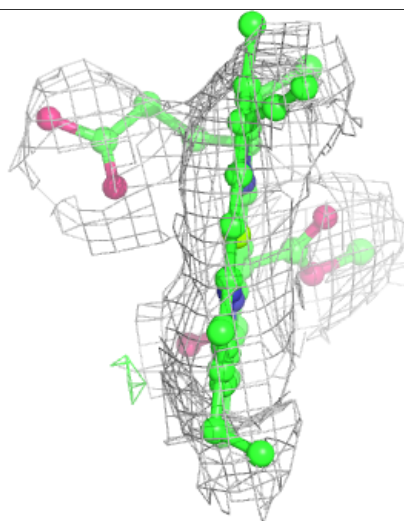
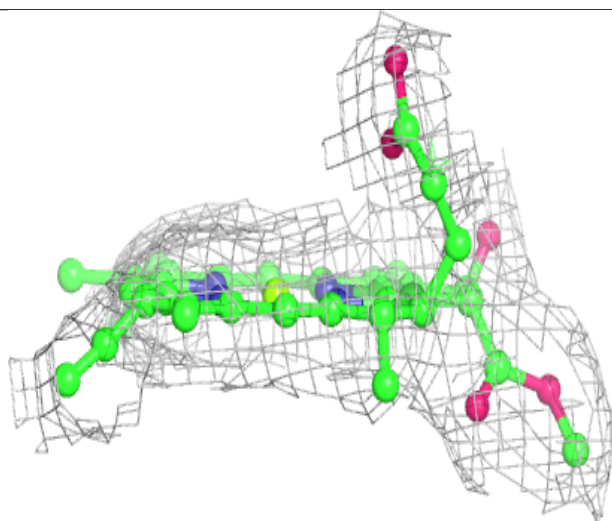
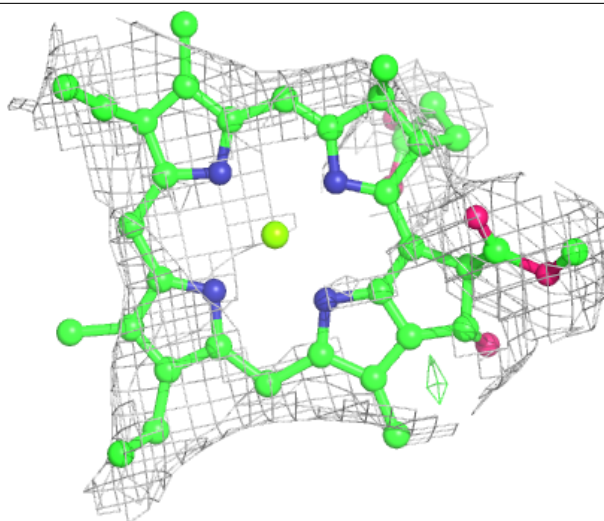
Electron density around CLA 2 315:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



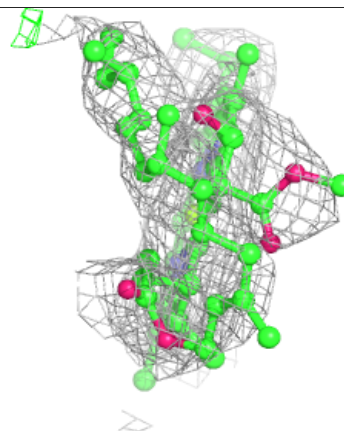
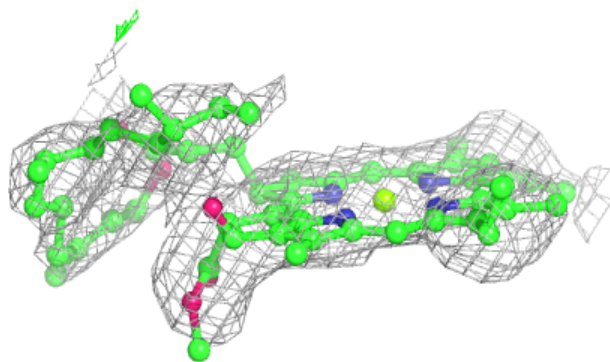
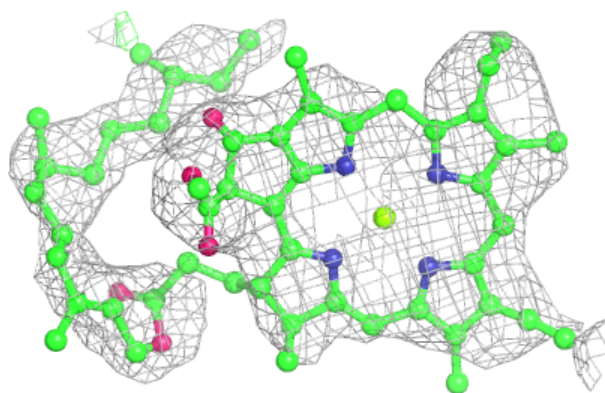
Electron density around CLA B 807:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



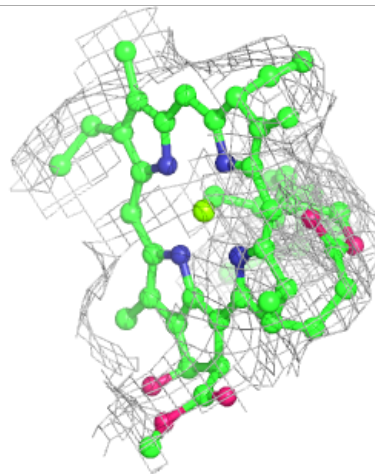
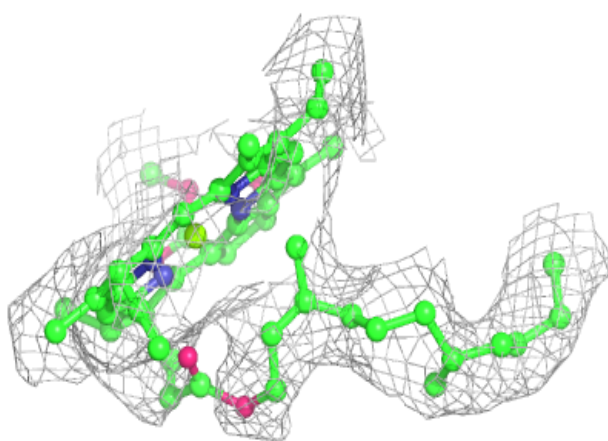
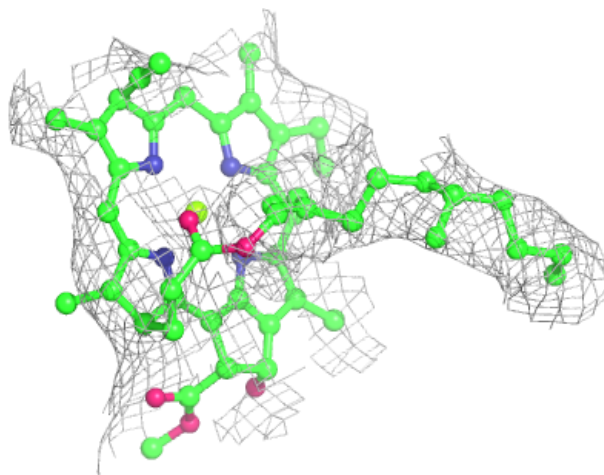
Electron density around CLA B 808:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



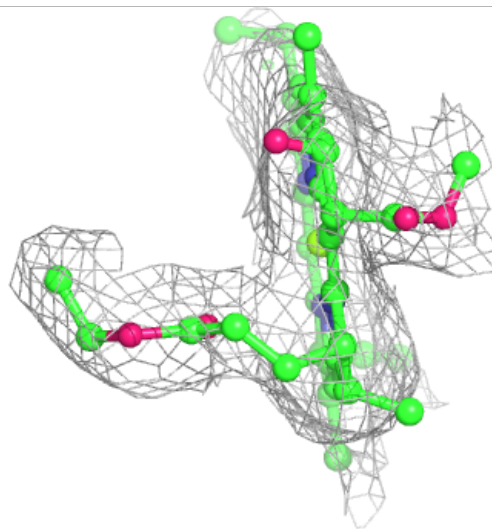
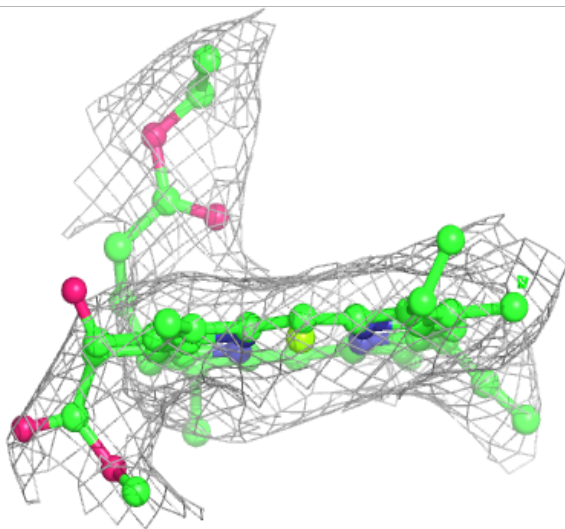
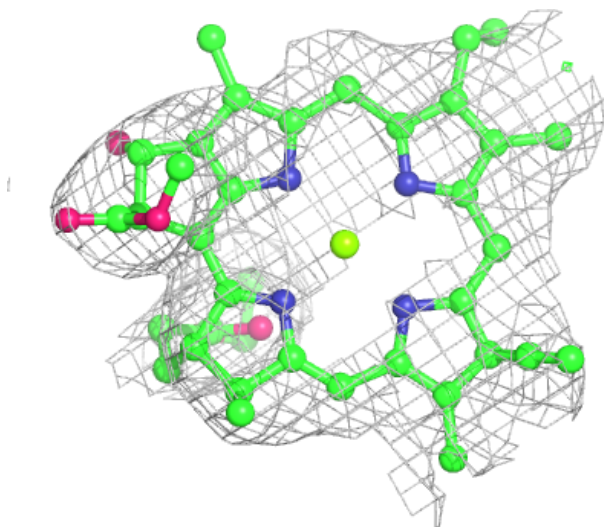
Electron density around CLA 2 303:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



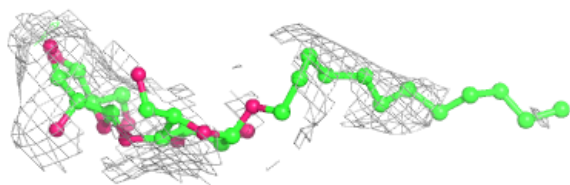
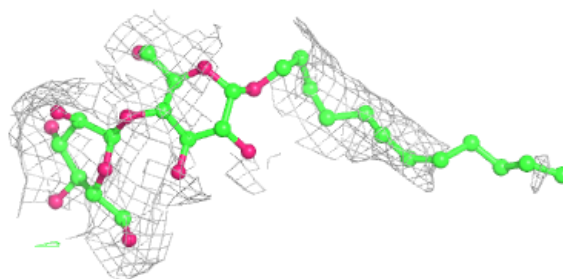
Electron density around CLA L 209:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

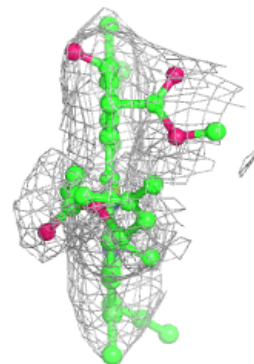
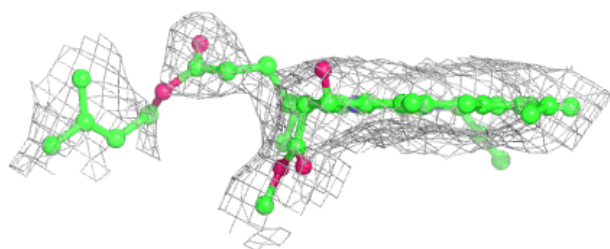
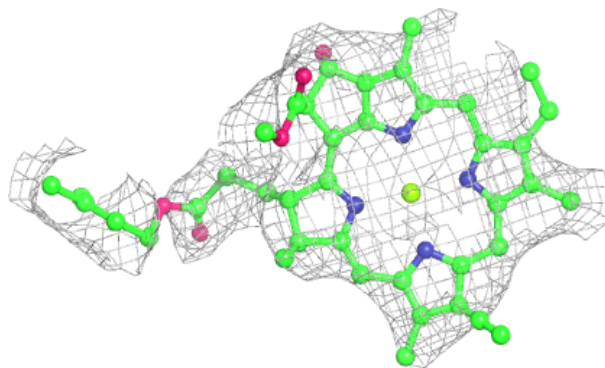


Electron density around LMU A 855:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

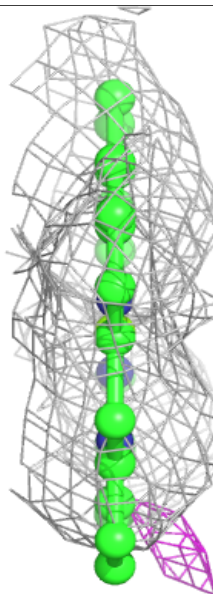
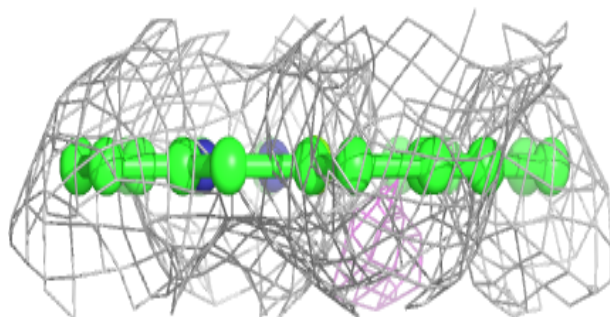
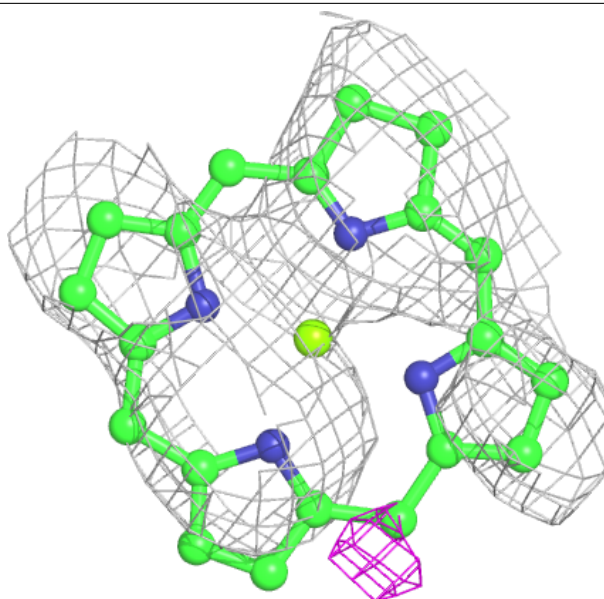
**Electron density around CLA F 201:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



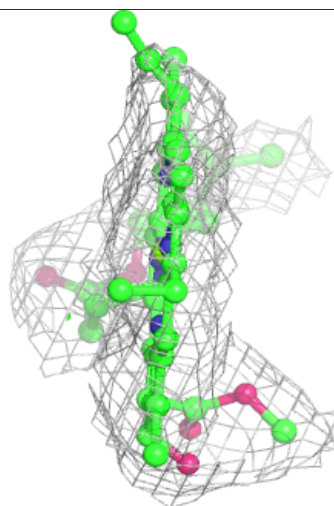
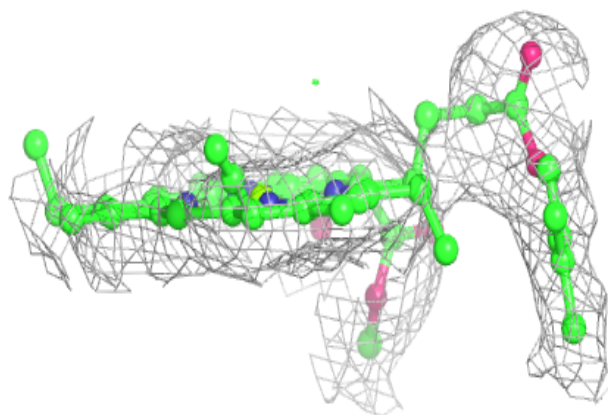
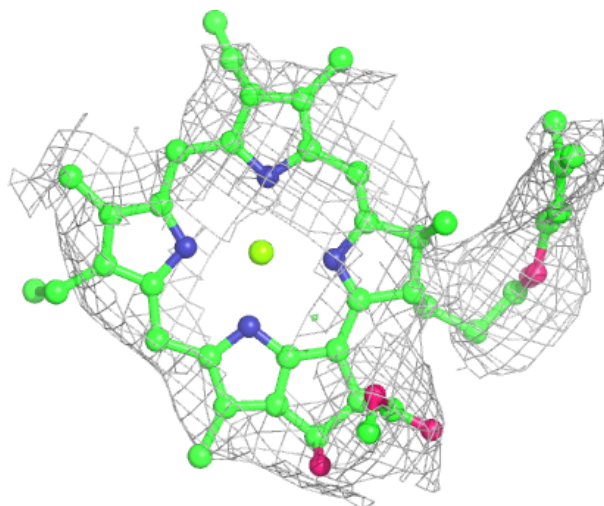
Electron density around CLA 2 304:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



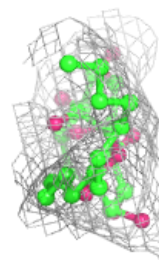
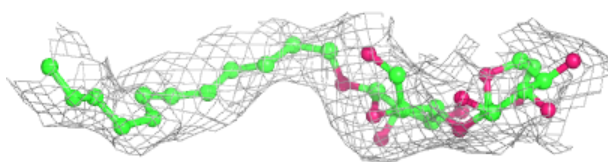
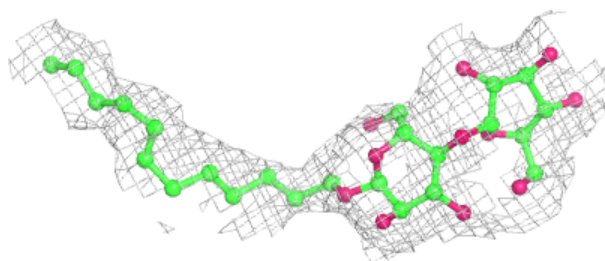
Electron density around CLA A 813:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



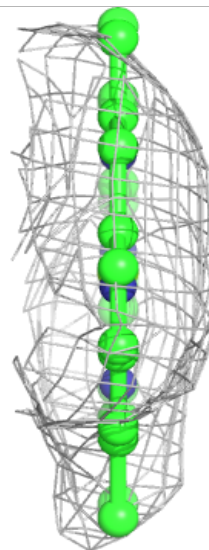
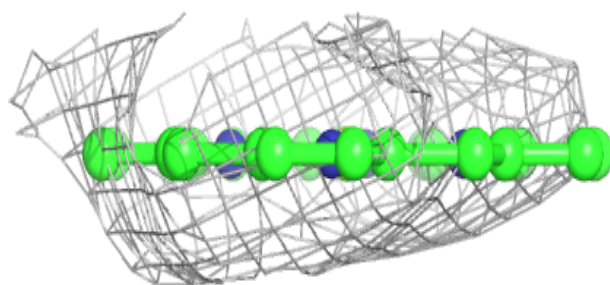
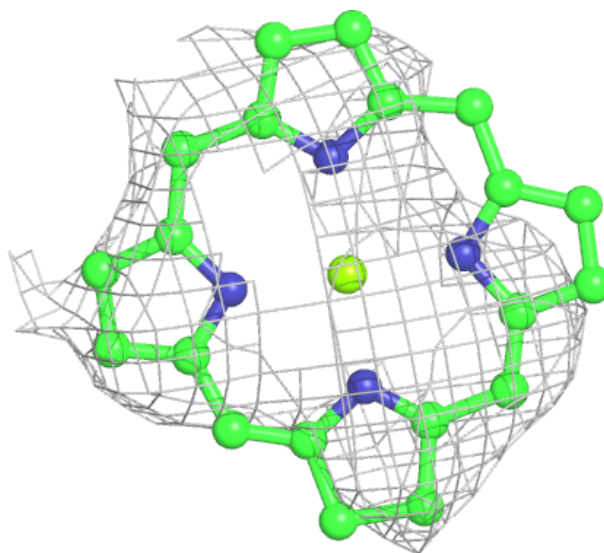
Electron density around LMU 1 216:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



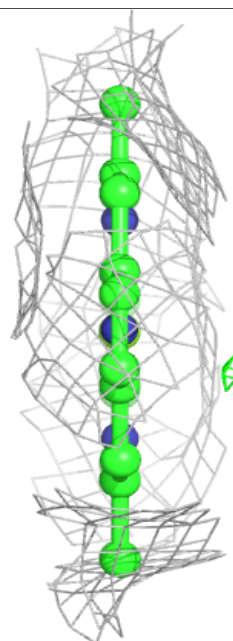
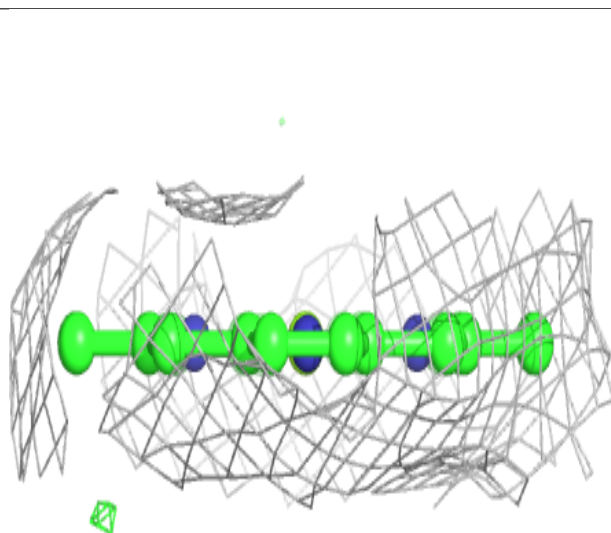
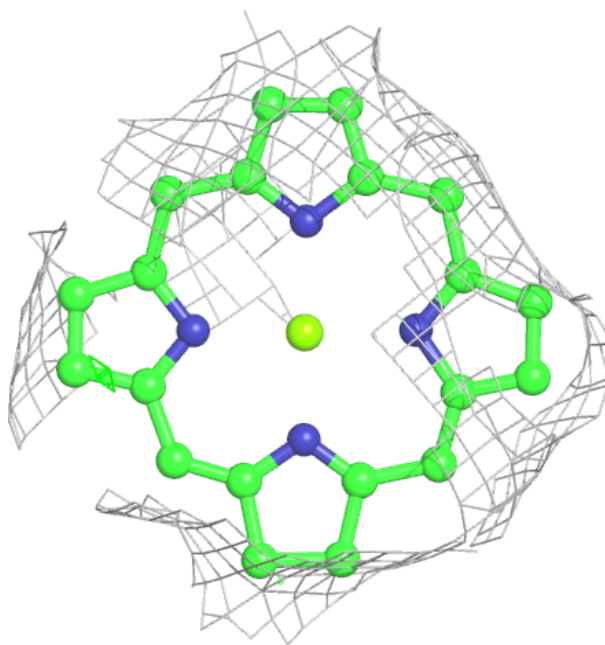
Electron density around CLA 4 309:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



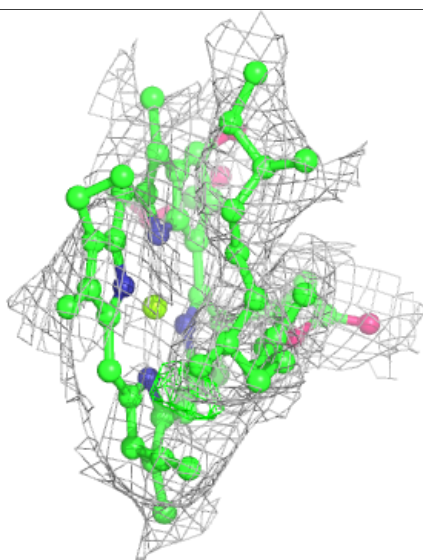
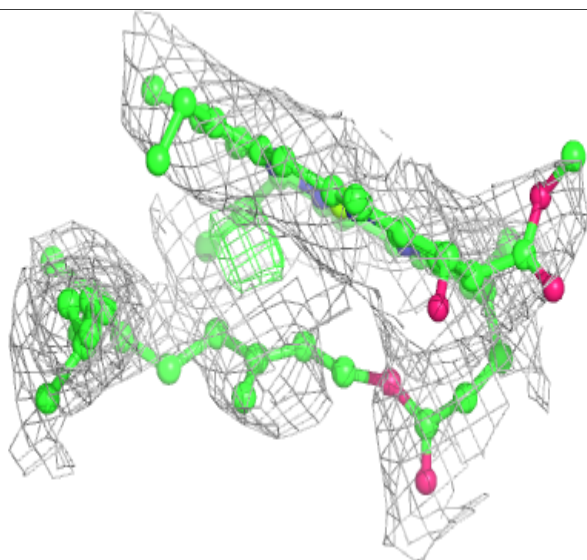
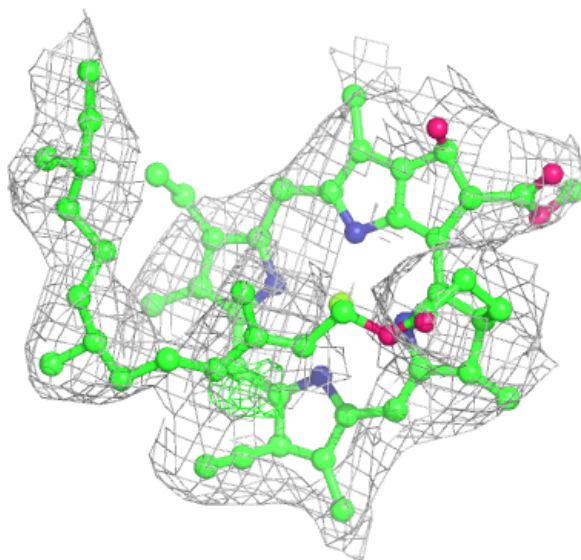
Electron density around CLA 3 308:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



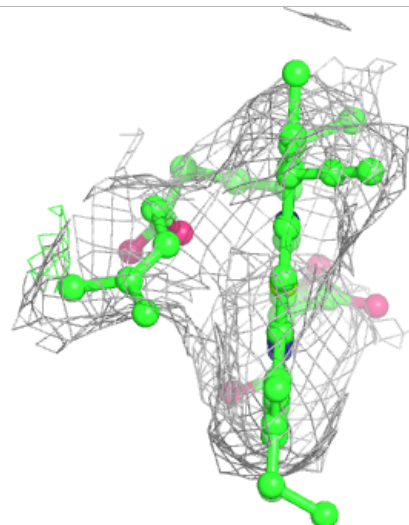
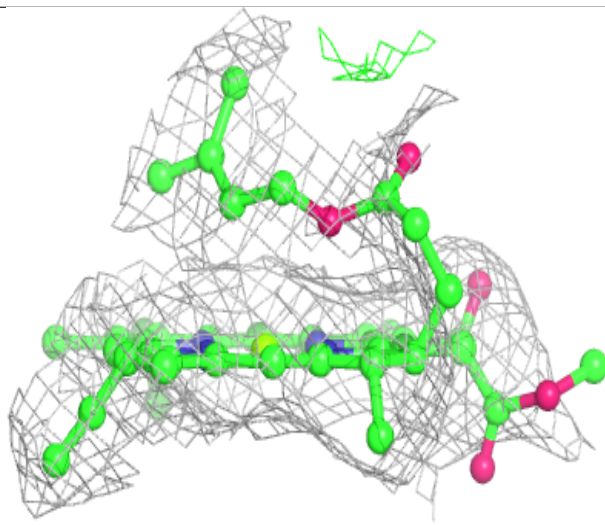
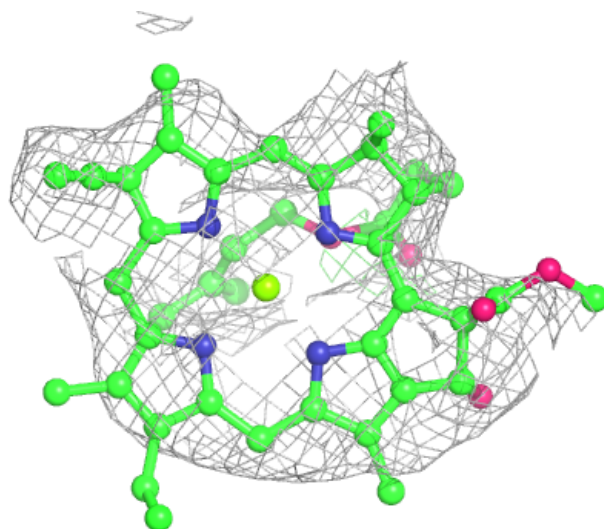
Electron density around CLA B 820:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



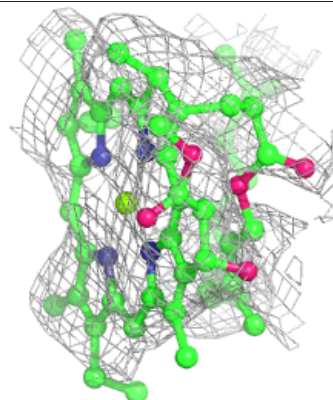
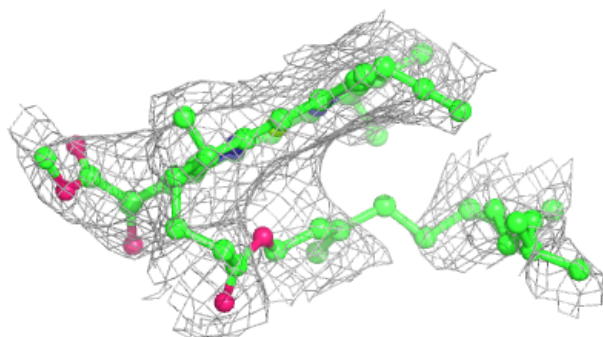
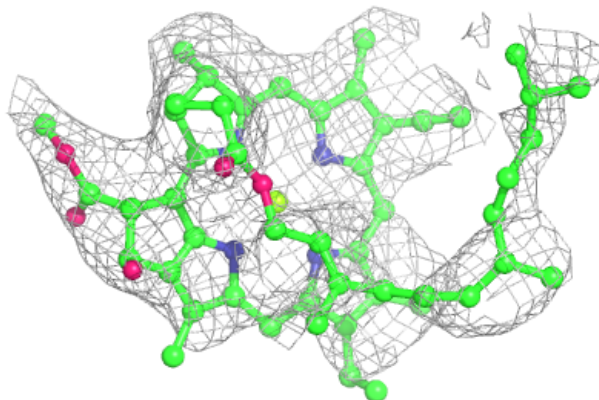
Electron density around CLA B 821:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



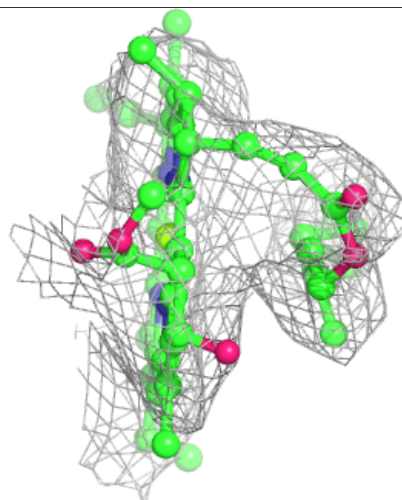
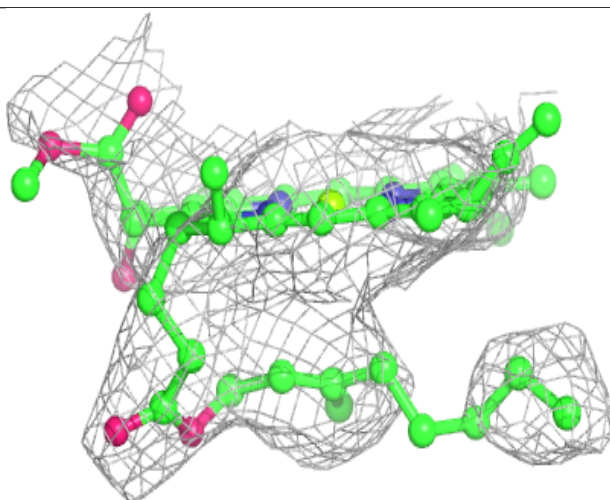
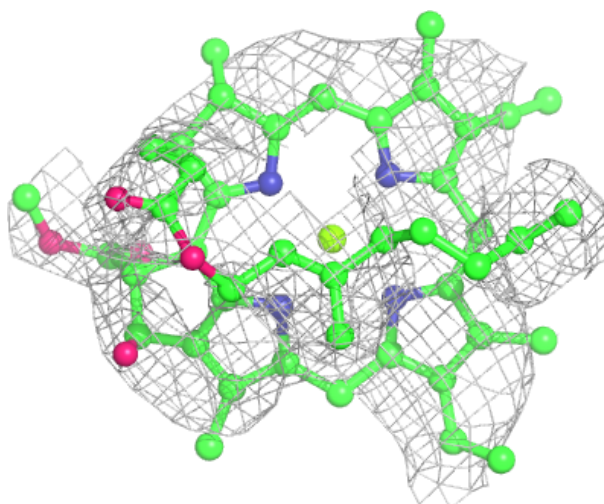
Electron density around CLA I 102:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



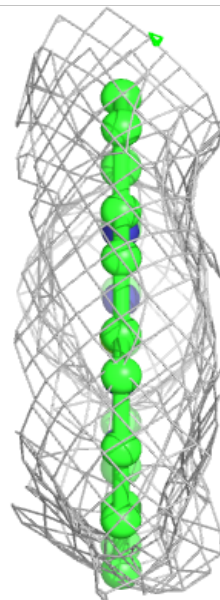
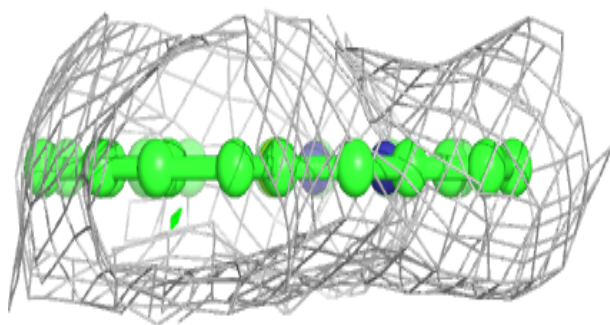
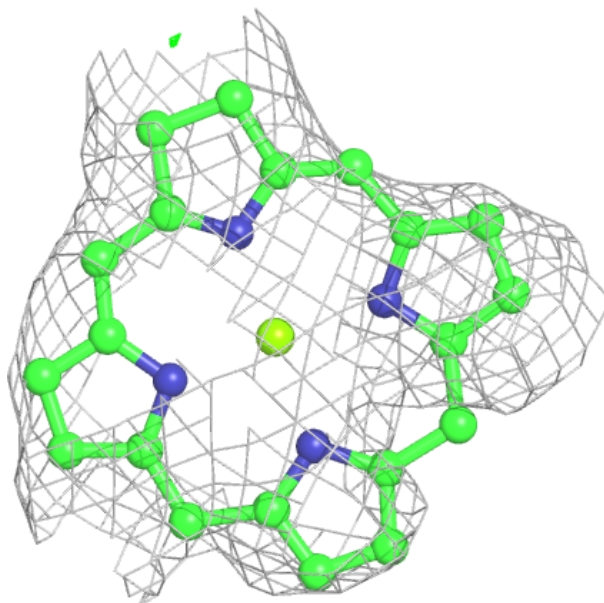
Electron density around CLA A 816:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



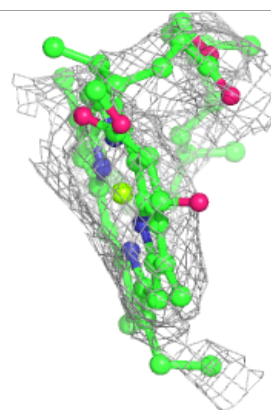
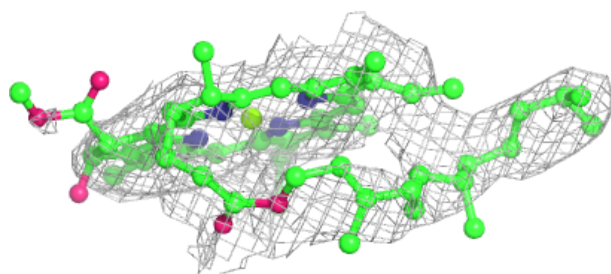
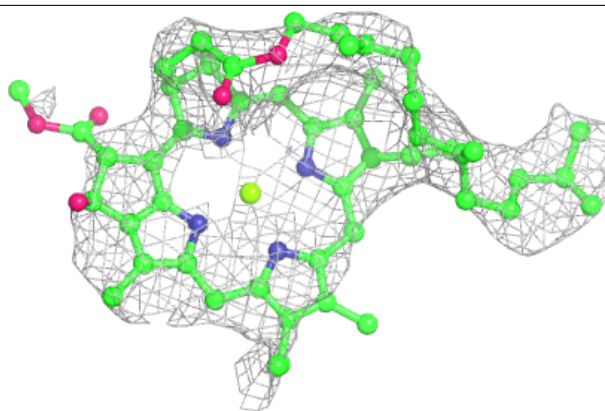
Electron density around CLA 2 316:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

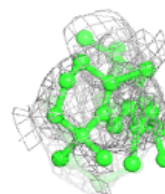
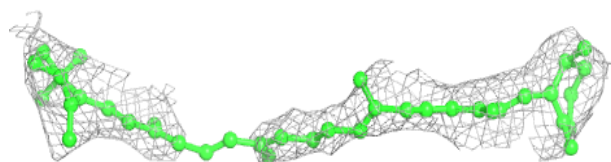
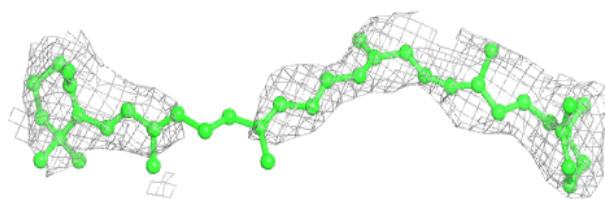


Electron density around CLA A 818:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

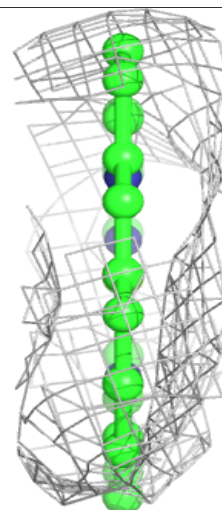
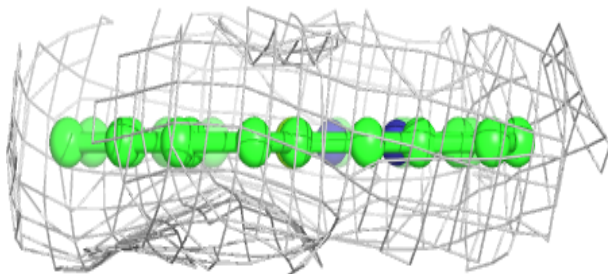
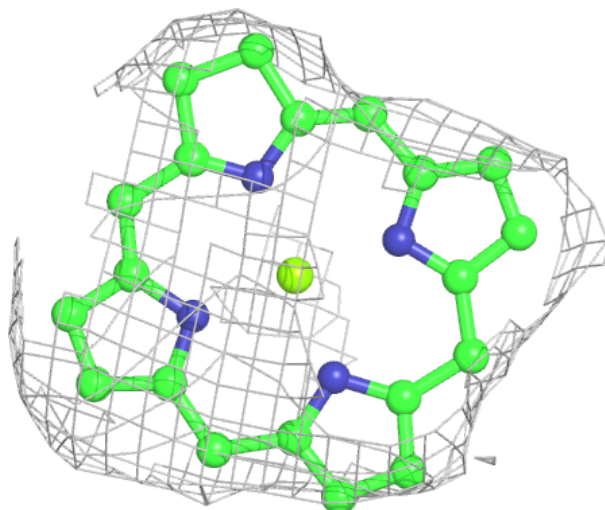
**Electron density around BCR I 101:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



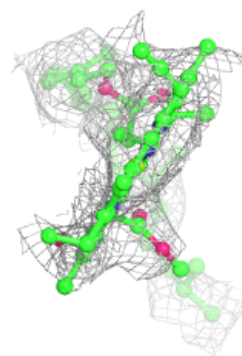
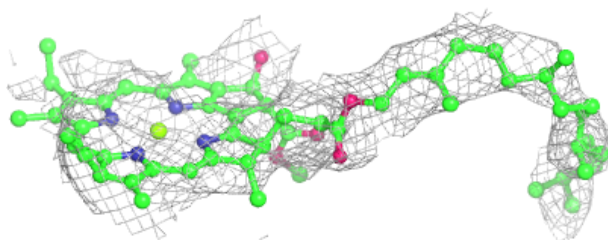
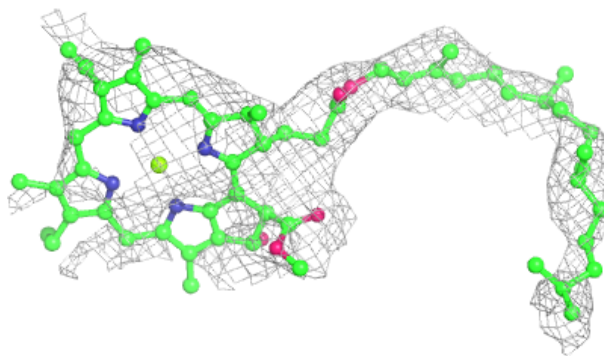
Electron density around CLA 3 304:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



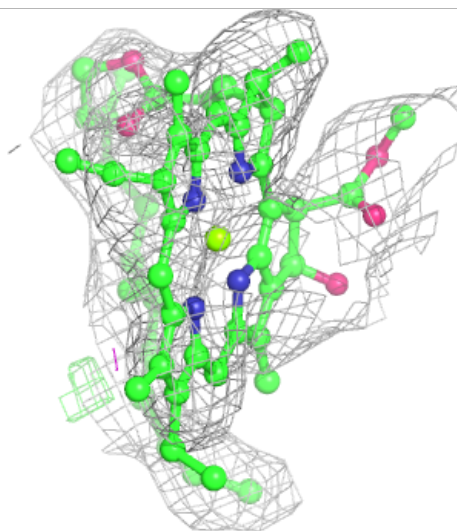
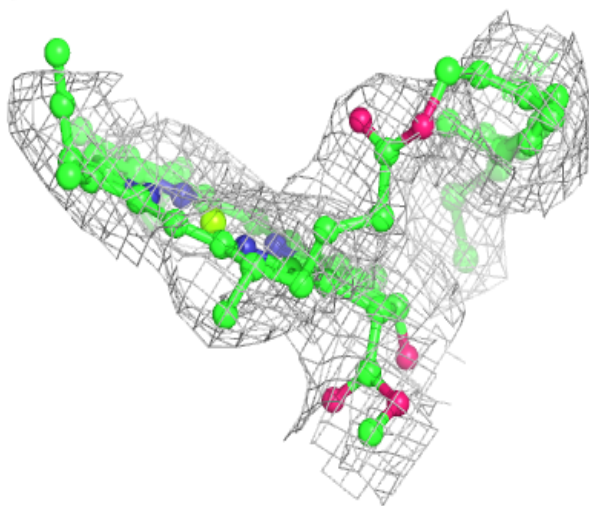
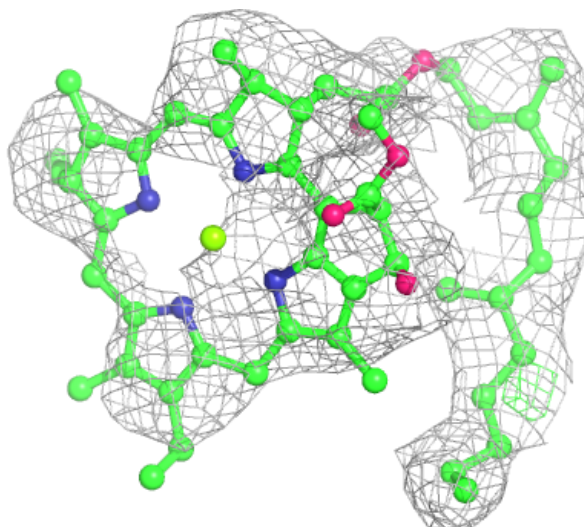
Electron density around CLA B 827:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



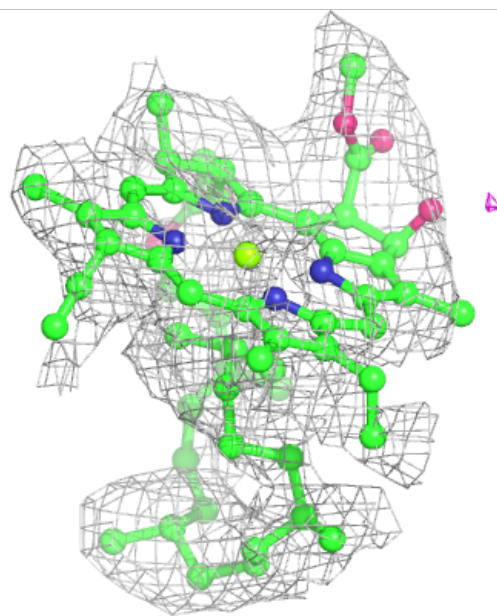
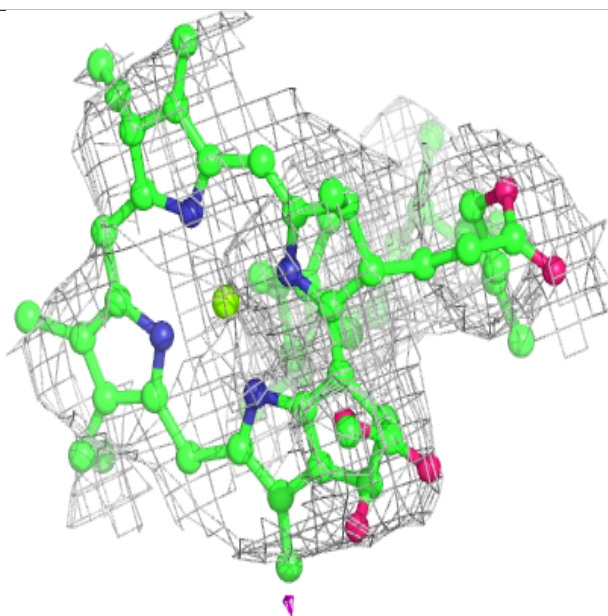
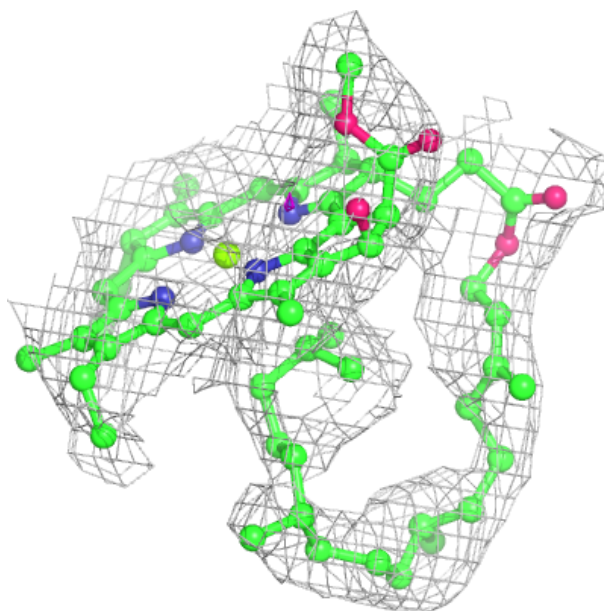
Electron density around CLA B 832:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



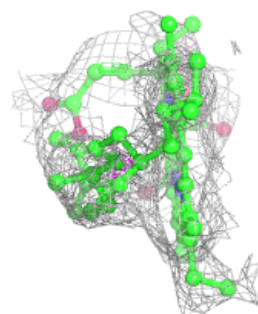
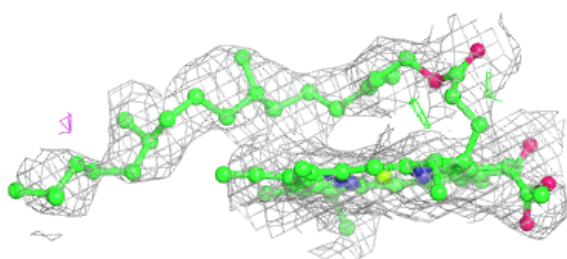
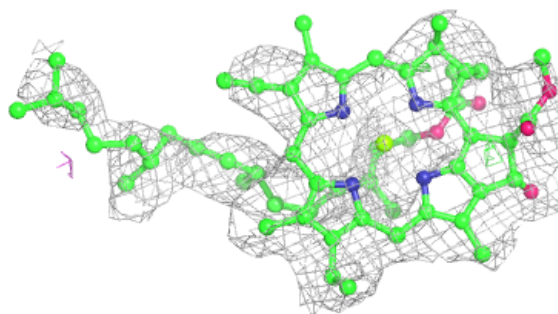
Electron density around CLA 2 317:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



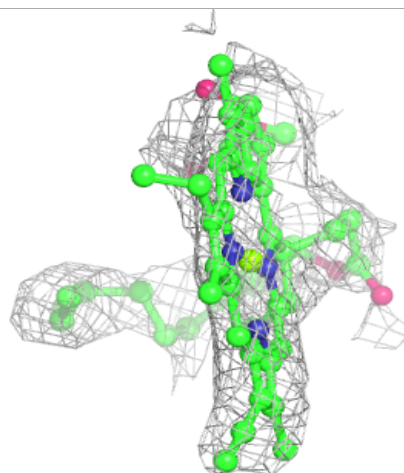
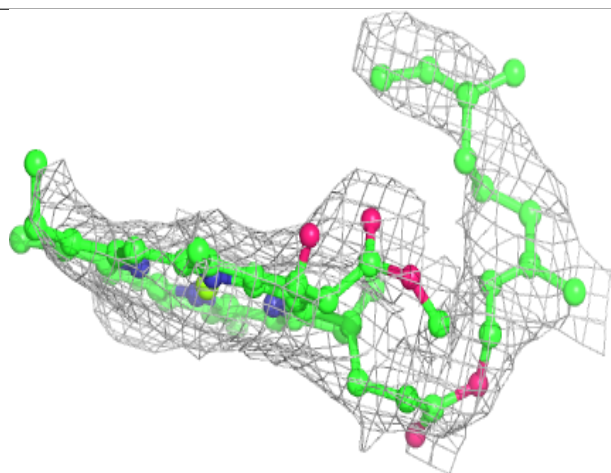
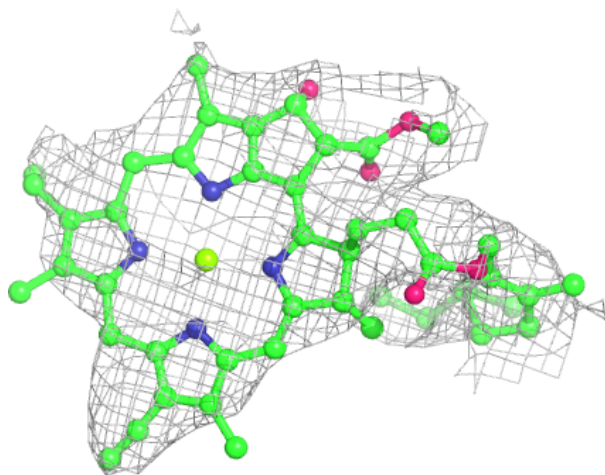
Electron density around CLA B 806:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



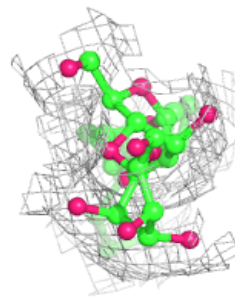
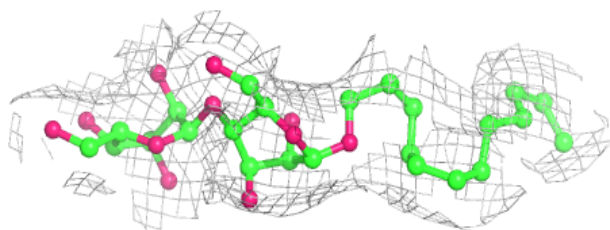
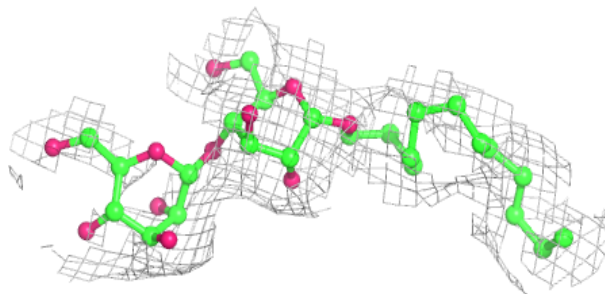
Electron density around CLA A 806:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



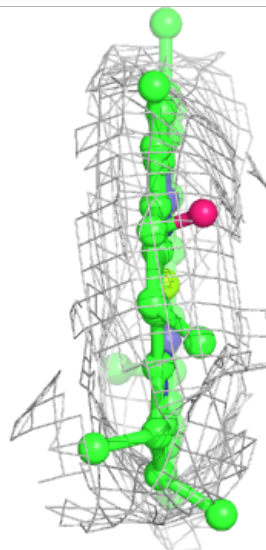
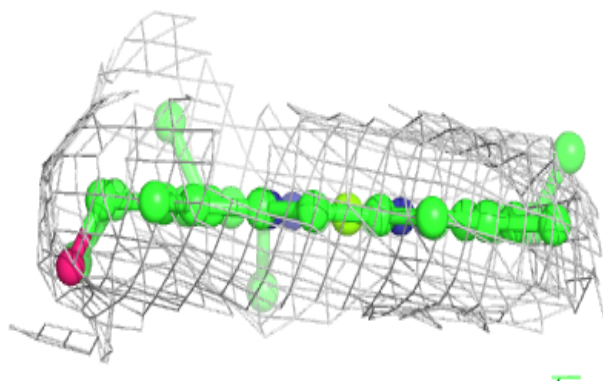
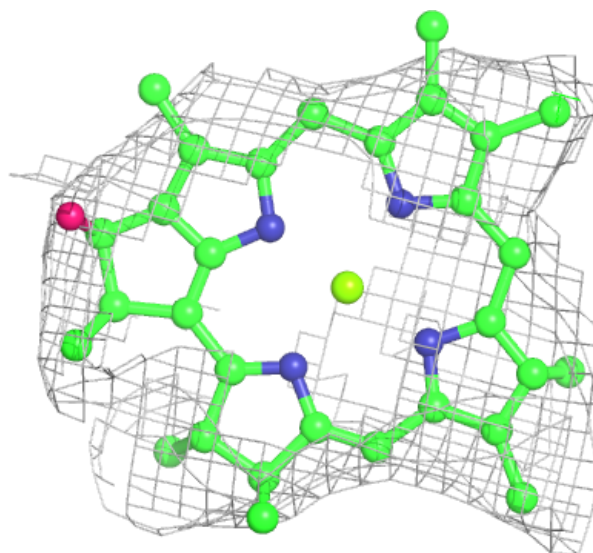
Electron density around LMU 3 320:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



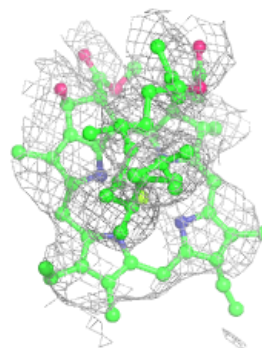
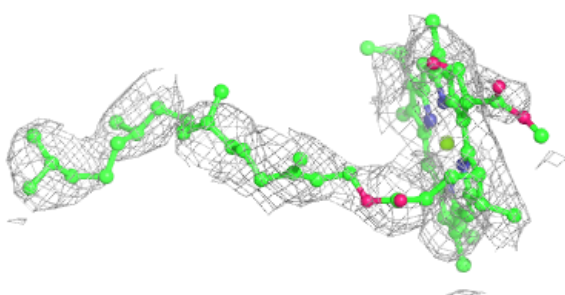
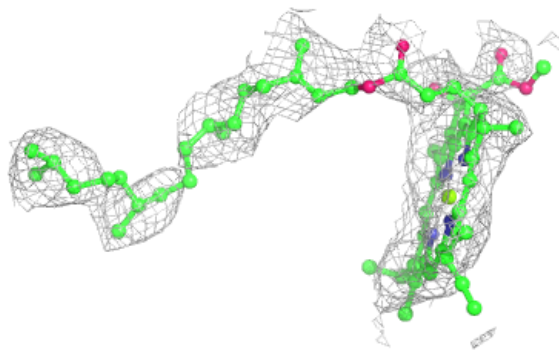
Electron density around CLA 4 313:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

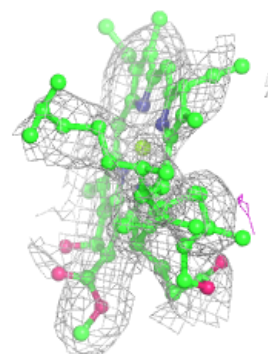
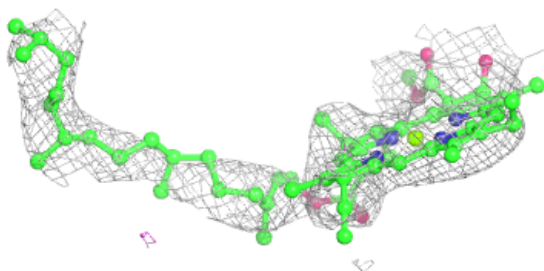
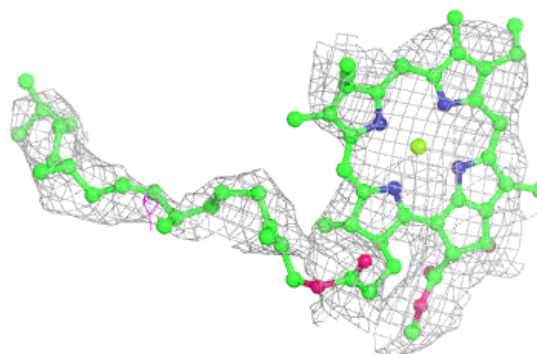


Electron density around CLA A 828:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

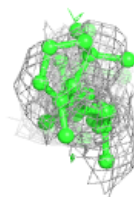
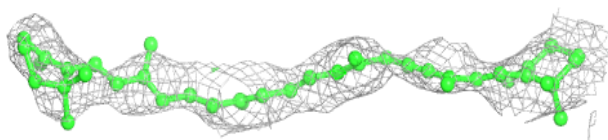
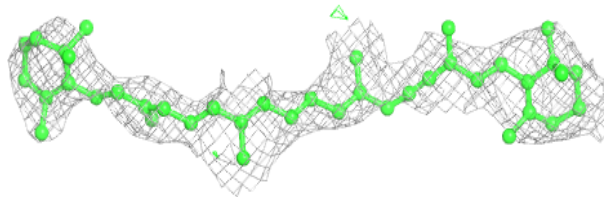
**Electron density around CLA A 851:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



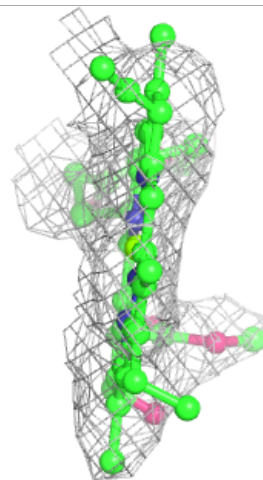
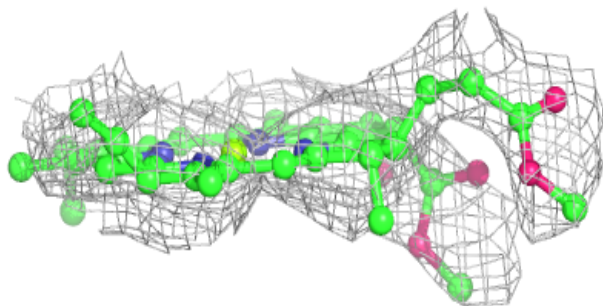
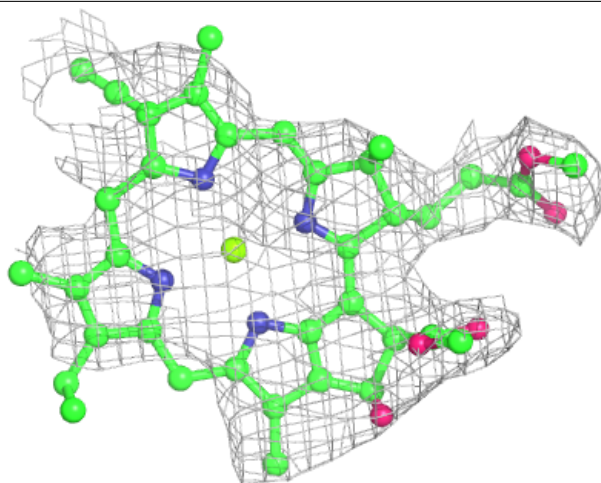
Electron density around BCR B 846:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



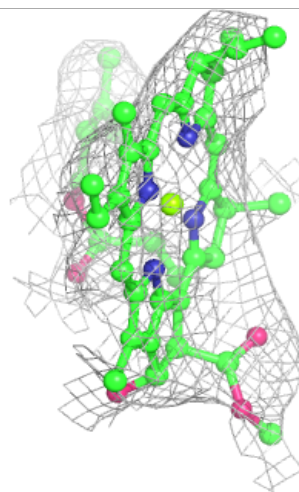
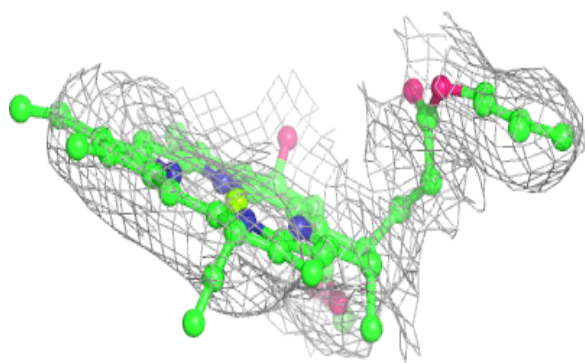
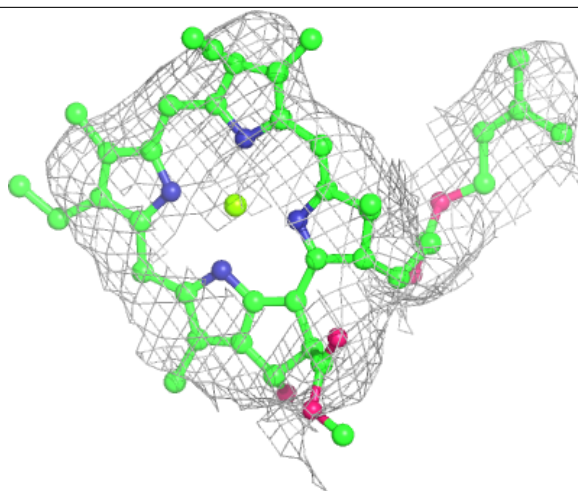
Electron density around CLA A 803:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



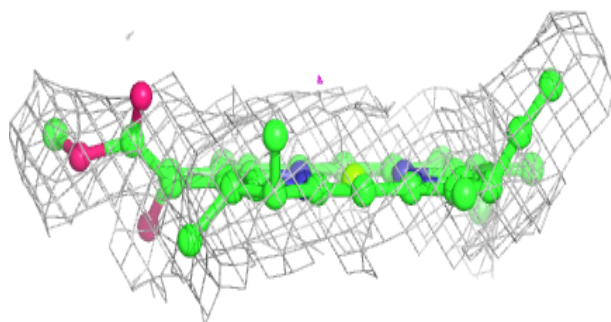
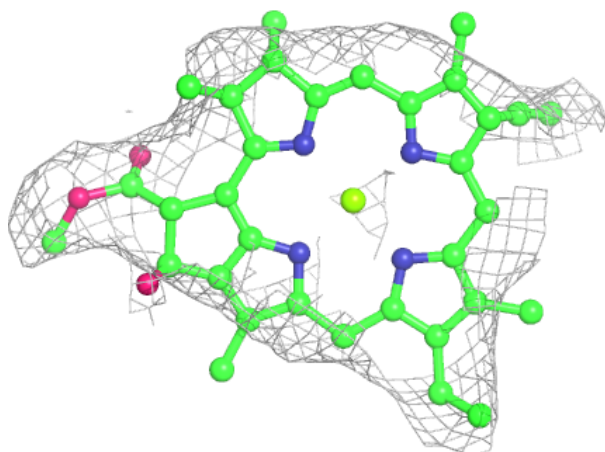
Electron density around CLA A 832:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



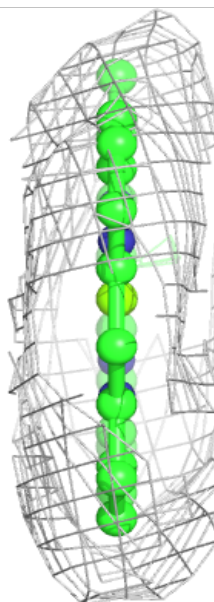
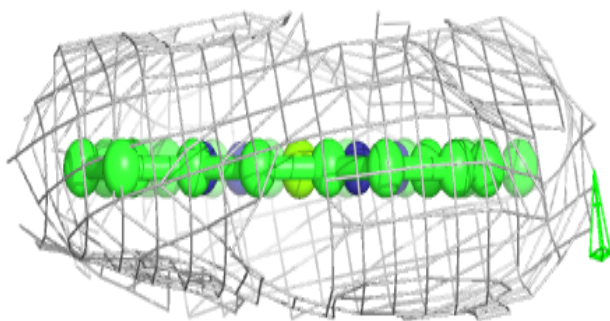
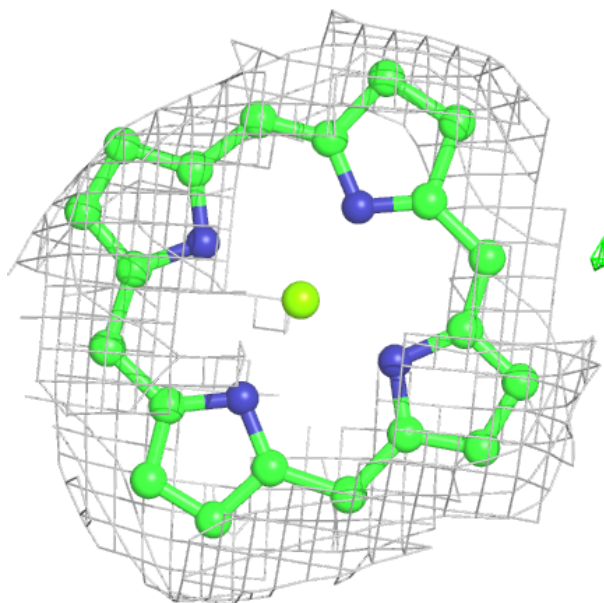
Electron density around CLA 1 202:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



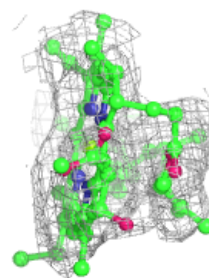
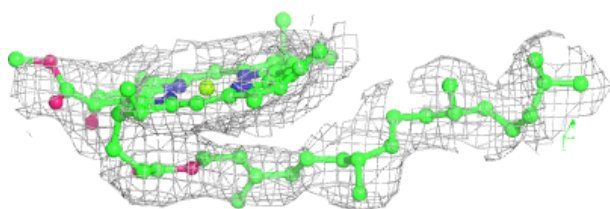
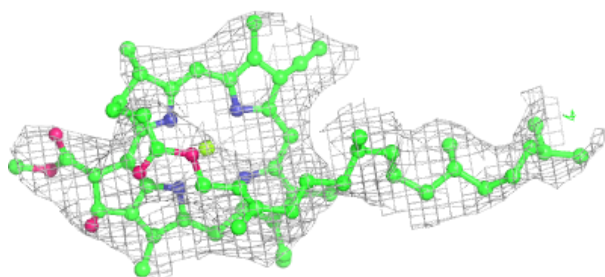
Electron density around CLA 4 312:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

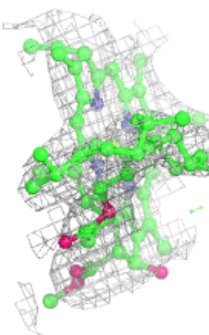
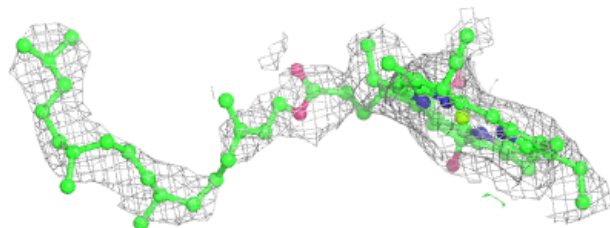
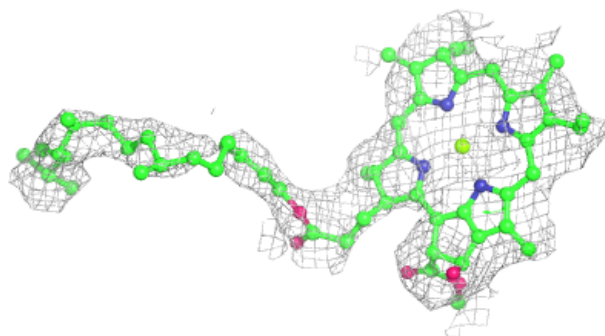


Electron density around CLA A 835:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

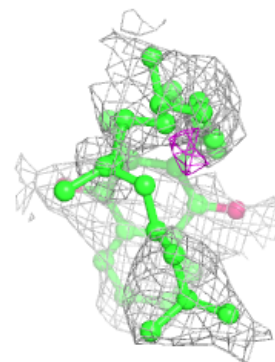
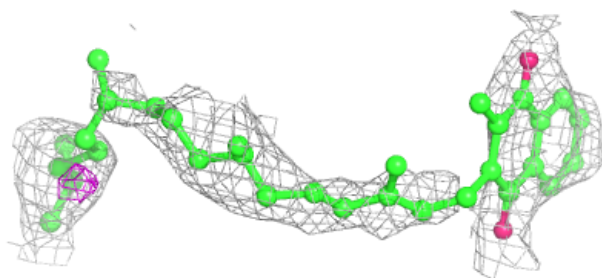
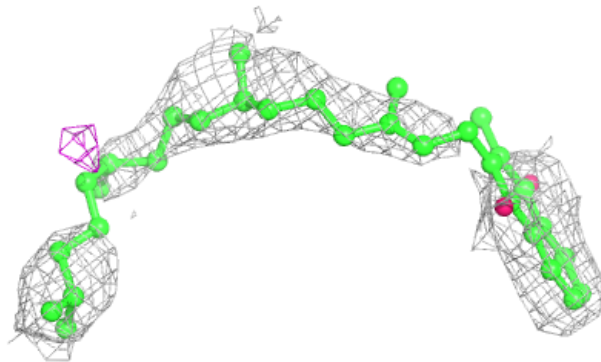
**Electron density around CLA B 814:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

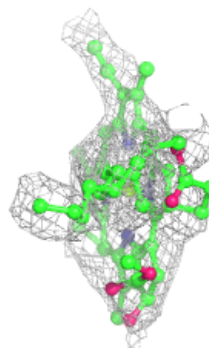
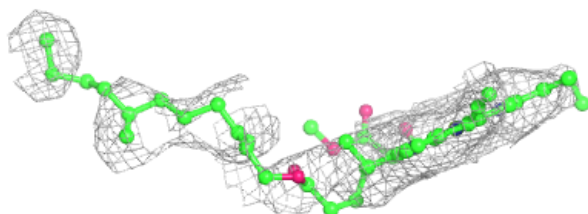
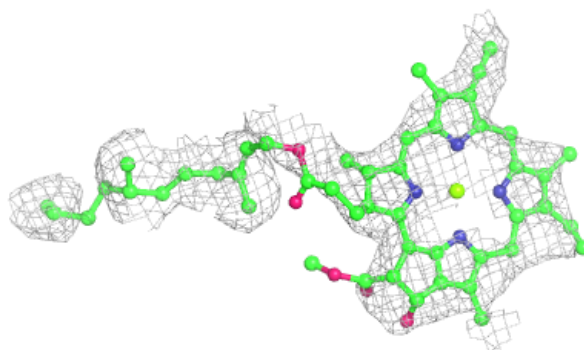


Electron density around PQN B 843:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

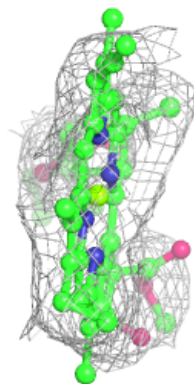
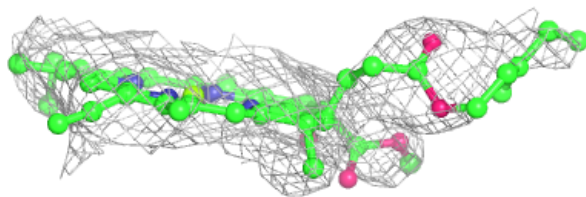
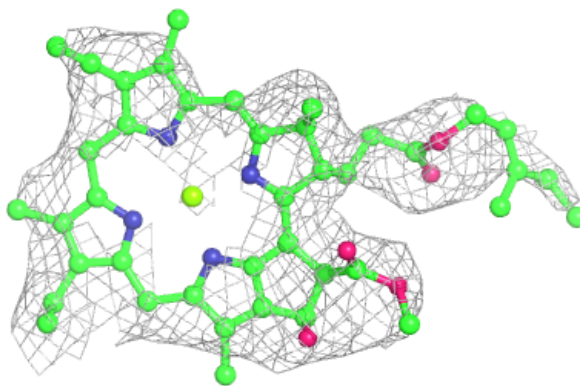
**Electron density around CLA H 111:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

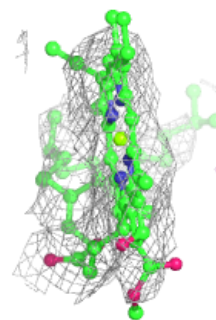
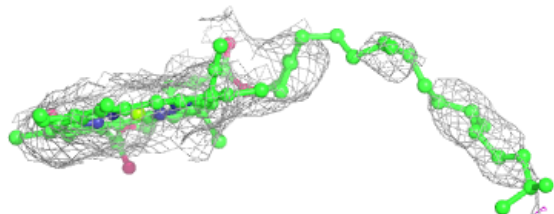
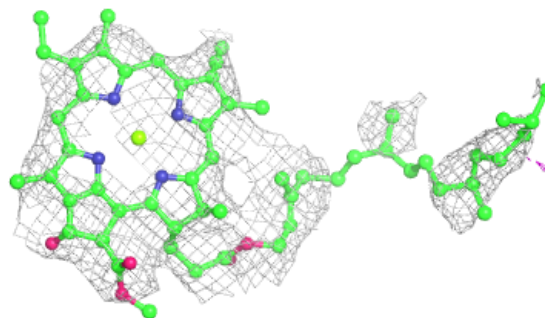


Electron density around CLA A 837:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

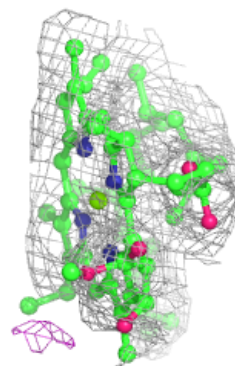
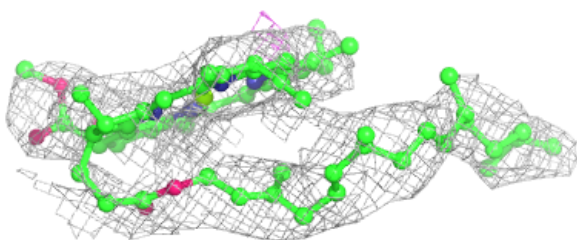
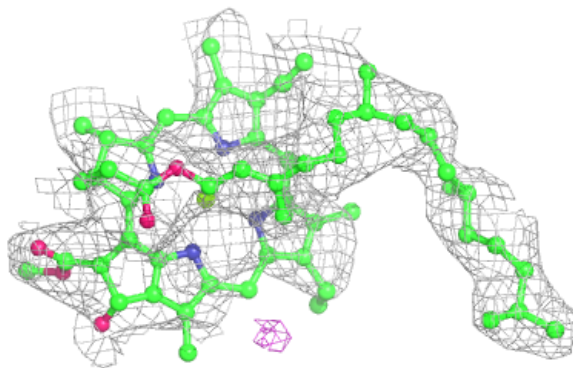
**Electron density around CLA B 803:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

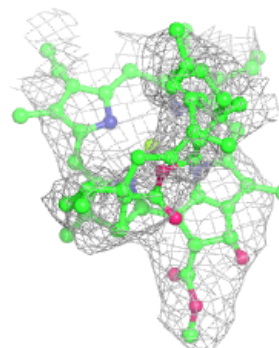
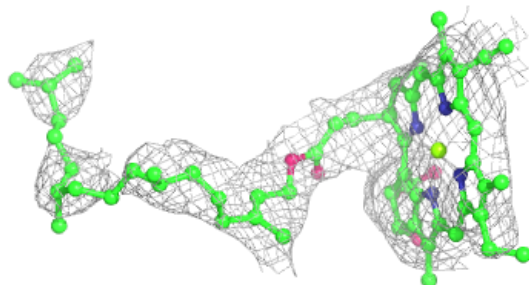
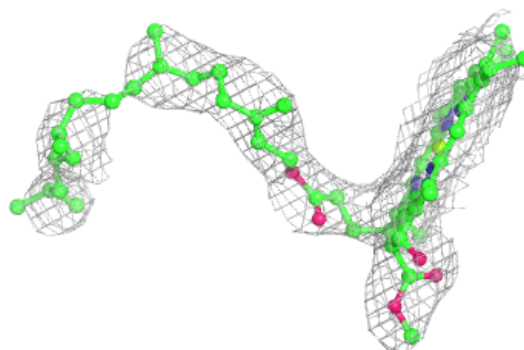


Electron density around CLA B 838:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

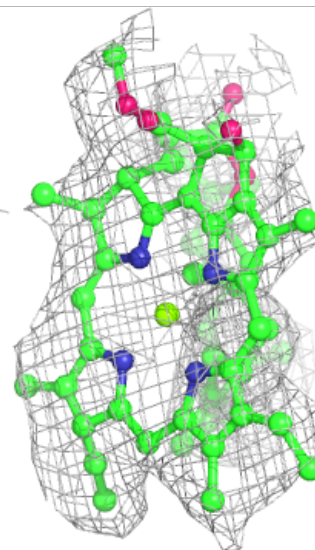
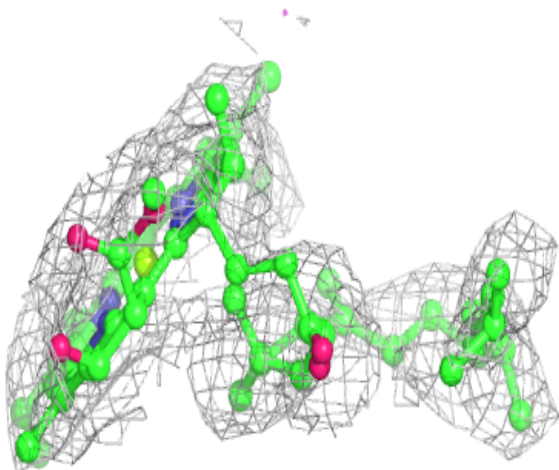
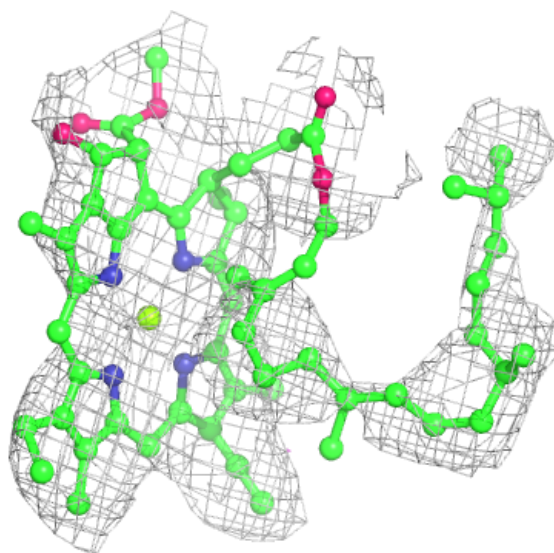
**Electron density around CLA B 840:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



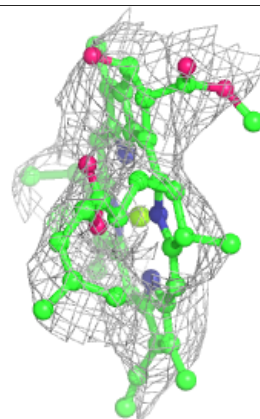
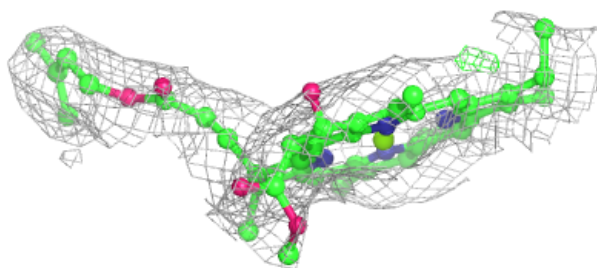
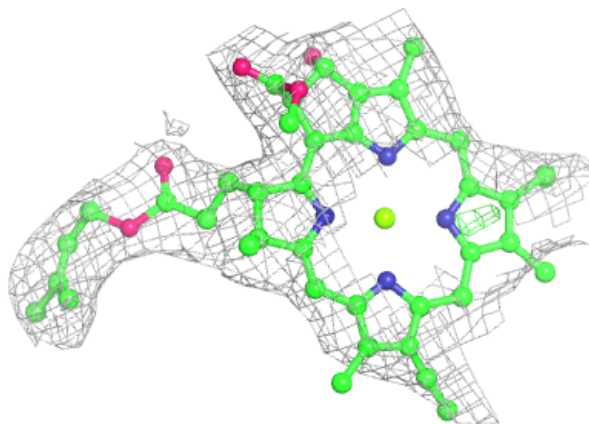
Electron density around CLA B 824:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



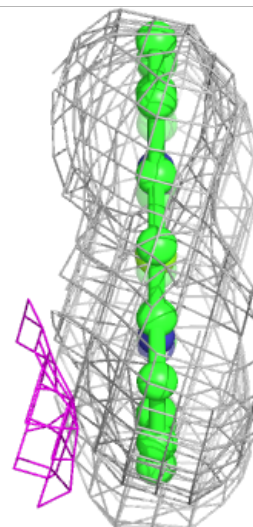
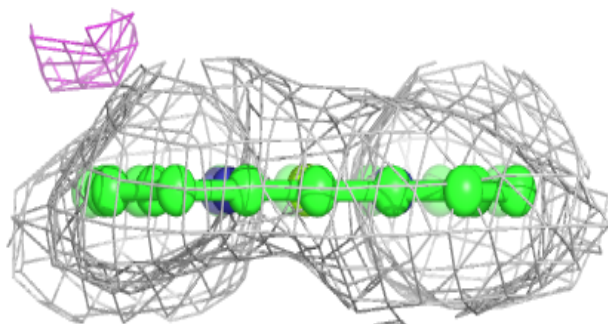
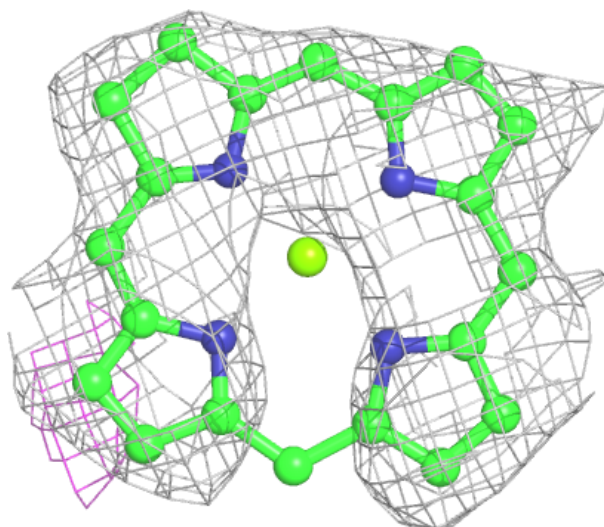
Electron density around CLA B 833:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



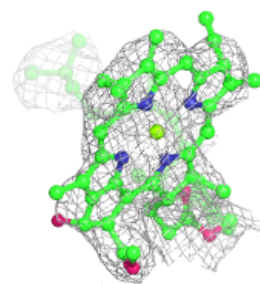
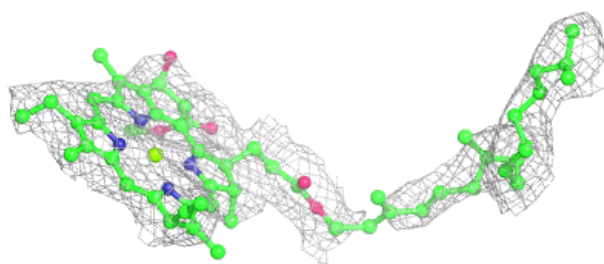
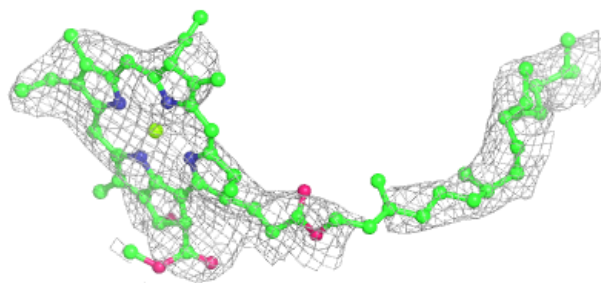
Electron density around CLA B 811:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



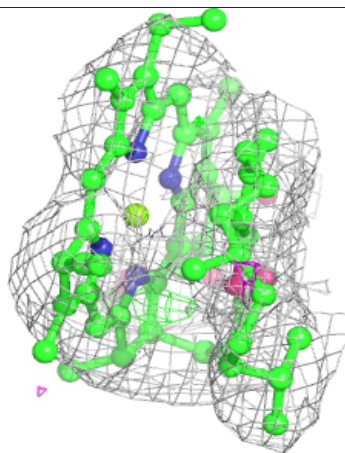
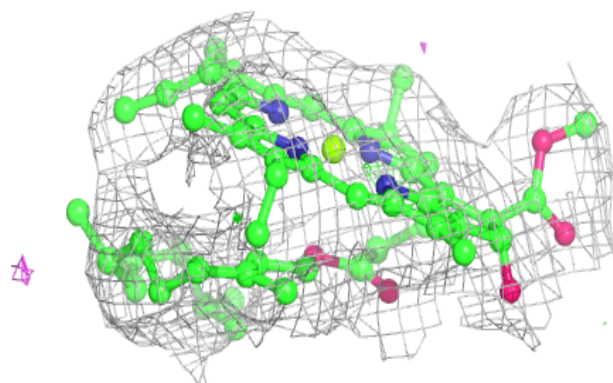
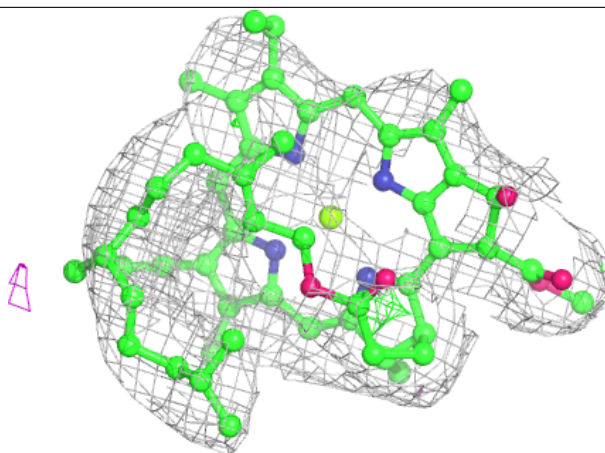
Electron density around CLA A 850:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

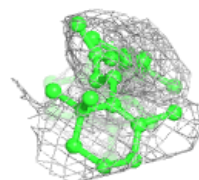
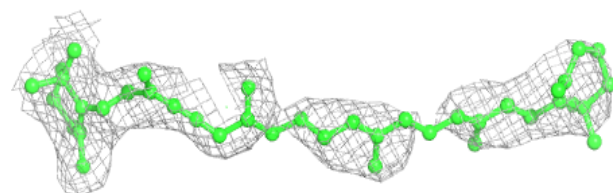
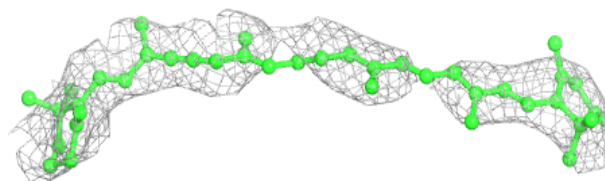


Electron density around CLA B 810:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

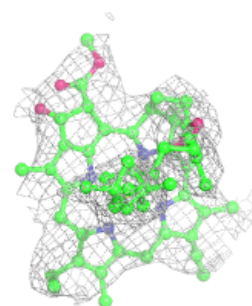
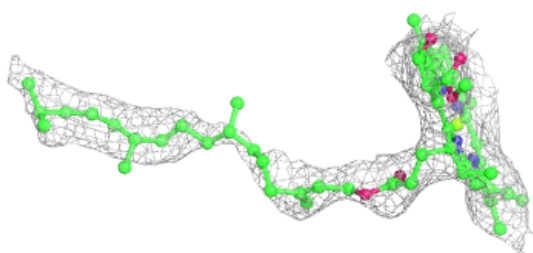
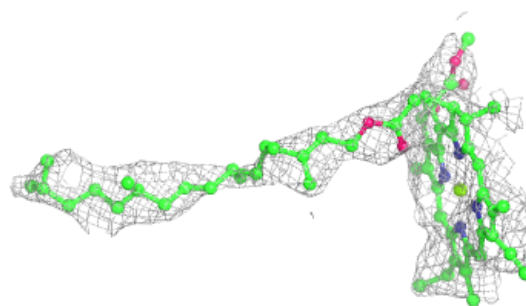
**Electron density around BCR F 203:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

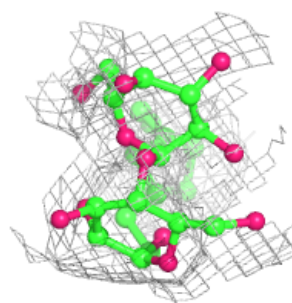
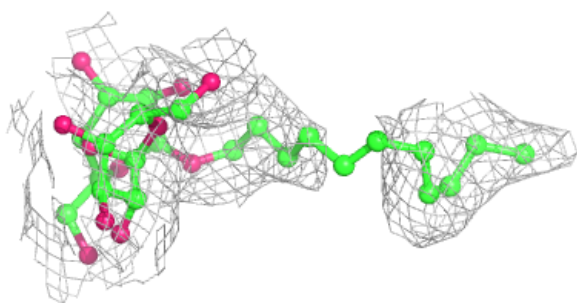
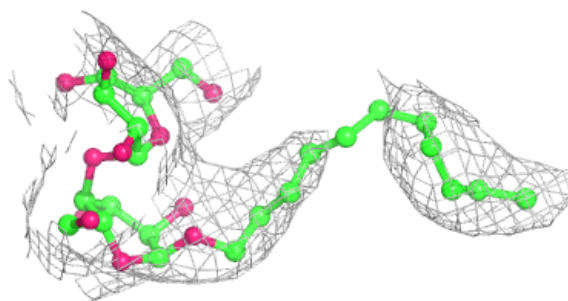


Electron density around CLA B 829:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

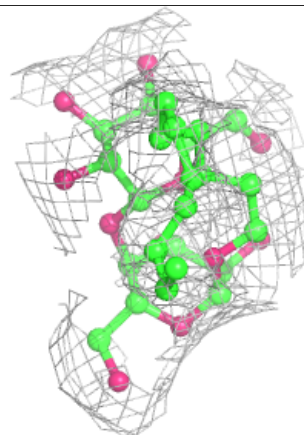
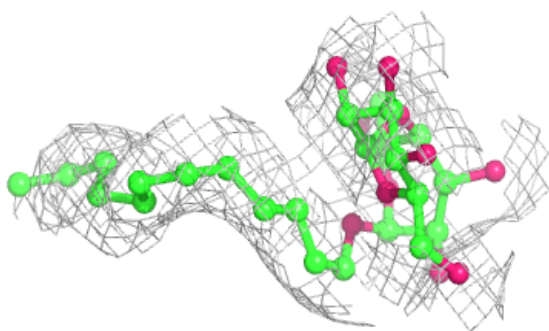
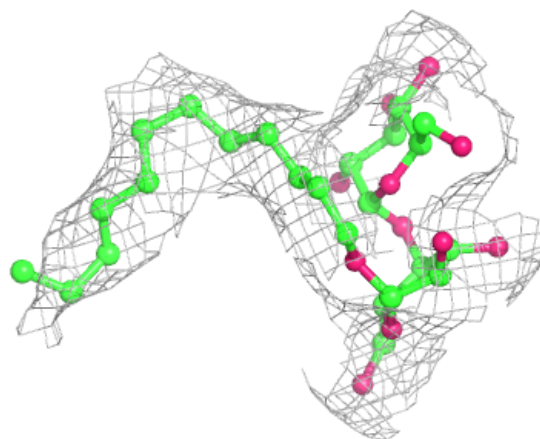
**Electron density around LMU 4 319:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

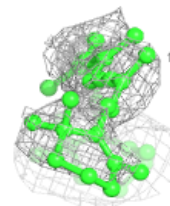
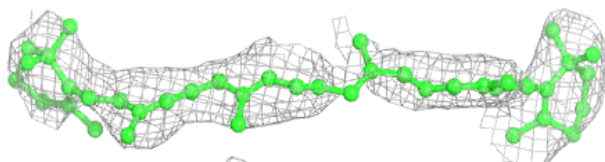
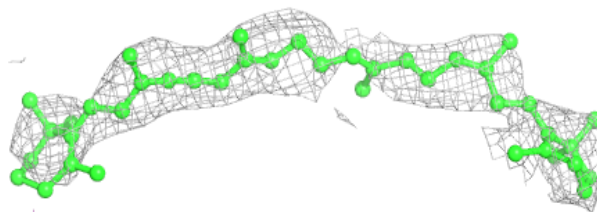


Electron density around LMU H 105:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

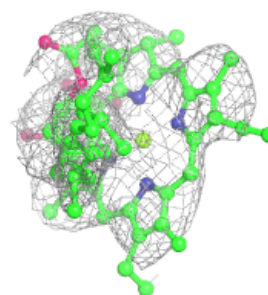
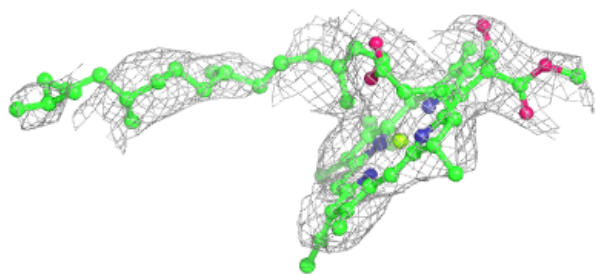
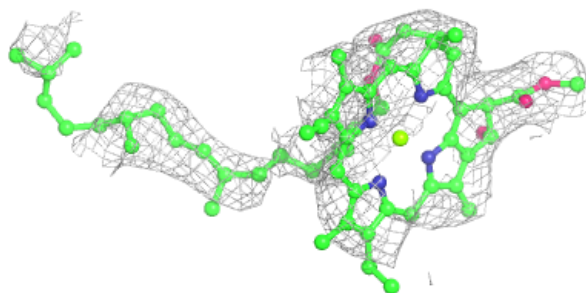
**Electron density around BCR B 801:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

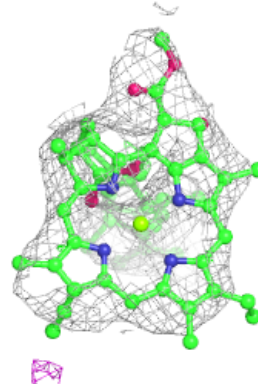
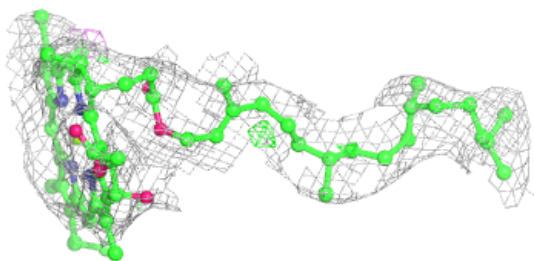
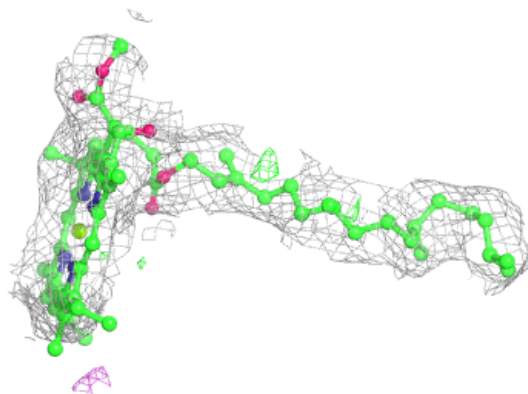


Electron density around CLA A 838:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

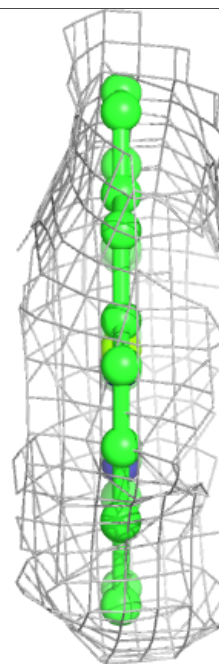
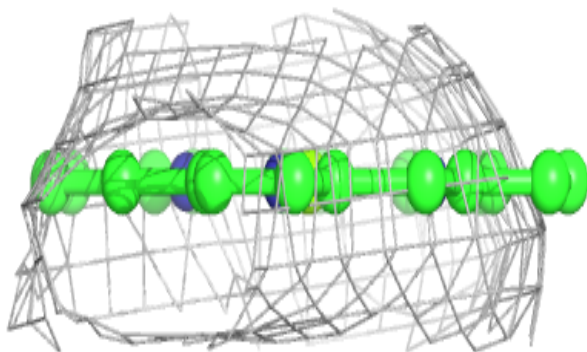
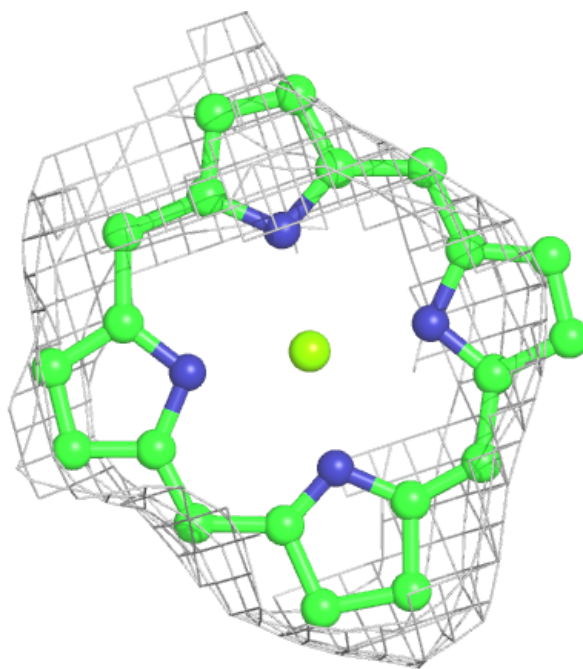
**Electron density around CLA A 826:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



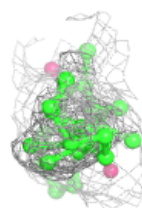
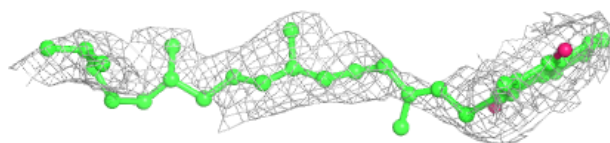
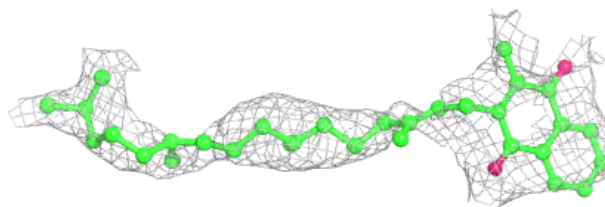
Electron density around CLA 4 311:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



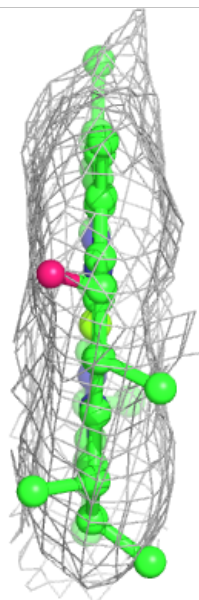
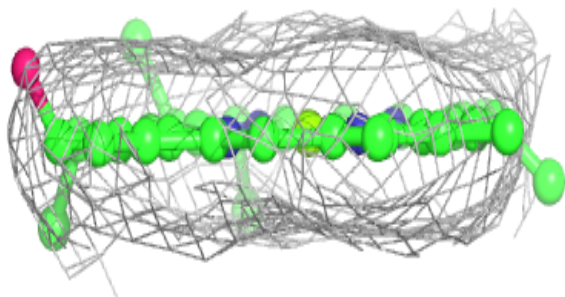
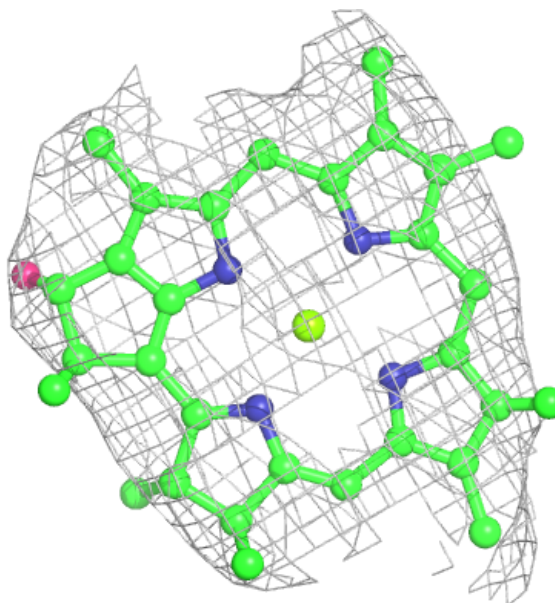
Electron density around PQN A 842:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



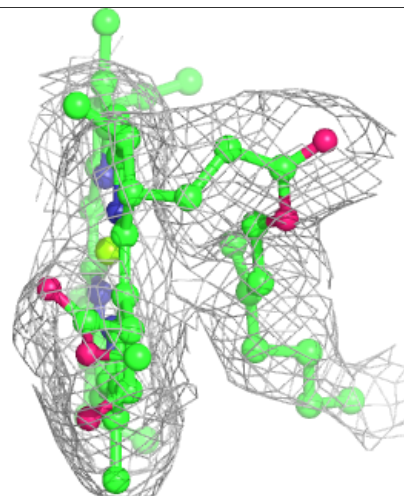
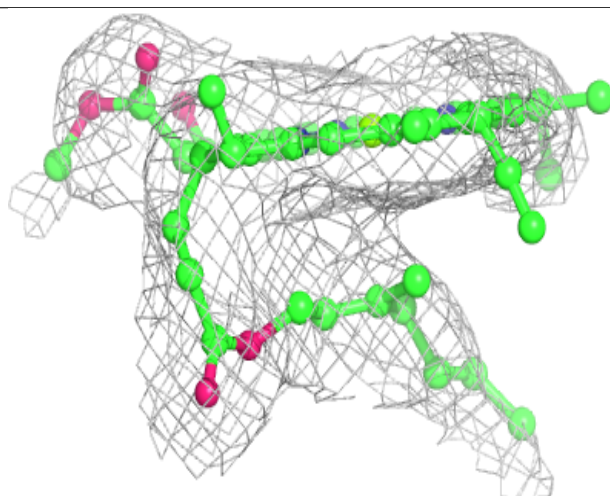
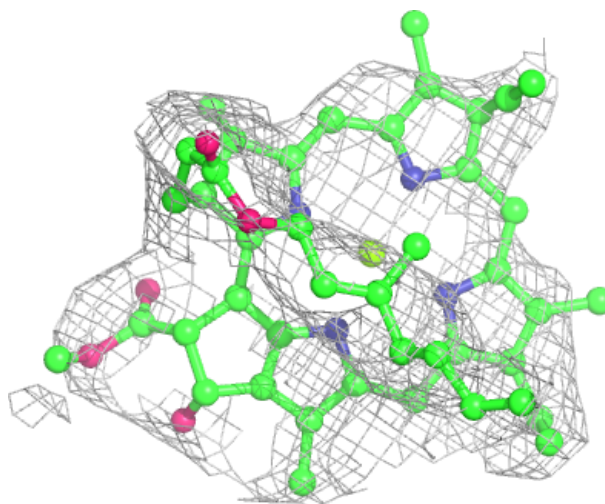
Electron density around CLA F 205:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



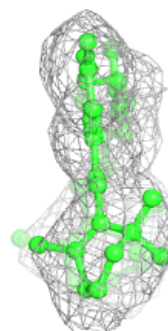
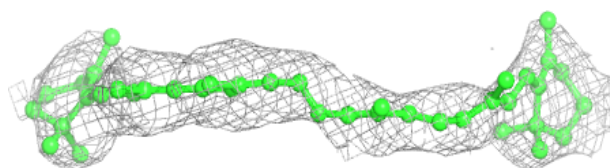
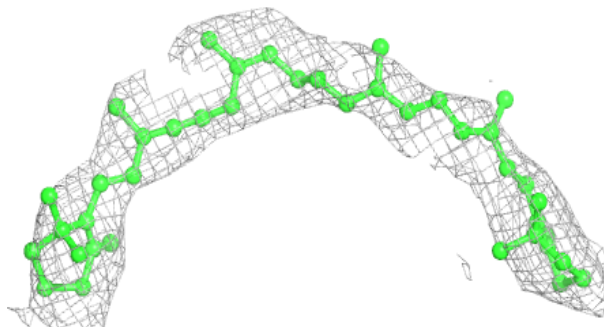
Electron density around CLA B 818:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



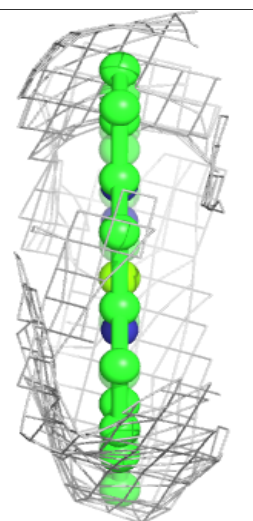
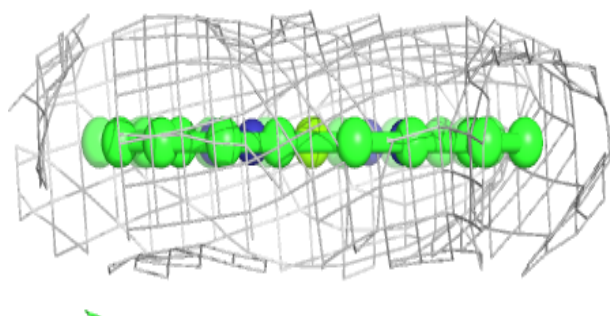
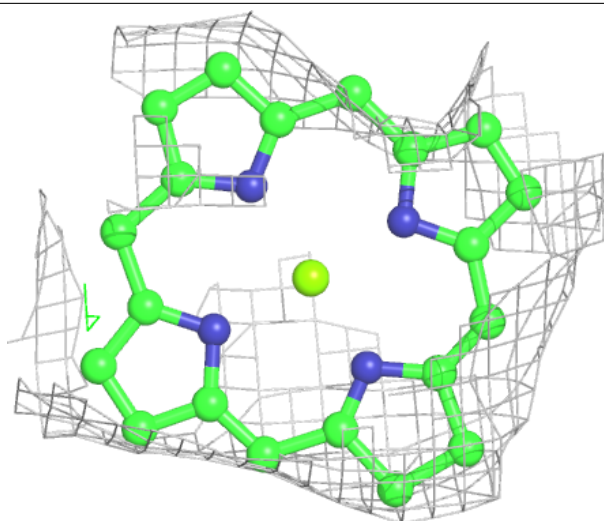
Electron density around BCR F 204:

$2mF_o - DF_c$ (at 0.7 rmsd) in gray
 $mF_o - DF_c$ (at 3 rmsd) in purple (negative)
and green (positive)



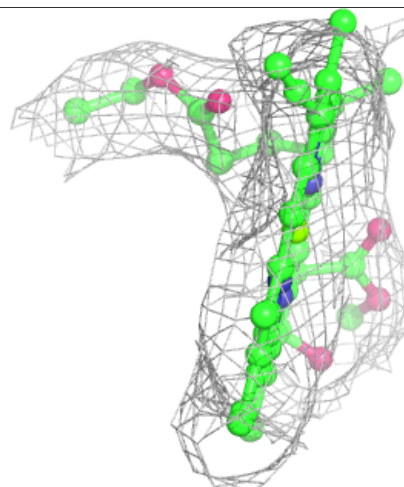
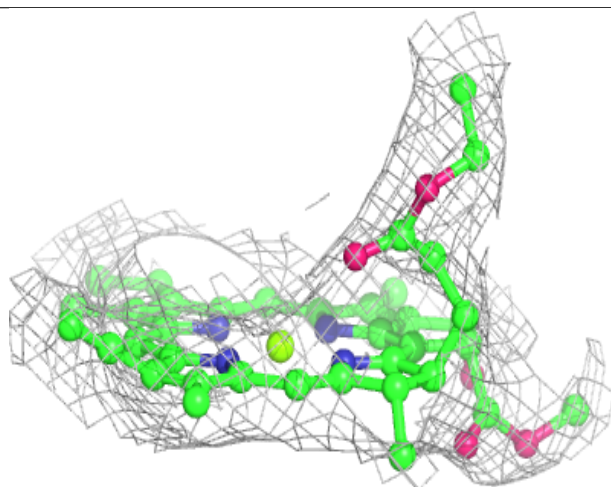
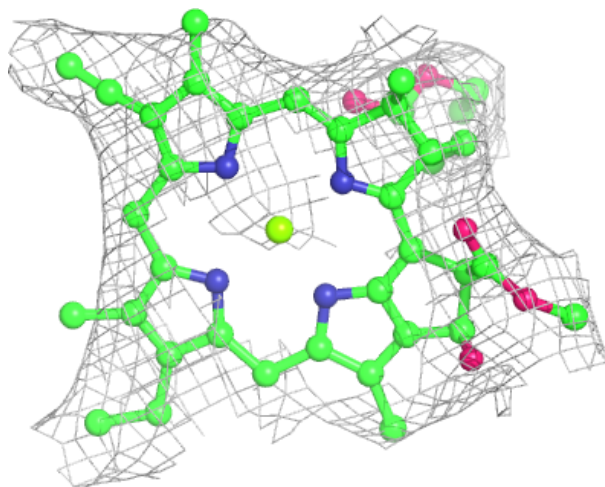
Electron density around CLA 2 308:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



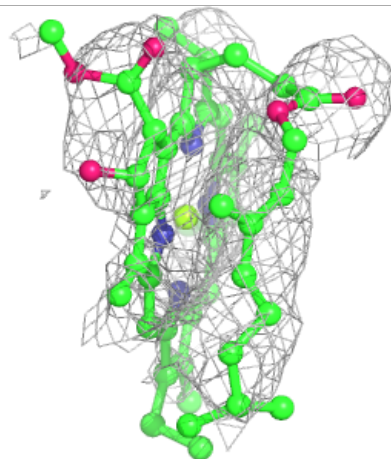
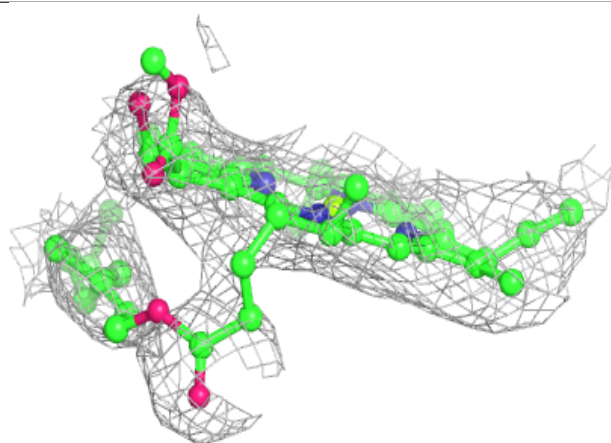
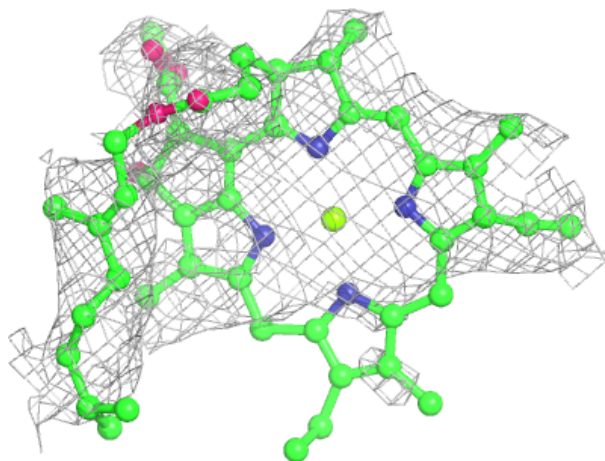
Electron density around CLA B 839:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



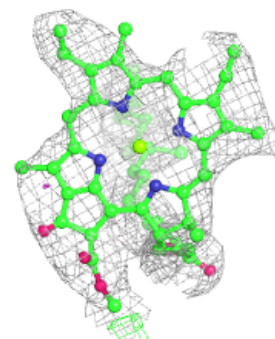
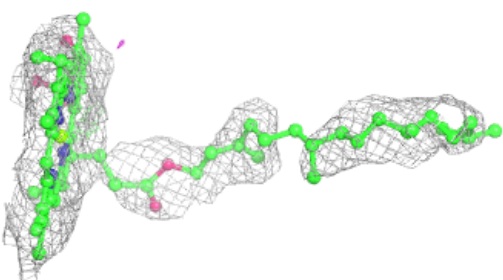
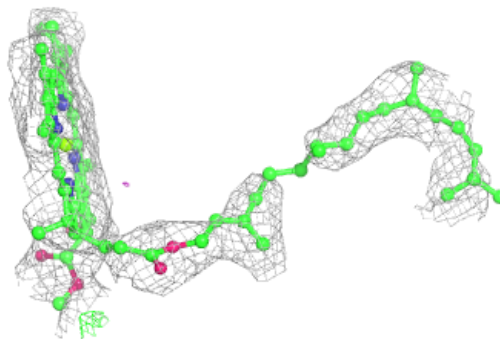
Electron density around CLA A 827:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

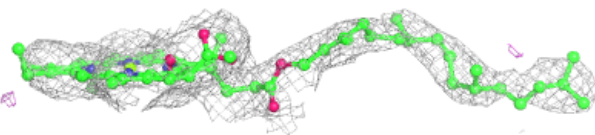
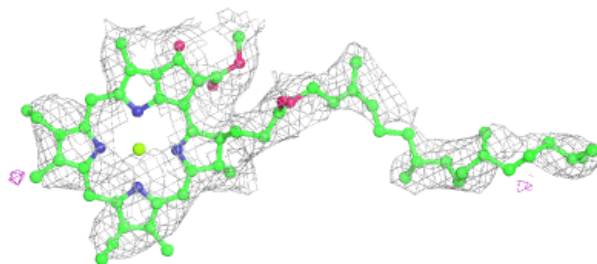


Electron density around CLA B 841:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

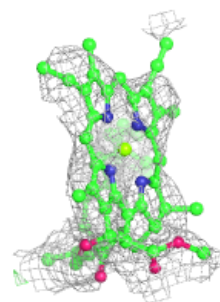
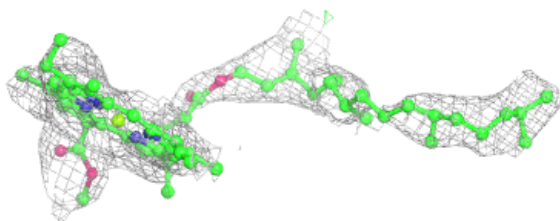
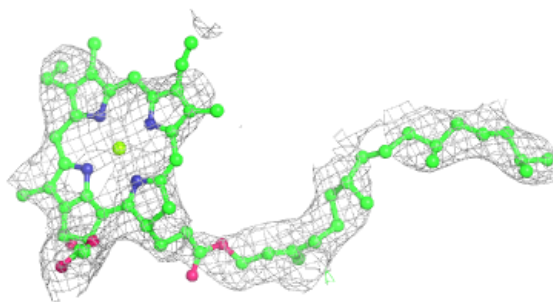
**Electron density around CLA A 830:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



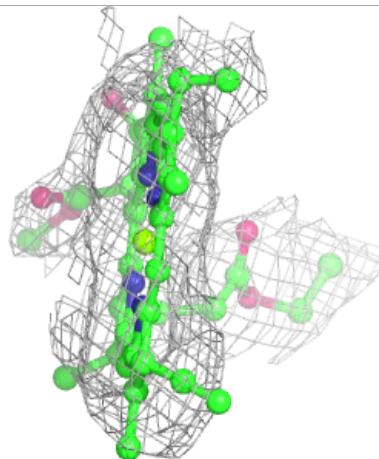
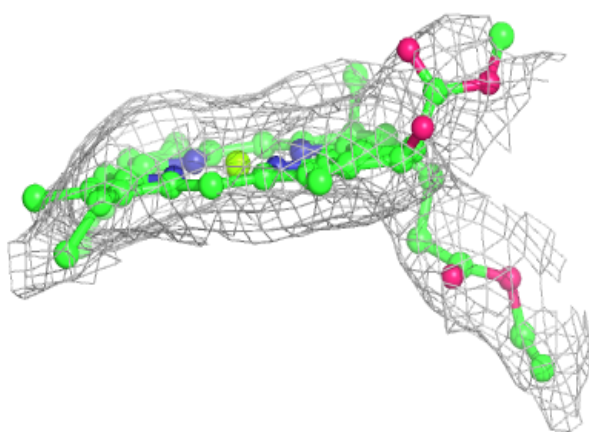
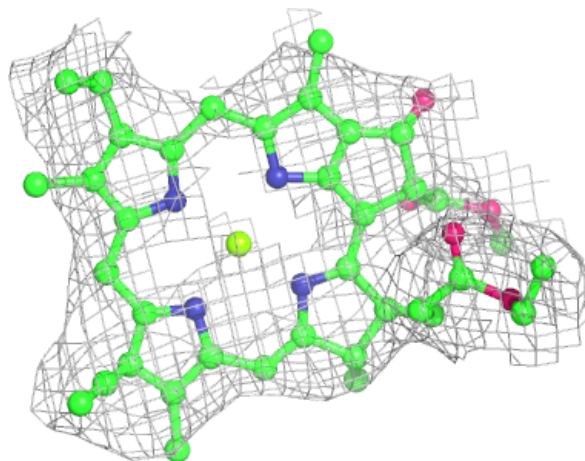
Electron density around CLA A 831:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



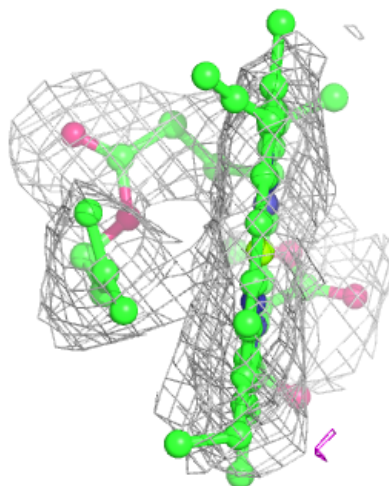
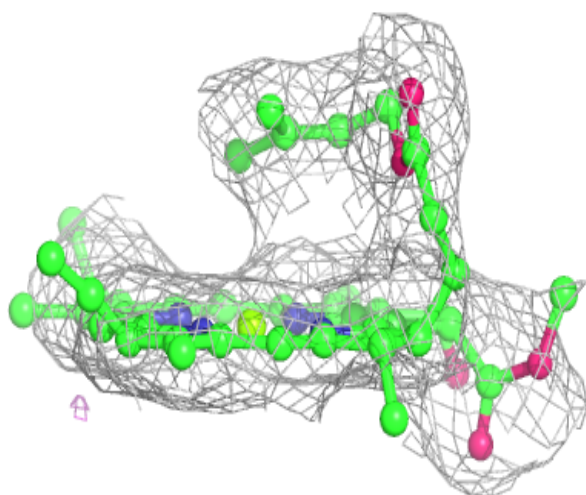
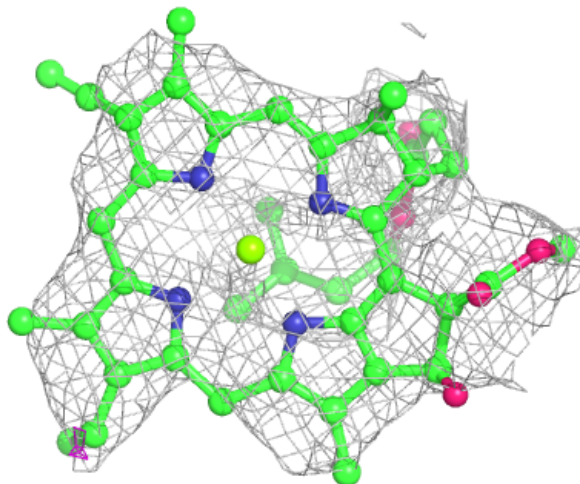
Electron density around CLA A 836:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



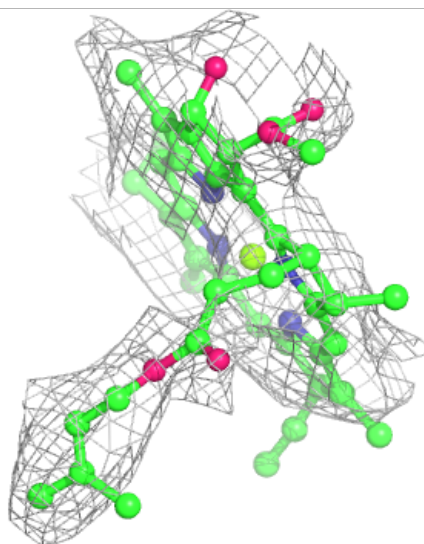
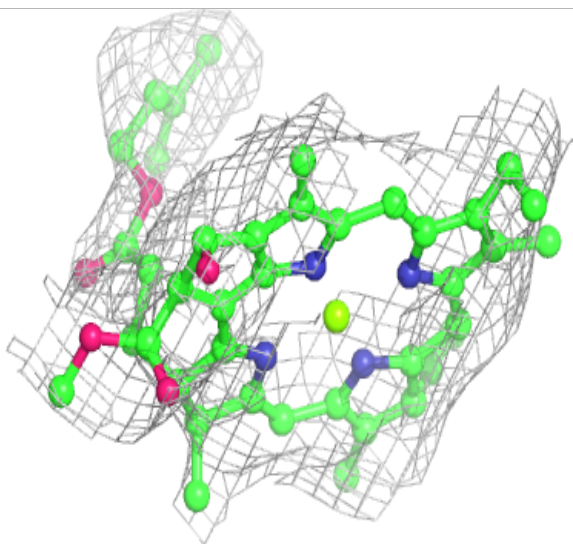
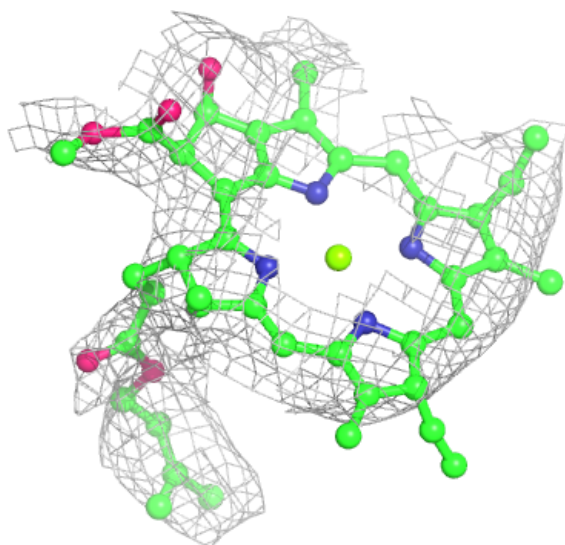
Electron density around CLA B 831:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



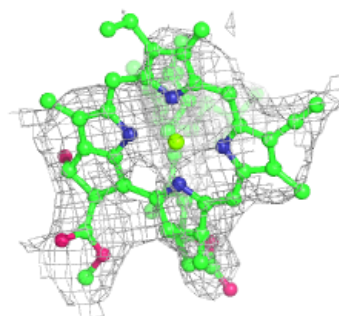
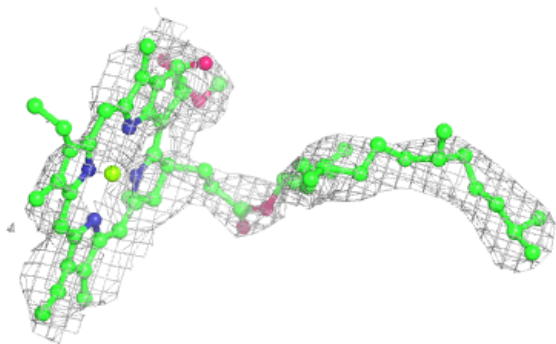
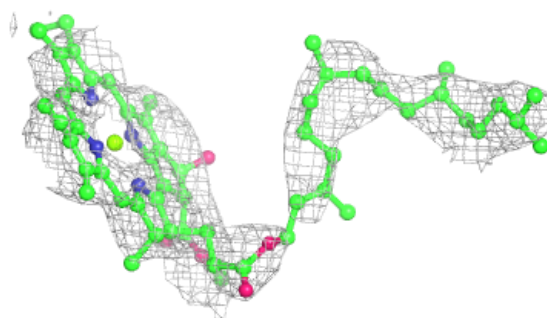
Electron density around CLA A 822:

2mF_o-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

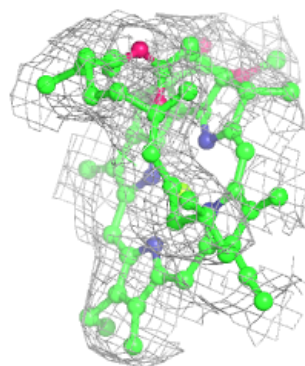
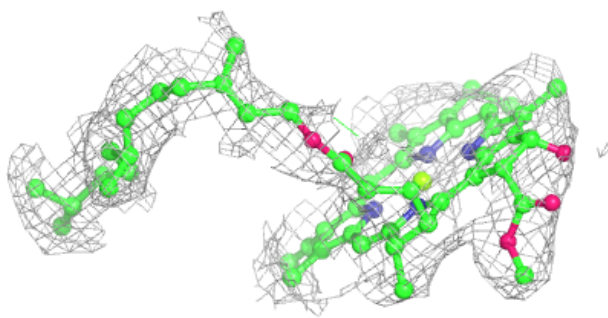
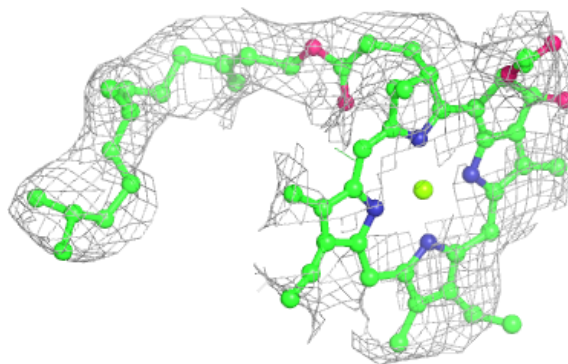


Electron density around CLA B 850:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

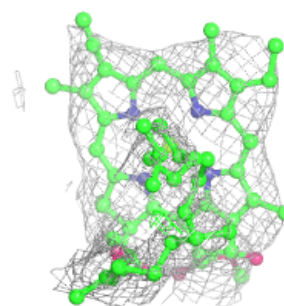
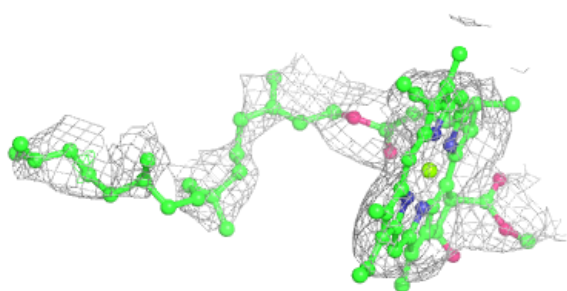
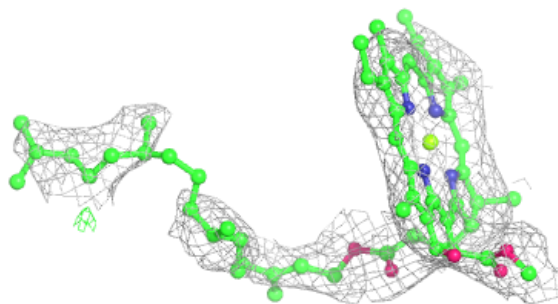
**Electron density around CLA A 808:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

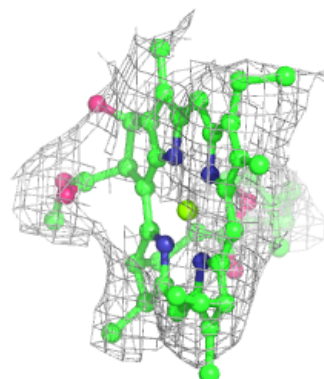
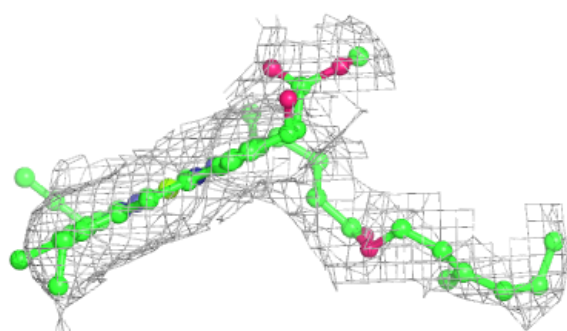
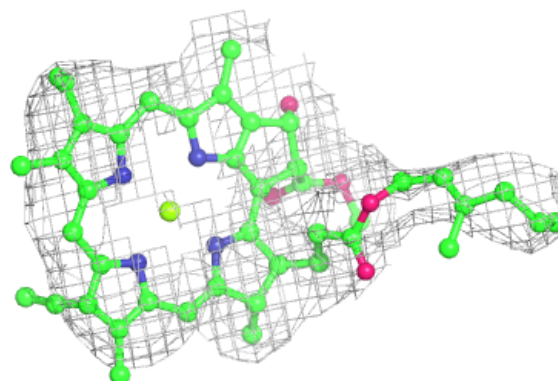


Electron density around CLA B 830:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

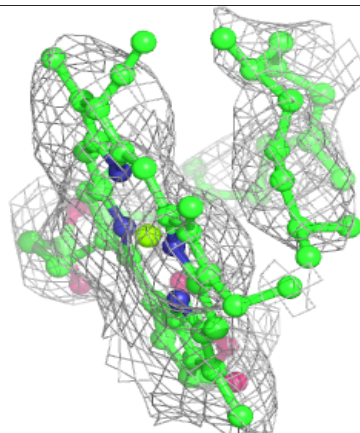
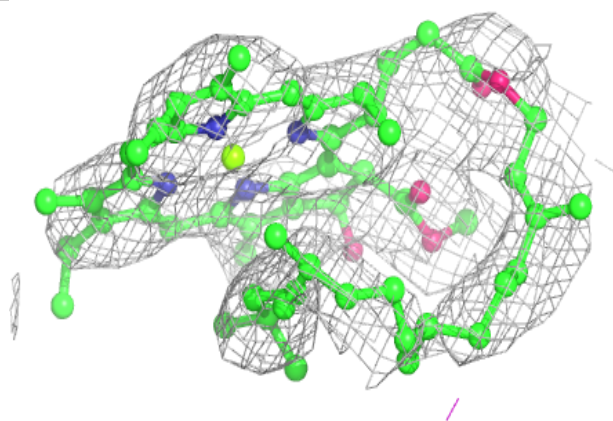
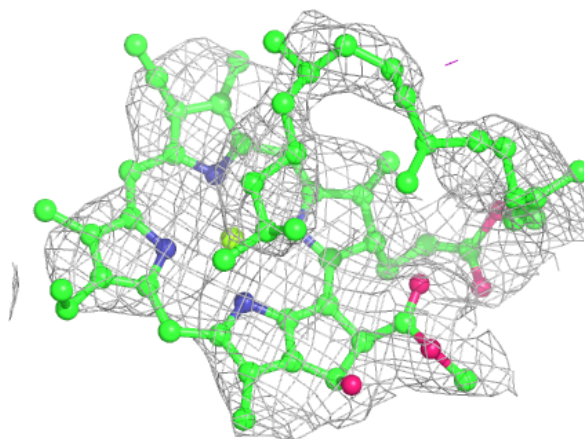
**Electron density around CLA A 809:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



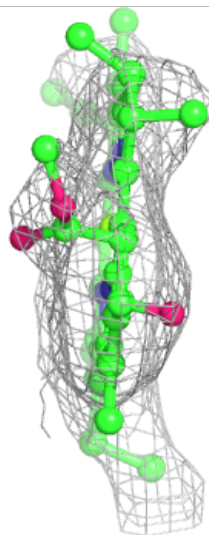
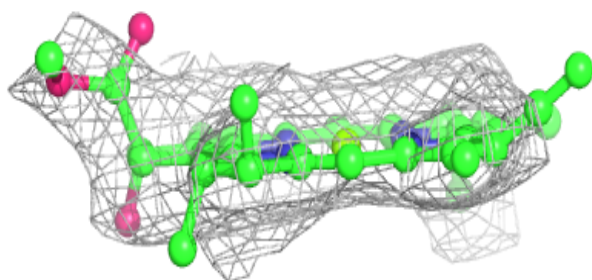
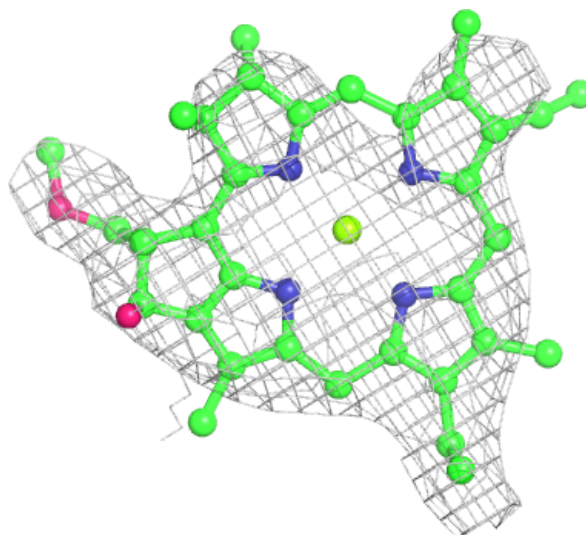
Electron density around CLA B 809:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



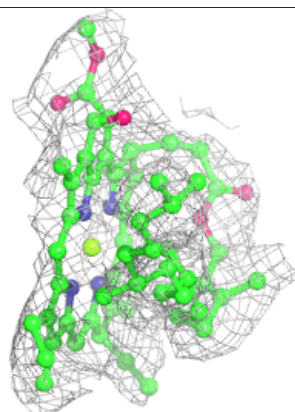
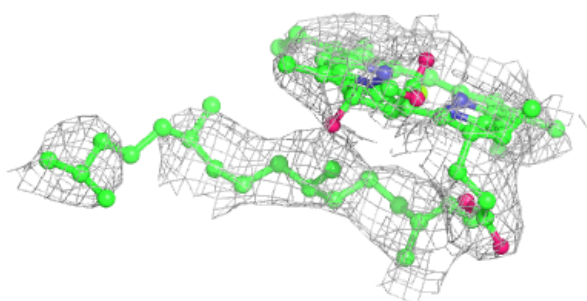
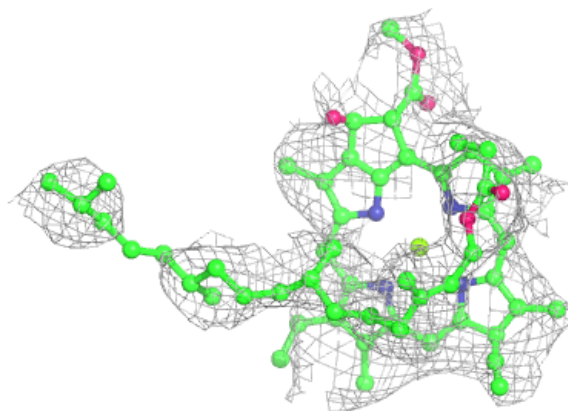
Electron density around CLA B 819:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

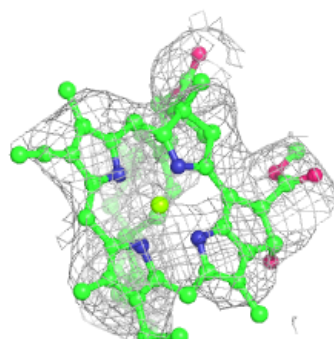
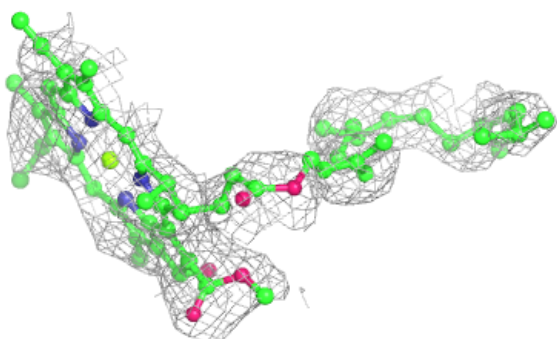
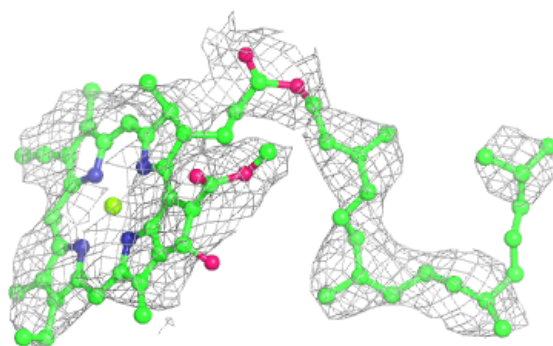


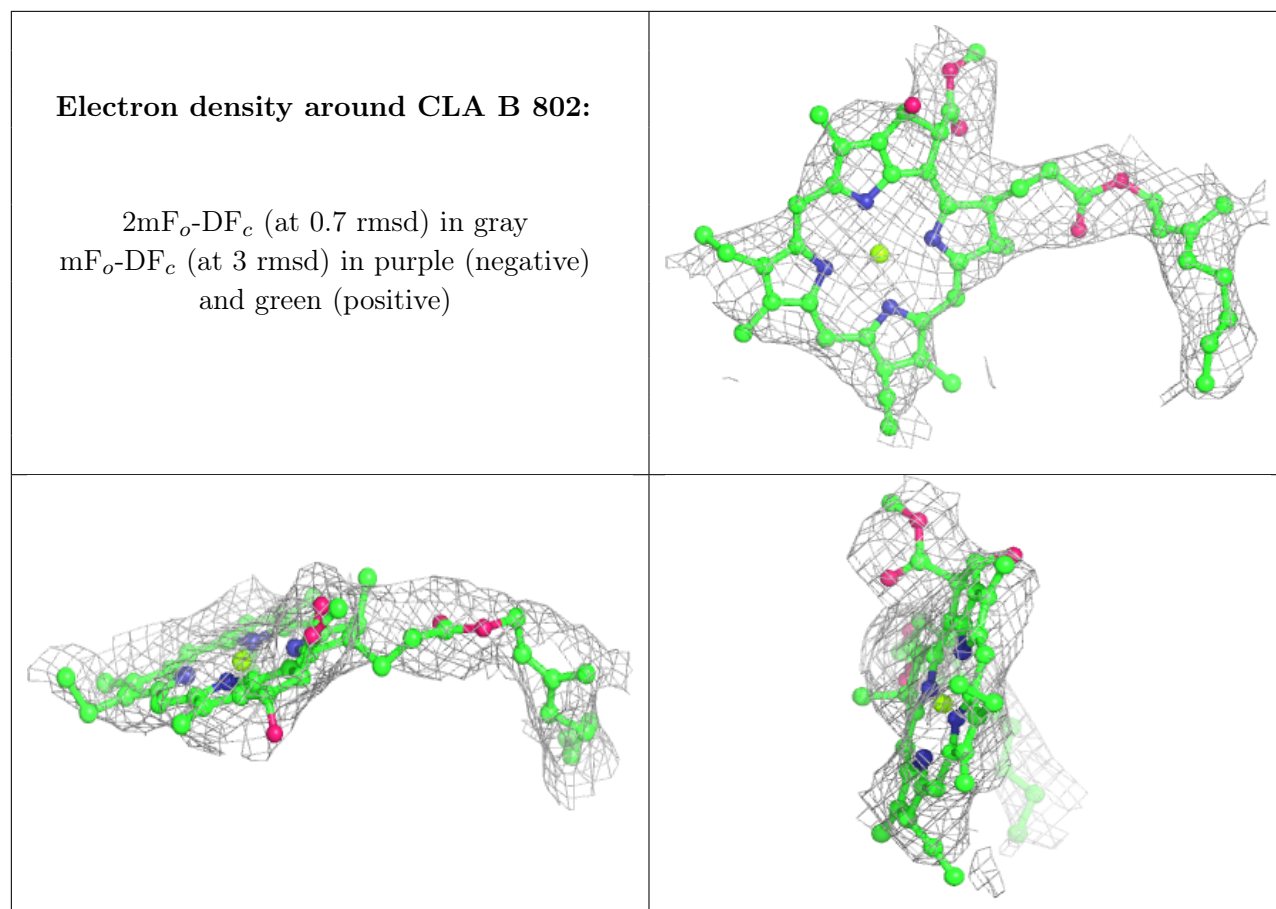
Electron density around CLA B 828:

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

**Electron density around CLA A 849:**

$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





6.5 Other polymers ⓘ

There are no such residues in this entry.