



# wwPDB X-ray Structure Validation Summary Report ⓘ

Aug 8, 2020 – 06:56 AM BST

PDB ID : 2WSC  
Title : Improved Model of Plant Photosystem I  
Authors : Amunts, A.; Toporik, H.; Borovikov, A.; Nelson, N.  
Deposited on : 2009-09-04  
Resolution : 3.30 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](mailto: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.

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

MolProbity : 4.02b-467  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
Xtriage (Phenix) : 1.13  
EDS : 2.13.1  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
Refmac : 5.8.0158  
CCP4 : 7.0.044 (Gargrove)  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)  
Validation Pipeline (wwPDB-VP) : 2.13.1

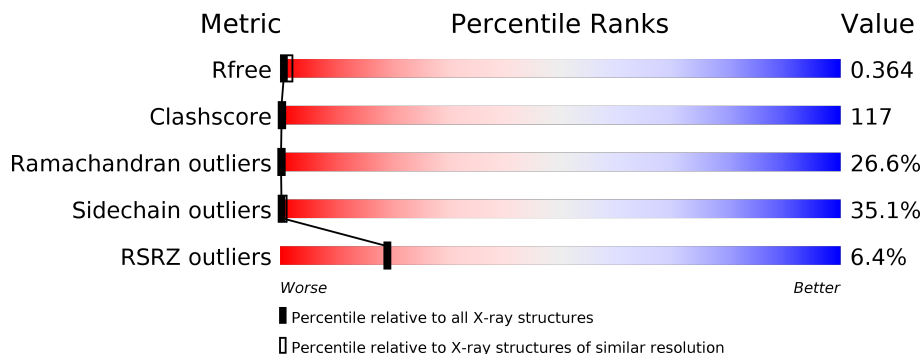
# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

*X-RAY DIFFRACTION*

The reported resolution of this entry is 3.30 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))
$R_{free}$	130704	1149 (3.34-3.26)
Clashscore	141614	1205 (3.34-3.26)
Ramachandran outliers	138981	1183 (3.34-3.26)
Sidechain outliers	138945	1182 (3.34-3.26)
RSRZ outliers	127900	1115 (3.34-3.26)

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 on the lower bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 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	
6	B	734	

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Mol	Chain	Length	Quality of chain
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	
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	GLC	M	1	-	-	X	-
19	FRU	M	2	X	-	X	-
19	FRU	O	2	X	-	X	-
19	FRU	P	2	X	-	-	-
19	GLC	Q	1	-	-	X	-
19	FRU	Q	2	X	-	X	-
19	FRU	S	2	X	-	-	-
19	GLC	T	1	-	-	X	-
19	FRU	T	2	X	-	X	-
19	GLC	U	1	-	-	X	-
19	FRU	U	2	X	-	X	-
19	FRU	V	2	X	-	-	-
19	GLC	W	1	-	-	X	-
19	FRU	W	2	X	-	X	-
19	GLC	X	1	-	-	X	-
19	FRU	X	2	X	-	X	-
19	FRU	Y	2	X	-	-	-
19	GLC	Z	1	-	-	X	-
19	FRU	Z	2	X	-	X	-
19	FRU	a	2	X	-	-	-
20	CLA	1	1187	X	-	-	-
20	CLA	1	1188	X	-	-	-
20	CLA	1	1189	X	-	-	-
20	CLA	1	1190	X	-	-	-
20	CLA	1	1191	X	-	-	-
20	CLA	1	1192	X	-	-	-
20	CLA	1	1193	X	-	-	-
20	CLA	1	1194	X	-	-	-
20	CLA	1	1195	X	-	-	-
20	CLA	1	1196	X	-	-	-
20	CLA	1	1197	X	-	-	X
20	CLA	1	1198	X	-	-	-
20	CLA	1	1199	X	-	-	-
20	CLA	1	1200	X	-	-	-
20	CLA	1	1201	X	-	-	-
20	CLA	2	1212	X	-	-	-
20	CLA	2	1213	X	-	-	-
20	CLA	2	1214	X	-	-	X
20	CLA	2	1215	X	-	X	-
20	CLA	2	1216	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
20	CLA	2	1217	X	-	-	-
20	CLA	2	1218	X	-	-	-
20	CLA	2	1219	X	-	-	-
20	CLA	2	1220	X	-	X	-
20	CLA	2	1221	X	-	-	-
20	CLA	2	1222	X	-	-	-
20	CLA	2	1223	X	-	-	-
20	CLA	2	1224	X	-	-	-
20	CLA	2	1227	X	-	-	X
20	CLA	2	2010	X	-	-	-
20	CLA	3	1212	X	-	-	-
20	CLA	3	1213	X	-	-	-
20	CLA	3	1214	X	-	-	-
20	CLA	3	1215	X	-	-	-
20	CLA	3	1216	X	-	-	-
20	CLA	3	1217	X	-	-	-
20	CLA	3	1218	X	-	X	-
20	CLA	3	1219	X	-	-	X
20	CLA	3	3001	X	-	-	-
20	CLA	3	3002	X	-	-	-
20	CLA	3	3007	X	-	-	-
20	CLA	3	3008	X	-	-	-
20	CLA	3	3011	X	-	-	-
20	CLA	3	3014	X	-	-	X
20	CLA	3	3015	X	-	-	-
20	CLA	4	1196	X	-	X	-
20	CLA	4	1197	X	-	-	-
20	CLA	4	1198	X	-	X	-
20	CLA	4	1199	X	-	X	-
20	CLA	4	1200	X	-	-	X
20	CLA	4	1201	X	-	X	-
20	CLA	4	1202	X	-	-	-
20	CLA	4	1203	X	-	-	-
20	CLA	4	1204	X	-	-	-
20	CLA	4	1205	X	-	-	-
20	CLA	4	1206	X	-	-	-
20	CLA	4	1207	X	-	-	-
20	CLA	4	1208	X	-	-	-
20	CLA	4	1209	X	-	-	-
20	CLA	4	4003	X	-	-	-
20	CLA	4	4007	X	-	-	-
20	CLA	4	4014	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
20	CLA	A	1759	X	-	-	-
20	CLA	A	1760	X	-	X	-
20	CLA	A	1761	X	-	X	-
20	CLA	A	1762	X	-	-	-
20	CLA	A	1763	X	-	X	-
20	CLA	A	1764	X	-	X	-
20	CLA	A	1765	X	-	X	-
20	CLA	A	1766	X	-	-	-
20	CLA	A	1767	X	-	X	-
20	CLA	A	1768	X	-	-	-
20	CLA	A	1769	X	-	X	-
20	CLA	A	1770	X	-	X	-
20	CLA	A	1771	X	-	-	-
20	CLA	A	1772	X	-	X	-
20	CLA	A	1773	X	-	-	-
20	CLA	A	1774	X	-	X	-
20	CLA	A	1775	X	-	-	-
20	CLA	A	1776	X	-	X	-
20	CLA	A	1777	X	-	-	-
20	CLA	A	1778	X	-	-	-
20	CLA	A	1779	X	-	X	-
20	CLA	A	1780	X	-	-	-
20	CLA	A	1781	X	-	X	-
20	CLA	A	1782	X	-	X	-
20	CLA	A	1783	X	-	X	-
20	CLA	A	1784	X	-	-	-
20	CLA	A	1785	X	-	-	-
20	CLA	A	1786	X	-	-	-
20	CLA	A	1787	X	-	X	-
20	CLA	A	1788	X	-	X	-
20	CLA	A	1789	X	-	-	-
20	CLA	A	1790	X	-	-	-
20	CLA	A	1791	X	-	X	-
20	CLA	A	1792	X	-	X	-
20	CLA	A	1793	X	-	X	-
20	CLA	A	1794	X	-	X	-
20	CLA	A	1795	X	-	X	-
20	CLA	A	1796	X	-	X	-
20	CLA	A	1797	X	-	X	-
20	CLA	A	1798	X	-	X	-
20	CLA	A	1799	X	-	-	X
20	CLA	A	1800	X	-	X	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
20	CLA	A	1801	X	-	-	X
20	CLA	A	1811	X	-	-	-
20	CLA	A	1812	X	-	X	-
20	CLA	A	1813	X	-	X	-
20	CLA	A	1815	X	-	-	-
20	CLA	A	1816	X	-	X	-
20	CLA	A	1817	X	-	-	-
20	CLA	B	1735	X	-	X	-
20	CLA	B	1736	X	-	-	-
20	CLA	B	1737	X	-	X	-
20	CLA	B	1738	X	-	-	-
20	CLA	B	1739	X	-	X	-
20	CLA	B	1740	X	-	-	-
20	CLA	B	1741	X	-	-	-
20	CLA	B	1742	X	-	-	-
20	CLA	B	1743	X	-	X	-
20	CLA	B	1744	X	-	-	-
20	CLA	B	1745	X	-	-	-
20	CLA	B	1746	X	-	X	-
20	CLA	B	1747	X	-	X	-
20	CLA	B	1748	X	-	-	-
20	CLA	B	1749	X	-	-	-
20	CLA	B	1750	X	-	-	-
20	CLA	B	1751	X	-	-	-
20	CLA	B	1752	X	-	-	-
20	CLA	B	1753	X	-	X	-
20	CLA	B	1754	X	-	X	-
20	CLA	B	1755	X	-	X	X
20	CLA	B	1756	X	-	X	-
20	CLA	B	1757	X	-	X	-
20	CLA	B	1758	X	-	X	-
20	CLA	B	1759	X	-	X	-
20	CLA	B	1760	X	-	-	-
20	CLA	B	1761	X	-	-	-
20	CLA	B	1762	X	-	X	-
20	CLA	B	1763	X	-	-	-
20	CLA	B	1764	X	-	X	-
20	CLA	B	1765	X	-	-	-
20	CLA	B	1766	X	-	-	-
20	CLA	B	1767	X	-	-	-
20	CLA	B	1768	X	-	X	-
20	CLA	B	1769	X	-	X	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
20	CLA	B	1770	X	-	X	-
20	CLA	B	1771	X	-	X	-
20	CLA	B	1772	X	-	-	-
20	CLA	B	1785	X	-	X	-
20	CLA	B	1786	X	-	X	-
20	CLA	B	1787	X	-	X	-
20	CLA	F	1155	X	-	-	-
20	CLA	F	1156	X	-	-	-
20	CLA	F	1157	X	-	-	-
20	CLA	G	1099	X	-	-	-
20	CLA	H	1079	X	-	-	-
20	CLA	I	1031	X	-	-	-
20	CLA	I	1033	X	-	-	-
20	CLA	J	1043	X	-	X	-
20	CLA	J	1044	X	-	X	-
20	CLA	J	1045	X	-	X	-
20	CLA	J	1046	X	-	-	X
20	CLA	K	1085	X	-	X	-
20	CLA	K	1142	X	-	X	-
20	CLA	K	1146	X	-	-	-
20	CLA	K	3009	X	-	-	-
20	CLA	L	1166	X	-	-	-
20	CLA	L	1167	X	-	-	-
20	CLA	L	1168	X	-	-	-
20	CLA	L	1505	X	-	-	-
20	CLA	R	1054	X	-	-	-
20	CLA	R	1055	X	-	-	-
21	LMU	1	7004	-	-	-	X
21	LMU	A	7016	-	-	X	-
21	LMU	A	7020	-	-	X	-
21	LMU	A	7021	-	-	X	-
21	LMU	A	7023	-	-	X	-
21	LMU	A	7026	-	-	X	-
21	LMU	A	7032	-	-	X	-
21	LMU	A	7037	-	-	X	-
21	LMU	A	7042	-	-	X	-
21	LMU	R	1057	X	-	-	-
22	BCR	3	1220	-	-	X	-
22	BCR	A	1803	-	-	X	X
22	BCR	A	1804	-	-	X	-
22	BCR	A	1805	-	-	X	-
22	BCR	A	1806	-	-	X	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
22	BCR	A	1807	-	-	X	-
22	BCR	A	1808	-	-	X	-
22	BCR	B	1777	-	-	X	-
22	BCR	B	1778	-	-	X	-
22	BCR	B	1779	-	-	X	-
22	BCR	B	1780	-	-	X	-
22	BCR	I	1032	-	-	X	-
22	BCR	L	1169	-	-	X	X
23	PQN	A	1802	X	-	-	-
23	PQN	B	1773	X	-	X	-
24	LMG	B	1783	-	-	X	-
25	SF4	B	1784	-	-	X	-
25	SF4	C	1082	-	-	X	-
25	SF4	C	1083	-	-	X	-

## 2 Entry composition [i](#)

There are 26 unique types of molecules in this entry. The entry contains 36379 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
			Total	C	N	O	S			
1	1	165	1264	822	208	230	4	0	0	0

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
			Total	C	N	O	S			
2	2	176	1374	899	226	245	4	0	0	0

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
			Total	C	N	O	S			
3	3	162	1254	826	203	220	5	0	0	0

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

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

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
			Total	C	N	O	S			
5	A	730	5745	3766	974	987	18	0	0	0

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

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

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

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

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

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

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
			Total	C	N	O			
9	E	65	520	332	93	95	0	0	0

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

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

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

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

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

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

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

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

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

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

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

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

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
K	47	ILE	LEU	conflict	UNP P36886

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
16	L	161	1203	791	193	214	5	0	0	0

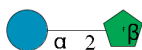
- Molecule 17 is a protein called PHOTOSYSTEM I-N SUBUNIT.

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

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

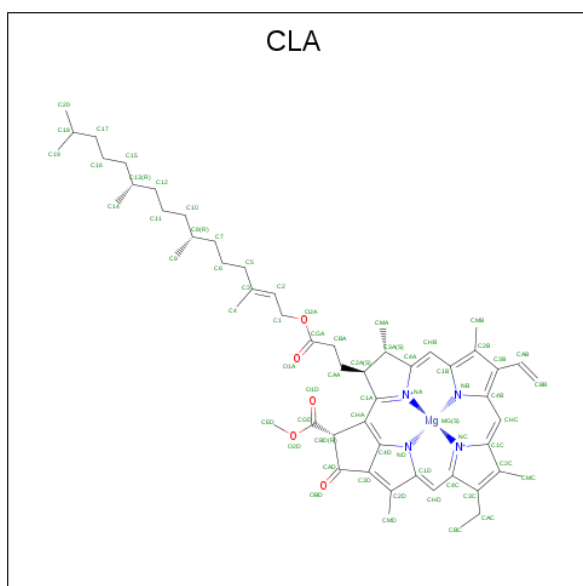
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
			Total	C	N	O			
18	R	53	265	159	53	53	0	0	0

- 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
			22	12	10			
19	O	2	Total	C	O	0	0	0
			23	12	11			
19	P	2	Total	C	O	0	0	0
			23	12	11			
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
			23	12	11			
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 (three-letter code: CLA) (formula:  $C_{55}H_{72}MgN_4O_5$ ).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	
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
			47	37	1	4	5		
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	O	0	0
			36	30	1	4	1		
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	O	0	0
			61	51	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	2	1	Total	C	Mg	N	O	0	0
			51	41	1	4	5		
20	2	1	Total	C	Mg	N	O	0	0
			56	46	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		
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	C	Mg	N	0	0	
			25	20	1	4			
20	2	1	Total	C	Mg	N	O	0	0
			56	46	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	O	0	0
			50	40	1	4	5		
20	2	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	2	1	Total	C	Mg	N	0	0	
			25	20	1	4			
20	2	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	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	0	0	
			25	20	1	4			
20	3	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
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
			42	34	1	4	3		
20	3	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	3	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
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	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	O	0	0
			55	45	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	0	0	
			25	20	1	4			
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		
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
			55	45	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
			57	47	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
			55	45	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
			54	44	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
			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
			52	42	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
			36	30	1	4	1		
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
			51	41	1	4	5		
20	A	1	Total	C	Mg	N	O	0	0
			42	34	1	4	3		
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
			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	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
			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
			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
			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
			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
			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
			55	45	1	4	5		
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
			Total	C	Mg	N	O		
20	A	1	65	55	1	4	5	0	0
20	A	1	65	55	1	4	5	0	0
20	A	1	55	45	1	4	5	0	0
20	A	1	55	45	1	4	5	0	0
20	A	1	46	36	1	4	5	0	0
20	B	1	65	55	1	4	5	0	0
20	B	1	45	35	1	4	5	0	0
20	B	1	65	55	1	4	5	0	0
20	B	1	65	55	1	4	5	0	0
20	B	1	65	55	1	4	5	0	0
20	B	1	65	55	1	4	5	0	0
20	B	1	65	55	1	4	5	0	0
20	B	1	54	44	1	4	5	0	0
20	B	1	55	45	1	4	5	0	0
20	B	1	65	55	1	4	5	0	0
20	B	1	65	55	1	4	5	0	0
20	B	1	60	50	1	4	5	0	0
20	B	1	46	36	1	4	5	0	0
20	B	1	59	49	1	4	5	0	0
20	B	1	60	50	1	4	5	0	0
20	B	1	61	51	1	4	5	0	0
20	B	1	50	40	1	4	5	0	0

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
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
			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
			50	40	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
			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		

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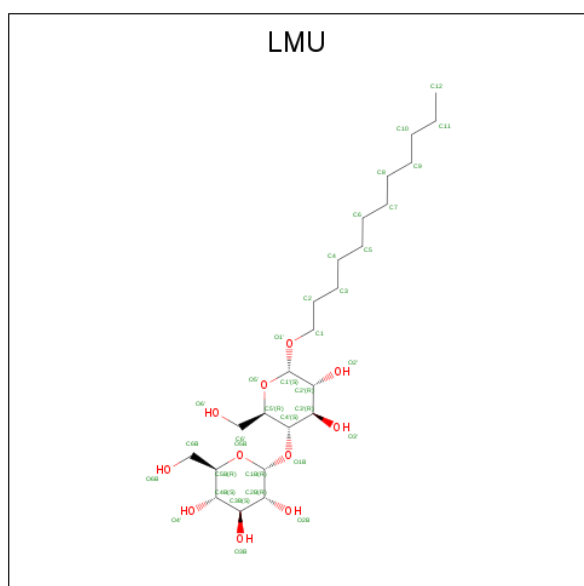
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	
20	B	1	Total	C	Mg	N	O	0	0
			36	30	1	4	1		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	F	1	Total	C	Mg	N	O	0	0
			36	30	1	4	1		
20	F	1	Total	C	Mg	N	O	0	0
			41	33	1	4	3		
20	F	1	Total	C	Mg	N	O	0	0
			53	43	1	4	5		
20	G	1	Total	C	Mg	N	O	0	0
			51	41	1	4	5		
20	H	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	I	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
20	I	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
20	J	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
20	J	1	Total	C	Mg	N	O	0	0
			61	51	1	4	5		
20	J	1	Total	C	Mg	N	O	0	0
			55	45	1	4	5		
20	J	1	Total	C	Mg	N	O	0	0
			25	20	1	4			
20	K	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	K	1	Total	C	Mg	N	O	0	0
			45	35	1	4	5		
20	K	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	K	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
20	L	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	L	1	Total	C	Mg	N	O	0	0
			47	37	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
20	L	1	Total	C	Mg	N	O	0	0
			50	40	1	4	5		
20	L	1	Total	C	Mg	N	O	0	0
			55	45	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-MALTOSE (three-letter code: LMU) (formula:  $C_{24}H_{46}O_{11}$ ).



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	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	3	1	Total	C	O	0	0
			35	24	11		
21	4	1	Total	C	O	0	0
			35	24	11		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
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
			34	23	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	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	A	1	Total	C	O	0	0
			35	24	11		

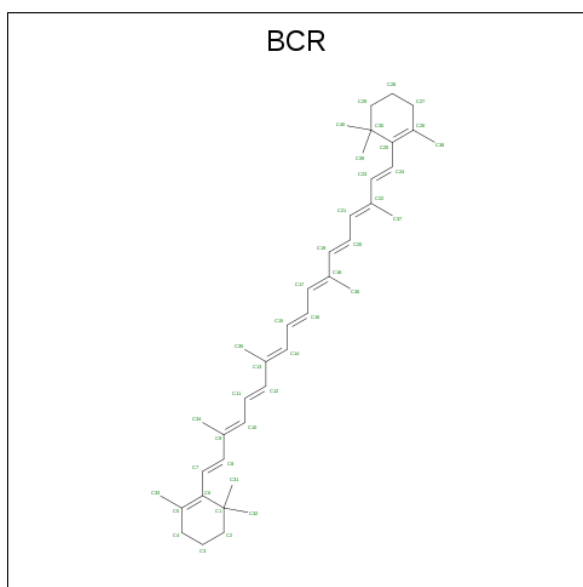
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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
21	A	1	Total	C	O	0	0
			35	24	11		
21	A	1	Total	C	O	0	0
			35	24	11		
21	A	1	Total	C	O	0	0
			35	24	11		
21	A	1	Total	C	O	0	0
			34	23	11		
21	A	1	Total	C	O	0	0
			35	24	11		
21	A	1	Total	C	O	0	0
			35	24	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	A	1	Total	C	O	0	0
			35	24	11		
21	B	1	Total	C	O	0	0
			25	14	11		
21	K	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		

- Molecule 22 is BETA-CAROTENE (three-letter code: BCR) (formula: C<sub>40</sub>H<sub>56</sub>).



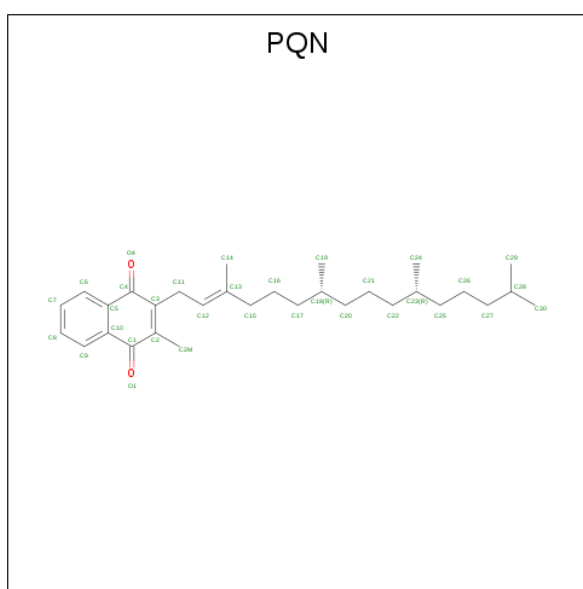
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
22	3	1	Total C 40 40	0	0
22	A	1	Total C 40 40	0	0
22	A	1	Total C 40 40	0	0
22	A	1	Total C 40 40	0	0
22	A	1	Total C 40 40	0	0
22	A	1	Total C 40 40	0	0
22	A	1	Total C 40 40	0	0
22	A	1	Total C 40 40	0	0
22	B	1	Total C 40 40	0	0
22	B	1	Total C 40 40	0	0
22	B	1	Total C 40 40	0	0
22	B	1	Total C 40 40	0	0
22	B	1	Total C 40 40	0	0
22	B	1	Total C 40 40	0	0
22	B	1	Total C 40 40	0	0

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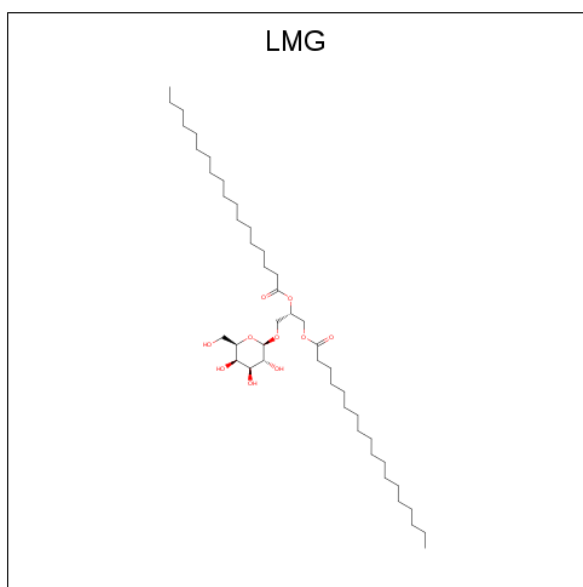
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
22	B	1	Total C 40 40	0	0
22	I	1	Total C 40 40	0	0
22	L	1	Total C 40 40	0	0
22	L	1	Total C 40 40	0	0

- Molecule 23 is PHYLLOQUINONE (three-letter code: PQN) (formula:  $C_{31}H_{46}O_2$ ).



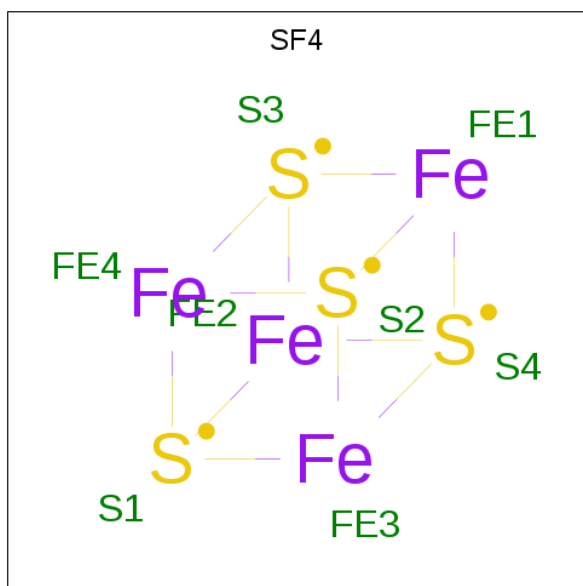
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
23	A	1	Total C O 33 31 2	0	0
23	B	1	Total C O 33 31 2	0	0

- Molecule 24 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula:  $C_{45}H_{86}O_{10}$ ).



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

- Molecule 25 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe<sub>4</sub>S<sub>4</sub>).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	Fe	S		
25	B	1	8	4	4	0	0
25	C	1	8	4	4	0	0
25	C	1	8	4	4	0	0

- Molecule 26 is UNKNOWN LIGAND (three-letter code: UNL) (formula: ).

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





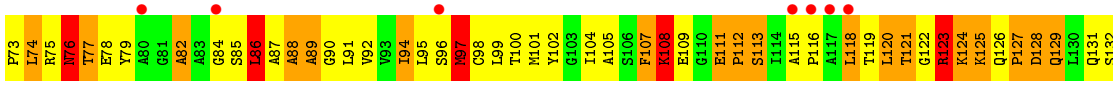




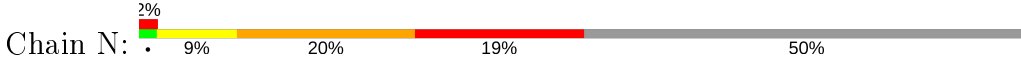




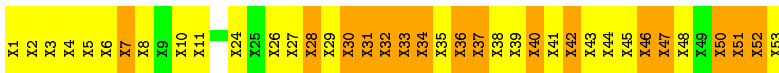
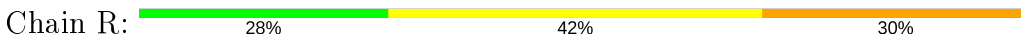




• Molecule 17: PHOTOSYSTEM I-N SUBUNIT



• Molecule 18: PHOTOSYSTEM I-N SUBUNIT



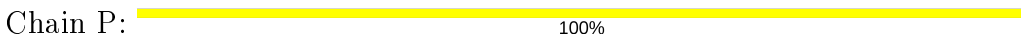
• Molecule 19: beta-D-fructofuranose-(2-1)-alpha-D-glucopyranose



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



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



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



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:  100%GLC1  
FRU2

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

Chain X:  100%GLC1  
FRU2

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

Chain Y:  100%GLC1  
FRU2

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

Chain Z:  100%

GLC1  
FRU2

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

Chain a:  100%

GLC1  
FRU2

## 4 Data and refinement statistics

Property	Value	Source
Space group	P 1 21 1	Depositor
Cell constants a, b, c, $\alpha$ , $\beta$ , $\gamma$	120.66Å 189.09Å 129.39Å 90.00° 91.24° 90.00°	Depositor
Resolution (Å)	30.00 – 3.30 49.14 – 3.21	Depositor EDS
% Data completeness (in resolution range)	99.5 (30.00-3.30) 98.5 (49.14-3.21)	Depositor EDS
$R_{merge}$	0.10	Depositor
$R_{sym}$	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ <sup>1</sup>	2.62 (at 3.19Å)	Xtrriage
Refinement program	REFMAC 5.5.0072	Depositor
R, $R_{free}$	0.363 , 0.366 0.359 , 0.364	Depositor DCC
$R_{free}$ test set	4685 reflections (5.02%)	wwPDB-VP
Wilson B-factor (Å <sup>2</sup> )	78.5	Xtrriage
Anisotropy	0.655	Xtrriage
Bulk solvent $k_{sol}$ (e/Å <sup>3</sup> ), $B_{sol}$ (Å <sup>2</sup> )	0.15 , 80.5	EDS
L-test for twinning <sup>2</sup>	$\langle  L  \rangle = 0.48$ , $\langle L^2 \rangle = 0.31$	Xtrriage
Estimated twinning fraction	0.032 for h,-k,-l	Xtrriage
$F_o, F_c$ correlation	0.78	EDS
Total number of atoms	36379	wwPDB-VP
Average B, all atoms (Å <sup>2</sup> )	25.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 3.11% of the height of the origin peak. No significant pseudotranslation is detected.*

<sup>1</sup>Intensities estimated from amplitudes.

<sup>2</sup>Theoretical 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: SF4, GLC, CLA, PQN, LMU, FRU, UNL, BCR, 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	0.48	0/1303	0.72	3/1774 (0.2%)
2	2	0.45	0/1420	0.71	0/1943
3	3	0.87	6/1292 (0.5%)	0.96	3/1743 (0.2%)
4	4	0.49	0/1359	0.75	2/1851 (0.1%)
5	A	0.95	3/5938 (0.1%)	1.04	11/8104 (0.1%)
6	B	0.95	2/6058 (0.0%)	1.02	14/8278 (0.2%)
7	C	1.43	7/632 (1.1%)	1.33	4/856 (0.5%)
8	D	1.10	0/1122	1.05	0/1514
9	E	1.15	0/530	1.17	2/718 (0.3%)
10	F	1.10	1/1250 (0.1%)	1.07	2/1687 (0.1%)
11	G	1.07	0/760	1.28	9/1031 (0.9%)
12	H	1.16	0/543	1.19	3/741 (0.4%)
13	I	1.00	0/235	0.97	0/320
14	J	1.02	0/349	1.09	1/475 (0.2%)
15	K	0.55	0/599	0.83	1/810 (0.1%)
16	L	1.08	0/1238	1.10	5/1691 (0.3%)
17	N	1.23	1/699 (0.1%)	1.33	7/936 (0.7%)
All	All	0.94	20/25327 (0.1%)	1.02	67/34472 (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	1
3	3	0	19
5	A	0	28
6	B	0	20
7	C	0	3

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Mol	Chain	#Chirality outliers	#Planarity outliers
8	D	0	6
9	E	0	6
10	F	0	12
11	G	1	16
12	H	0	9
15	K	0	2
16	L	0	3
17	N	0	21
18	R	0	17
All	All	1	166

The worst 5 of 20 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	3	92	TRP	CB-CG	16.88	1.80	1.50
3	3	93	PHE	CE1-CZ	8.69	1.53	1.37
6	B	640	CYS	CB-SG	7.67	1.95	1.82
7	C	72	GLU	CD-OE1	-7.43	1.17	1.25
3	3	93	PHE	CD2-CE2	7.38	1.54	1.39

The worst 5 of 67 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
6	B	732	LYS	N-CA-C	-8.11	89.10	111.00
5	A	93	LEU	CA-CB-CG	8.06	133.84	115.30
5	A	530	LEU	CA-CB-CG	7.27	132.02	115.30
6	B	486	LEU	CA-CB-CG	7.27	132.01	115.30
6	B	315	LEU	CA-CB-CG	7.21	131.88	115.30

All (1) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
11	G	21	PHE	CA

5 of 166 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
1	1	182	ALA	Peptide
1	1	183	ASP	Peptide
1	1	184	PRO	Peptide
2	2	120	ASN	Peptide
3	3	49	ILE	Peptide

## 5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	1	1264	0	1230	91	1
2	2	1374	0	1329	142	0
3	3	1254	0	1221	333	1
4	4	1319	0	1283	201	13
5	A	5745	0	5595	1661	0
6	B	5848	0	5655	1449	1
7	C	619	0	608	236	0
8	D	1095	0	1112	226	0
9	E	520	0	528	150	0
10	F	1221	0	1246	289	0
11	G	740	0	709	297	7
12	H	529	0	514	117	0
13	I	229	0	252	58	0
14	J	338	0	340	80	0
15	K	593	0	619	65	1
16	L	1203	0	1213	326	13
17	N	685	0	671	448	7
18	R	265	0	67	77	0
19	M	22	0	18	11	0
19	O	23	0	21	14	0
19	P	23	0	21	0	0
19	Q	23	0	21	11	0
19	S	23	0	20	1	0
19	T	23	0	21	8	0
19	U	23	0	21	9	0
19	V	23	0	21	3	0
19	W	23	0	21	17	0
19	X	23	0	21	7	0
19	Y	23	0	21	1	0
19	Z	23	0	20	20	0
19	a	23	0	19	0	0
20	1	644	0	429	113	2
20	2	658	0	480	160	0
20	3	548	0	326	115	0
20	4	699	0	454	157	0
20	A	2777	0	2599	1120	1
20	B	2372	0	2285	808	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
20	F	130	0	86	27	0
20	G	51	0	40	6	0
20	H	65	0	71	19	0
20	I	115	0	106	26	0
20	J	202	0	169	99	0
20	K	210	0	177	44	2
20	L	202	0	158	40	0
20	R	122	0	123	17	0
21	1	70	0	92	15	0
21	2	105	0	138	15	1
21	3	35	0	46	3	0
21	4	35	0	46	0	0
21	A	1153	0	1505	397	0
21	B	25	0	23	1	0
21	K	35	0	45	6	0
21	L	35	0	46	3	0
21	R	70	0	91	24	0
22	3	40	0	54	21	0
22	A	240	0	323	250	0
22	B	320	0	432	225	0
22	I	40	0	54	47	0
22	L	80	0	105	61	0
23	A	33	0	46	12	0
23	B	33	0	46	33	0
24	B	49	0	71	30	0
25	B	8	0	0	18	0
25	C	16	0	0	9	0
26	B	23	0	0	2	0
All	All	36379	0	35124	8371	25

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 117.

The worst 5 of 8371 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:SD	20:4:1201:CLA:HBB1	1.28	1.66
20:A:1776:CLA:H92	22:A:1805:BCR:C37	1.17	1.58
6:B:25:ILE:HG21	22:L:1169:BCR:C29	1.11	1.58
5:A:51:THR:HG21	20:A:1795:CLA:CBB	1.24	1.57
21:A:7036:LMU:H82	21:A:7036:LMU:C2	1.34	1.57

The worst 5 of 25 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)
11:G:31:MET:CE	17:N:85:TRP:NE1[2_546]	0.92	1.28
4:4:130:GLU:C	16:L:159:TYR:OH[1_655]	1.18	1.02
11:G:31:MET:CE	17:N:85:TRP:CE2[2_546]	1.19	1.01
20:1:1193:CLA:O2D	20:K:1142:CLA:O2A[1_654]	1.34	0.86
4:4:130:GLU:CA	16:L:159:TYR:OH[1_655]	1.43	0.77

## 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%)	83 (52%)	43 (27%)	35 (22%)	0	0
2	2	174/269 (65%)	88 (51%)	56 (32%)	30 (17%)	0	1
3	3	156/276 (56%)	78 (50%)	43 (28%)	35 (22%)	0	0
4	4	164/251 (65%)	79 (48%)	47 (29%)	38 (23%)	0	0
5	A	726/758 (96%)	334 (46%)	200 (28%)	192 (26%)	0	0
6	B	731/734 (100%)	361 (49%)	189 (26%)	181 (25%)	0	0
7	C	79/81 (98%)	23 (29%)	29 (37%)	27 (34%)	0	0
8	D	136/212 (64%)	48 (35%)	42 (31%)	46 (34%)	0	0
9	E	63/143 (44%)	29 (46%)	14 (22%)	20 (32%)	0	0
10	F	152/231 (66%)	67 (44%)	44 (29%)	41 (27%)	0	0
11	G	93/167 (56%)	35 (38%)	28 (30%)	30 (32%)	0	0
12	H	67/144 (46%)	28 (42%)	15 (22%)	24 (36%)	0	0
13	I	28/40 (70%)	10 (36%)	11 (39%)	7 (25%)	0	0
14	J	40/44 (91%)	19 (48%)	11 (28%)	10 (25%)	0	0
15	K	82/131 (63%)	49 (60%)	15 (18%)	18 (22%)	0	0
16	L	159/216 (74%)	66 (42%)	47 (30%)	46 (29%)	0	0

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
17	N	83/170 (49%)	22 (26%)	19 (23%)	42 (51%)	0	0
All	All	3094/4108 (75%)	1419 (46%)	853 (28%)	822 (27%)	0	0

5 of 822 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	1	25	ASP
1	1	29	LEU
1	1	30	GLY
1	1	35	ASN
1	1	58	LEU

### 5.3.2 Protein sidechains [i](#)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all 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%)	102 (80%)	25 (20%)	1	5
2	2	140/216 (65%)	107 (76%)	33 (24%)	1	3
3	3	120/215 (56%)	82 (68%)	38 (32%)	0	1
4	4	138/201 (69%)	103 (75%)	35 (25%)	0	2
5	A	592/618 (96%)	392 (66%)	200 (34%)	0	1
6	B	598/600 (100%)	367 (61%)	231 (39%)	0	0
7	C	70/70 (100%)	40 (57%)	30 (43%)	0	0
8	D	118/173 (68%)	75 (64%)	43 (36%)	0	0
9	E	56/114 (49%)	37 (66%)	19 (34%)	0	1
10	F	127/190 (67%)	73 (58%)	54 (42%)	0	0
11	G	79/144 (55%)	46 (58%)	33 (42%)	0	0
12	H	57/115 (50%)	26 (46%)	31 (54%)	0	0
13	I	26/36 (72%)	18 (69%)	8 (31%)	0	1
14	J	36/39 (92%)	25 (69%)	11 (31%)	0	1
15	K	61/102 (60%)	43 (70%)	18 (30%)	0	1

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
16	L	124/169 (73%)	81 (65%)	43 (35%)	0	1
17	N	74/139 (53%)	33 (45%)	41 (55%)	0	0
All	All	2543/3331 (76%)	1650 (65%)	893 (35%)	0	1

5 of 893 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
6	B	246	THR
6	B	551	LYS
16	L	63	LEU
6	B	285	LEU
6	B	419	ILE

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 111 such sidechains are listed below:

Mol	Chain	Res	Type
6	B	95	HIS
6	B	403	ASN
14	J	30	ASN
6	B	122	GLN
6	B	266	GLN

### 5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

### 5.5 Carbohydrates [i](#)

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	10,10,12	1.46	3 (30%)	14,14,17	3.31	10 (71%)
19	FRU	M	2	19	11,12,12	1.06	1 (9%)	10,18,18	2.33	3 (30%)
19	GLC	O	1	19	11,11,12	0.92	0	15,15,17	3.54	8 (53%)
19	FRU	O	2	19	11,12,12	1.08	1 (9%)	10,18,18	1.70	2 (20%)
19	GLC	P	1	19	11,11,12	0.99	0	15,15,17	2.44	3 (20%)
19	FRU	P	2	19	11,12,12	1.16	2 (18%)	10,18,18	0.96	0
19	GLC	Q	1	19	11,11,12	1.19	1 (9%)	15,15,17	2.20	5 (33%)
19	FRU	Q	2	19	11,12,12	1.00	1 (9%)	10,18,18	1.76	4 (40%)
19	GLC	S	1	19	11,11,12	0.44	0	15,15,17	1.12	2 (13%)
19	FRU	S	2	19,21	11,12,12	0.67	0	10,18,18	1.12	0
19	GLC	T	1	19	11,11,12	1.07	0	15,15,17	1.64	3 (20%)
19	FRU	T	2	19	11,12,12	2.01	4 (36%)	10,18,18	2.89	4 (40%)
19	GLC	U	1	19	11,11,12	1.06	1 (9%)	15,15,17	2.67	5 (33%)
19	FRU	U	2	19	11,12,12	0.96	0	10,18,18	1.53	2 (20%)
19	GLC	V	1	19	11,11,12	1.54	2 (18%)	15,15,17	1.98	5 (33%)
19	FRU	V	2	19	11,12,12	0.90	0	10,18,18	2.00	5 (50%)
19	GLC	W	1	19	11,11,12	1.30	1 (9%)	15,15,17	2.89	9 (60%)
19	FRU	W	2	19	11,12,12	1.17	2 (18%)	10,18,18	2.10	2 (20%)
19	GLC	X	1	19	11,11,12	1.22	1 (9%)	15,15,17	1.83	4 (26%)
19	FRU	X	2	19	11,12,12	1.56	2 (18%)	10,18,18	2.32	4 (40%)
19	GLC	Y	1	19	11,11,12	1.09	0	15,15,17	3.55	7 (46%)
19	FRU	Y	2	19	11,12,12	1.15	0	10,18,18	2.27	4 (40%)
19	GLC	Z	1	19	11,11,12	1.75	2 (18%)	15,15,17	4.50	8 (53%)
19	FRU	Z	2	19,21	11,12,12	1.06	1 (9%)	10,18,18	2.34	3 (30%)
19	GLC	a	1	19	11,11,12	1.06	1 (9%)	15,15,17	1.52	3 (20%)
19	FRU	a	2	19,12	11,12,12	1.07	0	10,18,18	2.15	3 (30%)

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	-	-	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
19	FRU	M	2	19	1/1/4/4	0/5/24/24	0/1/1/1
19	GLC	O	1	19	-	1/2/19/22	0/1/1/1
19	FRU	O	2	19	1/1/4/4	4/5/24/24	0/1/1/1
19	GLC	P	1	19	-	2/2/19/22	0/1/1/1
19	FRU	P	2	19	1/1/4/4	2/5/24/24	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	3/5/24/24	0/1/1/1
19	GLC	S	1	19	-	1/2/19/22	0/1/1/1
19	FRU	S	2	19,21	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	3/5/24/24	0/1/1/1
19	GLC	U	1	19	-	2/2/19/22	0/1/1/1
19	FRU	U	2	19	1/1/4/4	3/5/24/24	0/1/1/1
19	GLC	V	1	19	-	0/2/19/22	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	-	1/2/19/22	0/1/1/1
19	FRU	W	2	19	1/1/4/4	2/5/24/24	0/1/1/1
19	GLC	X	1	19	-	2/2/19/22	0/1/1/1
19	FRU	X	2	19	1/1/4/4	3/5/24/24	0/1/1/1
19	GLC	Y	1	19	-	2/2/19/22	0/1/1/1
19	FRU	Y	2	19	1/1/4/4	1/5/24/24	0/1/1/1
19	GLC	Z	1	19	-	0/2/19/22	0/1/1/1
19	FRU	Z	2	19,21	1/1/4/4	3/5/24/24	0/1/1/1
19	GLC	a	1	19	-	2/2/19/22	0/1/1/1
19	FRU	a	2	19,12	1/1/4/4	2/5/24/24	0/1/1/1

The worst 5 of 26 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
19	Z	1	GLC	O5-C1	-4.10	1.37	1.43
19	T	2	FRU	O5-C2	-3.74	1.37	1.43
19	T	2	FRU	C1-C2	-3.01	1.47	1.52
19	V	1	GLC	O5-C1	-2.83	1.39	1.43
19	X	2	FRU	O2-C2	-2.70	1.36	1.40

The worst 5 of 108 bond angle outliers are listed below:



Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
19	Z	1	GLC	C1-O5-C5	-11.46	96.66	112.19
19	M	1	GLC	C1-C2-C3	7.92	119.40	109.67
19	P	1	GLC	C1-O5-C5	7.71	122.64	112.19
19	Y	1	GLC	C1-O5-C5	7.50	122.35	112.19
19	Z	1	GLC	O5-C1-C2	-7.29	99.52	110.77

5 of 13 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
19	a	2	FRU	C2
19	Q	2	FRU	C2
19	P	2	FRU	C2
19	M	2	FRU	C2
19	W	2	FRU	C2

5 of 46 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
19	Q	2	FRU	O1-C1-C2-C3
19	Q	2	FRU	O1-C1-C2-O2
19	Q	2	FRU	O1-C1-C2-O5
19	O	2	FRU	O1-C1-C2-C3
19	O	2	FRU	O1-C1-C2-O2

There are no ring outliers.

21 monomers are involved in 102 short contacts:

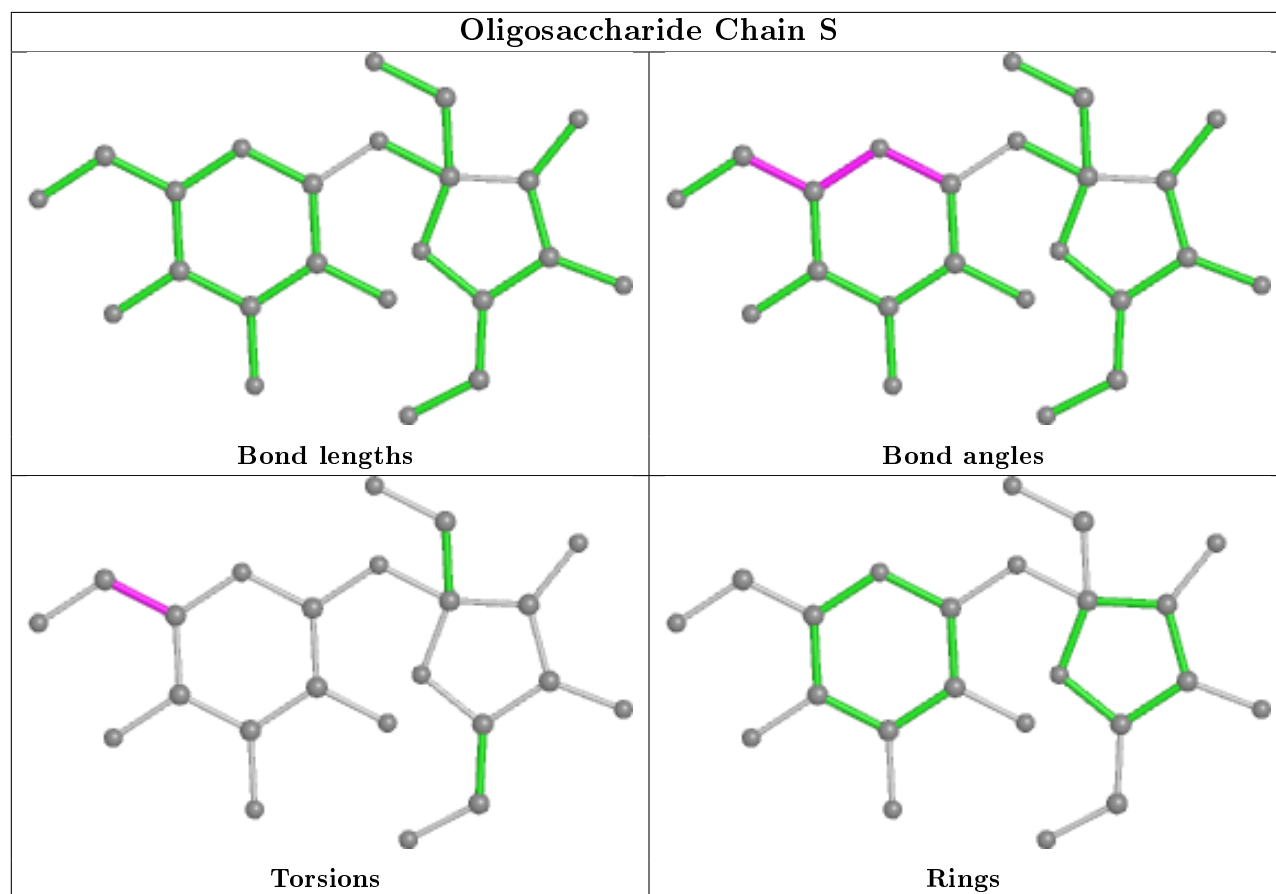
Mol	Chain	Res	Type	Clashes	Symm-Clashes
19	Q	2	FRU	9	0
19	M	2	FRU	7	0
19	W	2	FRU	15	0
19	T	1	GLC	7	0
19	O	2	FRU	14	0
19	X	2	FRU	7	0
19	U	1	GLC	6	0
19	Z	2	FRU	18	0
19	U	2	FRU	9	0
19	Z	1	GLC	7	0
19	T	2	FRU	8	0
19	M	1	GLC	10	0
19	Q	1	GLC	10	0
19	S	1	GLC	1	0
19	Y	1	GLC	1	0

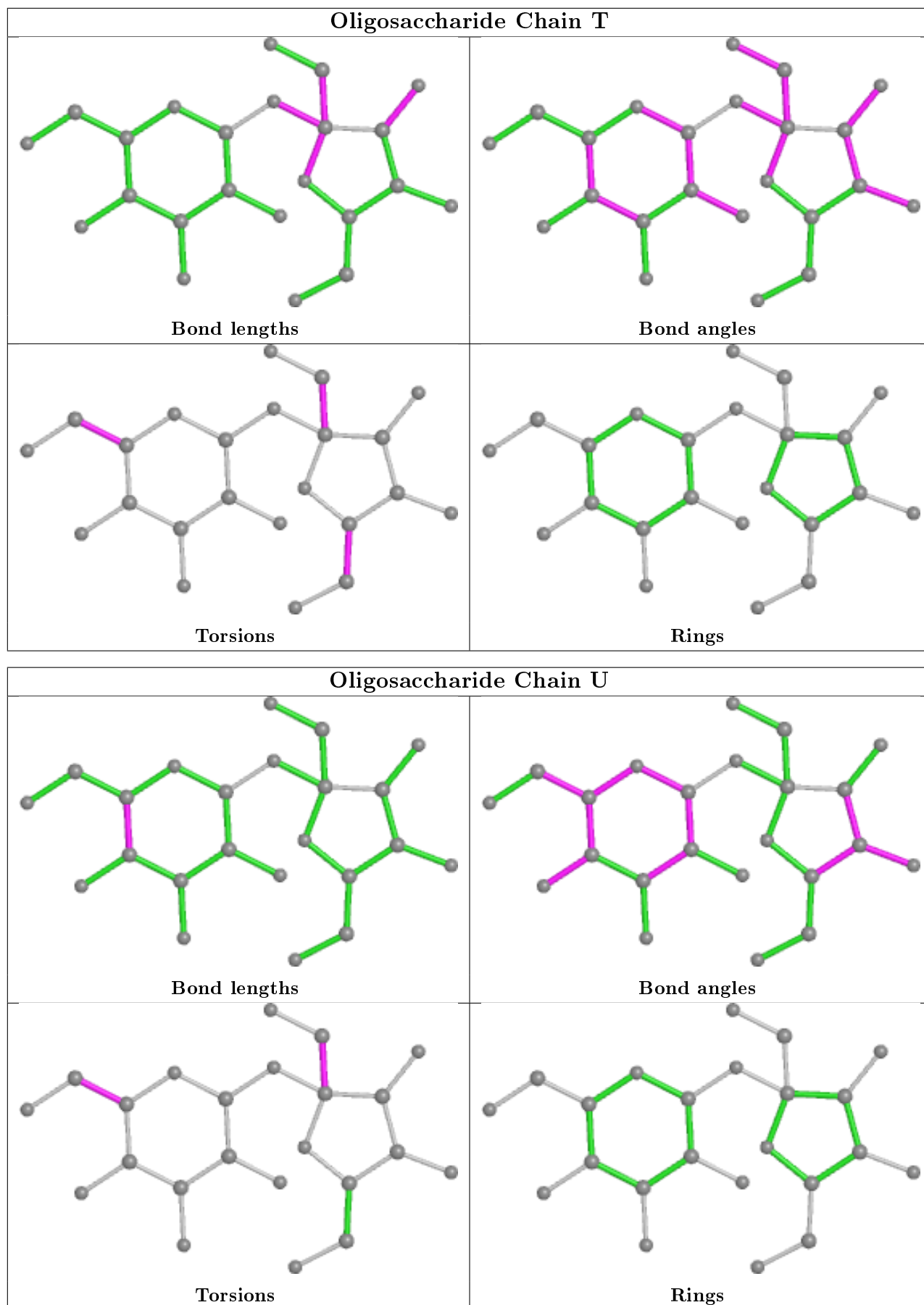
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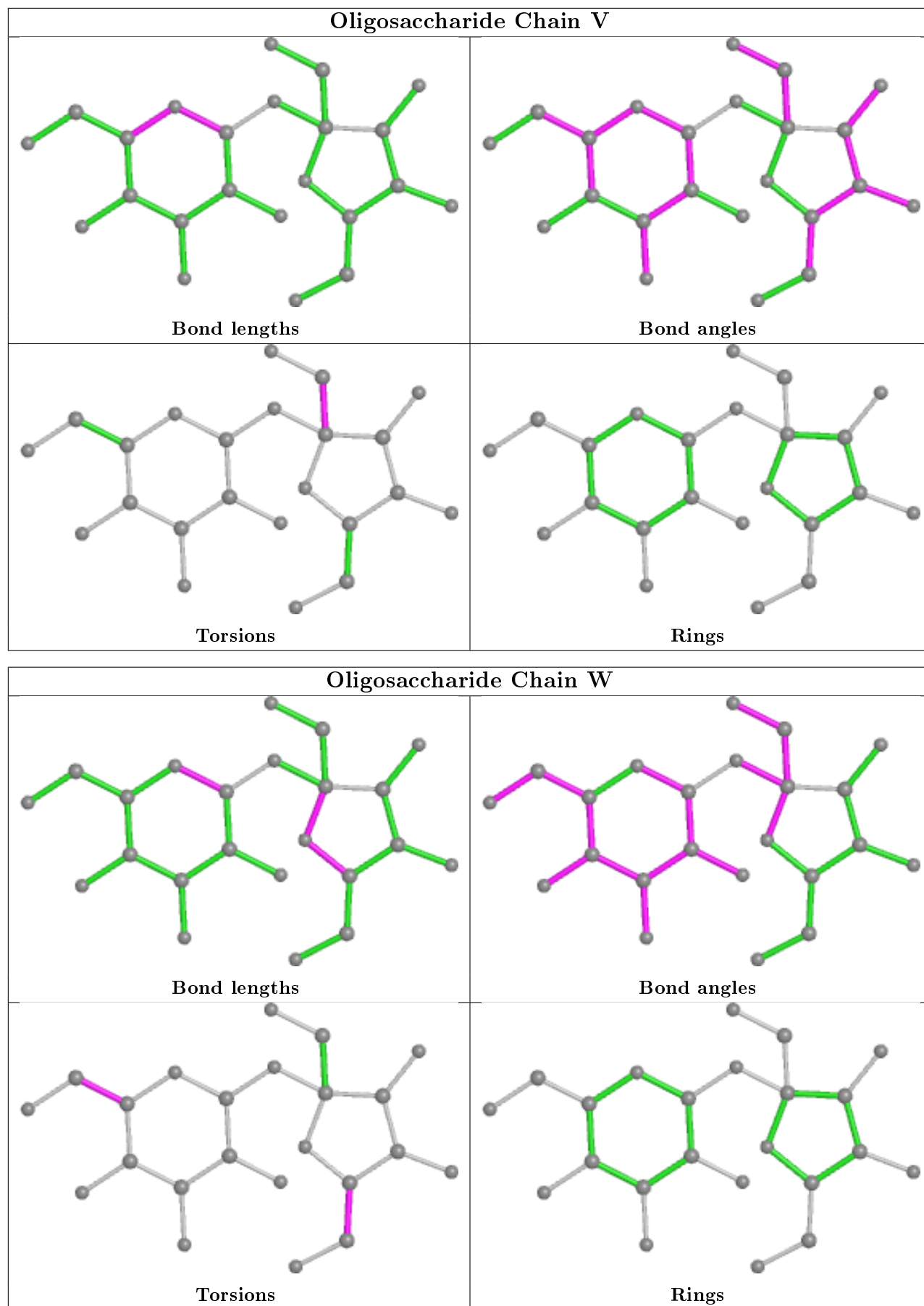
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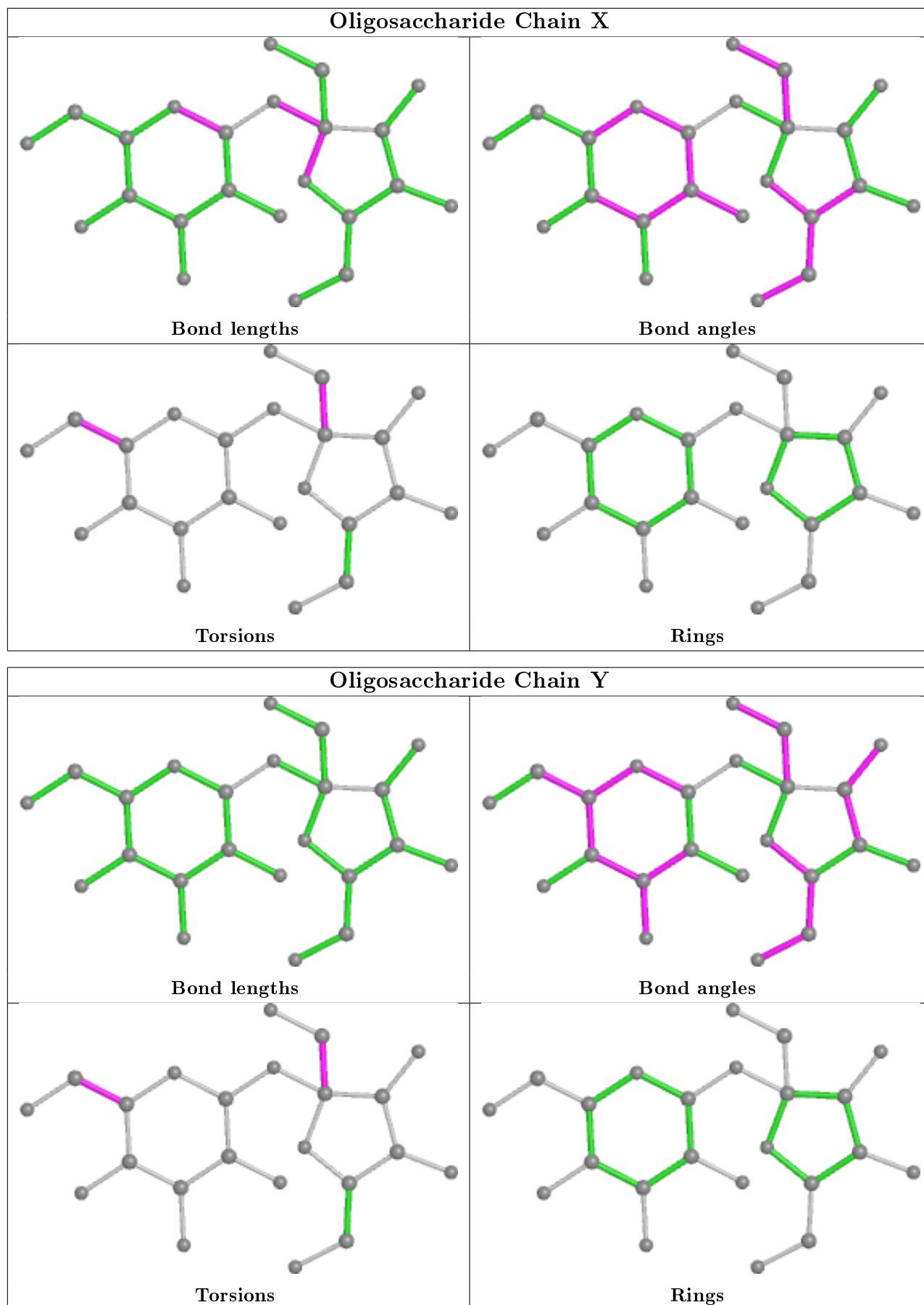
Mol	Chain	Res	Type	Clashes	Symm-Clashes
19	Y	2	FRU	1	0
19	V	1	GLC	3	0
19	V	2	FRU	3	0
19	O	1	GLC	5	0
19	X	1	GLC	7	0
19	W	1	GLC	13	0

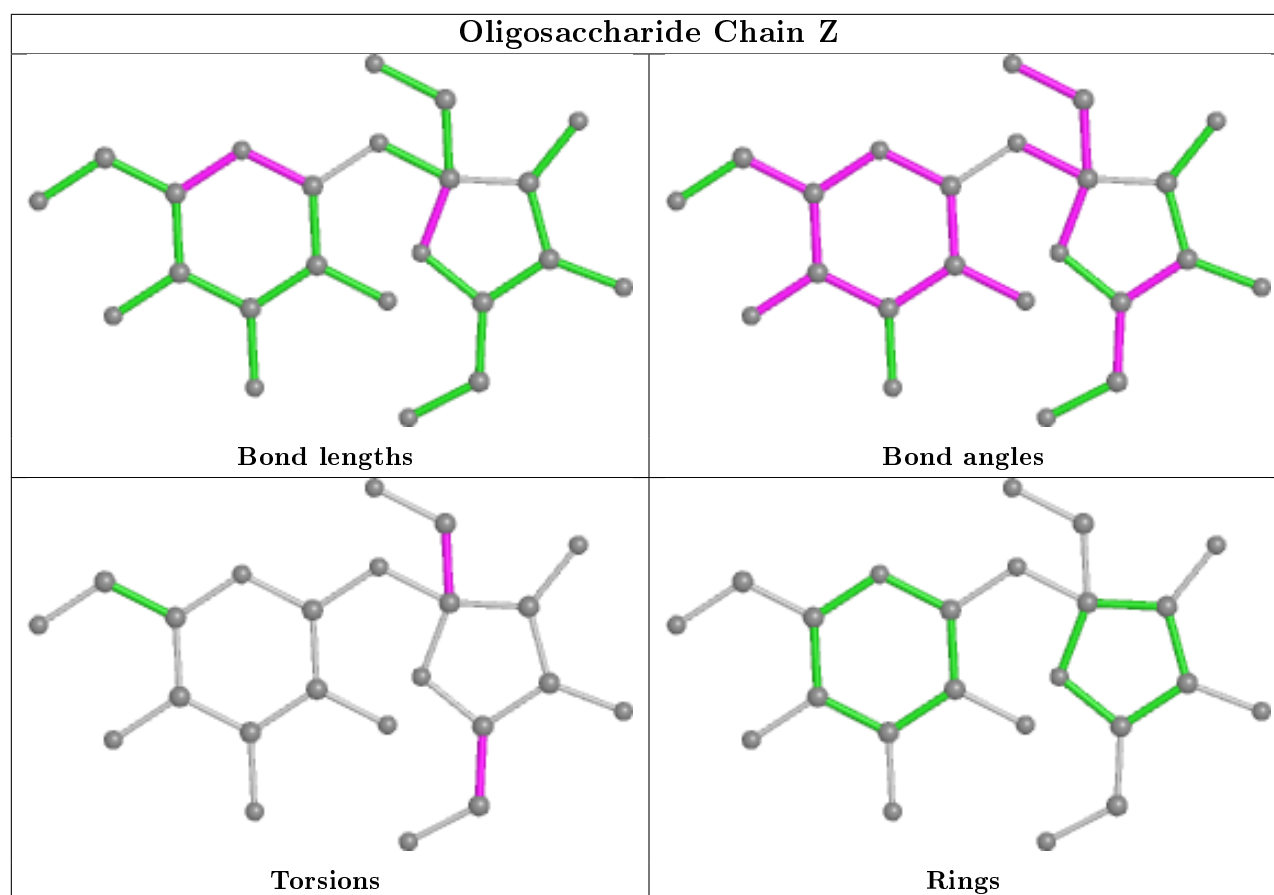
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for oligosaccharide.











## 5.6 Ligand geometry [i](#)

Of 243 ligands modelled in this entry, 1 is unknown - leaving 242 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	A	1760	-	49,63,73	2.30	10 (20%)	55,101,113	2.71	20 (36%)
20	CLA	A	1785	-	59,73,73	2.04	12 (20%)	67,113,113	3.48	26 (38%)
20	CLA	3	1218	-	59,73,73	2.30	15 (25%)	67,113,113	4.08	23 (34%)
20	CLA	4	1204	-	49,63,73	2.31	9 (18%)	55,101,113	3.33	19 (34%)
25	SF4	B	1784	5,6	0,12,12	0.00	-	-	-	-
20	CLA	J	1045	20	49,63,73	2.36	14 (28%)	55,101,113	3.42	22 (40%)
20	CLA	4	1201	-	46,60,73	2.94	21 (45%)	51,97,113	5.06	35 (68%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
20	CLA	1	1195	-	30,44,73	3.55	15 (50%)	35,78,113	5.35	16 (45%)
20	CLA	K	1142	-	36,53,73	2.42	11 (30%)	39,89,113	4.02	15 (38%)
20	CLA	3	1216	-	22,32,73	1.99	7 (31%)	26,54,113	2.96	16 (61%)
21	LMU	4	1210	-	36,36,36	0.86	1 (2%)	47,47,47	1.18	3 (6%)
20	CLA	L	1505	-	49,63,73	2.24	10 (20%)	55,101,113	3.57	18 (32%)
21	LMU	A	7040	-	36,36,36	0.97	3 (8%)	47,47,47	2.46	13 (27%)
22	BCR	B	1780	-	41,41,41	1.93	3 (7%)	56,56,56	5.92	21 (37%)
20	CLA	A	1778	5	36,50,73	2.51	10 (27%)	39,85,113	4.30	17 (43%)
20	CLA	A	1781	-	59,73,73	2.00	12 (20%)	67,113,113	3.20	18 (26%)
20	CLA	B	1753	-	59,73,73	2.74	20 (33%)	67,113,113	3.59	20 (29%)
20	CLA	A	1791	5	36,53,73	2.43	11 (30%)	39,89,113	4.04	15 (38%)
21	LMU	2	1225	-	36,36,36	0.89	1 (2%)	47,47,47	0.92	2 (4%)
20	CLA	B	1743	-	59,73,73	2.15	13 (22%)	67,113,113	3.35	21 (31%)
20	CLA	B	1742	-	49,63,73	2.13	12 (24%)	55,101,113	3.54	19 (34%)
20	CLA	B	1754	-	48,62,73	2.33	14 (29%)	53,99,113	2.90	24 (45%)
20	CLA	2	1218	20	59,73,73	2.06	9 (15%)	67,113,113	3.05	23 (34%)
20	CLA	4	1207	-	30,44,73	2.59	9 (30%)	35,78,113	4.65	18 (51%)
20	CLA	L	1168	-	44,58,73	2.54	15 (34%)	49,95,113	4.25	19 (38%)
20	CLA	F	1157	20	47,61,73	2.68	16 (34%)	52,98,113	3.58	22 (42%)
20	CLA	A	1776	-	59,73,73	2.02	10 (16%)	67,113,113	3.27	22 (32%)
20	CLA	A	1788	-	59,73,73	2.07	14 (23%)	67,113,113	3.29	19 (28%)
20	CLA	B	1758	-	59,73,73	2.10	14 (23%)	67,113,113	3.34	22 (32%)
20	CLA	B	1757	-	59,73,73	2.10	12 (20%)	67,113,113	3.73	23 (34%)
20	CLA	A	1812	-	59,73,73	2.11	14 (23%)	67,113,113	3.08	20 (29%)
21	LMU	A	7041	-	36,36,36	0.62	0	47,47,47	1.90	13 (27%)
20	CLA	A	1777	-	45,59,73	2.33	12 (26%)	50,96,113	3.56	20 (40%)
20	CLA	A	1764	5	59,73,73	2.06	11 (18%)	67,113,113	3.28	25 (37%)
20	CLA	4	1208	4	22,32,73	1.84	5 (22%)	26,54,113	2.60	15 (57%)
20	CLA	4	1203	-	22,32,73	1.94	6 (27%)	26,54,113	3.08	14 (53%)
20	CLA	A	1811	-	59,73,73	2.05	12 (20%)	67,113,113	3.61	22 (32%)
20	CLA	2	1227	-	22,32,73	2.35	12 (54%)	26,54,113	3.42	15 (57%)
22	BCR	A	1808	-	41,41,41	1.93	4 (9%)	56,56,56	5.91	21 (37%)
22	BCR	B	1774	-	41,41,41	1.95	4 (9%)	56,56,56	5.90	21 (37%)
20	CLA	B	1766	-	45,59,73	2.42	10 (22%)	50,96,113	3.87	19 (38%)
21	LMU	A	7038	-	36,36,36	0.65	0	47,47,47	2.41	15 (31%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
20	CLA	J	1046	-	22,32,73	1.90	8 (36%)	26,54,113	2.90	14 (53%)
20	CLA	R	1054	-	51,65,73	2.22	11 (21%)	57,103,113	3.85	22 (38%)
20	CLA	B	1750	-	44,58,73	2.31	11 (25%)	49,95,113	3.73	19 (38%)
20	CLA	A	1799	-	44,58,73	2.32	9 (20%)	49,95,113	3.82	19 (38%)
20	CLA	B	1751	-	40,54,73	2.44	9 (22%)	44,90,113	4.17	18 (40%)
20	CLA	A	1790	20	44,58,73	2.29	11 (25%)	49,95,113	3.51	19 (38%)
20	CLA	1	1197	-	45,59,73	2.99	20 (44%)	50,96,113	4.78	26 (52%)
20	CLA	B	1746	-	40,54,73	2.48	10 (25%)	44,90,113	3.74	16 (36%)
22	BCR	B	1778	-	41,41,41	1.94	3 (7%)	56,56,56	5.91	21 (37%)
20	CLA	3	1213	-	22,32,73	2.51	10 (45%)	26,54,113	3.63	16 (61%)
21	LMU	A	7036	-	35,35,36	1.21	5 (14%)	46,46,47	2.34	15 (32%)
20	CLA	B	1759	-	59,73,73	2.03	12 (20%)	67,113,113	3.14	20 (29%)
21	LMU	A	7021	-	36,36,36	0.76	0	47,47,47	2.07	14 (29%)
20	CLA	B	1737	-	59,73,73	1.99	11 (18%)	67,113,113	3.73	27 (40%)
21	LMU	A	7015	-	36,36,36	0.94	1 (2%)	47,47,47	1.35	7 (14%)
21	LMU	A	7019	-	36,36,36	1.03	1 (2%)	47,47,47	1.41	8 (17%)
20	CLA	A	1796	-	59,73,73	1.99	12 (20%)	67,113,113	3.19	18 (26%)
20	CLA	1	1191	-	30,44,73	2.78	9 (30%)	35,78,113	4.42	16 (45%)
20	CLA	B	1762	-	59,73,73	2.12	13 (22%)	67,113,113	3.34	23 (34%)
20	CLA	3	1212	-	30,44,73	2.59	8 (26%)	35,78,113	3.96	16 (45%)
20	CLA	A	1815	-	49,63,73	2.29	11 (22%)	55,101,113	4.18	24 (43%)
22	BCR	A	1805	-	41,41,41	1.94	4 (9%)	56,56,56	5.91	21 (37%)
20	CLA	A	1772	-	59,73,73	2.08	14 (23%)	67,113,113	3.26	25 (37%)
20	CLA	1	1193	-	45,59,73	2.47	13 (28%)	50,96,113	4.06	25 (50%)
22	BCR	L	1169	-	41,41,41	2.47	8 (19%)	56,56,56	5.72	20 (35%)
20	CLA	A	1759	-	44,58,73	2.27	10 (22%)	49,95,113	3.71	23 (46%)
20	CLA	2	1223	-	44,58,73	2.43	10 (22%)	49,95,113	4.30	18 (36%)
20	CLA	B	1786	-	59,73,73	2.03	12 (20%)	67,113,113	3.30	24 (35%)
22	BCR	B	1775	-	41,41,41	1.94	4 (9%)	56,56,56	5.90	21 (37%)
21	LMU	R	1057	-	36,36,36	1.16	2 (5%)	47,47,47	2.44	14 (29%)
20	CLA	1	1194	-	22,32,73	1.84	6 (27%)	26,54,113	3.12	18 (69%)
21	LMU	A	7039	-	36,36,36	0.99	2 (5%)	47,47,47	2.57	12 (25%)
20	CLA	2	1219	-	22,32,73	1.97	6 (27%)	26,54,113	3.15	15 (57%)
20	CLA	A	1783	-	59,73,73	2.02	11 (18%)	67,113,113	3.65	26 (38%)
20	CLA	4	1198	-	59,73,73	2.37	19 (32%)	67,113,113	4.03	31 (46%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
20	CLA	A	1797	-	59,73,73	1.99	12 (20%)	67,113,113	3.19	18 (26%)
20	CLA	3	3015	-	22,32,73	1.91	6 (27%)	26,54,113	2.88	14 (53%)
20	CLA	K	1085	21	44,58,73	2.31	12 (27%)	49,95,113	3.70	18 (36%)
20	CLA	A	1817	-	40,54,73	2.66	13 (32%)	48,90,113	5.59	29 (60%)
21	LMU	A	7032	-	36,36,36	0.99	3 (8%)	47,47,47	2.76	19 (40%)
22	BCR	B	1776	-	41,41,41	1.87	5 (12%)	56,56,56	5.04	24 (42%)
23	PQN	B	1773	-	34,34,34	1.66	2 (5%)	42,45,45	1.59	6 (14%)
20	CLA	A	1761	-	59,73,73	2.05	12 (20%)	67,113,113	3.08	21 (31%)
21	LMU	B	1782	-	26,26,36	1.04	1 (3%)	37,37,47	1.42	6 (16%)
20	CLA	2	1215	-	44,58,73	2.30	11 (25%)	49,95,113	3.72	19 (38%)
21	LMU	A	7024	-	36,36,36	0.97	2 (5%)	47,47,47	1.63	10 (21%)
22	BCR	I	1032	-	41,41,41	2.67	8 (19%)	56,56,56	6.54	28 (50%)
20	CLA	B	1771	-	59,73,73	1.95	10 (16%)	67,113,113	2.89	23 (34%)
20	CLA	A	1816	-	49,63,73	2.62	16 (32%)	55,101,113	4.49	25 (45%)
21	LMU	A	7035	-	36,36,36	0.84	1 (2%)	47,47,47	1.58	8 (17%)
21	LMU	A	7030	-	36,36,36	0.91	1 (2%)	47,47,47	2.29	15 (31%)
21	LMU	A	7022	-	36,36,36	0.70	0	47,47,47	2.16	16 (34%)
22	BCR	B	1777	-	41,41,41	1.95	4 (9%)	56,56,56	5.90	21 (37%)
20	CLA	A	1793	-	59,73,73	1.99	12 (20%)	67,113,113	3.19	18 (26%)
20	CLA	A	1798	-	49,63,73	2.25	10 (20%)	55,101,113	3.32	20 (36%)
20	CLA	1	1188	-	41,55,73	2.44	10 (24%)	45,91,113	3.49	20 (44%)
22	BCR	A	1806	-	41,41,41	1.94	3 (7%)	56,56,56	5.91	21 (37%)
20	CLA	3	3007	-	36,50,73	2.37	8 (22%)	39,85,113	4.18	18 (46%)
20	CLA	A	1774	-	59,73,73	2.00	11 (18%)	67,113,113	3.11	22 (32%)
20	CLA	B	1740	6	59,73,73	1.95	11 (18%)	67,113,113	3.47	20 (29%)
20	CLA	1	1200	-	45,59,73	2.73	17 (37%)	50,96,113	5.28	23 (46%)
21	LMU	A	7020	-	36,36,36	0.41	0	47,47,47	1.75	12 (25%)
20	CLA	1	1199	-	22,32,73	1.94	6 (27%)	26,54,113	3.23	17 (65%)
21	LMU	K	1086	20	36,36,36	0.75	0	47,47,47	2.27	12 (25%)
22	BCR	3	1220	-	41,41,41	2.06	5 (12%)	56,56,56	5.90	22 (39%)
20	CLA	A	1773	-	46,60,73	2.34	11 (23%)	51,97,113	3.83	19 (37%)
20	CLA	3	1219	-	59,73,73	1.99	12 (20%)	67,113,113	3.19	18 (26%)
20	CLA	J	1044	20	55,69,73	2.21	18 (32%)	62,108,113	3.55	28 (45%)
21	LMU	A	7047	-	36,36,36	1.11	1 (2%)	47,47,47	1.34	3 (6%)
20	CLA	4	1205	-	22,32,73	1.91	6 (27%)	26,54,113	3.13	17 (65%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
20	CLA	G	1099	-	45,59,73	2.37	11 (24%)	50,96,113	3.54	22 (44%)
20	CLA	2	1220	20	50,64,73	2.27	13 (26%)	56,102,113	3.95	22 (39%)
21	LMU	A	7037	-	36,36,36	0.90	2 (5%)	47,47,47	3.08	22 (46%)
20	CLA	A	1767	-	59,73,73	2.11	11 (18%)	67,113,113	3.05	24 (35%)
20	CLA	B	1769	-	41,55,73	2.35	12 (29%)	45,91,113	3.64	18 (40%)
20	CLA	B	1744	-	59,73,73	2.15	9 (15%)	67,113,113	2.62	22 (32%)
20	CLA	4	4003	-	22,32,73	1.90	8 (36%)	26,54,113	2.78	15 (57%)
20	CLA	1	1190	-	40,54,73	2.58	12 (30%)	44,90,113	2.61	18 (40%)
21	LMU	A	7034	20	36,36,36	0.85	1 (2%)	47,47,47	1.23	4 (8%)
21	LMU	A	7009	-	35,35,36	0.41	0	46,46,47	0.70	1 (2%)
22	BCR	A	1804	-	41,41,41	1.93	3 (7%)	56,56,56	5.91	21 (37%)
21	LMU	A	7031	-	36,36,36	1.09	1 (2%)	47,47,47	1.28	6 (12%)
20	CLA	3	3014	-	22,32,73	2.14	8 (36%)	26,54,113	3.47	17 (65%)
20	CLA	A	1813	-	59,73,73	2.20	12 (20%)	67,113,113	3.34	21 (31%)
20	CLA	A	1780	-	59,73,73	1.90	9 (15%)	67,113,113	2.58	21 (31%)
20	CLA	B	1767	-	54,68,73	2.06	10 (18%)	61,107,113	3.59	16 (26%)
20	CLA	L	1166	16	44,58,73	2.35	9 (20%)	49,95,113	3.69	17 (34%)
20	CLA	B	1787	-	59,73,73	2.13	12 (20%)	67,113,113	3.07	23 (34%)
21	LMU	1	1202	-	36,36,36	0.40	0	47,47,47	0.69	1 (2%)
20	CLA	B	1756	-	59,73,73	2.00	12 (20%)	67,113,113	3.19	18 (26%)
20	CLA	3	1215	-	22,32,73	1.95	7 (31%)	26,54,113	3.27	17 (65%)
21	LMU	2	7003	-	36,36,36	0.39	0	47,47,47	0.69	1 (2%)
20	CLA	2	1212	-	45,59,73	2.27	12 (26%)	50,96,113	3.67	18 (36%)
20	CLA	B	1772	-	30,44,73	2.73	11 (36%)	35,78,113	4.36	19 (54%)
20	CLA	1	1189	-	41,55,73	2.44	10 (24%)	45,91,113	4.29	19 (42%)
20	CLA	B	1738	-	59,73,73	2.12	15 (25%)	67,113,113	3.31	30 (44%)
22	BCR	A	1807	-	41,41,41	1.94	3 (7%)	56,56,56	5.91	21 (37%)
21	LMU	A	7033	-	36,36,36	1.02	2 (5%)	47,47,47	2.25	13 (27%)
23	PQN	A	1802	-	34,34,34	1.77	3 (8%)	42,45,45	1.49	6 (14%)
20	CLA	2	1217	-	59,73,73	2.11	11 (18%)	67,113,113	3.44	20 (29%)
21	LMU	L	1171	-	36,36,36	0.99	3 (8%)	47,47,47	1.48	8 (17%)
20	CLA	F	1156	20	35,49,73	2.53	12 (34%)	38,84,113	4.10	15 (39%)
20	CLA	A	1800	-	59,73,73	2.03	11 (18%)	67,113,113	3.58	22 (32%)
20	CLA	A	1768	-	48,62,73	2.17	10 (20%)	53,99,113	3.38	16 (30%)
21	LMU	A	7017	-	36,36,36	0.70	2 (5%)	47,47,47	2.40	15 (31%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
21	LMU	3	7005	-	36,36,36	0.41	0	47,47,47	0.68	1 (2%)
21	LMU	A	1809	-	36,36,36	0.94	0	47,47,47	1.38	7 (14%)
20	CLA	I	1033	-	49,63,73	2.27	9 (18%)	55,101,113	3.85	21 (38%)
21	LMU	A	7042	-	36,36,36	0.48	0	47,47,47	2.05	16 (34%)
20	CLA	B	1770	-	59,73,73	2.06	12 (20%)	67,113,113	2.95	24 (35%)
20	CLA	1	1187	1	40,54,73	2.77	16 (40%)	44,90,113	4.86	26 (59%)
21	LMU	A	7010	-	36,36,36	0.40	0	47,47,47	0.70	1 (2%)
20	CLA	A	1784	-	49,63,73	2.28	11 (22%)	55,101,113	3.44	20 (36%)
20	CLA	2	1213	-	50,64,73	2.22	11 (22%)	56,102,113	3.24	24 (42%)
20	CLA	4	1199	-	49,63,73	2.18	10 (20%)	55,101,113	3.24	20 (36%)
20	CLA	J	1043	-	55,69,73	2.06	12 (21%)	62,108,113	3.31	18 (29%)
20	CLA	4	1209	-	40,54,73	2.67	16 (40%)	44,90,113	3.43	19 (43%)
20	CLA	A	1771	-	44,58,73	2.41	10 (22%)	49,95,113	3.46	21 (42%)
20	CLA	2	1216	-	22,32,73	1.97	9 (40%)	26,54,113	3.39	14 (53%)
20	CLA	B	1763	-	44,58,73	2.48	14 (31%)	49,95,113	4.01	22 (44%)
20	CLA	A	1792	-	45,59,73	2.29	12 (26%)	50,96,113	3.67	18 (36%)
20	CLA	1	1192	-	55,69,73	2.19	11 (20%)	62,108,113	3.10	22 (35%)
22	BCR	A	1803	-	41,41,41	1.93	4 (9%)	56,56,56	5.91	20 (35%)
21	LMU	2	7006	-	36,36,36	0.39	0	47,47,47	0.69	1 (2%)
20	CLA	A	1782	20	59,73,73	1.99	12 (20%)	67,113,113	3.18	18 (26%)
20	CLA	2	1214	-	22,32,73	1.96	8 (36%)	26,54,113	3.17	15 (57%)
20	CLA	A	1762	-	51,65,73	2.22	11 (21%)	57,103,113	3.54	21 (36%)
20	CLA	R	1055	-	59,73,73	2.22	11 (18%)	67,113,113	2.93	24 (35%)
20	CLA	4	1206	-	22,32,73	1.92	4 (18%)	26,54,113	3.19	16 (61%)
20	CLA	A	1794	-	41,55,73	2.39	12 (29%)	45,91,113	3.79	16 (35%)
25	SF4	C	1082	7	0,12,12	0.00	-	-	-	-
20	CLA	B	1761	-	44,58,73	2.28	10 (22%)	49,95,113	3.48	20 (40%)
20	CLA	B	1739	-	59,73,73	2.14	11 (18%)	67,113,113	3.17	23 (34%)
20	CLA	2	1222	2	44,58,73	2.38	10 (22%)	49,95,113	3.71	19 (38%)
20	CLA	1	1198	-	55,69,73	2.14	14 (25%)	62,108,113	3.43	25 (40%)
20	CLA	A	1779	-	49,63,73	2.25	11 (22%)	55,101,113	3.58	21 (38%)
20	CLA	4	1197	-	30,44,73	2.96	12 (40%)	35,78,113	4.85	18 (51%)
20	CLA	F	1155	-	30,44,73	2.56	8 (26%)	35,78,113	3.83	21 (60%)
20	CLA	B	1736	-	36,53,73	2.42	10 (27%)	39,89,113	3.84	16 (41%)
20	CLA	A	1765	-	49,63,73	2.11	10 (20%)	55,101,113	3.34	23 (41%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
20	CLA	A	1801	-	49,63,73	2.39	9 (18%)	55,101,113	3.02	20 (36%)
20	CLA	B	1748	-	54,68,73	2.02	12 (22%)	61,107,113	3.71	22 (36%)
20	CLA	4	1200	-	44,58,73	2.47	11 (25%)	49,95,113	3.94	17 (34%)
21	LMU	A	7043	19	36,36,36	0.76	0	47,47,47	2.25	17 (36%)
20	CLA	A	1795	-	45,59,73	2.28	12 (26%)	50,96,113	3.66	18 (36%)
20	CLA	L	1167	22	41,55,73	2.36	10 (24%)	45,91,113	4.05	25 (55%)
21	LMU	R	1056	-	36,36,36	0.39	0	47,47,47	0.69	1 (2%)
20	CLA	2	1224	-	59,73,73	2.08	12 (20%)	67,113,113	3.88	22 (32%)
20	CLA	B	1785	-	59,73,73	2.00	12 (20%)	67,113,113	3.43	26 (38%)
20	CLA	B	1768	-	59,73,73	1.95	11 (18%)	67,113,113	2.89	17 (25%)
20	CLA	4	1196	-	49,63,73	2.19	12 (24%)	55,101,113	3.50	18 (32%)
21	LMU	A	7026	19	36,36,36	1.23	3 (8%)	47,47,47	3.10	22 (46%)
21	LMU	A	7023	-	36,36,36	0.68	1 (2%)	47,47,47	1.97	17 (36%)
20	CLA	4	4007	-	46,60,73	2.37	11 (23%)	51,97,113	3.64	19 (37%)
22	BCR	B	1781	-	41,41,41	2.68	17 (41%)	56,56,56	5.37	31 (55%)
21	LMU	A	1810	-	36,36,36	0.94	1 (2%)	47,47,47	1.65	10 (21%)
21	LMU	A	7025	-	36,36,36	0.96	1 (2%)	47,47,47	1.58	10 (21%)
20	CLA	B	1741	-	48,62,73	2.44	10 (20%)	58,100,113	3.43	24 (41%)
20	CLA	3	1214	-	22,32,73	1.99	7 (31%)	26,54,113	3.26	17 (65%)
20	CLA	1	1196	1	30,44,73	2.65	8 (26%)	35,78,113	4.03	14 (40%)
24	LMG	B	1783	-	49,49,55	0.95	2 (4%)	57,57,63	1.01	3 (5%)
20	CLA	1	1201	-	22,32,73	2.34	7 (31%)	26,54,113	3.75	15 (57%)
20	CLA	2	1221	-	22,32,73	1.93	5 (22%)	26,54,113	3.11	17 (65%)
22	BCR	L	1170	20	41,41,41	3.29	19 (46%)	56,56,56	6.44	27 (48%)
22	BCR	B	1779	-	41,41,41	2.79	13 (31%)	56,56,56	6.08	31 (55%)
20	CLA	B	1765	20	36,53,73	2.52	10 (27%)	39,89,113	4.02	16 (41%)
20	CLA	A	1787	-	59,73,73	2.08	10 (16%)	67,113,113	2.68	22 (32%)
20	CLA	B	1764	20	36,53,73	2.68	10 (27%)	39,89,113	4.15	17 (43%)
20	CLA	B	1755	-	52,66,73	2.12	12 (23%)	58,104,113	3.42	18 (31%)
20	CLA	B	1735	-	59,73,73	1.99	12 (20%)	67,113,113	3.19	18 (26%)
21	LMU	1	7004	-	36,36,36	0.40	0	47,47,47	0.69	1 (2%)
25	SF4	C	1083	7	0,12,12	0.00	-	-	-	-
20	CLA	K	3009	-	59,73,73	2.07	10 (16%)	67,113,113	2.91	21 (31%)
20	CLA	3	3008	-	44,58,73	2.32	13 (29%)	49,95,113	4.09	22 (44%)
21	LMU	A	7028	-	36,36,36	0.74	2 (5%)	47,47,47	1.89	17 (36%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
20	CLA	A	1786	-	44,58,73	2.31	10 (22%)	49,95,113	3.83	23 (46%)
20	CLA	A	1789	-	59,73,73	2.04	11 (18%)	67,113,113	3.23	26 (38%)
21	LMU	A	7013	-	36,36,36	0.45	0	47,47,47	1.62	9 (19%)
20	CLA	2	2010	-	22,32,73	2.02	7 (31%)	26,54,113	2.76	13 (50%)
21	LMU	A	7027	-	36,36,36	1.12	1 (2%)	47,47,47	1.91	14 (29%)
20	CLA	4	4014	21	41,55,73	2.40	12 (29%)	45,91,113	3.75	16 (35%)
20	CLA	3	3002	-	22,32,73	1.97	6 (27%)	26,54,113	2.92	14 (53%)
20	CLA	I	1031	-	54,68,73	2.10	11 (20%)	61,107,113	3.70	19 (31%)
20	CLA	3	1217	-	22,32,73	2.11	8 (36%)	26,54,113	3.48	15 (57%)
20	CLA	H	1079	-	59,73,73	2.05	11 (18%)	67,113,113	3.38	22 (32%)
20	CLA	B	1752	-	49,63,73	2.34	13 (26%)	55,101,113	3.51	18 (32%)
20	CLA	3	3011	-	59,73,73	1.95	10 (16%)	67,113,113	2.60	22 (32%)
20	CLA	B	1749	-	55,69,73	2.01	10 (18%)	62,108,113	3.57	23 (37%)
20	CLA	B	1745	-	54,68,73	2.10	10 (18%)	61,107,113	2.93	19 (31%)
20	CLA	A	1770	-	36,53,73	2.56	9 (25%)	39,89,113	3.74	15 (38%)
20	CLA	A	1775	-	30,44,73	2.63	8 (26%)	35,78,113	4.47	15 (42%)
20	CLA	K	1146	-	44,58,73	2.60	15 (34%)	49,95,113	4.07	22 (44%)
20	CLA	A	1766	-	36,53,73	2.53	10 (27%)	39,89,113	4.28	18 (46%)
21	LMU	A	7016	-	36,36,36	0.63	1 (2%)	47,47,47	1.89	11 (23%)
20	CLA	A	1769	-	48,62,73	2.07	10 (20%)	53,99,113	3.45	21 (39%)
20	CLA	A	1763	-	40,54,73	2.34	9 (22%)	44,90,113	4.31	19 (43%)
20	CLA	3	3001	-	22,32,73	1.99	6 (27%)	26,54,113	3.24	15 (57%)
20	CLA	4	1202	-	22,32,73	1.93	6 (27%)	26,54,113	3.24	17 (65%)
20	CLA	B	1747	-	53,67,73	2.18	11 (20%)	59,105,113	2.66	22 (37%)
20	CLA	B	1760	-	44,58,73	2.42	9 (20%)	49,95,113	3.42	20 (40%)

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	A	1760	-	4/4/18/25	12/25/123/135	-
20	CLA	A	1785	-	4/4/20/25	18/37/135/135	-
20	CLA	3	1218	-	4/4/20/25	19/37/135/135	-
21	LMU	A	7009	-	-	15/20/60/61	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	CLA	4	1204	-	4/4/18/25	13/25/123/135	-
25	SF4	B	1784	5,6	-	-	0/6/5/5
20	CLA	J	1045	20	4/4/18/25	15/25/123/135	-
20	CLA	4	1201	-	4/4/17/25	7/22/120/135	-
20	CLA	1	1195	-	3/3/14/25	-	-
20	CLA	K	1142	-	3/3/16/25	5/11/111/135	-
20	CLA	3	1216	-	3/3/7/25	-	-
21	LMU	4	1210	-	-	13/21/61/61	0/2/2/2
20	CLA	L	1505	-	4/4/18/25	14/25/123/135	-
21	LMU	A	7040	-	-	11/21/61/61	0/2/2/2
22	BCR	B	1780	-	-	14/29/63/63	0/2/2/2
20	CLA	A	1778	5	3/3/15/25	2/10/108/135	-
21	LMU	A	7027	-	-	13/21/61/61	0/2/2/2
20	CLA	A	1781	-	4/4/20/25	17/37/135/135	-
20	CLA	B	1753	-	3/3/20/25	19/37/135/135	-
20	CLA	A	1791	5	3/3/16/25	5/11/111/135	-
22	BCR	I	1032	-	-	13/29/63/63	0/2/2/2
21	LMU	2	1225	-	-	16/21/61/61	0/2/2/2
20	CLA	B	1743	-	4/4/20/25	22/37/135/135	-
20	CLA	B	1742	-	4/4/18/25	12/25/123/135	-
20	CLA	B	1754	-	3/3/17/25	8/24/122/135	-
20	CLA	2	1218	20	4/4/20/25	15/37/135/135	-
20	CLA	4	1207	-	3/3/14/25	-	-
20	CLA	L	1168	-	4/4/17/25	10/19/117/135	-
20	CLA	4	1205	-	3/3/7/25	-	-
20	CLA	A	1776	-	4/4/20/25	16/37/135/135	-
20	CLA	A	1788	-	4/4/20/25	21/37/135/135	-
20	CLA	B	1758	-	4/4/20/25	16/37/135/135	-
20	CLA	B	1757	-	4/4/20/25	16/37/135/135	-
20	CLA	A	1812	-	4/4/20/25	18/37/135/135	-
21	LMU	A	7041	-	-	12/21/61/61	0/2/2/2
20	CLA	A	1777	-	3/3/17/25	9/21/119/135	-
20	CLA	A	1764	5	4/4/20/25	21/37/135/135	-
20	CLA	4	1208	4	3/3/7/25	-	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	CLA	4	1203	-	3/3/7/25	-	-
20	CLA	A	1811	-	4/4/20/25	25/37/135/135	-
20	CLA	2	1227	-	3/3/7/25	-	-
22	BCR	A	1808	-	-	12/29/63/63	0/2/2/2
22	BCR	B	1774	-	-	10/29/63/63	0/2/2/2
20	CLA	B	1766	-	3/3/17/25	9/21/119/135	-
21	LMU	A	7038	-	-	16/21/61/61	0/2/2/2
20	CLA	J	1046	-	3/3/7/25	-	-
20	CLA	R	1054	-	4/4/18/25	13/28/126/135	-
20	CLA	B	1750	-	3/3/17/25	6/19/117/135	-
20	CLA	A	1799	-	3/3/17/25	10/19/117/135	-
20	CLA	B	1751	-	3/3/16/25	13/15/113/135	-
20	CLA	A	1790	20	3/3/17/25	12/19/117/135	-
20	CLA	1	1197	-	4/4/17/25	9/21/119/135	-
20	CLA	B	1746	-	3/3/16/25	9/15/113/135	-
22	BCR	B	1778	-	-	12/29/63/63	0/2/2/2
20	CLA	3	1213	-	3/3/7/25	-	-
21	LMU	A	7036	-	-	14/20/60/61	0/2/2/2
21	LMU	A	7021	-	-	13/21/61/61	0/2/2/2
20	CLA	B	1737	-	4/4/20/25	22/37/135/135	-
21	LMU	A	7015	-	-	14/21/61/61	0/2/2/2
21	LMU	A	7019	-	-	15/21/61/61	0/2/2/2
20	CLA	A	1796	-	4/4/20/25	18/37/135/135	-
20	CLA	1	1191	-	3/3/14/25	-	-
20	CLA	B	1762	-	4/4/20/25	20/37/135/135	-
20	CLA	3	1212	-	3/3/14/25	-	-
22	BCR	A	1803	-	-	12/29/63/63	0/2/2/2
22	BCR	A	1805	-	-	17/29/63/63	0/2/2/2
20	CLA	A	1772	-	4/4/20/25	17/37/135/135	-
20	CLA	1	1193	-	4/4/17/25	9/21/119/135	-
22	BCR	L	1169	-	-	12/29/63/63	0/2/2/2
20	CLA	K	3009	-	4/4/20/25	21/37/135/135	-
20	CLA	2	1223	-	3/3/17/25	11/19/117/135	-
20	CLA	B	1786	-	4/4/20/25	15/37/135/135	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	BCR	B	1775	-	-	8/29/63/63	0/2/2/2
21	LMU	R	1057	-	1/1/10/10	11/21/61/61	0/2/2/2
20	CLA	1	1194	-	3/3/7/25	-	-
21	LMU	A	7039	-	-	15/21/61/61	0/2/2/2
20	CLA	2	1219	-	3/3/7/25	-	-
20	CLA	A	1783	-	4/4/20/25	16/37/135/135	-
20	CLA	4	1198	-	5/5/20/25	20/37/135/135	-
20	CLA	A	1797	-	4/4/20/25	19/37/135/135	-
20	CLA	3	3015	-	3/3/7/25	-	-
20	CLA	K	1085	21	3/3/17/25	5/19/117/135	-
20	CLA	A	1817	-	5/5/16/25	12/16/112/135	-
21	LMU	A	7032	-	-	13/21/61/61	0/2/2/2
22	BCR	B	1776	-	-	11/29/63/63	0/2/2/2
23	PQN	B	1773	-	1/1/8/9	10/23/43/43	0/2/2/2
20	CLA	A	1761	-	4/4/20/25	22/37/135/135	-
21	LMU	B	1782	-	-	4/11/51/61	0/2/2/2
20	CLA	2	1215	-	3/3/17/25	9/19/117/135	-
21	LMU	A	7024	-	-	15/21/61/61	0/2/2/2
20	CLA	1	1200	-	5/5/17/25	12/21/119/135	-
20	CLA	B	1771	-	4/4/20/25	18/37/135/135	-
20	CLA	A	1816	-	5/5/18/25	12/25/123/135	-
21	LMU	A	7035	-	-	14/21/61/61	0/2/2/2
21	LMU	A	7030	-	-	16/21/61/61	0/2/2/2
21	LMU	A	7022	-	-	17/21/61/61	0/2/2/2
22	BCR	B	1777	-	-	15/29/63/63	0/2/2/2
21	LMU	A	7020	-	-	11/21/61/61	0/2/2/2
20	CLA	A	1793	-	4/4/20/25	16/37/135/135	-
20	CLA	A	1798	-	4/4/18/25	6/25/123/135	-
20	CLA	1	1188	-	3/3/16/25	8/16/114/135	-
22	BCR	A	1806	-	-	15/29/63/63	0/2/2/2
20	CLA	A	1774	-	4/4/20/25	19/37/135/135	-
20	CLA	B	1740	6	4/4/20/25	19/37/135/135	-
21	LMU	A	7025	-	-	13/21/61/61	0/2/2/2
20	CLA	B	1759	-	4/4/20/25	27/37/135/135	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	CLA	B	1749	-	4/4/19/25	17/33/131/135	-
20	CLA	1	1199	-	3/3/7/25	-	-
21	LMU	K	1086	20	-	12/21/61/61	0/2/2/2
22	BCR	3	1220	-	-	13/29/63/63	0/2/2/2
20	CLA	A	1773	-	3/3/17/25	14/22/120/135	-
20	CLA	3	1219	-	4/4/20/25	21/37/135/135	-
20	CLA	J	1044	20	4/4/19/25	21/33/131/135	-
21	LMU	A	7047	-	-	8/21/61/61	0/2/2/2
20	CLA	F	1157	20	6/6/17/25	9/23/121/135	-
20	CLA	G	1099	-	3/3/17/25	10/21/119/135	-
20	CLA	2	1220	20	4/4/18/25	14/27/125/135	-
21	LMU	A	7037	-	-	14/21/61/61	0/2/2/2
20	CLA	A	1767	-	4/4/20/25	25/37/135/135	-
20	CLA	B	1769	-	3/3/16/25	6/16/114/135	-
20	CLA	B	1744	-	4/4/20/25	24/37/135/135	-
20	CLA	4	4003	-	3/3/7/25	-	-
20	CLA	1	1190	-	3/3/16/25	6/15/113/135	-
21	LMU	A	7034	20	-	14/21/61/61	0/2/2/2
20	CLA	3	3007	-	3/3/15/25	5/10/108/135	-
22	BCR	A	1804	-	-	13/29/63/63	0/2/2/2
21	LMU	A	7031	-	-	13/21/61/61	0/2/2/2
20	CLA	3	3014	-	3/3/7/25	-	-
20	CLA	A	1813	-	4/4/20/25	24/37/135/135	-
20	CLA	A	1780	-	4/4/20/25	20/37/135/135	-
20	CLA	B	1767	-	4/4/19/25	15/31/129/135	-
20	CLA	L	1166	16	3/3/17/25	8/19/117/135	-
20	CLA	B	1787	-	4/4/20/25	18/37/135/135	-
21	LMU	1	1202	-	-	13/21/61/61	0/2/2/2
20	CLA	B	1756	-	4/4/20/25	21/37/135/135	-
20	CLA	3	1215	-	3/3/7/25	-	-
21	LMU	2	7003	-	-	11/21/61/61	0/2/2/2
20	CLA	2	1212	-	3/3/17/25	11/21/119/135	-
20	CLA	B	1772	-	3/3/14/25	-	-
20	CLA	1	1189	-	3/3/16/25	8/16/114/135	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	CLA	B	1738	-	4/4/20/25	17/37/135/135	-
22	BCR	A	1807	-	-	10/29/63/63	0/2/2/2
21	LMU	A	7033	-	-	13/21/61/61	0/2/2/2
23	PQN	A	1802	-	1/1/8/9	11/23/43/43	0/2/2/2
20	CLA	2	1217	-	4/4/20/25	17/37/135/135	-
21	LMU	L	1171	-	-	14/21/61/61	0/2/2/2
20	CLA	F	1156	20	3/3/15/25	5/8/106/135	-
20	CLA	A	1800	-	4/4/20/25	16/37/135/135	-
20	CLA	A	1768	-	3/3/17/25	13/24/122/135	-
21	LMU	A	7017	-	-	14/21/61/61	0/2/2/2
21	LMU	3	7005	-	-	18/21/61/61	0/2/2/2
21	LMU	A	1809	-	-	16/21/61/61	0/2/2/2
20	CLA	I	1033	-	4/4/18/25	9/25/123/135	-
21	LMU	A	7042	-	-	18/21/61/61	0/2/2/2
20	CLA	B	1770	-	4/4/20/25	20/37/135/135	-
20	CLA	1	1187	1	3/3/16/25	10/15/113/135	-
21	LMU	A	7010	-	-	19/21/61/61	0/2/2/2
20	CLA	A	1784	-	4/4/18/25	10/25/123/135	-
20	CLA	2	1213	-	4/4/18/25	11/27/125/135	-
20	CLA	4	1199	-	4/4/18/25	12/25/123/135	-
20	CLA	J	1043	-	4/4/19/25	24/33/131/135	-
20	CLA	4	1209	-	3/3/16/25	10/15/113/135	-
20	CLA	A	1771	-	3/3/17/25	11/19/117/135	-
20	CLA	2	1216	-	3/3/7/25	-	-
20	CLA	B	1763	-	3/3/17/25	6/19/117/135	-
20	CLA	A	1792	-	3/3/17/25	11/21/119/135	-
20	CLA	1	1192	-	4/4/19/25	20/33/131/135	-
20	CLA	A	1815	-	5/5/18/25	12/25/123/135	-
20	CLA	A	1782	20	4/4/20/25	23/37/135/135	-
20	CLA	2	1214	-	3/3/7/25	-	-
20	CLA	A	1762	-	4/4/18/25	7/28/126/135	-
20	CLA	R	1055	-	4/4/20/25	20/37/135/135	-
20	CLA	4	1206	-	3/3/7/25	-	-
20	CLA	A	1794	-	3/3/16/25	8/16/114/135	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	SF4	C	1082	7	-	-	0/6/5/5
20	CLA	B	1761	-	3/3/17/25	12/19/117/135	-
20	CLA	B	1739	-	4/4/20/25	9/37/135/135	-
20	CLA	2	1222	2	3/3/17/25	7/19/117/135	-
20	CLA	1	1198	-	4/4/19/25	16/33/131/135	-
20	CLA	A	1779	-	4/4/18/25	9/25/123/135	-
20	CLA	4	1197	-	3/3/14/25	-	-
20	CLA	F	1155	-	3/3/14/25	-	-
20	CLA	B	1736	-	3/3/16/25	6/11/111/135	-
20	CLA	A	1765	-	4/4/18/25	11/25/123/135	-
20	CLA	A	1801	-	4/4/18/25	7/25/123/135	-
20	CLA	B	1748	-	4/4/19/25	13/31/129/135	-
20	CLA	4	1200	-	3/3/17/25	6/19/117/135	-
20	CLA	A	1795	-	3/3/17/25	11/21/119/135	-
20	CLA	L	1167	22	3/3/16/25	9/16/114/135	-
21	LMU	R	1056	-	-	16/21/61/61	0/2/2/2
20	CLA	2	1224	-	4/4/20/25	17/37/135/135	-
20	CLA	B	1785	-	4/4/20/25	21/37/135/135	-
20	CLA	B	1768	-	4/4/20/25	16/37/135/135	-
20	CLA	4	1196	-	4/4/18/25	14/25/123/135	-
21	LMU	A	7026	19	-	14/21/61/61	0/2/2/2
21	LMU	A	7023	-	-	14/21/61/61	0/2/2/2
20	CLA	4	4007	-	3/3/17/25	8/22/120/135	-
22	BCR	B	1781	-	-	7/29/63/63	0/2/2/2
21	LMU	A	1810	-	-	13/21/61/61	0/2/2/2
20	CLA	I	1031	-	4/4/19/25	13/31/129/135	-
20	CLA	B	1741	-	4/4/18/25	11/25/121/135	-
20	CLA	3	1214	-	3/3/7/25	-	-
20	CLA	1	1196	1	3/3/14/25	-	-
24	LMG	B	1783	-	-	23/44/64/70	0/1/1/1
20	CLA	1	1201	-	3/3/7/25	-	-
20	CLA	2	1221	-	3/3/7/25	-	-
22	BCR	L	1170	20	-	12/29/63/63	0/2/2/2
22	BCR	B	1779	-	-	12/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
20	CLA	B	1765	20	3/3/16/25	6/11/111/135	-
20	CLA	A	1787	-	4/4/20/25	15/37/135/135	-
20	CLA	B	1764	20	3/3/16/25	9/11/111/135	-
20	CLA	B	1755	-	4/4/18/25	17/29/127/135	-
20	CLA	B	1735	-	4/4/20/25	23/37/135/135	-
21	LMU	1	7004	-	-	13/21/61/61	0/2/2/2
25	SF4	C	1083	7	-	-	0/6/5/5
20	CLA	A	1759	-	3/3/17/25	5/19/117/135	-
20	CLA	3	3008	-	3/3/17/25	6/19/117/135	-
21	LMU	A	7028	-	-	14/21/61/61	0/2/2/2
20	CLA	A	1786	-	3/3/17/25	3/19/117/135	-
20	CLA	A	1789	-	4/4/20/25	22/37/135/135	-
21	LMU	A	7013	-	-	10/21/61/61	0/2/2/2
20	CLA	2	2010	-	3/3/7/25	-	-
21	LMU	A	7043	19	-	11/21/61/61	0/2/2/2
20	CLA	4	4014	21	3/3/16/25	9/16/114/135	-
20	CLA	3	3002	-	3/3/7/25	-	-
20	CLA	3	1217	-	3/3/7/25	-	-
20	CLA	H	1079	-	4/4/20/25	19/37/135/135	-
20	CLA	B	1752	-	4/4/18/25	8/25/123/135	-
20	CLA	3	3011	-	4/4/20/25	20/37/135/135	-
21	LMU	2	7006	-	-	14/21/61/61	0/2/2/2
20	CLA	B	1745	-	4/4/19/25	14/31/129/135	-
20	CLA	A	1770	-	3/3/16/25	7/11/111/135	-
20	CLA	A	1775	-	3/3/14/25	-	-
20	CLA	K	1146	-	3/3/17/25	9/19/117/135	-
20	CLA	A	1766	-	3/3/16/25	3/11/111/135	-
21	LMU	A	7016	-	-	11/21/61/61	0/2/2/2
20	CLA	A	1769	-	3/3/17/25	10/24/122/135	-
20	CLA	A	1763	-	3/3/16/25	7/15/113/135	-
20	CLA	3	3001	-	3/3/7/25	-	-
20	CLA	4	1202	-	3/3/7/25	-	-
20	CLA	B	1747	-	4/4/18/25	12/30/128/135	-
20	CLA	B	1760	-	3/3/17/25	9/19/117/135	-

The worst 5 of 2056 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	L	1170	BCR	C21-C22	-11.03	1.21	1.35
20	1	1195	CLA	CAB-C3B	-10.23	1.30	1.51
22	B	1781	BCR	C21-C22	-10.00	1.22	1.35
22	L	1170	BCR	C20-C21	-9.90	1.12	1.43
22	B	1779	BCR	C21-C22	-9.40	1.23	1.35

The worst 5 of 4312 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	B	1780	BCR	C20-C21-C22	36.92	179.99	127.31
22	A	1808	BCR	C20-C21-C22	36.90	179.97	127.31
22	A	1805	BCR	C20-C21-C22	36.89	179.95	127.31
22	A	1806	BCR	C20-C21-C22	36.88	179.95	127.31
22	A	1804	BCR	C20-C21-C22	36.87	179.93	127.31

5 of 617 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
20	A	1760	CLA	C8
20	A	1760	CLA	NC
20	A	1760	CLA	ND
20	A	1760	CLA	NA
20	A	1785	CLA	C8

5 of 2717 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
20	A	1760	CLA	C3A-C2A-CAA-CBA
20	A	1760	CLA	CBA-CGA-O2A-C1
20	A	1760	CLA	O1A-CGA-O2A-C1
20	A	1785	CLA	C1A-C2A-CAA-CBA
20	A	1785	CLA	C3A-C2A-CAA-CBA

There are no ring outliers.

222 monomers are involved in 3478 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	A	1760	CLA	29	0
20	A	1785	CLA	17	0
20	3	1218	CLA	25	0
20	4	1204	CLA	8	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
25	B	1784	SF4	18	0
20	J	1045	CLA	45	0
20	4	1201	CLA	25	0
20	1	1195	CLA	4	0
20	K	1142	CLA	20	2
20	3	1216	CLA	7	0
20	L	1505	CLA	3	0
21	A	7040	LMU	4	0
22	B	1780	BCR	53	0
20	A	1778	CLA	11	0
20	A	1781	CLA	85	0
20	B	1753	CLA	40	0
20	A	1791	CLA	24	1
21	2	1225	LMU	1	1
20	B	1743	CLA	29	0
20	B	1742	CLA	9	0
20	B	1754	CLA	23	0
20	2	1218	CLA	7	0
20	4	1207	CLA	5	0
20	L	1168	CLA	12	0
20	F	1157	CLA	13	0
20	A	1776	CLA	47	0
20	A	1788	CLA	40	0
20	B	1758	CLA	34	0
20	B	1757	CLA	21	0
20	A	1812	CLA	35	0
21	A	7041	LMU	9	0
20	A	1777	CLA	13	0
20	A	1764	CLA	26	0
20	4	1208	CLA	8	0
20	A	1811	CLA	20	0
22	A	1808	BCR	43	0
22	B	1774	BCR	8	0
20	B	1766	CLA	3	0
21	A	7038	LMU	13	0
20	R	1054	CLA	11	0
20	B	1750	CLA	9	0
20	A	1799	CLA	7	0
20	B	1751	CLA	16	0
20	A	1790	CLA	16	0
20	1	1197	CLA	20	0
20	B	1746	CLA	23	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
22	B	1778	BCR	30	0
20	3	1213	CLA	1	0
21	A	7036	LMU	19	0
20	B	1759	CLA	34	0
21	A	7021	LMU	24	0
20	B	1737	CLA	24	0
21	A	7019	LMU	2	0
20	A	1796	CLA	63	0
20	1	1191	CLA	10	0
20	B	1762	CLA	28	0
20	3	1212	CLA	9	0
20	A	1815	CLA	19	0
22	A	1805	BCR	48	0
20	A	1772	CLA	35	0
20	1	1193	CLA	6	2
22	L	1169	BCR	48	0
20	A	1759	CLA	20	0
20	2	1223	CLA	4	0
20	B	1786	CLA	43	0
22	B	1775	BCR	20	0
21	R	1057	LMU	5	0
20	1	1194	CLA	5	0
21	A	7039	LMU	19	0
20	A	1783	CLA	61	0
20	4	1198	CLA	25	0
20	A	1797	CLA	35	0
20	K	1085	CLA	26	0
20	A	1817	CLA	9	0
21	A	7032	LMU	28	0
22	B	1776	BCR	20	0
23	B	1773	PQN	33	0
20	A	1761	CLA	32	0
21	B	1782	LMU	1	0
20	2	1215	CLA	24	0
22	I	1032	BCR	47	0
20	B	1771	CLA	24	0
20	A	1816	CLA	35	0
21	A	7030	LMU	12	0
21	A	7022	LMU	11	0
22	B	1777	BCR	31	0
20	A	1793	CLA	35	0
20	A	1798	CLA	29	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	1	1188	CLA	7	0
22	A	1806	BCR	36	0
20	3	3007	CLA	2	0
20	A	1774	CLA	31	0
20	B	1740	CLA	20	0
20	1	1200	CLA	11	0
21	A	7020	LMU	21	0
20	1	1199	CLA	2	0
21	K	1086	LMU	6	0
22	3	1220	BCR	21	0
20	A	1773	CLA	11	0
20	3	1219	CLA	18	0
20	J	1044	CLA	41	0
20	4	1205	CLA	3	0
20	G	1099	CLA	6	0
20	2	1220	CLA	74	0
21	A	7037	LMU	24	0
20	A	1767	CLA	23	0
20	B	1769	CLA	25	0
20	B	1744	CLA	20	0
20	1	1190	CLA	5	0
21	A	7034	LMU	1	0
21	A	7009	LMU	9	0
22	A	1804	BCR	22	0
21	A	7031	LMU	4	0
20	A	1813	CLA	33	0
20	A	1780	CLA	17	0
20	B	1767	CLA	15	0
20	L	1166	CLA	7	0
20	B	1787	CLA	50	0
21	1	1202	LMU	5	0
20	B	1756	CLA	46	0
20	3	1215	CLA	17	0
21	2	7003	LMU	3	0
20	2	1212	CLA	18	0
20	B	1772	CLA	2	0
20	1	1189	CLA	11	0
20	B	1738	CLA	19	0
22	A	1807	BCR	62	0
21	A	7033	LMU	19	0
23	A	1802	PQN	12	0
20	2	1217	CLA	9	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
21	L	1171	LMU	3	0
20	F	1156	CLA	13	0
20	A	1800	CLA	31	0
20	A	1768	CLA	4	0
21	A	7017	LMU	3	0
21	3	7005	LMU	3	0
21	A	1809	LMU	4	0
20	I	1033	CLA	15	0
21	A	7042	LMU	35	0
20	B	1770	CLA	24	0
20	1	1187	CLA	11	0
21	A	7010	LMU	8	0
20	A	1784	CLA	18	0
20	2	1213	CLA	13	0
20	4	1199	CLA	22	0
20	J	1043	CLA	29	0
20	4	1209	CLA	5	0
20	A	1771	CLA	13	0
20	B	1763	CLA	13	0
20	A	1792	CLA	22	0
20	1	1192	CLA	9	0
22	A	1803	BCR	41	0
21	2	7006	LMU	11	0
20	A	1782	CLA	81	0
20	2	1214	CLA	7	0
20	A	1762	CLA	18	0
20	R	1055	CLA	6	0
20	4	1206	CLA	2	0
20	A	1794	CLA	21	0
25	C	1082	SF4	5	0
20	B	1761	CLA	12	0
20	B	1739	CLA	22	0
20	2	1222	CLA	14	0
20	1	1198	CLA	20	0
20	A	1779	CLA	35	0
20	4	1197	CLA	2	0
20	F	1155	CLA	1	0
20	B	1736	CLA	9	0
20	A	1765	CLA	25	0
20	A	1801	CLA	15	0
20	B	1748	CLA	14	0
20	4	1200	CLA	3	0

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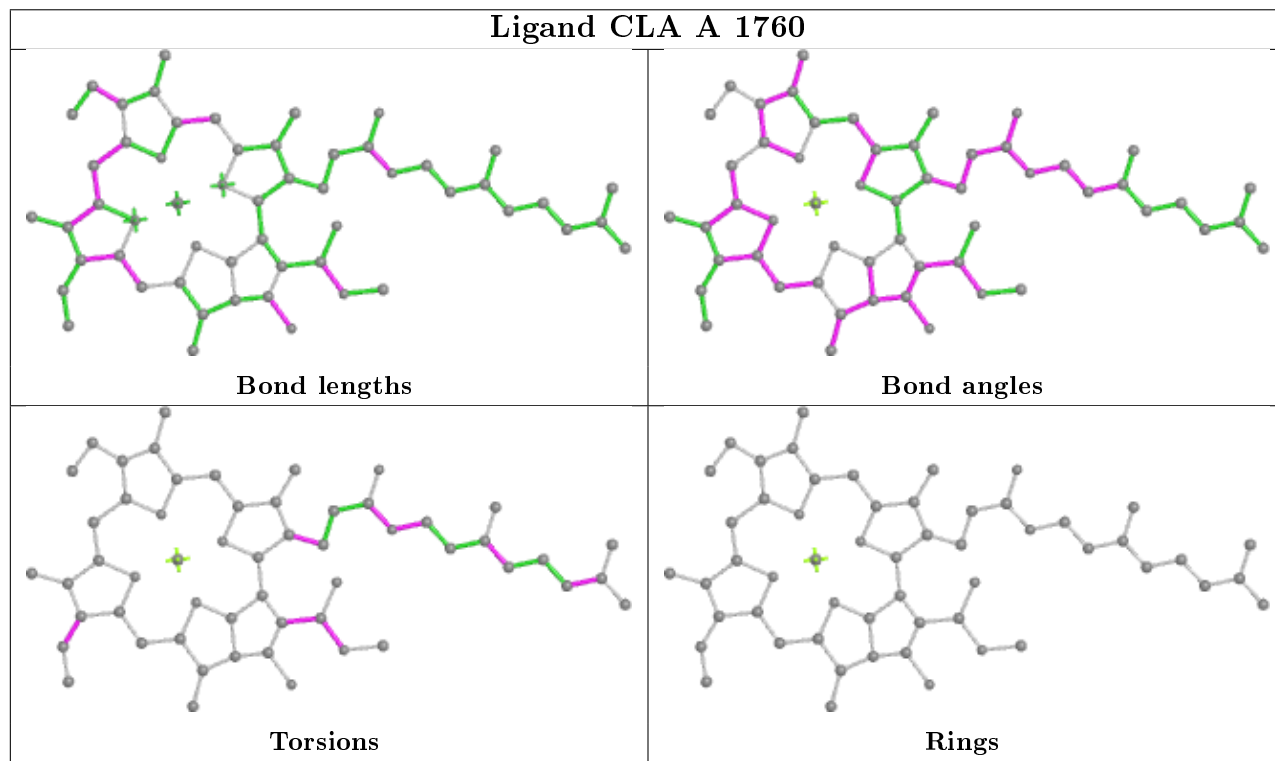
Mol	Chain	Res	Type	Clashes	Symm-Clashes
21	A	7043	LMU	16	0
20	A	1795	CLA	40	0
20	L	1167	CLA	18	0
21	R	1056	LMU	19	0
20	2	1224	CLA	7	0
20	B	1785	CLA	22	0
20	B	1768	CLA	48	0
20	4	1196	CLA	34	0
21	A	7026	LMU	21	0
21	A	7023	LMU	26	0
22	B	1781	BCR	17	0
21	A	1810	LMU	4	0
21	A	7025	LMU	1	0
20	B	1741	CLA	6	0
20	3	1214	CLA	3	0
20	1	1196	CLA	6	0
24	B	1783	LMG	30	0
22	L	1170	BCR	13	0
22	B	1779	BCR	46	0
20	B	1765	CLA	20	0
20	A	1787	CLA	26	0
20	B	1764	CLA	21	0
20	B	1755	CLA	62	0
20	B	1735	CLA	33	0
21	1	7004	LMU	10	0
25	C	1083	SF4	4	0
20	K	3009	CLA	3	0
20	3	3008	CLA	17	0
21	A	7028	LMU	4	0
20	A	1786	CLA	9	0
20	A	1789	CLA	20	0
21	A	7013	LMU	9	0
21	A	7027	LMU	6	0
20	4	4014	CLA	11	0
20	I	1031	CLA	11	0
20	3	1217	CLA	8	0
20	H	1079	CLA	19	0
20	B	1752	CLA	14	0
20	3	3011	CLA	17	0
20	B	1749	CLA	18	0
20	B	1745	CLA	12	0
20	A	1770	CLA	27	0

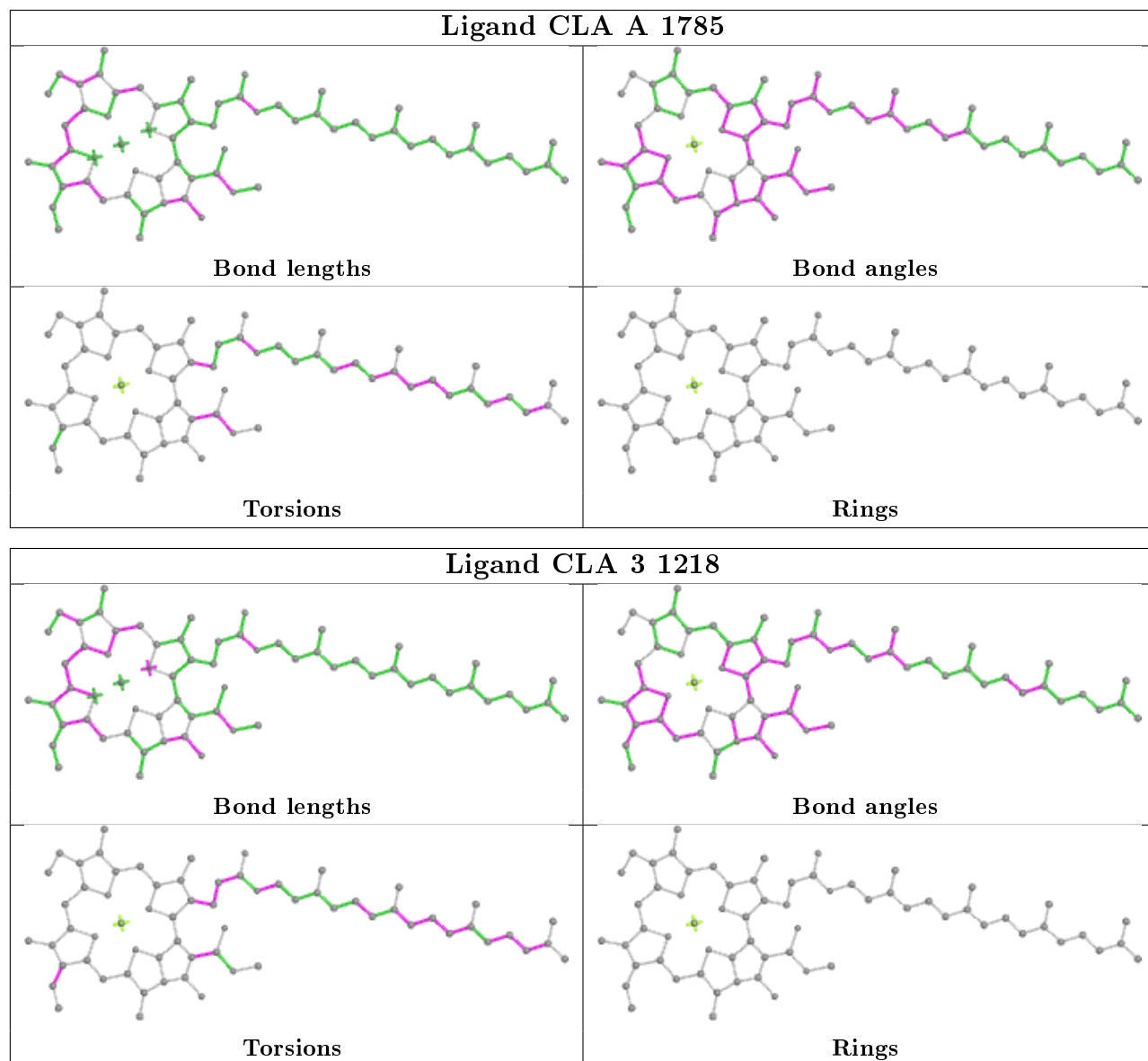
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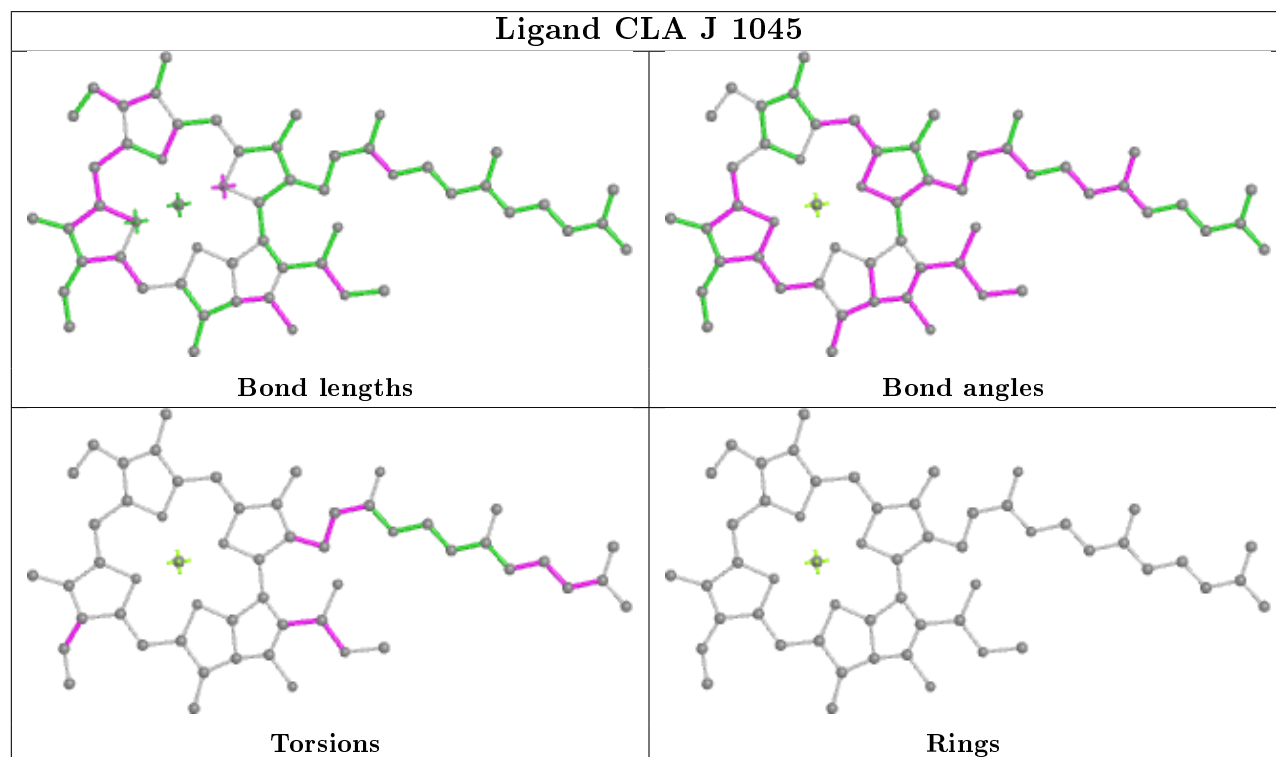
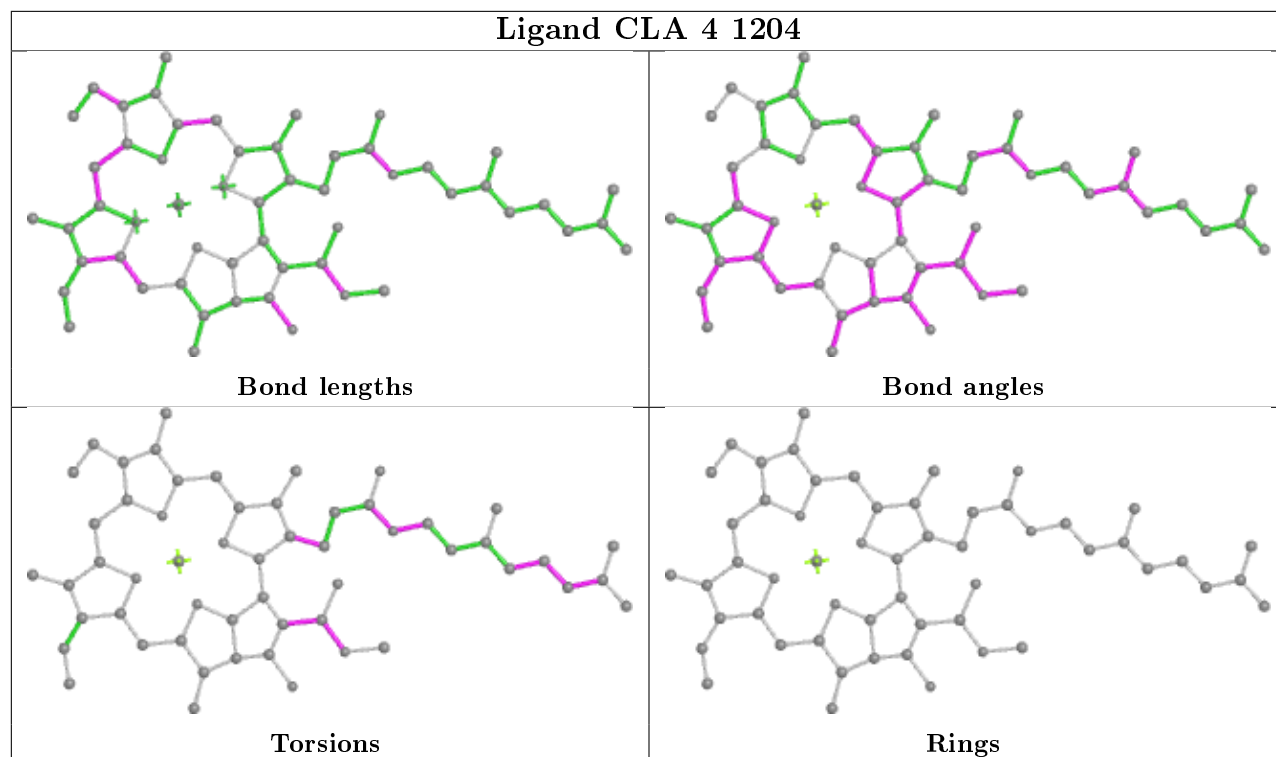
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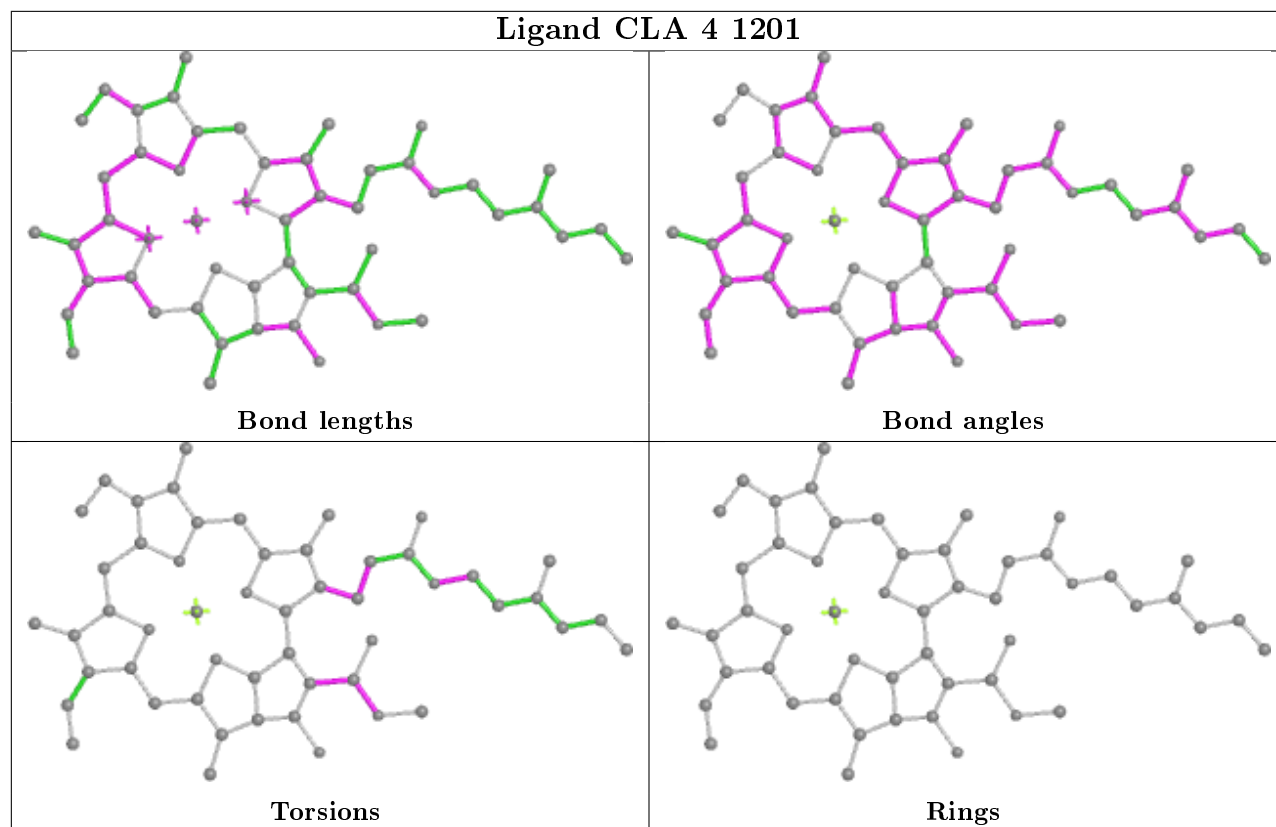
Mol	Chain	Res	Type	Clashes	Symm-Clashes
20	K	1146	CLA	11	0
20	A	1766	CLA	5	0
21	A	7016	LMU	42	0
20	A	1769	CLA	22	0
20	A	1763	CLA	31	0
20	4	1202	CLA	4	0
20	B	1747	CLA	23	0
20	B	1760	CLA	10	0

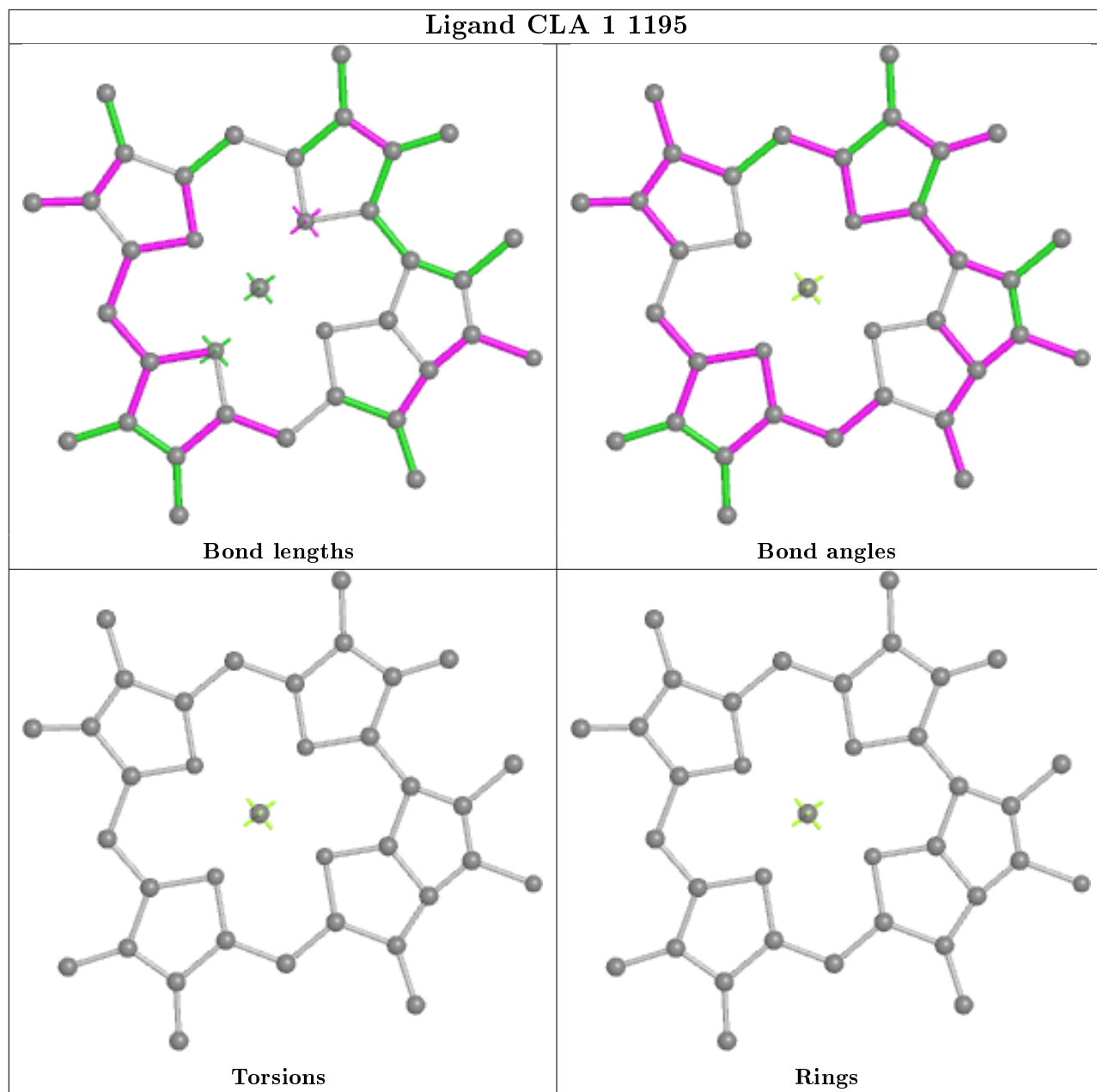
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

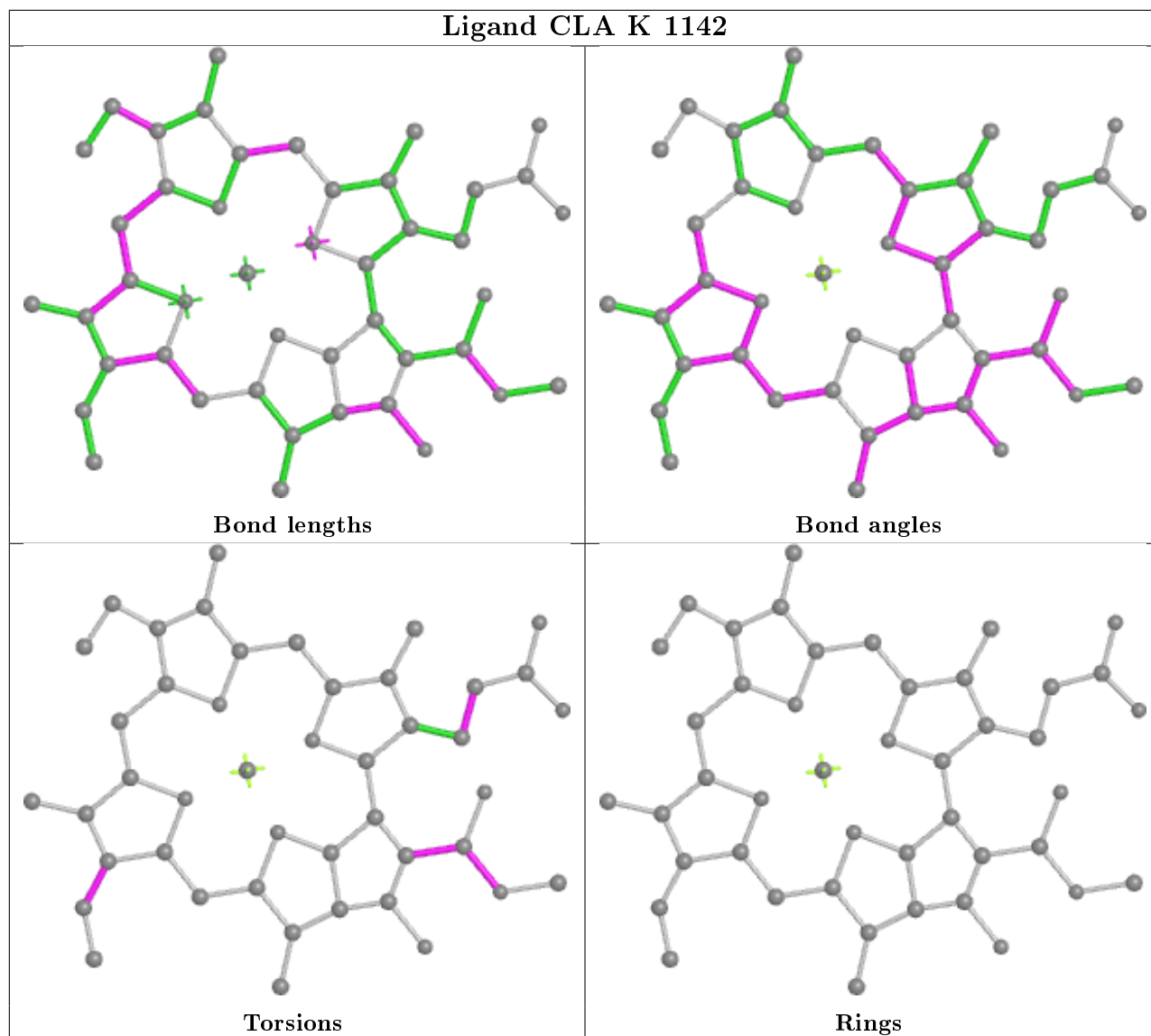




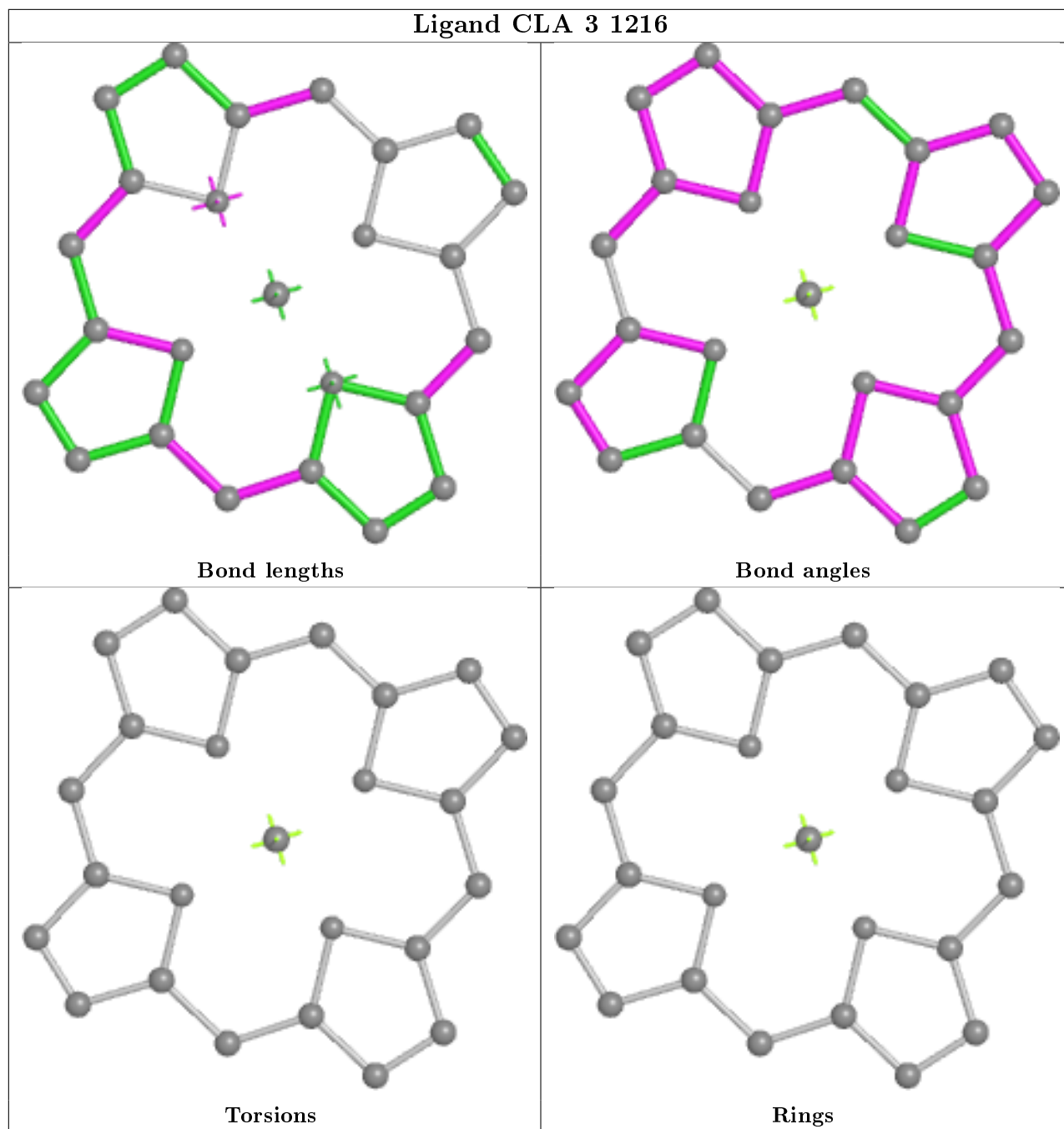


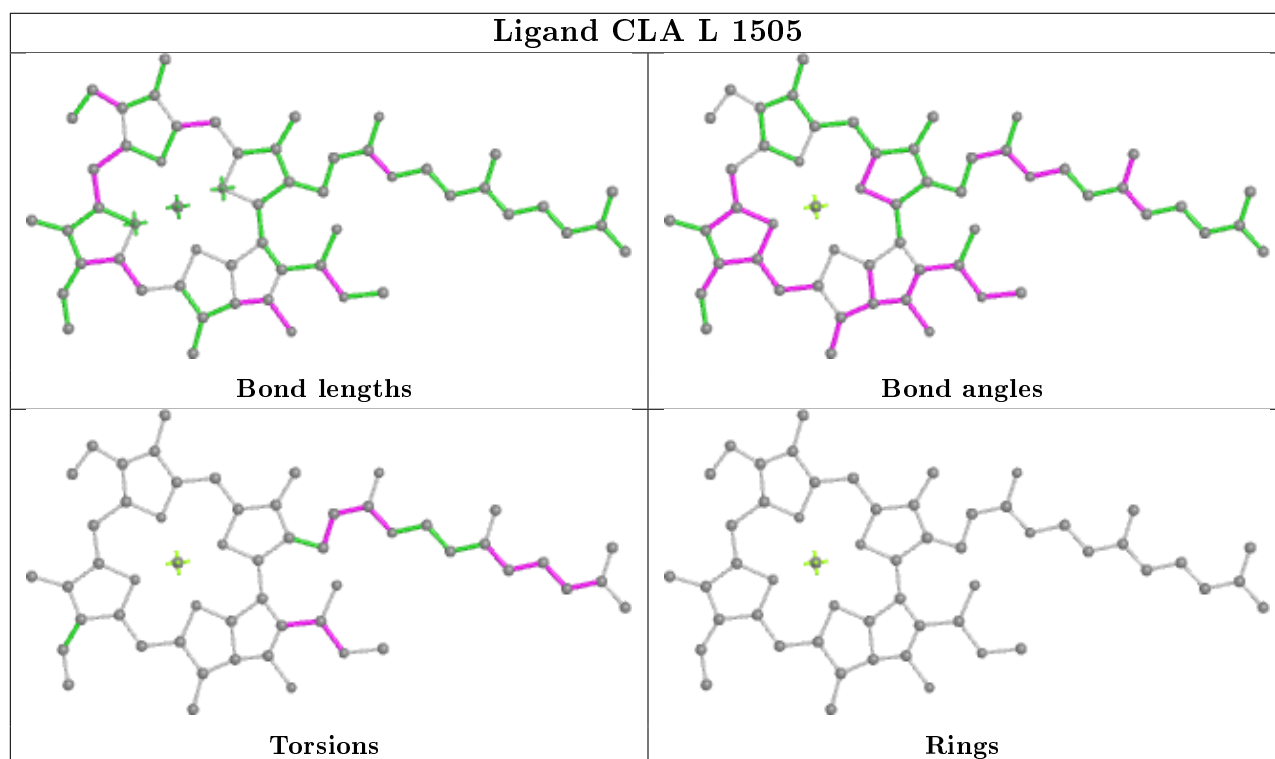
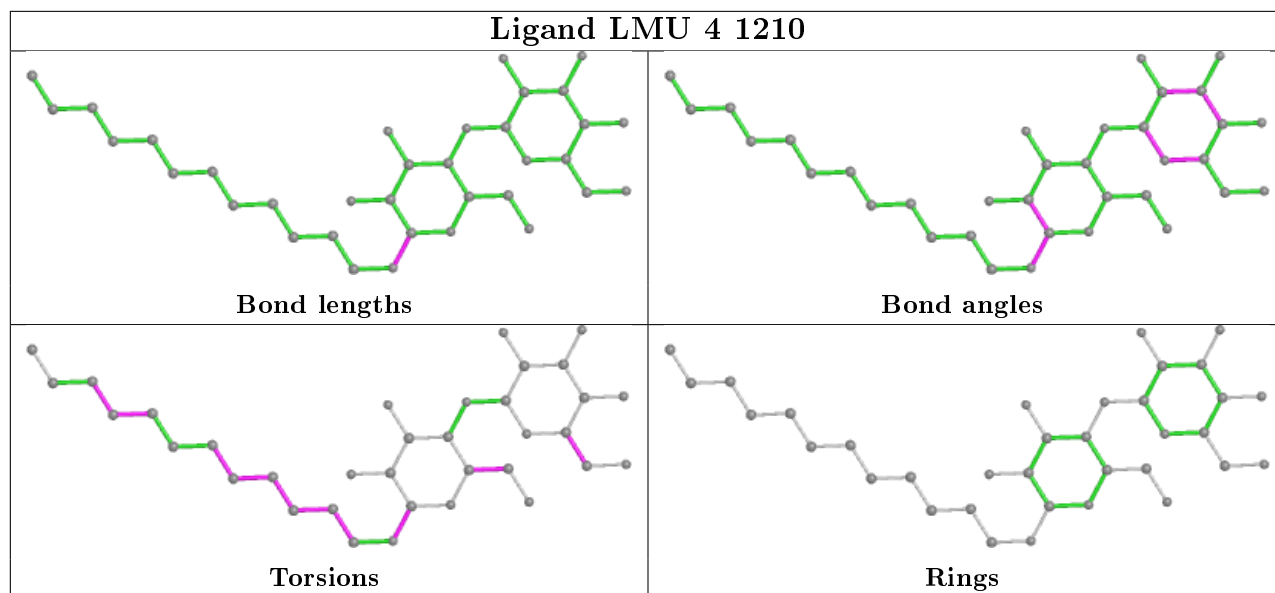


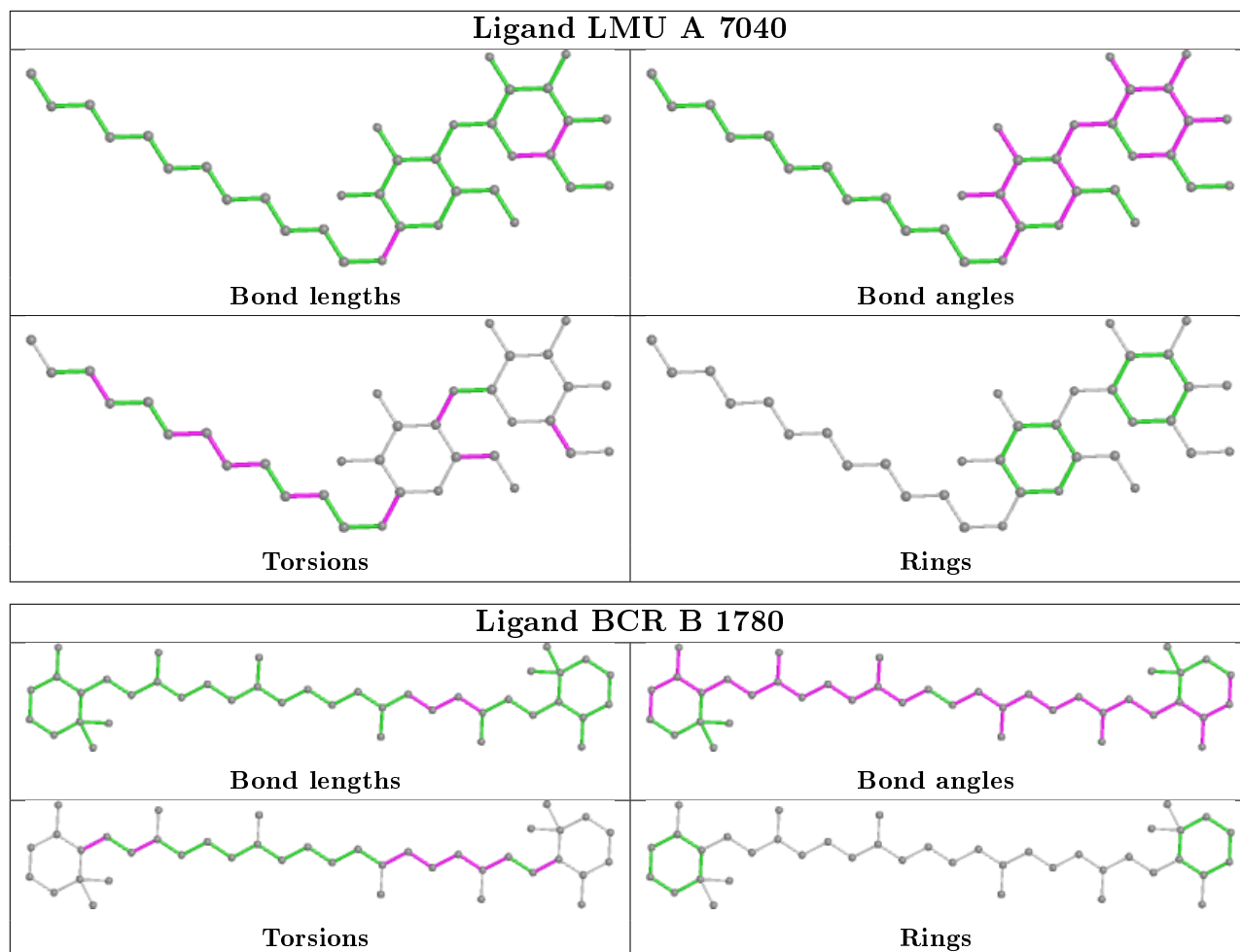


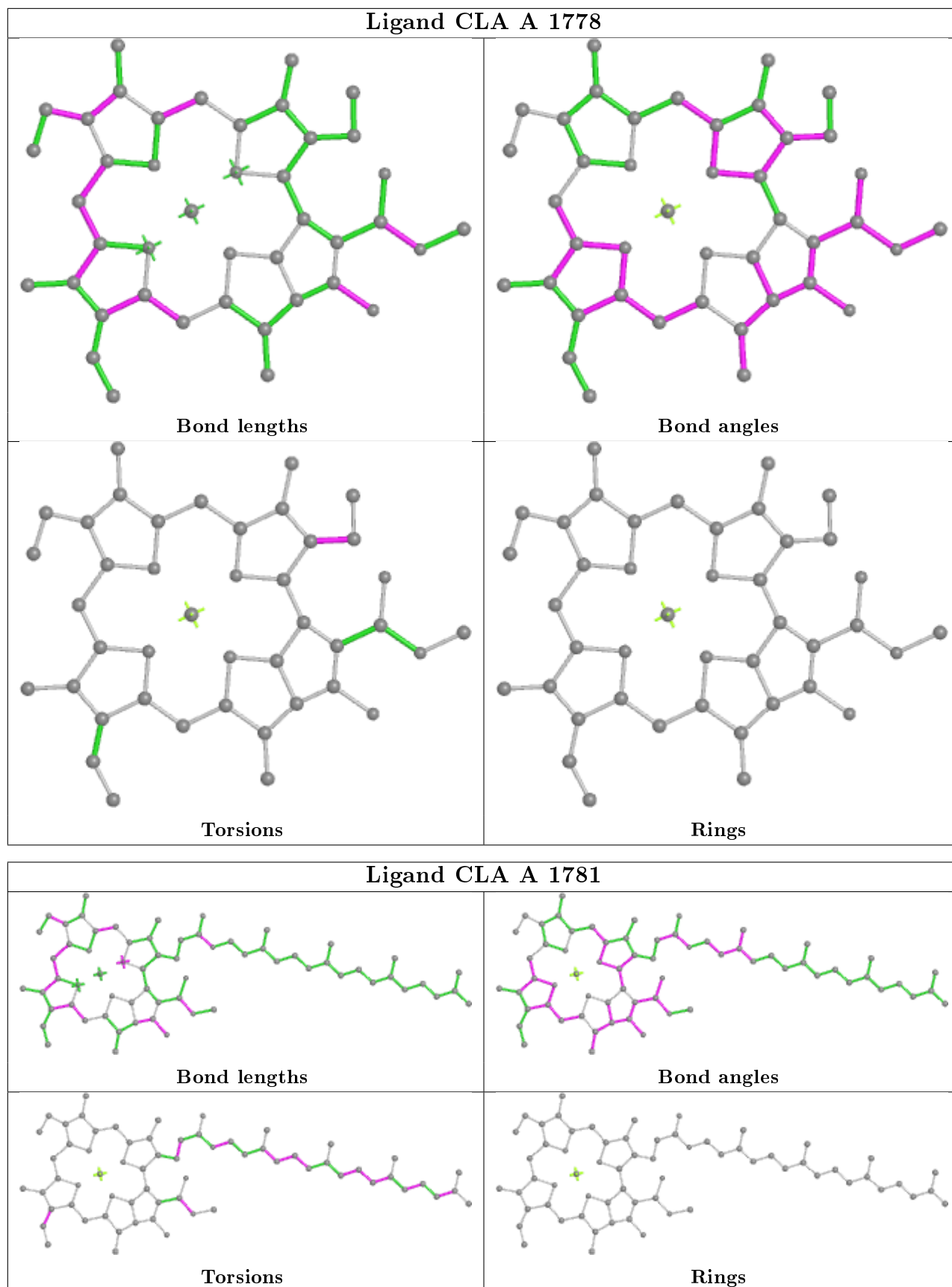


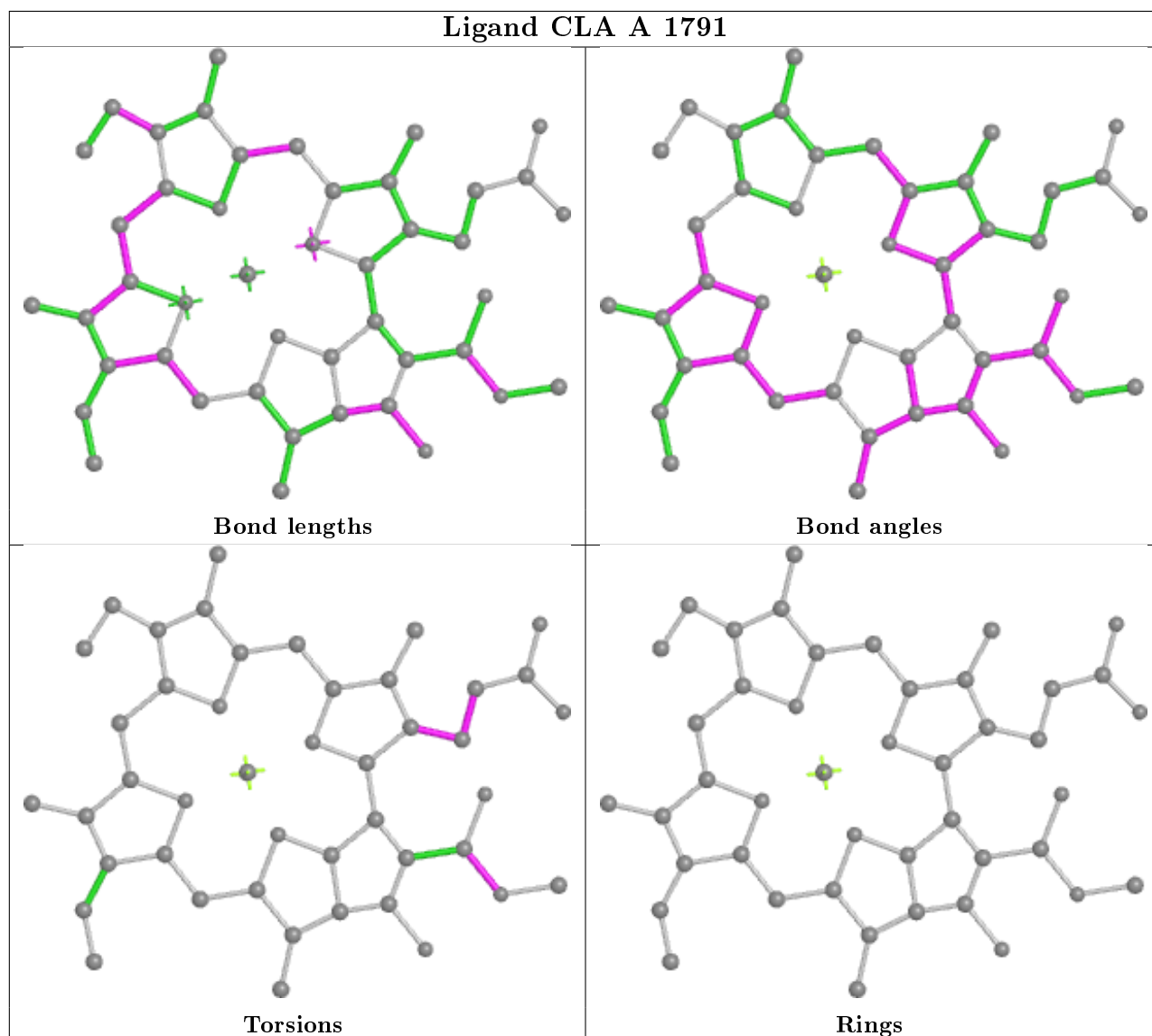
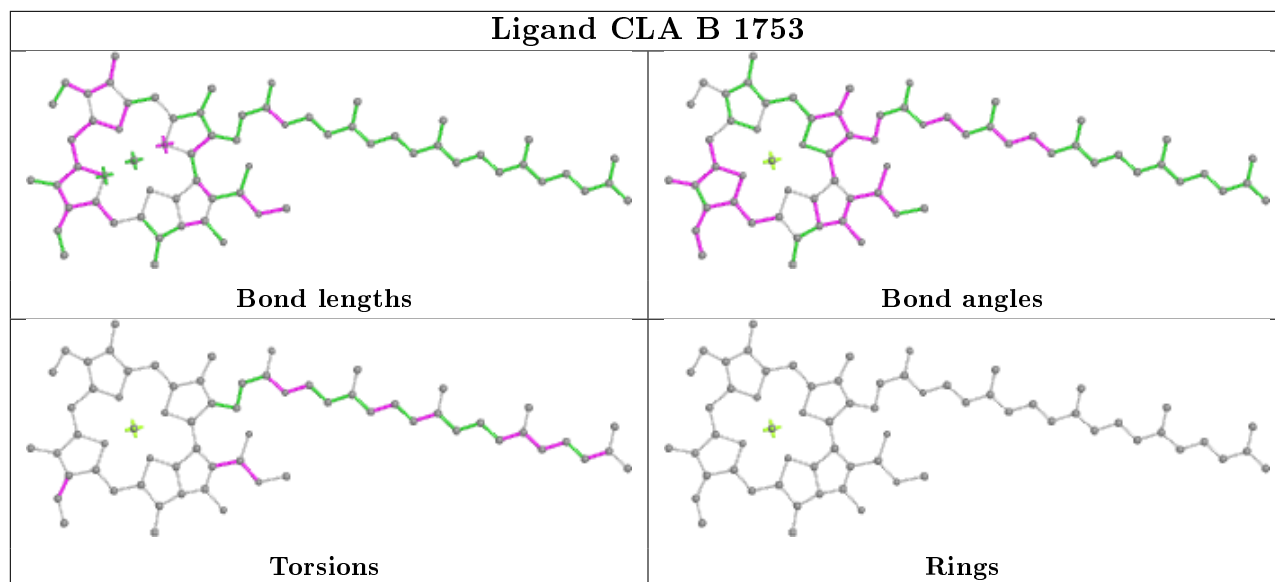


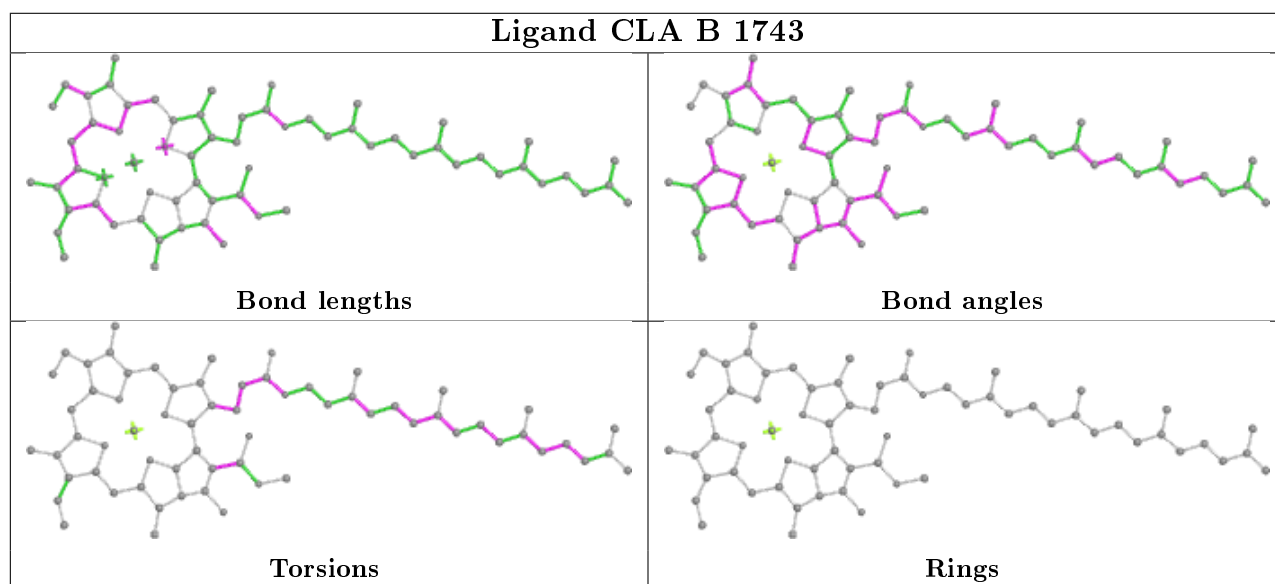
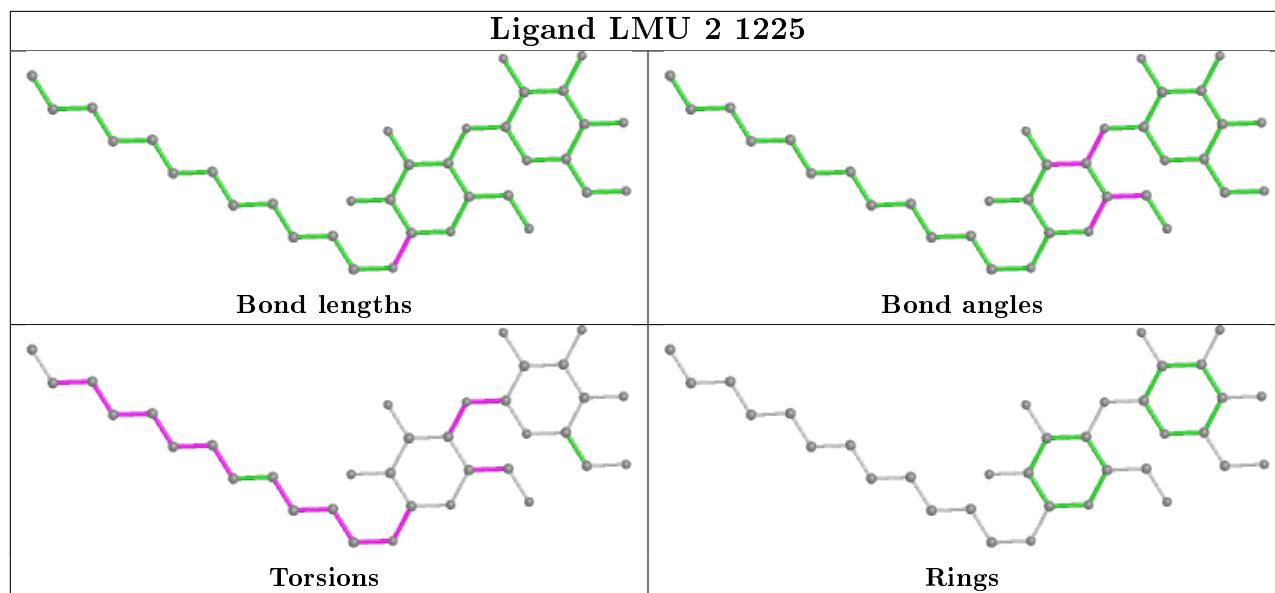


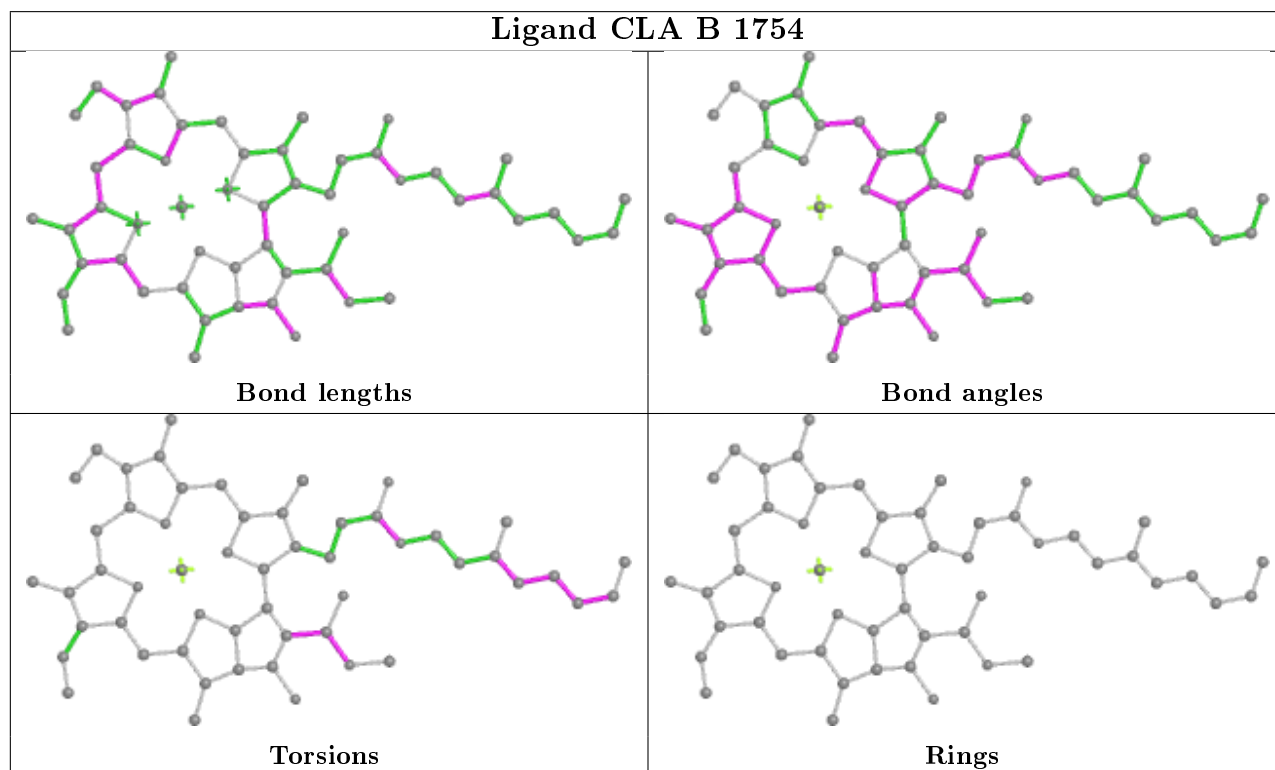
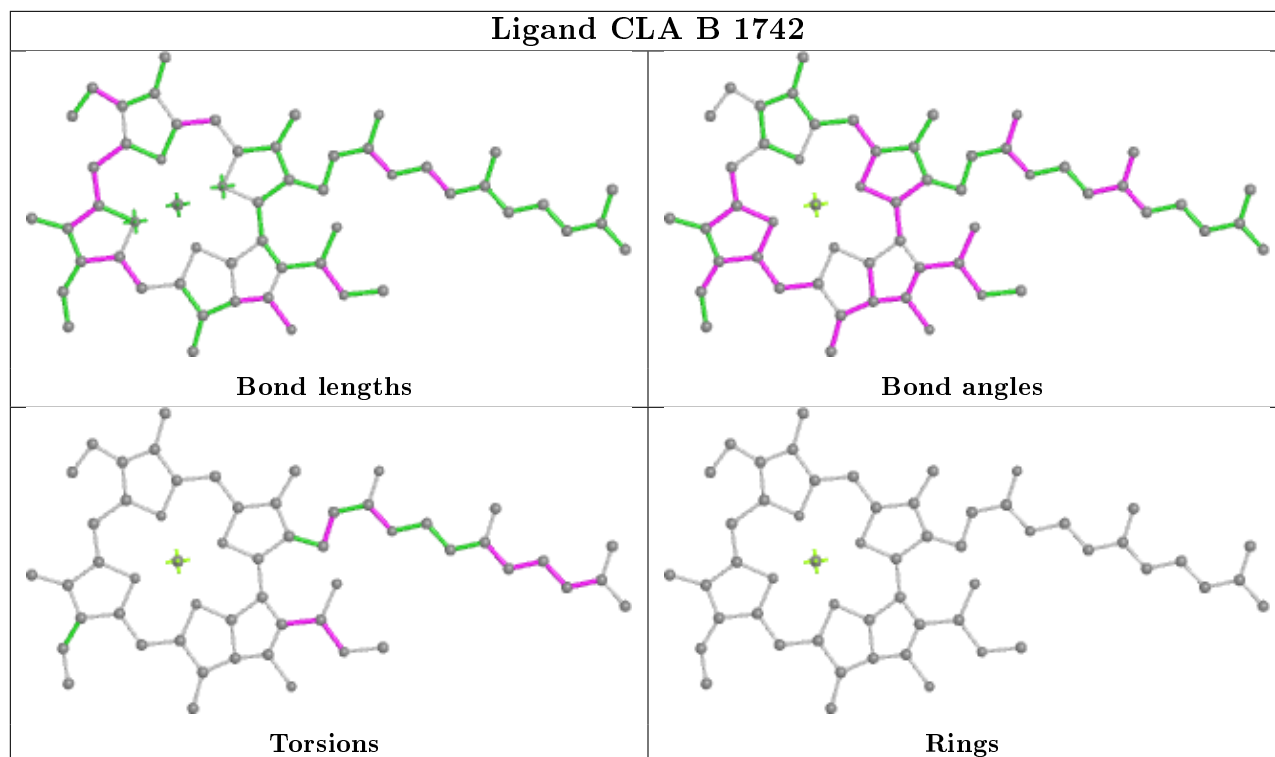


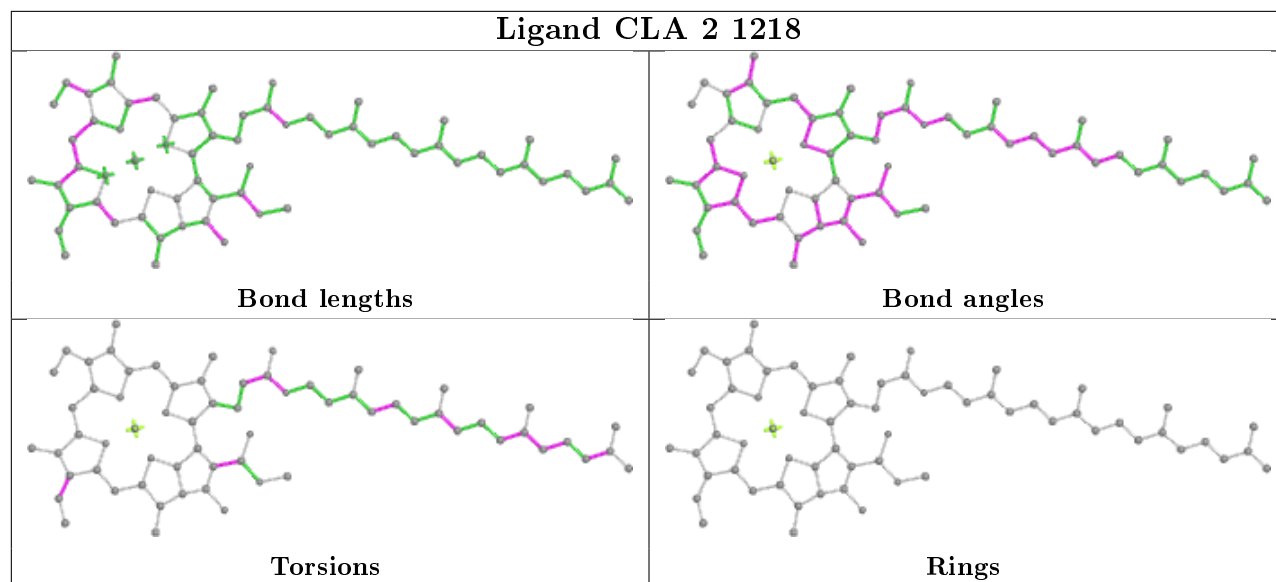




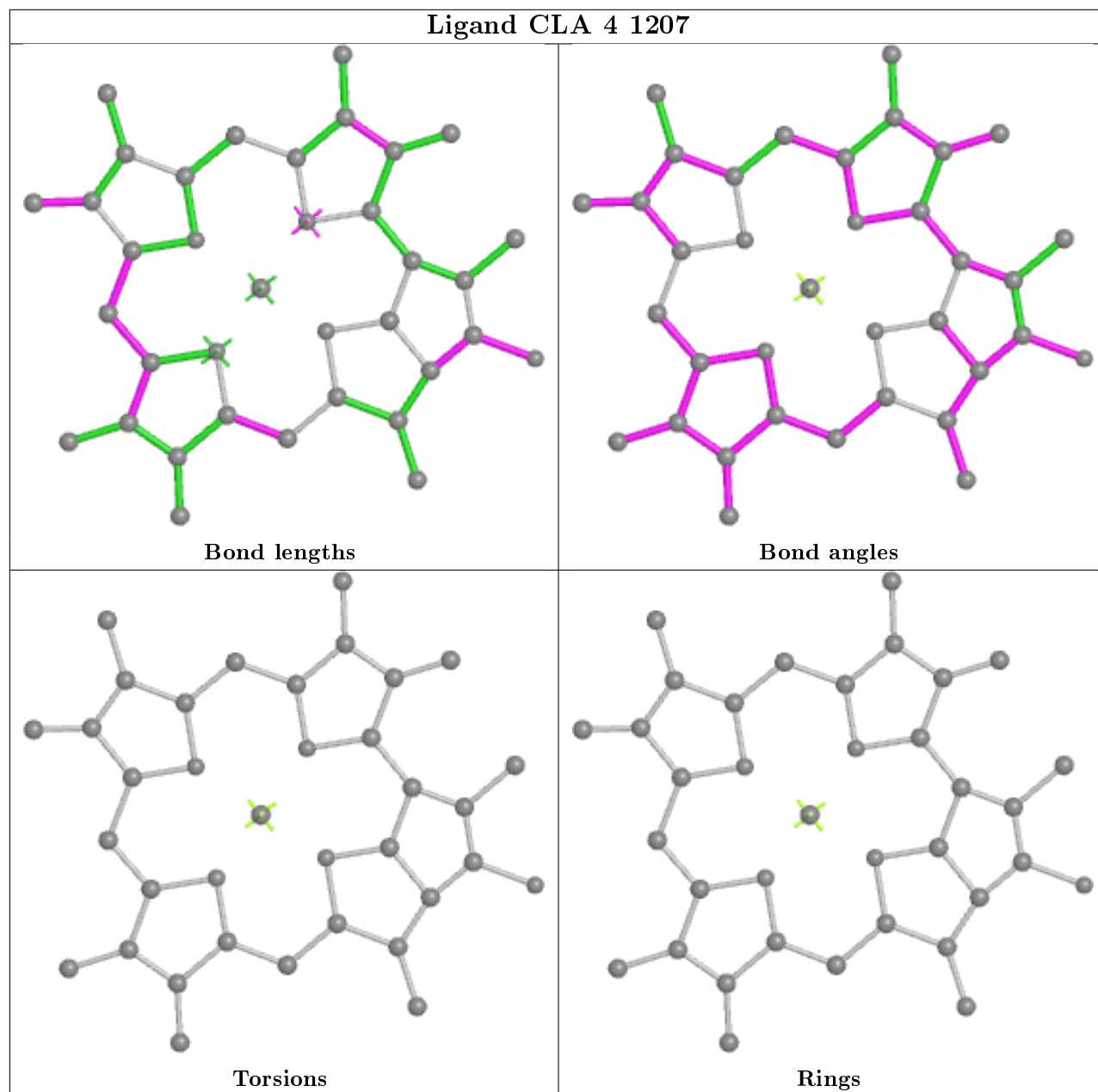


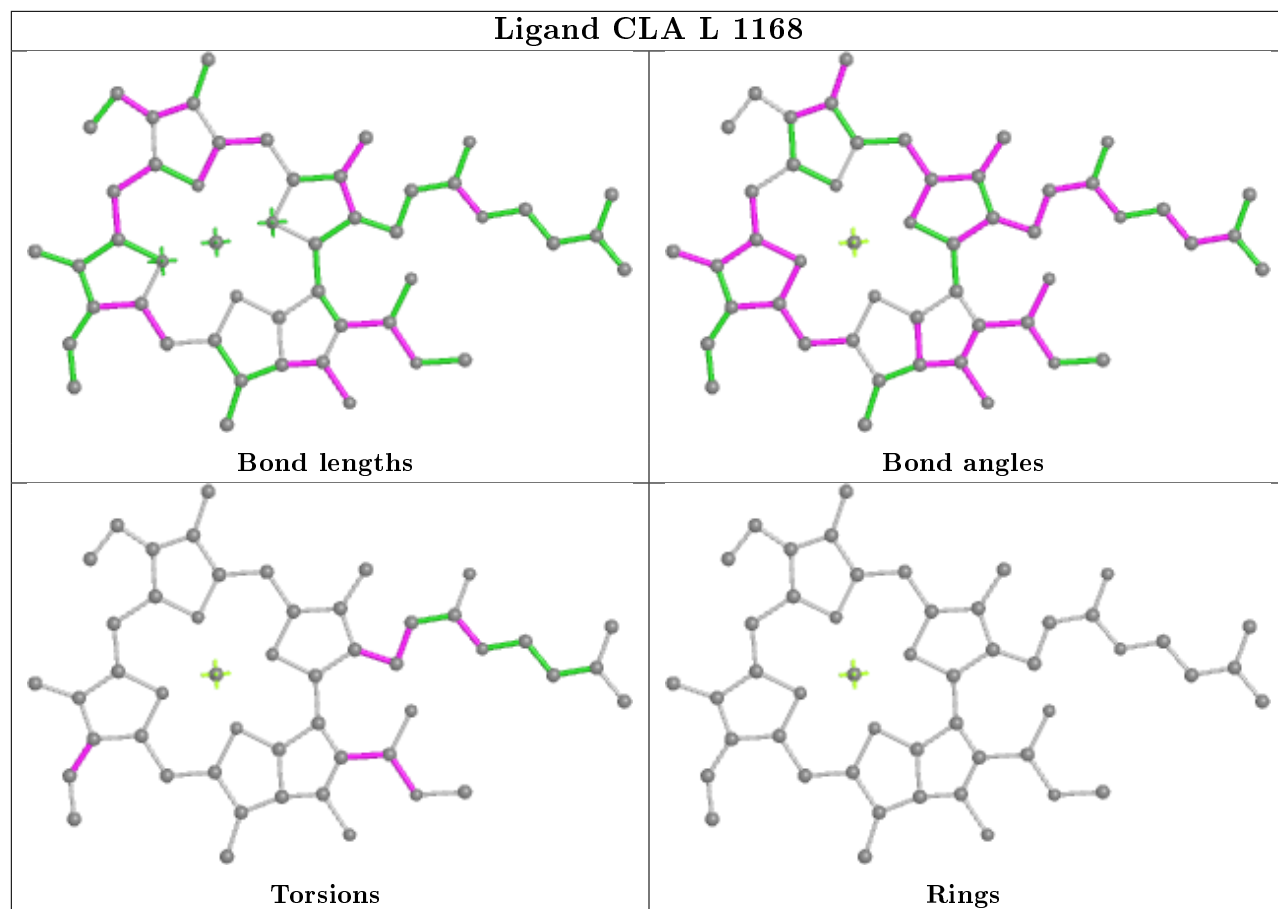


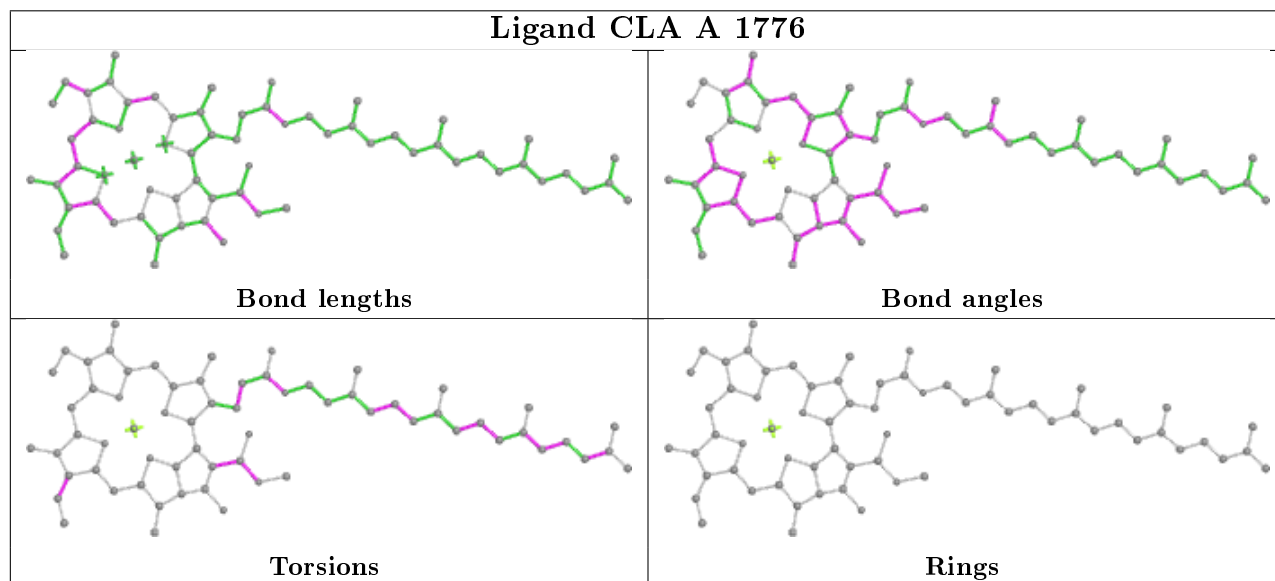
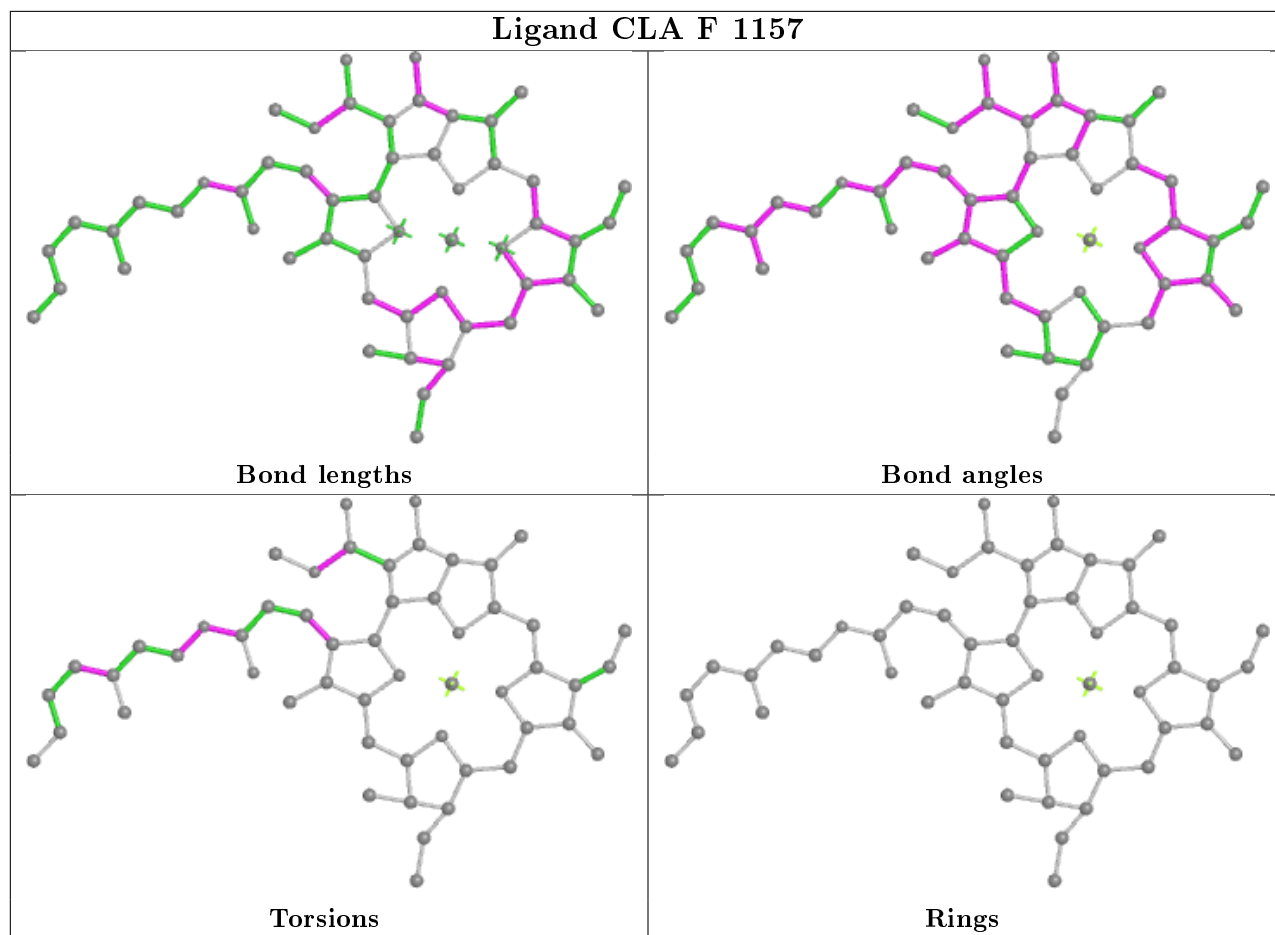


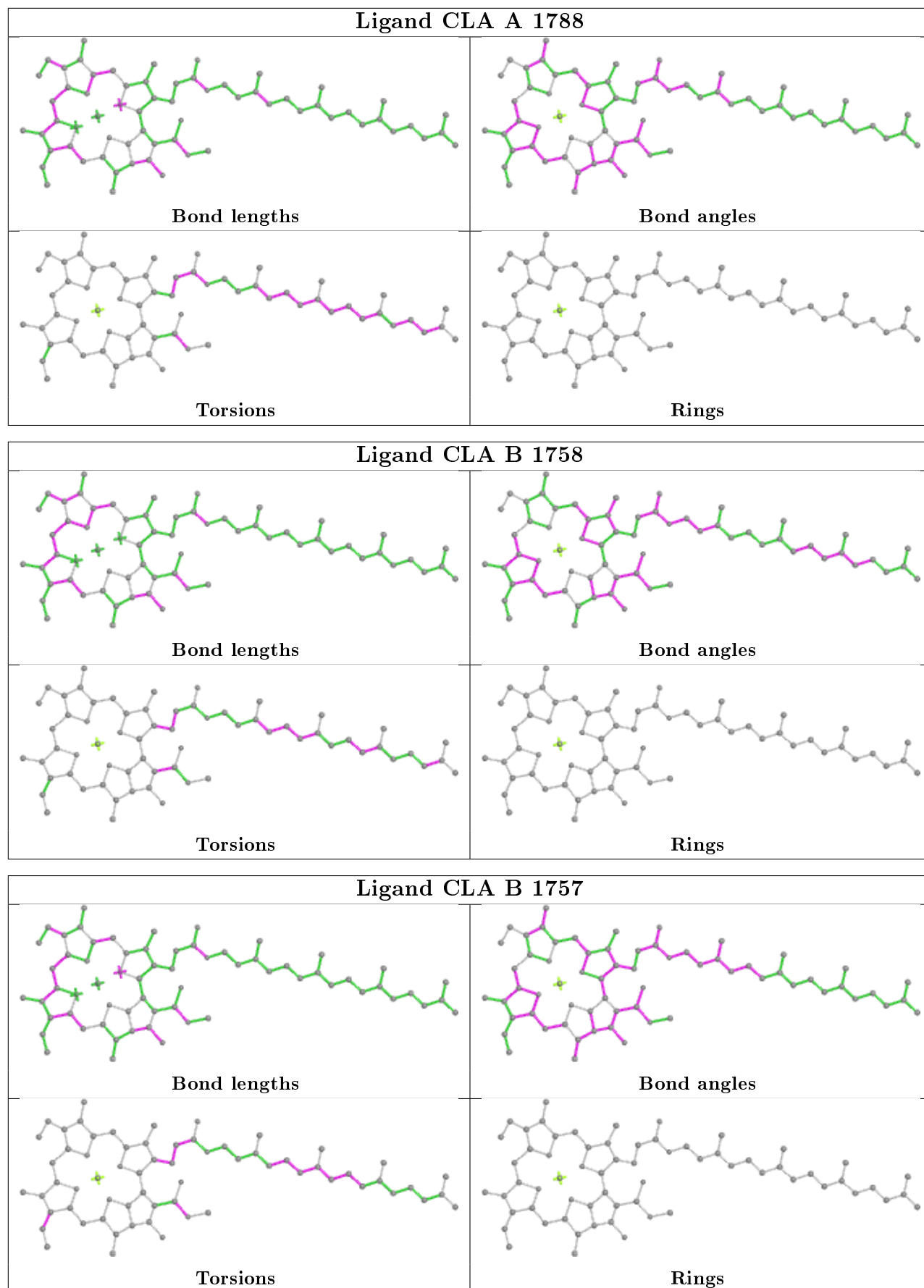


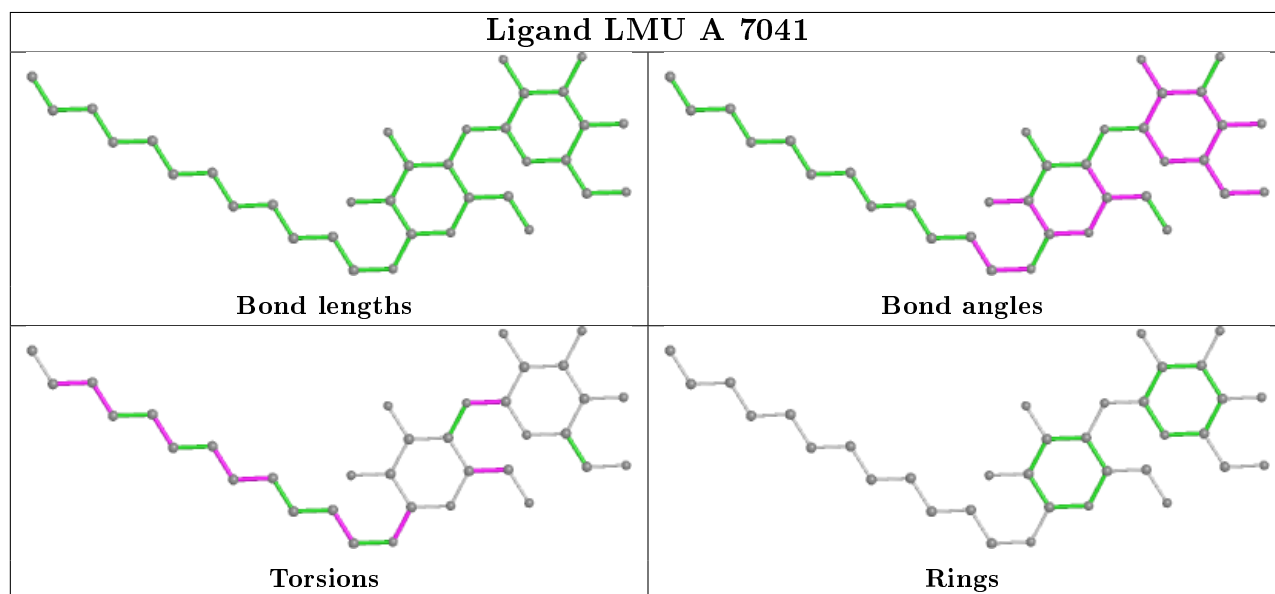
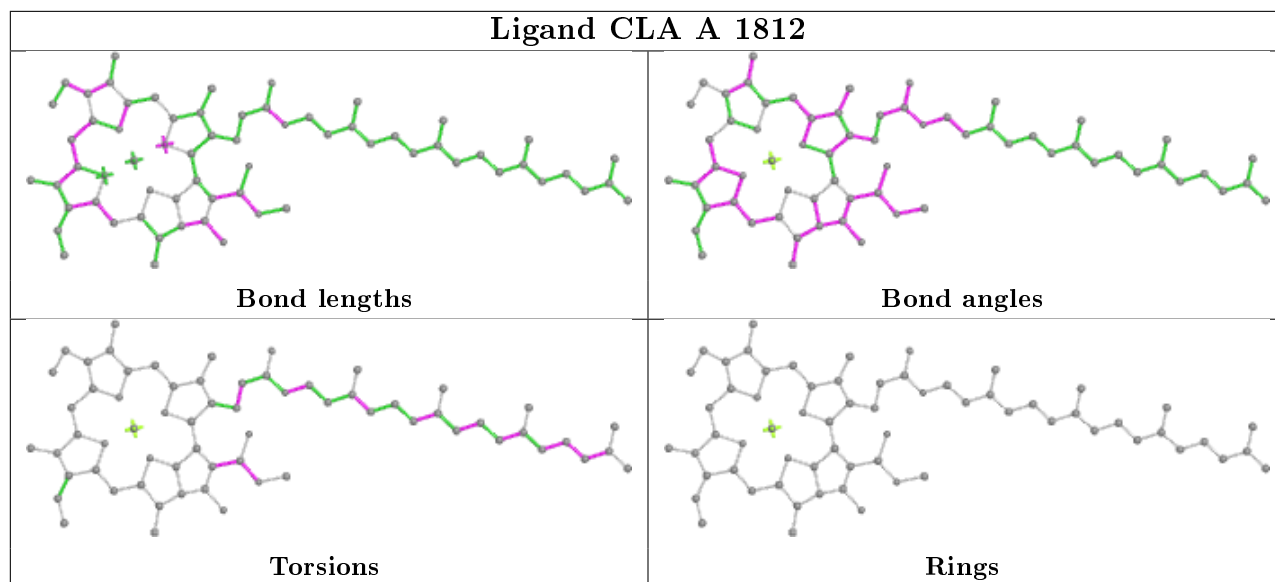


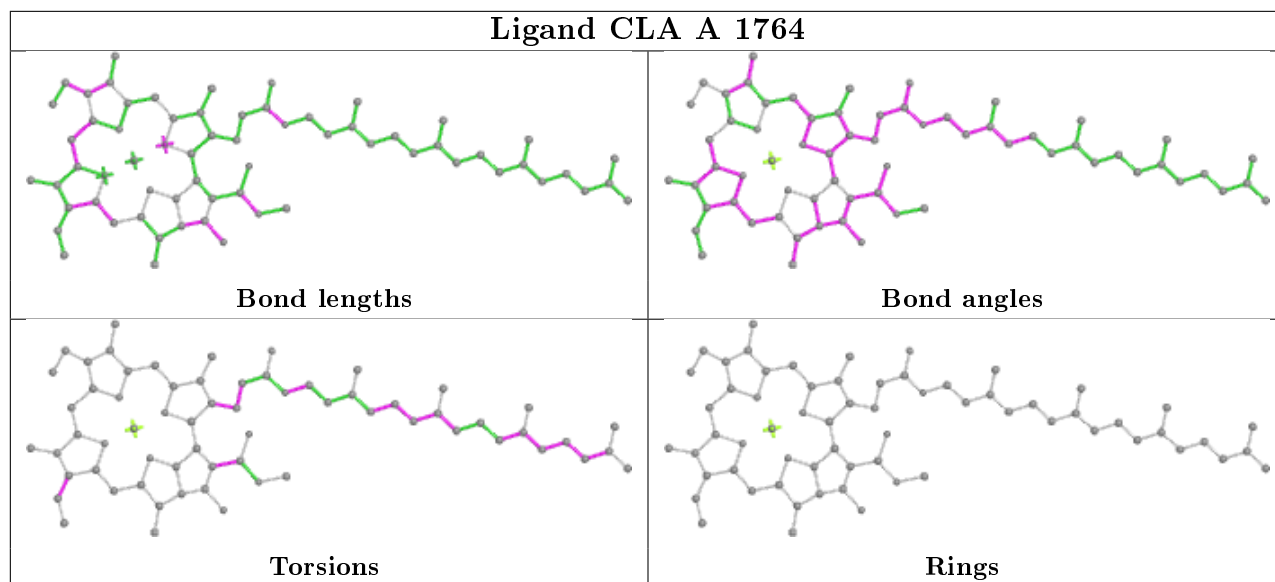
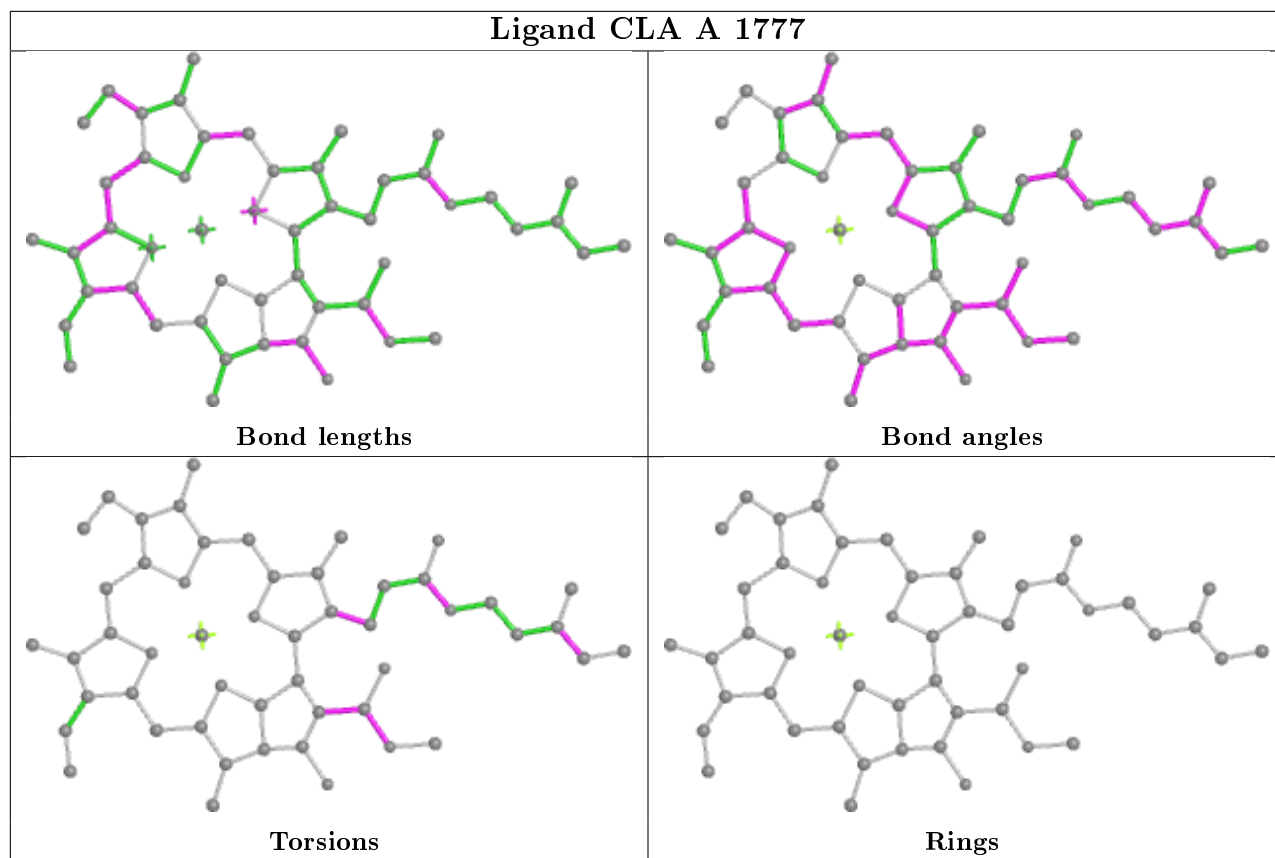


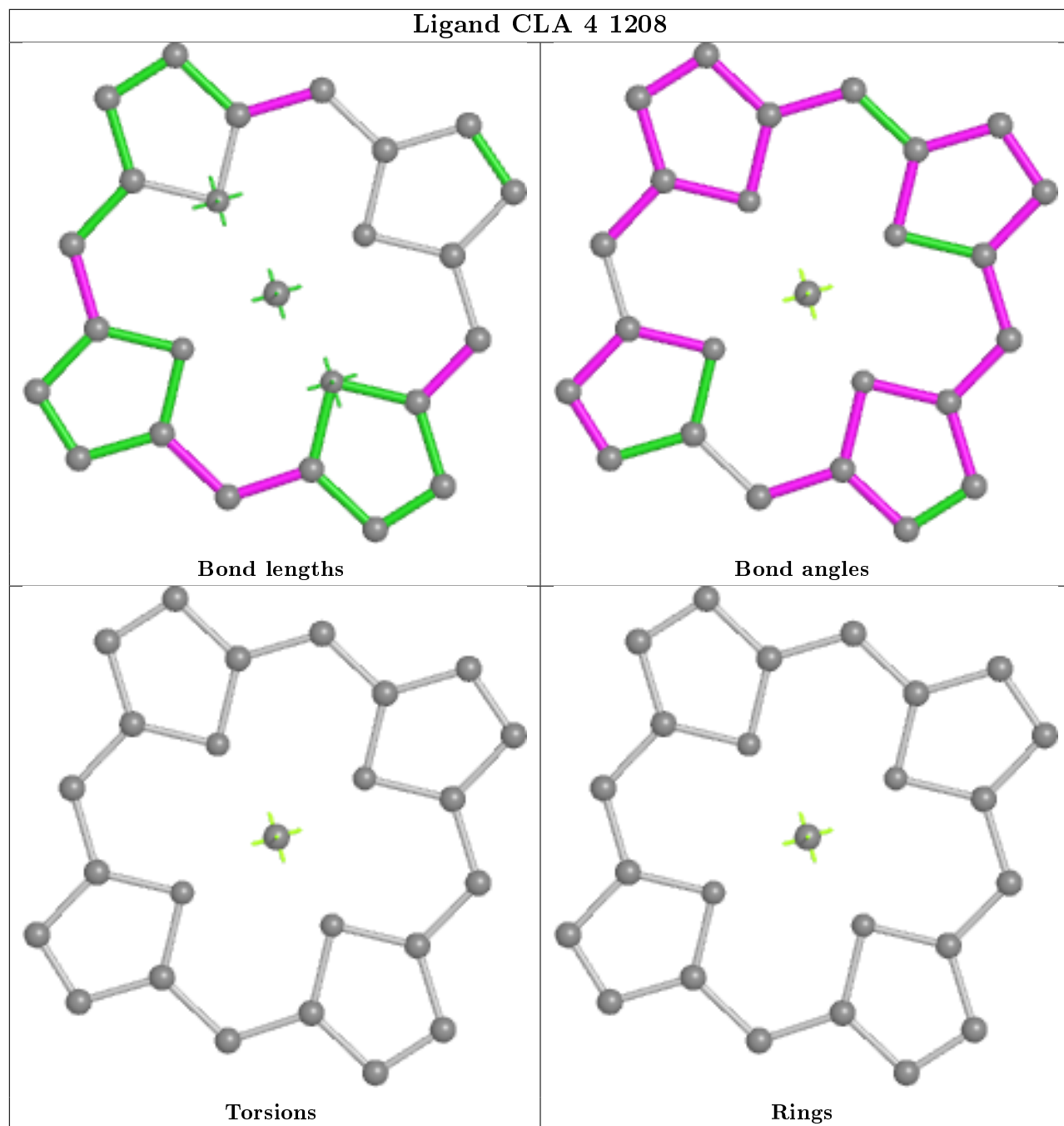


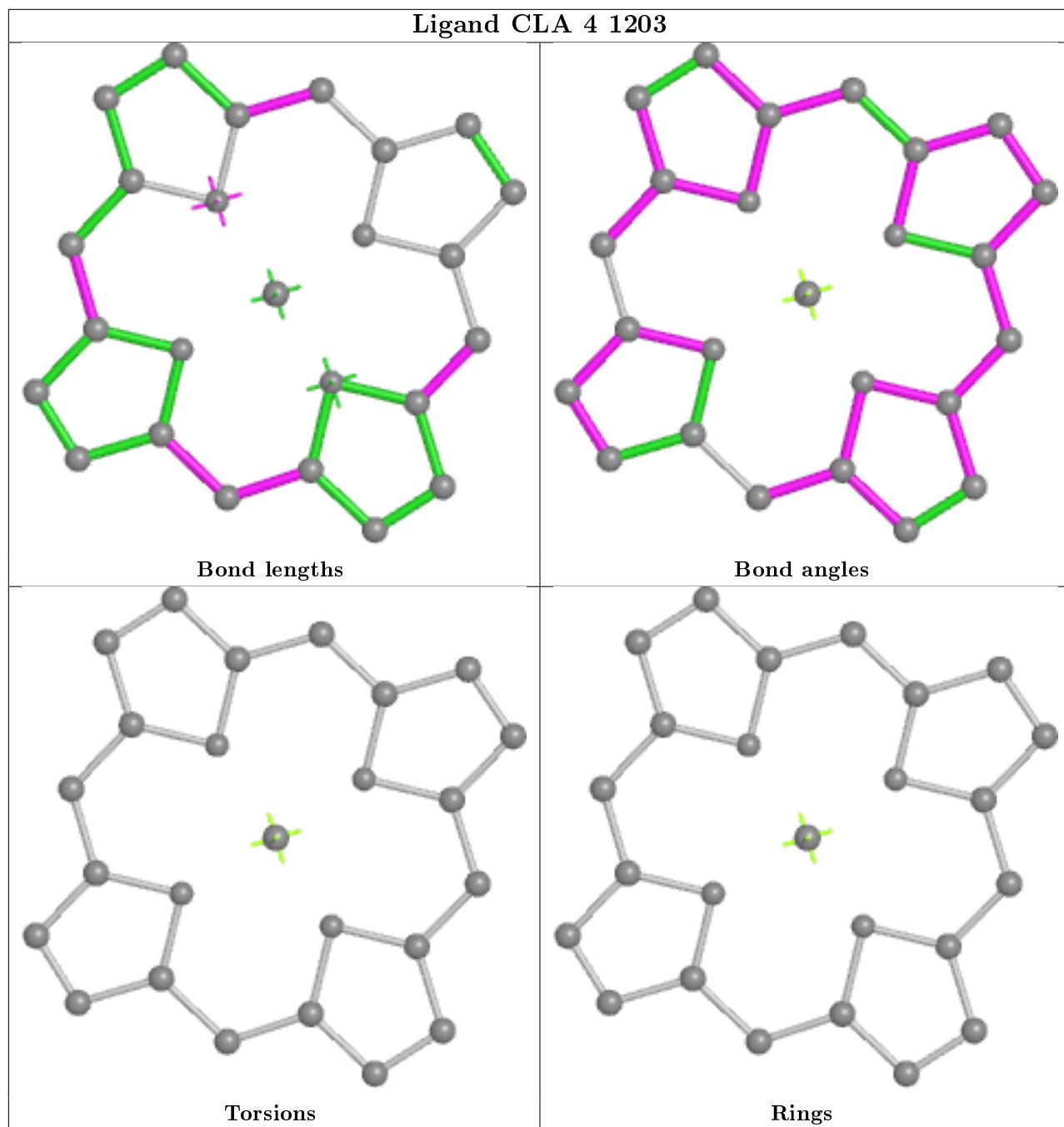




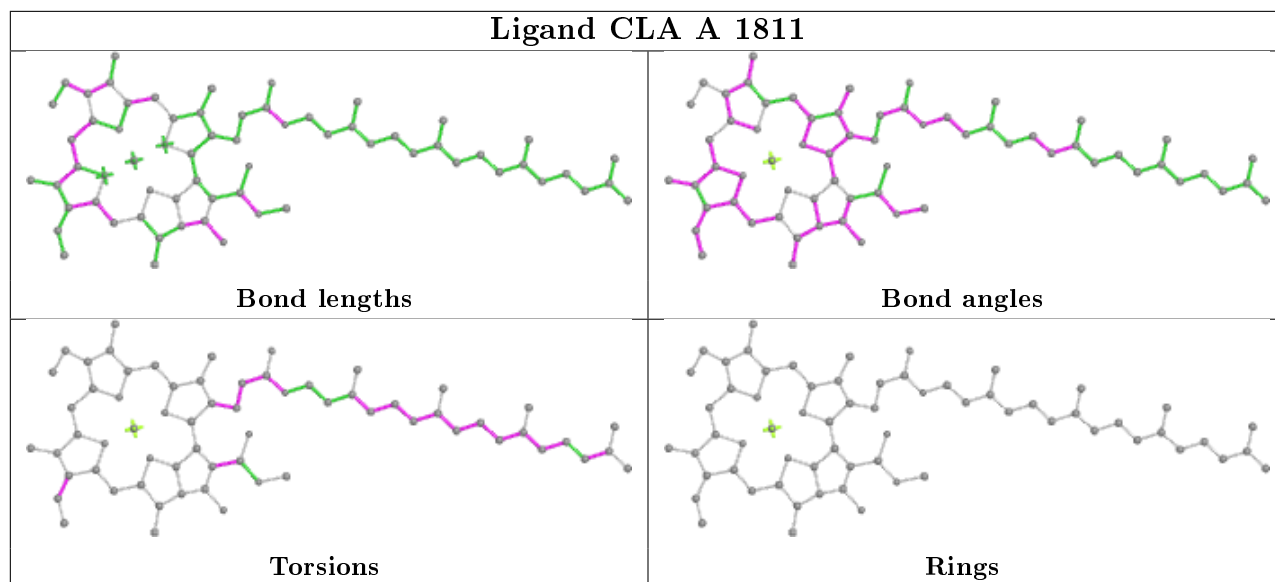


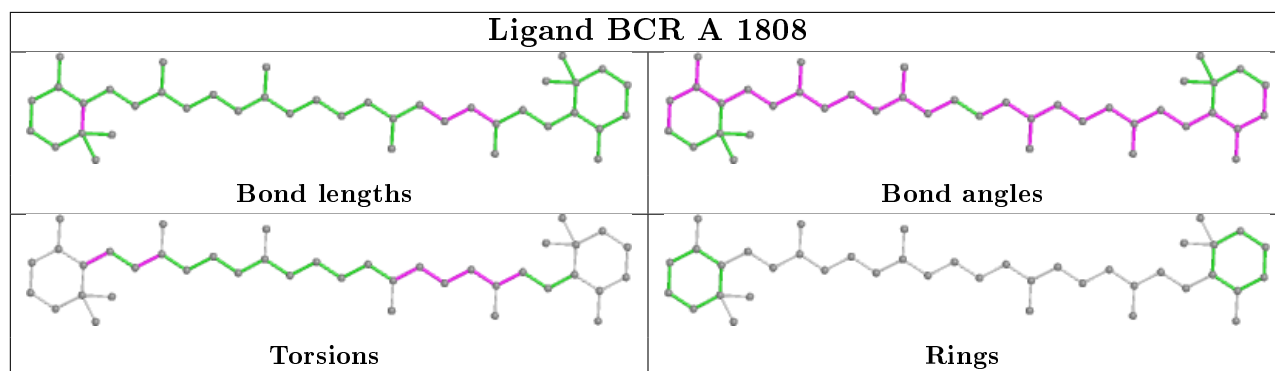
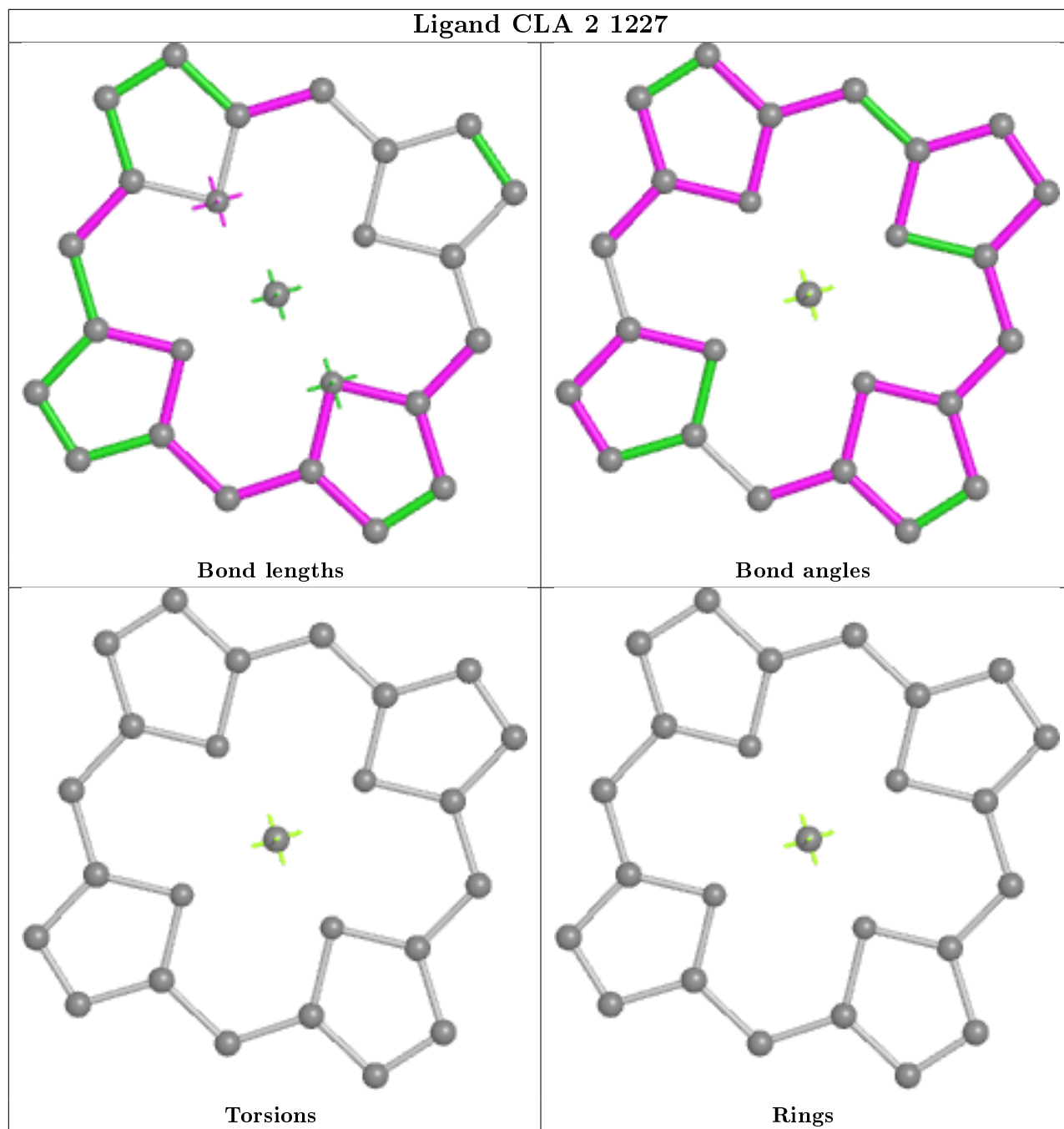


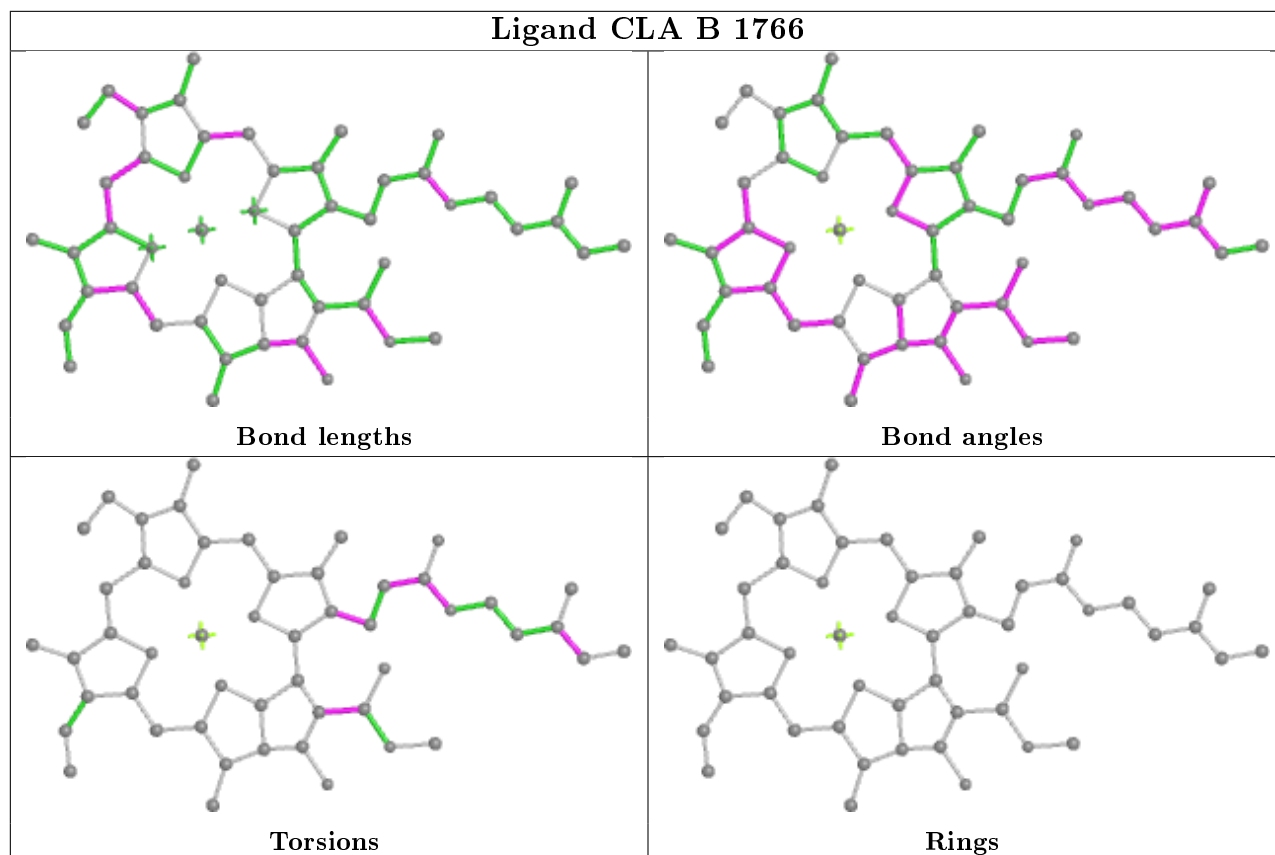
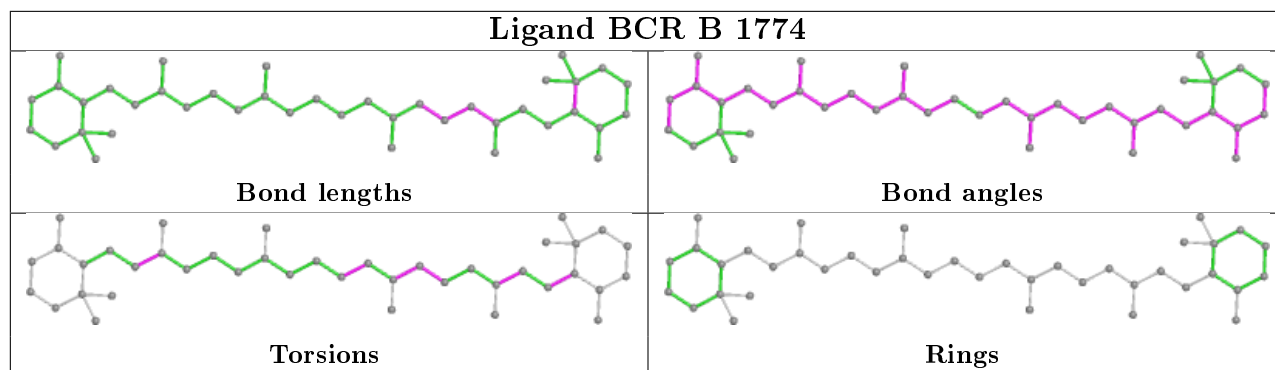


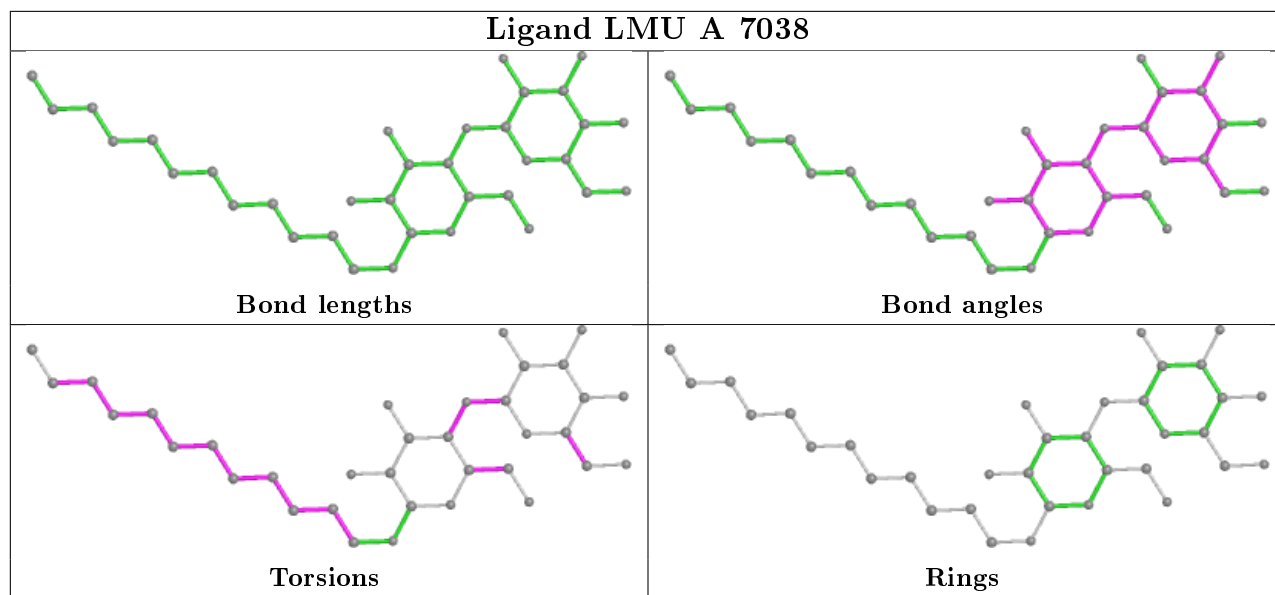


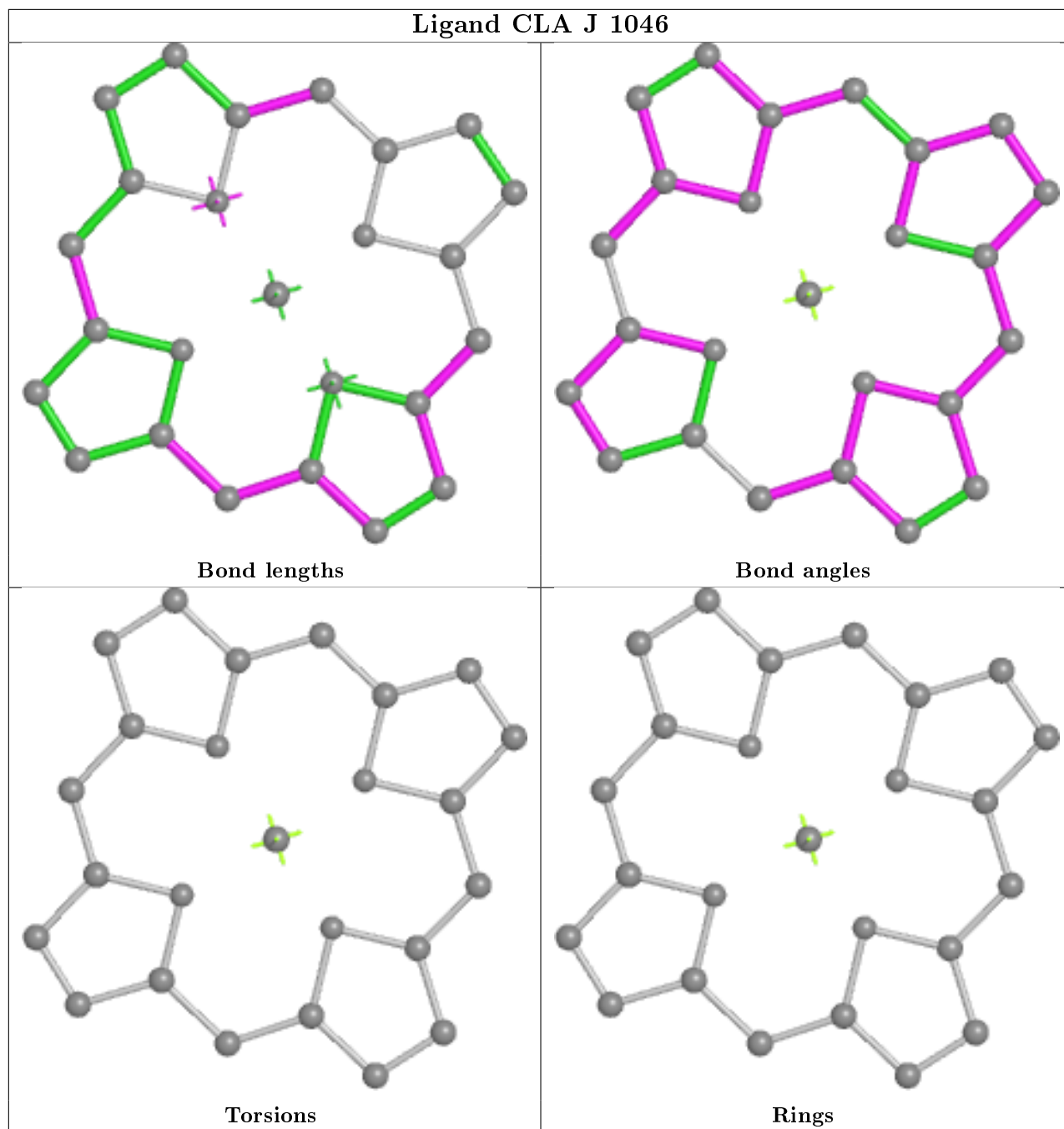


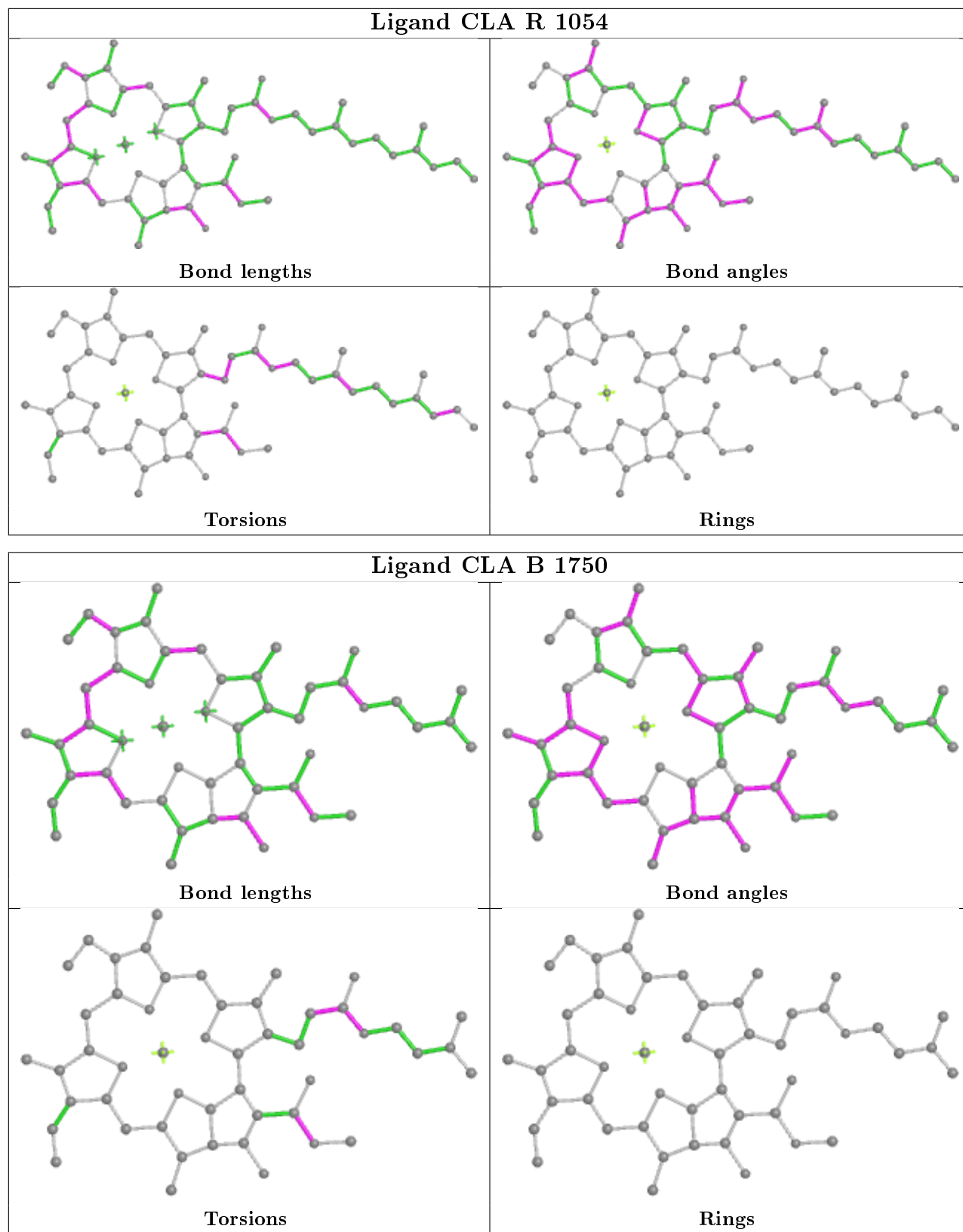


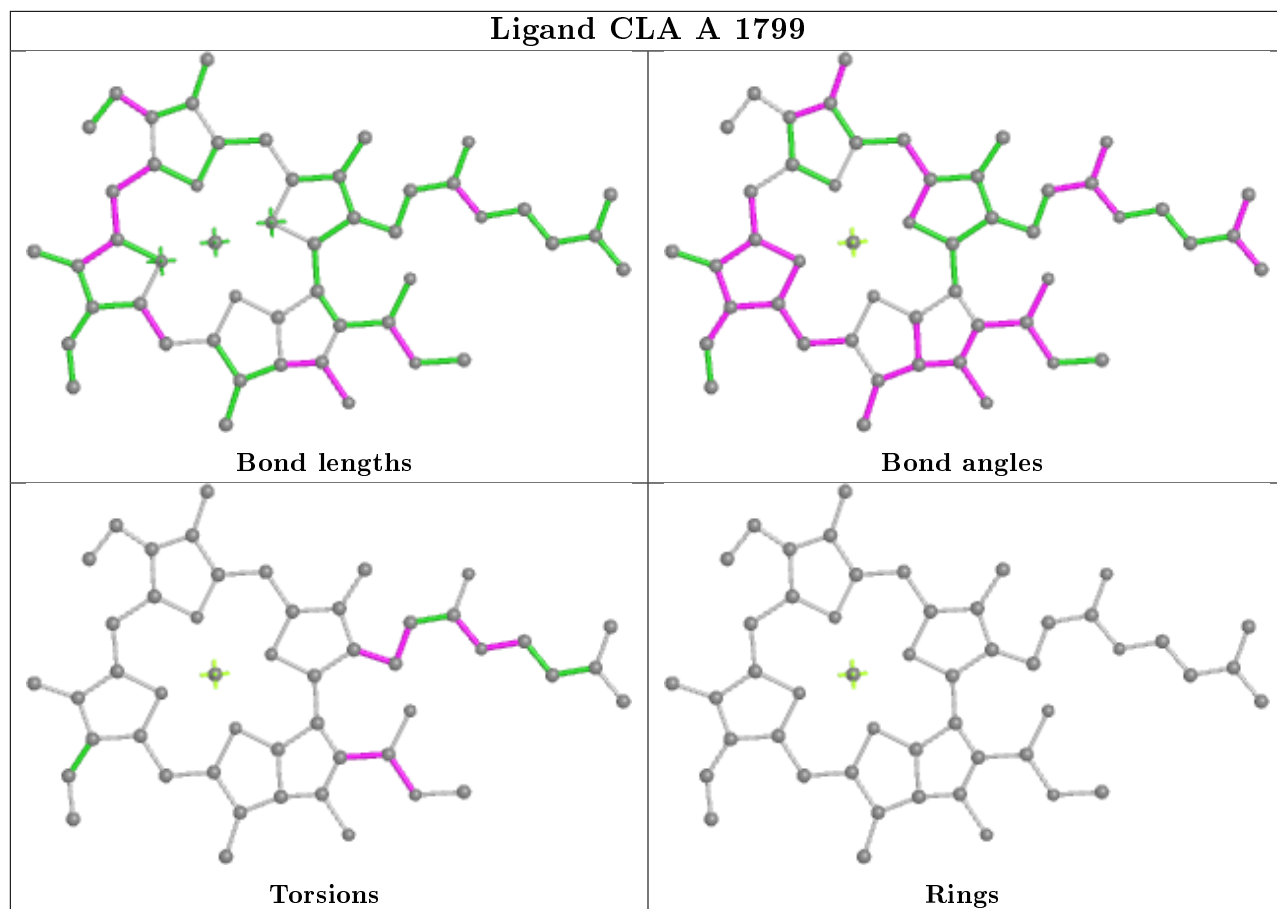


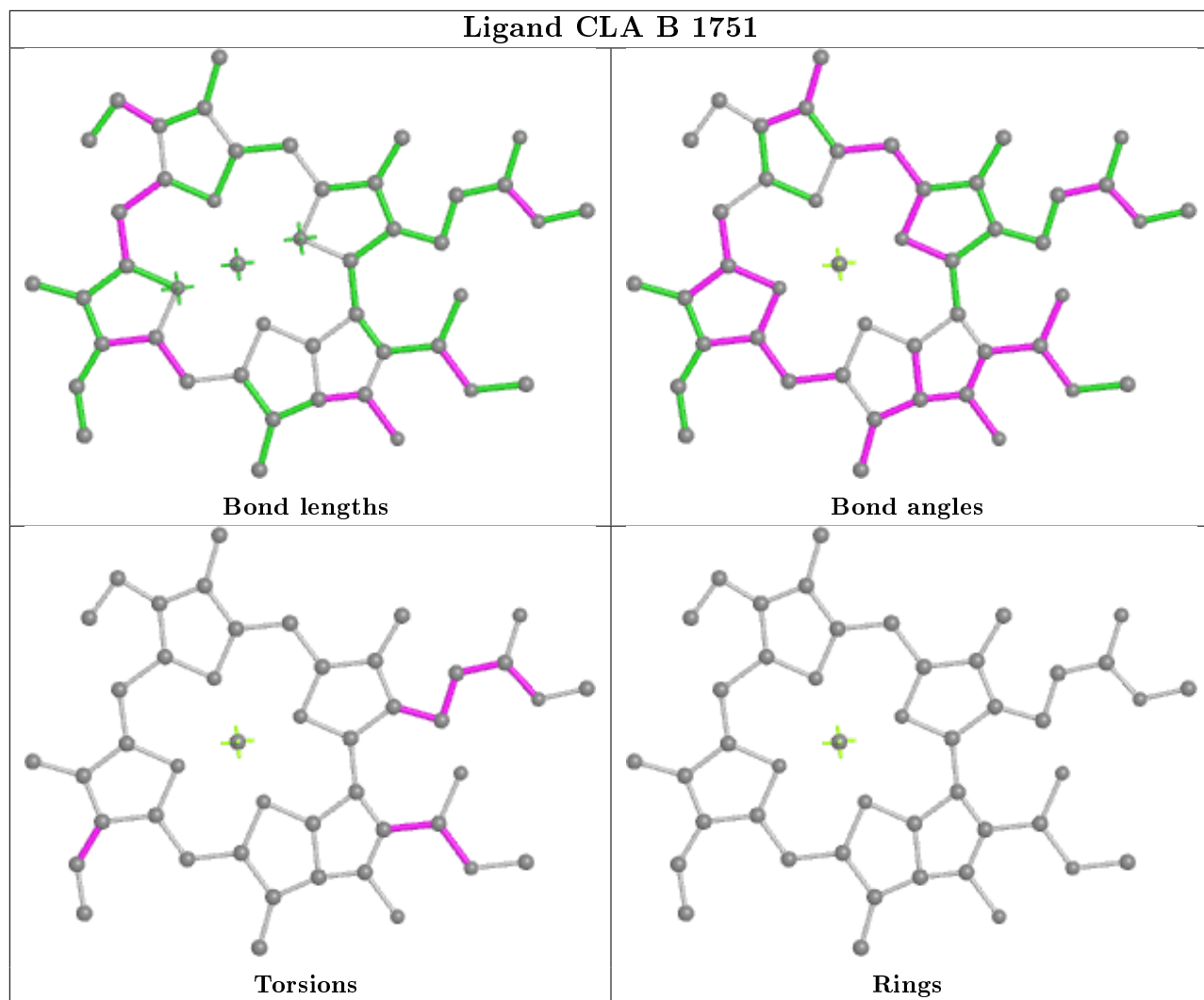




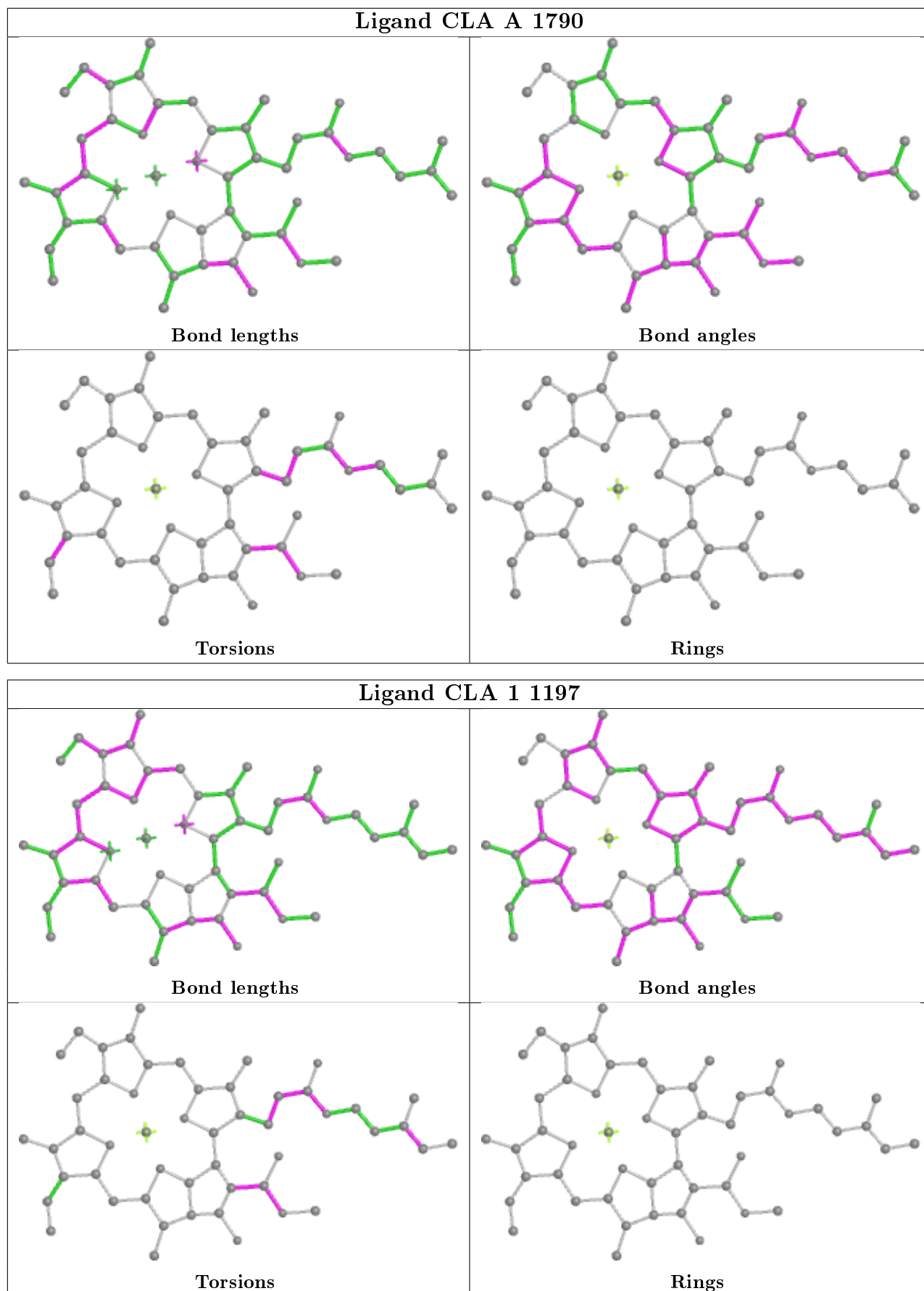


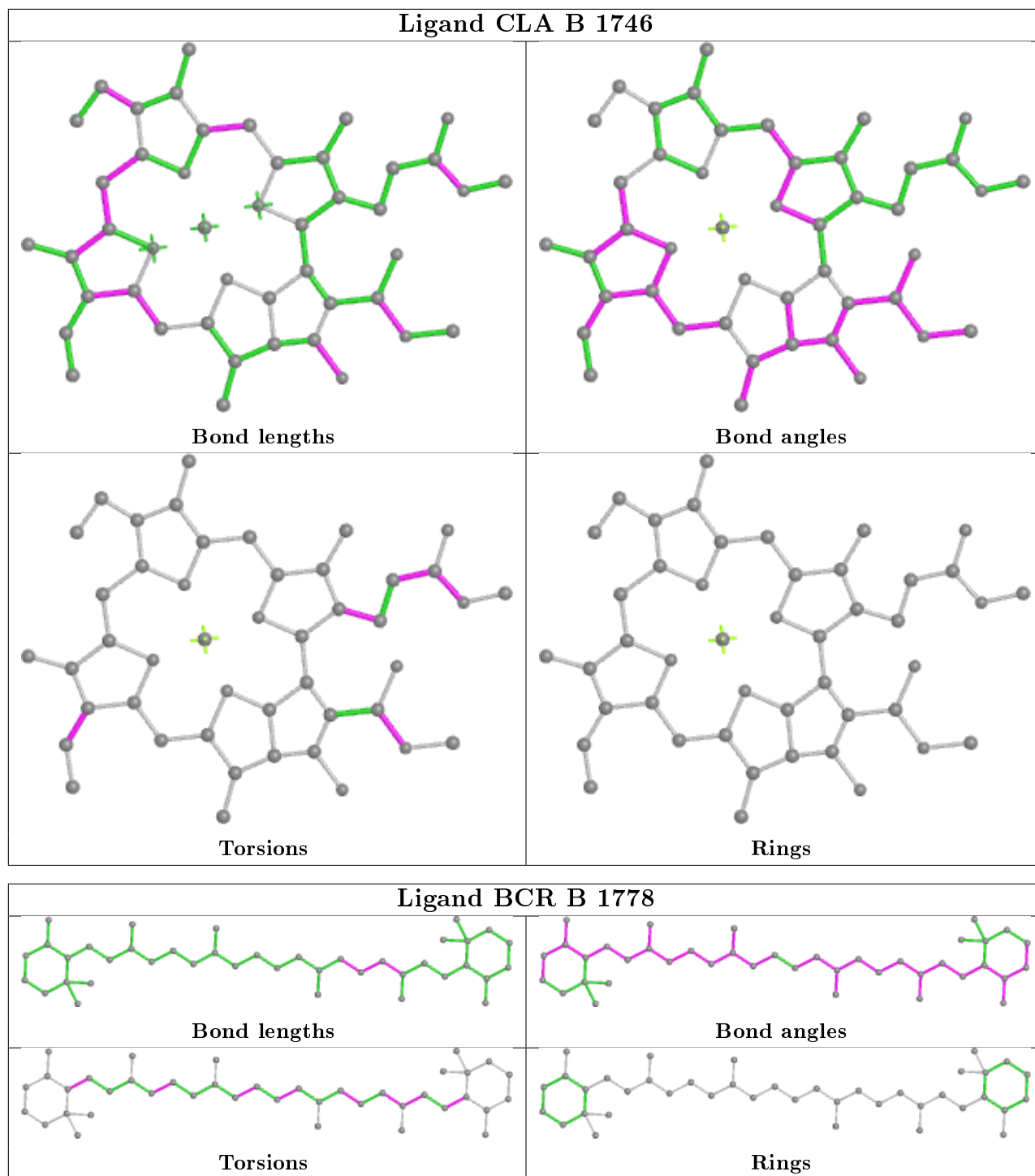


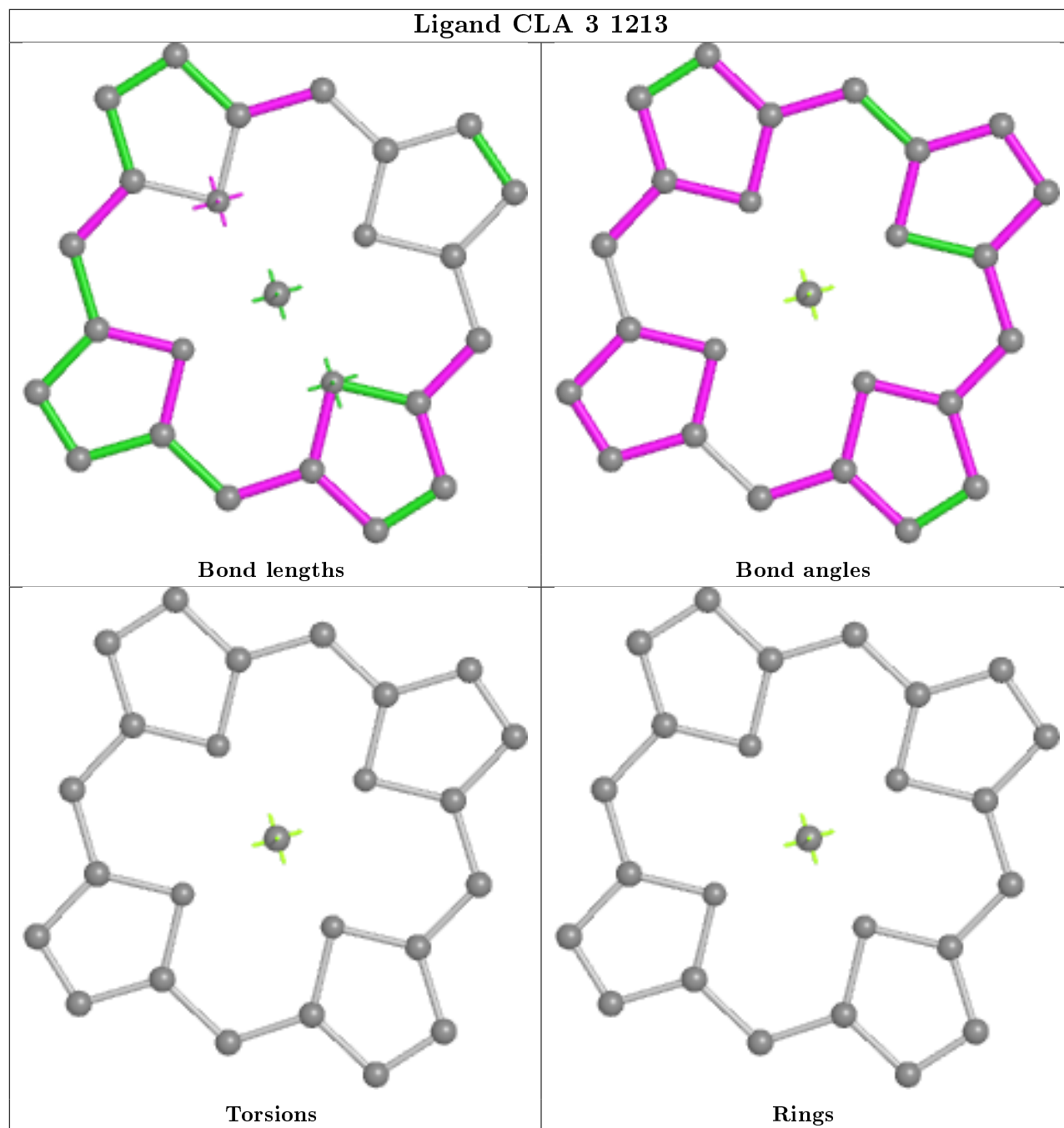


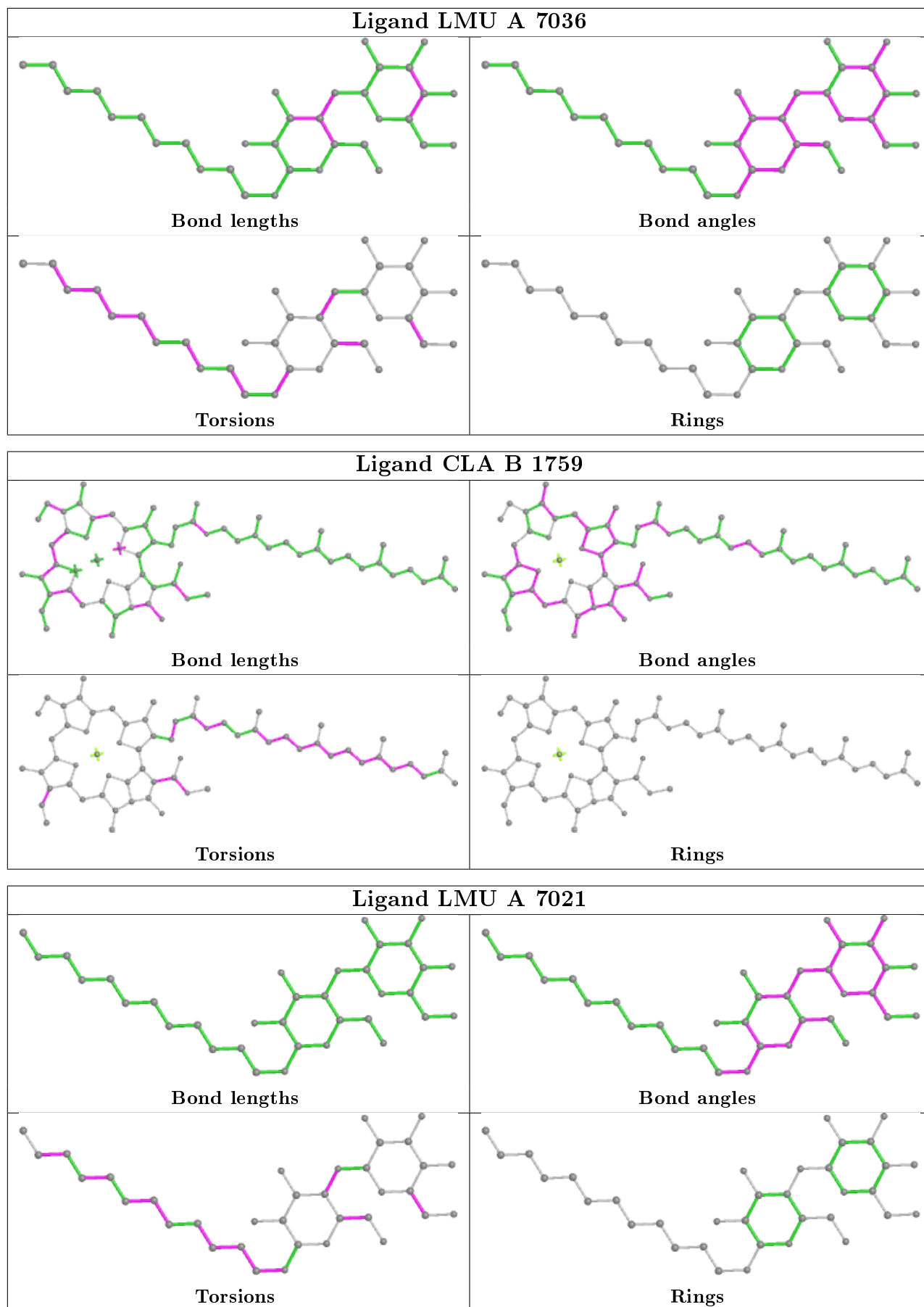


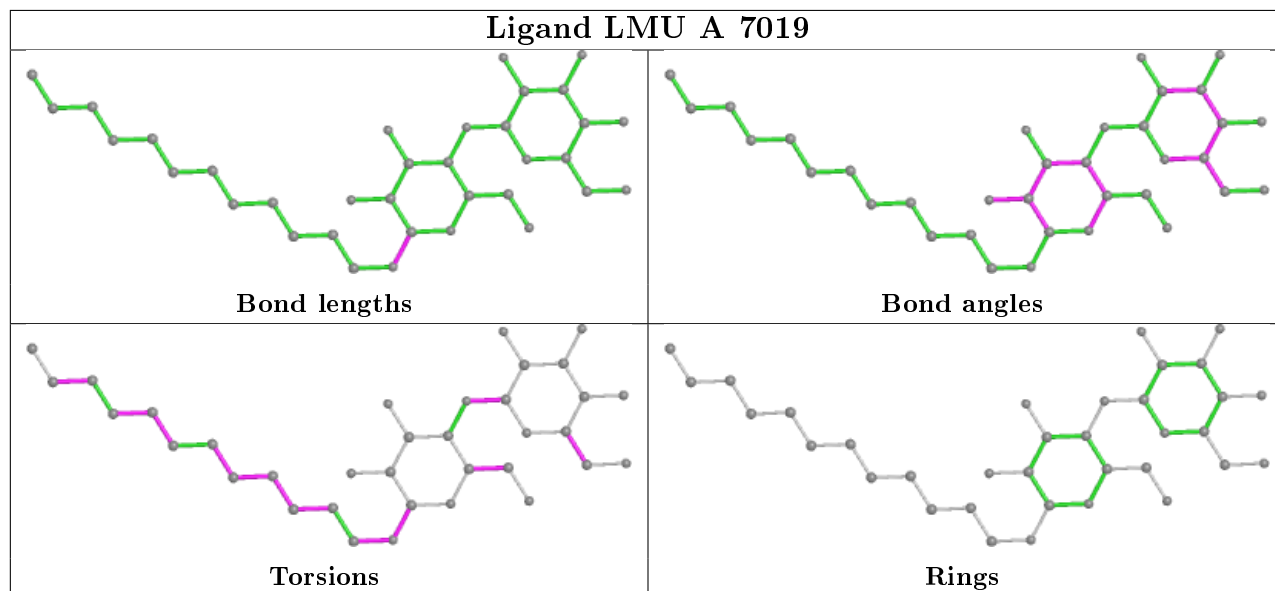
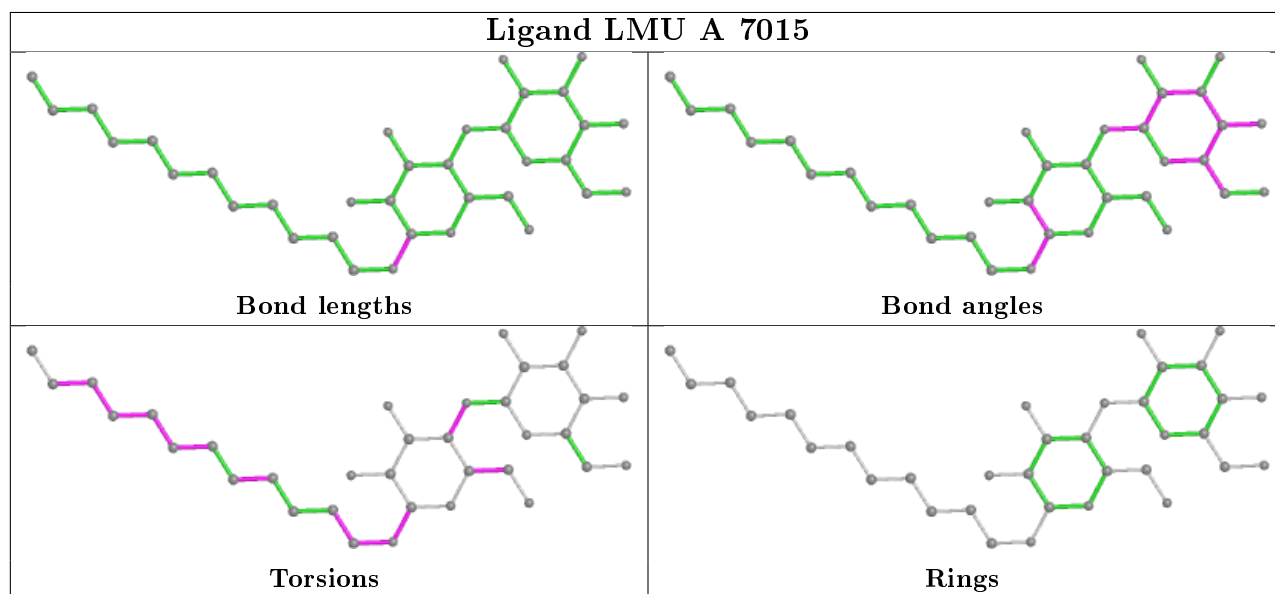
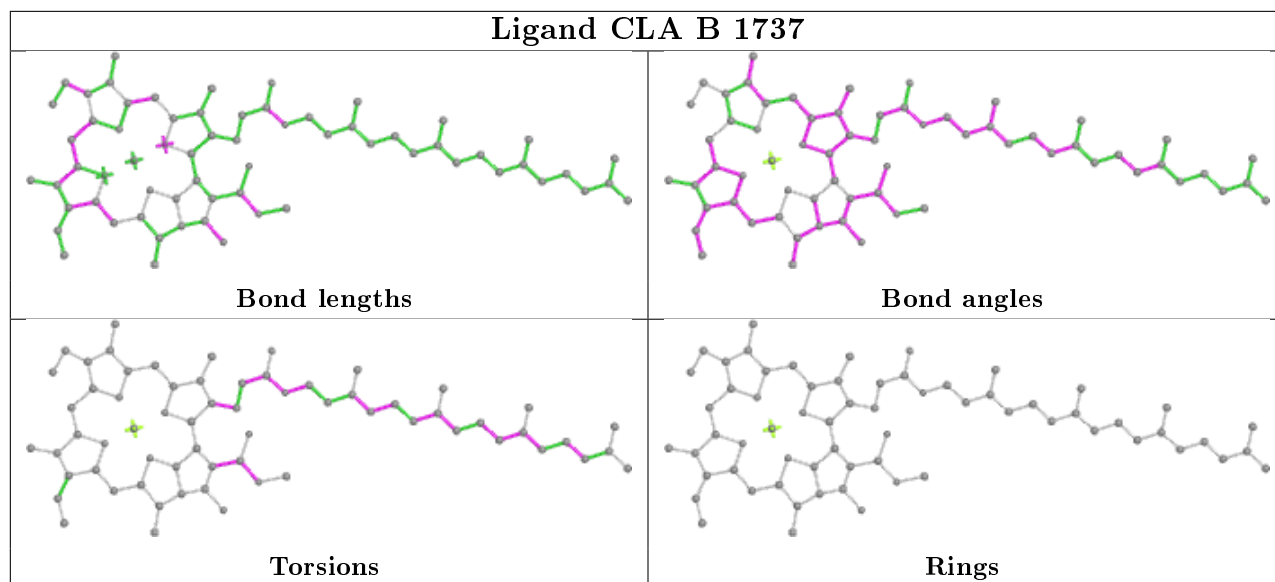


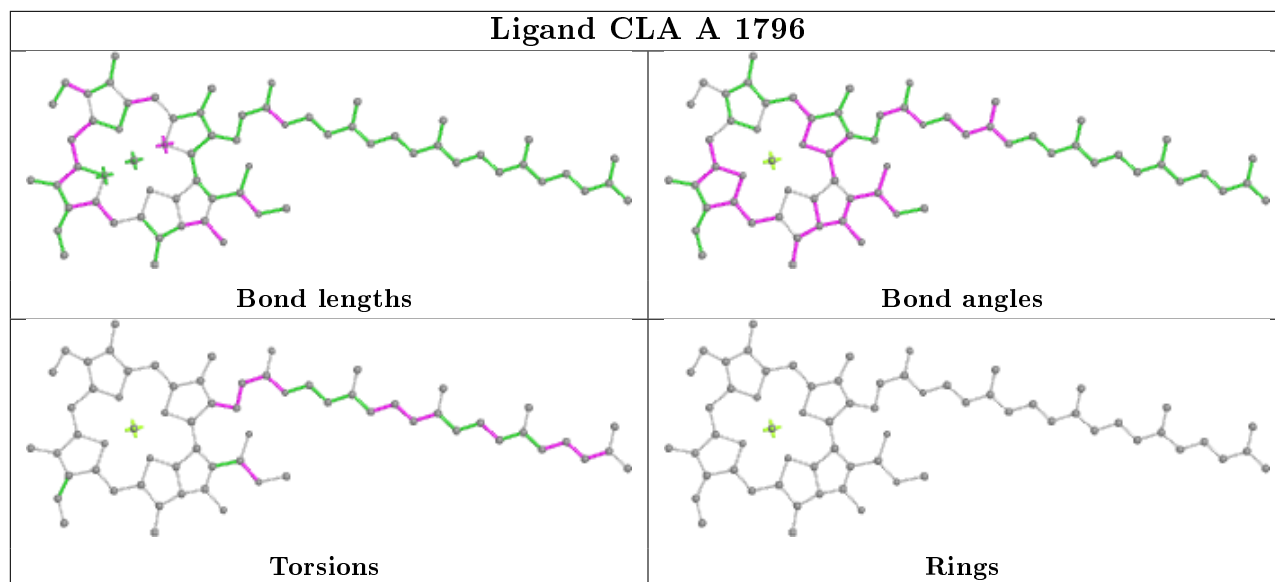


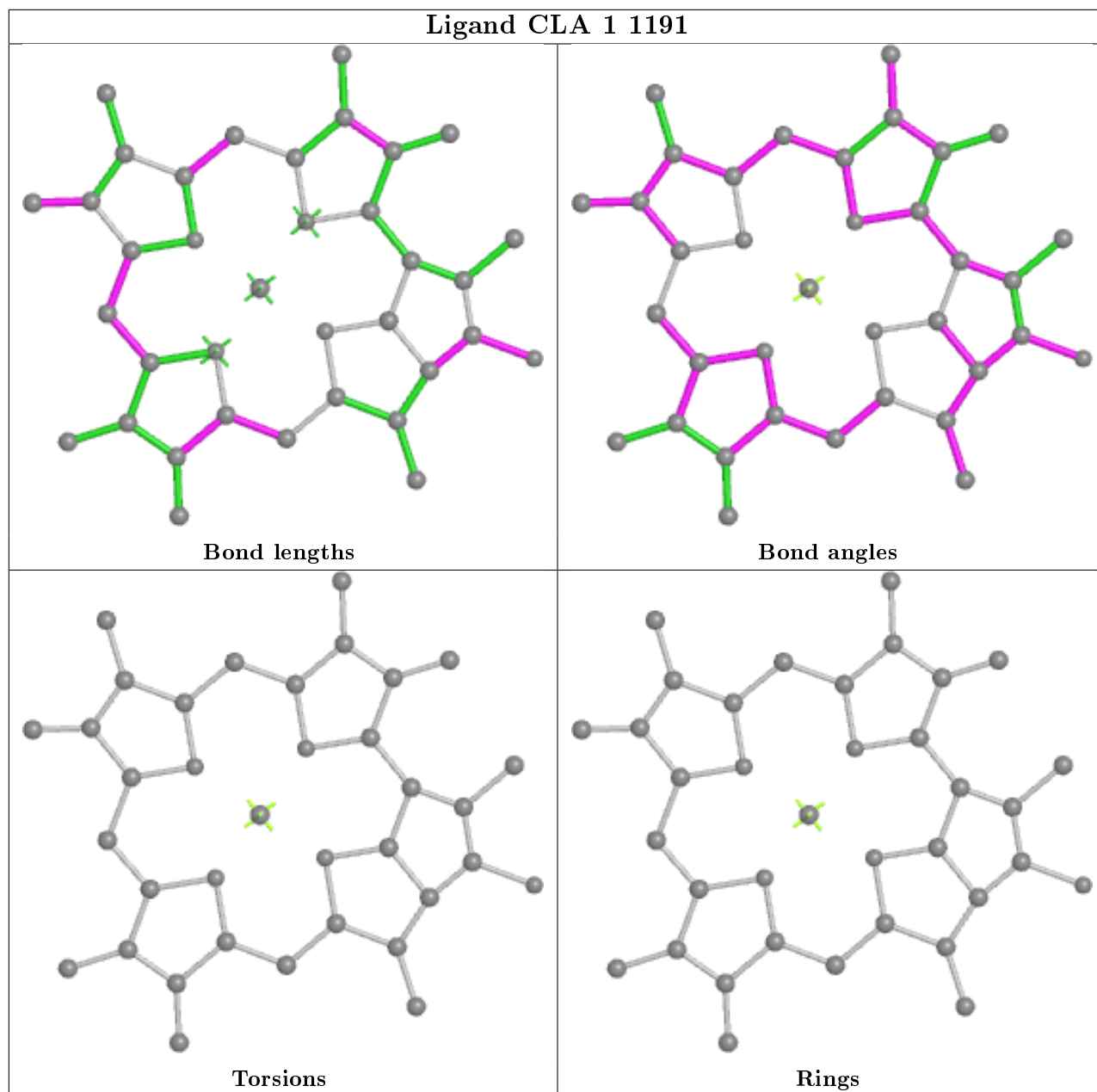


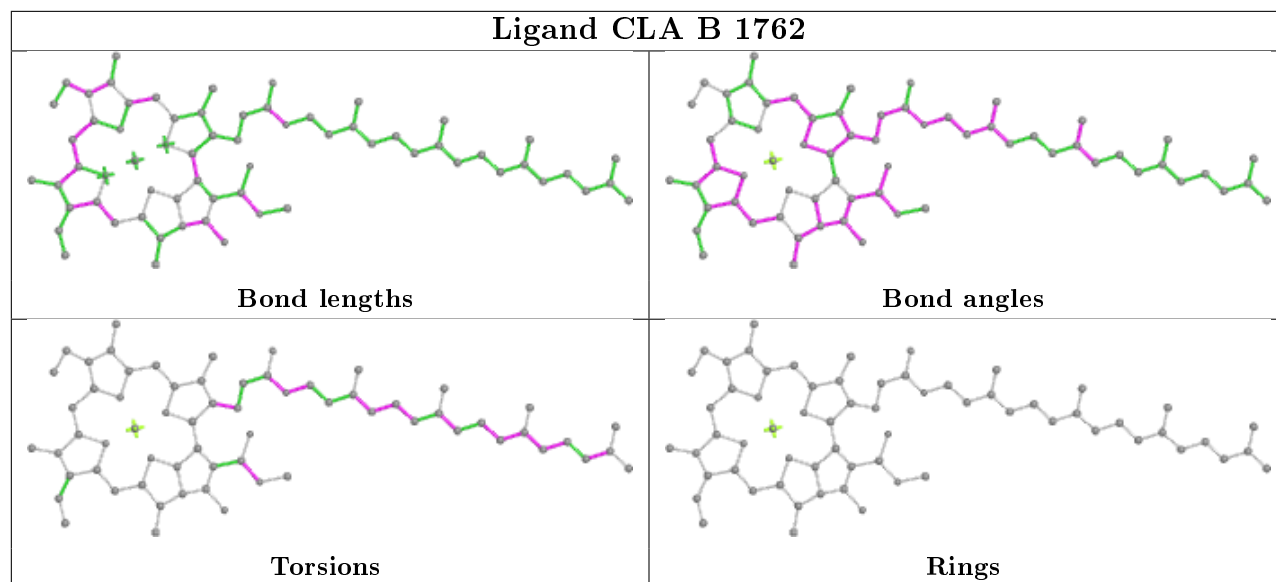




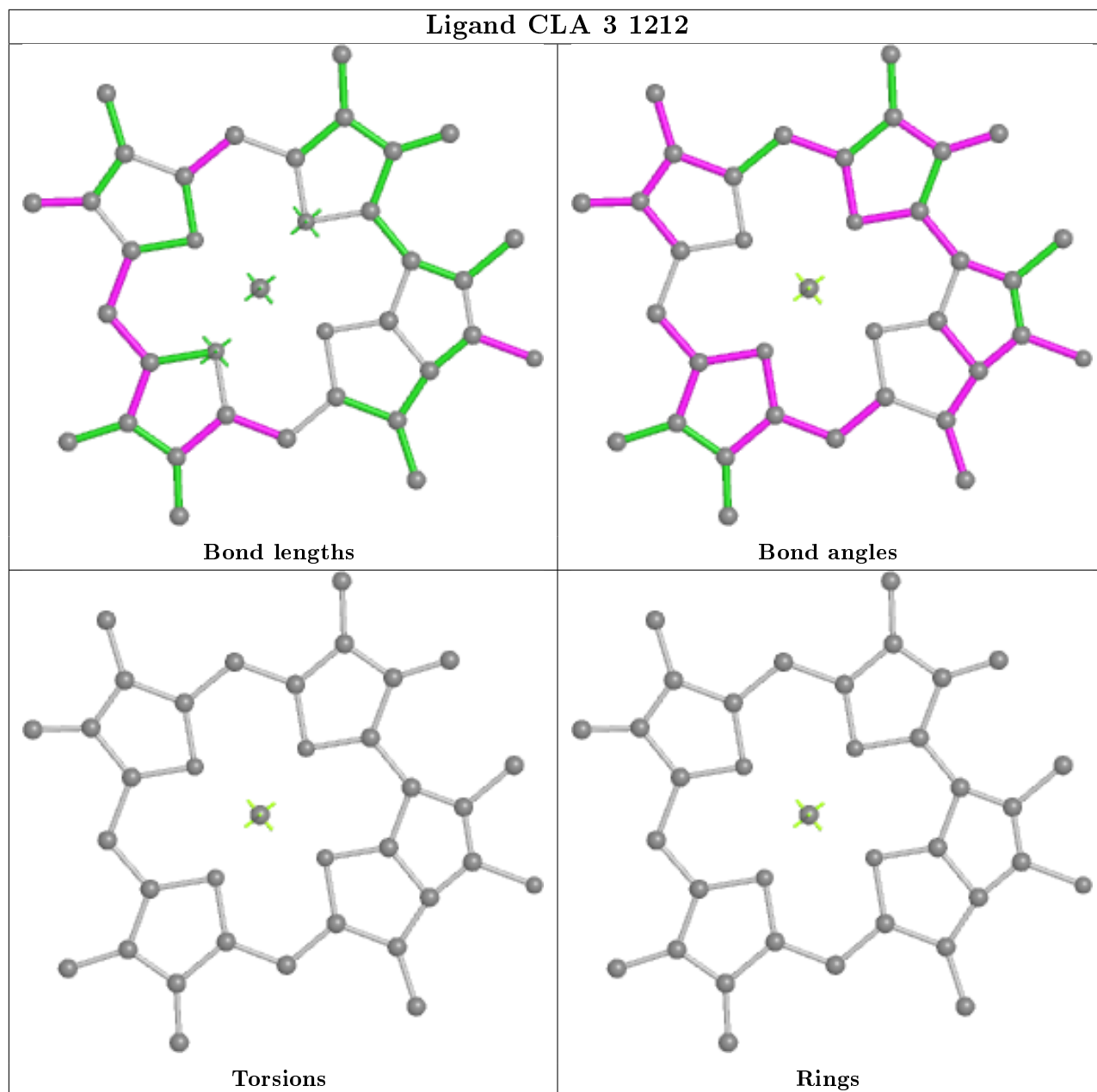


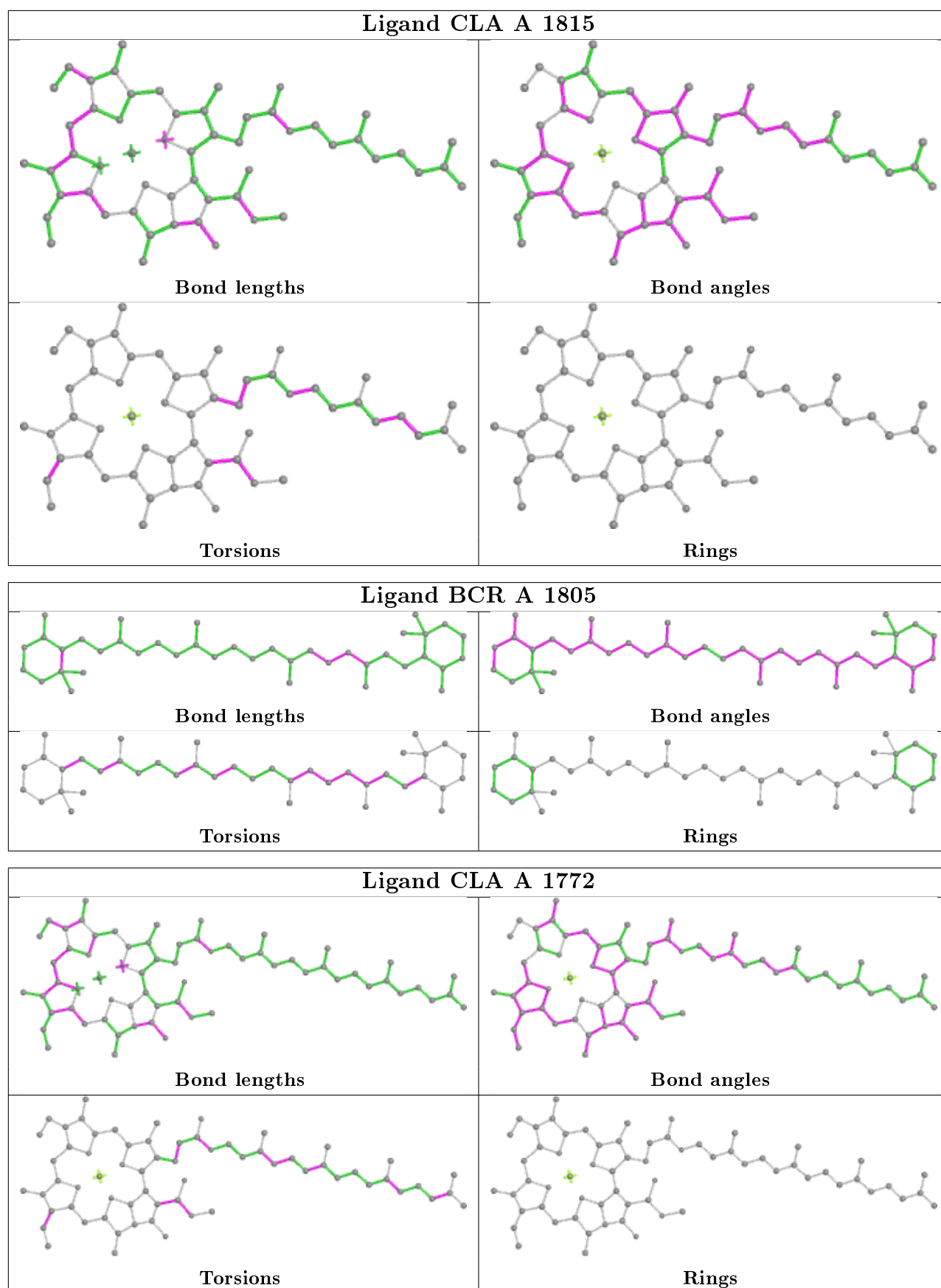


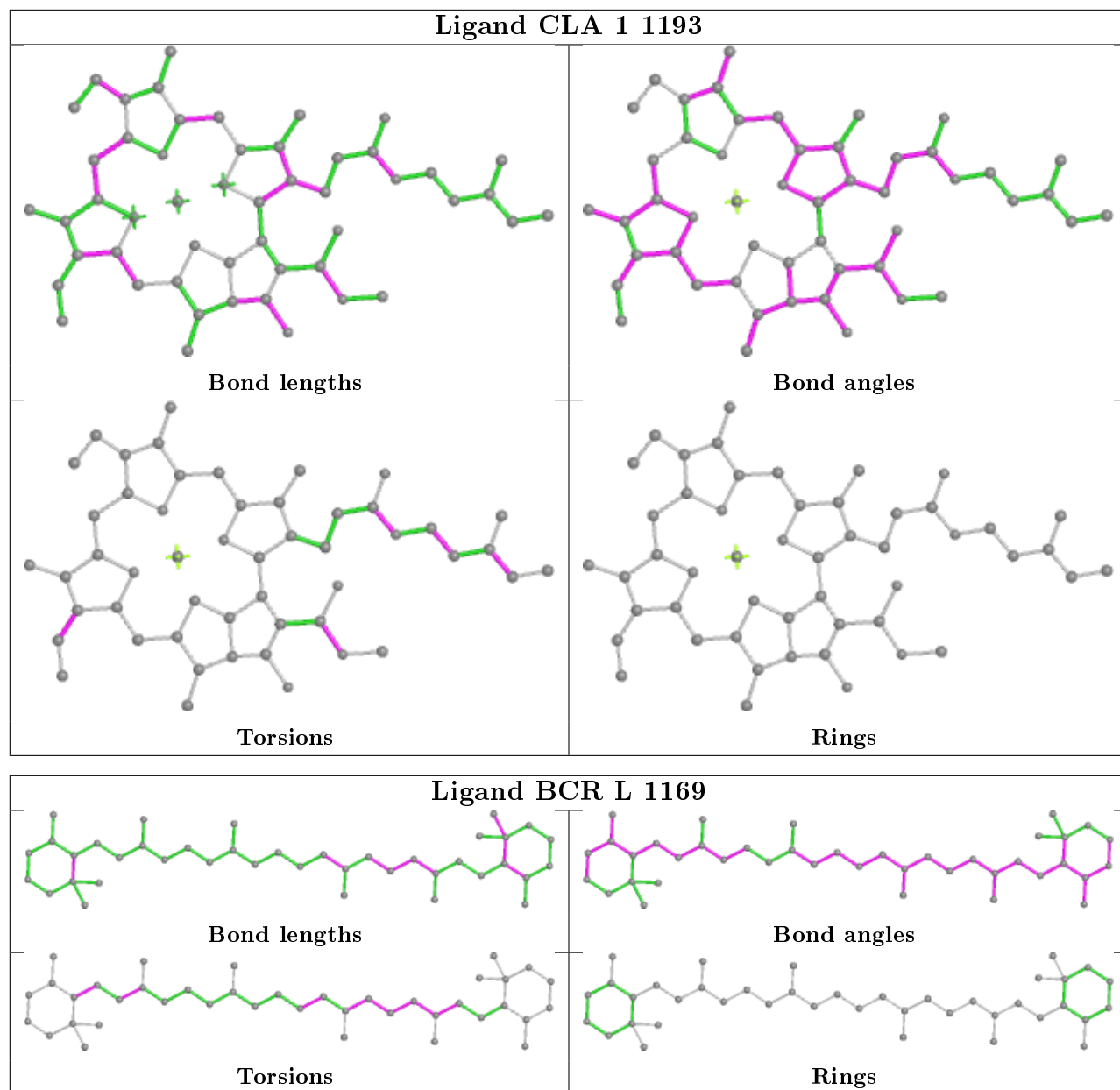


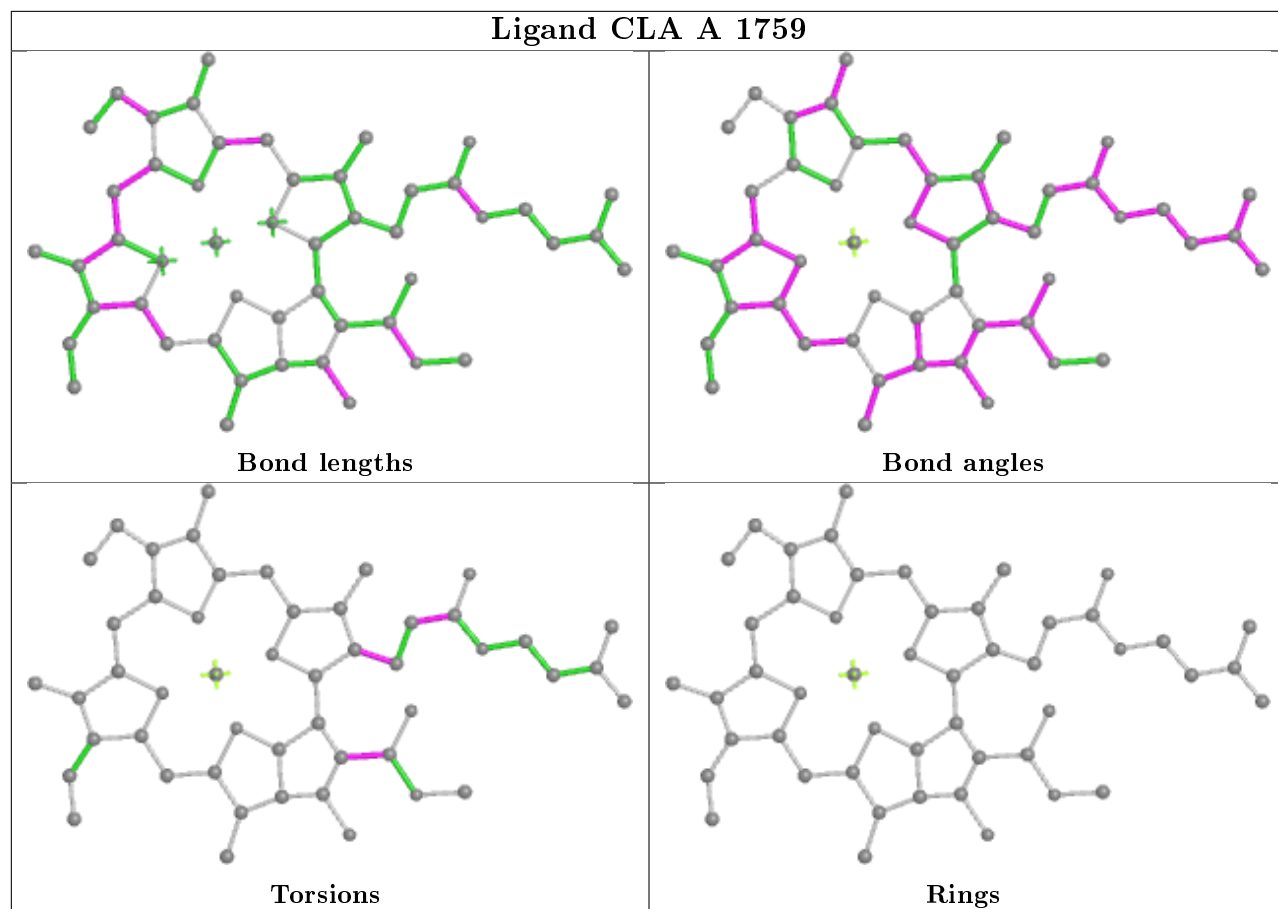


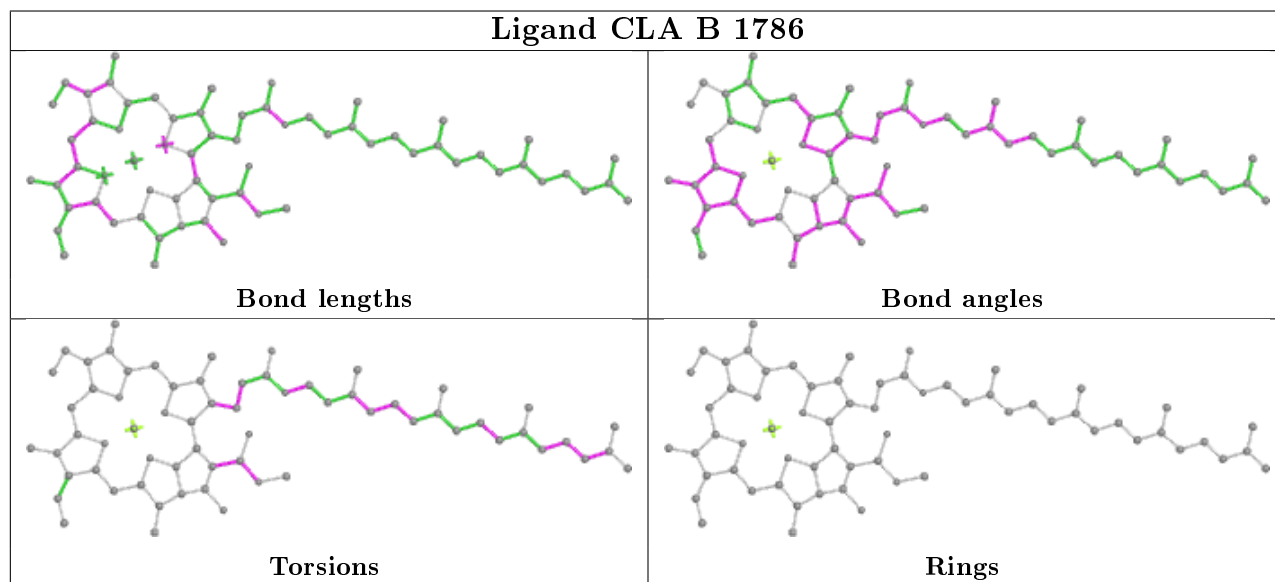
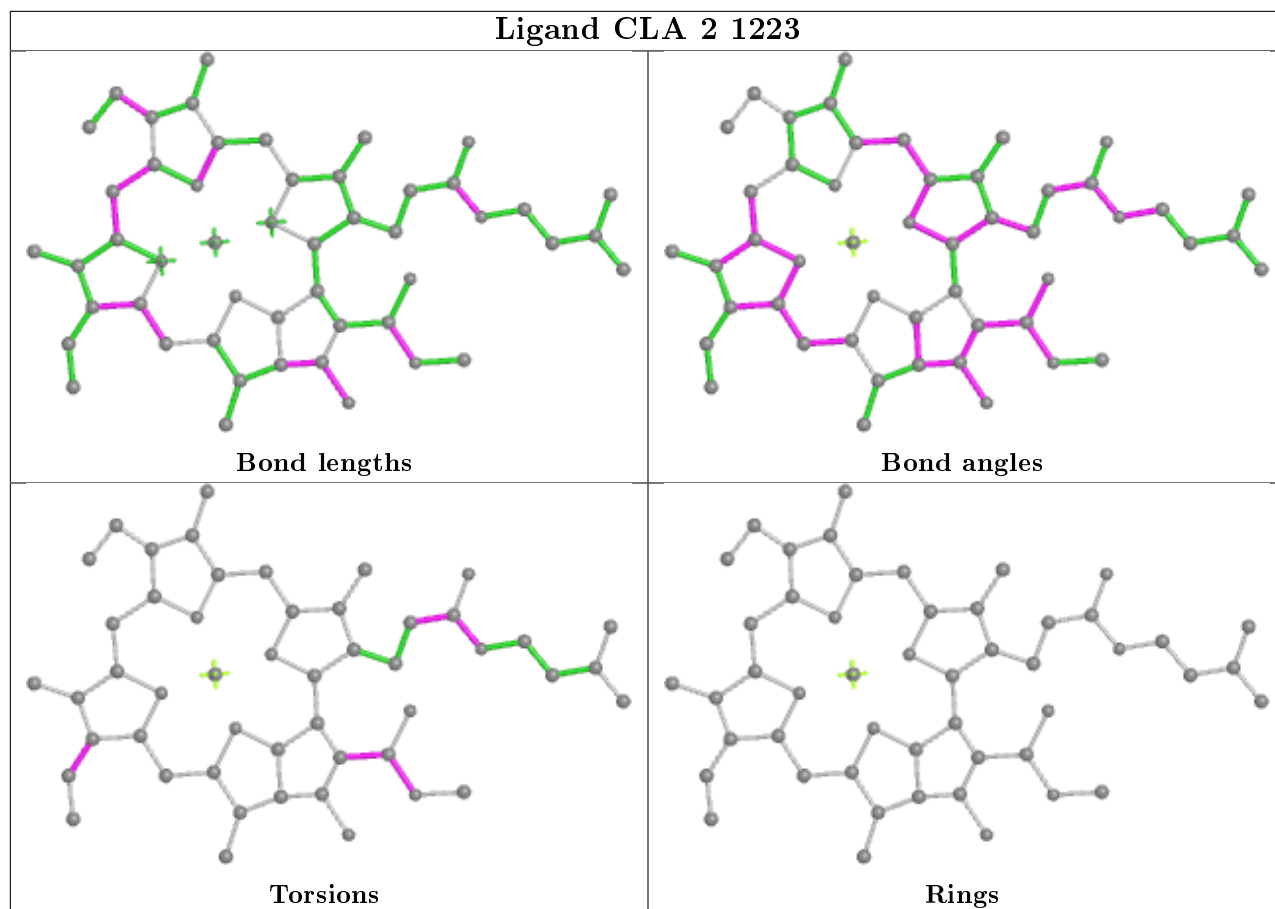


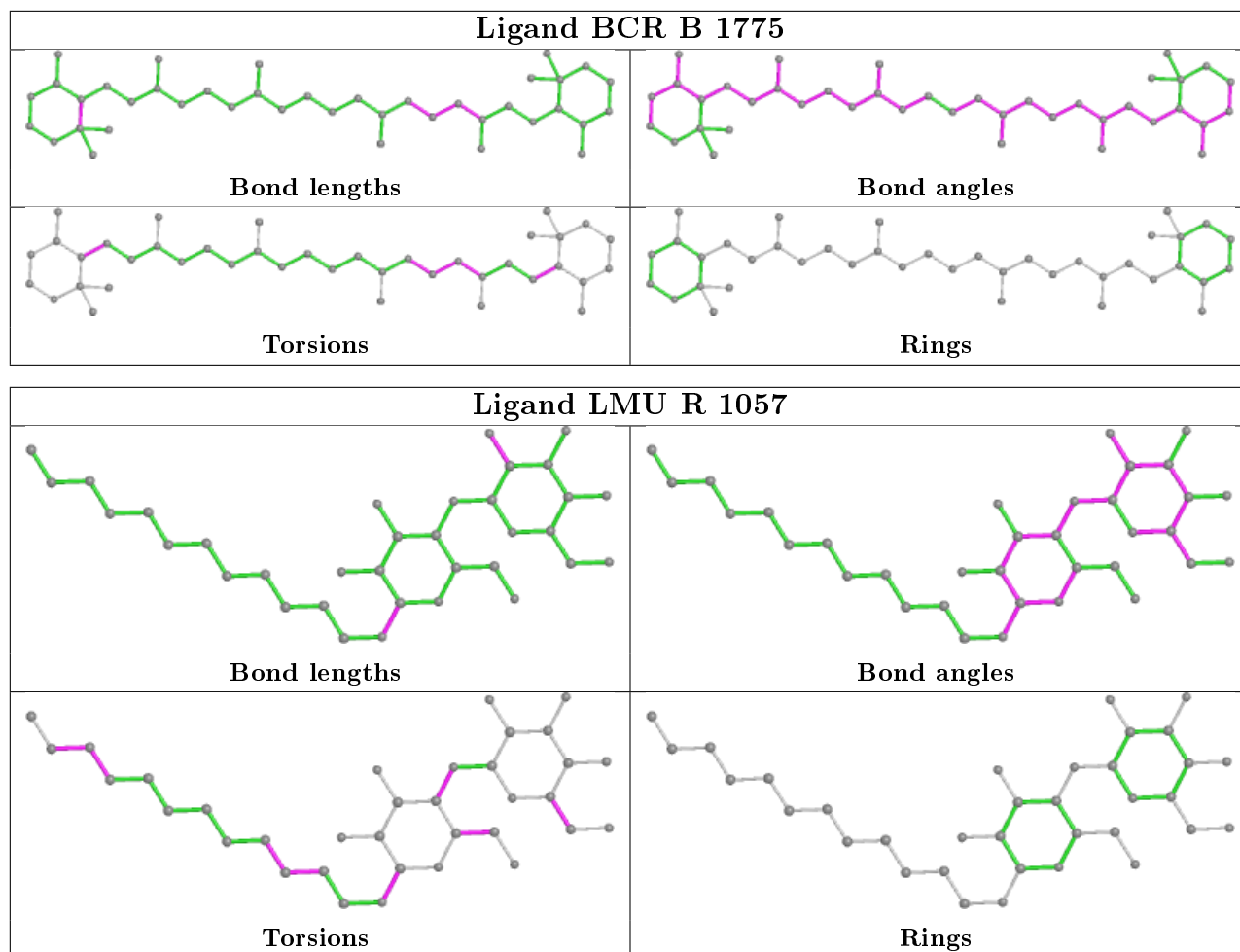


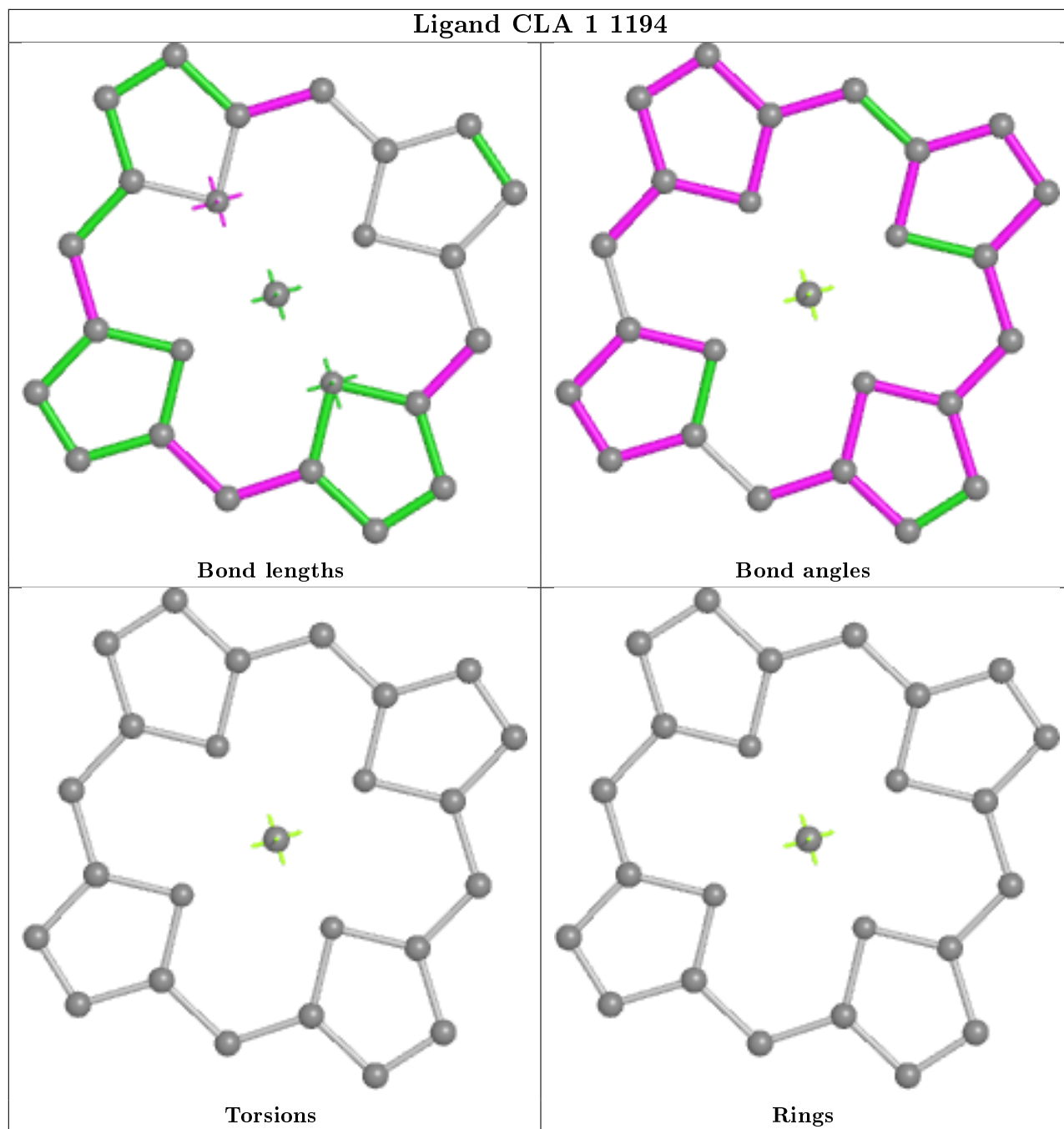


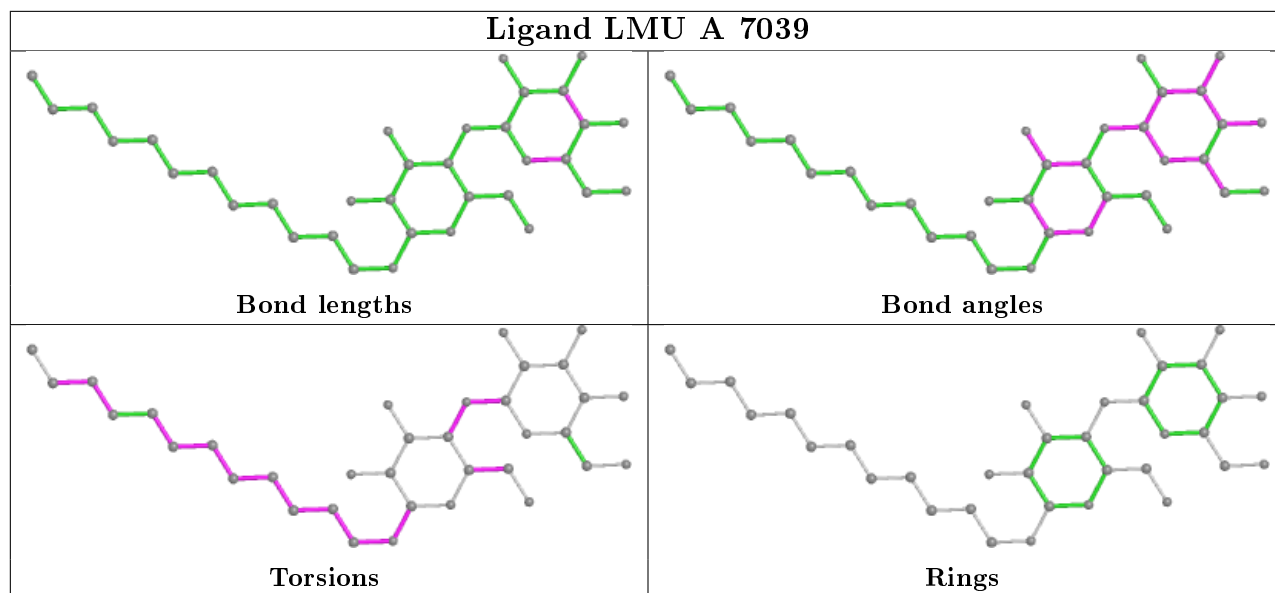




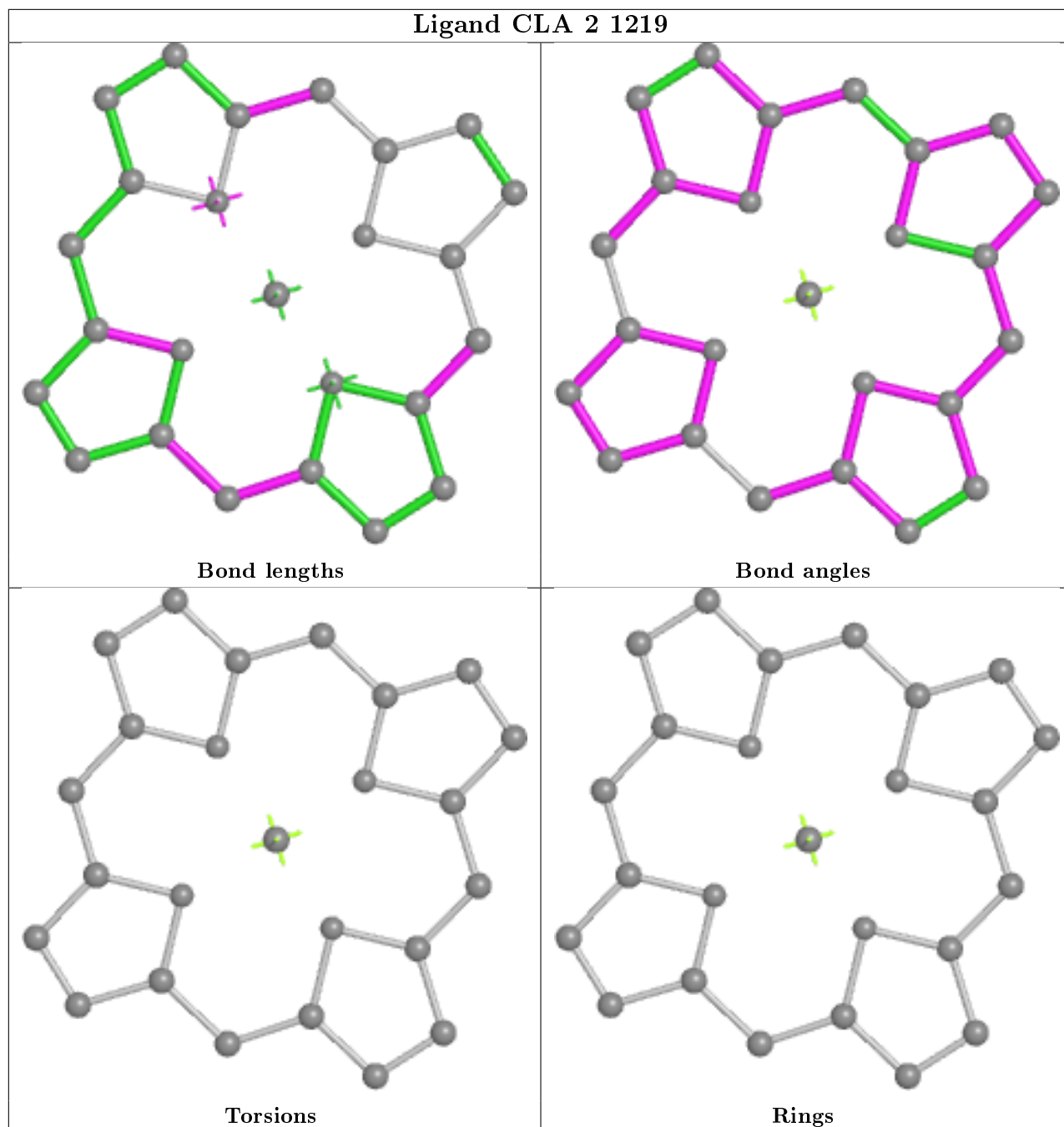


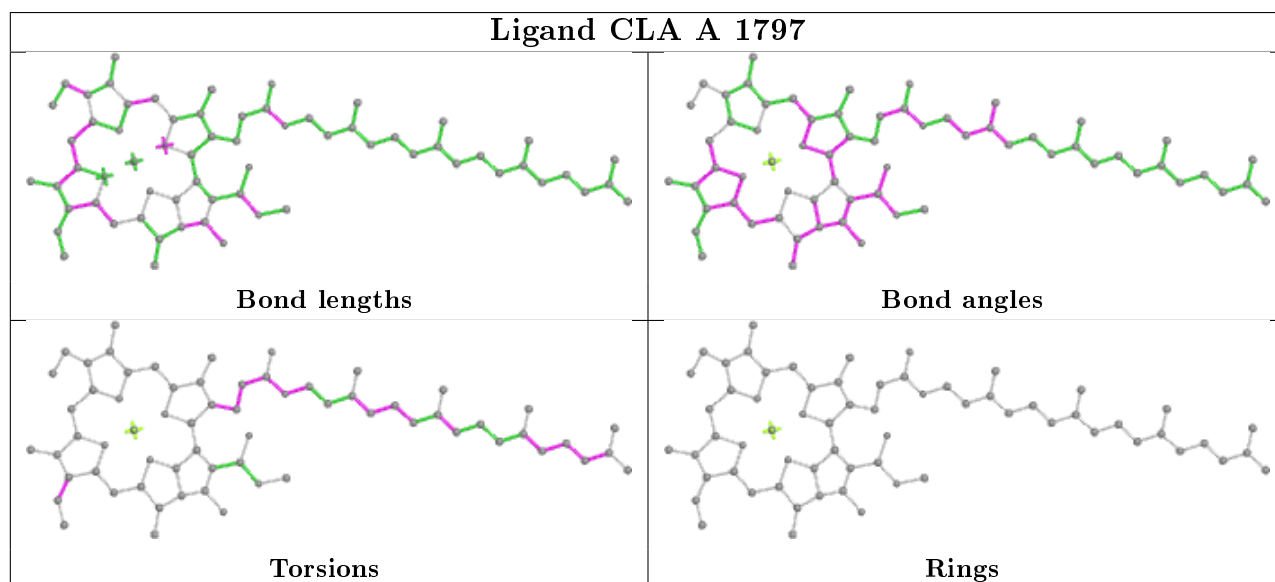
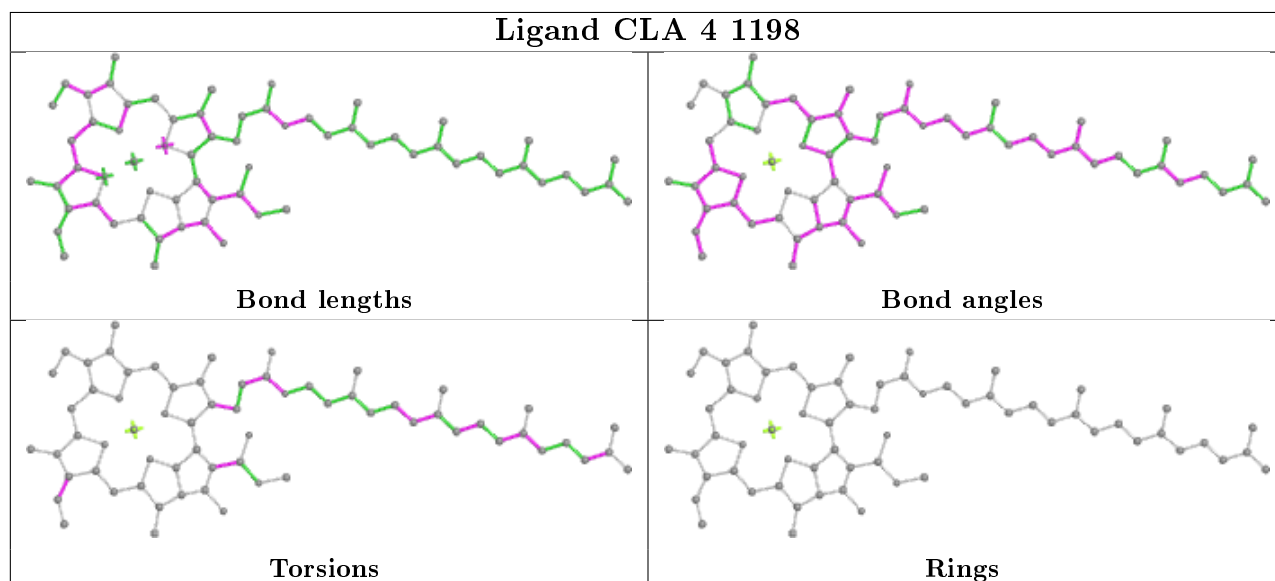
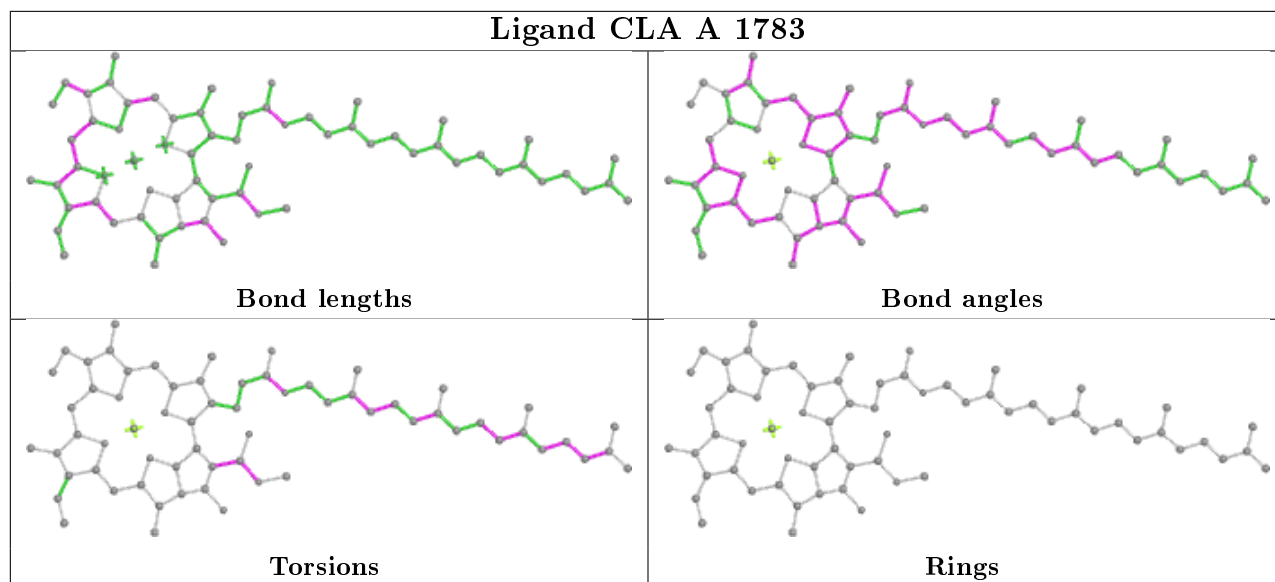


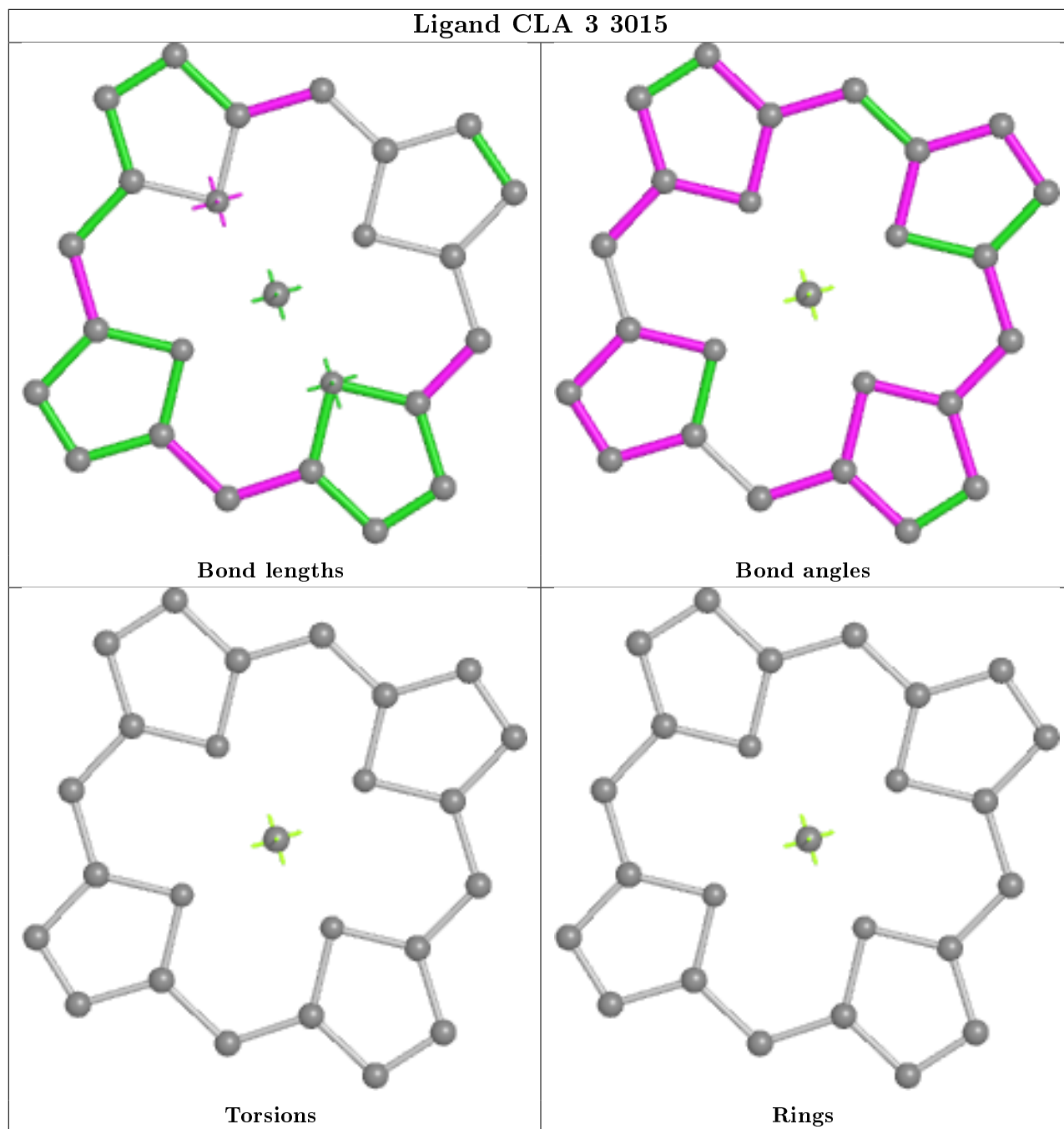


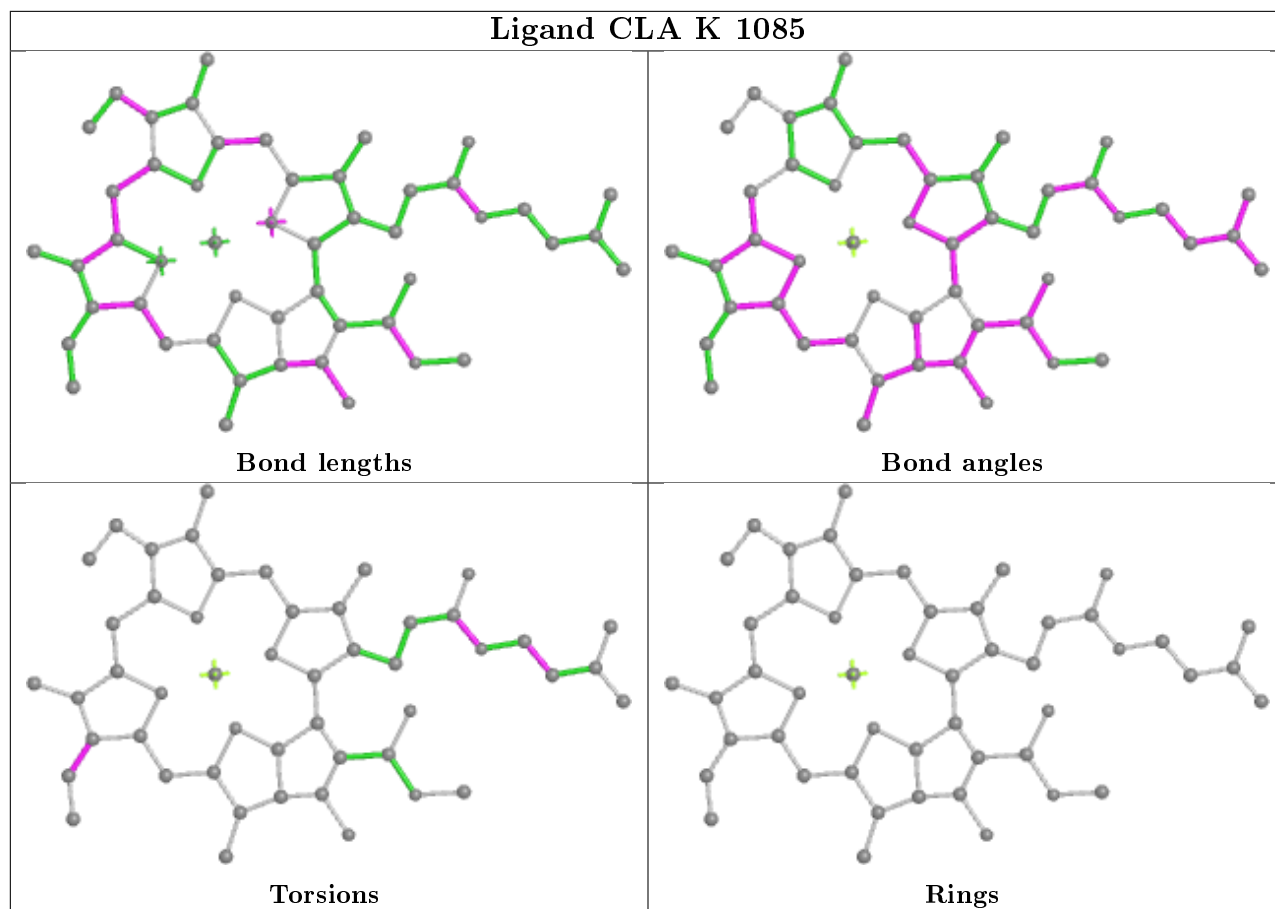


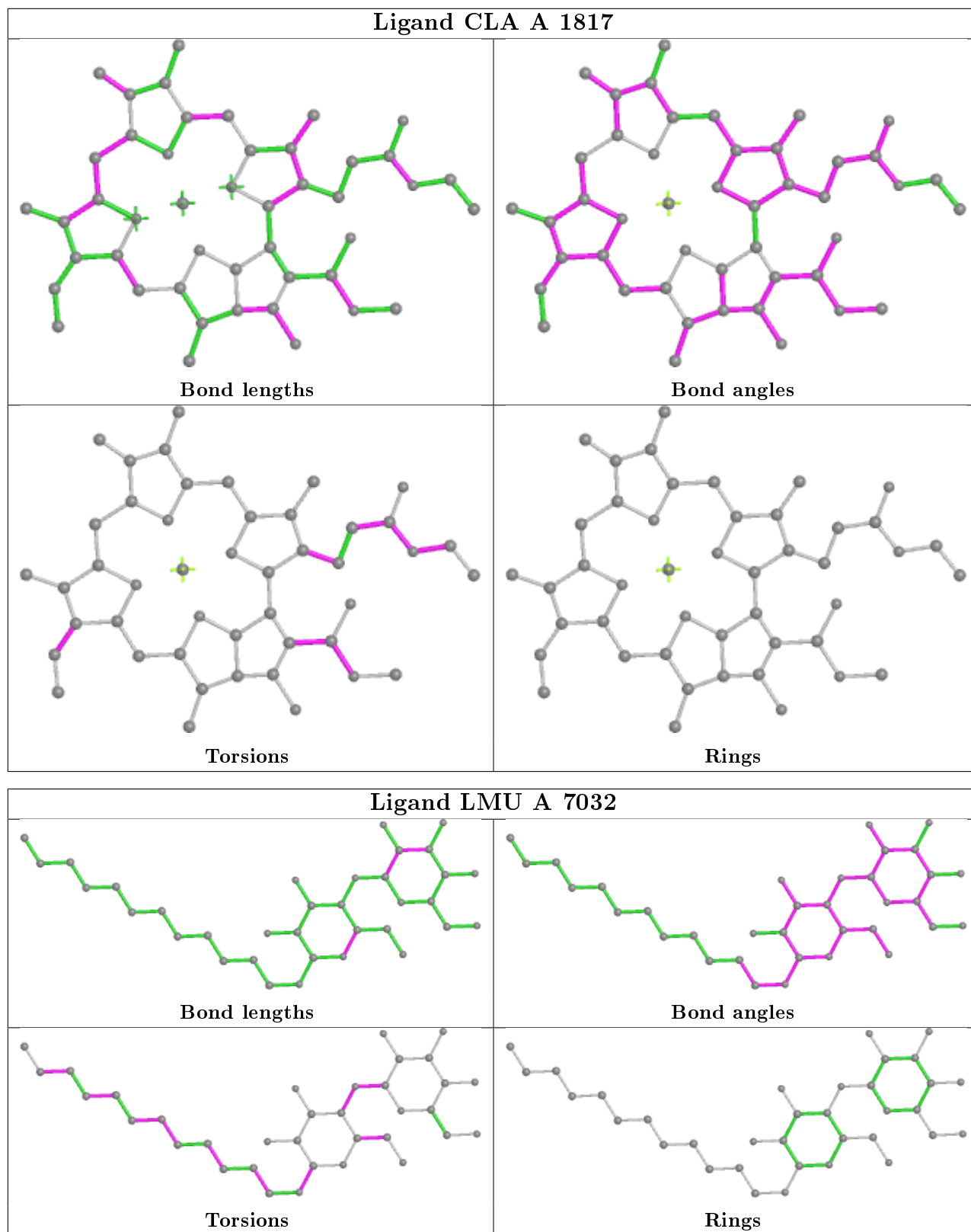


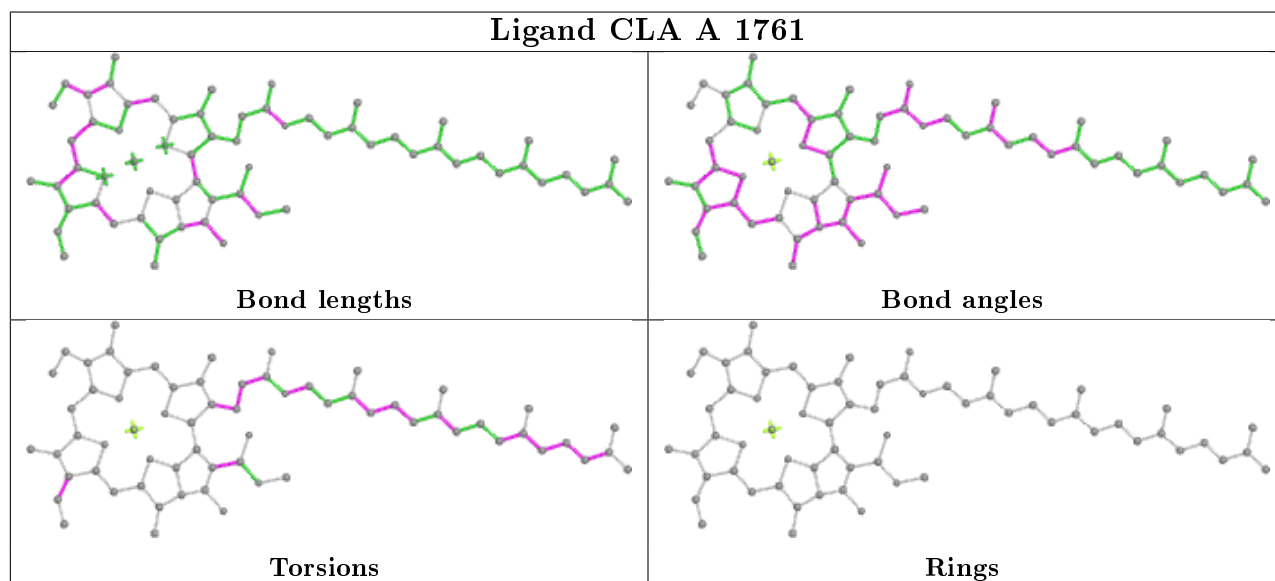
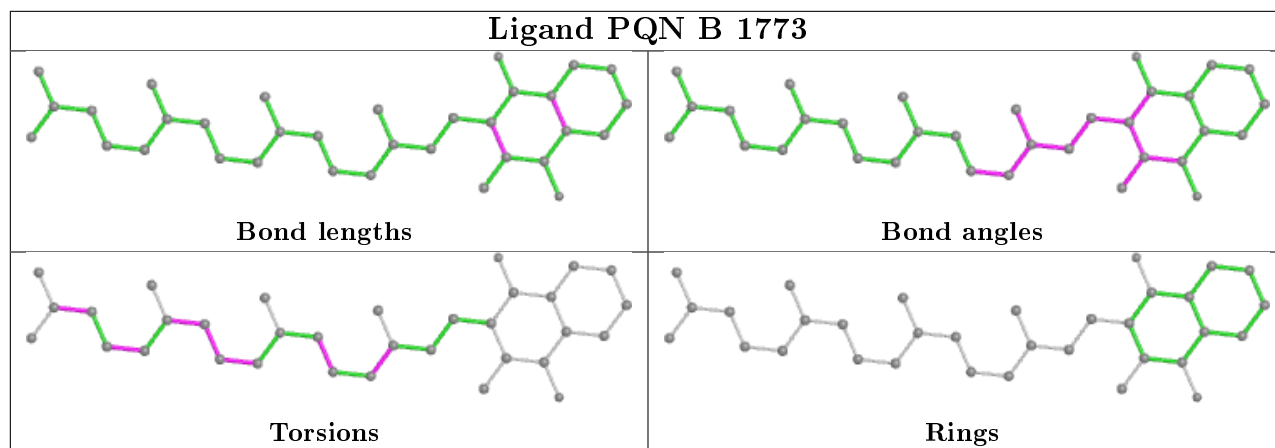
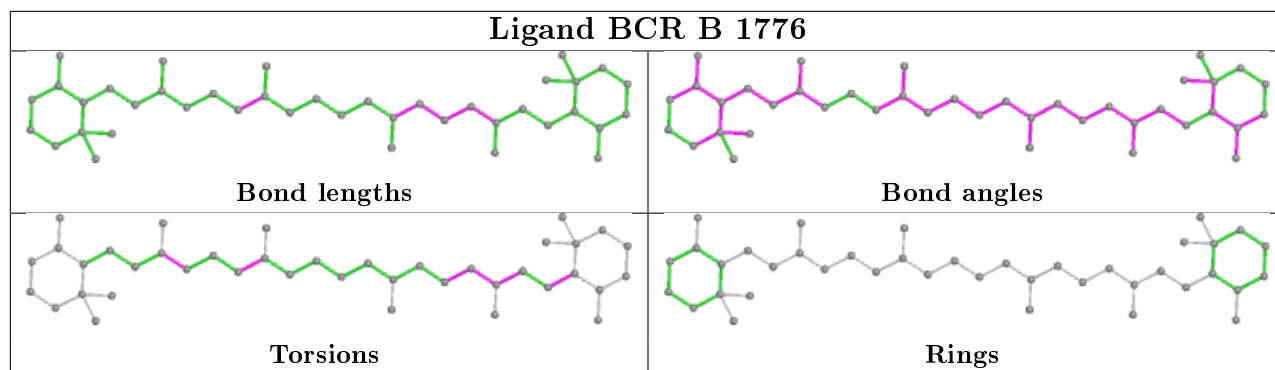


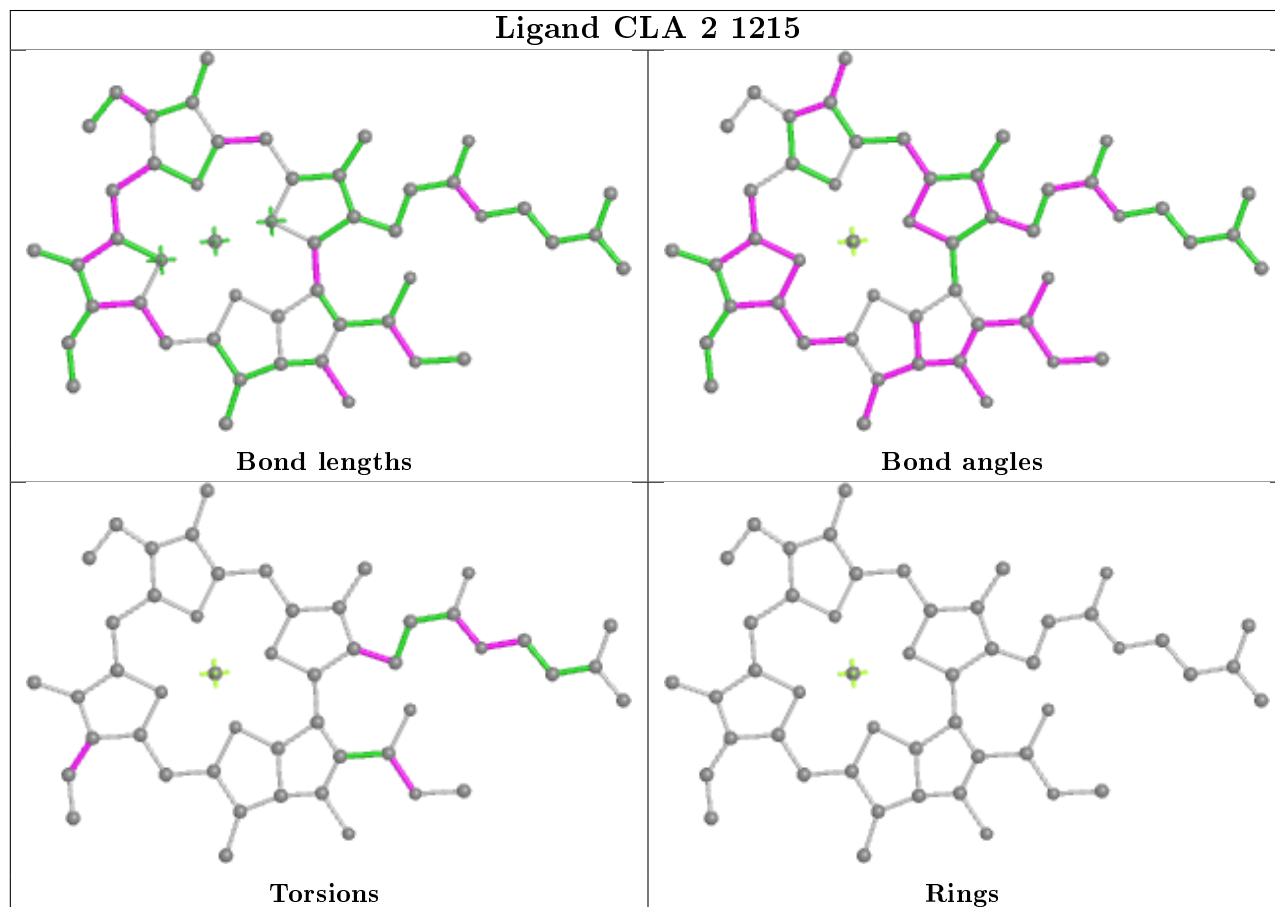
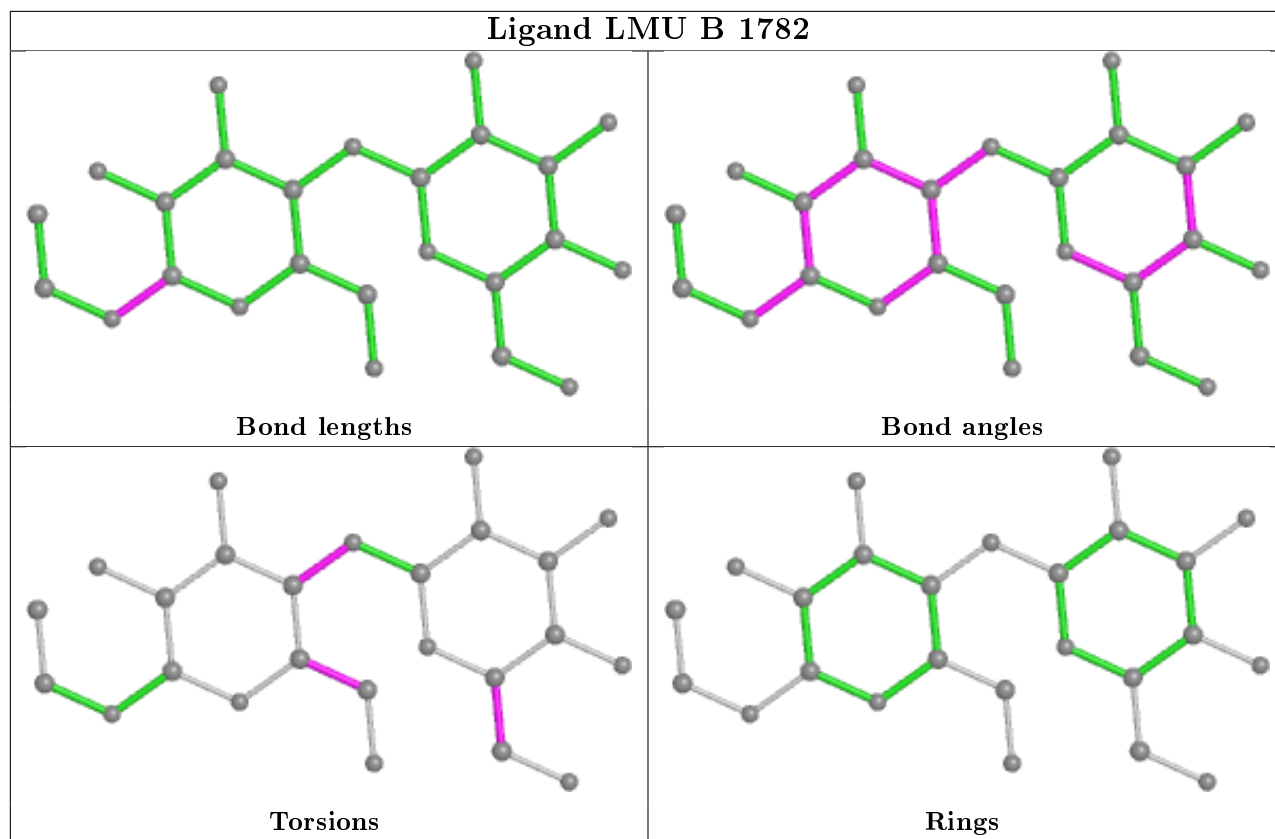


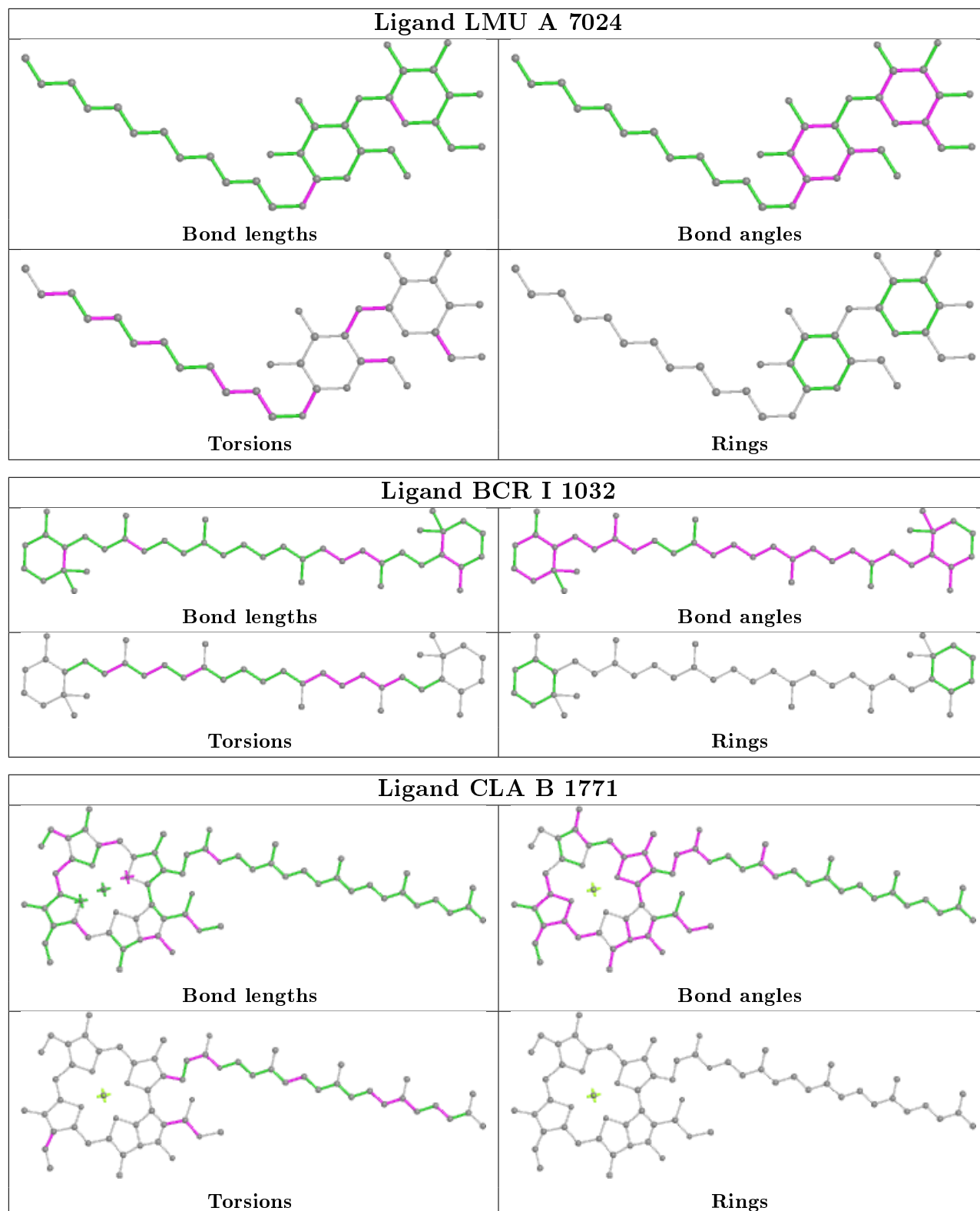




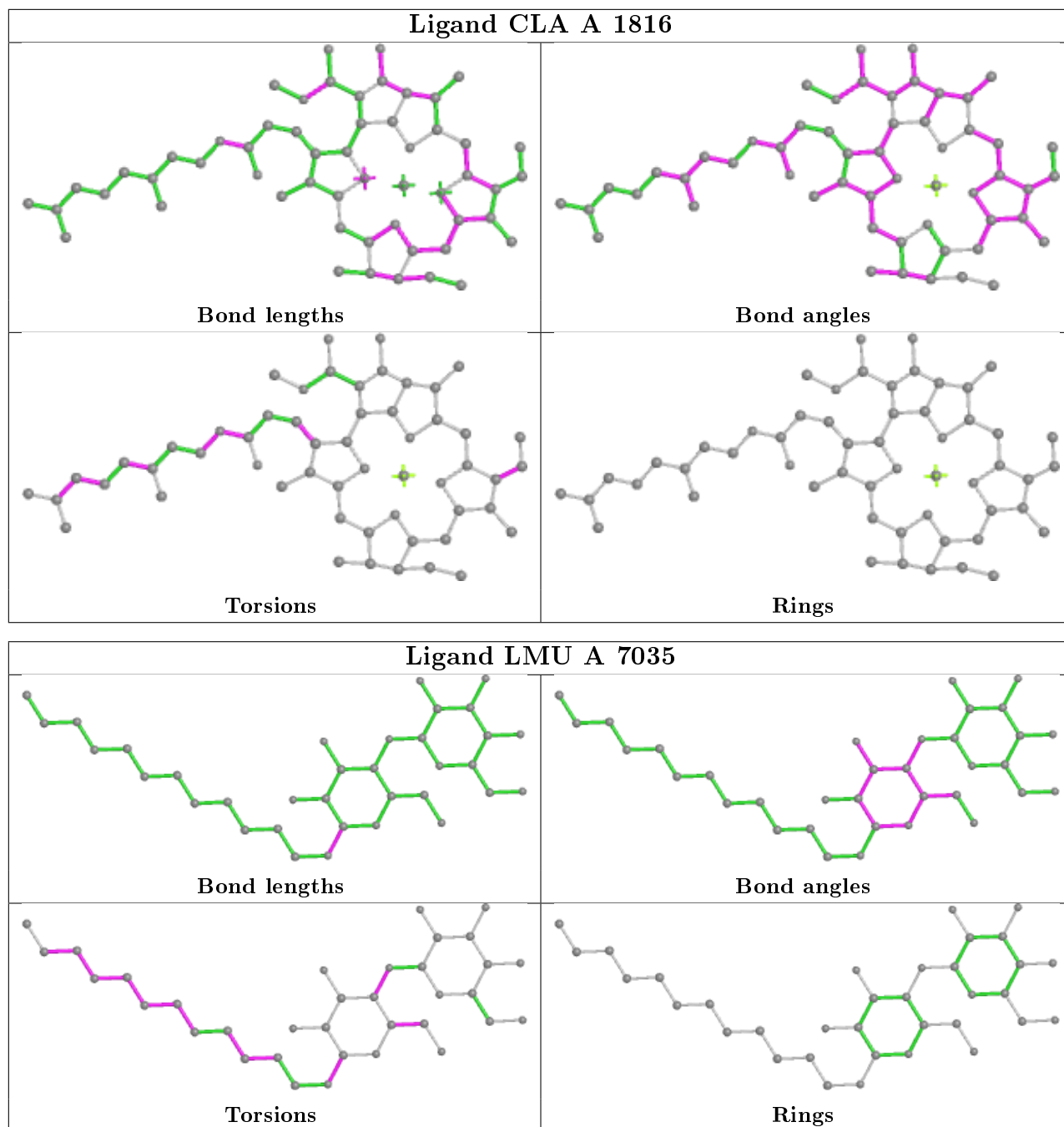


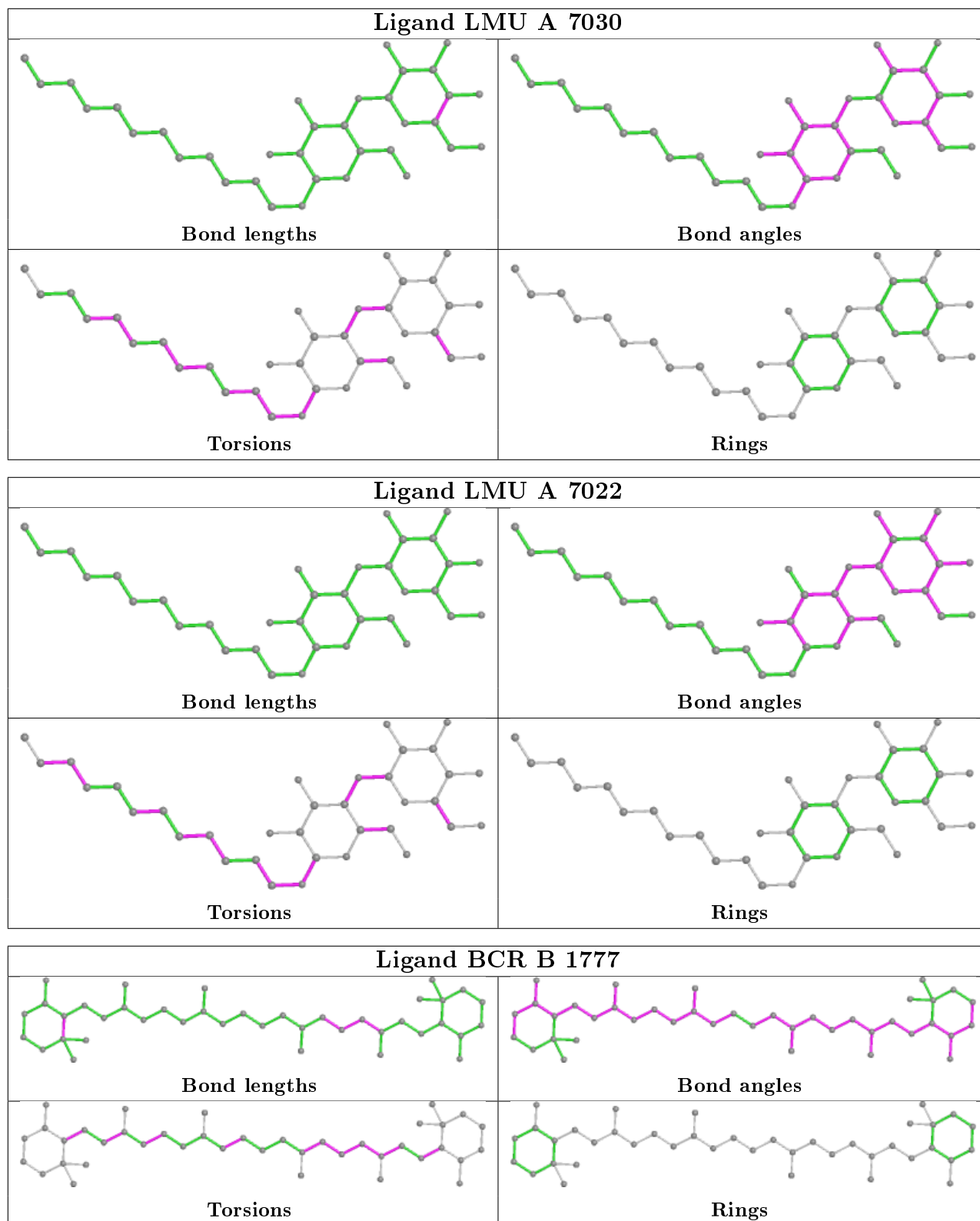


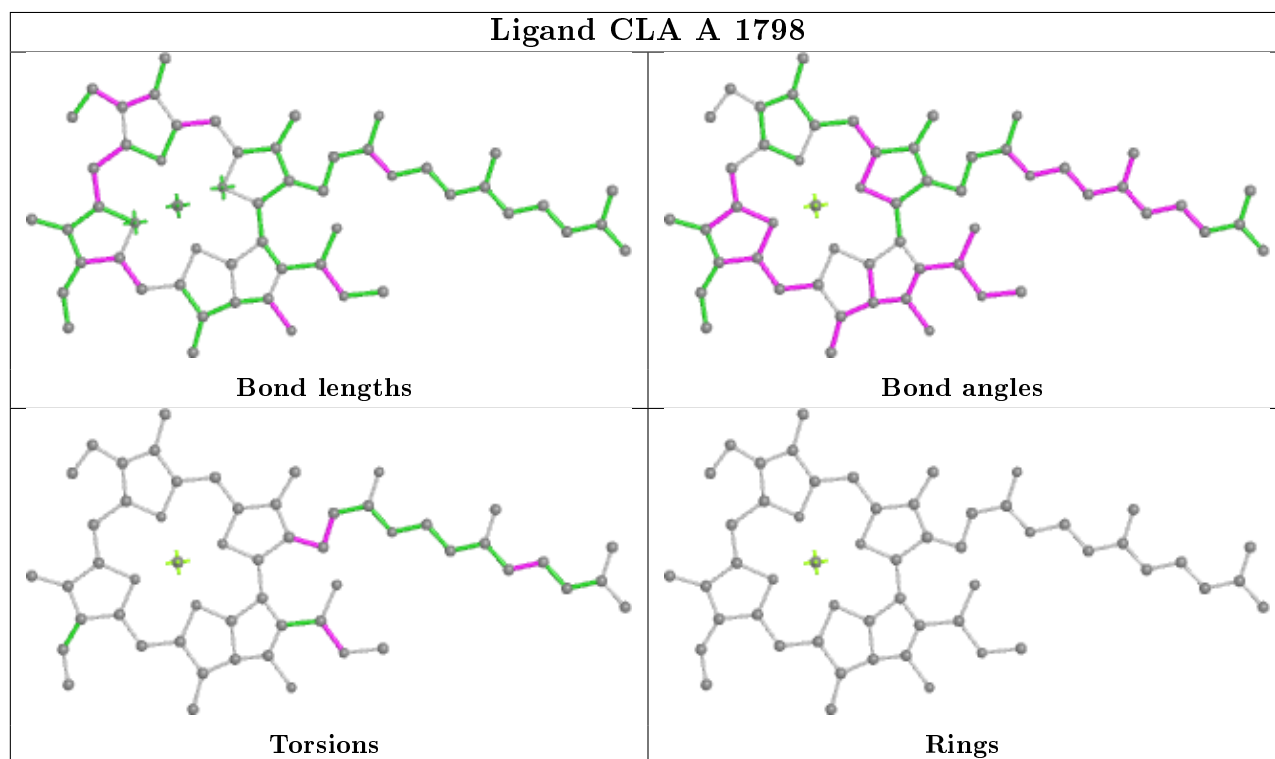
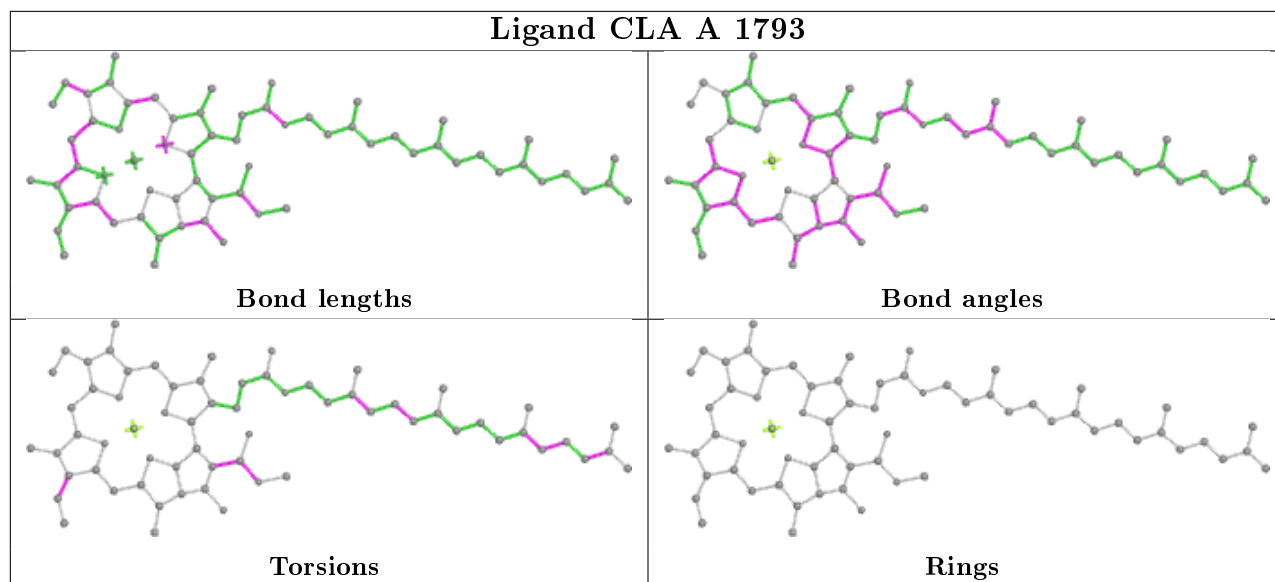


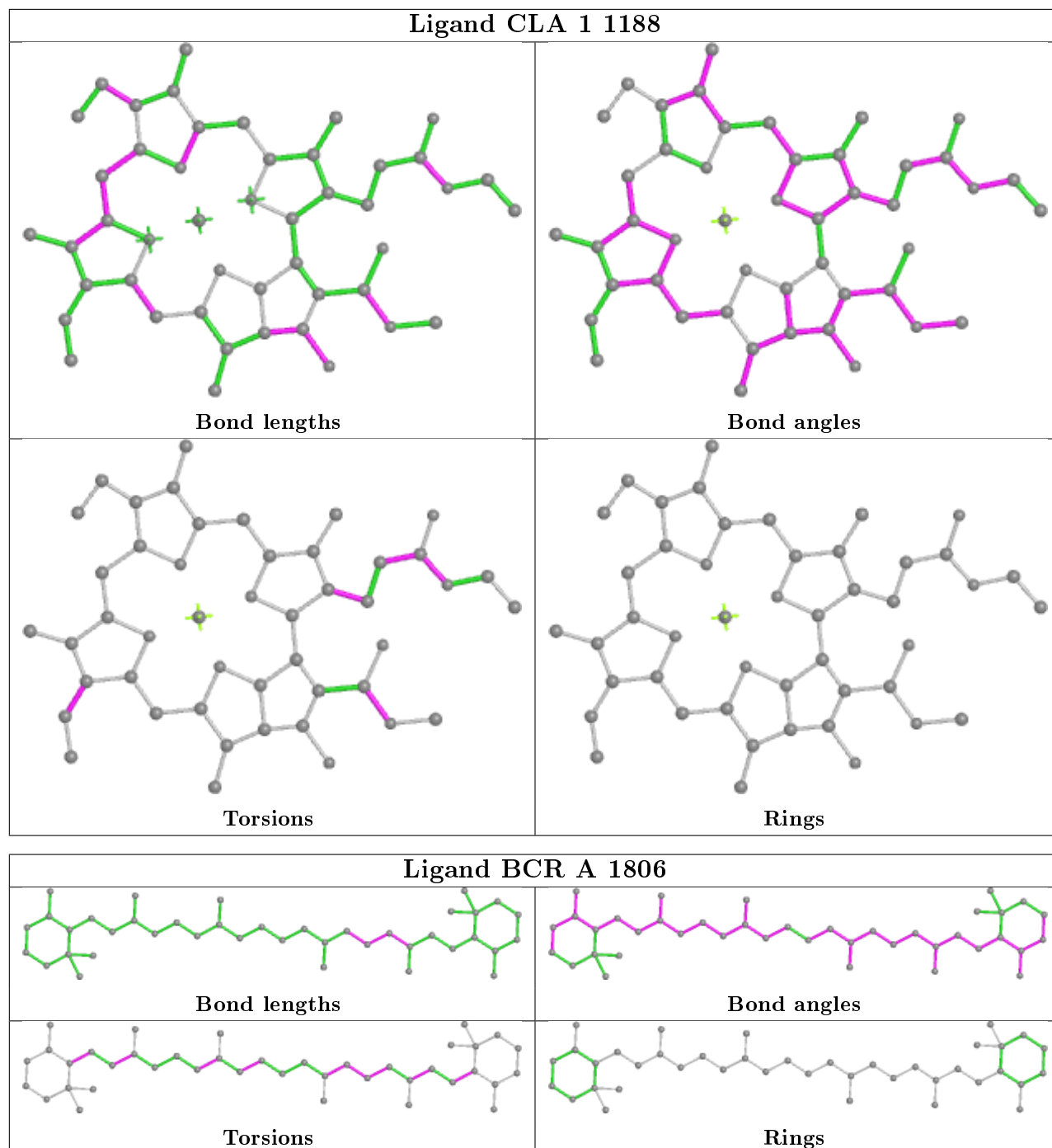


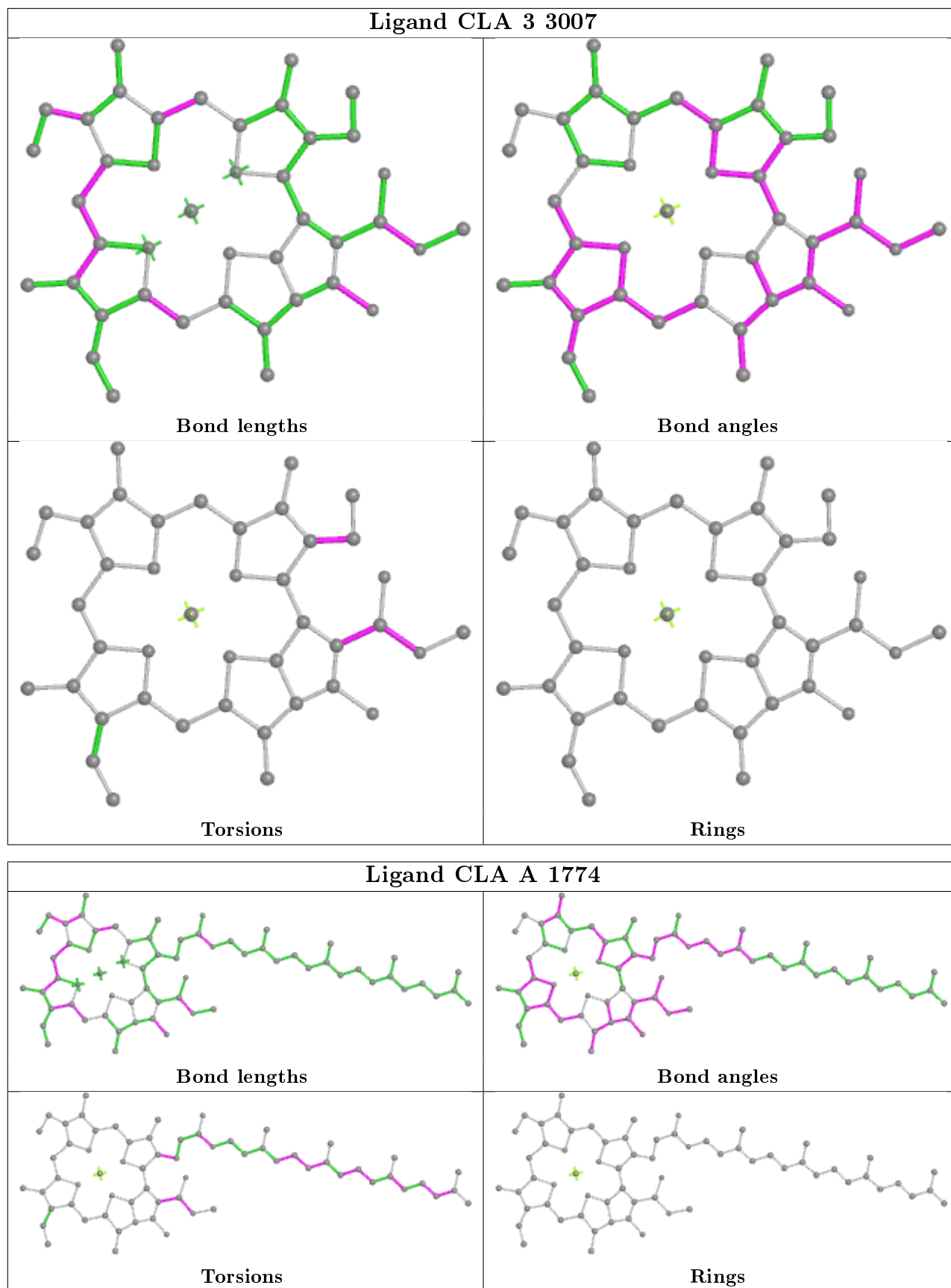


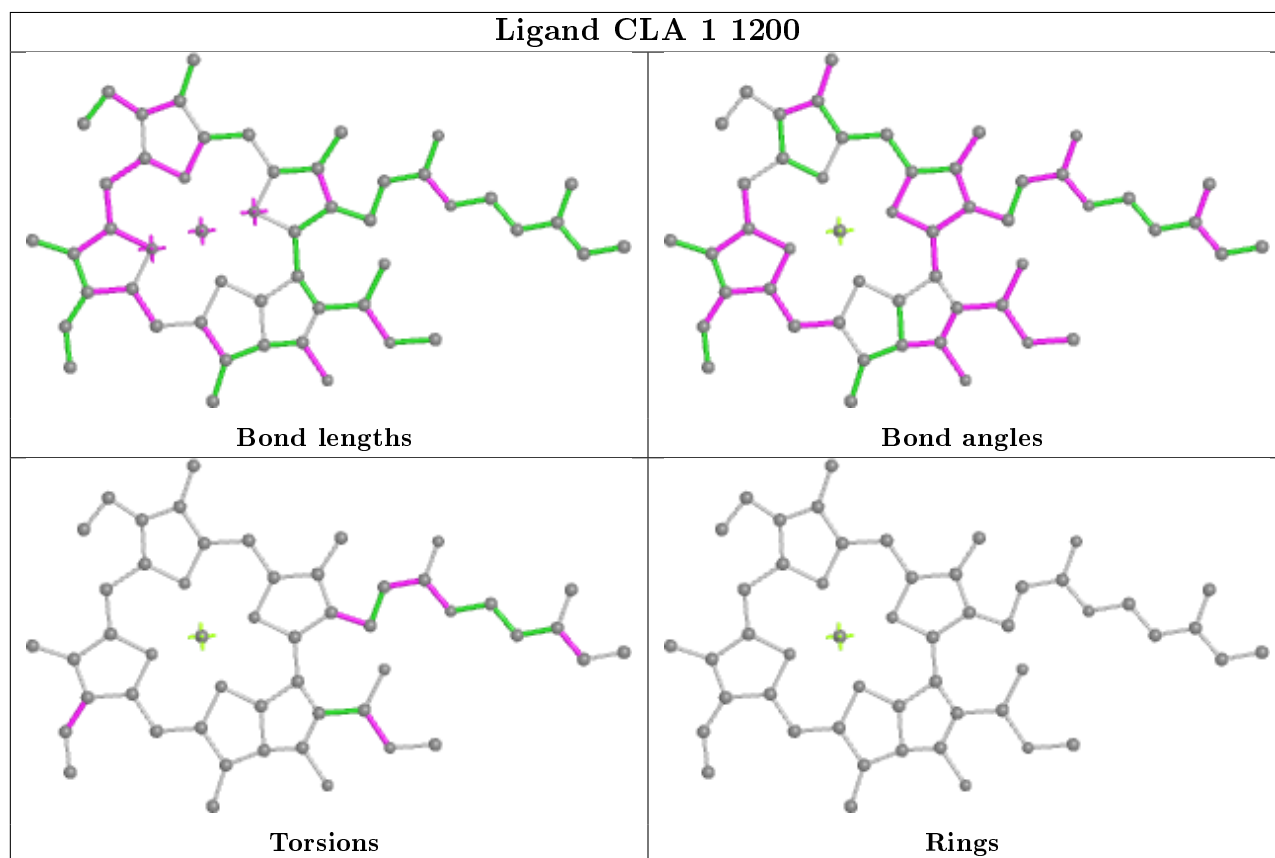
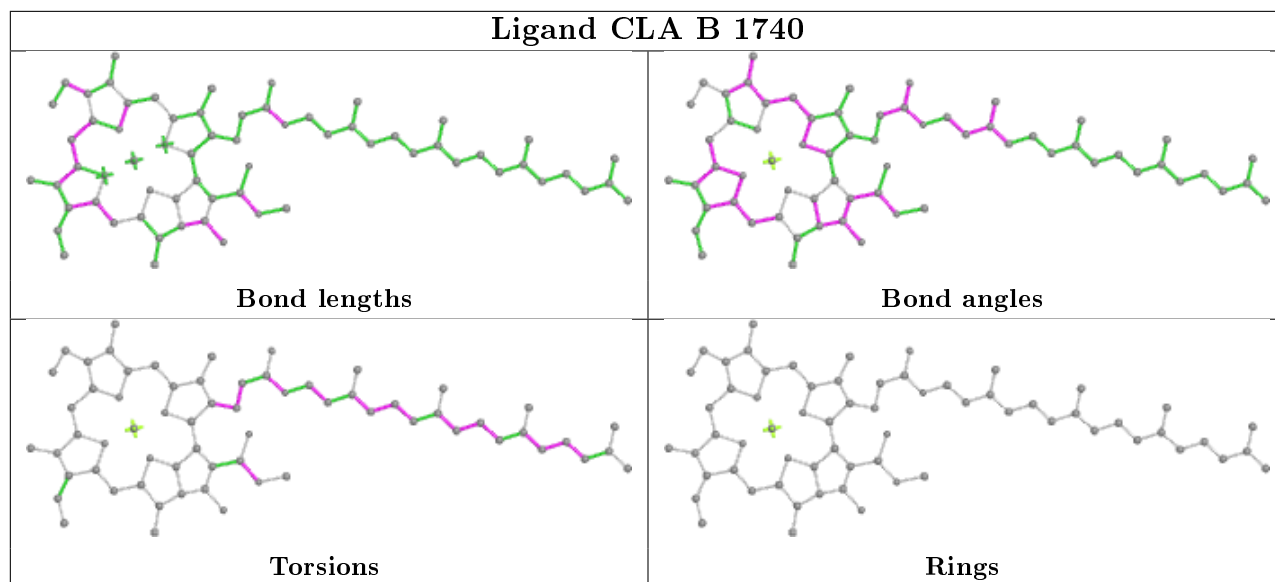


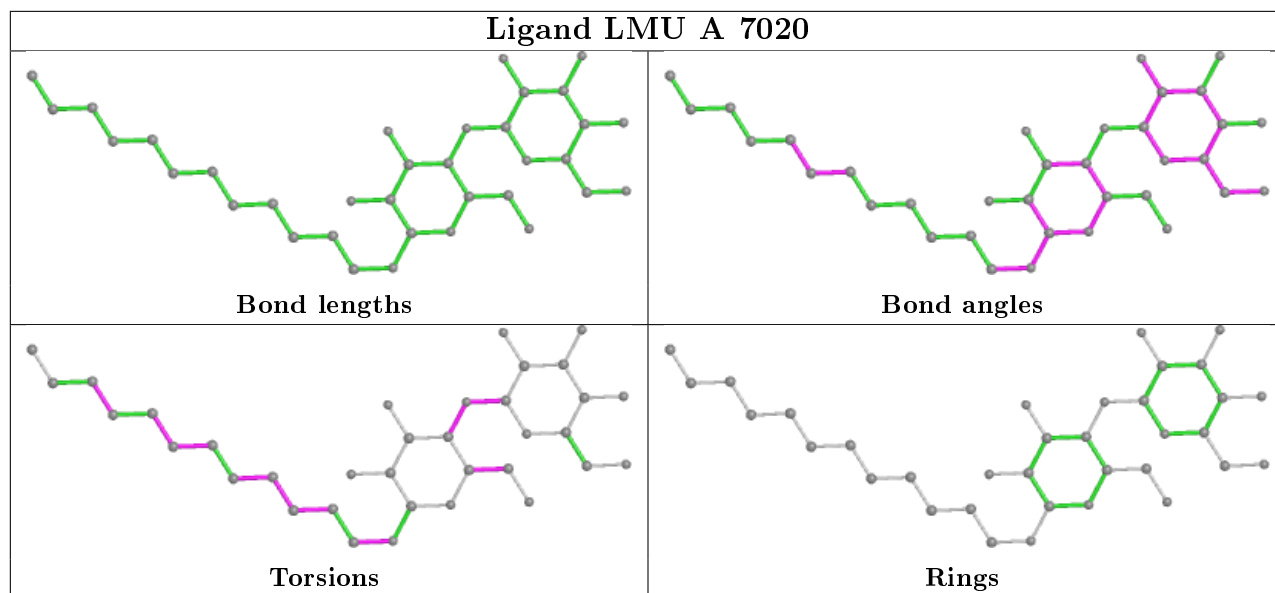


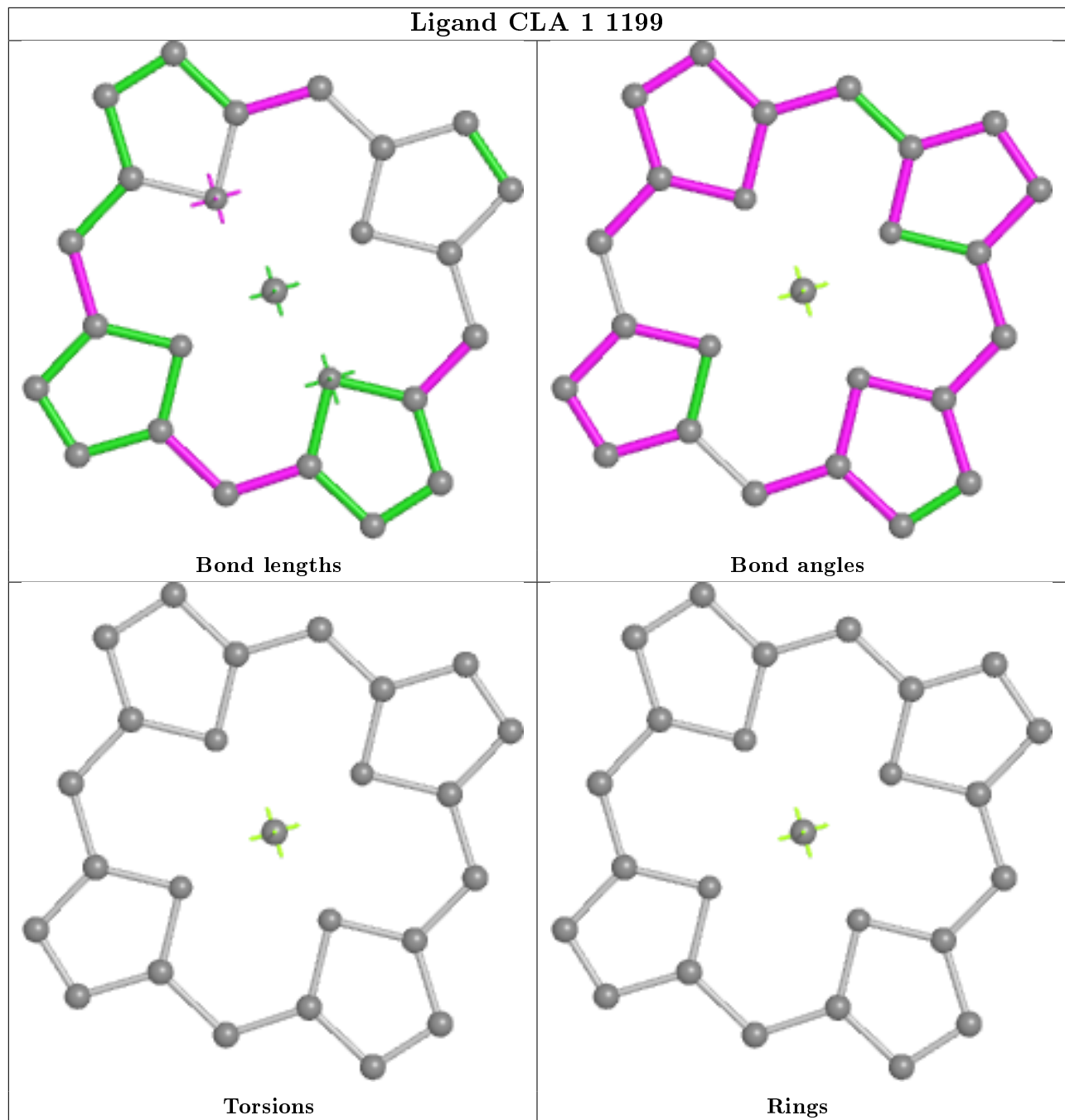




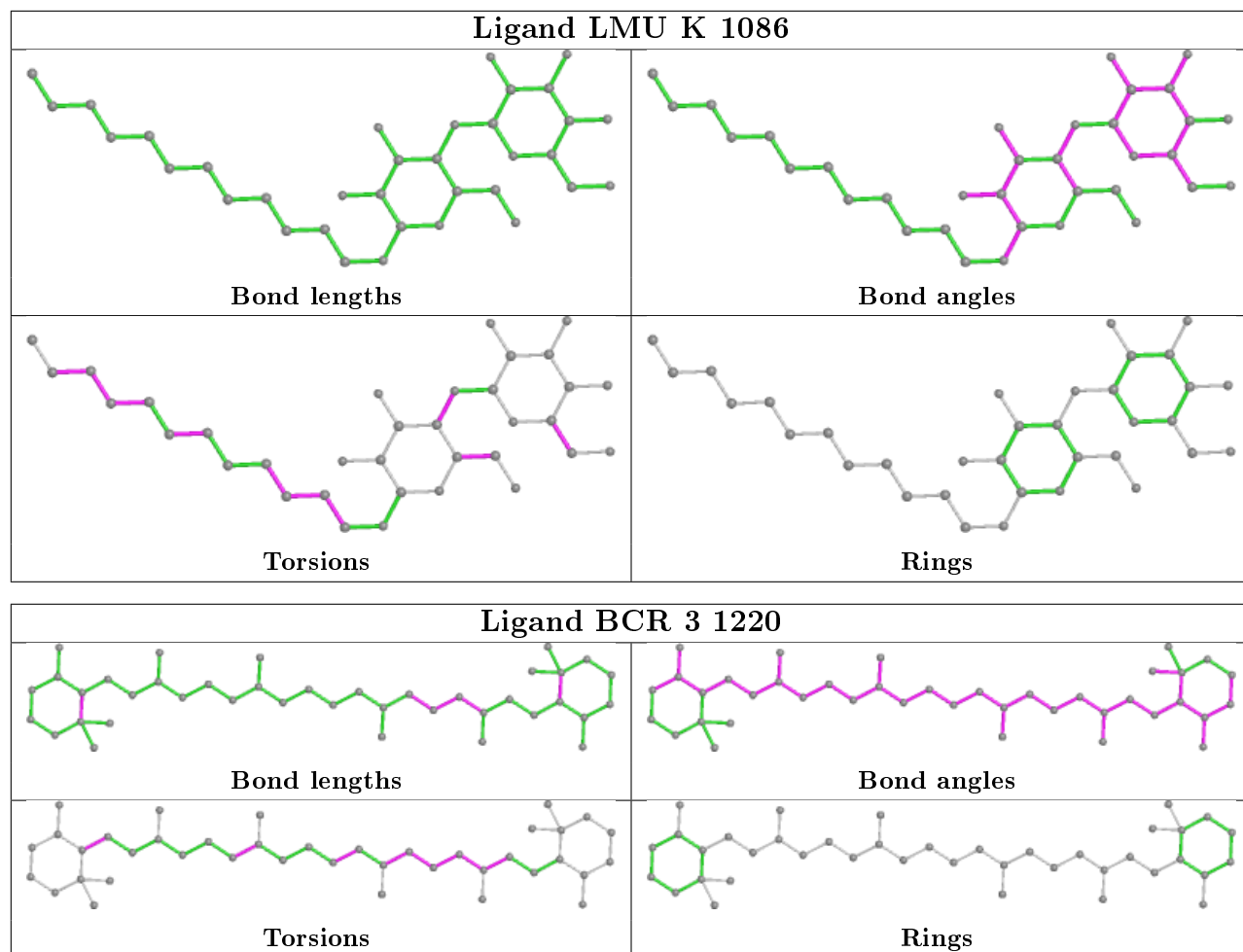


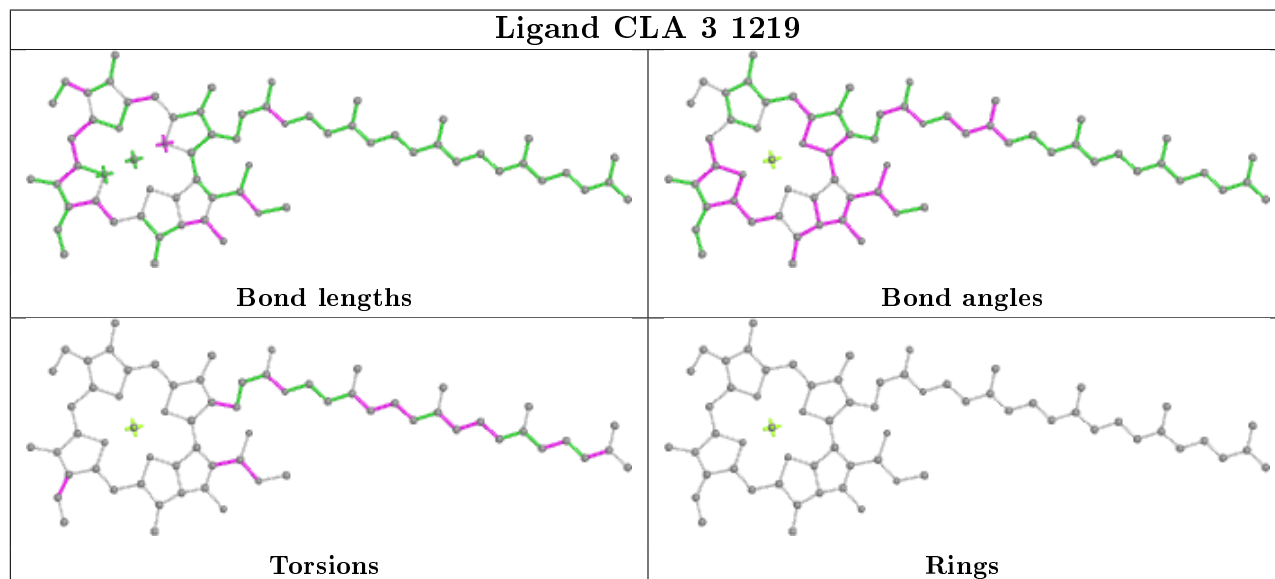
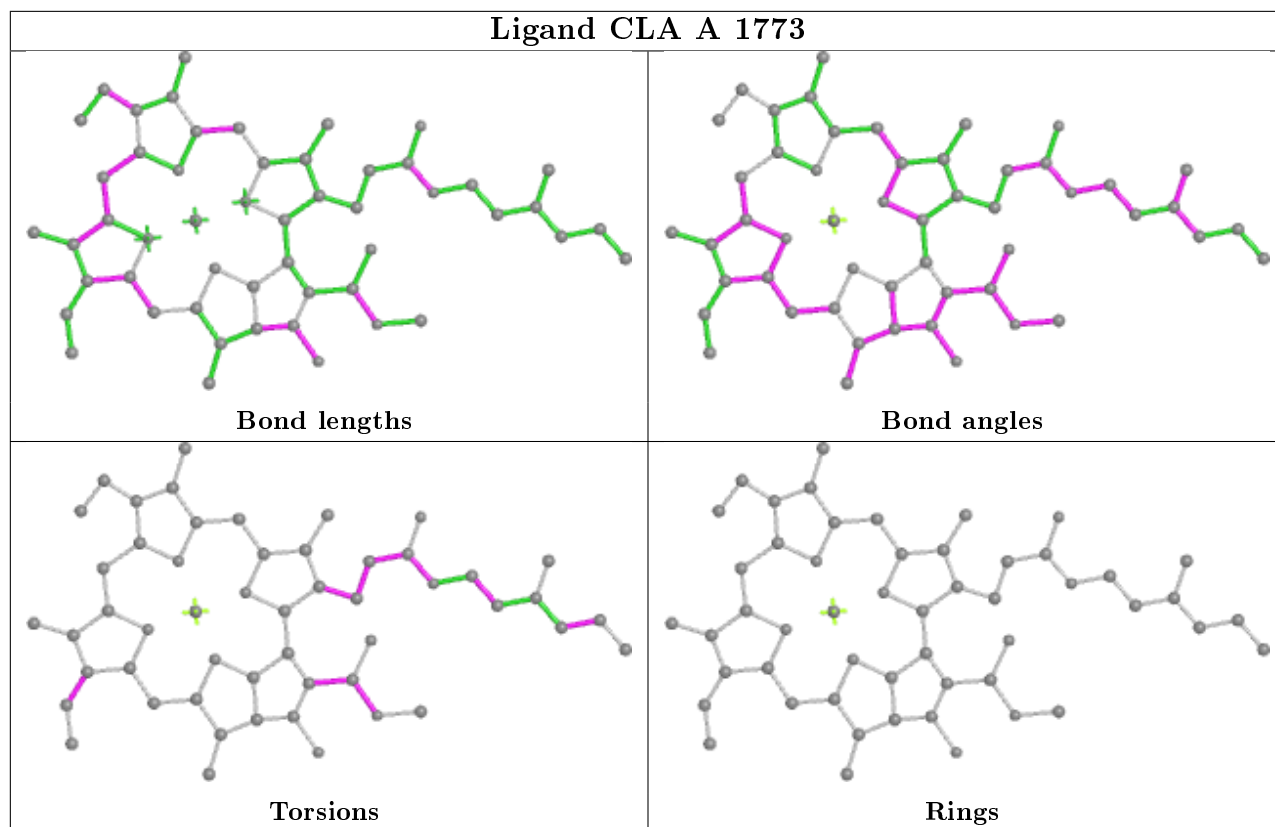


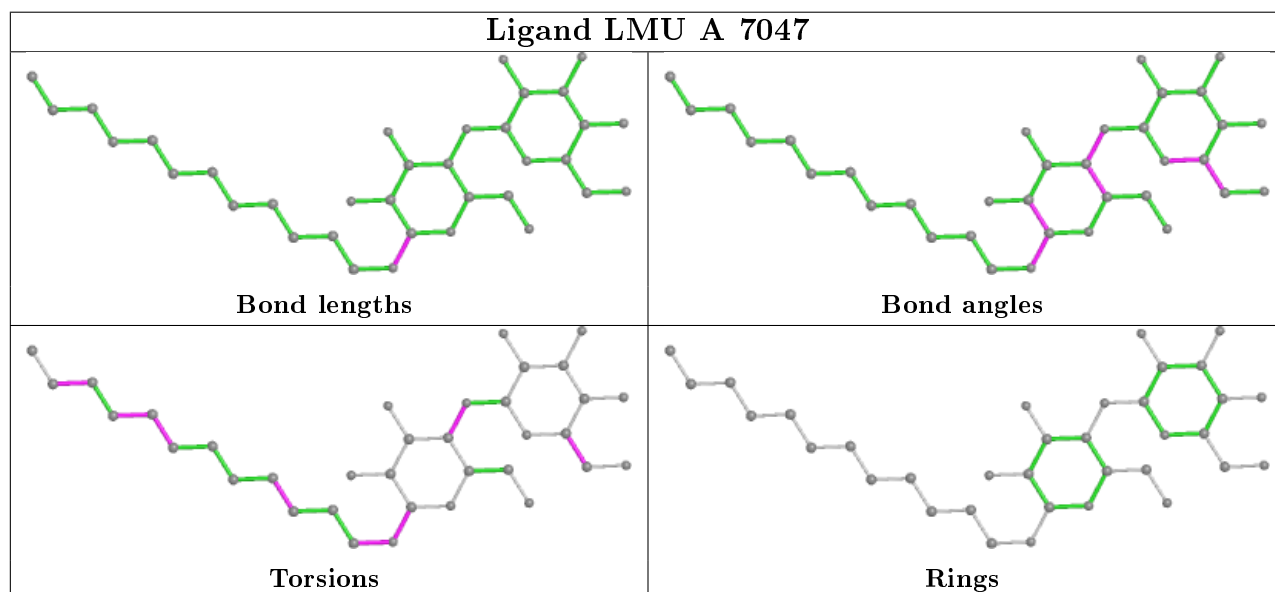
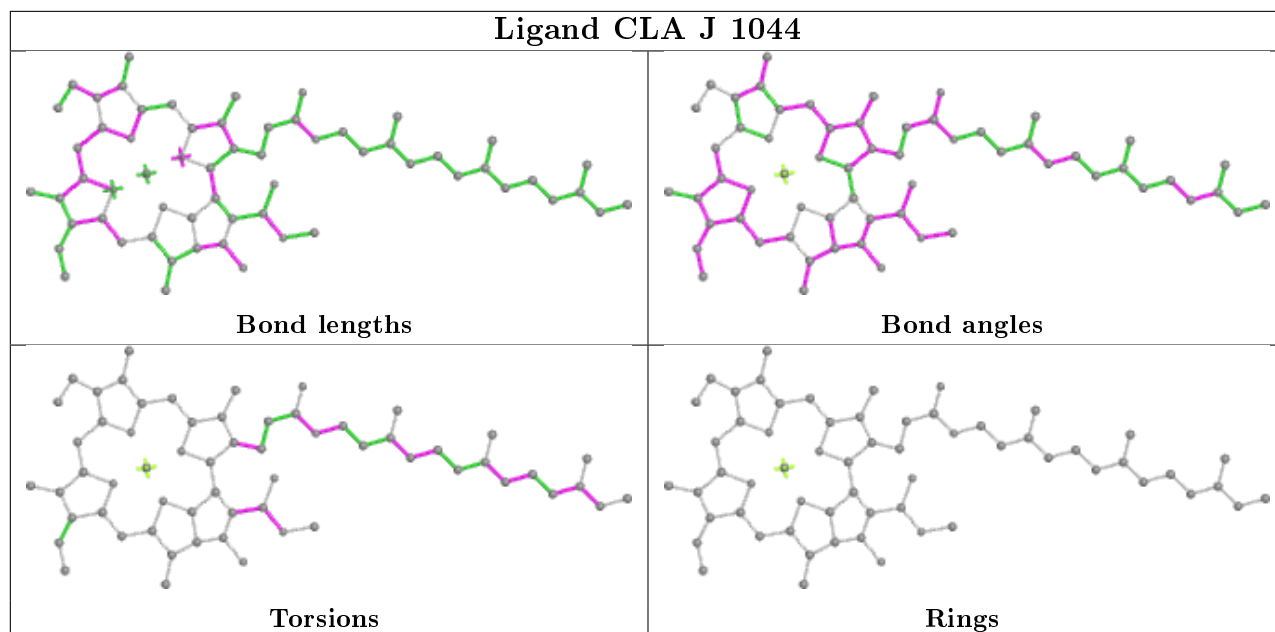


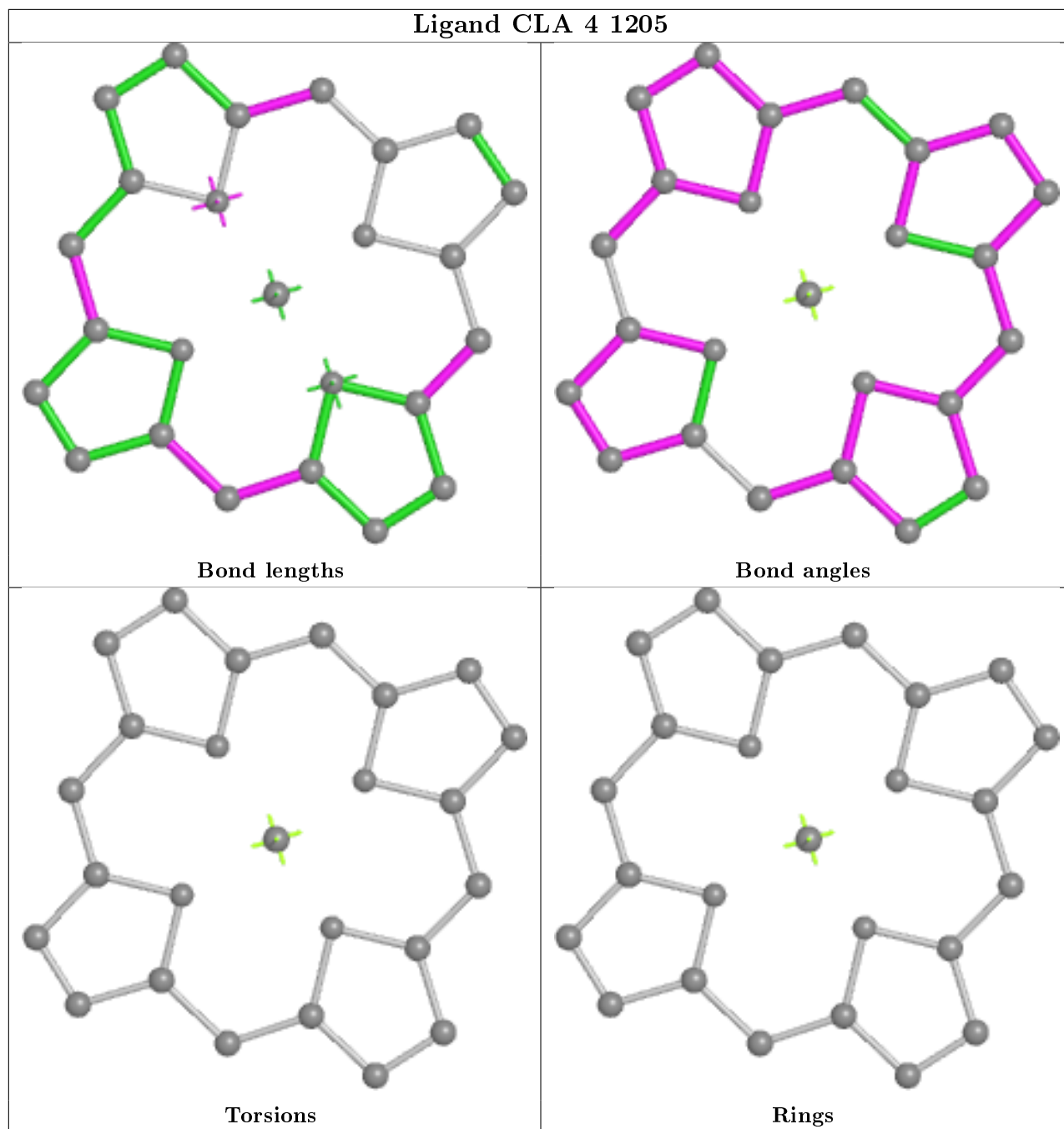


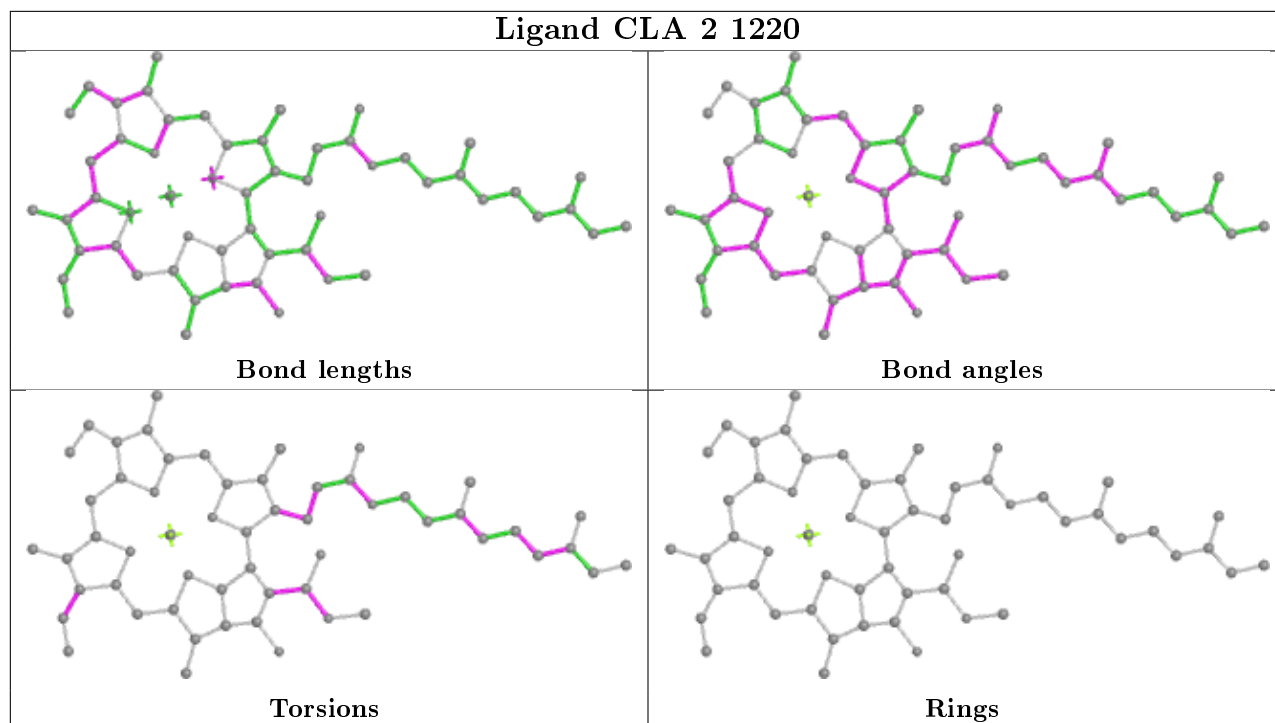
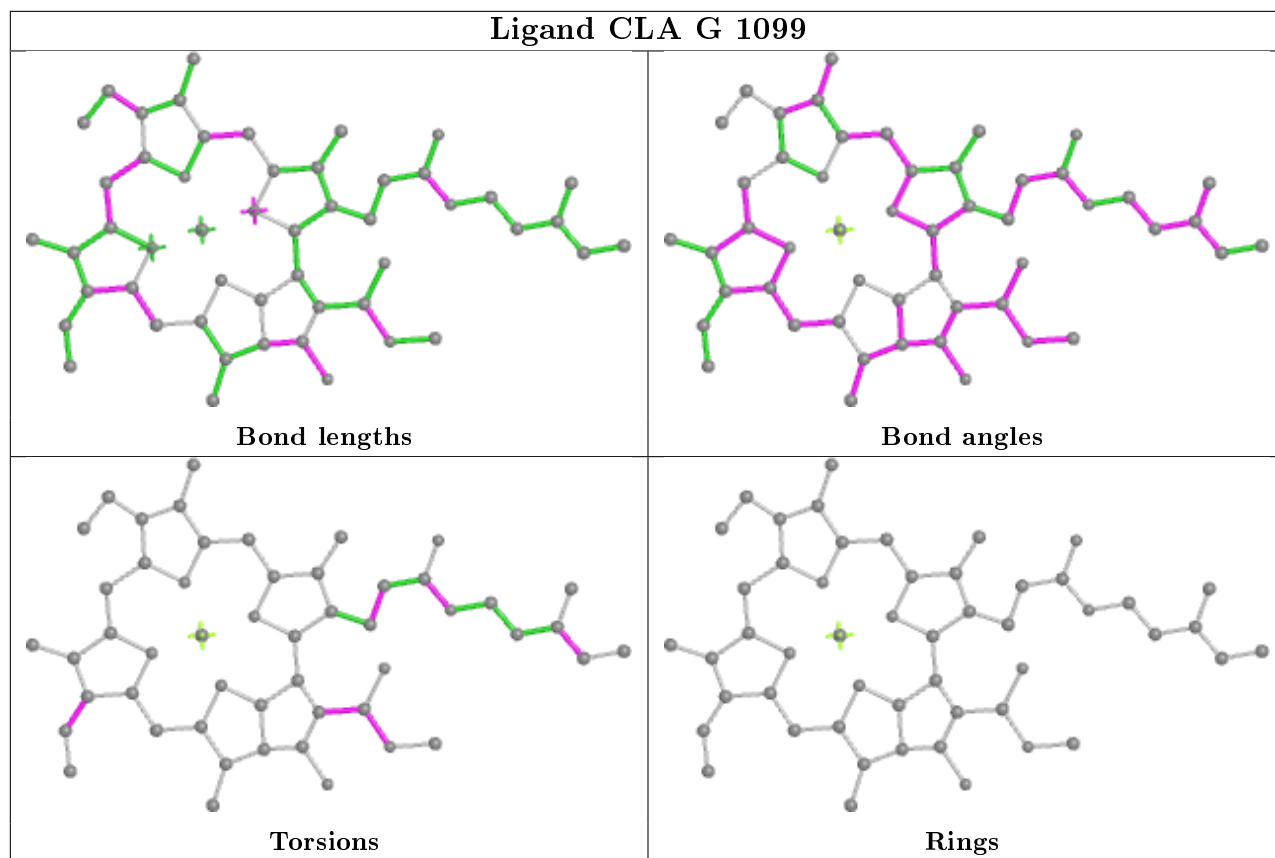


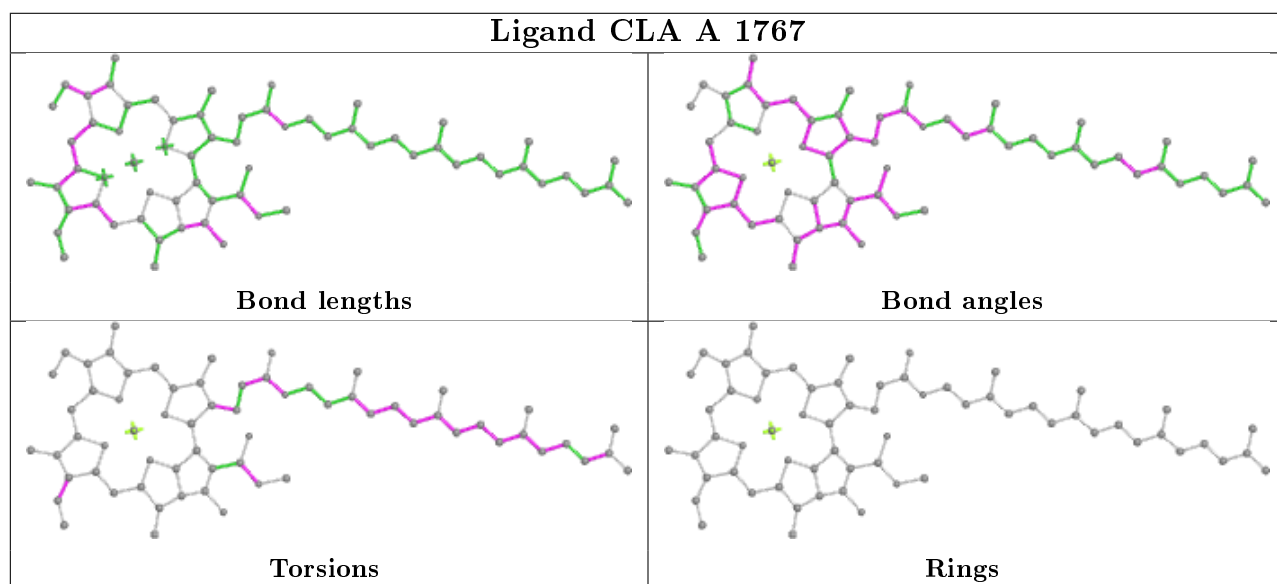
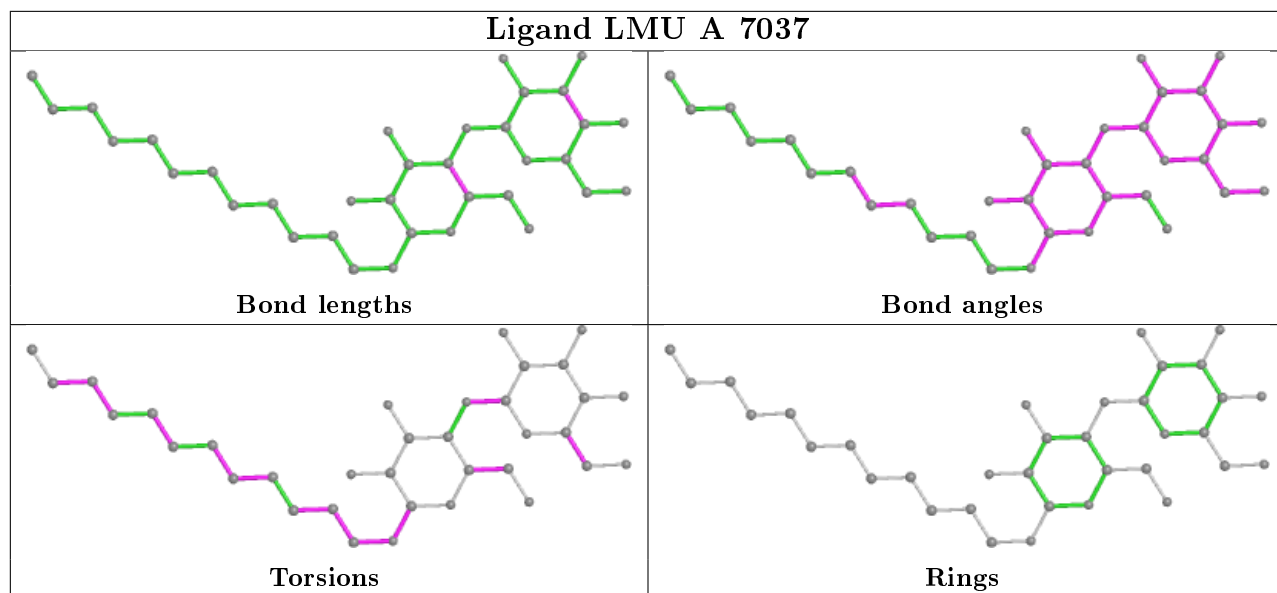


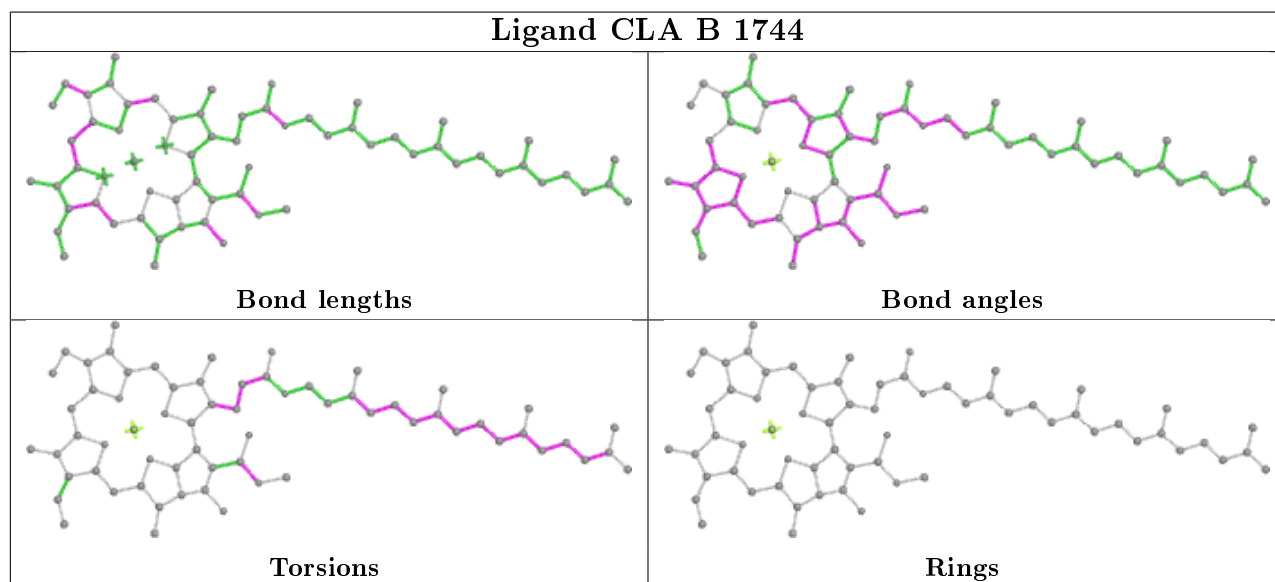
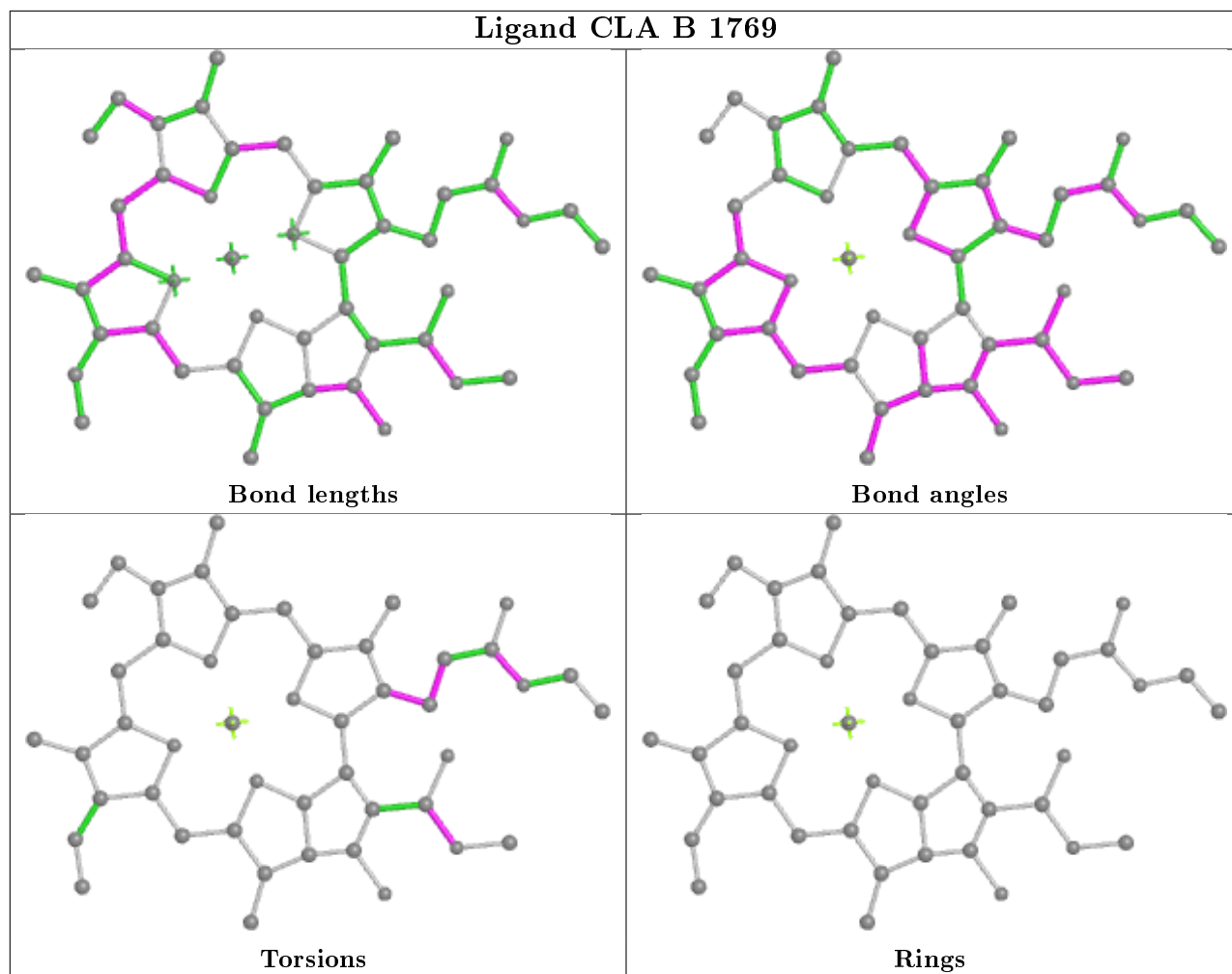


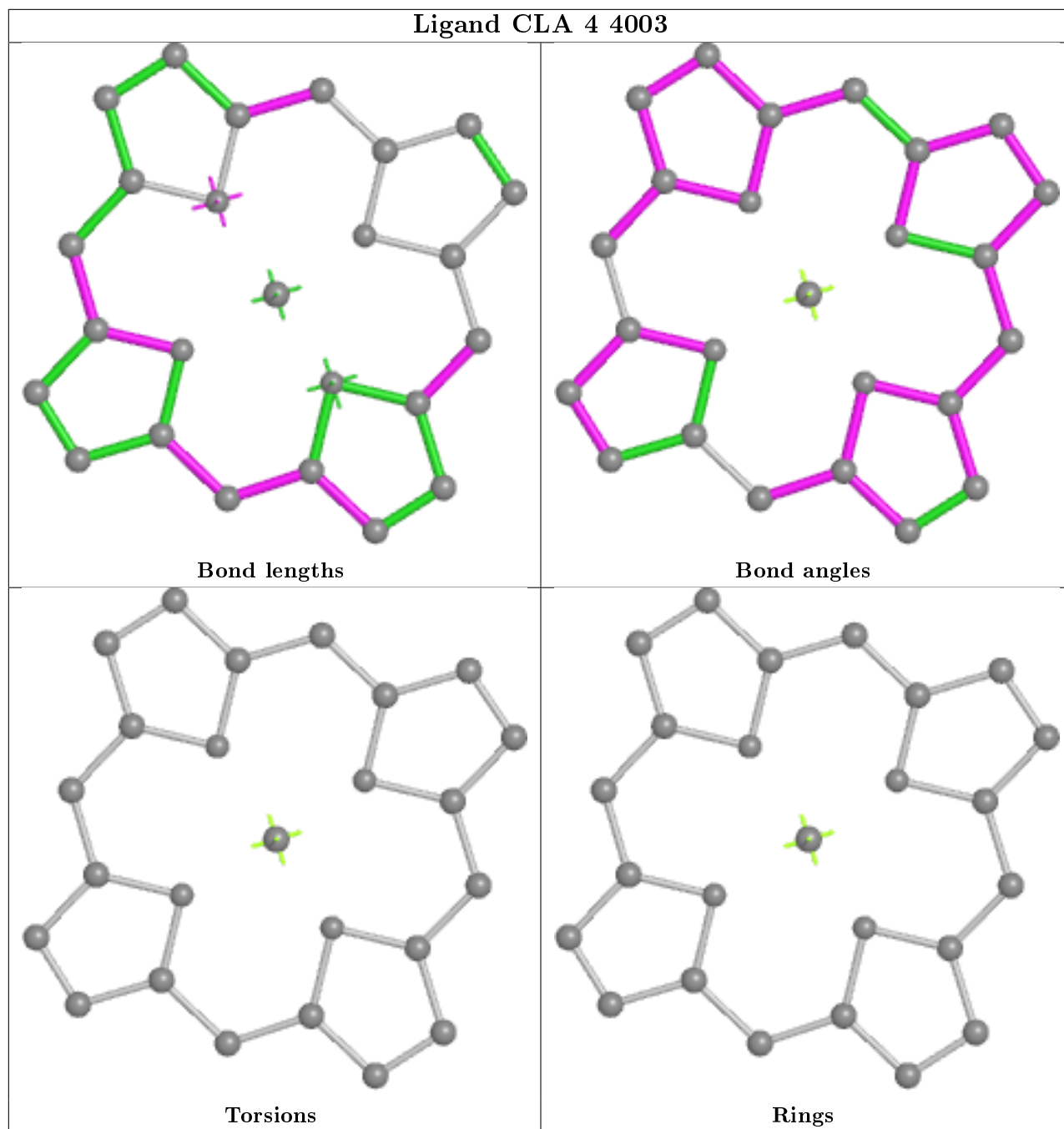




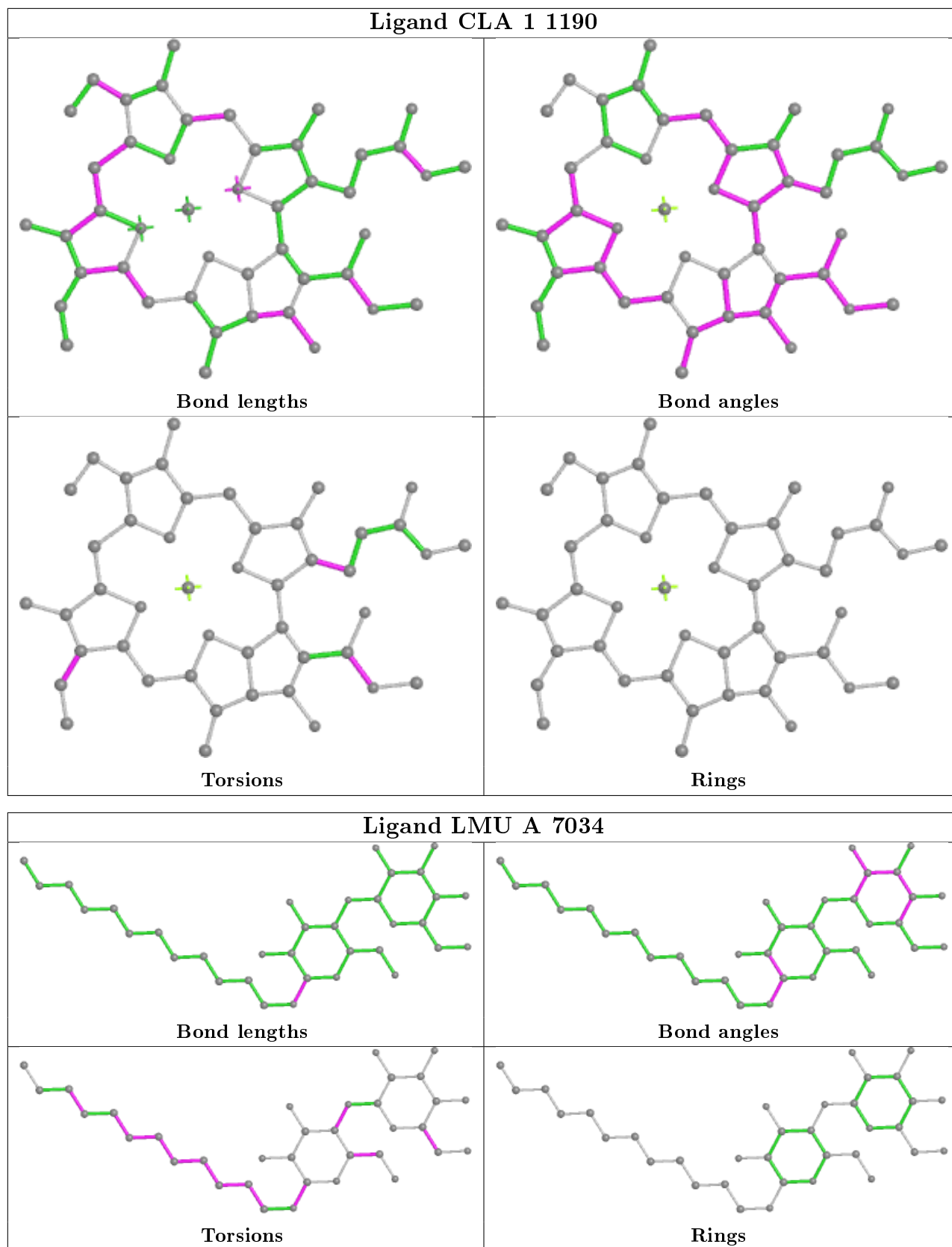


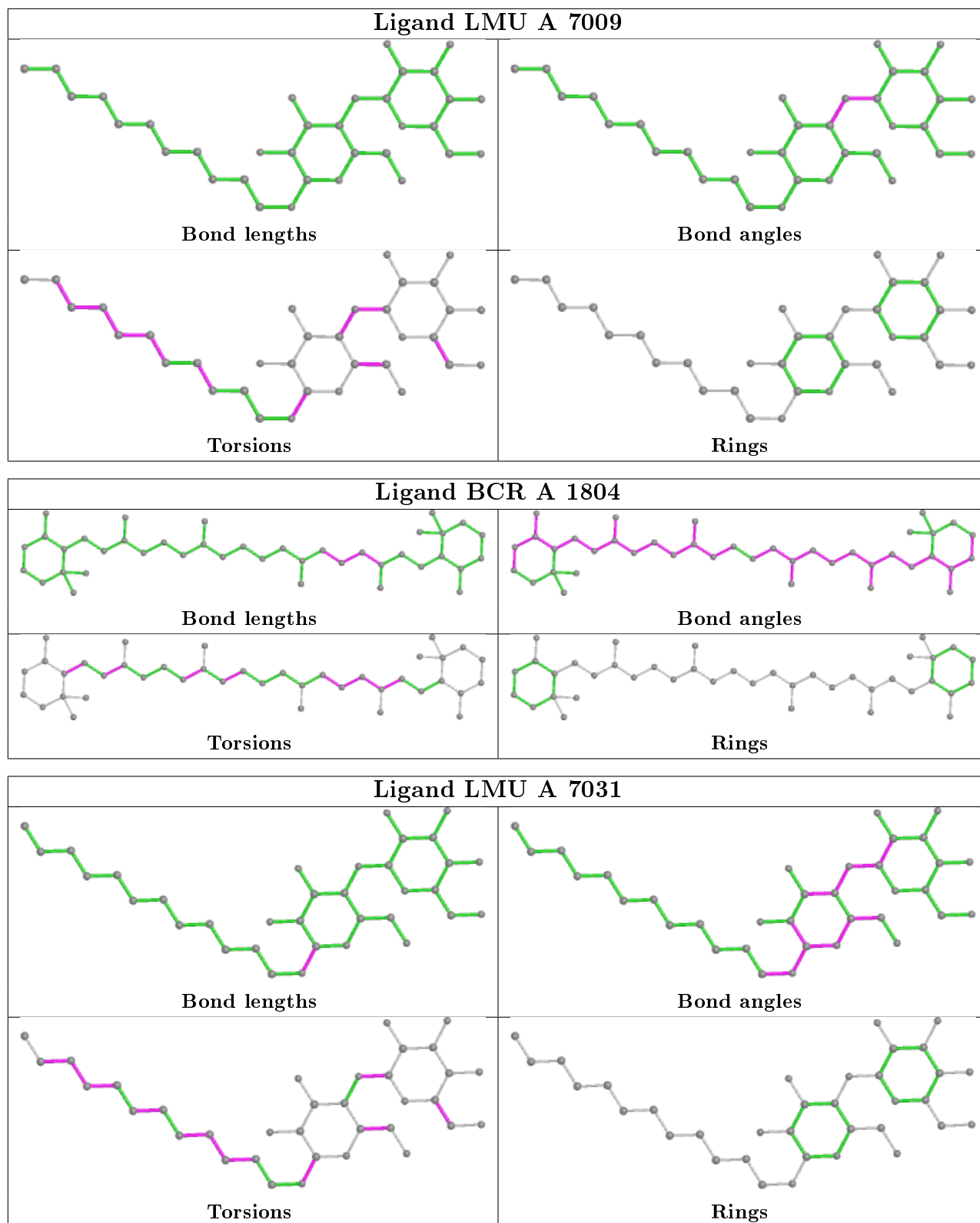


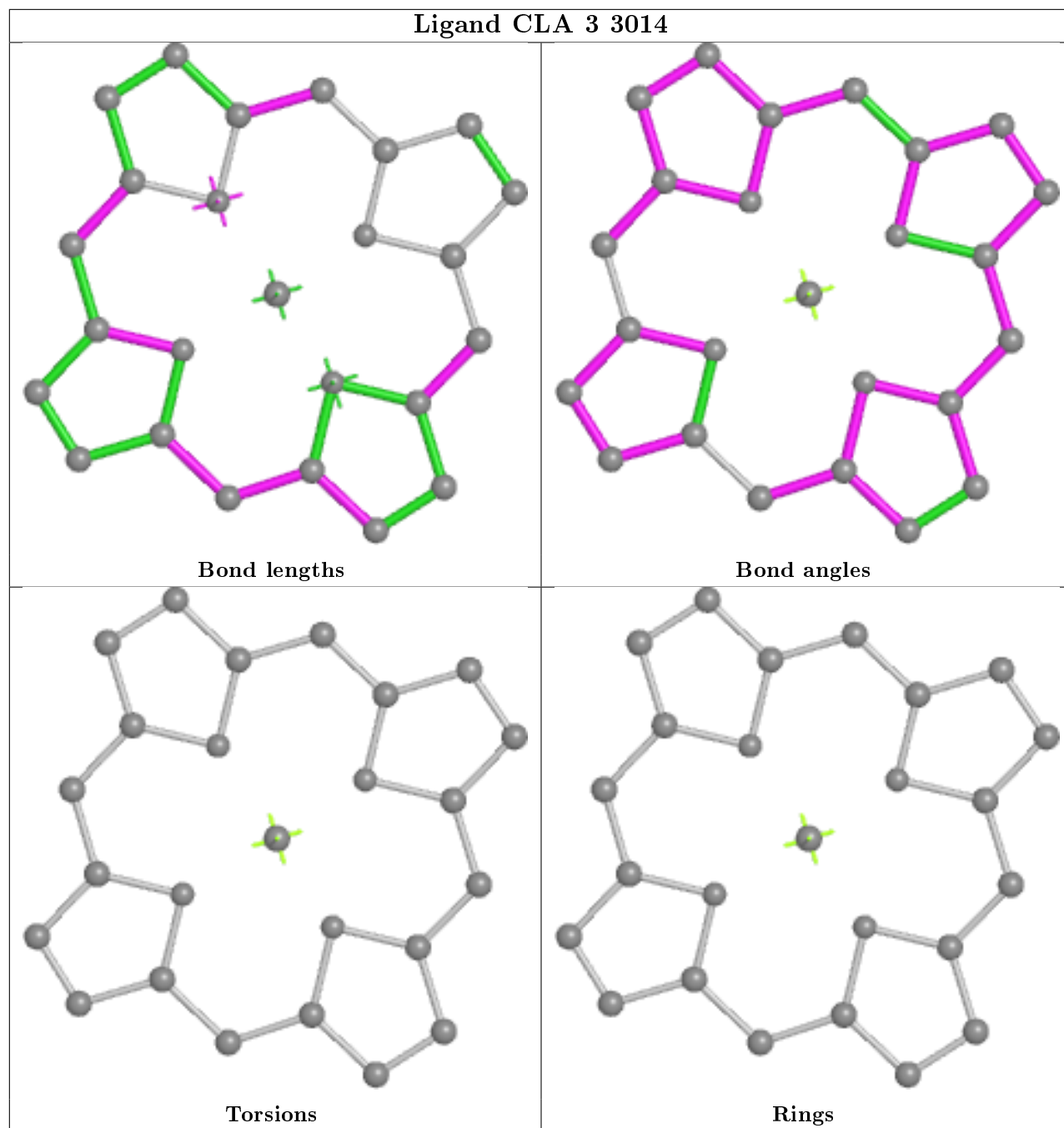


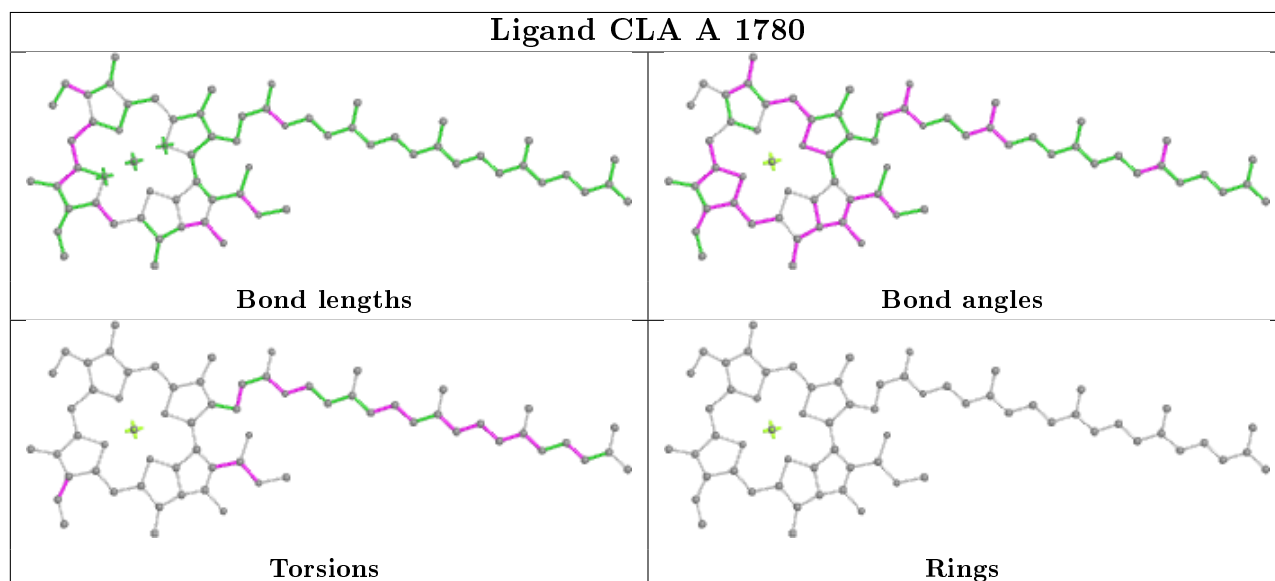
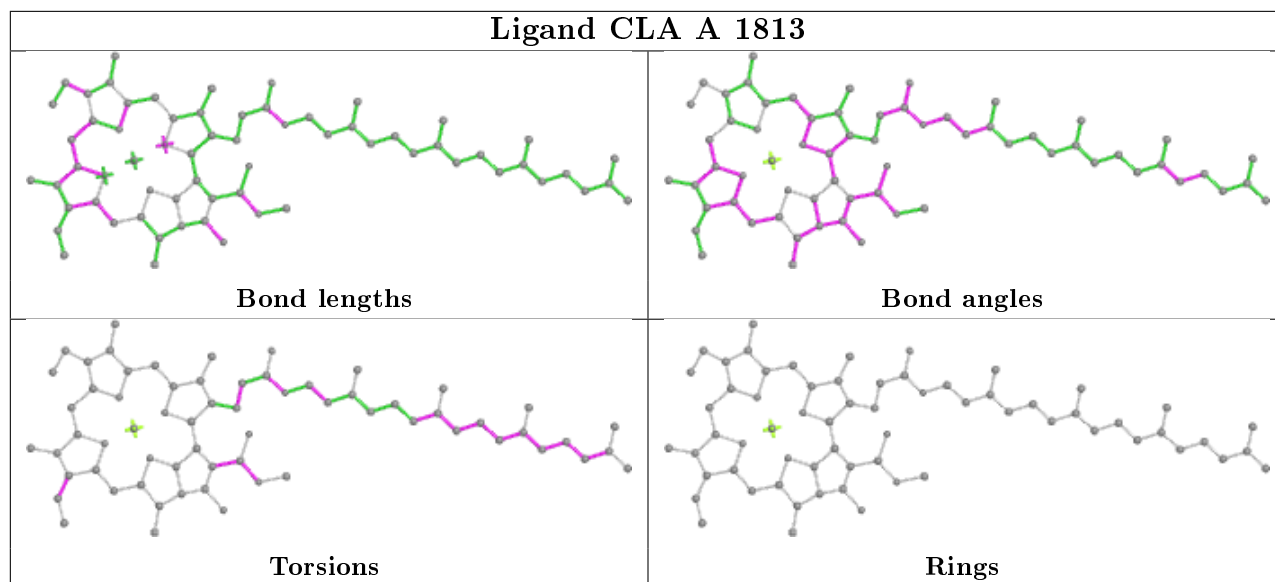


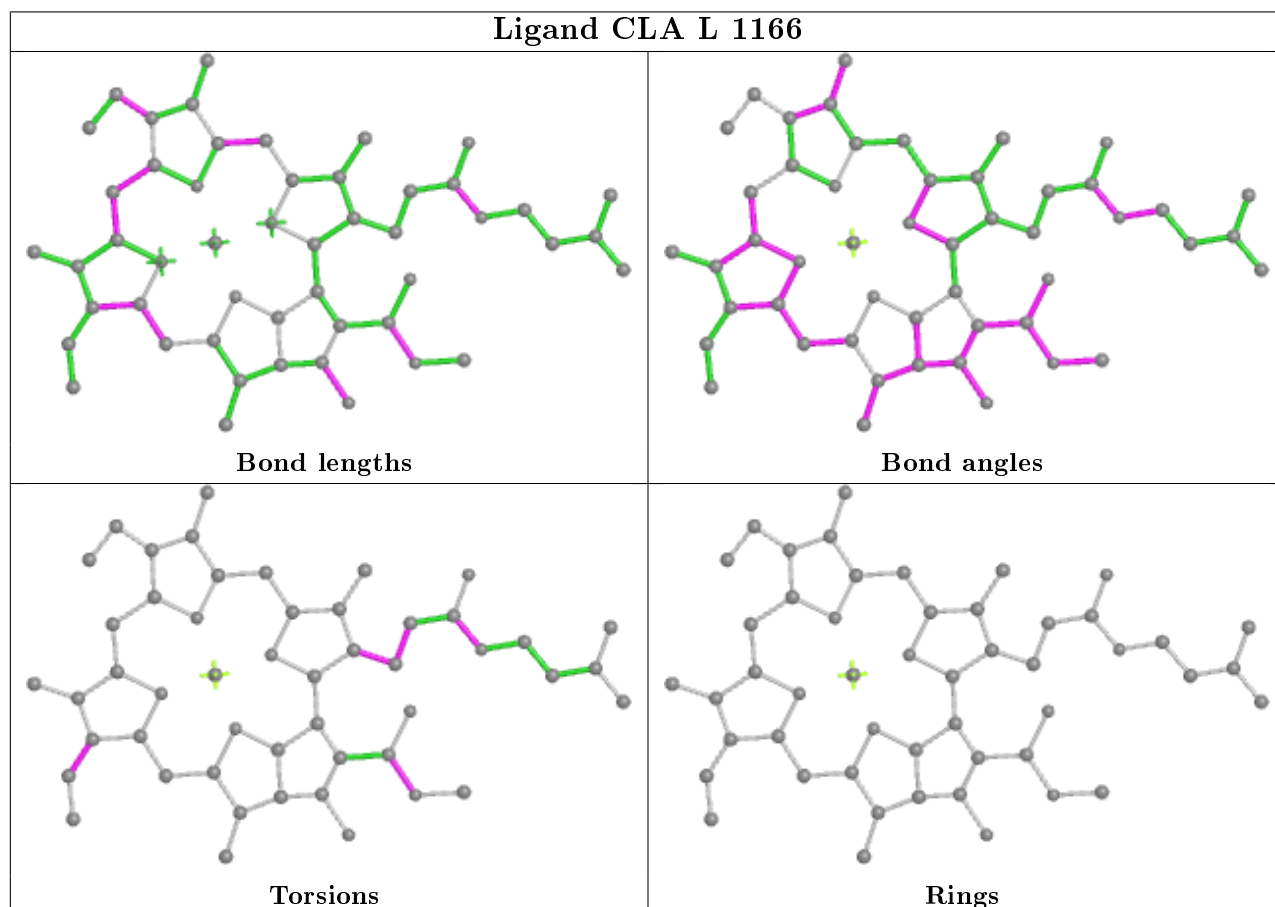
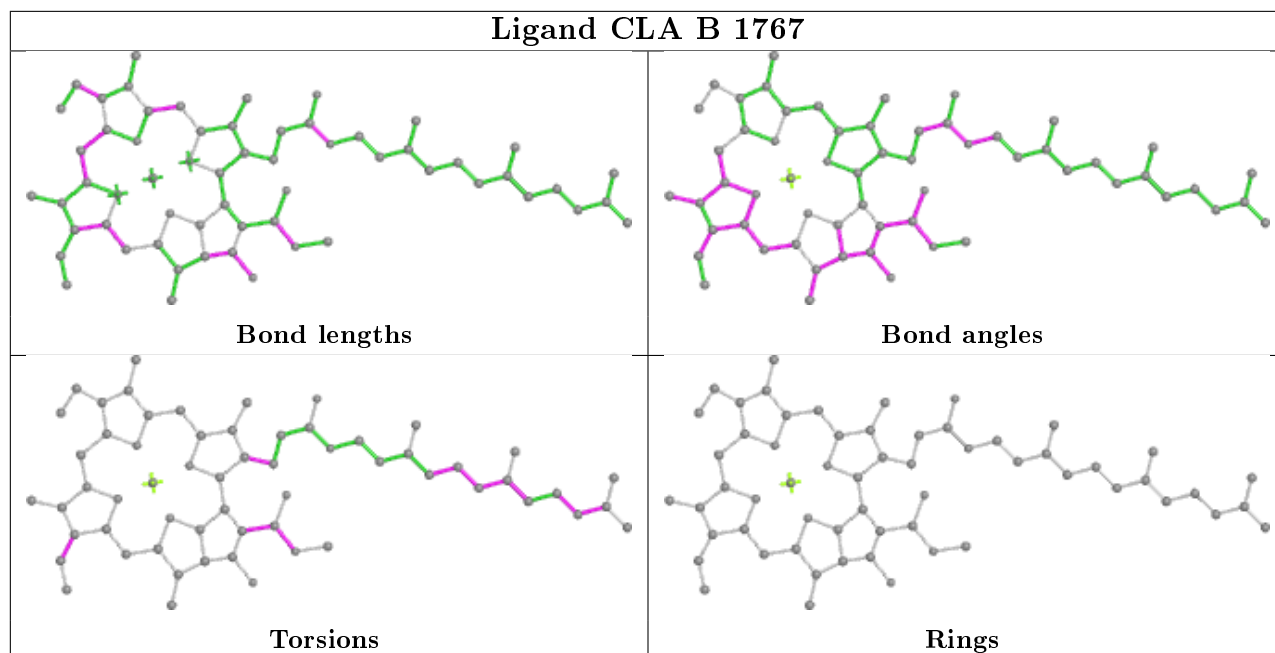


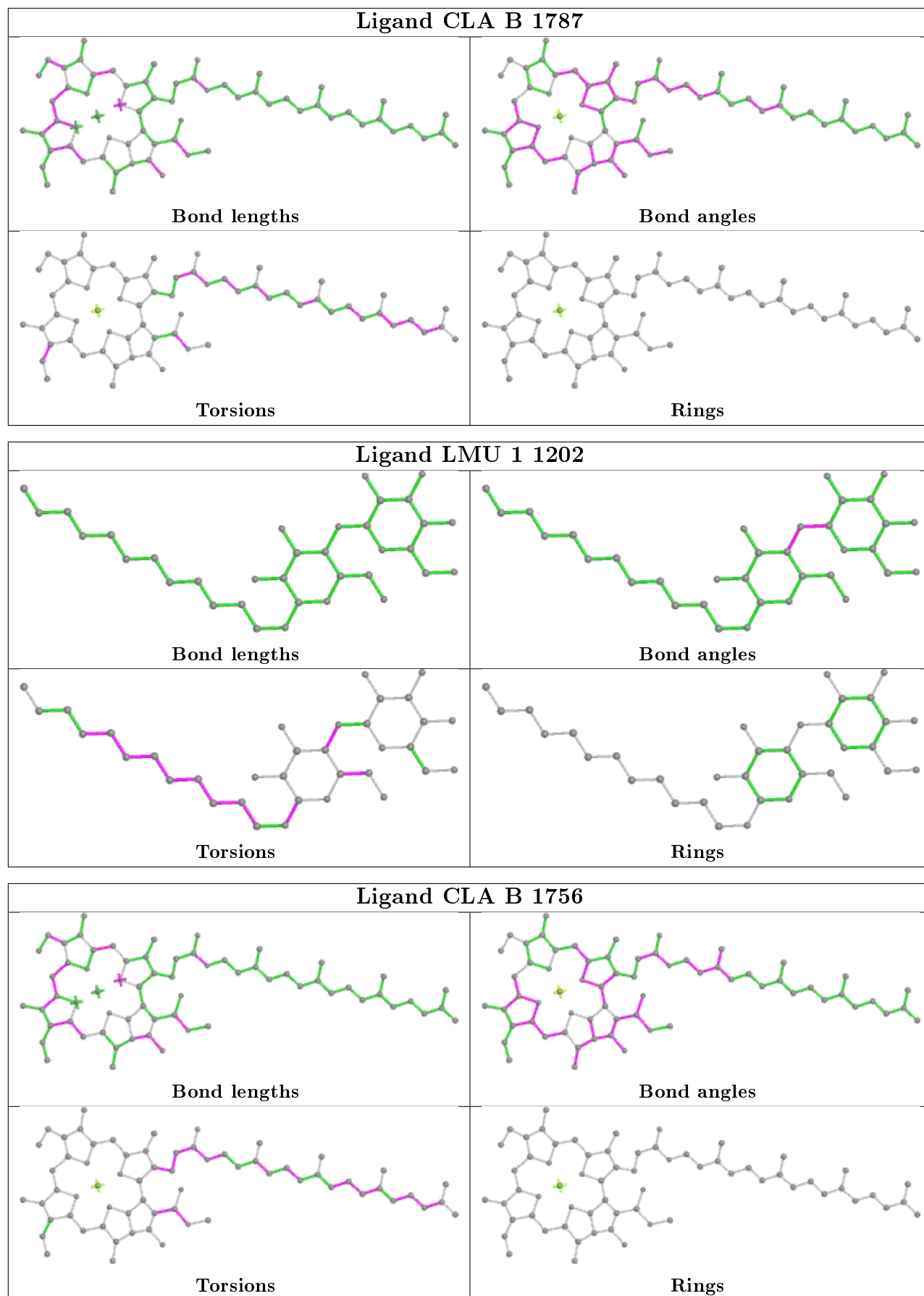


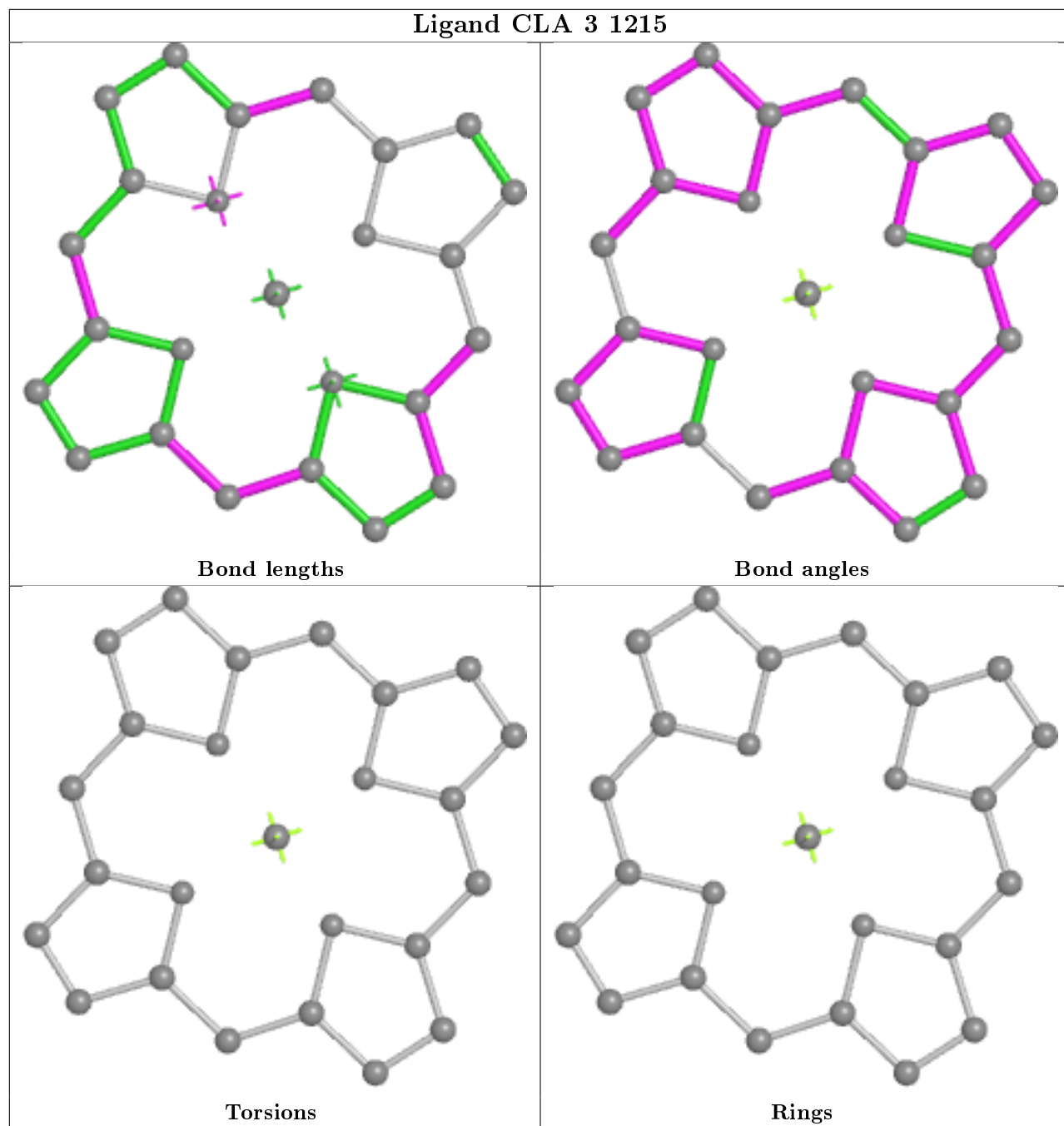


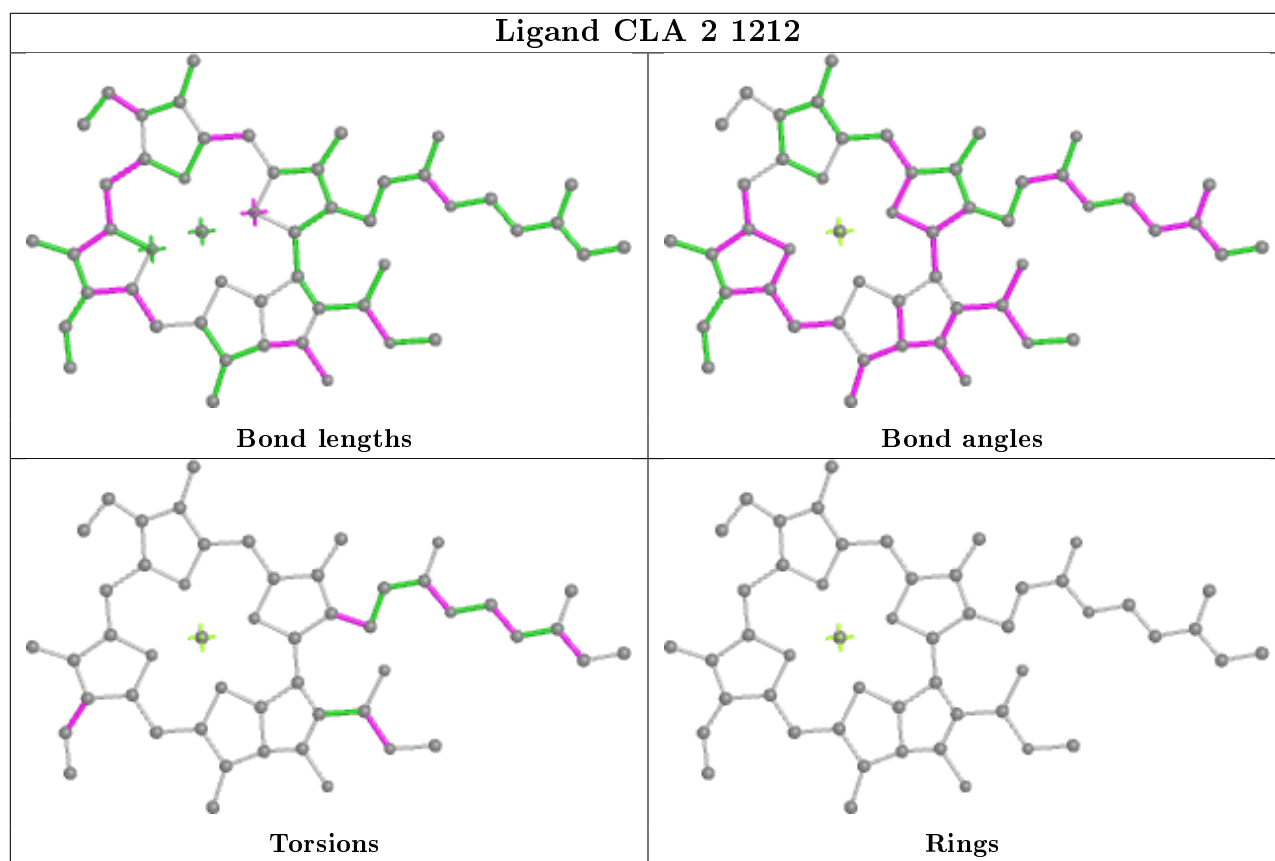
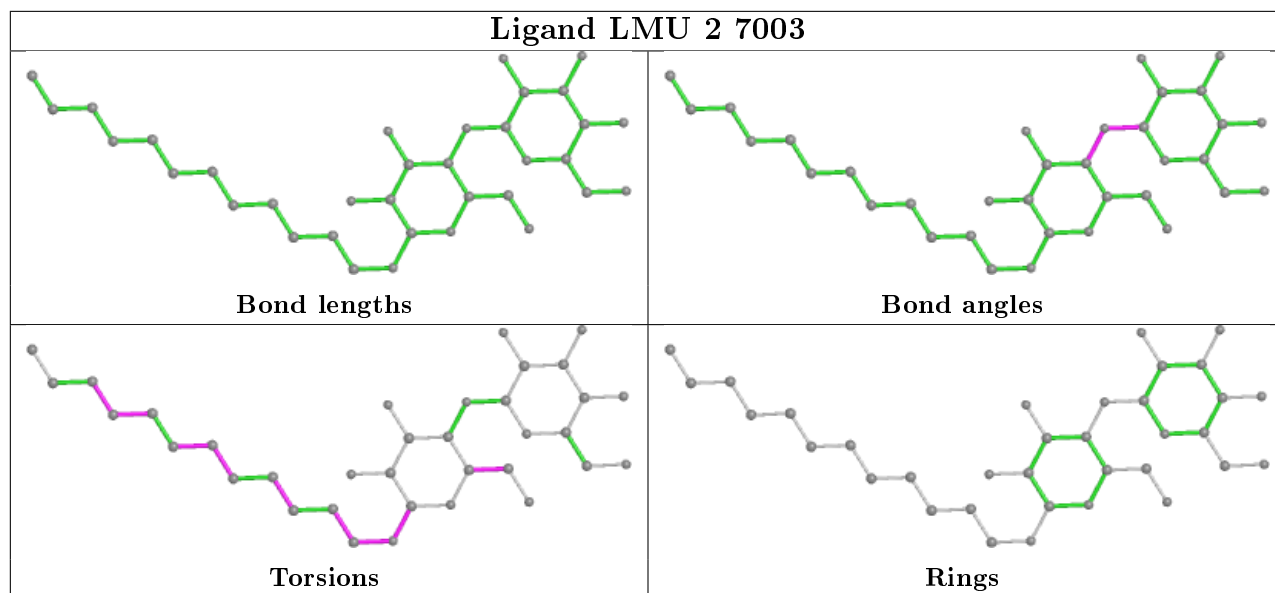




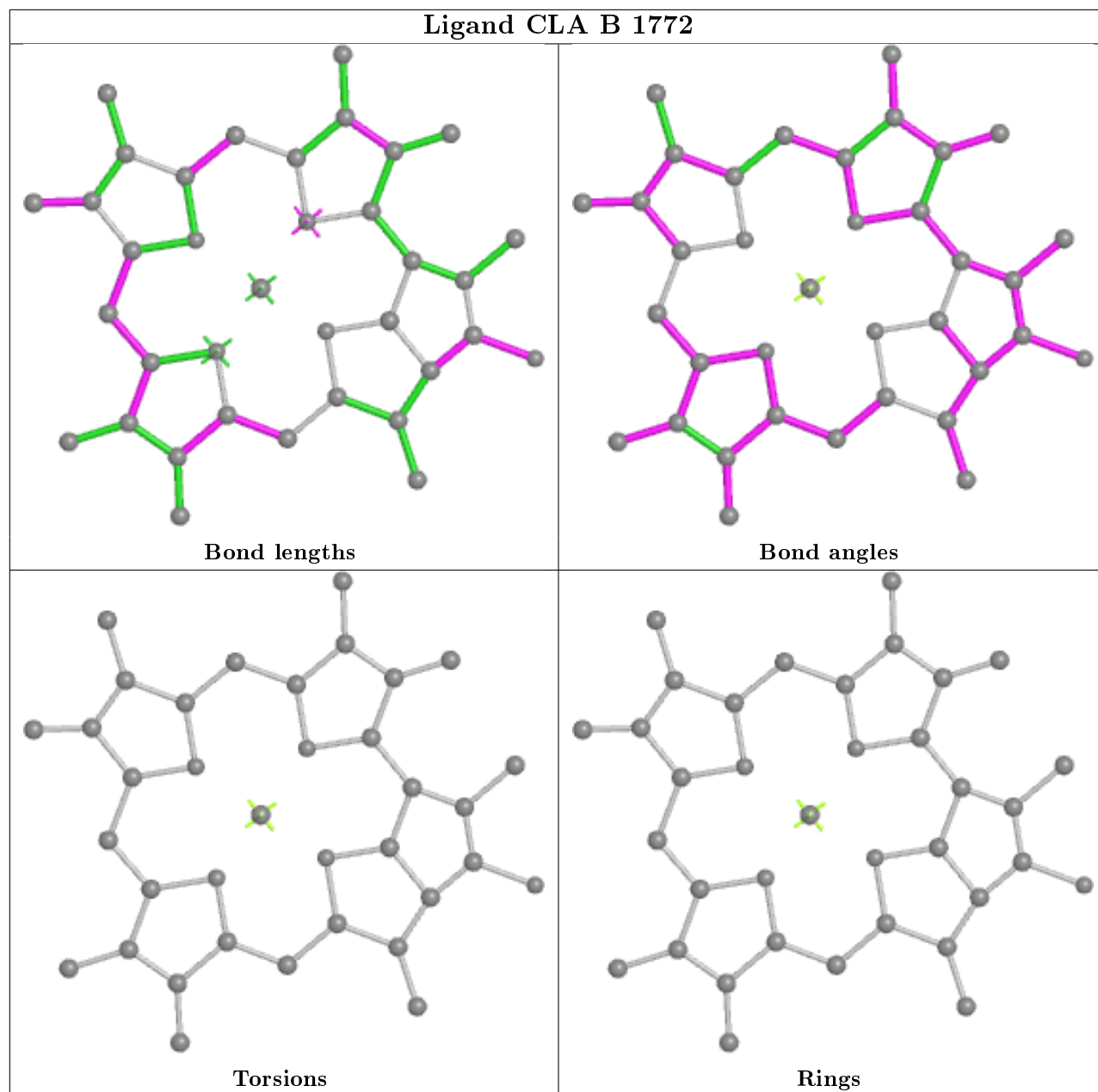


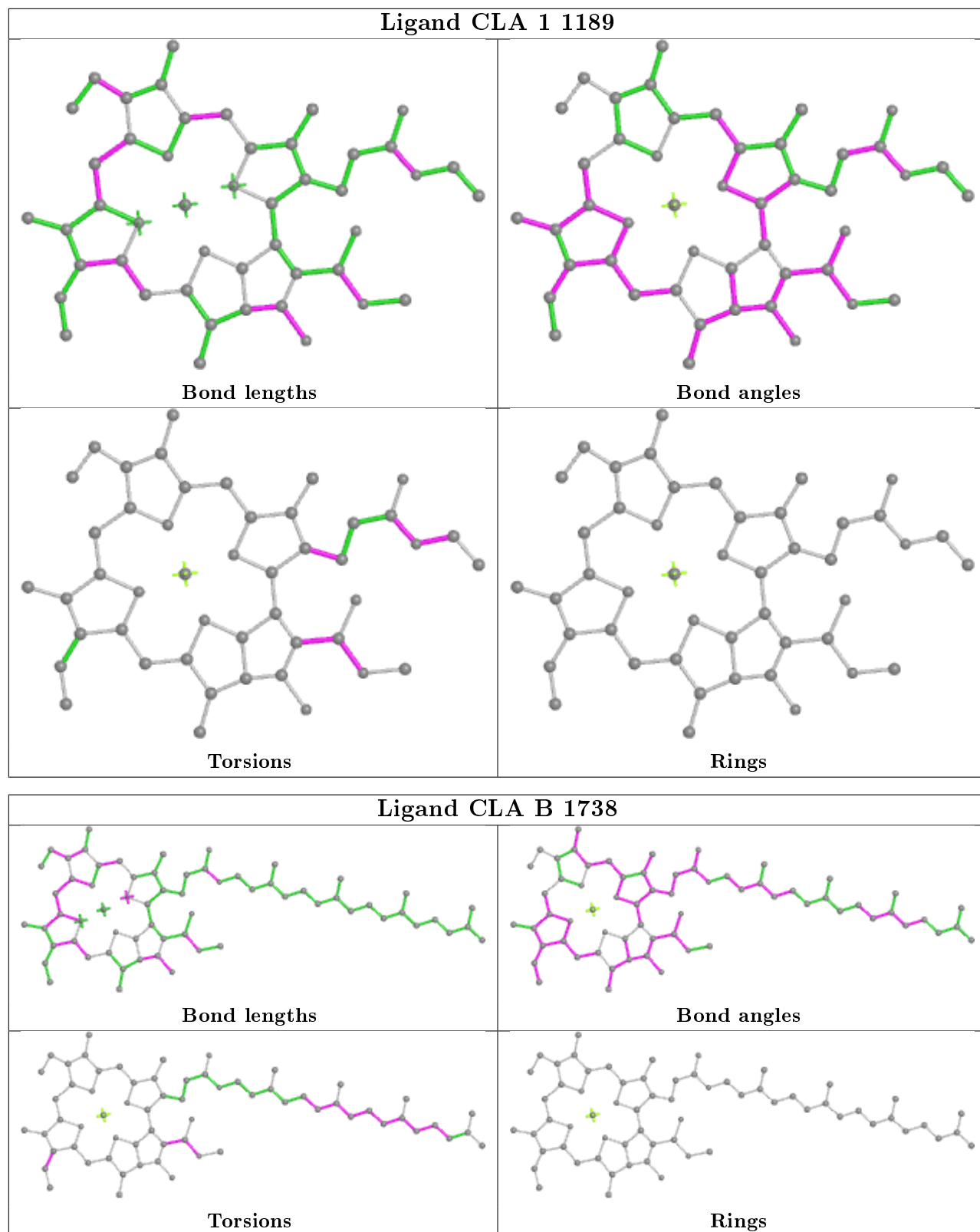


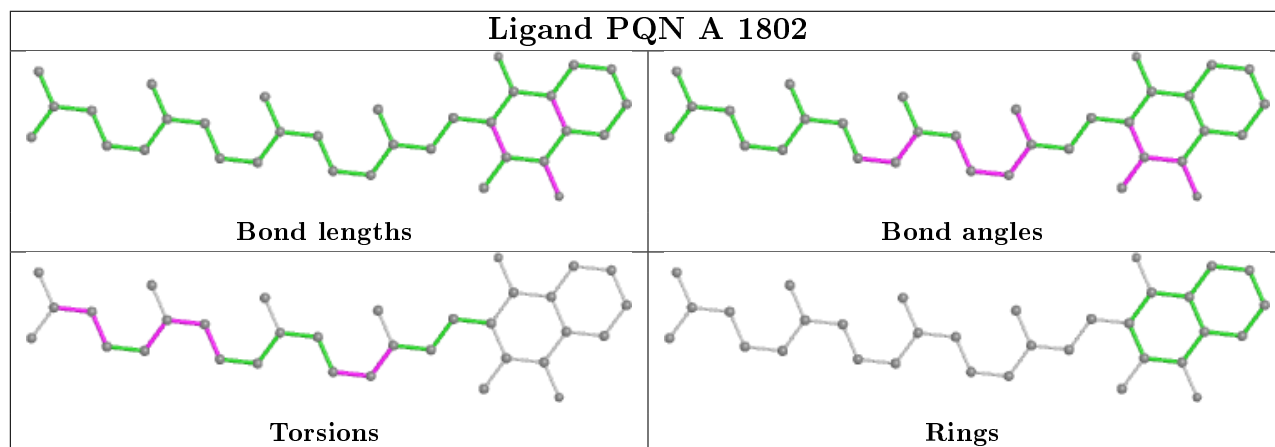
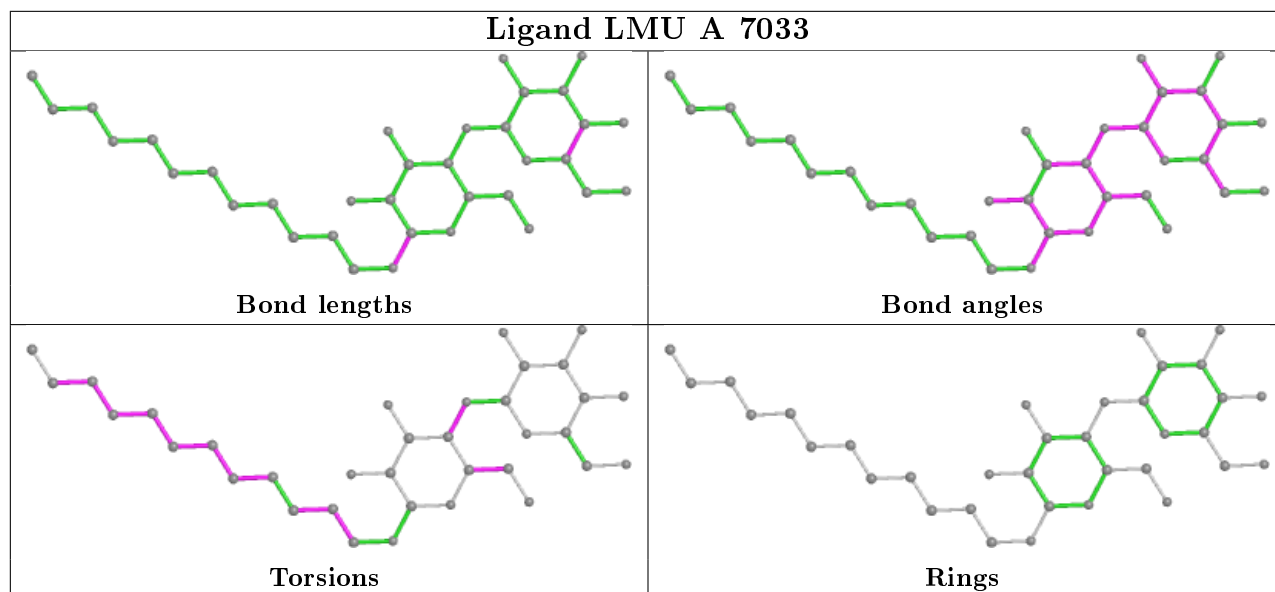
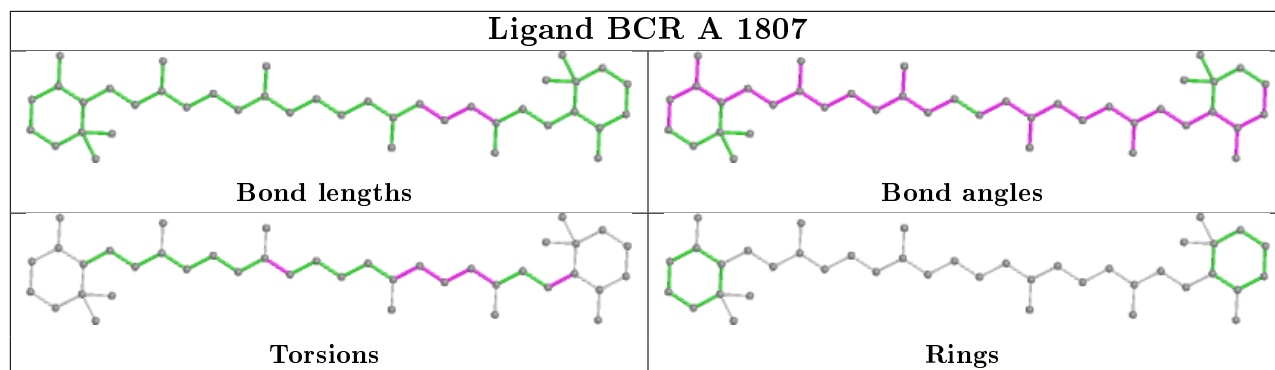


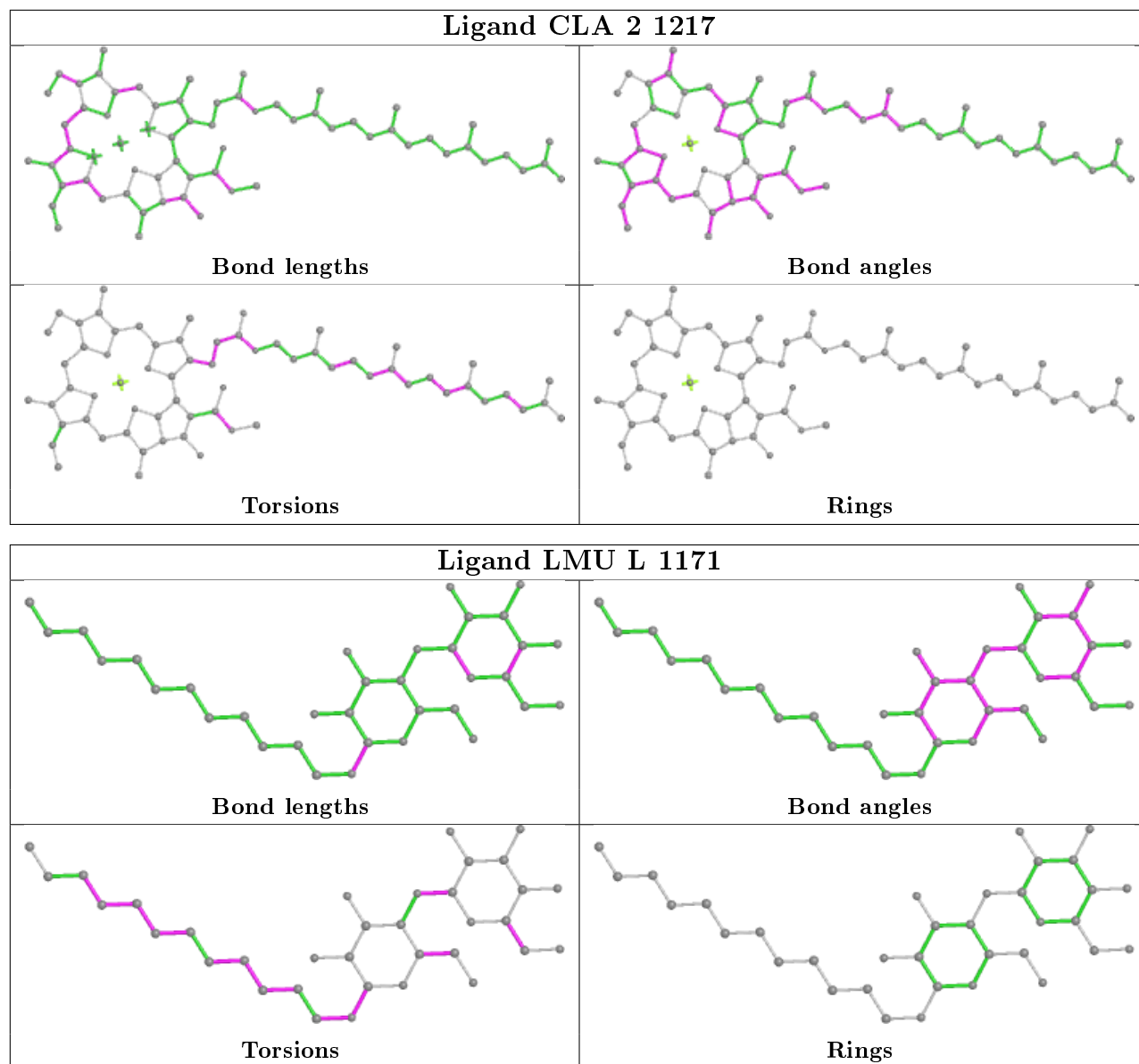


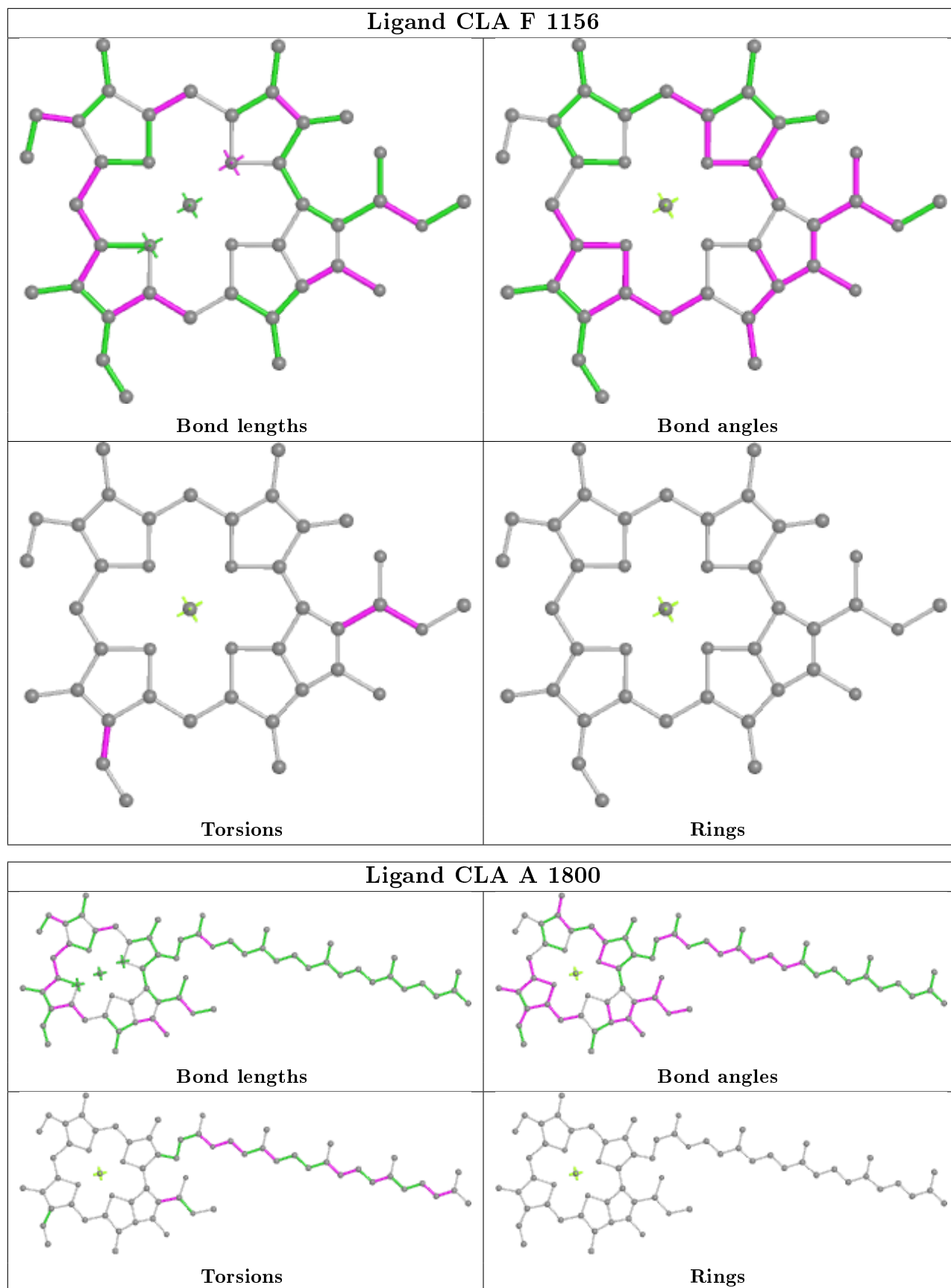


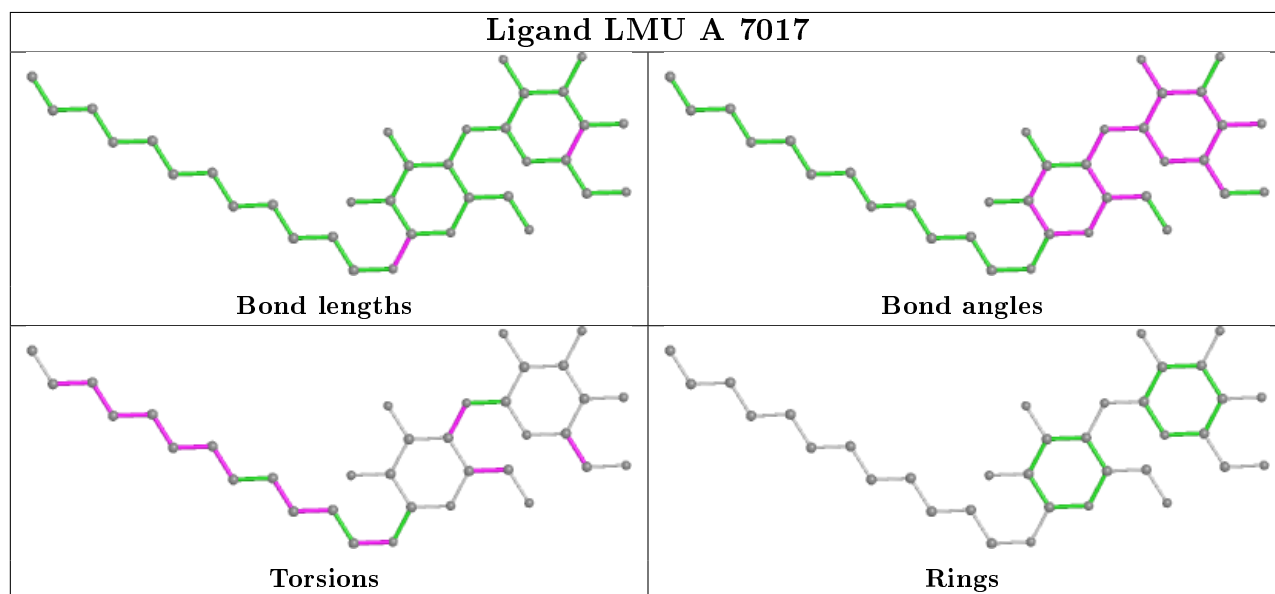
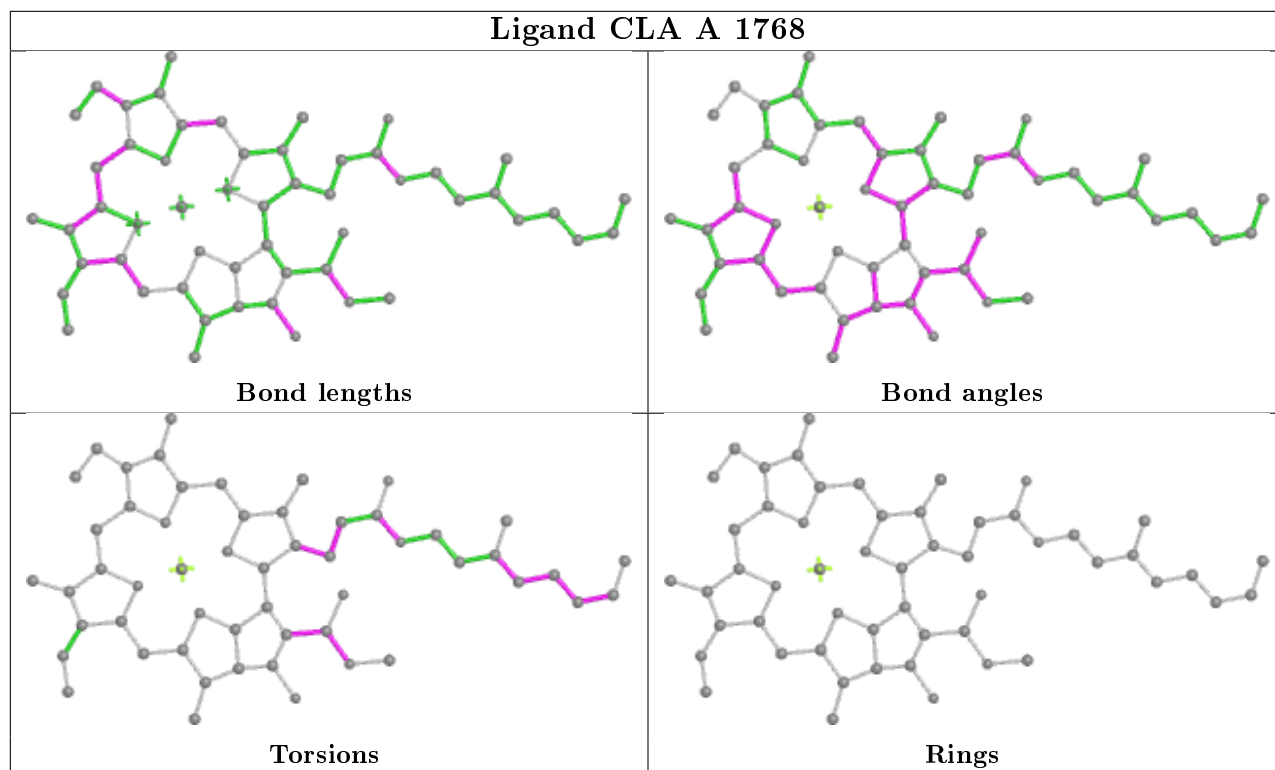


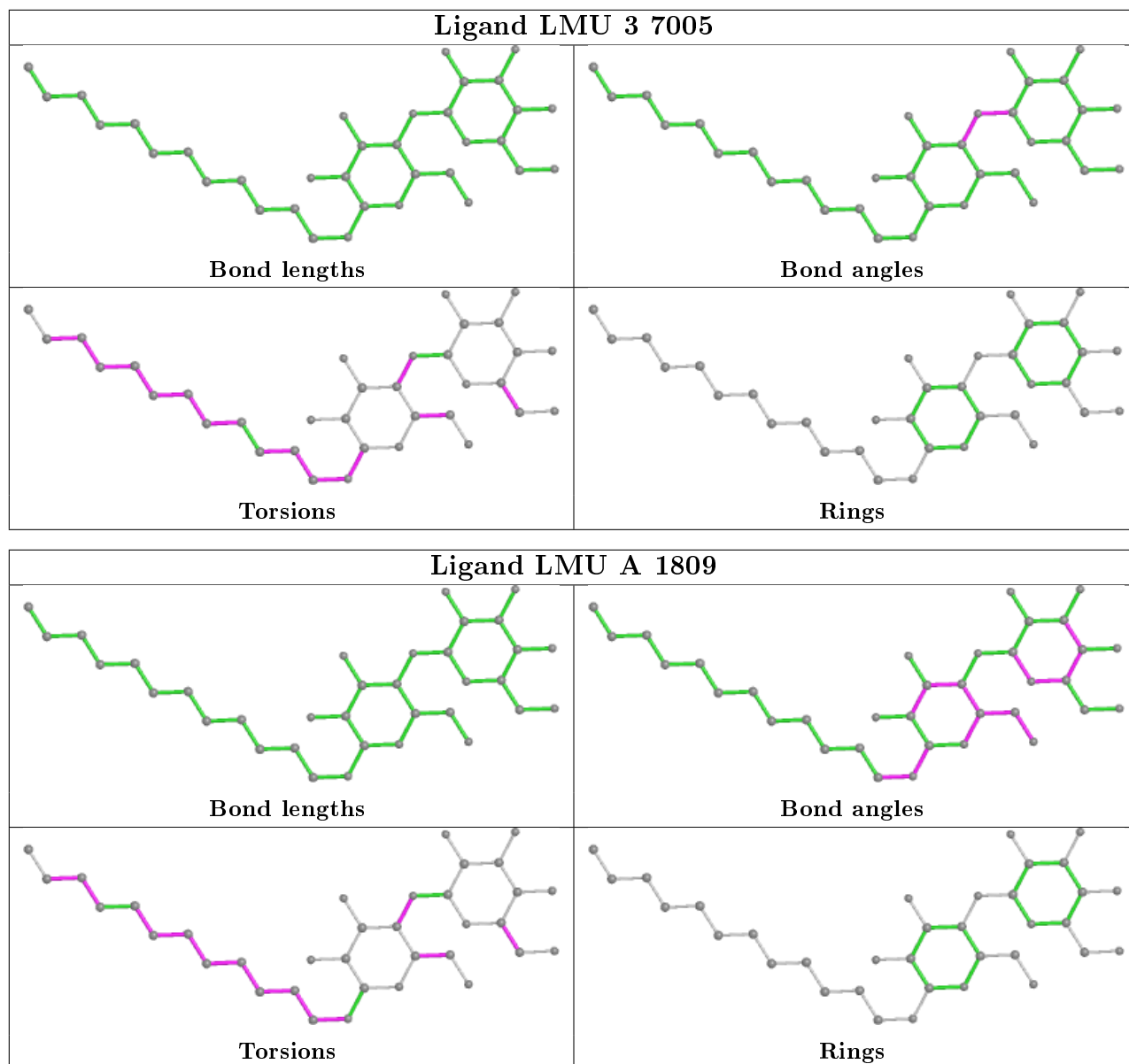


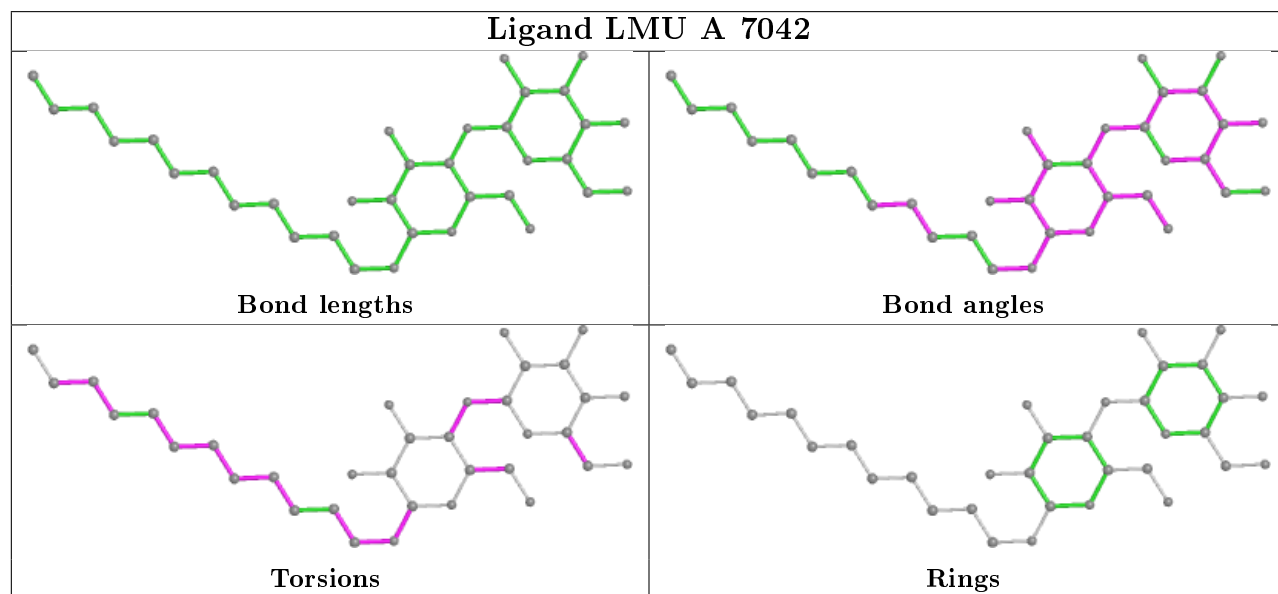
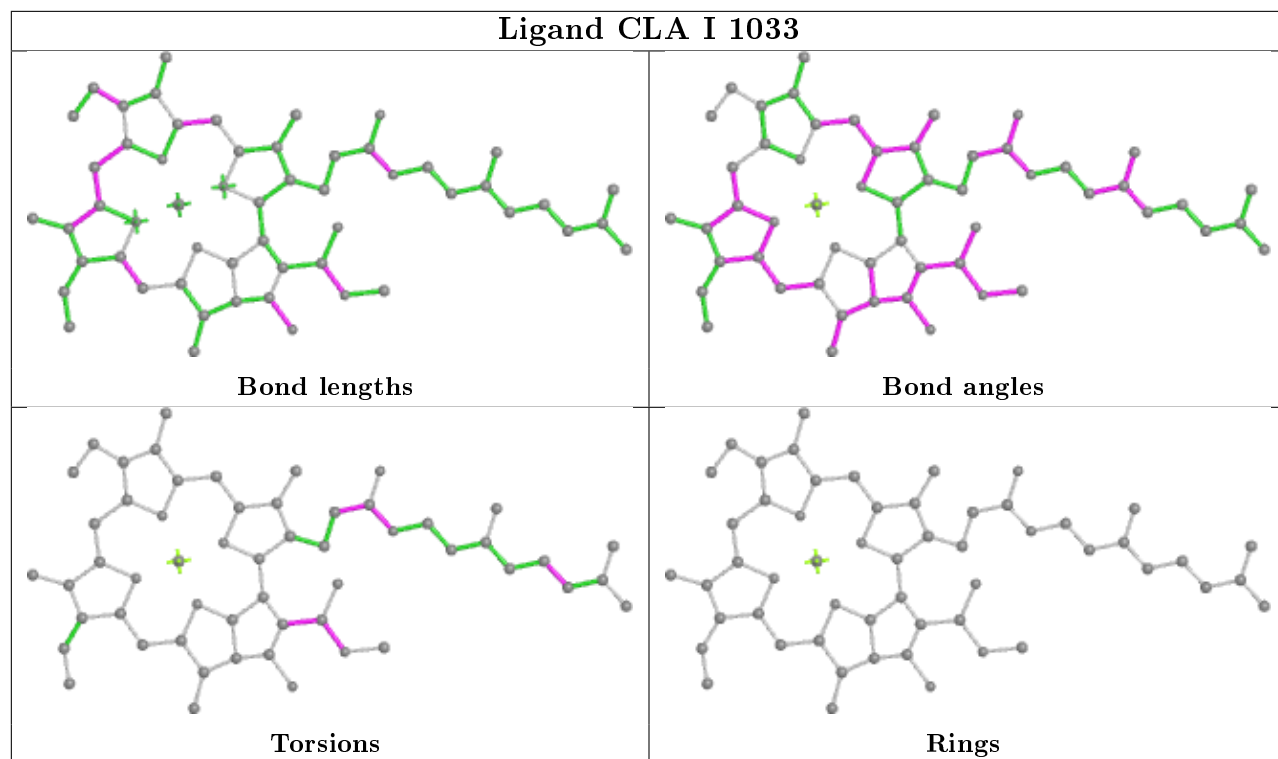




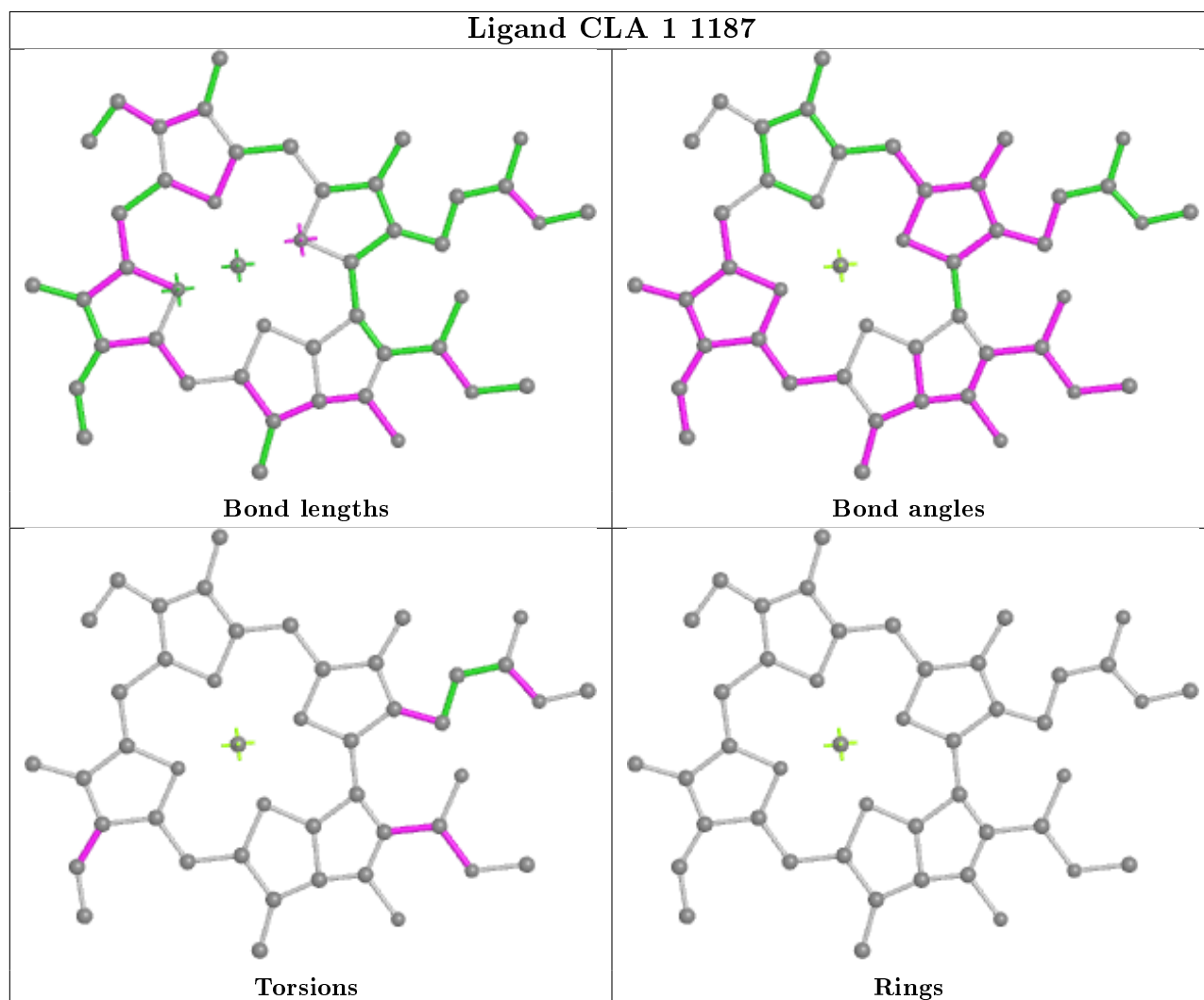
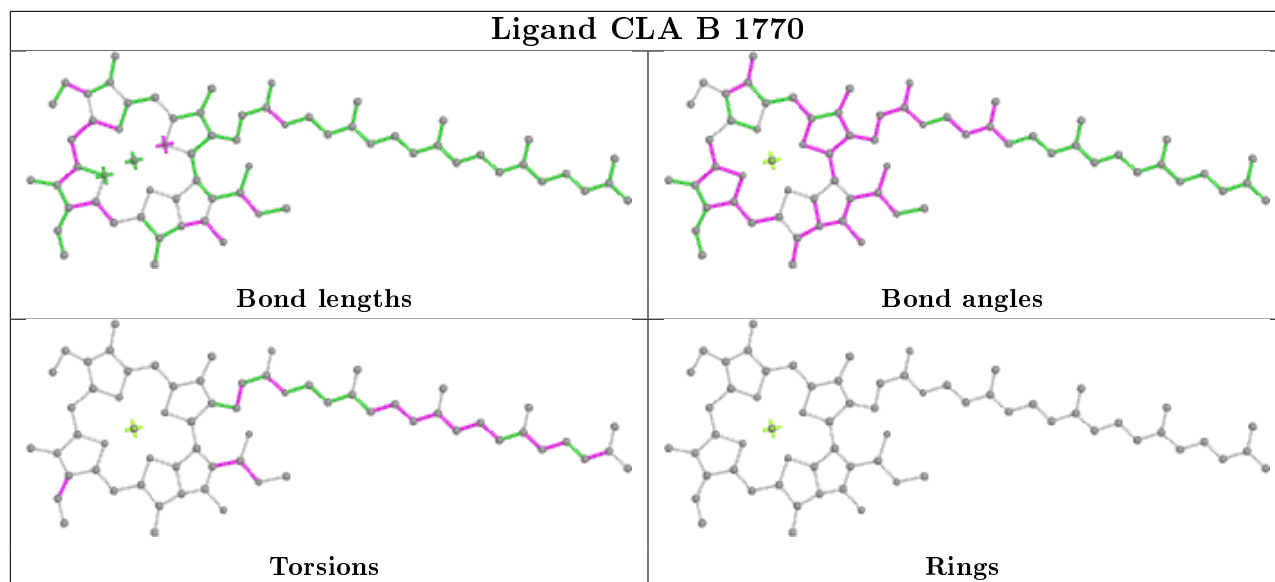


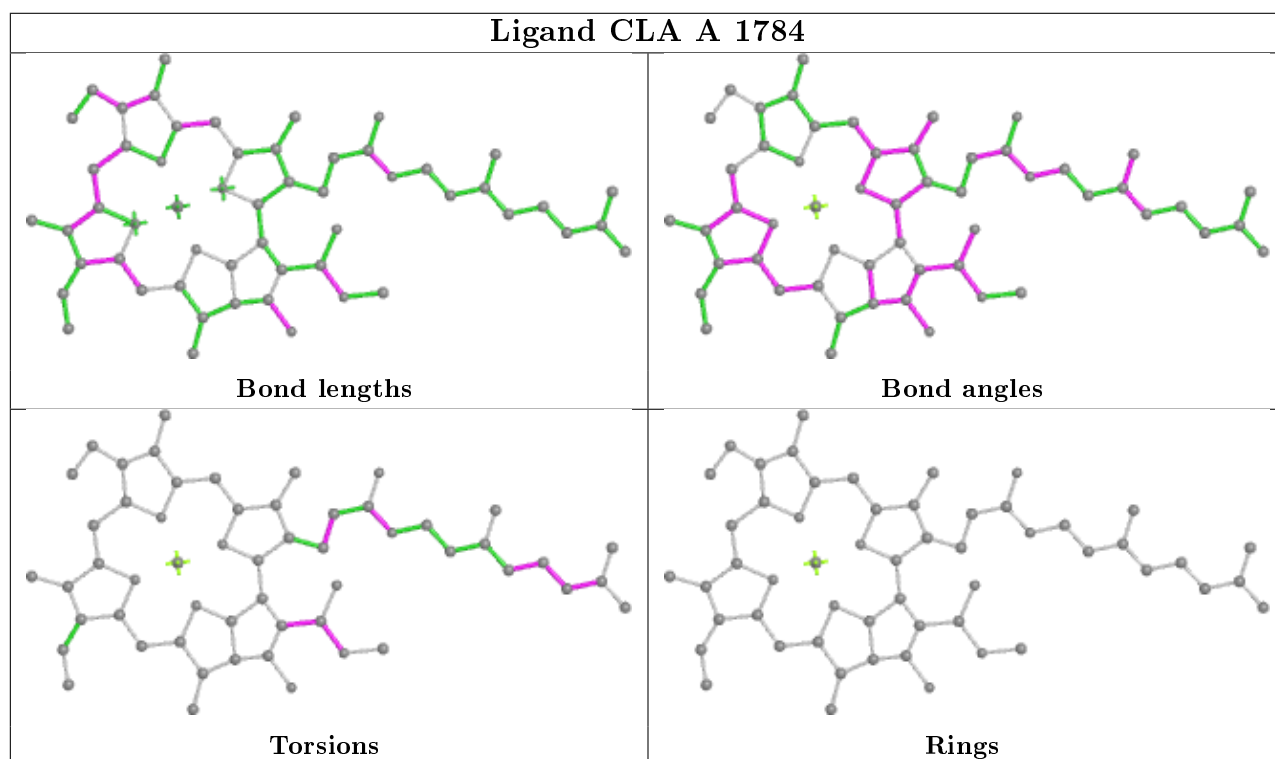
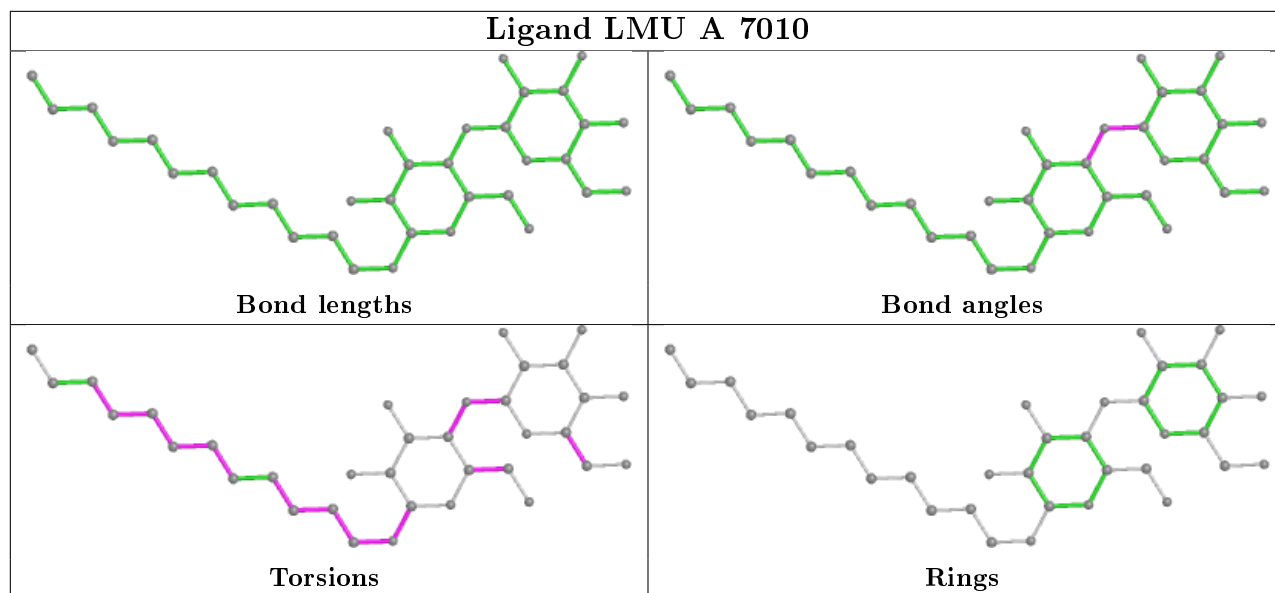


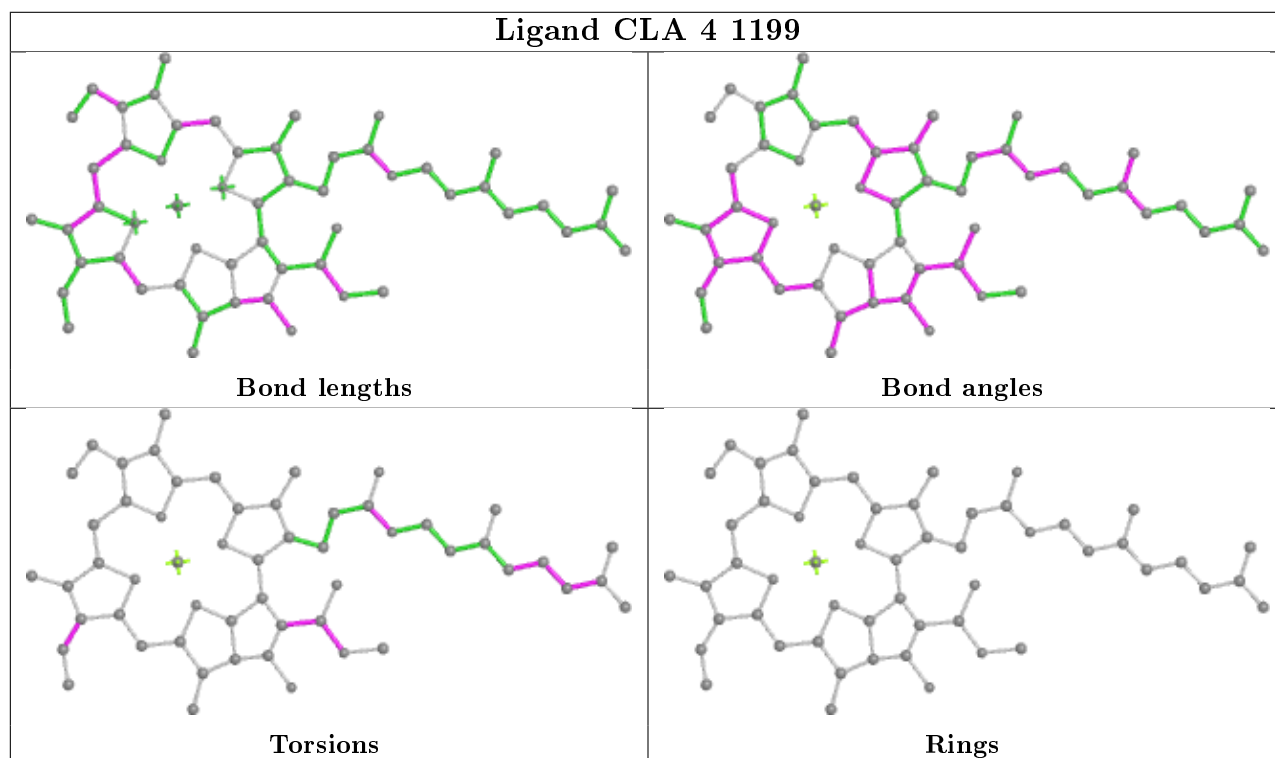
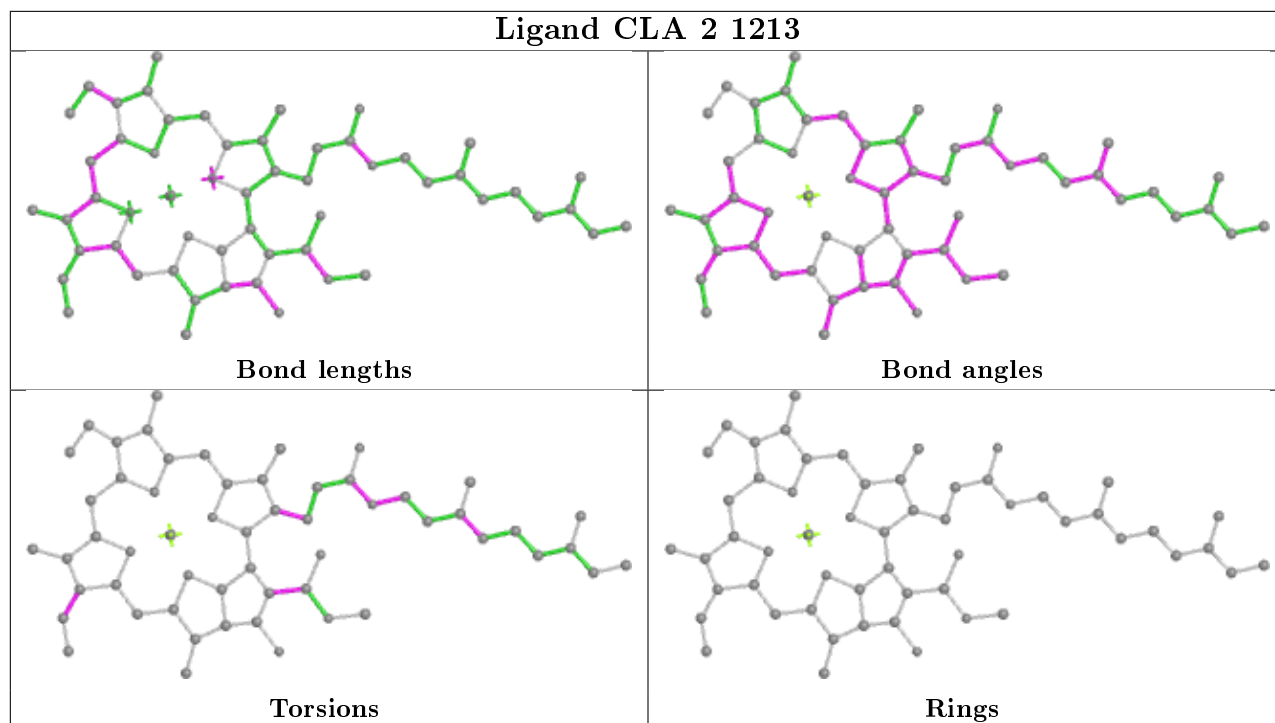


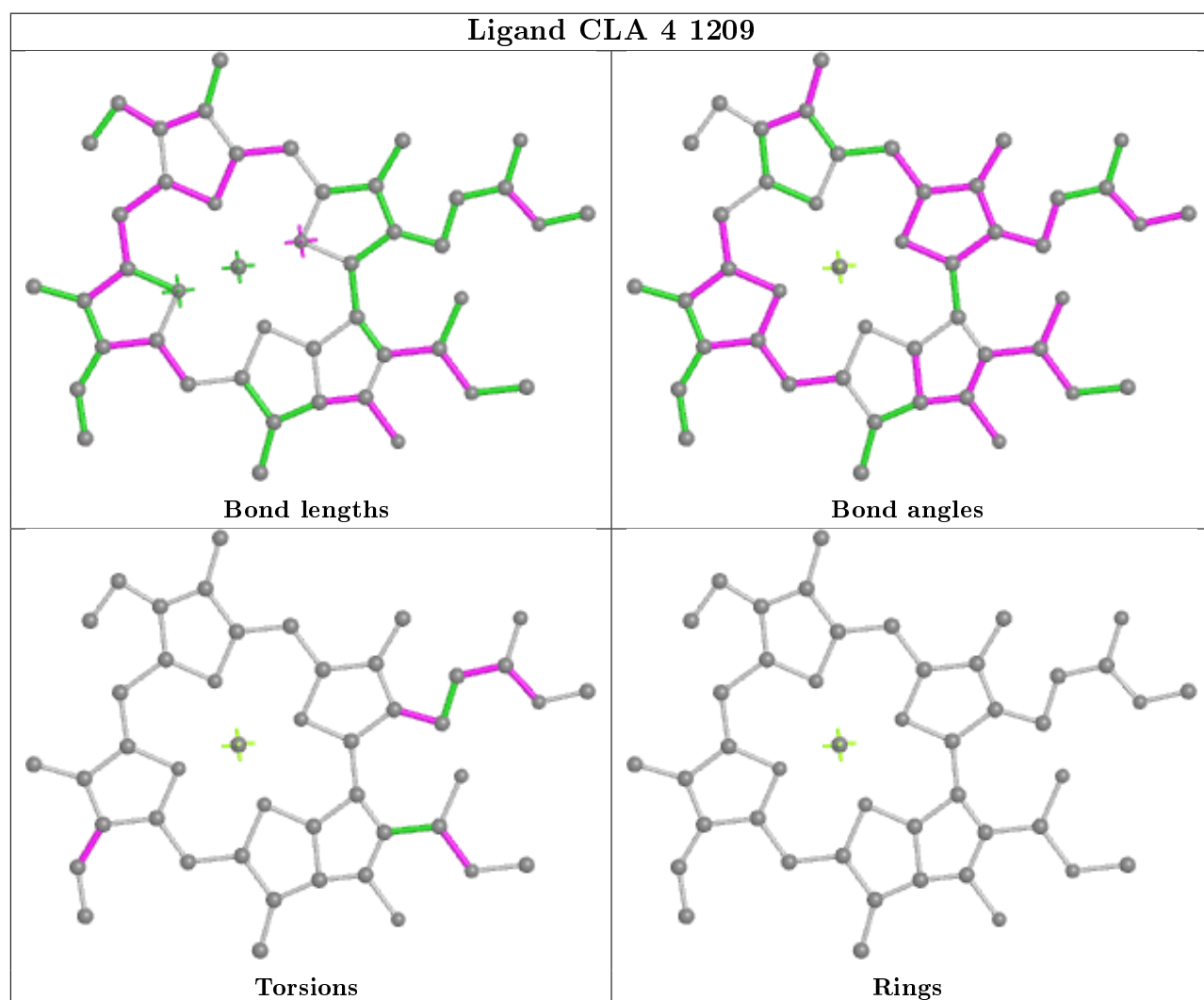
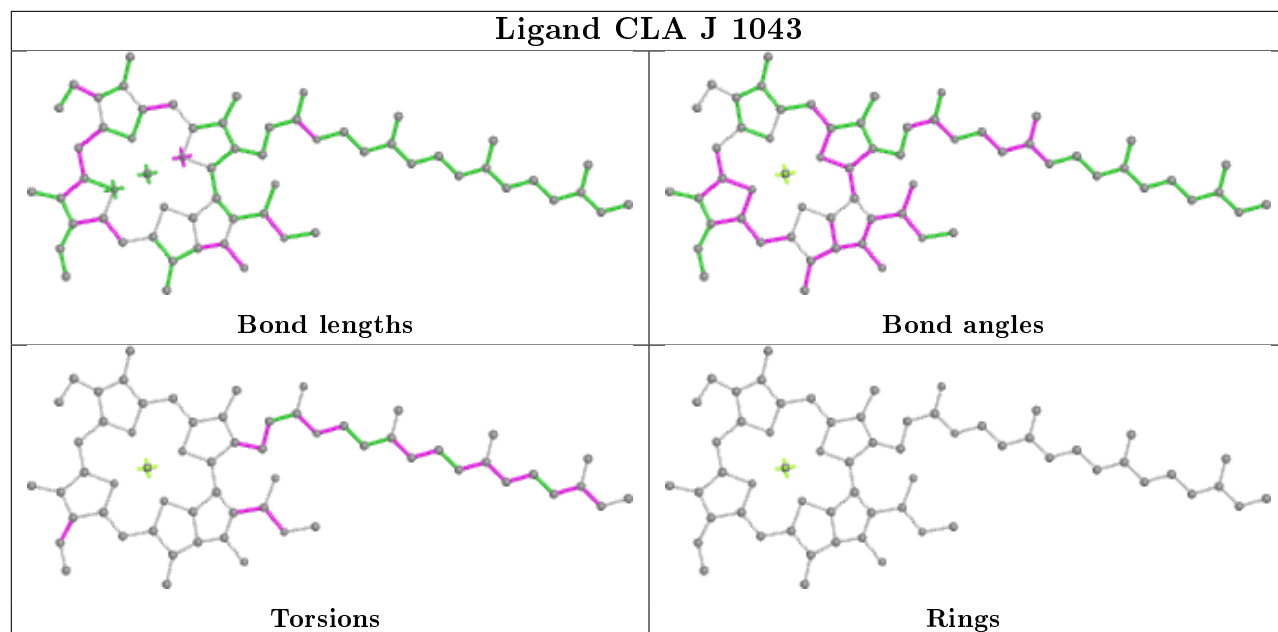


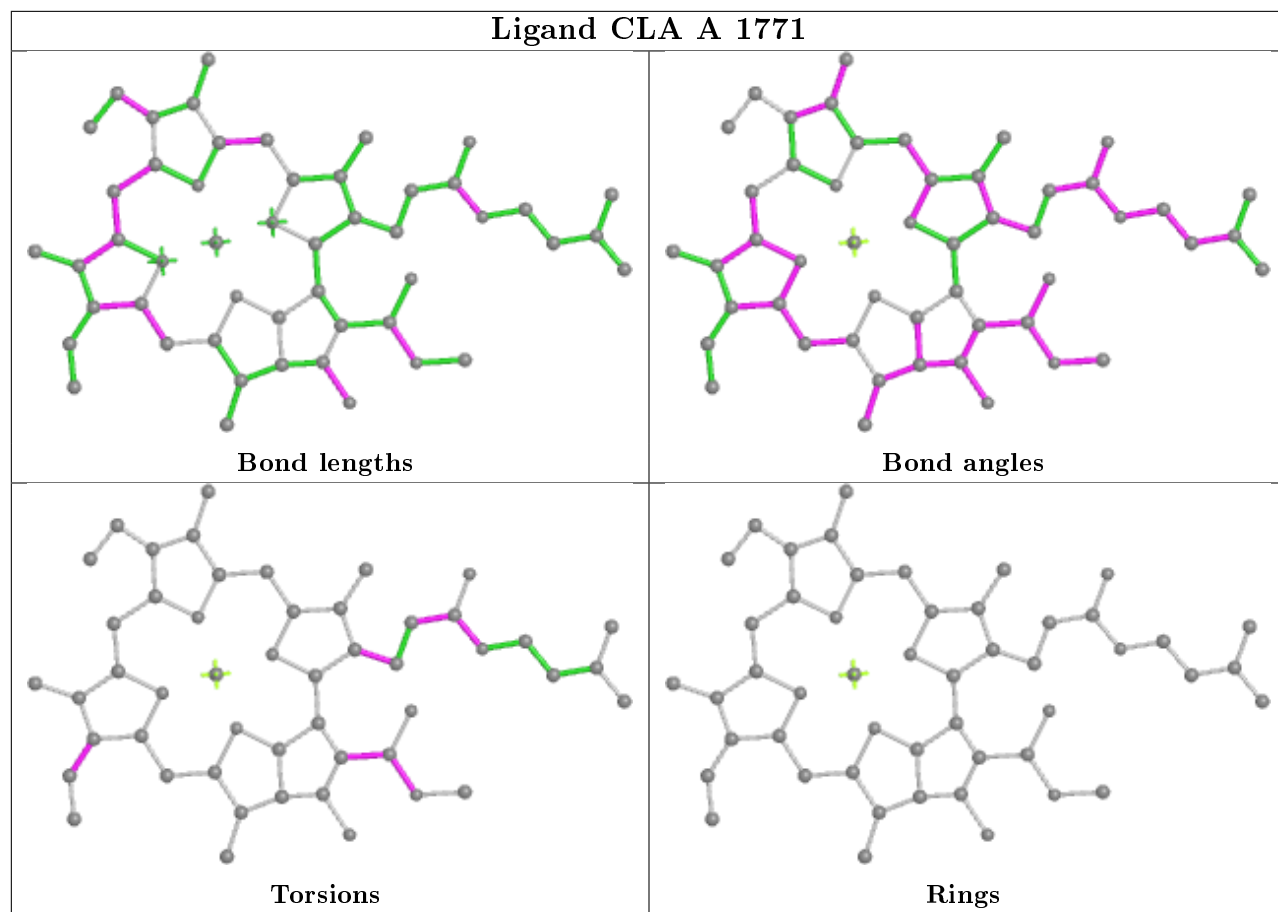


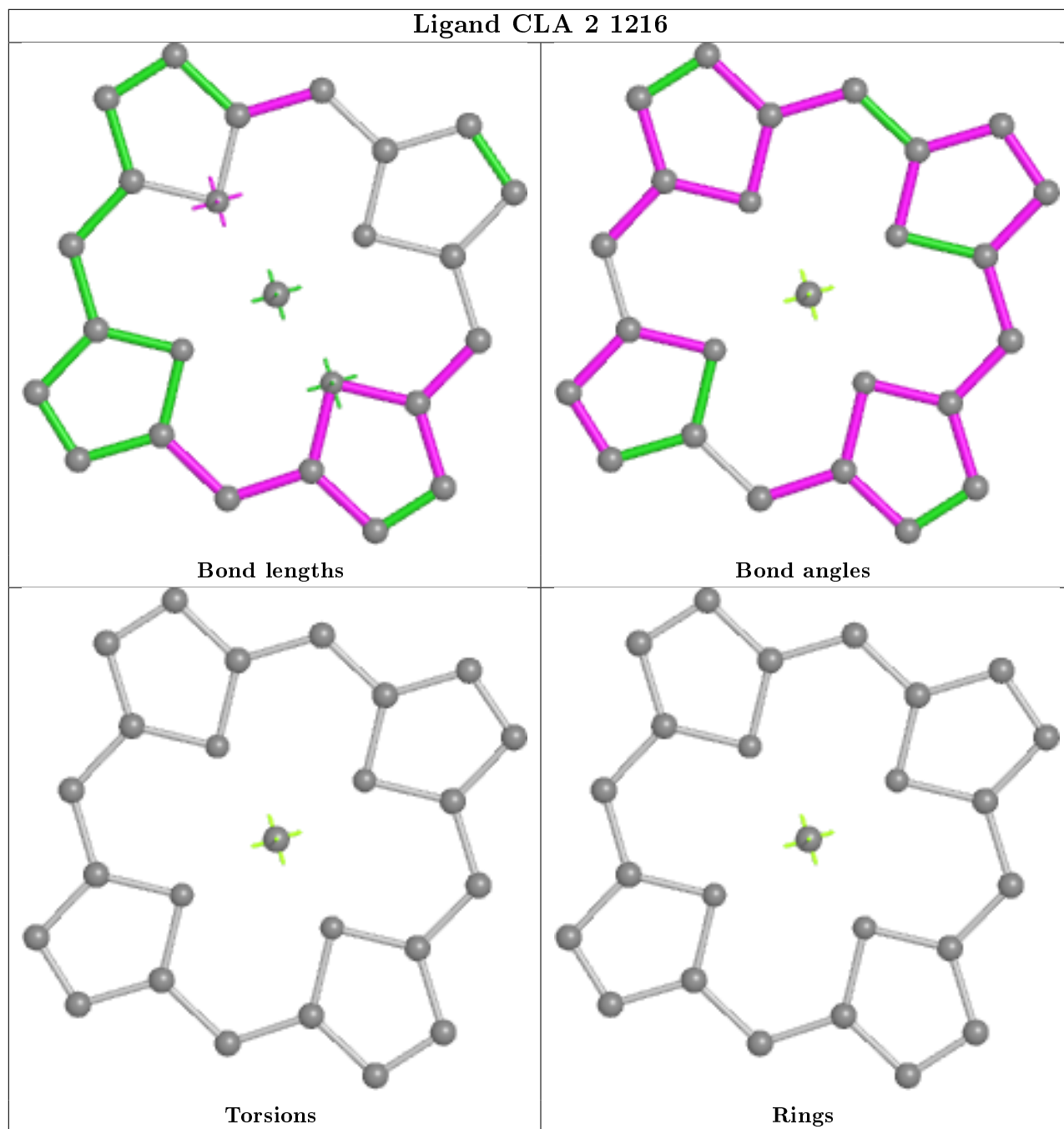


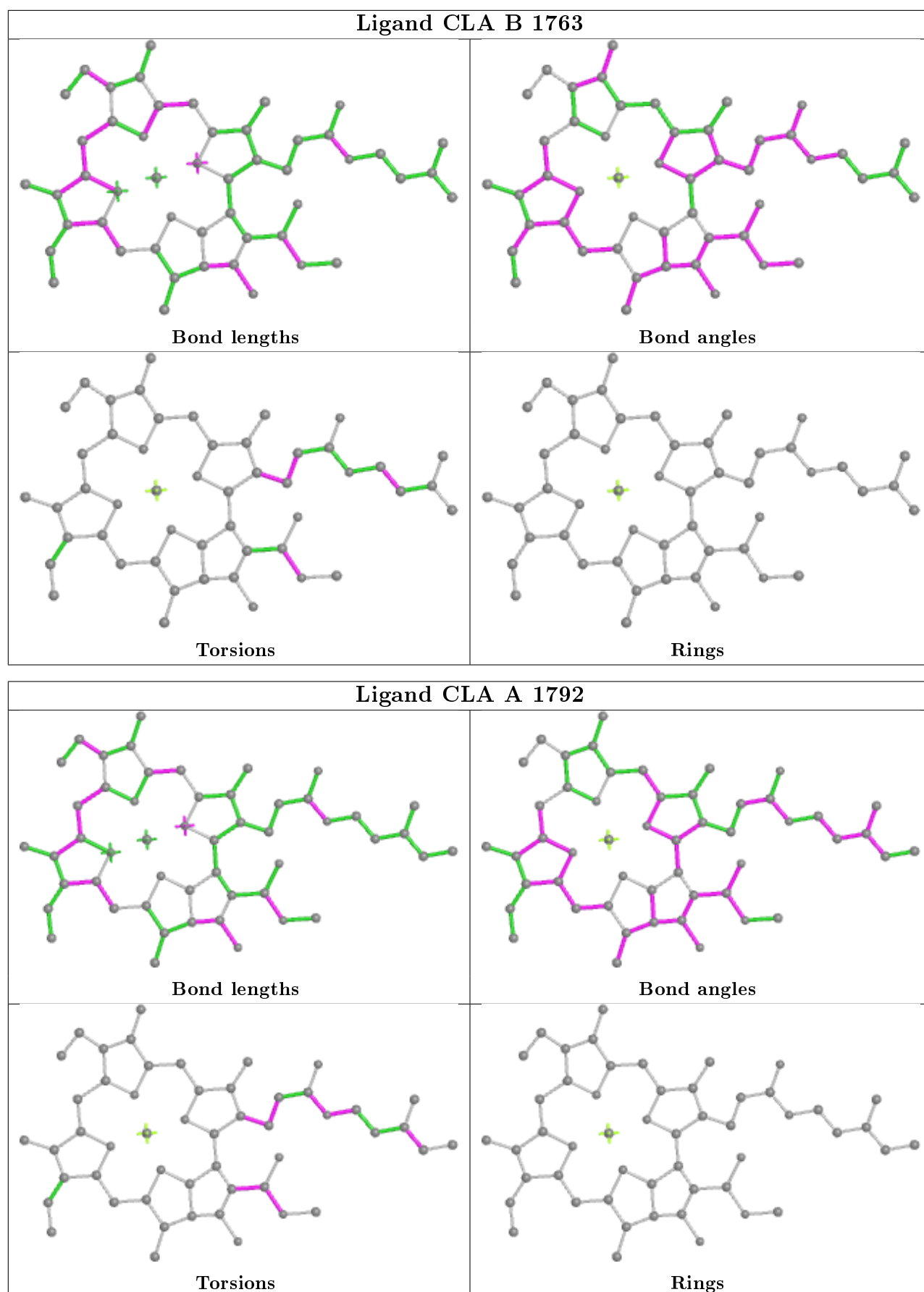


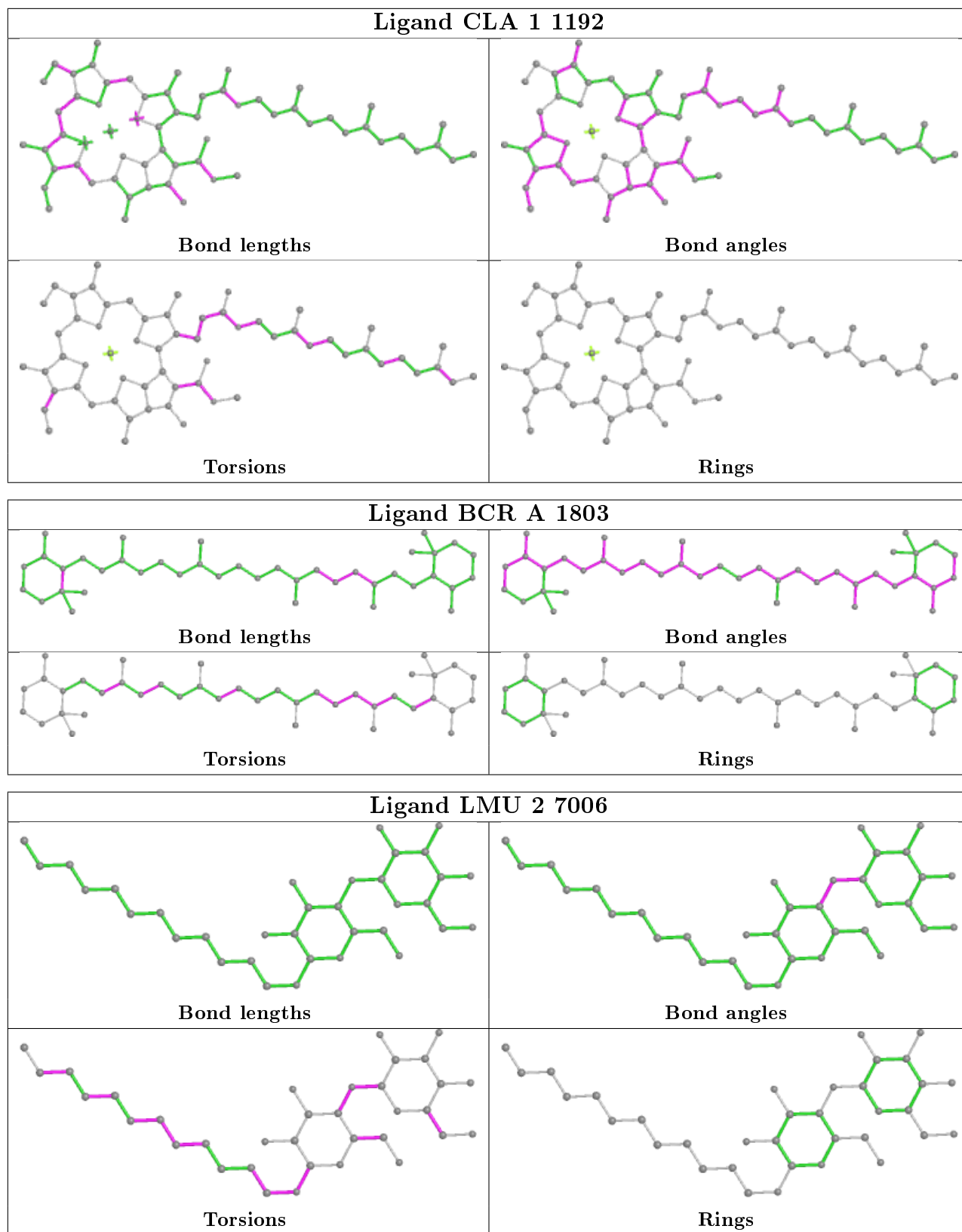




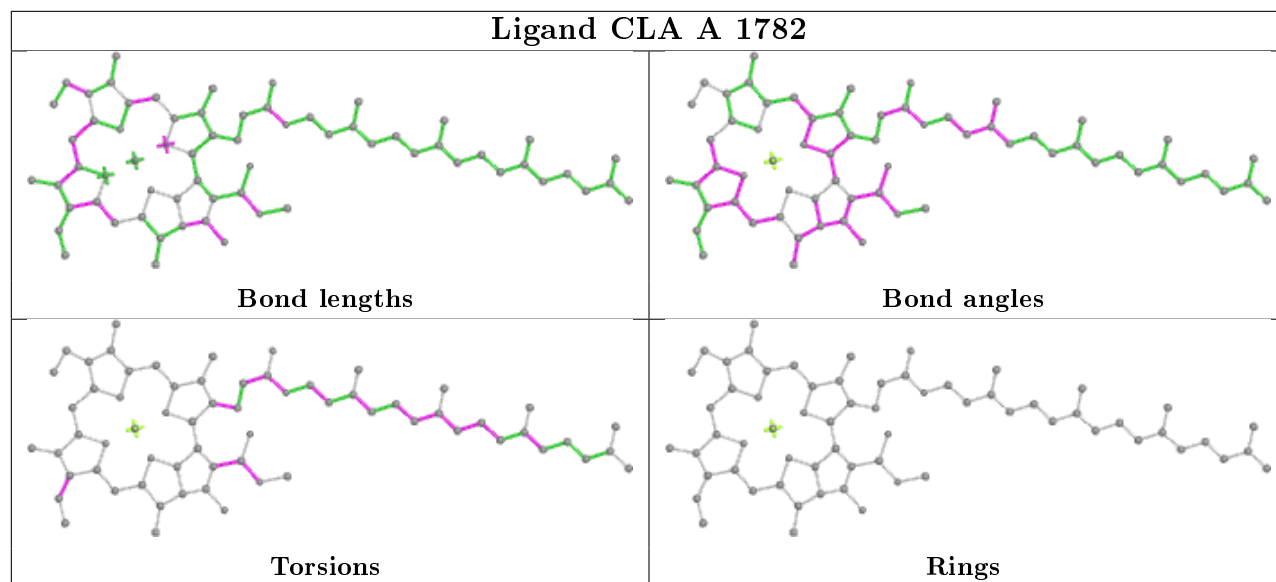


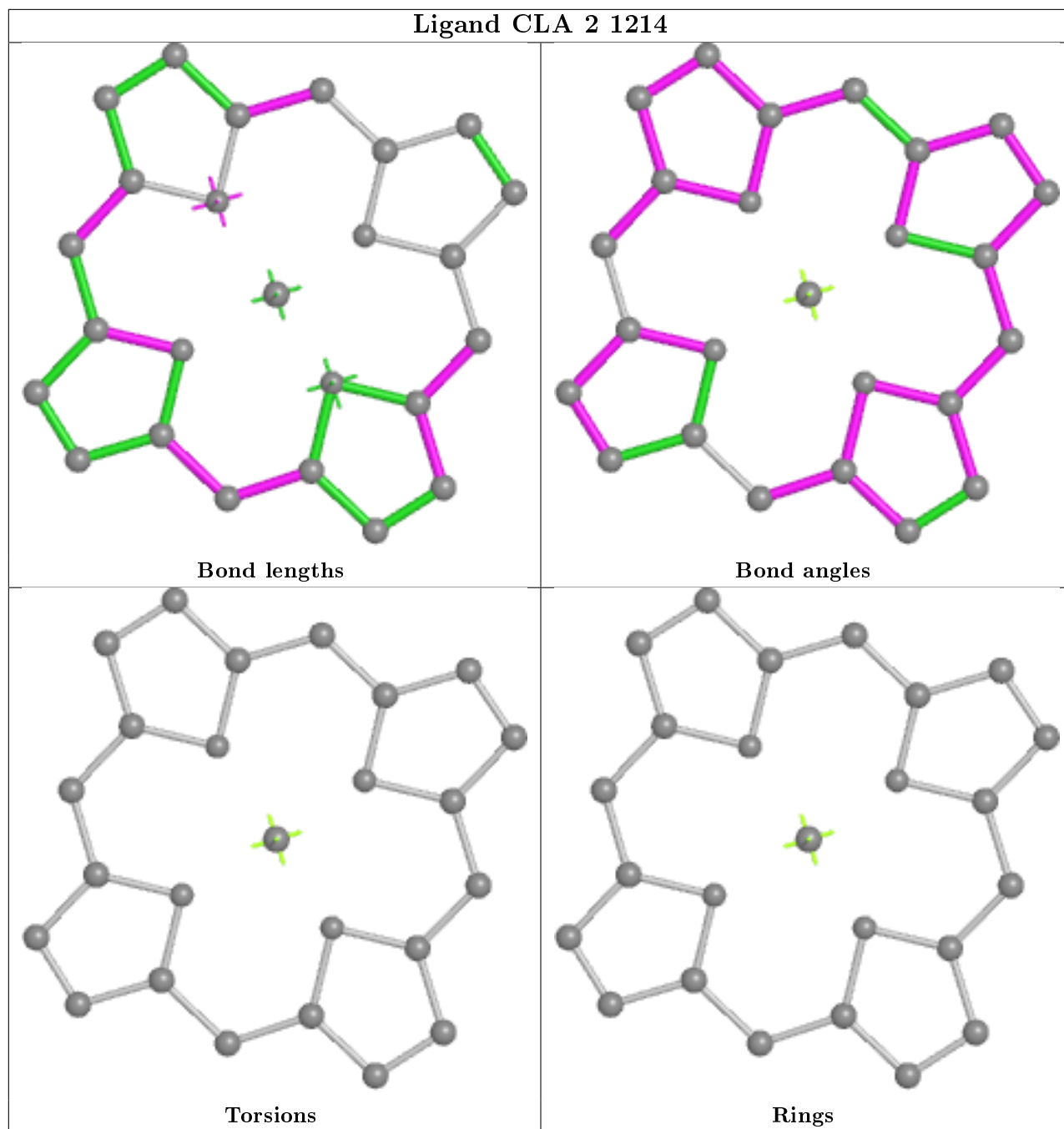


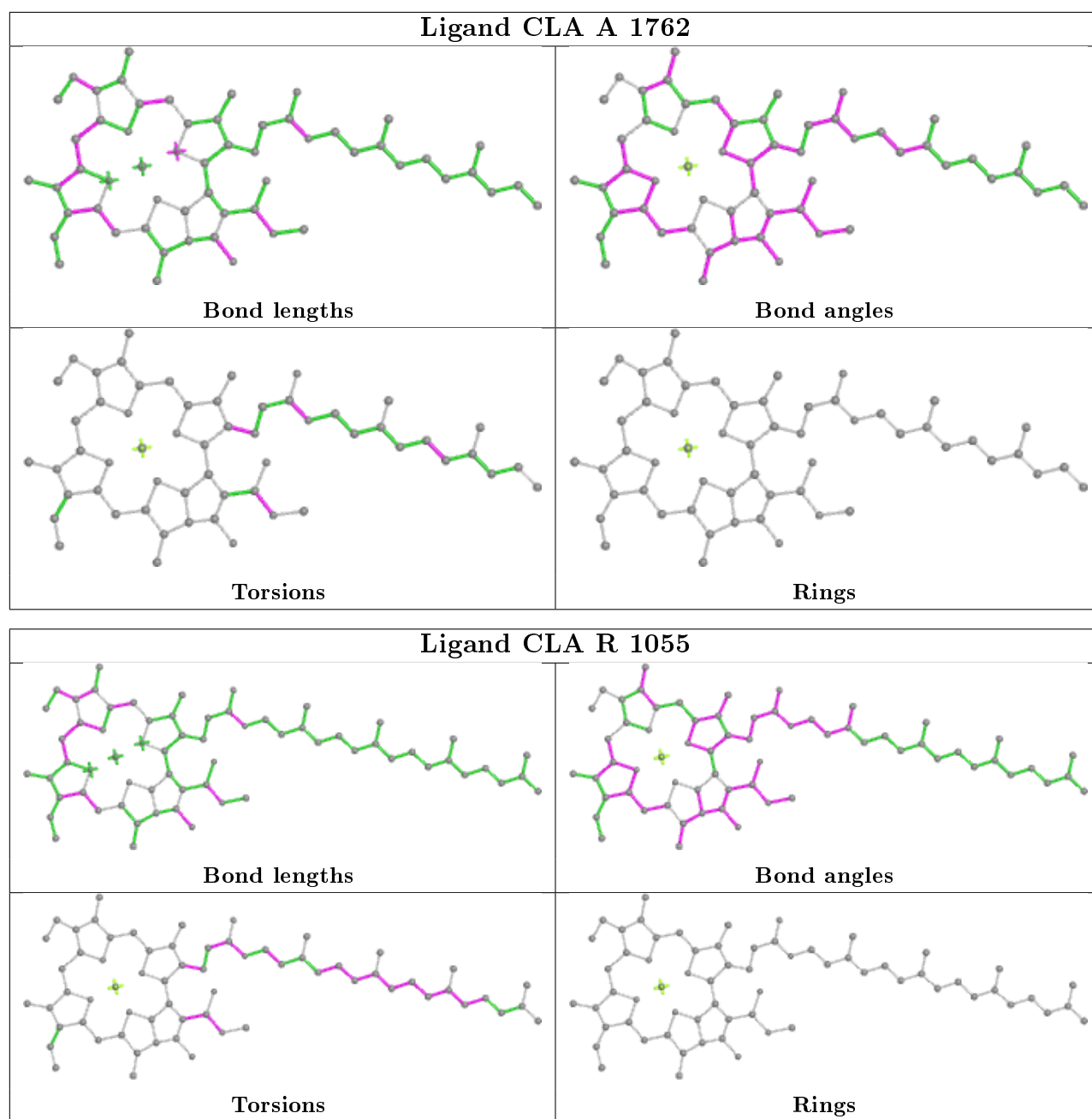


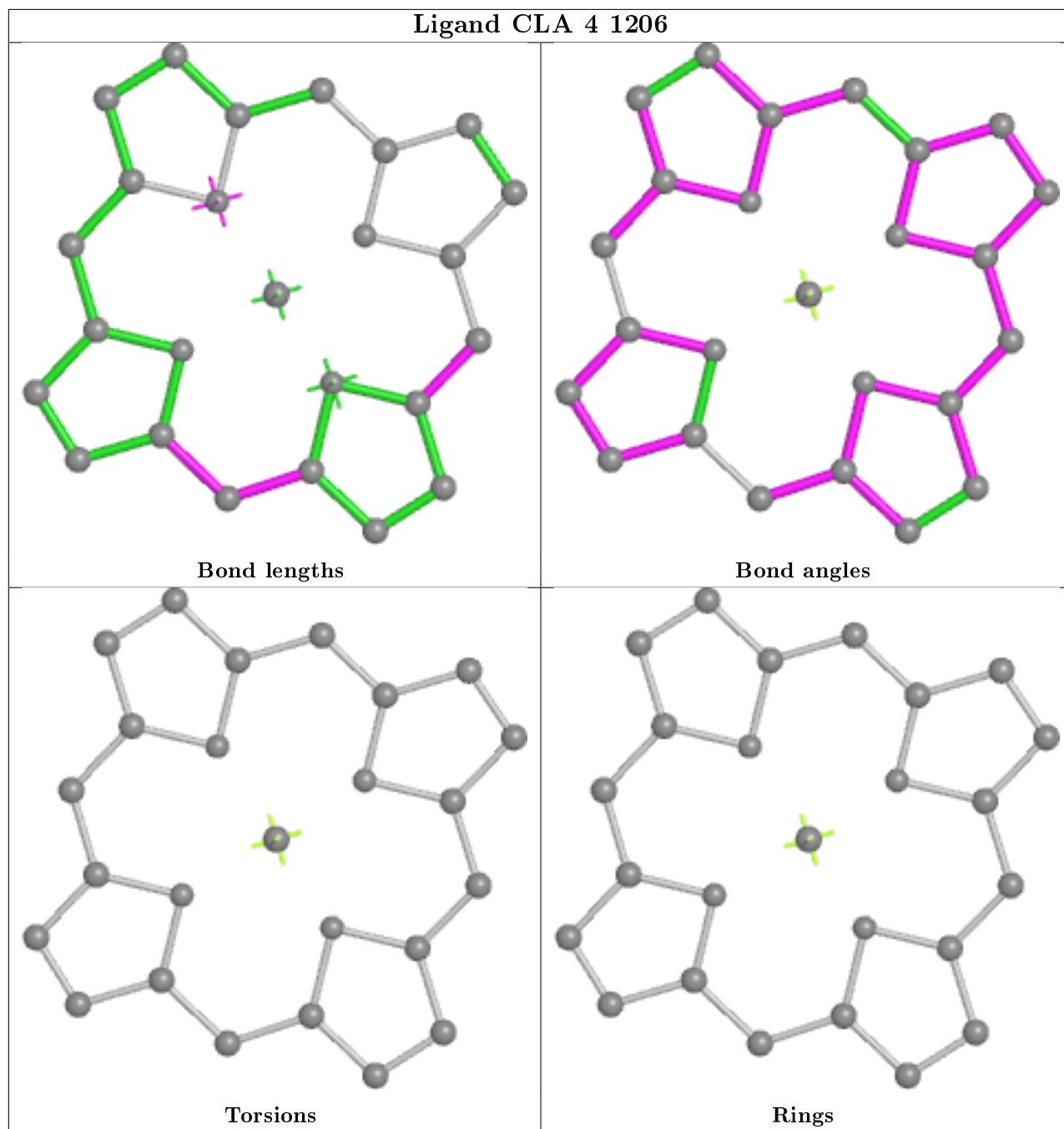


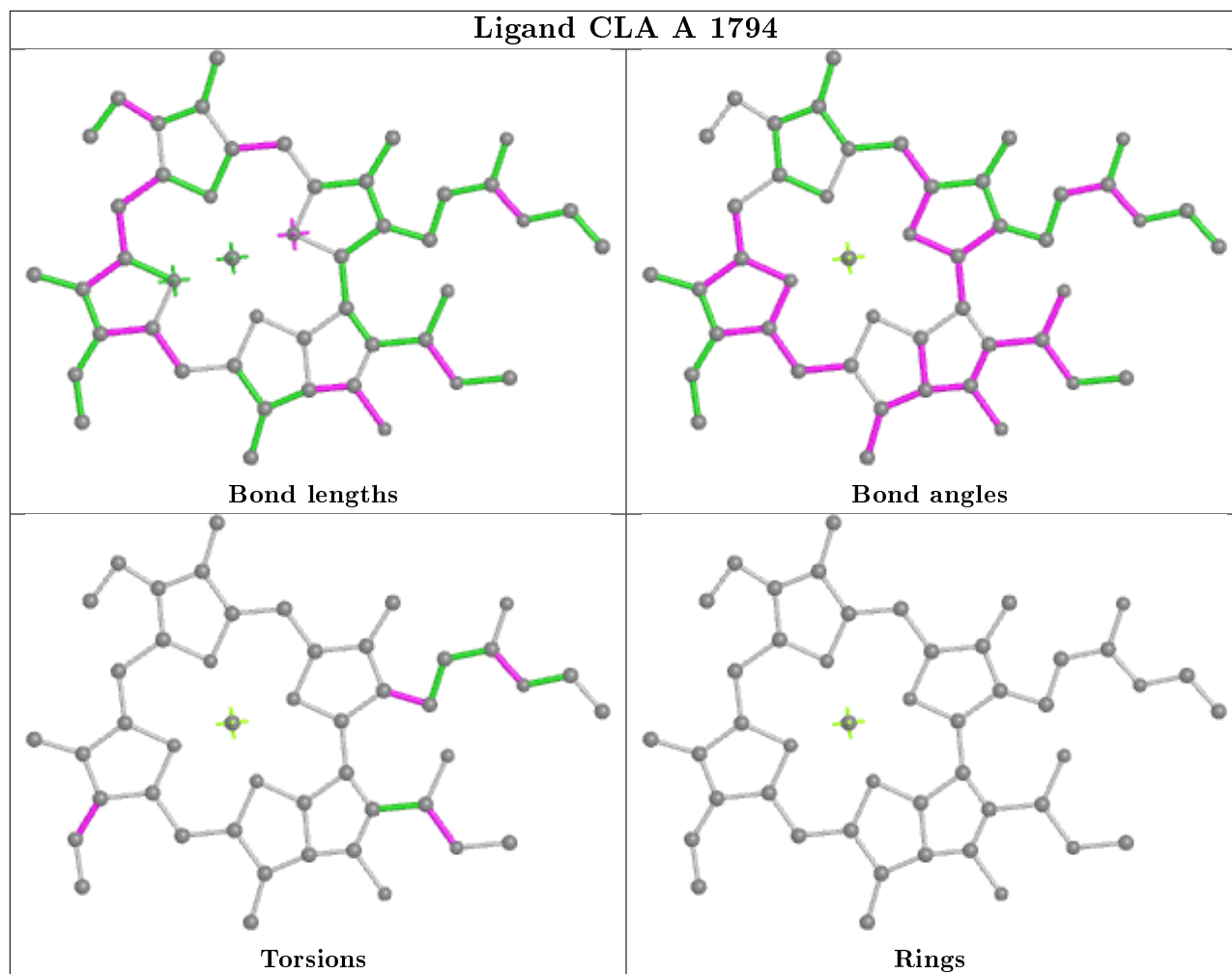


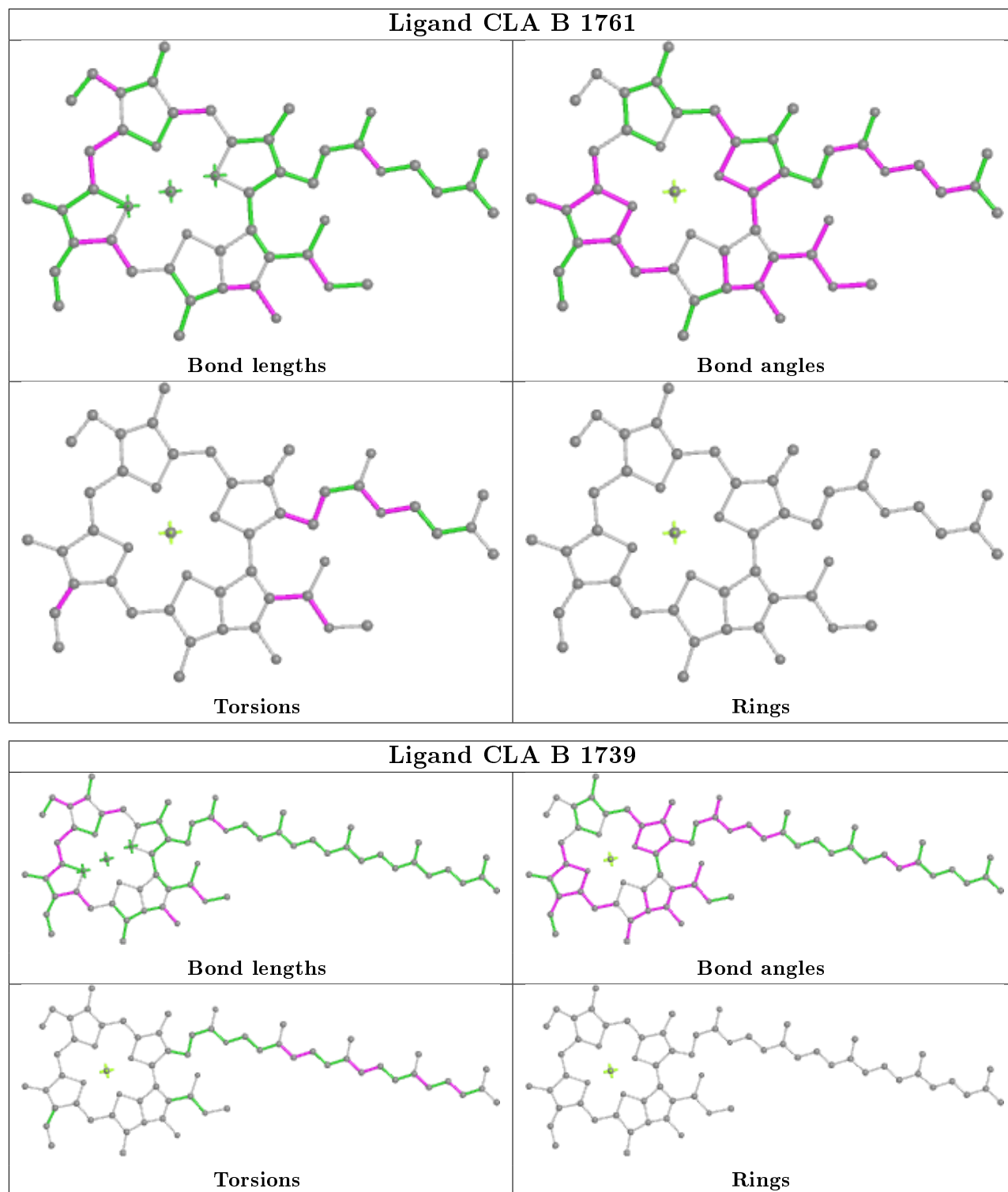


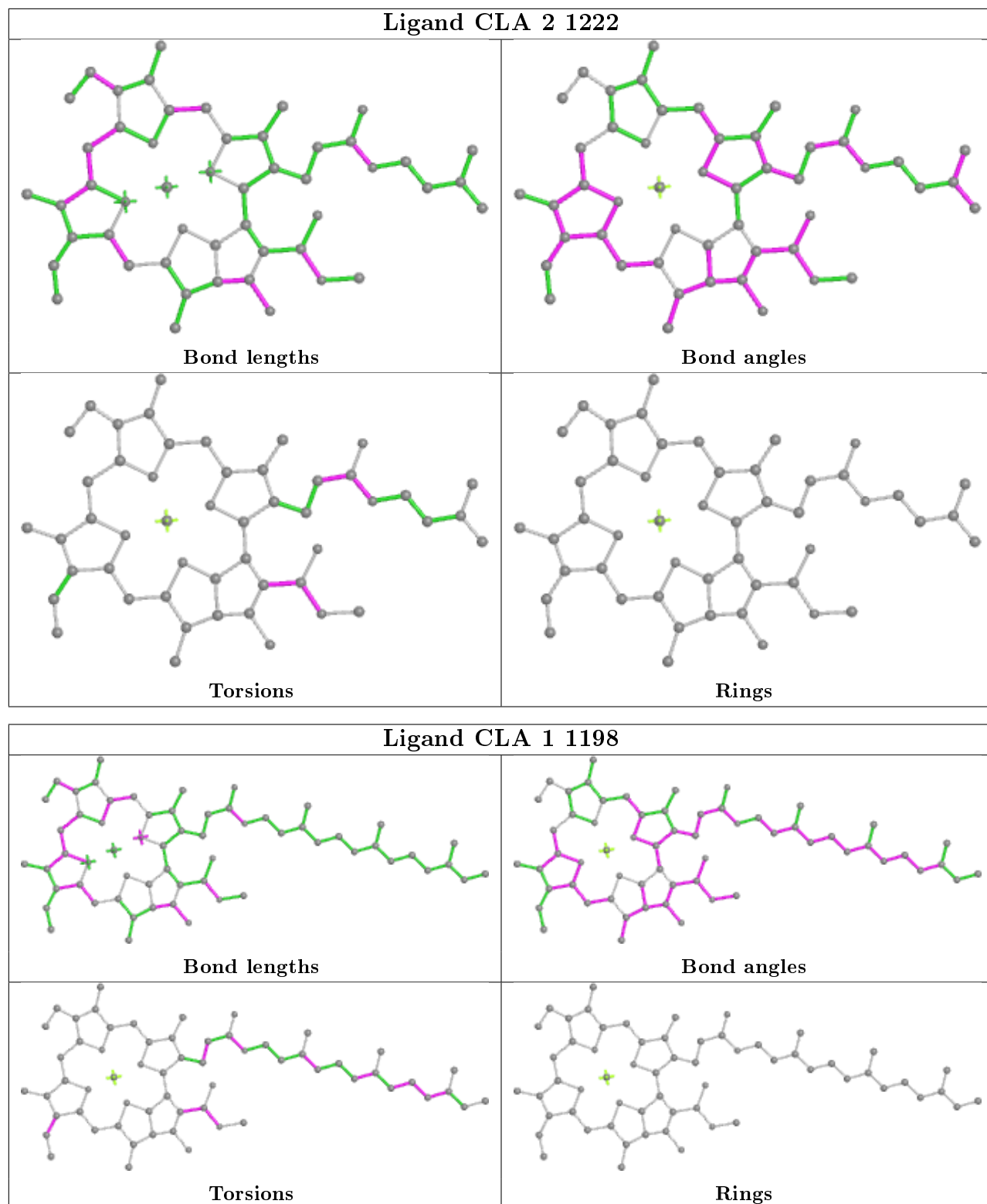


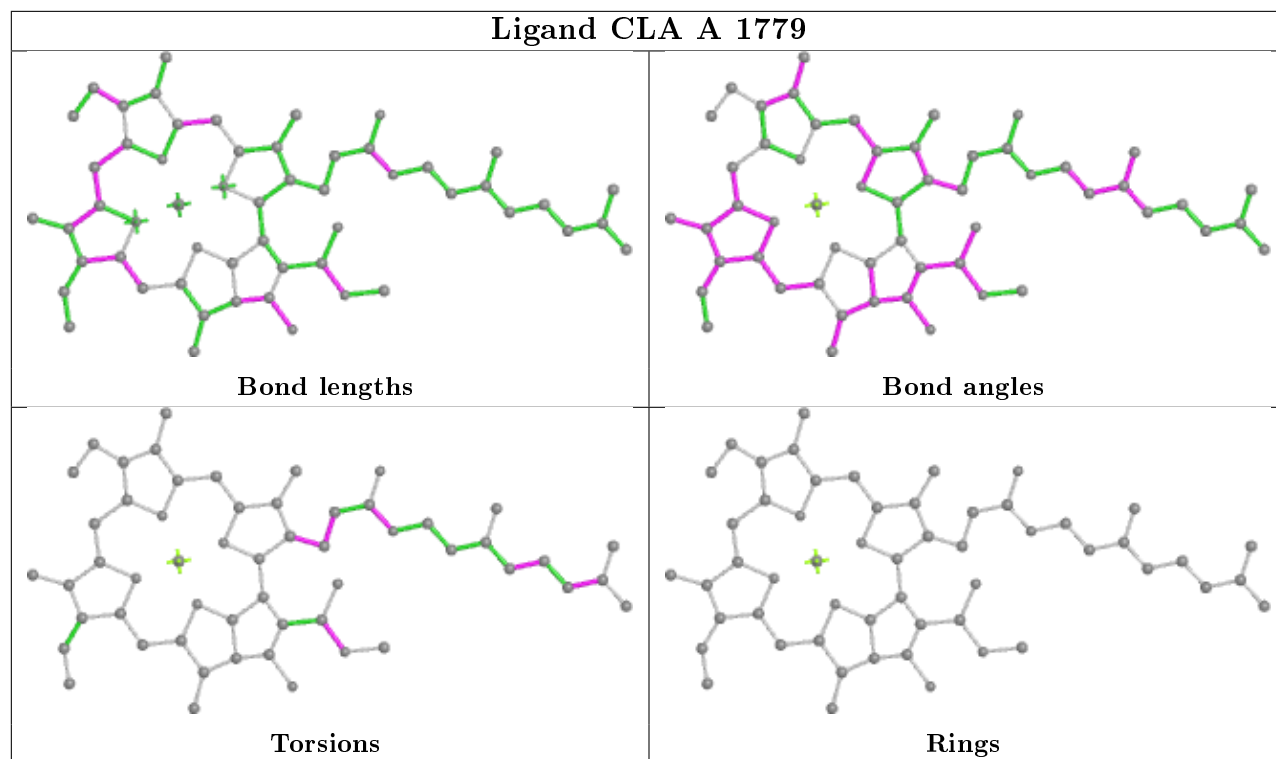




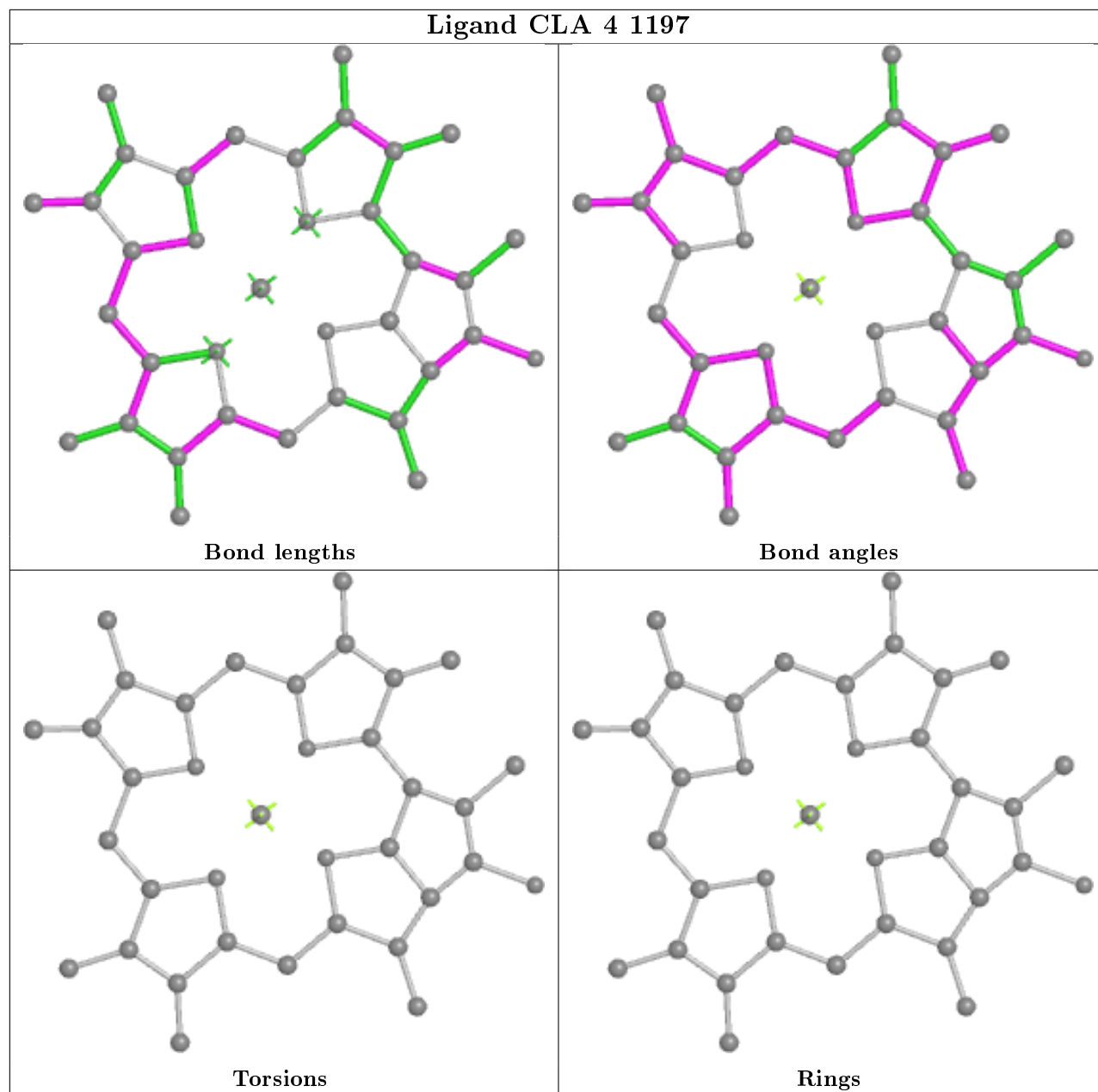


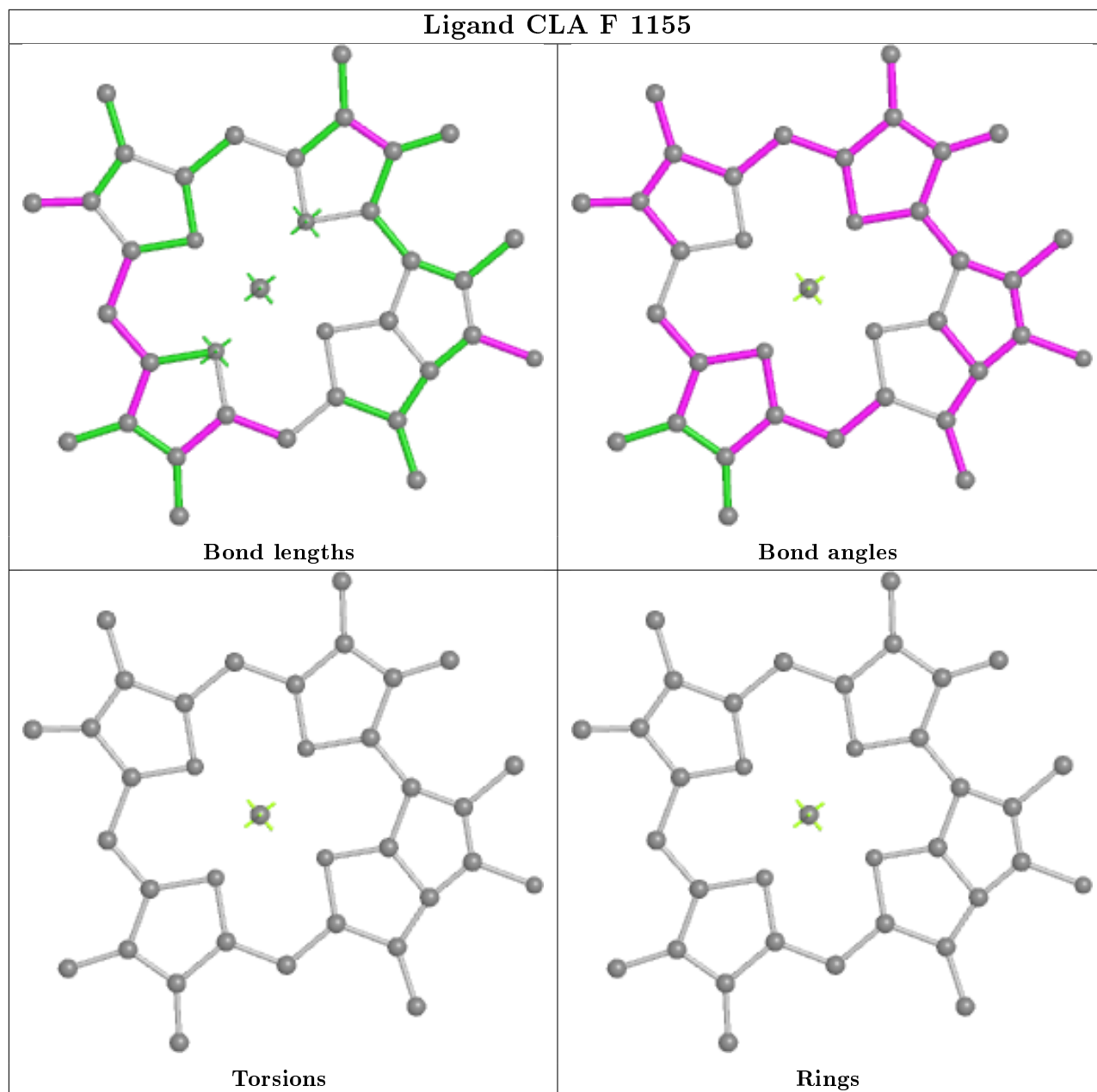


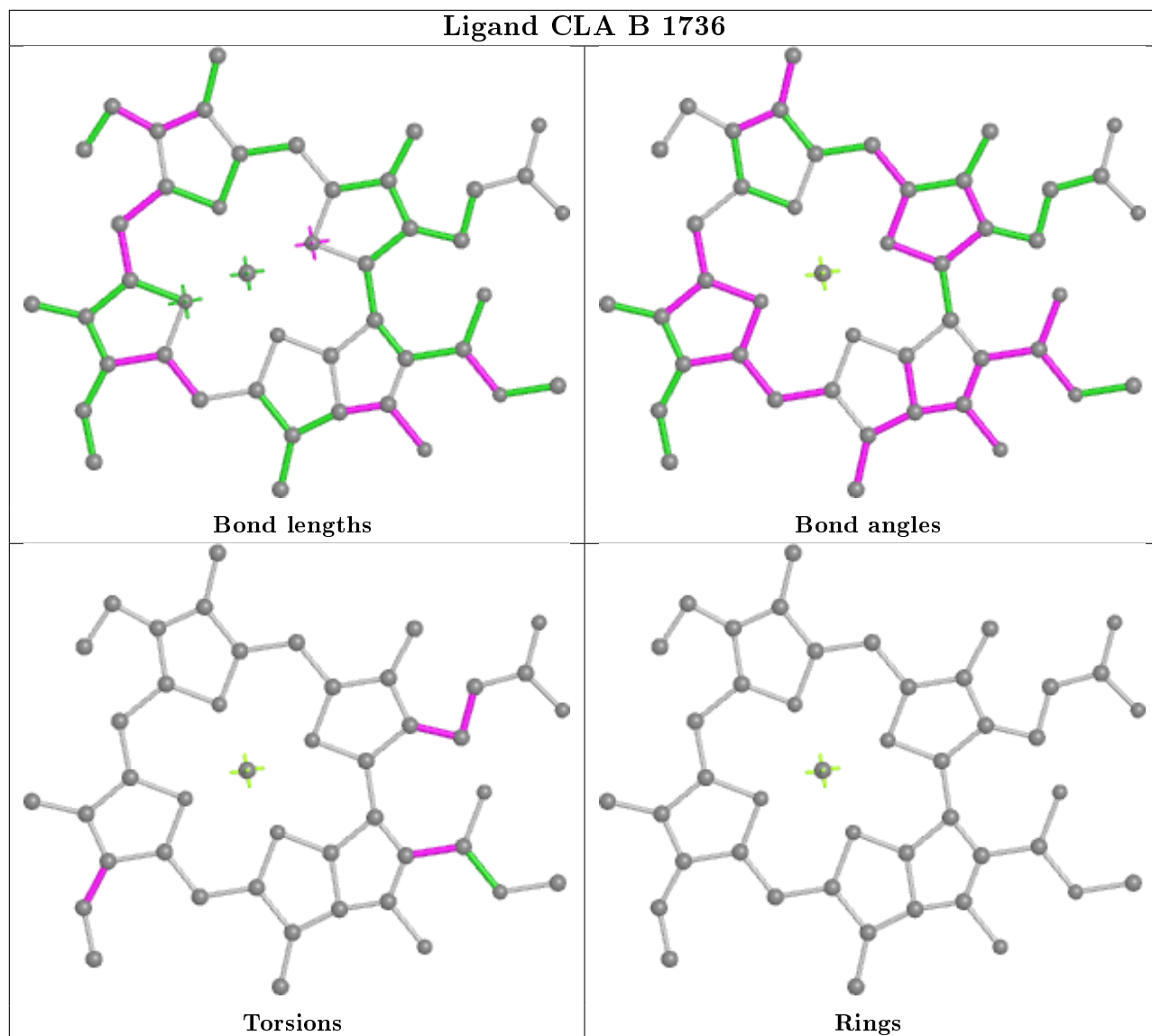


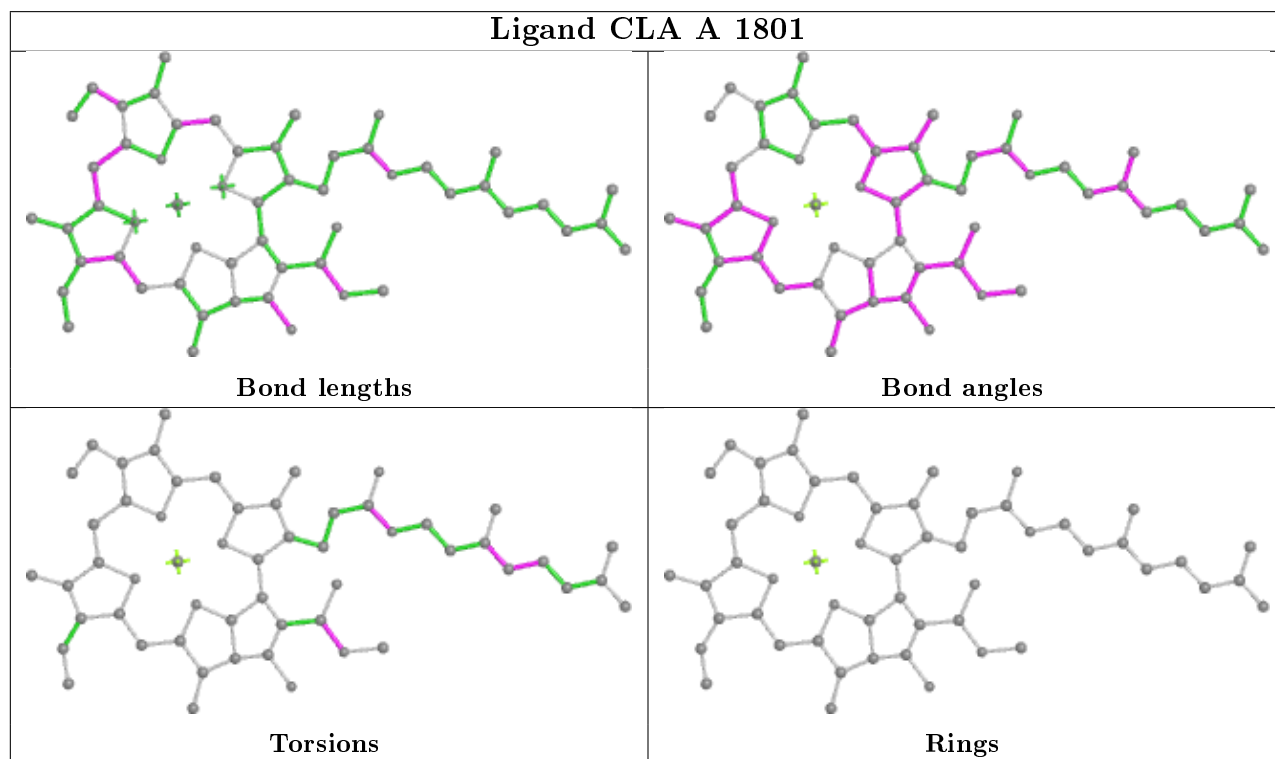
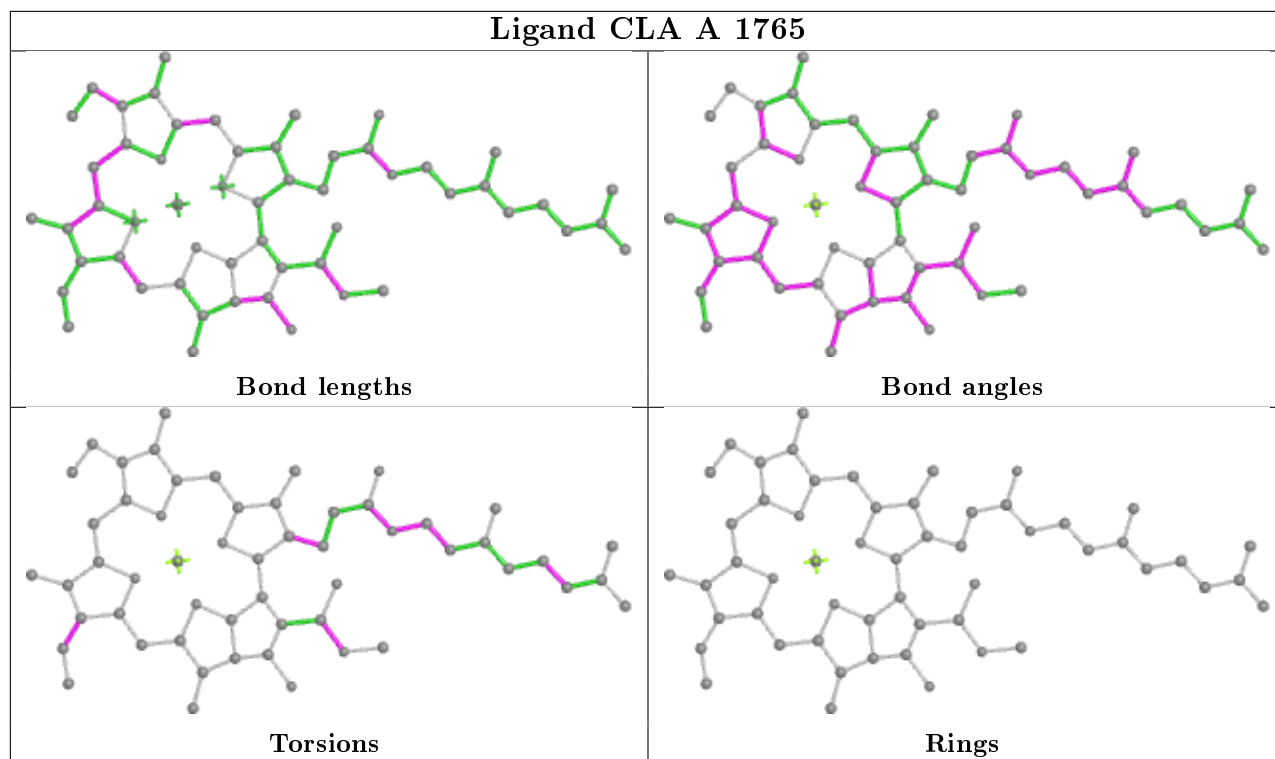


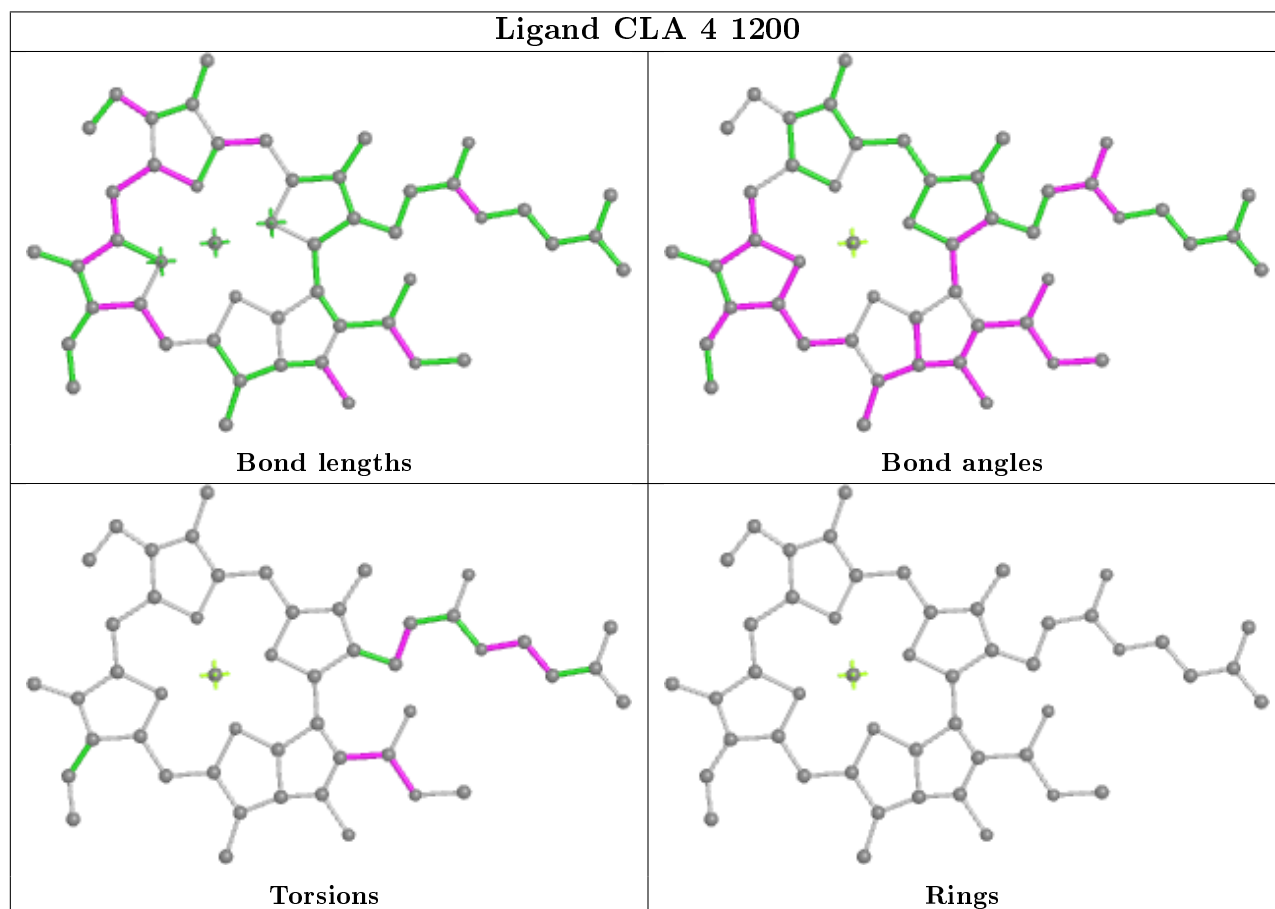
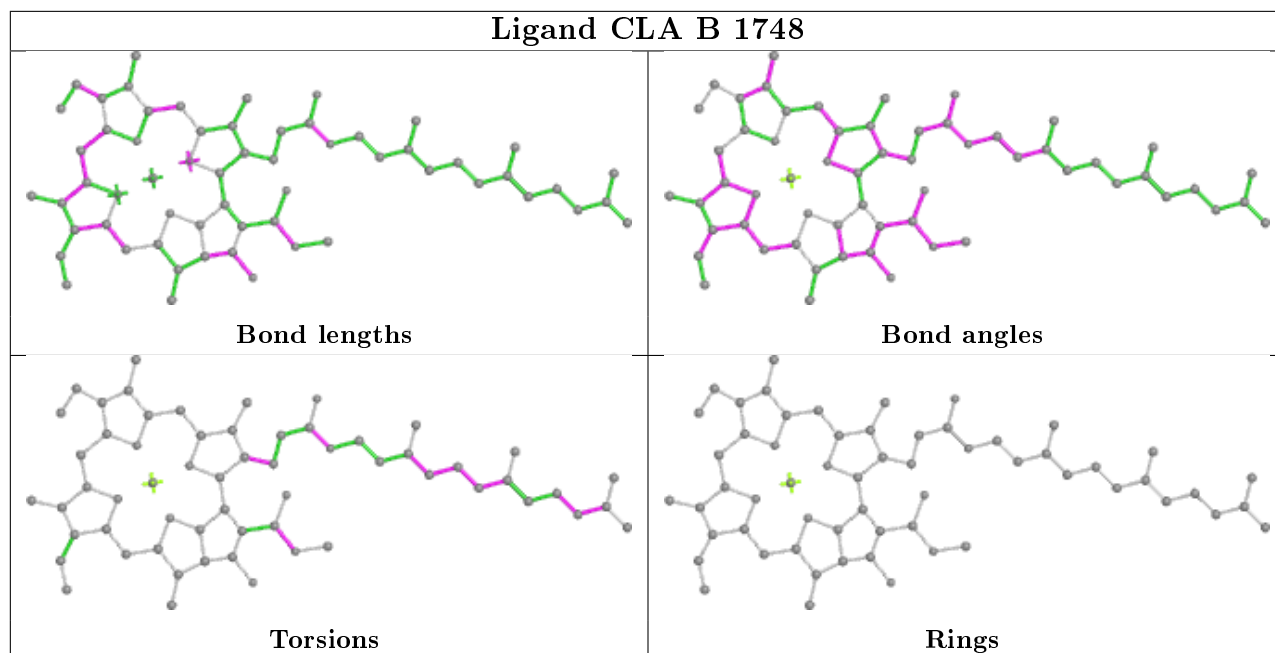


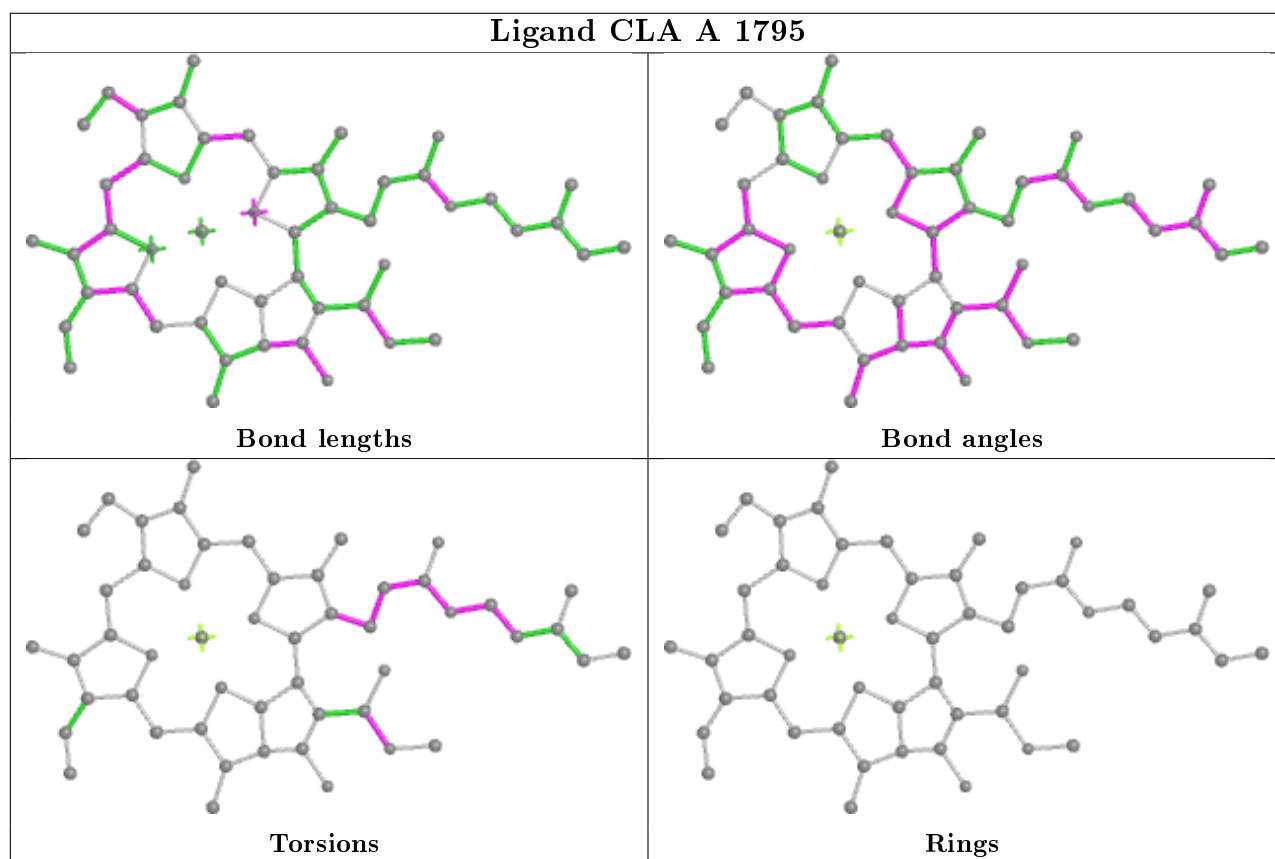
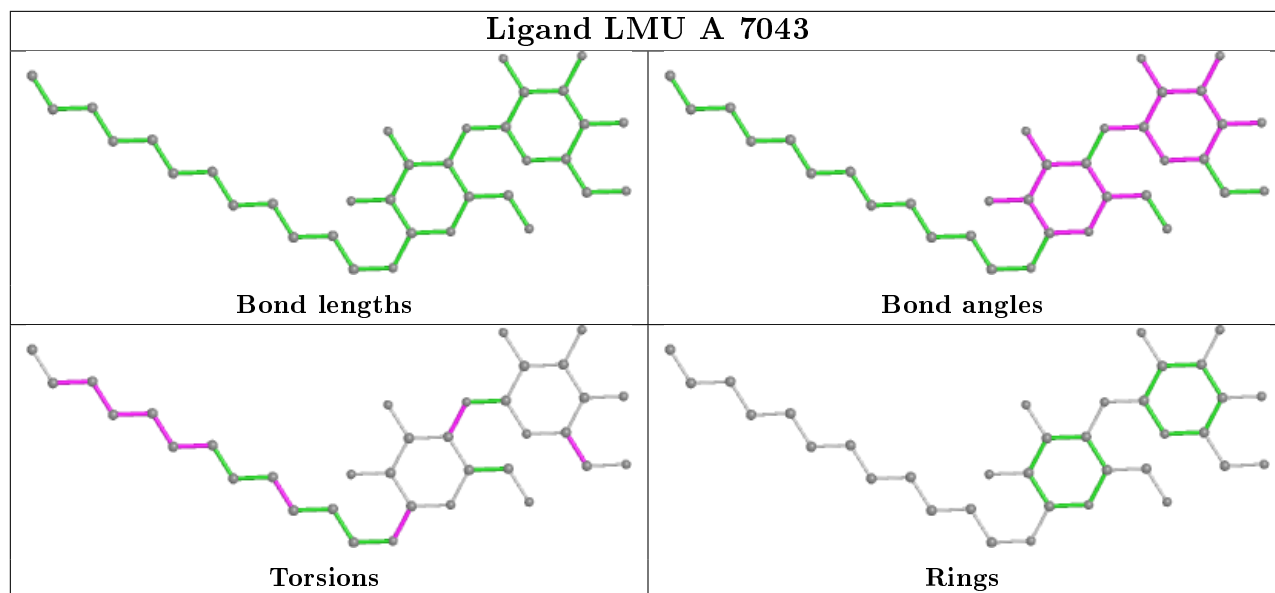


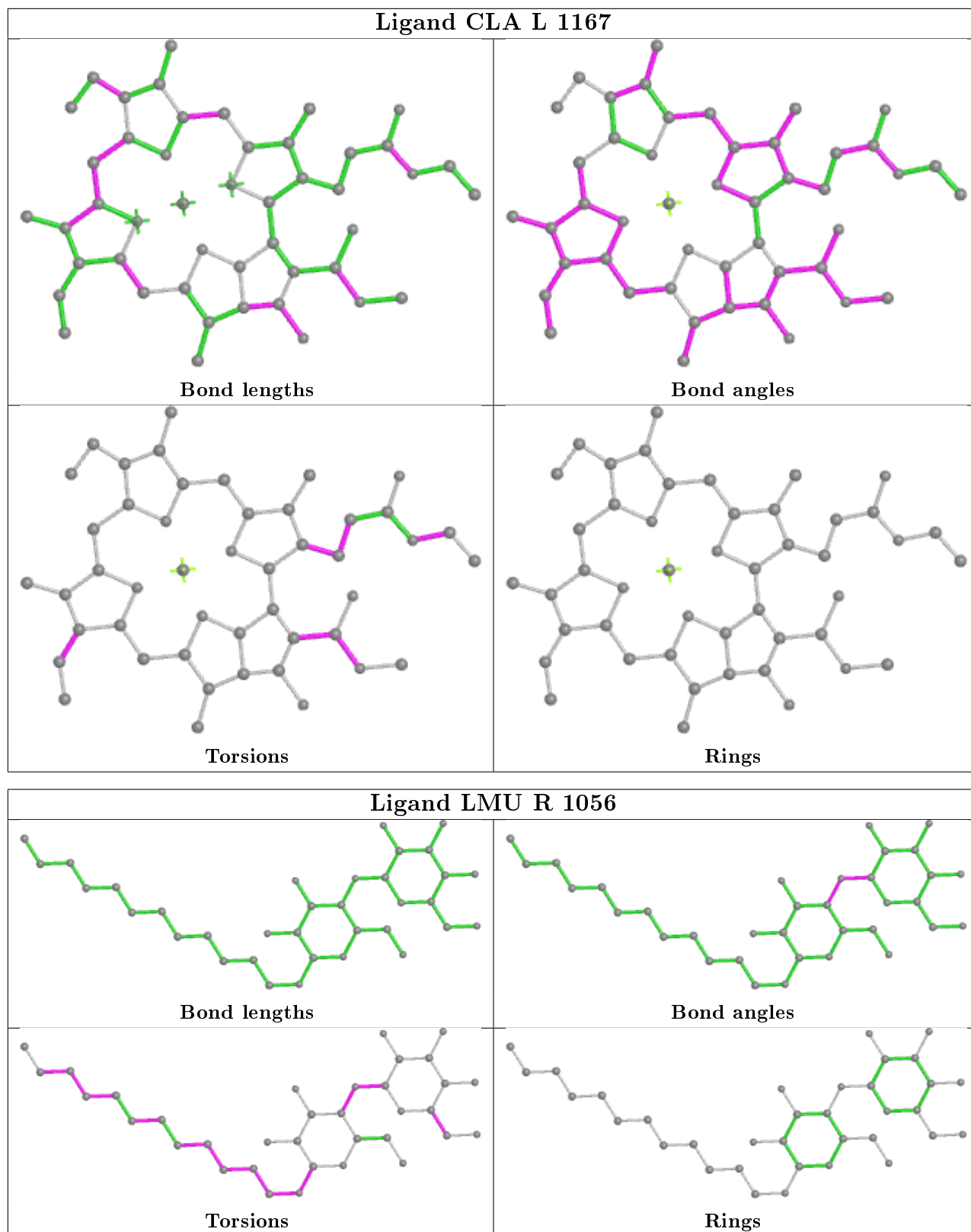


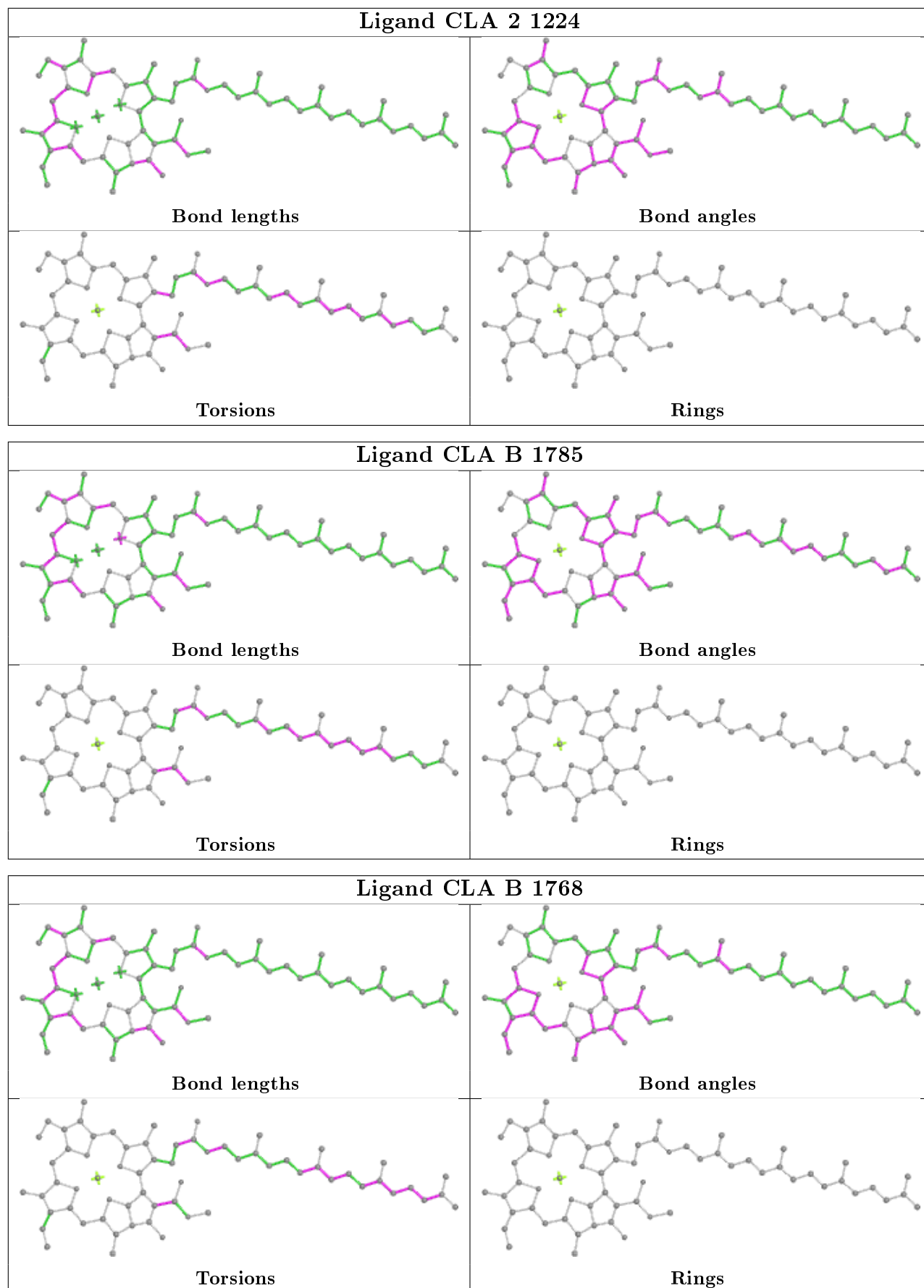




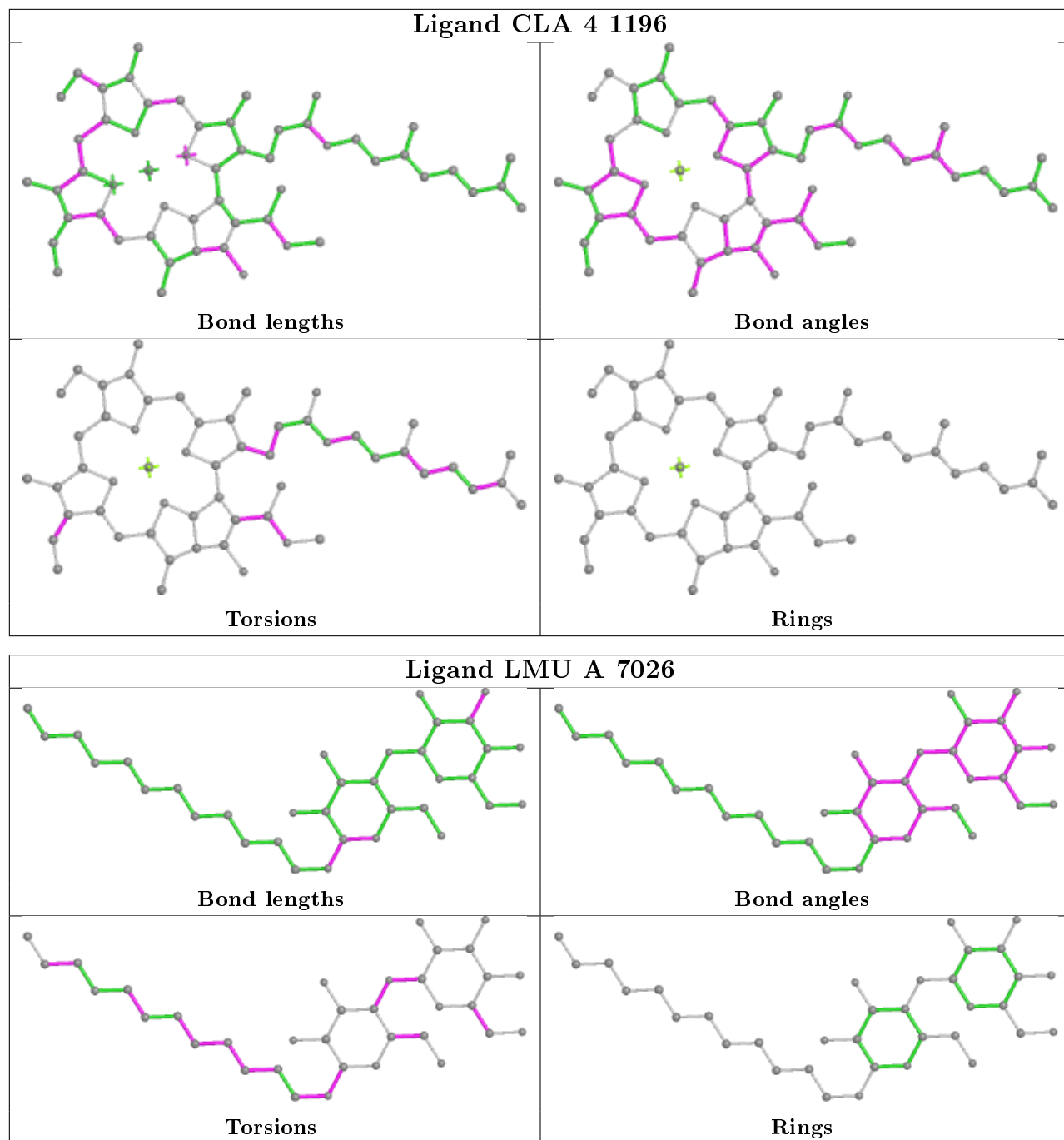


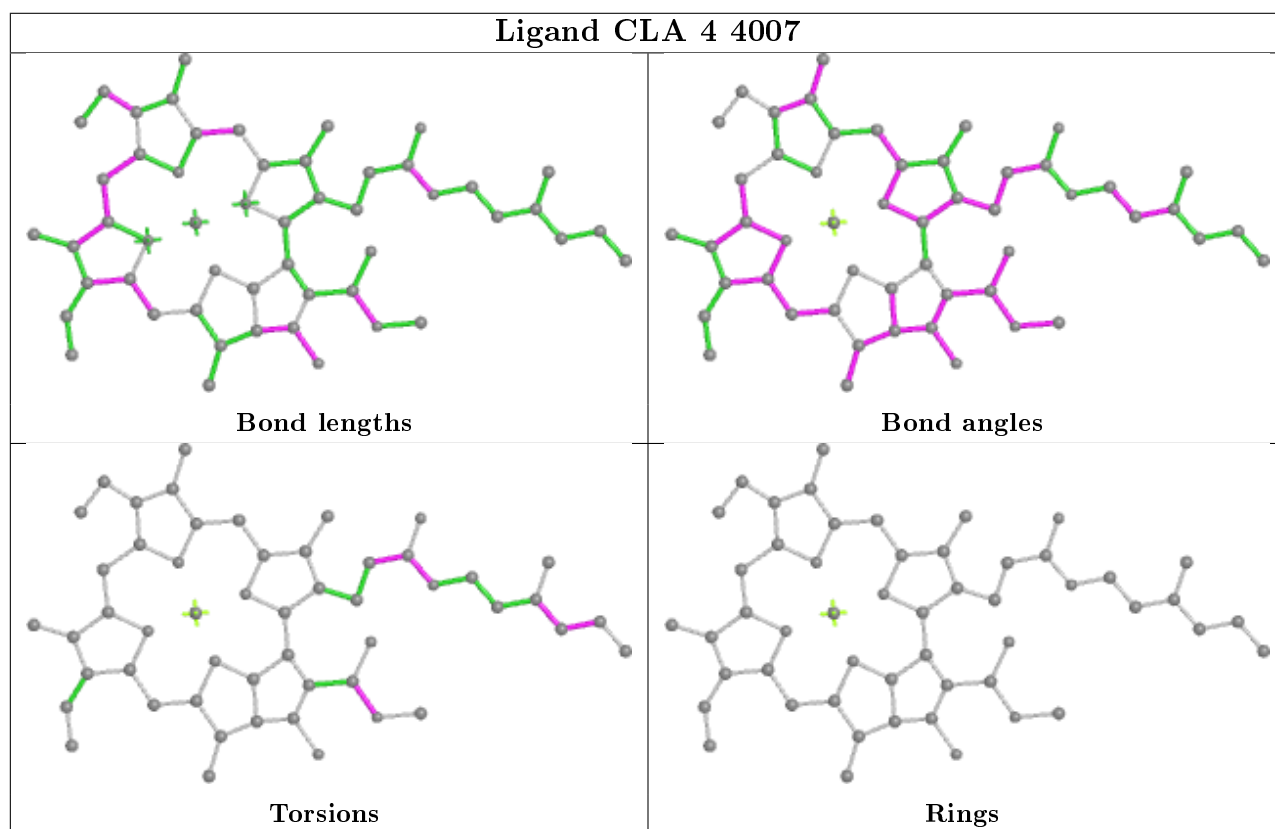
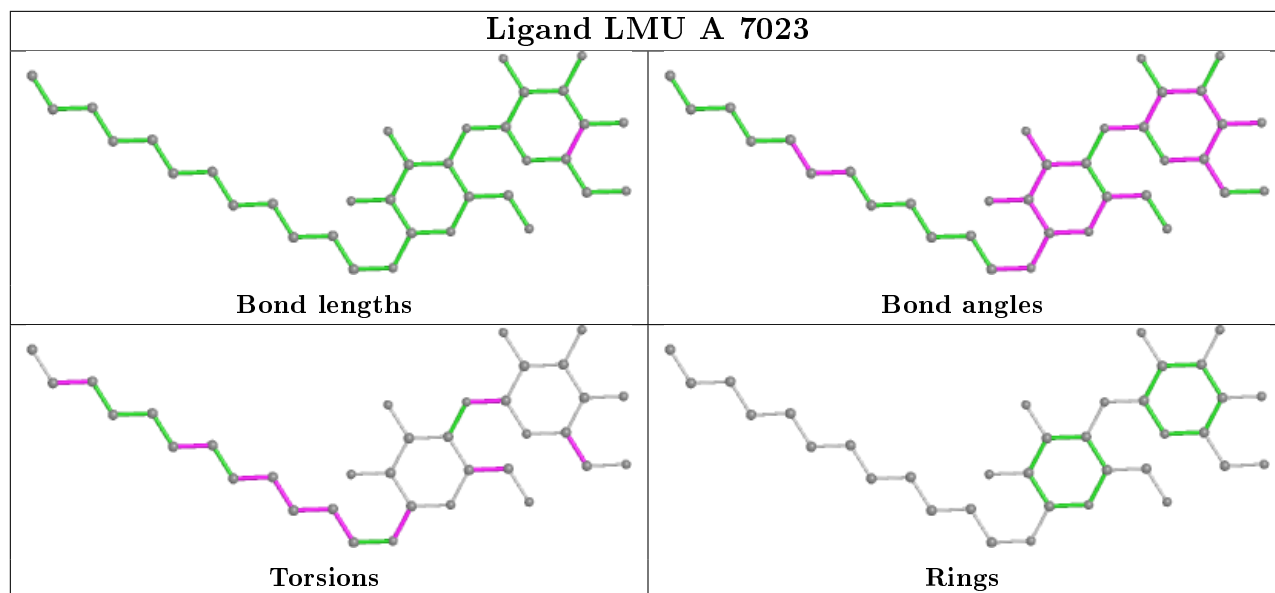


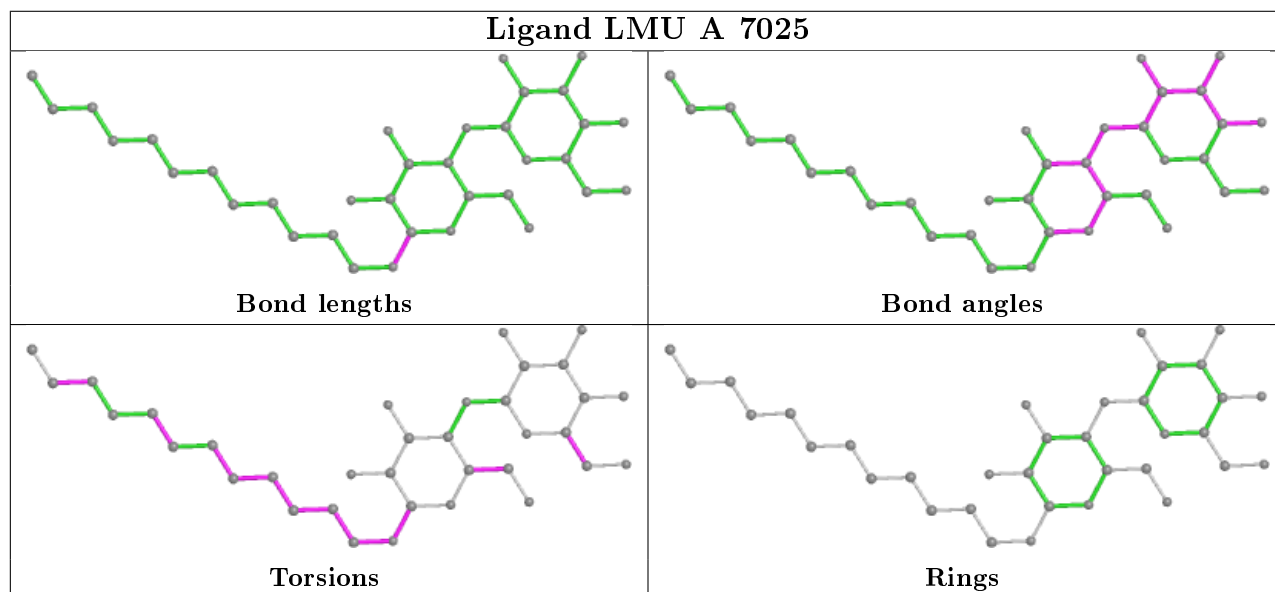
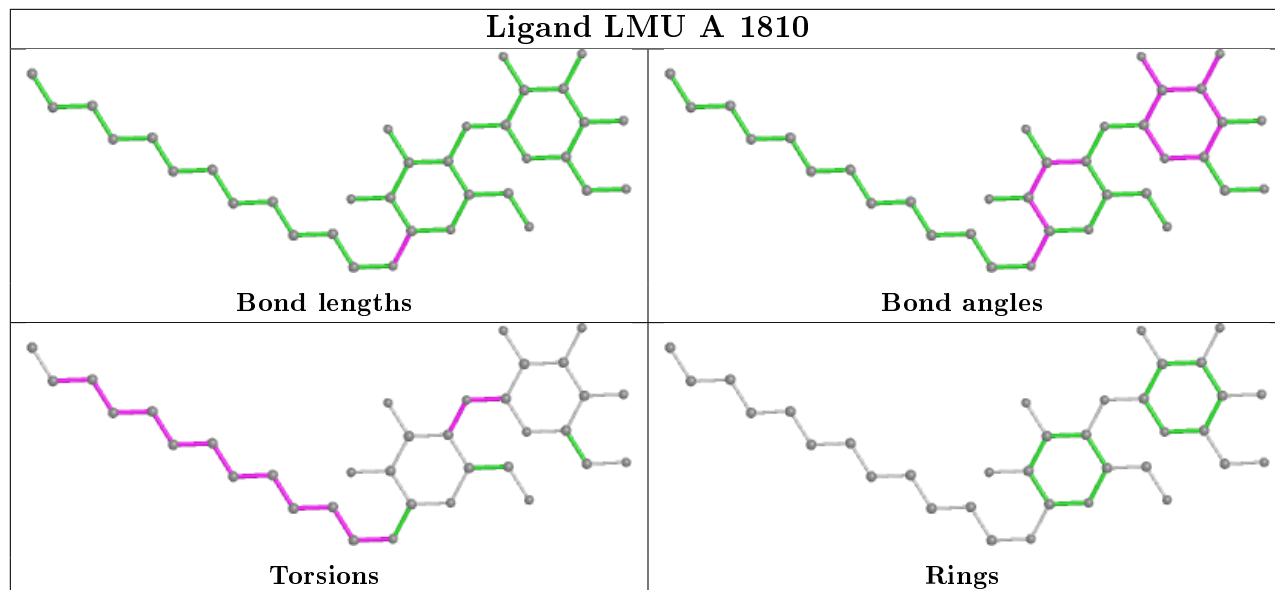
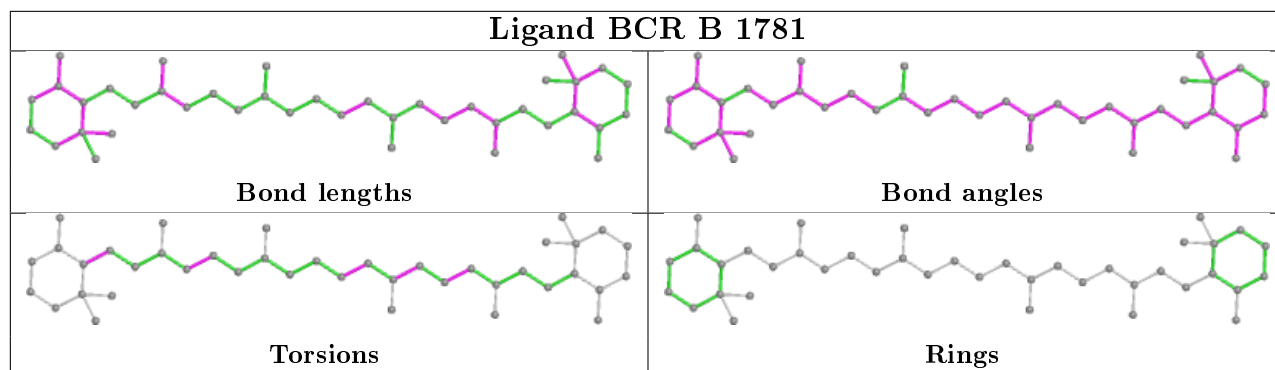


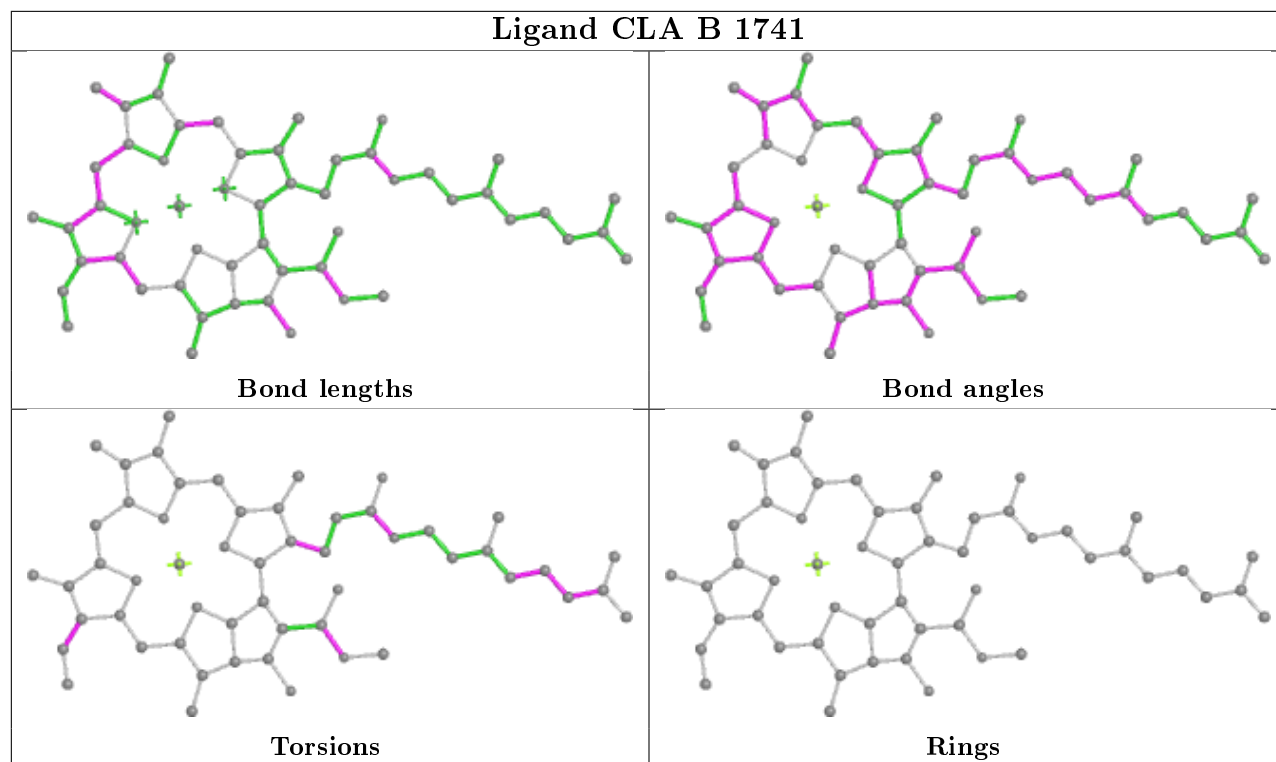


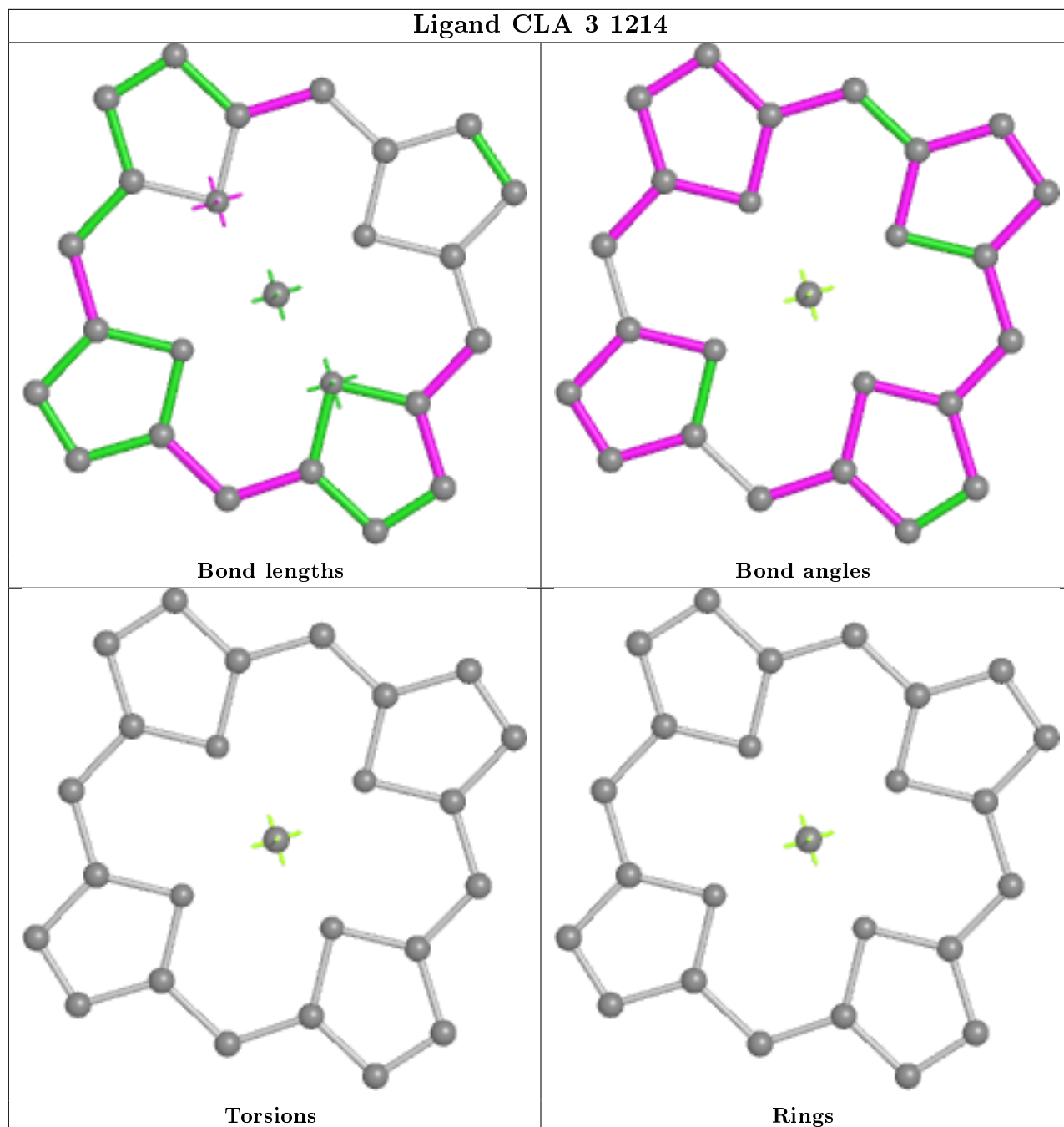


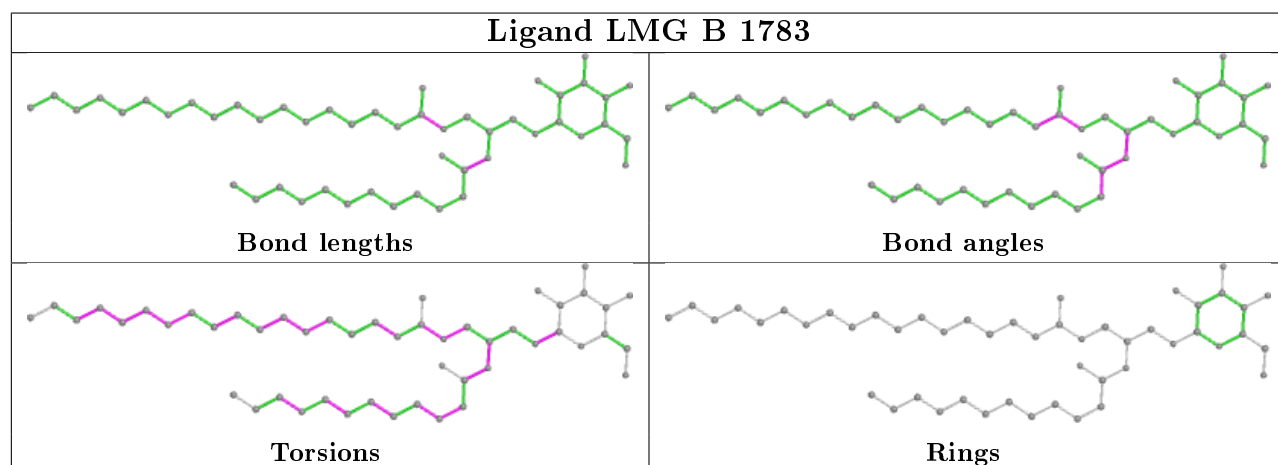
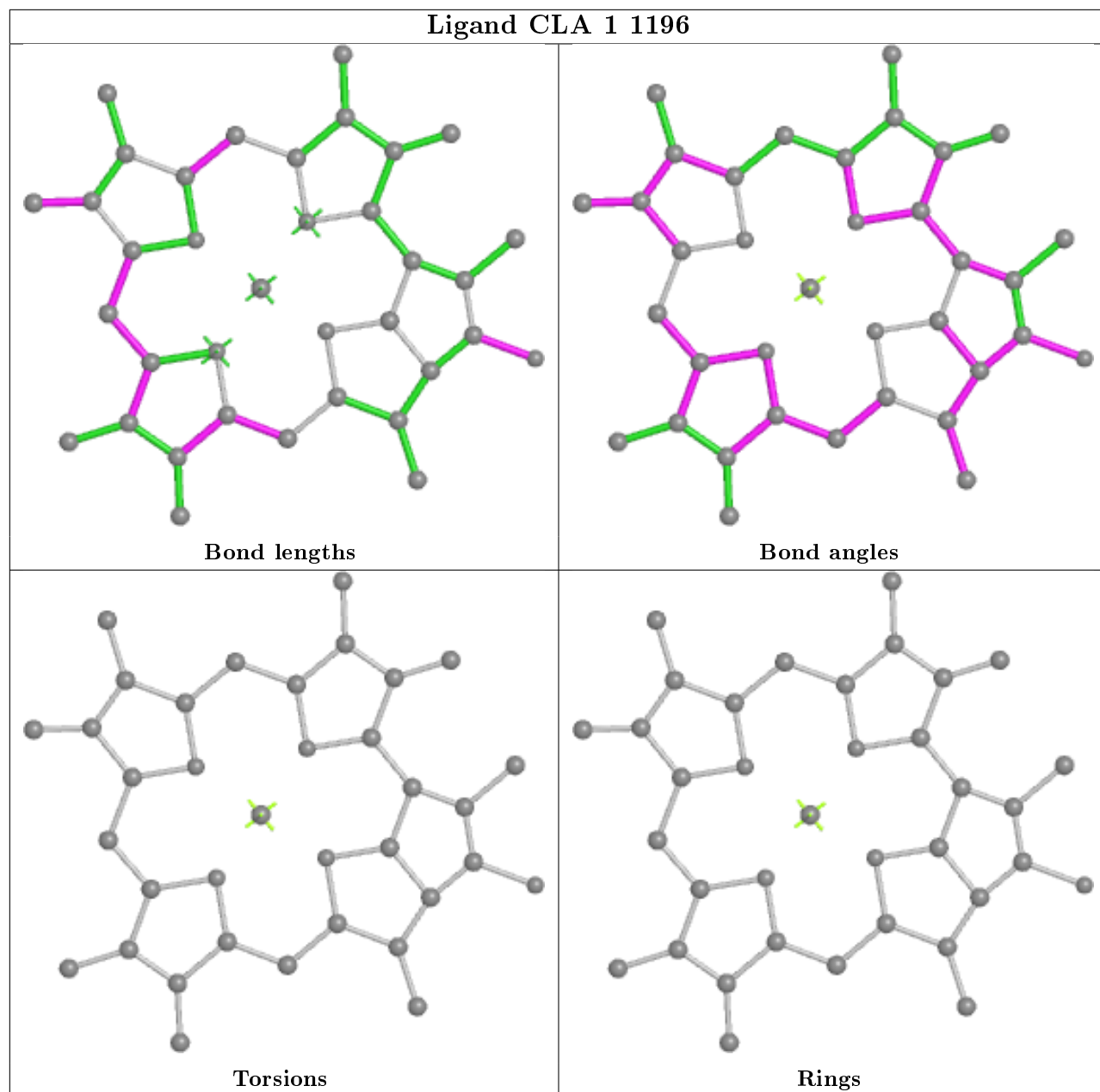


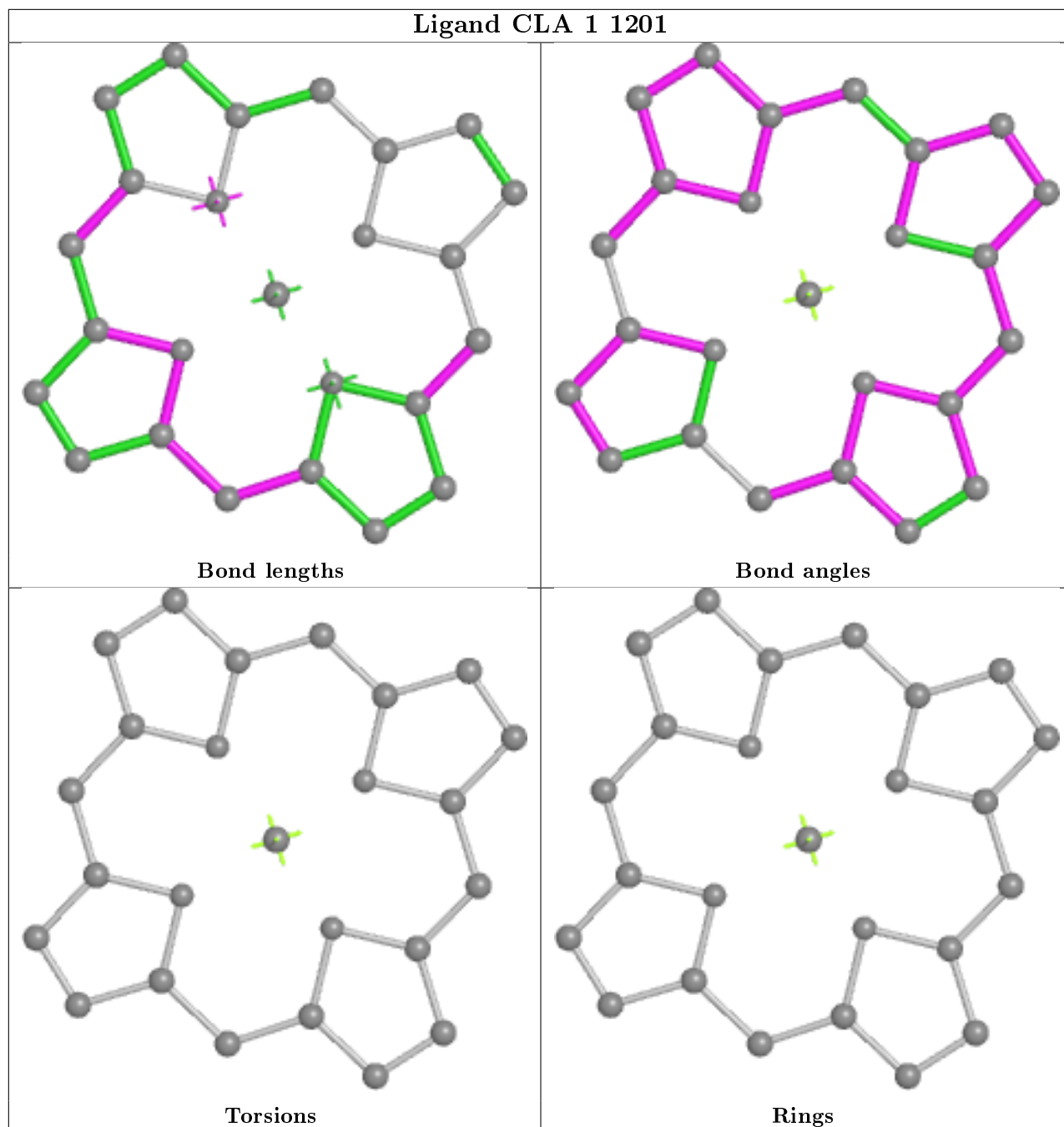


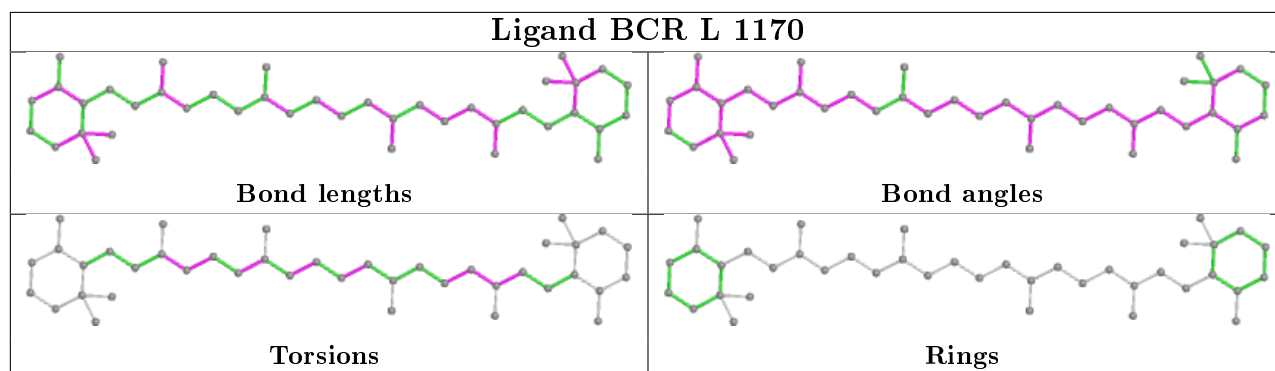
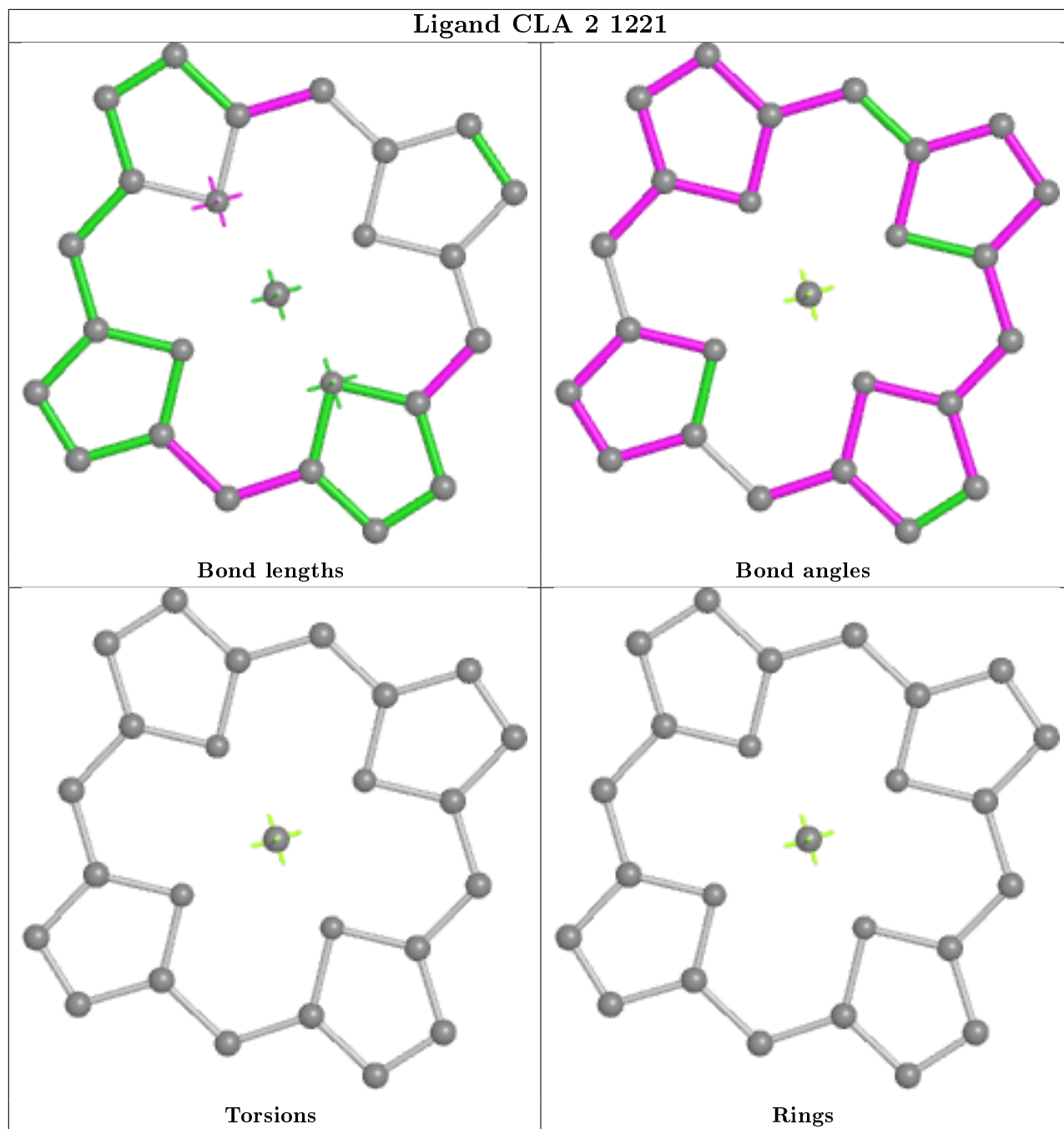




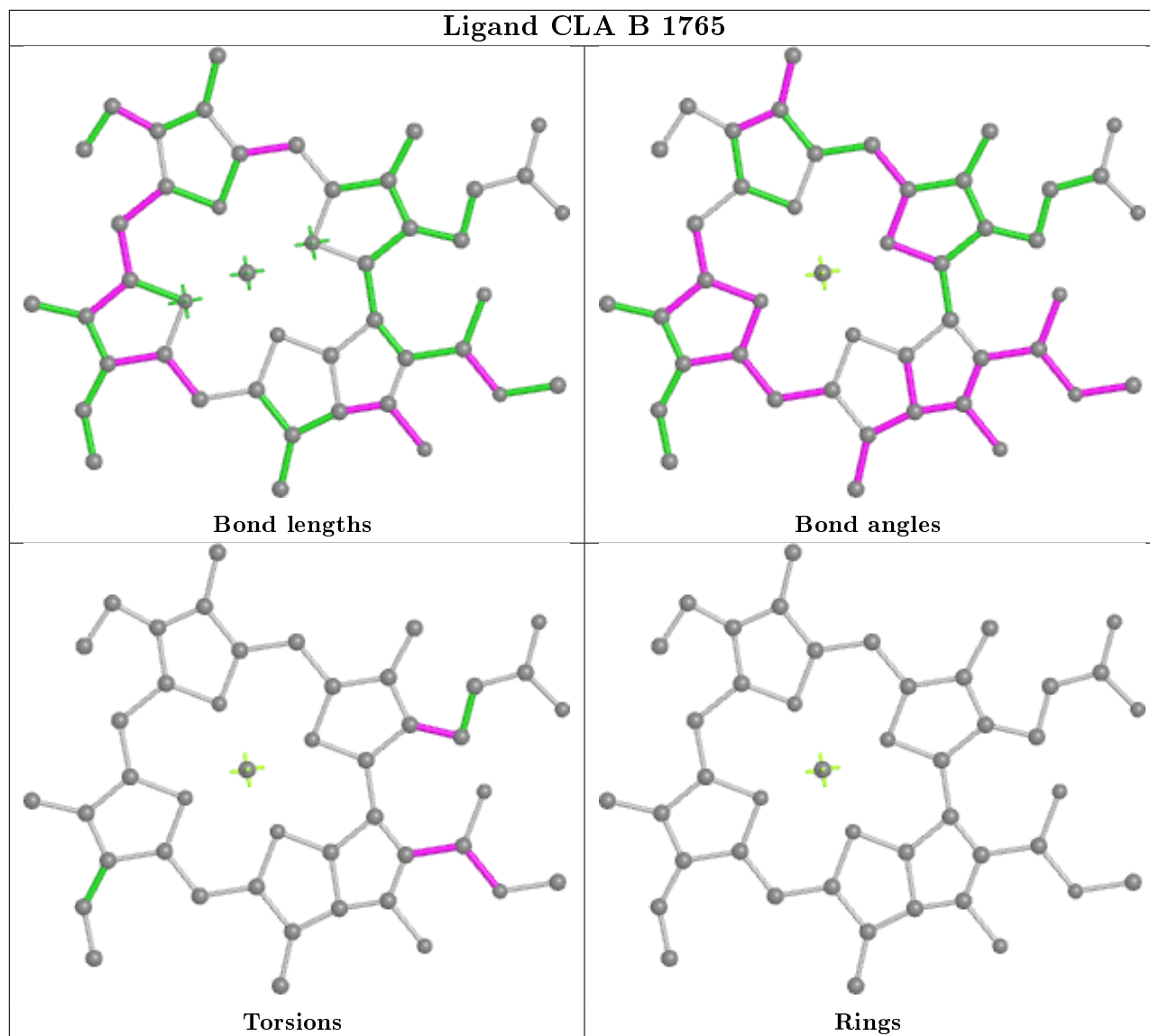
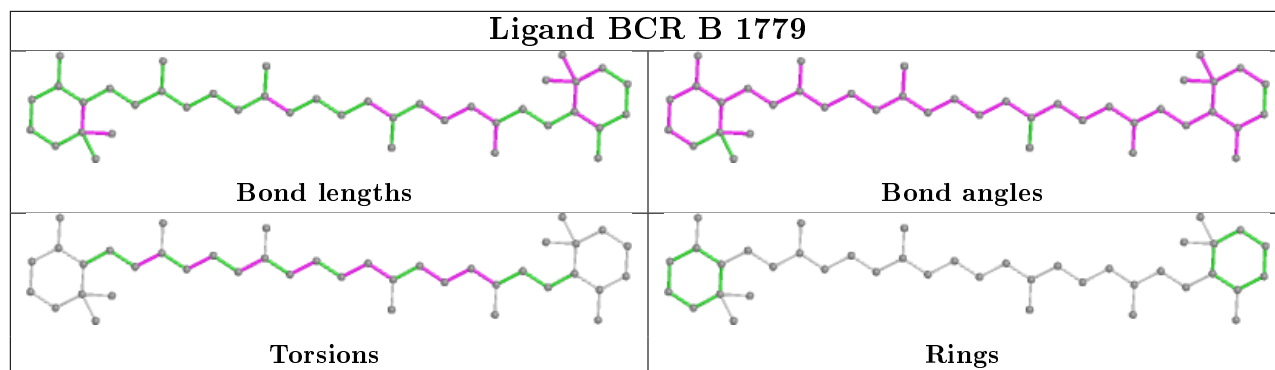


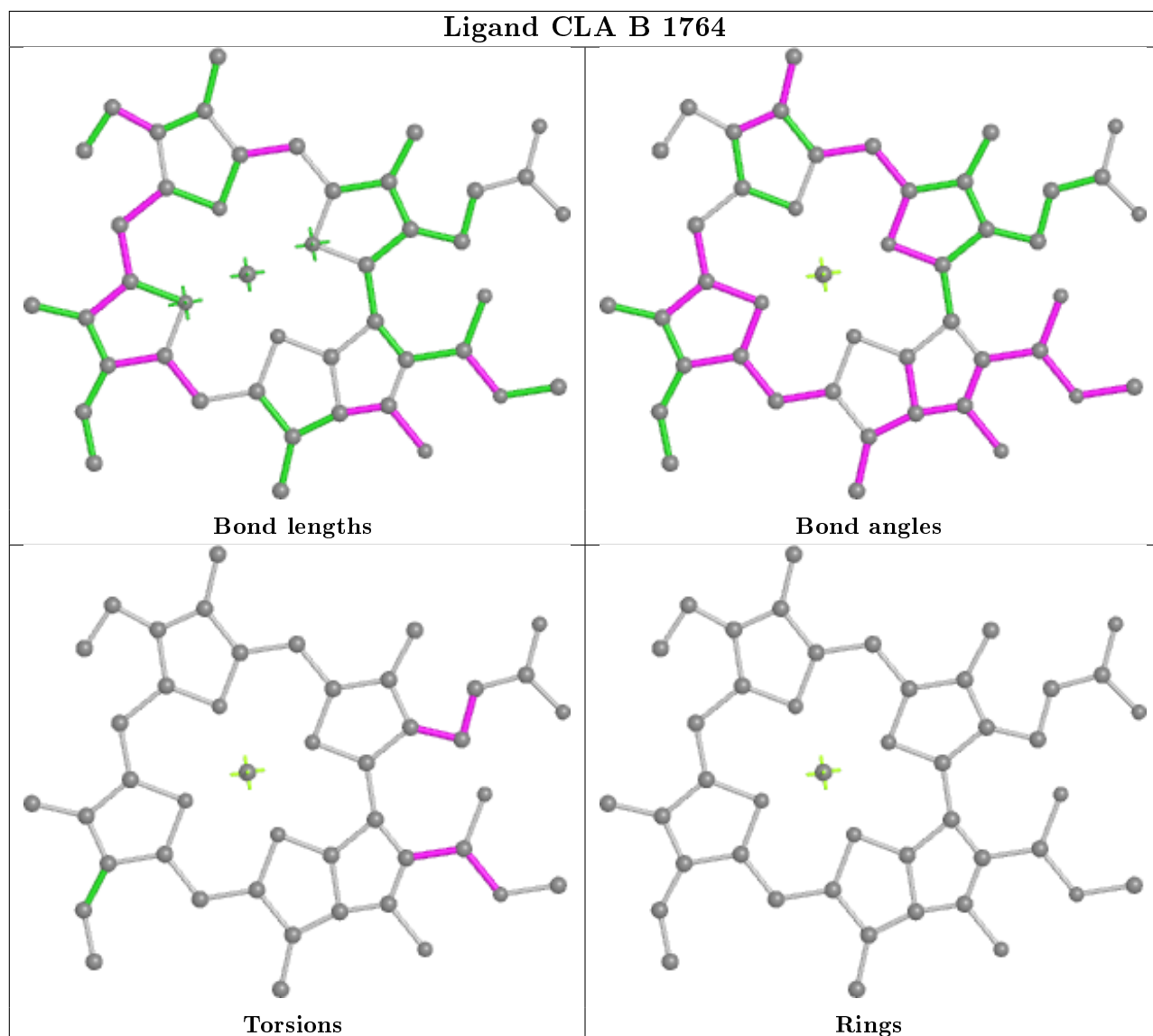
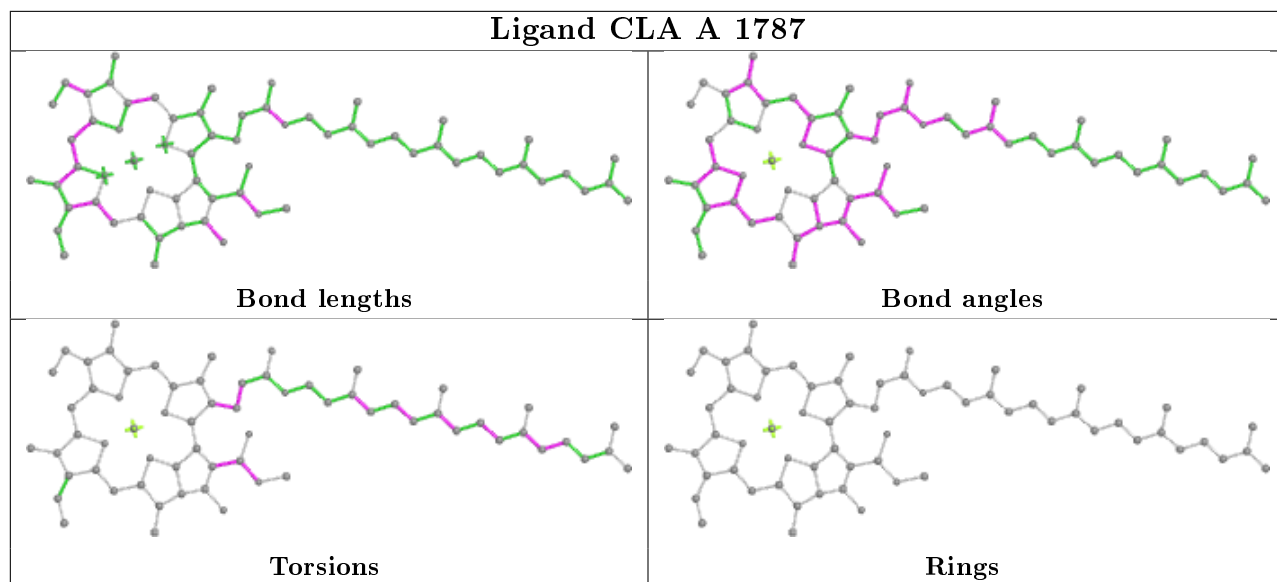


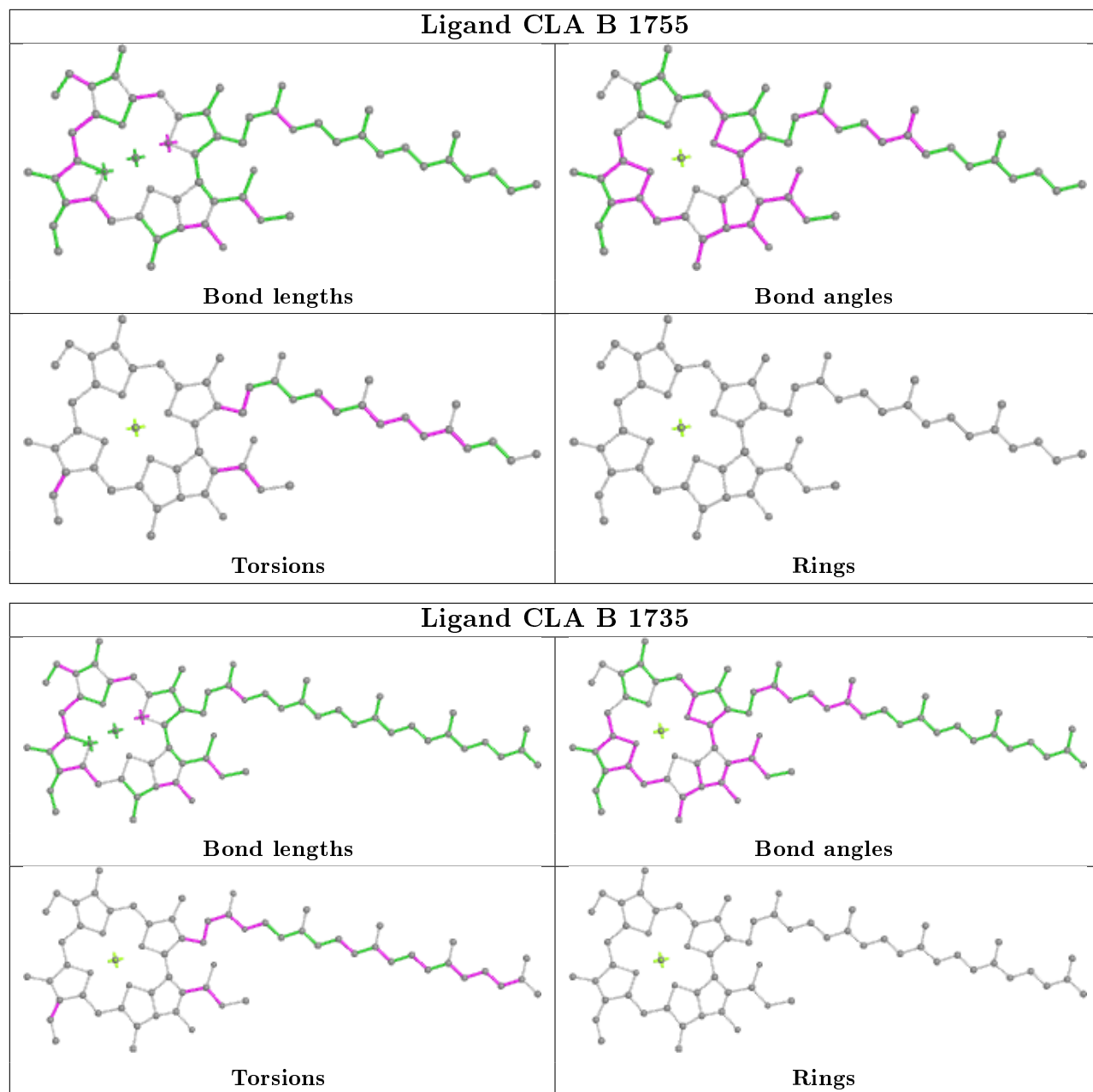


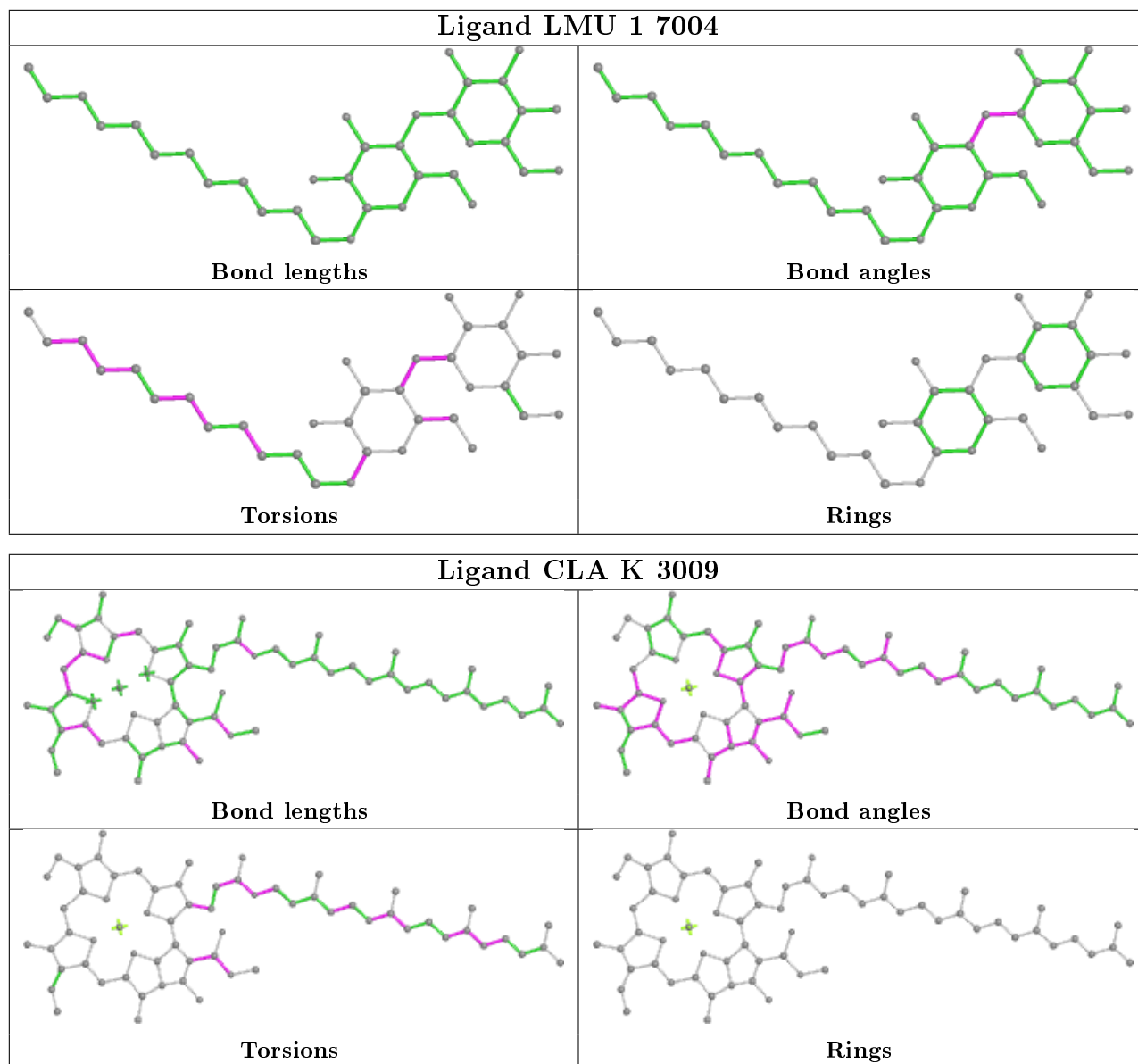


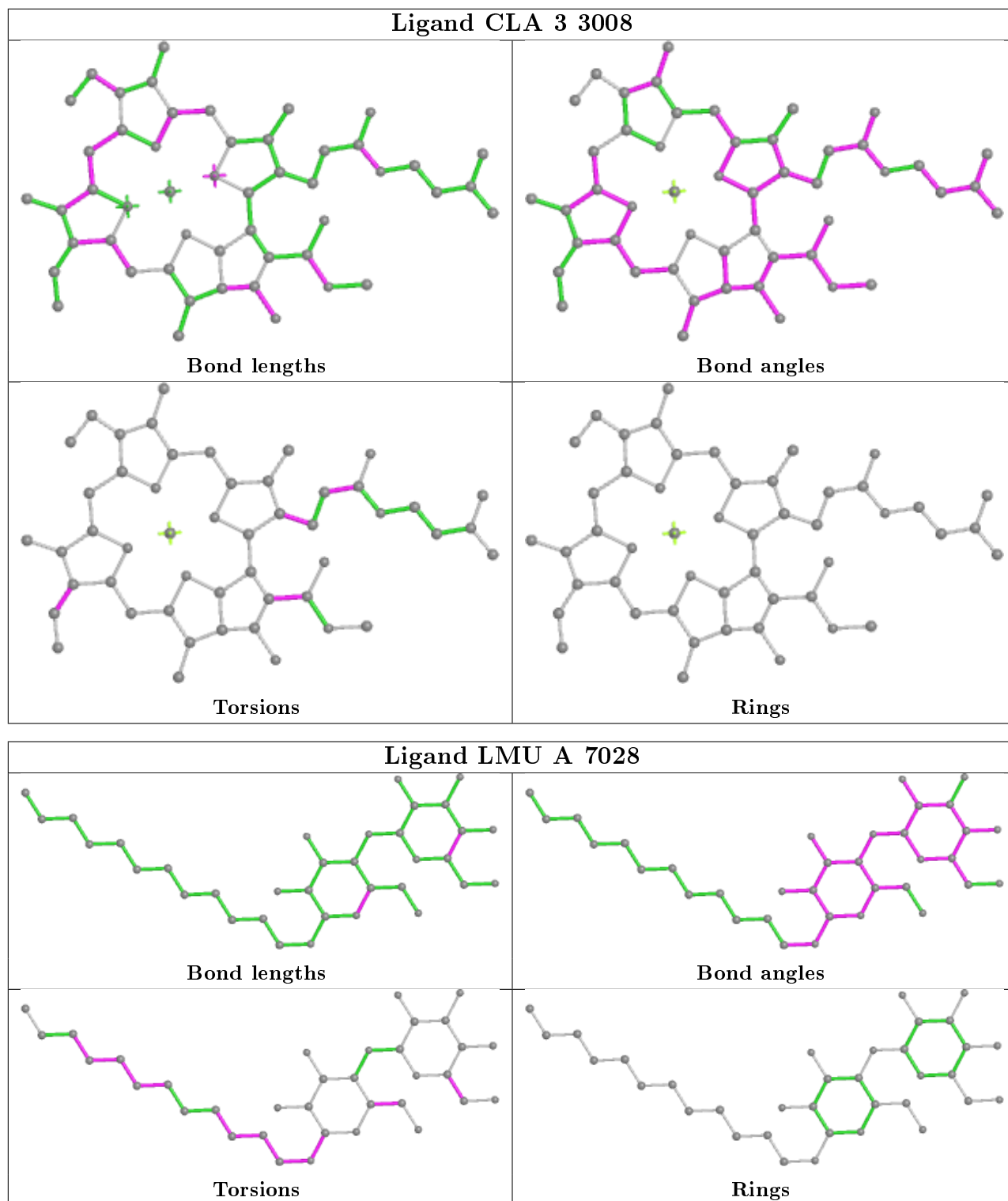


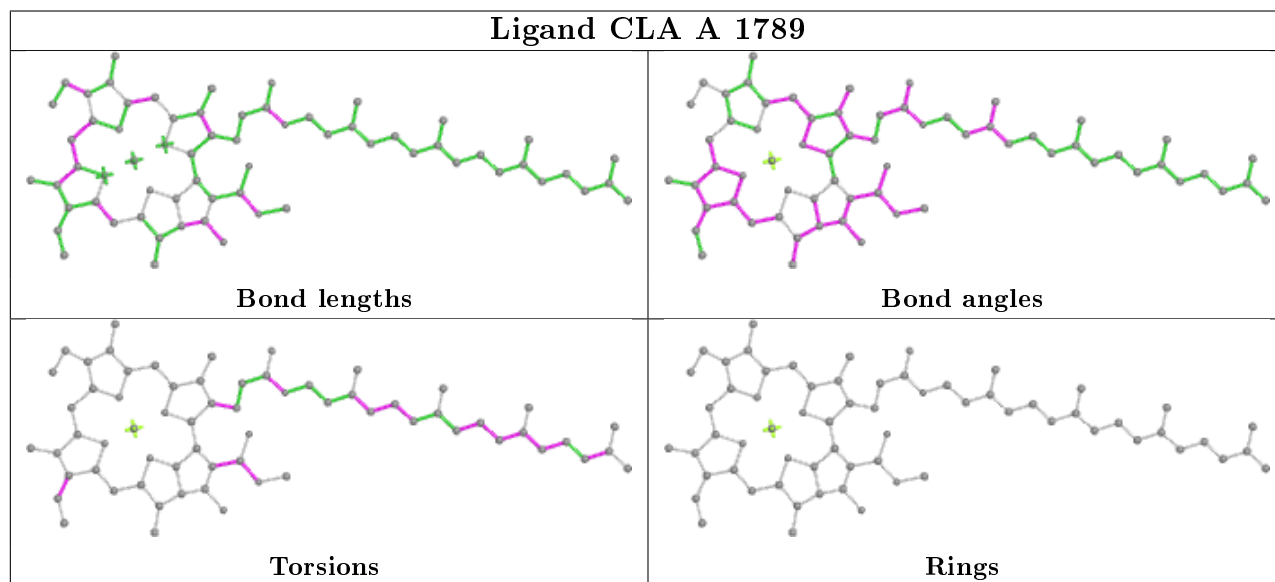
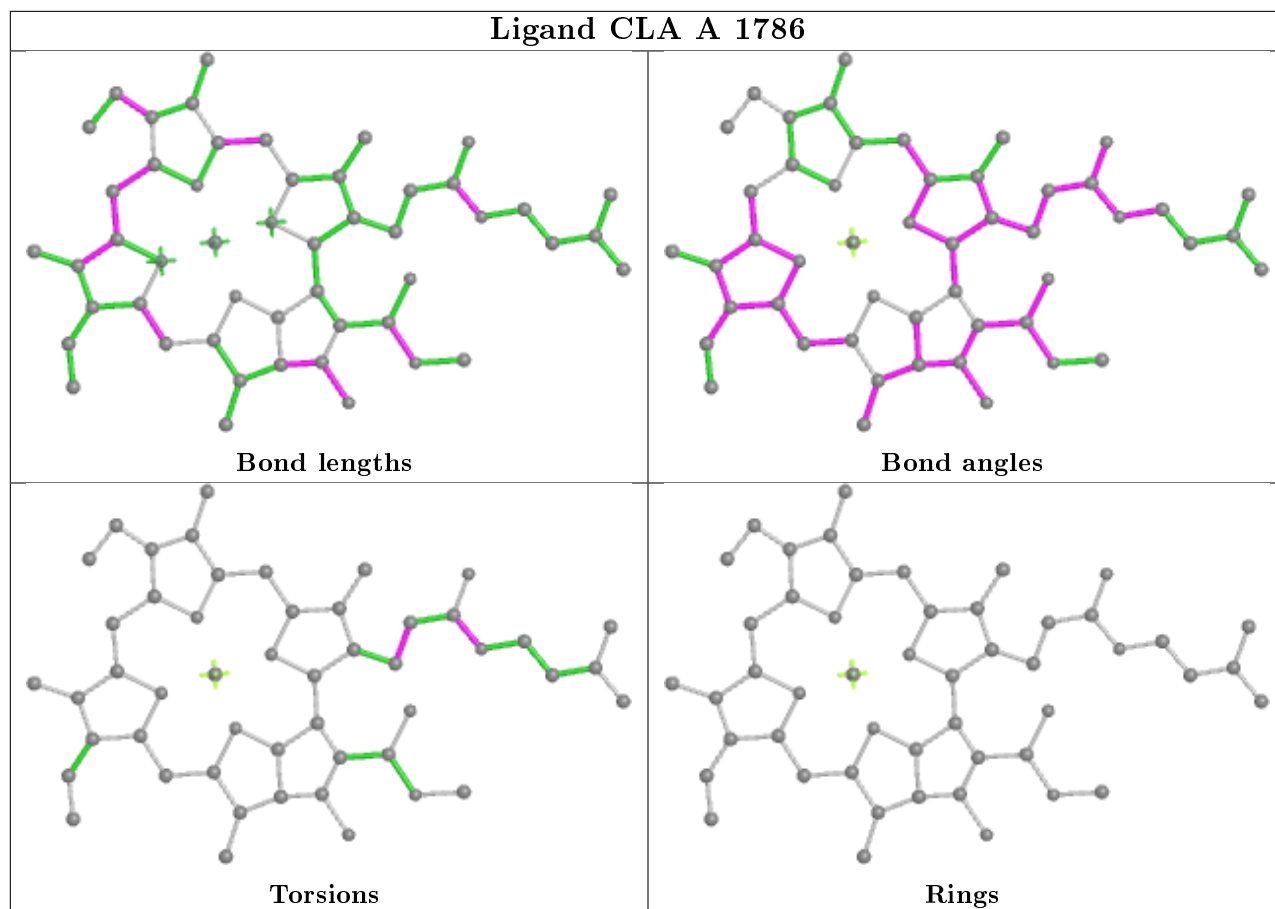


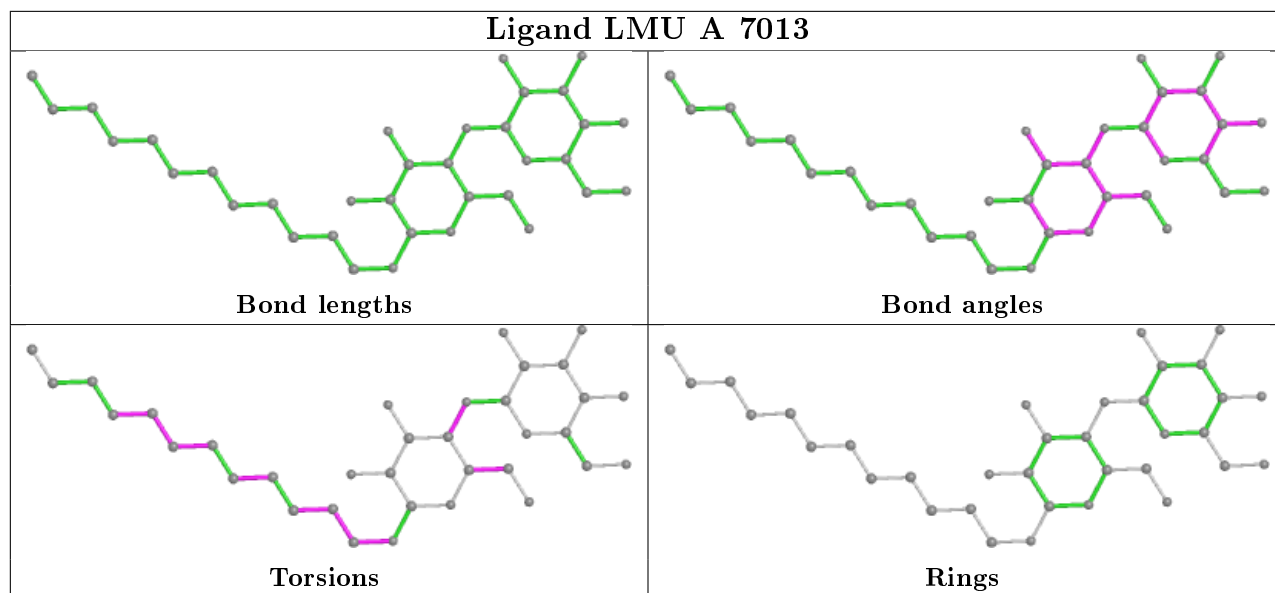


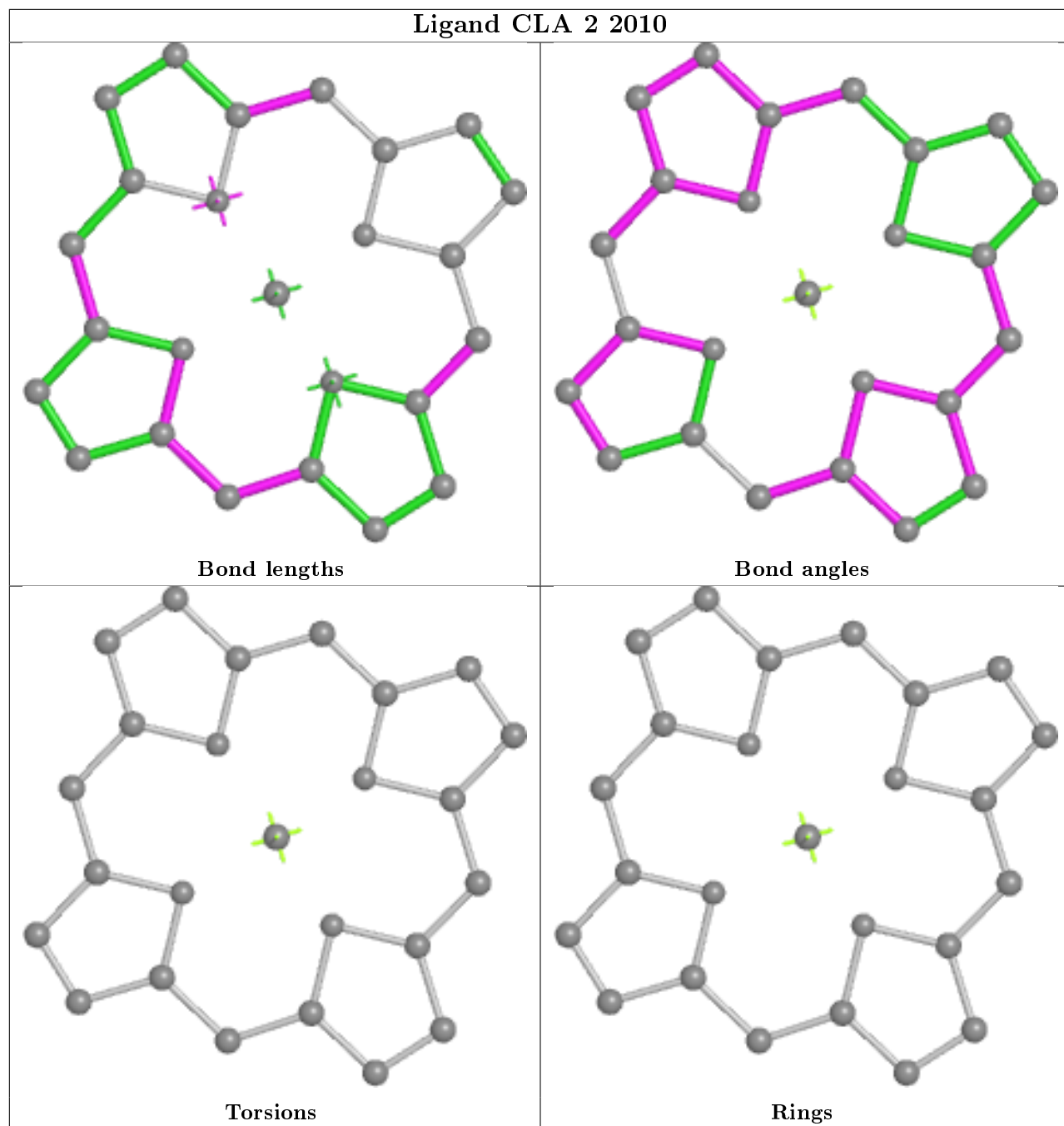




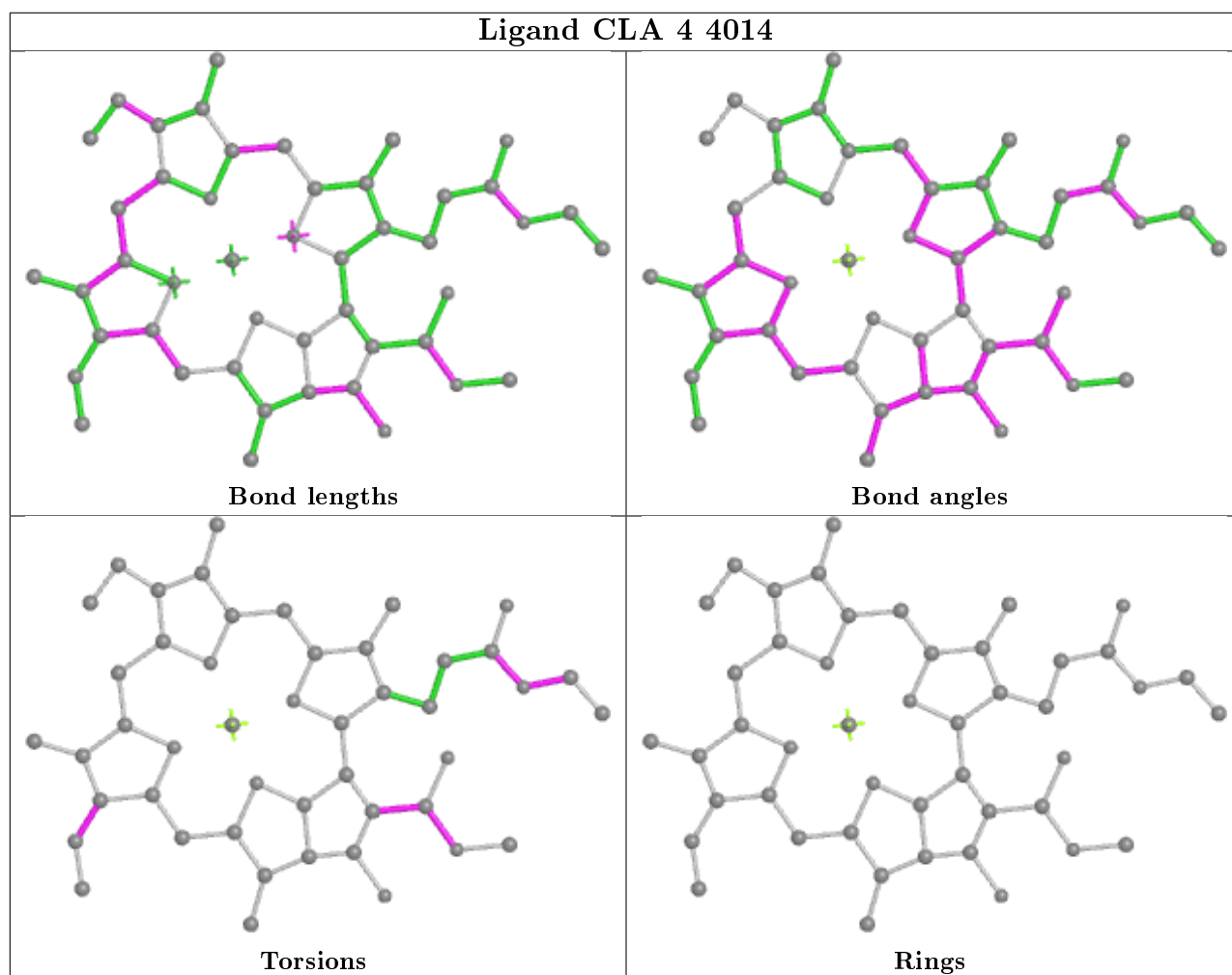
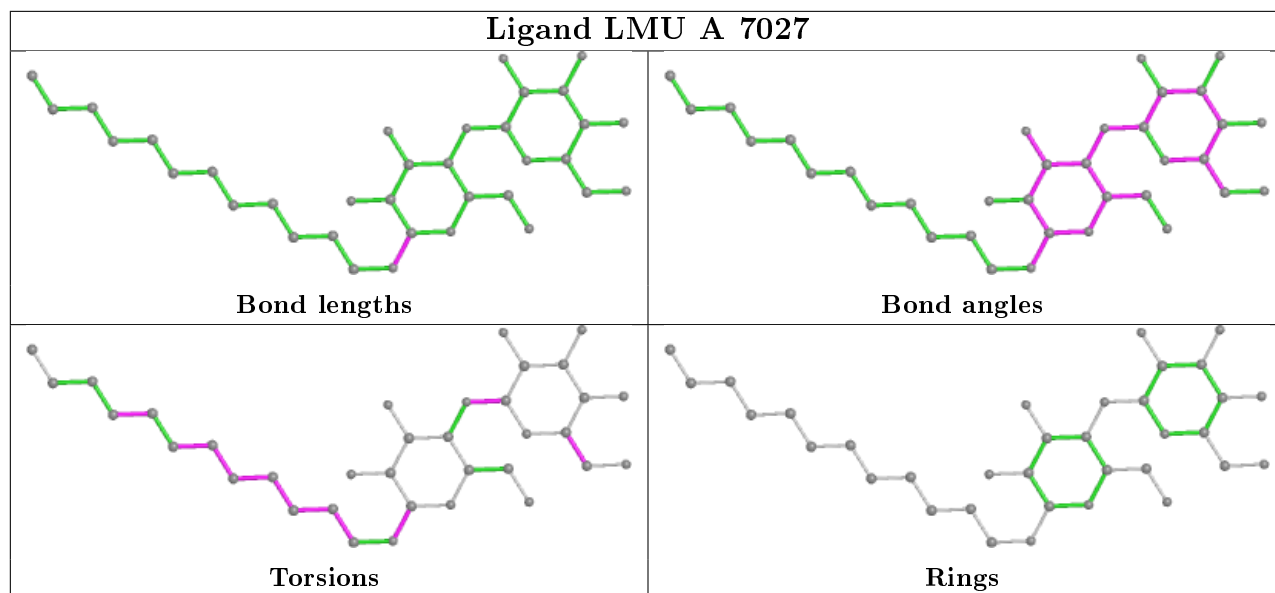


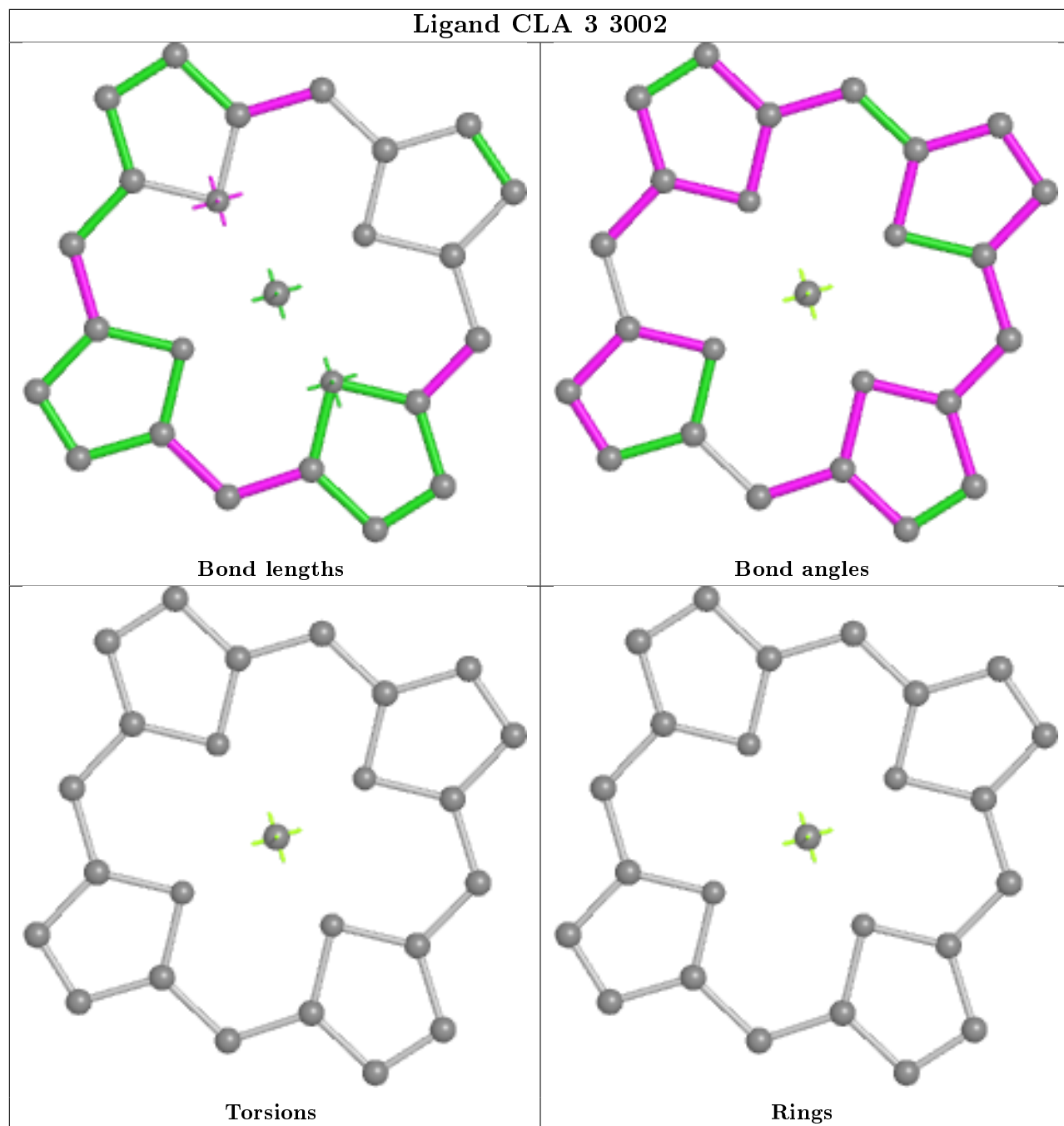


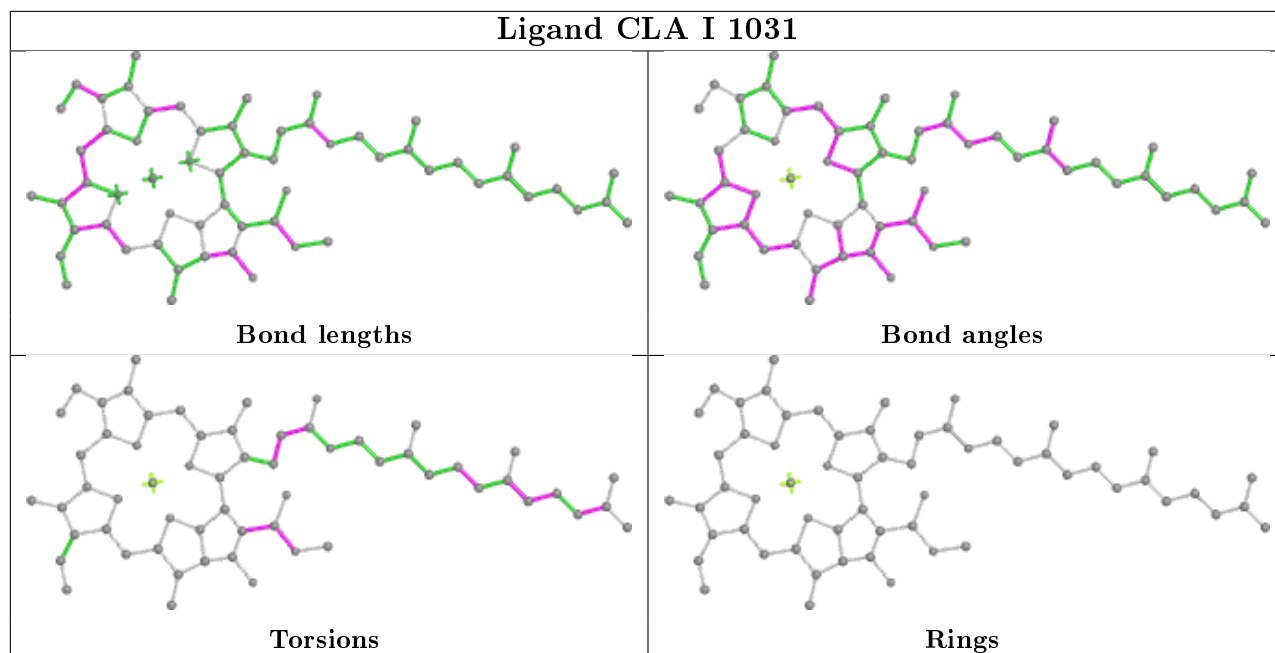


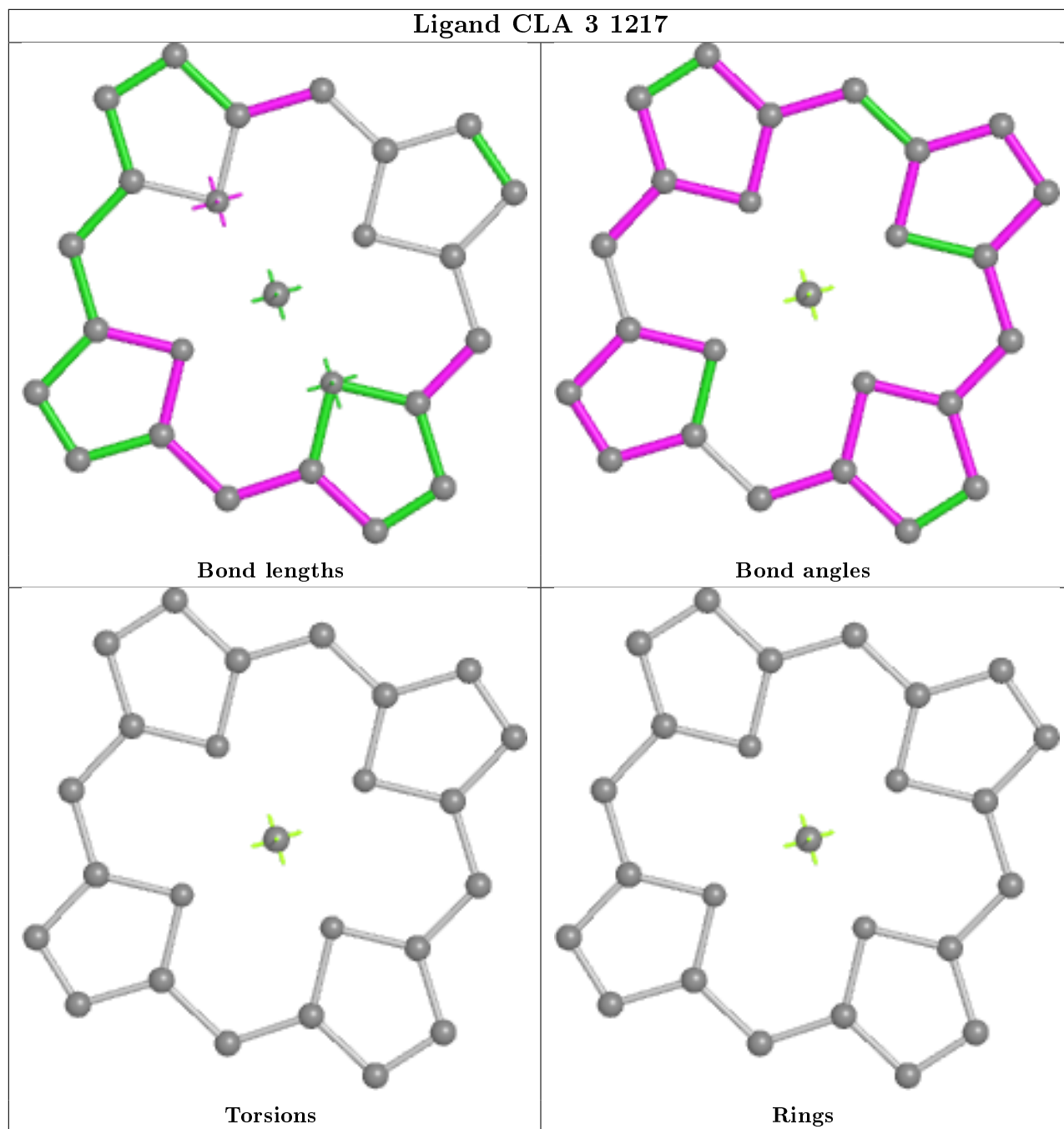


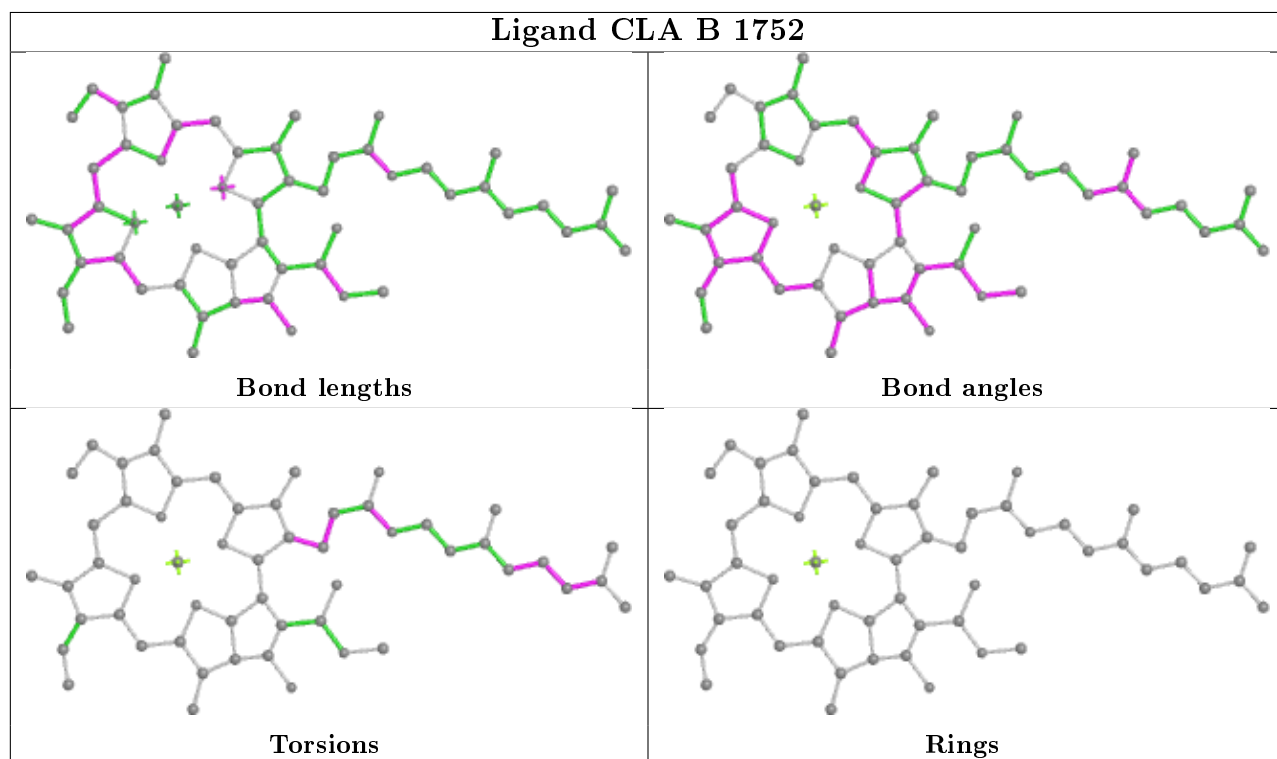
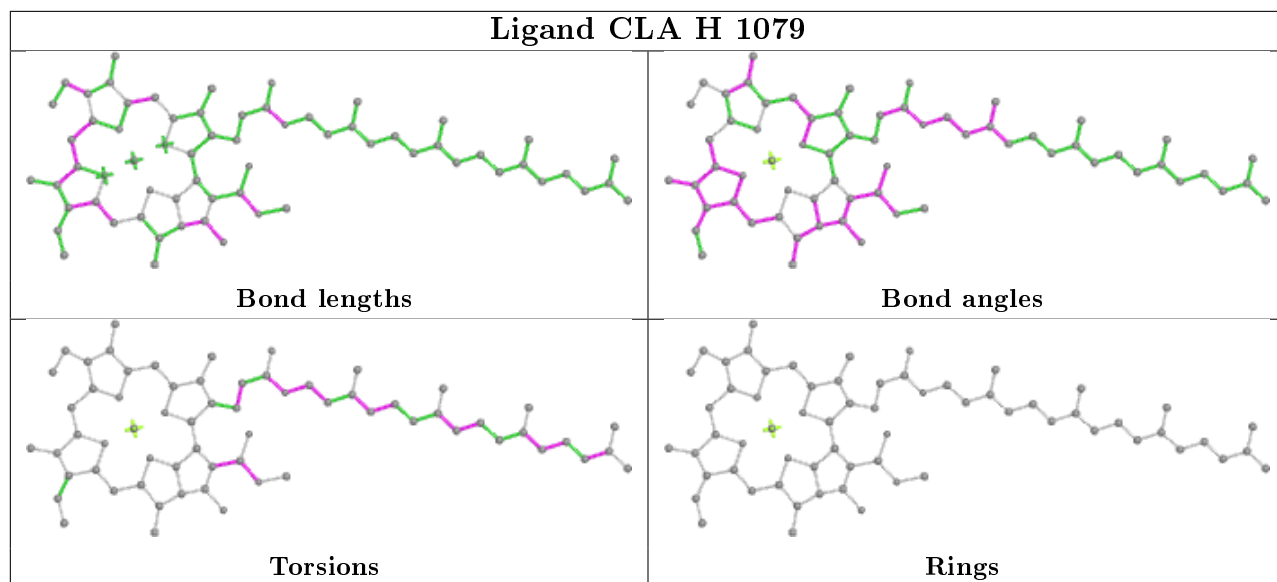


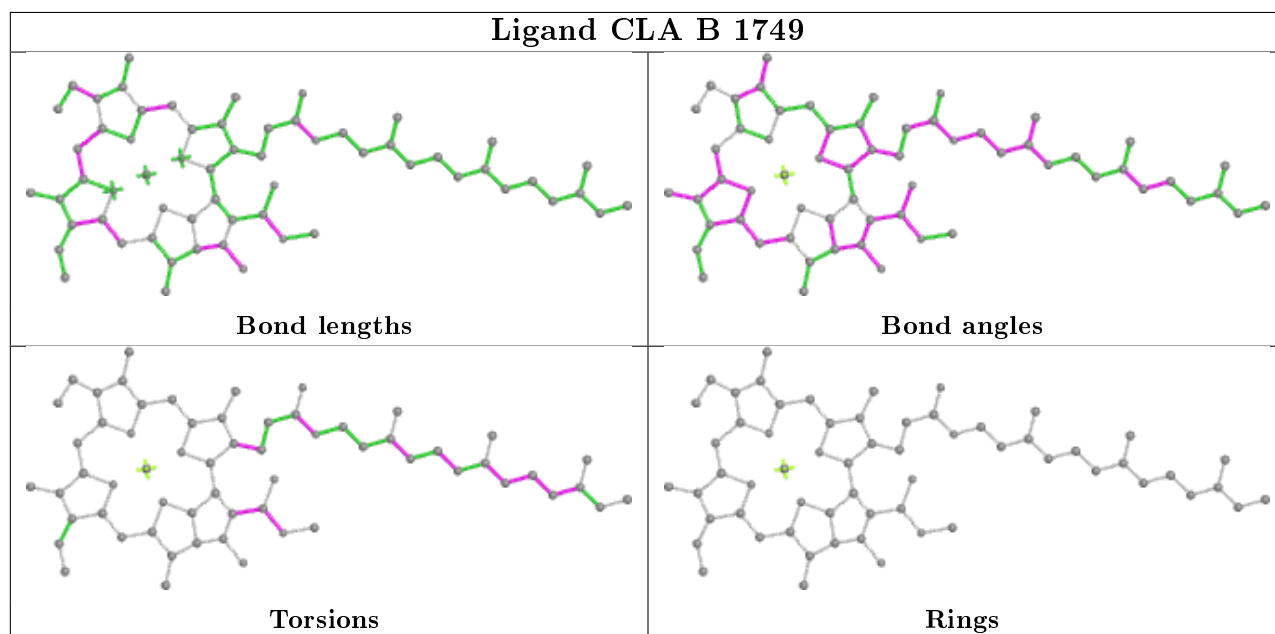
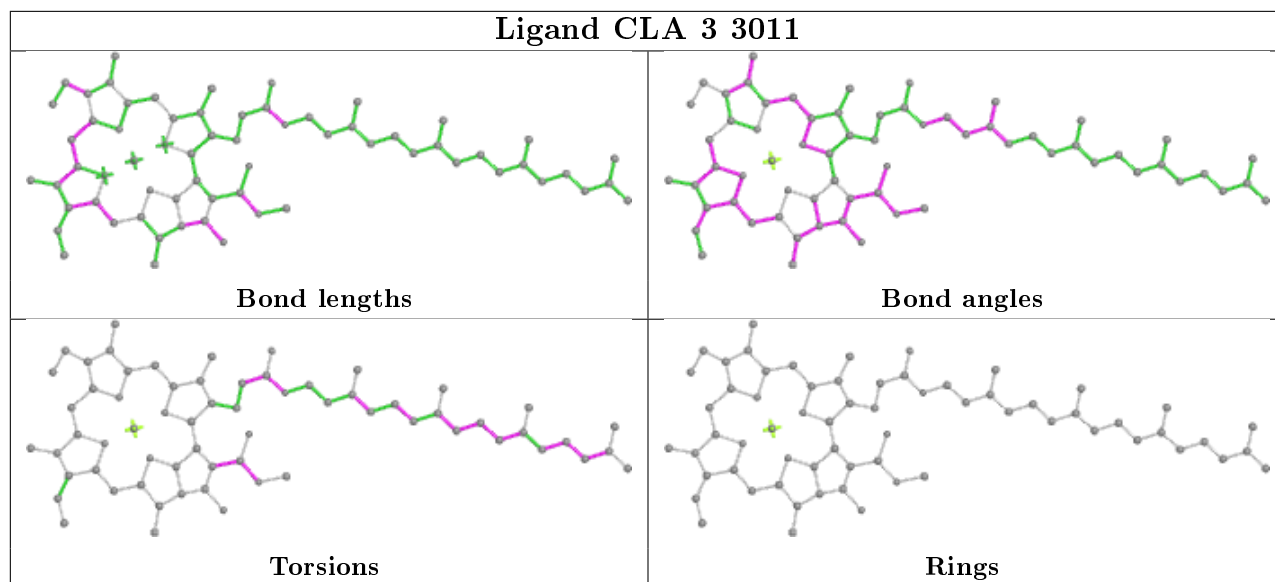


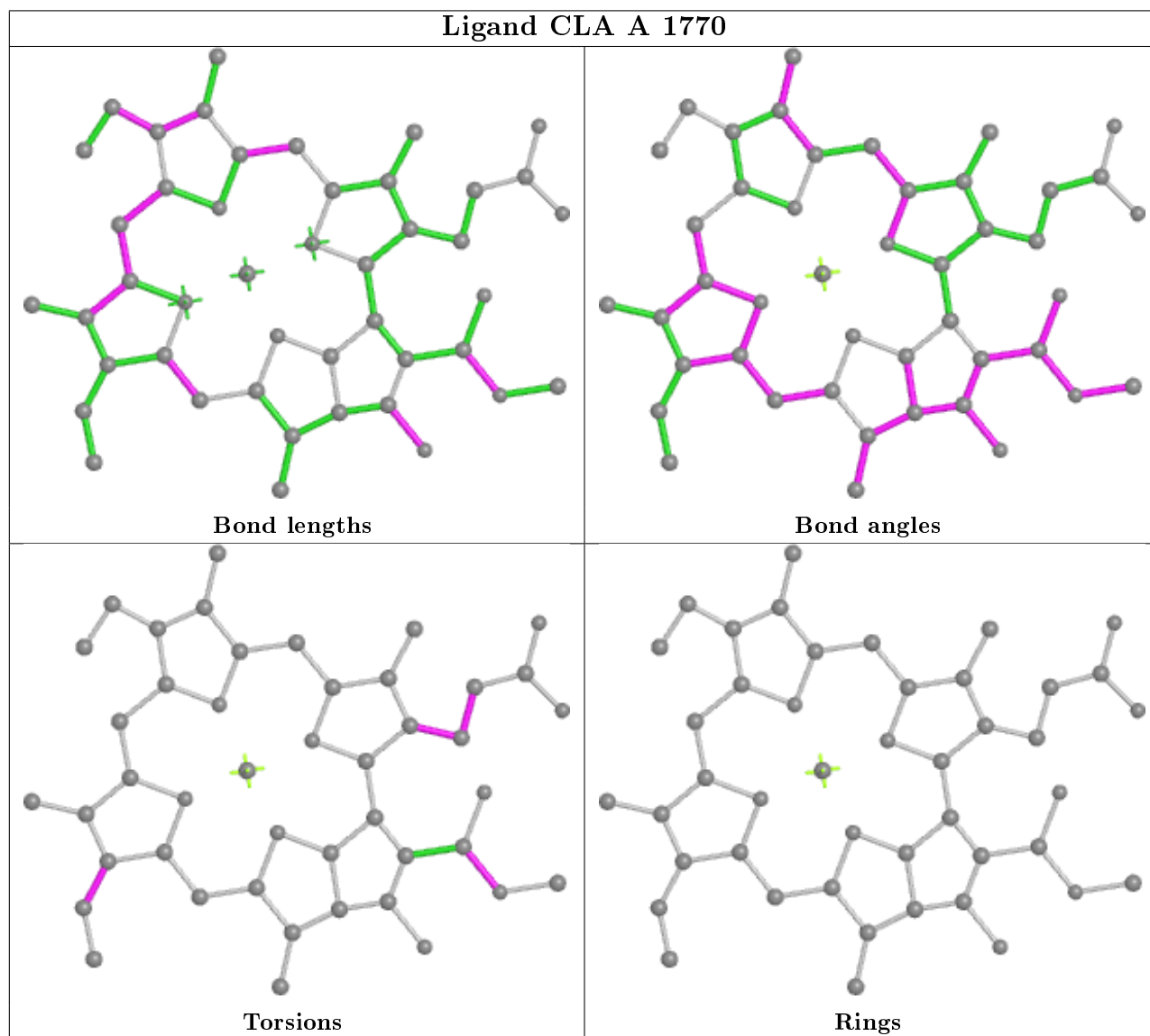
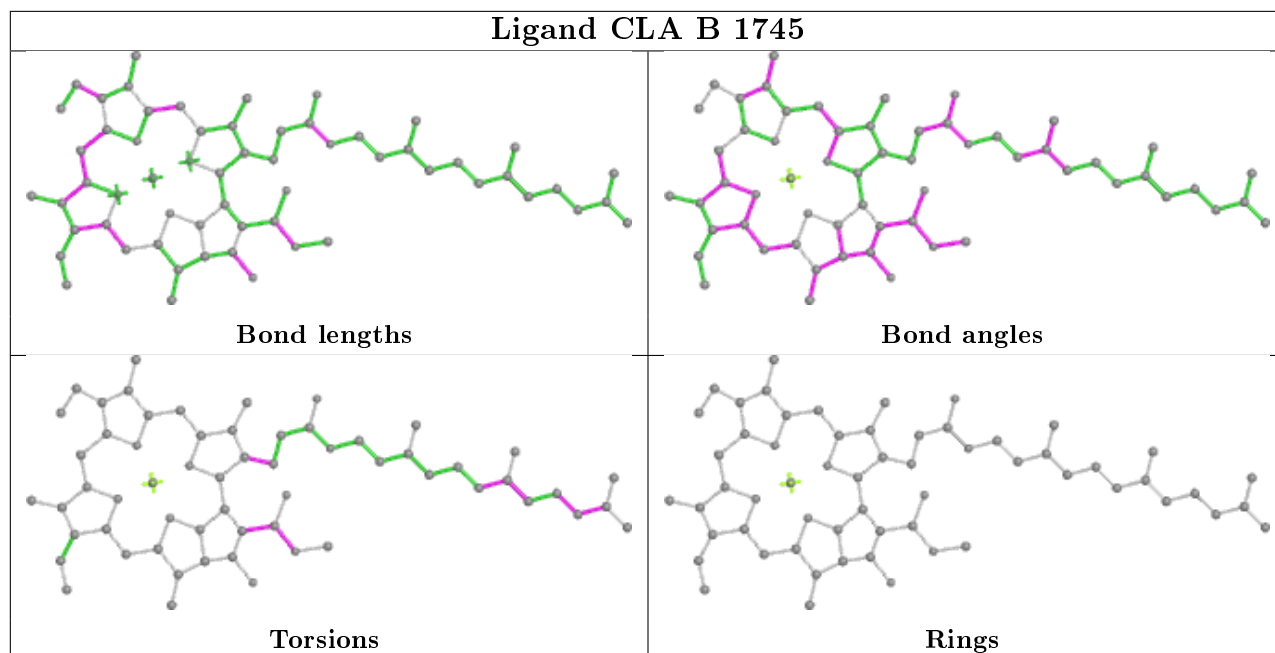


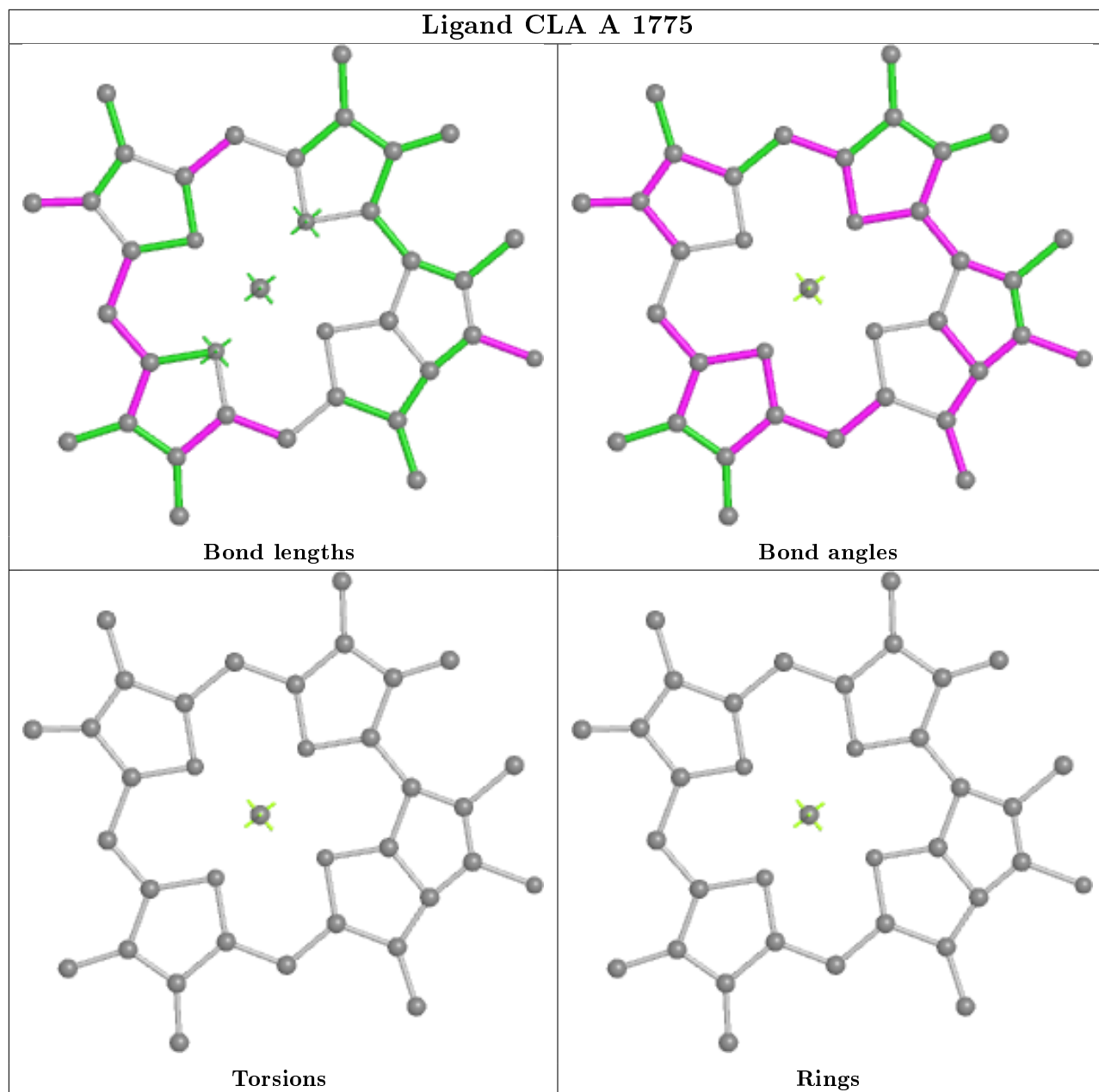




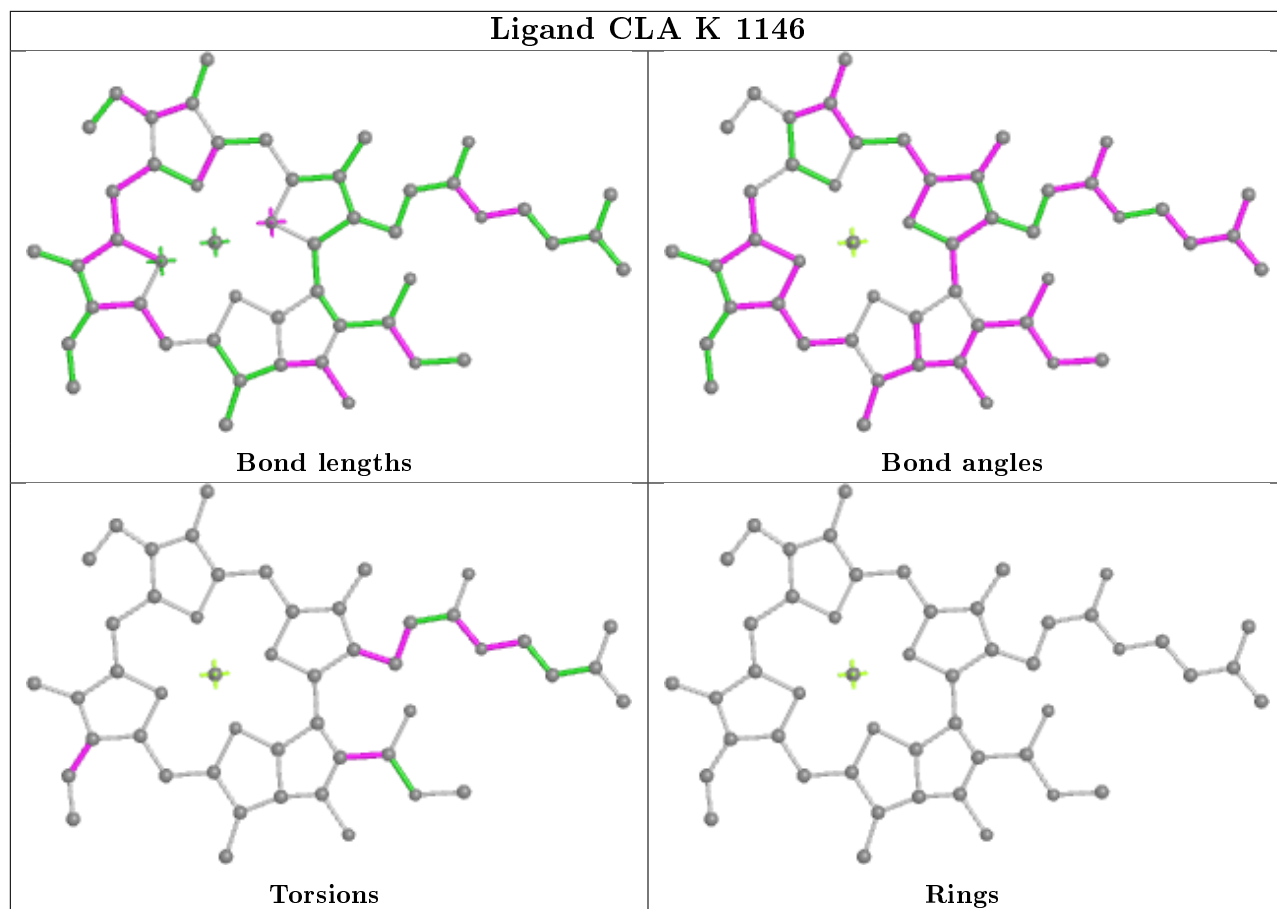


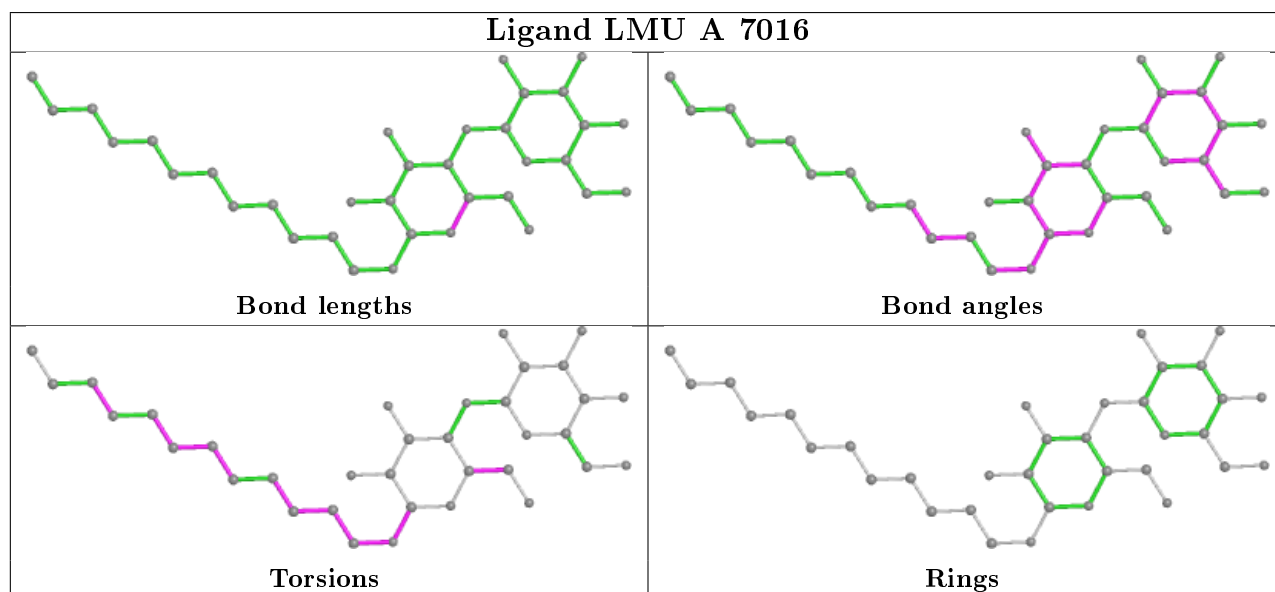
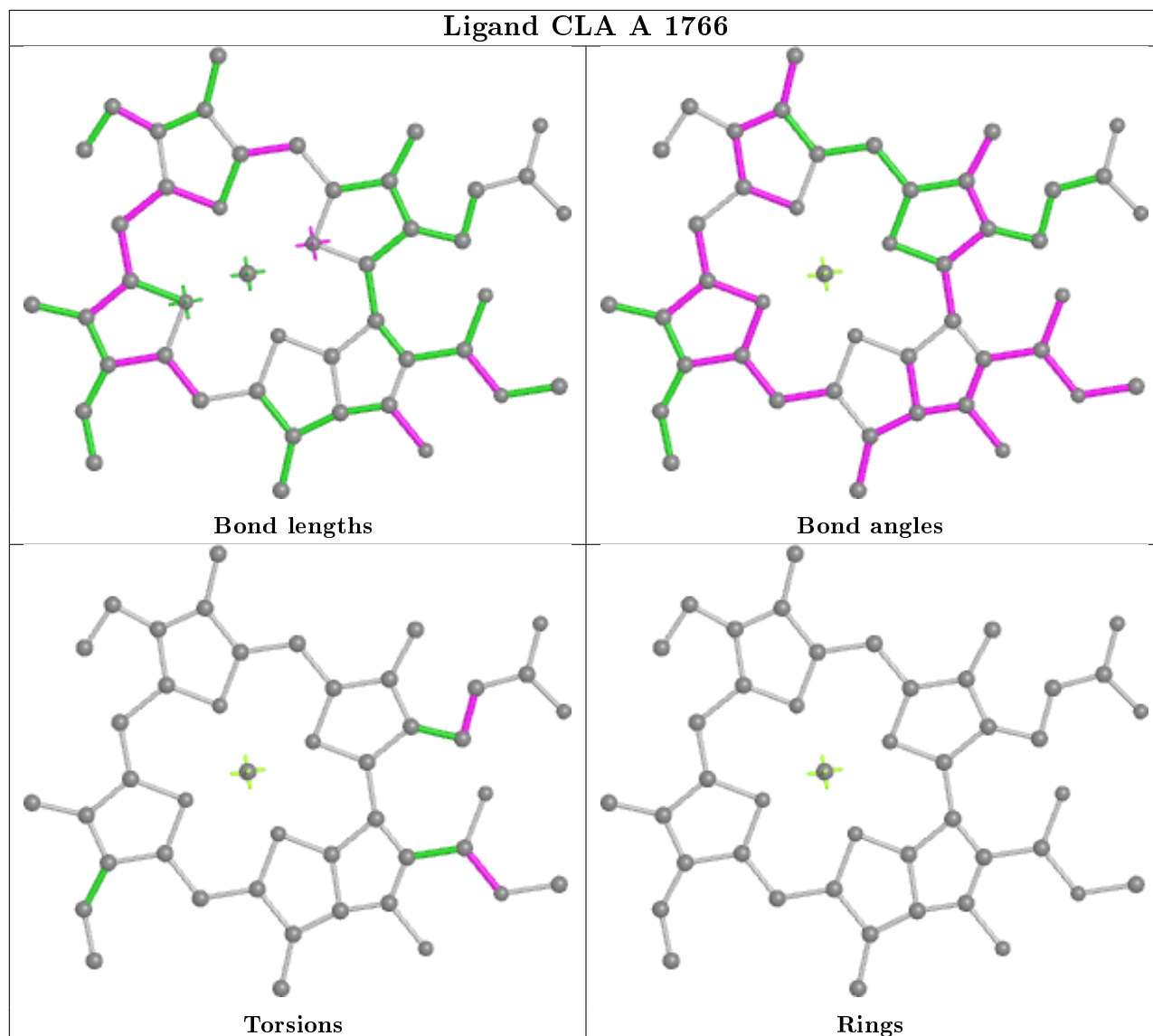


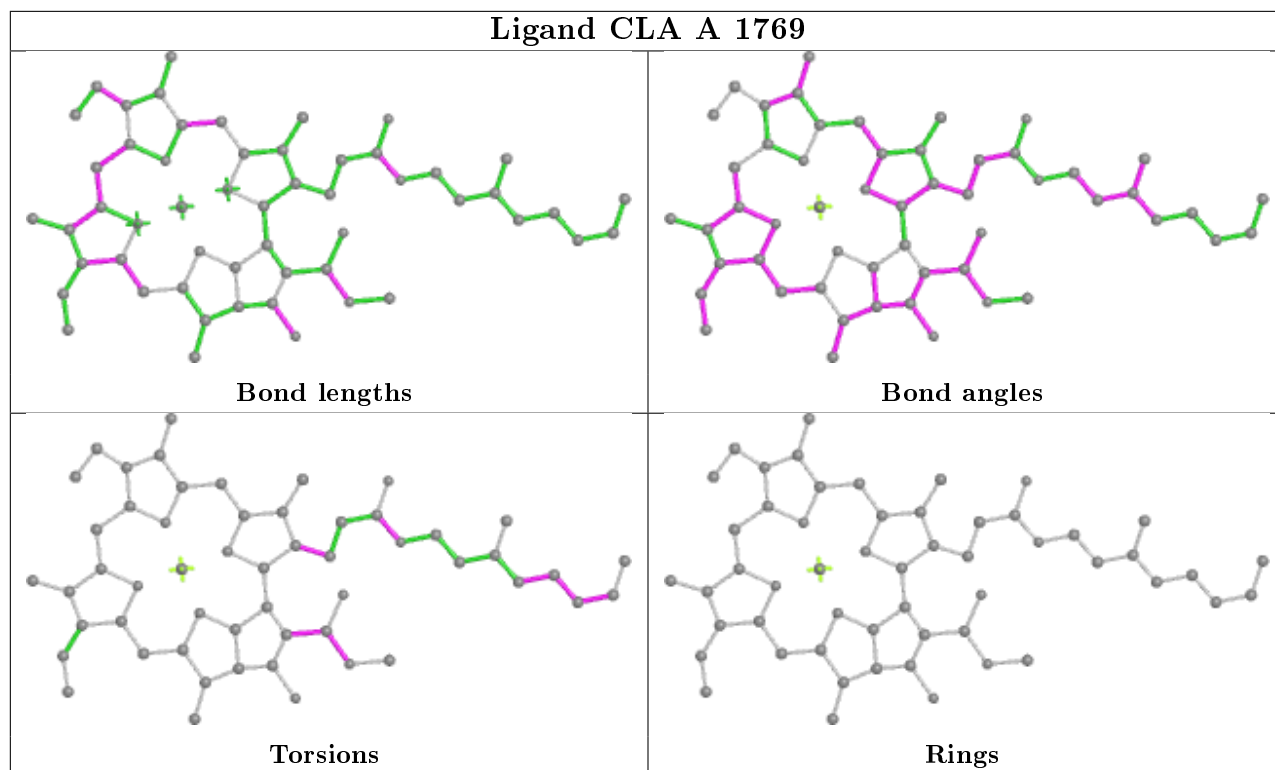


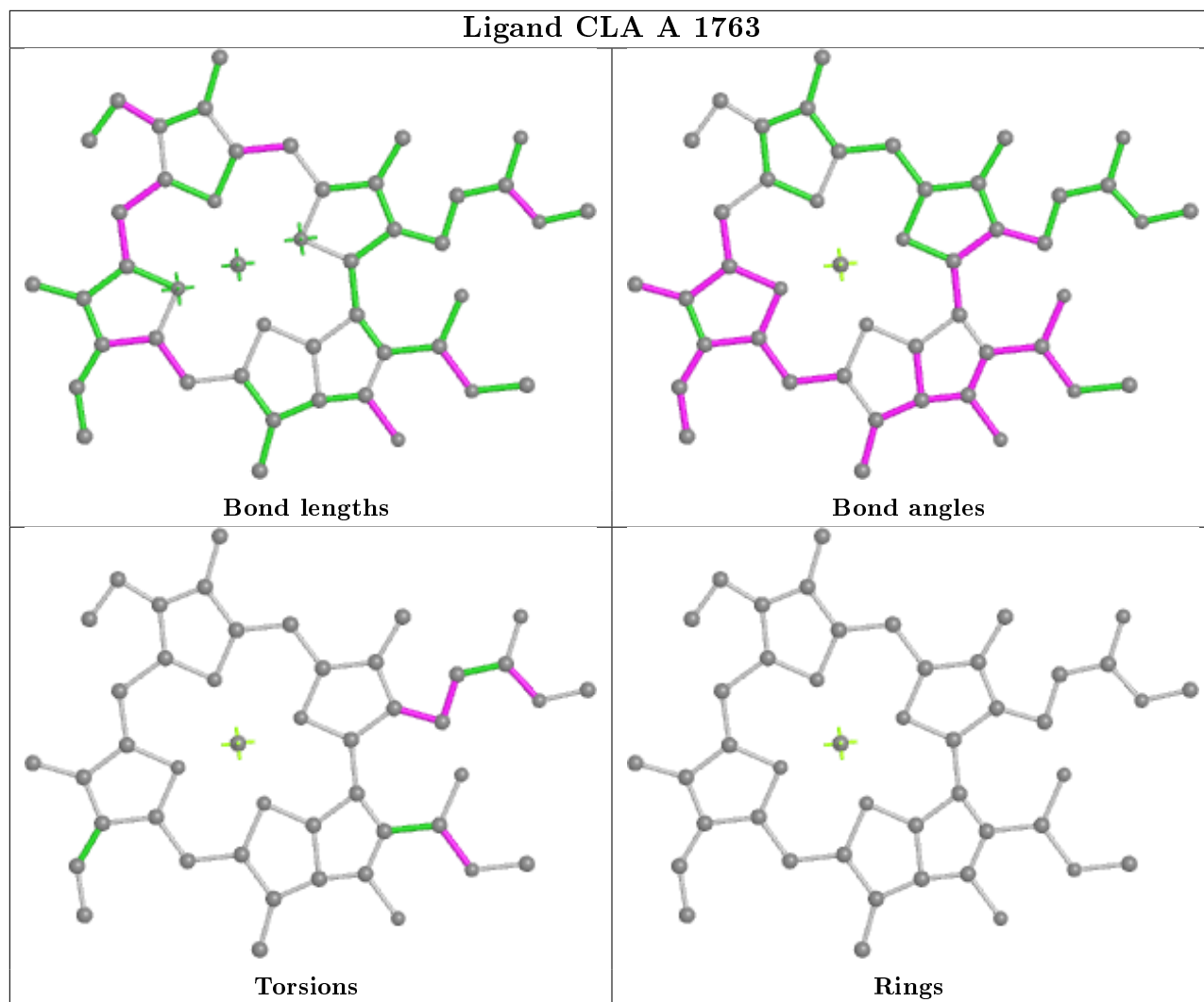


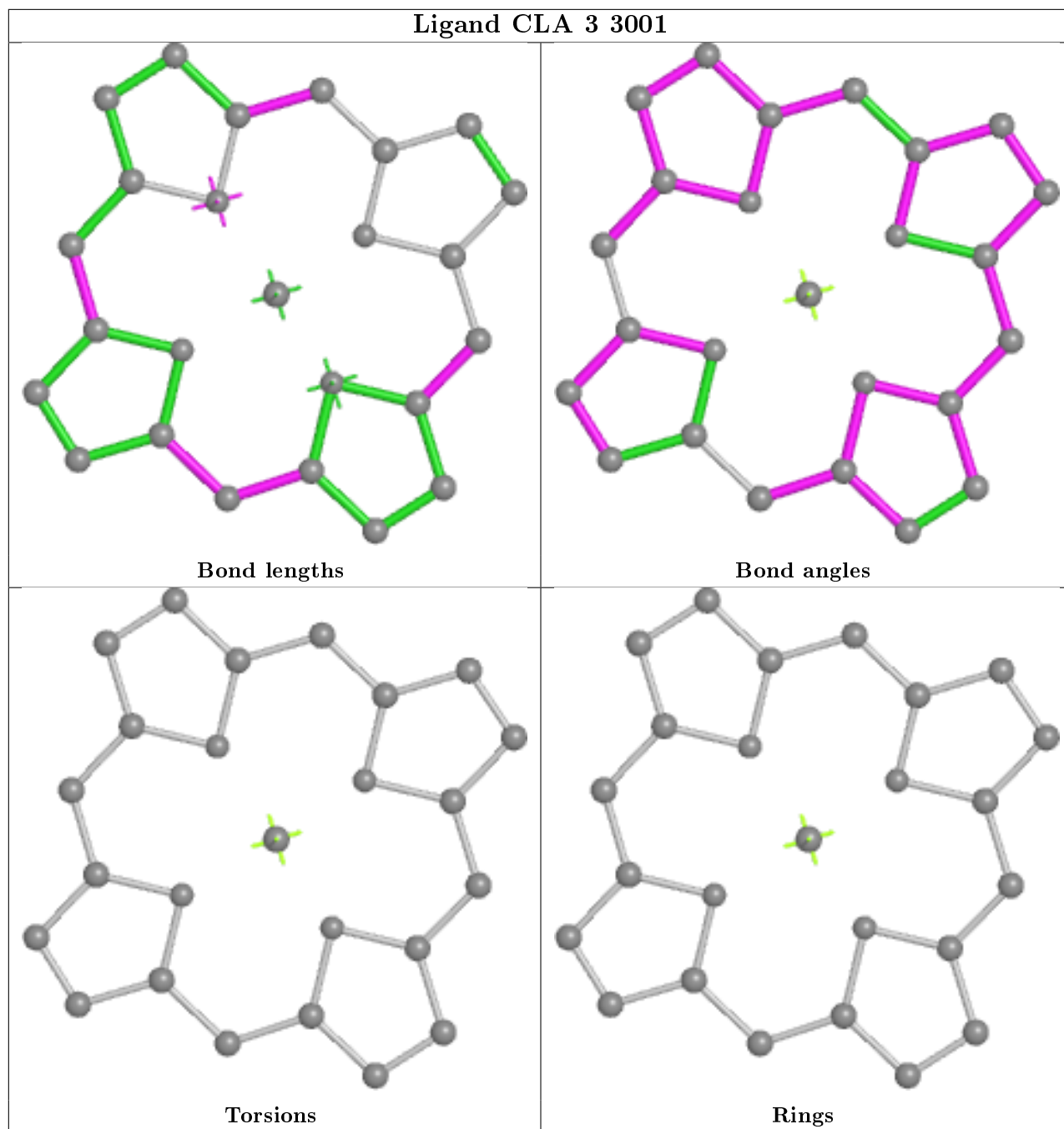


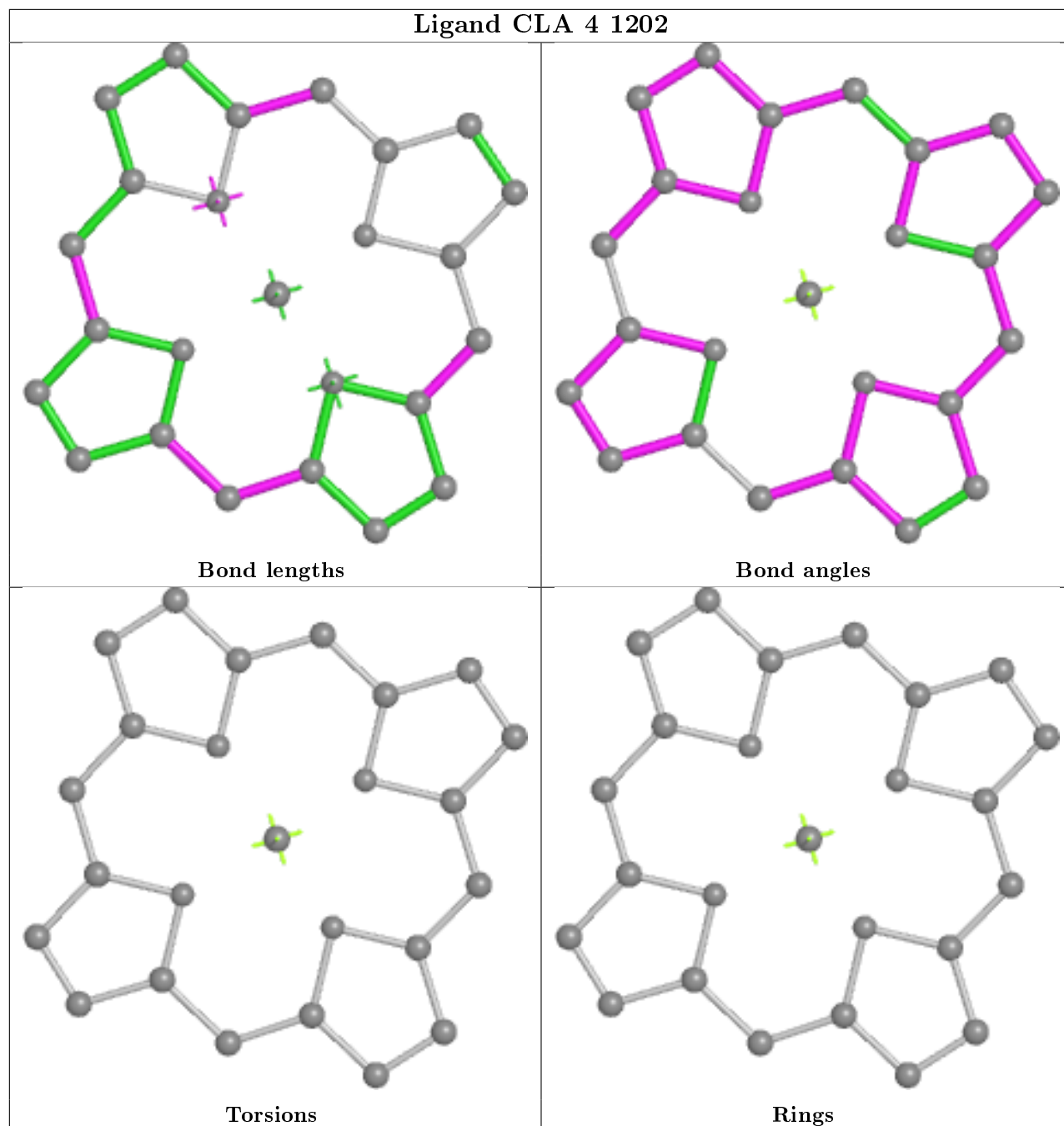


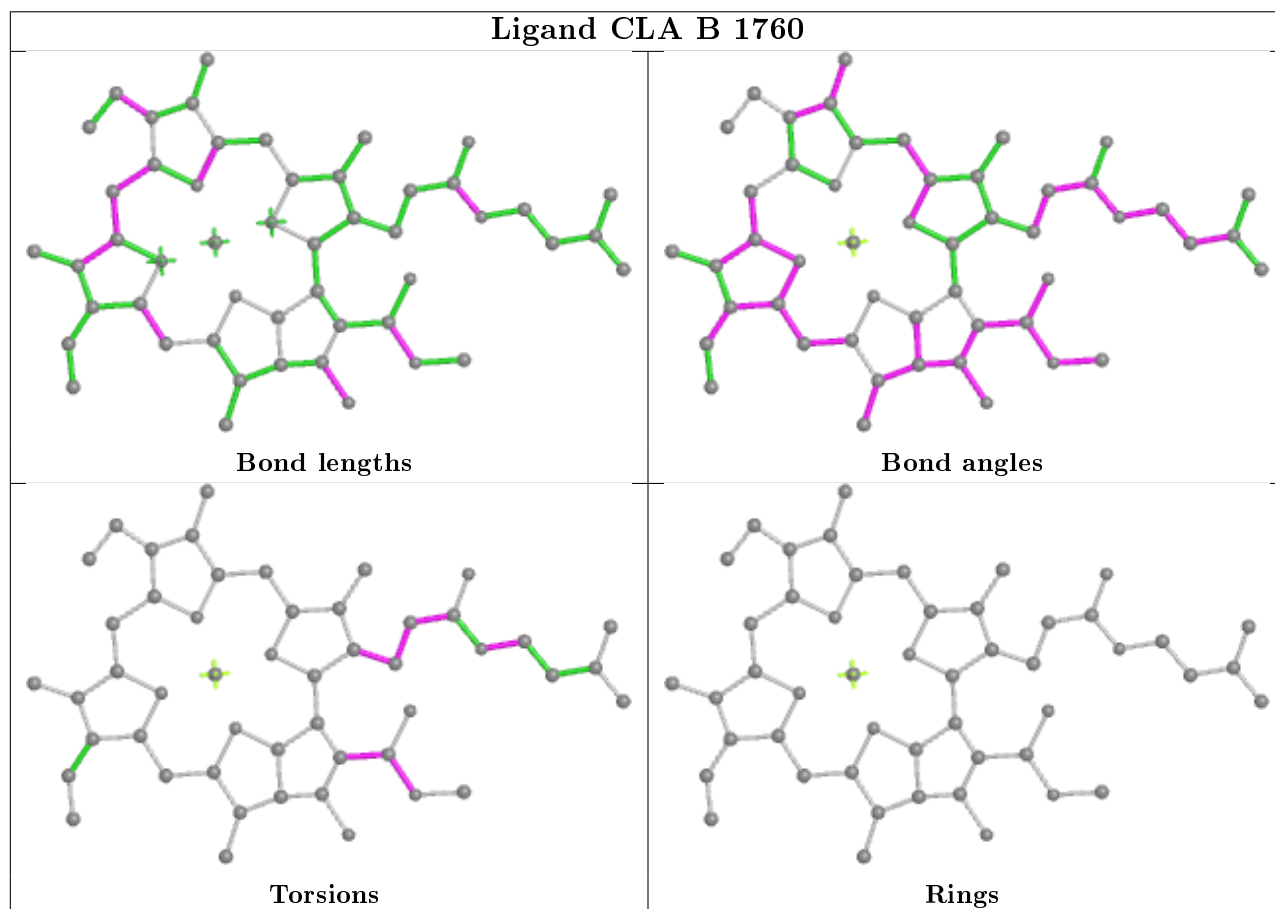
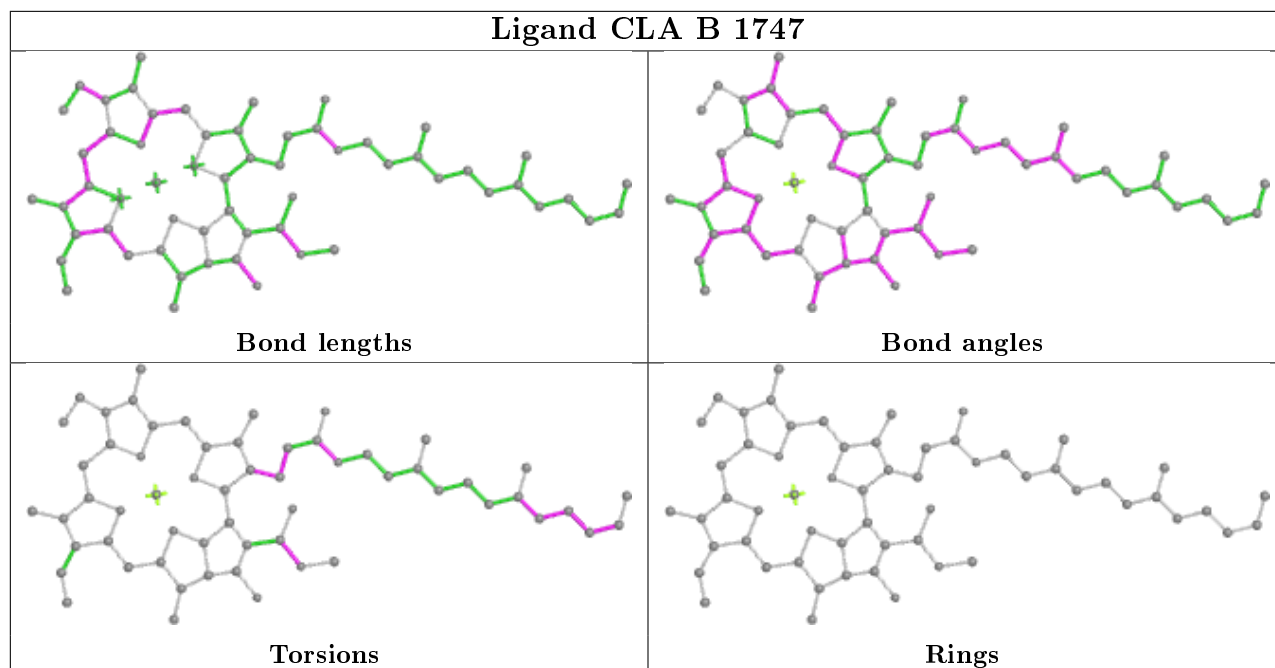


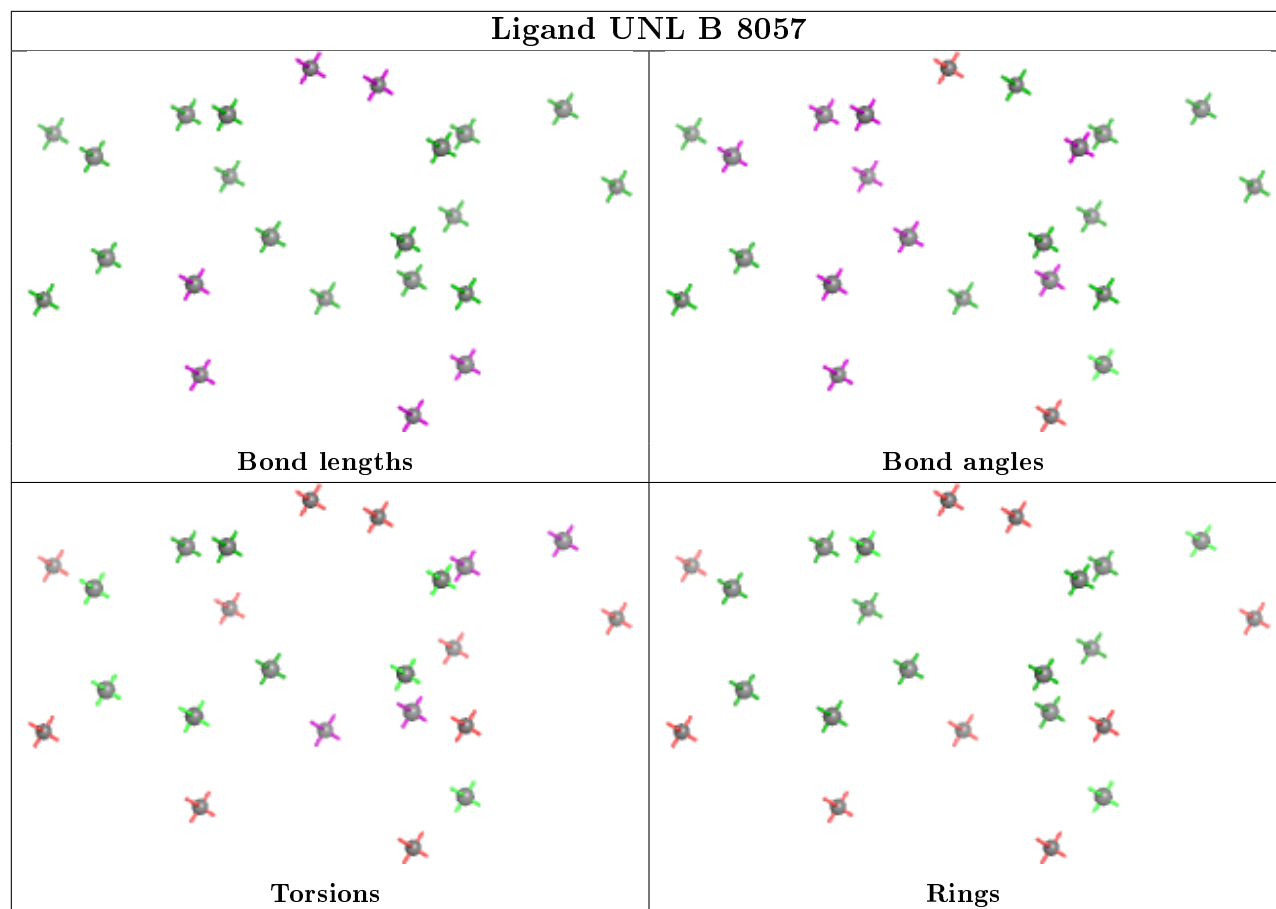












## 5.7 Other polymers [\(i\)](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [\(i\)](#)

The following chains have linkage breaks:

Mol	Chain	Number of breaks
5	A	1

All chain breaks are listed below:

Model	Chain	Residue-1	Atom-1	Residue-2	Atom-2	Distance (Å)
1	A	317:TYR	C	318:ARG	N	1.17



## 6 Fit of model and data [i](#)

### 6.1 Protein, DNA and RNA chains [i](#)

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, 95<sup>th</sup> 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 <sup>2</sup> )	Q<0.9
1	1	165/241 (68%)	0.82	23 (13%) 2 2	31, 61, 71, 72	0
2	2	176/269 (65%)	0.43	17 (9%) 7 8	33, 52, 64, 68	0
3	3	162/276 (58%)	0.74	20 (12%) 4 3	49, 79, 110, 112	0
4	4	166/251 (66%)	0.60	22 (13%) 3 3	21, 44, 57, 58	0
5	A	730/758 (96%)	0.20	27 (3%) 41 38	20, 20, 20, 20	0
6	B	733/734 (99%)	0.21	11 (1%) 73 72	20, 20, 20, 20	0
7	C	81/81 (100%)	0.72	10 (12%) 4 3	20, 20, 20, 20	0
8	D	138/212 (65%)	0.27	9 (6%) 18 18	20, 20, 20, 20	0
9	E	65/143 (45%)	0.45	7 (10%) 5 5	20, 20, 20, 20	0
10	F	154/231 (66%)	0.17	9 (5%) 23 22	20, 20, 20, 20	0
11	G	95/167 (56%)	0.43	9 (9%) 8 8	20, 20, 20, 20	0
12	H	69/144 (47%)	0.21	3 (4%) 35 34	20, 20, 20, 20	0
13	I	30/40 (75%)	-0.03	0 100 100	20, 20, 20, 20	0
14	J	42/44 (95%)	0.20	1 (2%) 59 56	20, 20, 20, 20	0
15	K	84/131 (64%)	1.36	22 (26%) 0 0	20, 20, 20, 20	0
16	L	161/216 (74%)	0.24	9 (5%) 24 23	20, 20, 20, 20	0
17	N	85/170 (50%)	0.19	3 (3%) 44 42	20, 20, 20, 20	0
18	R	0/53	-	-	-	-
All	All	3136/4161 (75%)	0.36	202 (6%) 19 19	20, 20, 65, 112	0

The worst 5 of 202 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
15	K	16	THR	12.8
6	B	491	ASN	9.6
3	3	42	PRO	8.8

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Mol	Chain	Res	Type	RSRZ
1	1	92	GLY	8.7
2	2	123	PRO	7.6

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

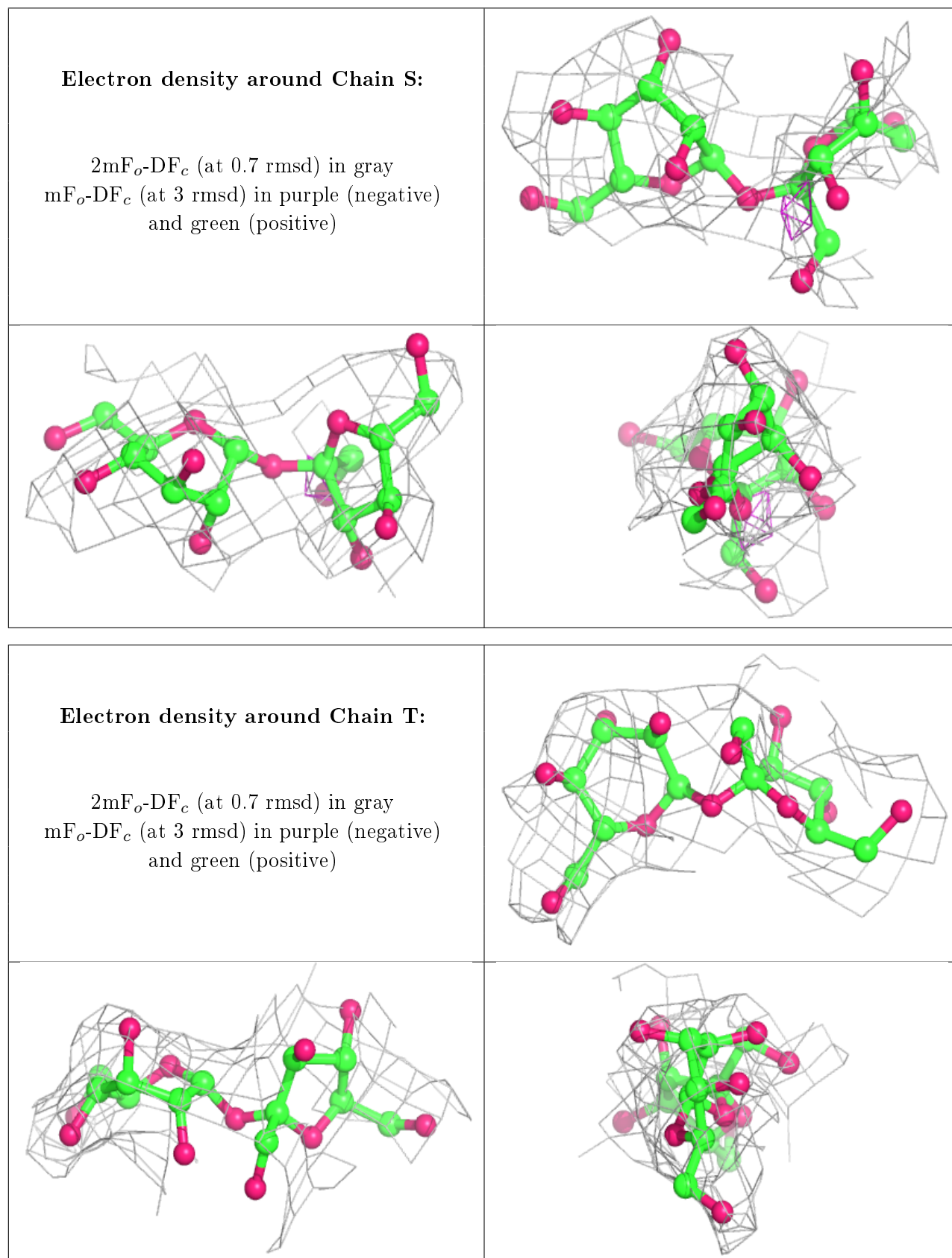
There are no non-standard protein/DNA/RNA residues in this entry.

## 6.3 Carbohydrates [i](#)

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, 95<sup>th</sup> 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.

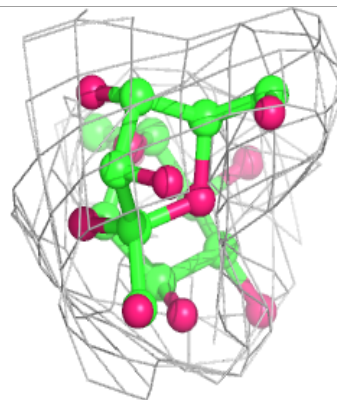
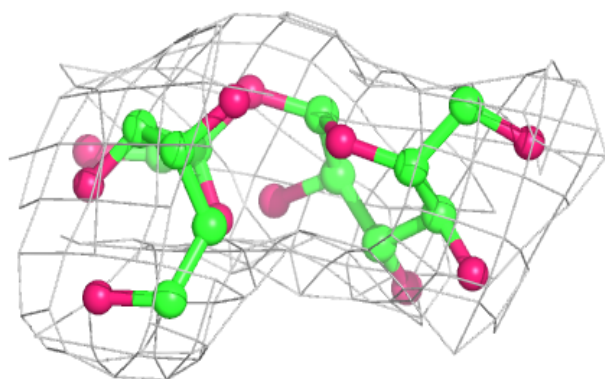
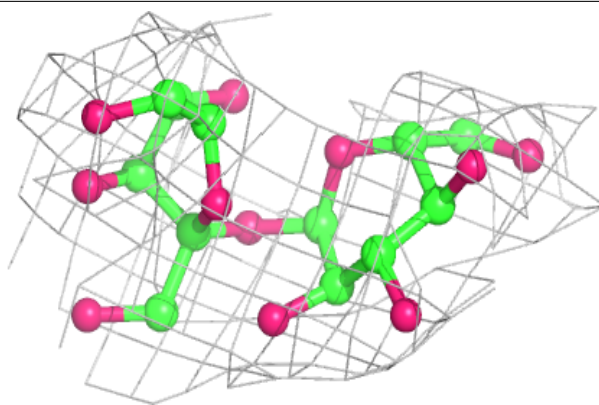
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
19	FRU	S	2	12/12	0.48	0.37	3,43,60,60	0
19	FRU	a	2	12/12	0.67	0.31	20,20,20,20	0
19	GLC	S	1	11/12	0.67	0.39	4,31,60,60	0
19	GLC	P	1	11/12	0.69	0.34	20,20,20,20	0
19	GLC	Y	1	11/12	0.69	0.38	20,20,20,20	0
19	FRU	Q	2	12/12	0.72	0.36	20,20,20,20	0
19	GLC	O	1	11/12	0.73	0.28	20,20,20,20	0
19	GLC	M	1	10/12	0.75	0.22	20,20,20,20	0
19	FRU	Z	2	12/12	0.79	0.30	20,20,20,20	0
19	GLC	V	1	11/12	0.80	0.19	20,20,20,20	0
19	FRU	Y	2	12/12	0.80	0.28	20,20,20,20	0
19	GLC	a	1	11/12	0.81	0.29	20,20,20,20	0
19	GLC	T	1	11/12	0.81	0.31	20,20,20,20	0
19	FRU	P	2	12/12	0.81	0.35	20,20,20,20	0
19	FRU	M	2	12/12	0.81	0.33	20,20,20,20	0
19	FRU	T	2	12/12	0.83	0.18	20,20,20,20	0
19	GLC	Z	1	11/12	0.83	0.30	20,20,20,20	0
19	GLC	Q	1	11/12	0.83	0.55	20,20,20,20	0
19	FRU	W	2	12/12	0.85	0.25	20,20,20,20	0
19	FRU	U	2	12/12	0.86	0.26	20,20,20,20	0
19	FRU	V	2	12/12	0.86	0.13	20,20,20,20	0
19	FRU	X	2	12/12	0.86	0.31	20,20,20,20	0
19	GLC	U	1	11/12	0.88	0.28	20,20,20,20	0
19	GLC	X	1	11/12	0.90	0.23	20,20,20,20	0
19	GLC	W	1	11/12	0.91	0.20	20,20,20,20	0
19	FRU	O	2	12/12	0.92	0.31	20,20,20,20	0

The following is a graphical depiction of the model fit to experimental electron density for oligosaccharide. Each fit is shown from different orientation to approximate a three-dimensional view.

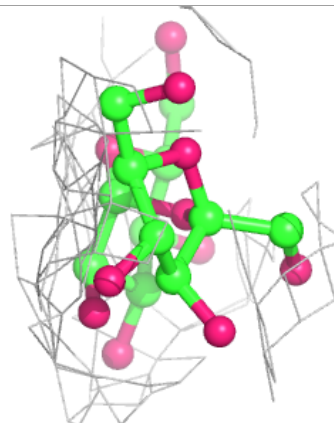
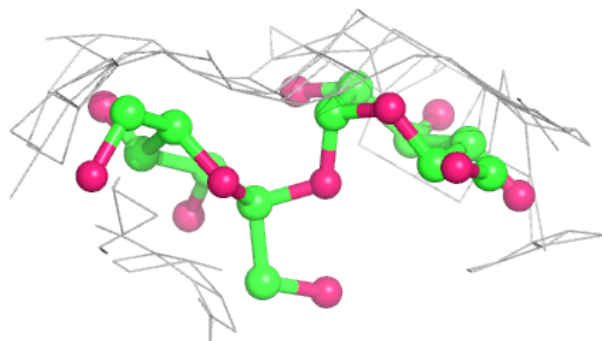
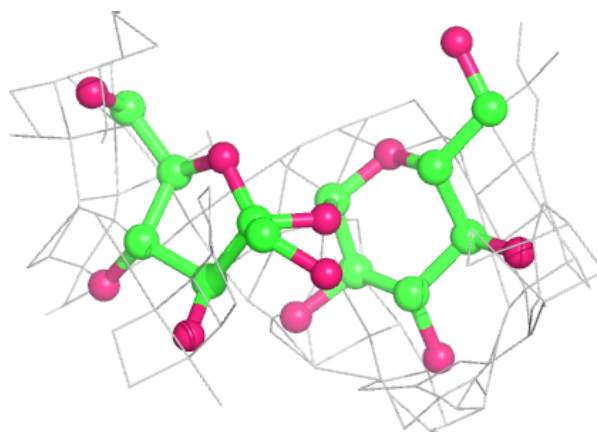


**Electron density around Chain U:**

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

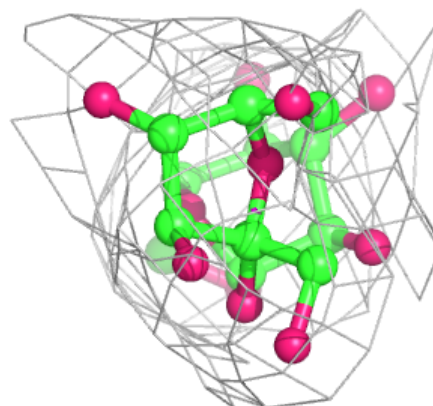
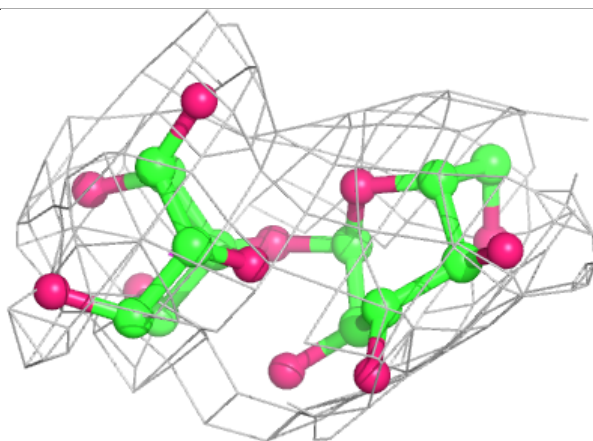
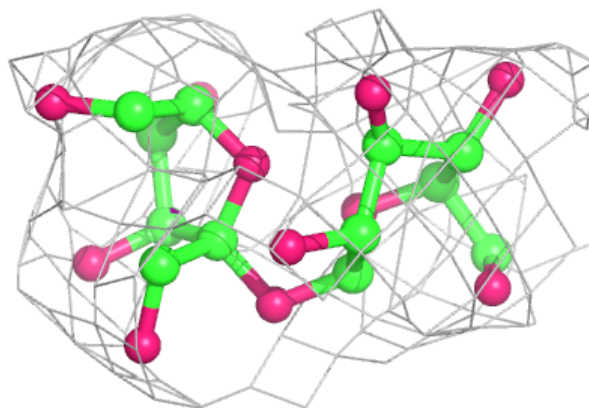
**Electron density around Chain V:**

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



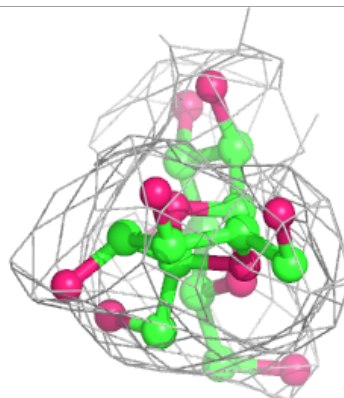
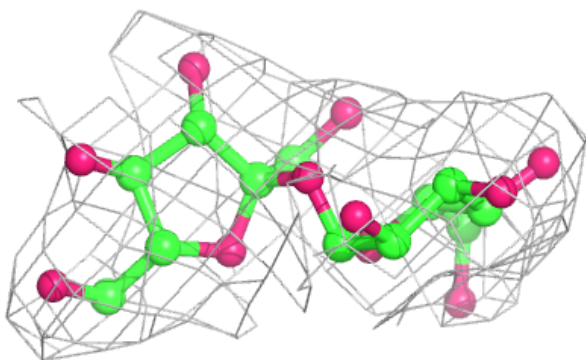
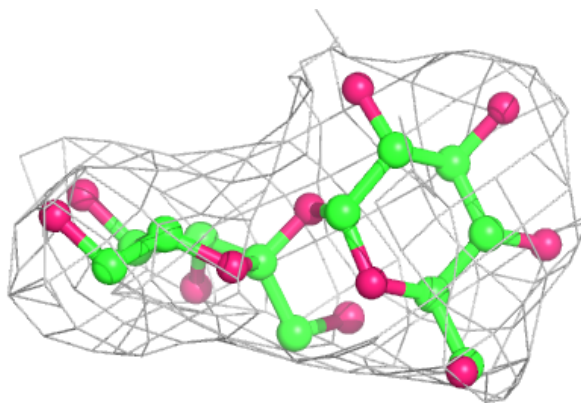
**Electron density around Chain W:**

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

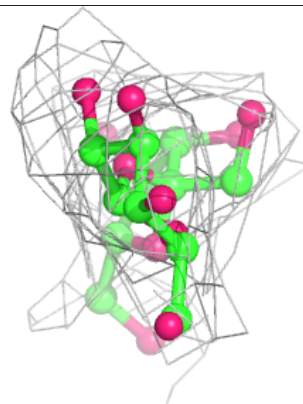
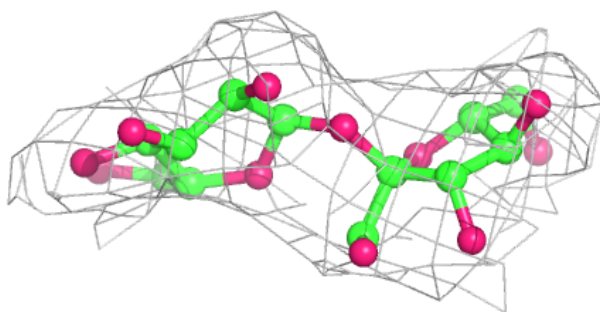
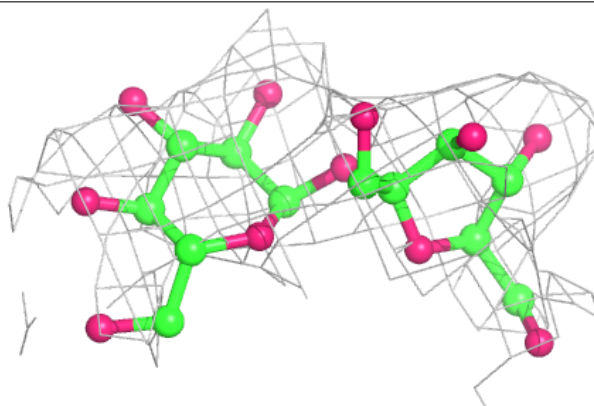


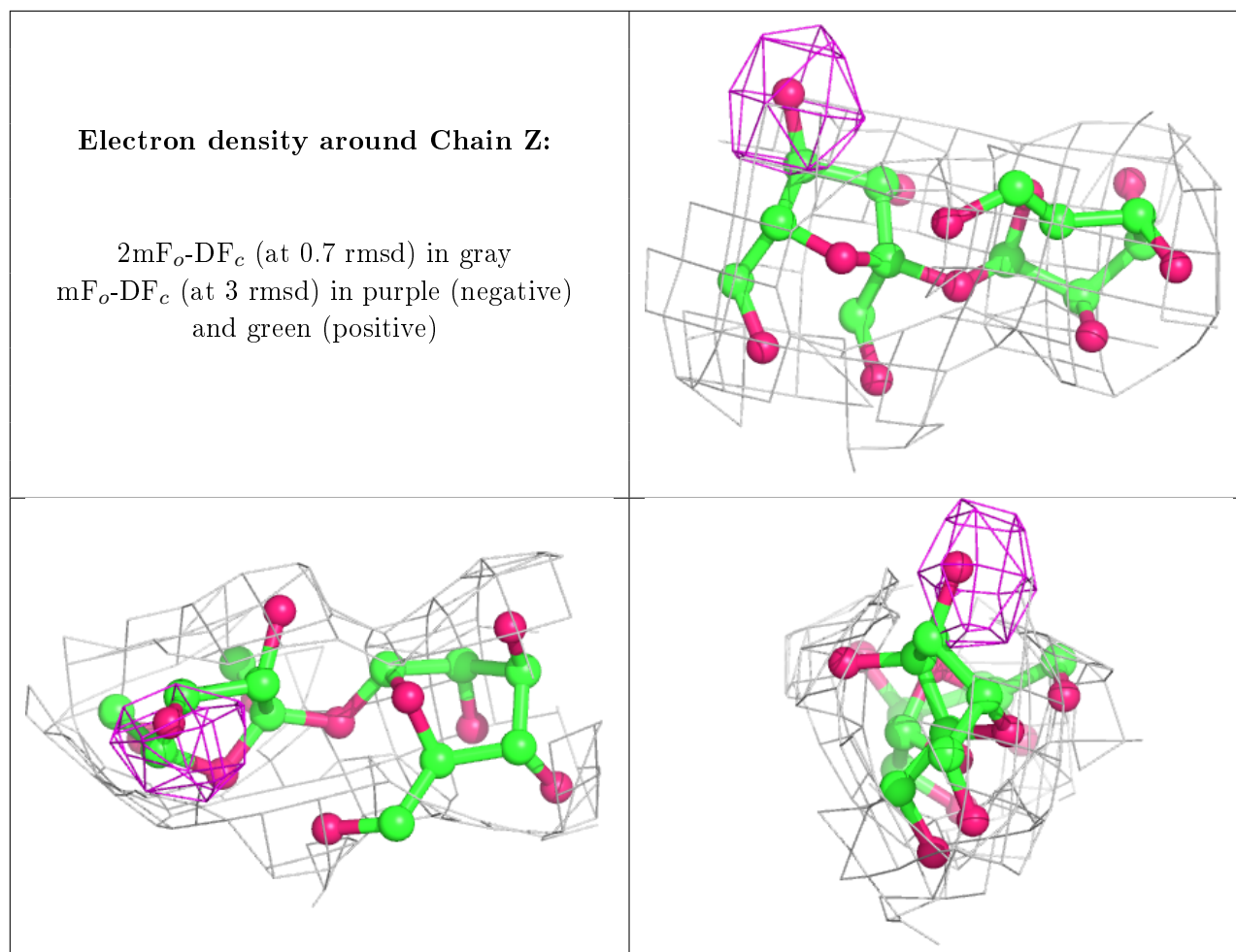
**Electron density around Chain X:**

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

**Electron density around Chain Y:**

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





## 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, 95<sup>th</sup> 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( $\text{\AA}^2$ )	Q<0.9
20	CLA	J	1046	25/65	0.49	0.57	5,42,60,60	0
21	LMU	A	7013	35/35	0.56	0.31	20,20,20,20	0
20	CLA	4	4003	25/65	0.57	0.32	20,20,20,20	0
22	BCR	A	1803	40/40	0.58	0.49	20,20,20,20	0
20	CLA	3	1214	25/65	0.59	0.27	20,20,20,20	0
21	LMU	2	1225	35/35	0.59	0.31	20,20,20,20	0
20	CLA	B	1766	51/65	0.61	0.39	20,20,20,20	0
20	CLA	A	1801	55/65	0.61	0.40	20,20,20,20	0
20	CLA	L	1505	55/65	0.62	0.36	20,20,20,20	0
20	CLA	3	1217	25/65	0.62	0.25	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
21	LMU	1	7004	35/35	0.63	0.43	20,20,20,20	0
20	CLA	2	1216	25/65	0.64	0.29	20,20,20,20	0
20	CLA	A	1797	65/65	0.65	0.27	20,20,20,20	0
21	LMU	A	7041	35/35	0.65	0.23	20,20,20,20	0
20	CLA	2	1212	51/65	0.65	0.27	20,20,20,20	0
20	CLA	B	1746	46/65	0.66	0.40	20,20,20,20	0
20	CLA	3	1219	65/65	0.66	0.46	20,20,20,20	0
20	CLA	J	1044	61/65	0.66	0.33	20,20,20,20	0
21	LMU	A	7038	35/35	0.66	0.37	20,20,20,20	0
20	CLA	3	3014	25/65	0.66	0.50	20,20,20,20	0
21	LMU	A	7015	35/35	0.66	0.40	20,20,20,20	0
20	CLA	B	1765	45/65	0.67	0.40	20,20,20,20	0
21	LMU	A	7037	35/35	0.67	0.24	20,20,20,20	0
20	CLA	K	1142	45/65	0.68	0.27	20,20,20,20	0
20	CLA	A	1799	50/65	0.68	0.41	20,20,20,20	0
20	CLA	B	1755	58/65	0.68	0.41	20,20,20,20	0
20	CLA	I	1033	55/65	0.68	0.28	20,20,20,20	0
21	LMU	R	1057	35/35	0.68	0.38	20,20,20,20	0
20	CLA	2	1227	25/65	0.68	0.57	20,20,20,20	0
20	CLA	2	1220	56/65	0.69	0.27	2,36,60,60	0
22	BCR	A	1808	40/40	0.69	0.38	20,20,20,20	0
20	CLA	4	1200	50/65	0.69	0.44	20,20,20,20	0
20	CLA	4	4007	52/65	0.69	0.36	20,20,20,20	0
20	CLA	4	4014	47/65	0.69	0.32	20,20,20,20	0
21	LMU	A	7009	34/35	0.69	0.33	20,20,20,20	0
20	CLA	4	1202	25/65	0.69	0.34	20,20,20,20	0
21	LMU	A	7030	35/35	0.70	0.35	20,20,20,20	0
21	LMU	A	7025	35/35	0.70	0.24	20,20,20,20	0
20	CLA	1	1198	61/65	0.70	0.28	2,35,60,60	0
20	CLA	2	1218	65/65	0.70	0.28	20,20,20,20	0
20	CLA	1	1200	51/65	0.70	0.37	20,20,20,20	0
20	CLA	G	1099	51/65	0.70	0.35	20,20,20,20	0
20	CLA	A	1775	36/65	0.70	0.29	20,20,20,20	0
21	LMU	3	7005	35/35	0.70	0.32	20,20,20,20	0
20	CLA	1	1197	51/65	0.71	0.53	20,20,20,20	0
20	CLA	1	1187	46/65	0.71	0.27	20,20,20,20	0
20	CLA	1	1194	25/65	0.71	0.25	20,20,20,20	0
20	CLA	A	1815	55/65	0.71	0.27	20,20,20,20	0
21	LMU	A	7031	35/35	0.71	0.27	20,20,20,20	0
21	LMU	A	7047	35/35	0.71	0.25	20,20,20,20	0
20	CLA	3	1218	65/65	0.71	0.29	20,20,20,20	0
20	CLA	A	1770	45/65	0.71	0.39	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
21	LMU	A	7043	35/35	0.71	0.19	20,20,20,20	0
20	CLA	K	1146	50/65	0.71	0.30	20,20,20,20	0
22	BCR	3	1220	40/40	0.71	0.25	20,20,20,20	0
20	CLA	A	1778	42/65	0.72	0.29	20,20,20,20	0
20	CLA	K	3009	65/65	0.72	0.34	20,20,20,20	0
21	LMU	A	7017	35/35	0.72	0.21	20,20,20,20	0
20	CLA	A	1817	46/65	0.72	0.34	20,20,20,20	0
20	CLA	2	1215	50/65	0.72	0.27	20,20,20,20	0
20	CLA	3	1212	36/65	0.72	0.37	20,20,20,20	0
20	CLA	J	1043	61/65	0.72	0.31	20,20,20,20	0
22	BCR	L	1169	40/40	0.72	0.42	20,20,20,20	0
20	CLA	R	1054	57/65	0.72	0.27	20,20,20,20	0
20	CLA	R	1055	65/65	0.72	0.33	20,20,20,20	0
21	LMU	A	7021	35/35	0.72	0.26	20,20,20,20	0
20	CLA	4	1198	65/65	0.72	0.26	20,20,20,20	0
21	LMU	1	1202	35/35	0.72	0.34	20,20,20,20	0
20	CLA	1	1199	25/65	0.73	0.25	20,20,20,20	0
20	CLA	A	1798	55/65	0.73	0.29	20,20,20,20	0
21	LMU	A	7042	35/35	0.73	0.23	20,20,20,20	0
20	CLA	F	1157	53/65	0.73	0.37	20,20,20,20	0
21	LMU	A	7010	35/35	0.73	0.32	20,20,20,20	0
22	BCR	A	1805	40/40	0.74	0.35	20,20,20,20	0
20	CLA	4	1199	55/65	0.74	0.31	20,20,20,20	0
20	CLA	1	1193	51/65	0.74	0.38	20,20,20,20	0
20	CLA	F	1156	41/65	0.74	0.28	20,20,20,20	0
20	CLA	3	3015	25/65	0.74	0.34	20,20,20,20	0
20	CLA	2	1214	25/65	0.74	0.41	20,20,20,20	0
20	CLA	1	1191	36/65	0.74	0.37	20,20,20,20	0
20	CLA	A	1791	45/65	0.74	0.27	20,20,20,20	0
21	LMU	A	7034	35/35	0.74	0.25	20,20,20,20	0
21	LMU	2	7003	35/35	0.74	0.25	20,20,20,20	0
20	CLA	A	1816	55/65	0.74	0.32	20,20,20,20	0
20	CLA	A	1763	46/65	0.74	0.37	20,20,20,20	0
20	CLA	4	1196	55/65	0.74	0.25	20,20,20,20	0
20	CLA	3	3007	42/65	0.75	0.30	20,20,20,20	0
20	CLA	4	1203	25/65	0.75	0.24	20,20,20,20	0
20	CLA	3	1216	25/65	0.75	0.20	20,20,20,20	0
20	CLA	3	3002	25/65	0.75	0.31	20,20,20,20	0
20	CLA	B	1751	46/65	0.75	0.34	20,20,20,20	0
21	LMU	A	7026	35/35	0.75	0.29	20,20,20,20	0
21	LMU	A	1809	35/35	0.75	0.20	20,20,20,20	0
20	CLA	3	1215	25/65	0.75	0.26	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
21	LMU	A	7040	35/35	0.75	0.20	20,20,20,20	0
20	CLA	1	1189	47/65	0.75	0.27	20,20,20,20	0
22	BCR	I	1032	40/40	0.76	0.31	20,20,20,20	0
20	CLA	1	1201	25/65	0.76	0.28	20,20,20,20	0
21	LMU	K	1086	35/35	0.76	0.21	20,20,20,20	0
20	CLA	B	1745	60/65	0.76	0.31	20,20,20,20	0
20	CLA	2	1217	65/65	0.76	0.38	20,20,20,20	0
20	CLA	2	1219	25/65	0.76	0.23	20,20,20,20	0
21	LMU	4	1210	35/35	0.76	0.30	20,20,20,20	0
20	CLA	2	2010	25/65	0.76	0.29	20,20,20,20	0
21	LMU	A	7027	35/35	0.76	0.22	20,20,20,20	0
21	LMU	A	7033	35/35	0.77	0.21	20,20,20,20	0
21	LMU	A	1810	35/35	0.77	0.17	20,20,20,20	0
21	LMU	A	7022	35/35	0.77	0.20	20,20,20,20	0
24	LMG	B	1783	49/55	0.77	0.34	20,20,20,20	0
21	LMU	L	1171	35/35	0.77	0.24	20,20,20,20	0
21	LMU	A	7019	35/35	0.77	0.20	20,20,20,20	0
22	BCR	B	1776	40/40	0.77	0.33	20,20,20,20	0
22	BCR	A	1804	40/40	0.77	0.33	20,20,20,20	0
20	CLA	B	1772	36/65	0.77	0.30	20,20,20,20	0
20	CLA	2	1223	50/65	0.77	0.25	20,20,20,20	0
20	CLA	3	3001	25/65	0.78	0.31	20,20,20,20	0
20	CLA	2	1221	25/65	0.78	0.30	20,20,20,20	0
21	LMU	B	1782	25/35	0.78	0.21	20,20,20,20	0
21	LMU	2	7006	35/35	0.78	0.21	20,20,20,20	0
20	CLA	3	1213	25/65	0.78	0.18	20,20,20,20	0
20	CLA	K	1085	50/65	0.78	0.29	20,20,20,20	0
20	CLA	3	3008	50/65	0.78	0.32	20,20,20,20	0
20	CLA	A	1780	65/65	0.78	0.34	20,20,20,20	0
20	CLA	J	1045	55/65	0.78	0.22	2,33,60,60	0
20	CLA	4	1209	46/65	0.78	0.32	20,20,20,20	0
20	CLA	H	1079	65/65	0.79	0.29	20,20,20,20	0
20	CLA	1	1188	47/65	0.79	0.26	20,20,20,20	0
20	CLA	2	1213	56/65	0.79	0.22	20,20,20,20	0
22	BCR	A	1806	40/40	0.79	0.35	20,20,20,20	0
22	BCR	B	1780	40/40	0.79	0.36	20,20,20,20	0
20	CLA	B	1764	45/65	0.79	0.29	20,20,20,20	0
22	BCR	B	1774	40/40	0.79	0.34	20,20,20,20	0
20	CLA	4	1204	55/65	0.79	0.24	20,20,20,20	0
20	CLA	B	1762	65/65	0.80	0.32	20,20,20,20	0
20	CLA	A	1781	65/65	0.80	0.30	20,20,20,20	0
20	CLA	4	1205	25/65	0.80	0.23	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å <sup>2</sup> )	Q<0.9
21	LMU	A	7024	35/35	0.80	0.18	20,20,20,20	0
22	BCR	A	1807	40/40	0.80	0.38	20,20,20,20	0
21	LMU	R	1056	35/35	0.80	0.22	20,20,20,20	0
20	CLA	A	1771	50/65	0.80	0.29	20,20,20,20	0
26	UNL	B	8057	23/-	0.80	0.17	20,20,20,20	0
20	CLA	1	1192	61/65	0.80	0.26	20,20,20,20	0
22	BCR	B	1775	40/40	0.80	0.36	20,20,20,20	0
21	LMU	A	7036	34/35	0.80	0.28	20,20,20,20	0
21	LMU	A	7035	35/35	0.81	0.26	20,20,20,20	0
20	CLA	L	1168	50/65	0.81	0.23	20,20,20,20	0
20	CLA	4	1208	25/65	0.81	0.18	20,20,20,20	0
20	CLA	2	1224	65/65	0.81	0.22	20,20,20,20	0
20	CLA	A	1787	65/65	0.81	0.28	20,20,20,20	0
20	CLA	3	3011	65/65	0.81	0.26	20,20,20,20	0
20	CLA	1	1190	46/65	0.81	0.23	20,20,20,20	0
21	LMU	A	7039	35/35	0.81	0.19	20,20,20,20	0
20	CLA	4	1197	36/65	0.81	0.25	20,20,20,20	0
20	CLA	B	1736	45/65	0.81	0.27	20,20,20,20	0
21	LMU	A	7028	35/35	0.81	0.18	20,20,20,20	0
20	CLA	A	1766	45/65	0.81	0.26	20,20,20,20	0
21	LMU	A	7016	35/35	0.81	0.24	20,20,20,20	0
20	CLA	L	1166	50/65	0.81	0.27	20,20,20,20	0
20	CLA	1	1196	36/65	0.81	0.25	20,20,20,20	0
21	LMU	A	7023	35/35	0.82	0.24	20,20,20,20	0
20	CLA	A	1777	51/65	0.82	0.40	20,20,20,20	0
21	LMU	A	7020	35/35	0.82	0.22	20,20,20,20	0
20	CLA	A	1776	65/65	0.82	0.32	20,20,20,20	0
20	CLA	B	1742	55/65	0.82	0.26	20,20,20,20	0
20	CLA	B	1756	65/65	0.82	0.32	20,20,20,20	0
21	LMU	A	7032	35/35	0.82	0.33	20,20,20,20	0
20	CLA	A	1774	65/65	0.82	0.32	20,20,20,20	0
20	CLA	B	1763	50/65	0.83	0.28	20,20,20,20	0
20	CLA	A	1792	51/65	0.83	0.28	20,20,20,20	0
22	BCR	B	1779	40/40	0.83	0.32	20,20,20,20	0
20	CLA	A	1772	65/65	0.83	0.23	2,35,60,60	0
20	CLA	1	1195	36/65	0.83	0.27	20,20,20,20	0
20	CLA	A	1760	55/65	0.83	0.29	20,20,20,20	0
20	CLA	A	1785	65/65	0.83	0.31	20,20,20,20	0
20	CLA	B	1735	65/65	0.83	0.30	20,20,20,20	0
20	CLA	A	1768	54/65	0.83	0.23	20,20,20,20	0
20	CLA	4	1201	52/65	0.83	0.21	20,20,20,20	0
20	CLA	B	1741	54/65	0.83	0.30	20,20,20,20	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
20	CLA	A	1773	52/65	0.83	0.25	20,20,20,20	0
20	CLA	A	1769	54/65	0.83	0.27	20,20,20,20	0
20	CLA	B	1744	65/65	0.83	0.30	20,20,20,20	0
20	CLA	B	1750	50/65	0.83	0.26	20,20,20,20	0
20	CLA	A	1812	65/65	0.84	0.32	20,20,20,20	0
20	CLA	I	1031	60/65	0.84	0.24	20,20,20,20	0
20	CLA	A	1796	65/65	0.84	0.29	20,20,20,20	0
20	CLA	B	1767	60/65	0.84	0.28	20,20,20,20	0
20	CLA	A	1761	65/65	0.84	0.28	20,20,20,20	0
22	BCR	B	1777	40/40	0.85	0.33	20,20,20,20	0
22	BCR	B	1778	40/40	0.85	0.32	20,20,20,20	0
20	CLA	B	1740	65/65	0.85	0.30	20,20,20,20	0
20	CLA	B	1787	65/65	0.85	0.32	20,20,20,20	0
20	CLA	A	1795	51/65	0.85	0.26	20,20,20,20	0
20	CLA	B	1770	65/65	0.85	0.30	20,20,20,20	0
20	CLA	B	1753	65/65	0.85	0.25	20,20,20,20	0
20	CLA	B	1749	61/65	0.85	0.28	20,20,20,20	0
20	CLA	A	1784	55/65	0.85	0.28	20,20,20,20	0
20	CLA	A	1762	57/65	0.85	0.30	20,20,20,20	0
20	CLA	A	1767	65/65	0.85	0.28	20,20,20,20	0
20	CLA	B	1761	50/65	0.85	0.25	20,20,20,20	0
20	CLA	2	1222	50/65	0.85	0.28	20,20,20,20	0
20	CLA	A	1789	65/65	0.85	0.27	20,20,20,20	0
20	CLA	4	1207	36/65	0.85	0.21	20,20,20,20	0
20	CLA	A	1813	65/65	0.85	0.30	20,20,20,20	0
20	CLA	B	1785	65/65	0.86	0.30	20,20,20,20	0
20	CLA	A	1793	65/65	0.86	0.28	20,20,20,20	0
20	CLA	A	1782	65/65	0.86	0.23	20,20,20,20	0
20	CLA	A	1790	50/65	0.86	0.23	20,20,20,20	0
20	CLA	B	1771	65/65	0.86	0.33	20,20,20,20	0
20	CLA	L	1167	47/65	0.86	0.22	20,20,20,20	0
20	CLA	B	1752	55/65	0.86	0.23	20,20,20,20	0
20	CLA	A	1800	65/65	0.86	0.27	20,20,20,20	0
20	CLA	A	1765	55/65	0.86	0.26	20,20,20,20	0
20	CLA	B	1769	47/65	0.87	0.29	20,20,20,20	0
20	CLA	B	1759	65/65	0.87	0.32	20,20,20,20	0
22	BCR	B	1781	40/40	0.87	0.27	20,20,20,20	0
23	PQN	A	1802	33/33	0.87	0.31	20,20,20,20	0
20	CLA	B	1747	59/65	0.87	0.24	20,20,20,20	0
20	CLA	4	1206	25/65	0.88	0.17	20,20,20,20	0
20	CLA	A	1794	47/65	0.88	0.27	20,20,20,20	0
20	CLA	A	1786	50/65	0.88	0.21	20,20,20,20	0

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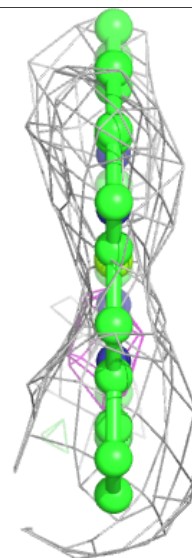
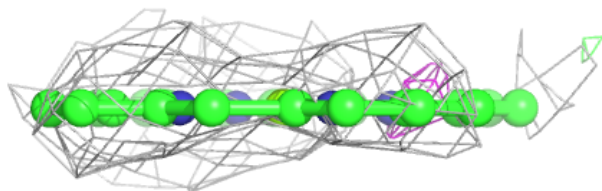
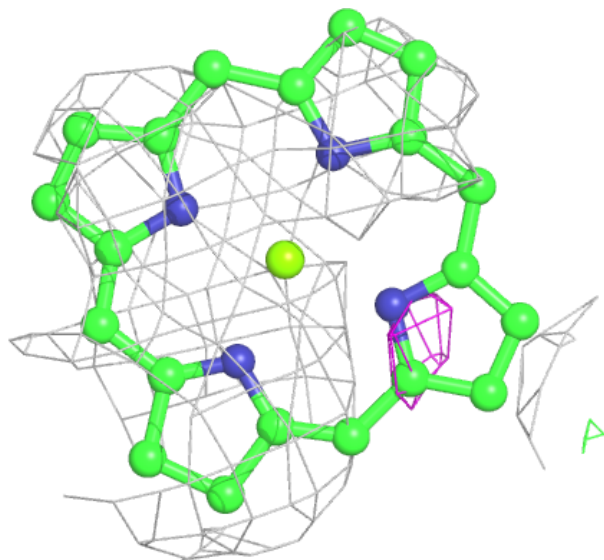
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors( $\text{\AA}^2$ )	Q<0.9
20	CLA	A	1788	65/65	0.88	0.27	20,20,20,20	0
20	CLA	B	1748	60/65	0.88	0.30	20,20,20,20	0
22	BCR	L	1170	40/40	0.88	0.27	20,20,20,20	0
20	CLA	F	1155	36/65	0.88	0.20	20,20,20,20	0
20	CLA	A	1759	50/65	0.88	0.26	20,20,20,20	0
20	CLA	A	1811	65/65	0.89	0.30	20,20,20,20	0
20	CLA	B	1768	65/65	0.89	0.26	20,20,20,20	0
20	CLA	A	1779	55/65	0.89	0.23	20,20,20,20	0
20	CLA	B	1757	65/65	0.89	0.29	20,20,20,20	0
20	CLA	A	1764	65/65	0.89	0.33	20,20,20,20	0
20	CLA	B	1743	65/65	0.89	0.23	20,20,20,20	0
20	CLA	B	1737	65/65	0.89	0.25	20,20,20,20	0
20	CLA	B	1758	65/65	0.89	0.30	20,20,20,20	0
20	CLA	B	1760	50/65	0.89	0.24	20,20,20,20	0
20	CLA	B	1738	65/65	0.90	0.27	20,20,20,20	0
20	CLA	B	1786	65/65	0.90	0.27	20,20,20,20	0
23	PQN	B	1773	33/33	0.90	0.29	20,20,20,20	0
20	CLA	B	1739	65/65	0.90	0.28	20,20,20,20	0
20	CLA	A	1783	65/65	0.91	0.30	20,20,20,20	0
20	CLA	B	1754	54/65	0.91	0.23	20,20,20,20	0
25	SF4	C	1082	8/8	0.97	0.09	20,20,20,20	0
25	SF4	C	1083	8/8	0.98	0.06	20,20,20,20	0
25	SF4	B	1784	8/8	0.99	0.06	20,20,20,20	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.

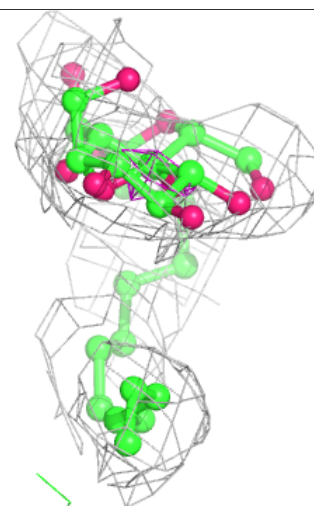
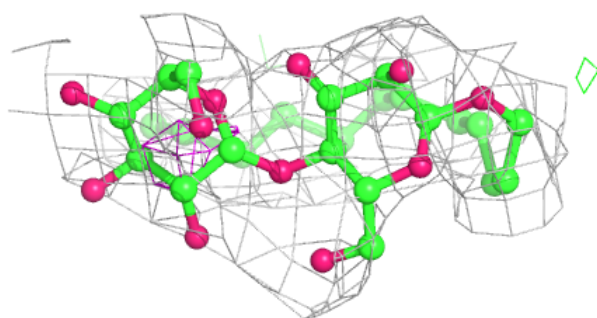
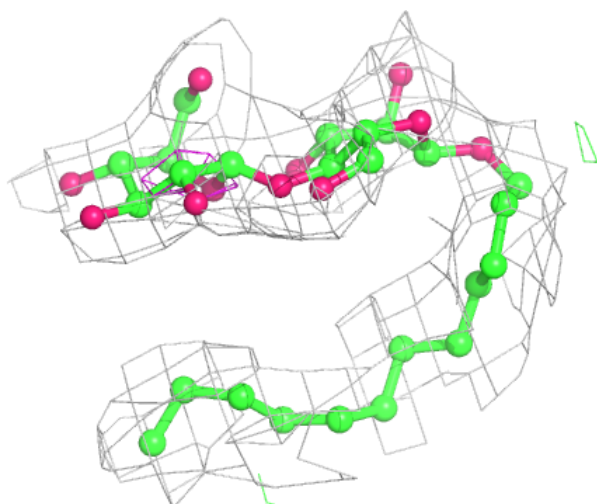
**Electron density around CLA J 1046:**

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



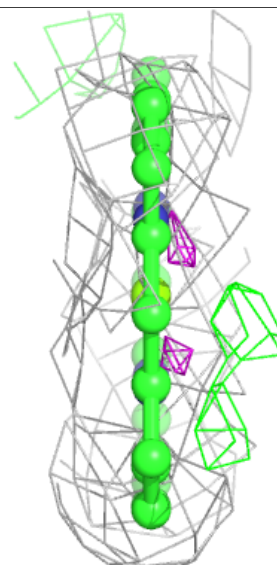
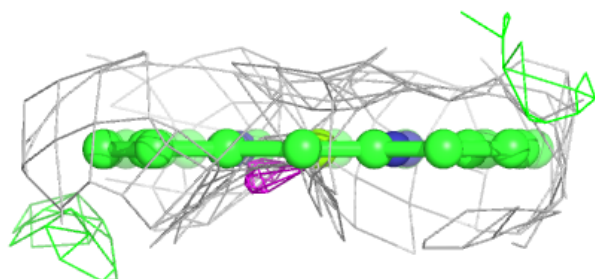
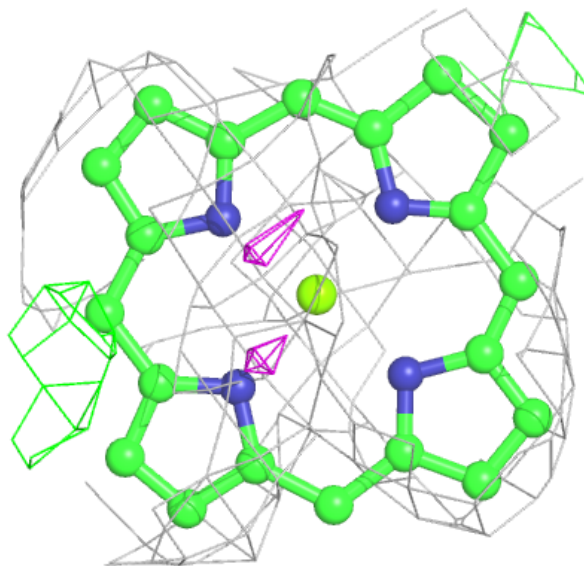
**Electron density around LMU A 7013:**

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

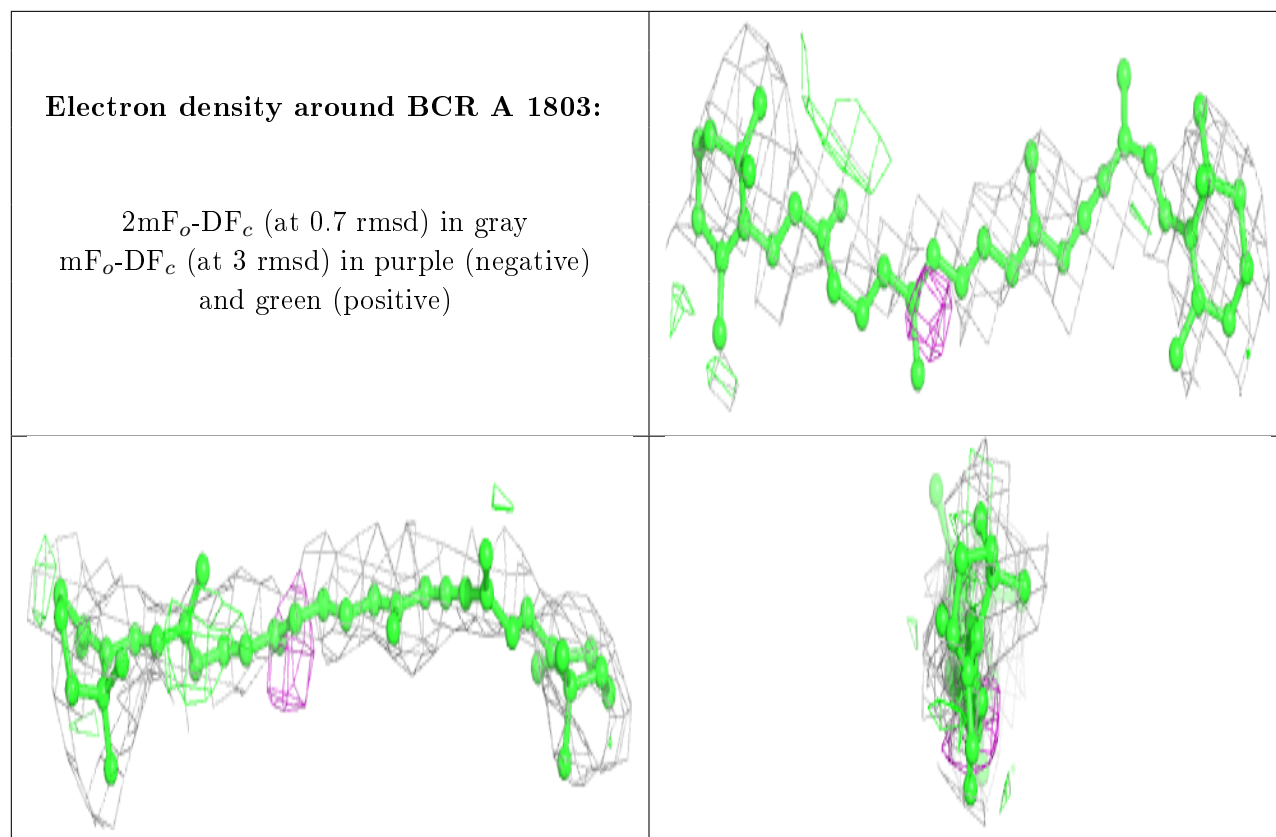


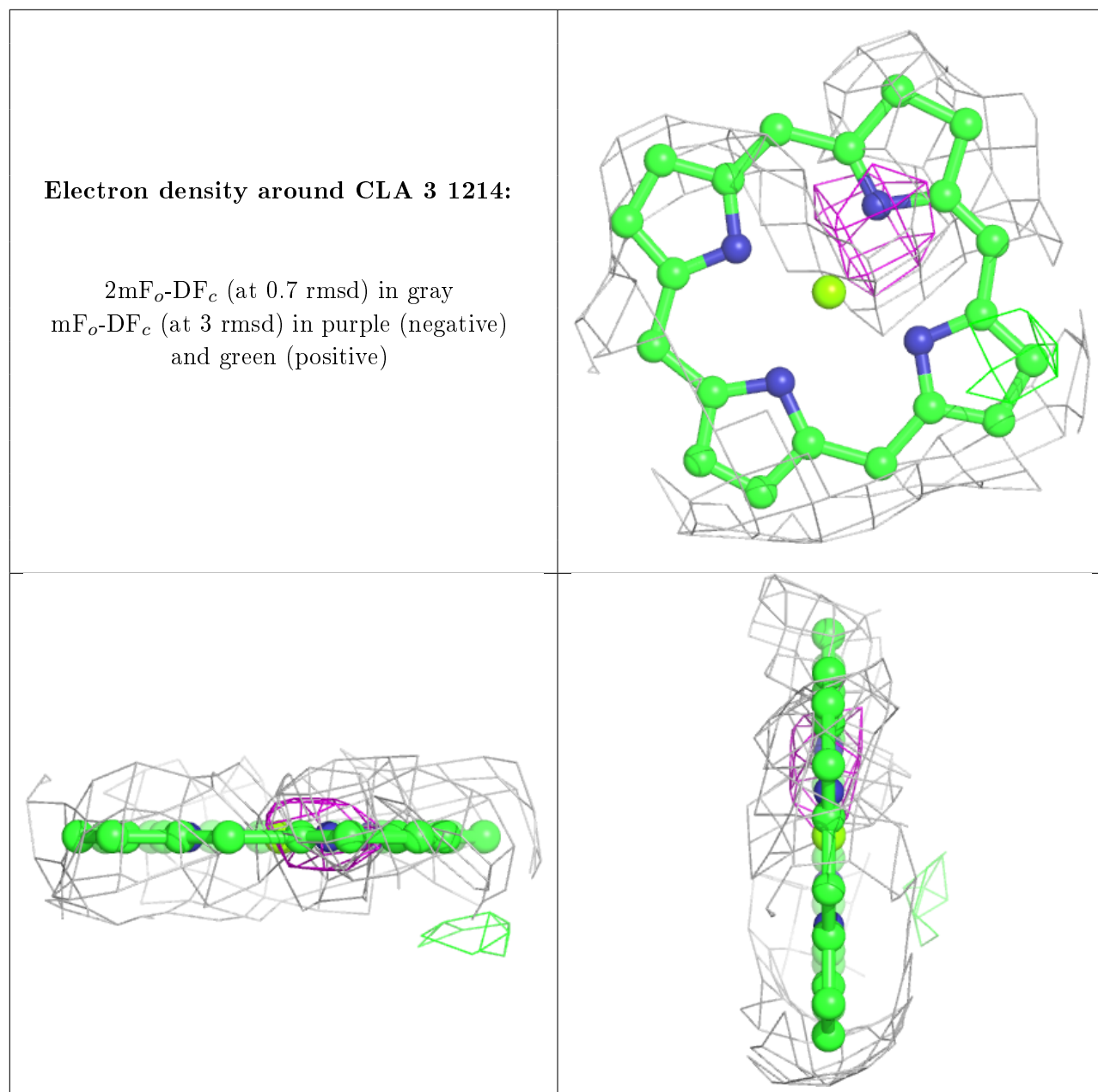
**Electron density around CLA 4 4003:**

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



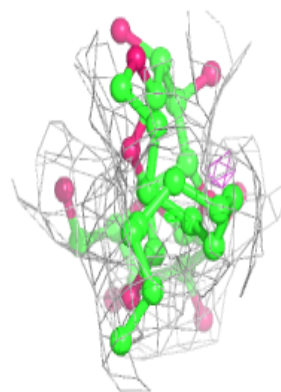
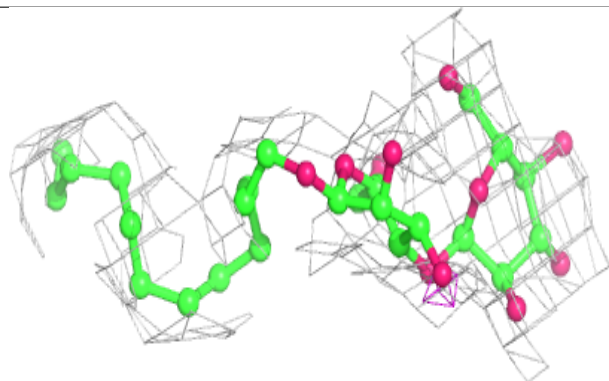
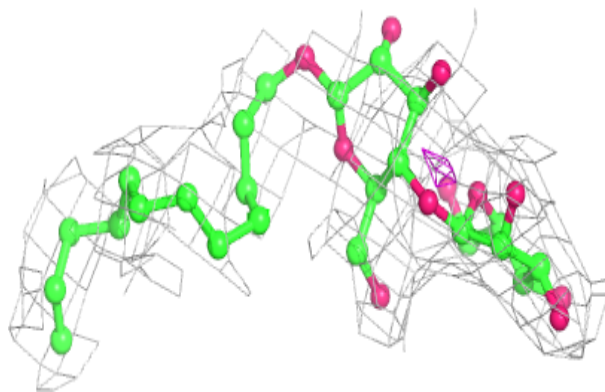






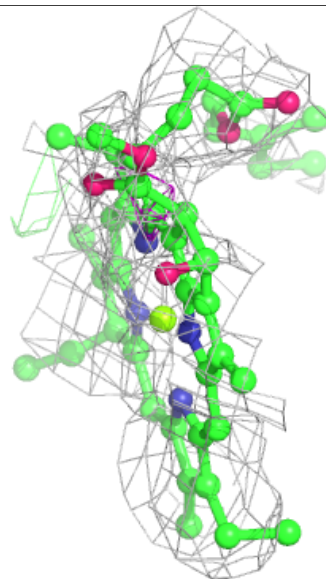
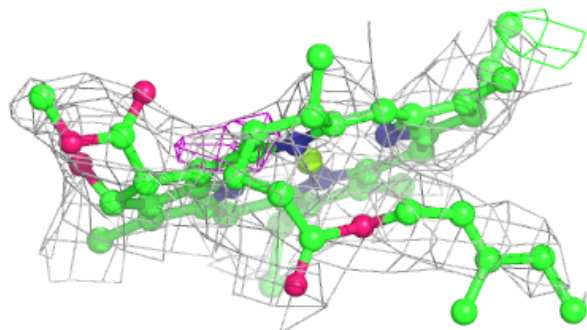
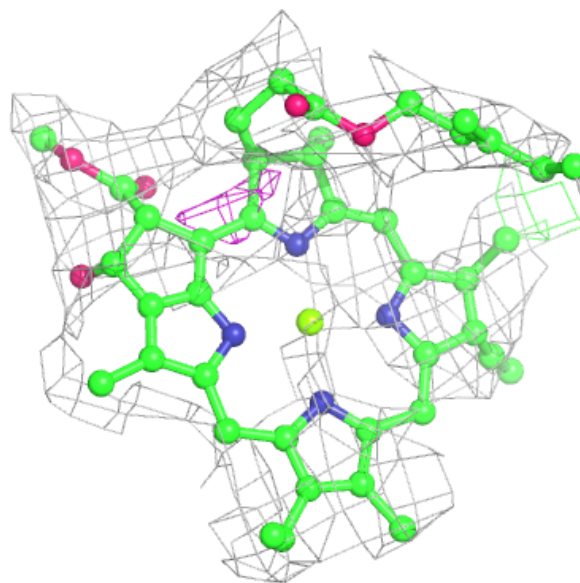
**Electron density around LMU 2 1225:**

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



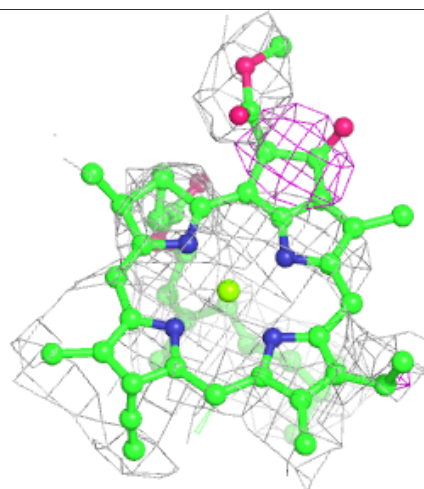
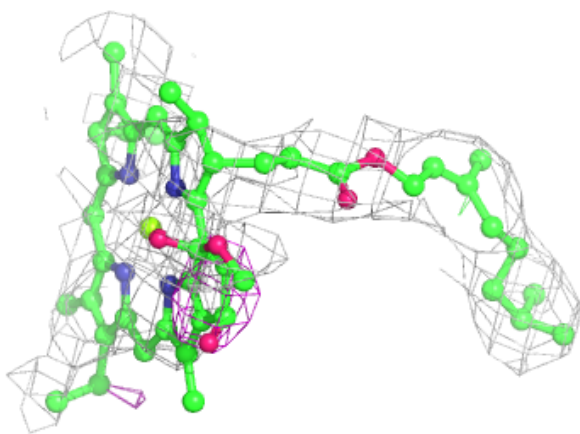
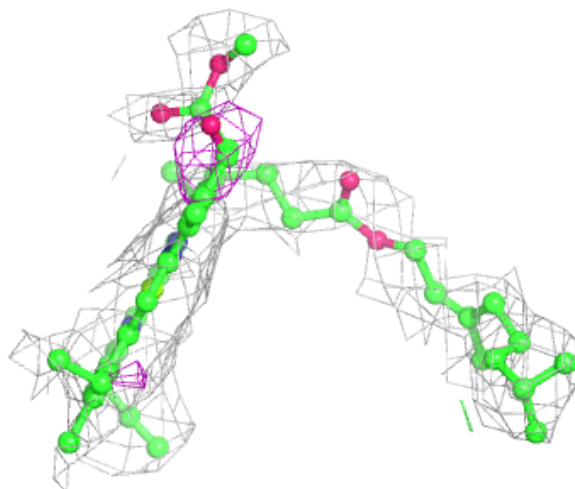
**Electron density around CLA B 1766:**

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



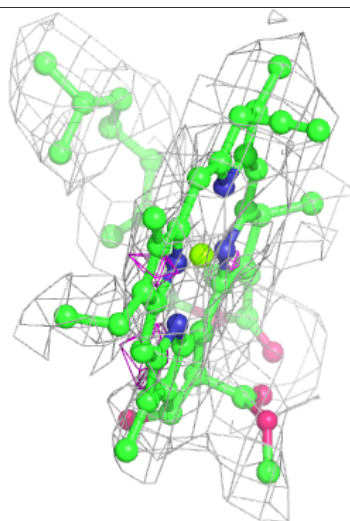
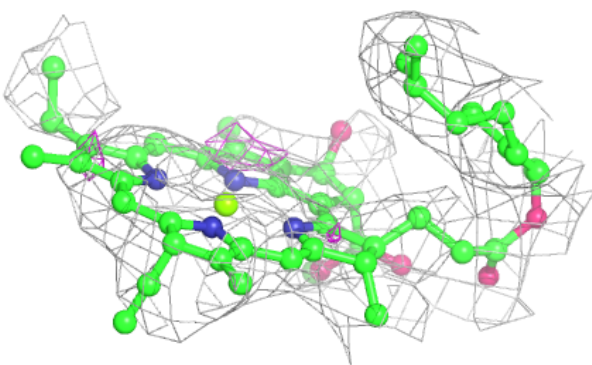
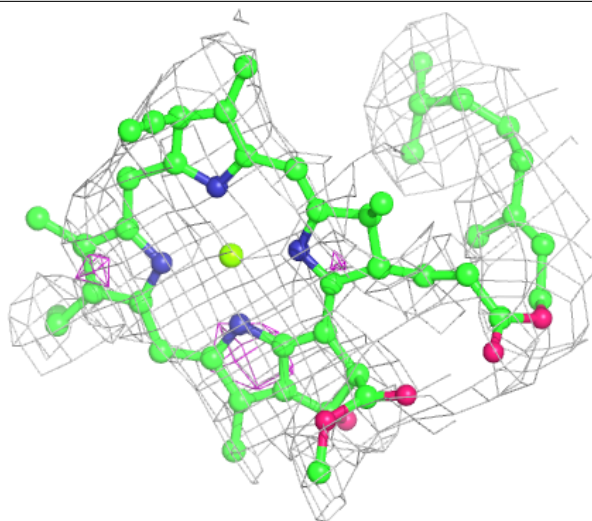
**Electron density around CLA A 1801:**

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



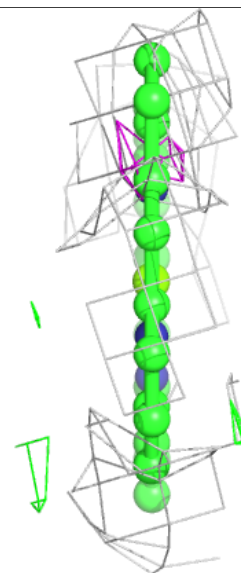
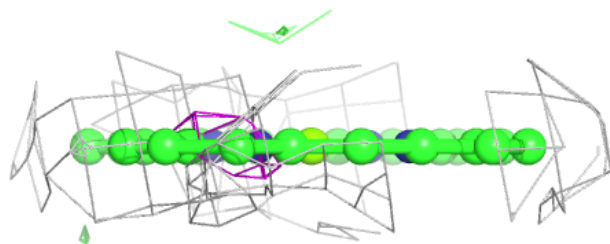
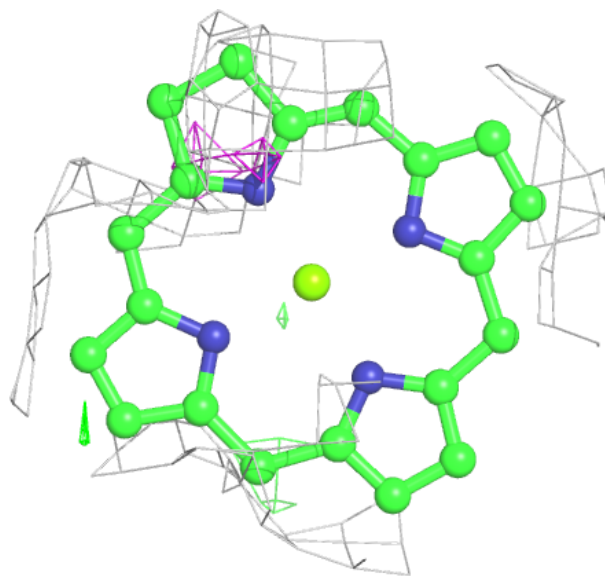
**Electron density around CLA L 1505:**

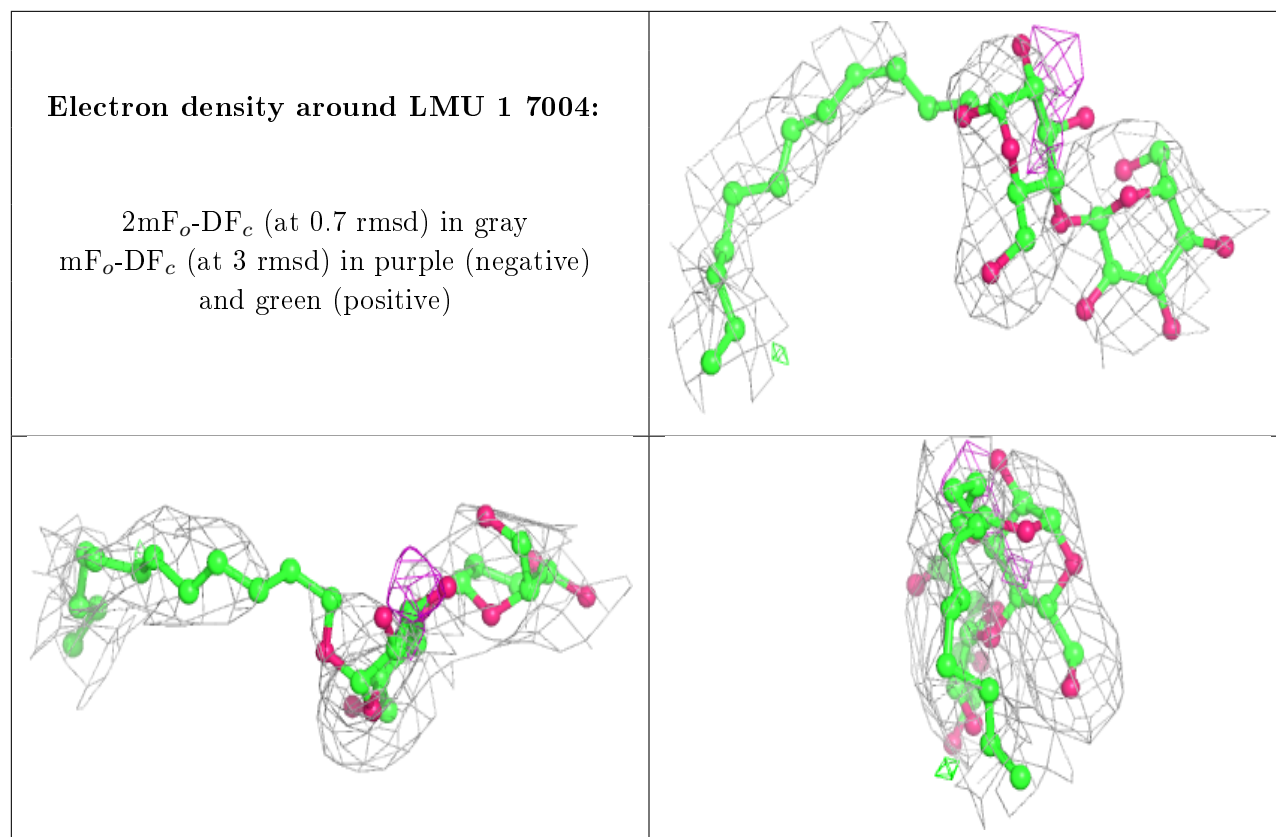
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA 3 1217:**

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

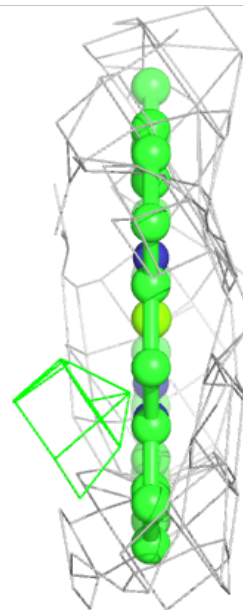
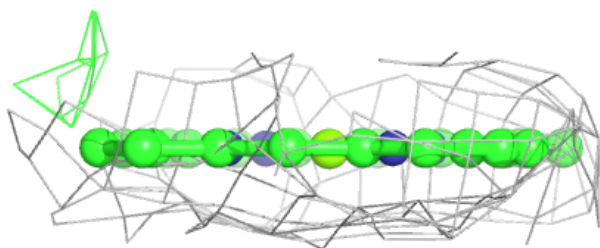
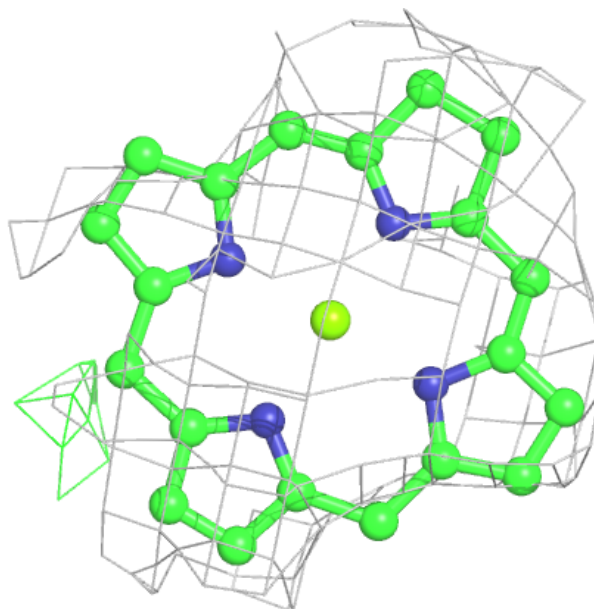






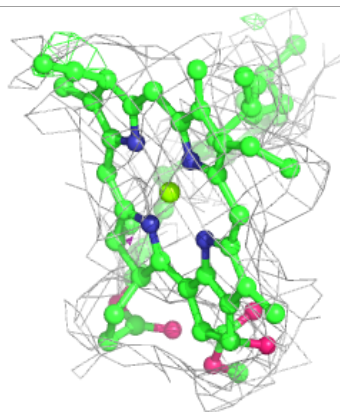
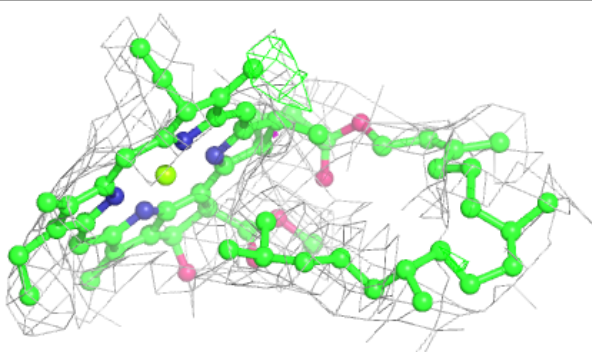
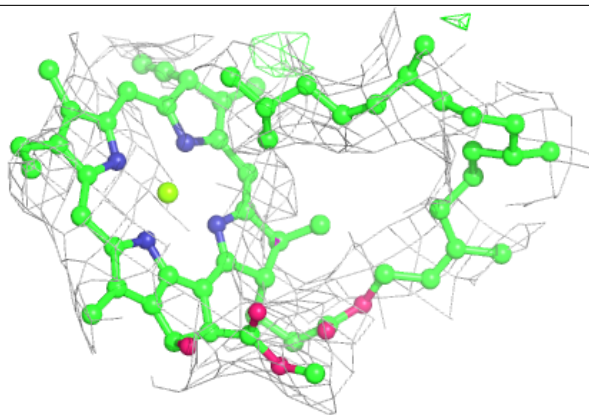
**Electron density around CLA 2 1216:**

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

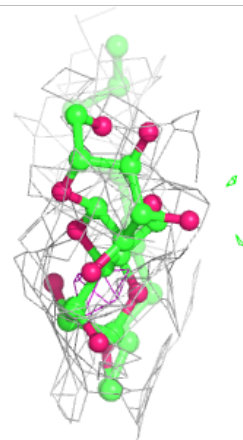
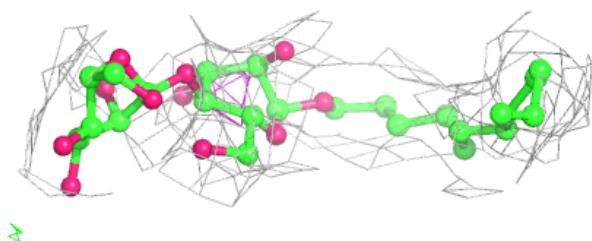
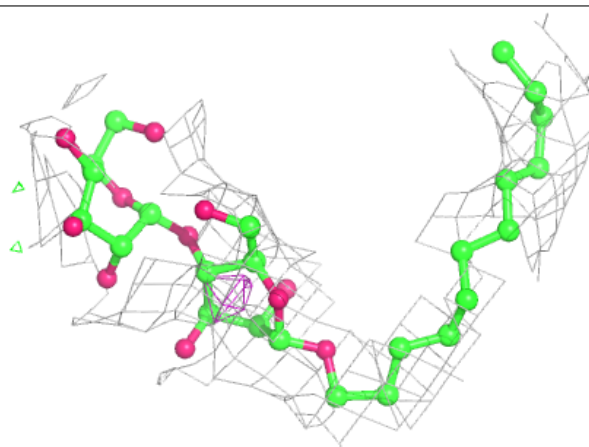


**Electron density around CLA A 1797:**

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

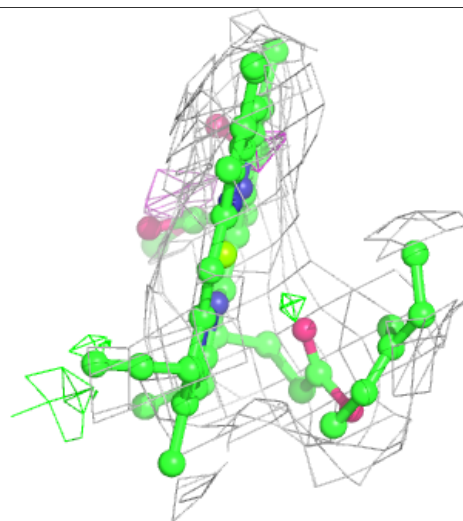
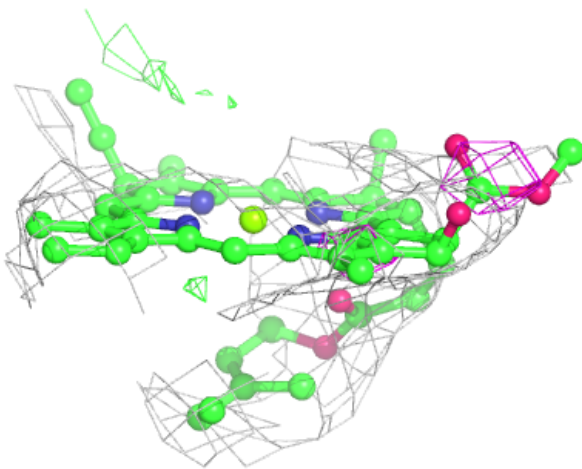
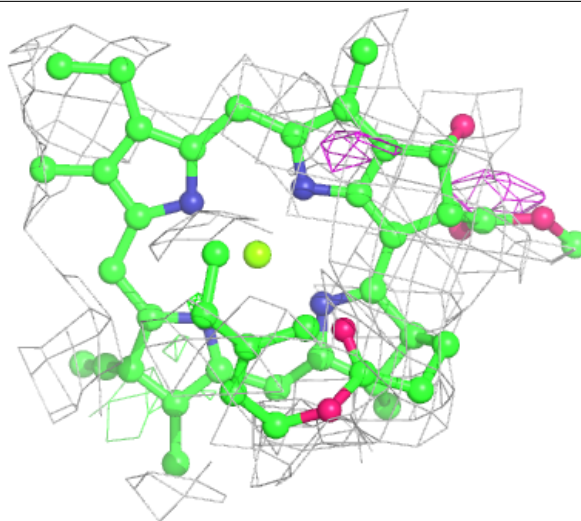
**Electron density around LMU A 7041:**

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



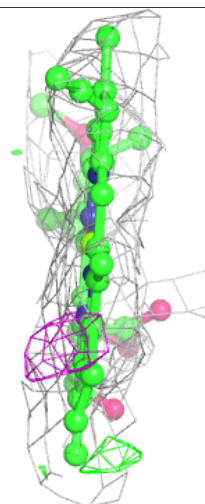
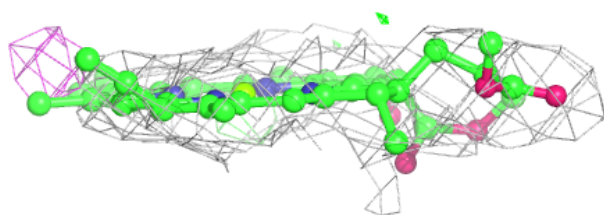
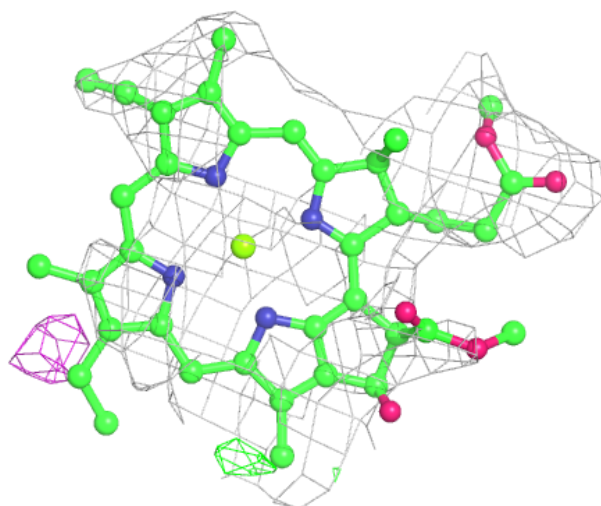
**Electron density around CLA 2 1212:**

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



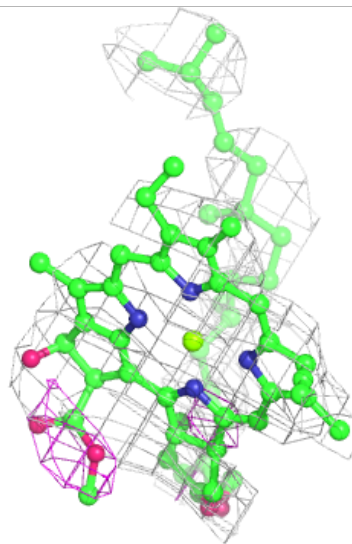
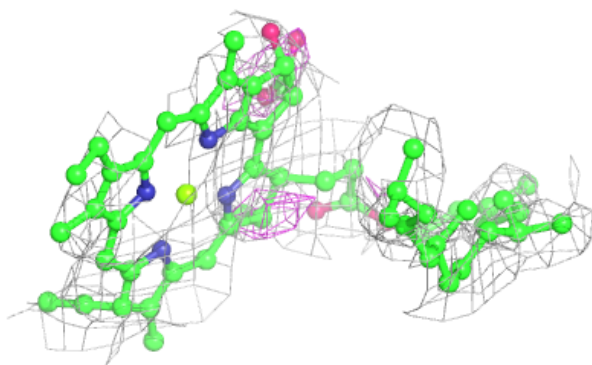
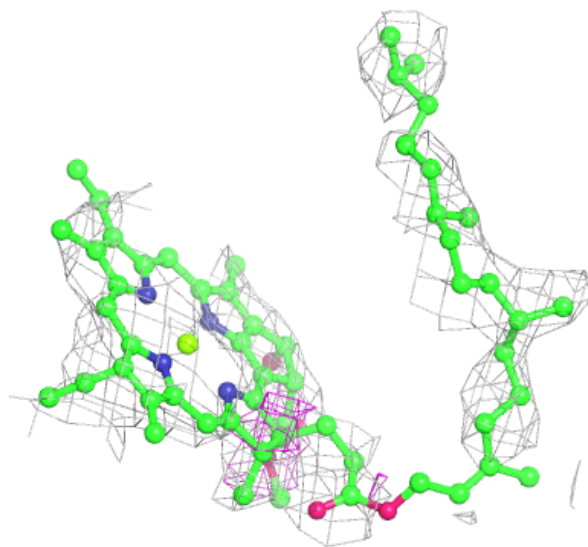
**Electron density around CLA B 1746:**

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



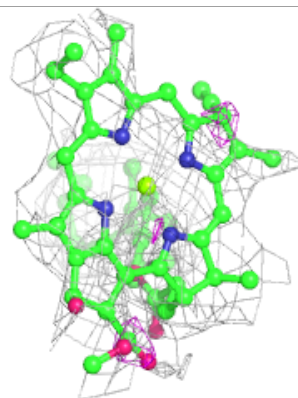
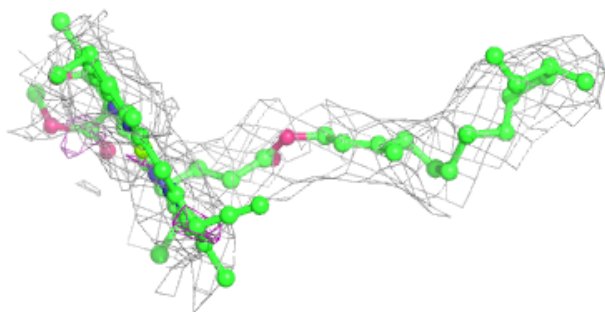
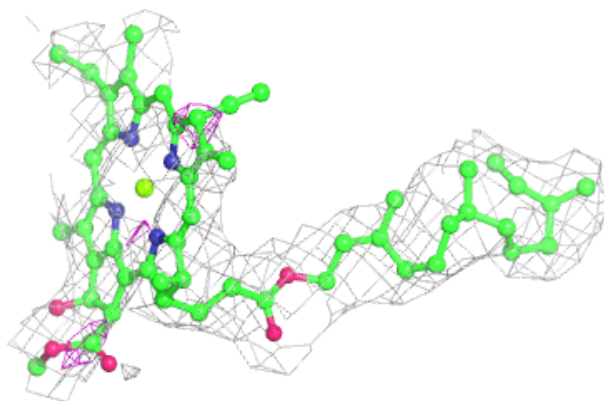
**Electron density around CLA 3 1219:**

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

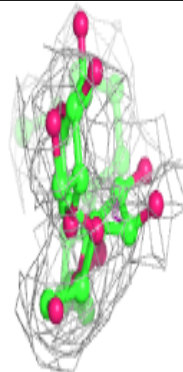
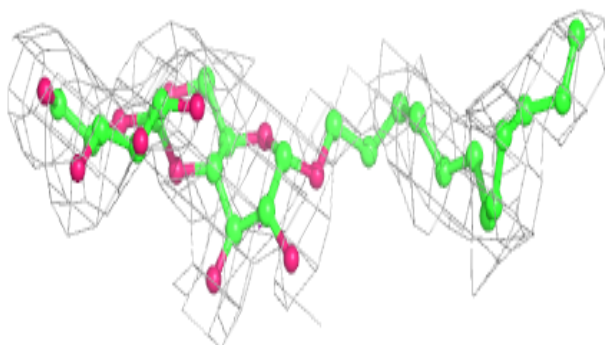
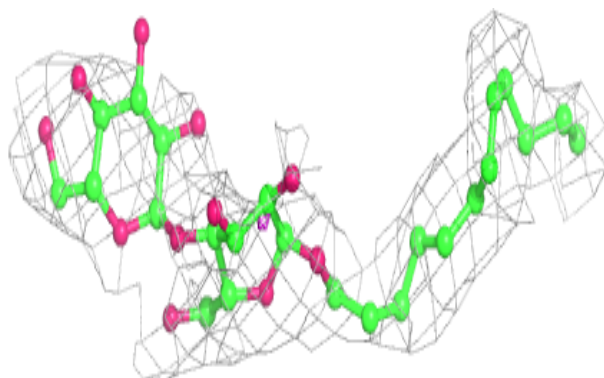


**Electron density around CLA J 1044:**

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

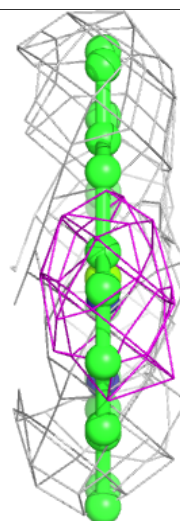
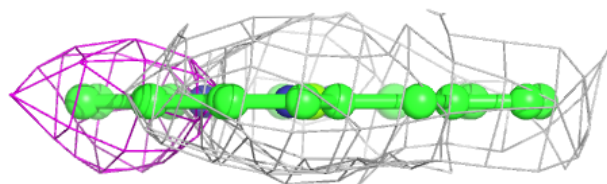
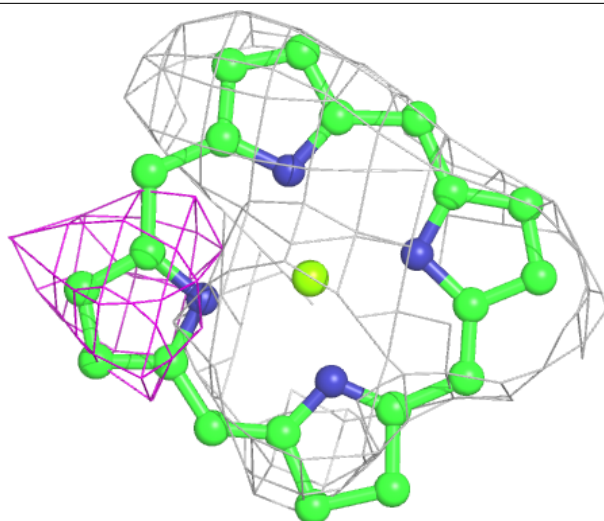
**Electron density around LMU A 7038:**

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



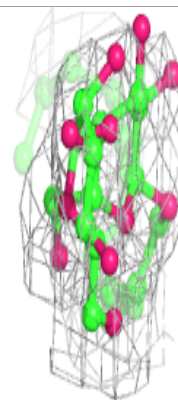
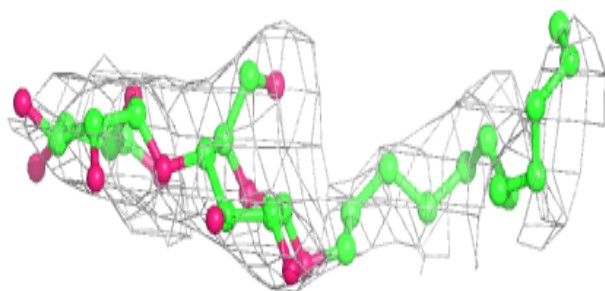
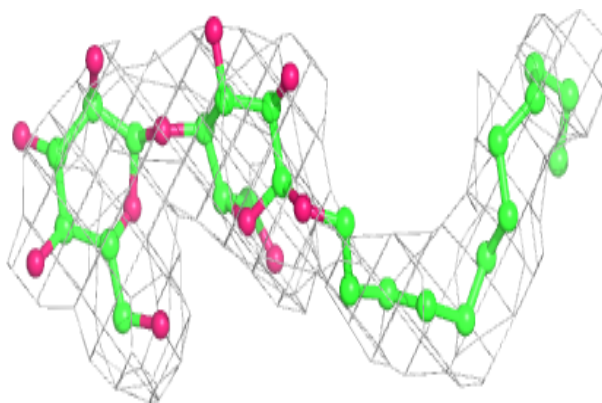
**Electron density around CLA 3 3014:**

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



**Electron density around LMU A 7015:**

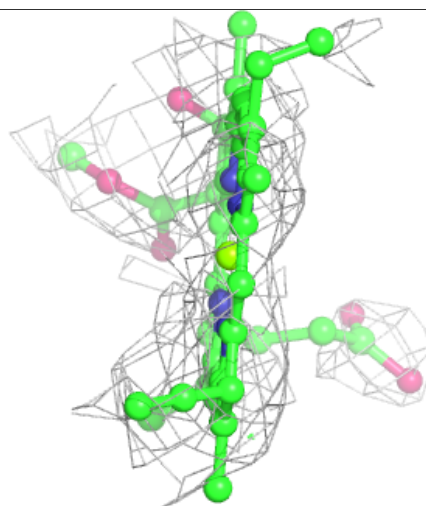
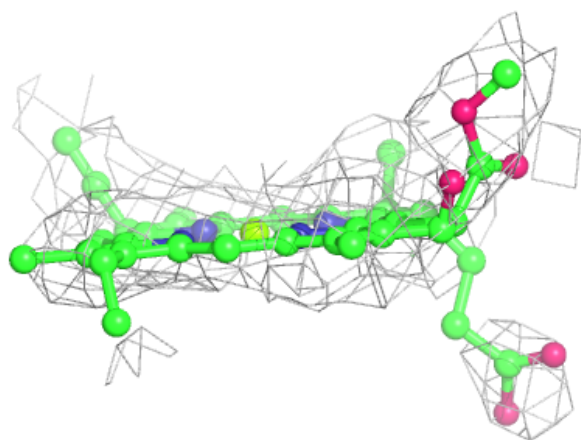
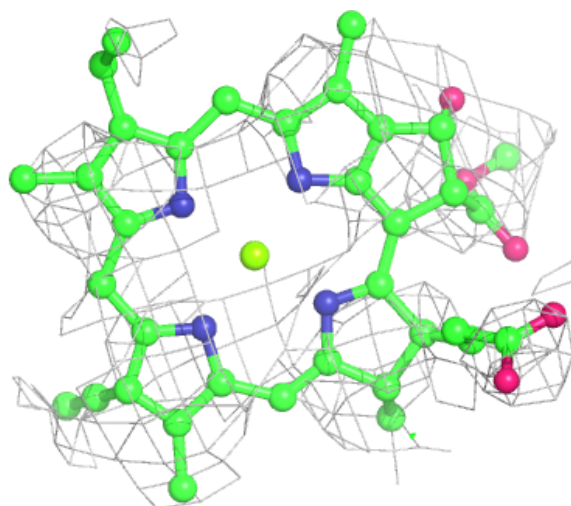
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





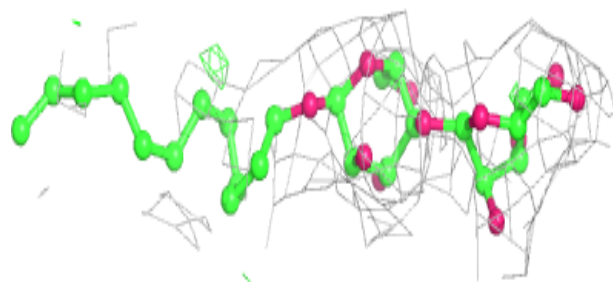
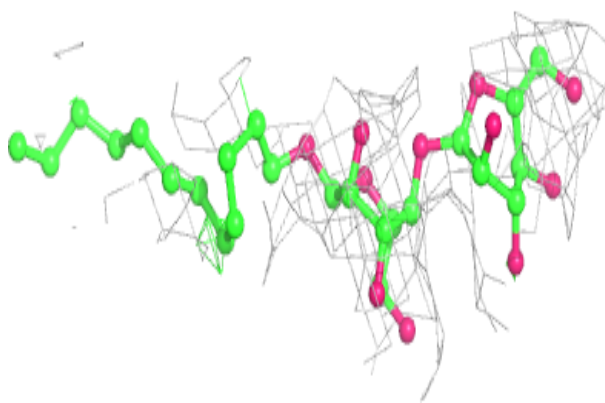
**Electron density around CLA B 1765:**

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



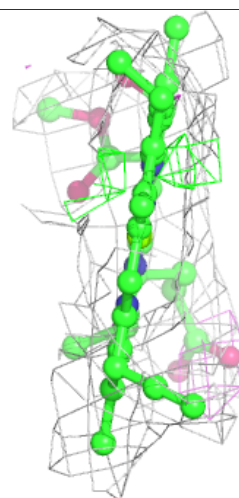
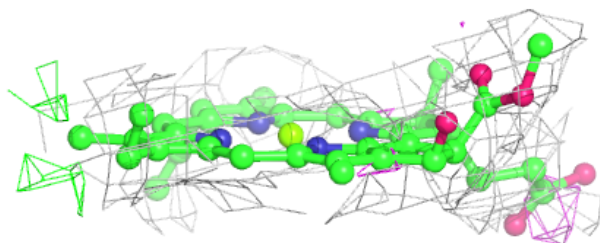
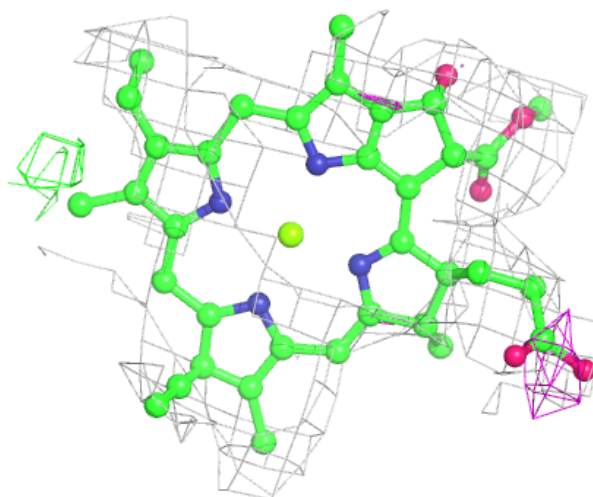
**Electron density around LMU A 7037:**

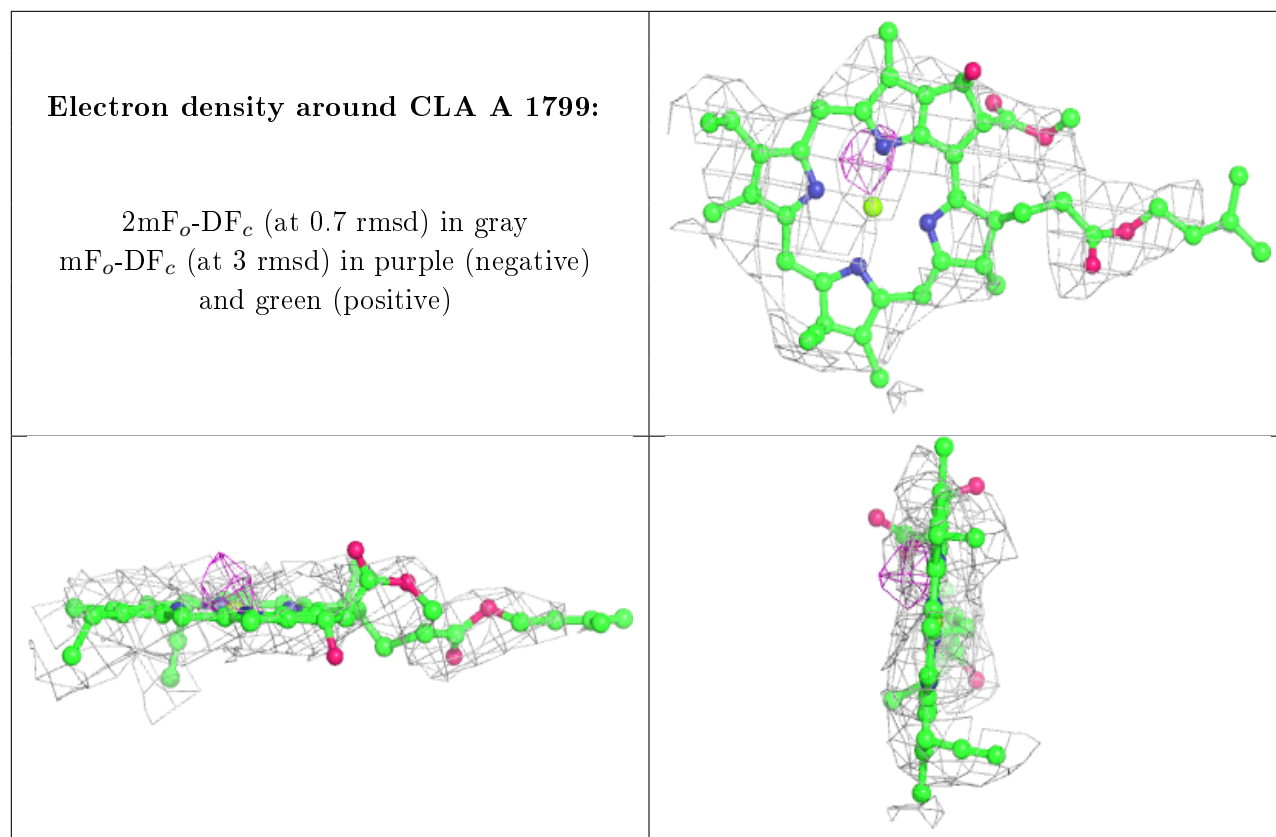
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA K 1142:**

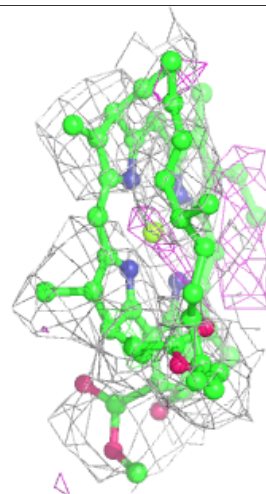
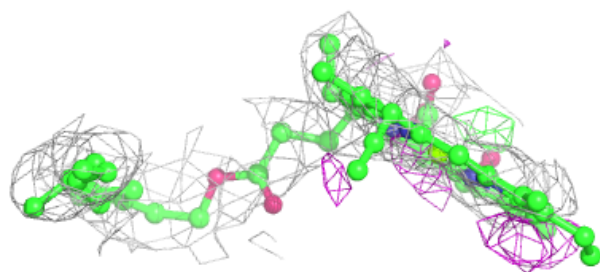
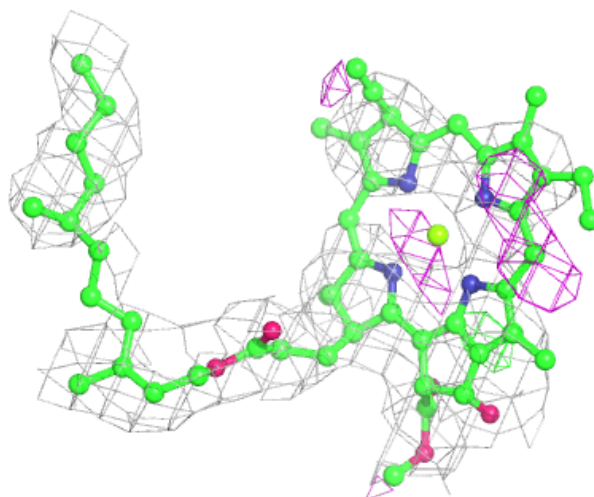
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

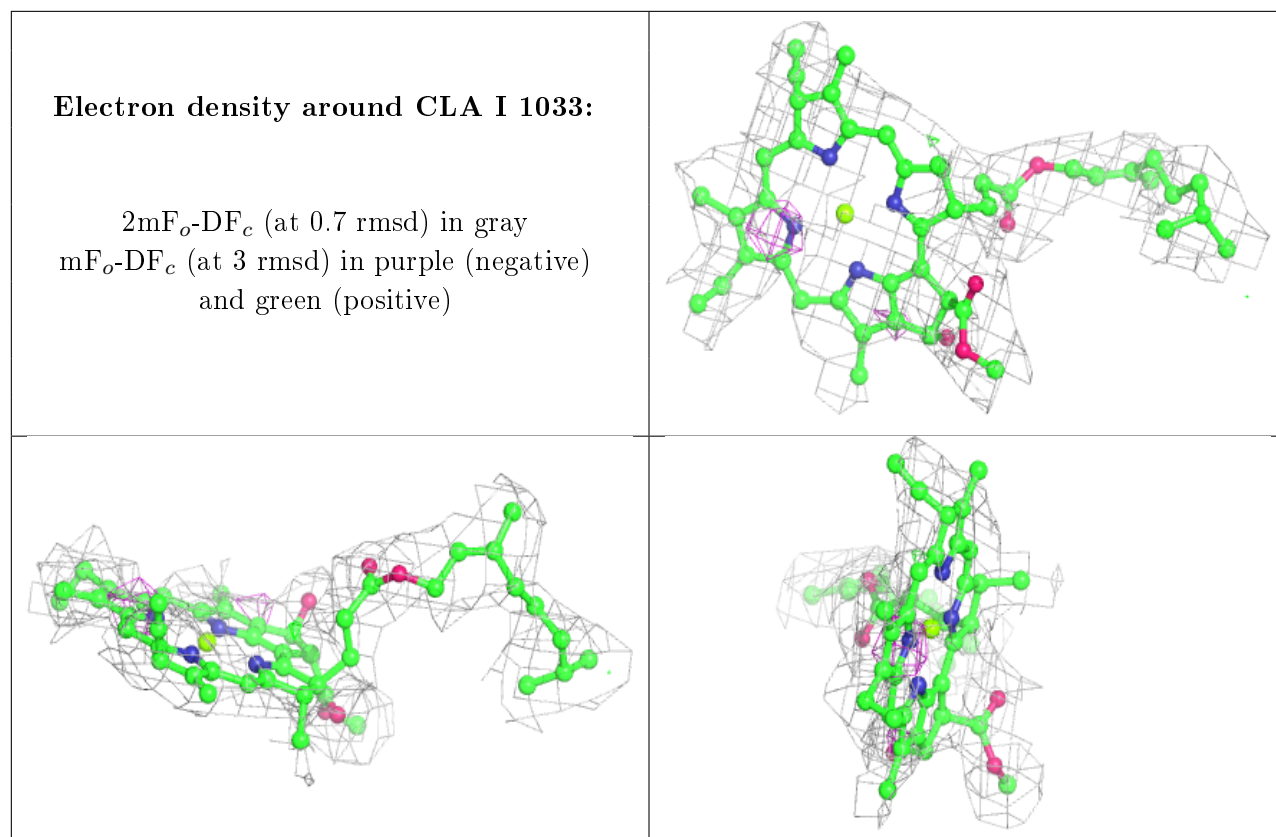




**Electron density around CLA B 1755:**

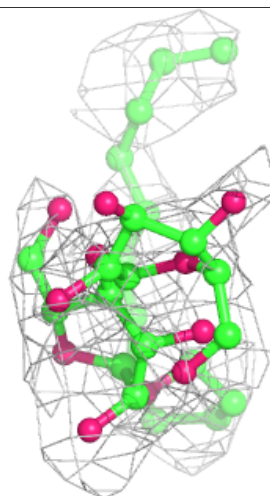
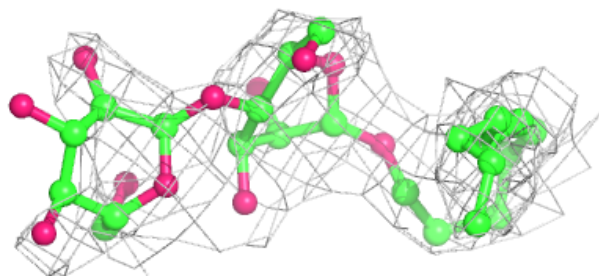
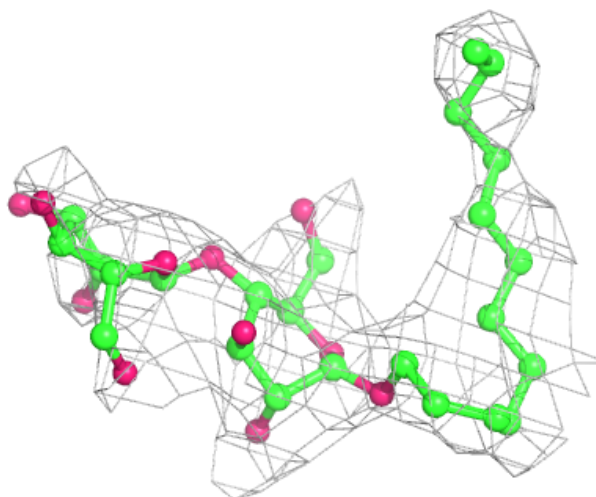
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





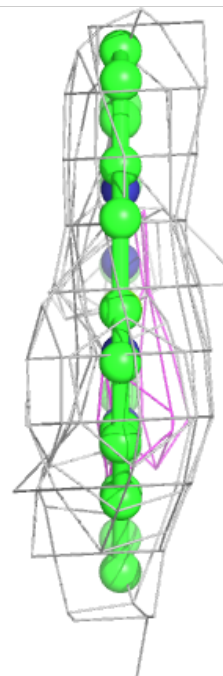
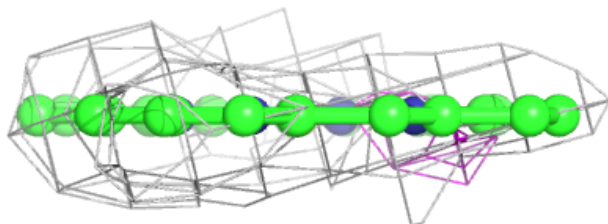
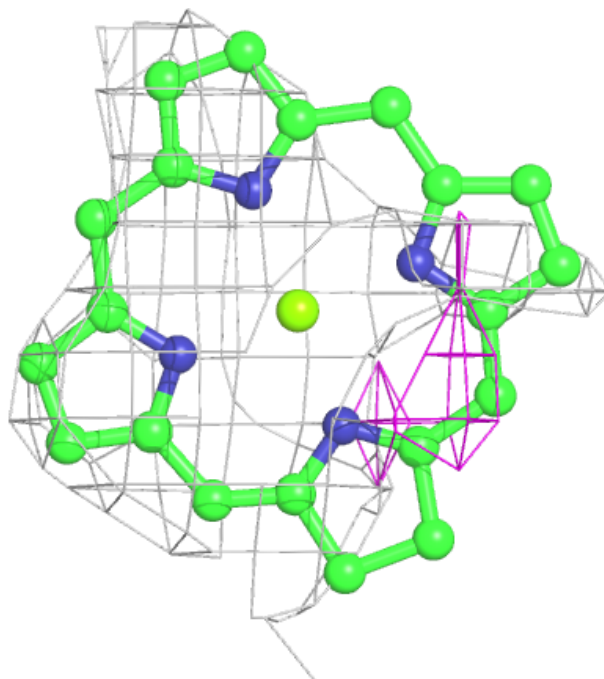
**Electron density around LMU R 1057:**

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



**Electron density around CLA 2 1227:**

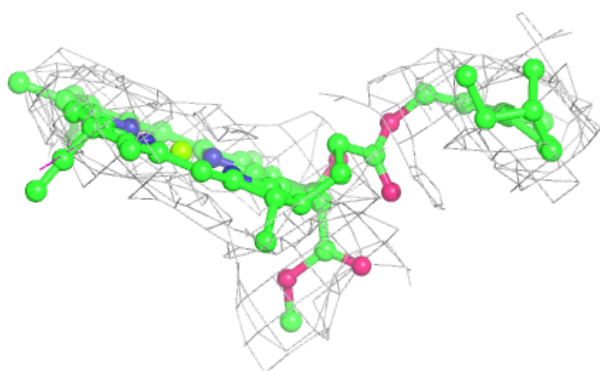
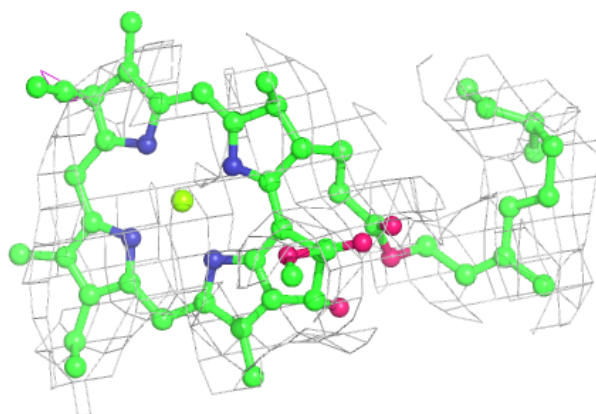
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



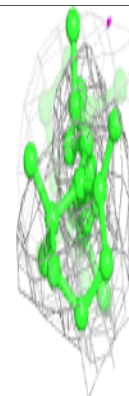
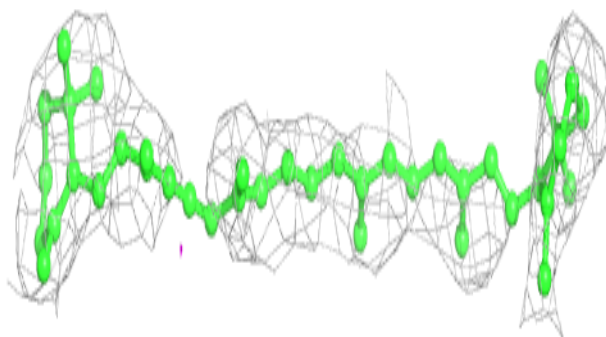
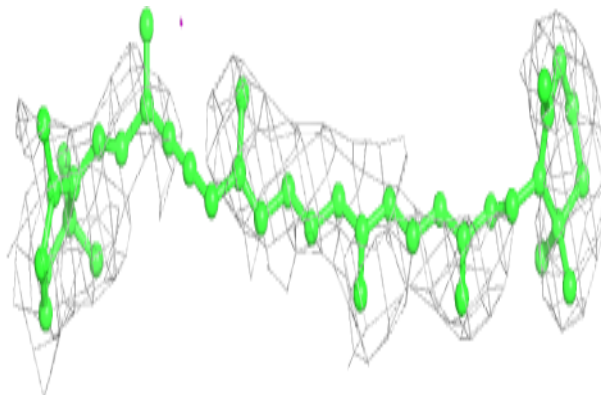


**Electron density around CLA 2 1220:**

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

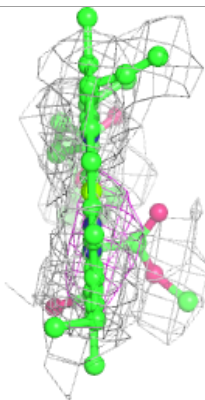
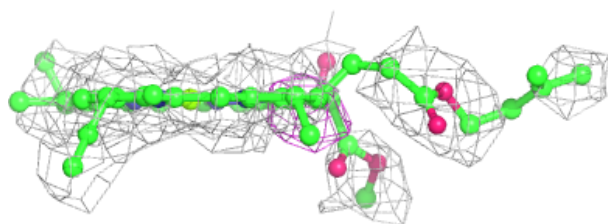
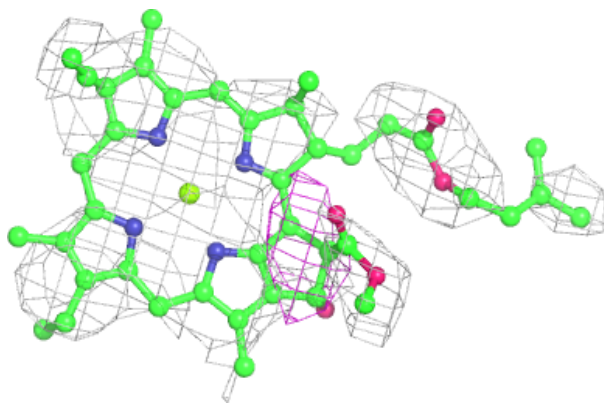
**Electron density around BCR A 1808:**

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

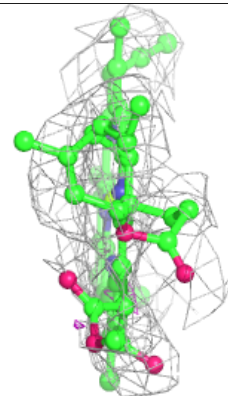
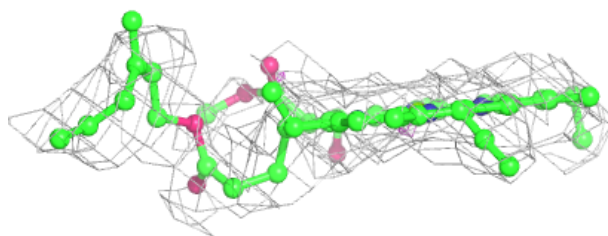
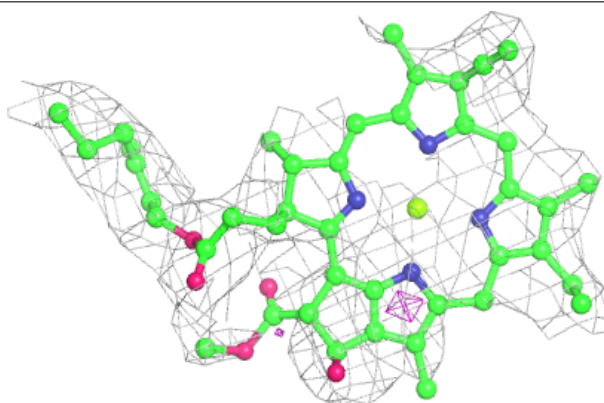


**Electron density around CLA 4 1200:**

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

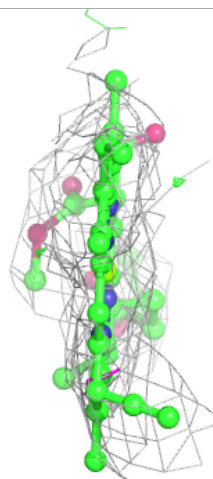
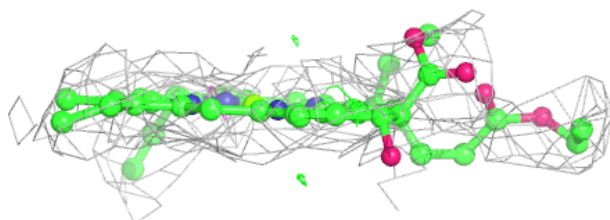
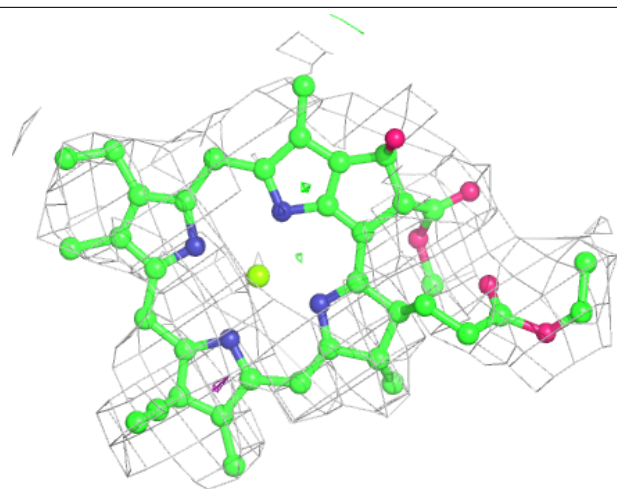
**Electron density around CLA 4 4007:**

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



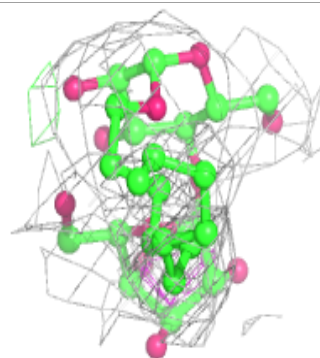
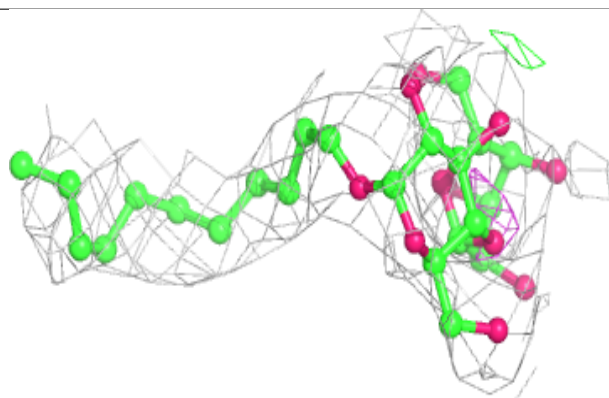
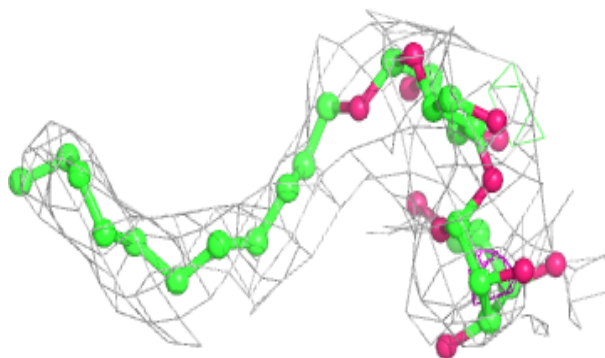
**Electron density around CLA 4 4014:**

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



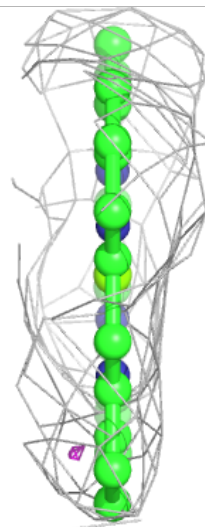
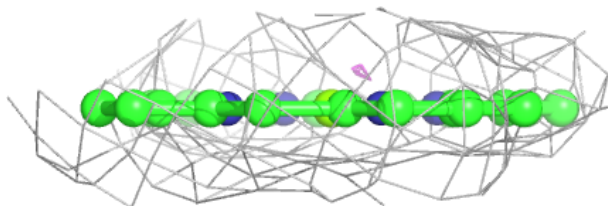
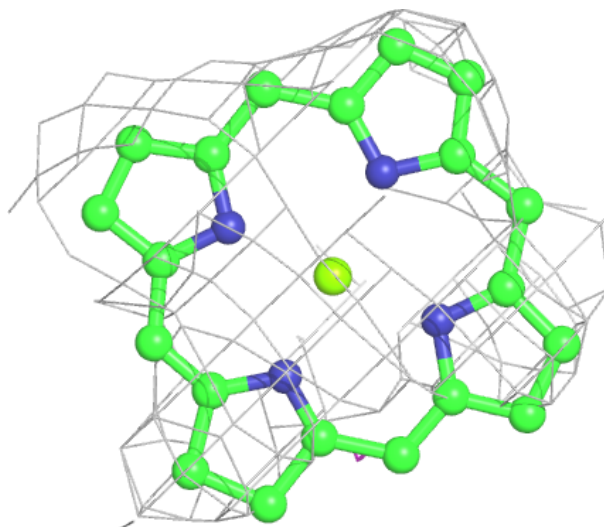
**Electron density around LMU A 7009:**

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



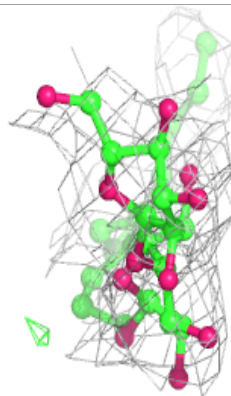
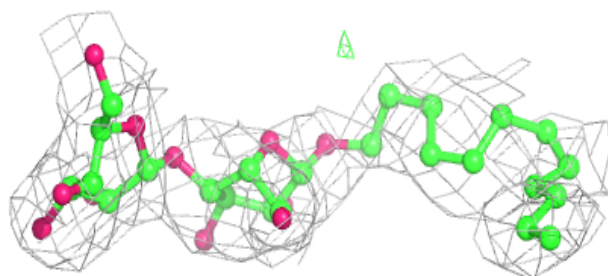
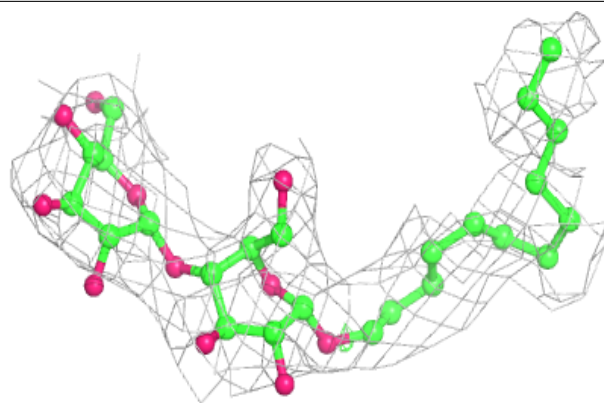
**Electron density around CLA 4 1202:**

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

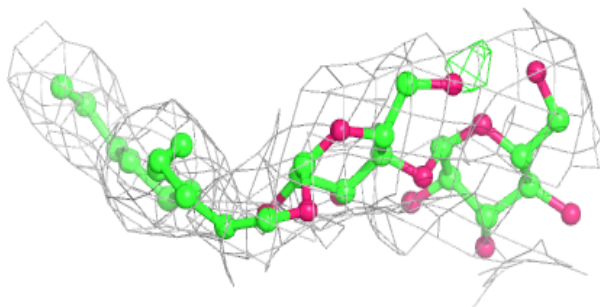
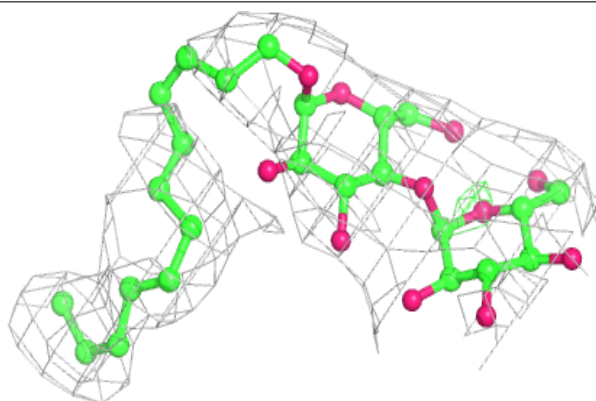


**Electron density around LMU A 7030:**

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

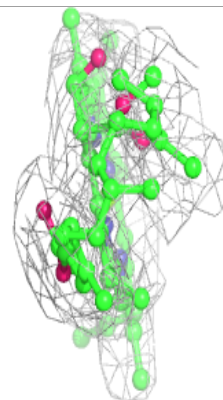
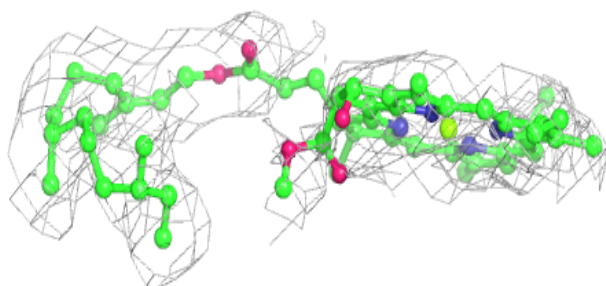
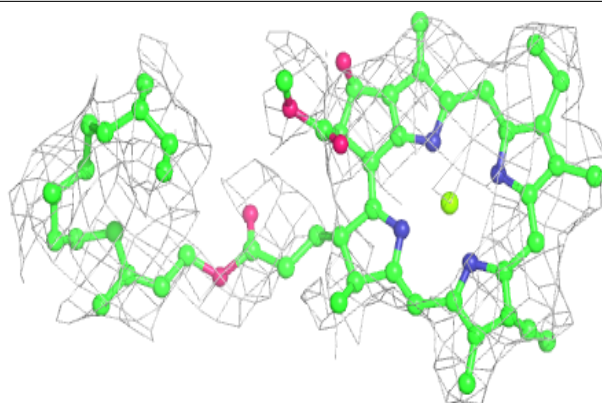
**Electron density around LMU A 7025:**

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

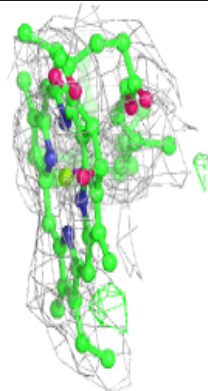
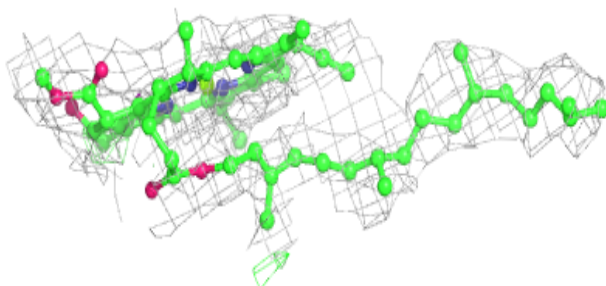
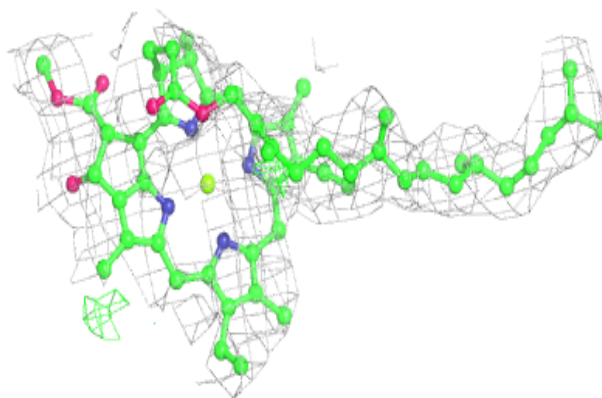


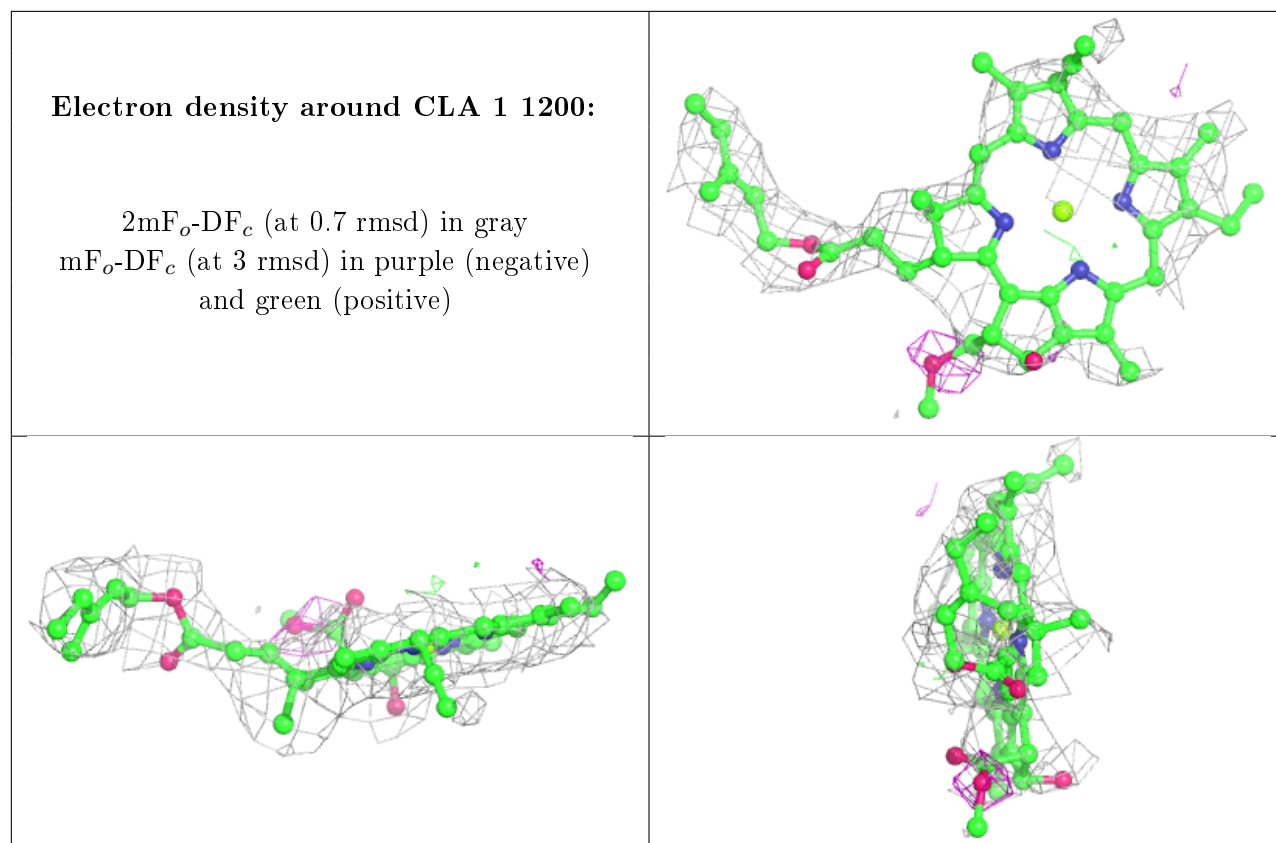
**Electron density around CLA 1 1198:**

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

**Electron density around CLA 2 1218:**

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

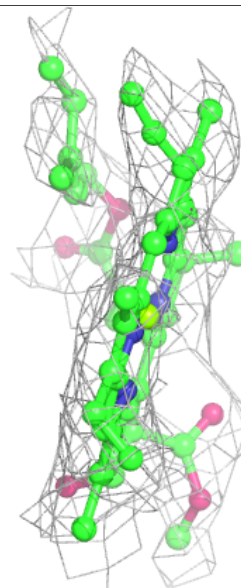
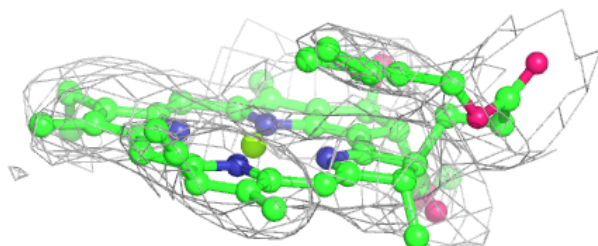
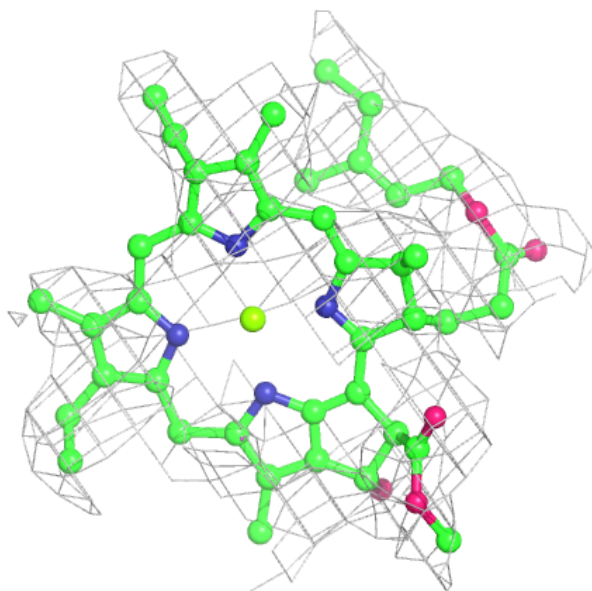






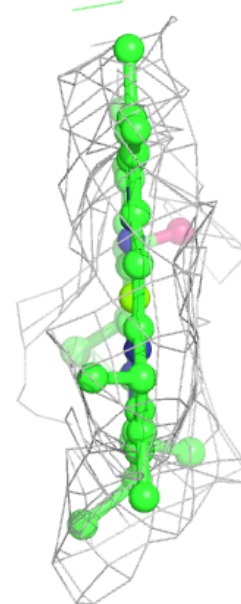
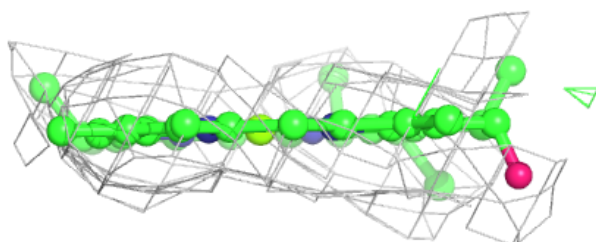
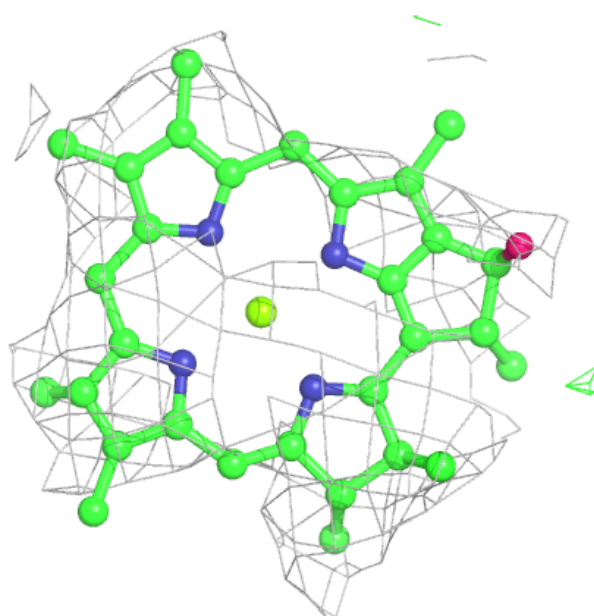
**Electron density around CLA G 1099:**

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



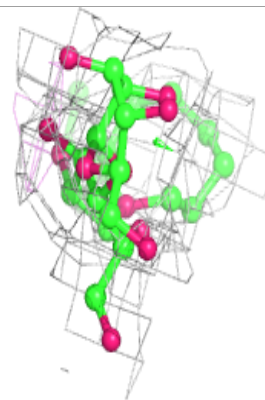
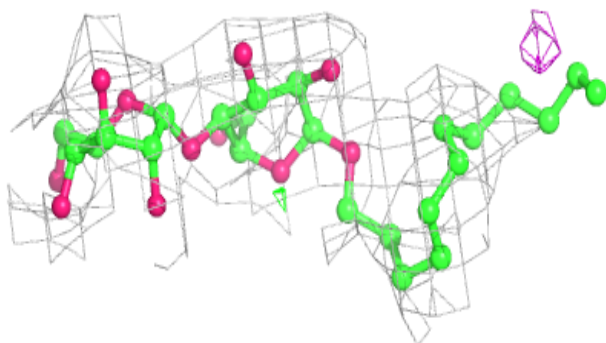
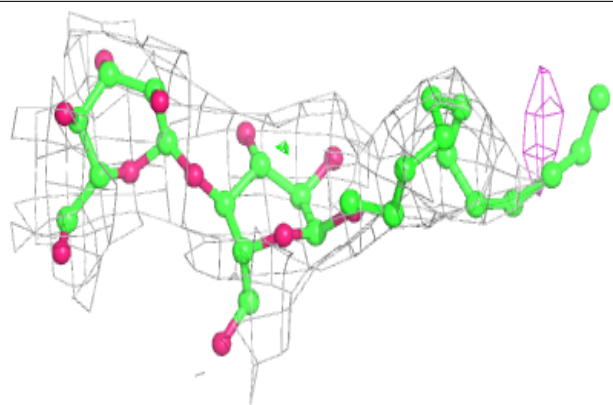
**Electron density around CLA A 1775:**

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

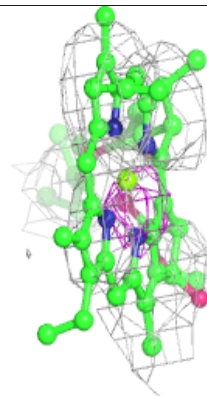
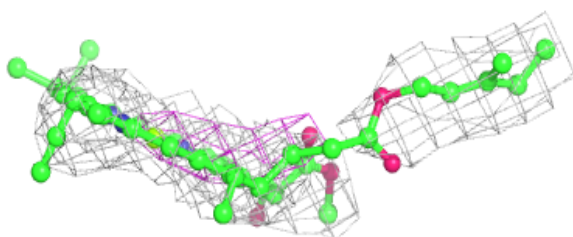
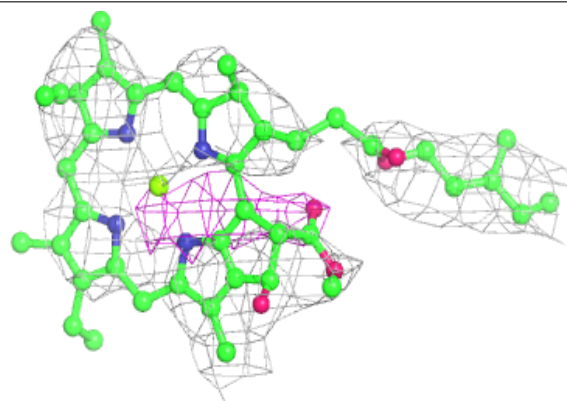


**Electron density around LMU 3 7005:**

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

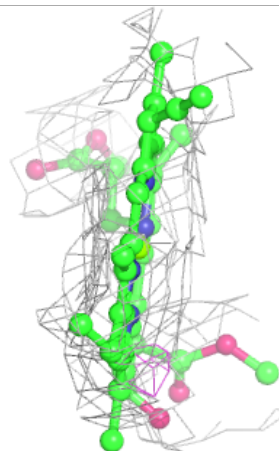
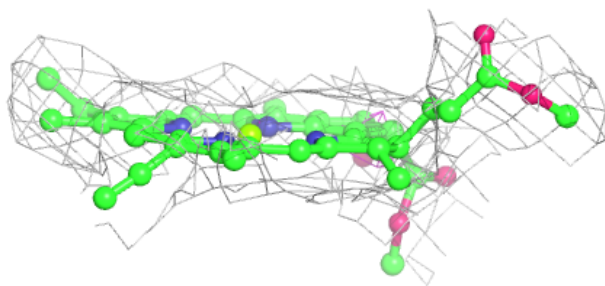
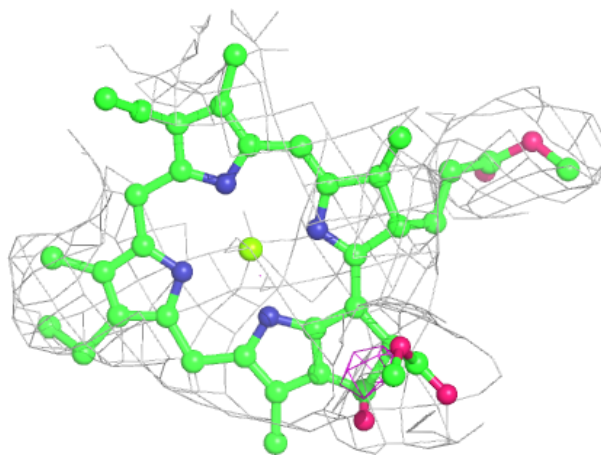
**Electron density around CLA 1 1197:**

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



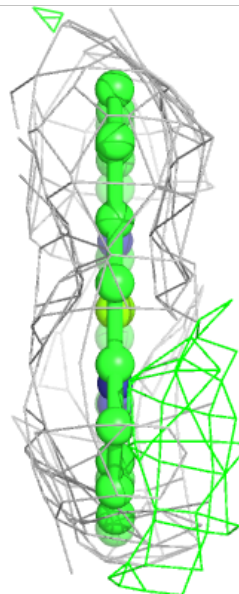
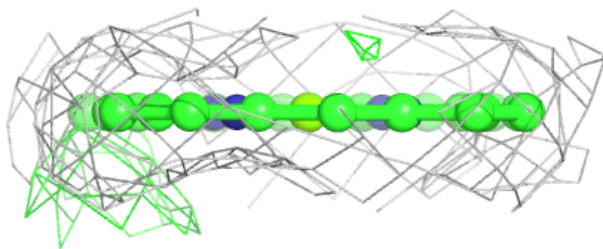
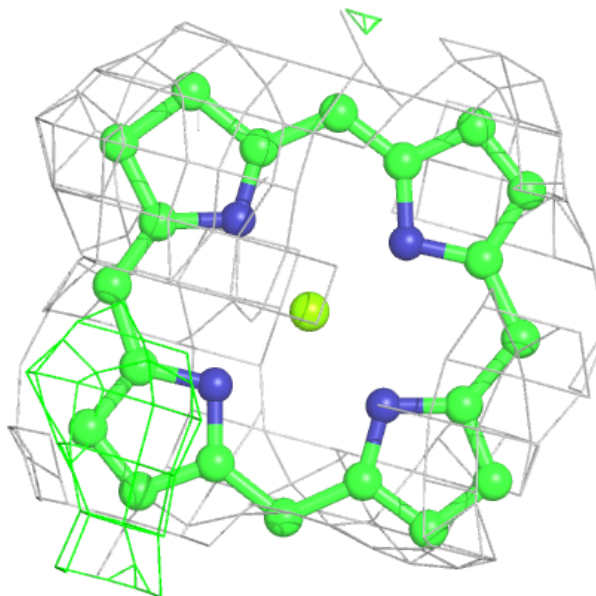
**Electron density around CLA 1 1187:**

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



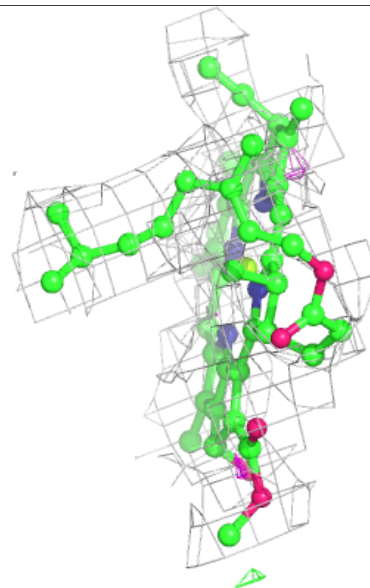
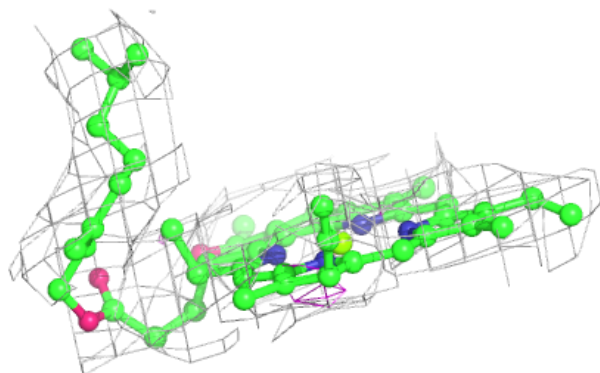
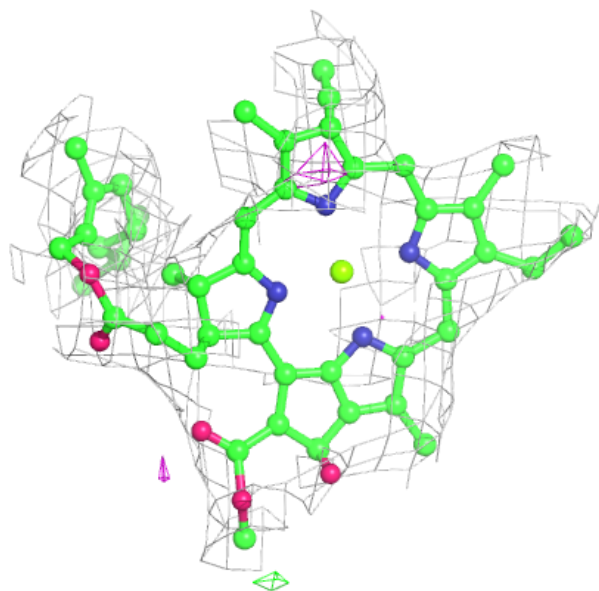
**Electron density around CLA 1 1194:**

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



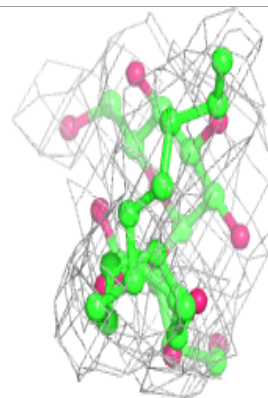
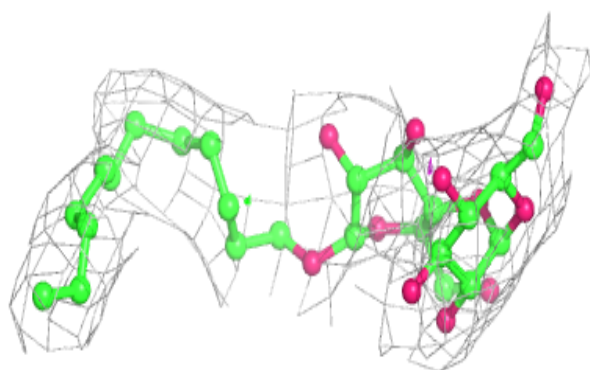
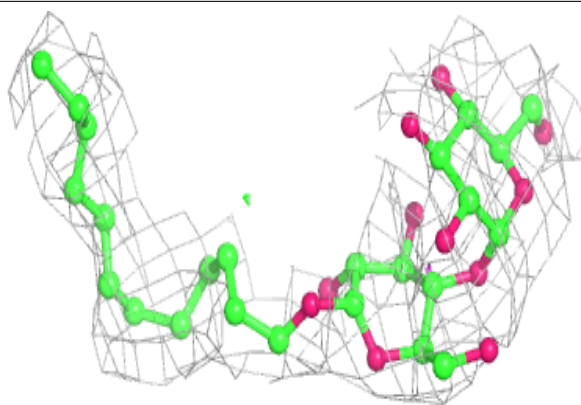
**Electron density around CLA A 1815:**

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

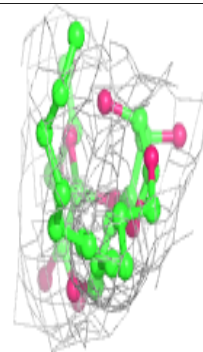
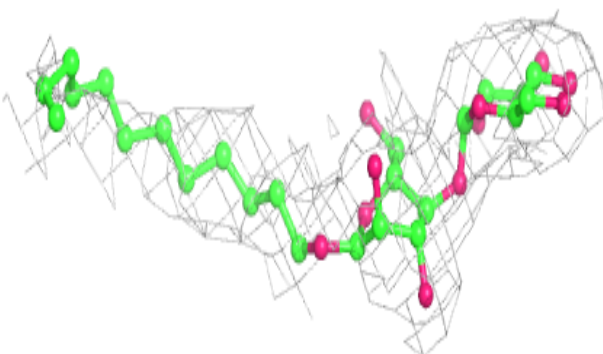
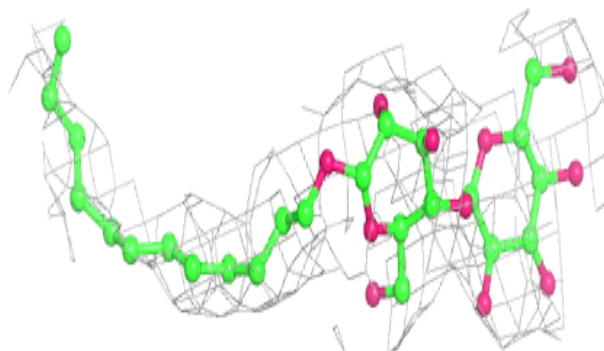


**Electron density around LMU A 7031:**

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

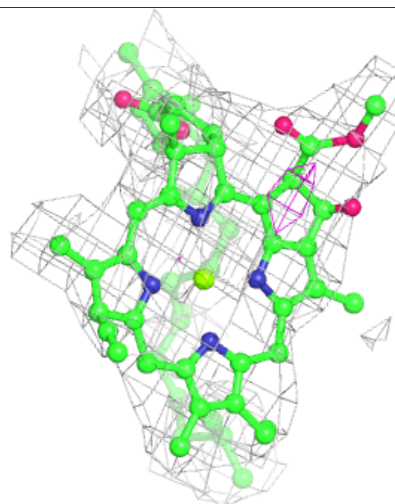
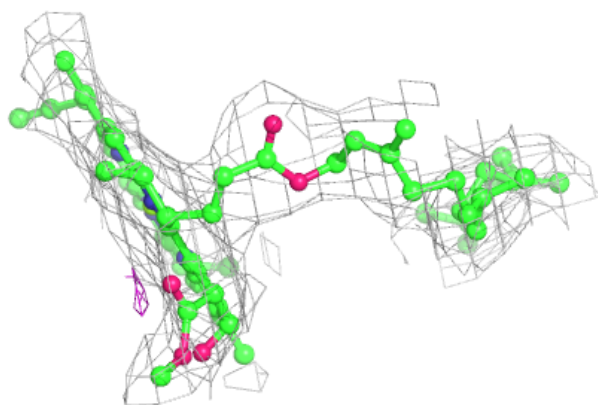
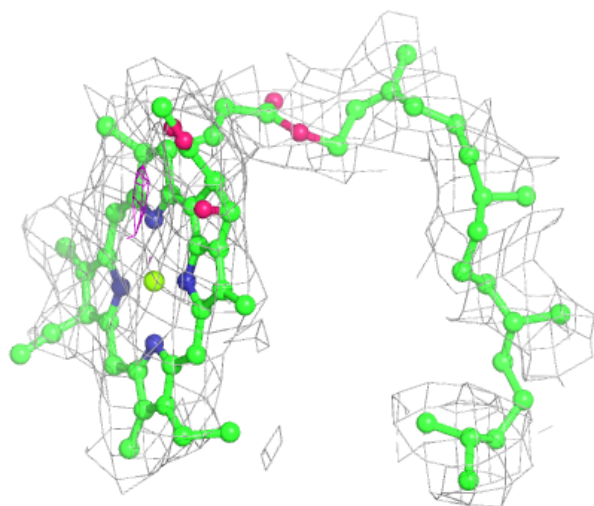
**Electron density around LMU A 7047:**

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



**Electron density around CLA 3 1218:**

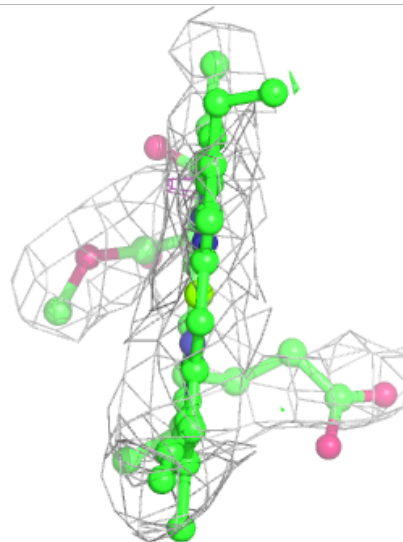
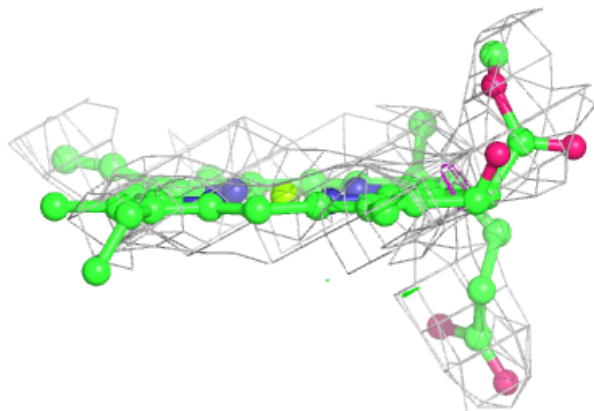
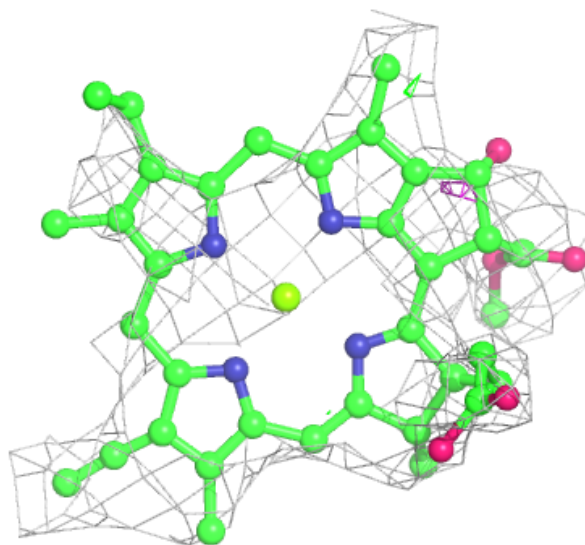
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





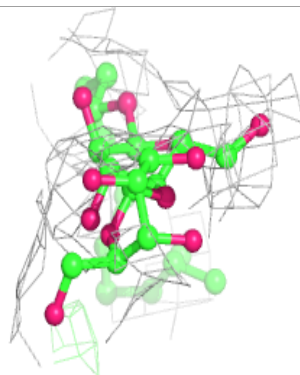
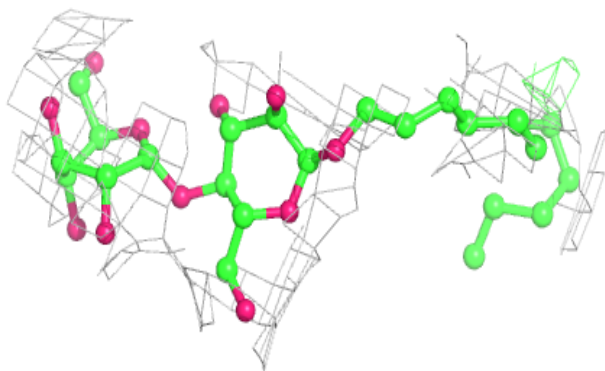
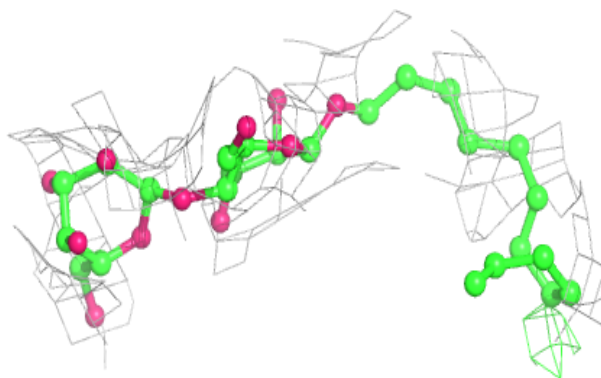
**Electron density around CLA A 1770:**

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

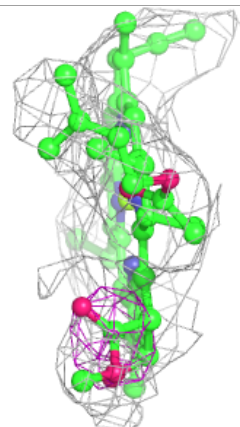
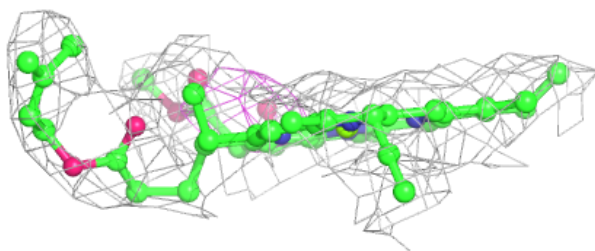
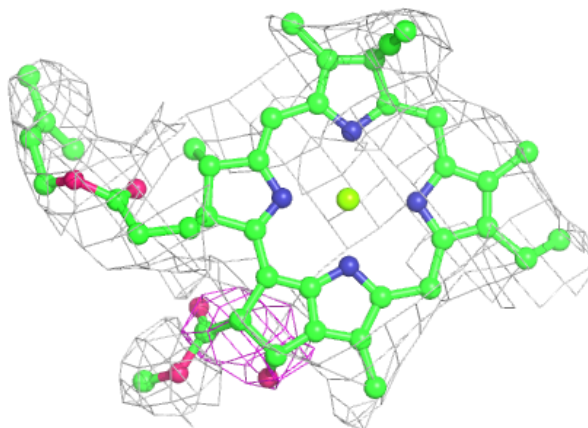


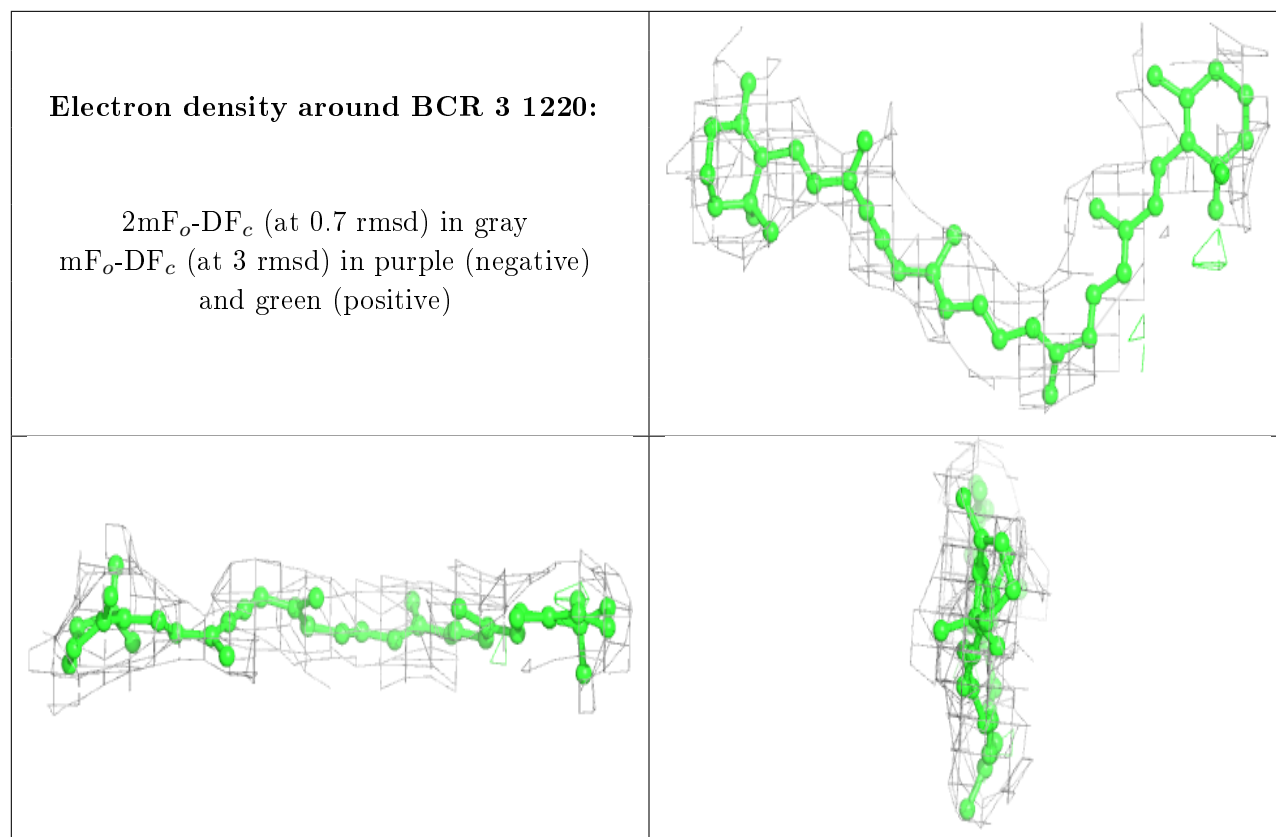
**Electron density around LMU A 7043:**

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

**Electron density around CLA K 1146:**

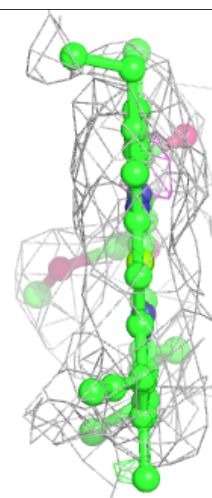
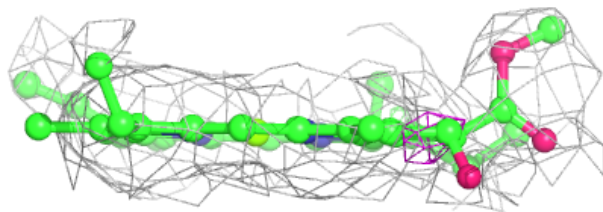
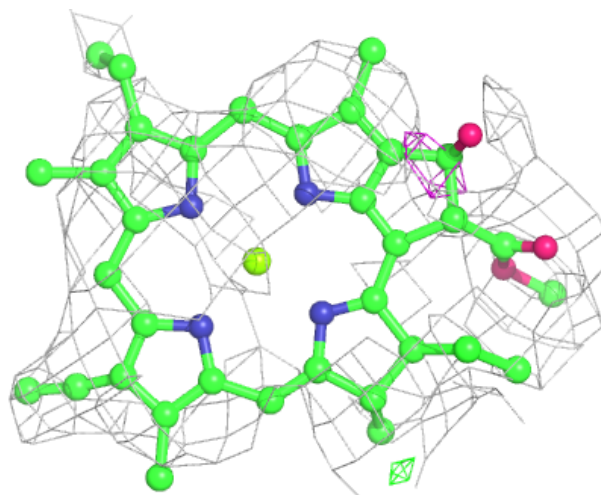
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





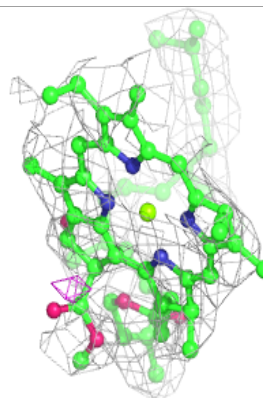
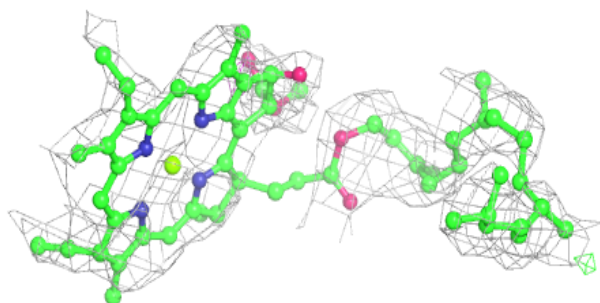
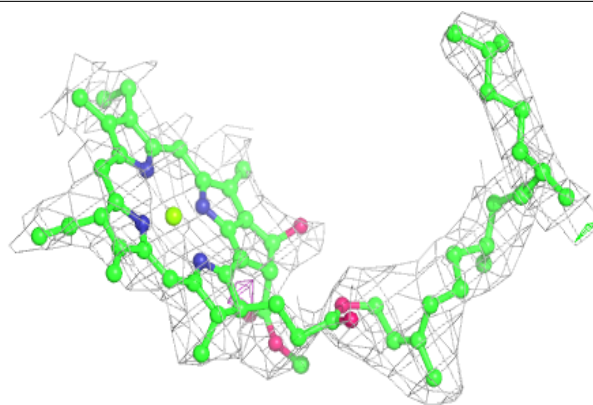
**Electron density around CLA A 1778:**

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

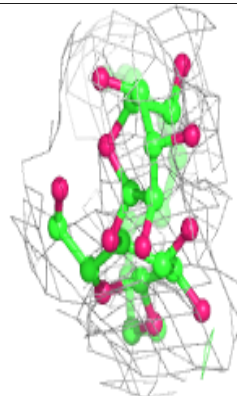
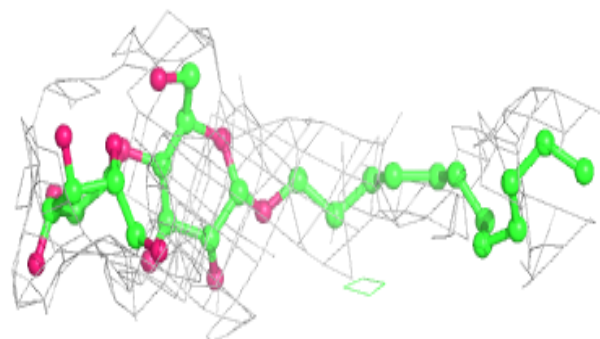
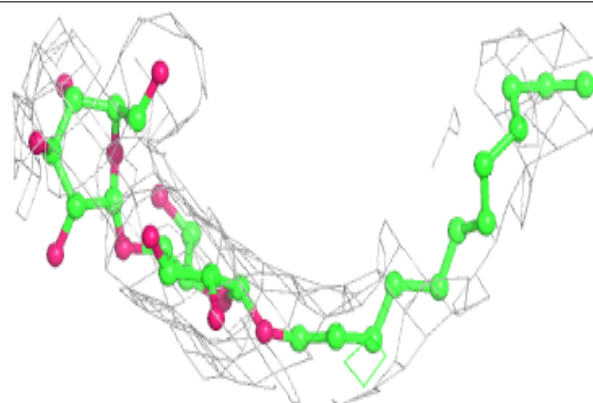


**Electron density around CLA K 3009:**

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

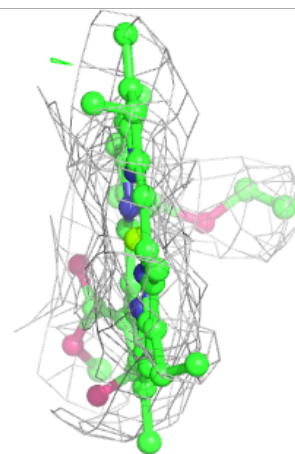
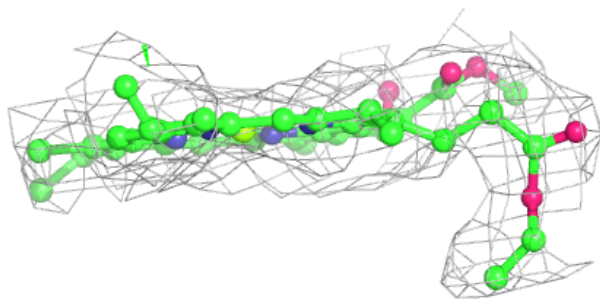
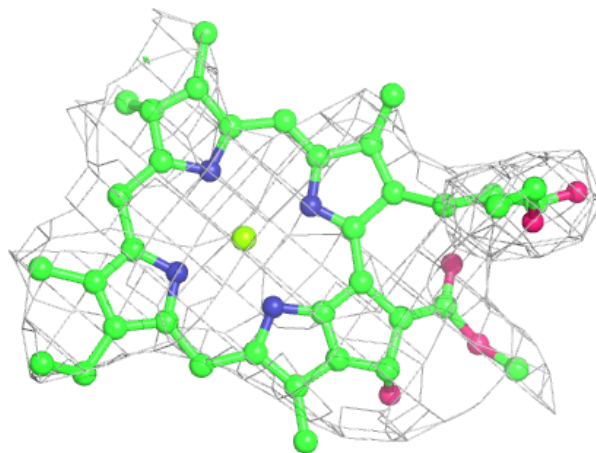
**Electron density around LMU A 7017:**

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



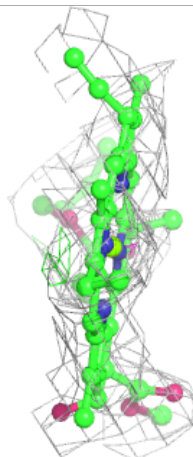
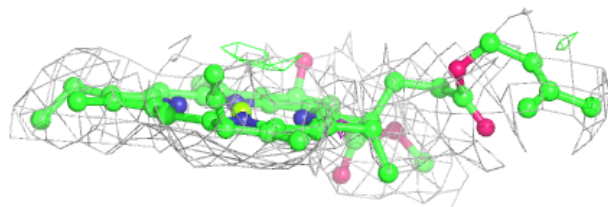
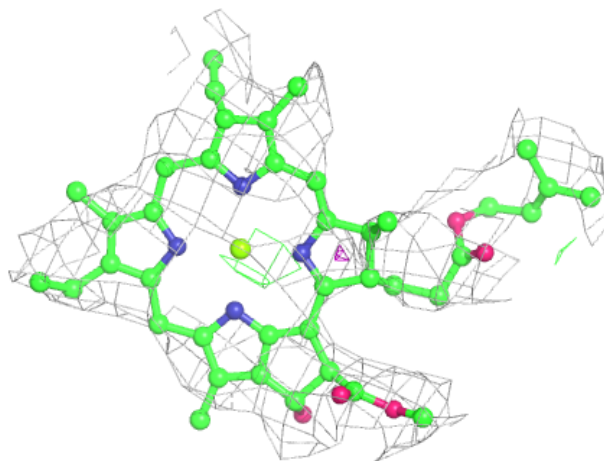
**Electron density around CLA A 1817:**

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



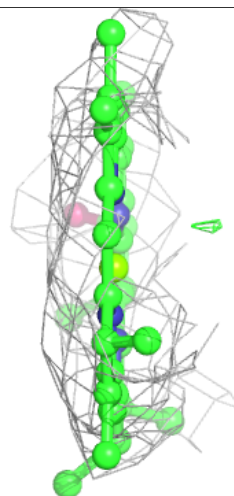
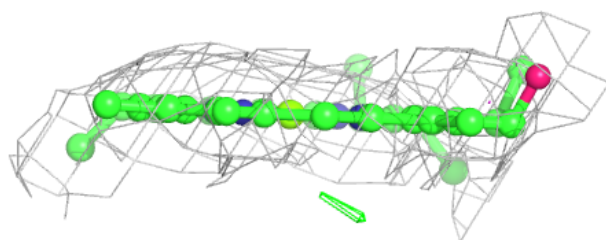
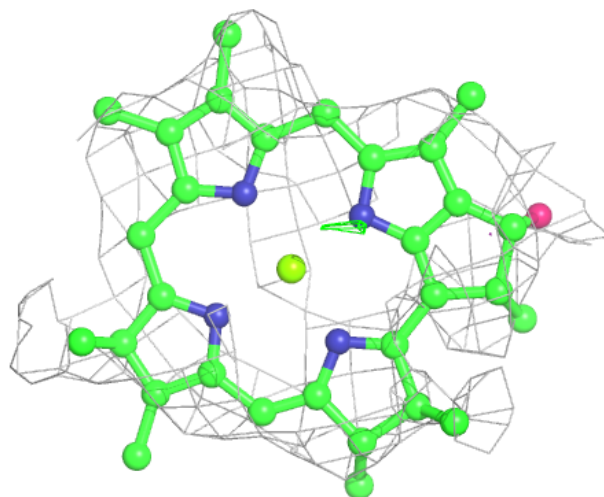
**Electron density around CLA 2 1215:**

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



**Electron density around CLA 3 1212:**

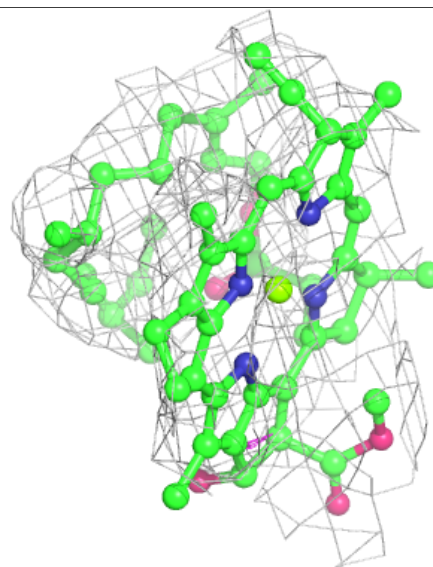
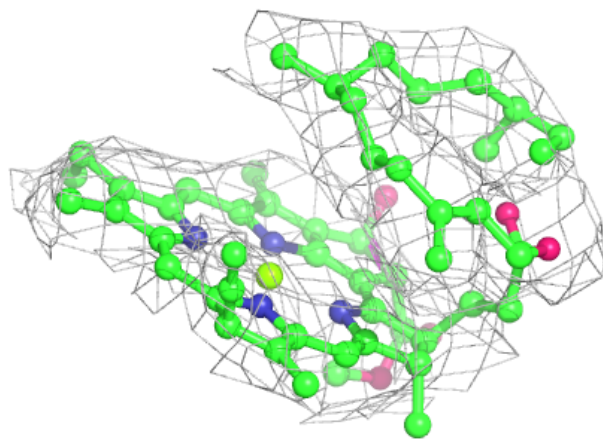
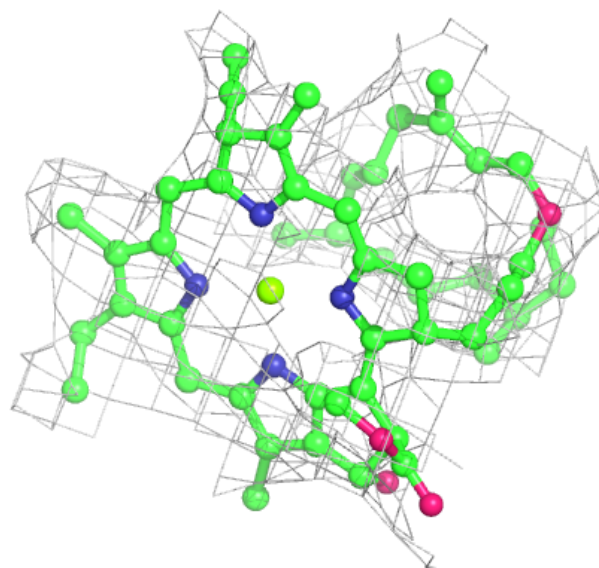
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





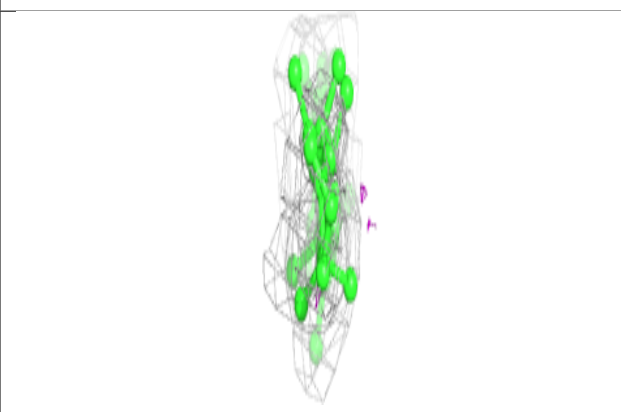
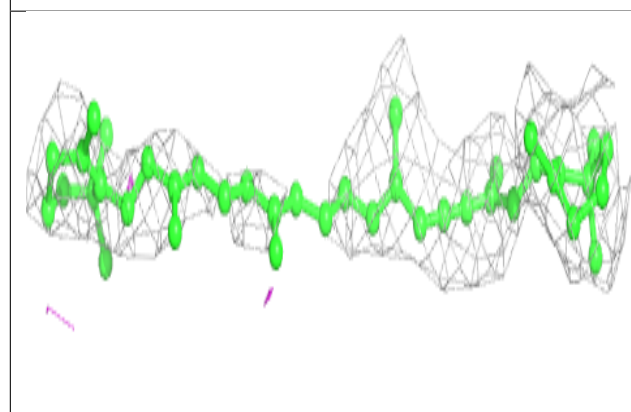
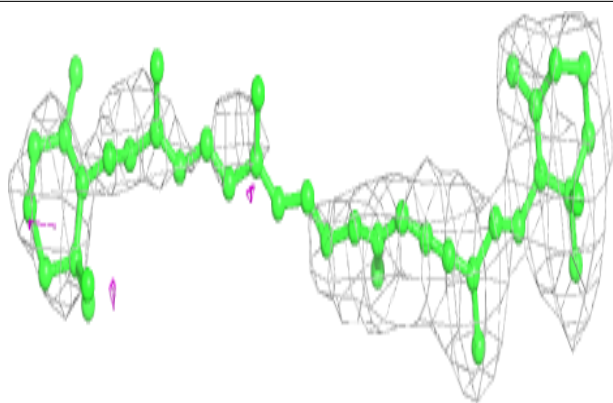
**Electron density around CLA J 1043:**

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

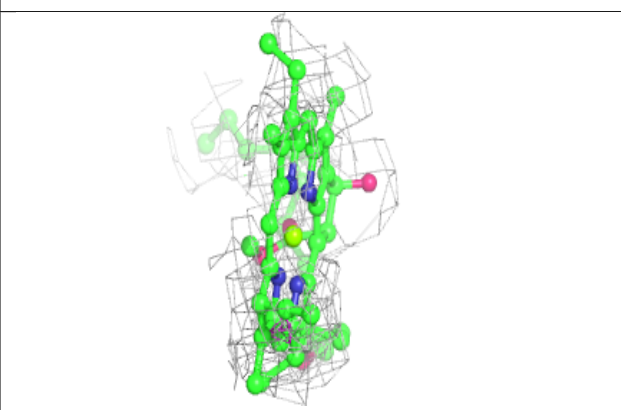
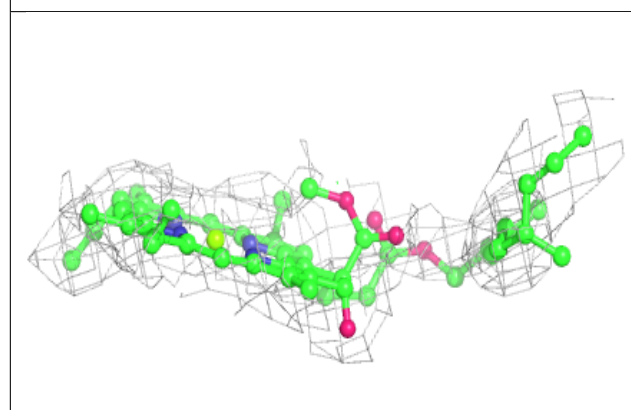
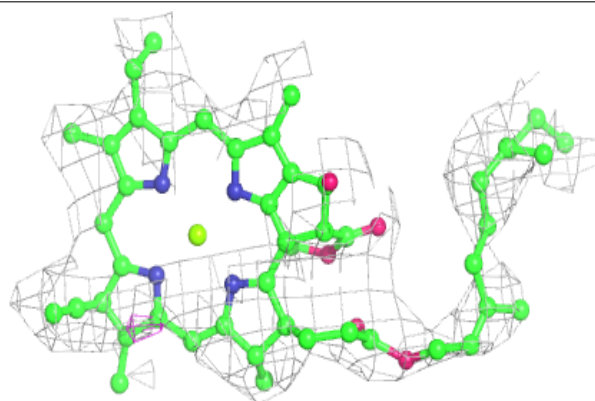


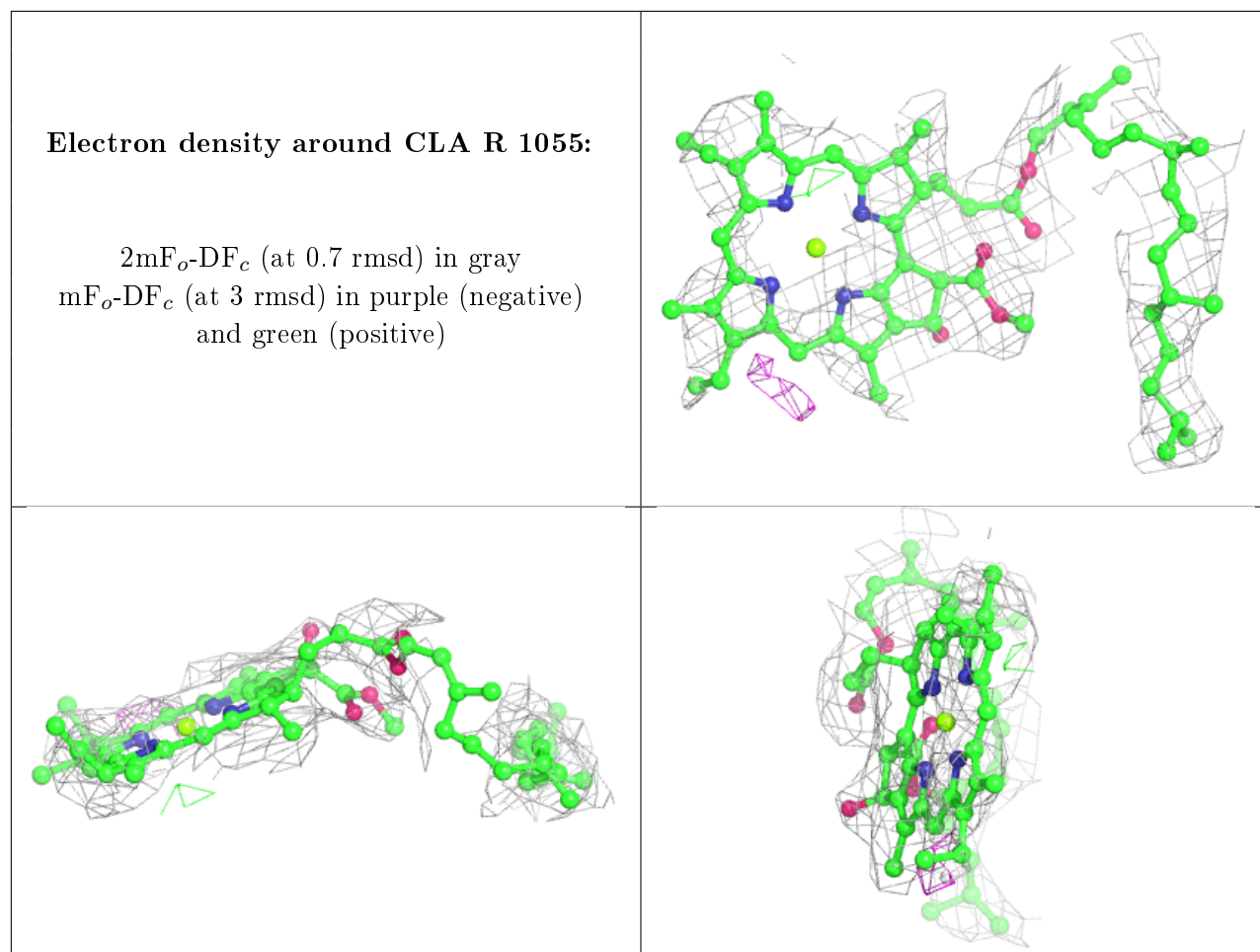
**Electron density around BCR L 1169:**

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

**Electron density around CLA R 1054:**

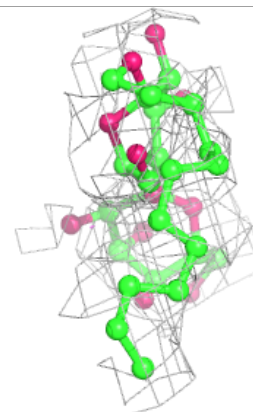
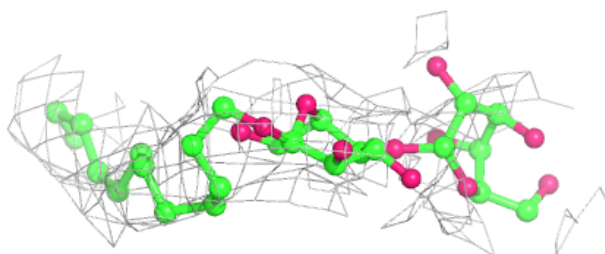
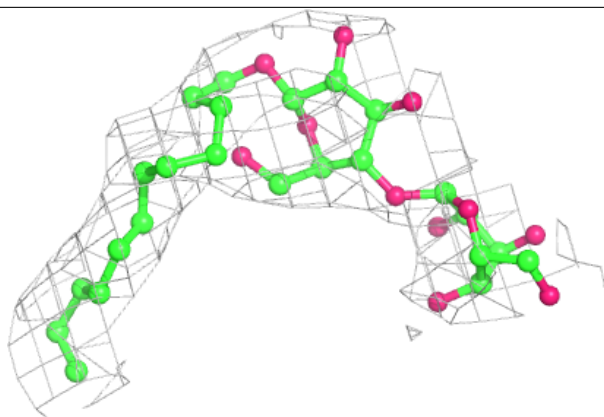
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



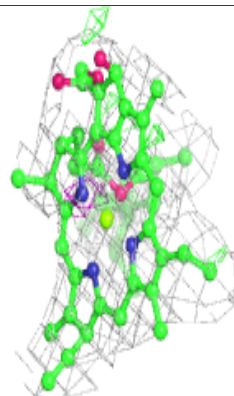
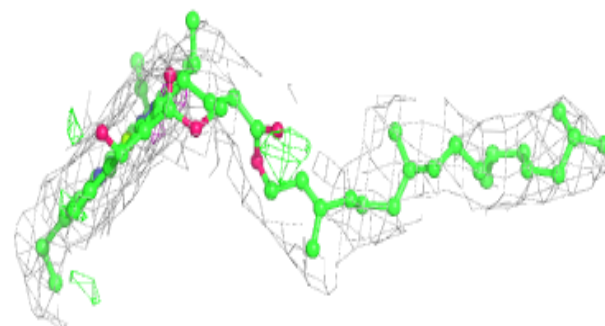
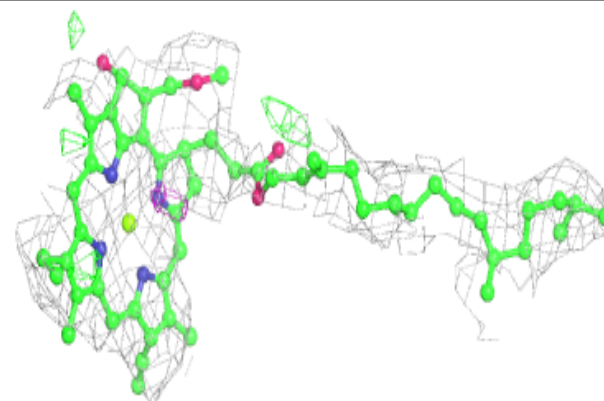


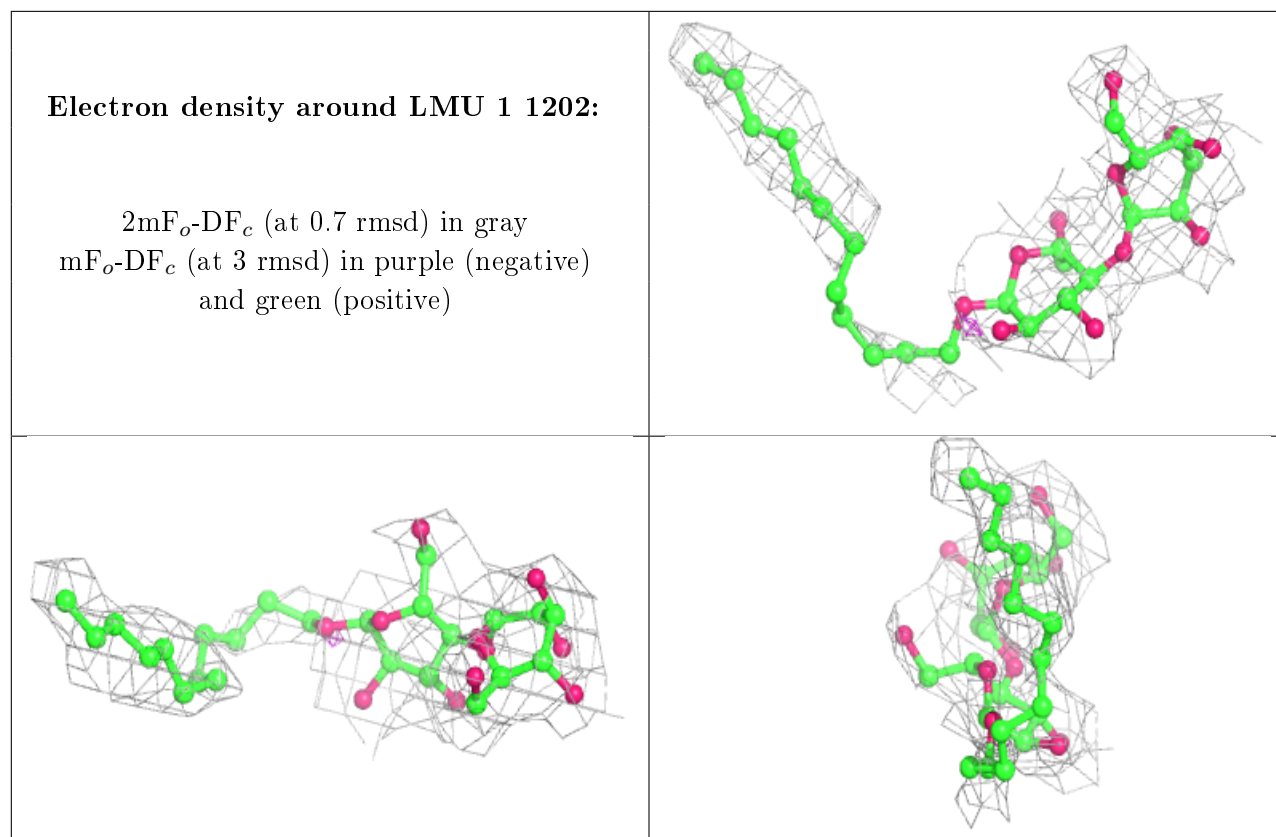
**Electron density around LMU A 7021:**

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

**Electron density around CLA 4 1198:**

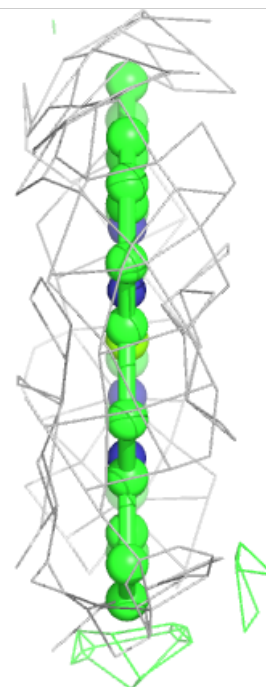
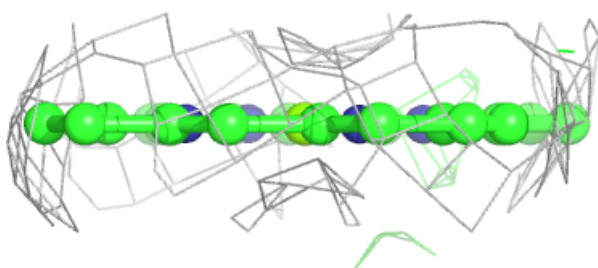
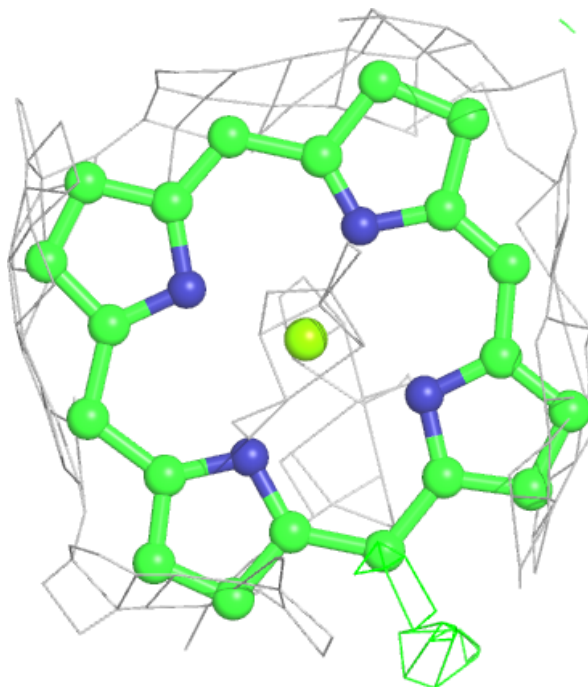
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





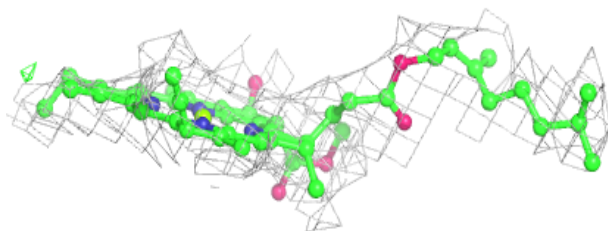
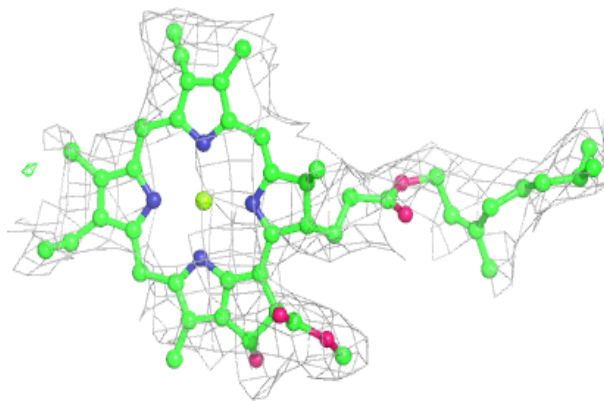
**Electron density around CLA 1 1199:**

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

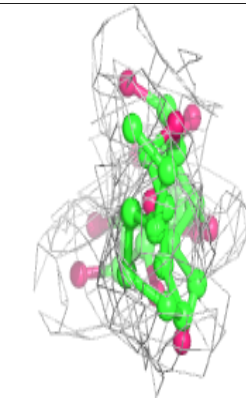
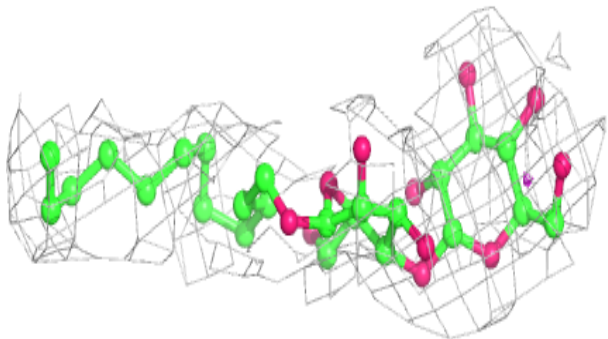
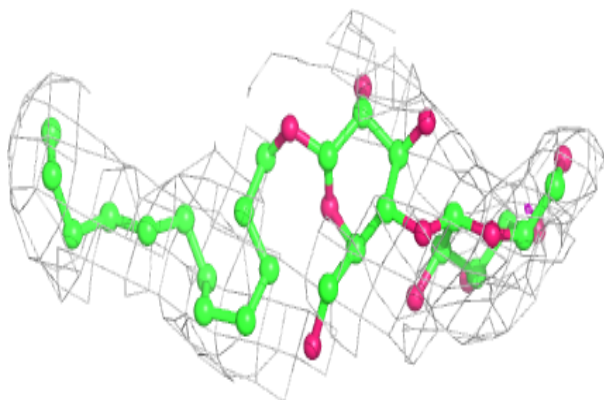


**Electron density around CLA A 1798:**

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

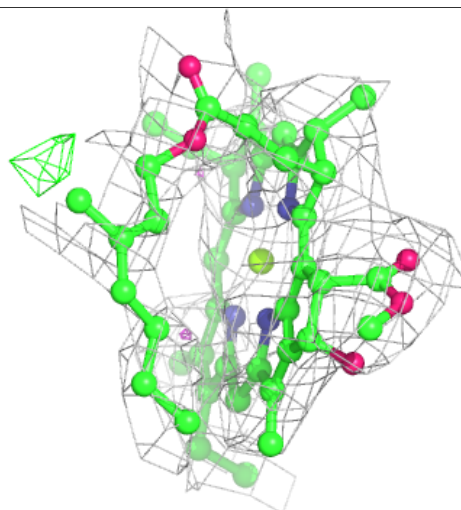
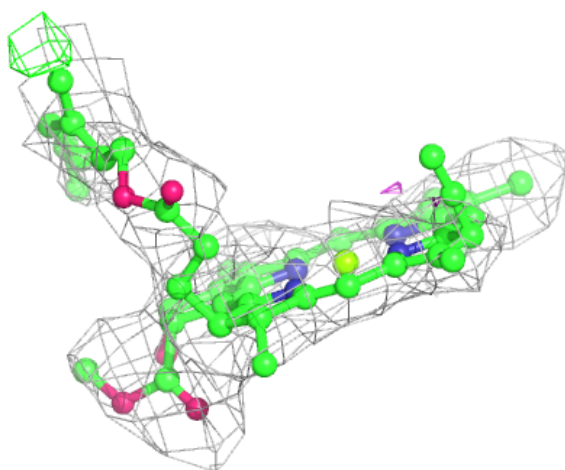
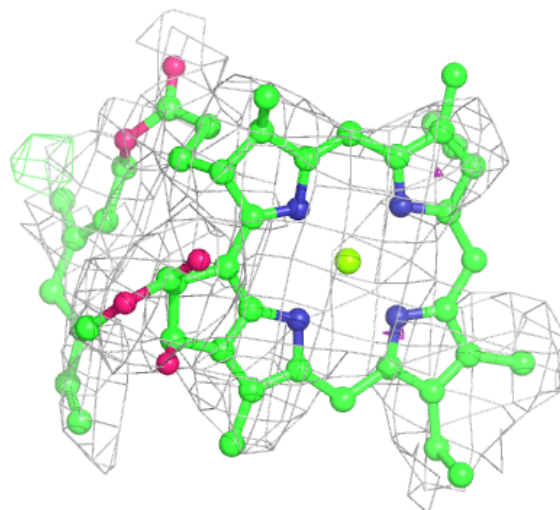
**Electron density around LMU A 7042:**

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



**Electron density around CLA F 1157:**

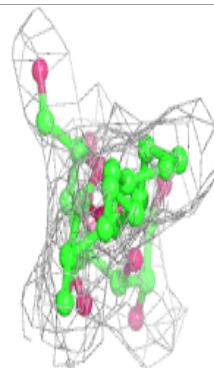
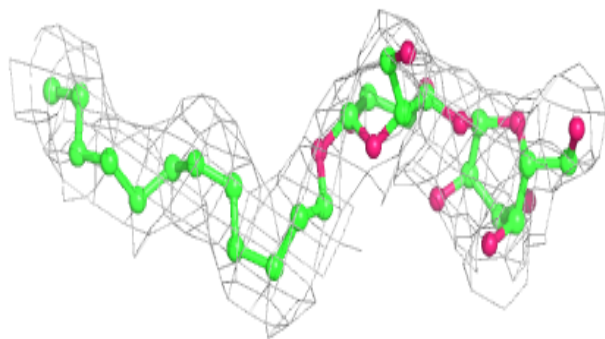
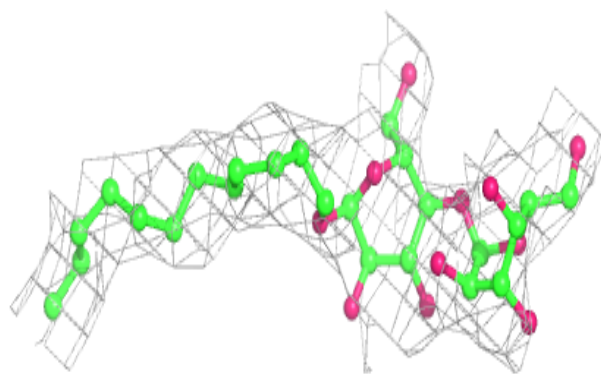
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



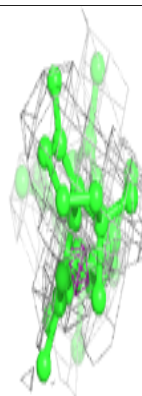
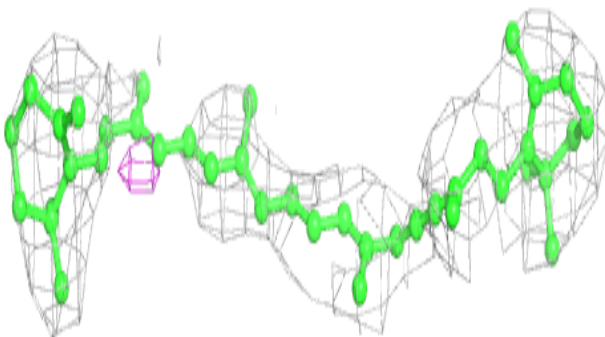
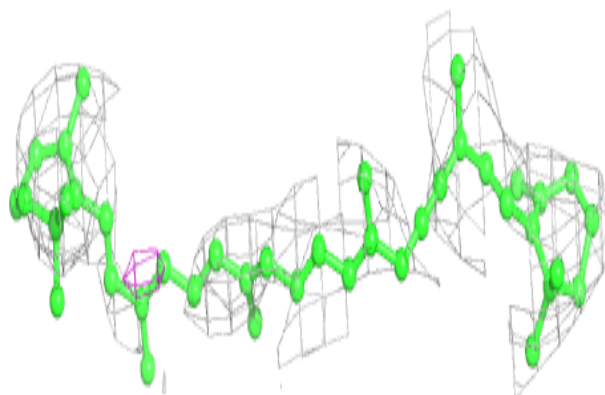


**Electron density around LMU A 7010:**

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

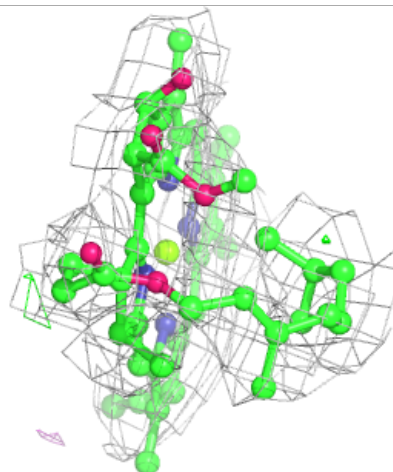
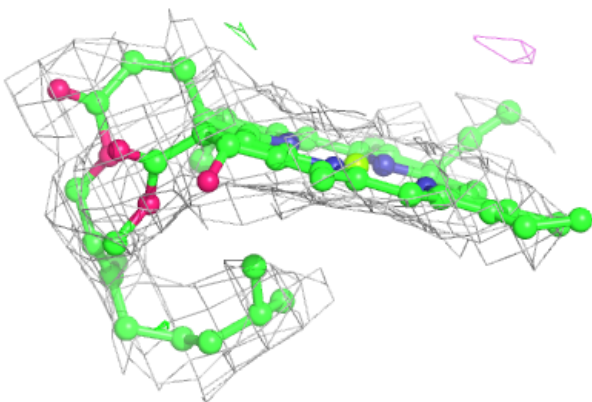
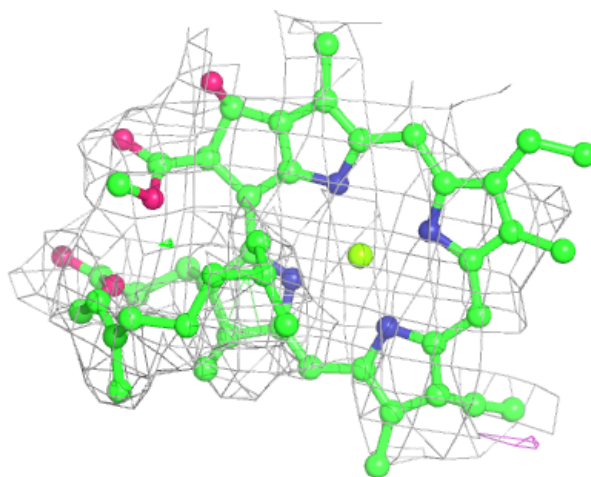
**Electron density around BCR A 1805:**

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



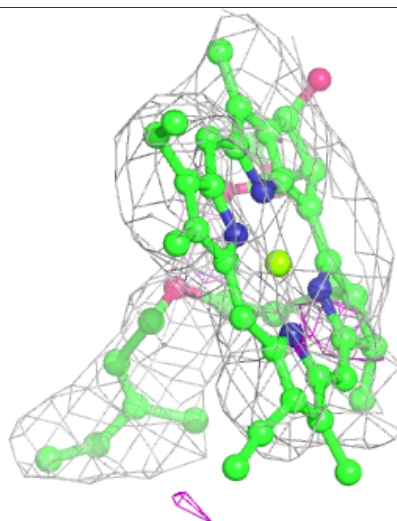
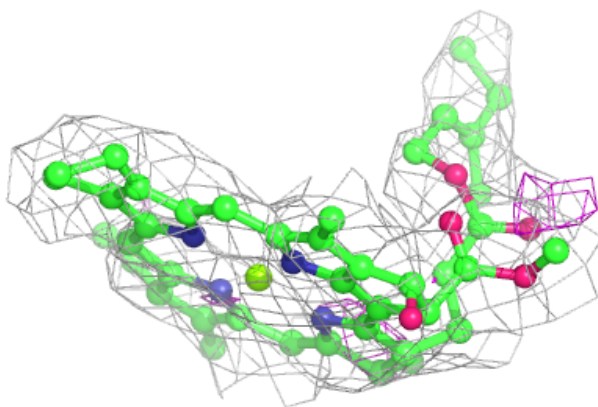
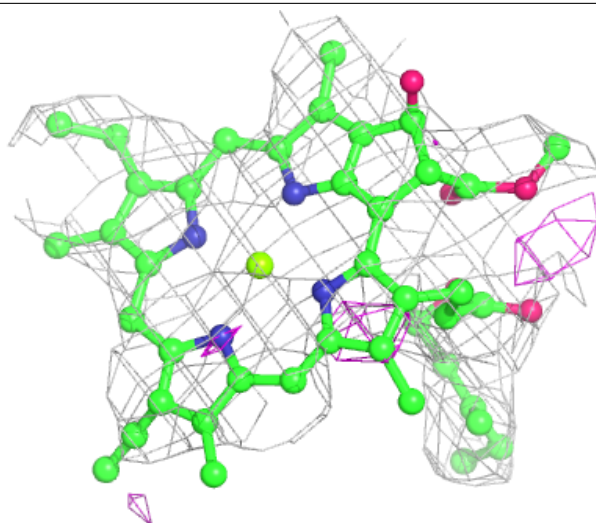
**Electron density around CLA 4 1199:**

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



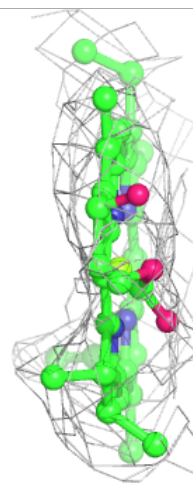
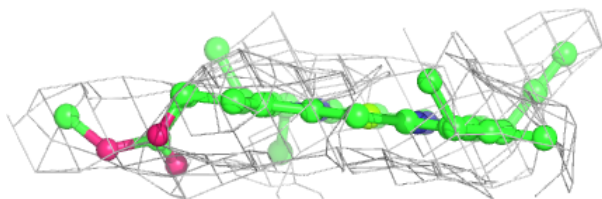
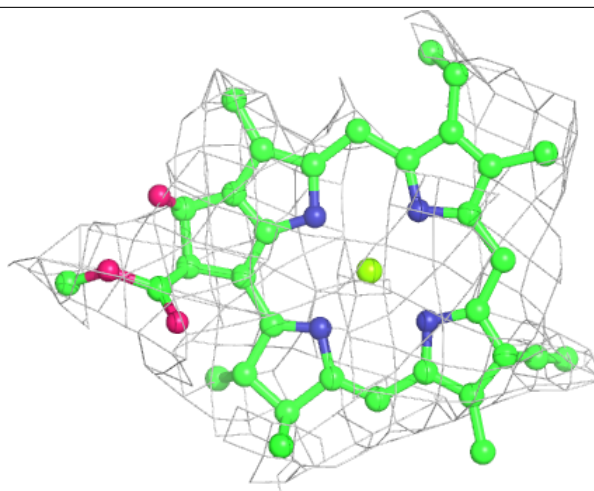
**Electron density around CLA 1 1193:**

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



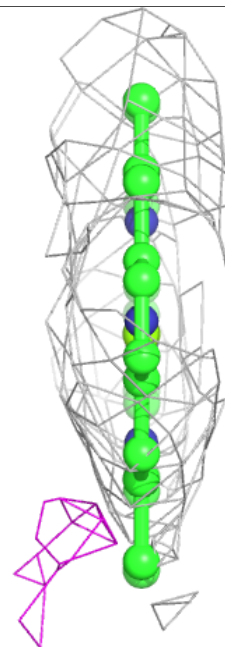
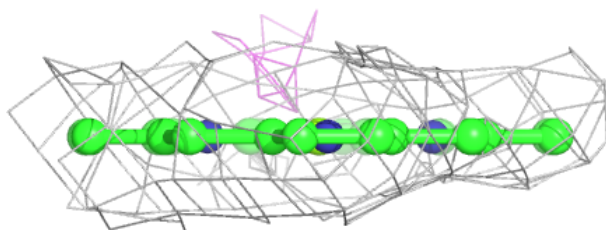
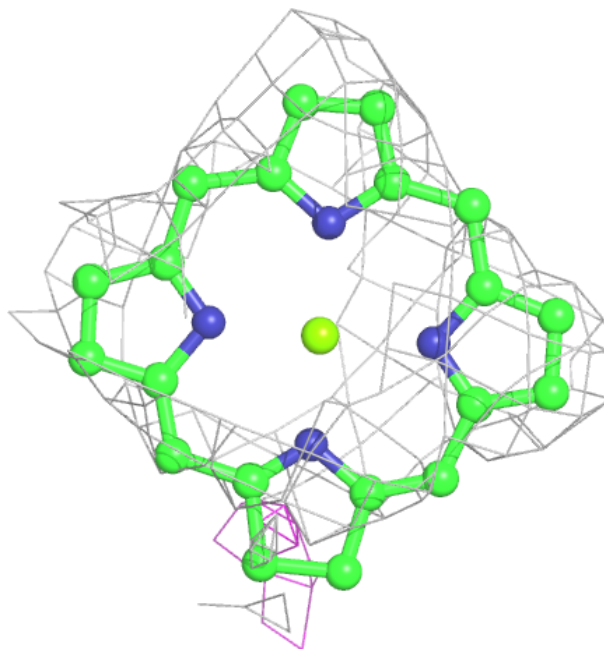
**Electron density around CLA F 1156:**

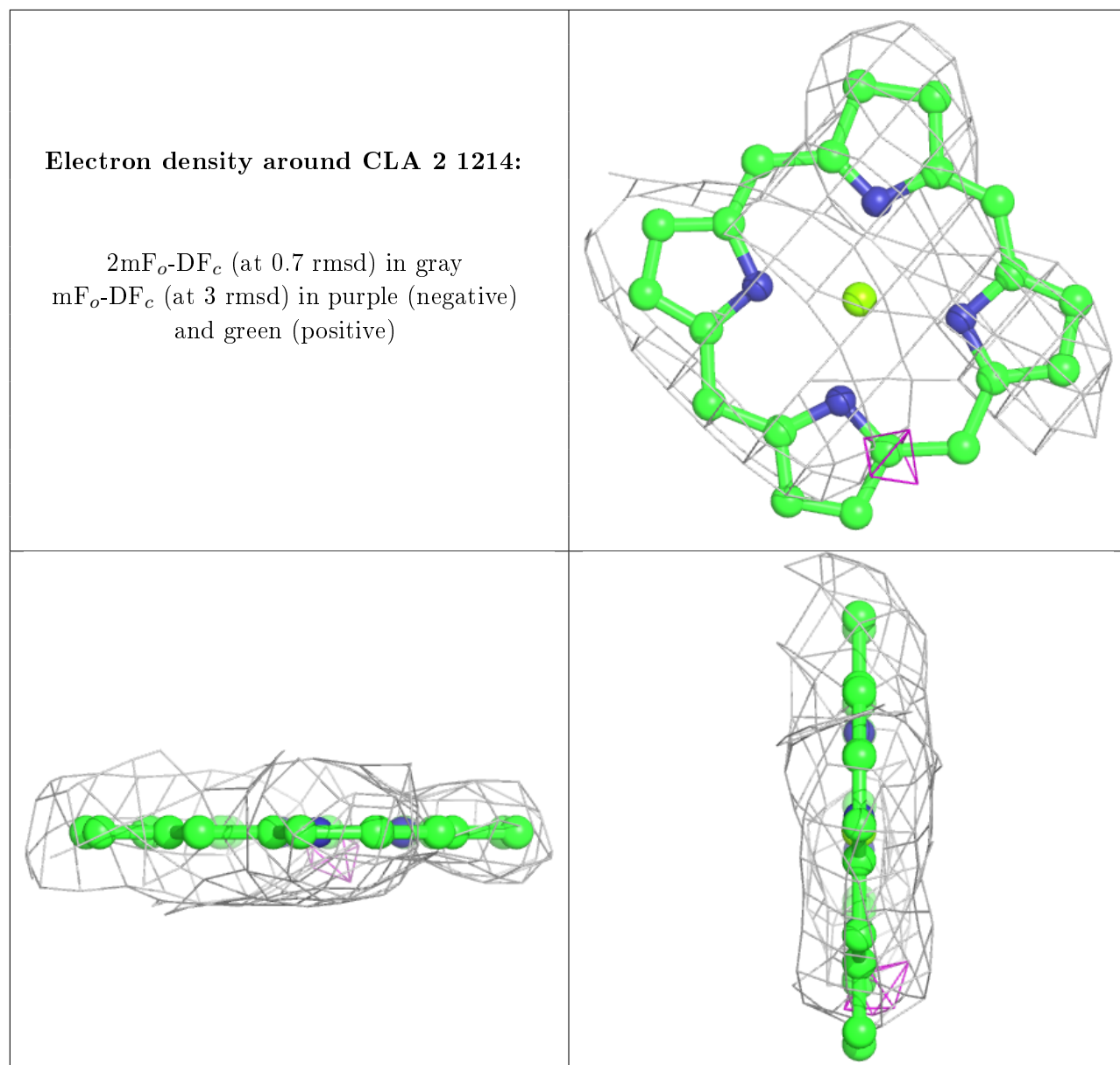
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA 3 3015:**

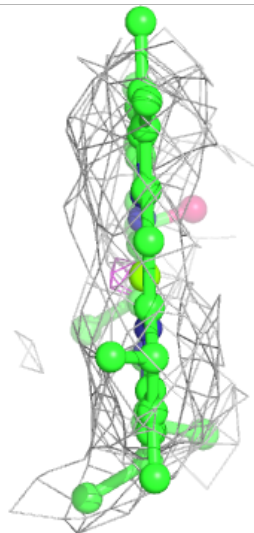
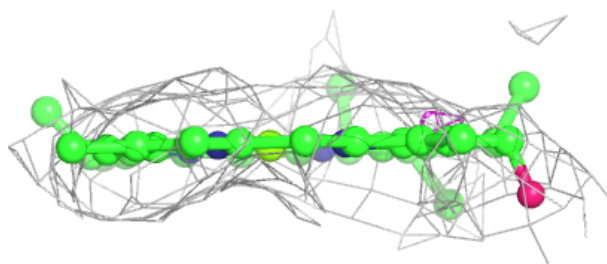
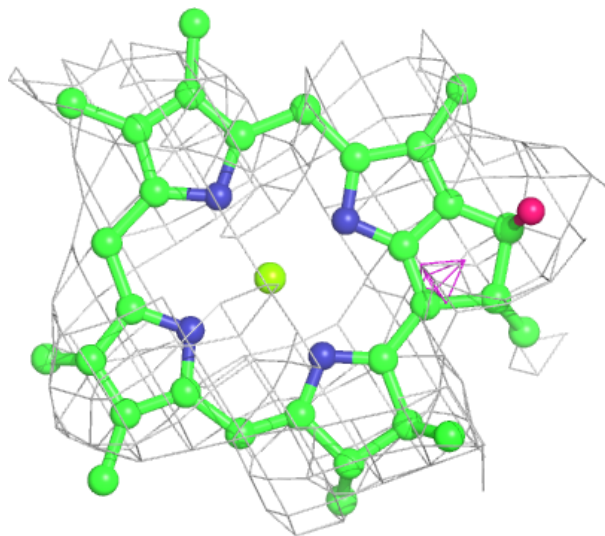
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





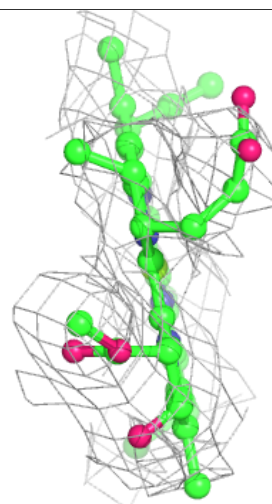
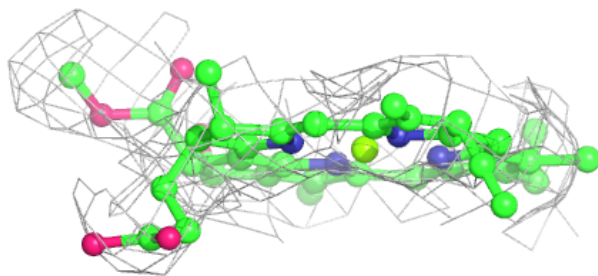
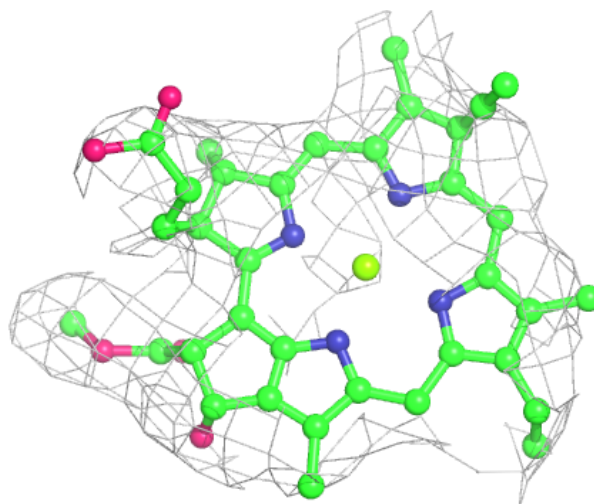
**Electron density around CLA 1 1191:**

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



**Electron density around CLA A 1791:**

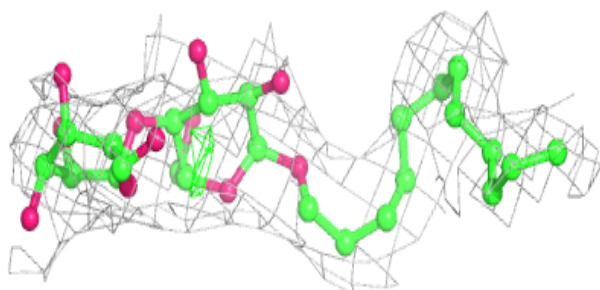
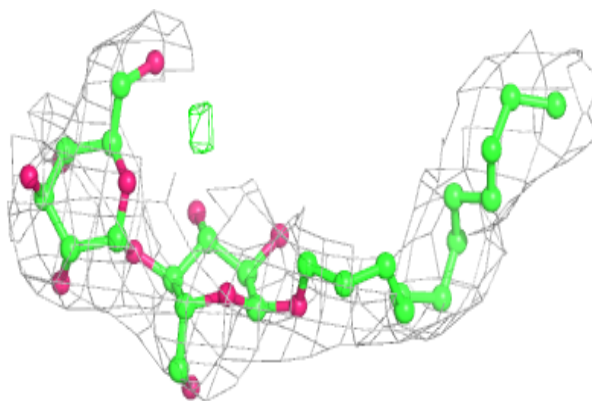
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



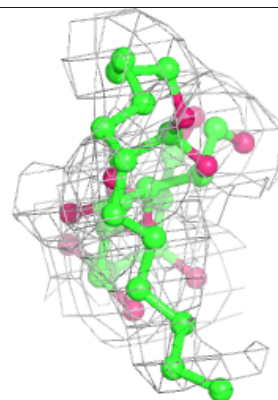
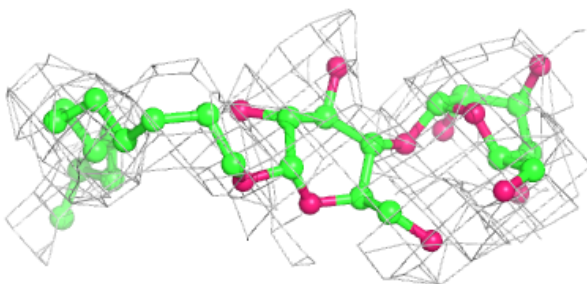
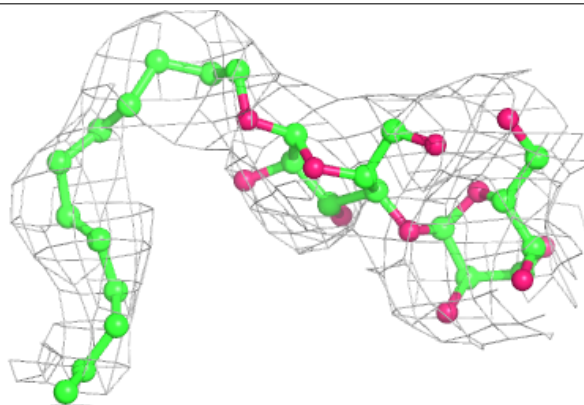


**Electron density around LMU A 7034:**

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

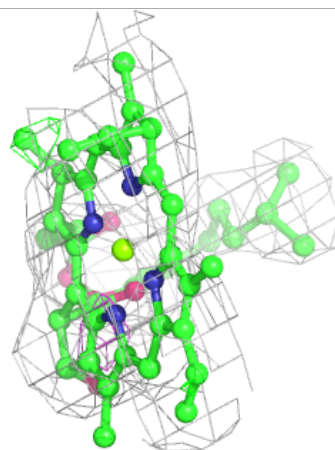
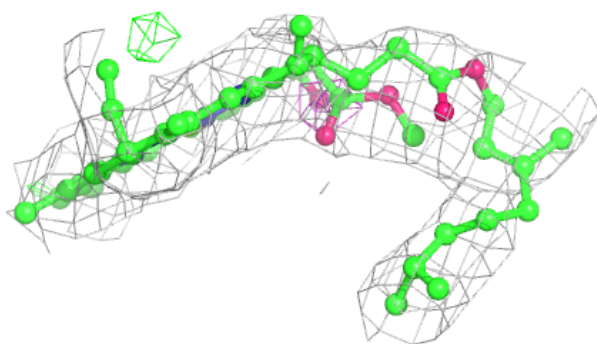
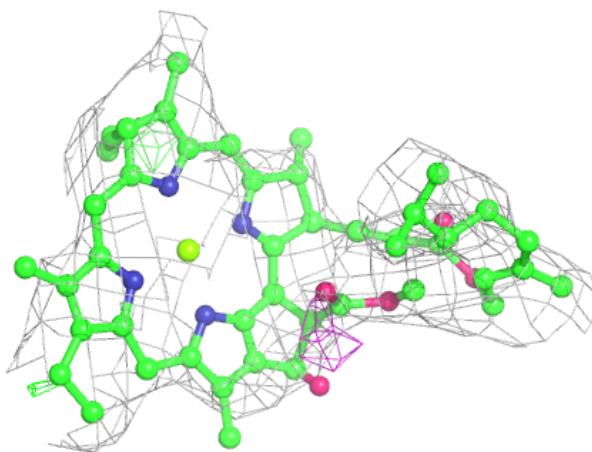
**Electron density around LMU 2 7003:**

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



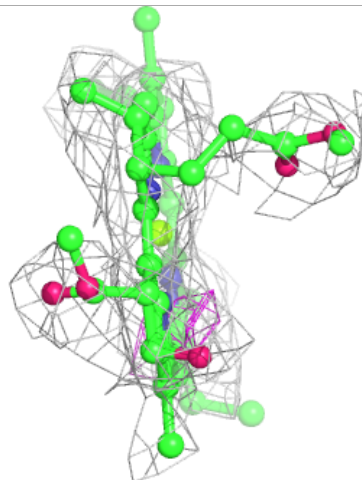
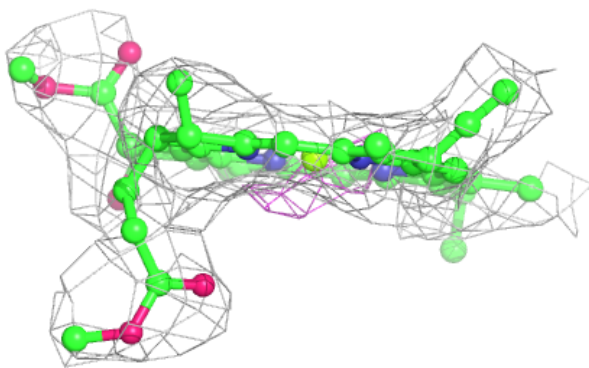
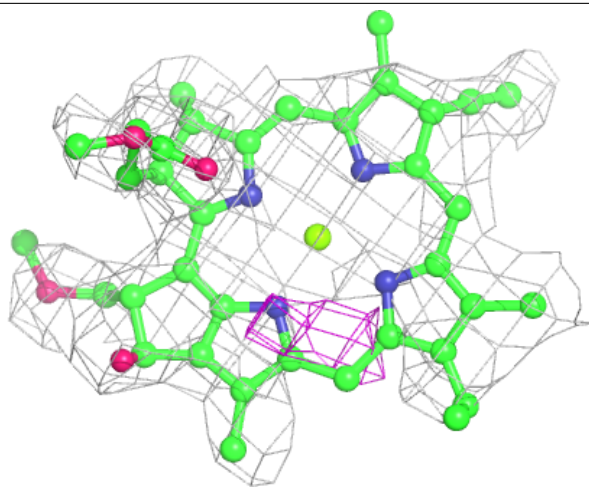
**Electron density around CLA A 1816:**

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



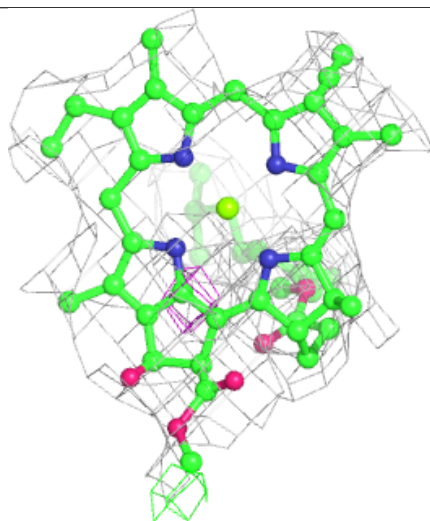
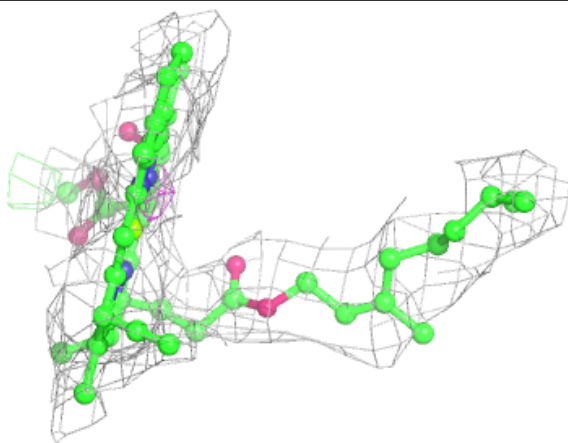
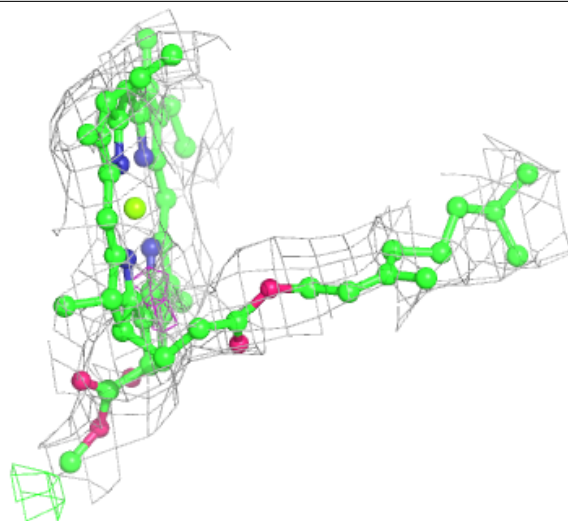
**Electron density around CLA A 1763:**

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



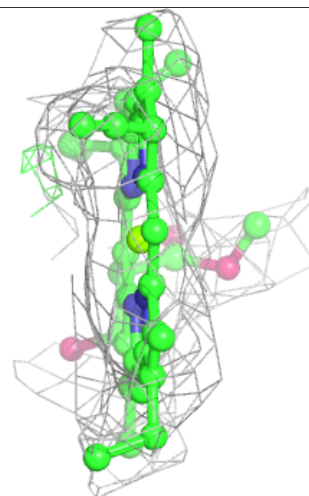
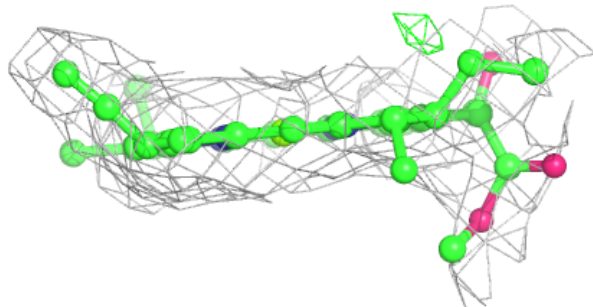
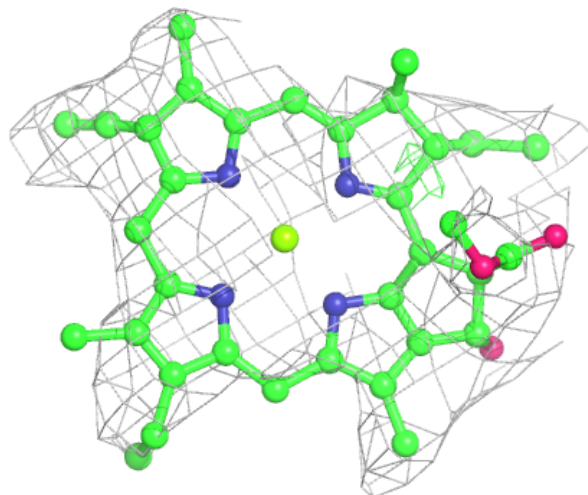
**Electron density around CLA 4 1196:**

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



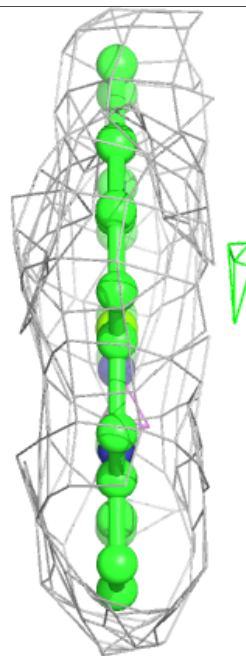
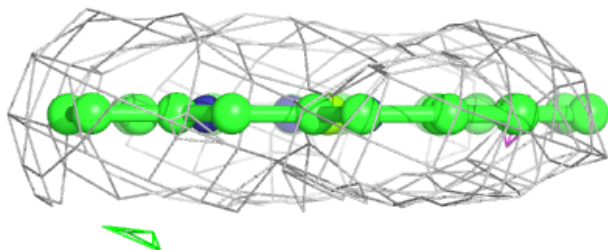
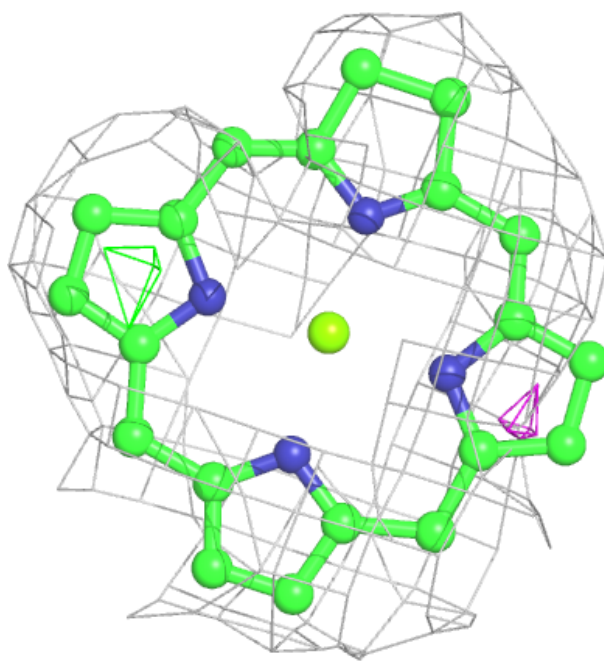
**Electron density around CLA 3 3007:**

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



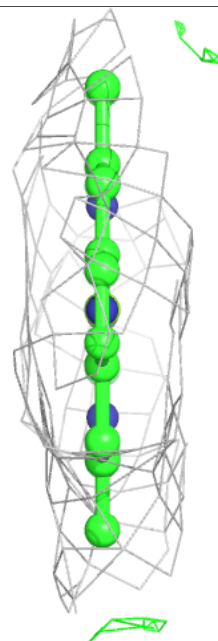
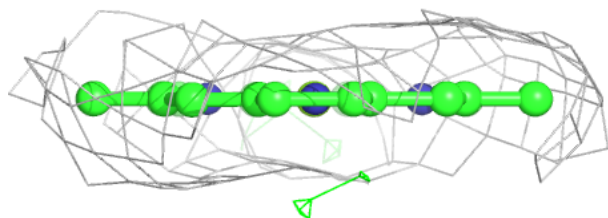
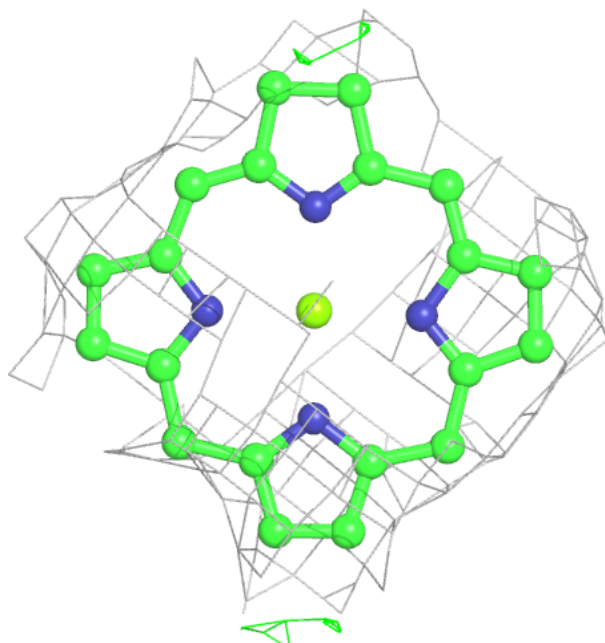
**Electron density around CLA 4 1203:**

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



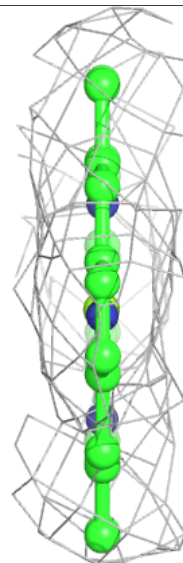
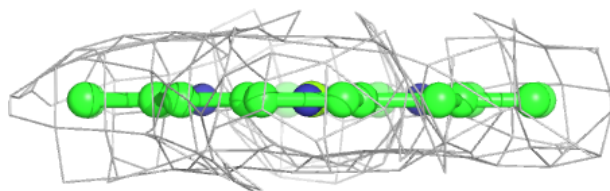
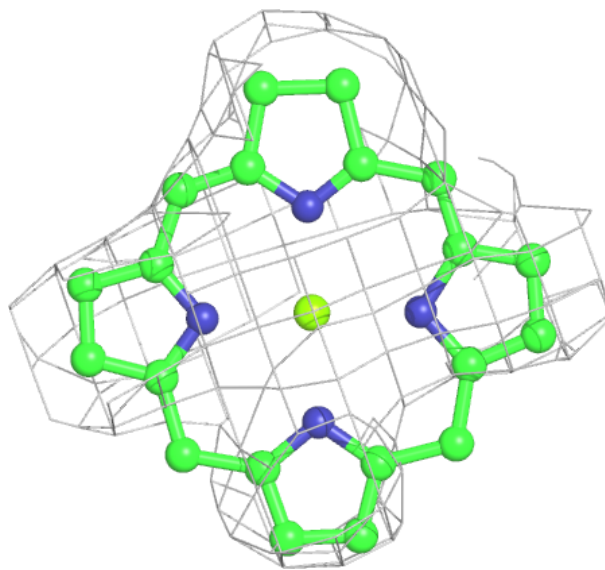
**Electron density around CLA 3 1216:**

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



**Electron density around CLA 3 3002:**

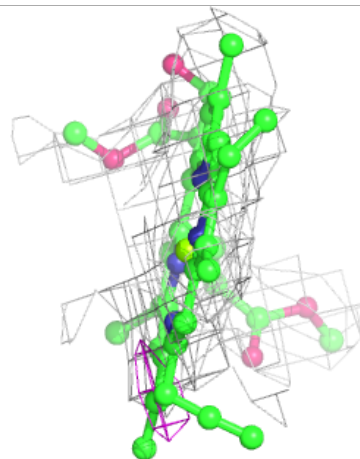
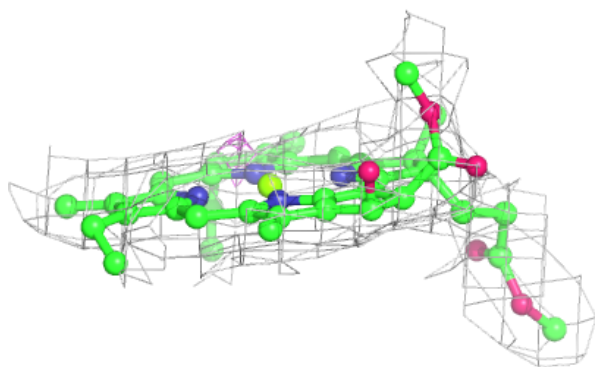
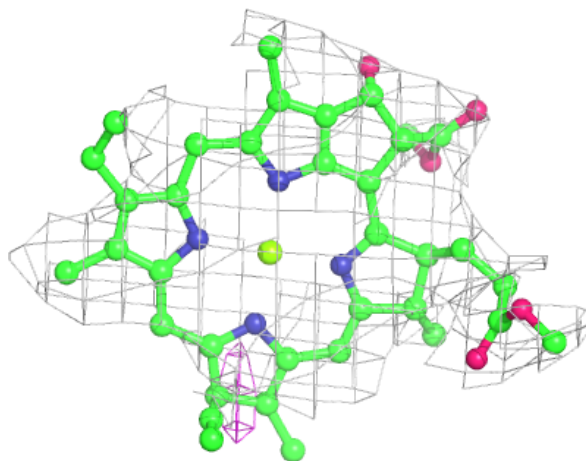
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





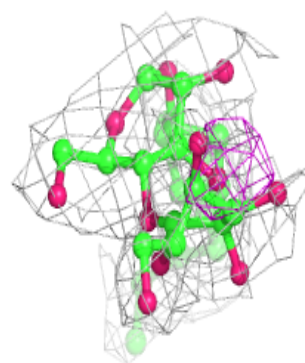
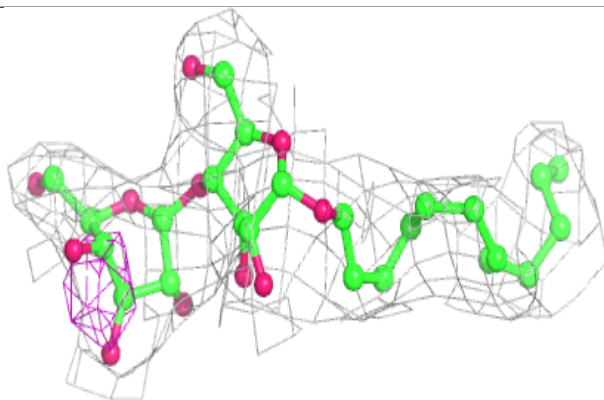
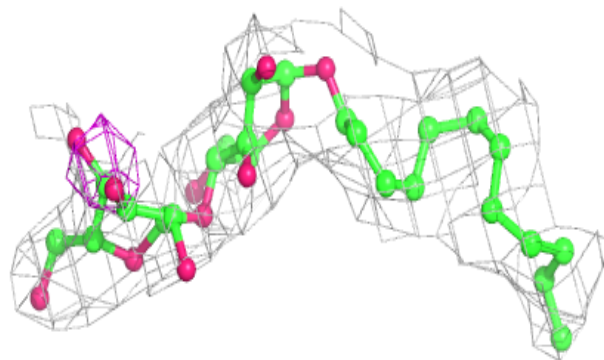
**Electron density around CLA B 1751:**

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

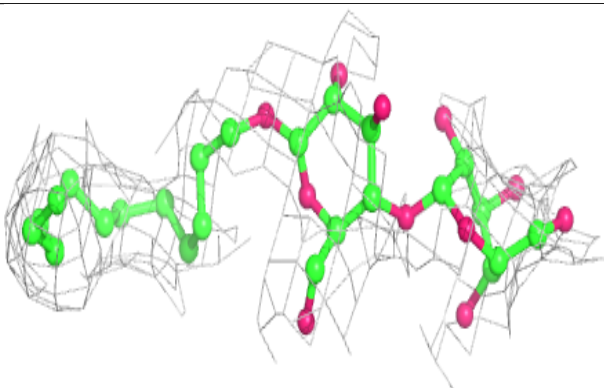
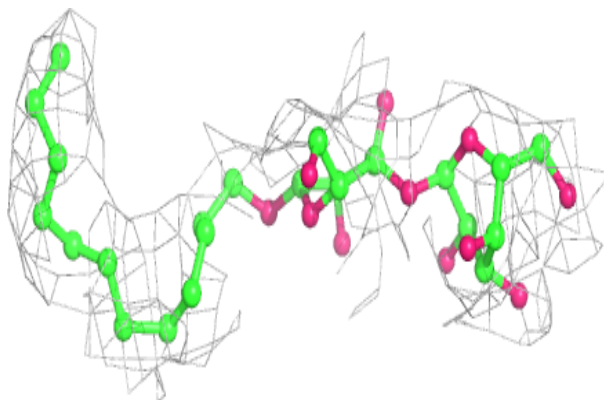


**Electron density around LMU A 7026:**

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

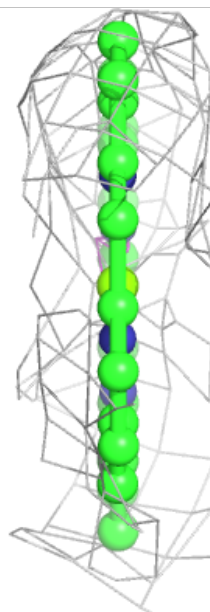
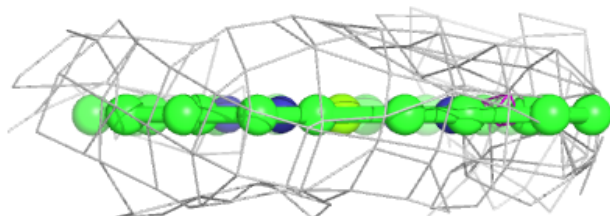
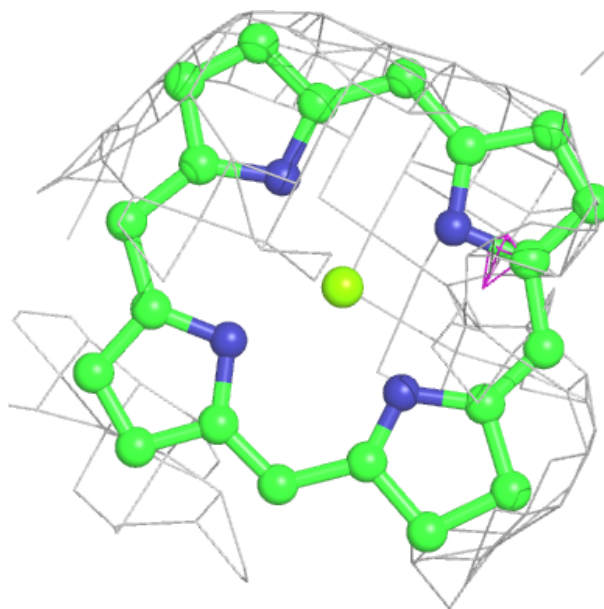
**Electron density around LMU A 1809:**

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



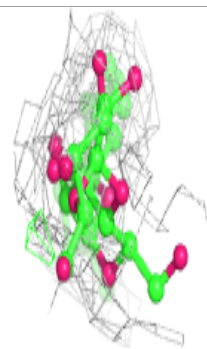
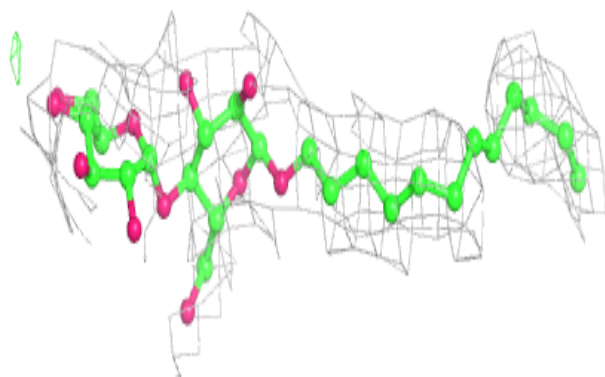
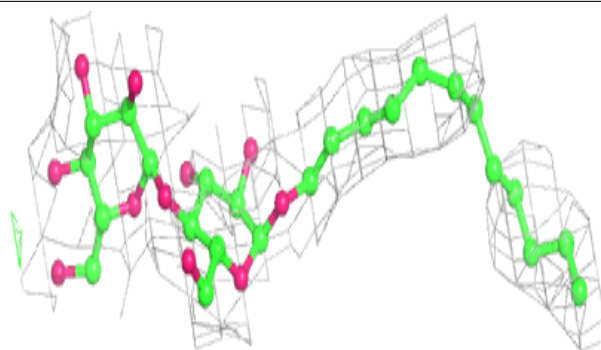
**Electron density around CLA 3 1215:**

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

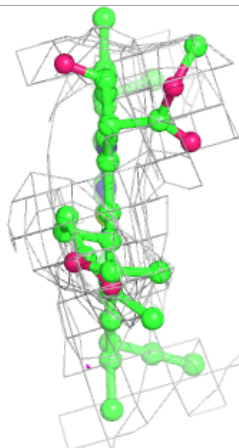
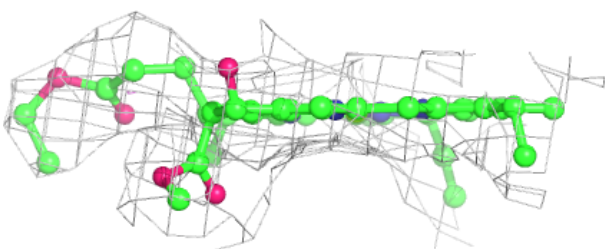
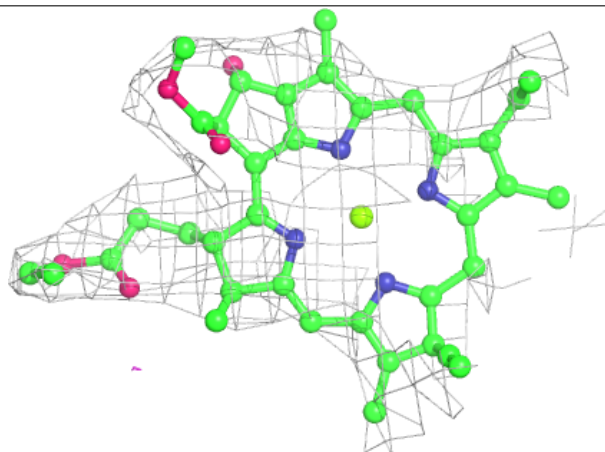


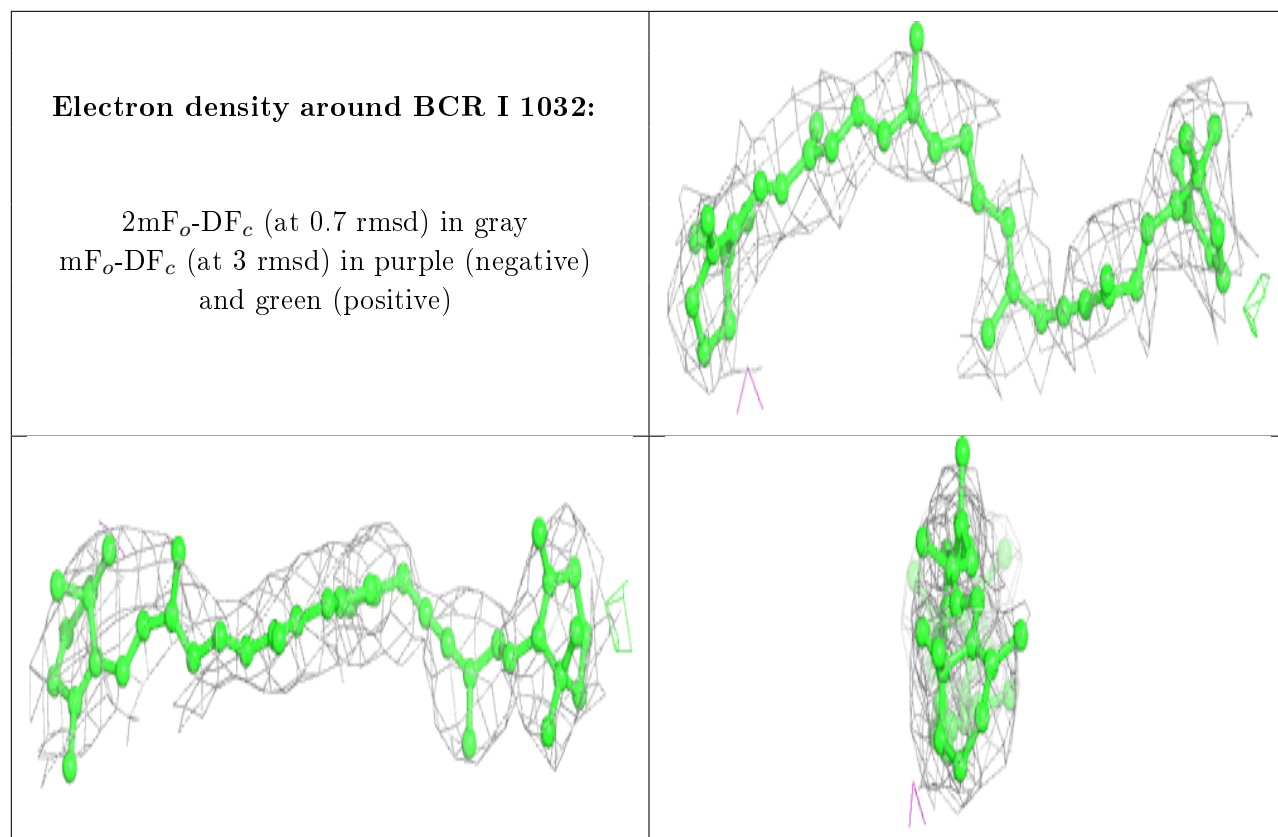
**Electron density around LMU A 7040:**

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

**Electron density around CLA 1 1189:**

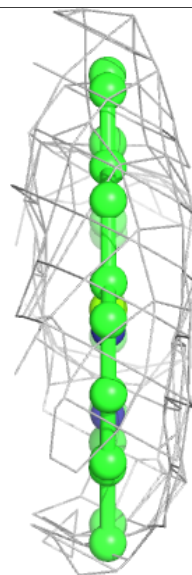
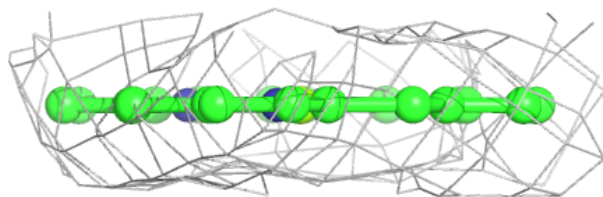
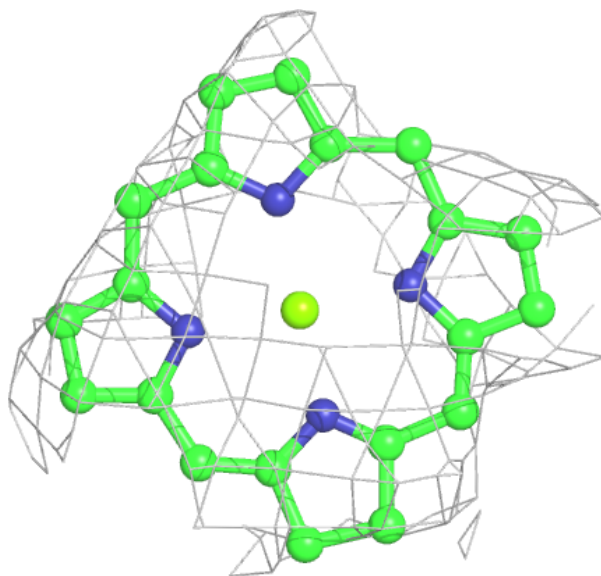
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





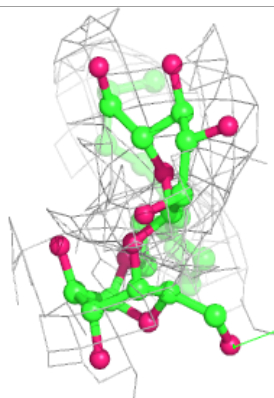
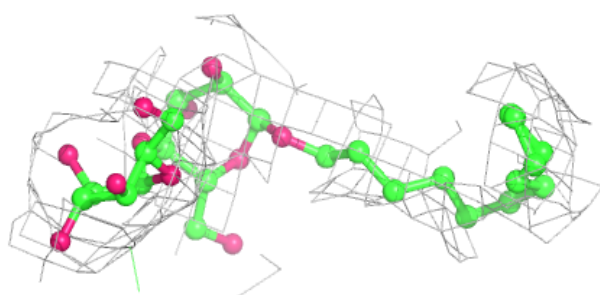
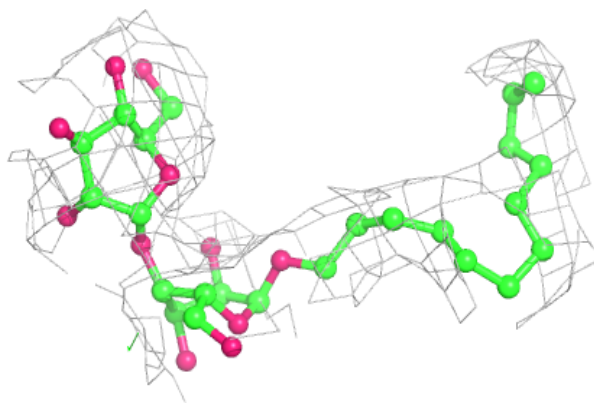
**Electron density around CLA 1 1201:**

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

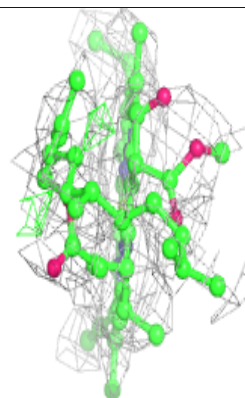
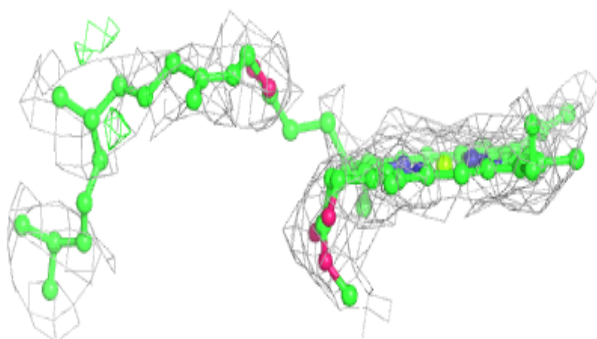
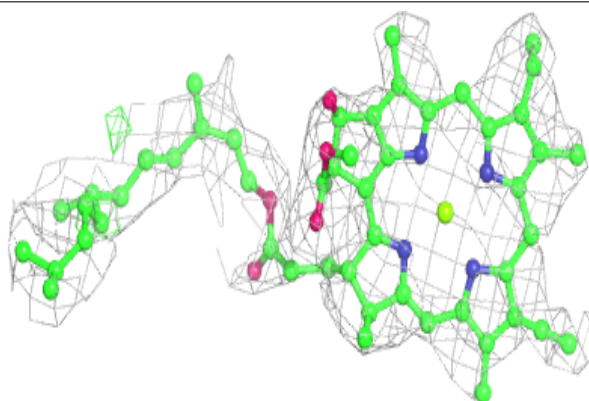


**Electron density around LMU K 1086:**

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

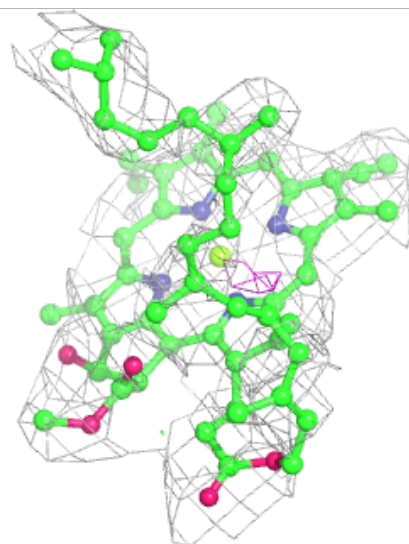
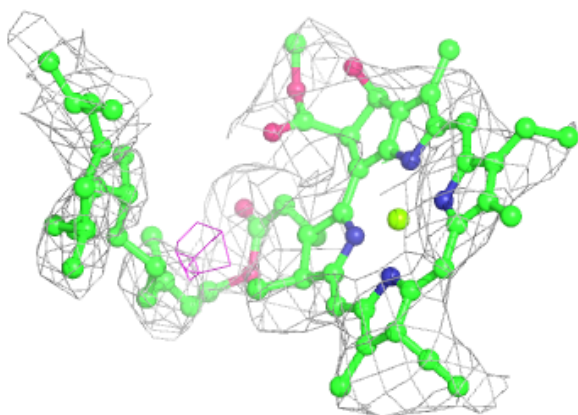
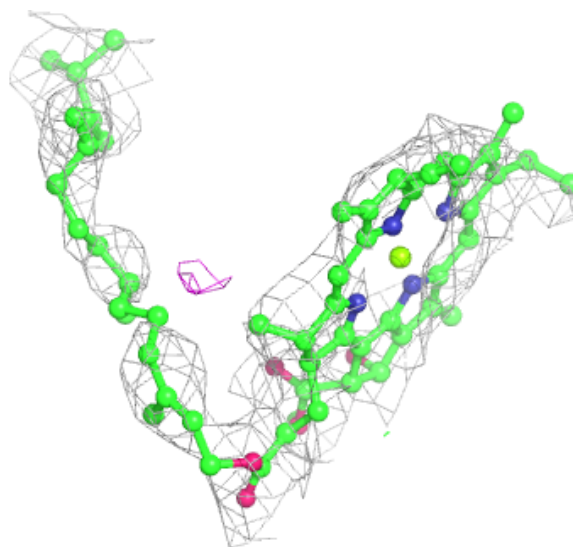
**Electron density around CLA B 1745:**

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



**Electron density around CLA 2 1217:**

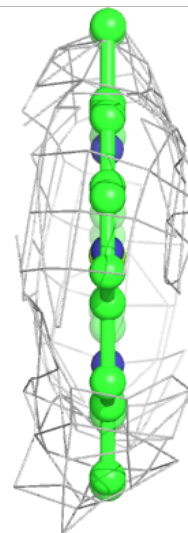
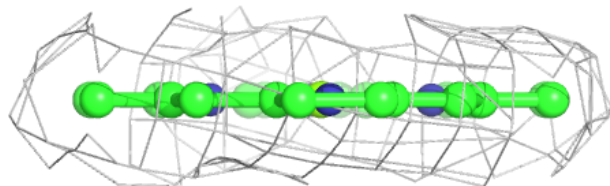
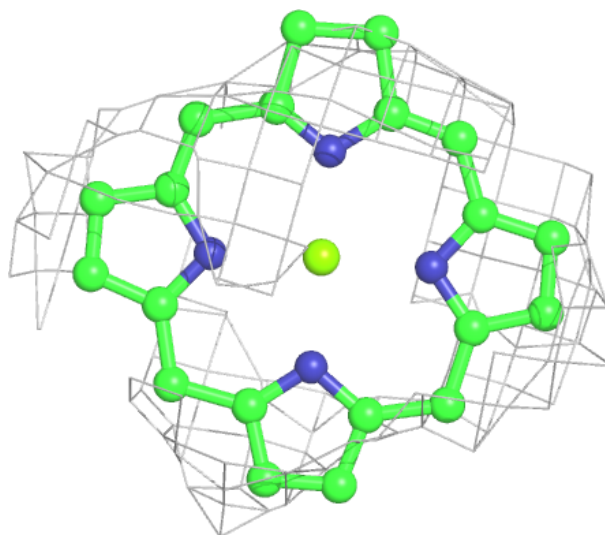
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





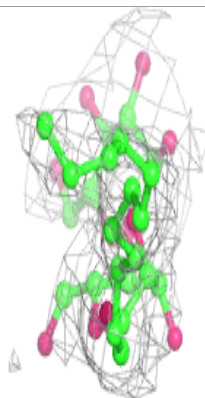
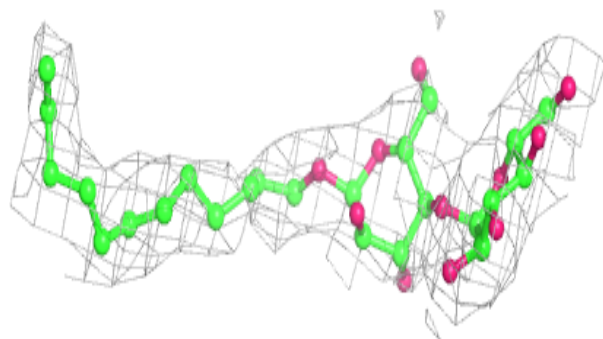
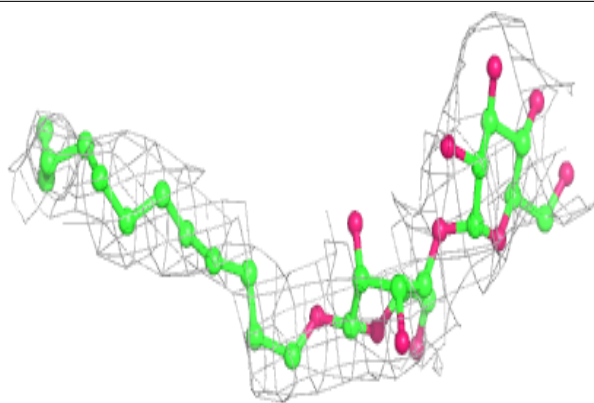
**Electron density around CLA 2 1219:**

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



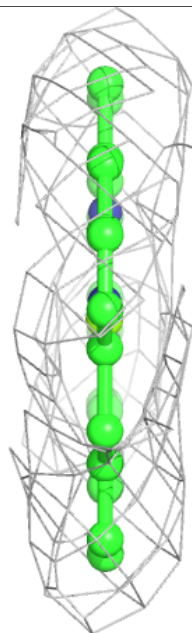
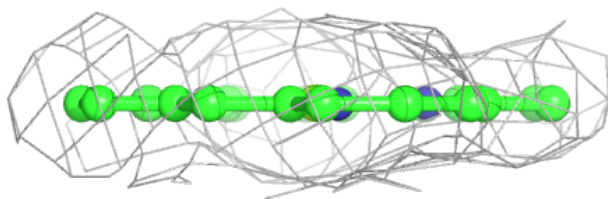
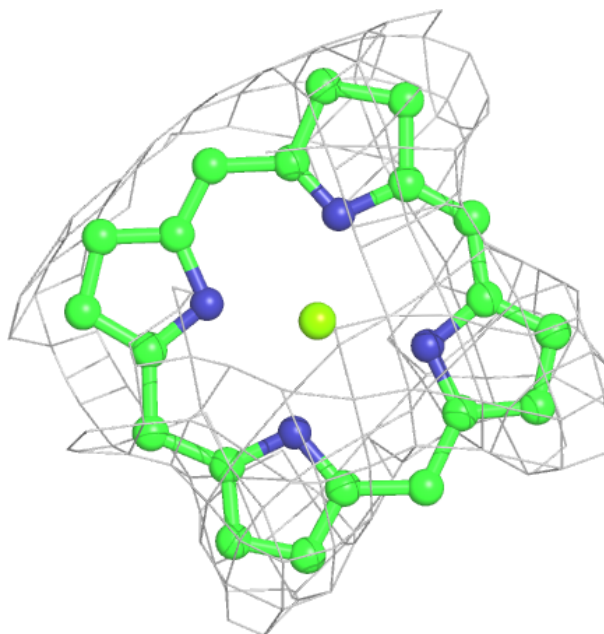
**Electron density around LMU 4 1210:**

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



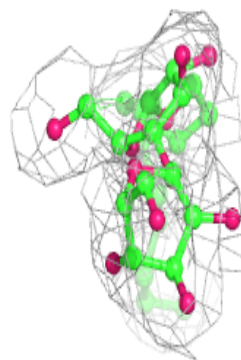
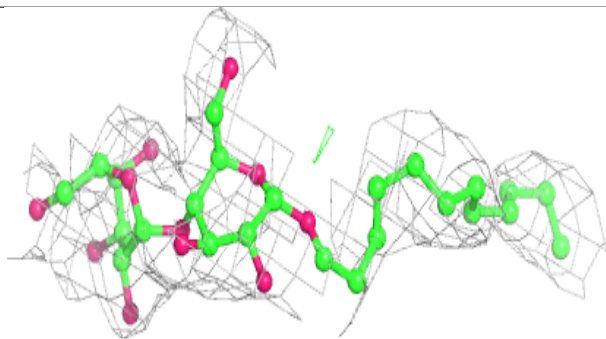
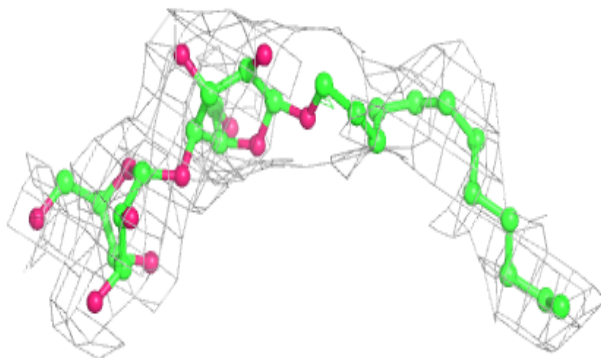
**Electron density around CLA 2 2010:**

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

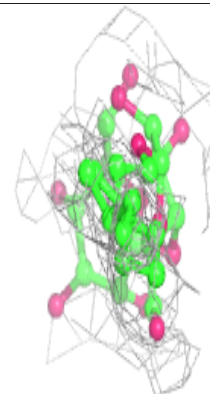
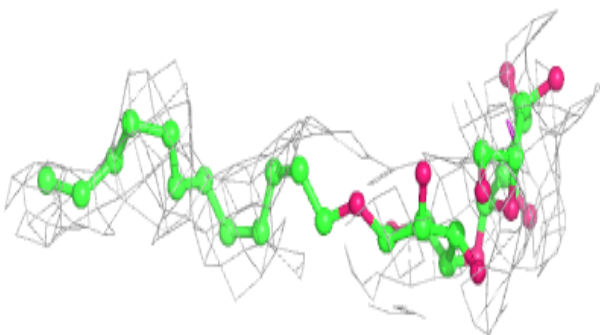
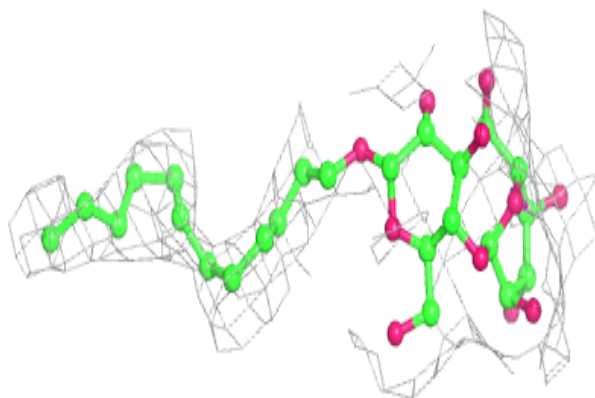


**Electron density around LMU A 7027:**

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

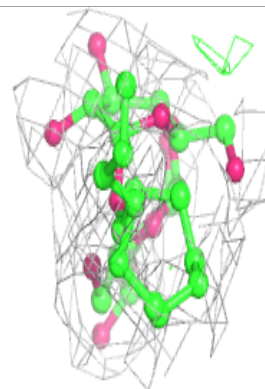
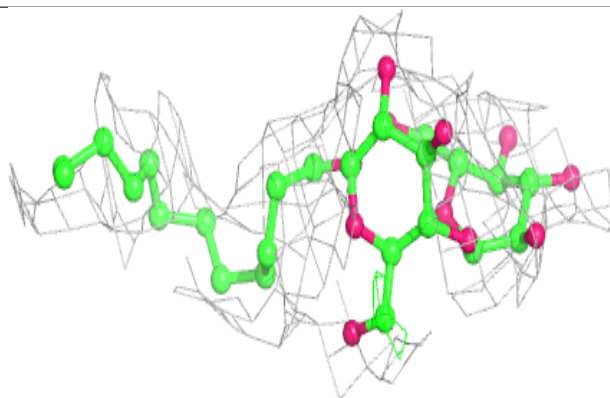
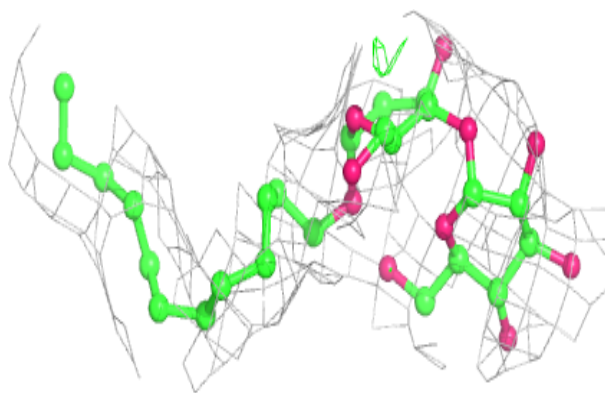
**Electron density around LMU A 7033:**

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

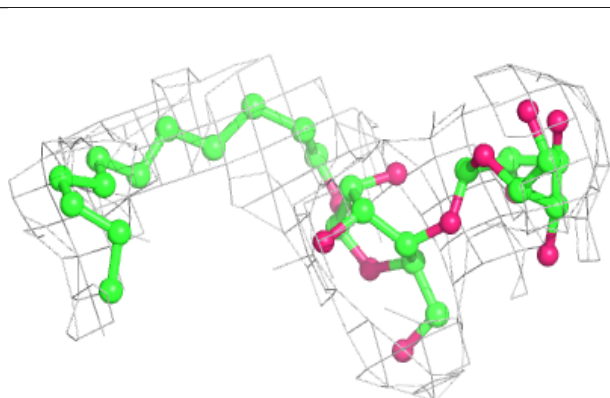
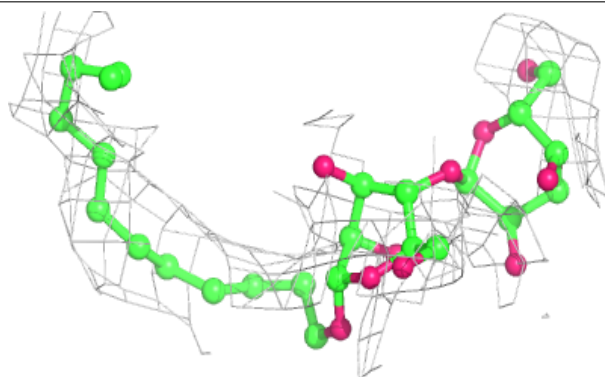


**Electron density around LMU A 1810:**

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

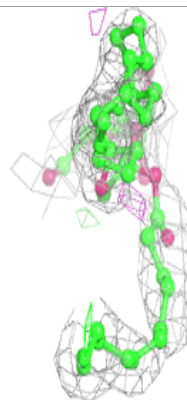
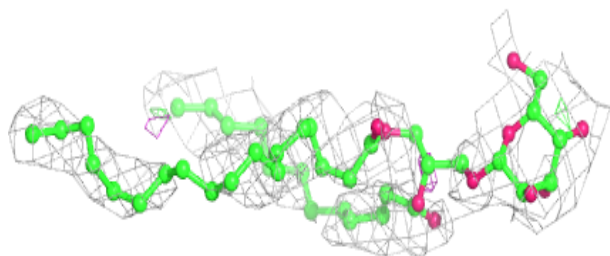
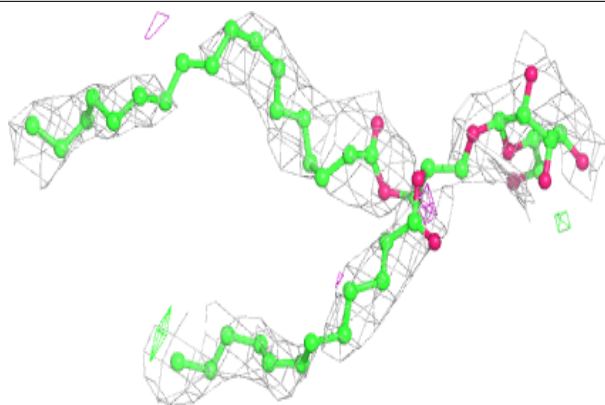
**Electron density around LMU A 7022:**

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

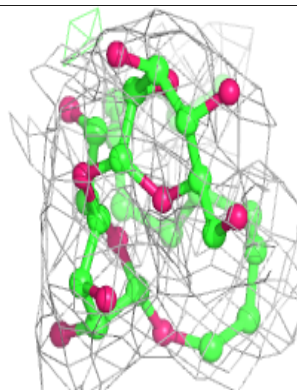
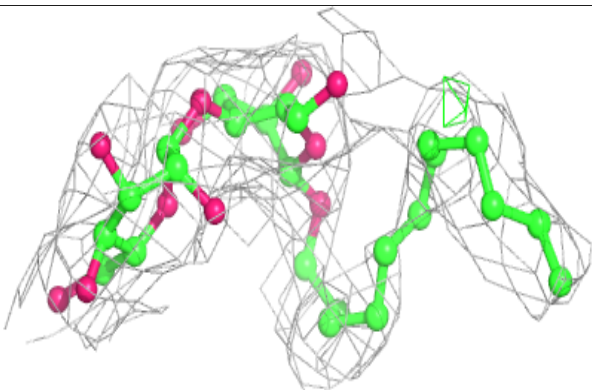
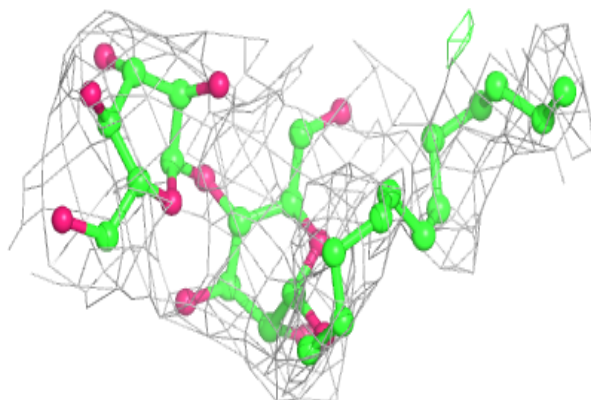


**Electron density around LMG B 1783:**

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

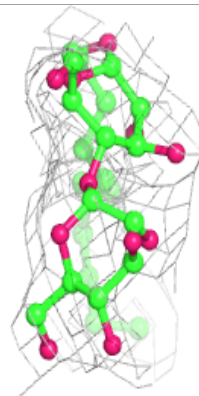
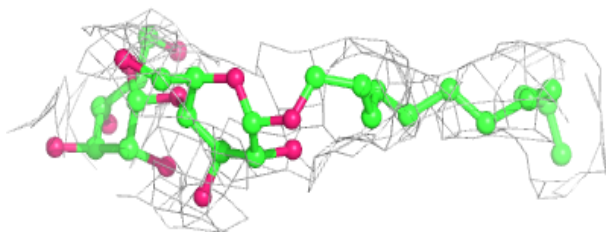
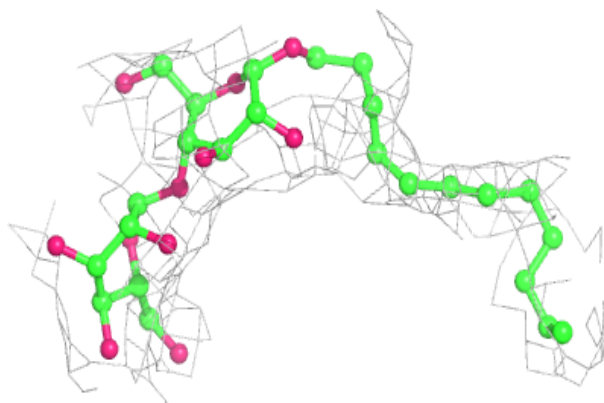
**Electron density around LMU L 1171:**

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

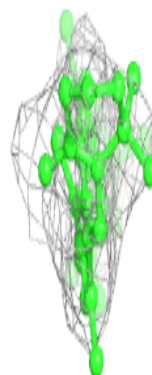
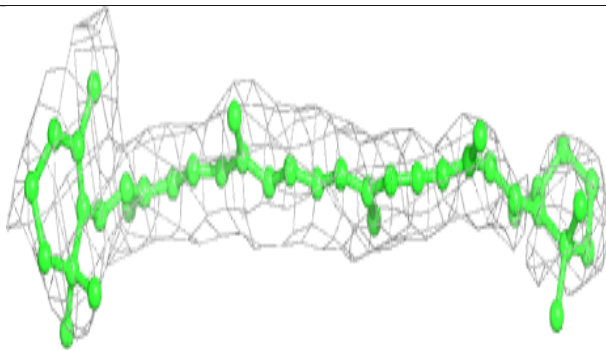
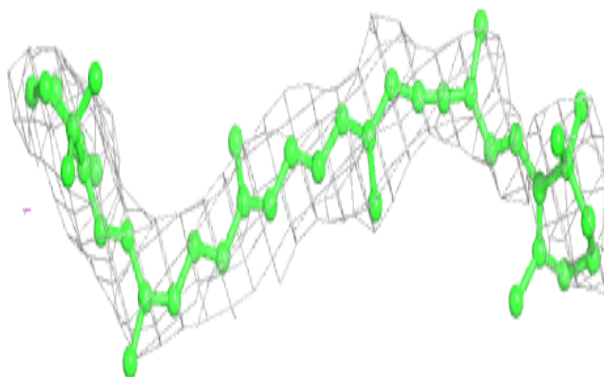


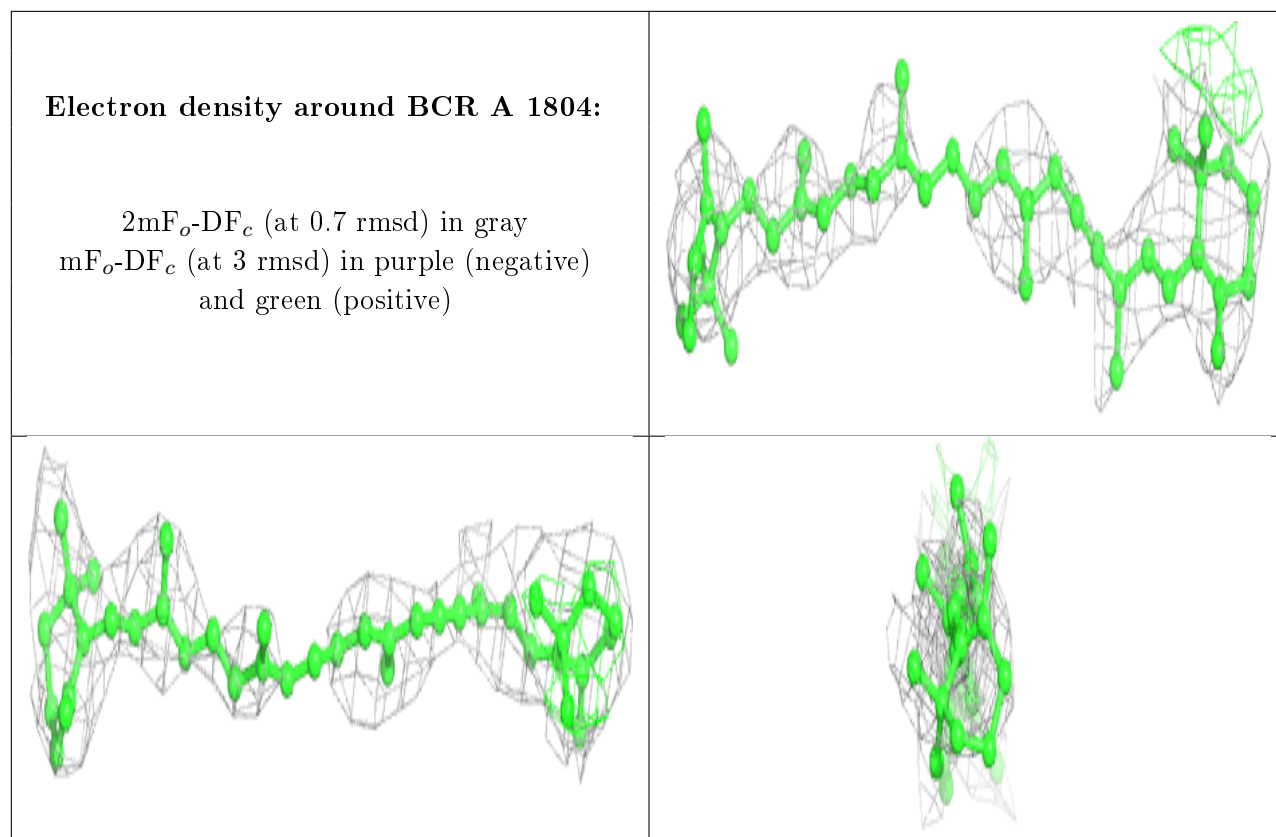
**Electron density around LMU A 7019:**

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

**Electron density around BCR B 1776:**

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

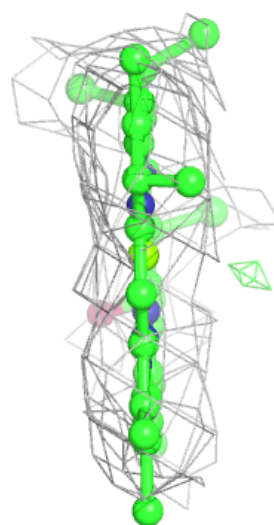
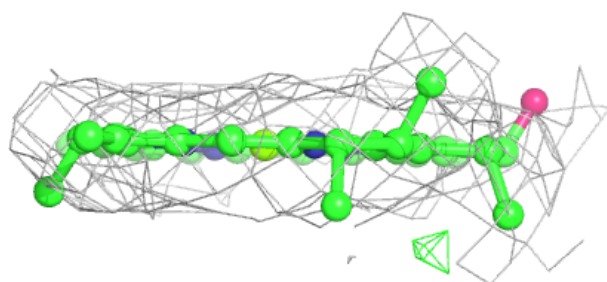
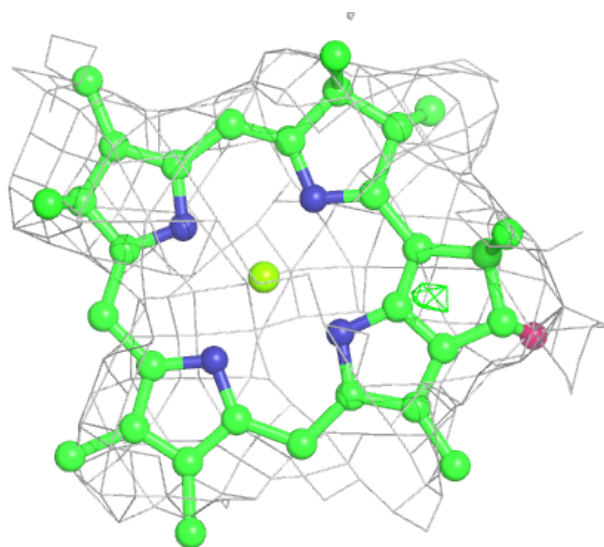


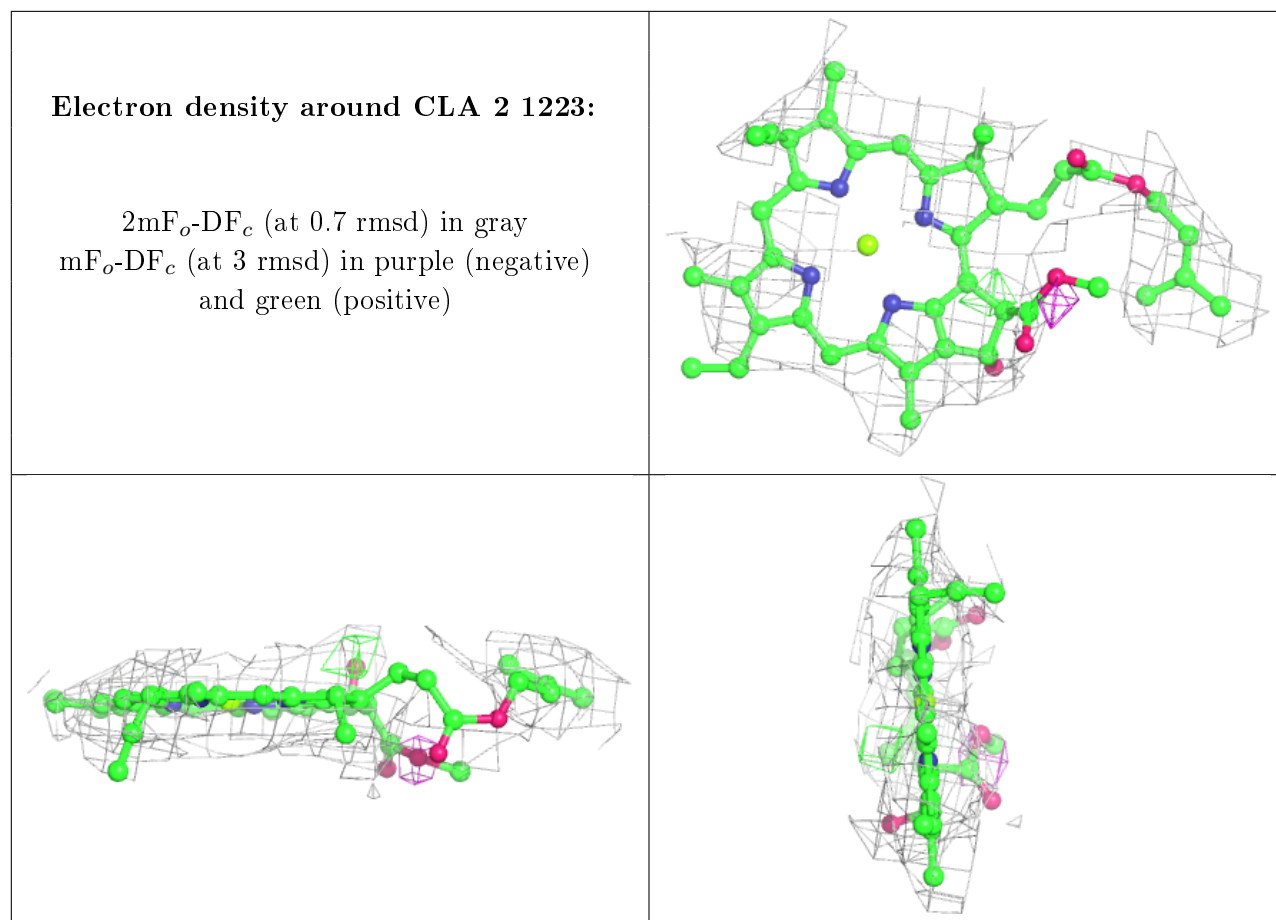




**Electron density around CLA B 1772:**

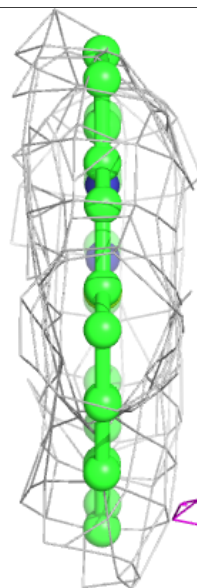
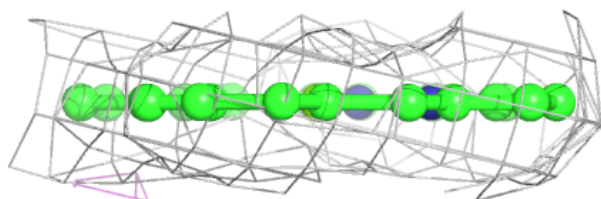
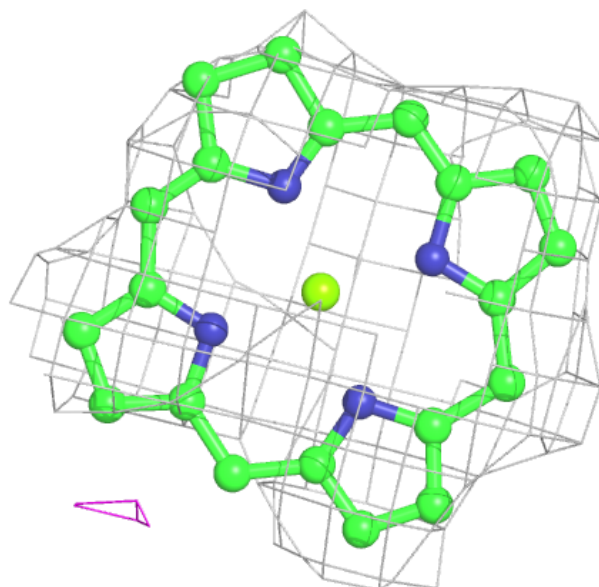
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





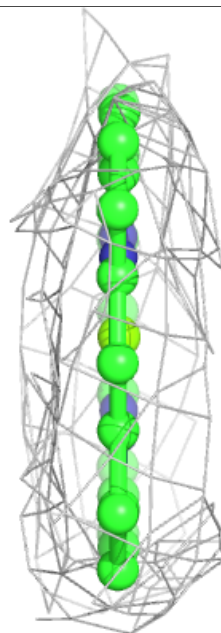
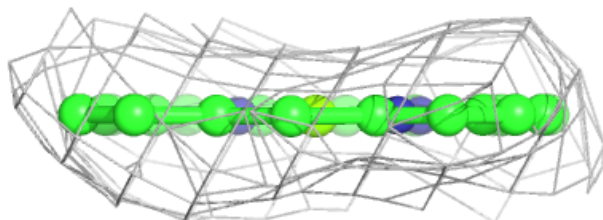
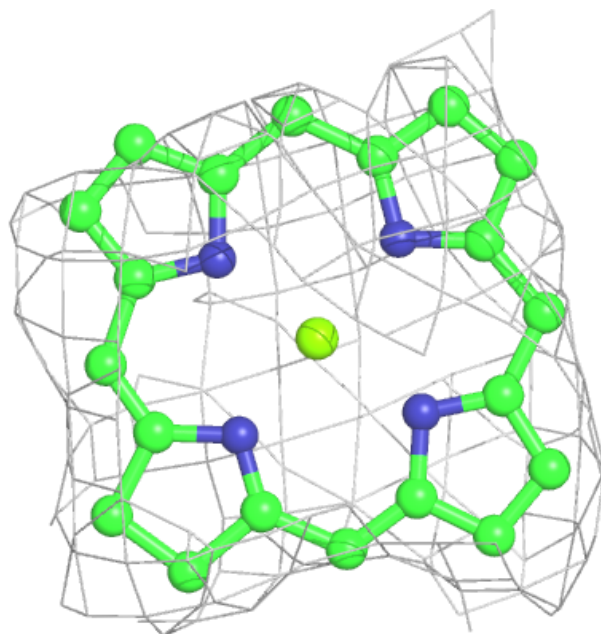
**Electron density around CLA 3 3001:**

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



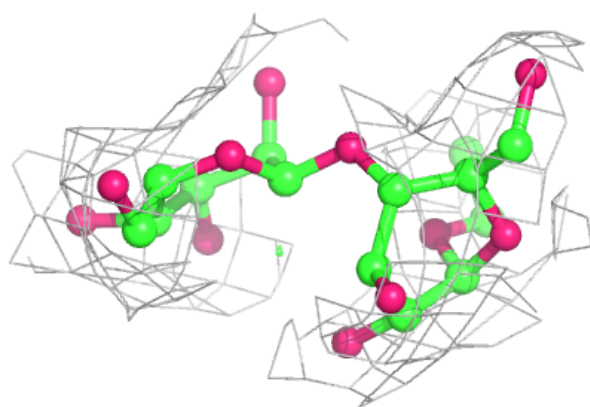
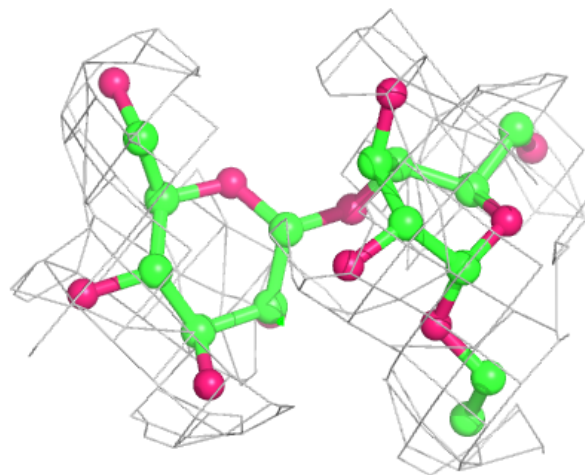
**Electron density around CLA 2 1221:**

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



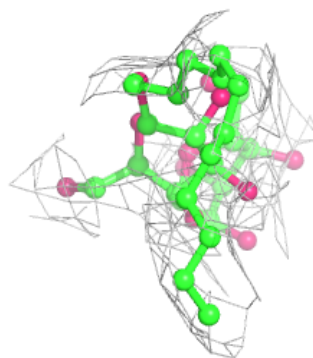
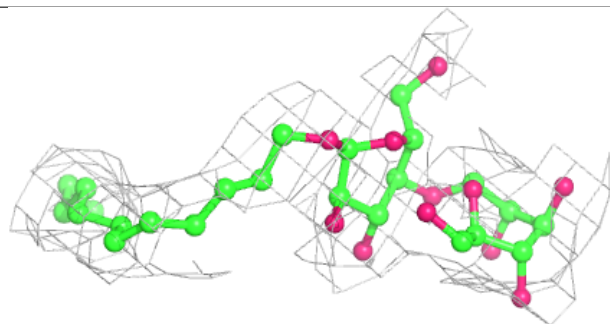
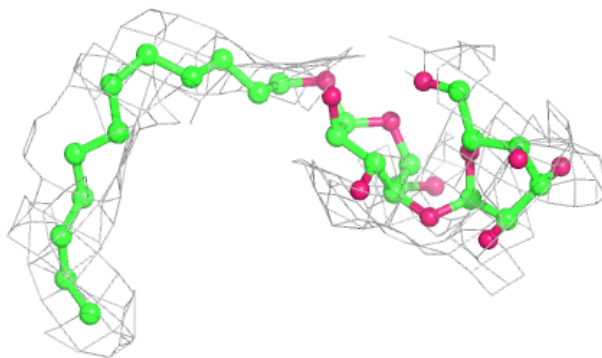
**Electron density around LMU B 1782:**

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



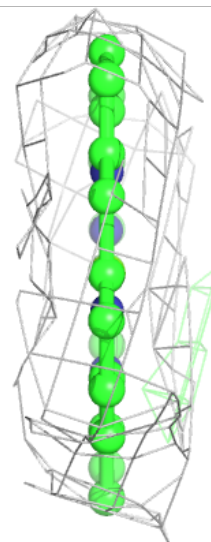
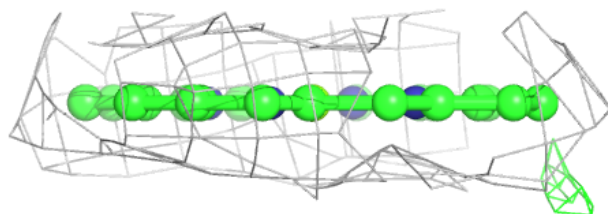
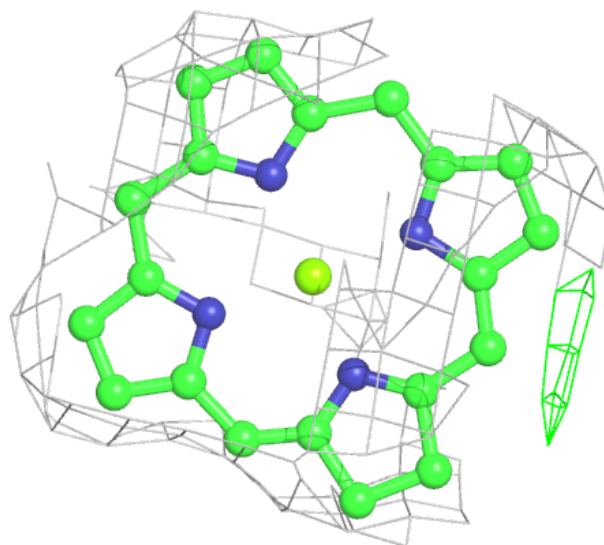
**Electron density around LMU 2 7006:**

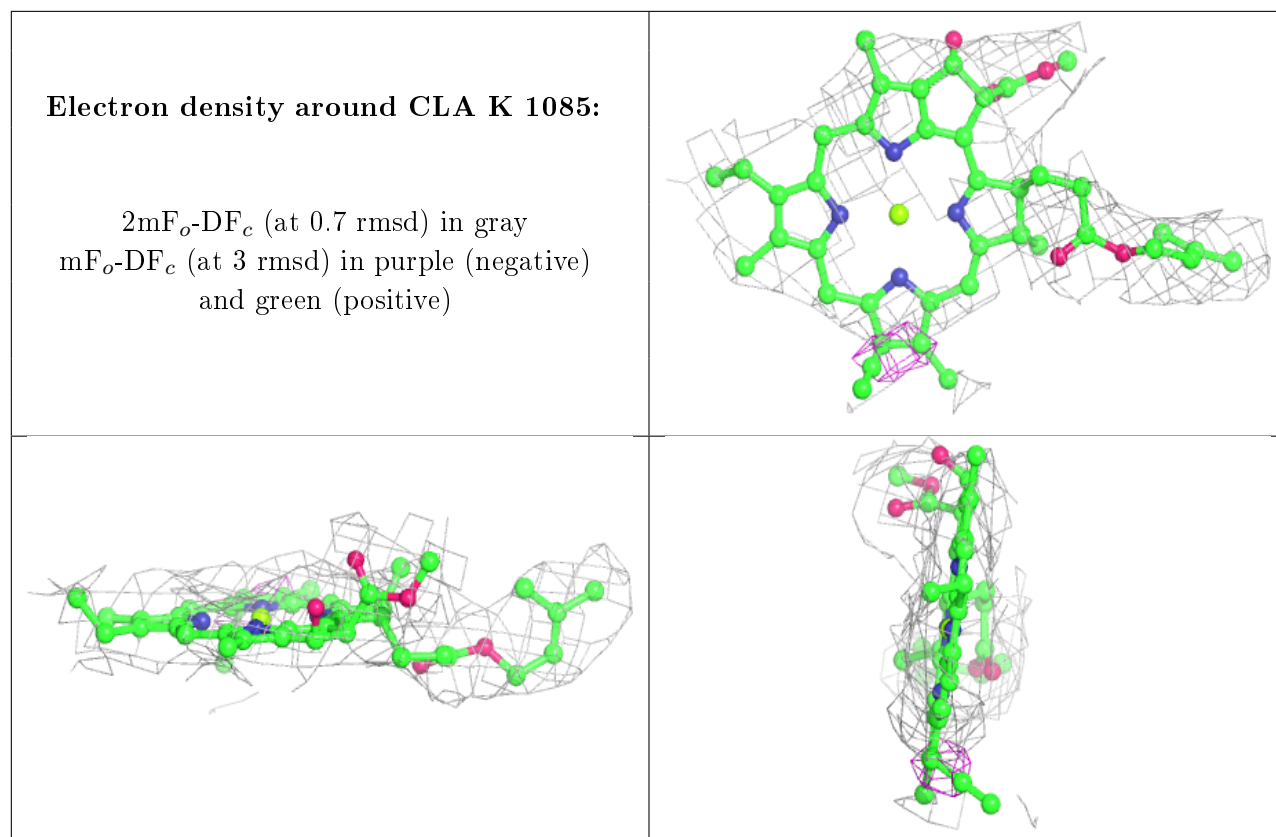
$2mF_o-DF_c$  (at 0.7 rnsd) in gray  
 $mF_o-DF_c$  (at 3 rnsd) in purple (negative)  
and green (positive)



**Electron density around CLA 3 1213:**

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

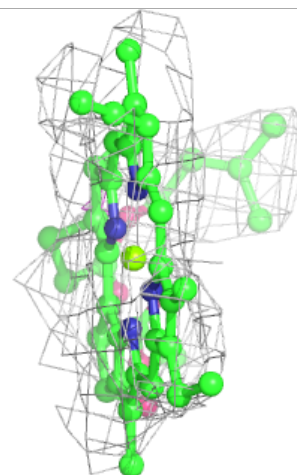
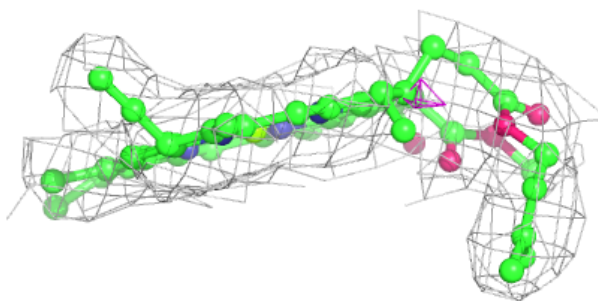
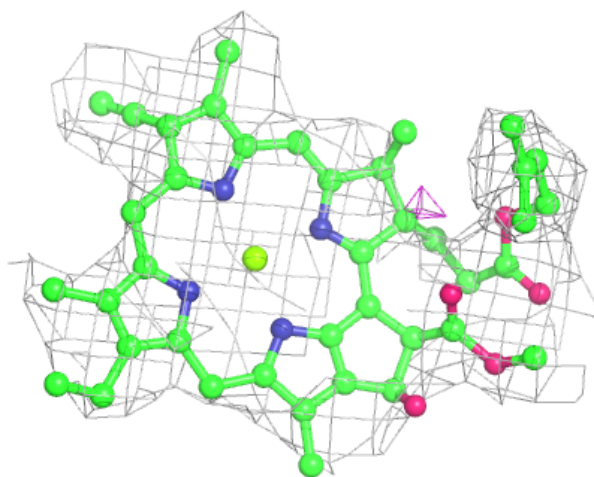






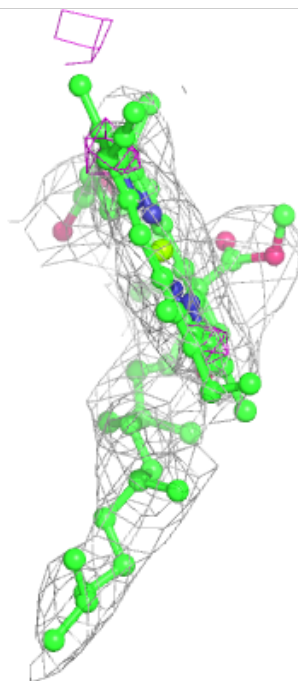
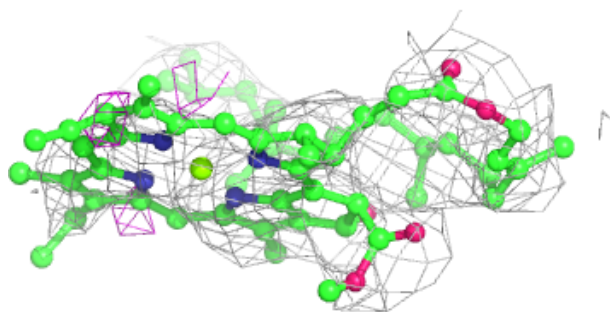
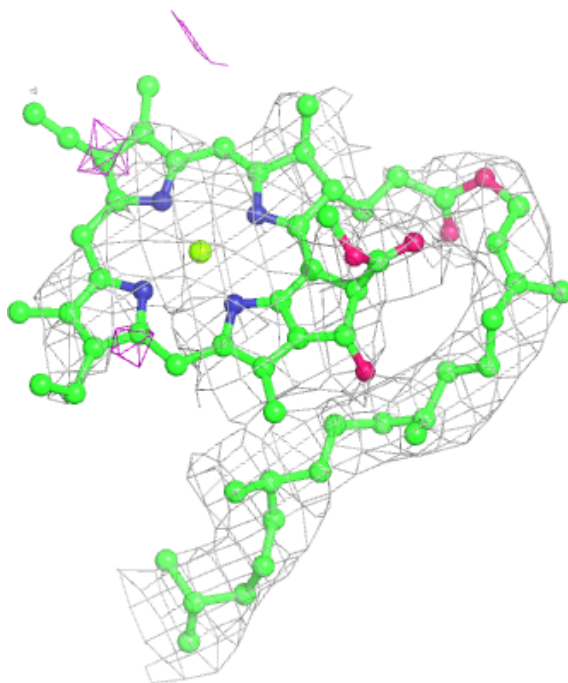
**Electron density around CLA 3 3008:**

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



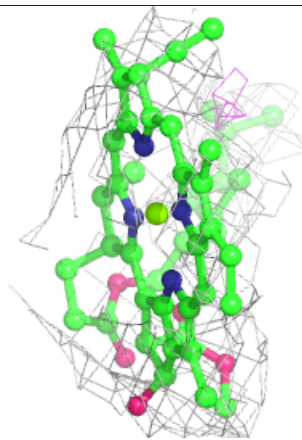
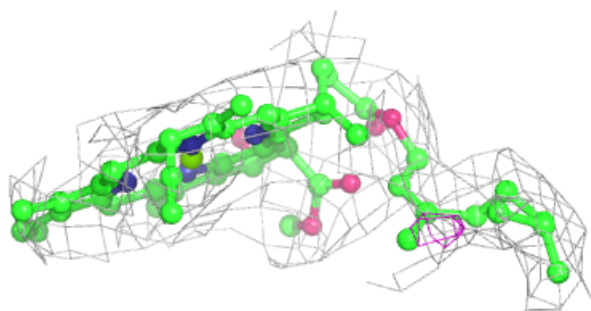
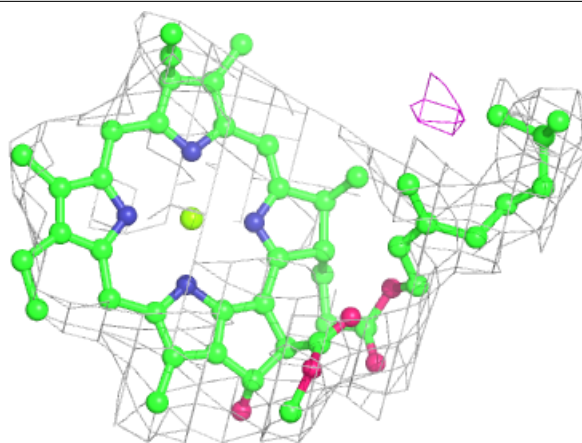
**Electron density around CLA A 1780:**

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



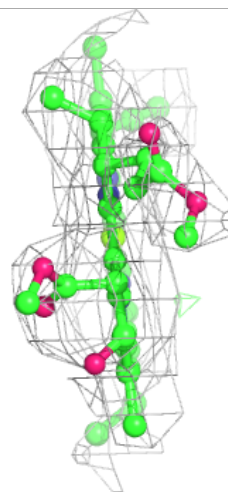
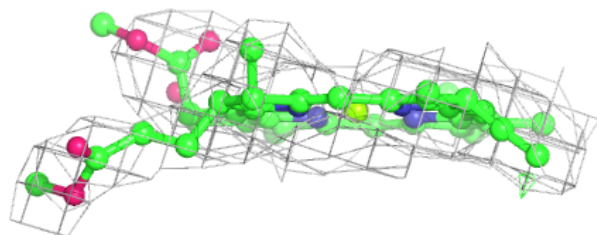
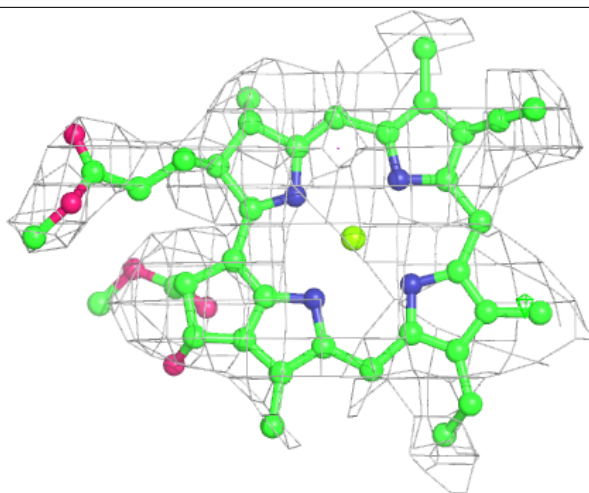
**Electron density around CLA J 1045:**

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



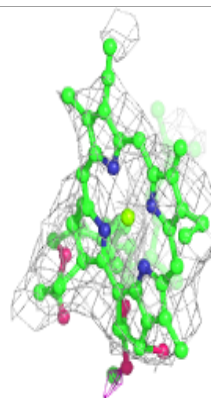
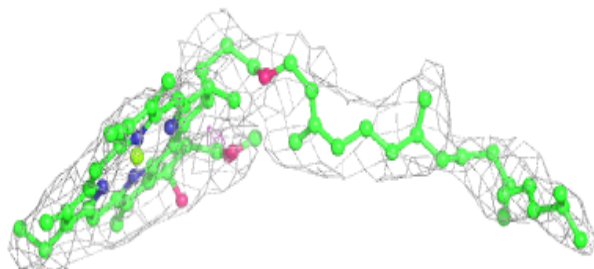
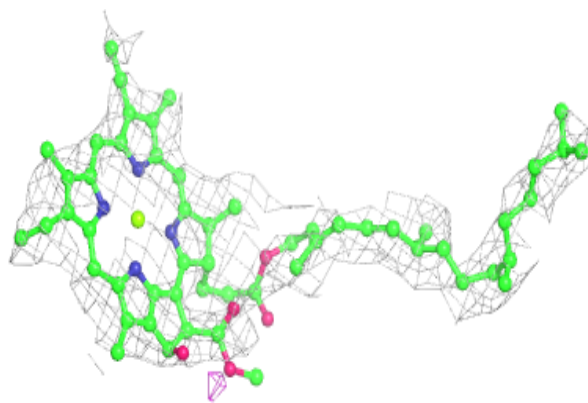
**Electron density around CLA 4 1209:**

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



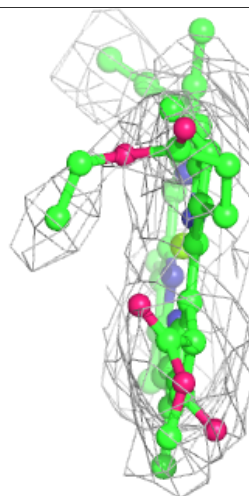
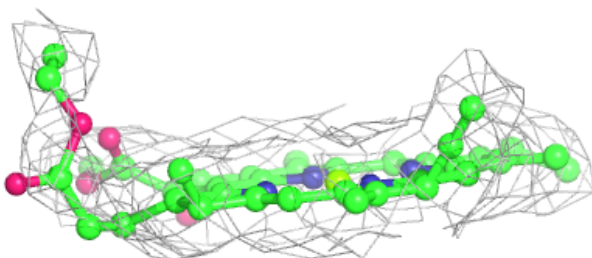
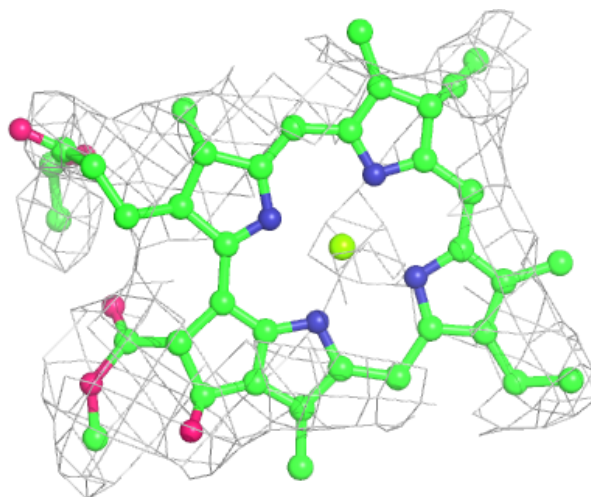
**Electron density around CLA H 1079:**

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



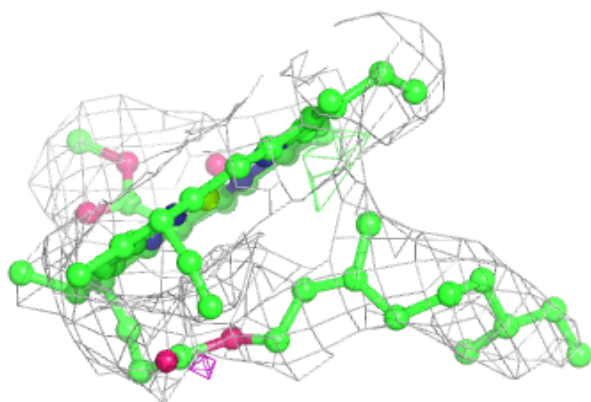
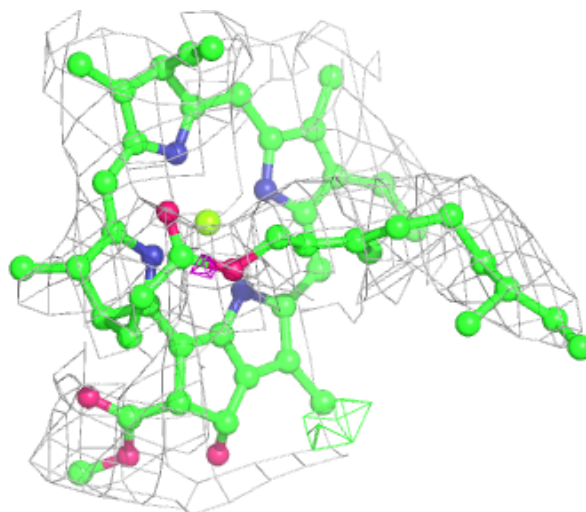
**Electron density around CLA 1 1188:**

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



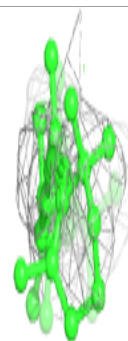
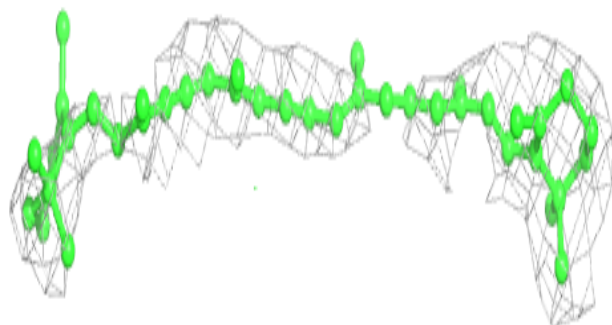
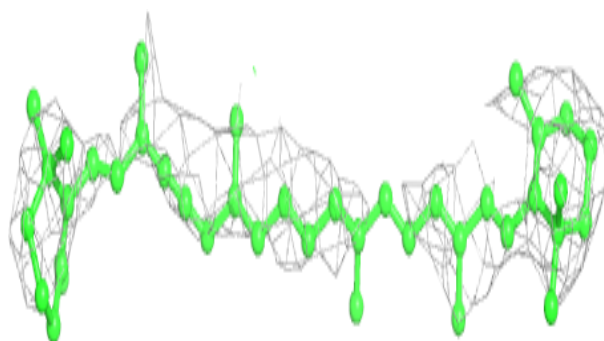
**Electron density around CLA 2 1213:**

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

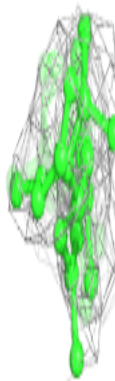
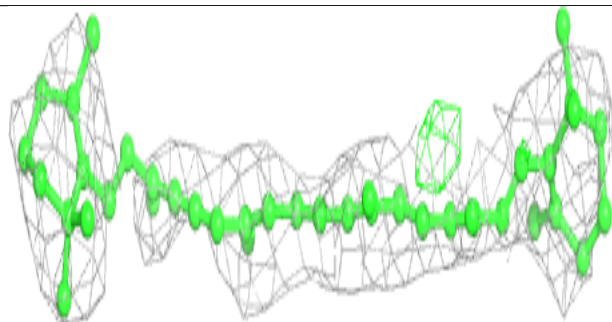
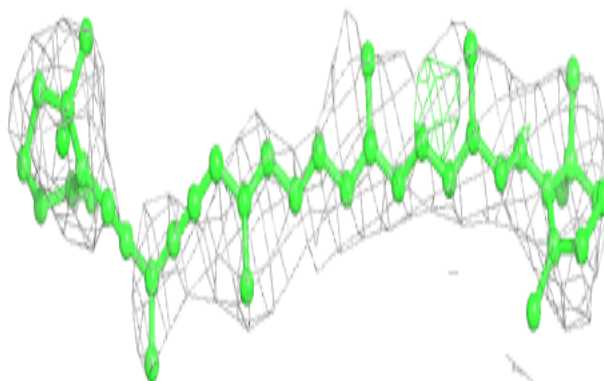


**Electron density around BCR A 1806:**

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

**Electron density around BCR B 1780:**

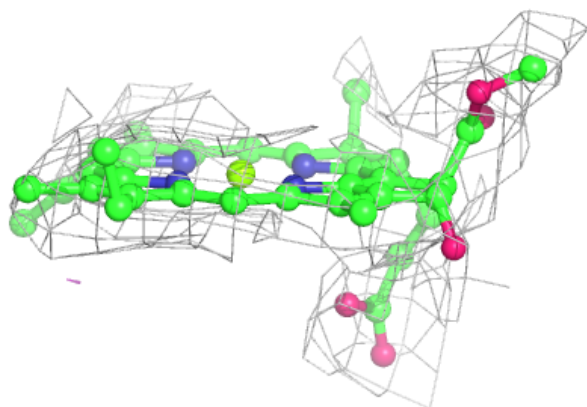
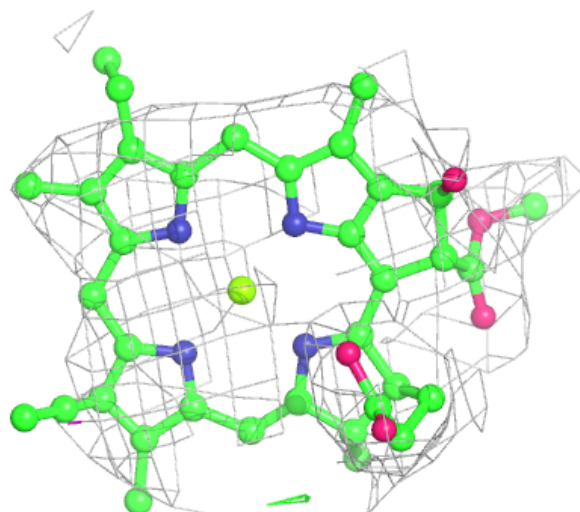
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





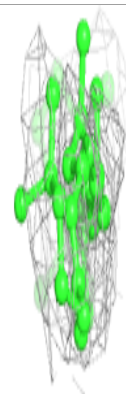
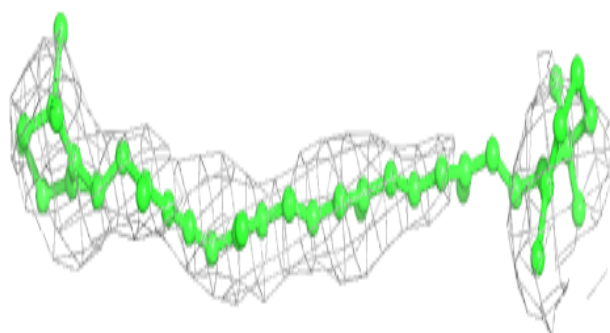
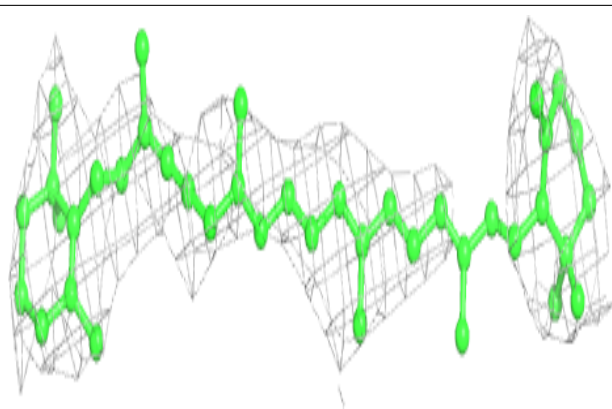
**Electron density around CLA B 1764:**

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

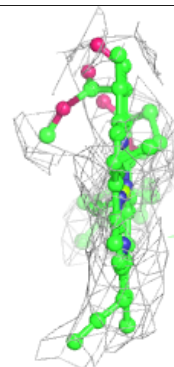
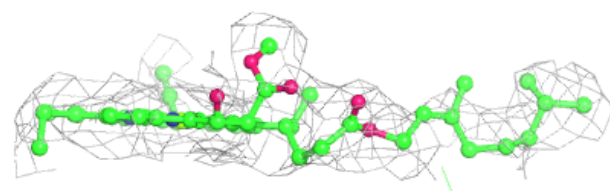
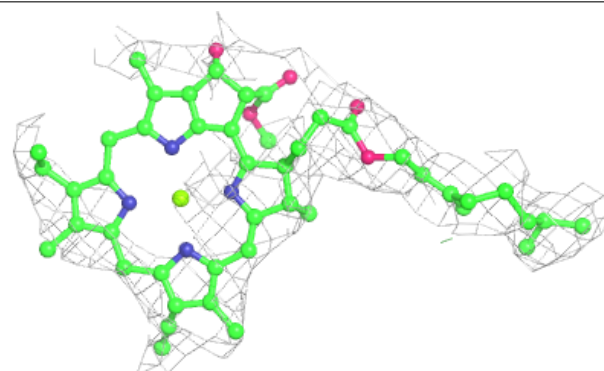


**Electron density around BCR B 1774:**

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

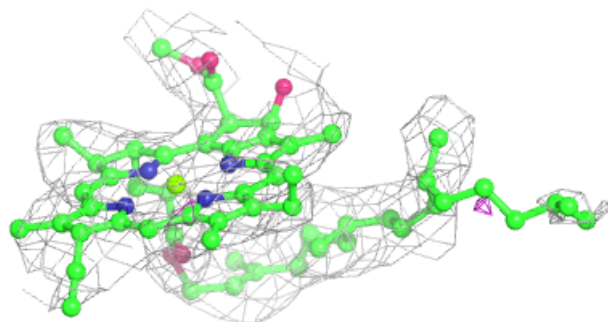
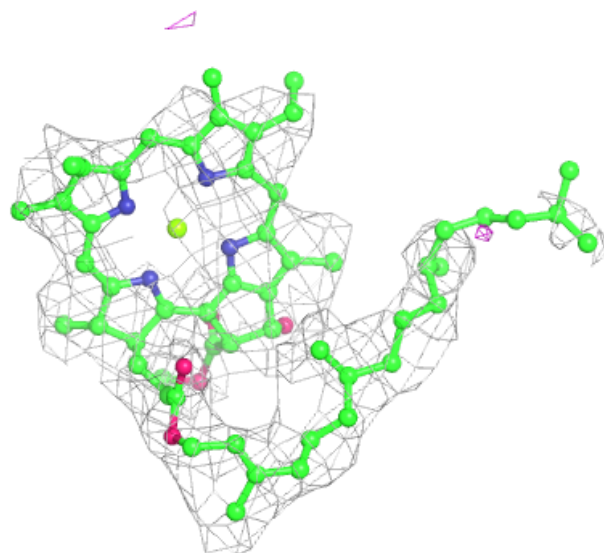
**Electron density around CLA 4 1204:**

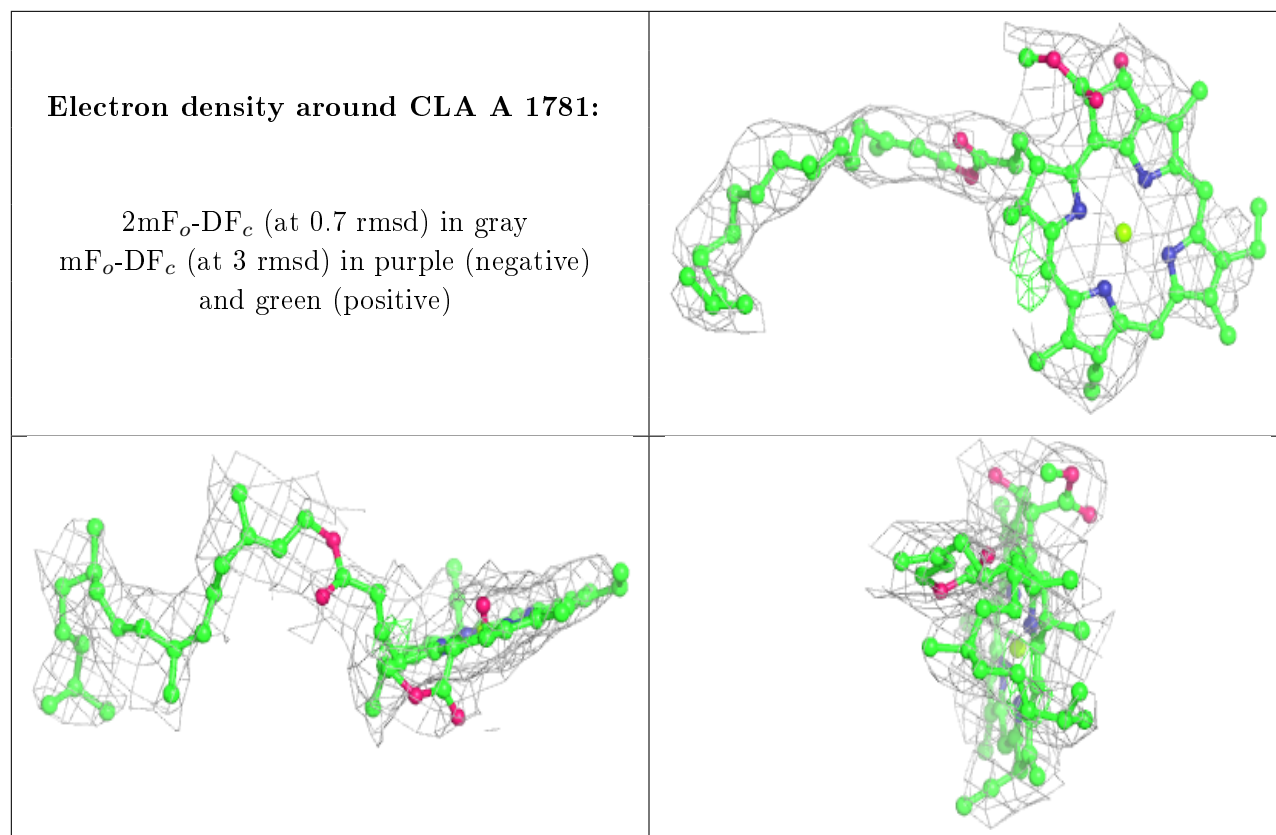
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA B 1762:**

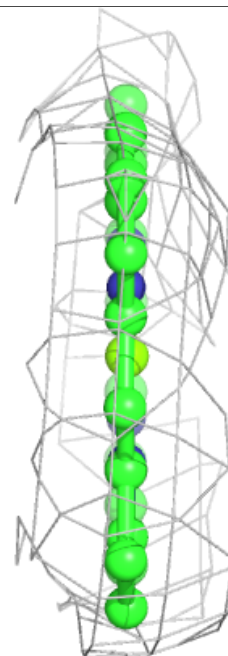
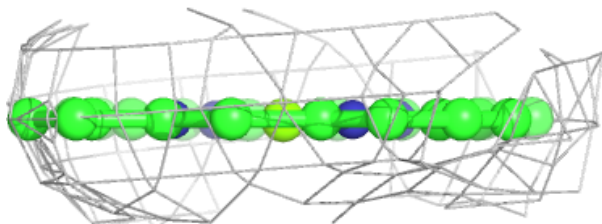
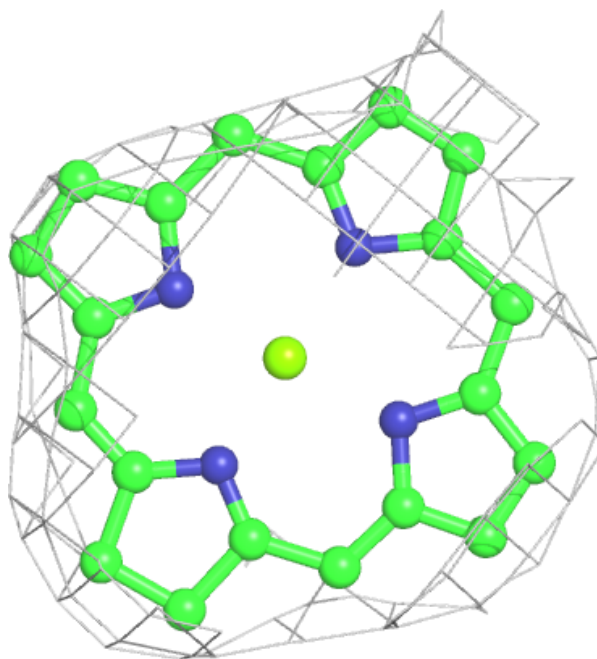
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





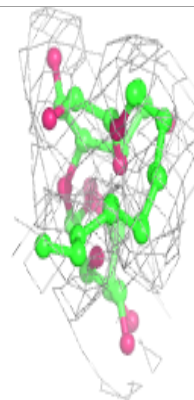
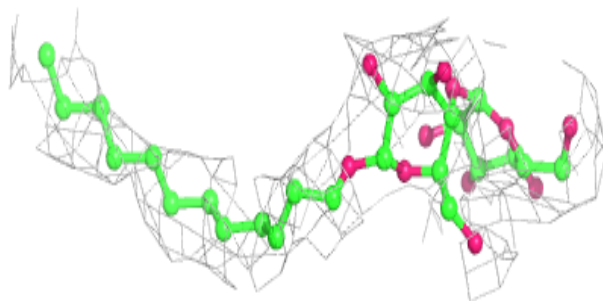
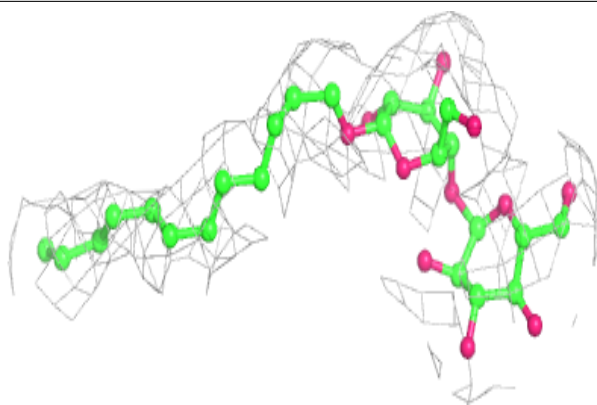
**Electron density around CLA 4 1205:**

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

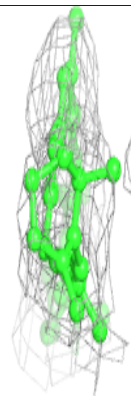
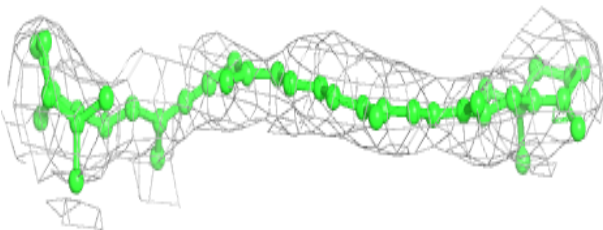
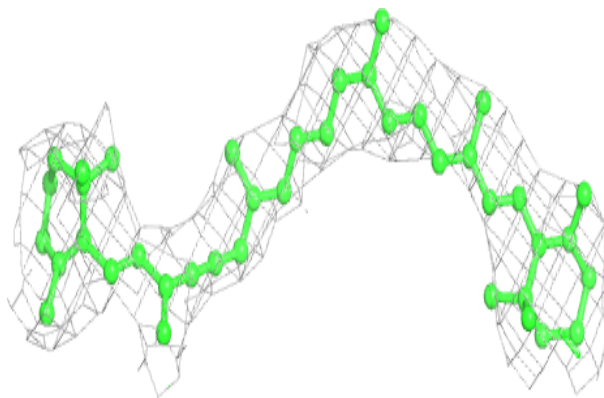


**Electron density around LMU A 7024:**

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

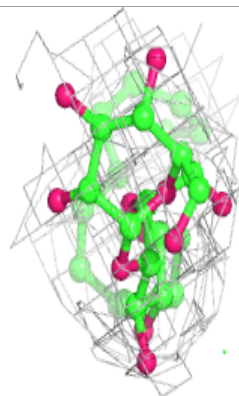
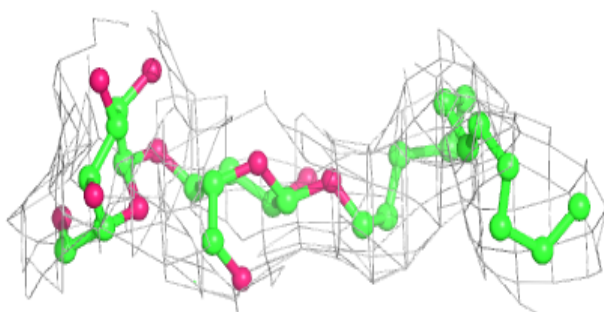
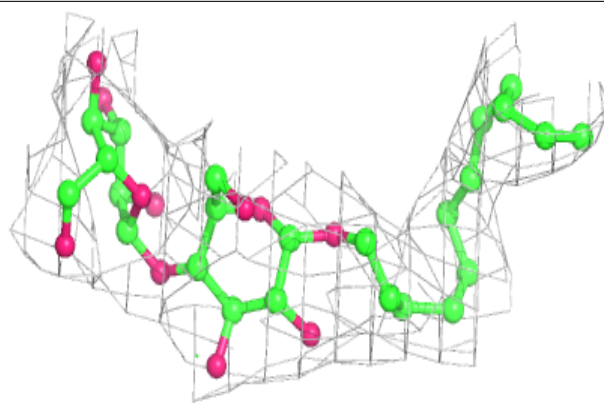
**Electron density around BCR A 1807:**

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

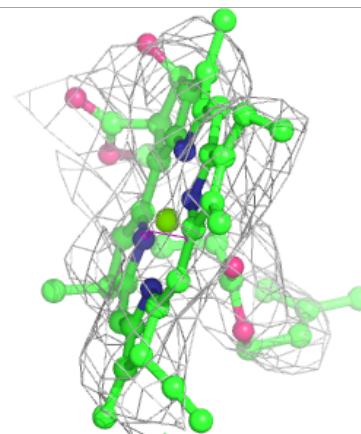
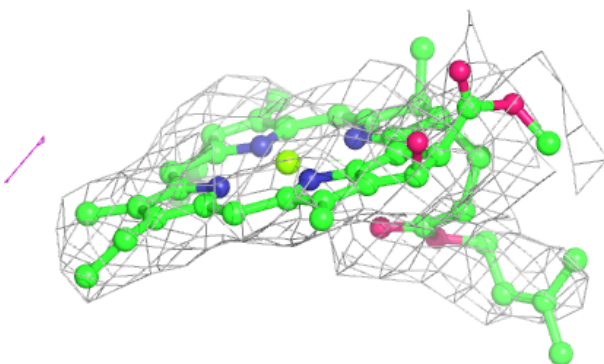
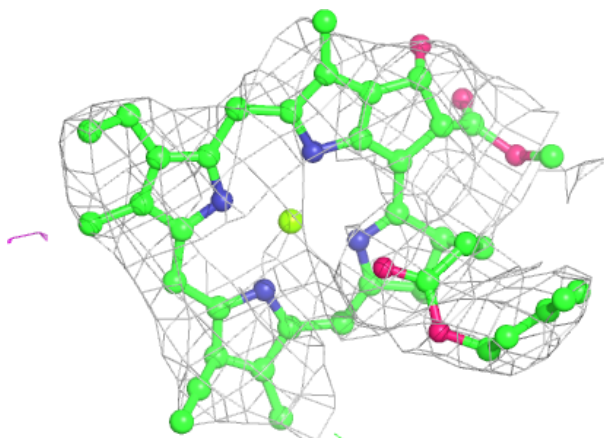


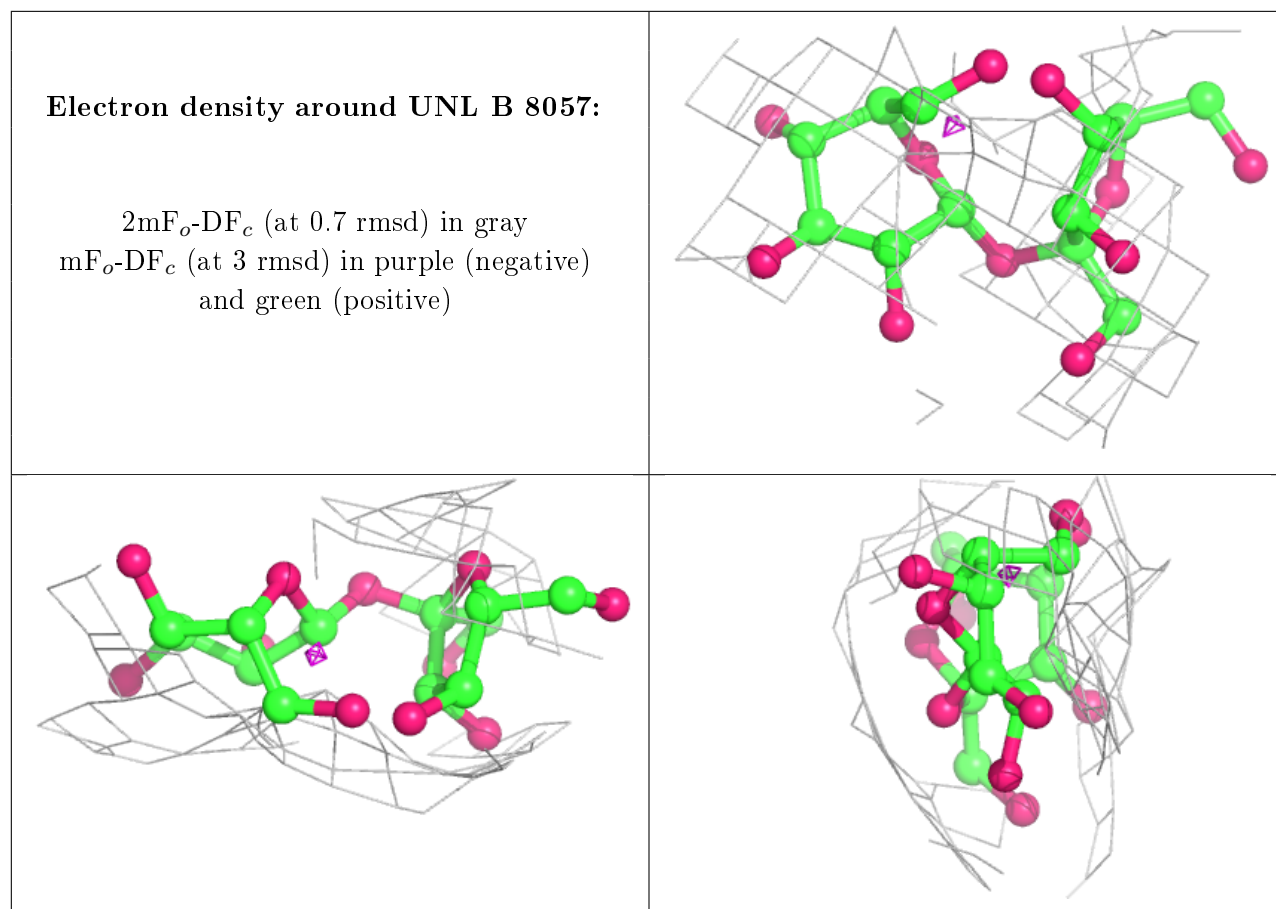
**Electron density around LMU R 1056:**

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

**Electron density around CLA A 1771:**

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

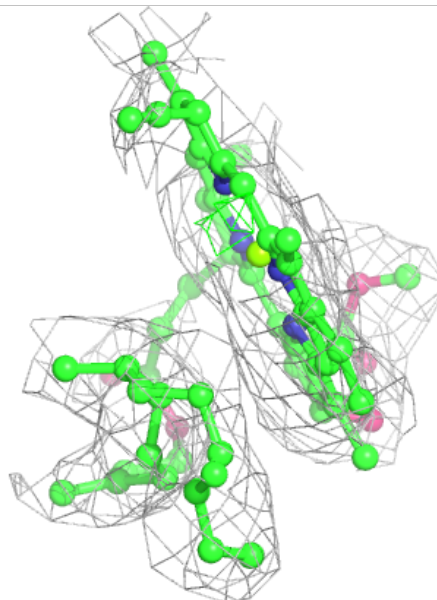
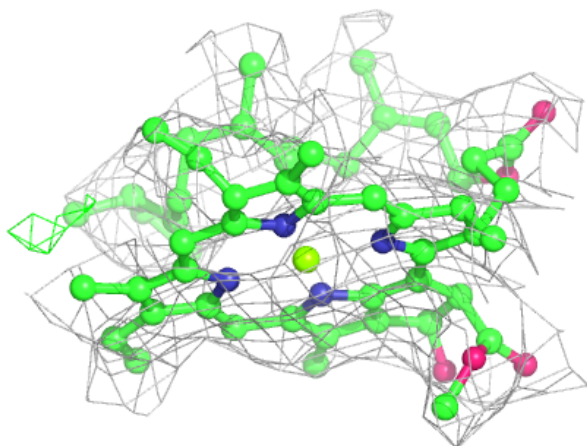
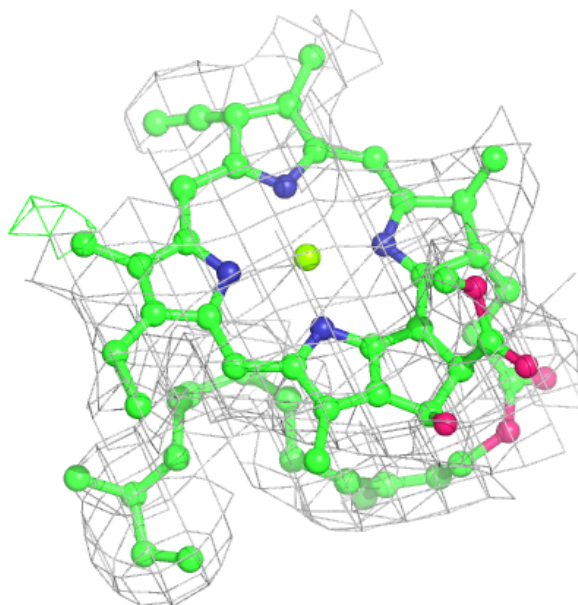






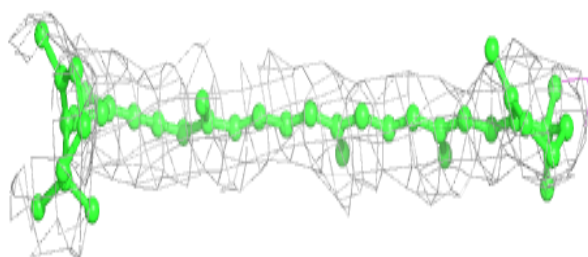
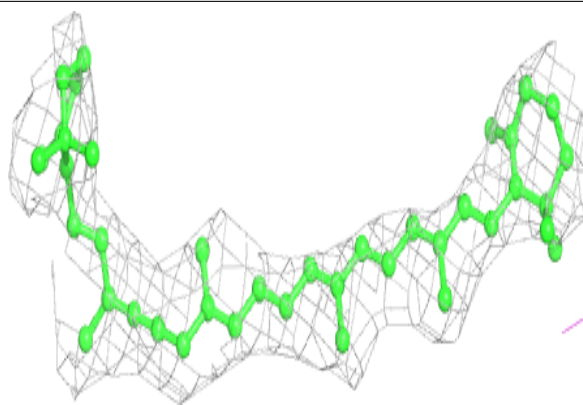
**Electron density around CLA 1 1192:**

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

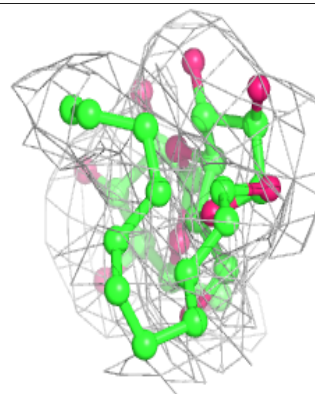
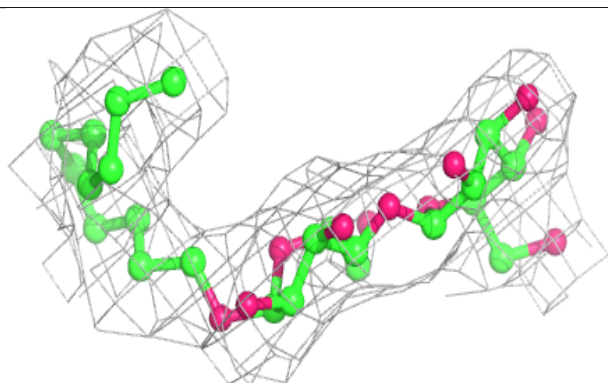
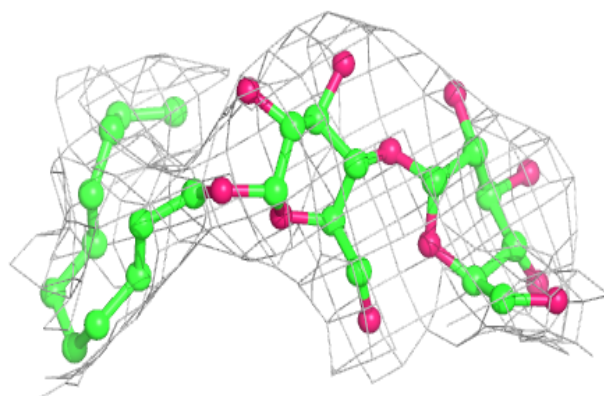


**Electron density around BCR B 1775:**

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

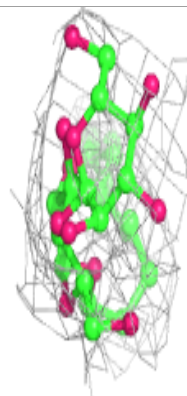
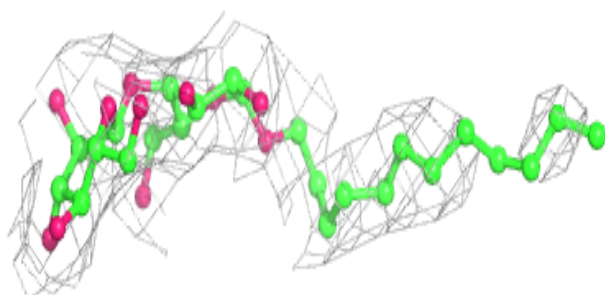
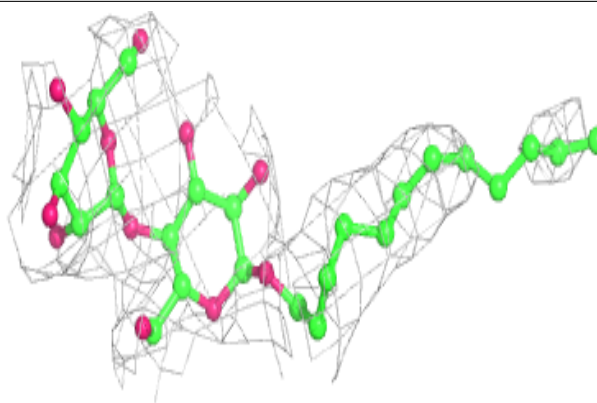
**Electron density around LMU A 7036:**

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

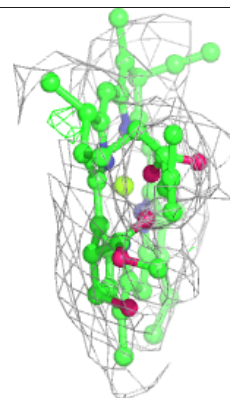
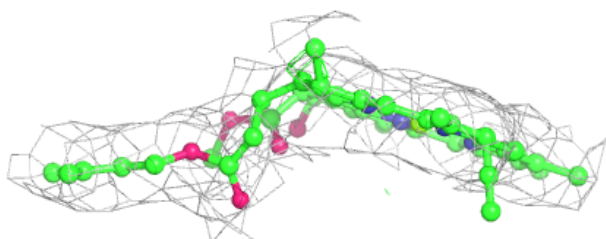
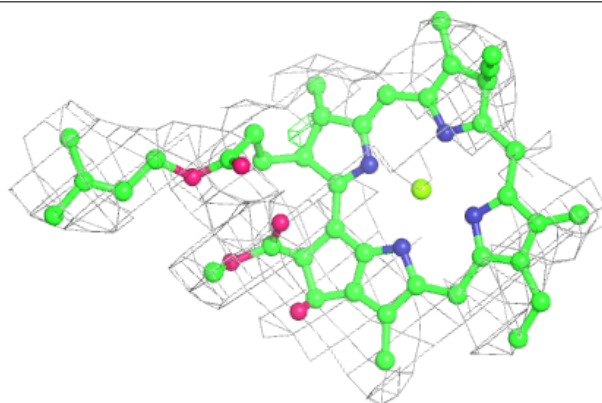


**Electron density around LMU A 7035:**

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

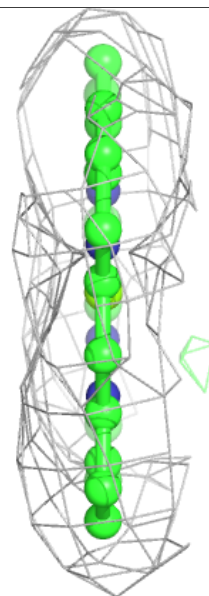
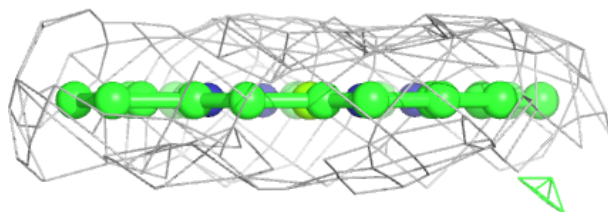
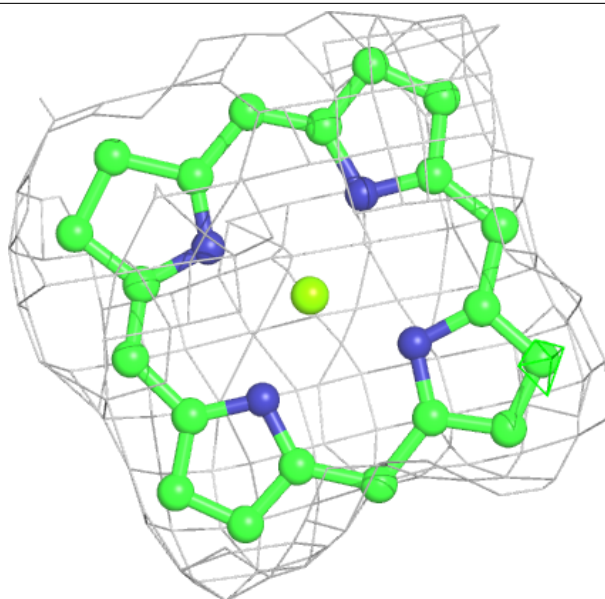
**Electron density around CLA L 1168:**

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



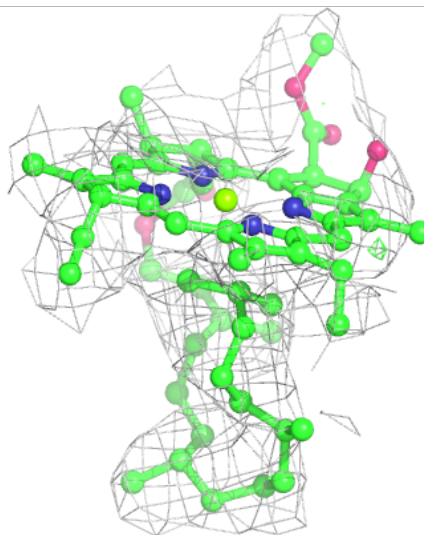
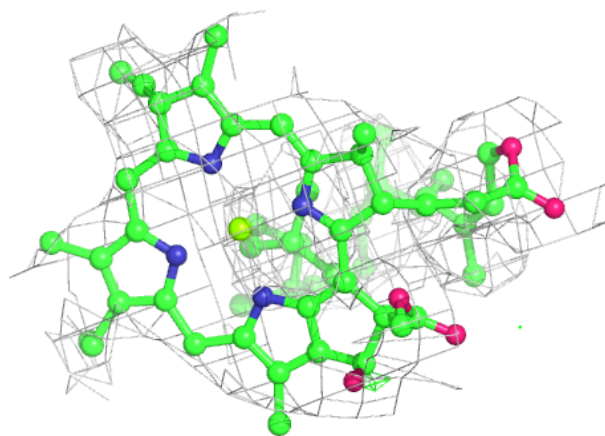
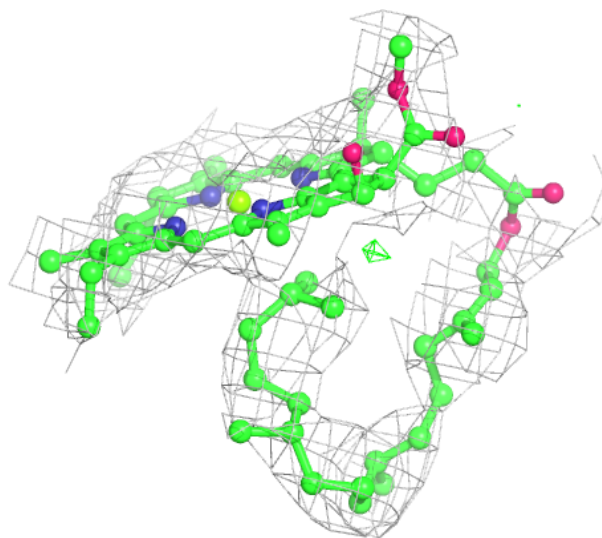
**Electron density around CLA 4 1208:**

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



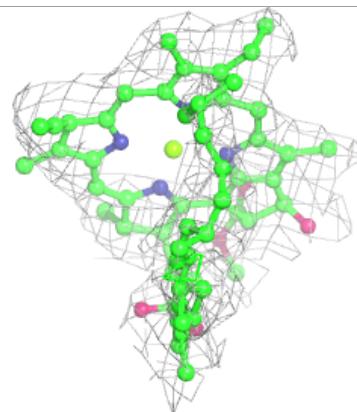
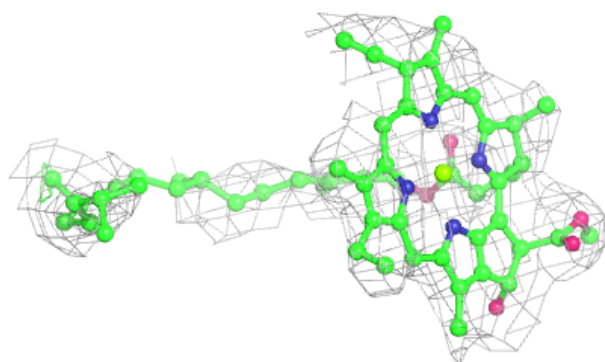
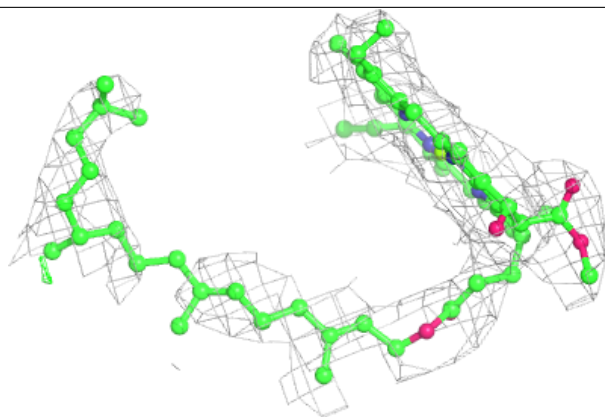
**Electron density around CLA 2 1224:**

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

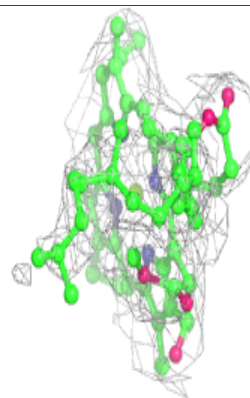
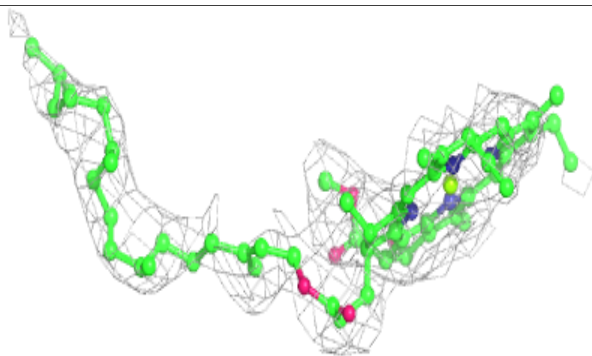
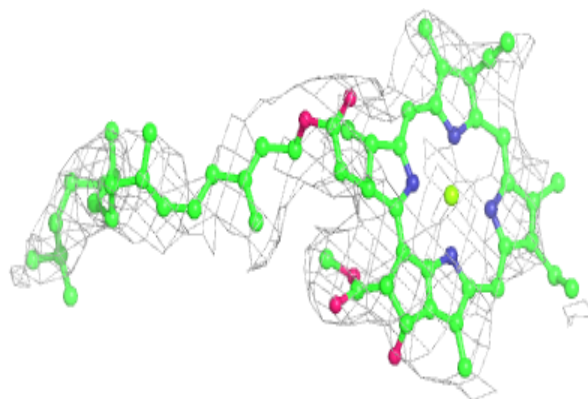


**Electron density around CLA A 1787:**

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

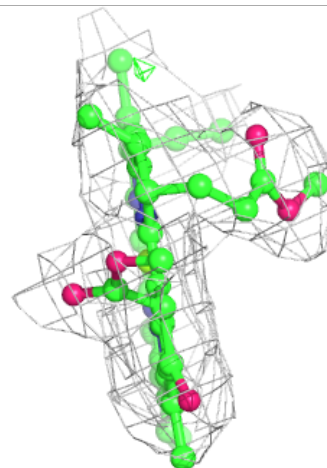
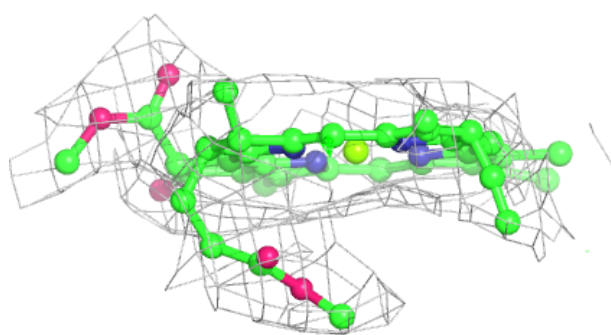
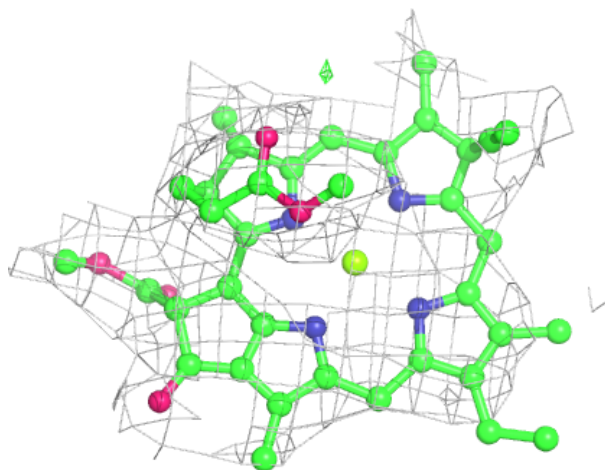
**Electron density around CLA 3 3011:**

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



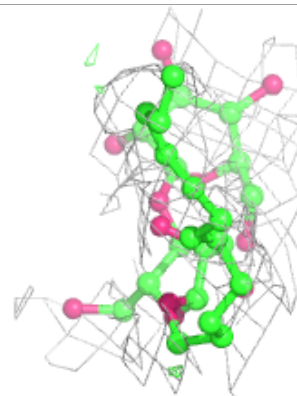
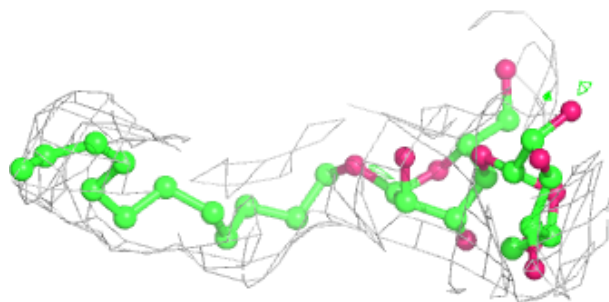
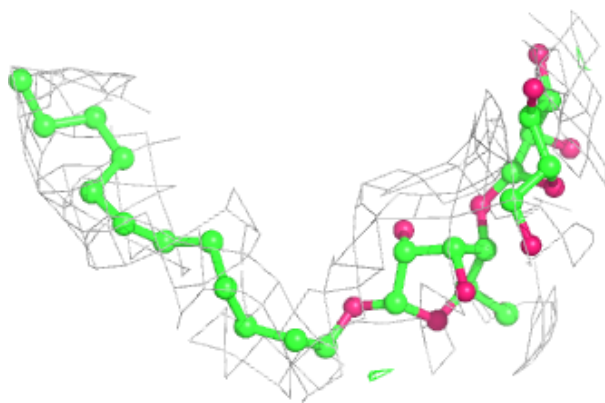
**Electron density around CLA 1 1190:**

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



**Electron density around LMU A 7039:**

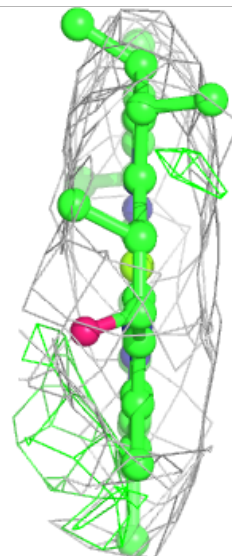
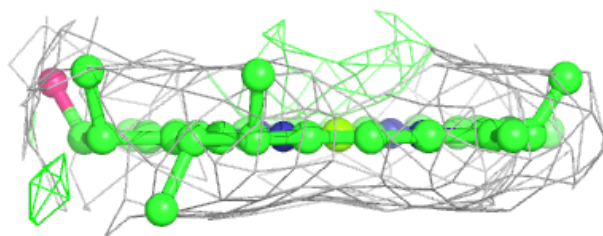
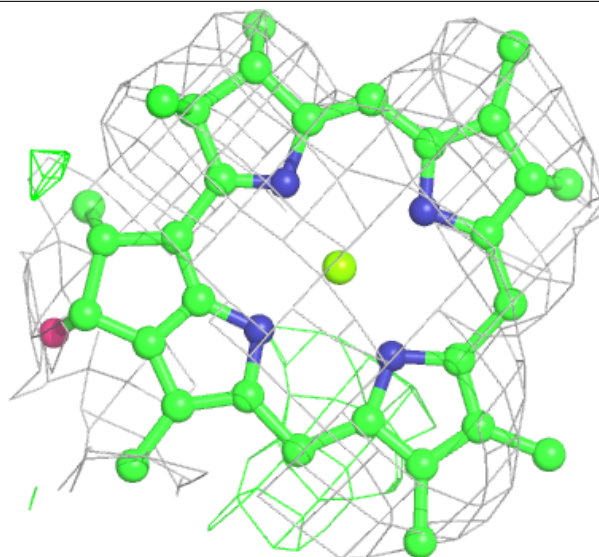
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





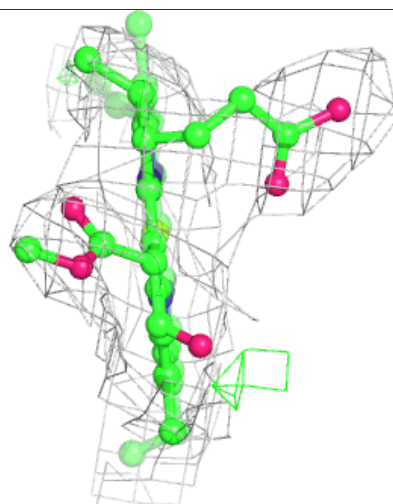
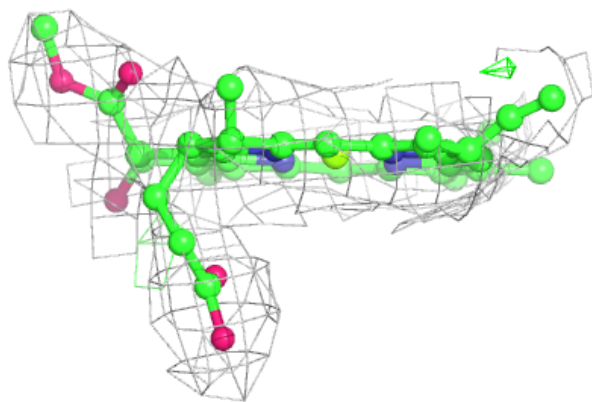
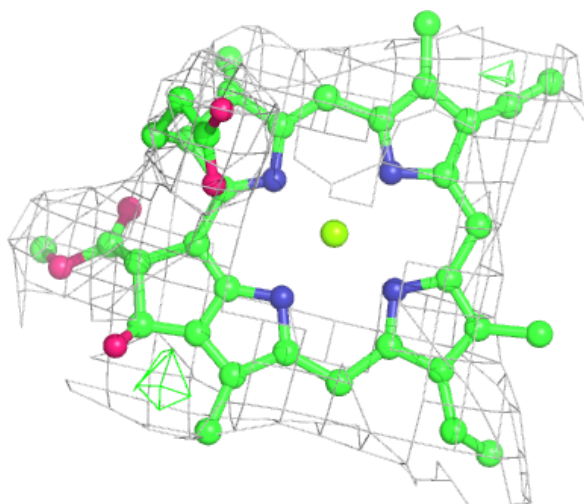
**Electron density around CLA 4 1197:**

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



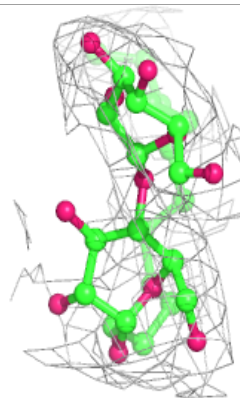
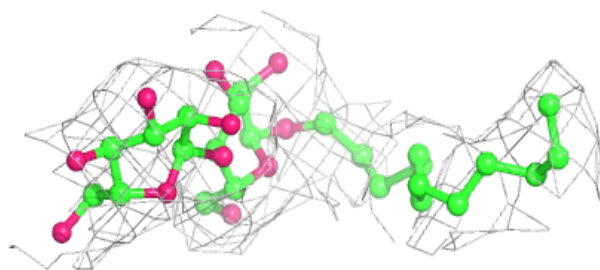
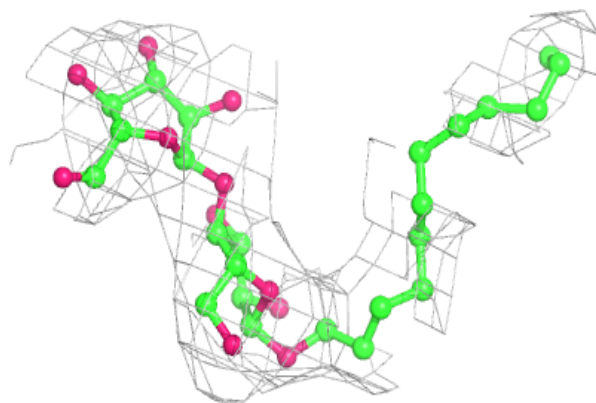
**Electron density around CLA B 1736:**

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



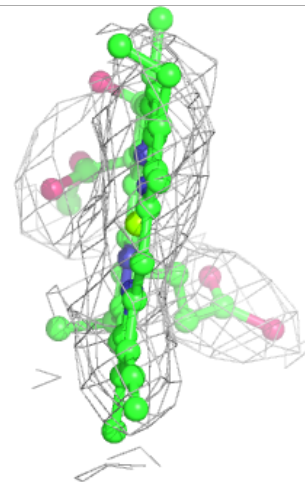
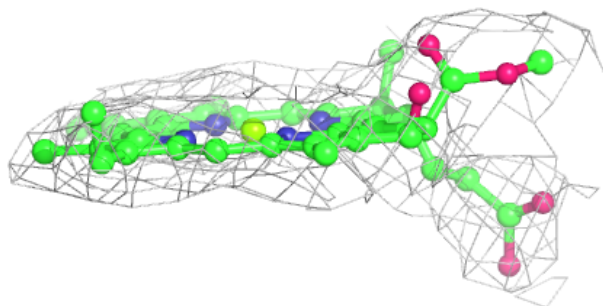
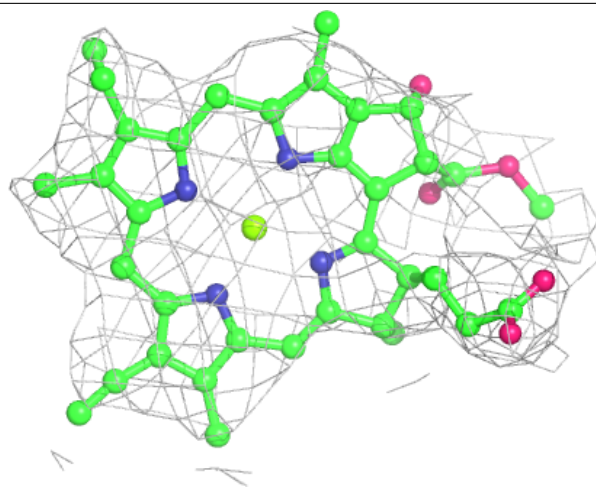
**Electron density around LMU A 7028:**

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



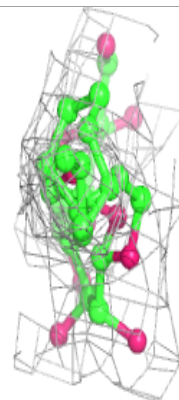
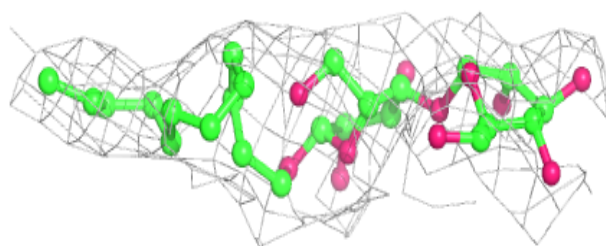
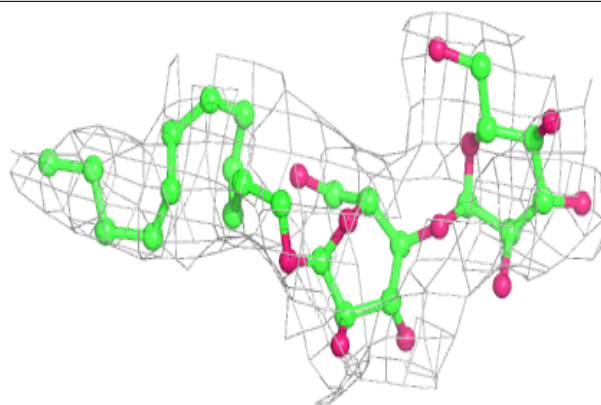
**Electron density around CLA A 1766:**

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



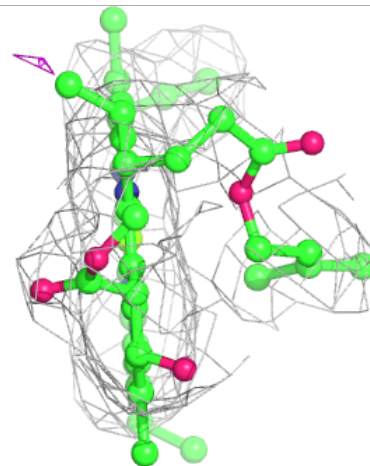
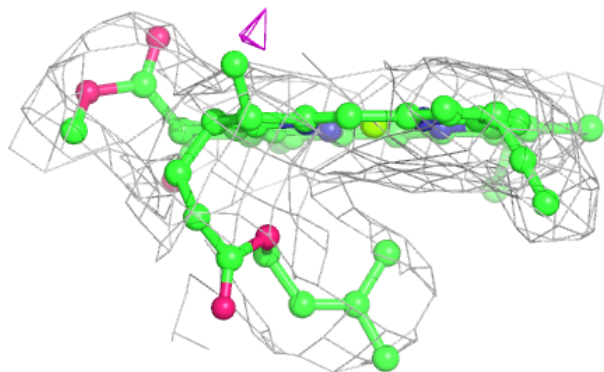
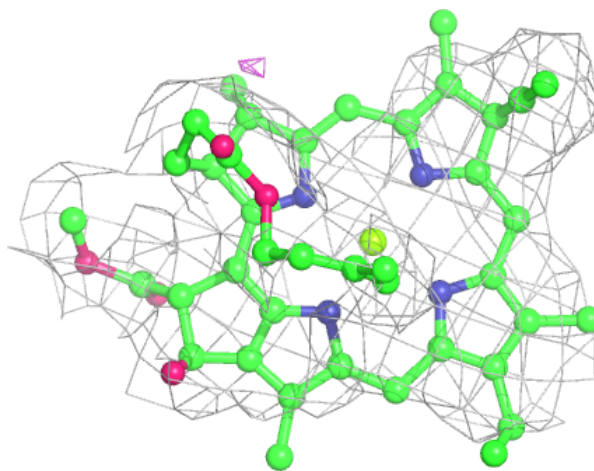
**Electron density around LMU A 7016:**

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



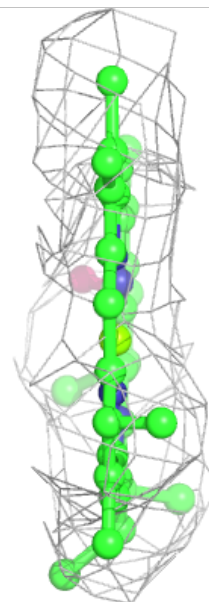
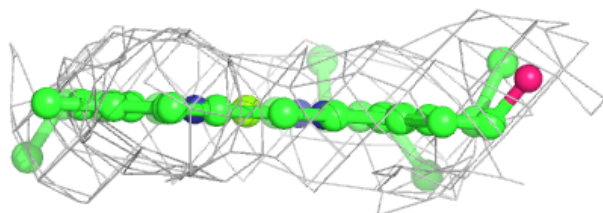
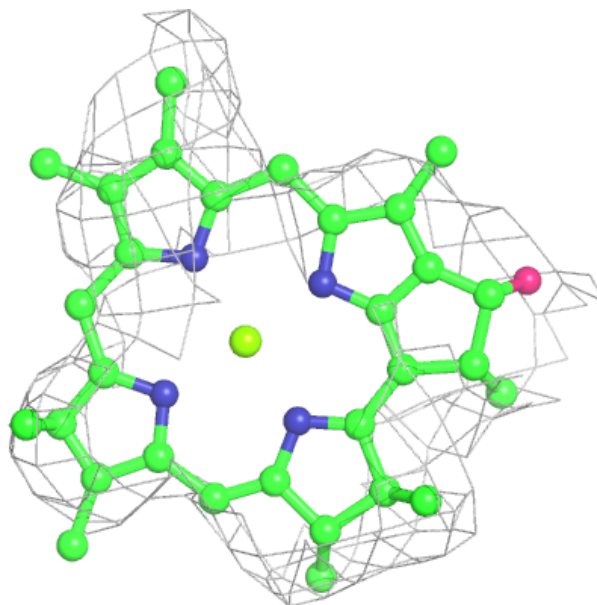
**Electron density around CLA L 1166:**

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



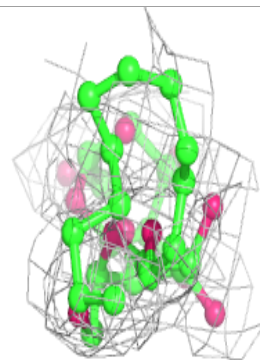
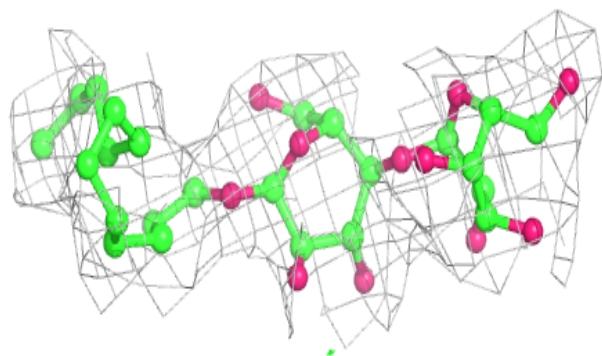
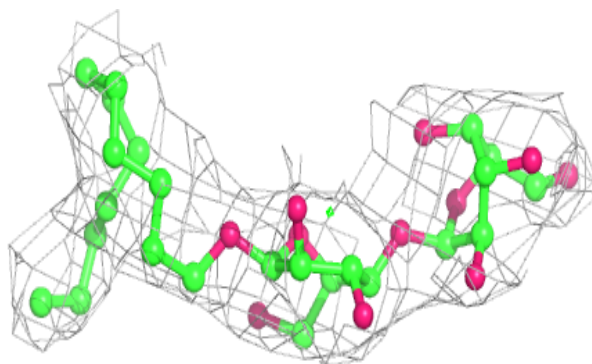
**Electron density around CLA 1 1196:**

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



**Electron density around LMU A 7023:**

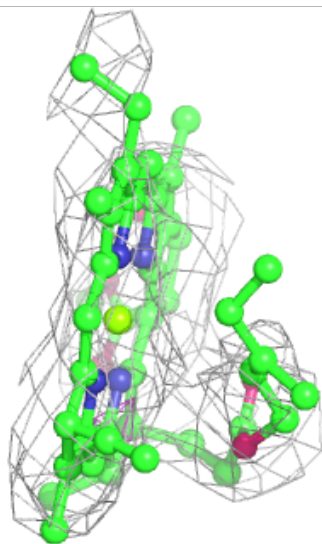
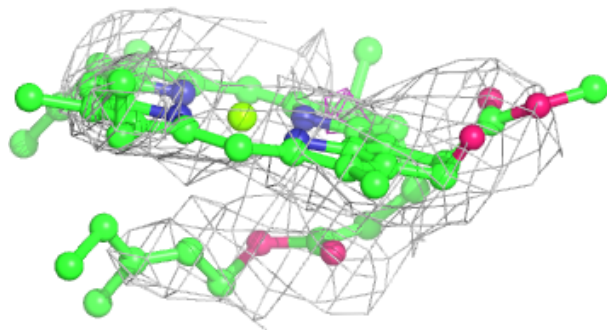
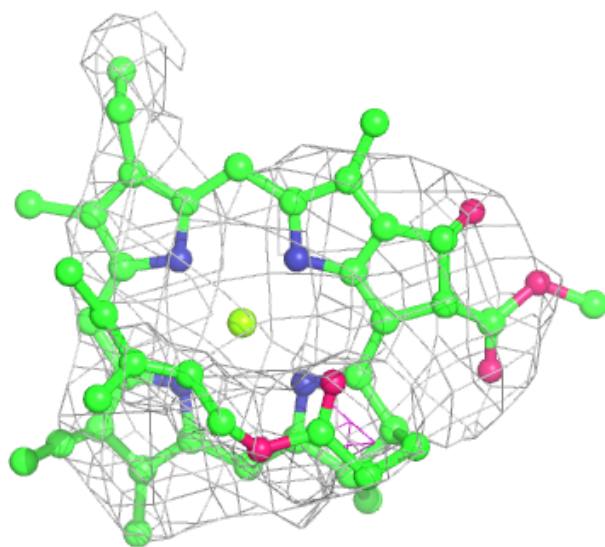
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





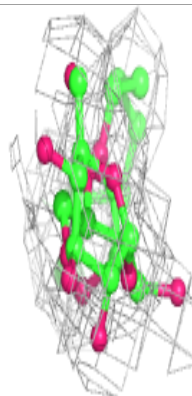
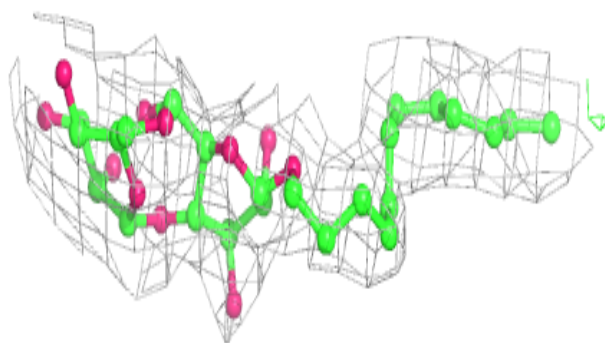
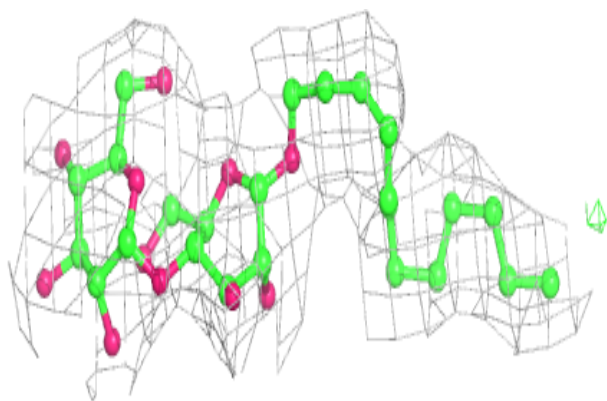
**Electron density around CLA A 1777:**

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

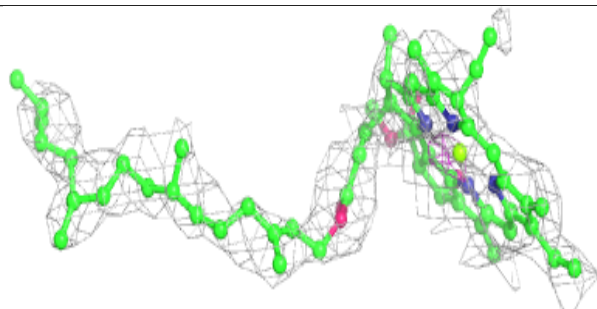
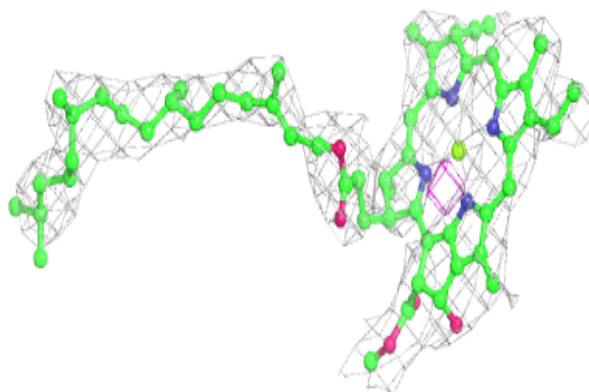


**Electron density around LMU A 7020:**

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

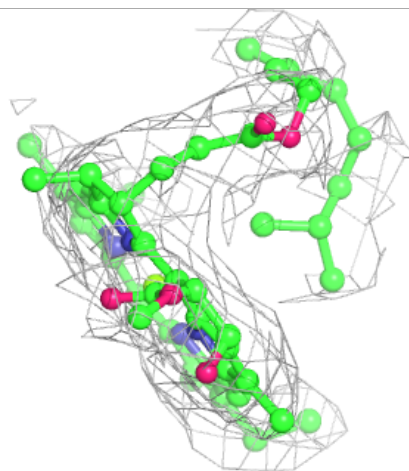
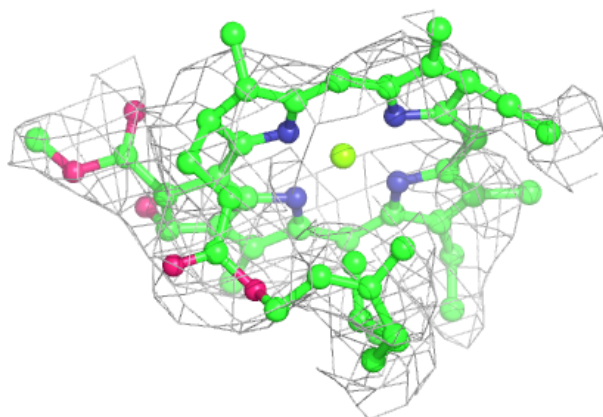
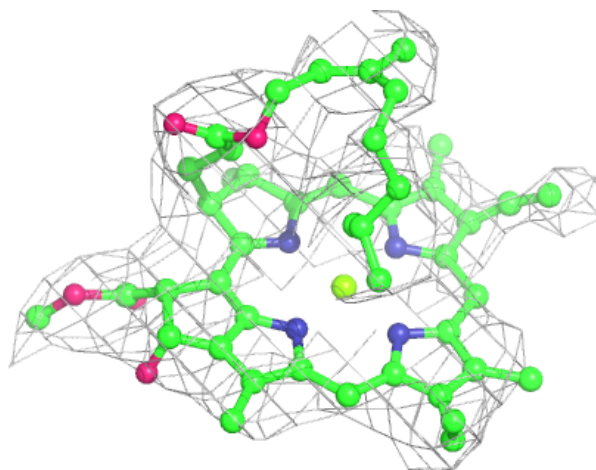
**Electron density around CLA A 1776:**

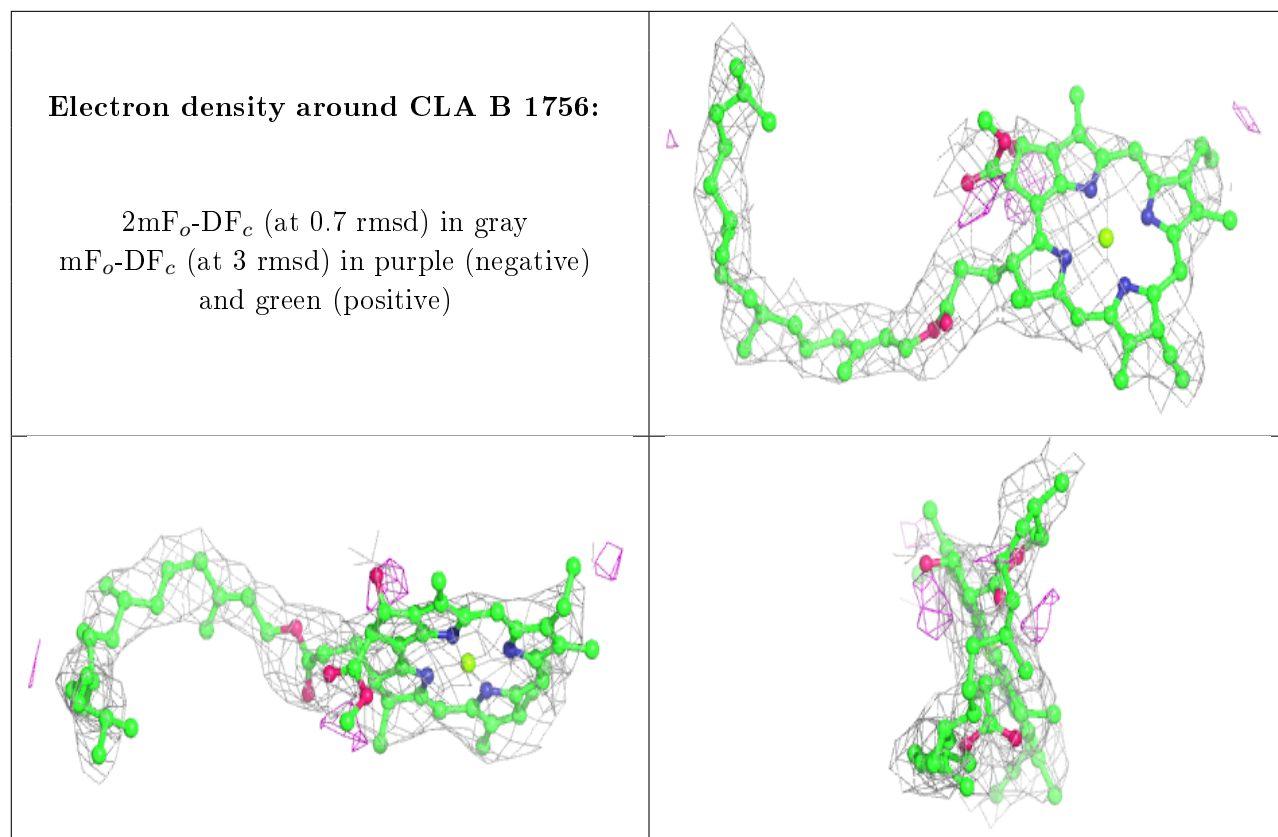
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA B 1742:**

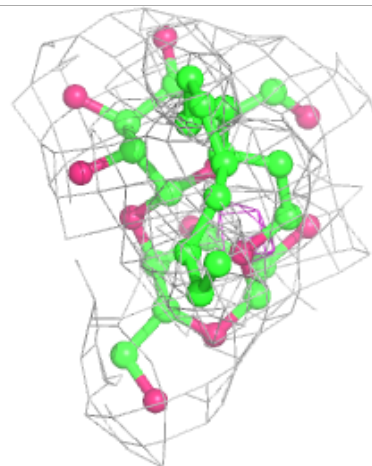
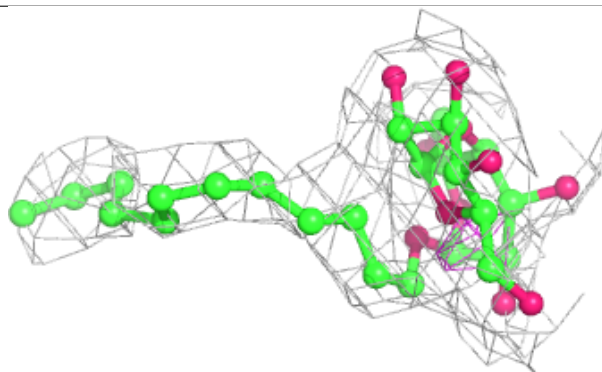
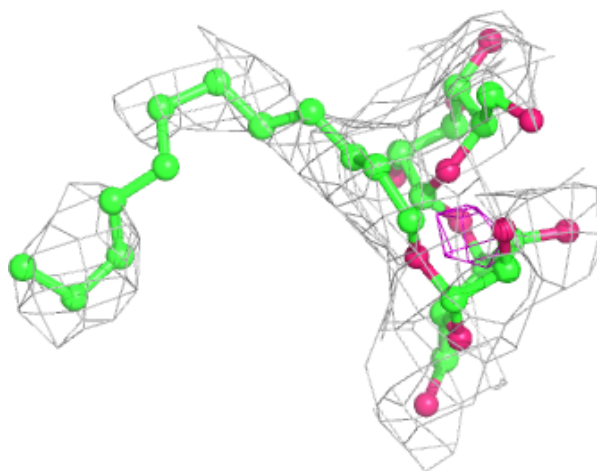
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





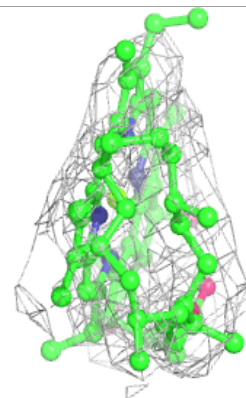
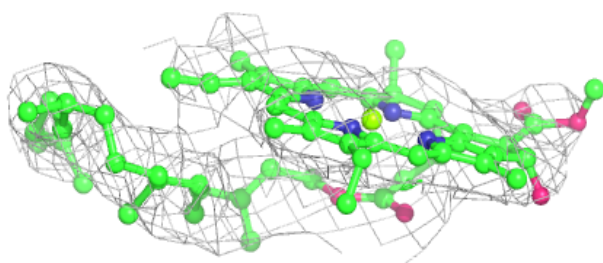
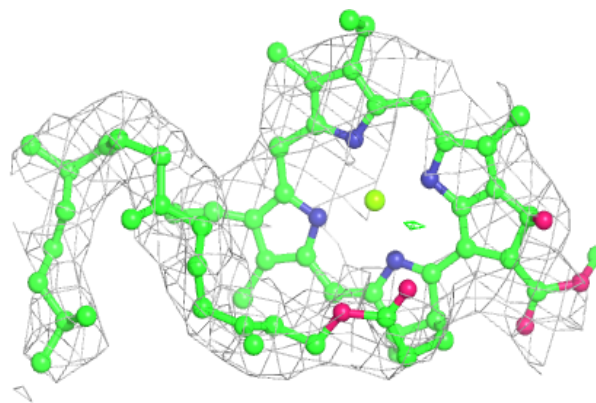
**Electron density around LMU A 7032:**

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

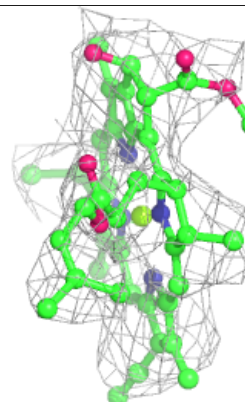
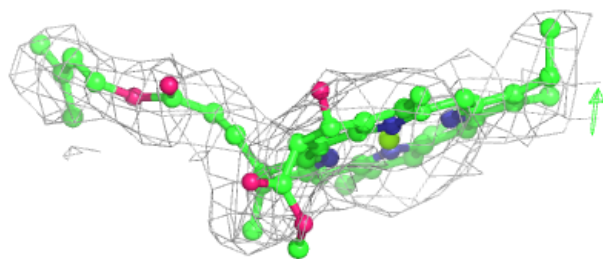
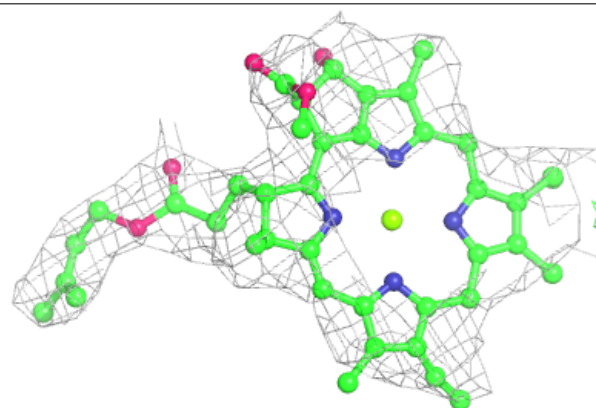


**Electron density around CLA A 1774:**

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

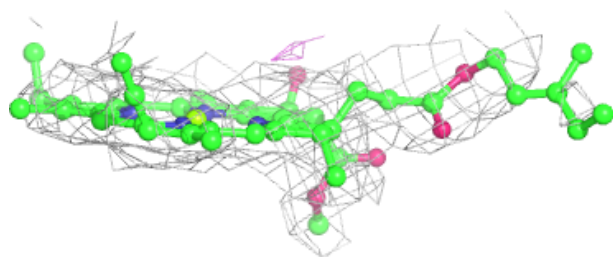
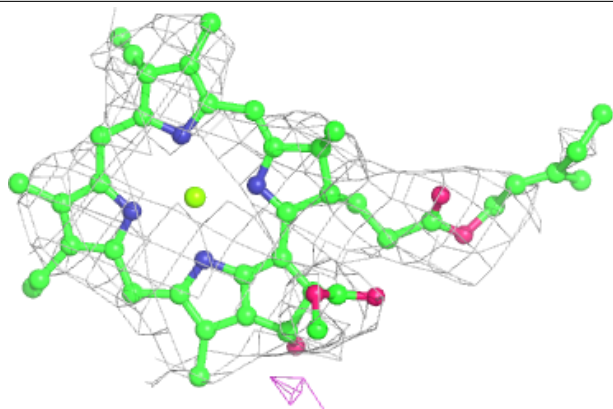
**Electron density around CLA B 1763:**

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

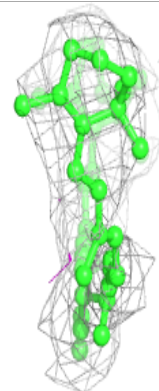
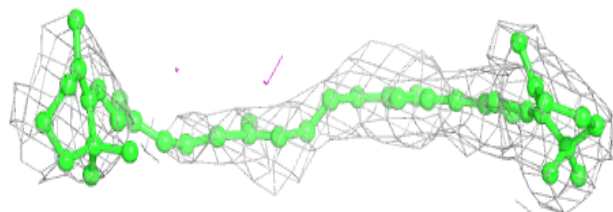
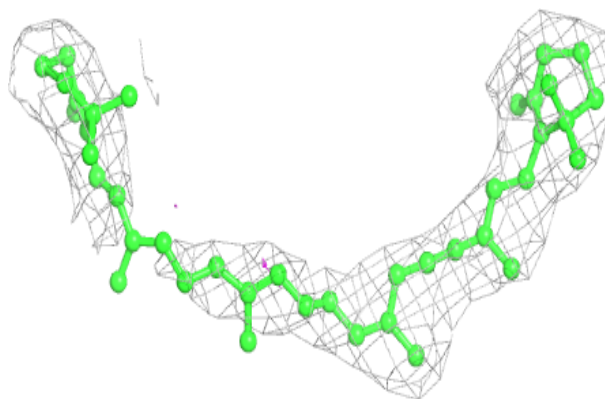


**Electron density around CLA A 1792:**

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

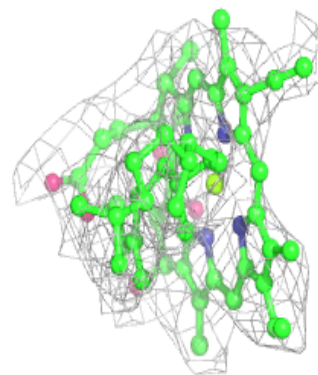
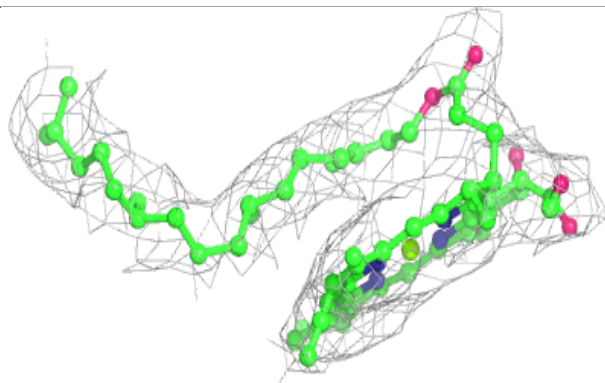
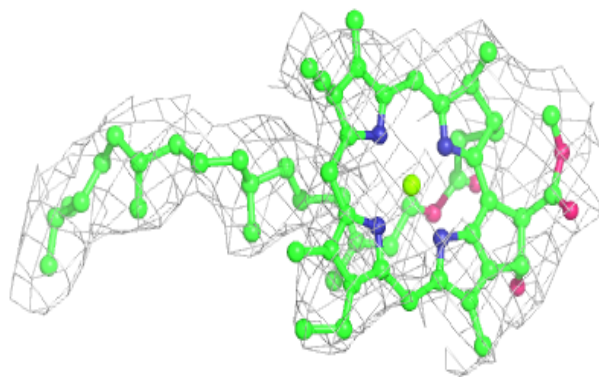
**Electron density around BCR B 1779:**

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



**Electron density around CLA A 1772:**

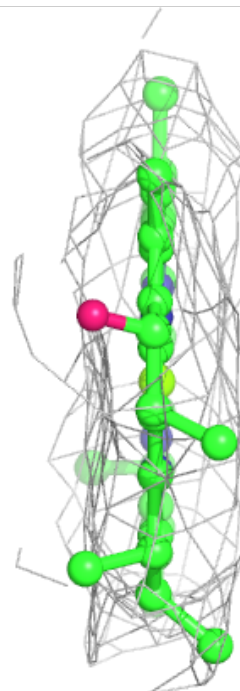
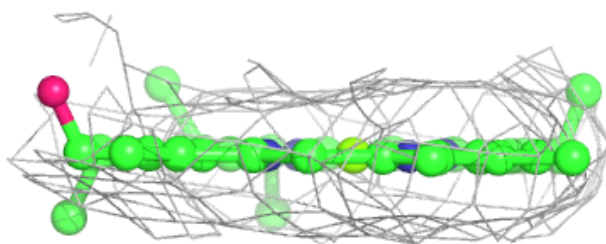
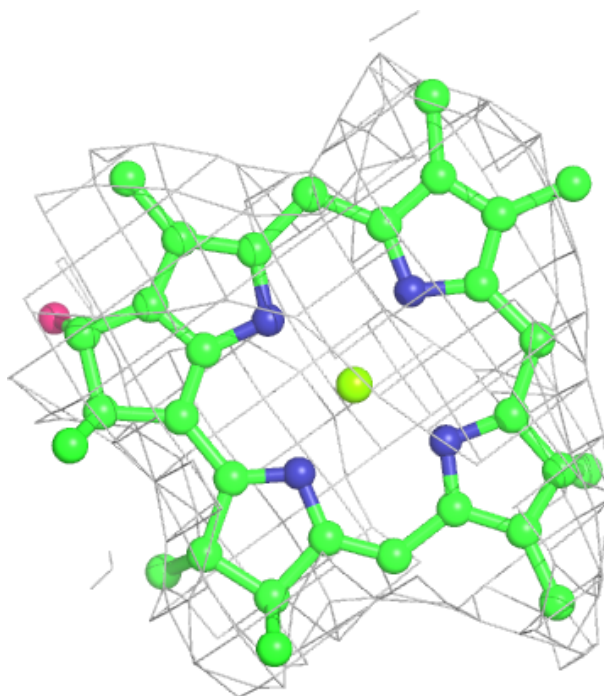
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





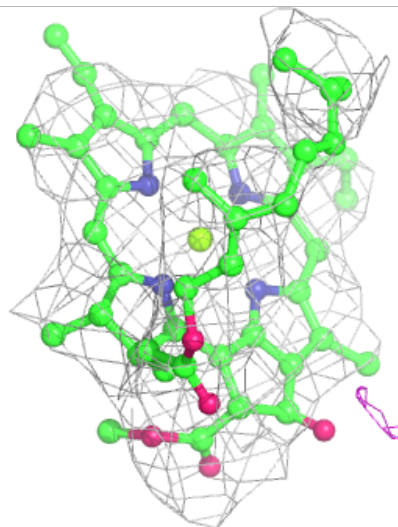
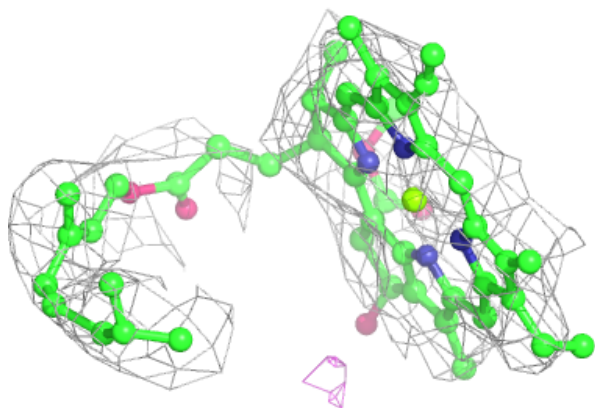
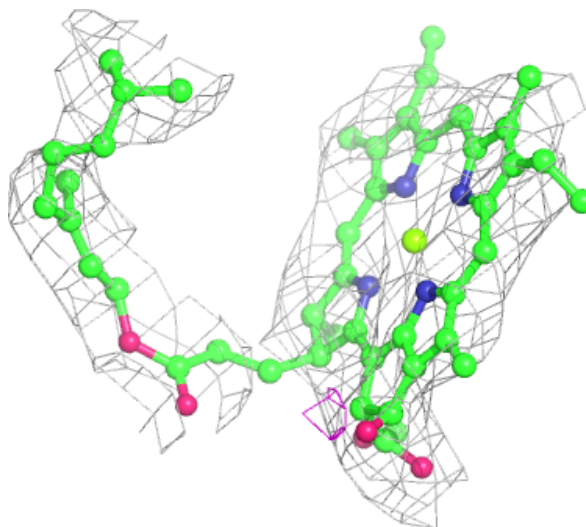
**Electron density around CLA 1 1195:**

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



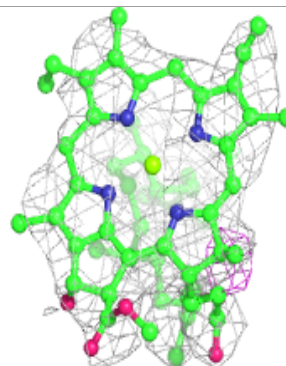
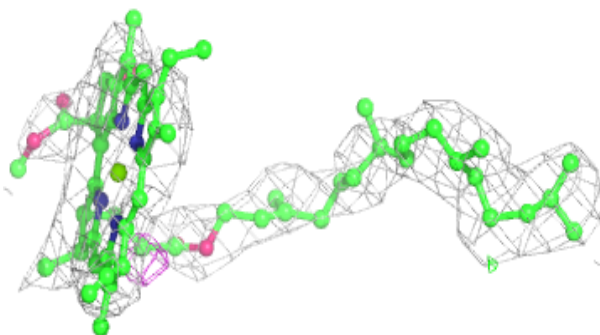
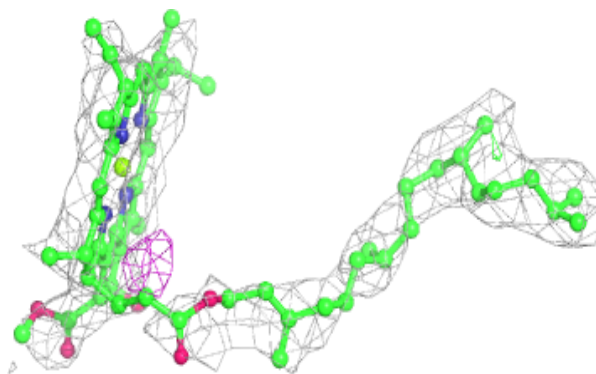
**Electron density around CLA A 1760:**

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

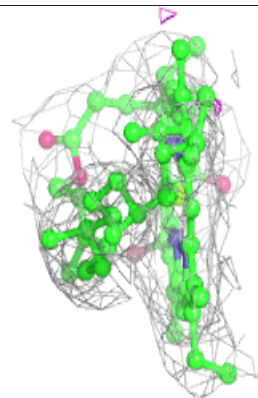
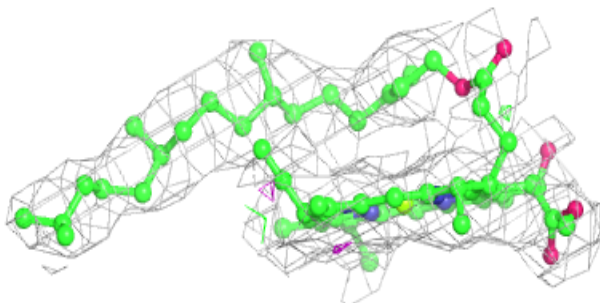
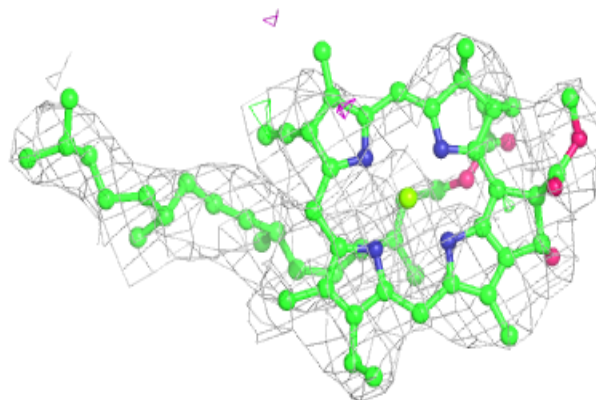


**Electron density around CLA A 1785:**

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

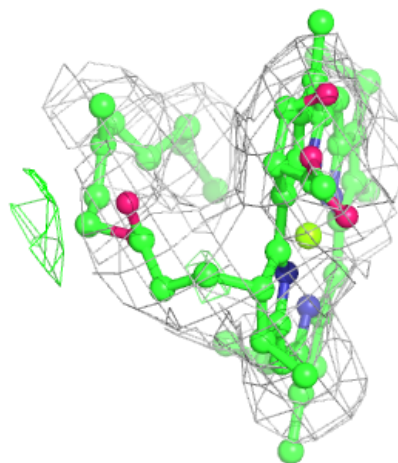
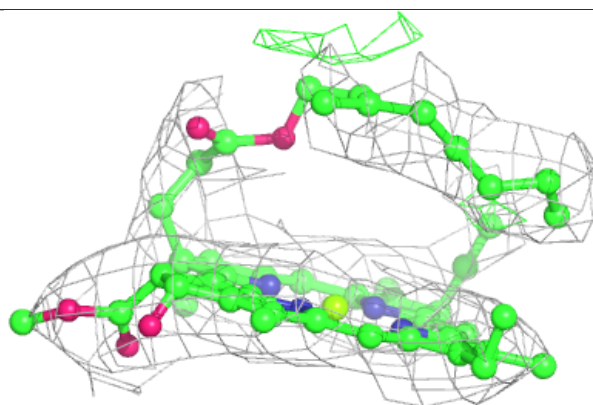
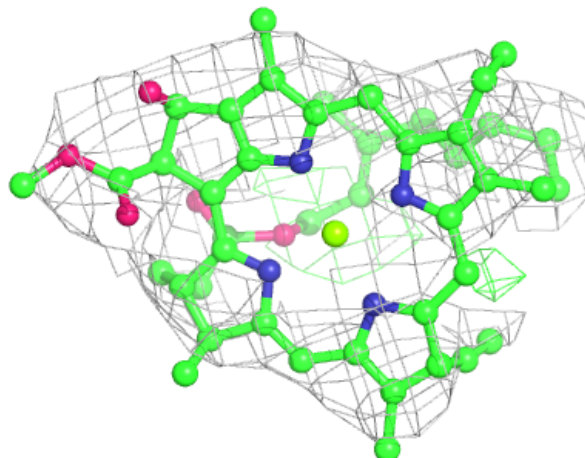
**Electron density around CLA B 1735:**

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



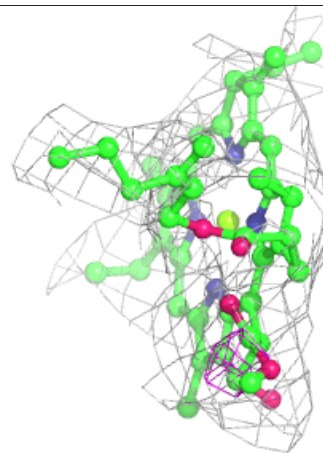
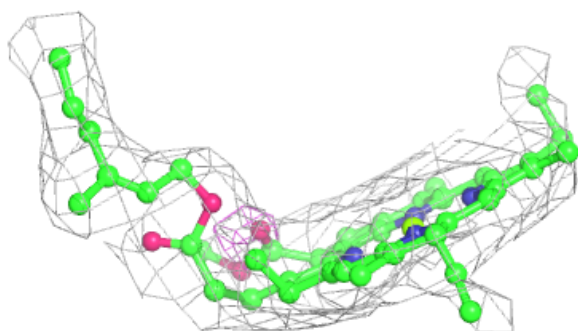
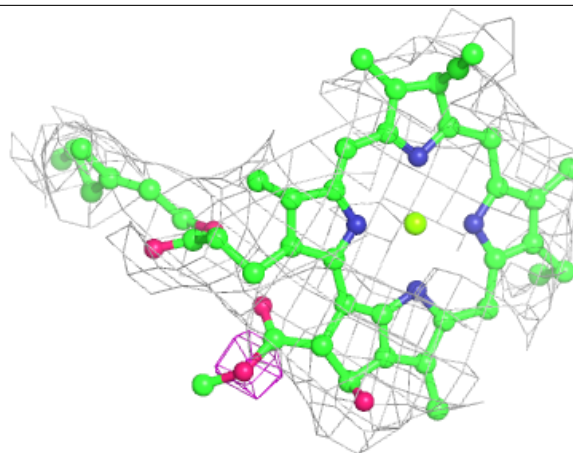
**Electron density around CLA A 1768:**

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



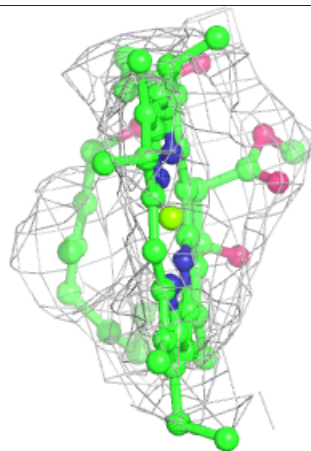
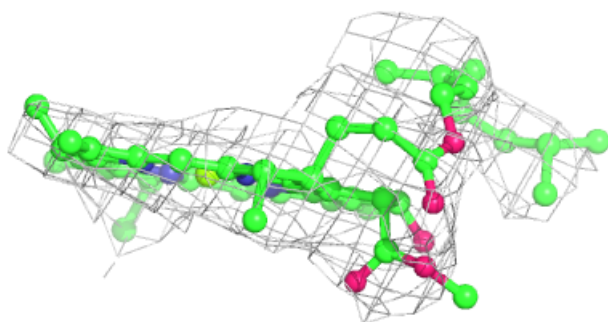
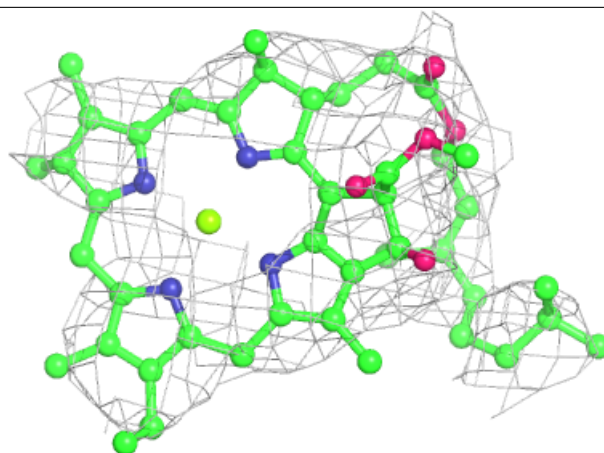
**Electron density around CLA 4 1201:**

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



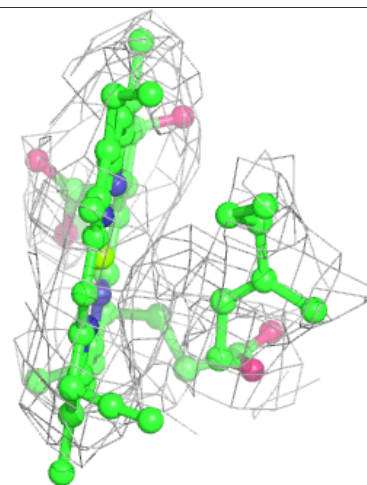
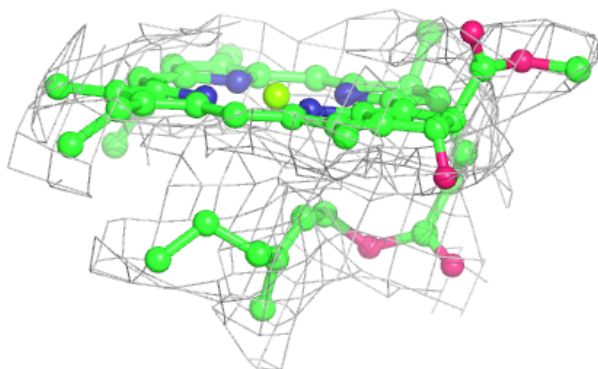
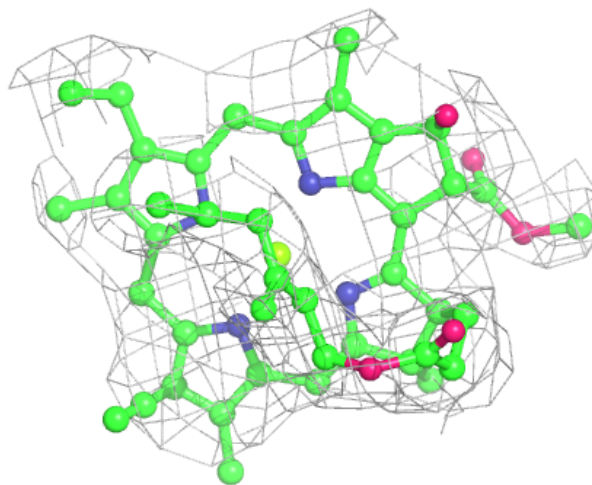
**Electron density around CLA B 1741:**

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



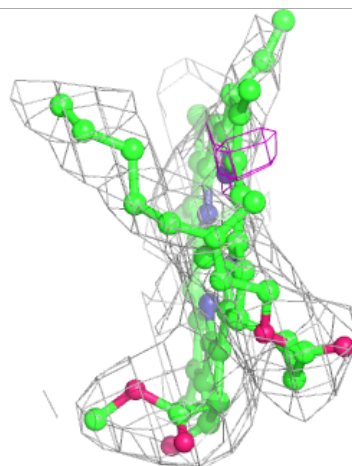
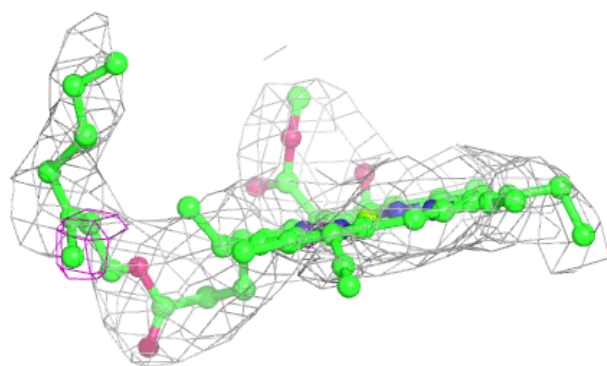
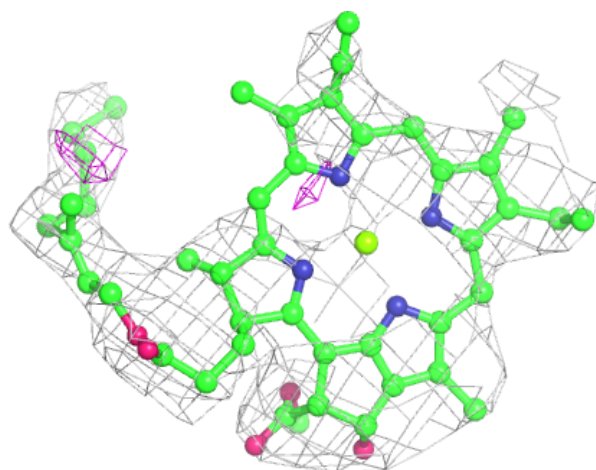
**Electron density around CLA A 1773:**

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

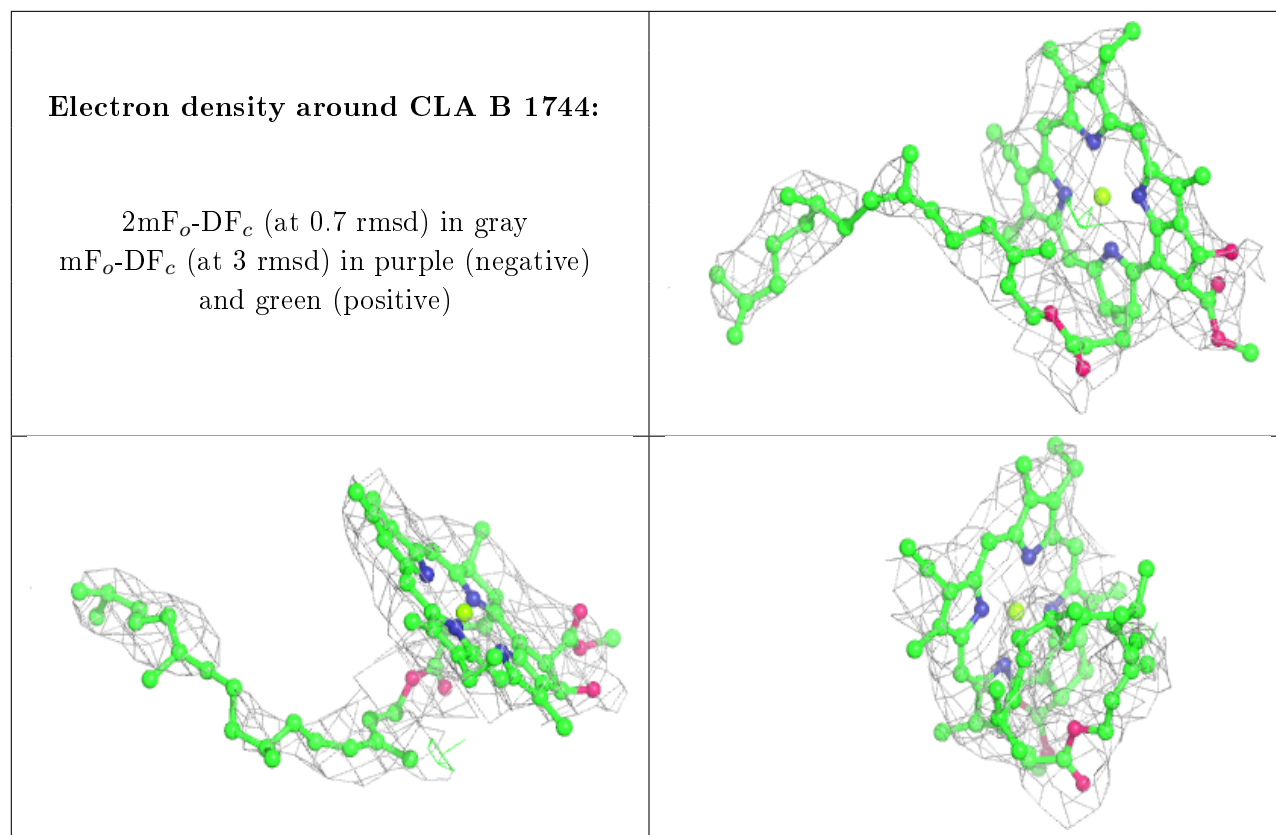


**Electron density around CLA A 1769:**

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

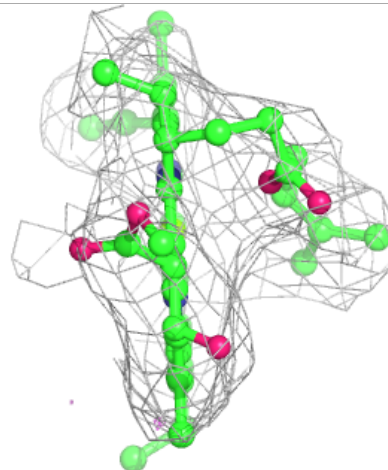
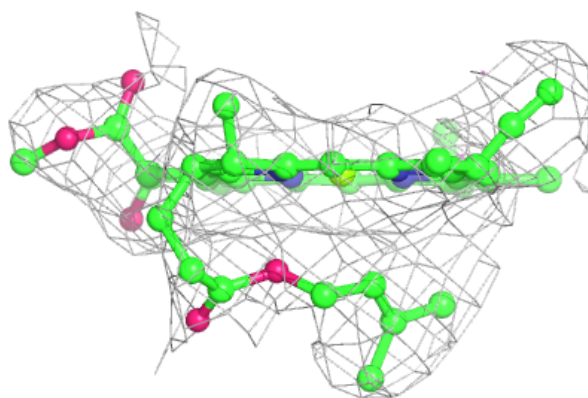
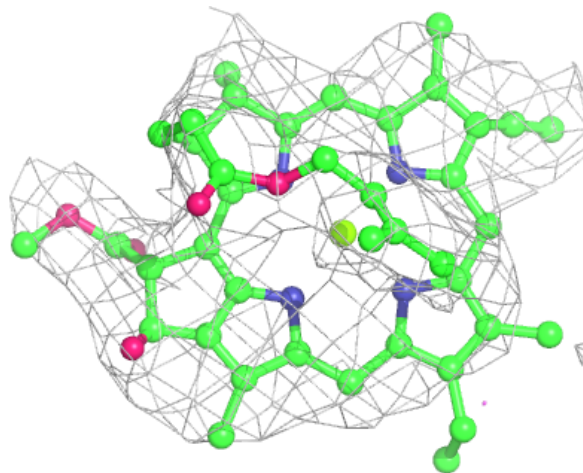






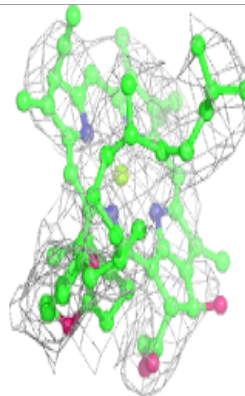
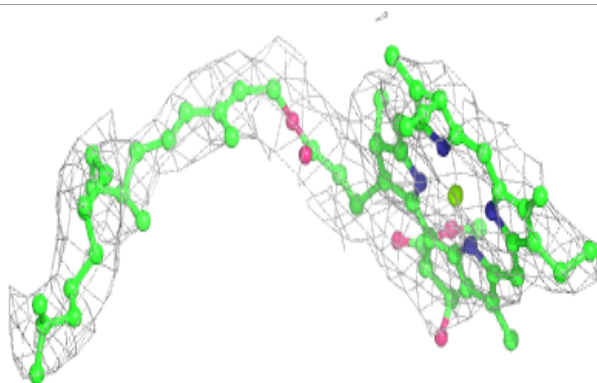
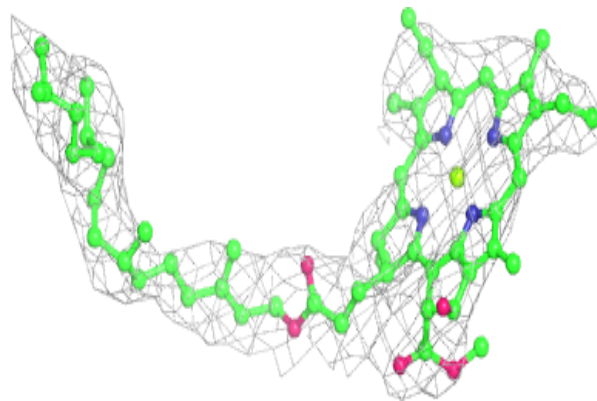
**Electron density around CLA B 1750:**

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

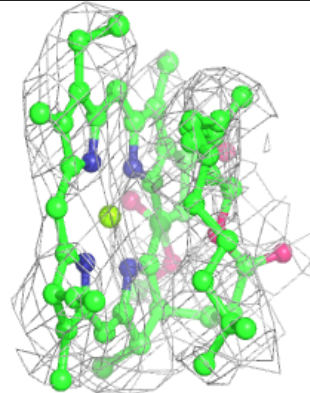
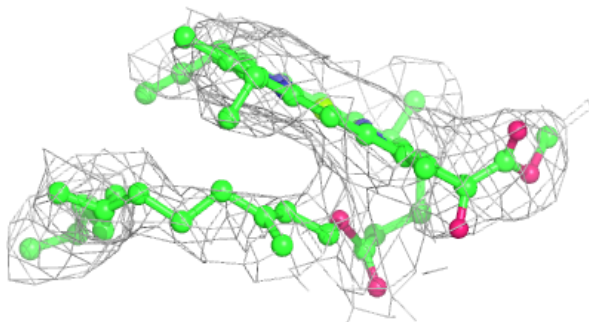
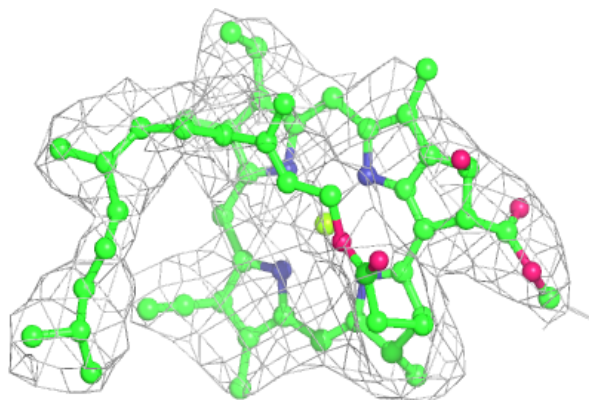


**Electron density around CLA A 1812:**

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

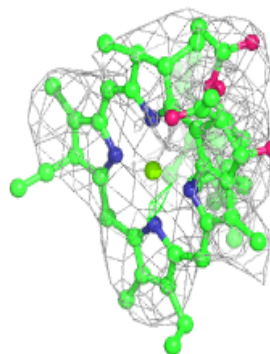
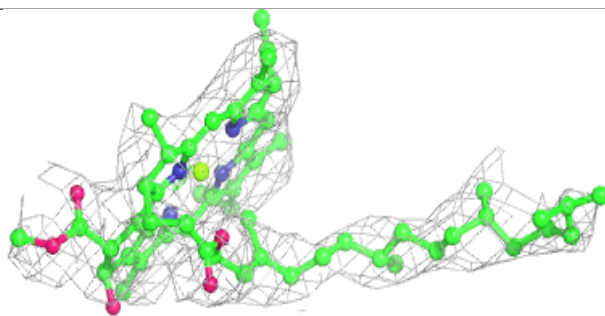
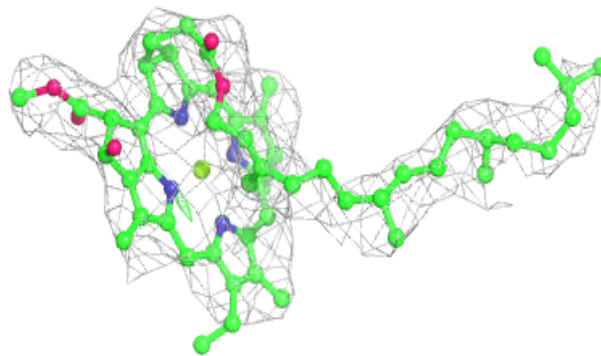
**Electron density around CLA I 1031:**

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

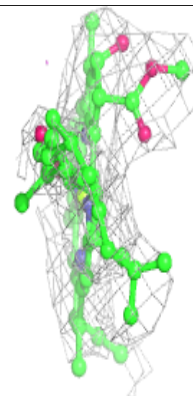
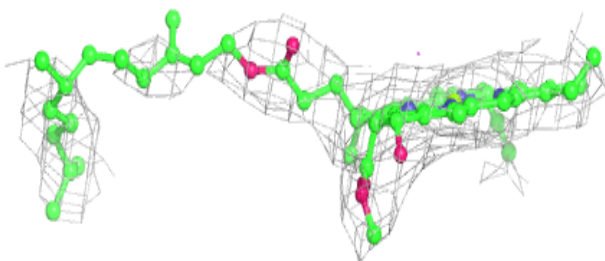
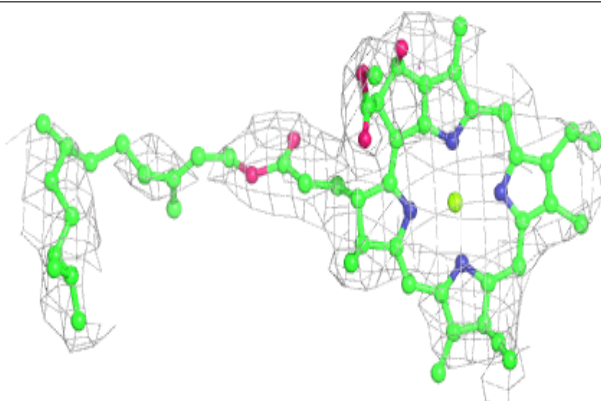


**Electron density around CLA A 1796:**

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

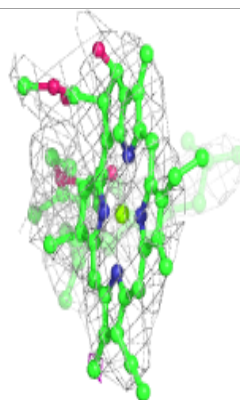
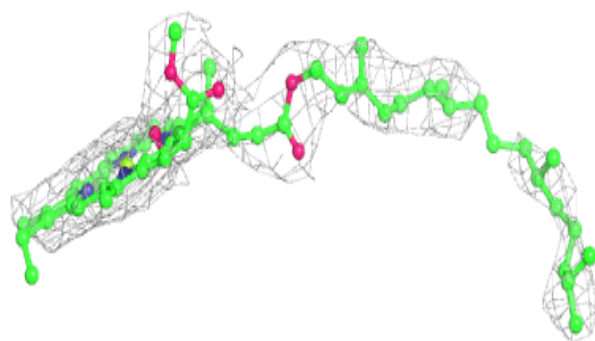
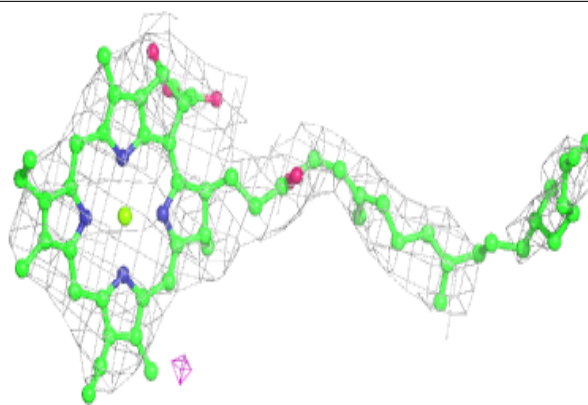
**Electron density around CLA B 1767:**

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

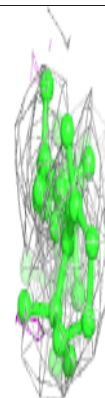
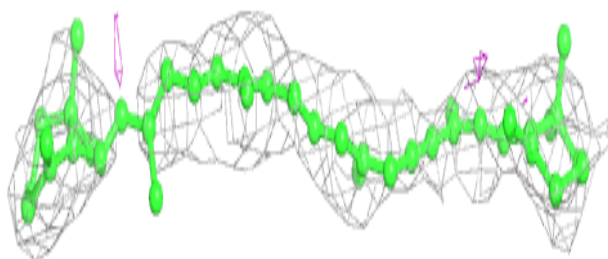
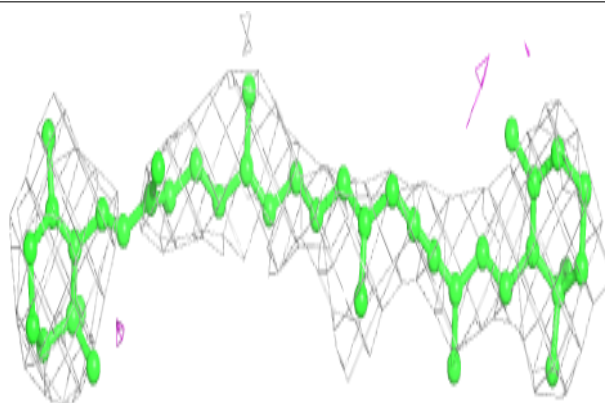


**Electron density around CLA A 1761:**

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

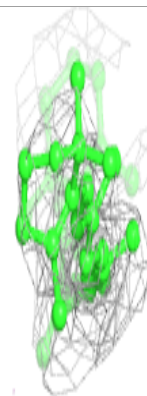
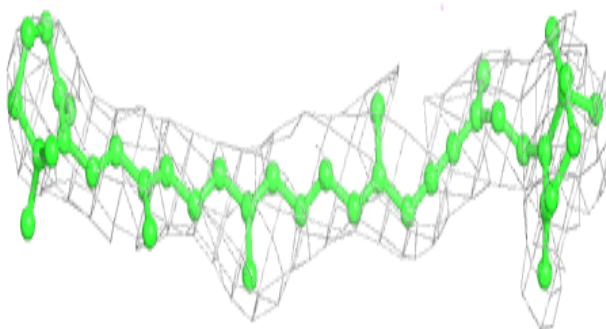
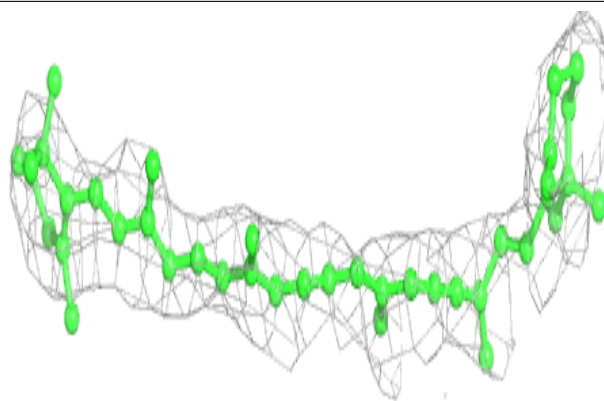
**Electron density around BCR B 1777:**

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

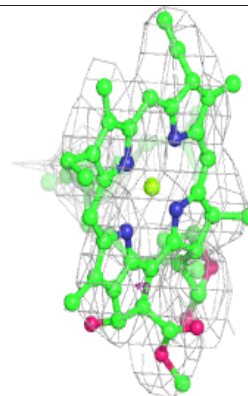
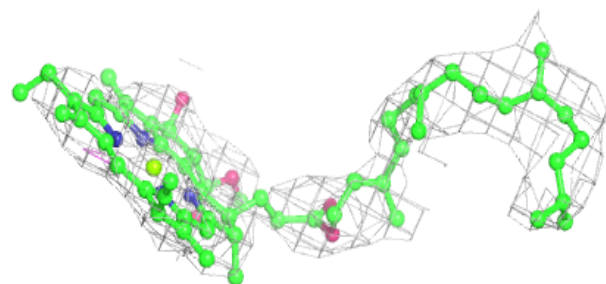
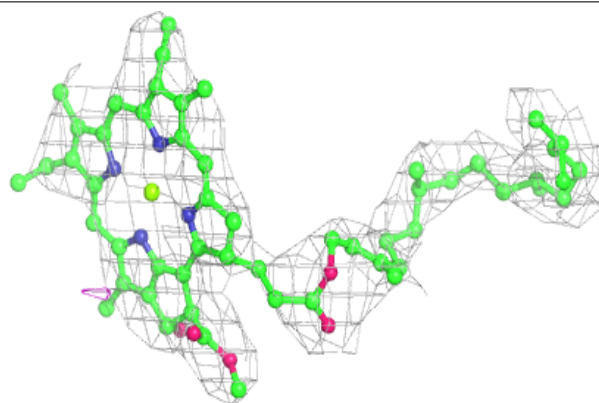


**Electron density around BCR B 1778:**

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

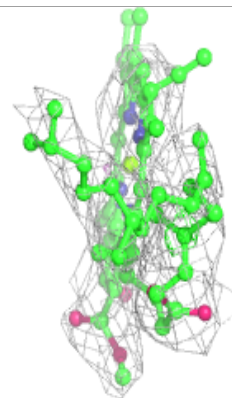
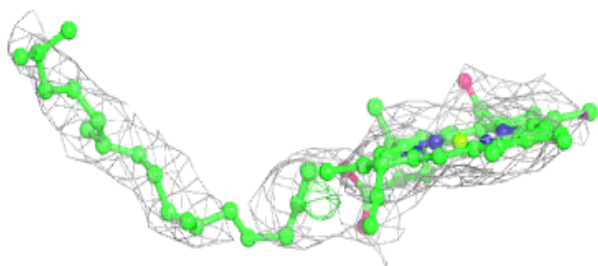
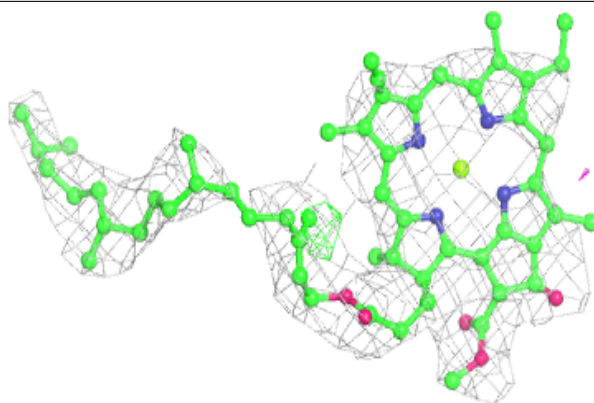
**Electron density around CLA B 1740:**

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

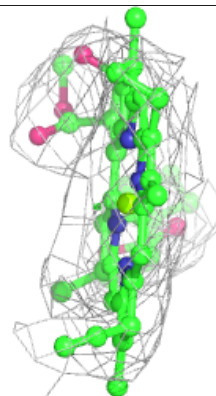
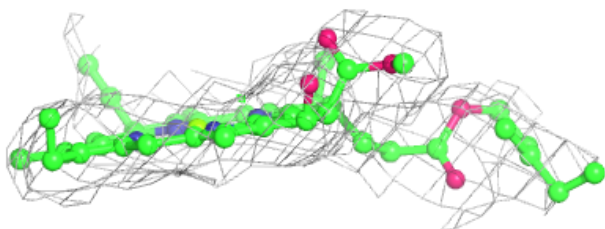
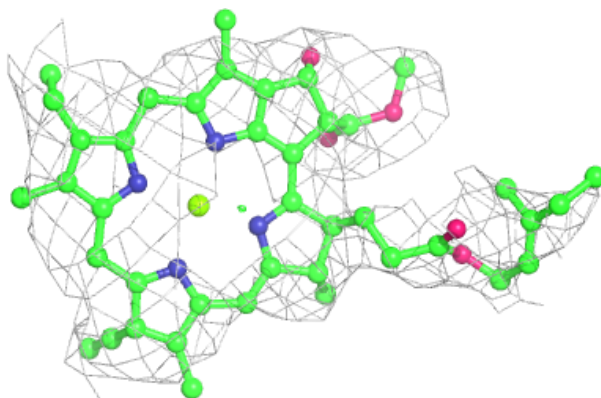


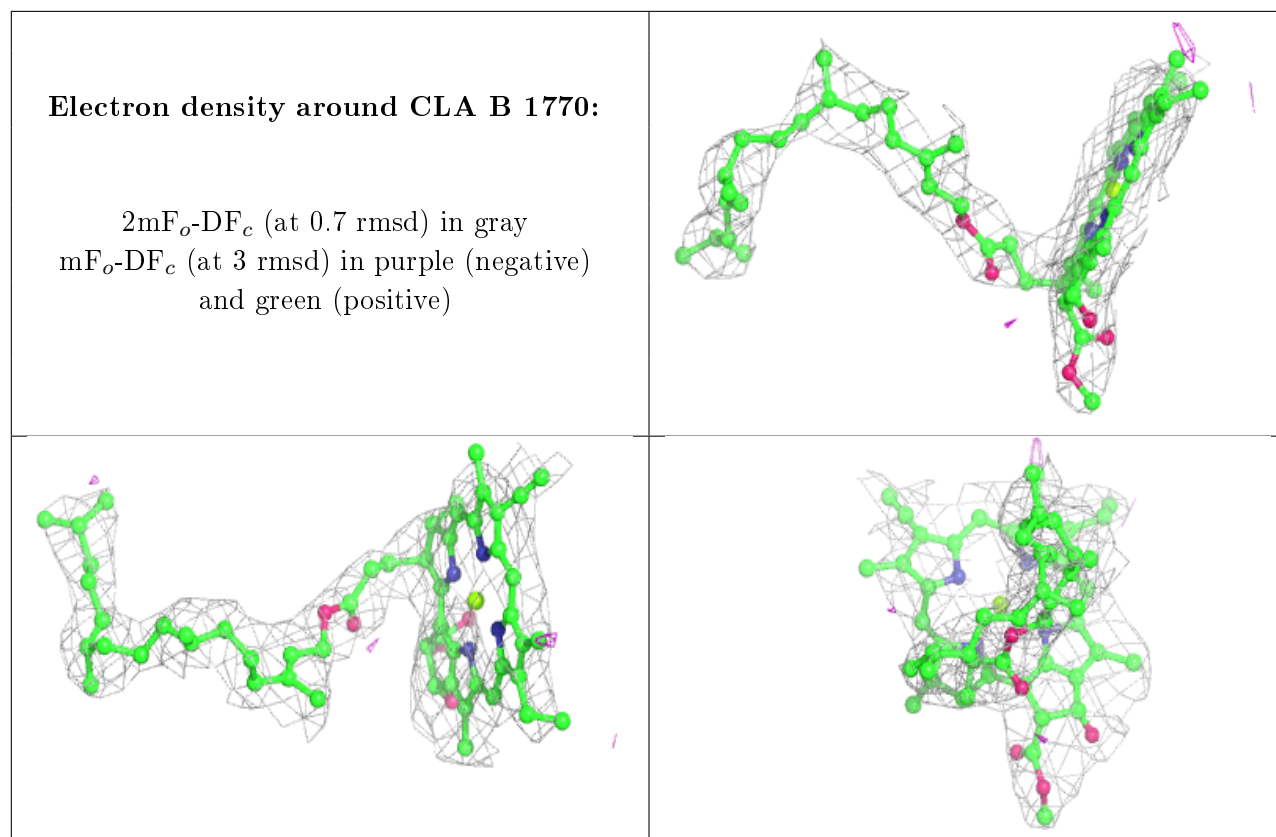
**Electron density around CLA B 1787:**

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

**Electron density around CLA A 1795:**

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

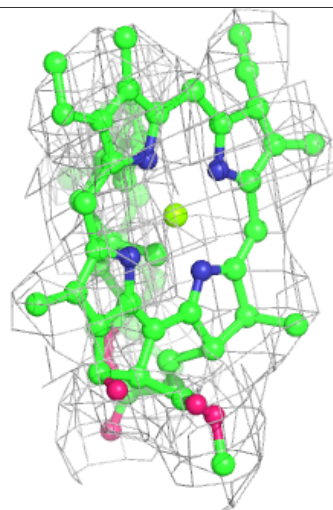
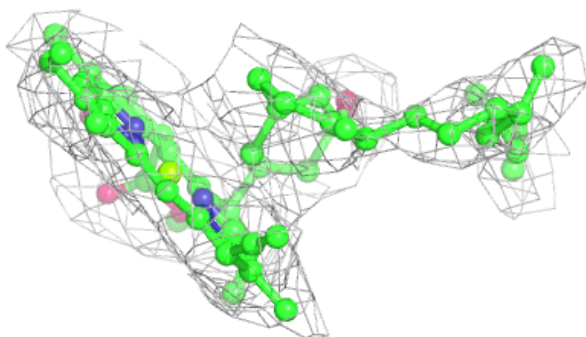
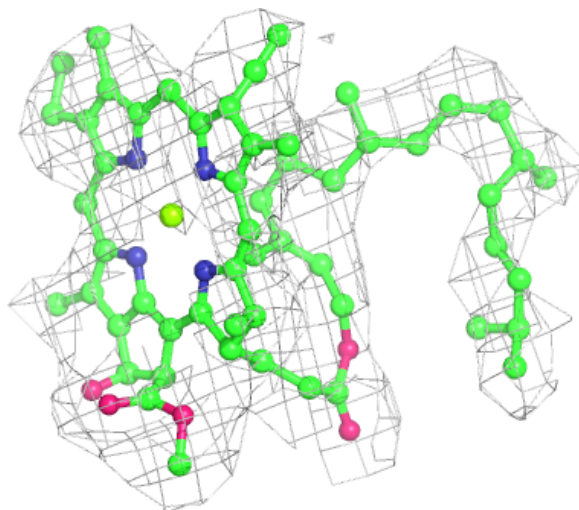






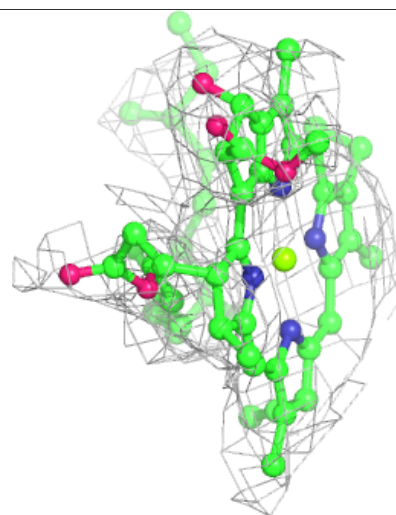
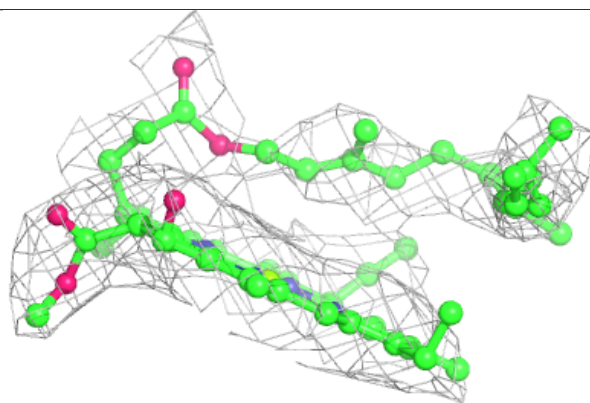
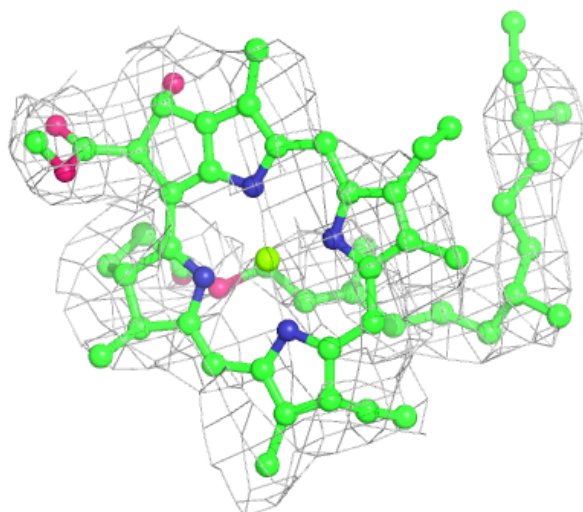
**Electron density around CLA B 1753:**

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



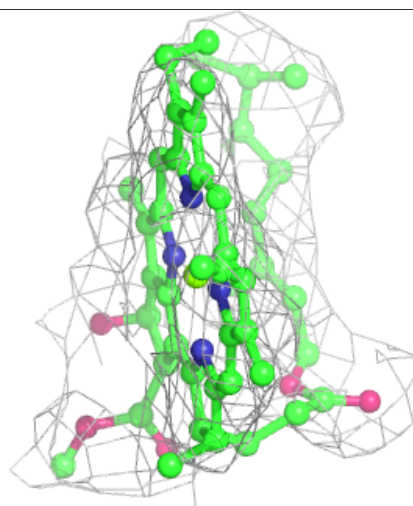
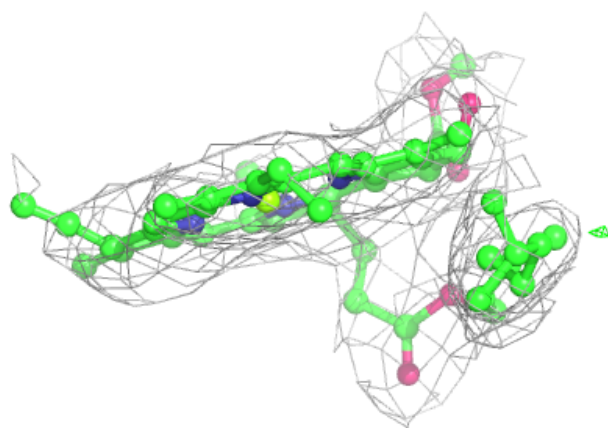
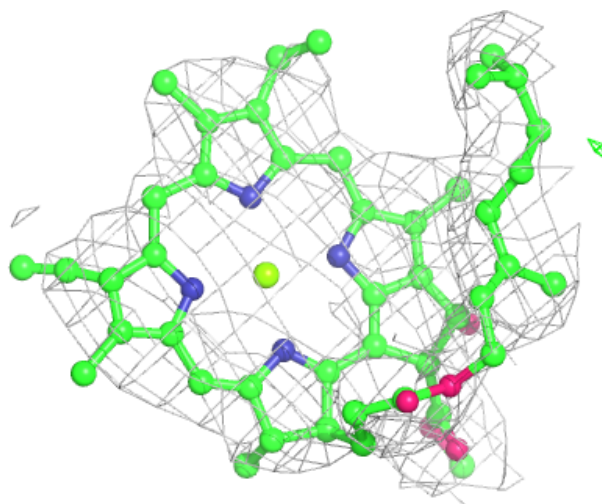
**Electron density around CLA B 1749:**

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



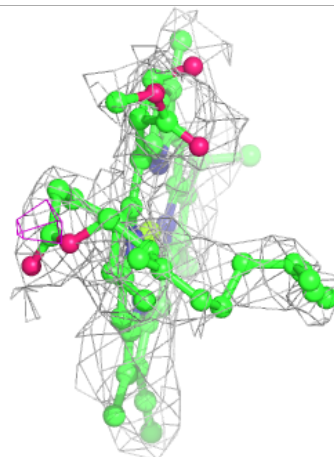
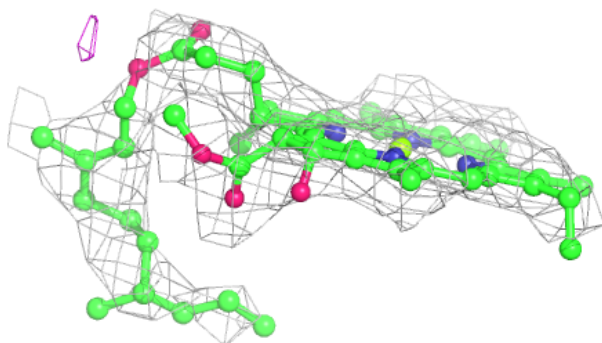
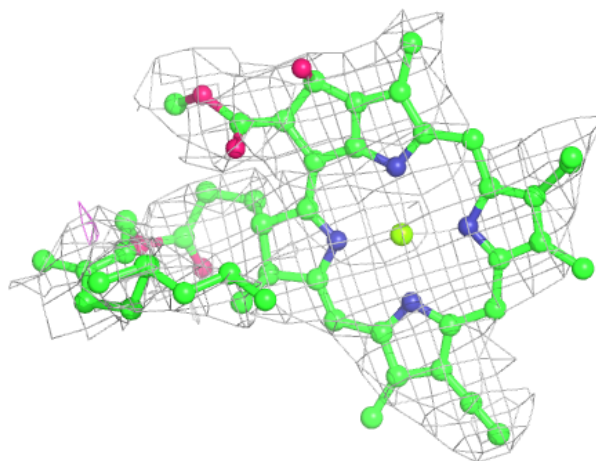
**Electron density around CLA A 1784:**

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



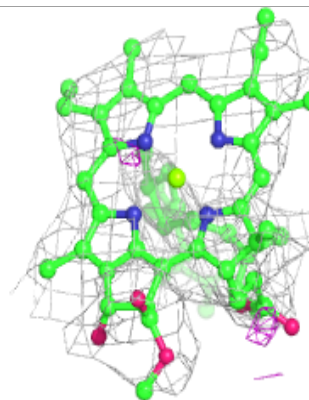
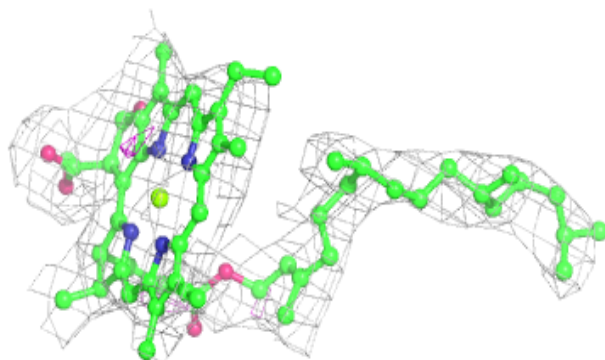
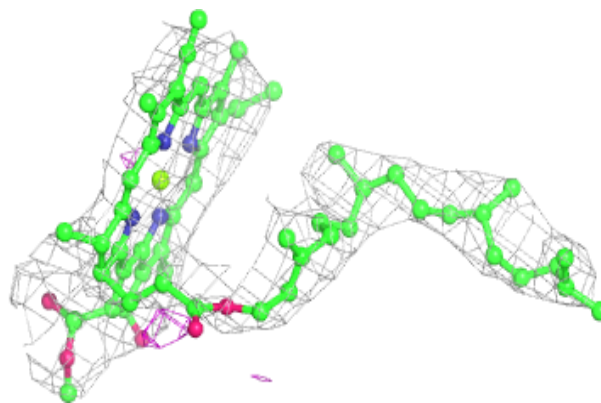
**Electron density around CLA A 1762:**

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

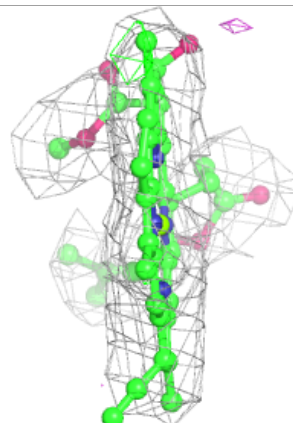
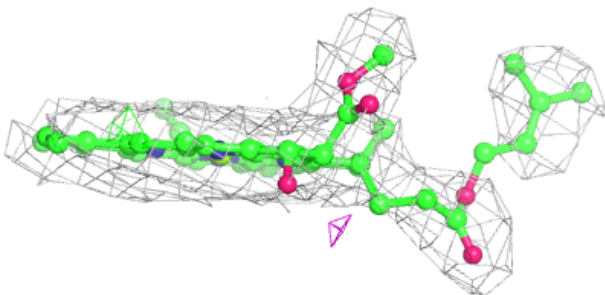
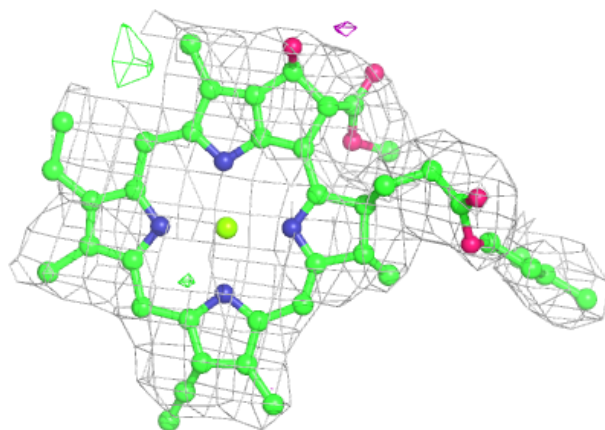


**Electron density around CLA A 1767:**

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

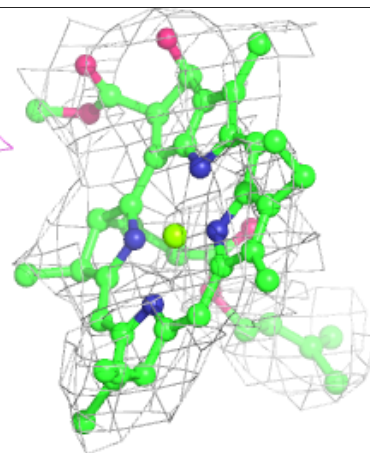
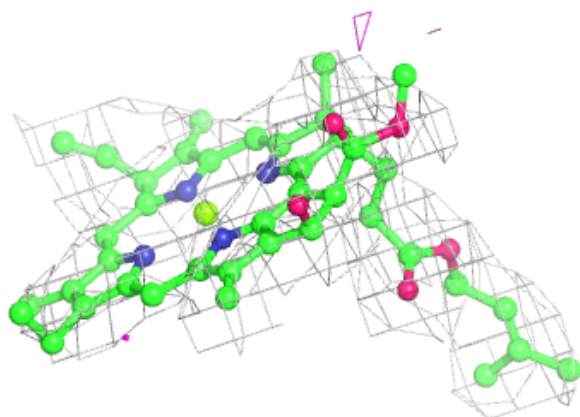
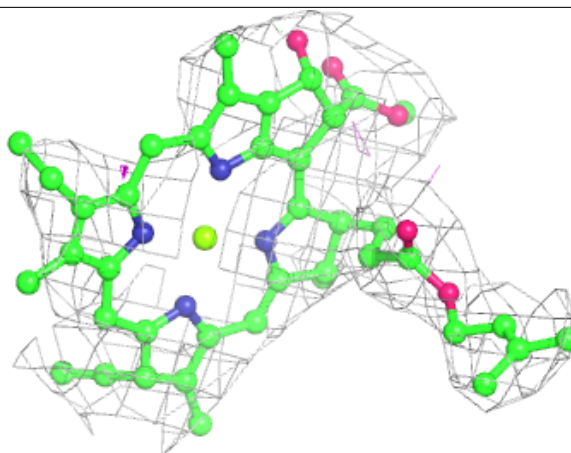
**Electron density around CLA B 1761:**

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

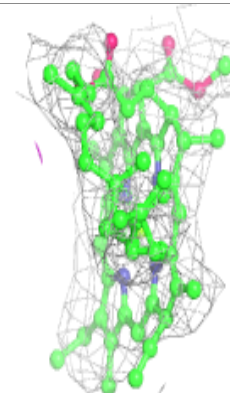
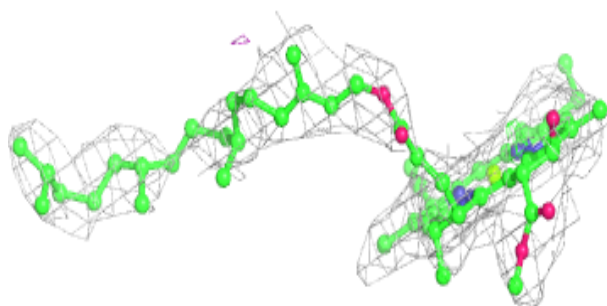
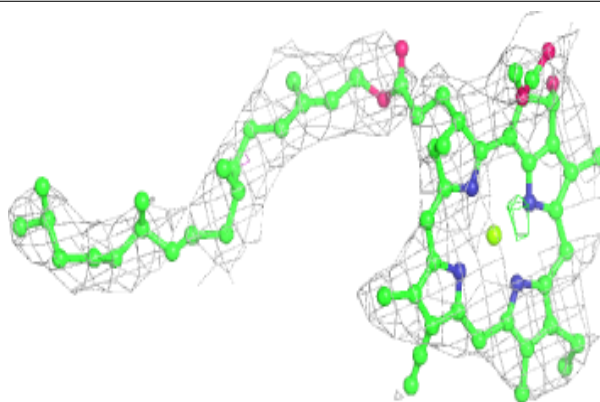


**Electron density around CLA 2 1222:**

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

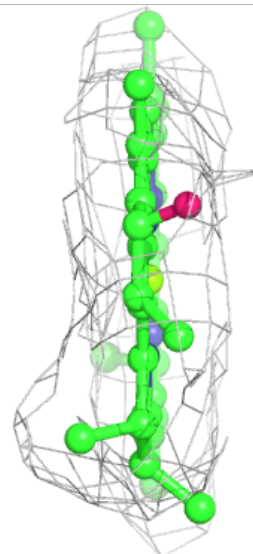
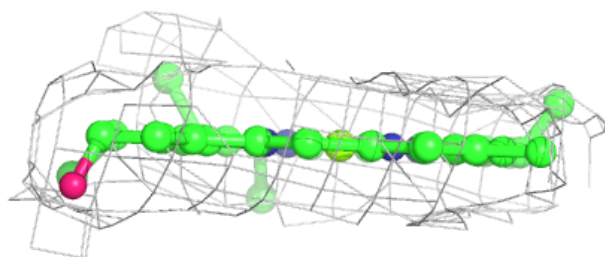
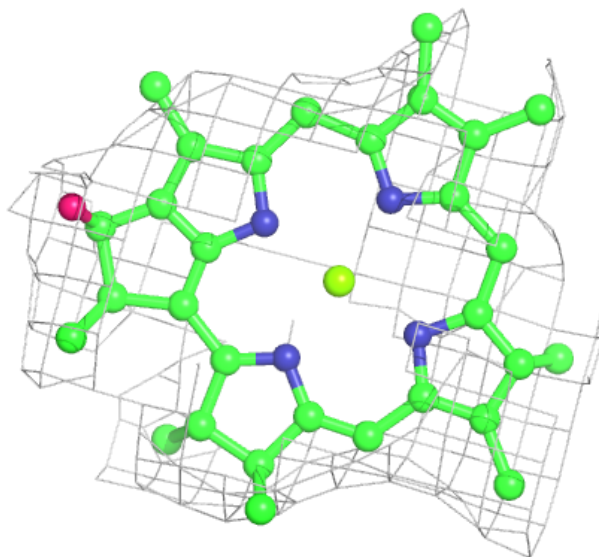
**Electron density around CLA A 1789:**

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



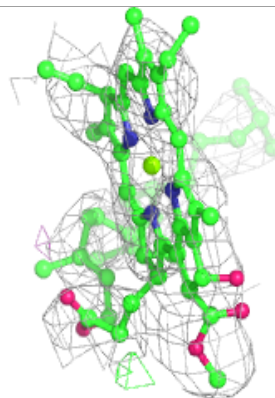
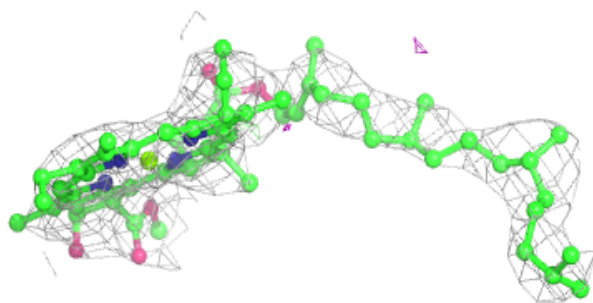
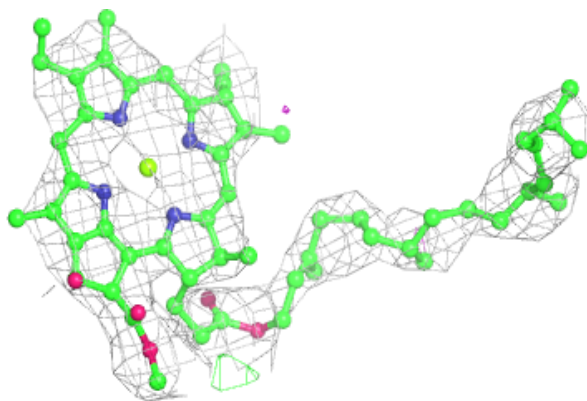
**Electron density around CLA 4 1207:**

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

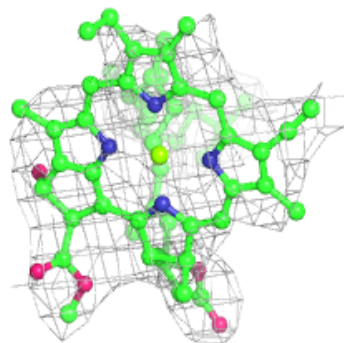
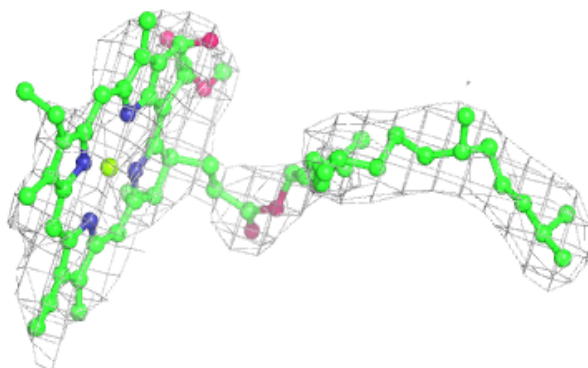
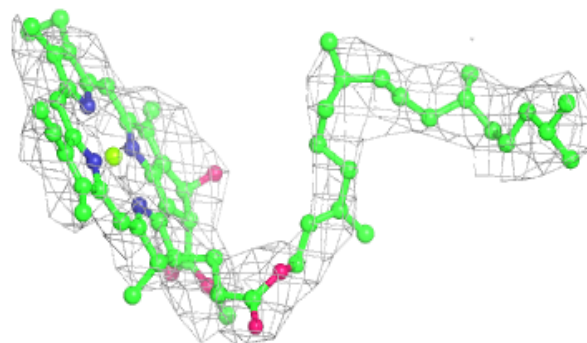


**Electron density around CLA A 1813:**

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

**Electron density around CLA B 1785:**

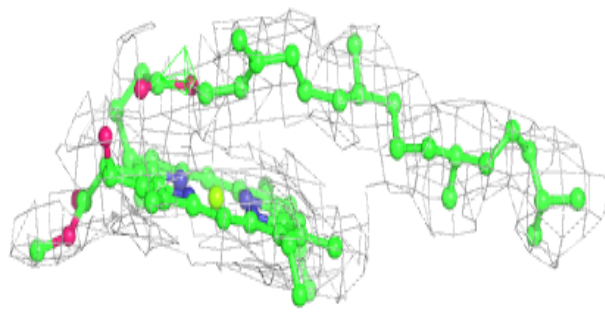
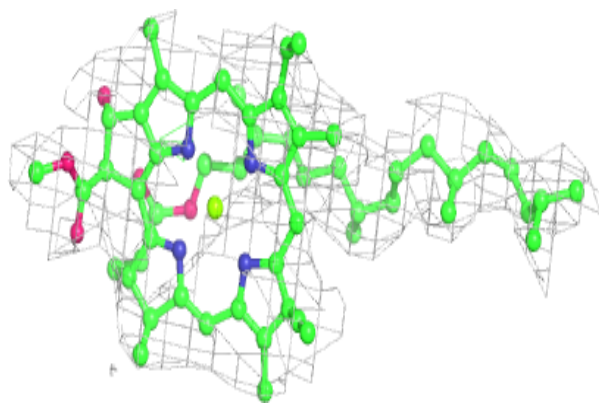
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



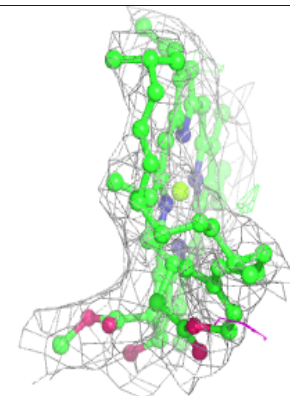
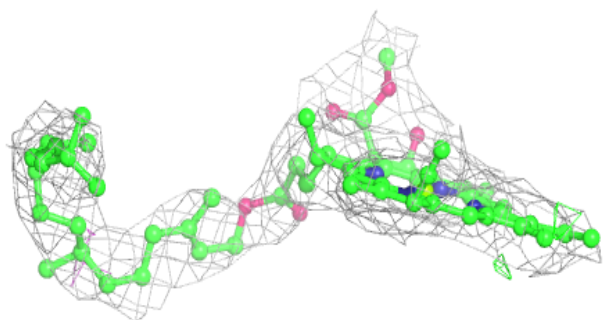
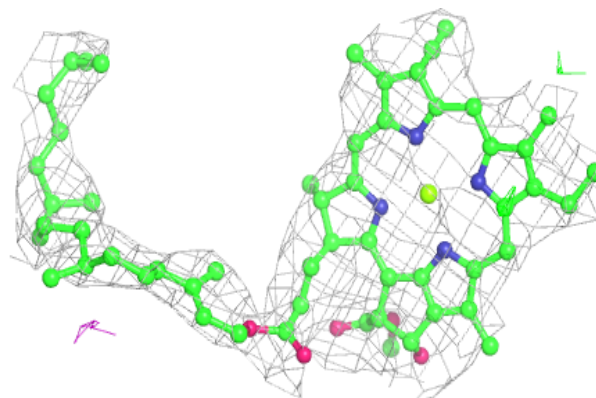


**Electron density around CLA A 1793:**

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

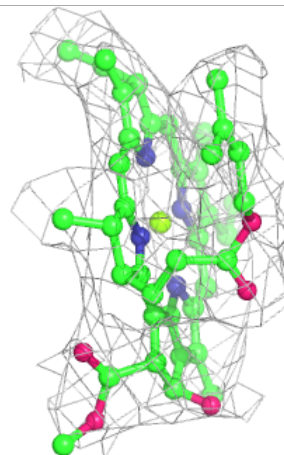
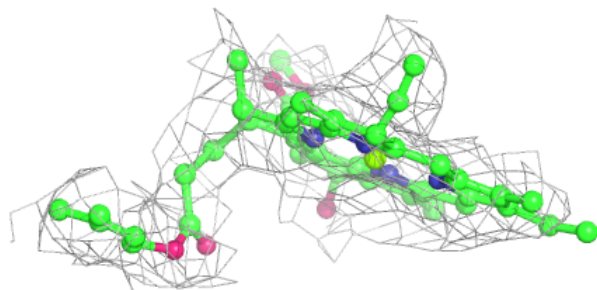
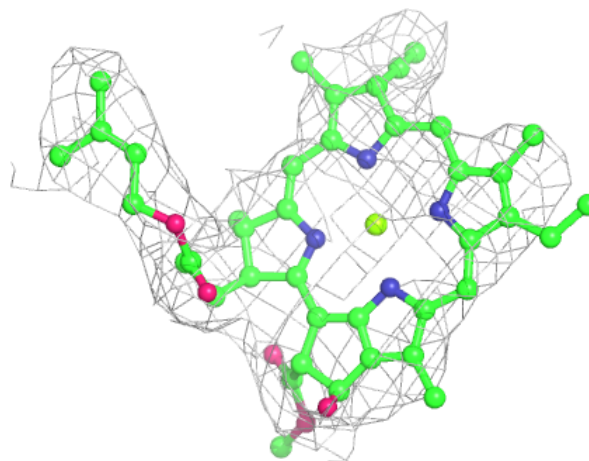
**Electron density around CLA A 1782:**

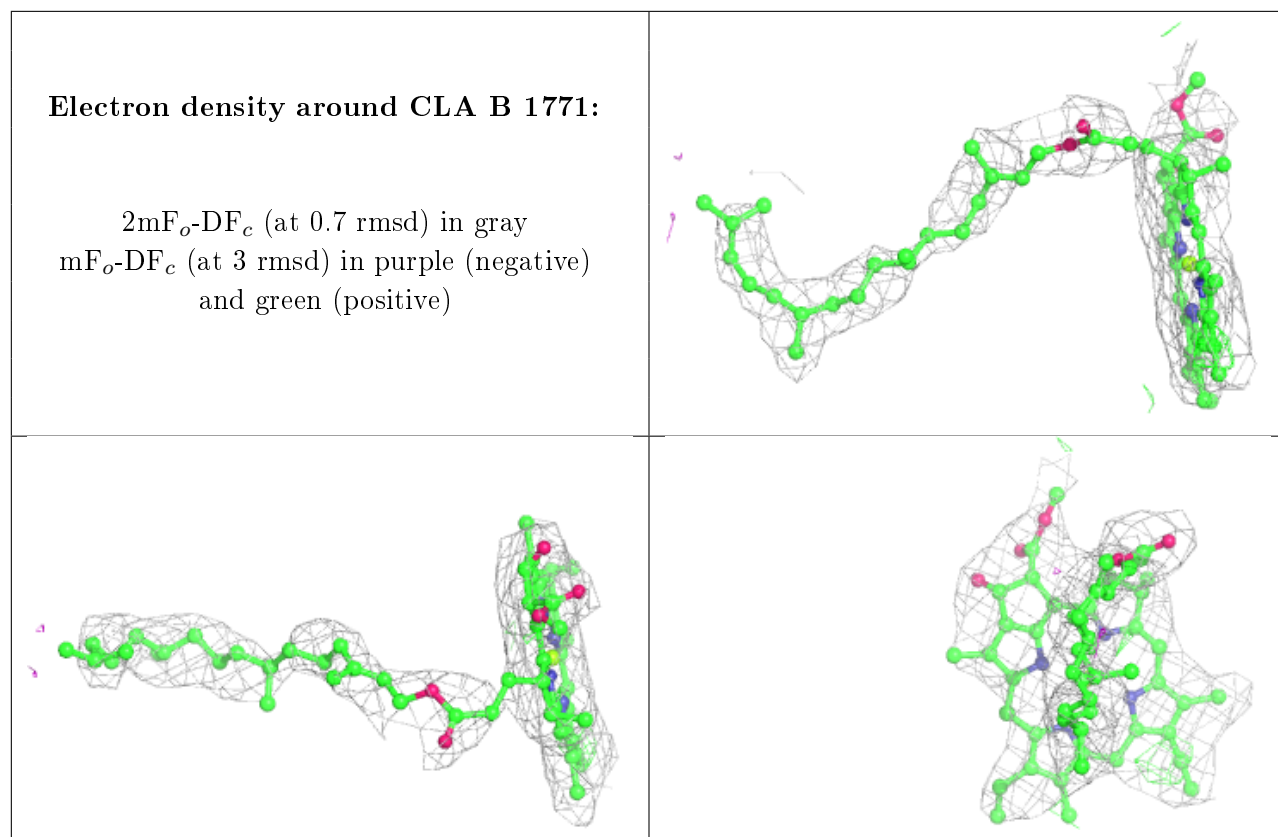
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)



**Electron density around CLA A 1790:**

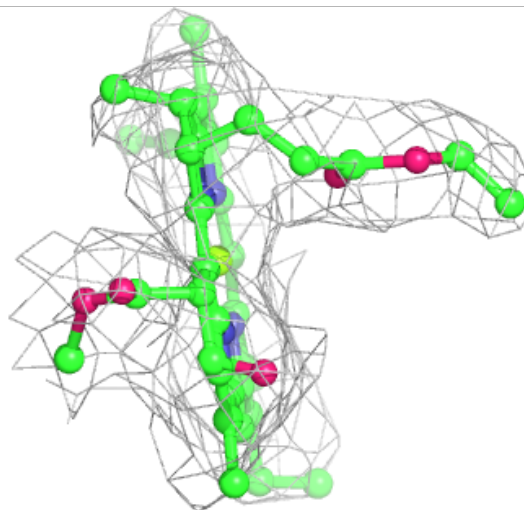
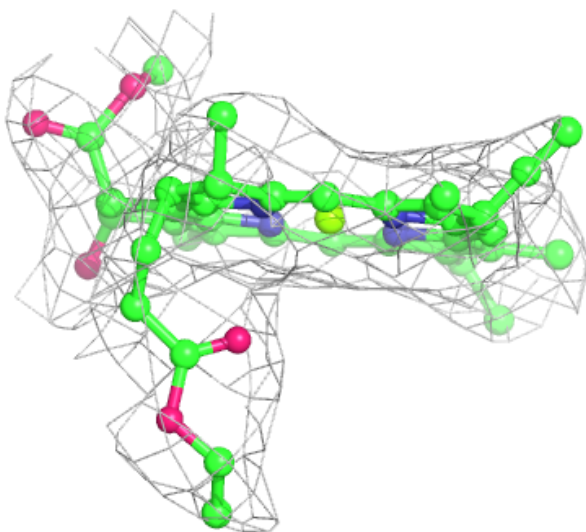
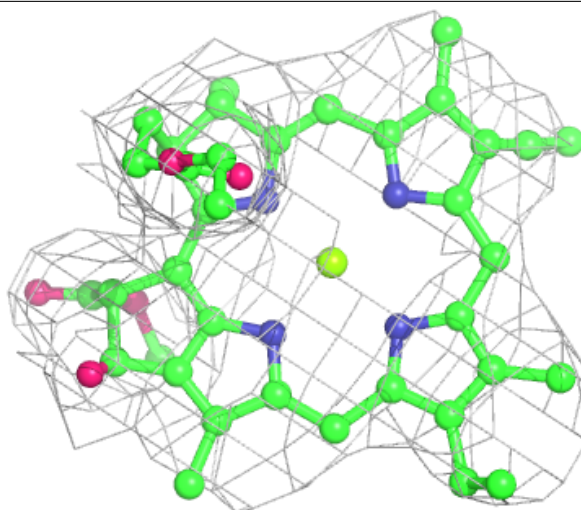
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





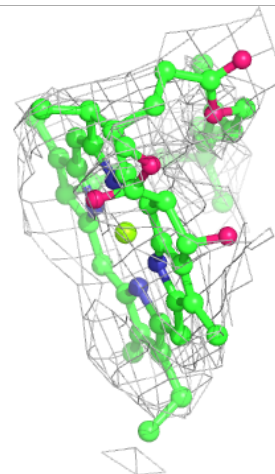
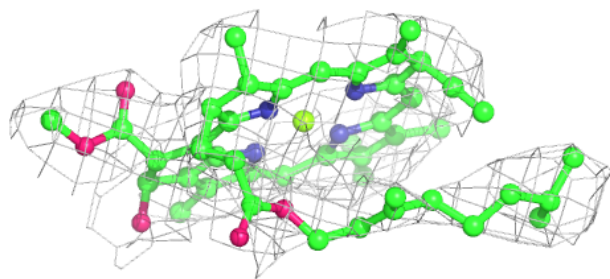
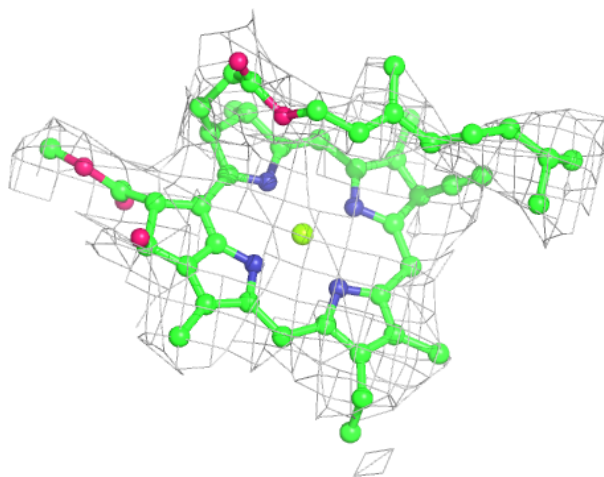
**Electron density around CLA L 1167:**

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



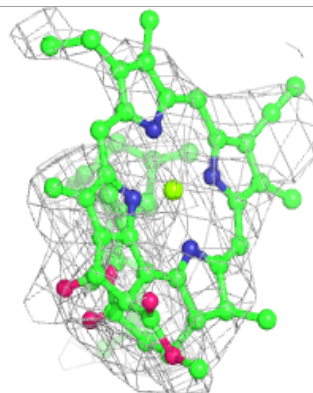
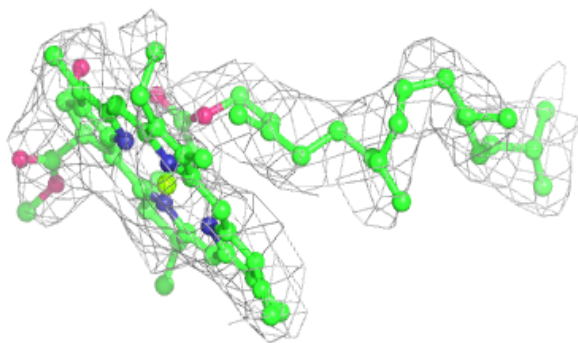
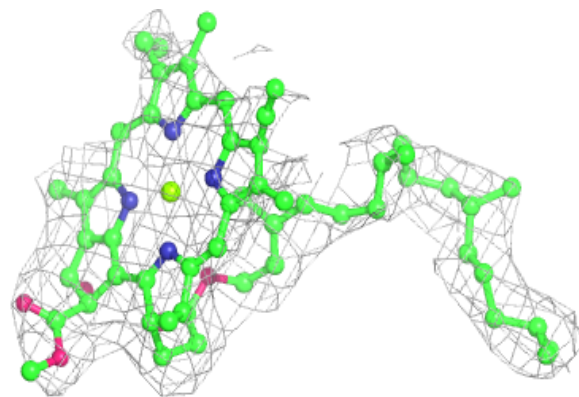
**Electron density around CLA B 1752:**

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

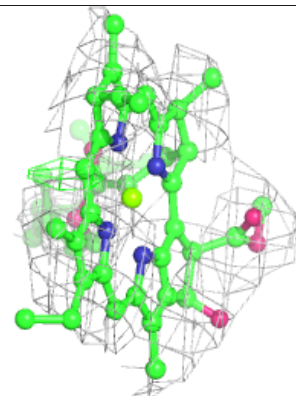
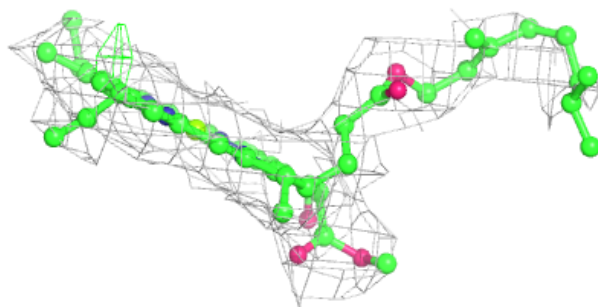
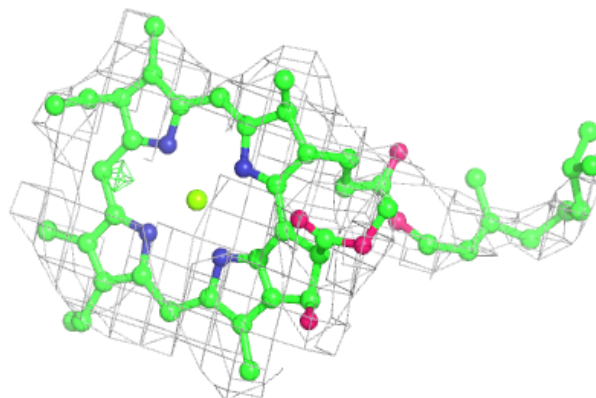


**Electron density around CLA A 1800:**

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

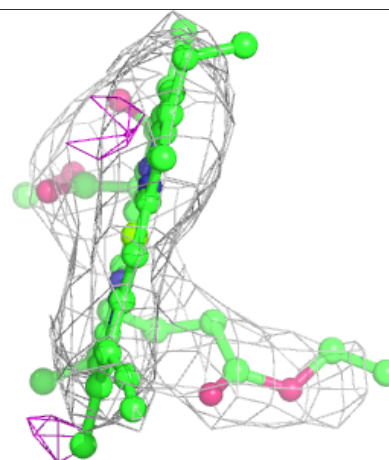
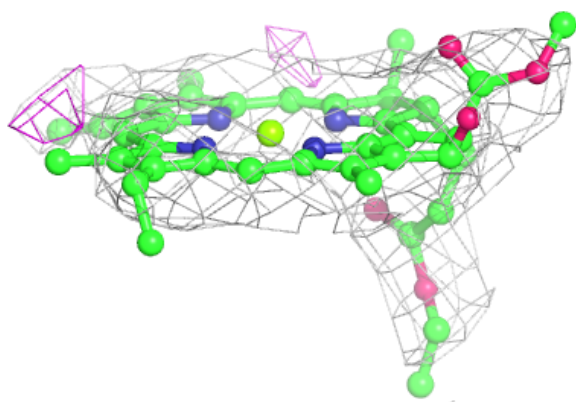
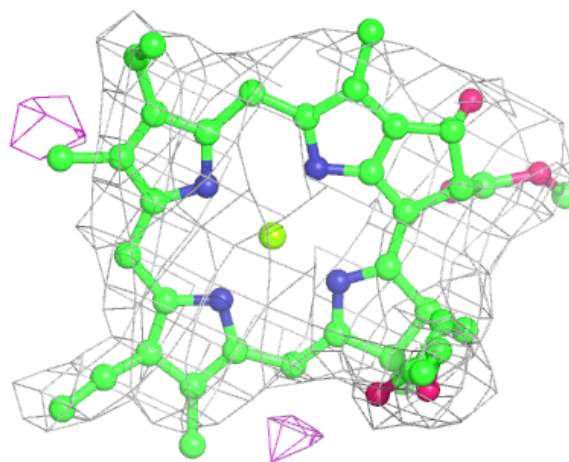
**Electron density around CLA A 1765:**

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



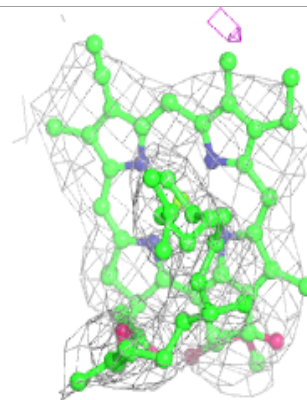
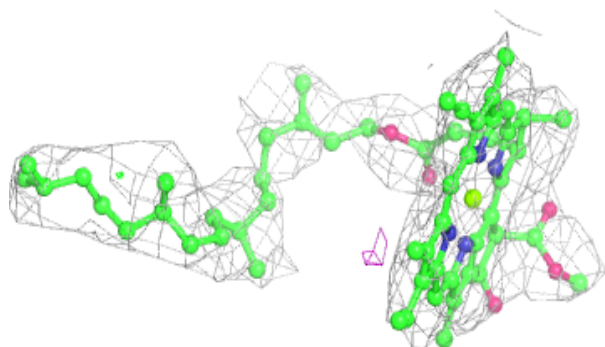
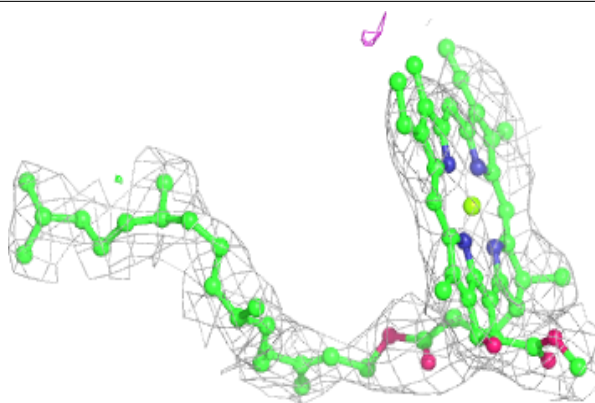
**Electron density around CLA B 1769:**

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

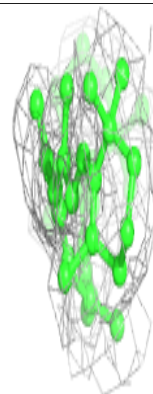
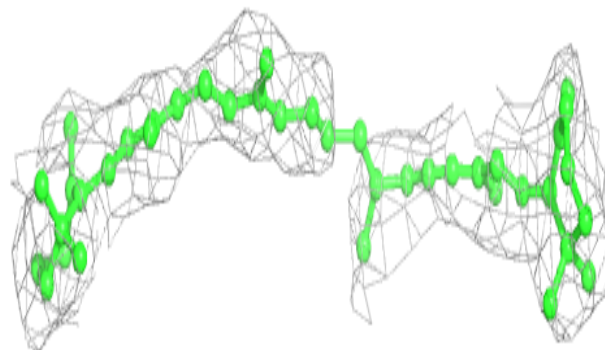
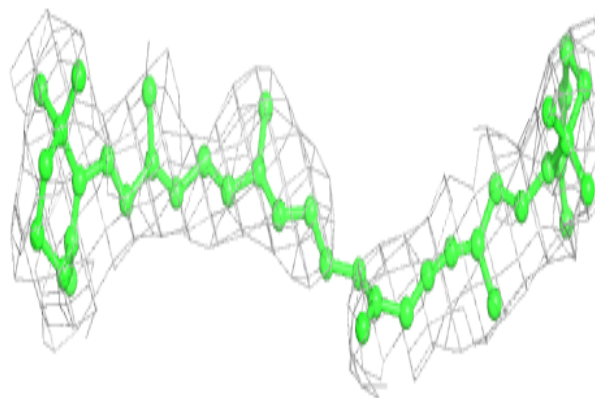


**Electron density around CLA B 1759:**

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

**Electron density around BCR B 1781:**

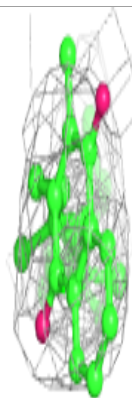
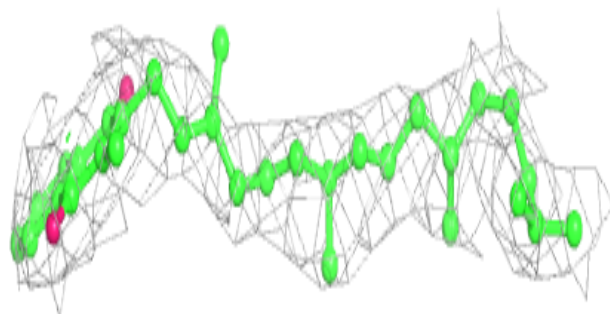
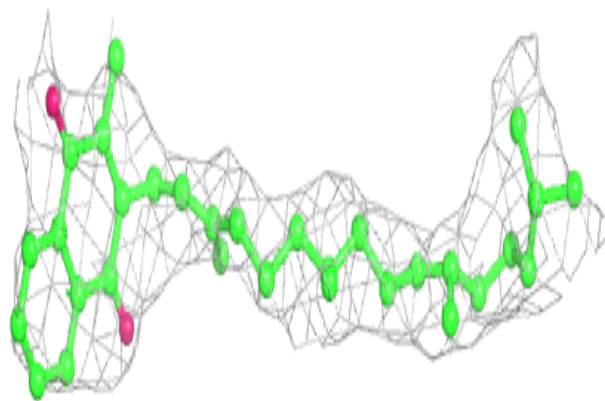
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





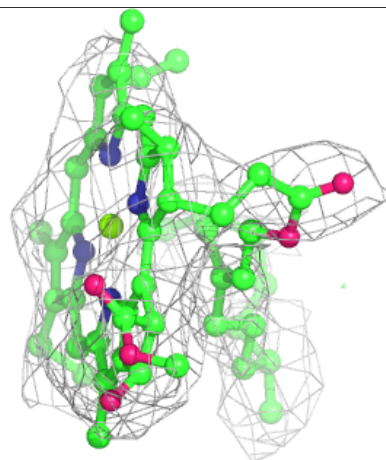
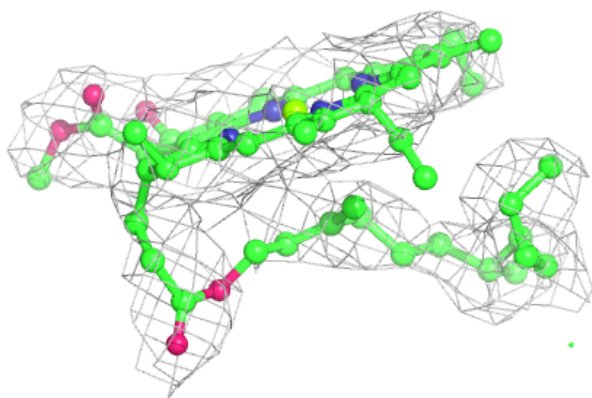
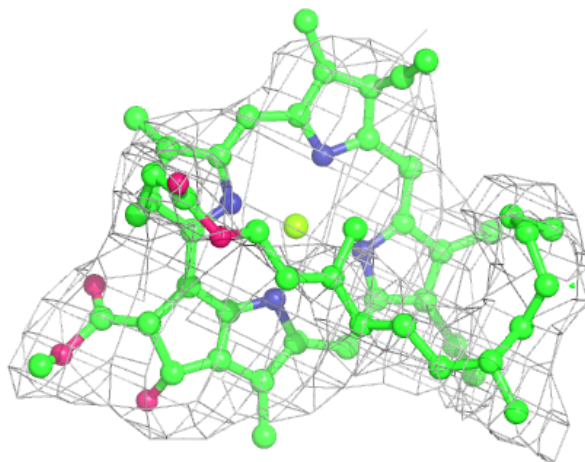
**Electron density around PQN A 1802:**

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



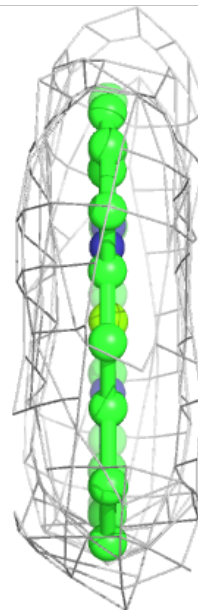
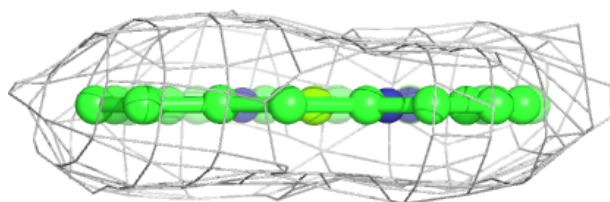
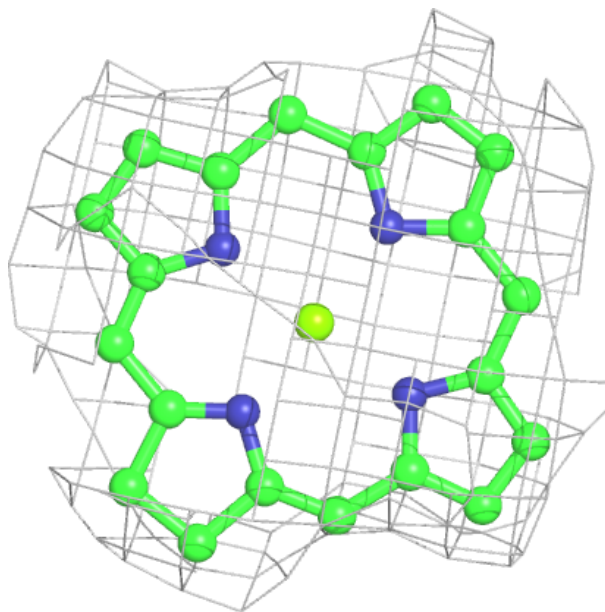
**Electron density around CLA B 1747:**

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



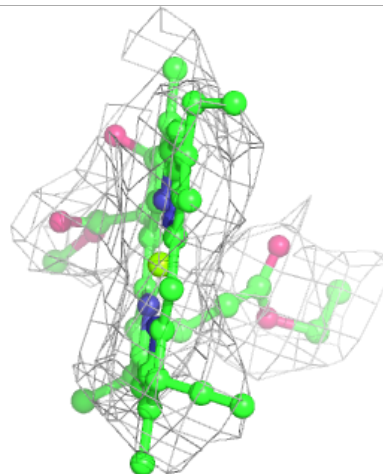
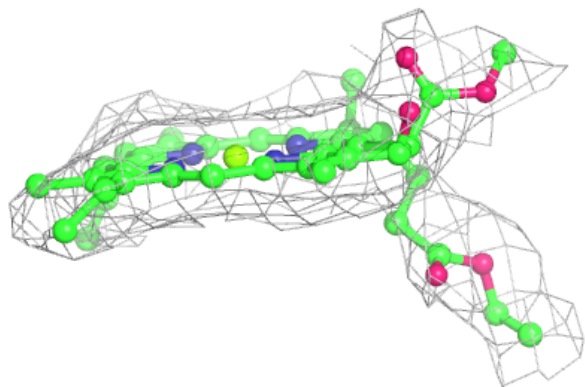
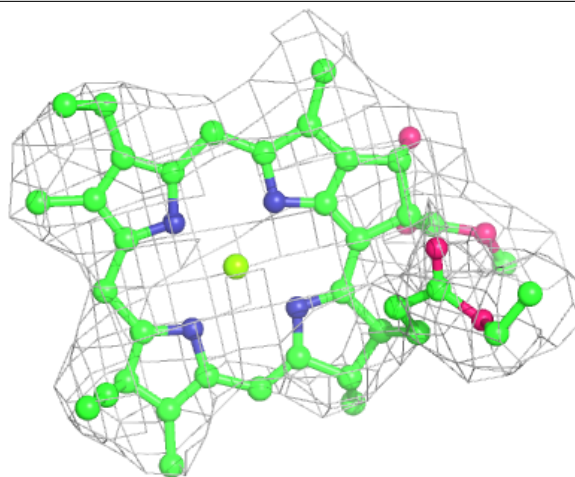
**Electron density around CLA 4 1206:**

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



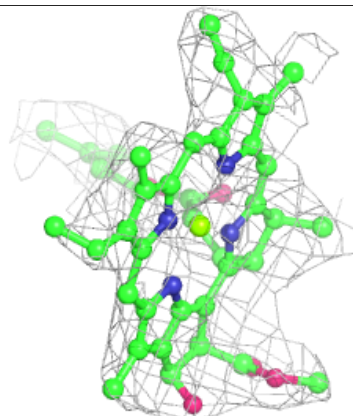
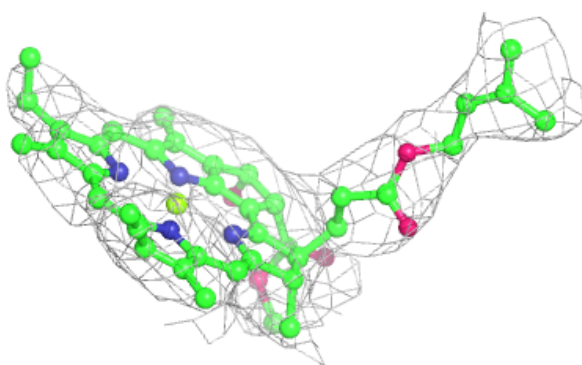
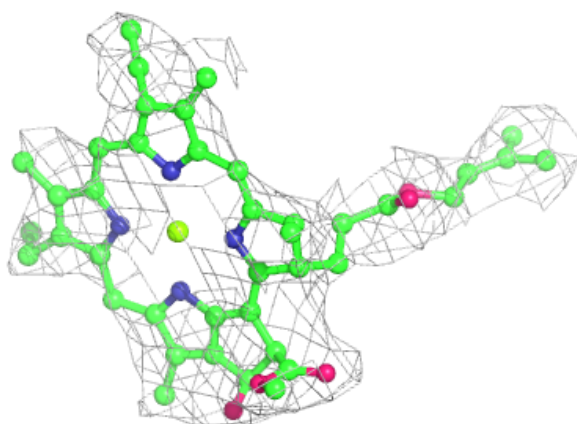
**Electron density around CLA A 1794:**

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

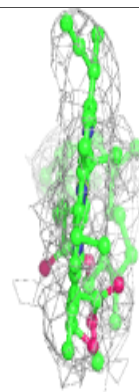
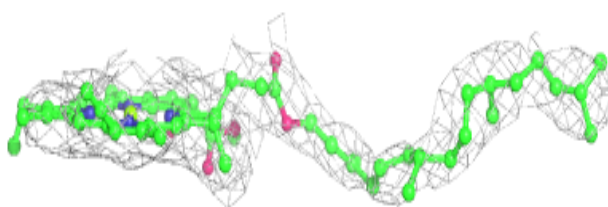
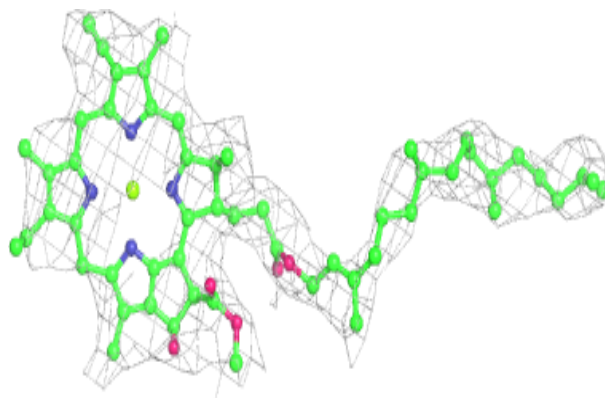


**Electron density around CLA A 1786:**

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

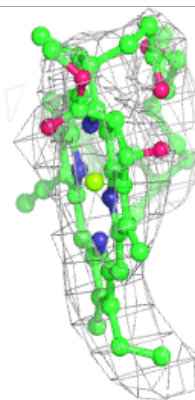
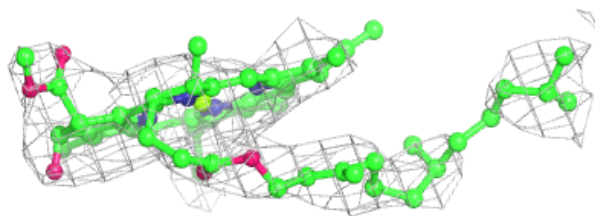
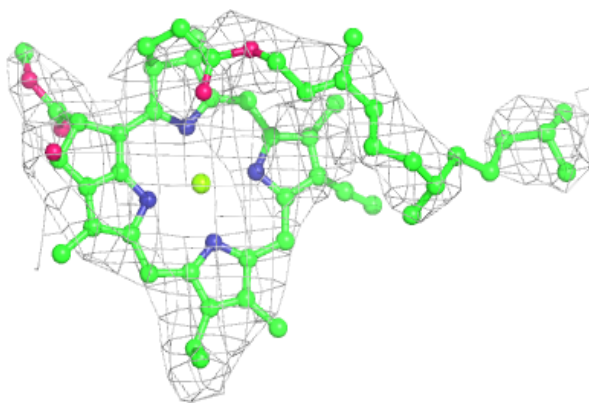
**Electron density around CLA A 1788:**

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

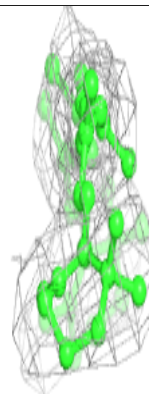
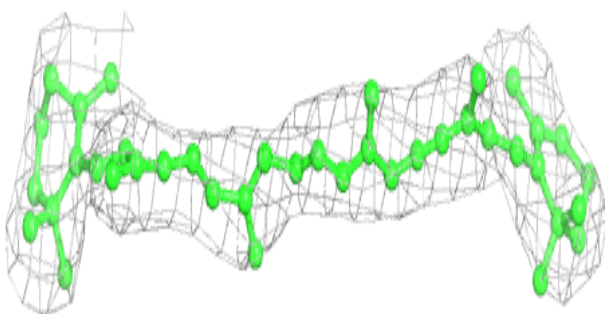
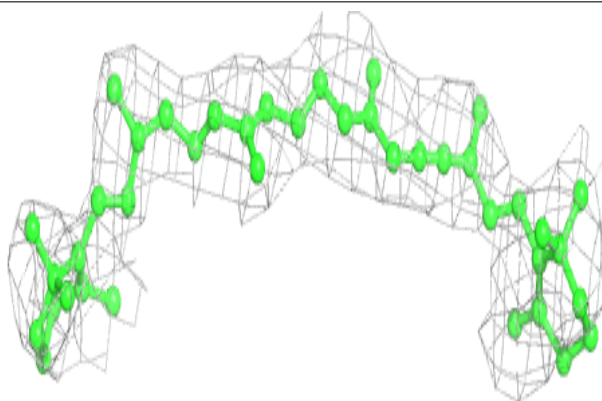


**Electron density around CLA B 1748:**

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

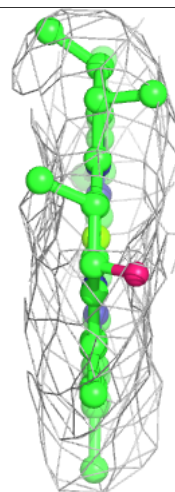
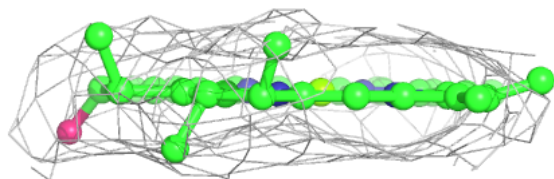
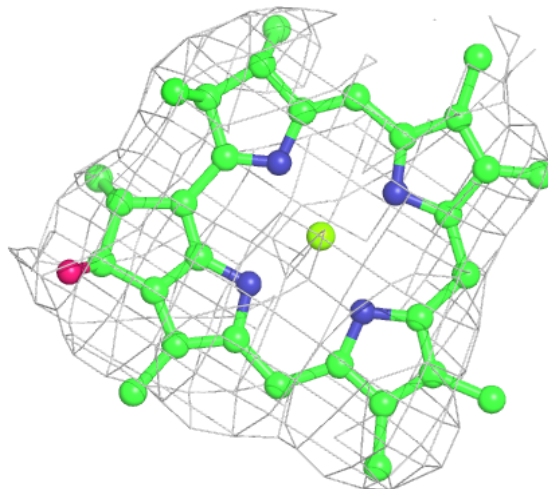
**Electron density around BCR L 1170:**

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



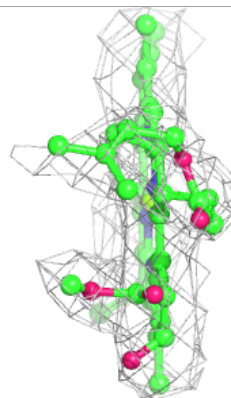
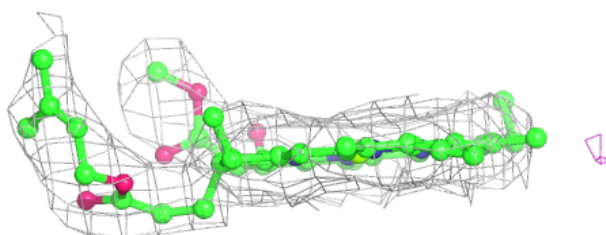
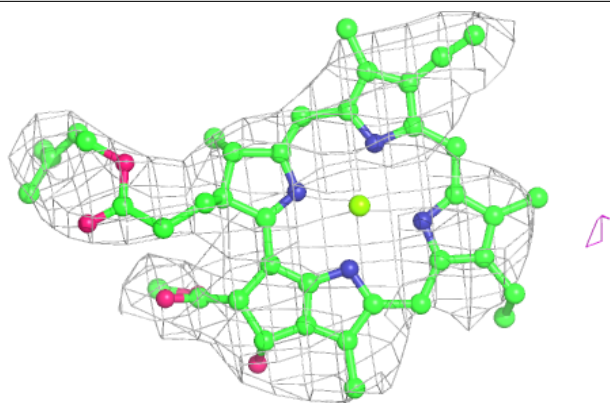
**Electron density around CLA F 1155:**

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

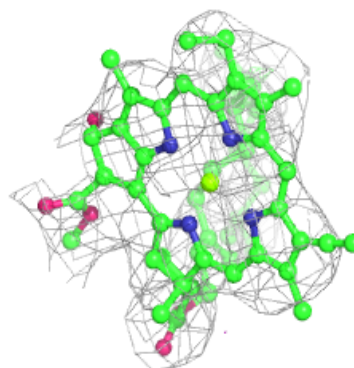
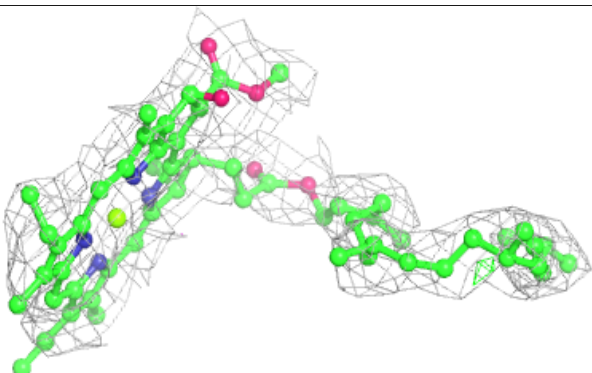
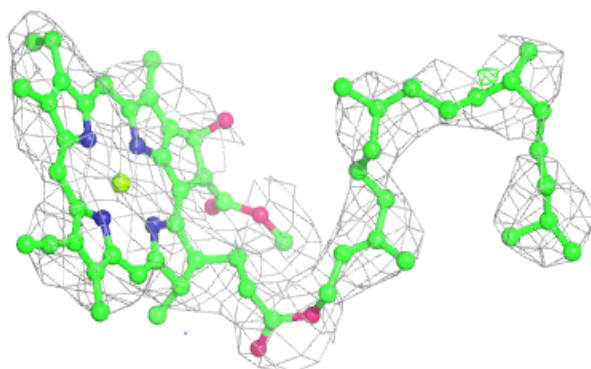


**Electron density around CLA A 1759:**

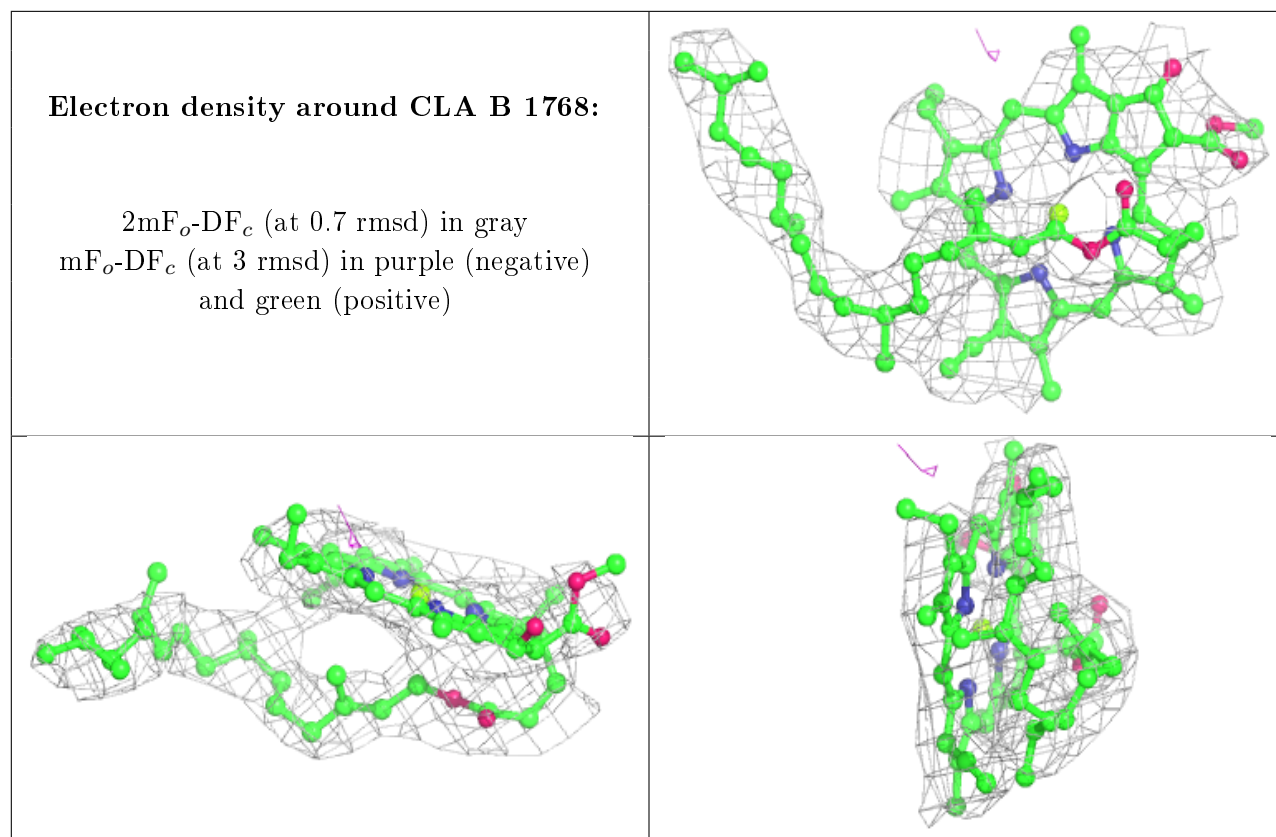
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

**Electron density around CLA A 1811:**

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

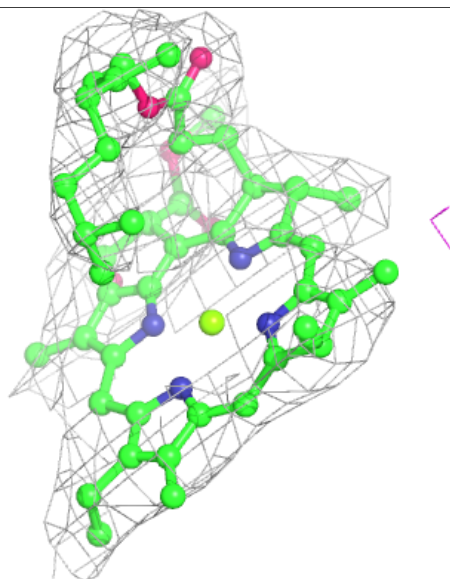
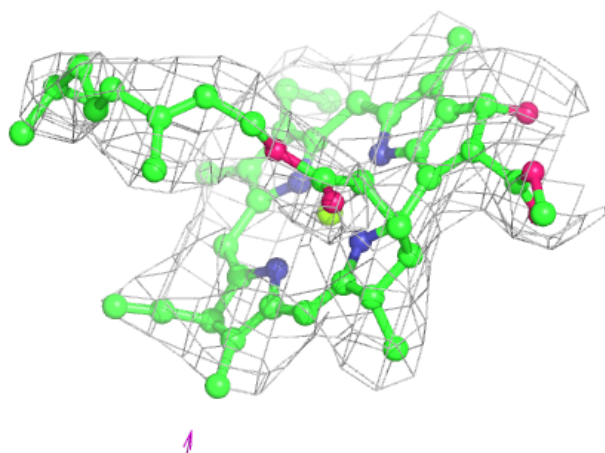
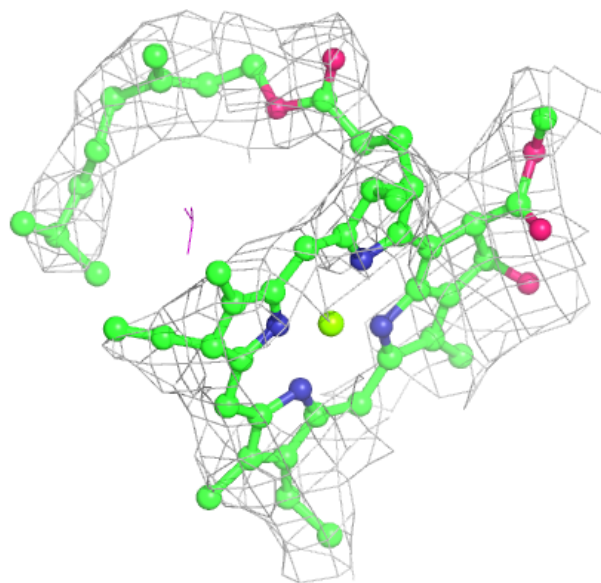






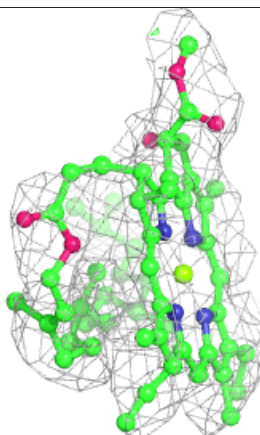
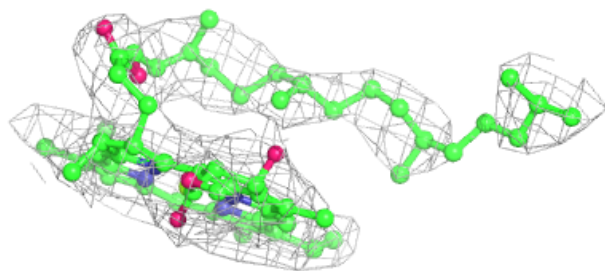
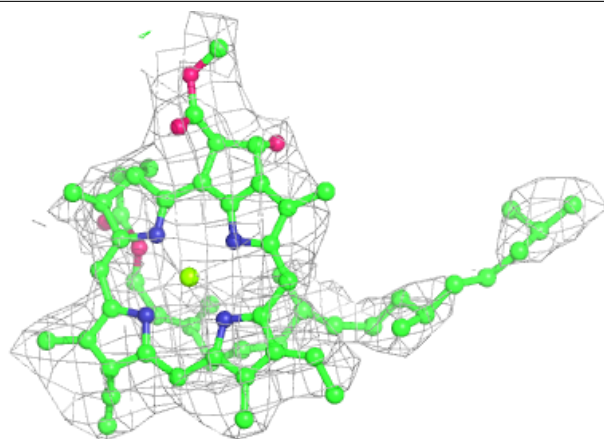
**Electron density around CLA A 1779:**

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

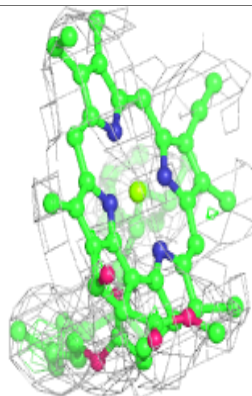
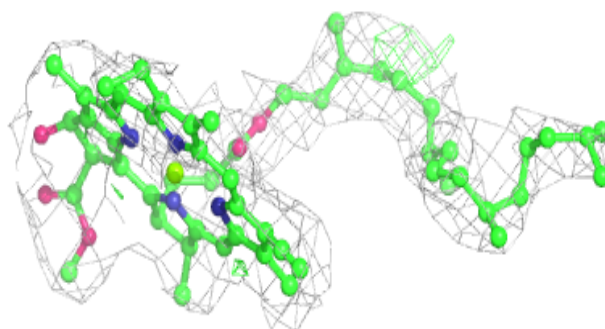
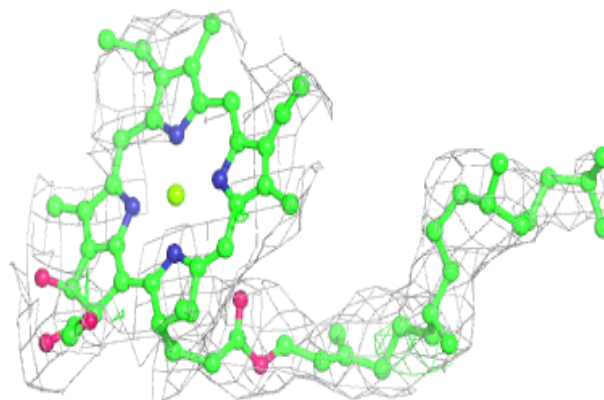


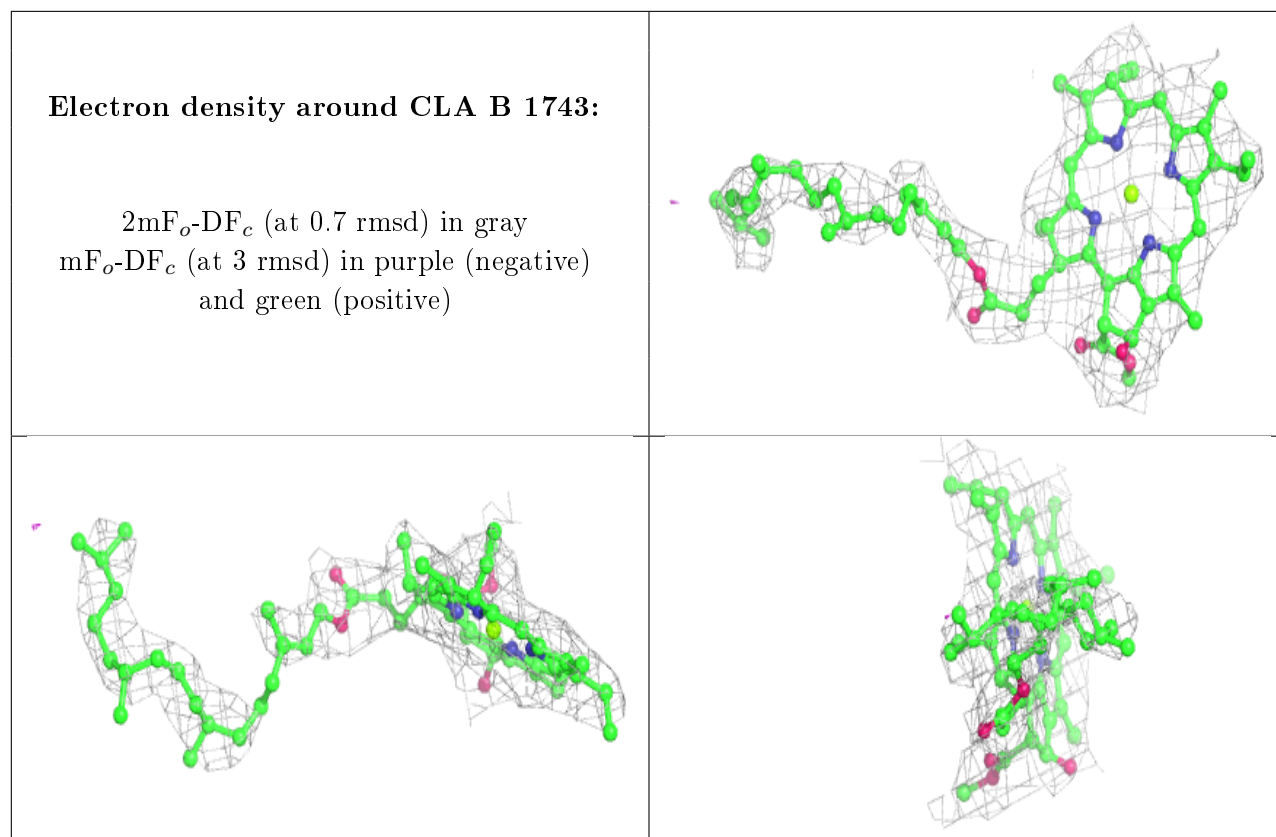
**Electron density around CLA B 1757:**

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

**Electron density around CLA A 1764:**

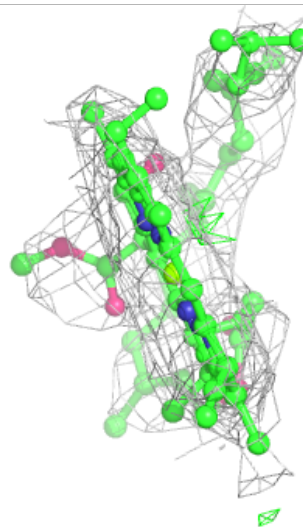
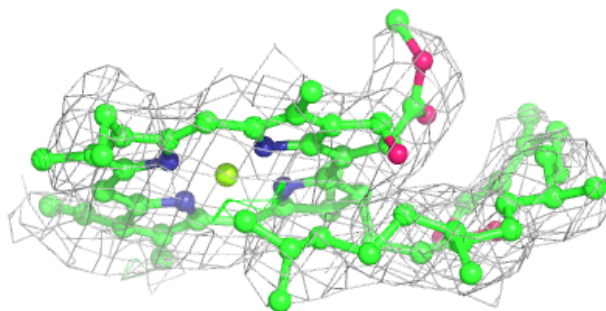
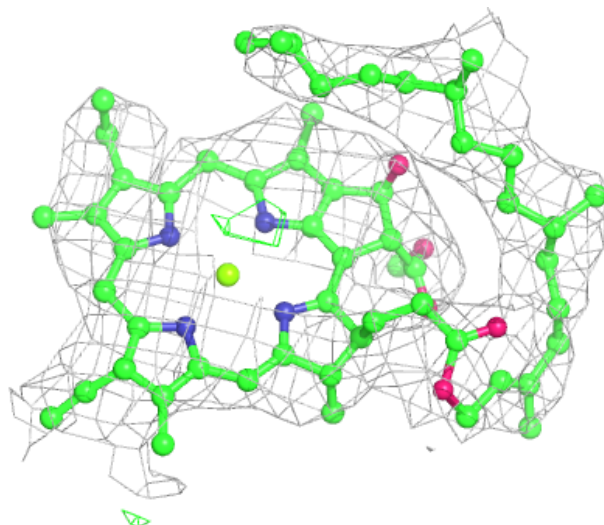
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

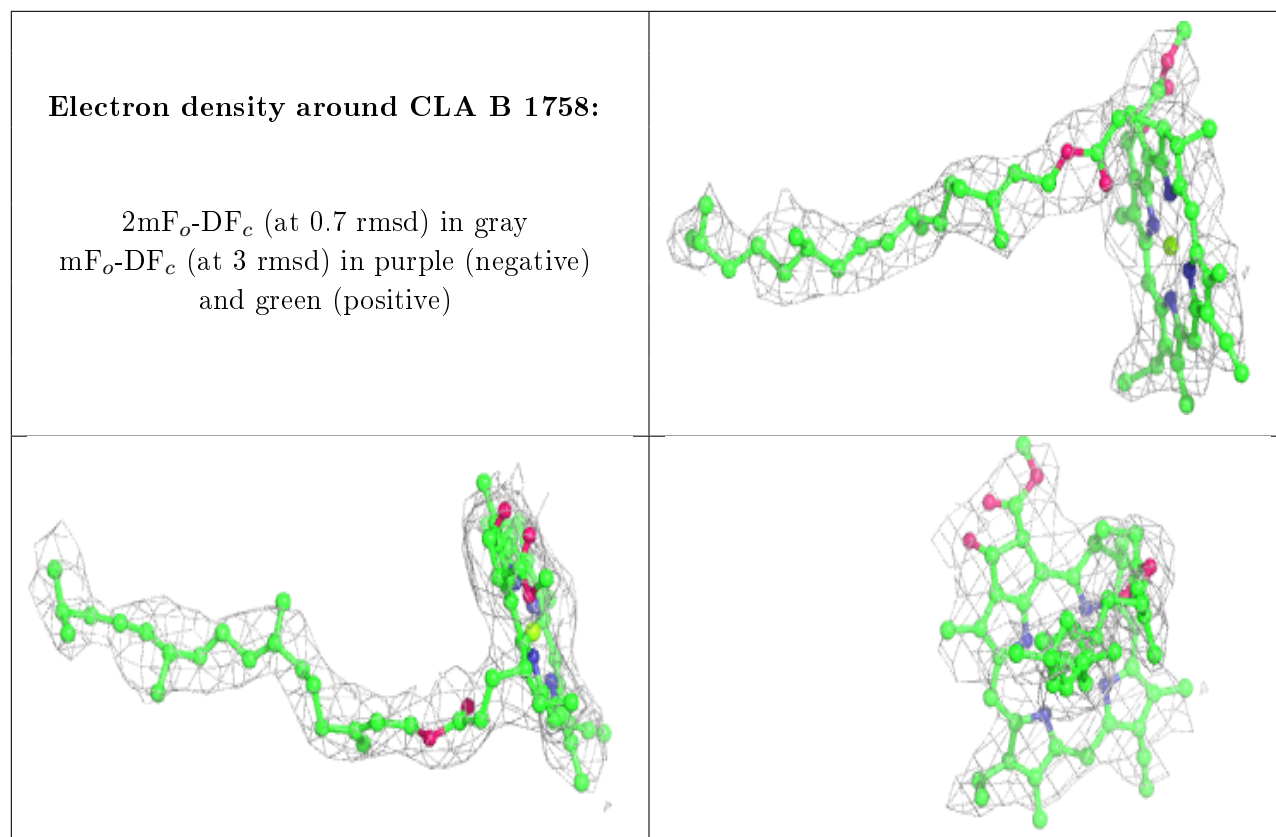




**Electron density around CLA B 1737:**

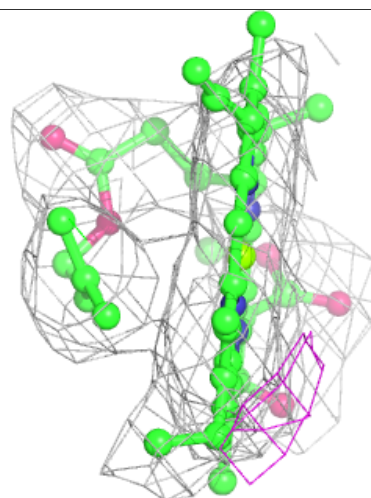
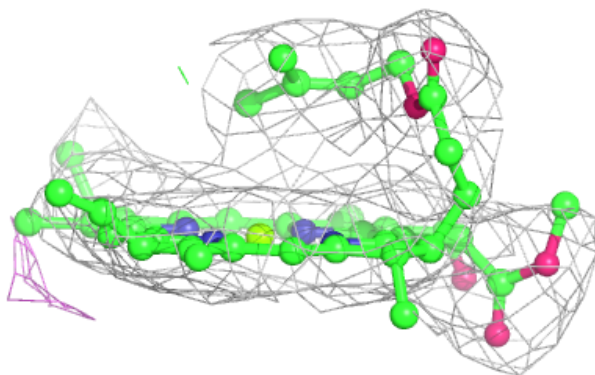
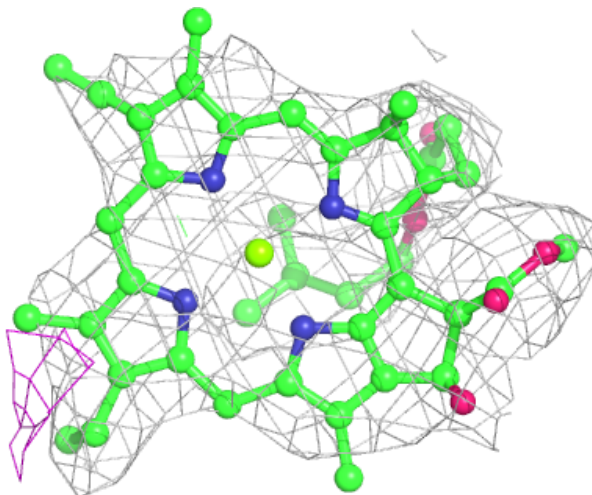
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





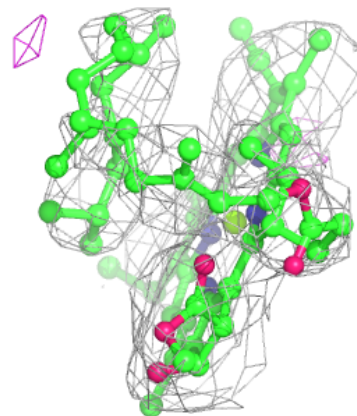
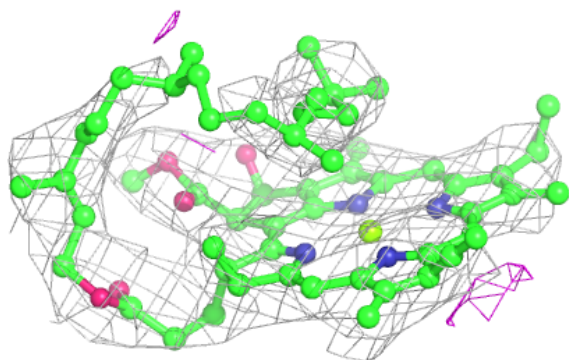
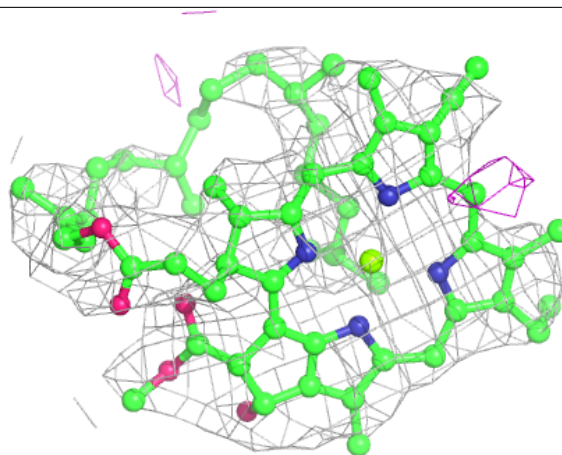
**Electron density around CLA B 1760:**

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

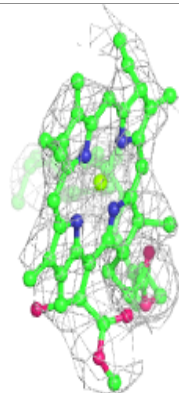
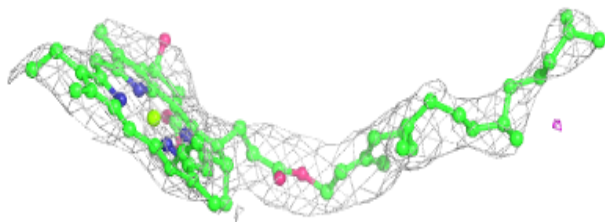
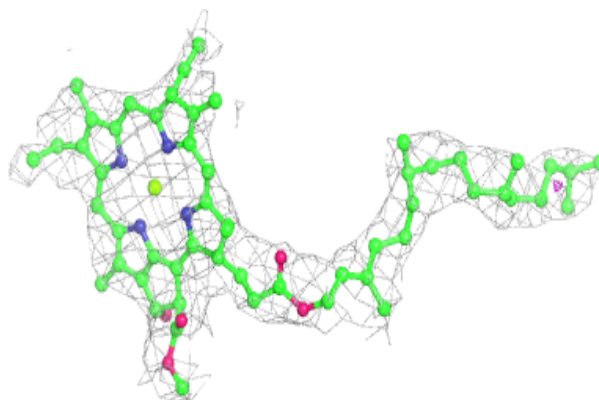


**Electron density around CLA B 1738:**

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

**Electron density around CLA B 1786:**

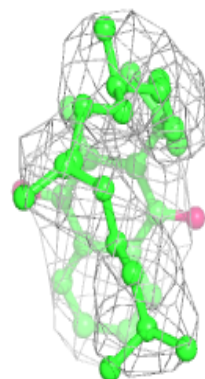
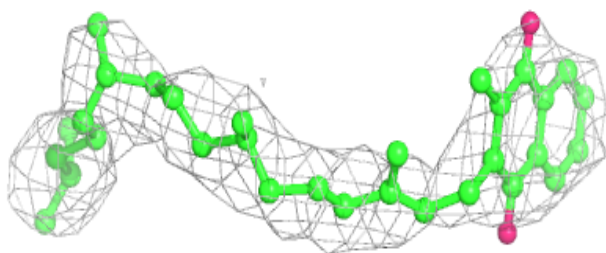
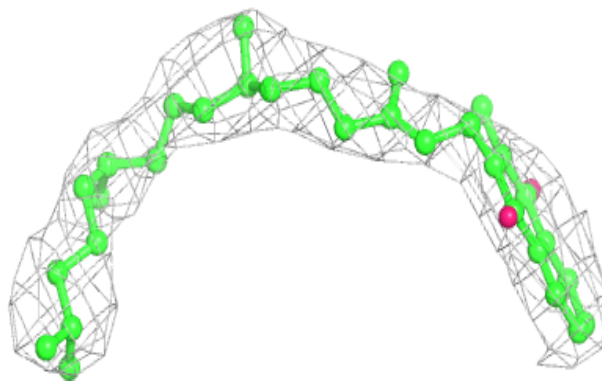
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)





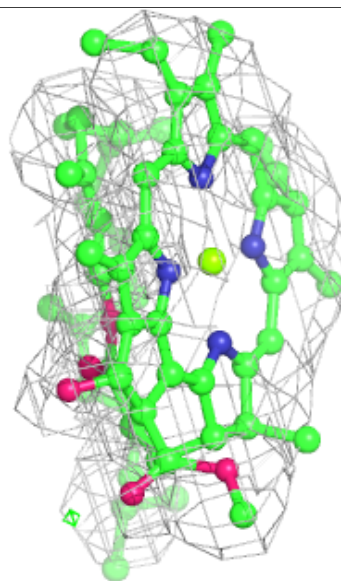
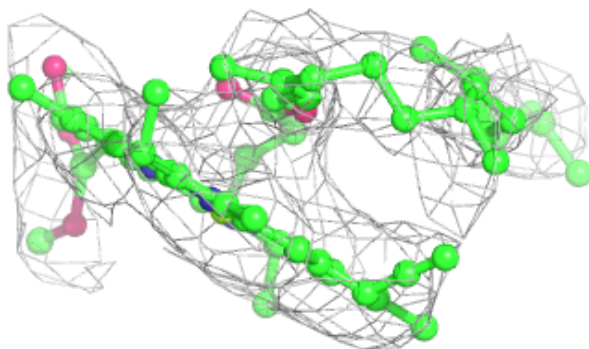
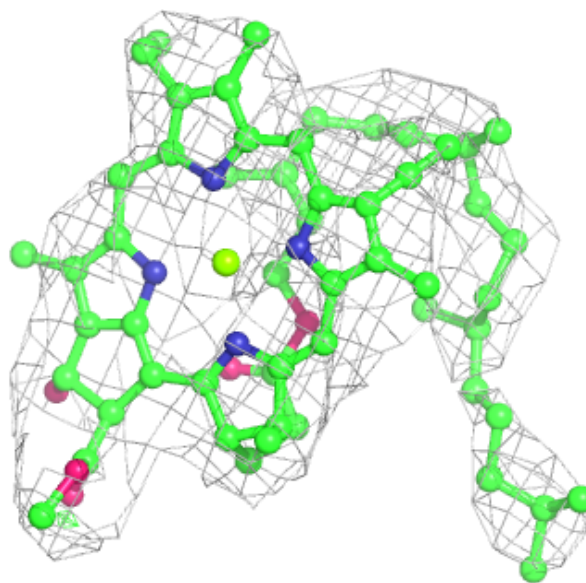
**Electron density around PQN B 1773:**

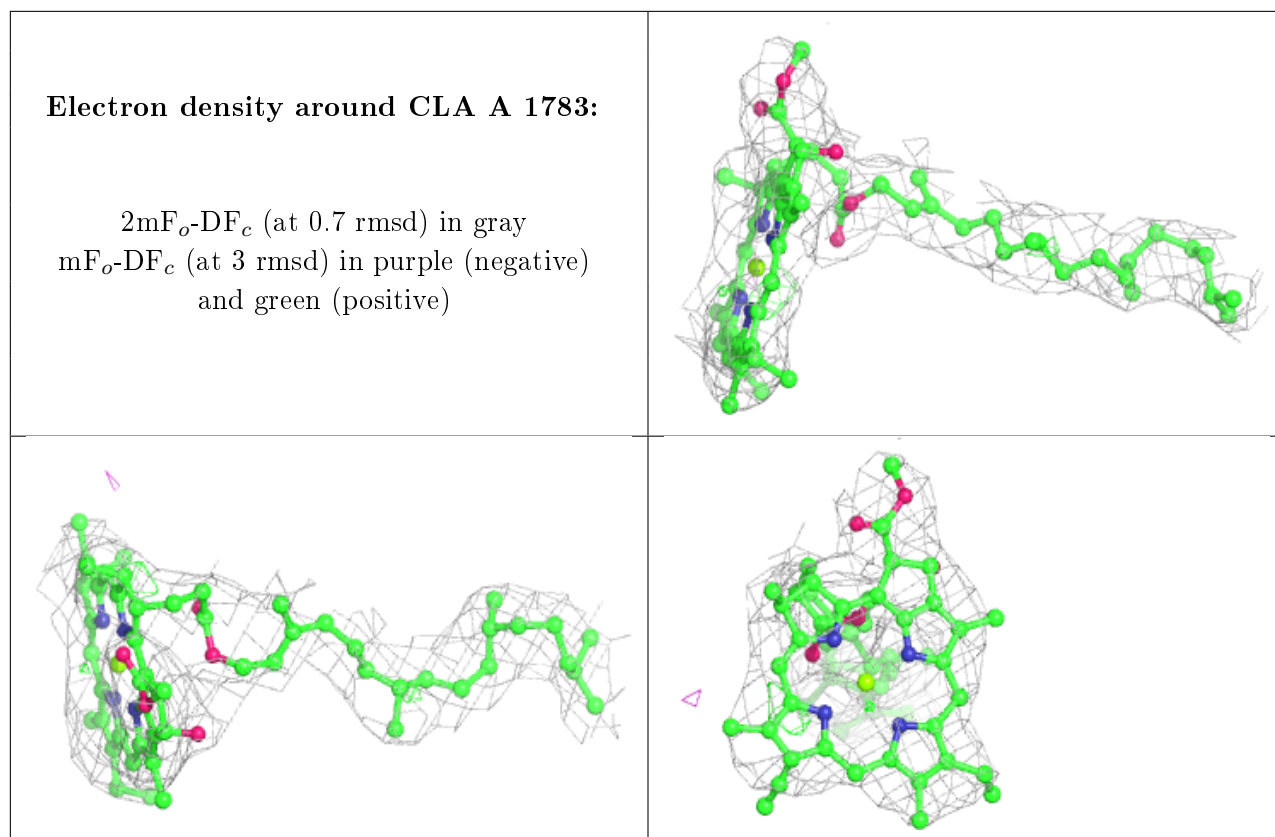
$2mF_o-DF_c$  (at 0.7 rmsd) in gray  
 $mF_o-DF_c$  (at 3 rmsd) in purple (negative)  
and green (positive)

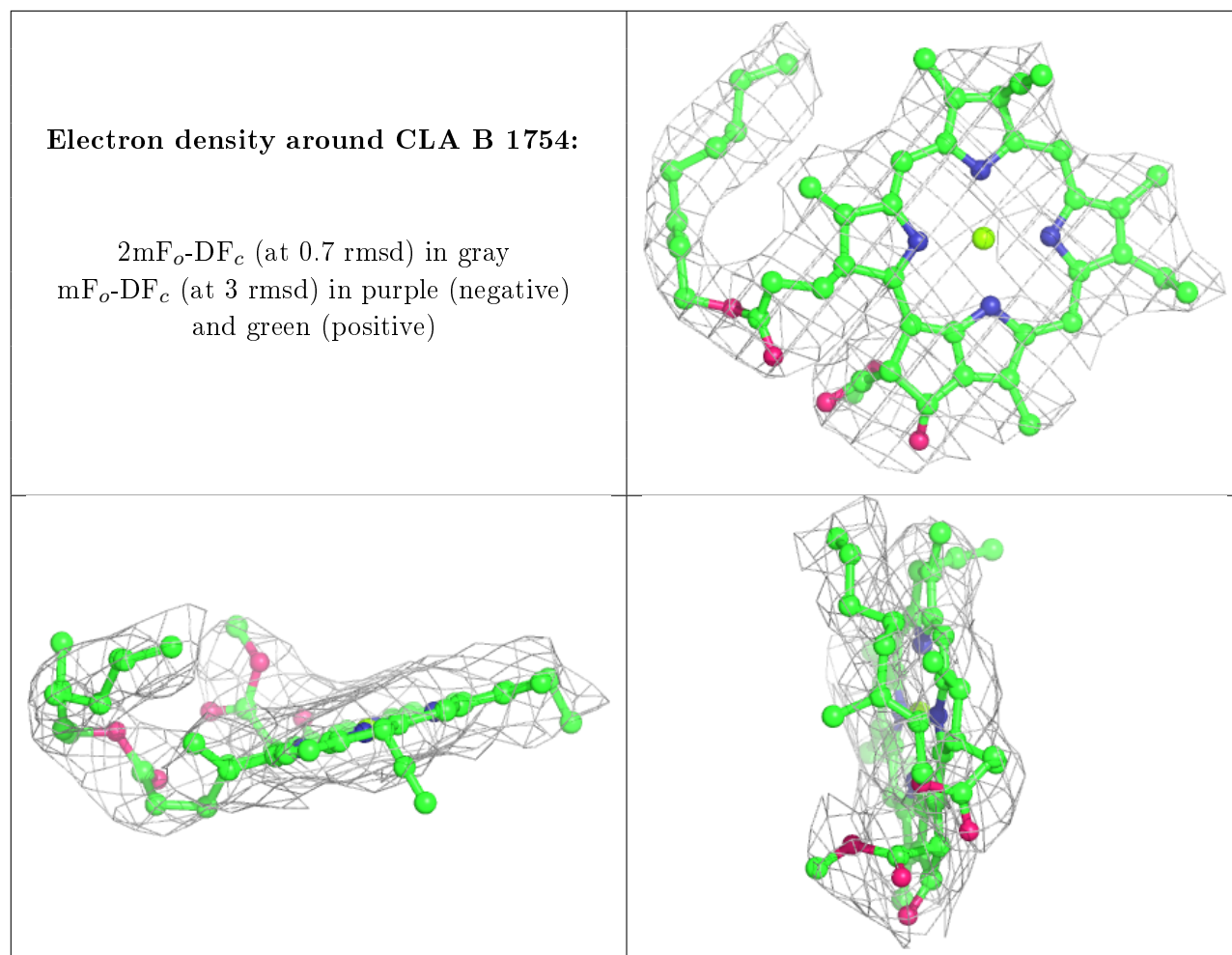


**Electron density around CLA B 1739:**

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







## 6.5 Other polymers [\(i\)](#)

There are no such residues in this entry.