



wwPDB X-ray Structure Validation Summary Report ⓘ

Aug 17, 2020 – 04:59 PM BST

PDB ID : 5B5E
Title : Crystal structure analysis of Photosystem II complex
Authors : Tanaka, A.; Fukushima, Y.; Kamiya, N.
Deposited on : 2016-05-02
Resolution : 1.87 Å(reported)

This is a wwPDB X-ray Structure Validation Summary Report for a publicly released PDB entry.

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/XrayValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The 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

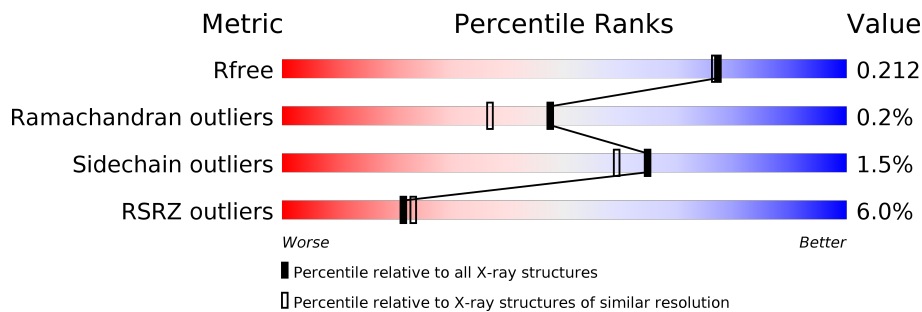
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

The reported resolution of this entry is 1.87 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	9470 (1.90-1.86)
Ramachandran outliers	138981	10152 (1.90-1.86)
Sidechain outliers	138945	10152 (1.90-1.86)
RSRZ outliers	127900	9303 (1.90-1.86)

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 ≥ 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	A	344	95% ..
1	a	344	95% ..
2	B	505	98% .
2	b	505	96% ..
3	C	455	97% ..
3	c	455	97% .
4	D	342	97% .

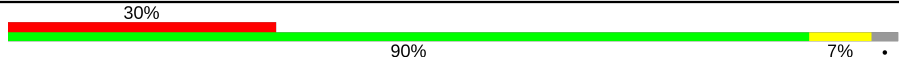
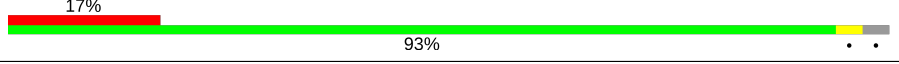
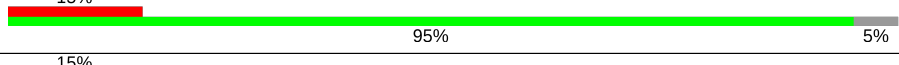
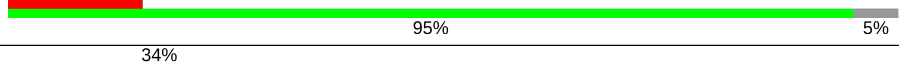
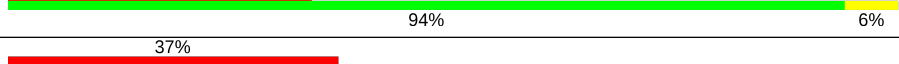
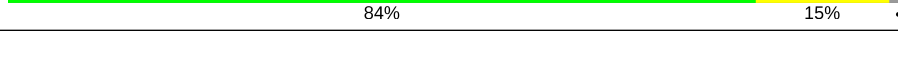
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Mol	Chain	Length	Quality of chain
4	d	342	97%
5	E	83	94%
5	e	83	89%
6	F	44	75%
6	f	44	70%
7	H	65	92%
7	h	65	92%
8	I	38	92%
8	i	38	97%
9	J	40	85%
9	j	40	98%
10	K	37	92%
10	k	37	95%
11	L	37	100%
11	l	37	97%
12	M	36	92%
12	m	36	94%
13	O	244	96%
13	o	244	97%
14	T	32	88%
14	t	32	91%
15	U	104	92%
15	u	104	93%
16	V	137	97%
16	v	137	99%

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Mol	Chain	Length	Quality of chain
17	Y	30	
17	y	30	
18	X	40	
18	x	40	
19	Z	62	
19	z	62	

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
23	CLA	A	405	X	-	-	-
23	CLA	A	406	X	-	-	-
23	CLA	A	408	X	-	-	-
23	CLA	B	602	X	-	-	-
23	CLA	B	603	X	-	-	-
23	CLA	B	604	X	-	-	-
23	CLA	B	605	X	-	-	-
23	CLA	B	606	X	-	-	-
23	CLA	B	607	X	-	-	-
23	CLA	B	608	X	-	-	-
23	CLA	B	609	X	-	-	-
23	CLA	B	610	X	-	-	-
23	CLA	B	611	X	-	-	-
23	CLA	B	612	X	-	-	-
23	CLA	B	613	X	-	-	-
23	CLA	B	614	X	-	-	-
23	CLA	B	615	X	-	-	-
23	CLA	B	616	X	-	-	-
23	CLA	B	617	X	-	-	-
23	CLA	C	502	X	-	-	-
23	CLA	C	503	X	-	-	-
23	CLA	C	504	X	-	-	-
23	CLA	C	505	X	-	-	-
23	CLA	C	506	X	-	-	-
23	CLA	C	507	X	-	-	-
23	CLA	C	508	X	-	-	-
23	CLA	C	509	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
23	CLA	C	510	X	-	-	-
23	CLA	C	511	X	-	-	-
23	CLA	C	512	X	-	-	-
23	CLA	C	513	X	-	-	-
23	CLA	C	514	X	-	-	-
23	CLA	D	401	X	-	-	-
23	CLA	D	403	X	-	-	-
23	CLA	D	404	X	-	-	-
23	CLA	a	406	X	-	-	-
23	CLA	a	407	X	-	-	-
23	CLA	a	410	X	-	-	-
23	CLA	b	602	X	-	-	-
23	CLA	b	603	X	-	-	-
23	CLA	b	604	X	-	-	-
23	CLA	b	605	X	-	-	-
23	CLA	b	606	X	-	-	-
23	CLA	b	607	X	-	-	-
23	CLA	b	608	X	-	-	-
23	CLA	b	609	X	-	-	-
23	CLA	b	610	X	-	-	-
23	CLA	b	611	X	-	-	-
23	CLA	b	612	X	-	-	-
23	CLA	b	613	X	-	-	-
23	CLA	b	614	X	-	-	-
23	CLA	b	615	X	-	-	-
23	CLA	b	616	X	-	-	-
23	CLA	b	617	X	-	-	-
23	CLA	c	902	X	-	-	-
23	CLA	c	903	X	-	-	-
23	CLA	c	904	X	-	-	-
23	CLA	c	905	X	-	-	-
23	CLA	c	906	X	-	-	-
23	CLA	c	907	X	-	-	-
23	CLA	c	908	X	-	-	-
23	CLA	c	909	X	-	-	-
23	CLA	c	910	X	-	-	-
23	CLA	c	911	X	-	-	-
23	CLA	c	912	X	-	-	-
23	CLA	c	913	X	-	-	-
23	CLA	c	914	X	-	-	-
23	CLA	d	401	X	-	-	-
23	CLA	d	403	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
23	CLA	d	404	X	-	-	-
29	UNL	B	628	-	-	-	X
29	UNL	H	104	-	-	-	X
35	HTG	B	626	-	-	-	X
35	HTG	c	922	-	-	-	X

2 Entry composition [i](#)

There are 41 unique types of molecules in this entry. The entry contains 55401 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 Photosystem II protein D1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	334	2622	1718	431	458	15	0	1	0
1	a	334	2633	1727	431	460	15	0	4	0

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
A	279	PRO	ARG	see sequence details	UNP P51765
a	279	PRO	ARG	see sequence details	UNP P51765

- Molecule 2 is a protein called Photosystem II CP47 reaction center protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
2	B	505	3992	2619	668	692	13	0	4	0
2	b	501	3929	2582	653	681	13	0	3	0

- Molecule 3 is a protein called Photosystem II CP43 reaction center protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
3	C	451	3511	2297	591	610	13	0	4	0
3	c	455	3521	2305	589	614	13	0	1	0

There are 8 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
C	19	ASN	-	see sequence details	UNP D0VWR7
C	20	SER	-	see sequence details	UNP D0VWR7

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Chain	Residue	Modelled	Actual	Comment	Reference
C	21	ILE	-	see sequence details	UNP D0VWR7
C	22	PHE	-	see sequence details	UNP D0VWR7
c	19	ASN	-	see sequence details	UNP D0VWR7
c	20	SER	-	see sequence details	UNP D0VWR7
c	21	ILE	-	see sequence details	UNP D0VWR7
c	22	PHE	-	see sequence details	UNP D0VWR7

- Molecule 4 is a protein called Photosystem II D2 protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	342	Total	C	N	O	S	0	2	0
			2733	1813	446	462	12			
4	d	342	Total	C	N	O	S	0	2	0
			2733	1813	446	462	12			

- Molecule 5 is a protein called Cytochrome b559 subunit alpha.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	E	81	Total	C	N	O	S	0	0	0
			651	426	103	122				
5	e	79	Total	C	N	O	S	0	0	0
			637	419	101	117				

- Molecule 6 is a protein called Cytochrome b559 subunit beta.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	35	Total	C	N	O	S	0	0	0
			280	190	46	43	1			
6	f	32	Total	C	N	O	S	0	0	0
			255	173	43	38	1			

- Molecule 7 is a protein called Photosystem II reaction center protein H.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	63	Total	C	N	O	S	0	2	0
			511	341	83	85	2			
7	h	63	Total	C	N	O	S	0	1	0
			506	338	83	83	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	35	Total	C	N	O	S	0	0	0
			285	195	45	44	1			
8	i	38	Total	C	N	O	S	0	0	0
			303	205	48	49	1			

- Molecule 9 is a protein called Photosystem II reaction center protein J.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J	36	Total	C	N	O	S	0	0	0
			251	171	37	42	1			
9	j	40	Total	C	N	O	S	0	0	0
			285	190	44	49	2			

- Molecule 10 is a protein called Photosystem II reaction center protein K.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
10	K	37	Total	C	N	O	0	0	0
			293	204	43	46			
10	k	37	Total	C	N	O	0	0	0
			293	204	43	46			

There are 4 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
K	33	LEU	PHE	see sequence details	UNP P19054
K	39	TRP	VAL	see sequence details	UNP P19054
k	33	LEU	PHE	see sequence details	UNP P19054
k	39	TRP	VAL	see sequence details	UNP P19054

- Molecule 11 is a protein called Photosystem II reaction center protein L.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
11	L	37	Total	C	N	O	0	1	0
			306	205	48	53			
11	l	36	Total	C	N	O	0	1	0
			297	200	47	50			

- Molecule 12 is a protein called Photosystem II reaction center protein M.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M	34	Total	C	N	O	S	0	1	0
			264	178	38	47	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	m	34	Total	C	N	O	S	0	1	0
			264	178	38	47	1			

There are 2 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
M	8	LEU	PHE	see sequence details	UNP P12312
m	8	LEU	PHE	see sequence details	UNP P12312

- Molecule 13 is a protein called Photosystem II manganese-stabilizing polypeptide.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	O	243	Total	C	N	O	S	0	2	0
			1861	1164	311	382	4			
13	o	243	Total	C	N	O	S	0	1	0
			1852	1159	310	379	4			

- Molecule 14 is a protein called Photosystem II reaction center protein T.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	T	30	Total	C	N	O	S	0	0	0
			256	180	36	38	2			
14	t	31	Total	C	N	O	S	0	0	0
			261	183	37	39	2			

- Molecule 15 is a protein called Photosystem II 12 kDa extrinsic protein.

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
15	U	97	Total	C	N	O	0	0	0
			766	486	128	152			
15	u	97	Total	C	N	O	0	1	0
			776	493	129	154			

- Molecule 16 is a protein called Cytochrome c-550.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	V	137	Total	C	N	O	S	0	1	0
			1072	680	180	208	4			
16	v	137	Total	C	N	O	S	0	1	0
			1060	671	177	208	4			

- Molecule 17 is a protein called Photosystem II reaction center protein Ycf12.

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	Ca	Mn	O		
20	a	1	10	1	4	5	0	0

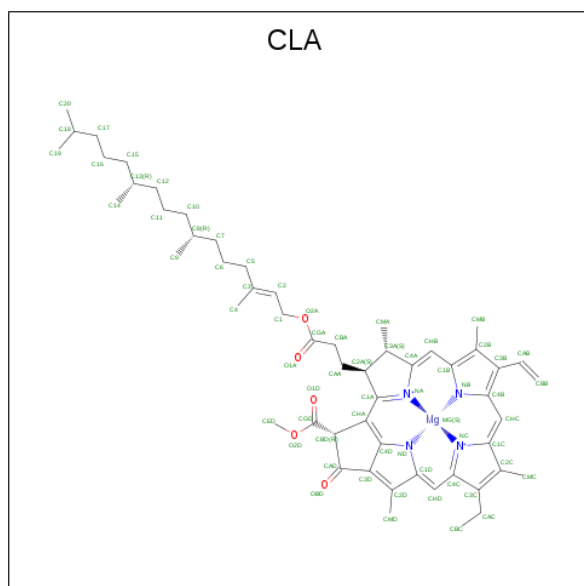
- Molecule 21 is FE (II) ION (three-letter code: FE2) (formula: Fe).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Fe		
21	A	1	1	1	0	0
21	a	1	1	1	0	0

- Molecule 22 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
			Total	Cl		
22	A	2	2	2	0	0
22	a	2	2	2	0	0

- Molecule 23 is CHLOROPHYLL A (three-letter code: CLA) (formula: C₅₅H₇₂MgN₄O₅).



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

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
23	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
23	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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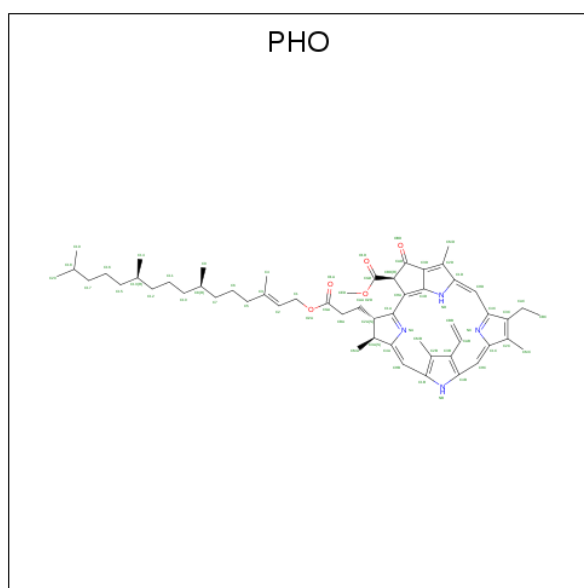
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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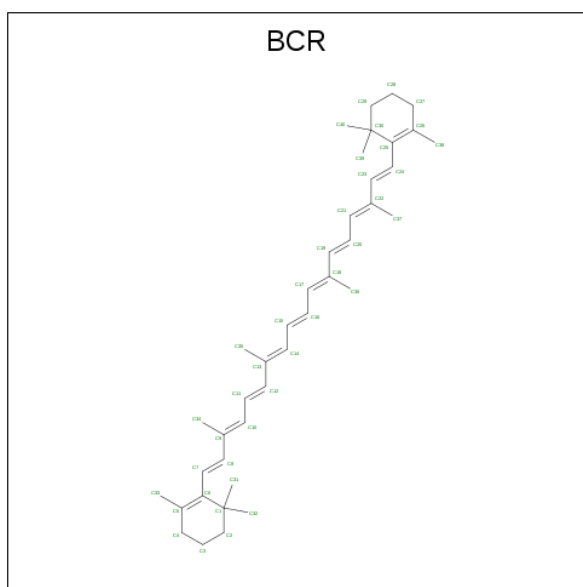
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
23	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

- Molecule 24 is PHEOPHYTIN A (three-letter code: PHO) (formula: $C_{55}H_{74}N_4O_5$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
24	A	1	Total	C	N	O	0	0
			64	55	4	5		
24	D	1	Total	C	N	O	0	0
			64	55	4	5		
24	a	1	Total	C	N	O	0	0
			64	55	4	5		
24	a	1	Total	C	N	O	0	0
			64	55	4	5		

- Molecule 25 is BETA-CAROTENE (three-letter code: BCR) (formula: $C_{40}H_{56}$).



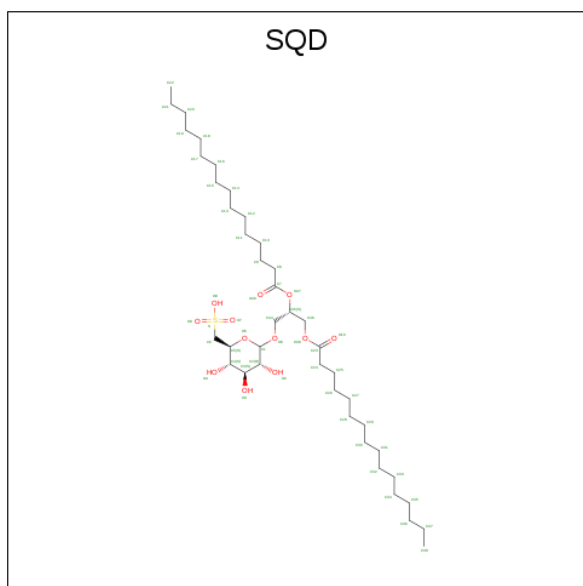
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
25	A	1	Total C 40 40	0	0
25	B	1	Total C 40 40	0	0
25	B	1	Total C 40 40	0	0
25	B	1	Total C 40 40	0	0
25	C	1	Total C 40 40	0	0
25	C	1	Total C 40 40	0	0
25	C	1	Total C 40 40	0	0
25	D	1	Total C 40 40	0	0
25	T	1	Total C 40 40	0	0
25	Y	1	Total C 40 40	0	0
25	a	1	Total C 40 40	0	0
25	b	1	Total C 40 40	0	0
25	b	1	Total C 40 40	0	0
25	b	1	Total C 40 40	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
25	c	1	Total C 40 40	0	0
25	c	1	Total C 40 40	0	0
25	d	1	Total C 40 40	0	0
25	j	1	Total C 40 40	0	0
25	k	1	Total C 40 40	0	0
25	t	1	Total C 40 40	0	0

- Molecule 26 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (three-letter code: SQD) (formula: $C_{41}H_{78}O_{12}S$).



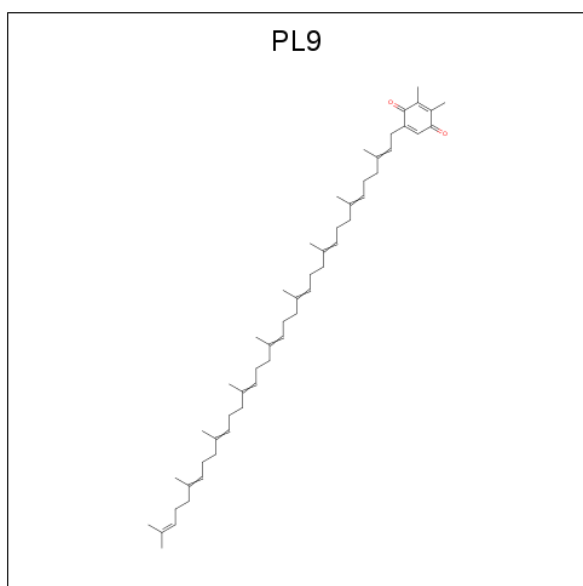
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
26	A	1	Total C O S 54 41 12 1	0	0
26	A	1	Total C O S 54 41 12 1	0	0
26	B	1	Total C O S 54 41 12 1	0	0
26	D	1	Total C O S 45 32 12 1	0	0
26	L	1	Total C O S 54 41 12 1	0	0

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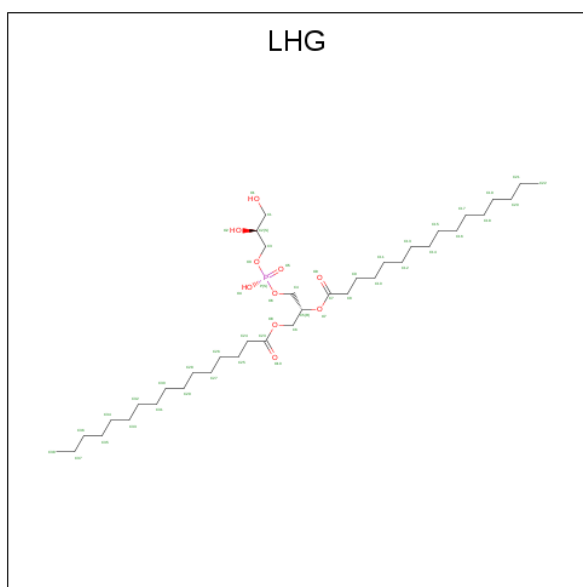
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	O	S		
26	a	1	54	41	12	1	0	0
26	a	1	54	41	12	1	0	0
26	x	1	41	28	12	1	0	0

- Molecule 27 is 2,3-DIMETHYL-5-(3,7,11,15,19,23,27,31,35-NONAMETHYL-2,6,10,14,18,22,26,30,34-HEXATRIACONTANONAENYL-2,5-CYCLOHEXADIENE-1,4-DIONE-2,3-DIMETHYL-5-SOLANESYL-1,4-BENZOQUINONE (three-letter code: PL9) (formula: $C_{53}H_{80}O_2$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
			Total	C	O		
27	A	1	55	53	2	0	0
27	D	1	55	53	2	0	0
27	a	1	55	53	2	0	0
27	d	1	55	53	2	0	0

- Molecule 28 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	O	P		
28	A	1	49	38	10	1	0	0
28	D	1	49	38	10	1	0	0
28	D	1	49	38	10	1	0	0
28	D	1	46	35	10	1	0	0
28	E	1	49	38	10	1	0	0
28	K	1	44	35	8	1	0	0
28	L	1	49	38	10	1	0	0
28	a	1	49	38	10	1	0	0
28	d	1	44	33	10	1	0	0
28	d	1	49	38	10	1	0	0
28	d	1	49	38	10	1	0	0
28	d	1	46	35	10	1	0	0
28	e	1	40	29	10	1	0	0
28	l	1	49	38	10	1	0	0

- Molecule 29 is UNKNOWN LIGAND (three-letter code: UNL) (formula:).

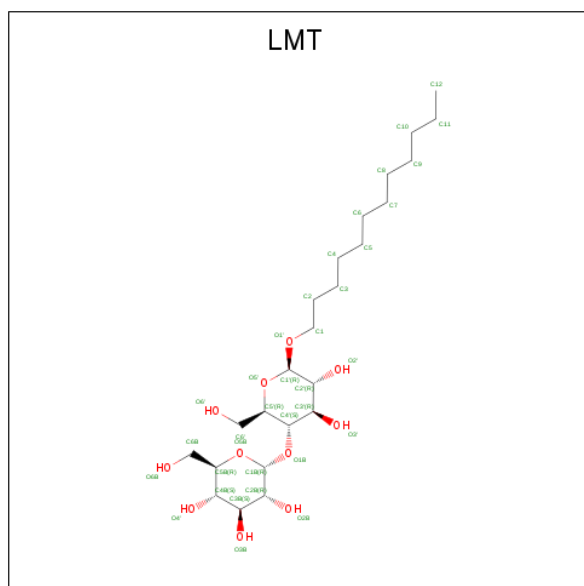
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
29	B	7	Total C 97 97	0	0
29	c	1	Total C 10 10	0	0
29	t	1	Total C 16 16	0	0
29	X	1	Total C 16 16	0	0
29	J	3	Total C 43 43	0	0
29	k	1	Total C 8 8	0	0
29	E	3	Total C 45 45	0	0
29	b	7	Total C 102 102	0	0
29	A	3	Total C 33 33	0	0
29	x	1	Total C 15 15	0	0
29	M	1	Total C 11 11	0	0
29	j	1	Total C 16 16	0	0
29	D	1	Total C 16 16	0	0
29	e	1	Total C 16 16	0	0
29	I	3	Total C 45 45	0	0
29	Z	2	Total C 23 23	0	0
29	a	2	Total C 16 16	0	0
29	U	1	Total C 14 14	0	0
29	m	1	Total C 11 11	0	0
29	d	2	Total C 27 27	0	0
29	H	1	Total C 14 14	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
29	i	4	Total C 64 64	0	0
29	C	1	Total C 11 11	0	0
29	z	1	Total C 13 13	0	0
29	T	1	Total C 13 13	0	0
29	u	2	Total C 27 27	0	0

- Molecule 30 is DODECYL-BETA-D-MALTOSE (three-letter code: LMT) (formula: $C_{24}H_{46}O_{11}$).



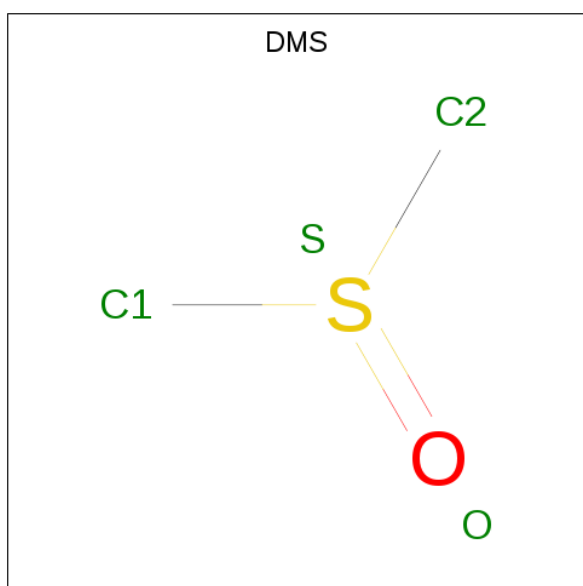
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
30	A	1	Total C O 35 24 11	0	0
30	B	1	Total C O 35 24 11	0	0
30	B	1	Total C O 24 18 6	0	0
30	B	1	Total C O 24 18 6	0	0
30	F	1	Total C O 35 24 11	0	0
30	I	1	Total C O 35 24 11	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
30	M	1	Total	C	O	0	0
			35	24	11		
30	T	1	Total	C	O	0	0
			24	18	6		
30	Z	1	Total	C	O	0	0
			35	24	11		
30	a	1	Total	C	O	0	0
			35	24	11		
30	a	1	Total	C	O	0	0
			35	24	11		
30	b	1	Total	C	O	0	0
			25	19	6		
30	e	1	Total	C	O	0	0
			25	19	6		
30	m	1	Total	C	O	0	0
			35	24	11		
30	m	1	Total	C	O	0	0
			35	24	11		
30	z	1	Total	C	O	0	0
			32	21	11		

- Molecule 31 is DIMETHYL SULFOXIDE (three-letter code: DMS) (formula: C₂H₆OS).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	A	1	Total	C	O	S	0	0
			4	2	1	1		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	A	1	Total 4	C 2	O 1	S 1	0	0
31	A	1	Total 4	C 2	O 1	S 1	0	0
31	A	1	Total 4	C 2	O 1	S 1	0	0
31	A	1	Total 4	C 2	O 1	S 1	0	0
31	A	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	B	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	C	1	Total 4	C 2	O 1	S 1	0	0
31	D	1	Total 4	C 2	O 1	S 1	0	0
31	D	1	Total 4	C 2	O 1	S 1	0	0
31	D	1	Total 4	C 2	O 1	S 1	0	0
31	F	1	Total 4	C 2	O 1	S 1	0	0
31	H	1	Total 4	C 2	O 1	S 1	0	0
31	H	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	O	1	Total 4	C 2	O 1	S 1	0	0
31	U	1	Total 4	C 2	O 1	S 1	0	0
31	U	1	Total 4	C 2	O 1	S 1	0	0
31	U	1	Total 4	C 2	O 1	S 1	0	0

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	V	1	Total	C	O	S	0	0
			4	2	1	1		
31	V	1	Total	C	O	S	0	0
			4	2	1	1		
31	V	1	Total	C	O	S	0	0
			4	2	1	1		
31	V	1	Total	C	O	S	0	0
			4	2	1	1		
31	V	1	Total	C	O	S	0	0
			4	2	1	1		
31	V	1	Total	C	O	S	0	0
			4	2	1	1		
31	V	1	Total	C	O	S	0	0
			4	2	1	1		
31	a	1	Total	C	O	S	0	0
			4	2	1	1		
31	a	1	Total	C	O	S	0	0
			4	2	1	1		
31	a	1	Total	C	O	S	0	0
			4	2	1	1		
31	a	1	Total	C	O	S	0	0
			4	2	1	1		
31	b	1	Total	C	O	S	0	0
			4	2	1	1		
31	b	1	Total	C	O	S	0	0
			4	2	1	1		
31	b	1	Total	C	O	S	0	0
			4	2	1	1		
31	b	1	Total	C	O	S	0	0
			4	2	1	1		
31	b	1	Total	C	O	S	0	0
			4	2	1	1		
31	b	1	Total	C	O	S	0	0
			4	2	1	1		

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	b	1	Total	C	O	S	0	0
			4	2	1	1		
31	b	1	Total	C	O	S	0	0
			4	2	1	1		
31	b	1	Total	C	O	S	0	0
			4	2	1	1		
31	b	1	Total	C	O	S	0	0
			4	2	1	1		
31	b	1	Total	C	O	S	0	0
			4	2	1	1		
31	b	1	Total	C	O	S	0	0
			4	2	1	1		
31	c	1	Total	C	O	S	0	0
			4	2	1	1		
31	c	1	Total	C	O	S	0	0
			4	2	1	1		
31	c	1	Total	C	O	S	0	0
			4	2	1	1		
31	c	1	Total	C	O	S	0	0
			4	2	1	1		
31	c	1	Total	C	O	S	0	0
			4	2	1	1		
31	c	1	Total	C	O	S	0	0
			4	2	1	1		
31	c	1	Total	C	O	S	0	0
			4	2	1	1		
31	c	1	Total	C	O	S	0	0
			4	2	1	1		
31	c	1	Total	C	O	S	0	0
			4	2	1	1		
31	c	1	Total	C	O	S	0	0
			4	2	1	1		
31	d	1	Total	C	O	S	0	0
			4	2	1	1		
31	d	1	Total	C	O	S	0	0
			4	2	1	1		

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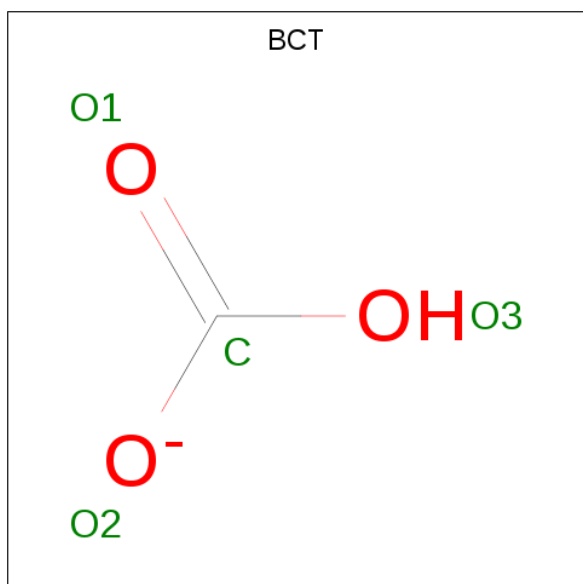
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	d	1	Total 4	C 2	O 1	S 1	0	0
31	d	1	Total 4	C 2	O 1	S 1	0	0
31	d	1	Total 4	C 2	O 1	S 1	0	0
31	e	1	Total 4	C 2	O 1	S 1	0	0
31	h	1	Total 4	C 2	O 1	S 1	0	0
31	h	1	Total 4	C 2	O 1	S 1	0	0
31	h	1	Total 4	C 2	O 1	S 1	0	0
31	h	1	Total 4	C 2	O 1	S 1	0	0
31	i	1	Total 4	C 2	O 1	S 1	0	0
31	i	1	Total 4	C 2	O 1	S 1	0	0
31	k	1	Total 4	C 2	O 1	S 1	0	0
31	l	1	Total 4	C 2	O 1	S 1	0	0
31	o	1	Total 4	C 2	O 1	S 1	0	0
31	o	1	Total 4	C 2	O 1	S 1	0	0
31	o	1	Total 4	C 2	O 1	S 1	0	0
31	u	1	Total 4	C 2	O 1	S 1	0	0
31	u	1	Total 4	C 2	O 1	S 1	0	0
31	u	1	Total 4	C 2	O 1	S 1	0	0
31	u	1	Total 4	C 2	O 1	S 1	0	0
31	v	1	Total 4	C 2	O 1	S 1	0	0
31	v	1	Total 4	C 2	O 1	S 1	0	0

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	v	1	Total	C	O	S	0	0
			4	2	1	1		
31	v	1	Total	C	O	S	0	0
			4	2	1	1		
31	v	1	Total	C	O	S	0	0
			4	2	1	1		
31	v	1	Total	C	O	S	0	0
			4	2	1	1		
31	v	1	Total	C	O	S	0	0
			4	2	1	1		

- Molecule 32 is BICARBONATE ION (three-letter code: BCT) (formula: CHO_3).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
32	A	1	Total	C	O	0	0
			4	1	3		
32	a	1	Total	C	O	0	0
			4	1	3		

- Molecule 33 is CALCIUM ION (three-letter code: CA) (formula: Ca).

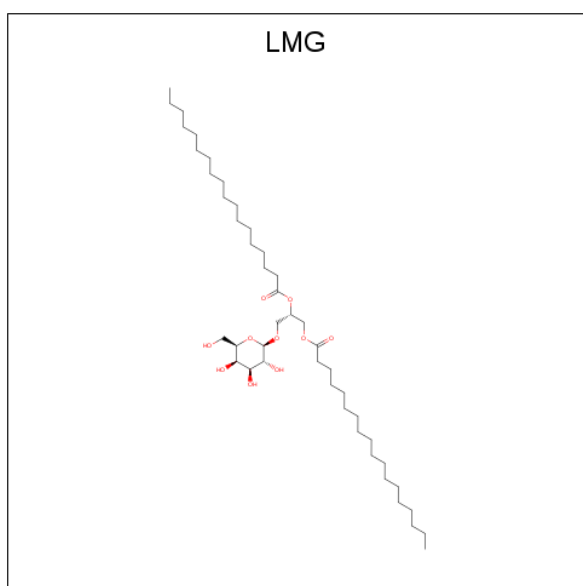
Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
33	o	1	Total	Ca	0	0
			1	1		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
33	O	1	Total Ca 1 1	0	0
33	B	1	Total Ca 1 1	0	0
33	b	1	Total Ca 1 1	0	0
33	c	1	Total Ca 1 1	0	0

- Molecule 34 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: C₄₅H₈₆O₁₀).



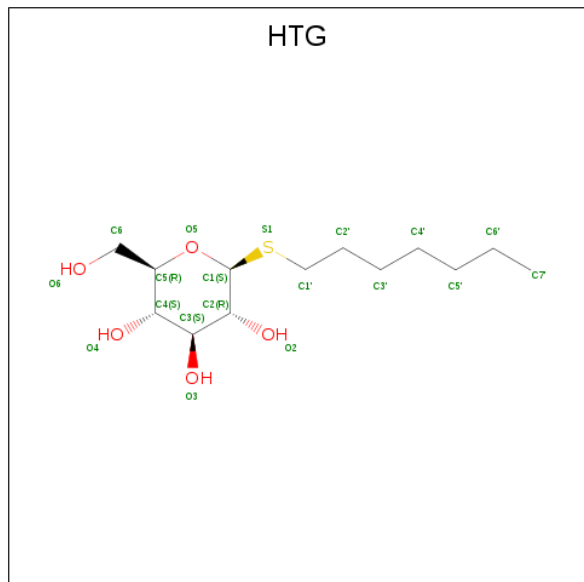
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
34	B	1	Total C O 51 41 10	0	0
34	C	1	Total C O 51 41 10	0	0
34	C	1	Total C O 51 41 10	0	0
34	C	1	Total C O 51 41 10	0	0
34	D	1	Total C O 51 41 10	0	0
34	J	1	Total C O 51 41 10	0	0
34	a	1	Total C O 51 41 10	0	0

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
34	c	1	Total	C	O	0	0
			51	41	10		
34	c	1	Total	C	O	0	0
			51	41	10		
34	d	1	Total	C	O	0	0
			51	41	10		
34	j	1	Total	C	O	0	0
			51	41	10		
34	m	1	Total	C	O	0	0
			51	41	10		

- Molecule 35 is heptyl 1-thio-beta-D-glucopyranoside (three-letter code: HTG) (formula: $C_{13}H_{26}O_5S$).



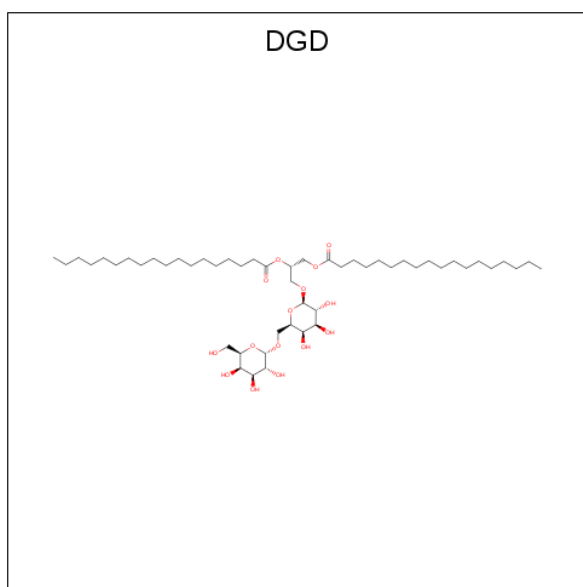
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
35	B	1	Total	C	O	S	0	0
			19	13	5	1		
35	B	1	Total	C	O	S	0	0
			19	13	5	1		
35	B	1	Total	C	O	S	0	0
			19	13	5	1		
35	B	1	Total	C	O	S	0	0
			19	13	5	1		
35	B	1	Total	C	O	S	0	0
			19	13	5	1		
35	C	1	Total	C	O	S	0	0
			19	13	5	1		

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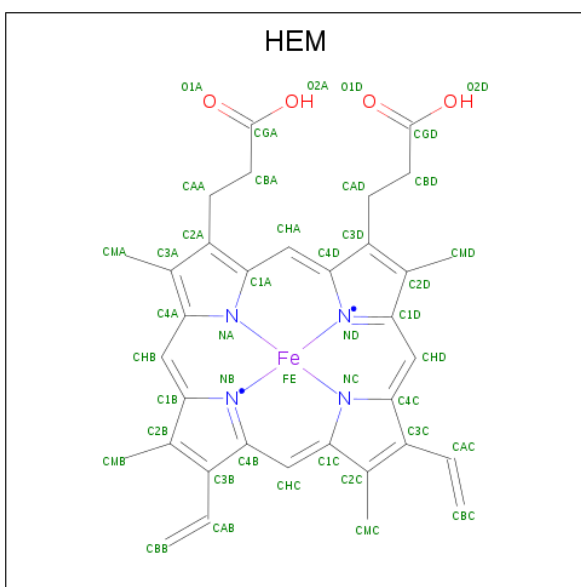
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	C	O	S		
35	C	1	Total 19	C 13	O 5	S 1	0	0
35	C	1	Total 19	C 13	O 5	S 1	0	0
35	D	1	Total 19	C 13	O 5	S 1	0	0
35	O	1	Total 19	C 13	O 5	S 1	0	0
35	V	1	Total 14	C 8	O 5	S 1	0	0
35	b	1	Total 19	C 13	O 5	S 1	0	0
35	b	1	Total 19	C 13	O 5	S 1	0	0
35	b	1	Total 19	C 13	O 5	S 1	0	0
35	b	1	Total 19	C 13	O 5	S 1	0	0
35	c	1	Total 19	C 13	O 5	S 1	0	0
35	c	1	Total 19	C 13	O 5	S 1	0	0
35	c	1	Total 13	C 10	O 2	S 1	0	0
35	d	1	Total 19	C 13	O 5	S 1	0	0
35	v	1	Total 19	C 13	O 5	S 1	0	0

- Molecule 36 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: C₅₁H₉₆O₁₅).



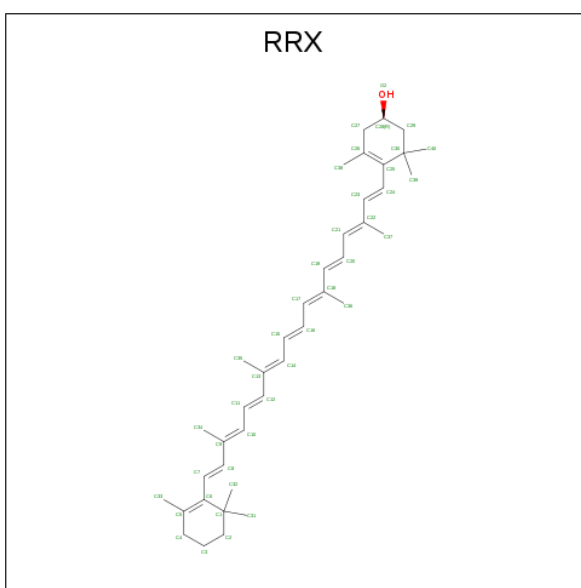
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
36	C	1	Total	C	O	0	0
			62	47	15		
36	C	1	Total	C	O	0	0
			62	47	15		
36	C	1	Total	C	O	0	0
			62	47	15		
36	D	1	Total	C	O	0	0
			50	41	9		
36	H	1	Total	C	O	0	0
			62	47	15		
36	c	1	Total	C	O	0	0
			62	47	15		
36	c	1	Total	C	O	0	0
			62	47	15		
36	c	1	Total	C	O	0	0
			62	47	15		
36	d	1	Total	C	O	0	0
			50	41	9		
36	h	1	Total	C	O	0	0
			62	47	15		

- Molecule 37 is PROTOPORPHYRIN IX CONTAINING FE (three-letter code: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	
37	E	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		
37	e	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		

- Molecule 38 is (3R)-beta,beta-caroten-3-ol (three-letter code: RRX) (formula: C₄₀H₅₆O).

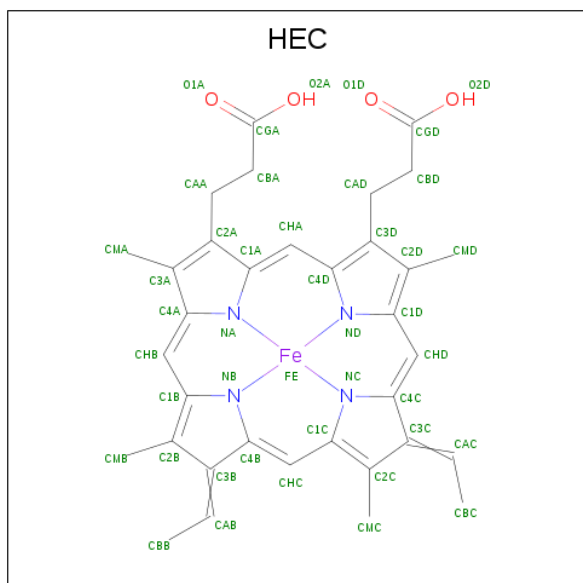


Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
38	H	1	Total	C	O	0	0
			41	40	1		
38	x	1	Total	C	O	0	0
			41	40	1		

- Molecule 39 is MAGNESIUM ION (three-letter code: MG) (formula: Mg).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
39	J	1	Total Mg 1 1	0	0
39	j	1	Total Mg 1 1	0	0

- Molecule 40 is HEME C (three-letter code: HEC) (formula: C₃₄H₃₄FeN₄O₄).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
40	V	1	Total C Fe N O 43 34 1 4 4	0	0
40	v	1	Total C Fe N O 43 34 1 4 4	0	0

- Molecule 41 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
41	A	176	Total O 187 187	0	11
41	B	420	Total O 437 437	0	17
41	C	286	Total O 294 294	0	8
41	D	159	Total O 166 166	0	7
41	E	44	Total O 47 47	0	3

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
41	F	9	Total O 9 9	0	0
41	H	54	Total O 54 54	0	0
41	I	11	Total O 13 13	0	2
41	J	16	Total O 17 17	0	1
41	K	13	Total O 14 14	0	1
41	L	23	Total O 26 26	0	3
41	M	15	Total O 17 17	0	2
41	O	251	Total O 265 265	0	14
41	T	15	Total O 16 16	0	1
41	U	123	Total O 128 128	0	5
41	V	165	Total O 169 169	0	4
41	Y	8	Total O 8 8	0	0
41	X	14	Total O 14 14	0	0
41	Z	8	Total O 10 10	0	2
41	a	172	Total O 175 175	0	3
41	b	405	Total O 423 423	0	18
41	c	300	Total O 320 320	0	20
41	d	177	Total O 185 185	0	8
41	e	52	Total O 56 56	0	4
41	f	9	Total O 9 9	0	0
41	h	56	Total O 57 57	0	1

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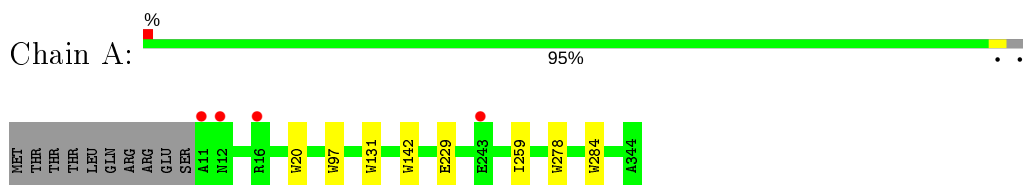
Continued from previous page...

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
41	i	12	Total O 13 13	0	1
41	j	13	Total O 13 13	0	0
41	k	14	Total O 14 14	0	0
41	l	16	Total O 19 19	0	3
41	m	14	Total O 15 15	0	1
41	o	223	Total O 240 240	0	17
41	t	19	Total O 21 21	0	2
41	u	146	Total O 157 157	0	11
41	v	147	Total O 154 154	0	7
41	y	16	Total O 16 16	0	0
41	x	18	Total O 19 19	0	1
41	z	5	Total O 5 5	0	0

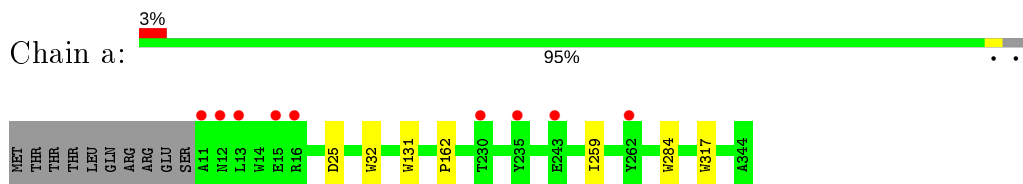
3 Residue-property plots [i](#)

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

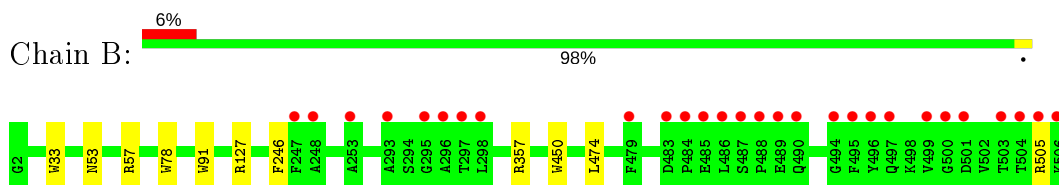
- Molecule 1: Photosystem II protein D1



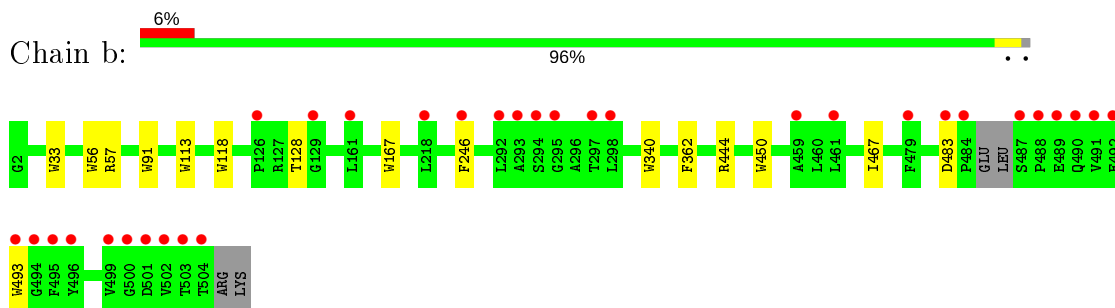
- Molecule 1: Photosystem II protein D1



- Molecule 2: Photosystem II CP47 reaction center protein

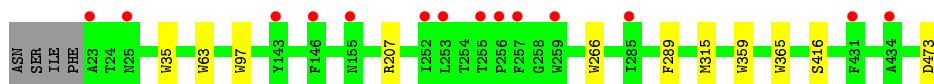


- Molecule 2: Photosystem II CP47 reaction center protein

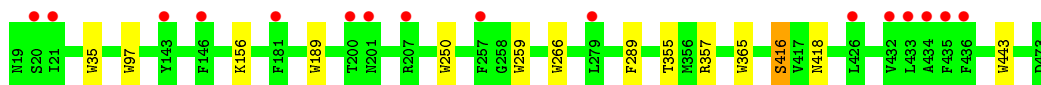


- Molecule 3: Photosystem II CP43 reaction center protein





- Molecule 3: Photosystem II CP43 reaction center protein



- Molecule 4: Photosystem II D2 protein



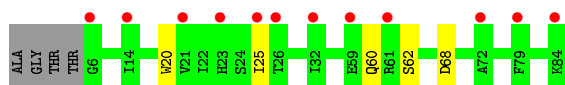
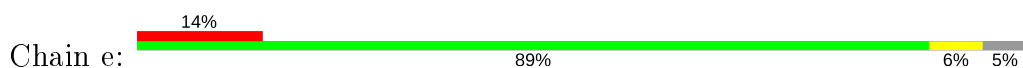
- Molecule 4: Photosystem II D2 protein



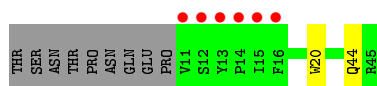
- Molecule 5: Cytochrome b559 subunit alpha



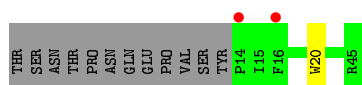
- Molecule 5: Cytochrome b559 subunit alpha



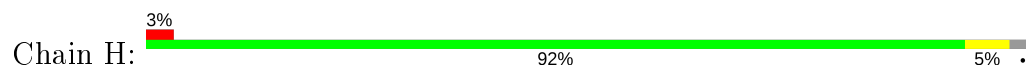
- Molecule 6: Cytochrome b559 subunit beta



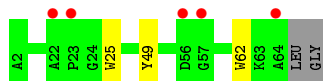
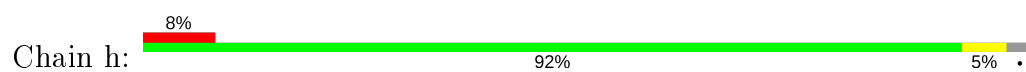
- Molecule 6: Cytochrome b559 subunit beta



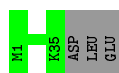
- Molecule 7: Photosystem II reaction center protein H



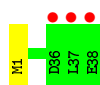
- Molecule 7: Photosystem II reaction center protein H



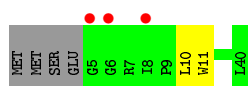
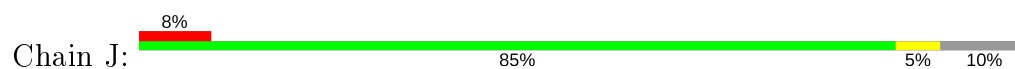
- Molecule 8: Photosystem II reaction center protein I



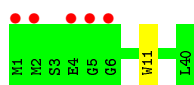
- Molecule 8: Photosystem II reaction center protein I



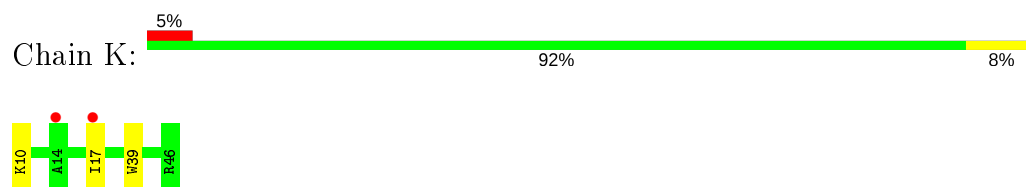
- Molecule 9: Photosystem II reaction center protein J



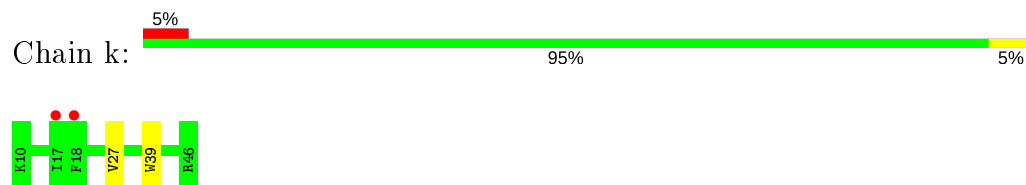
- Molecule 9: Photosystem II reaction center protein J



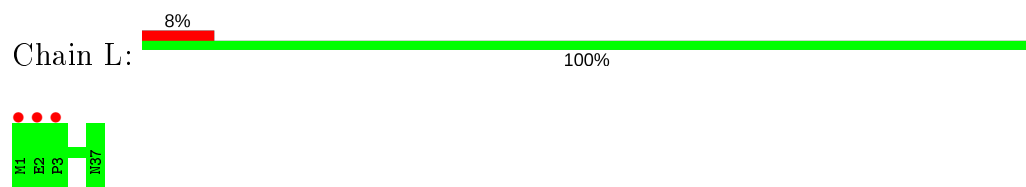
- Molecule 10: Photosystem II reaction center protein K



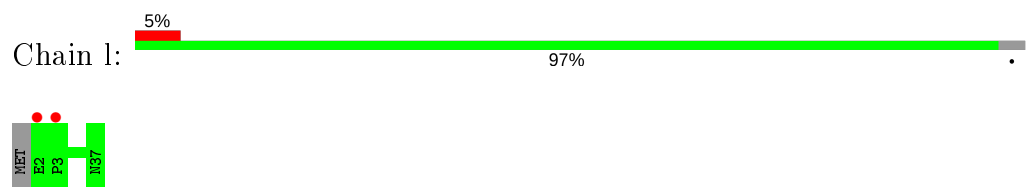
- Molecule 10: Photosystem II reaction center protein K



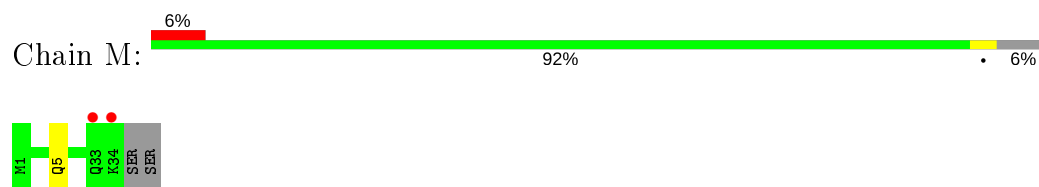
- Molecule 11: Photosystem II reaction center protein L



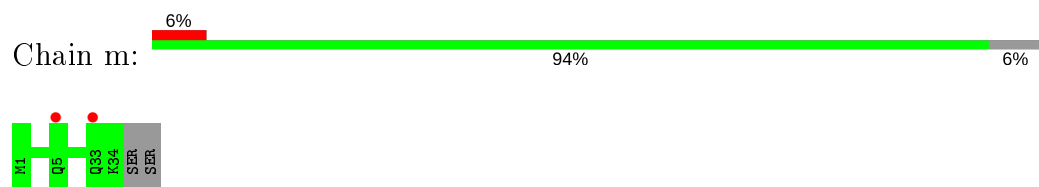
- Molecule 11: Photosystem II reaction center protein L



- Molecule 12: Photosystem II reaction center protein M

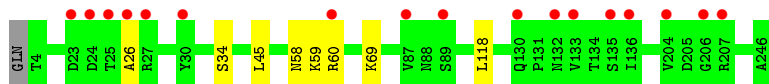


- Molecule 12: Photosystem II reaction center protein M

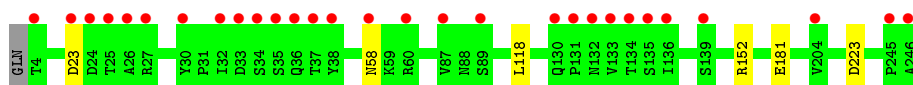


- Molecule 13: Photosystem II manganese-stabilizing polypeptide

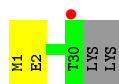
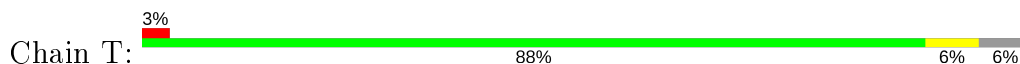




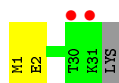
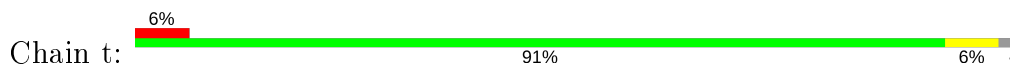
- Molecule 13: Photosystem II manganese-stabilizing polypeptide



- Molecule 14: Photosystem II reaction center protein T



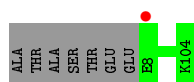
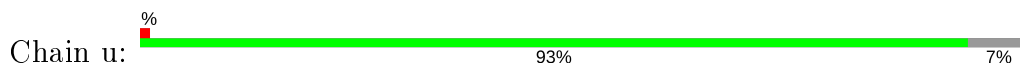
- Molecule 14: Photosystem II reaction center protein T



- Molecule 15: Photosystem II 12 kDa extrinsic protein



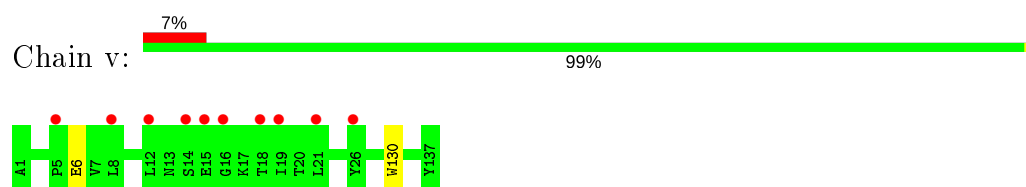
- Molecule 15: Photosystem II 12 kDa extrinsic protein



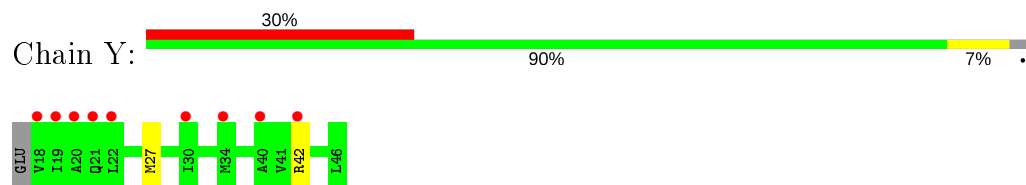
- Molecule 16: Cytochrome c-550



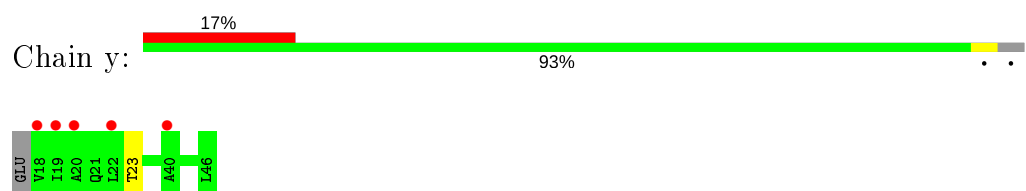
- Molecule 16: Cytochrome c-550



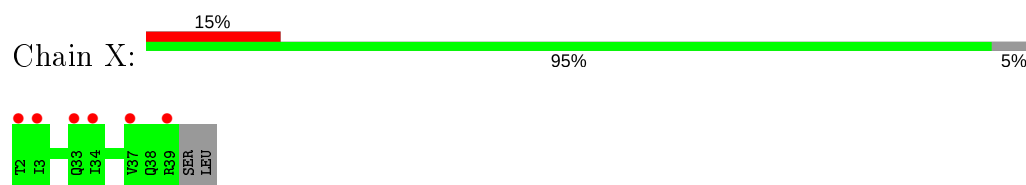
- Molecule 17: Photosystem II reaction center protein Ycf12



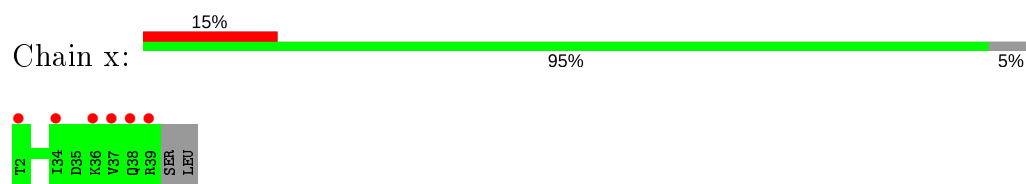
- Molecule 17: Photosystem II reaction center protein Ycf12



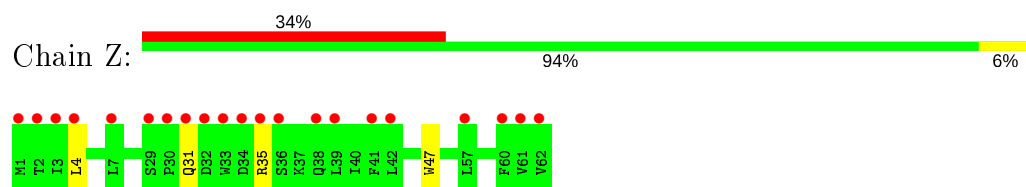
- Molecule 18: Photosystem II reaction center protein X



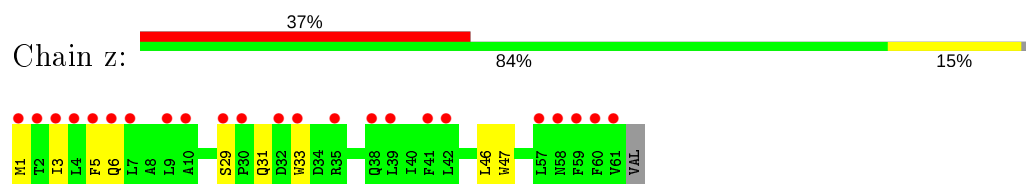
- Molecule 18: Photosystem II reaction center protein X



- Molecule 19: Photosystem II reaction center protein Z



- Molecule 19: Photosystem II reaction center protein Z



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	121.40Å 228.22Å 286.43Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	48.98 – 1.87 48.98 – 1.87	Depositor EDS
% Data completeness (in resolution range)	99.8 (48.98-1.87) 99.8 (48.98-1.87)	Depositor EDS
R_{merge}	0.13	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	1.98 (at 1.87Å)	Xtrriage
Refinement program	REFMAC 5.6.0117	Depositor
R, R_{free}	0.171 , 0.212 0.171 , 0.212	Depositor DCC
R_{free} test set	32518 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å ²)	27.4	Xtrriage
Anisotropy	0.104	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.35 , 70.0	EDS
L-test for twinning ²	$\langle L \rangle = 0.50$, $\langle L^2 \rangle = 0.33$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.97	EDS
Total number of atoms	55401	wwPDB-VP
Average B, all atoms (Å ²)	33.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.73% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: PL9, DMS, BCT, BCR, DGD, FE2, RRX, LHG, CL, CA, CLA, HEC, HEM, FME, UNL, HTG, MG, OEX, PHO, LMT, LMG, SQD

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	A	1.02	5/2710 (0.2%)	0.81	1/3696 (0.0%)
1	a	0.99	4/2730 (0.1%)	0.81	1/3723 (0.0%)
2	B	0.94	4/4144 (0.1%)	0.82	4/5647 (0.1%)
2	b	0.98	9/4076 (0.2%)	0.83	3/5558 (0.1%)
3	C	0.91	6/3633 (0.2%)	0.78	1/4945 (0.0%)
3	c	0.91	9/3638 (0.2%)	0.78	1/4953 (0.0%)
4	D	1.01	4/2834 (0.1%)	0.83	2/3861 (0.1%)
4	d	1.02	8/2834 (0.3%)	0.82	1/3861 (0.0%)
5	E	0.74	1/670 (0.1%)	0.71	0/917
5	e	0.71	1/656 (0.2%)	0.73	0/896
6	F	0.83	1/289 (0.3%)	0.64	0/394
6	f	0.83	1/262 (0.4%)	0.65	0/356
7	H	0.85	1/530 (0.2%)	0.78	0/722
7	h	0.89	2/522 (0.4%)	0.79	0/711
8	I	0.66	0/282	0.67	0/381
8	i	0.68	0/300	0.67	0/406
9	J	0.80	1/257 (0.4%)	0.63	0/349
9	j	0.84	1/291 (0.3%)	0.69	0/393
10	K	0.73	1/303 (0.3%)	0.70	0/416
10	k	0.77	1/303 (0.3%)	0.71	0/416
11	L	0.94	0/316	0.80	0/430
11	l	0.98	0/307	0.80	0/418
12	M	0.78	0/270	0.75	0/369
12	m	0.72	0/270	0.74	0/369
13	O	0.78	0/1898	0.83	0/2577
13	o	0.74	0/1886	0.83	2/2562 (0.1%)
14	T	0.83	0/255	0.79	0/346
14	t	0.82	0/260	0.74	0/353
15	U	0.82	0/777	0.84	2/1055 (0.2%)
15	u	0.80	0/790	0.82	0/1071
16	V	0.88	0/1096	0.83	1/1487 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	v	0.78	1/1084 (0.1%)	0.76	0/1475
17	Y	0.54	0/211	0.71	0/282
17	y	0.51	0/208	0.63	0/278
18	X	0.61	0/286	0.73	0/387
18	x	0.60	0/278	0.71	0/376
19	Z	0.67	1/479 (0.2%)	0.67	0/656
19	z	0.63	2/468 (0.4%)	0.61	0/640
All	All	0.90	64/42403 (0.2%)	0.80	19/57732 (0.0%)

The worst 5 of 64 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
3	c	365	TRP	CD2-CE2	7.28	1.50	1.41
1	a	131	TRP	CD2-CE2	6.83	1.49	1.41
3	c	35	TRP	CD2-CE2	6.66	1.49	1.41
2	b	56	TRP	CD2-CE2	6.63	1.49	1.41
10	k	39	TRP	CD2-CE2	6.56	1.49	1.41

The worst 5 of 19 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
13	o	152	ARG	NE-CZ-NH2	-7.84	116.38	120.30
4	d	297	ASP	CB-CG-OD1	7.14	124.73	118.30
2	B	357	ARG	NE-CZ-NH2	-6.52	117.04	120.30
15	U	39	ARG	NE-CZ-NH2	-6.50	117.05	120.30
4	D	100	ASP	CB-CG-OD1	6.18	123.86	118.30

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts [i](#)

Due to software issues we are unable to calculate clashes - this section is therefore empty.

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	A	333/344 (97%)	325 (98%)	7 (2%)	1 (0%)	41	30
1	a	336/344 (98%)	330 (98%)	5 (2%)	1 (0%)	41	30
2	B	507/505 (100%)	497 (98%)	10 (2%)	0	100	100
2	b	500/505 (99%)	490 (98%)	10 (2%)	0	100	100
3	C	453/455 (100%)	440 (97%)	12 (3%)	1 (0%)	47	37
3	c	454/455 (100%)	441 (97%)	12 (3%)	1 (0%)	47	37
4	D	342/342 (100%)	333 (97%)	8 (2%)	1 (0%)	41	30
4	d	342/342 (100%)	333 (97%)	9 (3%)	0	100	100
5	E	79/83 (95%)	76 (96%)	3 (4%)	0	100	100
5	e	77/83 (93%)	76 (99%)	1 (1%)	0	100	100
6	F	33/44 (75%)	33 (100%)	0	0	100	100
6	f	30/44 (68%)	30 (100%)	0	0	100	100
7	H	63/65 (97%)	59 (94%)	4 (6%)	0	100	100
7	h	62/65 (95%)	58 (94%)	4 (6%)	0	100	100
8	I	33/38 (87%)	32 (97%)	1 (3%)	0	100	100
8	i	36/38 (95%)	33 (92%)	3 (8%)	0	100	100
9	J	34/40 (85%)	33 (97%)	1 (3%)	0	100	100
9	j	38/40 (95%)	38 (100%)	0	0	100	100
10	K	35/37 (95%)	34 (97%)	1 (3%)	0	100	100
10	k	35/37 (95%)	35 (100%)	0	0	100	100
11	L	36/37 (97%)	36 (100%)	0	0	100	100
11	l	35/37 (95%)	35 (100%)	0	0	100	100
12	M	33/36 (92%)	32 (97%)	1 (3%)	0	100	100
12	m	33/36 (92%)	32 (97%)	1 (3%)	0	100	100
13	O	243/244 (100%)	229 (94%)	11 (4%)	3 (1%)	13	4
13	o	242/244 (99%)	230 (95%)	12 (5%)	0	100	100
14	T	28/32 (88%)	28 (100%)	0	0	100	100
14	t	29/32 (91%)	28 (97%)	1 (3%)	0	100	100
15	U	95/104 (91%)	92 (97%)	3 (3%)	0	100	100
15	u	96/104 (92%)	93 (97%)	3 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
16	V	136/137 (99%)	132 (97%)	4 (3%)	0	100	100
16	v	136/137 (99%)	132 (97%)	4 (3%)	0	100	100
17	Y	27/30 (90%)	27 (100%)	0	0	100	100
17	y	27/30 (90%)	26 (96%)	1 (4%)	0	100	100
18	X	37/40 (92%)	36 (97%)	1 (3%)	0	100	100
18	x	36/40 (90%)	35 (97%)	1 (3%)	0	100	100
19	Z	60/62 (97%)	56 (93%)	3 (5%)	1 (2%)	9	2
19	z	59/62 (95%)	54 (92%)	3 (5%)	2 (3%)	3	0
All	All	5210/5350 (97%)	5059 (97%)	140 (3%)	11 (0%)	47	37

5 of 11 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
4	D	12	ARG
19	Z	31	GLN
3	c	416	SER
19	z	31	GLN
3	C	416	SER

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	A	269/279 (96%)	268 (100%)	1 (0%)	91	90
1	a	272/279 (98%)	271 (100%)	1 (0%)	91	90
2	B	403/403 (100%)	399 (99%)	4 (1%)	76	73
2	b	394/403 (98%)	389 (99%)	5 (1%)	69	64
3	C	355/356 (100%)	351 (99%)	4 (1%)	73	70
3	c	356/356 (100%)	351 (99%)	5 (1%)	67	62
4	D	278/277 (100%)	274 (99%)	4 (1%)	67	62
4	d	278/277 (100%)	276 (99%)	2 (1%)	84	83

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
5	E	70/72 (97%)	68 (97%)	2 (3%)	42	32
5	e	68/72 (94%)	64 (94%)	4 (6%)	19	9
6	F	28/38 (74%)	27 (96%)	1 (4%)	35	23
6	f	25/38 (66%)	25 (100%)	0	100	100
7	H	55/54 (102%)	53 (96%)	2 (4%)	35	23
7	h	54/54 (100%)	53 (98%)	1 (2%)	57	49
8	I	30/34 (88%)	30 (100%)	0	100	100
8	i	31/34 (91%)	31 (100%)	0	100	100
9	J	23/28 (82%)	22 (96%)	1 (4%)	29	17
9	j	27/28 (96%)	27 (100%)	0	100	100
10	K	30/30 (100%)	28 (93%)	2 (7%)	16	6
10	k	30/30 (100%)	29 (97%)	1 (3%)	38	26
11	L	35/35 (100%)	35 (100%)	0	100	100
11	l	34/35 (97%)	34 (100%)	0	100	100
12	M	30/33 (91%)	29 (97%)	1 (3%)	38	26
12	m	30/33 (91%)	30 (100%)	0	100	100
13	O	205/207 (99%)	200 (98%)	5 (2%)	49	39
13	o	203/207 (98%)	199 (98%)	4 (2%)	55	47
14	T	25/28 (89%)	24 (96%)	1 (4%)	31	19
14	t	25/28 (89%)	24 (96%)	1 (4%)	31	19
15	U	82/89 (92%)	82 (100%)	0	100	100
15	u	84/89 (94%)	84 (100%)	0	100	100
16	V	118/117 (101%)	115 (98%)	3 (2%)	47	37
16	v	115/117 (98%)	114 (99%)	1 (1%)	78	76
17	Y	20/23 (87%)	18 (90%)	2 (10%)	7	2
17	y	19/23 (83%)	18 (95%)	1 (5%)	22	11
18	X	30/33 (91%)	30 (100%)	0	100	100
18	x	29/33 (88%)	29 (100%)	0	100	100
19	Z	49/52 (94%)	47 (96%)	2 (4%)	30	19
19	z	46/52 (88%)	41 (89%)	5 (11%)	6	2
All	All	4255/4376 (97%)	4189 (98%)	66 (2%)	65	56

5 of 66 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
16	V	86	GLN
2	b	128	THR
17	y	23	THR
16	V	122	GLU
19	Z	4	LEU

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 19 such sidechains are listed below:

Mol	Chain	Res	Type
2	b	331	ASN
3	c	201	ASN
13	o	82	GLN
2	b	179	GLN
13	o	231	HIS

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

4 non-standard protein/DNA/RNA residues 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	$\# Z > 2$
14	FME	T	1	14	8,9,10	0.53	0	7,9,11	1.70	2 (28%)
8	FME	I	1	8	8,9,10	0.75	0	7,9,11	1.04	0
8	FME	i	1	8	8,9,10	0.73	0	7,9,11	1.54	3 (42%)
14	FME	t	1	14	8,9,10	0.64	0	7,9,11	1.70	3 (42%)

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
14	FME	T	1	14	-	3/7/9/11	-
8	FME	I	1	8	-	2/7/9/11	-
8	FME	i	1	8	-	1/7/9/11	-
14	FME	t	1	14	-	3/7/9/11	-

There are no bond length outliers.

The worst 5 of 8 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed($^{\circ}$)	Ideal($^{\circ}$)
14	T	1	FME	CE-SD-CG	2.58	109.25	100.40
14	T	1	FME	O-C-CA	-2.49	118.27	124.78
14	t	1	FME	O-C-CA	-2.36	118.60	124.78
14	t	1	FME	CE-SD-CG	2.29	108.28	100.40
8	i	1	FME	O1-CN-N	-2.24	119.36	125.27

There are no chirality outliers.

5 of 9 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
14	T	1	FME	N-CA-CB-CG
8	I	1	FME	O1-CN-N-CA
8	i	1	FME	O1-CN-N-CA
14	t	1	FME	C-CA-CB-CG
14	t	1	FME	N-CA-CB-CG

There are no ring outliers.

No monomer is involved in short contacts.

5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 366 ligands modelled in this entry, 53 are unknown and 13 are monoatomic - leaving 300 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$
28	LHG	d	402	-	43,43,48	1.06	2 (4%)	46,49,54	0.96	3 (6%)
28	LHG	a	415	-	48,48,48	1.01	2 (4%)	51,54,54	1.07	4 (7%)
27	PL9	a	414	-	55,55,55	0.94	3 (5%)	68,69,69	1.65	16 (23%)
35	HTG	B	630	-	19,19,19	0.98	2 (10%)	23,24,24	1.32	2 (8%)
25	BCR	C	515	-	41,41,41	0.83	0	56,56,56	1.50	10 (17%)
31	DMS	V	207	-	3,3,3	2.84	1 (33%)	3,3,3	1.25	0
31	DMS	h	105	-	3,3,3	2.74	1 (33%)	3,3,3	0.68	0
23	CLA	b	605	-	59,73,73	2.00	14 (23%)	67,113,113	2.16	21 (31%)
30	LMT	m	103	-	36,36,36	0.61	1 (2%)	47,47,47	0.98	3 (6%)
28	LHG	L	101	-	48,48,48	0.97	3 (6%)	51,54,54	1.13	3 (5%)
23	CLA	C	504	-	59,73,73	2.33	13 (22%)	67,113,113	1.84	18 (26%)
31	DMS	V	210	-	3,3,3	2.71	1 (33%)	3,3,3	0.53	0
30	LMT	e	103	-	25,25,36	0.71	1 (4%)	30,30,47	1.02	3 (10%)
25	BCR	B	619	-	41,41,41	1.06	1 (2%)	56,56,56	1.17	9 (16%)
36	DGD	C	519	-	63,63,67	0.86	2 (3%)	77,77,81	1.13	8 (10%)
35	HTG	V	204	-	14,14,19	0.67	0	18,19,24	3.10	6 (33%)
23	CLA	B	604	-	59,73,73	1.83	14 (23%)	67,113,113	2.37	21 (31%)
30	LMT	B	623	-	36,36,36	0.59	0	47,47,47	1.05	3 (6%)
23	CLA	B	608	41	59,73,73	2.03	12 (20%)	67,113,113	2.08	20 (29%)
31	DMS	b	638	-	3,3,3	2.93	1 (33%)	3,3,3	1.08	0
35	HTG	c	921	-	19,19,19	0.95	2 (10%)	23,24,24	1.45	2 (8%)
37	HEM	e	105	5,6	27,50,50	2.18	9 (33%)	17,82,82	2.50	8 (47%)
23	CLA	B	613	-	59,73,73	2.11	13 (22%)	67,113,113	2.13	19 (28%)
34	LMG	D	412	-	51,51,55	1.10	2 (3%)	59,59,63	1.34	8 (13%)
23	CLA	a	407	41	59,73,73	1.82	11 (18%)	67,113,113	2.16	18 (26%)
31	DMS	i	106	-	3,3,3	2.74	1 (33%)	3,3,3	0.66	0
31	DMS	C	527	-	3,3,3	2.56	1 (33%)	3,3,3	0.63	0
23	CLA	b	602	41	59,73,73	2.26	15 (25%)	67,113,113	2.42	24 (35%)
36	DGD	h	102	-	63,63,67	0.93	3 (4%)	77,77,81	1.23	9 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
37	HEM	E	105	5,6	27,50,50	2.09	10 (37%)	17,82,82	2.40	7 (41%)
31	DMS	C	529	-	3,3,3	2.55	1 (33%)	3,3,3	0.44	0
31	DMS	v	210	-	3,3,3	2.67	1 (33%)	3,3,3	0.56	0
31	DMS	l	102	-	3,3,3	2.64	1 (33%)	3,3,3	0.48	0
31	DMS	B	647	-	3,3,3	2.72	1 (33%)	3,3,3	0.55	0
23	CLA	A	405	-	59,73,73	1.74	13 (22%)	67,113,113	2.22	25 (37%)
31	DMS	A	422	-	3,3,3	2.68	1 (33%)	3,3,3	0.84	0
25	BCR	D	405	-	41,41,41	1.10	4 (9%)	56,56,56	1.99	14 (25%)
31	DMS	V	205	-	3,3,3	2.63	1 (33%)	3,3,3	0.95	0
25	BCR	t	101	-	41,41,41	1.03	0	56,56,56	1.52	14 (25%)
34	LMG	B	622	-	51,51,55	0.99	3 (5%)	59,59,63	1.31	9 (15%)
23	CLA	c	903	-	59,73,73	1.97	10 (16%)	67,113,113	2.23	25 (37%)
27	PL9	D	406	-	55,55,55	1.02	3 (5%)	68,69,69	1.49	13 (19%)
23	CLA	D	401	41	59,73,73	1.88	14 (23%)	67,113,113	2.14	19 (28%)
31	DMS	d	419	-	3,3,3	2.69	1 (33%)	3,3,3	0.71	0
26	SQD	a	412	-	53,54,54	0.93	3 (5%)	62,65,65	2.14	13 (20%)
36	DGD	c	917	-	63,63,67	0.84	3 (4%)	77,77,81	1.24	8 (10%)
31	DMS	c	925	-	3,3,3	2.81	1 (33%)	3,3,3	0.84	0
36	DGD	d	407	-	50,50,67	1.11	2 (4%)	58,58,81	1.24	6 (10%)
31	DMS	B	649	-	3,3,3	2.71	1 (33%)	3,3,3	0.55	0
23	CLA	c	902	-	59,73,73	2.14	14 (23%)	67,113,113	2.36	15 (22%)
25	BCR	B	620	-	41,41,41	1.00	2 (4%)	56,56,56	1.57	13 (23%)
31	DMS	d	418	-	3,3,3	2.75	1 (33%)	3,3,3	0.62	0
31	DMS	v	205	-	3,3,3	2.65	1 (33%)	3,3,3	0.55	0
31	DMS	C	524	-	3,3,3	2.39	1 (33%)	3,3,3	0.94	0
28	LHG	D	411	-	45,45,48	0.98	2 (4%)	48,51,54	1.03	4 (8%)
25	BCR	b	619	-	41,41,41	1.03	2 (4%)	56,56,56	1.34	7 (12%)
31	DMS	C	533	-	3,3,3	2.67	1 (33%)	3,3,3	0.51	0
31	DMS	O	305	-	3,3,3	2.66	1 (33%)	3,3,3	0.88	0
31	DMS	H	101	-	3,3,3	2.78	1 (33%)	3,3,3	0.58	0
31	DMS	B	636	-	3,3,3	3.09	1 (33%)	3,3,3	0.77	0
31	DMS	D	417	-	3,3,3	2.99	1 (33%)	3,3,3	0.77	0
25	BCR	c	915	-	41,41,41	0.79	0	56,56,56	1.33	8 (14%)
36	DGD	c	918	-	63,63,67	0.90	2 (3%)	77,77,81	1.18	9 (11%)
35	HTG	d	413	-	19,19,19	1.18	1 (5%)	23,24,24	2.11	5 (21%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
31	DMS	b	634	-	3,3,3	2.45	1 (33%)	3,3,3	0.96	0
31	DMS	V	208	-	3,3,3	2.60	1 (33%)	3,3,3	0.41	0
31	DMS	v	207	-	3,3,3	2.72	1 (33%)	3,3,3	0.75	0
23	CLA	C	514	-	59,73,73	2.50	15 (25%)	67,113,113	2.01	15 (22%)
23	CLA	B	606	-	59,73,73	1.94	14 (23%)	67,113,113	1.96	19 (28%)
31	DMS	V	209	-	3,3,3	2.52	1 (33%)	3,3,3	0.80	0
35	HTG	v	204	-	19,19,19	0.90	1 (5%)	23,24,24	2.78	8 (34%)
31	DMS	c	928	-	3,3,3	2.64	1 (33%)	3,3,3	0.50	0
31	DMS	O	310	-	3,3,3	2.61	1 (33%)	3,3,3	0.71	0
31	DMS	b	633	-	3,3,3	1.83	1 (33%)	3,3,3	0.60	0
26	SQD	A	410	-	53,54,54	0.99	3 (5%)	62,65,65	2.00	17 (27%)
36	DGD	C	517	-	63,63,67	0.82	2 (3%)	77,77,81	1.22	8 (10%)
30	LMT	z	101	-	32,32,36	0.63	1 (3%)	42,42,47	1.19	5 (11%)
31	DMS	k	103	-	3,3,3	2.65	1 (33%)	3,3,3	0.78	0
31	DMS	V	206	-	3,3,3	2.65	1 (33%)	3,3,3	0.77	0
31	DMS	u	204	-	3,3,3	2.76	1 (33%)	3,3,3	0.87	0
38	RRX	x	102	-	42,42,42	0.90	0	57,58,58	1.38	7 (12%)
34	LMG	d	411	-	51,51,55	1.13	3 (5%)	59,59,63	1.32	6 (10%)
23	CLA	c	912	3	59,73,73	2.46	15 (25%)	67,113,113	2.08	15 (22%)
31	DMS	U	203	-	3,3,3	2.71	1 (33%)	3,3,3	0.51	0
23	CLA	C	505	41	59,73,73	2.04	12 (20%)	67,113,113	2.15	16 (23%)
20	OEX	A	401	1,3,41	0,15,15	0.00	-	-	-	-
31	DMS	C	525	-	3,3,3	2.62	1 (33%)	3,3,3	0.90	0
23	CLA	b	614	-	59,73,73	2.00	11 (18%)	67,113,113	2.07	17 (25%)
28	LHG	d	410	-	45,45,48	1.00	2 (4%)	48,51,54	1.02	3 (6%)
25	BCR	d	405	-	41,41,41	0.99	1 (2%)	56,56,56	1.93	19 (33%)
24	PHO	a	409	-	67,69,69	1.93	15 (22%)	85,99,99	1.98	21 (24%)
23	CLA	c	907	-	59,73,73	2.01	13 (22%)	67,113,113	1.91	16 (23%)
35	HTG	C	521	-	19,19,19	0.96	2 (10%)	23,24,24	1.69	1 (4%)
23	CLA	b	608	41	59,73,73	2.07	14 (23%)	67,113,113	1.96	22 (32%)
35	HTG	b	623	-	19,19,19	1.11	2 (10%)	23,24,24	1.79	4 (17%)
31	DMS	i	105	-	3,3,3	2.69	1 (33%)	3,3,3	0.88	0
31	DMS	b	645	-	3,3,3	2.69	1 (33%)	3,3,3	0.49	0
25	BCR	B	618	-	41,41,41	1.06	1 (2%)	56,56,56	1.48	9 (16%)
26	SQD	A	415	-	53,54,54	1.03	3 (5%)	62,65,65	1.91	12 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
28	LHG	l	101	-	48,48,48	0.82	2 (4%)	51,54,54	1.03	3 (5%)
23	CLA	b	606	-	59,73,73	1.84	13 (22%)	67,113,113	2.21	21 (31%)
26	SQD	L	102	-	53,54,54	1.08	3 (5%)	62,65,65	1.68	12 (19%)
30	LMT	B	644	-	24,24,36	0.34	0	29,29,47	1.26	4 (13%)
23	CLA	C	508	41	59,73,73	2.36	15 (25%)	67,113,113	2.31	19 (28%)
35	HTG	b	628	-	19,19,19	0.90	1 (5%)	23,24,24	1.51	1 (4%)
23	CLA	C	509	-	59,73,73	2.34	14 (23%)	67,113,113	1.95	19 (28%)
35	HTG	O	302	-	19,19,19	1.45	3 (15%)	23,24,24	1.51	5 (21%)
23	CLA	B	610	-	59,73,73	2.00	12 (20%)	67,113,113	2.06	18 (26%)
31	DMS	V	201	-	3,3,3	2.57	1 (33%)	3,3,3	0.76	0
23	CLA	c	908	41	59,73,73	2.18	15 (25%)	67,113,113	1.97	16 (23%)
35	HTG	B	624	-	19,19,19	1.52	3 (15%)	23,24,24	1.56	4 (17%)
31	DMS	V	211	-	3,3,3	2.97	1 (33%)	3,3,3	1.05	0
25	BCR	T	101	-	41,41,41	0.90	0	56,56,56	1.81	18 (32%)
31	DMS	c	927	-	3,3,3	2.71	1 (33%)	3,3,3	1.27	1 (33%)
31	DMS	V	202	-	3,3,3	2.66	1 (33%)	3,3,3	0.81	0
31	DMS	U	204	-	3,3,3	2.88	1 (33%)	3,3,3	0.80	0
35	HTG	b	622	-	19,19,19	1.31	3 (15%)	23,24,24	1.51	4 (17%)
25	BCR	c	916	-	41,41,41	0.81	0	56,56,56	1.56	10 (17%)
23	CLA	B	615	-	59,73,73	2.09	13 (22%)	67,113,113	2.25	21 (31%)
23	CLA	b	609	-	59,73,73	2.01	11 (18%)	67,113,113	2.10	22 (32%)
30	LMT	m	104	-	36,36,36	0.56	0	47,47,47	1.24	4 (8%)
36	DGD	c	919	-	63,63,67	0.94	3 (4%)	77,77,81	1.23	10 (12%)
31	DMS	D	415	-	3,3,3	2.74	1 (33%)	3,3,3	0.69	0
28	LHG	e	101	-	39,39,48	1.16	2 (5%)	42,45,54	1.02	3 (7%)
35	HTG	D	414	-	19,19,19	0.94	1 (5%)	23,24,24	1.31	1 (4%)
31	DMS	o	303	-	3,3,3	2.68	1 (33%)	3,3,3	1.00	0
28	LHG	K	101	-	43,43,48	1.07	2 (4%)	47,48,54	1.14	5 (10%)
26	SQD	a	417	-	53,54,54	1.10	5 (9%)	62,65,65	1.35	4 (6%)
25	BCR	C	530	-	41,41,41	0.84	0	56,56,56	1.56	8 (14%)
31	DMS	v	206	-	3,3,3	2.60	1 (33%)	3,3,3	0.81	0
23	CLA	B	617	-	59,73,73	1.95	14 (23%)	67,113,113	2.01	21 (31%)
34	LMG	C	520	-	51,51,55	1.15	2 (3%)	59,59,63	1.35	9 (15%)
31	DMS	v	202	-	3,3,3	2.60	1 (33%)	3,3,3	0.32	0
31	DMS	c	924	-	3,3,3	2.36	1 (33%)	3,3,3	0.42	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CLA	B	605	-	59,73,73	1.95	13 (22%)	67,113,113	1.83	16 (23%)
32	BCT	A	420	21	0,3,3	0.00	-	0,3,3	0.00	-
31	DMS	D	416	-	3,3,3	2.49	1 (33%)	3,3,3	0.88	0
31	DMS	a	401	-	3,3,3	2.71	1 (33%)	3,3,3	0.70	0
31	DMS	d	414	-	3,3,3	2.70	1 (33%)	3,3,3	0.77	0
31	DMS	b	640	-	3,3,3	2.70	1 (33%)	3,3,3	0.83	0
31	DMS	B	637	-	3,3,3	2.27	1 (33%)	3,3,3	0.96	0
31	DMS	F	102	-	3,3,3	2.61	1 (33%)	3,3,3	0.25	0
25	BCR	j	104	-	41,41,41	0.82	0	56,56,56	1.48	11 (19%)
40	HEC	V	203	16	26,50,50	1.95	6 (23%)	18,82,82	1.70	4 (22%)
35	HTG	B	625	-	19,19,19	1.41	3 (15%)	23,24,24	2.08	8 (34%)
31	DMS	a	420	-	3,3,3	2.65	1 (33%)	3,3,3	0.36	0
28	LHG	d	409	-	48,48,48	0.79	2 (4%)	51,54,54	1.28	8 (15%)
25	BCR	a	411	-	41,41,41	1.20	3 (7%)	56,56,56	1.35	5 (8%)
31	DMS	B	642	-	3,3,3	2.92	1 (33%)	3,3,3	1.28	0
25	BCR	C	516	-	41,41,41	0.99	0	56,56,56	1.37	7 (12%)
31	DMS	h	101	-	3,3,3	2.68	1 (33%)	3,3,3	1.34	1 (33%)
23	CLA	c	910	-	59,73,73	2.43	15 (25%)	67,113,113	2.48	22 (32%)
23	CLA	d	403	-	59,73,73	1.92	12 (20%)	67,113,113	2.04	19 (28%)
23	CLA	C	510	-	59,73,73	2.30	10 (16%)	67,113,113	2.17	19 (28%)
30	LMT	F	101	-	36,36,36	0.71	1 (2%)	47,47,47	1.19	5 (10%)
31	DMS	b	637	-	3,3,3	2.68	1 (33%)	3,3,3	1.01	0
36	DGD	H	103	-	63,63,67	1.05	3 (4%)	77,77,81	1.32	7 (9%)
31	DMS	v	208	-	3,3,3	2.73	1 (33%)	3,3,3	0.73	0
34	LMG	C	531	-	51,51,55	1.03	2 (3%)	59,59,63	1.08	4 (6%)
31	DMS	u	206	-	3,3,3	2.79	1 (33%)	3,3,3	0.63	0
31	DMS	a	423	-	3,3,3	2.80	1 (33%)	3,3,3	0.82	0
31	DMS	A	419	-	3,3,3	2.75	1 (33%)	3,3,3	0.71	0
31	DMS	v	209	-	3,3,3	2.71	1 (33%)	3,3,3	0.72	0
31	DMS	u	205	-	3,3,3	2.62	1 (33%)	3,3,3	1.05	0
31	DMS	b	641	-	3,3,3	2.64	1 (33%)	3,3,3	0.75	0
28	LHG	D	409	-	48,48,48	0.85	1 (2%)	51,54,54	1.27	6 (11%)
38	RRX	H	102	-	42,42,42	0.89	1 (2%)	57,58,58	1.57	9 (15%)
31	DMS	a	421	-	3,3,3	2.68	1 (33%)	3,3,3	0.63	0
31	DMS	A	421	-	3,3,3	2.71	1 (33%)	3,3,3	0.80	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
30	LMT	b	621	-	25,25,36	0.63	1 (4%)	30,30,47	1.30	5 (16%)
31	DMS	c	933	-	3,3,3	2.67	1 (33%)	3,3,3	0.93	0
23	CLA	C	503	-	59,73,73	2.27	11 (18%)	67,113,113	1.88	15 (22%)
31	DMS	B	638	-	3,3,3	2.78	1 (33%)	3,3,3	1.01	0
31	DMS	c	937	-	3,3,3	2.66	1 (33%)	3,3,3	0.62	0
23	CLA	d	401	41	59,73,73	2.01	11 (18%)	67,113,113	1.94	19 (28%)
23	CLA	C	512	3	59,73,73	2.33	14 (23%)	67,113,113	2.27	20 (29%)
23	CLA	a	406	-	59,73,73	1.92	14 (23%)	67,113,113	2.25	22 (32%)
23	CLA	B	616	-	59,73,73	2.19	16 (27%)	67,113,113	2.03	15 (22%)
23	CLA	B	603	-	59,73,73	2.21	14 (23%)	67,113,113	2.17	23 (34%)
23	CLA	b	611	41	59,73,73	2.02	15 (25%)	67,113,113	1.76	18 (26%)
31	DMS	b	643	-	3,3,3	2.68	1 (33%)	3,3,3	0.60	0
31	DMS	A	423	-	3,3,3	1.91	1 (33%)	3,3,3	0.64	0
23	CLA	A	408	-	59,73,73	1.83	15 (25%)	67,113,113	2.11	19 (28%)
31	DMS	b	647	-	3,3,3	2.75	1 (33%)	3,3,3	0.71	0
23	CLA	B	611	41	59,73,73	2.27	16 (27%)	67,113,113	2.19	17 (25%)
23	CLA	d	404	-	59,73,73	1.91	13 (22%)	67,113,113	1.99	19 (28%)
31	DMS	b	639	-	3,3,3	2.77	1 (33%)	3,3,3	1.33	1 (33%)
31	DMS	O	303	-	3,3,3	2.68	1 (33%)	3,3,3	0.57	0
23	CLA	b	604	-	59,73,73	2.14	12 (20%)	67,113,113	2.23	24 (35%)
31	DMS	B	645	-	3,3,3	2.80	1 (33%)	3,3,3	0.70	0
23	CLA	b	613	-	59,73,73	2.00	12 (20%)	67,113,113	2.07	18 (26%)
23	CLA	b	607	-	59,73,73	2.45	15 (25%)	67,113,113	1.95	18 (26%)
31	DMS	C	528	-	3,3,3	2.64	1 (33%)	3,3,3	0.71	0
23	CLA	A	406	41	59,73,73	1.72	10 (16%)	67,113,113	2.24	17 (25%)
25	BCR	b	618	-	41,41,41	0.95	0	56,56,56	1.75	13 (23%)
23	CLA	b	616	-	59,73,73	2.13	12 (20%)	67,113,113	2.19	22 (32%)
23	CLA	b	603	-	59,73,73	1.93	16 (27%)	67,113,113	2.32	27 (40%)
30	LMT	a	422	-	36,36,36	0.65	1 (2%)	47,47,47	0.95	3 (6%)
23	CLA	B	612	-	59,73,73	1.97	11 (18%)	67,113,113	2.05	18 (26%)
31	DMS	v	201	-	3,3,3	2.42	1 (33%)	3,3,3	0.47	0
31	DMS	A	424	-	3,3,3	2.76	1 (33%)	3,3,3	1.08	0
31	DMS	c	926	-	3,3,3	2.61	1 (33%)	3,3,3	0.30	0
30	LMT	Z	101	-	36,36,36	0.70	1 (2%)	47,47,47	0.90	2 (4%)
23	CLA	C	511	-	59,73,73	2.23	13 (22%)	67,113,113	1.97	16 (23%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
31	DMS	c	929	-	3,3,3	2.83	1 (33%)	3,3,3	0.69	0
23	CLA	c	904	-	59,73,73	2.63	16 (27%)	67,113,113	2.12	18 (26%)
31	DMS	b	644	-	3,3,3	2.78	1 (33%)	3,3,3	0.99	0
31	DMS	H	105	-	3,3,3	2.74	1 (33%)	3,3,3	0.65	0
23	CLA	c	913	-	59,73,73	2.43	14 (23%)	67,113,113	2.28	16 (23%)
23	CLA	B	609	-	59,73,73	1.86	13 (22%)	67,113,113	1.88	19 (28%)
23	CLA	C	506	-	59,73,73	2.16	15 (25%)	67,113,113	2.06	16 (23%)
31	DMS	h	103	-	3,3,3	2.65	1 (33%)	3,3,3	0.58	0
23	CLA	D	403	-	59,73,73	1.92	10 (16%)	67,113,113	2.43	24 (35%)
24	PHO	a	408	-	67,69,69	1.79	15 (22%)	85,99,99	1.77	17 (20%)
26	SQD	B	621	-	53,54,54	1.03	3 (5%)	62,65,65	1.60	7 (11%)
25	BCR	Y	101	-	41,41,41	0.85	0	56,56,56	1.66	15 (26%)
23	CLA	B	614	-	59,73,73	1.80	14 (23%)	67,113,113	1.85	15 (22%)
31	DMS	O	307	-	3,3,3	2.75	1 (33%)	3,3,3	0.72	0
31	DMS	O	304	-	3,3,3	2.79	1 (33%)	3,3,3	0.87	0
35	HTG	c	922	-	19,19,19	1.02	2 (10%)	23,24,24	1.74	3 (13%)
25	BCR	k	102	-	41,41,41	1.02	1 (2%)	56,56,56	1.21	8 (14%)
23	CLA	b	617	-	59,73,73	2.17	15 (25%)	67,113,113	2.05	22 (32%)
20	OEX	a	402	1,3,41	0,15,15	0.00	-	-	-	-
30	LMT	M	101	-	36,36,36	0.64	0	47,47,47	0.92	2 (4%)
31	DMS	b	636	-	3,3,3	2.74	1 (33%)	3,3,3	0.52	0
23	CLA	B	607	-	59,73,73	2.31	14 (23%)	67,113,113	2.04	16 (23%)
26	SQD	D	408	-	44,45,54	1.22	4 (9%)	53,56,65	2.21	13 (24%)
26	SQD	x	101	-	40,41,54	1.26	3 (7%)	49,52,65	1.46	9 (18%)
23	CLA	C	507	-	59,73,73	2.11	14 (23%)	67,113,113	2.20	18 (26%)
23	CLA	B	602	41	59,73,73	2.39	14 (23%)	67,113,113	2.29	18 (26%)
30	LMT	T	103	-	24,24,36	0.50	0	29,29,47	1.32	4 (13%)
30	LMT	A	416	-	36,36,36	0.84	1 (2%)	47,47,47	1.19	6 (12%)
31	DMS	B	640	-	3,3,3	2.63	1 (33%)	3,3,3	0.77	0
31	DMS	c	935	-	3,3,3	2.68	1 (33%)	3,3,3	0.74	0
28	LHG	A	412	-	48,48,48	1.05	2 (4%)	51,54,54	0.96	3 (5%)
35	HTG	c	923	-	11,12,19	0.54	0	11,11,24	1.89	2 (18%)
31	DMS	B	639	-	3,3,3	2.77	1 (33%)	3,3,3	0.89	0
31	DMS	B	648	-	3,3,3	2.49	1 (33%)	3,3,3	1.05	0
31	DMS	U	202	-	3,3,3	2.68	1 (33%)	3,3,3	1.60	1 (33%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
34	LMG	c	920	-	51,51,55	0.96	2 (3%)	59,59,63	1.31	7 (11%)
32	BCT	a	424	21	0,3,3	0.00	-	0,3,3	0.00	-
28	LHG	d	408	-	48,48,48	0.91	2 (4%)	51,54,54	1.24	3 (5%)
35	HTG	B	631	-	19,19,19	1.11	1 (5%)	23,24,24	1.25	2 (8%)
31	DMS	b	646	-	3,3,3	2.74	1 (33%)	3,3,3	0.69	0
31	DMS	o	301	-	3,3,3	2.14	1 (33%)	3,3,3	0.39	0
35	HTG	b	627	-	19,19,19	1.22	2 (10%)	23,24,24	1.49	2 (8%)
31	DMS	c	936	-	3,3,3	2.73	1 (33%)	3,3,3	0.83	0
25	BCR	A	409	-	41,41,41	1.06	4 (9%)	56,56,56	1.44	9 (16%)
36	DGD	C	518	-	63,63,67	0.95	4 (6%)	77,77,81	1.09	4 (5%)
31	DMS	h	104	-	3,3,3	2.70	1 (33%)	3,3,3	0.59	0
31	DMS	u	203	-	3,3,3	2.58	1 (33%)	3,3,3	0.92	0
27	PL9	d	406	-	55,55,55	1.05	4 (7%)	68,69,69	1.59	12 (17%)
35	HTG	C	523	-	19,19,19	1.09	2 (10%)	23,24,24	1.74	1 (4%)
28	LHG	D	410	-	48,48,48	0.83	2 (4%)	51,54,54	1.13	2 (3%)
28	LHG	E	101	-	48,48,48	1.06	2 (4%)	51,54,54	1.17	5 (9%)
31	DMS	B	641	-	3,3,3	2.82	1 (33%)	3,3,3	0.81	0
30	LMT	B	643	-	24,24,36	0.39	0	29,29,47	0.88	1 (3%)
34	LMG	C	501	-	51,51,55	0.95	2 (3%)	59,59,63	1.15	4 (6%)
31	DMS	o	304	-	3,3,3	2.76	1 (33%)	3,3,3	0.81	0
34	LMG	J	101	39	51,51,55	0.93	2 (3%)	59,59,63	0.97	4 (6%)
36	DGD	D	407	-	50,50,67	1.28	3 (6%)	58,58,81	1.74	8 (13%)
35	HTG	C	522	-	19,19,19	1.05	2 (10%)	23,24,24	1.95	4 (17%)
23	CLA	c	909	-	59,73,73	2.26	15 (25%)	67,113,113	1.87	14 (20%)
31	DMS	d	415	-	3,3,3	2.65	1 (33%)	3,3,3	0.88	0
30	LMT	a	418	-	36,36,36	0.71	1 (2%)	47,47,47	1.30	6 (12%)
35	HTG	B	626	-	19,19,19	0.94	1 (5%)	23,24,24	1.59	1 (4%)
23	CLA	c	914	-	59,73,73	2.55	14 (23%)	67,113,113	2.06	18 (26%)
31	DMS	d	416	-	3,3,3	2.68	1 (33%)	3,3,3	0.57	0
31	DMS	O	311	-	3,3,3	2.64	1 (33%)	3,3,3	0.85	0
34	LMG	j	101	39	51,51,55	0.98	4 (7%)	59,59,63	1.16	7 (11%)
31	DMS	C	526	-	3,3,3	2.73	1 (33%)	3,3,3	0.59	0
23	CLA	c	906	-	59,73,73	2.07	17 (28%)	67,113,113	1.95	20 (29%)
31	DMS	e	104	-	3,3,3	2.67	1 (33%)	3,3,3	0.58	0
34	LMG	c	930	-	51,51,55	1.07	3 (5%)	59,59,63	1.26	5 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
31	DMS	c	932	-	3,3,3	2.65	1 (33%)	3,3,3	0.75	0
23	CLA	D	404	-	59,73,73	2.04	14 (23%)	67,113,113	1.94	22 (32%)
34	LMG	a	413	-	51,51,55	1.00	2 (3%)	59,59,63	1.10	4 (6%)
23	CLA	b	615	-	59,73,73	2.11	16 (27%)	67,113,113	1.87	20 (29%)
25	BCR	b	620	-	41,41,41	0.90	2 (4%)	56,56,56	1.24	5 (8%)
24	PHO	D	402	-	67,69,69	1.95	14 (20%)	85,99,99	1.87	17 (20%)
31	DMS	b	642	-	3,3,3	2.70	1 (33%)	3,3,3	0.57	0
23	CLA	a	410	-	59,73,73	1.94	10 (16%)	67,113,113	2.09	21 (31%)
23	CLA	c	905	41	59,73,73	2.32	15 (25%)	67,113,113	2.33	20 (29%)
31	DMS	O	308	-	3,3,3	2.72	1 (33%)	3,3,3	0.69	0
24	PHO	A	407	-	67,69,69	1.75	11 (16%)	85,99,99	2.01	22 (25%)
31	DMS	O	306	-	3,3,3	2.70	1 (33%)	3,3,3	0.55	0
31	DMS	c	934	-	3,3,3	2.70	1 (33%)	3,3,3	0.73	0
23	CLA	c	911	-	59,73,73	1.82	10 (16%)	67,113,113	2.05	20 (29%)
40	HEC	v	203	16	26,50,50	2.27	9 (34%)	18,82,82	2.45	7 (38%)
31	DMS	O	309	-	3,3,3	2.88	1 (33%)	3,3,3	0.94	0
23	CLA	b	610	-	59,73,73	2.45	13 (22%)	67,113,113	1.76	16 (23%)
23	CLA	b	612	-	59,73,73	2.12	10 (16%)	67,113,113	2.11	21 (31%)
34	LMG	m	102	-	51,51,55	0.95	2 (3%)	59,59,63	1.33	6 (10%)
27	PL9	A	411	-	55,55,55	0.90	4 (7%)	68,69,69	1.69	14 (20%)
23	CLA	C	513	-	59,73,73	2.53	14 (23%)	67,113,113	2.08	18 (26%)
31	DMS	b	635	-	3,3,3	2.72	1 (33%)	3,3,3	0.59	0
31	DMS	B	646	-	3,3,3	2.60	1 (33%)	3,3,3	0.71	0
31	DMS	A	418	-	3,3,3	2.73	1 (33%)	3,3,3	0.65	0
23	CLA	C	502	-	59,73,73	2.05	12 (20%)	67,113,113	1.94	15 (22%)
30	LMT	I	101	-	36,36,36	0.74	1 (2%)	47,47,47	1.40	5 (10%)

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
28	LHG	d	402	-	-	24/48/48/53	-
28	LHG	a	415	-	-	20/53/53/53	-
35	HTG	C	522	-	-	5/10/30/30	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
35	HTG	B	630	-	-	4/10/30/30	0/1/1/1
25	BCR	C	515	-	-	3/29/63/63	0/2/2/2
23	CLA	b	605	-	3/3/20/25	5/37/135/135	-
30	LMT	m	103	-	-	10/21/61/61	0/2/2/2
28	LHG	L	101	-	-	18/53/53/53	-
23	CLA	C	504	-	2/2/20/25	3/37/135/135	-
28	LHG	d	410	-	-	11/50/50/53	-
25	BCR	B	619	-	-	0/29/63/63	0/2/2/2
36	DGD	C	519	-	-	18/51/91/95	0/2/2/2
35	HTG	V	204	-	-	1/5/25/30	0/1/1/1
23	CLA	B	604	-	3/3/20/25	3/37/135/135	-
30	LMT	B	623	-	-	15/21/61/61	0/2/2/2
23	CLA	B	608	41	3/3/20/25	3/37/135/135	-
35	HTG	c	921	-	-	5/10/30/30	0/1/1/1
37	HEM	e	105	5,6	-	0/6/54/54	-
23	CLA	B	613	-	3/3/20/25	2/37/135/135	-
34	LMG	D	412	-	-	24/46/66/70	0/1/1/1
23	CLA	a	407	41	2/2/20/25	9/37/135/135	-
35	HTG	B	631	-	-	3/10/30/30	0/1/1/1
23	CLA	b	602	41	3/3/20/25	18/37/135/135	-
36	DGD	h	102	-	-	17/51/91/95	0/2/2/2
37	HEM	E	105	5,6	-	0/6/54/54	-
23	CLA	B	603	-	3/3/20/25	4/37/135/135	-
23	CLA	b	607	-	3/3/20/25	11/37/135/135	-
36	DGD	D	407	-	-	24/44/64/95	0/1/1/2
23	CLA	A	405	-	2/2/20/25	2/37/135/135	-
25	BCR	D	405	-	-	4/29/63/63	0/2/2/2
25	BCR	t	101	-	-	4/29/63/63	0/2/2/2
34	LMG	B	622	-	-	15/46/66/70	0/1/1/1
23	CLA	c	903	-	2/2/20/25	8/37/135/135	-
27	PL9	D	406	-	-	3/53/73/73	0/1/1/1
23	CLA	c	914	-	1/1/20/25	9/37/135/135	-
26	SQD	a	412	-	-	23/49/69/69	0/1/1/1
36	DGD	c	917	-	-	13/51/91/95	0/2/2/2
36	DGD	d	407	-	-	22/44/64/95	0/1/1/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	SQD	B	621	-	-	29/49/69/69	0/1/1/1
23	CLA	c	902	-	3/3/20/25	4/37/135/135	-
25	BCR	B	620	-	-	0/29/63/63	0/2/2/2
23	CLA	b	610	-	2/2/20/25	0/37/135/135	-
28	LHG	D	411	-	-	15/50/50/53	-
25	BCR	b	619	-	-	1/29/63/63	0/2/2/2
25	BCR	c	915	-	-	1/29/63/63	0/2/2/2
36	DGD	c	918	-	-	16/51/91/95	0/2/2/2
35	HTG	d	413	-	-	7/10/30/30	0/1/1/1
23	CLA	B	606	-	3/3/20/25	6/37/135/135	-
35	HTG	v	204	-	-	7/10/30/30	0/1/1/1
28	LHG	d	409	-	-	10/53/53/53	-
26	SQD	A	410	-	-	20/49/69/69	0/1/1/1
23	CLA	b	609	-	1/1/20/25	1/37/135/135	-
34	LMG	d	411	-	-	25/46/66/70	0/1/1/1
23	CLA	c	912	3	2/2/20/25	1/37/135/135	-
23	CLA	B	607	-	3/3/20/25	8/37/135/135	-
23	CLA	b	614	-	3/3/20/25	3/37/135/135	-
30	LMT	e	103	-	-	6/17/37/61	0/1/1/2
25	BCR	d	405	-	-	4/29/63/63	0/2/2/2
24	PHO	a	409	-	-	6/53/103/103	0/5/6/6
23	CLA	c	907	-	2/2/20/25	10/37/135/135	-
35	HTG	C	521	-	-	3/10/30/30	0/1/1/1
36	DGD	c	919	-	-	15/51/91/95	0/2/2/2
35	HTG	b	623	-	-	8/10/30/30	0/1/1/1
25	BCR	B	618	-	-	2/29/63/63	0/2/2/2
26	SQD	A	415	-	-	24/49/69/69	0/1/1/1
28	LHG	l	101	-	-	13/53/53/53	-
23	CLA	b	606	-	3/3/20/25	6/37/135/135	-
26	SQD	L	102	-	-	27/49/69/69	0/1/1/1
30	LMT	B	644	-	-	8/15/35/61	0/1/1/2
23	CLA	C	508	41	3/3/20/25	11/37/135/135	-
35	HTG	b	628	-	-	1/10/30/30	0/1/1/1
23	CLA	C	509	-	3/3/20/25	6/37/135/135	-
35	HTG	O	302	-	-	3/10/30/30	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CLA	B	610	-	2/2/20/25	0/37/135/135	-
23	CLA	c	908	41	3/3/20/25	10/37/135/135	-
35	HTG	B	624	-	-	4/10/30/30	0/1/1/1
25	BCR	T	101	-	-	3/29/63/63	0/2/2/2
23	CLA	C	506	-	2/2/20/25	2/37/135/135	-
35	HTG	b	622	-	-	4/10/30/30	0/1/1/1
25	BCR	c	916	-	-	0/29/63/63	0/2/2/2
24	PHO	a	408	-	-	5/53/103/103	0/5/6/6
30	LMT	m	104	-	-	2/21/61/61	0/2/2/2
23	CLA	C	512	3	2/2/20/25	0/37/135/135	-
23	CLA	b	611	41	3/3/20/25	7/37/135/135	-
35	HTG	D	414	-	-	3/10/30/30	0/1/1/1
28	LHG	K	101	-	-	24/45/45/53	-
26	SQD	a	417	-	-	14/49/69/69	0/1/1/1
23	CLA	B	617	-	3/3/20/25	11/37/135/135	-
34	LMG	C	520	-	-	20/46/66/70	0/1/1/1
23	CLA	B	605	-	3/3/20/25	8/37/135/135	-
25	BCR	b	620	-	-	0/29/63/63	0/2/2/2
25	BCR	j	104	-	-	2/29/63/63	0/2/2/2
40	HEC	V	203	16	-	0/6/54/54	-
35	HTG	B	625	-	-	5/10/30/30	0/1/1/1
25	BCR	a	411	-	-	1/29/63/63	0/2/2/2
23	CLA	c	910	-	3/3/20/25	9/37/135/135	-
23	CLA	d	403	-	2/2/20/25	1/37/135/135	-
23	CLA	d	401	41	1/1/20/25	7/37/135/135	-
30	LMT	F	101	-	-	11/21/61/61	0/2/2/2
36	DGD	H	103	-	-	10/51/91/95	0/2/2/2
27	PL9	A	411	-	-	14/53/73/73	0/1/1/1
34	LMG	C	531	-	-	18/46/66/70	0/1/1/1
28	LHG	D	409	-	-	9/53/53/53	-
38	RRX	H	102	-	-	0/29/65/65	0/2/2/2
28	LHG	e	101	-	-	18/44/44/53	-
23	CLA	C	503	-	1/1/20/25	6/37/135/135	-
23	CLA	C	510	-	3/3/20/25	9/37/135/135	-
23	CLA	a	406	-	3/3/20/25	6/37/135/135	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CLA	B	616	-	3/3/20/25	5/37/135/135	-
35	HTG	B	626	-	-	7/10/30/30	0/1/1/1
23	CLA	D	404	-	3/3/20/25	11/37/135/135	-
23	CLA	A	408	-	2/2/20/25	18/37/135/135	-
23	CLA	B	611	41	3/3/20/25	5/37/135/135	-
23	CLA	d	404	-	1/1/20/25	13/37/135/135	-
23	CLA	b	604	-	3/3/20/25	5/37/135/135	-
30	LMT	A	416	-	-	7/21/61/61	0/2/2/2
23	CLA	b	613	-	3/3/20/25	3/37/135/135	-
23	CLA	A	406	41	2/2/20/25	11/37/135/135	-
25	BCR	b	618	-	-	2/29/63/63	0/2/2/2
23	CLA	b	616	-	3/3/20/25	8/37/135/135	-
23	CLA	b	603	-	3/3/20/25	2/37/135/135	-
23	CLA	C	513	-	3/3/20/25	14/37/135/135	-
23	CLA	B	612	-	3/3/20/25	5/37/135/135	-
30	LMT	Z	101	-	-	11/21/61/61	0/2/2/2
23	CLA	C	511	-	3/3/20/25	2/37/135/135	-
38	RRX	x	102	-	-	0/29/65/65	0/2/2/2
23	CLA	c	904	-	1/1/20/25	4/37/135/135	-
23	CLA	C	514	-	1/1/20/25	9/37/135/135	-
23	CLA	c	913	-	3/3/20/25	7/37/135/135	-
23	CLA	B	609	-	1/1/20/25	1/37/135/135	-
23	CLA	D	403	-	1/1/20/25	7/37/135/135	-
23	CLA	B	615	-	3/3/20/25	9/37/135/135	-
25	BCR	A	409	-	-	0/29/63/63	0/2/2/2
25	BCR	Y	101	-	-	2/29/63/63	0/2/2/2
23	CLA	B	614	-	3/3/20/25	5/37/135/135	-
35	HTG	c	922	-	-	4/10/30/30	0/1/1/1
25	BCR	k	102	-	-	2/29/63/63	0/2/2/2
23	CLA	b	617	-	3/3/20/25	19/37/135/135	-
30	LMT	M	101	-	-	0/21/61/61	0/2/2/2
23	CLA	C	505	41	3/3/20/25	9/37/135/135	-
26	SQD	D	408	-	-	19/40/60/69	0/1/1/1
26	SQD	x	101	-	-	19/36/56/69	0/1/1/1
23	CLA	C	507	-	3/3/20/25	16/37/135/135	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CLA	B	602	41	2/2/20/25	19/37/135/135	-
30	LMT	T	103	-	-	7/15/35/61	0/1/1/2
23	CLA	b	615	-	3/3/20/25	13/37/135/135	-
35	HTG	c	923	-	-	4/8/10/30	-
28	LHG	A	412	-	-	29/53/53/53	-
40	HEC	v	203	16	-	0/6/54/54	-
25	BCR	C	530	-	-	0/29/63/63	0/2/2/2
34	LMG	c	920	-	-	21/46/66/70	0/1/1/1
28	LHG	d	408	-	-	14/53/53/53	-
35	HTG	b	627	-	-	3/10/30/30	0/1/1/1
30	LMT	b	621	-	-	12/17/37/61	0/1/1/2
36	DGD	C	517	-	-	13/51/91/95	0/2/2/2
36	DGD	C	518	-	-	14/51/91/95	0/2/2/2
27	PL9	d	406	-	-	4/53/73/73	0/1/1/1
35	HTG	C	523	-	-	4/10/30/30	0/1/1/1
28	LHG	D	410	-	-	10/53/53/53	-
28	LHG	E	101	-	-	28/53/53/53	-
30	LMT	z	101	-	-	8/15/55/61	0/2/2/2
30	LMT	B	643	-	-	6/15/35/61	0/1/1/2
34	LMG	C	501	-	-	24/46/66/70	0/1/1/1
34	LMG	J	101	39	-	15/46/66/70	0/1/1/1
27	PL9	a	414	-	-	11/53/73/73	0/1/1/1
23	CLA	b	608	41	3/3/20/25	2/37/135/135	-
23	CLA	c	909	-	2/2/20/25	4/37/135/135	-
30	LMT	a	418	-	-	12/21/61/61	0/2/2/2
23	CLA	D	401	41	1/1/20/25	4/37/135/135	-
34	LMG	j	101	39	-	11/46/66/70	0/1/1/1
23	CLA	c	906	-	2/2/20/25	4/37/135/135	-
34	LMG	c	930	-	-	7/46/66/70	0/1/1/1
23	CLA	c	911	-	3/3/20/25	3/37/135/135	-
34	LMG	a	413	-	-	24/46/66/70	0/1/1/1
24	PHO	D	402	-	-	3/53/103/103	0/5/6/6
23	CLA	a	410	-	1/1/20/25	8/37/135/135	-
23	CLA	c	905	41	2/2/20/25	9/37/135/135	-
25	BCR	C	516	-	-	0/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	PHO	A	407	-	-	3/53/103/103	0/5/6/6
23	CLA	b	612	-	1/1/20/25	6/37/135/135	-
34	LMG	m	102	-	-	18/46/66/70	0/1/1/1
30	LMT	a	422	-	-	5/21/61/61	0/2/2/2
23	CLA	C	502	-	3/3/20/25	3/37/135/135	-
30	LMT	I	101	-	-	8/21/61/61	0/2/2/2

The worst 5 of 1325 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	c	914	CLA	MG-NA	12.47	2.35	2.06
23	c	904	CLA	MG-NA	12.19	2.35	2.06
23	b	607	CLA	MG-NA	11.84	2.34	2.06
23	b	610	CLA	MG-NA	11.72	2.34	2.06
23	B	602	CLA	MG-NA	11.01	2.32	2.06

The worst 5 of 2141 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
23	c	905	CLA	C4A-NA-C1A	12.36	112.26	106.71
23	c	910	CLA	C4A-NA-C1A	12.30	112.23	106.71
23	C	512	CLA	C4A-NA-C1A	11.20	111.74	106.71
23	c	902	CLA	C4A-NA-C1A	11.01	111.66	106.71
23	b	612	CLA	C4A-NA-C1A	10.40	111.38	106.71

5 of 169 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
23	b	605	CLA	NC
23	b	605	CLA	ND
23	b	605	CLA	NA
23	C	504	CLA	NC
23	C	504	CLA	NA

5 of 1567 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
30	m	103	LMT	C2-C1-O1'-C1'
25	D	405	BCR	C21-C22-C23-C24
25	D	405	BCR	C37-C22-C23-C24

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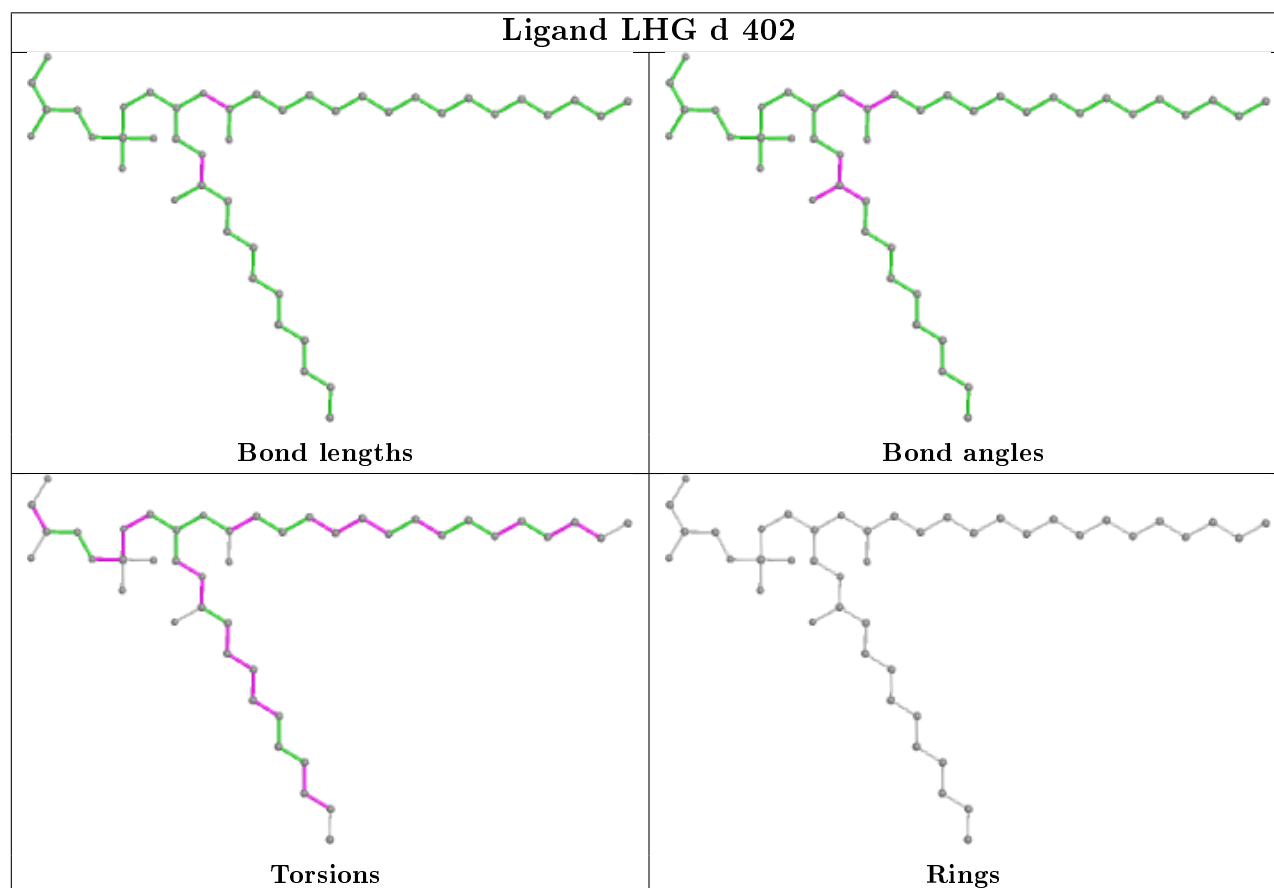
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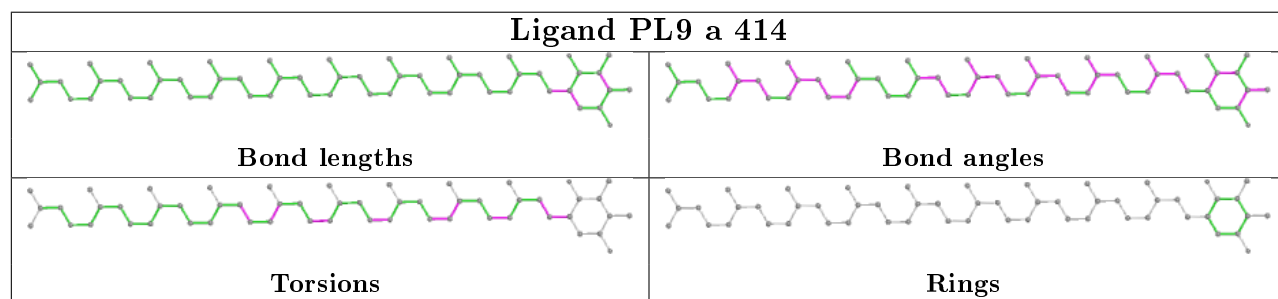
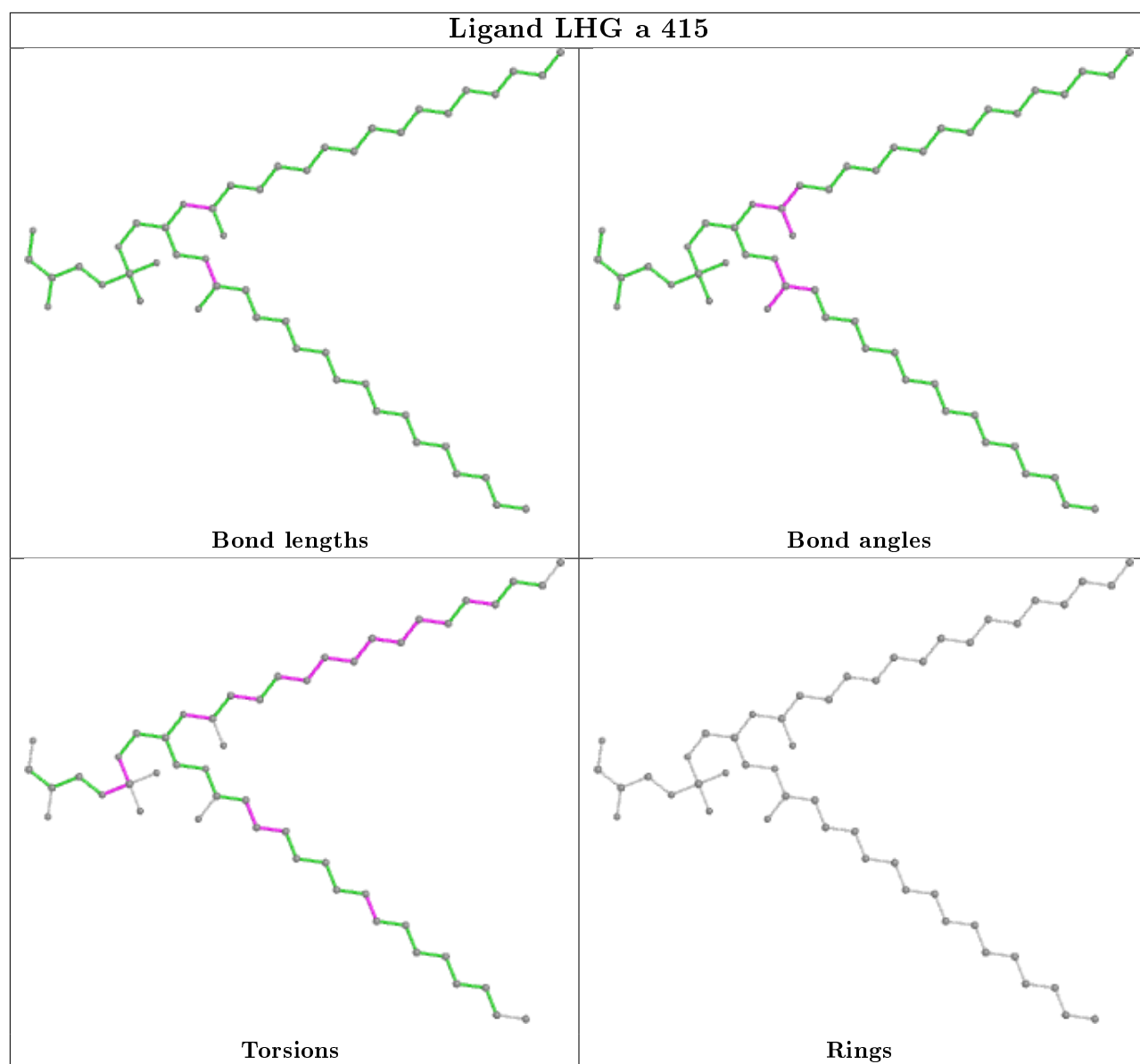
Mol	Chain	Res	Type	Atoms
25	t	101	BCR	C11-C12-C13-C14
25	t	101	BCR	C11-C12-C13-C35

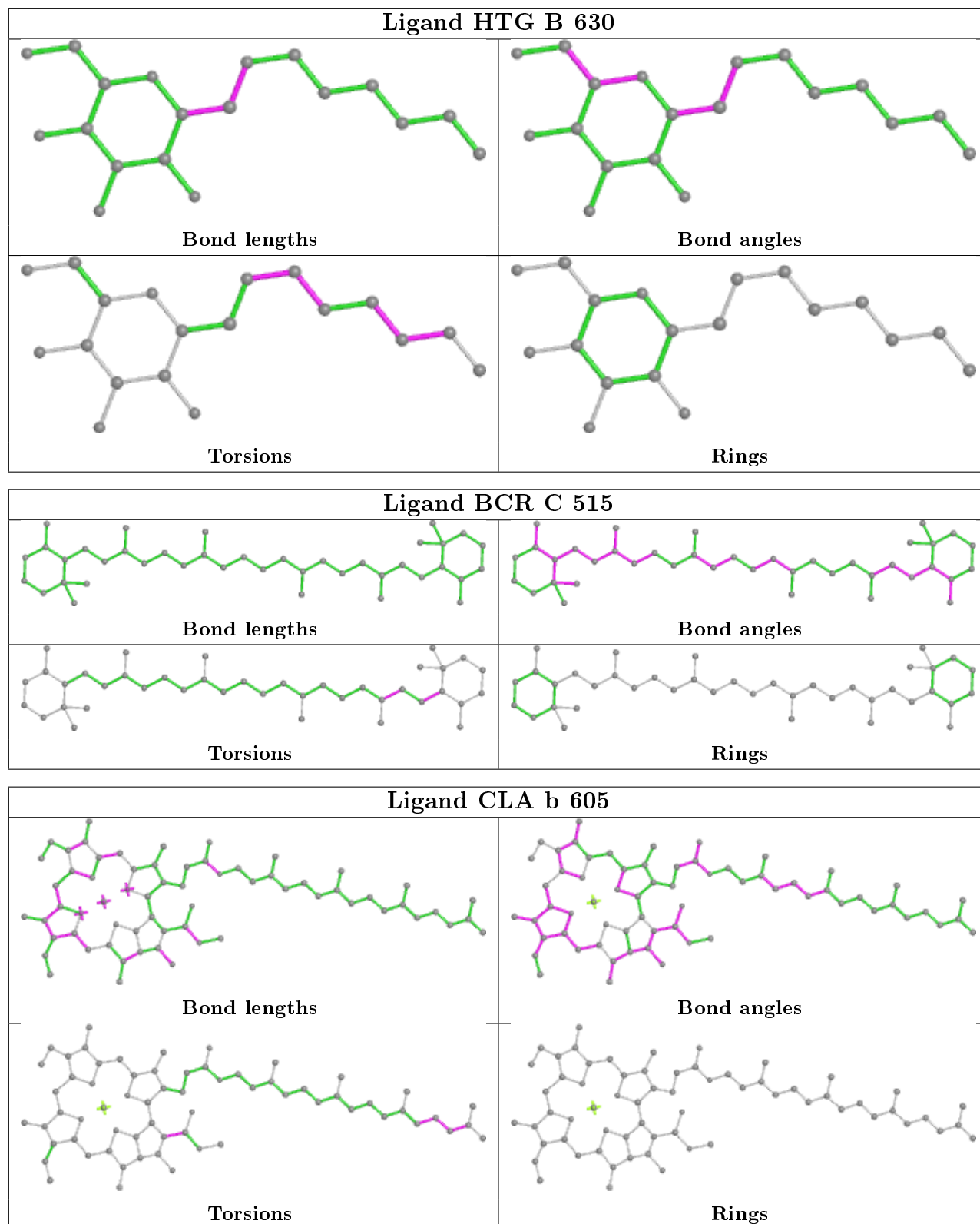
There are no ring outliers.

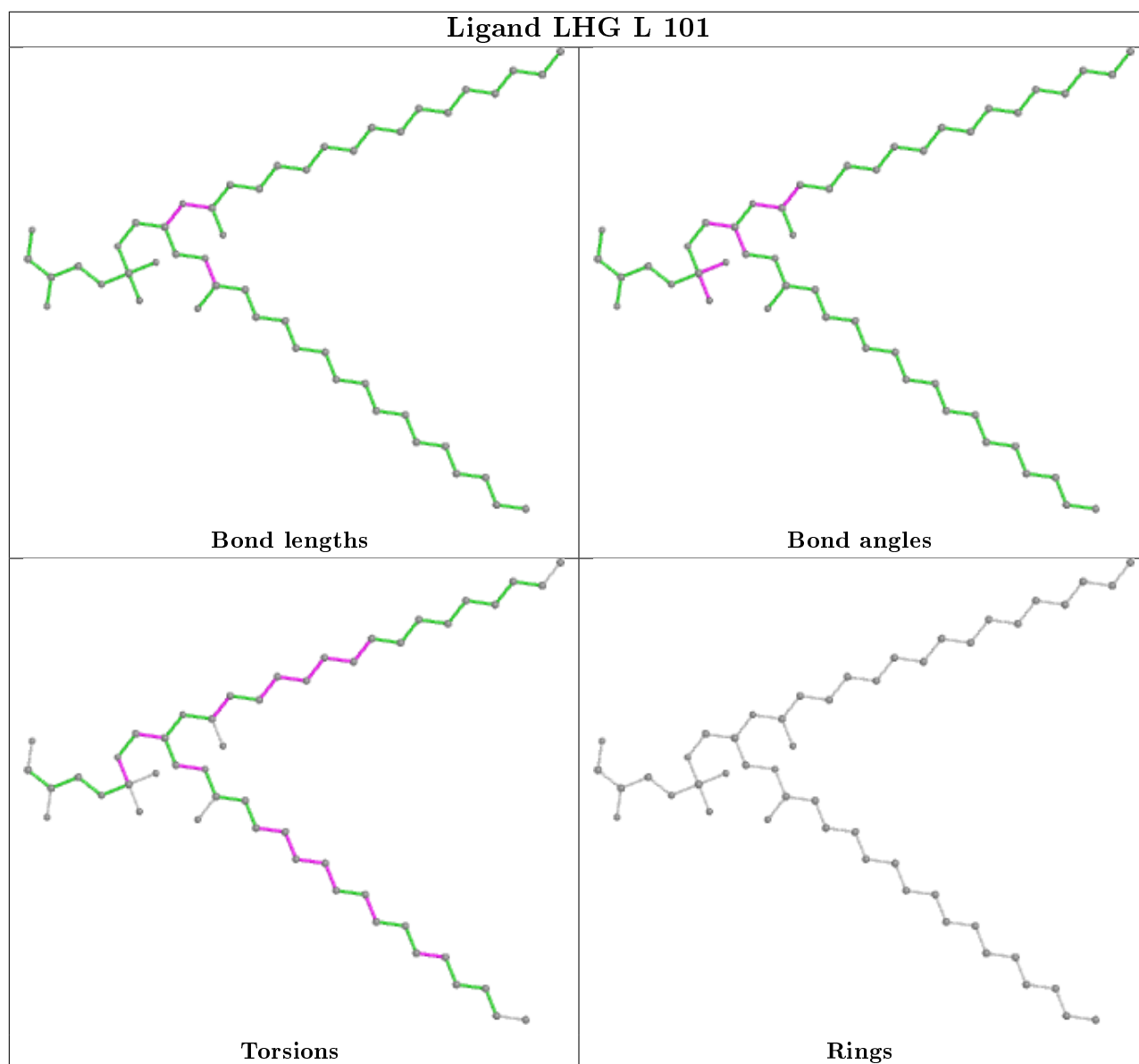
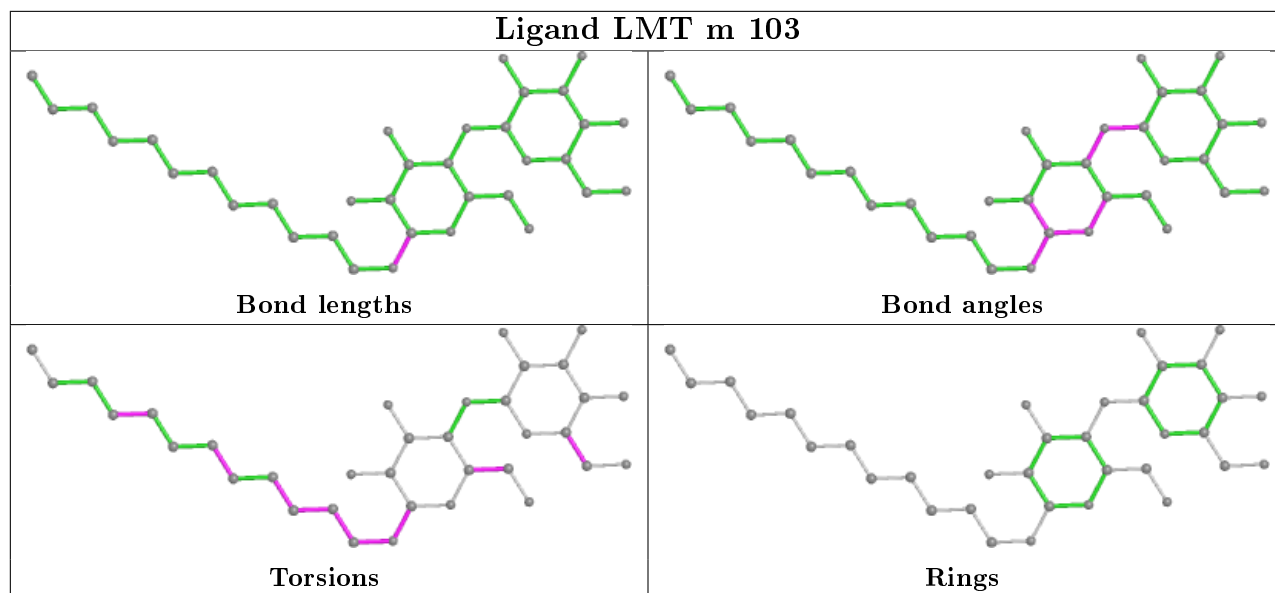
No monomer is involved in short contacts.

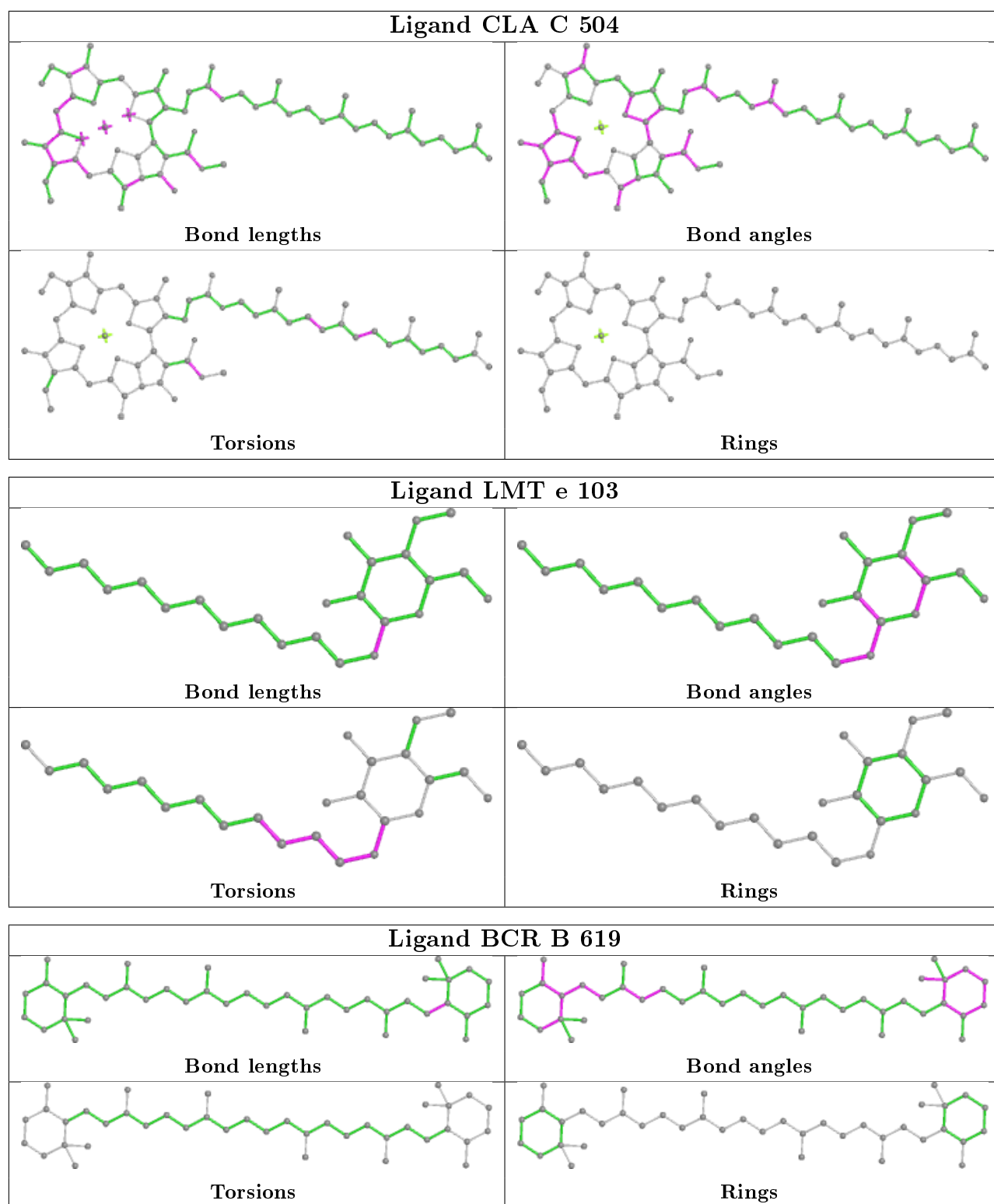
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

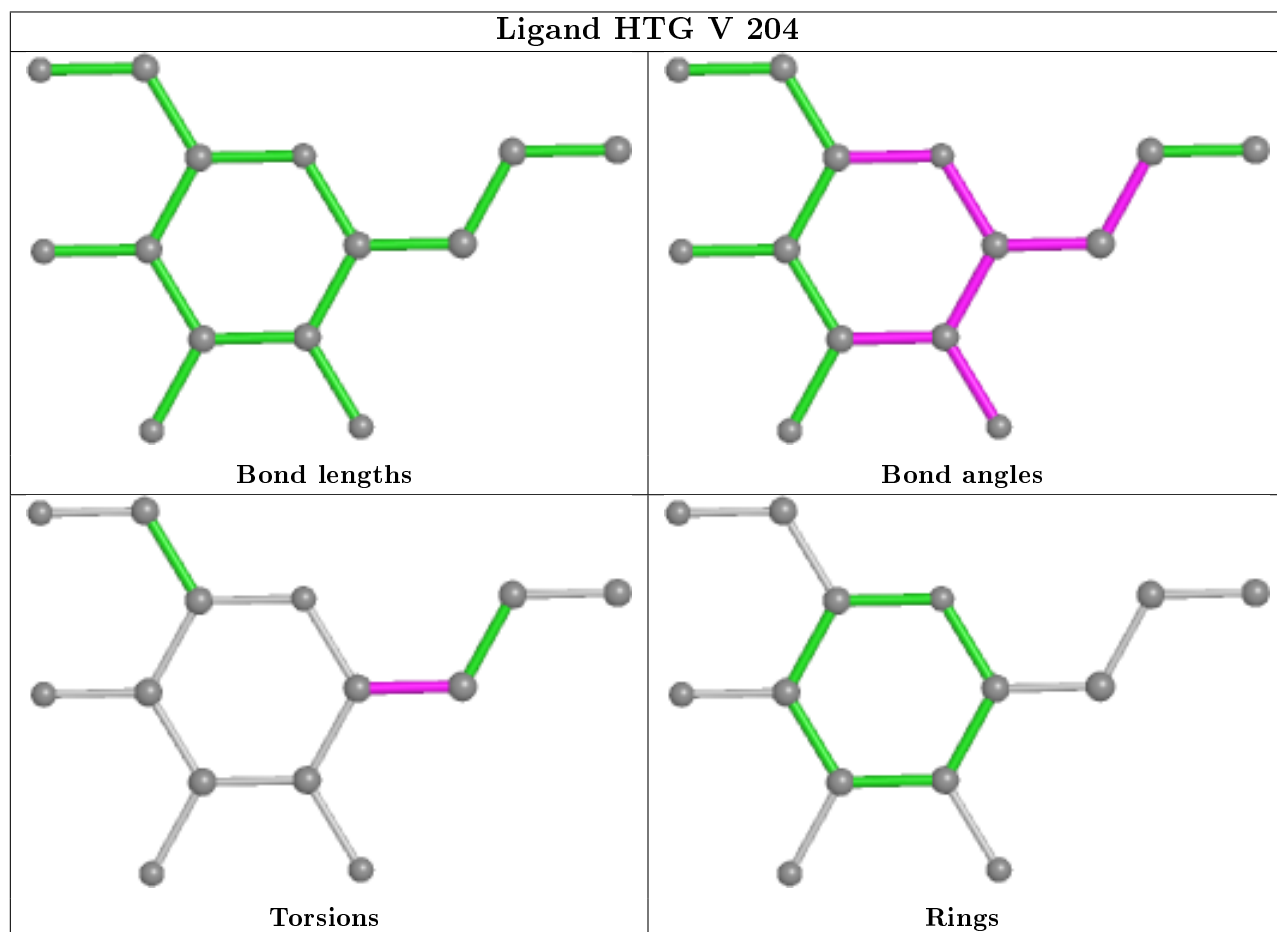
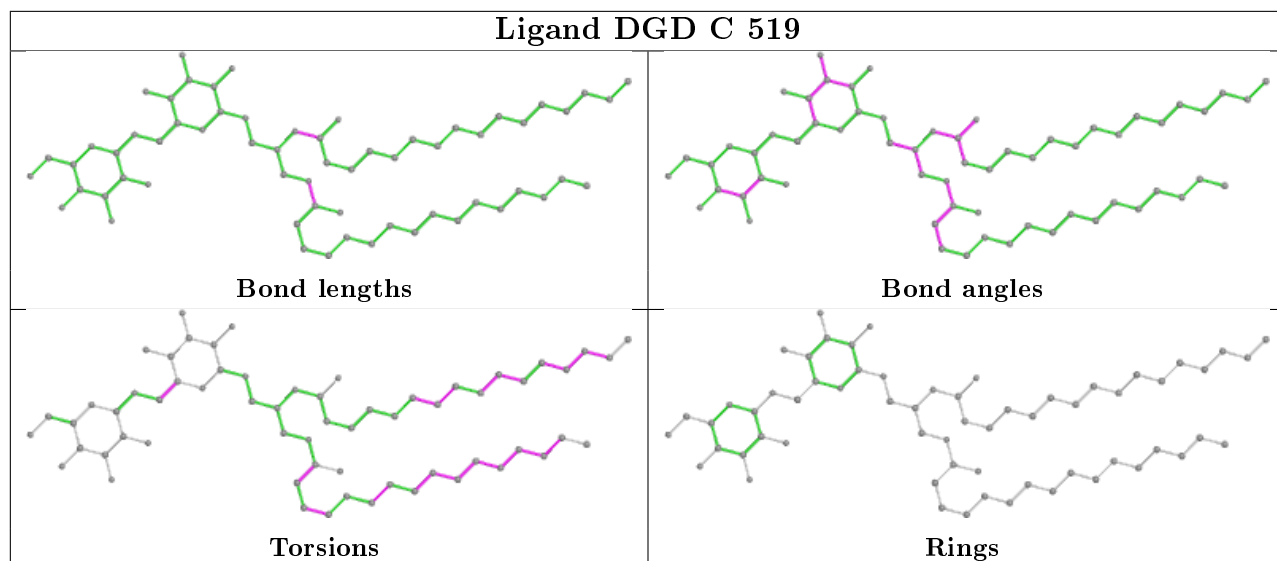


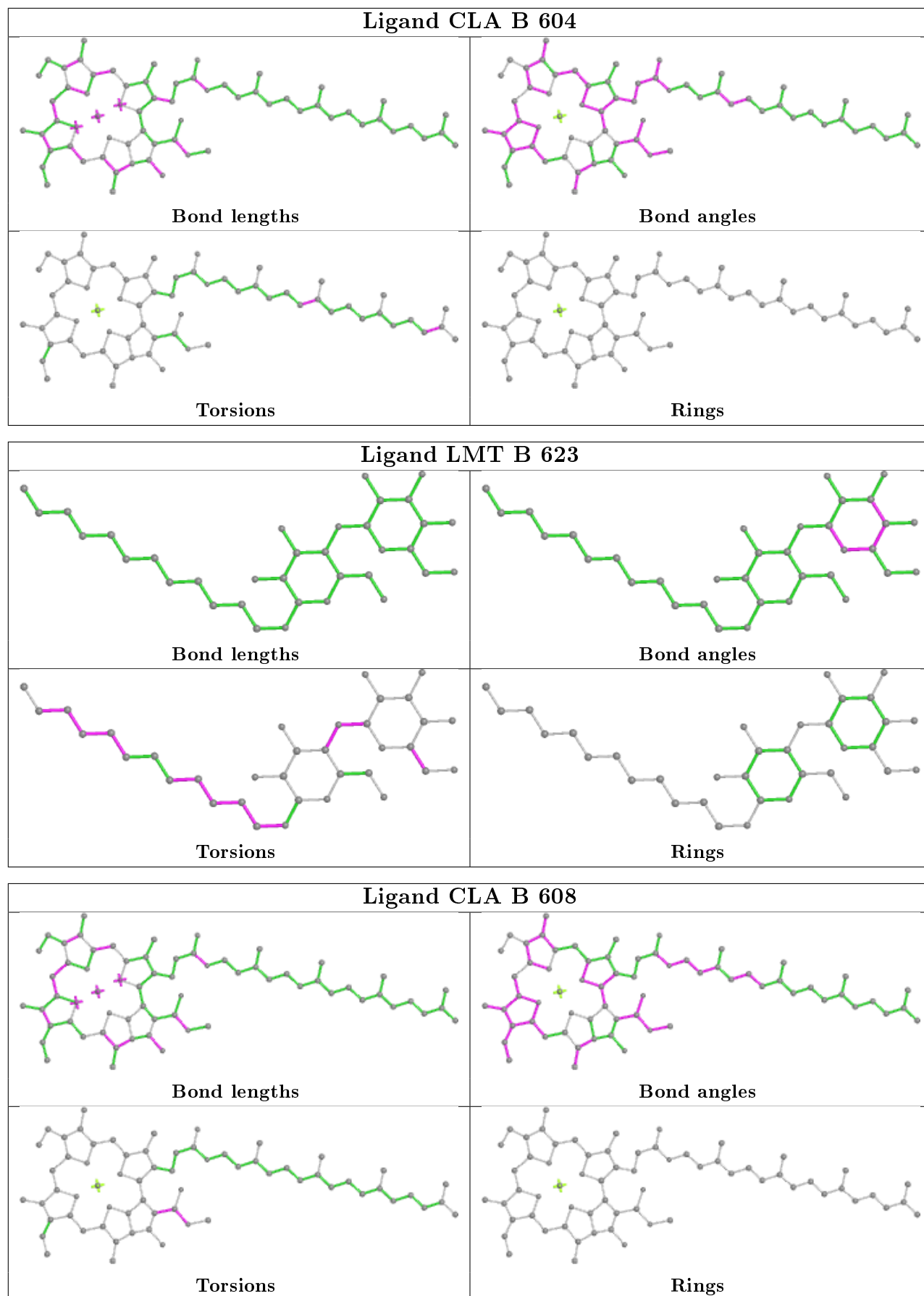


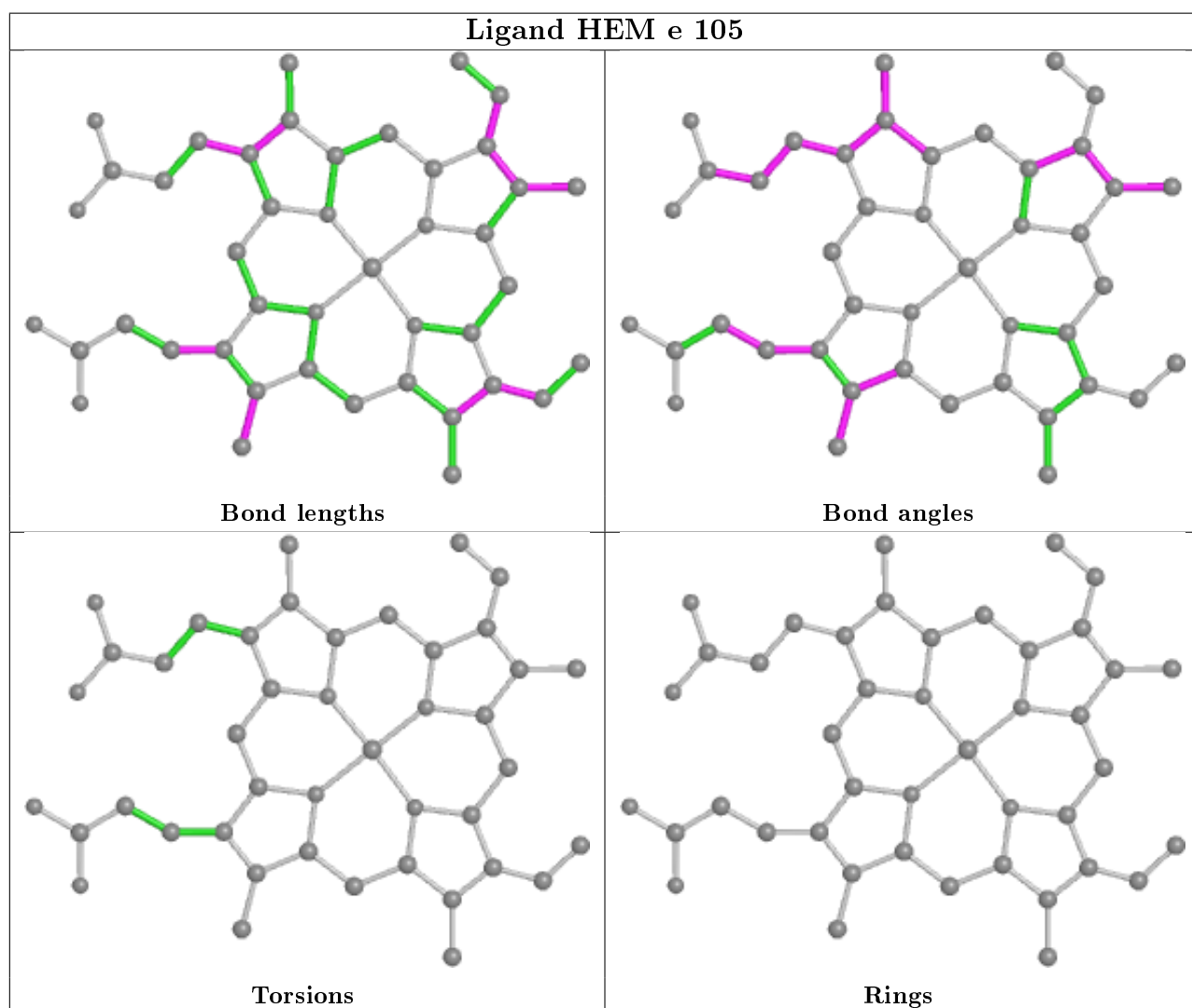
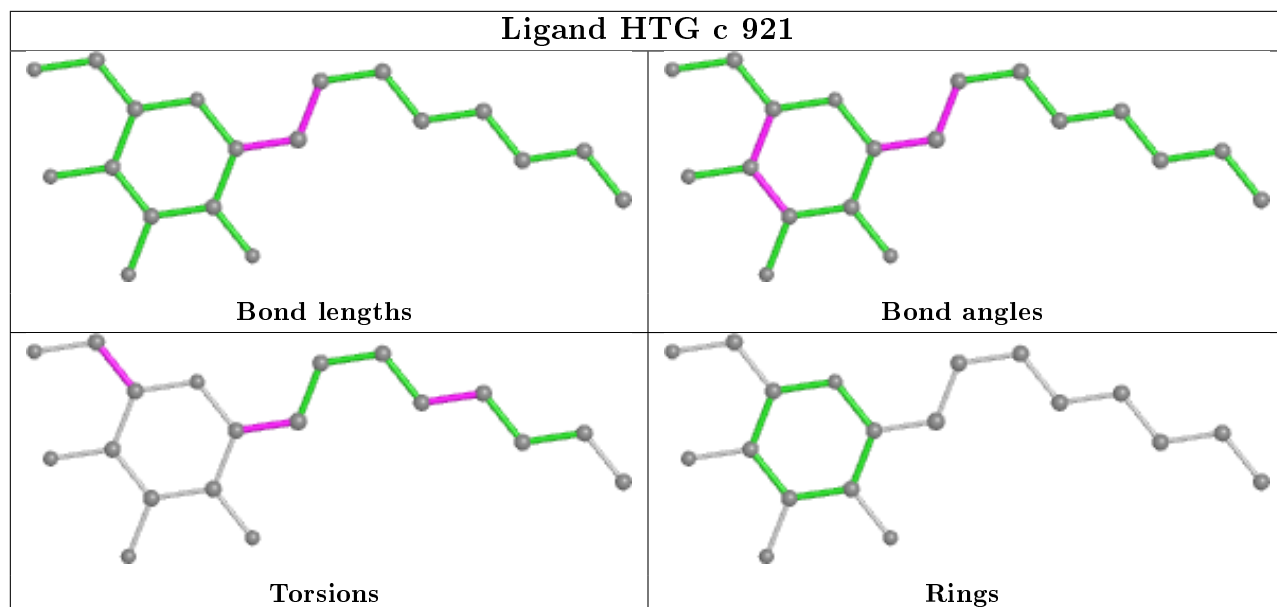


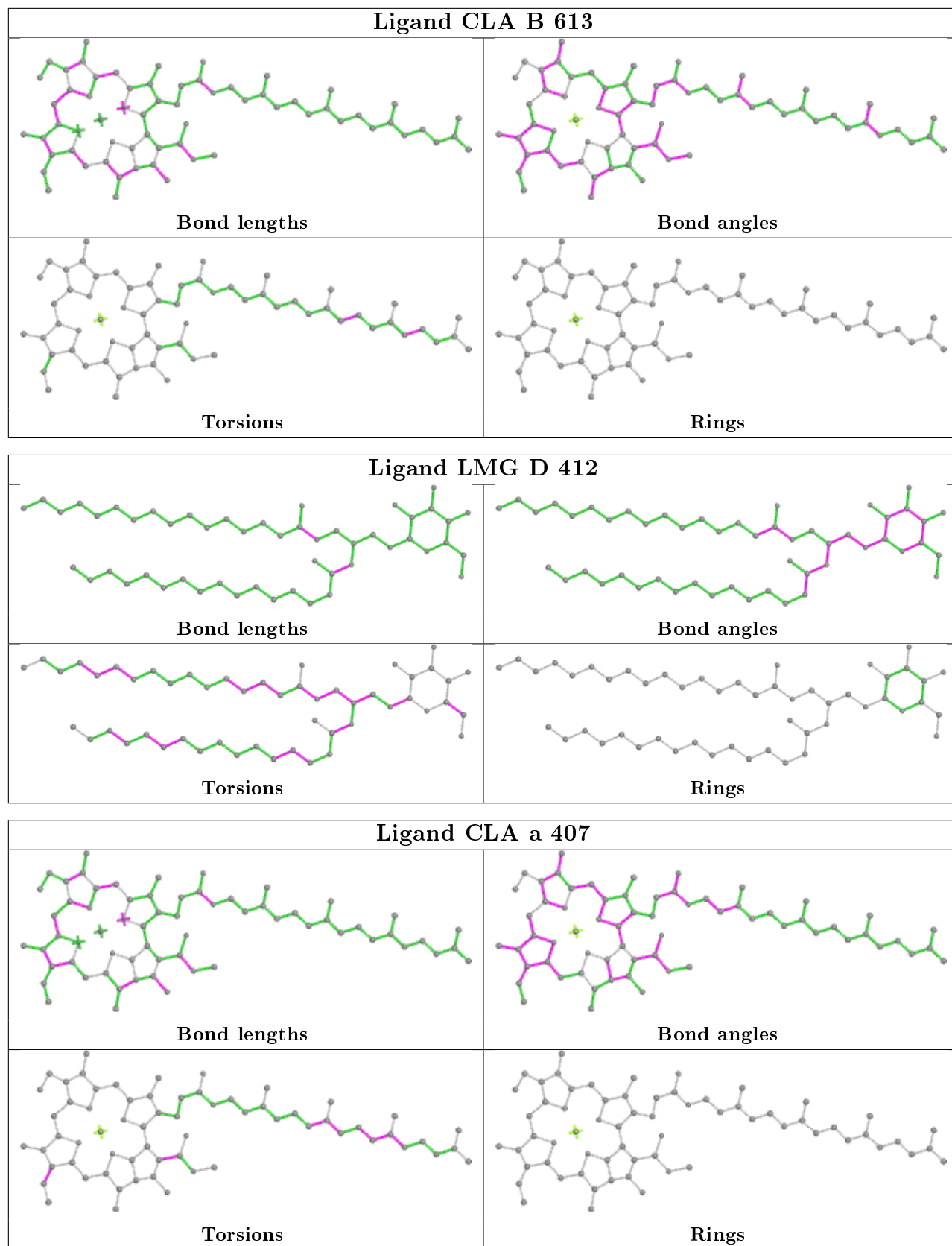


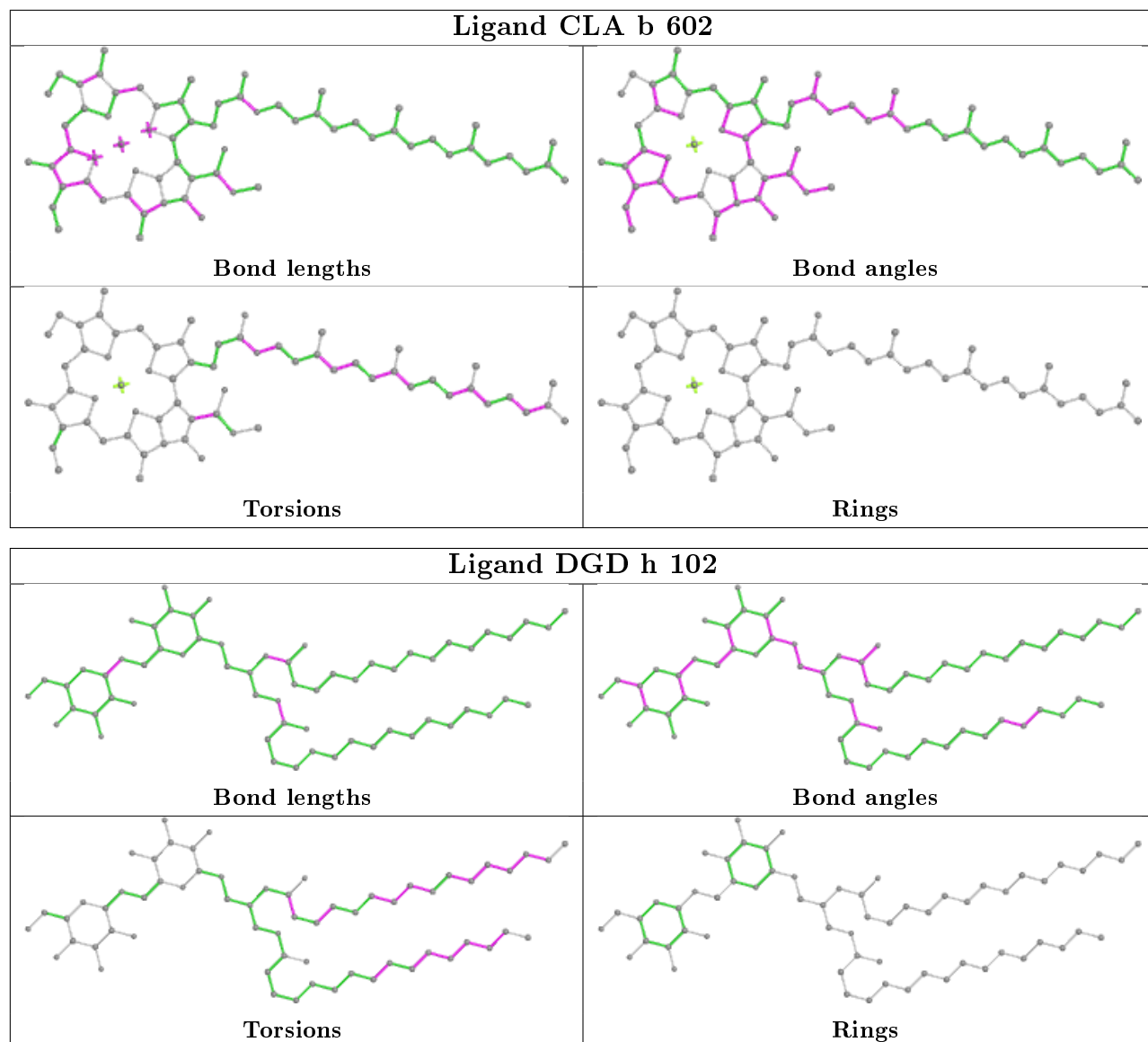


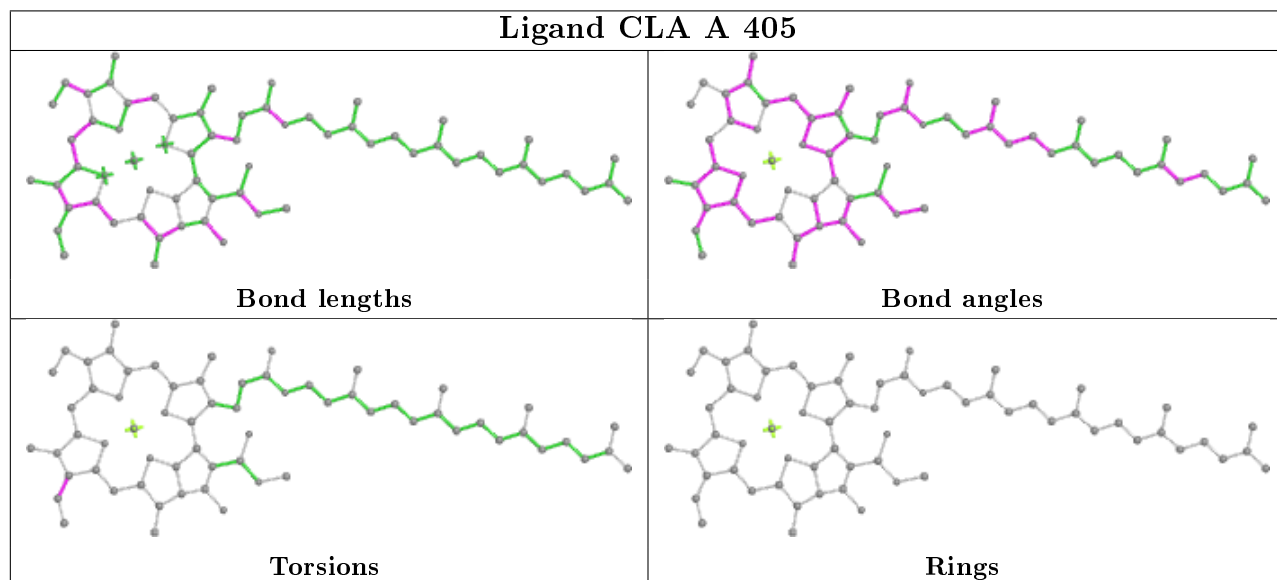
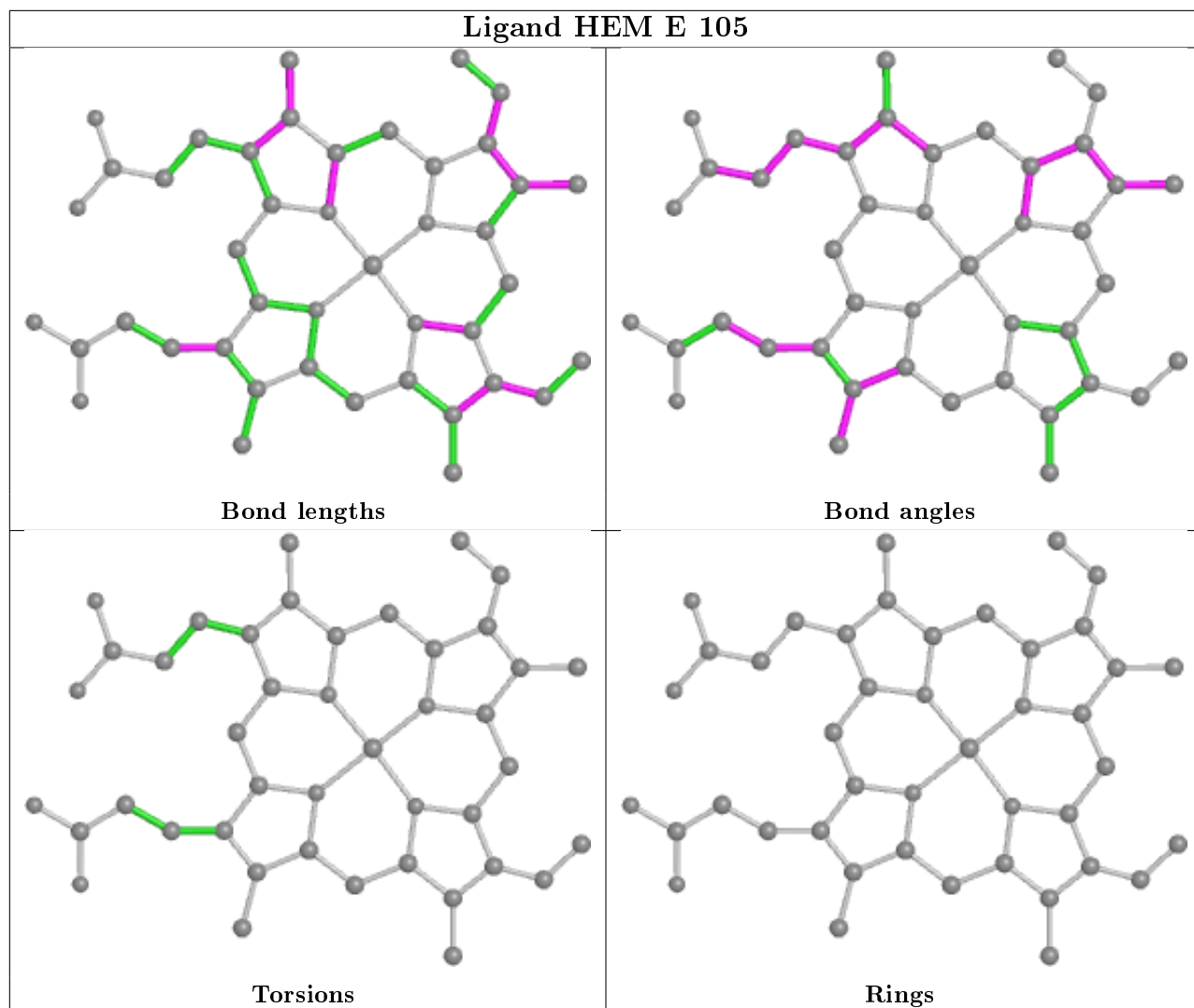


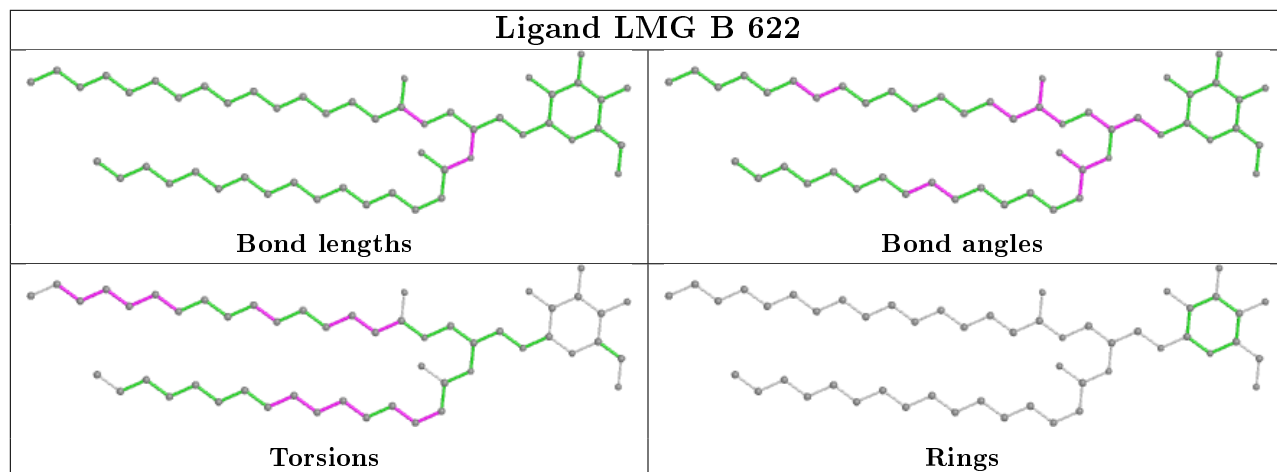
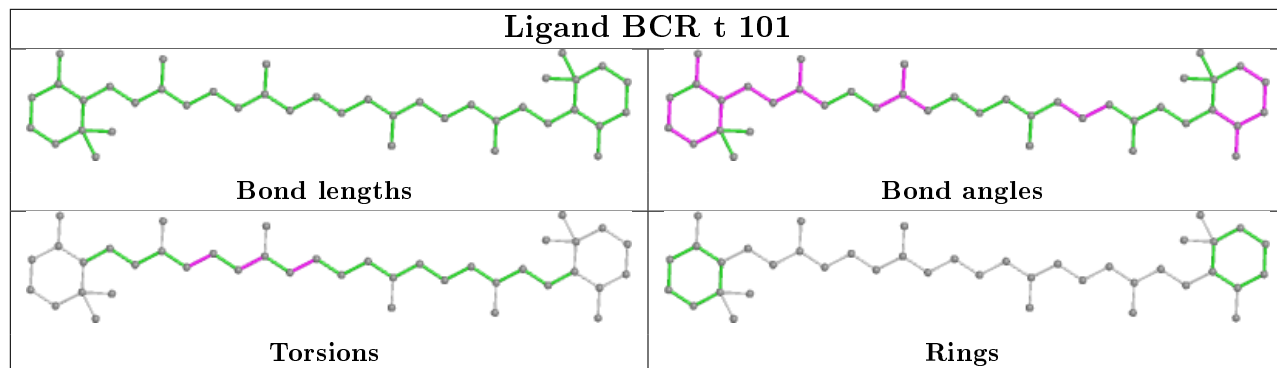
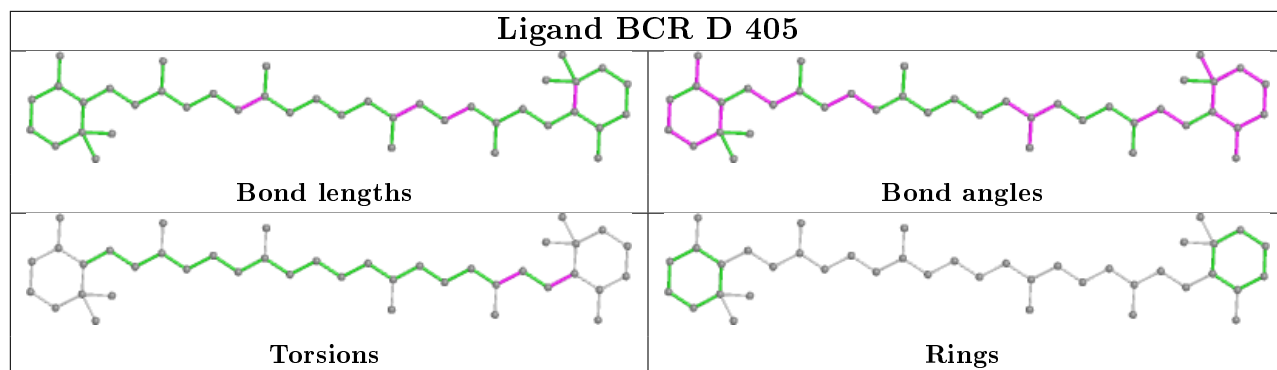


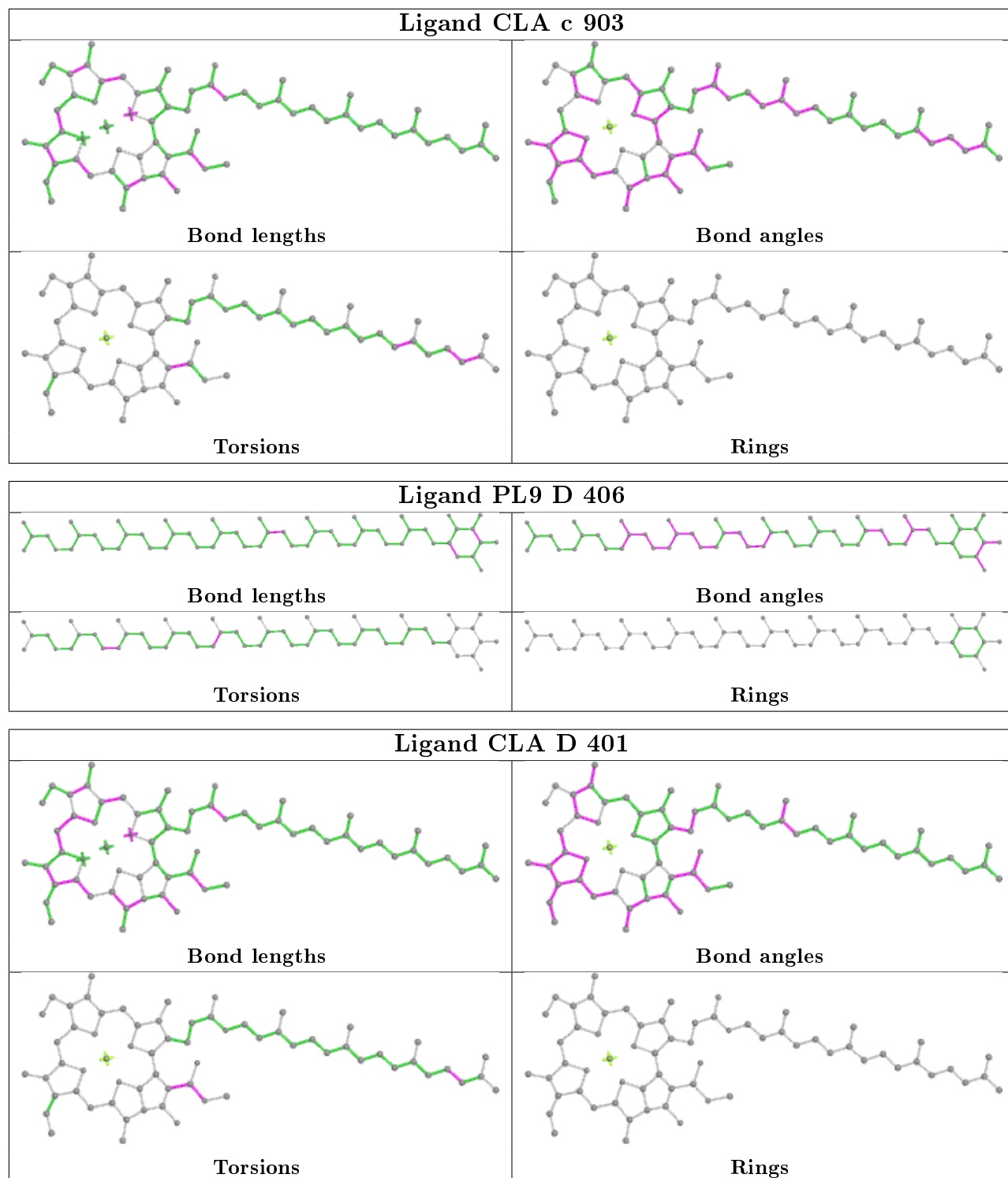


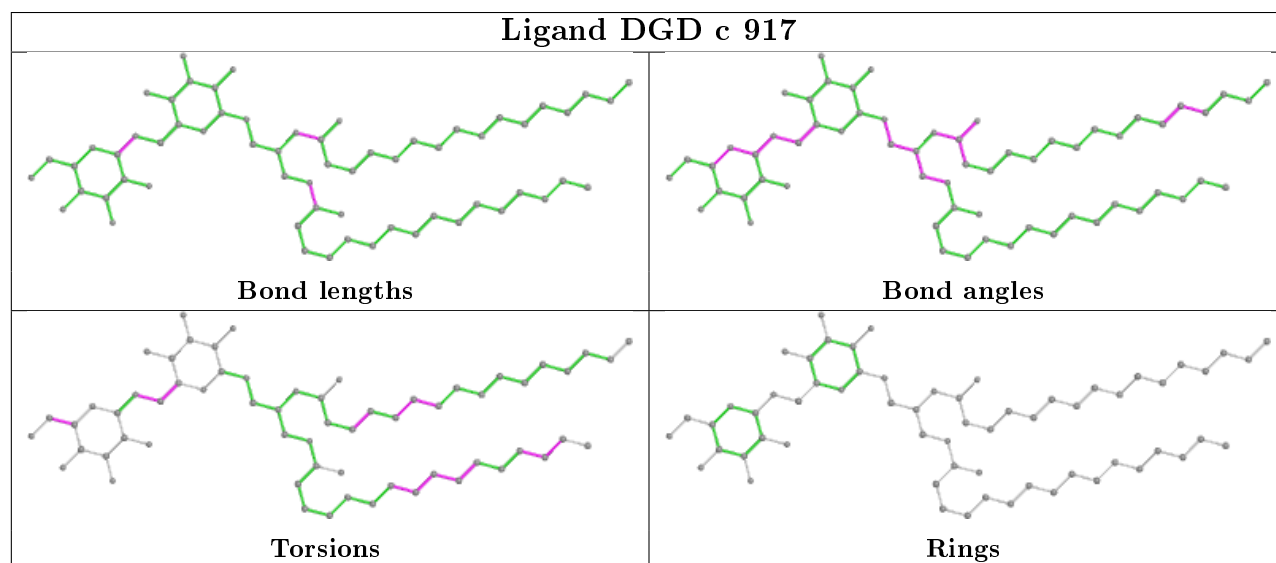
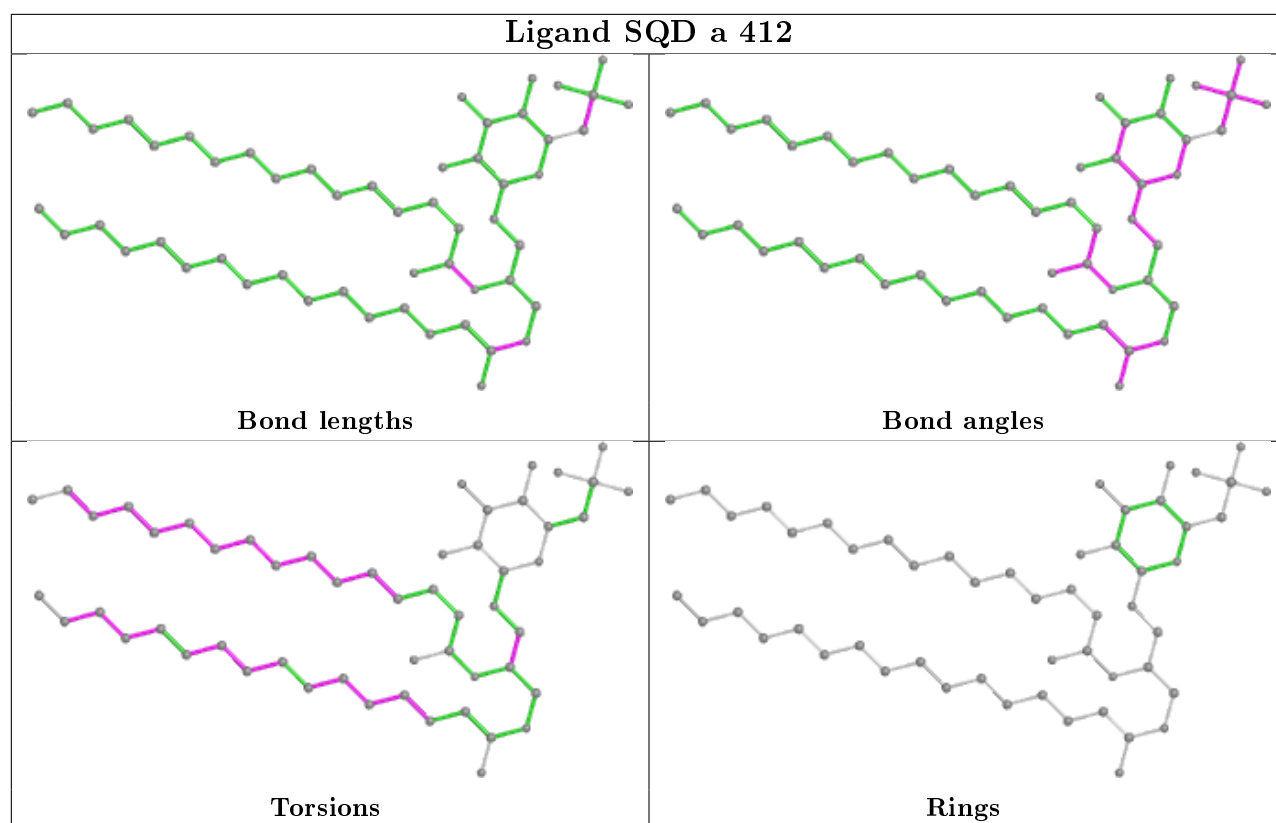


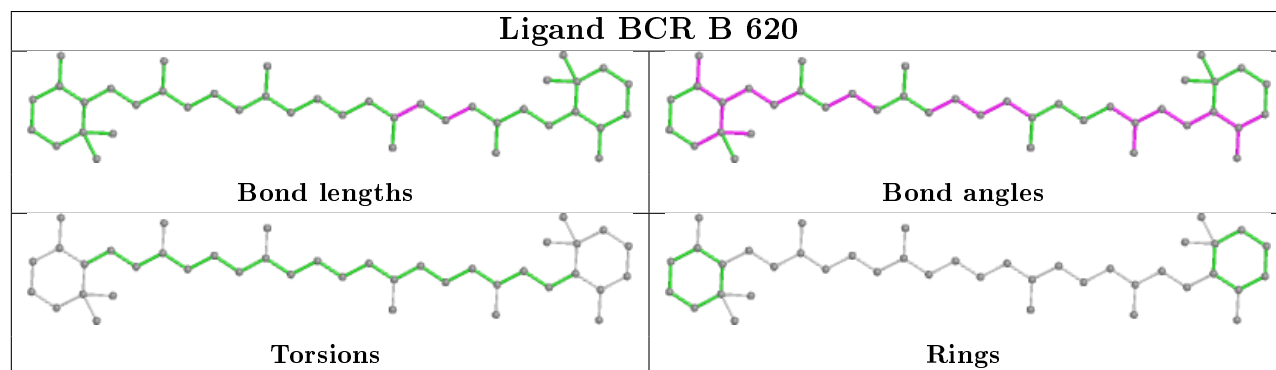
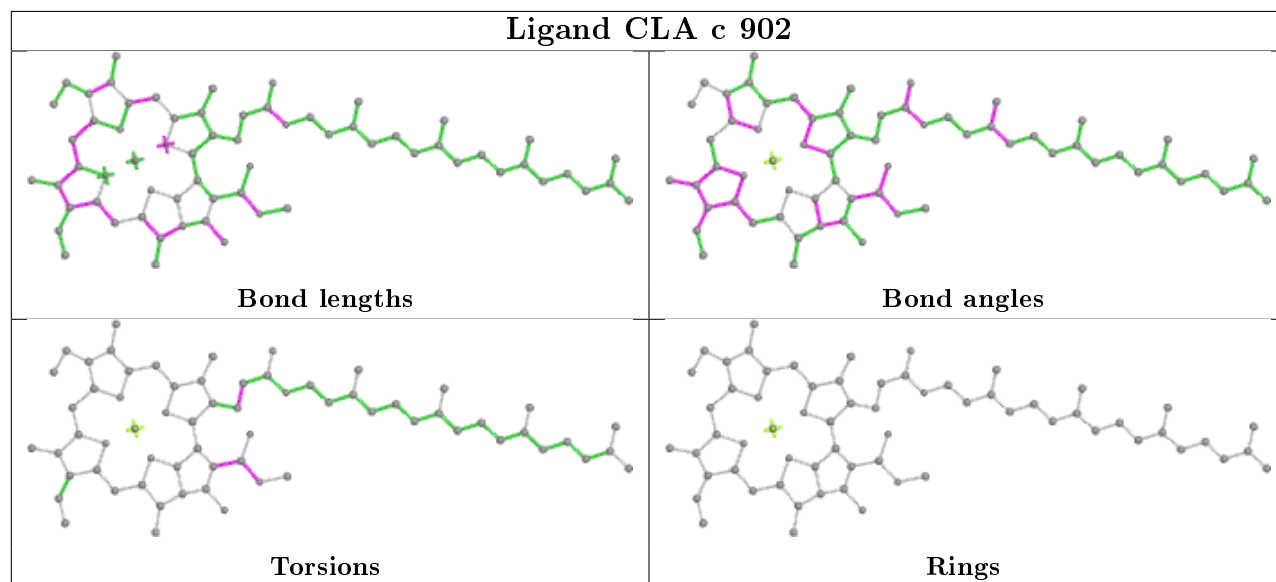
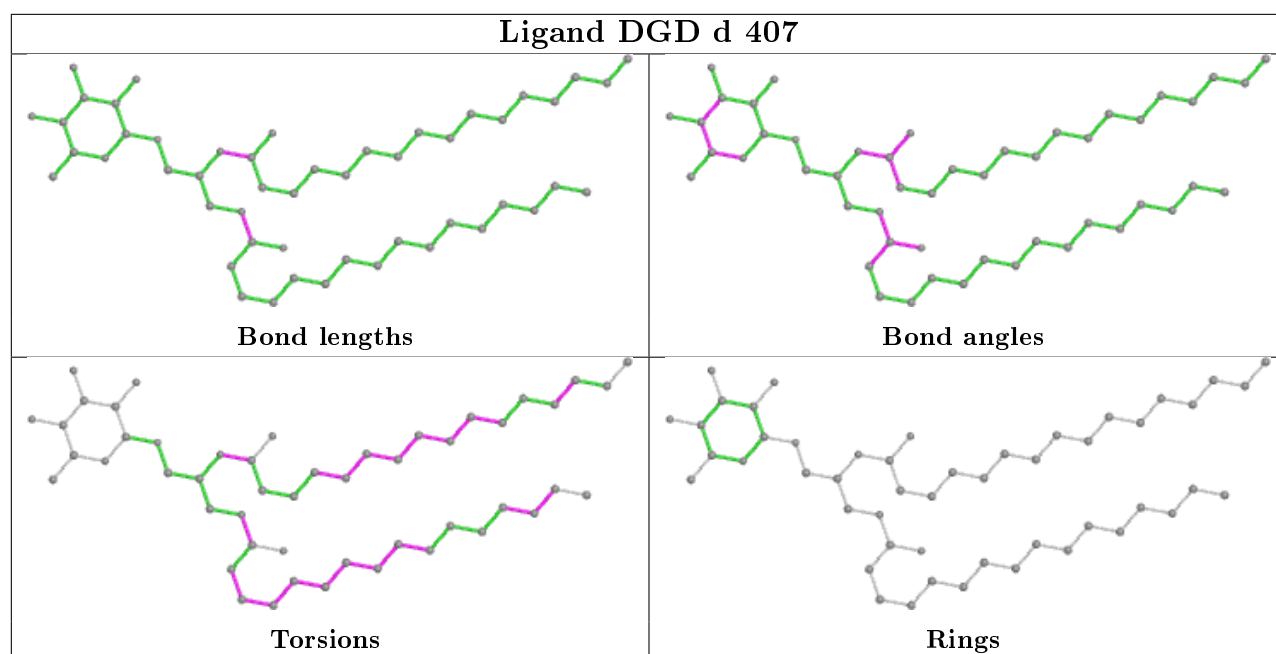


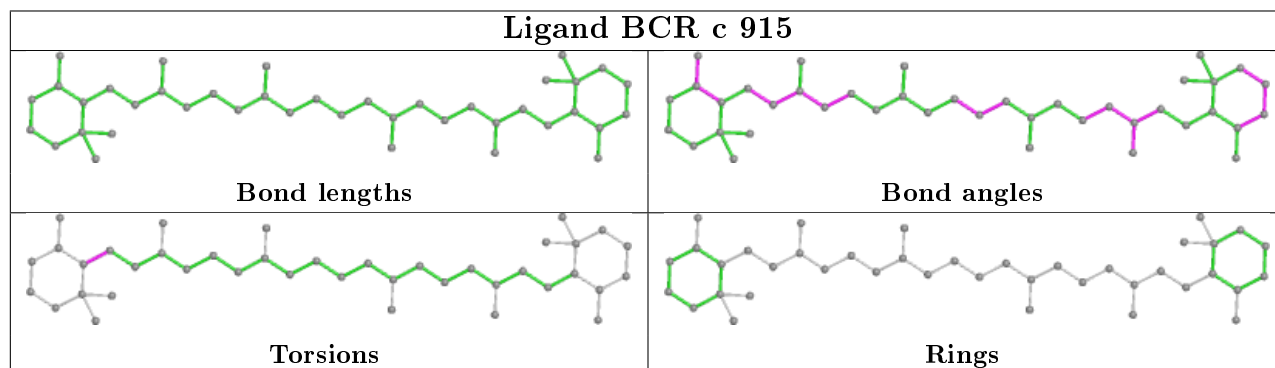
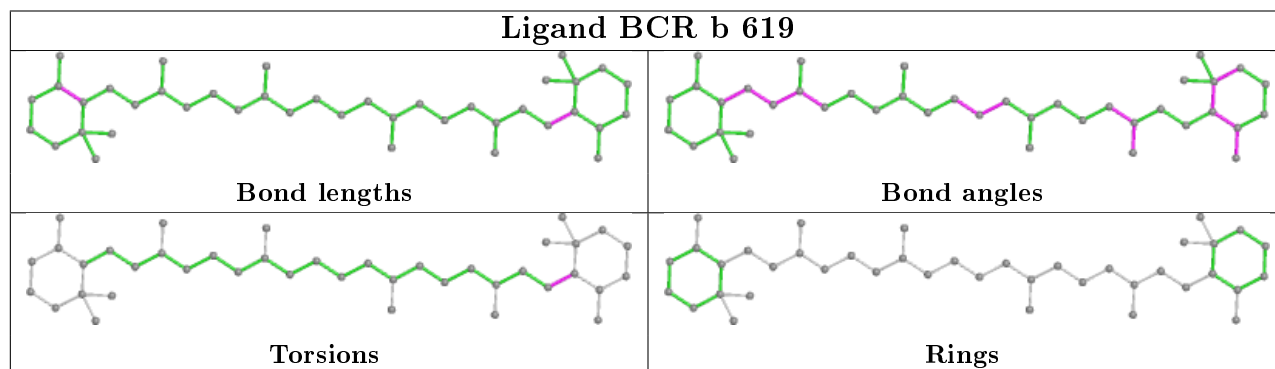
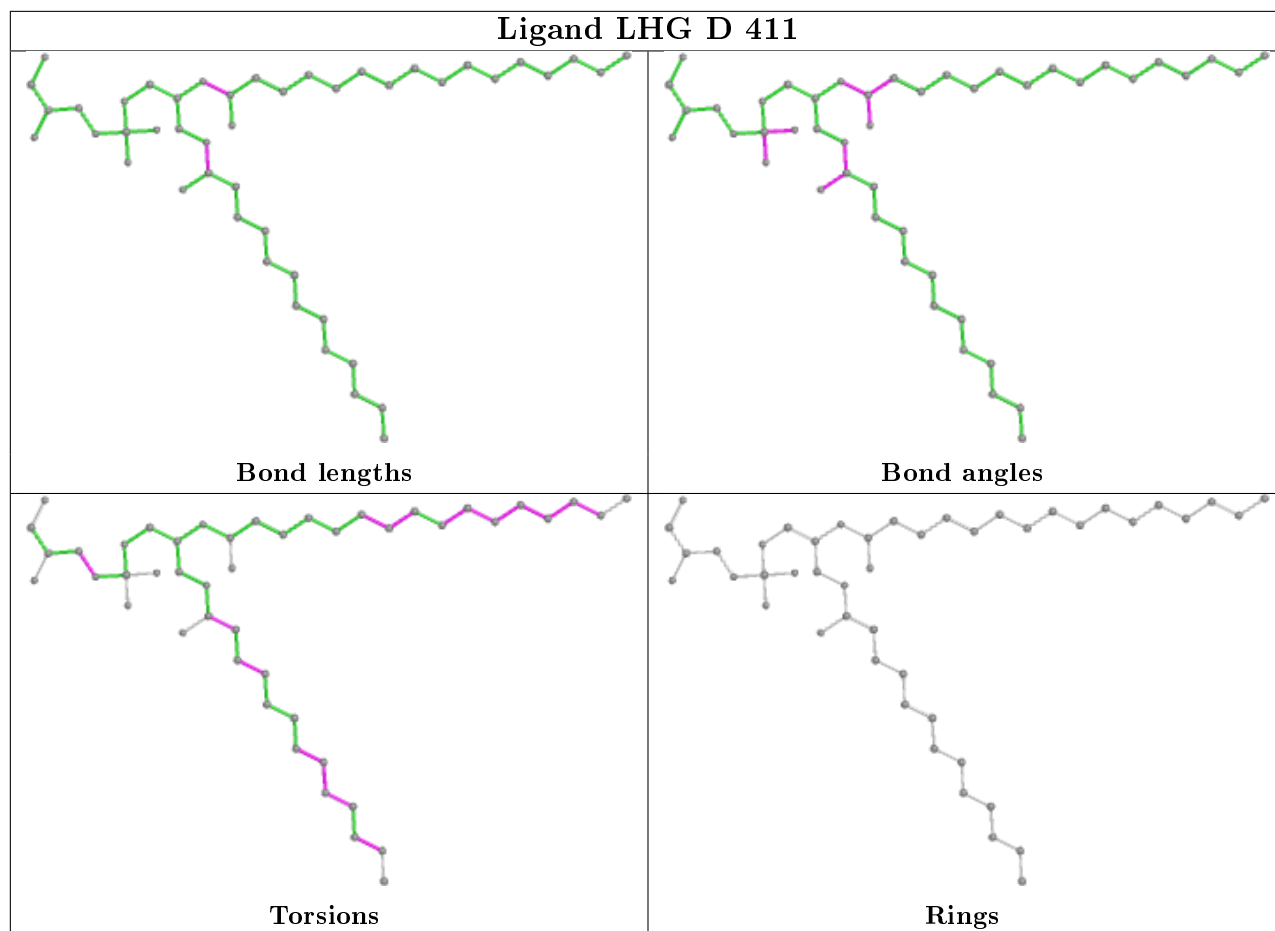


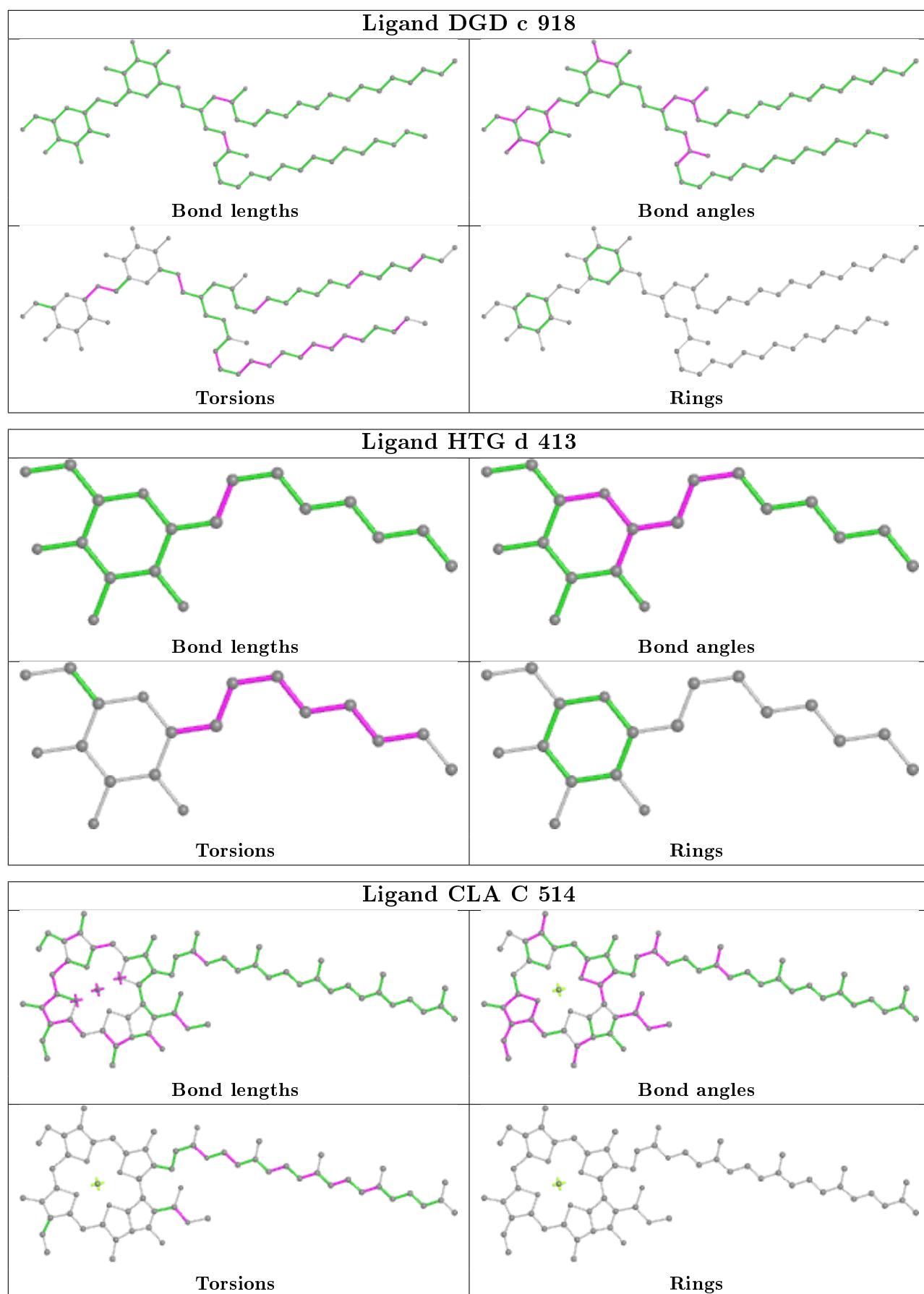


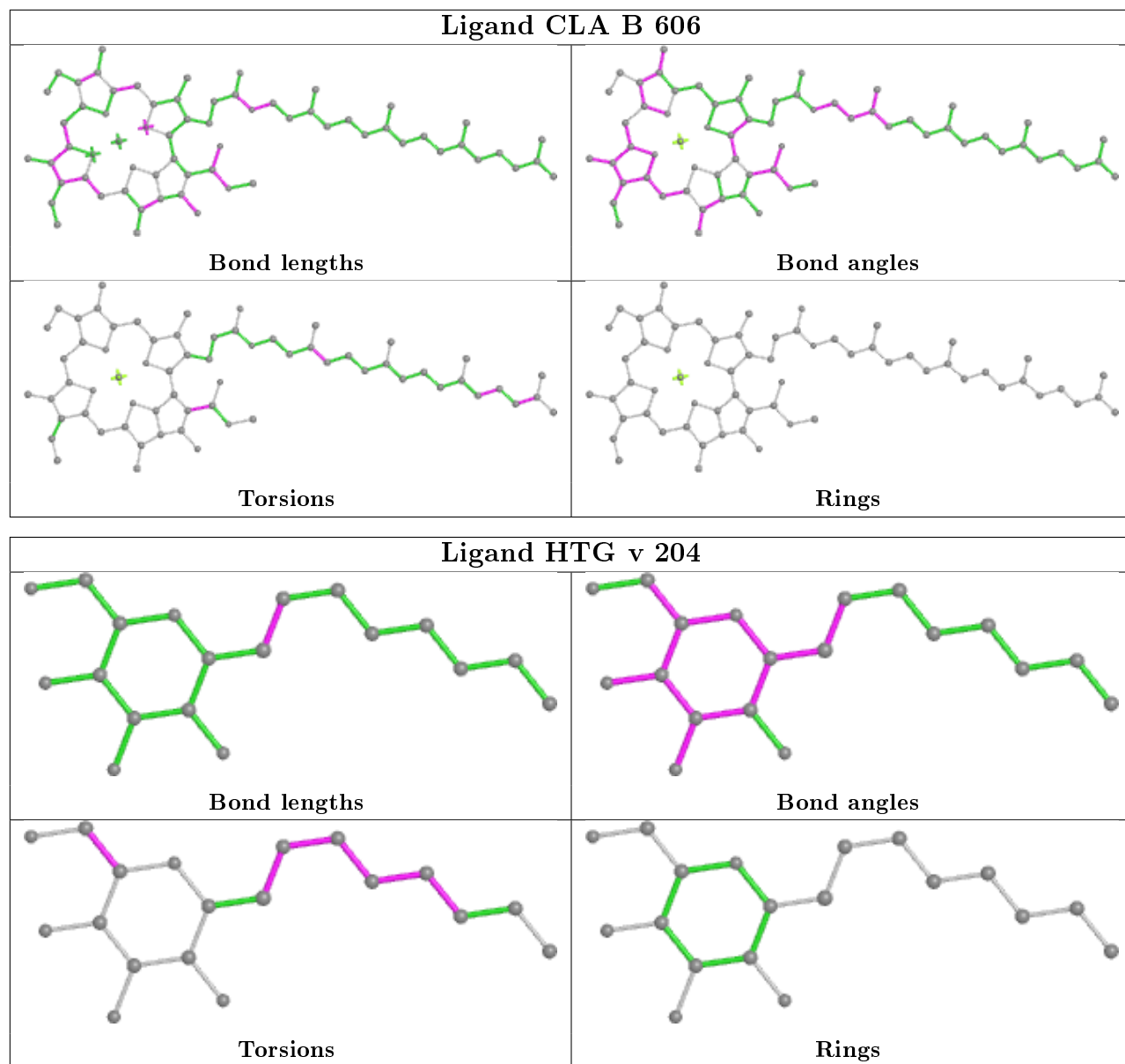


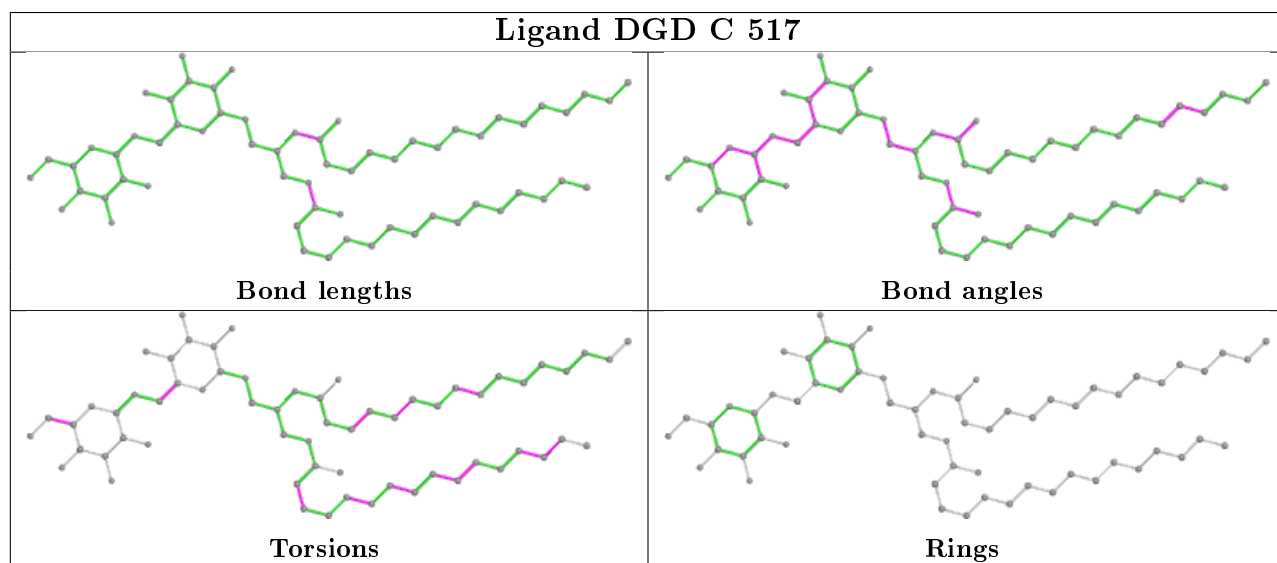
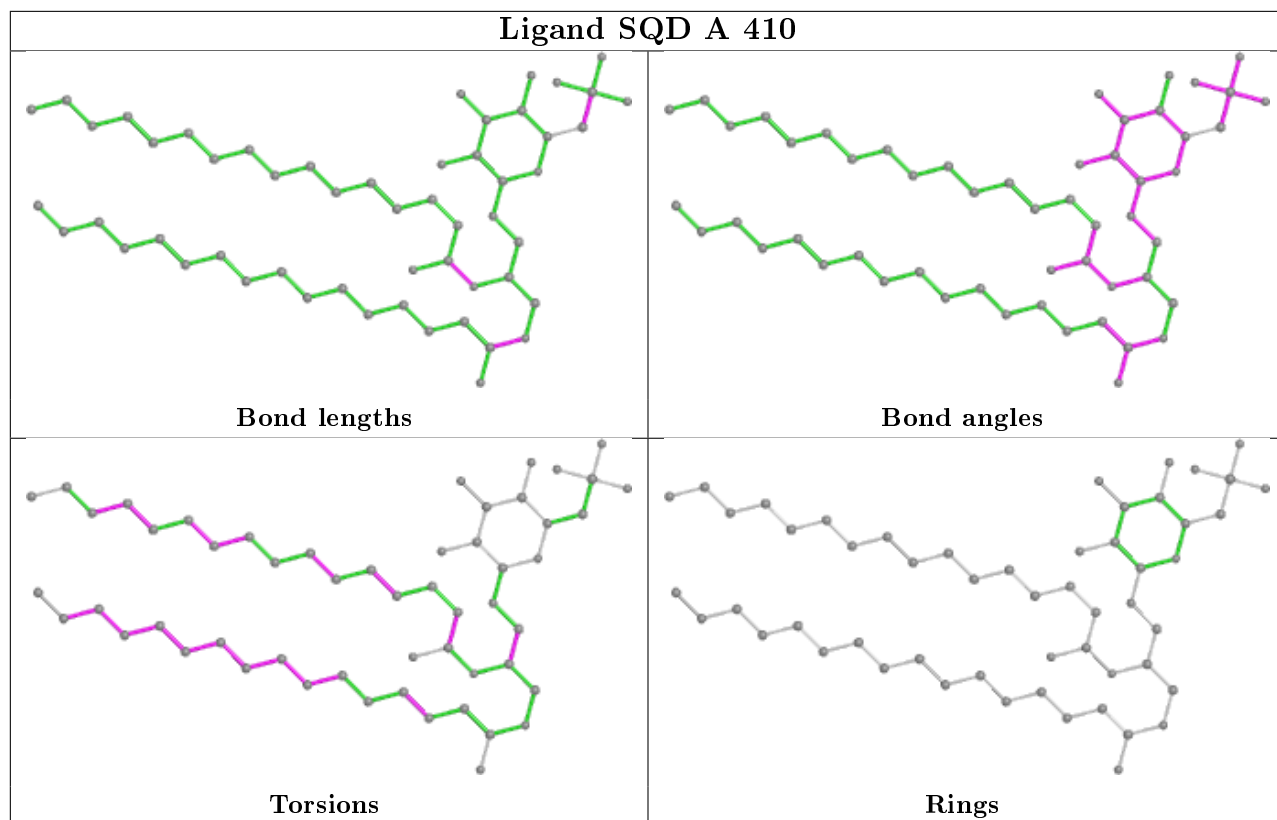


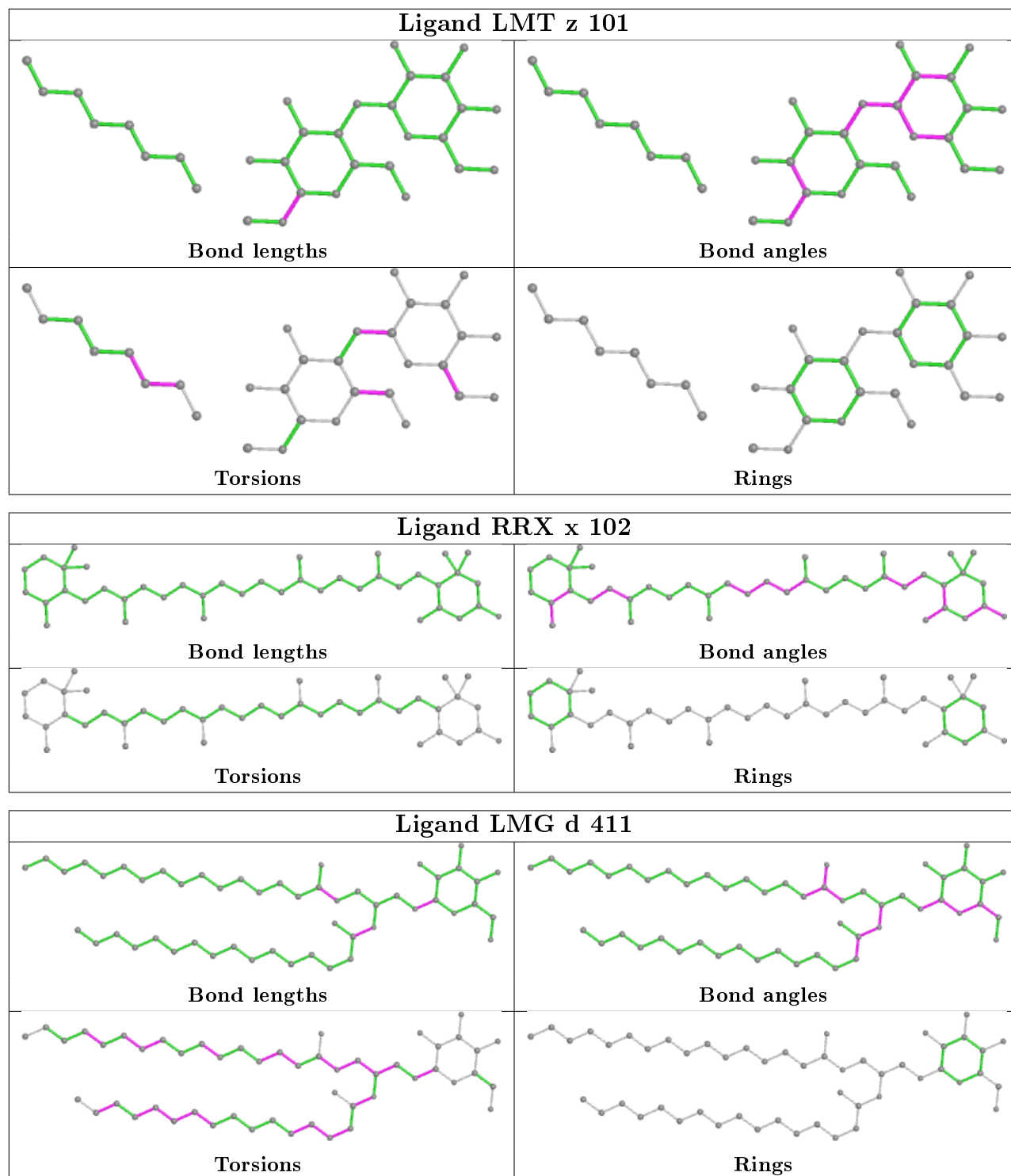


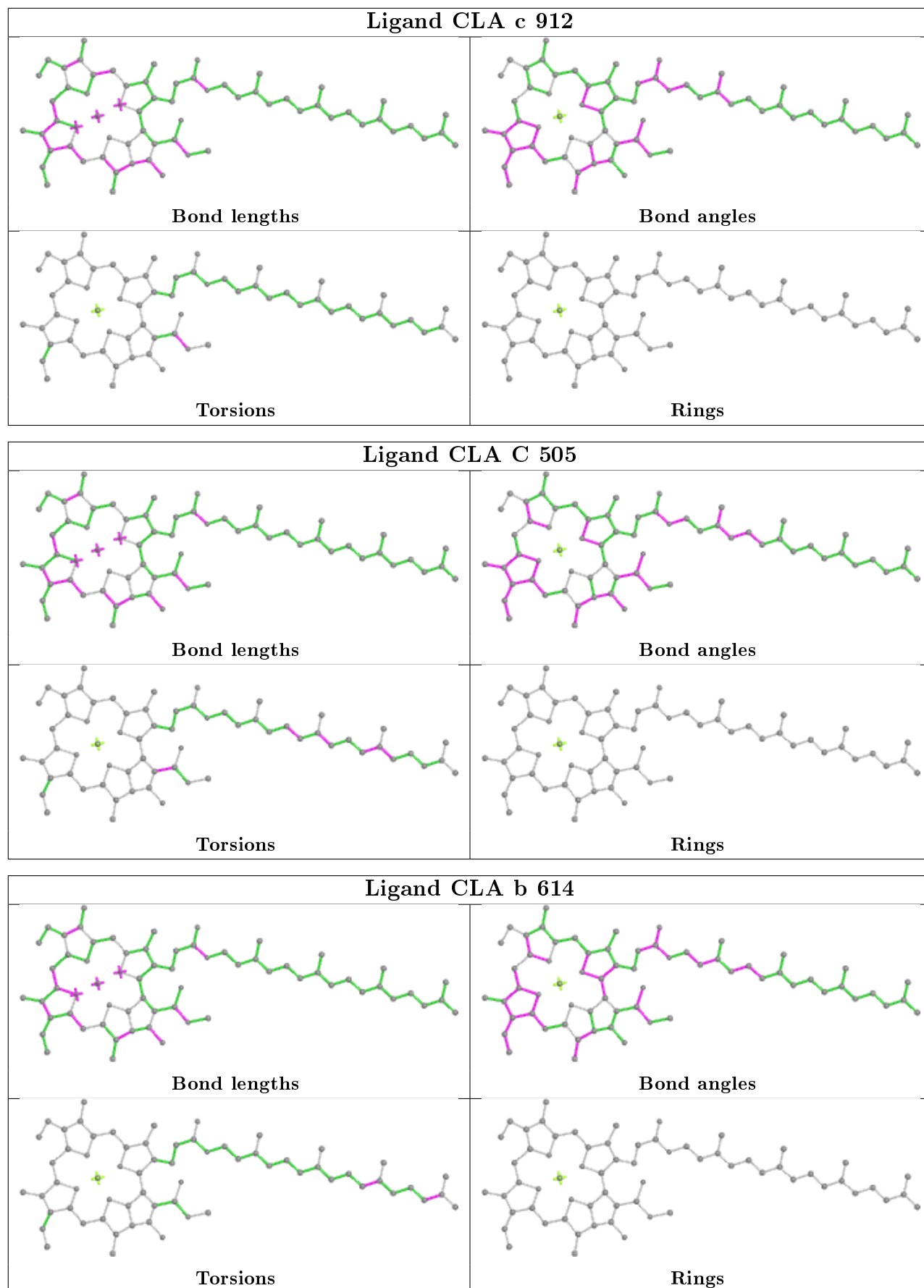


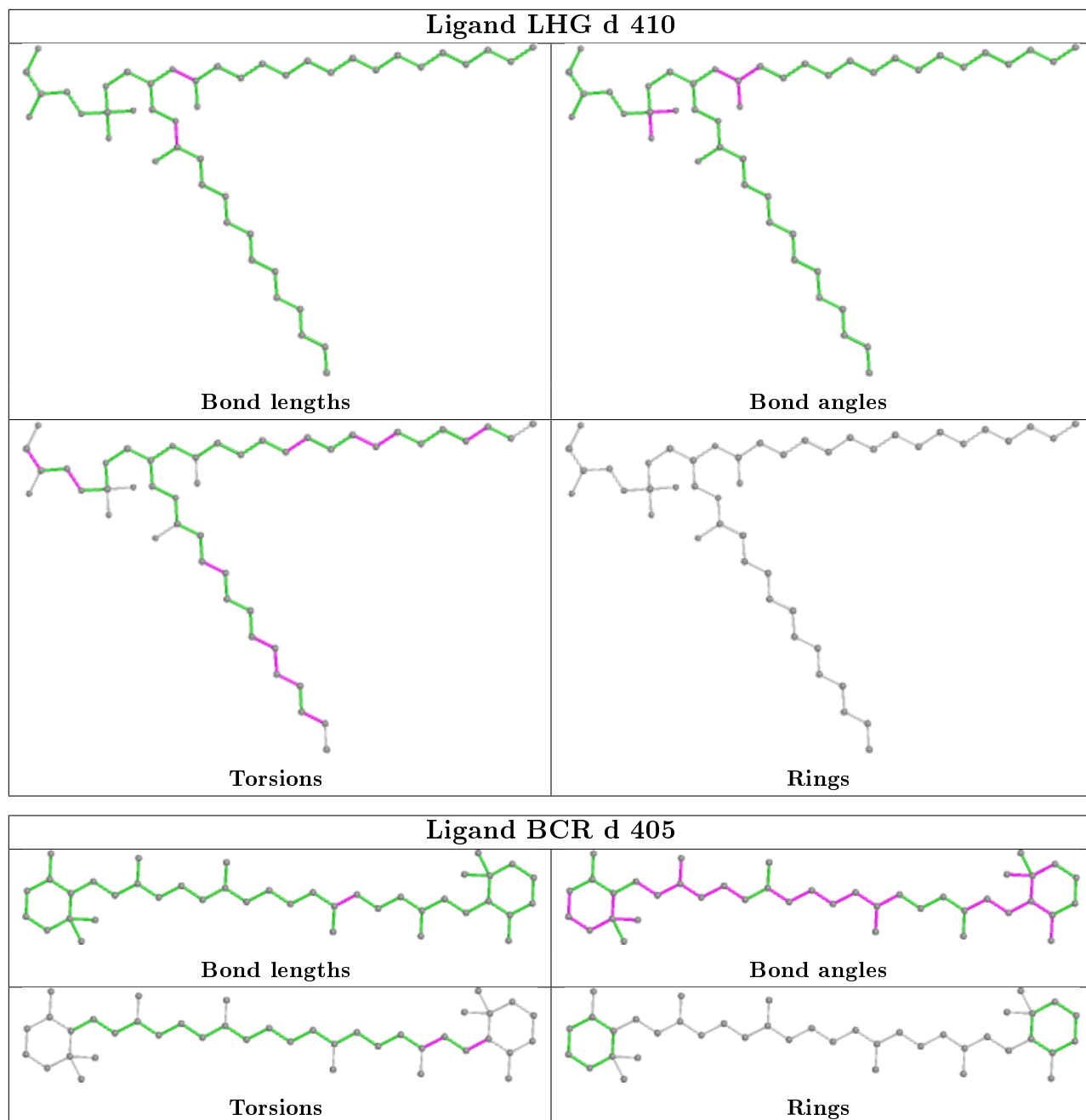


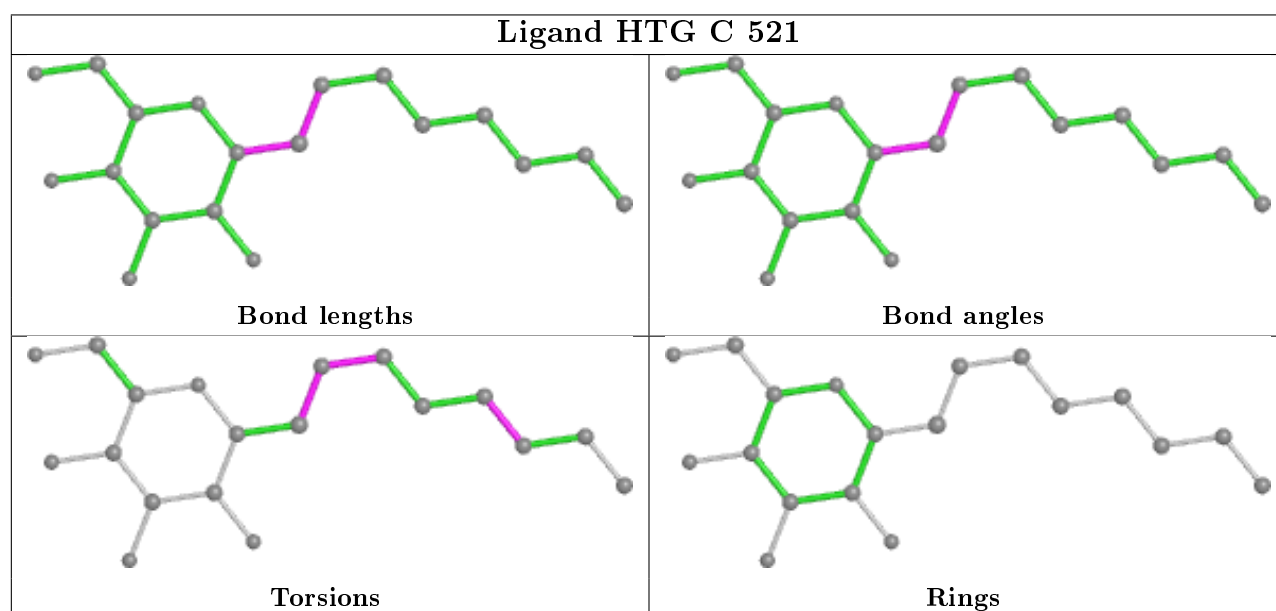
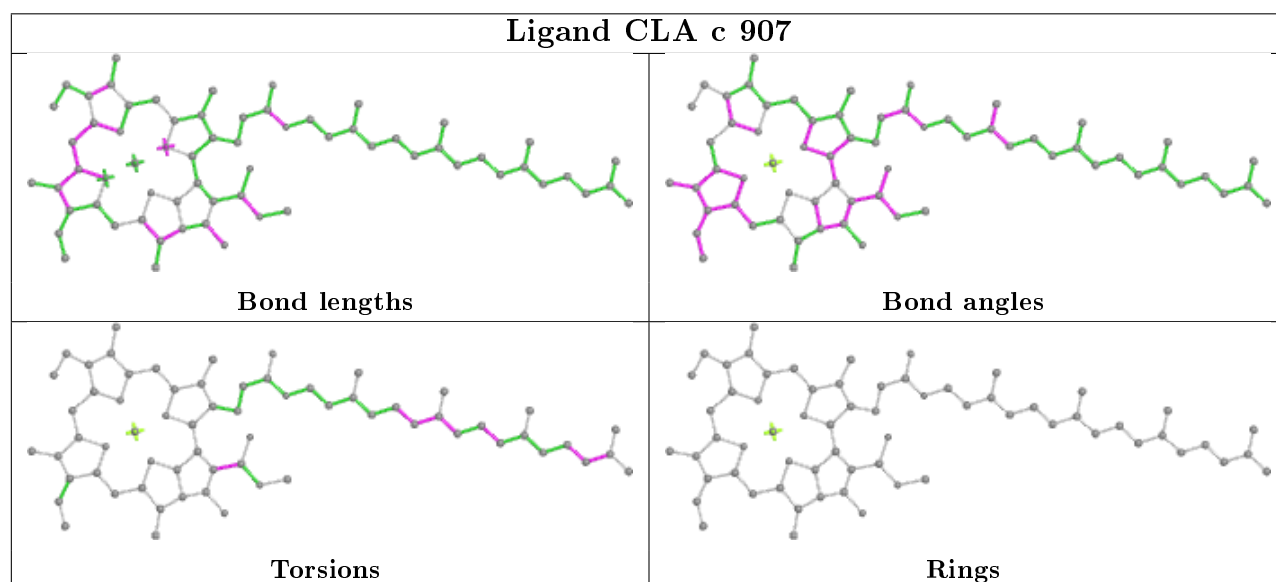
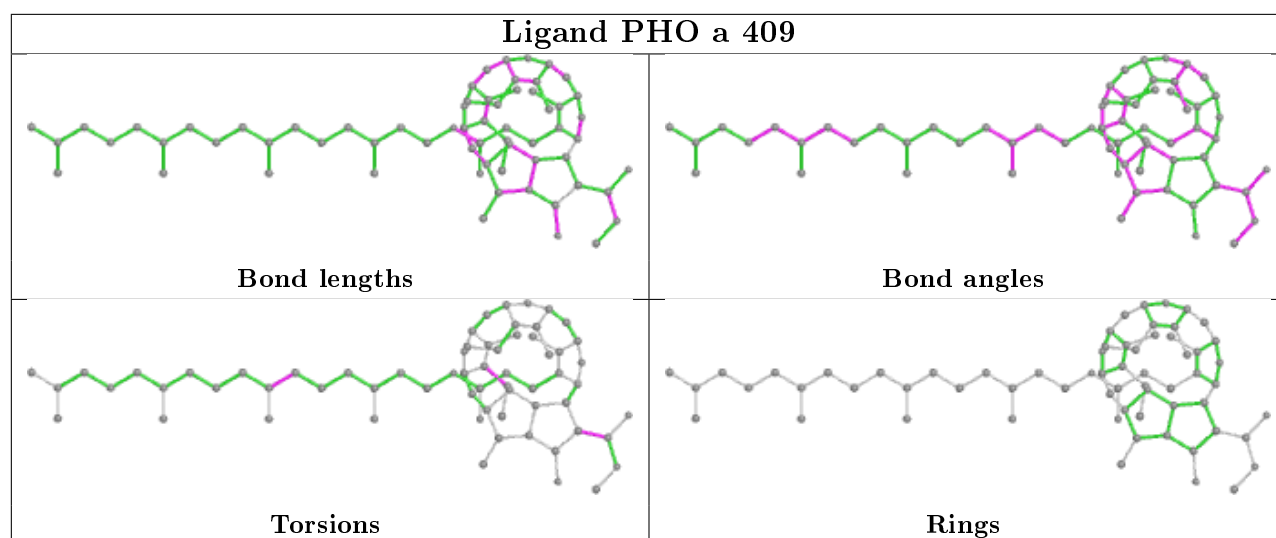


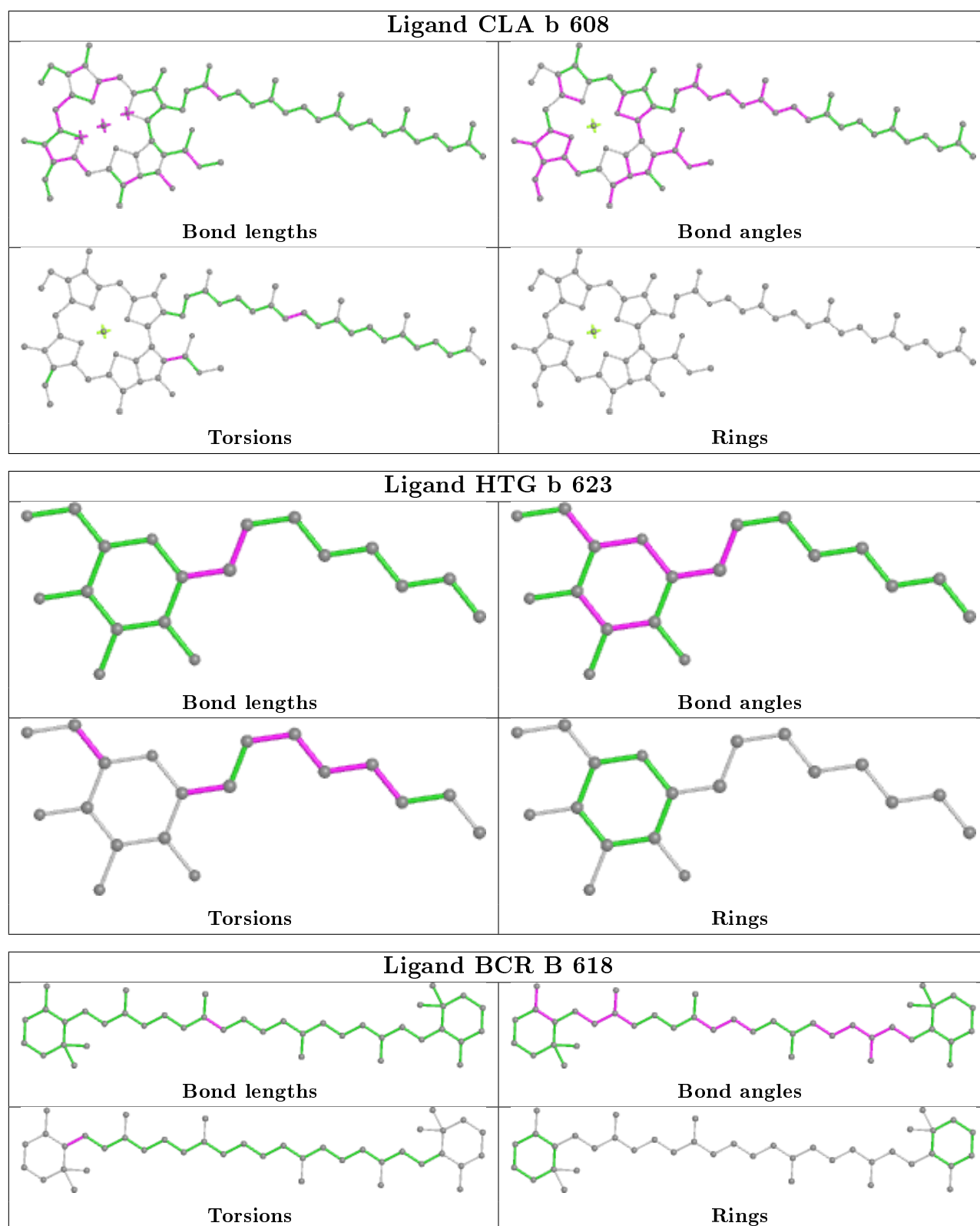


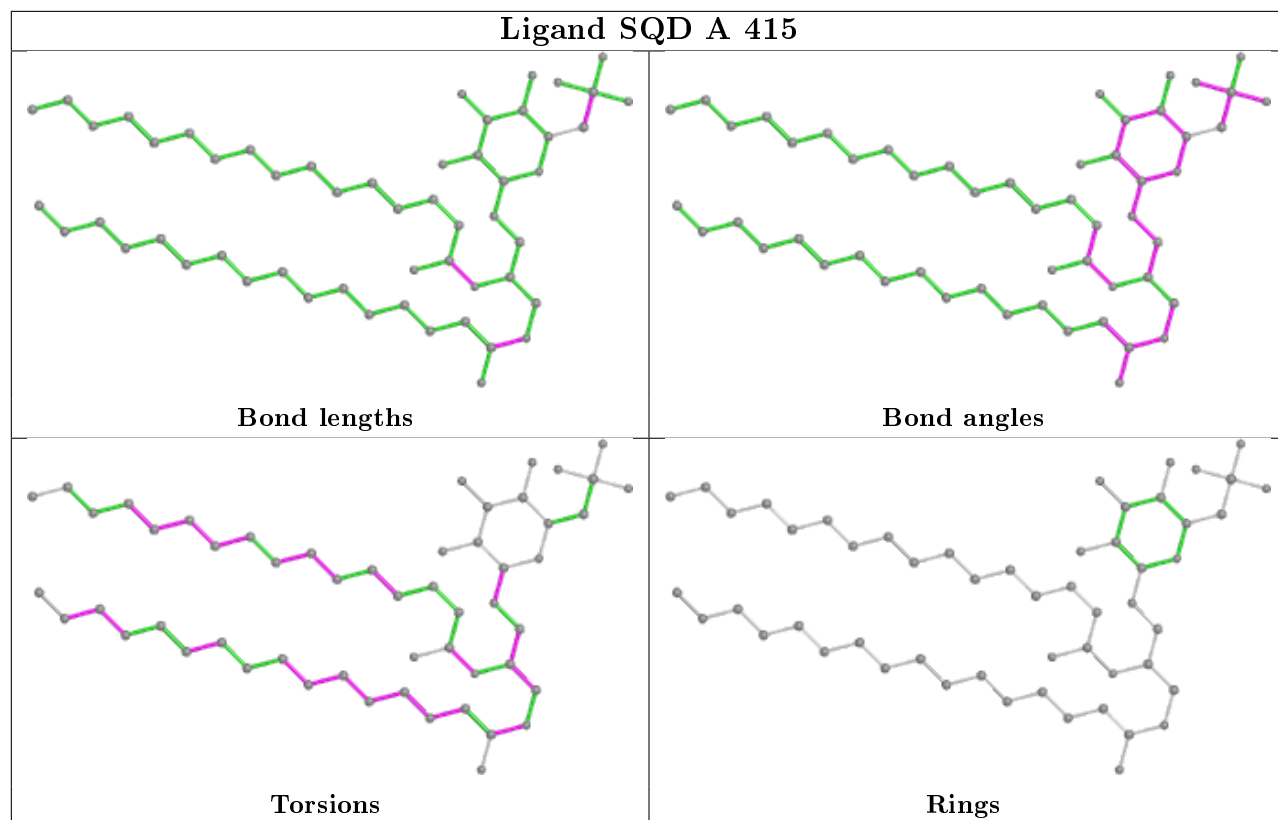


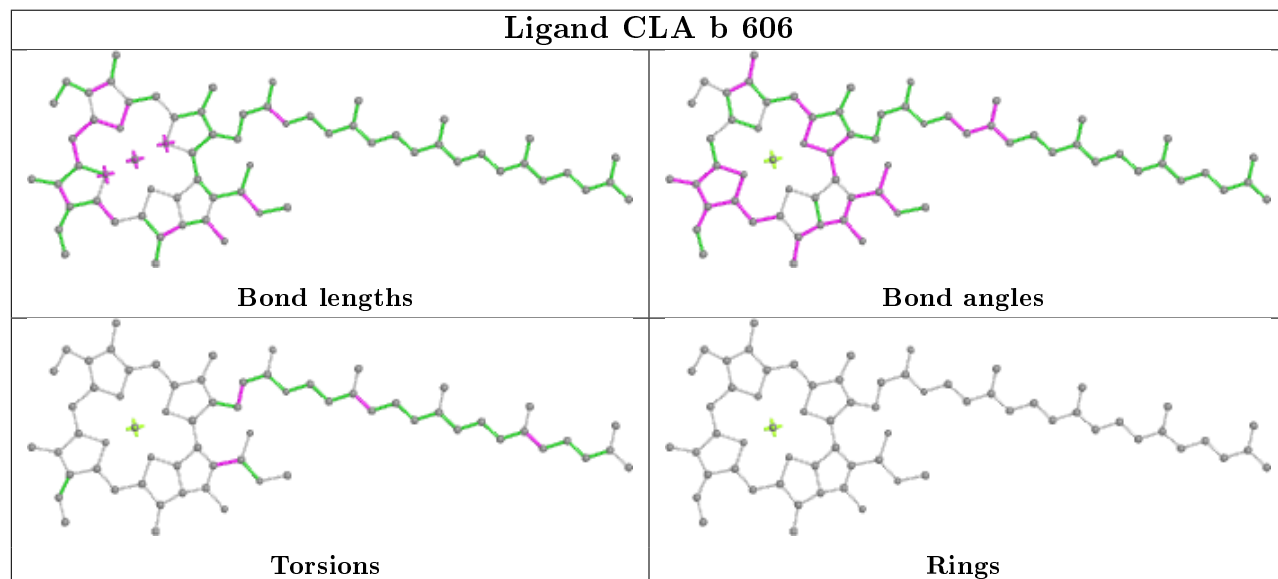
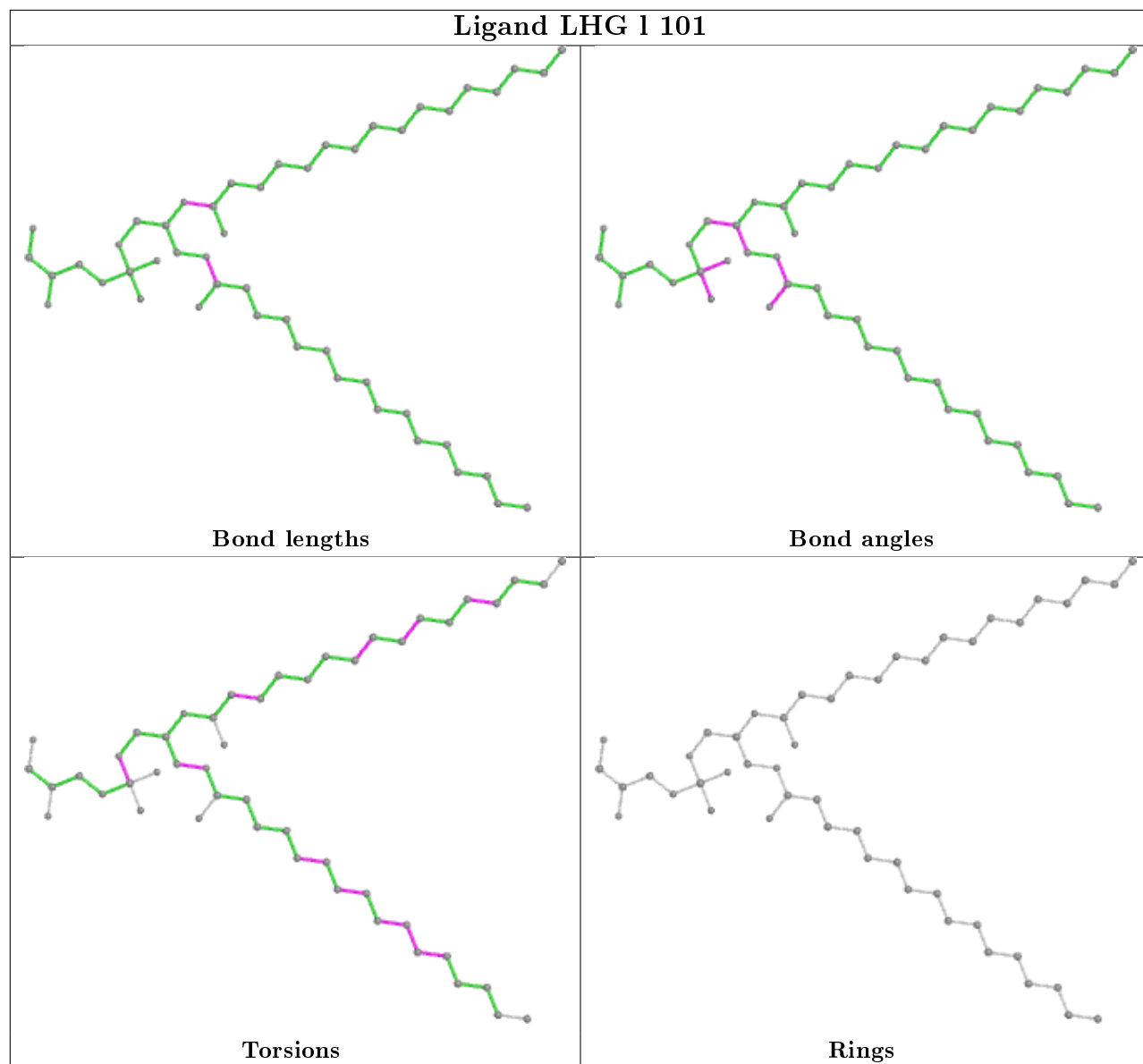


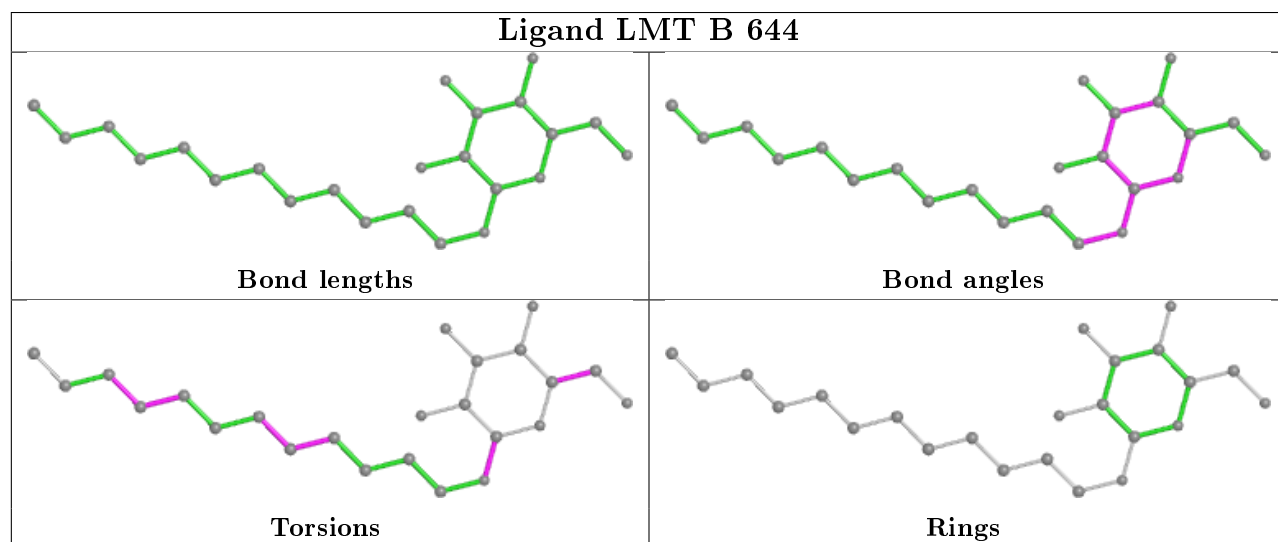
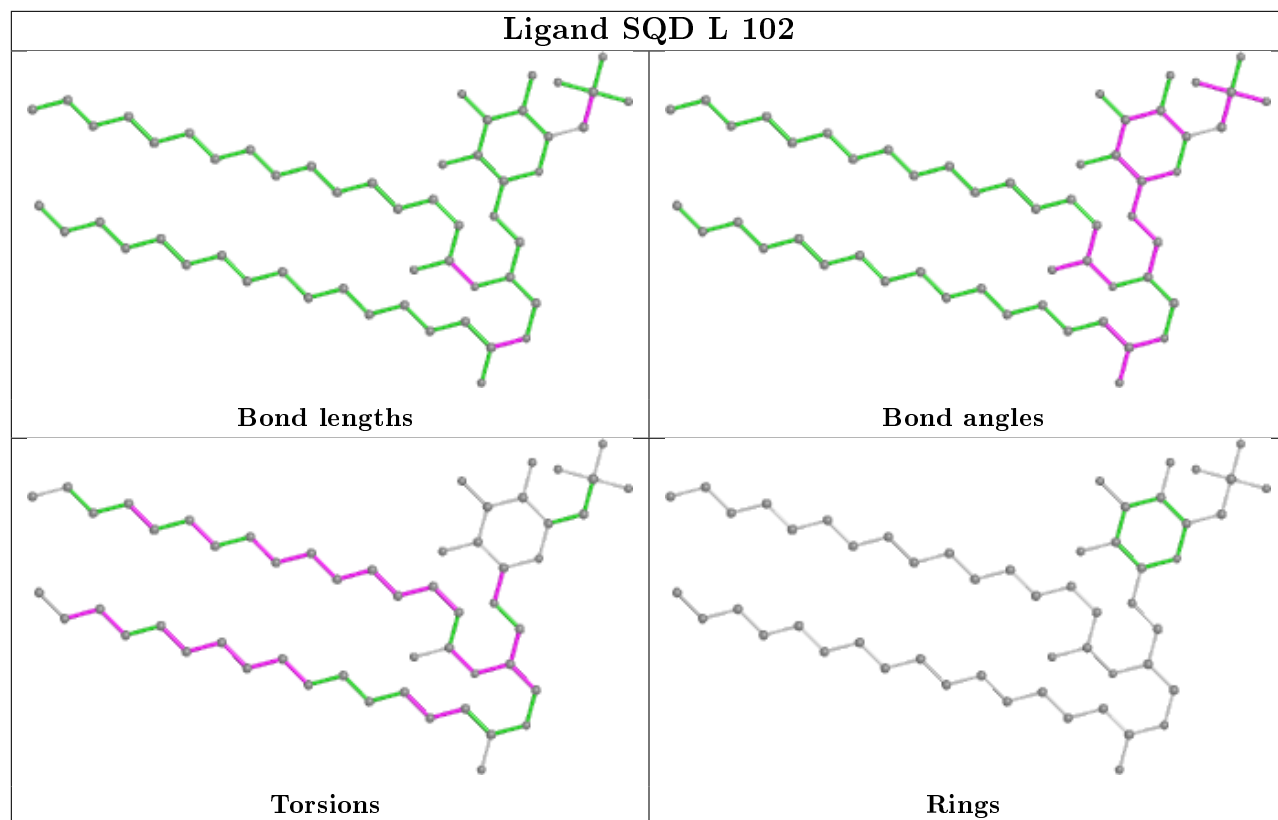


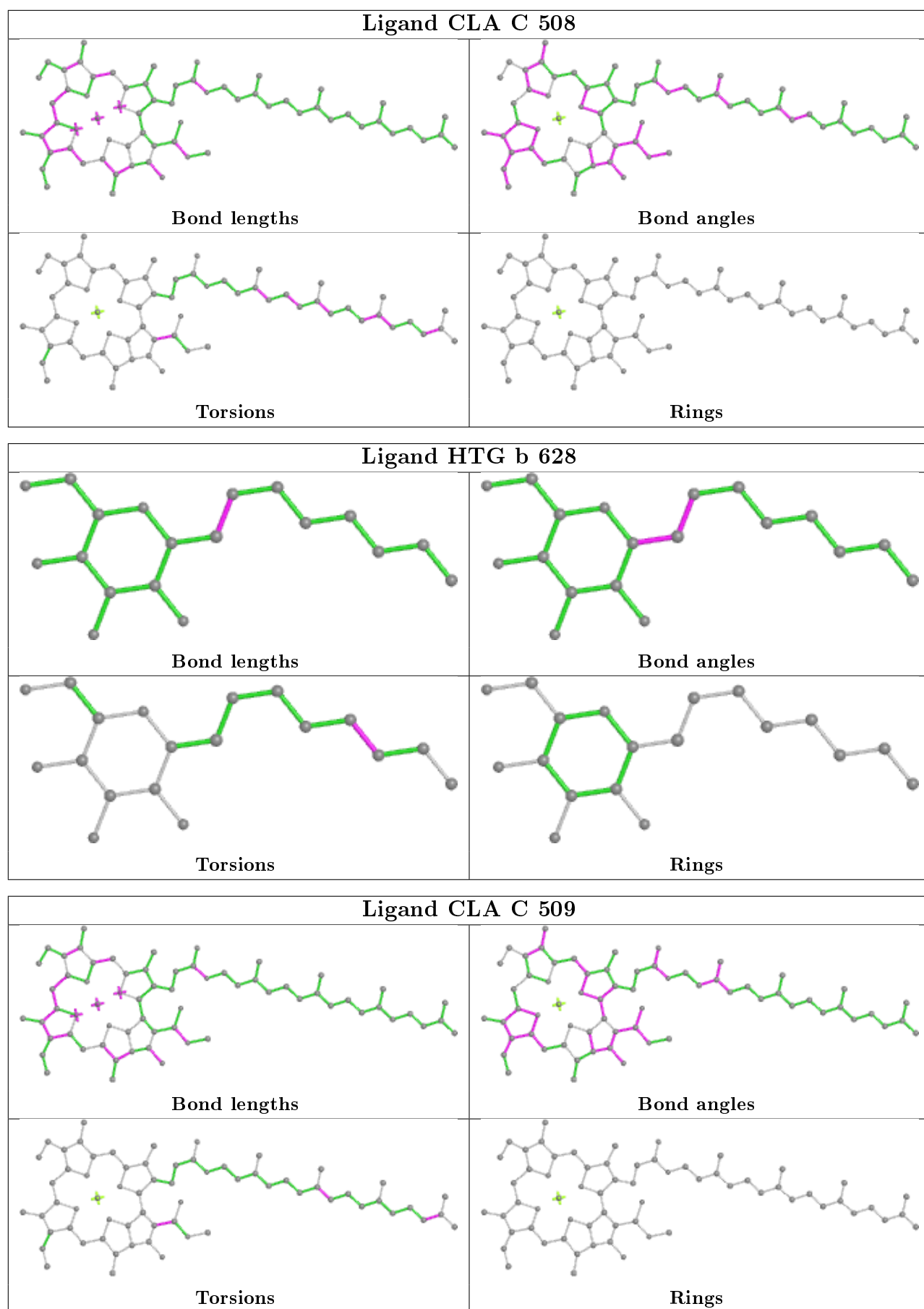


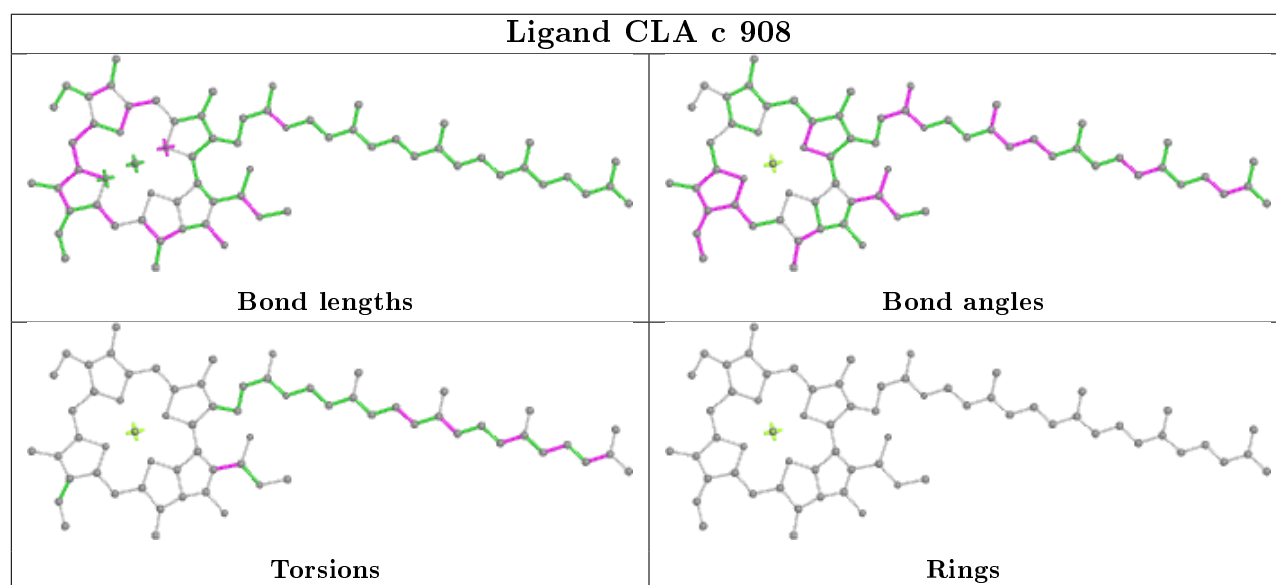
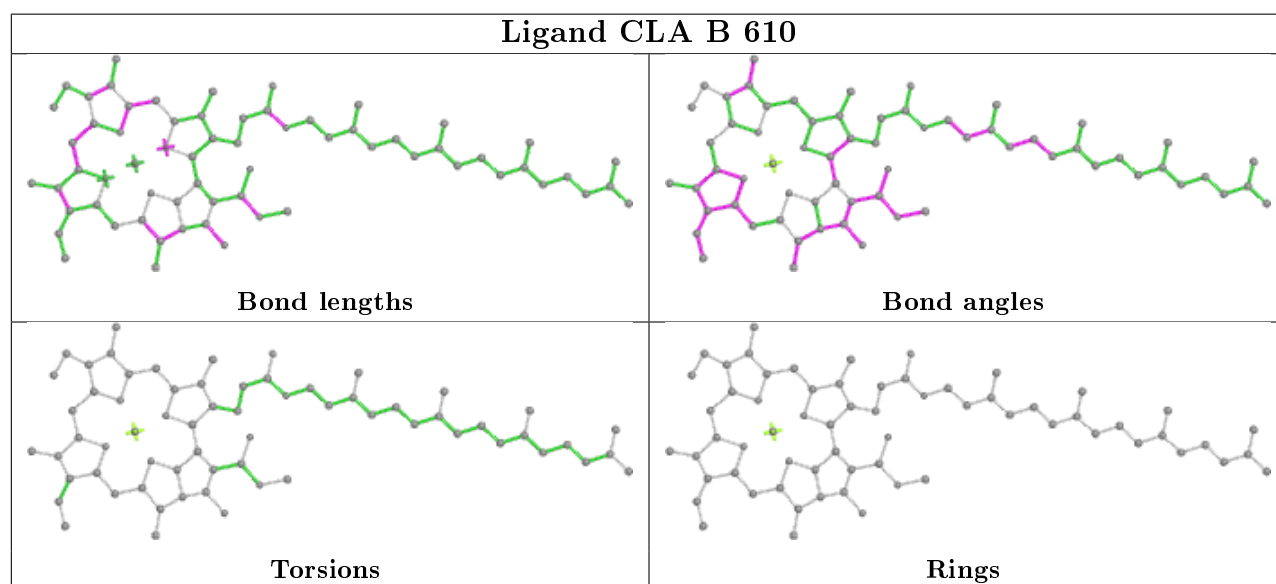
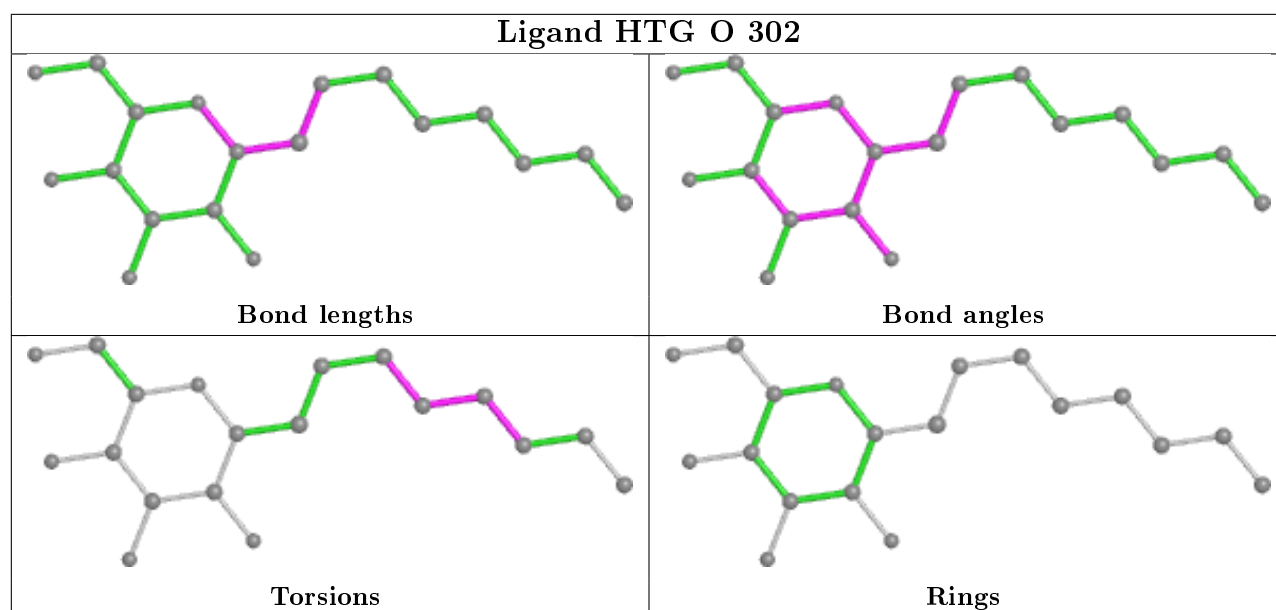


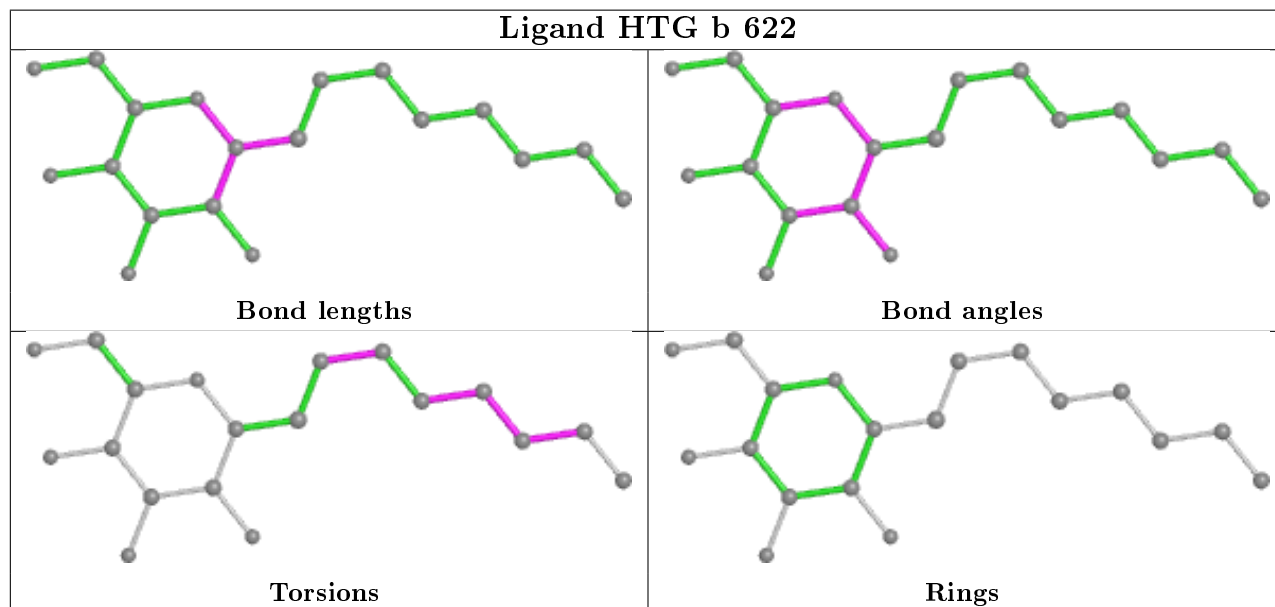
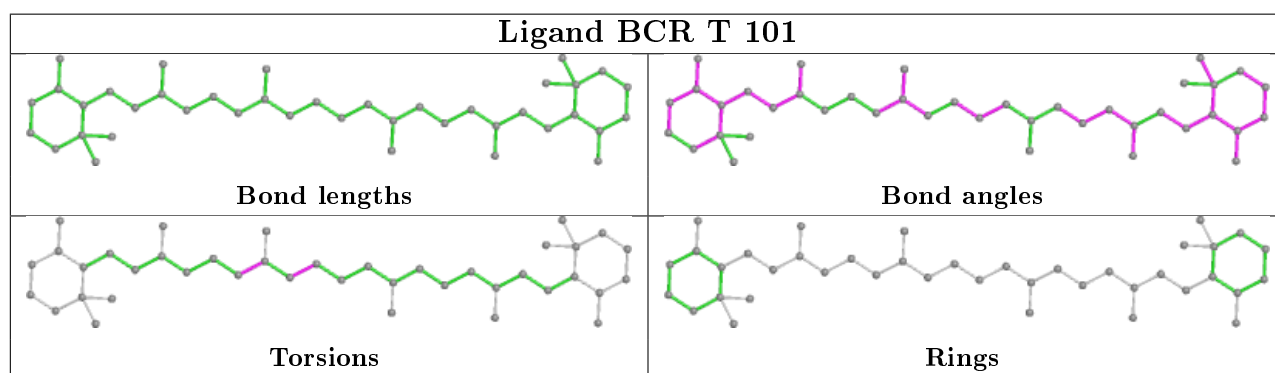
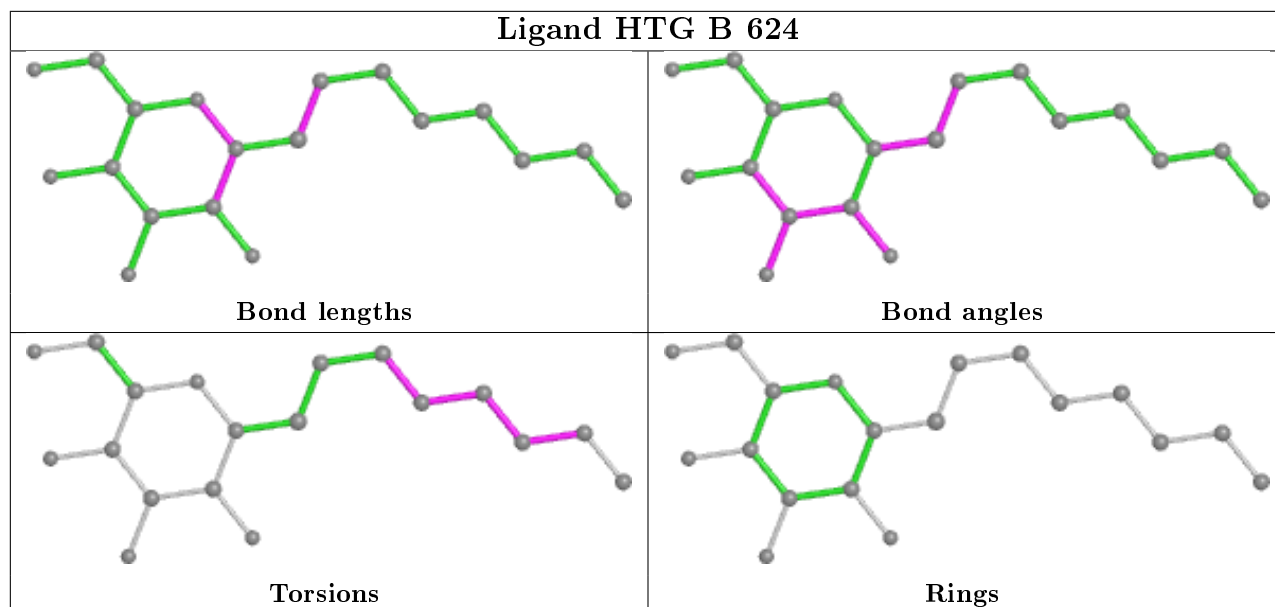


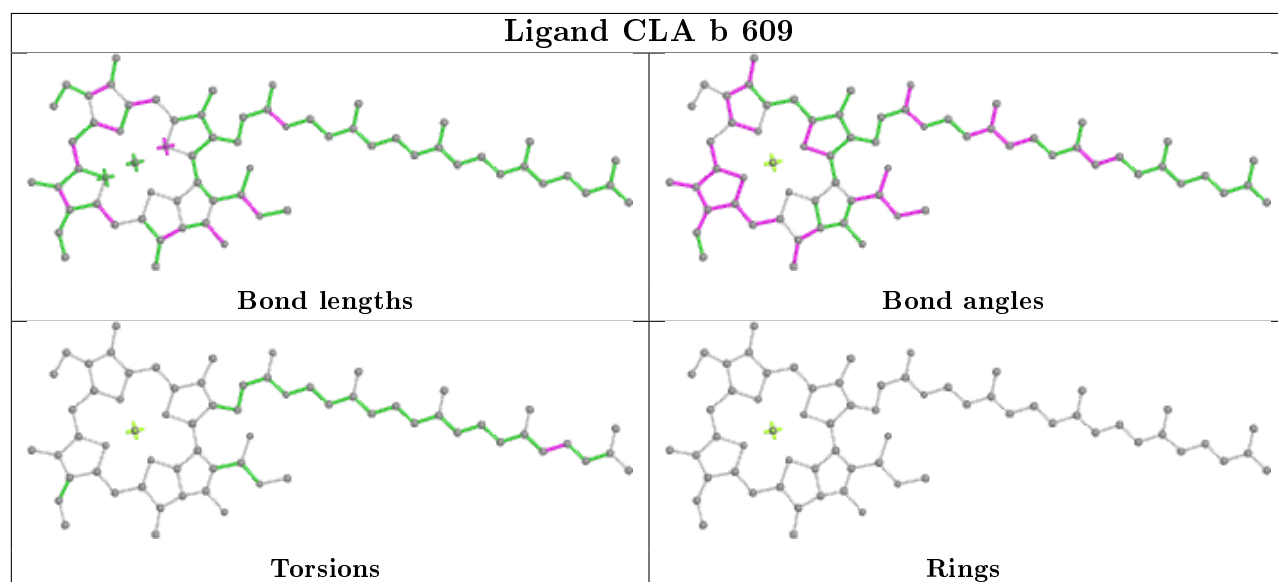
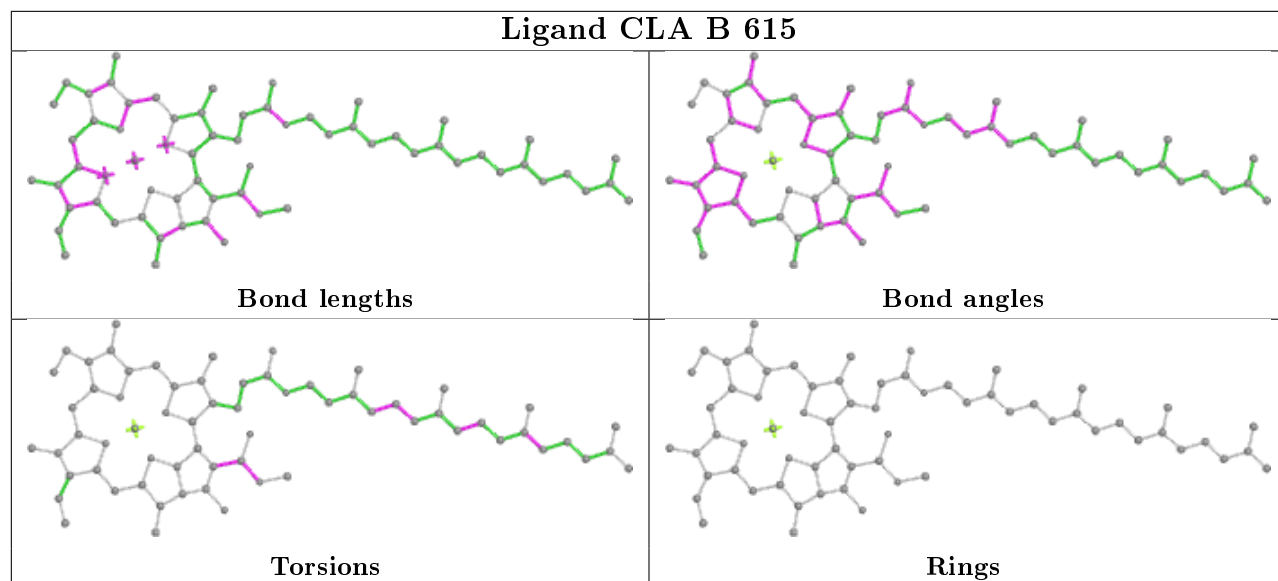
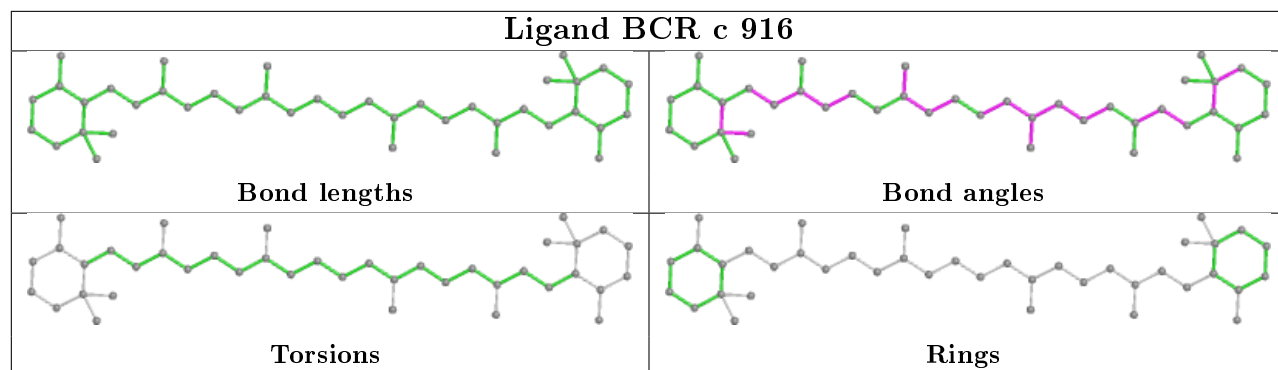


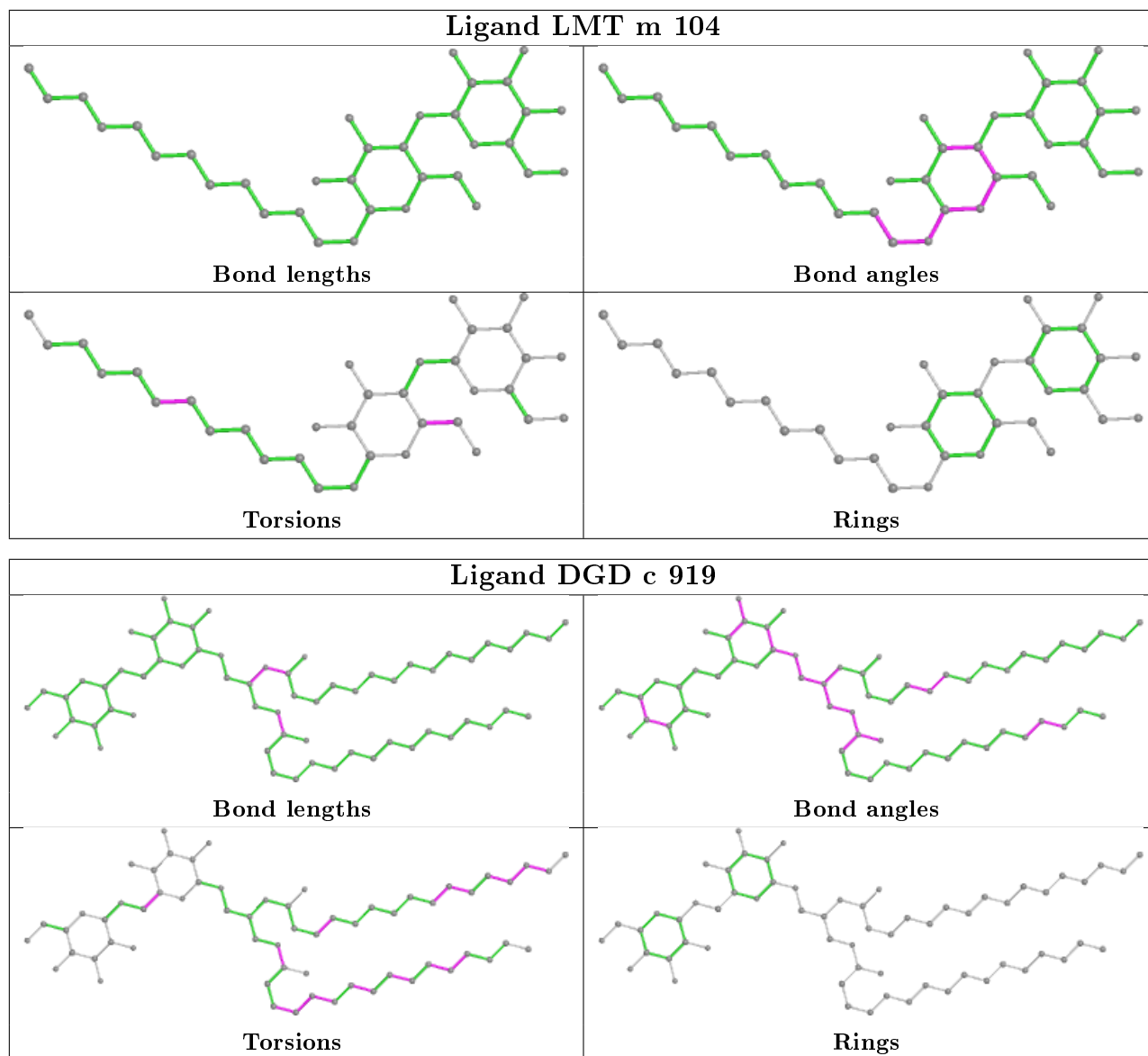


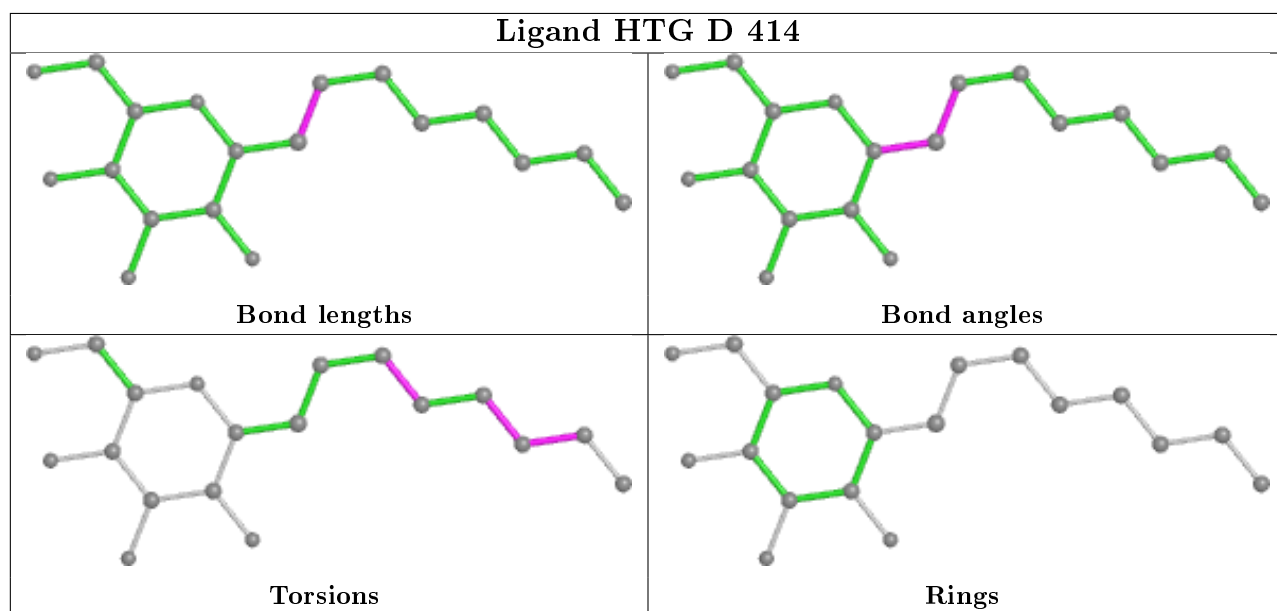
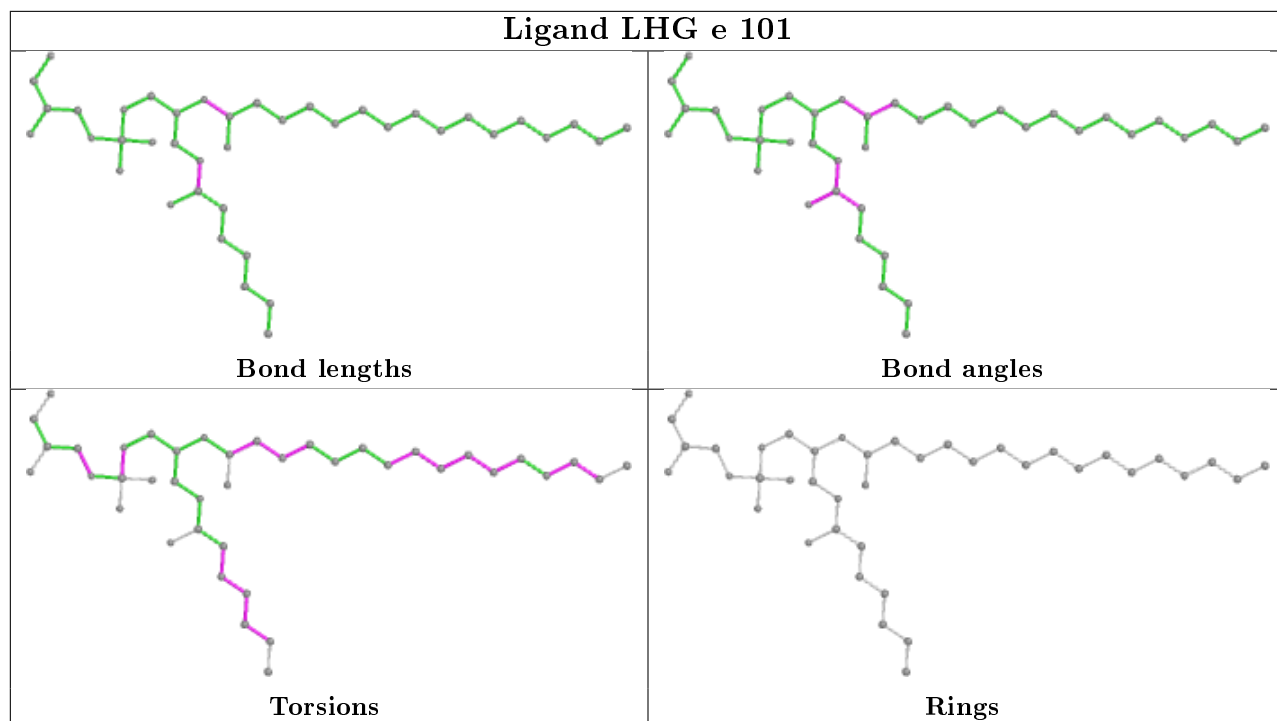


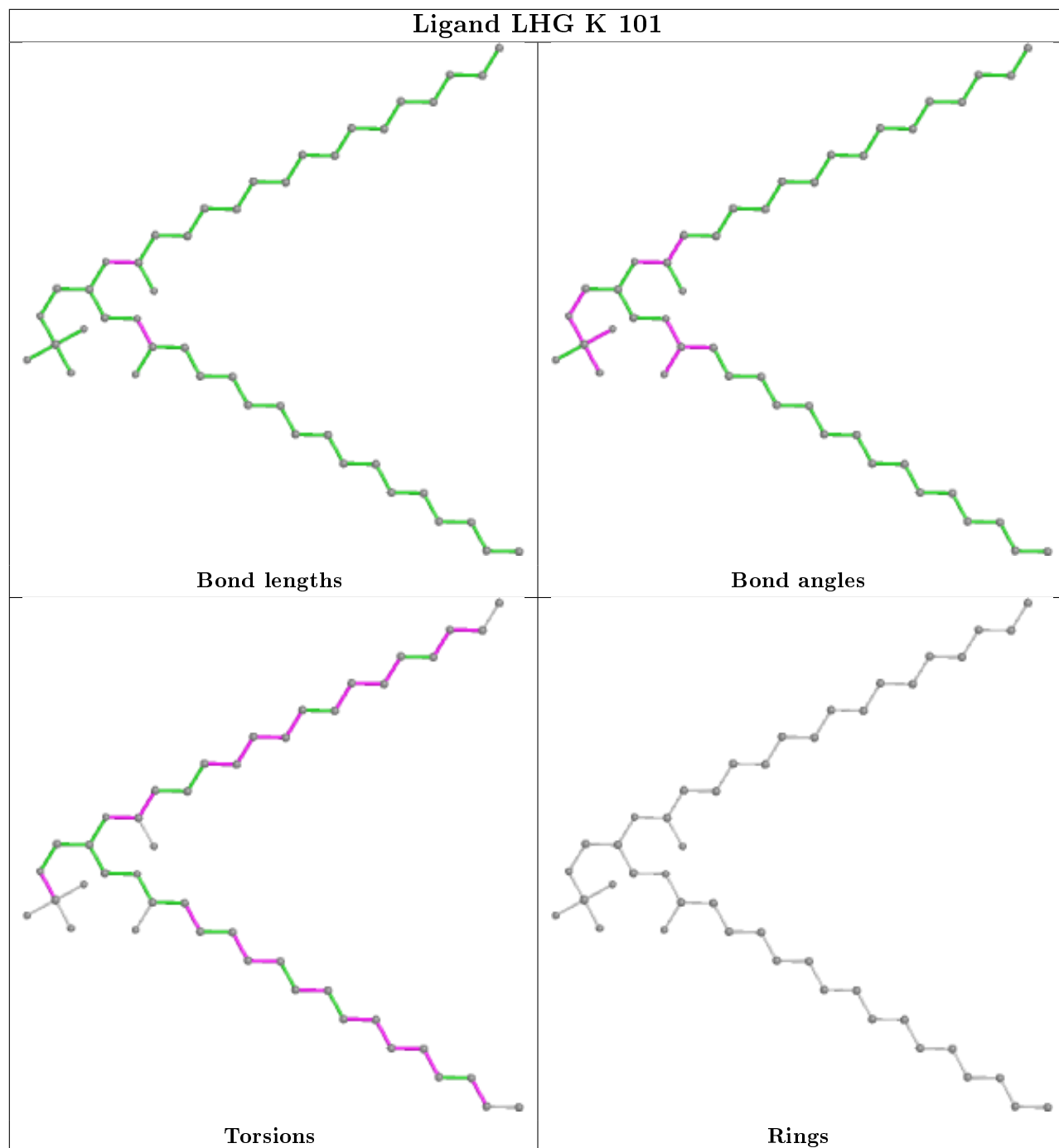


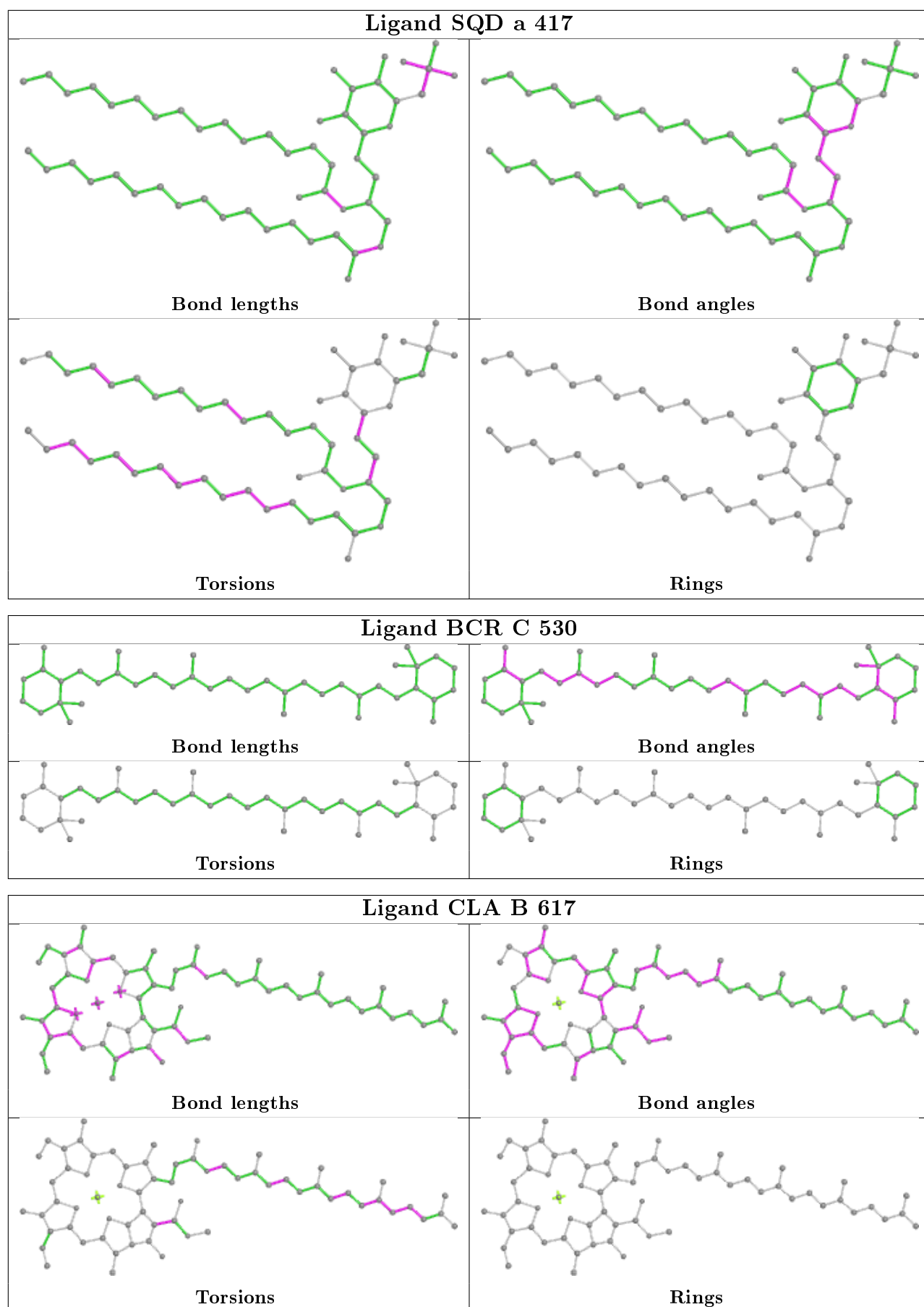


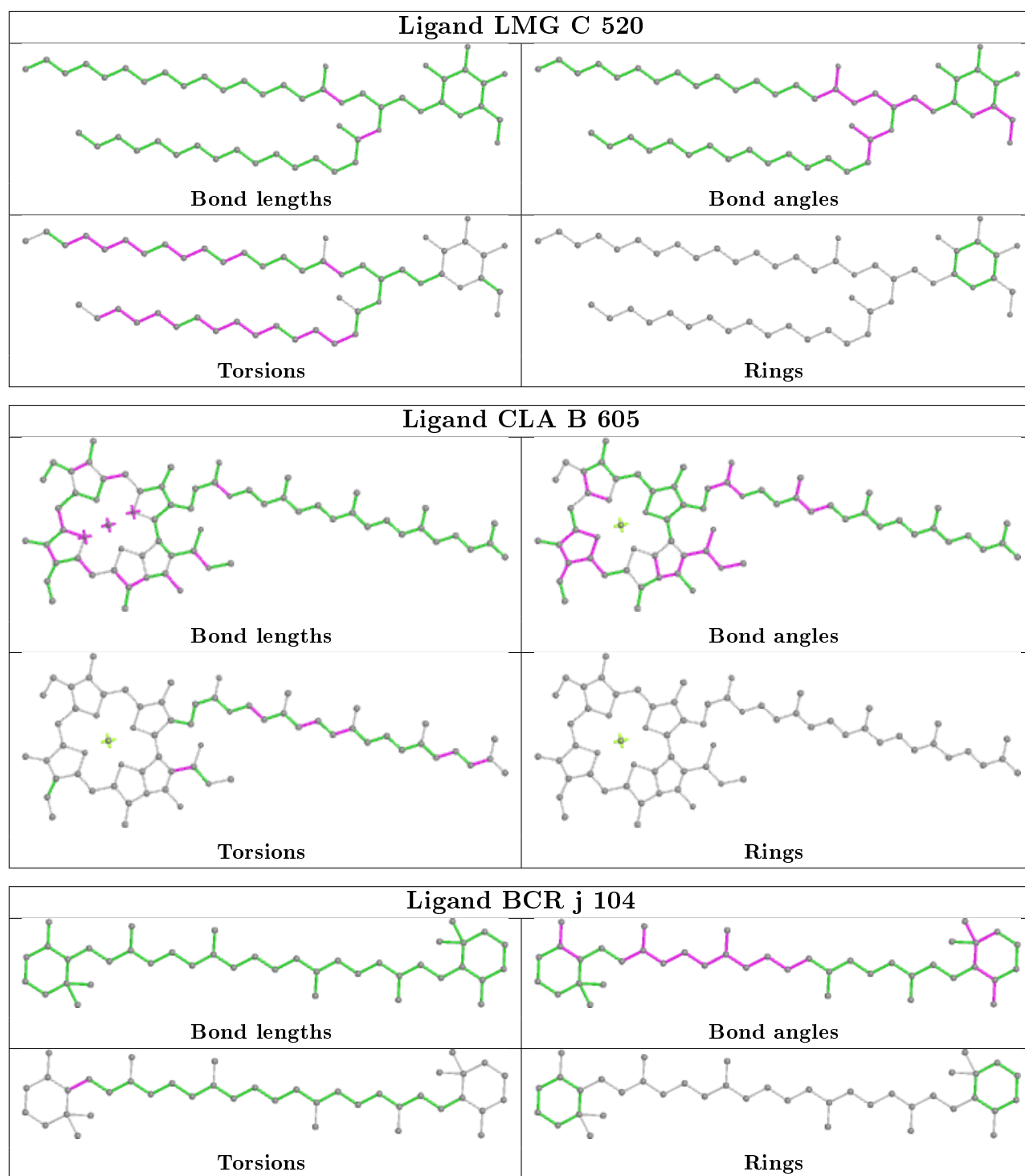


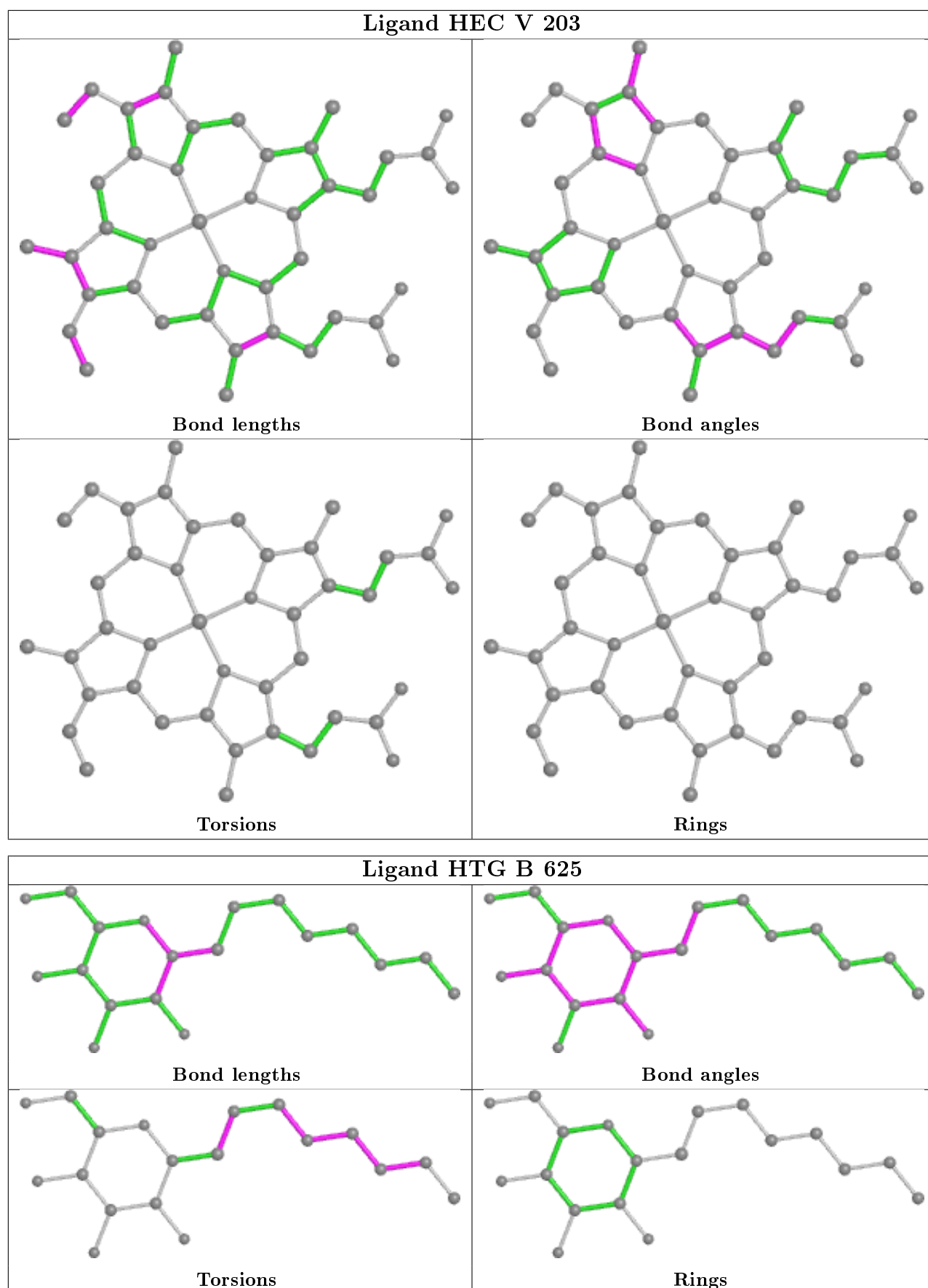


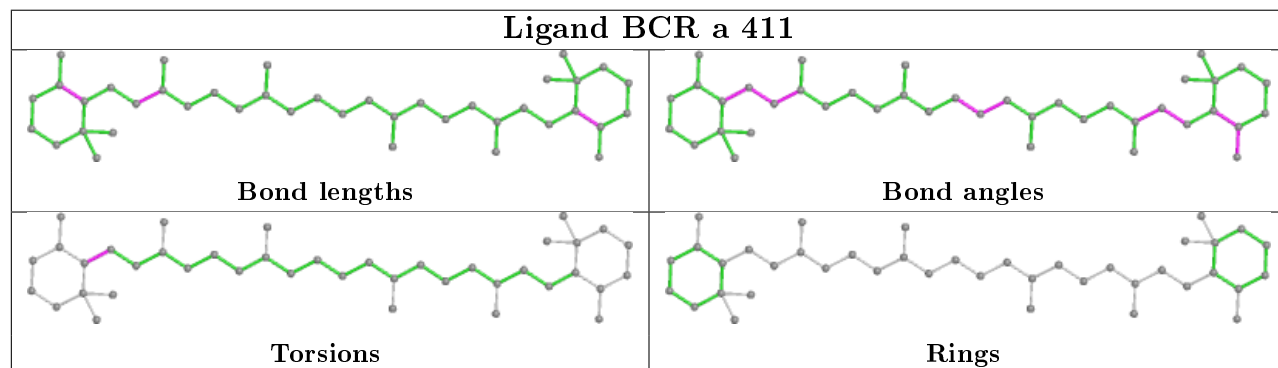
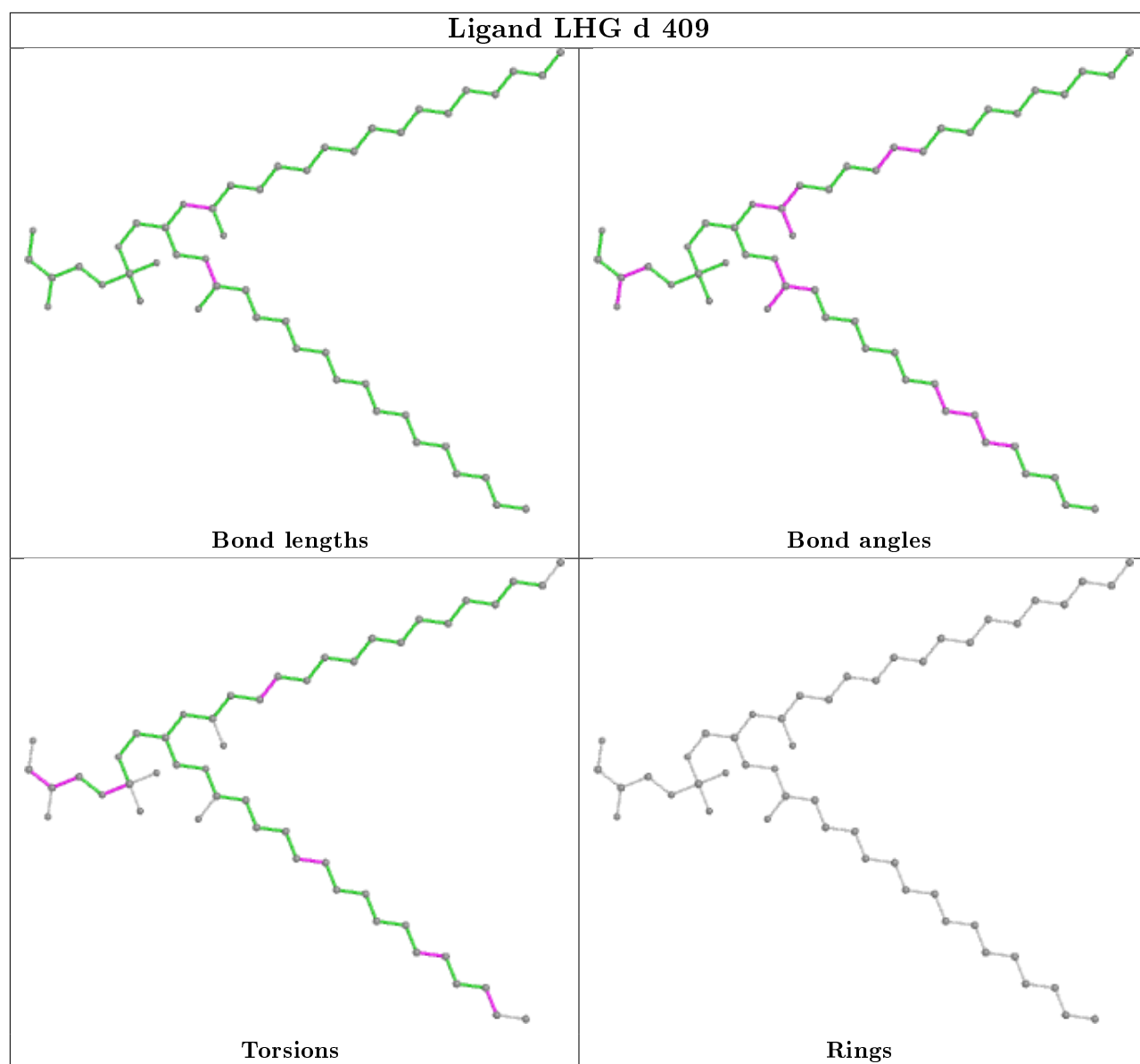


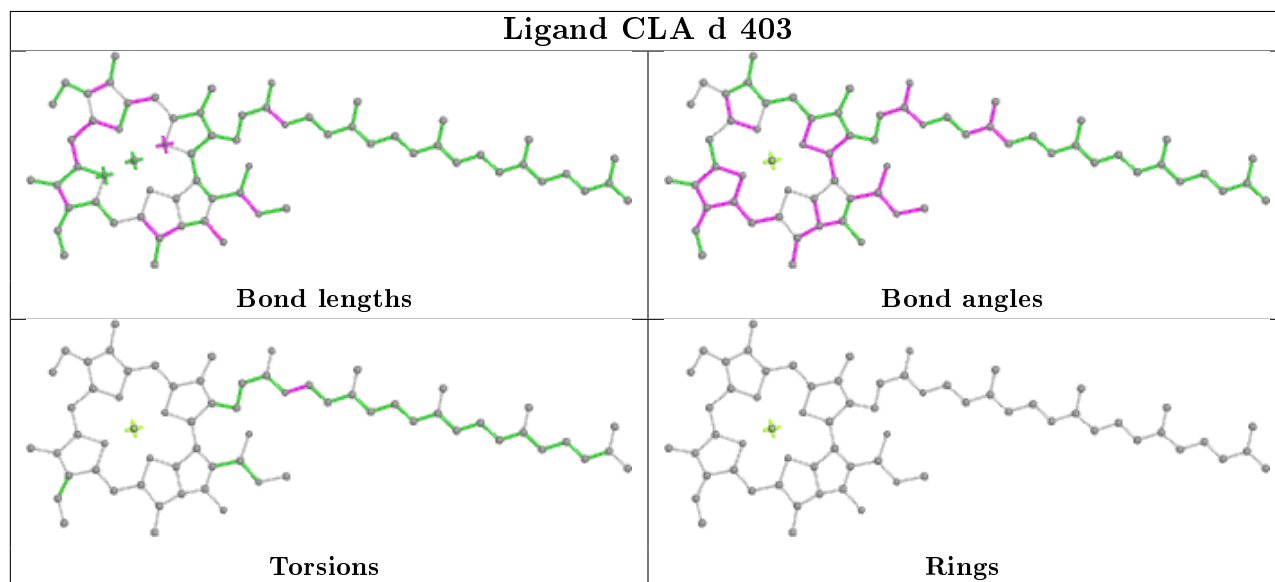
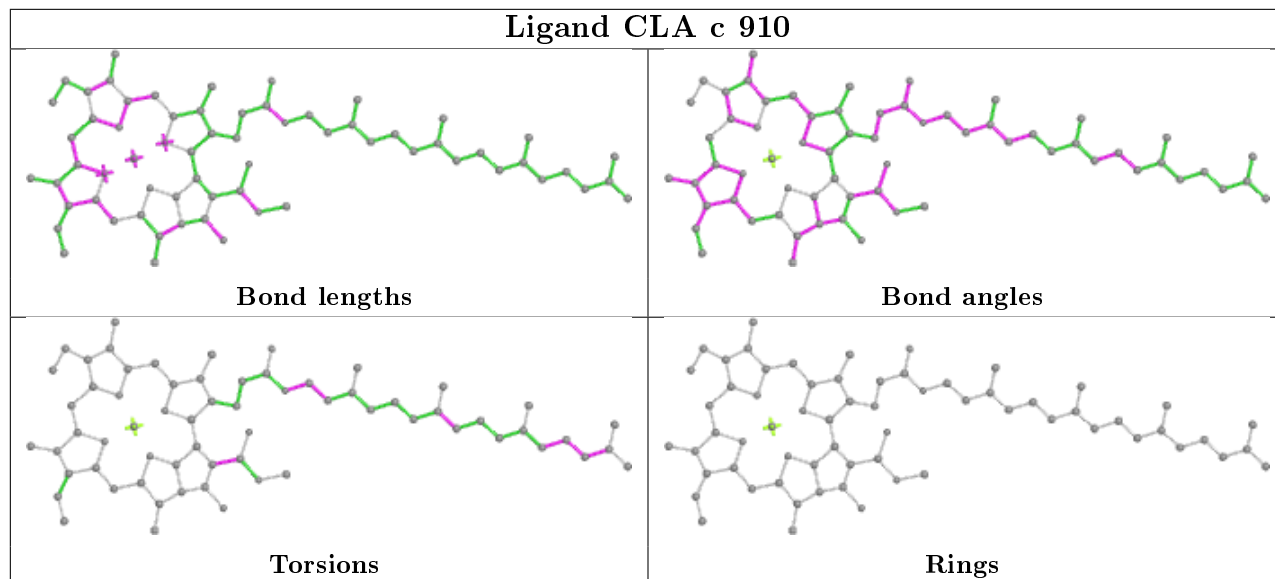
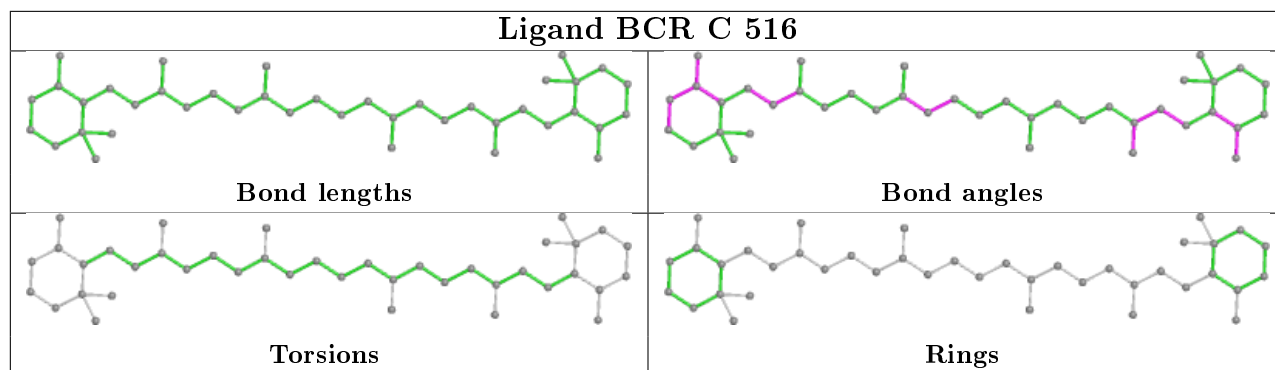


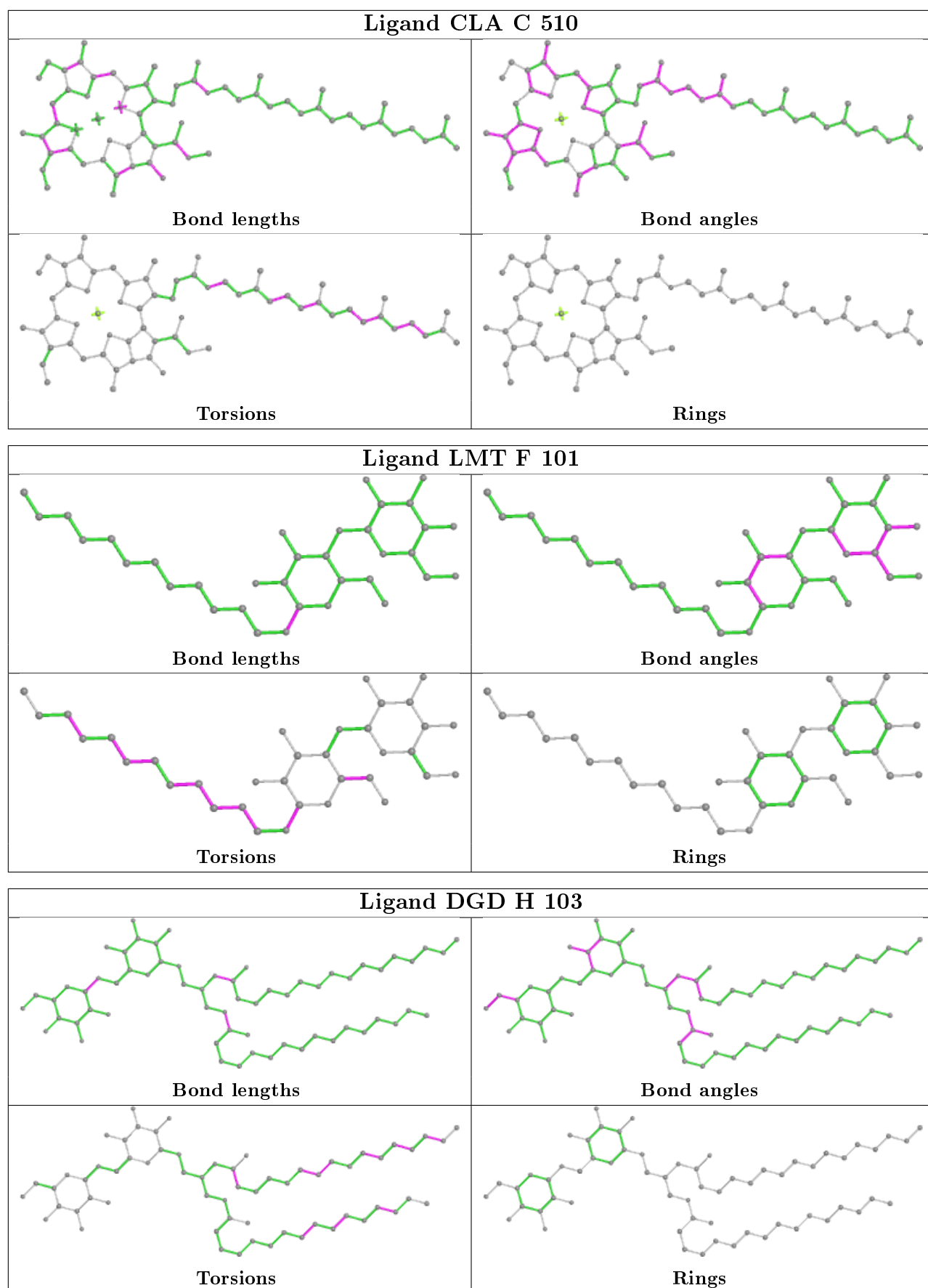


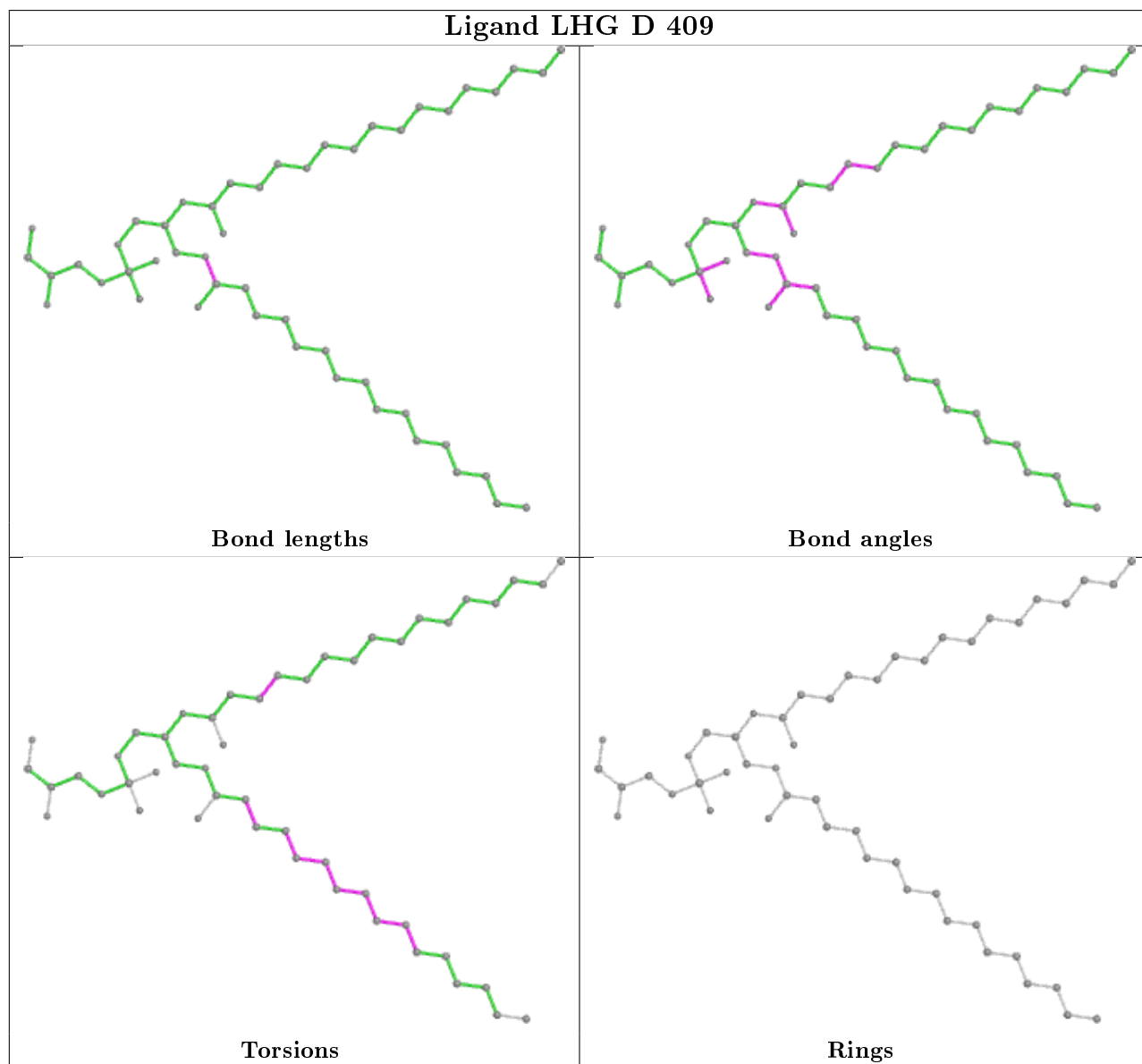
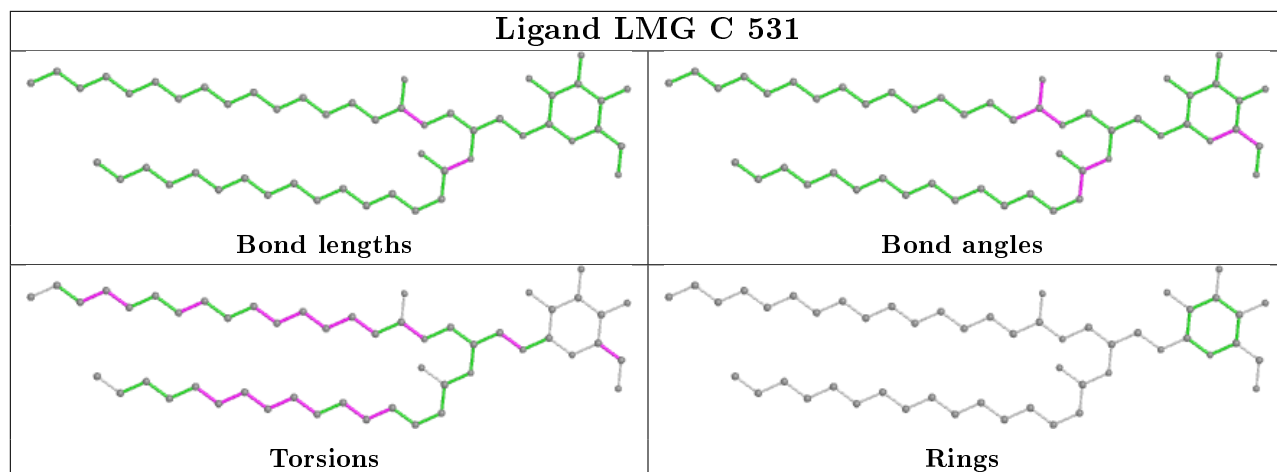


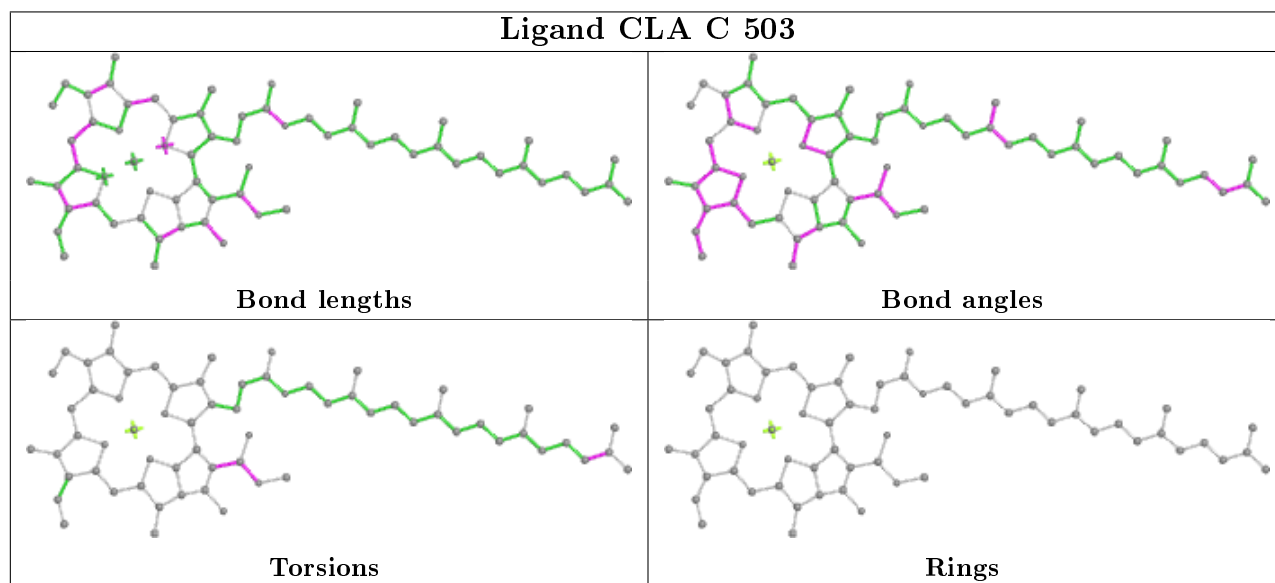
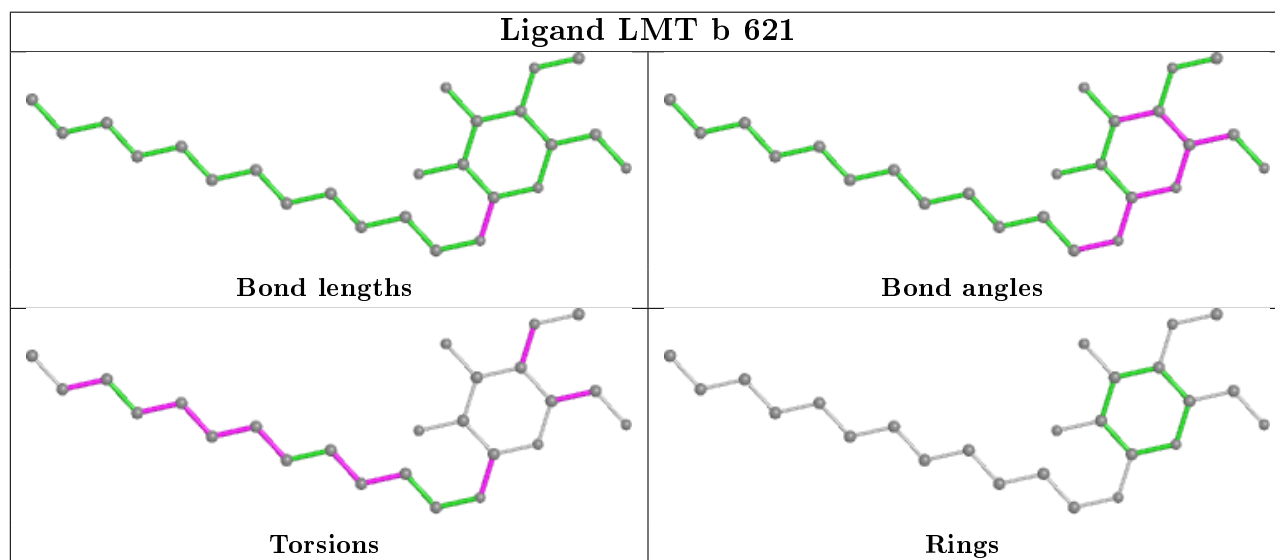
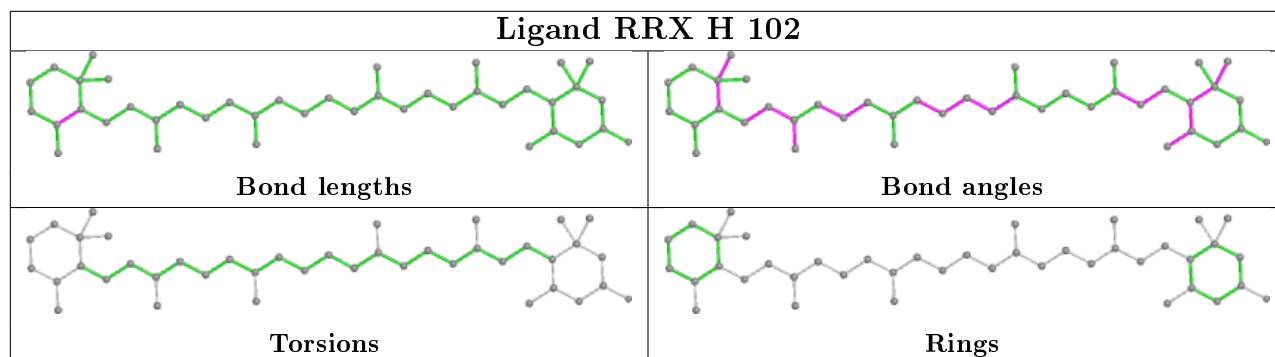


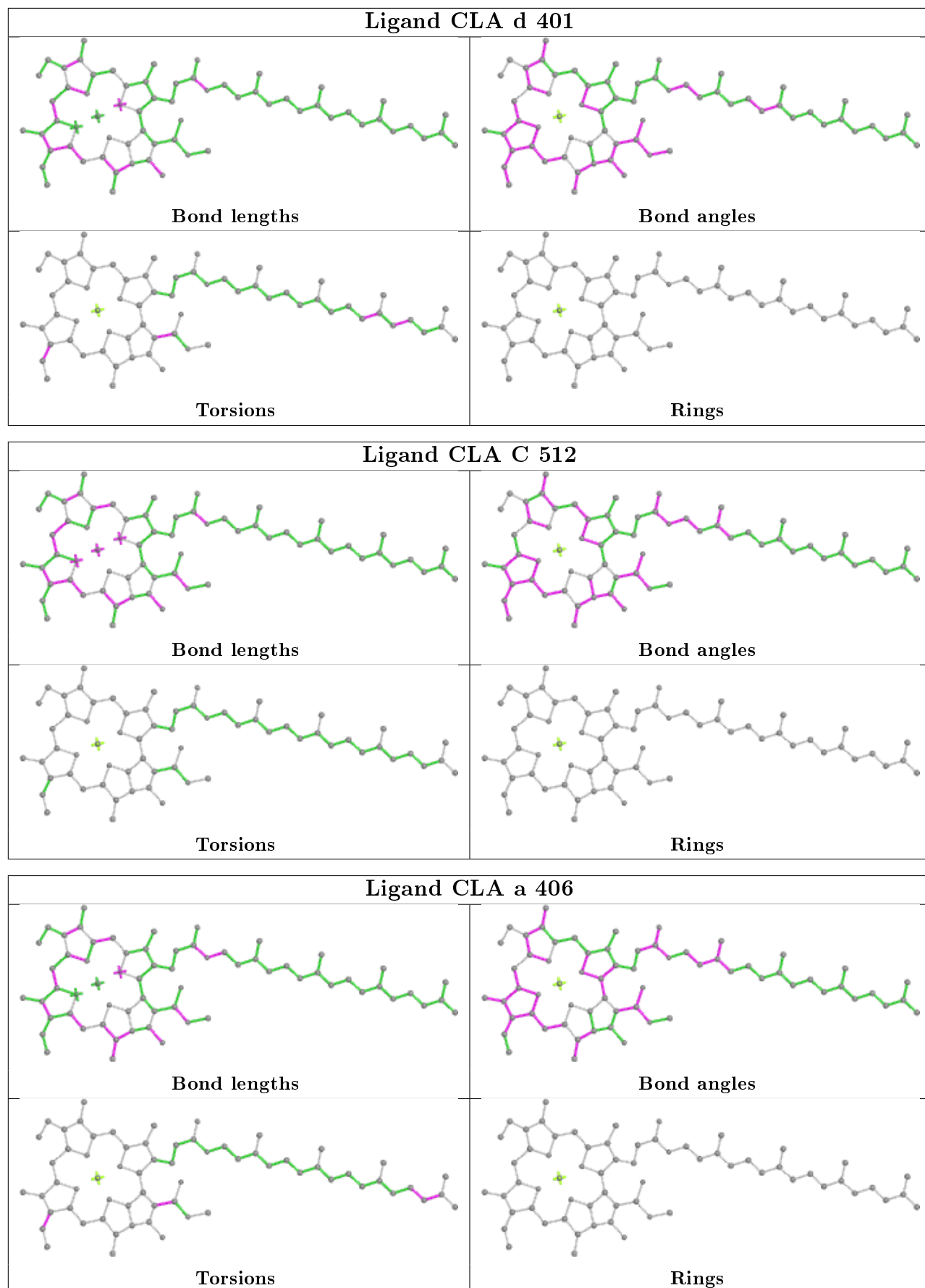


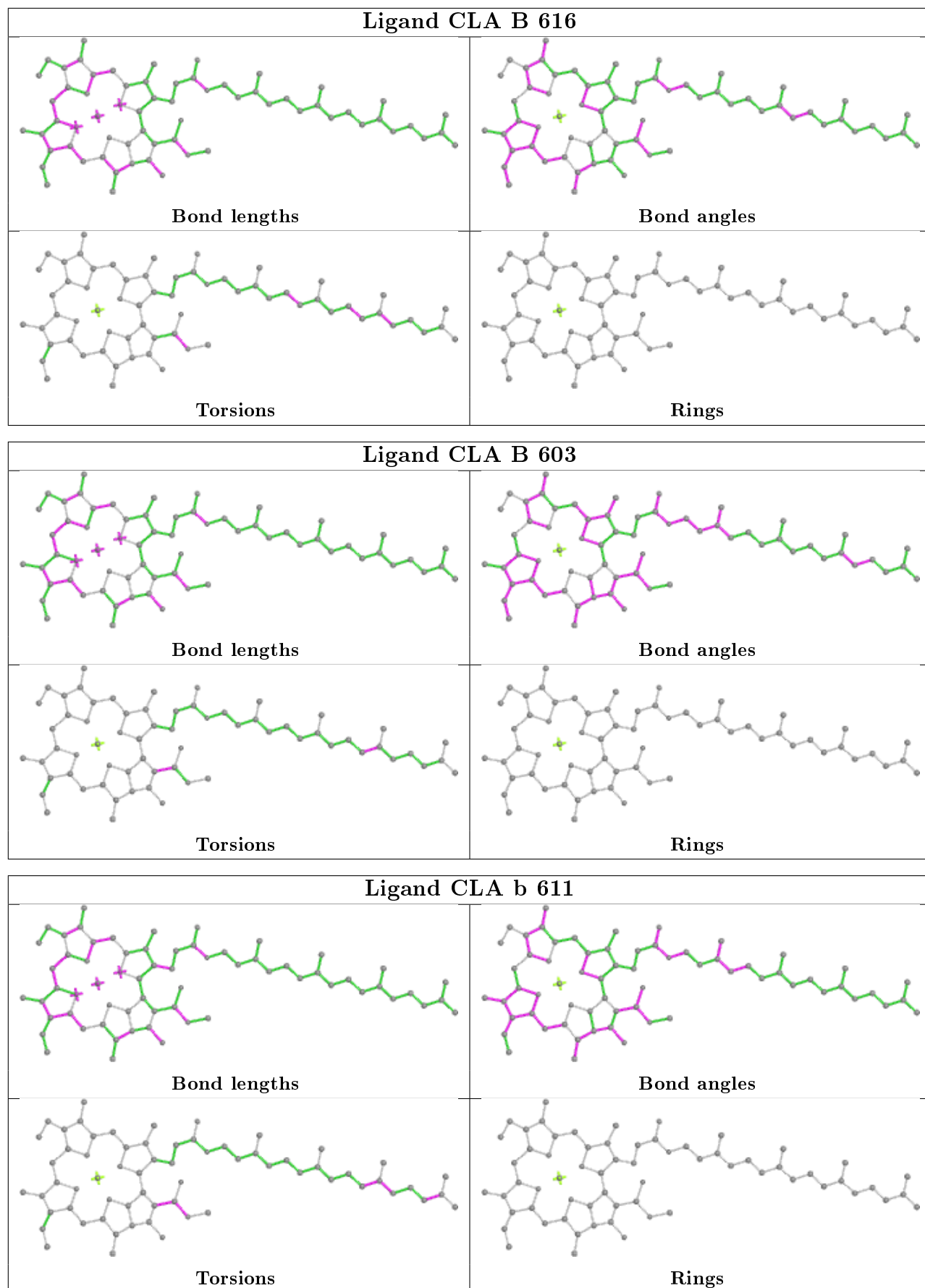


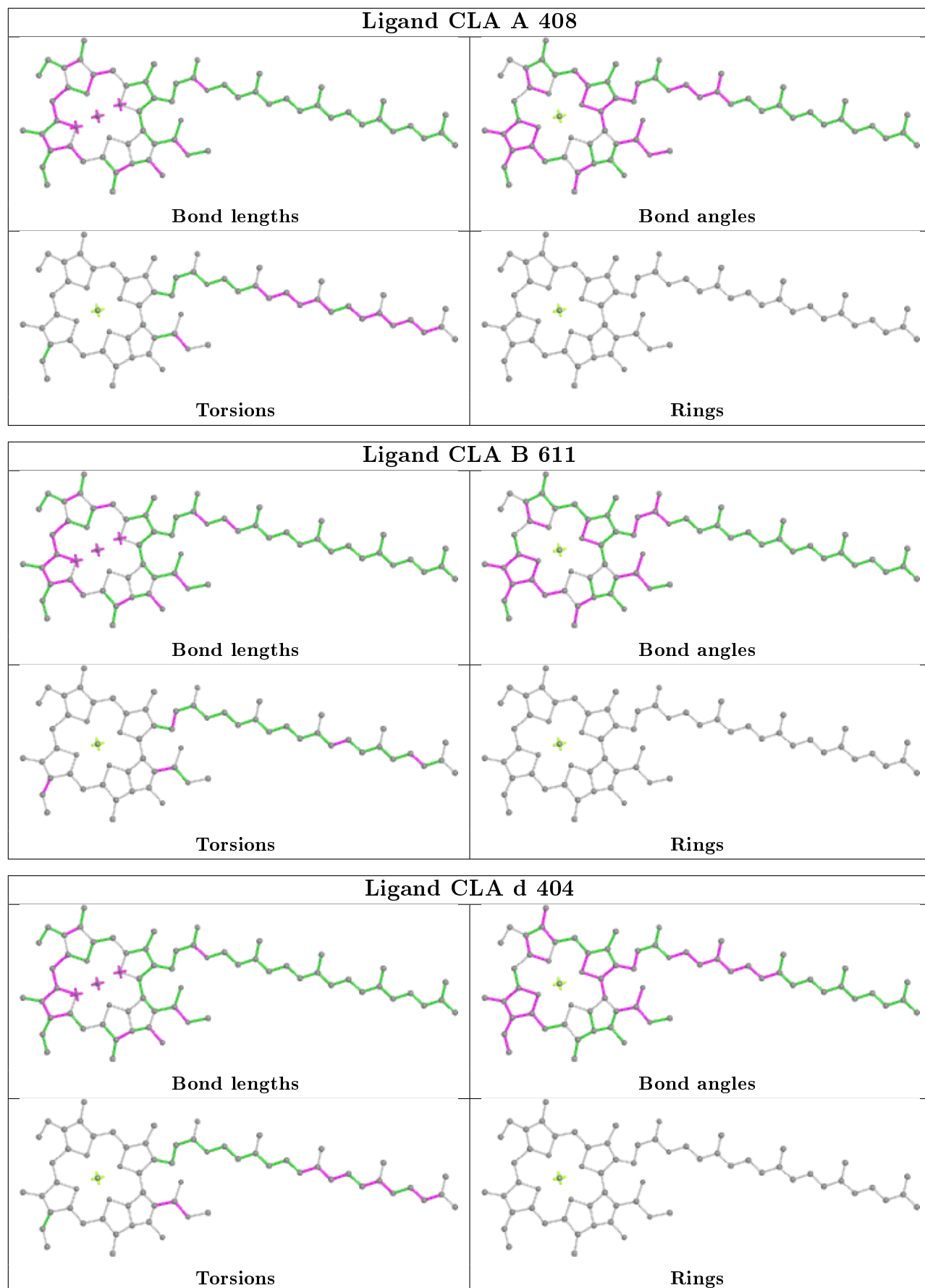


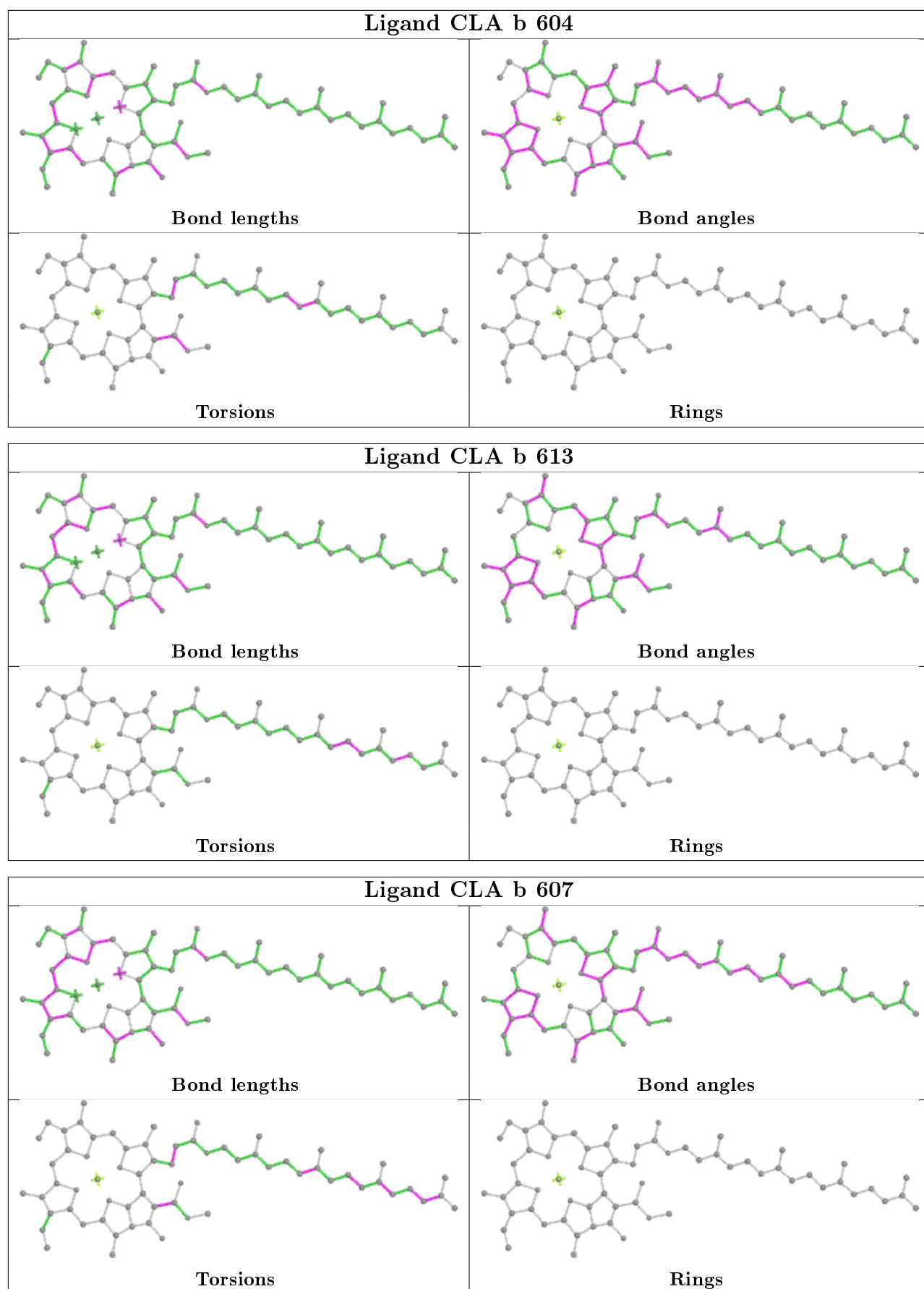


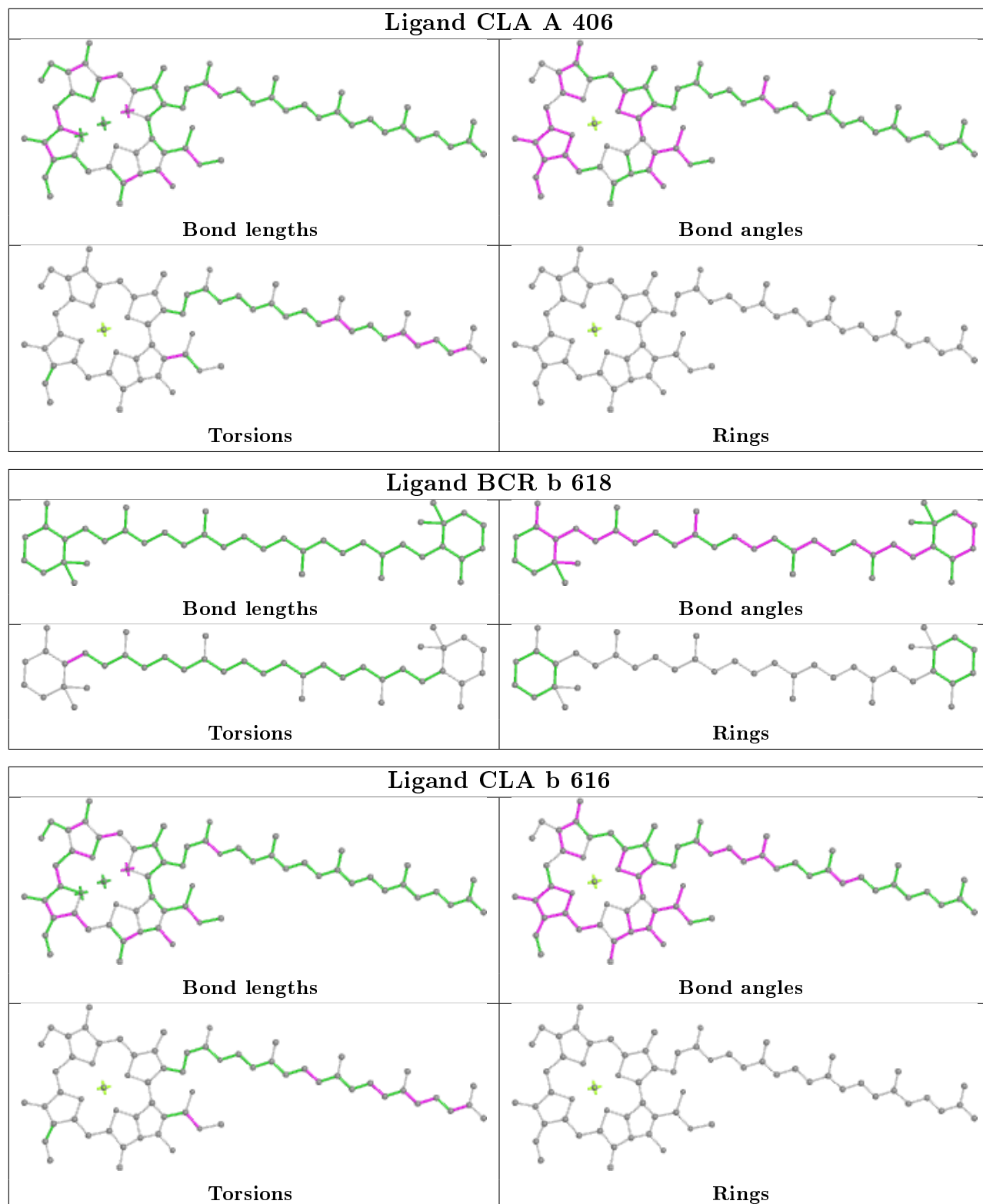


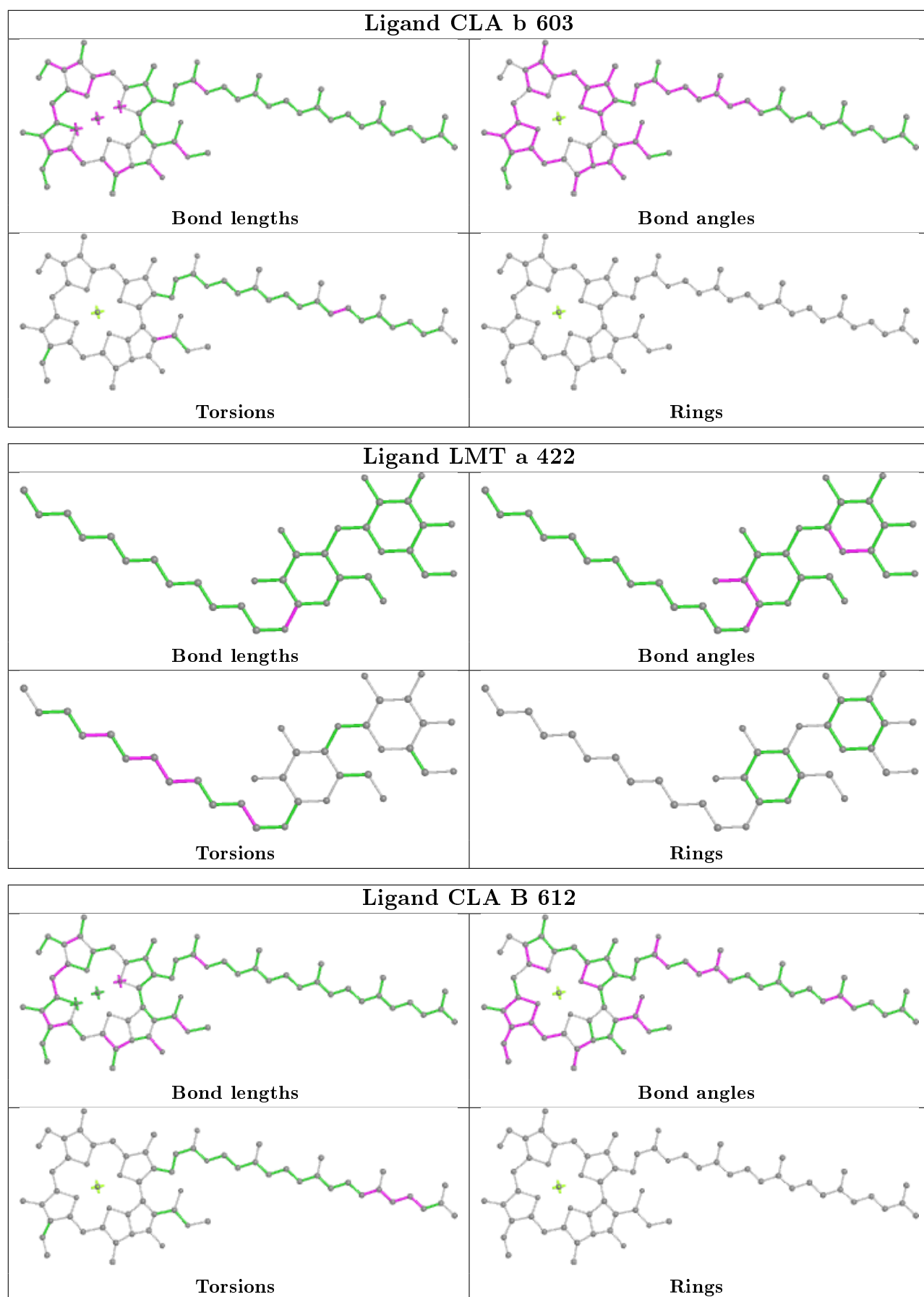


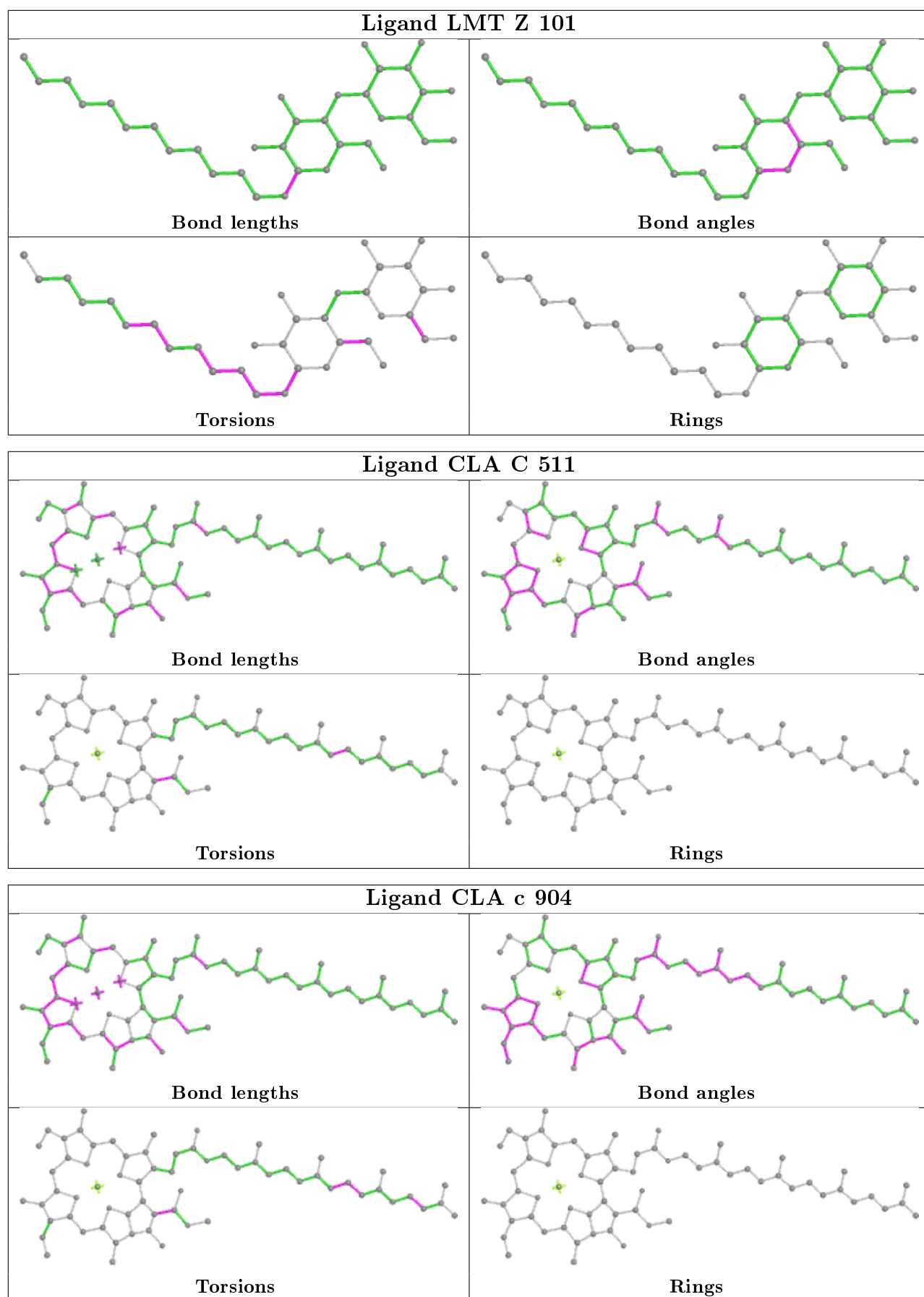


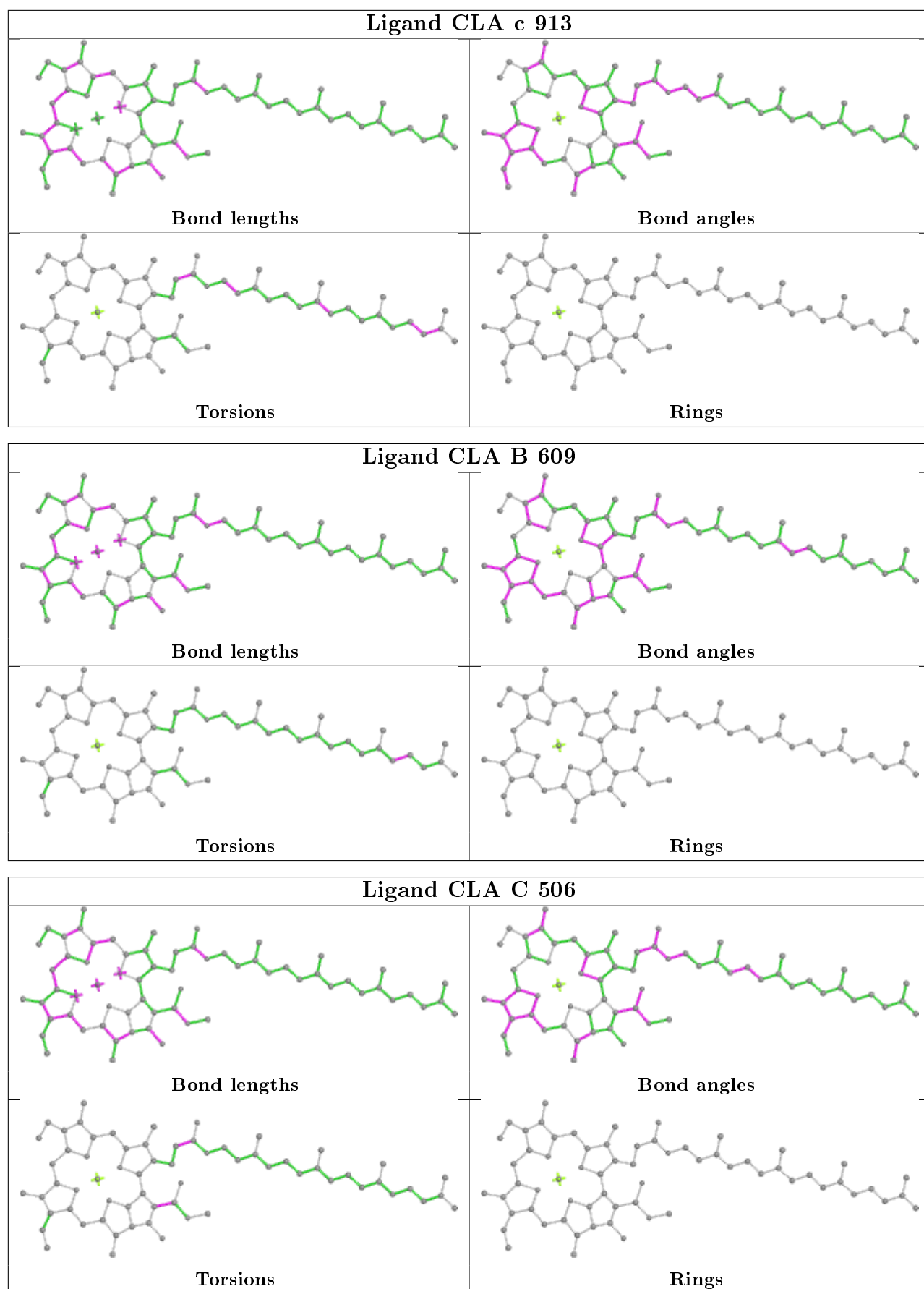


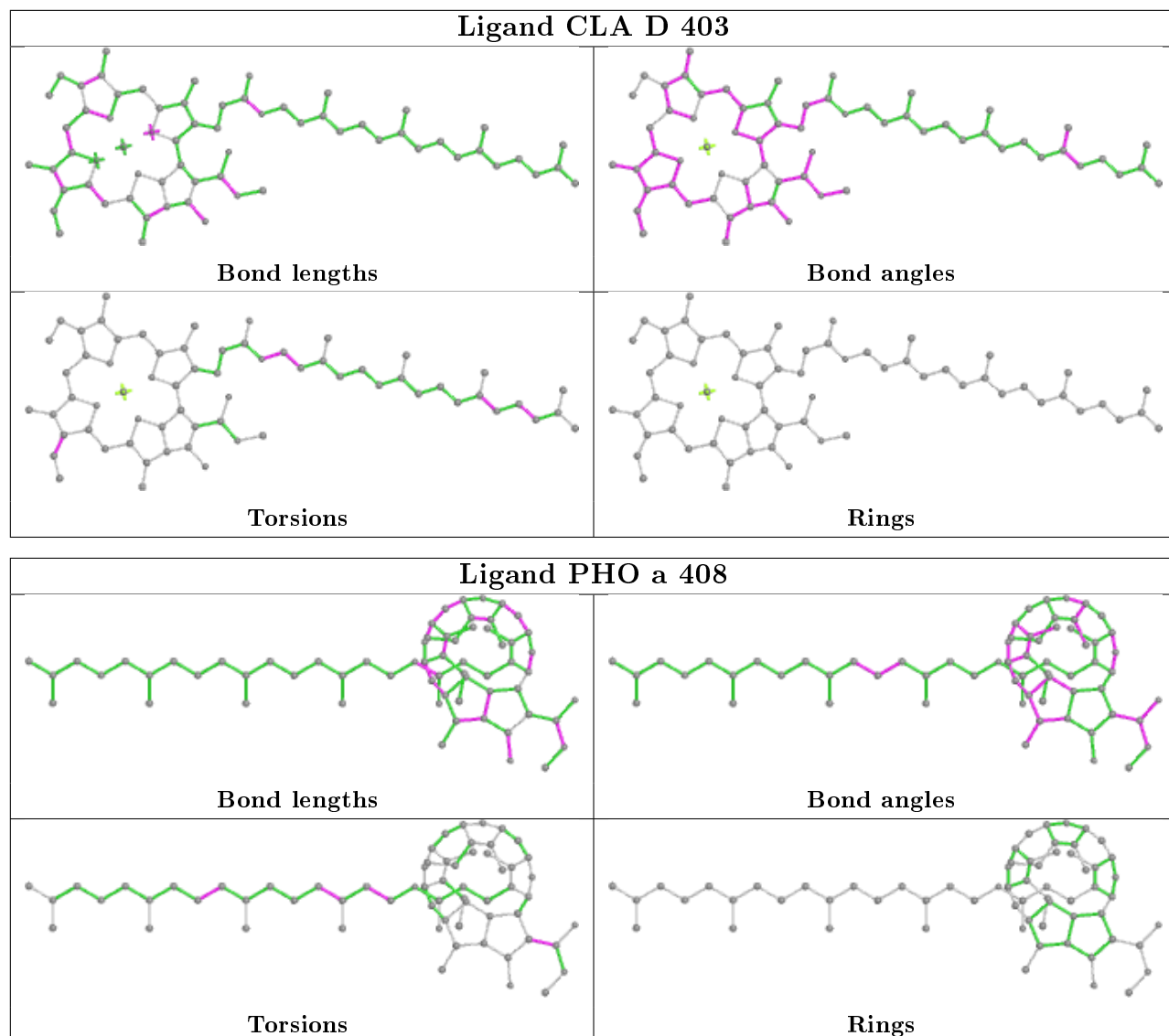


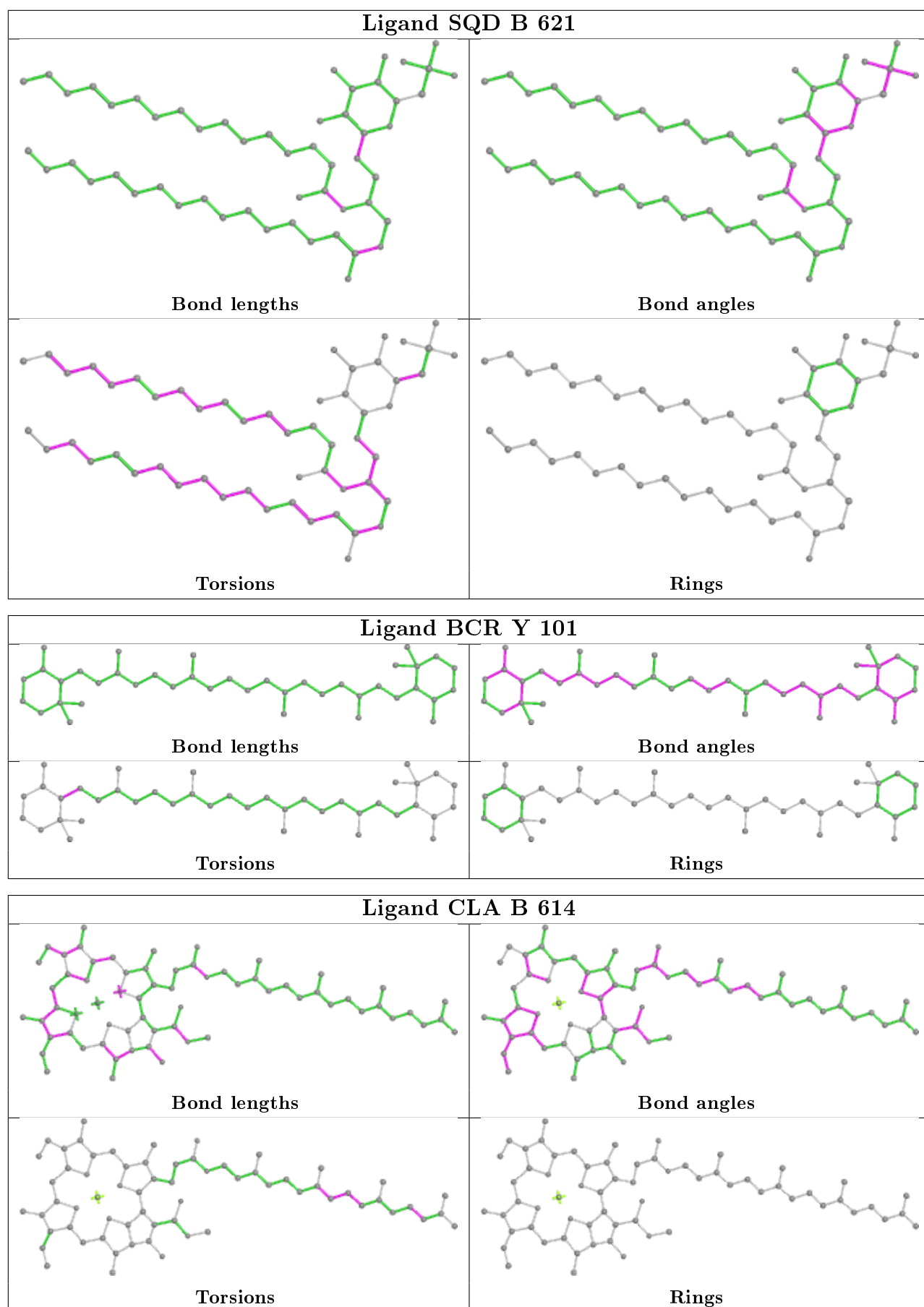


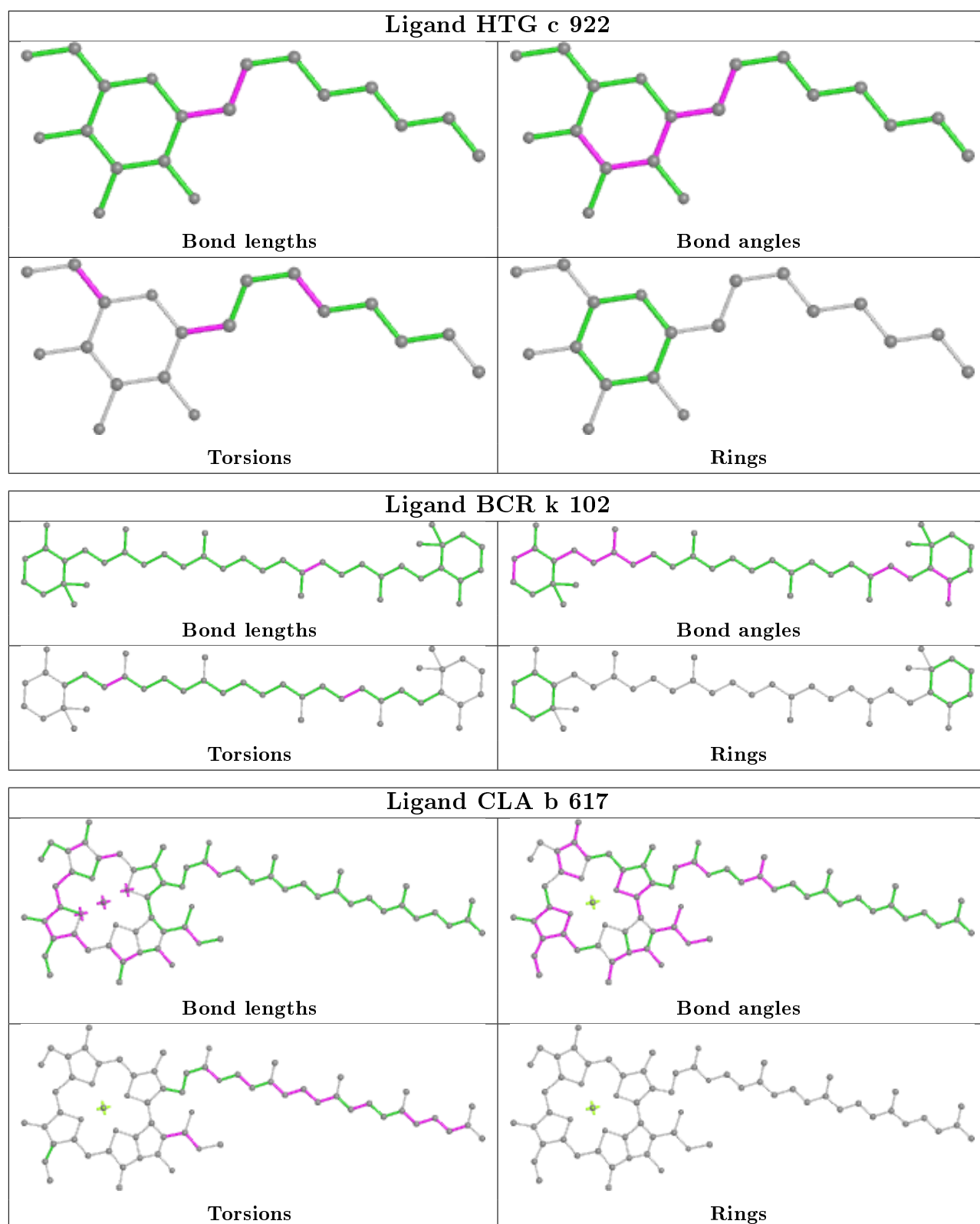


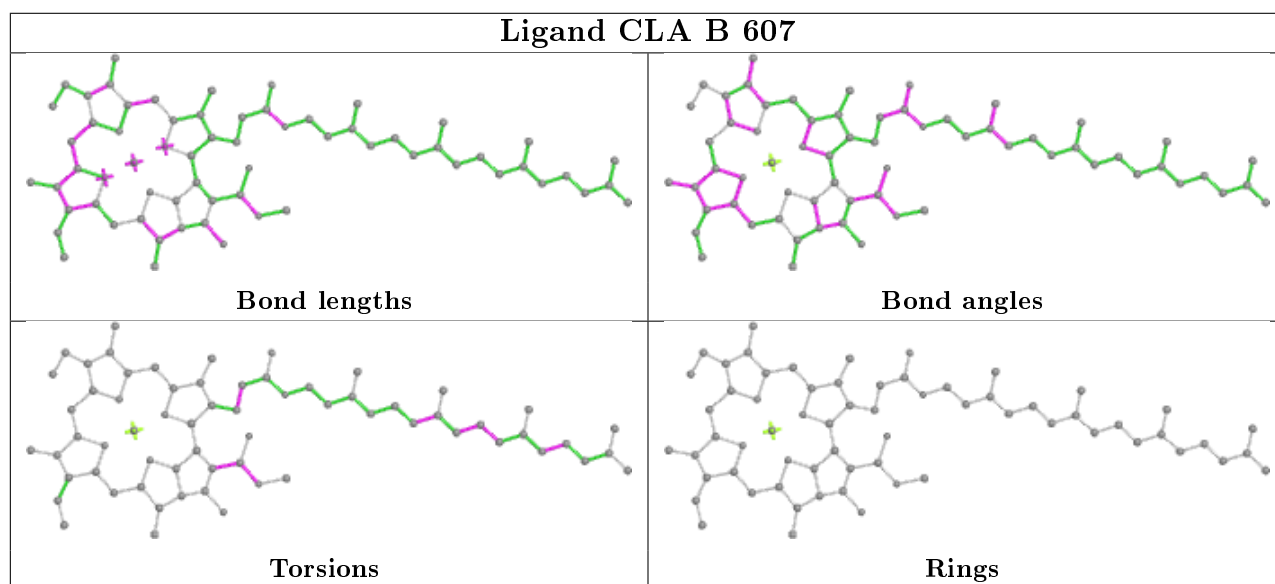
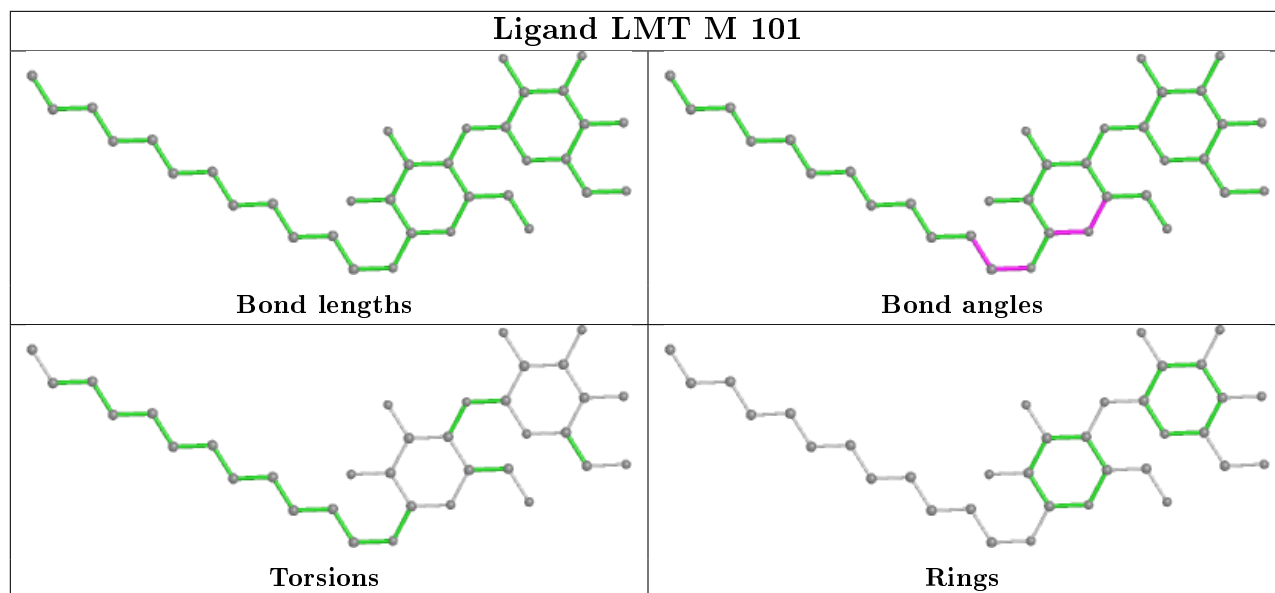


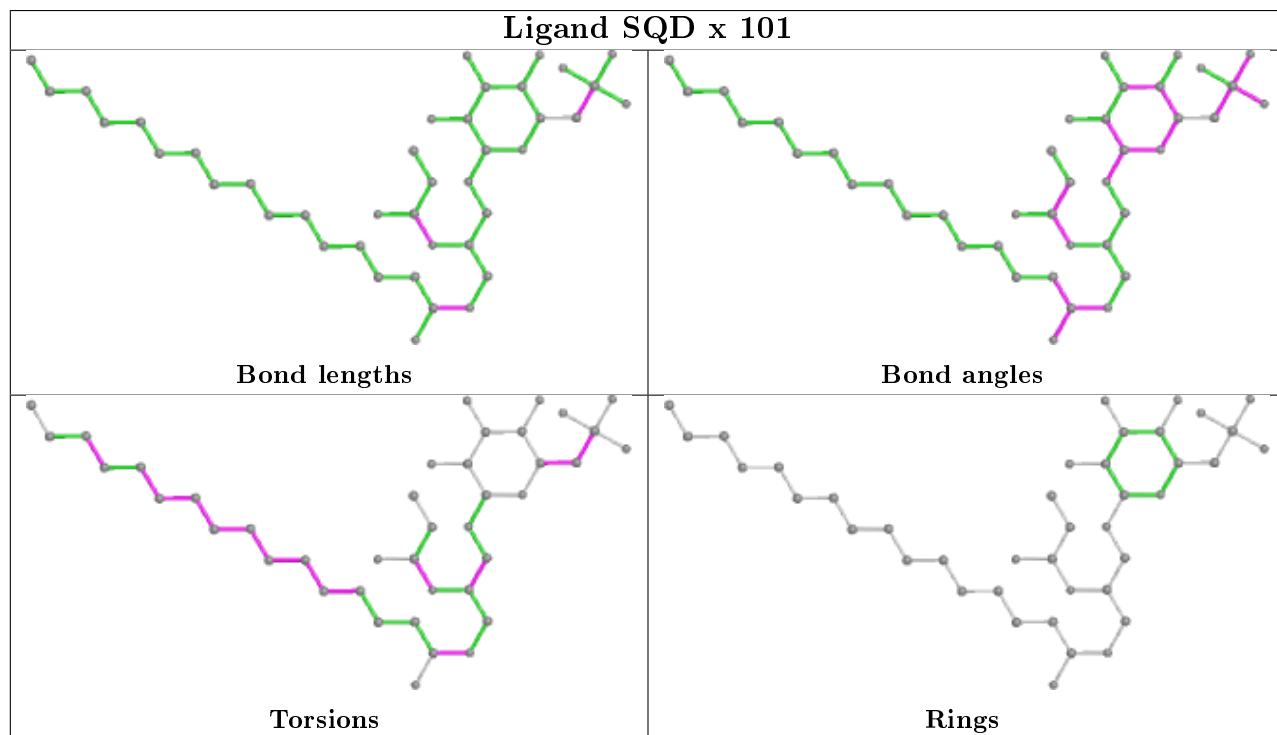
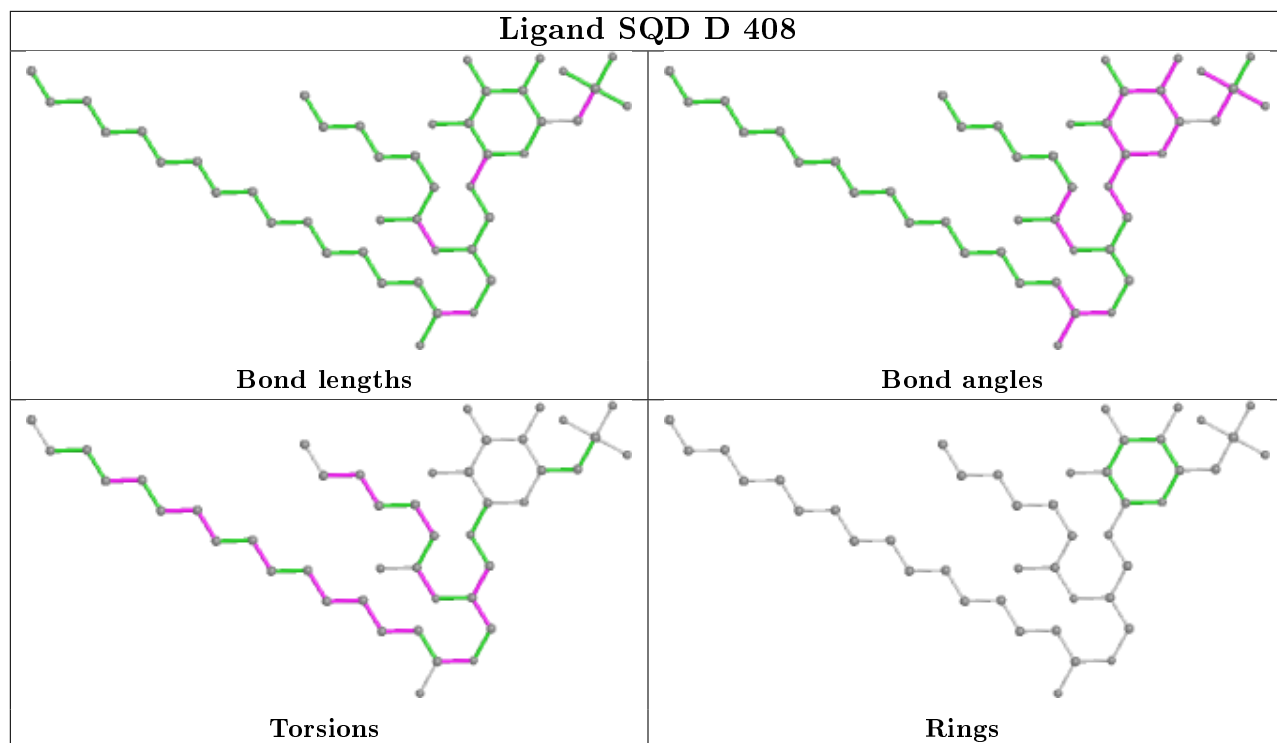


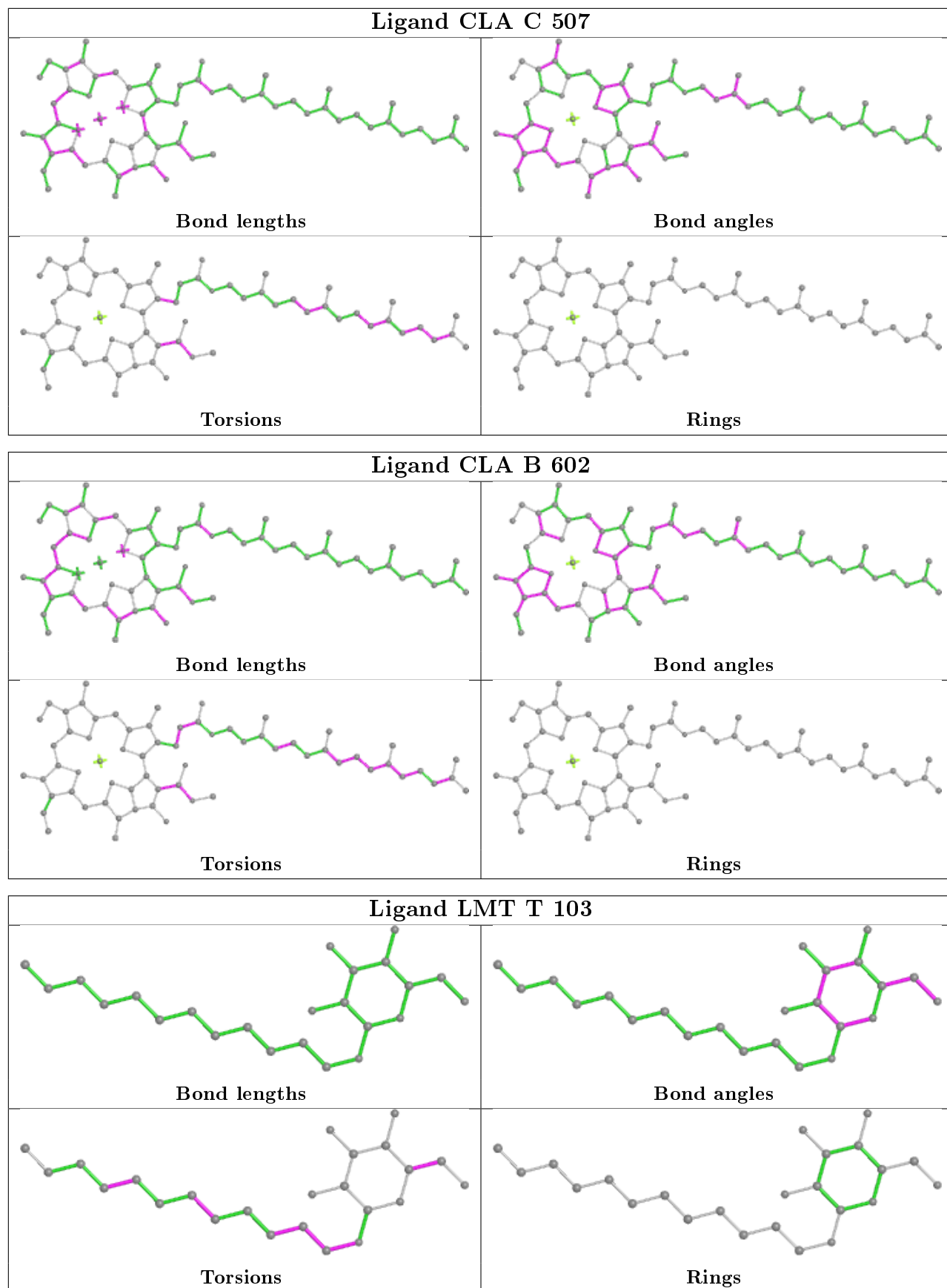


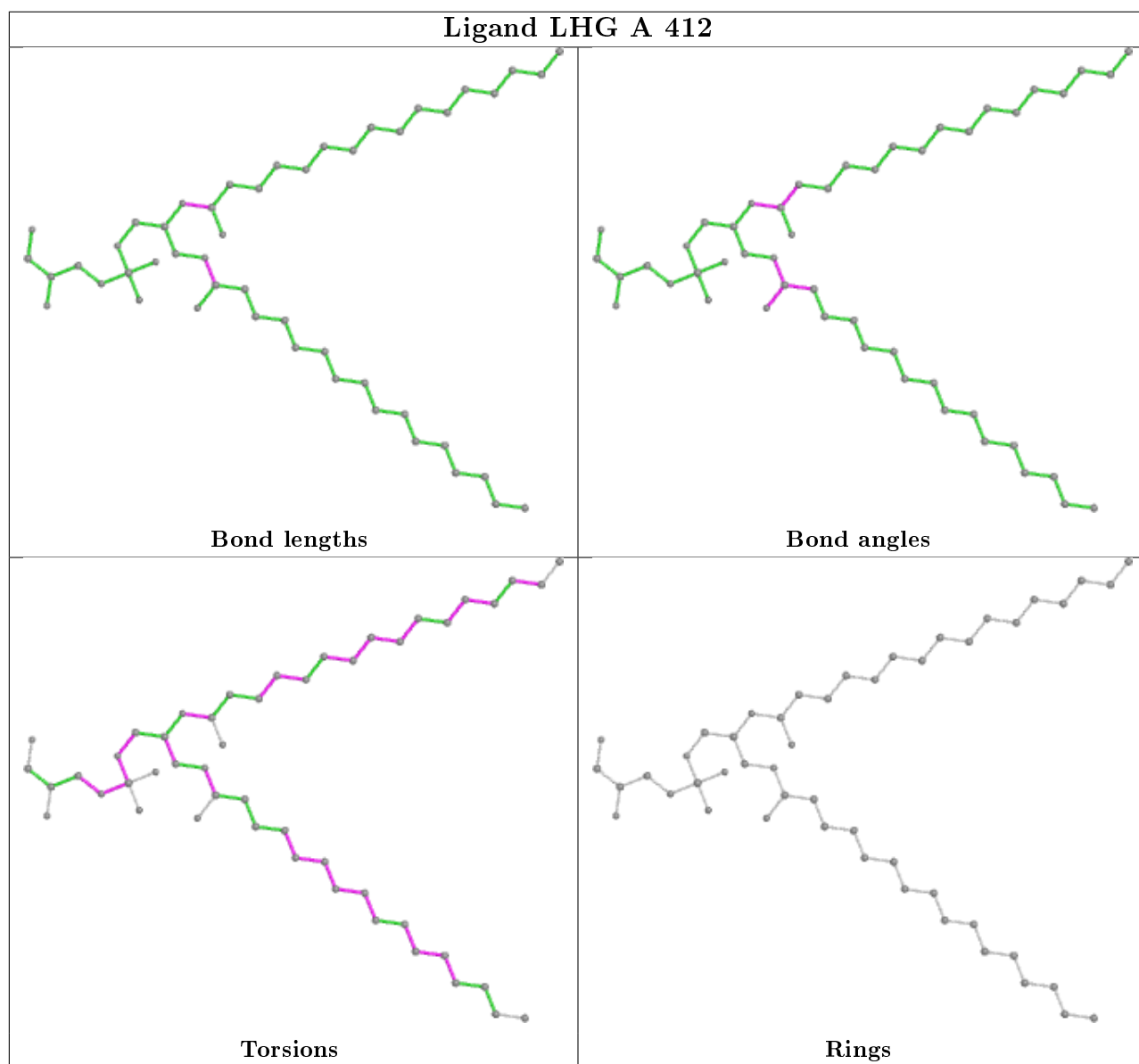
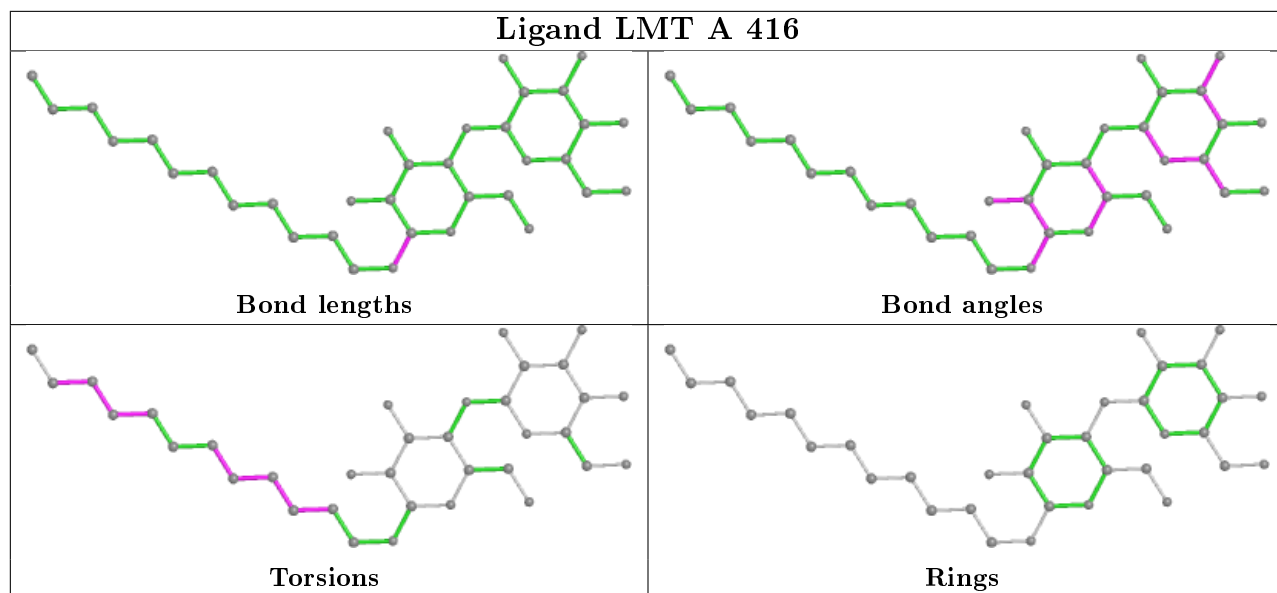


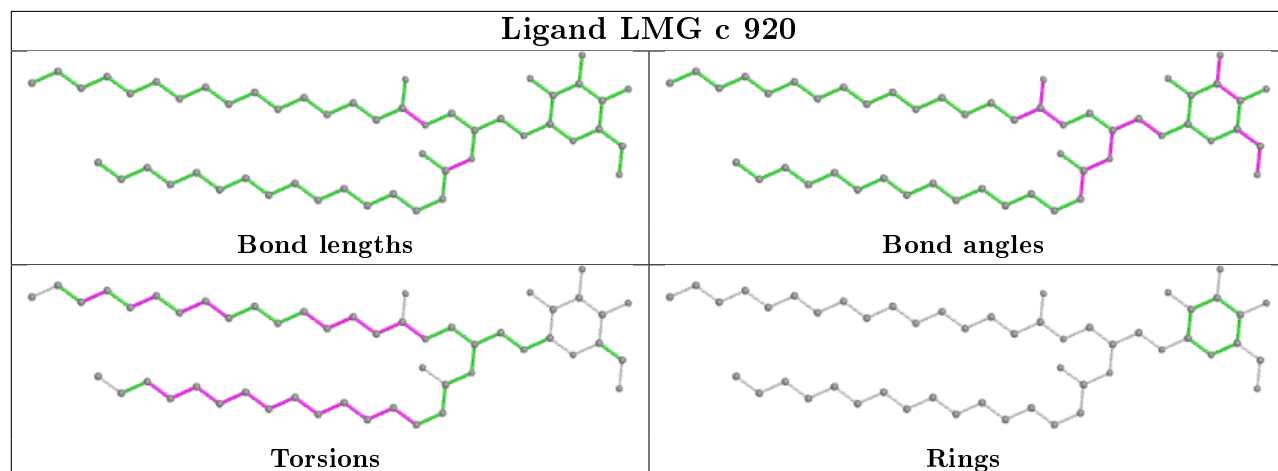
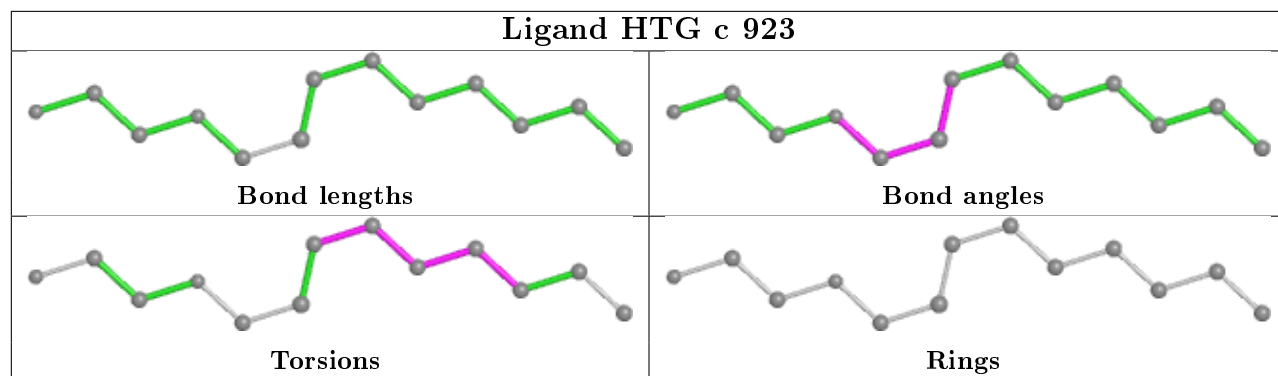


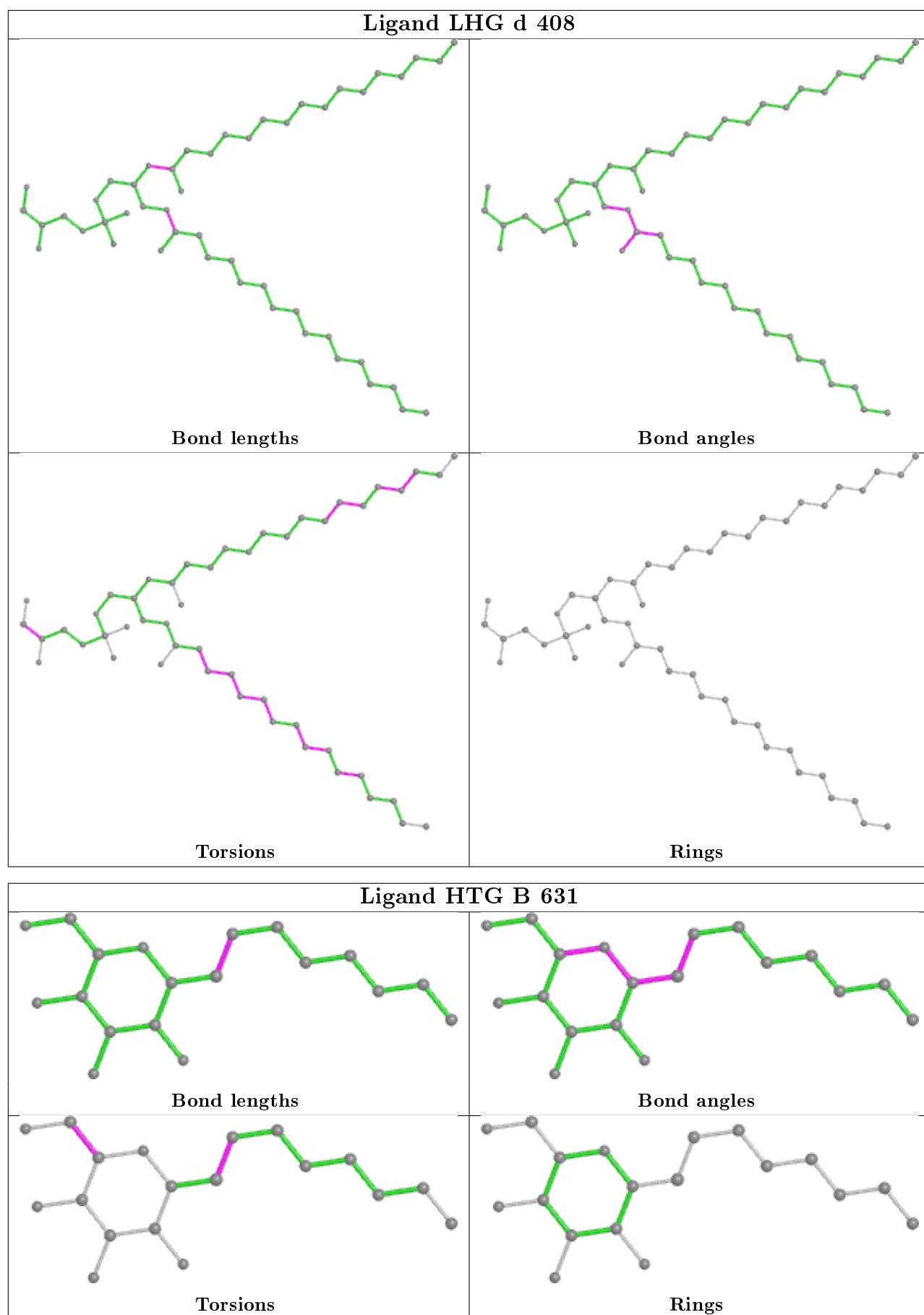


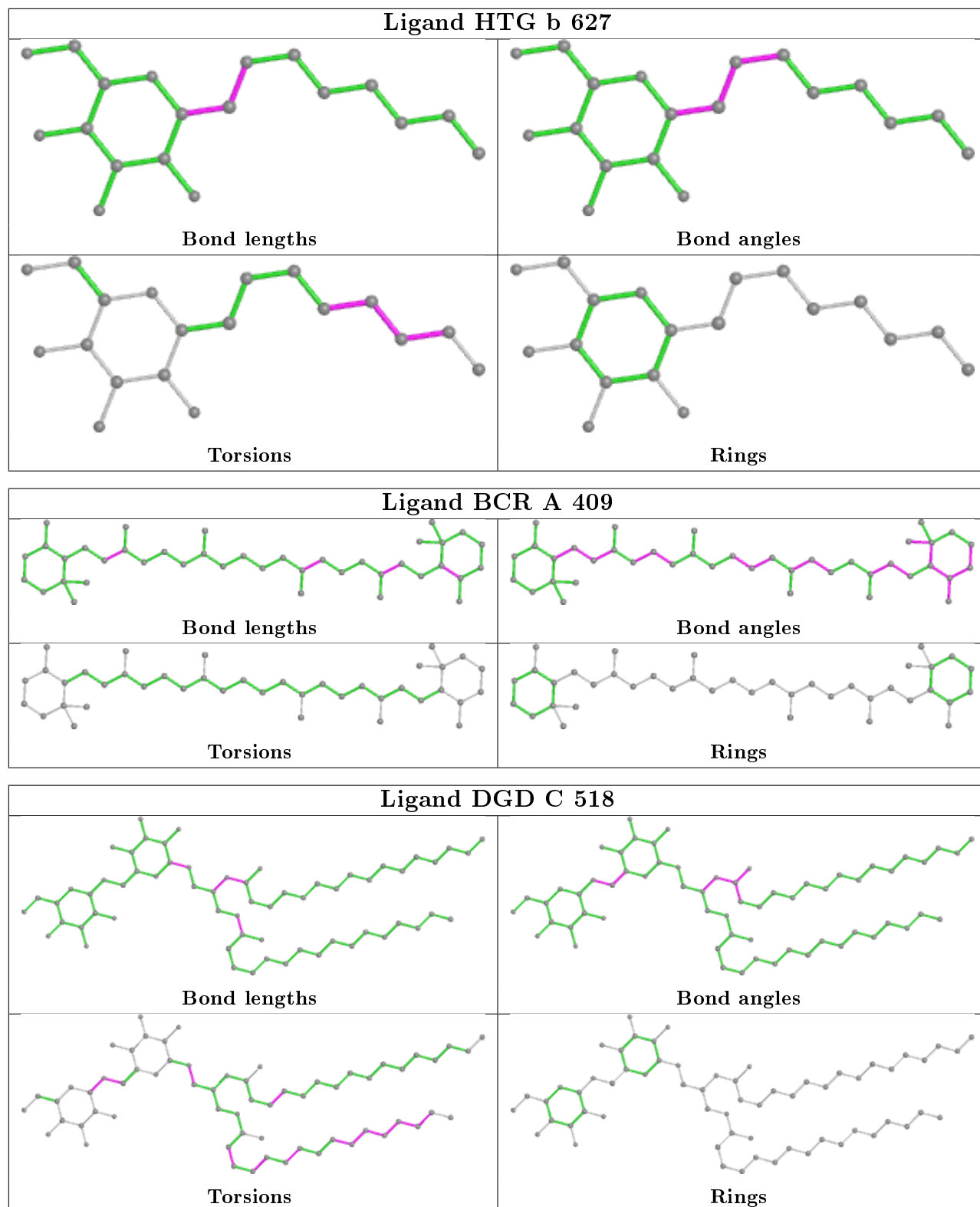


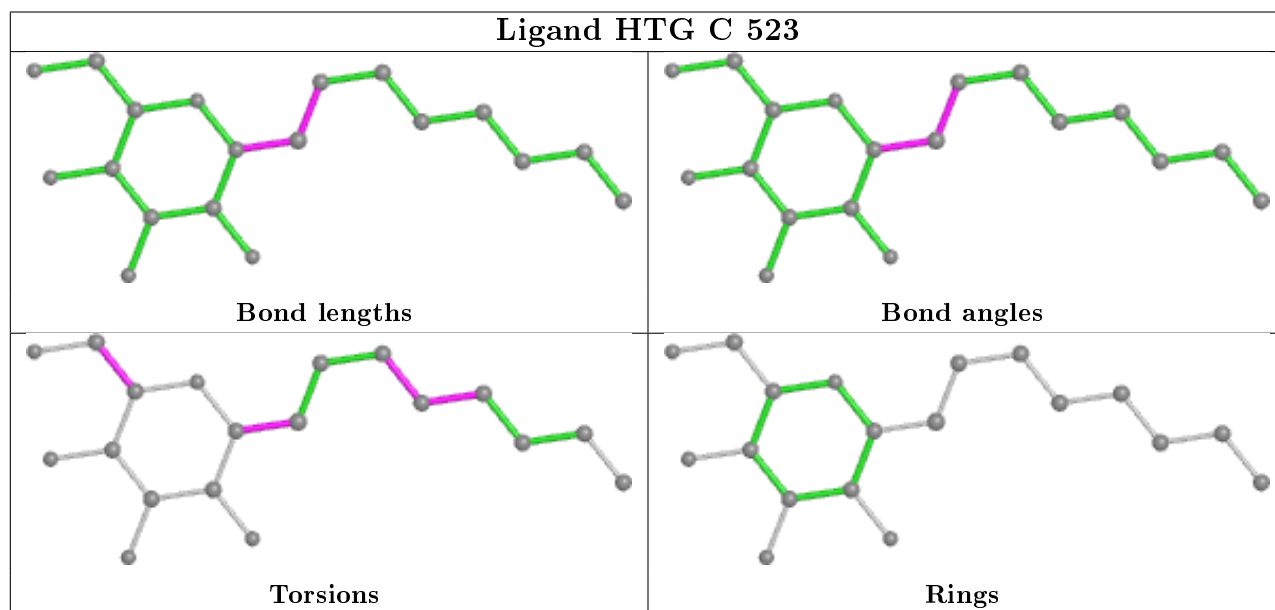
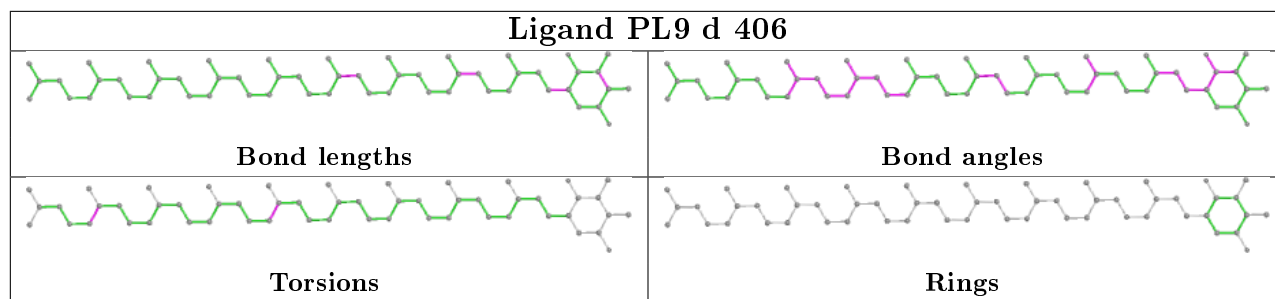


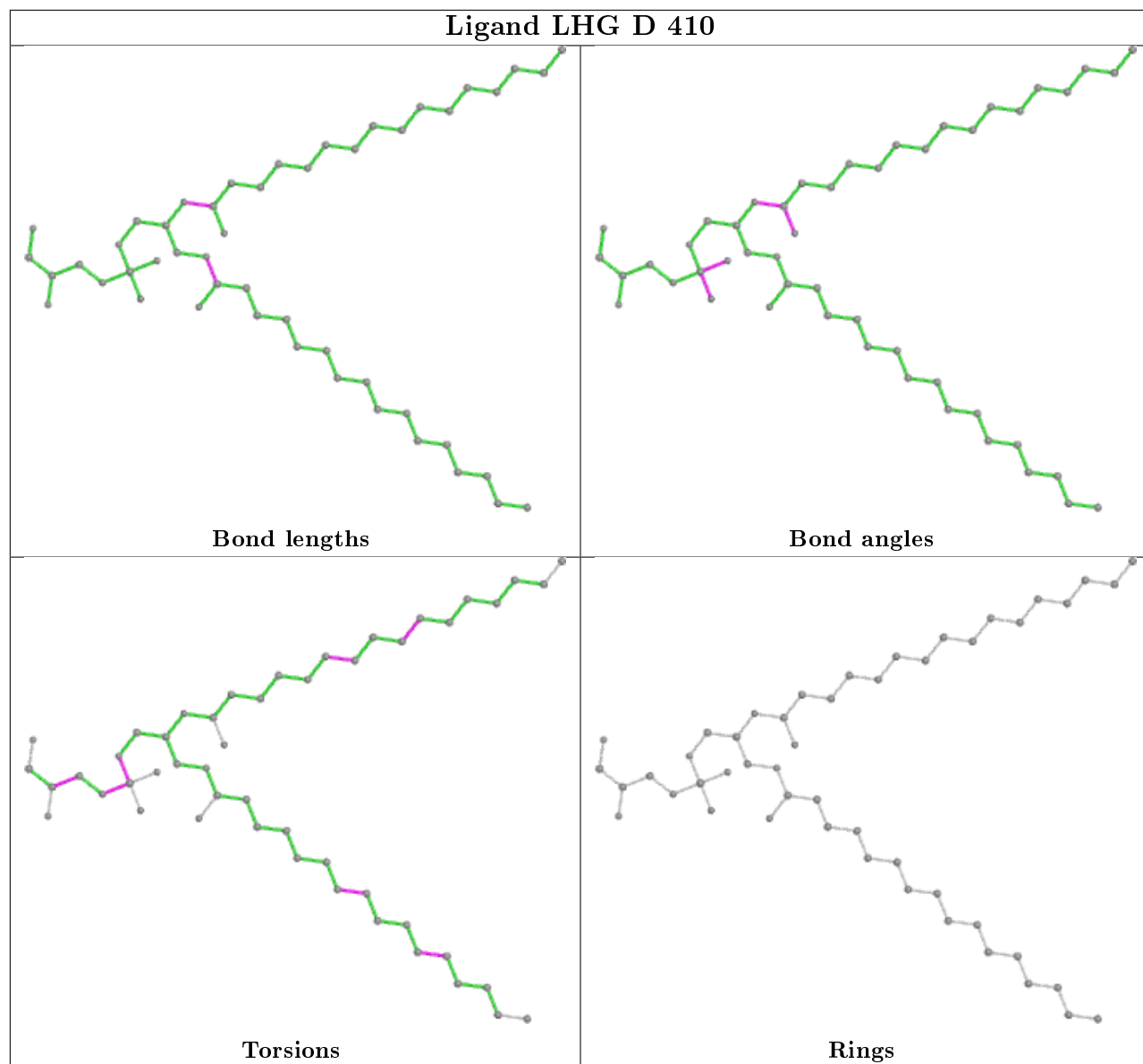


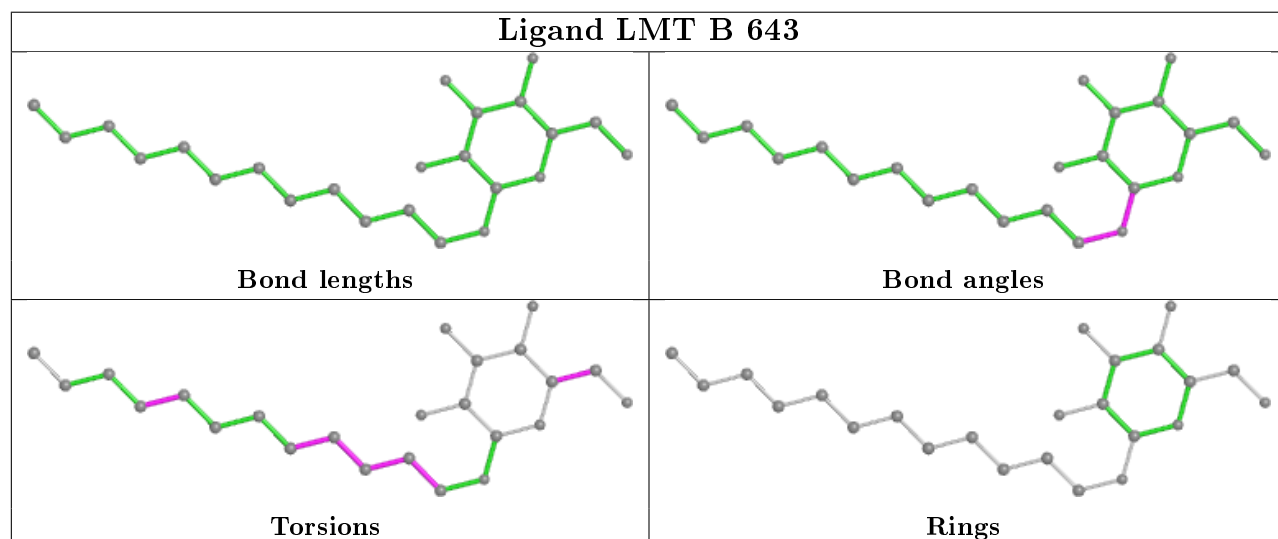
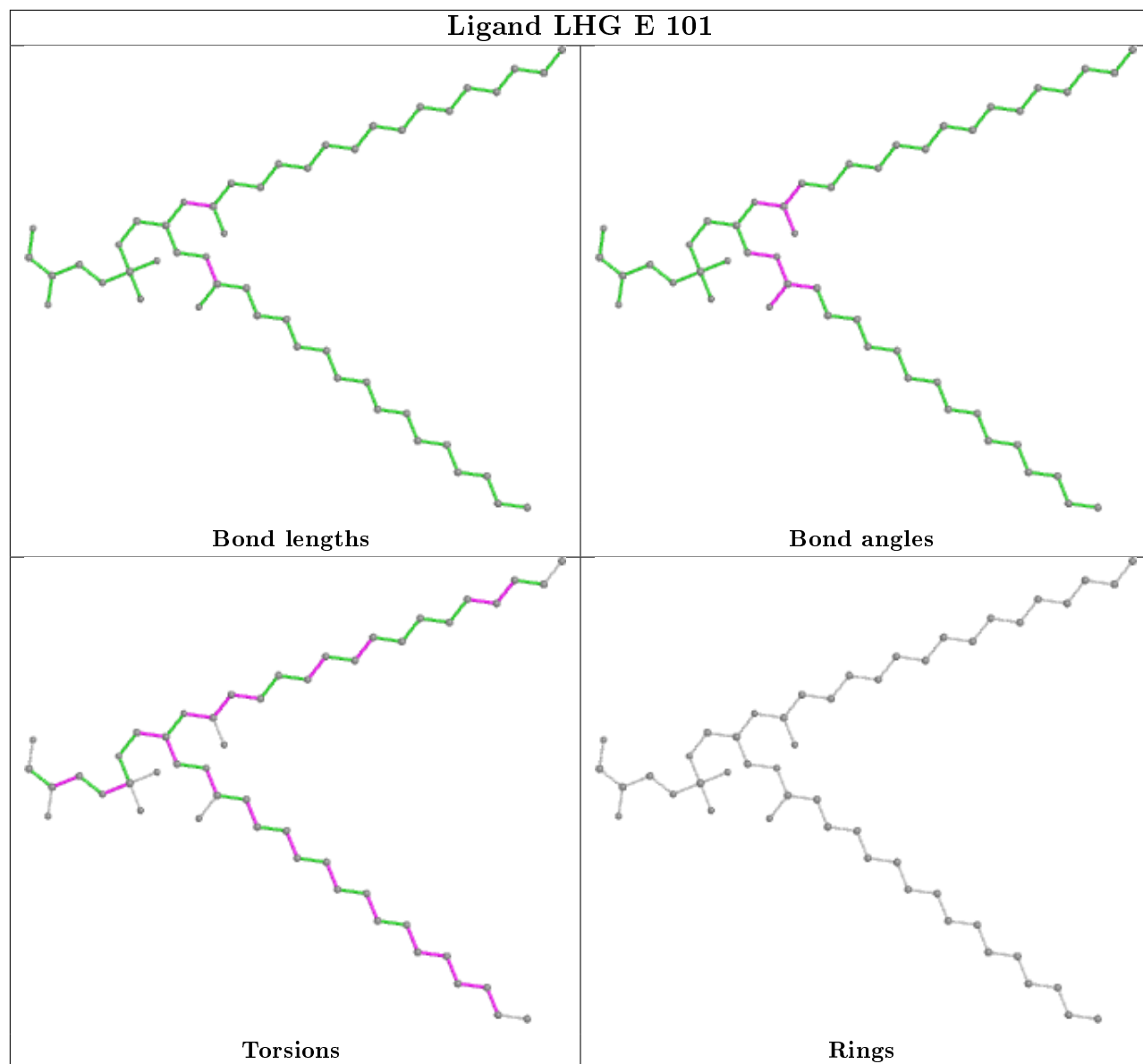


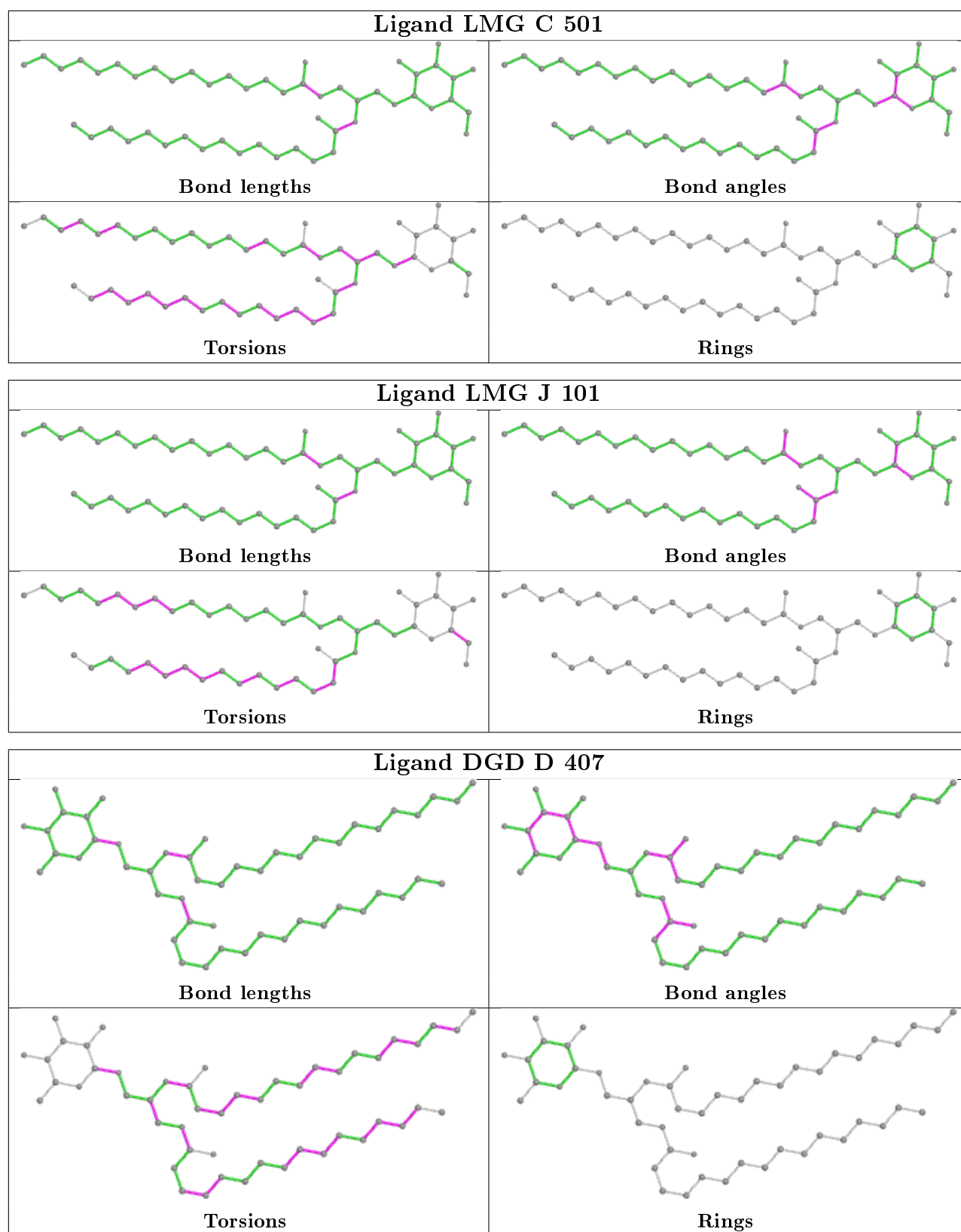


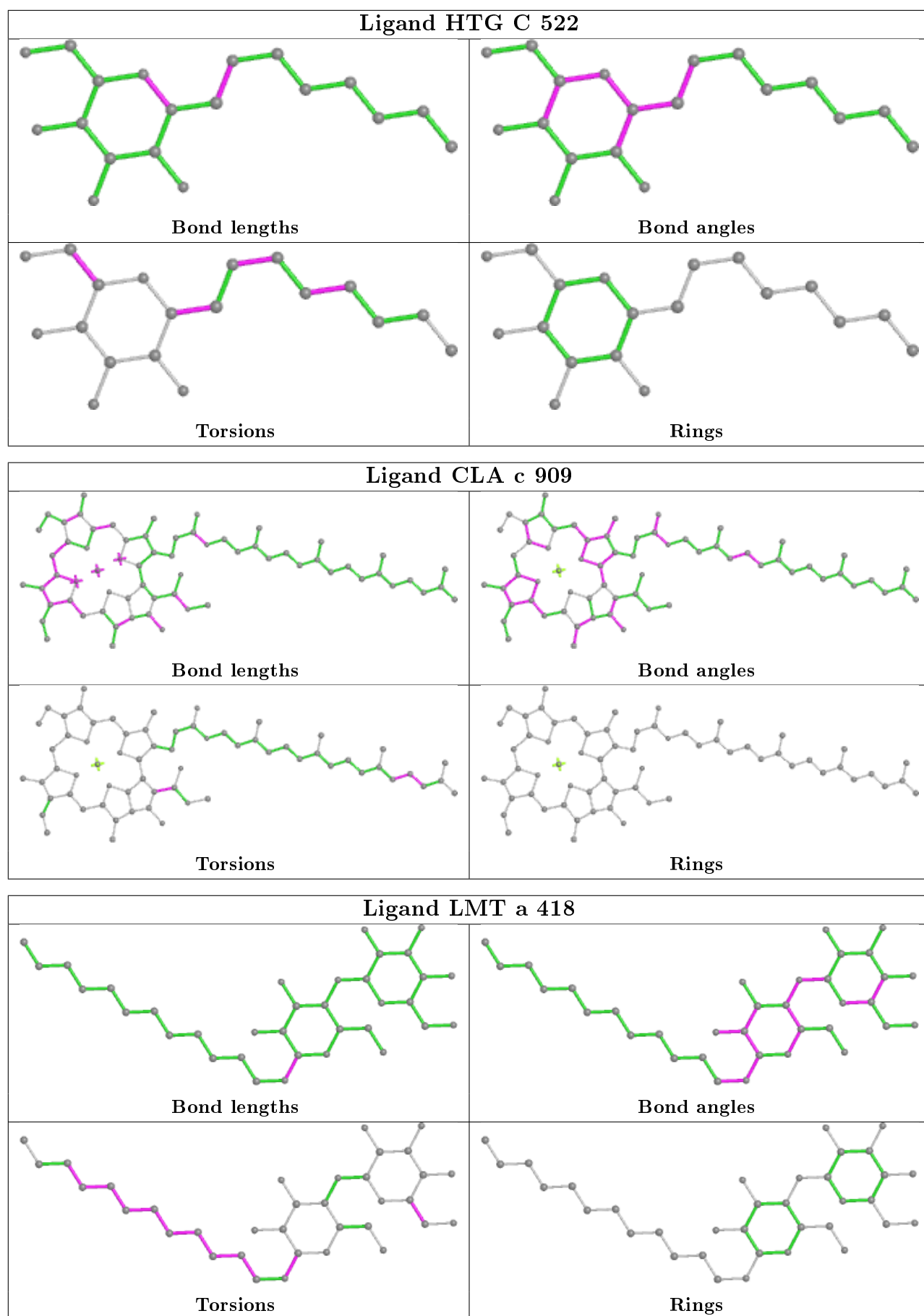


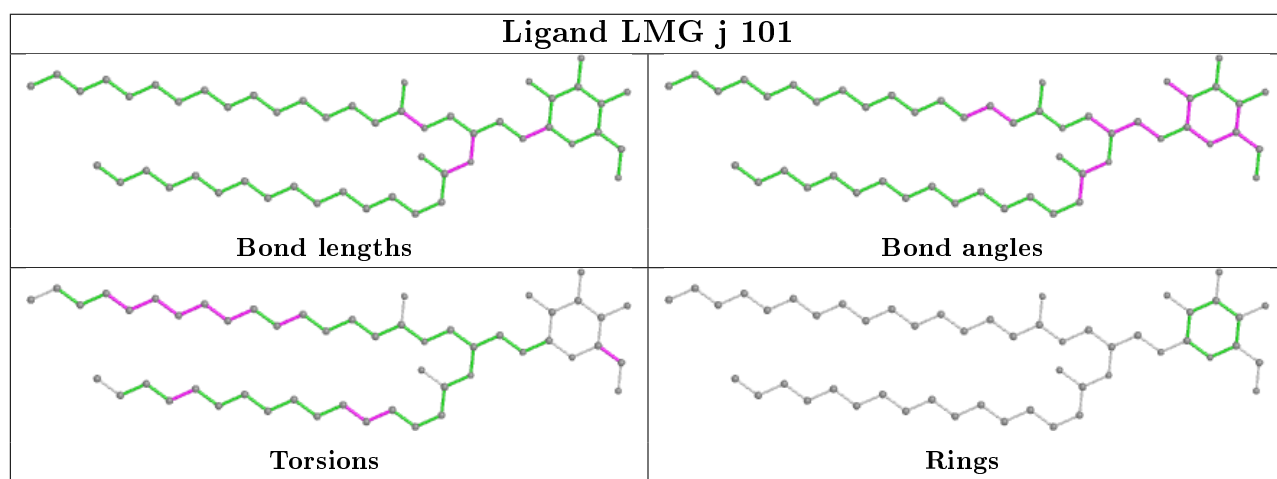
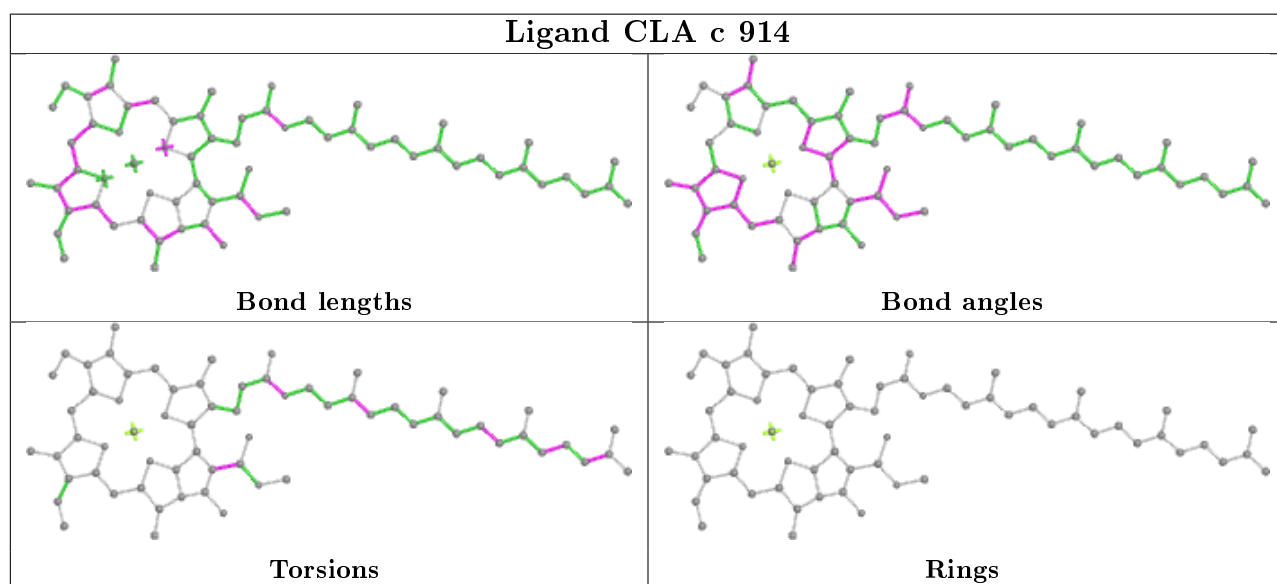
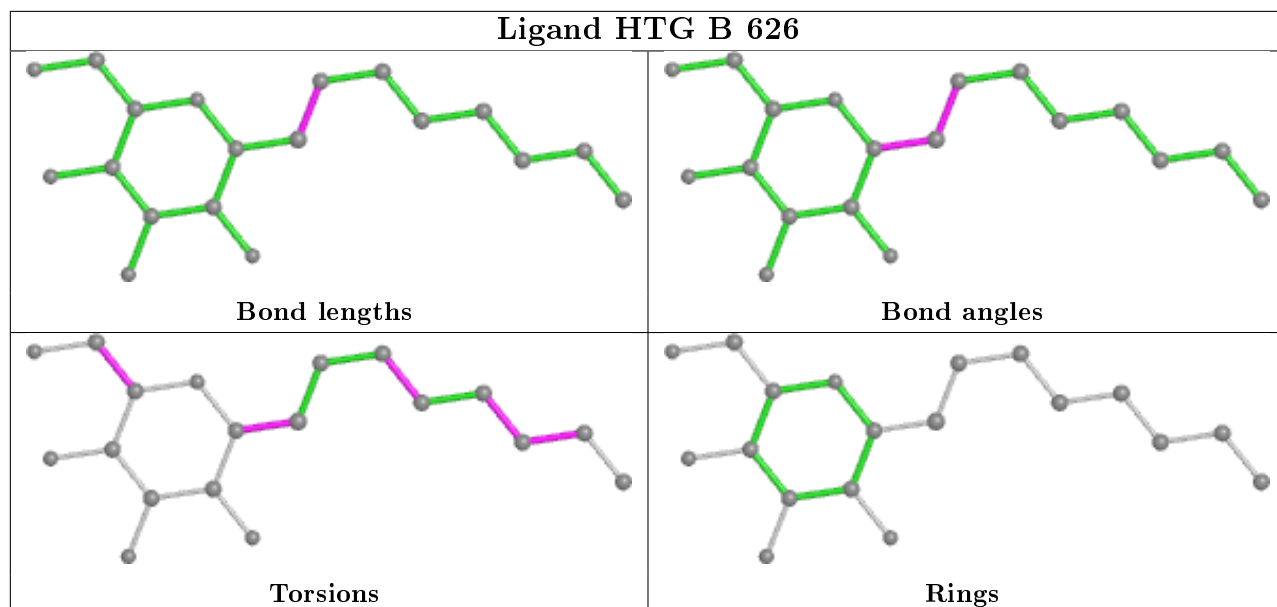


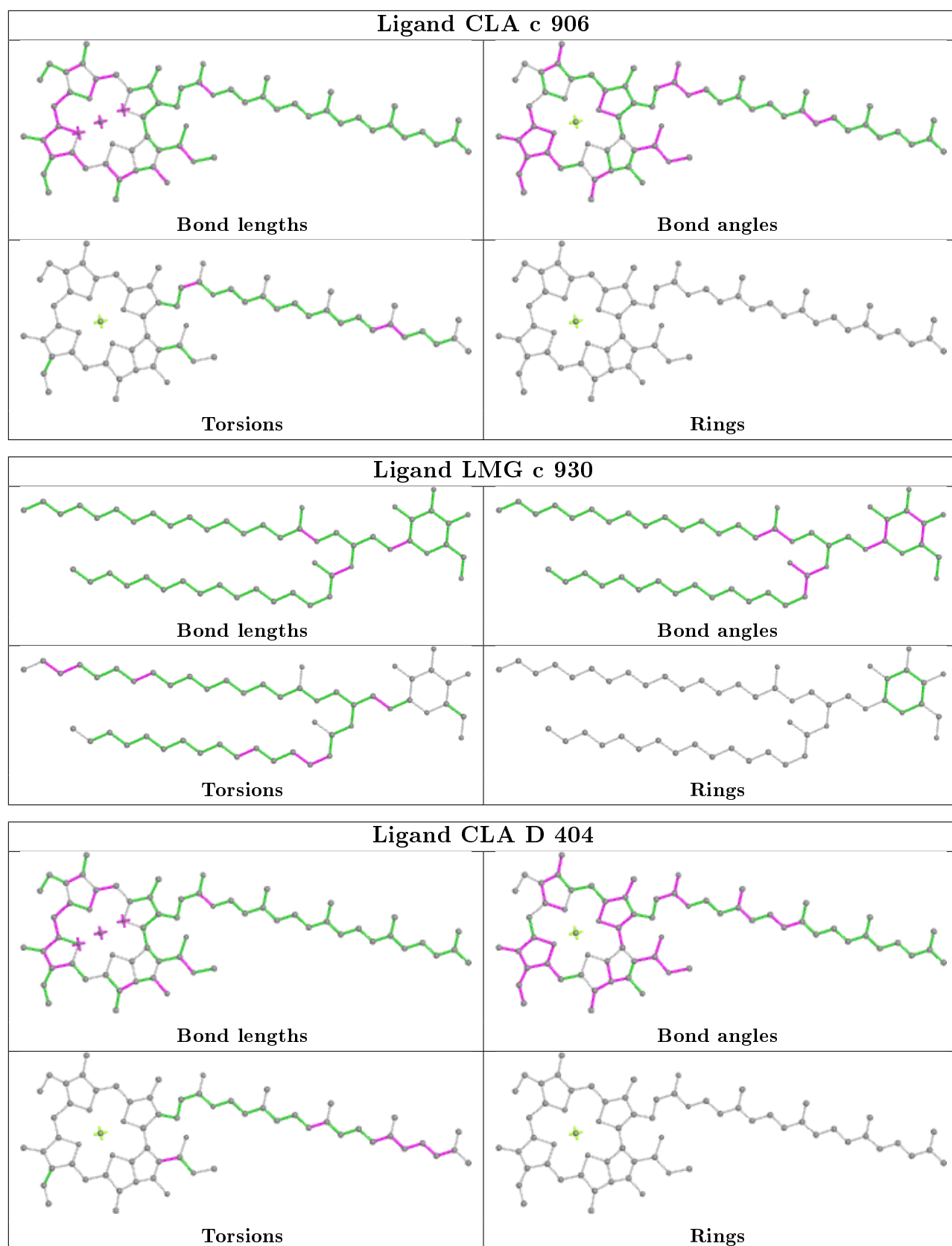


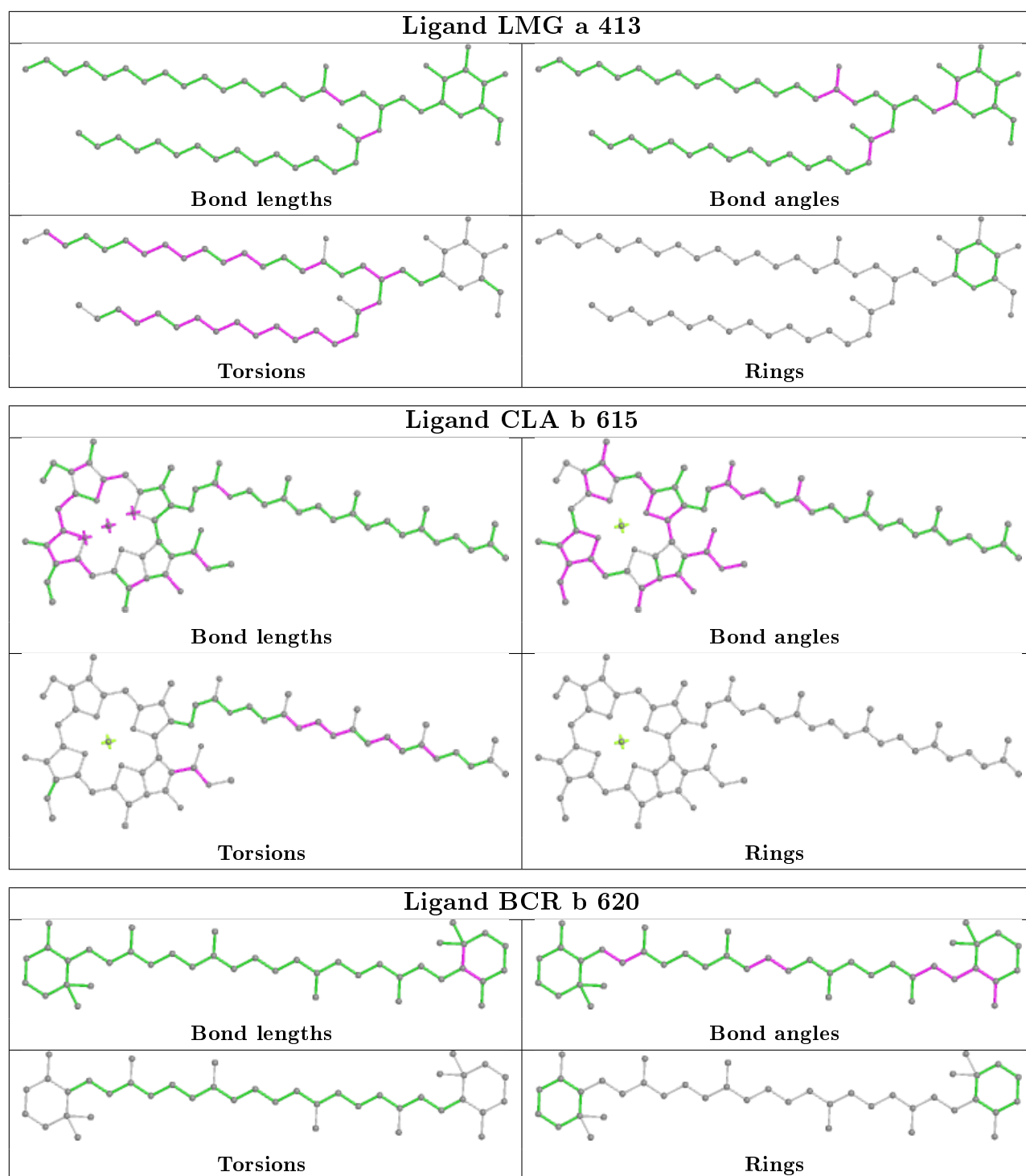


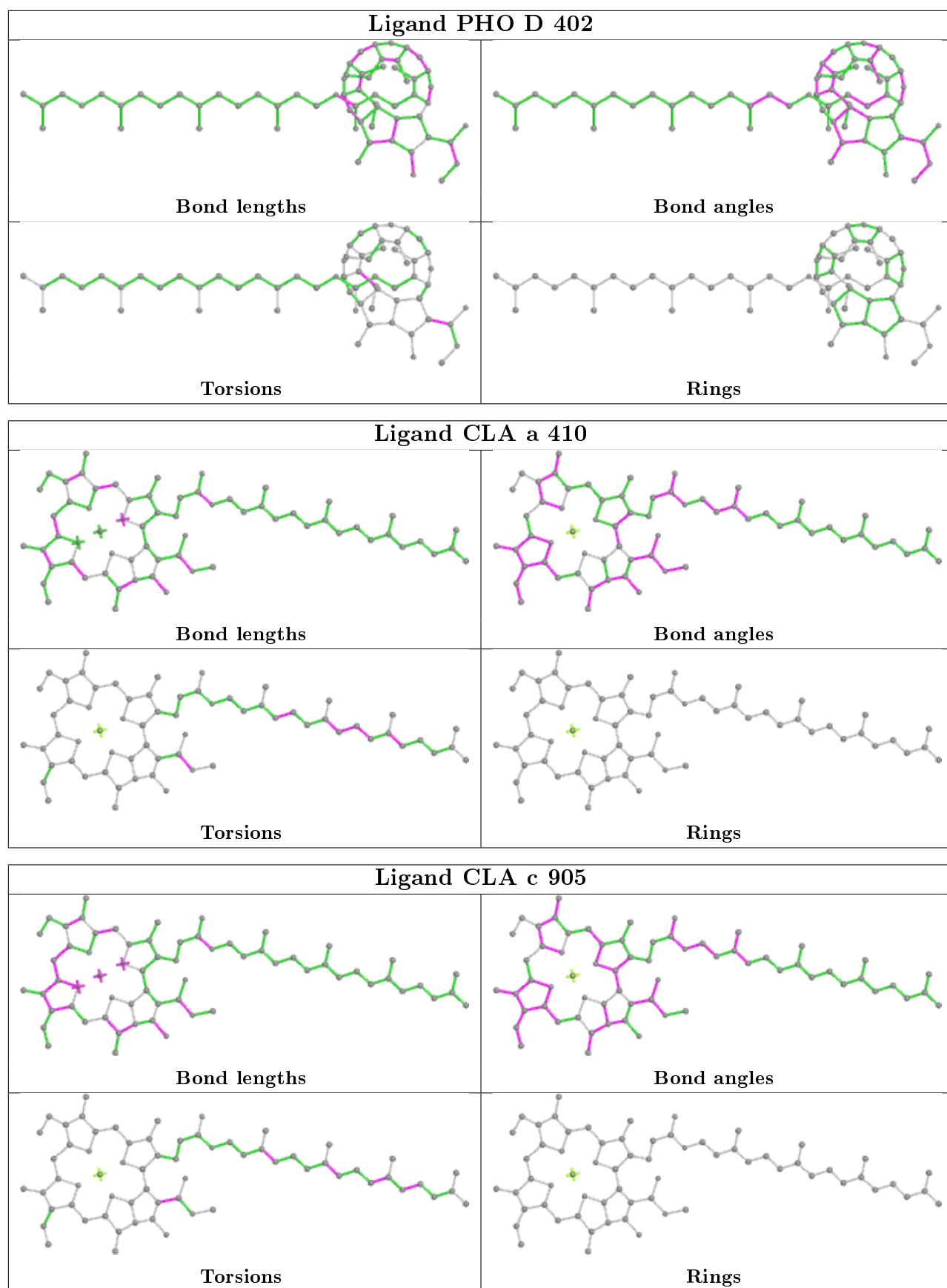


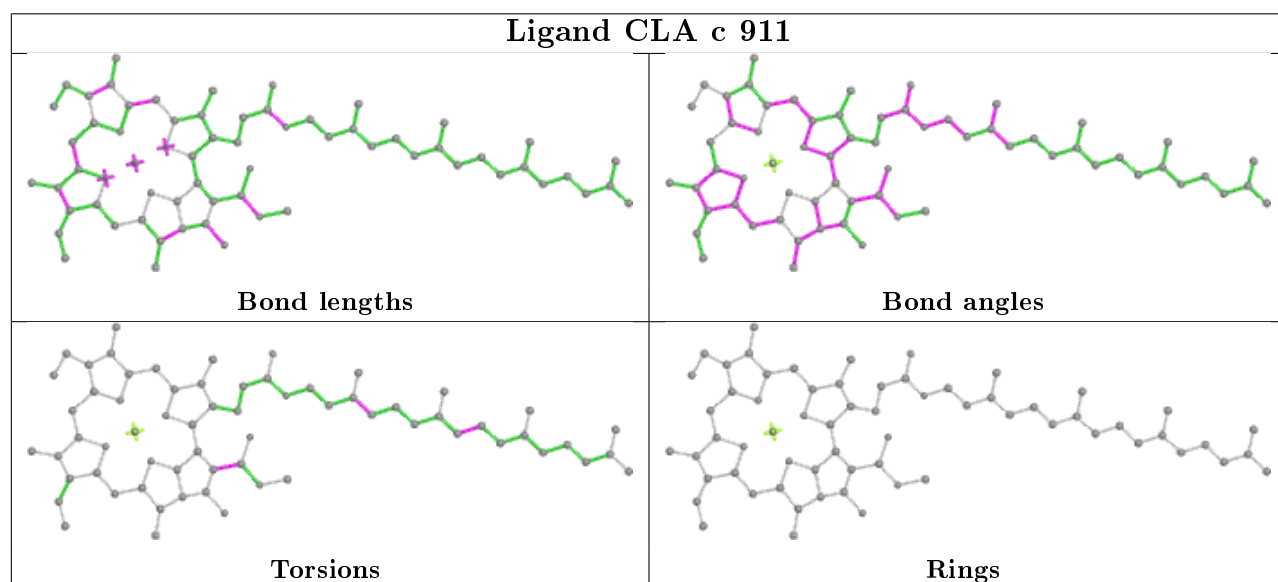
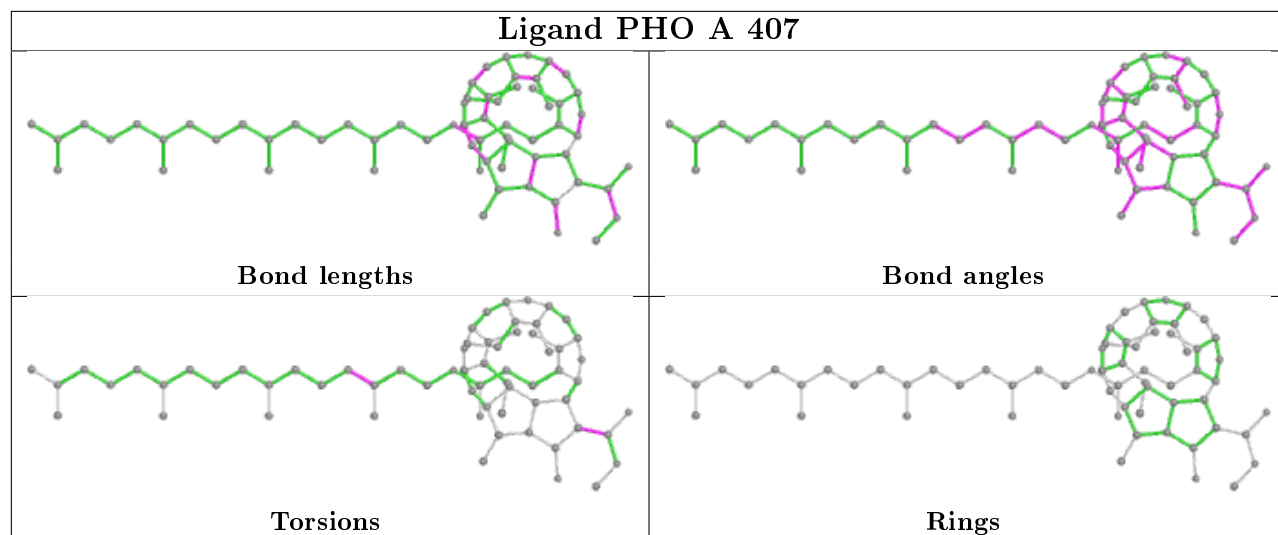


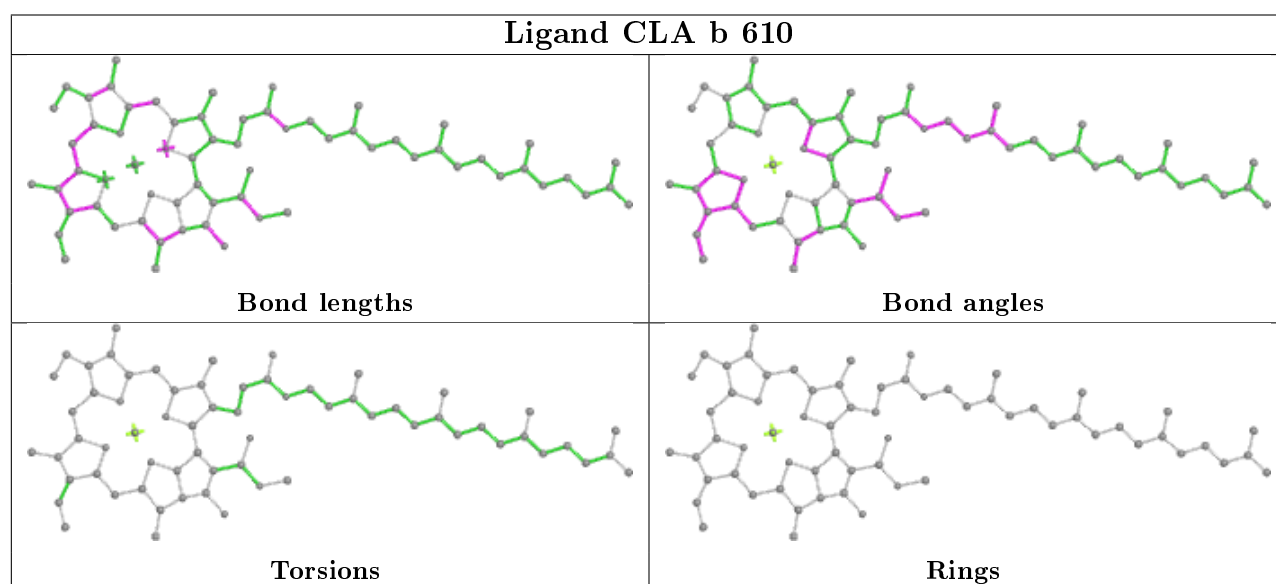
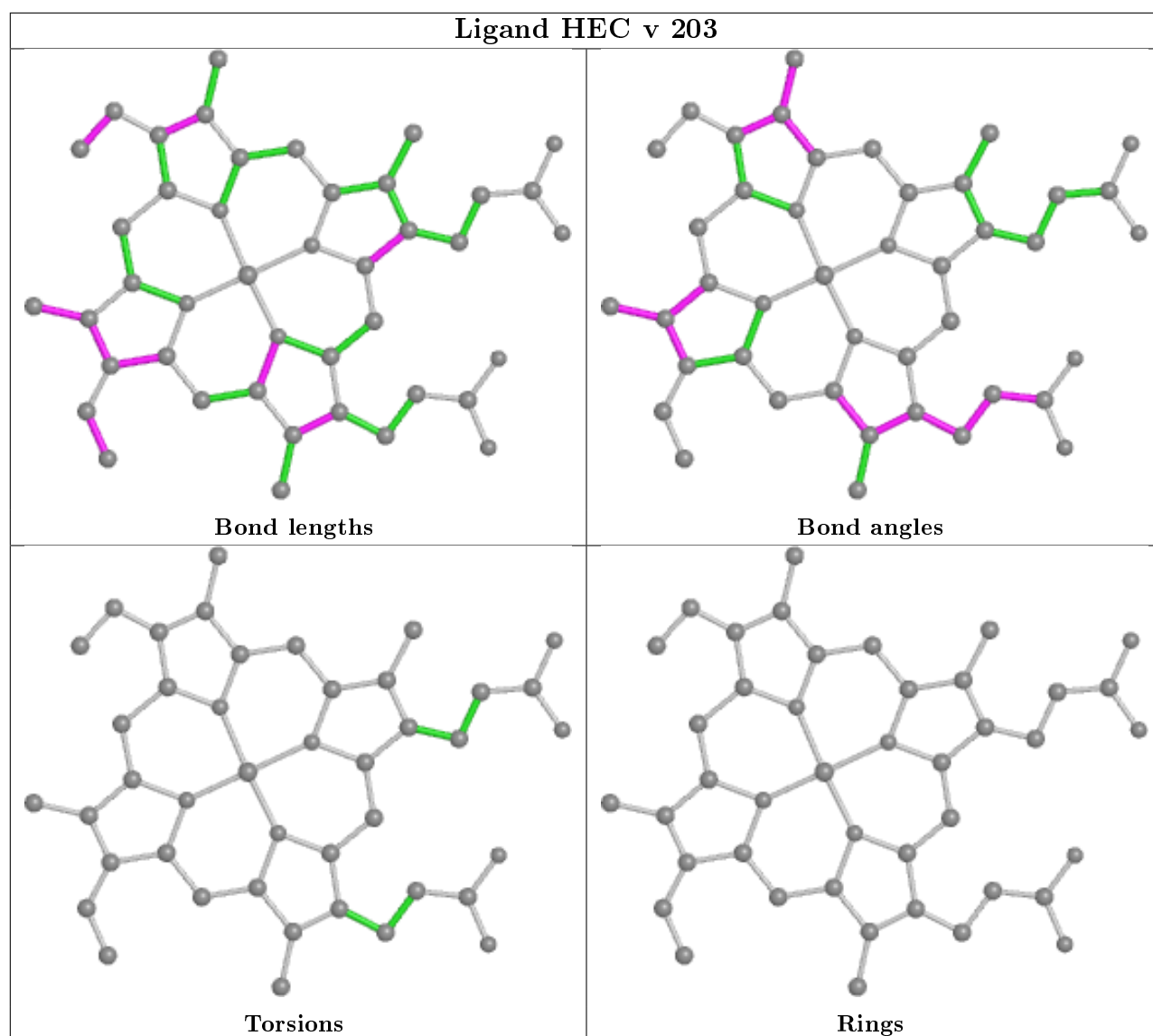


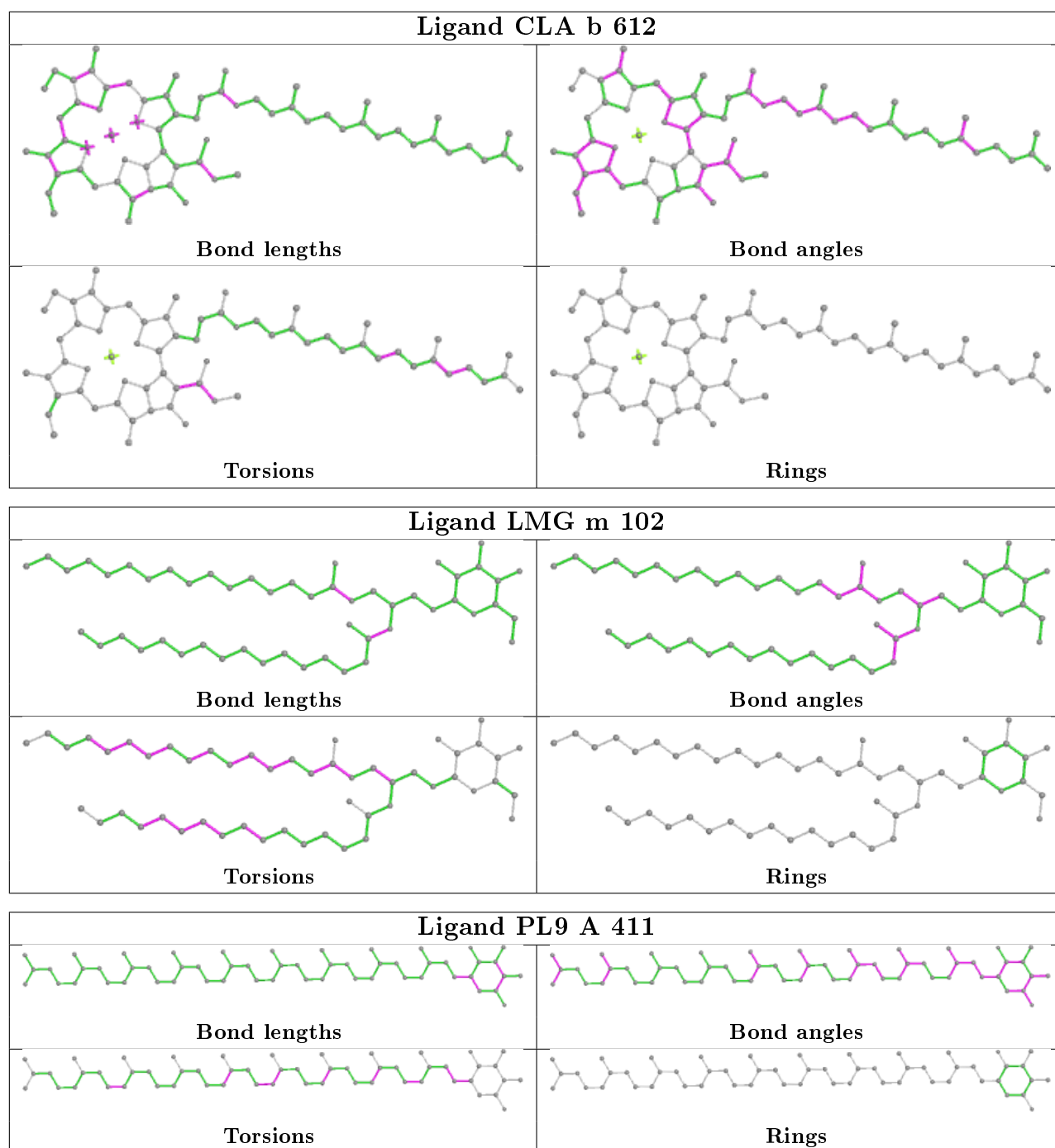


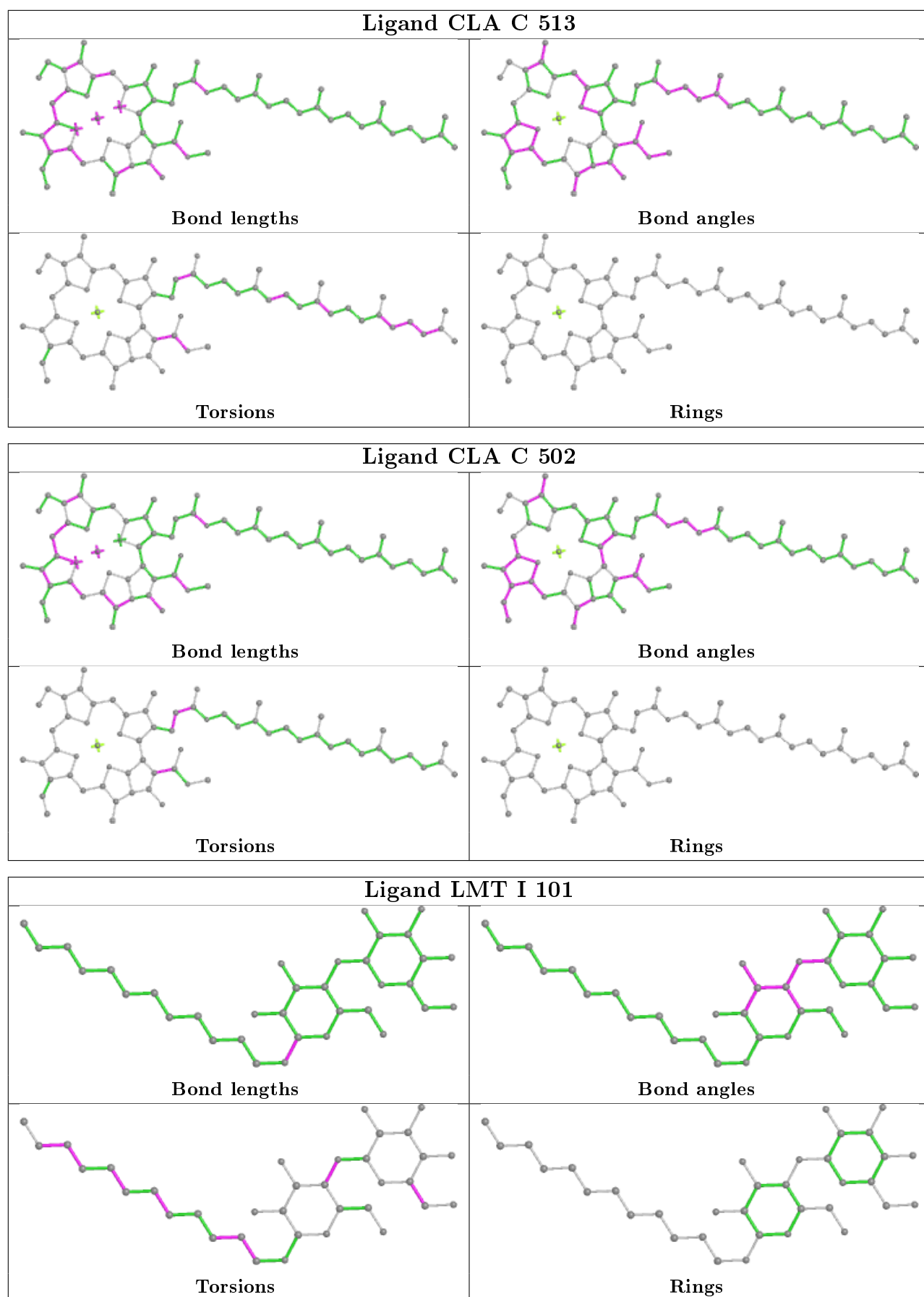












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

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, 95th percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q < 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
1	A	334/344 (97%)	-0.25	4 (1%) 79 80	14, 21, 43, 67	0
1	a	334/344 (97%)	-0.09	9 (2%) 54 56	14, 21, 44, 91	0
2	B	505/505 (100%)	0.01	28 (5%) 25 26	17, 26, 50, 81	0
2	b	501/505 (99%)	0.01	32 (6%) 19 20	16, 25, 53, 109	0
3	C	451/455 (99%)	-0.03	14 (3%) 49 50	18, 30, 46, 73	0
3	c	455/455 (100%)	-0.00	16 (3%) 44 45	20, 31, 43, 68	0
4	D	342/342 (100%)	-0.24	3 (0%) 84 85	15, 22, 41, 88	0
4	d	342/342 (100%)	-0.30	3 (0%) 84 85	15, 22, 40, 73	0
5	E	81/83 (97%)	1.43	24 (29%) 0 0	25, 45, 75, 97	0
5	e	79/83 (95%)	0.87	12 (15%) 2 2	28, 42, 67, 87	0
6	F	35/44 (79%)	0.44	6 (17%) 1 1	24, 35, 59, 96	0
6	f	32/44 (72%)	0.04	2 (6%) 20 21	26, 31, 70, 82	0
7	H	63/65 (96%)	0.00	2 (3%) 47 49	24, 34, 44, 77	0
7	h	63/65 (96%)	0.36	5 (7%) 12 13	23, 34, 46, 72	0
8	I	34/38 (89%)	-0.19	0 100 100	27, 35, 58, 77	0
8	i	37/38 (97%)	0.23	3 (8%) 12 13	26, 32, 84, 89	0
9	J	36/40 (90%)	0.21	3 (8%) 11 12	24, 38, 65, 81	0
9	j	40/40 (100%)	0.22	5 (12%) 3 4	24, 36, 69, 76	0
10	K	37/37 (100%)	0.05	2 (5%) 25 27	31, 37, 47, 56	0
10	k	37/37 (100%)	0.24	2 (5%) 25 27	29, 37, 55, 66	0
11	L	37/37 (100%)	-0.10	3 (8%) 12 13	15, 20, 62, 80	0
11	l	36/37 (97%)	-0.04	2 (5%) 24 26	17, 20, 68, 76	0
12	M	34/36 (94%)	-0.16	2 (5%) 22 24	19, 23, 52, 75	0
12	m	34/36 (94%)	0.11	2 (5%) 22 24	19, 24, 53, 72	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	O	243/244 (99%)	0.08	17 (6%) 16 17	16, 30, 55, 86	0
13	o	243/244 (99%)	0.17	29 (11%) 4 4	16, 32, 65, 86	0
14	T	29/32 (90%)	0.26	1 (3%) 45 46	17, 21, 45, 81	0
14	t	30/32 (93%)	0.29	2 (6%) 17 19	18, 22, 55, 85	0
15	U	97/104 (93%)	-0.22	0 100 100	20, 28, 46, 59	0
15	u	97/104 (93%)	-0.37	1 (1%) 82 83	22, 27, 40, 63	0
16	V	137/137 (100%)	-0.35	0 100 100	20, 26, 41, 59	0
16	v	137/137 (100%)	0.24	10 (7%) 15 16	23, 33, 51, 71	0
17	Y	29/30 (96%)	1.27	9 (31%) 0 0	38, 46, 69, 72	0
17	y	29/30 (96%)	0.85	5 (17%) 1 1	38, 47, 59, 69	0
18	X	38/40 (95%)	0.58	6 (15%) 2 2	29, 39, 58, 62	0
18	x	38/40 (95%)	0.82	6 (15%) 2 2	31, 38, 83, 98	0
19	Z	62/62 (100%)	1.61	21 (33%) 0 0	36, 45, 83, 96	0
19	z	61/62 (98%)	1.65	23 (37%) 0 0	42, 52, 83, 103	0
All	All	5249/5350 (98%)	0.05	314 (5%) 21 23	14, 28, 55, 109	0

The worst 5 of 314 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
2	b	487	SER	9.4
6	F	11	VAL	8.1
2	b	496	TYR	7.7
19	z	3	ILE	7.5
14	T	30	THR	7.3

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
14	FME	T	1	10/11	0.97	0.07	19,26,45,49	0
8	FME	I	1	10/11	0.97	0.09	27,32,36,36	0
14	FME	t	1	10/11	0.97	0.08	18,24,45,50	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
8	FME	i	1	10/11	0.98	0.08	28,29,33,33	0

6.3 Carbohydrates [i](#)

There are no monosaccharides in this entry.

6.4 Ligands [i](#)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å ²)	Q<0.9
31	DMS	i	106	4/4	0.18	0.33	120,121,124,138	0
29	UNL	b	630	16/-	0.38	0.34	74,86,106,110	0
29	UNL	b	631	16/-	0.41	0.23	61,73,81,82	0
31	DMS	b	644	4/4	0.46	0.39	73,76,78,96	0
29	UNL	B	634	16/-	0.50	0.27	73,80,95,97	0
29	UNL	I	104	16/-	0.50	0.29	69,76,89,92	0
31	DMS	V	211	4/4	0.52	0.36	61,61,68,79	0
28	LHG	a	415	49/49	0.53	0.34	56,72,99,108	0
29	UNL	J	105	11/-	0.54	0.27	61,67,75,78	0
29	UNL	J	104	16/-	0.54	0.37	62,82,99,99	0
29	UNL	B	629	14/-	0.55	0.28	62,72,81,82	0
29	UNL	B	633	16/-	0.59	0.30	61,80,87,88	0
29	UNL	b	632	16/-	0.59	0.34	58,83,101,101	0
31	DMS	U	203	4/4	0.59	0.32	70,74,80,89	0
35	HTG	D	414	19/19	0.59	0.37	76,92,111,112	0
35	HTG	b	628	19/19	0.60	0.22	52,96,109,112	0
28	LHG	e	101	40/49	0.61	0.25	55,93,121,126	0
31	DMS	U	204	4/4	0.61	0.22	53,62,62,80	0
36	DGD	D	407	50/66	0.61	0.31	54,71,97,97	0
28	LHG	A	412	49/49	0.62	0.35	59,83,104,111	0
29	UNL	A	414	13/-	0.62	0.34	58,71,83,83	0
28	LHG	d	402	44/49	0.62	0.23	59,78,125,135	0
29	UNL	i	104	16/-	0.63	0.35	69,76,78,79	0
36	DGD	d	407	50/66	0.63	0.26	58,74,97,98	0
29	UNL	b	626	16/-	0.63	0.28	59,68,73,73	0
29	UNL	H	104	14/-	0.64	0.42	64,69,74,76	0
35	HTG	B	631	19/19	0.64	0.22	41,88,97,100	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
31	DMS	c	936	4/4	0.65	0.29	80,80,81,90	0
35	HTG	d	413	19/19	0.65	0.27	62,86,104,106	0
30	LMT	F	101	35/35	0.66	0.38	64,88,93,96	0
34	LMG	D	412	51/55	0.66	0.25	37,65,106,119	0
35	HTG	B	626	19/19	0.66	0.46	52,88,96,96	0
35	HTG	c	922	19/19	0.67	0.41	53,84,96,100	0
31	DMS	A	419	4/4	0.67	0.37	75,76,91,97	0
31	DMS	O	304	4/4	0.67	0.26	69,71,78,87	0
28	LHG	K	101	44/49	0.67	0.32	63,93,124,137	0
26	SQD	B	621	54/54	0.68	0.24	43,63,88,93	0
29	UNL	E	102	16/-	0.68	0.39	58,61,76,77	0
35	HTG	c	923	13/19	0.68	0.34	59,72,86,87	0
35	HTG	v	204	19/19	0.69	0.33	62,70,81,91	0
28	LHG	E	101	49/49	0.70	0.28	39,83,104,109	0
31	DMS	b	642	4/4	0.70	0.34	90,90,97,101	0
30	LMT	Z	101	35/35	0.70	0.25	41,88,100,102	0
29	UNL	E	104	16/-	0.71	0.23	67,71,74,76	0
30	LMT	b	621	25/35	0.71	0.19	45,70,90,91	0
30	LMT	B	643	24/35	0.71	0.23	50,77,114,118	0
29	UNL	E	103	13/-	0.71	0.33	63,68,85,87	0
30	LMT	m	103	35/35	0.71	0.19	48,92,102,103	0
30	LMT	M	101	35/35	0.71	0.22	31,50,59,60	0
27	PL9	a	414	55/55	0.72	0.24	46,61,86,88	0
29	UNL	e	102	16/-	0.72	0.38	54,61,69,72	0
35	HTG	C	522	19/19	0.72	0.35	41,78,86,87	0
29	UNL	z	102	13/-	0.72	0.23	53,62,72,75	0
31	DMS	k	103	4/4	0.72	0.33	90,92,93,104	0
29	UNL	I	103	16/-	0.72	0.28	51,57,70,74	0
29	UNL	B	628	10/-	0.73	0.42	62,67,70,71	0
31	DMS	o	304	4/4	0.73	0.28	63,68,70,84	0
29	UNL	i	103	16/-	0.73	0.33	58,61,67,70	0
27	PL9	A	411	55/55	0.73	0.25	45,59,80,84	0
29	UNL	i	102	16/-	0.73	0.21	52,62,75,76	0
30	LMT	a	418	35/35	0.73	0.23	44,63,79,80	0
31	DMS	b	638	4/4	0.74	0.20	54,60,67,74	0
30	LMT	B	623	35/35	0.74	0.21	48,72,89,93	0
30	LMT	m	104	35/35	0.74	0.20	34,51,56,58	0
29	UNL	Z	103	9/-	0.75	0.22	50,61,69,70	0
30	LMT	e	103	25/35	0.75	0.32	60,77,93,95	0
26	SQD	L	102	54/54	0.75	0.20	42,58,87,90	0
29	UNL	Z	102	14/-	0.76	0.32	63,67,74,76	0
29	UNL	t	102	16/-	0.76	0.37	53,62,74,75	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
29	UNL	k	101	8/-	0.76	0.18	59,71,78,80	0
34	LMG	C	531	51/55	0.76	0.22	38,78,93,98	0
31	DMS	u	206	4/4	0.76	0.30	70,71,76,93	0
29	UNL	B	632	16/-	0.76	0.25	44,61,68,70	0
29	UNL	a	416	10/-	0.77	0.33	54,68,75,76	0
34	LMG	d	411	51/55	0.77	0.23	39,70,101,108	0
30	LMT	I	101	35/35	0.77	0.30	63,75,85,91	0
34	LMG	c	930	51/55	0.77	0.22	33,69,81,84	0
29	UNL	B	635	9/-	0.77	0.20	60,67,76,77	0
31	DMS	a	401	4/4	0.78	0.27	75,81,85,96	0
30	LMT	z	101	32/35	0.78	0.23	43,88,96,99	0
31	DMS	O	307	4/4	0.79	0.21	64,69,69,84	0
29	UNL	u	202	16/-	0.79	0.28	41,54,60,62	0
29	UNL	U	201	14/-	0.79	0.26	38,50,58,61	0
35	HTG	b	623	19/19	0.80	0.25	47,76,83,84	0
31	DMS	h	105	4/4	0.80	0.19	76,83,89,90	0
31	DMS	c	933	4/4	0.80	0.17	61,64,65,77	0
29	UNL	T	102	13/-	0.80	0.50	62,68,75,75	0
31	DMS	B	647	4/4	0.80	0.37	81,85,85,89	0
29	UNL	j	103	16/-	0.81	0.17	45,56,61,62	0
29	UNL	u	201	11/-	0.81	0.28	39,50,60,61	0
31	DMS	b	646	4/4	0.81	0.36	84,87,89,96	0
29	UNL	a	419	6/-	0.81	0.36	47,53,53,53	0
34	LMG	a	413	51/55	0.81	0.19	41,53,68,74	0
31	DMS	c	929	4/4	0.81	0.43	46,62,67,70	0
26	SQD	a	417	54/54	0.81	0.17	38,53,72,73	0
30	LMT	A	416	35/35	0.82	0.20	42,63,86,98	0
30	LMT	B	644	24/35	0.82	0.21	34,52,81,87	0
35	HTG	C	523	19/19	0.82	0.29	60,78,95,97	0
29	UNL	J	103	16/-	0.82	0.17	46,54,60,63	0
31	DMS	V	207	4/4	0.82	0.15	51,52,60,62	0
29	UNL	c	931	10/-	0.82	0.22	55,60,62,64	0
29	UNL	B	627	16/-	0.82	0.15	38,45,55,60	0
31	DMS	b	645	4/4	0.82	0.46	70,77,83,84	0
34	LMG	m	102	51/55	0.83	0.19	33,41,54,61	0
29	UNL	I	102	13/-	0.83	0.16	47,53,65,69	0
31	DMS	b	643	4/4	0.83	0.32	81,82,85,85	0
26	SQD	A	415	54/54	0.83	0.18	39,54,72,76	0
31	DMS	A	421	4/4	0.83	0.25	57,63,74,78	0
34	LMG	C	501	51/55	0.83	0.20	37,51,63,70	0
31	DMS	H	101	4/4	0.83	0.28	54,58,62,65	0
30	LMT	a	422	35/35	0.83	0.35	61,74,82,85	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
29	UNL	d	417	11/-	0.83	0.17	48,63,69,71	0
34	LMG	C	520	51/55	0.84	0.20	31,61,74,79	0
30	LMT	T	103	24/35	0.84	0.20	34,56,76,83	0
29	UNL	X	101	16/-	0.84	0.17	33,37,60,61	0
26	SQD	x	101	41/54	0.84	0.24	54,76,95,101	0
31	DMS	B	641	4/4	0.84	0.21	62,63,65,66	0
31	DMS	O	311	4/4	0.84	0.27	59,59,71,73	0
29	UNL	b	629	12/-	0.84	0.34	49,59,70,71	0
31	DMS	b	639	4/4	0.84	0.26	41,55,63,67	0
35	HTG	c	921	19/19	0.84	0.21	68,82,88,91	0
34	LMG	c	920	51/55	0.84	0.19	27,55,81,84	0
31	DMS	O	308	4/4	0.85	0.27	54,64,77,81	0
35	HTG	B	625	19/19	0.85	0.17	28,42,49,51	0
31	DMS	O	309	4/4	0.85	0.22	53,63,64,70	0
31	DMS	B	646	4/4	0.85	0.19	76,77,77,84	0
34	LMG	B	622	51/55	0.85	0.17	31,41,52,67	0
31	DMS	B	645	4/4	0.85	0.24	50,61,64,69	0
26	SQD	D	408	45/54	0.85	0.29	45,67,86,93	0
31	DMS	c	935	4/4	0.86	0.28	71,72,75,83	0
31	DMS	b	640	4/4	0.86	0.19	67,70,78,83	0
31	DMS	c	934	4/4	0.86	0.27	87,87,89,99	0
31	DMS	D	417	4/4	0.86	0.23	53,54,58,59	0
29	UNL	b	625	10/-	0.86	0.28	44,59,68,68	0
31	DMS	O	310	4/4	0.86	0.25	61,67,74,76	0
31	DMS	B	649	4/4	0.86	0.28	70,71,73,84	0
31	DMS	b	647	4/4	0.87	0.29	67,78,85,86	0
29	UNL	x	103	15/-	0.87	0.17	31,40,57,58	0
31	DMS	d	419	4/4	0.87	0.23	63,70,76,82	0
31	DMS	h	104	4/4	0.87	0.26	97,99,103,103	0
35	HTG	B	630	19/19	0.87	0.13	41,55,62,66	0
29	UNL	C	532	11/-	0.88	0.23	54,59,66,66	0
31	DMS	A	418	4/4	0.88	0.28	70,79,79,85	0
35	HTG	b	622	19/19	0.88	0.23	28,41,57,64	0
23	CLA	B	610	65/65	0.88	0.13	21,28,32,34	0
31	DMS	l	102	4/4	0.88	0.14	64,65,70,84	0
31	DMS	a	421	4/4	0.88	0.28	81,84,85,92	0
38	RRX	x	102	41/41	0.88	0.13	23,29,46,52	0
29	UNL	b	624	16/-	0.88	0.13	42,51,58,60	0
31	DMS	U	202	4/4	0.88	0.22	33,45,50,55	0
36	DGD	h	102	62/66	0.88	0.18	24,31,41,47	0
29	UNL	d	412	16/-	0.89	0.25	31,40,54,57	0
35	HTG	b	627	19/19	0.89	0.14	39,59,72,82	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
31	DMS	H	105	4/4	0.89	0.26	60,74,74,84	0
31	DMS	b	637	4/4	0.89	0.31	61,63,68,74	0
31	DMS	C	529	4/4	0.89	0.29	54,66,72,74	0
31	DMS	v	208	4/4	0.89	0.22	54,67,71,87	0
38	RRX	H	102	41/41	0.89	0.13	25,29,38,44	0
23	CLA	C	514	65/65	0.89	0.15	37,47,67,72	0
31	DMS	B	640	4/4	0.89	0.24	50,56,60,61	0
31	DMS	b	635	4/4	0.89	0.17	53,63,69,71	0
23	CLA	C	507	65/65	0.90	0.13	25,42,79,81	0
35	HTG	V	204	14/19	0.90	0.18	42,45,71,82	0
35	HTG	C	521	19/19	0.90	0.19	61,66,74,77	0
31	DMS	v	206	4/4	0.90	0.26	66,68,76,78	0
26	SQD	A	410	54/54	0.90	0.17	31,55,74,80	0
31	DMS	A	424	4/4	0.90	0.20	53,54,58,69	0
31	DMS	V	210	4/4	0.90	0.16	64,65,67,73	0
31	DMS	V	205	4/4	0.90	0.23	49,60,60,63	0
31	DMS	d	418	4/4	0.90	0.28	68,69,71,71	0
29	UNL	M	102	11/-	0.90	0.21	45,50,63,69	0
23	CLA	b	610	65/65	0.91	0.11	22,27,31,39	0
31	DMS	V	202	4/4	0.91	0.16	31,32,38,48	0
31	DMS	u	205	4/4	0.91	0.21	41,50,54,58	0
29	UNL	i	101	16/-	0.91	0.13	37,43,60,60	0
31	DMS	C	528	4/4	0.91	0.16	60,63,65,66	0
26	SQD	a	412	54/54	0.91	0.15	31,53,72,76	0
31	DMS	B	642	4/4	0.91	0.30	46,54,59,67	0
31	DMS	C	526	4/4	0.92	0.16	49,56,57,62	0
29	UNL	D	413	16/-	0.92	0.21	36,42,57,58	0
23	CLA	b	602	65/65	0.92	0.17	29,42,66,71	0
31	DMS	h	103	4/4	0.92	0.16	82,84,97,101	0
31	DMS	u	204	4/4	0.92	0.14	62,68,68,73	0
36	DGD	H	103	62/66	0.92	0.18	23,32,38,39	0
31	DMS	v	209	4/4	0.92	0.15	49,50,58,64	0
23	CLA	c	914	65/65	0.92	0.12	36,44,76,80	0
29	UNL	A	417	4/-	0.92	0.51	58,61,63,67	0
29	UNL	m	101	11/-	0.92	0.18	47,51,56,58	0
23	CLA	c	913	65/65	0.92	0.12	30,39,65,68	0
31	DMS	C	527	4/4	0.92	0.19	58,68,73,83	0
23	CLA	B	603	65/65	0.92	0.13	20,26,33,36	0
28	LHG	D	409	49/49	0.93	0.15	27,34,41,47	0
31	DMS	C	525	4/4	0.93	0.19	39,39,43,46	0
31	DMS	A	422	4/4	0.93	0.19	65,68,68,71	0
31	DMS	V	208	4/4	0.93	0.13	69,70,71,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
36	DGD	C	518	62/66	0.93	0.13	24,33,70,80	0
23	CLA	C	513	65/65	0.93	0.10	34,42,73,76	0
23	CLA	b	603	65/65	0.93	0.12	21,24,33,41	0
34	LMG	J	101	51/55	0.93	0.17	25,31,85,93	0
31	DMS	d	415	4/4	0.93	0.21	45,53,57,73	0
35	HTG	B	624	19/19	0.93	0.12	35,39,46,47	0
25	BCR	C	515	40/40	0.93	0.09	35,43,46,48	0
29	UNL	A	413	16/-	0.93	0.14	38,43,70,76	0
23	CLA	B	602	65/65	0.93	0.19	28,39,75,85	0
31	DMS	c	927	4/4	0.93	0.15	30,37,37,44	0
31	DMS	v	202	4/4	0.93	0.17	68,74,76,81	0
31	DMS	a	420	4/4	0.93	0.32	48,61,64,66	0
23	CLA	c	904	65/65	0.93	0.15	25,32,37,40	0
35	HTG	O	302	19/19	0.93	0.12	36,39,48,49	0
31	DMS	b	641	4/4	0.93	0.21	52,59,66,66	0
25	BCR	k	102	40/40	0.93	0.11	27,32,38,40	0
31	DMS	B	648	4/4	0.93	0.31	43,45,47,48	0
23	CLA	b	607	65/65	0.93	0.11	22,27,54,63	0
23	CLA	c	907	65/65	0.93	0.10	23,36,73,76	0
31	DMS	h	101	4/4	0.94	0.17	47,51,52,53	0
31	DMS	u	203	4/4	0.94	0.21	38,50,51,52	0
28	LHG	l	101	49/49	0.94	0.15	20,28,48,52	0
23	CLA	D	404	65/65	0.94	0.13	23,27,67,73	0
34	LMG	j	101	51/55	0.94	0.10	22,33,80,85	0
25	BCR	c	915	40/40	0.94	0.10	36,44,48,50	0
23	CLA	C	508	65/65	0.94	0.10	28,35,49,55	0
36	DGD	c	919	62/66	0.94	0.11	22,29,50,56	0
31	DMS	V	209	4/4	0.94	0.12	58,59,62,65	0
23	CLA	b	617	65/65	0.94	0.12	20,30,81,89	0
23	CLA	B	607	65/65	0.94	0.10	20,26,53,60	0
31	DMS	i	105	4/4	0.94	0.24	61,64,71,73	0
25	BCR	C	516	40/40	0.94	0.12	28,34,40,43	0
31	DMS	o	303	4/4	0.94	0.23	51,55,67,70	0
28	LHG	L	101	49/49	0.94	0.12	22,31,42,48	0
31	DMS	a	423	4/4	0.94	0.17	53,56,63,73	0
31	DMS	C	533	4/4	0.94	0.17	67,67,68,71	0
28	LHG	d	408	49/49	0.94	0.20	25,33,43,44	0
23	CLA	C	512	65/65	0.94	0.08	26,34,39,40	0
31	DMS	d	414	4/4	0.94	0.11	62,66,71,78	0
31	DMS	O	303	4/4	0.94	0.21	59,66,69,73	0
33	CA	o	302	1/1	0.94	0.06	43,43,43,43	0
31	DMS	v	210	4/4	0.94	0.21	62,65,68,72	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
25	BCR	c	916	40/40	0.94	0.10	25,32,38,38	0
23	CLA	c	909	65/65	0.95	0.16	22,26,79,92	0
23	CLA	C	510	65/65	0.95	0.12	25,31,52,55	0
23	CLA	B	616	65/65	0.95	0.10	23,27,43,49	0
32	BCT	A	420	4/4	0.95	0.06	31,32,35,40	0
23	CLA	C	509	65/65	0.95	0.13	24,29,76,85	0
25	BCR	b	620	40/40	0.95	0.11	25,29,40,44	0
25	BCR	a	411	40/40	0.95	0.08	20,23,27,28	0
25	BCR	C	530	40/40	0.95	0.08	27,32,36,37	0
23	CLA	c	908	65/65	0.95	0.11	23,28,46,54	0
31	DMS	c	932	4/4	0.95	0.32	54,57,63,64	0
31	DMS	O	305	4/4	0.95	0.41	65,70,70,77	0
23	CLA	C	502	65/65	0.95	0.14	25,31,41,51	0
25	BCR	D	405	40/40	0.95	0.16	22,28,54,57	0
31	DMS	B	638	4/4	0.95	0.17	55,60,62,71	0
31	DMS	e	104	4/4	0.95	0.11	72,73,78,83	0
31	DMS	c	937	4/4	0.95	0.31	76,80,84,84	0
31	DMS	v	205	4/4	0.95	0.11	63,66,68,69	0
23	CLA	b	616	65/65	0.95	0.09	21,26,42,44	0
36	DGD	C	519	62/66	0.95	0.12	21,28,68,83	0
23	CLA	c	903	65/65	0.95	0.18	20,24,37,43	0
33	CA	O	301	1/1	0.95	0.08	42,42,42,42	0
36	DGD	c	917	62/66	0.95	0.15	20,30,74,77	0
36	DGD	C	517	62/66	0.95	0.17	21,29,69,71	0
25	BCR	t	101	40/40	0.95	0.14	19,26,38,40	0
31	DMS	b	636	4/4	0.95	0.17	44,48,50,52	0
37	HEM	E	105	43/43	0.95	0.12	36,42,46,47	0
28	LHG	d	409	49/49	0.95	0.13	18,24,44,47	0
31	DMS	B	639	4/4	0.95	0.15	44,48,51,54	0
25	BCR	B	620	40/40	0.95	0.09	21,29,41,42	0
25	BCR	j	104	40/40	0.95	0.08	27,32,39,43	0
31	DMS	V	206	4/4	0.95	0.25	55,55,55,61	0
23	CLA	c	906	65/65	0.95	0.10	25,29,44,47	0
25	BCR	d	405	40/40	0.95	0.10	21,27,50,54	0
25	BCR	Y	101	40/40	0.95	0.09	29,33,40,41	0
23	CLA	c	905	65/65	0.95	0.16	21,27,51,54	0
31	DMS	O	306	4/4	0.95	0.28	68,68,73,76	0
23	CLA	C	504	65/65	0.95	0.10	24,31,36,41	0
36	DGD	c	918	62/66	0.95	0.13	24,30,75,84	0
23	CLA	C	505	65/65	0.96	0.13	25,28,58,60	0
23	CLA	c	910	65/65	0.96	0.17	23,27,49,60	0
27	PL9	d	406	55/55	0.96	0.12	16,21,27,34	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
23	CLA	c	912	65/65	0.96	0.09	26,31,37,41	0
25	BCR	T	101	40/40	0.96	0.16	22,29,40,41	0
25	BCR	b	618	40/40	0.96	0.13	20,25,32,33	0
25	BCR	b	619	40/40	0.96	0.18	20,27,41,43	0
25	BCR	B	618	40/40	0.96	0.13	19,24,30,33	0
23	CLA	b	615	65/65	0.96	0.14	19,24,71,76	0
23	CLA	b	605	65/65	0.96	0.14	17,22,53,55	0
23	CLA	B	611	65/65	0.96	0.13	20,24,33,39	0
28	LHG	D	411	46/49	0.96	0.12	25,30,82,85	0
31	DMS	F	102	4/4	0.96	0.14	48,48,50,64	0
31	DMS	v	207	4/4	0.96	0.14	53,54,54,60	0
31	DMS	c	928	4/4	0.96	0.14	57,59,61,61	0
33	CA	B	601	1/1	0.96	0.10	41,41,41,41	0
27	PL9	D	406	55/55	0.96	0.09	17,22,28,30	0
31	DMS	d	416	4/4	0.96	0.15	47,52,59,64	0
28	LHG	d	410	46/49	0.96	0.14	24,27,73,84	0
31	DMS	c	925	4/4	0.96	0.15	35,37,42,49	0
23	CLA	d	404	65/65	0.96	0.10	22,27,66,72	0
23	CLA	c	902	65/65	0.96	0.12	24,27,38,46	0
23	CLA	b	604	65/65	0.96	0.13	19,23,29,32	0
23	CLA	B	615	65/65	0.96	0.11	18,23,66,71	0
28	LHG	D	410	49/49	0.96	0.11	20,27,42,46	0
25	BCR	B	619	40/40	0.96	0.19	20,25,41,45	0
23	CLA	D	403	65/65	0.96	0.10	13,17,33,41	0
23	CLA	b	611	65/65	0.96	0.10	19,24,32,37	0
23	CLA	C	511	65/65	0.96	0.12	24,30,35,40	0
23	CLA	B	617	65/65	0.96	0.11	20,27,93,106	0
23	CLA	B	604	65/65	0.96	0.14	18,21,30,36	0
23	CLA	C	503	65/65	0.96	0.12	23,27,37,42	0
23	CLA	B	613	65/65	0.96	0.13	18,23,28,31	0
23	CLA	b	612	65/65	0.96	0.16	18,21,36,42	0
23	CLA	C	506	65/65	0.96	0.13	25,31,40,44	0
23	CLA	a	410	65/65	0.97	0.10	17,22,91,94	0
23	CLA	c	911	65/65	0.97	0.21	20,26,36,40	0
23	CLA	B	612	65/65	0.97	0.12	17,20,36,52	0
31	DMS	c	926	4/4	0.97	0.15	66,68,69,77	0
23	CLA	b	609	65/65	0.97	0.16	19,23,31,32	0
23	CLA	A	408	65/65	0.97	0.11	18,22,89,96	0
24	PHO	a	408	64/64	0.97	0.11	15,18,20,22	0
25	BCR	A	409	40/40	0.97	0.12	19,23,29,32	0
23	CLA	b	606	65/65	0.97	0.11	18,22,29,33	0
24	PHO	D	402	64/64	0.97	0.13	16,21,25,29	0

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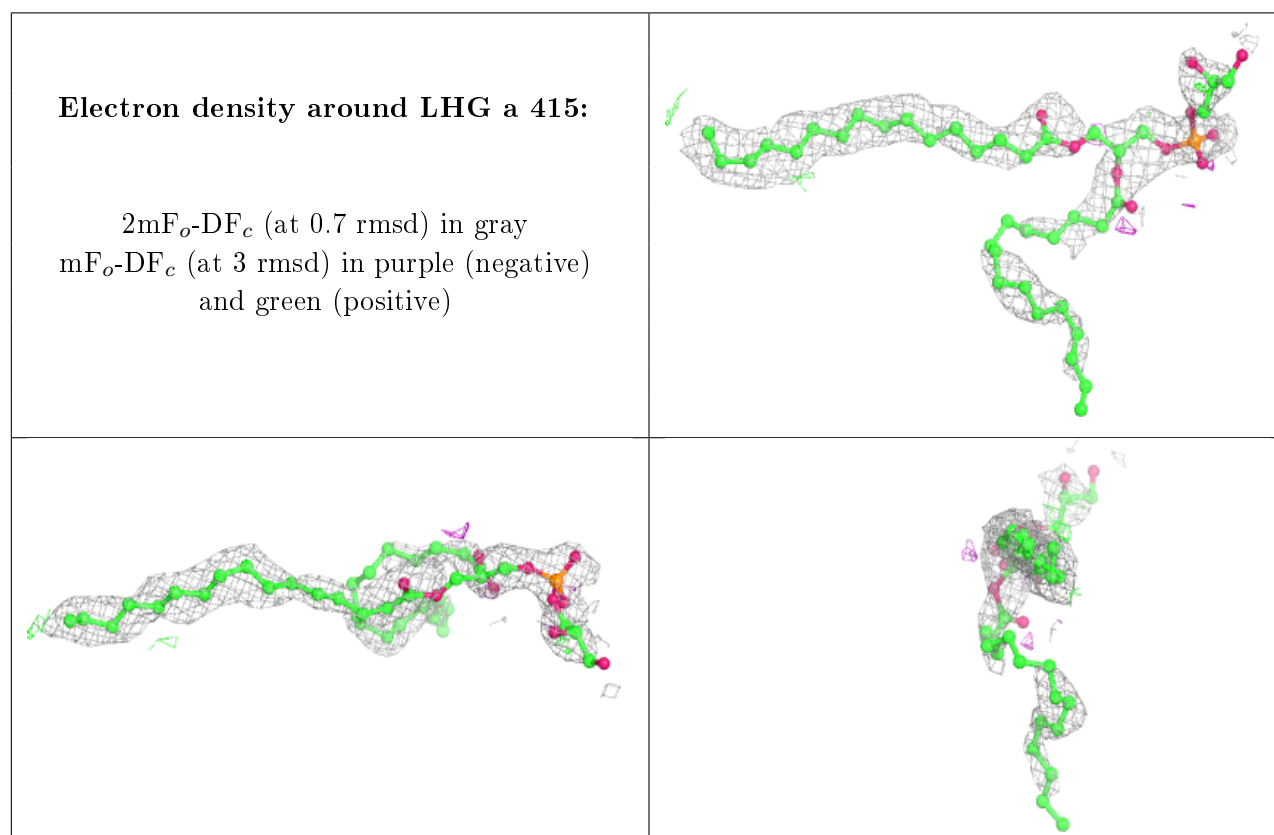
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
31	DMS	b	634	4/4	0.97	0.11	42,45,48,48	0
23	CLA	a	407	65/65	0.97	0.13	17,20,95,102	0
31	DMS	B	637	4/4	0.97	0.11	35,38,40,42	0
32	BCT	a	424	4/4	0.97	0.06	32,35,37,41	0
24	PHO	A	407	64/64	0.97	0.11	17,19,22,22	0
23	CLA	b	613	65/65	0.97	0.13	18,24,29,34	0
23	CLA	b	614	65/65	0.97	0.18	17,21,47,54	0
23	CLA	d	403	65/65	0.97	0.11	13,18,36,42	0
23	CLA	A	406	65/65	0.97	0.14	18,20,90,96	0
23	CLA	b	608	65/65	0.97	0.14	16,20,28,36	0
31	DMS	D	416	4/4	0.97	0.20	56,57,58,62	0
23	CLA	a	406	65/65	0.97	0.11	14,17,25,37	0
31	DMS	B	636	4/4	0.97	0.12	18,20,22,28	0
24	PHO	a	409	64/64	0.97	0.13	17,22,27,30	0
23	CLA	A	405	65/65	0.97	0.09	14,17,26,34	0
23	CLA	B	606	65/65	0.97	0.16	18,22,32,34	0
23	CLA	B	609	65/65	0.97	0.14	19,23,28,29	0
23	CLA	B	605	65/65	0.97	0.17	18,21,52,53	0
23	CLA	B	608	65/65	0.97	0.13	16,19,32,35	0
31	DMS	D	415	4/4	0.98	0.09	50,53,56,59	0
37	HEM	e	105	43/43	0.98	0.15	35,39,51,63	0
40	HEC	V	203	43/43	0.98	0.07	19,22,26,29	0
23	CLA	d	401	65/65	0.98	0.12	15,17,26,31	0
33	CA	b	601	1/1	0.98	0.08	41,41,41,41	0
23	CLA	D	401	65/65	0.98	0.09	13,17,27,35	0
31	DMS	V	201	4/4	0.98	0.10	41,46,47,47	0
40	HEC	v	203	43/43	0.98	0.08	22,27,29,32	0
23	CLA	B	614	65/65	0.98	0.15	18,20,44,51	0
31	DMS	v	201	4/4	0.98	0.12	46,48,51,51	0
33	CA	c	901	1/1	0.98	0.04	39,39,39,39	0
31	DMS	b	633	4/4	0.98	0.10	21,23,24,25	0
22	CL	a	404	1/1	0.99	0.06	19,19,19,19	0
39	MG	j	102	1/1	0.99	0.14	28,28,28,28	0
39	MG	J	102	1/1	0.99	0.09	30,30,30,30	0
31	DMS	A	423	4/4	0.99	0.09	23,27,27,28	0
31	DMS	o	301	4/4	0.99	0.08	22,27,28,31	0
31	DMS	c	924	4/4	0.99	0.09	31,33,36,36	0
31	DMS	C	524	4/4	0.99	0.10	32,33,36,36	0
21	FE2	a	403	1/1	0.99	0.07	25,25,25,25	0
22	CL	a	405	1/1	0.99	0.09	21,21,21,21	0
21	FE2	A	402	1/1	0.99	0.04	28,28,28,28	0
22	CL	A	404	1/1	1.00	0.08	20,20,20,20	0

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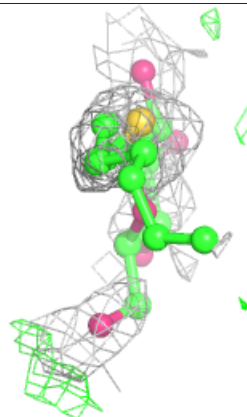
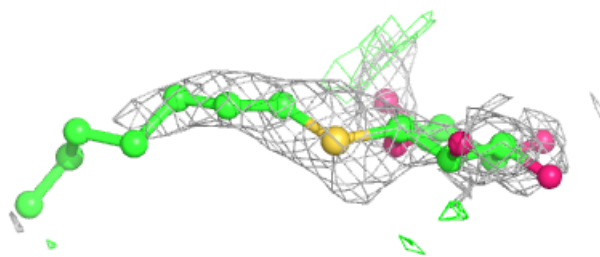
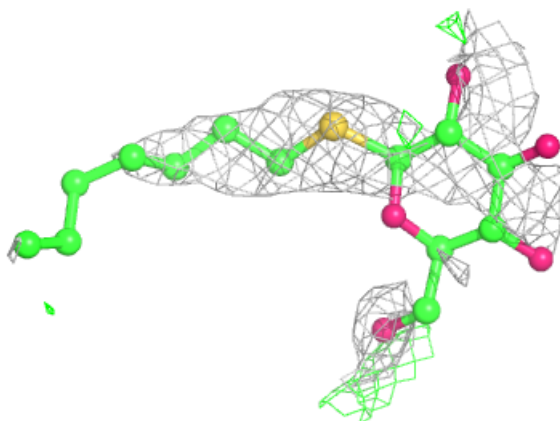
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
20	OEX	A	401	10/10	1.00	0.08	19,21,23,24	0
20	OEX	a	402	10/10	1.00	0.09	21,23,24,24	0
22	CL	A	403	1/1	1.00	0.07	19,19,19,19	0

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.

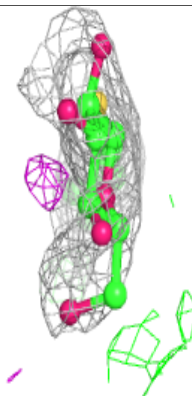
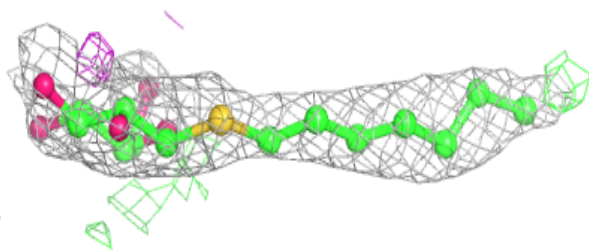
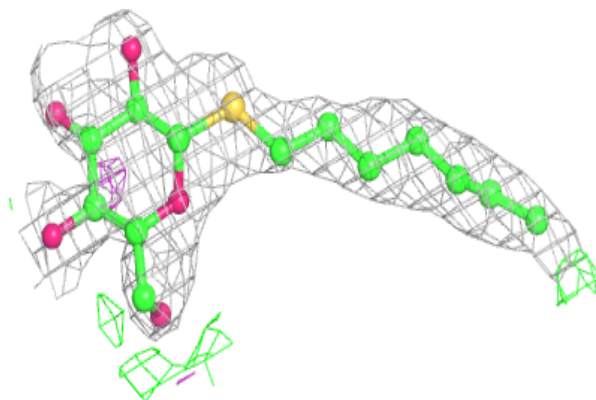


Electron density around HTG D 414:

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

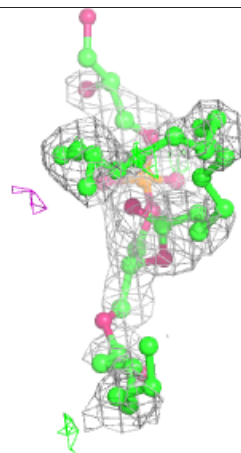
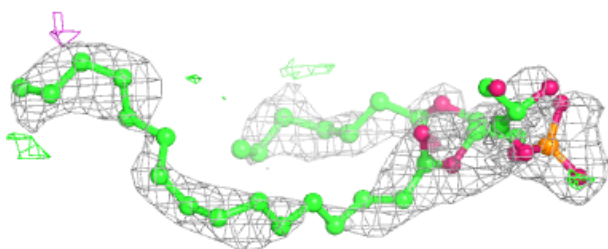
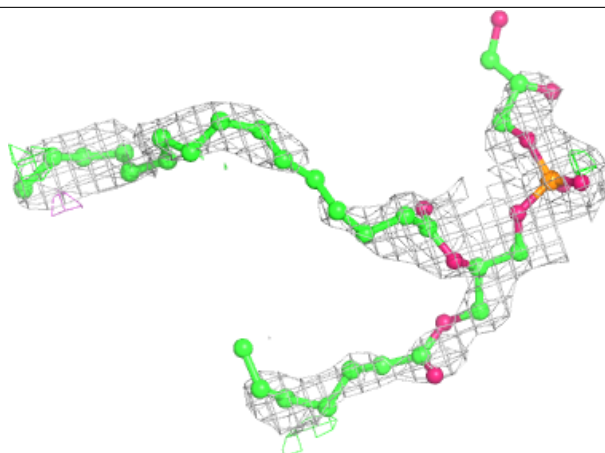
**Electron density around HTG b 628:**

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

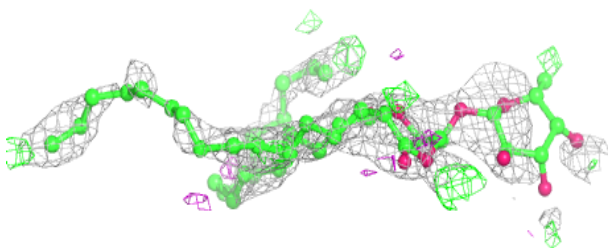
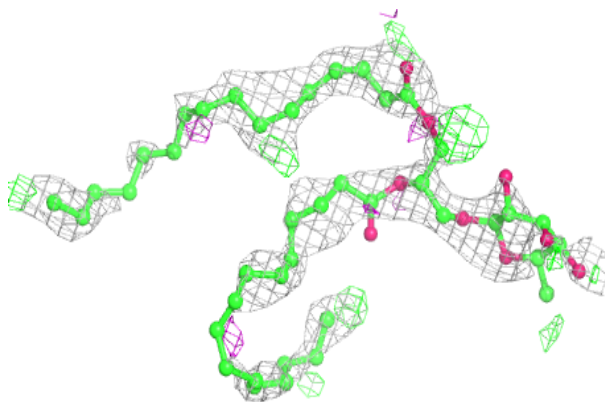


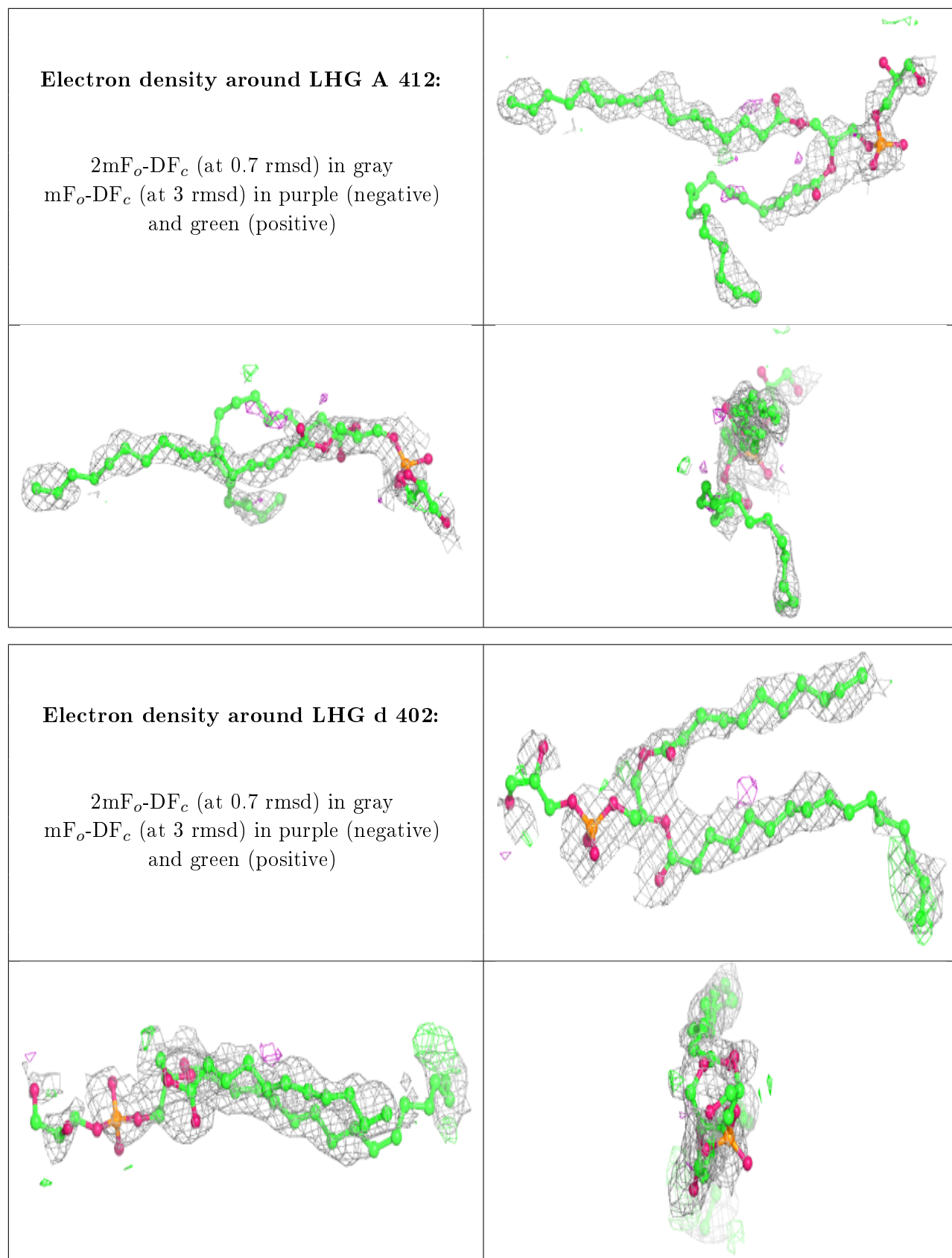
Electron density around LHG e 101:

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

**Electron density around DGD D 407:**

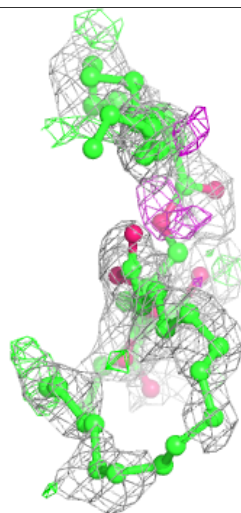
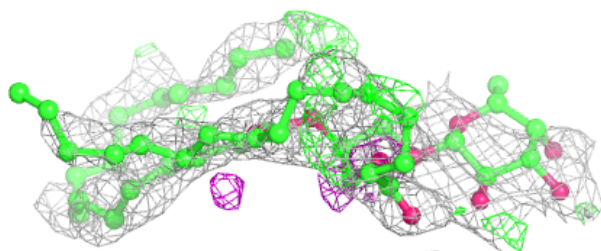
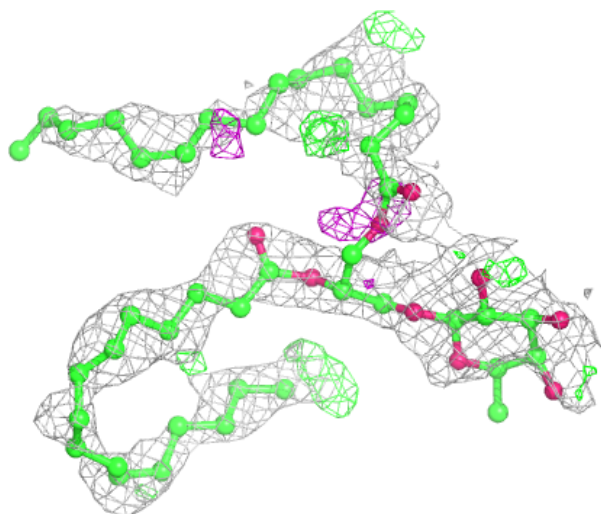
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





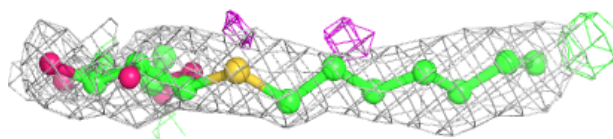
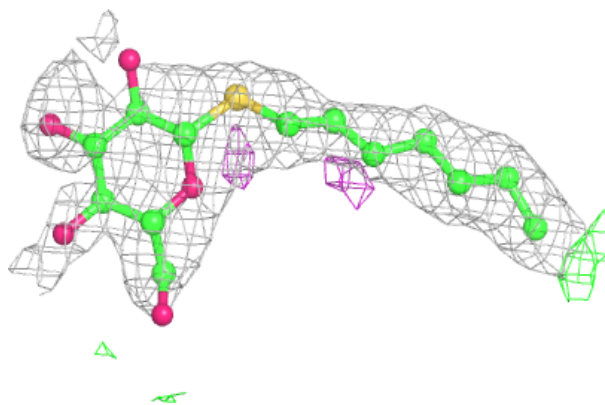
Electron density around DGD d 407:

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

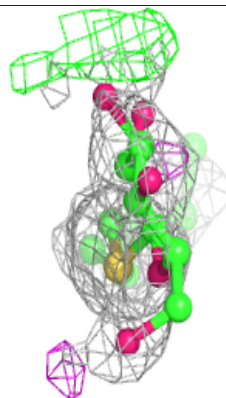
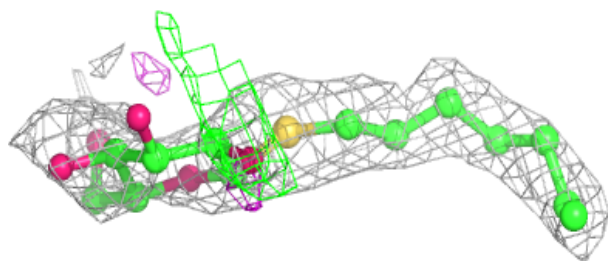
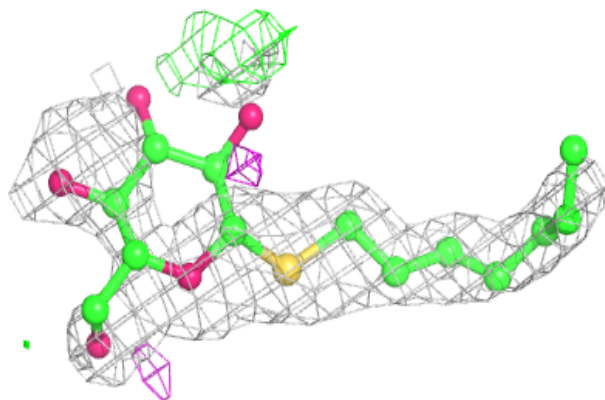


Electron density around HTG B 631:

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

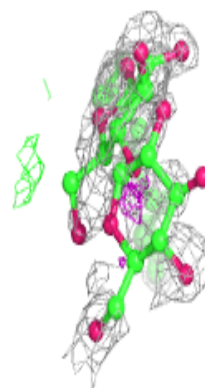
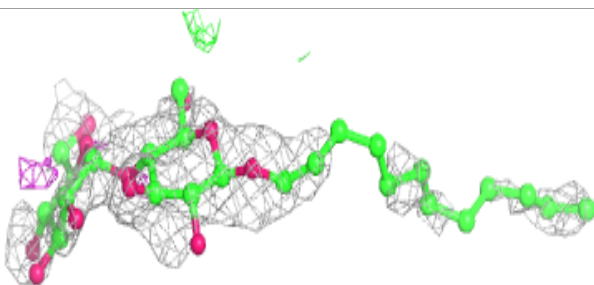
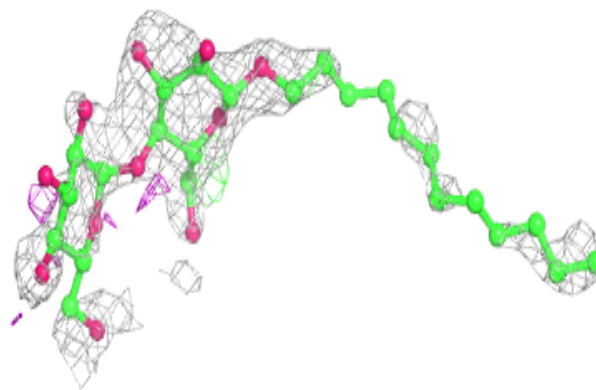
**Electron density around HTG d 413:**

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

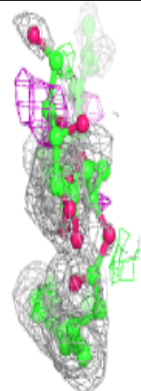
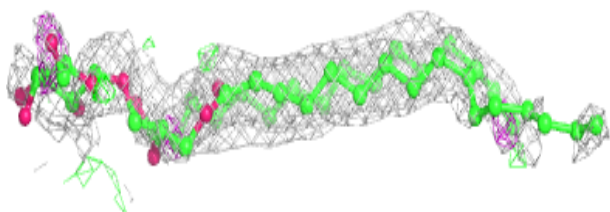
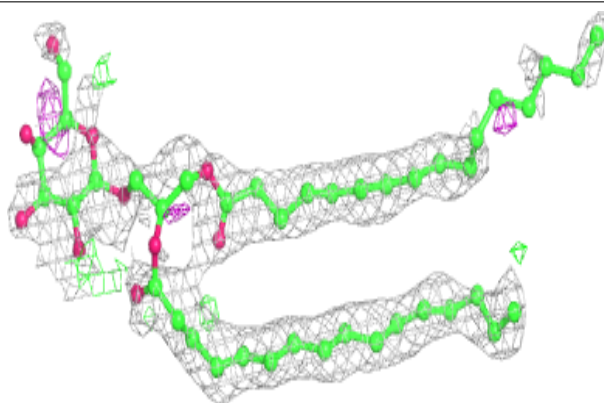


Electron density around LMT F 101:

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

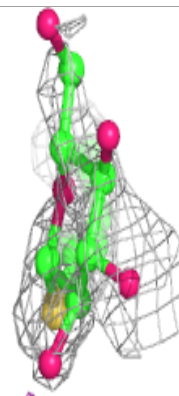
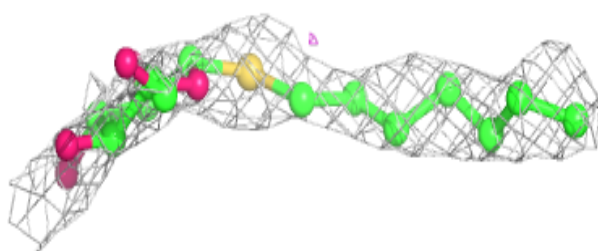
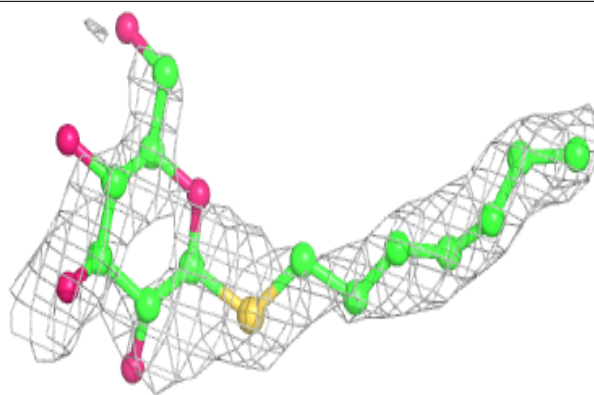
**Electron density around LMG D 412:**

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

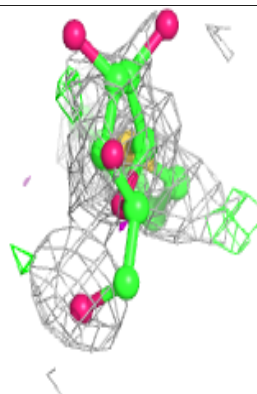
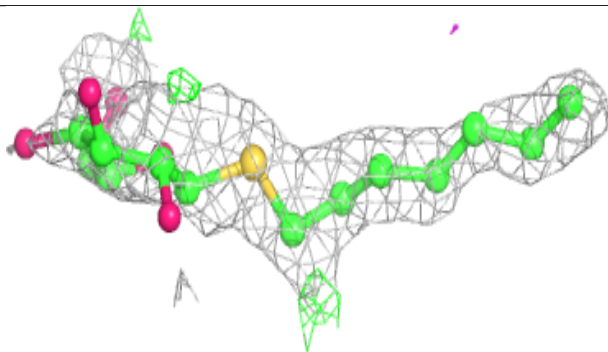
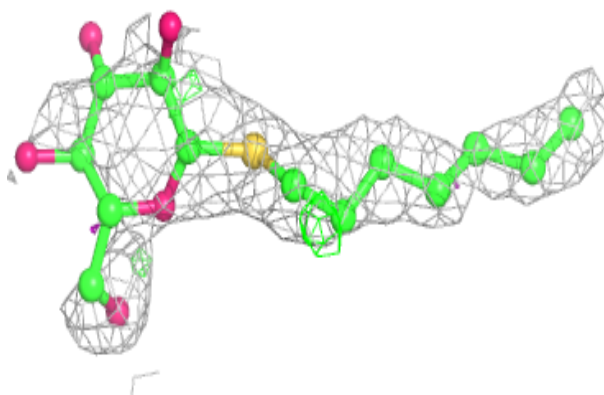


Electron density around HTG B 626:

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

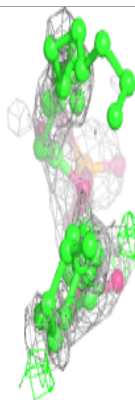
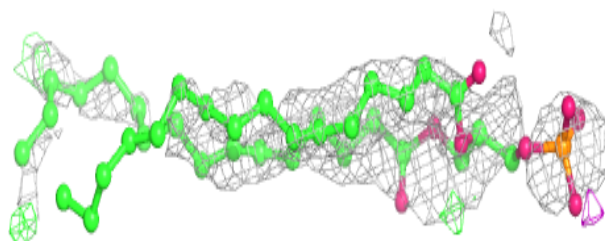
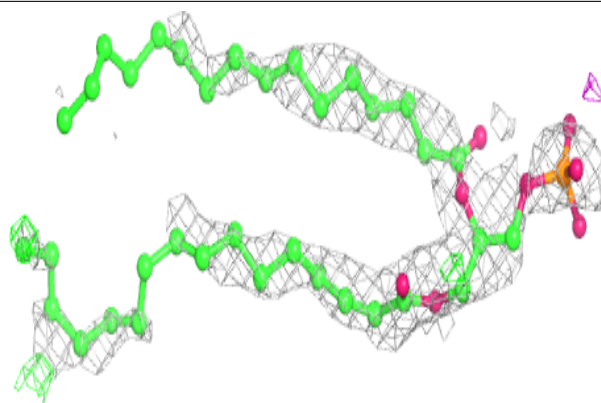
**Electron density around HTG c 922:**

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

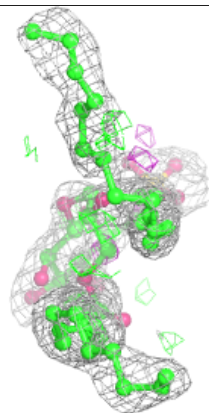
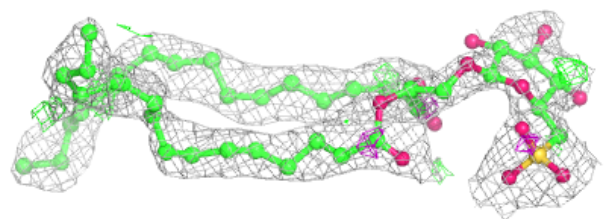
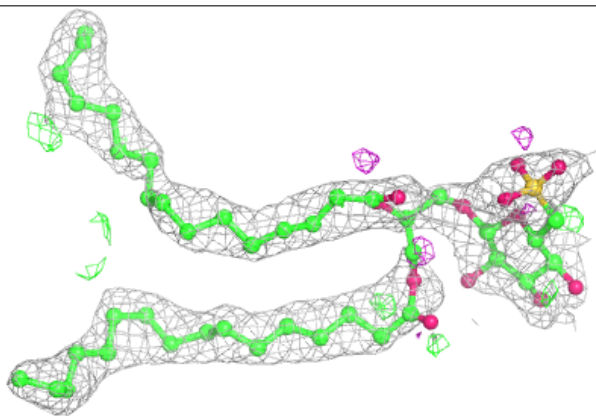


Electron density around LHG K 101:

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

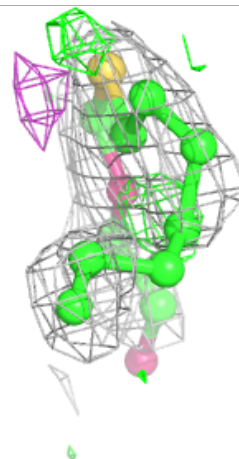
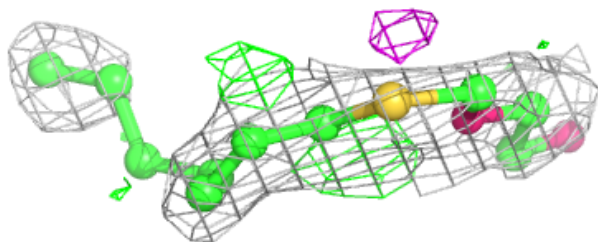
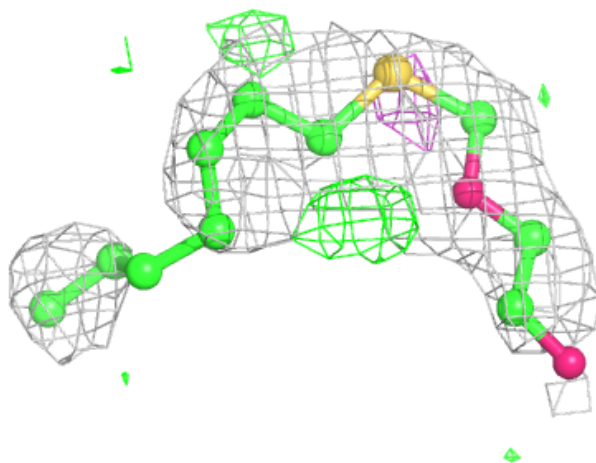
**Electron density around SQD B 621:**

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



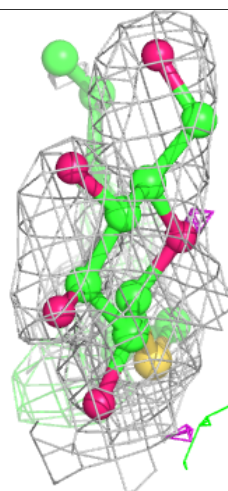
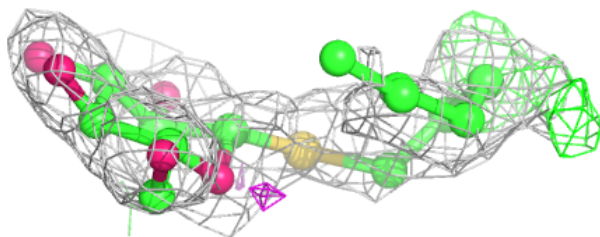
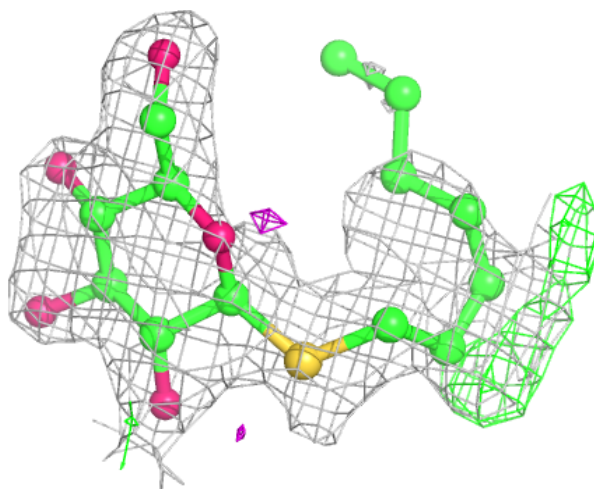
Electron density around HTG c 923:

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



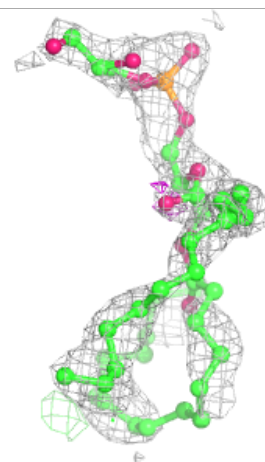
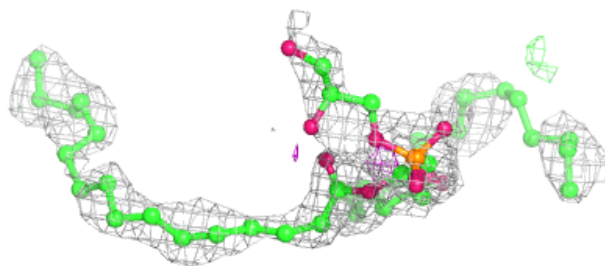
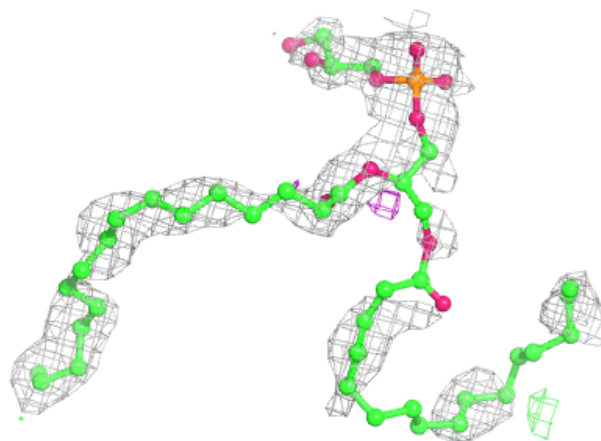
Electron density around HTG v 204:

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



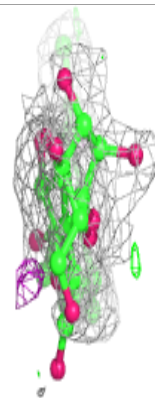
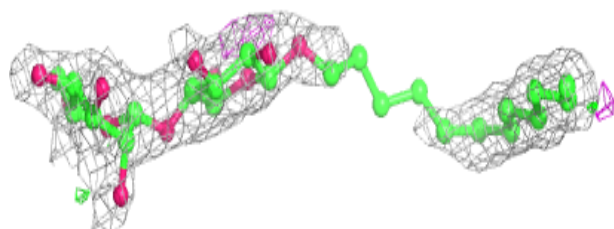
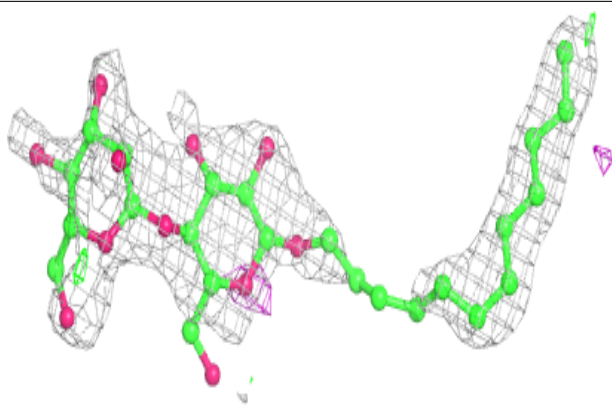
Electron density around LHG E 101:

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

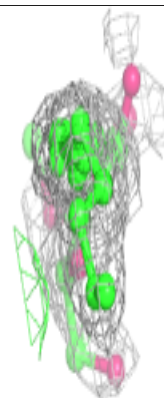
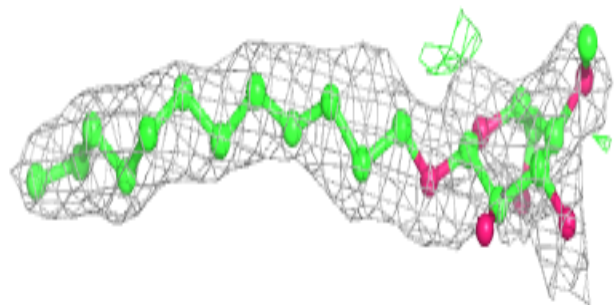
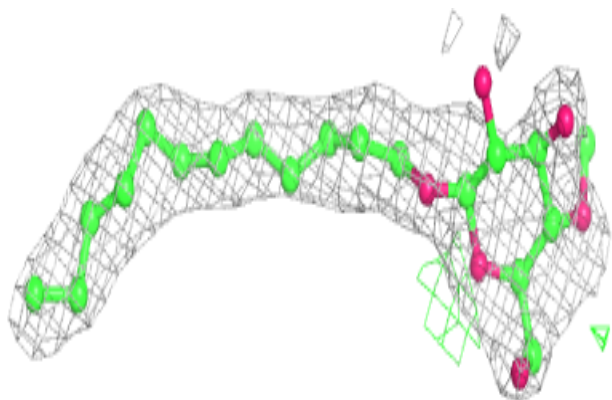


Electron density around LMT Z 101:

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

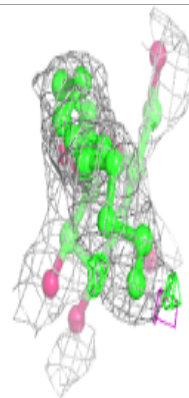
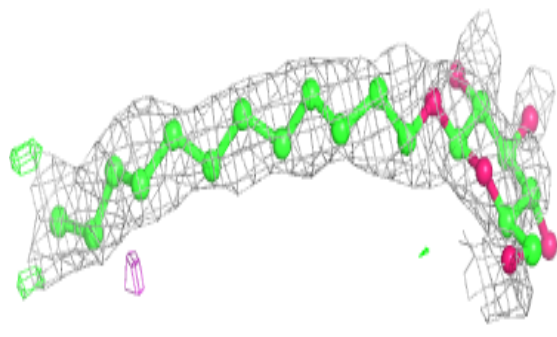
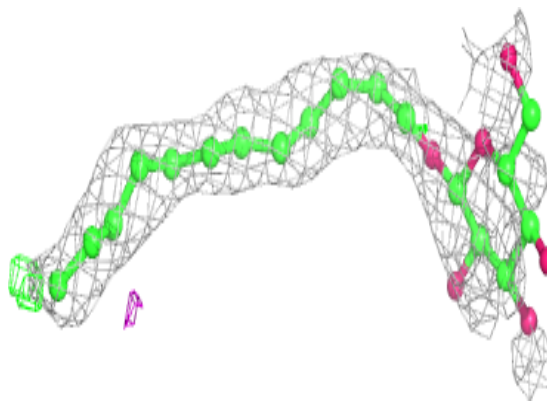
**Electron density around LMT b 621:**

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

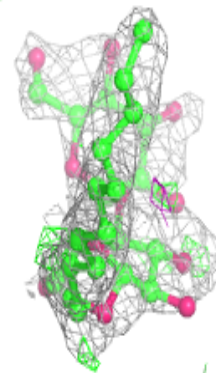
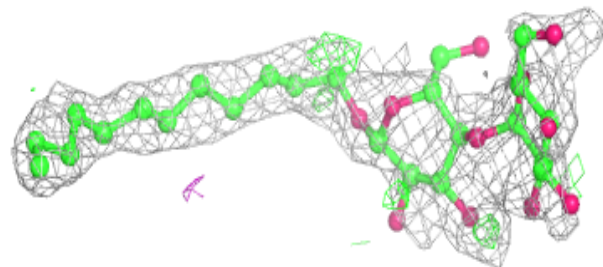
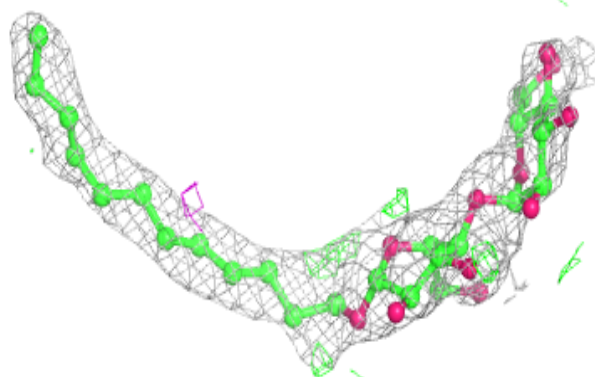


Electron density around LMT B 643:

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

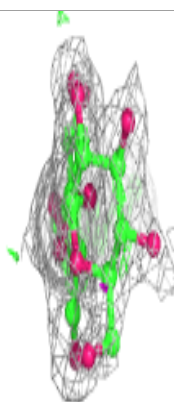
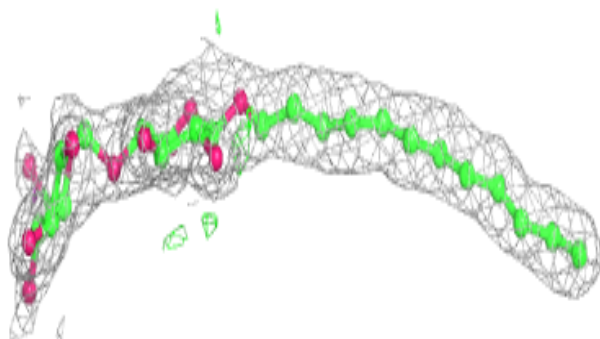
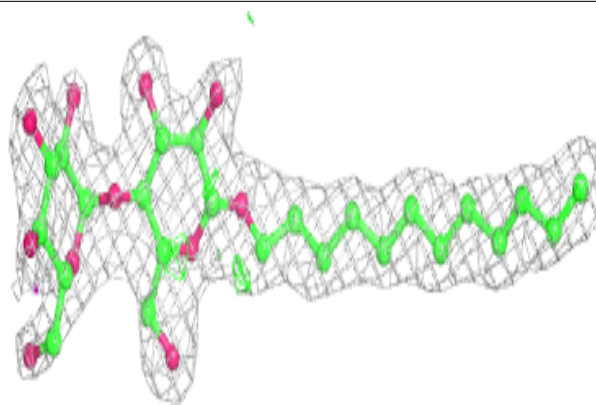
**Electron density around LMT m 103:**

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

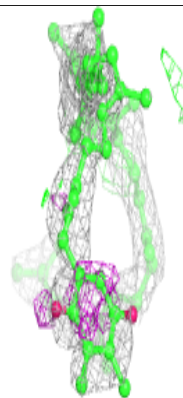
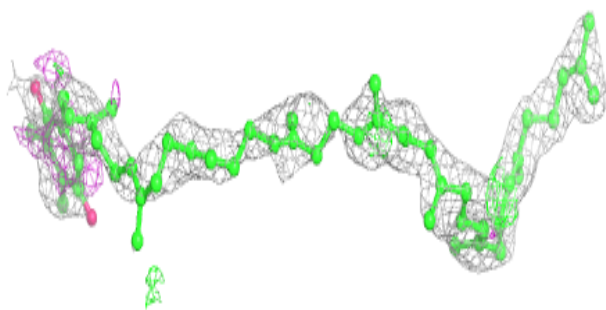
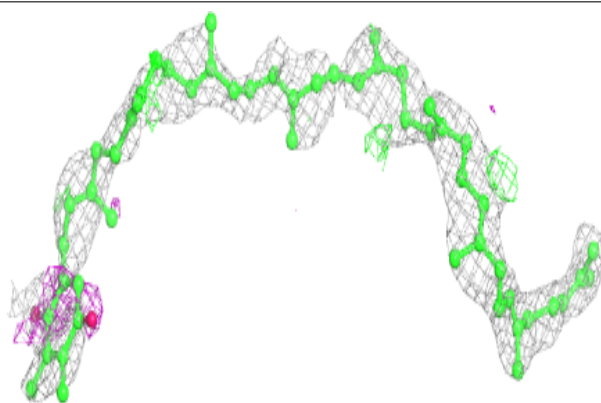


Electron density around LMT M 101:

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

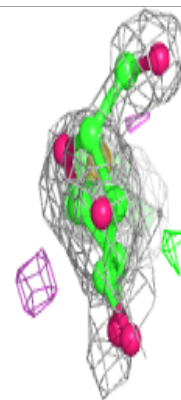
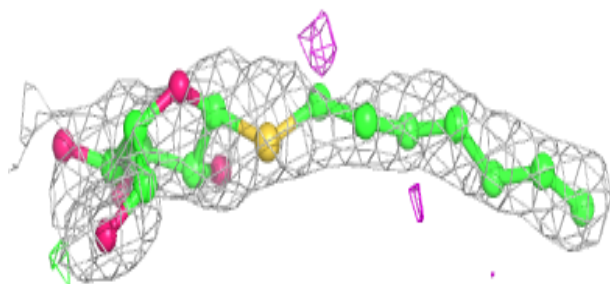
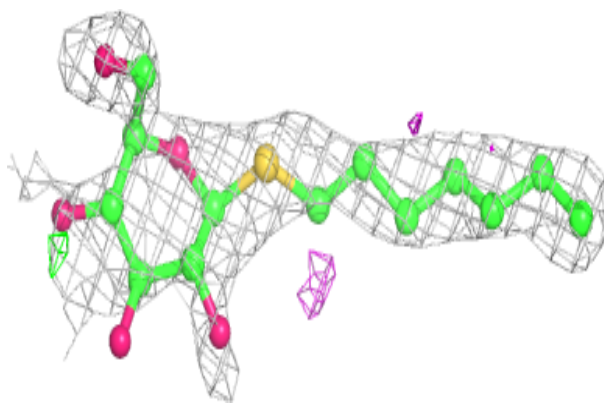
**Electron density around PL9 a 414:**

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

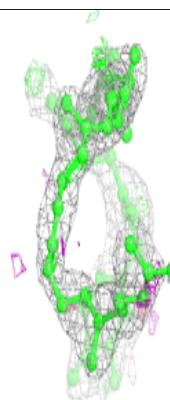
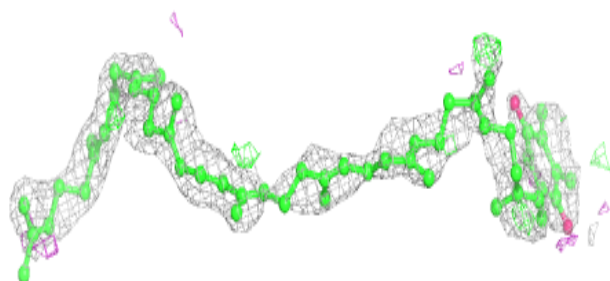
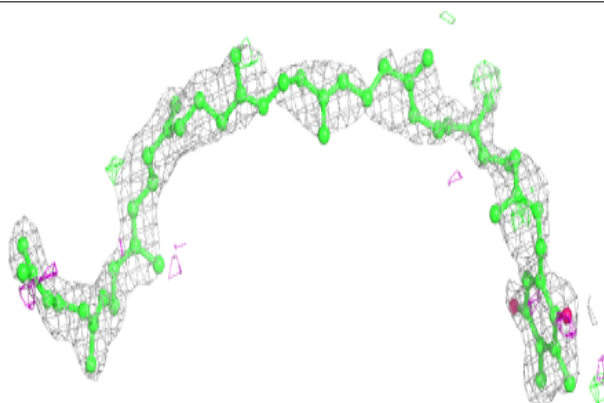


Electron density around HTG C 522:

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

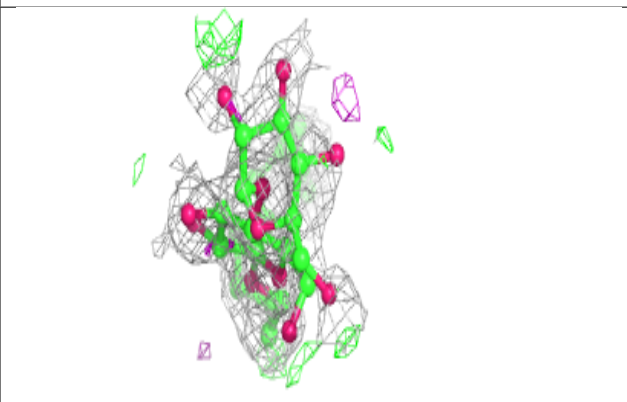
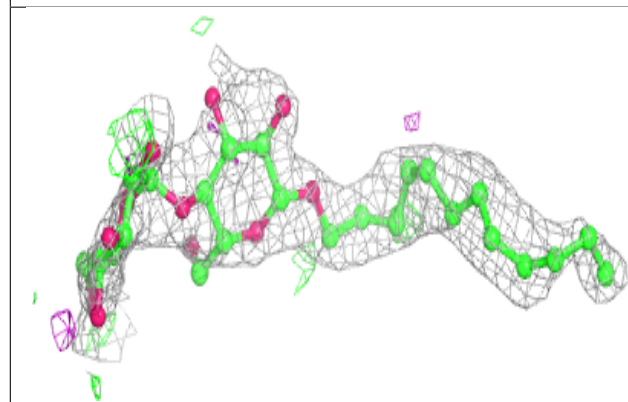
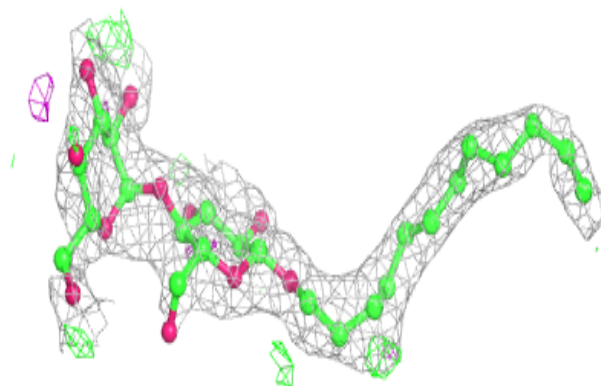
**Electron density around PL9 A 411:**

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

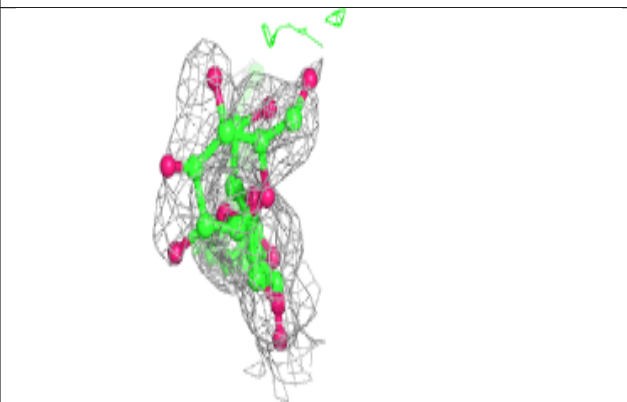
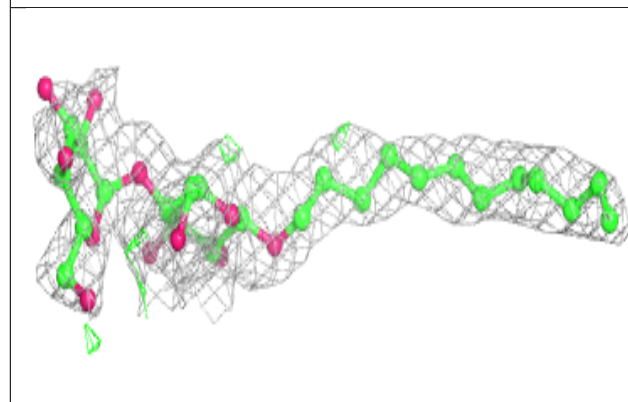
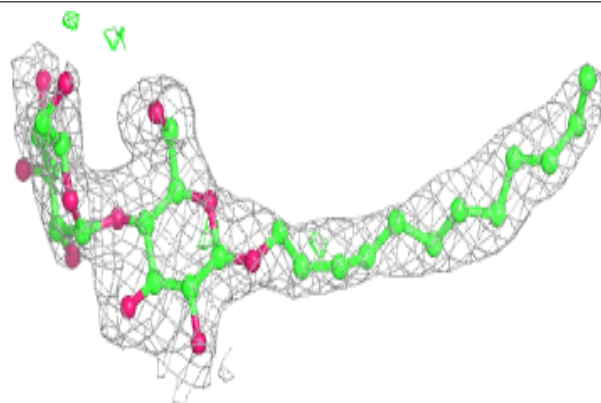


Electron density around LMT a 418:

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

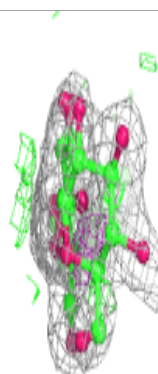
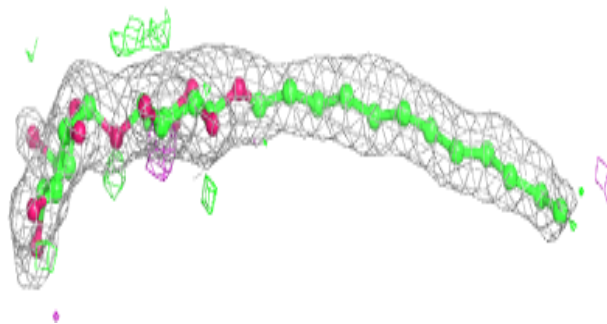
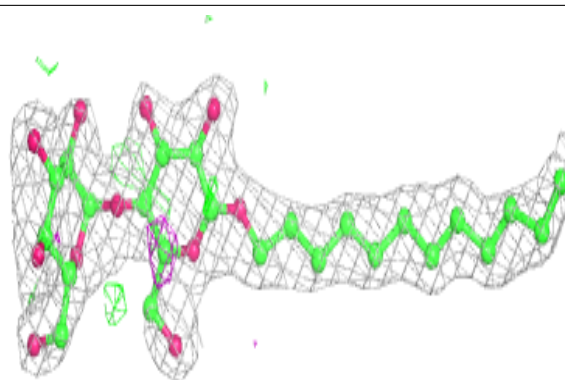
**Electron density around LMT B 623:**

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

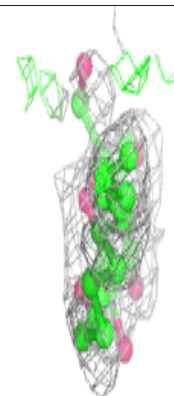
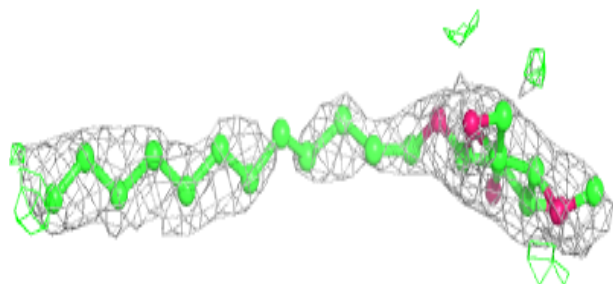
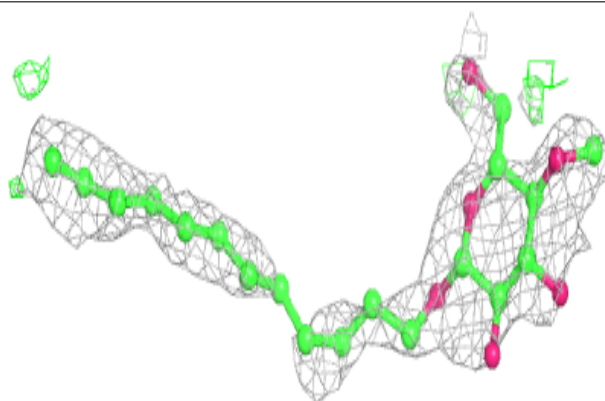


Electron density around LMT m 104:

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

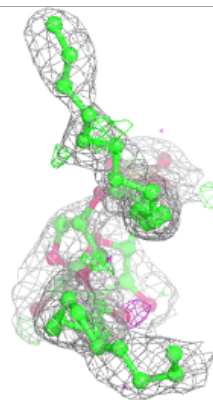
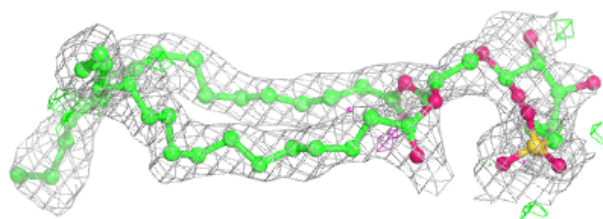
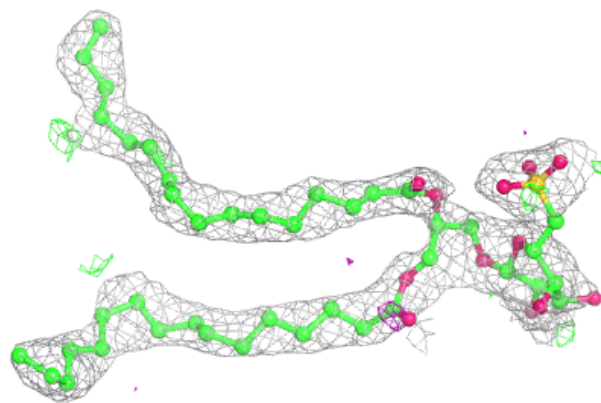
**Electron density around LMT e 103:**

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

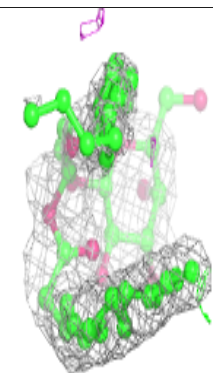
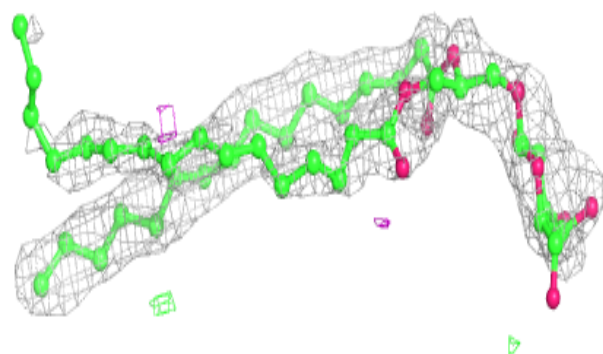
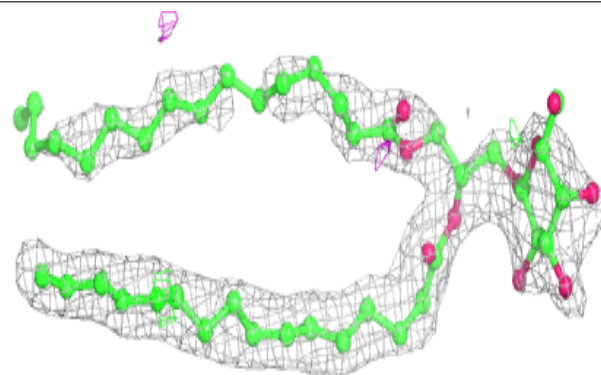


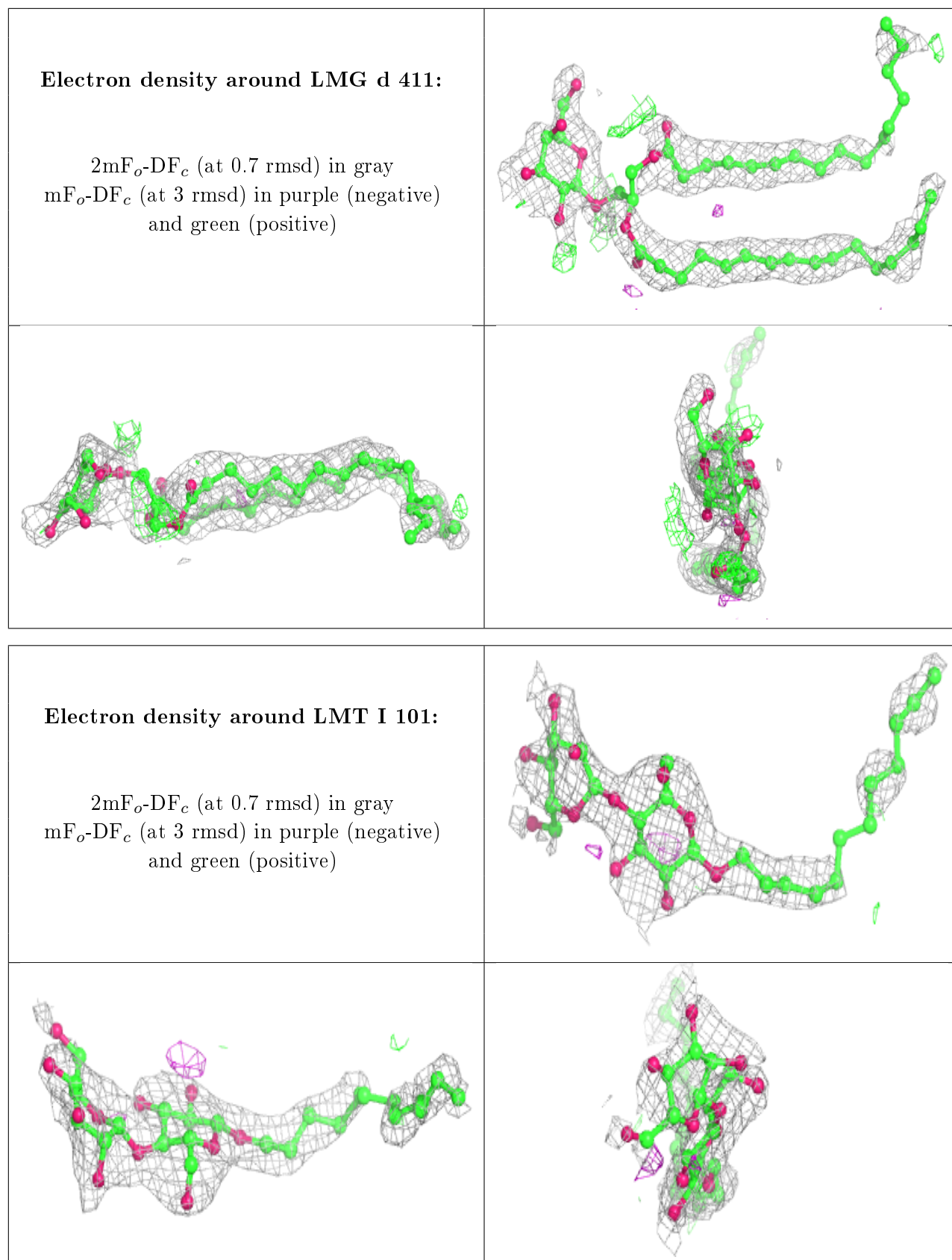
Electron density around SQD L 102:

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

**Electron density around LMG C 531:**

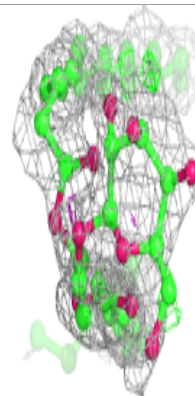
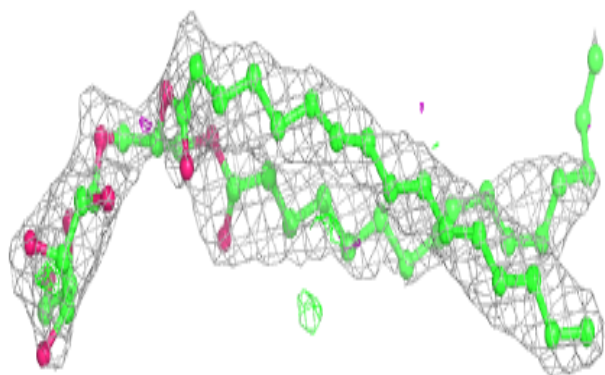
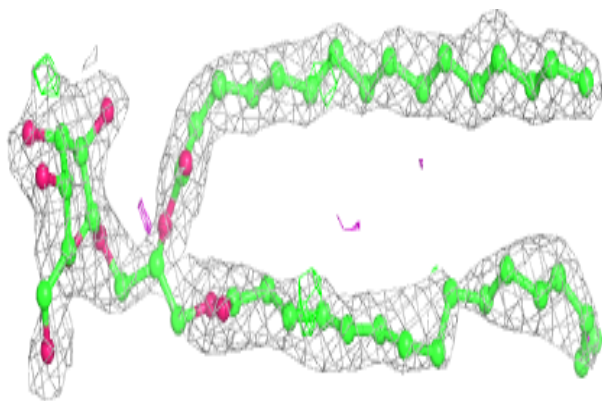
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



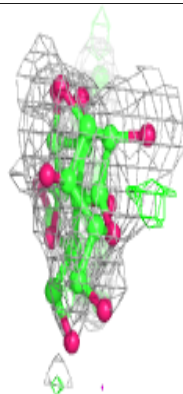
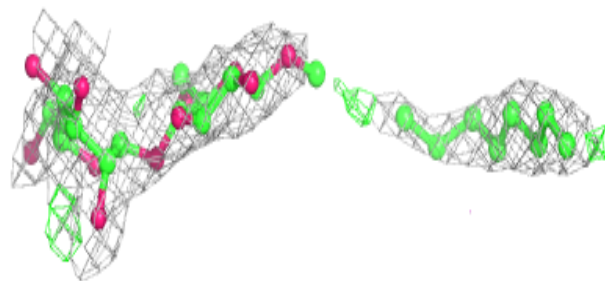
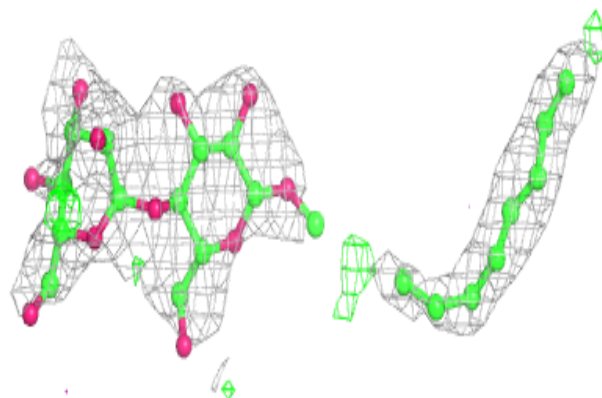


Electron density around LMG c 930:

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

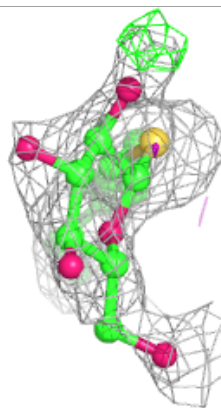
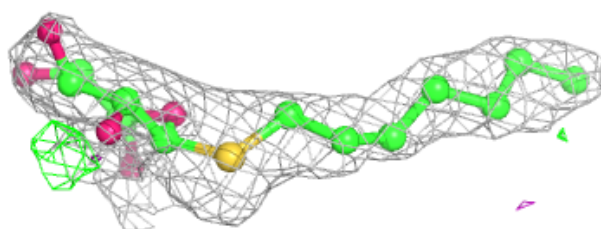
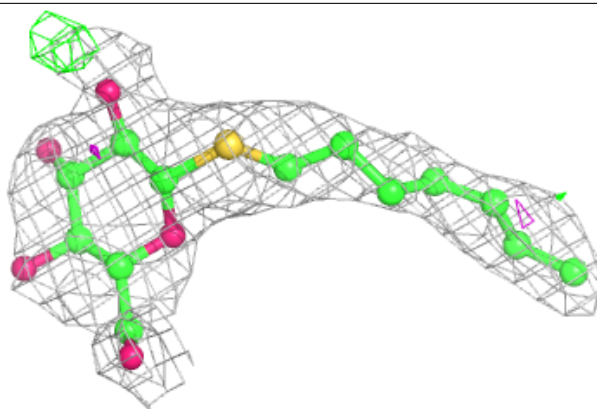
**Electron density around LMT z 101:**

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

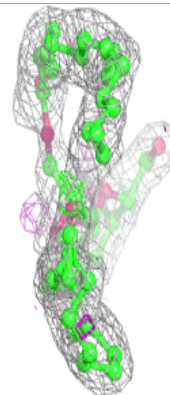
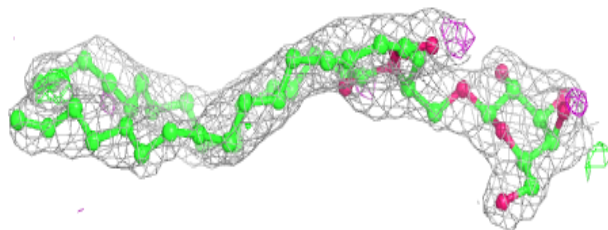
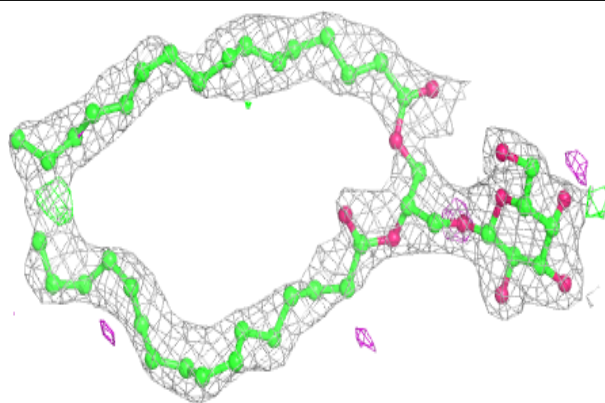


Electron density around HTG b 623:

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

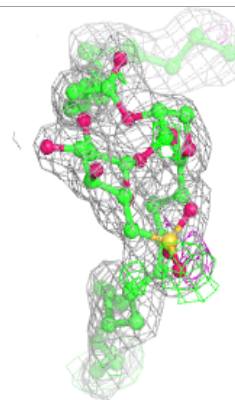
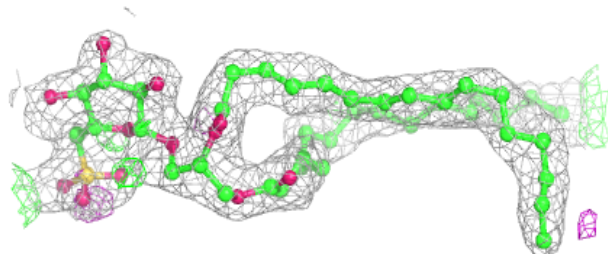
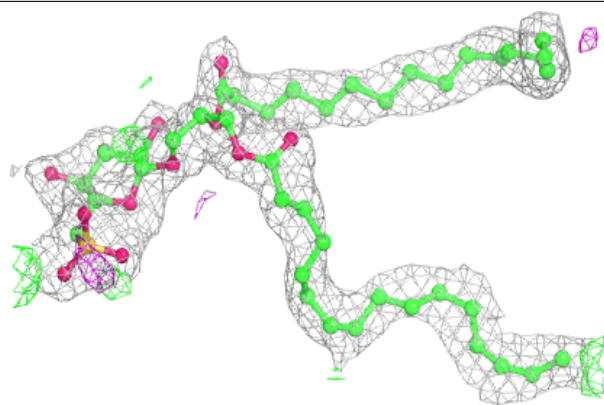
**Electron density around LMG a 413:**

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

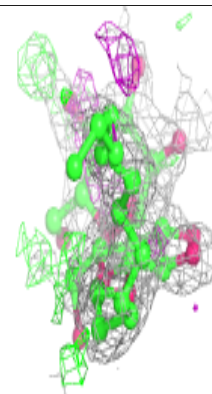
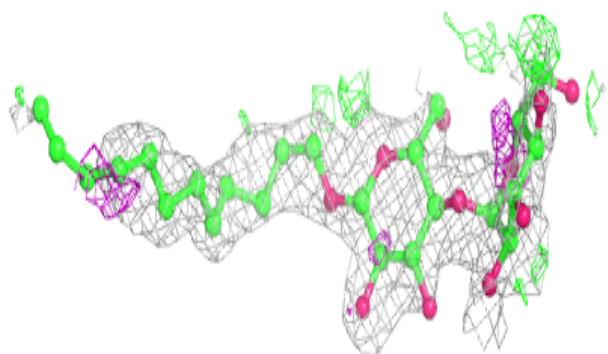
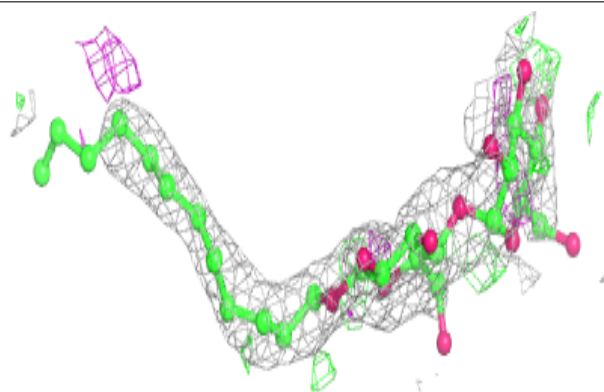


Electron density around SQD a 417:

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

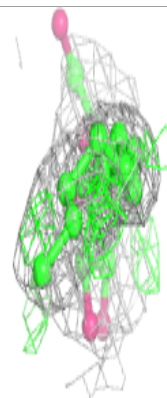
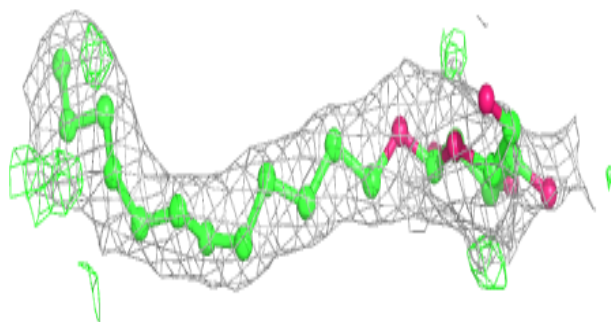
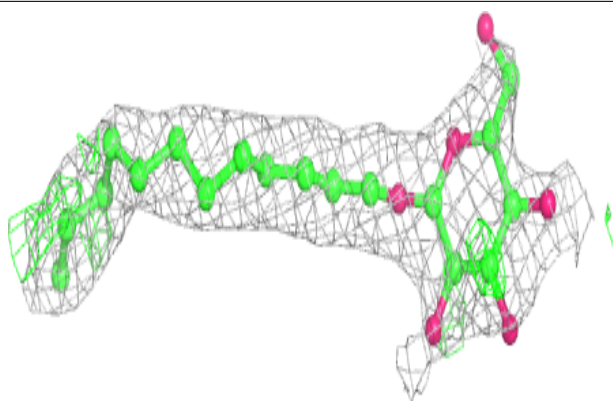
**Electron density around LMT A 416:**

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

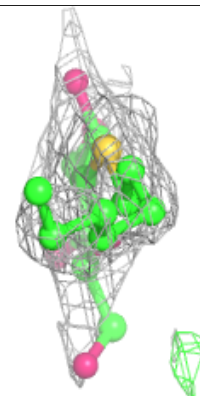
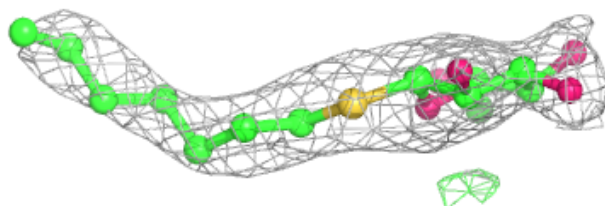
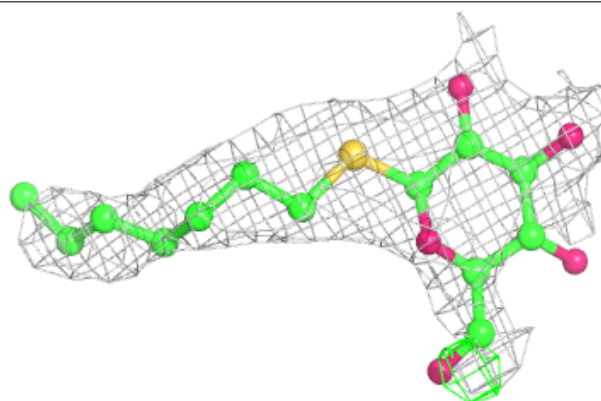


Electron density around LMT B 644:

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

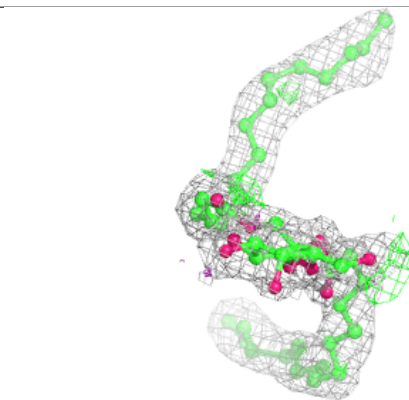
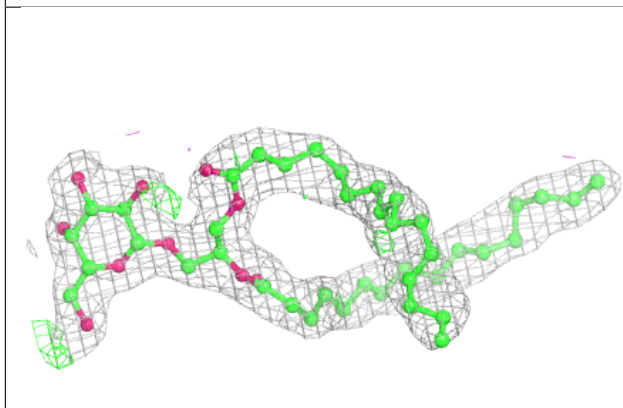
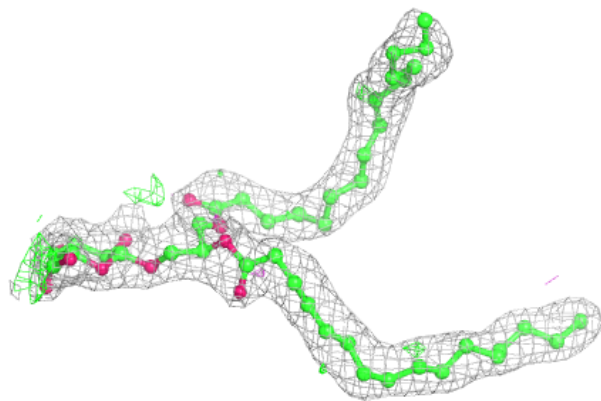
**Electron density around HTG C 523:**

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

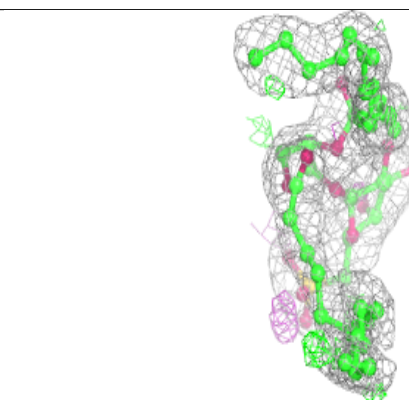
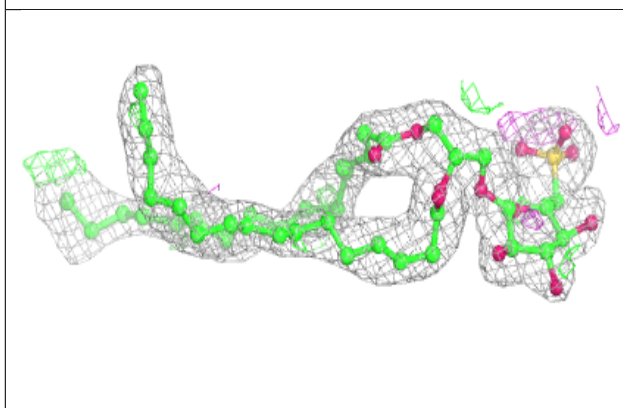
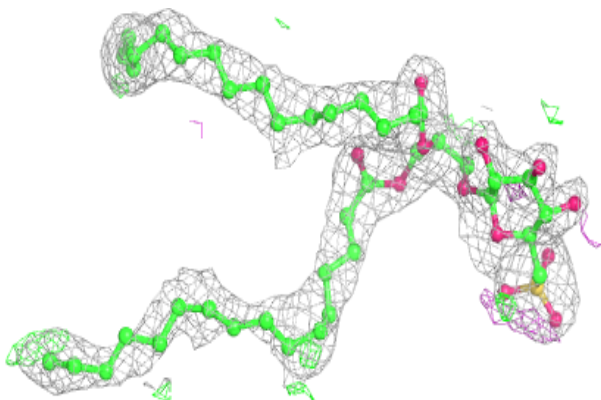


Electron density around LMG m 102:

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

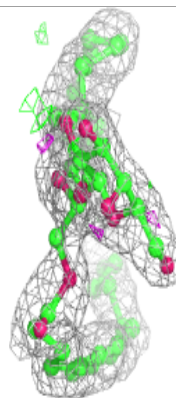
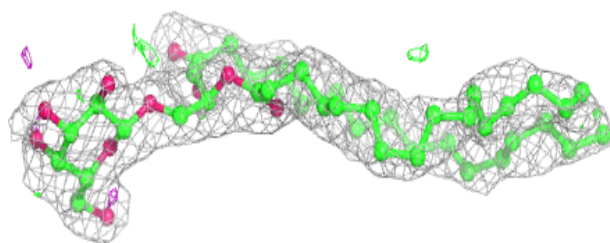
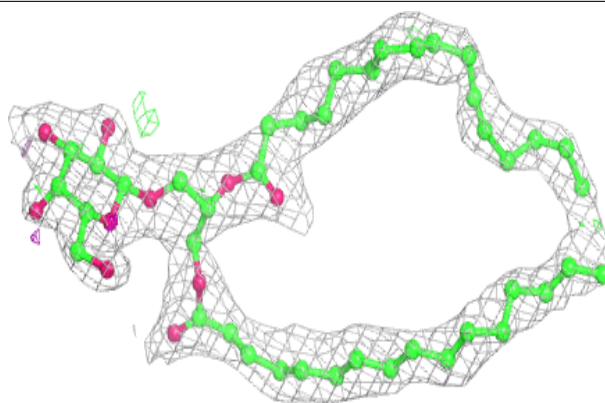
**Electron density around SQD A 415:**

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

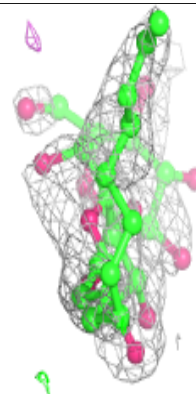
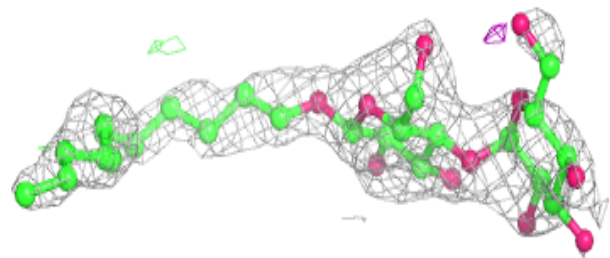
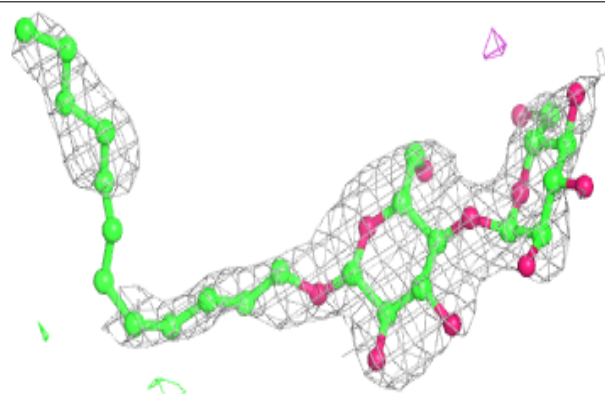


Electron density around LMG C 501:

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

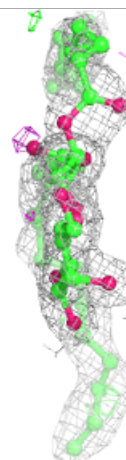
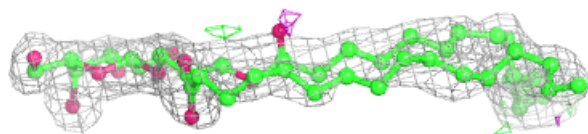
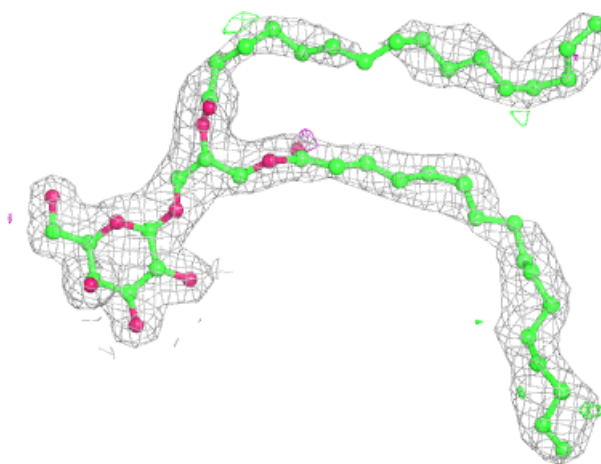
**Electron density around LMT a 422:**

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



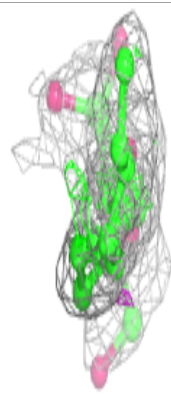
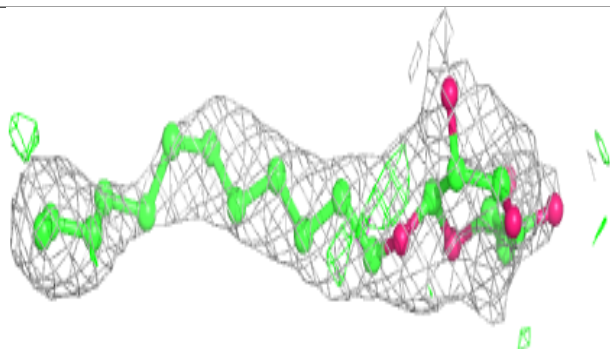
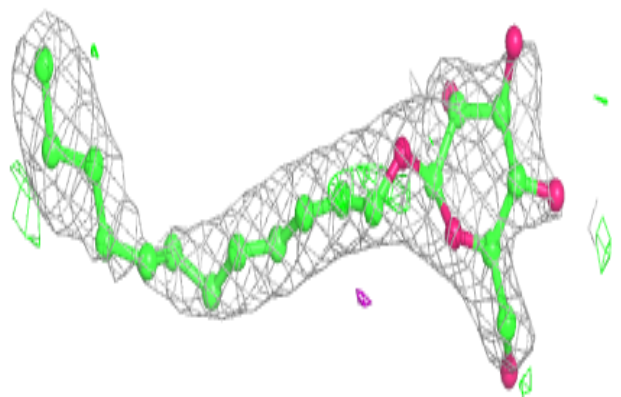
Electron density around LMG C 520:

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

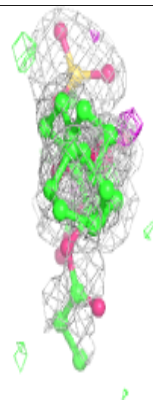
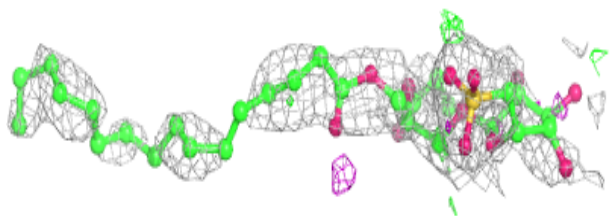
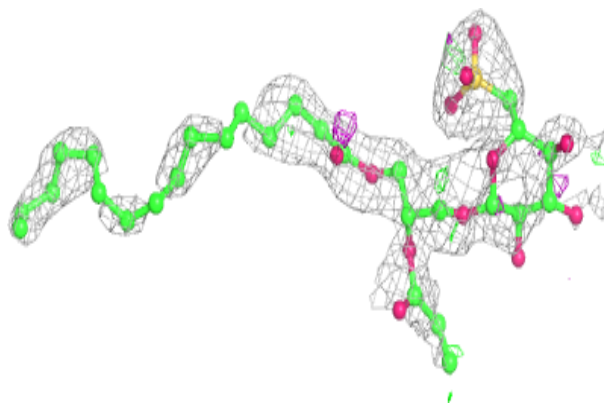


Electron density around LMT T 103:

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

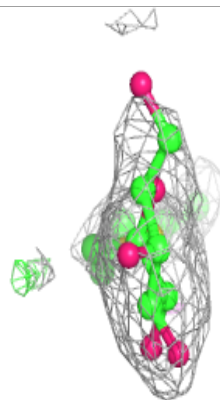
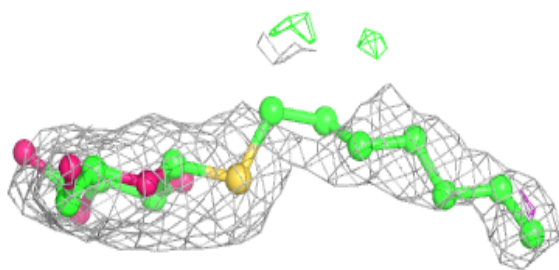
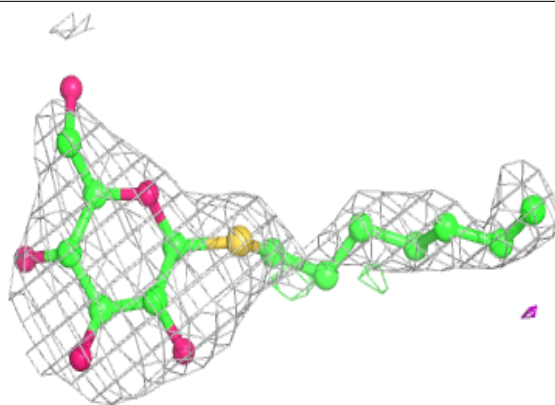
**Electron density around SQD x 101:**

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



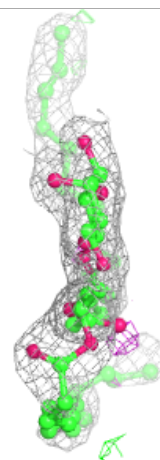
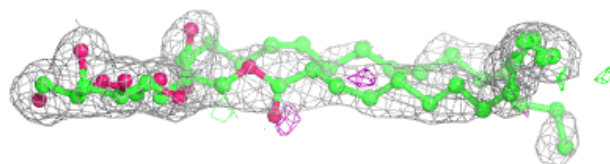
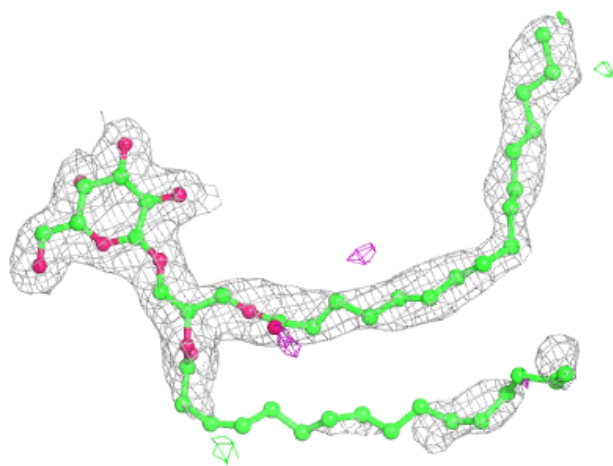
Electron density around HTG c 921:

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



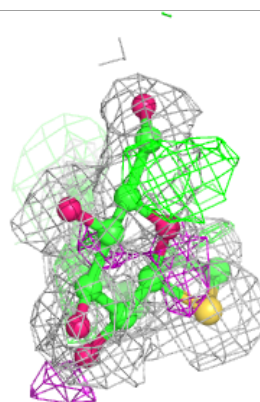
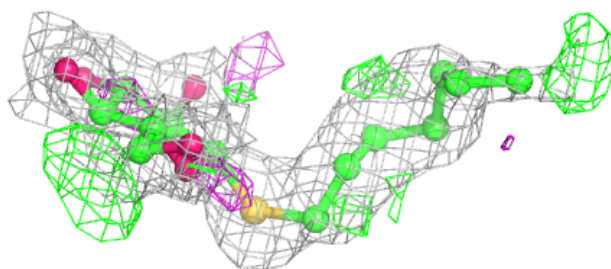
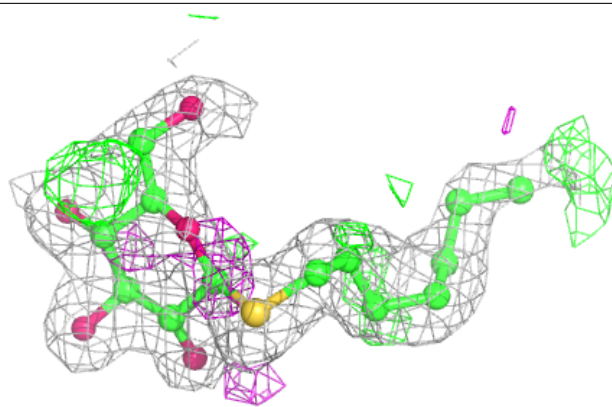
Electron density around LMG c 920:

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

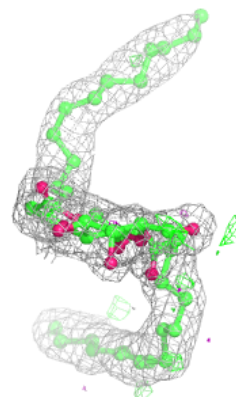
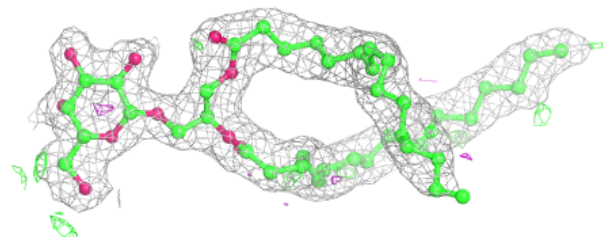
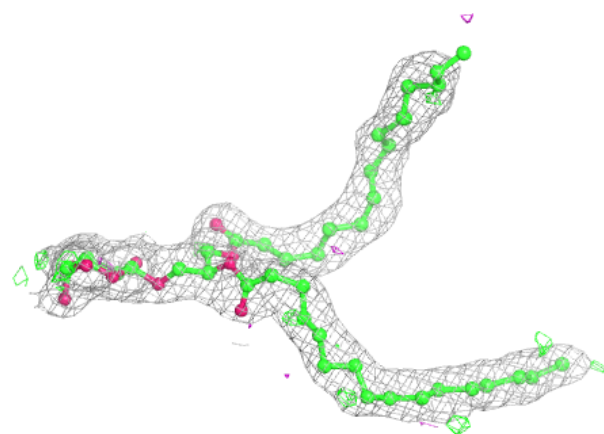


Electron density around HTG B 625:

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

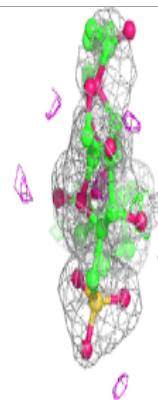
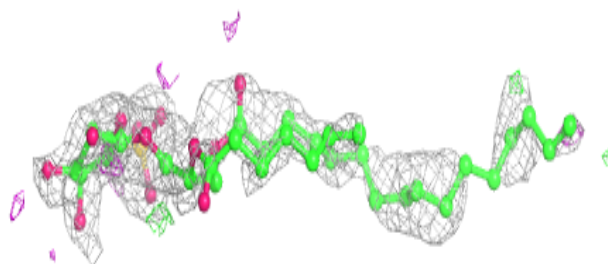
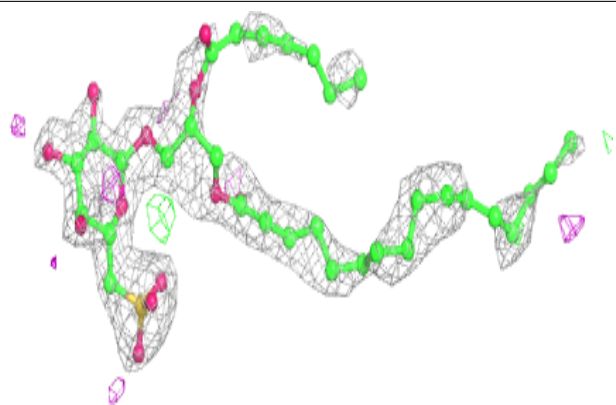
**Electron density around LMG B 622:**

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

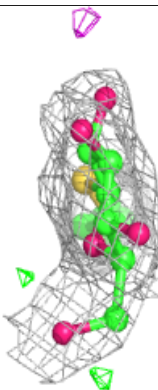
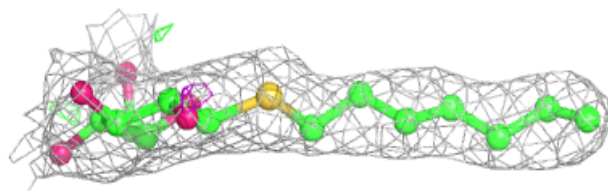
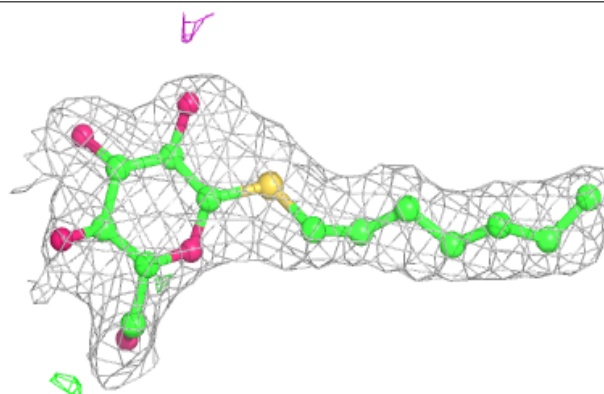


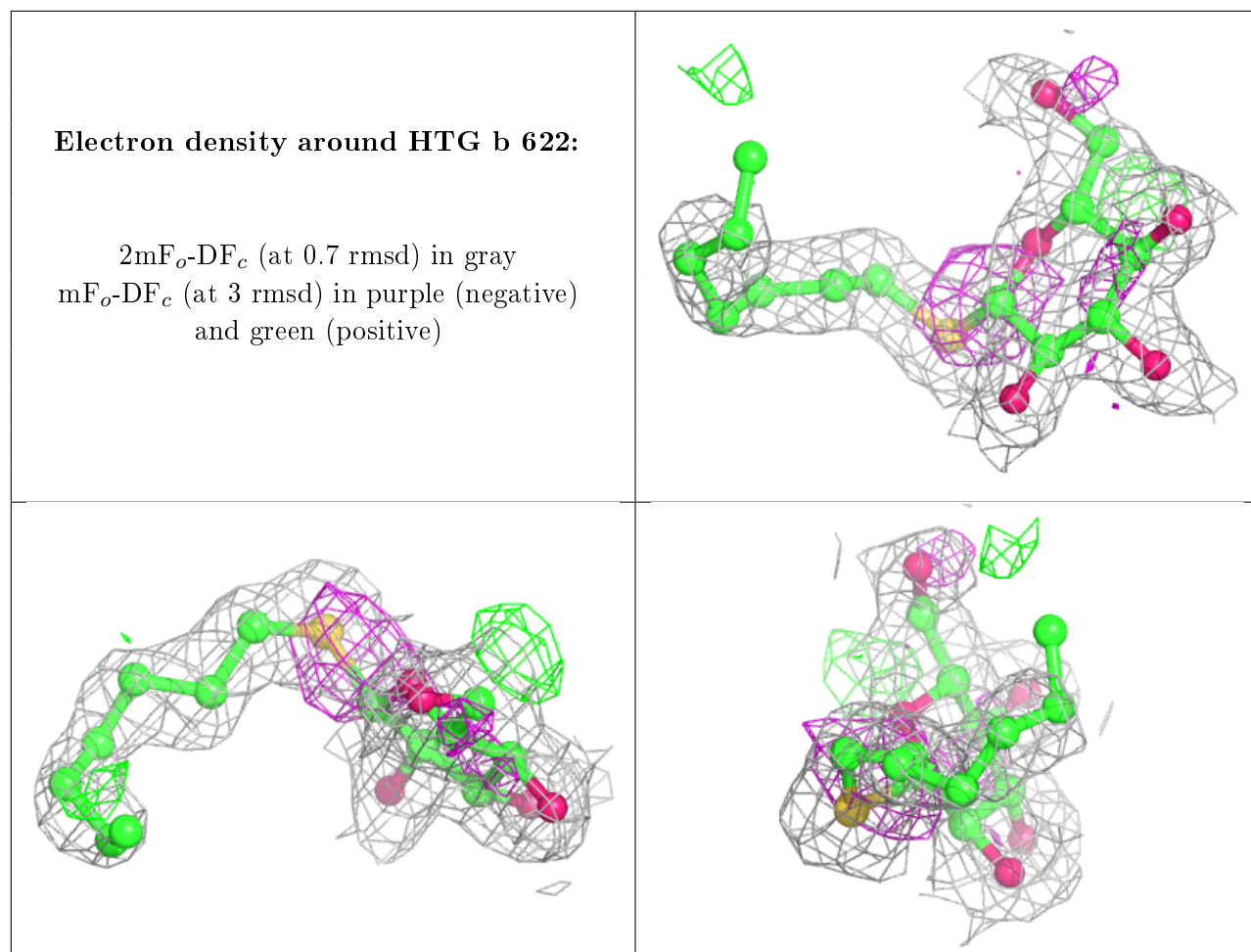
Electron density around SQD D 408:

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

**Electron density around HTG B 630:**

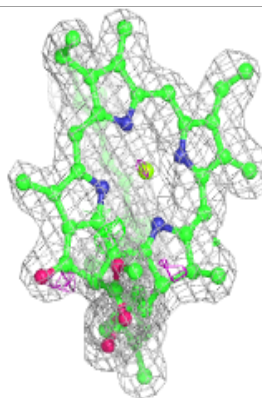
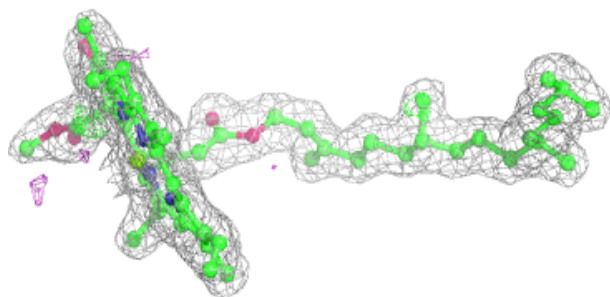
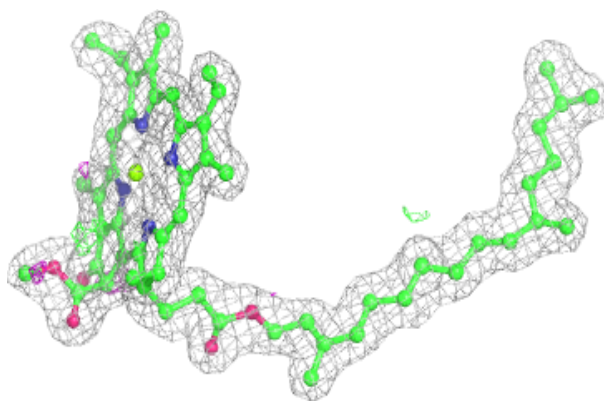
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



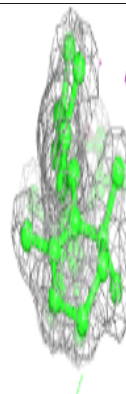
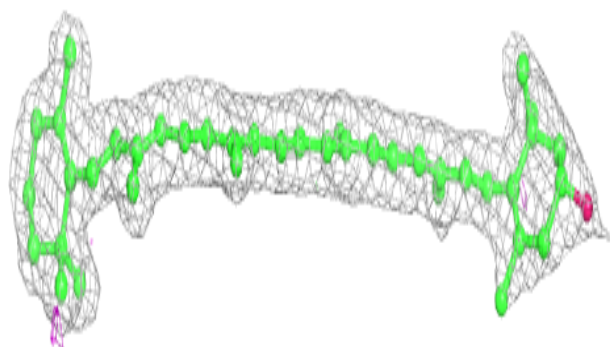
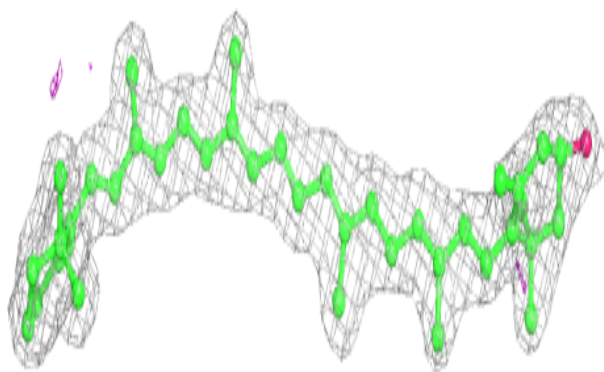


Electron density around CLA B 610:

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

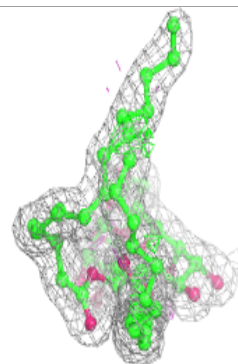
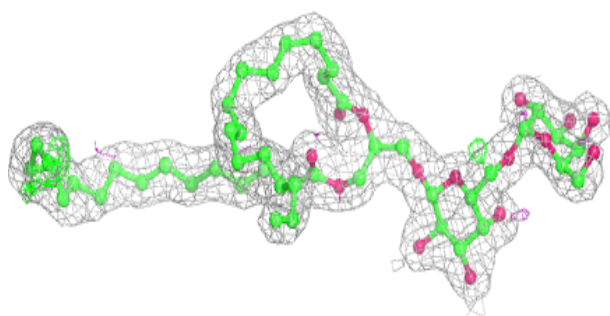
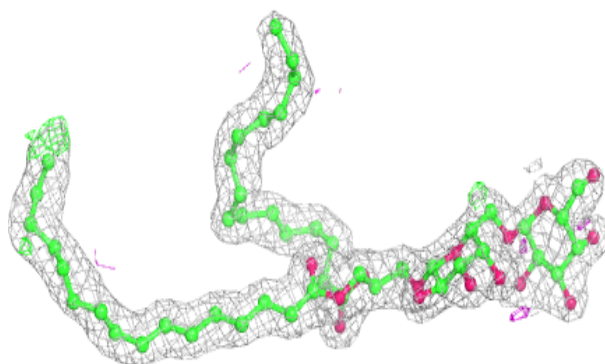
**Electron density around RRX x 102:**

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

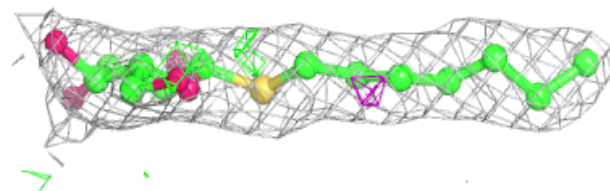
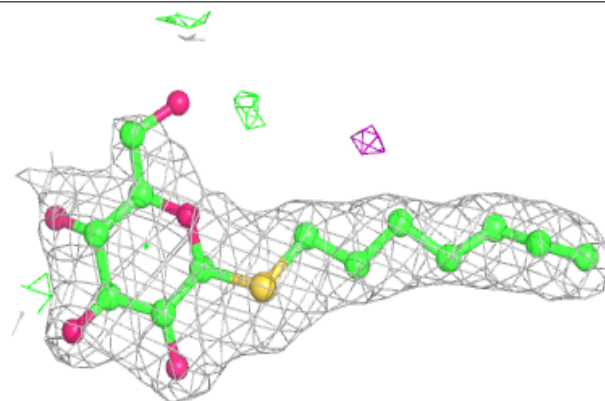


Electron density around DGD h 102:

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

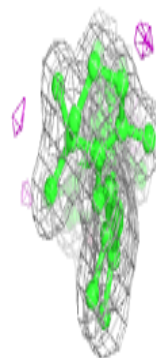
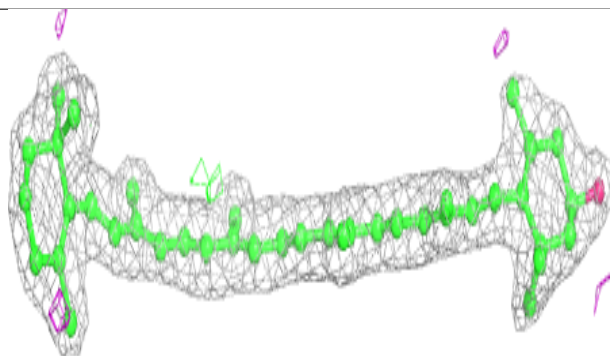
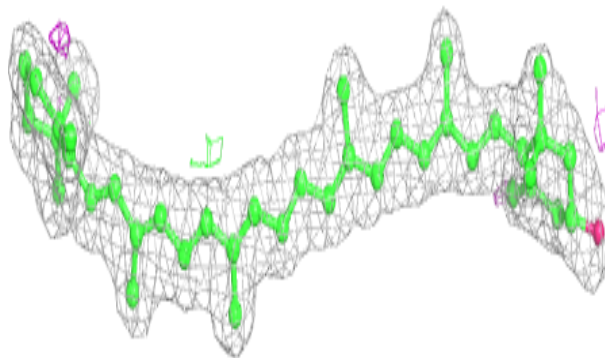
**Electron density around HTG b 627:**

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

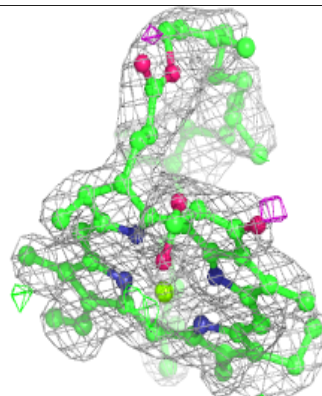
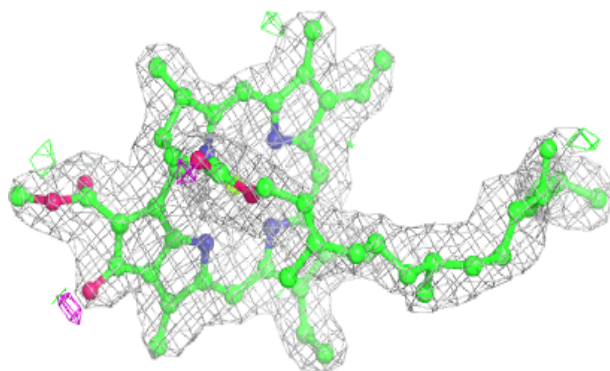
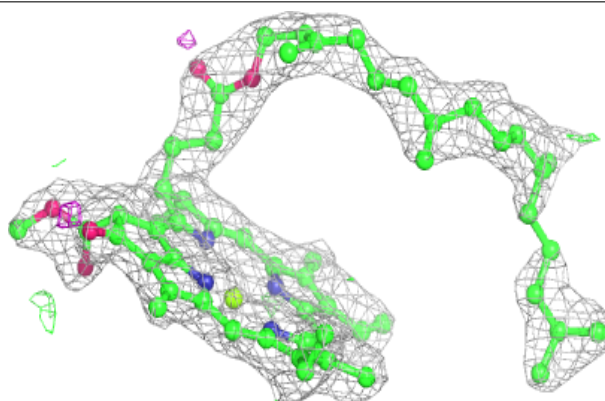


Electron density around RRX H 102:

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

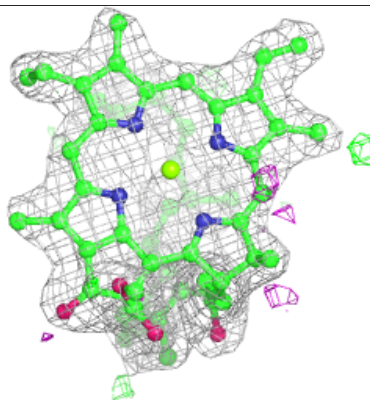
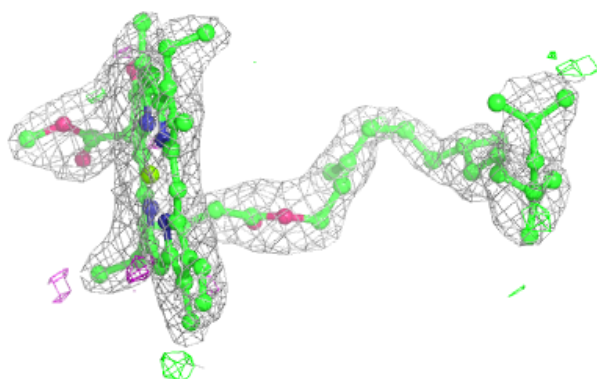
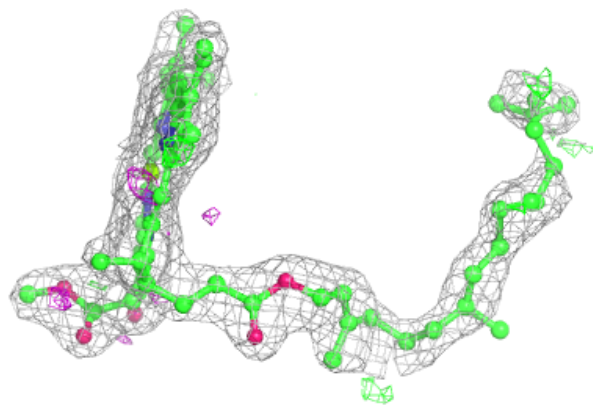
**Electron density around CLA C 514:**

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

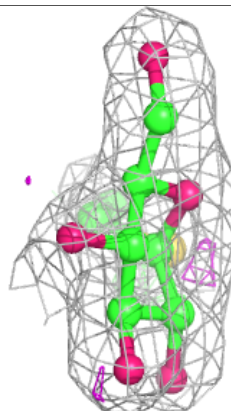
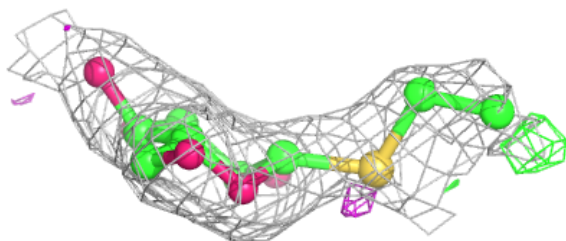
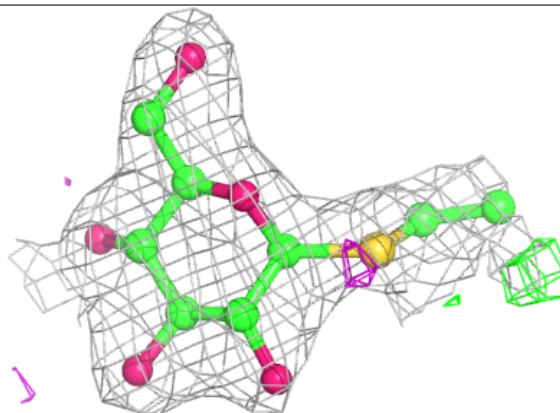


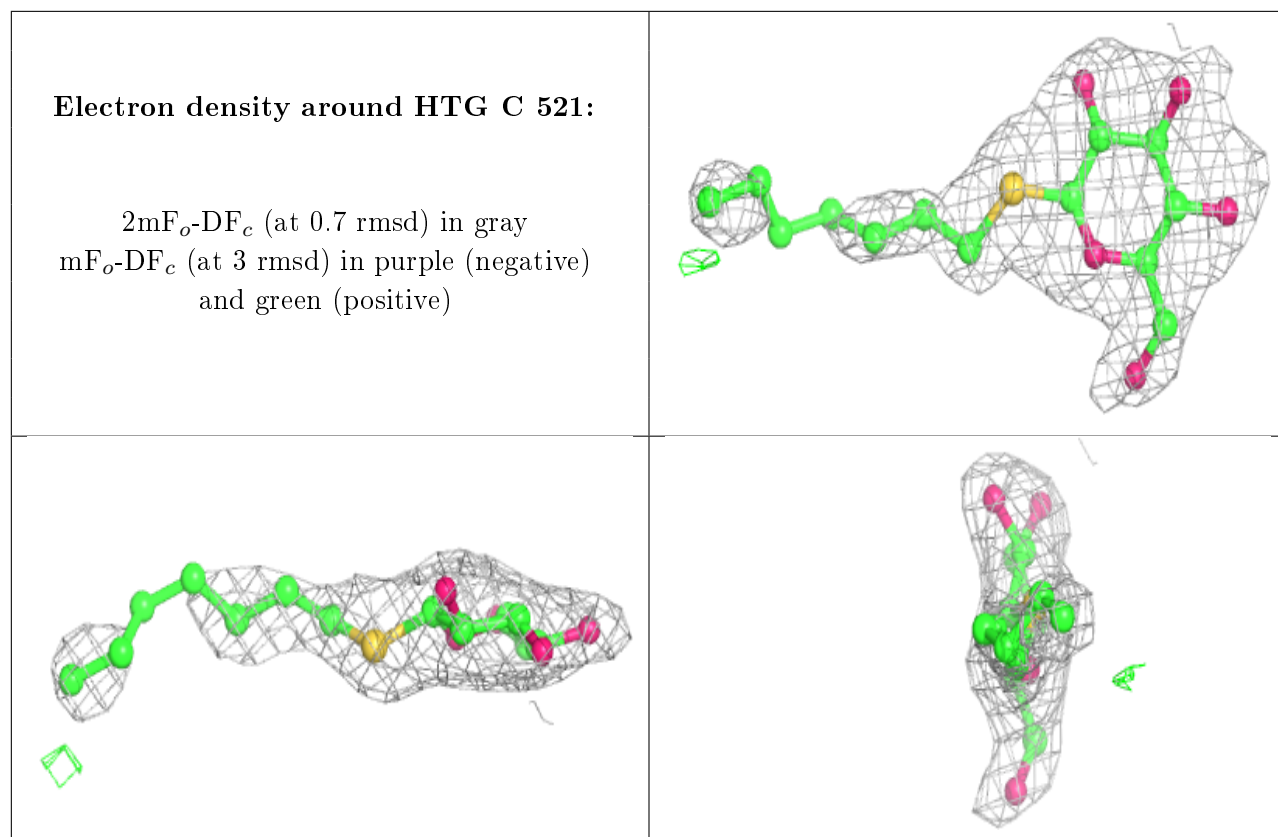
Electron density around CLA C 507:

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

**Electron density around HTG V 204:**

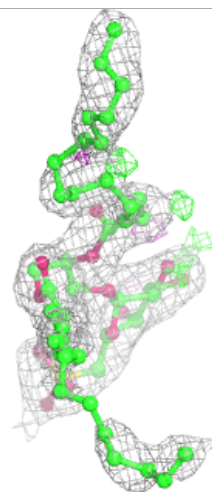
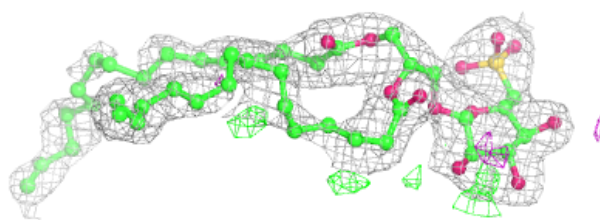
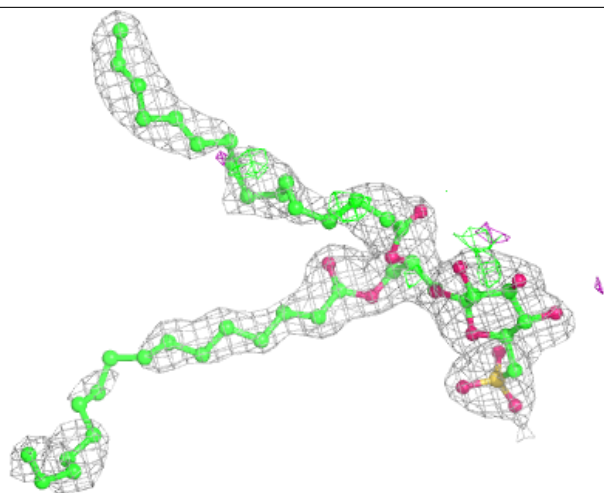
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





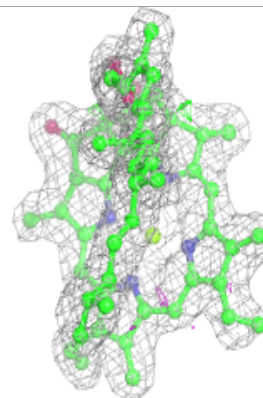
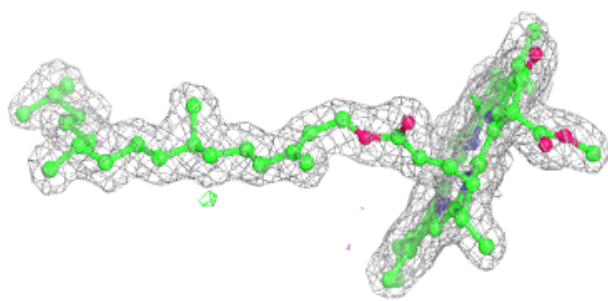
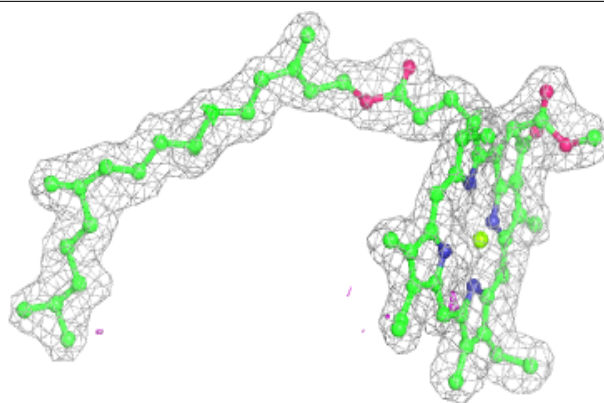
Electron density around SQD A 410:

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



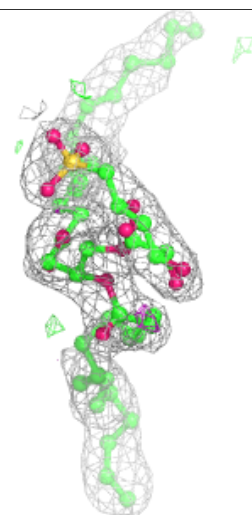
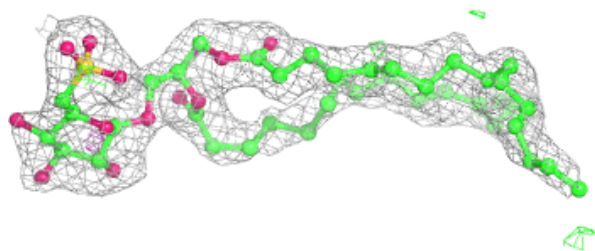
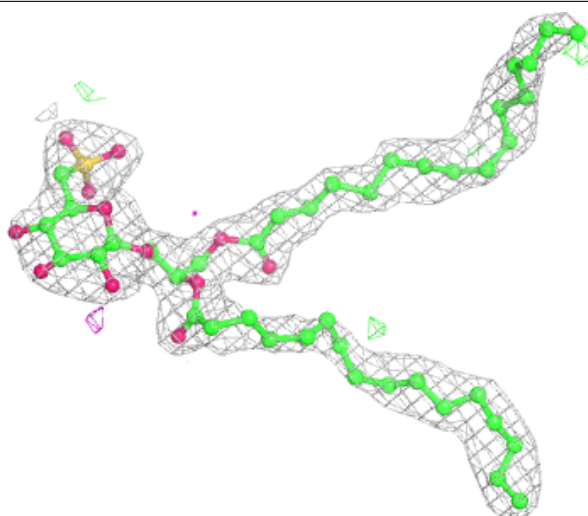
Electron density around CLA b 610:

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



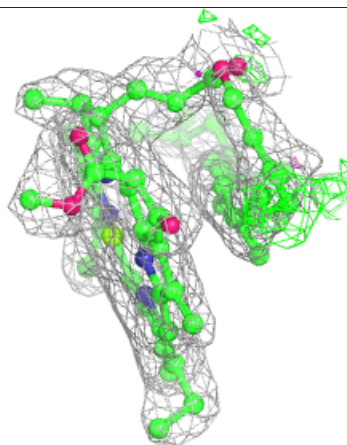
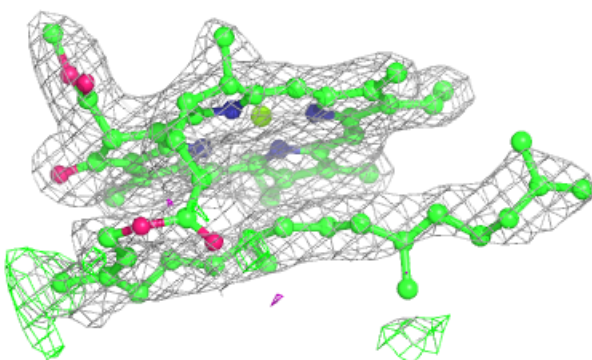
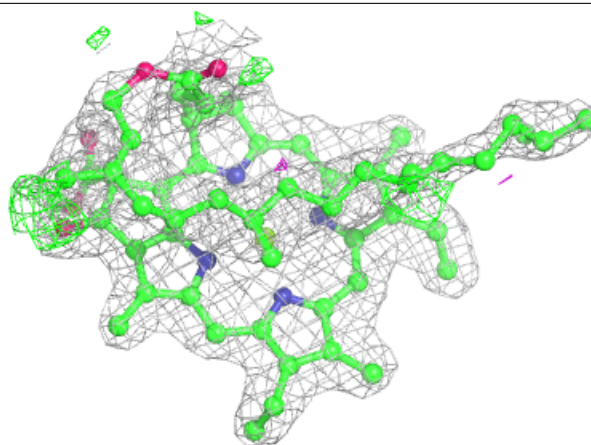
Electron density around SQD a 412:

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

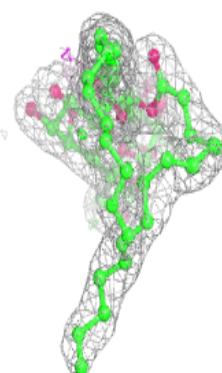
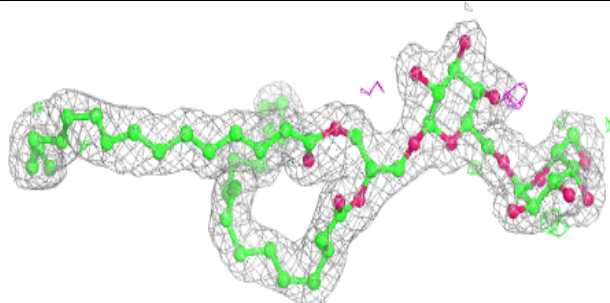
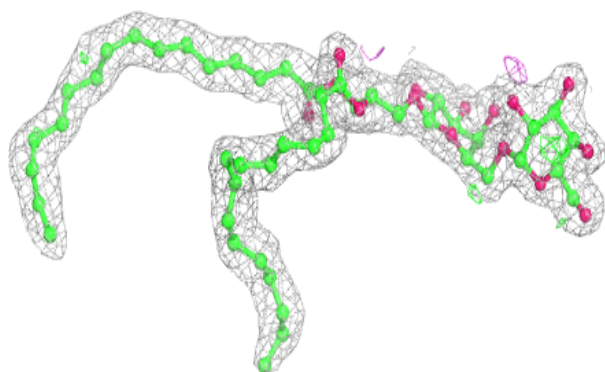


Electron density around CLA b 602:

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

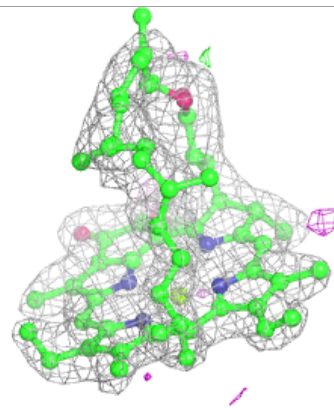
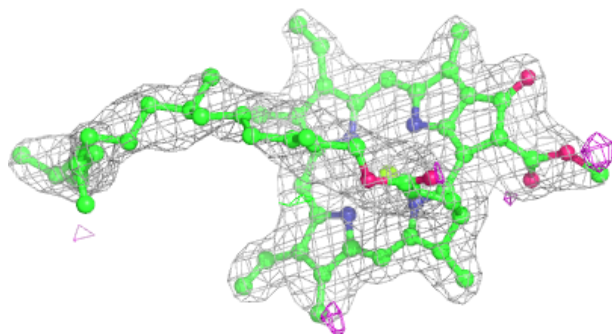
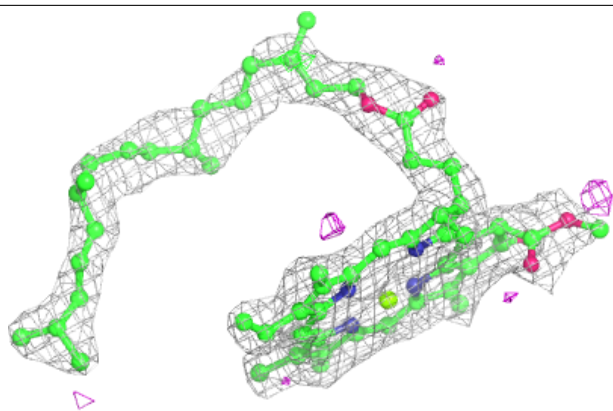
**Electron density around DGD H 103:**

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



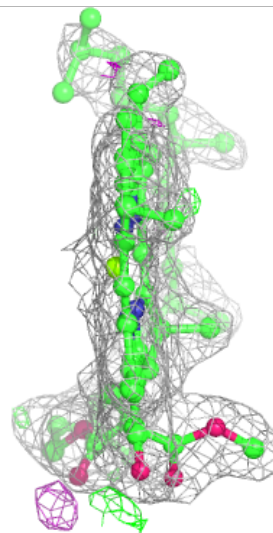
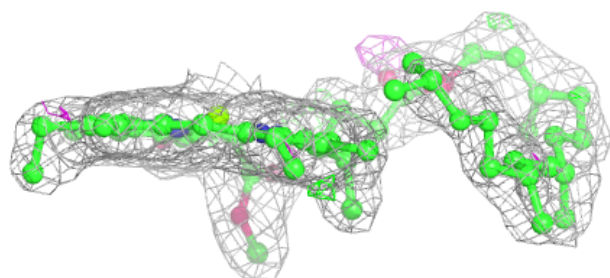
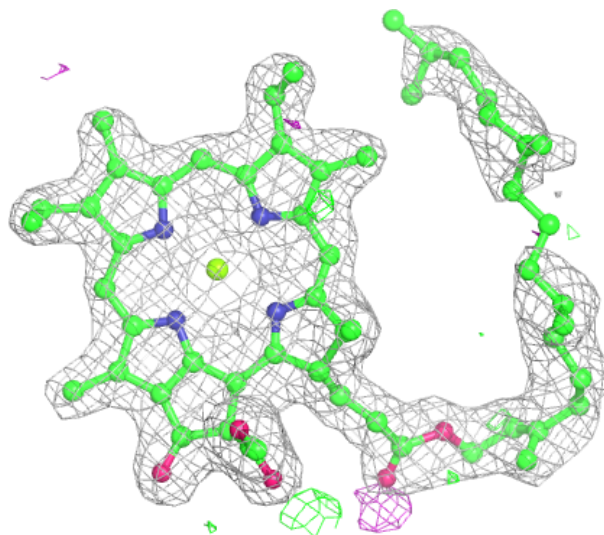
Electron density around CLA c 914:

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



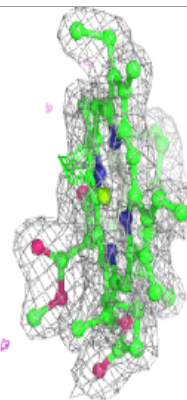
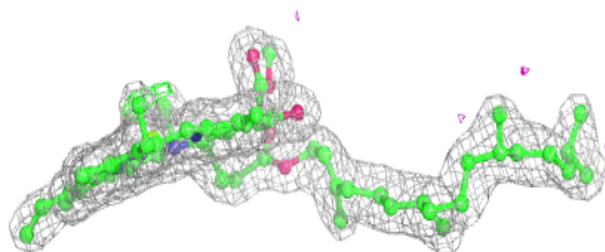
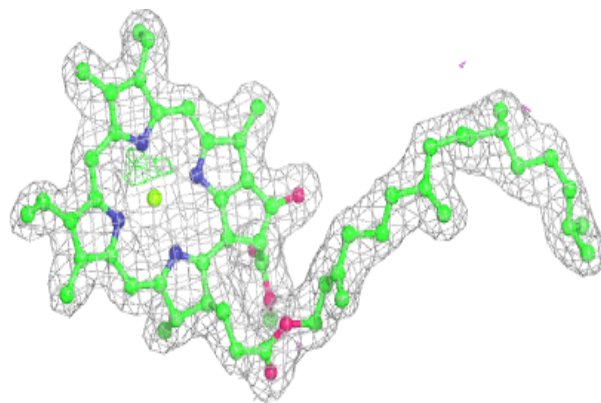
Electron density around CLA c 913:

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

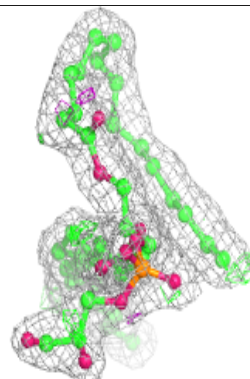
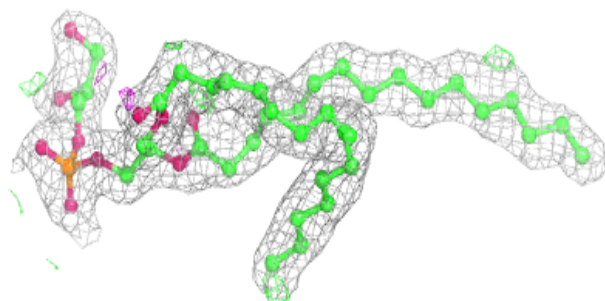
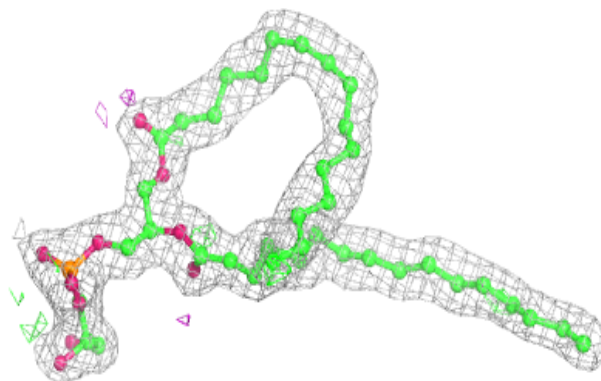


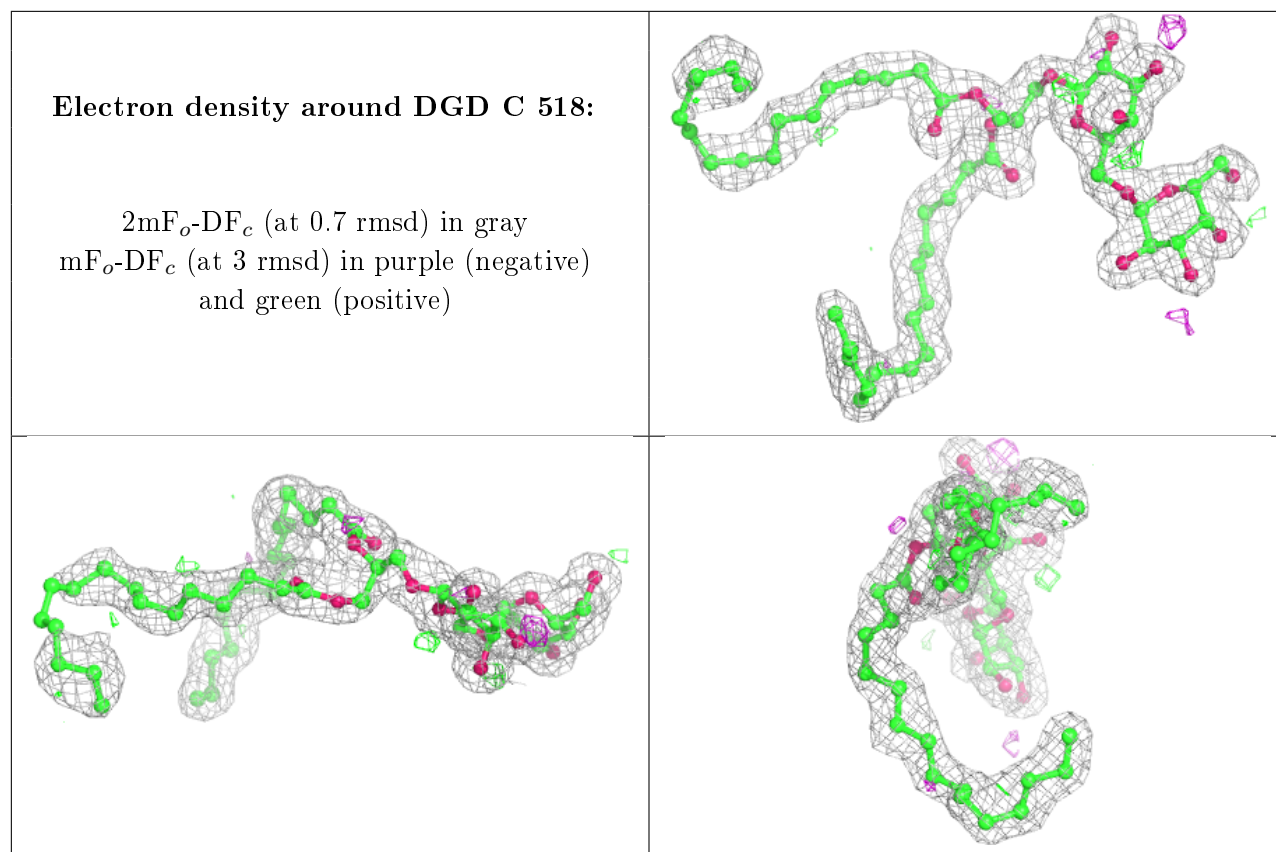
Electron density around CLA B 603:

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

**Electron density around LHG D 409:**

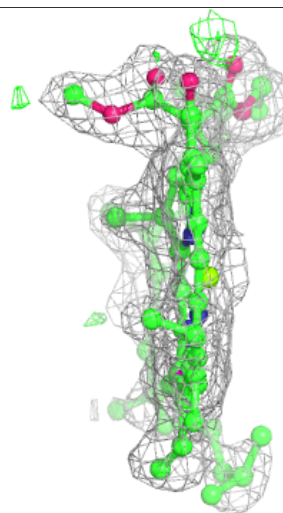
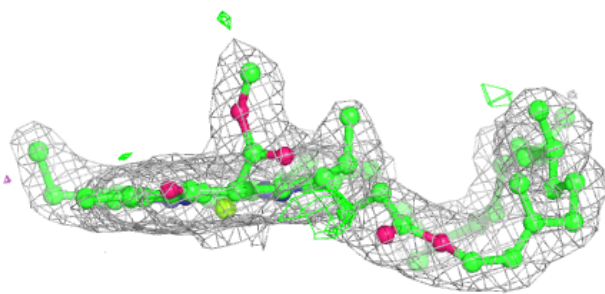
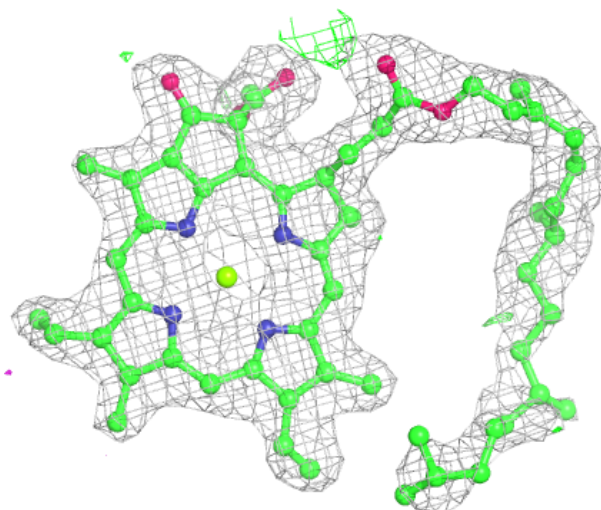
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





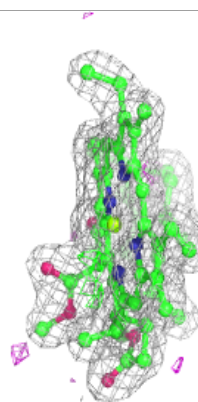
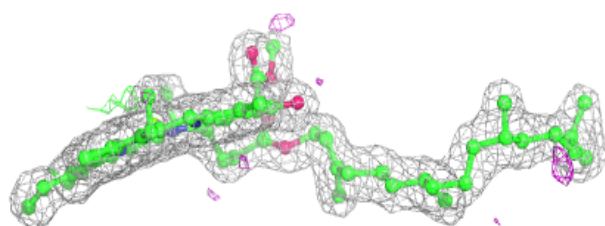
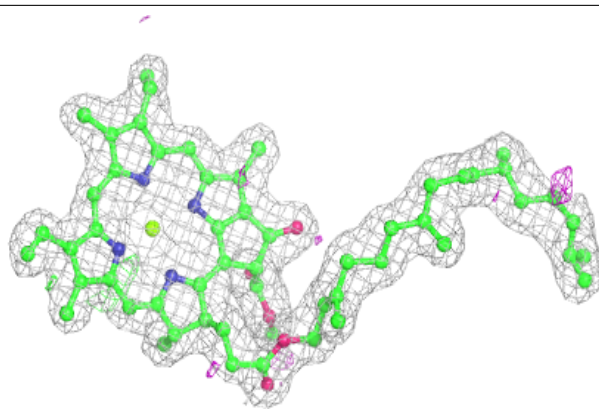
Electron density around CLA C 513:

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

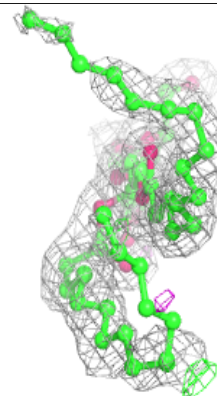
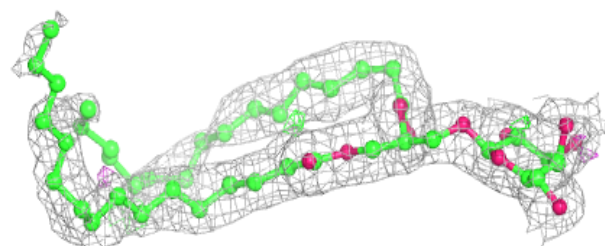
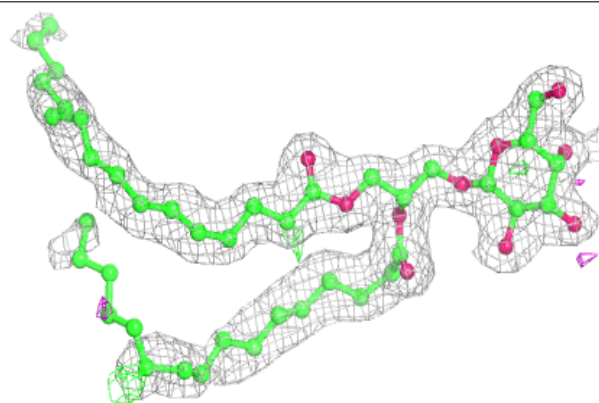


Electron density around CLA b 603:

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

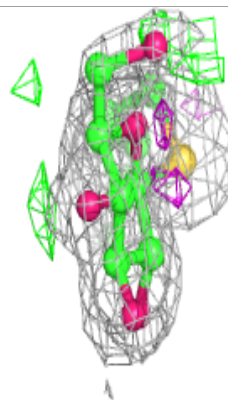
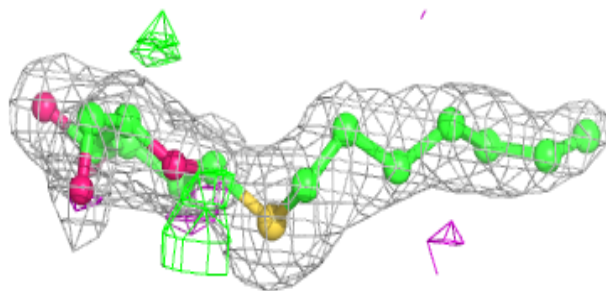
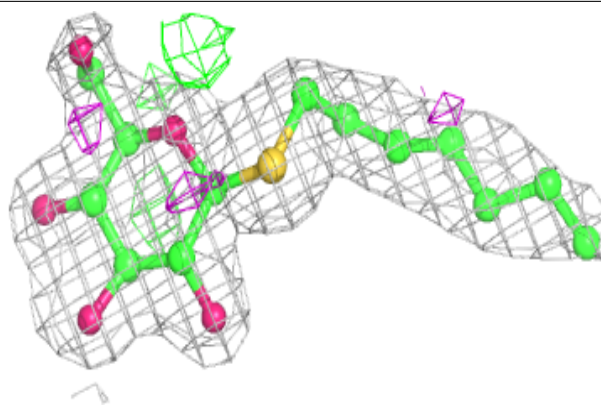
**Electron density around LMG J 101:**

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

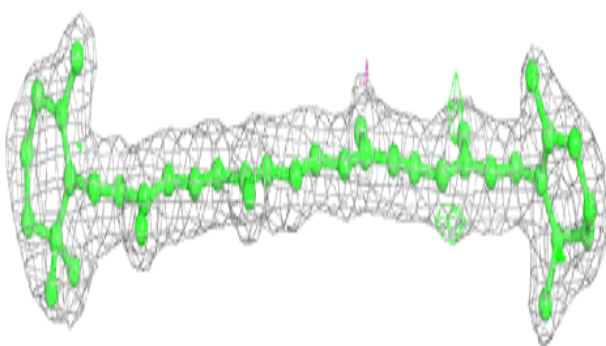
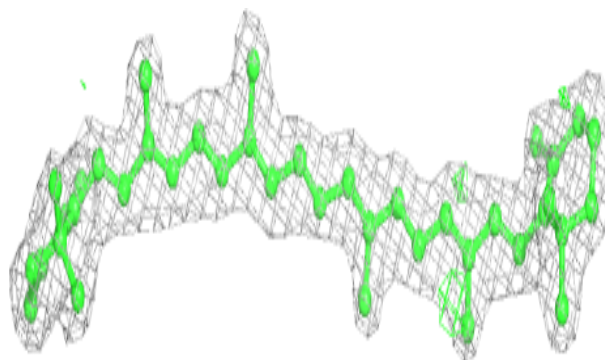


Electron density around HTG B 624:

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

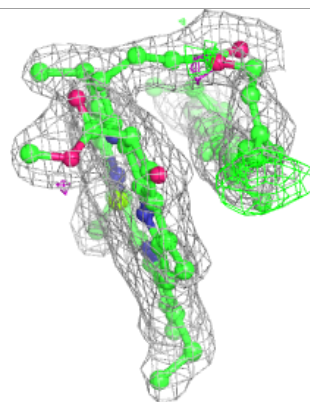
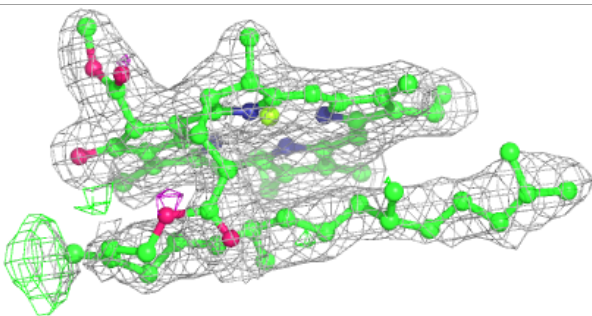
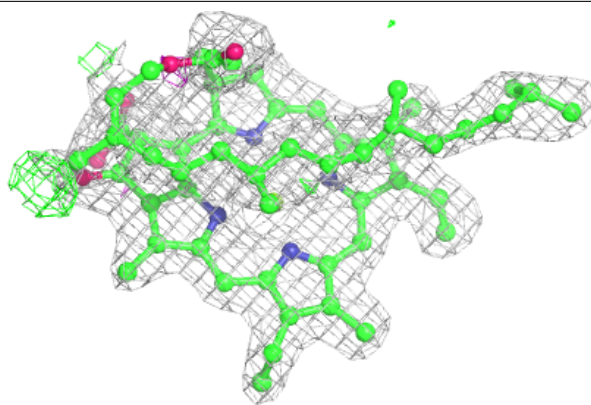
**Electron density around BCR C 515:**

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



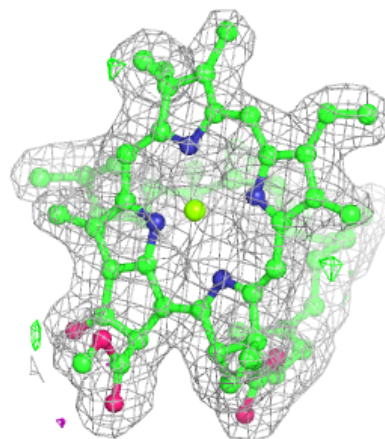
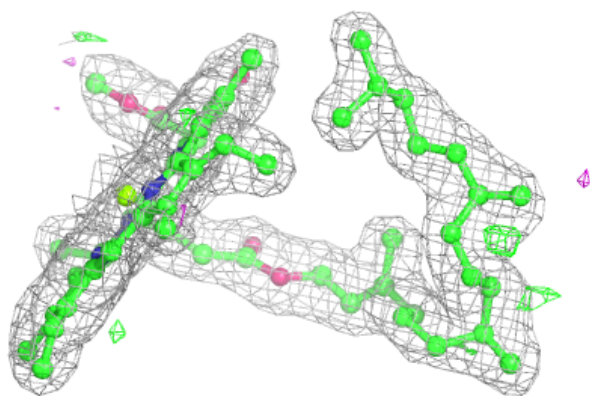
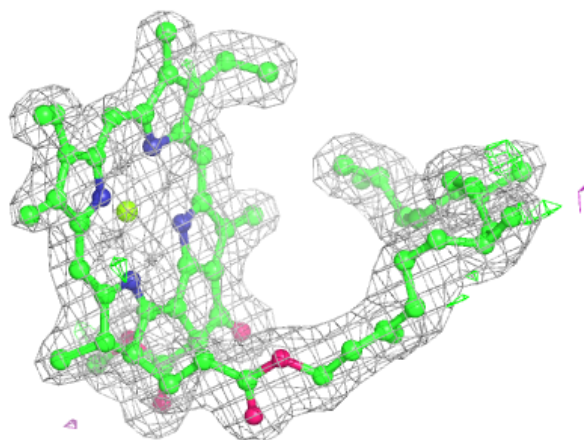
Electron density around CLA B 602:

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



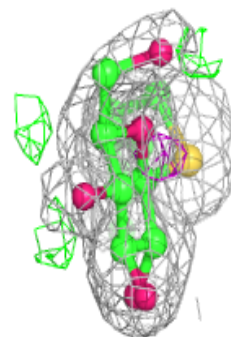
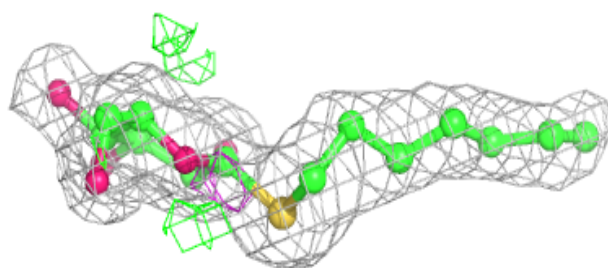
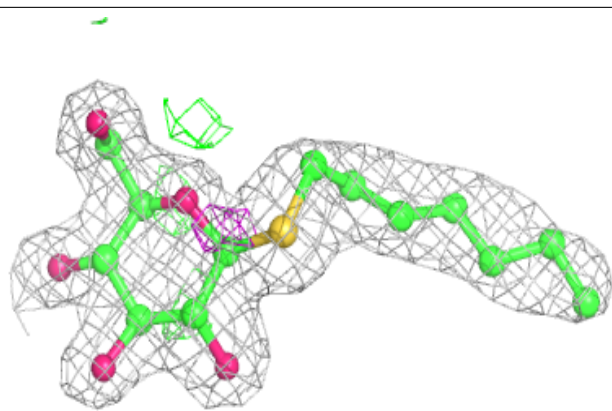
Electron density around CLA c 904:

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

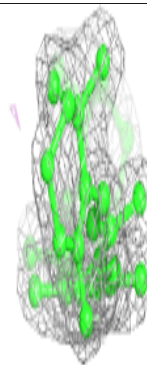
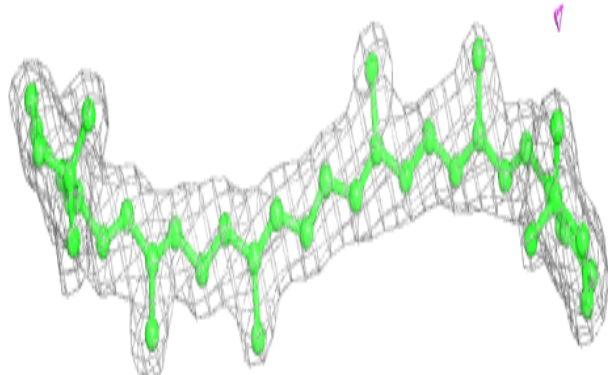
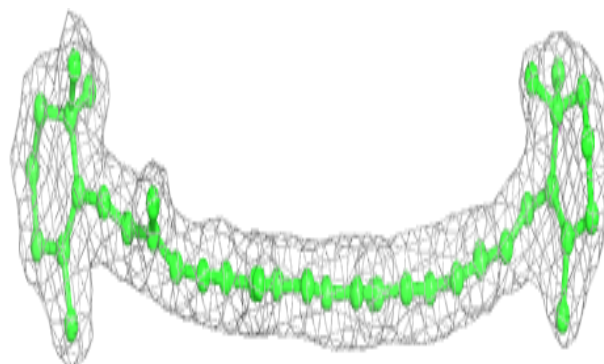


Electron density around HTG O 302:

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

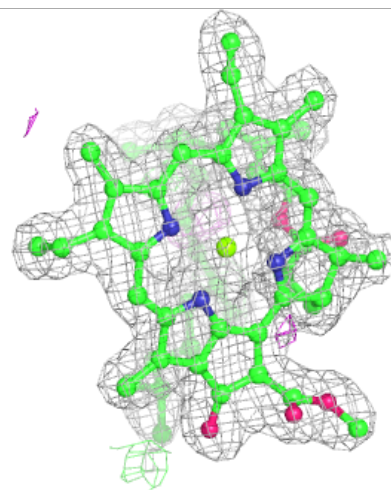
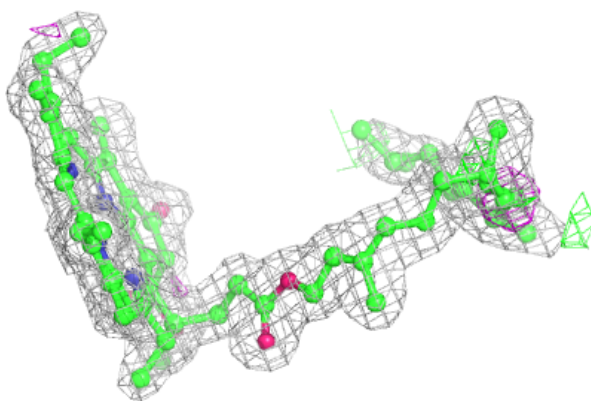
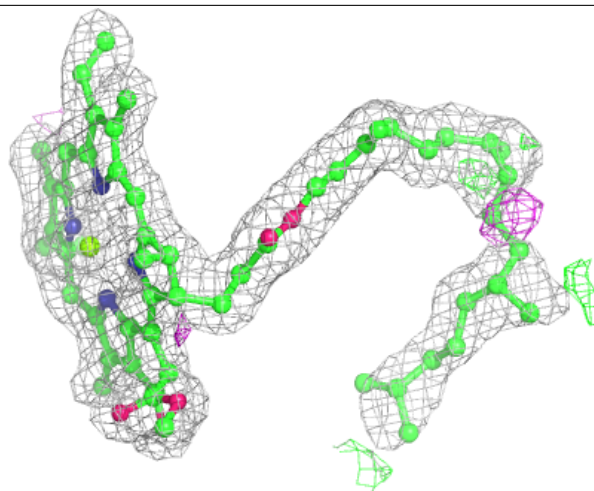
**Electron density around BCR k 102:**

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



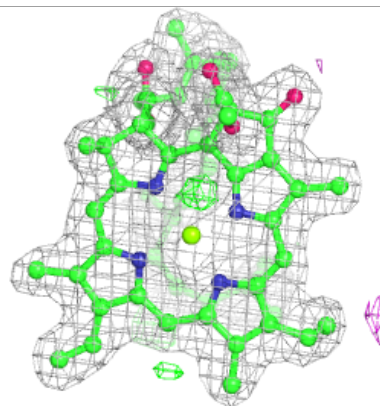
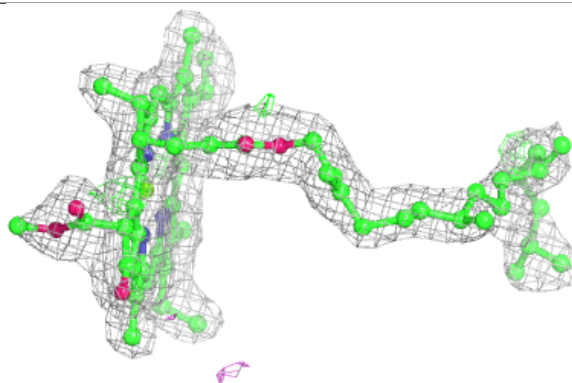
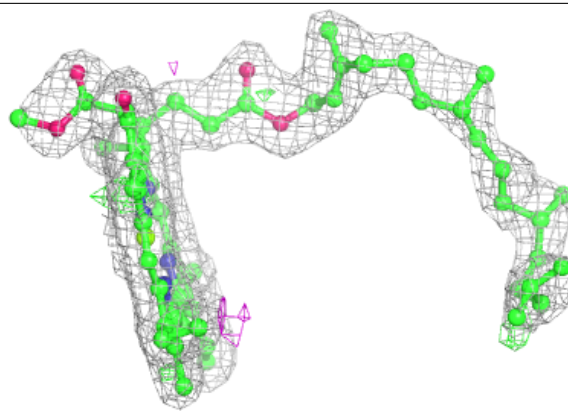
Electron density around CLA b 607:

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



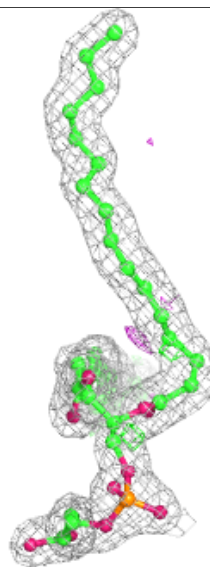
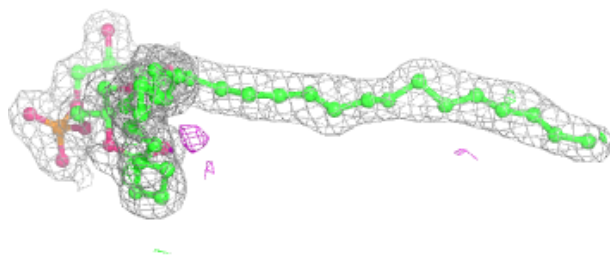
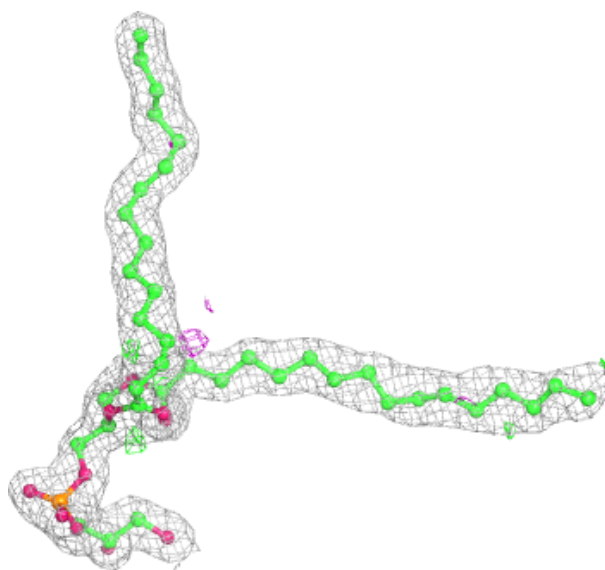
Electron density around CLA c 907:

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



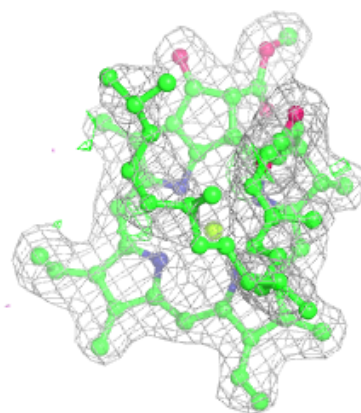
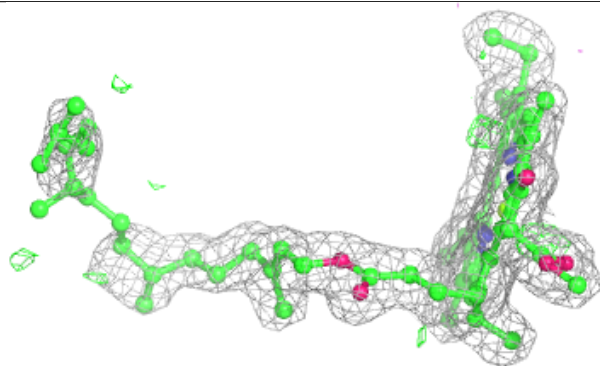
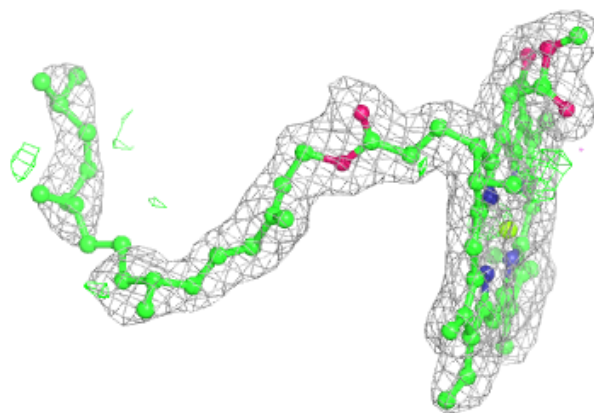
Electron density around LHG 1 101:

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

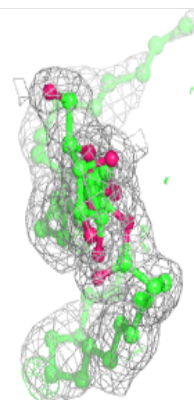
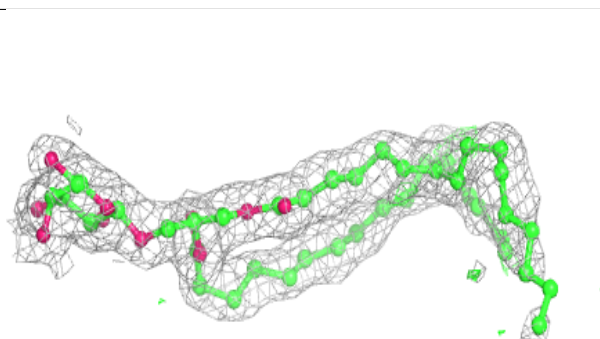
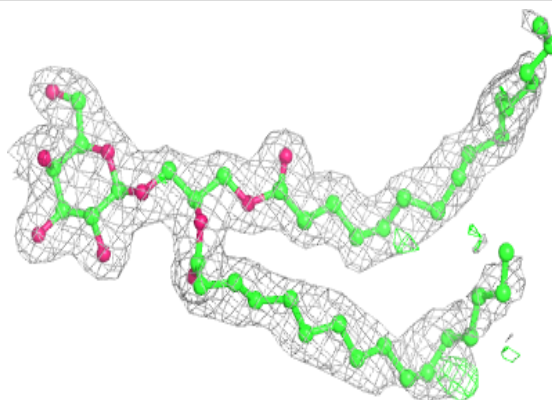


Electron density around CLA D 404:

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

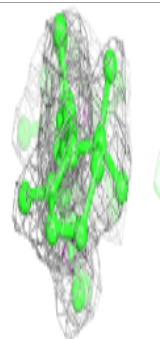
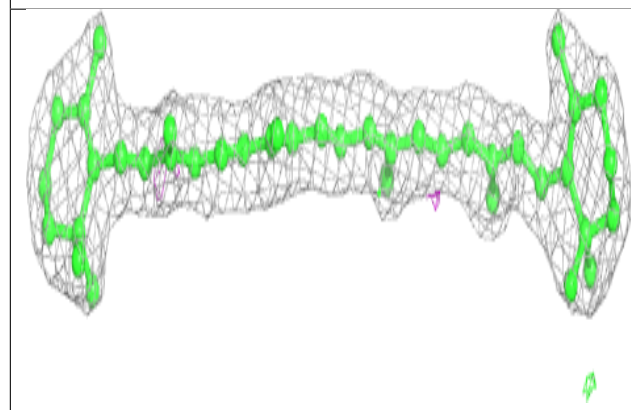
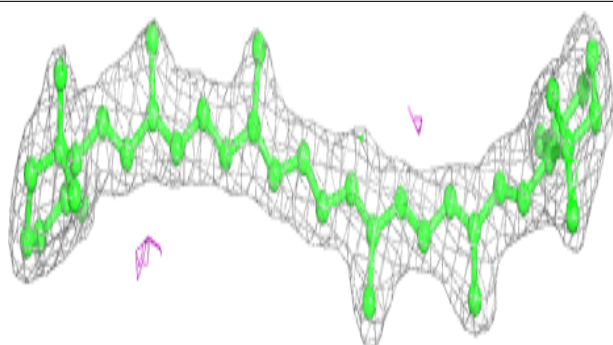
**Electron density around LMG j 101:**

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



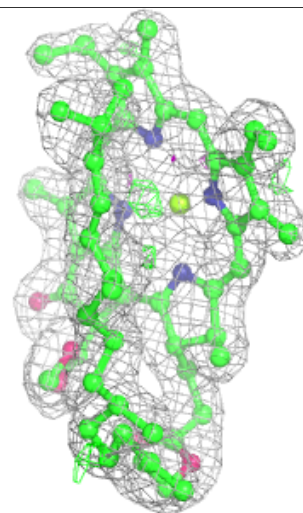
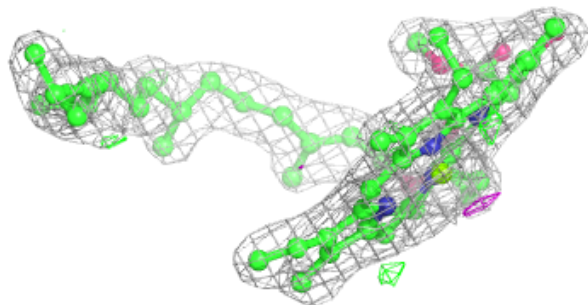
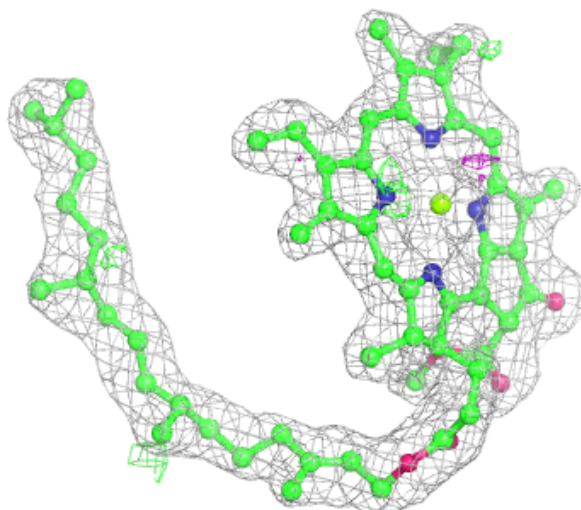
Electron density around BCR c 915:

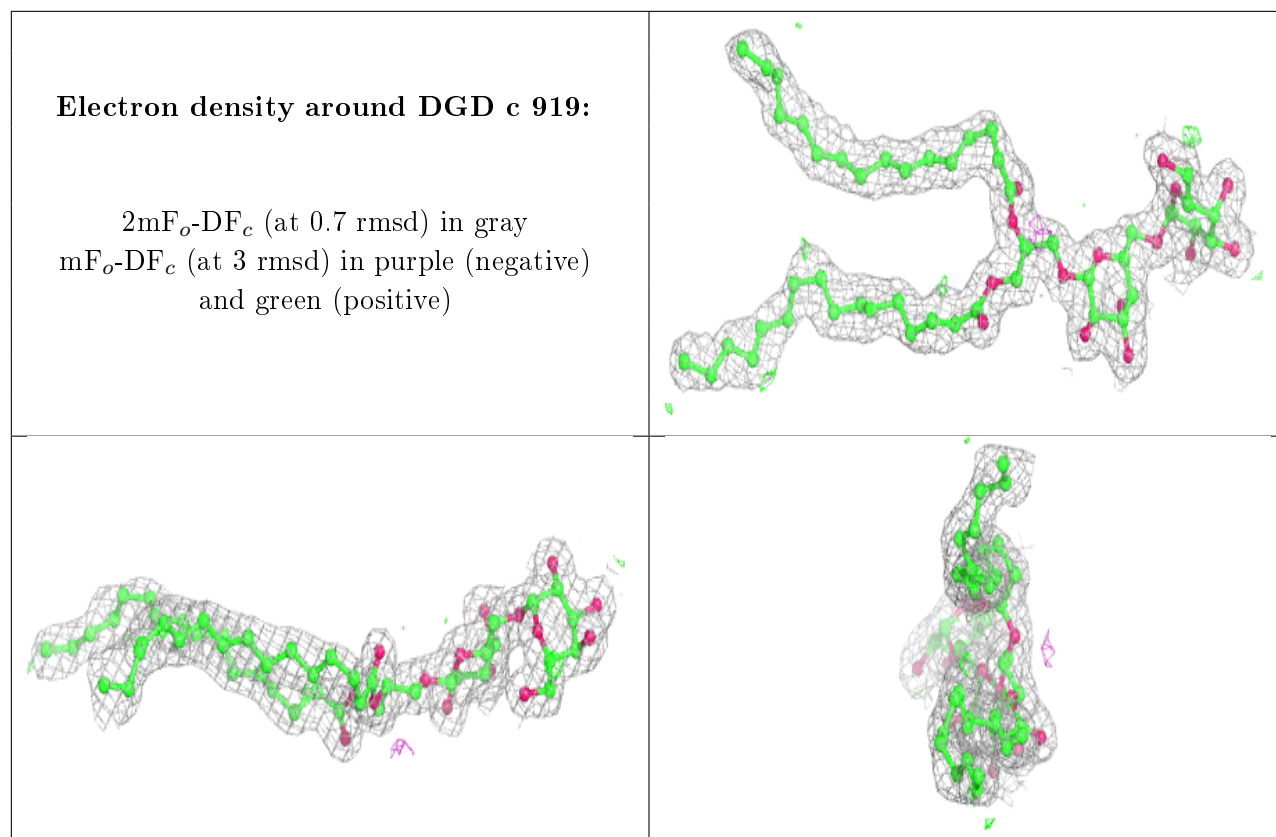
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around CLA C 508:

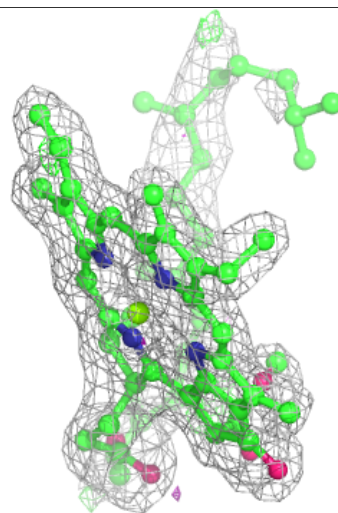
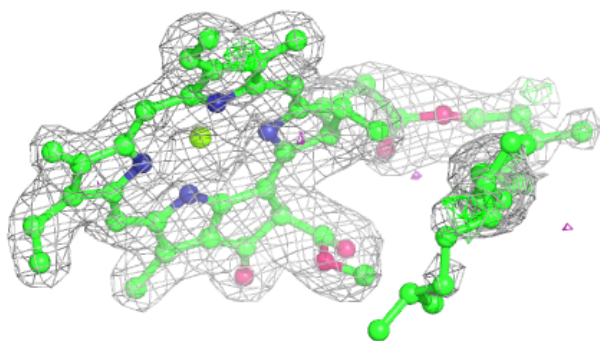
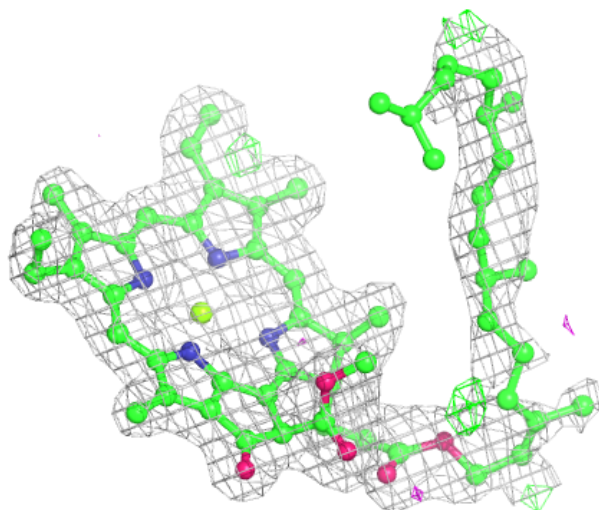
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





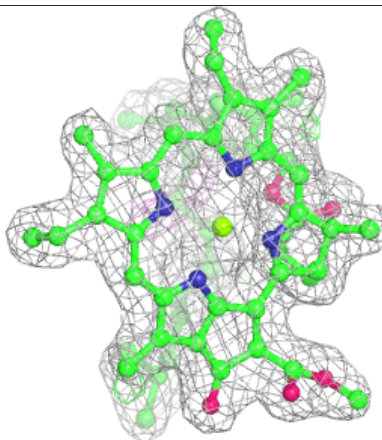
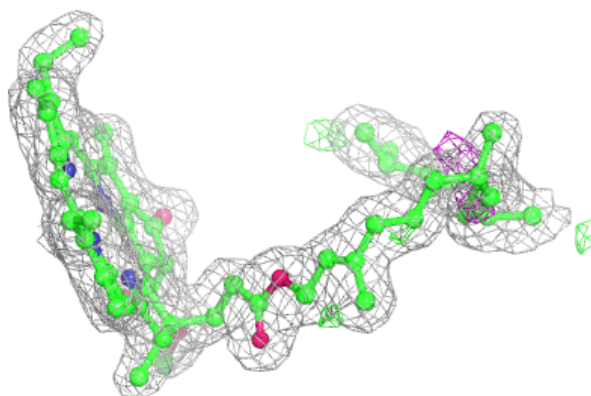
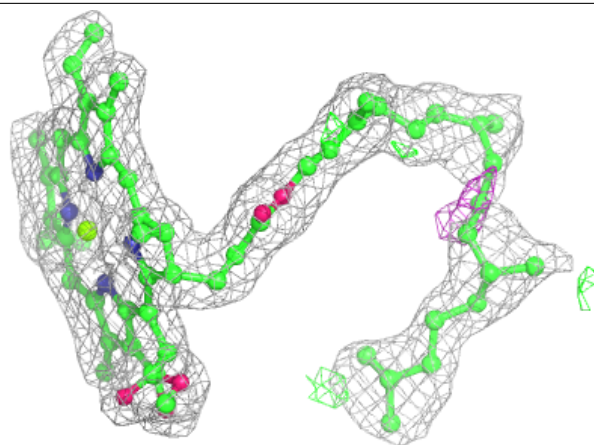
Electron density around CLA b 617:

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

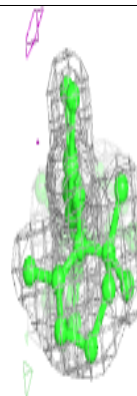
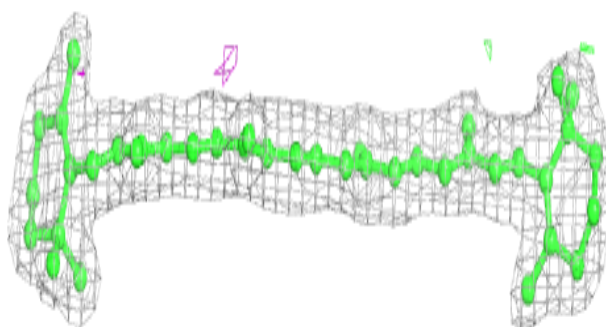
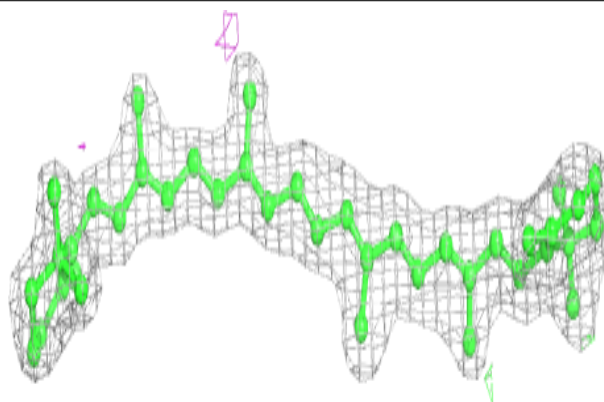


Electron density around CLA B 607:

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

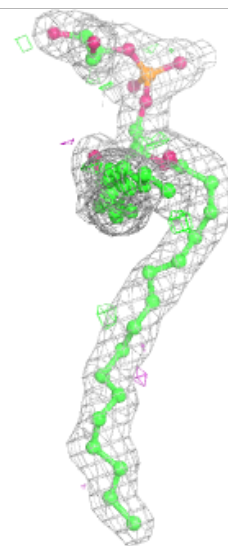
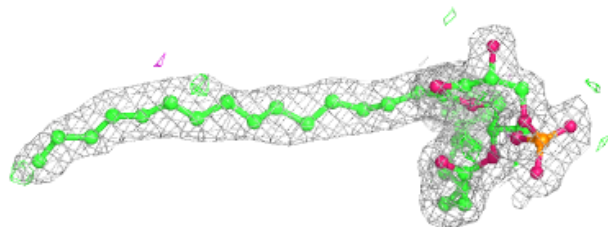
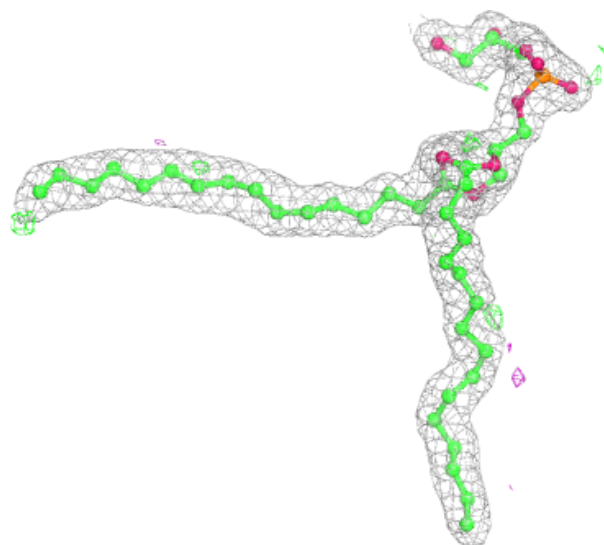
**Electron density around BCR C 516:**

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



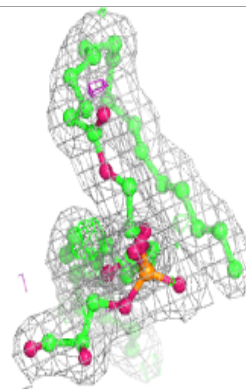
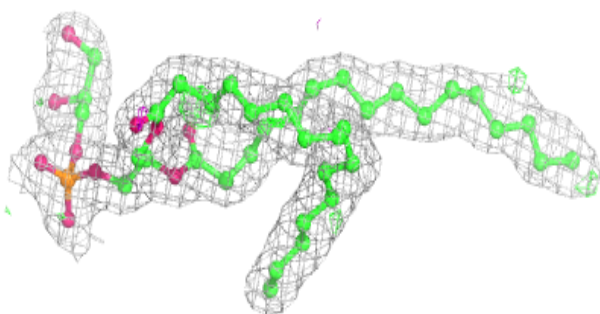
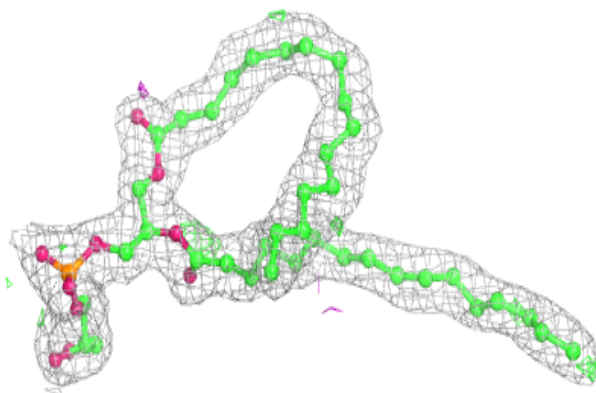
Electron density around LHG L 101:

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

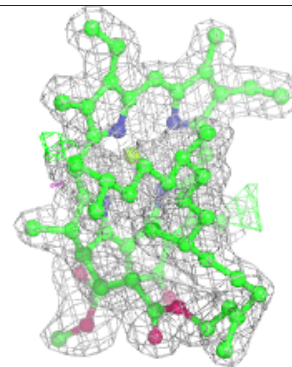
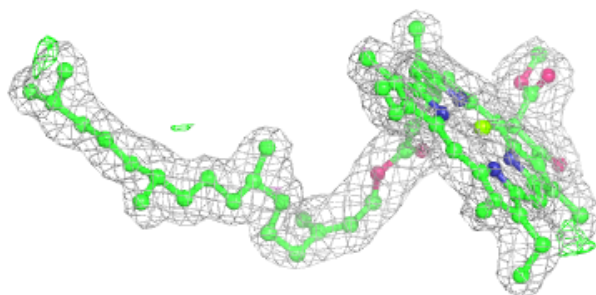
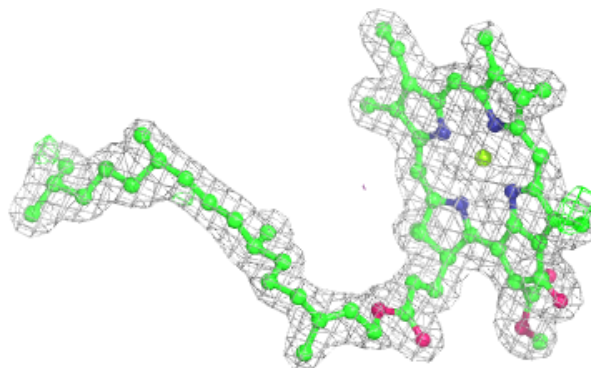


Electron density around LHG d 408:

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

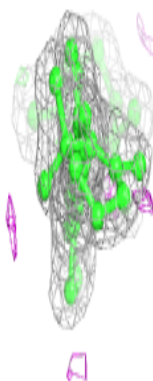
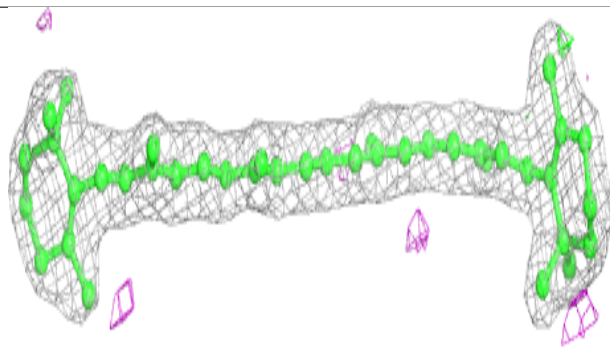
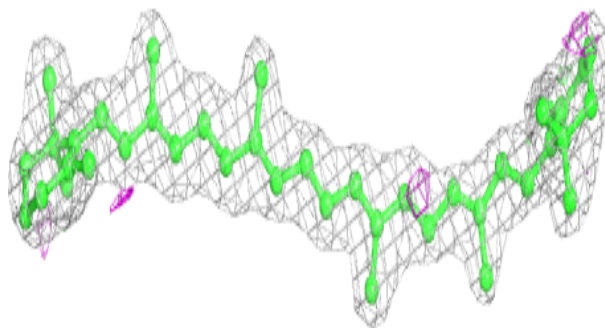
**Electron density around CLA C 512:**

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

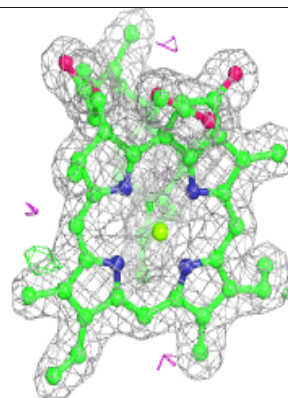
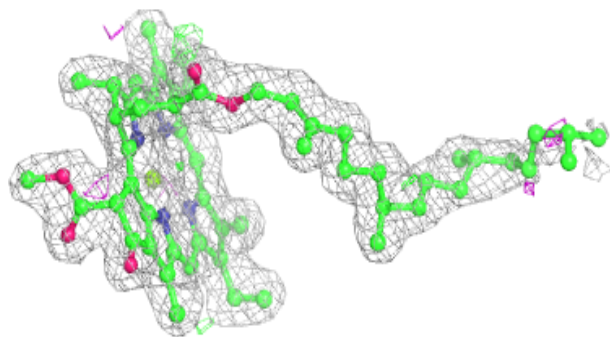
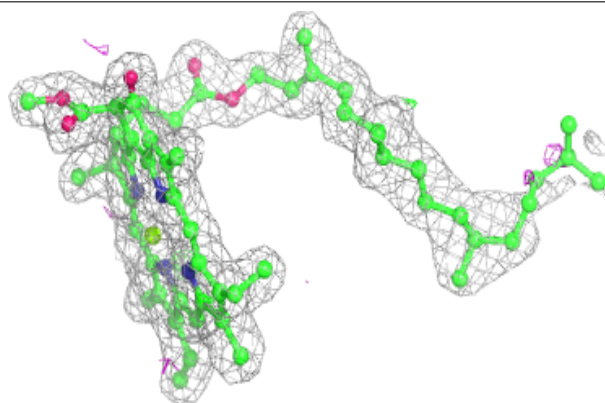


Electron density around BCR c 916:

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

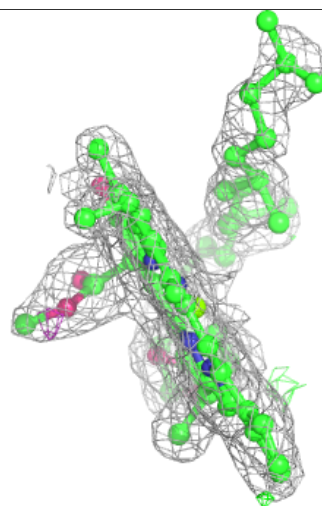
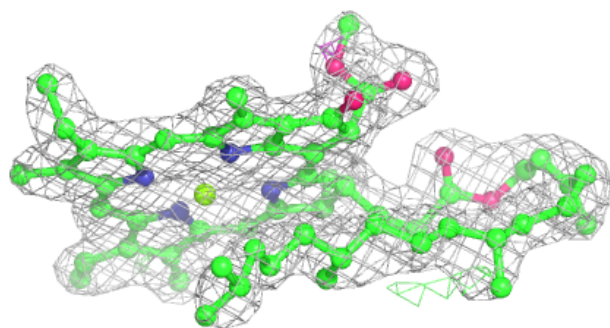
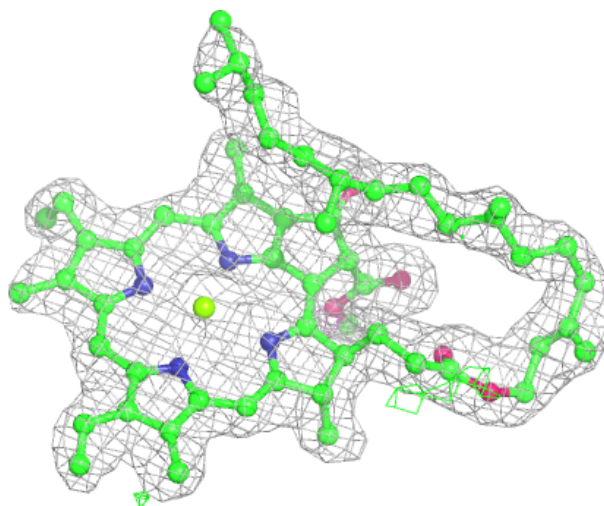
**Electron density around CLA c 909:**

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



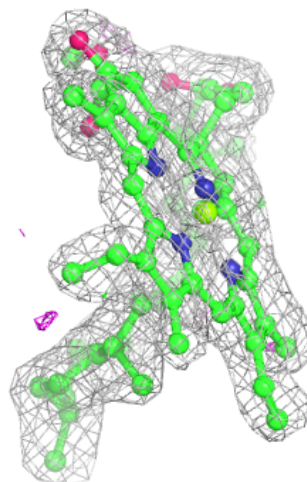
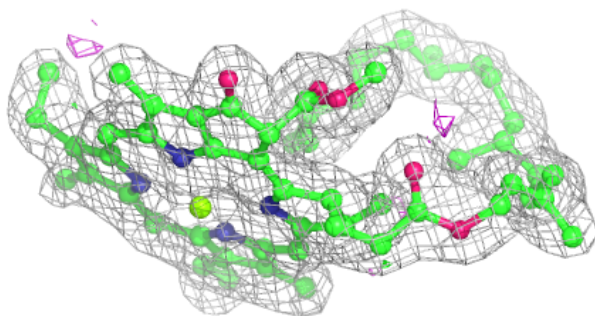
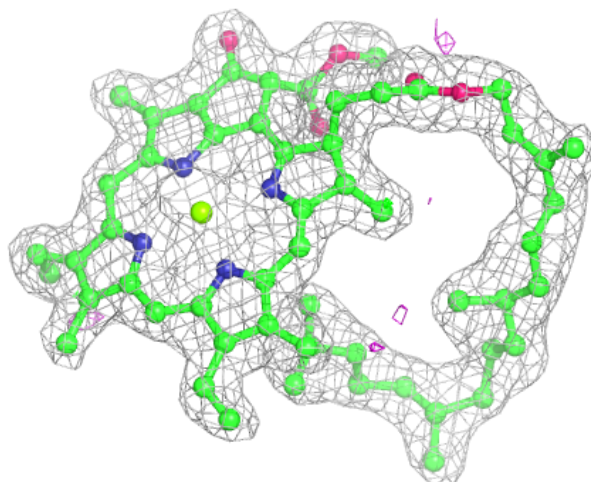
Electron density around CLA C 510:

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



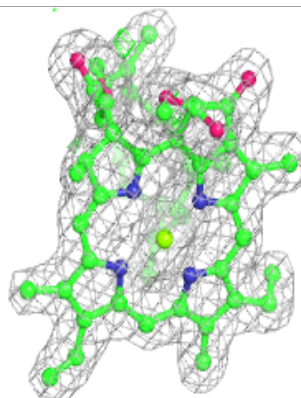
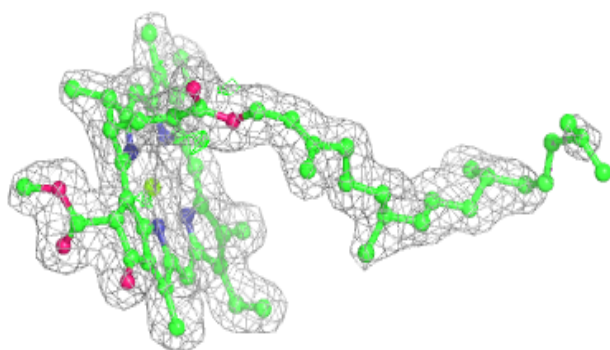
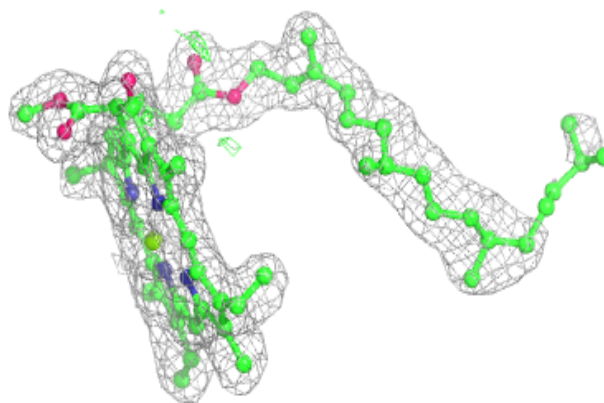
Electron density around CLA B 616:

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

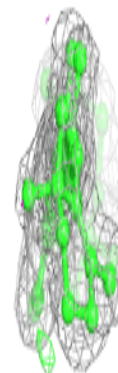
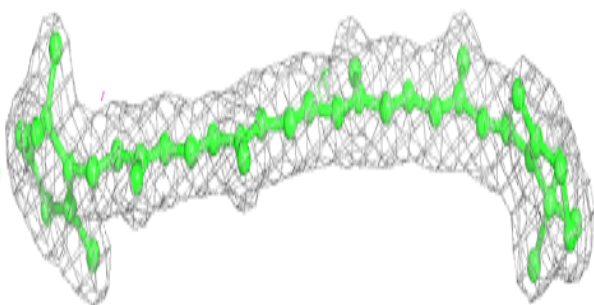
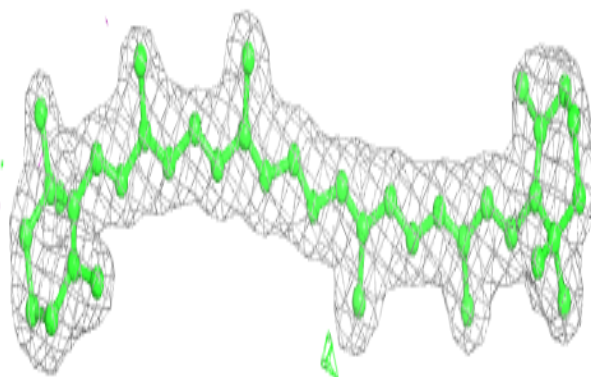


Electron density around CLA C 509:

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

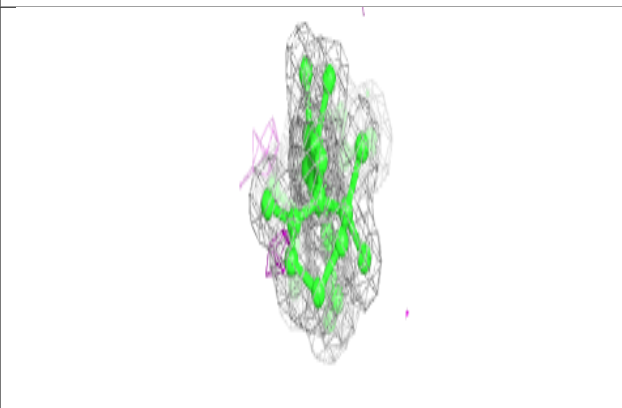
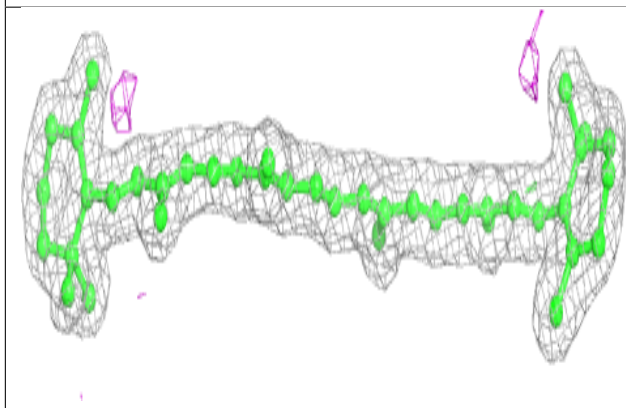
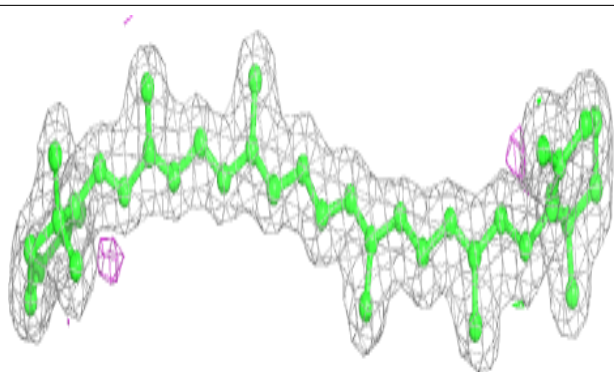
**Electron density around BCR b 620:**

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

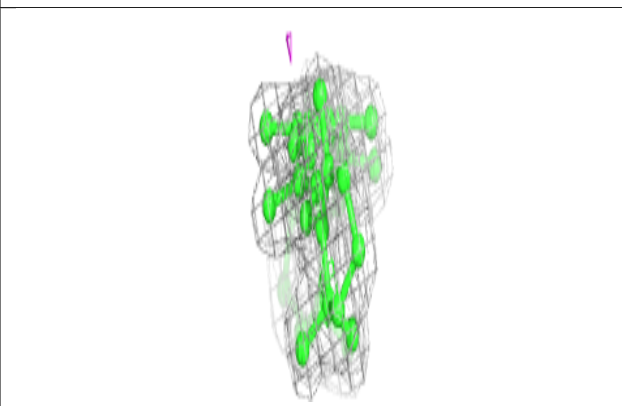
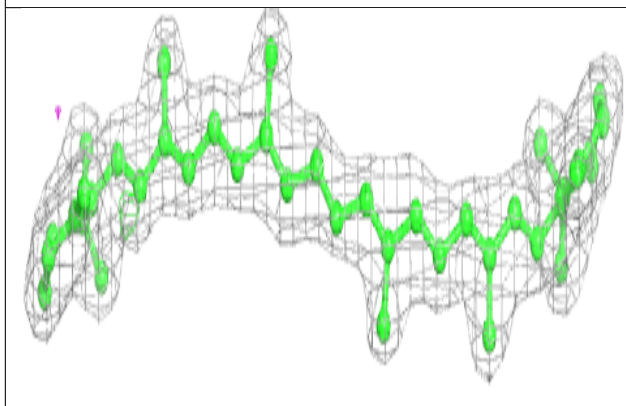
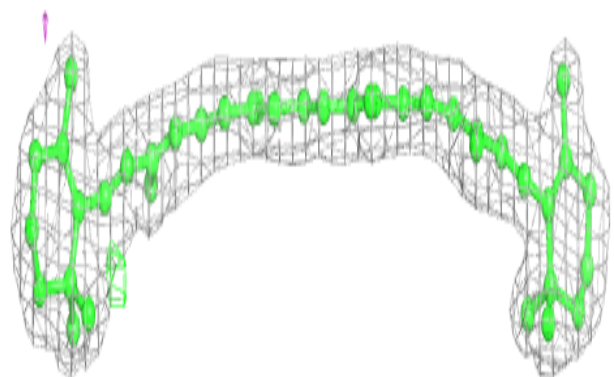


Electron density around BCR a 411:

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

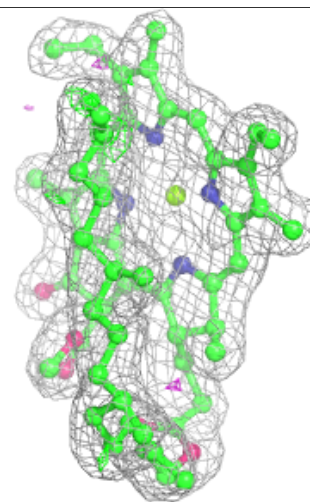
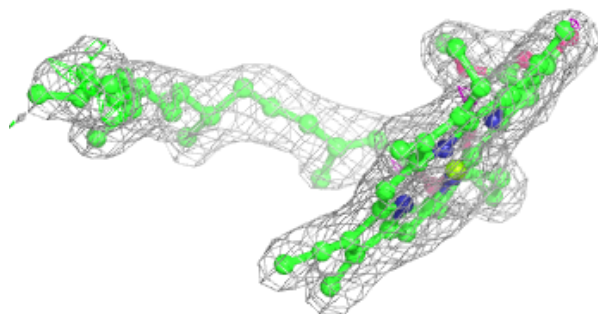
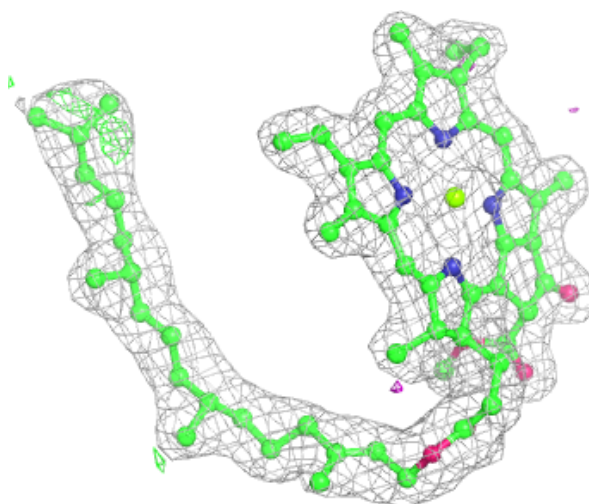
**Electron density around BCR C 530:**

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



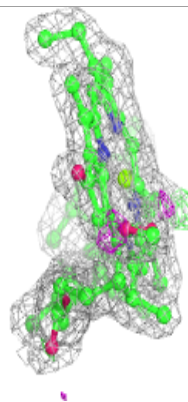
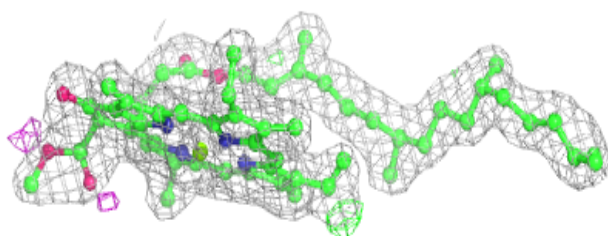
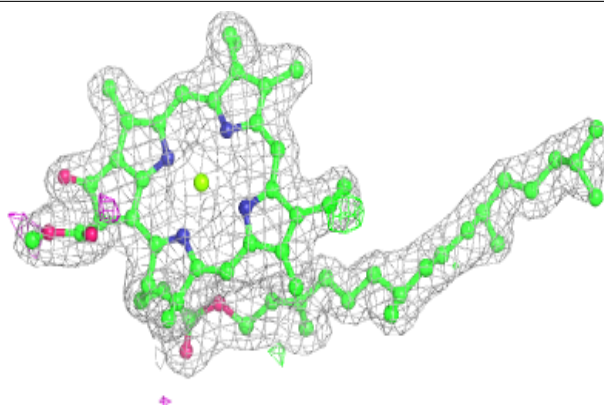
Electron density around CLA c 908:

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

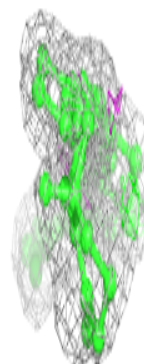
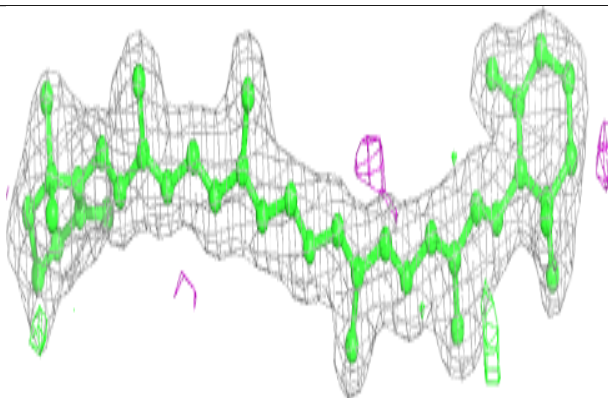
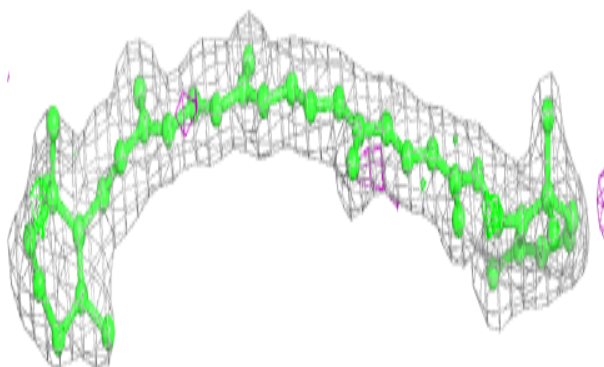


Electron density around CLA C 502:

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

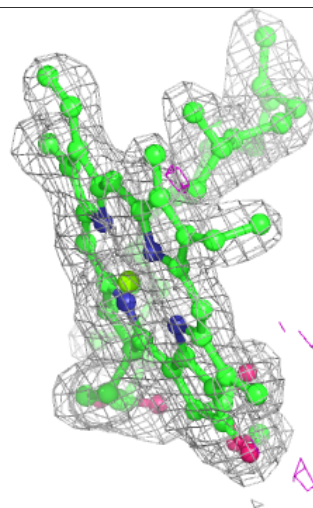
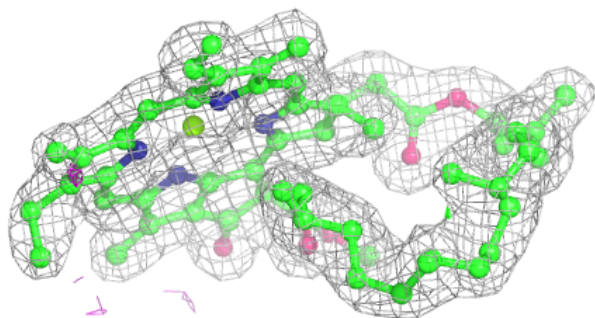
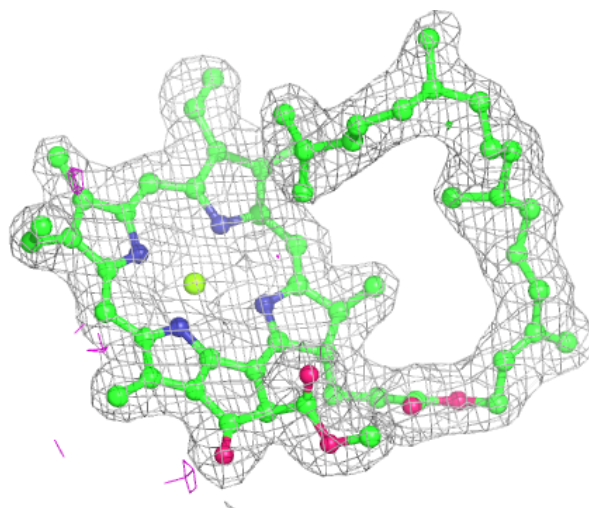
**Electron density around BCR D 405:**

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



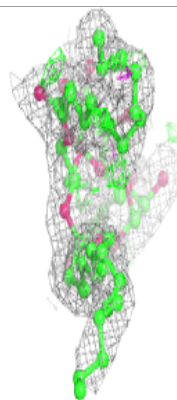
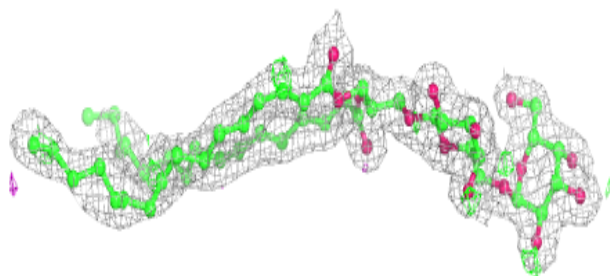
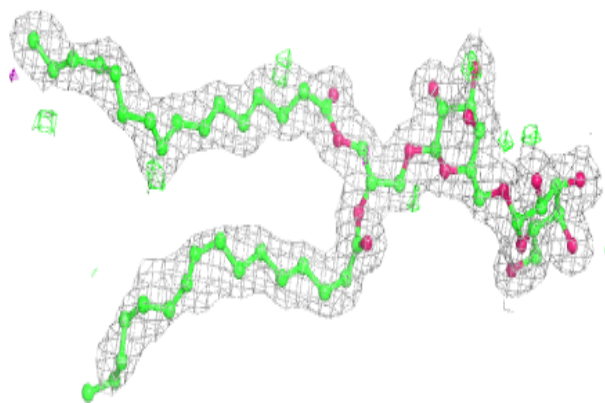
Electron density around CLA b 616:

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

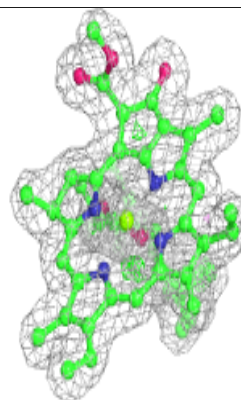
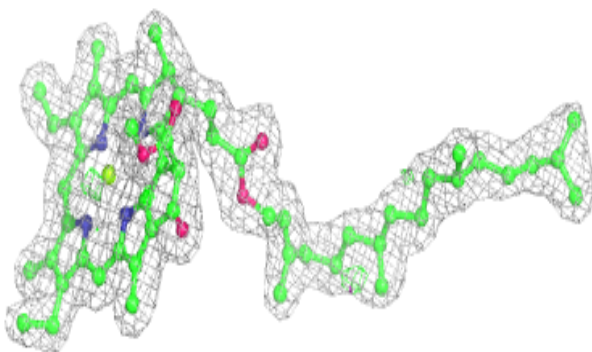
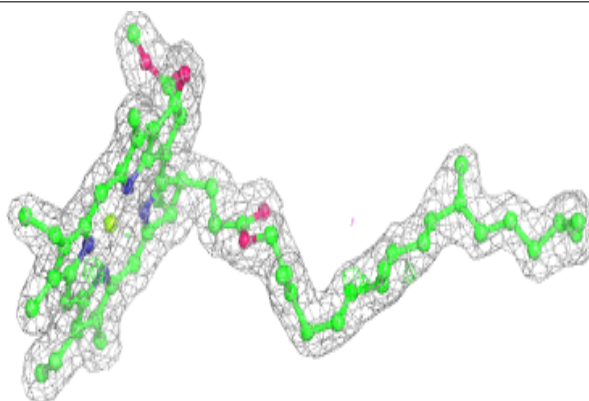


Electron density around DGD C 519:

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

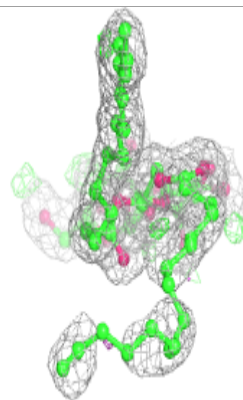
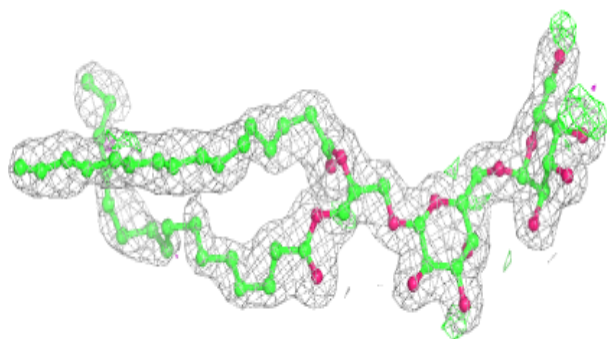
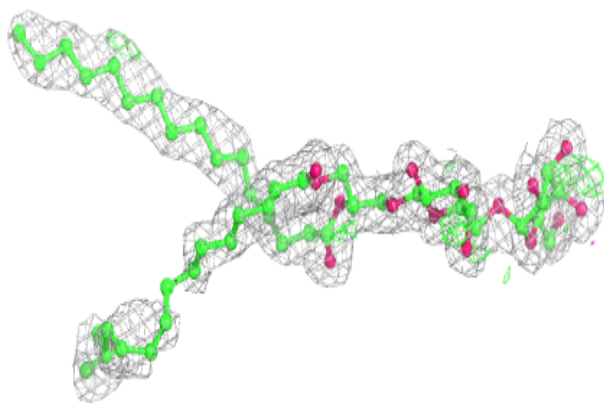
**Electron density around CLA c 903:**

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

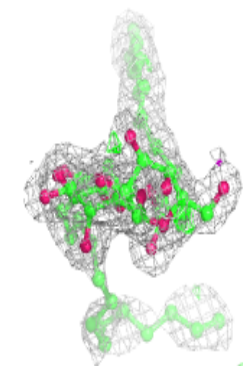
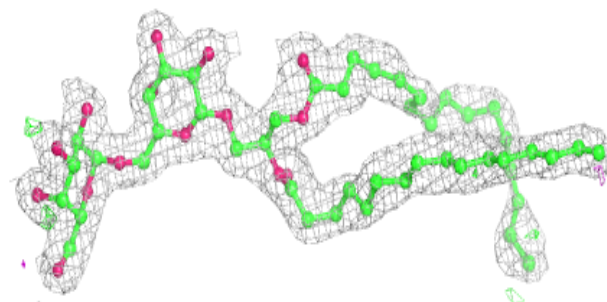
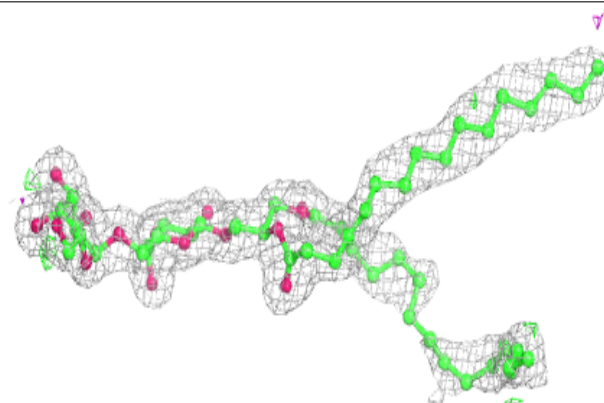


Electron density around DGD c 917:

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

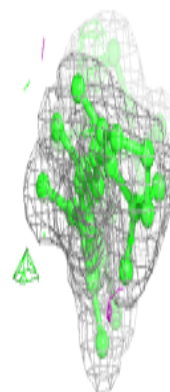
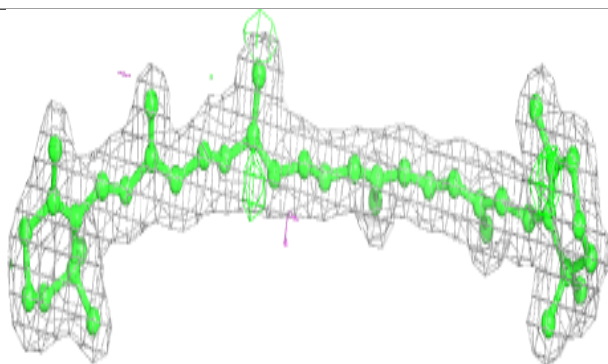
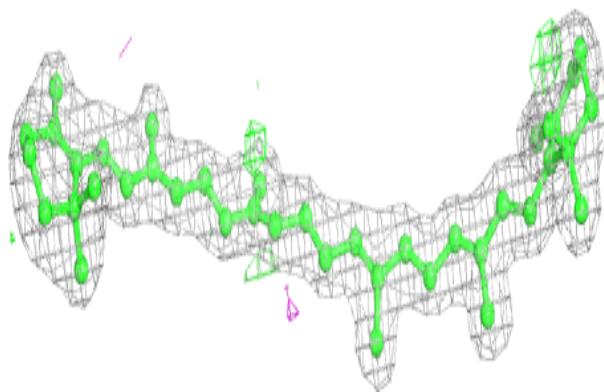
**Electron density around DGD C 517:**

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



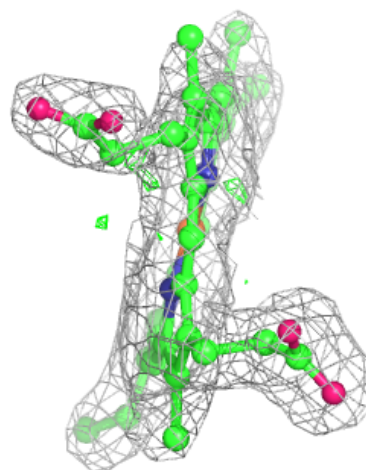
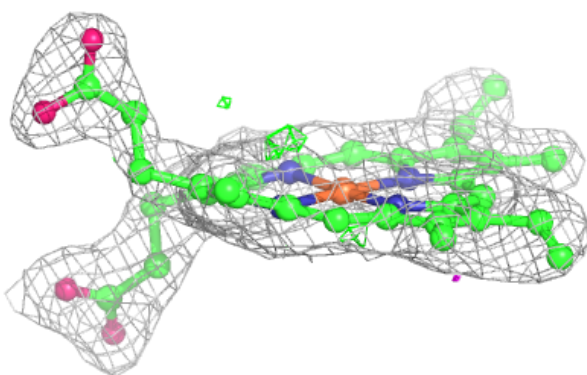
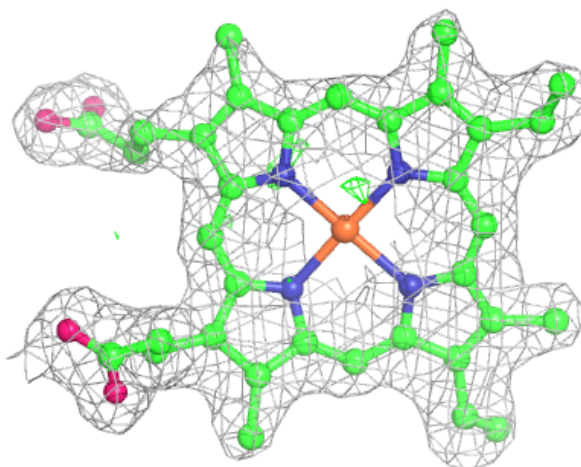
Electron density around BCR t 101:

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



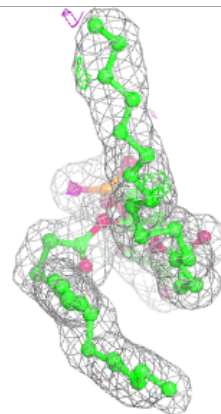
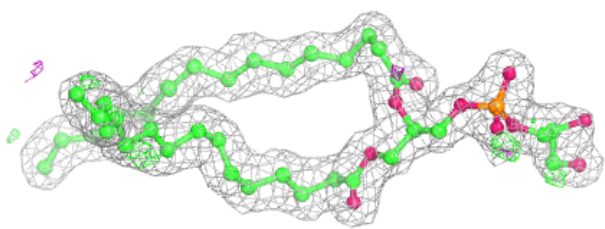
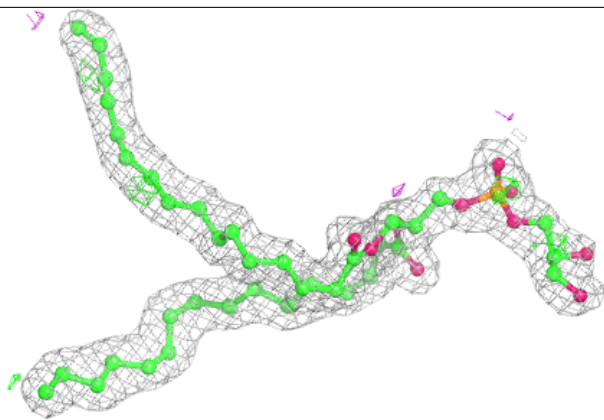
Electron density around HEM E 105:

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

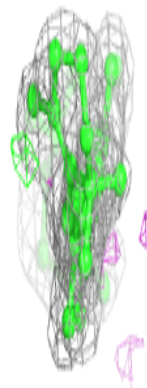
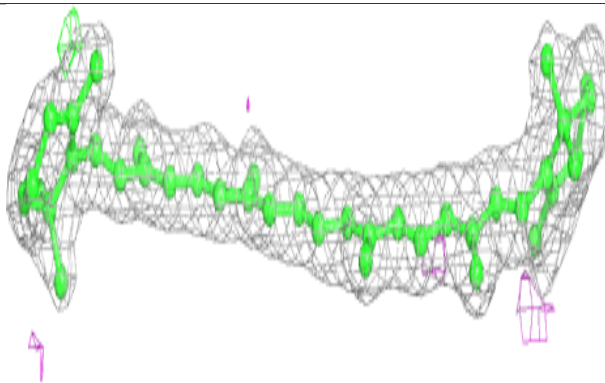
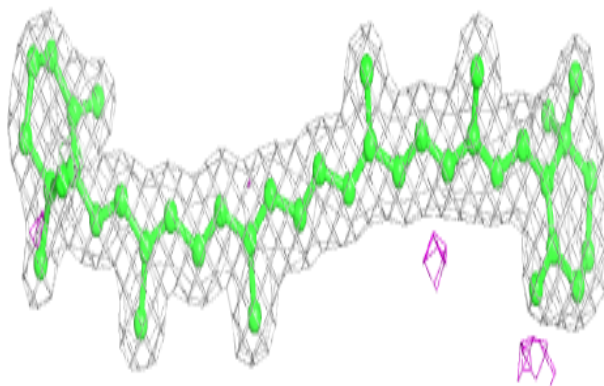


Electron density around LHG d 409:

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

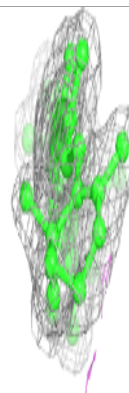
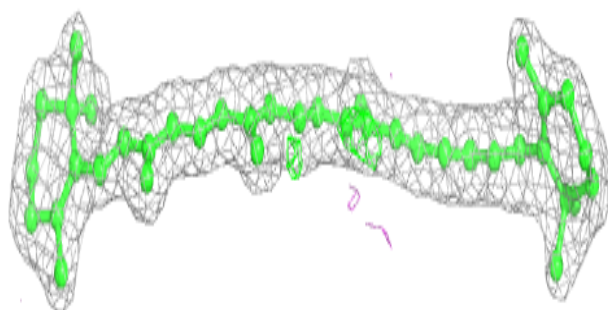
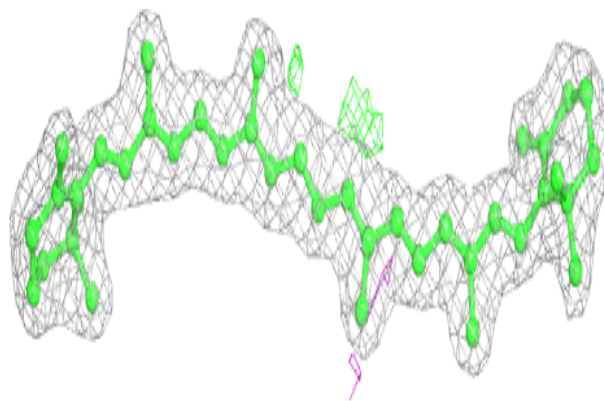
**Electron density around BCR B 620:**

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

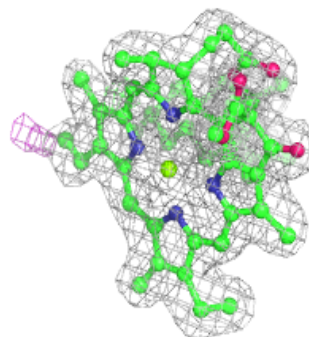
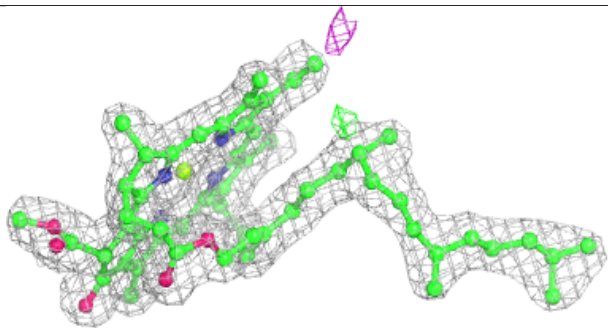
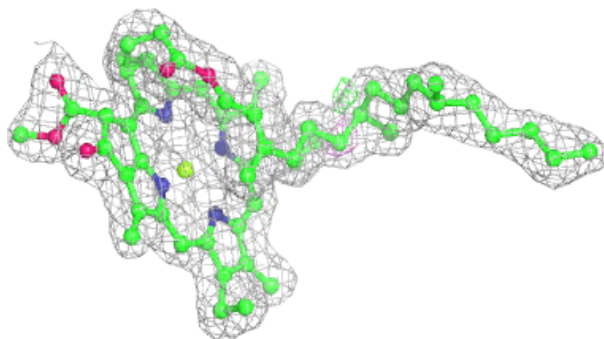


Electron density around BCR j 104:

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

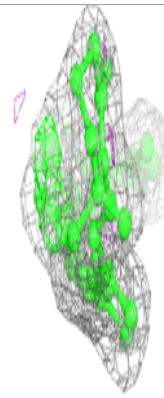
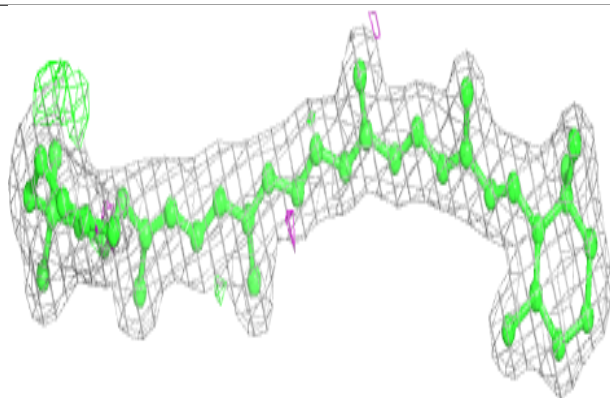
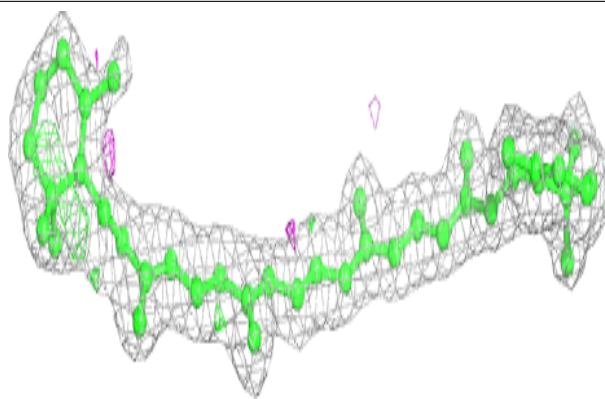
**Electron density around CLA c 906:**

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

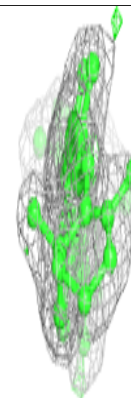
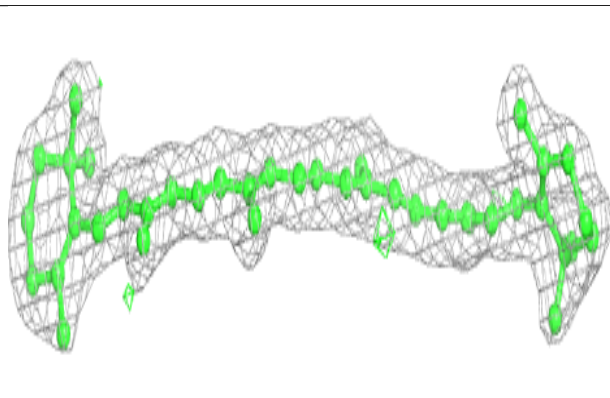
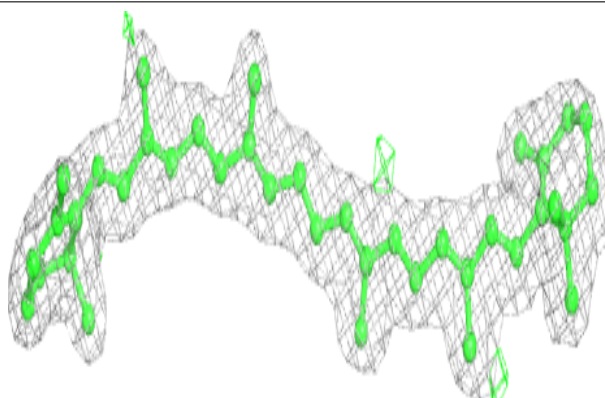


Electron density around BCR d 405:

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

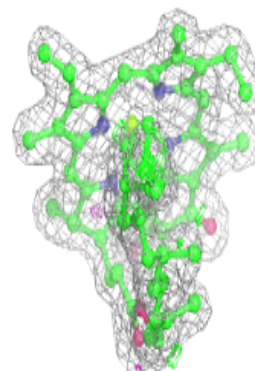
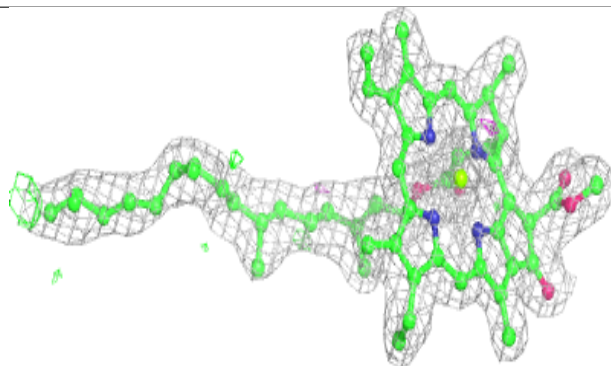
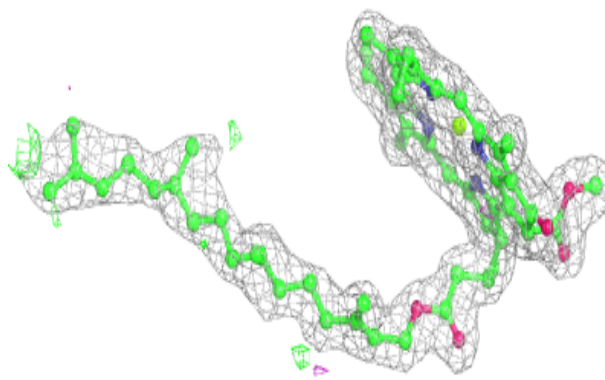
**Electron density around BCR Y 101:**

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



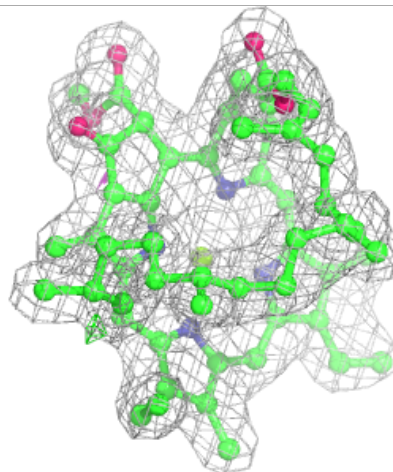
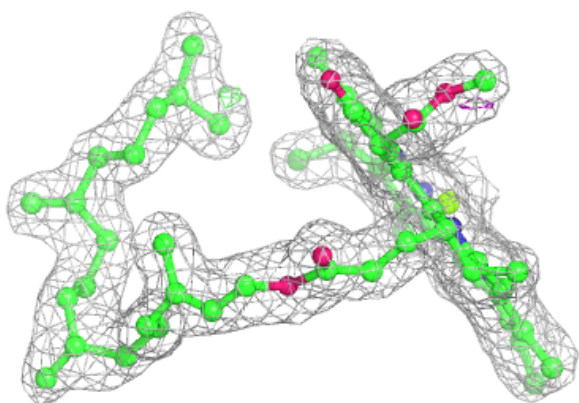
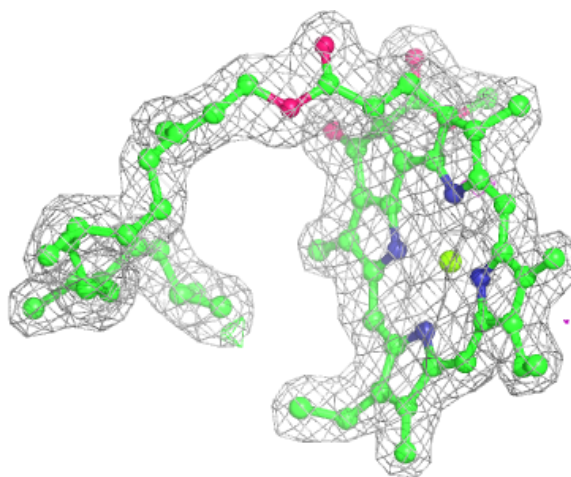
Electron density around CLA c 905:

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



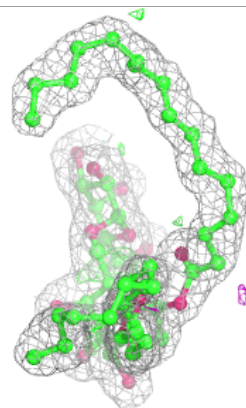
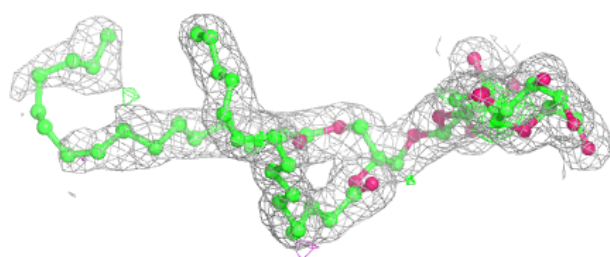
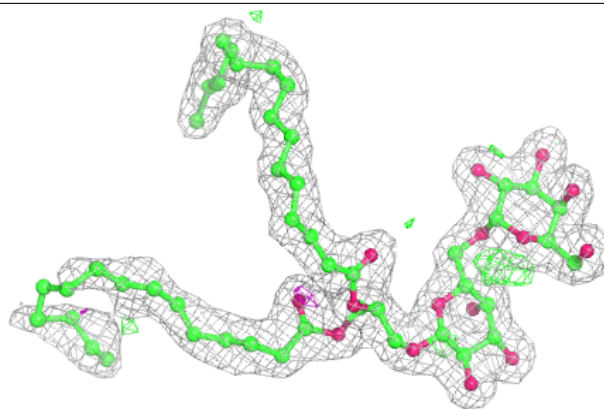
Electron density around CLA C 504:

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

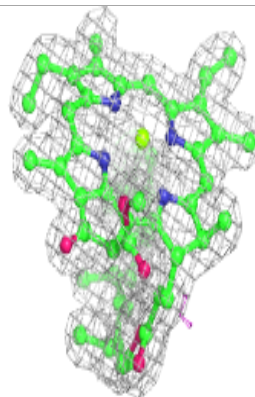
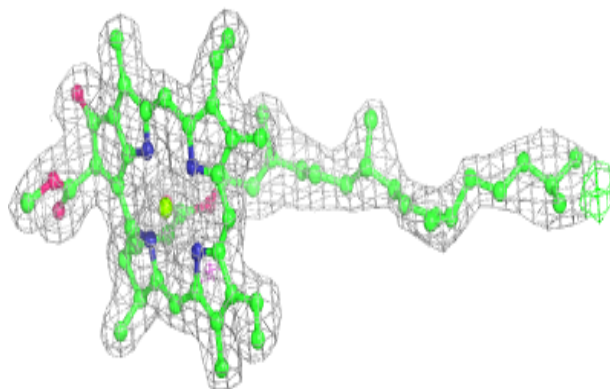
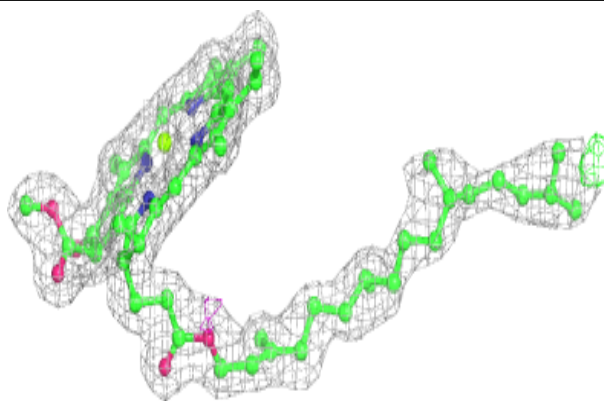


Electron density around DGD c 918:

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

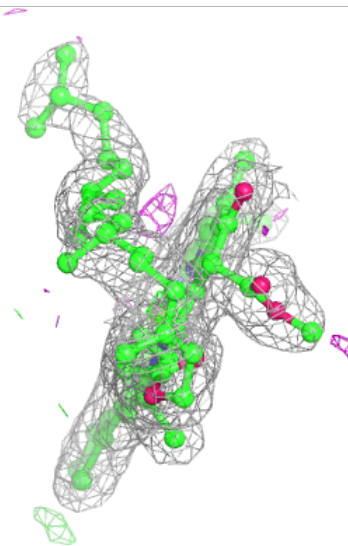
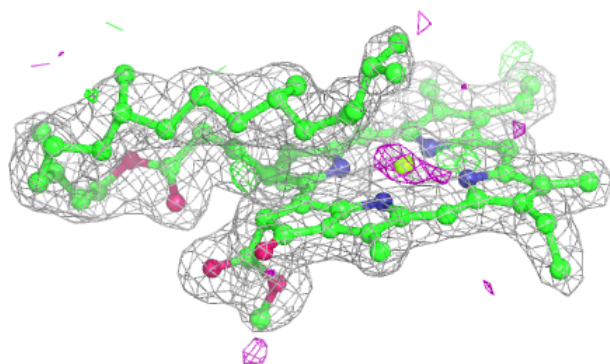
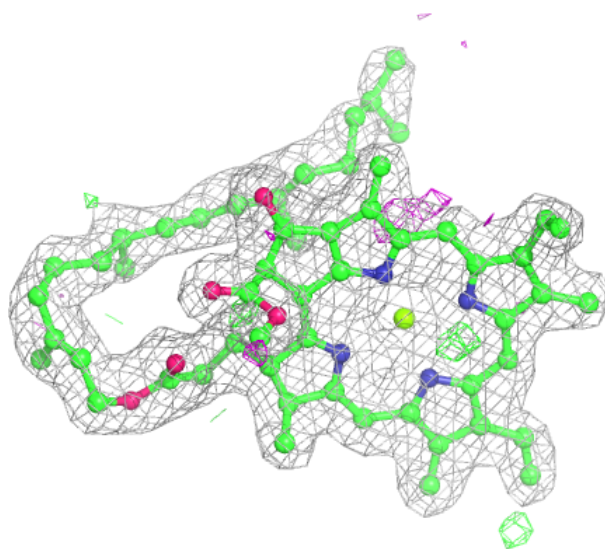
**Electron density around CLA C 505:**

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



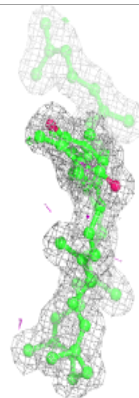
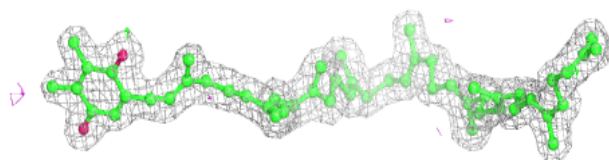
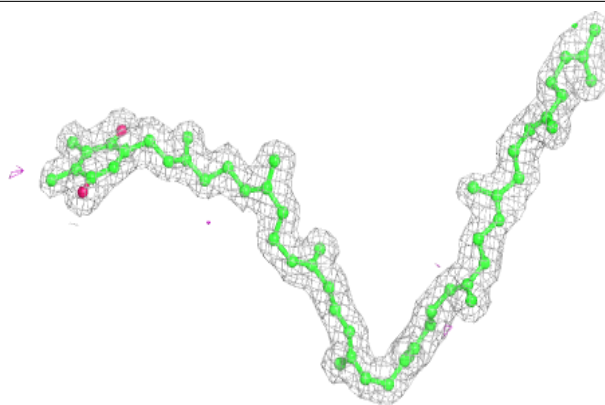
Electron density around CLA c 910:

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

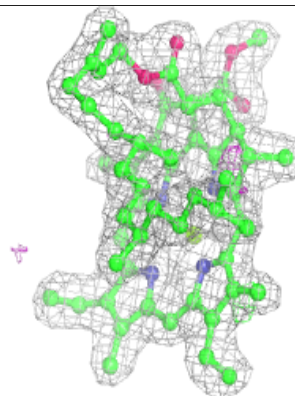
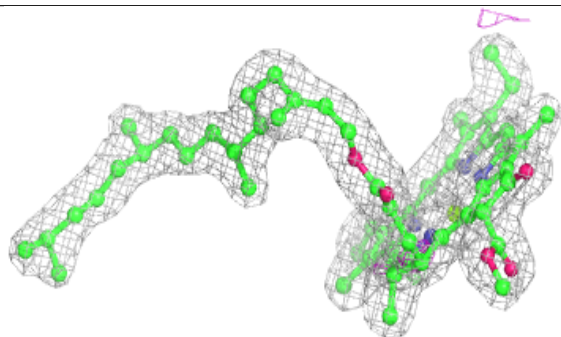
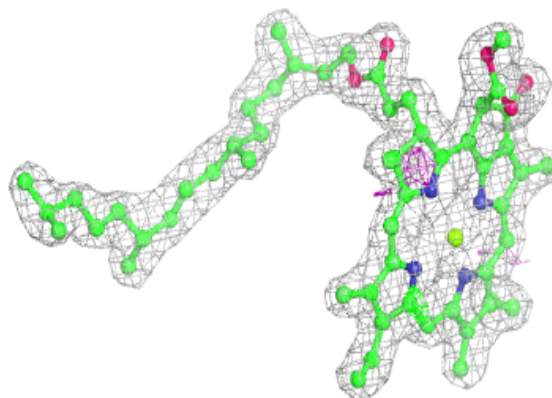


Electron density around PL9 d 406:

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

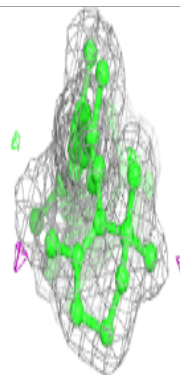
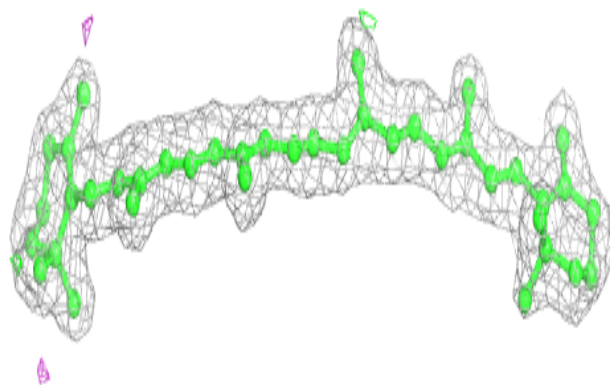
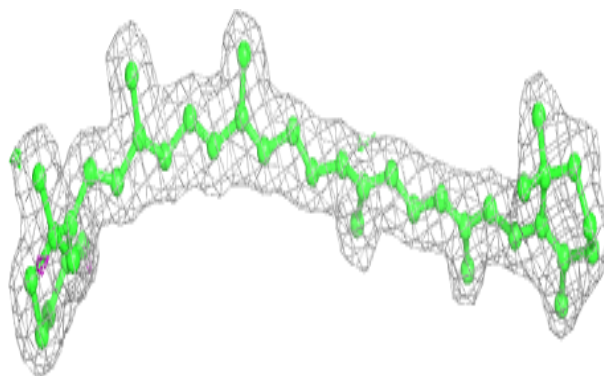
**Electron density around CLA c 912:**

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

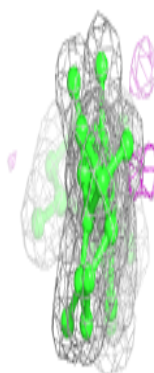
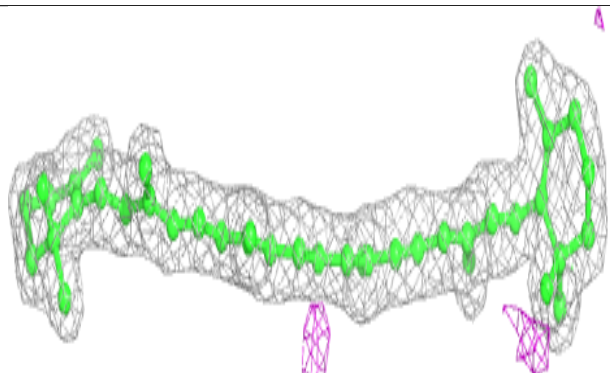
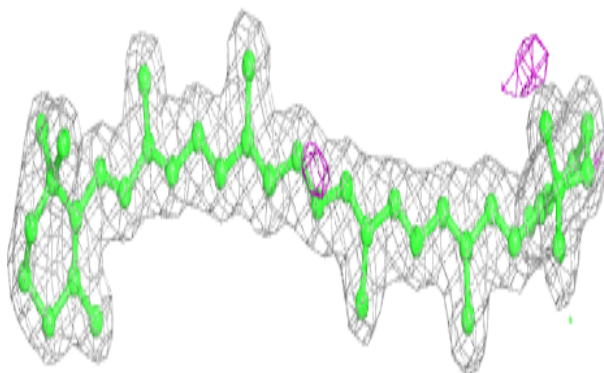


Electron density around BCR T 101:

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

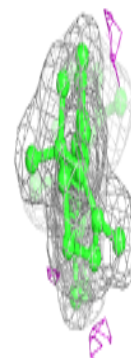
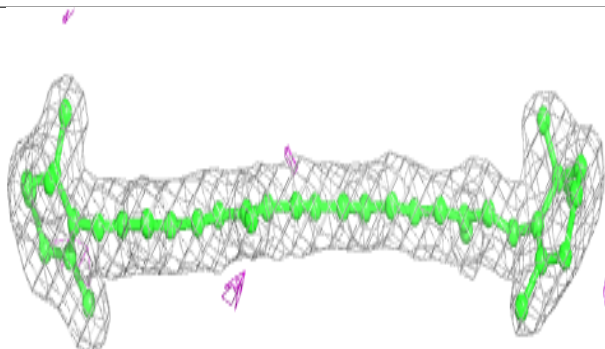
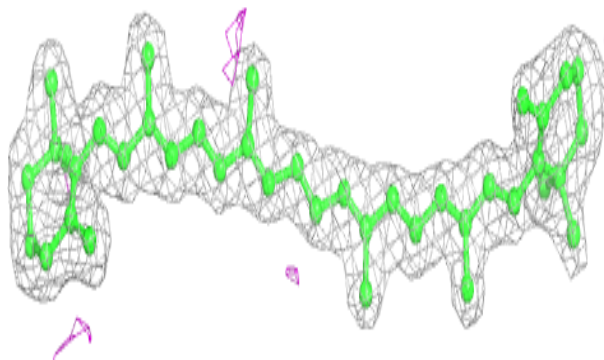
**Electron density around BCR b 618:**

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

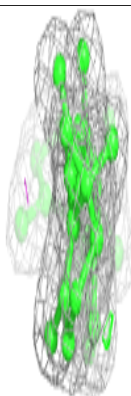
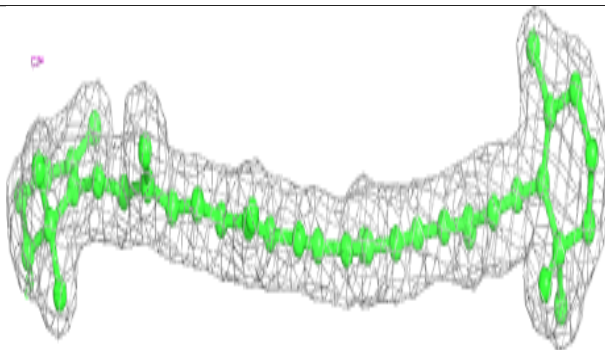
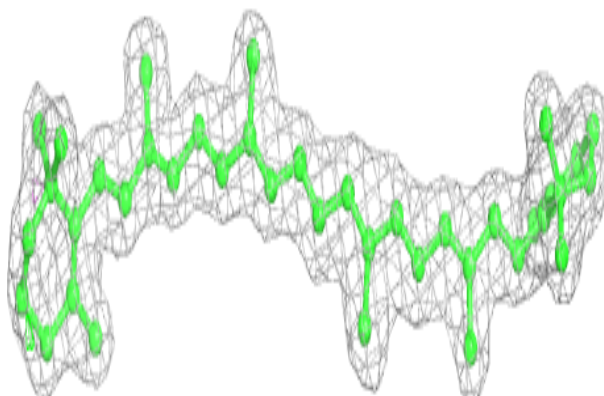


Electron density around BCR b 619:

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

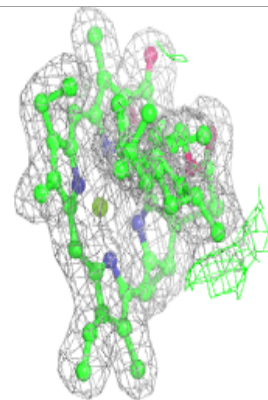
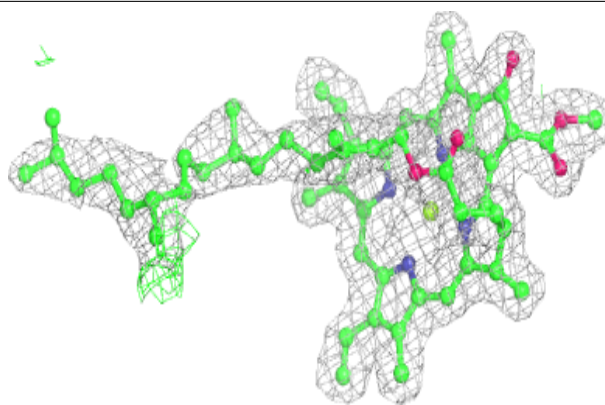
**Electron density around BCR B 618:**

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

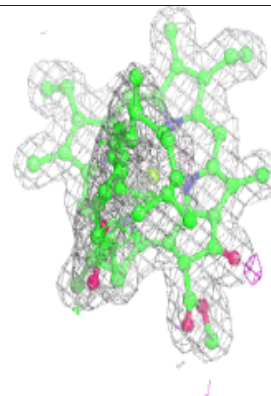
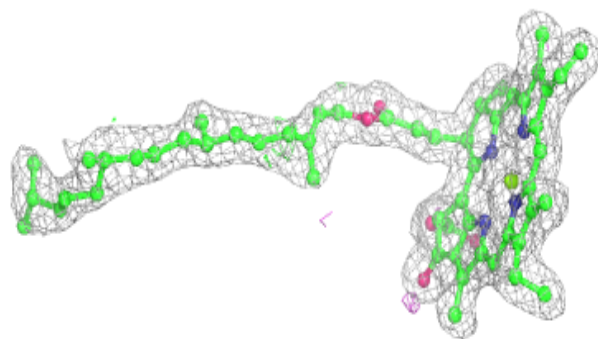
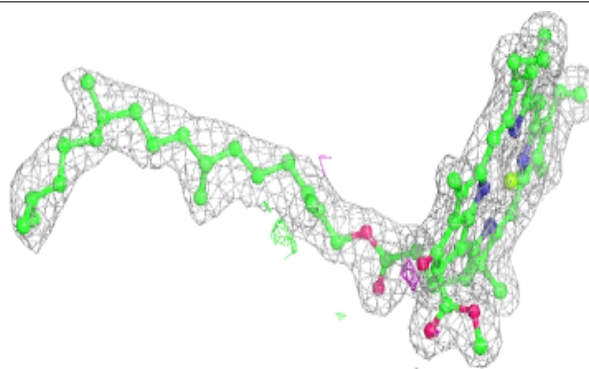


Electron density around CLA b 615:

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

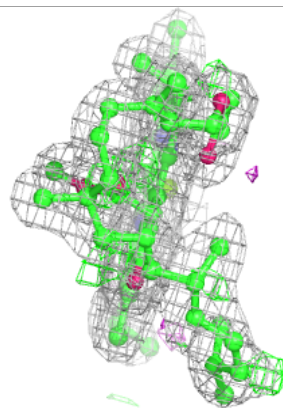
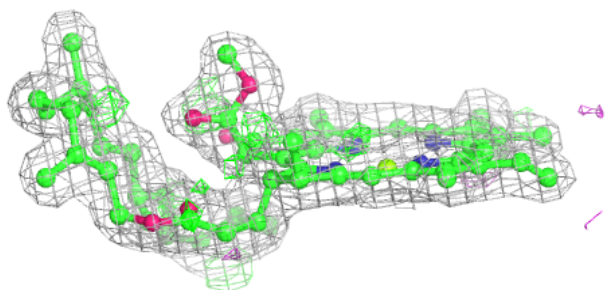
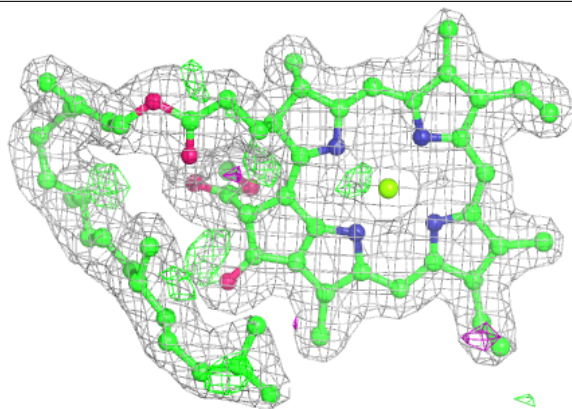
**Electron density around CLA b 605:**

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

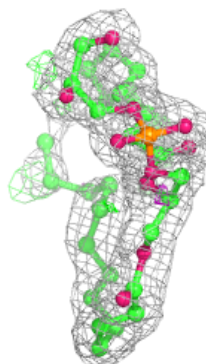
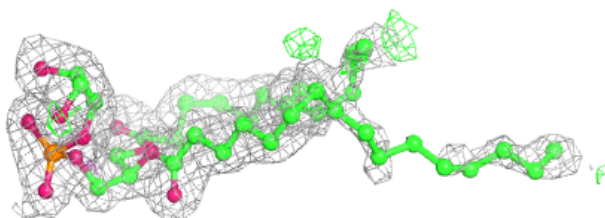
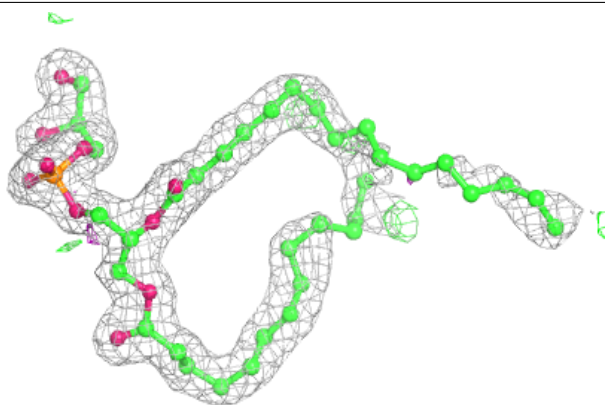


Electron density around CLA B 611:

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

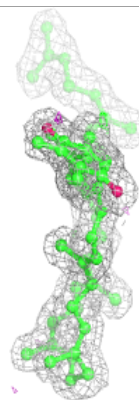
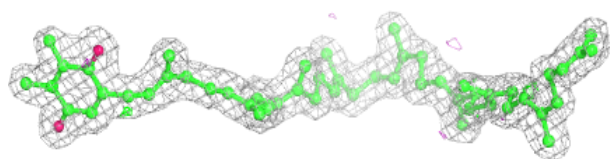
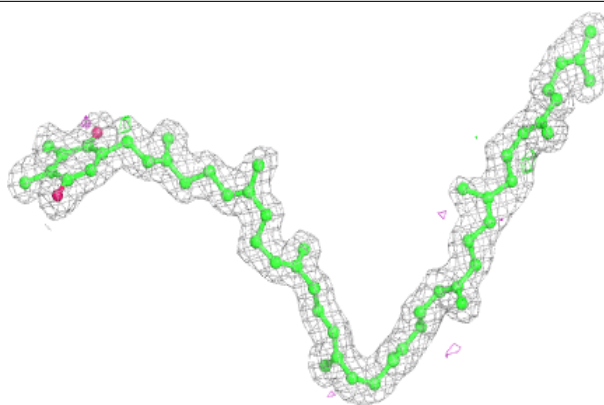
**Electron density around LHG D 411:**

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

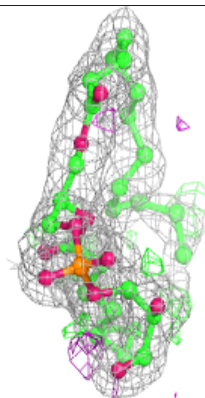
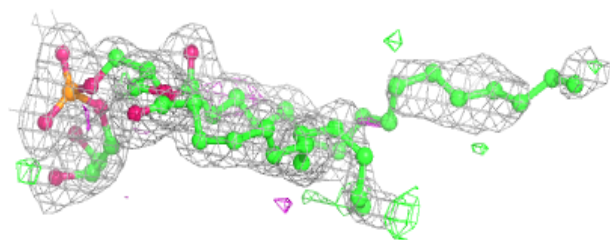
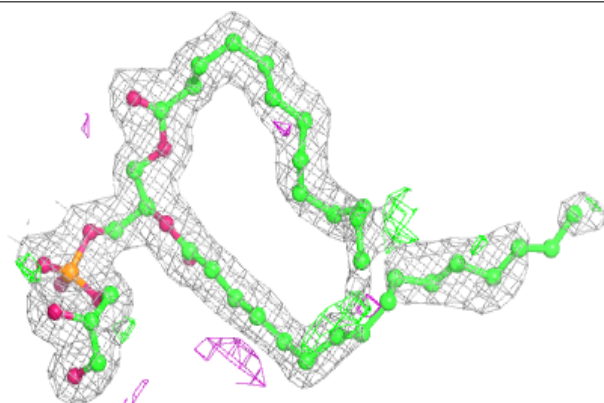


Electron density around PL9 D 406:

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

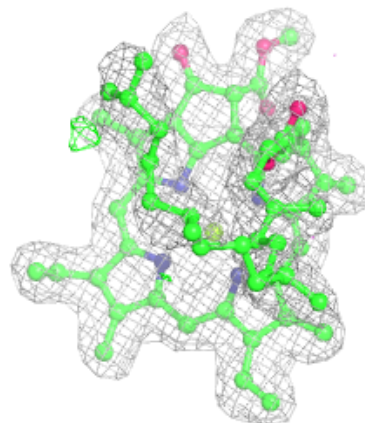
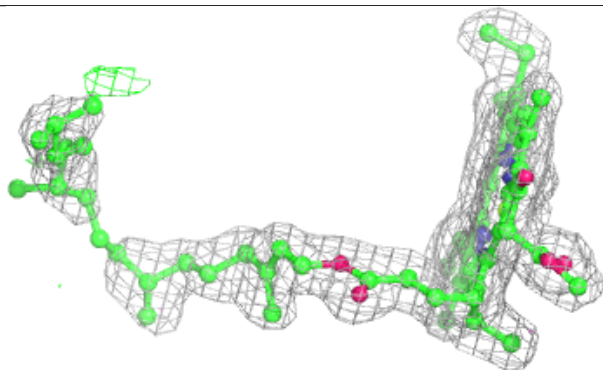
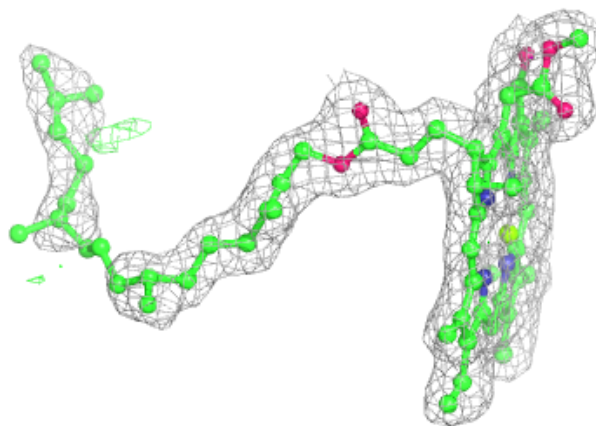
**Electron density around LHG d 410:**

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

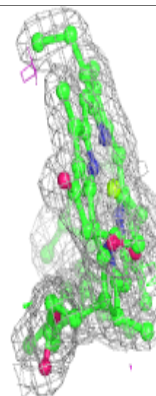
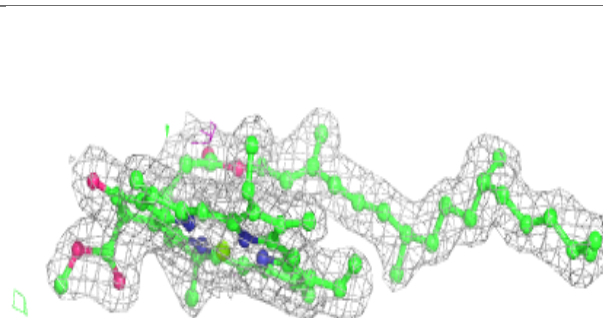
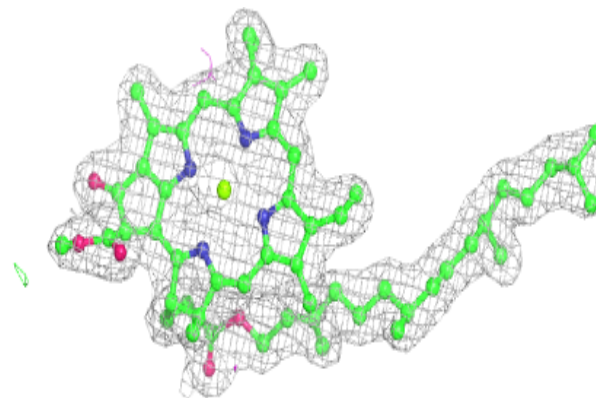


Electron density around CLA d 404:

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

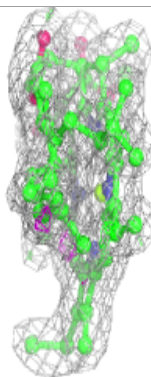
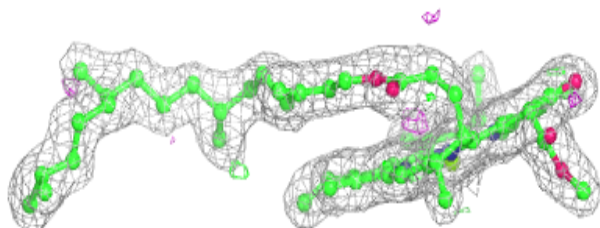
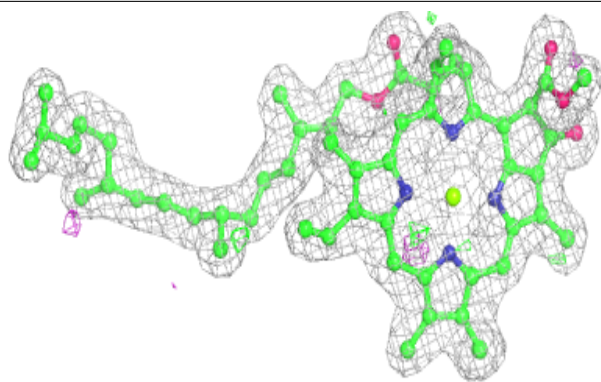
**Electron density around CLA c 902:**

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

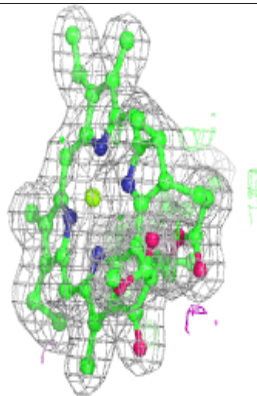
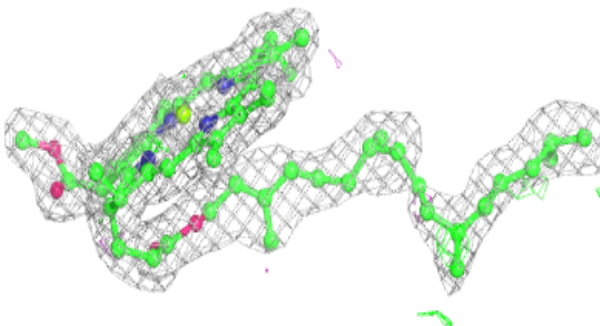
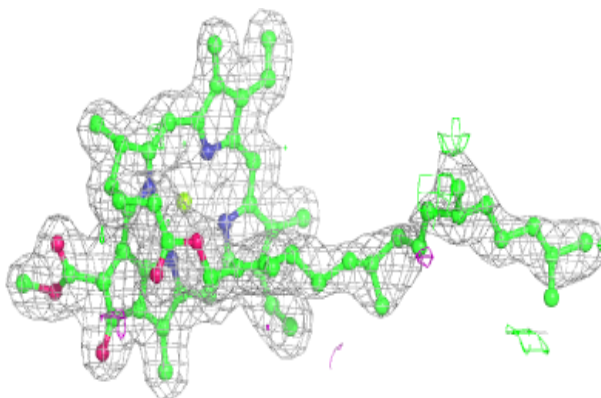


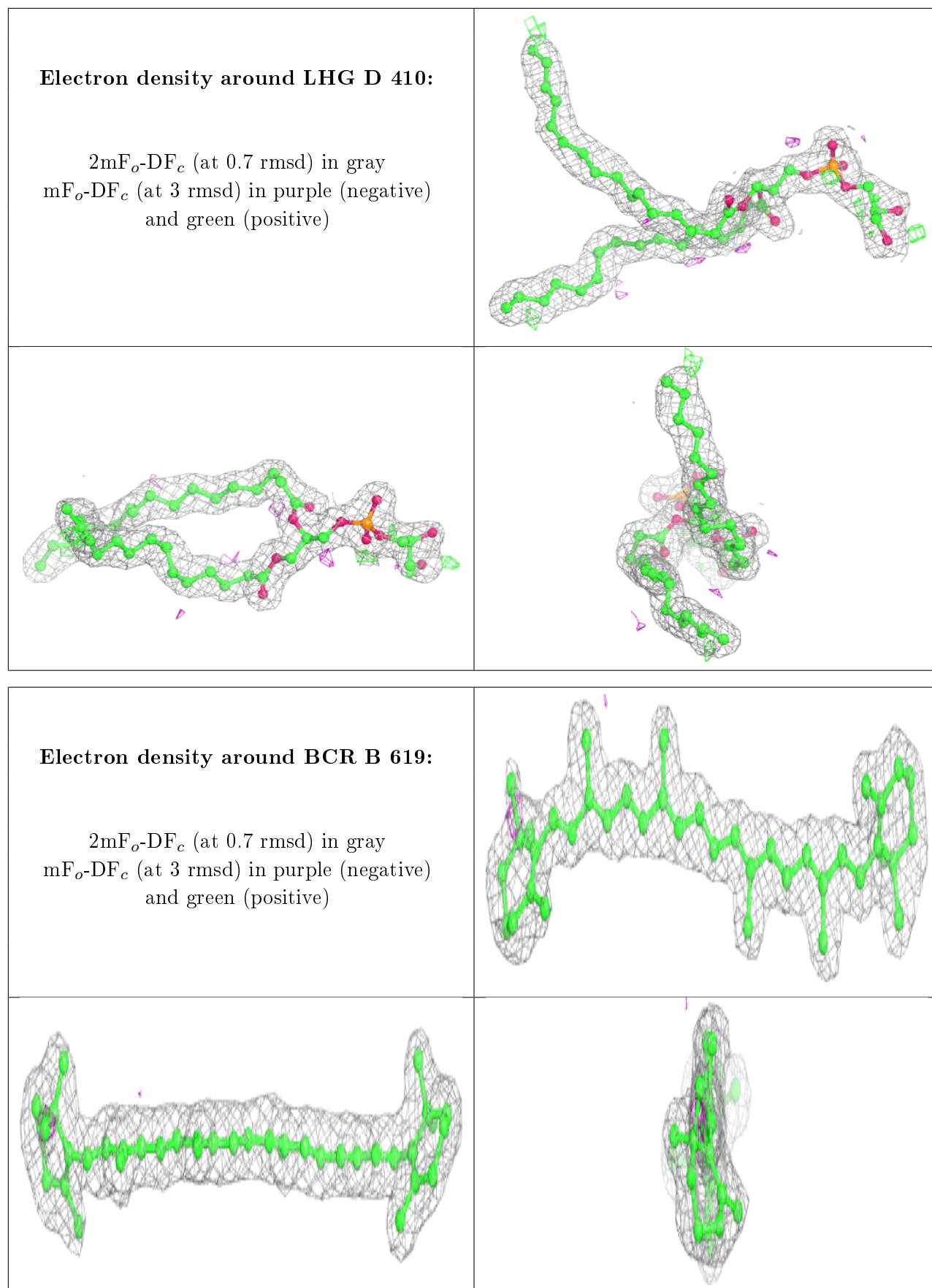
Electron density around CLA b 604:

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

**Electron density around CLA B 615:**

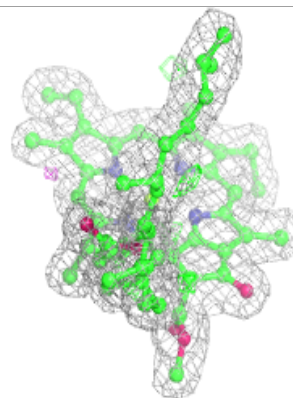
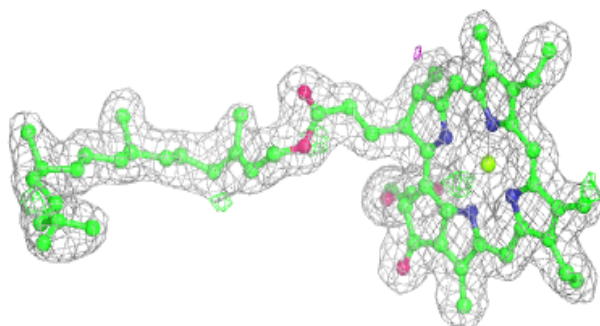
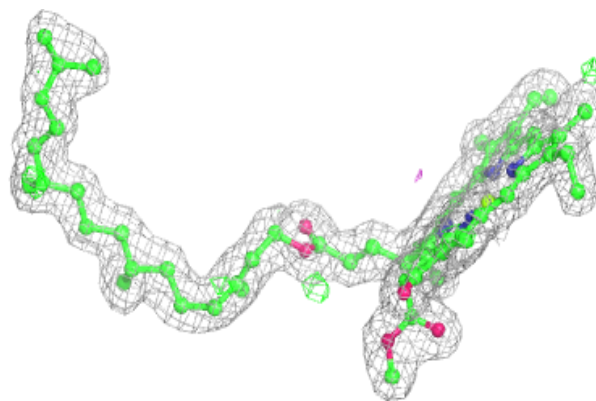
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



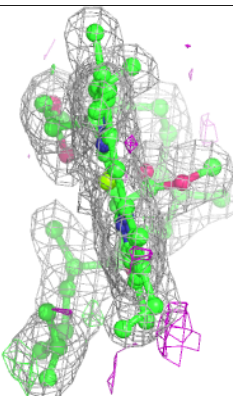
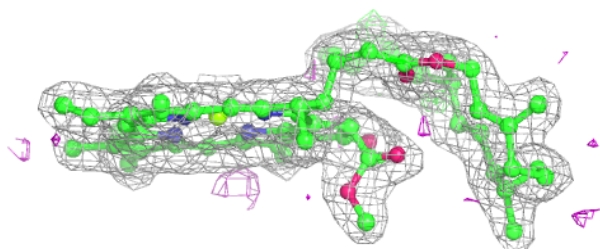
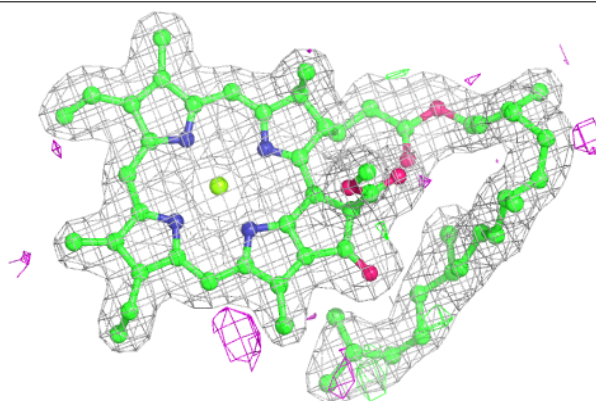


Electron density around CLA D 403:

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

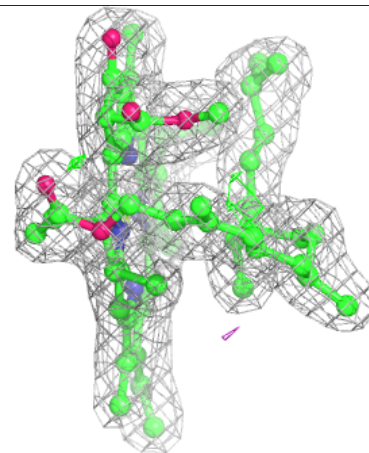
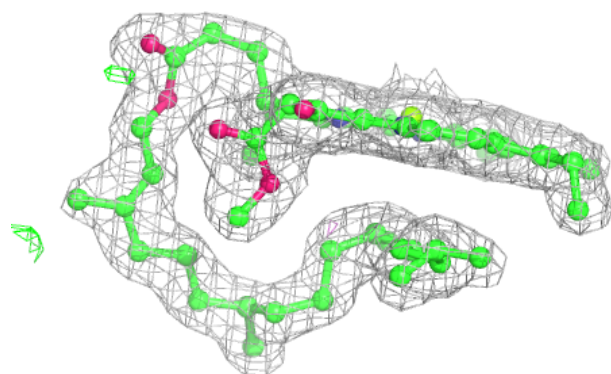
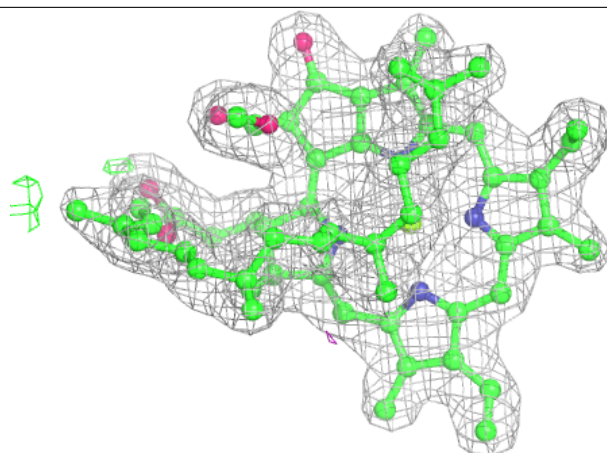
**Electron density around CLA b 611:**

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



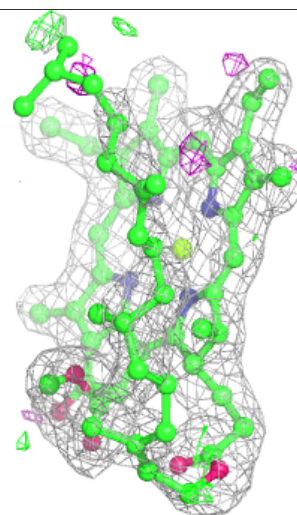
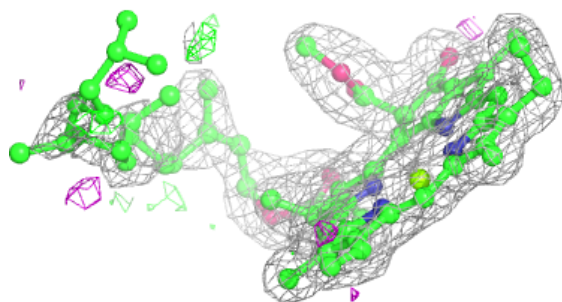
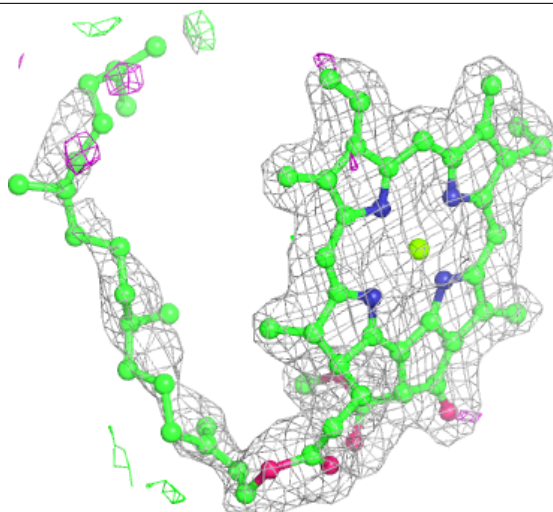
Electron density around CLA C 511:

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



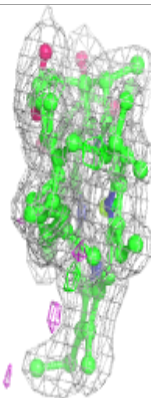
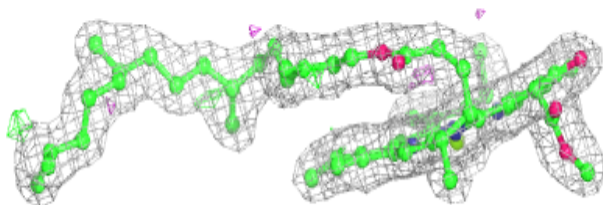
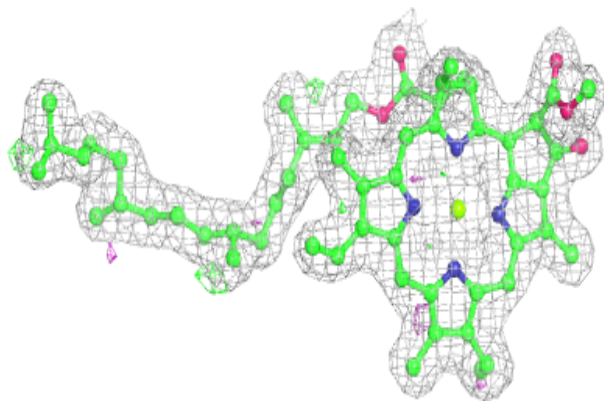
Electron density around CLA B 617:

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

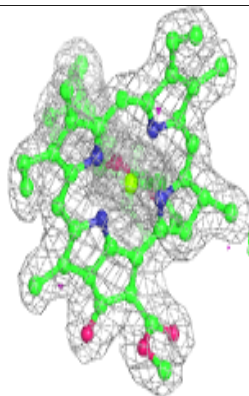
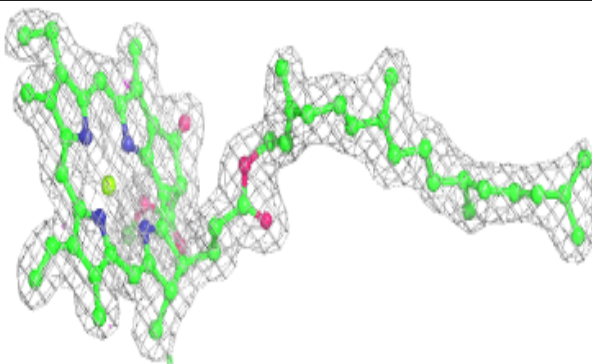
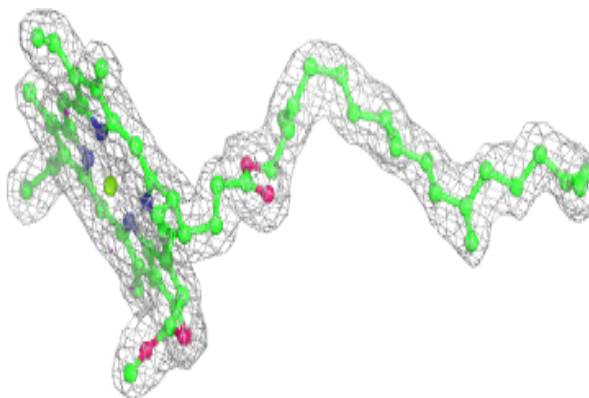


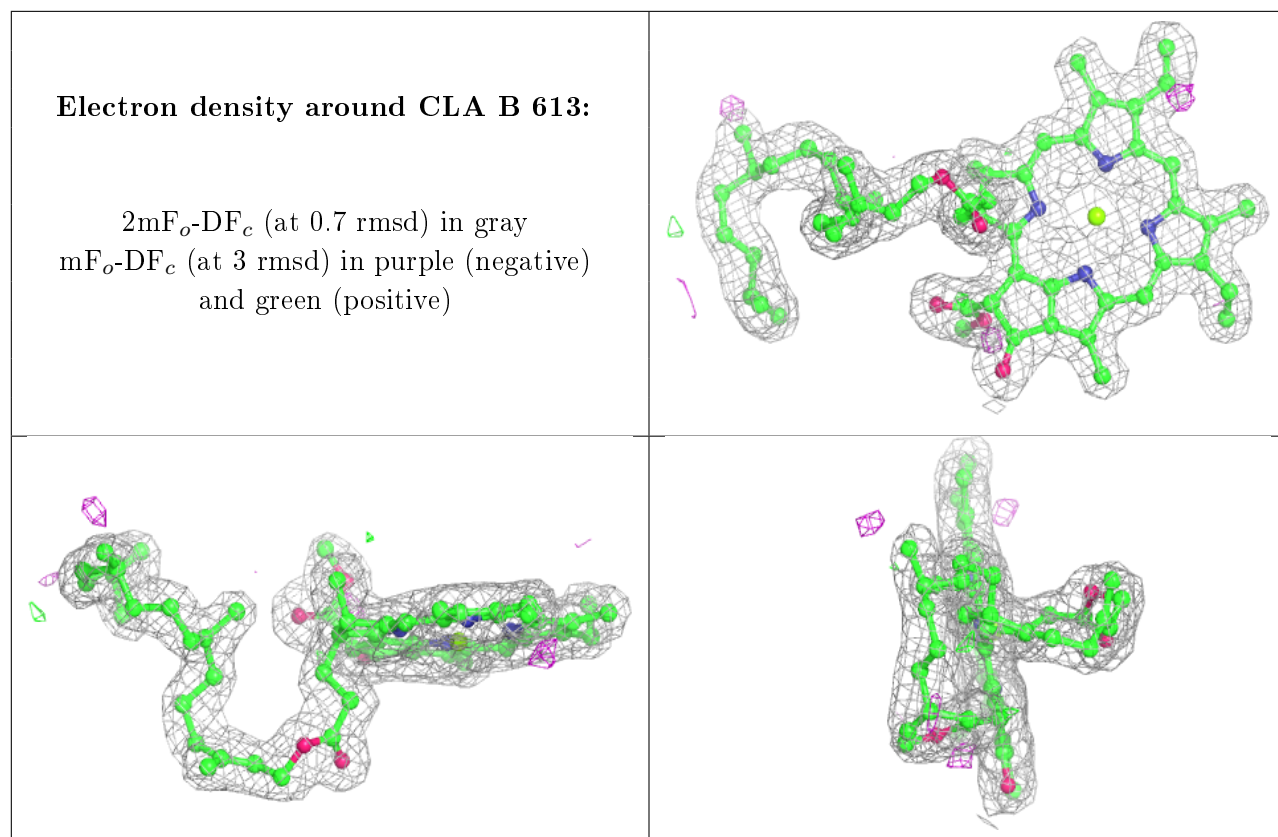
Electron density around CLA B 604:

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

**Electron density around CLA C 503:**

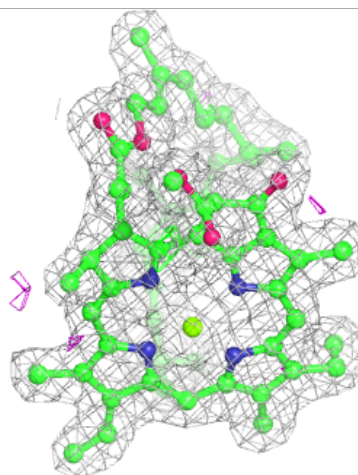
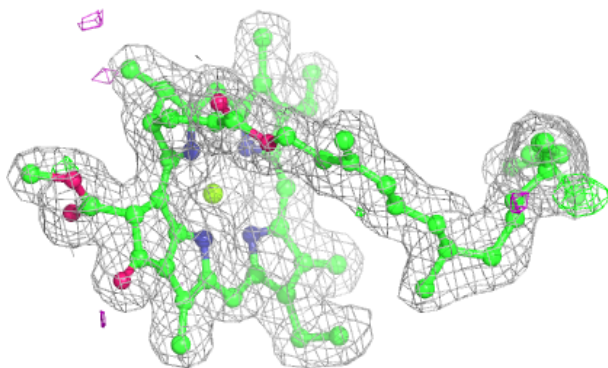
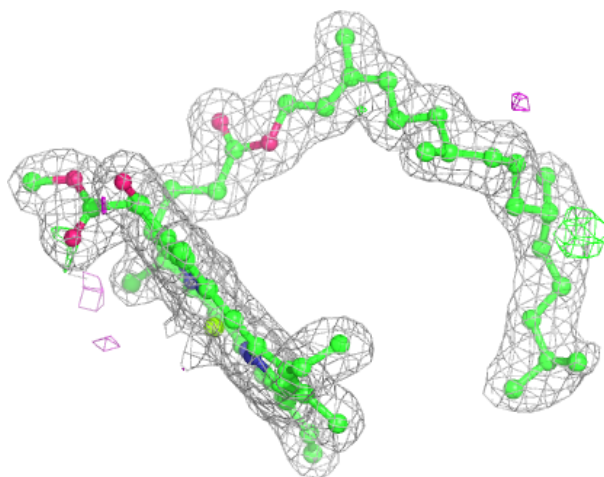
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





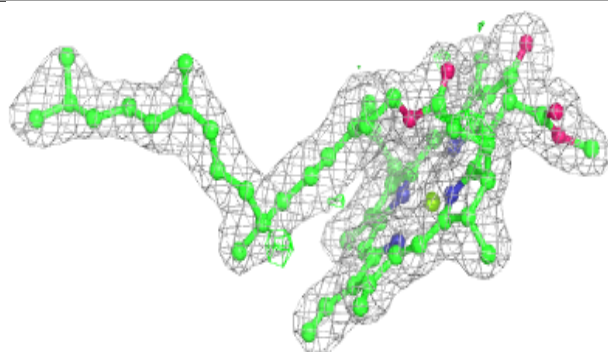
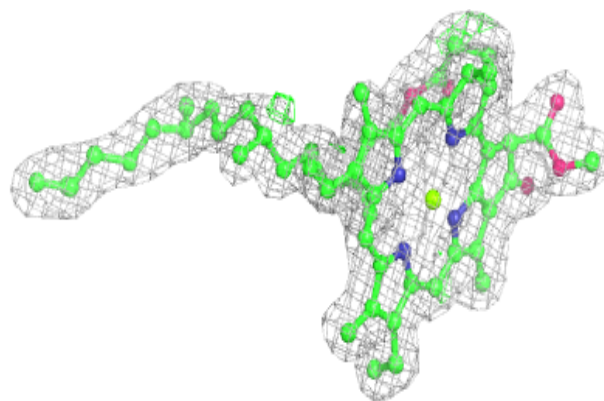
Electron density around CLA b 612:

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

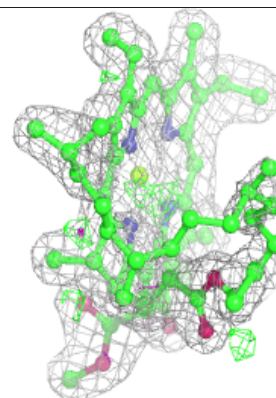
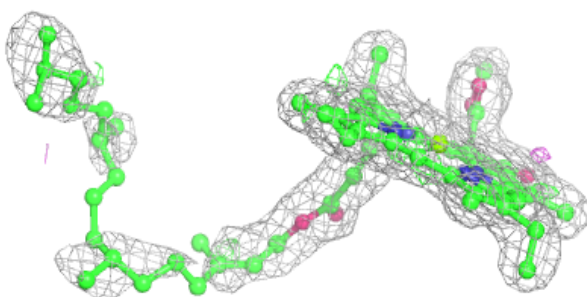
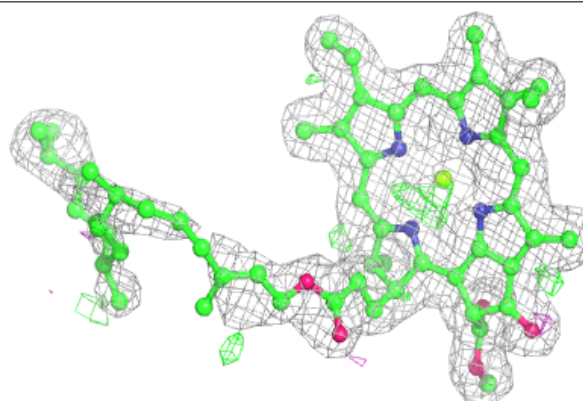


Electron density around CLA C 506:

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

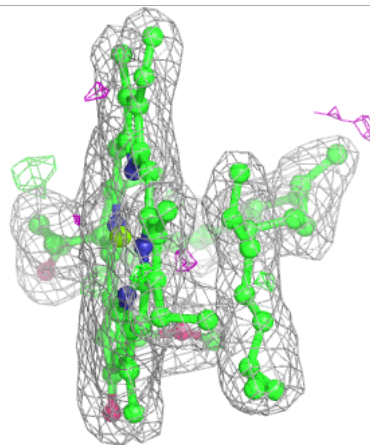
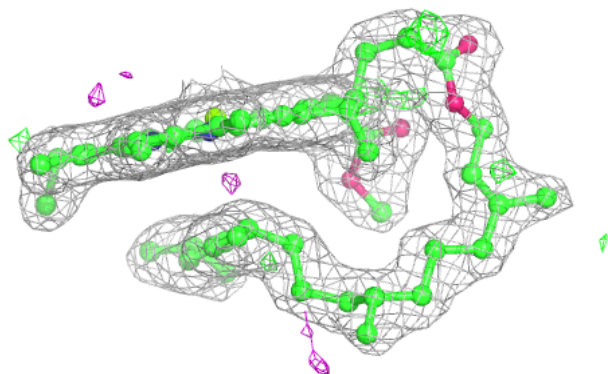
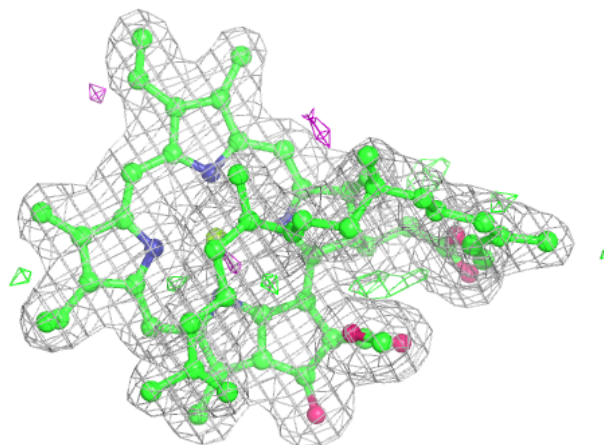
**Electron density around CLA a 410:**

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



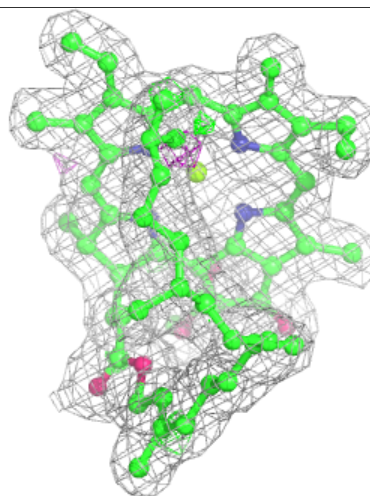
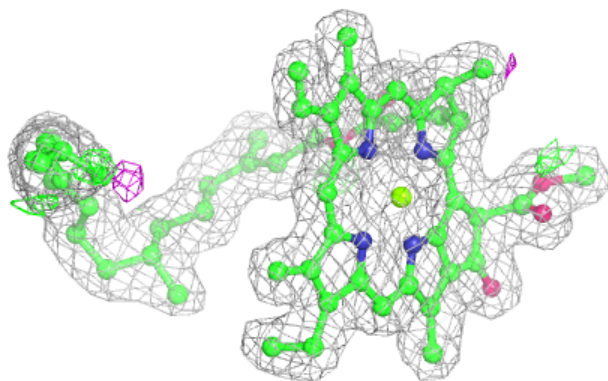
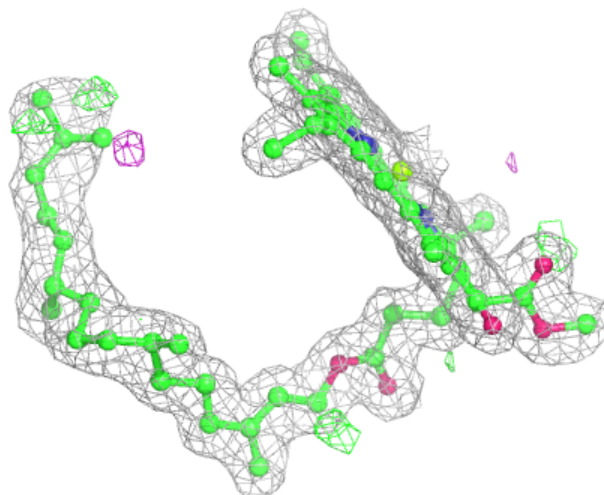
Electron density around CLA c 911:

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



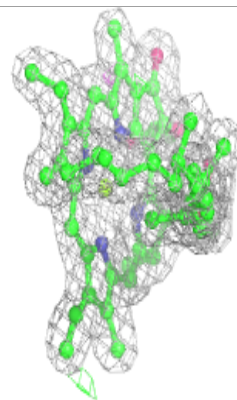
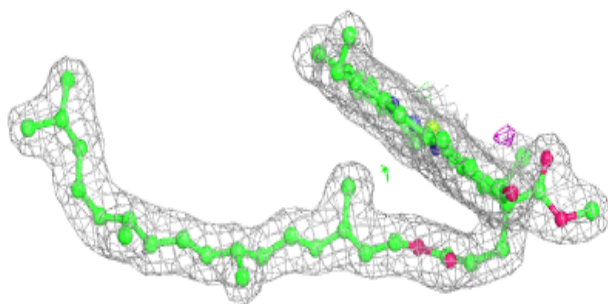
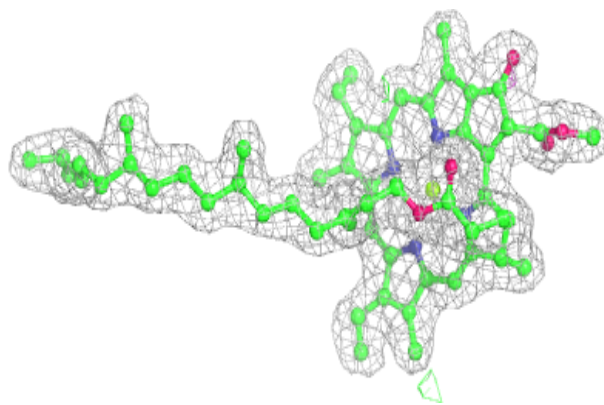
Electron density around CLA B 612:

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

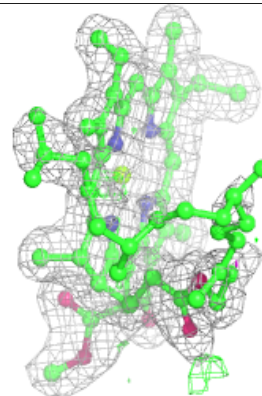
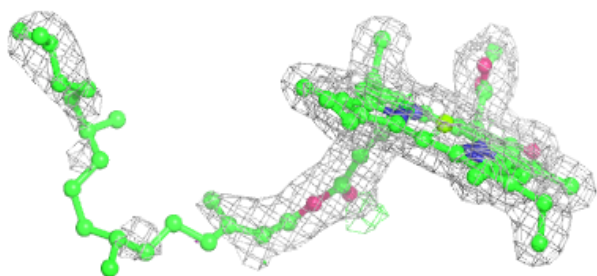
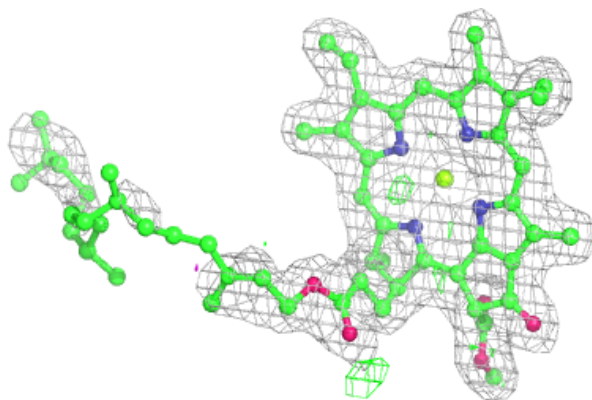


Electron density around CLA b 609:

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

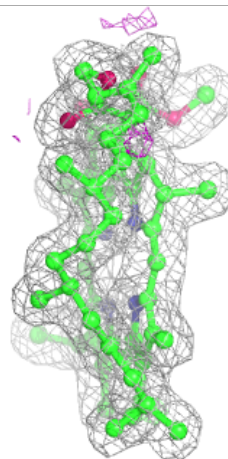
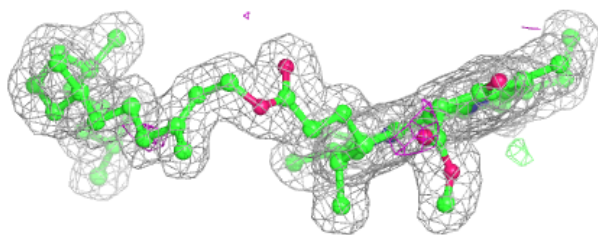
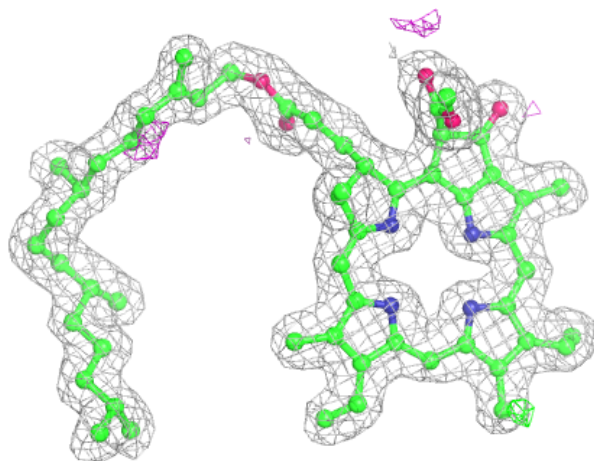
**Electron density around CLA A 408:**

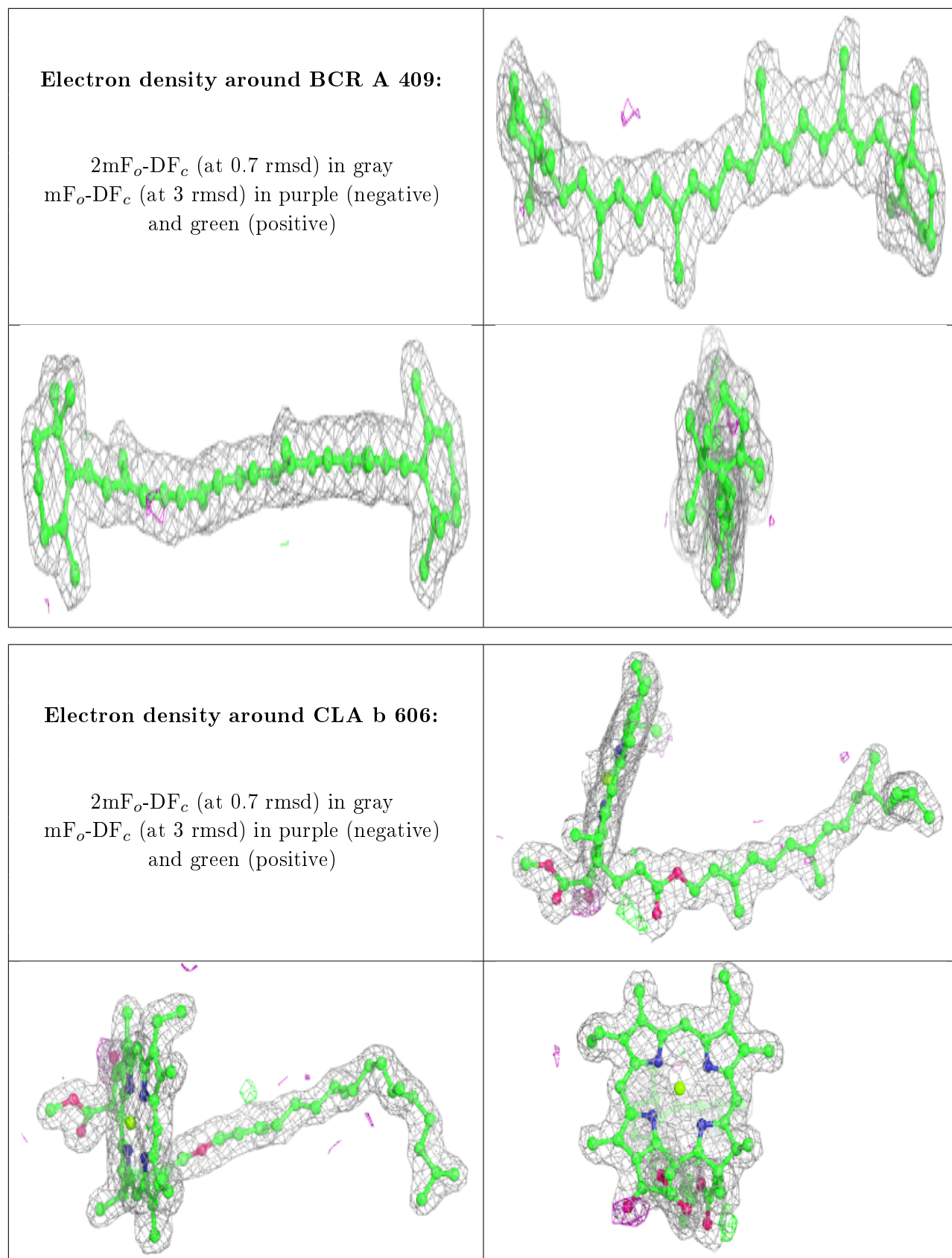
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around PHO a 408:

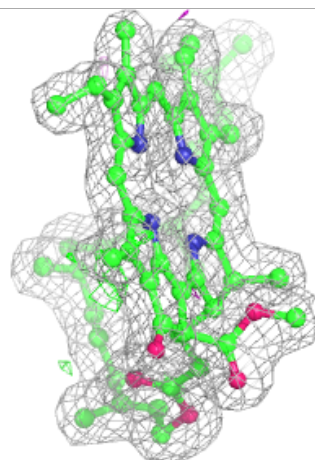
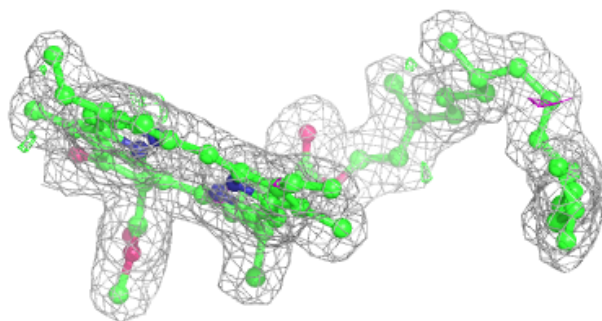
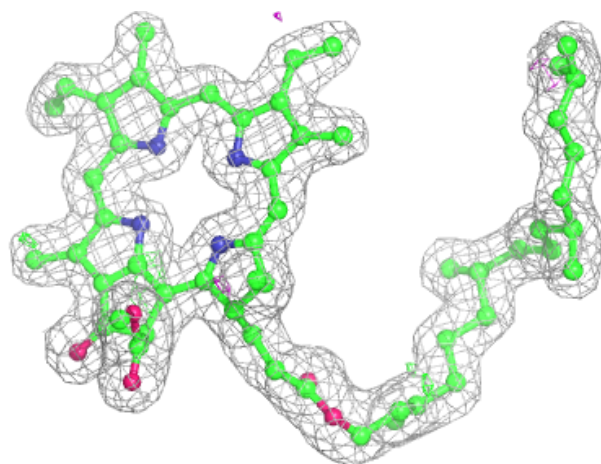
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





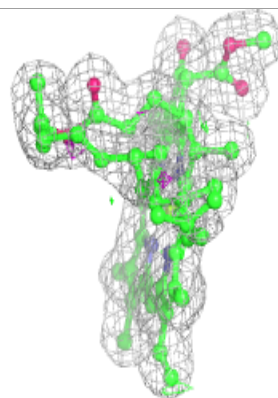
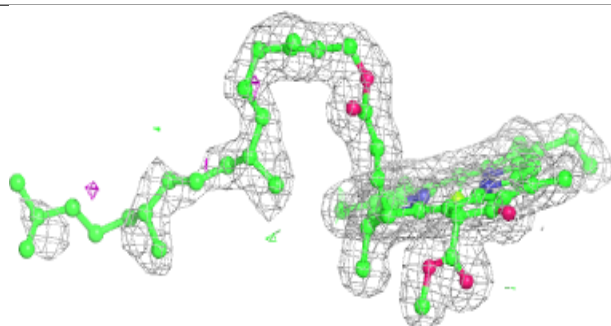
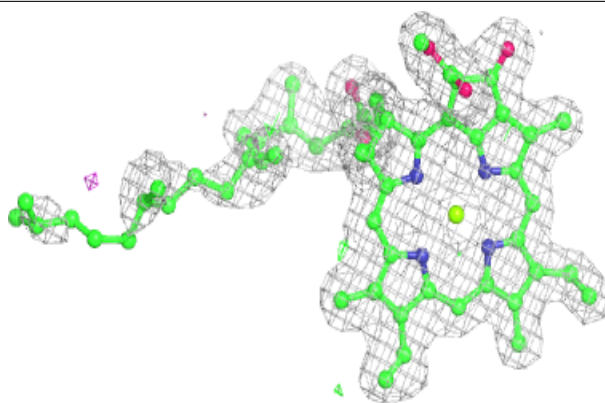
Electron density around PHO D 402:

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

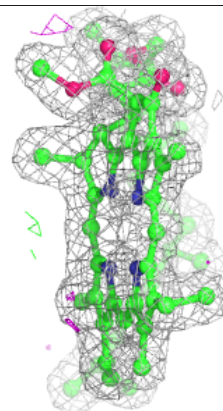
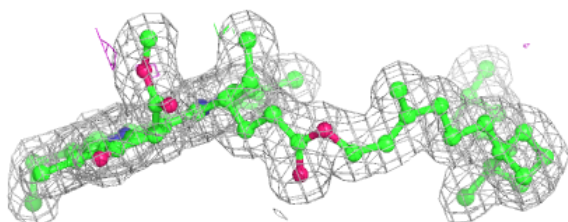
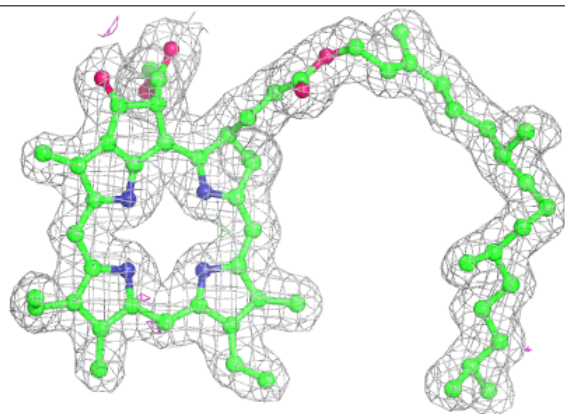


Electron density around CLA a 407:

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

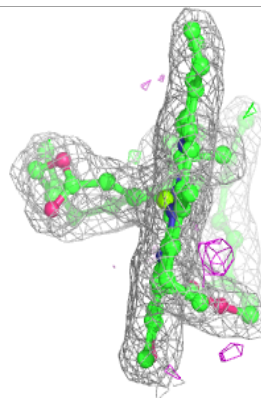
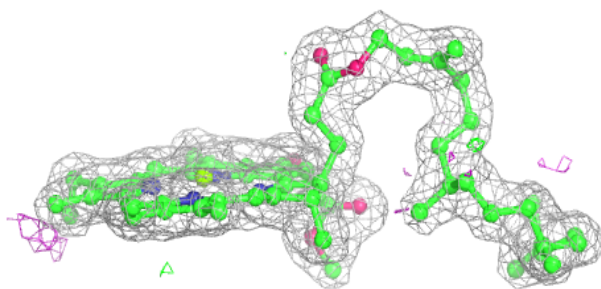
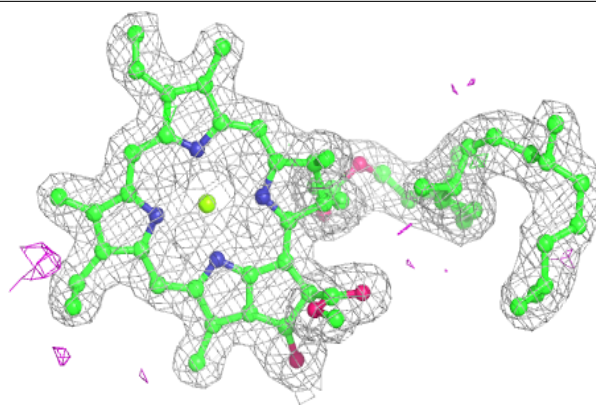
**Electron density around PHO A 407:**

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



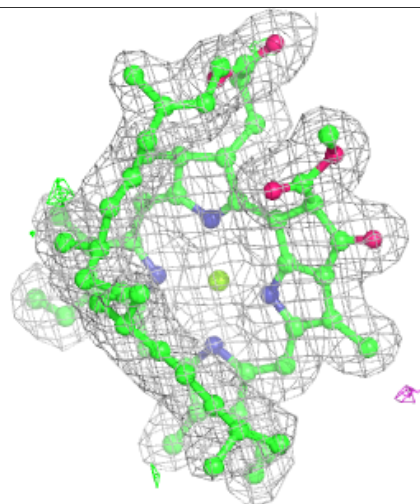
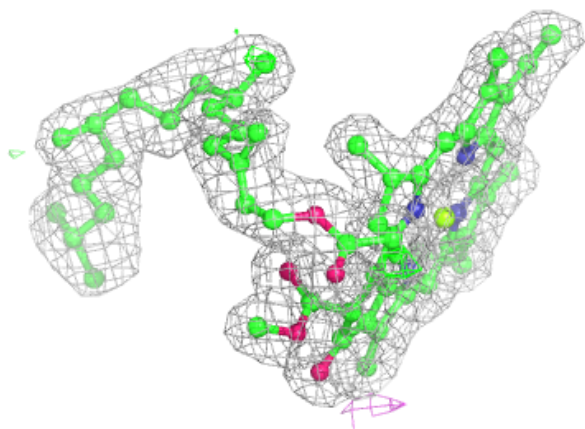
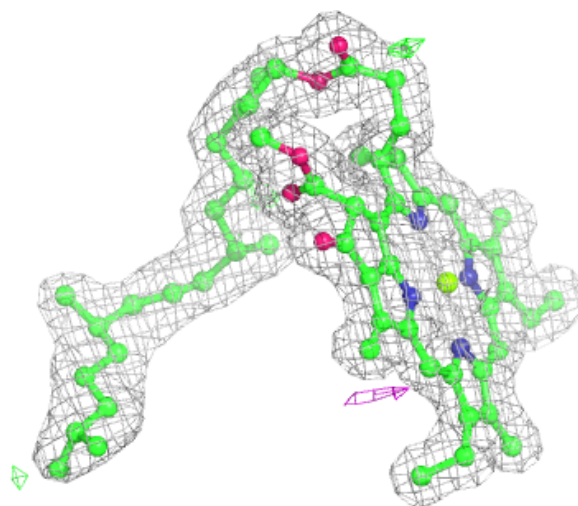
Electron density around CLA b 613:

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



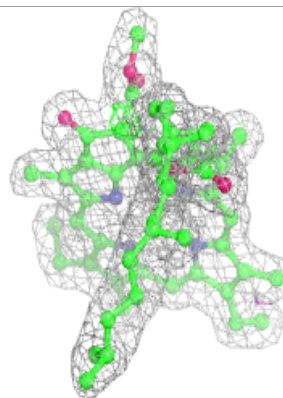
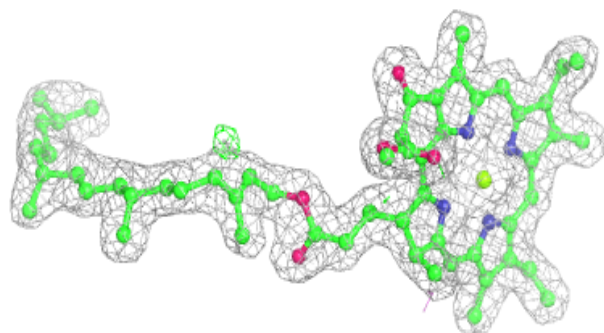
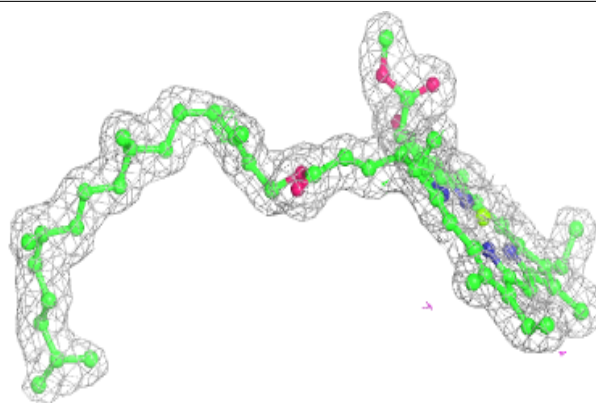
Electron density around CLA b 614:

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

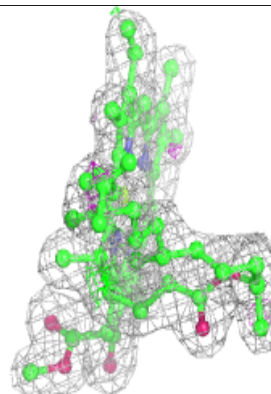
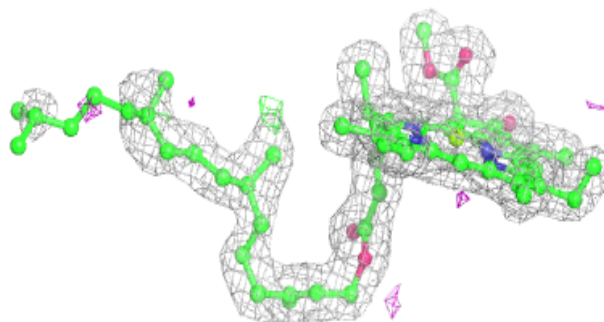
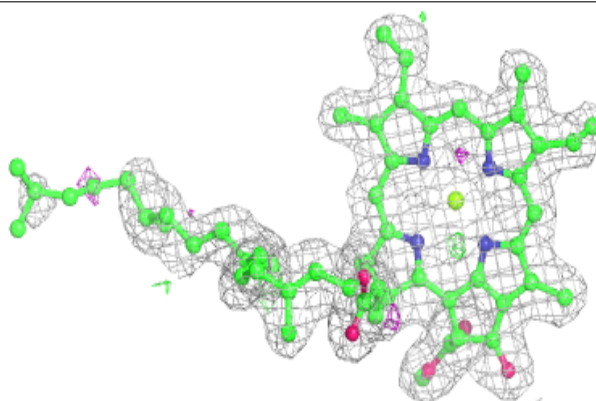


Electron density around CLA d 403:

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

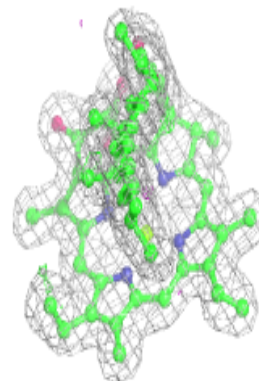
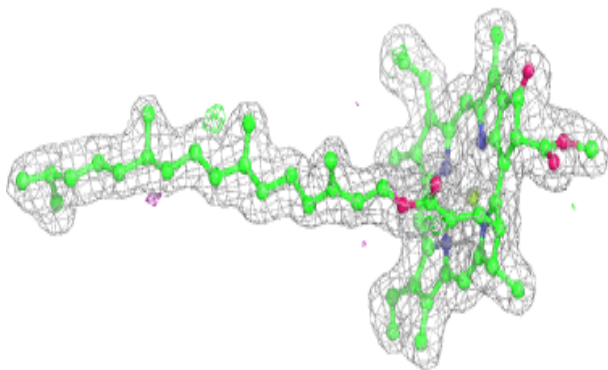
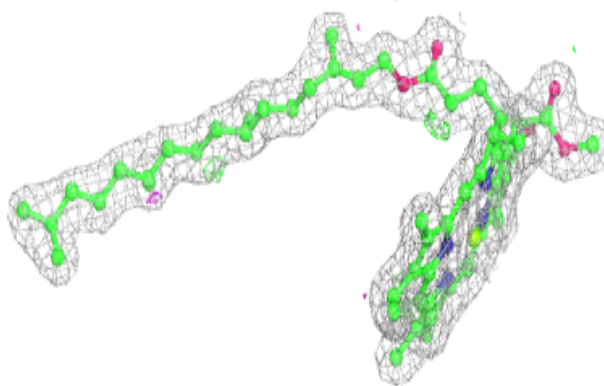
**Electron density around CLA A 406:**

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

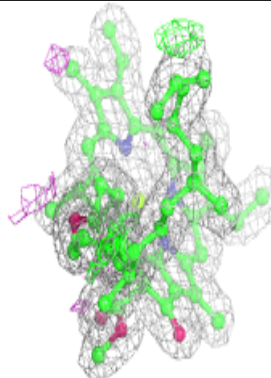
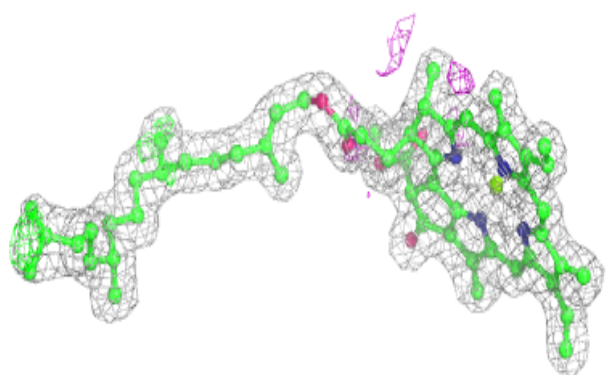
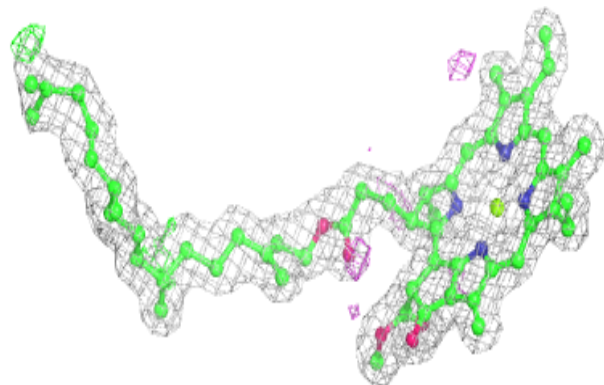


Electron density around CLA b 608:

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

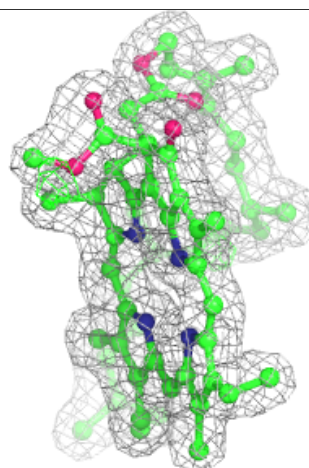
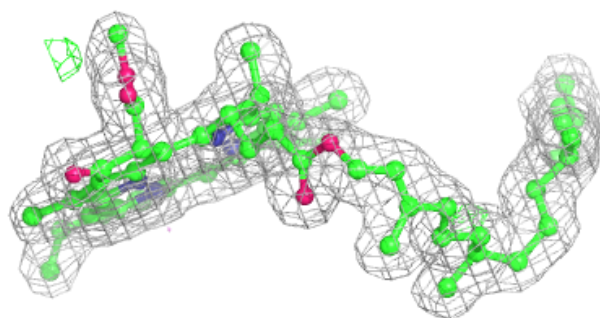
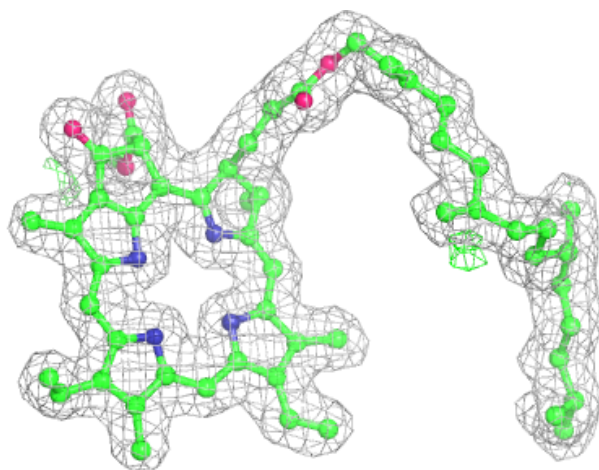
**Electron density around CLA a 406:**

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



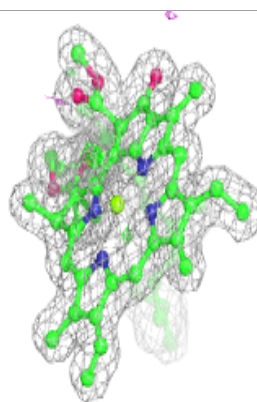
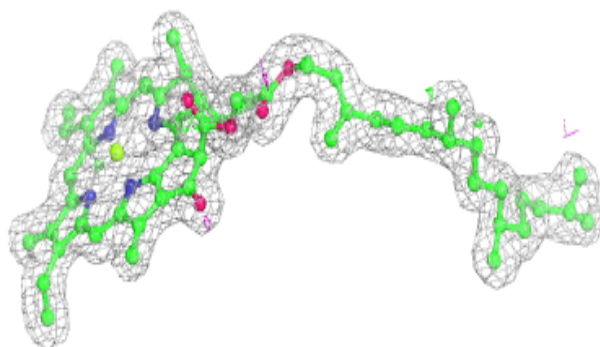
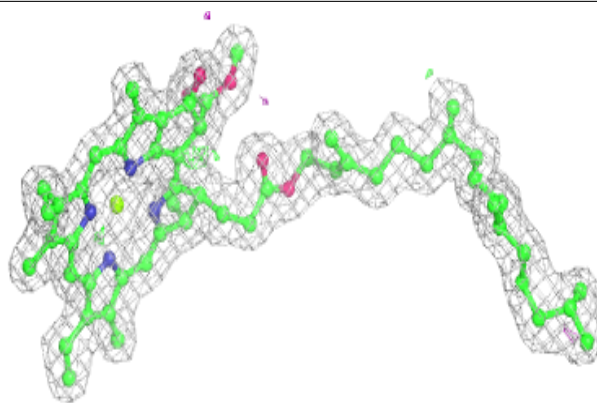
Electron density around PHO a 409:

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

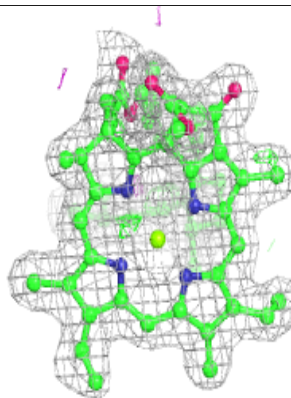
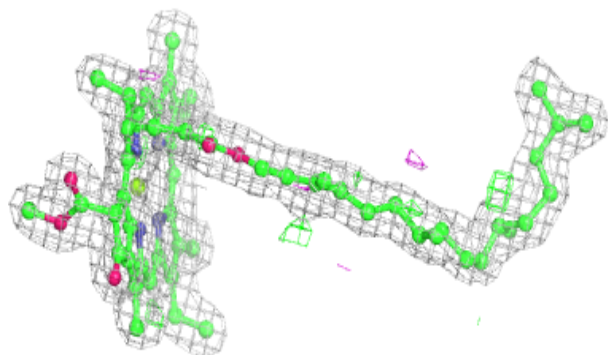
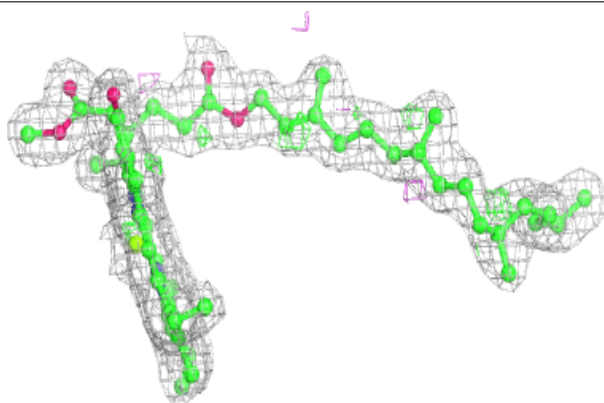


Electron density around CLA A 405:

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

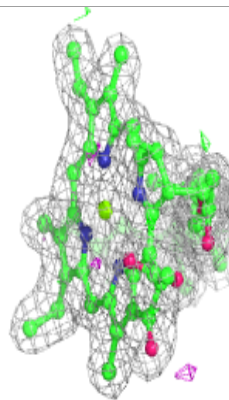
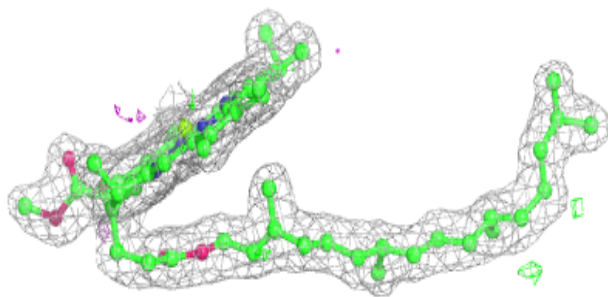
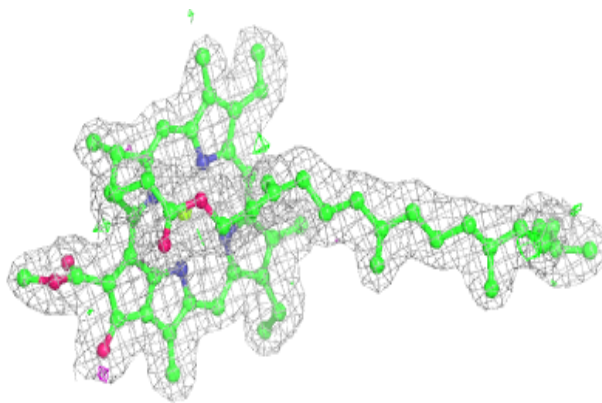
**Electron density around CLA B 606:**

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

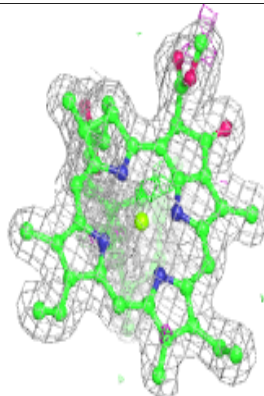
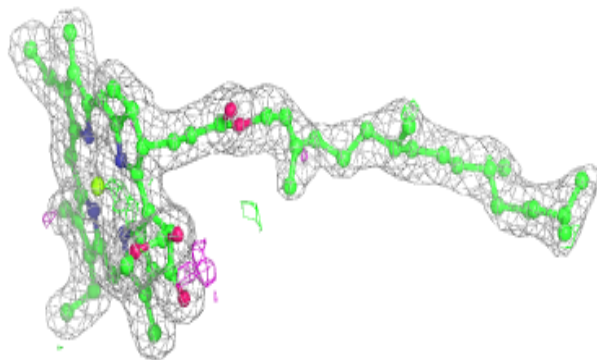
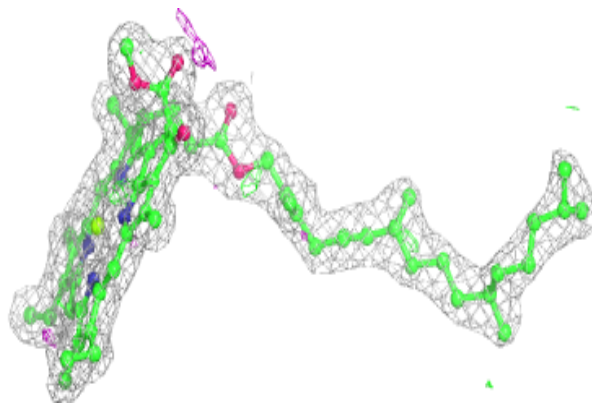


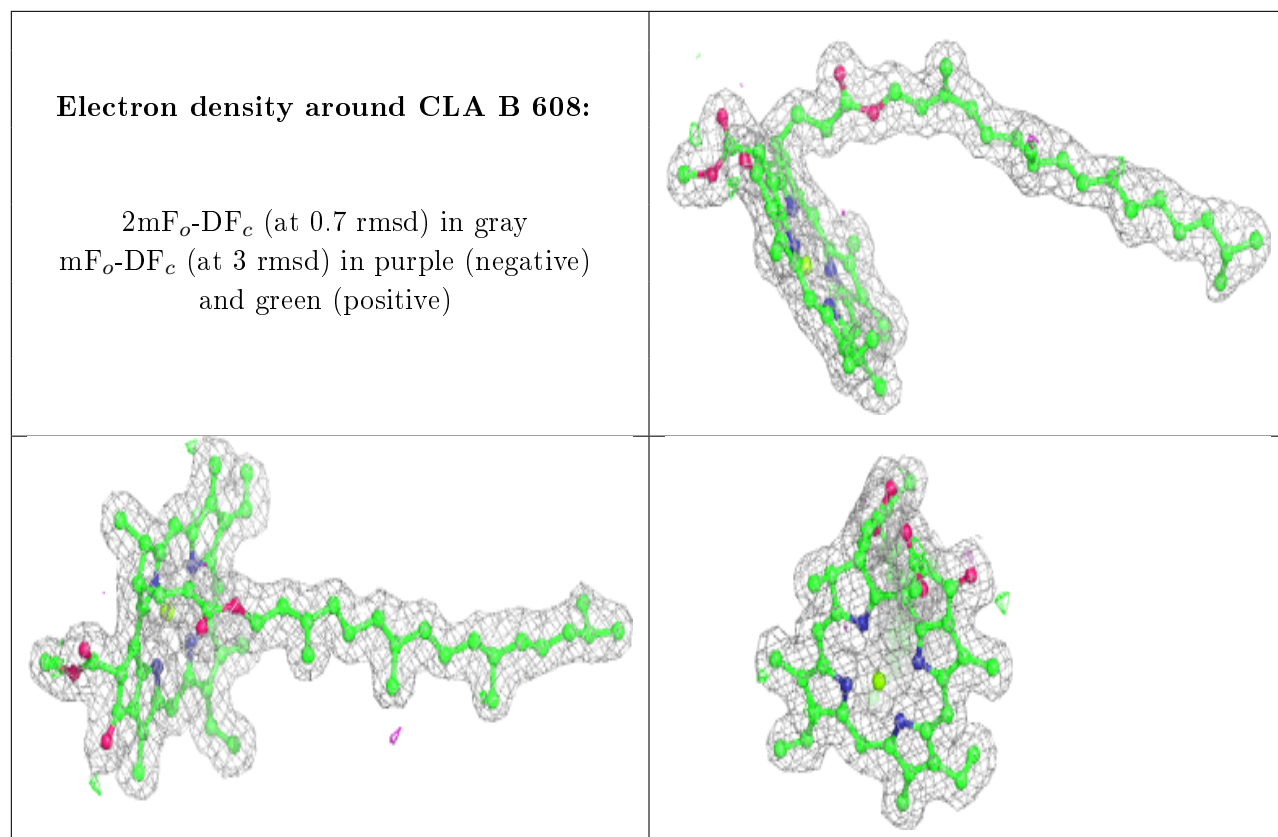
Electron density around CLA B 609:

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

**Electron density around CLA B 605:**

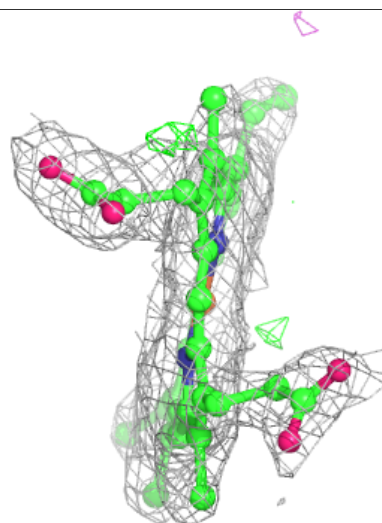
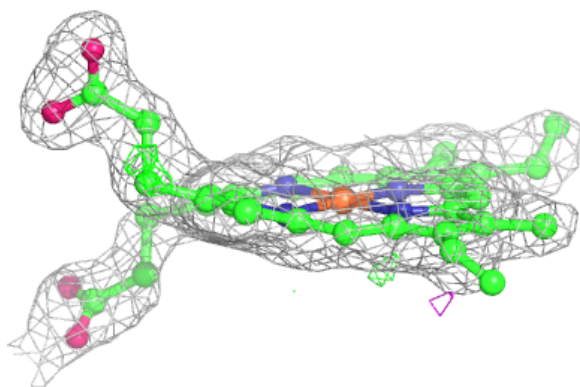
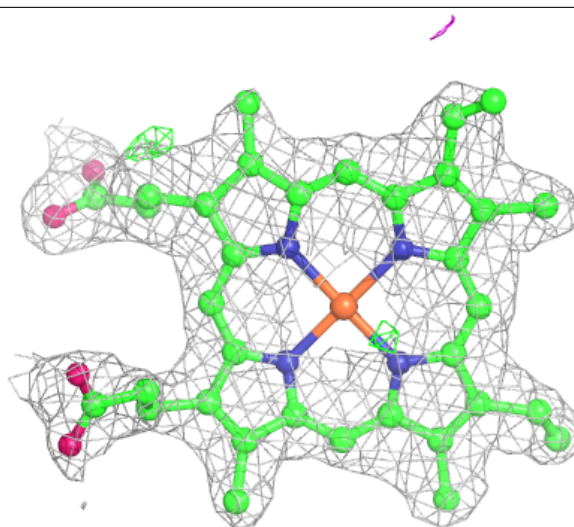
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





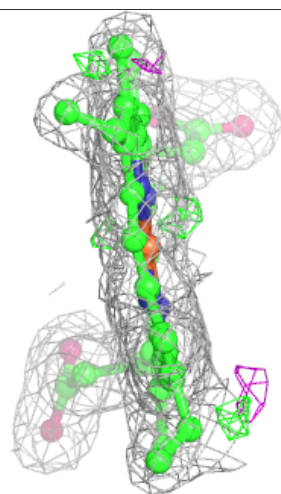
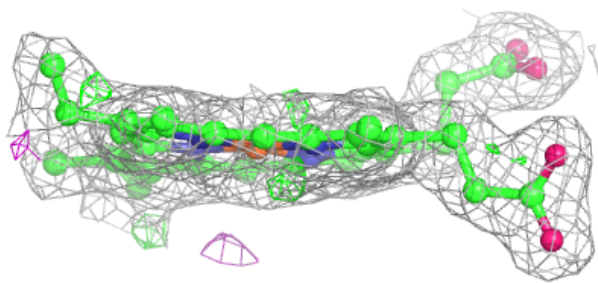
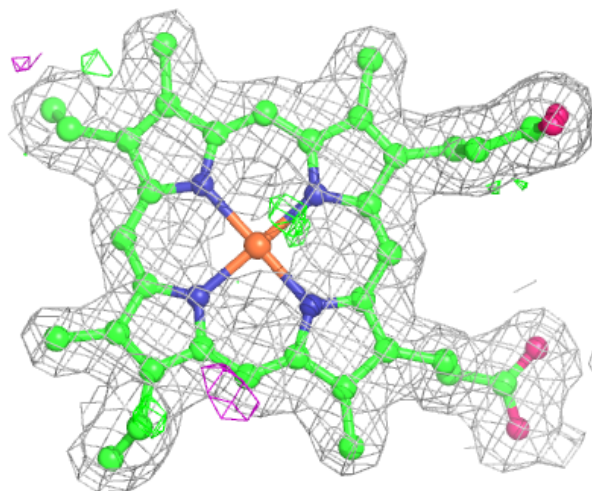
Electron density around HEM e 105:

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



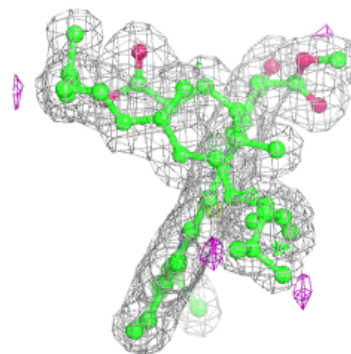
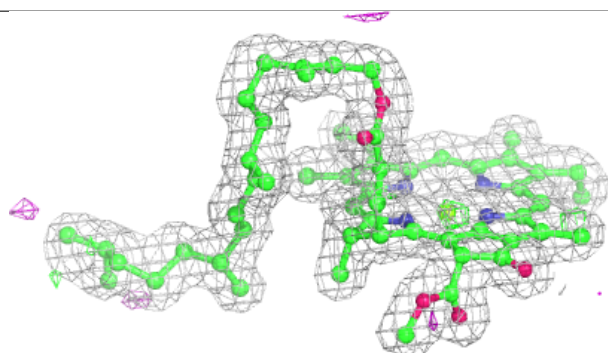
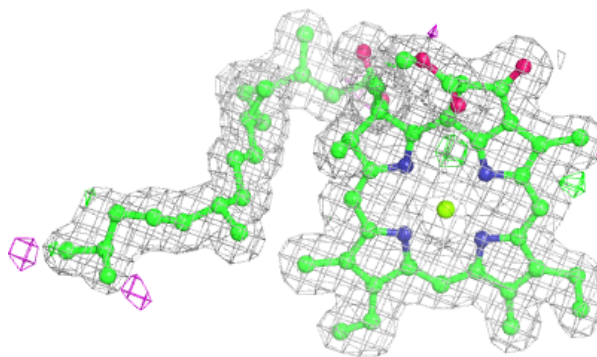
Electron density around HEC V 203:

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

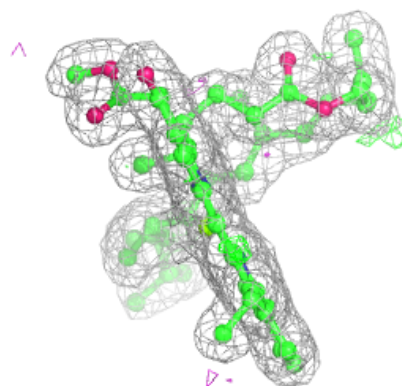
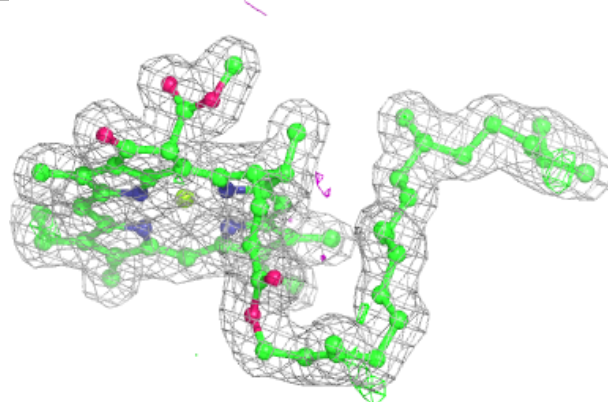
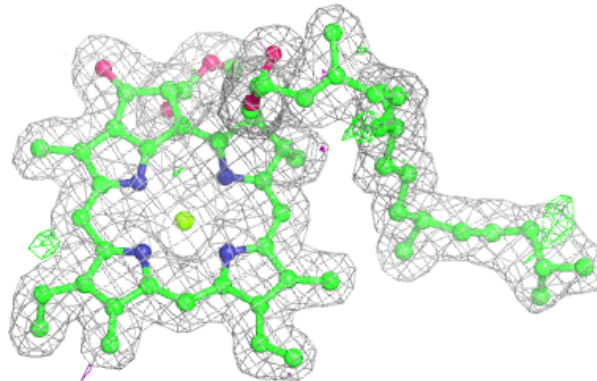


Electron density around CLA d 401:

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

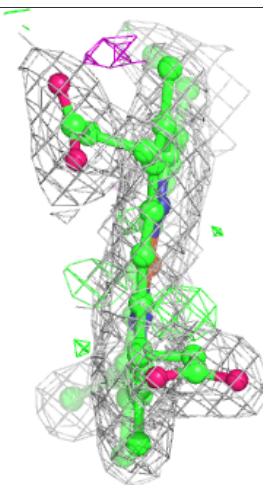
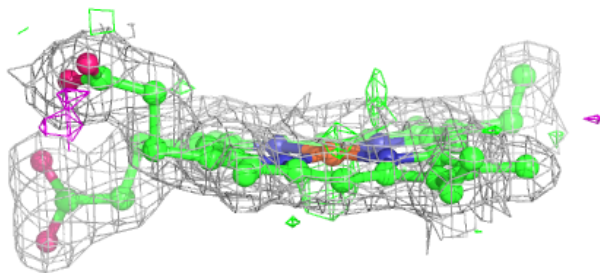
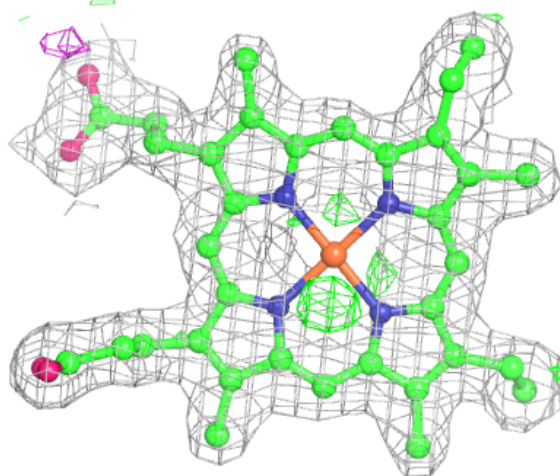
**Electron density around CLA D 401:**

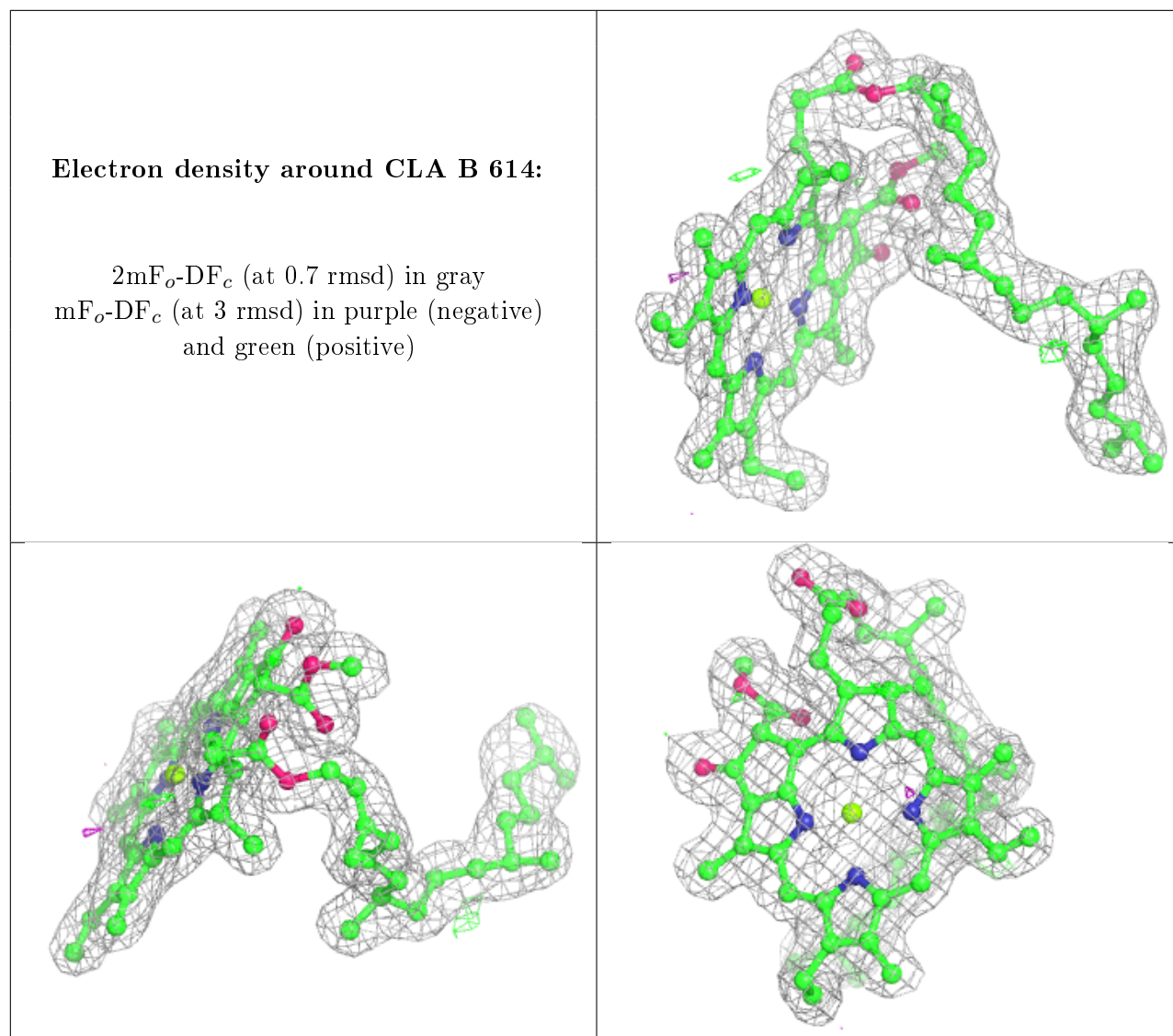
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around HEC v 203:

$2mF_o-DF_c$ (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.