



Full wwPDB X-ray Structure Validation Report ⓘ

Aug 9, 2023 – 02:41 PM EDT

PDB ID : 8F4J
Title : RT XFEL structure of Photosystem II 4000 microseconds after the third illumination at 2.00 Angstrom resolution
Authors : Bhowmick, A.; Hussein, R.; Bogacz, I.; Simon, P.S.; Ibrahim, M.; Chatterjee, R.; Doyle, M.D.; Cheah, M.H.; Fransson, T.; Chernev, P.; Kim, I.-S.; Makita, H.; Dasgupta, M.; Kaminsky, C.J.; Zhang, M.; Gatcke, J.; Haupt, S.; Nangca, I.I.; Keable, S.M.; Aydin, O.; Tono, K.; Owada, S.; Gee, L.B.; Fuller, F.D.; Batyuk, A.; Alonso-Mori, R.; Holton, J.M.; Paley, D.W.; Moriarty, N.W.; Mamedov, F.; Adams, P.D.; Brewster, A.S.; Dobbek, H.; Sauter, N.K.; Bergmann, U.; Zouni, A.; Messinger, J.; Kern, J.; Yano, J.; Yachandra, V.K.
Deposited on : 2022-11-10
Resolution : 2.00 Å (reported)

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

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

A user guide is available at

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

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

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

MolProbity : 4.02b-467
Mogul : 1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix) : 1.13
EDS : 2.35

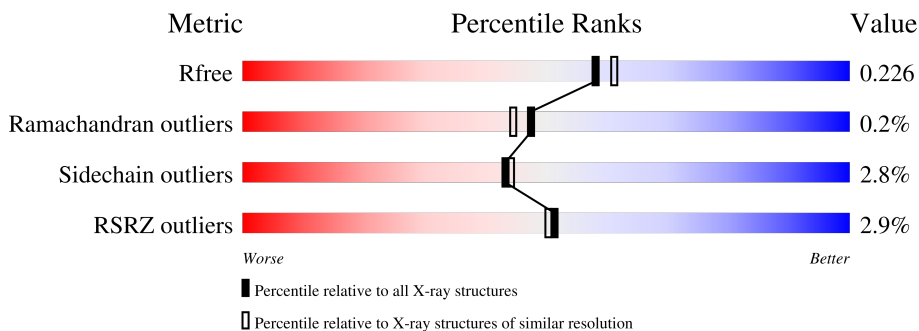
1 Overall quality at a glance

The following experimental techniques were used to determine the structure:

X-RAY DIFFRACTION

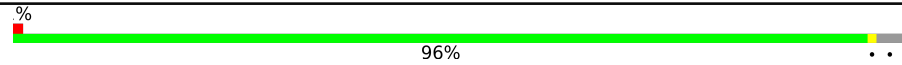
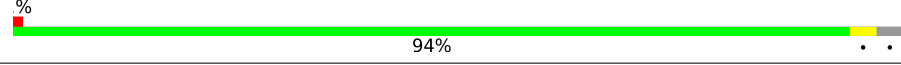
The reported resolution of this entry is 2.00 Å.

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	8085 (2.00-2.00)
Ramachandran outliers	138981	9054 (2.00-2.00)
Sidechain outliers	138945	9053 (2.00-2.00)
RSRZ outliers	127900	7900 (2.00-2.00)

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

Mol	Chain	Length	Quality of chain
1	A	344	 96%
1	a	344	 94%

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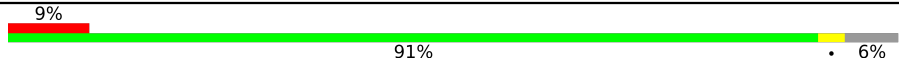

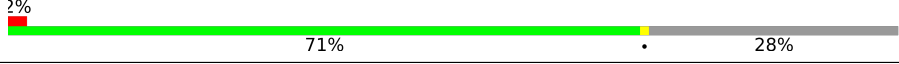
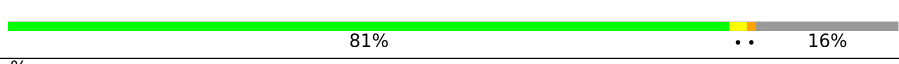

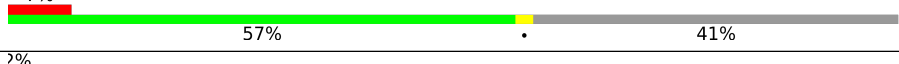

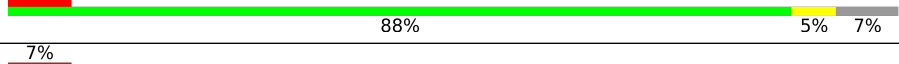
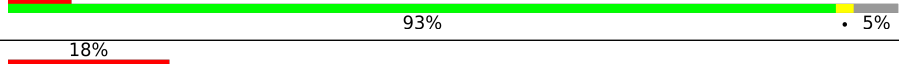
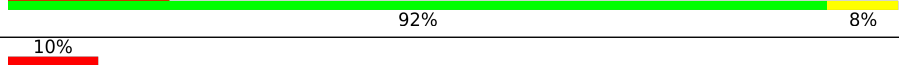
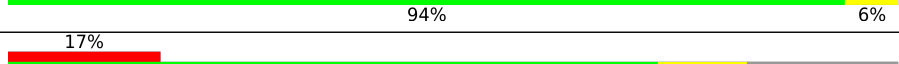
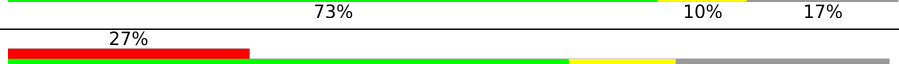

buster-report : 1.1.7 (2018)
 Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)
 Refmac : 5.8.0158
 CCP4 : 7.0.044 (Gargrove)
 Ideal geometry (proteins) : Engh & Huber (2001)
 Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
 Validation Pipeline (wwPDB-VP) : 2.35

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Mol	Chain	Length	Quality of chain
2	B	510	2% 98% ..
2	b	510	2% 98% ..
3	C	461	95% ..
3	c	461	% 95% ..
4	D	352	% 96% ..
4	d	352	% 95% ..
5	E	84	8% 95% ..
5	e	84	6% 94% ..
6	F	45	4% 76% 24%
6	f	45	4% 73% 24%
7	H	66	2% 97% ..
7	h	66	2% 91% 5% 5%
8	I	38	5% 92% 5%
8	i	38	5% 89% 5% 5%
9	J	40	5% 90% 10%
9	j	40	8% 88% 10%
10	K	46	2% 76% 20%
10	k	46	76% 20%
11	L	37	5% 100%
11	l	37	5% 86% 11%
12	M	36	3% 86% 6% 8%
12	m	36	83% 6% 11%
13	O	272	6% 86% 10%
13	o	272	5% 88% 10%
14	T	32	3% 91% 6%

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Mol	Chain	Length	Quality of chain
14	t	32	
15	U	134	
15	u	134	
16	V	163	
16	v	163	
17	Y	46	
17	y	46	
18	X	41	
18	x	41	
19	Z	62	
19	z	62	
20	R	41	
20	r	41	

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
25	CLA	A	606	X	-	-	-
25	CLA	A	607	X	-	-	-
25	CLA	A	609	X	-	-	-
25	CLA	A	612	X	-	-	-
25	CLA	B	601	X	-	-	-
25	CLA	B	602	X	-	-	-
25	CLA	B	603	X	-	-	-
25	CLA	B	604	X	-	-	-
25	CLA	B	605	X	-	-	-
25	CLA	B	606	X	-	-	-
25	CLA	B	607	X	-	-	-
25	CLA	B	608	X	-	-	-
25	CLA	B	610	X	-	-	-
25	CLA	B	611	X	-	-	-
25	CLA	B	612	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	B	613	X	-	-	-
25	CLA	B	614	X	-	-	-
25	CLA	B	615	X	-	-	-
25	CLA	B	616	X	-	-	-
25	CLA	C	501	X	-	-	-
25	CLA	C	502	X	-	-	-
25	CLA	C	503	X	-	-	-
25	CLA	C	504	X	-	-	-
25	CLA	C	505	X	-	-	-
25	CLA	C	506	X	-	-	-
25	CLA	C	507	X	-	-	-
25	CLA	C	509	X	-	-	-
25	CLA	C	510	X	-	-	-
25	CLA	C	511	X	-	-	-
25	CLA	C	512	X	-	-	-
25	CLA	C	513	X	-	-	-
25	CLA	D	403	X	-	-	-
25	CLA	a	607	X	-	-	-
25	CLA	a	608	X	-	-	-
25	CLA	a	610	X	-	-	-
25	CLA	a	613	X	-	-	-
25	CLA	b	601	X	-	-	-
25	CLA	b	602	X	-	-	-
25	CLA	b	603	X	-	-	-
25	CLA	b	604	X	-	-	-
25	CLA	b	605	X	-	-	-
25	CLA	b	606	X	-	-	-
25	CLA	b	609	X	-	-	-
25	CLA	b	611	X	-	-	-
25	CLA	b	612	X	-	-	-
25	CLA	b	613	X	-	-	-
25	CLA	b	614	X	-	-	-
25	CLA	b	615	X	-	-	-
25	CLA	c	501	X	-	-	-
25	CLA	c	502	X	-	-	-
25	CLA	c	503	X	-	-	-
25	CLA	c	504	X	-	-	-
25	CLA	c	505	X	-	-	-
25	CLA	c	506	X	-	-	-
25	CLA	c	507	X	-	-	-
25	CLA	c	509	X	-	-	-
25	CLA	c	510	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	c	511	X	-	-	-
25	CLA	c	512	X	-	-	-
25	CLA	c	513	X	-	-	-
25	CLA	d	402	X	-	-	-
25	CLA	d	403	X	-	-	-
25	CLA	h	101	X	-	-	-

2 Entry composition

There are 37 unique types of molecules in this entry. The entry contains 54524 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 1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
1	A	334	Total 3604	C 2343	N 595	O 643	S 23	0	64	0
1	a	334	Total 3601	C 2340	N 595	O 643	S 23	0	64	0

- 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	Total 4005	C 2631	N 666	O 695	S 13	0	4	0
2	b	505	Total 3978	C 2610	N 665	O 690	S 13	0	0	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	442	Total 3592	C 2355	N 601	O 621	S 15	0	11	0
3	c	451	Total 3666	C 2396	N 617	O 638	S 15	0	12	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
4	D	341	Total 2745	C 1818	N 448	O 467	S 12	0	2	0
4	d	341	Total 2751	C 1822	N 448	O 469	S 12	0	3	0

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	E	82	Total	C	N	O	0	1	0
			666	436	107	123			
5	e	82	Total	C	N	O	0	0	0
			664	434	108	122			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	F	34	Total	C	N	O	S	0	0	0
			275	187	45	42	1			
6	f	34	Total	C	N	O	S	0	0	0
			275	187	45	42	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	H	65	Total	C	N	O	S	0	0	0
			510	341	82	85	2			
7	h	63	Total	C	N	O	S	0	0	0
			498	333	80	83	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	36	Total	C	N	O	S	0	0	0
			296	200	46	49	1			
8	i	36	Total	C	N	O	S	0	0	0
			296	200	46	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
			257	174	40	42	1			
9	j	36	Total	C	N	O	S	0	0	0
			257	174	40	42	1			

- 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			

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
11	L	37	304	202	48	53	1	0	0	0
11	l	36	296	197	47	52		0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
12	M	33	256	171	37	47	1	0	0	0
12	m	32	251	168	36	46	1	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
13	O	244	1870	1168	313	385	4	0	1	0
13	o	244	1874	1170	317	383	4	0	0	0

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
			Total	C	N	O	S			
14	T	30	258	181	36	39	2	0	0	0
14	t	30	256	180	36	38	2	0	0	0

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

Mol	Chain	Residues	Atoms			ZeroOcc	AltConf	Trace	
			Total	C	N				O
15	U	97	774	491	129	154	0	0	0
15	u	97	774	491	129	154	0	0	0

- 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	0	0
			1064	675	177	208	4			
16	v	137	Total	C	N	O	S	0	0	0
			1064	675	177	208	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
17	Y	27	Total	C	N	O	S	0	0	0
			196	128	35	30	3			
17	y	30	Total	C	N	O	S	0	0	0
			218	144	35	36	3			

- Molecule 18 is a protein called Photosystem II reaction center X protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
18	X	38	Total	C	N	O	S	0	0	0
			281	188	45	48				
18	x	39	Total	C	N	O	S	0	0	0
			286	191	46	49				

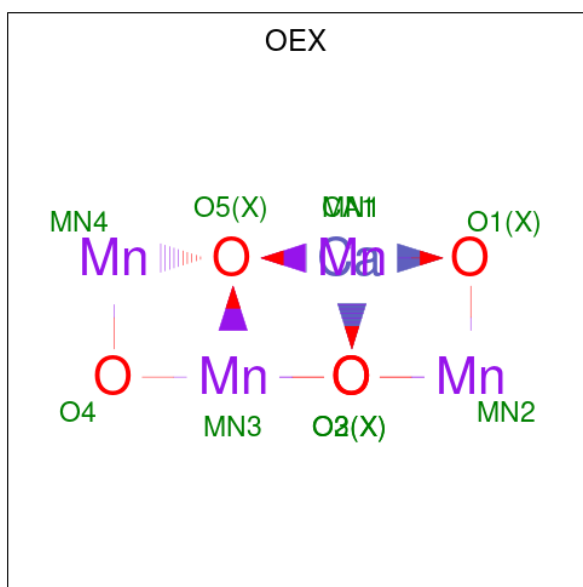
- Molecule 19 is a protein called Photosystem II reaction center protein Z.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
19	Z	62	Total	C	N	O	S	0	0	0
			479	328	72	77	2			
19	z	62	Total	C	N	O	S	0	0	0
			477	326	72	77	2			

- Molecule 20 is a protein called Photosystem II protein Y.

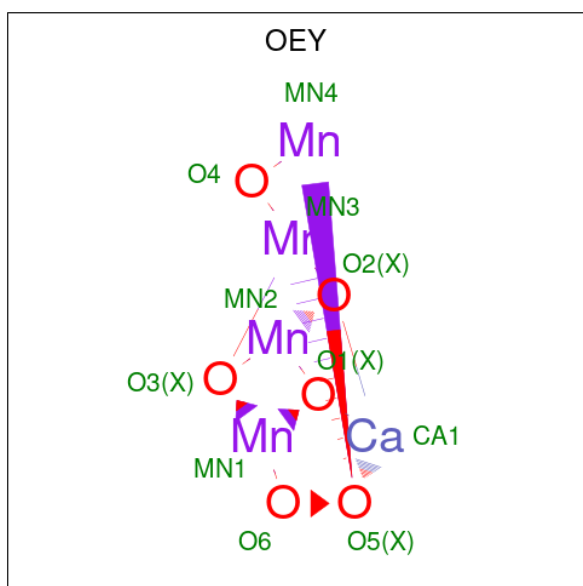
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
20	R	34	Total	C	N	O	S	0	0	0
			271	184	47	40				
20	r	31	Total	C	N	O	S	0	0	0
			246	166	43	37				

- Molecule 21 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula: CaMn₄O₅) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	Ca	Mn	O		
21	A	1	20	2	8	10	0	1
21	a	1	20	2	8	10	0	1

- Molecule 22 is CA-MN4-O6 CLUSTER (three-letter code: OEY) (formula: CaMn_4O_6) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	Ca	Mn	O		
22	A	1	11	1	4	6	0	1

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Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
			Total	Ca	Mn	O		
22	a	1	11	1	4	6	0	1

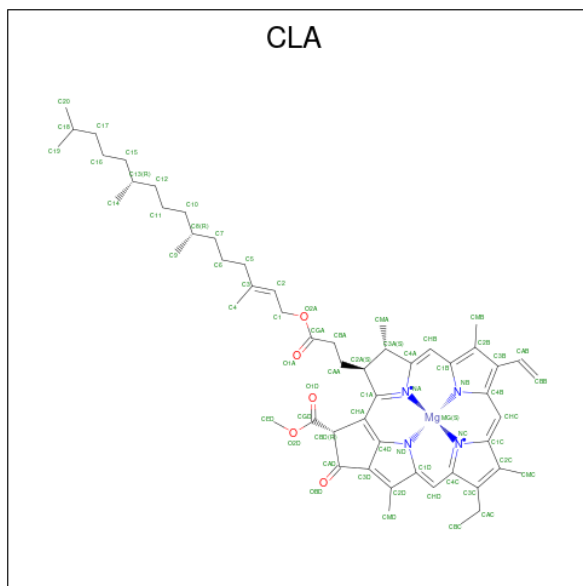
- Molecule 23 is FE (II) ION (three-letter code: FE2) (formula: Fe).

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

- Molecule 24 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

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

- Molecule 25 is CHLOROPHYLL A (three-letter code: CLA) (formula: C₅₅H₇₂MgN₄O₅).



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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	A	1	Total	C	Mg	N	O	0	0
			54	44	1	4	5		
25	A	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	B	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	C	1	Total	C	Mg	N	O	0	0
			59	49	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	C	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	D	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	a	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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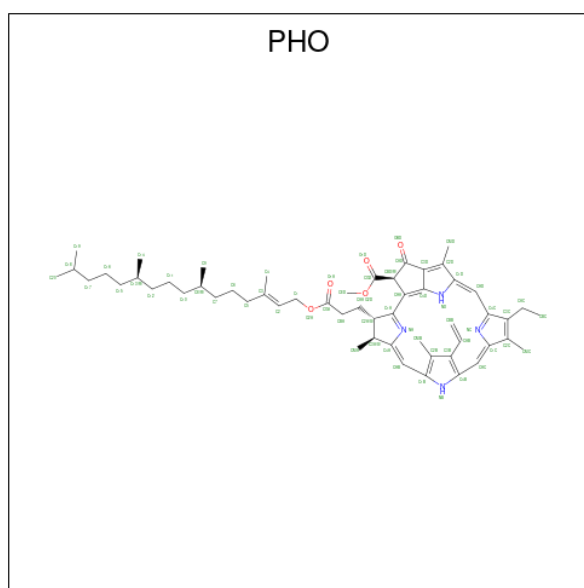
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	b	1	Total	C	Mg	N	O	0	0
			60	50	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			64	54	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

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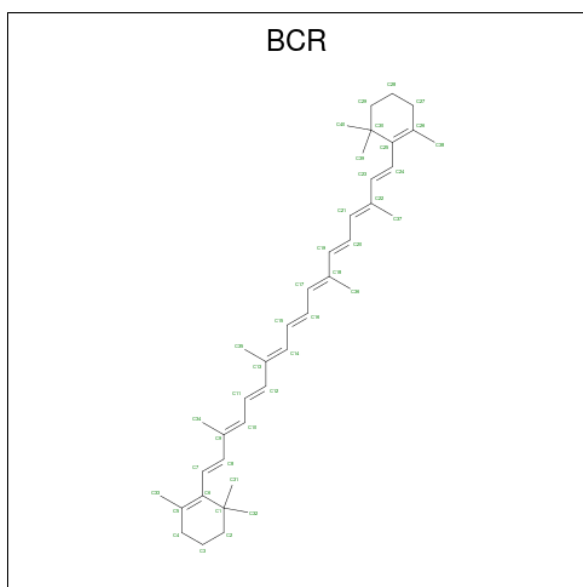
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	c	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	d	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		
25	h	1	Total	C	Mg	N	O	0	0
			65	55	1	4	5		

- Molecule 26 is PHEOPHYTIN A (three-letter code: PHO) (formula: $C_{55}H_{74}N_4O_5$).



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

- Molecule 27 is BETA-CAROTENE (three-letter code: BCR) (formula: $C_{40}H_{56}$).



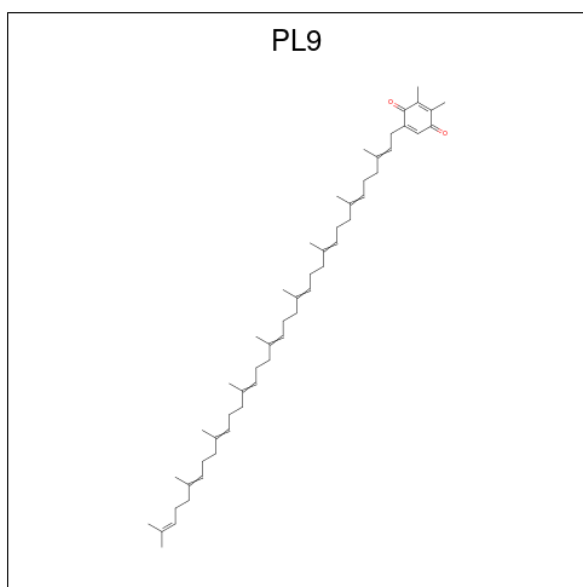
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
27	A	1	Total C 40 40	0	0
27	B	1	Total C 40 40	0	0
27	B	1	Total C 40 40	0	0
27	B	1	Total C 40 40	0	0
27	C	1	Total C 40 40	0	0
27	D	1	Total C 40 40	0	0
27	H	1	Total C 40 40	0	0
27	K	1	Total C 40 40	0	0
27	K	1	Total C 40 40	0	0
27	K	1	Total C 40 40	0	0
27	T	1	Total C 40 40	0	0
27	a	1	Total C 40 40	0	0
27	b	1	Total C 40 40	0	0
27	b	1	Total C 40 40	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
27	b	1	Total C 40 40	0	0
27	c	1	Total C 40 40	0	0
27	c	1	Total C 40 40	0	0
27	d	1	Total C 40 40	0	0
27	h	1	Total C 40 40	0	0
27	k	1	Total C 40 40	0	0
27	k	1	Total C 40 40	0	0
27	t	1	Total C 40 40	0	0

- Molecule 28 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: $C_{53}H_{80}O_2$).



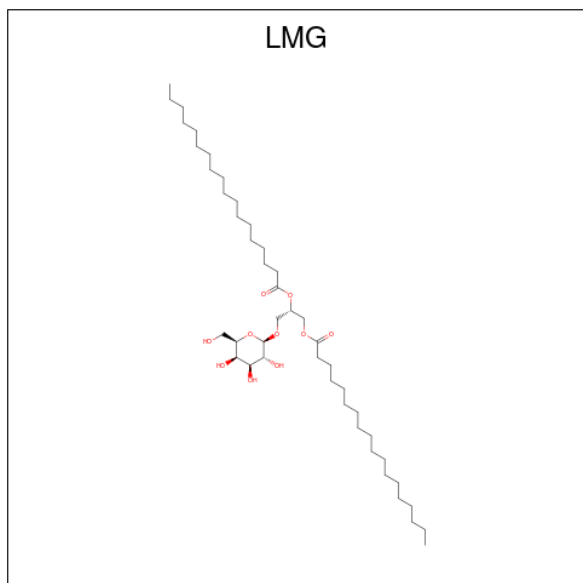
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	A	1	Total C O 55 53 2	0	0
28	D	1	Total C O 55 53 2	0	0

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

- Molecule 29 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$).



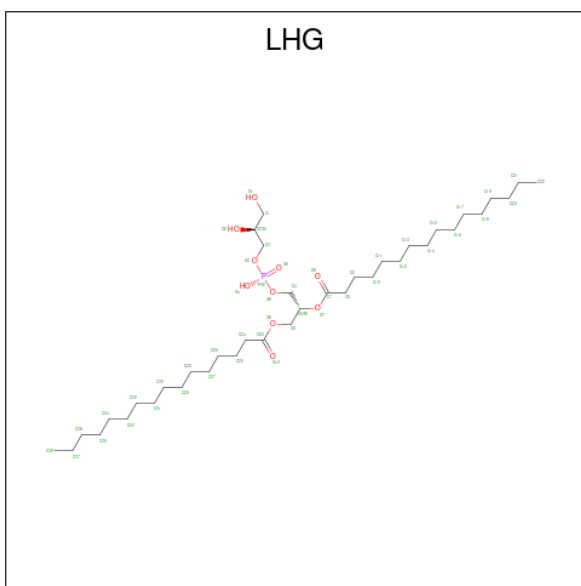
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	A	1	Total	C	O	0	0
			48	38	10		
29	B	1	Total	C	O	0	0
			28	24	4		
29	C	1	Total	C	O	0	0
			48	38	10		
29	D	1	Total	C	O	0	0
			51	41	10		
29	D	1	Total	C	O	0	0
			33	27	6		
29	M	1	Total	C	O	0	0
			51	41	10		
29	b	1	Total	C	O	0	0
			55	45	10		
29	c	1	Total	C	O	0	0
			37	27	10		
29	c	1	Total	C	O	0	0
			48	38	10		

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Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
29	c	1	Total	C	O	0	0
			49	39	10		
29	d	1	Total	C	O	0	0
			23	21	2		
29	d	1	Total	C	O	0	0
			44	34	10		
29	m	1	Total	C	O	0	0
			51	41	10		

- Molecule 30 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



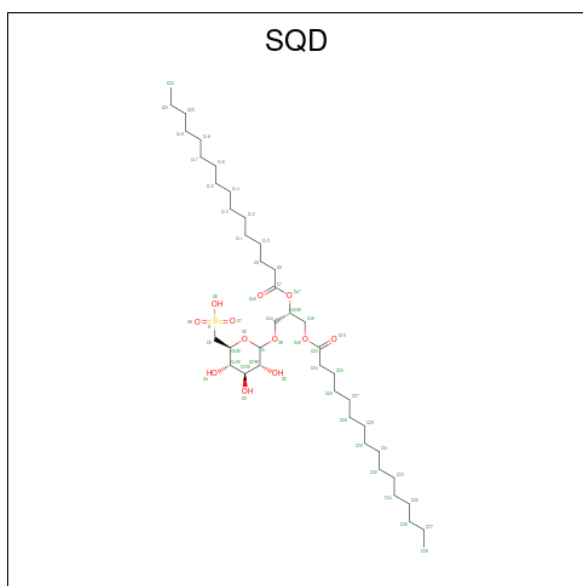
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
30	A	1	Total	C	O	P	0	0
			47	36	10	1		
30	B	1	Total	C	O	P	0	0
			49	38	10	1		
30	D	1	Total	C	O	P	0	0
			49	38	10	1		
30	E	1	Total	C	O	P	0	0
			49	38	10	1		
30	L	1	Total	C	O	P	0	0
			49	38	10	1		
30	a	1	Total	C	O	P	0	0
			49	38	10	1		
30	d	1	Total	C	O	P	0	0
			49	38	10	1		

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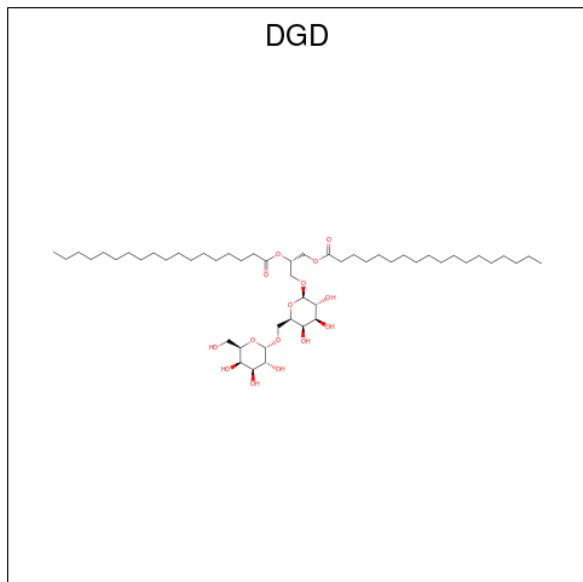
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
30	d	1	Total	C	O	P	0	0
			39	28	10	1		
30	e	1	Total	C	O	P	0	0
			42	31	10	1		
30	l	1	Total	C	O	P	0	0
			49	38	10	1		

- Molecule 31 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (three-letter code: SQD) (formula: C₄₁H₇₈O₁₂S).



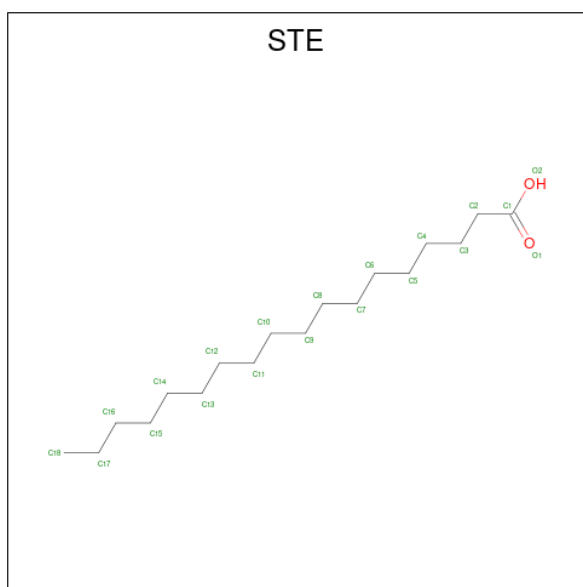
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
31	A	1	Total	C	O	S	0	0
			52	39	12	1		
31	A	1	Total	C	O		0	0
			39	35	4			
31	B	1	Total	C	O	S	0	0
			54	41	12	1		
31	F	1	Total	C	O	S	0	0
			36	25	10	1		
31	a	1	Total	C	O	S	0	0
			54	41	12	1		
31	a	1	Total	C	O		0	0
			36	31	5			
31	b	1	Total	C	O	S	0	0
			49	36	12	1		
31	f	1	Total	C	O	S	0	0
			41	28	12	1		

- Molecule 32 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
32	A	1	Total	C	O	0	0
			66	51	15		
32	C	1	Total	C	O	0	0
			62	47	15		
32	C	1	Total	C	O	0	0
			62	47	15		
32	C	1	Total	C	O	0	0
			62	47	15		
32	H	1	Total	C	O	0	0
			62	47	15		
32	a	1	Total	C	O	0	0
			44	39	5		
32	c	1	Total	C	O	0	0
			62	47	15		
32	c	1	Total	C	O	0	0
			62	47	15		
32	c	1	Total	C	O	0	0
			62	47	15		
32	h	1	Total	C	O	0	0
			62	47	15		

- Molecule 33 is STEARIC ACID (three-letter code: STE) (formula: $C_{18}H_{36}O_2$).



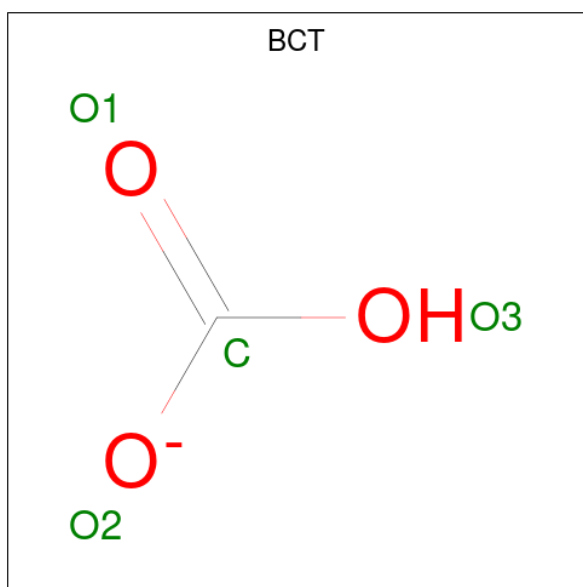
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
33	B	1	Total C O 17 15 2	0	0
33	B	1	Total C O 12 10 2	0	0
33	B	1	Total C O 12 10 2	0	0
33	B	1	Total C 16 16	0	0
33	C	1	Total C O 12 10 2	0	0
33	C	1	Total C O 12 10 2	0	0
33	C	1	Total C 16 16	0	0
33	E	1	Total C O 12 10 2	0	0
33	H	1	Total C 18 18	0	0
33	I	1	Total C 15 15	0	0
33	J	1	Total C O 12 10 2	0	0
33	M	1	Total C O 15 13 2	0	0
33	M	1	Total C 10 10	0	0
33	X	1	Total C O 20 18 2	0	0

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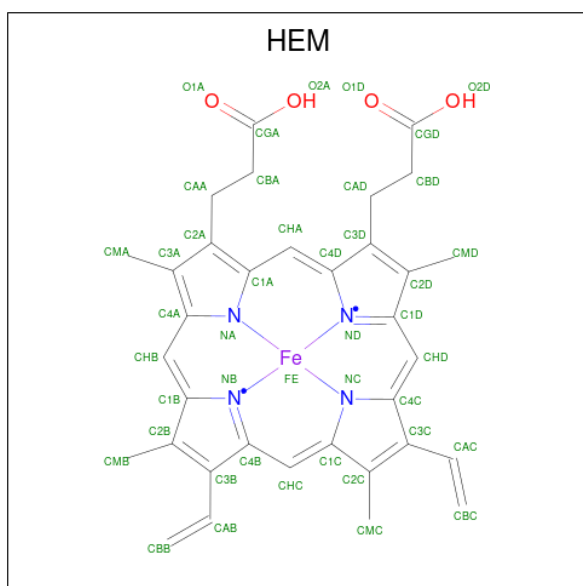
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
33	a	1	Total C O 12 10 2	0	0
33	b	1	Total C 16 16	0	0
33	b	1	Total C O 20 18 2	0	0
33	b	1	Total C O 16 14 2	0	0
33	b	1	Total C 15 15	0	0
33	b	1	Total C O 20 18 2	0	0
33	b	1	Total C 10 10	0	0
33	c	1	Total C O 20 18 2	0	0
33	d	1	Total C O 17 15 2	0	0
33	j	1	Total C O 12 10 2	0	0
33	k	1	Total C O 12 10 2	0	0
33	l	1	Total C 18 18	0	0
33	m	1	Total C O 12 10 2	0	0
33	t	1	Total C O 14 12 2	0	0
33	t	1	Total C 10 10	0	0
33	t	1	Total C O 18 16 2	0	0
33	x	1	Total C O 20 18 2	0	0

- Molecule 34 is BICARBONATE ION (three-letter code: BCT) (formula: CHO_3).



Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
34	D	1	Total	C	O	0	0
			4	1	3		
34	a	1	Total	C	O	0	0
			4	1	3		

- Molecule 35 is PROTOPORPHYRIN IX CONTAINING FE (three-letter code: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).



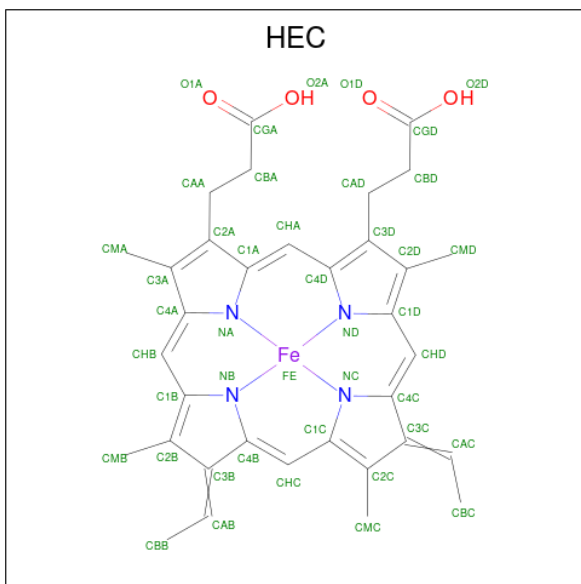
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
35	F	1	Total	C	Fe	N	O	0	0
			43	34	1	4	4		

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

- Molecule 36 is HEME C (three-letter code: HEC) (formula: $C_{34}H_{34}FeN_4O_4$).



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

- Molecule 37 is water.

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
37	A	150	Total	O	0	4
			158	158		
37	B	214	Total	O	0	0
			214	214		
37	C	196	Total	O	0	0
			196	196		
37	D	115	Total	O	0	0
			115	115		
37	E	33	Total	O	0	0
			33	33		
37	F	6	Total	O	0	0
			6	6		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
37	H	27	Total O 27 27	0	0
37	I	20	Total O 20 20	0	0
37	J	13	Total O 13 13	0	0
37	K	5	Total O 5 5	0	0
37	L	10	Total O 10 10	0	0
37	M	7	Total O 7 7	0	0
37	O	89	Total O 89 89	0	0
37	T	9	Total O 9 9	0	0
37	U	40	Total O 40 40	0	0
37	V	61	Total O 61 61	0	0
37	X	12	Total O 12 12	0	0
37	Z	6	Total O 6 6	0	0
37	a	123	Total O 131 131	0	4
37	b	199	Total O 199 199	0	0
37	c	150	Total O 150 150	0	0
37	d	109	Total O 109 109	0	0
37	e	17	Total O 17 17	0	0
37	f	3	Total O 3 3	0	0
37	h	17	Total O 17 17	0	0
37	i	17	Total O 17 17	0	0
37	j	14	Total O 14 14	0	0

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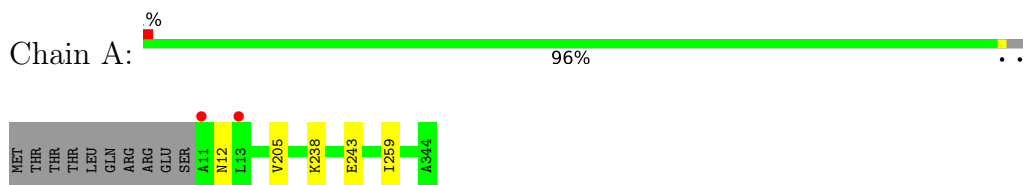
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Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
37	k	7	Total 7	O 7	0	0
37	l	7	Total 7	O 7	0	0
37	m	9	Total 9	O 9	0	0
37	o	85	Total 85	O 85	0	0
37	t	14	Total 14	O 14	0	0
37	u	48	Total 48	O 48	0	0
37	v	56	Total 56	O 56	0	0
37	x	10	Total 10	O 10	0	0
37	z	5	Total 5	O 5	0	0
37	r	2	Total 2	O 2	0	0

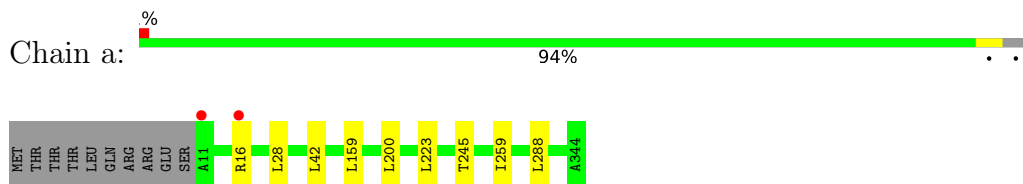
3 Residue-property plots [i](#)

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.

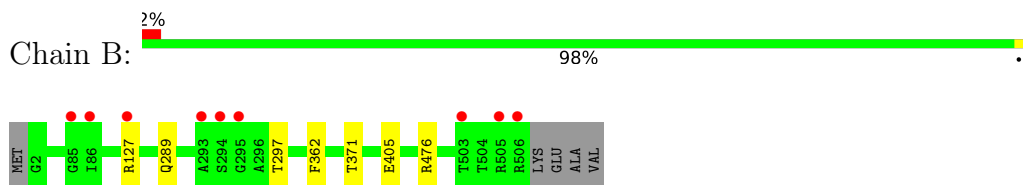
- Molecule 1: Photosystem II protein D1 1



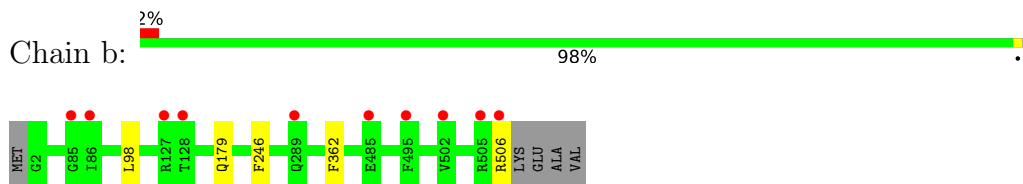
- Molecule 1: Photosystem II protein D1 1



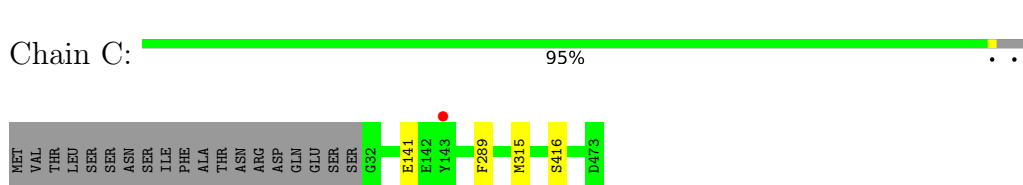
- Molecule 2: Photosystem II CP47 reaction center protein



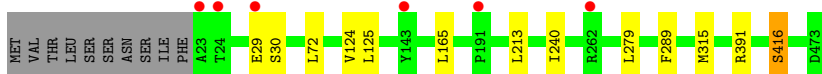
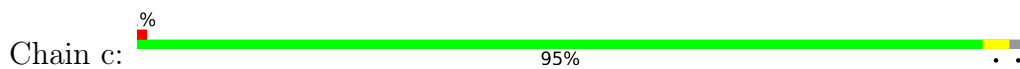
- Molecule 2: Photosystem II CP47 reaction center protein



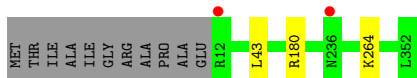
- Molecule 3: Photosystem II CP43 reaction center protein



- Molecule 3: Photosystem II CP43 reaction center protein



- Molecule 4: Photosystem II D2 protein



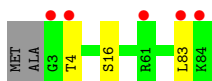
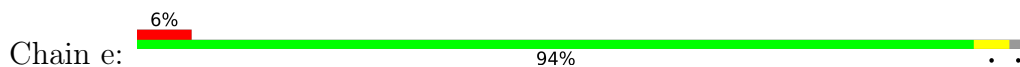
- Molecule 4: Photosystem II D2 protein



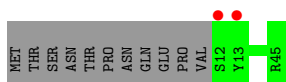
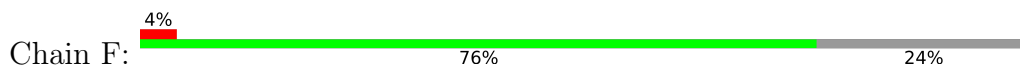
- Molecule 5: Cytochrome b559 subunit alpha



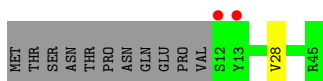
- Molecule 5: Cytochrome b559 subunit alpha



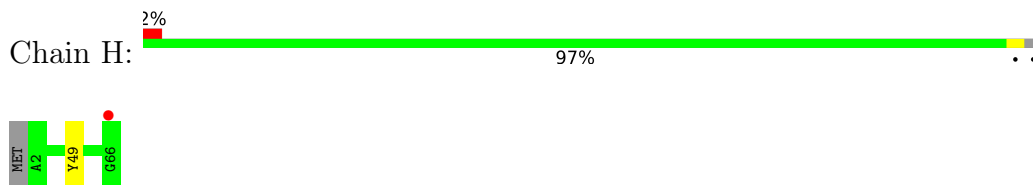
- Molecule 6: Cytochrome b559 subunit beta



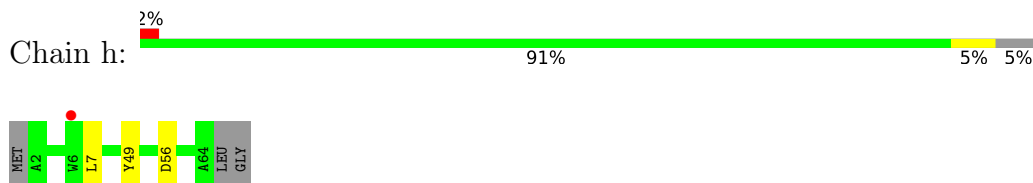
- Molecule 6: Cytochrome b559 subunit beta



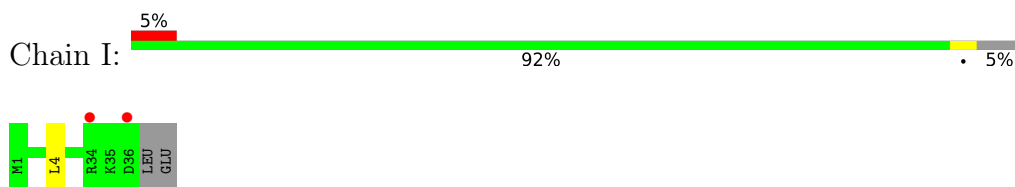
- Molecule 7: Photosystem II reaction center protein H



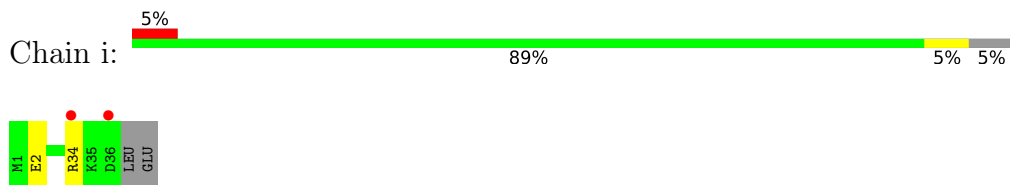
- Molecule 7: Photosystem II reaction center protein H



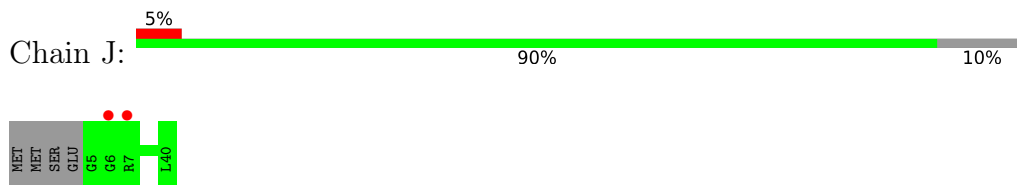
- Molecule 8: Photosystem II reaction center protein I



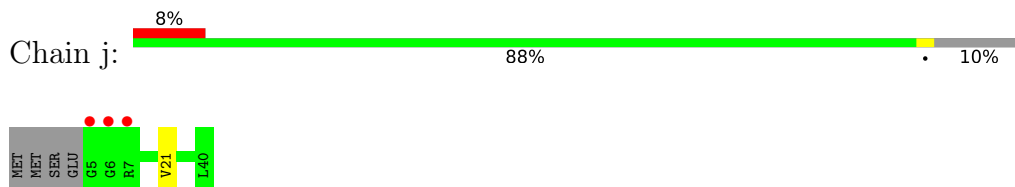
- Molecule 8: Photosystem II reaction center protein I



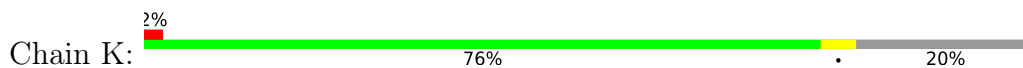
- Molecule 9: Photosystem II reaction center protein J

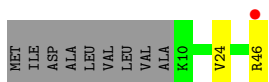


- Molecule 9: Photosystem II reaction center protein J

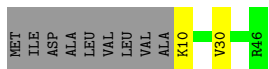
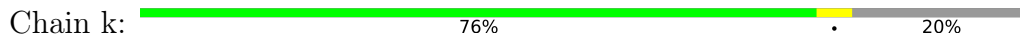


- Molecule 10: Photosystem II reaction center protein K





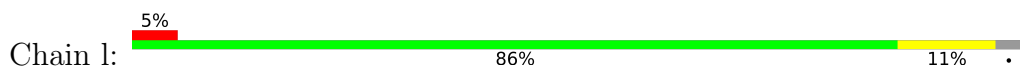
- Molecule 10: Photosystem II reaction center protein K



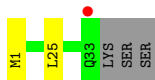
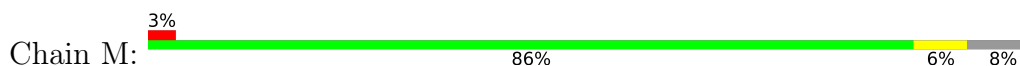
- Molecule 11: Photosystem II reaction center protein L



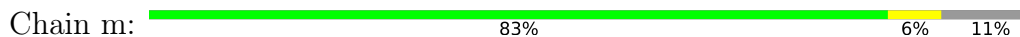
- Molecule 11: Photosystem II reaction center protein L



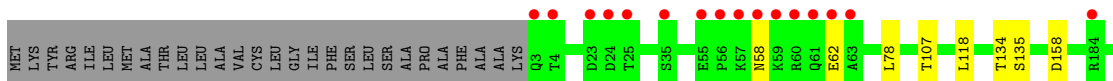
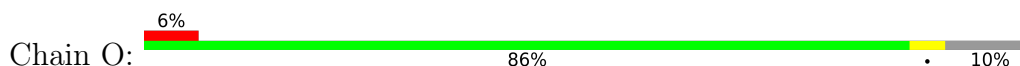
- Molecule 12: Photosystem II reaction center protein M



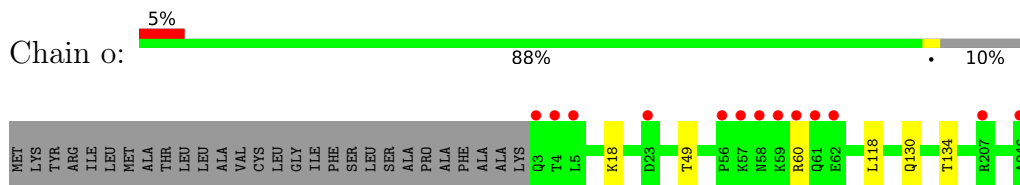
- Molecule 12: Photosystem II reaction center protein M



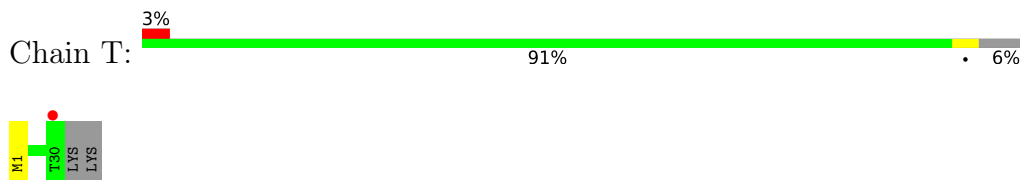
- Molecule 13: Photosystem II manganese-stabilizing polypeptide



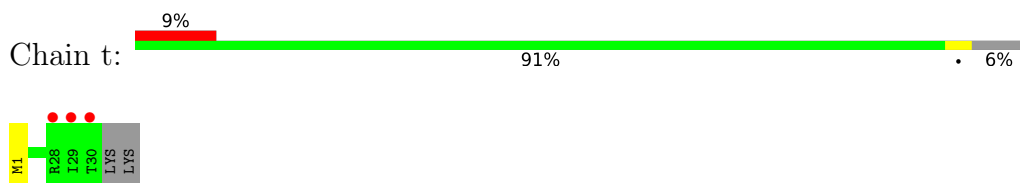
- Molecule 13: Photosystem II manganese-stabilizing polypeptide



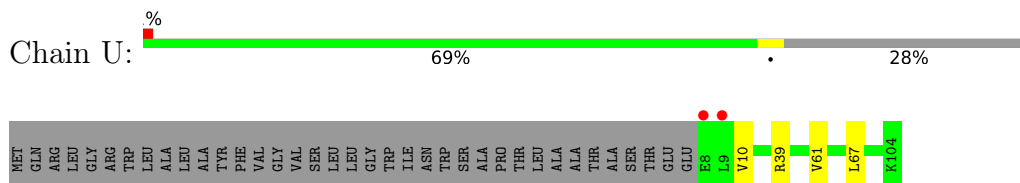
- Molecule 14: Photosystem II reaction center protein T



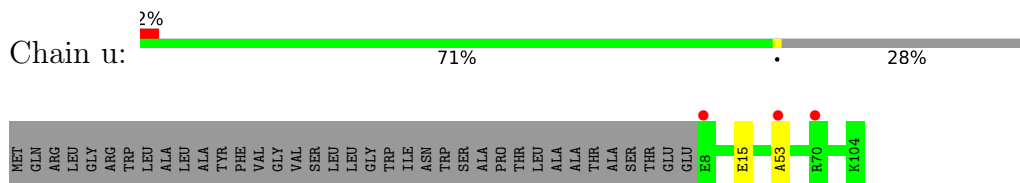
- Molecule 14: Photosystem II reaction center protein T



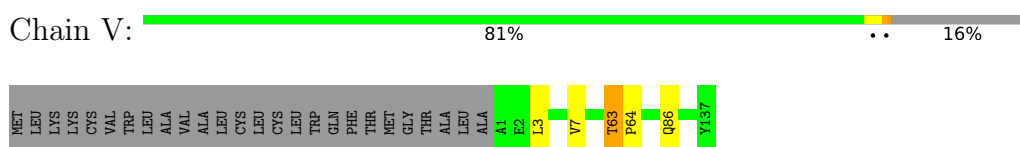
- Molecule 15: Photosystem II 12 kDa extrinsic protein



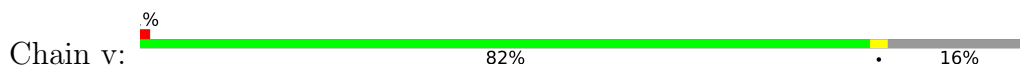
- Molecule 15: Photosystem II 12 kDa extrinsic protein

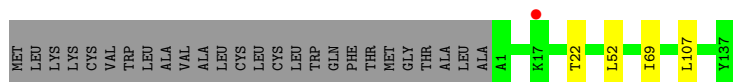


- Molecule 16: Cytochrome c-550

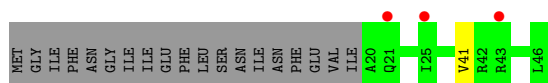


- Molecule 16: Cytochrome c-550

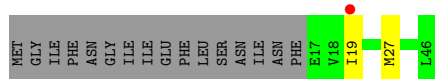




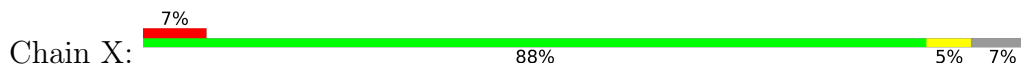
- Molecule 17: Photosystem II reaction center protein Ycf12



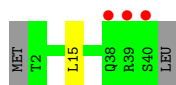
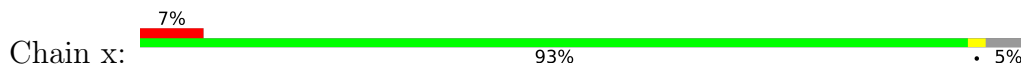
- Molecule 17: Photosystem II reaction center protein Ycf12



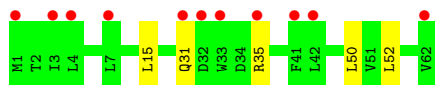
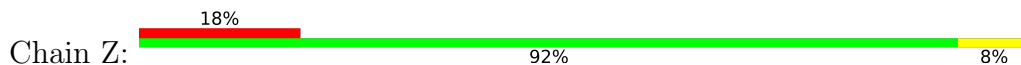
- Molecule 18: Photosystem II reaction center X protein



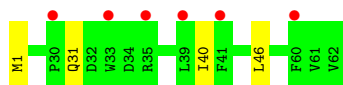
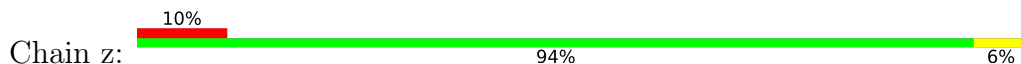
- Molecule 18: Photosystem II reaction center X protein



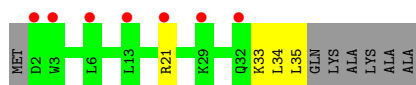
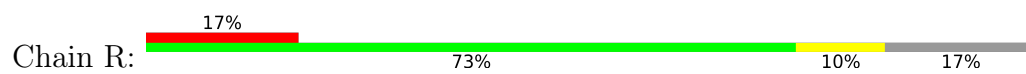
- Molecule 19: Photosystem II reaction center protein Z



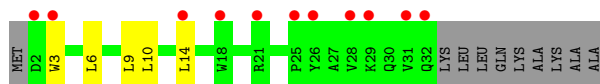
- Molecule 19: Photosystem II reaction center protein Z



- Molecule 20: Photosystem II protein Y



● Molecule 20: Photosystem II protein Y



4 Data and refinement statistics

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α , β , γ	117.34Å 222.83Å 309.19Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	19.74 – 2.00 19.74 – 2.00	Depositor EDS
% Data completeness (in resolution range)	99.3 (19.74-2.00) 84.5 (19.74-2.00)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$\langle I/\sigma(I) \rangle$ ¹	0.33 (at 2.01Å)	Xtrriage
Refinement program	PHENIX 1.19.2_4158	Depositor
R, R_{free}	0.182 , 0.226 0.182 , 0.226	Depositor DCC
R_{free} test set	4807 reflections (0.89%)	wwPDB-VP
Wilson B-factor (Å ²)	26.8	Xtrriage
Anisotropy	0.224	Xtrriage
Bulk solvent k_{sol} (e/Å ³), B_{sol} (Å ²)	0.27 , 64.7	EDS
L-test for twinning ²	$\langle L \rangle = 0.46$, $\langle L^2 \rangle = 0.28$	Xtrriage
Estimated twinning fraction	No twinning to report.	Xtrriage
F_o, F_c correlation	0.96	EDS
Total number of atoms	54524	wwPDB-VP
Average B, all atoms (Å ²)	40.0	wwPDB-VP

Xtrriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.65% of the height of the origin peak. No significant pseudotranslation is detected.*

¹Intensities estimated from amplitudes.

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

5 Model quality i

5.1 Standard geometry i

Bond lengths and bond angles in the following residue types are not validated in this section: HEM, DGD, SQD, PHO, OEY, LHG, CL, CLA, FME, STE, LMG, FE2, PL9, BCR, OEX, HEC, BCT

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	0.42	0/3717	0.57	0/5060
1	a	0.39	0/3714	0.57	0/5056
2	B	0.41	0/4155	0.58	0/5661
2	b	0.40	0/4118	0.57	0/5611
3	C	0.41	0/3711	0.55	0/5051
3	c	0.39	0/3791	0.56	0/5158
4	D	0.42	0/2838	0.57	0/3862
4	d	0.42	0/2847	0.58	0/3874
5	E	0.36	0/688	0.55	0/940
5	e	0.34	0/683	0.55	0/932
6	F	0.38	0/284	0.50	0/387
6	f	0.31	0/284	0.56	0/387
7	H	0.40	0/523	0.58	0/713
7	h	0.39	0/511	0.58	0/697
8	I	0.40	0/293	0.56	0/396
8	i	0.42	0/293	0.55	0/396
9	J	0.38	0/263	0.56	0/356
9	j	0.33	0/263	0.53	0/356
10	K	0.37	0/303	0.52	0/416
10	k	0.36	0/303	0.58	0/416
11	L	0.38	0/311	0.55	0/422
11	l	0.41	0/303	0.61	0/412
12	M	0.35	0/249	0.52	0/341
12	m	0.37	0/244	0.53	0/334
13	O	0.39	0/1904	0.62	1/2585 (0.0%)
13	o	0.37	0/1905	0.62	0/2583
14	T	0.43	0/257	0.60	0/349
14	t	0.45	0/255	0.54	0/346
15	U	0.36	0/785	0.57	0/1064
15	u	0.37	0/785	0.59	0/1064
16	V	0.36	0/1085	0.58	1/1473 (0.1%)

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
16	v	0.34	0/1085	0.56	0/1473
17	Y	0.30	0/197	0.52	0/264
17	y	0.30	0/219	0.48	0/294
18	X	0.36	0/284	0.51	0/384
18	x	0.30	0/289	0.46	0/391
19	Z	0.32	0/490	0.49	0/669
19	z	0.30	0/488	0.42	0/666
20	R	0.32	0/277	0.52	0/380
20	r	0.31	0/252	0.53	0/347
All	All	0.39	0/45246	0.57	2/61566 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
16	V	0	1

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	V	63	THR	C-N-CD	-5.42	108.69	120.60
13	O	158	ASP	CB-CG-OD1	5.13	122.92	118.30

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
16	V	63	THR	Peptide

5.2 Too-close contacts

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	458/344 (133%)	445 (97%)	12 (3%)	1 (0%)	47	44
1	a	458/344 (133%)	440 (96%)	17 (4%)	1 (0%)	47	44
2	B	507/510 (99%)	499 (98%)	8 (2%)	0	100	100
2	b	503/510 (99%)	493 (98%)	10 (2%)	0	100	100
3	C	461/461 (100%)	449 (97%)	11 (2%)	1 (0%)	47	44
3	c	471/461 (102%)	457 (97%)	13 (3%)	1 (0%)	47	44
4	D	341/352 (97%)	332 (97%)	9 (3%)	0	100	100
4	d	342/352 (97%)	332 (97%)	10 (3%)	0	100	100
5	E	81/84 (96%)	80 (99%)	1 (1%)	0	100	100
5	e	80/84 (95%)	80 (100%)	0	0	100	100
6	F	32/45 (71%)	32 (100%)	0	0	100	100
6	f	32/45 (71%)	32 (100%)	0	0	100	100
7	H	63/66 (96%)	59 (94%)	4 (6%)	0	100	100
7	h	61/66 (92%)	58 (95%)	3 (5%)	0	100	100
8	I	34/38 (90%)	33 (97%)	1 (3%)	0	100	100
8	i	34/38 (90%)	32 (94%)	2 (6%)	0	100	100
9	J	34/40 (85%)	32 (94%)	2 (6%)	0	100	100
9	j	34/40 (85%)	34 (100%)	0	0	100	100
10	K	35/46 (76%)	34 (97%)	1 (3%)	0	100	100
10	k	35/46 (76%)	35 (100%)	0	0	100	100
11	L	35/37 (95%)	35 (100%)	0	0	100	100
11	l	34/37 (92%)	34 (100%)	0	0	100	100
12	M	31/36 (86%)	31 (100%)	0	0	100	100
12	m	30/36 (83%)	29 (97%)	1 (3%)	0	100	100
13	O	243/272 (89%)	231 (95%)	9 (4%)	3 (1%)	13	7

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
13	o	242/272 (89%)	235 (97%)	7 (3%)	0	100	100
14	T	28/32 (88%)	28 (100%)	0	0	100	100
14	t	28/32 (88%)	27 (96%)	1 (4%)	0	100	100
15	U	95/134 (71%)	93 (98%)	2 (2%)	0	100	100
15	u	95/134 (71%)	90 (95%)	4 (4%)	1 (1%)	14	8
16	V	135/163 (83%)	131 (97%)	3 (2%)	1 (1%)	22	16
16	v	135/163 (83%)	130 (96%)	5 (4%)	0	100	100
17	Y	25/46 (54%)	25 (100%)	0	0	100	100
17	y	28/46 (61%)	27 (96%)	1 (4%)	0	100	100
18	X	36/41 (88%)	35 (97%)	1 (3%)	0	100	100
18	x	37/41 (90%)	37 (100%)	0	0	100	100
19	Z	60/62 (97%)	58 (97%)	2 (3%)	0	100	100
19	z	60/62 (97%)	60 (100%)	0	0	100	100
20	R	32/41 (78%)	31 (97%)	0	1 (3%)	4	1
20	r	29/41 (71%)	28 (97%)	1 (3%)	0	100	100
All	All	5534/5700 (97%)	5383 (97%)	141 (2%)	10 (0%)	47	44

All (10) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	416	SER
16	V	64	PRO
13	O	62	GLU
3	c	416	SER
15	u	53	ALA
13	O	58	ASN
13	O	134	THR
20	R	34	LEU
1	A	259	ILE
1	a	259	ILE

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	374/280 (134%)	370 (99%)	4 (1%)	73	78
1	a	373/280 (133%)	363 (97%)	10 (3%)	44	46
2	B	407/407 (100%)	400 (98%)	7 (2%)	60	65
2	b	402/407 (99%)	397 (99%)	5 (1%)	71	76
3	C	361/362 (100%)	358 (99%)	3 (1%)	81	86
3	c	370/362 (102%)	356 (96%)	14 (4%)	33	31
4	D	278/283 (98%)	275 (99%)	3 (1%)	73	78
4	d	279/283 (99%)	272 (98%)	7 (2%)	47	49
5	E	72/73 (99%)	69 (96%)	3 (4%)	30	27
5	e	71/73 (97%)	68 (96%)	3 (4%)	30	27
6	F	28/39 (72%)	28 (100%)	0	100	100
6	f	28/39 (72%)	27 (96%)	1 (4%)	35	34
7	H	54/55 (98%)	53 (98%)	1 (2%)	57	61
7	h	53/55 (96%)	50 (94%)	3 (6%)	20	16
8	I	32/34 (94%)	31 (97%)	1 (3%)	40	40
8	i	32/34 (94%)	30 (94%)	2 (6%)	18	13
9	J	24/28 (86%)	24 (100%)	0	100	100
9	j	24/28 (86%)	23 (96%)	1 (4%)	30	27
10	K	30/37 (81%)	28 (93%)	2 (7%)	16	11
10	k	30/37 (81%)	28 (93%)	2 (7%)	16	11
11	L	35/35 (100%)	35 (100%)	0	100	100
11	l	34/35 (97%)	30 (88%)	4 (12%)	5	3
12	M	28/32 (88%)	27 (96%)	1 (4%)	35	34
12	m	28/32 (88%)	26 (93%)	2 (7%)	14	10
13	O	206/228 (90%)	200 (97%)	6 (3%)	42	43
13	o	207/228 (91%)	201 (97%)	6 (3%)	42	43
14	T	26/28 (93%)	26 (100%)	0	100	100
14	t	25/28 (89%)	25 (100%)	0	100	100
15	U	84/112 (75%)	80 (95%)	4 (5%)	25	22
15	u	84/112 (75%)	83 (99%)	1 (1%)	71	76

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
16	V	117/138 (85%)	114 (97%)	3 (3%)	46	48
16	v	117/138 (85%)	113 (97%)	4 (3%)	37	36
17	Y	19/37 (51%)	18 (95%)	1 (5%)	22	18
17	y	22/37 (60%)	20 (91%)	2 (9%)	9	5
18	X	31/34 (91%)	29 (94%)	2 (6%)	17	12
18	x	31/34 (91%)	30 (97%)	1 (3%)	39	38
19	Z	52/52 (100%)	47 (90%)	5 (10%)	8	5
19	z	51/52 (98%)	47 (92%)	4 (8%)	12	8
20	R	28/33 (85%)	25 (89%)	3 (11%)	6	3
20	r	25/33 (76%)	20 (80%)	5 (20%)	1	0
All	All	4572/4654 (98%)	4446 (97%)	126 (3%)	43	44

All (126) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	12	ASN
1	A	205	VAL
1	A	238	LYS
1	A	243	GLU
2	B	127	ARG
2	B	289	GLN
2	B	297	THR
2	B	362	PHE
2	B	371	THR
2	B	405	GLU
2	B	476	ARG
3	C	141	GLU
3	C	289	PHE
3	C	315	MET
4	D	43	LEU
4	D	180	ARG
4	D	264	LYS
5	E	12	ASP
5	E	22[A]	ILE
5	E	22[B]	ILE
7	H	49	TYR
8	I	4	LEU
10	K	24	VAL

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Mol	Chain	Res	Type
10	K	46	ARG
12	M	25	LEU
13	O	78	LEU
13	O	107	THR
13	O	118	LEU
13	O	135	SER
13	O	214	THR
13	O	234	LYS
15	U	10	VAL
15	U	39	ARG
15	U	61	VAL
15	U	67	LEU
16	V	3	LEU
16	V	7	VAL
16	V	86	GLN
17	Y	41	VAL
18	X	15	LEU
18	X	23	LEU
19	Z	15	LEU
19	Z	31	GLN
19	Z	35	ARG
19	Z	50	LEU
19	Z	52	LEU
20	R	21	ARG
20	R	33	LYS
20	R	35	LEU
1	a	16	ARG
1	a	28	LEU
1	a	42	LEU
1	a	159[A]	LEU
1	a	159[B]	LEU
1	a	159[C]	LEU
1	a	200	LEU
1	a	223	LEU
1	a	245	THR
1	a	288	LEU
2	b	98	LEU
2	b	179	GLN
2	b	246	PHE
2	b	362	PHE
2	b	506	ARG
3	c	29	GLU

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Mol	Chain	Res	Type
3	c	30	SER
3	c	72	LEU
3	c	124	VAL
3	c	125	LEU
3	c	165	LEU
3	c	213	LEU
3	c	240	ILE
3	c	279	LEU
3	c	289	PHE
3	c	315	MET
3	c	391[A]	ARG
3	c	391[B]	ARG
3	c	416	SER
4	d	180	ARG
4	d	182	LEU
4	d	230	SER
4	d	259	ILE
4	d	291	LEU
4	d	307	GLU
4	d	321	LEU
5	e	4	THR
5	e	16	SER
5	e	83	LEU
6	f	28	VAL
7	h	7	LEU
7	h	49	TYR
7	h	56	ASP
8	i	2	GLU
8	i	34	ARG
9	j	21	VAL
10	k	10	LYS
10	k	30	VAL
11	l	2	GLU
11	l	7	ARG
11	l	21	LEU
11	l	30	LEU
12	m	5	GLN
12	m	13	LEU
13	o	18	LYS
13	o	49	THR
13	o	60	ARG
13	o	118	LEU

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Mol	Chain	Res	Type
13	o	130	GLN
13	o	134	THR
15	u	15	GLU
16	v	22	THR
16	v	52	LEU
16	v	69	ILE
16	v	107	LEU
17	y	19	ILE
17	y	27	MET
18	x	15	LEU
19	z	1	MET
19	z	31	GLN
19	z	40	ILE
19	z	46	LEU
20	r	3	TRP
20	r	6	LEU
20	r	9	LEU
20	r	10	LEU
20	r	14	LEU

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (22) such sidechains are listed below:

Mol	Chain	Res	Type
2	B	289	GLN
2	B	409	GLN
3	C	311	GLN
13	O	3	GLN
13	O	36	GLN
13	O	82	GLN
13	O	88	ASN
13	O	231	HIS
16	V	86	GLN
19	Z	38	GLN
20	R	32	GLN
1	a	234	ASN
2	b	409	GLN
2	b	490	GLN
2	b	497	GLN
3	c	28	GLN
3	c	311	GLN
5	e	60	GLN
12	m	5	GLN

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Mol	Chain	Res	Type
18	x	33	GLN
19	z	31	GLN
20	r	30	GLN

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

6 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	1.12	1 (12%)	7,9,11	1.01	0
12	FME	M	1	12	8,9,10	1.02	1 (12%)	7,9,11	0.98	0
14	FME	T	1	14	8,9,10	1.04	0	7,9,11	1.01	1 (14%)
12	FME	m	1	12	8,9,10	0.92	0	7,9,11	0.81	0
8	FME	I	1	8	8,9,10	0.92	0	7,9,11	0.88	0
8	FME	i	1	8	8,9,10	1.02	0	7,9,11	0.84	0

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	FME	t	1	14	-	2/7/9/11	-
12	FME	M	1	12	-	2/7/9/11	-
14	FME	T	1	14	-	1/7/9/11	-
12	FME	m	1	12	-	0/7/9/11	-
8	FME	I	1	8	-	0/7/9/11	-
8	FME	i	1	8	-	1/7/9/11	-

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
12	M	1	FME	CA-N	-2.09	1.43	1.46
14	t	1	FME	CA-N	-2.05	1.43	1.46

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	T	1	FME	C-CA-N	2.16	113.63	109.73

There are no chirality outliers.

All (6) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
8	i	1	FME	O-C-CA-CB
14	t	1	FME	O-C-CA-CB
14	T	1	FME	CB-CG-SD-CE
14	t	1	FME	CB-CG-SD-CE
12	M	1	FME	N-CA-CB-CG
12	M	1	FME	CB-CA-N-CN

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 190 ligands modelled in this entry, 6 are monoatomic - leaving 184 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
27	BCR	D	405	-	41,41,41	1.06	3 (7%)	56,56,56	1.16	5 (8%)
29	LMG	c	521	-	48,48,55	0.96	3 (6%)	56,56,63	1.28	7 (12%)
25	CLA	b	613	-	65,73,73	1.65	7 (10%)	76,113,113	1.32	9 (11%)
25	CLA	C	511	3	65,73,73	1.66	7 (10%)	76,113,113	1.57	6 (7%)
30	LHG	E	101	-	48,48,48	0.77	2 (4%)	51,54,54	1.23	6 (11%)
25	CLA	B	610	37	65,73,73	1.55	9 (13%)	76,113,113	1.34	11 (14%)
25	CLA	C	504	37	59,67,73	1.53	6 (10%)	68,105,113	1.39	9 (13%)
25	CLA	B	608	-	65,73,73	1.45	8 (12%)	76,113,113	1.51	8 (10%)
25	CLA	c	509	-	65,73,73	1.51	8 (12%)	76,113,113	1.53	8 (10%)
25	CLA	b	603	-	65,73,73	1.68	7 (10%)	76,113,113	1.54	11 (14%)
27	BCR	A	610	-	41,41,41	0.94	1 (2%)	56,56,56	1.11	4 (7%)
27	BCR	a	611	-	41,41,41	0.94	2 (4%)	56,56,56	1.23	6 (10%)
27	BCR	b	617	-	41,41,41	1.04	2 (4%)	56,56,56	1.08	5 (8%)
29	LMG	m	101	-	51,51,55	0.90	3 (5%)	59,59,63	1.47	6 (10%)
25	CLA	b	608	-	65,73,73	1.63	9 (13%)	76,113,113	1.35	7 (9%)
25	CLA	c	502	-	65,73,73	1.56	8 (12%)	76,113,113	1.36	9 (11%)
29	LMG	d	409	-	44,44,55	0.94	3 (6%)	52,52,63	1.29	7 (13%)
32	DGD	c	516	-	63,63,67	0.91	4 (6%)	77,77,81	1.39	11 (14%)
33	STE	C	521	-	15,15,19	0.37	0	14,14,19	0.79	0
33	STE	b	626	-	9,9,19	0.37	0	8,8,19	0.59	0
33	STE	t	102	-	13,13,19	0.64	0	13,13,19	1.33	2 (15%)
25	CLA	c	501	-	65,73,73	1.52	9 (13%)	76,113,113	1.50	8 (10%)
29	LMG	D	409	-	31,31,55	0.83	2 (6%)	33,33,63	1.26	3 (9%)
33	STE	t	104	-	17,17,19	0.64	0	17,17,19	1.11	1 (5%)
33	STE	B	625	-	11,11,19	0.67	0	11,11,19	1.31	2 (18%)
28	PL9	D	406	-	55,55,55	0.92	2 (3%)	68,69,69	1.75	12 (17%)
25	CLA	b	612	-	65,73,73	1.52	7 (10%)	76,113,113	1.51	11 (14%)
25	CLA	a	608	37	65,73,73	1.61	6 (9%)	76,113,113	1.43	13 (17%)
33	STE	b	625	-	19,19,19	0.58	0	19,19,19	1.08	1 (5%)
32	DGD	A	617	-	67,67,67	1.11	6 (8%)	81,81,81	1.31	9 (11%)
25	CLA	A	607	37	65,73,73	1.52	6 (9%)	76,113,113	1.48	13 (17%)
27	BCR	t	101	-	41,41,41	0.95	1 (2%)	56,56,56	1.38	9 (16%)
25	CLA	B	611	-	65,73,73	1.52	6 (9%)	76,113,113	1.45	9 (11%)
27	BCR	k	101	-	41,41,41	1.05	2 (4%)	56,56,56	1.05	3 (5%)
25	CLA	c	513	-	65,73,73	1.58	7 (10%)	76,113,113	1.44	12 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
28	PL9	A	611	-	55,55,55	0.78	1 (1%)	68,69,69	1.50	13 (19%)
25	CLA	c	510	-	65,73,73	1.58	6 (9%)	76,113,113	1.49	9 (11%)
33	STE	C	519	-	11,11,19	0.63	0	11,11,19	1.54	1 (9%)
28	PL9	d	405	-	55,55,55	1.01	3 (5%)	68,69,69	1.63	14 (20%)
33	STE	d	410	-	16,16,19	0.60	0	16,16,19	1.30	1 (6%)
26	PHO	A	608	-	51,69,69	0.96	2 (3%)	47,99,99	1.21	5 (10%)
25	CLA	b	602	-	65,73,73	1.56	8 (12%)	76,113,113	1.40	9 (11%)
25	CLA	b	607	-	65,73,73	1.55	6 (9%)	76,113,113	1.52	10 (13%)
25	CLA	A	606	-	65,73,73	1.52	8 (12%)	76,113,113	1.32	9 (11%)
25	CLA	B	613	-	65,73,73	1.51	6 (9%)	76,113,113	1.59	11 (14%)
25	CLA	C	506	-	65,73,73	1.47	7 (10%)	76,113,113	1.37	8 (10%)
32	DGD	C	517	-	63,63,67	0.90	2 (3%)	77,77,81	1.35	8 (10%)
30	LHG	B	622	-	48,48,48	0.70	1 (2%)	51,54,54	1.35	7 (13%)
33	STE	a	618	-	11,11,19	0.77	0	11,11,19	1.20	1 (9%)
36	HEC	v	201	16	32,50,50	2.05	3 (9%)	24,82,82	1.87	5 (20%)
25	CLA	B	612	-	65,73,73	1.48	6 (9%)	76,113,113	1.50	12 (15%)
27	BCR	B	617	-	41,41,41	1.00	3 (7%)	56,56,56	1.18	6 (10%)
25	CLA	b	611	-	65,73,73	1.59	8 (12%)	76,113,113	1.44	11 (14%)
25	CLA	b	615	-	60,68,73	1.52	6 (10%)	70,107,113	1.51	10 (14%)
30	LHG	d	407	-	38,38,48	0.75	1 (2%)	41,44,54	1.08	2 (4%)
31	SQD	B	623	-	53,54,54	1.54	9 (16%)	62,65,65	1.78	10 (16%)
25	CLA	c	506	-	65,73,73	1.59	8 (12%)	76,113,113	1.31	9 (11%)
33	STE	M	102	-	14,14,19	0.62	0	14,14,19	1.44	1 (7%)
21	OEX	a	601[C]	3,37,1	0,15,15	-	-	-	-	-
30	LHG	e	102	-	41,41,48	0.80	1 (2%)	44,47,54	1.28	5 (11%)
27	BCR	K	101	-	41,41,41	1.03	2 (4%)	56,56,56	1.24	6 (10%)
33	STE	I	101	-	14,14,19	0.32	0	13,13,19	0.81	0
25	CLA	C	501	-	65,73,73	1.76	9 (13%)	76,113,113	1.49	9 (11%)
33	STE	m	102	-	11,11,19	0.68	0	11,11,19	1.44	2 (18%)
25	CLA	B	606	-	65,73,73	1.64	9 (13%)	76,113,113	1.56	9 (11%)
32	DGD	c	517	-	63,63,67	0.95	2 (3%)	77,77,81	1.41	9 (11%)
25	CLA	b	601	-	65,73,73	1.46	7 (10%)	76,113,113	1.54	10 (13%)
25	CLA	c	504	37	60,68,73	1.50	5 (8%)	70,107,113	1.50	9 (12%)
34	BCT	a	606	23	2,3,3	1.22	0	2,3,3	3.13	1 (50%)
33	STE	c	520	-	19,19,19	0.59	0	19,19,19	1.04	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
33	STE	M	103	-	9,9,19	0.34	0	8,8,19	0.78	0
27	BCR	b	616	-	41,41,41	0.92	3 (7%)	56,56,56	1.20	4 (7%)
32	DGD	H	102	-	63,63,67	1.21	9 (14%)	77,77,81	1.33	8 (10%)
26	PHO	D	402	-	51,69,69	0.98	3 (5%)	47,99,99	1.34	6 (12%)
32	DGD	h	103	-	63,63,67	0.95	3 (4%)	77,77,81	1.42	12 (15%)
25	CLA	C	502	-	65,73,73	1.55	7 (10%)	76,113,113	1.24	8 (10%)
32	DGD	c	518	-	63,63,67	0.86	2 (3%)	77,77,81	1.37	8 (10%)
25	CLA	c	508	-	64,72,73	1.64	9 (14%)	74,111,113	1.48	9 (12%)
33	STE	j	101	-	11,11,19	0.76	0	11,11,19	1.30	2 (18%)
33	STE	B	624	-	11,11,19	0.74	0	11,11,19	1.24	0
25	CLA	C	509	-	65,73,73	1.60	10 (15%)	76,113,113	1.45	9 (11%)
35	HEM	F	101	6,5	41,50,50	1.47	4 (9%)	45,82,82	1.45	6 (13%)
25	CLA	B	615	-	65,73,73	1.50	8 (12%)	76,113,113	1.35	8 (10%)
29	LMG	A	613	-	48,48,55	0.89	3 (6%)	56,56,63	1.29	4 (7%)
33	STE	H	103	-	17,17,19	0.41	0	16,16,19	0.68	0
31	SQD	a	616	-	35,35,54	1.63	5 (14%)	37,37,65	1.42	6 (16%)
31	SQD	f	101	-	40,41,54	1.67	9 (22%)	49,52,65	1.71	10 (20%)
29	LMG	D	407	-	51,51,55	0.76	1 (1%)	59,59,63	1.34	8 (13%)
30	LHG	D	408	-	48,48,48	0.72	2 (4%)	51,54,54	1.28	6 (11%)
33	STE	B	626	-	15,15,19	0.35	0	14,14,19	0.91	0
26	PHO	d	401	-	51,69,69	0.95	2 (3%)	47,99,99	1.46	8 (17%)
35	HEM	e	101	6,5	41,50,50	1.45	5 (12%)	45,82,82	1.51	9 (20%)
22	OEY	a	602[A]	3,37,1	0,16,16	-	-	-	-	-
33	STE	t	103	-	9,9,19	0.34	0	8,8,19	0.79	0
27	BCR	C	514	-	41,41,41	1.03	2 (4%)	56,56,56	1.17	6 (10%)
25	CLA	c	503	-	65,73,73	1.66	8 (12%)	76,113,113	1.54	9 (11%)
25	CLA	b	614	-	65,73,73	1.46	8 (12%)	76,113,113	1.39	8 (10%)
27	BCR	k	102	-	41,41,41	0.99	2 (4%)	56,56,56	1.13	3 (5%)
27	BCR	c	514	-	41,41,41	1.04	2 (4%)	56,56,56	1.29	5 (8%)
33	STE	l	102	-	17,17,19	0.33	0	16,16,19	0.89	0
26	PHO	a	609	-	51,69,69	0.92	1 (1%)	47,99,99	1.06	4 (8%)
33	STE	E	102	-	11,11,19	0.73	0	11,11,19	1.14	0
33	STE	k	103	-	11,11,19	0.74	0	11,11,19	1.09	0
25	CLA	D	403	-	65,73,73	1.57	10 (15%)	76,113,113	1.36	7 (9%)
25	CLA	B	603	-	65,73,73	1.51	7 (10%)	76,113,113	1.29	7 (9%)
25	CLA	d	403	-	65,73,73	1.57	6 (9%)	76,113,113	1.40	7 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
36	HEC	V	201	16	32,50,50	1.94	3 (9%)	24,82,82	2.10	8 (33%)
27	BCR	c	515	-	41,41,41	1.09	2 (4%)	56,56,56	1.28	5 (8%)
27	BCR	h	102	-	41,41,41	0.97	1 (2%)	56,56,56	1.26	5 (8%)
33	STE	X	101	-	19,19,19	0.55	0	19,19,19	1.19	1 (5%)
25	CLA	B	616	-	60,68,73	1.74	8 (13%)	70,107,113	1.47	7 (10%)
25	CLA	b	604	-	65,73,73	1.53	7 (10%)	76,113,113	1.67	12 (15%)
29	LMG	M	101	-	51,51,55	0.86	3 (5%)	59,59,63	1.44	10 (16%)
29	LMG	d	408	-	21,21,55	0.55	0	20,20,63	1.20	3 (15%)
33	STE	B	620	-	16,16,19	0.68	0	16,16,19	1.07	0
33	STE	x	101	-	19,19,19	0.69	0	19,19,19	0.98	1 (5%)
25	CLA	a	610	-	65,73,73	1.62	6 (9%)	76,113,113	1.40	11 (14%)
21	OEX	A	601[C]	3,37,1	0,15,15	-	-	-	-	-
31	SQD	b	619	-	48,49,54	1.62	9 (18%)	57,60,65	1.78	10 (17%)
25	CLA	b	609	37	65,73,73	1.39	6 (9%)	76,113,113	1.41	9 (11%)
25	CLA	c	511	3	65,73,73	1.83	8 (12%)	76,113,113	1.53	7 (9%)
29	LMG	c	522	-	49,49,55	0.96	4 (8%)	57,57,63	1.29	4 (7%)
25	CLA	b	610	-	65,73,73	1.62	6 (9%)	76,113,113	1.45	10 (13%)
25	CLA	A	612	37	65,73,73	1.40	7 (10%)	76,113,113	1.44	9 (11%)
25	CLA	B	609	-	65,73,73	1.54	6 (9%)	76,113,113	1.44	8 (10%)
25	CLA	C	510	-	65,73,73	1.54	6 (9%)	76,113,113	1.45	9 (11%)
28	PL9	a	612	-	55,55,55	0.81	2 (3%)	68,69,69	1.59	12 (17%)
30	LHG	A	614	-	46,46,48	0.83	3 (6%)	49,52,54	1.18	6 (12%)
25	CLA	B	607	37	65,73,73	1.49	9 (13%)	76,113,113	1.43	6 (7%)
25	CLA	D	404	-	65,73,73	1.61	10 (15%)	76,113,113	1.28	10 (13%)
25	CLA	c	507	37	65,73,73	1.57	11 (16%)	76,113,113	1.52	10 (13%)
25	CLA	A	609	-	54,62,73	1.64	8 (14%)	62,99,113	1.59	9 (14%)
25	CLA	c	512	-	65,73,73	1.54	8 (12%)	76,113,113	1.43	9 (11%)
21	OEX	a	601[B]	3,37,1	0,15,15	-	-	-	-	-
27	BCR	K	103	-	41,41,41	1.07	2 (4%)	56,56,56	1.12	2 (3%)
27	BCR	B	619	-	41,41,41	1.00	2 (4%)	56,56,56	1.27	4 (7%)
29	LMG	c	519	-	37,37,55	1.02	2 (5%)	45,45,63	1.35	6 (13%)
25	CLA	C	508	-	65,73,73	1.55	8 (12%)	76,113,113	1.65	11 (14%)
25	CLA	a	607	-	65,73,73	1.62	8 (12%)	76,113,113	1.44	10 (13%)
27	BCR	T	101	-	41,41,41	0.94	2 (4%)	56,56,56	1.30	5 (8%)
29	LMG	C	518	-	48,48,55	0.74	1 (2%)	56,56,63	1.31	7 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
25	CLA	b	606	37	65,73,73	1.45	8 (12%)	76,113,113	1.36	6 (7%)
27	BCR	B	618	-	41,41,41	1.03	2 (4%)	56,56,56	1.25	8 (14%)
32	DGD	C	516	-	63,63,67	1.06	5 (7%)	77,77,81	1.34	9 (11%)
25	CLA	C	512	-	65,73,73	1.59	8 (12%)	76,113,113	1.47	9 (11%)
25	CLA	B	614	-	65,73,73	1.73	9 (13%)	76,113,113	1.48	7 (9%)
27	BCR	K	102	-	41,41,41	1.00	2 (4%)	56,56,56	1.09	5 (8%)
33	STE	b	621	-	19,19,19	0.63	0	19,19,19	0.95	0
25	CLA	B	605	-	65,73,73	1.47	5 (7%)	76,113,113	1.46	9 (11%)
25	CLA	h	101	37	65,73,73	1.70	10 (15%)	76,113,113	1.52	9 (11%)
25	CLA	b	605	-	65,73,73	1.62	6 (9%)	76,113,113	1.57	7 (9%)
31	SQD	A	615	-	51,52,54	1.54	7 (13%)	60,63,65	1.88	10 (16%)
32	DGD	C	515	-	63,63,67	1.04	5 (7%)	77,77,81	1.38	11 (14%)
29	LMG	b	622	-	55,55,55	0.81	2 (3%)	63,63,63	1.37	12 (19%)
27	BCR	H	101	-	41,41,41	0.95	2 (4%)	56,56,56	1.19	6 (10%)
31	SQD	F	102	-	35,36,54	1.50	6 (17%)	42,45,65	2.01	10 (23%)
33	STE	C	520	-	11,11,19	0.69	0	11,11,19	1.19	1 (9%)
25	CLA	C	503	-	65,73,73	1.71	9 (13%)	76,113,113	1.68	12 (15%)
29	LMG	B	621	-	26,26,55	0.59	1 (3%)	26,26,63	1.35	2 (7%)
25	CLA	C	513	-	65,73,73	1.54	7 (10%)	76,113,113	1.50	7 (9%)
30	LHG	a	614	-	48,48,48	0.75	3 (6%)	51,54,54	1.29	7 (13%)
30	LHG	d	406	-	48,48,48	0.69	2 (4%)	51,54,54	1.19	5 (9%)
31	SQD	a	615	-	53,54,54	1.56	7 (13%)	62,65,65	1.90	10 (16%)
22	OEY	A	602[A]	3,37,1	0,16,16	-	-	-	-	-
33	STE	b	623	-	15,15,19	0.67	0	15,15,19	1.05	0
30	LHG	L	101	-	48,48,48	0.73	1 (2%)	51,54,54	1.14	2 (3%)
25	CLA	B	602	-	65,73,73	1.59	7 (10%)	76,113,113	1.48	10 (13%)
25	CLA	B	601	37	65,73,73	1.68	8 (12%)	76,113,113	1.47	14 (18%)
25	CLA	a	613	37	65,73,73	1.67	8 (12%)	76,113,113	1.53	8 (10%)
25	CLA	C	507	37	65,73,73	1.58	8 (12%)	76,113,113	1.52	10 (13%)
32	DGD	a	617	-	43,43,67	0.79	3 (6%)	45,45,81	1.40	7 (15%)
27	BCR	d	404	-	41,41,41	1.10	2 (4%)	56,56,56	1.15	4 (7%)
33	STE	b	620	-	15,15,19	0.37	0	14,14,19	0.83	0
34	BCT	D	401	23	2,3,3	1.16	0	2,3,3	3.25	1 (50%)
33	STE	J	101	-	11,11,19	0.77	0	11,11,19	1.20	0
27	BCR	b	618	-	41,41,41	0.93	2 (4%)	56,56,56	1.10	4 (7%)
31	SQD	A	616	-	38,38,54	1.74	5 (13%)	40,40,65	1.19	2 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
25	CLA	d	402	-	65,73,73	1.43	7 (10%)	76,113,113	1.34	8 (10%)
25	CLA	B	604	-	65,73,73	1.63	7 (10%)	76,113,113	1.62	9 (11%)
30	LHG	l	101	-	48,48,48	0.57	0	51,54,54	1.20	5 (9%)
21	OEX	A	601[B]	3,37,1	0,15,15	-	-	-	-	-
25	CLA	C	505	-	65,73,73	1.56	6 (9%)	76,113,113	1.38	5 (6%)
33	STE	b	624	-	14,14,19	0.31	0	13,13,19	0.89	0
25	CLA	c	505	-	65,73,73	1.44	6 (9%)	76,113,113	1.36	7 (9%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	BCR	D	405	-	-	3/29/63/63	0/2/2/2
29	LMG	c	521	-	-	22/43/63/70	0/1/1/1
25	CLA	b	613	-	1/1/15/20	19/37/115/115	-
25	CLA	C	511	3	1/1/15/20	3/37/115/115	-
30	LHG	E	101	-	-	27/53/53/53	-
25	CLA	B	610	37	1/1/15/20	7/37/115/115	-
25	CLA	C	504	37	1/1/13/20	7/30/108/115	-
25	CLA	B	608	-	1/1/15/20	4/37/115/115	-
25	CLA	c	509	-	1/1/15/20	12/37/115/115	-
25	CLA	b	603	-	1/1/15/20	8/37/115/115	-
27	BCR	A	610	-	-	2/29/63/63	0/2/2/2
27	BCR	a	611	-	-	1/29/63/63	0/2/2/2
27	BCR	b	617	-	-	3/29/63/63	0/2/2/2
29	LMG	m	101	-	-	19/46/66/70	0/1/1/1
25	CLA	c	502	-	1/1/15/20	6/37/115/115	-
25	CLA	b	608	-	-	10/37/115/115	-
29	LMG	d	409	-	-	11/39/59/70	0/1/1/1
32	DGD	c	516	-	-	19/51/91/95	0/2/2/2
33	STE	C	521	-	-	8/13/13/17	-
33	STE	b	626	-	-	5/7/7/17	-
33	STE	t	102	-	-	4/11/11/17	-
25	CLA	c	501	-	1/1/15/20	6/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
29	LMG	D	409	-	-	19/33/33/70	-
33	STE	t	104	-	-	7/15/15/17	-
33	STE	B	625	-	-	4/9/9/17	-
28	PL9	D	406	-	-	12/53/73/73	0/1/1/1
25	CLA	b	612	-	1/1/15/20	4/37/115/115	-
25	CLA	a	608	37	1/1/15/20	12/37/115/115	-
33	STE	b	625	-	-	7/17/17/17	-
32	DGD	A	617	-	-	28/55/95/95	0/2/2/2
25	CLA	A	607	37	1/1/15/20	11/37/115/115	-
27	BCR	t	101	-	-	1/29/63/63	0/2/2/2
25	CLA	B	611	-	1/1/15/20	5/37/115/115	-
27	BCR	k	101	-	-	9/29/63/63	0/2/2/2
25	CLA	c	513	-	1/1/15/20	12/37/115/115	-
28	PL9	A	611	-	-	24/53/73/73	0/1/1/1
25	CLA	c	510	-	1/1/15/20	17/37/115/115	-
33	STE	C	519	-	-	5/9/9/17	-
28	PL9	d	405	-	-	7/53/73/73	0/1/1/1
33	STE	d	410	-	-	10/14/14/17	-
26	PHO	A	608	-	-	5/37/103/103	0/5/6/6
25	CLA	b	602	-	1/1/15/20	9/37/115/115	-
25	CLA	b	607	-	-	5/37/115/115	-
25	CLA	A	606	-	1/1/15/20	4/37/115/115	-
25	CLA	B	613	-	1/1/15/20	9/37/115/115	-
25	CLA	C	506	-	1/1/15/20	10/37/115/115	-
32	DGD	C	517	-	-	17/51/91/95	0/2/2/2
30	LHG	B	622	-	-	16/53/53/53	-
33	STE	a	618	-	-	5/9/9/17	-
36	HEC	v	201	16	-	2/10/54/54	-
25	CLA	B	612	-	1/1/15/20	9/37/115/115	-
27	BCR	B	617	-	-	2/29/63/63	0/2/2/2
25	CLA	b	611	-	1/1/15/20	5/37/115/115	-
25	CLA	b	615	-	1/1/14/20	6/31/109/115	-
30	LHG	d	407	-	-	11/43/43/53	-
31	SQD	B	623	-	-	20/49/69/69	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	c	506	-	1/1/15/20	13/37/115/115	-
33	STE	M	102	-	-	6/12/12/17	-
30	LHG	e	102	-	-	25/46/46/53	-
27	BCR	K	101	-	-	12/29/63/63	0/2/2/2
33	STE	I	101	-	-	5/12/12/17	-
25	CLA	C	501	-	1/1/15/20	6/37/115/115	-
33	STE	m	102	-	-	5/9/9/17	-
25	CLA	B	606	-	1/1/15/20	9/37/115/115	-
32	DGD	c	517	-	-	19/51/91/95	0/2/2/2
25	CLA	b	601	-	1/1/15/20	9/37/115/115	-
25	CLA	c	504	37	1/1/14/20	10/31/109/115	-
33	STE	c	520	-	-	13/17/17/17	-
33	STE	M	103	-	-	3/7/7/17	-
27	BCR	b	616	-	-	5/29/63/63	0/2/2/2
32	DGD	H	102	-	-	16/51/91/95	0/2/2/2
26	PHO	D	402	-	-	0/37/103/103	0/5/6/6
32	DGD	h	103	-	-	18/51/91/95	0/2/2/2
25	CLA	C	502	-	1/1/15/20	10/37/115/115	-
32	DGD	c	518	-	-	19/51/91/95	0/2/2/2
25	CLA	c	508	-	-	12/36/114/115	-
33	STE	j	101	-	-	4/9/9/17	-
33	STE	B	624	-	-	8/9/9/17	-
25	CLA	C	509	-	1/1/15/20	14/37/115/115	-
35	HEM	F	101	6,5	-	2/12/54/54	-
25	CLA	B	615	-	1/1/15/20	14/37/115/115	-
29	LMG	A	613	-	-	22/43/63/70	0/1/1/1
33	STE	H	103	-	-	11/15/15/17	-
31	SQD	a	616	-	-	17/37/37/69	-
31	SQD	f	101	-	-	14/36/56/69	0/1/1/1
29	LMG	D	407	-	-	19/46/66/70	0/1/1/1
30	LHG	D	408	-	-	19/53/53/53	-
33	STE	B	626	-	-	2/13/13/17	-
26	PHO	d	401	-	-	7/37/103/103	0/5/6/6
35	HEM	e	101	6,5	-	3/12/54/54	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
33	STE	t	103	-	-	4/7/7/17	-
27	BCR	C	514	-	-	3/29/63/63	0/2/2/2
25	CLA	c	503	-	1/1/15/20	9/37/115/115	-
25	CLA	b	614	-	1/1/15/20	9/37/115/115	-
27	BCR	k	102	-	-	4/29/63/63	0/2/2/2
27	BCR	c	514	-	-	9/29/63/63	0/2/2/2
33	STE	l	102	-	-	8/15/15/17	-
26	PHO	a	609	-	-	6/37/103/103	0/5/6/6
33	STE	E	102	-	-	7/9/9/17	-
33	STE	k	103	-	-	6/9/9/17	-
25	CLA	D	403	-	1/1/15/20	4/37/115/115	-
25	CLA	B	603	-	1/1/15/20	9/37/115/115	-
25	CLA	d	403	-	1/1/15/20	9/37/115/115	-
36	HEC	V	201	16	-	2/10/54/54	-
27	BCR	c	515	-	-	4/29/63/63	0/2/2/2
27	BCR	h	102	-	-	5/29/63/63	0/2/2/2
33	STE	X	101	-	-	8/17/17/17	-
25	CLA	B	616	-	1/1/14/20	13/31/109/115	-
25	CLA	b	604	-	1/1/15/20	8/37/115/115	-
29	LMG	M	101	-	-	23/46/66/70	0/1/1/1
29	LMG	d	408	-	-	11/17/17/70	-
33	STE	B	620	-	-	5/14/14/17	-
33	STE	x	101	-	-	11/17/17/17	-
25	CLA	a	610	-	1/1/15/20	10/37/115/115	-
31	SQD	b	619	-	-	21/44/64/69	0/1/1/1
25	CLA	b	609	37	1/1/15/20	4/37/115/115	-
25	CLA	c	511	3	1/1/15/20	10/37/115/115	-
29	LMG	c	522	-	-	24/44/64/70	0/1/1/1
25	CLA	b	610	-	-	6/37/115/115	-
25	CLA	A	612	37	1/1/15/20	6/37/115/115	-
25	CLA	B	609	-	-	4/37/115/115	-
25	CLA	C	510	-	1/1/15/20	15/37/115/115	-
28	PL9	a	612	-	-	13/53/73/73	0/1/1/1
30	LHG	A	614	-	-	18/51/51/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	B	607	37	1/1/15/20	8/37/115/115	-
25	CLA	D	404	-	-	11/37/115/115	-
25	CLA	c	507	37	1/1/15/20	9/37/115/115	-
25	CLA	A	609	-	1/1/12/20	2/24/102/115	-
25	CLA	c	512	-	1/1/15/20	19/37/115/115	-
27	BCR	K	103	-	-	5/29/63/63	0/2/2/2
27	BCR	B	619	-	-	4/29/63/63	0/2/2/2
29	LMG	c	519	-	-	13/31/51/70	0/1/1/1
25	CLA	a	607	-	1/1/15/20	2/37/115/115	-
25	CLA	C	508	-	-	9/37/115/115	-
27	BCR	T	101	-	-	4/29/63/63	0/2/2/2
29	LMG	C	518	-	-	18/43/63/70	0/1/1/1
25	CLA	b	606	37	1/1/15/20	12/37/115/115	-
27	BCR	B	618	-	-	5/29/63/63	0/2/2/2
32	DGD	C	516	-	-	17/51/91/95	0/2/2/2
25	CLA	C	512	-	1/1/15/20	13/37/115/115	-
25	CLA	B	614	-	1/1/15/20	10/37/115/115	-
27	BCR	K	102	-	-	7/29/63/63	0/2/2/2
33	STE	b	621	-	-	10/17/17/17	-
25	CLA	B	605	-	1/1/15/20	11/37/115/115	-
25	CLA	h	101	37	1/1/15/20	14/37/115/115	-
25	CLA	b	605	-	1/1/15/20	7/37/115/115	-
31	SQD	A	615	-	-	14/47/67/69	0/1/1/1
32	DGD	C	515	-	-	19/51/91/95	0/2/2/2
29	LMG	b	622	-	-	32/50/70/70	0/1/1/1
27	BCR	H	101	-	-	5/29/63/63	0/2/2/2
31	SQD	F	102	-	-	7/28/48/69	0/1/1/1
33	STE	C	520	-	-	3/9/9/17	-
25	CLA	C	503	-	1/1/15/20	5/37/115/115	-
29	LMG	B	621	-	-	7/22/22/70	-
25	CLA	C	513	-	1/1/15/20	9/37/115/115	-
30	LHG	a	614	-	-	21/53/53/53	-
30	LHG	d	406	-	-	21/53/53/53	-
31	SQD	a	615	-	-	22/49/69/69	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
33	STE	b	623	-	-	7/13/13/17	-
30	LHG	L	101	-	-	22/53/53/53	-
25	CLA	B	602	-	1/1/15/20	7/37/115/115	-
25	CLA	B	601	37	1/1/15/20	14/37/115/115	-
25	CLA	a	613	37	1/1/15/20	5/37/115/115	-
25	CLA	C	507	37	1/1/15/20	5/37/115/115	-
32	DGD	a	617	-	-	21/45/45/95	-
27	BCR	d	404	-	-	4/29/63/63	0/2/2/2
33	STE	b	620	-	-	8/13/13/17	-
33	STE	J	101	-	-	3/9/9/17	-
27	BCR	b	618	-	-	4/29/63/63	0/2/2/2
31	SQD	A	616	-	-	20/39/39/69	-
25	CLA	d	402	-	1/1/15/20	4/37/115/115	-
25	CLA	B	604	-	1/1/15/20	11/37/115/115	-
30	LHG	l	101	-	-	21/53/53/53	-
25	CLA	C	505	-	1/1/15/20	9/37/115/115	-
33	STE	b	624	-	-	9/12/12/17	-
25	CLA	c	505	-	1/1/15/20	12/37/115/115	-

All (740) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	511	CLA	MG-NA	8.45	2.26	2.06
25	a	610	CLA	C4B-NB	8.27	1.42	1.35
25	C	507	CLA	C4B-NB	8.24	1.42	1.35
25	h	101	CLA	C4B-NB	8.09	1.42	1.35
25	B	614	CLA	C4B-NB	8.08	1.42	1.35
25	d	403	CLA	C4B-NB	8.05	1.42	1.35
25	A	607	CLA	C4B-NB	8.00	1.42	1.35
25	b	603	CLA	C4B-NB	7.96	1.42	1.35
25	b	613	CLA	C4B-NB	7.88	1.42	1.35
25	B	601	CLA	C4B-NB	7.87	1.42	1.35
25	C	501	CLA	C4B-NB	7.83	1.42	1.35
25	C	509	CLA	C4B-NB	7.77	1.42	1.35
25	b	602	CLA	C4B-NB	7.75	1.42	1.35
25	C	510	CLA	C4B-NB	7.74	1.42	1.35
25	b	604	CLA	C4B-NB	7.70	1.42	1.35
25	a	608	CLA	C4B-NB	7.68	1.42	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	511	CLA	C4B-NB	7.68	1.42	1.35
25	A	609	CLA	C4B-NB	7.64	1.42	1.35
25	a	613	CLA	C4B-NB	7.63	1.42	1.35
25	B	602	CLA	C4B-NB	7.62	1.42	1.35
25	C	511	CLA	C4B-NB	7.59	1.42	1.35
25	b	608	CLA	C4B-NB	7.45	1.41	1.35
25	C	504	CLA	C4B-NB	7.44	1.41	1.35
25	c	512	CLA	C4B-NB	7.44	1.41	1.35
25	c	502	CLA	C4B-NB	7.43	1.41	1.35
25	C	502	CLA	C4B-NB	7.42	1.41	1.35
25	C	505	CLA	C4B-NB	7.41	1.41	1.35
25	B	611	CLA	C4B-NB	7.41	1.41	1.35
25	B	610	CLA	C4B-NB	7.38	1.41	1.35
25	c	509	CLA	C4B-NB	7.36	1.41	1.35
25	c	508	CLA	C4B-NB	7.35	1.41	1.35
25	b	610	CLA	C4B-NB	7.32	1.41	1.35
25	D	404	CLA	C4B-NB	7.31	1.41	1.35
25	B	609	CLA	C4B-NB	7.29	1.41	1.35
25	C	513	CLA	C4B-NB	7.27	1.41	1.35
25	b	611	CLA	C4B-NB	7.26	1.41	1.35
25	c	506	CLA	C4B-NB	7.25	1.41	1.35
25	b	607	CLA	C4B-NB	7.24	1.41	1.35
25	C	508	CLA	C4B-NB	7.23	1.41	1.35
25	b	615	CLA	C4B-NB	7.19	1.41	1.35
25	b	612	CLA	C4B-NB	7.17	1.41	1.35
25	a	607	CLA	C4B-NB	7.17	1.41	1.35
25	c	504	CLA	C4B-NB	7.16	1.41	1.35
25	B	613	CLA	C4B-NB	7.16	1.41	1.35
25	b	606	CLA	C4B-NB	7.10	1.41	1.35
25	B	612	CLA	C4B-NB	7.00	1.41	1.35
25	B	604	CLA	C4B-NB	6.98	1.41	1.35
25	c	513	CLA	C4B-NB	6.94	1.41	1.35
25	c	505	CLA	C4B-NB	6.92	1.41	1.35
25	B	608	CLA	C4B-NB	6.92	1.41	1.35
25	B	616	CLA	C4B-NB	6.89	1.41	1.35
25	b	601	CLA	C4B-NB	6.89	1.41	1.35
25	C	503	CLA	C4B-NB	6.86	1.41	1.35
25	c	503	CLA	C4B-NB	6.80	1.41	1.35
25	c	501	CLA	C4B-NB	6.75	1.41	1.35
25	b	605	CLA	MG-NA	6.73	2.22	2.06
25	b	614	CLA	C4B-NB	6.67	1.41	1.35
25	B	615	CLA	C4B-NB	6.67	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b	605	CLA	C4B-NB	6.66	1.41	1.35
25	D	403	CLA	C4B-NB	6.65	1.41	1.35
25	C	506	CLA	C4B-NB	6.55	1.41	1.35
25	c	510	CLA	MG-NA	6.55	2.21	2.06
25	c	507	CLA	C4B-NB	6.54	1.41	1.35
25	d	402	CLA	C4B-NB	6.54	1.41	1.35
25	B	603	CLA	C4B-NB	6.50	1.41	1.35
25	B	606	CLA	MG-NA	6.44	2.21	2.06
25	C	512	CLA	C4B-NB	6.43	1.40	1.35
25	b	603	CLA	MG-NA	6.40	2.21	2.06
25	b	609	CLA	C4B-NB	6.37	1.40	1.35
25	B	606	CLA	C4B-NB	6.35	1.40	1.35
36	v	201	HEC	C2B-C3B	-6.29	1.34	1.40
25	B	605	CLA	C4B-NB	6.29	1.40	1.35
25	B	616	CLA	MG-NA	6.27	2.21	2.06
25	A	612	CLA	C4B-NB	6.09	1.40	1.35
25	c	510	CLA	C4B-NB	6.02	1.40	1.35
25	B	614	CLA	MG-NA	5.90	2.20	2.06
25	c	503	CLA	MG-NA	5.88	2.20	2.06
25	C	511	CLA	MG-NA	5.74	2.19	2.06
36	V	201	HEC	C2B-C3B	-5.63	1.34	1.40
25	A	606	CLA	C4B-NB	5.61	1.40	1.35
25	C	501	CLA	MG-NA	5.59	2.19	2.06
31	A	616	SQD	O47-C45	-5.56	1.37	1.47
25	C	512	CLA	MG-NC	5.53	2.19	2.06
25	a	613	CLA	MG-NA	5.41	2.19	2.06
25	B	607	CLA	C4B-NB	5.13	1.39	1.35
25	B	601	CLA	MG-NA	5.12	2.18	2.06
25	b	610	CLA	MG-NA	5.11	2.18	2.06
25	C	503	CLA	MG-NC	5.08	2.18	2.06
31	a	615	SQD	O48-C23	5.08	1.48	1.33
25	B	604	CLA	MG-NC	5.07	2.18	2.06
36	v	201	HEC	C3D-C2D	5.00	1.52	1.37
25	h	101	CLA	MG-NA	5.00	2.18	2.06
25	c	507	CLA	MG-NA	4.99	2.18	2.06
31	b	619	SQD	O48-C23	4.98	1.47	1.33
36	V	201	HEC	C3D-C2D	4.98	1.52	1.37
31	B	623	SQD	O48-C23	4.92	1.47	1.33
25	C	505	CLA	MG-NA	4.92	2.18	2.06
25	A	606	CLA	MG-NA	4.87	2.17	2.06
36	v	201	HEC	C3C-C2C	-4.83	1.35	1.40
25	b	608	CLA	MG-NA	4.82	2.17	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	A	616	SQD	O48-C23	4.80	1.47	1.33
25	C	501	CLA	MG-ND	-4.76	1.96	2.05
36	V	201	HEC	C3C-C2C	-4.76	1.35	1.40
25	B	602	CLA	MG-NA	4.71	2.17	2.06
25	b	611	CLA	MG-ND	-4.70	1.96	2.05
25	b	607	CLA	MG-NA	4.70	2.17	2.06
25	c	513	CLA	MG-NA	4.68	2.17	2.06
25	a	607	CLA	MG-NA	4.65	2.17	2.06
31	F	102	SQD	O48-C23	4.65	1.46	1.33
25	D	403	CLA	MG-NA	4.64	2.17	2.06
25	a	610	CLA	C1D-ND	4.63	1.43	1.37
31	f	101	SQD	O48-C23	4.60	1.46	1.33
25	D	404	CLA	MG-NC	4.58	2.17	2.06
25	B	603	CLA	MG-NA	4.57	2.17	2.06
31	A	615	SQD	O48-C23	4.52	1.46	1.33
31	a	616	SQD	O48-C23	4.48	1.46	1.33
25	B	607	CLA	C1D-ND	4.36	1.43	1.37
25	a	608	CLA	C4D-ND	-4.35	1.31	1.37
25	B	611	CLA	C1D-ND	4.34	1.43	1.37
25	b	611	CLA	C1D-ND	4.34	1.43	1.37
25	b	609	CLA	C1D-ND	4.33	1.43	1.37
25	C	509	CLA	C1D-ND	4.32	1.43	1.37
35	F	101	HEM	C3C-C2C	-4.31	1.34	1.40
25	D	404	CLA	C1D-ND	4.31	1.43	1.37
25	B	601	CLA	C1D-ND	4.28	1.43	1.37
25	b	612	CLA	MG-NA	4.27	2.16	2.06
25	C	503	CLA	MG-ND	4.23	2.14	2.05
25	B	605	CLA	C1D-ND	4.21	1.43	1.37
25	C	507	CLA	MG-NA	4.20	2.16	2.06
25	C	501	CLA	C1D-ND	4.19	1.42	1.37
25	b	610	CLA	C1D-ND	4.19	1.42	1.37
25	B	604	CLA	MG-NA	4.18	2.16	2.06
25	c	503	CLA	C1D-ND	4.14	1.42	1.37
25	B	612	CLA	MG-ND	-4.13	1.97	2.05
25	B	613	CLA	MG-ND	-4.12	1.97	2.05
25	B	604	CLA	C1D-ND	4.12	1.42	1.37
25	B	605	CLA	MG-NA	4.12	2.16	2.06
25	A	609	CLA	C1D-ND	4.11	1.42	1.37
25	b	613	CLA	C1D-ND	4.07	1.42	1.37
25	a	610	CLA	MG-ND	-4.07	1.97	2.05
25	c	509	CLA	C1D-ND	4.06	1.42	1.37
25	c	513	CLA	C1D-ND	4.05	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	602	CLA	C1D-ND	4.02	1.42	1.37
25	c	512	CLA	C1D-ND	4.01	1.42	1.37
25	b	602	CLA	MG-NA	4.00	2.15	2.06
25	h	101	CLA	C1D-ND	4.00	1.42	1.37
25	b	604	CLA	C4D-ND	-3.98	1.32	1.37
25	B	609	CLA	C1D-ND	3.96	1.42	1.37
25	B	606	CLA	C1D-ND	3.92	1.42	1.37
25	C	513	CLA	C1D-ND	3.91	1.42	1.37
25	c	508	CLA	MG-NA	3.91	2.15	2.06
25	B	616	CLA	C1D-ND	3.90	1.42	1.37
25	B	615	CLA	MG-NA	3.89	2.15	2.06
25	C	503	CLA	C1D-ND	3.88	1.42	1.37
35	F	101	HEM	C3C-CAC	3.87	1.55	1.47
28	d	405	PL9	C6-C1	-3.87	1.41	1.48
25	C	502	CLA	C1D-ND	3.85	1.42	1.37
25	A	612	CLA	C1D-ND	3.84	1.42	1.37
25	a	613	CLA	C1D-ND	3.84	1.42	1.37
25	b	604	CLA	C1D-ND	3.83	1.42	1.37
25	d	402	CLA	C1D-ND	3.83	1.42	1.37
25	C	510	CLA	MG-NA	3.82	2.15	2.06
25	C	511	CLA	C1D-ND	3.82	1.42	1.37
25	c	502	CLA	C1D-ND	3.81	1.42	1.37
25	b	606	CLA	C1D-ND	3.81	1.42	1.37
27	c	515	BCR	C1-C6	-3.81	1.48	1.53
25	A	606	CLA	C1D-ND	3.81	1.42	1.37
32	A	617	DGD	C4D-C3D	3.78	1.62	1.52
25	b	603	CLA	C1D-ND	3.78	1.42	1.37
25	c	508	CLA	C1D-ND	3.77	1.42	1.37
25	b	607	CLA	CHC-C1C	3.76	1.44	1.35
25	B	607	CLA	MG-NA	3.74	2.15	2.06
25	b	613	CLA	CHC-C1C	3.72	1.44	1.35
25	C	512	CLA	C1D-ND	3.72	1.42	1.37
25	D	403	CLA	C1D-ND	3.71	1.42	1.37
25	B	615	CLA	C1D-ND	3.71	1.42	1.37
25	a	607	CLA	C1D-ND	3.71	1.42	1.37
25	a	608	CLA	C1D-ND	3.69	1.42	1.37
31	f	101	SQD	O47-C7	3.69	1.44	1.34
25	c	511	CLA	C1D-ND	3.68	1.42	1.37
31	a	616	SQD	O47-C7	3.68	1.44	1.34
25	c	507	CLA	C1D-ND	3.68	1.42	1.37
25	B	603	CLA	C1D-ND	3.67	1.42	1.37
25	b	608	CLA	C1D-ND	3.67	1.42	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b	612	CLA	C1D-ND	3.65	1.42	1.37
25	h	101	CLA	CHC-C1C	3.65	1.44	1.35
25	c	506	CLA	C1D-ND	3.65	1.42	1.37
25	b	601	CLA	C1D-ND	3.64	1.42	1.37
31	B	623	SQD	O47-C7	3.63	1.44	1.34
25	C	503	CLA	C4D-ND	-3.63	1.32	1.37
25	b	615	CLA	C1D-ND	3.63	1.42	1.37
25	A	607	CLA	C4D-ND	-3.62	1.32	1.37
25	C	513	CLA	MG-NA	3.61	2.14	2.06
31	A	615	SQD	O47-C45	-3.60	1.37	1.46
25	c	508	CLA	CHC-C1C	3.60	1.44	1.35
25	a	608	CLA	CHC-C1C	3.60	1.44	1.35
31	b	619	SQD	O47-C7	3.59	1.44	1.34
25	C	506	CLA	C1D-ND	3.59	1.42	1.37
25	c	502	CLA	MG-NA	3.58	2.14	2.06
25	c	511	CLA	CHC-C1C	3.57	1.44	1.35
25	C	509	CLA	MG-NA	3.56	2.14	2.06
25	b	614	CLA	MG-NA	3.55	2.14	2.06
25	c	508	CLA	C4D-ND	-3.55	1.32	1.37
31	A	616	SQD	O47-C7	3.54	1.44	1.34
25	a	607	CLA	MG-NC	3.54	2.14	2.06
32	H	102	DGD	O5D-C1E	3.53	1.46	1.40
25	C	505	CLA	CHC-C1C	3.53	1.44	1.35
25	C	503	CLA	MG-NA	3.53	2.14	2.06
25	b	614	CLA	C1D-ND	3.52	1.42	1.37
25	b	613	CLA	MG-NA	3.51	2.14	2.06
25	C	508	CLA	MG-NA	3.49	2.14	2.06
25	c	506	CLA	CHC-C1C	3.49	1.43	1.35
25	c	512	CLA	CHC-C1C	3.49	1.43	1.35
25	B	614	CLA	C4D-ND	-3.48	1.32	1.37
25	b	610	CLA	CHC-C1C	3.48	1.43	1.35
25	c	503	CLA	C4D-ND	-3.48	1.32	1.37
25	A	606	CLA	MG-ND	-3.47	1.98	2.05
25	c	501	CLA	C1D-ND	3.46	1.42	1.37
27	d	404	BCR	C30-C25	-3.46	1.49	1.53
25	c	501	CLA	MG-ND	-3.46	1.98	2.05
25	B	609	CLA	MG-NC	3.45	2.14	2.06
35	e	101	HEM	C3C-CAC	3.44	1.54	1.47
25	C	501	CLA	CHC-C1C	3.43	1.43	1.35
35	e	101	HEM	C3C-C2C	-3.43	1.35	1.40
25	A	606	CLA	C4D-ND	-3.42	1.33	1.37
25	C	510	CLA	C4D-ND	-3.42	1.33	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	512	CLA	C4D-ND	-3.42	1.33	1.37
25	b	613	CLA	MG-ND	-3.41	1.99	2.05
25	B	611	CLA	MG-NA	3.41	2.14	2.06
25	C	510	CLA	CHC-C1C	3.41	1.43	1.35
25	C	510	CLA	C1D-ND	3.41	1.42	1.37
25	c	509	CLA	MG-NA	3.41	2.14	2.06
25	b	604	CLA	CHC-C1C	3.40	1.43	1.35
25	B	612	CLA	C1D-ND	3.40	1.42	1.37
27	d	404	BCR	C1-C6	-3.40	1.49	1.53
25	a	613	CLA	CHC-C1C	3.39	1.43	1.35
25	C	503	CLA	CHC-C1C	3.39	1.43	1.35
25	c	510	CLA	C4D-ND	-3.38	1.33	1.37
25	C	506	CLA	C4D-ND	-3.38	1.33	1.37
25	B	606	CLA	CHC-C1C	3.38	1.43	1.35
25	b	612	CLA	C4D-ND	-3.38	1.33	1.37
25	B	612	CLA	C4D-ND	-3.38	1.33	1.37
25	c	506	CLA	MG-NA	3.38	2.14	2.06
25	b	608	CLA	C4D-ND	-3.37	1.33	1.37
27	B	618	BCR	C30-C25	-3.37	1.49	1.53
25	B	610	CLA	C1D-ND	3.37	1.41	1.37
31	b	619	SQD	O5-C1	3.36	1.50	1.41
25	c	505	CLA	C4D-ND	-3.36	1.33	1.37
25	c	504	CLA	C4D-ND	-3.35	1.33	1.37
25	b	611	CLA	CHC-C1C	3.35	1.43	1.35
31	A	615	SQD	C24-C23	3.32	1.60	1.50
25	c	506	CLA	MG-ND	-3.32	1.99	2.05
25	C	511	CLA	CHC-C1C	3.32	1.43	1.35
25	b	605	CLA	C1D-ND	3.31	1.41	1.37
25	A	606	CLA	CHC-C1C	3.31	1.43	1.35
25	C	507	CLA	C1D-ND	3.31	1.41	1.37
25	c	501	CLA	CHC-C1C	3.31	1.43	1.35
25	A	607	CLA	CHC-C1C	3.30	1.43	1.35
25	c	504	CLA	CHC-C1C	3.30	1.43	1.35
25	C	504	CLA	C1D-ND	3.30	1.41	1.37
27	K	102	BCR	C1-C6	-3.30	1.49	1.53
25	c	502	CLA	C4D-ND	-3.30	1.33	1.37
25	C	508	CLA	CHC-C1C	3.29	1.43	1.35
25	A	607	CLA	C1D-ND	3.29	1.41	1.37
27	k	101	BCR	C30-C25	-3.29	1.49	1.53
31	a	615	SQD	O47-C45	-3.28	1.38	1.46
25	b	601	CLA	C4D-ND	-3.27	1.33	1.37
25	C	508	CLA	C1D-ND	3.27	1.41	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	C	514	BCR	C1-C6	-3.27	1.49	1.53
25	b	607	CLA	C1D-ND	3.27	1.41	1.37
25	B	611	CLA	CHC-C1C	3.26	1.43	1.35
25	D	403	CLA	MG-NC	3.25	2.14	2.06
25	b	615	CLA	C4D-ND	-3.25	1.33	1.37
25	b	602	CLA	C1D-ND	3.25	1.41	1.37
25	D	403	CLA	CHC-C1C	3.24	1.43	1.35
25	B	605	CLA	C4D-ND	-3.24	1.33	1.37
27	B	617	BCR	C1-C6	-3.24	1.49	1.53
27	K	103	BCR	C30-C25	-3.24	1.49	1.53
25	C	508	CLA	C4D-ND	-3.24	1.33	1.37
25	C	505	CLA	C4D-ND	-3.23	1.33	1.37
31	a	615	SQD	O47-C7	3.23	1.43	1.34
25	C	507	CLA	CHC-C1C	3.23	1.43	1.35
25	c	507	CLA	CHC-C1C	3.22	1.43	1.35
25	d	403	CLA	CHC-C1C	3.22	1.43	1.35
25	a	608	CLA	MG-NC	3.22	2.13	2.06
25	B	608	CLA	C4D-ND	-3.21	1.33	1.37
25	B	613	CLA	C4D-ND	-3.21	1.33	1.37
25	b	601	CLA	CHC-C1C	3.21	1.43	1.35
25	A	612	CLA	CHC-C1C	3.20	1.43	1.35
25	B	615	CLA	CHC-C1C	3.19	1.43	1.35
25	A	612	CLA	C4D-ND	-3.19	1.33	1.37
27	k	101	BCR	C1-C6	-3.18	1.49	1.53
25	B	607	CLA	MG-NC	3.17	2.13	2.06
31	F	102	SQD	C24-C23	3.17	1.60	1.50
25	C	506	CLA	MG-ND	-3.17	1.99	2.05
27	K	101	BCR	C30-C25	-3.17	1.49	1.53
27	K	103	BCR	C1-C6	-3.16	1.49	1.53
25	a	607	CLA	C4D-ND	-3.16	1.33	1.37
27	D	405	BCR	C30-C25	-3.16	1.49	1.53
32	A	617	DGD	C4D-C5D	3.16	1.59	1.53
25	b	602	CLA	C4D-ND	-3.15	1.33	1.37
25	B	613	CLA	C1D-ND	3.15	1.41	1.37
25	B	612	CLA	CHC-C1C	3.14	1.43	1.35
25	B	616	CLA	C4D-ND	-3.13	1.33	1.37
25	C	504	CLA	CHC-C1C	3.13	1.43	1.35
28	a	612	PL9	C7-C3	-3.13	1.48	1.51
25	B	615	CLA	C4D-ND	-3.13	1.33	1.37
31	f	101	SQD	C24-C23	3.12	1.59	1.50
32	C	516	DGD	C4D-C3D	3.12	1.60	1.52
25	c	513	CLA	MG-ND	-3.12	1.99	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	d	402	CLA	MG-NC	3.12	2.13	2.06
25	c	503	CLA	CHC-C1C	3.12	1.43	1.35
25	C	506	CLA	CHC-C1C	3.12	1.43	1.35
25	B	614	CLA	C1D-ND	3.11	1.41	1.37
25	a	607	CLA	CHC-C1C	3.11	1.42	1.35
25	c	505	CLA	CHC-C1C	3.11	1.42	1.35
25	C	512	CLA	CHC-C1C	3.11	1.42	1.35
25	B	608	CLA	C1D-ND	3.11	1.41	1.37
25	d	403	CLA	C1D-ND	3.10	1.41	1.37
25	c	505	CLA	C1D-ND	3.10	1.41	1.37
25	B	614	CLA	MG-ND	-3.09	1.99	2.05
25	B	610	CLA	CHC-C1C	3.09	1.42	1.35
31	B	623	SQD	O5-C1	3.09	1.49	1.41
31	B	623	SQD	O47-C45	-3.09	1.38	1.46
25	c	510	CLA	C1D-ND	3.08	1.41	1.37
25	B	614	CLA	CHC-C1C	3.07	1.42	1.35
31	A	616	SQD	C24-C23	3.07	1.59	1.50
25	B	608	CLA	CHC-C1C	3.07	1.42	1.35
25	D	403	CLA	C4D-ND	-3.07	1.33	1.37
28	D	406	PL9	C6-C1	-3.07	1.43	1.48
25	B	604	CLA	CHC-C1C	3.07	1.42	1.35
25	B	605	CLA	CHC-C1C	3.07	1.42	1.35
25	C	502	CLA	C4D-ND	-3.07	1.33	1.37
29	d	409	LMG	C4-C5	3.06	1.59	1.53
25	C	513	CLA	C4D-ND	-3.06	1.33	1.37
31	a	616	SQD	C24-C23	3.06	1.59	1.50
31	a	615	SQD	O5-C1	3.05	1.49	1.41
25	C	502	CLA	CHC-C1C	3.04	1.42	1.35
25	b	603	CLA	C4D-ND	-3.04	1.33	1.37
25	A	609	CLA	CHC-C1C	3.04	1.42	1.35
25	B	616	CLA	CHC-C1C	3.04	1.42	1.35
25	B	610	CLA	MG-NA	3.04	2.13	2.06
25	B	603	CLA	CHC-C1C	3.04	1.42	1.35
25	c	510	CLA	CHC-C1C	3.03	1.42	1.35
27	c	514	BCR	C1-C6	-3.03	1.49	1.53
25	B	607	CLA	MG-ND	-3.03	1.99	2.05
25	C	513	CLA	CHC-C1C	3.02	1.42	1.35
25	b	614	CLA	CHC-C1C	3.02	1.42	1.35
25	c	513	CLA	CHC-C1C	3.02	1.42	1.35
32	H	102	DGD	C6D-C5D	3.02	1.61	1.51
31	a	615	SQD	C24-C23	3.02	1.59	1.50
32	a	617	DGD	O1G-C1A	3.01	1.42	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	512	CLA	C4D-ND	-3.01	1.33	1.37
25	b	603	CLA	CHC-C1C	3.01	1.42	1.35
25	C	509	CLA	CHC-C1C	3.00	1.42	1.35
25	B	613	CLA	CHC-C1C	2.99	1.42	1.35
25	d	402	CLA	CHC-C1C	2.99	1.42	1.35
31	a	616	SQD	O47-C45	-2.99	1.39	1.46
25	c	508	CLA	MG-ND	2.98	2.11	2.05
25	B	602	CLA	CHC-C1C	2.98	1.42	1.35
25	C	509	CLA	C4D-ND	-2.98	1.33	1.37
25	b	605	CLA	C4D-ND	-2.98	1.33	1.37
35	F	101	HEM	CAB-C3B	2.97	1.55	1.47
32	H	102	DGD	C4E-C5E	2.97	1.59	1.53
25	C	505	CLA	C1D-ND	2.96	1.41	1.37
27	b	617	BCR	C30-C25	-2.96	1.49	1.53
25	B	601	CLA	CHC-C1C	2.96	1.42	1.35
25	C	505	CLA	MG-ND	-2.96	1.99	2.05
25	d	403	CLA	C4D-ND	-2.94	1.33	1.37
25	B	606	CLA	C4D-ND	-2.94	1.33	1.37
25	B	608	CLA	MG-NA	2.93	2.13	2.06
25	b	605	CLA	CHC-C1C	2.93	1.42	1.35
31	f	101	SQD	O47-C45	-2.93	1.39	1.46
32	C	515	DGD	O2G-C2G	-2.93	1.39	1.46
25	b	602	CLA	CHC-C1C	2.93	1.42	1.35
32	h	103	DGD	C4D-C3D	2.92	1.59	1.52
25	b	608	CLA	CHC-C1C	2.91	1.42	1.35
25	A	612	CLA	MG-NA	2.90	2.13	2.06
25	c	506	CLA	C4D-ND	-2.90	1.33	1.37
25	b	607	CLA	C4D-ND	-2.90	1.33	1.37
29	c	522	LMG	C4-C5	2.90	1.59	1.53
27	T	101	BCR	C30-C25	-2.89	1.49	1.53
25	c	513	CLA	C4D-ND	-2.89	1.33	1.37
31	f	101	SQD	O5-C1	2.88	1.49	1.41
30	L	101	LHG	O7-C5	-2.88	1.39	1.46
25	a	610	CLA	CHC-C1C	2.88	1.42	1.35
25	b	612	CLA	CHC-C1C	2.88	1.42	1.35
25	b	615	CLA	CHC-C1C	2.88	1.42	1.35
27	A	610	BCR	C1-C6	-2.88	1.49	1.53
29	c	521	LMG	C4-C3	2.88	1.59	1.52
25	b	609	CLA	C4D-ND	-2.87	1.33	1.37
30	A	614	LHG	P-O6	2.87	1.70	1.59
25	b	606	CLA	CHC-C1C	2.87	1.42	1.35
29	m	101	LMG	O7-C8	-2.85	1.39	1.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	B	619	BCR	C1-C6	-2.85	1.49	1.53
25	c	502	CLA	CHC-C1C	2.85	1.42	1.35
29	c	521	LMG	C3-C2	2.85	1.59	1.52
27	b	617	BCR	C1-C6	-2.85	1.49	1.53
25	c	509	CLA	C4D-ND	-2.85	1.33	1.37
25	B	610	CLA	CMB-C2B	-2.84	1.45	1.51
25	a	613	CLA	MG-NC	2.84	2.13	2.06
25	c	509	CLA	CHC-C1C	2.84	1.42	1.35
25	b	611	CLA	C4D-ND	-2.84	1.33	1.37
25	b	609	CLA	CHC-C1C	2.84	1.42	1.35
27	k	102	BCR	C1-C6	-2.83	1.49	1.53
25	b	601	CLA	MG-ND	2.83	2.11	2.05
27	h	102	BCR	C30-C25	-2.83	1.49	1.53
25	C	501	CLA	C4D-ND	-2.82	1.33	1.37
25	b	614	CLA	C4D-ND	-2.82	1.33	1.37
31	A	615	SQD	O47-C7	2.82	1.42	1.34
25	A	609	CLA	C4D-ND	-2.82	1.33	1.37
31	b	619	SQD	C24-C23	2.82	1.58	1.50
31	A	615	SQD	O5-C1	2.82	1.49	1.41
29	c	519	LMG	C4-C5	2.82	1.59	1.53
25	B	610	CLA	C3B-C2B	-2.82	1.36	1.40
30	E	101	LHG	P-O6	2.82	1.70	1.59
27	H	101	BCR	C30-C25	-2.81	1.49	1.53
25	B	610	CLA	C4D-ND	-2.81	1.33	1.37
31	F	102	SQD	O5-C1	2.80	1.49	1.41
32	C	515	DGD	C4E-C3E	2.79	1.59	1.52
30	B	622	LHG	O7-C5	-2.79	1.39	1.46
25	B	606	CLA	C3B-CAB	-2.79	1.42	1.47
27	a	611	BCR	C1-C6	-2.78	1.49	1.53
25	C	511	CLA	C4D-ND	-2.78	1.33	1.37
25	d	403	CLA	MG-NA	2.77	2.12	2.06
25	c	501	CLA	C4D-ND	-2.77	1.33	1.37
27	B	619	BCR	C30-C25	-2.74	1.50	1.53
32	c	516	DGD	C4E-C3E	2.74	1.59	1.52
27	D	405	BCR	C1-C6	-2.73	1.50	1.53
32	c	518	DGD	C4D-C5D	2.73	1.58	1.53
35	e	101	HEM	FE-NB	2.73	2.10	1.96
27	K	102	BCR	C30-C25	-2.72	1.50	1.53
27	c	515	BCR	C30-C25	-2.72	1.50	1.53
25	B	611	CLA	C4D-ND	-2.72	1.33	1.37
25	B	609	CLA	MG-NA	2.72	2.12	2.06
29	b	622	LMG	C4-C3	2.72	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
27	C	514	BCR	C30-C25	-2.71	1.50	1.53
27	b	618	BCR	C1-C6	-2.71	1.50	1.53
25	C	507	CLA	C4D-ND	-2.70	1.34	1.37
31	b	619	SQD	O47-C45	-2.69	1.39	1.46
25	c	501	CLA	MG-NA	2.69	2.12	2.06
25	c	504	CLA	C1D-ND	2.69	1.41	1.37
25	b	606	CLA	C4D-ND	-2.67	1.34	1.37
25	B	604	CLA	C4D-ND	-2.67	1.34	1.37
25	B	609	CLA	CHC-C1C	2.66	1.41	1.35
25	c	510	CLA	CMB-C2B	-2.66	1.46	1.51
29	A	613	LMG	C1-C2	2.66	1.60	1.52
27	c	514	BCR	C30-C25	-2.64	1.50	1.53
25	b	615	CLA	MG-NA	2.63	2.12	2.06
25	D	404	CLA	C4D-ND	-2.63	1.34	1.37
25	b	612	CLA	CMB-C2B	-2.63	1.46	1.51
25	B	609	CLA	C4D-ND	-2.63	1.34	1.37
29	D	409	LMG	C9-C8	2.62	1.58	1.50
25	B	616	CLA	MG-ND	2.62	2.11	2.05
25	c	512	CLA	CMB-C2B	-2.62	1.46	1.51
25	c	505	CLA	MG-NA	2.61	2.12	2.06
25	C	512	CLA	CMB-C2B	-2.61	1.46	1.51
35	e	101	HEM	CAB-C3B	2.61	1.54	1.47
25	C	512	CLA	MG-ND	-2.61	2.00	2.05
31	B	623	SQD	C24-C23	2.61	1.58	1.50
29	c	522	LMG	C3-C2	2.60	1.59	1.52
32	C	516	DGD	C1G-C2G	2.60	1.58	1.50
25	B	603	CLA	C4D-ND	-2.59	1.34	1.37
25	C	504	CLA	C4D-ND	-2.58	1.34	1.37
31	A	616	SQD	C46-C45	2.58	1.56	1.50
32	C	516	DGD	C4E-C3E	2.57	1.58	1.52
27	K	101	BCR	C1-C6	-2.57	1.50	1.53
25	b	608	CLA	MG-ND	-2.57	2.00	2.05
25	c	507	CLA	C4D-ND	-2.56	1.34	1.37
30	e	102	LHG	P-O6	2.56	1.69	1.59
25	B	607	CLA	CHC-C1C	2.55	1.41	1.35
25	b	602	CLA	CMB-C2B	-2.55	1.46	1.51
28	d	405	PL9	C3-C4	-2.54	1.45	1.49
30	D	408	LHG	O7-C5	-2.54	1.40	1.46
25	b	613	CLA	C4D-ND	-2.54	1.34	1.37
32	H	102	DGD	C1E-C2E	2.53	1.59	1.52
25	B	607	CLA	C4D-ND	-2.52	1.34	1.37
32	h	103	DGD	C1E-C2E	2.51	1.59	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	B	601	CLA	CMB-C2B	-2.51	1.46	1.51
25	c	505	CLA	CMB-C2B	-2.51	1.46	1.51
28	d	405	PL9	C31-C29	-2.51	1.46	1.51
25	C	508	CLA	MG-ND	2.50	2.10	2.05
30	d	406	LHG	O8-C6	-2.50	1.39	1.45
25	C	508	CLA	MG-NC	2.50	2.12	2.06
32	c	517	DGD	C3E-C2E	2.50	1.58	1.52
25	C	509	CLA	CMB-C2B	-2.50	1.46	1.51
25	a	613	CLA	C1B-NB	2.49	1.37	1.35
32	c	518	DGD	O2G-C2G	-2.48	1.40	1.46
25	b	606	CLA	MG-NC	2.48	2.12	2.06
25	b	607	CLA	CMB-C2B	-2.48	1.46	1.51
25	D	404	CLA	CHC-C1C	2.47	1.41	1.35
25	D	404	CLA	CMB-C2B	-2.47	1.46	1.51
32	C	515	DGD	C3E-C2E	2.47	1.58	1.52
29	D	409	LMG	C7-C8	2.47	1.57	1.51
26	D	402	PHO	CAC-C3C	-2.47	1.47	1.52
25	B	610	CLA	MG-ND	-2.46	2.00	2.05
25	C	502	CLA	CMC-C2C	-2.46	1.45	1.50
26	d	401	PHO	CAC-C3C	-2.46	1.47	1.52
25	C	513	CLA	MG-NC	2.46	2.12	2.06
32	C	515	DGD	C3G-C2G	2.45	1.58	1.50
29	m	101	LMG	C4-C3	2.45	1.58	1.52
25	D	404	CLA	MG-NA	2.44	2.12	2.06
25	C	511	CLA	CMB-C2B	-2.44	1.46	1.51
29	c	522	LMG	C4-C3	2.43	1.58	1.52
25	C	502	CLA	CMB-C2B	-2.43	1.46	1.51
27	b	616	BCR	C1-C6	-2.43	1.50	1.53
30	A	614	LHG	O3-C3	-2.42	1.35	1.44
25	c	509	CLA	CMB-C2B	-2.42	1.46	1.51
25	B	601	CLA	MG-ND	-2.42	2.01	2.05
32	c	516	DGD	C3G-C2G	2.42	1.58	1.50
25	b	610	CLA	C4D-ND	-2.42	1.34	1.37
25	h	101	CLA	C4D-ND	-2.41	1.34	1.37
25	a	607	CLA	CMB-C2B	-2.41	1.46	1.51
25	B	603	CLA	CMB-C2B	-2.40	1.46	1.51
25	B	602	CLA	C4D-ND	-2.40	1.34	1.37
27	B	617	BCR	C30-C25	-2.40	1.50	1.53
25	C	512	CLA	CMD-C2D	-2.40	1.45	1.50
30	d	407	LHG	P-O6	2.40	1.69	1.59
25	A	606	CLA	C1B-NB	2.39	1.37	1.35
25	c	507	CLA	MG-ND	2.39	2.10	2.05

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	C	504	CLA	CMB-C2B	-2.39	1.46	1.51
25	b	611	CLA	CMB-C2B	-2.39	1.46	1.51
32	C	516	DGD	O2G-C2G	-2.39	1.40	1.46
25	c	506	CLA	MG-NC	2.39	2.11	2.06
25	b	615	CLA	CMB-C2B	-2.39	1.46	1.51
25	b	606	CLA	CMB-C2B	-2.39	1.46	1.51
25	B	602	CLA	CMB-C2B	-2.38	1.46	1.51
25	C	513	CLA	CMB-C2B	-2.38	1.46	1.51
25	B	613	CLA	CMB-C2B	-2.38	1.46	1.51
25	c	507	CLA	CMB-C2B	-2.38	1.46	1.51
29	M	101	LMG	O7-C8	-2.37	1.40	1.46
25	b	608	CLA	CMB-C2B	-2.37	1.46	1.51
30	a	614	LHG	P-O6	2.37	1.68	1.59
25	B	611	CLA	CMB-C2B	-2.37	1.46	1.51
25	b	605	CLA	CMB-C2B	-2.35	1.46	1.51
25	b	613	CLA	CMC-C2C	-2.35	1.45	1.50
32	C	516	DGD	C1E-C2E	2.35	1.59	1.52
29	d	409	LMG	C7-C8	2.35	1.57	1.50
25	c	501	CLA	MG-NC	2.35	2.11	2.06
28	A	611	PL9	C53-C6	-2.34	1.45	1.50
25	c	503	CLA	CMB-C2B	-2.34	1.46	1.51
30	D	408	LHG	P-O6	2.34	1.68	1.59
25	c	503	CLA	MG-NC	2.34	2.11	2.06
27	t	101	BCR	C30-C25	-2.33	1.50	1.53
25	B	608	CLA	CMB-C2B	-2.32	1.46	1.51
27	T	101	BCR	C1-C6	-2.32	1.50	1.53
31	b	619	SQD	C6-S	2.32	1.85	1.77
29	m	101	LMG	O1-C7	-2.32	1.39	1.43
25	D	404	CLA	C3B-C2B	-2.32	1.37	1.40
25	a	608	CLA	CMB-C2B	-2.32	1.46	1.51
30	d	406	LHG	O7-C5	-2.31	1.40	1.46
27	H	101	BCR	C1-C6	-2.31	1.50	1.53
29	c	519	LMG	C1-C2	2.31	1.59	1.52
25	a	613	CLA	CMB-C2B	-2.31	1.46	1.51
25	c	502	CLA	CMB-C2B	-2.29	1.46	1.51
25	c	507	CLA	C3B-CAB	-2.29	1.43	1.47
32	A	617	DGD	C3G-C2G	2.29	1.57	1.50
26	A	608	PHO	CMC-C2C	-2.28	1.46	1.51
25	c	507	CLA	C3B-C2B	-2.28	1.37	1.40
25	c	512	CLA	MG-ND	-2.28	2.01	2.05
25	B	615	CLA	CMB-C2B	-2.28	1.46	1.51
28	D	406	PL9	C26-C24	-2.28	1.46	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	506	CLA	CMB-C2B	-2.28	1.46	1.51
31	f	101	SQD	O9-S	2.27	1.51	1.45
30	a	614	LHG	O7-C5	-2.27	1.40	1.46
31	b	619	SQD	O9-S	2.27	1.51	1.45
27	k	102	BCR	C30-C25	-2.27	1.50	1.53
25	b	606	CLA	MG-NA	2.27	2.11	2.06
25	b	602	CLA	CMD-C2D	-2.27	1.46	1.50
30	a	614	LHG	C24-C23	2.27	1.57	1.50
25	b	614	CLA	CMD-C2D	-2.27	1.46	1.50
25	C	506	CLA	CMB-C2B	-2.27	1.46	1.51
32	H	102	DGD	C4E-C3E	2.26	1.58	1.52
25	b	614	CLA	CMB-C2B	-2.26	1.46	1.51
25	D	403	CLA	CMB-C2B	-2.25	1.47	1.51
25	c	511	CLA	C4D-ND	-2.25	1.34	1.37
30	E	101	LHG	O7-C5	-2.25	1.41	1.46
29	M	101	LMG	O1-C7	-2.25	1.39	1.43
29	c	522	LMG	O8-C9	-2.25	1.40	1.45
27	B	617	BCR	C33-C5	-2.24	1.47	1.50
25	a	610	CLA	CMC-C2C	-2.24	1.46	1.50
25	c	513	CLA	CMB-C2B	-2.24	1.47	1.51
29	D	407	LMG	C4-C5	2.24	1.57	1.53
25	A	607	CLA	CMB-C2B	-2.23	1.47	1.51
32	A	617	DGD	C6E-C5E	2.23	1.59	1.51
25	d	403	CLA	CMB-C2B	-2.23	1.47	1.51
25	A	612	CLA	C1D-C2D	2.23	1.49	1.45
32	h	103	DGD	C6D-C5D	2.23	1.58	1.51
25	B	604	CLA	C1B-NB	2.23	1.37	1.35
25	b	603	CLA	CMB-C2B	-2.23	1.47	1.51
25	c	512	CLA	C1D-C2D	2.23	1.49	1.45
31	b	619	SQD	C46-C45	2.22	1.57	1.50
25	d	402	CLA	CMB-C2B	-2.22	1.47	1.51
29	M	101	LMG	O8-C9	-2.22	1.40	1.45
25	C	501	CLA	C1D-C2D	2.22	1.49	1.45
25	B	607	CLA	C1B-NB	2.22	1.37	1.35
26	d	401	PHO	CMD-C2D	-2.21	1.46	1.51
32	C	515	DGD	C4E-C5E	2.21	1.57	1.53
32	c	516	DGD	C4D-C3D	2.21	1.58	1.52
25	b	604	CLA	C3D-C4D	2.21	1.49	1.44
31	f	101	SQD	O7-S	2.21	1.51	1.45
25	A	609	CLA	CMB-C2B	-2.20	1.47	1.51
25	B	612	CLA	CMB-C2B	-2.20	1.47	1.51
25	C	508	CLA	CMB-C2B	-2.20	1.47	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	508	CLA	CMB-C2B	-2.20	1.47	1.51
32	a	617	DGD	C1G-C2G	2.20	1.57	1.50
25	b	609	CLA	C3B-C2B	-2.20	1.37	1.40
27	B	618	BCR	C1-C6	-2.20	1.50	1.53
26	a	609	PHO	CAC-C3C	-2.20	1.48	1.52
25	B	607	CLA	CMB-C2B	-2.19	1.47	1.51
25	B	616	CLA	C1B-NB	2.19	1.37	1.35
25	a	613	CLA	C4D-ND	-2.19	1.34	1.37
31	a	615	SQD	O7-S	2.19	1.51	1.45
32	A	617	DGD	O1G-C1G	-2.19	1.40	1.45
25	c	504	CLA	CMB-C2B	-2.19	1.47	1.51
25	B	614	CLA	MG-NC	2.19	2.11	2.06
25	C	504	CLA	CMD-C2D	-2.19	1.46	1.50
27	b	616	BCR	C30-C25	-2.18	1.50	1.53
25	c	501	CLA	CMB-C2B	-2.18	1.47	1.51
25	B	614	CLA	C3B-CAB	-2.17	1.43	1.47
31	B	623	SQD	O9-S	2.17	1.51	1.45
25	h	101	CLA	C1B-NB	2.17	1.37	1.35
25	a	607	CLA	MG-ND	-2.17	2.01	2.05
30	A	614	LHG	O7-C7	2.17	1.40	1.34
25	C	509	CLA	CMC-C2C	-2.17	1.46	1.50
25	h	101	CLA	CMC-C2C	-2.16	1.46	1.50
25	b	611	CLA	CMC-C2C	-2.16	1.46	1.50
31	a	616	SQD	C44-C45	2.16	1.56	1.51
25	B	608	CLA	CMD-C2D	-2.16	1.46	1.50
27	a	611	BCR	C30-C25	-2.16	1.50	1.53
25	b	611	CLA	MG-NC	2.16	2.11	2.06
25	c	507	CLA	C3D-C4D	2.16	1.49	1.44
32	a	617	DGD	O2G-C1B	2.16	1.40	1.34
32	c	517	DGD	C1E-C2E	2.15	1.58	1.52
25	h	101	CLA	CMB-C2B	-2.15	1.47	1.51
31	F	102	SQD	O5-C5	2.15	1.49	1.44
25	B	608	CLA	CMC-C2C	-2.14	1.46	1.50
31	F	102	SQD	O9-S	2.14	1.51	1.45
25	B	603	CLA	CMC-C2C	-2.14	1.46	1.50
25	C	507	CLA	CMB-C2B	-2.14	1.47	1.51
29	c	521	LMG	C1-C2	2.13	1.58	1.52
25	b	610	CLA	MG-NC	2.13	2.11	2.06
25	d	402	CLA	CMD-C2D	-2.13	1.46	1.50
25	b	604	CLA	CMB-C2B	-2.13	1.47	1.51
25	C	509	CLA	MG-ND	-2.13	2.01	2.05
25	d	402	CLA	C4D-ND	-2.13	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	D	404	CLA	CMD-C2D	-2.13	1.46	1.50
26	D	402	PHO	O2D-CGD	2.12	1.38	1.33
25	C	506	CLA	C3B-C2B	-2.12	1.37	1.40
32	H	102	DGD	C4D-C5D	2.12	1.57	1.53
31	B	623	SQD	O7-S	2.11	1.51	1.45
25	B	602	CLA	C1B-NB	2.11	1.37	1.35
27	b	618	BCR	C30-C25	-2.11	1.50	1.53
32	H	102	DGD	O2G-C2G	-2.10	1.41	1.46
25	c	502	CLA	MG-ND	-2.10	2.01	2.05
25	c	511	CLA	CMD-C2D	-2.10	1.46	1.50
25	A	607	CLA	CMD-C2D	-2.10	1.46	1.50
31	B	623	SQD	C46-C45	2.10	1.57	1.50
25	B	614	CLA	CMB-C2B	-2.10	1.47	1.51
25	C	503	CLA	CMB-C2B	-2.09	1.47	1.51
25	B	601	CLA	C1D-C2D	2.09	1.49	1.45
32	A	617	DGD	O2G-C2G	-2.09	1.41	1.46
31	A	615	SQD	C6-S	2.09	1.85	1.77
31	f	101	SQD	O5-C5	2.09	1.49	1.44
25	A	606	CLA	CMC-C2C	-2.08	1.46	1.50
31	b	619	SQD	O5-C5	2.08	1.49	1.44
29	d	409	LMG	O7-C8	-2.08	1.41	1.46
25	D	403	CLA	CMC-C2C	-2.08	1.46	1.50
25	C	509	CLA	C3D-C4D	2.08	1.48	1.44
25	b	609	CLA	CMD-C2D	-2.08	1.46	1.50
32	H	102	DGD	C1G-C2G	2.08	1.57	1.50
25	B	616	CLA	CMC-C2C	-2.07	1.46	1.50
25	C	501	CLA	CMD-C2D	-2.07	1.46	1.50
35	F	101	HEM	CMD-C2D	2.07	1.55	1.50
25	c	511	CLA	CMB-C2B	-2.07	1.47	1.51
25	b	606	CLA	CMD-C2D	-2.07	1.46	1.50
25	a	610	CLA	C4D-ND	-2.07	1.34	1.37
25	C	509	CLA	O2D-CGD	2.07	1.38	1.33
26	D	402	PHO	CMB-C2B	-2.07	1.46	1.51
31	A	615	SQD	C8-C7	2.07	1.56	1.50
29	A	613	LMG	O1-C1	2.07	1.43	1.40
25	c	501	CLA	CMC-C2C	-2.06	1.46	1.50
32	c	516	DGD	O2G-C2G	-2.06	1.41	1.46
25	b	601	CLA	C1D-C2D	2.06	1.49	1.45
25	A	609	CLA	C3D-C4D	2.06	1.48	1.44
25	B	610	CLA	C1D-C2D	2.06	1.49	1.45
25	c	508	CLA	C3C-C2C	2.05	1.41	1.36
25	c	503	CLA	CMC-C2C	-2.05	1.46	1.50

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	c	509	CLA	MG-ND	-2.05	2.01	2.05
25	b	603	CLA	C3D-C4D	2.05	1.48	1.44
32	C	517	DGD	O2G-C2G	-2.05	1.41	1.46
25	B	601	CLA	C3D-C4D	2.05	1.48	1.44
25	b	602	CLA	CMC-C2C	-2.05	1.46	1.50
25	c	512	CLA	C3D-C4D	2.05	1.48	1.44
29	A	613	LMG	C7-C8	2.05	1.57	1.50
25	B	615	CLA	CMD-C2D	-2.05	1.46	1.50
25	c	507	CLA	CMC-C2C	-2.05	1.46	1.50
25	B	606	CLA	CMD-C2D	-2.04	1.46	1.50
25	C	502	CLA	MG-NC	2.04	2.11	2.06
27	D	405	BCR	C38-C26	-2.04	1.47	1.50
25	A	612	CLA	CMB-C2B	-2.04	1.47	1.51
25	D	404	CLA	C3D-C4D	2.04	1.48	1.44
25	c	502	CLA	CMC-C2C	-2.04	1.46	1.50
31	a	615	SQD	C46-C45	2.03	1.56	1.50
26	A	608	PHO	CMD-C2D	-2.03	1.46	1.51
25	b	608	CLA	O2D-CGD	2.03	1.38	1.33
31	F	102	SQD	O7-S	2.03	1.51	1.45
25	h	101	CLA	O2A-CGA	2.03	1.39	1.33
25	C	507	CLA	C3C-C2C	2.03	1.41	1.36
25	C	507	CLA	CMD-C2D	-2.02	1.46	1.50
25	A	609	CLA	MG-ND	-2.02	2.01	2.05
25	b	604	CLA	MG-NC	2.02	2.11	2.06
29	B	621	LMG	O8-C28	2.02	1.37	1.30
35	e	101	HEM	C3B-C2B	-2.02	1.33	1.37
25	c	508	CLA	CMD-C2D	-2.02	1.46	1.50
31	f	101	SQD	C46-C45	2.02	1.56	1.50
32	C	517	DGD	C1G-C2G	2.02	1.56	1.50
25	C	510	CLA	CMD-C2D	-2.02	1.46	1.50
25	D	403	CLA	CMD-C2D	-2.02	1.46	1.50
25	c	511	CLA	C1B-NB	2.02	1.37	1.35
28	a	612	PL9	C53-C6	-2.02	1.46	1.50
29	b	622	LMG	C9-C8	2.02	1.56	1.50
25	C	501	CLA	C3B-C2B	-2.02	1.37	1.40
25	B	615	CLA	CMC-C2C	-2.02	1.46	1.50
25	A	609	CLA	C4B-CHC	-2.02	1.35	1.41
31	B	623	SQD	C6-S	2.01	1.84	1.77
25	c	509	CLA	CMD-C2D	-2.01	1.46	1.50
25	h	101	CLA	C1D-C2D	2.01	1.49	1.45
29	C	518	LMG	C7-C8	2.01	1.56	1.50
25	B	606	CLA	CMB-C2B	-2.01	1.47	1.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
25	b	614	CLA	C3B-CAB	-2.01	1.43	1.47
25	D	403	CLA	C1B-NB	2.01	1.37	1.35
25	C	503	CLA	CMD-C2D	-2.01	1.46	1.50
32	H	102	DGD	O2D-C2D	-2.01	1.38	1.43
25	B	606	CLA	C3B-C2B	-2.01	1.37	1.40
25	C	511	CLA	CMD-C2D	-2.01	1.46	1.50
25	b	608	CLA	CMC-C2C	-2.01	1.46	1.50
27	b	616	BCR	C33-C5	-2.00	1.47	1.50
25	b	612	CLA	CMD-C2D	-2.00	1.46	1.50
25	b	601	CLA	CMD-C2D	-2.00	1.46	1.50

All (1156) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B	604	CLA	C4A-NA-C1A	9.11	110.80	106.71
25	C	511	CLA	C4A-NA-C1A	8.61	110.58	106.71
25	c	511	CLA	C4A-NA-C1A	8.59	110.57	106.71
25	b	605	CLA	C4A-NA-C1A	8.42	110.49	106.71
25	C	508	CLA	C4A-NA-C1A	8.25	110.41	106.71
25	C	503	CLA	C4A-NA-C1A	8.01	110.31	106.71
25	B	606	CLA	C4A-NA-C1A	7.95	110.28	106.71
25	c	507	CLA	C4A-NA-C1A	7.95	110.28	106.71
25	C	513	CLA	C4A-NA-C1A	7.83	110.23	106.71
25	b	604	CLA	C4A-NA-C1A	7.82	110.22	106.71
25	c	509	CLA	C4A-NA-C1A	7.71	110.17	106.71
25	B	614	CLA	C4A-NA-C1A	7.59	110.12	106.71
25	b	603	CLA	C4A-NA-C1A	7.45	110.06	106.71
25	h	101	CLA	C4A-NA-C1A	7.32	110.00	106.71
25	C	507	CLA	C4A-NA-C1A	7.30	109.99	106.71
25	a	613	CLA	C4A-NA-C1A	7.28	109.98	106.71
25	b	601	CLA	C4A-NA-C1A	7.27	109.97	106.71
25	B	616	CLA	C4A-NA-C1A	7.24	109.96	106.71
25	c	503	CLA	C4A-NA-C1A	7.21	109.95	106.71
25	B	607	CLA	C4A-NA-C1A	7.16	109.92	106.71
25	b	614	CLA	C4A-NA-C1A	7.13	109.91	106.71
25	c	501	CLA	C4A-NA-C1A	7.11	109.90	106.71
25	B	605	CLA	C4A-NA-C1A	6.97	109.84	106.71
25	a	607	CLA	C4A-NA-C1A	6.85	109.79	106.71
25	C	510	CLA	C4A-NA-C1A	6.80	109.76	106.71
25	B	608	CLA	C4A-NA-C1A	6.76	109.74	106.71
25	c	510	CLA	C4A-NA-C1A	6.73	109.73	106.71
25	C	501	CLA	C4A-NA-C1A	6.63	109.69	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	a	615	SQD	C1-O5-C5	-6.61	100.72	113.69
28	D	406	PL9	C7-C3-C4	6.58	122.22	116.88
25	c	505	CLA	C4A-NA-C1A	6.51	109.63	106.71
25	c	504	CLA	C4A-NA-C1A	6.49	109.62	106.71
31	A	615	SQD	O6-C1-C2	6.47	118.41	108.30
31	a	615	SQD	O6-C1-C2	6.45	118.38	108.30
25	b	610	CLA	C4A-NA-C1A	6.37	109.57	106.71
25	B	615	CLA	C4A-NA-C1A	6.29	109.53	106.71
25	c	508	CLA	C4A-NA-C1A	6.29	109.53	106.71
25	B	611	CLA	C4A-NA-C1A	6.24	109.51	106.71
25	B	601	CLA	C4A-NA-C1A	6.17	109.48	106.71
25	d	403	CLA	C4A-NA-C1A	6.00	109.40	106.71
28	a	612	PL9	C7-C3-C4	5.97	121.73	116.88
25	C	512	CLA	C4A-NA-C1A	5.89	109.35	106.71
25	B	609	CLA	C4A-NA-C1A	5.88	109.35	106.71
25	C	509	CLA	C4A-NA-C1A	5.81	109.32	106.71
28	d	405	PL9	C7-C3-C4	5.81	121.60	116.88
25	D	403	CLA	C4A-NA-C1A	5.81	109.32	106.71
25	b	607	CLA	C4A-NA-C1A	5.78	109.31	106.71
25	b	612	CLA	C4A-NA-C1A	5.70	109.27	106.71
25	d	402	CLA	C4A-NA-C1A	5.65	109.24	106.71
25	c	506	CLA	C4A-NA-C1A	5.42	109.14	106.71
31	b	619	SQD	O6-C1-C2	5.42	116.77	108.30
25	b	606	CLA	C4A-NA-C1A	5.40	109.13	106.71
31	B	623	SQD	O7-S-C6	5.35	113.30	106.94
25	c	502	CLA	C4A-NA-C1A	5.30	109.09	106.71
25	c	512	CLA	C4A-NA-C1A	5.30	109.09	106.71
25	b	608	CLA	C4A-NA-C1A	5.23	109.06	106.71
25	C	502	CLA	C4A-NA-C1A	5.20	109.04	106.71
25	B	608	CLA	CMB-C2B-C1B	-5.19	120.49	128.46
25	a	608	CLA	C4A-NA-C1A	5.16	109.02	106.71
25	A	612	CLA	C4A-NA-C1A	5.13	109.01	106.71
25	b	615	CLA	C4A-NA-C1A	5.12	109.01	106.71
25	c	510	CLA	CMB-C2B-C1B	-5.10	120.63	128.46
31	F	102	SQD	C1-O5-C5	-5.03	103.81	113.69
25	B	613	CLA	C4A-NA-C1A	5.01	108.96	106.71
25	C	505	CLA	C4A-NA-C1A	5.01	108.96	106.71
25	B	602	CLA	C4A-NA-C1A	5.00	108.96	106.71
25	D	404	CLA	C4A-NA-C1A	4.99	108.95	106.71
25	A	607	CLA	C4A-NA-C1A	4.97	108.94	106.71
25	c	513	CLA	CMB-C2B-C1B	-4.96	120.84	128.46
25	c	513	CLA	C4A-NA-C1A	4.96	108.93	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	607	CLA	CMB-C2B-C1B	-4.92	120.90	128.46
25	b	615	CLA	CMB-C2B-C1B	-4.90	120.93	128.46
25	B	602	CLA	CMB-C2B-C1B	-4.86	120.99	128.46
31	A	615	SQD	C1-O5-C5	-4.83	104.20	113.69
36	V	201	HEC	CBD-CAD-C3D	-4.83	104.38	112.62
25	C	509	CLA	CMB-C2B-C1B	-4.77	121.13	128.46
31	F	102	SQD	O6-C1-C2	4.75	115.71	108.30
31	a	616	SQD	O47-C7-C8	4.72	121.68	111.50
25	B	613	CLA	C1-C2-C3	-4.72	117.88	126.04
25	a	610	CLA	C4A-NA-C1A	4.68	108.81	106.71
25	b	613	CLA	C4A-NA-C1A	4.60	108.77	106.71
31	b	619	SQD	O7-S-C6	4.59	112.39	106.94
31	B	623	SQD	O47-C7-C8	4.58	121.38	111.50
25	A	609	CLA	C4A-NA-C1A	4.58	108.77	106.71
25	C	506	CLA	C4A-NA-C1A	4.56	108.76	106.71
25	B	612	CLA	CMB-C2B-C1B	-4.54	121.48	128.46
36	v	201	HEC	CBD-CAD-C3D	-4.53	104.89	112.62
25	A	606	CLA	C4A-NA-C1A	4.52	108.74	106.71
25	b	605	CLA	CMB-C2B-C1B	-4.52	121.52	128.46
25	C	506	CLA	CMB-C2B-C1B	-4.51	121.53	128.46
31	B	623	SQD	O6-C1-C2	4.49	115.32	108.30
31	F	102	SQD	O9-S-C6	4.46	112.24	106.94
31	A	615	SQD	C1-C2-C3	-4.42	100.79	110.00
25	c	512	CLA	C1-C2-C3	-4.42	118.40	126.04
25	C	508	CLA	CHD-C1D-ND	-4.41	120.40	124.45
25	B	614	CLA	O2D-CGD-O1D	-4.41	115.22	123.84
25	A	609	CLA	O2D-CGD-O1D	-4.40	115.23	123.84
25	C	504	CLA	C4A-NA-C1A	4.38	108.68	106.71
25	d	403	CLA	CMB-C2B-C1B	-4.38	121.74	128.46
28	A	611	PL9	C7-C3-C4	4.36	120.42	116.88
25	C	507	CLA	CMB-C2B-C1B	-4.35	121.78	128.46
25	B	613	CLA	CMB-C2B-C1B	-4.31	121.84	128.46
25	a	610	CLA	O2D-CGD-O1D	-4.29	115.45	123.84
25	b	603	CLA	CMB-C2B-C1B	-4.27	121.90	128.46
25	c	504	CLA	CMB-C2B-C1B	-4.26	121.91	128.46
25	C	508	CLA	CMB-C2B-C1B	-4.25	121.93	128.46
31	f	101	SQD	O7-S-C6	4.25	111.99	106.94
34	D	401	BCT	O2-C-O1	4.24	130.53	119.55
25	B	610	CLA	O2D-CGD-O1D	-4.23	115.56	123.84
25	b	612	CLA	CMB-C2B-C1B	-4.23	121.97	128.46
25	a	610	CLA	O2D-CGD-CBD	4.22	118.77	111.27
25	B	602	CLA	CMB-C2B-C3B	4.18	132.51	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B	612	CLA	CMB-C2B-C3B	4.18	132.50	124.68
34	a	606	BCT	O2-C-O1	4.18	130.38	119.55
28	a	612	PL9	C7-C3-C2	-4.16	117.83	123.30
25	c	513	CLA	CMB-C2B-C3B	4.16	132.46	124.68
25	c	501	CLA	O2D-CGD-O1D	-4.16	115.71	123.84
25	C	510	CLA	CMB-C2B-C1B	-4.15	122.08	128.46
25	C	505	CLA	CMB-C2B-C1B	-4.15	122.09	128.46
25	b	602	CLA	CMB-C2B-C1B	-4.15	122.09	128.46
25	b	606	CLA	CMB-C2B-C1B	-4.14	122.11	128.46
27	b	616	BCR	C2-C1-C6	4.13	116.84	110.48
30	e	102	LHG	O4-P-O5	4.13	132.64	112.24
36	v	201	HEC	CBA-CAA-C2A	-4.12	105.66	112.60
25	C	511	CLA	CMB-C2B-C1B	-4.11	122.14	128.46
25	h	101	CLA	CMB-C2B-C1B	-4.11	122.15	128.46
25	b	615	CLA	CMB-C2B-C3B	4.11	132.36	124.68
25	B	608	CLA	CMB-C2B-C3B	4.09	132.32	124.68
30	B	622	LHG	O4-P-O5	4.08	132.43	112.24
32	a	617	DGD	O3G-C3G-C2G	-4.08	100.97	111.78
30	d	406	LHG	O4-P-O5	4.08	132.39	112.24
25	B	609	CLA	CMB-C2B-C1B	-4.05	122.24	128.46
25	c	509	CLA	O2A-CGA-O1A	-4.04	113.39	123.59
31	a	615	SQD	O9-S-O7	-4.03	100.00	113.95
25	B	612	CLA	C4A-NA-C1A	4.03	108.52	106.71
30	L	101	LHG	O4-P-O5	4.02	132.12	112.24
30	l	101	LHG	O4-P-O5	4.02	132.09	112.24
30	E	101	LHG	O4-P-O5	4.01	132.08	112.24
36	V	201	HEC	CMC-C2C-C1C	-4.01	122.30	128.46
30	D	408	LHG	O4-P-O5	4.00	132.00	112.24
25	b	608	CLA	CMB-C2B-C1B	-3.99	122.33	128.46
25	c	510	CLA	CMB-C2B-C3B	3.99	132.15	124.68
25	b	607	CLA	CMB-C2B-C3B	3.99	132.14	124.68
31	F	102	SQD	O8-S-C6	3.98	112.09	105.74
25	b	602	CLA	C4A-NA-C1A	3.98	108.49	106.71
25	b	604	CLA	O2D-CGD-O1D	-3.97	116.08	123.84
35	e	101	HEM	CBD-CAD-C3D	-3.96	101.63	112.63
32	C	516	DGD	O3G-C3G-C2G	-3.96	101.35	110.90
35	F	101	HEM	CBD-CAD-C3D	-3.96	101.64	112.63
32	C	517	DGD	O3G-C3G-C2G	-3.95	101.37	110.90
25	a	613	CLA	CMB-C2B-C1B	-3.95	122.40	128.46
26	A	608	PHO	CMB-C2B-C3B	3.95	132.06	124.68
31	f	101	SQD	O5-C5-C4	3.94	116.84	109.69
25	b	604	CLA	C1-C2-C3	-3.94	119.23	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	605	CLA	O2D-CGD-O1D	-3.94	116.14	123.84
31	F	102	SQD	C1-C2-C3	-3.94	101.80	110.00
25	C	509	CLA	CMB-C2B-C3B	3.93	132.03	124.68
25	C	503	CLA	CMB-C2B-C1B	-3.92	122.43	128.46
32	H	102	DGD	O3G-C3G-C2G	-3.91	101.46	110.90
25	C	512	CLA	CMB-C2B-C1B	-3.91	122.45	128.46
31	A	615	SQD	O7-S-C6	3.91	111.58	106.94
26	D	402	PHO	CMB-C2B-C3B	3.90	131.98	124.68
25	b	602	CLA	O2D-CGD-O1D	-3.90	116.20	123.84
25	C	501	CLA	O2D-CGD-O1D	-3.90	116.21	123.84
25	b	615	CLA	O2D-CGD-O1D	-3.90	116.21	123.84
25	B	607	CLA	CMB-C2B-C1B	-3.89	122.49	128.46
25	c	508	CLA	CMB-C2B-C1B	-3.89	122.49	128.46
30	a	614	LHG	O4-P-O5	3.89	131.46	112.24
25	b	612	CLA	C1-C2-C3	-3.88	119.33	126.04
30	d	407	LHG	O4-P-O5	3.88	131.43	112.24
25	A	609	CLA	CMB-C2B-C1B	-3.87	122.51	128.46
25	c	502	CLA	CMB-C2B-C1B	-3.87	122.51	128.46
25	d	402	CLA	O2D-CGD-O1D	-3.86	116.29	123.84
30	A	614	LHG	O4-P-O5	3.86	131.33	112.24
25	b	611	CLA	C4A-NA-C1A	3.85	108.44	106.71
25	C	513	CLA	O2D-CGD-O1D	-3.84	116.32	123.84
25	c	503	CLA	CMB-C2B-C1B	-3.84	122.56	128.46
32	c	517	DGD	O3G-C3G-C2G	-3.80	101.73	110.90
25	B	611	CLA	O2D-CGD-O1D	-3.79	116.43	123.84
25	A	612	CLA	CMB-C2B-C1B	-3.77	122.67	128.46
25	b	605	CLA	CMB-C2B-C3B	3.77	131.73	124.68
25	d	403	CLA	CHD-C1D-ND	-3.74	121.02	124.45
26	d	401	PHO	CMB-C2B-C3B	3.73	131.66	124.68
26	d	401	PHO	C1-C2-C3	-3.72	119.60	126.04
25	d	403	CLA	CMB-C2B-C3B	3.72	131.64	124.68
27	c	514	BCR	C15-C14-C13	-3.72	122.00	127.31
25	b	613	CLA	CMB-C2B-C1B	-3.72	122.75	128.46
31	B	623	SQD	C1-O5-C5	-3.71	106.41	113.69
25	B	601	CLA	O2D-CGD-O1D	-3.71	116.58	123.84
25	b	611	CLA	CMB-C2B-C1B	-3.70	122.78	128.46
25	B	613	CLA	CMB-C2B-C3B	3.69	131.59	124.68
25	B	603	CLA	C4A-NA-C1A	3.68	108.36	106.71
25	B	602	CLA	O2D-CGD-CBD	3.68	117.81	111.27
25	A	607	CLA	CMB-C2B-C1B	-3.67	122.82	128.46
25	B	615	CLA	CHB-C4A-NA	3.67	129.58	124.51
25	B	603	CLA	CMB-C2B-C1B	-3.66	122.83	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	C	515	DGD	O5D-C6D-C5D	-3.66	102.27	109.05
31	a	615	SQD	O47-C7-C8	3.66	119.39	111.50
25	C	504	CLA	CMB-C2B-C1B	-3.65	122.85	128.46
25	b	610	CLA	CMB-C2B-C1B	-3.64	122.87	128.46
25	B	609	CLA	CMB-C2B-C3B	3.64	131.48	124.68
25	C	503	CLA	CMB-C2B-C3B	3.63	131.48	124.68
25	A	607	CLA	O2D-CGD-O1D	-3.63	116.74	123.84
25	C	513	CLA	CMB-C2B-C1B	-3.63	122.89	128.46
32	h	103	DGD	O3G-C3G-C2G	-3.63	102.15	110.90
25	h	101	CLA	O2D-CGD-O1D	-3.62	116.75	123.84
25	C	505	CLA	CMB-C2B-C3B	3.62	131.45	124.68
25	C	507	CLA	CMB-C2B-C3B	3.61	131.44	124.68
25	C	506	CLA	CMB-C2B-C3B	3.61	131.43	124.68
31	a	615	SQD	C1-C2-C3	-3.60	102.50	110.00
31	f	101	SQD	O9-S-O7	-3.59	101.51	113.95
31	A	615	SQD	O9-S-O7	-3.59	101.53	113.95
31	a	615	SQD	O7-S-C6	3.58	111.19	106.94
25	A	609	CLA	CMB-C2B-C3B	3.57	131.37	124.68
31	B	623	SQD	O9-S-O7	-3.57	101.59	113.95
31	b	619	SQD	O8-S-C6	3.57	111.43	105.74
29	b	622	LMG	C1-O6-C5	-3.57	106.69	113.69
25	B	606	CLA	O2D-CGD-O1D	-3.57	116.87	123.84
26	D	402	PHO	C1-C2-C3	-3.56	119.88	126.04
25	B	607	CLA	CMB-C2B-C3B	3.55	131.33	124.68
36	V	201	HEC	CMB-C2B-C1B	-3.55	123.01	128.46
25	C	512	CLA	C1-C2-C3	-3.55	119.91	126.04
25	c	508	CLA	O2D-CGD-O1D	-3.54	116.91	123.84
25	c	509	CLA	CMB-C2B-C1B	-3.54	123.02	128.46
25	b	601	CLA	CHB-C4A-NA	3.54	129.40	124.51
31	b	619	SQD	O47-C7-C8	3.54	119.12	111.50
25	A	609	CLA	O2D-CGD-CBD	3.53	117.54	111.27
28	A	611	PL9	C40-C39-C41	3.53	121.20	115.27
25	c	504	CLA	CMB-C2B-C3B	3.53	131.28	124.68
25	B	601	CLA	CMB-C2B-C1B	-3.53	123.04	128.46
25	A	612	CLA	CMB-C2B-C3B	3.51	131.25	124.68
25	C	501	CLA	O2D-CGD-CBD	3.51	117.51	111.27
25	C	508	CLA	O2D-CGD-O1D	-3.50	117.00	123.84
25	B	604	CLA	O2D-CGD-O1D	-3.50	117.00	123.84
28	D	406	PL9	C27-C28-C29	-3.50	119.24	127.66
25	C	510	CLA	CMB-C2B-C3B	3.49	131.21	124.68
25	B	603	CLA	O2D-CGD-O1D	-3.49	117.02	123.84
25	a	608	CLA	CMB-C2B-C1B	-3.49	123.11	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	D	406	PL9	C7-C3-C2	-3.48	118.73	123.30
25	D	403	CLA	CMB-C2B-C1B	-3.48	123.12	128.46
25	b	610	CLA	O2D-CGD-O1D	-3.47	117.05	123.84
32	C	517	DGD	O6D-C1D-O3G	-3.46	101.79	109.97
25	b	603	CLA	CMB-C2B-C3B	3.46	131.14	124.68
25	b	606	CLA	CMB-C2B-C3B	3.44	131.12	124.68
31	f	101	SQD	O6-C1-C2	3.44	113.67	108.30
25	c	501	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
25	b	611	CLA	C1-C2-C3	-3.43	120.11	126.04
25	b	609	CLA	C4A-NA-C1A	3.43	108.25	106.71
25	b	602	CLA	CMB-C2B-C3B	3.43	131.10	124.68
25	B	608	CLA	O2D-CGD-O1D	-3.42	117.15	123.84
25	b	611	CLA	CMB-C2B-C3B	3.42	131.08	124.68
25	B	610	CLA	C1B-CHB-C4A	-3.42	123.35	130.12
25	b	609	CLA	C1B-CHB-C4A	-3.42	123.35	130.12
25	A	606	CLA	CMB-C2B-C1B	-3.41	123.23	128.46
31	A	615	SQD	O5-C1-C2	-3.40	103.15	110.35
28	d	405	PL9	C7-C8-C9	-3.39	121.14	126.79
31	A	615	SQD	O47-C7-C8	3.39	118.81	111.50
25	B	601	CLA	O2A-C1-C2	-3.39	99.73	108.64
25	c	509	CLA	O2D-CGD-O1D	-3.39	117.22	123.84
28	d	405	PL9	C37-C38-C39	-3.38	119.51	127.66
31	A	616	SQD	O47-C7-C8	3.38	118.79	111.50
31	f	101	SQD	O47-C7-C8	3.38	120.21	110.80
36	v	201	HEC	CMC-C2C-C1C	-3.37	123.29	128.46
32	c	516	DGD	O3G-C3G-C2G	-3.36	102.78	110.90
30	D	408	LHG	O8-C23-C24	3.36	122.44	111.91
25	A	606	CLA	CMB-C2B-C3B	3.35	130.96	124.68
31	b	619	SQD	O5-C5-C4	3.35	115.79	109.69
25	C	512	CLA	CHB-C4A-NA	3.35	129.15	124.51
30	a	614	LHG	O8-C23-C24	3.35	122.43	111.91
27	B	617	BCR	C2-C1-C6	3.34	115.63	110.48
25	B	616	CLA	C1B-CHB-C4A	-3.34	123.50	130.12
31	a	616	SQD	O48-C23-C24	3.33	122.37	111.91
28	d	405	PL9	C7-C3-C2	-3.33	118.92	123.30
25	B	612	CLA	O2D-CGD-O1D	-3.33	117.33	123.84
36	V	201	HEC	C1D-C2D-C3D	-3.33	104.68	107.00
31	a	615	SQD	O48-C23-C24	3.33	122.34	111.91
25	C	512	CLA	O2D-CGD-O1D	-3.33	117.34	123.84
27	h	102	BCR	C2-C1-C6	3.32	115.60	110.48
25	B	602	CLA	C1B-CHB-C4A	-3.32	123.53	130.12
25	A	609	CLA	CHB-C4A-NA	3.32	129.10	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	608	CLA	CMB-C2B-C3B	3.32	130.88	124.68
31	A	615	SQD	O8-S-C6	3.31	111.02	105.74
25	h	101	CLA	CMB-C2B-C3B	3.31	130.87	124.68
25	b	605	CLA	O2D-CGD-CBD	3.31	117.15	111.27
25	c	508	CLA	CMB-C2B-C3B	3.30	130.85	124.68
25	a	607	CLA	CMB-C2B-C1B	-3.29	123.41	128.46
25	b	601	CLA	CMB-C2B-C1B	-3.29	123.41	128.46
25	c	502	CLA	CMB-C2B-C3B	3.27	130.80	124.68
25	b	612	CLA	O2D-CGD-O1D	-3.27	117.44	123.84
25	c	512	CLA	CHB-C4A-NA	3.27	129.03	124.51
35	e	101	HEM	CBA-CAA-C2A	-3.27	107.04	112.62
25	B	610	CLA	O2A-CGA-O1A	-3.27	115.35	123.59
25	b	601	CLA	O2D-CGD-O1D	-3.26	117.46	123.84
25	b	606	CLA	O2D-CGD-O1D	-3.26	117.46	123.84
25	c	511	CLA	CMB-C2B-C1B	-3.26	123.45	128.46
25	B	611	CLA	O2D-CGD-CBD	3.26	117.06	111.27
28	D	406	PL9	C7-C8-C9	-3.26	121.37	126.79
25	b	601	CLA	CMB-C2B-C3B	3.26	130.78	124.68
25	C	508	CLA	CMB-C2B-C3B	3.25	130.75	124.68
25	a	613	CLA	C1-C2-C3	-3.24	120.43	126.04
25	A	607	CLA	CMB-C2B-C3B	3.24	130.74	124.68
25	B	611	CLA	CMB-C2B-C1B	-3.24	123.48	128.46
25	A	607	CLA	O2D-CGD-CBD	3.24	117.02	111.27
25	B	606	CLA	CMB-C2B-C1B	-3.23	123.50	128.46
31	a	615	SQD	O8-S-C6	3.23	110.89	105.74
27	C	514	BCR	C15-C16-C17	-3.23	116.86	123.47
25	b	601	CLA	CHD-C1D-ND	-3.23	121.49	124.45
33	M	102	STE	C3-C2-C1	-3.22	106.35	114.47
32	c	518	DGD	O3G-C3G-C2G	-3.22	103.13	110.90
25	B	612	CLA	CHB-C4A-NA	3.22	128.96	124.51
32	h	103	DGD	O6E-C5E-C4E	3.22	115.54	109.69
25	b	609	CLA	CMB-C2B-C1B	-3.22	123.52	128.46
26	d	401	PHO	O2D-CGD-O1D	-3.22	117.55	123.84
29	c	519	LMG	O6-C1-O1	-3.21	102.37	109.97
25	D	404	CLA	O2D-CGD-O1D	-3.21	117.56	123.84
25	b	604	CLA	CHD-C1D-ND	-3.21	121.51	124.45
25	b	612	CLA	CMB-C2B-C3B	3.21	130.68	124.68
25	b	609	CLA	CMB-C2B-C3B	3.21	130.68	124.68
25	A	612	CLA	O2D-CGD-CBD	3.20	116.96	111.27
25	B	605	CLA	O2D-CGD-O1D	-3.20	117.57	123.84
29	m	101	LMG	O1-C7-C8	-3.20	103.17	110.90
25	b	614	CLA	CMB-C2B-C1B	-3.20	123.55	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c	507	CLA	CMB-C2B-C1B	-3.20	123.55	128.46
32	C	516	DGD	O6D-C1D-O3G	-3.19	102.42	109.97
25	B	609	CLA	O2A-CGA-O1A	-3.19	115.54	123.59
27	c	515	BCR	C11-C10-C9	-3.18	122.77	127.31
25	a	608	CLA	O2D-CGD-O1D	-3.18	117.61	123.84
25	C	512	CLA	CMB-C2B-C3B	3.17	130.62	124.68
25	c	503	CLA	CMB-C2B-C3B	3.17	130.62	124.68
25	c	506	CLA	CMB-C2B-C1B	-3.17	123.59	128.46
28	D	406	PL9	C22-C23-C24	-3.17	120.03	127.66
25	B	605	CLA	CHD-C1D-ND	-3.17	121.55	124.45
25	b	611	CLA	O2D-CGD-O1D	-3.16	117.66	123.84
25	b	611	CLA	C11-C12-C13	-3.16	105.71	115.92
25	b	613	CLA	CMB-C2B-C3B	3.16	130.59	124.68
25	A	606	CLA	C1B-CHB-C4A	-3.16	123.87	130.12
25	b	602	CLA	C1B-CHB-C4A	-3.16	123.87	130.12
25	b	604	CLA	CMB-C2B-C1B	-3.16	123.61	128.46
25	D	403	CLA	C1-C2-C3	-3.15	120.60	126.04
36	V	201	HEC	CMC-C2C-C3C	3.14	129.52	125.82
32	c	516	DGD	CDB-CCB-CBB	-3.13	98.52	114.42
33	C	519	STE	C3-C2-C1	-3.13	106.58	114.47
25	A	607	CLA	C2D-C1D-ND	-3.13	107.80	110.10
31	B	623	SQD	O48-C23-C24	3.13	121.73	111.91
28	D	406	PL9	C37-C38-C39	-3.13	120.13	127.66
27	c	515	BCR	C7-C8-C9	-3.13	121.51	126.23
25	b	609	CLA	C1-C2-C3	-3.12	120.64	126.04
25	c	502	CLA	C1-C2-C3	-3.12	120.65	126.04
28	d	405	PL9	C22-C23-C24	-3.12	120.15	127.66
25	B	612	CLA	C1B-CHB-C4A	-3.12	123.94	130.12
25	D	404	CLA	CMB-C2B-C1B	-3.10	123.69	128.46
30	B	622	LHG	O8-C23-C24	3.10	121.64	111.91
31	b	619	SQD	O48-C23-C24	3.10	121.63	111.91
27	B	619	BCR	C2-C1-C6	3.10	115.25	110.48
31	f	101	SQD	O9-S-C6	3.09	110.61	106.94
36	v	201	HEC	CMB-C2B-C1B	-3.09	123.71	128.46
25	C	510	CLA	CHD-C1D-ND	-3.09	121.61	124.45
25	C	511	CLA	CMB-C2B-C3B	3.08	130.44	124.68
27	K	101	BCR	C24-C23-C22	-3.08	121.58	126.23
32	c	517	DGD	O6D-C1D-O3G	-3.08	102.68	109.97
25	B	604	CLA	CMB-C2B-C1B	-3.08	123.73	128.46
25	C	505	CLA	O2D-CGD-O1D	-3.07	117.83	123.84
25	a	613	CLA	CMB-C2B-C3B	3.07	130.43	124.68
25	B	611	CLA	C1-C2-C3	-3.07	120.74	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	d	409	LMG	O6-C1-O1	-3.07	102.71	109.97
25	B	604	CLA	O2A-CGA-O1A	-3.06	115.86	123.59
31	F	102	SQD	O9-S-O7	-3.06	103.35	113.95
31	B	623	SQD	O8-S-C6	3.06	110.61	105.74
28	D	406	PL9	C36-C34-C33	-3.05	114.94	121.12
25	b	615	CLA	CHB-C4A-NA	3.05	128.74	124.51
25	c	512	CLA	O2D-CGD-O1D	-3.05	117.88	123.84
25	c	508	CLA	CHD-C1D-ND	-3.05	121.65	124.45
32	A	617	DGD	O3G-C3G-C2G	-3.04	103.55	110.90
32	C	515	DGD	O3G-C3G-C2G	-3.04	103.56	110.90
25	b	611	CLA	C1B-CHB-C4A	-3.04	124.09	130.12
25	a	613	CLA	O2D-CGD-CBD	3.04	116.67	111.27
28	D	406	PL9	C40-C39-C41	3.03	120.37	115.27
25	c	504	CLA	O2D-CGD-O1D	-3.03	117.91	123.84
27	t	101	BCR	C15-C14-C13	-3.03	122.98	127.31
25	B	603	CLA	CMB-C2B-C3B	3.03	130.35	124.68
31	b	619	SQD	C1-C2-C3	-3.03	103.69	110.00
29	m	101	LMG	O6-C1-O1	-3.03	102.81	109.97
25	c	507	CLA	CMB-C2B-C3B	3.02	130.33	124.68
25	c	503	CLA	C7-C6-C5	-3.02	105.16	113.36
32	h	103	DGD	C1D-C2D-C3D	-3.02	103.71	110.00
31	b	619	SQD	O9-S-O7	-3.02	103.51	113.95
25	b	604	CLA	O2A-CGA-O1A	-3.01	116.01	123.59
25	D	403	CLA	C1B-CHB-C4A	-3.01	124.17	130.12
25	d	402	CLA	CMB-C2B-C1B	-3.00	123.85	128.46
25	a	607	CLA	O2A-CGA-O1A	-3.00	116.03	123.59
25	C	503	CLA	CHB-C4A-NA	2.99	128.65	124.51
29	c	522	LMG	C1-O6-C5	-2.99	107.82	113.69
26	d	401	PHO	O1D-CGD-CBD	2.99	129.71	124.74
25	b	610	CLA	CHD-C1D-ND	-2.98	121.71	124.45
25	C	509	CLA	CED-O2D-CGD	2.98	122.68	115.94
29	m	101	LMG	O3-C3-C2	-2.97	103.48	110.35
25	b	609	CLA	CHB-C4A-NA	2.97	128.61	124.51
25	c	507	CLA	O2D-CGD-O1D	-2.97	118.04	123.84
25	b	610	CLA	CMB-C2B-C3B	2.96	130.22	124.68
25	B	616	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
25	A	606	CLA	CHB-C4A-NA	2.96	128.61	124.51
25	b	602	CLA	O2D-CGD-CBD	2.95	116.50	111.27
28	a	612	PL9	C22-C23-C24	-2.94	120.57	127.66
25	a	610	CLA	CMB-C2B-C1B	-2.94	123.95	128.46
27	T	101	BCR	C15-C14-C13	-2.94	123.12	127.31
27	D	405	BCR	C27-C26-C25	2.93	126.99	122.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	A	612	CLA	CHB-C4A-NA	2.93	128.56	124.51
28	A	611	PL9	C7-C8-C9	-2.93	121.91	126.79
25	b	602	CLA	CHD-C1D-ND	-2.93	121.76	124.45
25	B	613	CLA	CHD-C1D-ND	-2.93	121.76	124.45
25	a	608	CLA	CMB-C2B-C3B	2.93	130.15	124.68
25	c	501	CLA	CMB-C2B-C3B	2.92	130.14	124.68
25	b	609	CLA	O2D-CGD-O1D	-2.92	118.13	123.84
25	c	509	CLA	CMB-C2B-C3B	2.92	130.14	124.68
25	c	502	CLA	O2D-CGD-O1D	-2.92	118.13	123.84
25	c	512	CLA	CMB-C2B-C1B	-2.92	123.98	128.46
25	B	610	CLA	C4A-NA-C1A	2.91	108.02	106.71
25	B	603	CLA	O2A-CGA-O1A	-2.91	116.25	123.59
27	T	101	BCR	C35-C13-C14	-2.91	118.85	122.92
25	b	611	CLA	O2A-CGA-O1A	-2.91	116.26	123.59
31	b	619	SQD	O9-S-C6	2.90	110.39	106.94
25	B	612	CLA	C1-C2-C3	-2.90	121.03	126.04
29	m	101	LMG	O1-C1-C2	-2.89	103.78	108.30
25	b	613	CLA	C1-C2-C3	-2.89	121.04	126.04
25	C	513	CLA	CMB-C2B-C3B	2.89	130.09	124.68
32	C	515	DGD	C3D-C4D-C5D	-2.89	105.08	110.24
31	f	101	SQD	O48-C23-C24	2.88	120.96	111.91
25	B	609	CLA	O2D-CGD-O1D	-2.88	118.20	123.84
25	A	607	CLA	C1B-CHB-C4A	-2.88	124.42	130.12
25	d	403	CLA	C1B-CHB-C4A	-2.87	124.43	130.12
27	c	514	BCR	C15-C16-C17	-2.87	117.59	123.47
32	c	518	DGD	O6D-C1D-O3G	-2.87	103.18	109.97
27	h	102	BCR	C27-C26-C25	2.87	126.89	122.73
25	c	507	CLA	CHD-C1D-ND	-2.87	121.82	124.45
25	B	606	CLA	CMB-C2B-C3B	2.87	130.04	124.68
30	a	614	LHG	O8-C23-O10	-2.86	116.36	123.59
32	A	617	DGD	C3G-C2G-C1G	-2.86	105.03	111.79
25	C	511	CLA	O2D-CGD-O1D	-2.85	118.26	123.84
27	t	101	BCR	C15-C16-C17	-2.85	117.63	123.47
25	b	615	CLA	C1B-CHB-C4A	-2.85	124.47	130.12
25	A	609	CLA	C1B-CHB-C4A	-2.85	124.47	130.12
25	c	512	CLA	CHD-C1D-ND	-2.85	121.83	124.45
28	d	405	PL9	C40-C39-C41	2.85	120.06	115.27
27	k	101	BCR	C33-C5-C6	-2.85	121.33	124.53
25	a	613	CLA	O2D-CGD-O1D	-2.85	118.27	123.84
25	C	503	CLA	O2D-CGD-O1D	-2.85	118.27	123.84
25	d	402	CLA	O2D-CGD-CBD	2.84	116.32	111.27
32	C	515	DGD	CDB-CCB-CBB	-2.84	100.00	114.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
35	F	101	HEM	CBA-CAA-C2A	-2.84	107.77	112.62
27	B	619	BCR	C29-C30-C25	2.84	114.85	110.48
31	f	101	SQD	O5-C1-C2	-2.84	104.34	110.35
31	A	615	SQD	O9-S-C6	2.84	110.31	106.94
25	A	612	CLA	C1B-CHB-C4A	-2.84	124.50	130.12
25	B	602	CLA	CGD-CBD-CAD	-2.83	101.55	110.73
30	l	101	LHG	O8-C23-C24	2.83	120.80	111.91
25	A	607	CLA	CHB-C4A-NA	2.83	128.43	124.51
25	b	601	CLA	C1-C2-C3	-2.83	121.14	126.04
25	C	504	CLA	CHB-C4A-NA	2.83	128.43	124.51
31	F	102	SQD	O48-C23-C24	2.82	120.75	111.91
26	D	402	PHO	O2D-CGD-O1D	-2.82	118.33	123.84
25	C	504	CLA	CHD-C1D-ND	-2.82	121.86	124.45
25	A	606	CLA	O2A-CGA-O1A	-2.82	116.48	123.59
25	B	613	CLA	O2D-CGD-O1D	-2.82	118.33	123.84
25	C	510	CLA	O2D-CGD-O1D	-2.81	118.34	123.84
25	C	502	CLA	C1-C2-C3	-2.81	121.18	126.04
25	c	513	CLA	C1B-CHB-C4A	-2.81	124.56	130.12
25	b	606	CLA	C1B-CHB-C4A	-2.80	124.57	130.12
27	t	101	BCR	C35-C13-C14	-2.80	119.00	122.92
25	h	101	CLA	CHB-C4A-NA	2.80	128.38	124.51
25	B	602	CLA	O2A-CGA-O1A	-2.80	116.53	123.59
25	B	613	CLA	CHB-C4A-NA	2.79	128.38	124.51
25	B	603	CLA	C1B-CHB-C4A	-2.79	124.59	130.12
25	a	607	CLA	O2D-CGD-O1D	-2.79	118.38	123.84
31	b	619	SQD	C3-C4-C5	2.79	115.21	110.24
31	B	623	SQD	C3-C4-C5	2.78	115.20	110.24
32	C	516	DGD	C1D-C2D-C3D	-2.78	104.20	110.00
27	T	101	BCR	C7-C8-C9	-2.78	122.03	126.23
32	c	517	DGD	CDB-CCB-CBB	-2.78	100.31	114.42
25	D	404	CLA	CMB-C2B-C3B	2.78	129.88	124.68
32	c	516	DGD	O6D-C1D-O3G	-2.77	103.41	109.97
32	H	102	DGD	O6D-C1D-O3G	-2.77	103.42	109.97
25	b	614	CLA	CMB-C2B-C3B	2.77	129.85	124.68
32	c	516	DGD	O3E-C3E-C2E	-2.76	103.96	110.35
25	a	608	CLA	CHB-C4A-NA	2.76	128.33	124.51
25	c	507	CLA	CHB-C4A-NA	2.76	128.33	124.51
25	B	611	CLA	CMB-C2B-C3B	2.76	129.84	124.68
27	B	618	BCR	C15-C14-C13	-2.76	123.38	127.31
30	B	622	LHG	C11-C10-C9	-2.75	100.45	114.42
32	C	517	DGD	CDB-CCB-CBB	-2.75	100.46	114.42
25	B	616	CLA	CHD-C1D-ND	-2.75	121.93	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B	616	CLA	CMB-C2B-C3B	2.75	129.82	124.68
27	d	404	BCR	C27-C26-C25	2.75	126.72	122.73
25	C	503	CLA	C7-C6-C5	-2.74	105.91	113.36
25	a	607	CLA	CMB-C2B-C3B	2.74	129.81	124.68
35	F	101	HEM	CHC-C4B-NB	2.74	127.41	124.43
27	K	101	BCR	C11-C10-C9	-2.73	123.41	127.31
25	c	505	CLA	O2D-CGD-CBD	2.73	116.12	111.27
26	d	401	PHO	CMC-C2C-C3C	2.73	130.09	124.94
25	C	504	CLA	CHC-C1C-NC	2.73	128.34	124.20
25	a	610	CLA	CHB-C4A-NA	2.73	128.28	124.51
27	H	101	BCR	C2-C1-C6	2.73	114.68	110.48
26	a	609	PHO	CMB-C2B-C3B	2.72	129.77	124.68
27	H	101	BCR	C27-C26-C25	2.72	126.68	122.73
30	E	101	LHG	O8-C23-C24	2.72	120.45	111.91
31	A	615	SQD	O48-C23-C24	2.72	120.44	111.91
25	A	612	CLA	O2D-CGD-O1D	-2.72	118.53	123.84
25	B	604	CLA	C2D-C1D-ND	-2.72	108.10	110.10
27	T	101	BCR	C33-C5-C6	-2.72	121.48	124.53
30	e	102	LHG	O8-C23-C24	2.71	120.42	111.91
25	b	608	CLA	C1B-CHB-C4A	-2.71	124.75	130.12
28	d	405	PL9	C20-C19-C21	2.71	119.83	115.27
25	A	609	CLA	CHD-C1D-ND	-2.70	121.97	124.45
32	A	617	DGD	O6D-C1D-O3G	-2.70	103.58	109.97
25	b	603	CLA	C1-C2-C3	-2.70	121.37	126.04
28	A	611	PL9	C7-C3-C2	-2.70	119.75	123.30
31	a	615	SQD	C44-O6-C1	-2.70	108.47	113.74
25	c	504	CLA	CHD-C1D-ND	-2.70	121.97	124.45
25	b	611	CLA	CAC-C3C-C4C	2.70	128.31	124.81
32	A	617	DGD	CDB-CCB-CBB	-2.69	100.75	114.42
25	a	610	CLA	CMB-C2B-C3B	2.69	129.71	124.68
28	A	611	PL9	C36-C34-C33	-2.69	115.67	121.12
32	h	103	DGD	O6D-C1D-O3G	-2.69	103.61	109.97
27	c	515	BCR	C27-C26-C25	2.69	126.63	122.73
25	C	506	CLA	O2A-CGA-O1A	-2.69	116.81	123.59
25	C	507	CLA	CHB-C4A-NA	2.68	128.22	124.51
31	F	102	SQD	O5-C5-C4	2.68	114.56	109.69
25	B	610	CLA	CHD-C1D-ND	-2.68	121.99	124.45
27	C	514	BCR	C2-C1-C6	2.68	114.61	110.48
25	c	510	CLA	O2D-CGD-O1D	-2.68	118.60	123.84
28	a	612	PL9	O2-C1-C2	-2.68	115.64	121.78
25	A	607	CLA	O2A-CGA-O1A	-2.68	116.83	123.59
25	C	512	CLA	O2A-CGA-O1A	-2.68	116.84	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c	508	CLA	O2D-CGD-CBD	2.67	116.02	111.27
29	M	101	LMG	C38-C37-C36	-2.67	100.85	114.42
25	B	601	CLA	CMB-C2B-C3B	2.67	129.67	124.68
25	c	505	CLA	O2D-CGD-O1D	-2.67	118.63	123.84
25	B	615	CLA	CMB-C2B-C1B	-2.66	124.37	128.46
25	c	511	CLA	O2D-CGD-O1D	-2.66	118.63	123.84
32	C	515	DGD	O6D-C1D-O3G	-2.66	103.67	109.97
25	b	611	CLA	CHB-C4A-NA	2.66	128.19	124.51
25	b	601	CLA	O2D-CGD-CBD	2.66	115.99	111.27
25	b	608	CLA	O2A-CGA-O1A	-2.66	116.88	123.59
27	K	102	BCR	C27-C26-C25	2.66	126.59	122.73
25	B	614	CLA	O1D-CGD-CBD	2.66	129.92	124.48
28	a	612	PL9	C7-C8-C9	-2.66	122.37	126.79
25	c	502	CLA	C1B-CHB-C4A	-2.65	124.87	130.12
25	D	403	CLA	CMB-C2B-C3B	2.65	129.63	124.68
25	a	608	CLA	O2A-CGA-O1A	-2.64	116.92	123.59
27	a	611	BCR	C27-C26-C25	2.64	126.57	122.73
25	B	608	CLA	O2D-CGD-CBD	2.64	115.96	111.27
25	a	608	CLA	O2D-CGD-CBD	2.64	115.96	111.27
32	c	516	DGD	C3D-C4D-C5D	-2.64	105.53	110.24
33	m	102	STE	O2-C1-C2	2.64	122.52	114.03
25	d	402	CLA	CMB-C2B-C3B	2.64	129.62	124.68
29	M	101	LMG	C1-C2-C3	-2.64	104.50	110.00
25	b	607	CLA	CHD-C1D-ND	-2.64	122.03	124.45
25	b	607	CLA	CHB-C4A-NA	2.64	128.16	124.51
25	a	607	CLA	O1D-CGD-CBD	2.64	129.88	124.48
25	C	501	CLA	CHD-C1D-ND	-2.64	122.03	124.45
25	C	507	CLA	CHD-C1D-ND	-2.64	122.03	124.45
25	B	610	CLA	CMB-C2B-C1B	-2.64	124.41	128.46
25	B	606	CLA	O2D-CGD-CBD	2.64	115.95	111.27
25	B	612	CLA	O2A-CGA-O1A	-2.64	116.94	123.59
25	a	607	CLA	CHB-C4A-NA	2.63	128.15	124.51
29	D	409	LMG	O1-C7-C8	-2.63	104.81	111.78
28	a	612	PL9	C27-C28-C29	-2.62	121.34	127.66
25	B	601	CLA	CAA-C2A-C3A	-2.62	105.60	112.78
27	c	514	BCR	C27-C26-C25	2.62	126.53	122.73
29	C	518	LMG	O1-C7-C8	-2.62	104.59	110.90
25	c	513	CLA	O2D-CGD-O1D	-2.61	118.73	123.84
25	b	613	CLA	O2A-CGA-O1A	-2.61	117.00	123.59
27	b	616	BCR	C27-C26-C25	2.61	126.52	122.73
25	B	607	CLA	C1B-CHB-C4A	-2.61	124.95	130.12
30	d	406	LHG	O8-C23-C24	2.61	120.09	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	C	502	CLA	O2A-CGA-O1A	-2.61	117.02	123.59
28	a	612	PL9	C40-C39-C41	2.60	119.65	115.27
32	c	518	DGD	CDB-CCB-CBB	-2.60	101.20	114.42
33	x	101	STE	C3-C2-C1	-2.60	107.91	114.47
25	C	506	CLA	C1B-CHB-C4A	-2.60	124.97	130.12
25	B	614	CLA	O2A-CGA-O1A	-2.60	117.03	123.59
32	C	515	DGD	C6D-O5D-C1E	2.60	118.81	113.74
27	B	618	BCR	C35-C13-C14	-2.60	119.28	122.92
29	b	622	LMG	O1-C1-C2	-2.60	104.25	108.30
25	c	507	CLA	O2A-CGA-O1A	-2.60	117.04	123.59
25	C	502	CLA	CMB-C2B-C1B	-2.59	124.48	128.46
25	B	608	CLA	CHB-C4A-NA	2.59	128.10	124.51
25	B	604	CLA	CMB-C2B-C3B	2.59	129.53	124.68
27	k	102	BCR	C11-C10-C9	-2.59	123.61	127.31
25	D	404	CLA	C1B-CHB-C4A	-2.59	124.99	130.12
27	K	101	BCR	C27-C26-C25	2.59	126.49	122.73
25	C	503	CLA	C1B-CHB-C4A	-2.59	124.99	130.12
25	b	607	CLA	C1B-CHB-C4A	-2.59	124.99	130.12
25	B	610	CLA	CHB-C4A-NA	2.59	128.09	124.51
25	C	506	CLA	O2D-CGD-O1D	-2.58	118.79	123.84
29	M	101	LMG	C40-C39-C38	-2.58	101.31	114.42
25	B	604	CLA	CHB-C4A-NA	2.58	128.08	124.51
27	B	618	BCR	C27-C26-C25	2.58	126.48	122.73
25	C	504	CLA	CMB-C2B-C3B	2.58	129.50	124.68
25	A	612	CLA	C1-C2-C3	-2.58	121.59	126.04
25	c	506	CLA	CMB-C2B-C3B	2.58	129.50	124.68
25	B	605	CLA	O2A-CGA-O1A	-2.57	117.10	123.59
25	C	507	CLA	O2D-CGD-O1D	-2.57	118.81	123.84
27	A	610	BCR	C27-C26-C25	2.57	126.47	122.73
27	d	404	BCR	C38-C26-C25	-2.57	121.64	124.53
25	c	506	CLA	C2D-C1D-ND	-2.57	108.21	110.10
27	A	610	BCR	C2-C1-C6	2.56	114.42	110.48
25	b	613	CLA	C1B-CHB-C4A	-2.56	125.05	130.12
25	C	503	CLA	CHD-C1D-ND	-2.56	122.10	124.45
32	c	516	DGD	O5D-C6D-C5D	-2.56	104.32	109.05
36	V	201	HEC	CMB-C2B-C3B	2.55	128.82	125.82
25	b	603	CLA	O2D-CGD-CBD	2.55	115.80	111.27
32	h	103	DGD	C1E-O6E-C5E	2.55	118.70	113.69
25	b	603	CLA	O2D-CGD-O1D	-2.55	118.85	123.84
25	D	404	CLA	O2A-CGA-O1A	-2.55	117.15	123.59
32	c	518	DGD	CAB-C9B-C8B	-2.55	101.48	114.42
29	m	101	LMG	C38-C37-C36	-2.55	101.49	114.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	c	505	CLA	CMB-C2B-C1B	-2.55	124.55	128.46
27	c	515	BCR	C15-C16-C17	-2.55	118.26	123.47
25	b	604	CLA	CMB-C2B-C3B	2.54	129.43	124.68
25	c	511	CLA	CMB-C2B-C3B	2.54	129.43	124.68
30	D	408	LHG	C27-C26-C25	-2.54	101.53	114.42
28	a	612	PL9	O2-C1-C6	2.54	124.99	120.59
25	B	602	CLA	CHB-C4A-NA	2.54	128.02	124.51
29	b	622	LMG	C8-O7-C10	2.54	124.04	117.79
33	t	102	STE	C3-C2-C1	-2.54	108.08	114.47
25	C	501	CLA	CMB-C2B-C1B	-2.54	124.56	128.46
30	a	614	LHG	C11-C10-C9	-2.54	101.55	114.42
30	d	407	LHG	O8-C23-C24	2.53	119.86	111.91
25	h	101	CLA	CHD-C1D-ND	-2.53	122.13	124.45
25	B	612	CLA	C16-C15-C13	-2.53	107.75	115.92
25	c	504	CLA	O2A-CGA-O1A	-2.53	117.21	123.59
25	b	610	CLA	O2D-CGD-CBD	2.53	115.76	111.27
27	k	102	BCR	C33-C5-C6	-2.53	121.69	124.53
25	b	603	CLA	O2A-CGA-O1A	-2.52	117.22	123.59
26	A	608	PHO	O2D-CGD-O1D	-2.52	118.91	123.84
27	d	404	BCR	C30-C25-C26	-2.52	119.06	122.61
25	b	612	CLA	O2A-CGA-O1A	-2.52	117.24	123.59
25	B	610	CLA	O2D-CGD-CBD	2.52	115.74	111.27
27	D	405	BCR	C7-C8-C9	-2.52	122.43	126.23
30	D	408	LHG	O8-C23-O10	-2.52	117.24	123.59
30	D	408	LHG	C11-C10-C9	-2.52	101.65	114.42
30	E	101	LHG	C20-C19-C18	-2.52	101.65	114.42
25	b	610	CLA	C2D-C1D-ND	-2.52	108.25	110.10
25	A	607	CLA	C1-C2-C3	-2.51	121.69	126.04
27	D	405	BCR	C24-C23-C22	-2.51	122.44	126.23
25	C	509	CLA	C1B-CHB-C4A	-2.51	125.14	130.12
31	f	101	SQD	C3-C4-C5	2.51	114.72	110.24
30	d	406	LHG	O8-C23-O10	-2.51	117.26	123.59
25	b	609	CLA	O2A-CGA-O1A	-2.51	117.27	123.59
29	c	521	LMG	O8-C28-O10	-2.50	117.28	123.59
33	d	410	STE	O2-C1-C2	2.50	122.07	114.03
35	F	101	HEM	C4D-ND-C1D	2.50	107.66	105.07
25	C	513	CLA	O2D-CGD-CBD	2.50	115.71	111.27
29	C	518	LMG	C1-O6-C5	-2.50	108.78	113.69
26	d	401	PHO	CMA-C3A-C4A	-2.50	108.91	114.38
32	C	517	DGD	O3E-C3E-C2E	-2.49	104.58	110.35
31	a	615	SQD	O9-S-C6	2.49	109.90	106.94
25	B	606	CLA	C1B-CHB-C4A	-2.49	125.18	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	D	406	PL9	C20-C19-C21	2.49	119.46	115.27
25	B	613	CLA	CAC-C3C-C4C	2.49	128.04	124.81
25	C	501	CLA	C2D-C1D-ND	-2.49	108.27	110.10
25	B	614	CLA	CHB-C4A-NA	2.49	127.95	124.51
25	c	512	CLA	O2A-CGA-O1A	-2.48	117.32	123.59
25	B	613	CLA	C1B-CHB-C4A	-2.48	125.20	130.12
29	c	519	LMG	C38-C37-C36	-2.48	101.83	114.42
25	A	612	CLA	CHD-C1D-ND	-2.48	122.17	124.45
29	D	407	LMG	O6-C1-O1	-2.48	104.11	109.97
27	b	616	BCR	C33-C5-C6	-2.48	121.75	124.53
25	b	604	CLA	CHB-C4A-NA	2.48	127.94	124.51
32	h	103	DGD	CDB-CCB-CBB	-2.48	101.86	114.42
25	b	606	CLA	CHB-C4A-NA	2.47	127.93	124.51
27	c	514	BCR	C7-C8-C9	-2.47	122.50	126.23
28	d	405	PL9	C42-C43-C44	-2.47	121.72	127.66
25	c	505	CLA	C11-C10-C8	-2.47	107.94	115.92
25	B	611	CLA	CHD-C1D-ND	-2.47	122.19	124.45
27	K	102	BCR	C33-C5-C6	-2.47	121.76	124.53
25	c	512	CLA	CMB-C2B-C3B	2.47	129.29	124.68
27	H	101	BCR	C35-C13-C14	-2.46	119.47	122.92
25	B	612	CLA	C11-C12-C13	-2.46	107.96	115.92
25	B	606	CLA	CGD-CBD-CAD	-2.46	102.76	110.73
25	C	501	CLA	O2A-CGA-O1A	-2.46	117.38	123.59
27	K	101	BCR	C33-C5-C6	-2.46	121.77	124.53
30	e	102	LHG	C11-C10-C9	-2.46	101.94	114.42
25	C	504	CLA	O2A-CGA-O1A	-2.46	117.39	123.59
25	b	604	CLA	O1D-CGD-CBD	2.46	129.51	124.48
27	B	617	BCR	C33-C5-C6	-2.46	121.77	124.53
27	B	619	BCR	C34-C9-C10	-2.45	119.48	122.92
27	T	101	BCR	C27-C26-C25	2.45	126.29	122.73
27	t	101	BCR	C3-C4-C5	-2.45	109.70	114.08
25	b	601	CLA	C1B-CHB-C4A	-2.45	125.27	130.12
25	c	506	CLA	CHB-C4A-NA	2.44	127.89	124.51
28	a	612	PL9	C37-C38-C39	-2.44	121.78	127.66
25	C	512	CLA	O2D-CGD-CBD	2.44	115.61	111.27
25	B	601	CLA	O2A-CGA-O1A	-2.44	117.44	123.59
30	B	622	LHG	C20-C19-C18	-2.44	102.06	114.42
25	D	403	CLA	O2D-CGD-O1D	-2.43	119.09	123.84
32	c	517	DGD	O3G-C1D-C2D	-2.43	104.51	108.30
25	b	613	CLA	CHB-C4A-NA	2.43	127.87	124.51
32	c	516	DGD	CAB-C9B-C8B	-2.42	102.13	114.42
25	b	614	CLA	CHB-C4A-NA	2.42	127.86	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	C	516	DGD	CDB-CCB-CBB	-2.42	102.13	114.42
33	m	102	STE	C3-C2-C1	-2.42	108.37	114.47
25	b	614	CLA	CHD-C1D-ND	-2.42	122.23	124.45
29	D	407	LMG	O8-C28-O10	-2.42	117.49	123.59
25	b	614	CLA	O2A-CGA-O1A	-2.42	117.49	123.59
25	c	506	CLA	O2D-CGD-O1D	-2.42	119.11	123.84
25	b	607	CLA	O2A-CGA-O1A	-2.41	117.50	123.59
25	h	101	CLA	C2D-C1D-ND	-2.41	108.33	110.10
25	h	101	CLA	O2D-CGD-CBD	2.41	115.55	111.27
25	B	605	CLA	C16-C15-C13	-2.41	108.14	115.92
32	a	617	DGD	C1G-C2G-C3G	-2.41	106.17	111.80
27	c	514	BCR	C33-C5-C6	-2.41	121.82	124.53
28	A	611	PL9	C22-C23-C24	-2.41	121.86	127.66
25	b	613	CLA	O2D-CGD-O1D	-2.41	119.13	123.84
29	D	407	LMG	O3-C3-C2	-2.41	104.79	110.35
25	c	510	CLA	C1B-CHB-C4A	-2.40	125.36	130.12
27	B	618	BCR	C2-C1-C6	2.40	114.18	110.48
32	a	617	DGD	C8B-C7B-C6B	-2.40	102.23	114.42
26	D	402	PHO	O1D-CGD-CBD	2.40	128.74	124.74
27	B	617	BCR	C24-C23-C22	-2.40	122.61	126.23
28	D	406	PL9	C42-C43-C44	-2.40	121.88	127.66
25	C	504	CLA	CED-O2D-CGD	2.40	121.36	115.94
25	B	601	CLA	O2D-CGD-CBD	2.40	115.53	111.27
25	a	613	CLA	C1B-CHB-C4A	-2.40	125.37	130.12
29	c	521	LMG	O6-C1-O1	-2.40	104.30	109.97
25	C	502	CLA	C1B-CHB-C4A	-2.40	125.37	130.12
25	C	506	CLA	CHB-C4A-NA	2.40	127.82	124.51
31	A	616	SQD	O48-C23-C24	2.39	119.42	111.91
27	K	103	BCR	C27-C26-C25	2.39	126.19	122.73
25	a	610	CLA	C1-C2-C3	-2.38	121.92	126.04
26	A	608	PHO	O2D-CGD-CBD	2.38	114.01	111.00
30	D	408	LHG	C20-C19-C18	-2.38	102.34	114.42
25	C	503	CLA	O1D-CGD-CBD	2.38	129.35	124.48
29	b	622	LMG	O2-C2-C1	-2.38	104.27	110.05
29	c	522	LMG	C40-C39-C38	-2.37	102.39	114.42
29	d	408	LMG	O7-C10-O9	-2.37	117.39	123.30
28	D	406	PL9	C31-C32-C33	-2.37	104.09	111.88
29	c	519	LMG	C40-C39-C38	-2.37	102.39	114.42
25	C	508	CLA	CHD-C4C-NC	2.37	127.94	124.20
25	c	513	CLA	C1-C2-C3	-2.37	121.95	126.04
25	h	101	CLA	C3C-C4C-NC	-2.37	107.92	110.57
27	B	617	BCR	C11-C10-C9	-2.37	123.93	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	C	518	LMG	O6-C1-O1	-2.37	104.37	109.97
35	e	101	HEM	C4B-CHC-C1C	2.36	125.68	122.56
25	C	513	CLA	CHB-C4A-NA	2.36	127.78	124.51
25	b	604	CLA	O1A-CGA-CBA	2.36	132.95	123.73
25	b	607	CLA	O2D-CGD-CBD	2.36	115.47	111.27
27	b	618	BCR	C7-C8-C9	-2.36	122.67	126.23
32	c	516	DGD	C8B-C7B-C6B	-2.36	102.45	114.42
25	c	501	CLA	C1-C2-C3	-2.36	121.97	126.04
30	E	101	LHG	C18-C17-C16	-2.36	102.46	114.42
25	c	509	CLA	O1D-CGD-CBD	2.36	129.31	124.48
25	B	606	CLA	CHD-C1D-ND	-2.36	122.29	124.45
25	B	604	CLA	O2A-C1-C2	2.35	114.82	108.64
32	h	103	DGD	C3D-C4D-C5D	-2.35	106.05	110.24
25	c	511	CLA	CHD-C1D-ND	-2.35	122.30	124.45
25	a	608	CLA	C1B-CHB-C4A	-2.35	125.47	130.12
25	a	608	CLA	C2D-C1D-ND	-2.35	108.37	110.10
25	C	511	CLA	CHB-C4A-NA	2.35	127.76	124.51
25	C	508	CLA	CHD-C1D-C2D	2.34	130.39	125.48
32	c	517	DGD	O2D-C2D-C1D	-2.34	104.36	110.05
25	C	503	CLA	O2A-C1-C2	-2.34	102.48	108.64
25	b	612	CLA	C7-C6-C5	-2.34	107.00	113.36
32	H	102	DGD	C1D-C2D-C3D	-2.34	105.12	110.00
25	c	501	CLA	O2D-CGD-CBD	2.34	115.42	111.27
27	K	101	BCR	C15-C16-C17	-2.34	118.68	123.47
27	k	102	BCR	C27-C26-C25	2.34	126.13	122.73
25	C	509	CLA	C16-C15-C13	-2.34	108.36	115.92
25	c	507	CLA	C1B-CHB-C4A	-2.34	125.49	130.12
25	c	502	CLA	CHD-C1D-ND	-2.34	122.31	124.45
25	c	509	CLA	CHB-C4A-NA	2.34	127.74	124.51
25	C	508	CLA	CHB-C4A-NA	2.33	127.73	124.51
25	C	509	CLA	CHB-C4A-NA	2.33	127.73	124.51
25	c	504	CLA	O2D-CGD-CBD	2.33	115.40	111.27
29	M	101	LMG	O6-C1-O1	-2.33	104.46	109.97
27	A	610	BCR	C38-C26-C25	-2.33	121.92	124.53
25	C	510	CLA	O2A-CGA-O1A	-2.32	117.72	123.59
25	b	609	CLA	CAA-CBA-CGA	-2.32	106.46	113.25
35	e	101	HEM	CHC-C4B-C3B	2.32	128.13	124.57
33	j	101	STE	O2-C1-C2	2.32	121.50	114.03
25	b	615	CLA	O1D-CGD-CBD	2.32	129.23	124.48
27	b	617	BCR	C27-C26-C25	2.32	126.10	122.73
25	C	507	CLA	C1B-CHB-C4A	-2.32	125.52	130.12
29	c	519	LMG	O1-C7-C8	-2.32	105.30	110.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	C	509	CLA	C1-C2-C3	-2.32	122.03	126.04
33	b	625	STE	C3-C2-C1	-2.32	108.63	114.47
25	D	403	CLA	O2A-CGA-O1A	-2.32	117.75	123.59
25	B	615	CLA	O2D-CGD-O1D	-2.31	119.31	123.84
29	c	522	LMG	C38-C37-C36	-2.31	102.68	114.42
27	a	611	BCR	C2-C1-C6	2.31	114.04	110.48
25	B	613	CLA	C16-C15-C13	-2.31	108.45	115.92
25	b	608	CLA	CHB-C4A-NA	2.31	127.71	124.51
29	A	613	LMG	C38-C37-C36	-2.31	102.70	114.42
25	D	404	CLA	O2D-CGD-CBD	2.31	115.37	111.27
27	t	101	BCR	C7-C8-C9	-2.31	122.75	126.23
28	A	611	PL9	O1-C4-C3	-2.31	118.18	120.72
25	b	613	CLA	CHD-C1D-ND	-2.31	122.33	124.45
28	A	611	PL9	C12-C13-C14	-2.31	122.11	127.66
32	a	617	DGD	CDB-CCB-CBB	-2.30	102.73	114.42
25	c	511	CLA	O2A-CGA-O1A	-2.30	117.78	123.59
25	C	510	CLA	C1B-CHB-C4A	-2.30	125.56	130.12
28	A	611	PL9	O2-C1-C2	-2.30	116.51	121.78
30	l	101	LHG	C11-C10-C9	-2.30	102.76	114.42
32	H	102	DGD	O3E-C3E-C2E	-2.30	105.04	110.35
27	B	617	BCR	C27-C26-C25	2.30	126.06	122.73
28	D	406	PL9	C12-C13-C14	-2.30	122.13	127.66
29	d	409	LMG	C40-C39-C38	-2.30	102.77	114.42
25	c	501	CLA	CHD-C1D-ND	-2.29	122.34	124.45
25	B	609	CLA	CHB-C4A-NA	2.29	127.68	124.51
25	b	612	CLA	CHB-C4A-NA	2.29	127.68	124.51
25	b	614	CLA	C1B-CHB-C4A	-2.29	125.58	130.12
25	B	611	CLA	CHB-C4A-NA	2.29	127.68	124.51
27	a	611	BCR	C35-C13-C14	-2.29	119.72	122.92
25	a	610	CLA	O2A-CGA-O1A	-2.29	117.82	123.59
25	c	513	CLA	CHB-C4A-NA	2.29	127.67	124.51
29	D	409	LMG	C38-C37-C36	-2.29	102.82	114.42
27	b	618	BCR	C2-C1-C6	2.29	114.00	110.48
31	a	616	SQD	C9-C8-C7	-2.28	105.31	113.62
25	B	602	CLA	CHA-C4D-ND	2.28	137.27	132.50
25	B	605	CLA	CMB-C2B-C1B	-2.28	124.96	128.46
30	l	101	LHG	C20-C19-C18	-2.28	102.85	114.42
25	B	605	CLA	O1D-CGD-CBD	2.28	129.15	124.48
26	A	608	PHO	CMC-C2C-C3C	2.28	129.24	124.94
32	A	617	DGD	C4E-C3E-C2E	-2.28	106.85	110.82
25	B	611	CLA	C1B-CHB-C4A	-2.28	125.61	130.12
27	a	611	BCR	C7-C8-C9	-2.28	122.80	126.23

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	b	603	CLA	CHB-C4A-NA	2.28	127.66	124.51
29	d	409	LMG	O3-C3-C2	-2.27	105.09	110.35
30	E	101	LHG	C11-C10-C9	-2.27	102.88	114.42
27	k	101	BCR	C27-C26-C25	2.27	126.03	122.73
32	C	515	DGD	CBB-CAB-C9B	-2.27	102.90	114.42
27	H	101	BCR	C24-C23-C22	-2.27	122.81	126.23
29	b	622	LMG	O1-C7-C8	-2.27	105.43	110.90
27	h	102	BCR	C3-C4-C5	-2.27	110.03	114.08
32	H	102	DGD	CDB-CCB-CBB	-2.26	102.93	114.42
31	a	616	SQD	O48-C23-O10	-2.26	117.88	123.59
31	B	623	SQD	C9-C8-C7	-2.26	105.39	113.62
25	B	615	CLA	C1B-CHB-C4A	-2.26	125.64	130.12
32	C	516	DGD	C5B-C4B-C3B	-2.26	102.96	114.42
28	A	611	PL9	C31-C32-C33	-2.26	104.46	111.88
25	b	615	CLA	CHD-C1D-ND	-2.26	122.38	124.45
29	C	518	LMG	C38-C37-C36	-2.26	102.96	114.42
25	c	503	CLA	CHD-C1D-ND	-2.26	122.38	124.45
27	C	514	BCR	C33-C5-C6	-2.25	122.00	124.53
25	c	506	CLA	CAC-C3C-C4C	2.25	127.73	124.81
25	A	606	CLA	O2D-CGD-O1D	-2.25	119.44	123.84
29	d	409	LMG	O2-C2-C1	-2.25	104.58	110.05
35	e	101	HEM	C4D-ND-C1D	2.25	107.39	105.07
27	K	102	BCR	C16-C15-C14	-2.25	118.87	123.47
25	B	602	CLA	O2D-CGD-O1D	-2.25	119.45	123.84
36	V	201	HEC	CBA-CAA-C2A	-2.25	108.82	112.60
29	b	622	LMG	O8-C28-O10	-2.24	117.93	123.59
25	A	607	CLA	C1D-ND-C4D	2.24	107.93	106.33
25	d	402	CLA	C1B-CHB-C4A	-2.24	125.68	130.12
27	C	514	BCR	C11-C10-C9	-2.24	124.11	127.31
25	c	506	CLA	C1B-CHB-C4A	-2.24	125.69	130.12
25	c	510	CLA	CHD-C1D-ND	-2.24	122.40	124.45
25	d	402	CLA	O2A-CGA-O1A	-2.23	117.95	123.59
25	b	604	CLA	C4-C3-C5	2.23	119.03	115.27
25	c	508	CLA	CHB-C4A-NA	2.23	127.60	124.51
29	c	521	LMG	C40-C39-C38	-2.23	103.10	114.42
25	c	510	CLA	O2A-CGA-O1A	-2.23	117.96	123.59
25	C	502	CLA	CMB-C2B-C3B	2.23	128.85	124.68
25	C	511	CLA	CHD-C1D-ND	-2.23	122.41	124.45
25	C	508	CLA	O1D-CGD-CBD	2.23	129.04	124.48
27	K	101	BCR	C2-C1-C6	2.23	113.91	110.48
29	c	522	LMG	O8-C28-O10	-2.23	117.97	123.59
27	b	618	BCR	C15-C16-C17	-2.23	118.92	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	c	518	DGD	O3G-C1D-C2D	-2.22	104.83	108.30
29	b	622	LMG	C40-C39-C38	-2.22	103.14	114.42
27	K	103	BCR	C2-C1-C6	2.22	113.90	110.48
30	L	101	LHG	C11-C10-C9	-2.22	103.15	114.42
32	A	617	DGD	CAB-C9B-C8B	-2.22	103.15	114.42
35	e	101	HEM	CMC-C2C-C3C	2.22	128.83	124.68
27	h	102	BCR	C16-C15-C14	-2.22	118.93	123.47
27	C	514	BCR	C7-C8-C9	-2.22	122.88	126.23
27	t	101	BCR	C33-C5-C6	-2.22	122.04	124.53
25	C	505	CLA	O2A-CGA-O1A	-2.22	118.00	123.59
25	B	601	CLA	C2A-C1A-CHA	2.21	127.73	123.86
25	b	602	CLA	O2A-CGA-O1A	-2.21	118.00	123.59
27	b	616	BCR	C29-C30-C25	2.21	113.89	110.48
27	B	618	BCR	C33-C5-C6	-2.21	122.05	124.53
28	A	611	PL9	C20-C19-C21	2.21	118.99	115.27
25	C	513	CLA	O2A-CGA-O1A	-2.21	118.02	123.59
25	C	502	CLA	O2D-CGD-O1D	-2.21	119.53	123.84
25	B	605	CLA	CMB-C2B-C3B	2.21	128.81	124.68
32	C	517	DGD	CAB-C9B-C8B	-2.20	103.23	114.42
27	b	617	BCR	C15-C14-C13	-2.20	124.16	127.31
27	c	515	BCR	C33-C5-C6	-2.20	122.05	124.53
28	d	405	PL9	C36-C34-C33	-2.20	116.66	121.12
30	d	406	LHG	C20-C19-C18	-2.20	103.26	114.42
29	d	409	LMG	O7-C10-O9	-2.20	118.39	123.70
31	F	102	SQD	C46-C45-C44	-2.20	106.39	113.70
35	F	101	HEM	C4C-CHD-C1D	2.20	125.46	122.56
27	a	611	BCR	C15-C16-C17	-2.19	118.98	123.47
25	b	603	CLA	C6-C7-C8	-2.19	108.83	115.92
32	h	103	DGD	O5D-C1E-C2E	2.19	111.73	108.30
29	D	409	LMG	C8-O7-C10	2.19	123.19	117.79
33	t	104	STE	C3-C2-C1	-2.19	108.95	114.47
29	c	521	LMG	O2-C2-C1	-2.19	104.72	110.05
27	A	610	BCR	C7-C8-C9	-2.19	122.93	126.23
32	C	515	DGD	CAB-C9B-C8B	-2.19	103.31	114.42
32	C	516	DGD	O5D-C6D-C5D	-2.19	105.00	109.05
27	b	617	BCR	C24-C23-C22	-2.19	122.93	126.23
30	a	614	LHG	C20-C19-C18	-2.19	103.33	114.42
25	a	608	CLA	CHD-C1D-ND	-2.19	122.45	124.45
26	d	401	PHO	C6-C7-C8	-2.18	108.86	115.92
36	v	201	HEC	CMC-C2C-C3C	2.18	128.39	125.82
25	B	609	CLA	CHA-C1A-NA	-2.18	121.40	126.40
32	C	515	DGD	O1G-C1A-C2A	-2.18	105.07	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B	621	LMG	O7-C10-O9	-2.18	117.87	123.30
25	A	607	CLA	CHD-C1D-ND	-2.18	122.45	124.45
25	c	508	CLA	CHD-C4C-NC	2.18	127.63	124.20
32	c	518	DGD	C8B-C7B-C6B	-2.17	103.39	114.42
25	a	613	CLA	CHB-C4A-NA	2.17	127.52	124.51
28	d	405	PL9	C47-C48-C49	-2.17	120.32	127.75
30	A	614	LHG	C27-C26-C25	-2.17	103.39	114.42
25	C	508	CLA	O2A-CGA-O1A	-2.17	118.11	123.59
25	C	507	CLA	C2A-C1A-CHA	2.17	127.66	123.86
25	B	615	CLA	CMB-C2B-C3B	2.17	128.74	124.68
29	M	101	LMG	O1-C7-C8	-2.17	105.66	110.90
25	b	610	CLA	CHD-C1D-C2D	2.17	130.03	125.48
27	D	405	BCR	C38-C26-C25	-2.17	122.09	124.53
30	A	614	LHG	C11-C10-C9	-2.17	103.42	114.42
25	c	505	CLA	CHB-C4A-NA	2.17	127.51	124.51
25	B	615	CLA	O2A-CGA-O1A	-2.17	118.12	123.59
25	B	603	CLA	O2D-CGD-CBD	2.17	115.12	111.27
25	B	605	CLA	CHB-C4A-NA	2.17	127.51	124.51
32	C	515	DGD	C6B-C5B-C4B	-2.16	103.44	114.42
29	D	407	LMG	O2-C2-C1	-2.16	104.79	110.05
29	c	521	LMG	C42-C41-C40	-2.16	103.44	114.42
25	B	615	CLA	C7-C6-C5	-2.16	107.48	113.36
29	D	407	LMG	C38-C37-C36	-2.16	103.45	114.42
27	H	101	BCR	C16-C15-C14	-2.16	119.05	123.47
32	a	617	DGD	CAB-C9B-C8B	-2.16	103.45	114.42
25	B	609	CLA	C1B-CHB-C4A	-2.16	125.84	130.12
32	C	515	DGD	C8B-C7B-C6B	-2.16	103.46	114.42
33	t	102	STE	O2-C1-C2	2.16	120.96	114.03
27	k	101	BCR	C24-C23-C22	-2.16	122.97	126.23
32	A	617	DGD	CBB-CAB-C9B	-2.16	103.47	114.42
30	E	101	LHG	C27-C26-C25	-2.16	103.47	114.42
27	B	617	BCR	C29-C30-C25	2.16	113.80	110.48
25	c	503	CLA	O2A-CGA-O1A	-2.15	118.16	123.59
25	c	504	CLA	CHB-C4A-NA	2.15	127.49	124.51
25	b	612	CLA	O1D-CGD-CBD	2.15	128.89	124.48
30	e	102	LHG	C20-C19-C18	-2.15	103.50	114.42
32	c	516	DGD	CBB-CAB-C9B	-2.15	103.50	114.42
29	b	622	LMG	C1-C2-C3	-2.15	105.52	110.00
25	C	503	CLA	C2D-C1D-ND	-2.15	108.52	110.10
25	c	507	CLA	C2A-C1A-CHA	2.15	127.61	123.86
30	a	614	LHG	O8-C6-C5	-2.15	102.19	108.43
25	c	511	CLA	O2D-CGD-CBD	2.15	115.08	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B	610	CLA	CMB-C2B-C3B	2.15	128.69	124.68
28	A	611	PL9	C27-C28-C29	-2.14	122.50	127.66
25	A	609	CLA	CHD-C4C-NC	2.14	127.58	124.20
25	c	502	CLA	C4D-CHA-C1A	2.14	123.86	121.25
25	A	606	CLA	O1D-CGD-CBD	2.14	128.87	124.48
29	d	408	LMG	C40-C39-C38	-2.14	103.56	114.42
25	c	504	CLA	C1-C2-C3	-2.14	122.34	126.04
32	c	517	DGD	CAB-C9B-C8B	-2.14	103.56	114.42
32	c	517	DGD	O2E-C2E-C1E	-2.14	104.85	110.05
33	B	625	STE	O2-C1-C2	2.14	120.90	114.03
30	A	614	LHG	O8-C23-C24	2.14	118.61	111.91
25	a	608	CLA	C3C-C4C-NC	-2.14	108.17	110.57
25	C	509	CLA	CHD-C1D-ND	-2.14	122.49	124.45
30	B	622	LHG	O8-C23-O10	-2.13	118.20	123.59
30	A	614	LHG	C18-C17-C16	-2.13	103.61	114.42
27	t	101	BCR	C38-C26-C27	-2.13	109.53	113.62
25	c	508	CLA	O2A-CGA-O1A	-2.13	118.22	123.59
28	d	405	PL9	C31-C32-C33	-2.13	104.89	111.88
33	j	101	STE	C3-C2-C1	-2.13	109.11	114.47
25	b	612	CLA	CHA-C1A-NA	-2.13	121.53	126.40
32	C	517	DGD	C7B-C6B-C5B	-2.13	103.63	114.42
25	c	501	CLA	O1D-CGD-CBD	2.13	128.83	124.48
29	c	519	LMG	O2-C2-C1	-2.12	104.89	110.05
29	d	409	LMG	C38-C37-C36	-2.12	103.64	114.42
31	f	101	SQD	C1-O5-C5	-2.12	109.52	113.69
32	h	103	DGD	O6E-C5E-C6E	-2.12	101.16	106.44
25	B	614	CLA	CMB-C2B-C1B	-2.12	125.20	128.46
29	A	613	LMG	C40-C39-C38	-2.12	103.65	114.42
32	c	516	DGD	C3G-C2G-C1G	-2.12	106.77	111.79
27	H	101	BCR	C1-C6-C5	-2.12	119.63	122.61
25	c	503	CLA	C1B-CHB-C4A	-2.12	125.92	130.12
30	A	614	LHG	O8-C6-C5	-2.12	102.27	108.43
27	B	619	BCR	C15-C14-C13	-2.11	124.29	127.31
25	B	601	CLA	C4-C3-C5	2.11	118.83	115.27
25	B	606	CLA	CHB-C4A-NA	2.11	127.43	124.51
25	b	607	CLA	O2D-CGD-O1D	-2.11	119.71	123.84
35	e	101	HEM	CAB-C3B-C2B	-2.11	121.65	128.60
32	H	102	DGD	CAB-C9B-C8B	-2.11	103.72	114.42
25	b	611	CLA	C11-C10-C8	-2.11	109.10	115.92
25	c	506	CLA	C4-C3-C5	2.11	118.82	115.27
25	b	610	CLA	C7-C6-C5	-2.11	107.63	113.36
25	c	512	CLA	C1B-CHB-C4A	-2.11	125.94	130.12

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	c	519	LMG	O8-C28-O10	-2.11	118.28	123.59
32	C	517	DGD	C5B-C4B-C3B	-2.11	103.73	114.42
26	d	401	PHO	C1B-NB-C4B	2.11	111.42	107.09
28	a	612	PL9	C32-C33-C34	-2.10	122.59	127.66
29	c	521	LMG	O1-C1-C2	-2.10	105.02	108.30
25	c	513	CLA	O2A-CGA-O1A	-2.10	118.28	123.59
32	A	617	DGD	O2D-C2D-C1D	-2.10	104.94	110.05
30	B	622	LHG	C18-C17-C16	-2.10	103.76	114.42
32	a	617	DGD	CFB-CEB-CDB	-2.10	103.76	114.42
25	B	608	CLA	C6-C7-C8	-2.10	109.13	115.92
32	H	102	DGD	C7B-C6B-C5B	-2.10	103.76	114.42
25	c	505	CLA	CMB-C2B-C3B	2.10	128.61	124.68
29	m	101	LMG	C40-C39-C38	-2.10	103.77	114.42
25	B	601	CLA	C2D-C1D-ND	-2.10	108.56	110.10
25	C	504	CLA	O2D-CGD-O1D	-2.10	119.73	123.84
32	h	103	DGD	O5E-C6E-C5E	-2.10	104.09	111.29
27	b	617	BCR	C8-C7-C6	-2.10	121.31	127.20
28	A	611	PL9	O2-C1-C6	2.10	124.22	120.59
32	c	517	DGD	CBB-CAB-C9B	-2.10	103.77	114.42
26	a	609	PHO	CMA-C3A-C4A	-2.10	109.78	114.38
28	a	612	PL9	C50-C49-C48	-2.10	116.58	122.65
25	a	608	CLA	C1-C2-C3	-2.10	122.42	126.04
32	C	516	DGD	CBB-CAB-C9B	-2.10	103.78	114.42
32	A	617	DGD	O5D-C6D-C5D	-2.10	105.17	109.05
25	D	404	CLA	CHA-C1A-NA	-2.10	121.60	126.40
32	a	617	DGD	C5B-C4B-C3B	-2.09	103.79	114.42
25	d	403	CLA	CHD-C1D-C2D	2.09	129.87	125.48
33	a	618	STE	C3-C2-C1	-2.09	109.20	114.47
32	C	516	DGD	CAB-C9B-C8B	-2.09	103.82	114.42
29	b	622	LMG	C42-C41-C40	-2.09	103.82	114.42
25	c	503	CLA	O2D-CGD-O1D	-2.09	119.75	123.84
25	a	607	CLA	C1B-CHB-C4A	-2.09	125.98	130.12
25	c	513	CLA	CHA-C1A-NA	-2.09	121.62	126.40
27	a	611	BCR	C29-C30-C25	2.09	113.69	110.48
32	c	518	DGD	C3E-C4E-C5E	-2.09	106.52	110.24
32	H	102	DGD	O6E-C5E-C4E	2.09	113.48	109.69
25	c	507	CLA	O2D-CGD-CBD	2.09	114.97	111.27
25	a	607	CLA	C7-C6-C5	-2.08	107.70	113.36
29	M	101	LMG	C9-C8-C7	-2.08	106.86	111.79
25	C	508	CLA	C1-C2-C3	-2.08	122.44	126.04
25	b	604	CLA	CHD-C4C-NC	2.08	127.49	124.20
27	d	404	BCR	C1-C6-C5	-2.08	119.68	122.61

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
25	B	601	CLA	CHB-C4A-NA	2.08	127.39	124.51
27	b	617	BCR	C35-C13-C14	-2.08	120.00	122.92
33	B	625	STE	C3-C2-C1	-2.08	109.22	114.47
32	C	516	DGD	C6D-O5D-C1E	2.08	117.81	113.74
29	D	407	LMG	C40-C39-C38	-2.08	103.85	114.42
28	d	405	PL9	C27-C28-C29	-2.08	122.65	127.66
25	B	616	CLA	O2D-CGD-O1D	-2.08	119.77	123.84
30	l	101	LHG	C18-C17-C16	-2.08	103.86	114.42
27	t	101	BCR	C28-C27-C26	-2.08	110.36	114.08
27	B	618	BCR	C30-C25-C26	-2.08	119.68	122.61
25	b	607	CLA	CHD-C4C-NC	2.08	127.48	124.20
25	b	601	CLA	CHD-C4C-NC	2.08	127.48	124.20
29	D	407	LMG	C1-C2-C3	-2.08	105.67	110.00
29	M	101	LMG	C35-C34-C33	-2.08	103.89	114.42
29	A	613	LMG	C1-O6-C5	-2.07	109.62	113.69
25	C	510	CLA	CHD-C4C-NC	2.07	127.47	124.20
25	B	607	CLA	O2D-CGD-O1D	-2.07	119.79	123.84
29	d	408	LMG	C38-C37-C36	-2.07	103.91	114.42
25	c	513	CLA	CHD-C1D-ND	-2.07	122.55	124.45
31	F	102	SQD	O7-S-C6	2.07	109.40	106.94
26	a	609	PHO	O2D-CGD-O1D	-2.07	119.79	123.84
26	D	402	PHO	C1B-NB-C4B	2.07	111.34	107.09
29	M	101	LMG	O2-C2-C1	-2.07	105.02	110.05
25	B	610	CLA	C1-C2-C3	-2.07	122.47	126.04
25	a	610	CLA	C4-C3-C5	2.07	118.75	115.27
29	M	101	LMG	C1-O6-C5	-2.07	109.63	113.69
25	B	613	CLA	O2A-CGA-O1A	-2.06	118.38	123.59
25	a	608	CLA	C1D-ND-C4D	2.06	107.80	106.33
25	b	603	CLA	CHD-C1D-ND	-2.06	122.56	124.45
25	b	612	CLA	C1B-CHB-C4A	-2.06	126.03	130.12
29	A	613	LMG	O8-C28-O10	-2.06	118.39	123.59
33	X	101	STE	C3-C2-C1	-2.06	109.28	114.47
30	B	622	LHG	O8-C6-C5	-2.06	102.44	108.43
25	b	603	CLA	C1B-CHB-C4A	-2.06	126.04	130.12
25	b	608	CLA	CHA-C1A-NA	-2.06	121.68	126.40
25	C	503	CLA	C5-C3-C2	-2.06	116.95	121.12
29	b	622	LMG	C38-C37-C36	-2.06	103.98	114.42
29	C	518	LMG	O3-C3-C2	-2.06	105.59	110.35
25	B	610	CLA	O1D-CGD-CBD	2.06	128.69	124.48
25	c	503	CLA	C11-C12-C13	-2.06	109.27	115.92
26	a	609	PHO	O2A-CGA-O1A	-2.06	118.40	123.59
25	a	607	CLA	C2D-C1D-ND	-2.05	108.59	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
29	B	621	LMG	C38-C37-C36	-2.05	104.00	114.42
25	A	606	CLA	C7-C6-C5	-2.05	107.78	113.36
25	B	616	CLA	CHB-C4A-NA	2.05	127.35	124.51
27	C	514	BCR	C27-C26-C25	2.05	125.71	122.73
25	C	507	CLA	O2D-CGD-CBD	2.05	114.92	111.27
25	b	605	CLA	C1B-CHB-C4A	-2.05	126.05	130.12
29	C	518	LMG	C40-C39-C38	-2.05	104.01	114.42
25	b	602	CLA	CAA-CBA-CGA	-2.05	107.26	113.25
25	d	402	CLA	CHB-C4A-NA	2.05	127.35	124.51
25	C	510	CLA	O2D-CGD-CBD	2.05	114.91	111.27
29	M	101	LMG	O5-C6-C5	-2.05	104.26	111.29
33	C	520	STE	O2-C1-C2	2.05	120.61	114.03
25	B	601	CLA	C1B-CHB-C4A	-2.05	126.06	130.12
27	K	102	BCR	C30-C25-C26	-2.05	119.73	122.61
30	a	614	LHG	C27-C26-C25	-2.04	104.05	114.42
25	b	610	CLA	CHB-C4A-NA	2.04	127.34	124.51
29	b	622	LMG	C24-C23-C22	-2.04	104.05	114.42
32	h	103	DGD	C6D-C5D-C4D	2.04	116.36	112.09
27	B	618	BCR	C15-C16-C17	-2.04	119.29	123.47
35	F	101	HEM	C4B-CHC-C1C	2.04	125.25	122.56
35	e	101	HEM	C1B-NB-C4B	2.04	107.18	105.07
31	a	616	SQD	C45-O47-C7	-2.04	112.77	117.79
25	C	501	CLA	CHA-C1A-NA	-2.04	121.73	126.40
27	B	618	BCR	C7-C8-C9	-2.04	123.15	126.23
25	C	506	CLA	O1D-CGD-CBD	2.04	128.66	124.48
25	c	509	CLA	C1B-CHB-C4A	-2.04	126.08	130.12
27	h	102	BCR	C35-C13-C14	-2.04	120.07	122.92
25	c	510	CLA	C1-C2-C3	-2.04	122.52	126.04
25	b	614	CLA	CHC-C1C-NC	2.03	127.29	124.20
35	e	101	HEM	C3B-C2B-C1B	2.03	108.00	106.49
25	C	501	CLA	CAC-C3C-C4C	2.03	127.45	124.81
25	C	507	CLA	CHA-C1A-NA	-2.03	121.74	126.40
32	c	516	DGD	C6B-C5B-C4B	-2.03	104.10	114.42
25	B	607	CLA	CHB-C4A-NA	2.03	127.32	124.51
36	V	201	HEC	CAD-CBD-CGD	-2.03	108.06	113.76
25	A	607	CLA	CHD-C1D-C2D	2.03	129.74	125.48
27	b	618	BCR	C27-C26-C25	2.03	125.68	122.73
32	h	103	DGD	O3E-C3E-C2E	-2.03	105.65	110.35
32	c	517	DGD	C3D-C4D-C5D	-2.03	106.62	110.24
28	d	405	PL9	O2-C1-C2	-2.03	117.13	121.78
29	C	518	LMG	O8-C28-O10	-2.03	118.47	123.59
25	d	403	CLA	CHB-C4A-NA	2.03	127.32	124.51

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	A	608	PHO	CMA-C3A-C4A	-2.03	109.93	114.38
28	a	612	PL9	C11-C12-C13	-2.03	105.21	111.88
31	a	616	SQD	O49-C7-C8	-2.03	115.82	123.73
29	b	622	LMG	O5-C6-C5	-2.03	104.33	111.29
25	C	512	CLA	C1B-CHB-C4A	-2.03	126.10	130.12
25	D	404	CLA	C2D-C1D-ND	-2.03	108.61	110.10
25	c	513	CLA	C2A-C1A-CHA	2.03	127.40	123.86
25	b	605	CLA	O2A-CGA-O1A	-2.03	118.48	123.59
25	a	610	CLA	C2D-C1D-ND	-2.03	108.61	110.10
25	B	604	CLA	O2D-CGD-CBD	2.02	114.87	111.27
25	B	612	CLA	CHD-C1D-ND	-2.02	122.59	124.45
27	t	101	BCR	C29-C30-C25	2.02	113.60	110.48
25	c	502	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
25	c	510	CLA	C6-C7-C8	-2.02	109.39	115.92
26	D	402	PHO	CMC-C2C-C3C	2.02	128.75	124.94
25	b	615	CLA	O2A-CGA-O1A	-2.02	118.50	123.59
32	C	517	DGD	CBB-CAB-C9B	-2.01	104.20	114.42
32	c	518	DGD	O2D-C2D-C1D	-2.01	105.15	110.05
25	B	601	CLA	CHA-C1A-NA	-2.01	121.78	126.40
27	K	102	BCR	C1-C6-C5	-2.01	119.78	122.61
30	e	102	LHG	C27-C26-C25	-2.01	104.20	114.42
25	b	615	CLA	C1-C2-C3	-2.01	122.56	126.04
25	B	614	CLA	O2D-CGD-CBD	2.01	114.84	111.27
30	d	406	LHG	C11-C10-C9	-2.01	104.21	114.42
25	B	608	CLA	C1B-CHB-C4A	-2.01	126.14	130.12
25	D	404	CLA	CHB-C4A-NA	2.01	127.29	124.51
25	c	513	CLA	C2D-C1D-ND	-2.01	108.62	110.10
25	a	610	CLA	C1B-CHB-C4A	-2.01	126.14	130.12
25	B	612	CLA	O1D-CGD-CBD	2.01	128.59	124.48
25	C	502	CLA	CHA-C1A-NA	-2.01	121.80	126.40
27	D	405	BCR	C30-C25-C26	-2.01	119.79	122.61
29	c	521	LMG	C6-C5-C4	-2.01	108.31	113.00
29	d	409	LMG	O1-C7-C8	-2.00	106.06	110.90
29	D	407	LMG	C3-C4-C5	-2.00	106.67	110.24
31	B	623	SQD	C25-C24-C23	-2.00	106.34	113.62
28	d	405	PL9	C8-C7-C3	2.00	117.64	111.98

All (63) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
25	A	606	CLA	ND
25	A	607	CLA	ND

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Mol	Chain	Res	Type	Atom
25	A	609	CLA	ND
25	A	612	CLA	ND
25	B	601	CLA	ND
25	B	602	CLA	ND
25	B	603	CLA	ND
25	B	604	CLA	ND
25	B	605	CLA	ND
25	B	606	CLA	ND
25	B	607	CLA	ND
25	B	608	CLA	ND
25	B	610	CLA	ND
25	B	611	CLA	ND
25	B	612	CLA	ND
25	B	613	CLA	ND
25	B	614	CLA	ND
25	B	615	CLA	ND
25	B	616	CLA	ND
25	C	501	CLA	ND
25	C	502	CLA	ND
25	C	503	CLA	ND
25	C	504	CLA	ND
25	C	505	CLA	ND
25	C	506	CLA	ND
25	C	507	CLA	ND
25	C	509	CLA	ND
25	C	510	CLA	ND
25	C	511	CLA	ND
25	C	512	CLA	ND
25	C	513	CLA	ND
25	D	403	CLA	ND
25	a	607	CLA	ND
25	a	608	CLA	ND
25	a	610	CLA	ND
25	a	613	CLA	ND
25	b	601	CLA	ND
25	b	602	CLA	ND
25	b	603	CLA	ND
25	b	604	CLA	ND
25	b	605	CLA	ND
25	b	606	CLA	ND
25	b	609	CLA	ND
25	b	611	CLA	ND

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Mol	Chain	Res	Type	Atom
25	b	612	CLA	ND
25	b	613	CLA	ND
25	b	614	CLA	ND
25	b	615	CLA	ND
25	c	501	CLA	ND
25	c	502	CLA	ND
25	c	503	CLA	ND
25	c	504	CLA	ND
25	c	505	CLA	ND
25	c	506	CLA	ND
25	c	507	CLA	ND
25	c	509	CLA	ND
25	c	510	CLA	ND
25	c	511	CLA	ND
25	c	512	CLA	ND
25	c	513	CLA	ND
25	d	402	CLA	ND
25	d	403	CLA	ND
25	h	101	CLA	ND

All (1775) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
25	B	607	CLA	C14-C13-C15-C16
25	B	614	CLA	CAD-CBD-CGD-O1D
25	B	614	CLA	CAD-CBD-CGD-O2D
25	C	504	CLA	C2-C3-C5-C6
25	C	504	CLA	C4-C3-C5-C6
25	C	508	CLA	CHA-CBD-CGD-O1D
25	C	508	CLA	CHA-CBD-CGD-O2D
25	a	608	CLA	CHA-CBD-CGD-O1D
25	a	613	CLA	CHA-CBD-CGD-O1D
25	a	613	CLA	CHA-CBD-CGD-O2D
25	b	603	CLA	C4-C3-C5-C6
25	b	604	CLA	C2-C3-C5-C6
25	b	604	CLA	C4-C3-C5-C6
25	b	604	CLA	C11-C10-C8-C9
25	b	613	CLA	CHA-CBD-CGD-O1D
25	b	613	CLA	CAD-CBD-CGD-O1D
25	b	613	CLA	CAD-CBD-CGD-O2D
25	b	613	CLA	C2-C3-C5-C6
25	b	613	CLA	C4-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
25	c	502	CLA	CHA-CBD-CGD-O1D
25	c	502	CLA	CHA-CBD-CGD-O2D
25	c	502	CLA	CAD-CBD-CGD-O1D
25	c	508	CLA	CHA-CBD-CGD-O1D
25	c	508	CLA	CHA-CBD-CGD-O2D
25	c	513	CLA	C1A-C2A-CAA-CBA
25	h	101	CLA	CBD-CGD-O2D-CED
27	B	618	BCR	C7-C8-C9-C34
27	B	619	BCR	C7-C8-C9-C34
27	B	619	BCR	C37-C22-C23-C24
27	C	514	BCR	C7-C8-C9-C34
27	D	405	BCR	C37-C22-C23-C24
27	D	405	BCR	C23-C24-C25-C26
27	D	405	BCR	C23-C24-C25-C30
27	K	101	BCR	C10-C11-C12-C13
27	K	101	BCR	C11-C12-C13-C14
27	K	101	BCR	C11-C12-C13-C35
27	K	101	BCR	C16-C17-C18-C36
27	K	102	BCR	C5-C6-C7-C8
27	K	102	BCR	C37-C22-C23-C24
27	T	101	BCR	C37-C22-C23-C24
27	a	611	BCR	C35-C13-C14-C15
27	c	514	BCR	C16-C17-C18-C36
27	d	404	BCR	C21-C22-C23-C24
27	d	404	BCR	C37-C22-C23-C24
27	k	101	BCR	C5-C6-C7-C8
27	k	101	BCR	C21-C22-C23-C24
28	A	611	PL9	C9-C11-C12-C13
28	A	611	PL9	C12-C13-C14-C15
28	A	611	PL9	C18-C19-C21-C22
28	A	611	PL9	C22-C23-C24-C26
28	A	611	PL9	C32-C33-C34-C35
28	A	611	PL9	C33-C34-C36-C37
28	A	611	PL9	C37-C38-C39-C40
28	A	611	PL9	C37-C38-C39-C41
28	A	611	PL9	C40-C39-C41-C42
28	A	611	PL9	C43-C44-C46-C47
28	D	406	PL9	C32-C33-C34-C35
28	D	406	PL9	C42-C43-C44-C45
28	D	406	PL9	C42-C43-C44-C46
28	D	406	PL9	C47-C48-C49-C50
28	a	612	PL9	C22-C23-C24-C25

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Mol	Chain	Res	Type	Atoms
28	a	612	PL9	C24-C26-C27-C28
28	a	612	PL9	C39-C41-C42-C43
28	a	612	PL9	C47-C48-C49-C51
29	A	613	LMG	O6-C1-O1-C7
29	A	613	LMG	O9-C10-O7-C8
29	A	613	LMG	C11-C10-O7-C8
29	D	409	LMG	O1-C7-C8-C9
29	D	409	LMG	O1-C7-C8-O7
29	b	622	LMG	C2-C1-O1-C7
29	b	622	LMG	O6-C1-O1-C7
29	c	521	LMG	C11-C10-O7-C8
29	c	522	LMG	C2-C1-O1-C7
29	c	522	LMG	O6-C1-O1-C7
30	A	614	LHG	O1-C1-C2-C3
30	A	614	LHG	C3-O3-P-O5
30	B	622	LHG	C1-C2-C3-O3
30	B	622	LHG	C3-O3-P-O4
30	B	622	LHG	C3-O3-P-O5
30	D	408	LHG	O1-C1-C2-C3
30	D	408	LHG	C3-O3-P-O5
30	D	408	LHG	C4-O6-P-O4
30	E	101	LHG	O1-C1-C2-C3
30	L	101	LHG	C3-O3-P-O4
30	L	101	LHG	C4-O6-P-O4
30	a	614	LHG	O1-C1-C2-C3
30	a	614	LHG	C3-O3-P-O5
30	a	614	LHG	C3-O3-P-O6
30	d	406	LHG	C3-O3-P-O5
30	d	406	LHG	C3-O3-P-O6
30	d	406	LHG	C4-O6-P-O4
30	d	406	LHG	C4-O6-P-O5
30	e	102	LHG	C1-C2-C3-O3
30	e	102	LHG	C3-O3-P-O5
30	e	102	LHG	C3-O3-P-O6
30	e	102	LHG	C24-C23-O8-C6
31	B	623	SQD	C2-C1-O6-C44
31	B	623	SQD	O5-C1-O6-C44
31	B	623	SQD	O6-C44-C45-O47
31	B	623	SQD	O49-C7-O47-C45
31	B	623	SQD	C8-C7-O47-C45
31	a	615	SQD	O6-C44-C45-O47
31	a	616	SQD	C8-C7-O47-C45

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Mol	Chain	Res	Type	Atoms
31	b	619	SQD	C46-C45-O47-C7
31	b	619	SQD	C8-C7-O47-C45
31	f	101	SQD	C2-C1-O6-C44
31	f	101	SQD	O5-C1-O6-C44
32	A	617	DGD	C2B-C1B-O2G-C2G
32	A	617	DGD	O1B-C1B-O2G-C2G
32	A	617	DGD	O2G-C2G-C3G-O3G
25	c	513	CLA	CBD-CGD-O2D-CED
29	c	521	LMG	O10-C28-O8-C9
30	E	101	LHG	O10-C23-O8-C6
30	e	102	LHG	O10-C23-O8-C6
31	b	619	SQD	O10-C23-O48-C46
31	f	101	SQD	O10-C23-O48-C46
30	E	101	LHG	C24-C23-O8-C6
31	b	619	SQD	C24-C23-O48-C46
28	D	406	PL9	C47-C48-C49-C51
25	c	511	CLA	CBD-CGD-O2D-CED
25	c	512	CLA	CBD-CGD-O2D-CED
29	c	522	LMG	O10-C28-O8-C9
25	h	101	CLA	O1D-CGD-O2D-CED
25	b	615	CLA	CBD-CGD-O2D-CED
25	c	501	CLA	CBD-CGD-O2D-CED
29	D	409	LMG	O9-C10-O7-C8
29	c	521	LMG	O9-C10-O7-C8
31	a	616	SQD	O49-C7-O47-C45
25	B	616	CLA	C3-C5-C6-C7
25	C	509	CLA	C3-C5-C6-C7
25	b	613	CLA	C3-C5-C6-C7
29	c	522	LMG	C29-C28-O8-C9
31	f	101	SQD	C24-C23-O48-C46
25	c	507	CLA	C4-C3-C5-C6
28	A	611	PL9	C20-C19-C21-C22
28	a	612	PL9	C35-C34-C36-C37
25	b	603	CLA	C2-C3-C5-C6
25	B	606	CLA	C2A-CAA-CBA-CGA
25	b	605	CLA	C2A-CAA-CBA-CGA
25	B	605	CLA	C3-C5-C6-C7
25	C	512	CLA	C3-C5-C6-C7
25	h	101	CLA	C3-C5-C6-C7
29	c	521	LMG	C29-C28-O8-C9
29	c	519	LMG	C11-C10-O7-C8
31	a	615	SQD	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
25	c	513	CLA	O1D-CGD-O2D-CED
31	b	619	SQD	O49-C7-O47-C45
28	A	611	PL9	C12-C13-C14-C16
28	D	406	PL9	C32-C33-C34-C36
29	M	101	LMG	O10-C28-O8-C9
25	C	501	CLA	CBD-CGD-O2D-CED
25	C	509	CLA	CBD-CGD-O2D-CED
25	b	606	CLA	CBD-CGD-O2D-CED
30	d	406	LHG	O2-C2-C3-O3
30	e	102	LHG	O2-C2-C3-O3
25	B	601	CLA	CBA-CGA-O2A-C1
25	c	506	CLA	CBA-CGA-O2A-C1
29	M	101	LMG	C29-C28-O8-C9
32	h	103	DGD	O6E-C5E-C6E-O5E
29	C	518	LMG	C11-C10-O7-C8
29	d	409	LMG	C10-C11-C12-C13
25	C	512	CLA	CBD-CGD-O2D-CED
29	c	522	LMG	O6-C5-C6-O5
32	h	103	DGD	C4E-C5E-C6E-O5E
31	A	615	SQD	C30-C31-C32-C33
30	d	407	LHG	C24-C25-C26-C27
32	C	515	DGD	O6E-C5E-C6E-O5E
25	c	508	CLA	CBD-CGD-O2D-CED
26	d	401	PHO	CBD-CGD-O2D-CED
29	A	613	LMG	O6-C5-C6-O5
25	B	601	CLA	O1A-CGA-O2A-C1
25	c	506	CLA	O1A-CGA-O2A-C1
25	A	609	CLA	C4-C3-C5-C6
25	B	614	CLA	C4-C3-C5-C6
28	A	611	PL9	C45-C44-C46-C47
25	A	609	CLA	C2-C3-C5-C6
25	B	614	CLA	C2-C3-C5-C6
28	A	611	PL9	C38-C39-C41-C42
32	c	518	DGD	O1A-C1A-O1G-C1G
28	A	611	PL9	C19-C21-C22-C23
28	A	611	PL9	C44-C46-C47-C48
28	D	406	PL9	C34-C36-C37-C38
32	a	617	DGD	C2B-C3B-C4B-C5B
30	d	406	LHG	C1-C2-C3-O3
28	a	612	PL9	C22-C23-C24-C26
33	b	621	STE	C3-C4-C5-C6
25	b	601	CLA	C3-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
25	b	603	CLA	C3-C5-C6-C7
25	a	610	CLA	C13-C15-C16-C17
29	M	101	LMG	O6-C5-C6-O5
29	c	522	LMG	C4-C5-C6-O5
30	a	614	LHG	C28-C29-C30-C31
25	B	614	CLA	C13-C15-C16-C17
25	c	511	CLA	C13-C15-C16-C17
30	B	622	LHG	O2-C2-C3-O3
33	a	618	STE	C1-C2-C3-C4
25	B	601	CLA	C6-C7-C8-C9
25	B	601	CLA	C14-C13-C15-C16
25	B	605	CLA	C6-C7-C8-C9
25	B	615	CLA	C11-C10-C8-C9
25	C	503	CLA	C11-C10-C8-C9
25	C	509	CLA	C11-C10-C8-C9
25	C	512	CLA	C11-C10-C8-C9
25	C	512	CLA	C14-C13-C15-C16
25	D	404	CLA	C11-C12-C13-C14
25	a	608	CLA	C11-C12-C13-C14
25	b	605	CLA	C14-C13-C15-C16
25	b	612	CLA	C6-C7-C8-C9
25	b	615	CLA	C6-C7-C8-C9
25	c	509	CLA	C11-C12-C13-C14
25	c	512	CLA	C6-C7-C8-C9
25	d	403	CLA	C6-C7-C8-C9
25	c	511	CLA	O1D-CGD-O2D-CED
25	a	607	CLA	C15-C16-C17-C18
27	H	101	BCR	C11-C12-C13-C35
27	b	618	BCR	C37-C22-C23-C24
27	c	515	BCR	C11-C12-C13-C35
27	k	101	BCR	C7-C8-C9-C34
27	t	101	BCR	C7-C8-C9-C34
33	B	624	STE	C1-C2-C3-C4
25	B	609	CLA	C13-C15-C16-C17
25	B	613	CLA	C8-C10-C11-C12
25	c	512	CLA	O1D-CGD-O2D-CED
29	A	613	LMG	C4-C5-C6-O5
25	b	607	CLA	C2C-C3C-CAC-CBC
30	a	614	LHG	C7-C8-C9-C10
25	A	612	CLA	C15-C16-C17-C18
25	B	606	CLA	C13-C15-C16-C17
25	C	503	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
25	C	506	CLA	C15-C16-C17-C18
25	C	513	CLA	C15-C16-C17-C18
25	b	604	CLA	C5-C6-C7-C8
25	b	606	CLA	C5-C6-C7-C8
25	b	608	CLA	C15-C16-C17-C18
25	b	612	CLA	C13-C15-C16-C17
25	b	613	CLA	C5-C6-C7-C8
25	b	615	CLA	C10-C11-C12-C13
25	c	505	CLA	C13-C15-C16-C17
25	c	508	CLA	C10-C11-C12-C13
25	c	510	CLA	C10-C11-C12-C13
29	B	621	LMG	C28-C29-C30-C31
29	D	409	LMG	C28-C29-C30-C31
29	M	101	LMG	C10-C11-C12-C13
29	c	521	LMG	C10-C11-C12-C13
29	d	409	LMG	C28-C29-C30-C31
30	a	614	LHG	C23-C24-C25-C26
30	d	407	LHG	C23-C24-C25-C26
30	e	102	LHG	C23-C24-C25-C26
30	l	101	LHG	C7-C8-C9-C10
31	A	615	SQD	C7-C8-C9-C10
31	b	619	SQD	C23-C24-C25-C26
29	b	622	LMG	O6-C5-C6-O5
25	C	506	CLA	C8-C10-C11-C12
25	c	507	CLA	C8-C10-C11-C12
25	d	403	CLA	C10-C11-C12-C13
25	b	615	CLA	O1D-CGD-O2D-CED
29	C	518	LMG	O9-C10-O7-C8
25	A	606	CLA	C15-C16-C17-C18
25	B	601	CLA	C15-C16-C17-C18
25	b	614	CLA	C5-C6-C7-C8
30	E	101	LHG	C23-C24-C25-C26
32	c	518	DGD	C1A-C2A-C3A-C4A
33	b	625	STE	C1-C2-C3-C4
33	x	101	STE	C1-C2-C3-C4
29	m	101	LMG	C38-C39-C40-C41
25	b	606	CLA	C10-C11-C12-C13
25	B	601	CLA	C11-C10-C8-C7
25	C	508	CLA	C12-C13-C15-C16
25	C	513	CLA	C12-C13-C15-C16
25	b	605	CLA	C12-C13-C15-C16
25	b	613	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
25	c	510	CLA	C11-C10-C8-C7
25	c	513	CLA	C6-C7-C8-C10
25	B	615	CLA	C3-C5-C6-C7
25	B	606	CLA	C8-C10-C11-C12
25	B	611	CLA	C13-C15-C16-C17
25	B	615	CLA	C5-C6-C7-C8
25	c	512	CLA	C10-C11-C12-C13
25	c	511	CLA	C15-C16-C17-C18
28	A	611	PL9	C29-C31-C32-C33
28	A	611	PL9	C34-C36-C37-C38
28	A	611	PL9	C39-C41-C42-C43
33	C	519	STE	C1-C2-C3-C4
27	T	101	BCR	C18-C19-C20-C21
27	c	514	BCR	C10-C11-C12-C13
25	B	613	CLA	C5-C6-C7-C8
25	C	509	CLA	C10-C11-C12-C13
25	b	610	CLA	C15-C16-C17-C18
25	c	503	CLA	C8-C10-C11-C12
31	a	616	SQD	C24-C23-O48-C46
32	C	516	DGD	CCA-CDA-CEA-CFA
25	A	612	CLA	C13-C15-C16-C17
25	B	614	CLA	C8-C10-C11-C12
25	B	615	CLA	C13-C15-C16-C17
25	C	506	CLA	C13-C15-C16-C17
25	a	610	CLA	C5-C6-C7-C8
25	b	606	CLA	C8-C10-C11-C12
25	b	614	CLA	C8-C10-C11-C12
25	c	503	CLA	C5-C6-C7-C8
25	c	507	CLA	C5-C6-C7-C8
25	c	512	CLA	C8-C10-C11-C12
32	c	518	DGD	O6E-C5E-C6E-O5E
25	B	616	CLA	C5-C6-C7-C8
25	b	608	CLA	C13-C15-C16-C17
25	b	610	CLA	C13-C15-C16-C17
25	c	506	CLA	C8-C10-C11-C12
25	c	509	CLA	C13-C15-C16-C17
25	c	512	CLA	C5-C6-C7-C8
30	B	622	LHG	C3-O3-P-O6
30	L	101	LHG	C4-O6-P-O3
30	d	406	LHG	C4-O6-P-O3
30	l	101	LHG	C4-O6-P-O3
25	B	602	CLA	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
25	C	510	CLA	C15-C16-C17-C18
25	b	604	CLA	C10-C11-C12-C13
29	M	101	LMG	C4-C5-C6-O5
29	c	521	LMG	O6-C5-C6-O5
32	C	515	DGD	C4E-C5E-C6E-O5E
25	c	507	CLA	C2-C3-C5-C6
25	b	614	CLA	C15-C16-C17-C18
25	C	502	CLA	C16-C17-C18-C19
25	a	610	CLA	C16-C17-C18-C20
25	b	614	CLA	C16-C17-C18-C20
25	c	511	CLA	C16-C17-C18-C19
25	d	402	CLA	C16-C17-C18-C20
29	c	519	LMG	O6-C5-C6-O5
32	A	617	DGD	C2A-C1A-O1G-C1G
32	a	617	DGD	C2A-C1A-O1G-C1G
25	b	610	CLA	C8-C10-C11-C12
32	A	617	DGD	C1B-C2B-C3B-C4B
30	d	406	LHG	C26-C27-C28-C29
32	C	516	DGD	CAB-CBB-CCB-CDB
33	X	101	STE	C6-C7-C8-C9
27	B	618	BCR	C20-C21-C22-C37
27	H	101	BCR	C16-C17-C18-C36
27	K	101	BCR	C35-C13-C14-C15
27	K	102	BCR	C16-C17-C18-C36
27	K	102	BCR	C20-C21-C22-C37
27	b	618	BCR	C20-C21-C22-C37
27	c	514	BCR	C11-C10-C9-C34
29	b	622	LMG	C13-C14-C15-C16
29	c	521	LMG	C30-C31-C32-C33
29	c	521	LMG	C39-C40-C41-C42
29	d	408	LMG	C35-C36-C37-C38
30	A	614	LHG	C29-C30-C31-C32
30	a	614	LHG	C25-C26-C27-C28
30	e	102	LHG	C26-C27-C28-C29
30	l	101	LHG	C15-C16-C17-C18
30	l	101	LHG	C29-C30-C31-C32
31	B	623	SQD	C11-C12-C13-C14
31	a	615	SQD	C29-C30-C31-C32
32	A	617	DGD	C5B-C6B-C7B-C8B
32	C	515	DGD	C4B-C5B-C6B-C7B
32	a	617	DGD	C5A-C6A-C7A-C8A
32	c	516	DGD	C4B-C5B-C6B-C7B

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Mol	Chain	Res	Type	Atoms
32	c	517	DGD	C8A-C9A-CAA-CBA
33	E	102	STE	C3-C4-C5-C6
33	I	101	STE	C11-C10-C9-C8
33	b	624	STE	C12-C13-C14-C15
33	c	520	STE	C9-C10-C11-C12
33	d	410	STE	C10-C11-C12-C13
33	t	102	STE	C6-C7-C8-C9
25	c	501	CLA	O1D-CGD-O2D-CED
29	C	518	LMG	C30-C31-C32-C33
29	b	622	LMG	C23-C24-C25-C26
29	b	622	LMG	C39-C40-C41-C42
29	m	101	LMG	C15-C16-C17-C18
30	E	101	LHG	C33-C34-C35-C36
30	a	614	LHG	C16-C17-C18-C19
30	a	614	LHG	C17-C18-C19-C20
30	d	406	LHG	C28-C29-C30-C31
30	d	407	LHG	C29-C30-C31-C32
30	l	101	LHG	C13-C14-C15-C16
31	a	616	SQD	C12-C13-C14-C15
32	C	515	DGD	C3A-C4A-C5A-C6A
32	C	517	DGD	C5A-C6A-C7A-C8A
32	h	103	DGD	CBA-CCA-CDA-CEA
33	M	102	STE	C11-C10-C9-C8
33	a	618	STE	C5-C6-C7-C8
33	b	621	STE	C14-C15-C16-C17
33	t	104	STE	C5-C6-C7-C8
32	a	617	DGD	O1B-C1B-O2G-C2G
30	e	102	LHG	C7-C8-C9-C10
29	A	613	LMG	C14-C15-C16-C17
29	d	408	LMG	C37-C38-C39-C40
31	A	616	SQD	C9-C10-C11-C12
32	A	617	DGD	CDB-CEB-CFB-CGB
32	h	103	DGD	C5B-C6B-C7B-C8B
33	E	102	STE	C4-C5-C6-C7
33	a	618	STE	C2-C3-C4-C5
29	c	521	LMG	C13-C14-C15-C16
29	c	522	LMG	C11-C12-C13-C14
30	L	101	LHG	C10-C11-C12-C13
31	a	616	SQD	C17-C18-C19-C20
32	h	103	DGD	C6B-C7B-C8B-C9B
33	t	103	STE	C5-C6-C7-C8
30	D	408	LHG	O2-C2-C3-O3

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Mol	Chain	Res	Type	Atoms
29	D	407	LMG	C31-C32-C33-C34
29	D	407	LMG	C33-C34-C35-C36
30	L	101	LHG	C27-C28-C29-C30
31	A	616	SQD	C14-C15-C16-C17
32	A	617	DGD	CCB-CDB-CEB-CFB
32	c	516	DGD	C3B-C4B-C5B-C6B
25	c	510	CLA	C3-C5-C6-C7
30	B	622	LHG	C23-C24-C25-C26
27	B	618	BCR	C11-C10-C9-C8
27	K	103	BCR	C11-C10-C9-C8
27	T	101	BCR	C12-C13-C14-C15
32	C	516	DGD	C2E-C1E-O5D-C6D
32	c	517	DGD	C2E-C1E-O5D-C6D
25	c	512	CLA	CBA-CGA-O2A-C1
32	c	518	DGD	C2A-C1A-O1G-C1G
29	D	407	LMG	C36-C37-C38-C39
30	d	406	LHG	C32-C33-C34-C35
31	A	616	SQD	C16-C17-C18-C19
31	a	615	SQD	C25-C26-C27-C28
32	C	516	DGD	CAA-CBA-CCA-CDA
32	c	518	DGD	C6A-C7A-C8A-C9A
33	H	103	STE	C7-C8-C9-C10
33	b	623	STE	C11-C10-C9-C8
25	B	603	CLA	C16-C17-C18-C20
25	c	505	CLA	C16-C17-C18-C20
25	d	402	CLA	C16-C17-C18-C19
25	c	505	CLA	C4-C3-C5-C6
28	a	612	PL9	C32-C33-C34-C35
28	a	612	PL9	C45-C44-C46-C47
30	D	408	LHG	C11-C12-C13-C14
30	a	614	LHG	C18-C19-C20-C21
31	b	619	SQD	C24-C25-C26-C27
32	c	518	DGD	CBA-CCA-CDA-CEA
33	b	625	STE	C3-C4-C5-C6
33	b	625	STE	C7-C8-C9-C10
33	b	626	STE	C5-C6-C7-C8
33	j	101	STE	C2-C3-C4-C5
33	t	103	STE	C3-C4-C5-C6
28	A	611	PL9	C23-C24-C26-C27
25	B	601	CLA	C11-C10-C8-C9
25	B	606	CLA	C11-C10-C8-C9
25	C	502	CLA	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
25	a	608	CLA	C11-C10-C8-C9
25	b	603	CLA	C11-C10-C8-C9
25	b	608	CLA	C11-C12-C13-C14
25	h	101	CLA	C11-C12-C13-C14
29	c	519	LMG	C31-C32-C33-C34
30	A	614	LHG	C9-C10-C11-C12
30	A	614	LHG	C32-C33-C34-C35
30	B	622	LHG	C13-C14-C15-C16
30	d	406	LHG	C30-C31-C32-C33
30	e	102	LHG	C27-C28-C29-C30
31	F	102	SQD	C25-C26-C27-C28
31	a	616	SQD	C10-C11-C12-C13
31	a	616	SQD	C11-C12-C13-C14
32	C	517	DGD	CBB-CCB-CDB-CEB
32	c	518	DGD	C5A-C6A-C7A-C8A
33	I	101	STE	C6-C7-C8-C9
33	X	101	STE	C7-C8-C9-C10
33	t	102	STE	C3-C4-C5-C6
33	t	103	STE	C6-C7-C8-C9
29	A	613	LMG	C13-C14-C15-C16
29	A	613	LMG	C34-C35-C36-C37
29	D	407	LMG	C17-C18-C19-C20
30	L	101	LHG	C18-C19-C20-C21
30	l	101	LHG	C27-C28-C29-C30
31	A	615	SQD	C11-C12-C13-C14
32	A	617	DGD	C4A-C5A-C6A-C7A
32	A	617	DGD	C6B-C7B-C8B-C9B
32	c	517	DGD	CBA-CCA-CDA-CEA
33	X	101	STE	C4-C5-C6-C7
30	d	407	LHG	O1-C1-C2-C3
25	c	506	CLA	C13-C15-C16-C17
29	M	101	LMG	C14-C15-C16-C17
29	b	622	LMG	C32-C33-C34-C35
29	c	521	LMG	C31-C32-C33-C34
30	A	614	LHG	C11-C12-C13-C14
30	E	101	LHG	C25-C26-C27-C28
31	f	101	SQD	C33-C34-C35-C36
32	A	617	DGD	CEB-CFB-CGB-CHB
33	C	519	STE	C6-C7-C8-C9
33	H	103	STE	C3-C4-C5-C6
33	b	624	STE	C11-C12-C13-C14
33	b	624	STE	C13-C14-C15-C16

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Mol	Chain	Res	Type	Atoms
33	b	625	STE	C5-C6-C7-C8
33	t	104	STE	C7-C8-C9-C10
29	B	621	LMG	C36-C37-C38-C39
29	M	101	LMG	C37-C38-C39-C40
29	m	101	LMG	C11-C12-C13-C14
30	A	614	LHG	C25-C26-C27-C28
30	L	101	LHG	C12-C13-C14-C15
30	e	102	LHG	C12-C13-C14-C15
30	l	101	LHG	C32-C33-C34-C35
31	a	615	SQD	C14-C15-C16-C17
32	A	617	DGD	C7A-C8A-C9A-CAA
32	H	102	DGD	C7A-C8A-C9A-CAA
32	c	516	DGD	C4A-C5A-C6A-C7A
32	h	103	DGD	C3A-C4A-C5A-C6A
33	X	101	STE	C9-C10-C11-C12
33	b	621	STE	C4-C5-C6-C7
33	b	625	STE	C4-C5-C6-C7
25	B	612	CLA	C16-C17-C18-C20
25	C	502	CLA	C16-C17-C18-C20
25	b	614	CLA	C16-C17-C18-C19
32	c	517	DGD	O6E-C1E-O5D-C6D
25	b	613	CLA	C8-C10-C11-C12
29	B	621	LMG	C29-C30-C31-C32
29	M	101	LMG	C13-C14-C15-C16
29	b	622	LMG	C41-C42-C43-C44
29	m	101	LMG	C30-C31-C32-C33
30	E	101	LHG	C16-C17-C18-C19
30	E	101	LHG	C32-C33-C34-C35
31	A	616	SQD	C24-C25-C26-C27
31	a	616	SQD	C15-C16-C17-C18
31	b	619	SQD	C26-C27-C28-C29
32	C	515	DGD	C5B-C6B-C7B-C8B
32	c	516	DGD	C5B-C6B-C7B-C8B
33	C	519	STE	C3-C4-C5-C6
33	t	104	STE	C9-C10-C11-C12
29	A	613	LMG	C18-C19-C20-C21
29	D	407	LMG	C21-C22-C23-C24
29	M	101	LMG	C15-C16-C17-C18
31	B	623	SQD	C16-C17-C18-C19
32	A	617	DGD	C4B-C5B-C6B-C7B
32	c	518	DGD	C5B-C6B-C7B-C8B
32	h	103	DGD	C2B-C3B-C4B-C5B

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Mol	Chain	Res	Type	Atoms
33	x	101	STE	C4-C5-C6-C7
33	c	520	STE	C1-C2-C3-C4
30	a	614	LHG	C27-C28-C29-C30
31	B	623	SQD	C9-C10-C11-C12
32	C	517	DGD	C7B-C8B-C9B-CAB
32	H	102	DGD	CCA-CDA-CEA-CFA
33	H	103	STE	C5-C6-C7-C8
33	b	620	STE	C11-C12-C13-C14
33	b	621	STE	C13-C14-C15-C16
30	D	408	LHG	C15-C16-C17-C18
30	d	407	LHG	C26-C27-C28-C29
30	l	101	LHG	C10-C11-C12-C13
32	A	617	DGD	CCA-CDA-CEA-CFA
32	C	517	DGD	C4B-C5B-C6B-C7B
33	C	520	STE	C5-C6-C7-C8
25	C	512	CLA	O1D-CGD-O2D-CED
25	c	513	CLA	C3A-C2A-CAA-CBA
29	C	518	LMG	C31-C32-C33-C34
29	D	407	LMG	C35-C36-C37-C38
29	d	408	LMG	C38-C39-C40-C41
30	A	614	LHG	C34-C35-C36-C37
30	d	406	LHG	C29-C30-C31-C32
32	H	102	DGD	C9A-CAA-CBA-CCA
32	h	103	DGD	C8A-C9A-CAA-CBA
33	E	102	STE	C6-C7-C8-C9
33	b	623	STE	C9-C10-C11-C12
25	C	509	CLA	O1D-CGD-O2D-CED
25	c	505	CLA	C16-C17-C18-C19
25	c	511	CLA	C16-C17-C18-C20
32	C	517	DGD	CCA-CDA-CEA-CFA
33	x	101	STE	C12-C13-C14-C15
30	a	614	LHG	C10-C11-C12-C13
30	a	614	LHG	C32-C33-C34-C35
31	B	623	SQD	C17-C18-C19-C20
32	A	617	DGD	CAA-CBA-CCA-CDA
32	C	516	DGD	C4A-C5A-C6A-C7A
31	a	615	SQD	C7-C8-C9-C10
29	D	407	LMG	C37-C38-C39-C40
30	L	101	LHG	C32-C33-C34-C35
32	a	617	DGD	O1A-C1A-O1G-C1G
25	C	506	CLA	C4-C3-C5-C6
25	C	510	CLA	C4-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
28	A	611	PL9	C35-C34-C36-C37
25	C	506	CLA	C2-C3-C5-C6
25	C	510	CLA	C2-C3-C5-C6
29	D	409	LMG	C11-C10-O7-C8
31	A	615	SQD	C11-C10-C9-C8
31	A	616	SQD	C15-C16-C17-C18
32	C	516	DGD	C6A-C7A-C8A-C9A
33	b	621	STE	C10-C11-C12-C13
30	A	614	LHG	O1-C1-C2-O2
30	D	408	LHG	O1-C1-C2-O2
30	a	614	LHG	O1-C1-C2-O2
25	B	607	CLA	C13-C15-C16-C17
25	b	611	CLA	C13-C15-C16-C17
29	M	101	LMG	C34-C35-C36-C37
29	c	521	LMG	C11-C12-C13-C14
30	l	101	LHG	C12-C13-C14-C15
31	a	616	SQD	C18-C19-C20-C21
32	H	102	DGD	C7B-C8B-C9B-CAB
32	h	103	DGD	C6A-C7A-C8A-C9A
33	H	103	STE	C12-C13-C14-C15
33	b	624	STE	C11-C10-C9-C8
33	x	101	STE	C3-C4-C5-C6
31	a	616	SQD	O10-C23-O48-C46
25	B	603	CLA	C16-C17-C18-C19
25	a	610	CLA	C16-C17-C18-C19
25	c	503	CLA	C16-C17-C18-C20
30	a	614	LHG	C31-C32-C33-C34
29	d	408	LMG	C32-C33-C34-C35
30	E	101	LHG	C9-C10-C11-C12
30	a	614	LHG	C33-C34-C35-C36
31	B	623	SQD	C13-C14-C15-C16
33	m	102	STE	C4-C5-C6-C7
32	H	102	DGD	C1A-C2A-C3A-C4A
31	f	101	SQD	C29-C30-C31-C32
33	l	102	STE	C4-C5-C6-C7
29	A	613	LMG	C16-C17-C18-C19
29	D	407	LMG	C20-C21-C22-C23
29	b	622	LMG	C29-C30-C31-C32
29	c	521	LMG	C38-C39-C40-C41
29	d	408	LMG	C31-C32-C33-C34
30	a	614	LHG	C15-C16-C17-C18
33	B	626	STE	C9-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
33	t	104	STE	C4-C5-C6-C7
25	c	512	CLA	O1A-CGA-O2A-C1
29	C	518	LMG	C33-C34-C35-C36
29	D	407	LMG	C15-C16-C17-C18
30	B	622	LHG	C27-C28-C29-C30
33	c	520	STE	C11-C12-C13-C14
33	k	103	STE	C2-C3-C4-C5
25	B	602	CLA	C16-C17-C18-C20
27	K	102	BCR	C1-C6-C7-C8
27	b	616	BCR	C1-C6-C7-C8
27	b	616	BCR	C5-C6-C7-C8
27	d	404	BCR	C23-C24-C25-C26
27	d	404	BCR	C23-C24-C25-C30
27	k	101	BCR	C1-C6-C7-C8
25	b	607	CLA	C4C-C3C-CAC-CBC
29	b	622	LMG	C22-C23-C24-C25
29	c	519	LMG	C38-C39-C40-C41
30	E	101	LHG	C27-C28-C29-C30
32	c	517	DGD	CAA-CBA-CCA-CDA
33	X	101	STE	C3-C4-C5-C6
25	B	605	CLA	C8-C10-C11-C12
25	C	512	CLA	C13-C15-C16-C17
25	c	508	CLA	C13-C15-C16-C17
29	M	101	LMG	C39-C40-C41-C42
30	D	408	LHG	C17-C18-C19-C20
33	b	621	STE	C1-C2-C3-C4
30	L	101	LHG	C30-C31-C32-C33
31	B	623	SQD	C31-C32-C33-C34
28	d	405	PL9	C47-C48-C49-C50
25	B	605	CLA	C15-C16-C17-C18
25	c	512	CLA	C13-C15-C16-C17
33	H	103	STE	C11-C10-C9-C8
33	l	102	STE	C3-C4-C5-C6
25	C	505	CLA	C12-C13-C15-C16
25	a	608	CLA	C11-C10-C8-C7
25	b	608	CLA	C11-C12-C13-C15
25	c	504	CLA	C11-C10-C8-C7
25	c	505	CLA	C2-C3-C5-C6
25	c	509	CLA	C11-C10-C8-C7
25	c	510	CLA	C12-C13-C15-C16
25	B	604	CLA	C10-C11-C12-C13
25	B	608	CLA	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
25	b	602	CLA	C10-C11-C12-C13
25	A	607	CLA	C16-C17-C18-C20
25	C	510	CLA	C16-C17-C18-C19
25	b	602	CLA	C16-C17-C18-C19
25	c	512	CLA	C16-C17-C18-C19
29	m	101	LMG	C29-C28-O8-C9
30	E	101	LHG	C15-C16-C17-C18
30	L	101	LHG	C31-C32-C33-C34
31	A	615	SQD	C16-C17-C18-C19
33	b	624	STE	C5-C6-C7-C8
25	b	609	CLA	C2A-CAA-CBA-CGA
25	a	608	CLA	C10-C11-C12-C13
25	c	505	CLA	C15-C16-C17-C18
25	c	509	CLA	C10-C11-C12-C13
29	D	407	LMG	C19-C20-C21-C22
30	e	102	LHG	C16-C17-C18-C19
32	H	102	DGD	CBB-CCB-CDB-CEB
25	C	501	CLA	O1D-CGD-O2D-CED
29	b	622	LMG	C16-C17-C18-C19
29	c	522	LMG	C12-C13-C14-C15
30	A	614	LHG	C24-C25-C26-C27
31	F	102	SQD	C32-C33-C34-C35
32	h	103	DGD	C3B-C4B-C5B-C6B
33	b	625	STE	C9-C10-C11-C12
32	a	617	DGD	C1B-C2B-C3B-C4B
25	B	612	CLA	C10-C11-C12-C13
29	c	522	LMG	C18-C19-C20-C21
30	E	101	LHG	C31-C32-C33-C34
31	A	615	SQD	C13-C14-C15-C16
33	d	410	STE	C5-C6-C7-C8
33	j	101	STE	C5-C6-C7-C8
28	D	406	PL9	C12-C13-C14-C15
28	a	612	PL9	C42-C43-C44-C45
32	a	617	DGD	CAA-CBA-CCA-CDA
32	C	516	DGD	O6E-C1E-O5D-C6D
29	d	409	LMG	C37-C38-C39-C40
30	B	622	LHG	C29-C30-C31-C32
30	d	406	LHG	C12-C13-C14-C15
31	f	101	SQD	C8-C7-O47-C45
32	a	617	DGD	C2B-C1B-O2G-C2G
27	B	618	BCR	C10-C11-C12-C13
29	A	613	LMG	C38-C39-C40-C41

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Mol	Chain	Res	Type	Atoms
32	A	617	DGD	CBA-CCA-CDA-CEA
25	b	604	CLA	C15-C16-C17-C18
25	b	612	CLA	C10-C11-C12-C13
25	B	604	CLA	CBD-CGD-O2D-CED
29	d	409	LMG	C36-C37-C38-C39
30	D	408	LHG	C25-C26-C27-C28
32	c	518	DGD	CCA-CDA-CEA-CFA
30	E	101	LHG	O9-C7-O7-C5
31	A	616	SQD	C10-C11-C12-C13
32	A	617	DGD	CEA-CFA-CGA-CHA
29	A	613	LMG	O1-C7-C8-O7
29	d	409	LMG	O6-C5-C6-O5
29	c	522	LMG	C30-C31-C32-C33
31	A	616	SQD	C11-C12-C13-C14
25	C	510	CLA	C16-C17-C18-C20
25	c	503	CLA	C16-C17-C18-C19
25	C	504	CLA	C11-C12-C13-C14
29	M	101	LMG	C29-C30-C31-C32
30	d	406	LHG	C33-C34-C35-C36
31	a	615	SQD	C9-C10-C11-C12
33	B	620	STE	C11-C12-C13-C14
25	B	613	CLA	C4-C3-C5-C6
31	A	616	SQD	C7-C8-C9-C10
25	B	604	CLA	C11-C10-C8-C9
25	B	606	CLA	C11-C12-C13-C14
25	B	616	CLA	C6-C7-C8-C9
25	C	509	CLA	C14-C13-C15-C16
25	C	510	CLA	C11-C10-C8-C9
25	b	602	CLA	C11-C10-C8-C9
25	c	504	CLA	C11-C10-C8-C9
25	c	506	CLA	C11-C12-C13-C14
25	c	509	CLA	C11-C10-C8-C9
25	c	510	CLA	C14-C13-C15-C16
25	b	606	CLA	O1D-CGD-O2D-CED
28	a	612	PL9	C47-C48-C49-C50
33	m	102	STE	C3-C4-C5-C6
33	b	623	STE	C3-C4-C5-C6
33	l	102	STE	C13-C14-C15-C16
27	c	515	BCR	C7-C8-C9-C34
33	E	102	STE	C1-C2-C3-C4
25	c	504	CLA	C8-C10-C11-C12
29	b	622	LMG	C17-C18-C19-C20

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Mol	Chain	Res	Type	Atoms
29	d	409	LMG	C30-C31-C32-C33
31	F	102	SQD	C27-C28-C29-C30
32	A	617	DGD	C2B-C3B-C4B-C5B
33	C	521	STE	C7-C8-C9-C10
25	c	508	CLA	C1A-C2A-CAA-CBA
25	h	101	CLA	C1A-C2A-CAA-CBA
25	B	602	CLA	C16-C17-C18-C19
31	f	101	SQD	O49-C7-O47-C45
30	D	408	LHG	C13-C14-C15-C16
31	A	616	SQD	C32-C33-C34-C35
33	B	620	STE	C9-C10-C11-C12
33	H	103	STE	C2-C3-C4-C5
33	M	102	STE	C5-C6-C7-C8
33	b	620	STE	C4-C5-C6-C7
33	x	101	STE	C11-C10-C9-C8
25	C	507	CLA	C5-C6-C7-C8
33	J	101	STE	C1-C2-C3-C4
26	d	401	PHO	O1D-CGD-O2D-CED
33	H	103	STE	C11-C12-C13-C14
25	a	610	CLA	CBA-CGA-O2A-C1
30	A	614	LHG	C11-C10-C9-C8
29	D	409	LMG	C12-C13-C14-C15
32	a	617	DGD	C3B-C4B-C5B-C6B
33	M	102	STE	C2-C3-C4-C5
31	a	615	SQD	C35-C36-C37-C38
29	c	522	LMG	C32-C33-C34-C35
31	a	616	SQD	C11-C10-C9-C8
32	a	617	DGD	CBA-CCA-CDA-CEA
25	b	601	CLA	C13-C15-C16-C17
33	b	623	STE	C1-C2-C3-C4
33	B	624	STE	C5-C6-C7-C8
33	t	102	STE	C11-C10-C9-C8
25	B	616	CLA	C4-C3-C5-C6
31	a	615	SQD	C32-C33-C34-C35
32	C	517	DGD	C2B-C3B-C4B-C5B
25	A	607	CLA	C10-C11-C12-C13
25	h	101	CLA	C8-C10-C11-C12
33	j	101	STE	C4-C5-C6-C7
29	c	522	LMG	C15-C16-C17-C18
32	C	516	DGD	CBA-CCA-CDA-CEA
32	C	516	DGD	C8B-C9B-CAB-CBB
32	c	518	DGD	C9B-CAB-CBB-CCB

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Mol	Chain	Res	Type	Atoms
25	c	512	CLA	C16-C17-C18-C20
29	M	101	LMG	C7-C8-C9-O8
29	b	622	LMG	C7-C8-C9-O8
30	e	102	LHG	C4-C5-C6-O8
31	B	623	SQD	O6-C44-C45-C46
31	a	615	SQD	O6-C44-C45-C46
31	a	616	SQD	C31-C32-C33-C34
32	A	617	DGD	C1G-C2G-C3G-O3G
32	C	515	DGD	O1G-C1G-C2G-C3G
33	B	625	STE	C7-C8-C9-C10
33	B	620	STE	C2-C3-C4-C5
32	C	516	DGD	C5D-C6D-O5D-C1E
32	c	517	DGD	C5D-C6D-O5D-C1E
29	d	408	LMG	C30-C31-C32-C33
30	B	622	LHG	C10-C11-C12-C13
31	b	619	SQD	C27-C28-C29-C30
32	H	102	DGD	CDB-CEB-CFB-CGB
33	k	103	STE	C4-C5-C6-C7
32	c	516	DGD	O6E-C5E-C6E-O5E
32	a	617	DGD	CFB-CGB-CHB-CIB
32	c	516	DGD	CDA-CEA-CFA-CGA
33	x	101	STE	C5-C6-C7-C8
29	c	519	LMG	C40-C41-C42-C43
30	d	406	LHG	C11-C12-C13-C14
32	h	103	DGD	C7A-C8A-C9A-CAA
33	X	101	STE	C11-C12-C13-C14
30	d	407	LHG	O1-C1-C2-O2
29	A	613	LMG	C36-C37-C38-C39
29	C	518	LMG	C17-C18-C19-C20
32	C	517	DGD	CBA-CCA-CDA-CEA
25	c	513	CLA	C8-C10-C11-C12
29	D	407	LMG	O6-C5-C6-O5
29	D	409	LMG	C34-C35-C36-C37
30	B	622	LHG	C28-C29-C30-C31
33	H	103	STE	C1-C2-C3-C4
30	e	102	LHG	C8-C7-O7-C5
29	c	522	LMG	C14-C15-C16-C17
31	a	615	SQD	C15-C16-C17-C18
32	C	516	DGD	C2B-C3B-C4B-C5B
25	B	603	CLA	C5-C6-C7-C8
29	D	407	LMG	C28-C29-C30-C31
29	b	622	LMG	C28-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
25	C	508	CLA	C16-C17-C18-C20
31	B	623	SQD	C24-C23-O48-C46
25	C	513	CLA	C13-C15-C16-C17
29	c	522	LMG	C40-C41-C42-C43
29	d	408	LMG	C34-C35-C36-C37
30	A	614	LHG	C30-C31-C32-C33
30	L	101	LHG	C19-C20-C21-C22
31	A	615	SQD	C17-C18-C19-C20
32	h	103	DGD	CAB-CBB-CCB-CDB
33	d	410	STE	C12-C13-C14-C15
29	D	409	LMG	C7-C8-O7-C10
25	c	510	CLA	C8-C10-C11-C12
25	C	506	CLA	C2-C1-O2A-CGA
25	c	506	CLA	C2-C1-O2A-CGA
30	A	614	LHG	C27-C28-C29-C30
30	B	622	LHG	C17-C18-C19-C20
30	L	101	LHG	C11-C12-C13-C14
32	C	517	DGD	C3A-C4A-C5A-C6A
25	c	510	CLA	C15-C16-C17-C18
30	e	102	LHG	C28-C29-C30-C31
32	C	517	DGD	CDB-CEB-CFB-CGB
31	A	615	SQD	C26-C27-C28-C29
25	B	603	CLA	C13-C15-C16-C17
25	c	503	CLA	C15-C16-C17-C18
25	c	511	CLA	C8-C10-C11-C12
25	c	508	CLA	O1D-CGD-O2D-CED
25	a	610	CLA	O1A-CGA-O2A-C1
31	a	615	SQD	C12-C13-C14-C15
32	C	517	DGD	CAB-CBB-CCB-CDB
27	K	101	BCR	C16-C17-C18-C19
27	h	102	BCR	C16-C17-C18-C19
29	A	613	LMG	C2-C1-O1-C7
29	M	101	LMG	O1-C7-C8-O7
29	b	622	LMG	O7-C8-C9-O8
29	d	409	LMG	C34-C35-C36-C37
32	a	617	DGD	C4B-C5B-C6B-C7B
25	C	505	CLA	C10-C11-C12-C13
25	c	505	CLA	C5-C6-C7-C8
25	A	607	CLA	C16-C17-C18-C19
30	L	101	LHG	C9-C10-C11-C12
32	C	517	DGD	CCB-CDB-CEB-CFB
25	B	615	CLA	C4-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
29	c	521	LMG	C33-C34-C35-C36
30	l	101	LHG	C9-C10-C11-C12
25	B	604	CLA	C11-C10-C8-C7
25	B	604	CLA	C12-C13-C15-C16
25	B	605	CLA	C11-C10-C8-C7
25	B	606	CLA	C6-C7-C8-C10
25	B	606	CLA	C11-C12-C13-C15
25	B	611	CLA	C11-C10-C8-C7
25	B	615	CLA	C6-C7-C8-C10
25	B	615	CLA	C11-C10-C8-C7
25	B	616	CLA	C6-C7-C8-C10
25	C	503	CLA	C11-C10-C8-C7
25	C	504	CLA	C11-C10-C8-C7
25	C	509	CLA	C11-C10-C8-C7
25	C	509	CLA	C12-C13-C15-C16
25	C	510	CLA	C11-C10-C8-C7
25	C	510	CLA	C12-C13-C15-C16
25	C	511	CLA	C6-C7-C8-C10
25	C	512	CLA	C11-C10-C8-C7
25	C	512	CLA	C11-C12-C13-C15
25	D	404	CLA	C6-C7-C8-C10
25	a	608	CLA	C6-C7-C8-C10
25	a	608	CLA	C12-C13-C15-C16
25	b	601	CLA	C6-C7-C8-C10
25	b	602	CLA	C11-C10-C8-C7
25	b	604	CLA	C11-C10-C8-C7
25	b	606	CLA	C6-C7-C8-C10
25	b	614	CLA	C11-C10-C8-C7
25	b	614	CLA	C12-C13-C15-C16
25	c	502	CLA	C11-C12-C13-C15
25	c	506	CLA	C11-C10-C8-C7
25	c	506	CLA	C11-C12-C13-C15
25	c	509	CLA	C11-C12-C13-C15
25	d	402	CLA	C11-C12-C13-C15
25	d	403	CLA	C6-C7-C8-C10
25	d	403	CLA	C11-C12-C13-C15
25	C	506	CLA	C3-C5-C6-C7
29	d	408	LMG	C33-C34-C35-C36
25	B	604	CLA	C11-C12-C13-C14
25	B	604	CLA	C14-C13-C15-C16
25	B	605	CLA	C11-C10-C8-C9
25	C	505	CLA	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
25	C	506	CLA	C14-C13-C15-C16
25	C	507	CLA	C11-C10-C8-C9
25	C	508	CLA	C14-C13-C15-C16
25	C	510	CLA	C6-C7-C8-C9
25	C	510	CLA	C14-C13-C15-C16
25	C	511	CLA	C6-C7-C8-C9
25	C	512	CLA	C11-C12-C13-C14
25	C	513	CLA	C14-C13-C15-C16
25	D	404	CLA	C6-C7-C8-C9
25	a	608	CLA	C6-C7-C8-C9
25	a	608	CLA	C14-C13-C15-C16
25	b	601	CLA	C6-C7-C8-C9
25	b	606	CLA	C6-C7-C8-C9
25	b	613	CLA	C11-C12-C13-C14
25	b	614	CLA	C14-C13-C15-C16
25	c	507	CLA	C6-C7-C8-C9
25	c	510	CLA	C11-C10-C8-C9
25	d	402	CLA	C11-C12-C13-C14
25	d	403	CLA	C11-C12-C13-C14
33	j	101	STE	C1-C2-C3-C4
29	b	622	LMG	C15-C16-C17-C18
27	b	617	BCR	C7-C8-C9-C34
25	C	508	CLA	C8-C10-C11-C12
32	A	617	DGD	C4E-C5E-C6E-O5E
29	D	409	LMG	C13-C14-C15-C16
31	A	615	SQD	C10-C11-C12-C13
25	B	606	CLA	C15-C16-C17-C18
29	c	521	LMG	C15-C16-C17-C18
29	d	409	LMG	C38-C39-C40-C41
29	m	101	LMG	C19-C20-C21-C22
32	a	617	DGD	C8A-C9A-CAA-CBA
28	d	405	PL9	C32-C33-C34-C36
29	D	409	LMG	C29-C28-O8-C9
29	b	622	LMG	C24-C25-C26-C27
30	E	101	LHG	C18-C19-C20-C21
33	a	618	STE	C4-C5-C6-C7
29	D	409	LMG	C16-C17-C18-C19
30	A	614	LHG	C33-C34-C35-C36
33	m	102	STE	C5-C6-C7-C8
30	l	101	LHG	O6-C4-C5-C6
30	a	614	LHG	C29-C30-C31-C32
29	m	101	LMG	O6-C5-C6-O5

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Mol	Chain	Res	Type	Atoms
30	B	622	LHG	C7-C8-C9-C10
31	a	615	SQD	C19-C20-C21-C22
33	X	101	STE	C14-C15-C16-C17
25	C	513	CLA	C8-C10-C11-C12
30	d	406	LHG	C35-C36-C37-C38
30	d	407	LHG	C28-C29-C30-C31
32	a	617	DGD	C8B-C9B-CAB-CBB
25	c	506	CLA	C4-C3-C5-C6
25	B	615	CLA	C2-C3-C5-C6
32	c	517	DGD	C1A-C2A-C3A-C4A
32	c	518	DGD	CCB-CDB-CEB-CFB
32	A	617	DGD	CFA-CGA-CHA-CIA
33	d	410	STE	C11-C12-C13-C14
30	d	407	LHG	C27-C28-C29-C30
25	c	513	CLA	C5-C6-C7-C8
32	c	518	DGD	C4A-C5A-C6A-C7A
25	c	512	CLA	C3A-C2A-CAA-CBA
29	c	519	LMG	C33-C34-C35-C36
32	c	516	DGD	C8B-C9B-CAB-CBB
30	l	101	LHG	C35-C36-C37-C38
33	H	103	STE	C6-C7-C8-C9
29	d	408	LMG	C36-C37-C38-C39
31	A	616	SQD	C29-C30-C31-C32
32	c	518	DGD	C6B-C7B-C8B-C9B
25	b	613	CLA	C16-C17-C18-C19
29	C	518	LMG	C29-C28-O8-C9
29	C	518	LMG	C38-C39-C40-C41
29	A	613	LMG	O1-C7-C8-C9
29	C	518	LMG	O1-C7-C8-C9
29	M	101	LMG	O1-C7-C8-C9
29	c	521	LMG	C7-C8-C9-O8
30	E	101	LHG	C4-C5-C6-O8
31	A	615	SQD	O6-C44-C45-C46
31	a	616	SQD	C44-C45-C46-O48
29	A	613	LMG	C35-C36-C37-C38
32	C	515	DGD	CCA-CDA-CEA-CFA
31	B	623	SQD	C23-C24-C25-C26
33	B	620	STE	C7-C8-C9-C10
33	C	519	STE	C4-C5-C6-C7
25	B	611	CLA	C8-C10-C11-C12
26	A	608	PHO	C8-C10-C11-C12
32	a	617	DGD	CFA-CGA-CHA-CIA

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Mol	Chain	Res	Type	Atoms
25	B	608	CLA	C3-C5-C6-C7
33	x	101	STE	C10-C11-C12-C13
31	F	102	SQD	C31-C32-C33-C34
32	C	515	DGD	C3B-C4B-C5B-C6B
33	k	103	STE	C3-C4-C5-C6
33	l	102	STE	C9-C10-C11-C12
29	C	518	LMG	C37-C38-C39-C40
30	D	408	LHG	C32-C33-C34-C35
30	l	101	LHG	C30-C31-C32-C33
33	C	521	STE	C3-C4-C5-C6
29	D	407	LMG	C10-C11-C12-C13
33	b	624	STE	C9-C10-C11-C12
30	E	101	LHG	O1-C1-C2-O2
31	A	615	SQD	C14-C15-C16-C17
32	c	517	DGD	C7A-C8A-C9A-CAA
33	C	520	STE	C6-C7-C8-C9
30	e	102	LHG	O6-C4-C5-O7
30	l	101	LHG	O6-C4-C5-O7
25	C	508	CLA	C16-C17-C18-C19
25	C	509	CLA	C16-C17-C18-C20
25	b	602	CLA	C16-C17-C18-C20
33	J	101	STE	C5-C6-C7-C8
32	H	102	DGD	O2G-C1B-C2B-C3B
30	e	102	LHG	C11-C10-C9-C8
31	B	623	SQD	O10-C23-O48-C46
30	E	101	LHG	C24-C25-C26-C27
33	E	102	STE	C7-C8-C9-C10
33	b	626	STE	C1-C2-C3-C4
29	C	518	LMG	O1-C7-C8-O7
29	M	101	LMG	O7-C8-C9-O8
29	c	522	LMG	O1-C7-C8-O7
31	A	615	SQD	O6-C44-C45-O47
31	f	101	SQD	C30-C31-C32-C33
33	b	620	STE	C3-C4-C5-C6
25	B	612	CLA	C16-C17-C18-C19
30	E	101	LHG	C29-C30-C31-C32
32	c	518	DGD	C7A-C8A-C9A-CAA
28	D	406	PL9	C39-C41-C42-C43
28	D	406	PL9	C44-C46-C47-C48
31	A	616	SQD	C27-C28-C29-C30
25	a	607	CLA	C2-C1-O2A-CGA
30	B	622	LHG	C24-C25-C26-C27

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Mol	Chain	Res	Type	Atoms
25	B	614	CLA	C6-C7-C8-C9
25	C	501	CLA	C14-C13-C15-C16
25	C	504	CLA	C11-C10-C8-C9
25	C	508	CLA	C11-C10-C8-C9
25	b	602	CLA	C14-C13-C15-C16
25	b	603	CLA	C14-C13-C15-C16
25	b	606	CLA	C11-C12-C13-C14
25	b	608	CLA	C14-C13-C15-C16
25	c	508	CLA	C11-C10-C8-C9
32	h	103	DGD	C5A-C6A-C7A-C8A
32	c	517	DGD	C4E-C5E-C6E-O5E
29	b	622	LMG	C18-C19-C20-C21
29	c	521	LMG	C40-C41-C42-C43
29	c	522	LMG	C38-C39-C40-C41
30	d	406	LHG	C25-C26-C27-C28
32	H	102	DGD	C2B-C3B-C4B-C5B
25	C	501	CLA	C2A-CAA-CBA-CGA
25	D	404	CLA	C16-C17-C18-C19
25	b	613	CLA	C16-C17-C18-C20
25	D	404	CLA	C3-C5-C6-C7
27	B	617	BCR	C1-C6-C7-C8
27	B	617	BCR	C5-C6-C7-C8
27	H	101	BCR	C23-C24-C25-C26
27	H	101	BCR	C23-C24-C25-C30
27	K	101	BCR	C1-C6-C7-C8
27	K	101	BCR	C5-C6-C7-C8
27	K	103	BCR	C1-C6-C7-C8
27	K	103	BCR	C5-C6-C7-C8
27	b	617	BCR	C23-C24-C25-C26
27	b	617	BCR	C23-C24-C25-C30
27	c	514	BCR	C1-C6-C7-C8
27	c	514	BCR	C5-C6-C7-C8
27	k	102	BCR	C1-C6-C7-C8
27	k	102	BCR	C5-C6-C7-C8
30	D	408	LHG	C33-C34-C35-C36
30	d	406	LHG	C15-C16-C17-C18
31	b	619	SQD	C19-C20-C21-C22
33	d	410	STE	C3-C4-C5-C6
27	b	616	BCR	C21-C22-C23-C24
25	a	613	CLA	C10-C11-C12-C13
25	c	510	CLA	C13-C15-C16-C17
27	c	514	BCR	C14-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
29	c	522	LMG	C31-C32-C33-C34
33	b	625	STE	C11-C10-C9-C8
25	B	610	CLA	C16-C17-C18-C19
25	d	403	CLA	C16-C17-C18-C19
29	m	101	LMG	C39-C40-C41-C42
29	c	519	LMG	O9-C10-O7-C8
29	D	409	LMG	C33-C34-C35-C36
30	B	622	LHG	C25-C26-C27-C28
30	E	101	LHG	C28-C29-C30-C31
32	H	102	DGD	C3A-C4A-C5A-C6A
25	A	607	CLA	C11-C12-C13-C15
25	B	601	CLA	C6-C7-C8-C10
25	B	601	CLA	C12-C13-C15-C16
25	B	604	CLA	C11-C12-C13-C15
25	B	605	CLA	C6-C7-C8-C10
25	B	607	CLA	C12-C13-C15-C16
25	B	608	CLA	C6-C7-C8-C10
25	B	615	CLA	C11-C12-C13-C15
25	C	506	CLA	C12-C13-C15-C16
25	C	507	CLA	C11-C10-C8-C7
25	C	508	CLA	C11-C10-C8-C7
25	C	510	CLA	C6-C7-C8-C10
25	b	603	CLA	C12-C13-C15-C16
25	b	606	CLA	C11-C12-C13-C15
25	b	608	CLA	C12-C13-C15-C16
25	b	613	CLA	C12-C13-C15-C16
25	b	615	CLA	C6-C7-C8-C10
25	c	505	CLA	C6-C7-C8-C10
25	c	508	CLA	C11-C10-C8-C7
25	d	403	CLA	C12-C13-C15-C16
25	h	101	CLA	C11-C12-C13-C15
30	E	101	LHG	C11-C12-C13-C14
25	C	509	CLA	C15-C16-C17-C18
25	B	616	CLA	C11-C12-C13-C15
30	D	408	LHG	C29-C30-C31-C32
25	c	513	CLA	CBA-CGA-O2A-C1
25	c	512	CLA	C2A-CAA-CBA-CGA
33	b	624	STE	C10-C11-C12-C13
25	b	602	CLA	C13-C15-C16-C17
25	c	512	CLA	C15-C16-C17-C18
27	B	619	BCR	C35-C13-C14-C15
27	K	103	BCR	C11-C10-C9-C34

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Mol	Chain	Res	Type	Atoms
27	b	616	BCR	C20-C21-C22-C37
27	k	101	BCR	C16-C17-C18-C36
33	b	624	STE	C6-C7-C8-C9
31	a	615	SQD	C23-C24-C25-C26
30	D	408	LHG	C14-C15-C16-C17
32	c	516	DGD	CBB-CCB-CDB-CEB
33	C	520	STE	C3-C4-C5-C6
25	D	404	CLA	C16-C17-C18-C20
25	c	504	CLA	C11-C12-C13-C14
31	A	616	SQD	C24-C23-O48-C46
29	C	518	LMG	C15-C16-C17-C18
29	D	409	LMG	C31-C32-C33-C34
33	C	521	STE	C10-C11-C12-C13
25	b	601	CLA	C8-C10-C11-C12
25	B	616	CLA	CAD-CBD-CGD-O2D
25	C	503	CLA	CAD-CBD-CGD-O2D
25	C	513	CLA	CAD-CBD-CGD-O2D
25	c	503	CLA	CAD-CBD-CGD-O2D
26	a	609	PHO	CAD-CBD-CGD-O2D
29	A	613	LMG	C9-C8-O7-C10
29	A	613	LMG	C33-C34-C35-C36
29	C	518	LMG	C14-C15-C16-C17
31	A	616	SQD	C26-C27-C28-C29
33	b	623	STE	C7-C8-C9-C10
32	c	517	DGD	C9A-CAA-CBA-CCA
32	h	103	DGD	CAA-CBA-CCA-CDA
25	B	616	CLA	CBA-CGA-O2A-C1
33	t	103	STE	C4-C5-C6-C7
31	b	619	SQD	O5-C1-O6-C44
25	a	610	CLA	C15-C16-C17-C18
31	A	616	SQD	C19-C20-C21-C22
33	x	101	STE	C15-C16-C17-C18
33	d	410	STE	C1-C2-C3-C4
29	b	622	LMG	O1-C7-C8-C9
25	c	513	CLA	O1A-CGA-O2A-C1
33	C	521	STE	C12-C13-C14-C15
25	D	404	CLA	C10-C11-C12-C13
35	e	101	HEM	C4B-C3B-CAB-CBB
27	b	618	BCR	C14-C15-C16-C17
29	D	409	LMG	C37-C38-C39-C40
29	D	409	LMG	C36-C37-C38-C39
25	A	612	CLA	CHA-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
25	B	612	CLA	CHA-CBD-CGD-O1D
25	C	502	CLA	CHA-CBD-CGD-O1D
25	C	502	CLA	CHA-CBD-CGD-O2D
25	C	504	CLA	CHA-CBD-CGD-O1D
25	C	507	CLA	CHA-CBD-CGD-O1D
25	C	507	CLA	CHA-CBD-CGD-O2D
25	a	608	CLA	CHA-CBD-CGD-O2D
25	c	504	CLA	CHA-CBD-CGD-O1D
25	c	504	CLA	CHA-CBD-CGD-O2D
25	c	507	CLA	CHA-CBD-CGD-O1D
30	A	614	LHG	C17-C18-C19-C20
30	E	101	LHG	C30-C31-C32-C33
27	B	619	BCR	C11-C10-C9-C8
27	H	101	BCR	C11-C10-C9-C8
27	K	101	BCR	C12-C13-C14-C15
29	b	622	LMG	O1-C7-C8-O7
30	E	101	LHG	O7-C5-C6-O8
31	f	101	SQD	O47-C45-C46-O48
32	C	515	DGD	O1G-C1G-C2G-O2G
25	B	603	CLA	C8-C10-C11-C12
25	B	616	CLA	O1A-CGA-O2A-C1
29	A	613	LMG	C11-C12-C13-C14
33	k	103	STE	C7-C8-C9-C10
25	C	509	CLA	C16-C17-C18-C19
25	c	504	CLA	C11-C12-C13-C15
25	c	505	CLA	C10-C11-C12-C13
25	c	512	CLA	C4-C3-C5-C6
31	a	615	SQD	C24-C25-C26-C27
32	C	515	DGD	O1A-C1A-O1G-C1G
25	c	512	CLA	C2-C3-C5-C6
28	A	611	PL9	C4-C3-C7-C8
28	a	612	PL9	C4-C3-C7-C8
25	b	613	CLA	C6-C7-C8-C9
29	D	407	LMG	C12-C13-C14-C15
29	m	101	LMG	C37-C38-C39-C40
31	A	616	SQD	C11-C10-C9-C8
33	c	520	STE	C4-C5-C6-C7
29	D	409	LMG	O10-C28-O8-C9
32	c	516	DGD	C6A-C7A-C8A-C9A
25	c	513	CLA	C2A-CAA-CBA-CGA
32	H	102	DGD	CCB-CDB-CEB-CFB
27	K	103	BCR	C37-C22-C23-C24

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Mol	Chain	Res	Type	Atoms
32	c	516	DGD	O6D-C5D-C6D-O5D
25	B	601	CLA	C3-C5-C6-C7
32	H	102	DGD	C3B-C4B-C5B-C6B
32	c	517	DGD	C3A-C4A-C5A-C6A
25	c	503	CLA	C1A-C2A-CAA-CBA
25	c	512	CLA	C1A-C2A-CAA-CBA
29	b	622	LMG	C36-C37-C38-C39
25	c	504	CLA	C5-C6-C7-C8
30	D	408	LHG	C3-O3-P-O6
29	c	519	LMG	C36-C37-C38-C39
32	c	517	DGD	C5A-C6A-C7A-C8A
33	H	103	STE	C4-C5-C6-C7
33	c	520	STE	C11-C10-C9-C8
31	A	616	SQD	O10-C23-O48-C46
30	L	101	LHG	C4-O6-P-O5
30	d	406	LHG	C3-O3-P-O4
30	e	102	LHG	C3-O3-P-O4
30	l	101	LHG	C4-O6-P-O5
29	b	622	LMG	C10-C11-C12-C13
33	c	520	STE	C15-C16-C17-C18
30	e	102	LHG	O6-C4-C5-C6
25	B	602	CLA	C10-C11-C12-C13
32	C	517	DGD	C3B-C4B-C5B-C6B
32	c	518	DGD	C2A-C3A-C4A-C5A
33	C	521	STE	C11-C12-C13-C14
29	D	407	LMG	C11-C12-C13-C14
33	C	521	STE	C4-C5-C6-C7
25	B	612	CLA	CAD-CBD-CGD-O1D
25	C	502	CLA	CAD-CBD-CGD-O1D
25	C	504	CLA	CAD-CBD-CGD-O1D
25	c	504	CLA	CAD-CBD-CGD-O1D
33	k	103	STE	C6-C7-C8-C9
29	D	407	LMG	C34-C35-C36-C37
33	d	410	STE	C2-C3-C4-C5
33	m	102	STE	C6-C7-C8-C9
25	B	605	CLA	C12-C13-C15-C16
25	B	607	CLA	C11-C12-C13-C15
25	b	601	CLA	C11-C12-C13-C15
25	c	501	CLA	C11-C12-C13-C15
25	c	507	CLA	C11-C10-C8-C7
25	c	510	CLA	C6-C7-C8-C10
26	a	609	PHO	C6-C7-C8-C10

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Mol	Chain	Res	Type	Atoms
31	A	616	SQD	C28-C29-C30-C31
33	a	618	STE	C7-C8-C9-C10
30	l	101	LHG	C26-C27-C28-C29
25	b	603	CLA	C8-C10-C11-C12
29	b	622	LMG	C11-C10-O7-C8
29	c	521	LMG	C34-C35-C36-C37
29	c	522	LMG	C17-C18-C19-C20
33	b	620	STE	C13-C14-C15-C16
31	B	623	SQD	C35-C36-C37-C38
29	c	522	LMG	O1-C7-C8-C9
29	c	522	LMG	C7-C8-C9-O8
32	A	617	DGD	O6E-C5E-C6E-O5E
29	D	409	LMG	O7-C8-C9-O8
29	c	521	LMG	O7-C8-C9-O8
31	a	616	SQD	O47-C45-C46-O48
29	D	407	LMG	C16-C17-C18-C19
25	B	607	CLA	C8-C10-C11-C12
25	B	604	CLA	O2A-C1-C2-C3
32	c	517	DGD	C2G-C3G-O3G-C1D
25	B	616	CLA	C11-C12-C13-C14
32	A	617	DGD	C2A-C3A-C4A-C5A
31	b	619	SQD	C11-C12-C13-C14
25	B	608	CLA	C6-C7-C8-C9
25	B	610	CLA	C14-C13-C15-C16
25	B	615	CLA	C11-C12-C13-C14
25	C	513	CLA	C11-C10-C8-C9
25	a	610	CLA	C6-C7-C8-C9
25	b	613	CLA	C14-C13-C15-C16
25	c	502	CLA	C11-C12-C13-C14
25	c	511	CLA	C14-C13-C15-C16
25	c	513	CLA	C6-C7-C8-C9
25	d	403	CLA	C14-C13-C15-C16
25	h	101	CLA	C11-C10-C8-C9
25	h	101	CLA	C14-C13-C15-C16
29	m	101	LMG	C21-C22-C23-C24
32	c	518	DGD	C7B-C8B-C9B-CAB
32	a	617	DGD	C6A-C7A-C8A-C9A
32	c	516	DGD	C4D-C5D-C6D-O5D
32	C	516	DGD	C3A-C4A-C5A-C6A
29	B	621	LMG	C10-C11-C12-C13
25	C	505	CLA	C15-C16-C17-C18
29	C	518	LMG	C19-C20-C21-C22

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Mol	Chain	Res	Type	Atoms
33	I	101	STE	C7-C8-C9-C10
30	a	614	LHG	C19-C20-C21-C22
33	b	623	STE	C10-C11-C12-C13
33	x	101	STE	C11-C12-C13-C14
25	h	101	CLA	C16-C17-C18-C19
33	B	625	STE	C2-C3-C4-C5
33	b	621	STE	C5-C6-C7-C8
30	d	407	LHG	C30-C31-C32-C33
30	e	102	LHG	C24-C25-C26-C27
33	c	520	STE	C12-C13-C14-C15
32	h	103	DGD	C2A-C3A-C4A-C5A
29	c	522	LMG	C13-C14-C15-C16
33	k	103	STE	C5-C6-C7-C8
28	d	405	PL9	C33-C34-C36-C37
33	M	103	STE	C7-C8-C9-C10
32	C	515	DGD	C4D-C5D-C6D-O5D
29	d	409	LMG	C14-C15-C16-C17
29	d	408	LMG	C29-C30-C31-C32
29	m	101	LMG	C9-C8-O7-C10
33	B	624	STE	C7-C8-C9-C10
25	B	613	CLA	C2-C1-O2A-CGA
30	e	102	LHG	C25-C26-C27-C28
32	C	517	DGD	C6A-C7A-C8A-C9A
29	m	101	LMG	C28-C29-C30-C31
25	c	509	CLA	CAA-CBA-CGA-O2A
25	C	502	CLA	C15-C16-C17-C18
31	A	616	SQD	C30-C31-C32-C33
31	B	623	SQD	C34-C35-C36-C37
31	a	615	SQD	C34-C35-C36-C37
25	B	613	CLA	C15-C16-C17-C18
30	E	101	LHG	C2-C3-O3-P
30	E	101	LHG	C12-C13-C14-C15
32	C	515	DGD	C8A-C9A-CAA-CBA
32	C	516	DGD	C5B-C6B-C7B-C8B
33	b	620	STE	C14-C15-C16-C17
33	t	102	STE	C2-C3-C4-C5
31	F	102	SQD	O6-C44-C45-C46
25	b	609	CLA	C16-C17-C18-C20
25	c	509	CLA	C16-C17-C18-C19
33	b	626	STE	C7-C8-C9-C10
25	B	613	CLA	C2-C3-C5-C6
25	A	607	CLA	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
32	h	103	DGD	O2G-C1B-C2B-C3B
33	B	620	STE	C10-C11-C12-C13
33	C	521	STE	C5-C6-C7-C8
25	d	403	CLA	C16-C17-C18-C20
29	C	518	LMG	O6-C1-O1-C7
27	c	514	BCR	C16-C17-C18-C19
27	k	101	BCR	C11-C10-C9-C8
30	l	101	LHG	C17-C18-C19-C20
30	e	102	LHG	O7-C5-C6-O8
31	b	619	SQD	O6-C44-C45-O47
31	b	619	SQD	O47-C45-C46-O48
30	A	614	LHG	C3-O3-P-O6
30	L	101	LHG	C3-O3-P-O6
31	A	616	SQD	C23-C24-C25-C26
31	B	623	SQD	C7-C8-C9-C10
29	C	518	LMG	C16-C17-C18-C19
32	C	515	DGD	O6D-C5D-C6D-O5D
25	c	510	CLA	C16-C17-C18-C19
29	M	101	LMG	C17-C18-C19-C20
30	E	101	LHG	C17-C18-C19-C20
28	A	611	PL9	C30-C29-C31-C32
31	A	615	SQD	C25-C26-C27-C28
25	B	606	CLA	C12-C13-C15-C16
25	B	616	CLA	C2-C3-C5-C6
25	C	501	CLA	C12-C13-C15-C16
25	C	513	CLA	C11-C10-C8-C7
25	c	510	CLA	C11-C12-C13-C15
31	B	623	SQD	C29-C30-C31-C32
29	c	519	LMG	C39-C40-C41-C42
29	d	409	LMG	C13-C14-C15-C16
25	A	607	CLA	C11-C12-C13-C14
25	B	609	CLA	C11-C12-C13-C14
25	B	614	CLA	C14-C13-C15-C16
25	B	615	CLA	C6-C7-C8-C9
25	b	601	CLA	C11-C12-C13-C14
25	b	614	CLA	C11-C10-C8-C9
25	c	505	CLA	C6-C7-C8-C9
25	c	506	CLA	C11-C10-C8-C9
33	x	101	STE	C7-C8-C9-C10
31	F	102	SQD	C44-C45-C46-O48
33	I	101	STE	C9-C10-C11-C12
25	D	404	CLA	C13-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
29	b	622	LMG	C35-C36-C37-C38
30	E	101	LHG	C26-C27-C28-C29
32	A	617	DGD	O1A-C1A-O1G-C1G
25	D	403	CLA	C16-C17-C18-C20
30	d	407	LHG	C2-C3-O3-P
35	e	101	HEM	CAD-CBD-CGD-O1D
33	l	102	STE	C5-C6-C7-C8
29	c	519	LMG	C37-C38-C39-C40
25	B	610	CLA	C16-C17-C18-C20
29	c	519	LMG	C29-C28-O8-C9
29	m	101	LMG	O10-C28-O8-C9
31	a	616	SQD	C9-C10-C11-C12
29	b	622	LMG	C4-C5-C6-O5
32	c	518	DGD	C4E-C5E-C6E-O5E
29	D	409	LMG	C29-C30-C31-C32
33	c	520	STE	C7-C8-C9-C10
30	l	101	LHG	C16-C17-C18-C19
29	M	101	LMG	O6-C1-O1-C7
32	C	516	DGD	O6D-C1D-O3G-C3G
30	E	101	LHG	C11-C10-C9-C8
25	C	511	CLA	C8-C10-C11-C12
29	D	407	LMG	C14-C15-C16-C17
33	d	410	STE	C4-C5-C6-C7
33	l	102	STE	C14-C15-C16-C17
25	B	615	CLA	C16-C17-C18-C19
31	b	619	SQD	C12-C13-C14-C15
25	b	608	CLA	C4-C3-C5-C6
25	b	608	CLA	C2-C3-C5-C6
28	a	612	PL9	C43-C44-C46-C47
31	b	619	SQD	C30-C31-C32-C33
32	C	517	DGD	C8A-C9A-CAA-CBA
25	D	403	CLA	C2-C1-O2A-CGA
25	a	613	CLA	C2C-C3C-CAC-CBC
29	m	101	LMG	C17-C18-C19-C20
29	c	522	LMG	O7-C8-C9-O8
32	c	516	DGD	CBA-CCA-CDA-CEA
33	B	626	STE	C7-C8-C9-C10
33	l	102	STE	C10-C11-C12-C13
33	b	626	STE	C6-C7-C8-C9
25	b	602	CLA	CBD-CGD-O2D-CED
31	b	619	SQD	C16-C17-C18-C19
25	A	612	CLA	C16-C17-C18-C19

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Mol	Chain	Res	Type	Atoms
29	C	518	LMG	C39-C40-C41-C42
32	H	102	DGD	O1B-C1B-C2B-C3B
27	k	102	BCR	C15-C16-C17-C18
32	C	516	DGD	C9A-CAA-CBA-CCA
33	B	624	STE	C2-C3-C4-C5
33	I	101	STE	C4-C5-C6-C7
25	b	610	CLA	C4-C3-C5-C6
28	D	406	PL9	C30-C29-C31-C32
25	b	610	CLA	C2-C3-C5-C6
25	A	607	CLA	C14-C13-C15-C16
25	C	502	CLA	C14-C13-C15-C16
25	b	606	CLA	C11-C10-C8-C9
25	b	606	CLA	C14-C13-C15-C16
25	b	610	CLA	C11-C12-C13-C14
25	c	502	CLA	C6-C7-C8-C9
25	c	505	CLA	C14-C13-C15-C16
25	c	511	CLA	C11-C10-C8-C9
26	a	609	PHO	C11-C10-C8-C9
25	D	403	CLA	C16-C17-C18-C19
29	b	622	LMG	C31-C32-C33-C34
32	A	617	DGD	C7B-C8B-C9B-CAB
32	C	517	DGD	C9A-CAA-CBA-CCA
32	c	517	DGD	C8B-C9B-CAB-CBB
32	c	518	DGD	CBB-CCB-CDB-CEB
32	h	103	DGD	C9A-CAA-CBA-CCA
27	B	618	BCR	C16-C17-C18-C36
27	k	101	BCR	C35-C13-C14-C15
32	c	516	DGD	O1G-C1G-C2G-C3G
35	F	101	HEM	CAD-CBD-CGD-O1D
25	B	616	CLA	O2A-C1-C2-C3
26	A	608	PHO	O2A-C1-C2-C3
26	a	609	PHO	O2A-C1-C2-C3
32	c	517	DGD	O6D-C1D-O3G-C3G
29	b	622	LMG	C34-C35-C36-C37
31	F	102	SQD	C29-C30-C31-C32
31	a	616	SQD	C13-C14-C15-C16
27	b	616	BCR	C37-C22-C23-C24
33	t	104	STE	O1-C1-C2-C3
33	C	519	STE	C5-C6-C7-C8
25	c	509	CLA	C3-C5-C6-C7
32	c	517	DGD	C7B-C8B-C9B-CAB
33	B	624	STE	C3-C4-C5-C6

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Mol	Chain	Res	Type	Atoms
29	b	622	LMG	C9-C8-O7-C10
25	C	505	CLA	C4-C3-C5-C6
25	C	513	CLA	C1A-C2A-CAA-CBA
25	B	603	CLA	C6-C7-C8-C10
25	B	609	CLA	C11-C12-C13-C15
25	C	502	CLA	C11-C12-C13-C15
25	C	505	CLA	C6-C7-C8-C10
25	b	605	CLA	C11-C12-C13-C15
25	c	506	CLA	C2-C3-C5-C6
25	c	511	CLA	C12-C13-C15-C16
25	c	512	CLA	C6-C7-C8-C10
25	b	609	CLA	C15-C16-C17-C18
33	c	520	STE	O1-C1-C2-C3
33	d	410	STE	O1-C1-C2-C3
35	F	101	HEM	CAD-CBD-CGD-O2D
35	e	101	HEM	CAD-CBD-CGD-O2D
33	C	521	STE	C11-C10-C9-C8
33	c	520	STE	C14-C15-C16-C17
25	B	603	CLA	C2A-CAA-CBA-CGA
32	C	517	DGD	O6D-C5D-C6D-O5D
33	c	520	STE	O2-C1-C2-C3
33	t	104	STE	O2-C1-C2-C3
29	M	101	LMG	C12-C13-C14-C15
29	b	622	LMG	C42-C43-C44-C45
29	c	521	LMG	C32-C33-C34-C35
25	B	601	CLA	C4-C3-C5-C6
29	c	521	LMG	C16-C17-C18-C19
32	C	515	DGD	C6A-C7A-C8A-C9A
25	C	505	CLA	C2-C3-C5-C6
25	B	610	CLA	C15-C16-C17-C18
25	C	509	CLA	C5-C6-C7-C8
26	d	401	PHO	C5-C6-C7-C8
25	b	605	CLA	C16-C17-C18-C20
30	L	101	LHG	C25-C26-C27-C28
27	h	102	BCR	C11-C10-C9-C8
36	v	201	HEC	CAD-CBD-CGD-O2D
29	m	101	LMG	C33-C34-C35-C36
30	d	406	LHG	C14-C15-C16-C17
33	X	101	STE	C5-C6-C7-C8
32	c	516	DGD	O1G-C1G-C2G-O2G
31	b	619	SQD	C10-C11-C12-C13
30	l	101	LHG	C14-C15-C16-C17

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Mol	Chain	Res	Type	Atoms
29	D	407	LMG	C13-C14-C15-C16
30	L	101	LHG	C17-C18-C19-C20
33	b	621	STE	C7-C8-C9-C10
32	c	516	DGD	C6B-C7B-C8B-C9B
25	B	604	CLA	O1D-CGD-O2D-CED
25	B	603	CLA	C4-C3-C5-C6
25	c	508	CLA	C4-C3-C5-C6
28	A	611	PL9	C12-C11-C9-C10
28	d	405	PL9	C45-C44-C46-C47
25	A	606	CLA	C2-C1-O2A-CGA
33	M	102	STE	O1-C1-C2-C3
33	d	410	STE	O2-C1-C2-C3
29	m	101	LMG	C40-C41-C42-C43
28	d	405	PL9	C47-C48-C49-C51
33	B	624	STE	C4-C5-C6-C7
25	C	512	CLA	C16-C17-C18-C20
33	B	625	STE	O2-C1-C2-C3
32	C	516	DGD	C7A-C8A-C9A-CAA
33	H	103	STE	C10-C11-C12-C13
33	b	620	STE	C5-C6-C7-C8
27	A	610	BCR	C23-C24-C25-C30
27	C	514	BCR	C1-C6-C7-C8
27	K	101	BCR	C23-C24-C25-C30
27	c	514	BCR	C23-C24-C25-C30
27	c	515	BCR	C23-C24-C25-C30
27	h	102	BCR	C23-C24-C25-C30
27	k	101	BCR	C23-C24-C25-C30
27	k	102	BCR	C23-C24-C25-C30
32	C	515	DGD	O1G-C1A-C2A-C3A
32	c	516	DGD	O1G-C1A-C2A-C3A
30	A	614	LHG	C13-C14-C15-C16
31	b	619	SQD	C7-C8-C9-C10
29	B	621	LMG	C30-C31-C32-C33
29	c	519	LMG	C34-C35-C36-C37
30	L	101	LHG	C11-C10-C9-C8
27	K	101	BCR	C15-C16-C17-C18
27	c	514	BCR	C15-C16-C17-C18
25	b	607	CLA	C4-C3-C5-C6
25	C	505	CLA	C16-C17-C18-C19
25	b	611	CLA	C15-C16-C17-C18
33	B	625	STE	O1-C1-C2-C3
33	b	626	STE	C3-C4-C5-C6

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Mol	Chain	Res	Type	Atoms
33	B	624	STE	O2-C1-C2-C3
25	b	607	CLA	C16-C17-C18-C19
33	l	102	STE	C11-C12-C13-C14
25	h	101	CLA	C2A-CAA-CBA-CGA
32	A	617	DGD	CBB-CCB-CDB-CEB
25	C	510	CLA	CBD-CGD-O2D-CED
25	a	610	CLA	C6-C7-C8-C10
25	h	101	CLA	C12-C13-C15-C16
28	D	406	PL9	C33-C34-C36-C37
36	v	201	HEC	CAD-CBD-CGD-O1D
29	c	522	LMG	C19-C20-C21-C22
30	l	101	LHG	C33-C34-C35-C36
32	C	516	DGD	CDB-CEB-CFB-CGB
32	a	617	DGD	O2G-C2G-C3G-O3G
29	M	101	LMG	C2-C1-O1-C7
30	D	408	LHG	C1-C2-C3-O3
25	a	610	CLA	C10-C11-C12-C13
31	a	615	SQD	O47-C45-C46-O48
31	f	101	SQD	O6-C44-C45-O47
32	a	617	DGD	C6B-C7B-C8B-C9B
30	e	102	LHG	C11-C12-C13-C14
31	A	616	SQD	C13-C14-C15-C16
32	a	617	DGD	C7B-C8B-C9B-CAB
33	b	621	STE	O2-C1-C2-C3
27	T	101	BCR	C16-C17-C18-C36
27	b	618	BCR	C16-C17-C18-C36
30	e	102	LHG	C14-C15-C16-C17
29	m	101	LMG	O8-C28-C29-C30
33	B	624	STE	O1-C1-C2-C3
25	c	508	CLA	C2-C3-C5-C6
33	b	624	STE	C7-C8-C9-C10
25	A	606	CLA	C14-C13-C15-C16
25	B	603	CLA	C6-C7-C8-C9
25	B	605	CLA	C14-C13-C15-C16
25	B	607	CLA	C11-C12-C13-C14
25	B	613	CLA	C11-C12-C13-C14
25	b	601	CLA	C11-C10-C8-C9
25	c	501	CLA	C11-C12-C13-C14
25	c	507	CLA	C11-C10-C8-C9
25	c	510	CLA	C6-C7-C8-C9
26	a	609	PHO	C14-C13-C15-C16
33	b	620	STE	C7-C8-C9-C10

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Mol	Chain	Res	Type	Atoms
31	a	615	SQD	C27-C28-C29-C30
29	d	409	LMG	O7-C10-C11-C12
31	a	615	SQD	O47-C7-C8-C9
30	l	101	LHG	C19-C20-C21-C22
25	B	604	CLA	CAD-CBD-CGD-O2D
25	B	610	CLA	CAD-CBD-CGD-O2D
25	C	501	CLA	CAD-CBD-CGD-O2D
25	C	506	CLA	CAD-CBD-CGD-O2D
25	C	510	CLA	CAD-CBD-CGD-O2D
25	C	512	CLA	CAD-CBD-CGD-O2D
25	D	404	CLA	CAD-CBD-CGD-O2D
25	b	603	CLA	CAD-CBD-CGD-O2D
25	b	604	CLA	CAD-CBD-CGD-O2D
25	b	609	CLA	CAD-CBD-CGD-O2D
25	c	509	CLA	CAD-CBD-CGD-O2D
25	c	510	CLA	CAD-CBD-CGD-O2D
25	c	512	CLA	CAD-CBD-CGD-O2D
25	c	513	CLA	CAD-CBD-CGD-O2D
29	b	622	LMG	C7-C8-O7-C10
32	a	617	DGD	C1G-C2G-O2G-C1B
32	H	102	DGD	CBA-CCA-CDA-CEA
25	B	601	CLA	C10-C11-C12-C13
25	c	508	CLA	C15-C16-C17-C18
29	M	101	LMG	C16-C17-C18-C19
29	d	408	LMG	O7-C10-C11-C12
31	b	619	SQD	C11-C10-C9-C8
30	a	614	LHG	C26-C27-C28-C29
36	V	201	HEC	CAD-CBD-CGD-O1D
33	c	520	STE	C2-C3-C4-C5
25	B	601	CLA	C2-C3-C5-C6
30	B	622	LHG	C26-C27-C28-C29
25	C	510	CLA	C8-C10-C11-C12
26	d	401	PHO	C2C-C3C-CAC-CBC
29	A	613	LMG	C7-C8-C9-O8
31	b	619	SQD	C44-C45-C46-O48
31	f	101	SQD	C44-C45-C46-O48
32	c	516	DGD	C1G-C2G-C3G-O3G
33	b	621	STE	O1-C1-C2-C3
30	L	101	LHG	C35-C36-C37-C38
31	a	615	SQD	C13-C14-C15-C16
32	c	516	DGD	O2G-C1B-C2B-C3B
26	A	608	PHO	C16-C17-C18-C20

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Mol	Chain	Res	Type	Atoms
32	H	102	DGD	C9B-CAB-CBB-CCB
25	D	404	CLA	O2A-C1-C2-C3
33	b	620	STE	C11-C10-C9-C8
32	c	518	DGD	C9A-CAA-CBA-CCA
29	A	613	LMG	C10-C11-C12-C13
32	C	517	DGD	O1A-C1A-O1G-C1G
25	b	613	CLA	C13-C15-C16-C17
25	b	605	CLA	C16-C17-C18-C19
30	d	407	LHG	C32-C33-C34-C35
25	A	607	CLA	CHA-CBD-CGD-O1D
25	A	607	CLA	CHA-CBD-CGD-O2D
25	A	612	CLA	CHA-CBD-CGD-O2D
25	B	607	CLA	CHA-CBD-CGD-O1D
25	B	610	CLA	CHA-CBD-CGD-O2D
25	B	612	CLA	CHA-CBD-CGD-O2D
25	B	614	CLA	CHA-CBD-CGD-O1D
25	B	614	CLA	CHA-CBD-CGD-O2D
25	C	509	CLA	CHA-CBD-CGD-O1D
25	C	509	CLA	CHA-CBD-CGD-O2D
25	b	605	CLA	CHA-CBD-CGD-O1D
25	b	608	CLA	CHA-CBD-CGD-O1D
25	b	613	CLA	CHA-CBD-CGD-O2D
25	b	615	CLA	CHA-CBD-CGD-O1D
25	c	503	CLA	CHA-CBD-CGD-O2D
25	c	507	CLA	CHA-CBD-CGD-O2D
25	c	510	CLA	CHA-CBD-CGD-O2D
27	h	102	BCR	C15-C16-C17-C18
36	V	201	HEC	CAD-CBD-CGD-O2D
29	b	622	LMG	O7-C10-C11-C12
25	b	607	CLA	C2-C3-C5-C6
32	a	617	DGD	CCA-CDA-CEA-CFA
32	c	517	DGD	O6E-C5E-C6E-O5E
29	m	101	LMG	O7-C10-C11-C12
29	M	101	LMG	C28-C29-C30-C31
33	M	103	STE	C4-C5-C6-C7
25	B	611	CLA	C10-C11-C12-C13
29	B	621	LMG	O7-C10-C11-C12
25	B	613	CLA	CAA-CBA-CGA-O2A
31	f	101	SQD	O48-C23-C24-C25
31	a	616	SQD	C14-C15-C16-C17
25	B	610	CLA	C2A-CAA-CBA-CGA
26	d	401	PHO	CHA-CBD-CGD-O1D

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Mol	Chain	Res	Type	Atoms
26	d	401	PHO	CHA-CBD-CGD-O2D
25	a	608	CLA	C11-C12-C13-C15
25	b	612	CLA	C6-C7-C8-C10
26	A	608	PHO	C2-C3-C5-C6
28	a	612	PL9	C23-C24-C26-C27
28	d	405	PL9	C13-C14-C16-C17
25	C	512	CLA	C16-C17-C18-C19
25	c	506	CLA	C16-C17-C18-C20
30	A	614	LHG	C2-C3-O3-P
25	C	503	CLA	C10-C11-C12-C13
25	b	611	CLA	CAA-CBA-CGA-O2A
25	B	602	CLA	C11-C12-C13-C14
25	B	615	CLA	C14-C13-C15-C16
25	B	616	CLA	C11-C10-C8-C9
26	a	609	PHO	C6-C7-C8-C9
25	D	403	CLA	C2C-C3C-CAC-CBC
27	K	101	BCR	C14-C15-C16-C17
25	b	606	CLA	C16-C17-C18-C20
33	x	101	STE	C2-C3-C4-C5
32	H	102	DGD	CAB-CBB-CCB-CDB
33	M	102	STE	O2-C1-C2-C3
28	d	405	PL9	C11-C12-C13-C14
25	B	612	CLA	CAA-CBA-CGA-O2A
29	c	522	LMG	C36-C37-C38-C39
33	M	102	STE	C6-C7-C8-C9
27	K	102	BCR	C7-C8-C9-C34
27	k	101	BCR	C37-C22-C23-C24
27	c	515	BCR	C7-C8-C9-C10
25	B	602	CLA	C1A-C2A-CAA-CBA
25	C	512	CLA	C1A-C2A-CAA-CBA
29	c	519	LMG	C32-C33-C34-C35
30	a	614	LHG	C30-C31-C32-C33
32	A	617	DGD	C8B-C9B-CAB-CBB
32	c	517	DGD	CDA-CEA-CFA-CGA
32	C	515	DGD	C1G-C2G-C3G-O3G
25	b	613	CLA	C2A-CAA-CBA-CGA
25	c	501	CLA	C2A-CAA-CBA-CGA
30	D	408	LHG	C4-O6-P-O3
33	J	101	STE	C6-C7-C8-C9
25	B	612	CLA	CAA-CBA-CGA-O1A
32	C	515	DGD	O1B-C1B-C2B-C3B
25	h	101	CLA	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
31	a	615	SQD	O49-C7-C8-C9
29	A	613	LMG	C17-C18-C19-C20
29	C	518	LMG	C2-C1-O1-C7
33	m	102	STE	C7-C8-C9-C10
30	D	408	LHG	C4-O6-P-O5
29	M	101	LMG	C22-C23-C24-C25
33	t	104	STE	C12-C13-C14-C15
31	a	615	SQD	C33-C34-C35-C36
27	A	610	BCR	C23-C24-C25-C26
27	K	102	BCR	C23-C24-C25-C30
27	h	102	BCR	C23-C24-C25-C26
25	b	602	CLA	C8-C10-C11-C12
25	A	612	CLA	C16-C17-C18-C20
32	A	617	DGD	O6D-C5D-C6D-O5D
25	a	613	CLA	C4C-C3C-CAC-CBC
33	M	103	STE	C1-C2-C3-C4
33	c	520	STE	C10-C11-C12-C13
26	d	401	PHO	C8-C10-C11-C12
25	c	503	CLA	O1D-CGD-O2D-CED
32	h	103	DGD	CDA-CEA-CFA-CGA
30	d	406	LHG	C23-C24-C25-C26
25	B	605	CLA	CAD-CBD-CGD-O1D
25	B	607	CLA	CAD-CBD-CGD-O1D
25	B	609	CLA	CAD-CBD-CGD-O1D
25	b	601	CLA	CAD-CBD-CGD-O1D
25	b	608	CLA	CAD-CBD-CGD-O1D
25	c	506	CLA	CAD-CBD-CGD-O1D
29	m	101	LMG	C7-C8-O7-C10
31	B	623	SQD	O5-C5-C6-S
30	L	101	LHG	O7-C7-C8-C9
25	B	612	CLA	C11-C10-C8-C9
25	C	505	CLA	C6-C7-C8-C9
25	c	504	CLA	C6-C7-C8-C9
25	c	510	CLA	C11-C12-C13-C14
29	b	622	LMG	O9-C10-C11-C12
25	B	605	CLA	C10-C11-C12-C13
25	C	510	CLA	C13-C15-C16-C17
29	c	521	LMG	C36-C37-C38-C39
30	D	408	LHG	C11-C10-C9-C8
25	c	509	CLA	C2A-CAA-CBA-CGA
31	A	615	SQD	O47-C7-C8-C9
32	C	515	DGD	O2G-C1B-C2B-C3B

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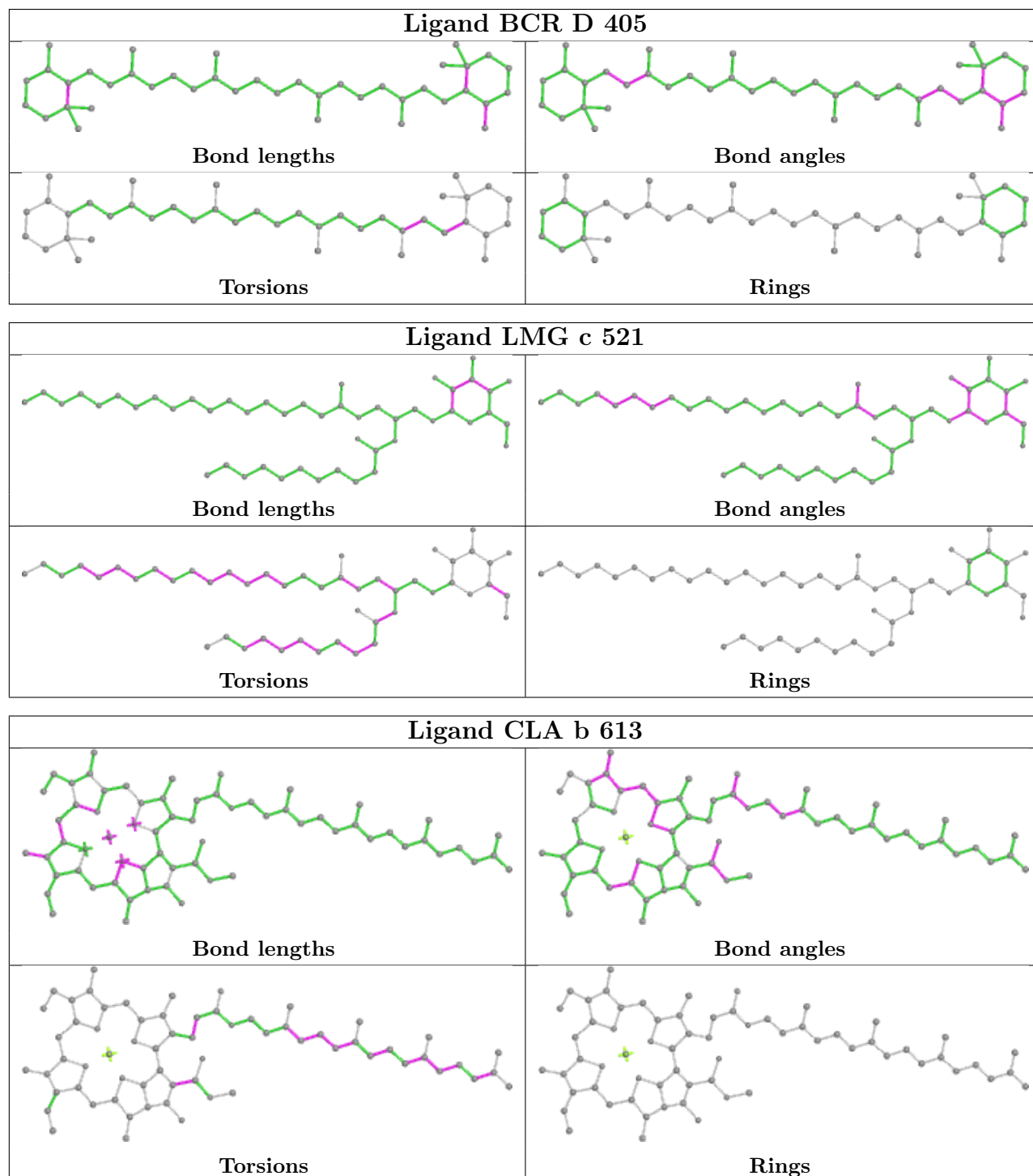
Mol	Chain	Res	Type	Atoms
30	L	101	LHG	O10-C23-O8-C6
25	b	611	CLA	C8-C10-C11-C12
29	c	521	LMG	C14-C15-C16-C17
25	B	613	CLA	CAA-CBA-CGA-O1A
25	c	509	CLA	C4-C3-C5-C6
25	A	606	CLA	C12-C13-C15-C16
25	A	607	CLA	C11-C10-C8-C7
25	A	607	CLA	C12-C13-C15-C16
25	B	601	CLA	C3A-C2A-CAA-CBA
25	B	602	CLA	C3A-C2A-CAA-CBA
25	B	611	CLA	C12-C13-C15-C16
25	B	615	CLA	C12-C13-C15-C16
25	C	502	CLA	C12-C13-C15-C16
25	D	404	CLA	C12-C13-C15-C16
25	b	613	CLA	C6-C7-C8-C10
25	c	505	CLA	C11-C12-C13-C15
32	c	517	DGD	O1B-C1B-C2B-C3B
33	E	102	STE	O2-C1-C2-C3
25	c	510	CLA	CAA-CBA-CGA-O2A
27	C	514	BCR	C11-C12-C13-C14
25	b	611	CLA	CAA-CBA-CGA-O1A
25	h	101	CLA	CAA-CBA-CGA-O1A
29	D	409	LMG	C17-C18-C19-C20
30	L	101	LHG	O9-C7-C8-C9
31	f	101	SQD	O10-C23-C24-C25
33	b	623	STE	O1-C1-C2-C3
32	c	516	DGD	O1B-C1B-C2B-C3B
33	E	102	STE	O1-C1-C2-C3
25	a	608	CLA	C3-C5-C6-C7
26	A	608	PHO	C4-C3-C5-C6
32	C	515	DGD	C4A-C5A-C6A-C7A
25	c	501	CLA	CAA-CBA-CGA-O2A
30	e	102	LHG	O8-C23-C24-C25
29	B	621	LMG	O10-C28-C29-C30

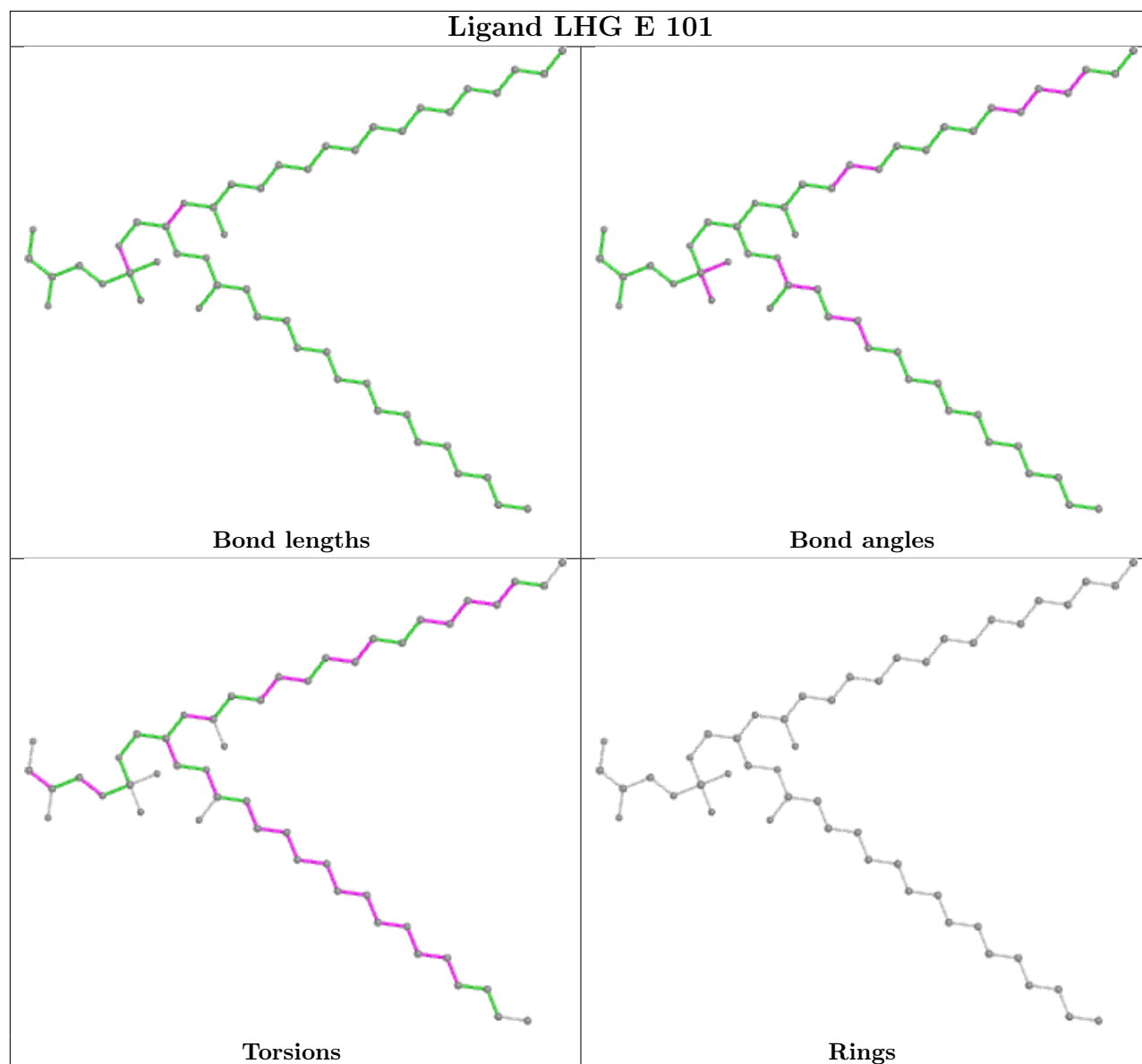
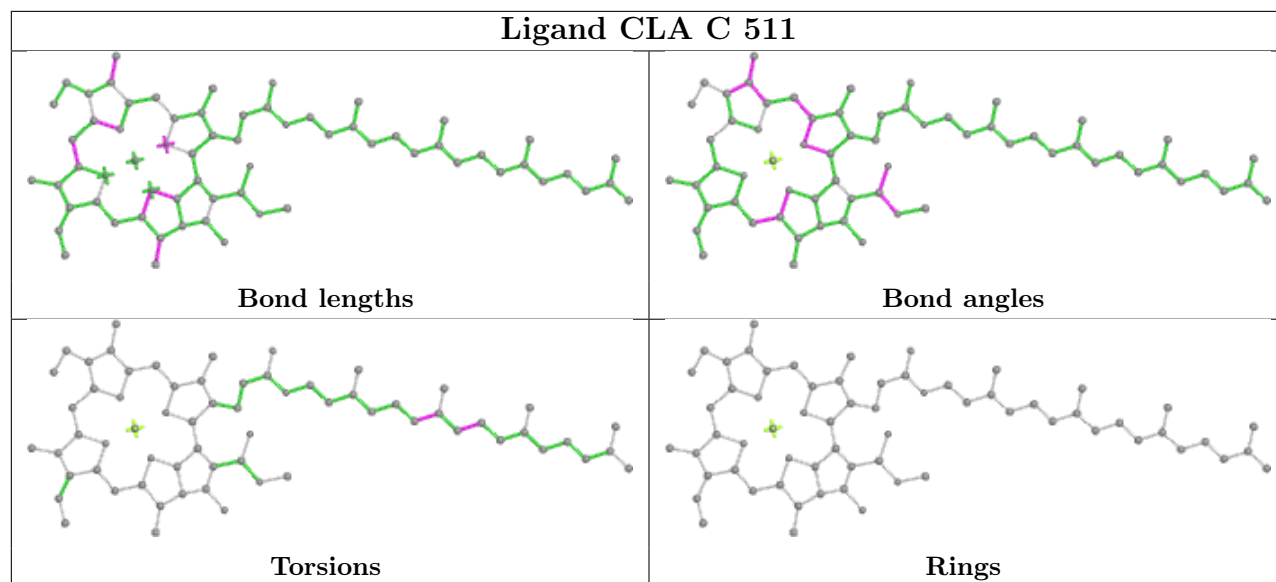
There are no ring outliers.

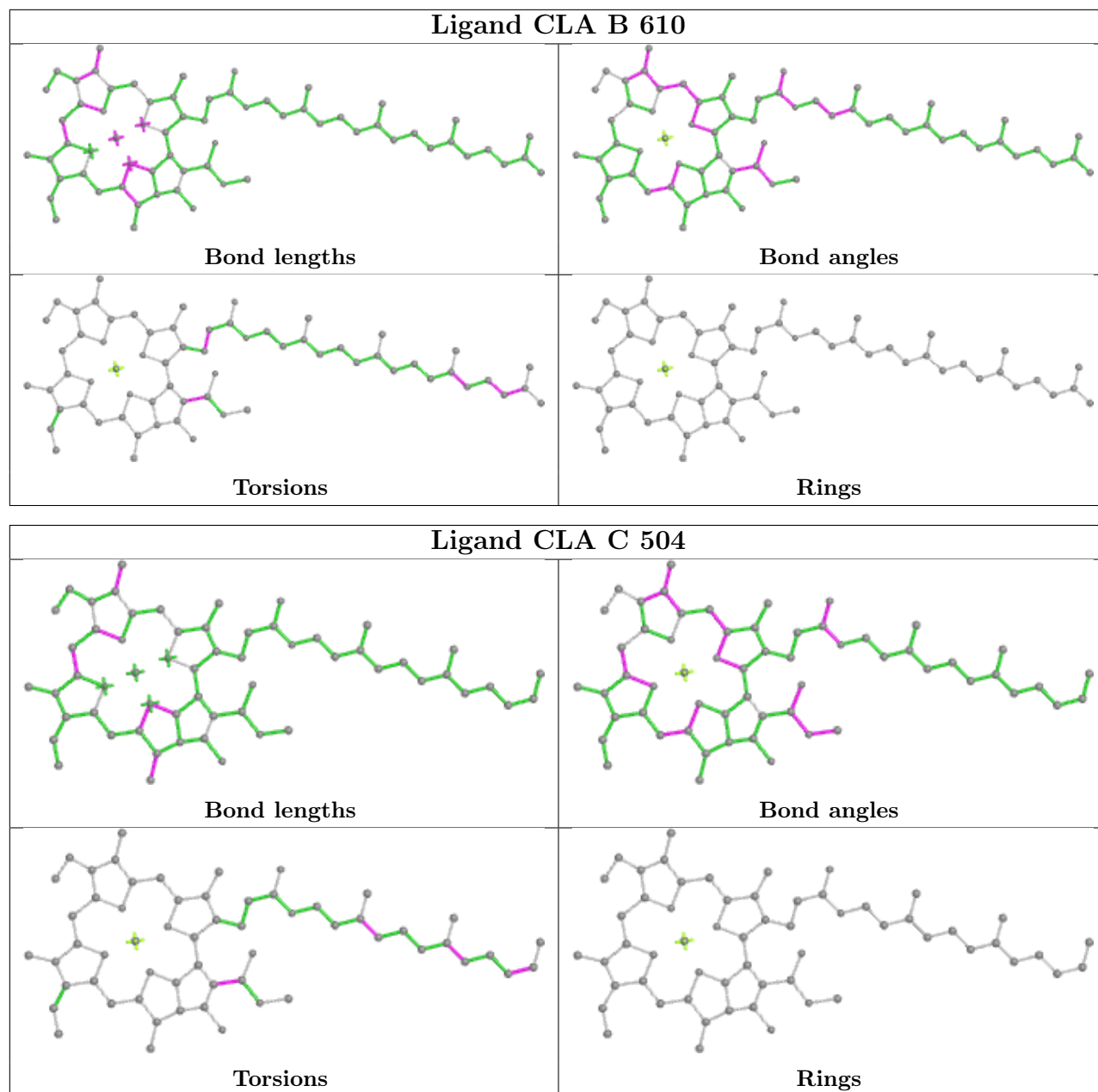
No monomer is involved in short contacts.

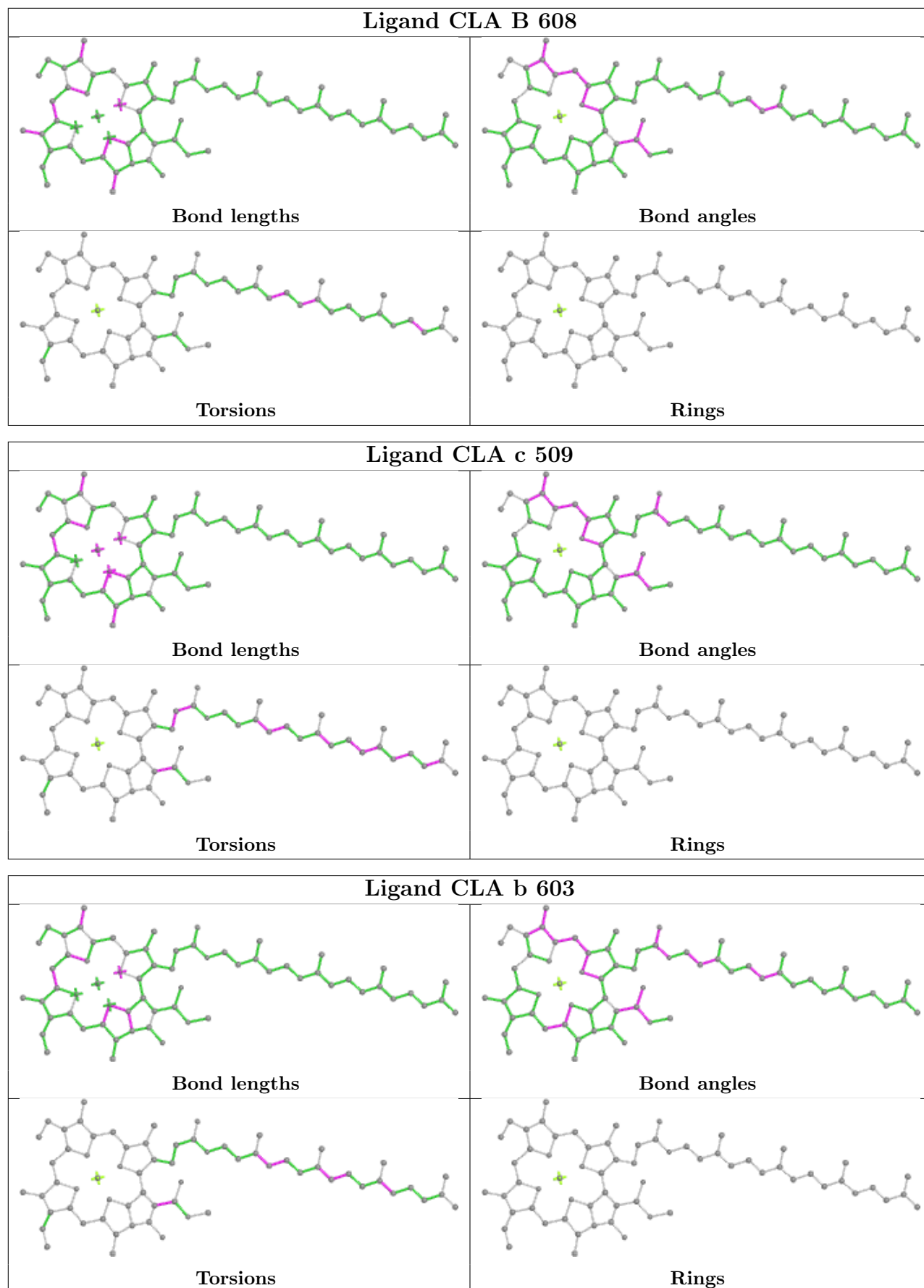
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

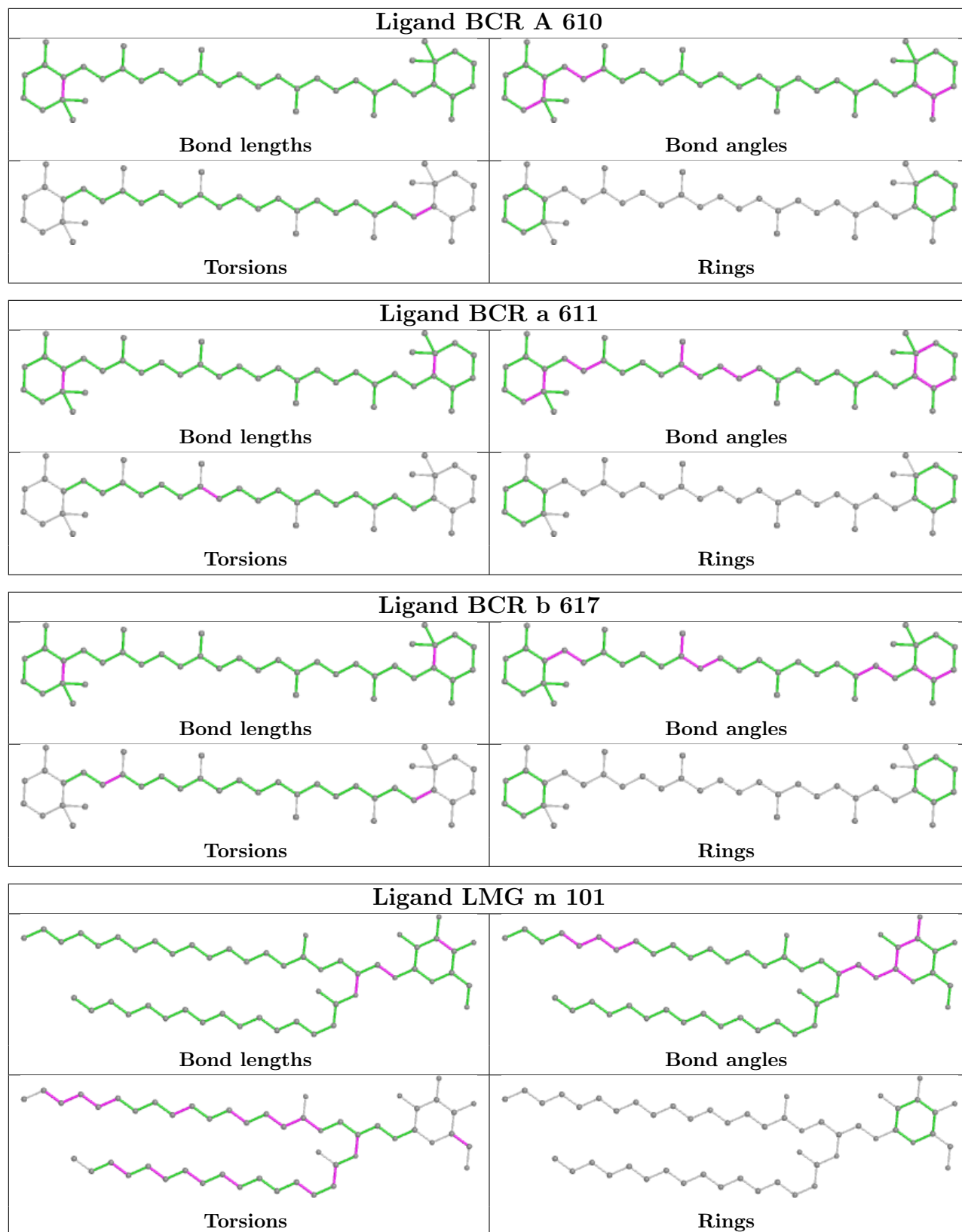
Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD 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.

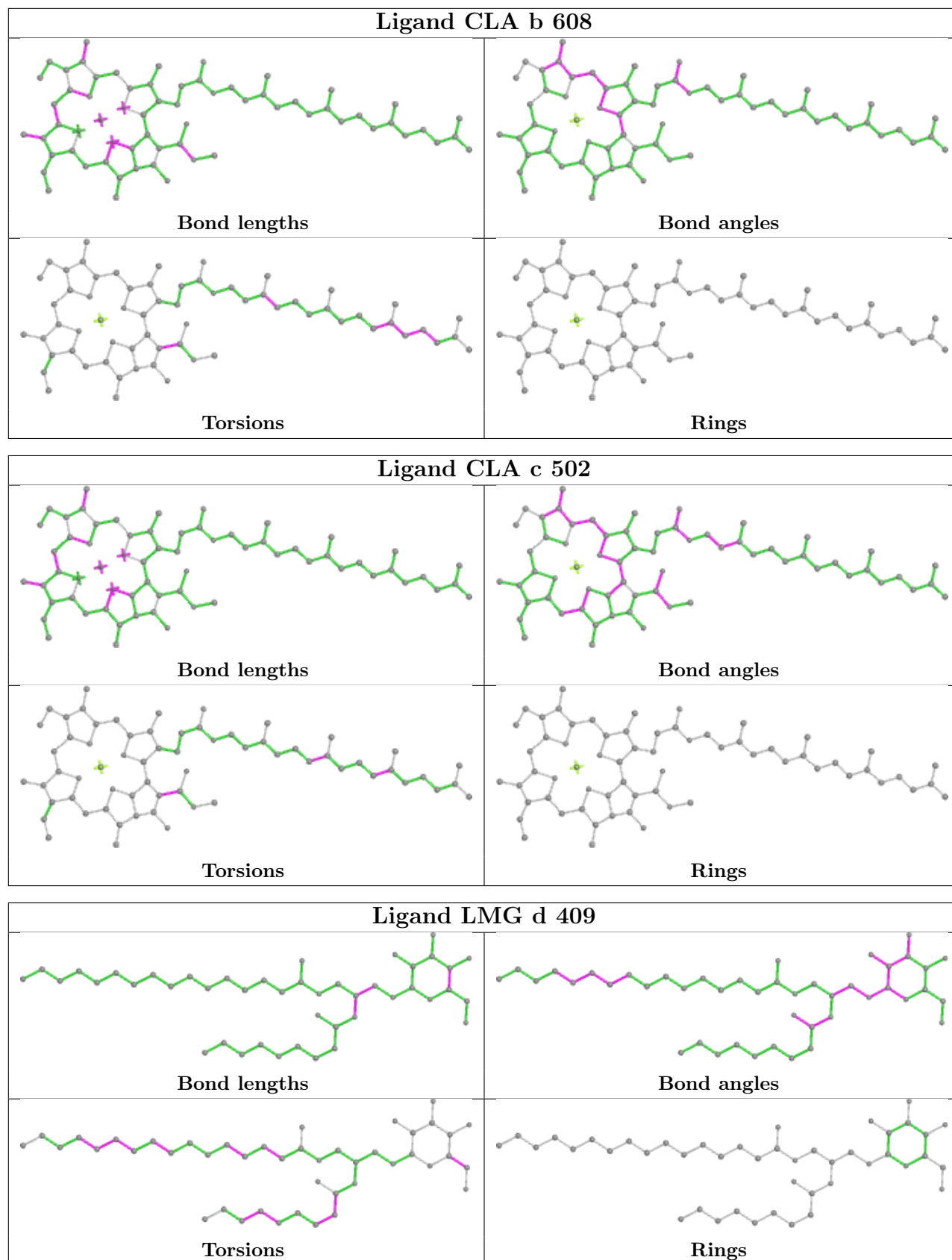


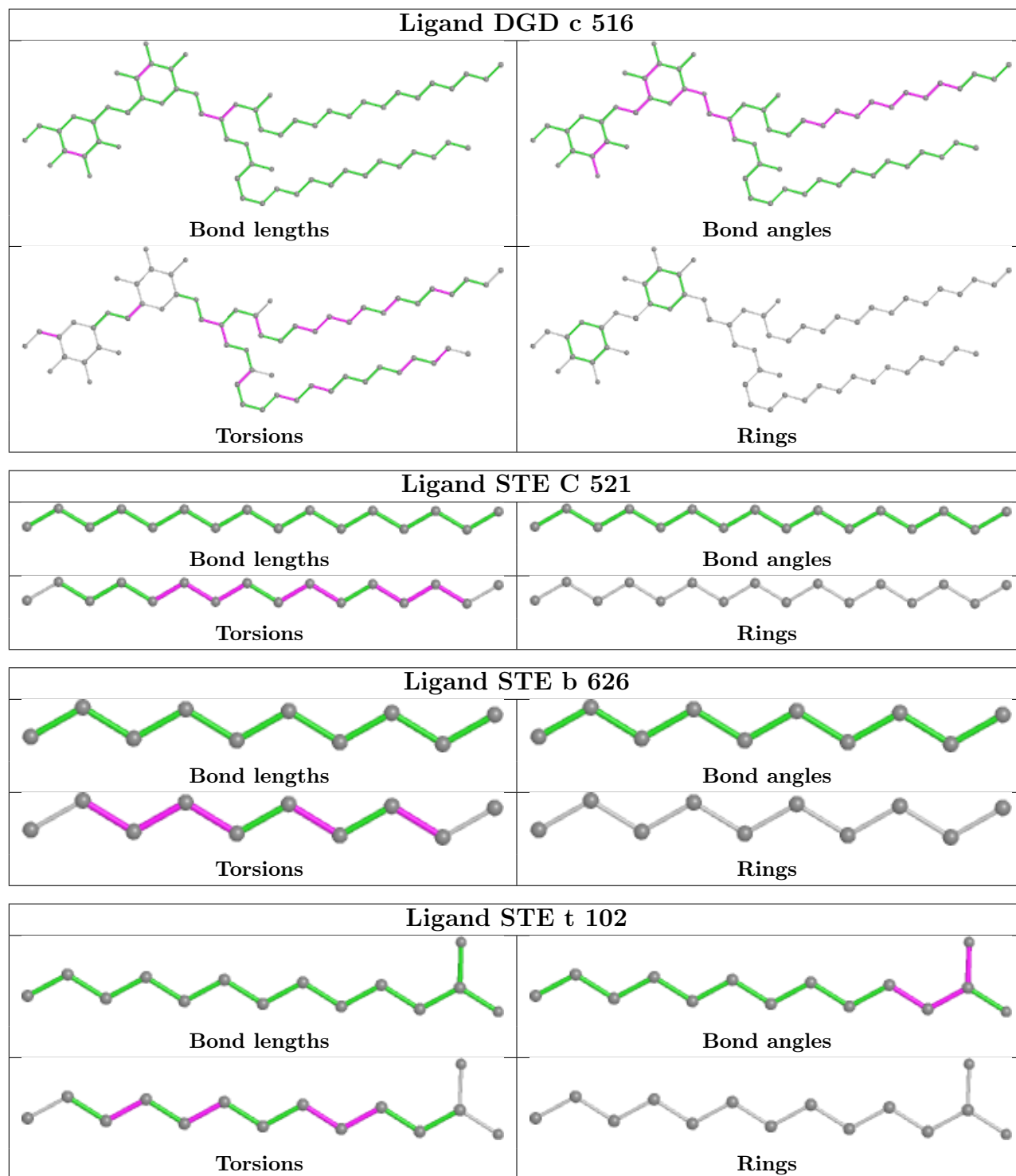


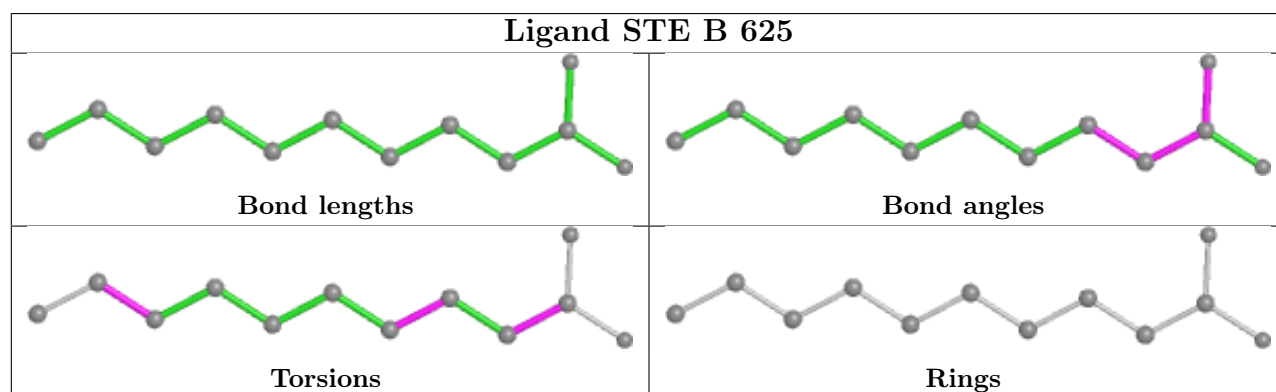
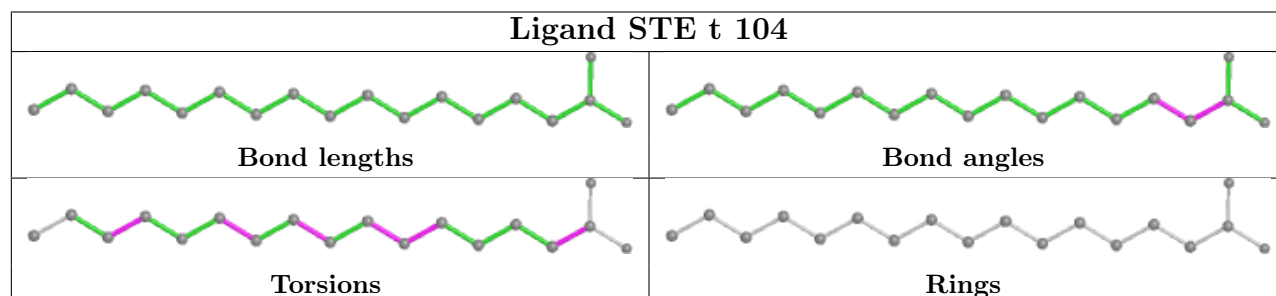
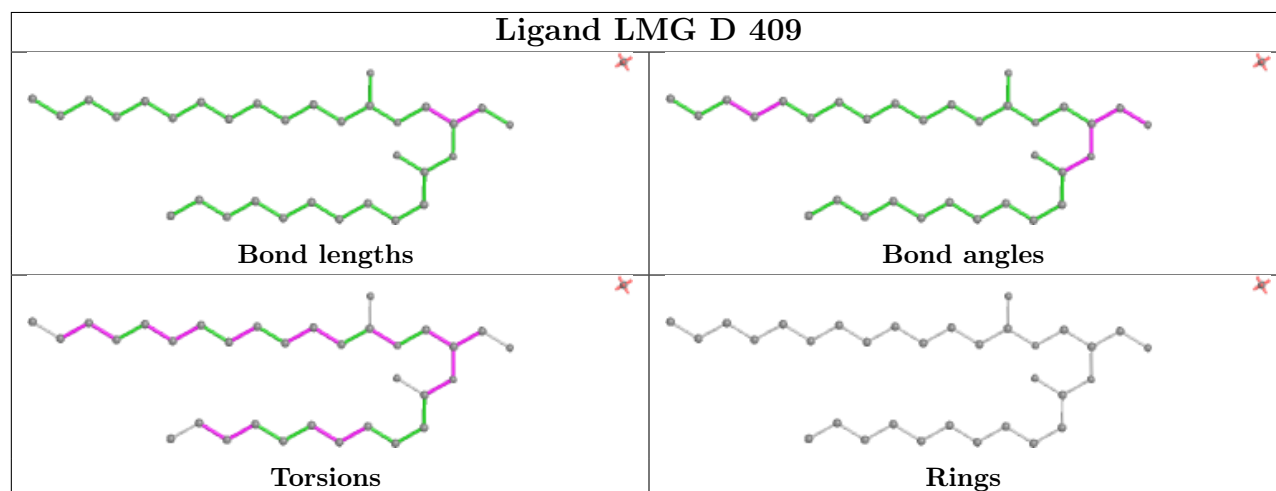
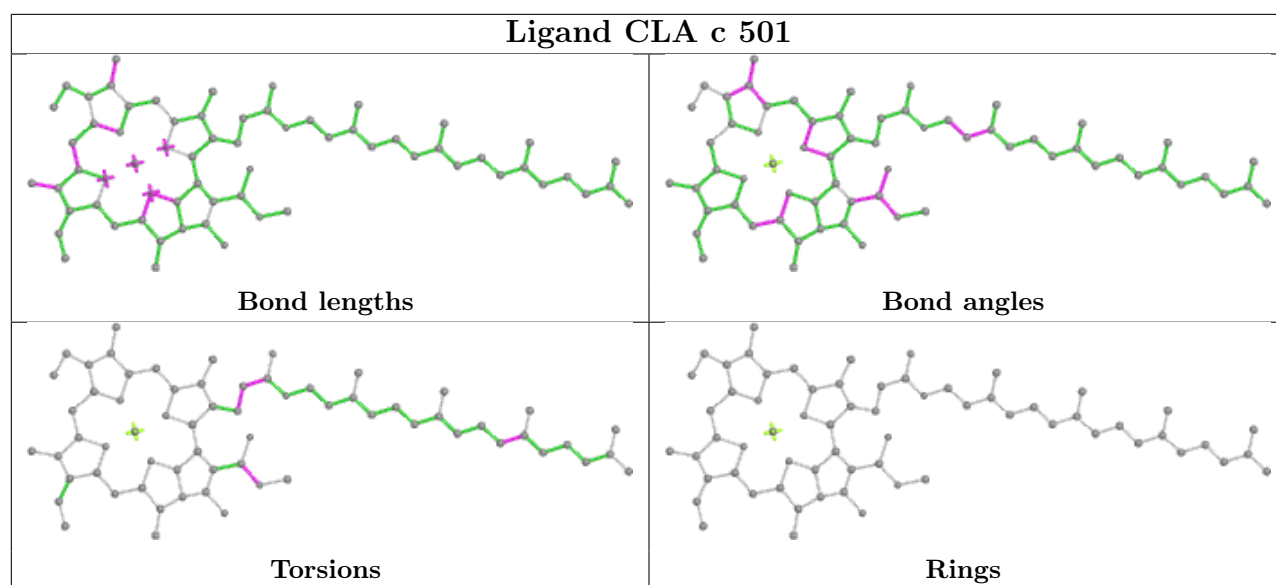


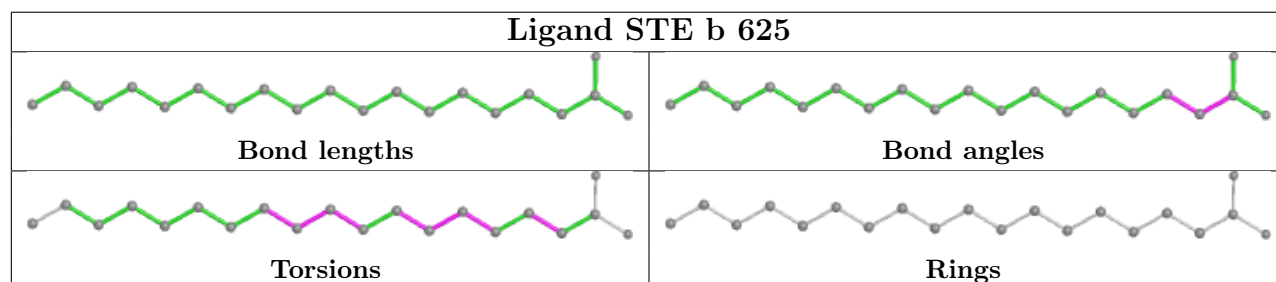
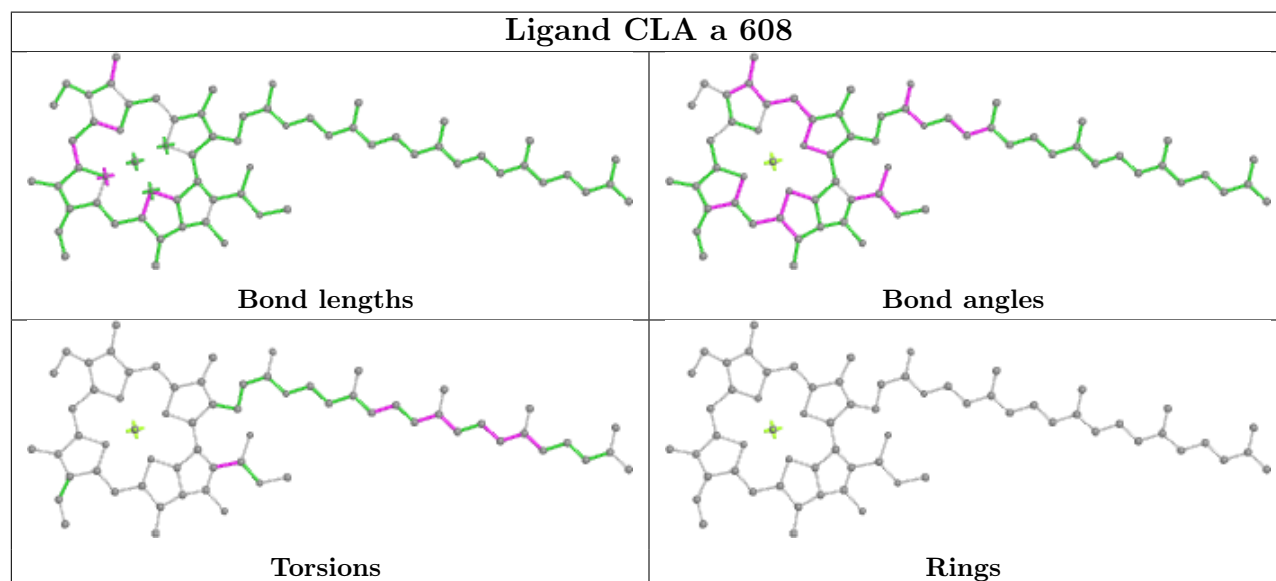
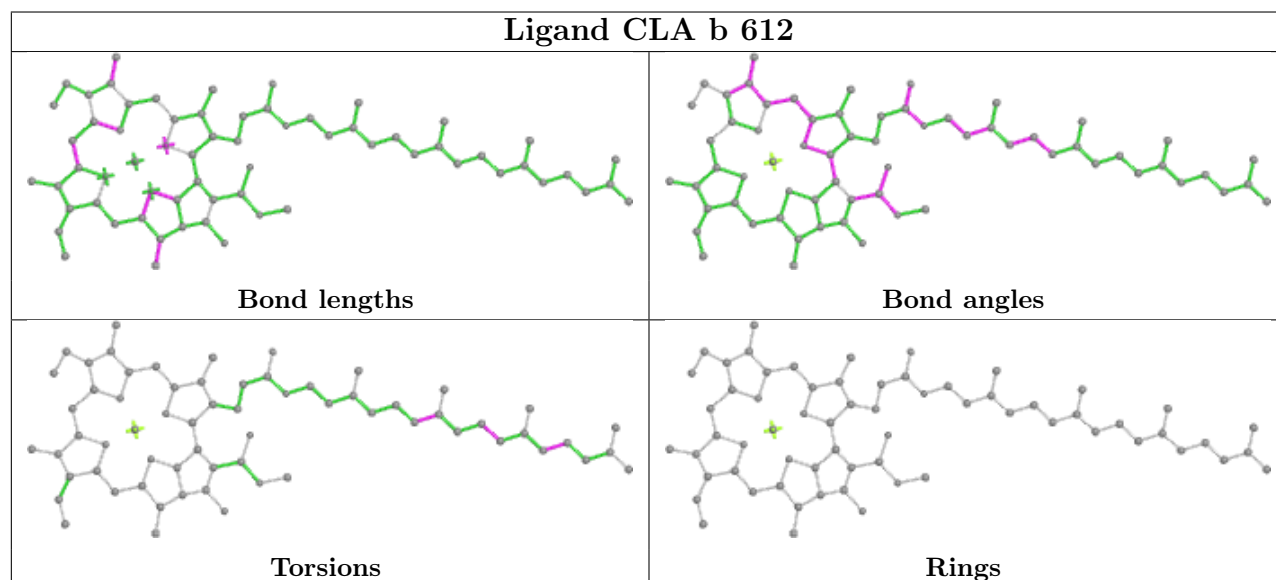
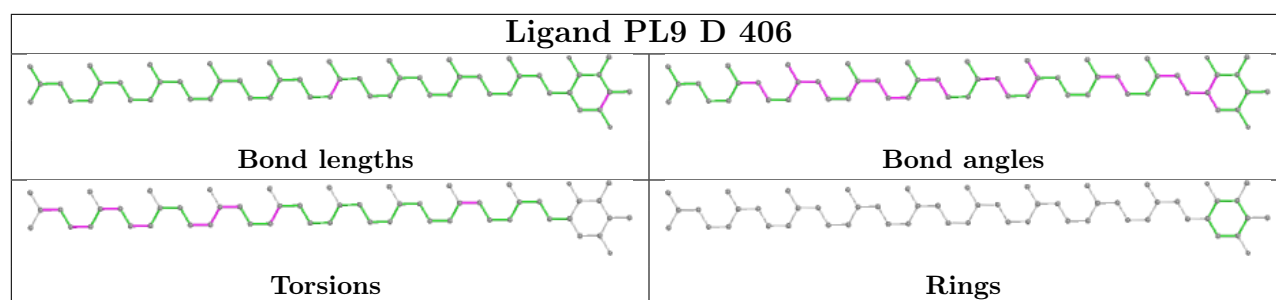


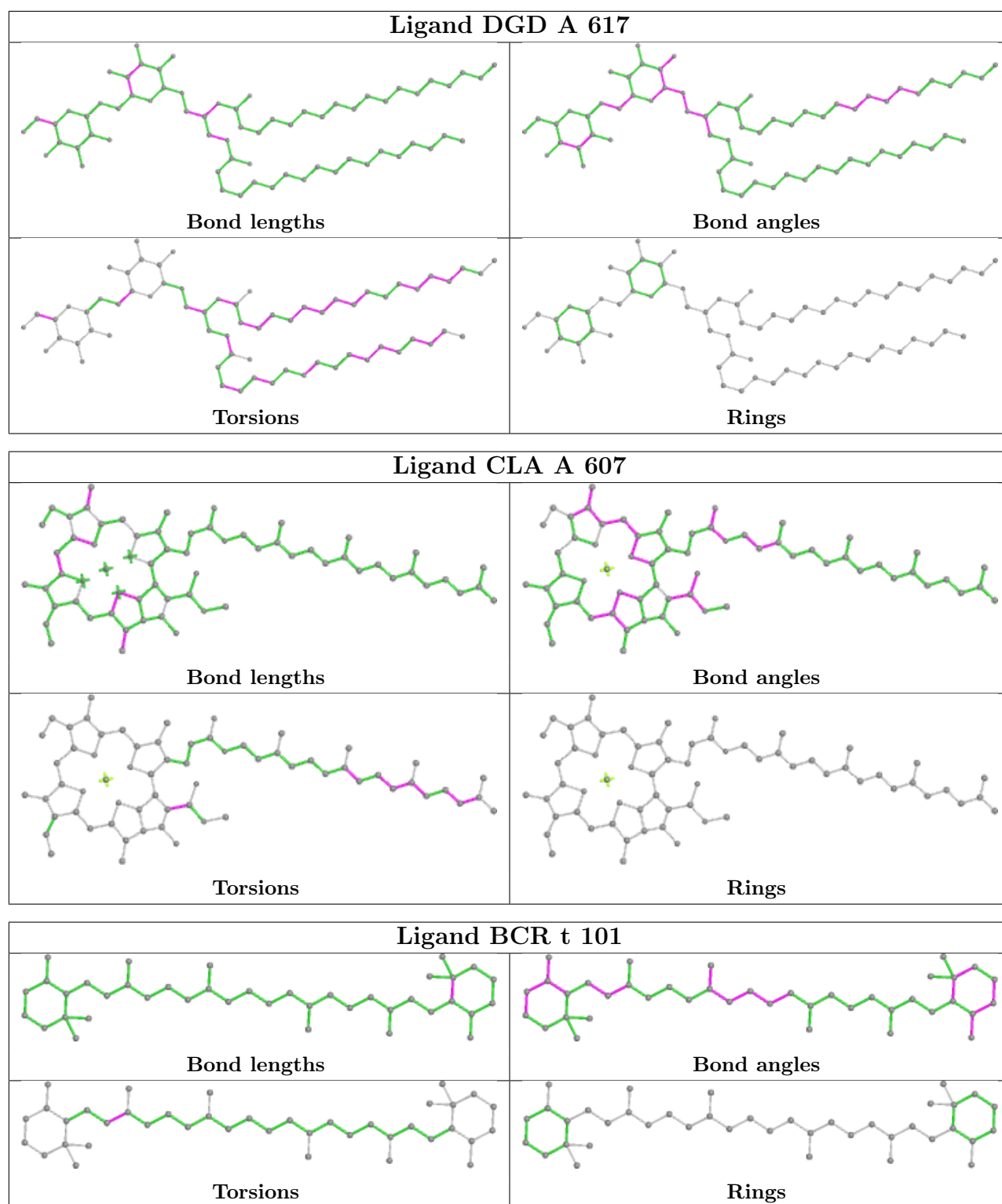


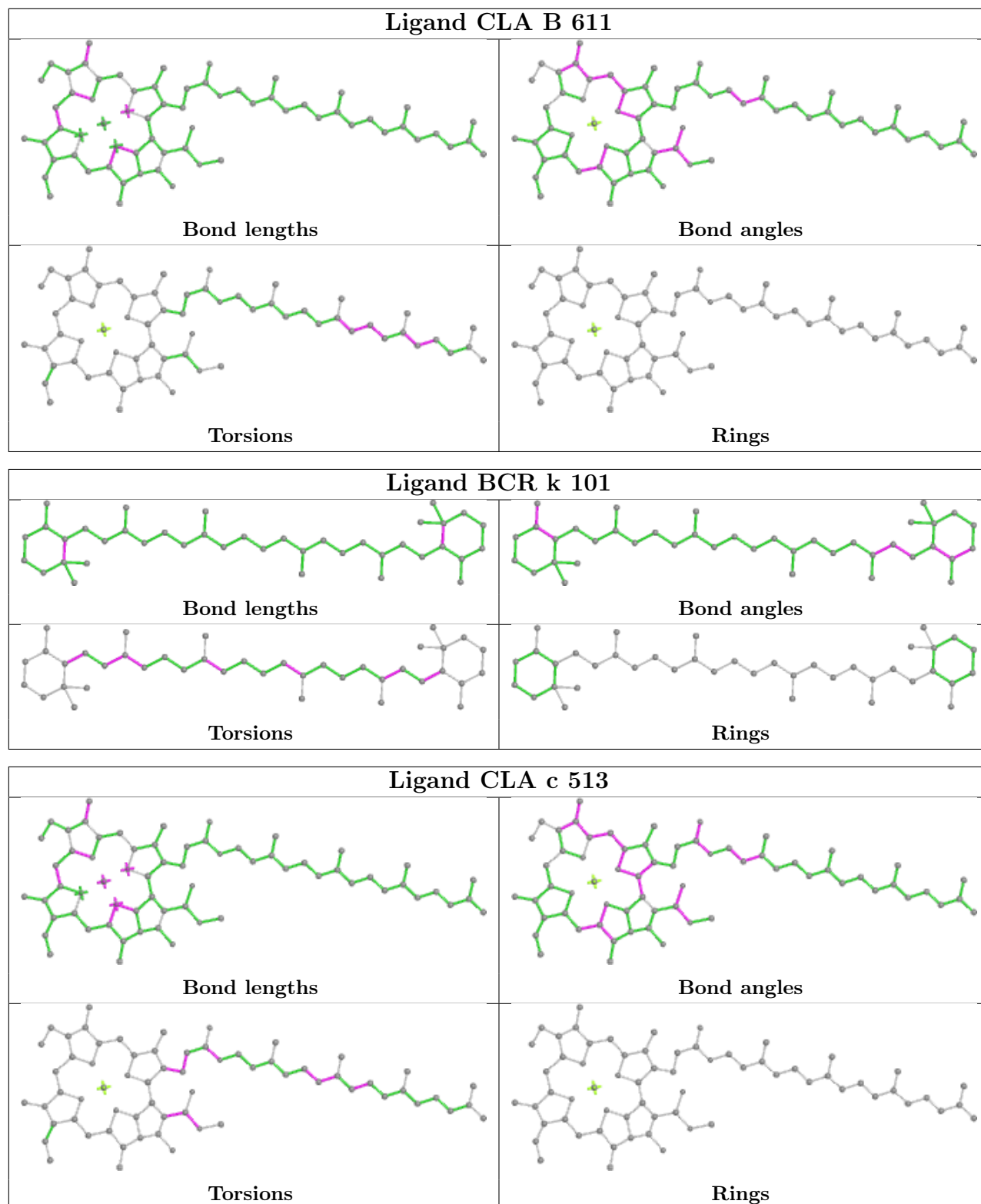


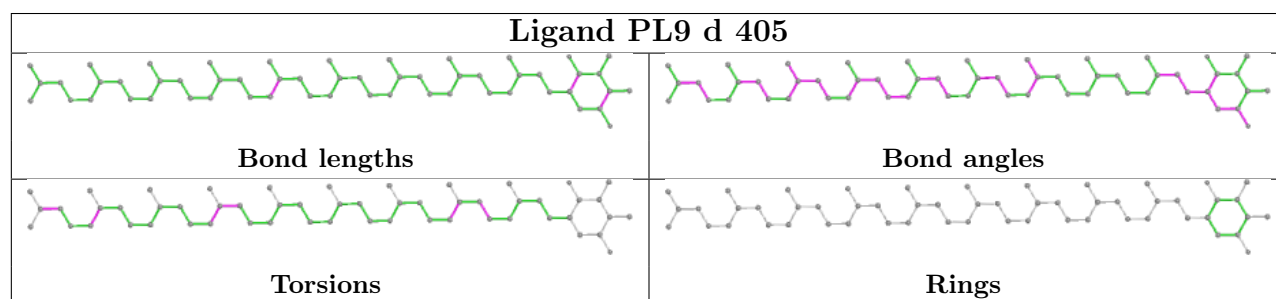
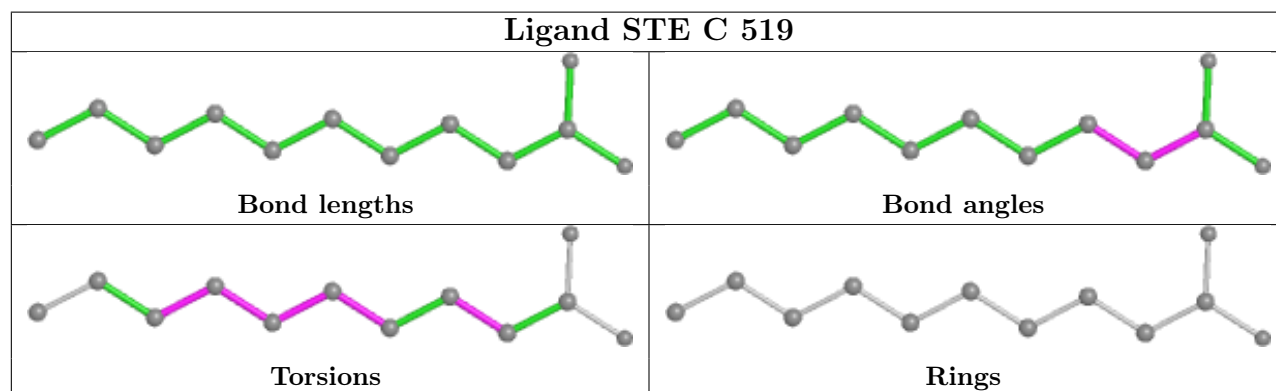
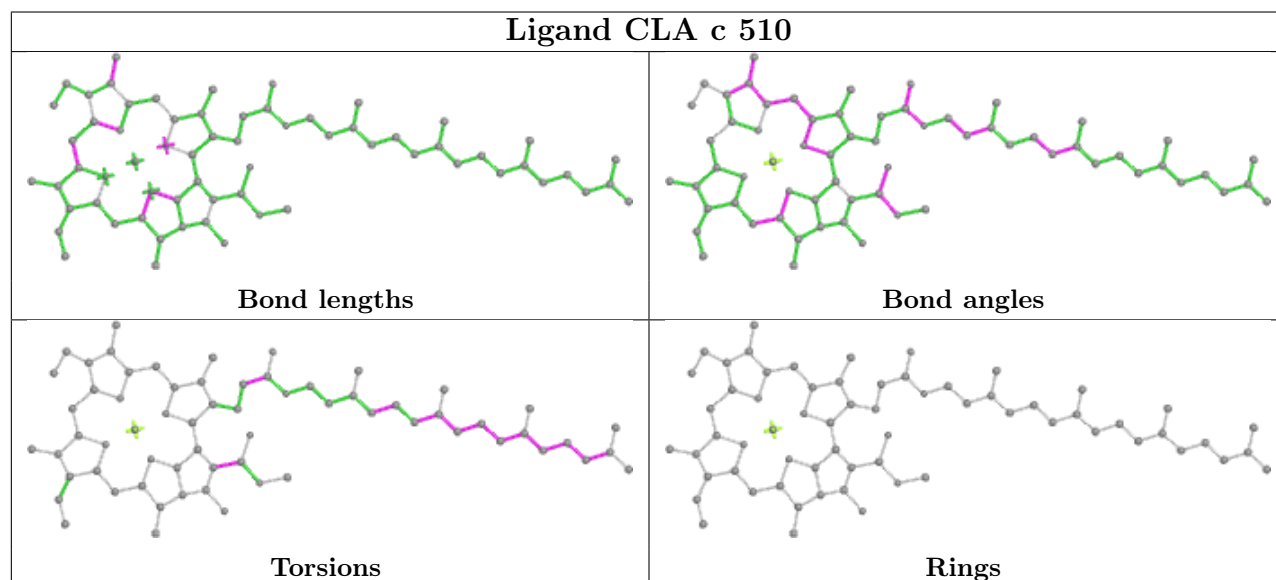
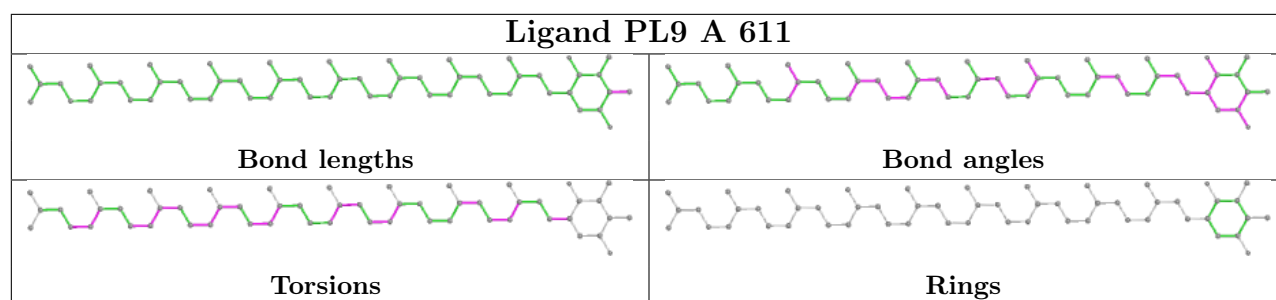


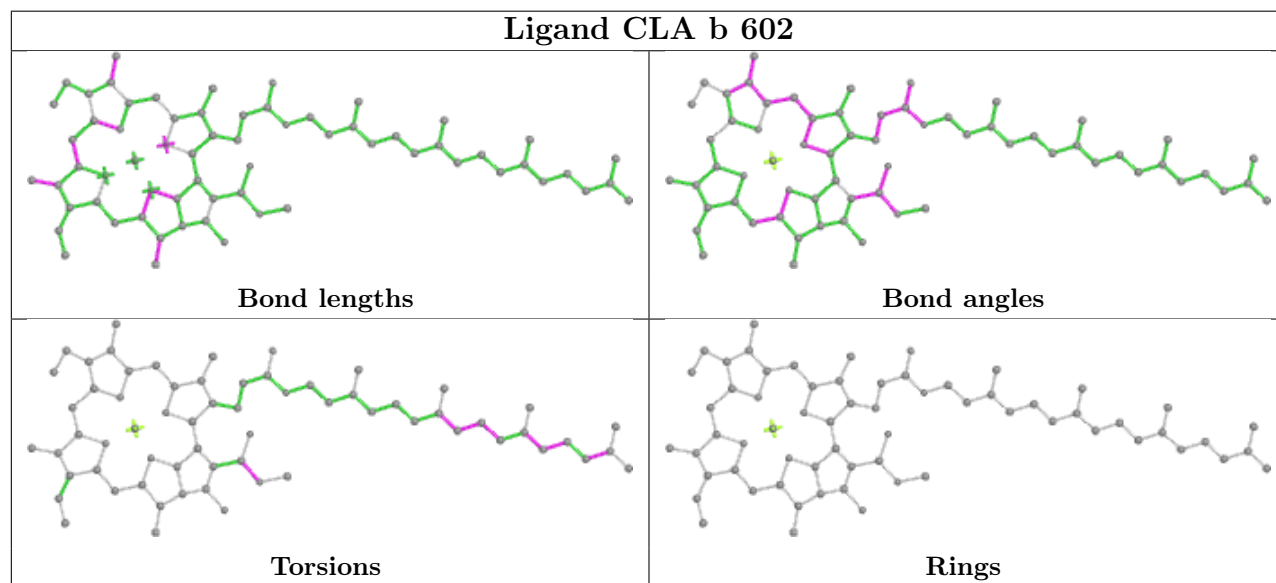
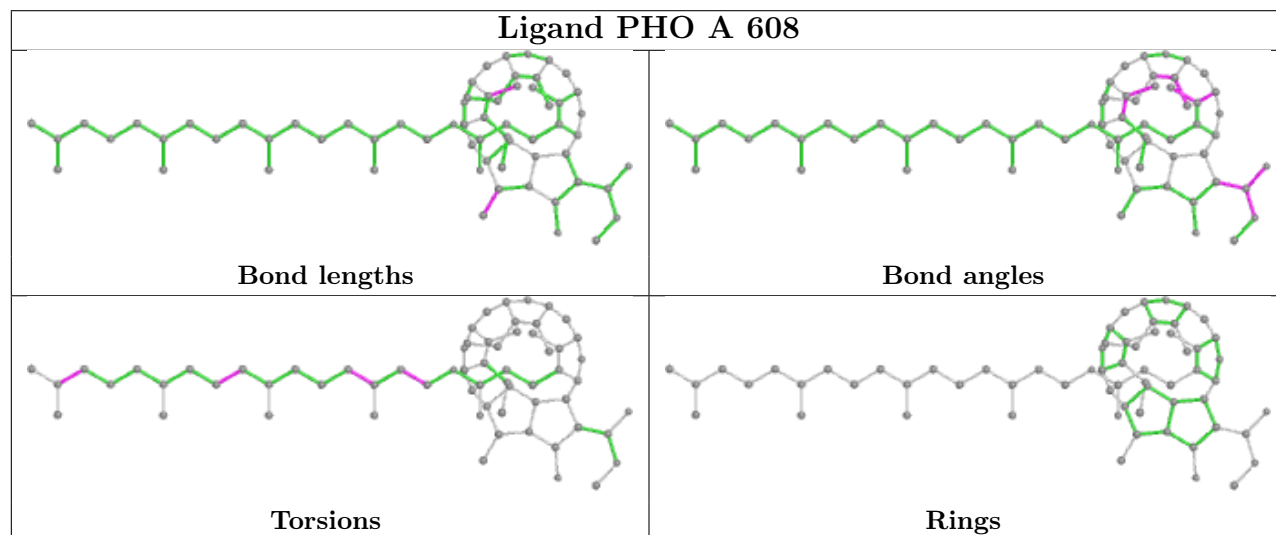
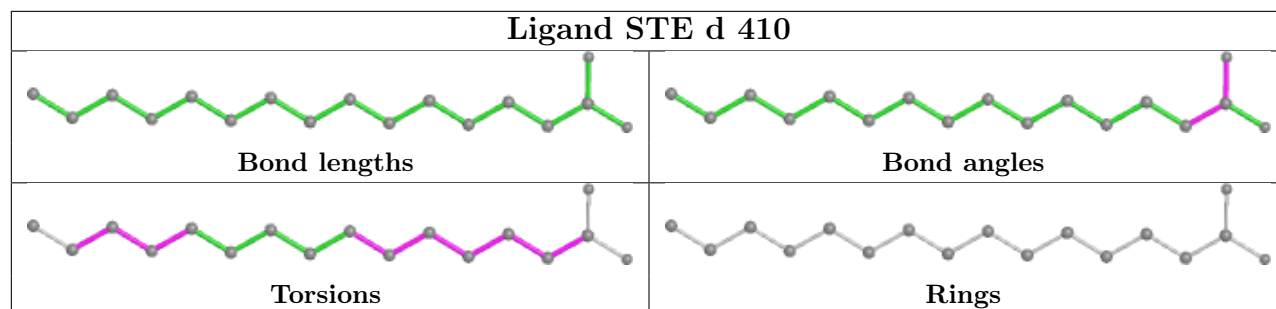


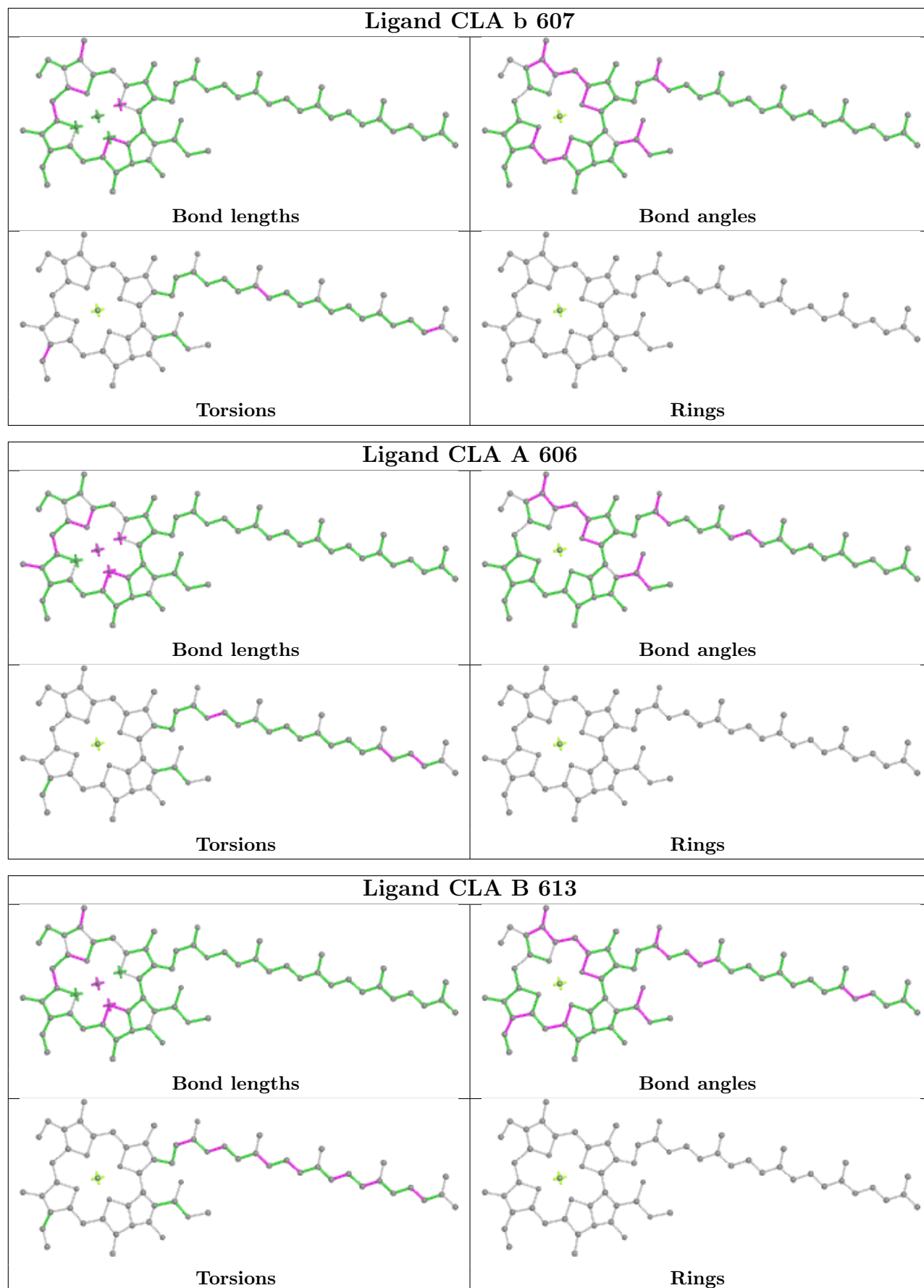


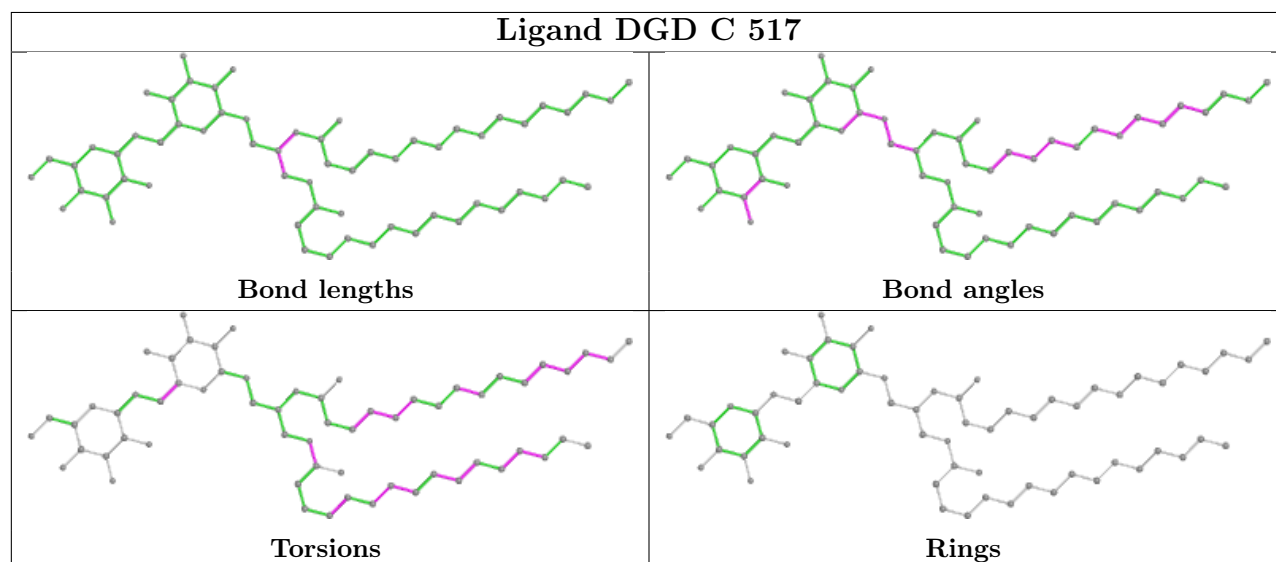
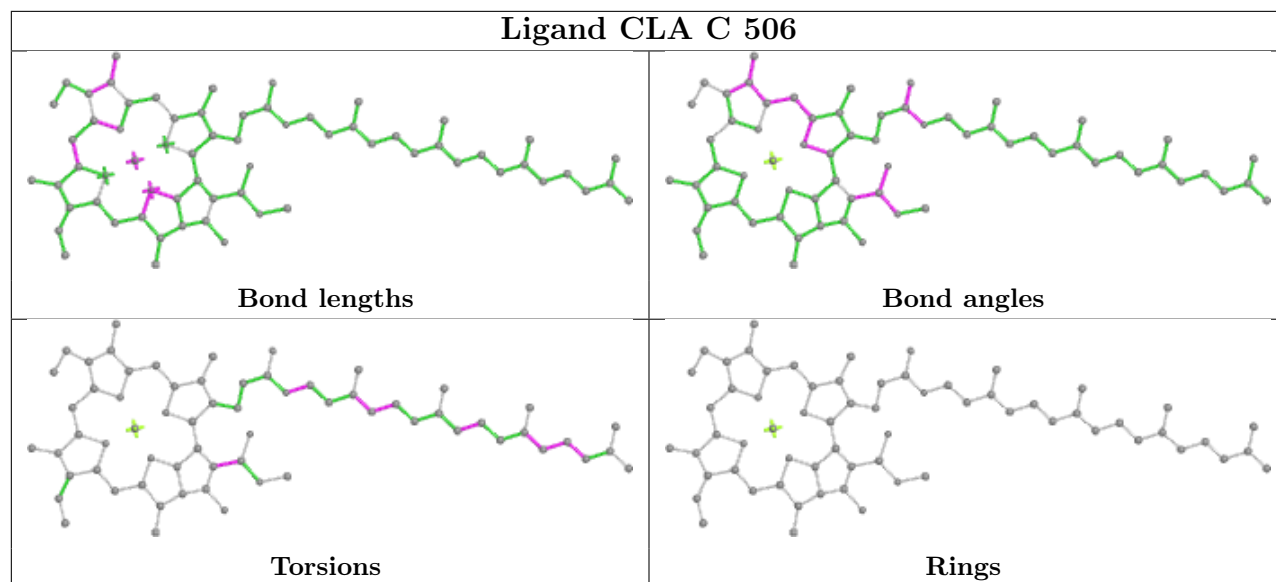


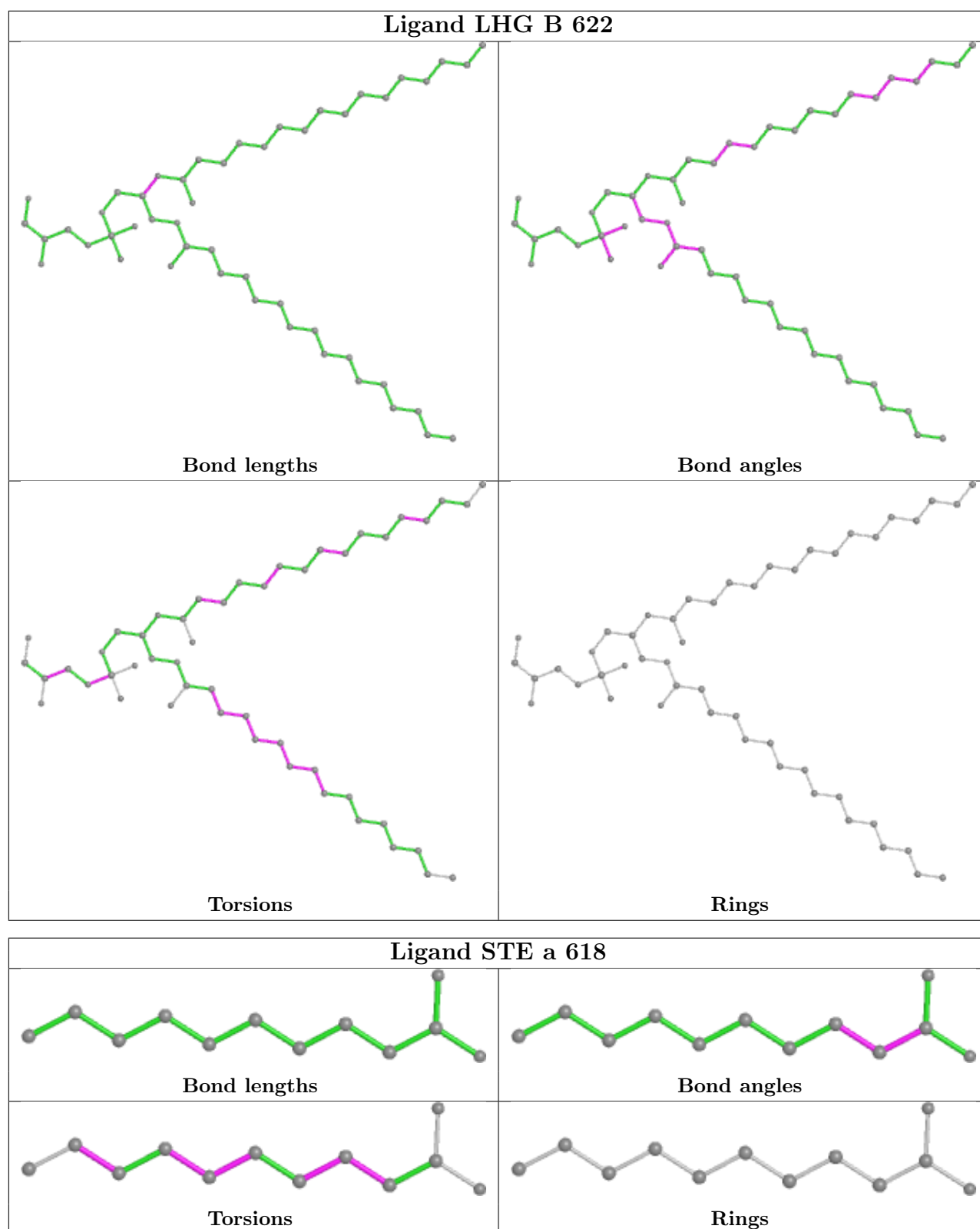


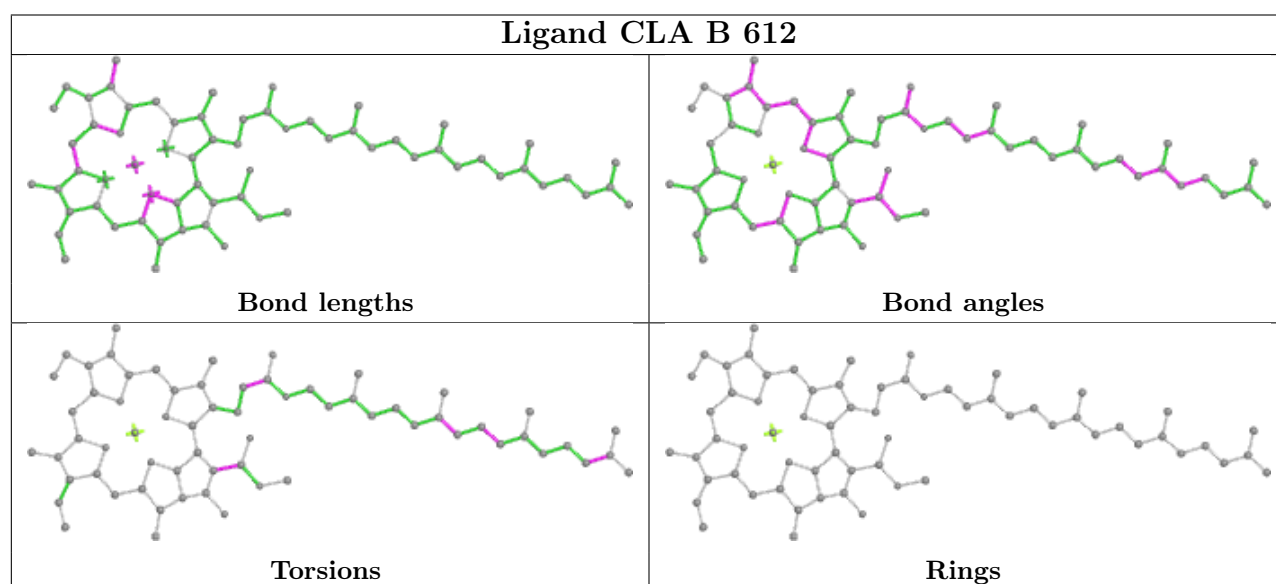
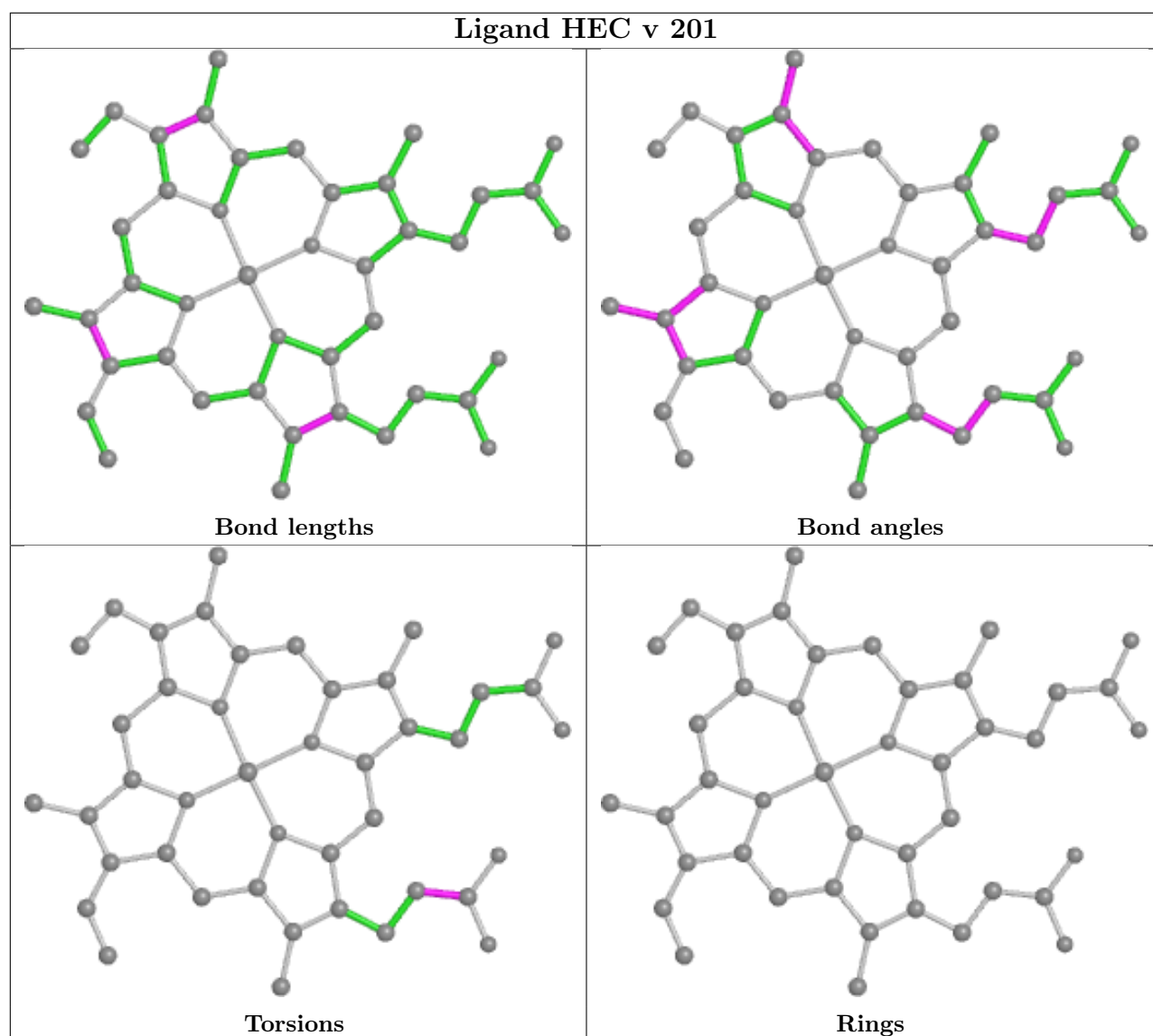


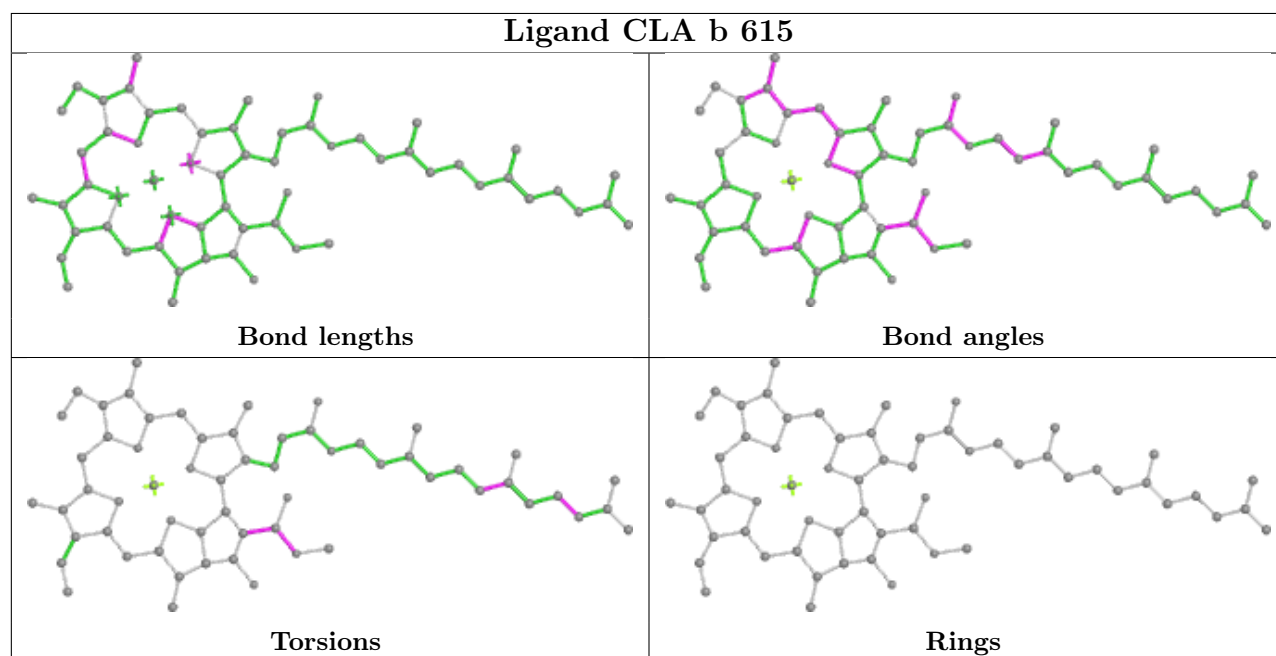
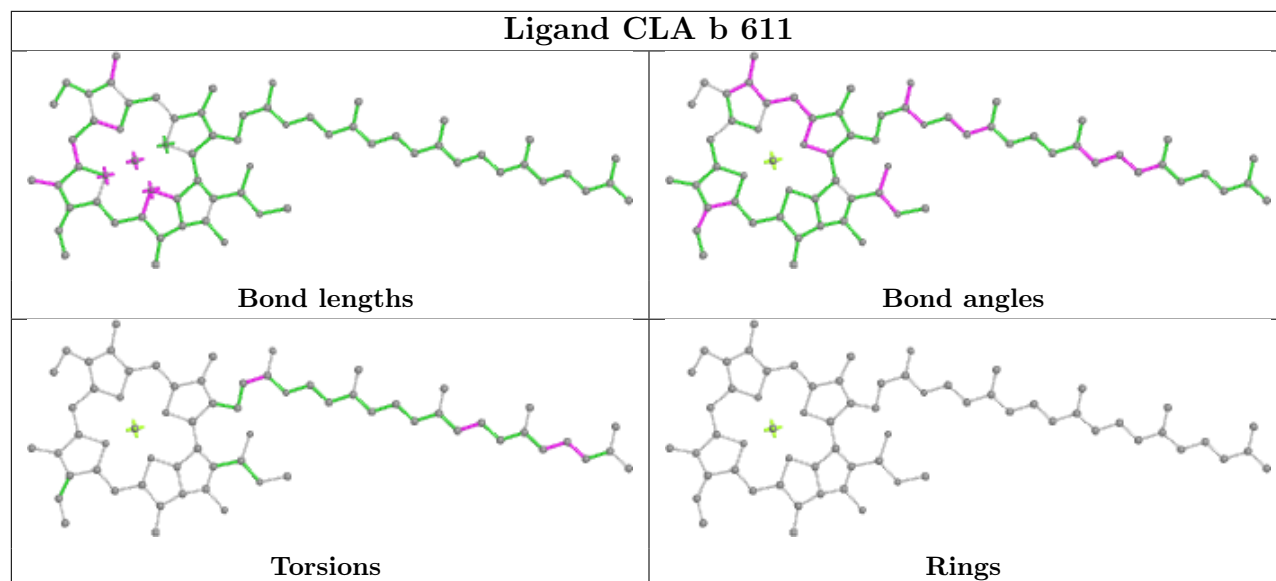
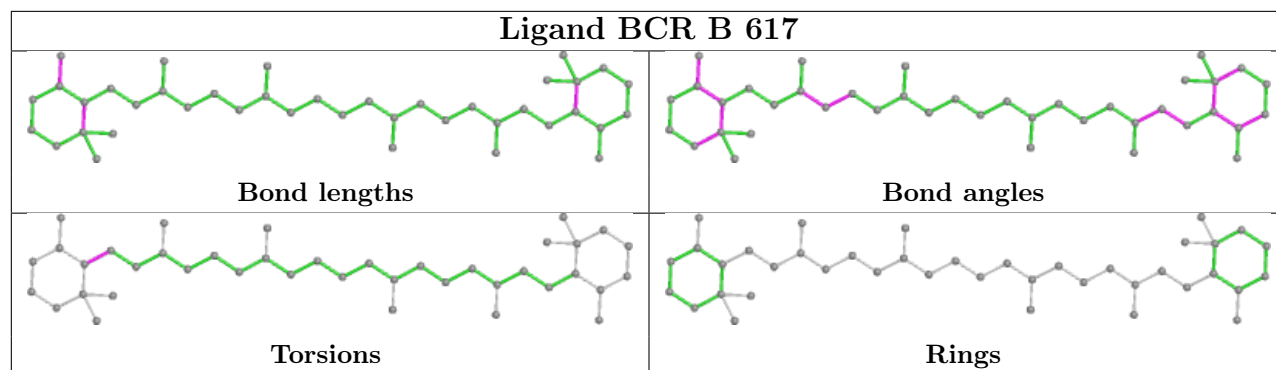


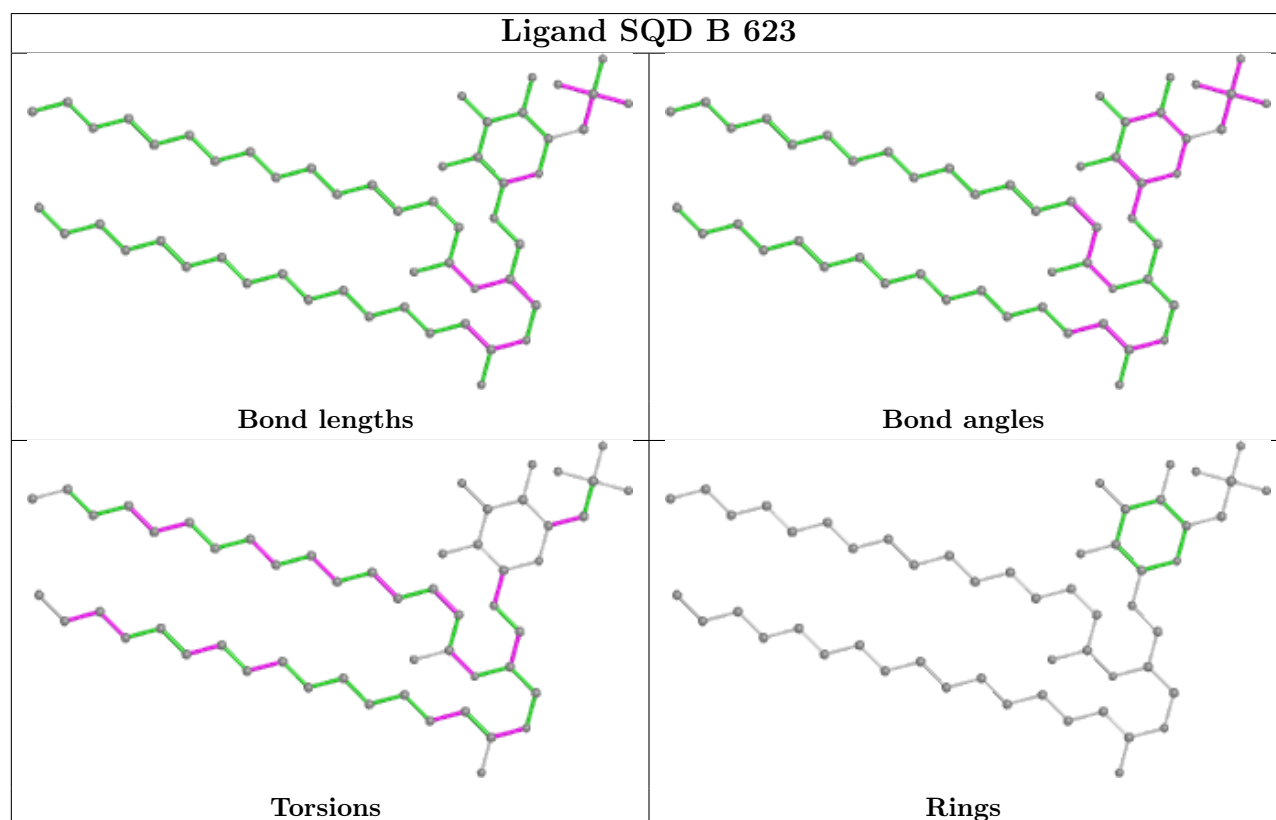
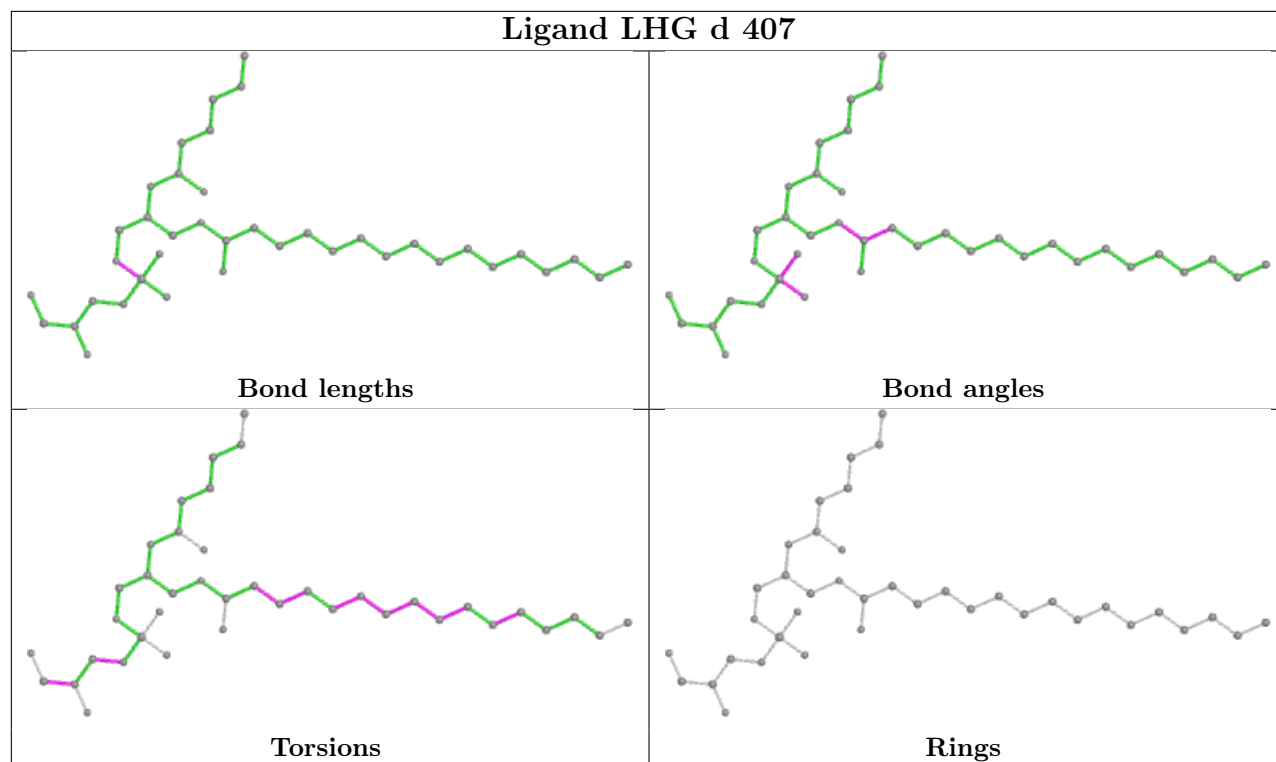


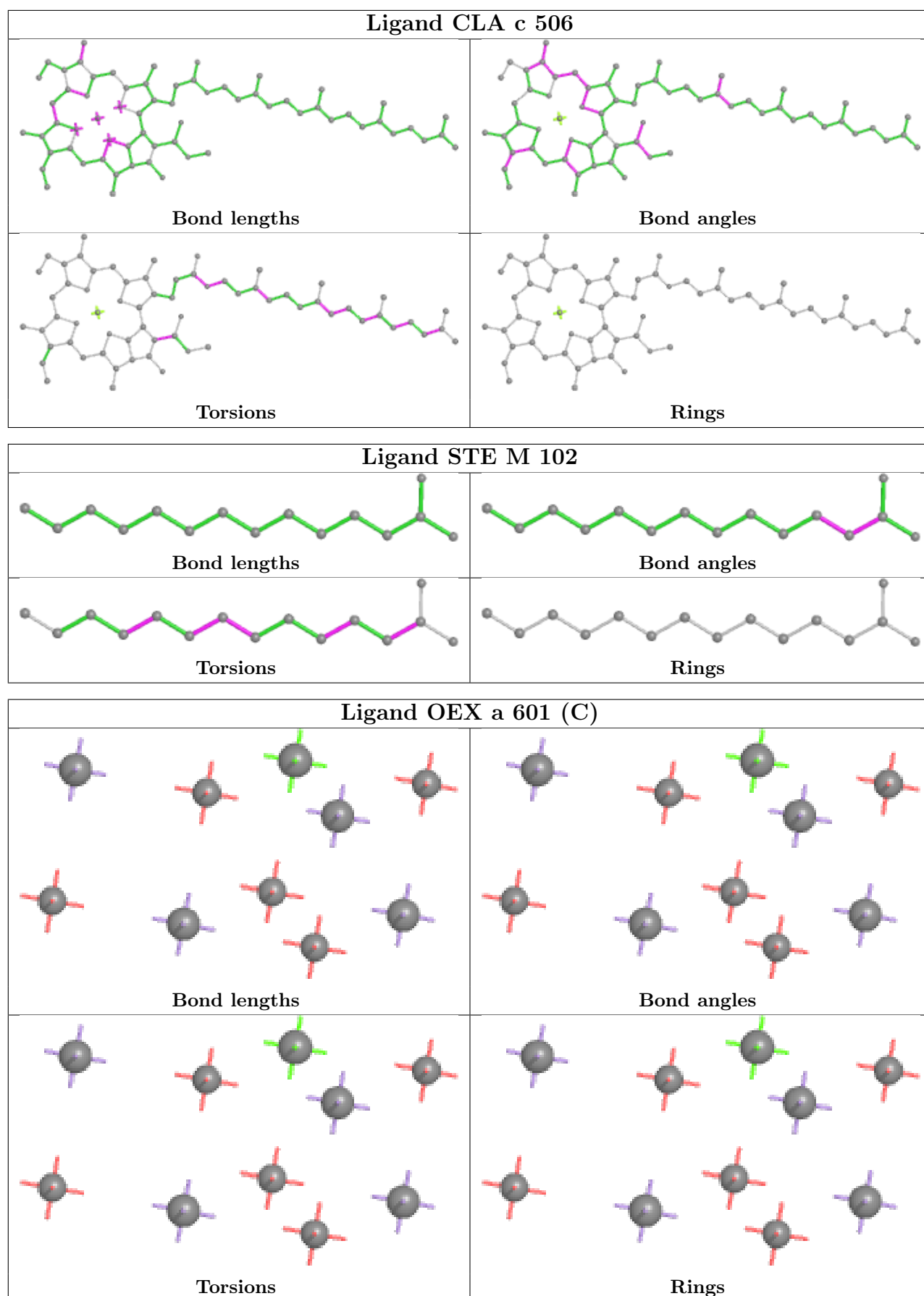


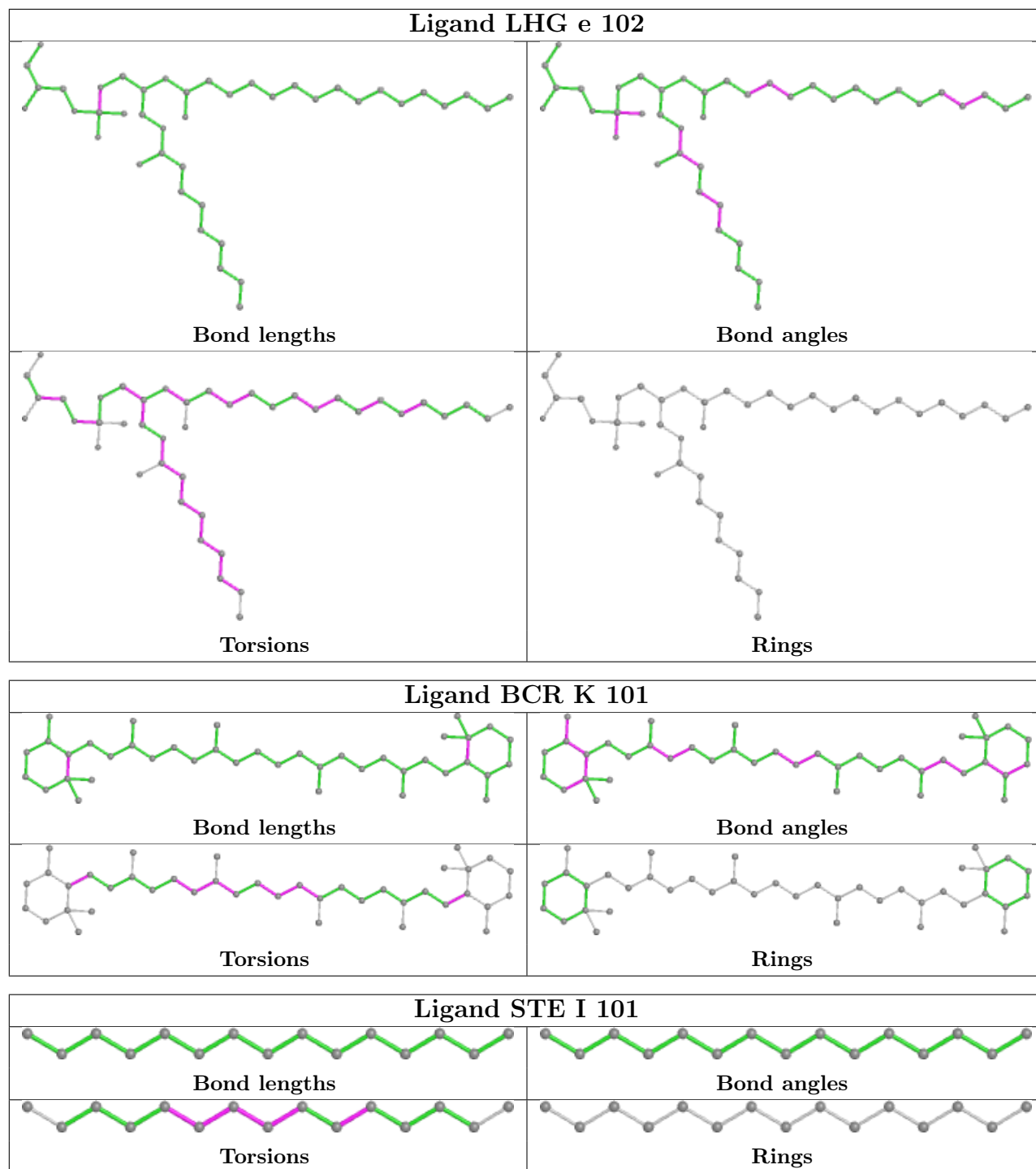


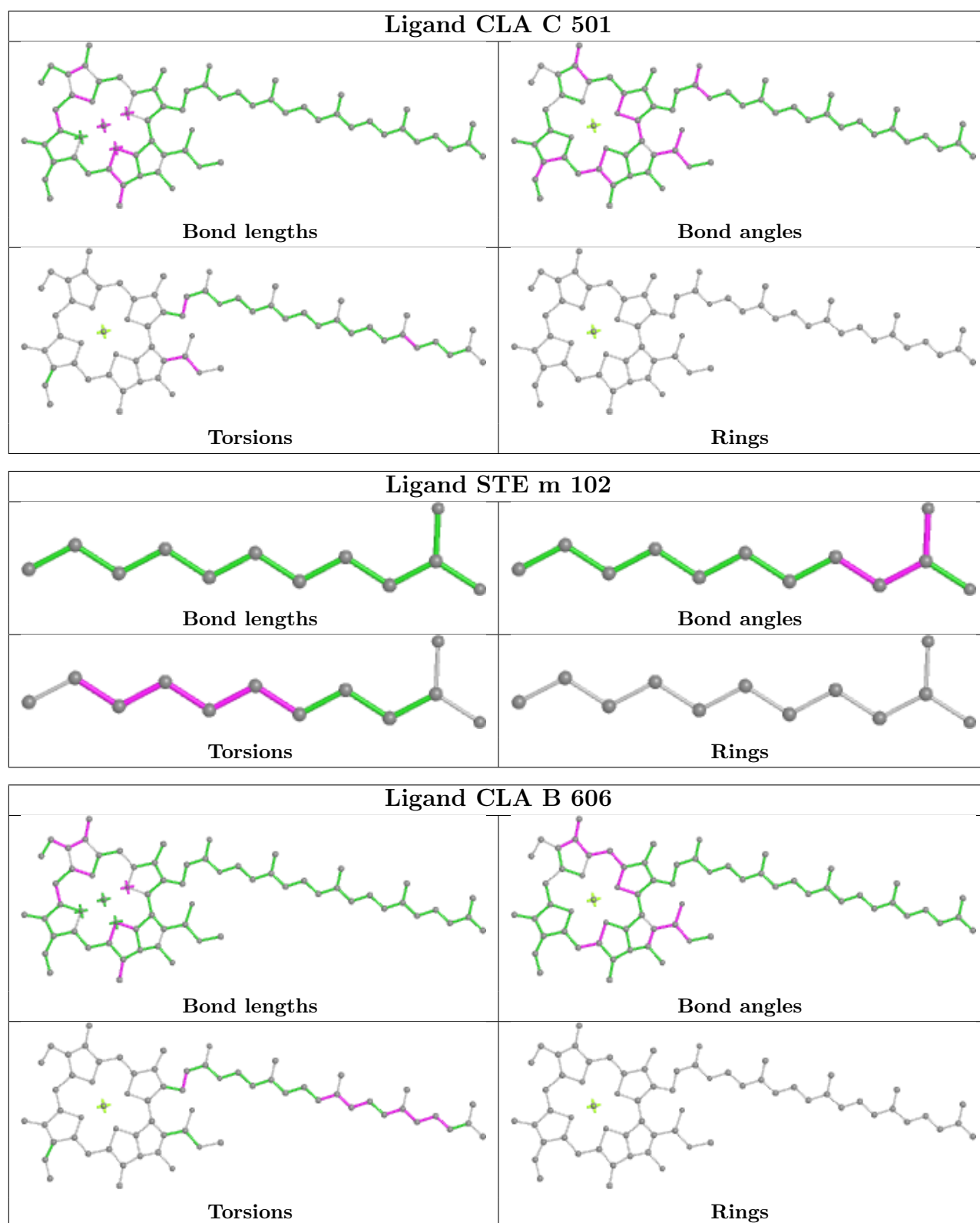


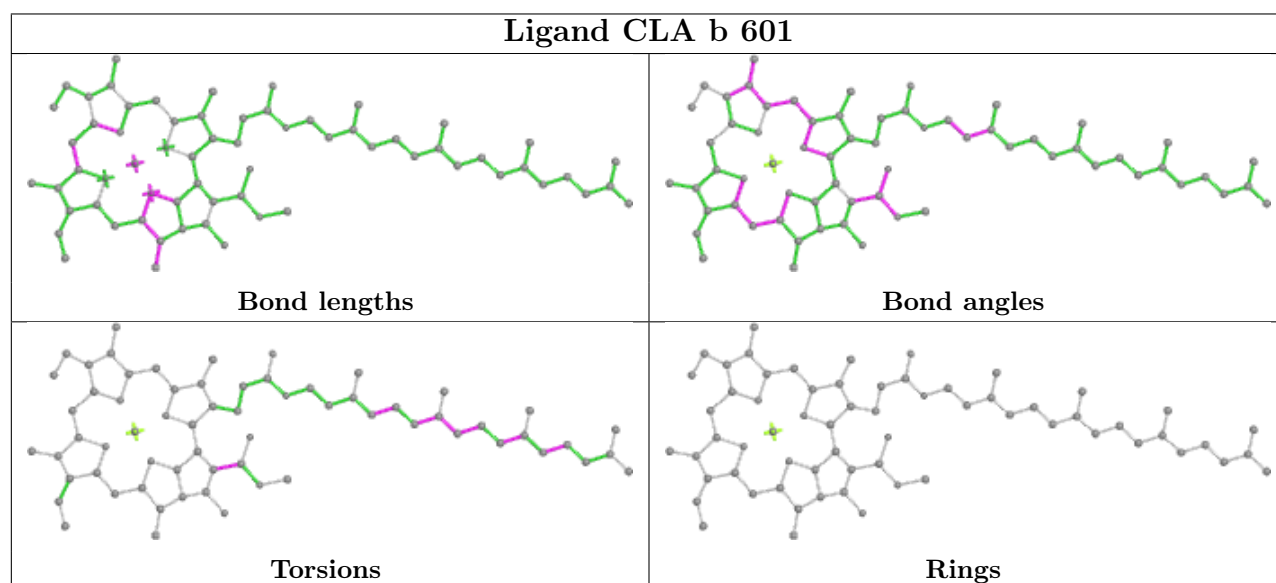
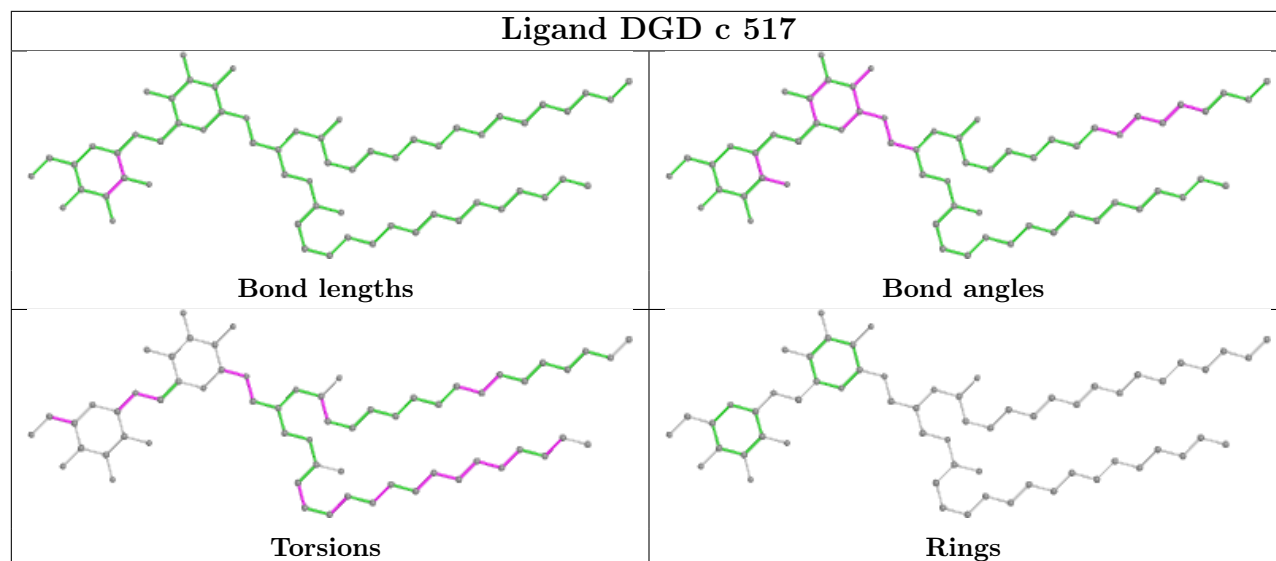


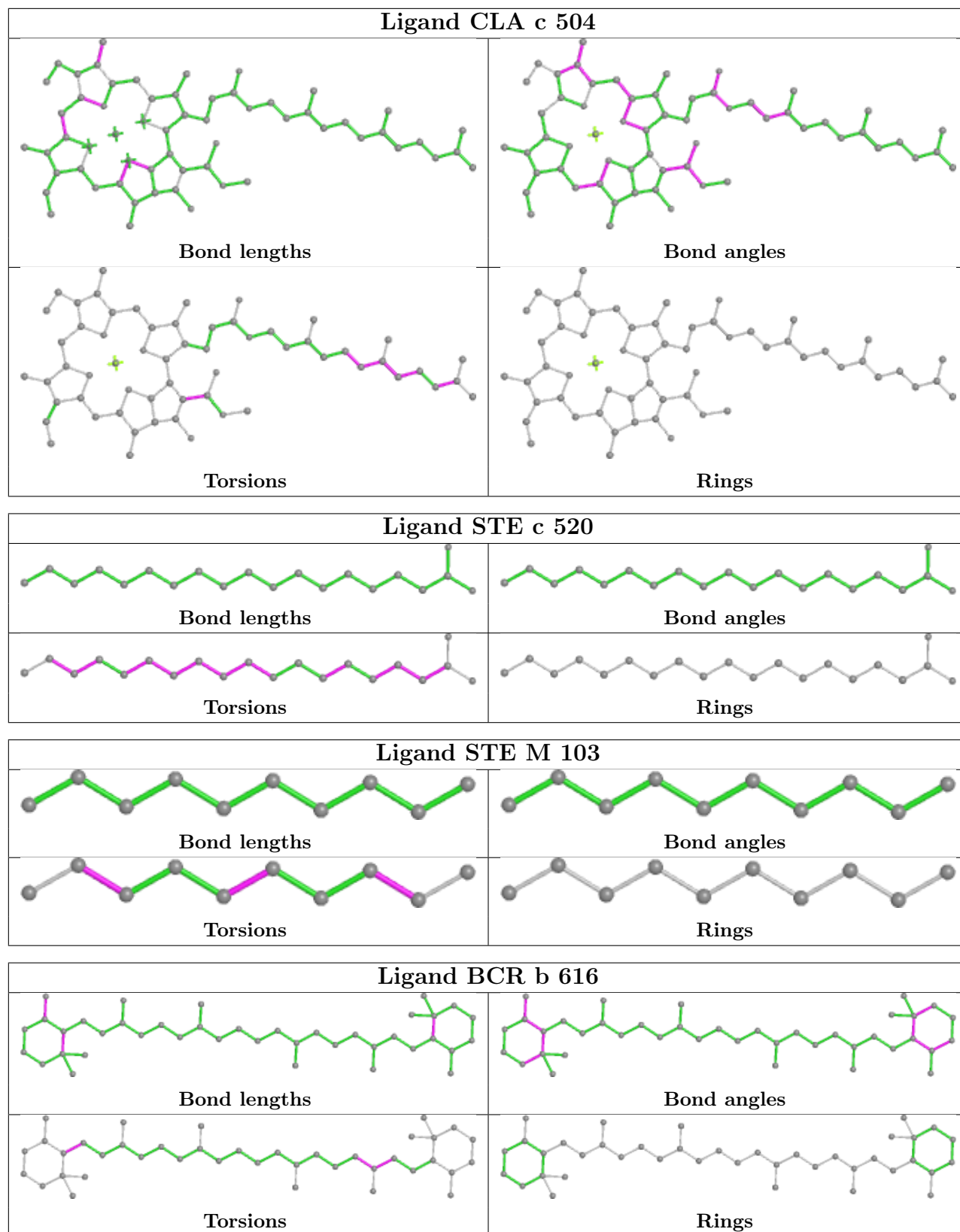


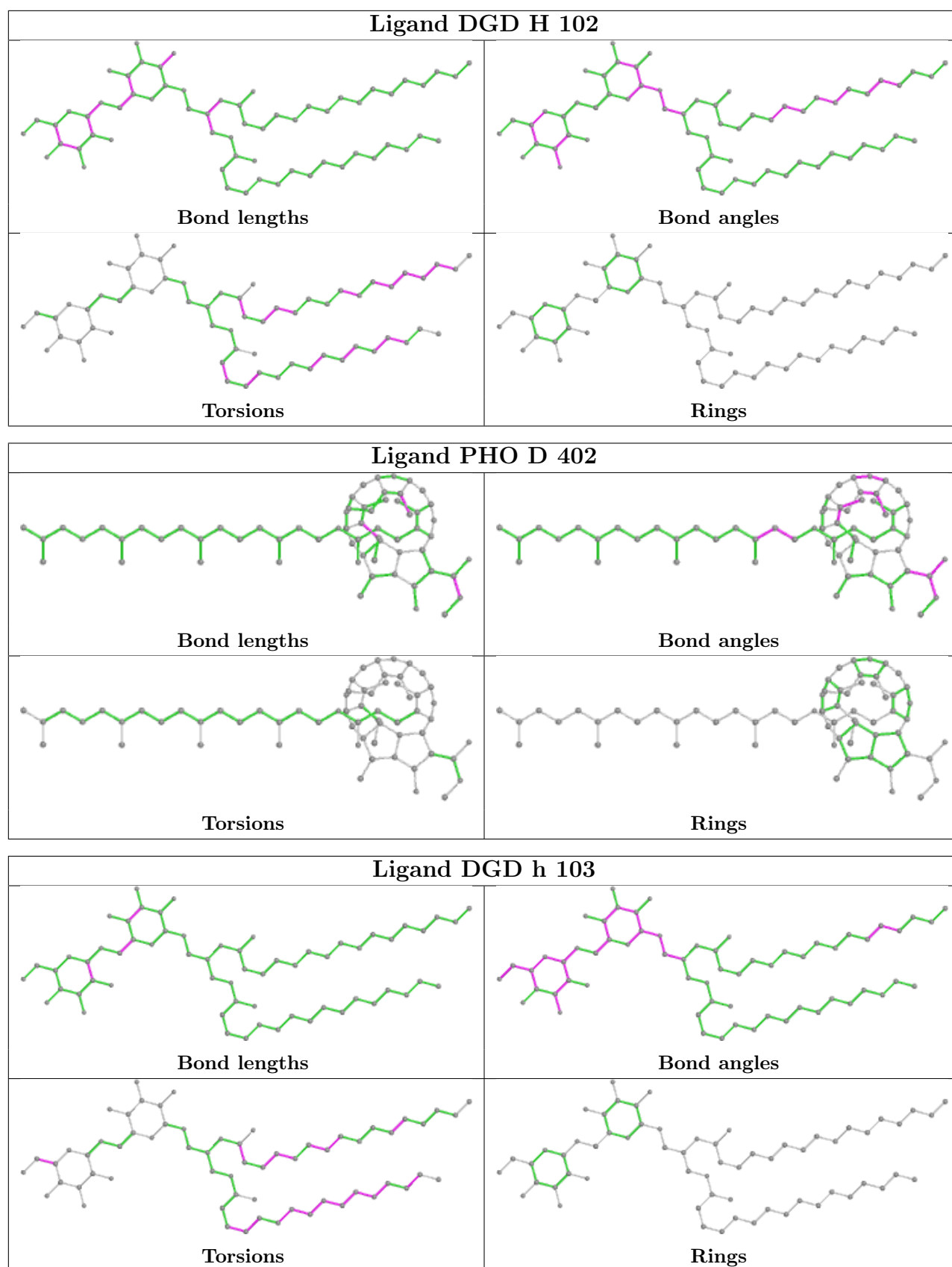


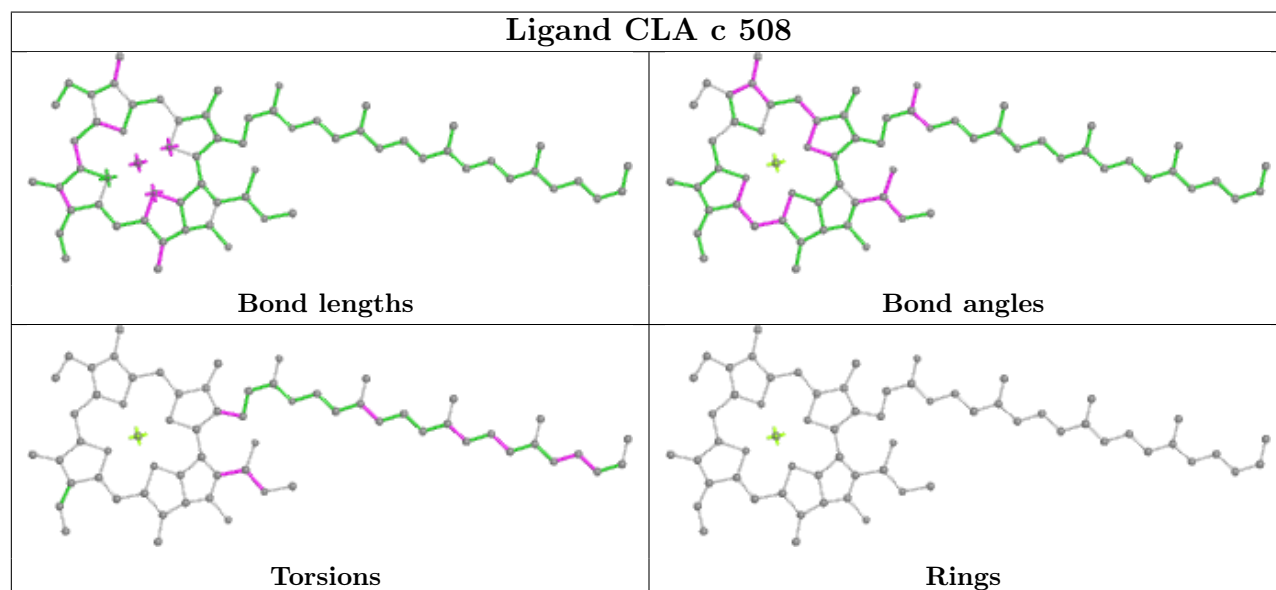
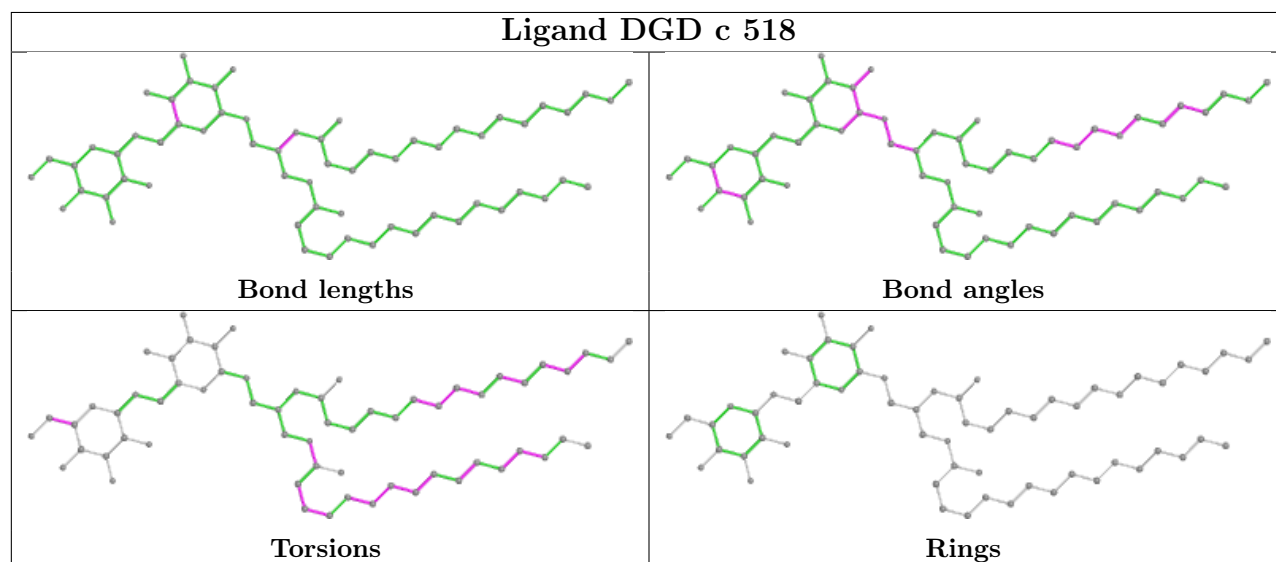
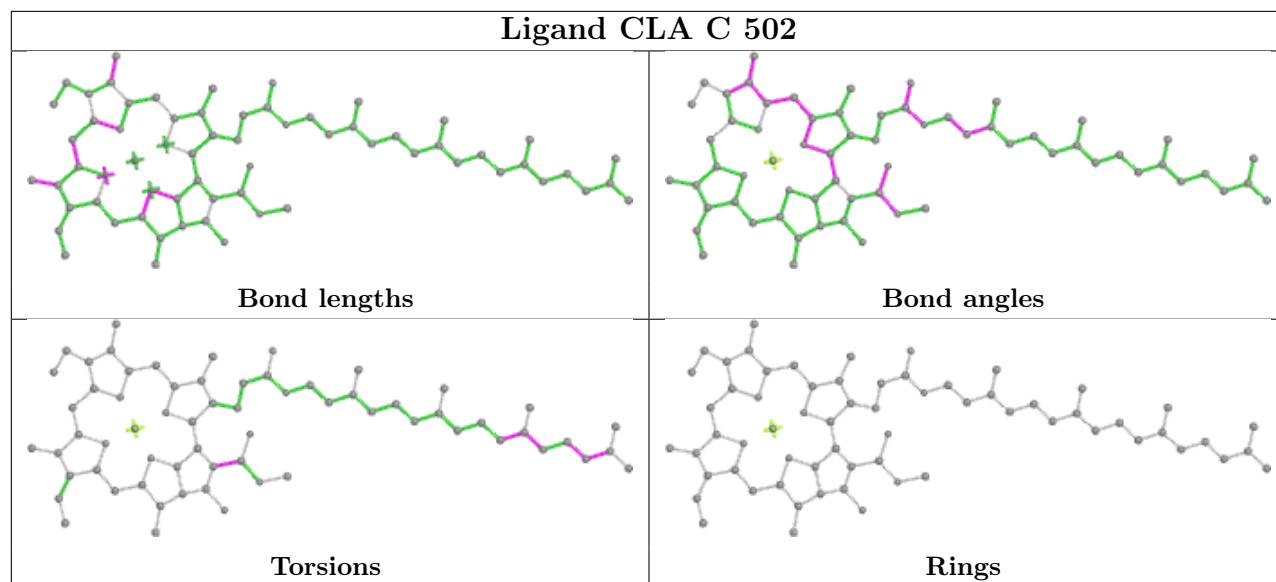


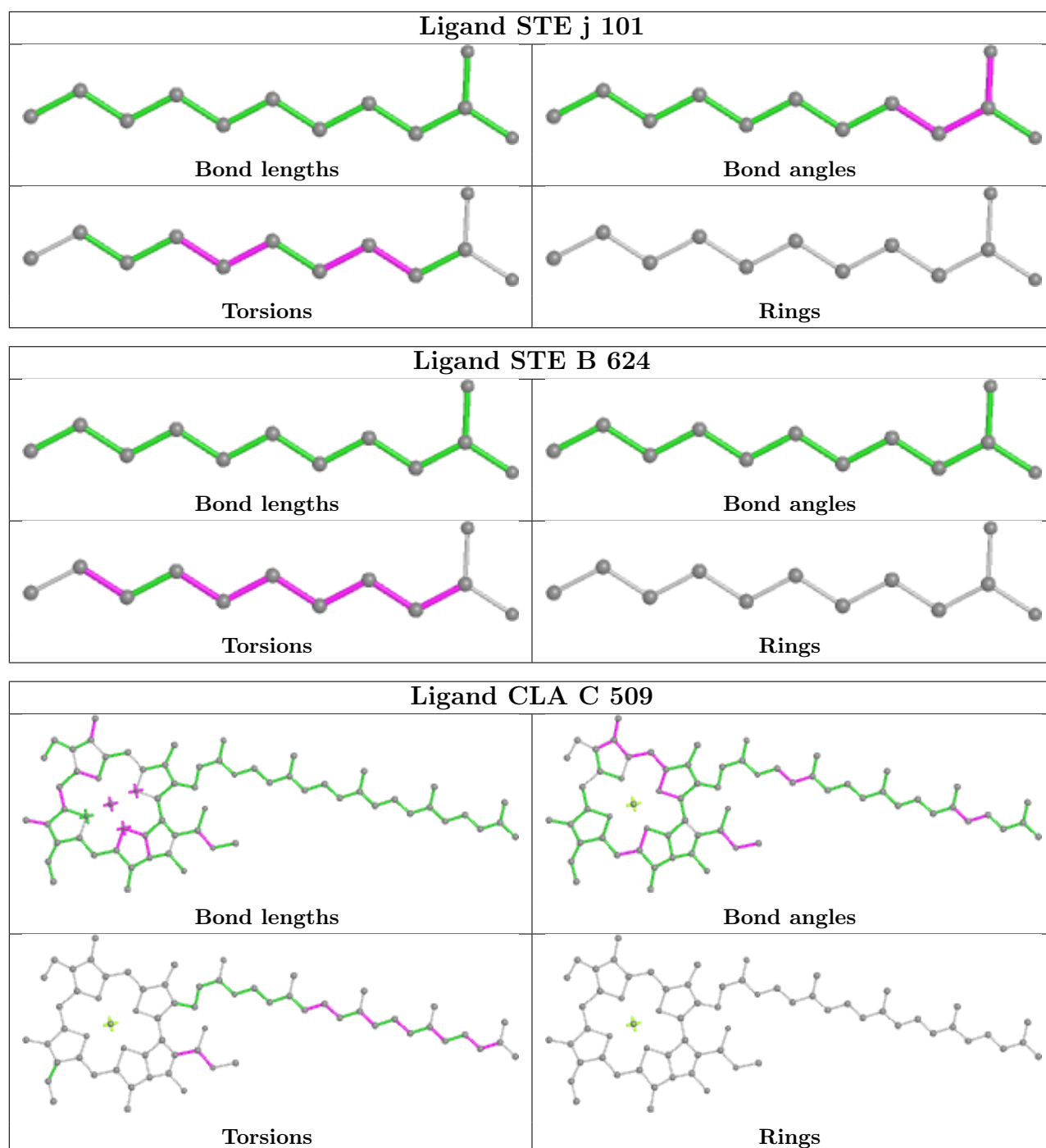


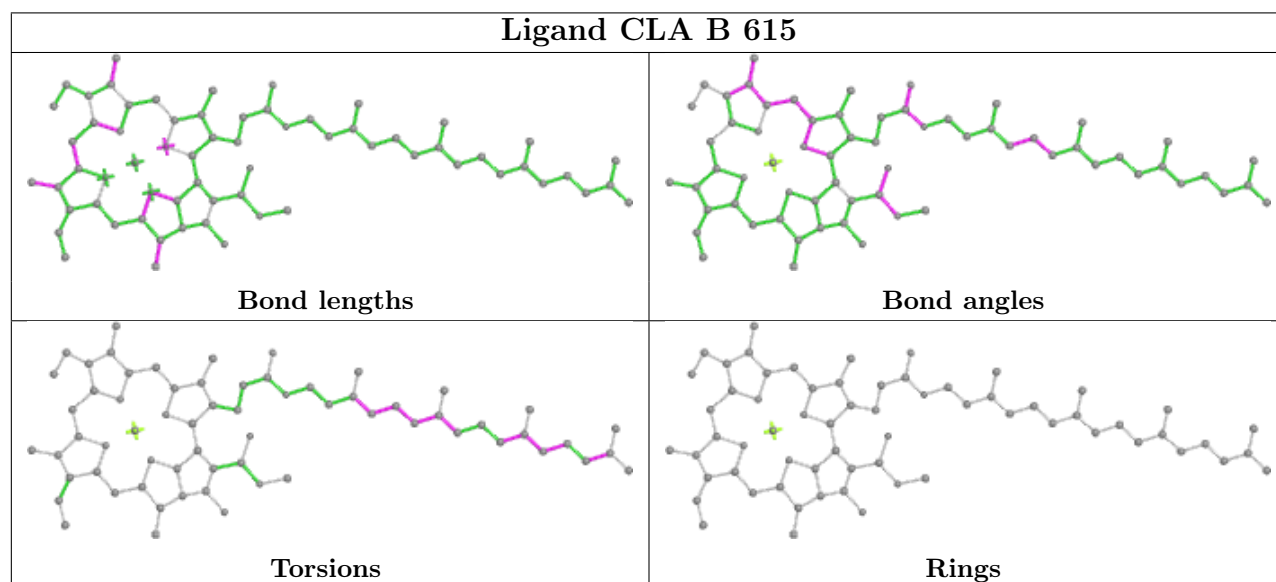
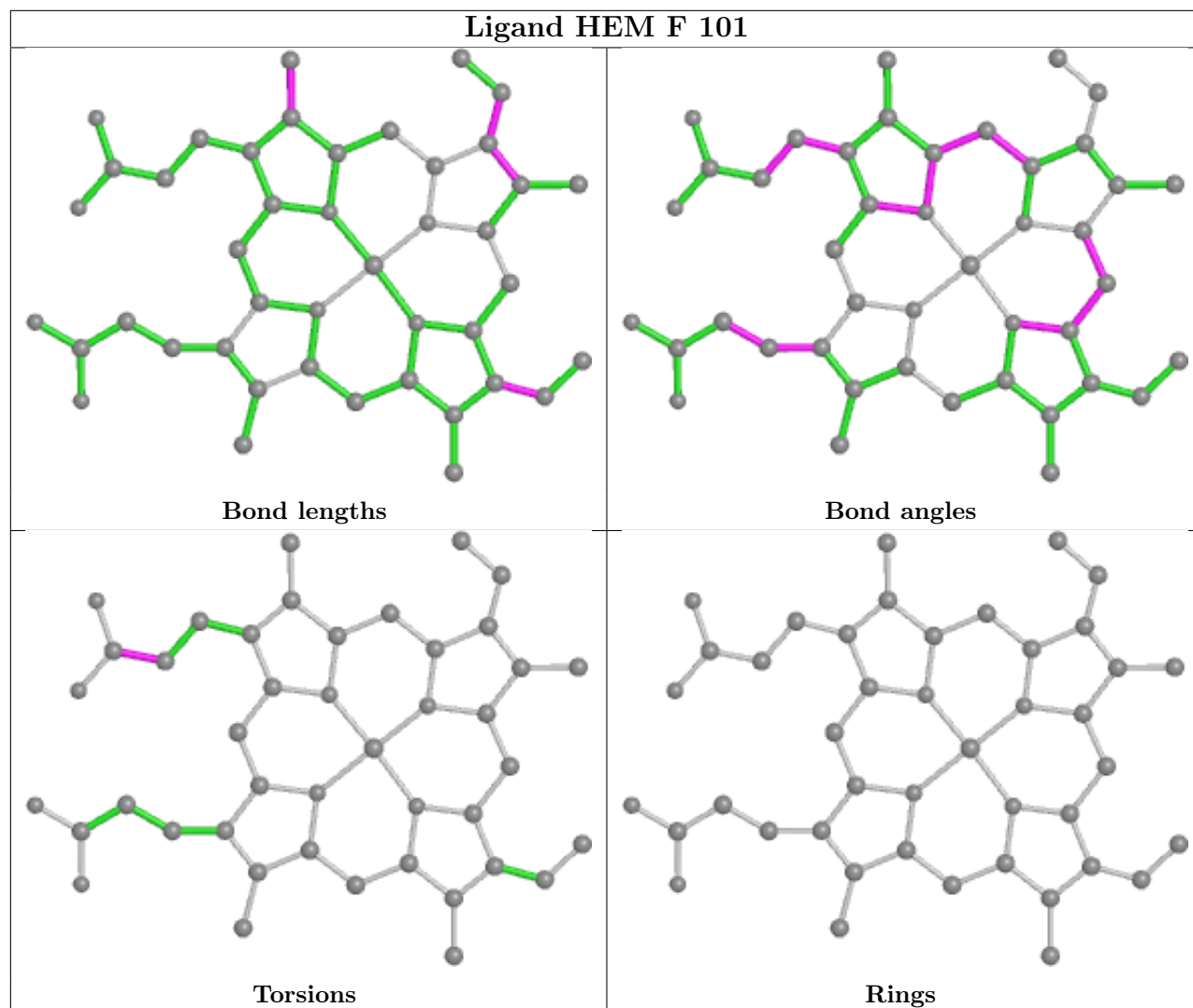


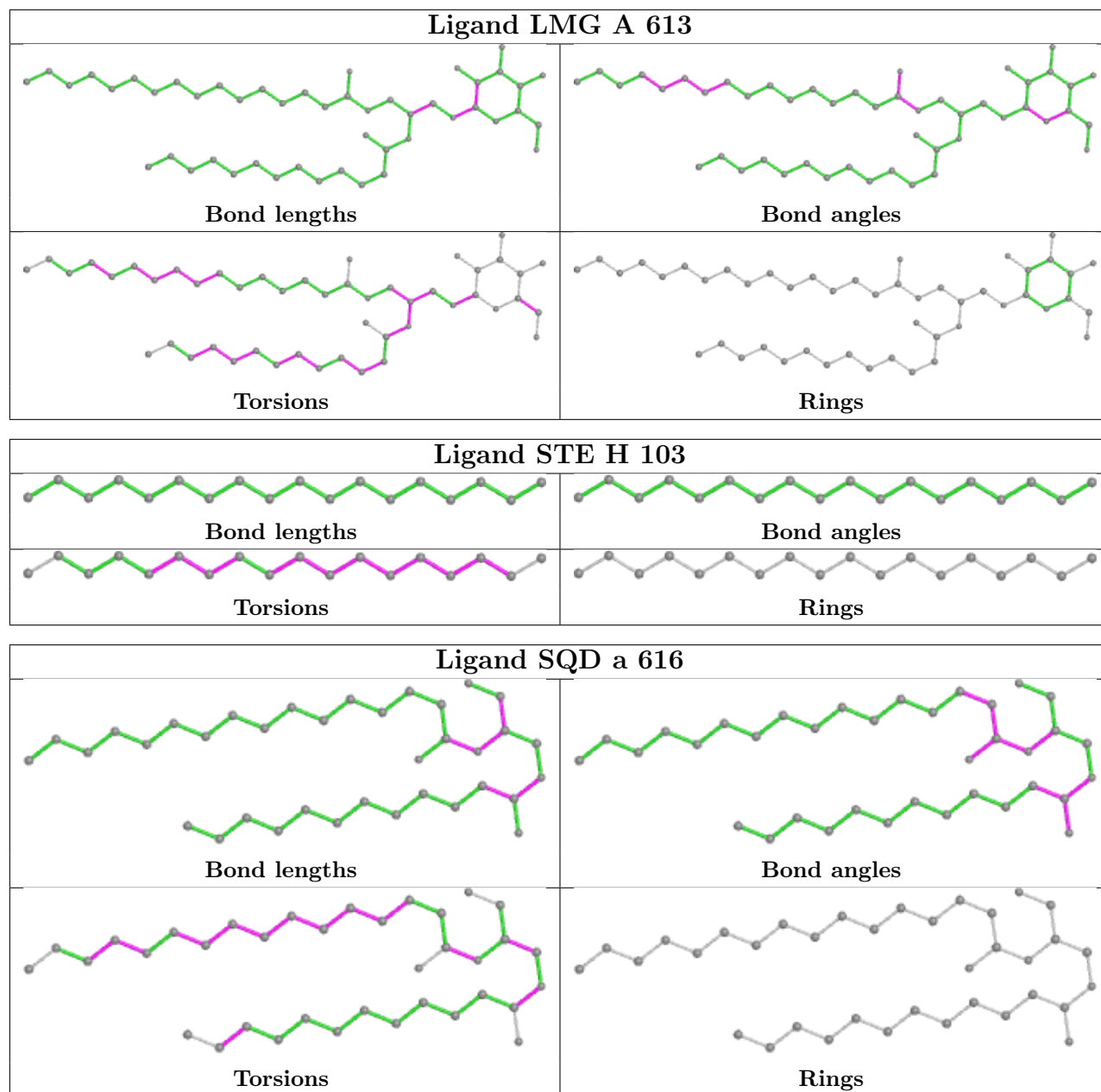


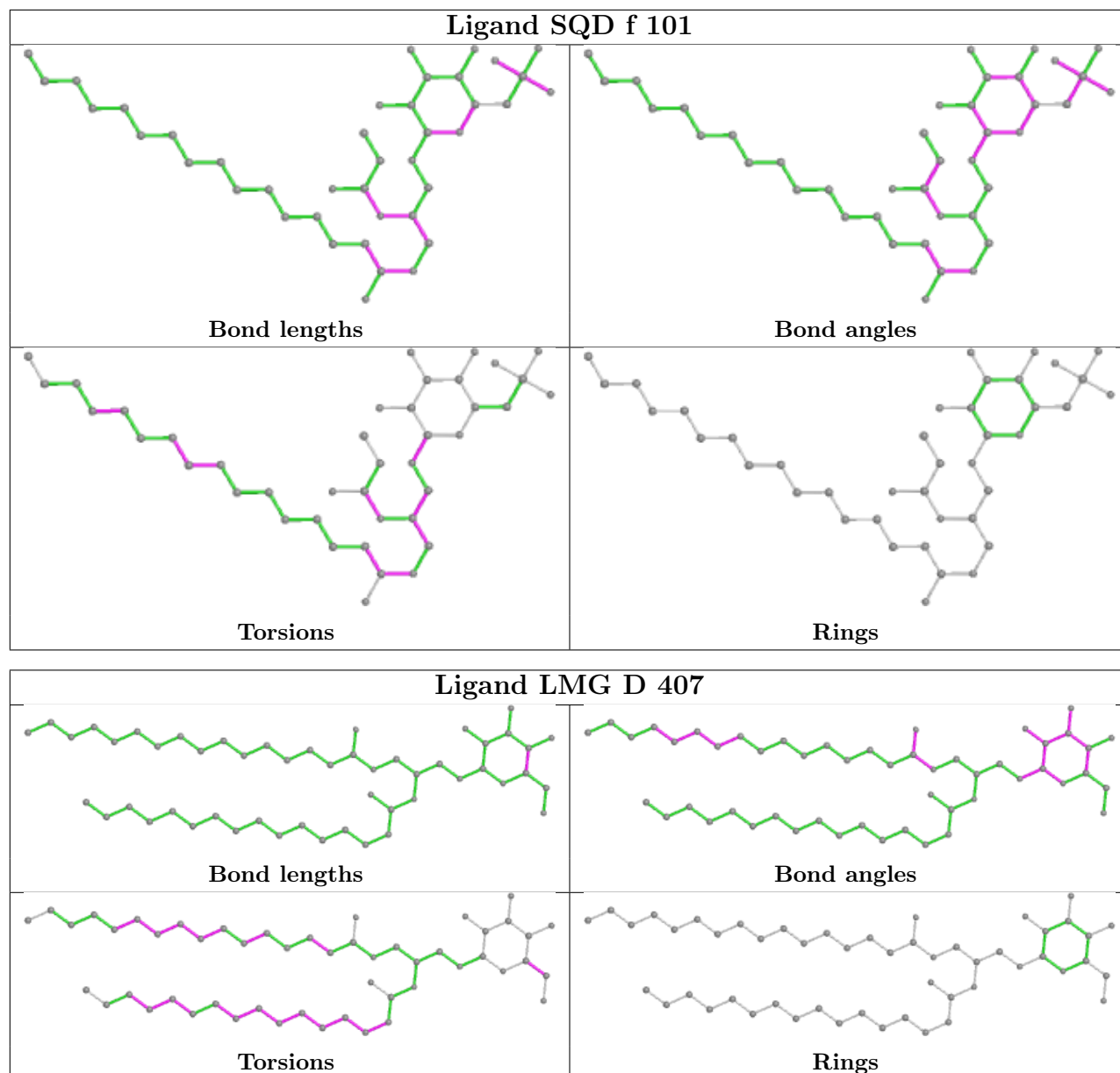


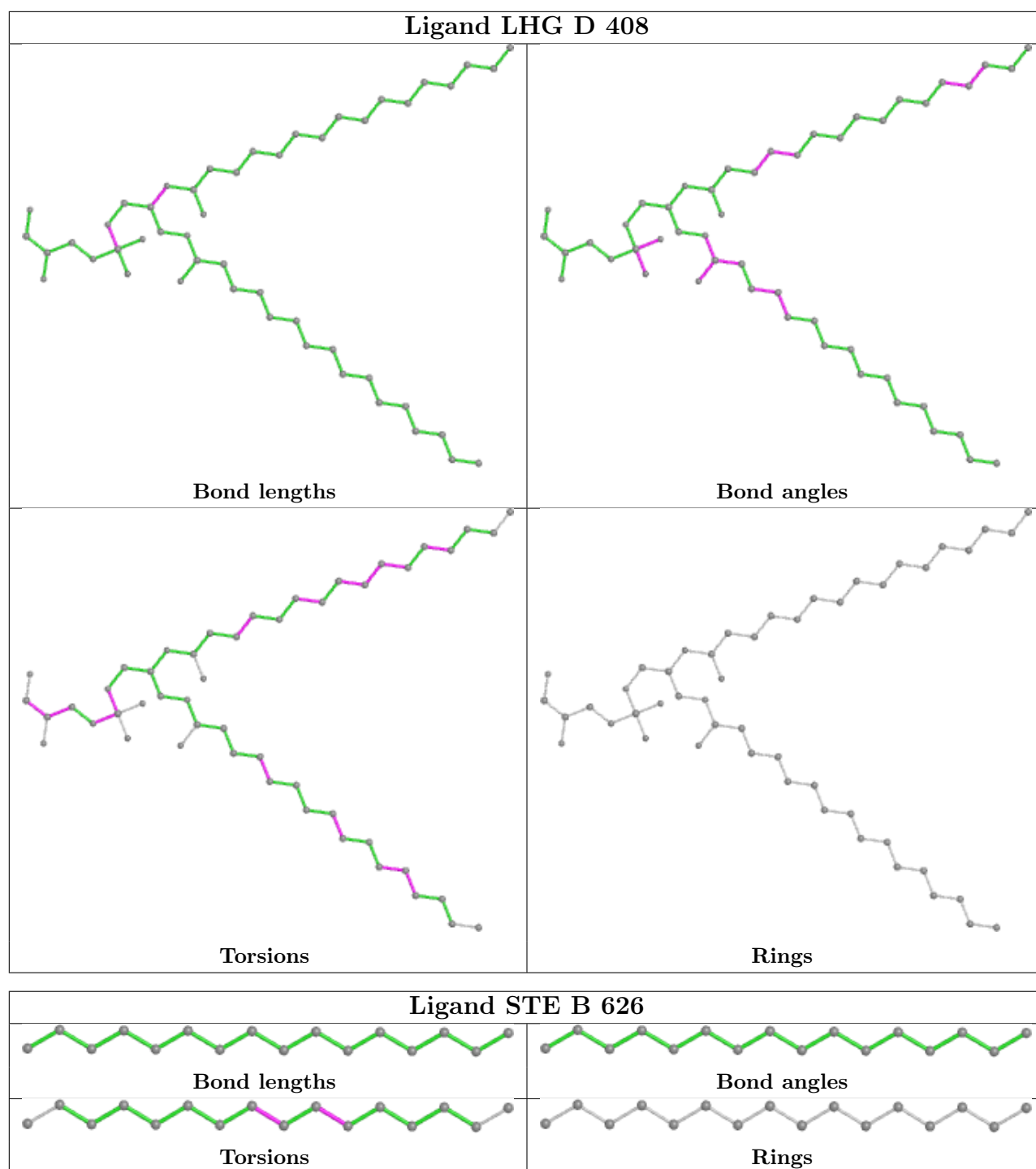


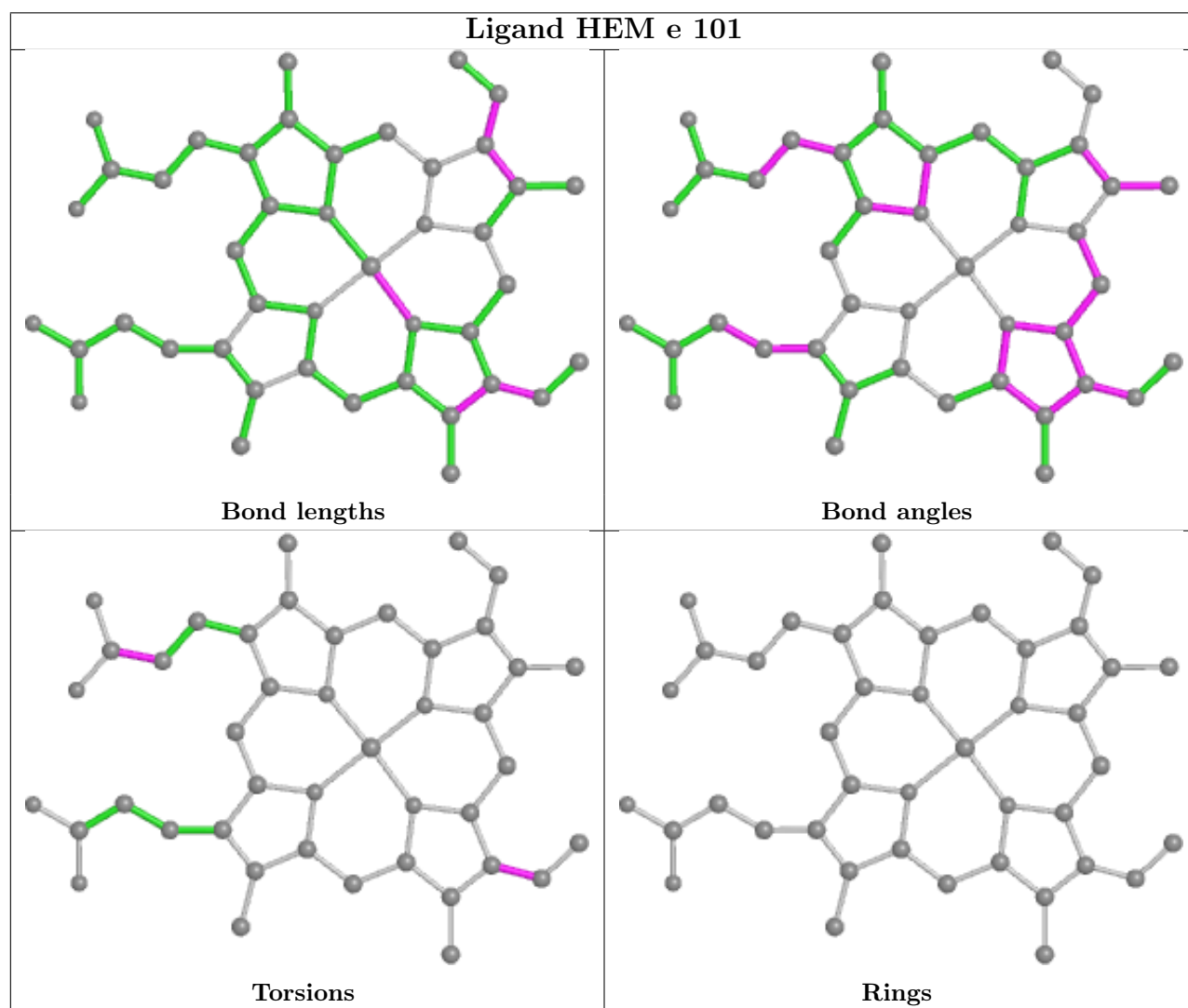
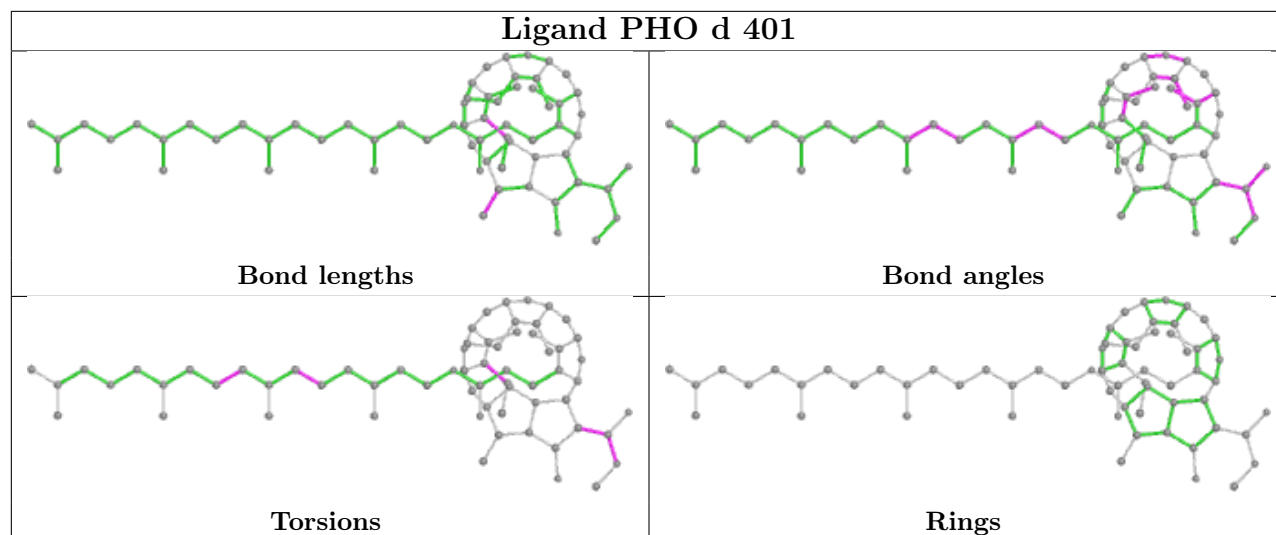


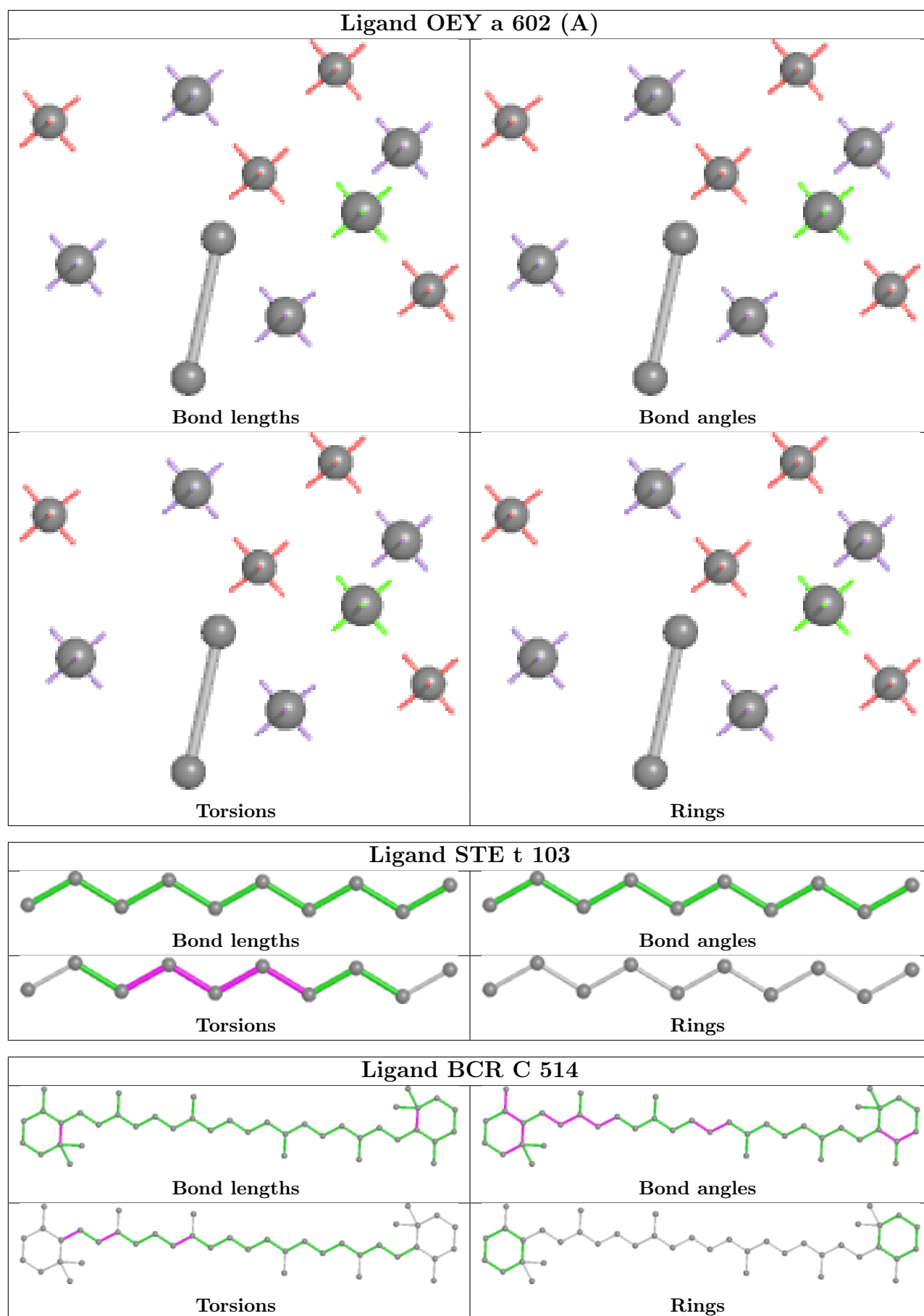


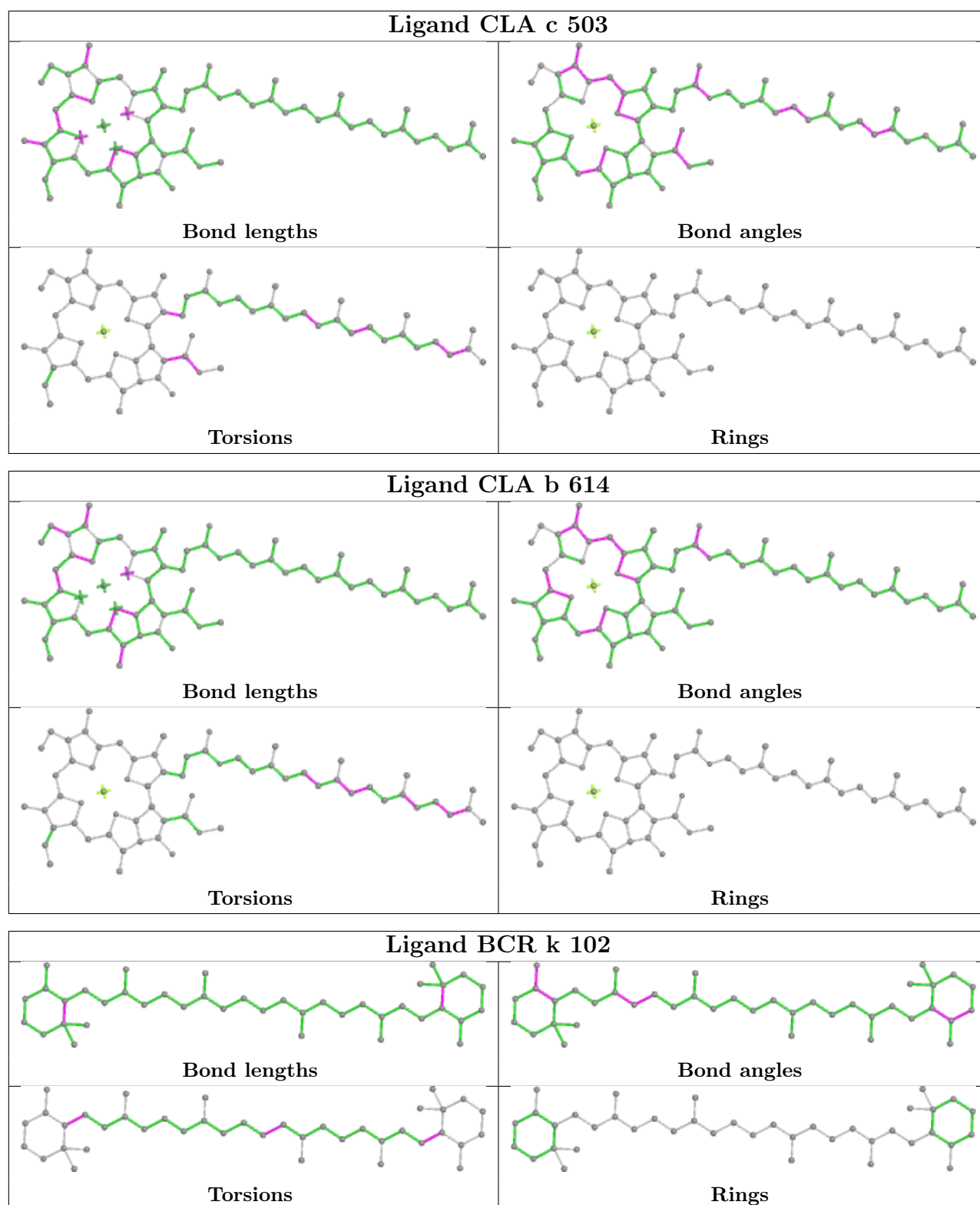


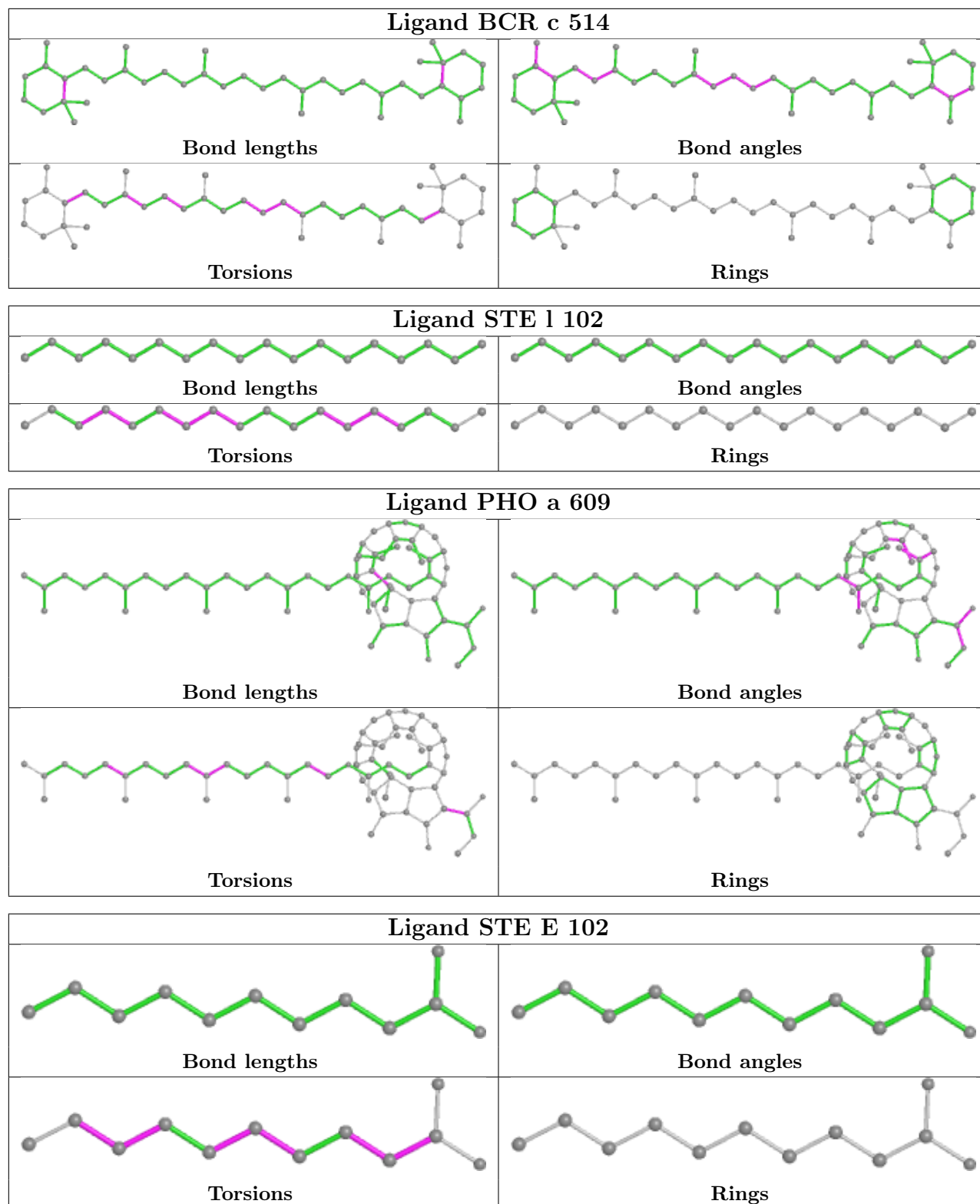


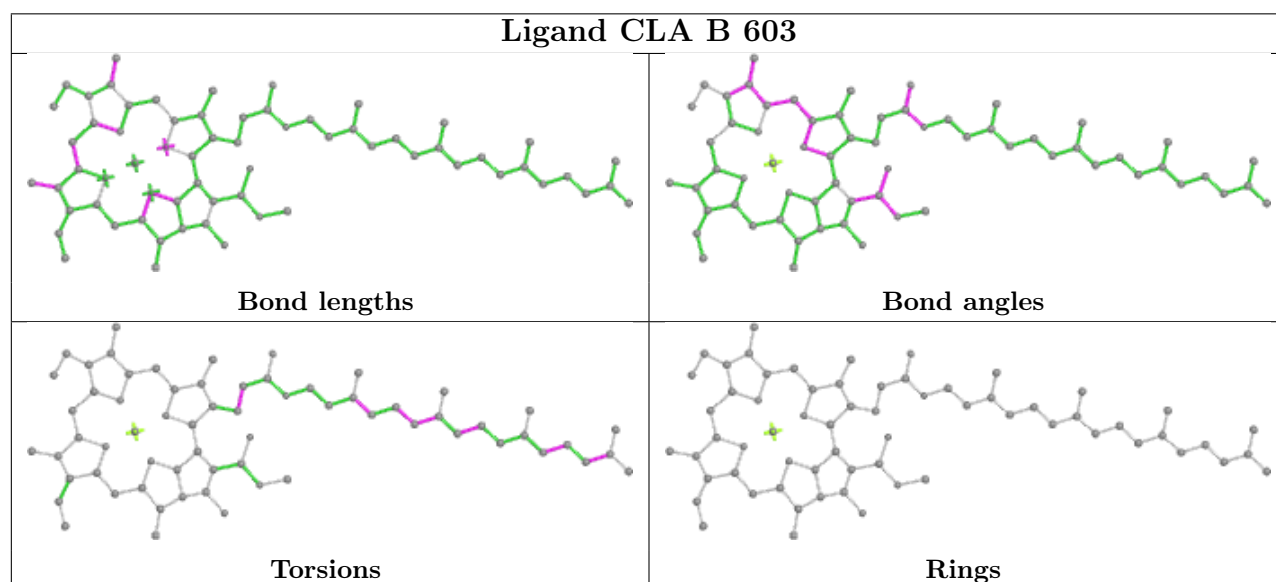
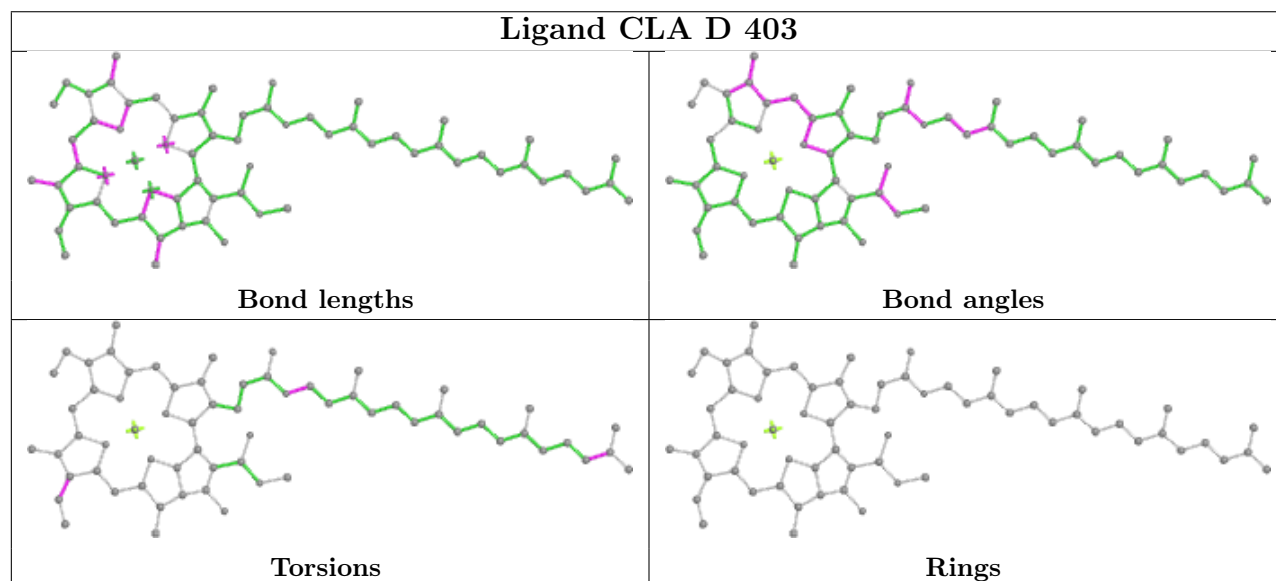
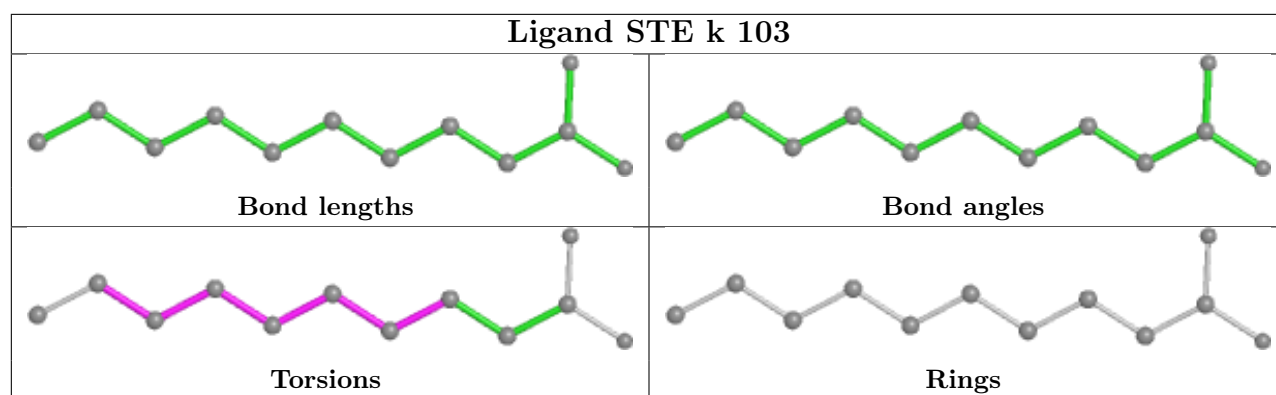


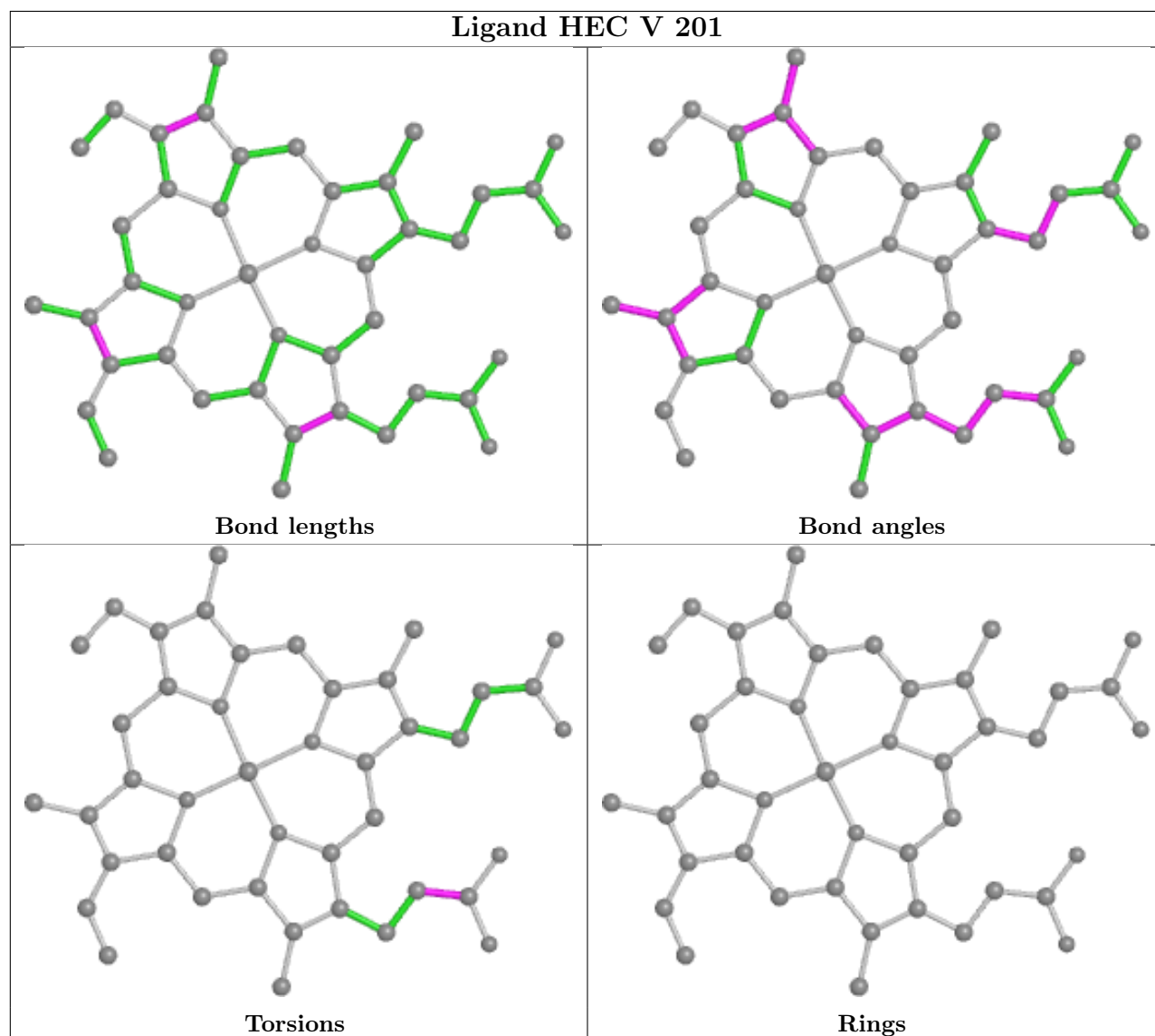
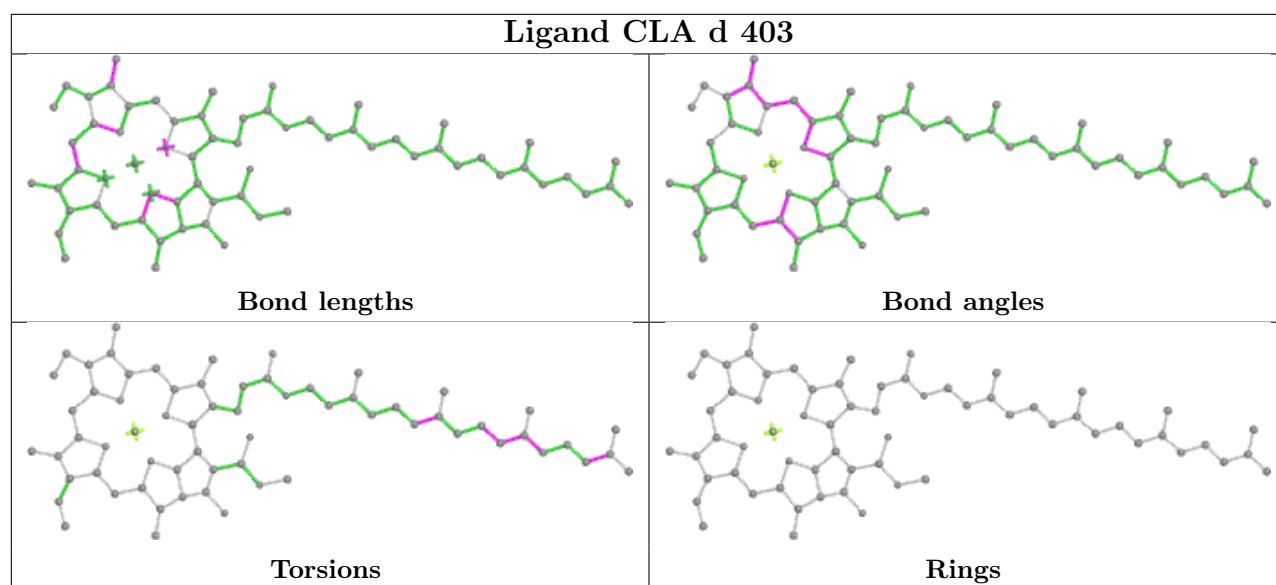


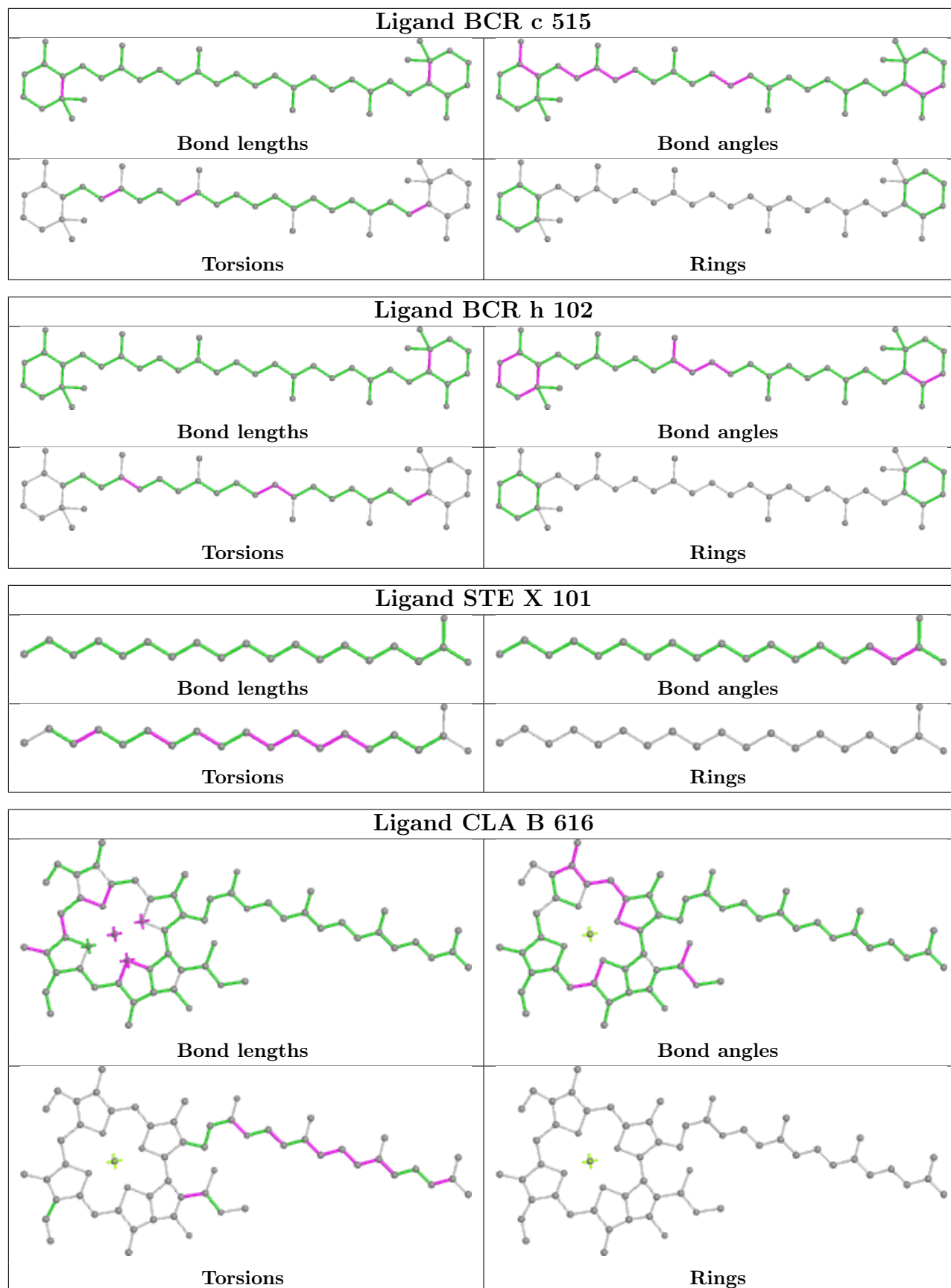


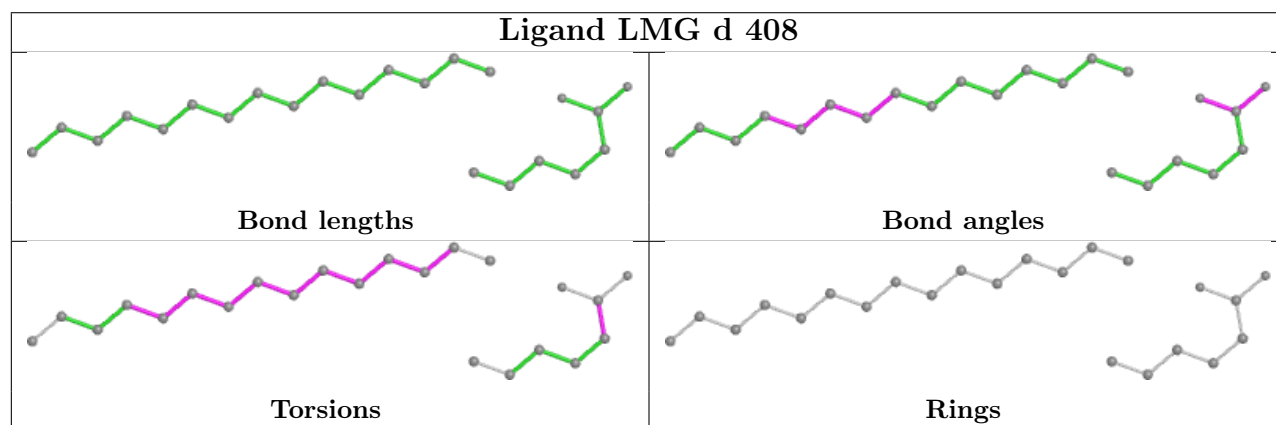
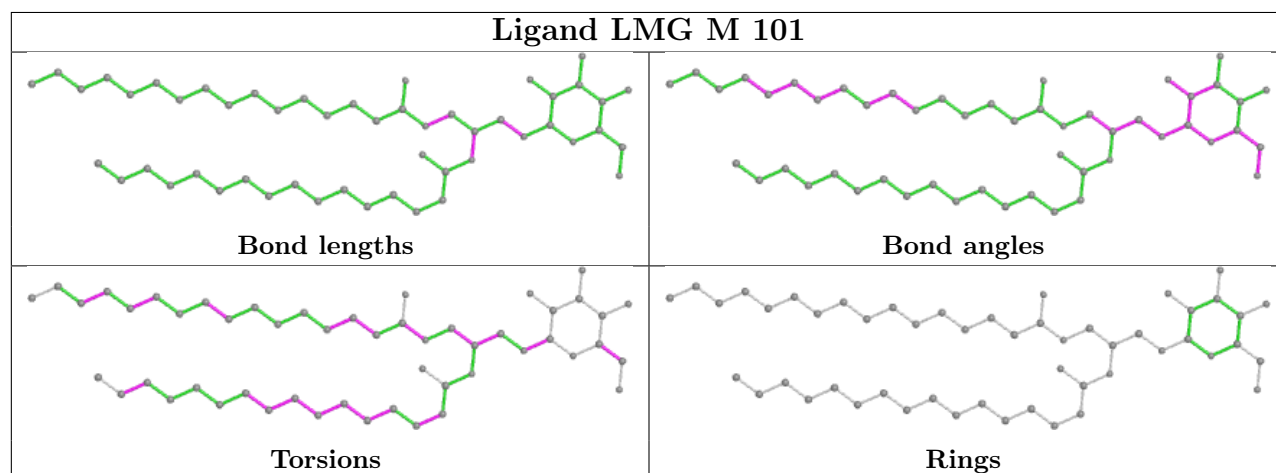
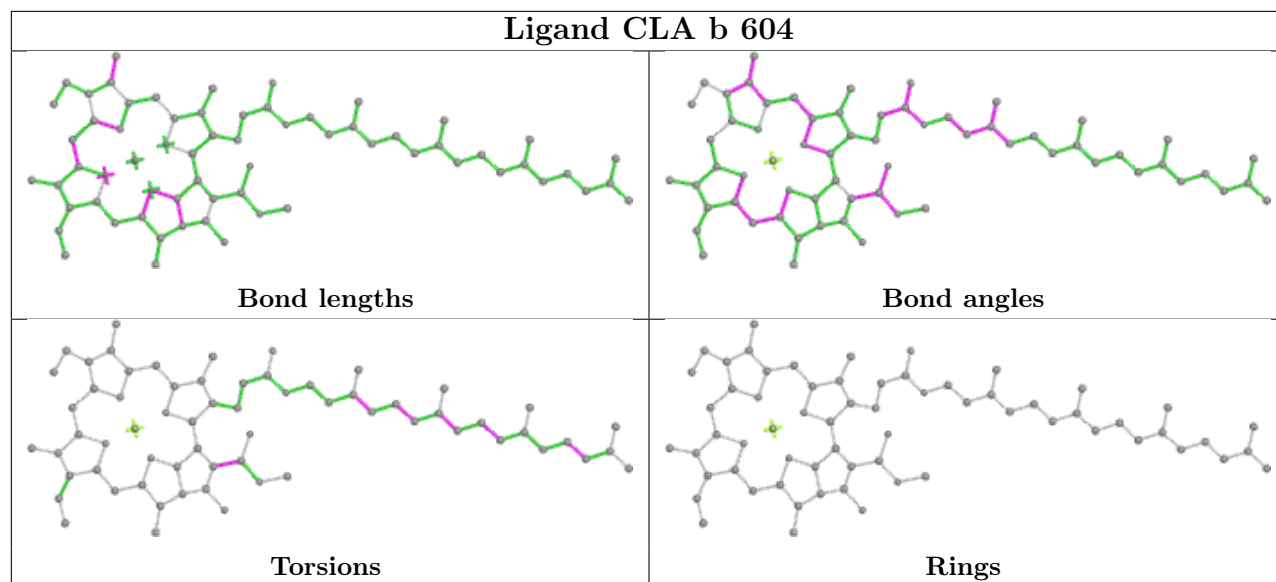


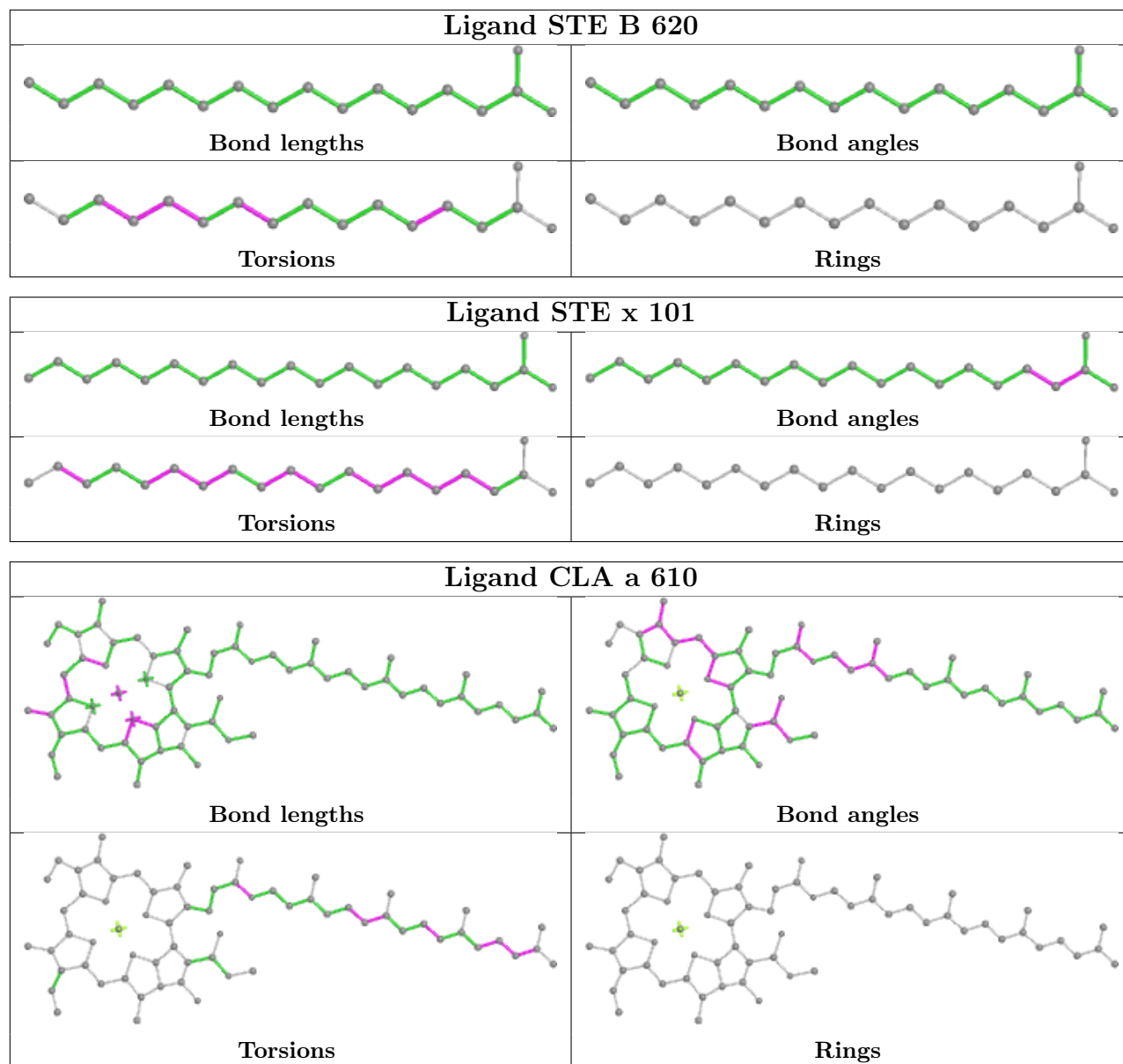


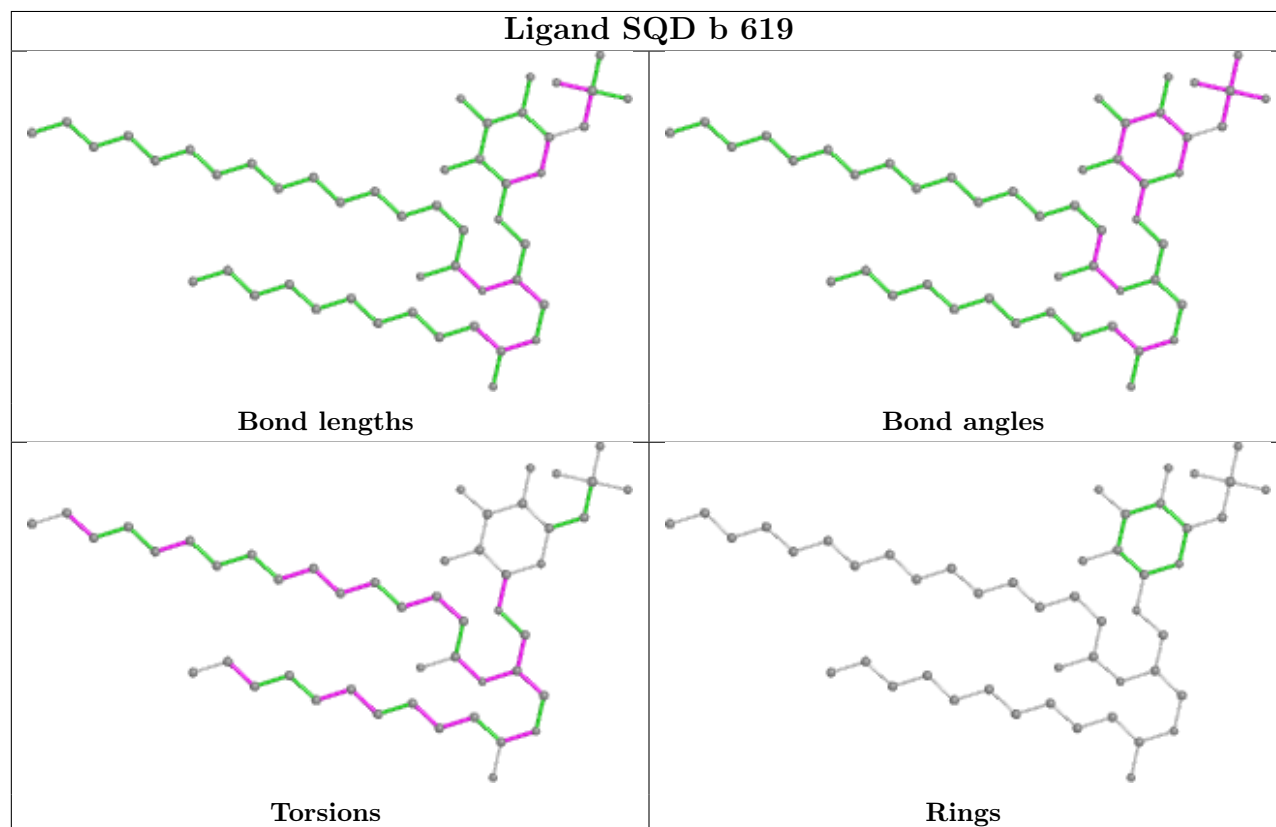
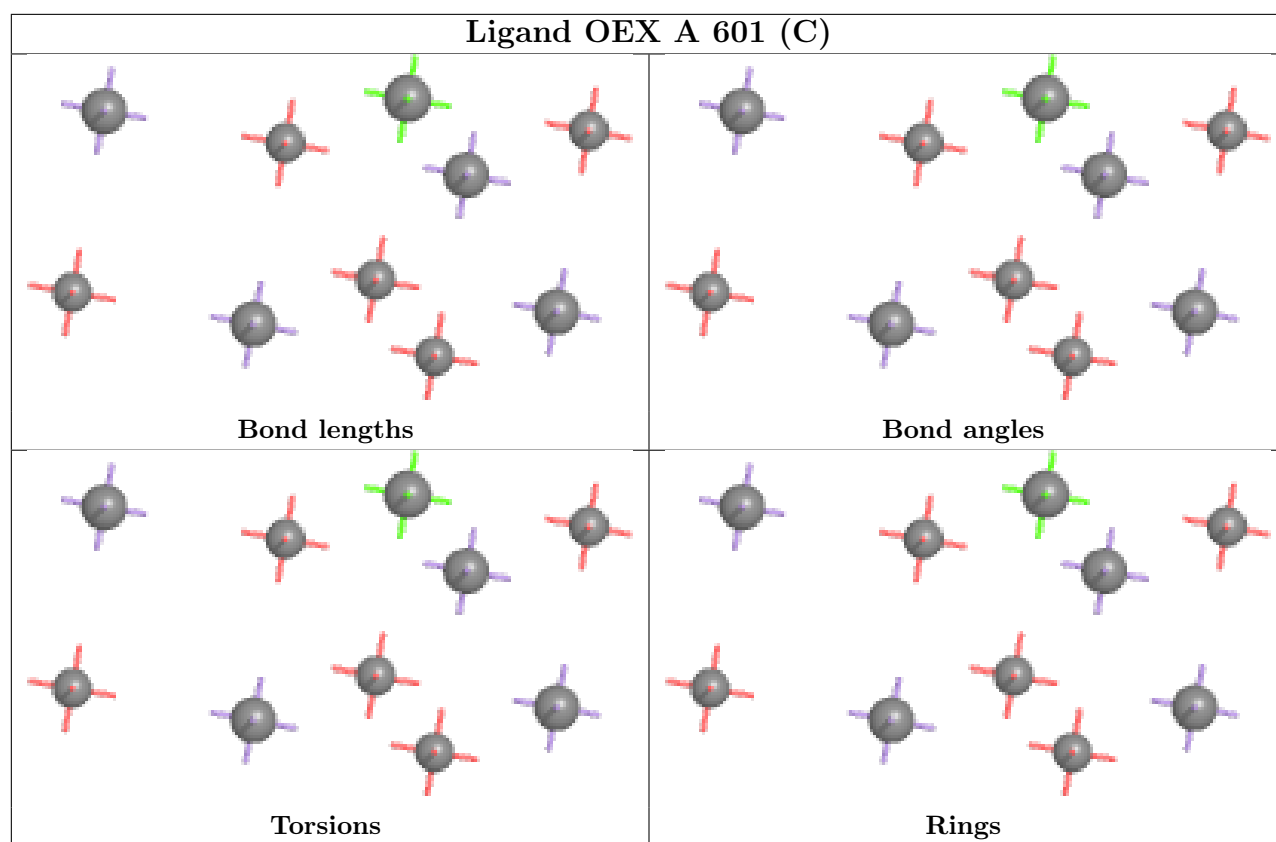


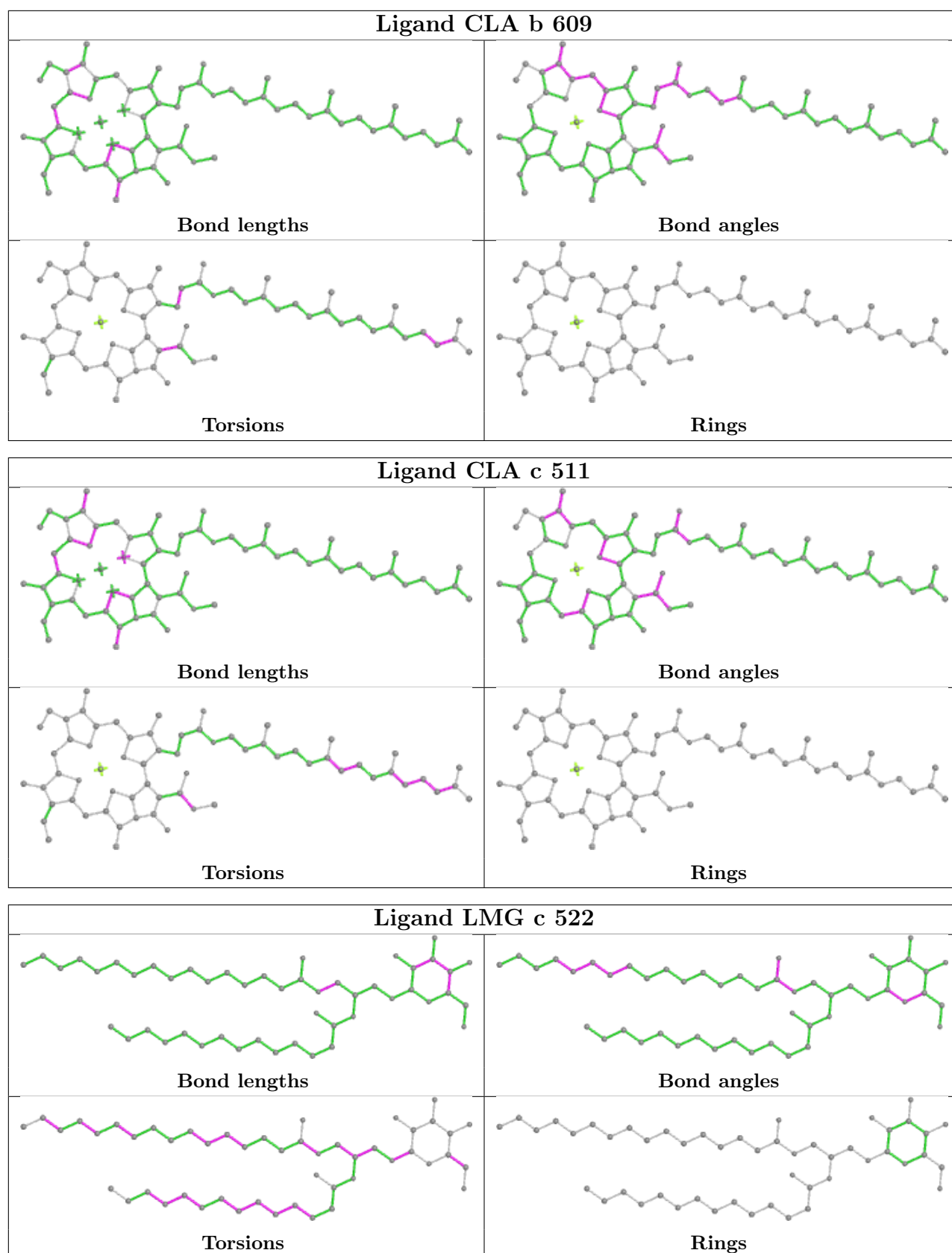


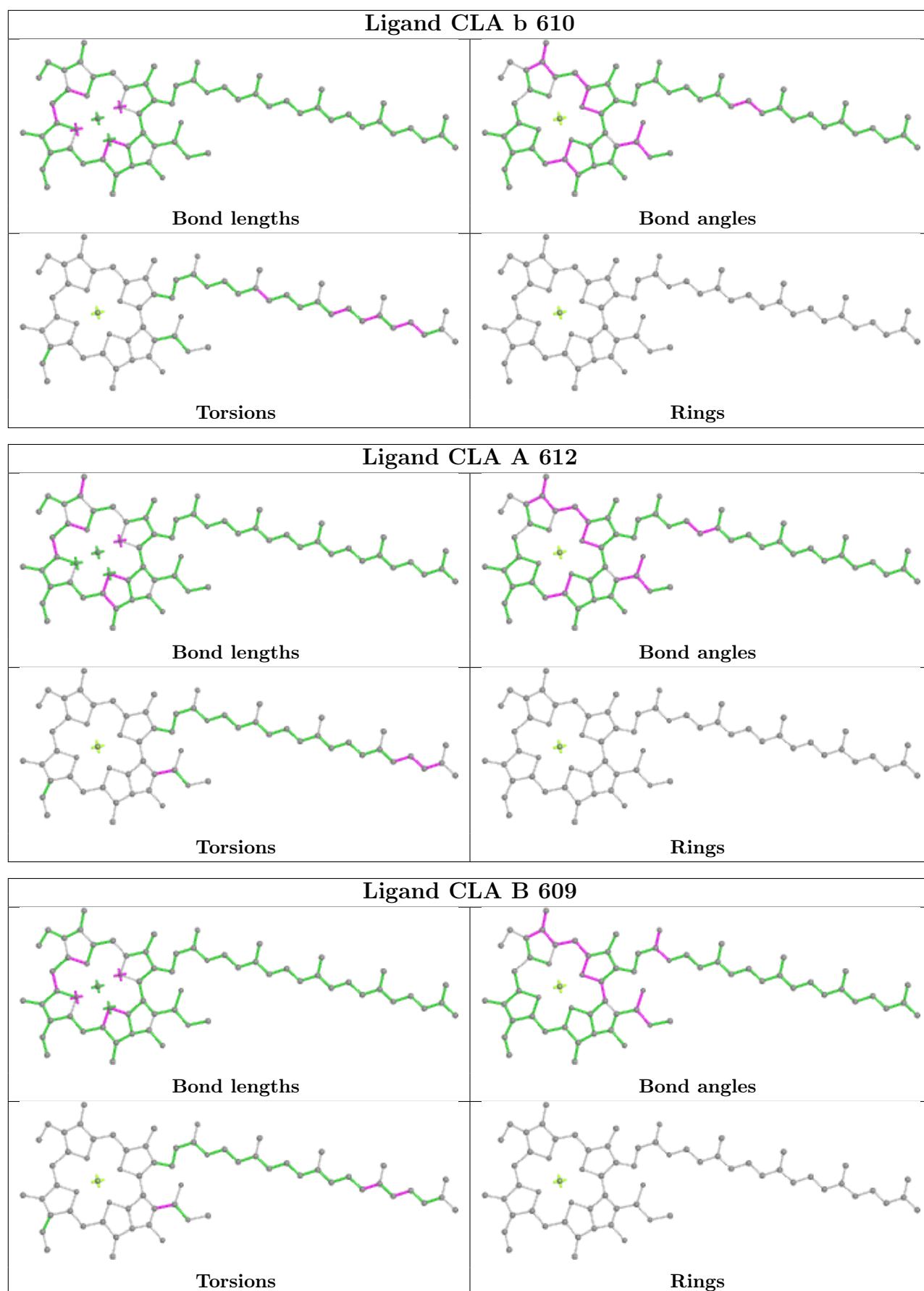


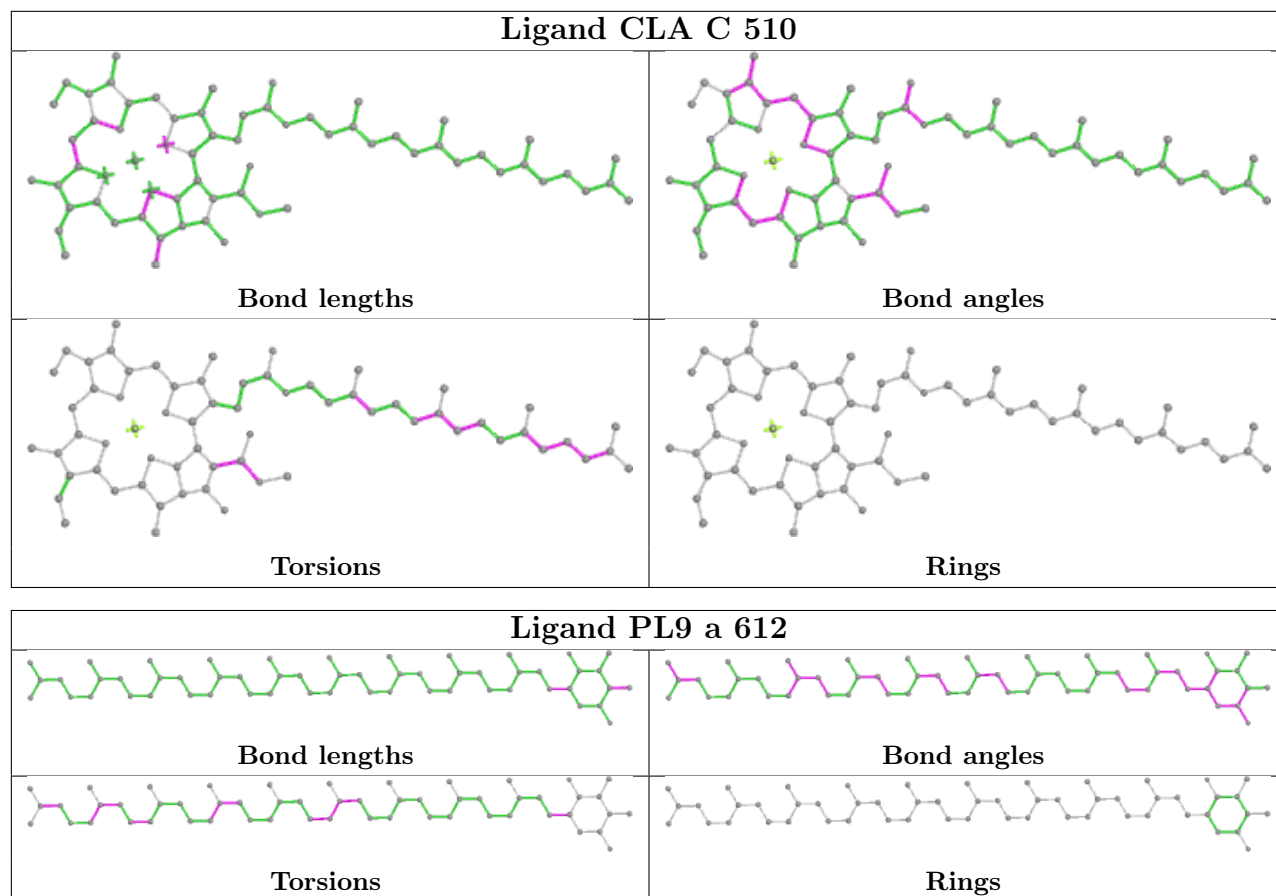


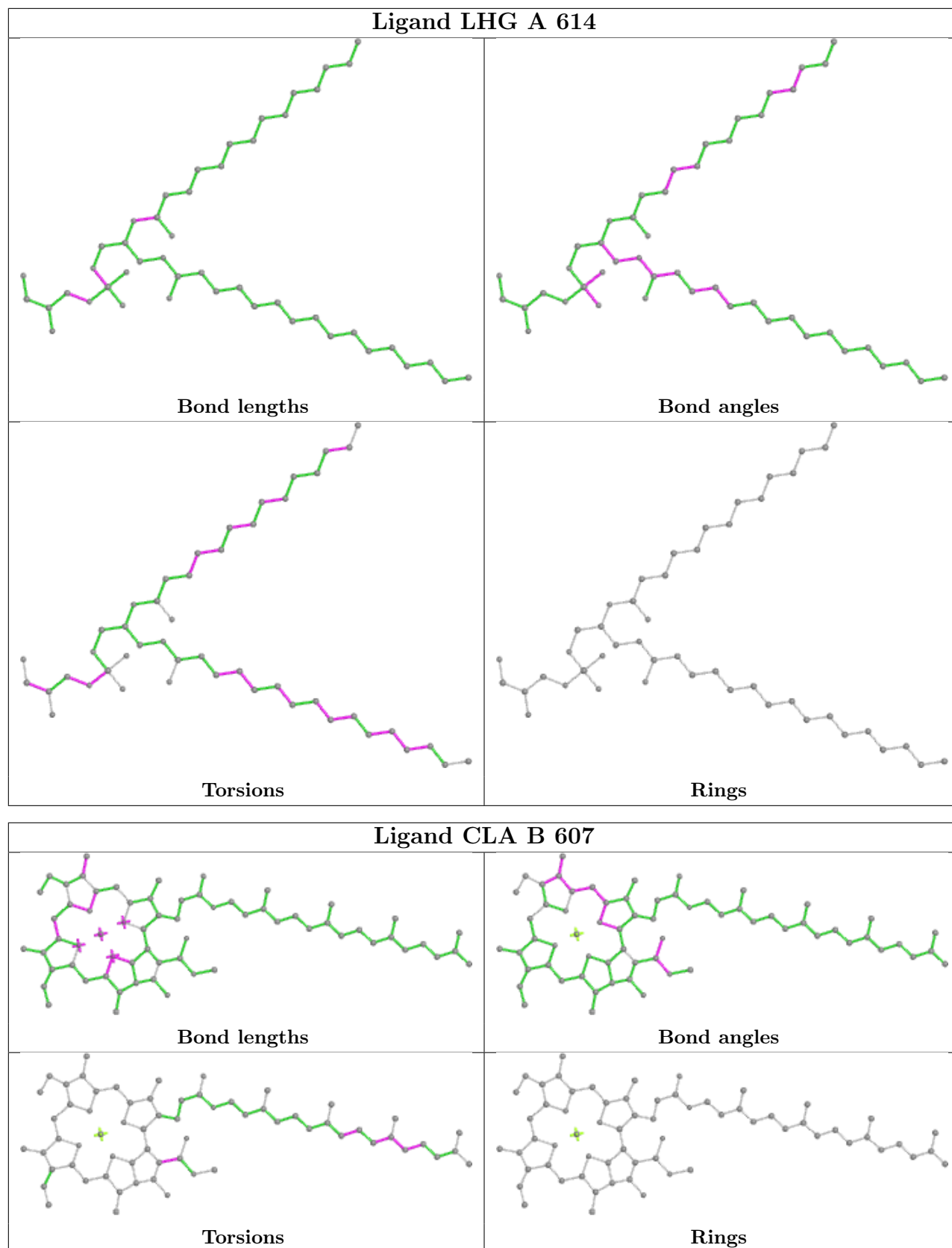


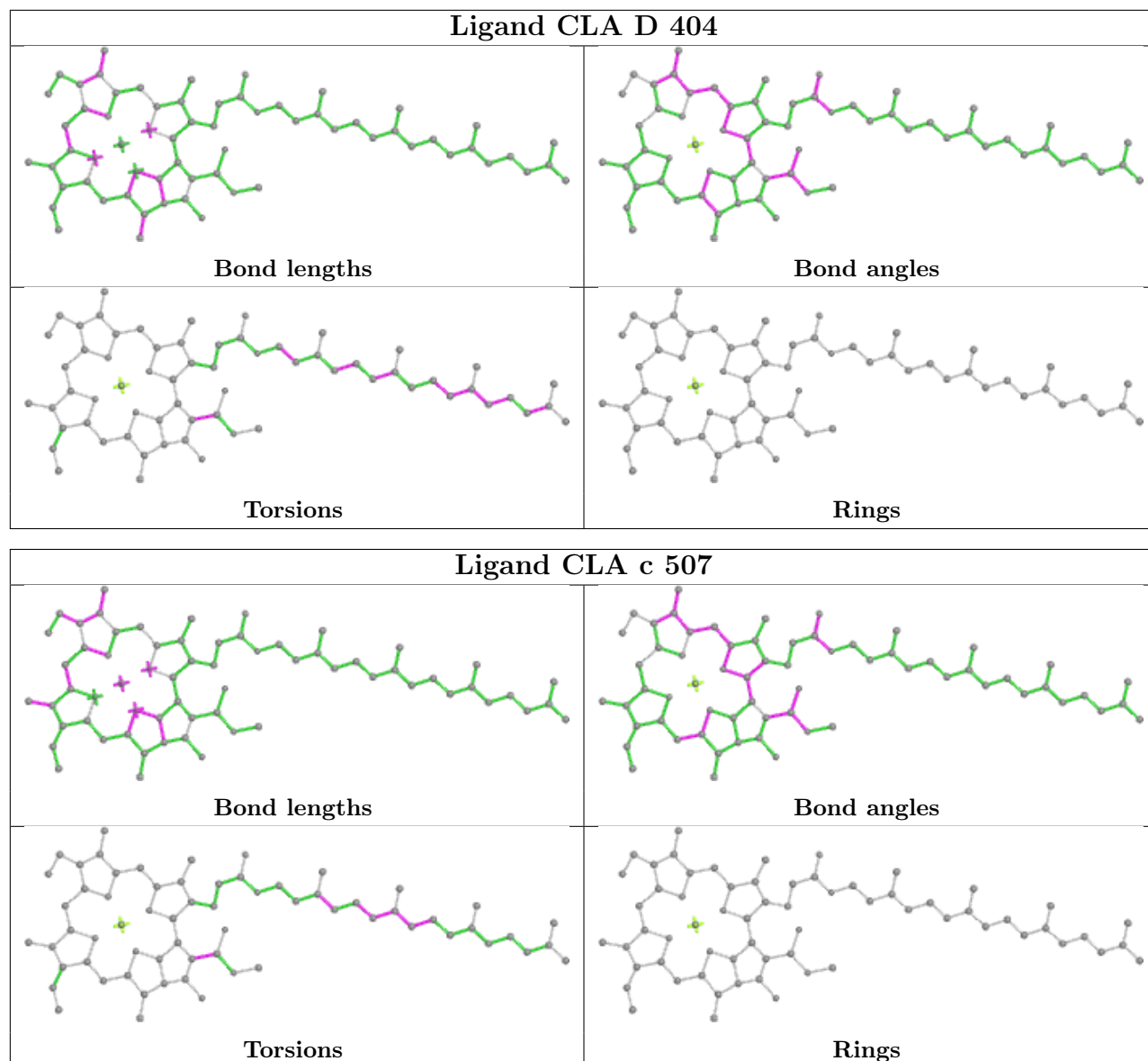


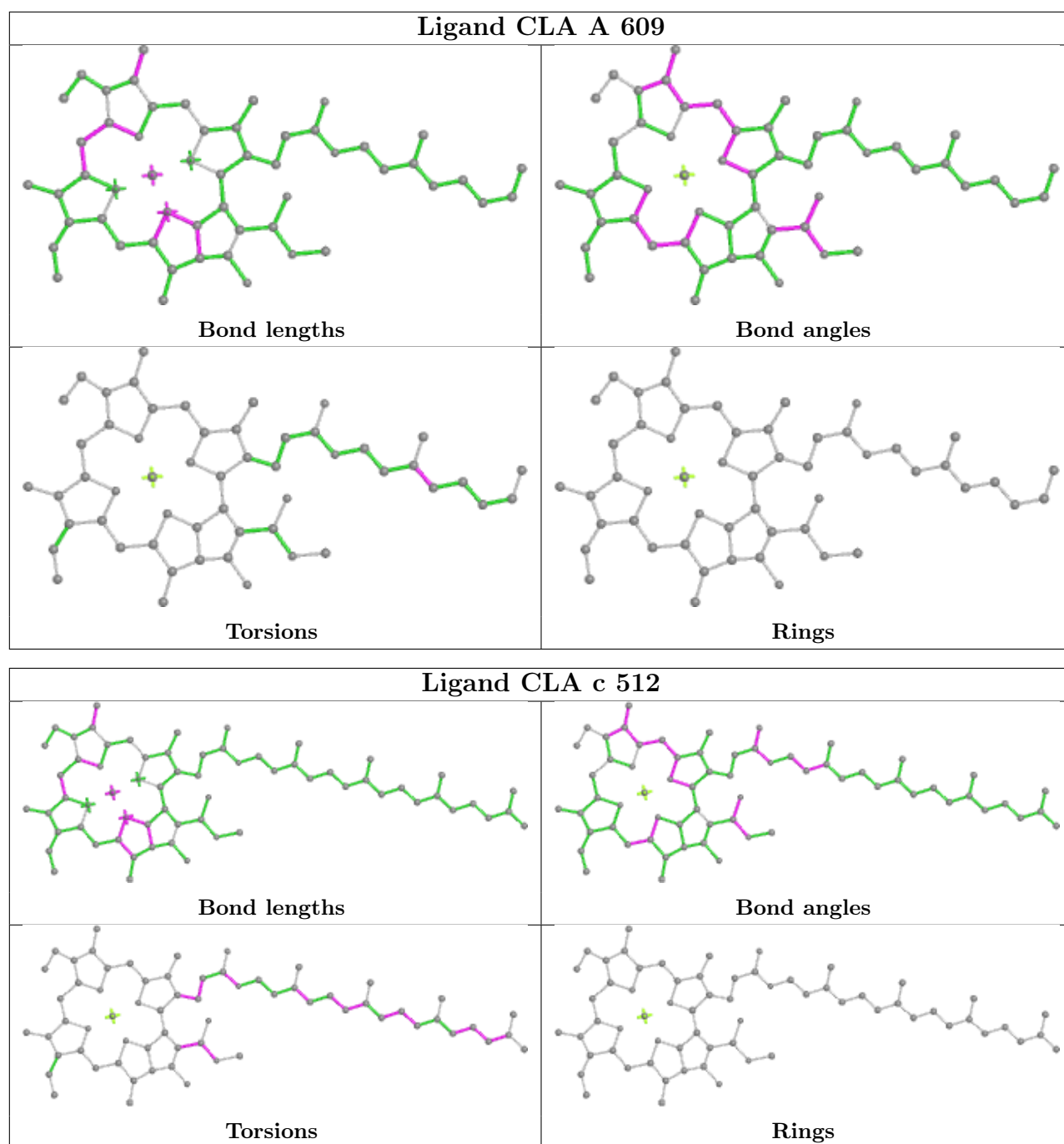


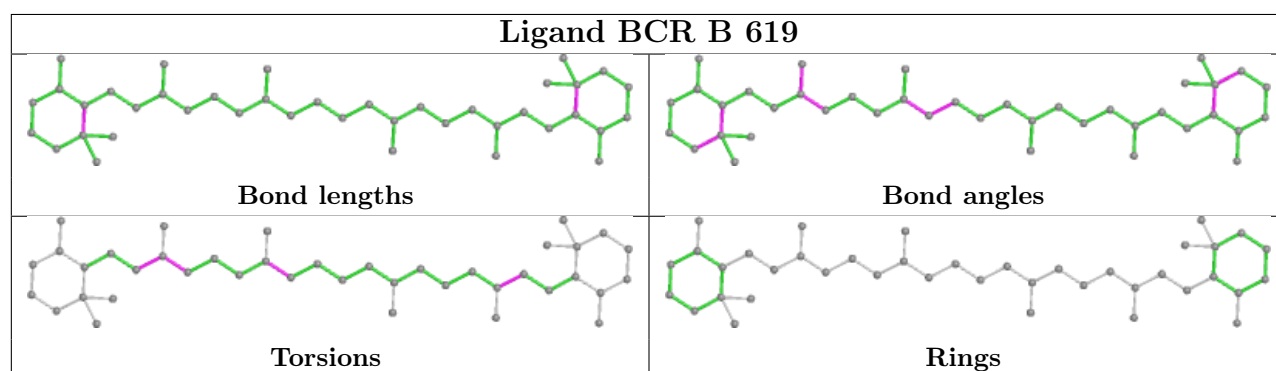
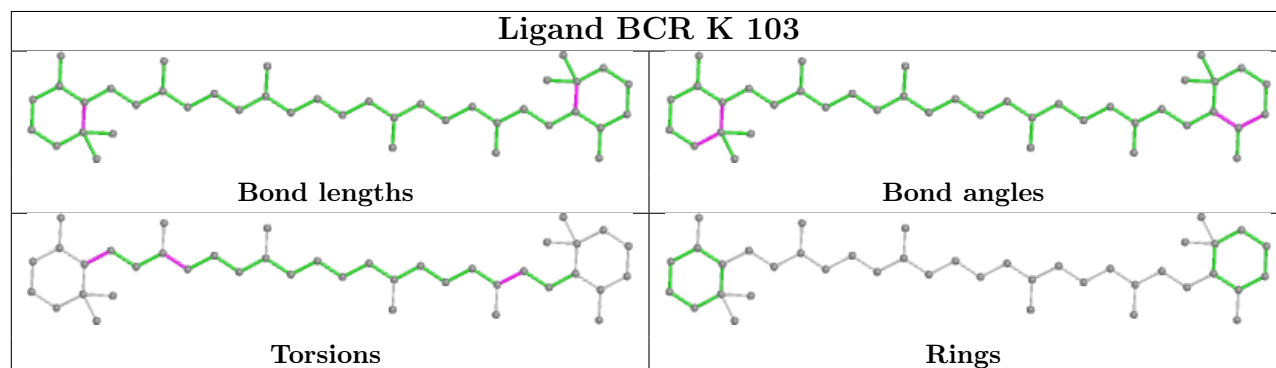
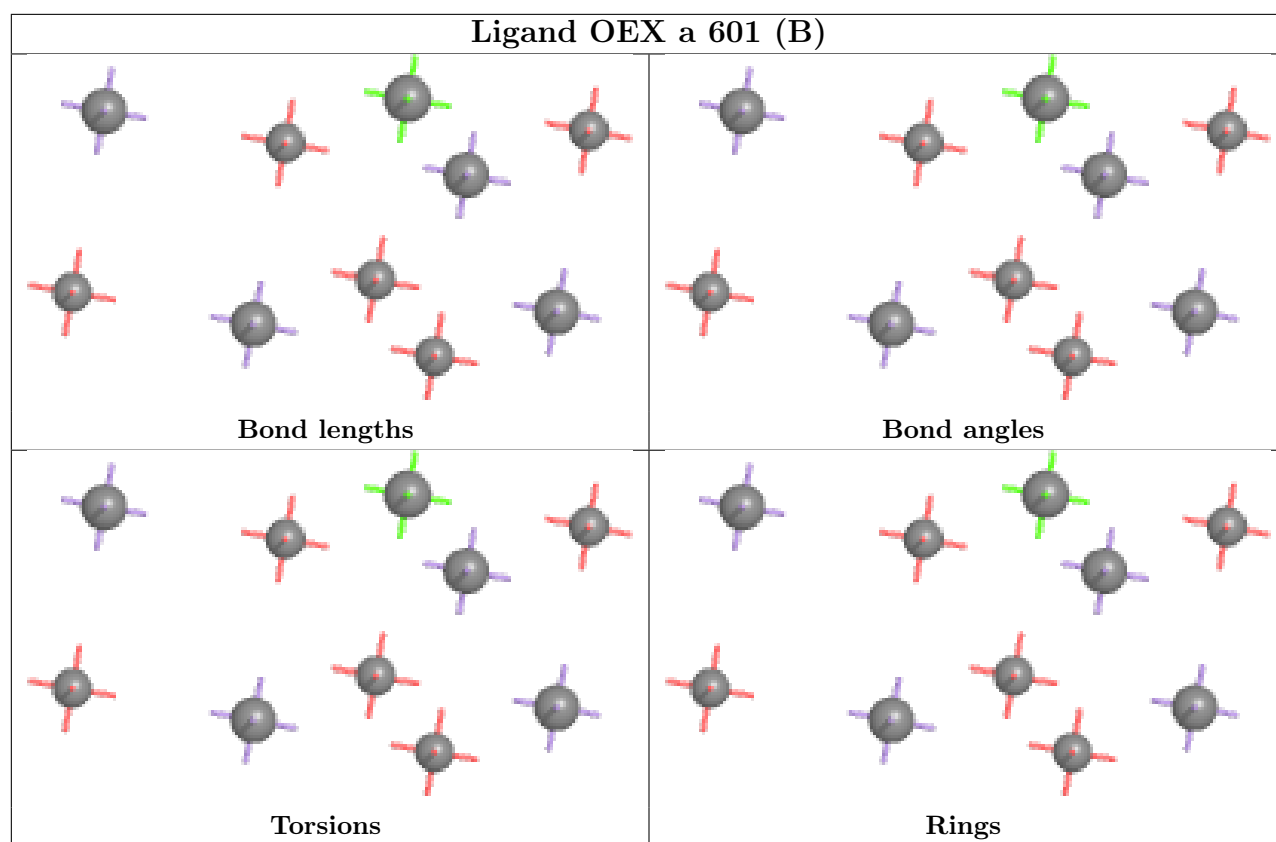


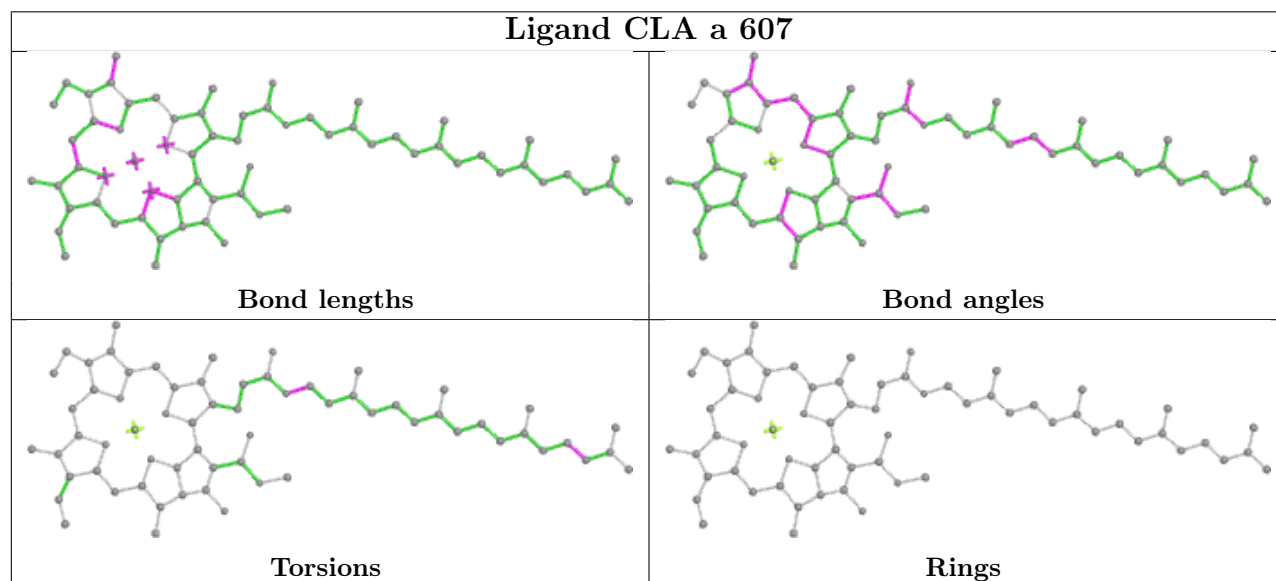
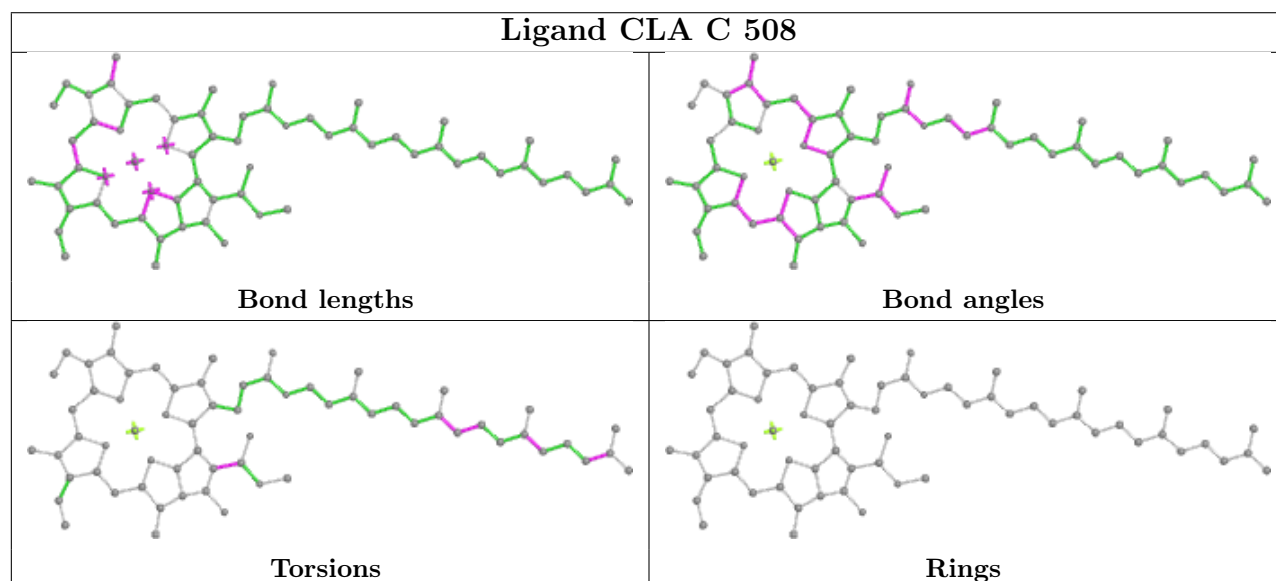
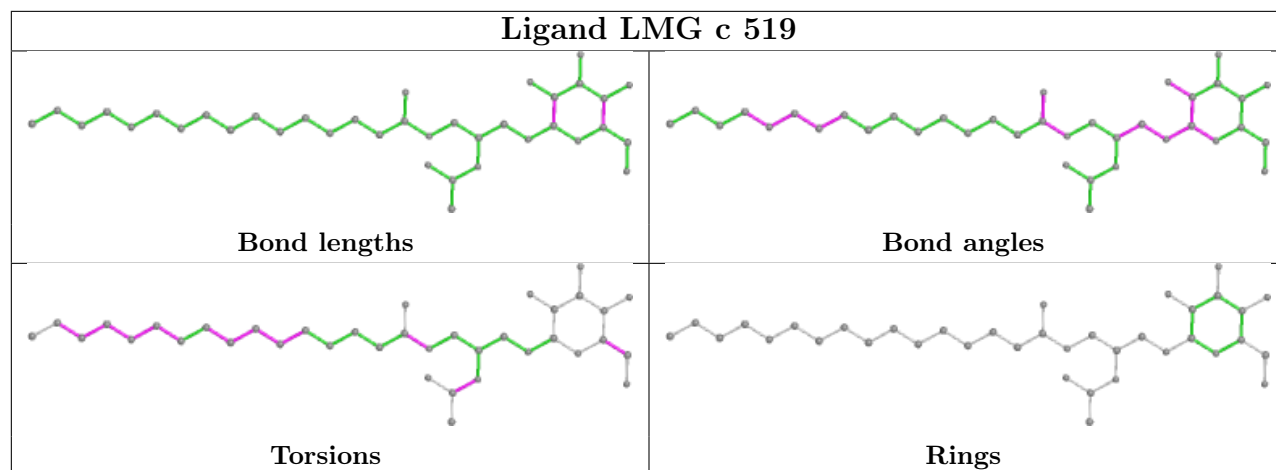


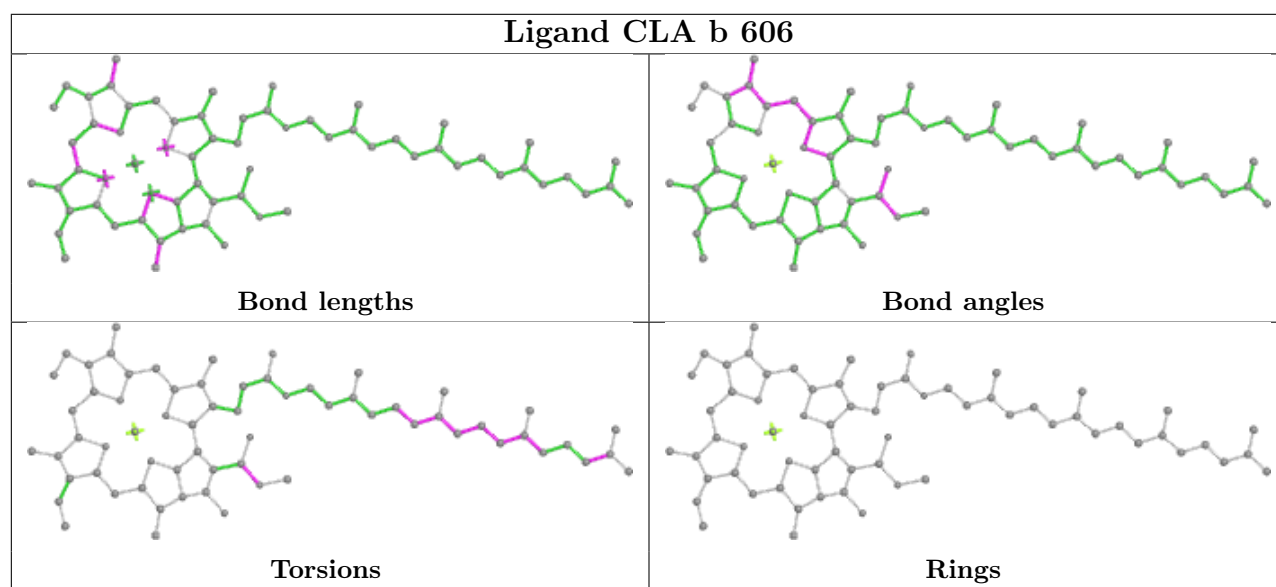
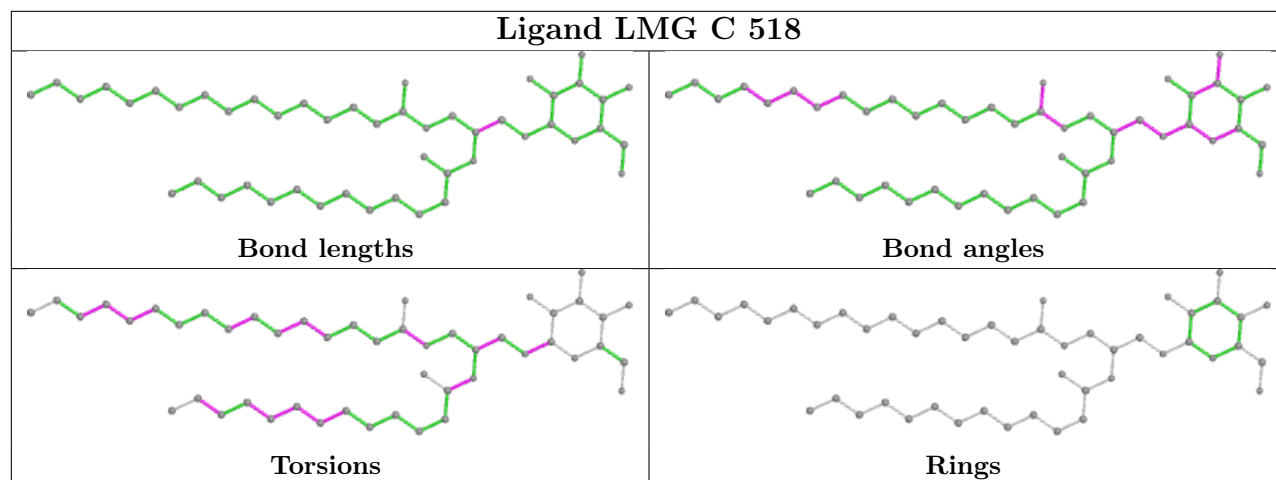
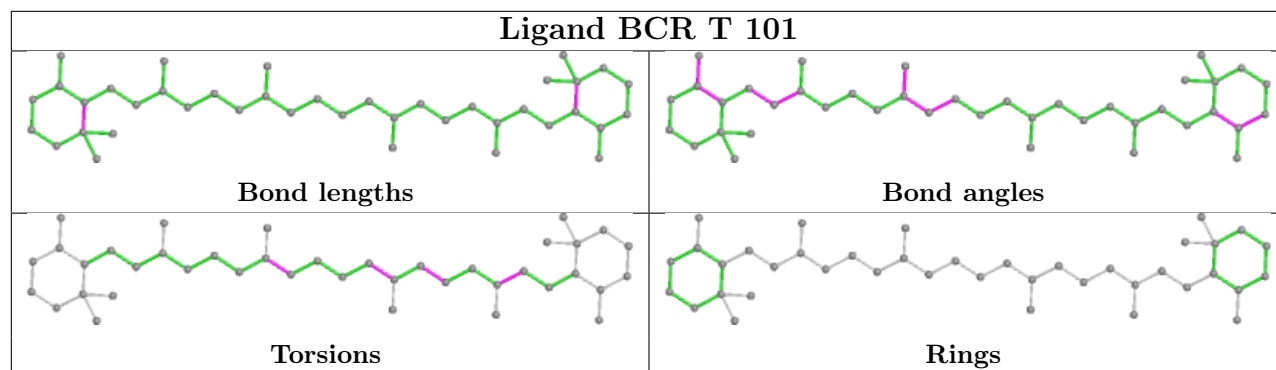


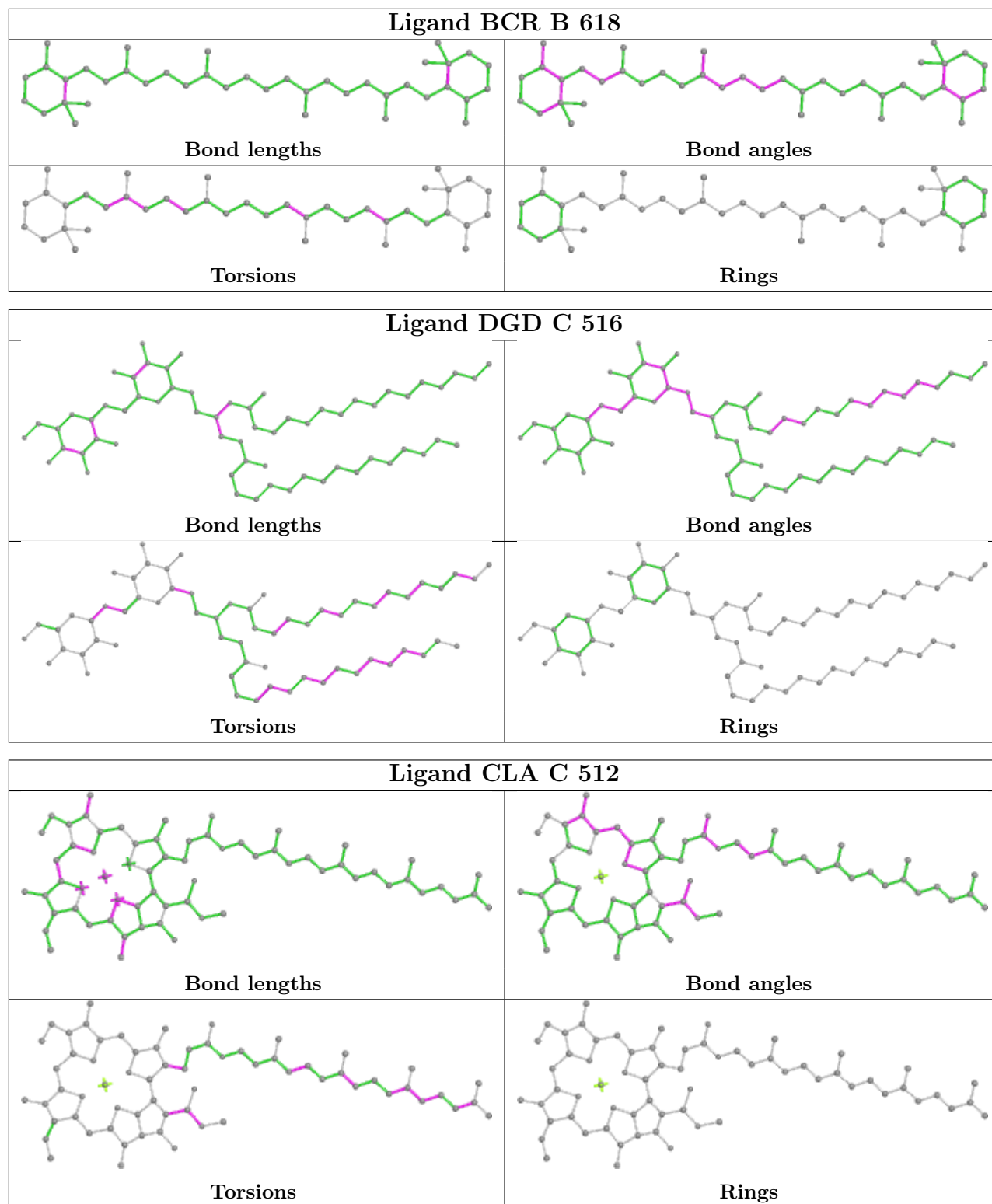


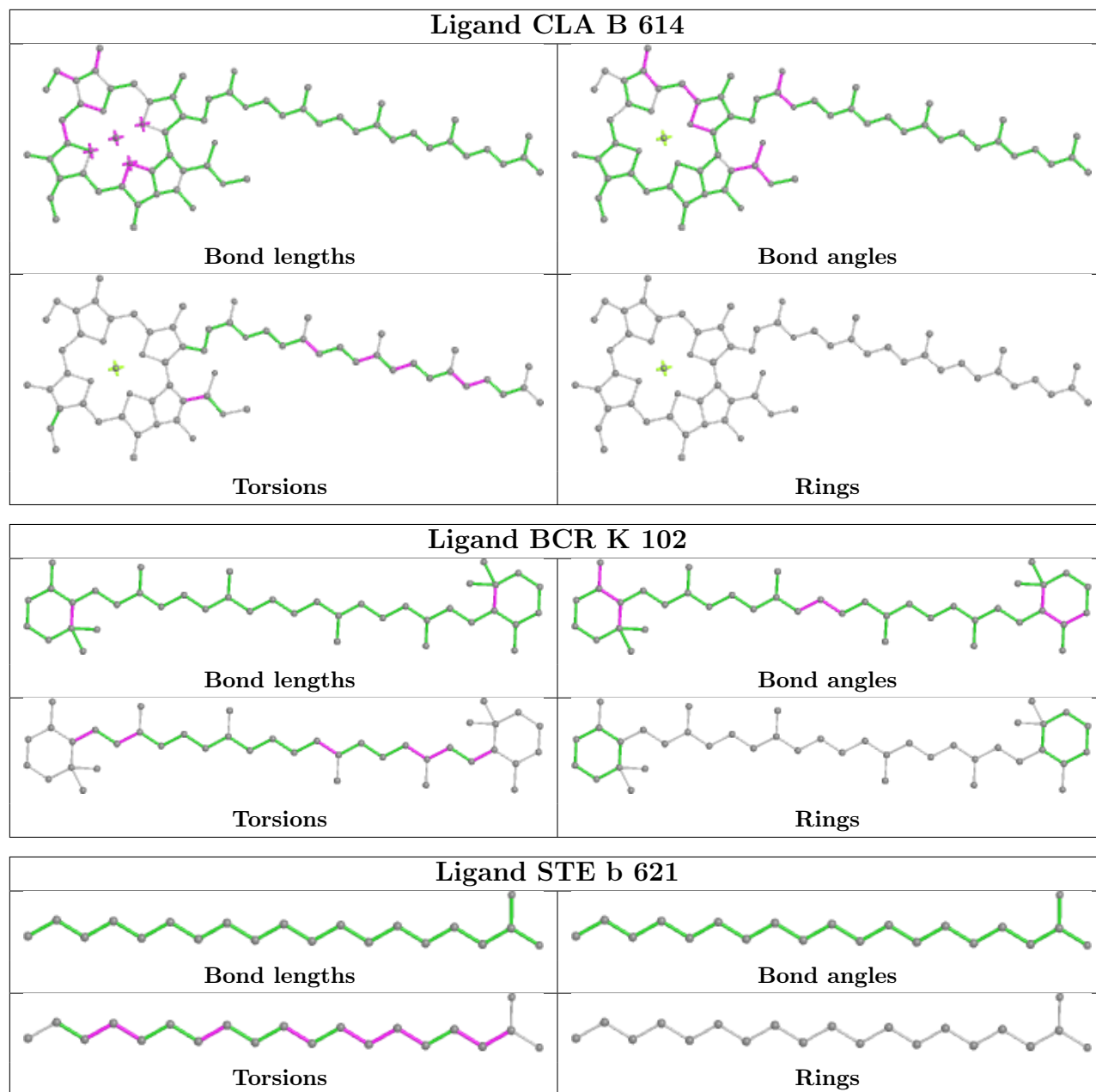


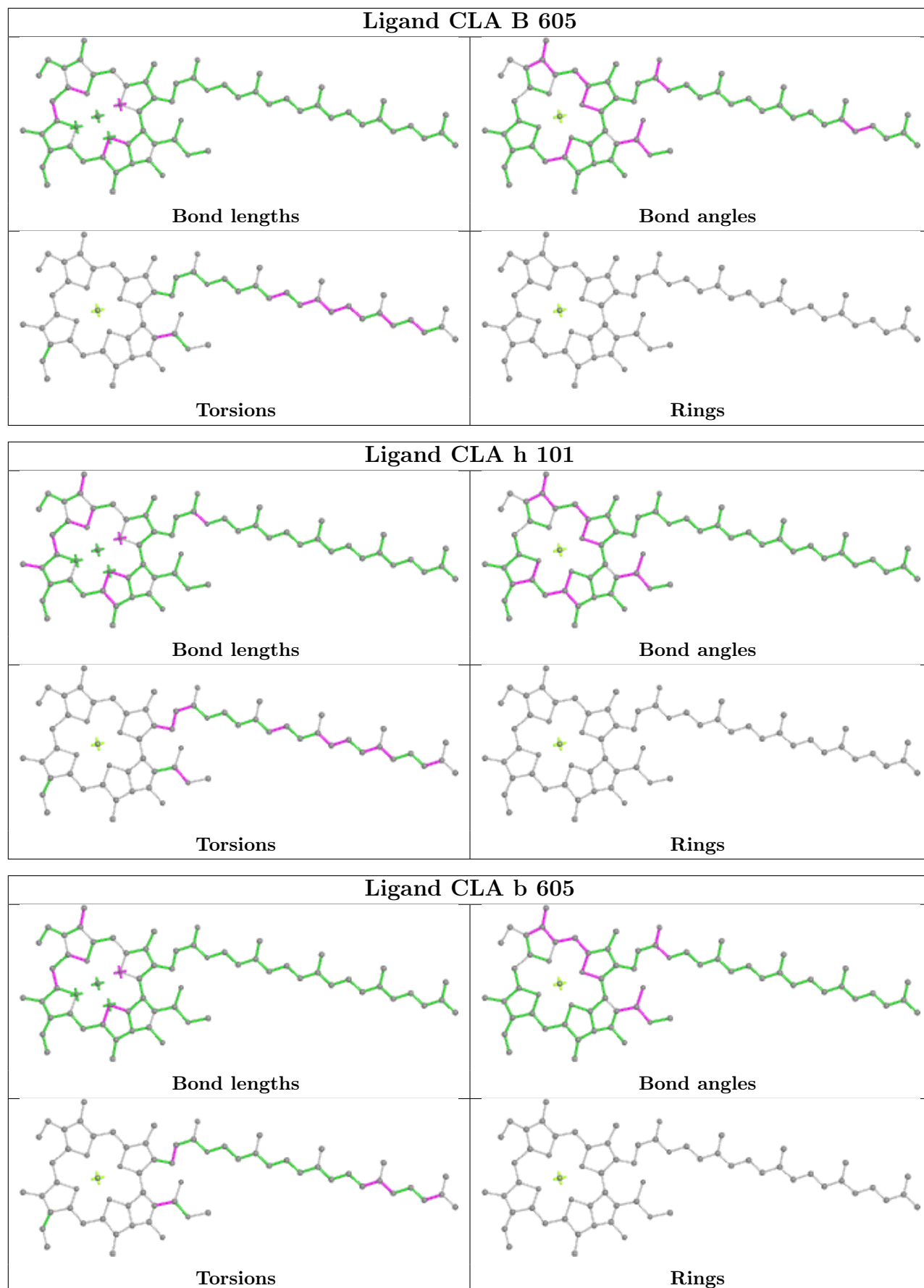


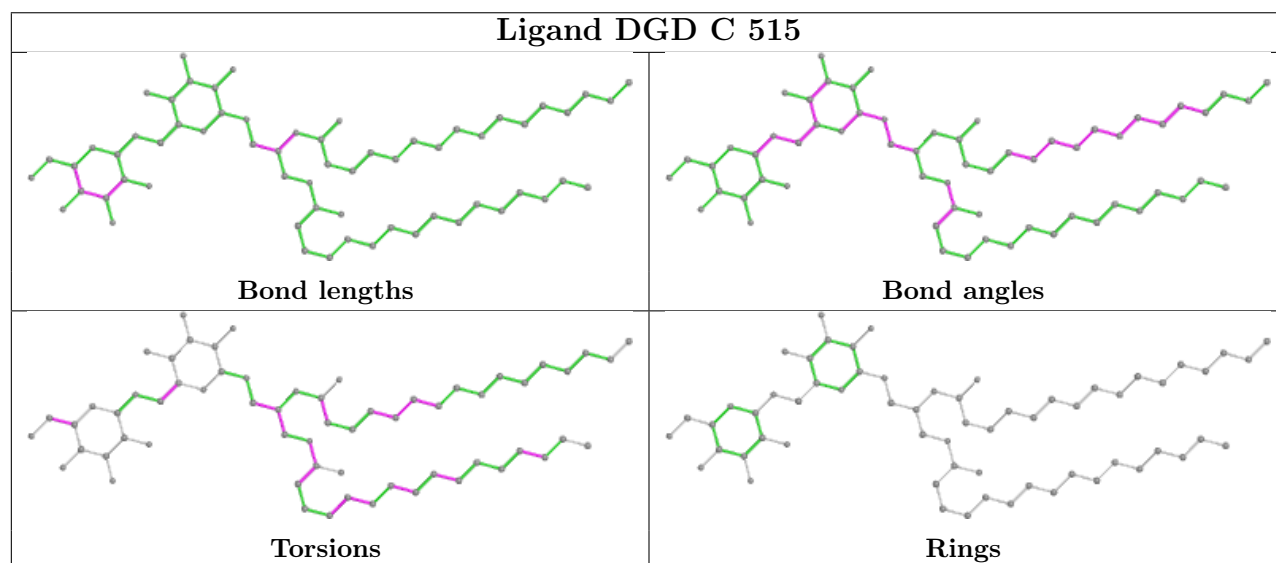
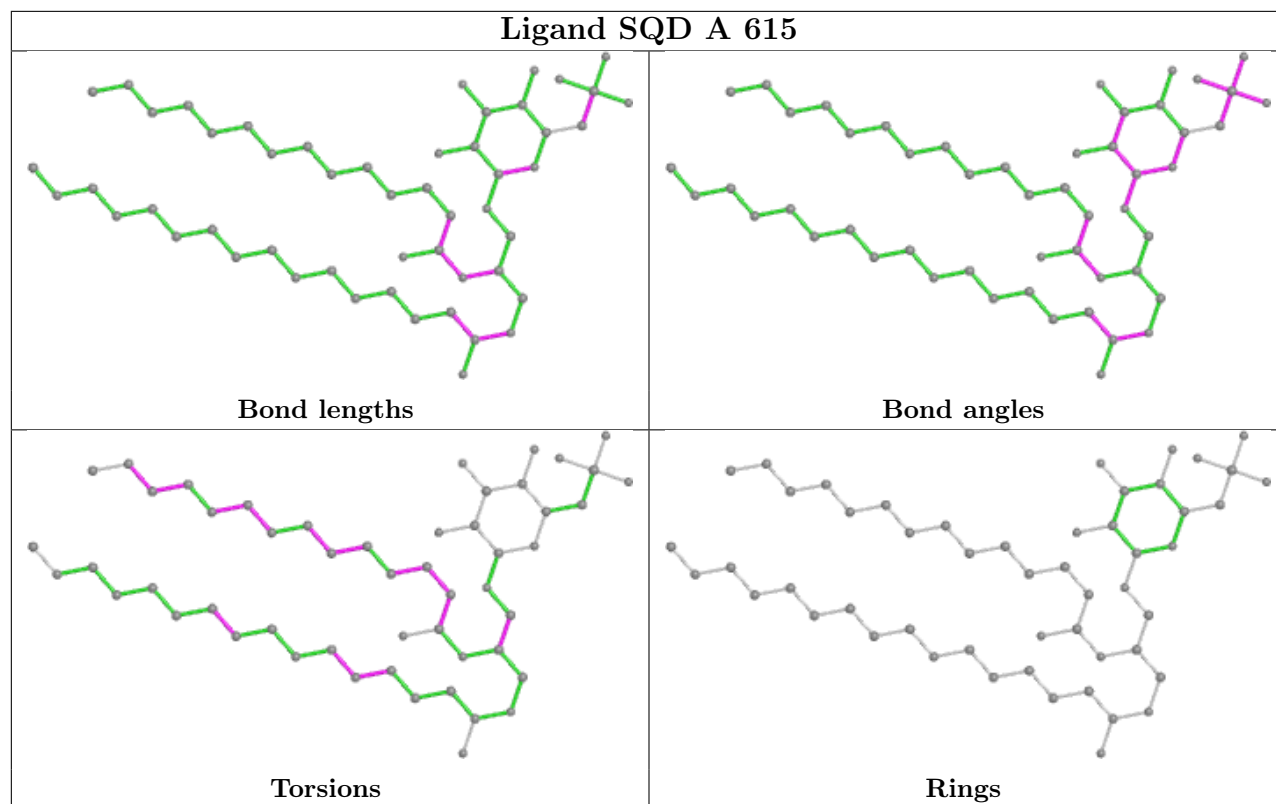


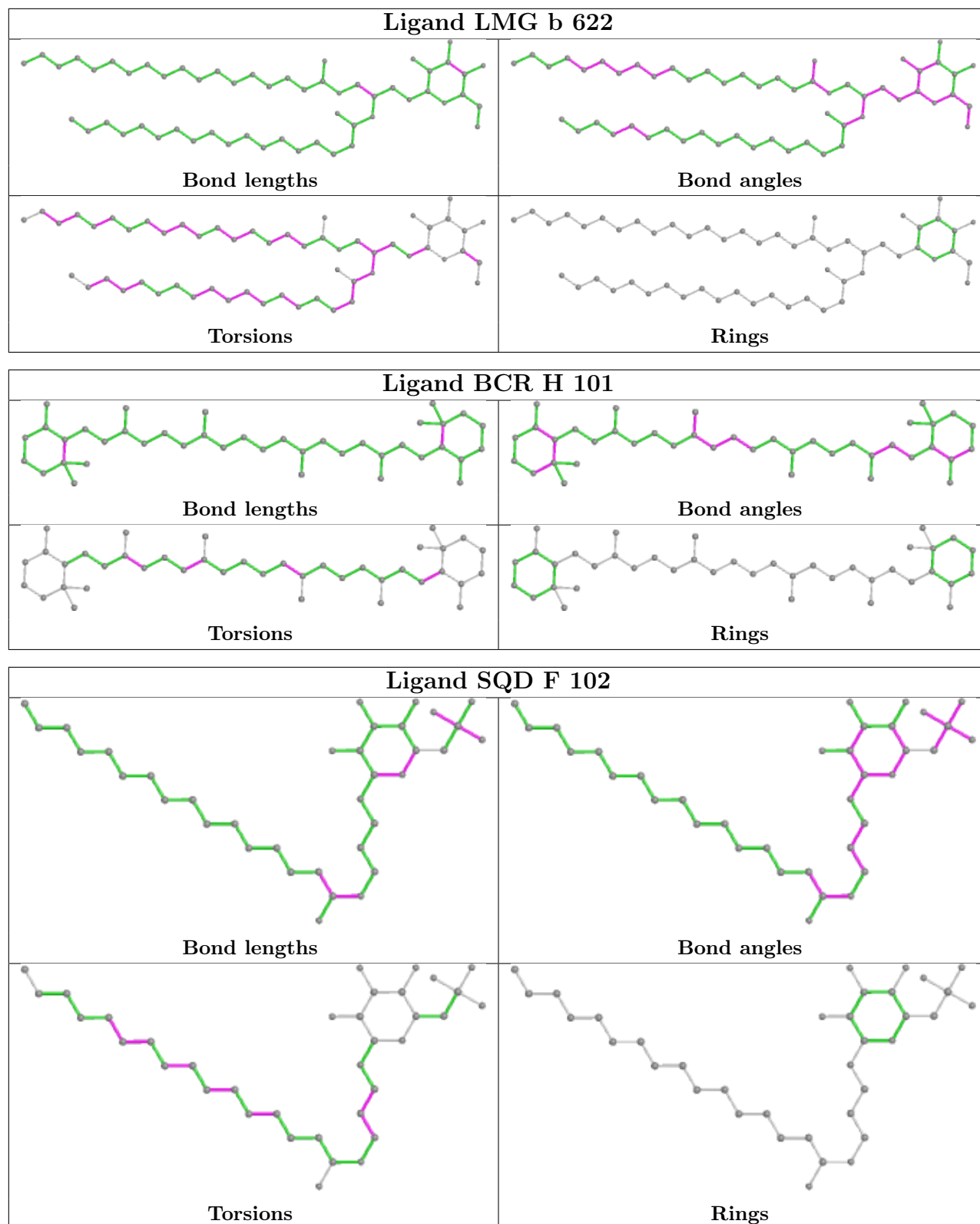


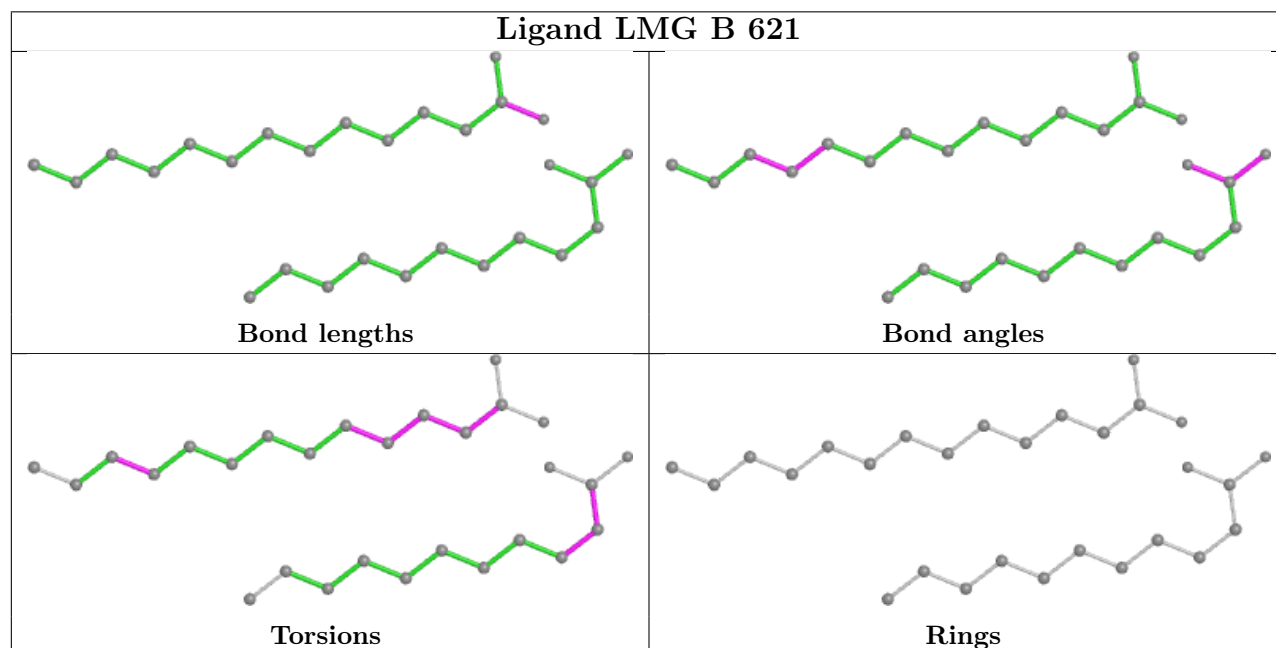
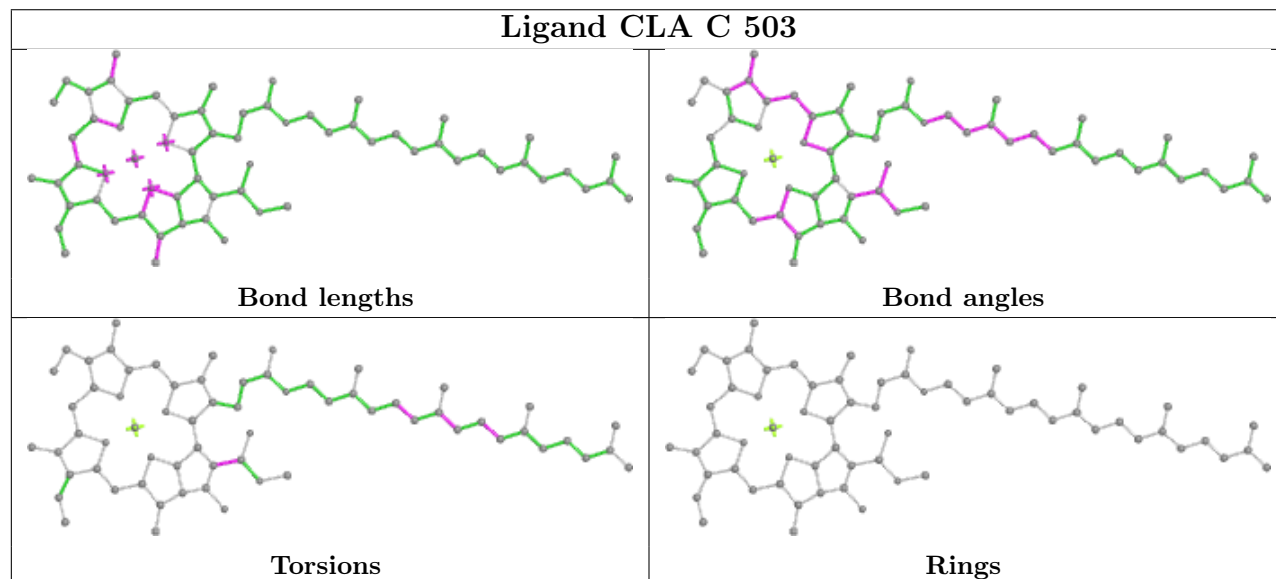
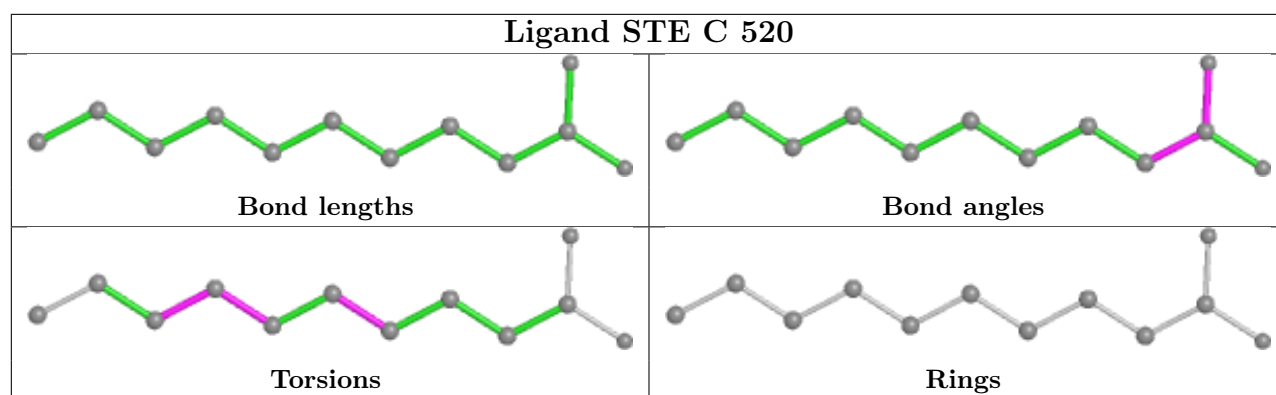


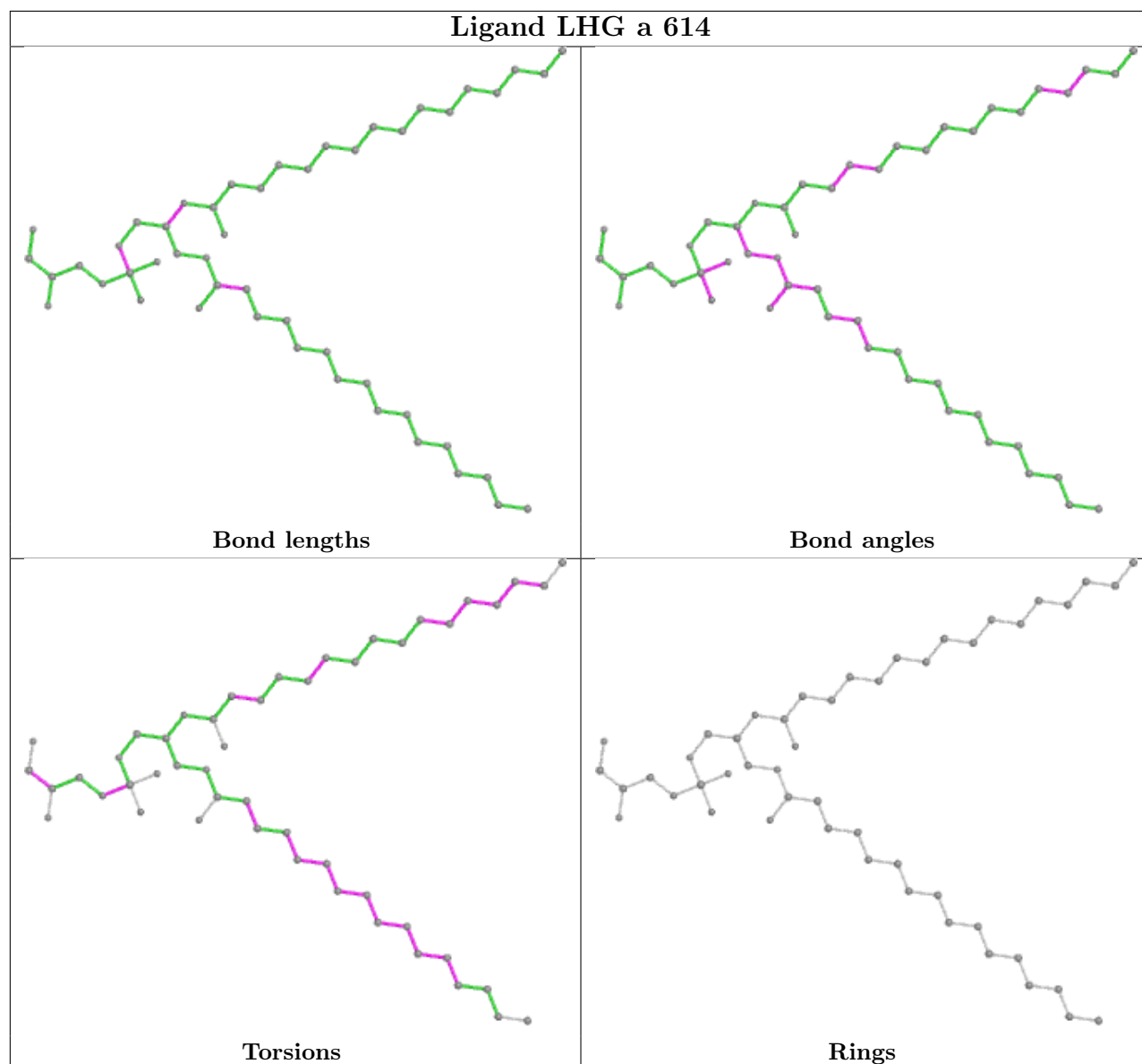
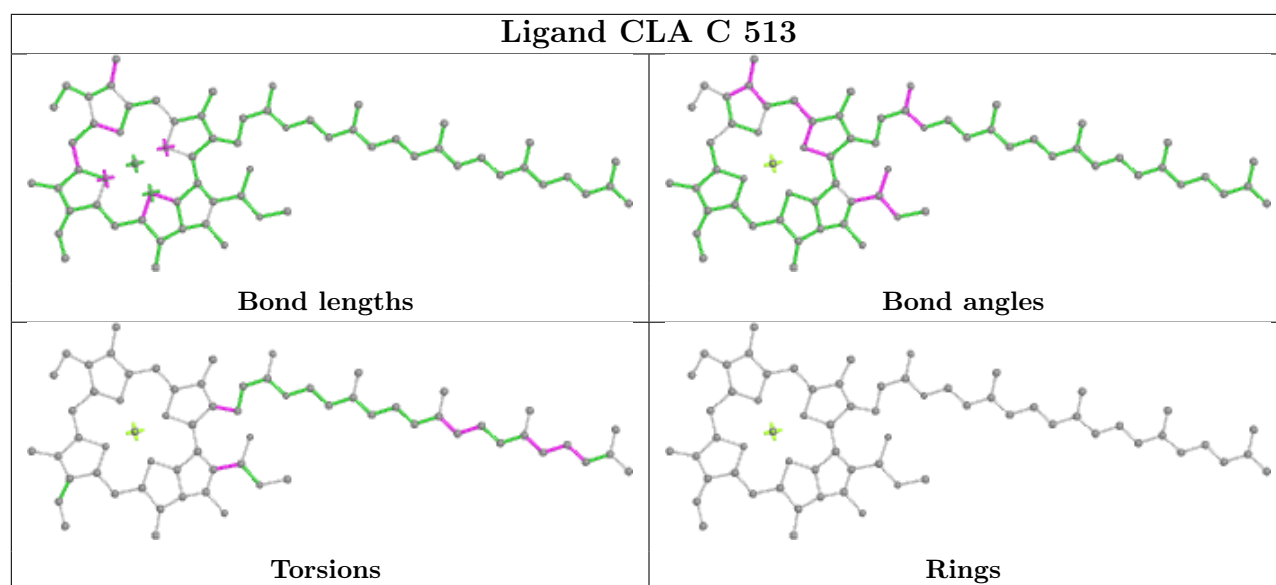


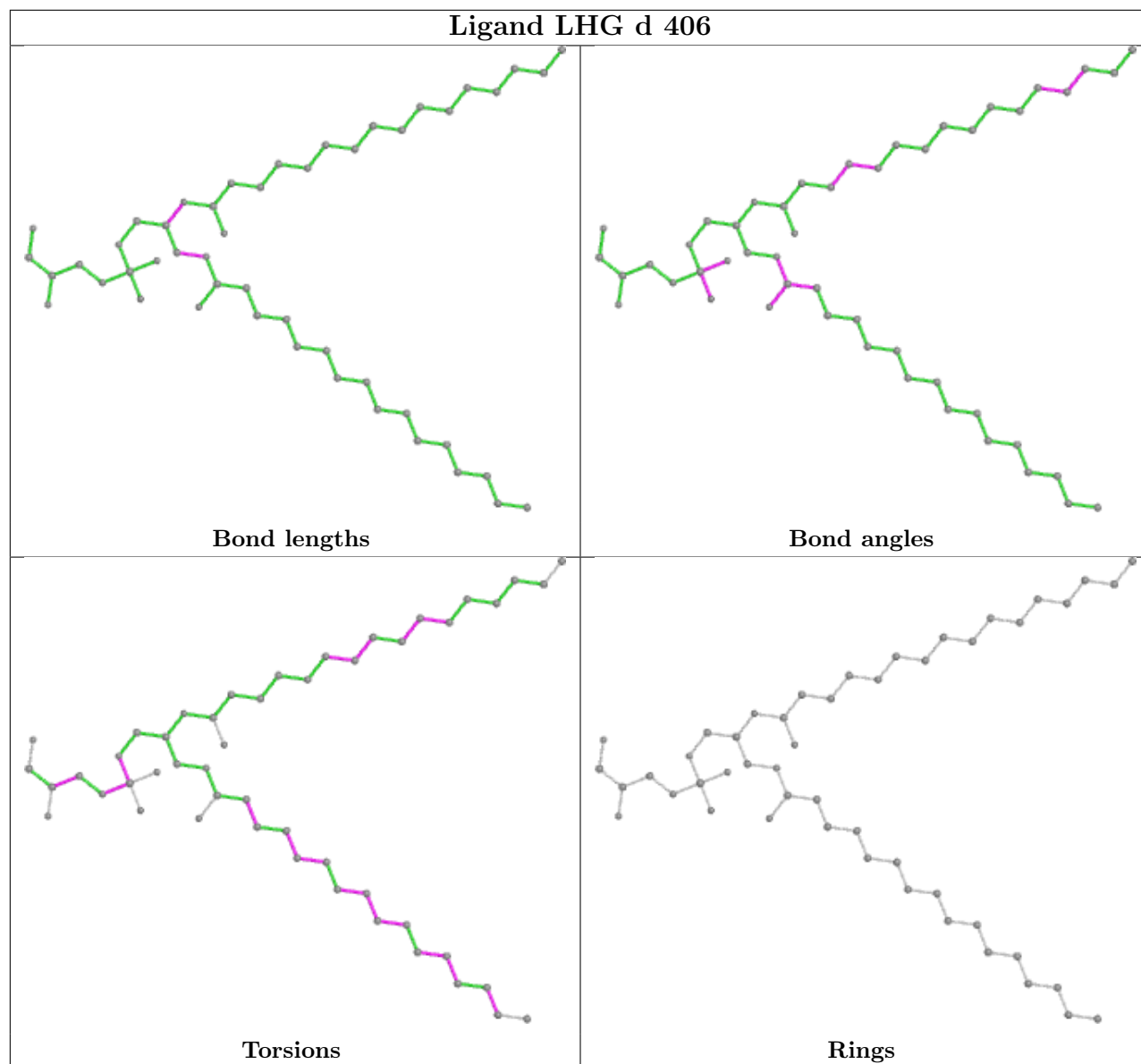


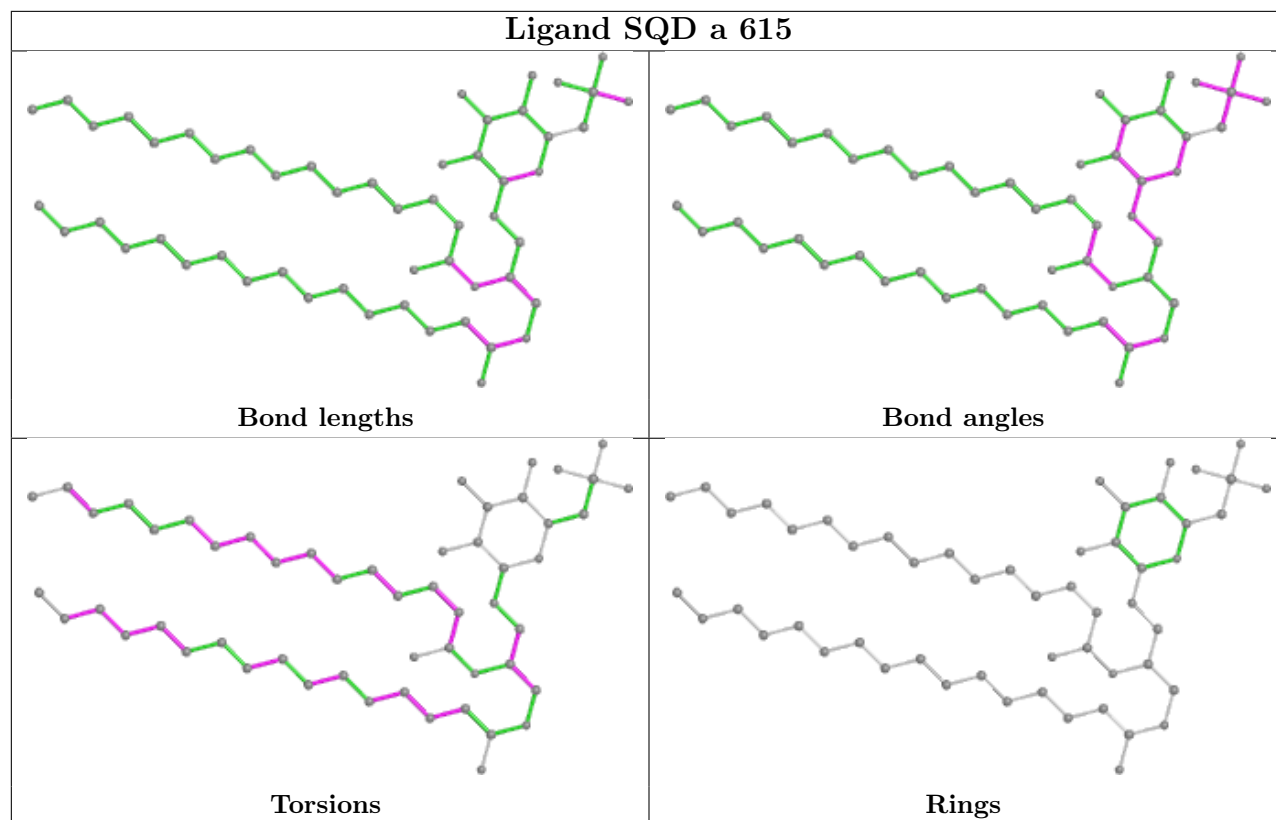


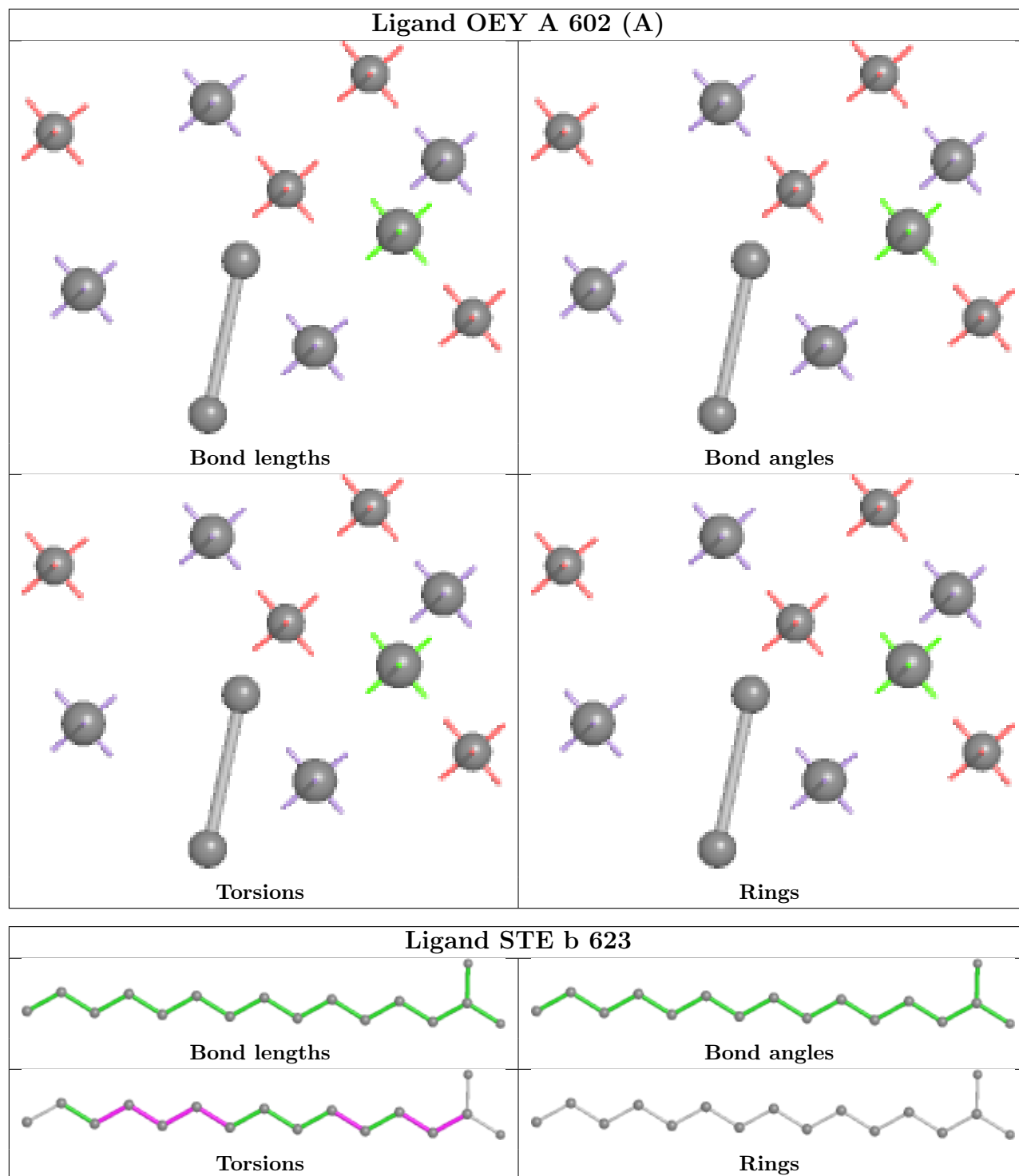


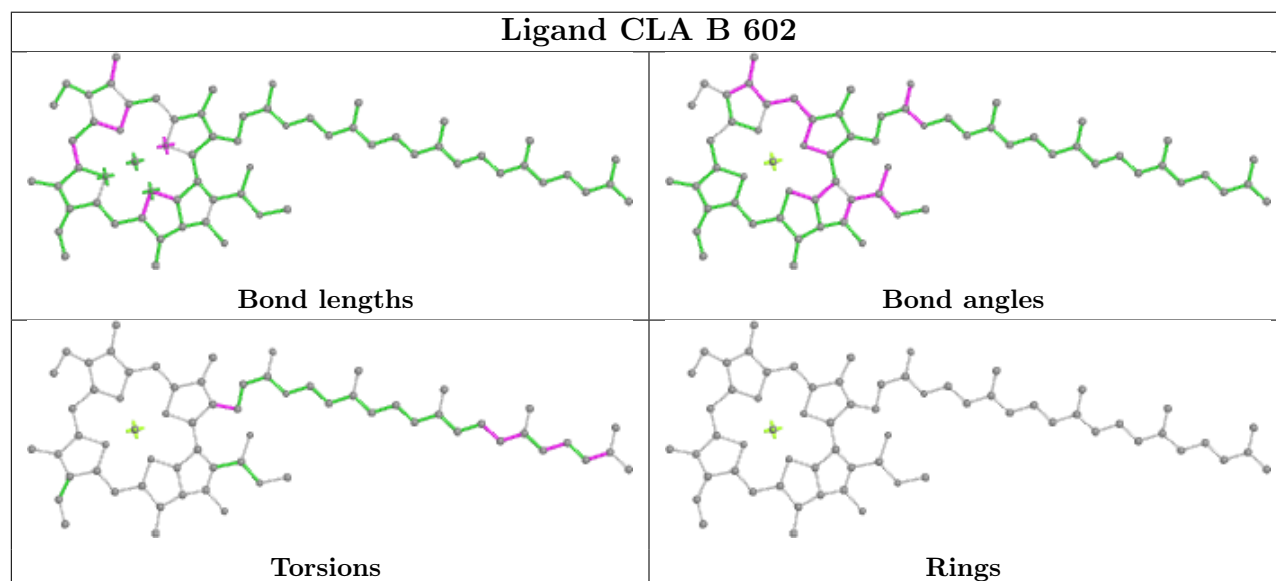
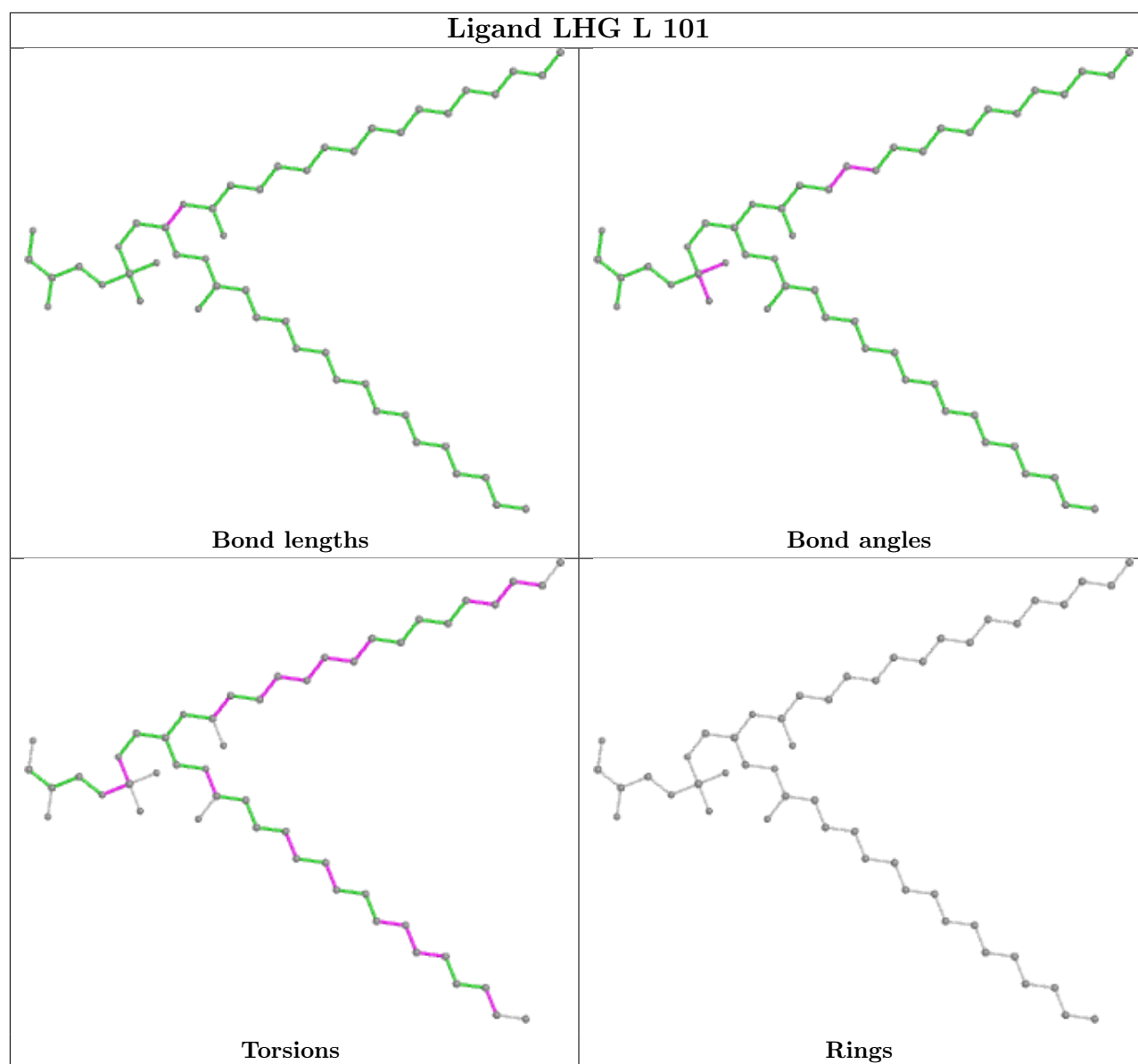


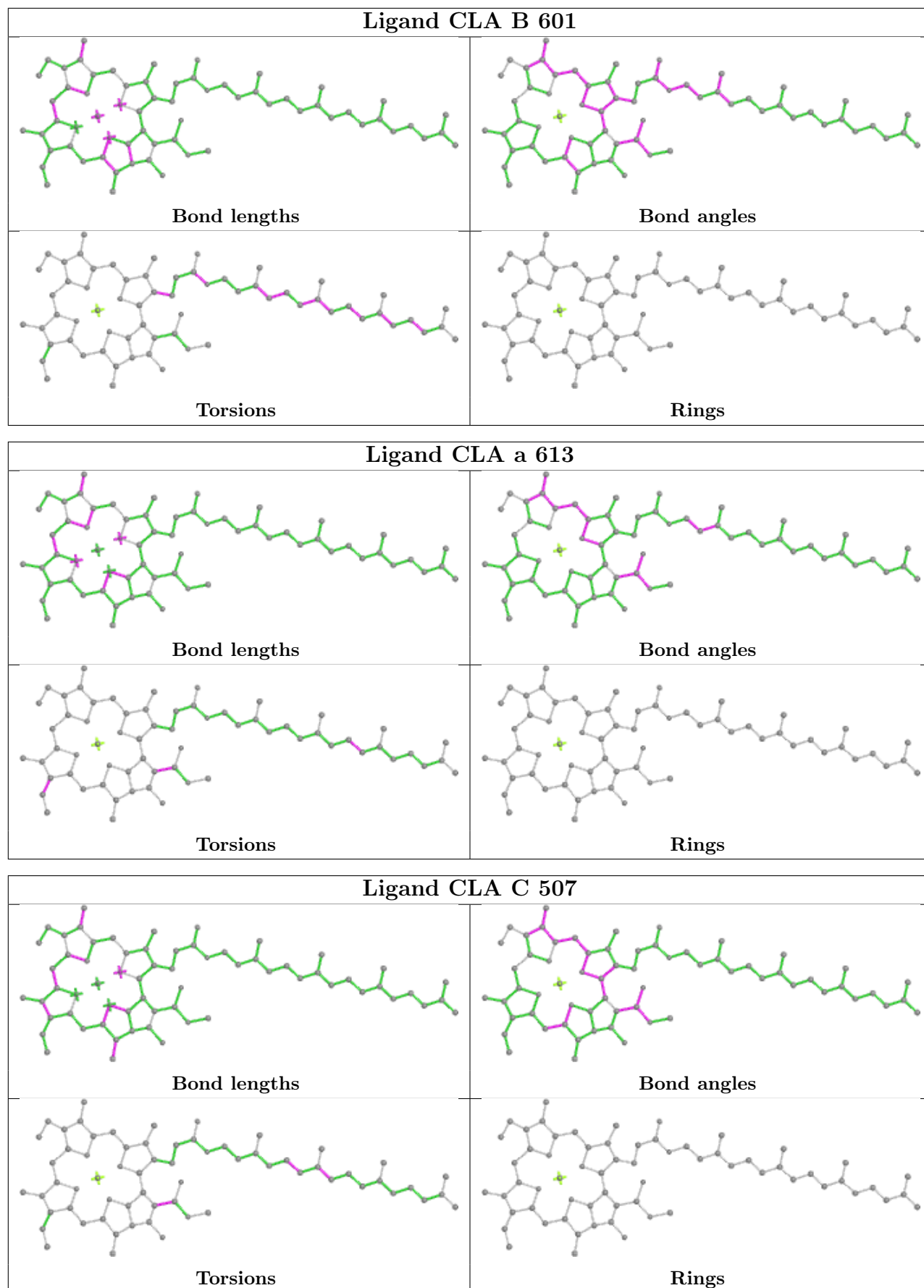


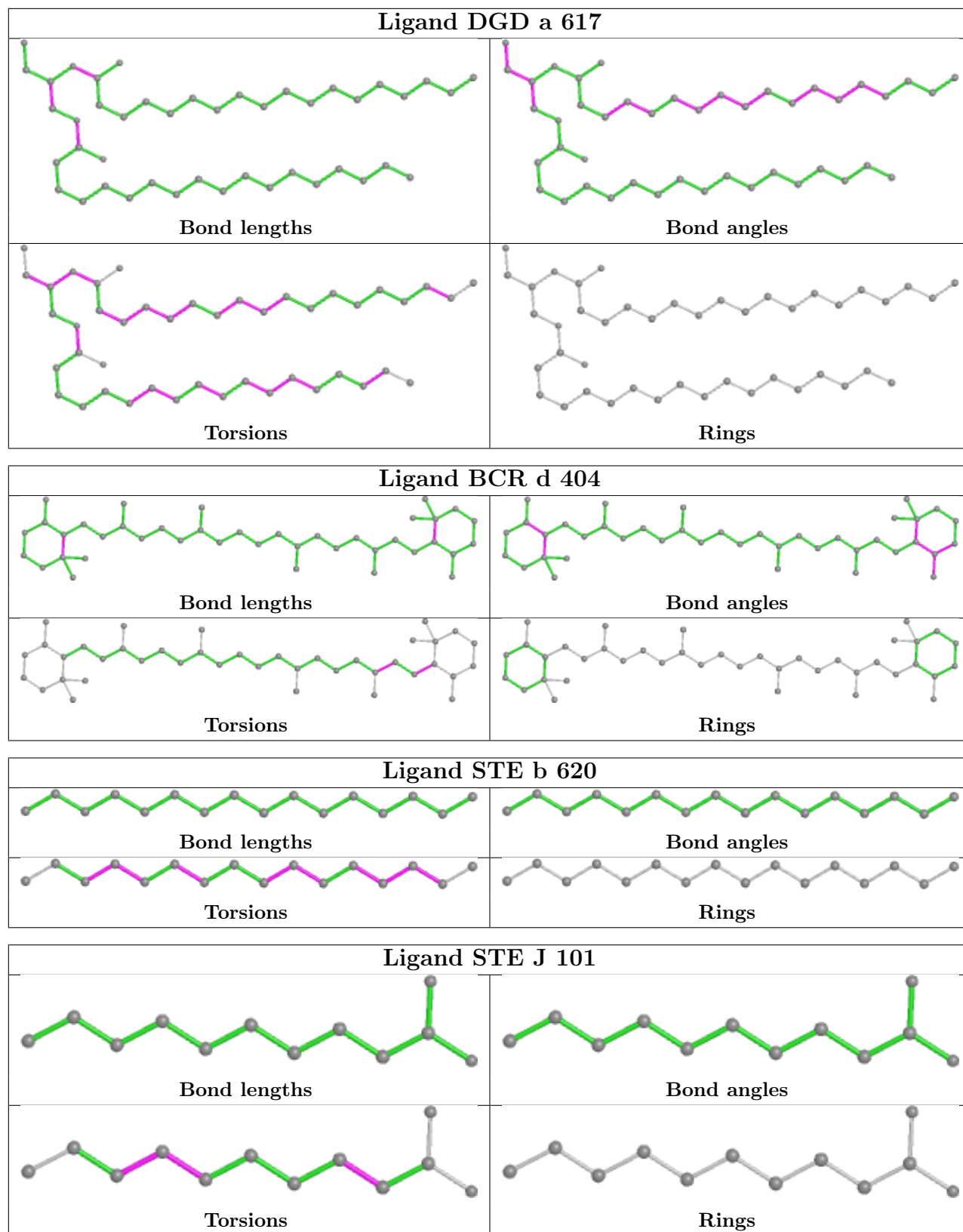


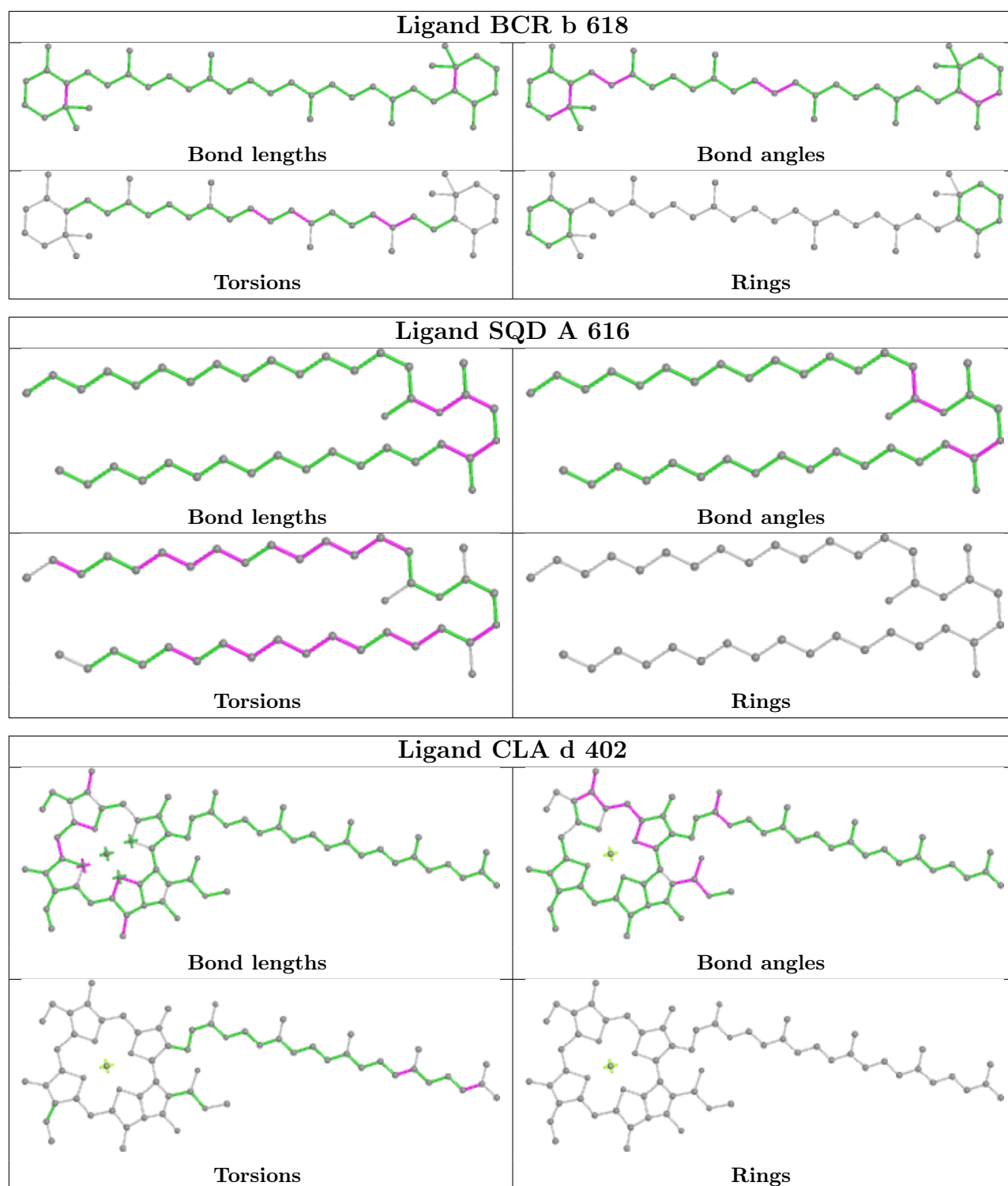


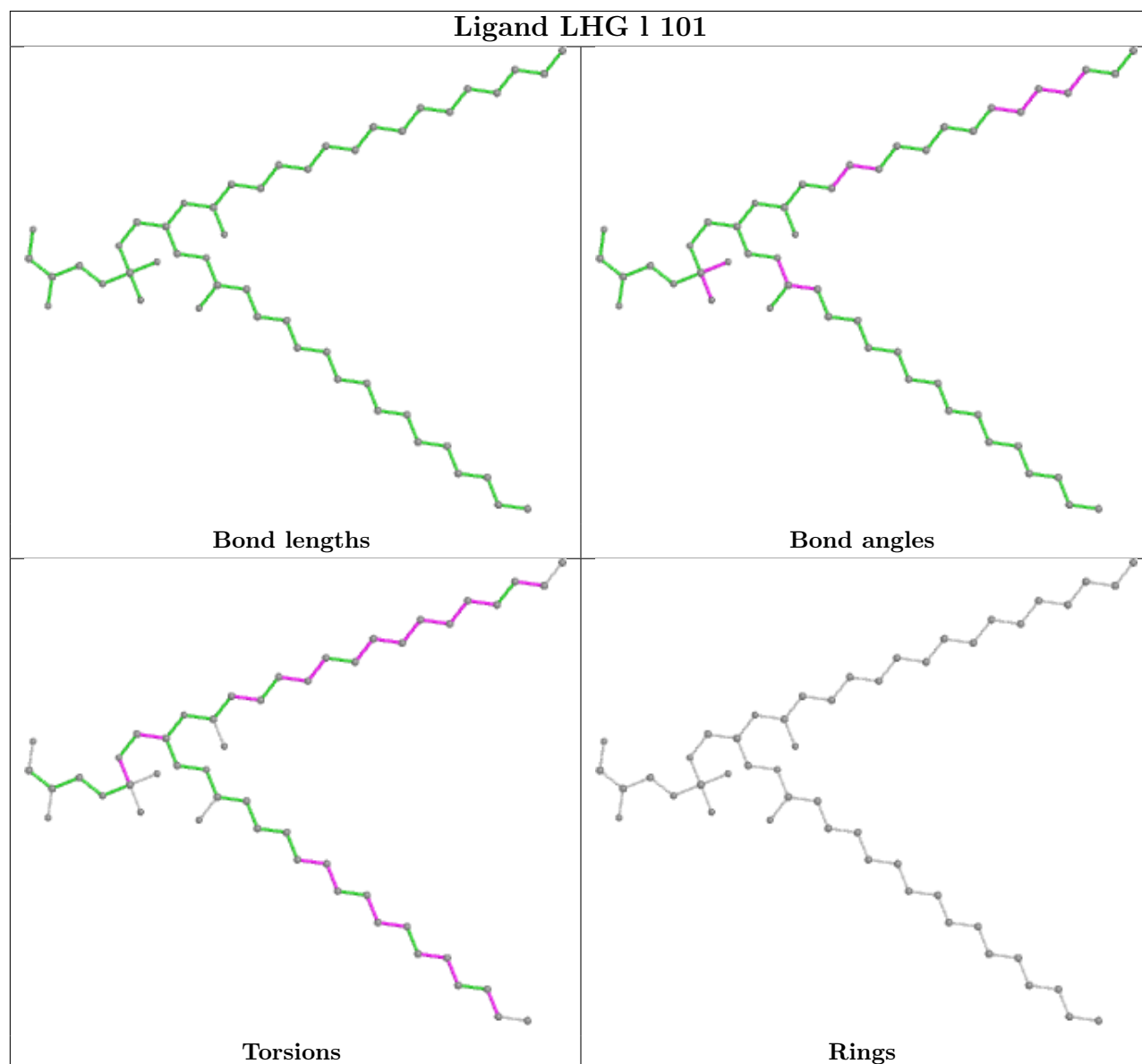
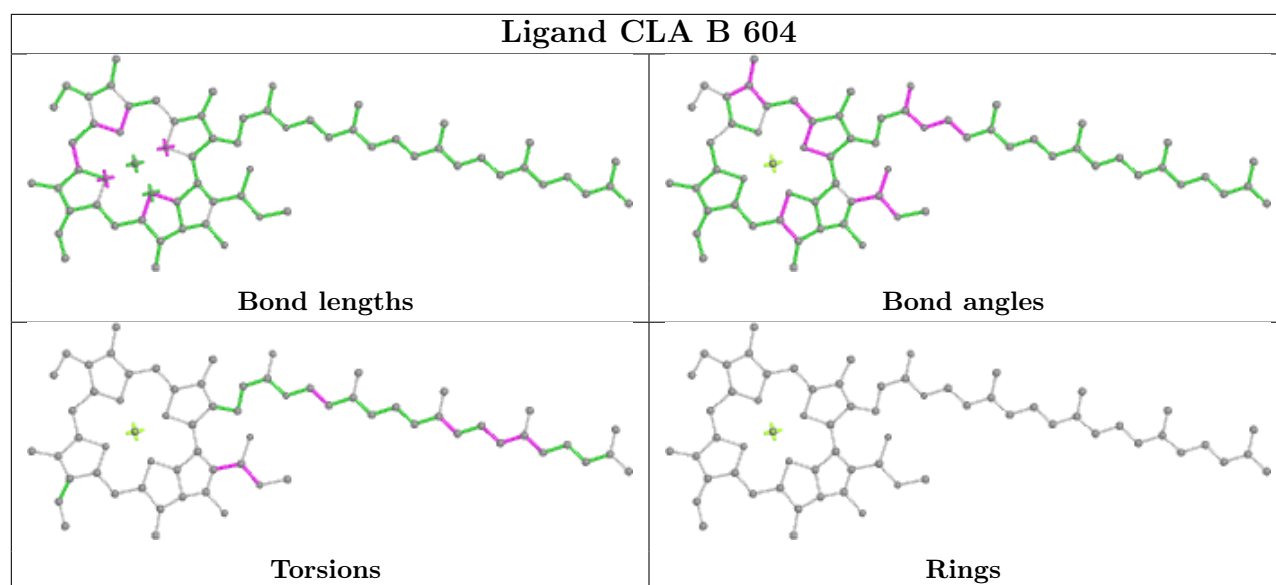


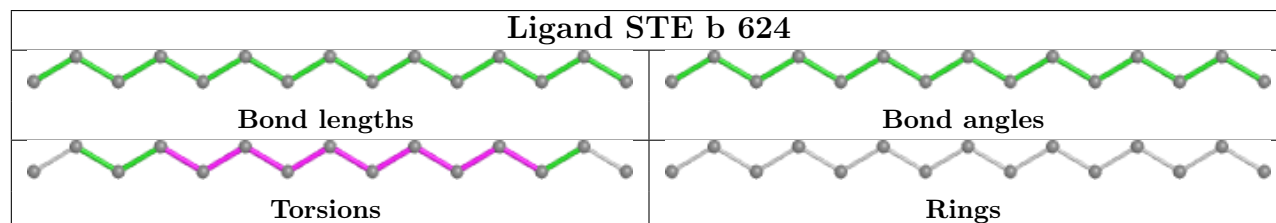
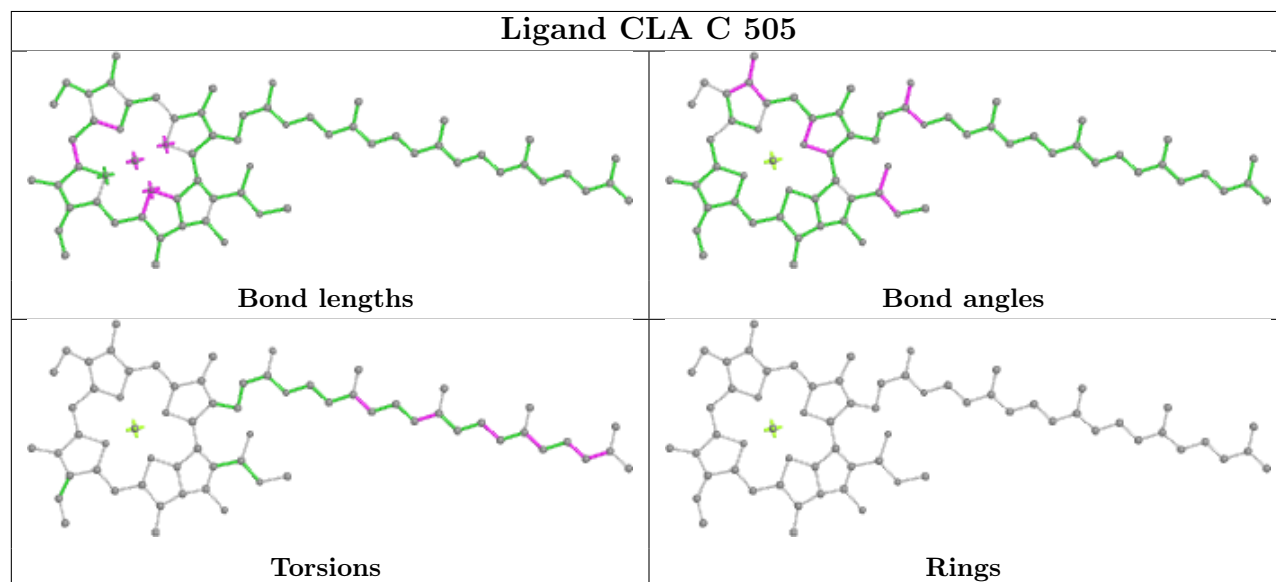
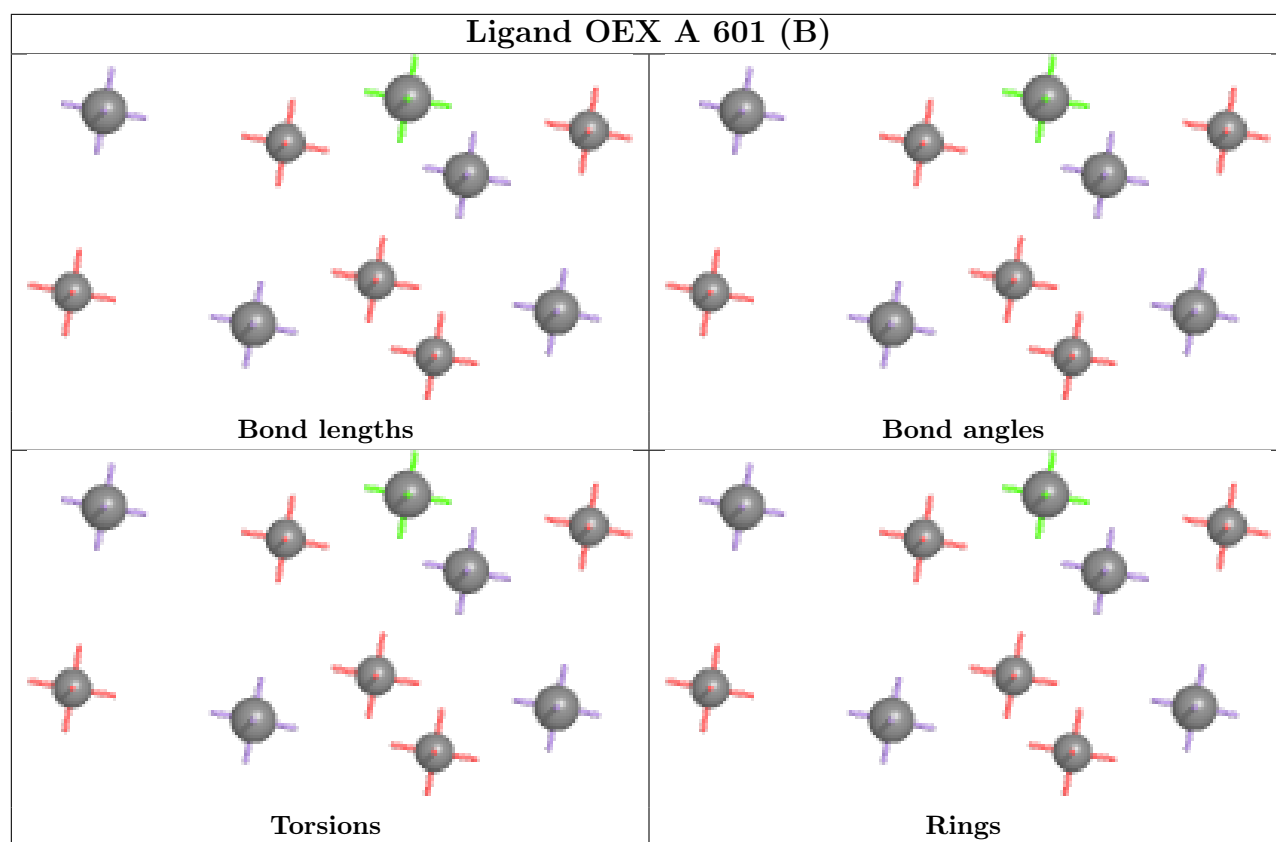


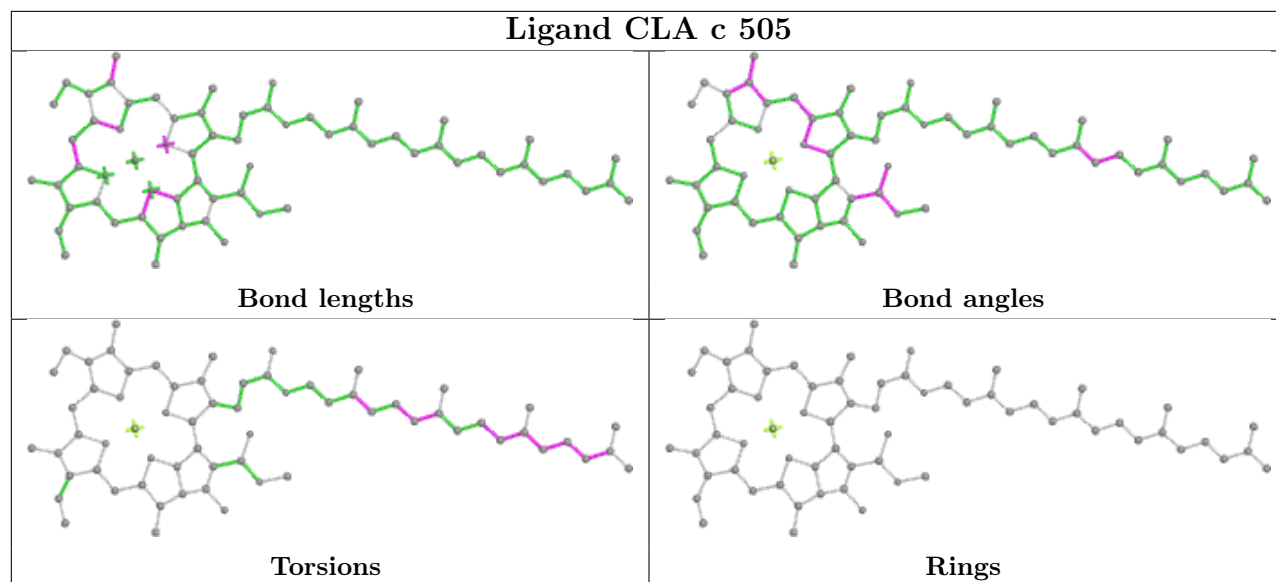












5.7 Other polymers [i](#)

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%)	-0.57	2 (0%) 89 88	23, 28, 47, 76	0
1	a	334/344 (97%)	-0.50	2 (0%) 89 88	23, 30, 56, 76	0
2	B	505/510 (99%)	-0.46	9 (1%) 68 66	24, 33, 60, 90	0
2	b	505/510 (99%)	-0.36	10 (1%) 65 63	25, 35, 68, 105	0
3	C	442/461 (95%)	-0.52	1 (0%) 95 94	24, 35, 50, 70	0
3	c	451/461 (97%)	-0.42	6 (1%) 77 76	26, 39, 57, 91	0
4	D	341/352 (96%)	-0.58	2 (0%) 89 88	23, 30, 45, 78	0
4	d	341/352 (96%)	-0.49	3 (0%) 84 83	24, 33, 57, 82	0
5	E	82/84 (97%)	0.16	7 (8%) 10 10	33, 49, 67, 83	0
5	e	82/84 (97%)	0.23	5 (6%) 21 20	37, 56, 76, 82	0
6	F	34/45 (75%)	-0.13	2 (5%) 22 21	35, 41, 58, 88	0
6	f	34/45 (75%)	0.01	2 (5%) 22 21	39, 48, 74, 88	0
7	H	65/66 (98%)	-0.18	1 (1%) 73 72	32, 40, 54, 68	0
7	h	63/66 (95%)	-0.11	1 (1%) 72 70	39, 49, 60, 63	0
8	I	35/38 (92%)	-0.39	2 (5%) 23 23	32, 38, 62, 81	0
8	i	35/38 (92%)	-0.34	2 (5%) 23 23	31, 39, 67, 81	0
9	J	36/40 (90%)	-0.14	2 (5%) 24 23	33, 46, 71, 84	0
9	j	36/40 (90%)	0.24	3 (8%) 11 10	38, 52, 83, 93	0
10	K	37/46 (80%)	-0.05	1 (2%) 54 53	40, 47, 62, 70	0
10	k	37/46 (80%)	-0.09	0 100 100	46, 51, 66, 78	0
11	L	37/37 (100%)	-0.40	2 (5%) 25 24	24, 28, 60, 64	0
11	l	36/37 (97%)	-0.33	2 (5%) 24 23	26, 31, 63, 87	0
12	M	32/36 (88%)	-0.39	1 (3%) 49 48	27, 33, 57, 70	0
12	m	31/36 (86%)	-0.32	0 100 100	28, 32, 50, 63	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å ²)	Q<0.9
13	O	244/272 (89%)	-0.00	17 (6%) 16 15	25, 41, 77, 126	0
13	o	244/272 (89%)	-0.11	13 (5%) 26 25	26, 39, 78, 115	0
14	T	29/32 (90%)	-0.38	1 (3%) 45 44	26, 30, 54, 67	0
14	t	29/32 (90%)	-0.18	3 (10%) 6 6	26, 31, 67, 81	0
15	U	97/134 (72%)	-0.27	2 (2%) 63 62	30, 41, 66, 89	0
15	u	97/134 (72%)	-0.30	3 (3%) 49 48	31, 39, 55, 85	0
16	V	137/163 (84%)	-0.46	0 100 100	29, 38, 55, 71	0
16	v	137/163 (84%)	-0.27	1 (0%) 87 87	33, 44, 63, 75	0
17	Y	27/46 (58%)	0.71	3 (11%) 5 4	49, 66, 76, 85	0
17	y	30/46 (65%)	0.48	1 (3%) 46 45	56, 68, 77, 93	0
18	X	38/41 (92%)	-0.08	3 (7%) 12 11	39, 48, 65, 74	0
18	x	39/41 (95%)	0.40	3 (7%) 13 12	47, 60, 80, 92	0
19	Z	62/62 (100%)	0.67	11 (17%) 1 1	52, 63, 101, 111	0
19	z	62/62 (100%)	0.53	6 (9%) 7 7	55, 64, 100, 109	0
20	R	34/41 (82%)	0.96	7 (20%) 1 0	57, 66, 78, 84	0
20	r	31/41 (75%)	1.75	11 (35%) 0 0	68, 80, 97, 101	0
All	All	5302/5700 (93%)	-0.30	153 (2%) 51 50	23, 37, 69, 126	0

All (153) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
13	O	3	GLN	8.6
13	o	58	ASN	8.0
13	O	4	THR	7.2
6	F	12	SER	7.2
13	O	62	GLU	7.2
13	O	60	ARG	7.1
13	o	60	ARG	6.0
13	O	56	PRO	5.7
19	Z	33	TRP	5.7
13	O	59	LYS	5.5
2	b	495	PHE	5.1
3	c	23	ALA	5.0
13	o	3	GLN	5.0
20	r	28	VAL	4.9
19	z	33	TRP	4.9

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Mol	Chain	Res	Type	RSRZ
20	r	32	GLN	4.9
2	b	86	ILE	4.9
19	Z	62	VAL	4.8
19	z	35	ARG	4.8
13	o	246	ALA	4.7
19	Z	32	ASP	4.7
9	j	6	GLY	4.7
13	o	4	THR	4.6
13	o	62	GLU	4.6
13	O	61	GLN	4.6
9	j	5	GLY	4.6
19	Z	35	ARG	4.6
14	t	30	THR	4.4
19	Z	41	PHE	4.4
20	r	3	TRP	4.4
20	R	3	TRP	4.3
20	r	29	LYS	4.2
20	r	31	VAL	4.2
6	f	12	SER	4.1
19	z	30	PRO	4.0
6	F	13	TYR	4.0
4	d	227[A]	GLU	4.0
20	r	18	TRP	4.0
20	r	2	ASP	3.9
14	T	30	THR	3.8
1	a	11	ALA	3.7
2	b	127	ARG	3.7
9	j	7	ARG	3.7
13	O	58	ASN	3.7
19	Z	1	MET	3.7
4	D	12	ARG	3.7
18	x	38	GLN	3.6
9	J	7	ARG	3.6
18	X	2	THR	3.6
19	Z	4	LEU	3.6
18	X	3	ILE	3.5
15	U	8	GLU	3.5
13	O	57	LYS	3.5
7	H	66	GLY	3.5
3	c	24	THR	3.4
5	E	3	GLY	3.4
5	E	4	THR	3.4

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Mol	Chain	Res	Type	RSRZ
13	o	57	LYS	3.2
19	Z	7	LEU	3.2
18	x	40	SER	3.2
13	o	61	GLN	3.2
11	l	2	GLU	3.2
20	r	14	LEU	3.1
20	R	21	ARG	3.1
19	Z	42	LEU	3.1
18	X	39	ARG	3.1
20	R	6	LEU	3.1
3	c	262	ARG	3.0
3	c	191	PRO	3.0
19	z	60	PHE	3.0
13	o	56	PRO	2.9
13	o	207	ARG	2.9
19	z	41	PHE	2.9
20	R	32	GLN	2.9
5	E	83	LEU	2.9
2	b	128	THR	2.9
2	B	506	ARG	2.9
5	e	3	GLY	2.9
2	b	502	VAL	2.9
5	e	4	THR	2.9
17	Y	43	ARG	2.8
2	B	127	ARG	2.8
15	U	9	LEU	2.8
11	L	2	GLU	2.8
5	E	84	LYS	2.7
20	R	29	LYS	2.7
11	l	3	PRO	2.7
13	O	24	ASP	2.7
13	o	59	LYS	2.7
3	c	143	TYR	2.7
2	B	293	ALA	2.6
20	r	26	TYR	2.6
17	y	19	ILE	2.6
19	Z	31	GLN	2.6
9	J	6	GLY	2.6
5	e	61	ARG	2.6
8	I	36	ASP	2.5
14	t	28	ARG	2.5
2	b	506	ARG	2.5

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Mol	Chain	Res	Type	RSRZ
10	K	46	ARG	2.5
13	O	25	THR	2.4
2	B	85	GLY	2.4
2	B	295	GLY	2.4
2	B	86	ILE	2.4
5	E	5	THR	2.4
8	I	34	ARG	2.4
12	M	33	GLN	2.4
17	Y	25	ILE	2.4
1	A	13	LEU	2.4
15	u	8	GLU	2.4
13	O	63	ALA	2.4
7	h	6	TRP	2.4
20	r	21	ARG	2.3
14	t	29	ILE	2.3
17	Y	21	GLN	2.3
4	d	14	TRP	2.3
8	i	34	ARG	2.3
2	b	485	GLU	2.3
20	R	2	ASP	2.3
15	u	53	ALA	2.2
2	b	85	GLY	2.2
4	d	240	ALA	2.2
2	b	505	ARG	2.2
4	D	236	ASN	2.2
11	L	3	PRO	2.2
5	E	82	GLN	2.2
13	O	184	ARG	2.2
2	B	503	THR	2.2
13	O	35	SER	2.2
5	e	83	LEU	2.2
19	z	39	LEU	2.2
2	B	505	ARG	2.2
15	u	70	ARG	2.2
13	o	23	ASP	2.1
19	Z	3	ILE	2.1
13	O	23	ASP	2.1
3	C	143	TYR	2.1
6	f	13	TYR	2.1
13	o	5	LEU	2.1
13	O	55	GLU	2.1
20	r	25	PRO	2.1

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Mol	Chain	Res	Type	RSRZ
5	e	84	LYS	2.1
16	v	17	LYS	2.1
2	B	294	SER	2.0
13	O	229[A]	GLU	2.0
1	A	11	ALA	2.0
20	R	13	LEU	2.0
3	c	29	GLU	2.0
1	a	16	ARG	2.0
2	b	289	GLN	2.0
8	i	36	ASP	2.0
18	x	39	ARG	2.0
5	E	60	GLN	2.0

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
12	FME	M	1	10/11	0.92	0.14	35,47,63,65	0
14	FME	T	1	10/11	0.94	0.11	34,39,49,63	0
14	FME	t	1	10/11	0.94	0.08	30,38,53,58	0
8	FME	I	1	10/11	0.95	0.10	39,44,52,53	0
12	FME	m	1	10/11	0.96	0.15	32,46,60,66	0
8	FME	i	1	10/11	0.97	0.15	37,46,50,53	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(\AA^2)	Q<0.9
33	STE	a	618	12/20	0.65	0.24	49,63,71,74	0
29	LMG	c	521	48/55	0.70	0.26	48,66,83,91	0
30	LHG	E	101	49/49	0.71	0.26	43,73,89,90	0
33	STE	H	103	18/20	0.72	0.23	56,69,71,71	0
33	STE	B	620	17/20	0.72	0.18	32,46,61,64	0
33	STE	X	101	20/20	0.74	0.22	35,44,63,75	0
33	STE	k	103	12/20	0.74	0.29	55,65,72,77	0
33	STE	b	623	16/20	0.76	0.15	52,57,74,79	0
33	STE	t	104	18/20	0.76	0.18	45,52,78,78	0
33	STE	B	626	16/20	0.77	0.22	47,54,60,64	0
31	SQD	a	616	36/54	0.78	0.17	37,52,65,73	0
33	STE	c	520	20/20	0.78	0.15	40,51,78,80	0
29	LMG	b	622	55/55	0.79	0.26	51,63,76,78	0
33	STE	b	621	20/20	0.79	0.22	38,50,67,71	0
32	DGD	a	617	44/66	0.80	0.16	36,49,71,74	0
29	LMG	d	408	23/55	0.80	0.18	48,61,69,73	0
33	STE	B	625	12/20	0.80	0.26	51,56,71,74	0
33	STE	E	102	12/20	0.81	0.24	58,68,81,81	0
29	LMG	D	409	33/55	0.82	0.15	32,50,67,78	0
28	PL9	A	611	55/55	0.82	0.24	39,56,70,72	0
33	STE	t	102	14/20	0.82	0.14	41,45,59,59	0
33	STE	b	625	20/20	0.82	0.19	46,55,62,63	0
33	STE	C	519	12/20	0.83	0.18	38,43,55,55	0
30	LHG	e	102	42/49	0.83	0.30	60,76,86,97	0
29	LMG	A	613	48/55	0.83	0.17	36,54,67,76	0
28	PL9	a	612	55/55	0.83	0.21	41,61,74,80	0
33	STE	b	624	15/20	0.84	0.16	45,51,65,66	0
29	LMG	c	522	49/55	0.84	0.16	37,50,75,84	0
25	CLA	h	101	65/65	0.84	0.17	46,62,82,86	0
31	SQD	A	616	39/54	0.85	0.16	41,51,73,74	0
33	STE	b	626	10/20	0.85	0.17	43,51,58,60	0
32	DGD	A	617	66/66	0.85	0.17	47,56,65,72	0
31	SQD	B	623	54/54	0.86	0.16	36,59,78,86	0
33	STE	t	103	10/20	0.86	0.15	46,50,56,60	0
33	STE	m	102	12/20	0.86	0.15	46,56,66,66	0
33	STE	x	101	20/20	0.86	0.18	41,50,59,62	0
31	SQD	f	101	41/54	0.87	0.18	57,75,85,87	0
25	CLA	c	512	65/65	0.87	0.16	44,52,73,80	0
25	CLA	b	615	60/65	0.87	0.15	30,39,77,82	0
27	BCR	D	405	40/40	0.87	0.13	28,38,67,71	0
33	STE	B	624	12/20	0.87	0.15	41,48,59,60	0
29	LMG	B	621	28/55	0.87	0.13	35,47,57,65	0
29	LMG	D	407	51/55	0.87	0.18	31,44,68,69	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
31	SQD	b	619	49/54	0.87	0.16	40,55,78,82	0
33	STE	j	101	12/20	0.88	0.13	47,53,56,56	0
33	STE	C	520	12/20	0.88	0.17	45,52,59,59	0
33	STE	l	102	18/20	0.88	0.15	37,44,64,64	0
29	LMG	c	519	37/55	0.88	0.19	43,57,66,68	0
29	LMG	m	101	51/55	0.88	0.12	34,48,59,63	0
33	STE	J	101	12/20	0.88	0.13	45,52,59,63	0
25	CLA	c	513	65/65	0.88	0.17	41,55,78,82	0
25	CLA	C	513	65/65	0.88	0.15	38,50,72,76	0
27	BCR	c	514	40/40	0.89	0.13	44,50,57,58	0
29	LMG	M	101	51/55	0.89	0.13	33,47,59,63	0
25	CLA	B	601	65/65	0.89	0.14	31,52,75,81	0
33	STE	b	620	16/20	0.89	0.13	34,46,57,58	0
29	LMG	C	518	48/55	0.89	0.16	39,58,70,76	0
25	CLA	B	616	60/65	0.89	0.15	24,32,66,70	0
31	SQD	F	102	36/54	0.90	0.17	44,61,69,70	0
25	CLA	c	506	65/65	0.90	0.13	33,41,71,75	0
33	STE	I	101	15/20	0.90	0.13	40,50,60,63	0
33	STE	d	410	17/20	0.91	0.13	43,48,62,62	0
25	CLA	C	506	65/65	0.91	0.12	27,37,69,71	0
25	CLA	C	512	65/65	0.91	0.14	34,44,75,80	0
25	CLA	B	606	65/65	0.91	0.12	22,32,58,64	0
27	BCR	d	404	40/40	0.91	0.15	38,47,72,79	0
25	CLA	D	404	65/65	0.91	0.14	25,32,81,91	0
29	LMG	d	409	44/55	0.91	0.14	37,44,66,73	0
33	STE	M	103	10/20	0.91	0.14	41,45,51,57	0
25	CLA	d	403	65/65	0.91	0.13	30,39,72,76	0
33	STE	C	521	16/20	0.92	0.10	34,43,57,57	0
27	BCR	k	101	40/40	0.92	0.11	44,52,60,62	0
32	DGD	H	102	62/66	0.92	0.12	32,41,48,52	0
25	CLA	a	610	65/65	0.92	0.14	22,28,65,69	0
32	DGD	h	103	62/66	0.92	0.13	38,43,53,57	0
27	BCR	K	102	40/40	0.92	0.10	37,45,55,58	0
25	CLA	b	605	65/65	0.93	0.11	28,36,59,62	0
25	CLA	b	608	65/65	0.93	0.14	30,39,55,68	0
27	BCR	h	102	40/40	0.93	0.11	37,49,62,64	0
27	BCR	K	103	40/40	0.93	0.13	32,43,51,57	0
31	SQD	a	615	54/54	0.93	0.15	37,54,68,70	0
27	BCR	b	618	40/40	0.93	0.11	31,43,56,59	0
25	CLA	B	604	65/65	0.94	0.11	22,28,57,61	0
25	CLA	B	609	65/65	0.94	0.12	26,34,50,54	0
33	STE	M	102	15/20	0.94	0.09	38,44,55,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
27	BCR	T	101	40/40	0.94	0.09	29,35,43,46	0
27	BCR	b	617	40/40	0.94	0.09	26,34,43,46	0
25	CLA	c	508	64/65	0.94	0.10	32,38,69,88	0
32	DGD	C	516	62/66	0.94	0.10	32,42,80,88	0
32	DGD	C	517	62/66	0.94	0.10	25,39,64,71	0
25	CLA	a	608	65/65	0.94	0.11	26,35,73,78	0
25	CLA	C	508	65/65	0.94	0.10	29,34,74,85	0
32	DGD	c	517	62/66	0.94	0.10	34,44,72,76	0
32	DGD	c	518	62/66	0.94	0.11	30,42,65,70	0
25	CLA	C	511	65/65	0.94	0.11	27,42,51,56	0
25	CLA	B	614	65/65	0.94	0.11	22,32,62,69	0
27	BCR	k	102	40/40	0.94	0.12	38,47,55,58	0
27	BCR	B	618	40/40	0.94	0.08	26,34,40,43	0
30	LHG	a	614	49/49	0.94	0.11	30,46,60,63	0
27	BCR	B	619	40/40	0.94	0.09	28,38,50,53	0
31	SQD	A	615	52/54	0.94	0.14	34,48,69,73	0
25	CLA	b	613	65/65	0.94	0.11	27,35,63,67	0
27	BCR	H	101	40/40	0.94	0.10	31,41,51,53	0
27	BCR	K	101	40/40	0.94	0.10	38,47,54,56	0
30	LHG	B	622	49/49	0.95	0.11	29,39,54,57	0
27	BCR	c	515	40/40	0.95	0.10	29,42,50,53	0
25	CLA	d	402	65/65	0.95	0.10	23,29,49,60	0
25	CLA	b	609	65/65	0.95	0.11	28,34,41,48	0
30	LHG	l	101	49/49	0.95	0.10	30,39,48,54	0
25	CLA	A	607	65/65	0.95	0.10	24,29,76,83	0
27	BCR	A	610	40/40	0.95	0.08	24,31,41,42	0
27	BCR	t	101	40/40	0.95	0.08	25,32,45,47	0
27	BCR	B	617	40/40	0.95	0.09	25,33,42,43	0
25	CLA	b	614	65/65	0.95	0.10	28,36,51,59	0
28	PL9	d	405	55/55	0.95	0.10	22,31,38,39	0
25	CLA	C	503	65/65	0.95	0.08	30,36,41,46	0
27	BCR	C	514	40/40	0.95	0.10	29,36,46,48	0
25	CLA	c	501	65/65	0.95	0.10	28,35,43,49	0
32	DGD	C	515	62/66	0.95	0.09	25,33,65,72	0
25	CLA	c	502	65/65	0.95	0.10	26,34,51,56	0
25	CLA	c	503	65/65	0.95	0.10	31,39,45,49	0
25	CLA	b	601	65/65	0.95	0.11	30,37,51,53	0
25	CLA	c	507	65/65	0.95	0.11	28,37,49,52	0
32	DGD	c	516	62/66	0.95	0.10	25,35,58,68	0
25	CLA	b	603	65/65	0.95	0.10	22,31,64,72	0
27	BCR	a	611	40/40	0.95	0.08	23,31,42,44	0
27	BCR	b	616	40/40	0.95	0.09	27,37,42,45	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
25	CLA	c	511	65/65	0.95	0.11	40,47,57,62	0
25	CLA	B	602	65/65	0.95	0.10	26,32,48,53	0
25	CLA	A	609	54/65	0.95	0.12	20,26,54,60	0
30	LHG	A	614	47/49	0.95	0.11	27,38,64,73	0
25	CLA	B	608	65/65	0.96	0.09	25,30,46,51	0
25	CLA	b	610	65/65	0.96	0.09	22,31,46,52	0
25	CLA	b	611	65/65	0.96	0.09	21,30,42,45	0
25	CLA	b	612	65/65	0.96	0.09	20,28,59,63	0
25	CLA	C	507	65/65	0.96	0.10	26,33,46,51	0
25	CLA	B	603	65/65	0.96	0.09	22,27,51,59	0
25	CLA	C	509	65/65	0.96	0.10	27,35,49,53	0
25	CLA	C	510	65/65	0.96	0.09	29,36,47,53	0
25	CLA	B	610	65/65	0.96	0.09	22,30,36,40	0
25	CLA	B	611	65/65	0.96	0.09	21,28,40,42	0
25	CLA	c	504	60/65	0.96	0.09	29,37,64,68	0
25	CLA	c	505	65/65	0.96	0.09	27,36,54,57	0
25	CLA	B	612	65/65	0.96	0.09	21,28,38,41	0
25	CLA	D	403	65/65	0.96	0.09	20,25,45,51	0
25	CLA	B	613	65/65	0.96	0.09	21,27,54,65	0
25	CLA	c	509	65/65	0.96	0.10	32,39,53,57	0
25	CLA	c	510	65/65	0.96	0.10	29,41,50,54	0
25	CLA	a	607	65/65	0.96	0.09	22,27,37,44	0
25	CLA	A	606	65/65	0.96	0.09	18,24,35,45	0
28	PL9	D	406	55/55	0.96	0.08	21,28,36,40	0
25	CLA	B	615	65/65	0.96	0.08	25,32,49,54	0
25	CLA	A	612	65/65	0.96	0.08	17,25,39,45	0
25	CLA	b	602	65/65	0.96	0.10	24,31,52,61	0
25	CLA	C	502	65/65	0.96	0.08	27,32,44,50	0
26	PHO	a	609	64/64	0.96	0.09	21,28,33,38	0
26	PHO	d	401	64/64	0.96	0.09	23,34,40,44	0
25	CLA	B	607	65/65	0.96	0.09	19,26,51,53	0
25	CLA	b	606	65/65	0.96	0.10	23,30,55,59	0
25	CLA	b	607	65/65	0.96	0.09	29,36,52,56	0
25	CLA	C	505	65/65	0.96	0.09	25,33,55,61	0
35	HEM	F	101	43/43	0.96	0.14	38,43,51,63	0
35	HEM	e	101	43/43	0.96	0.13	46,55,66,78	0
30	LHG	d	406	49/49	0.97	0.10	29,36,42,51	0
30	LHG	d	407	39/49	0.97	0.08	31,40,56,62	0
25	CLA	a	613	65/65	0.97	0.08	19,27,38,43	0
25	CLA	C	504	59/65	0.97	0.08	29,35,63,69	0
26	PHO	A	608	64/64	0.97	0.08	18,25,32,36	0
26	PHO	D	402	64/64	0.97	0.09	20,29,34,37	0

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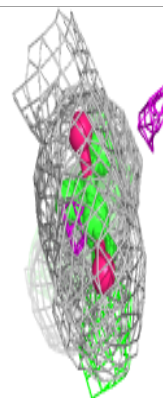
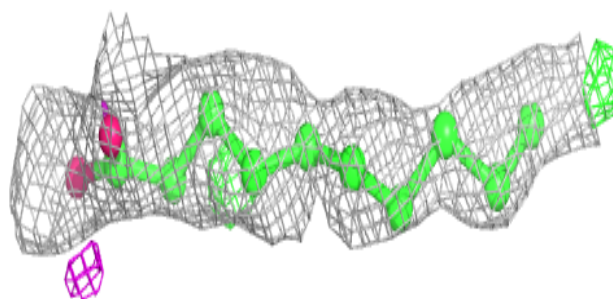
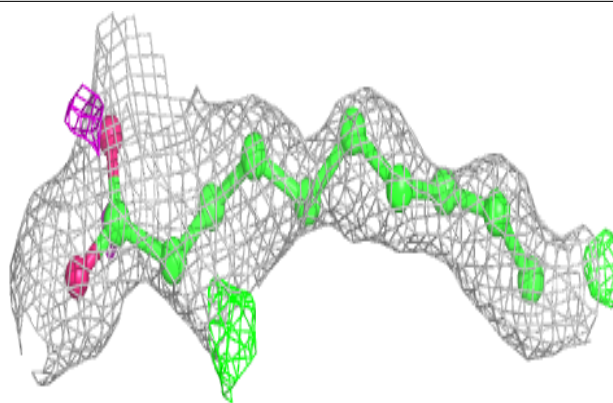
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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(\AA^2)	Q<0.9
25	CLA	B	605	65/65	0.97	0.10	22,28,38,40	0
30	LHG	D	408	49/49	0.97	0.09	27,34,44,48	0
25	CLA	C	501	65/65	0.97	0.09	26,30,40,44	0
34	BCT	D	401	4/4	0.97	0.16	35,36,39,40	0
34	BCT	a	606	4/4	0.97	0.11	30,36,40,46	0
30	LHG	L	101	49/49	0.97	0.10	29,36,47,53	0
25	CLA	b	604	65/65	0.97	0.09	22,30,40,44	0
36	HEC	V	201	43/43	0.97	0.11	23,30,38,42	0
21	OEX	A	601[C]	10/10	0.98	0.10	22,25,28,28	10
21	OEX	A	601[B]	10/10	0.98	0.10	25,29,33,33	10
36	HEC	v	201	43/43	0.98	0.10	28,33,37,43	0
22	OEY	A	602[A]	11/11	0.99	0.10	26,29,32,32	11
22	OEY	a	602[A]	11/11	0.99	0.09	28,30,34,34	11
23	FE2	a	603	1/1	0.99	0.04	34,34,34,34	0
24	CL	A	604	1/1	0.99	0.03	28,28,28,28	0
24	CL	A	605	1/1	0.99	0.05	29,29,29,29	0
24	CL	a	604	1/1	0.99	0.09	27,27,27,27	0
21	OEX	a	601[B]	10/10	0.99	0.09	26,29,32,32	10
21	OEX	a	601[C]	10/10	0.99	0.09	21,23,25,25	10
23	FE2	A	603	1/1	1.00	0.02	30,30,30,30	0
24	CL	a	605	1/1	1.00	0.06	29,29,29,29	0

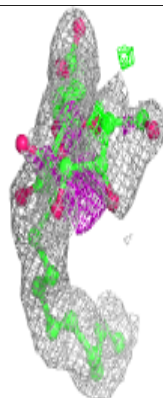
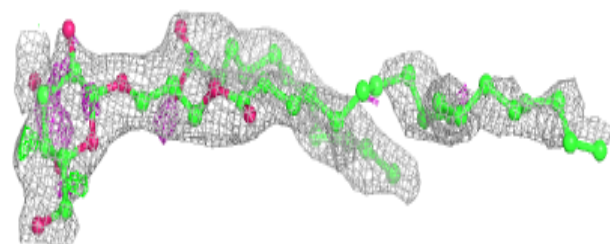
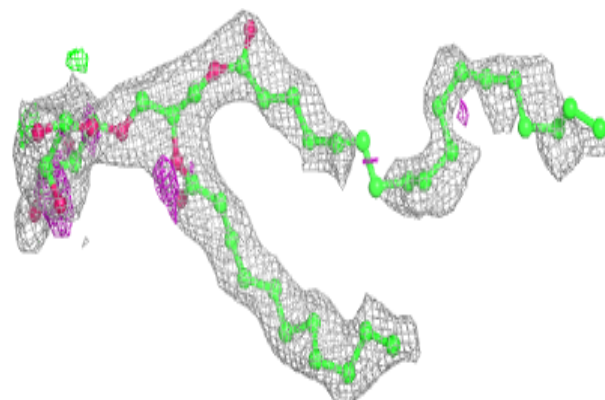
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around STE a 618:

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

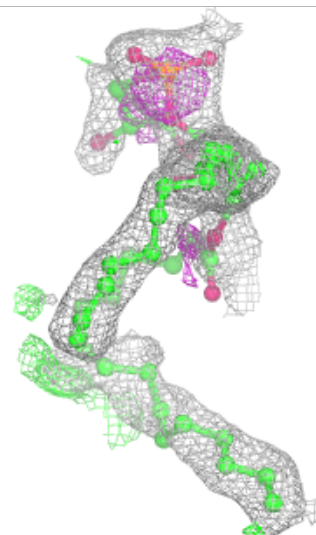
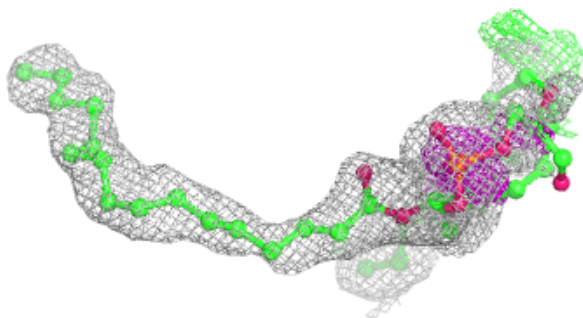
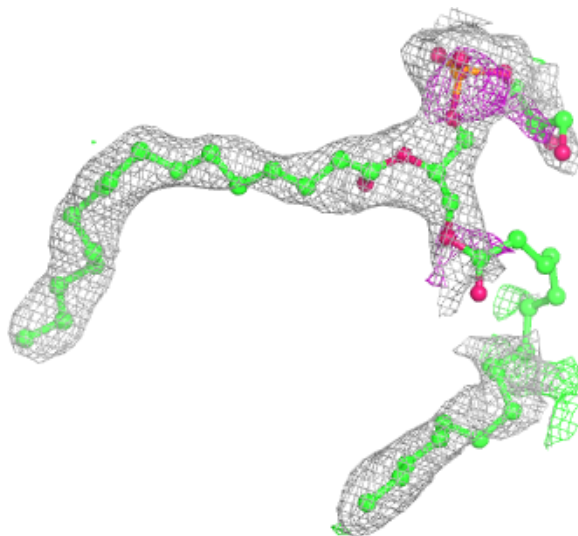
**Electron density around LMG c 521:**

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



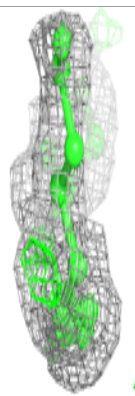
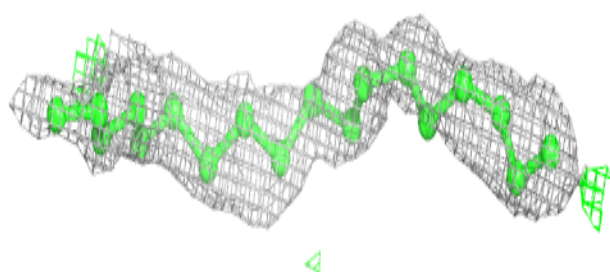
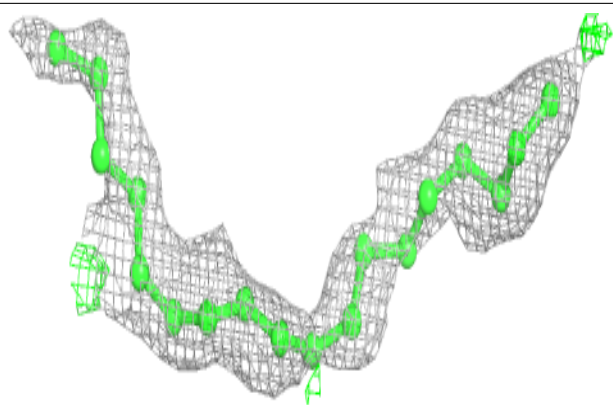
Electron density around LHG E 101:

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

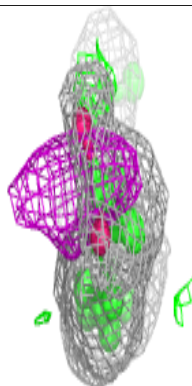
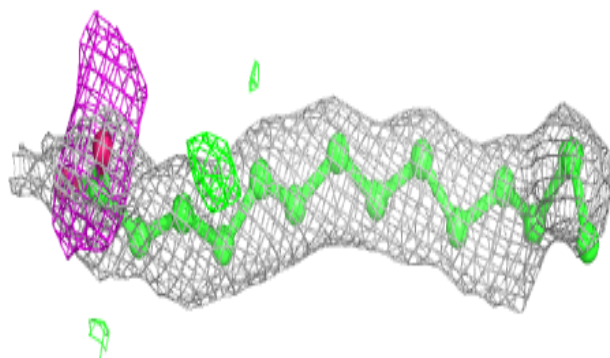
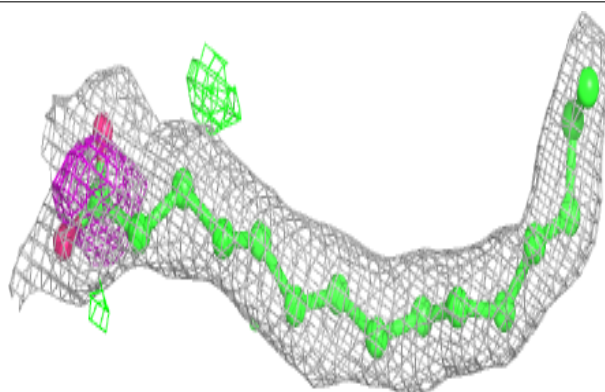


Electron density around STE H 103:

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

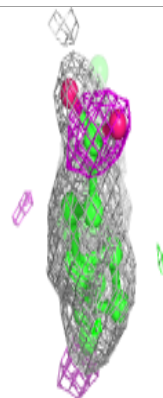
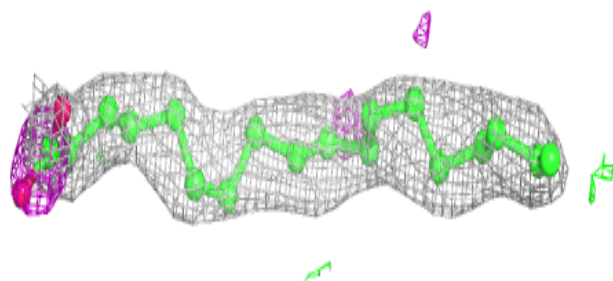
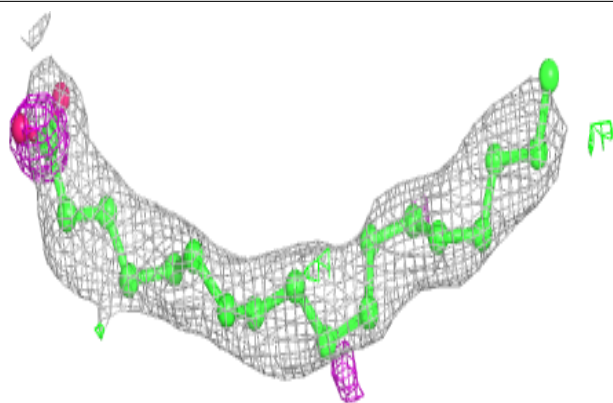
**Electron density around STE B 620:**

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

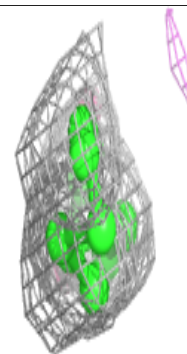
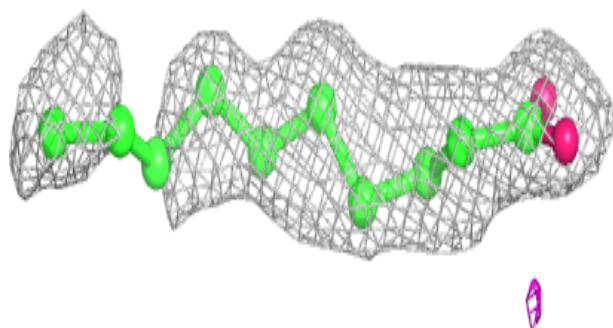
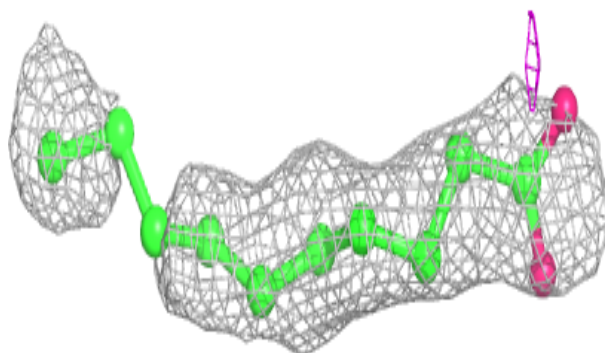


Electron density around STE X 101:

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

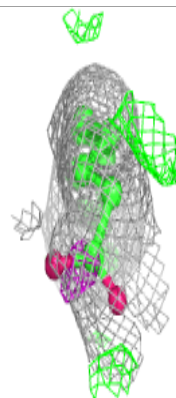
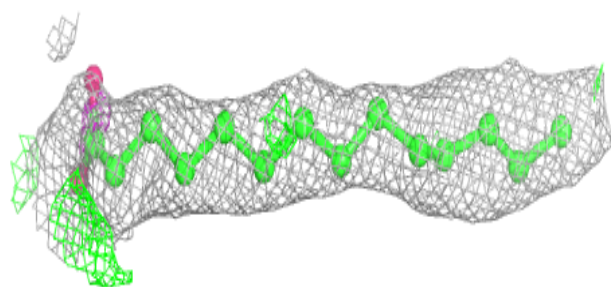
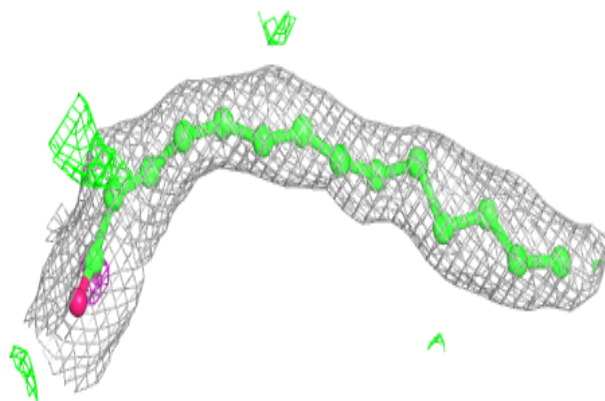
**Electron density around STE k 103:**

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

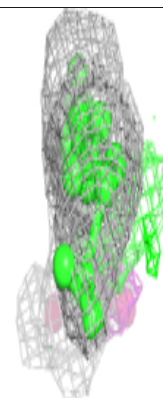
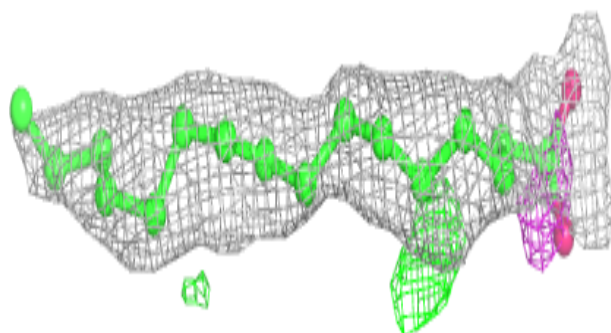
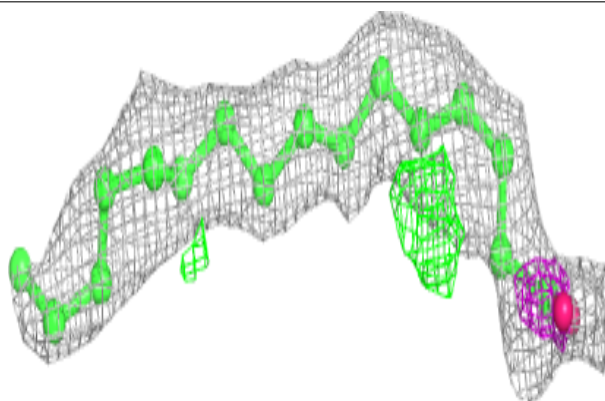


Electron density around STE b 623:

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

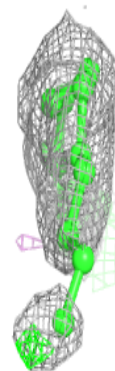
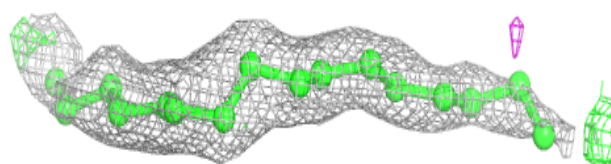
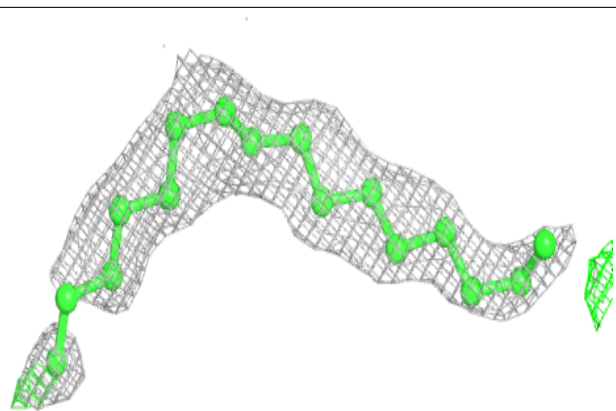
**Electron density around STE t 104:**

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



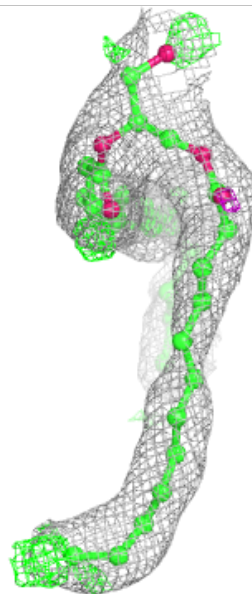
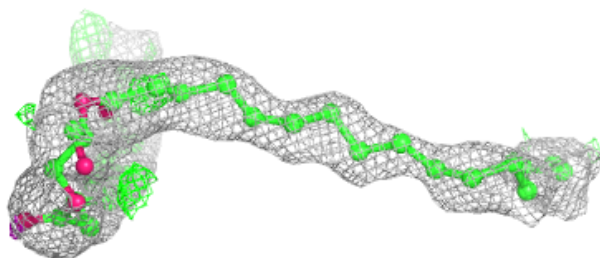
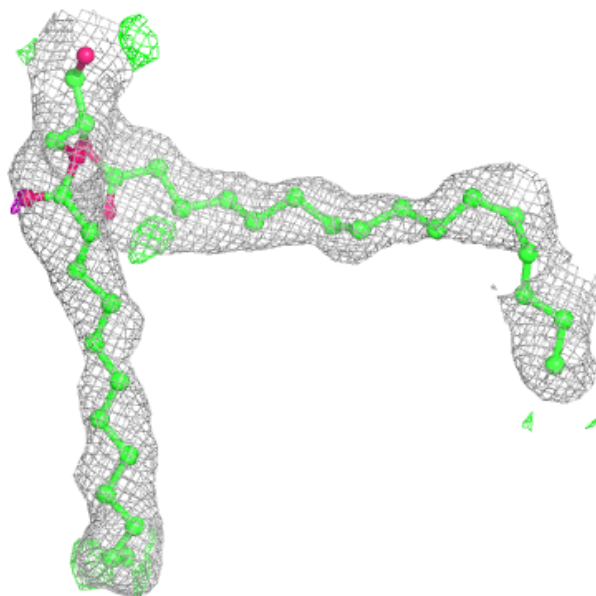
Electron density around STE B 626:

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



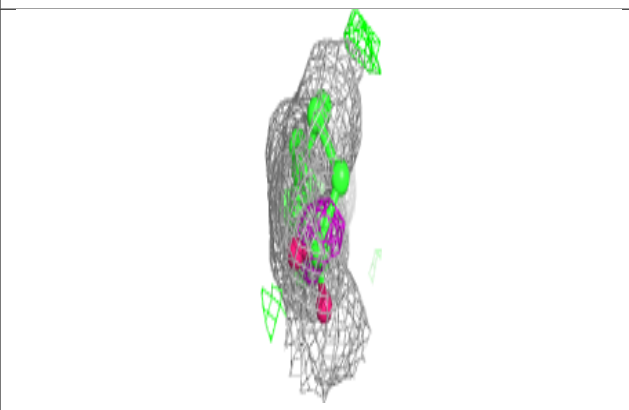
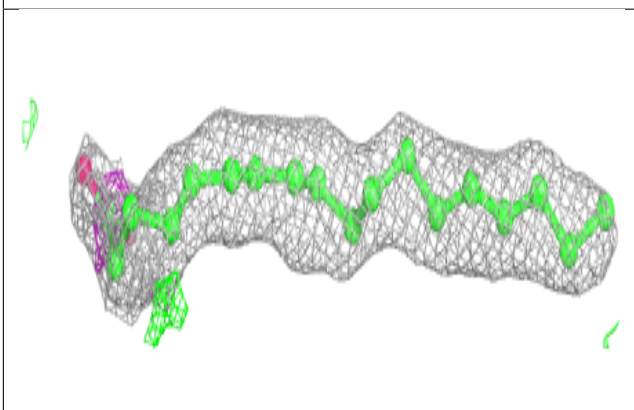
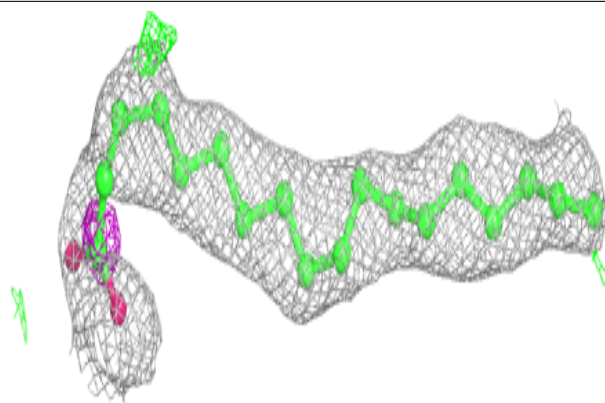
Electron density around SQD a 616:

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

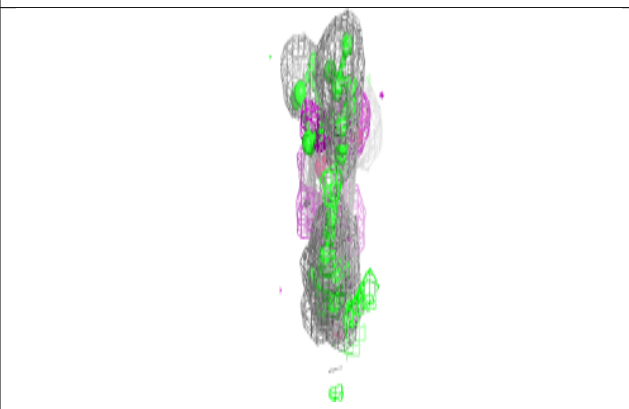
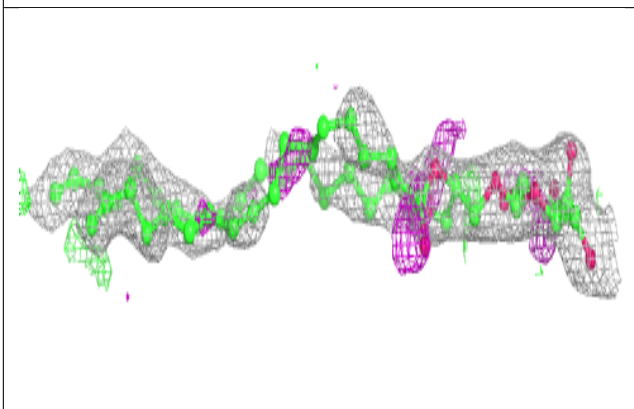
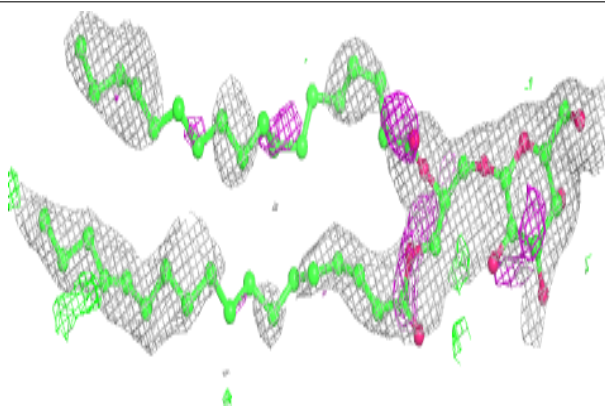


Electron density around STE c 520:

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

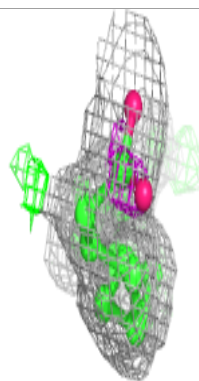
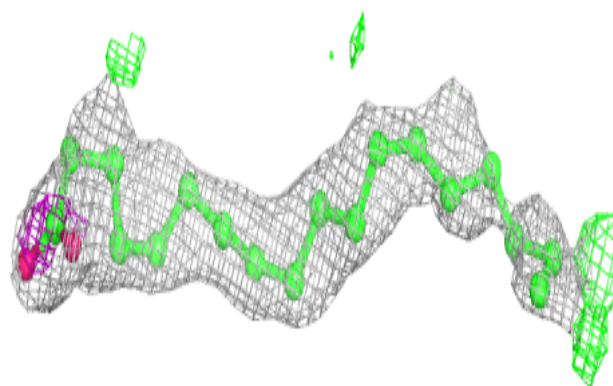
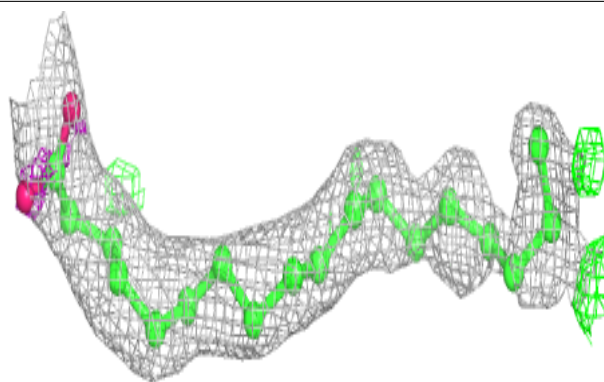
**Electron density around LMG b 622:**

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

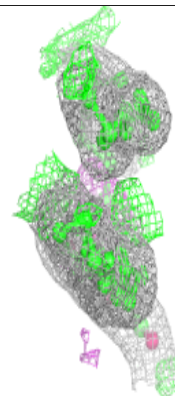
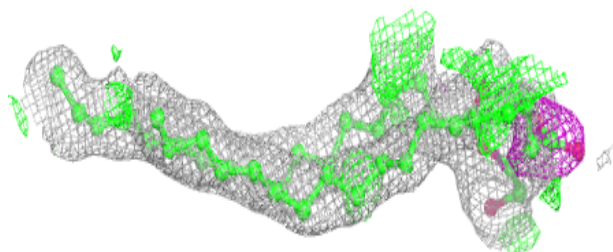
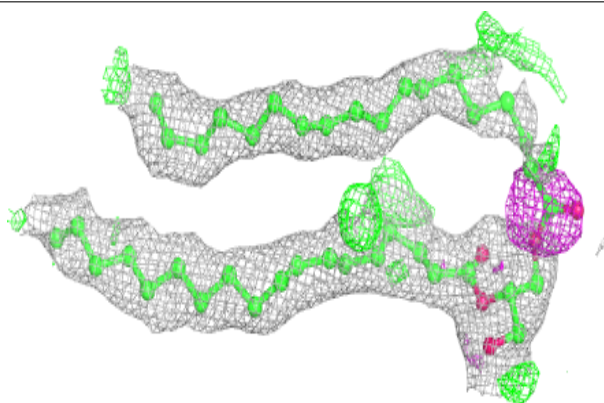


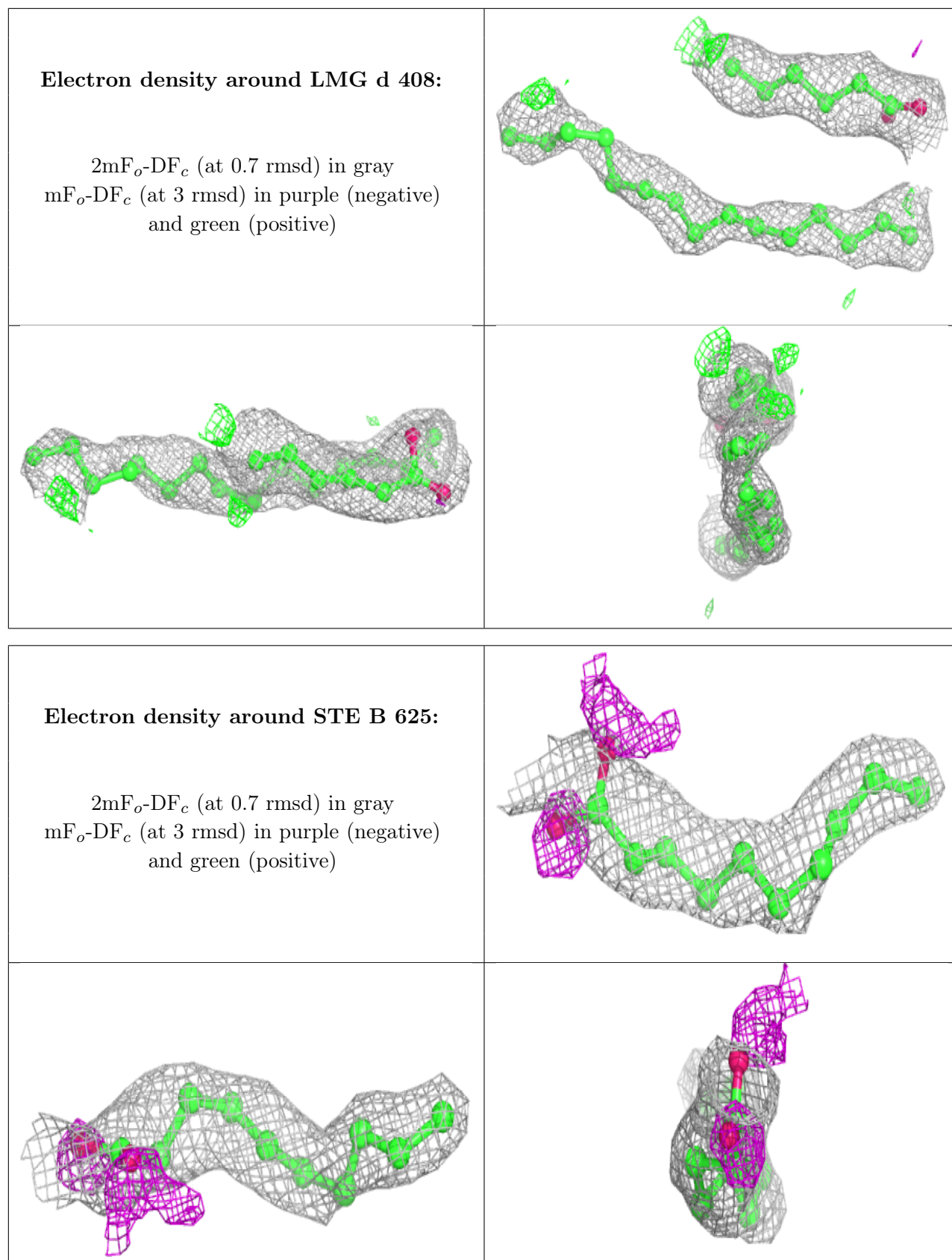
Electron density around STE b 621:

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

**Electron density around DGD a 617:**

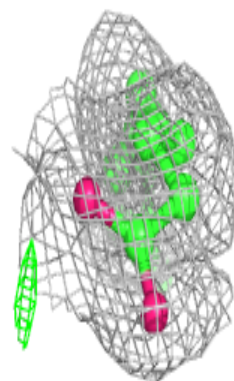
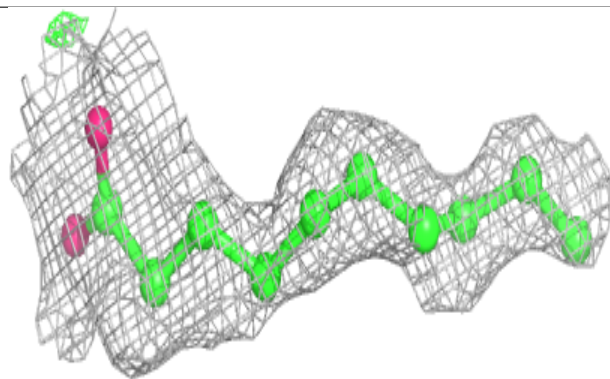
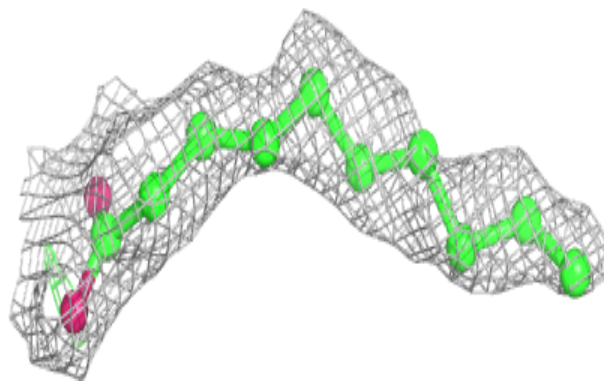
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



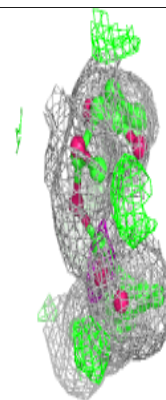
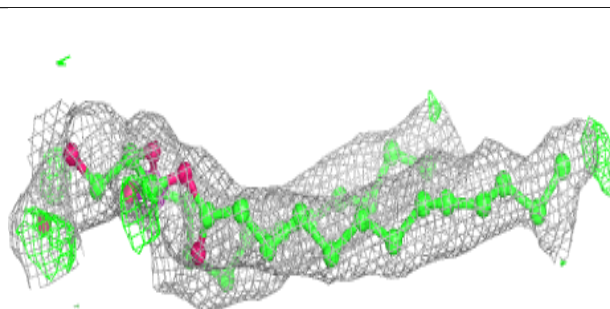
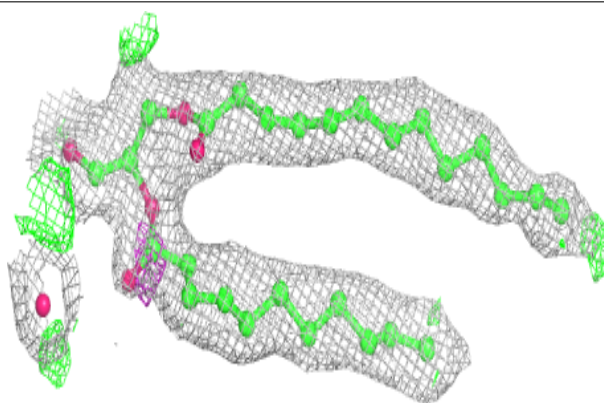


Electron density around STE E 102:

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

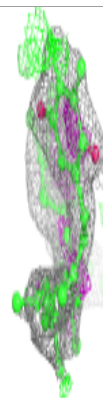
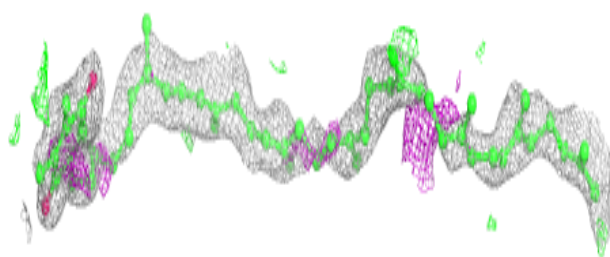
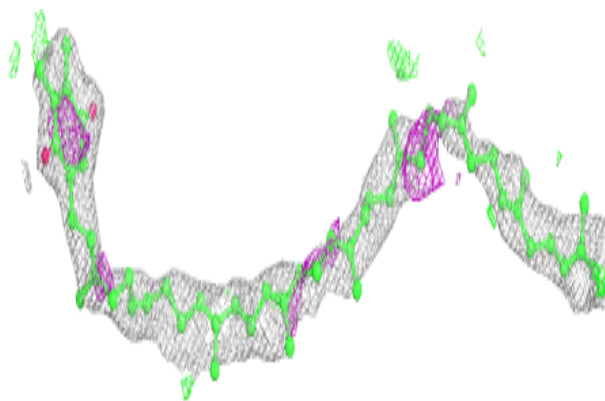
**Electron density around LMG D 409:**

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

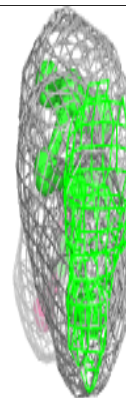
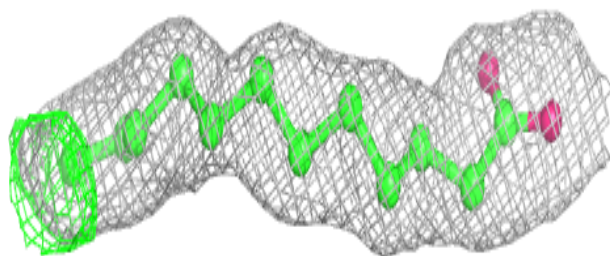
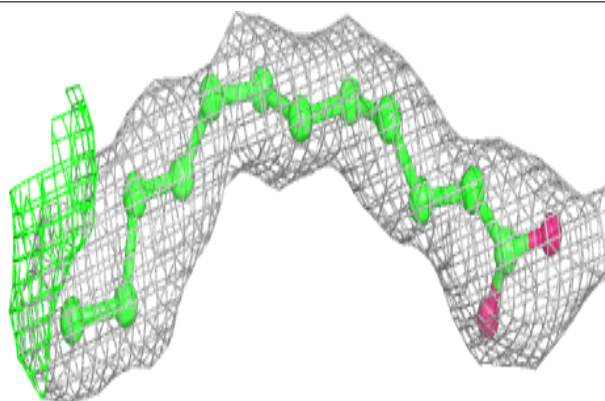


Electron density around PL9 A 611:

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

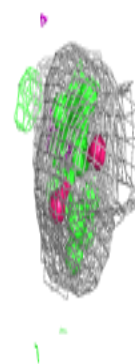
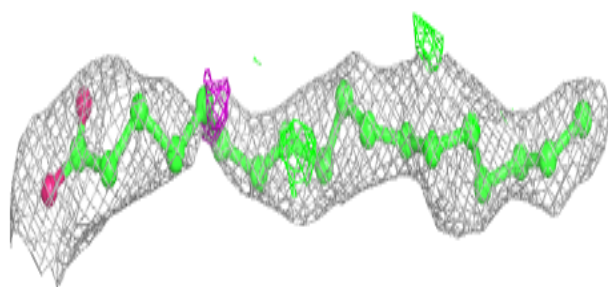
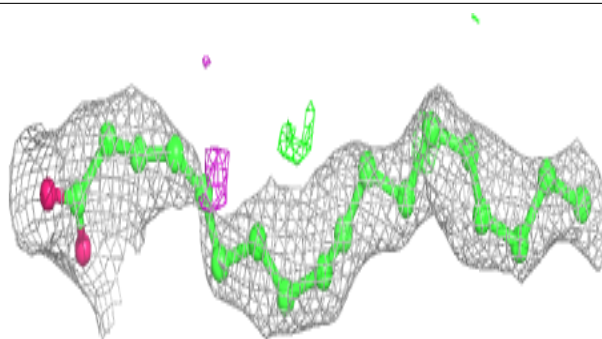
**Electron density around STE t 102:**

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

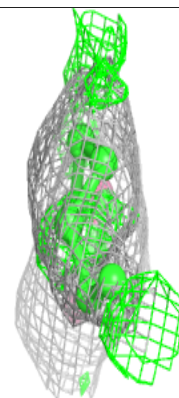
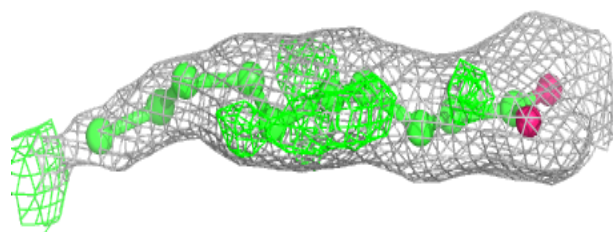
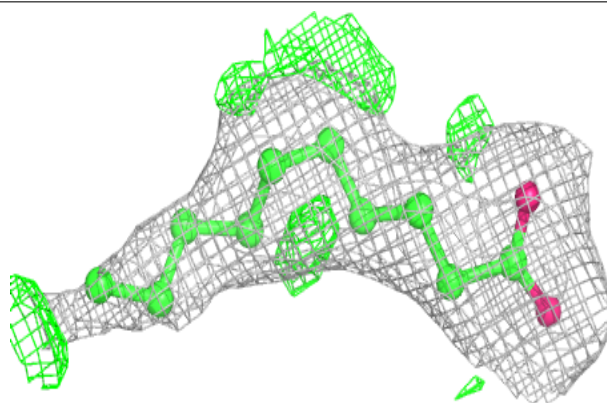


Electron density around STE b 625:

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

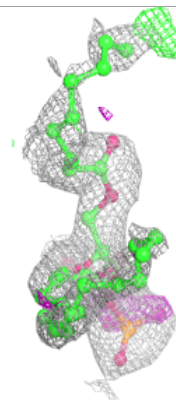
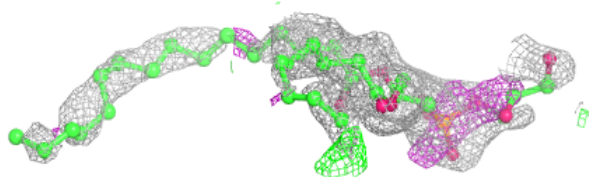
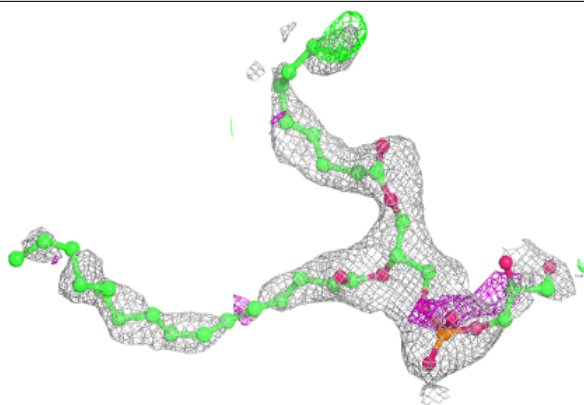
**Electron density around STE C 519:**

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

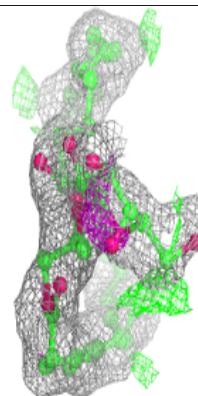
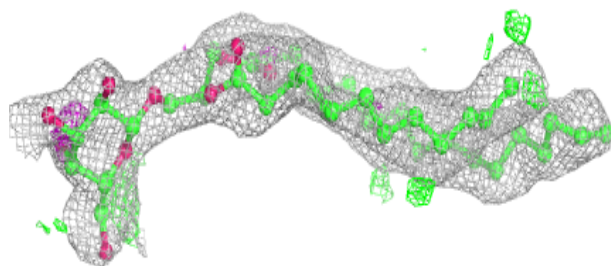
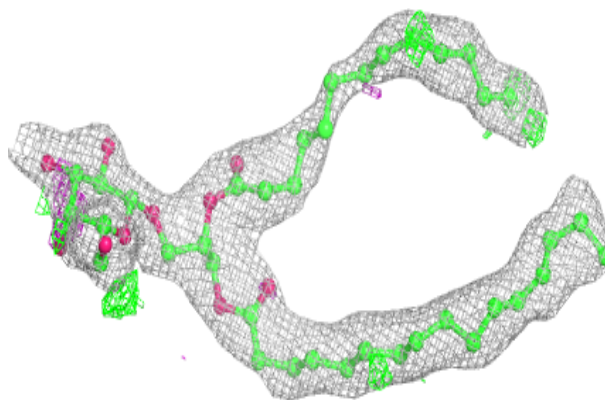


Electron density around LHG e 102:

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

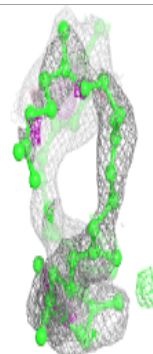
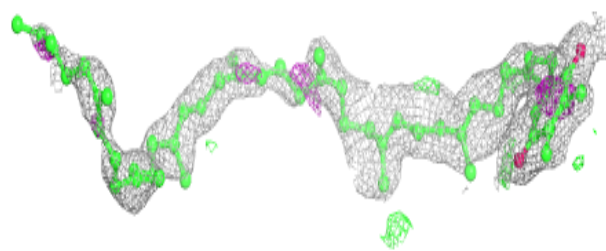
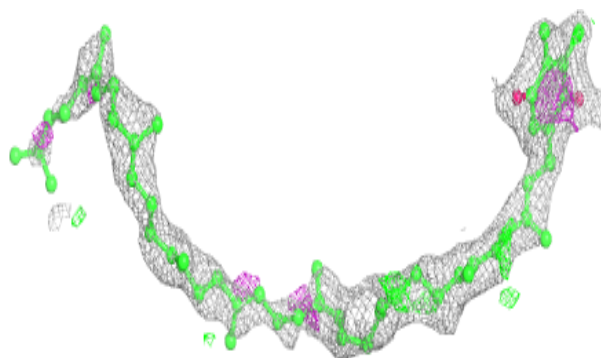
**Electron density around LMG A 613:**

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

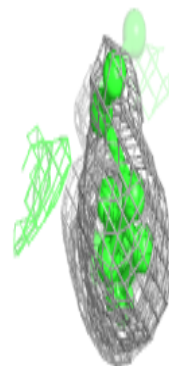
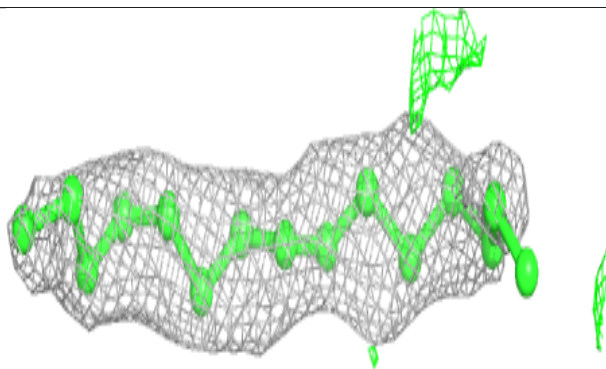
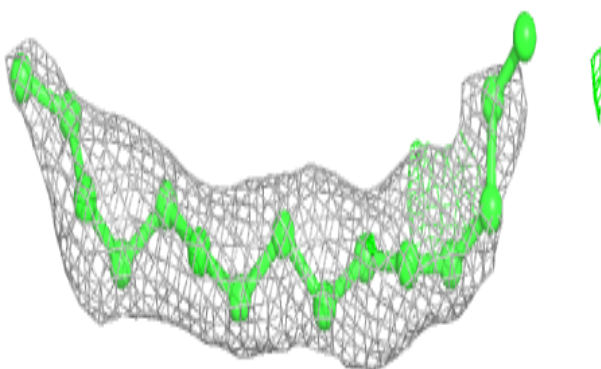


Electron density around PL9 a 612:

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

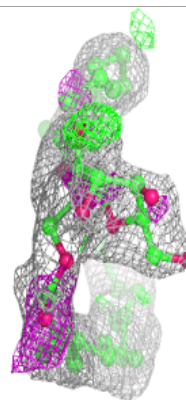
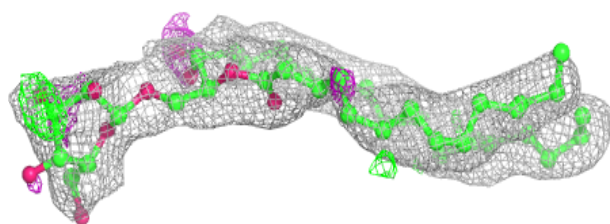
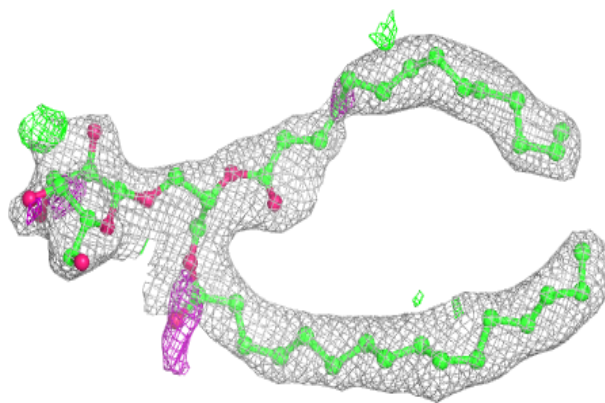
**Electron density around STE b 624:**

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

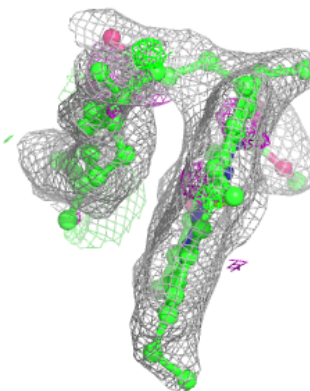
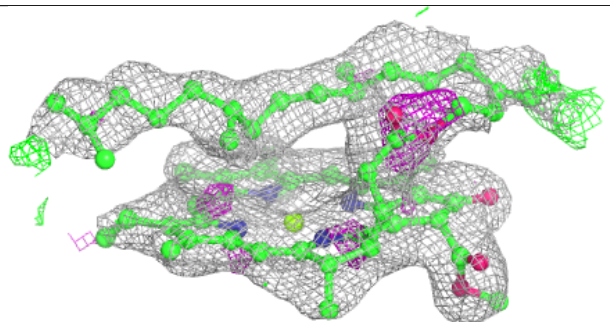
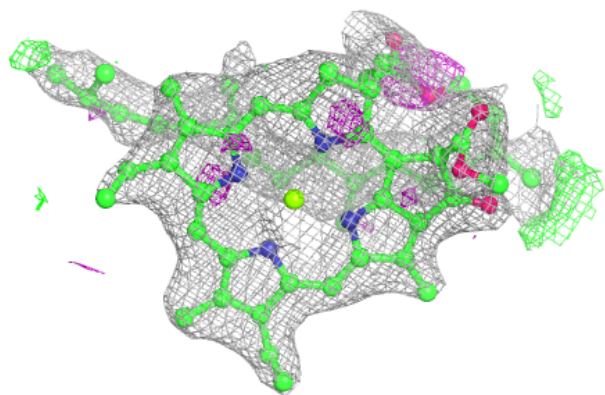


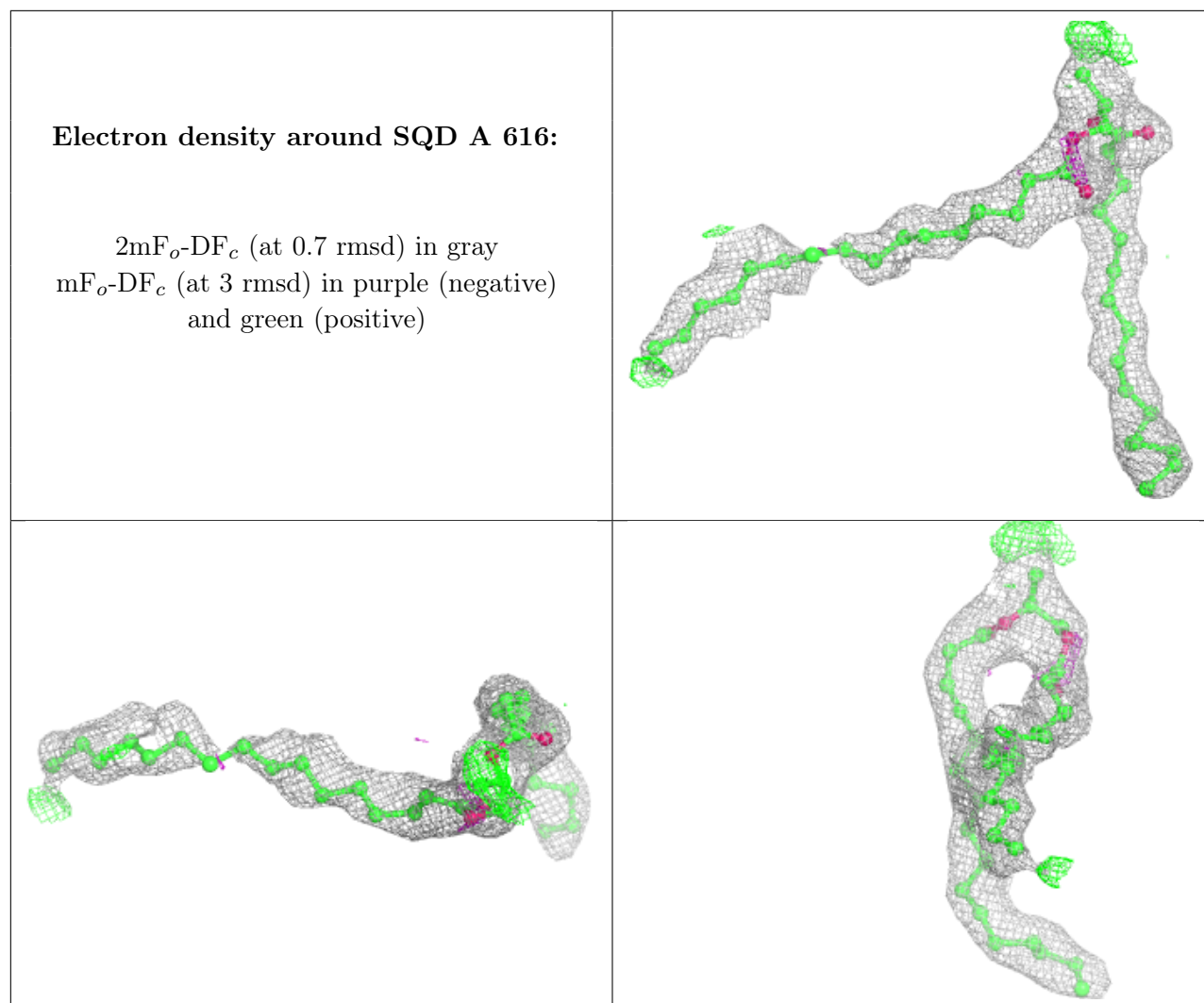
Electron density around LMG c 522:

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

**Electron density around CLA h 101:**

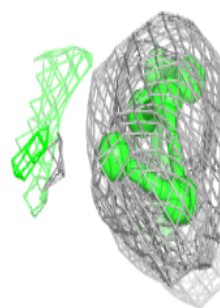
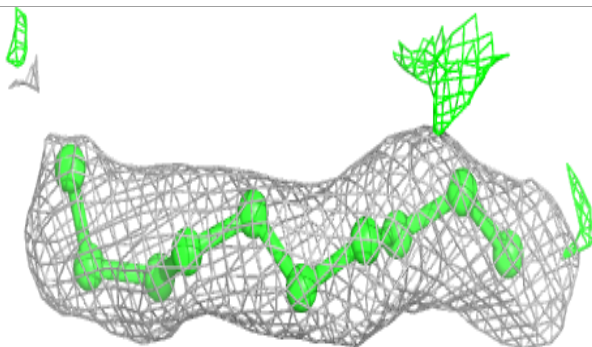
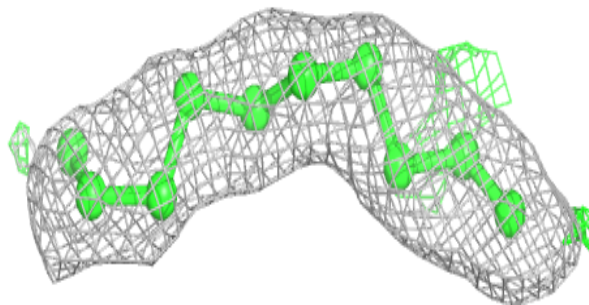
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



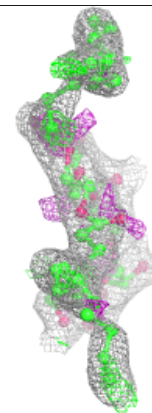
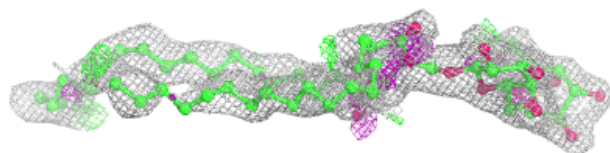
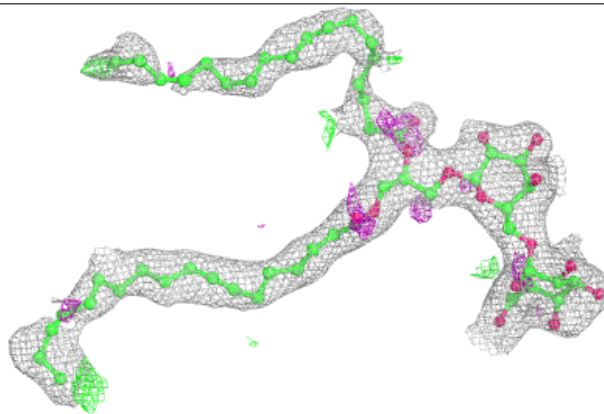


Electron density around STE b 626:

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

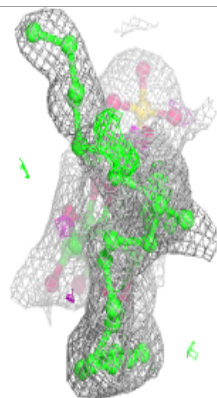
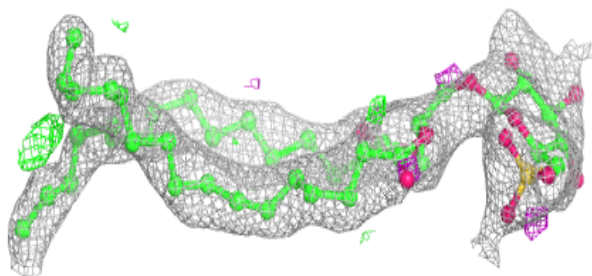
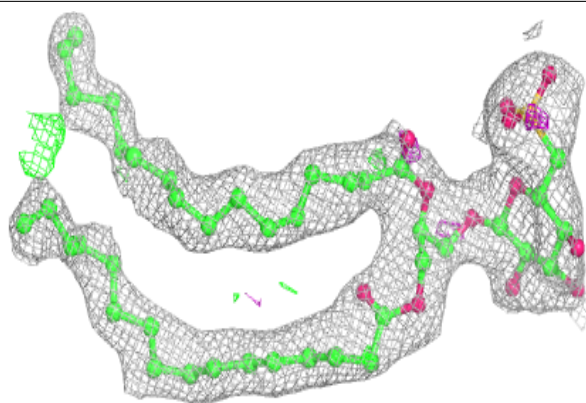
**Electron density around DGD A 617:**

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

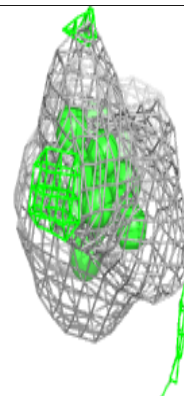
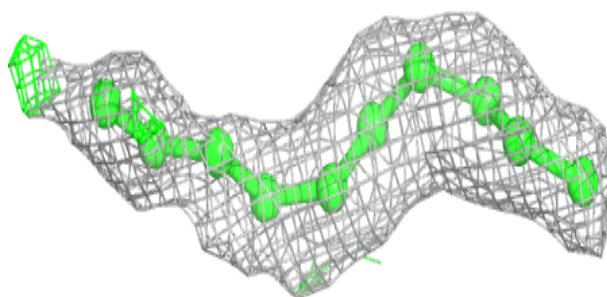
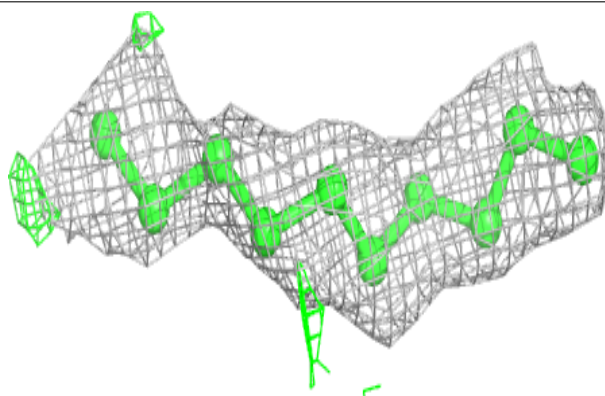


Electron density around SQD B 623:

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

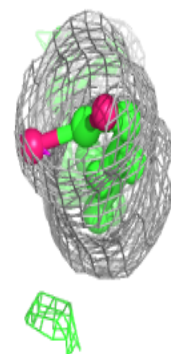
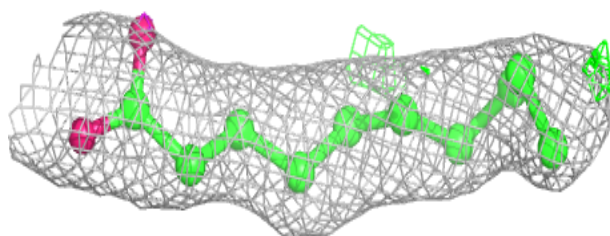
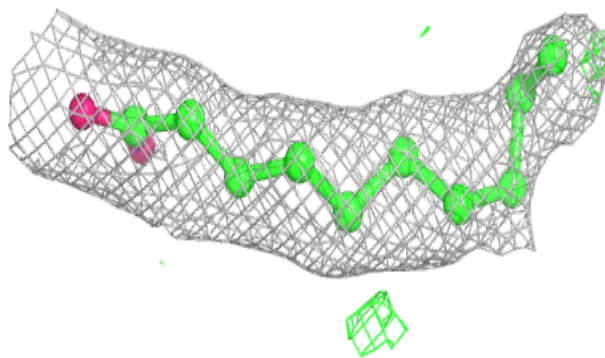
**Electron density around STE t 103:**

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

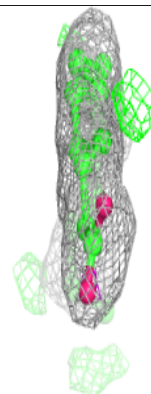
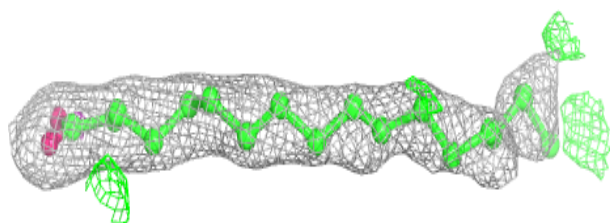
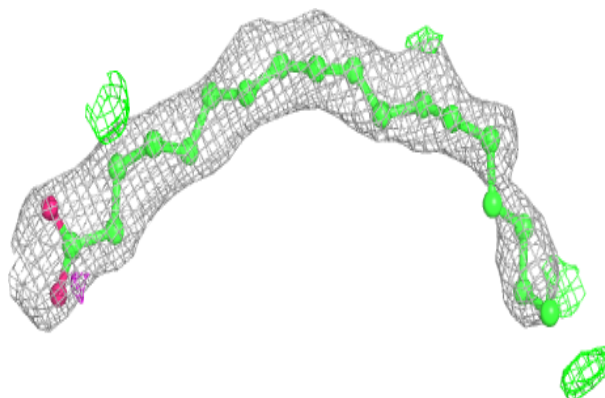


Electron density around STE m 102:

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

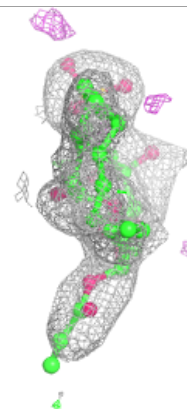
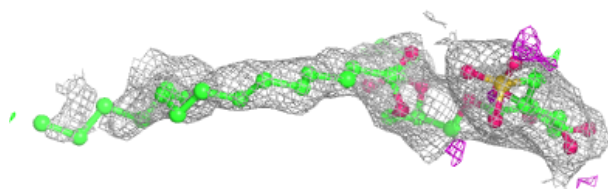
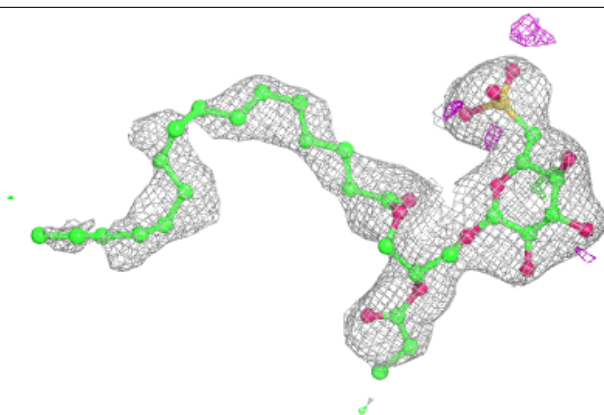
**Electron density around STE x 101:**

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



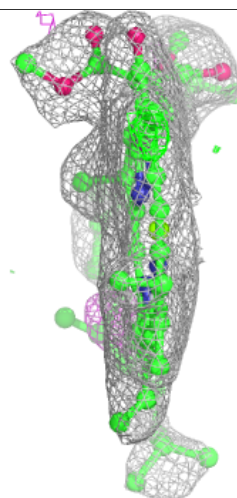
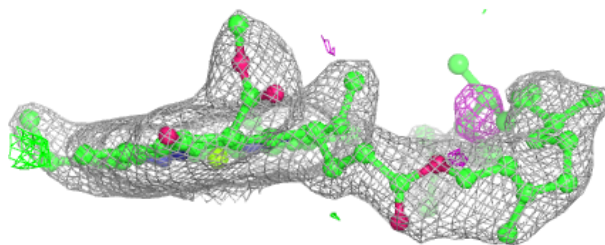
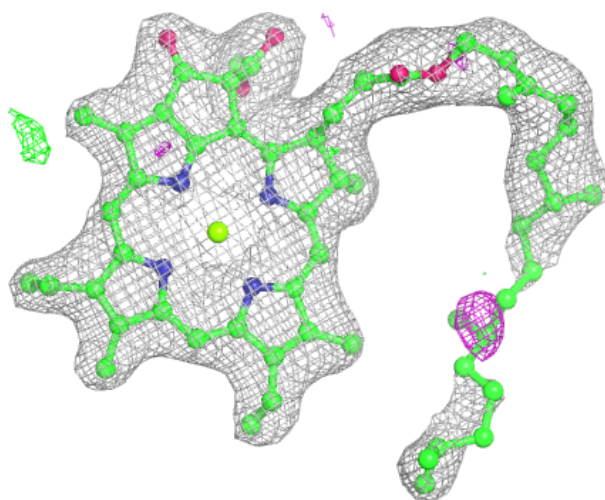
Electron density around SQD f 101:

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



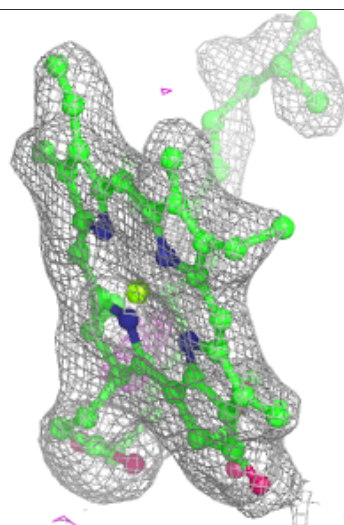
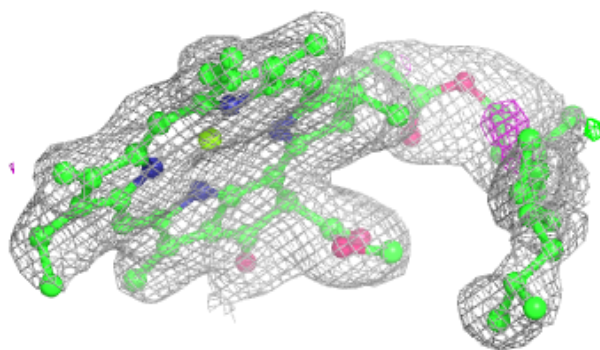
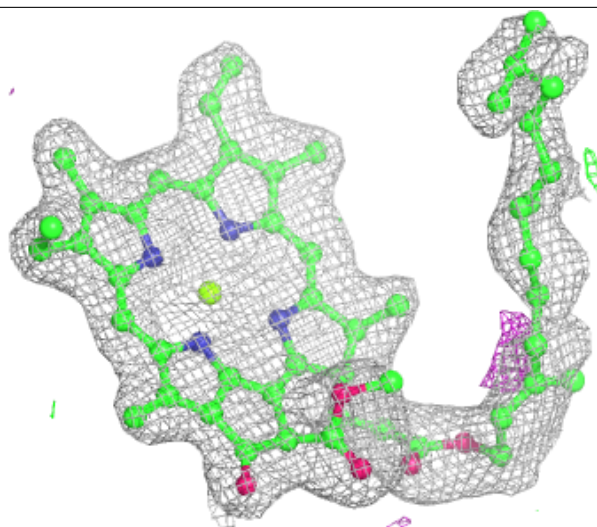
Electron density around CLA c 512:

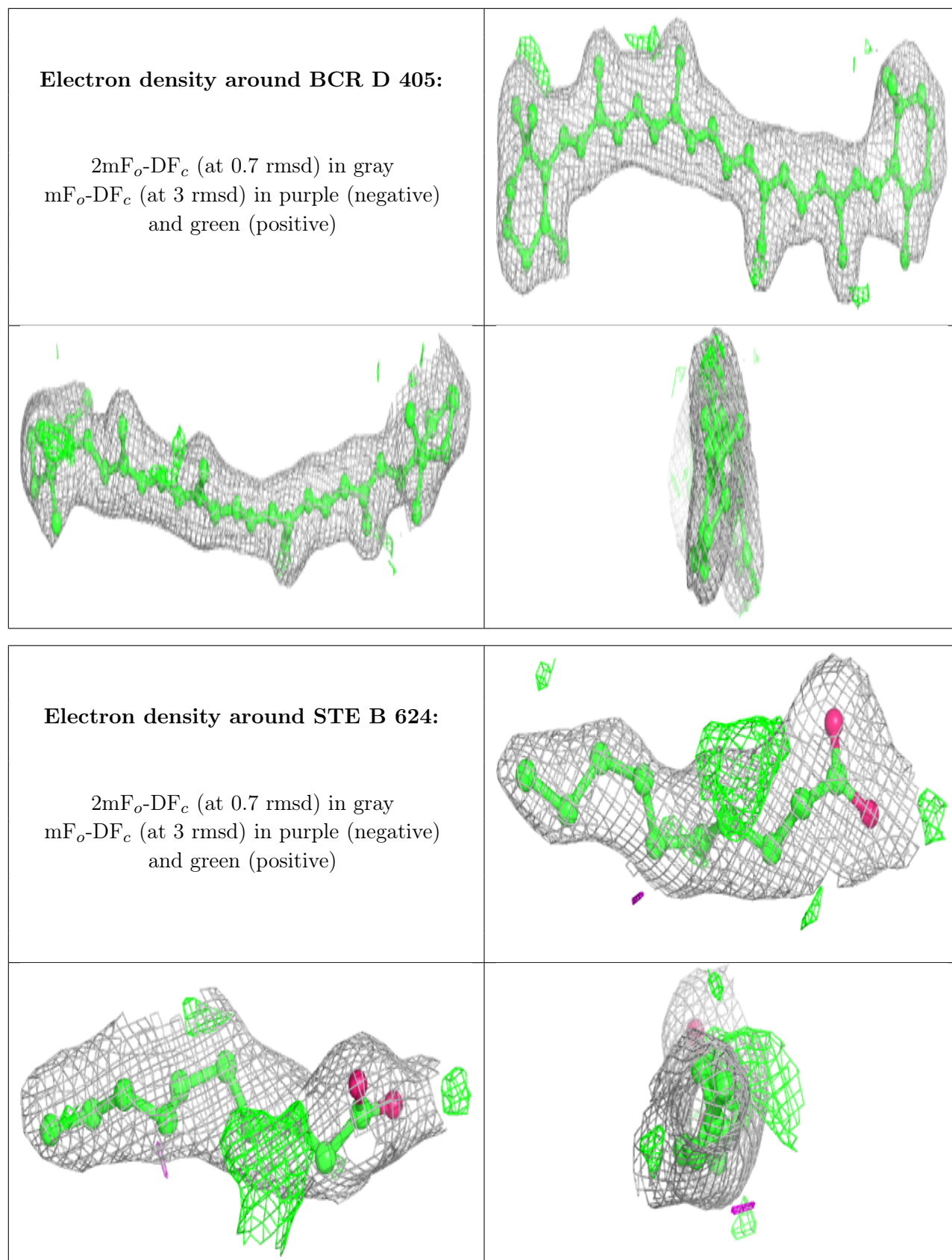
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around CLA b 615:

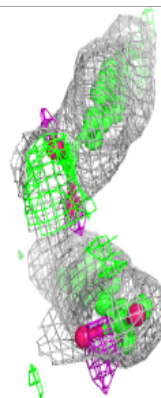
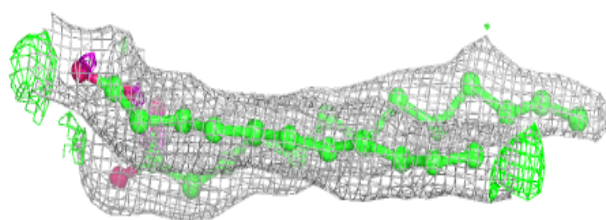
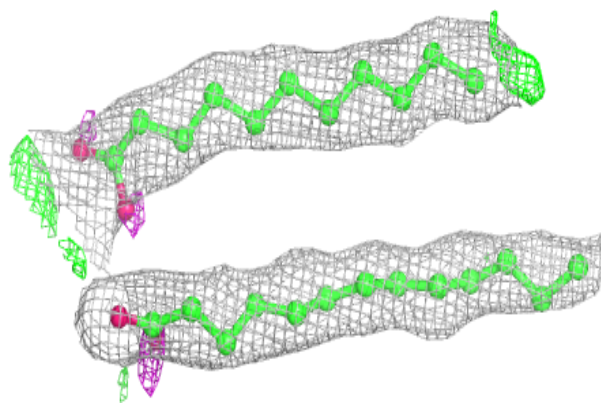
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



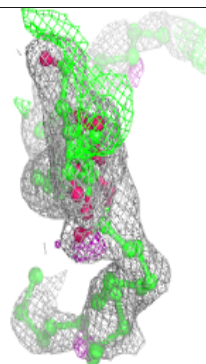
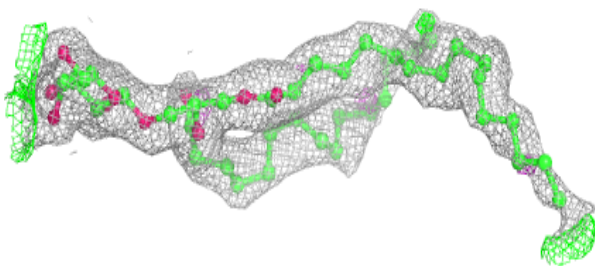
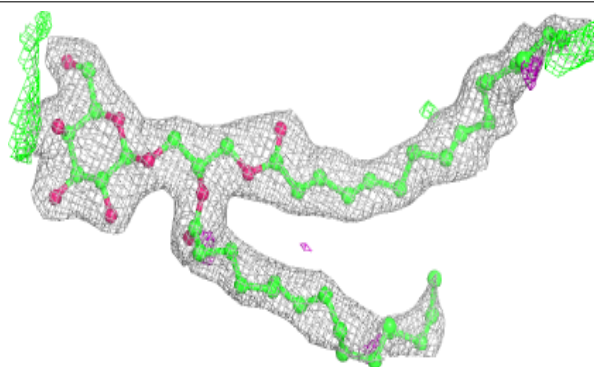


Electron density around LMG B 621:

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

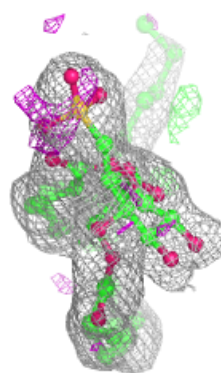
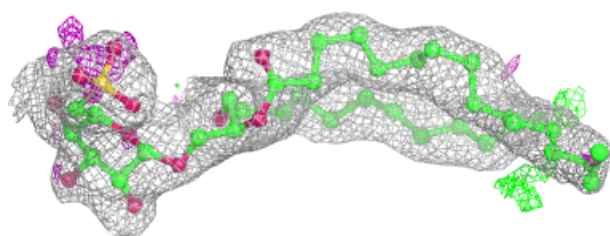
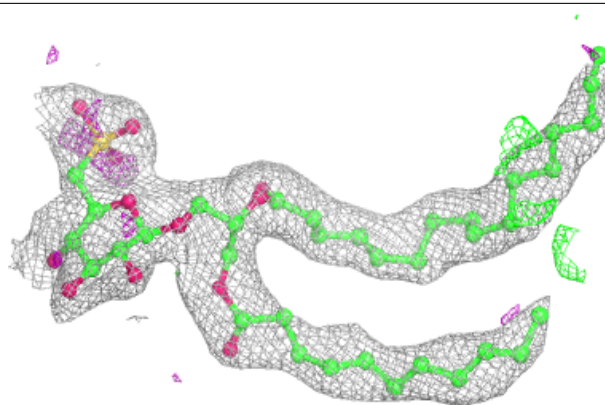
**Electron density around LMG D 407:**

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

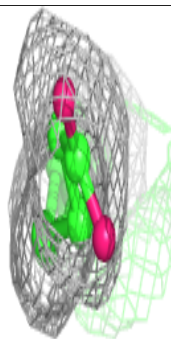
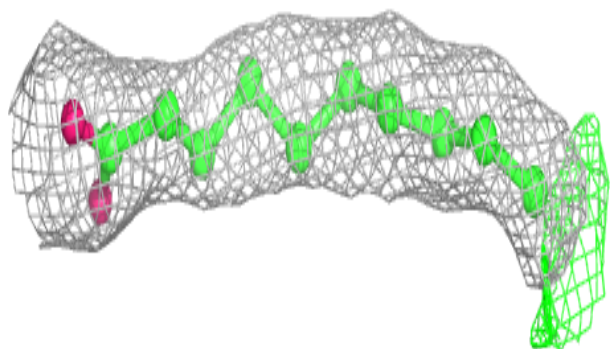
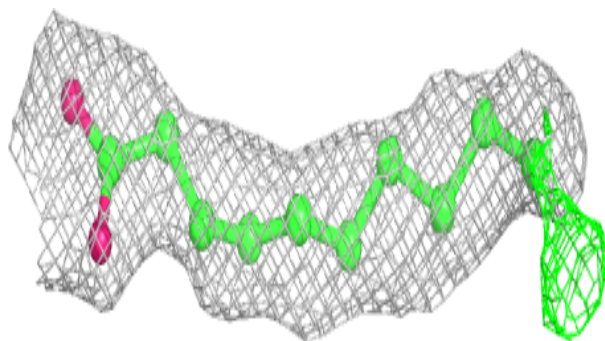


Electron density around SQD b 619:

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

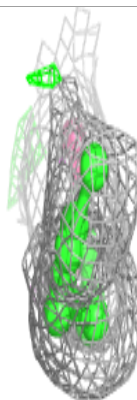
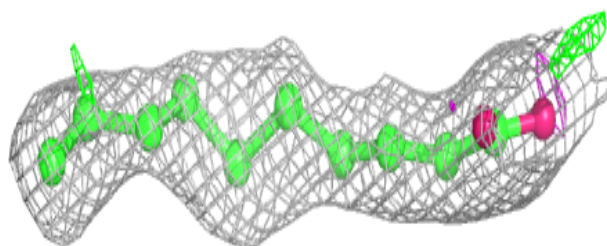
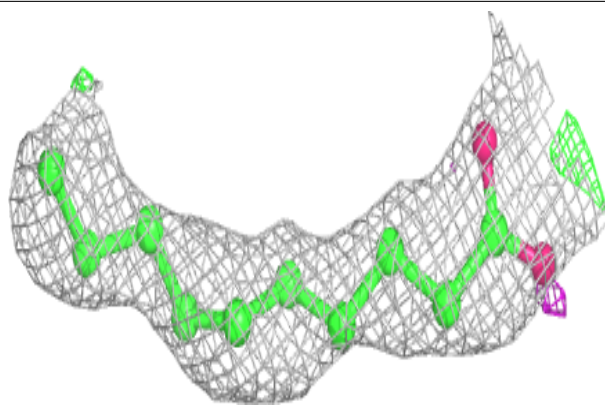
**Electron density around STE j 101:**

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

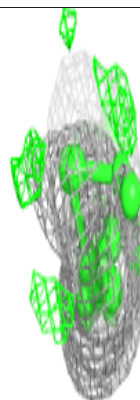
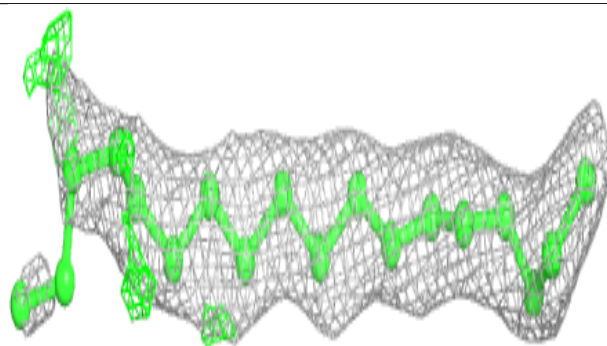
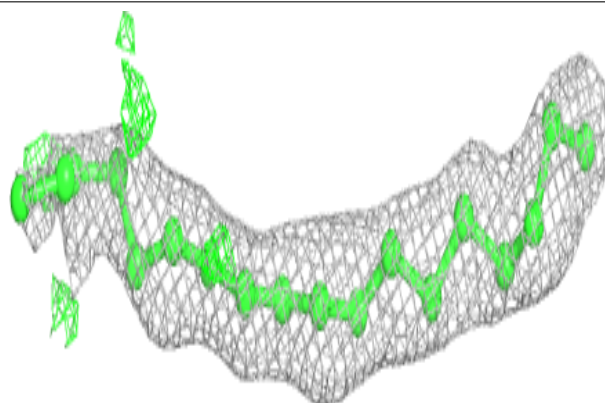


Electron density around STE C 520:

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

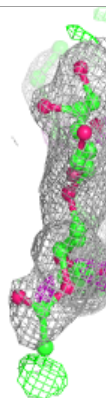
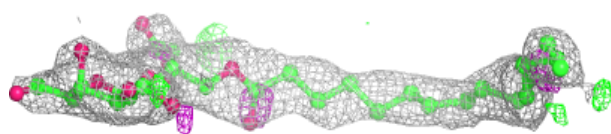
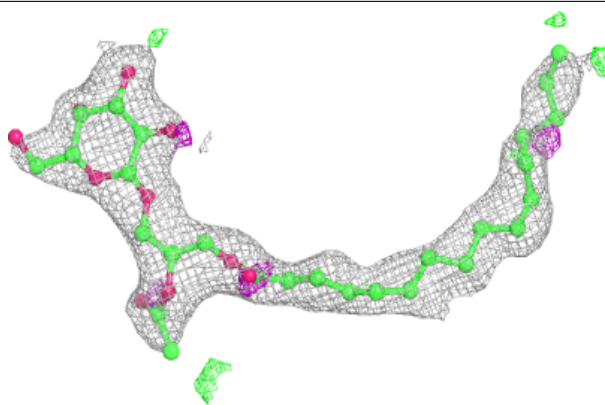
**Electron density around STE I 102:**

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

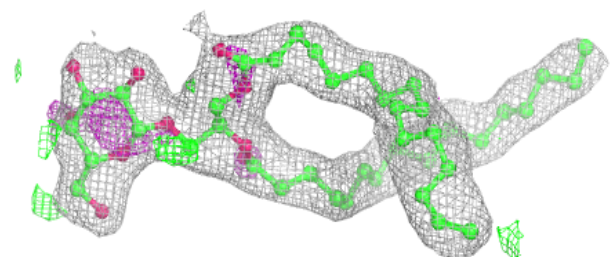
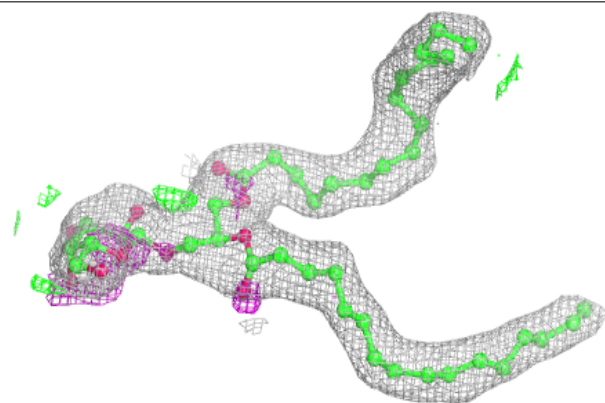


Electron density around LMG c 519:

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

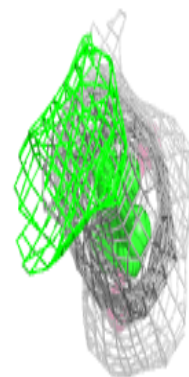
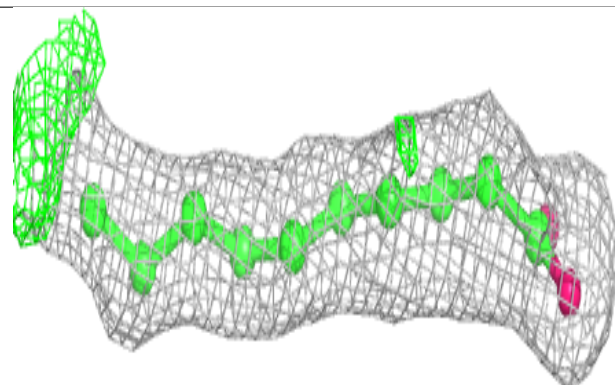
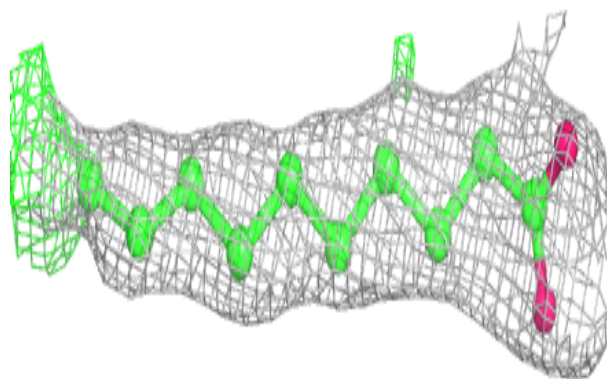
**Electron density around LMG m 101:**

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

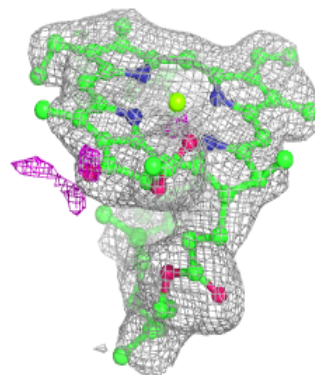
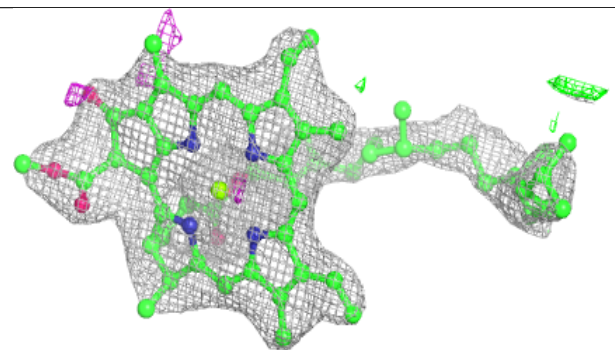
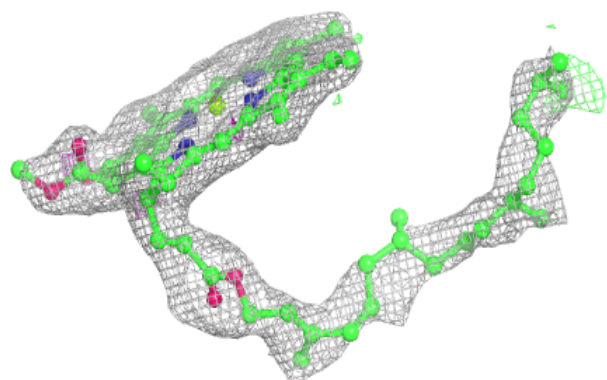


Electron density around STE J 101:

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

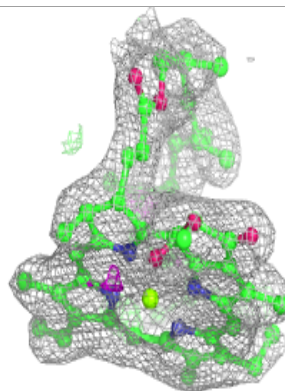
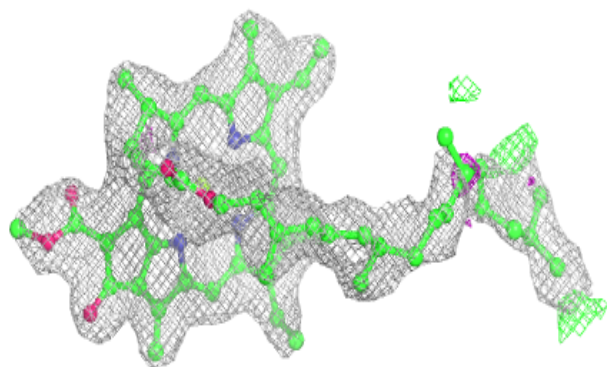
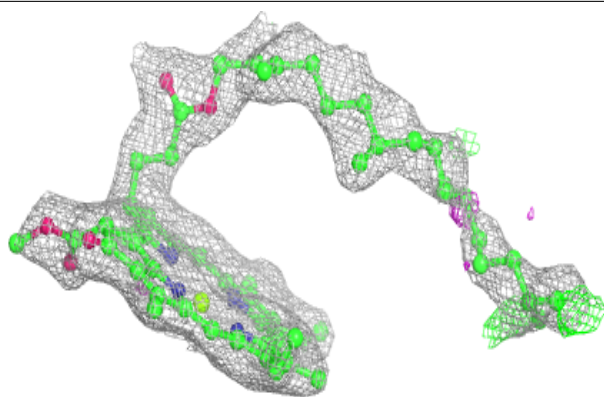
**Electron density around CLA c 513:**

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

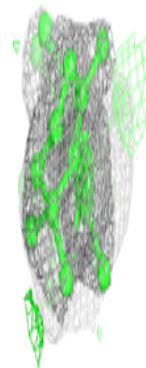
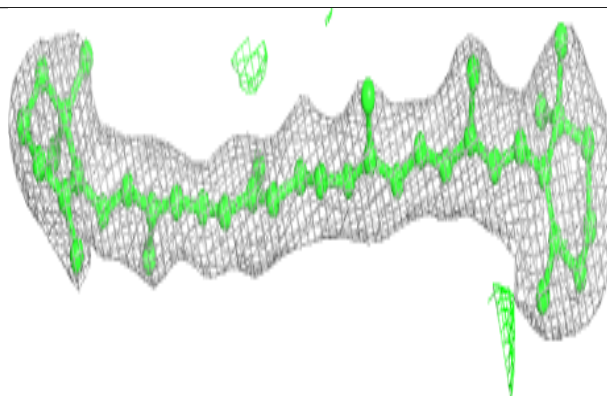
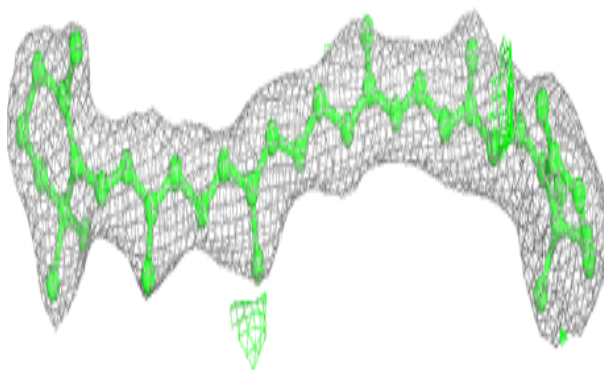


Electron density around CLA C 513:

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

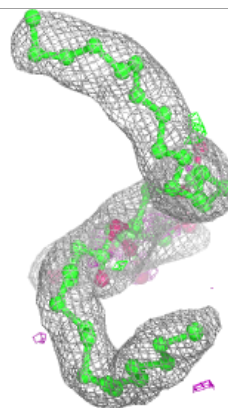
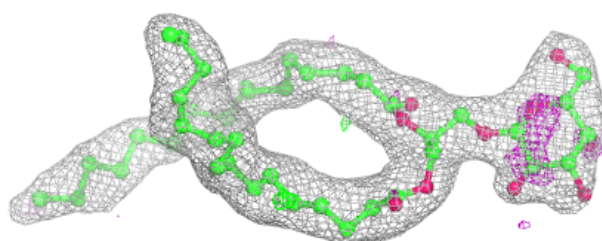
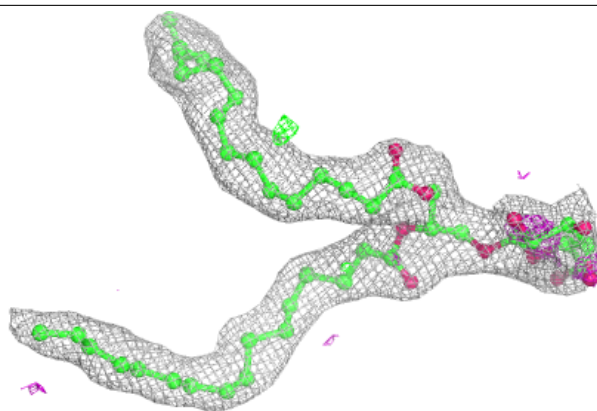
**Electron density around BCR c 514:**

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

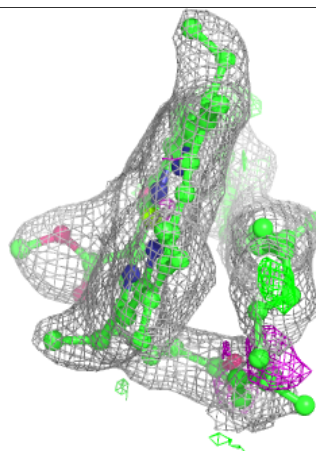
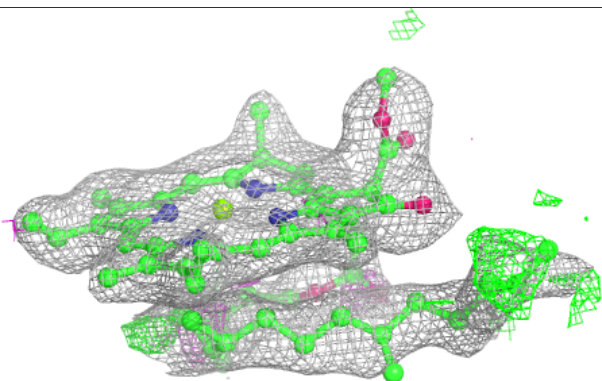
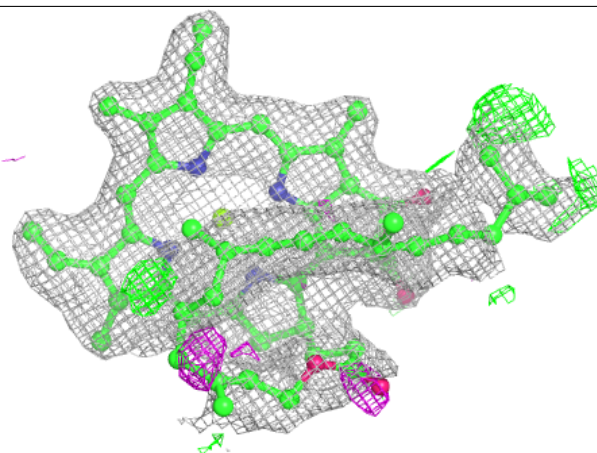


Electron density around LMG M 101:

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

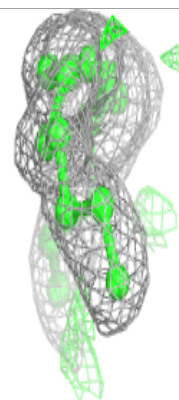
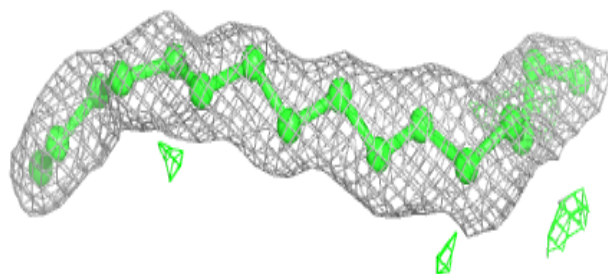
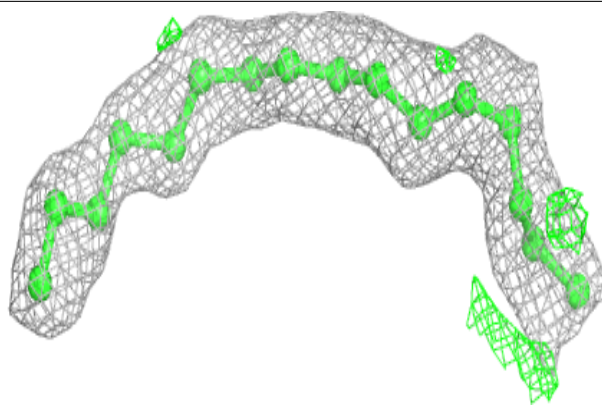
**Electron density around CLA B 601:**

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

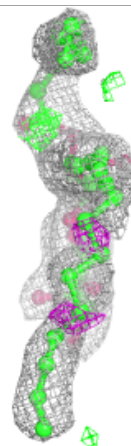
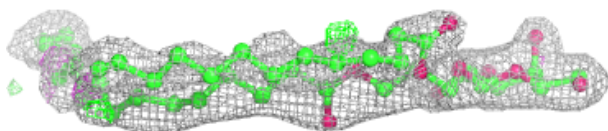
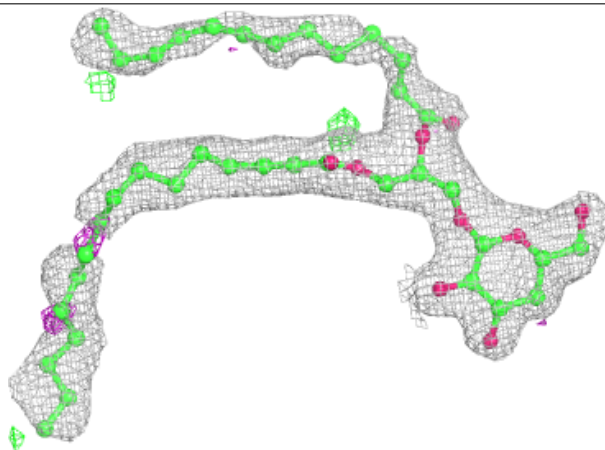


Electron density around STE b 620:

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

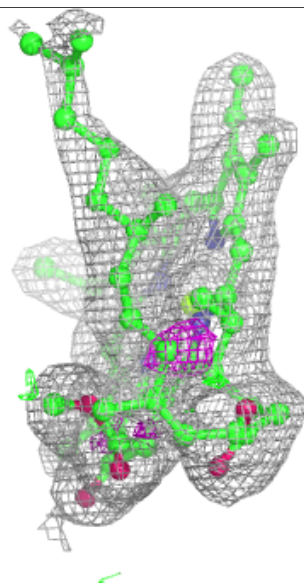
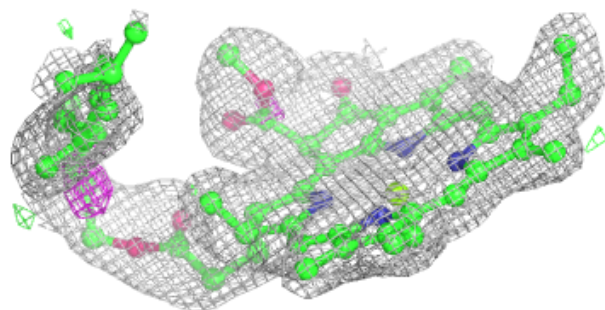
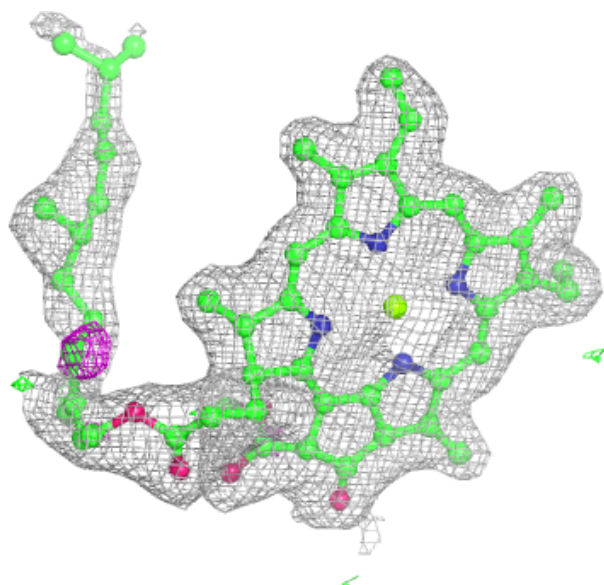
**Electron density around LMG C 518:**

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



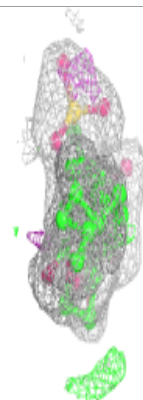
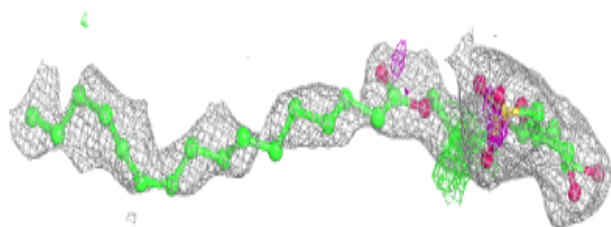
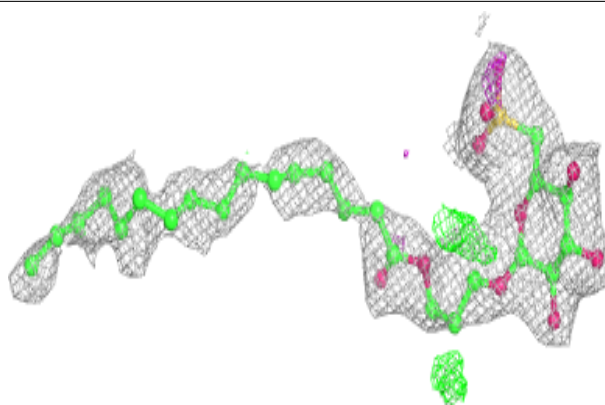
Electron density around CLA B 616:

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

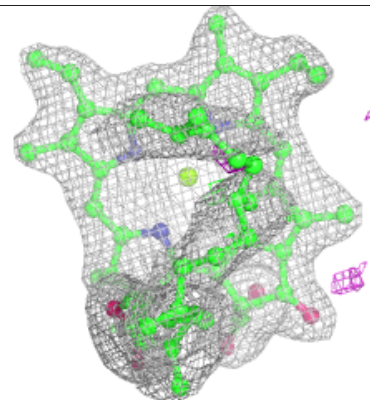
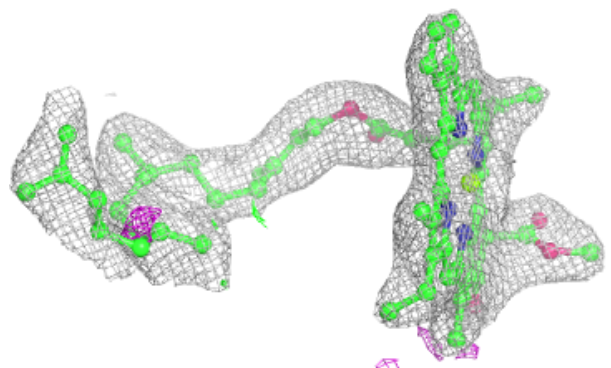
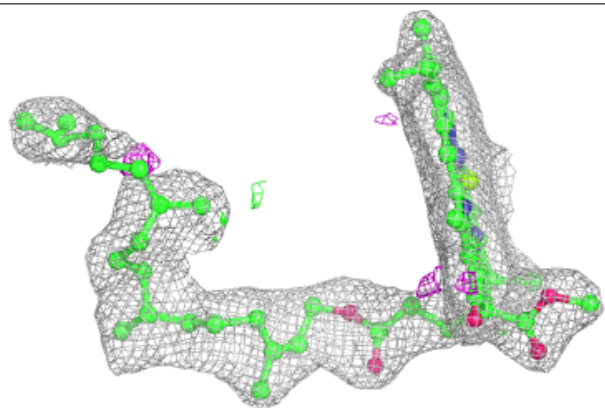


Electron density around SQD F 102:

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

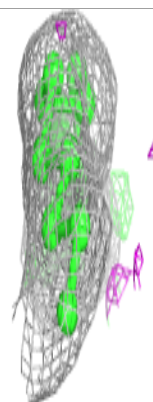
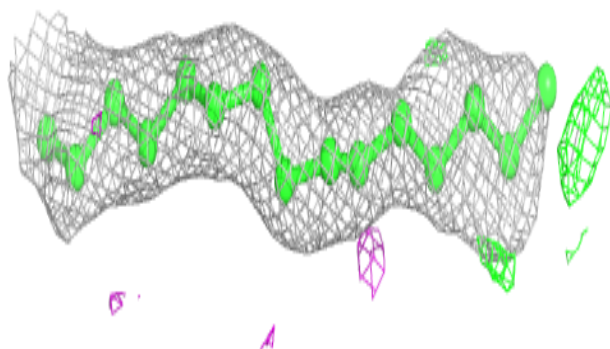
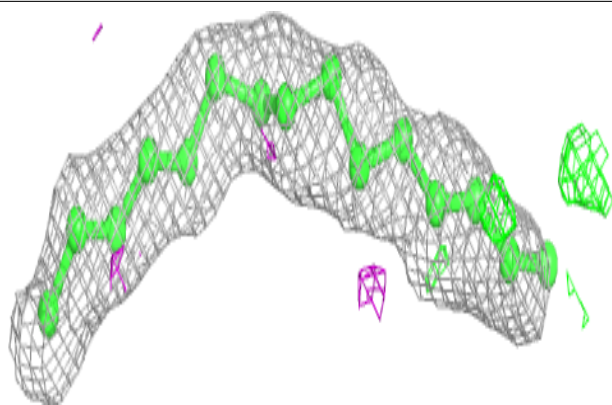
**Electron density around CLA c 506:**

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

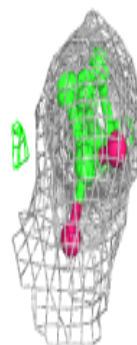
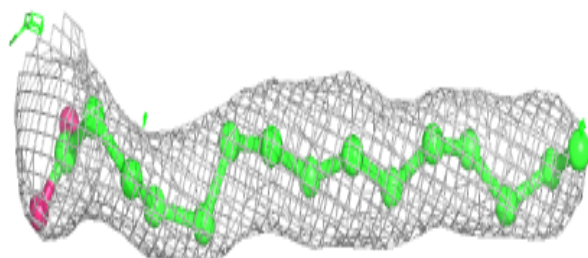
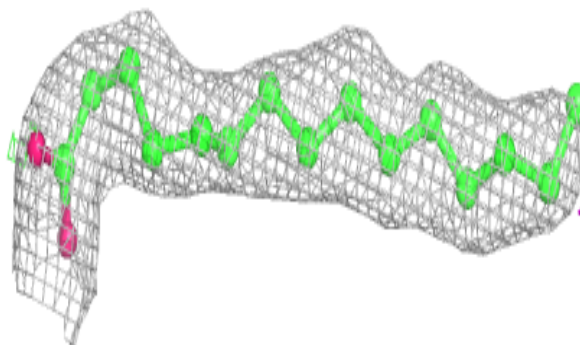


Electron density around STE I 101:

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

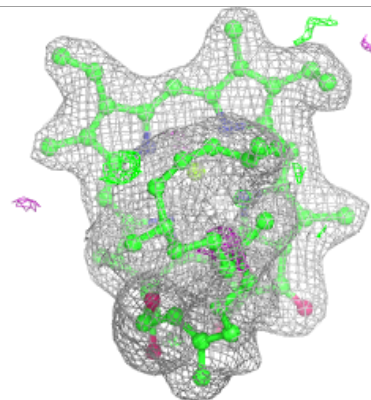
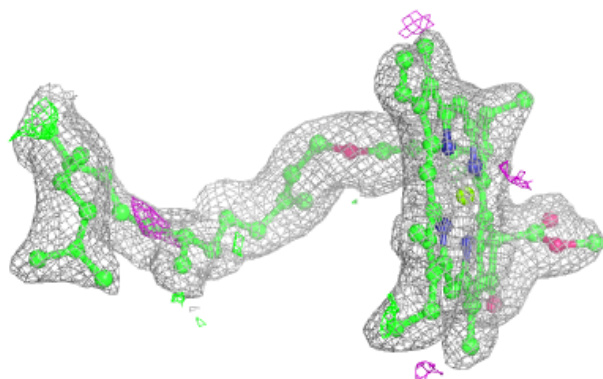
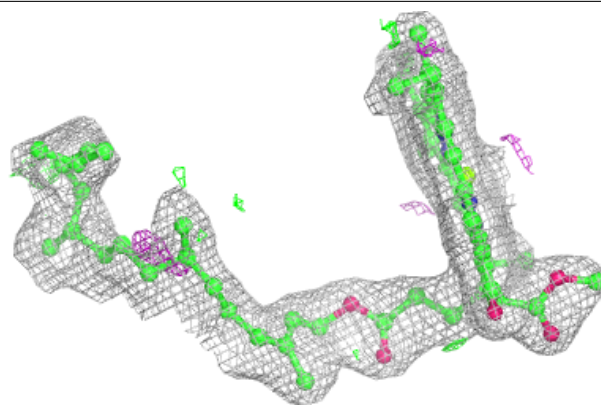
**Electron density around STE d 410:**

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



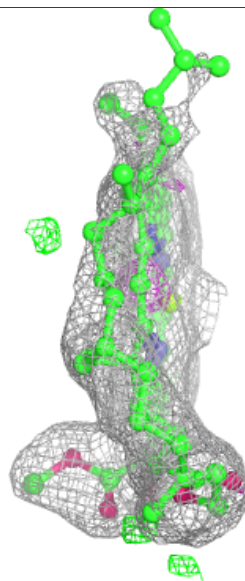
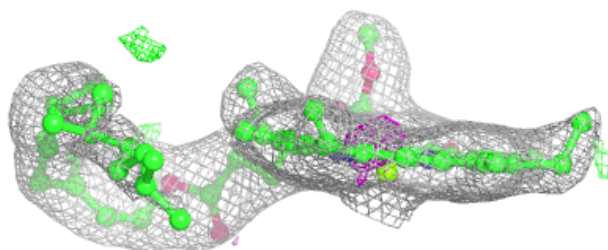
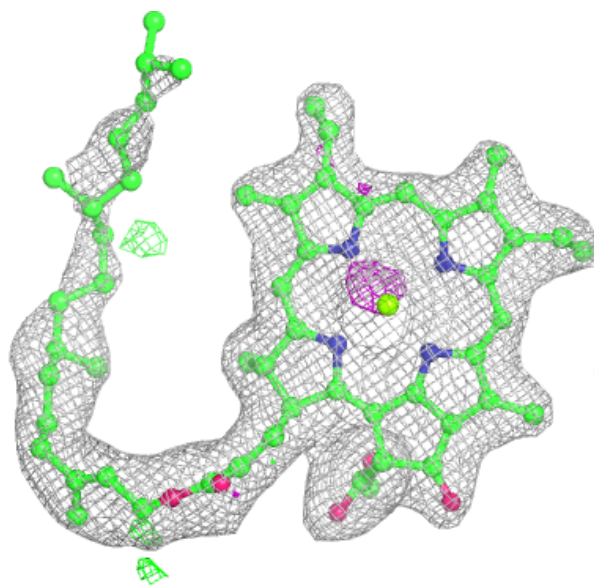
Electron density around CLA C 506:

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



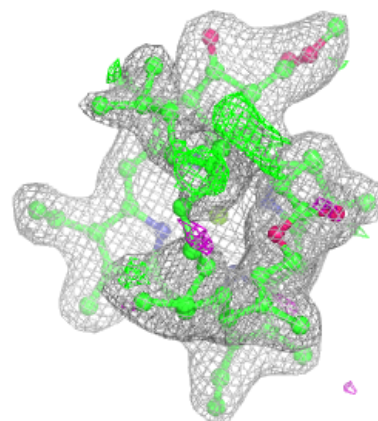
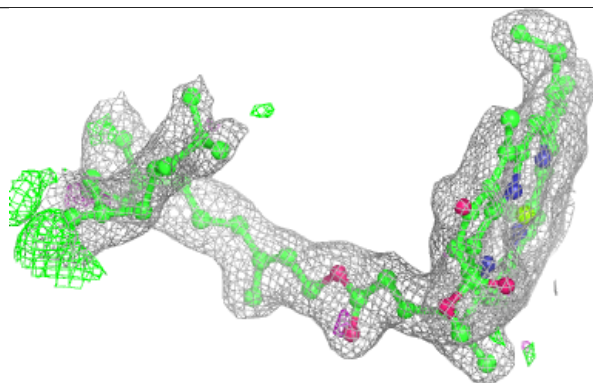
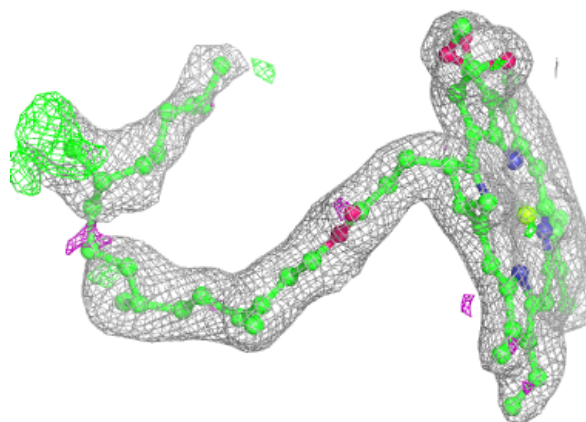
Electron density around CLA C 512:

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

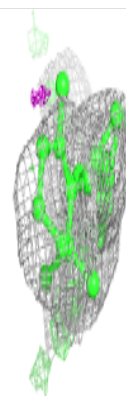
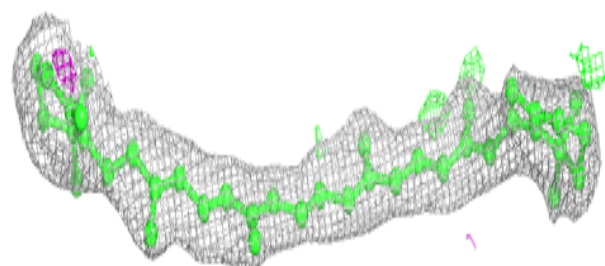
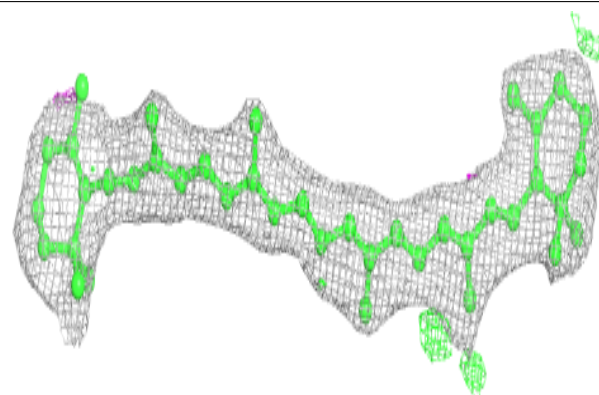


Electron density around CLA B 606:

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

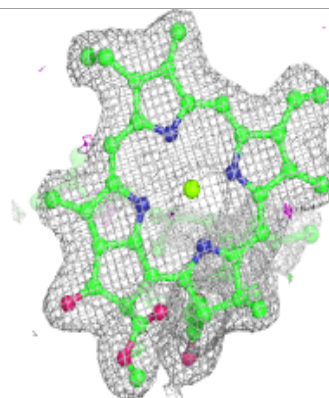
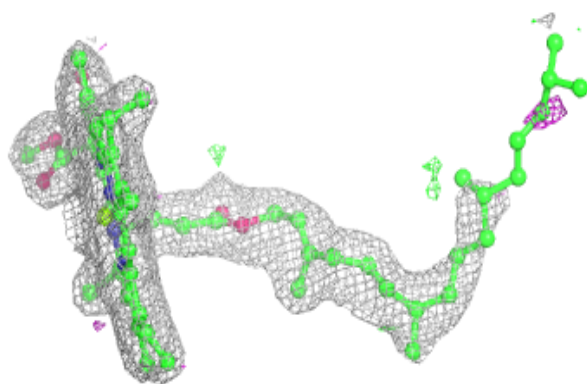
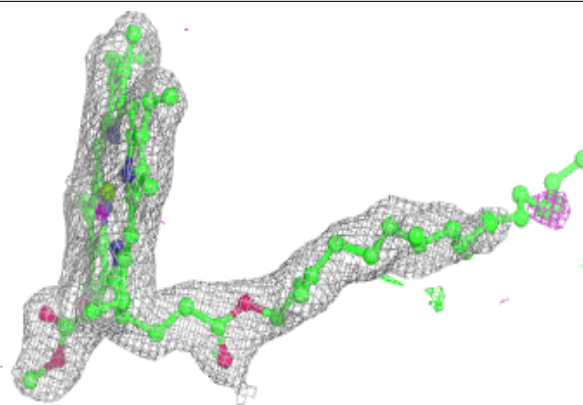
**Electron density around BCR d 404:**

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

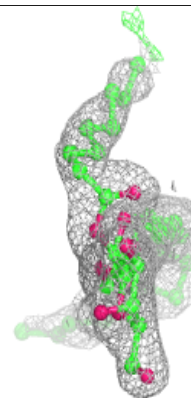
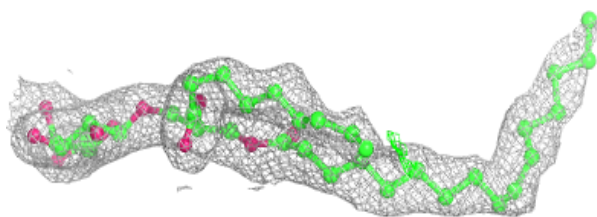
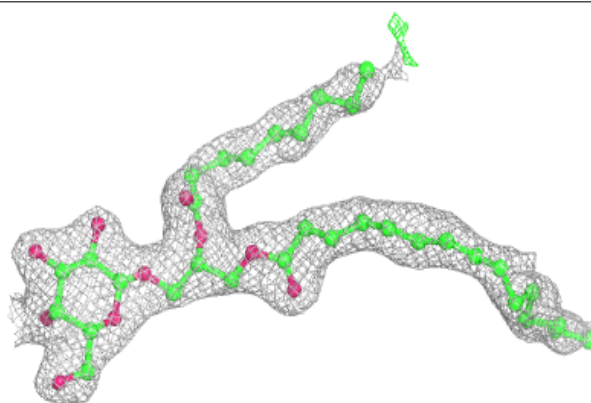


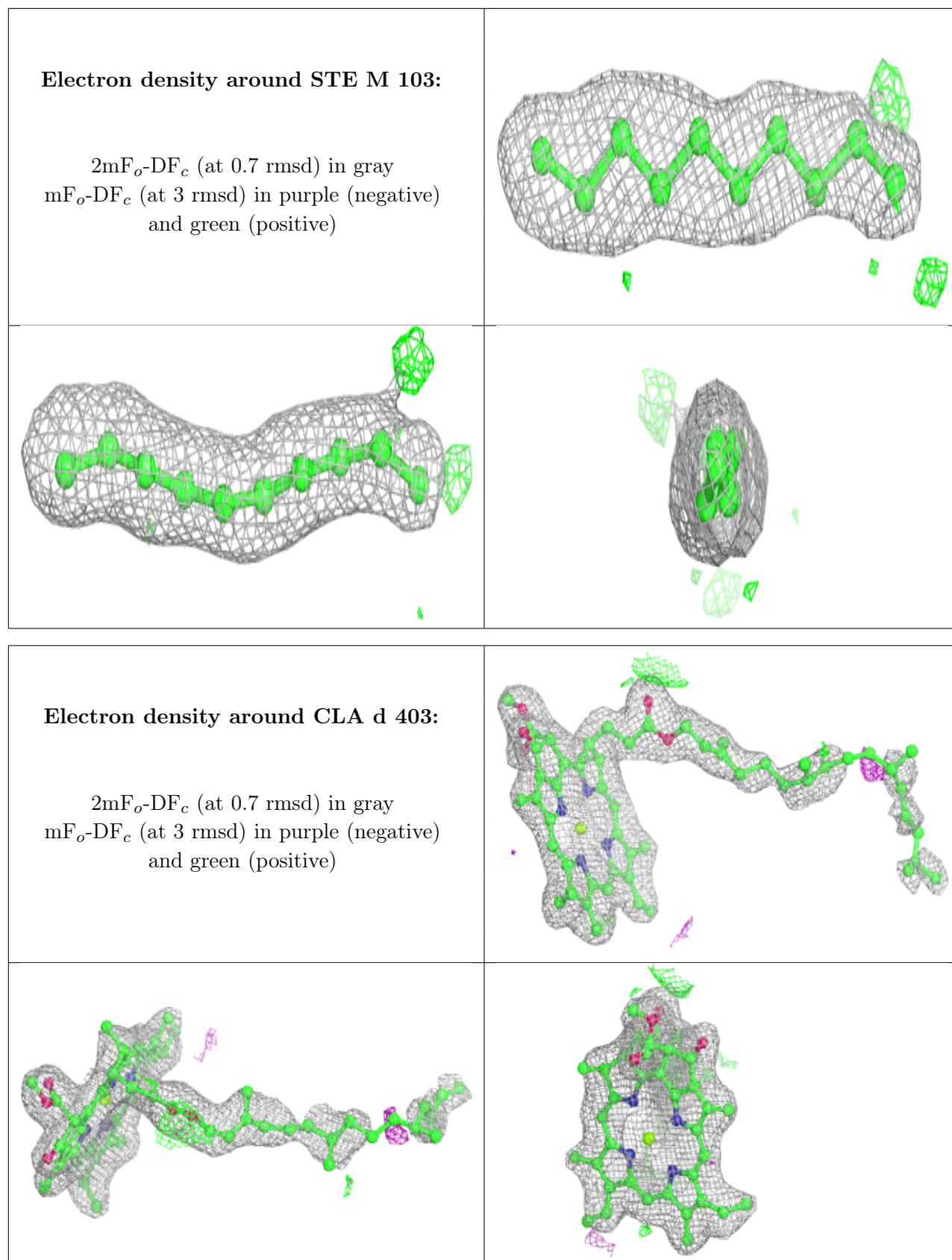
Electron density around CLA D 404:

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

**Electron density around LMG d 409:**

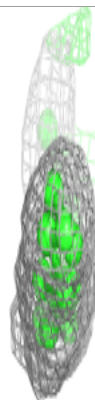
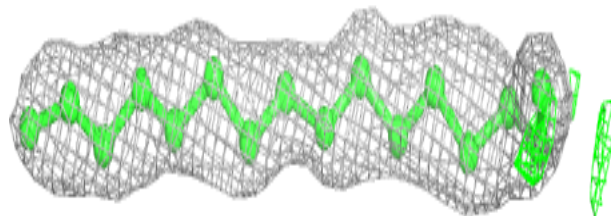
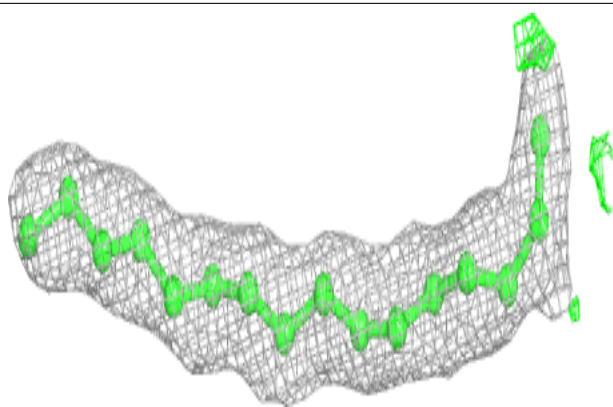
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



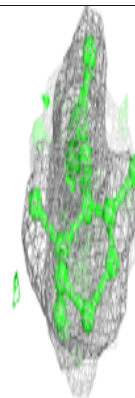
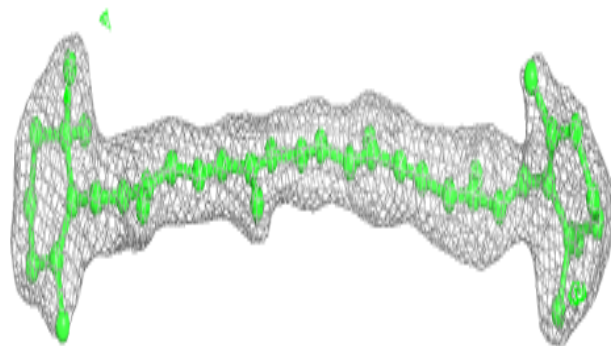
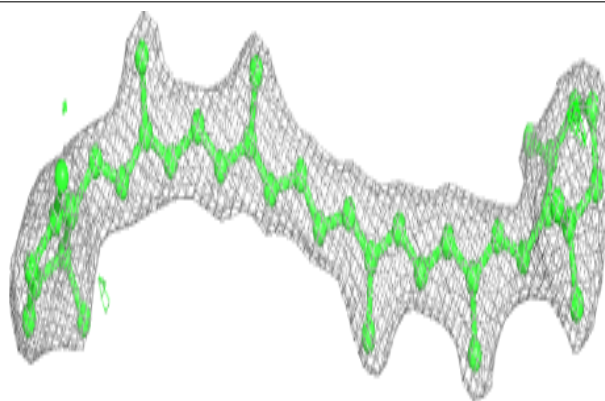


Electron density around STE C 521:

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

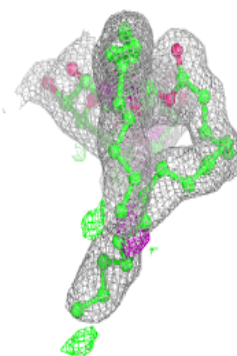
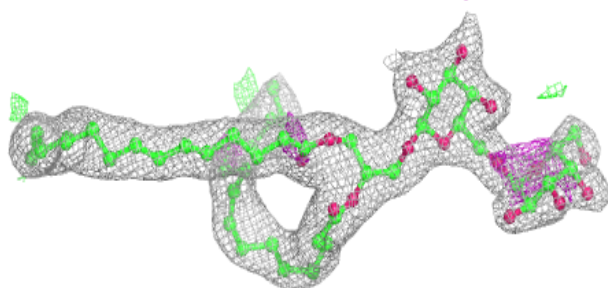
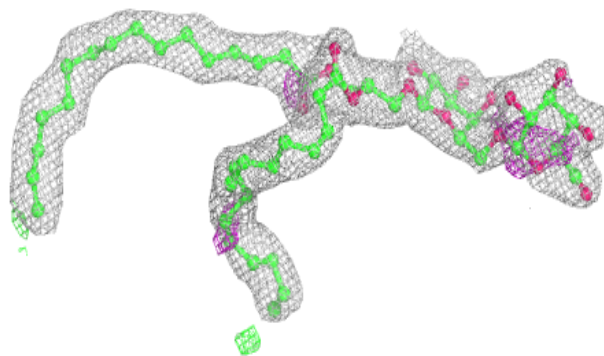
**Electron density around BCR k 101:**

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

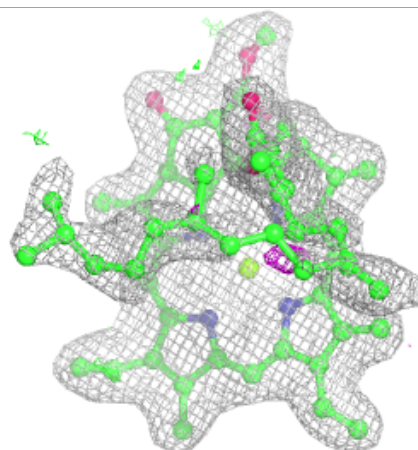
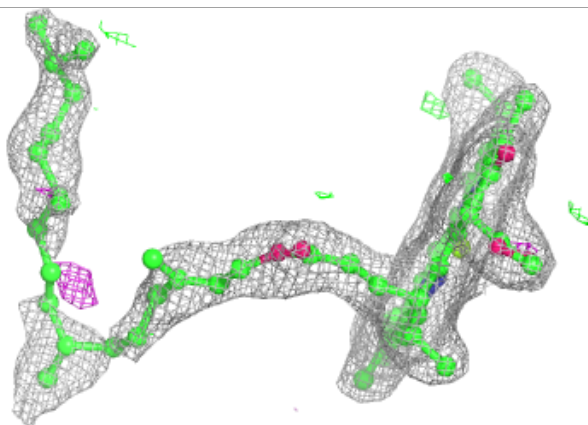
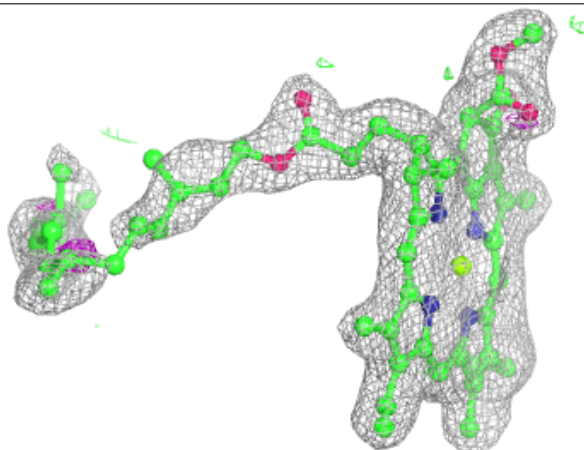


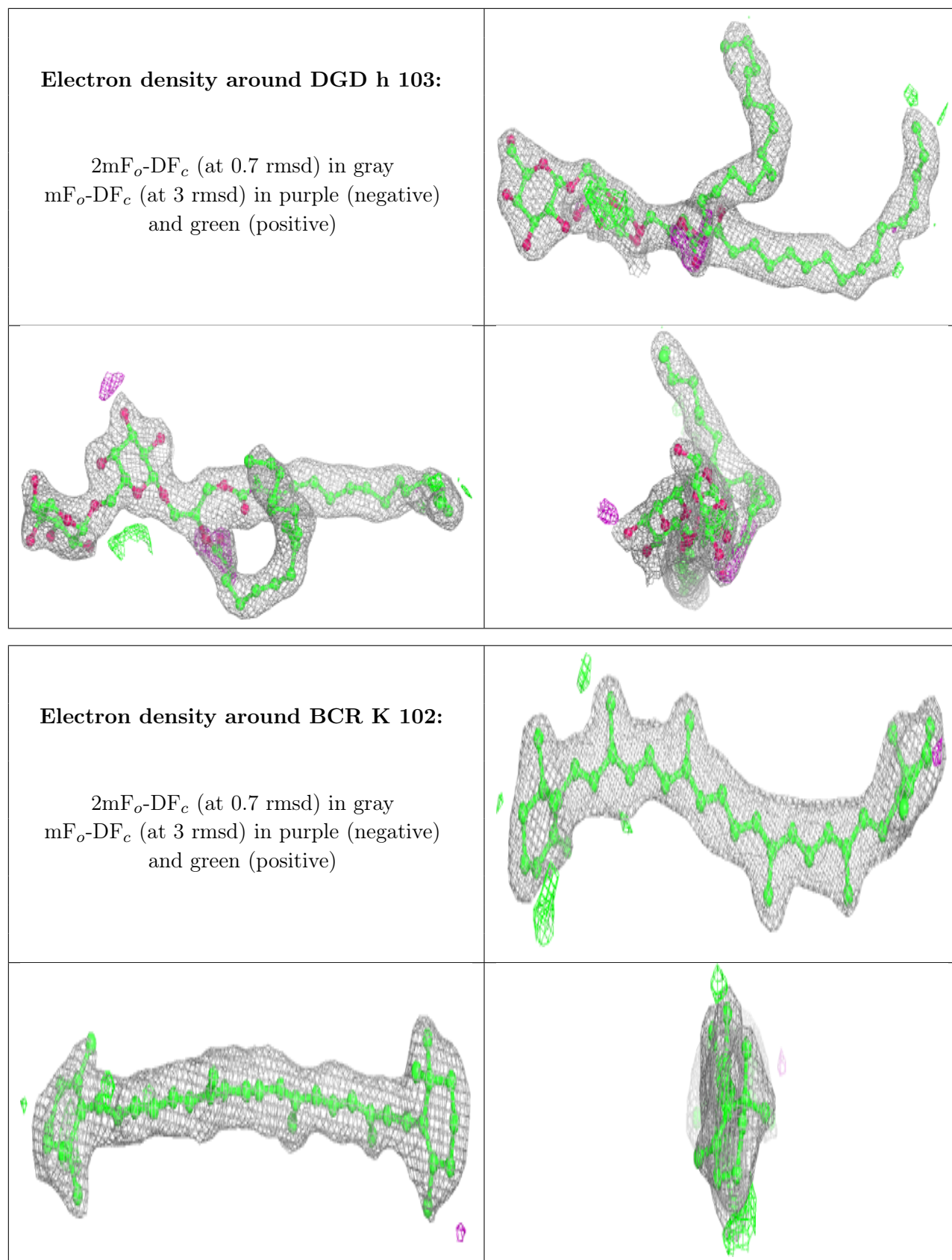
Electron density around DGD H 102:

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

**Electron density around CLA a 610:**

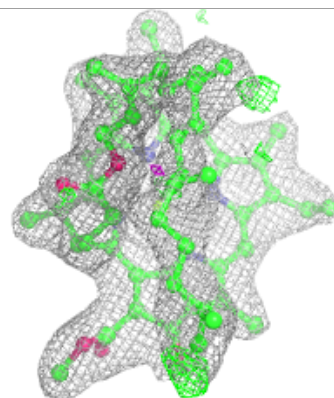
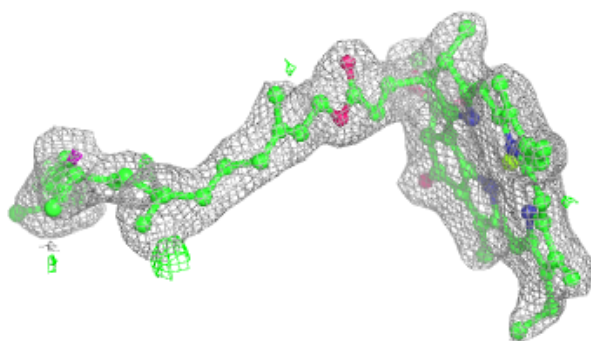
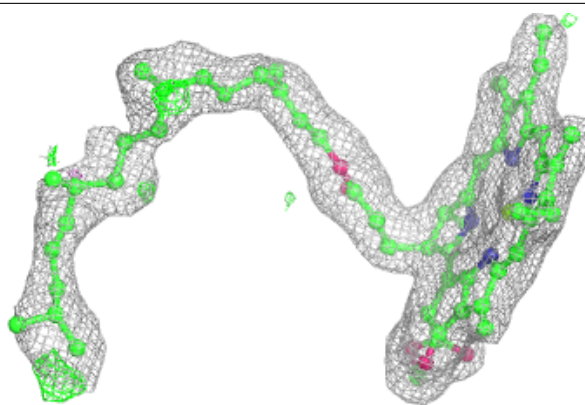
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



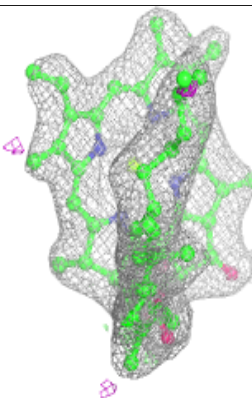
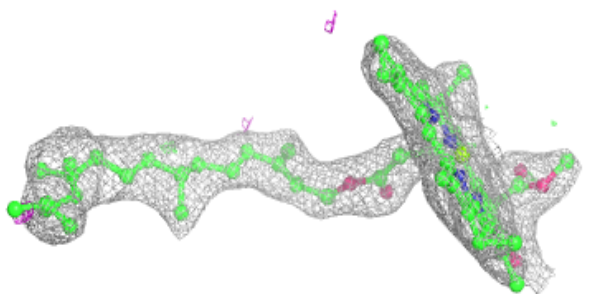
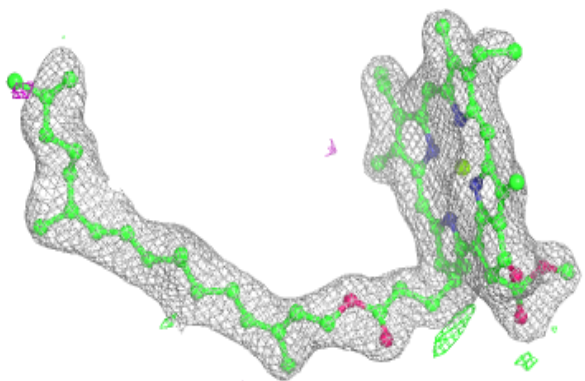


Electron density around CLA b 605:

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

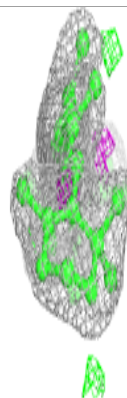
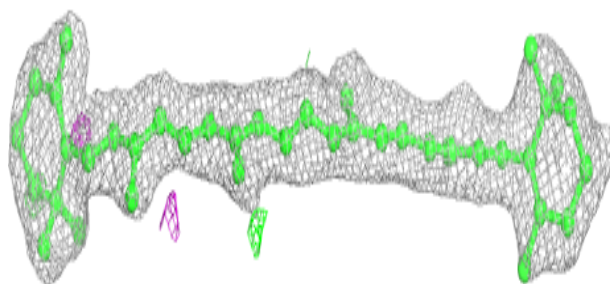
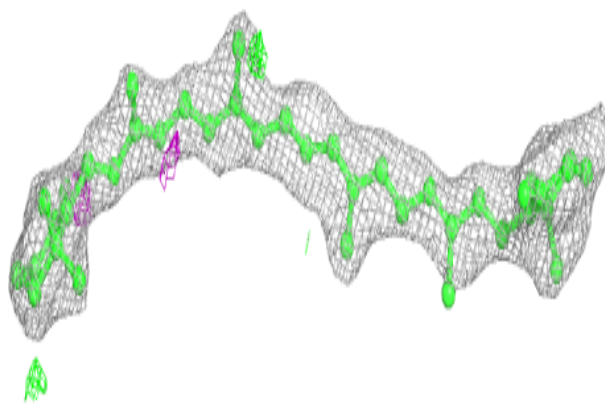
**Electron density around CLA b 608:**

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

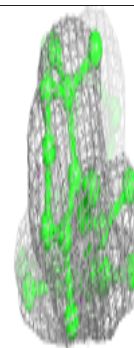
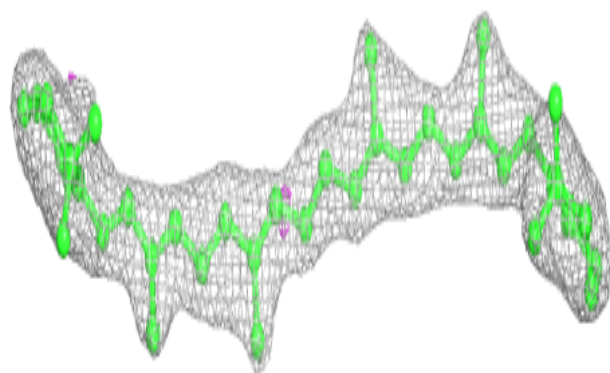
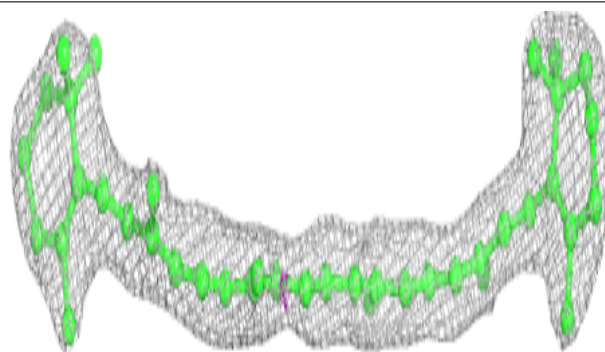


Electron density around BCR h 102:

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

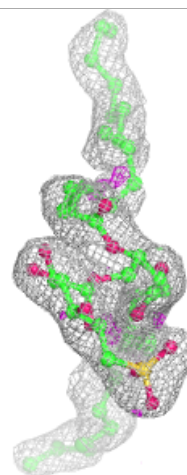
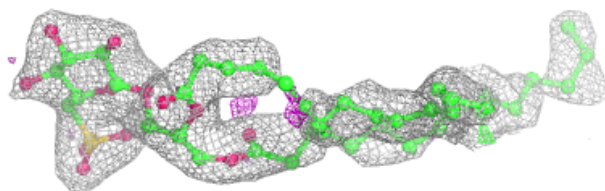
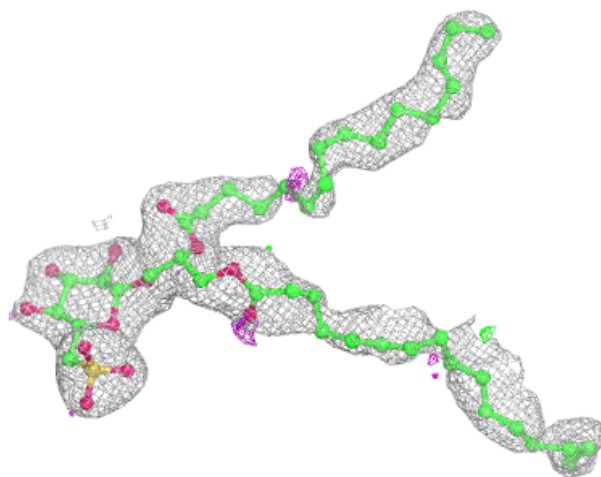
**Electron density around BCR K 103:**

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



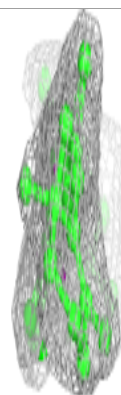
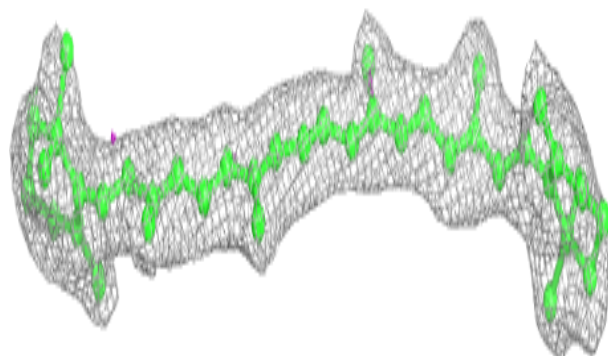
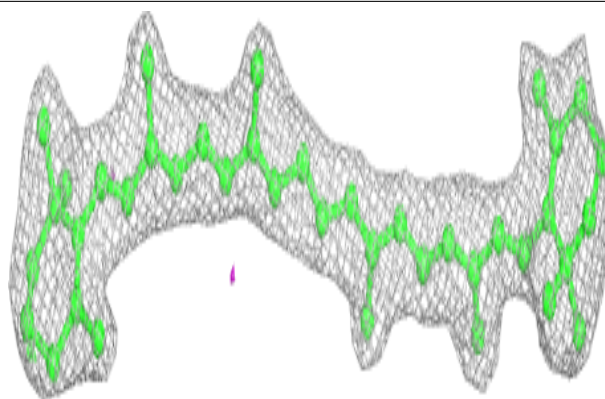
Electron density around SQD a 615:

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

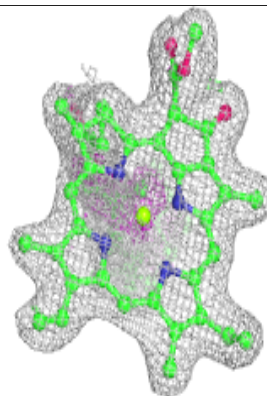
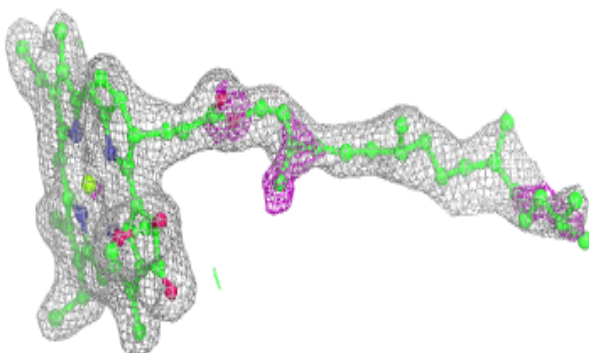
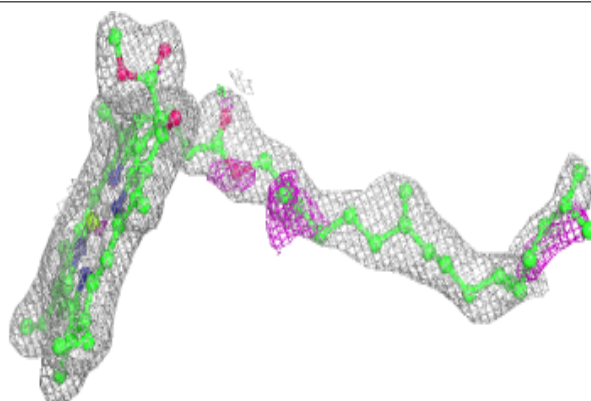


Electron density around BCR b 618:

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

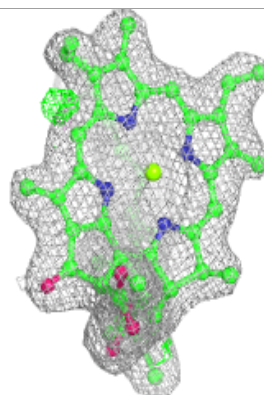
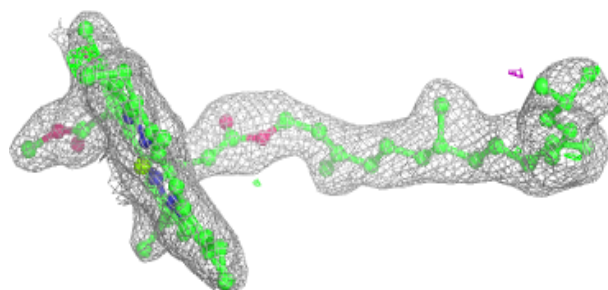
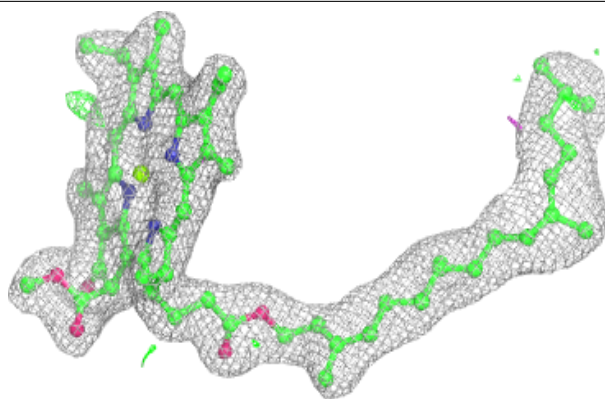
**Electron density around CLA B 604:**

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

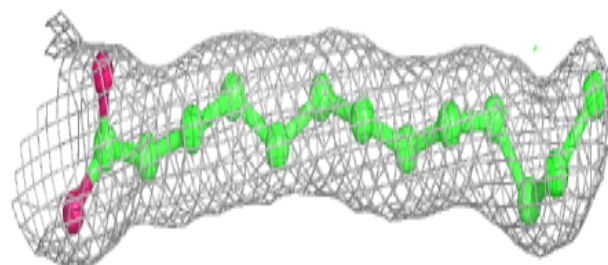
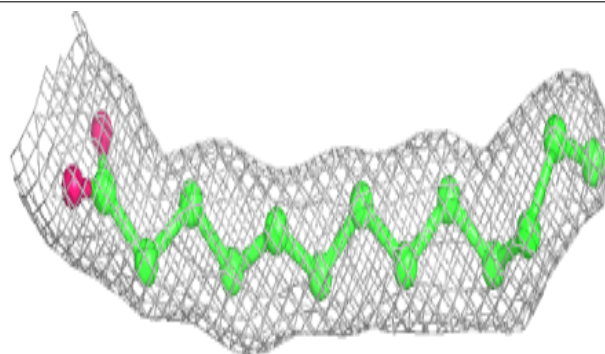


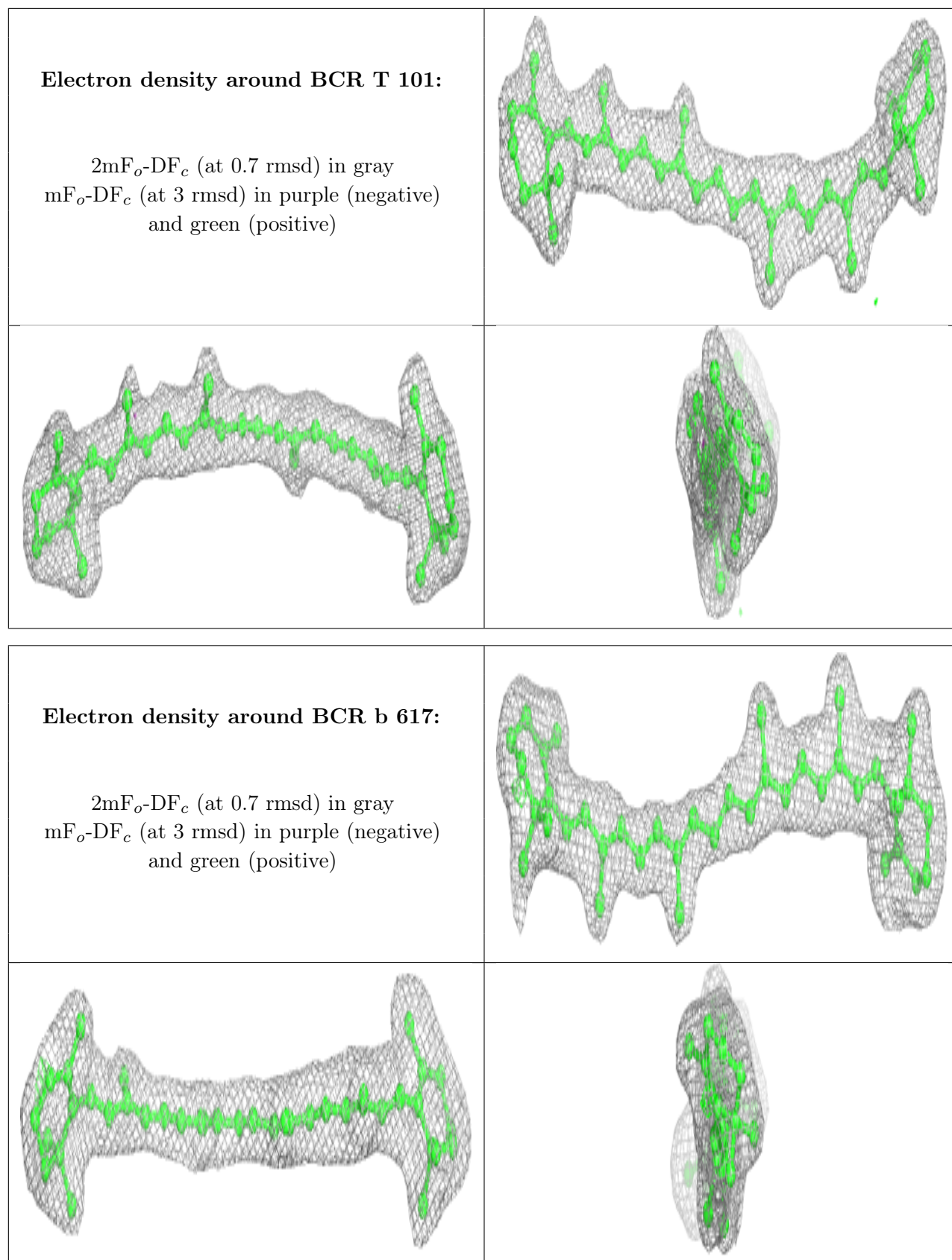
Electron density around CLA B 609:

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

**Electron density around STE M 102:**

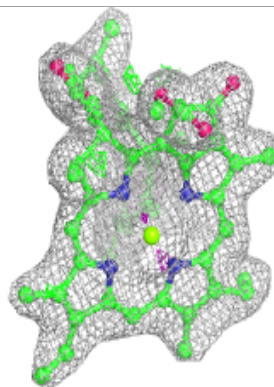
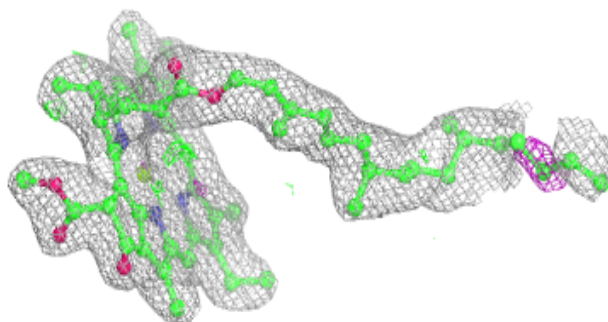
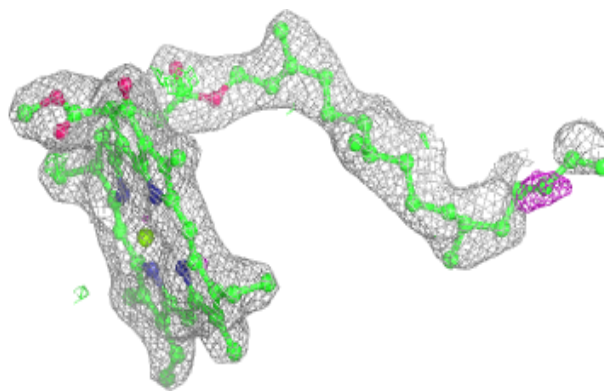
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



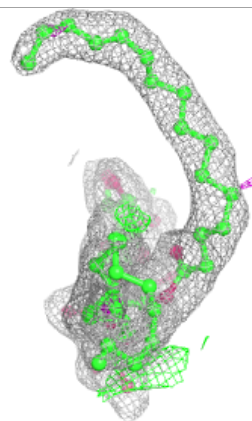
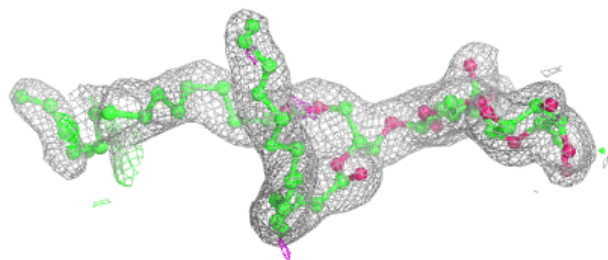
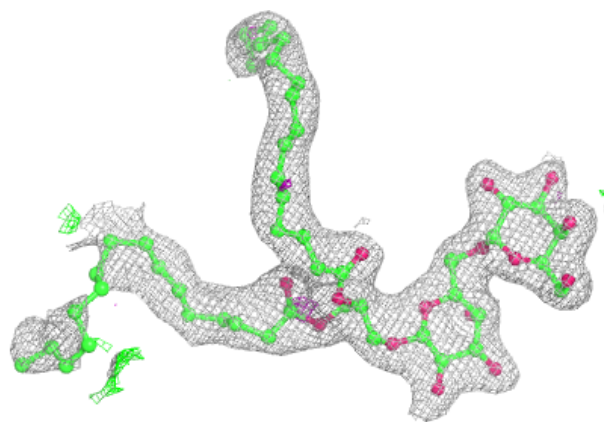


Electron density around CLA c 508:

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

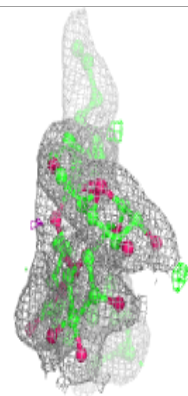
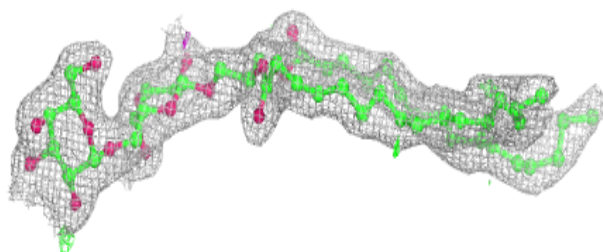
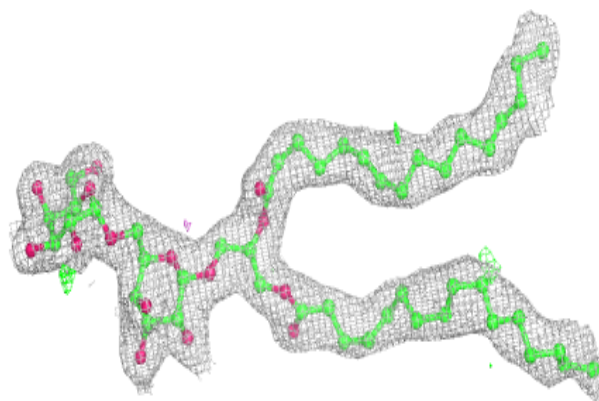
**Electron density around DGD C 516:**

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

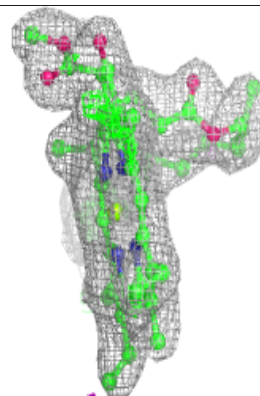
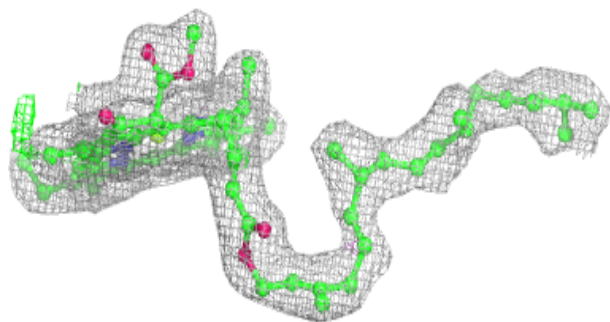
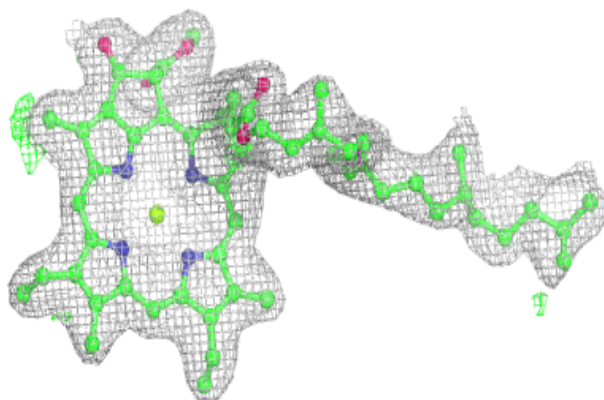


Electron density around DGD C 517:

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

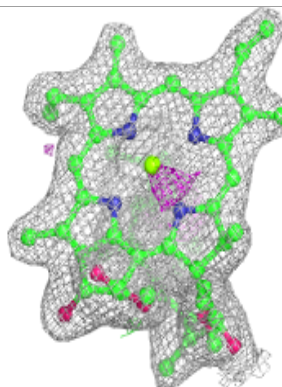
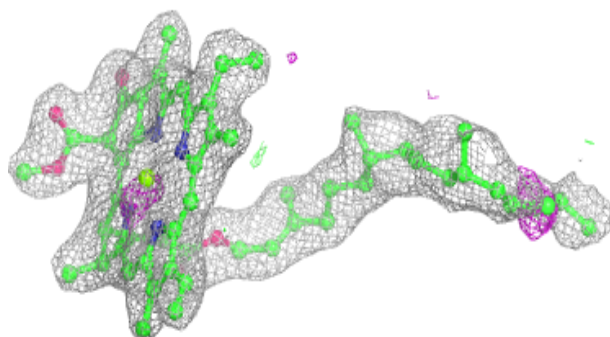
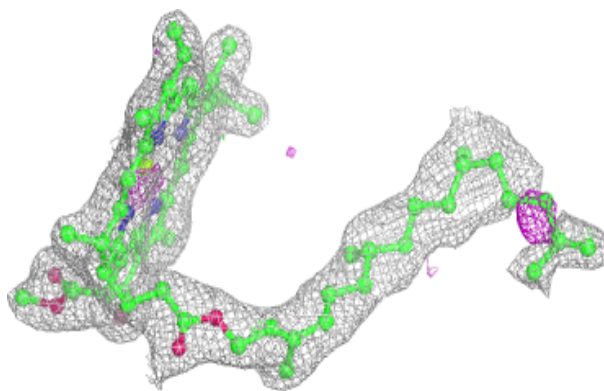
**Electron density around CLA a 608:**

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

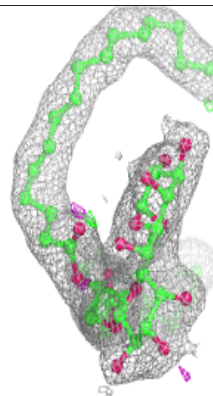
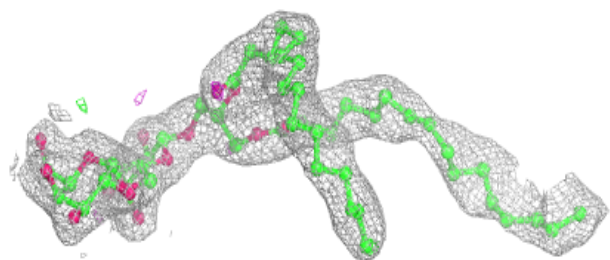
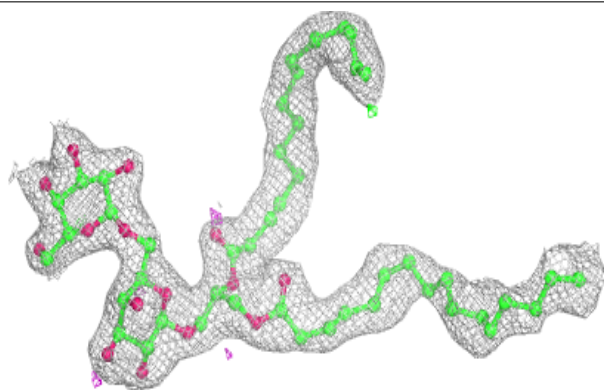


Electron density around CLA C 508:

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

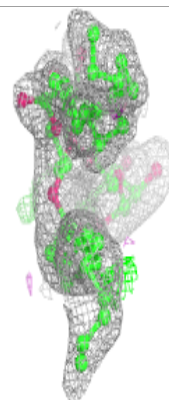
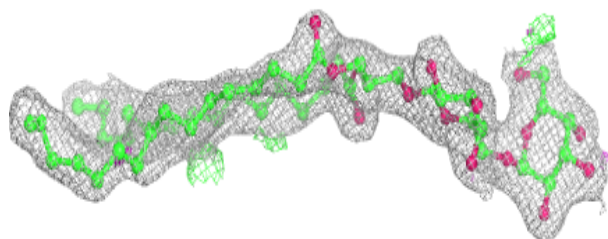
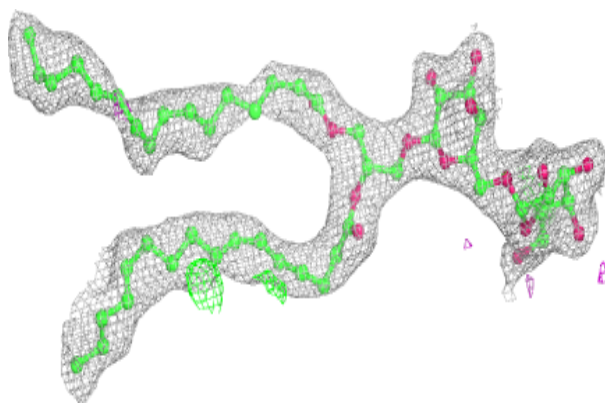
**Electron density around DGD c 517:**

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

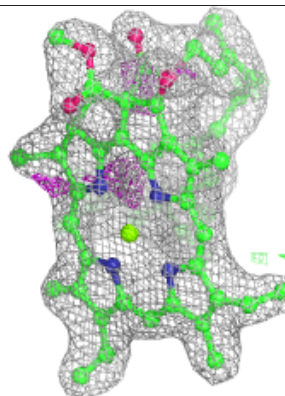
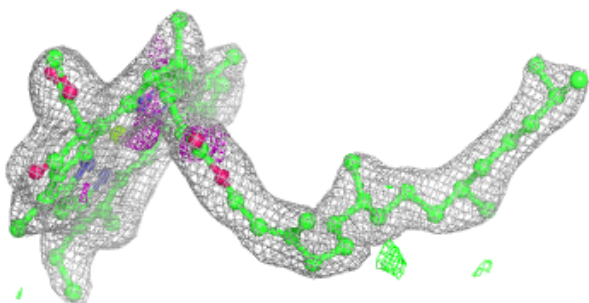
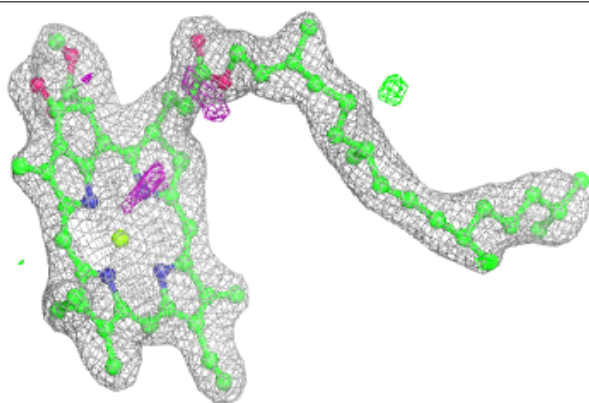


Electron density around DGD c 518:

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

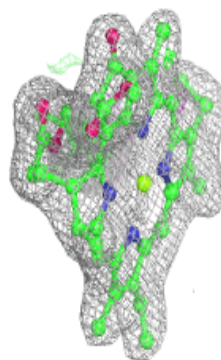
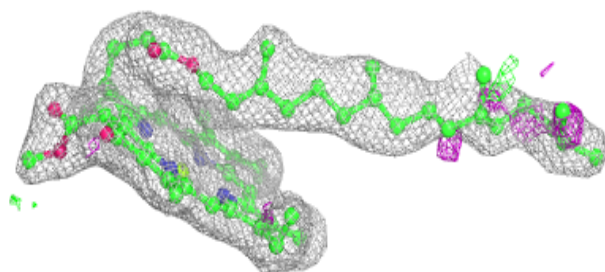
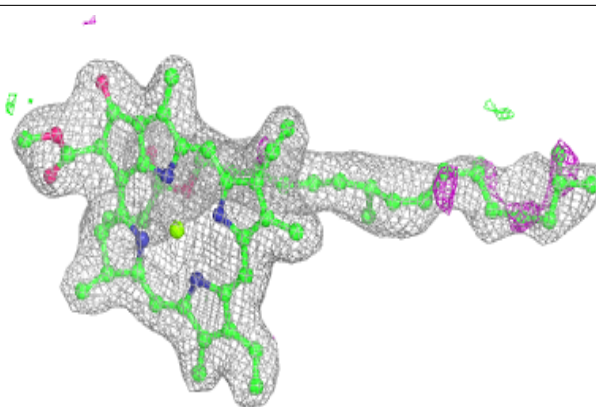
**Electron density around CLA C 511:**

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

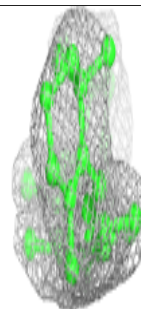
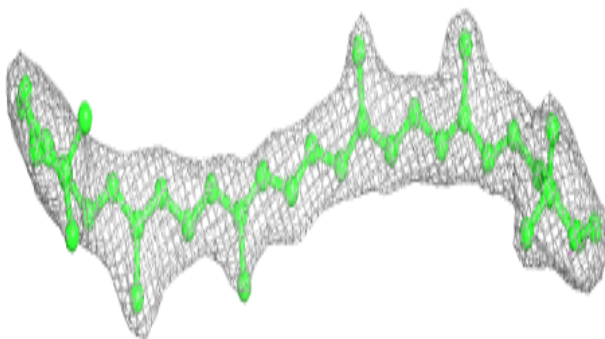
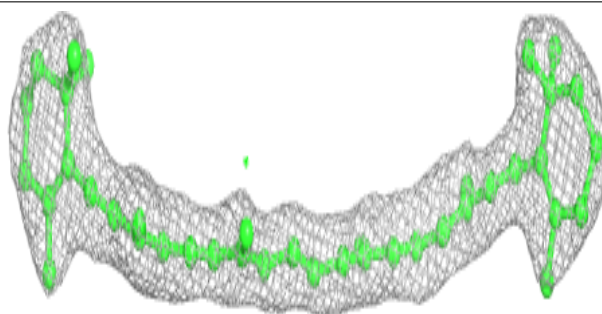


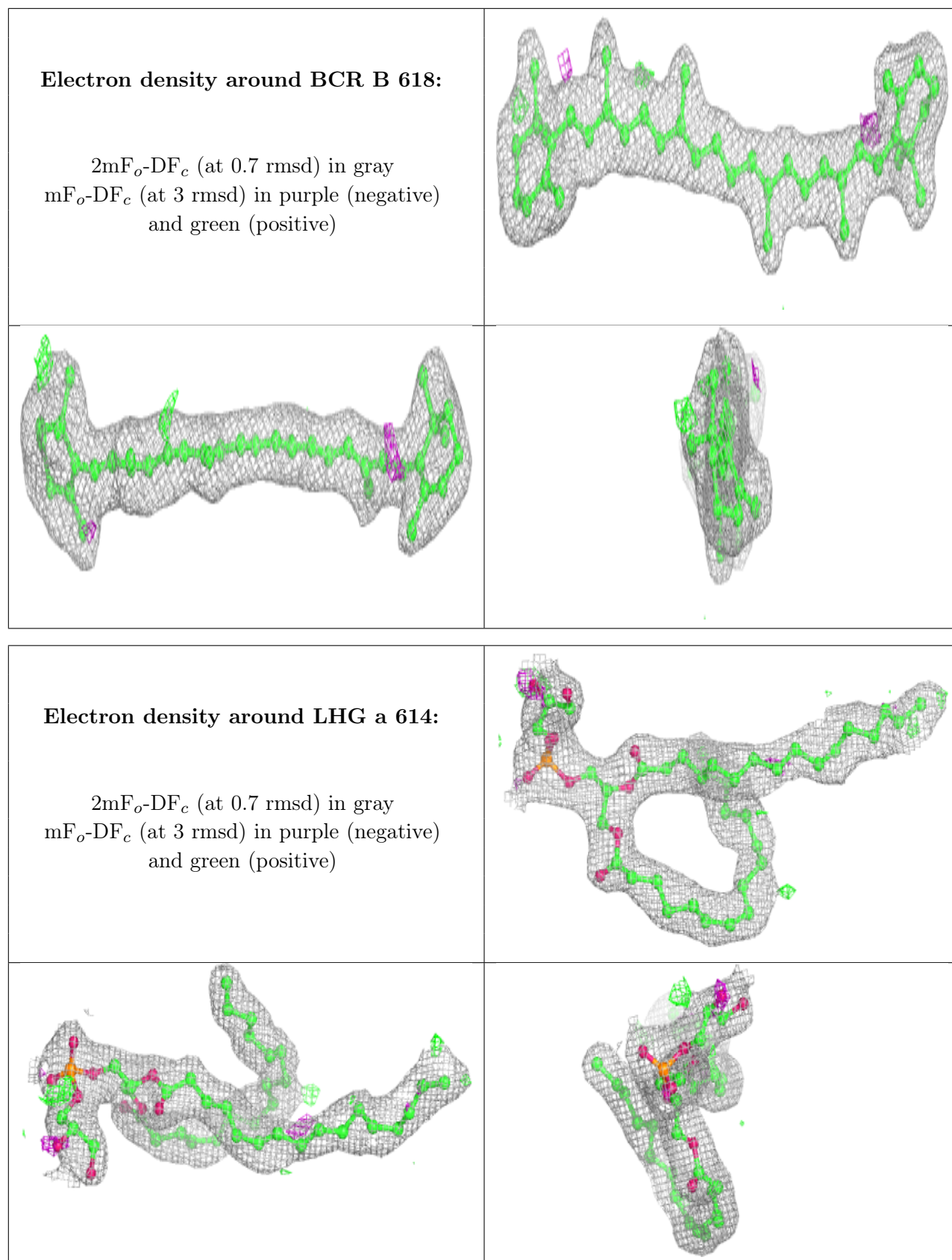
Electron density around CLA B 614:

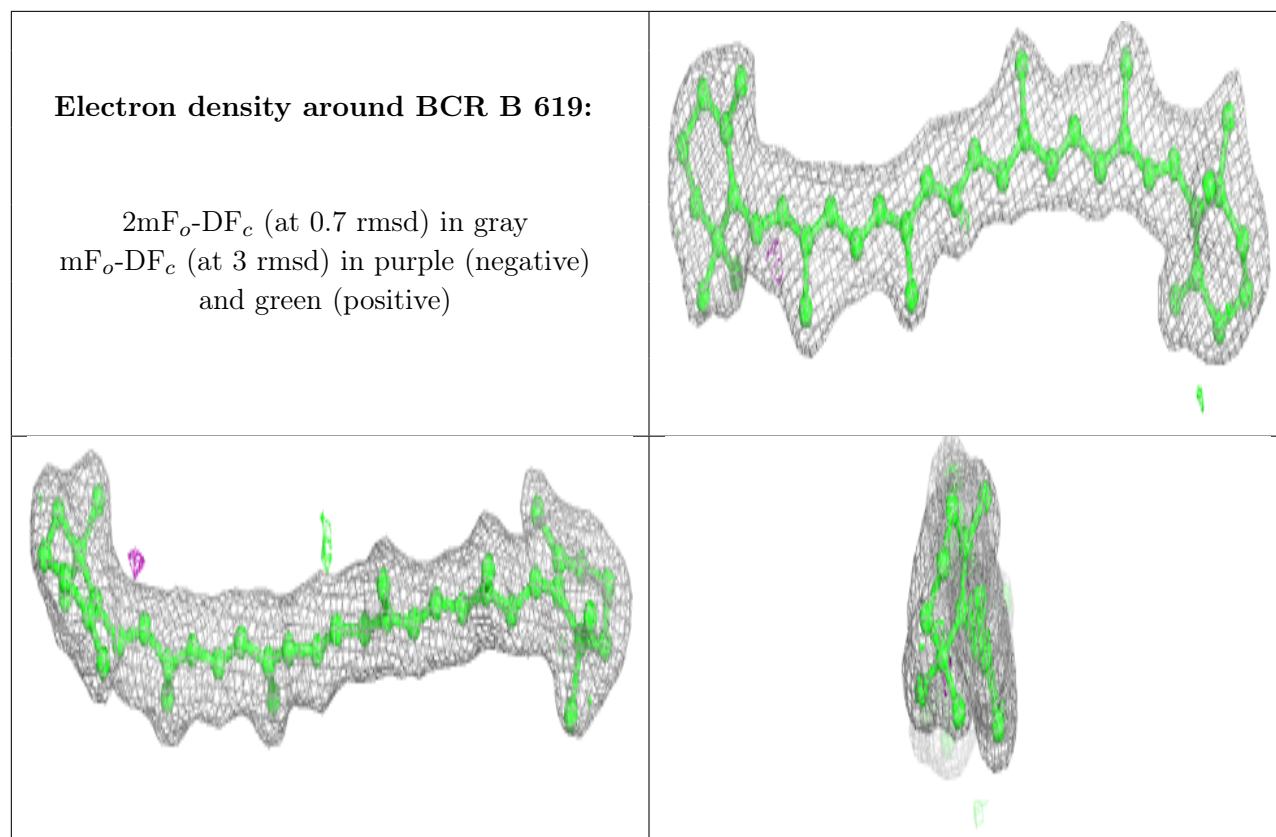
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)

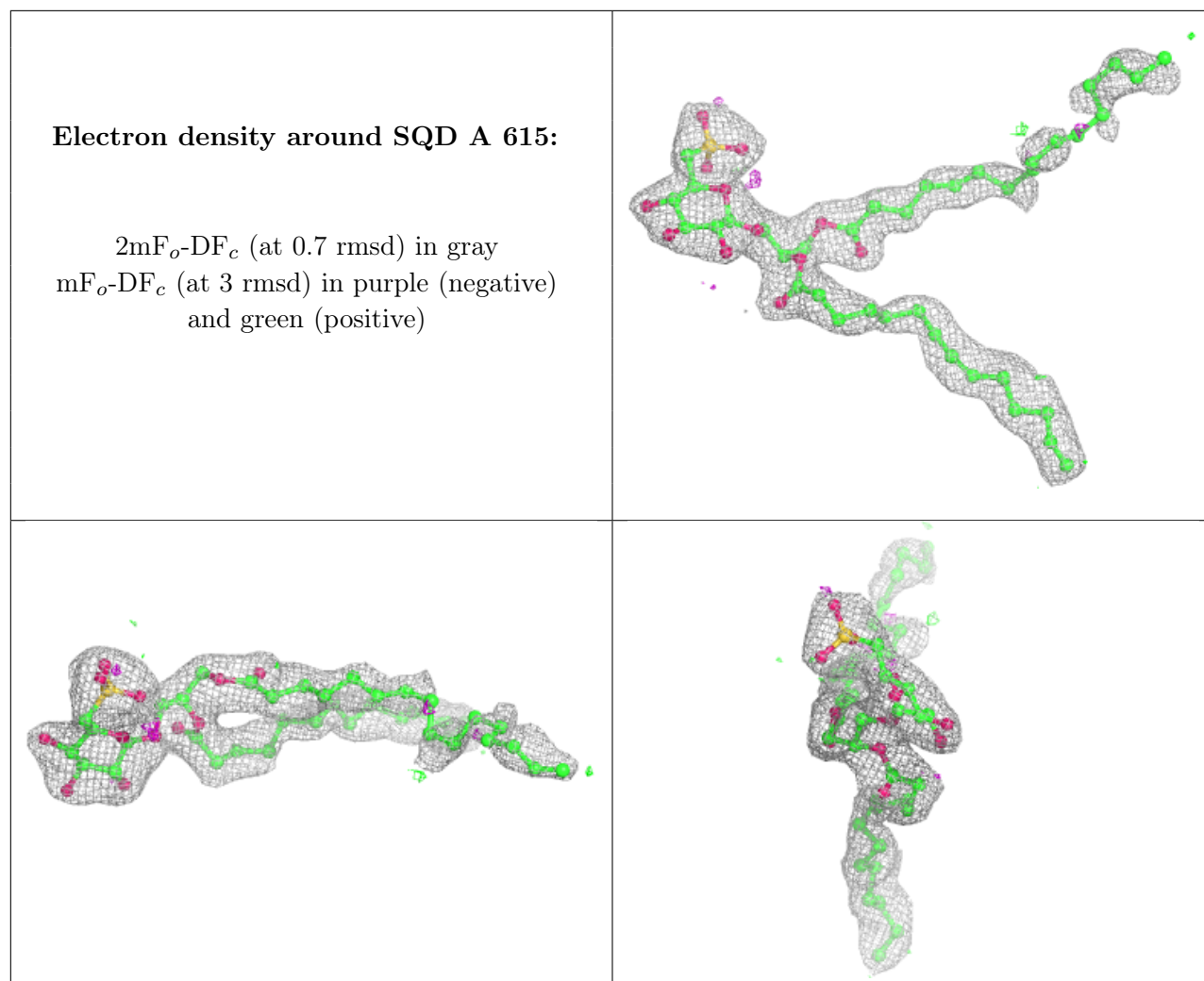
**Electron density around BCR k 102:**

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



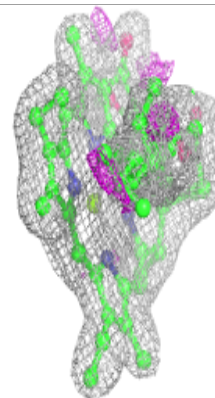
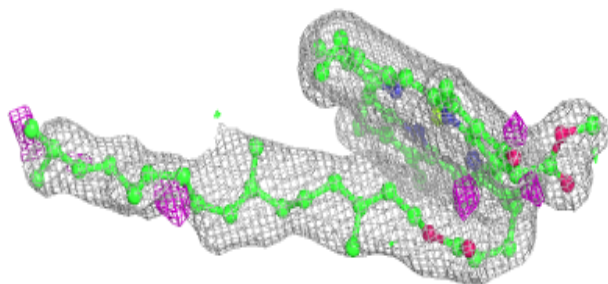
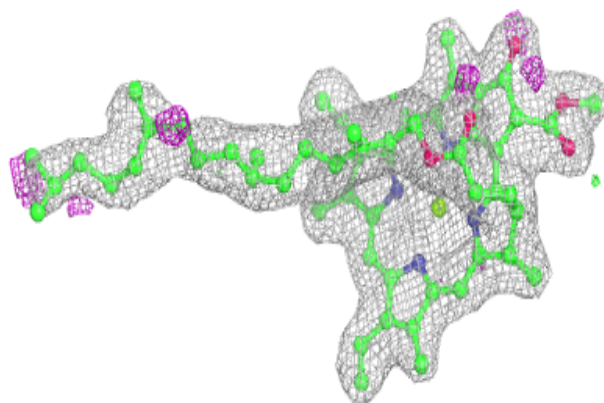




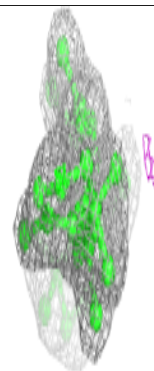
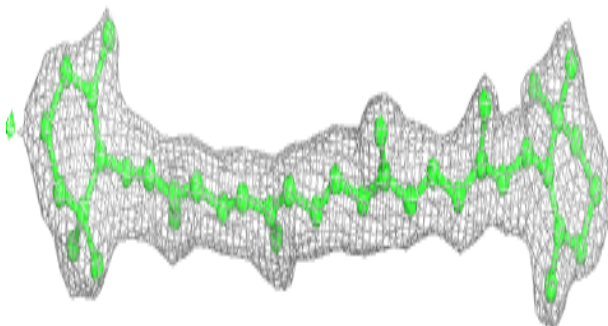
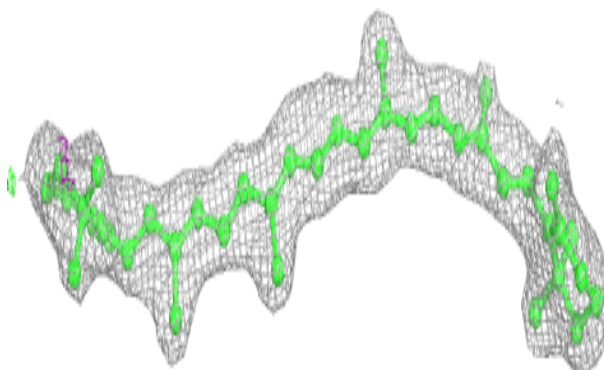


Electron density around CLA b 613:

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

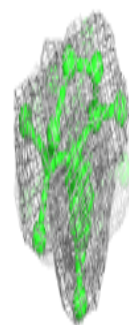
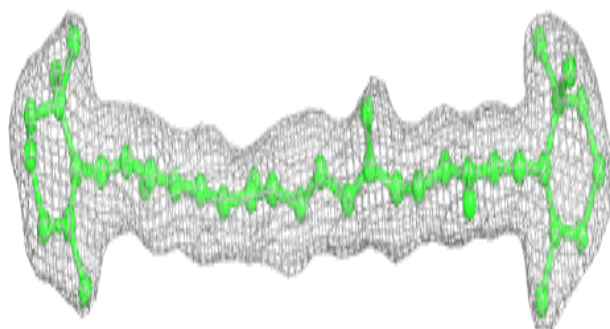
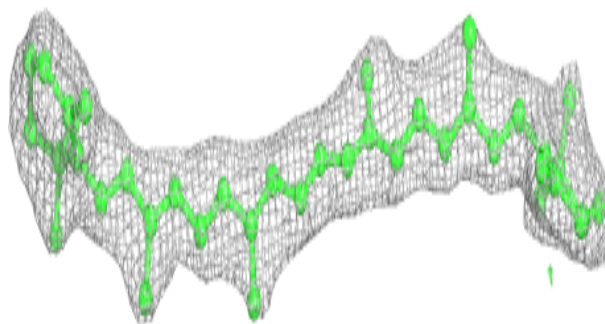
**Electron density around BCR H 101:**

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

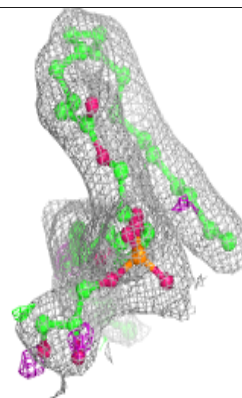
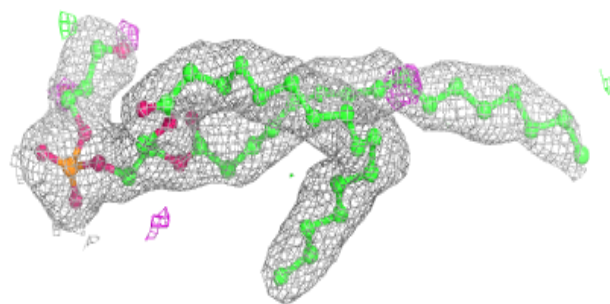
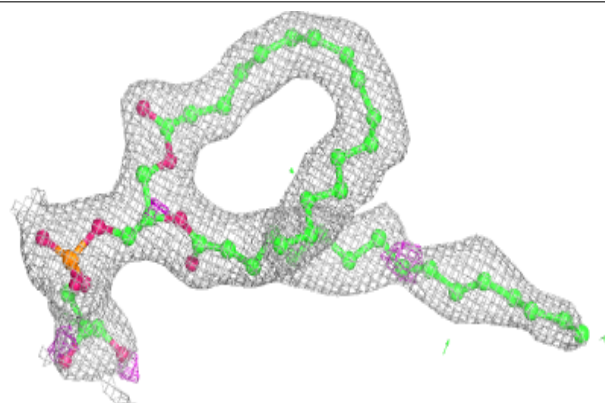


Electron density around BCR K 101:

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

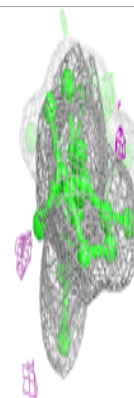
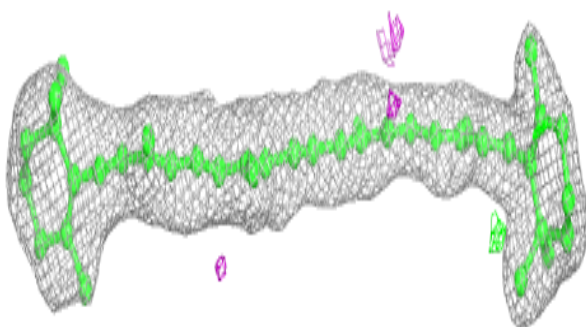
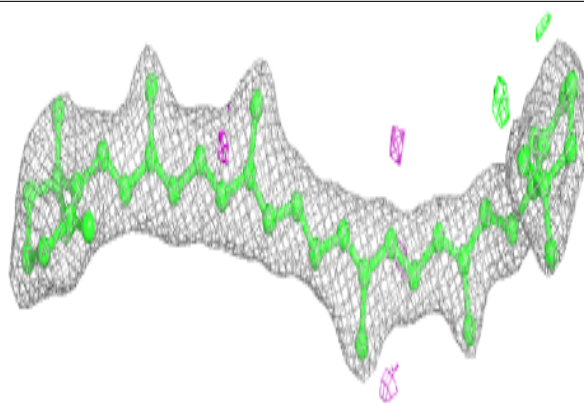
**Electron density around LHG B 622:**

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

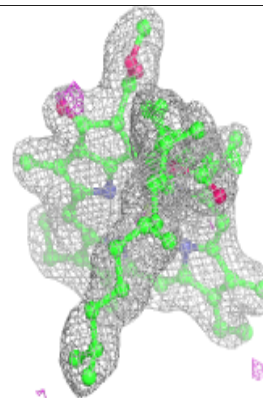
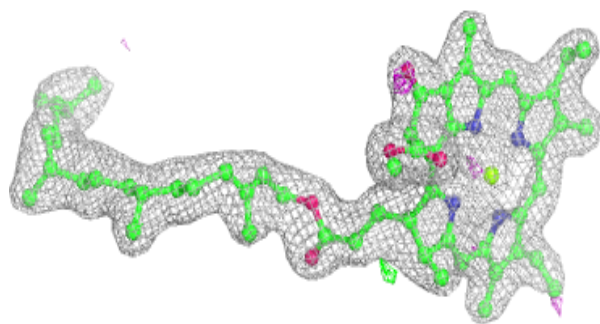
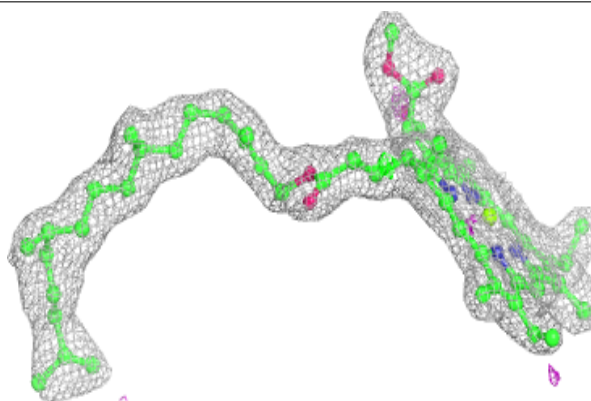


Electron density around BCR c 515:

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

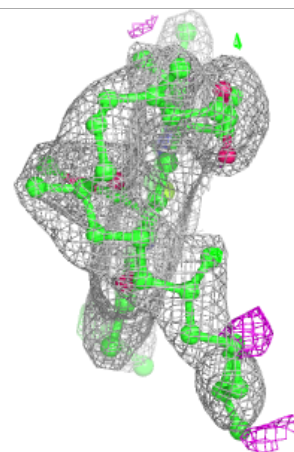
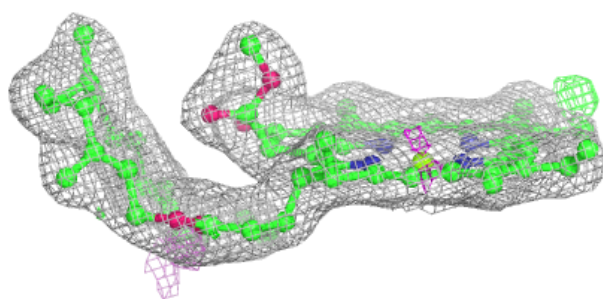
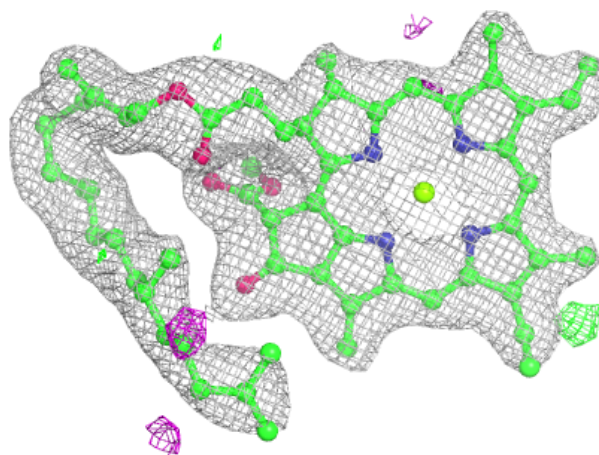
**Electron density around CLA d 402:**

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



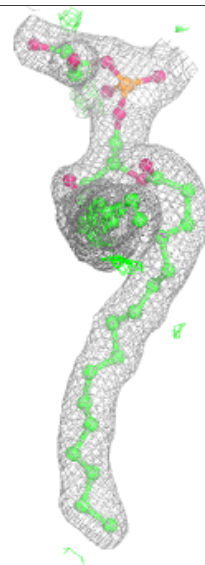
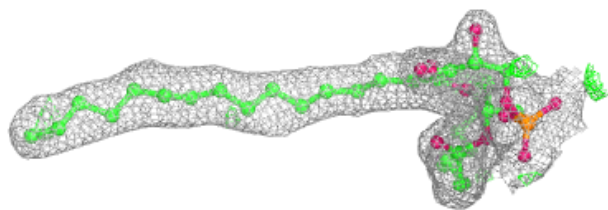
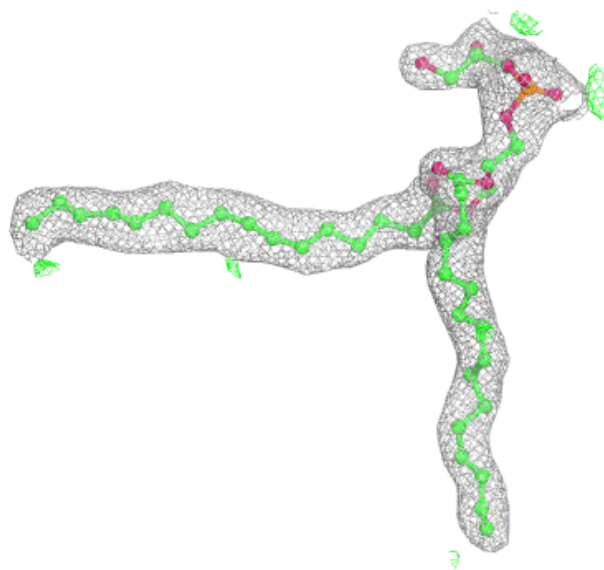
Electron density around CLA b 609:

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



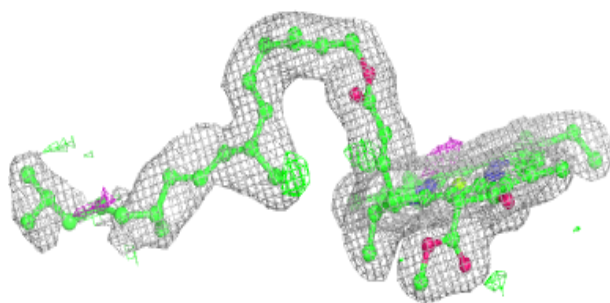
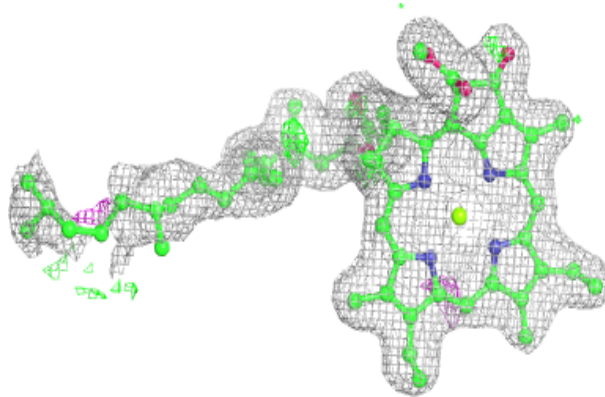
Electron density around LHG 1 101:

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

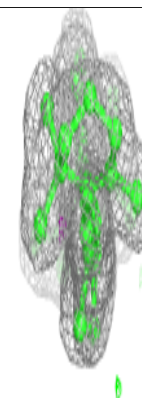
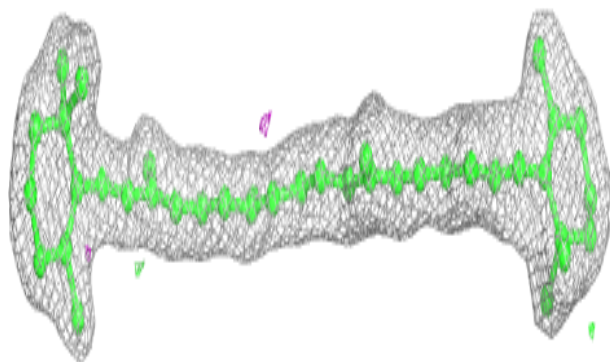
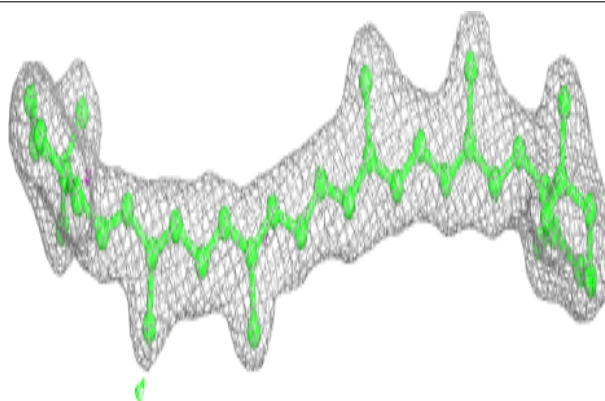


Electron density around CLA A 607:

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

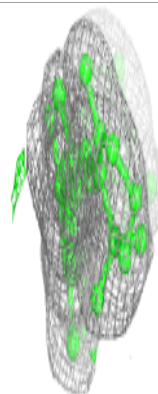
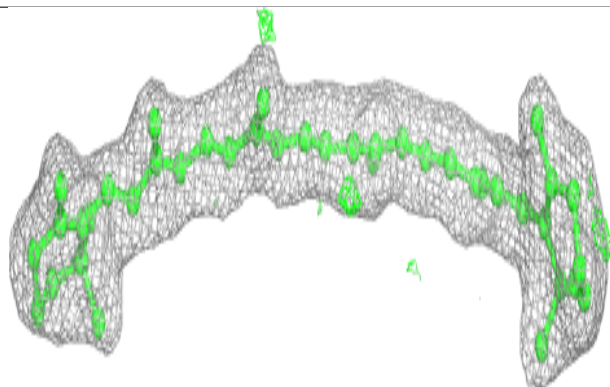
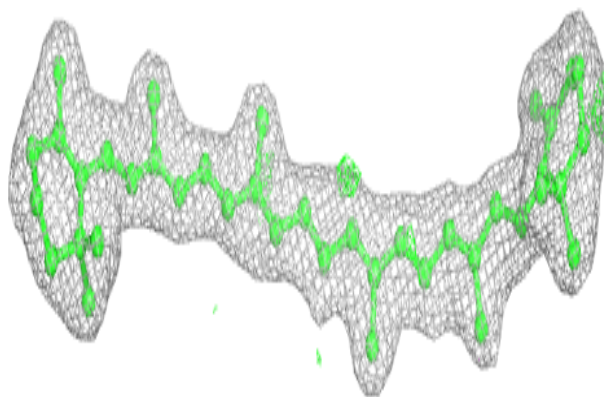
**Electron density around BCR A 610:**

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

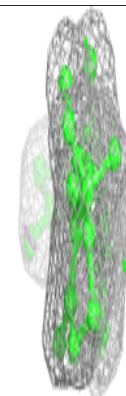
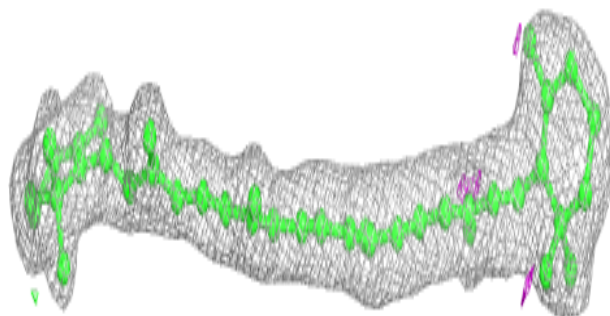
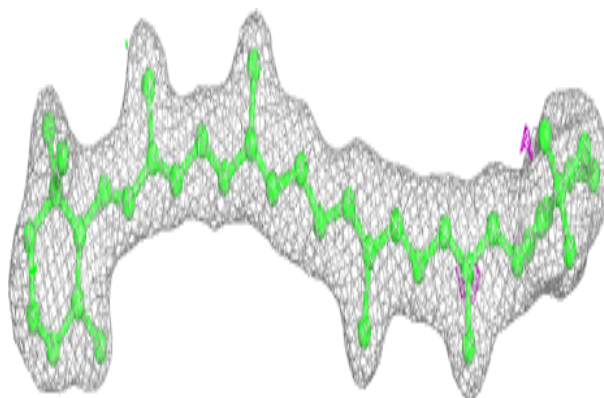


Electron density around BCR t 101:

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

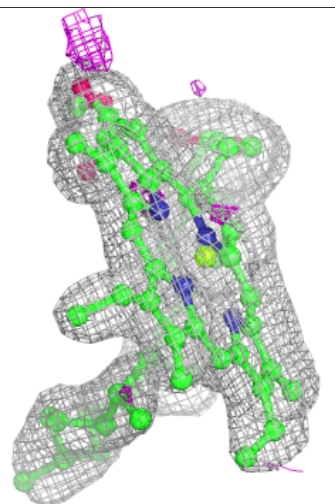
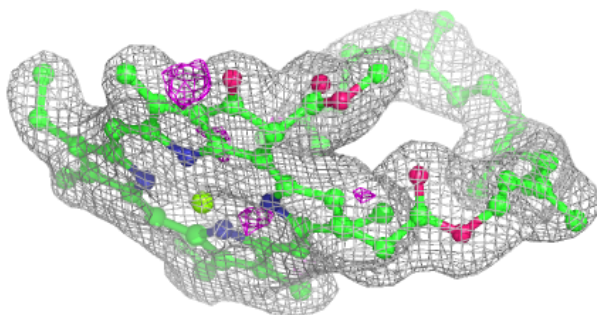
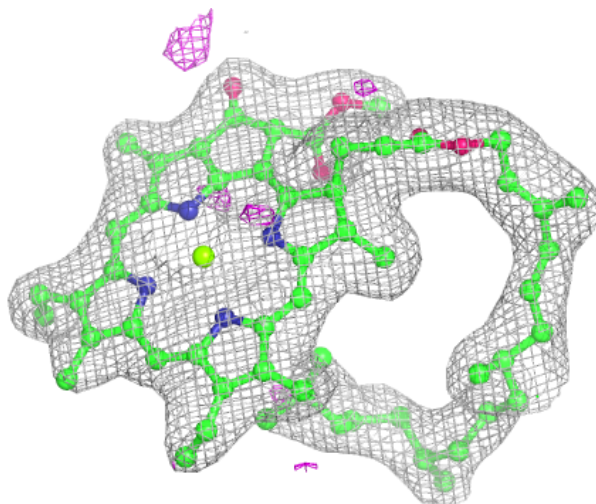
**Electron density around BCR B 617:**

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



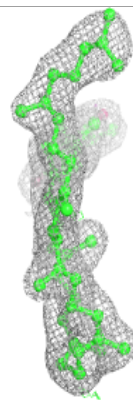
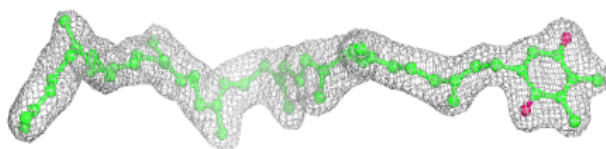
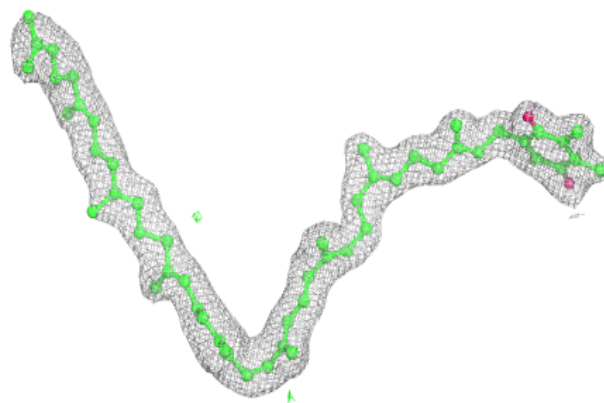
Electron density around CLA b 614:

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



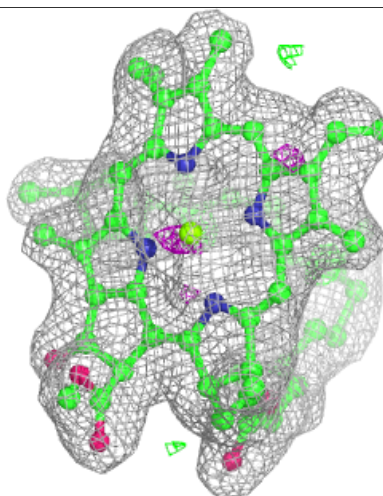
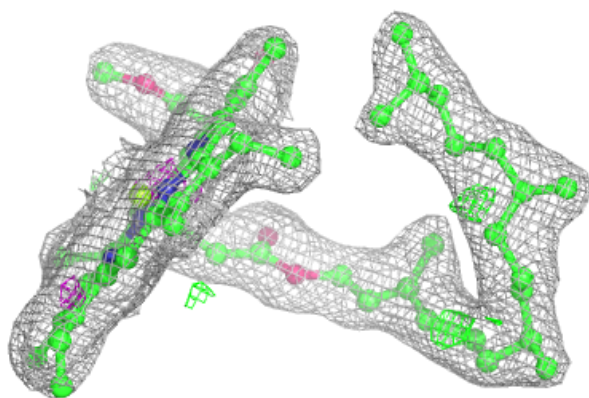
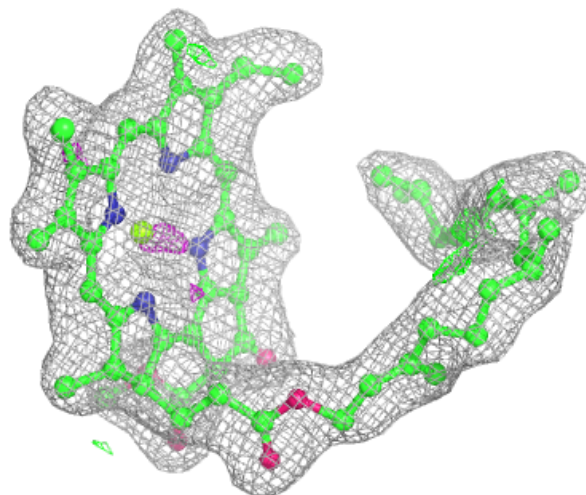
Electron density around PL9 d 405:

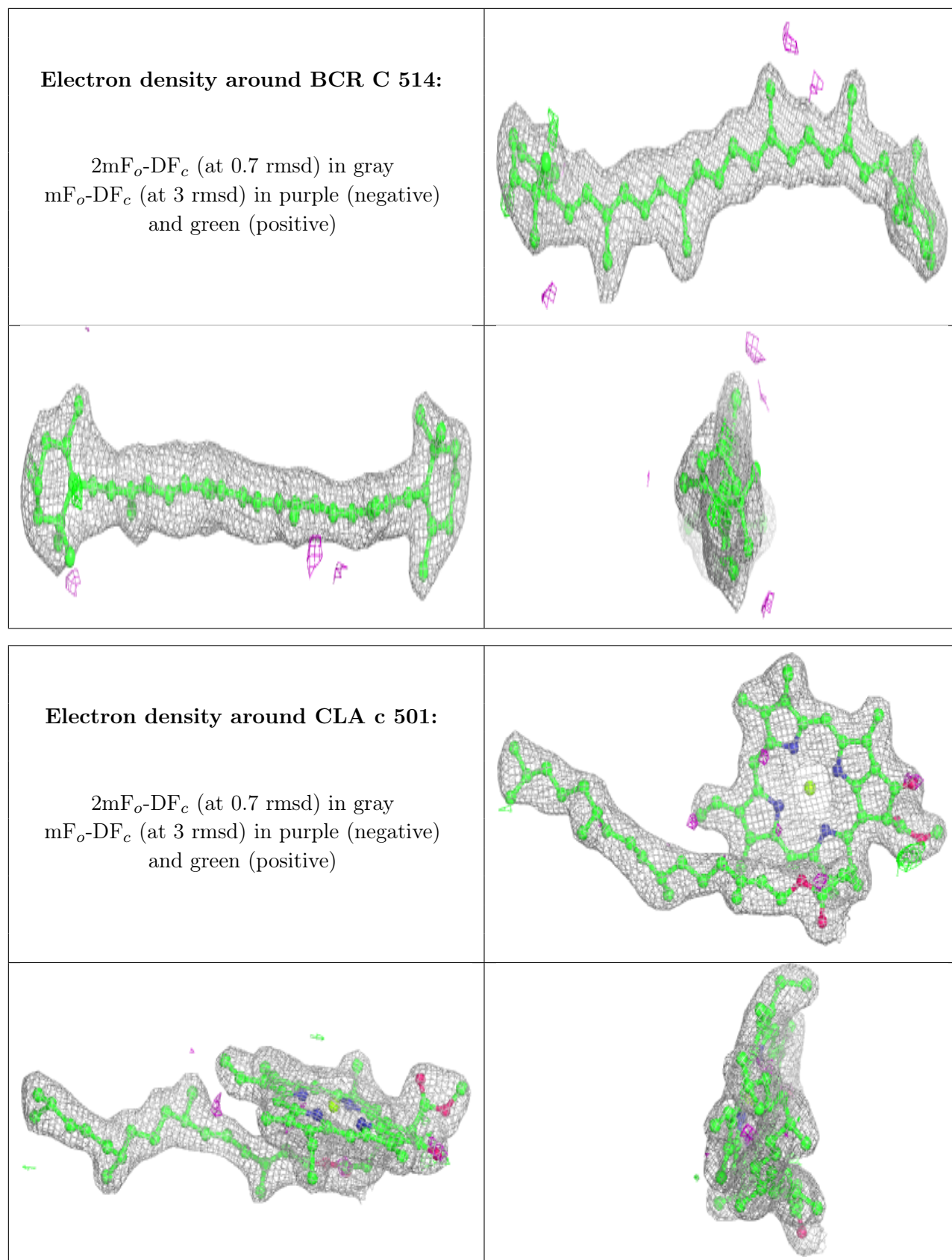
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



Electron density around CLA C 503:

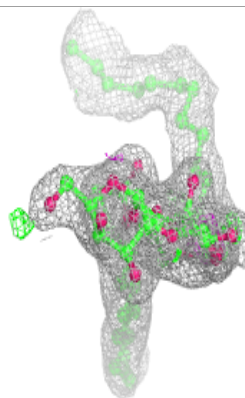
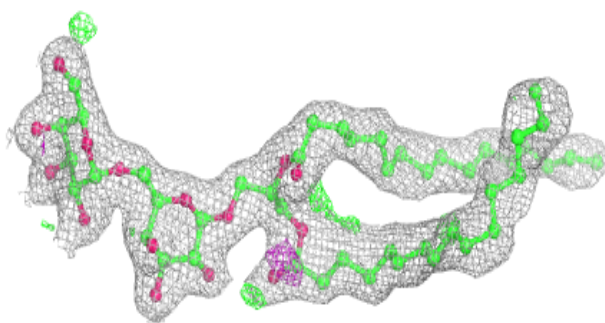
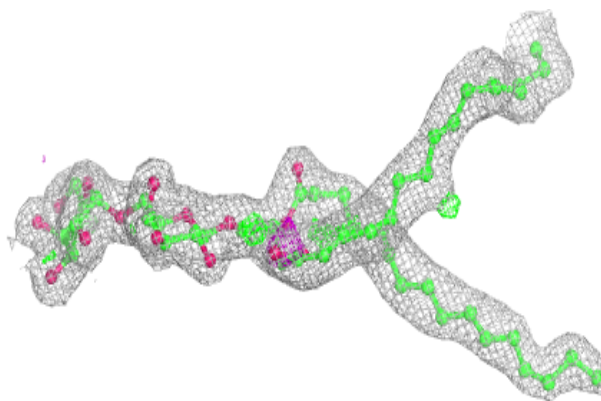
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)



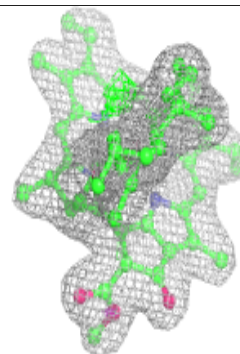
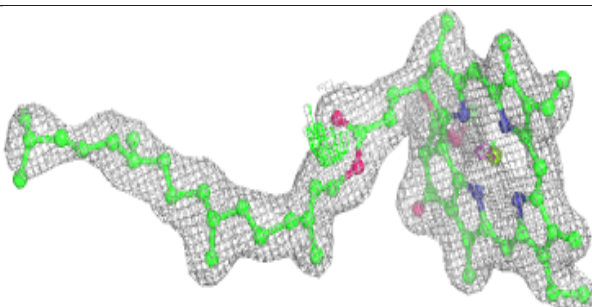
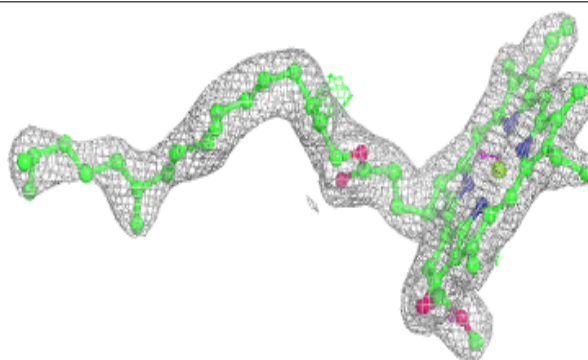


Electron density around DGD C 515:

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

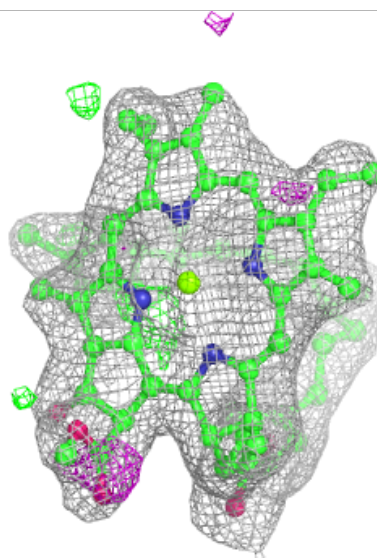
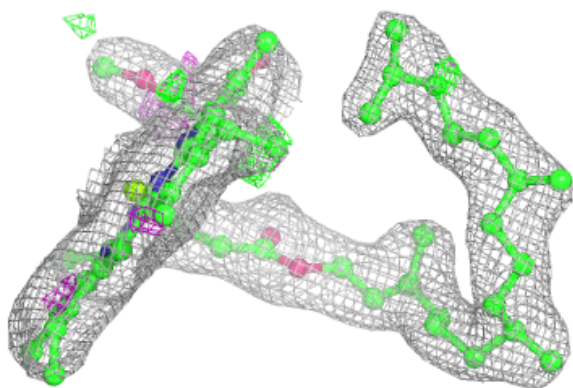
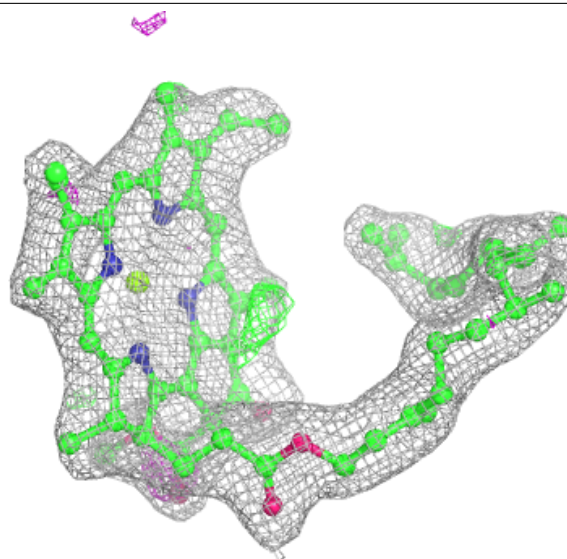
**Electron density around CLA c 502:**

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



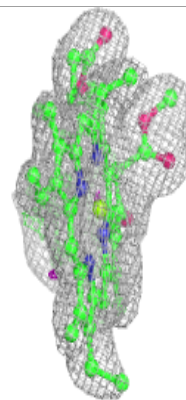
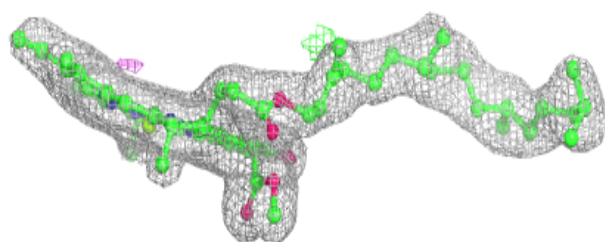
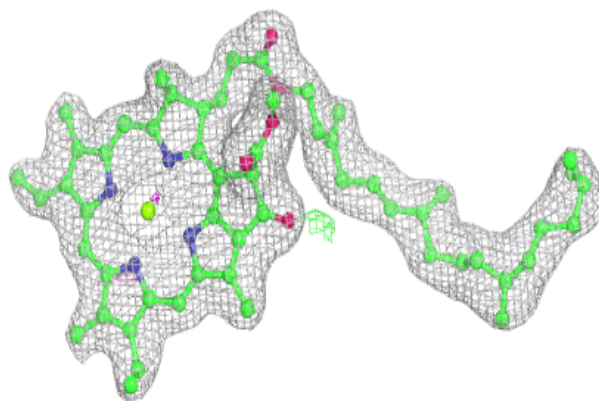
Electron density around CLA c 503:

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



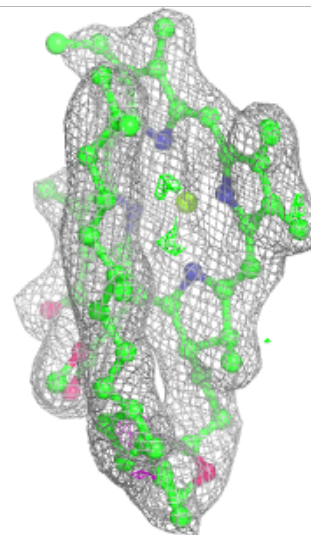
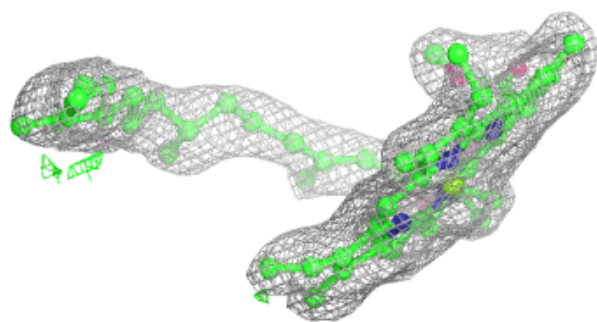
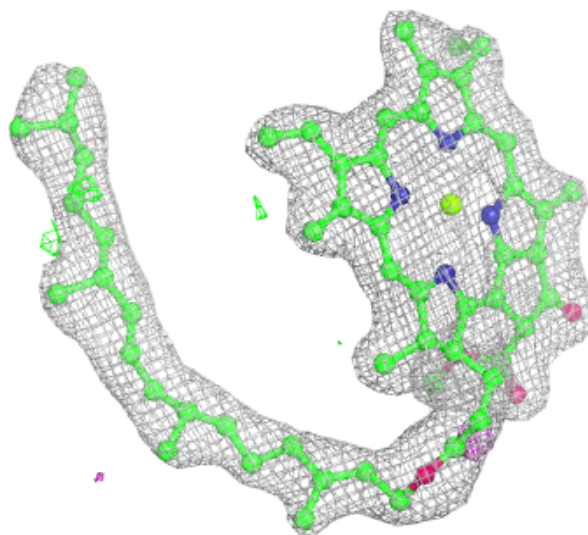
Electron density around CLA b 601:

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



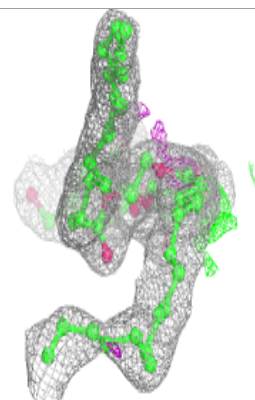
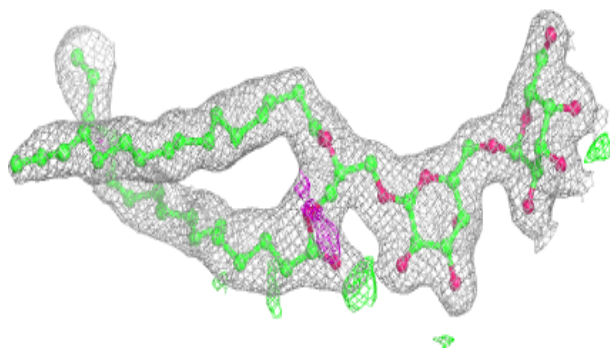
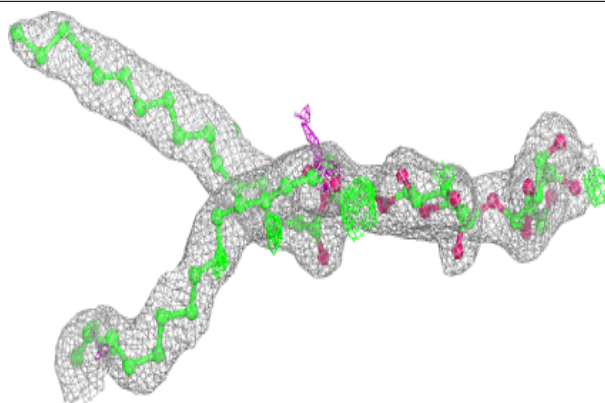
Electron density around CLA c 507:

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

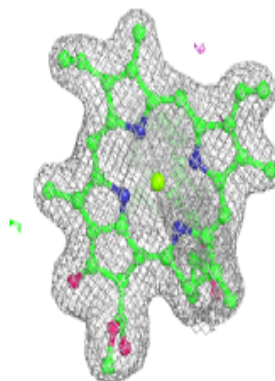
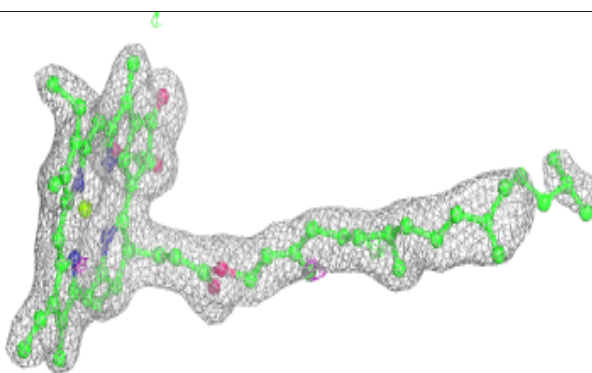
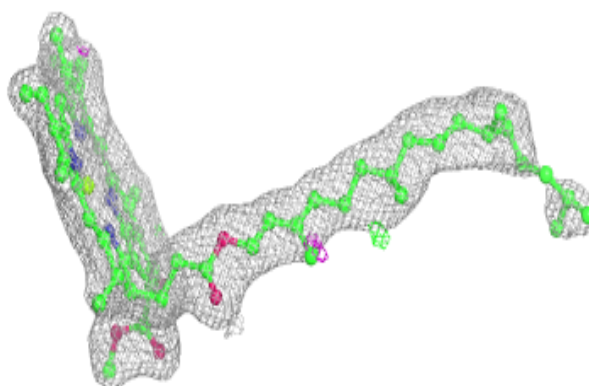


Electron density around DGD c 516:

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

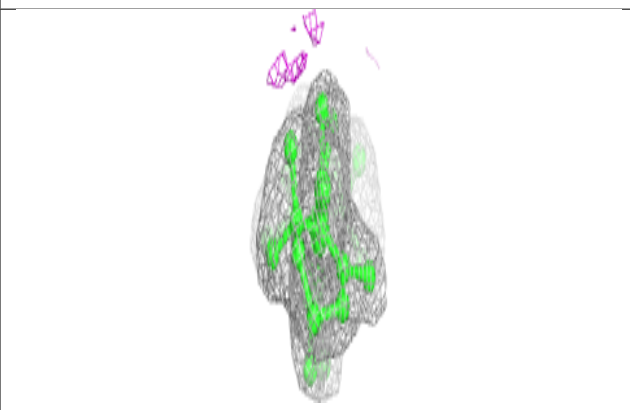
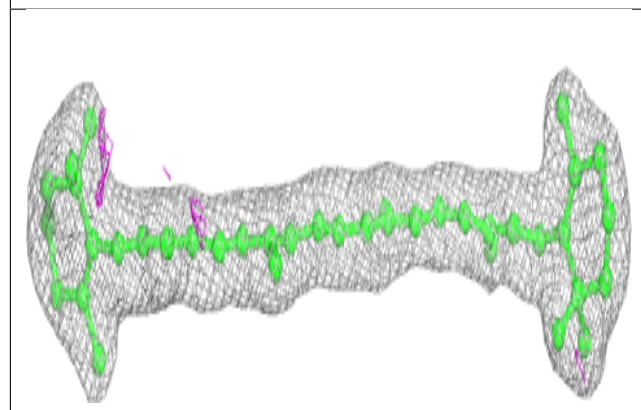
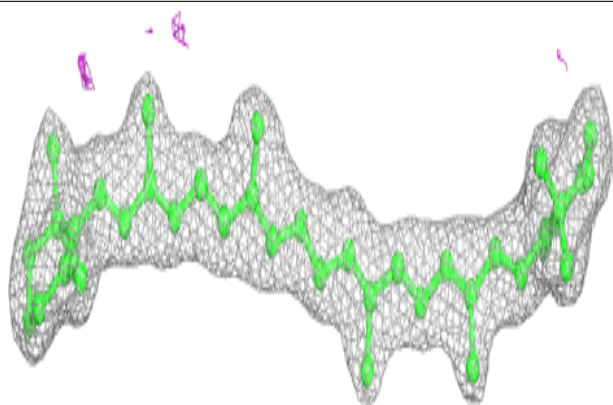
**Electron density around CLA b 603:**

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

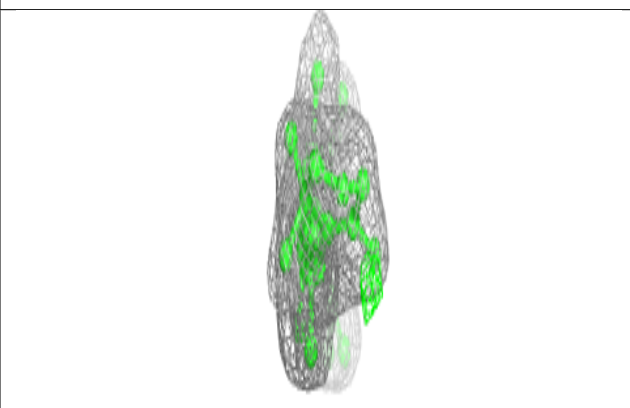
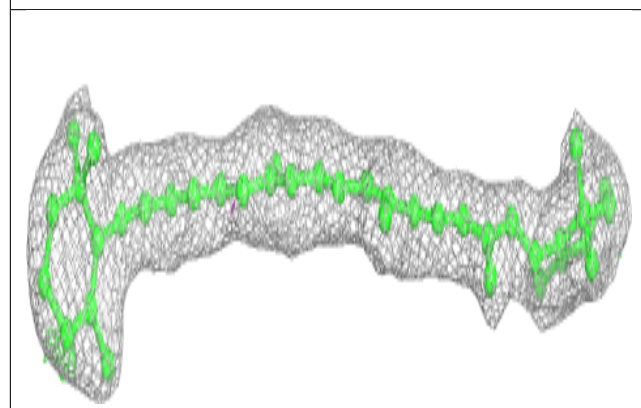
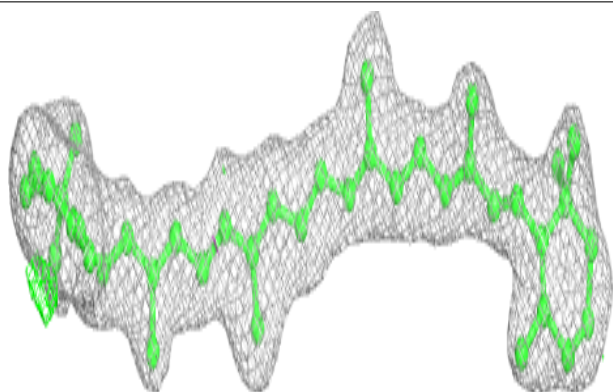


Electron density around BCR a 611:

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

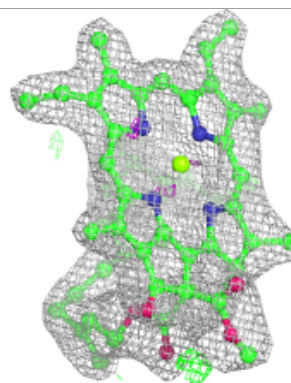
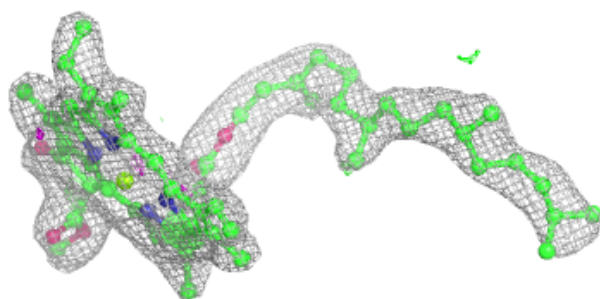
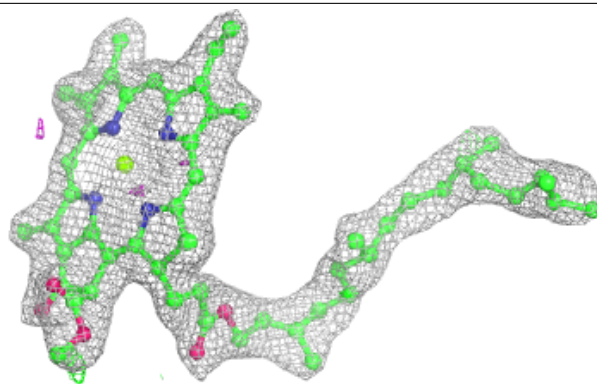
**Electron density around BCR b 616:**

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

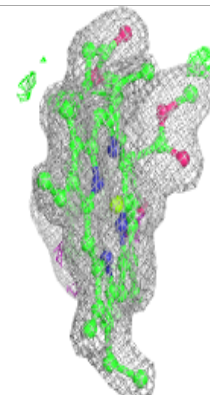
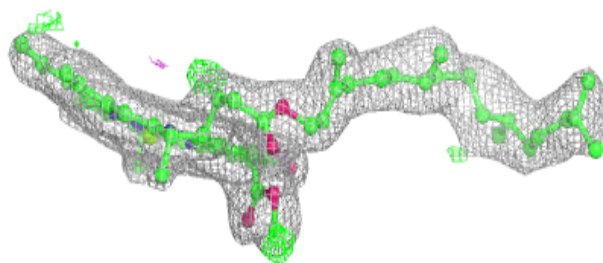
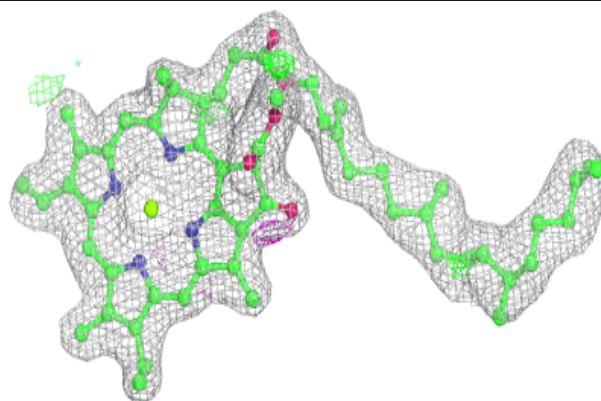


Electron density around CLA c 511:

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

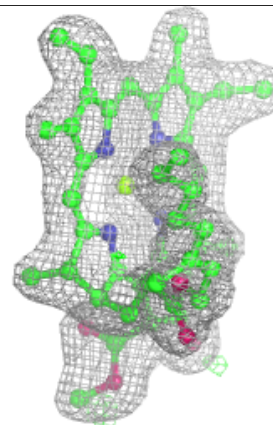
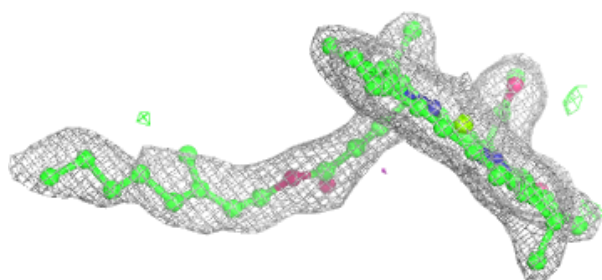
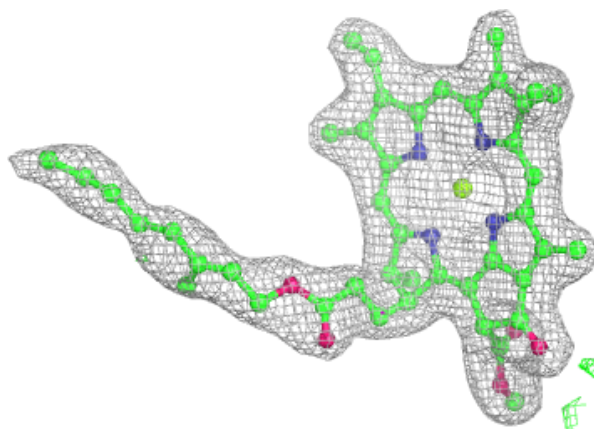
**Electron density around CLA B 602:**

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

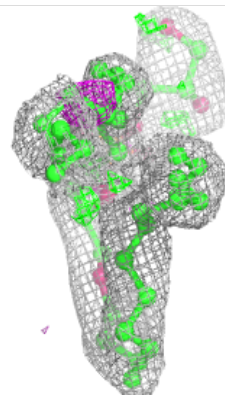
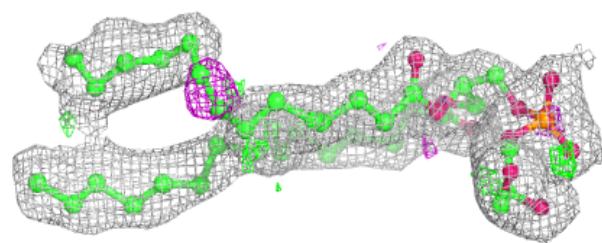
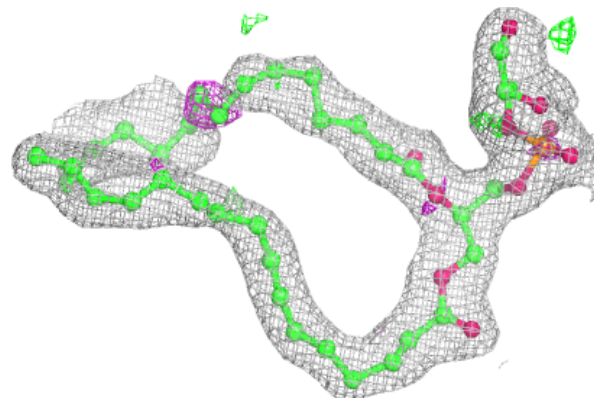


Electron density around CLA A 609:

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

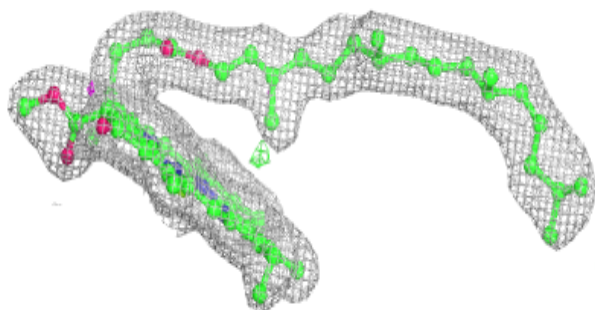
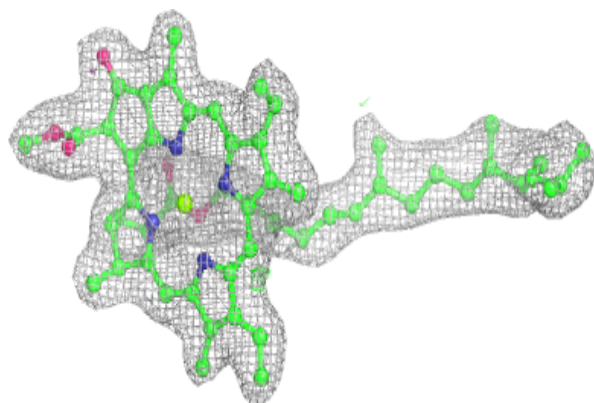
**Electron density around LHG A 614:**

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



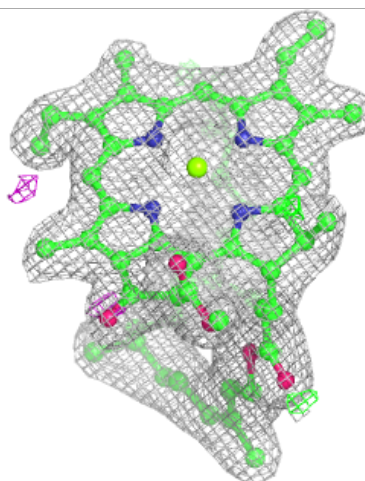
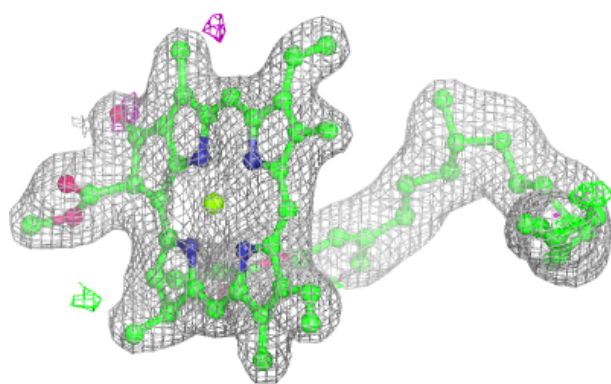
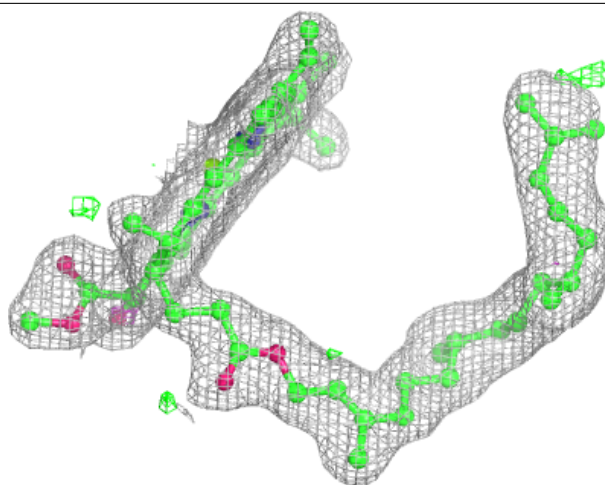
Electron density around CLA B 608:

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



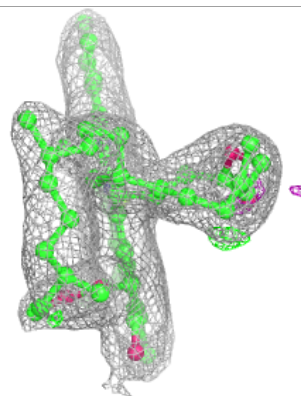
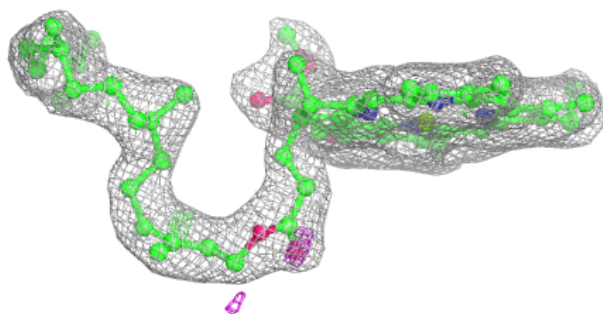
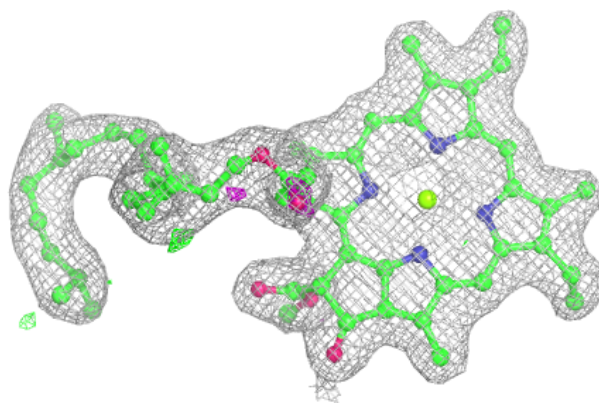
Electron density around CLA b 610:

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



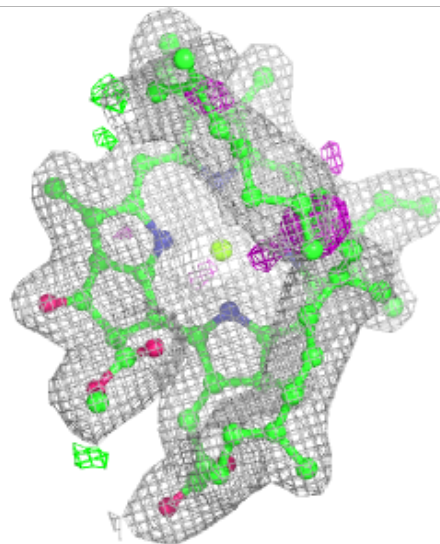
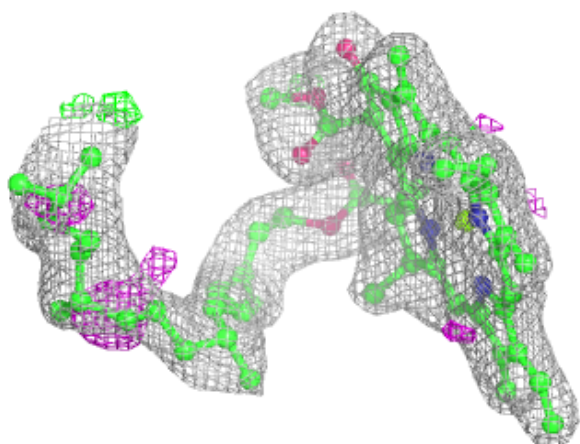
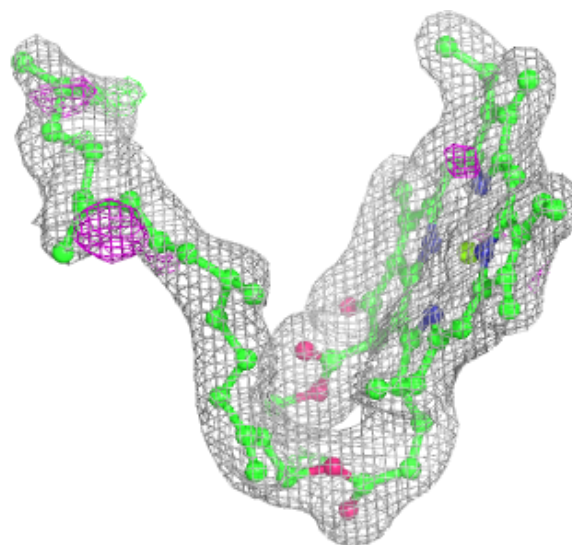
Electron density around CLA b 611:

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



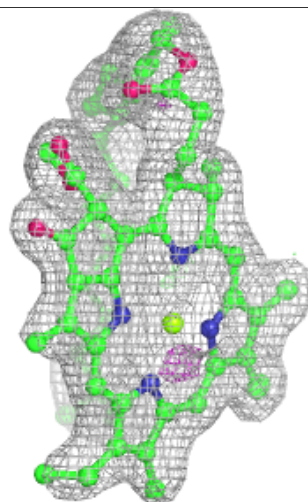
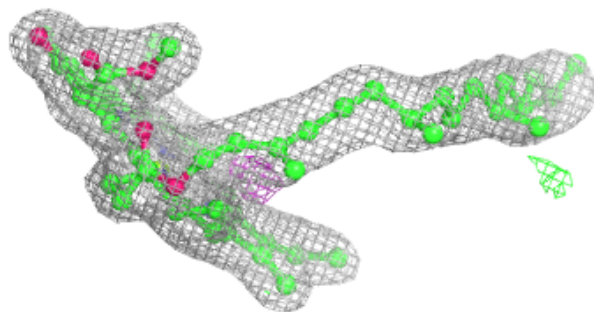
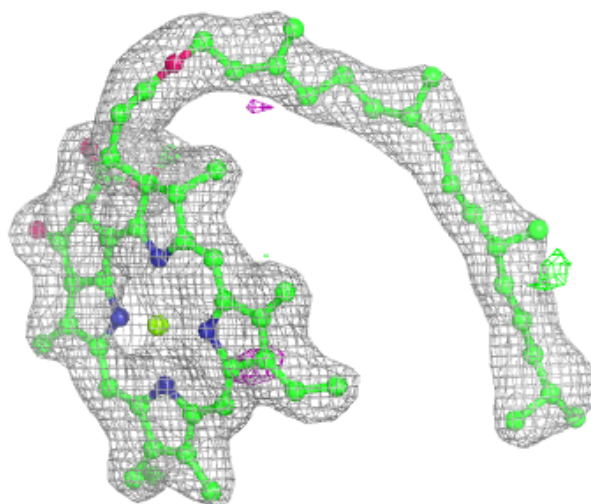
Electron density around CLA b 612:

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



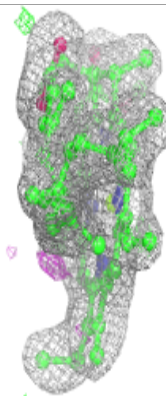
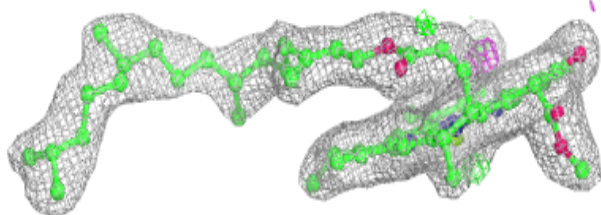
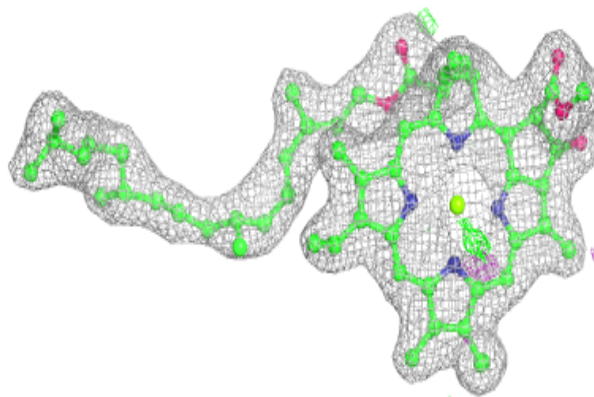
Electron density around CLA C 507:

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

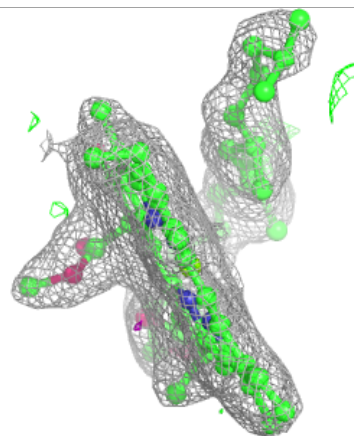
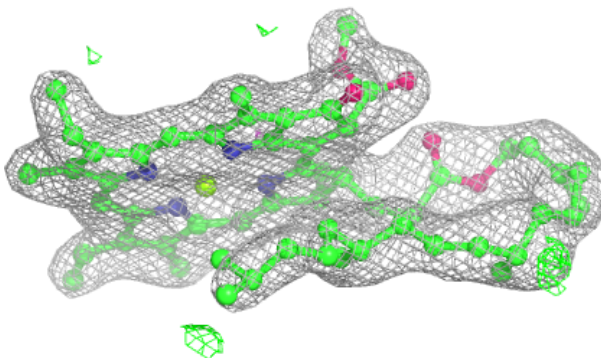
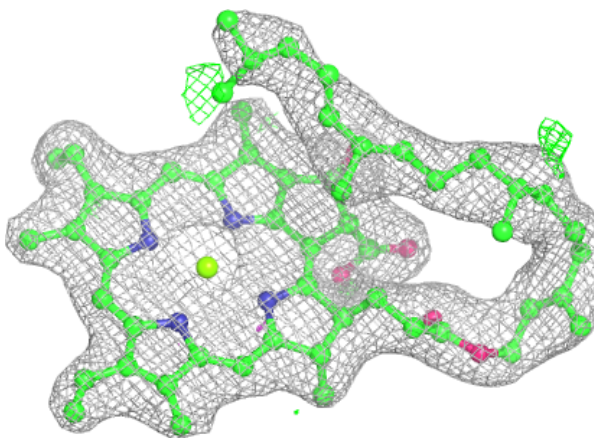


Electron density around CLA B 603:

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

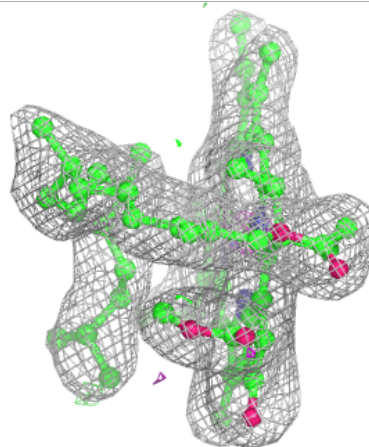
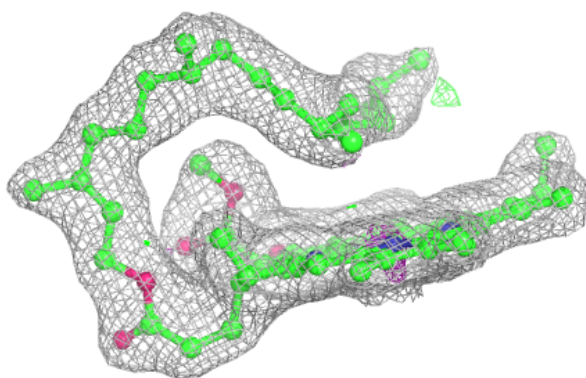
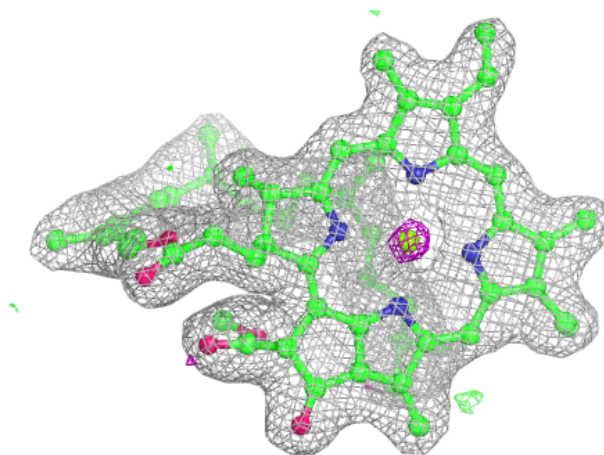
**Electron density around CLA C 509:**

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



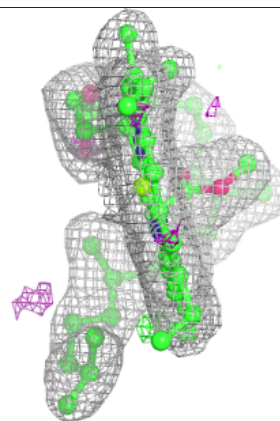
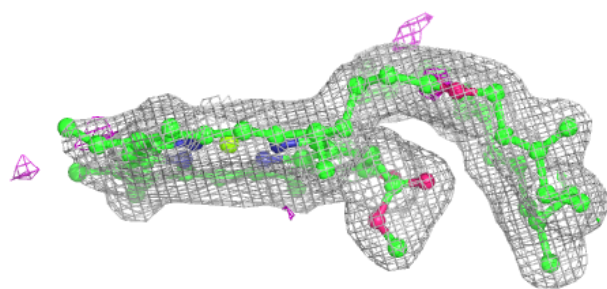
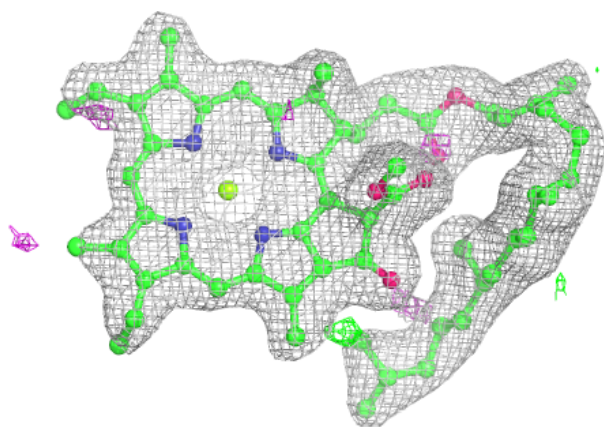
Electron density around CLA C 510:

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



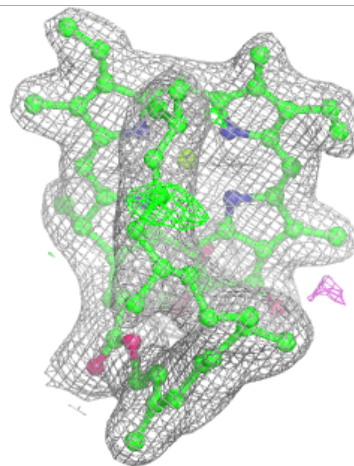
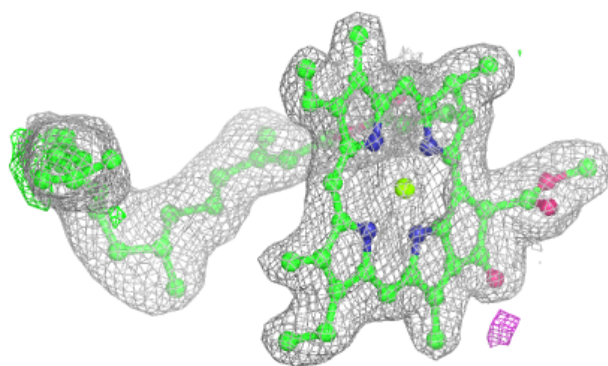
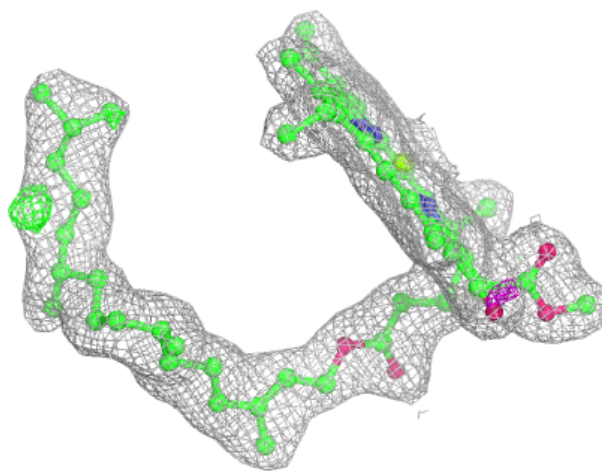
Electron density around CLA B 610:

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



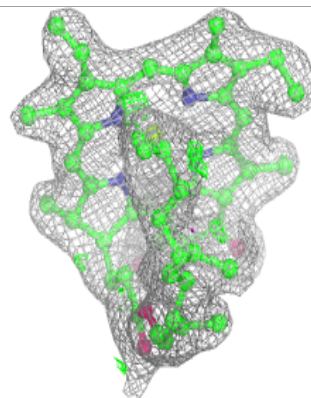
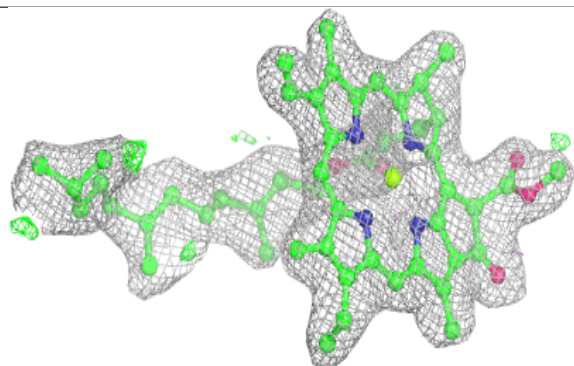
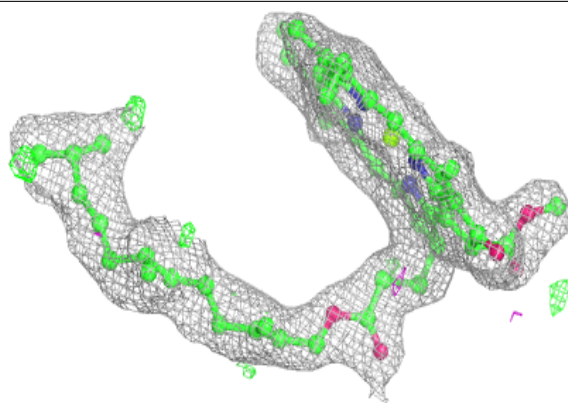
Electron density around CLA B 611:

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

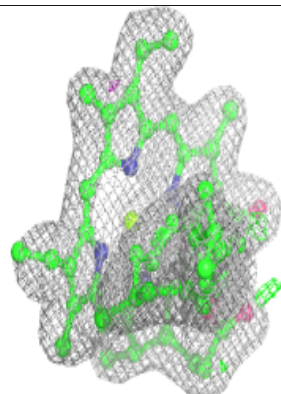
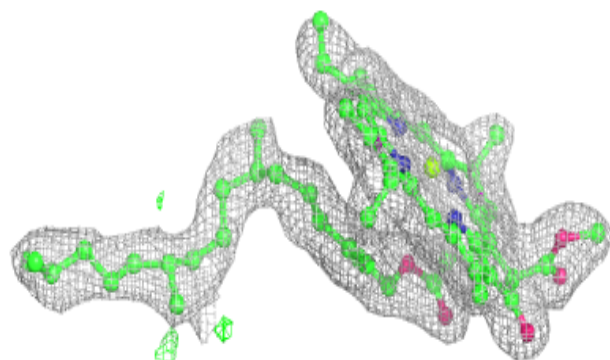
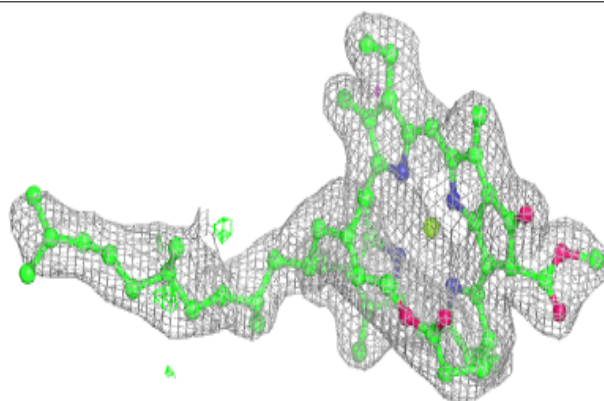


Electron density around CLA c 504:

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

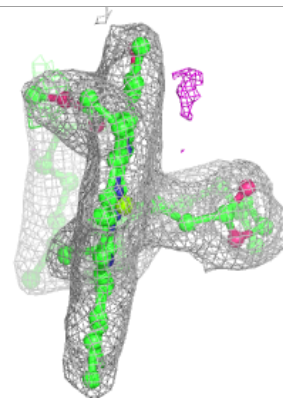
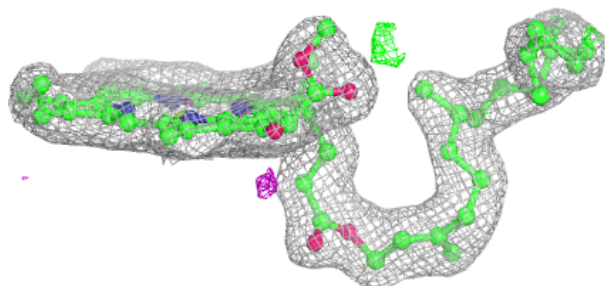
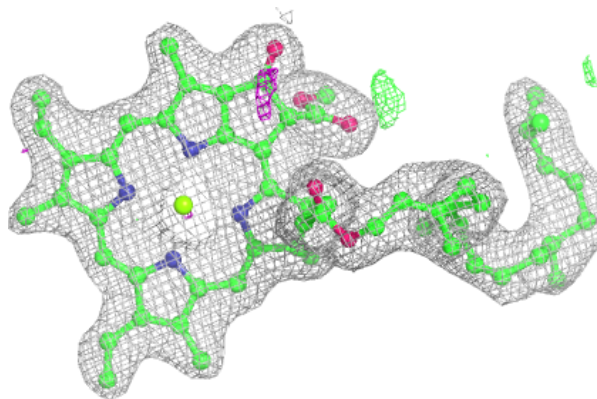
**Electron density around CLA c 505:**

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

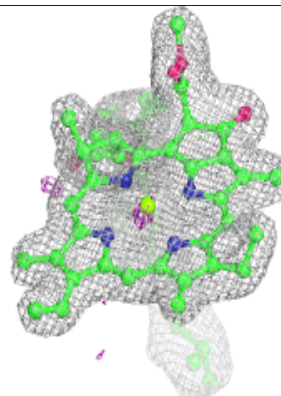
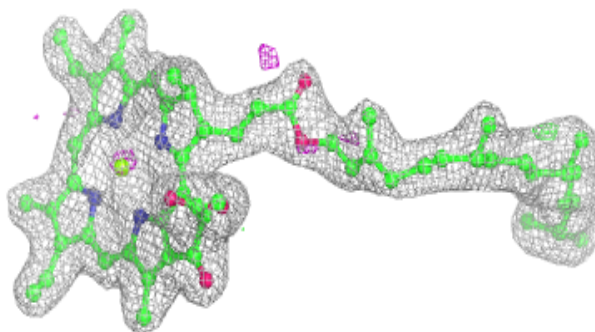
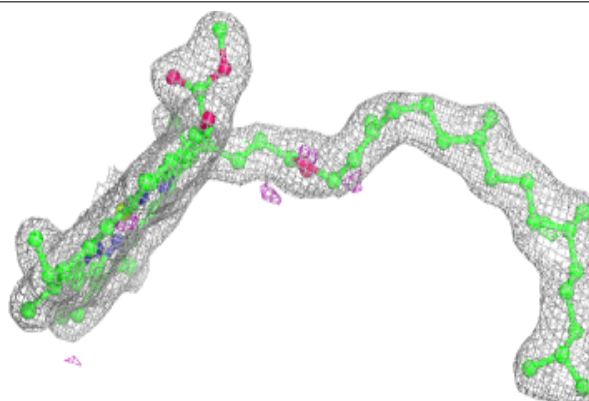


Electron density around CLA B 612:

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

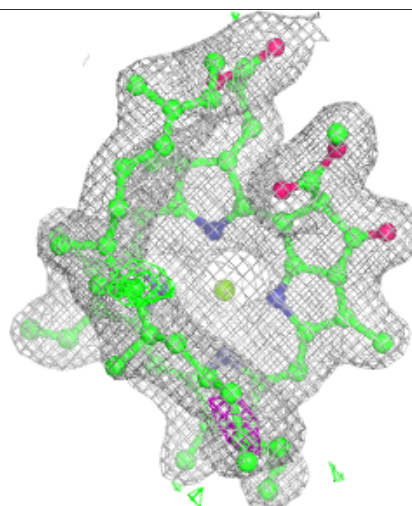
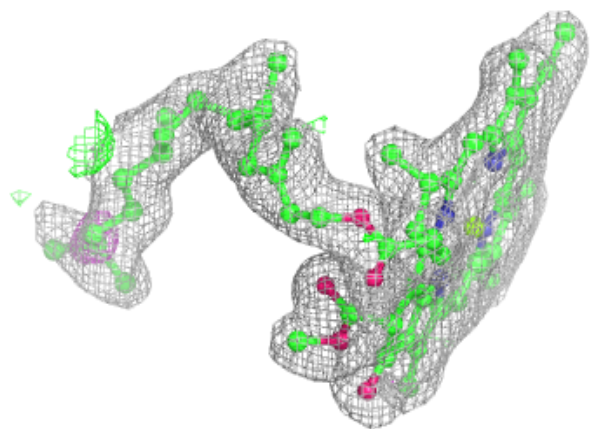
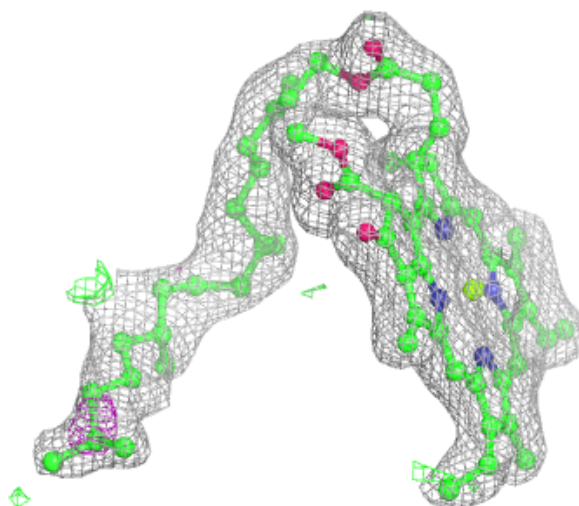
**Electron density around CLA D 403:**

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



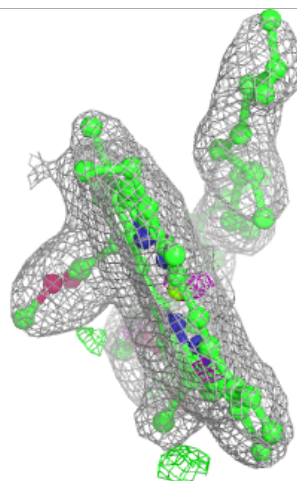
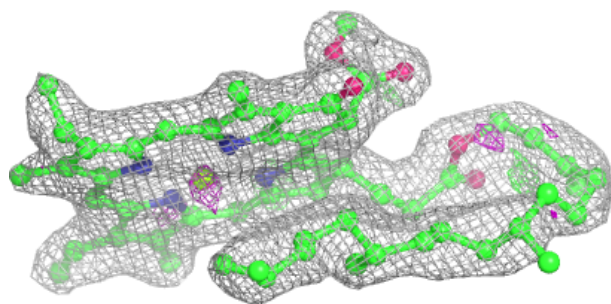
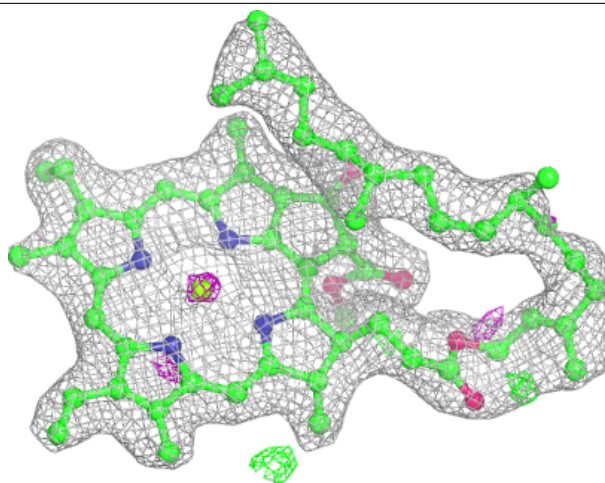
Electron density around CLA B 613:

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



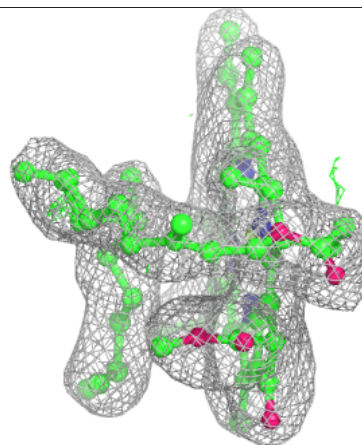
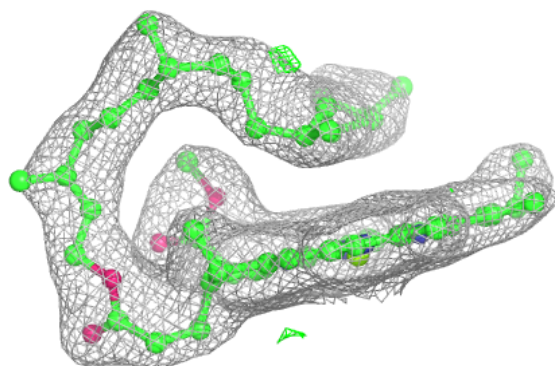
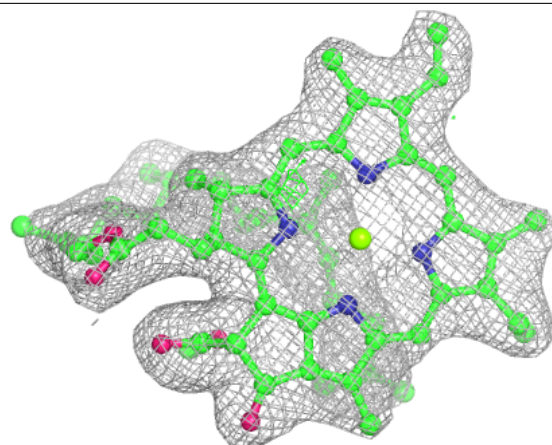
Electron density around CLA c 509:

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

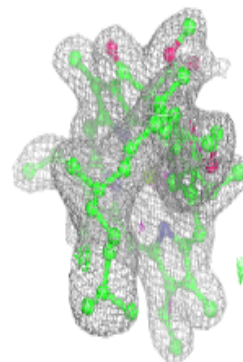
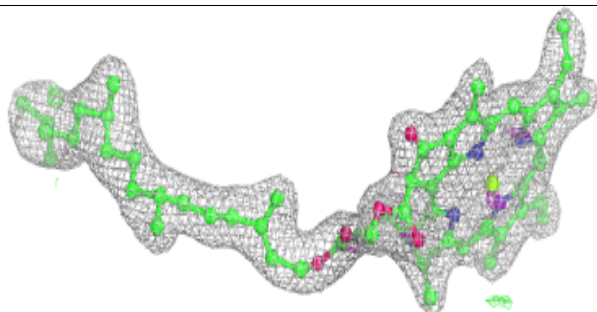
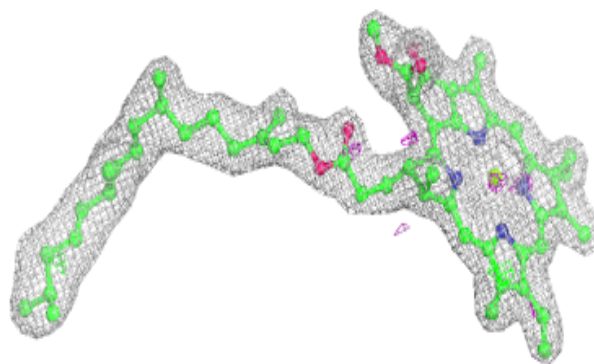


Electron density around CLA c 510:

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

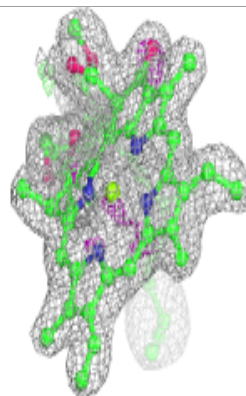
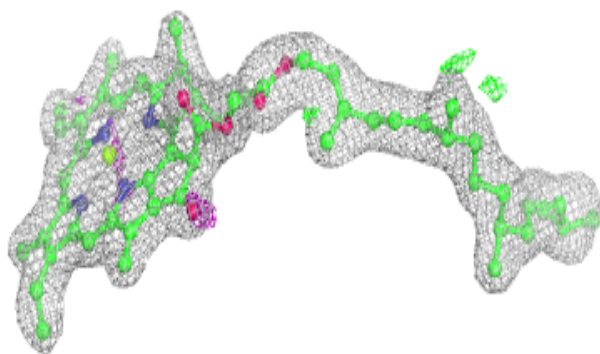
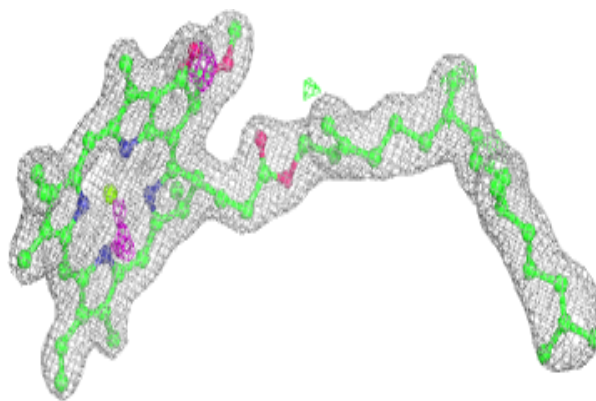
**Electron density around CLA a 607:**

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

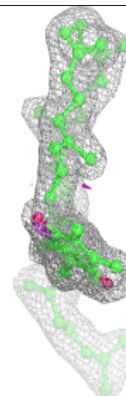
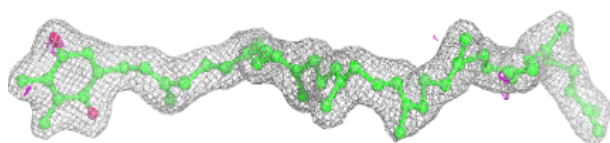
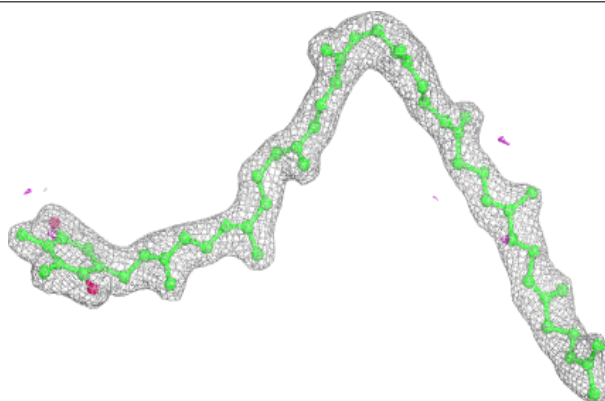


Electron density around CLA A 606:

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

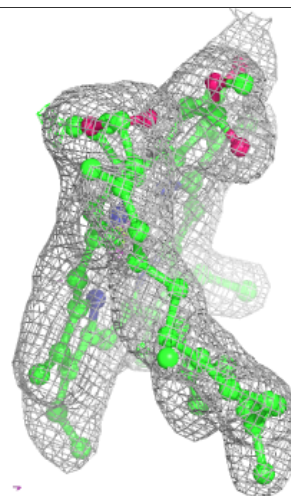
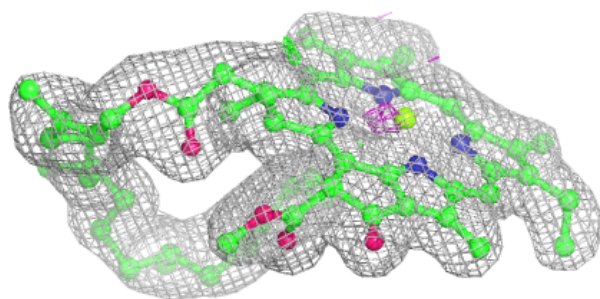
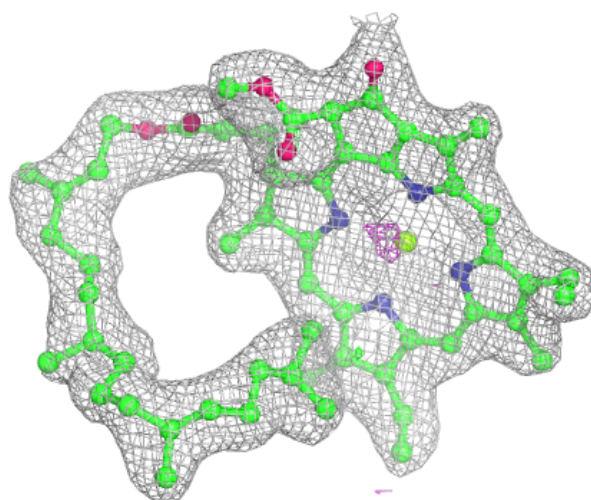
**Electron density around PL9 D 406:**

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



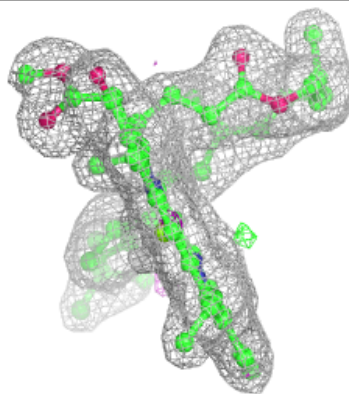
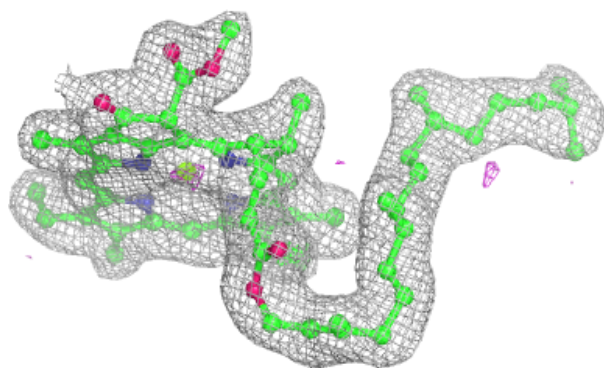
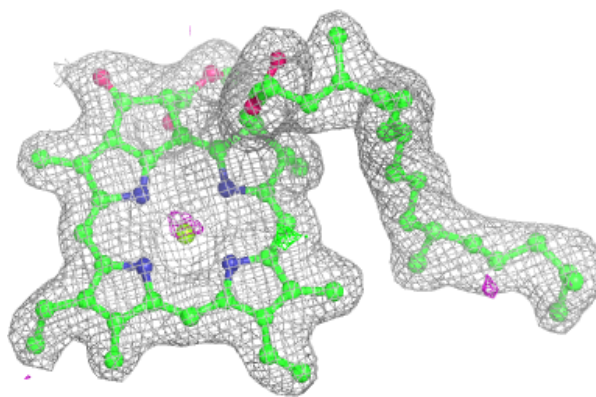
Electron density around CLA B 615:

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

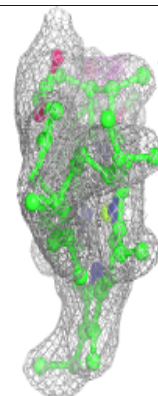
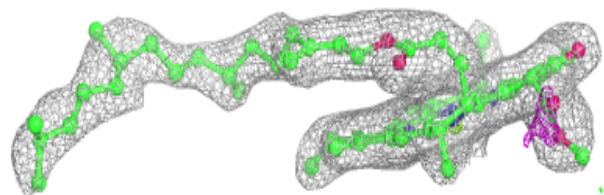
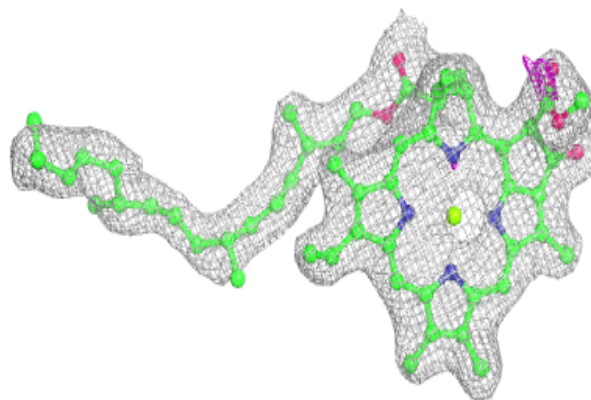


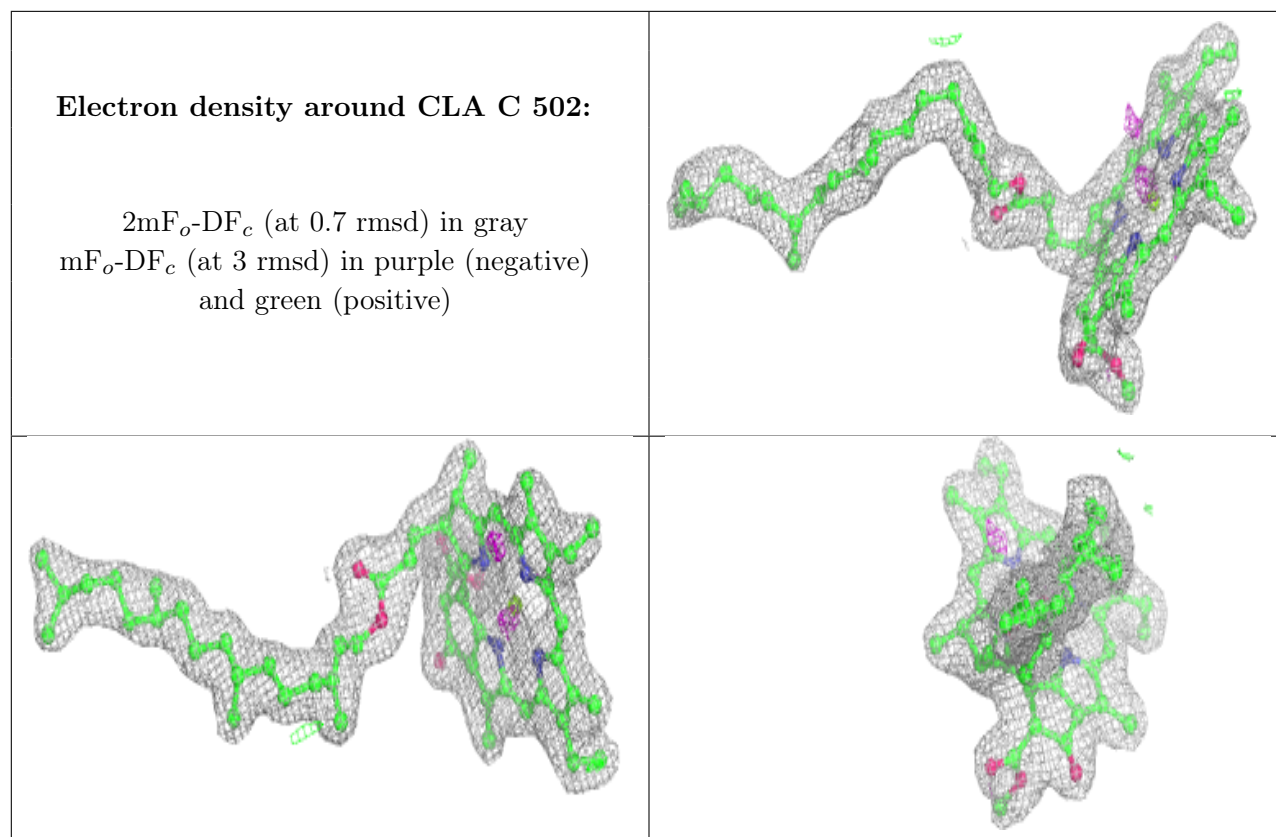
Electron density around CLA A 612:

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

**Electron density around CLA b 602:**

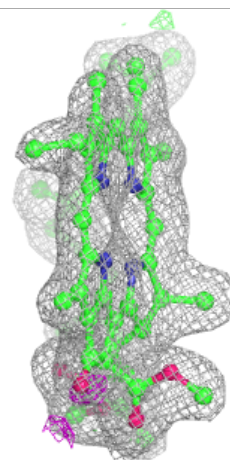
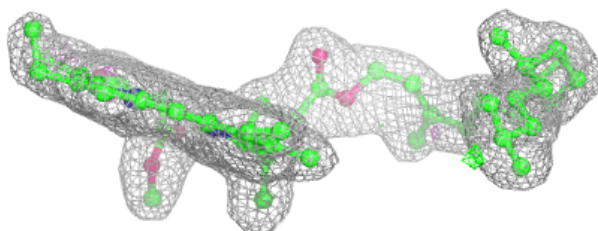
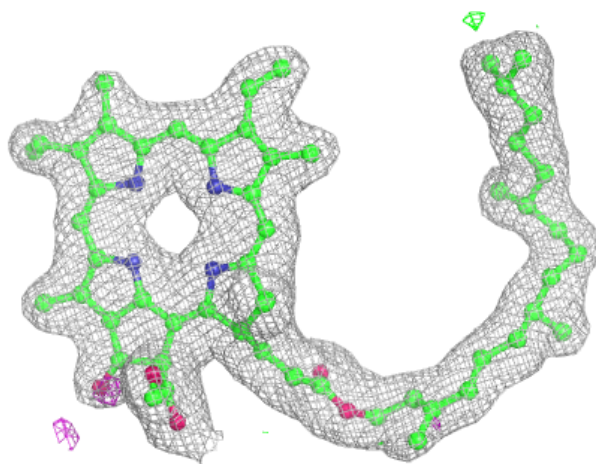
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





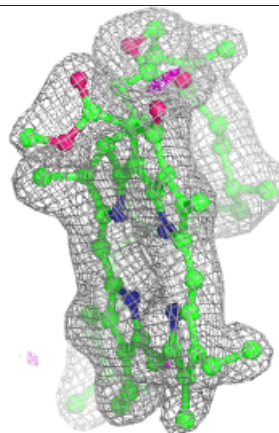
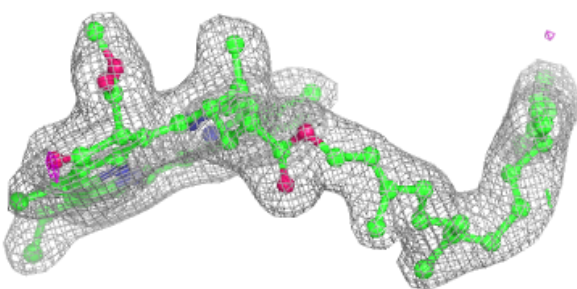
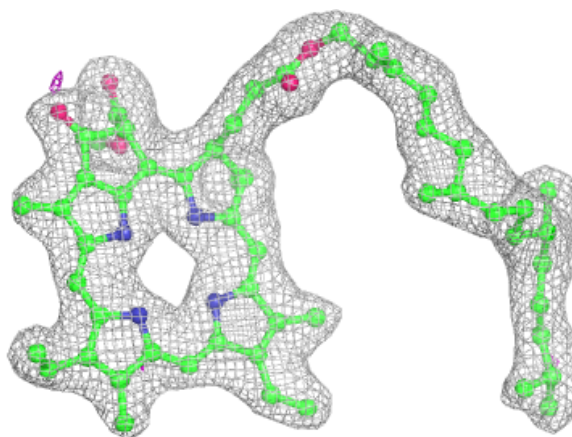
Electron density around PHO a 609:

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

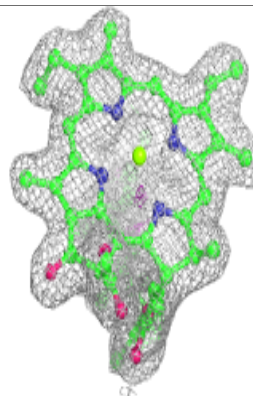
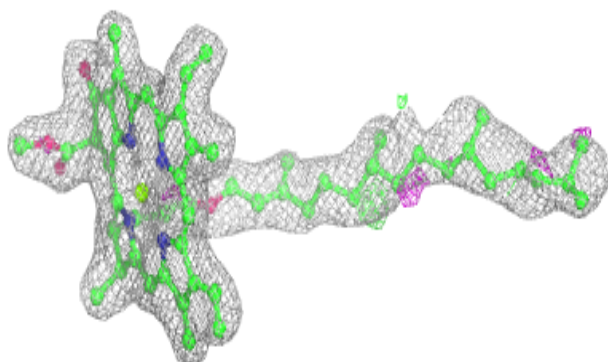
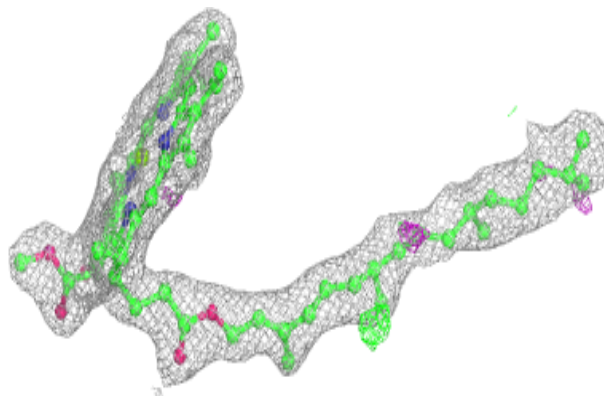


Electron density around PHO d 401:

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

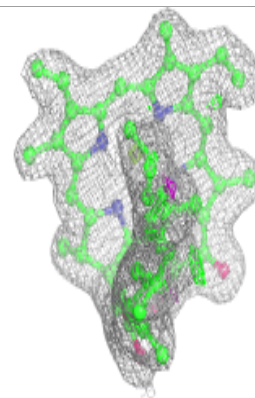
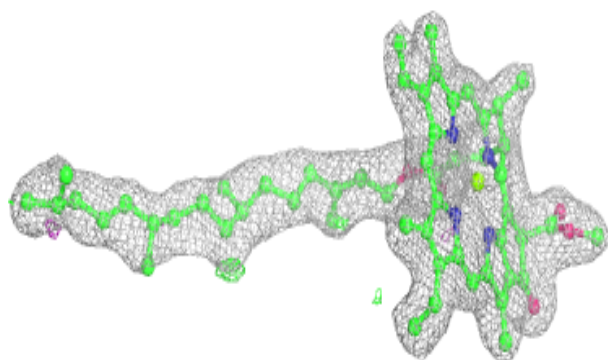
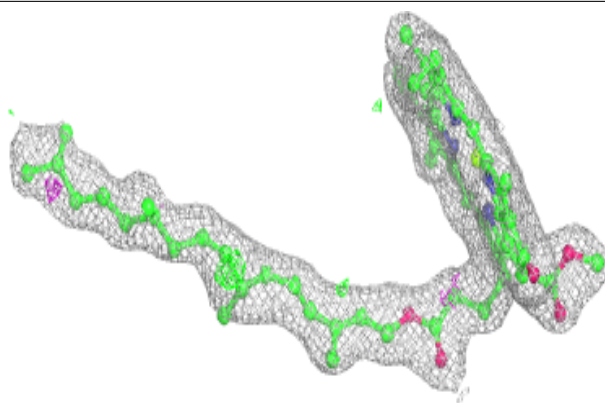
**Electron density around CLA B 607:**

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

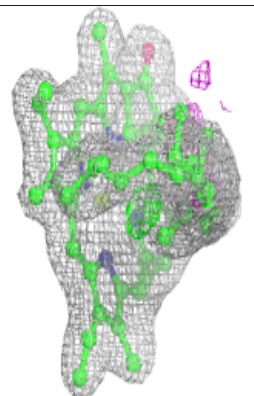
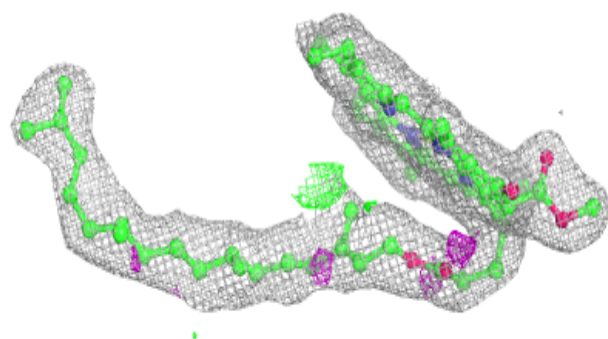
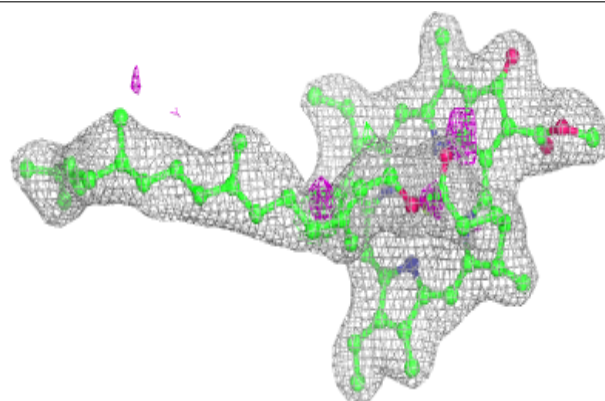


Electron density around CLA b 606:

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

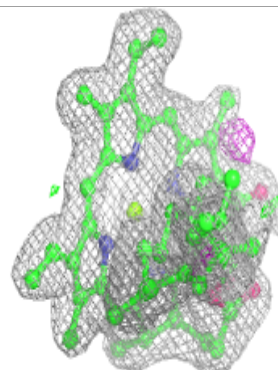
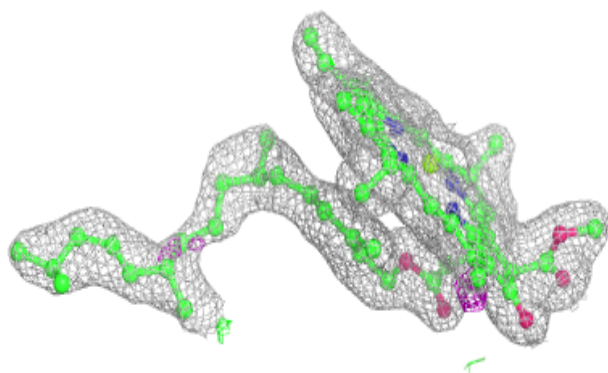
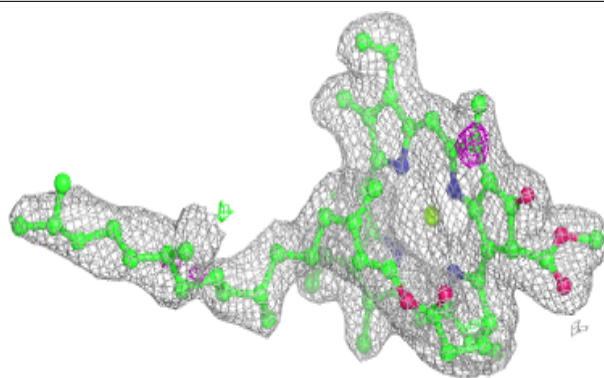
**Electron density around CLA b 607:**

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

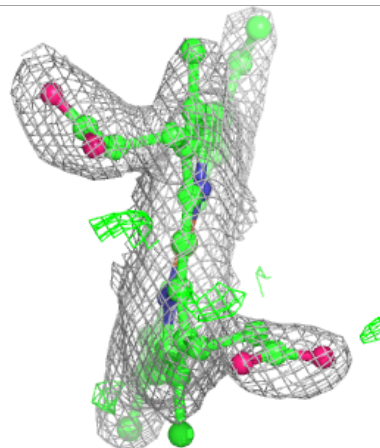
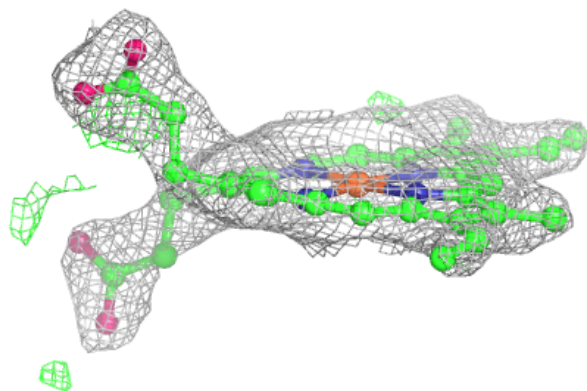
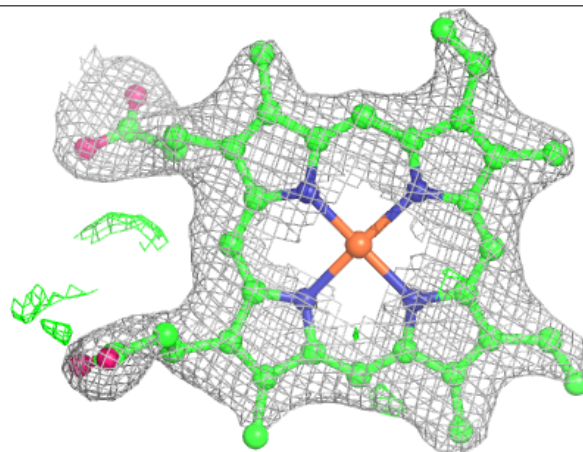


Electron density around CLA C 505:

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

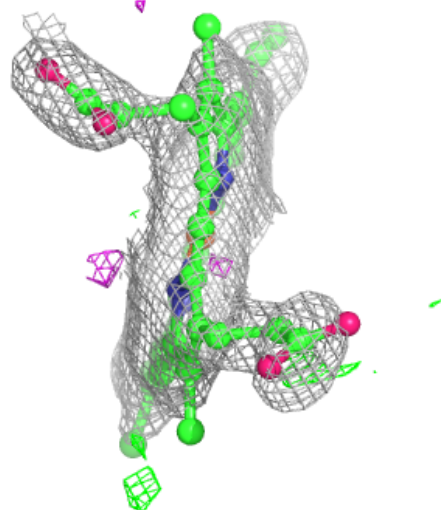
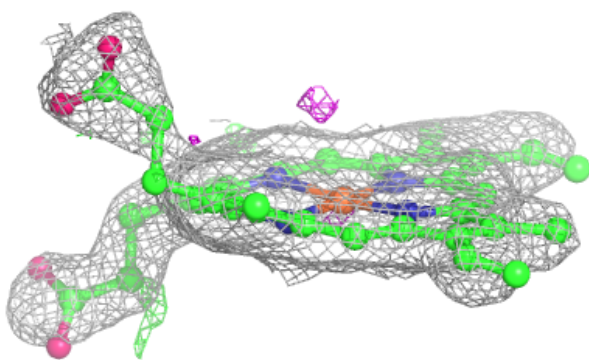
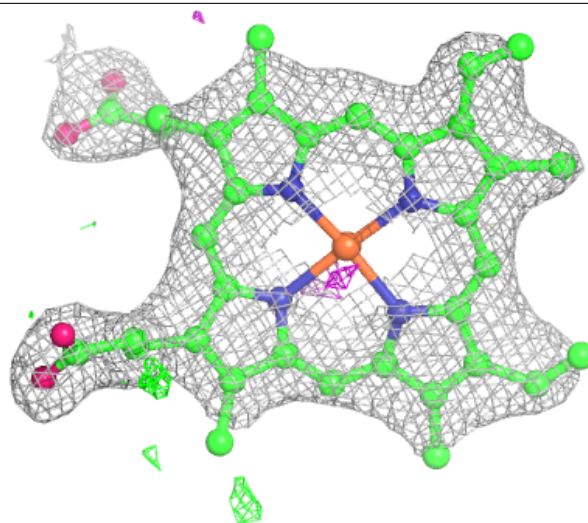
**Electron density around HEM F 101:**

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



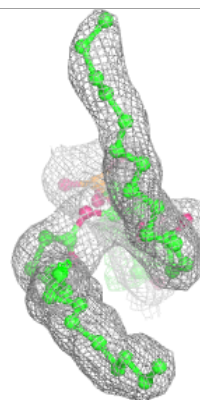
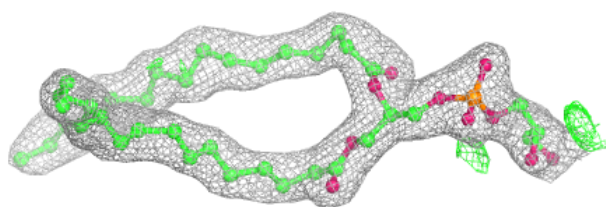
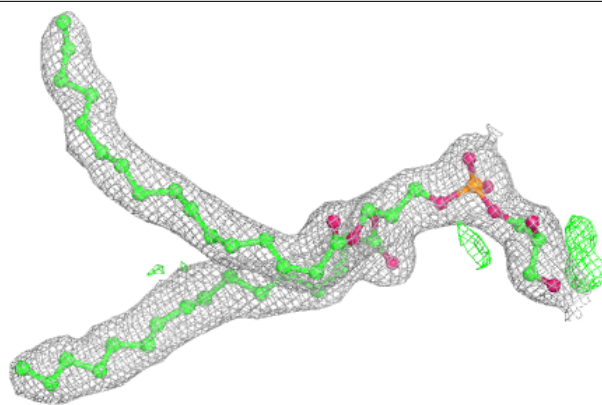
Electron density around HEM e 101:

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

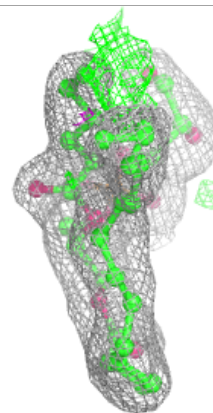
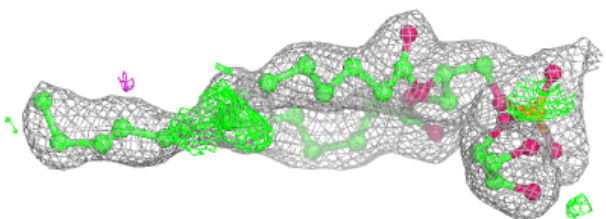
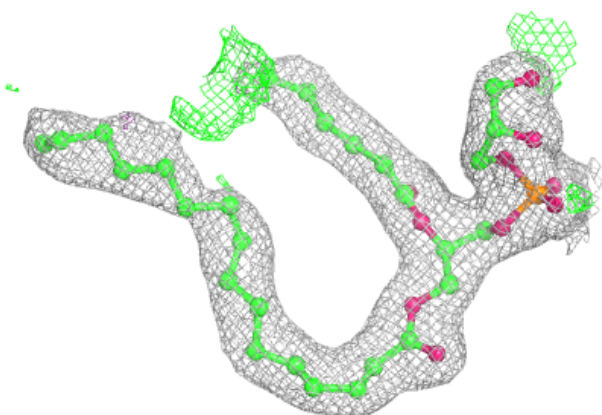


Electron density around LHG d 406:

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

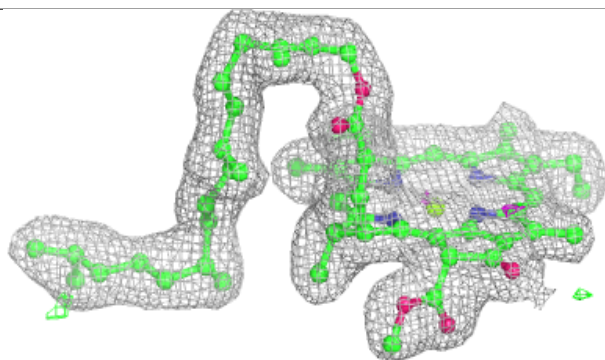
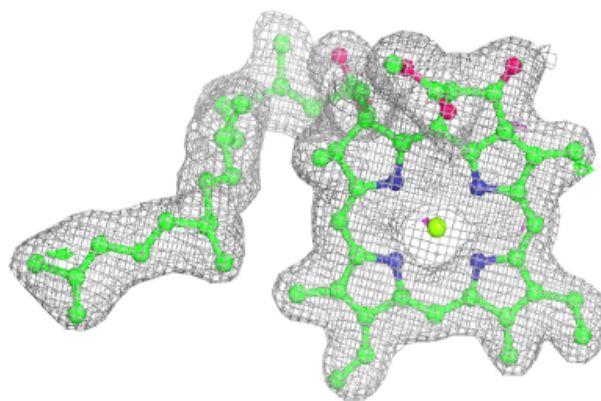
**Electron density around LHG d 407:**

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

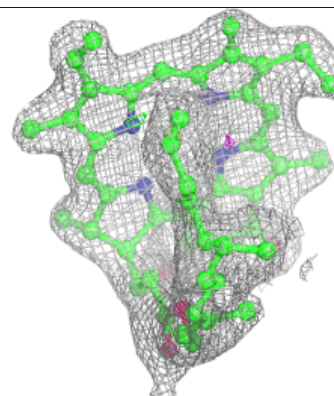
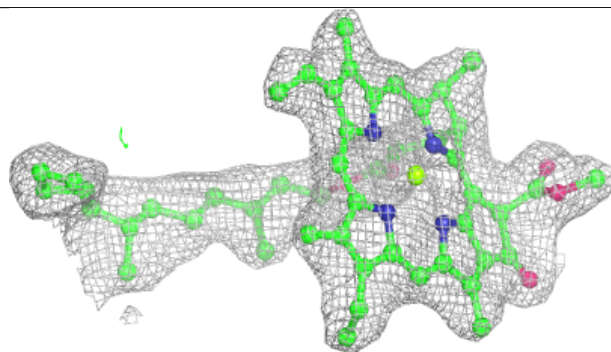
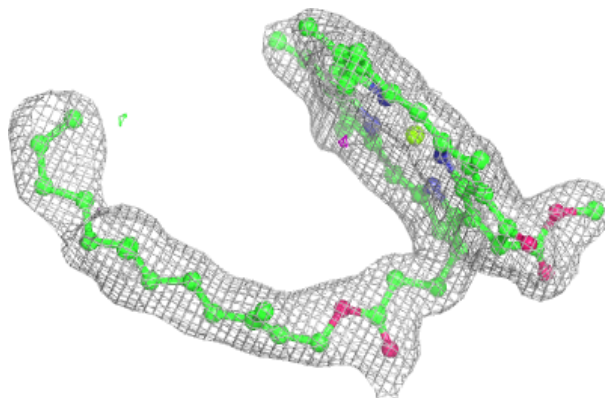


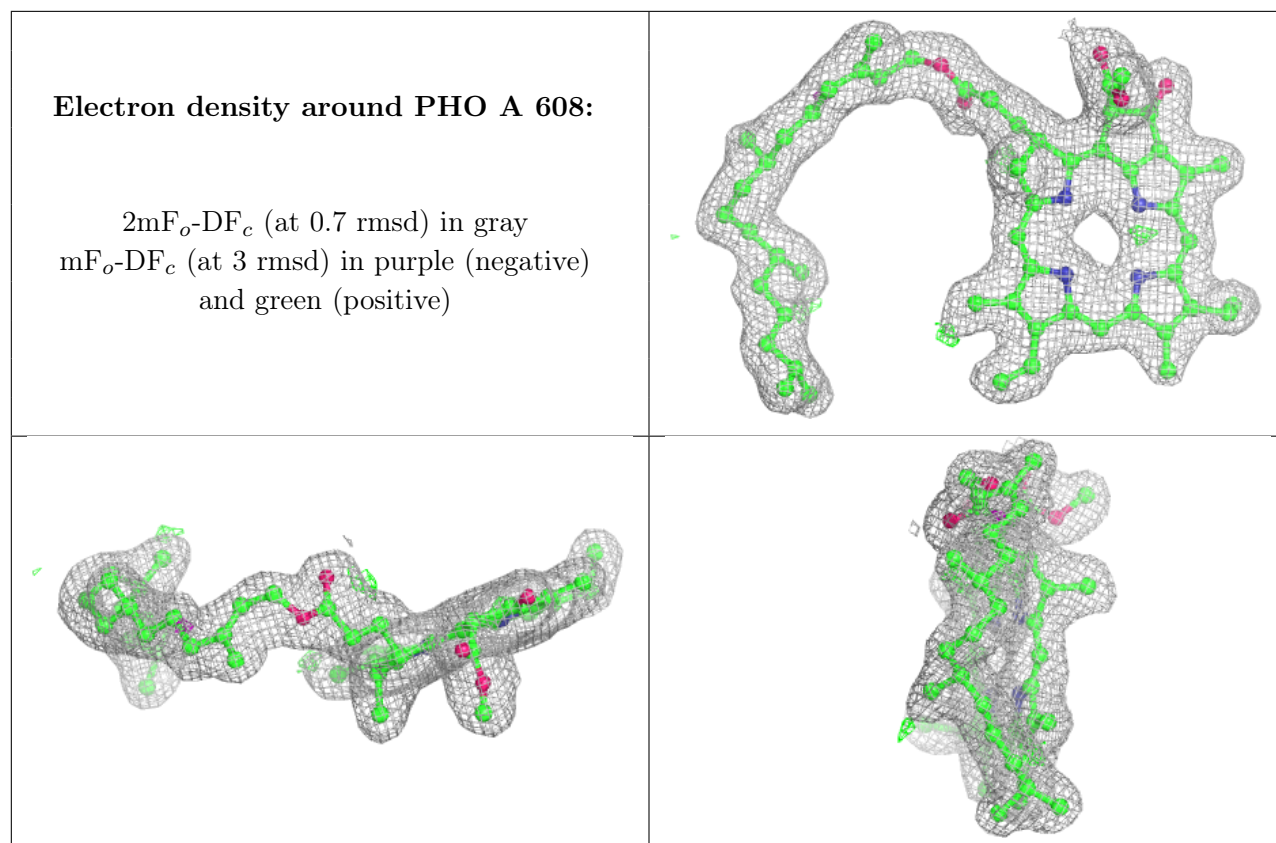
Electron density around CLA a 613:

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

**Electron density around CLA C 504:**

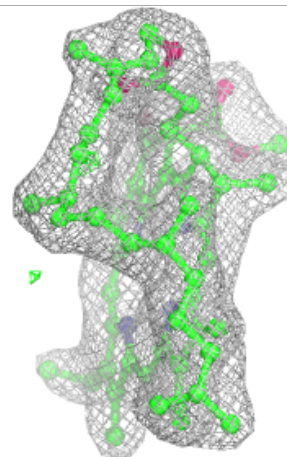
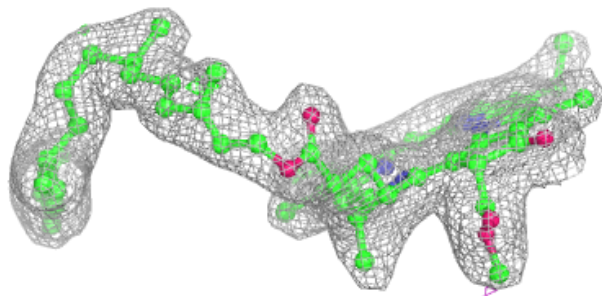
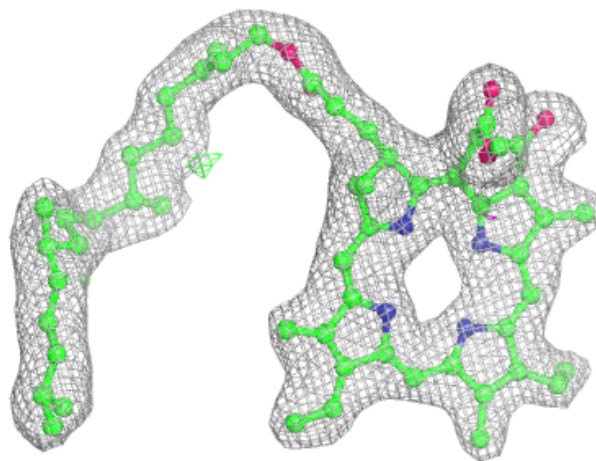
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





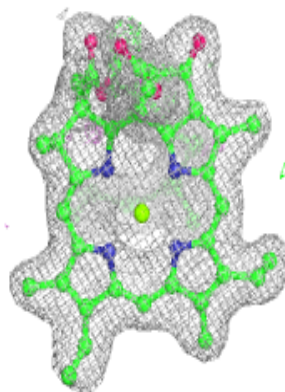
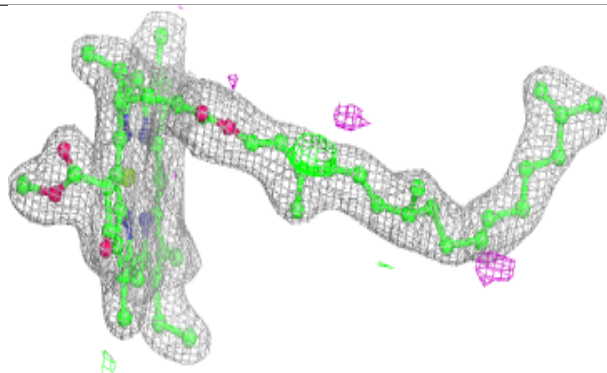
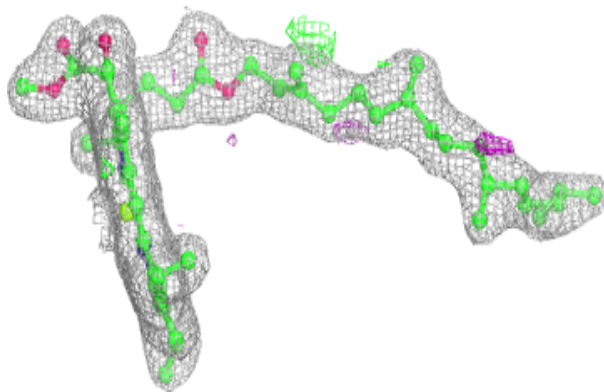
Electron density around PHO D 402:

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

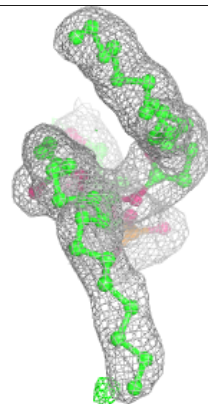
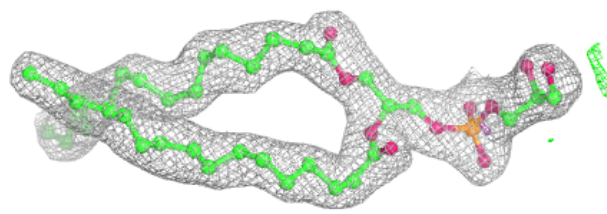
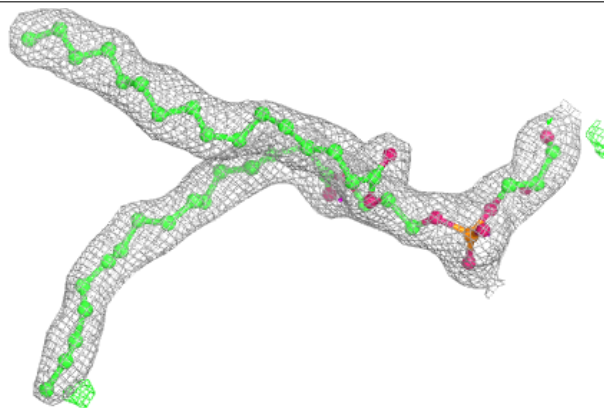


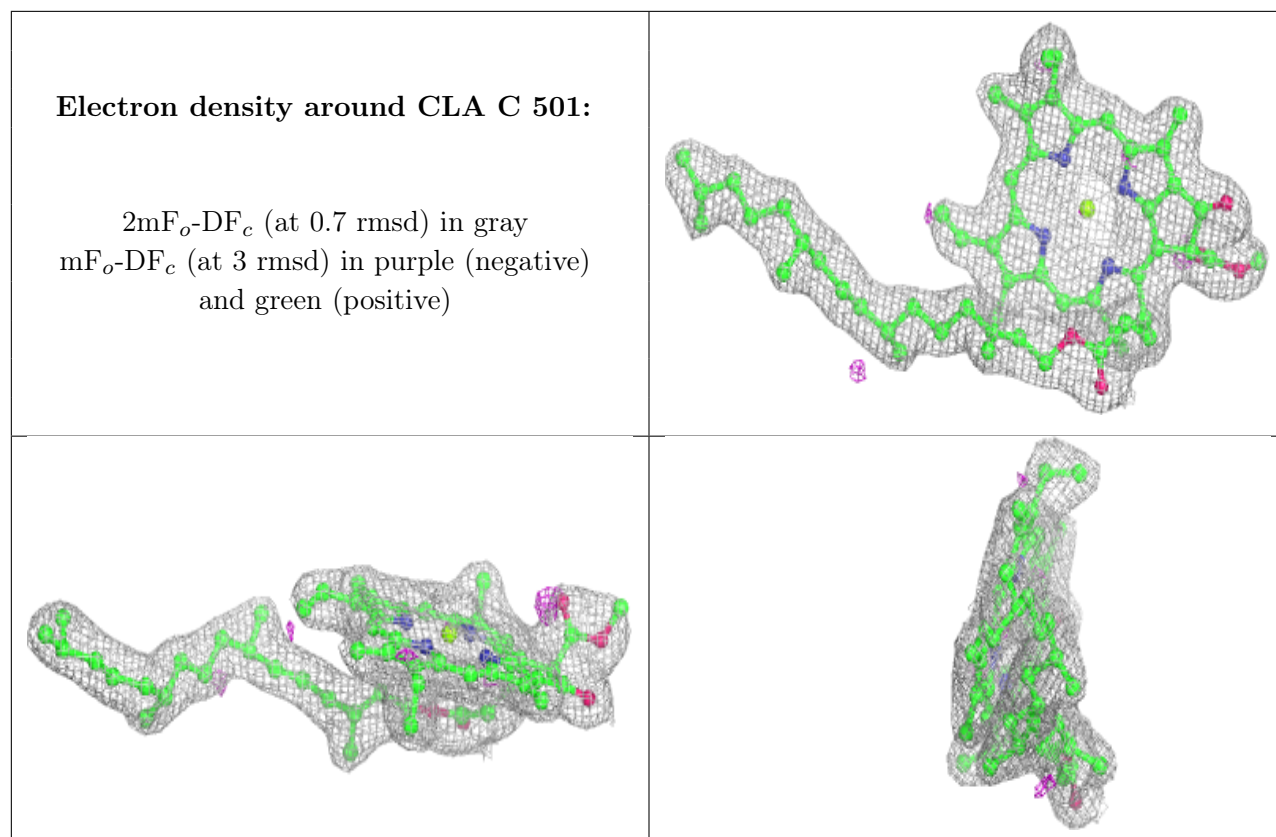
Electron density around CLA B 605:

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

**Electron density around LHG D 408:**

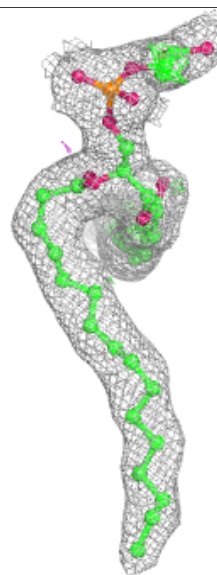
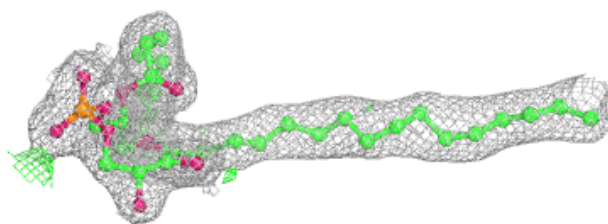
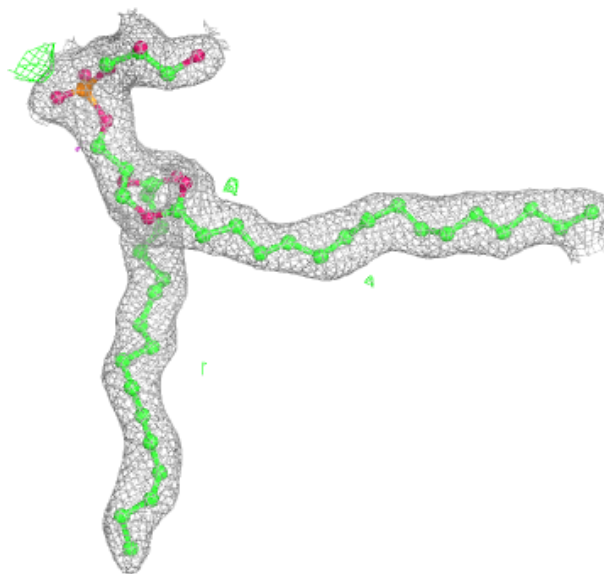
$2mF_o-DF_c$ (at 0.7 rmsd) in gray
 mF_o-DF_c (at 3 rmsd) in purple (negative)
and green (positive)





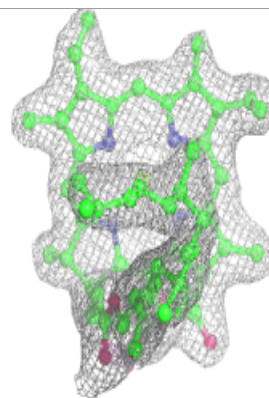
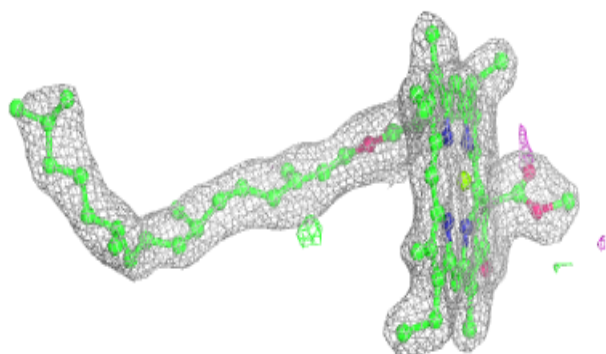
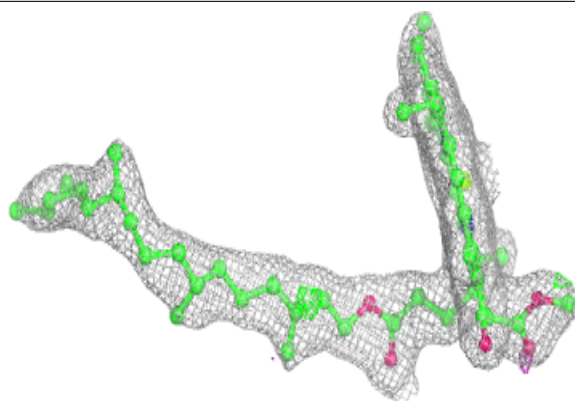
Electron density around LHG L 101:

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

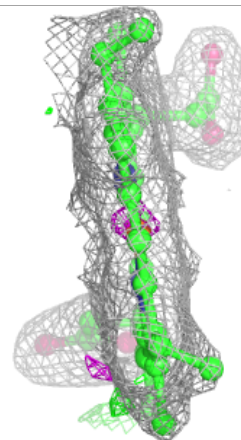
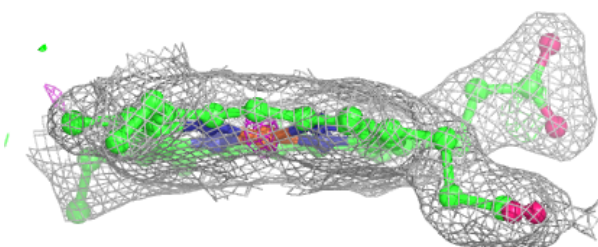
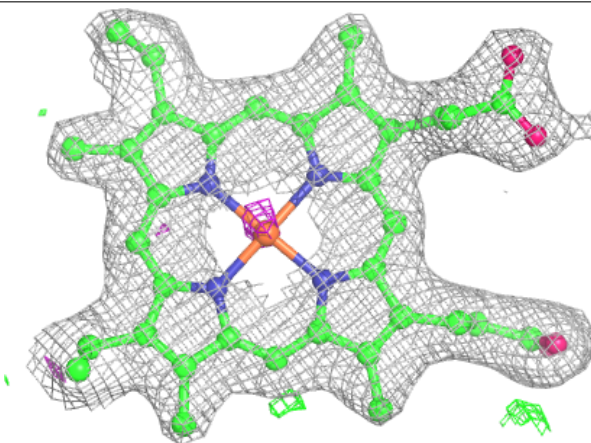


Electron density around CLA b 604:

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

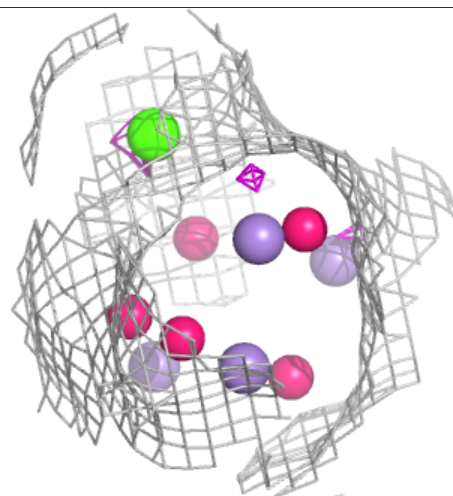
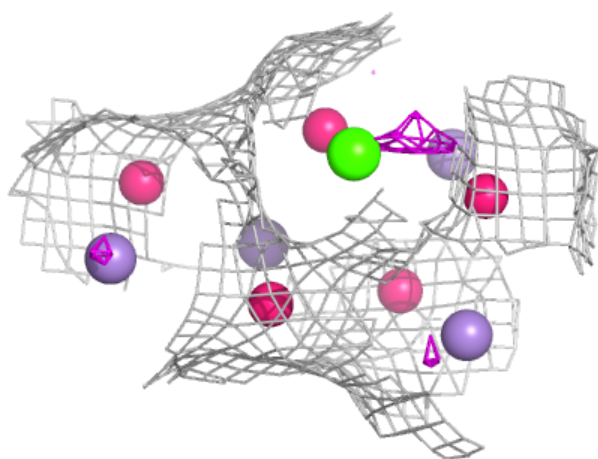
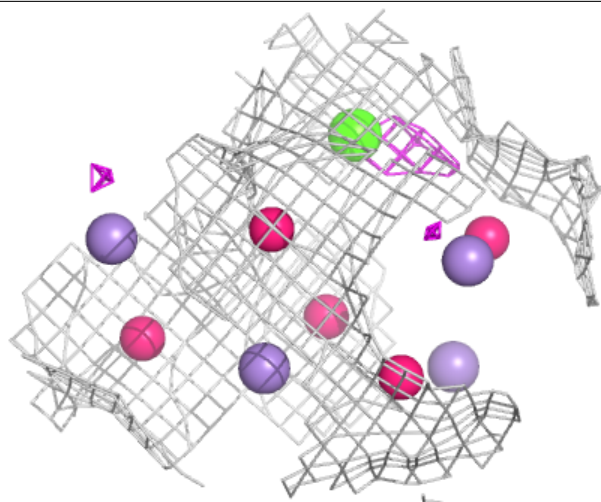
**Electron density around HEC V 201:**

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



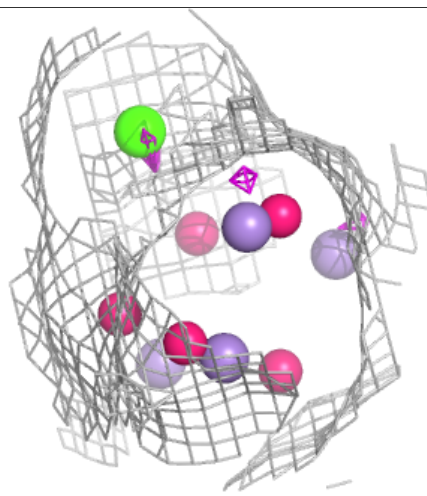
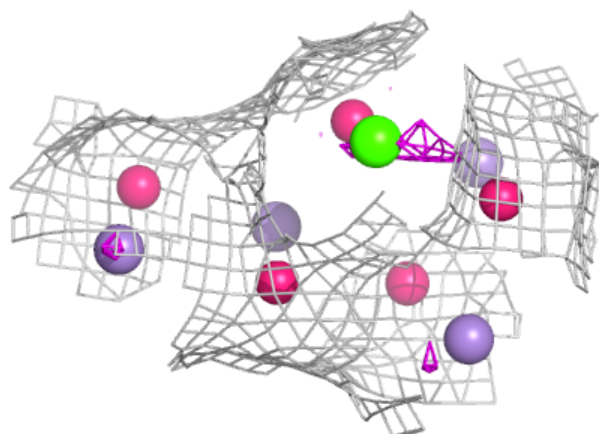
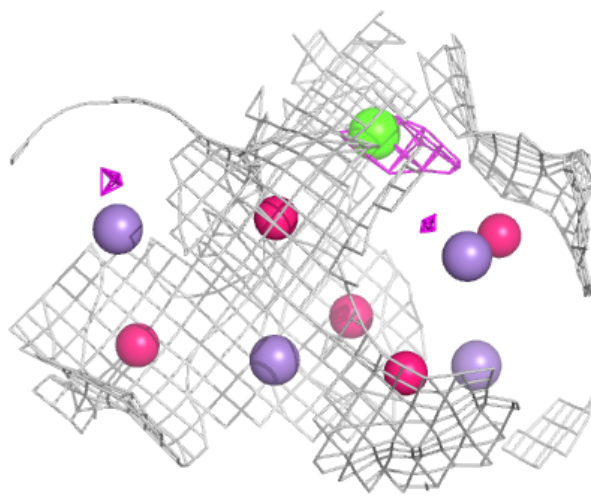
Electron density around OEX A 601 (C):

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



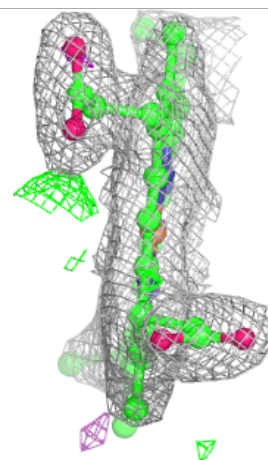
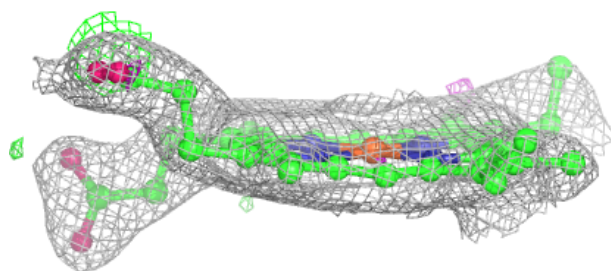
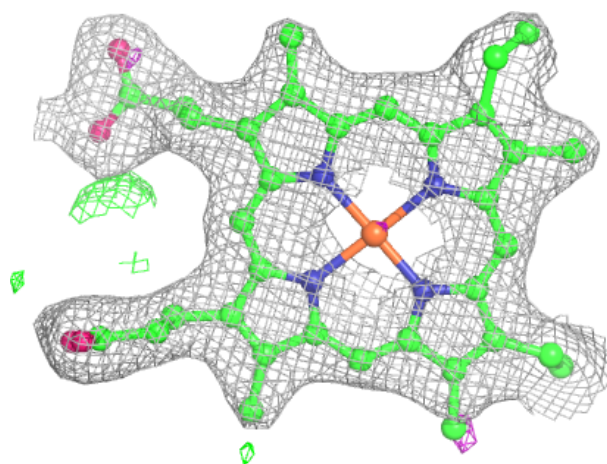
Electron density around OEX A 601 (B):

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



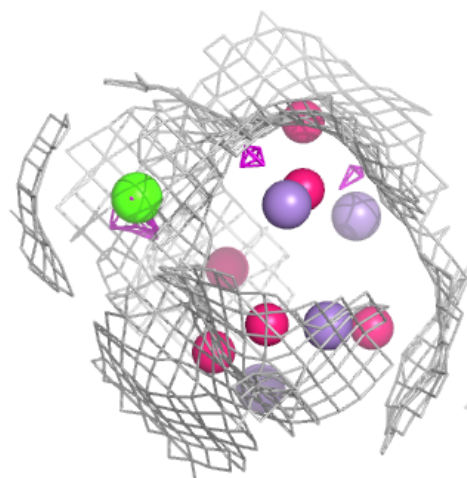
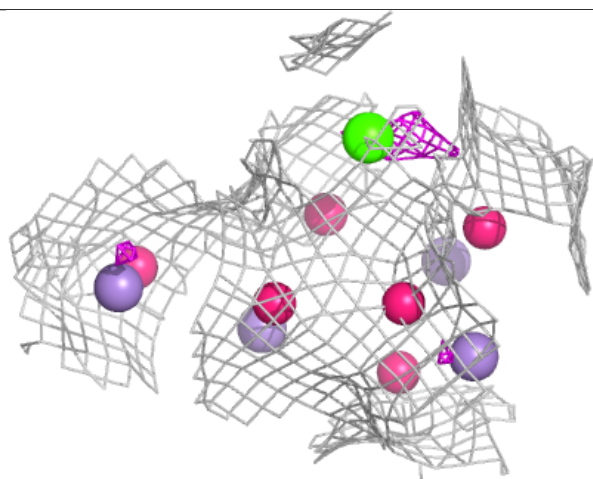
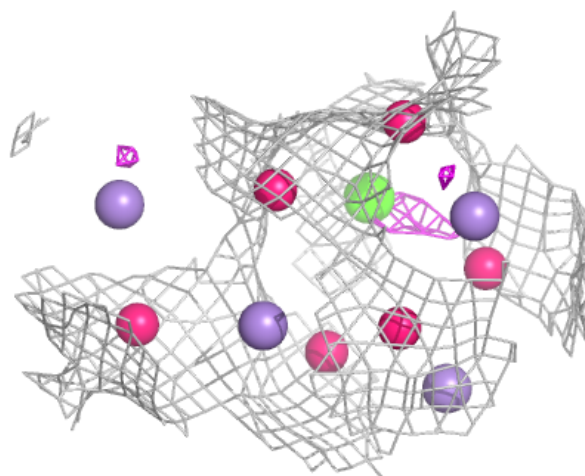
Electron density around HEC v 201:

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



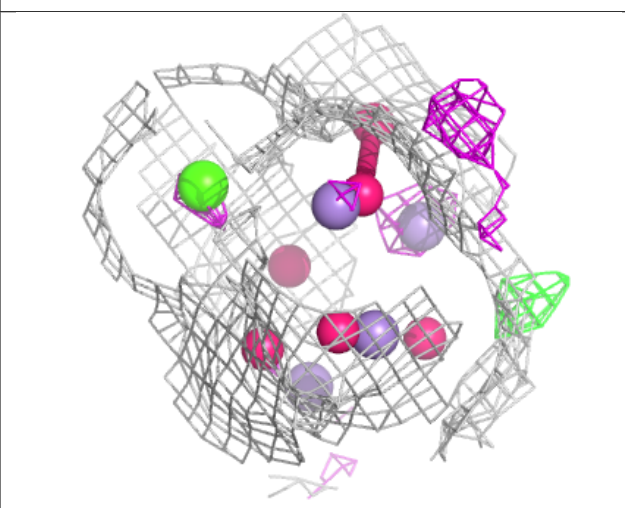
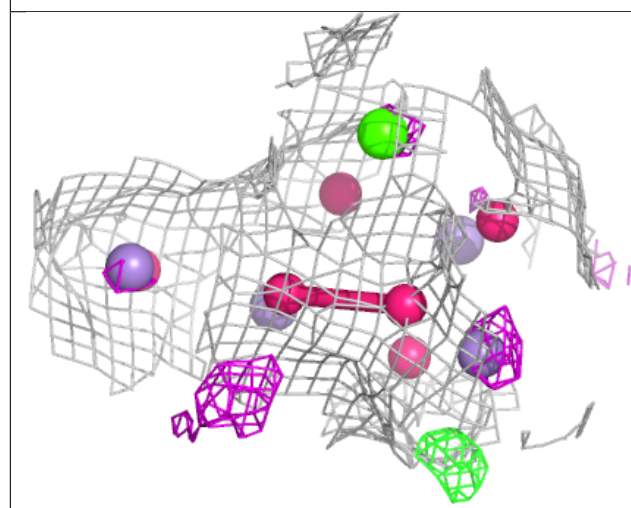
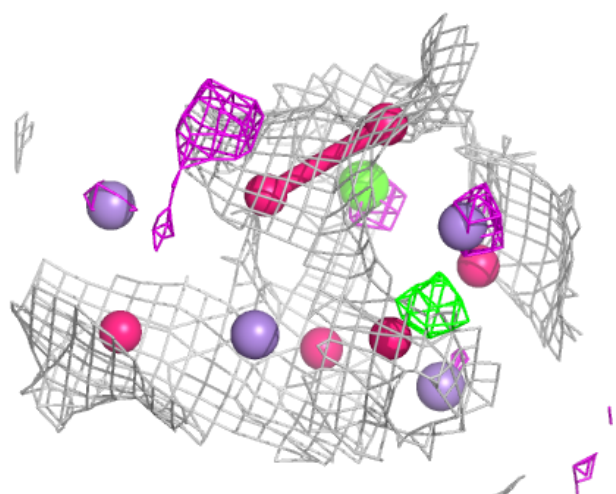
Electron density around OEY A 602 (A):

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



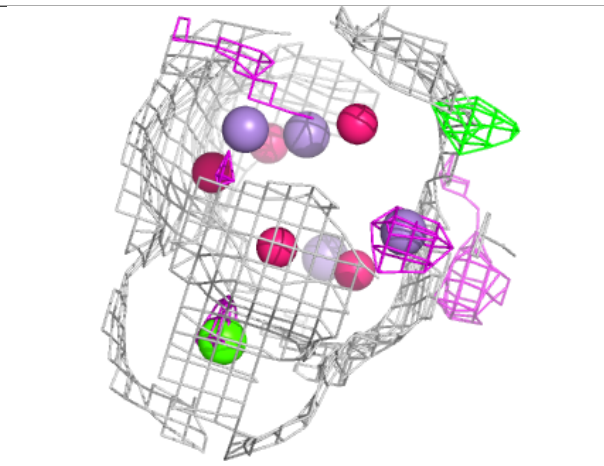
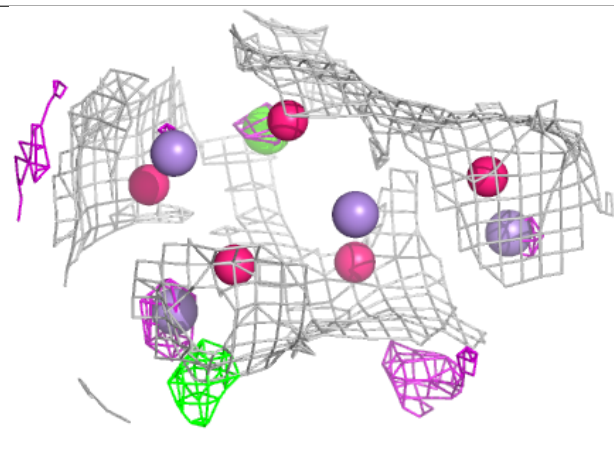
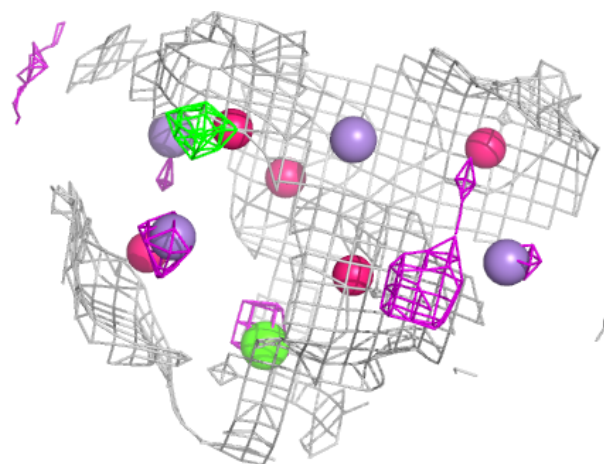
Electron density around OEY a 602 (A):

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



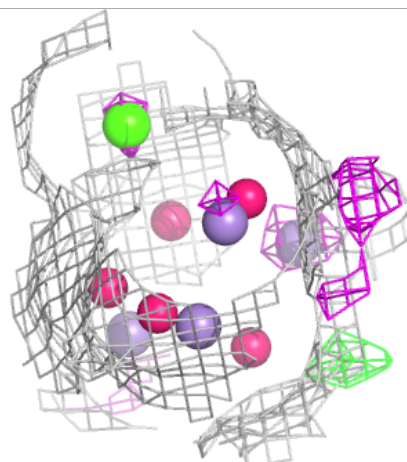
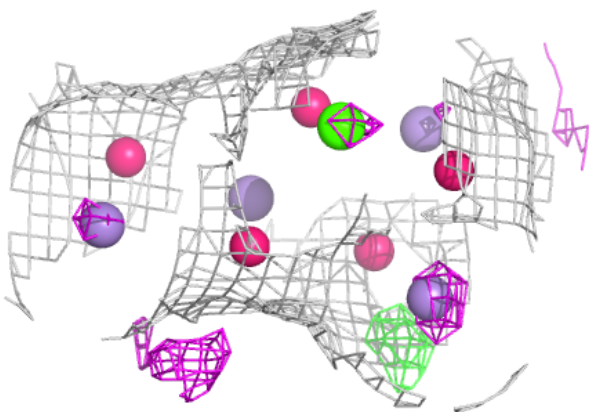
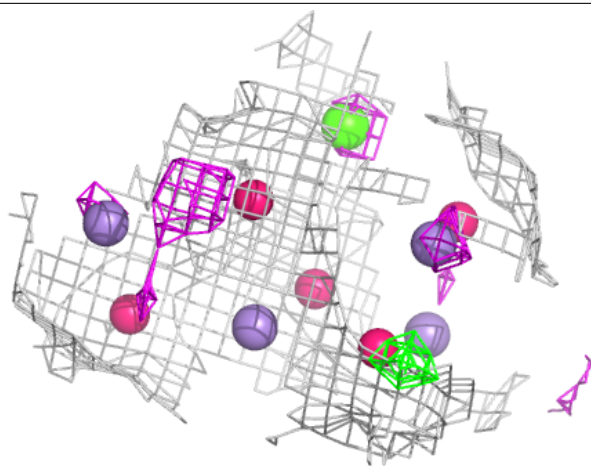
Electron density around OEX a 601 (B):

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



Electron density around OEX a 601 (C):

$2mF_o-DF_c$ (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.