wwPDB X-ray Structure Validation Summary Report (i)

Nov 15, 2023 – 05:16 PM JST

PDB ID	:	6JLJ
Title	:	XFEL structure of cyanobacterial photosystem II (dark state, dataset1)
Authors	:	Suga, M.; Shen, J.R.
Deposited on	:	2019-03-06
Resolution	:	2.15 Å(reported)

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

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

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

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

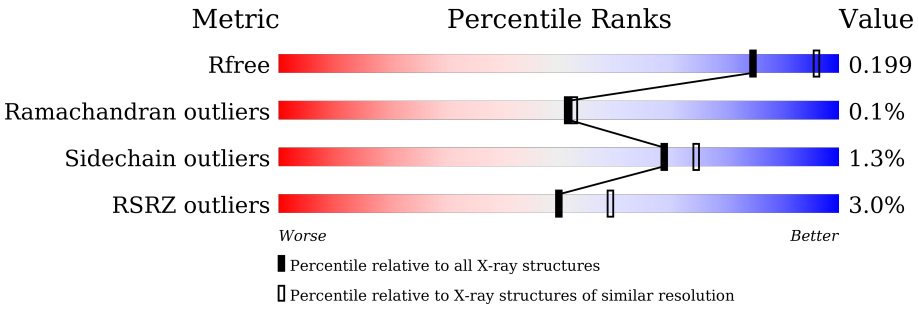
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.36
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36

1 Overall quality at a glance (i)

The following experimental techniques were used to determine the structure:
X-RAY DIFFRACTION

The reported resolution of this entry is 2.15 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	1479 (2.16-2.16)
Ramachandran outliers	138981	1560 (2.16-2.16)
Sidechain outliers	138945	1559 (2.16-2.16)
RSRZ outliers	127900	1456 (2.16-2.16)

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 <=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	97%
1	a	344	97%
2	B	505	99%
2	b	505	99%
3	C	455	98%
3	c	455	99%
4	D	342	99%

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Mol	Chain	Length	Quality of chain
4	d	342	99%
5	E	84	10% 95%
5	e	84	11% 94%
6	F	44	5% 77% 23%
6	f	44	5% 70% 27%
7	H	65	5% 97%
7	h	65	3% 98%
8	I	38	5% 97%
8	i	38	5% 95% 5%
9	J	39	8% 97%
9	j	39	13% 97%
10	K	37	97%
10	k	37	97%
11	L	37	97%
11	l	37	5% 100%
12	M	36	6% 89% 6% 6%
12	m	36	92% 6%
13	O	244	2% 98%
13	o	244	2% 97%
14	T	32	88% 6% 6%
14	t	32	88% 6% 6%
15	U	104	91% 7%
15	u	104	93% 7%
16	V	137	100%
16	v	137	% 99%

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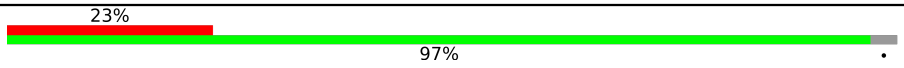
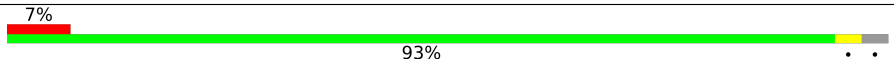
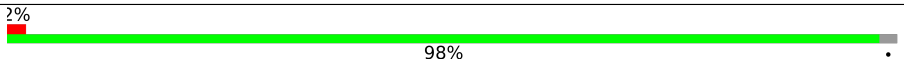
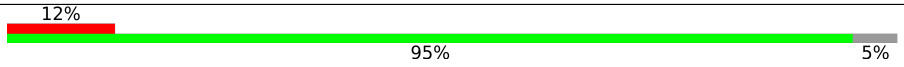
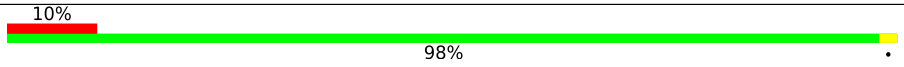
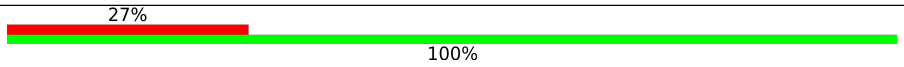
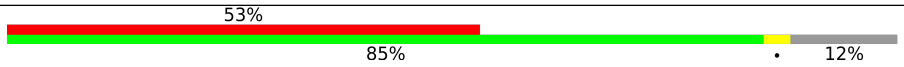
Mol	Chain	Length	Quality of chain
17	Y	30	
17	y	30	
18	X	40	
18	x	40	
19	Z	62	
19	z	62	
20	R	34	

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
24	CLA	A	405	X	-	-	-
24	CLA	B	602	X	-	-	-
24	CLA	B	603	X	-	-	-
24	CLA	B	604	X	-	-	-
24	CLA	B	605	X	-	-	-
24	CLA	B	606	X	-	-	-
24	CLA	B	607	X	-	-	-
24	CLA	B	608	X	-	-	-
24	CLA	B	610	X	-	-	-
24	CLA	B	611	X	-	-	-
24	CLA	B	612	X	-	-	-
24	CLA	B	613	X	-	-	-
24	CLA	B	614	X	-	-	-
24	CLA	B	615	X	-	-	-
24	CLA	B	616	X	-	-	-
24	CLA	B	617	X	-	-	-
24	CLA	C	502	X	-	-	-
24	CLA	C	504	X	-	-	-
24	CLA	C	505	X	-	-	-
24	CLA	C	506	X	-	-	-
24	CLA	C	507	X	-	-	-
24	CLA	C	508	X	-	-	-
24	CLA	C	509	X	-	-	-
24	CLA	C	510	X	-	-	-
24	CLA	C	511	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	CLA	C	512	X	-	-	-
24	CLA	C	513	X	-	-	-
24	CLA	C	514	X	-	-	-
24	CLA	D	402	X	-	-	-
24	CLA	D	403	X	-	-	-
24	CLA	a	409	X	-	-	-
24	CLA	a	412	X	-	-	-
24	CLA	b	610	X	-	-	-
24	CLA	b	611	X	-	-	-
24	CLA	b	612	X	-	-	-
24	CLA	b	613	X	-	-	-
24	CLA	b	614	X	-	-	-
24	CLA	b	615	X	-	-	-
24	CLA	b	616	X	-	-	-
24	CLA	b	618	X	-	-	-
24	CLA	b	619	X	-	-	-
24	CLA	b	621	X	-	-	-
24	CLA	b	622	X	-	-	-
24	CLA	b	623	X	-	-	-
24	CLA	b	624	X	-	-	-
24	CLA	b	625	X	-	-	-
24	CLA	c	505	X	-	-	-
24	CLA	c	507	X	-	-	-
24	CLA	c	508	X	-	-	-
24	CLA	c	509	X	-	-	-
24	CLA	c	510	X	-	-	-
24	CLA	c	511	X	-	-	-
24	CLA	c	512	X	-	-	-
24	CLA	c	513	X	-	-	-
24	CLA	c	514	X	-	-	-
24	CLA	c	515	X	-	-	-
24	CLA	c	516	X	-	-	-
24	CLA	c	517	X	-	-	-
24	CLA	d	402	X	-	-	-
24	CLA	d	403	X	-	-	-
24	CLA	d	404	X	-	-	-

2 Entry composition (i)

There are 40 unique types of molecules in this entry. The entry contains 54101 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called Photosystem II protein D1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	A	334	Total	C	N	O	S	0	3	0
			2634	1728	432	459	15			
1	a	334	Total	C	N	O	S	0	6	0
			2645	1737	432	461	15			

There are 2 discrepancies between the modelled and reference sequences:

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	B	504	Total	C	N	O	S	0	10	0
			4021	2639	667	702	13			
2	b	503	Total	C	N	O	S	0	12	0
			4022	2644	664	701	13			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	C	451	Total	C	N	O	S	0	4	0
			3501	2291	584	613	13			
3	c	455	Total	C	N	O	S	0	6	0
			3544	2323	589	619	13			

There are 8 discrepancies between the modelled and reference sequences:

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	D	341	Total	C	N	O	S	0	1	0
			2720	1802	444	462	12			
4	d	341	Total	C	N	O	S	0	1	0
			2720	1802	444	462	12			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
5	E	81	Total	C	N	O	0	2	0
			668	436	107	125			
5	e	81	Total	C	N	O	0	2	0
			670	439	107	124			

- 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	32	Total	C	N	O	S	0	0	0
			257	175	43	38	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	1	0
			519	346	85	86	2			
7	h	65	Total	C	N	O	S	0	0	0
			511	341	82	86	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	I	38	Total	C	N	O	S	0	0	0
			314	211	48	54	1			
8	i	38	Total	C	N	O	S	0	0	0
			314	211	48	54	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	J	38	Total	C	N	O	S	0	0	0
			272	182	42	47	1			
9	j	39	Total	C	N	O	S	0	0	0
			280	187	43	48	2			

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

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

There are 4 discrepancies between the modelled and reference sequences:

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	L	37	Total	C	N	O	S	0	1	0
			309	207	48	53	1			
11	l	37	Total	C	N	O	S	0	1	0
			309	207	48	53	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	M	34	Total	C	N	O	S	0	1	0
			274	184	40	49	1			

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Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	m	34	Total	C	N	O	S	0	0	0
			269	179	40	49	1			

There are 2 discrepancies between the modelled and reference sequences:

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	O	243	Total	C	N	O	S	0	8	0
			1903	1191	315	392	5			
13	o	243	Total	C	N	O	S	0	5	0
			1891	1183	315	388	5			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	T	30	Total	C	N	O	S	0	1	0
			264	185	36	41	2			
14	t	30	Total	C	N	O	S	0	1	0
			264	185	36	41	2			

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

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

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
16	V	137	Total	C	N	O	S	0	1	0
			1072	680	180	208	4			
16	v	137	Total	C	N	O	S	0	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	29	Total	C	N	O	S	0	0	0
			215	142	37	33	3			
17	y	29	Total	C	N	O	S	0	0	0
			215	142	37	33	3			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
18	X	39	Total	C	N	O	0	0	0
			287	191	46	50			
18	x	38	Total	C	N	O	0	0	0
			281	188	45	48			

- 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
			479	328	72	77	2			

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

Mol	Chain	Residues	Atoms				ZeroOcc	AltConf	Trace
20	R	30	Total	C	N	O	98	0	0
			239	163	41	35			

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

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

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

Mol	Chain	Residues	Atoms		ZeroOcc	AltConf
22	A	2	Total	Cl	0	0
			2	2		
22	U	1	Total	Cl	0	0
			1	1		

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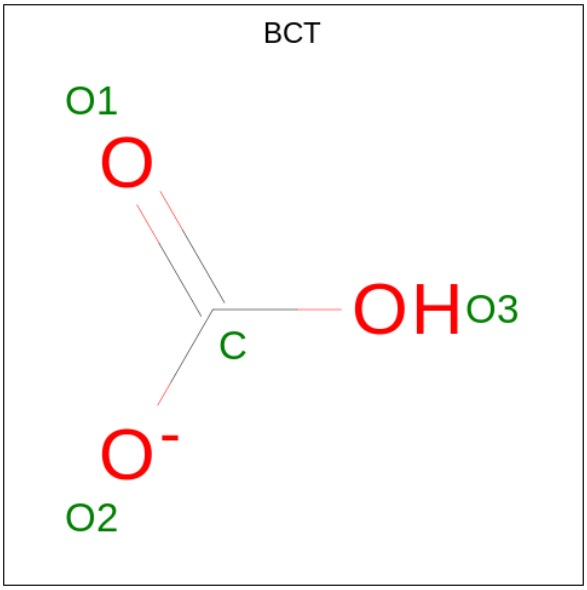
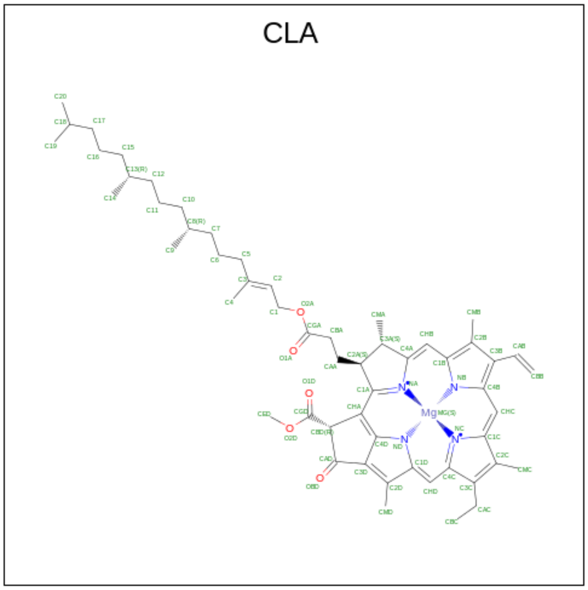
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
22	a	2	Total Cl 2 2	0	0
22	v	1	Total Cl 1 1	0	0

- Molecule 23 is BICARBONATE ION (three-letter code: BCT) (formula: CHO_3).



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

- Molecule 24 is CHLOROPHYLL A (three-letter code: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



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

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

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

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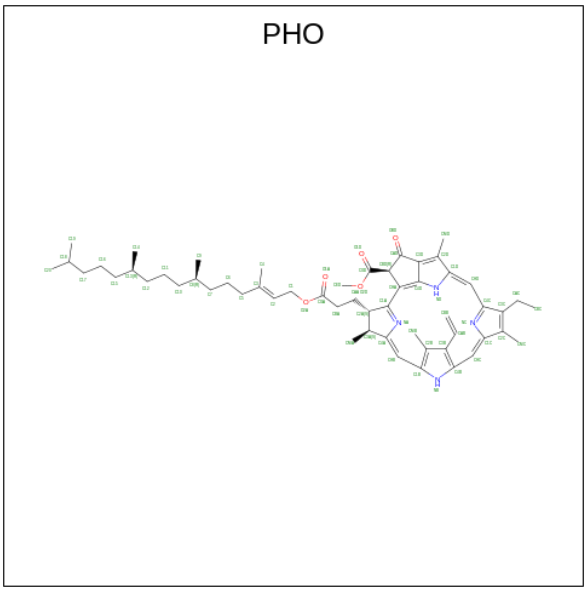
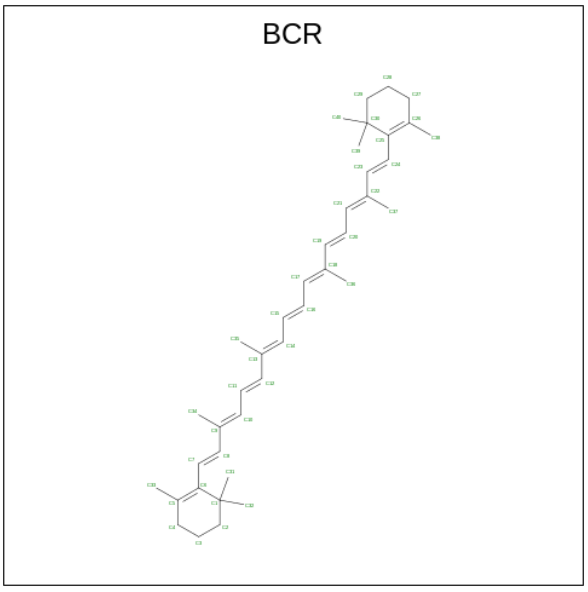
Mol	Chain	Residues	Atoms					ZeroOcc	AltConf
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0	0
24	c	1	Total 65	C 55	Mg 1	N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

- Molecule 25 is PHEOPHYTIN A (three-letter code: PHO) (formula: $C_{55}H_{74}N_4O_5$).



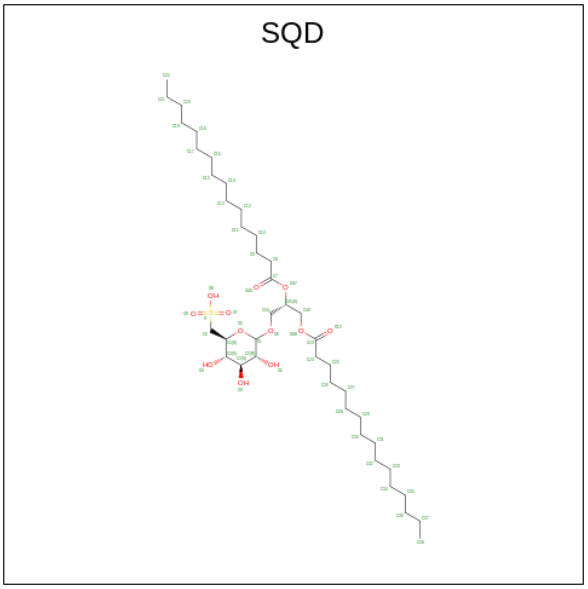
Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
25	A	1	Total	C	N	O	0	0
			64	55	4	5		
25	D	1	Total	C	N	O	0	0
			64	55	4	5		
25	a	1	Total	C	N	O	0	0
			64	55	4	5		
25	d	1	Total	C	N	O	0	0
			64	55	4	5		

- Molecule 26 is BETA-CAROTENE (three-letter code: BCR) (formula: $C_{40}H_{56}$).



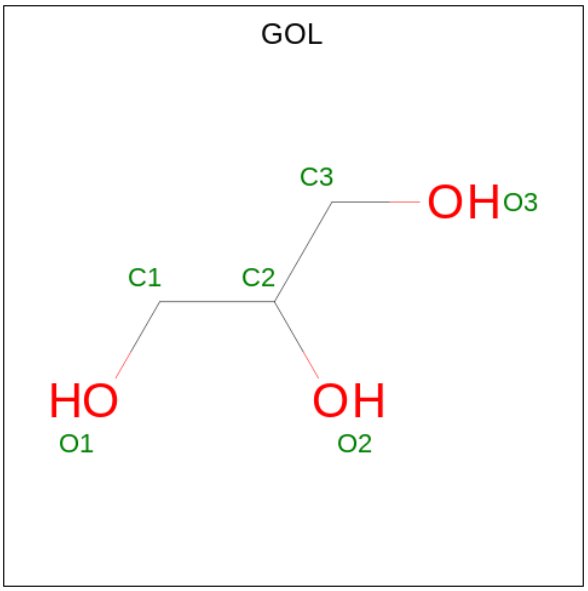
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
26	A	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	B	1	Total C 40 40	0	0
26	C	1	Total C 40 40	0	0
26	C	1	Total C 40 40	0	0
26	D	1	Total C 40 40	0	0
26	H	1	Total C 40 40	0	0
26	K	1	Total C 40 40	0	0
26	T	1	Total C 40 40	0	0
26	Y	1	Total C 40 40	0	0
26	a	1	Total C 40 40	0	0
26	b	1	Total C 40 40	0	0
26	b	1	Total C 40 40	0	0
26	b	1	Total C 40 40	0	0
26	c	1	Total C 40 40	0	0
26	c	1	Total C 40 40	0	0
26	d	1	Total C 40 40	0	0
26	h	1	Total C 40 40	0	0
26	k	1	Total C 40 40	0	0
26	t	1	Total C 40 40	0	0
26	y	1	Total C 40 40	0	0

- Molecule 27 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (three-letter code: SQD) (formula: $C_{41}H_{78}O_{12}S$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
27	A	1	Total	C	O	S	0	0
			54	41	12	1		
27	A	1	Total	C	O	S	0	0
			54	41	12	1		
27	B	1	Total	C	O	S	0	0
			54	41	12	1		
27	F	1	Total	C	O	S	0	0
			43	30	12	1		
27	L	1	Total	C	O	S	0	0
			54	41	12	1		
27	a	1	Total	C	O	S	0	0
			54	41	12	1		
27	a	1	Total	C	O	S	0	0
			54	41	12	1		
27	f	1	Total	C	O	S	0	0
			43	30	12	1		

- Molecule 28 is GLYCEROL (three-letter code: GOL) (formula: $C_3H_8O_3$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
28	A	1	Total C O 6 3 3	0	0
28	A	1	Total C O 6 3 3	0	0
28	A	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	B	1	Total C O 6 3 3	0	0
28	C	1	Total C O 6 3 3	0	0
28	C	1	Total C O 6 3 3	0	0
28	F	1	Total C O 6 3 3	0	0
28	O	1	Total C O 6 3 3	0	0

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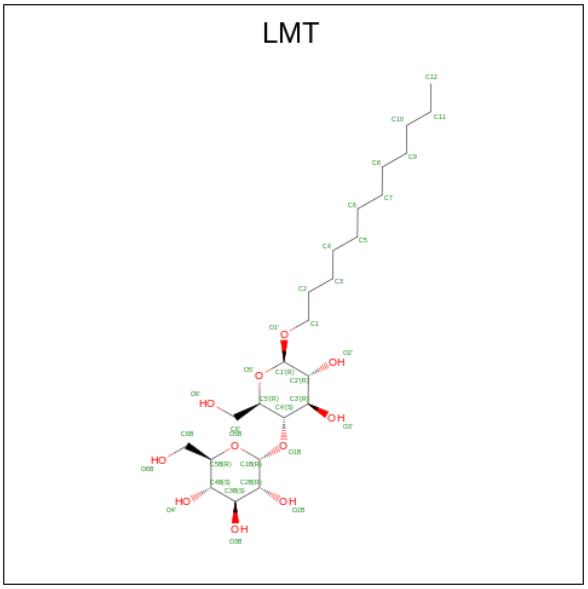
Mol	Chain	Residues	Atoms			ZeroOcc	AltConf
28	T	1	Total	C	O	0	0
			6	3	3		
28	T	1	Total	C	O	0	0
			6	3	3		
28	V	1	Total	C	O	0	0
			6	3	3		
28	V	1	Total	C	O	0	0
			6	3	3		
28	V	1	Total	C	O	0	0
			6	3	3		
28	V	1	Total	C	O	0	0
			6	3	3		
28	a	1	Total	C	O	0	0
			6	3	3		
28	a	1	Total	C	O	0	0
			6	3	3		
28	b	1	Total	C	O	0	0
			6	3	3		
28	b	1	Total	C	O	0	0
			6	3	3		
28	b	1	Total	C	O	0	0
			6	3	3		
28	b	1	Total	C	O	0	0
			6	3	3		
28	b	1	Total	C	O	0	0
			6	3	3		
28	c	1	Total	C	O	0	0
			6	3	3		
28	c	1	Total	C	O	0	0
			6	3	3		
28	f	1	Total	C	O	0	0
			6	3	3		
28	o	1	Total	C	O	0	0
			6	3	3		
28	t	1	Total	C	O	0	0
			6	3	3		
28	v	1	Total	C	O	0	0
			6	3	3		
28	v	1	Total	C	O	0	0
			6	3	3		
28	v	1	Total	C	O	0	0
			6	3	3		

- Molecule 29 is DODECYL-BETA-D-MALTOSIDE (three-letter code: LMT) (formula: $C_{24}H_{46}O_{11}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
29	A	1	Total C O 35 24 11	0	0
29	B	1	Total C O 35 24 11	0	0
29	B	1	Total C O 25 19 6	0	0
29	C	1	Total C O 35 24 11	0	0
29	F	1	Total C O 35 24 11	0	0
29	M	1	Total C O 35 24 11	0	0
29	M	1	Total C O 35 24 11	0	0
29	M	1	Total C O 35 24 11	0	0
29	T	1	Total C O 25 19 6	0	0
29	a	1	Total C O 35 24 11	0	0
29	a	1	Total C O 35 24 11	0	0
29	b	1	Total C O 25 19 6	0	0

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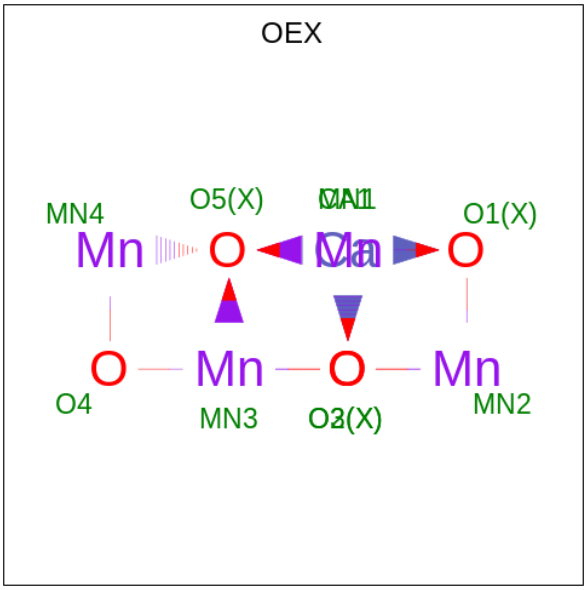
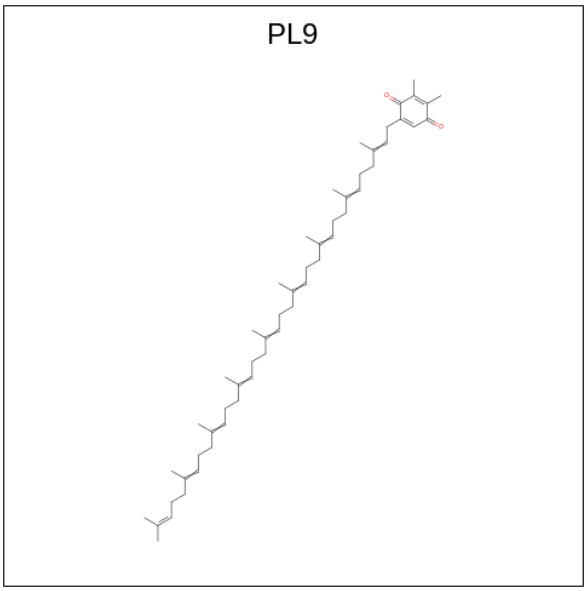
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
29	f	1	Total C O 35 24 11	0	0
29	m	1	Total C O 35 24 11	0	0

- Molecule 30 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula: $CaMn_4O_5$).



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

- Molecule 31 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
31	A	1	Total C O 55 53 2	0	0
31	D	1	Total C O 55 53 2	0	0
31	a	1	Total C O 55 53 2	0	0
31	d	1	Total C O 55 53 2	0	0

- Molecule 32 is UNKNOWN LIGAND (three-letter code: UNL) (formula:).

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
32	A	1	Total C O 28 23 5	0	0
32	B	1	Total C O 33 28 5	0	0
32	C	1	Total C O 34 29 5	0	0
32	D	2	Total C O 57 51 6	0	0
32	I	1	Total C O 40 35 5	0	0
32	J	1	Total C 10 10	0	0
32	M	1	Total C 10 10	0	0
32	X	1	Total C O 18 16 2	0	0

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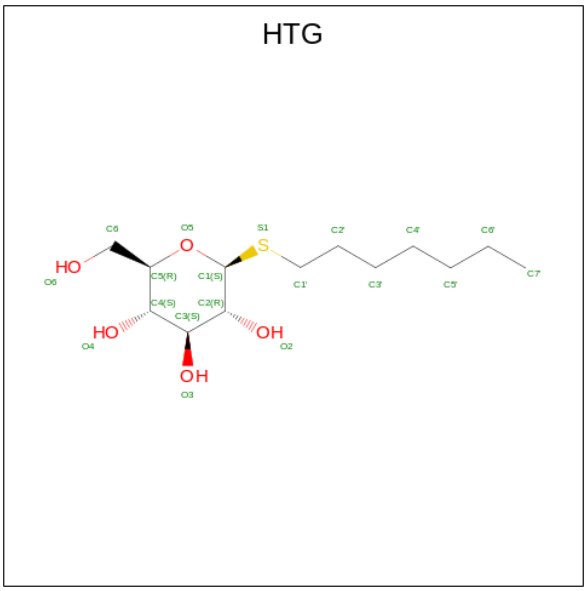
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
32	a	1	Total C O 30 25 5	0	0
32	b	1	Total C O 33 28 5	0	0
32	c	1	Total C O 32 27 5	0	0
32	d	3	Total C O 71 63 8	0	0
32	i	1	Total C O 40 35 5	0	0
32	j	1	Total C 10 10	0	0
32	m	1	Total C 10 10	0	0

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

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
33	B	1	Total Ca 1 1	0	0
33	C	1	Total Ca 1 1	0	0
33	F	1	Total Ca 1 1	0	0
33	O	1	Total Ca 1 1	0	0
33	b	1	Total Ca 1 1	0	0
33	c	2	Total Ca 2 2	0	0
33	f	1	Total Ca 1 1	0	0
33	o	1	Total Ca 1 1	0	0

- Molecule 34 is heptyl 1-thio-beta-D-glucopyranoside (three-letter code: HTG) (formula: $C_{13}H_{26}O_5S$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
34	B	1	Total	C	O	S	0	0
			19	13	5	1		
34	B	1	Total	C	O	S	0	0
			19	13	5	1		
34	B	1	Total	C	O	S	0	0
			19	13	5	1		
34	B	1	Total	C	O	S	0	0
			19	13	5	1		
34	B	1	Total	C	O	S	0	0
			19	13	5	1		
34	C	1	Total	C	O	S	0	0
			19	13	5	1		
34	C	1	Total	C	O	S	0	0
			19	13	5	1		
34	D	1	Total	C	O	S	0	0
			16	10	5	1		
34	V	1	Total	C	O	S	0	0
			19	13	5	1		
34	b	1	Total	C	O	S	0	0
			19	13	5	1		
34	b	1	Total	C	O	S	0	0
			19	13	5	1		
34	b	1	Total	C	O	S	0	0
			19	13	5	1		
34	b	1	Total	C	O	S	0	0
			19	13	5	1		
34	b	1	Total	C	O	S	0	0
			19	13	5	1		

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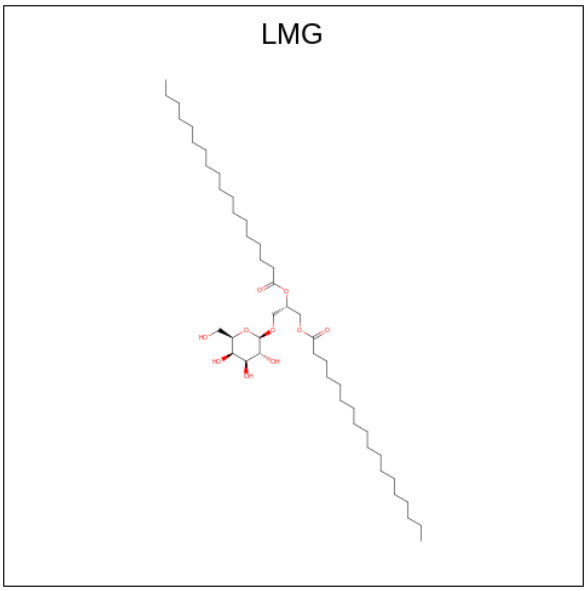
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
34	c	1	Total C O S 19 13 5 1	0	0
34	c	1	Total C O S 19 13 5 1	0	0
34	d	1	Total C O S 16 10 5 1	0	0

- Molecule 35 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
35	C	1	Total C O 51 41 10	0	0
35	C	1	Total C O 51 41 10	0	0
35	C	1	Total C O 51 41 10	0	0
35	J	1	Total C O 51 41 10	0	0
35	M	1	Total C O 51 41 10	0	0
35	Z	1	Total C O 37 27 10	0	0
35	a	1	Total C O 51 41 10	0	0
35	b	1	Total C O 51 41 10	0	0

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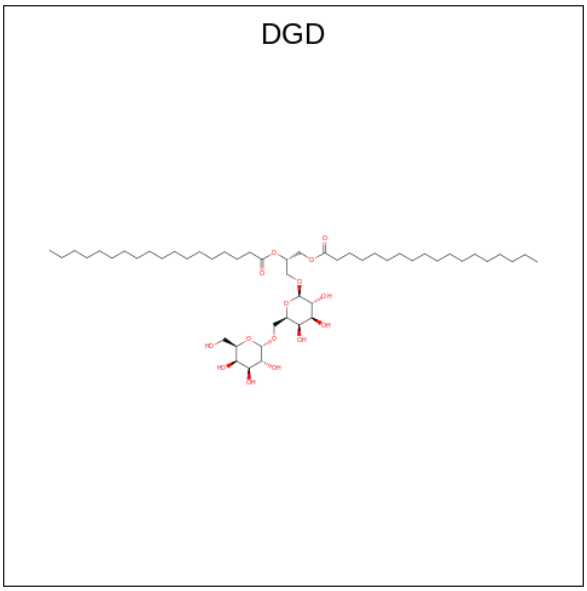
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
35	c	1	Total C O 51 41 10	0	0
35	c	1	Total C O 51 41 10	0	0
35	j	1	Total C O 51 41 10	0	0
35	z	1	Total C O 39 29 10	0	0

- Molecule 36 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
36	C	1	Total C O 62 47 15	0	0
36	C	1	Total C O 62 47 15	0	0
36	C	1	Total C O 62 47 15	0	0
36	D	1	Total C O 52 42 10	0	0
36	H	1	Total C O 62 47 15	0	0
36	c	1	Total C O 62 47 15	0	0
36	c	1	Total C O 62 47 15	0	0

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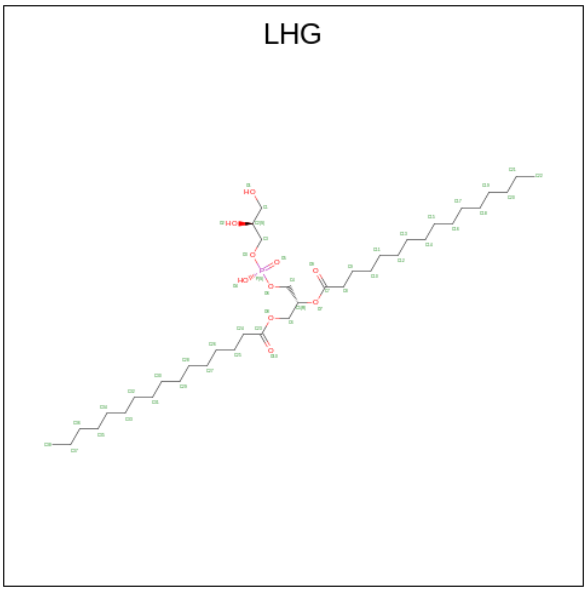
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
36	c	1	Total C O 62 47 15	0	0
36	e	1	Total C O 62 47 15	0	0
36	h	1	Total C O 62 47 15	0	0

- Molecule 37 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
37	D	1	Total C O P 49 38 10 1	0	0
37	D	1	Total C O P 49 38 10 1	0	0
37	D	1	Total C O P 49 38 10 1	0	0
37	E	1	Total C O P 42 31 10 1	0	0
37	L	1	Total C O P 49 38 10 1	0	0
37	d	1	Total C O P 49 38 10 1	0	0
37	d	1	Total C O P 49 38 10 1	0	0
37	d	1	Total C O P 49 38 10 1	0	0

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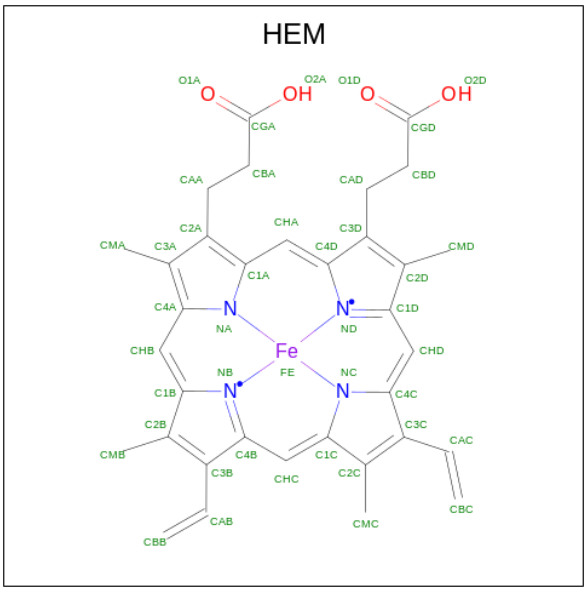
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
37	e	1	Total C O P 42 31 10 1	0	0
37	l	1	Total C O P 49 38 10 1	0	0

- Molecule 38 is PROTOPORPHYRIN IX CONTAINING FE (three-letter code: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).



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

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

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

- Molecule 40 is water.

Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
40	A	163	Total O 166 166	0	3
40	B	291	Total O 295 295	0	4
40	C	230	Total O 232 232	0	2
40	D	139	Total O 143 143	0	4
40	E	34	Total O 34 34	0	0
40	F	8	Total O 8 8	0	0
40	H	43	Total O 44 44	0	1
40	I	4	Total O 4 4	0	0
40	J	11	Total O 11 11	0	0
40	K	7	Total O 7 7	0	0
40	L	16	Total O 17 17	0	1
40	M	24	Total O 24 24	0	0
40	O	177	Total O 179 179	0	2
40	T	16	Total O 17 17	0	1
40	U	85	Total O 85 85	0	0
40	V	115	Total O 117 117	0	2
40	Y	4	Total O 4 4	0	0
40	X	8	Total O 8 8	0	0
40	Z	1	Total O 1 1	0	0
40	a	158	Total O 159 159	0	1
40	b	258	Total O 261 261	0	3
40	c	201	Total O 204 204	0	3

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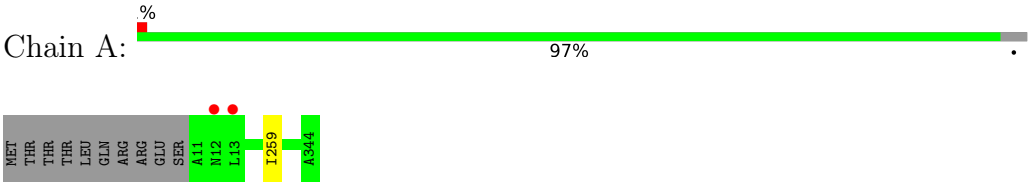
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
40	d	128	Total O 131 131	0	3
40	e	20	Total O 20 20	0	0
40	f	8	Total O 8 8	0	0
40	h	42	Total O 42 42	0	0
40	i	6	Total O 6 6	0	0
40	j	6	Total O 6 6	0	0
40	k	7	Total O 7 7	0	0
40	l	8	Total O 8 8	0	0
40	m	14	Total O 14 14	0	0
40	o	163	Total O 163 163	0	0
40	t	9	Total O 9 9	0	0
40	u	91	Total O 91 91	0	0
40	v	82	Total O 83 83	0	1
40	y	2	Total O 2 2	0	0
40	x	6	Total O 6 6	0	0

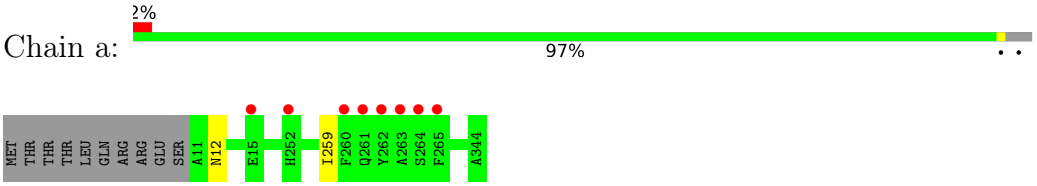
3 Residue-property plots (i)

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

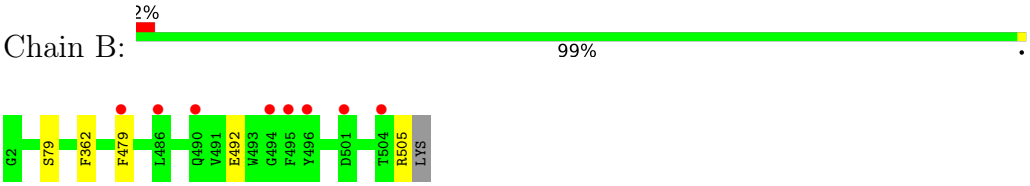
• Molecule 1: Photosystem II protein D1



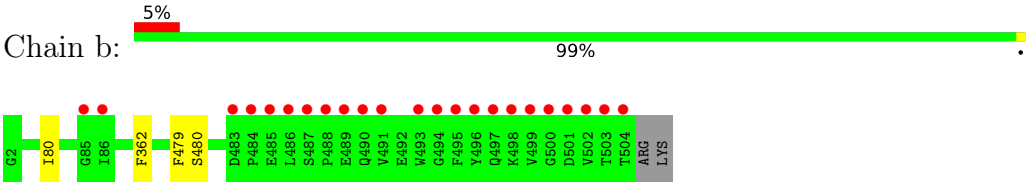
• Molecule 1: Photosystem II protein D1



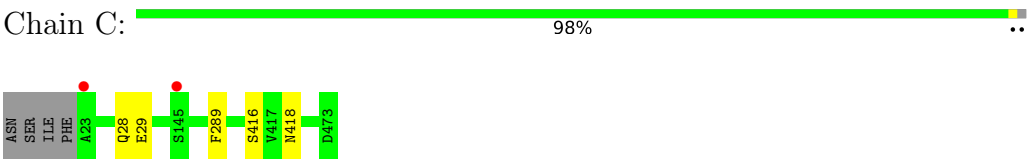
• Molecule 2: Photosystem II CP47 reaction center protein



• Molecule 2: Photosystem II CP47 reaction center protein

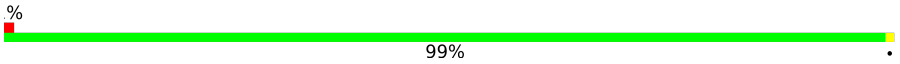


• Molecule 3: Photosystem II CP43 reaction center protein



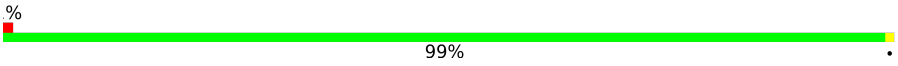
• Molecule 3: Photosystem II CP43 reaction center protein

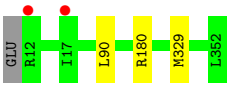
Chain c:



• Molecule 4: Photosystem II D2 protein

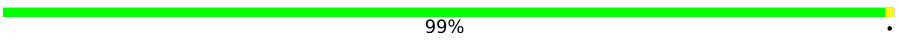
Chain D:

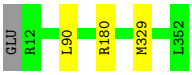




• Molecule 4: Photosystem II D2 protein

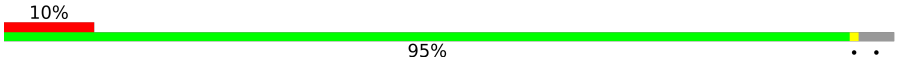
Chain d:

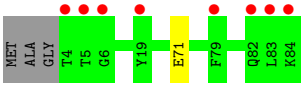




• Molecule 5: Cytochrome b559 subunit alpha

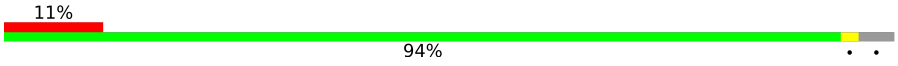
Chain E:

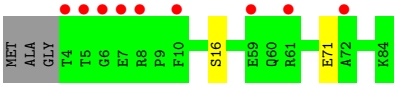




• Molecule 5: Cytochrome b559 subunit alpha

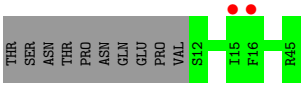
Chain e:





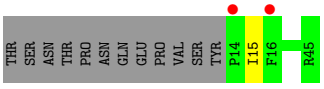
• Molecule 6: Cytochrome b559 subunit beta

Chain F:



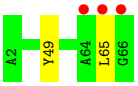
• Molecule 6: Cytochrome b559 subunit beta

Chain f:



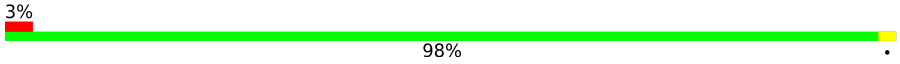
• Molecule 7: Photosystem II reaction center protein H

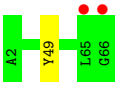
Chain H:



• Molecule 7: Photosystem II reaction center protein H

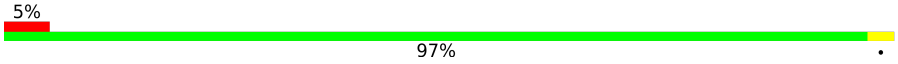
Chain h:

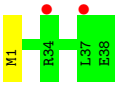




• Molecule 8: Photosystem II reaction center protein I

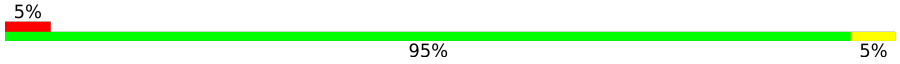
Chain I:





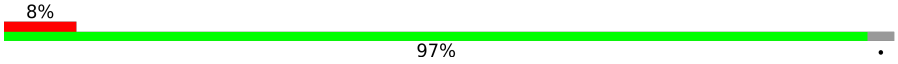
• Molecule 8: Photosystem II reaction center protein I

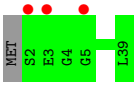
Chain i:



• Molecule 9: Photosystem II reaction center protein J

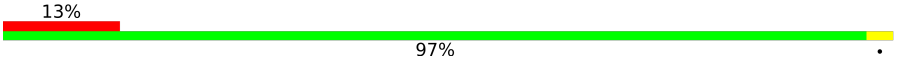
Chain J:

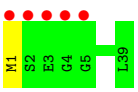




• Molecule 9: Photosystem II reaction center protein J

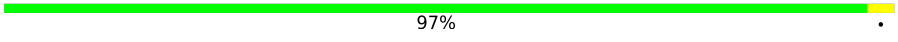
Chain j:





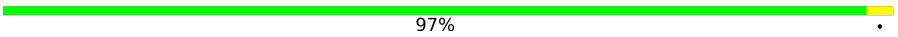
• Molecule 10: Photosystem II reaction center protein K

Chain K:



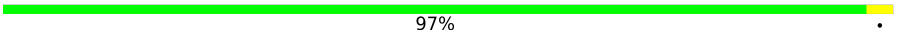
• Molecule 10: Photosystem II reaction center protein K

Chain k:



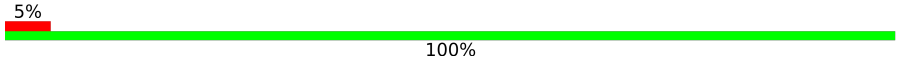
• Molecule 11: Photosystem II reaction center protein L

Chain L:



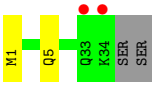
• Molecule 11: Photosystem II reaction center protein L

Chain l:



• Molecule 12: Photosystem II reaction center protein M

Chain M:

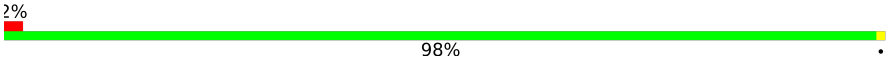


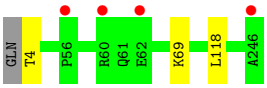
• Molecule 12: Photosystem II reaction center protein M

Chain m:

• Molecule 13: Photosystem II manganese-stabilizing polypeptide

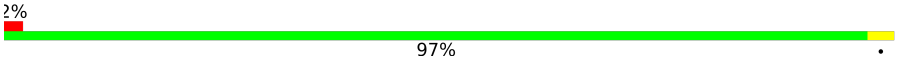
Chain O:

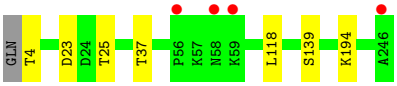




• Molecule 13: Photosystem II manganese-stabilizing polypeptide

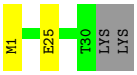
Chain o:





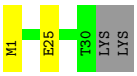
• Molecule 14: Photosystem II reaction center protein T

Chain T:



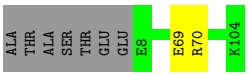
• Molecule 14: Photosystem II reaction center protein T

Chain t:



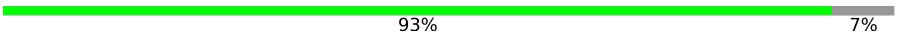
• Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain U:



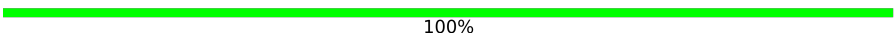
• Molecule 15: Photosystem II 12 kDa extrinsic protein

Chain u:



• Molecule 16: Cytochrome c-550

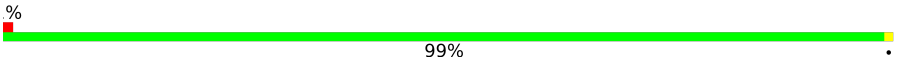
Chain V:

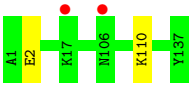


There are no outlier residues recorded for this chain.

• Molecule 16: Cytochrome c-550

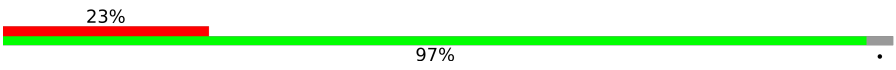
Chain v:

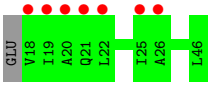




• Molecule 17: Photosystem II reaction center protein Ycf12

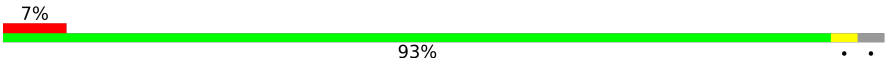
Chain Y:

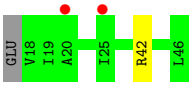




• Molecule 17: Photosystem II reaction center protein Ycf12

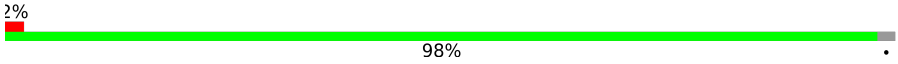
Chain y:

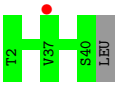




• Molecule 18: Photosystem II reaction center protein X

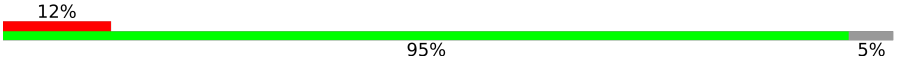
Chain X:

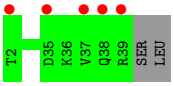




• Molecule 18: Photosystem II reaction center protein X

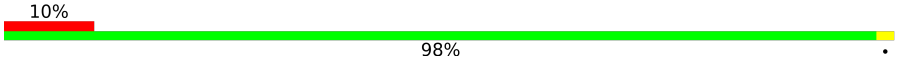
Chain x:

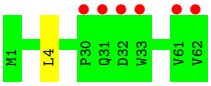




• Molecule 19: Photosystem II reaction center protein Z

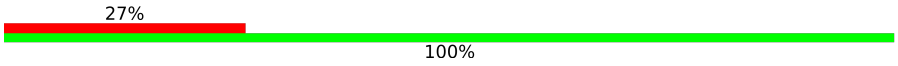
Chain Z:

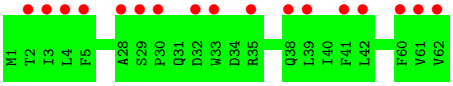




• Molecule 19: Photosystem II reaction center protein Z

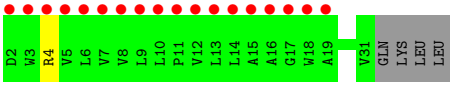
Chain z:





• Molecule 20: Photosystem II protein Y

Chain R:



4 Data and refinement statistics (i)

Property	Value	Source
Space group	P 21 21 21	Depositor
Cell constants a, b, c, α, β, γ	121.97Å 228.72Å 286.98Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	19.99 – 2.15 178.86 – 2.00	Depositor EDS
% Data completeness (in resolution range)	100.0 (19.99-2.15) 99.9 (178.86-2.00)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.41 (at 2.00Å)	Xtriage
Refinement program	PHENIX 1.9_1692	Depositor
R, R_{free}	0.152 , 0.198 0.154 , 0.199	Depositor DCC
R_{free} test set	26827 reflections (5.01%)	wwPDB-VP
Wilson B-factor (Å^2)	35.0	Xtriage
Anisotropy	0.684	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.37 , 79.2	EDS
L-test for twinning[2]	$< \|L\| > = 0.48$, $< L^2 > = 0.31$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.97	EDS
Total number of atoms	54101	wwPDB-VP
Average B, all atoms (Å^2)	55.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 1.97% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ 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: UNL, HTG, CL, FME, SQD, BCR, LMG, BCT, DGD, OEX, GOL, FE2, MG, CA, PL9, LHG, PHO, HEM, CLA, LMT

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	0.47	0/2728	0.57	0/3719
1	a	0.47	0/2748	0.56	0/3746
2	B	0.45	0/4191	0.53	0/5709
2	b	0.43	0/4198	0.53	0/5720
3	C	0.39	0/3626	0.50	0/4936
3	c	0.39	0/3676	0.51	0/5004
4	D	0.50	0/2818	0.56	0/3840
4	d	0.47	0/2818	0.54	0/3840
5	E	0.34	0/693	0.50	0/944
5	e	0.36	0/695	0.50	0/948
6	F	0.41	0/284	0.52	0/387
6	f	0.42	0/265	0.52	0/360
7	H	0.39	0/535	0.56	0/728
7	h	0.34	0/524	0.52	0/713
8	I	0.35	0/311	0.49	0/419
8	i	0.36	0/311	0.46	0/419
9	J	0.34	0/278	0.42	0/376
9	j	0.34	0/286	0.46	0/386
10	K	0.34	0/303	0.52	0/416
10	k	0.38	0/303	0.50	0/416
11	L	0.44	0/319	0.48	0/433
11	l	0.46	0/319	0.44	0/433
12	M	0.49	0/270	0.58	0/368
12	m	0.45	0/262	0.54	0/357
13	O	0.38	0/1958	0.56	0/2654
13	o	0.38	0/1937	0.55	0/2625
14	T	0.48	0/266	0.54	0/362
14	t	0.51	0/266	0.51	0/362
15	U	0.38	0/785	0.53	0/1064
15	u	0.41	0/785	0.54	0/1064
16	V	0.38	0/1096	0.51	0/1487

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
16	v	0.36	0/1085	0.52	0/1473
17	Y	0.37	0/216	0.51	0/289
17	y	0.31	0/216	0.46	0/289
18	X	0.31	0/290	0.47	0/392
18	x	0.32	0/284	0.47	0/384
19	Z	0.31	0/490	0.44	0/669
19	z	0.31	0/490	0.48	0/669
20	R	0.23	0/245	0.37	0/338
All	All	0.42	0/43170	0.53	0/58738

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts

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

5.3 Torsion angles

5.3.1 Protein backbone

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	335/344 (97%)	327 (98%)	7 (2%)	1 (0%)	41	37
1	a	338/344 (98%)	332 (98%)	5 (2%)	1 (0%)	41	37
2	B	512/505 (101%)	506 (99%)	6 (1%)	0	100	100
2	b	513/505 (102%)	502 (98%)	11 (2%)	0	100	100
3	C	453/455 (100%)	444 (98%)	7 (2%)	2 (0%)	34	29
3	c	459/455 (101%)	449 (98%)	8 (2%)	2 (0%)	34	29

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	D	340/342 (99%)	333 (98%)	7 (2%)	0	100	100
4	d	340/342 (99%)	332 (98%)	8 (2%)	0	100	100
5	E	81/84 (96%)	81 (100%)	0	0	100	100
5	e	81/84 (96%)	78 (96%)	3 (4%)	0	100	100
6	F	32/44 (73%)	32 (100%)	0	0	100	100
6	f	30/44 (68%)	30 (100%)	0	0	100	100
7	H	64/65 (98%)	60 (94%)	4 (6%)	0	100	100
7	h	63/65 (97%)	58 (92%)	5 (8%)	0	100	100
8	I	36/38 (95%)	34 (94%)	2 (6%)	0	100	100
8	i	36/38 (95%)	33 (92%)	3 (8%)	0	100	100
9	J	36/39 (92%)	35 (97%)	1 (3%)	0	100	100
9	j	37/39 (95%)	36 (97%)	1 (3%)	0	100	100
10	K	35/37 (95%)	35 (100%)	0	0	100	100
10	k	35/37 (95%)	35 (100%)	0	0	100	100
11	L	36/37 (97%)	36 (100%)	0	0	100	100
11	l	36/37 (97%)	36 (100%)	0	0	100	100
12	M	33/36 (92%)	33 (100%)	0	0	100	100
12	m	32/36 (89%)	32 (100%)	0	0	100	100
13	O	249/244 (102%)	243 (98%)	6 (2%)	0	100	100
13	o	246/244 (101%)	240 (98%)	6 (2%)	0	100	100
14	T	29/32 (91%)	29 (100%)	0	0	100	100
14	t	29/32 (91%)	29 (100%)	0	0	100	100
15	U	95/104 (91%)	93 (98%)	2 (2%)	0	100	100
15	u	95/104 (91%)	93 (98%)	2 (2%)	0	100	100
16	V	136/137 (99%)	131 (96%)	5 (4%)	0	100	100
16	v	135/137 (98%)	130 (96%)	5 (4%)	0	100	100
17	Y	27/30 (90%)	27 (100%)	0	0	100	100
17	y	27/30 (90%)	26 (96%)	1 (4%)	0	100	100
18	X	37/40 (92%)	37 (100%)	0	0	100	100
18	x	36/40 (90%)	36 (100%)	0	0	100	100
19	Z	60/62 (97%)	58 (97%)	2 (3%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
19	z	60/62 (97%)	58 (97%)	2 (3%)	0	100	100
20	R	28/34 (82%)	27 (96%)	1 (4%)	0	100	100
All	All	5282/5384 (98%)	5166 (98%)	110 (2%)	6 (0%)	51	53

5 of 6 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
3	C	416[A]	SER
3	C	416[B]	SER
3	c	416[A]	SER
3	c	416[B]	SER
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	272/279 (98%)	272 (100%)	0	100	100
1	a	275/279 (99%)	274 (100%)	1 (0%)	91	93
2	B	412/403 (102%)	407 (99%)	5 (1%)	71	76
2	b	413/403 (102%)	409 (99%)	4 (1%)	76	81
3	C	356/356 (100%)	352 (99%)	4 (1%)	73	78
3	c	362/356 (102%)	354 (98%)	8 (2%)	52	55
4	D	277/277 (100%)	274 (99%)	3 (1%)	73	78
4	d	277/277 (100%)	274 (99%)	3 (1%)	73	78
5	E	74/73 (101%)	73 (99%)	1 (1%)	67	72
5	e	74/73 (101%)	72 (97%)	2 (3%)	44	46
6	F	28/38 (74%)	28 (100%)	0	100	100
6	f	26/38 (68%)	25 (96%)	1 (4%)	33	31
7	H	55/54 (102%)	53 (96%)	2 (4%)	35	33
7	h	54/54 (100%)	53 (98%)	1 (2%)	57	61

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
8	I	34/34 (100%)	34 (100%)	0	100 100
8	i	34/34 (100%)	33 (97%)	1 (3%)	42 42
9	J	26/27 (96%)	26 (100%)	0	100 100
9	j	27/27 (100%)	26 (96%)	1 (4%)	34 32
10	K	30/30 (100%)	29 (97%)	1 (3%)	38 37
10	k	30/30 (100%)	29 (97%)	1 (3%)	38 37
11	L	36/35 (103%)	35 (97%)	1 (3%)	43 44
11	l	36/35 (103%)	36 (100%)	0	100 100
12	M	31/32 (97%)	30 (97%)	1 (3%)	39 38
12	m	30/32 (94%)	30 (100%)	0	100 100
13	O	214/207 (103%)	211 (99%)	3 (1%)	67 72
13	o	211/207 (102%)	204 (97%)	7 (3%)	38 37
14	T	27/28 (96%)	25 (93%)	2 (7%)	13 9
14	t	27/28 (96%)	25 (93%)	2 (7%)	13 9
15	U	84/89 (94%)	83 (99%)	1 (1%)	71 76
15	u	84/89 (94%)	84 (100%)	0	100 100
16	V	118/117 (101%)	118 (100%)	0	100 100
16	v	117/117 (100%)	115 (98%)	2 (2%)	60 65
17	Y	22/23 (96%)	22 (100%)	0	100 100
17	y	22/23 (96%)	21 (96%)	1 (4%)	27 24
18	X	32/33 (97%)	32 (100%)	0	100 100
18	x	31/33 (94%)	31 (100%)	0	100 100
19	Z	52/52 (100%)	51 (98%)	1 (2%)	57 61
19	z	52/52 (100%)	52 (100%)	0	100 100
20	R	25/29 (86%)	24 (96%)	1 (4%)	31 29
All	All	4387/4403 (100%)	4326 (99%)	61 (1%)	69 72

5 of 61 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	b	362	PHE
13	o	194	LYS
3	c	416[B]	SER

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Mol	Chain	Res	Type
13	o	139	SER
16	v	110	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 20 such sidechains are listed below:

Mol	Chain	Res	Type
3	c	373	ASN
13	o	124	ASN
19	z	58	ASN
13	o	147	ASN
4	D	332	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	$\#\|Z\| > 2$
12	FME	M	1	12	8,9,10	0.63	0	7,9,11	1.36	2 (28%)
14	FME	t	1	14	8,9,10	0.85	0	7,9,11	2.25	4 (57%)
8	FME	i	1	8	8,9,10	0.63	0	7,9,11	1.37	2 (28%)
12	FME	m	1	12	8,9,10	0.68	0	7,9,11	1.53	2 (28%)
14	FME	T	1	14	8,9,10	0.71	0	7,9,11	1.36	1 (14%)
8	FME	I	1	8	8,9,10	0.66	0	7,9,11	1.17	1 (14%)

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
12	FME	M	1	12	-	1/7/9/11	-
14	FME	t	1	14	-	0/7/9/11	-
8	FME	i	1	8	-	0/7/9/11	-
12	FME	m	1	12	-	2/7/9/11	-
14	FME	T	1	14	-	1/7/9/11	-
8	FME	I	1	8	-	1/7/9/11	-

There are no bond length outliers.

The worst 5 of 12 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
14	t	1	FME	CA-N-CN	-3.38	117.62	122.82
14	t	1	FME	C-CA-N	2.62	114.47	109.73
12	m	1	FME	CA-N-CN	-2.46	119.03	122.82
8	i	1	FME	CA-N-CN	-2.45	119.05	122.82
14	t	1	FME	O1-CN-N	-2.43	118.87	125.27

There are no chirality outliers.

All (5) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
8	I	1	FME	O1-CN-N-CA
14	T	1	FME	O1-CN-N-CA
12	m	1	FME	CA-CB-CG-SD
12	M	1	FME	CB-CA-N-CN
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 251 ligands modelled in this entry, 19 are monoatomic and 18 are unknown - leaving 214 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	$\#\|Z\| > 2$
36	DGD	C	518	-	63,63,67	0.89	2 (3%)	77,77,81	1.02	5 (6%)
24	CLA	b	624	-	65,73,73	2.02	15 (23%)	76,113,113	2.80	24 (31%)
24	CLA	c	515	3	65,73,73	2.04	15 (23%)	76,113,113	2.66	28 (36%)
24	CLA	B	608	40	65,73,73	2.02	17 (26%)	76,113,113	2.71	28 (36%)
38	HEM	v	205	16	41,50,50	1.31	5 (12%)	45,82,82	1.80	10 (22%)
24	CLA	C	513	-	65,73,73	2.04	16 (24%)	76,113,113	2.77	26 (34%)
28	GOL	B	631	-	5,5,5	0.37	0	5,5,5	0.38	0
24	CLA	B	613	-	65,73,73	2.02	16 (24%)	76,113,113	2.87	27 (35%)
34	HTG	b	607	-	19,19,19	1.08	2 (10%)	23,24,24	1.32	1 (4%)
25	PHO	a	411	-	51,69,69	1.88	9 (17%)	47,99,99	1.69	11 (23%)
24	CLA	D	402	-	65,73,73	1.99	16 (24%)	76,113,113	2.87	28 (36%)
24	CLA	c	508	40	65,73,73	2.06	17 (26%)	76,113,113	2.81	29 (38%)
25	PHO	d	401	-	51,69,69	1.82	8 (15%)	47,99,99	1.99	9 (19%)
29	LMT	F	102	-	36,36,36	0.46	0	47,47,47	1.01	2 (4%)
28	GOL	b	603	-	5,5,5	0.33	0	5,5,5	0.20	0
36	DGD	C	519	-	63,63,67	0.87	2 (3%)	77,77,81	0.88	2 (2%)
26	BCR	C	516	-	41,41,41	1.01	1 (2%)	56,56,56	1.53	13 (23%)
24	CLA	B	612	-	65,73,73	2.03	16 (24%)	76,113,113	2.74	25 (32%)
24	CLA	b	618	-	65,73,73	1.99	15 (23%)	76,113,113	2.75	28 (36%)
24	CLA	B	611	40	65,73,73	2.08	16 (24%)	76,113,113	2.72	31 (40%)
28	GOL	V	204	-	5,5,5	0.35	0	5,5,5	0.29	0
31	PL9	a	416	-	55,55,55	0.64	2 (3%)	68,69,69	1.91	18 (26%)
34	HTG	c	524	-	19,19,19	1.04	2 (10%)	23,24,24	1.49	1 (4%)
24	CLA	b	614	-	65,73,73	2.03	16 (24%)	76,113,113	2.93	26 (34%)
36	DGD	C	517	-	63,63,67	0.89	2 (3%)	77,77,81	1.12	7 (9%)
24	CLA	C	507	-	65,73,73	2.06	16 (24%)	76,113,113	2.68	26 (34%)
26	BCR	C	515	-	41,41,41	1.07	1 (2%)	56,56,56	1.57	7 (12%)
24	CLA	a	410	40	65,73,73	2.00	17 (26%)	76,113,113	2.82	28 (36%)
24	CLA	b	619	40	65,73,73	2.06	18 (27%)	76,113,113	2.80	29 (38%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
27	SQD	L	102	-	53,54,54	1.02	3 (5%)	62,65,65	1.58	10 (16%)
27	SQD	a	405	-	53,54,54	1.06	3 (5%)	62,65,65	1.24	6 (9%)
28	GOL	B	630	-	5,5,5	0.40	0	5,5,5	0.36	0
34	HTG	B	623	-	19,19,19	1.07	1 (5%)	23,24,24	1.09	1 (4%)
36	DGD	c	520	-	63,63,67	0.88	2 (3%)	77,77,81	0.98	4 (5%)
28	GOL	v	201	-	5,5,5	0.35	0	5,5,5	0.21	0
24	CLA	c	507	-	65,73,73	2.04	16 (24%)	76,113,113	2.66	24 (31%)
24	CLA	C	503	-	65,73,73	2.08	16 (24%)	76,113,113	2.69	26 (34%)
24	CLA	C	510	-	65,73,73	2.15	16 (24%)	76,113,113	2.69	26 (34%)
27	SQD	A	415	-	53,54,54	1.05	3 (5%)	62,65,65	1.15	4 (6%)
28	GOL	B	628	-	5,5,5	0.36	0	5,5,5	0.52	0
28	GOL	o	301	-	5,5,5	0.38	0	5,5,5	0.26	0
37	LHG	d	407	-	48,48,48	0.88	3 (6%)	51,54,54	1.04	5 (9%)
28	GOL	T	101	-	5,5,5	0.43	0	5,5,5	0.17	0
28	GOL	V	202	-	5,5,5	0.38	0	5,5,5	0.32	0
24	CLA	c	512	-	65,73,73	2.10	16 (24%)	76,113,113	2.72	28 (36%)
24	CLA	D	403	-	65,73,73	2.07	17 (26%)	76,113,113	2.73	26 (34%)
28	GOL	b	606	-	5,5,5	0.37	0	5,5,5	0.28	0
26	BCR	B	619	-	41,41,41	1.10	1 (2%)	56,56,56	1.38	6 (10%)
23	BCT	A	404	21	2,3,3	0.59	0	2,3,3	1.30	0
24	CLA	B	606	-	65,73,73	2.01	15 (23%)	76,113,113	2.86	27 (35%)
26	BCR	d	405	-	41,41,41	1.06	1 (2%)	56,56,56	1.65	13 (23%)
28	GOL	F	101	33	5,5,5	0.37	0	5,5,5	0.22	0
34	HTG	b	632	-	19,19,19	1.14	2 (10%)	23,24,24	1.75	3 (13%)
24	CLA	b	616	40	65,73,73	2.01	17 (26%)	76,113,113	2.76	27 (35%)
27	SQD	A	411	-	53,54,54	0.96	3 (5%)	62,65,65	1.52	11 (17%)
36	DGD	H	102	-	63,63,67	0.88	2 (3%)	77,77,81	1.00	6 (7%)
28	GOL	V	203	-	5,5,5	0.40	0	5,5,5	0.28	0
37	LHG	L	101	-	48,48,48	0.91	2 (4%)	51,54,54	1.11	5 (9%)
36	DGD	c	519	-	63,63,67	0.84	2 (3%)	77,77,81	1.12	7 (9%)
24	CLA	B	607	-	65,73,73	2.03	16 (24%)	76,113,113	2.85	28 (36%)
26	BCR	b	628	-	41,41,41	1.07	1 (2%)	56,56,56	1.25	7 (12%)
24	CLA	A	406	40	65,73,73	2.06	16 (24%)	76,113,113	2.84	29 (38%)
28	GOL	A	414	-	5,5,5	0.39	0	5,5,5	0.17	0
24	CLA	B	616	-	65,73,73	1.98	15 (23%)	76,113,113	2.81	27 (35%)
34	HTG	b	608	-	19,19,19	1.07	2 (10%)	23,24,24	1.27	3 (13%)
26	BCR	y	101	-	41,41,41	1.03	1 (2%)	56,56,56	1.57	9 (16%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
26	BCR	D	404	-	41,41,41	1.05	1 (2%)	56,56,56	1.73	14 (25%)
28	GOL	B	627	-	5,5,5	0.30	0	5,5,5	0.45	0
24	CLA	C	506	-	65,73,73	1.99	16 (24%)	76,113,113	2.61	24 (31%)
35	LMG	b	629	-	51,51,55	0.90	2 (3%)	59,59,63	1.01	3 (5%)
31	PL9	d	406	-	55,55,55	0.71	2 (3%)	68,69,69	1.54	16 (23%)
34	HTG	b	601	-	19,19,19	0.96	1 (5%)	23,24,24	1.04	1 (4%)
28	GOL	b	602	-	5,5,5	0.41	0	5,5,5	0.44	0
24	CLA	A	405	-	65,73,73	2.07	17 (26%)	76,113,113	2.68	30 (39%)
24	CLA	c	517	-	65,73,73	2.06	16 (24%)	76,113,113	2.76	29 (38%)
31	PL9	A	418	-	55,55,55	0.66	2 (3%)	68,69,69	1.77	20 (29%)
26	BCR	c	527	-	41,41,41	1.03	1 (2%)	56,56,56	1.53	8 (14%)
24	CLA	B	609	-	65,73,73	2.04	16 (24%)	76,113,113	2.68	29 (38%)
34	HTG	d	412	-	16,16,19	1.22	2 (12%)	20,21,24	1.80	3 (15%)
37	LHG	d	409	-	48,48,48	0.93	2 (4%)	51,54,54	1.05	2 (3%)
24	CLA	b	615	-	65,73,73	2.02	16 (24%)	76,113,113	2.82	27 (35%)
35	LMG	c	523	-	51,51,55	0.96	2 (3%)	59,59,63	1.22	7 (11%)
29	LMT	a	419	-	36,36,36	0.45	0	47,47,47	0.79	1 (2%)
28	GOL	T	102	-	5,5,5	0.40	0	5,5,5	0.30	0
24	CLA	a	412	-	65,73,73	2.03	16 (24%)	76,113,113	2.76	30 (39%)
28	GOL	a	402	-	5,5,5	0.38	0	5,5,5	0.27	0
28	GOL	B	636	-	5,5,5	0.41	0	5,5,5	0.57	0
29	LMT	m	102	-	36,36,36	0.49	0	47,47,47	0.98	2 (4%)
26	BCR	K	101	-	41,41,41	1.00	1 (2%)	56,56,56	1.43	11 (19%)
24	CLA	c	511	40	65,73,73	2.04	16 (24%)	76,113,113	2.72	24 (31%)
38	HEM	E	102	6,5	41,50,50	1.30	5 (12%)	45,82,82	1.93	10 (22%)
34	HTG	B	632	-	19,19,19	1.02	2 (10%)	23,24,24	1.39	3 (13%)
25	PHO	D	401	-	51,69,69	1.84	8 (15%)	47,99,99	1.56	9 (19%)
29	LMT	C	522	-	36,36,36	0.50	0	47,47,47	1.22	3 (6%)
24	CLA	C	502	-	65,73,73	2.01	15 (23%)	76,113,113	2.77	27 (35%)
31	PL9	D	405	-	55,55,55	0.65	1 (1%)	68,69,69	1.71	18 (26%)
36	DGD	D	406	-	52,52,67	1.02	3 (5%)	60,60,81	1.21	5 (8%)
36	DGD	e	101	-	63,63,67	0.93	2 (3%)	77,77,81	1.21	7 (9%)
24	CLA	c	513	-	65,73,73	2.13	16 (24%)	76,113,113	2.69	26 (34%)
34	HTG	V	206	-	19,19,19	1.04	2 (10%)	23,24,24	1.30	3 (13%)
24	CLA	C	512	3	65,73,73	2.09	15 (23%)	76,113,113	2.72	29 (38%)
24	CLA	A	407	40	65,73,73	2.01	16 (24%)	76,113,113	2.80	28 (36%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
24	CLA	C	504	-	65,73,73	2.06	16 (24%)	76,113,113	2.66	23 (30%)
37	LHG	D	409	-	48,48,48	0.96	2 (4%)	51,54,54	1.04	3 (5%)
34	HTG	B	625	-	19,19,19	1.04	2 (10%)	23,24,24	1.83	4 (17%)
24	CLA	b	610	40	65,73,73	2.08	16 (24%)	76,113,113	2.74	23 (30%)
24	CLA	b	625	-	65,73,73	2.05	16 (24%)	76,113,113	2.78	26 (34%)
28	GOL	a	401	-	5,5,5	0.42	0	5,5,5	0.46	0
24	CLA	a	409	-	65,73,73	2.09	16 (24%)	76,113,113	2.78	30 (39%)
27	SQD	a	414	-	53,54,54	0.97	3 (5%)	62,65,65	1.59	13 (20%)
24	CLA	b	611	-	65,73,73	2.06	17 (26%)	76,113,113	2.80	27 (35%)
28	GOL	t	102	-	5,5,5	0.45	0	5,5,5	0.12	0
37	LHG	E	101	-	41,41,48	1.03	2 (4%)	44,47,54	1.10	3 (6%)
26	BCR	Y	101	-	41,41,41	1.07	1 (2%)	56,56,56	1.53	9 (16%)
29	LMT	B	635	-	25,25,36	0.55	1 (4%)	30,30,47	0.80	1 (3%)
26	BCR	t	101	-	41,41,41	1.02	1 (2%)	56,56,56	1.61	16 (28%)
27	SQD	F	103	-	42,43,54	1.15	3 (7%)	51,54,65	1.59	11 (21%)
25	PHO	A	408	-	51,69,69	1.89	8 (15%)	47,99,99	1.79	9 (19%)
29	LMT	f	103	-	36,36,36	0.48	0	47,47,47	0.94	2 (4%)
28	GOL	O	301	-	5,5,5	0.35	0	5,5,5	0.40	0
27	SQD	f	102	-	42,43,54	1.19	3 (7%)	51,54,65	1.47	8 (15%)
29	LMT	M	102	-	36,36,36	0.40	0	47,47,47	0.90	1 (2%)
24	CLA	d	402	40	65,73,73	2.08	16 (24%)	76,113,113	2.75	28 (36%)
26	BCR	h	101	-	41,41,41	1.04	1 (2%)	56,56,56	1.39	11 (19%)
24	CLA	C	505	40	65,73,73	2.08	16 (24%)	76,113,113	2.79	27 (35%)
26	BCR	H	101	-	41,41,41	1.09	1 (2%)	56,56,56	1.44	9 (16%)
28	GOL	c	501	-	5,5,5	0.37	0	5,5,5	0.29	0
28	GOL	C	525	-	5,5,5	0.38	0	5,5,5	0.73	0
28	GOL	C	526	-	5,5,5	0.34	0	5,5,5	0.52	0
24	CLA	B	614	-	65,73,73	2.07	15 (23%)	76,113,113	2.72	28 (36%)
24	CLA	C	514	-	65,73,73	2.04	16 (24%)	76,113,113	2.70	28 (36%)
37	LHG	e	102	-	41,41,48	1.03	2 (4%)	44,47,54	0.93	2 (4%)
29	LMT	T	104	-	25,25,36	0.52	0	30,30,47	0.92	1 (3%)
24	CLA	d	404	-	65,73,73	2.06	18 (27%)	76,113,113	2.81	29 (38%)
28	GOL	B	629	-	5,5,5	0.37	0	5,5,5	0.28	0
28	GOL	c	502	-	5,5,5	0.40	0	5,5,5	0.48	0
35	LMG	Z	101	-	37,37,55	0.96	2 (5%)	45,45,63	1.38	6 (13%)
24	CLA	b	617	-	65,73,73	2.10	16 (24%)	76,113,113	2.61	29 (38%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
28	GOL	b	605	-	5,5,5	0.37	0	5,5,5	0.30	0
35	LMG	C	520	-	51,51,55	0.95	2 (3%)	59,59,63	0.98	3 (5%)
28	GOL	v	203	-	5,5,5	0.41	0	5,5,5	0.27	0
29	LMT	M	105	-	36,36,36	0.47	0	47,47,47	0.85	0
29	LMT	b	630	-	25,25,36	0.52	0	30,30,47	0.64	0
34	HTG	C	524	-	19,19,19	1.01	2 (10%)	23,24,24	1.78	4 (17%)
26	BCR	b	627	-	41,41,41	1.00	1 (2%)	56,56,56	1.38	7 (12%)
35	LMG	a	415	-	51,51,55	0.90	2 (3%)	59,59,63	1.17	5 (8%)
24	CLA	B	605	-	65,73,73	2.02	17 (26%)	76,113,113	2.73	28 (36%)
36	DGD	h	102	-	63,63,67	0.91	3 (4%)	77,77,81	0.92	4 (5%)
24	CLA	c	505	-	65,73,73	2.04	16 (24%)	76,113,113	2.73	27 (35%)
24	CLA	c	510	-	65,73,73	2.05	17 (26%)	76,113,113	2.74	29 (38%)
24	CLA	c	516	-	65,73,73	2.04	15 (23%)	76,113,113	2.85	29 (38%)
27	SQD	B	621	-	53,54,54	1.01	3 (5%)	62,65,65	1.53	9 (14%)
28	GOL	b	604	-	5,5,5	0.37	0	5,5,5	0.24	0
24	CLA	B	617	-	65,73,73	2.06	16 (24%)	76,113,113	2.72	26 (34%)
35	LMG	J	101	39	51,51,55	0.86	2 (3%)	59,59,63	0.99	4 (6%)
24	CLA	B	615	-	65,73,73	2.05	16 (24%)	76,113,113	2.82	27 (35%)
34	HTG	b	631	-	19,19,19	0.79	1 (5%)	23,24,24	1.26	2 (8%)
24	CLA	B	603	-	65,73,73	2.08	18 (27%)	76,113,113	2.85	26 (34%)
24	CLA	b	623	-	65,73,73	2.02	15 (23%)	76,113,113	2.86	30 (39%)
24	CLA	B	602	40	65,73,73	2.07	16 (24%)	76,113,113	2.78	26 (34%)
26	BCR	c	518	-	41,41,41	1.03	1 (2%)	56,56,56	1.45	8 (14%)
34	HTG	B	624	-	19,19,19	0.78	1 (5%)	23,24,24	1.56	3 (13%)
34	HTG	D	412	-	16,16,19	1.10	2 (12%)	20,21,24	1.49	1 (5%)
34	HTG	B	633	-	19,19,19	1.03	2 (10%)	23,24,24	1.41	1 (4%)
24	CLA	A	409	-	65,73,73	2.08	16 (24%)	76,113,113	2.71	29 (38%)
24	CLA	C	511	-	65,73,73	2.09	16 (24%)	76,113,113	2.68	30 (39%)
37	LHG	D	408	-	48,48,48	0.89	2 (4%)	51,54,54	0.89	4 (7%)
24	CLA	b	612	-	65,73,73	2.05	16 (24%)	76,113,113	2.84	30 (39%)
26	BCR	b	626	-	41,41,41	1.02	1 (2%)	56,56,56	1.45	8 (14%)
24	CLA	c	509	-	65,73,73	1.99	16 (24%)	76,113,113	2.65	23 (30%)
36	DGD	c	521	-	63,63,67	0.89	2 (3%)	77,77,81	1.01	4 (5%)
28	GOL	A	412	-	5,5,5	0.32	0	5,5,5	0.36	0
23	BCT	a	418	21	2,3,3	0.64	0	2,3,3	0.73	0
26	BCR	B	618	-	41,41,41	1.02	1 (2%)	56,56,56	1.38	7 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
24	CLA	c	506	-	65,73,73	2.04	17 (26%)	76,113,113	2.64	26 (34%)
35	LMG	M	101	-	51,51,55	0.94	2 (3%)	59,59,63	1.02	3 (5%)
28	GOL	V	201	-	5,5,5	0.37	0	5,5,5	0.32	0
24	CLA	c	514	-	65,73,73	2.07	16 (24%)	76,113,113	2.74	30 (39%)
28	GOL	B	626	-	5,5,5	0.43	0	5,5,5	0.30	0
28	GOL	v	202	-	5,5,5	0.34	0	5,5,5	0.28	0
35	LMG	c	522	-	51,51,55	0.90	2 (3%)	59,59,63	1.12	4 (6%)
34	HTG	C	523	-	19,19,19	0.99	2 (10%)	23,24,24	1.58	2 (8%)
37	LHG	d	408	-	48,48,48	0.88	2 (4%)	51,54,54	1.00	4 (7%)
30	OEX	A	417	1,40,3	0,15,15	-	-	-		
26	BCR	a	413	-	41,41,41	1.07	1 (2%)	56,56,56	1.14	4 (7%)
26	BCR	B	620	-	41,41,41	1.05	1 (2%)	56,56,56	1.50	10 (17%)
38	HEM	V	205	16	41,50,50	1.36	6 (14%)	45,82,82	1.69	11 (24%)
24	CLA	b	621	-	65,73,73	2.05	17 (26%)	76,113,113	2.74	29 (38%)
29	LMT	a	404	-	36,36,36	0.48	1 (2%)	47,47,47	1.10	2 (4%)
29	LMT	B	622	-	36,36,36	0.43	0	47,47,47	1.06	2 (4%)
24	CLA	b	620	-	65,73,73	2.03	15 (23%)	76,113,113	2.74	27 (35%)
29	LMT	M	104	-	36,36,36	0.54	1 (2%)	47,47,47	1.04	4 (8%)
28	GOL	f	101	33	5,5,5	0.32	0	5,5,5	0.49	0
35	LMG	z	101	-	39,39,55	1.08	2 (5%)	47,47,63	1.11	3 (6%)
35	LMG	C	501	-	51,51,55	0.94	2 (3%)	59,59,63	1.10	4 (6%)
24	CLA	C	508	40	65,73,73	2.03	16 (24%)	76,113,113	2.66	25 (32%)
34	HTG	c	525	-	19,19,19	1.03	2 (10%)	23,24,24	1.49	3 (13%)
24	CLA	b	622	-	65,73,73	2.08	15 (23%)	76,113,113	2.63	27 (35%)
35	LMG	C	521	-	51,51,55	0.95	2 (3%)	59,59,63	1.18	5 (8%)
28	GOL	A	413	-	5,5,5	0.46	0	5,5,5	0.46	0
24	CLA	B	604	-	65,73,73	2.08	17 (26%)	76,113,113	2.70	28 (36%)
24	CLA	B	610	-	65,73,73	2.00	16 (24%)	76,113,113	2.71	27 (35%)
26	BCR	T	103	-	41,41,41	1.08	1 (2%)	56,56,56	1.62	13 (23%)
30	OEX	a	417	1,40,3	0,15,15	-	-	-		
29	LMT	A	416	-	36,36,36	0.56	1 (2%)	47,47,47	1.28	3 (6%)
37	LHG	l	101	-	48,48,48	0.93	2 (4%)	51,54,54	0.98	3 (5%)
35	LMG	j	101	39	51,51,55	0.92	2 (3%)	59,59,63	1.04	3 (5%)
26	BCR	k	101	-	41,41,41	1.07	1 (2%)	56,56,56	1.47	11 (19%)
24	CLA	C	509	-	65,73,73	2.10	16 (24%)	76,113,113	2.77	27 (35%)
26	BCR	A	410	-	41,41,41	1.00	1 (2%)	56,56,56	1.23	7 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
38	HEM	e	103	6,5	41,50,50	1.28	5 (12%)	45,82,82	1.75	10 (22%)
24	CLA	b	613	-	65,73,73	2.05	16 (24%)	76,113,113	2.70	29 (38%)
37	LHG	D	407	-	48,48,48	0.87	2 (4%)	51,54,54	1.11	5 (9%)
24	CLA	d	403	-	65,73,73	2.05	16 (24%)	76,113,113	2.78	27 (35%)

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
36	DGD	C	518	-	-	18/51/91/95	0/2/2/2
24	CLA	b	624	-	1/1/15/20	4/37/115/115	-
24	CLA	c	515	3	1/1/15/20	5/37/115/115	-
24	CLA	B	608	40	1/1/15/20	2/37/115/115	-
38	HEM	v	205	16	-	4/12/54/54	-
24	CLA	C	513	-	1/1/15/20	10/37/115/115	-
28	GOL	B	631	-	-	0/4/4/4	-
24	CLA	B	613	-	1/1/15/20	1/37/115/115	-
34	HTG	b	607	-	-	2/10/30/30	0/1/1/1
25	PHO	a	411	-	-	5/37/103/103	0/5/6/6
24	CLA	D	402	-	1/1/15/20	0/37/115/115	-
24	CLA	c	508	40	1/1/15/20	8/37/115/115	-
25	PHO	d	401	-	-	1/37/103/103	0/5/6/6
29	LMT	F	102	-	-	3/21/61/61	0/2/2/2
28	GOL	b	603	-	-	0/4/4/4	-
36	DGD	C	519	-	-	8/51/91/95	0/2/2/2
26	BCR	C	516	-	-	4/29/63/63	0/2/2/2
24	CLA	B	612	-	1/1/15/20	4/37/115/115	-
24	CLA	b	618	-	1/1/15/20	6/37/115/115	-
24	CLA	B	611	40	1/1/15/20	6/37/115/115	-
28	GOL	V	204	-	-	0/4/4/4	-
31	PL9	a	416	-	-	15/53/73/73	0/1/1/1
34	HTG	c	524	-	-	3/10/30/30	0/1/1/1
24	CLA	b	614	-	1/1/15/20	3/37/115/115	-
36	DGD	C	517	-	-	16/51/91/95	0/2/2/2
24	CLA	C	507	-	1/1/15/20	9/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
26	BCR	C	515	-	-	2/29/63/63	0/2/2/2
24	CLA	b	619	40	1/1/15/20	6/37/115/115	-
24	CLA	a	410	40	-	10/37/115/115	-
27	SQD	L	102	-	-	20/49/69/69	0/1/1/1
27	SQD	a	405	-	-	16/49/69/69	0/1/1/1
28	GOL	B	630	-	-	4/4/4/4	-
34	HTG	B	623	-	-	3/10/30/30	0/1/1/1
36	DGD	c	520	-	-	16/51/91/95	0/2/2/2
28	GOL	v	201	-	-	2/4/4/4	-
24	CLA	c	507	-	1/1/15/20	2/37/115/115	-
24	CLA	C	503	-	-	3/37/115/115	-
24	CLA	C	510	-	1/1/15/20	11/37/115/115	-
27	SQD	A	415	-	-	14/49/69/69	0/1/1/1
28	GOL	B	628	-	-	2/4/4/4	-
28	GOL	o	301	-	-	3/4/4/4	-
37	LHG	d	407	-	-	12/53/53/53	-
28	GOL	T	101	-	-	0/4/4/4	-
28	GOL	V	202	-	-	2/4/4/4	-
24	CLA	c	512	-	1/1/15/20	4/37/115/115	-
24	CLA	D	403	-	1/1/15/20	5/37/115/115	-
28	GOL	b	606	-	-	3/4/4/4	-
26	BCR	B	619	-	-	0/29/63/63	0/2/2/2
24	CLA	B	606	-	1/1/15/20	6/37/115/115	-
26	BCR	d	405	-	-	5/29/63/63	0/2/2/2
28	GOL	F	101	33	-	2/4/4/4	-
34	HTG	b	632	-	-	5/10/30/30	0/1/1/1
24	CLA	b	616	40	1/1/15/20	2/37/115/115	-
27	SQD	A	411	-	-	11/49/69/69	0/1/1/1
36	DGD	H	102	-	-	13/51/91/95	0/2/2/2
28	GOL	V	203	-	-	1/4/4/4	-
37	LHG	L	101	-	-	15/53/53/53	-
36	DGD	c	519	-	-	15/51/91/95	0/2/2/2
24	CLA	B	607	-	1/1/15/20	5/37/115/115	-
26	BCR	b	628	-	-	2/29/63/63	0/2/2/2
24	CLA	A	406	40	-	4/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	GOL	A	414	-	-	2/4/4/4	-
24	CLA	B	616	-	1/1/15/20	9/37/115/115	-
34	HTG	b	608	-	-	1/10/30/30	0/1/1/1
26	BCR	y	101	-	-	4/29/63/63	0/2/2/2
26	BCR	D	404	-	-	8/29/63/63	0/2/2/2
28	GOL	B	627	-	-	2/4/4/4	-
24	CLA	C	506	-	1/1/15/20	4/37/115/115	-
35	LMG	b	629	-	-	10/46/66/70	0/1/1/1
31	PL9	d	406	-	-	3/53/73/73	0/1/1/1
34	HTG	b	601	-	-	3/10/30/30	0/1/1/1
28	GOL	b	602	-	-	4/4/4/4	-
24	CLA	A	405	-	1/1/15/20	4/37/115/115	-
24	CLA	c	517	-	1/1/15/20	5/37/115/115	-
31	PL9	A	418	-	-	13/53/73/73	0/1/1/1
26	BCR	c	527	-	-	0/29/63/63	0/2/2/2
24	CLA	B	609	-	-	1/37/115/115	-
34	HTG	d	412	-	-	0/7/27/30	0/1/1/1
37	LHG	d	409	-	-	13/53/53/53	-
24	CLA	b	615	-	1/1/15/20	11/37/115/115	-
35	LMG	c	523	-	-	3/46/66/70	0/1/1/1
29	LMT	a	419	-	-	5/21/61/61	0/2/2/2
28	GOL	T	102	-	-	2/4/4/4	-
24	CLA	a	412	-	1/1/15/20	9/37/115/115	-
28	GOL	a	402	-	-	2/4/4/4	-
28	GOL	B	636	-	-	0/4/4/4	-
29	LMT	m	102	-	-	5/21/61/61	0/2/2/2
26	BCR	K	101	-	-	1/29/63/63	0/2/2/2
24	CLA	c	511	40	1/1/15/20	5/37/115/115	-
38	HEM	E	102	6,5	-	7/12/54/54	-
34	HTG	B	632	-	-	3/10/30/30	0/1/1/1
25	PHO	D	401	-	-	5/37/103/103	0/5/6/6
29	LMT	C	522	-	-	10/21/61/61	0/2/2/2
24	CLA	C	502	-	1/1/15/20	5/37/115/115	-
31	PL9	D	405	-	-	8/53/73/73	0/1/1/1
36	DGD	D	406	-	-	21/47/67/95	0/1/1/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
36	DGD	e	101	-	-	26/51/91/95	0/2/2/2
24	CLA	c	513	-	1/1/15/20	11/37/115/115	-
34	HTG	V	206	-	-	4/10/30/30	0/1/1/1
24	CLA	C	512	3	1/1/15/20	3/37/115/115	-
24	CLA	A	407	40	-	3/37/115/115	-
24	CLA	C	504	-	1/1/15/20	1/37/115/115	-
37	LHG	D	409	-	-	14/53/53/53	-
34	HTG	B	625	-	-	5/10/30/30	0/1/1/1
24	CLA	b	610	40	1/1/15/20	16/37/115/115	-
24	CLA	b	625	-	1/1/15/20	8/37/115/115	-
28	GOL	a	401	-	-	2/4/4/4	-
24	CLA	a	409	-	1/1/15/20	6/37/115/115	-
27	SQD	a	414	-	-	15/49/69/69	0/1/1/1
24	CLA	b	611	-	1/1/15/20	5/37/115/115	-
28	GOL	t	102	-	-	0/4/4/4	-
37	LHG	E	101	-	-	22/46/46/53	-
26	BCR	Y	101	-	-	4/29/63/63	0/2/2/2
29	LMT	B	635	-	-	7/17/37/61	0/1/1/2
26	BCR	t	101	-	-	3/29/63/63	0/2/2/2
27	SQD	F	103	-	-	16/38/58/69	0/1/1/1
25	PHO	A	408	-	-	0/37/103/103	0/5/6/6
29	LMT	f	103	-	-	10/21/61/61	0/2/2/2
28	GOL	O	301	-	-	2/4/4/4	-
27	SQD	f	102	-	-	15/38/58/69	0/1/1/1
29	LMT	M	102	-	-	5/21/61/61	0/2/2/2
24	CLA	d	402	40	1/1/15/20	7/37/115/115	-
26	BCR	h	101	-	-	1/29/63/63	0/2/2/2
24	CLA	C	505	40	1/1/15/20	6/37/115/115	-
26	BCR	H	101	-	-	0/29/63/63	0/2/2/2
28	GOL	c	501	-	-	0/4/4/4	-
28	GOL	C	525	-	-	2/4/4/4	-
28	GOL	C	526	-	-	0/4/4/4	-
24	CLA	B	614	-	1/1/15/20	7/37/115/115	-
24	CLA	C	514	-	1/1/15/20	6/37/115/115	-
37	LHG	e	102	-	-	20/46/46/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
29	LMT	T	104	-	-	7/17/37/61	0/1/1/2
24	CLA	d	404	-	1/1/15/20	3/37/115/115	-
28	GOL	B	629	-	-	3/4/4/4	-
28	GOL	c	502	-	-	0/4/4/4	-
35	LMG	Z	101	-	-	14/31/51/70	0/1/1/1
24	CLA	b	617	-	-	3/37/115/115	-
28	GOL	b	605	-	-	2/4/4/4	-
35	LMG	C	520	-	-	11/46/66/70	0/1/1/1
28	GOL	v	203	-	-	2/4/4/4	-
29	LMT	M	105	-	-	7/21/61/61	0/2/2/2
29	LMT	b	630	-	-	4/17/37/61	0/1/1/2
34	HTG	C	524	-	-	3/10/30/30	0/1/1/1
26	BCR	b	627	-	-	2/29/63/63	0/2/2/2
35	LMG	a	415	-	-	18/46/66/70	0/1/1/1
24	CLA	B	605	-	1/1/15/20	6/37/115/115	-
36	DGD	h	102	-	-	10/51/91/95	0/2/2/2
24	CLA	c	505	-	1/1/15/20	3/37/115/115	-
24	CLA	c	510	-	1/1/15/20	14/37/115/115	-
24	CLA	c	516	-	1/1/15/20	9/37/115/115	-
27	SQD	B	621	-	-	20/49/69/69	0/1/1/1
28	GOL	b	604	-	-	2/4/4/4	-
24	CLA	B	617	-	1/1/15/20	6/37/115/115	-
35	LMG	J	101	39	-	9/46/66/70	0/1/1/1
24	CLA	B	615	-	1/1/15/20	14/37/115/115	-
34	HTG	b	631	-	-	3/10/30/30	0/1/1/1
24	CLA	B	603	-	1/1/15/20	5/37/115/115	-
24	CLA	b	623	-	1/1/15/20	20/37/115/115	-
24	CLA	B	602	40	1/1/15/20	12/37/115/115	-
26	BCR	c	518	-	-	2/29/63/63	0/2/2/2
34	HTG	B	624	-	-	5/10/30/30	0/1/1/1
34	HTG	D	412	-	-	1/7/27/30	0/1/1/1
34	HTG	B	633	-	-	0/10/30/30	0/1/1/1
24	CLA	C	511	-	1/1/15/20	8/37/115/115	-
24	CLA	A	409	-	-	8/37/115/115	-
37	LHG	D	408	-	-	11/53/53/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	b	612	-	1/1/15/20	5/37/115/115	-
26	BCR	b	626	-	-	2/29/63/63	0/2/2/2
24	CLA	c	509	-	1/1/15/20	4/37/115/115	-
36	DGD	c	521	-	-	16/51/91/95	0/2/2/2
28	GOL	A	412	-	-	0/4/4/4	-
26	BCR	B	618	-	-	2/29/63/63	0/2/2/2
35	LMG	M	101	-	-	7/46/66/70	0/1/1/1
24	CLA	c	506	-	-	5/37/115/115	-
28	GOL	V	201	-	-	2/4/4/4	-
24	CLA	c	514	-	1/1/15/20	9/37/115/115	-
28	GOL	B	626	-	-	2/4/4/4	-
28	GOL	v	202	-	-	3/4/4/4	-
35	LMG	c	522	-	-	13/46/66/70	0/1/1/1
34	HTG	C	523	-	-	0/10/30/30	0/1/1/1
37	LHG	d	408	-	-	9/53/53/53	-
26	BCR	a	413	-	-	0/29/63/63	0/2/2/2
26	BCR	B	620	-	-	0/29/63/63	0/2/2/2
38	HEM	V	205	16	-	4/12/54/54	-
24	CLA	b	621	-	1/1/15/20	2/37/115/115	-
29	LMT	a	404	-	-	9/21/61/61	0/2/2/2
29	LMT	B	622	-	-	10/21/61/61	0/2/2/2
24	CLA	b	620	-	-	3/37/115/115	-
29	LMT	M	104	-	-	10/21/61/61	0/2/2/2
28	GOL	f	101	33	-	3/4/4/4	-
35	LMG	z	101	-	-	13/34/54/70	0/1/1/1
35	LMG	C	501	-	-	18/46/66/70	0/1/1/1
24	CLA	C	508	40	1/1/15/20	5/37/115/115	-
34	HTG	c	525	-	-	0/10/30/30	0/1/1/1
24	CLA	b	622	-	1/1/15/20	4/37/115/115	-
35	LMG	C	521	-	-	9/46/66/70	0/1/1/1
28	GOL	A	413	-	-	2/4/4/4	-
24	CLA	B	604	-	1/1/15/20	6/37/115/115	-
24	CLA	B	610	-	1/1/15/20	5/37/115/115	-
26	BCR	T	103	-	-	2/29/63/63	0/2/2/2
29	LMT	A	416	-	-	5/21/61/61	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
37	LHG	l	101	-	-	14/53/53/53	-
35	LMG	j	101	39	-	12/46/66/70	0/1/1/1
26	BCR	k	101	-	-	1/29/63/63	0/2/2/2
24	CLA	C	509	-	1/1/15/20	5/37/115/115	-
26	BCR	A	410	-	-	0/29/63/63	0/2/2/2
38	HEM	e	103	6,5	-	8/12/54/54	-
24	CLA	b	613	-	1/1/15/20	3/37/115/115	-
37	LHG	D	407	-	-	13/53/53/53	-
24	CLA	d	403	-	1/1/15/20	2/37/115/115	-

The worst 5 of 1334 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
24	C	510	CLA	C3B-C2B	6.54	1.49	1.40
24	C	505	CLA	C3B-C2B	6.48	1.49	1.40
24	B	605	CLA	C3B-C2B	6.45	1.49	1.40
24	c	513	CLA	C3B-C2B	6.44	1.49	1.40
24	B	613	CLA	C3B-C2B	6.38	1.49	1.40

The worst 5 of 2545 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	a	410	CLA	C1D-ND-C4D	-10.50	98.87	106.33
24	B	606	CLA	C1D-ND-C4D	-10.46	98.90	106.33
24	b	614	CLA	C1D-ND-C4D	-10.09	99.17	106.33
24	B	613	CLA	C1D-ND-C4D	-10.05	99.20	106.33
24	B	616	CLA	C1D-ND-C4D	-10.01	99.23	106.33

5 of 61 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
24	A	405	CLA	ND
24	B	602	CLA	ND
24	B	603	CLA	ND
24	B	604	CLA	ND
24	B	605	CLA	ND

5 of 1297 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
24	A	406	CLA	CHA-CBD-CGD-O1D
24	A	406	CLA	CHA-CBD-CGD-O2D
24	B	602	CLA	CHA-CBD-CGD-O1D
24	B	606	CLA	C2-C3-C5-C6
24	B	606	CLA	C4-C3-C5-C6

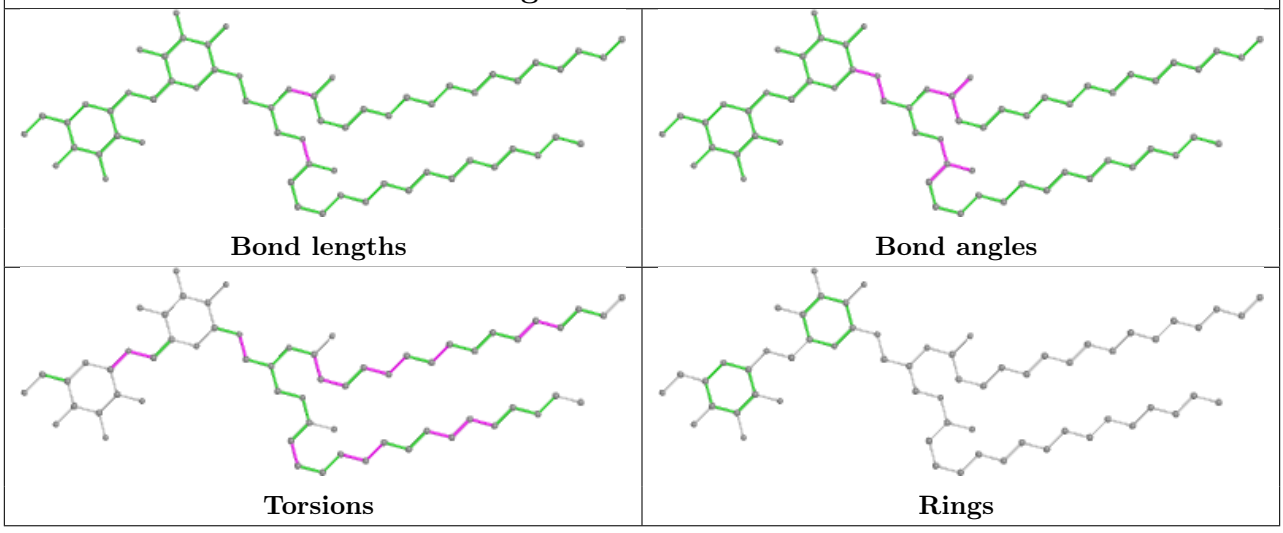
There are no ring outliers.

1 monomer is involved in 1 short contact:

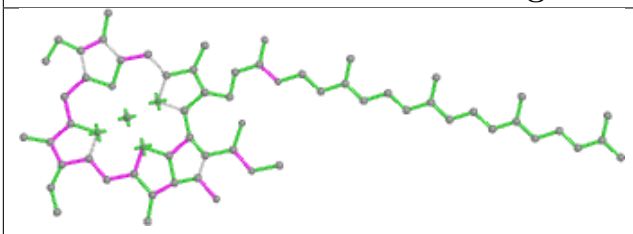
Mol	Chain	Res	Type	Clashes	Symm-Clashes
27	f	102	SQD	0	1

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

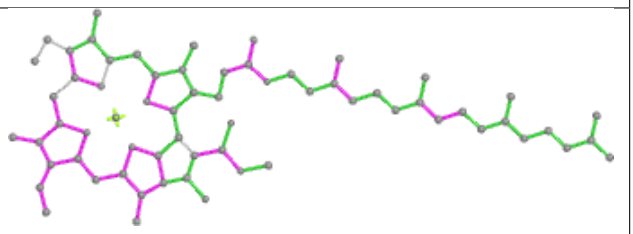
Ligand DGD C 518



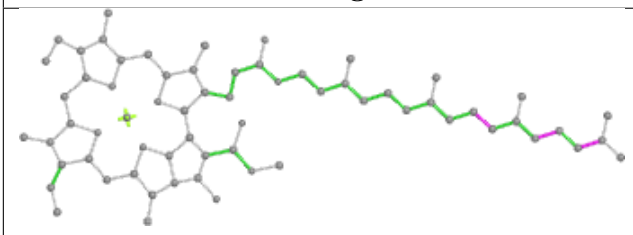
Ligand CLA b 624



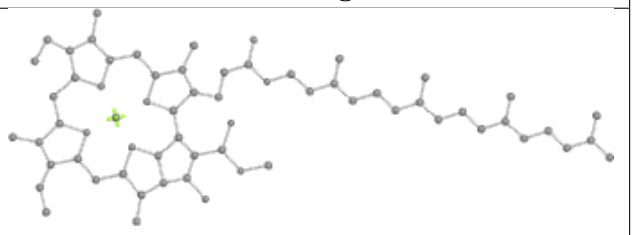
Bond lengths



Bond angles

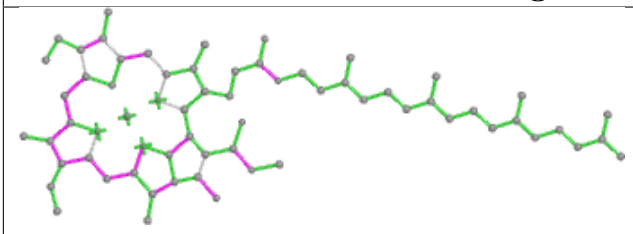


Torsions

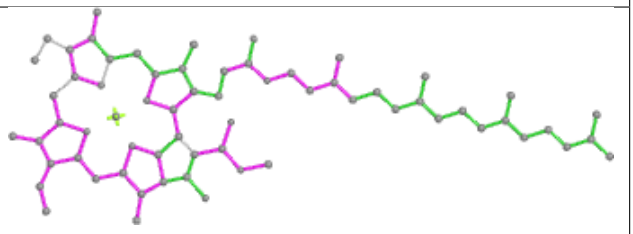


Rings

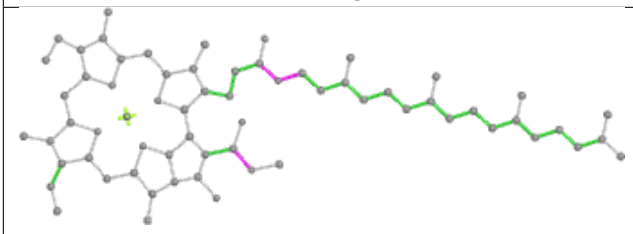
Ligand CLA c 515



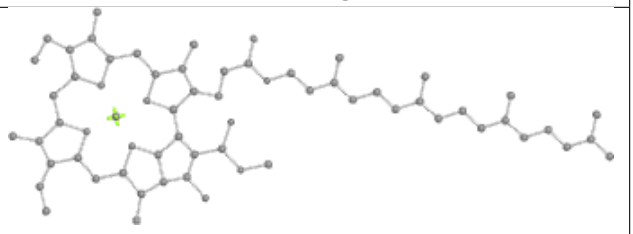
Bond lengths



Bond angles

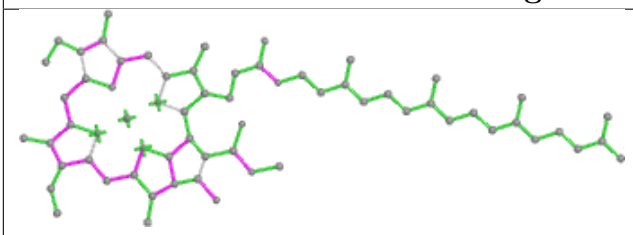


Torsions

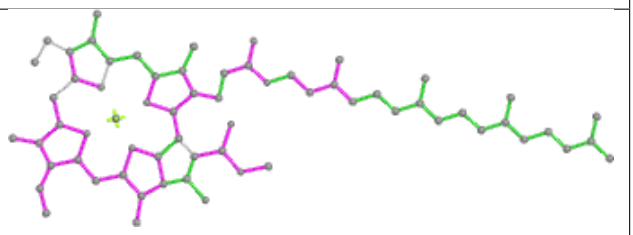


Rings

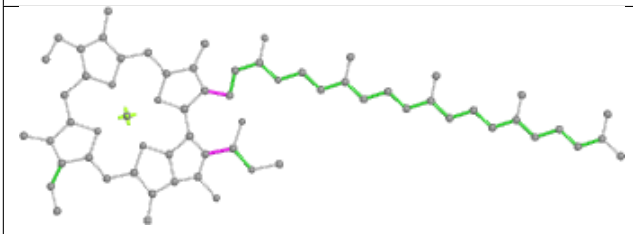
Ligand CLA B 608



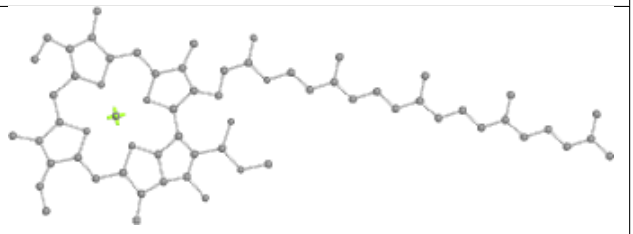
Bond lengths



Bond angles

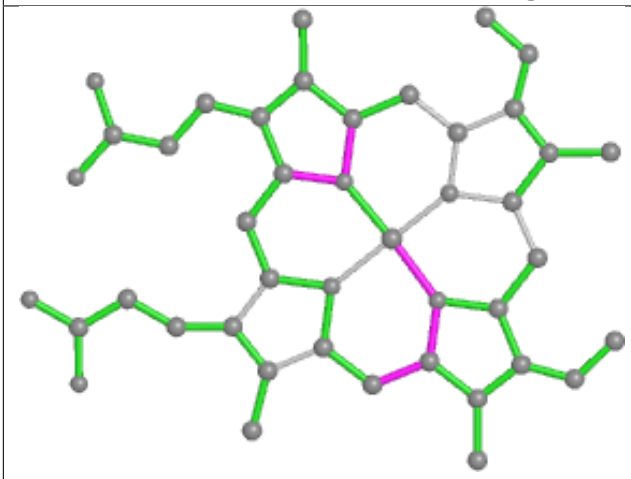


Torsions

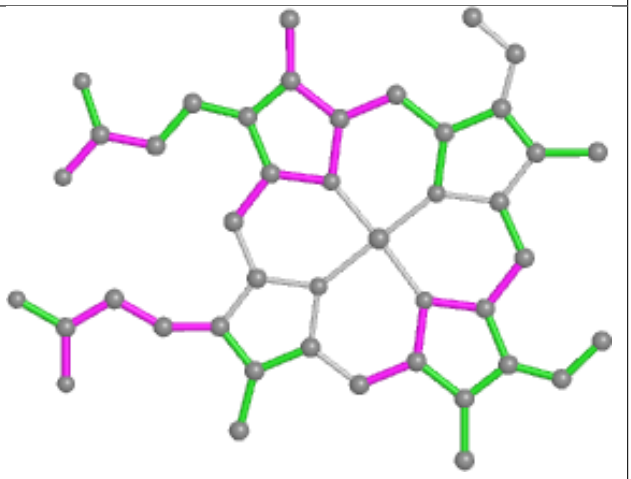


Rings

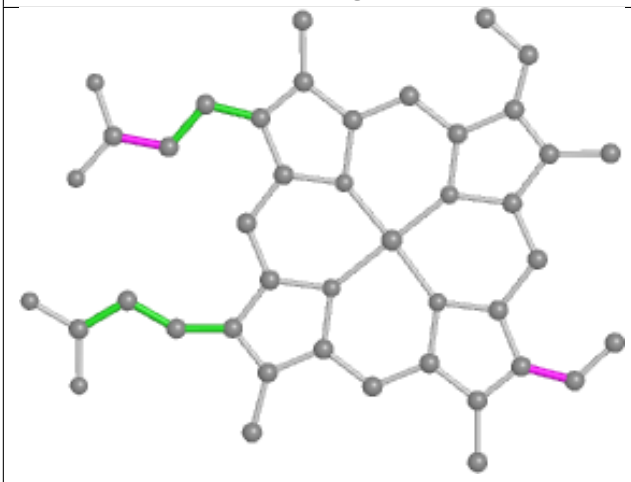
Ligand HEM v 205



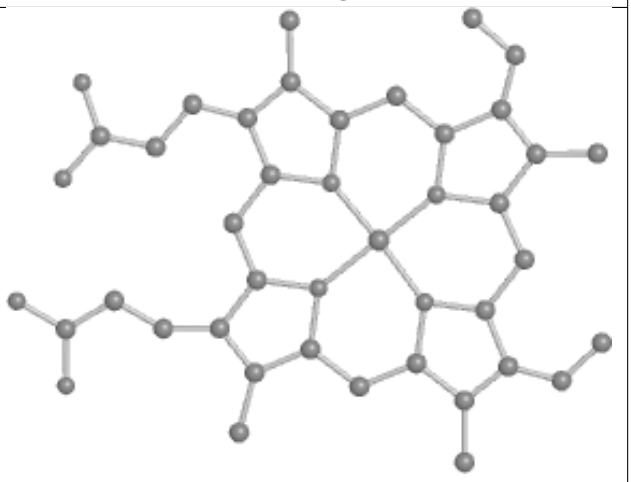
Bond lengths



Bond angles

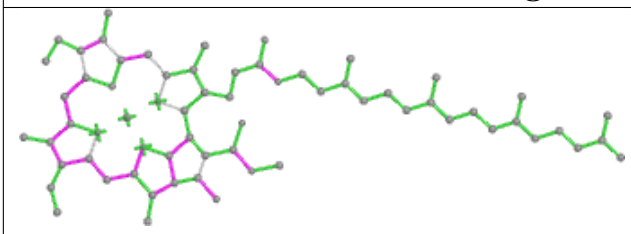


Torsions

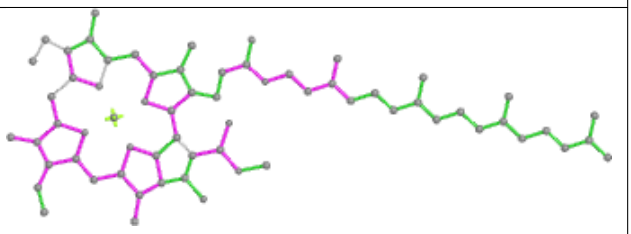


Rings

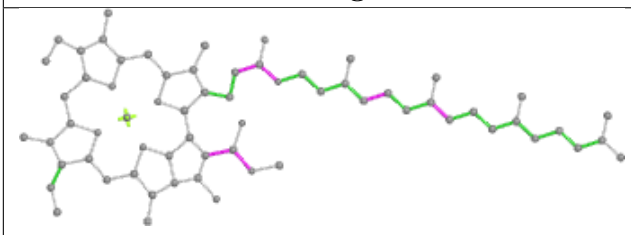
Ligand CLA C 513



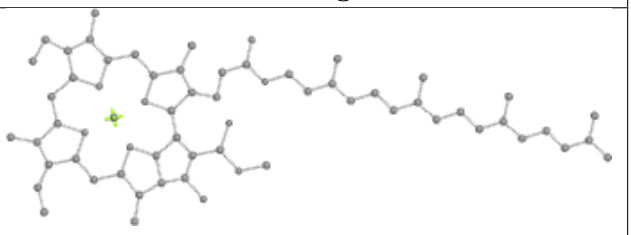
Bond lengths



Bond angles

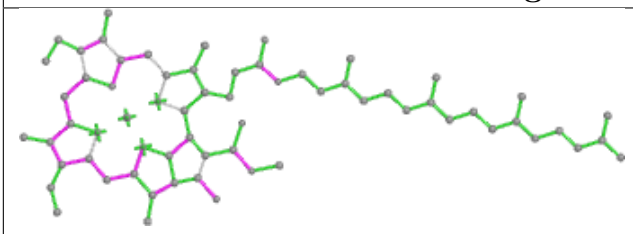


Torsions

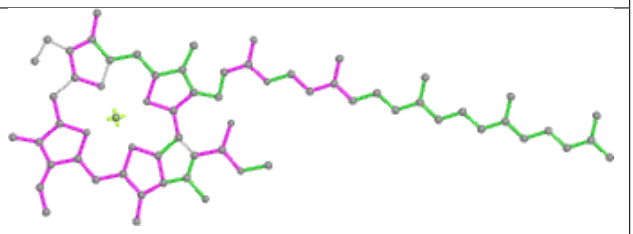


Rings

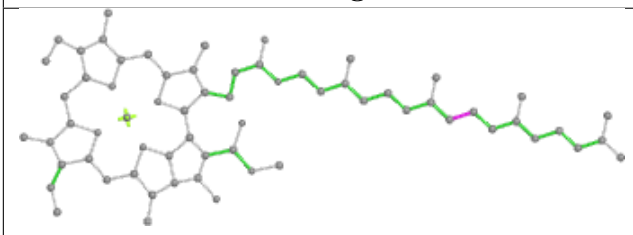
Ligand CLA B 613



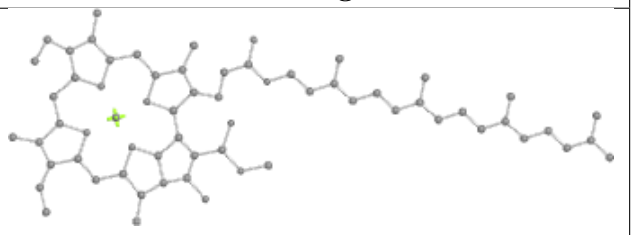
Bond lengths



Bond angles

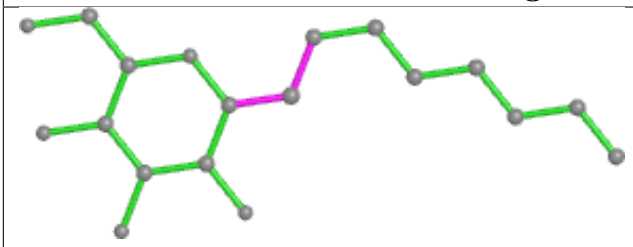


Torsions

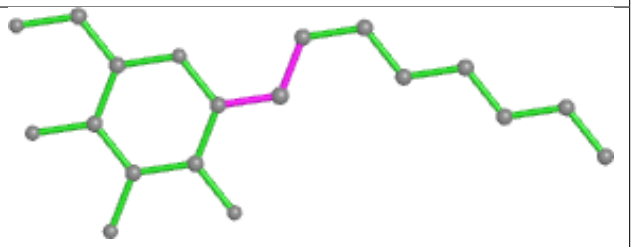


Rings

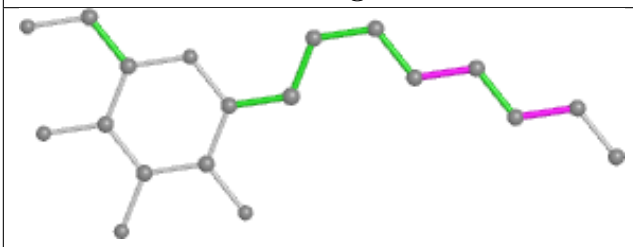
Ligand HTG b 607



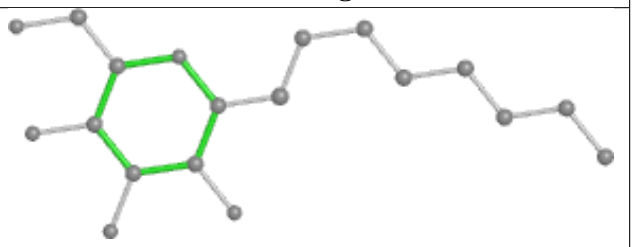
Bond lengths



Bond angles

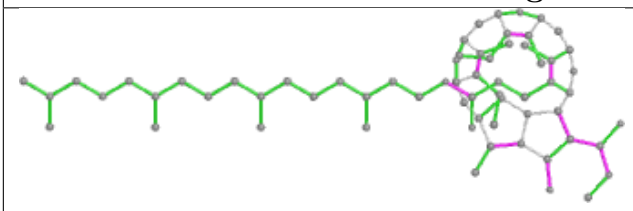


Torsions

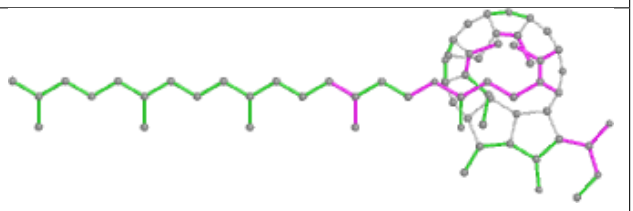


Rings

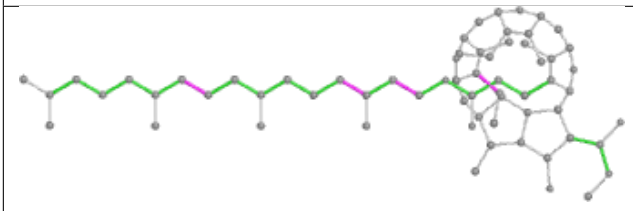
Ligand PHO a 411



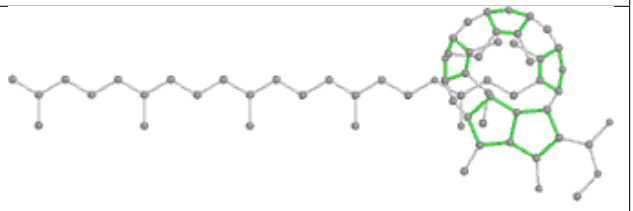
Bond lengths



Bond angles

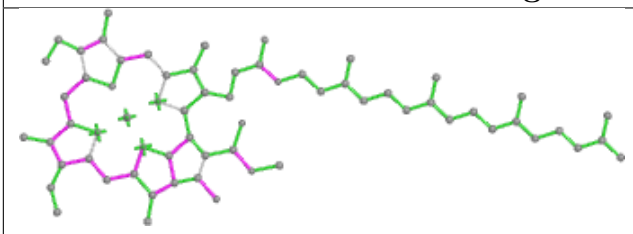


Torsions

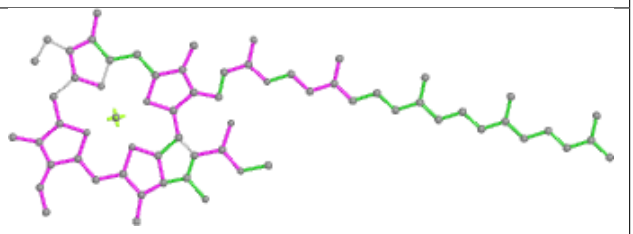


Rings

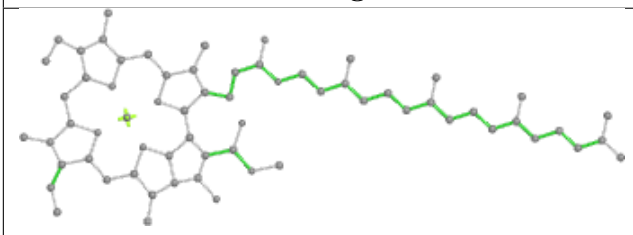
Ligand CLA D 402



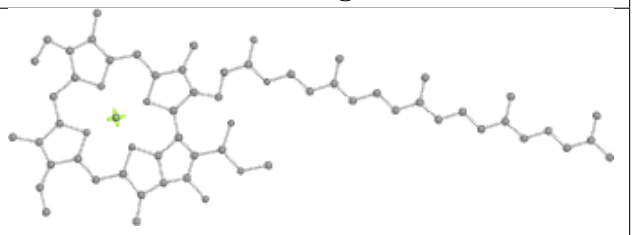
Bond lengths



Bond angles

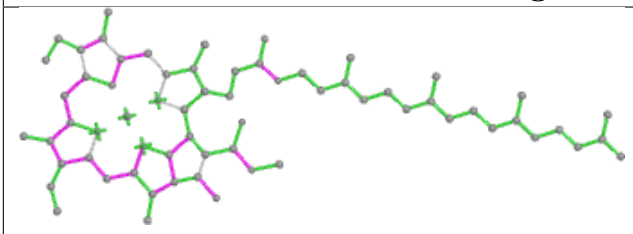


Torsions

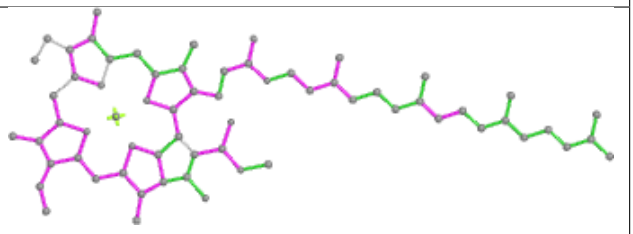


Rings

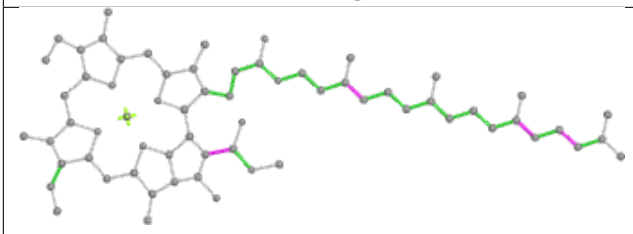
Ligand CLA c 508



Bond lengths



Bond angles



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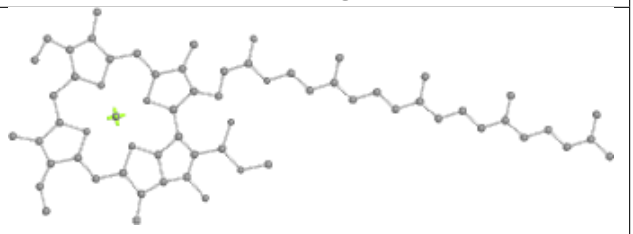
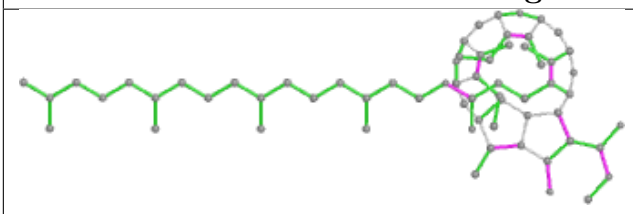
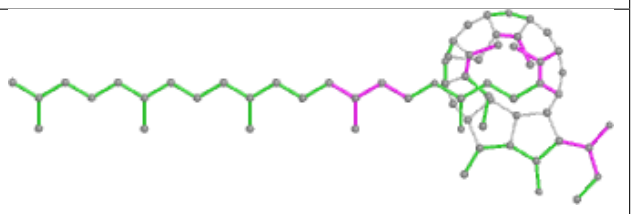


Rings

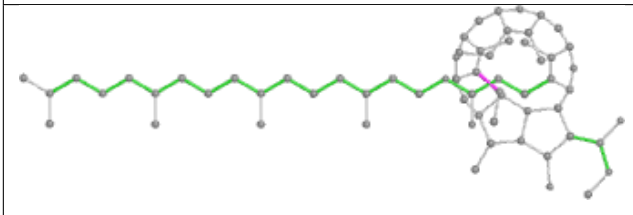
Ligand PHO d 401



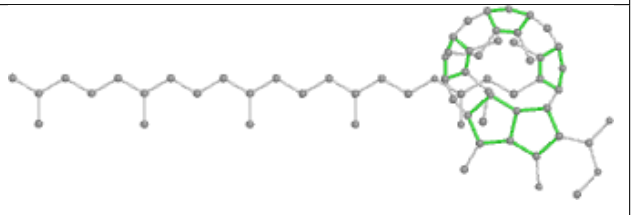
Bond lengths



Bond angles

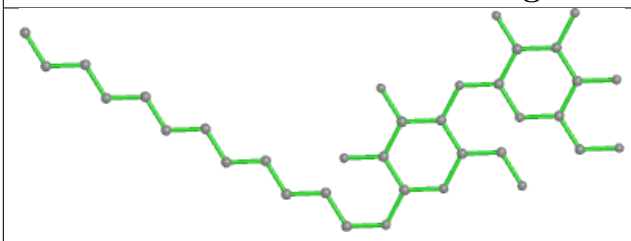


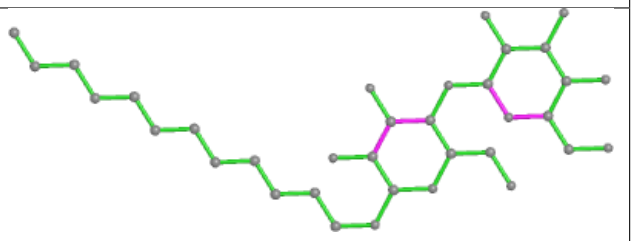
Torsions

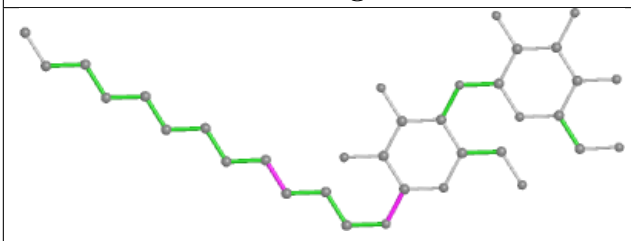


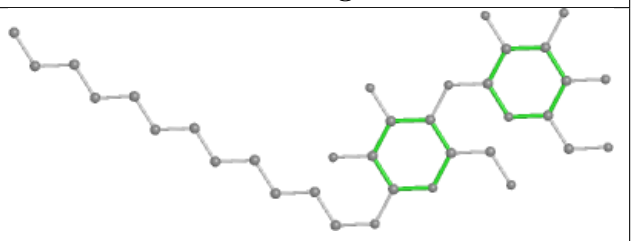
Rings

Ligand LMT F 102

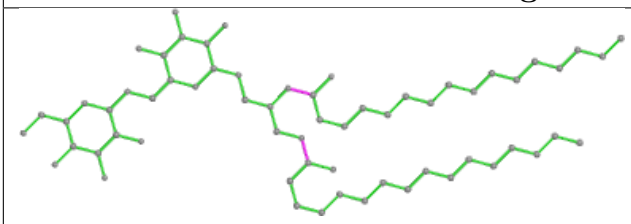

Bond lengths

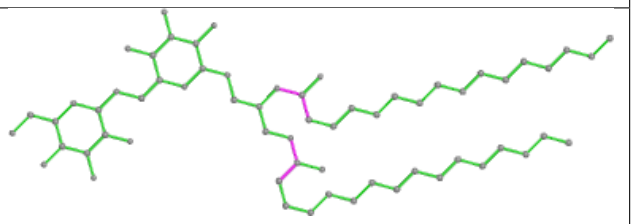

Bond angles

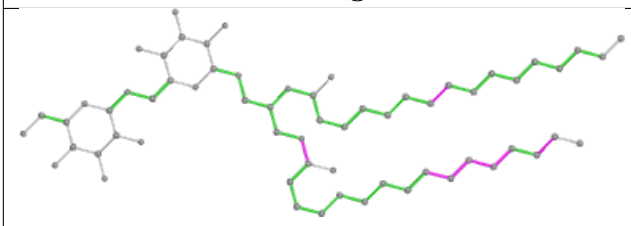

Torsions

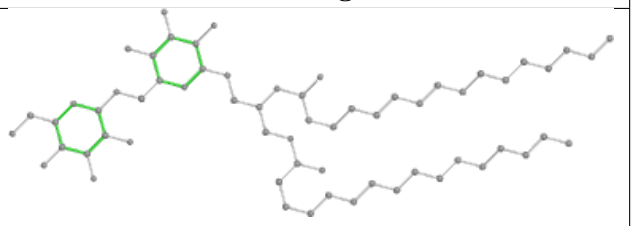

Rings

Ligand DGD C 519

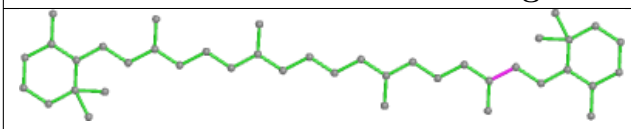

Bond lengths

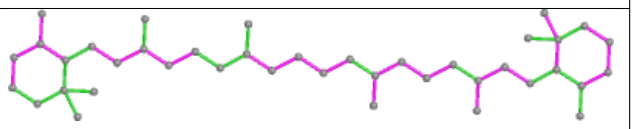

Bond angles

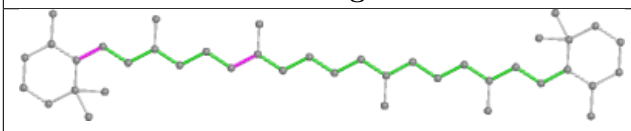

Torsions

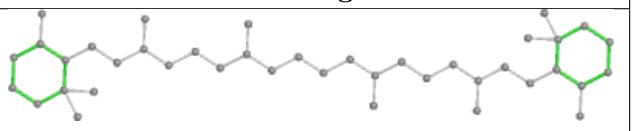

Rings

Ligand BCR C 516

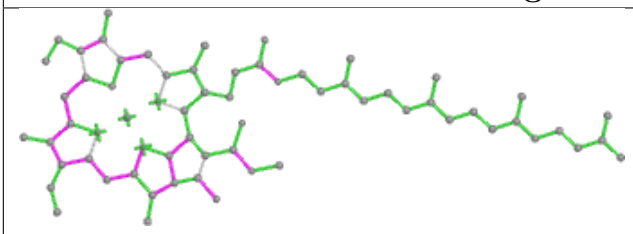

Bond lengths


Bond angles

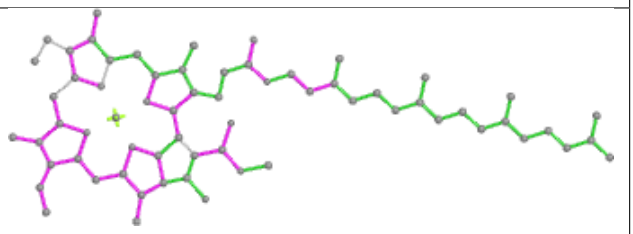

Torsions


Rings

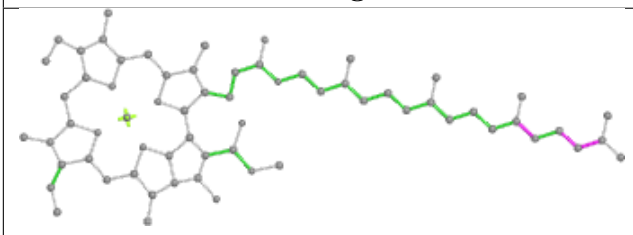
Ligand CLA B 612



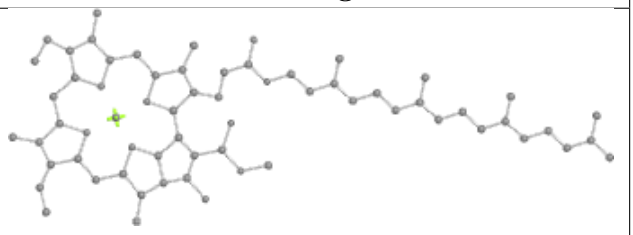
Bond lengths



Bond angles

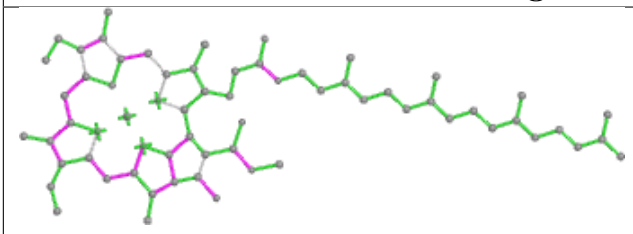


Torsions

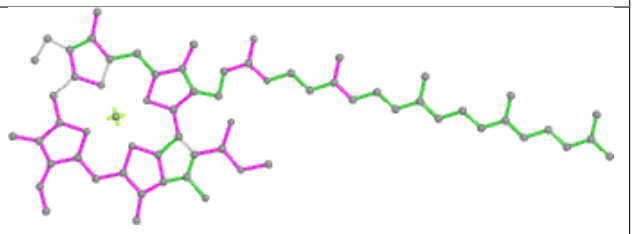


Rings

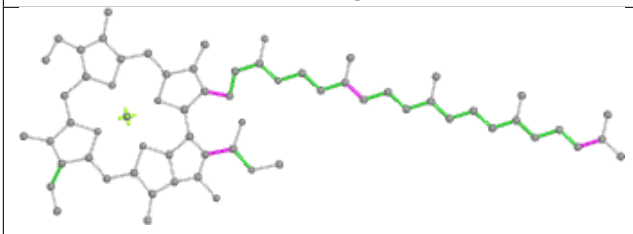
Ligand CLA b 618



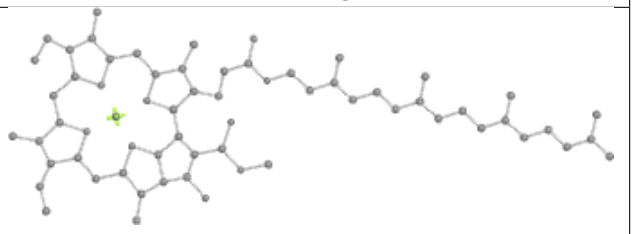
Bond lengths



Bond angles

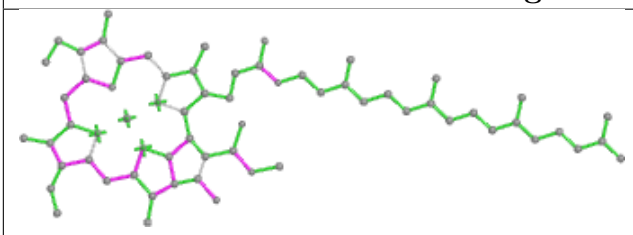


Torsions

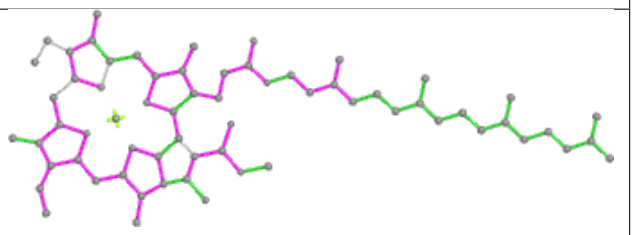


Rings

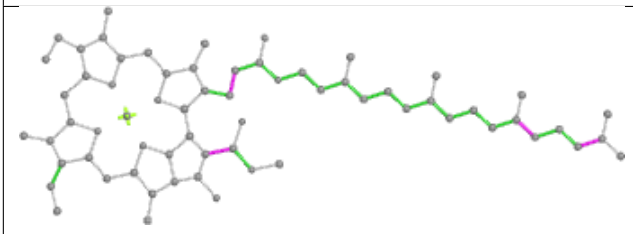
Ligand CLA B 611



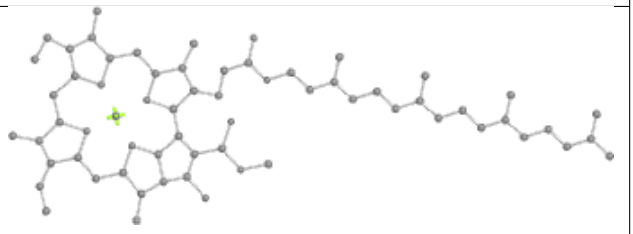
Bond lengths



Bond angles

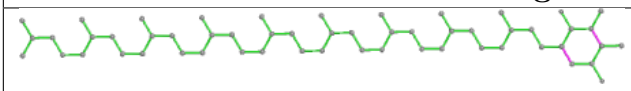


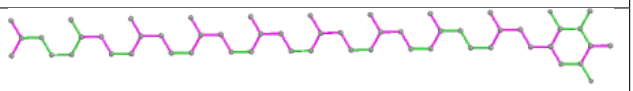
Torsions

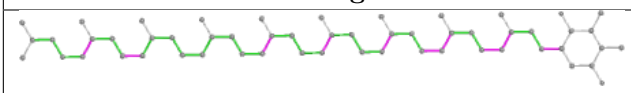


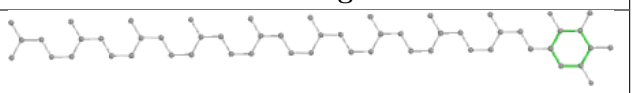
Rings

Ligand PL9 a 416

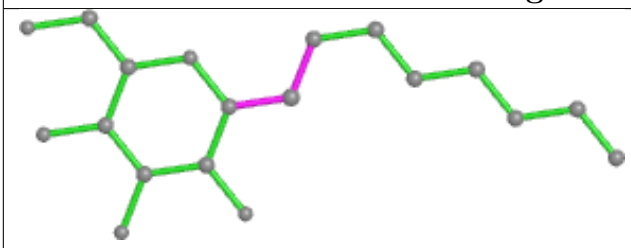

Bond lengths

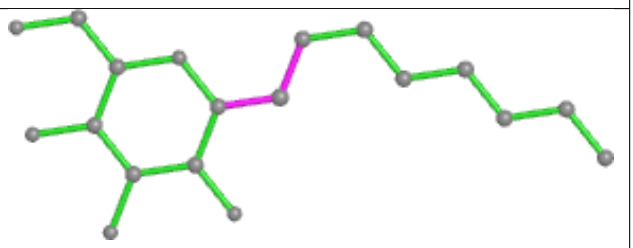

Bond angles

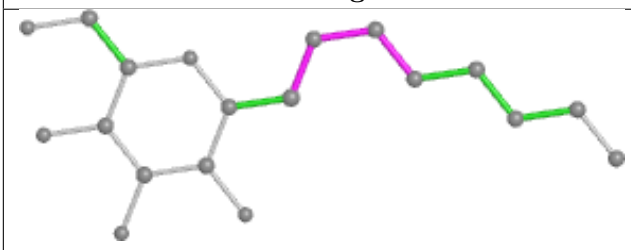

Torsions

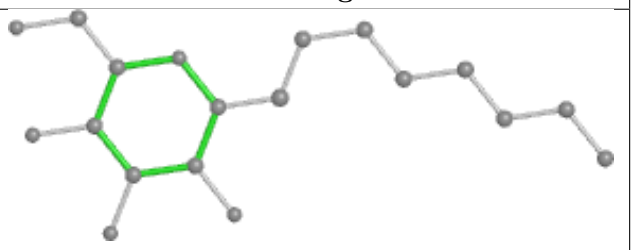

Rings

Ligand HTG c 524

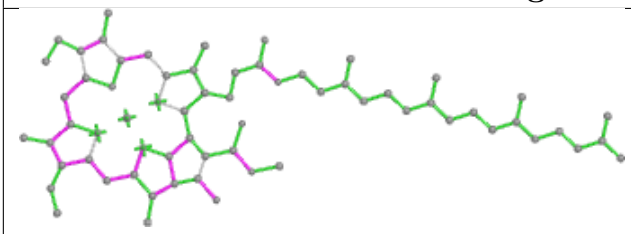

Bond lengths

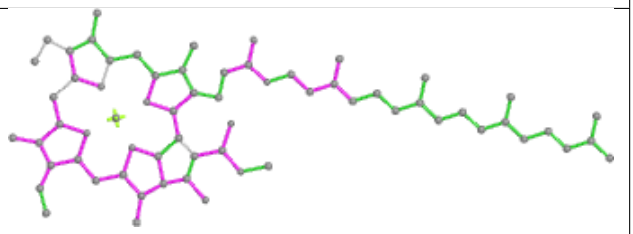

Bond angles

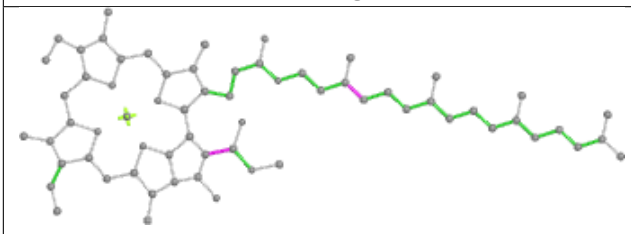

Torsions

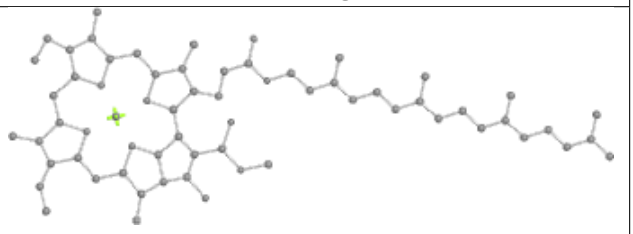

Rings

Ligand CLA b 614

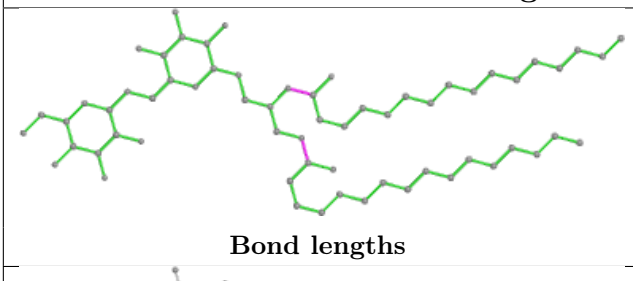

Bond lengths


Bond angles

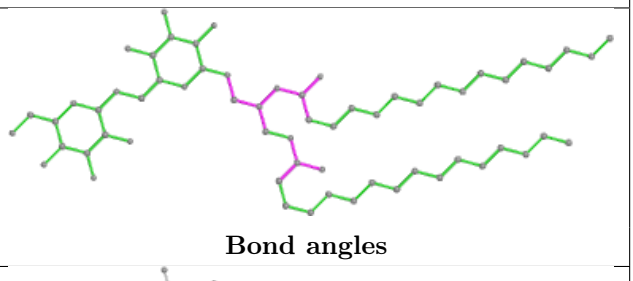

Torsions


Rings

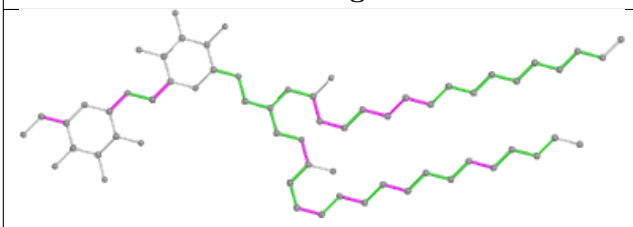
Ligand DGD C 517



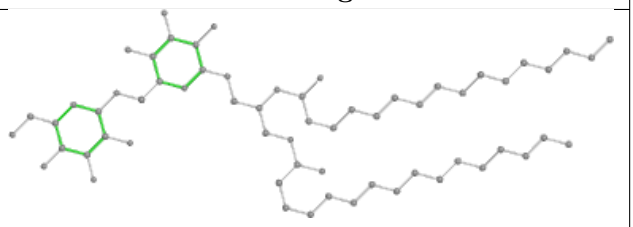
Bond lengths



Bond angles

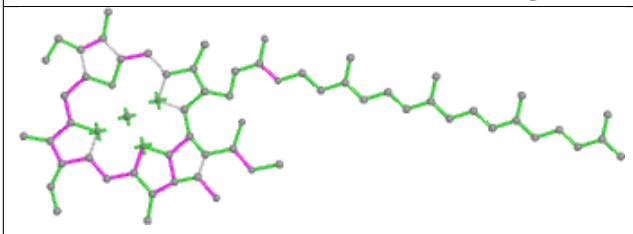


Torsions

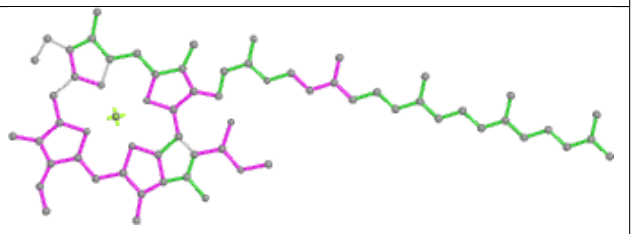


Rings

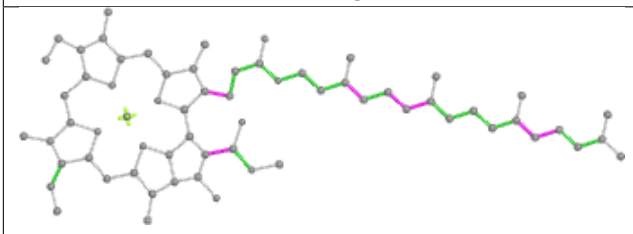
Ligand CLA C 507



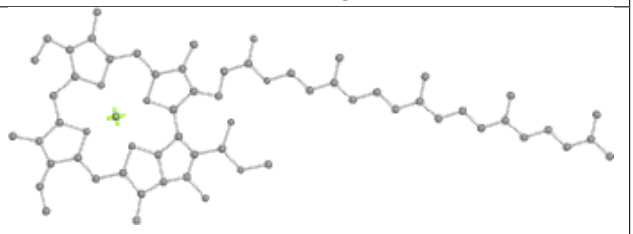
Bond lengths



Bond angles

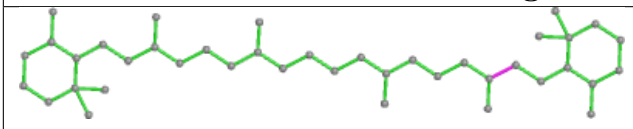


Torsions

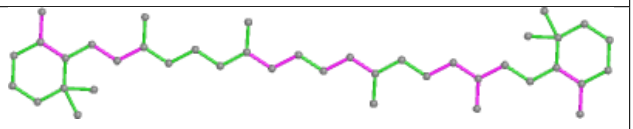


Rings

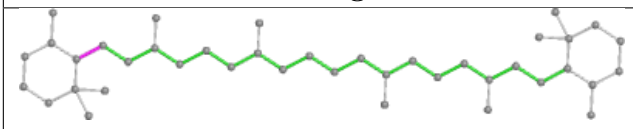
Ligand BCR C 515



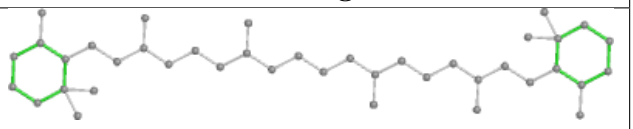
Bond lengths



Bond angles

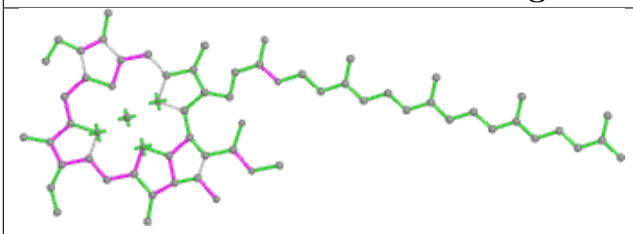


Torsions

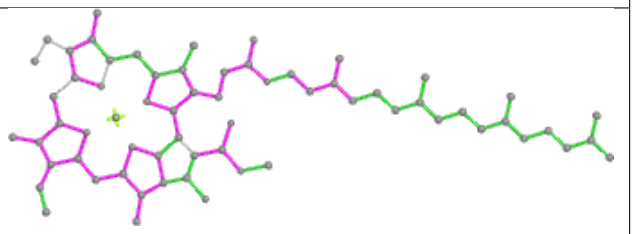


Rings

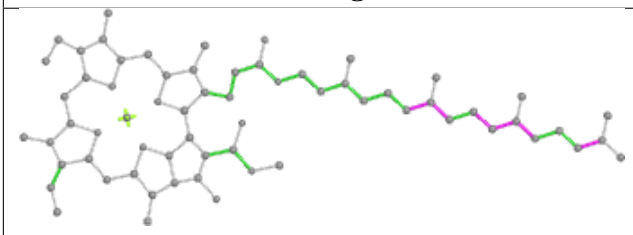
Ligand CLA a 410



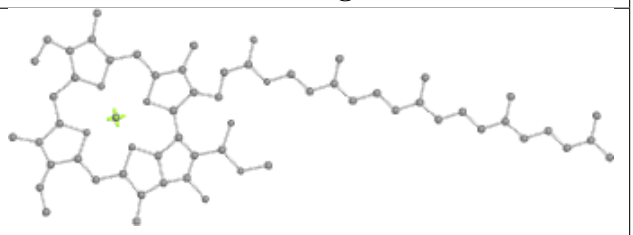
Bond lengths



Bond angles

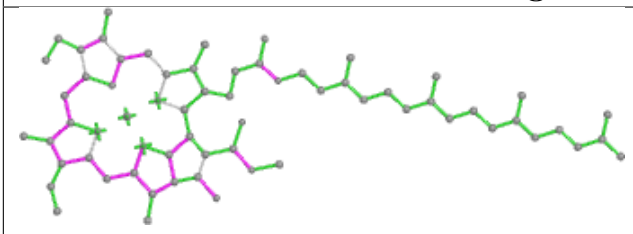


Torsions

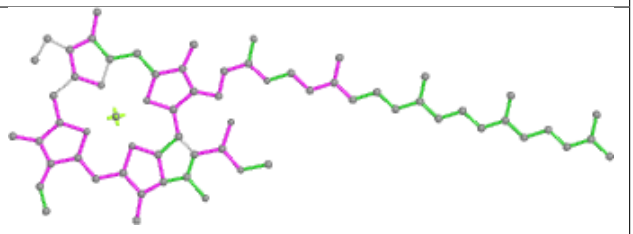


Rings

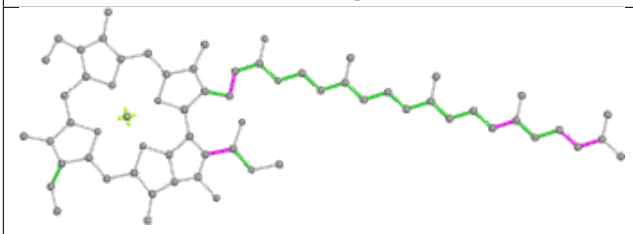
Ligand CLA b 619



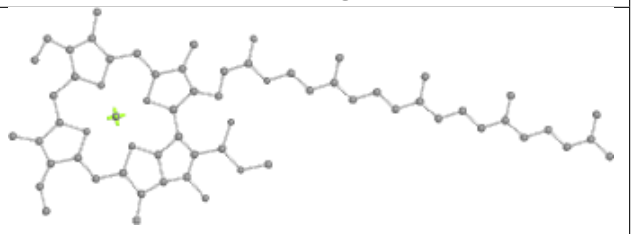
Bond lengths



Bond angles

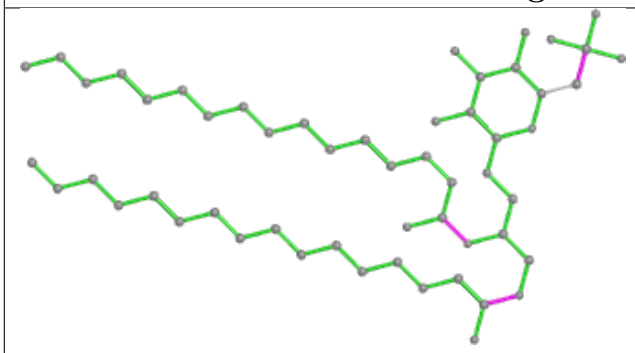


Torsions

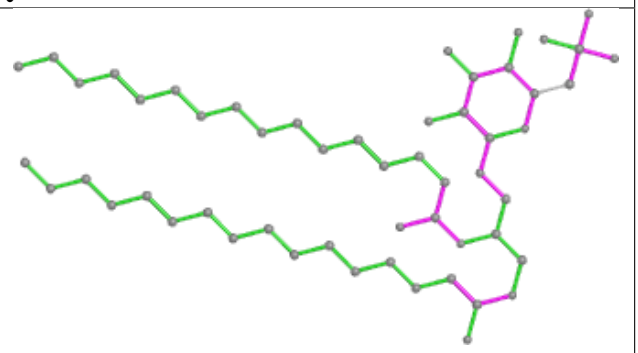


Rings

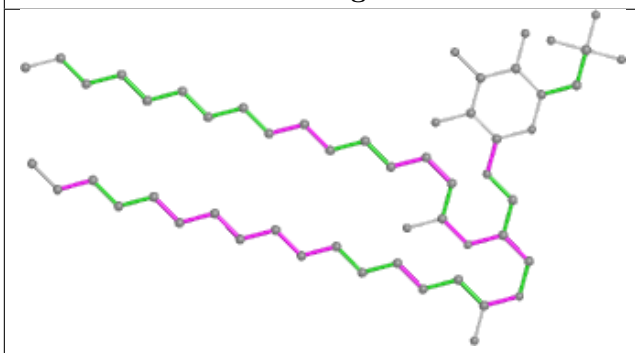
Ligand SQD L 102



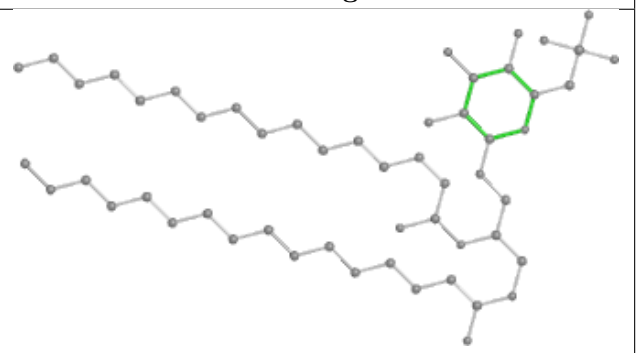
Bond lengths



Bond angles

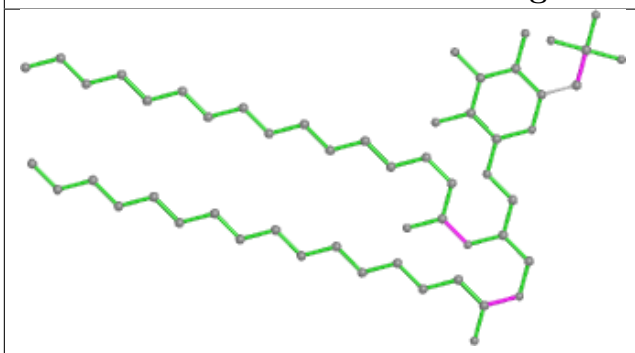


Torsions

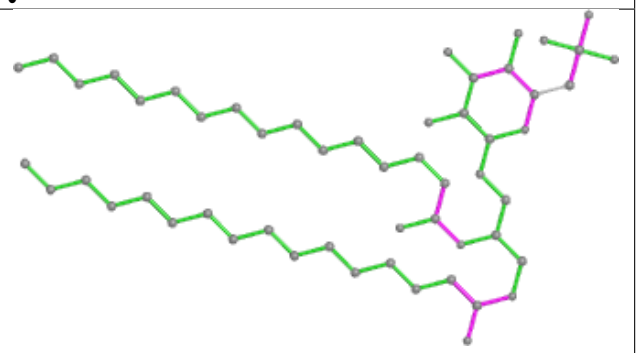


Rings

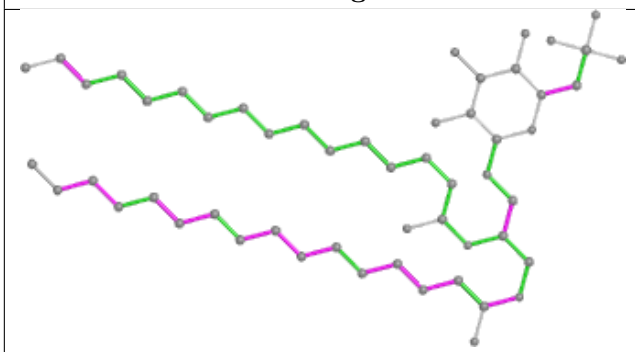
Ligand SQD a 405



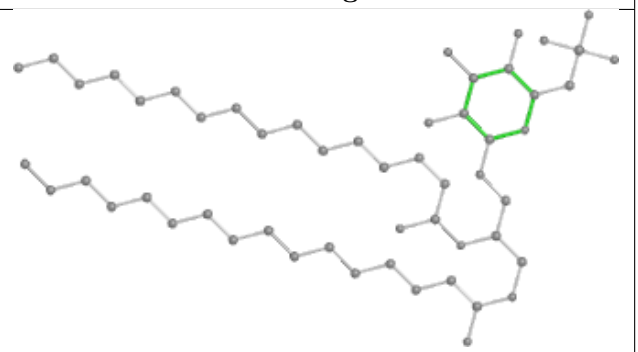
Bond lengths



Bond angles

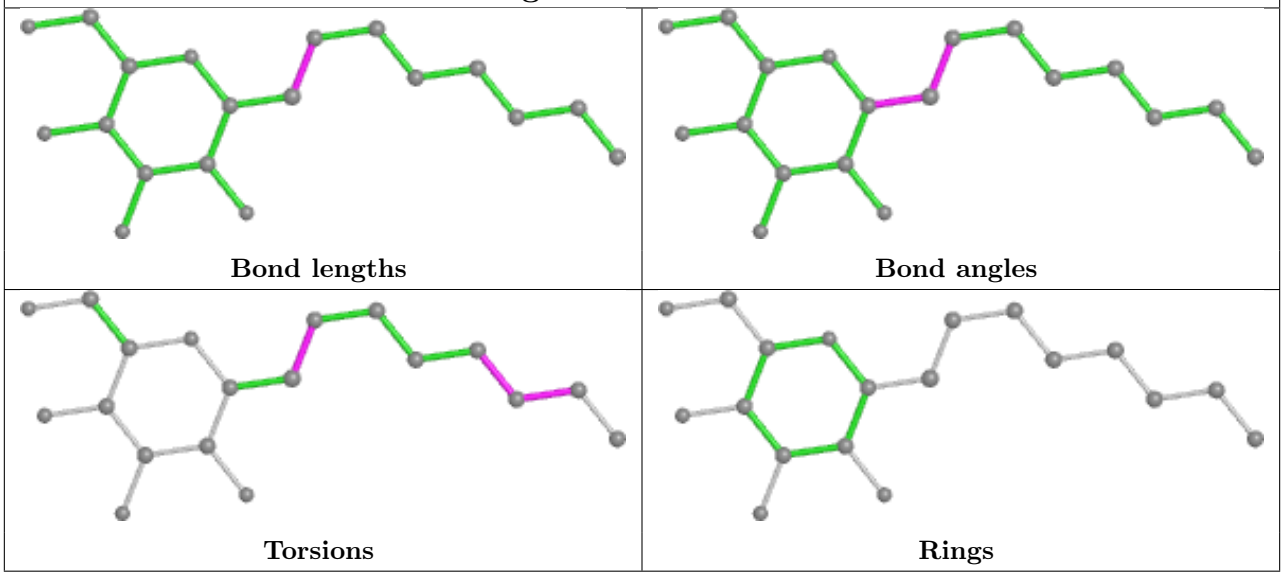


Torsions

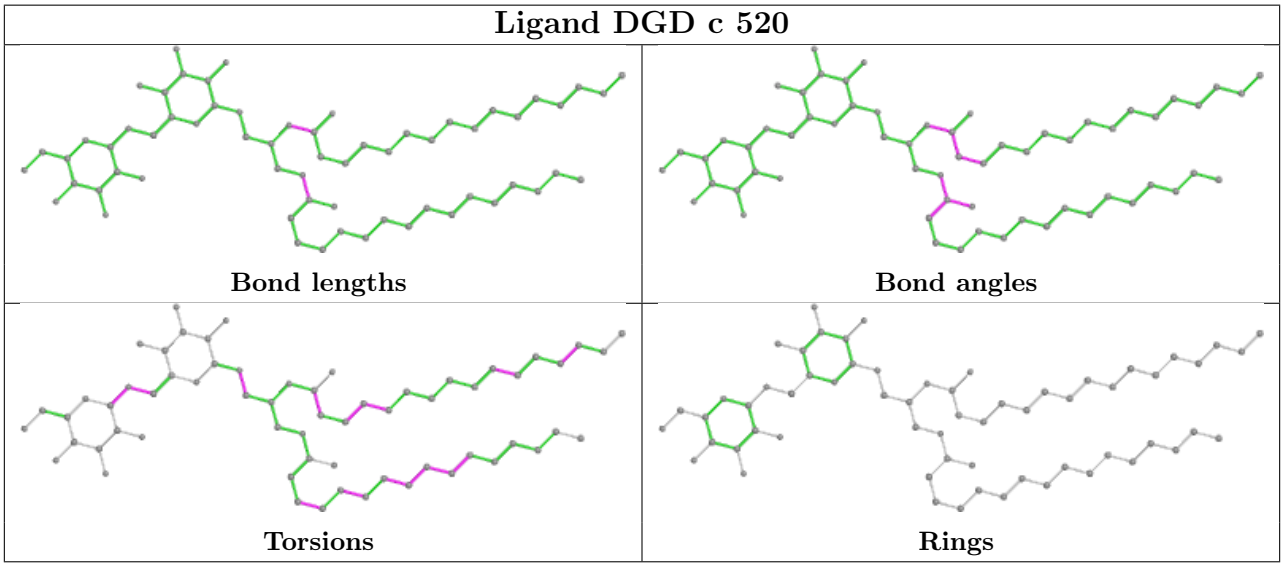


Rings

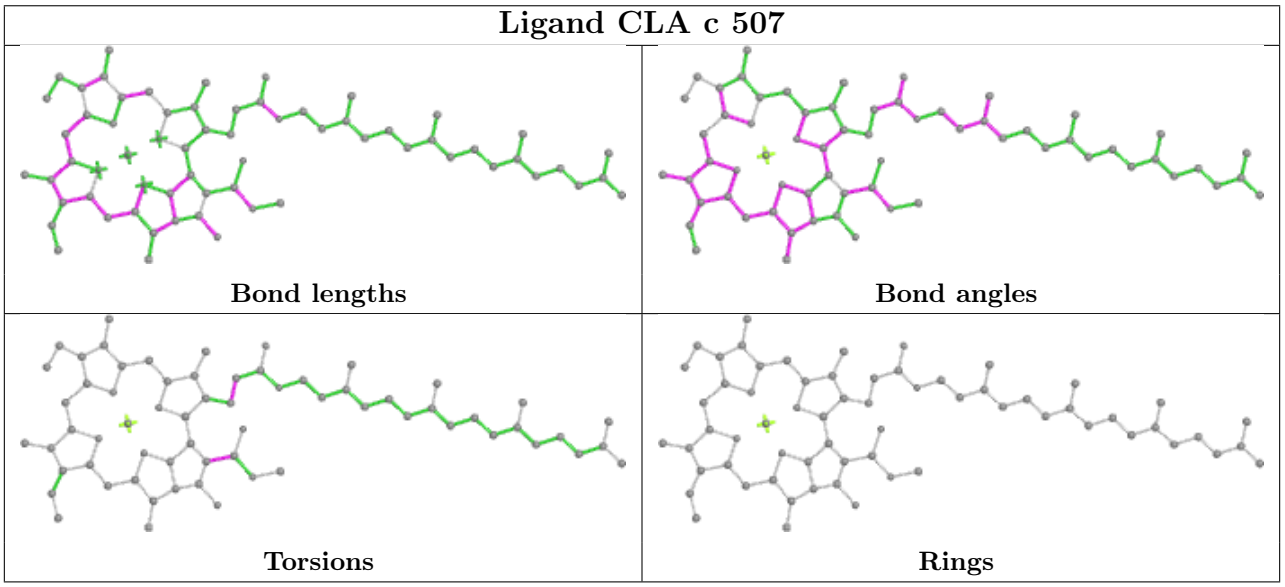
Ligand HTG B 623



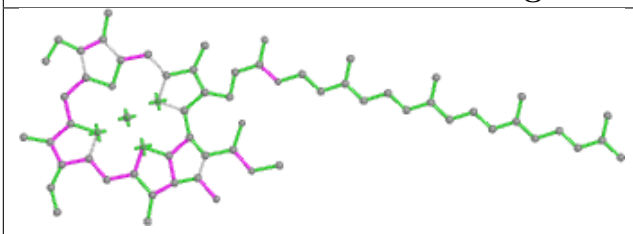
Ligand DGD c 520



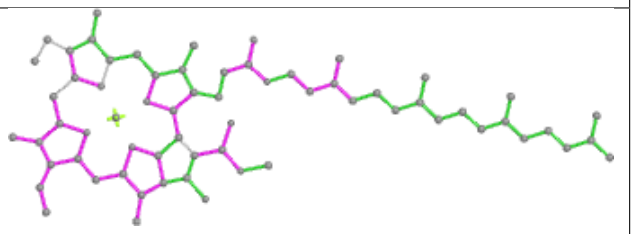
Ligand CLA c 507



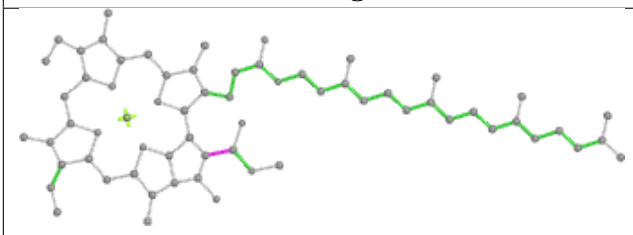
Ligand CLA C 503



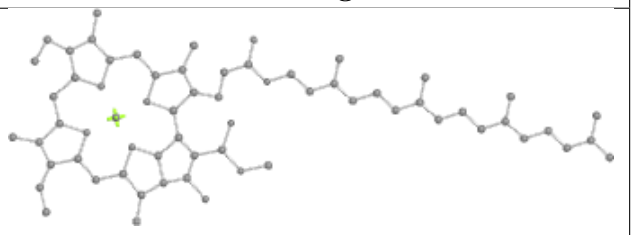
Bond lengths



Bond angles

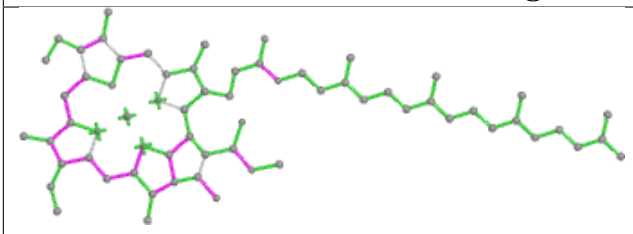


Torsions

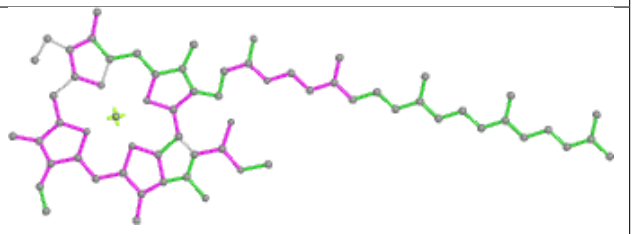


Rings

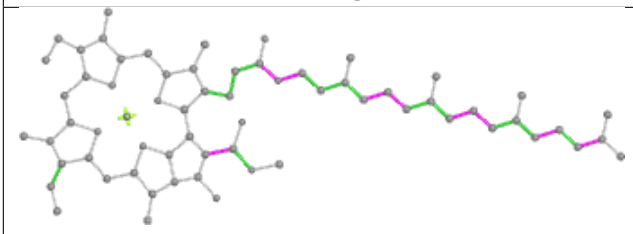
Ligand CLA C 510



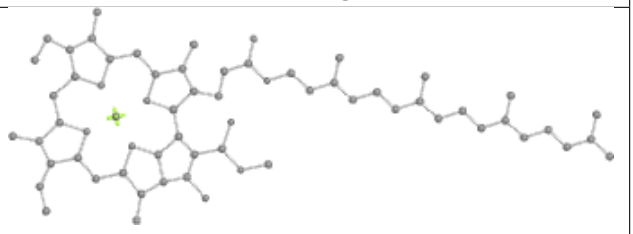
Bond lengths



Bond angles

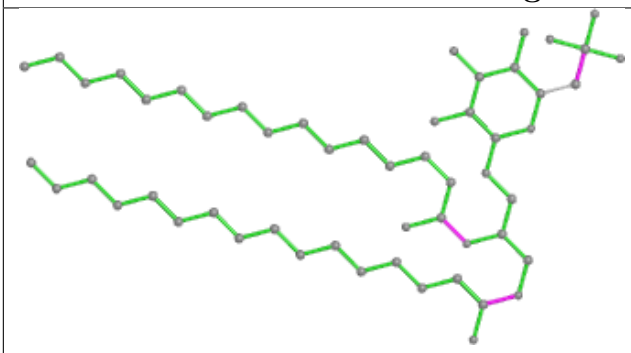


Torsions

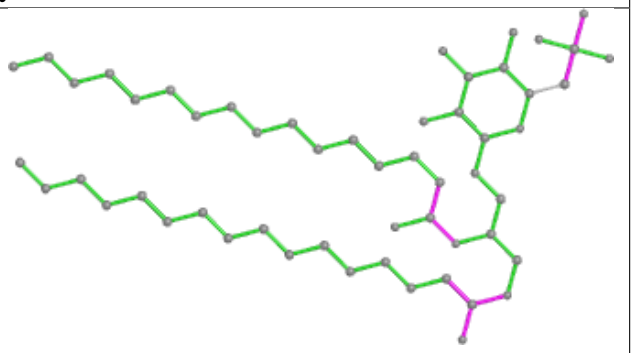


Rings

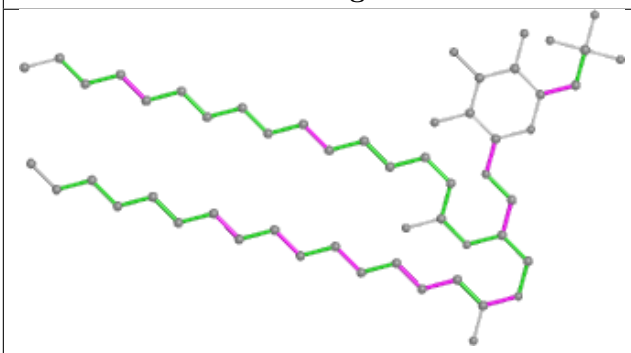
Ligand SQD A 415



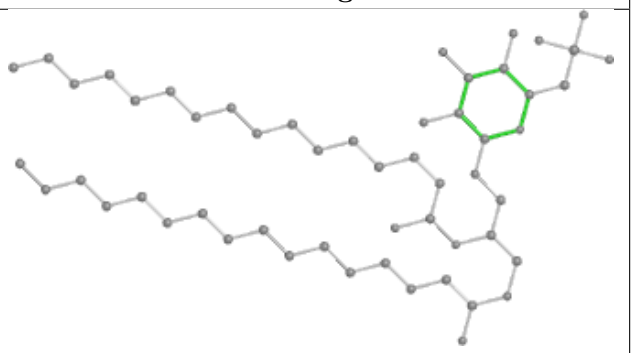
Bond lengths



Bond angles

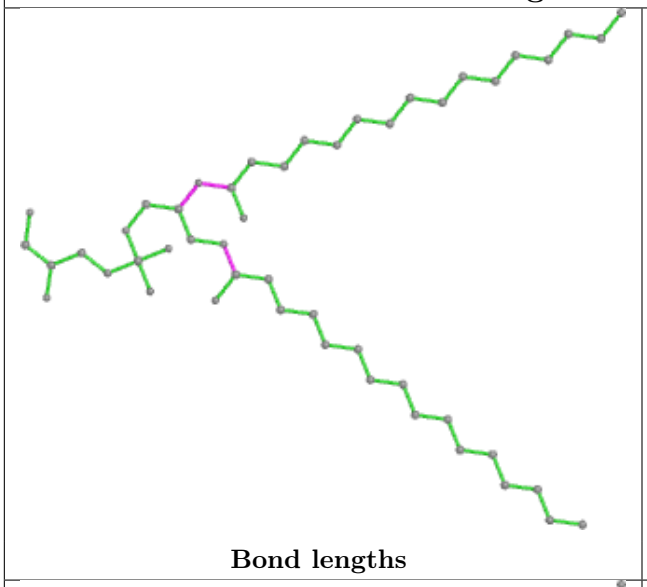


Torsions

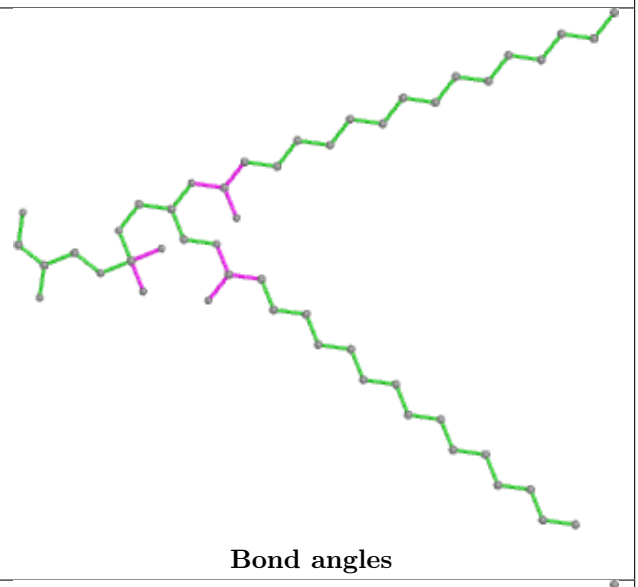


Rings

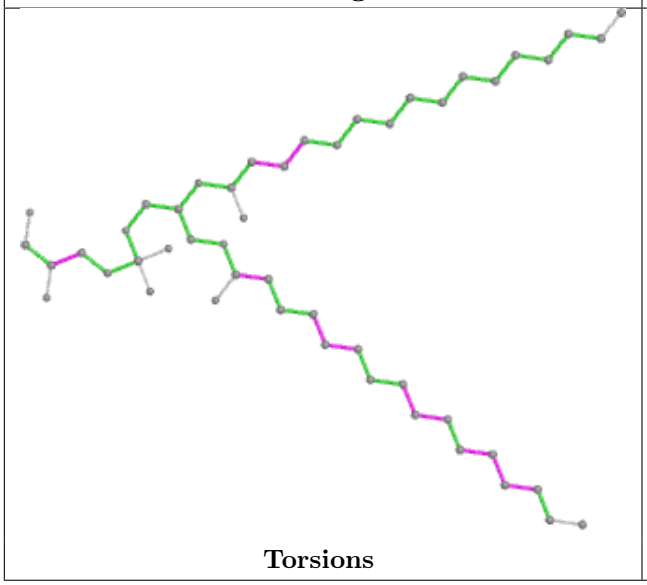
Ligand LHG d 407



Bond lengths



Bond angles



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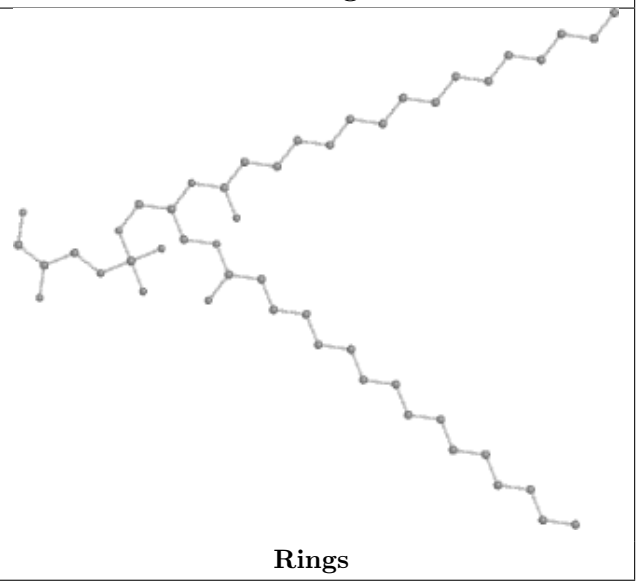
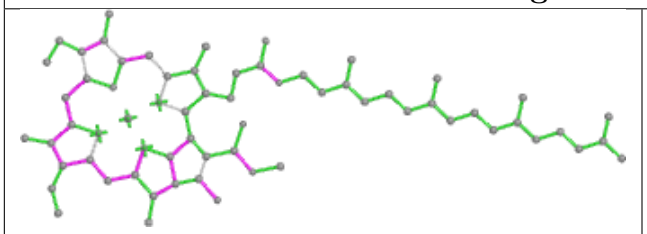
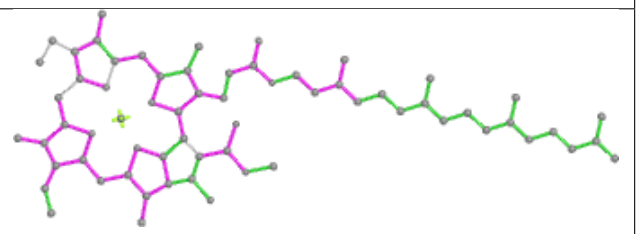


Rings

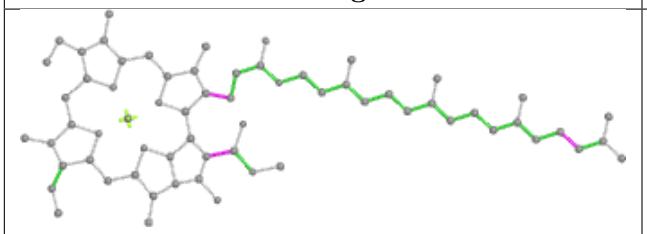
Ligand CLA c 512



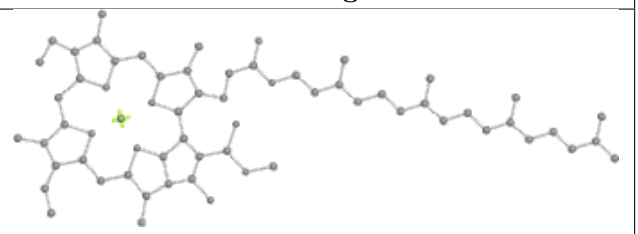
Bond lengths



Bond angles

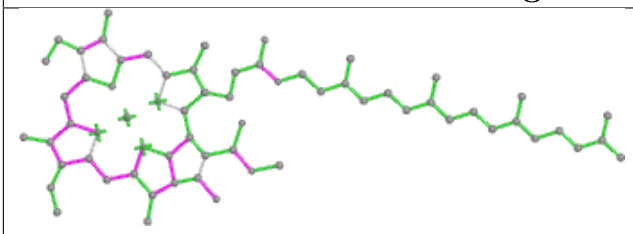


Torsions

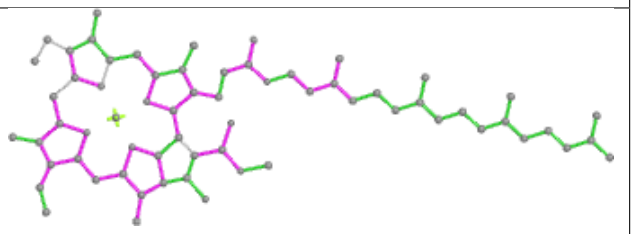


Rings

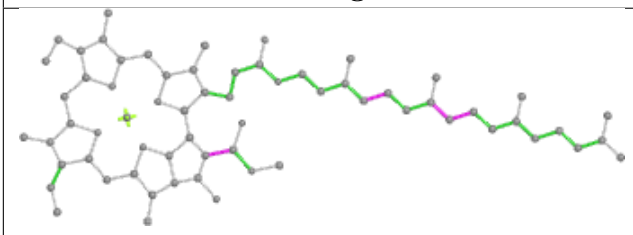
Ligand CLA D 403



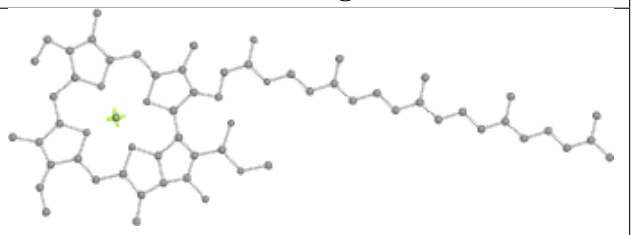
Bond lengths



Bond angles

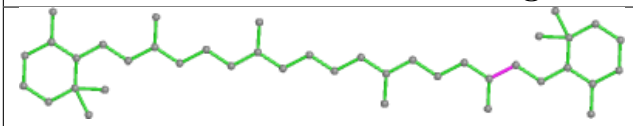


Torsions

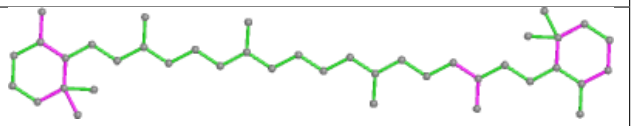


Rings

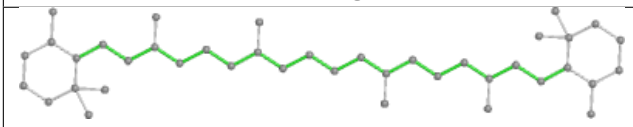
Ligand BCR B 619



Bond lengths



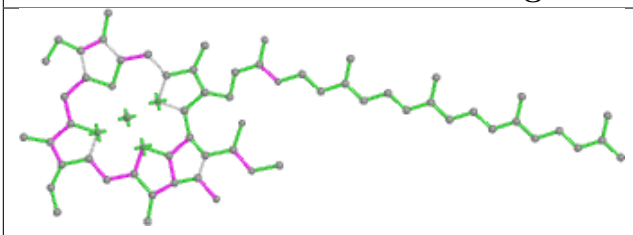
Bond angles



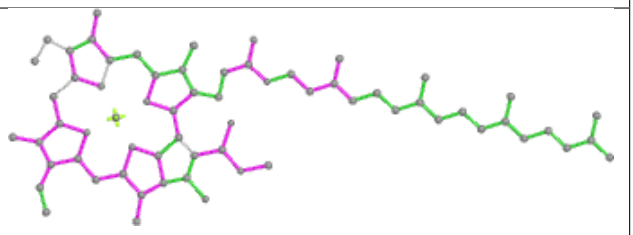
Torsions

Rings

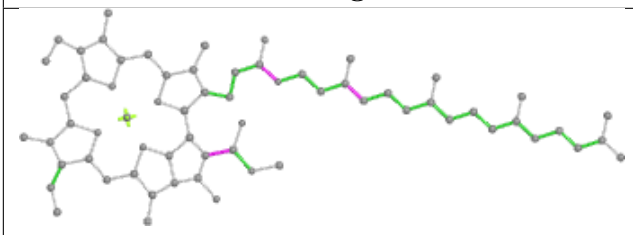
Ligand CLA B 606



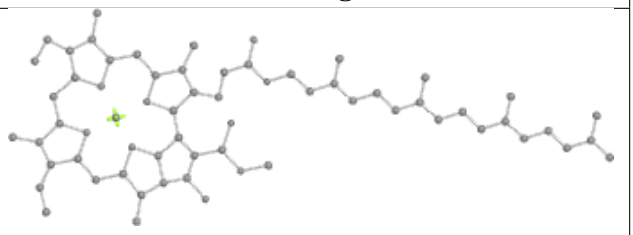
Bond lengths



Bond angles

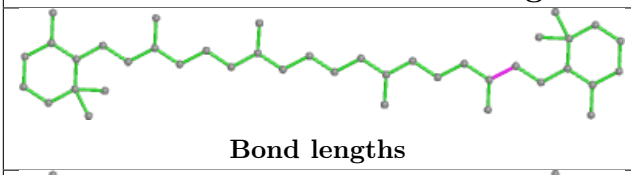


Torsions

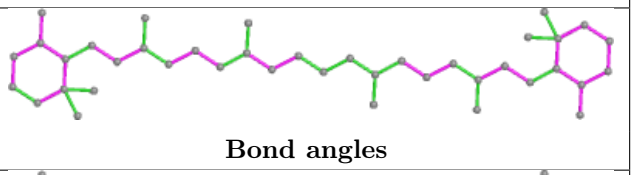


Rings

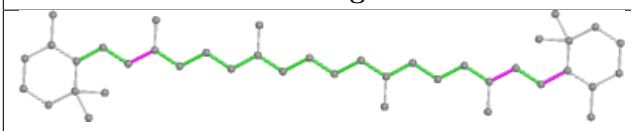
Ligand BCR d 405



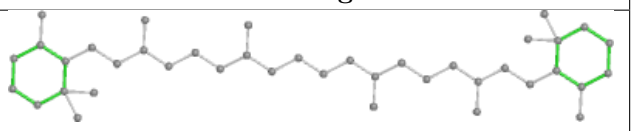
Bond lengths



Bond angles

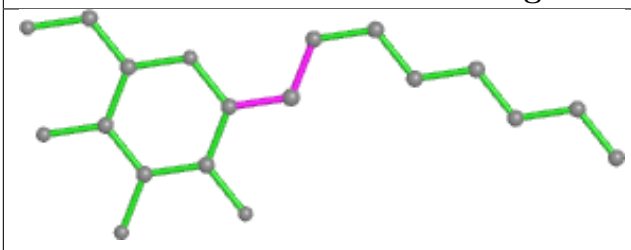


Torsions

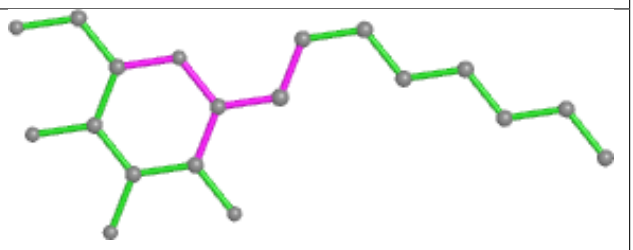


Rings

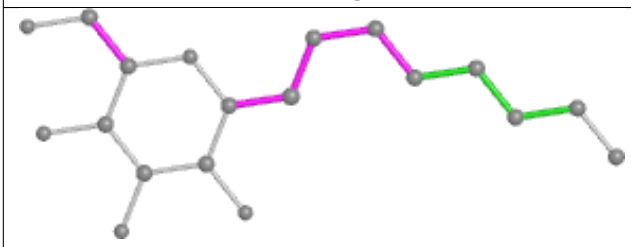
Ligand HTG b 632



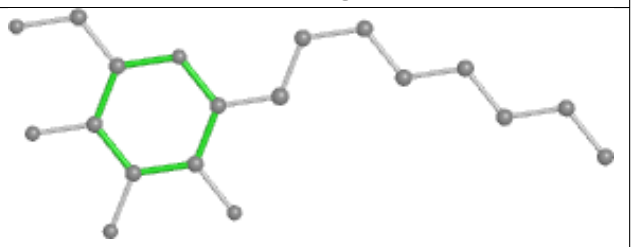
Bond lengths



Bond angles

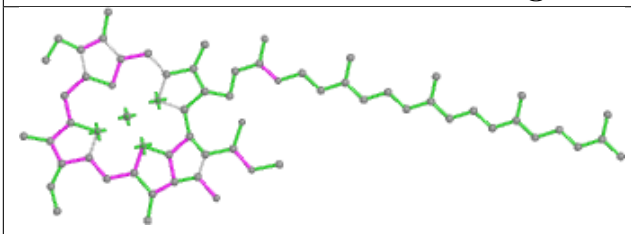


Torsions

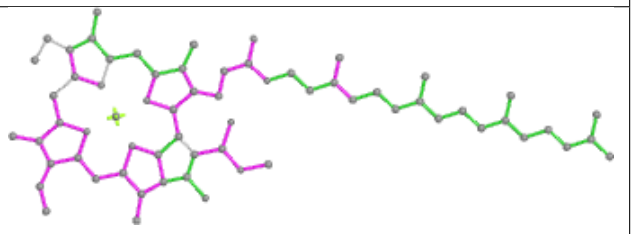


Rings

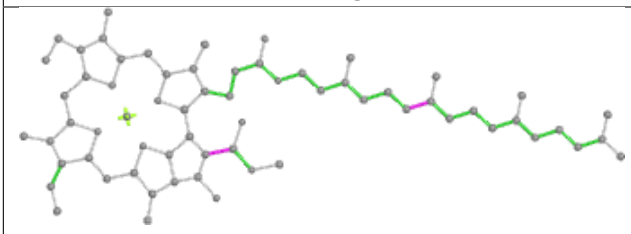
Ligand CLA b 616



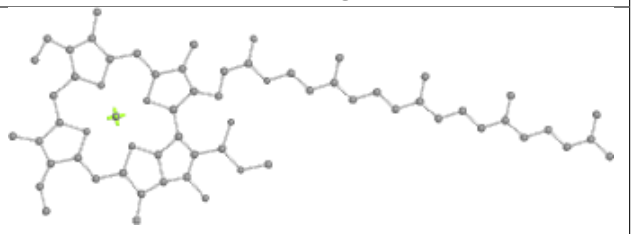
Bond lengths



Bond angles

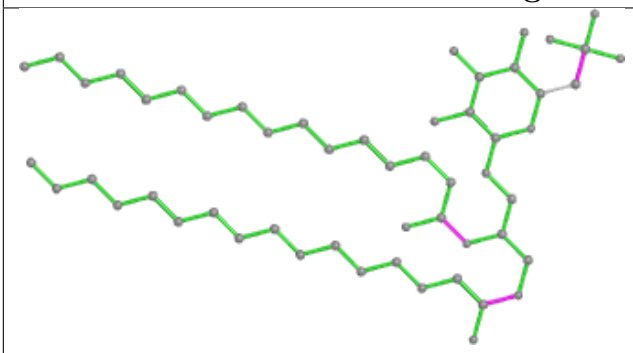


Torsions

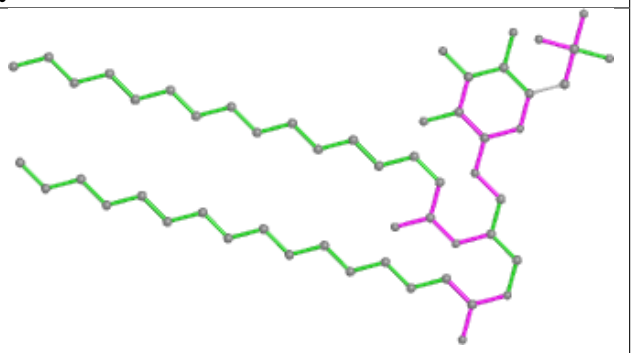


Rings

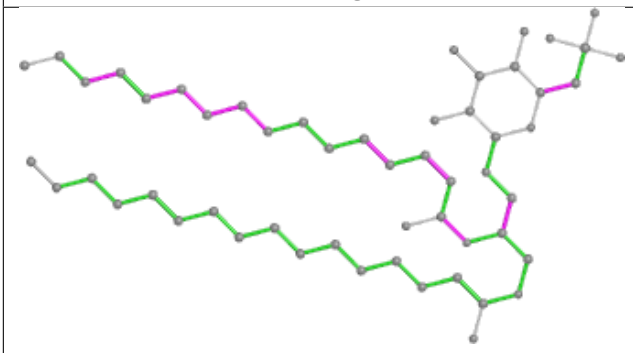
Ligand SQD A 411



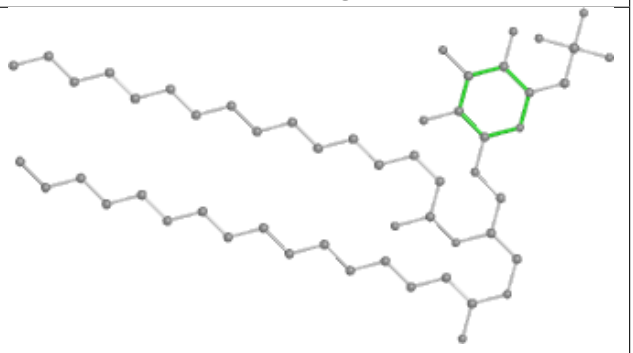
Bond lengths



Bond angles

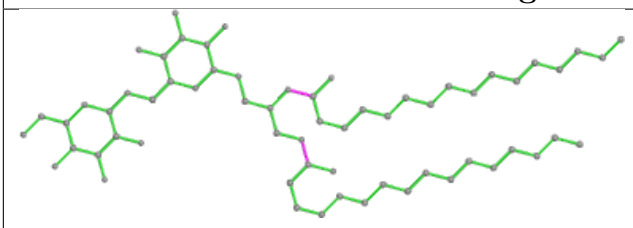


Torsions

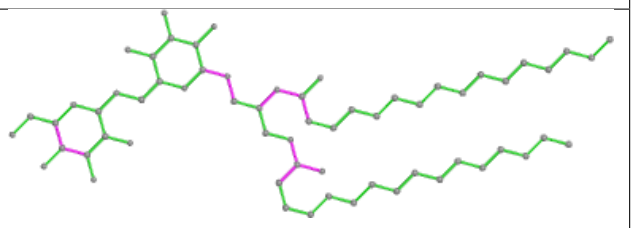


Rings

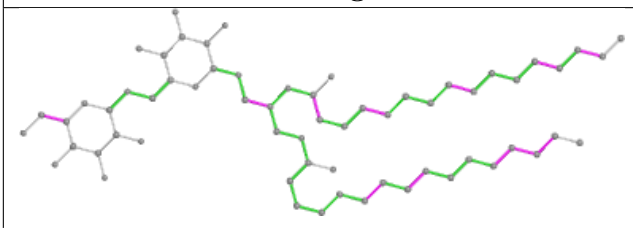
Ligand DGD H 102



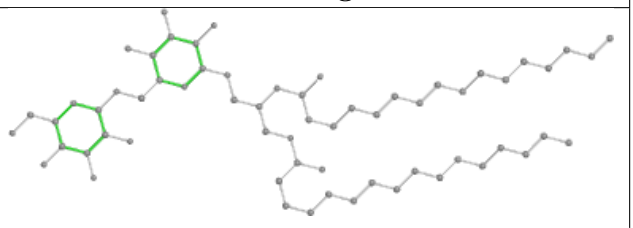
Bond lengths



Bond angles

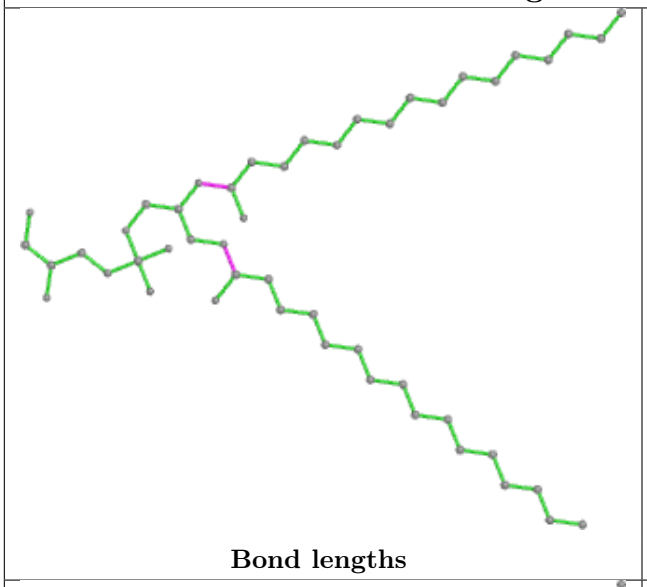


Torsions

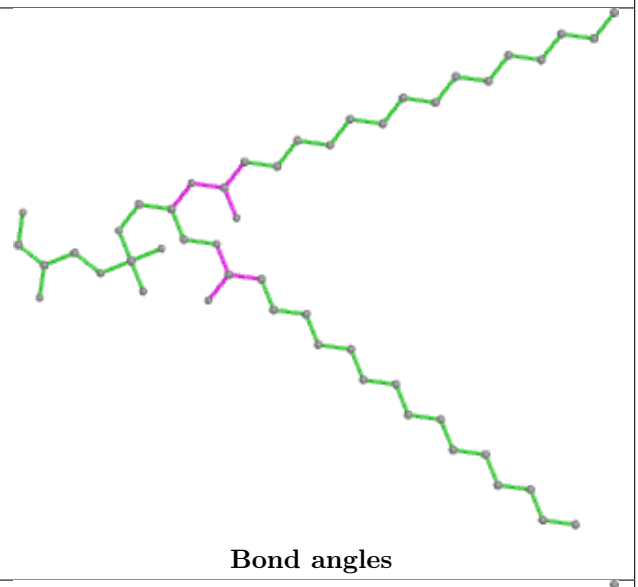


Rings

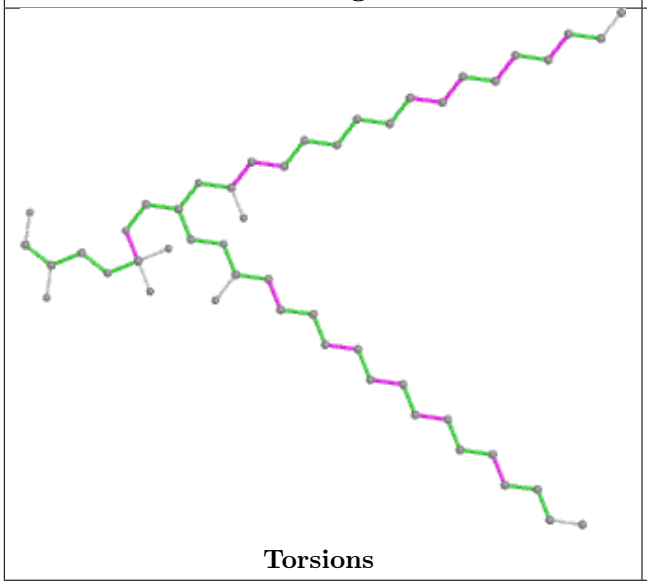
Ligand LHG L 101



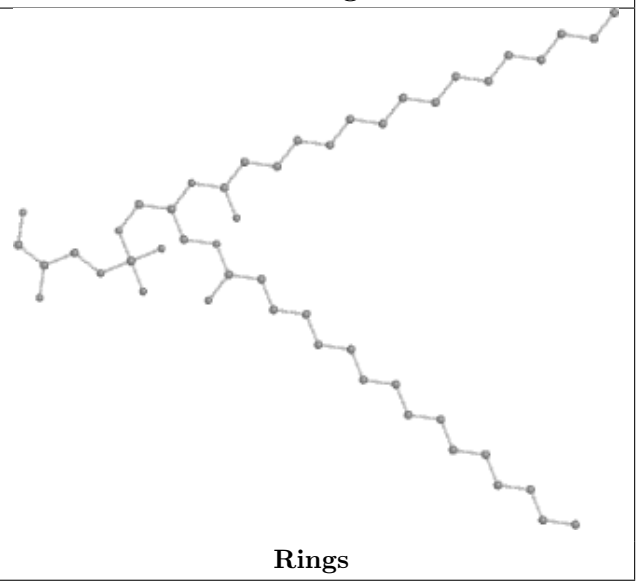
Bond lengths



Bond angles

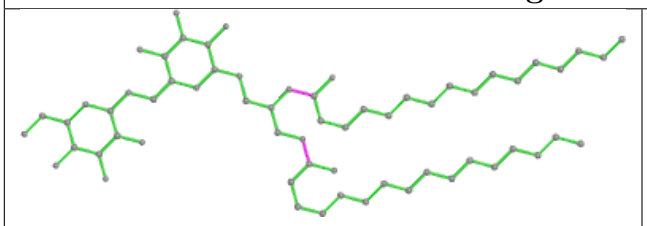


Torsions

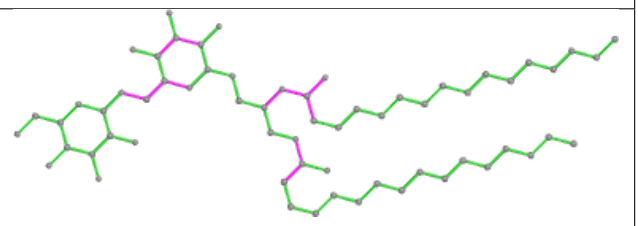


Rings

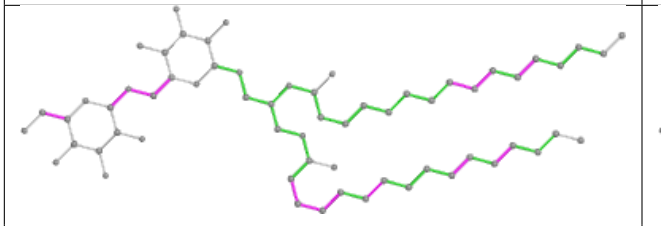
Ligand DGD c 519



Bond lengths



Bond angles



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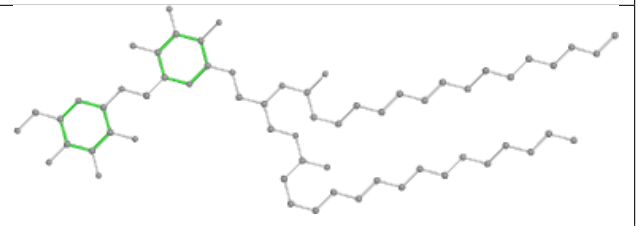
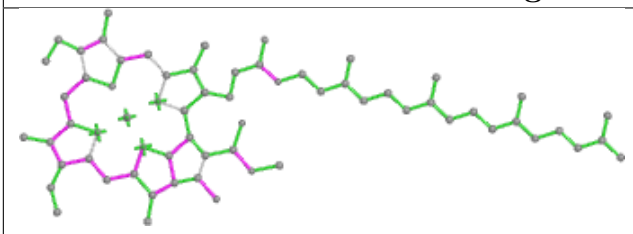
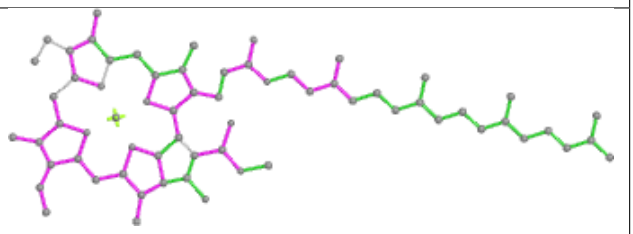


Rings

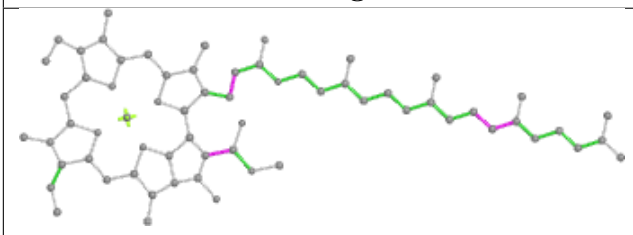
Ligand CLA B 607



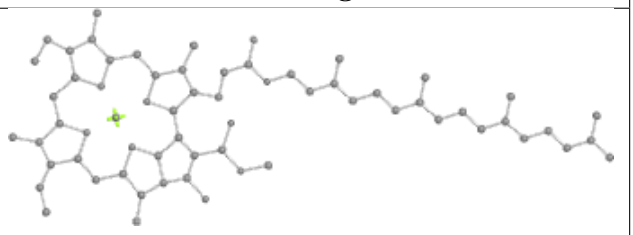
Bond lengths



Bond angles

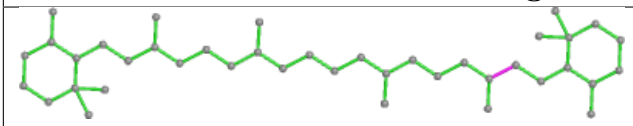


Torsions

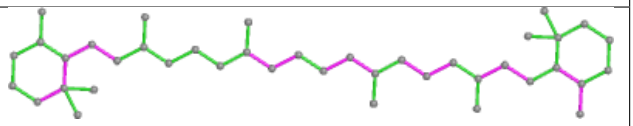


Rings

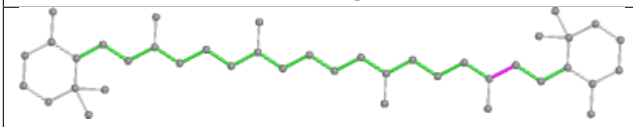
Ligand BCR b 628



Bond lengths



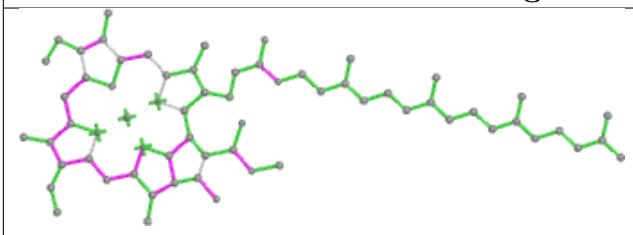
Bond angles



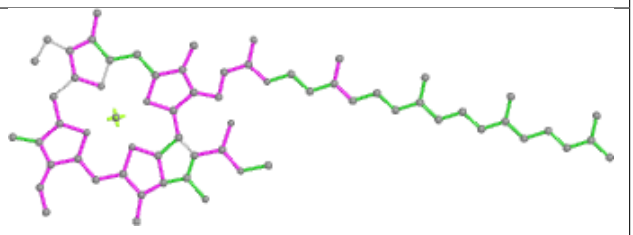
Torsions

Rings

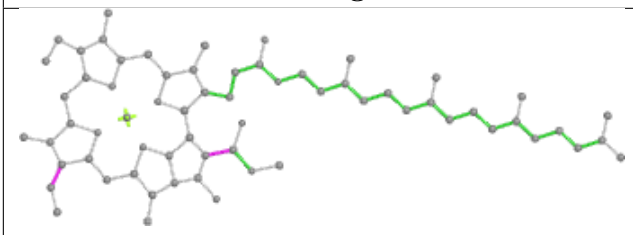
Ligand CLA A 406



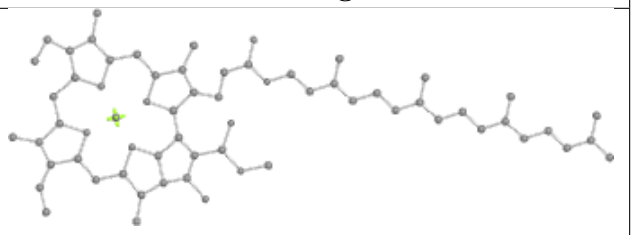
Bond lengths



Bond angles

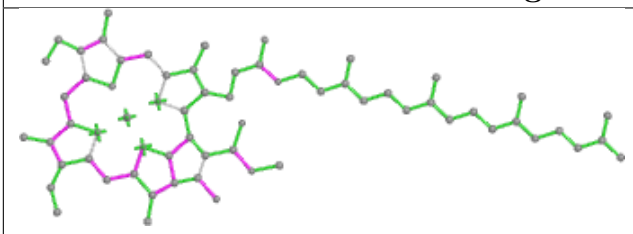


Torsions



Rings

Ligand CLA B 616



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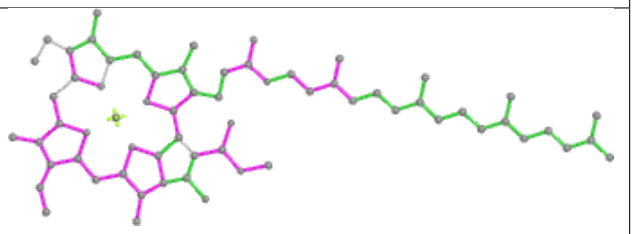
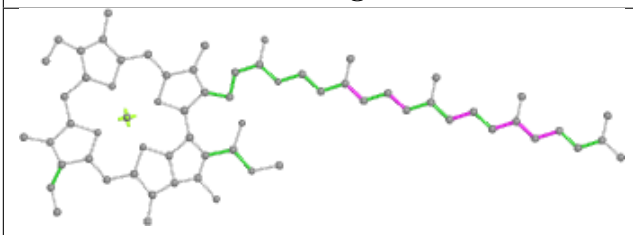
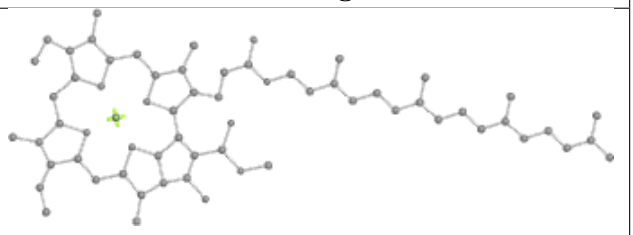


Bond angles

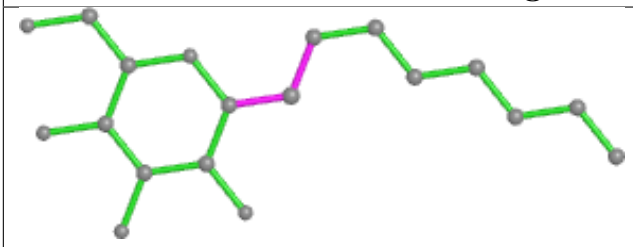


Torsions

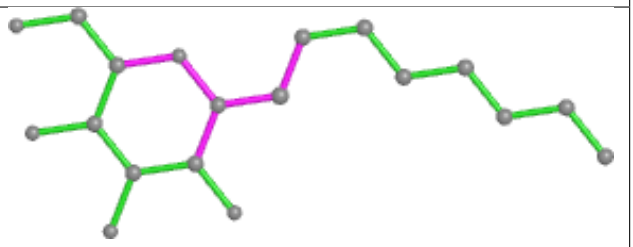


Rings

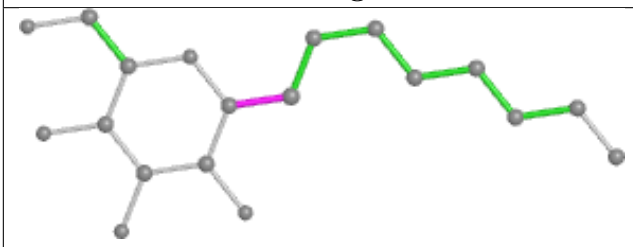
Ligand HTG b 608



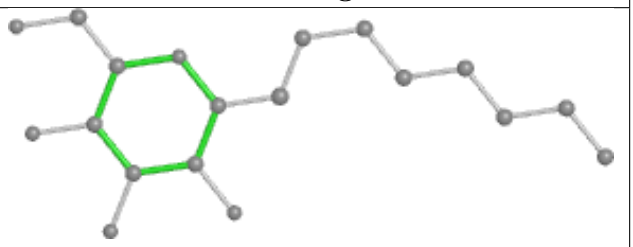
Bond lengths



Bond angles

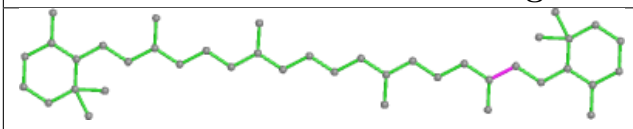


Torsions

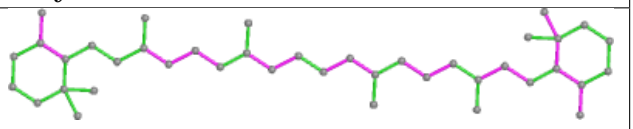


Rings

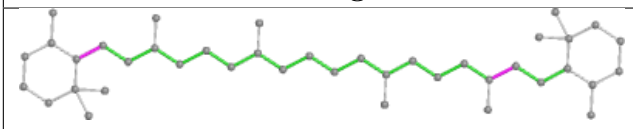
Ligand BCR y 101



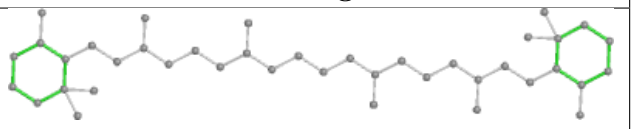
Bond lengths



Bond angles

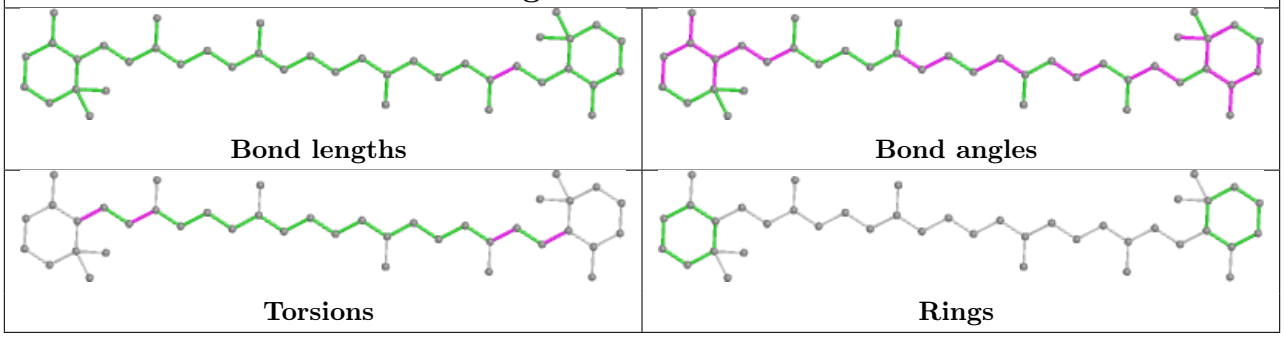


Torsions

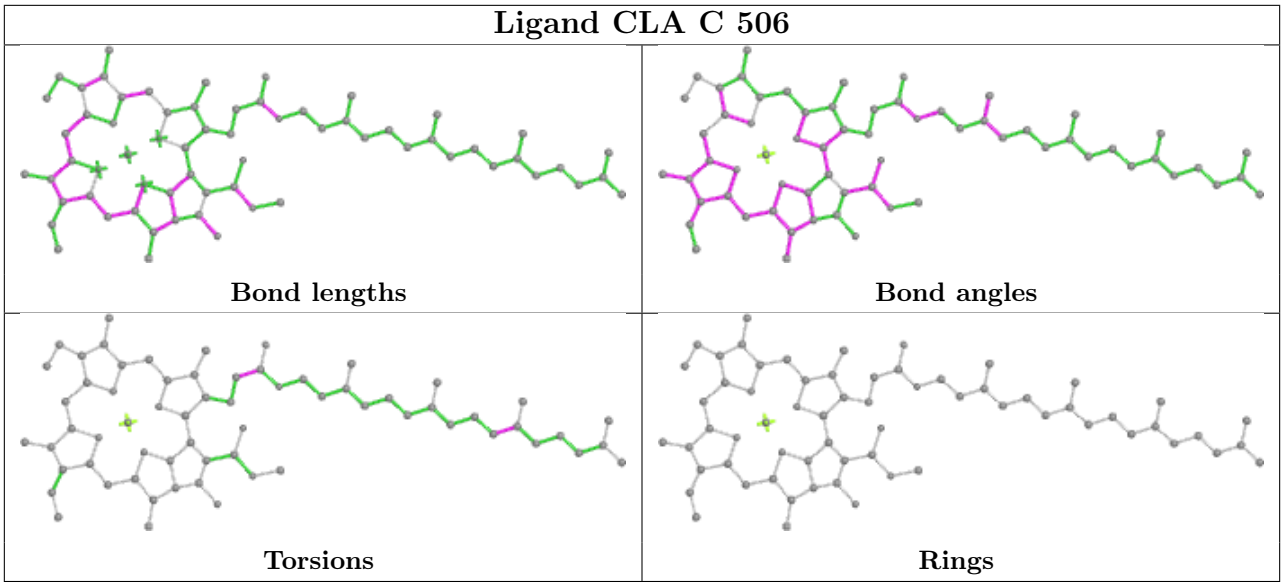


Rings

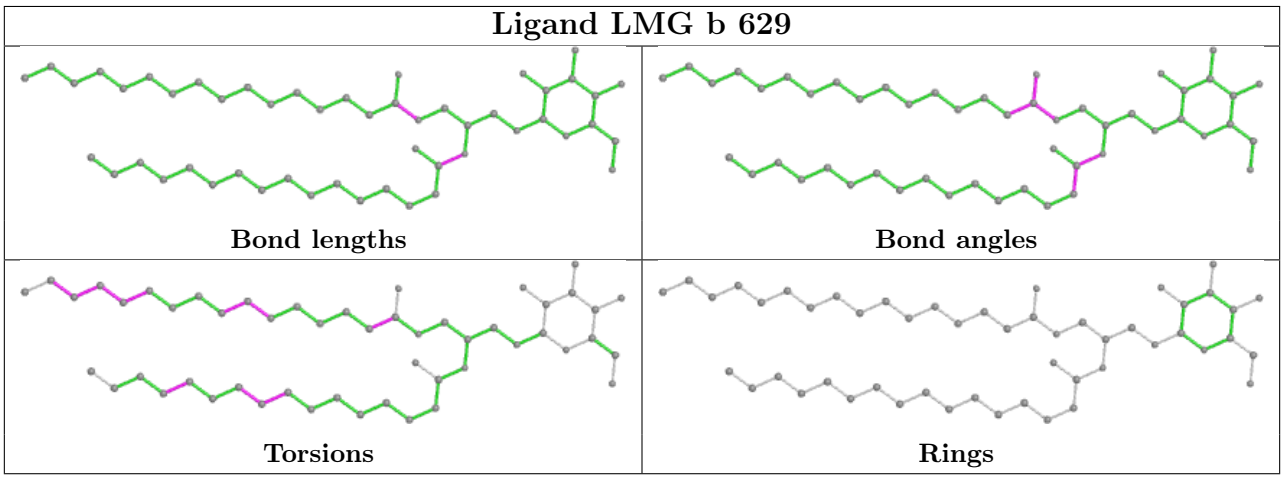
Ligand BCR D 404



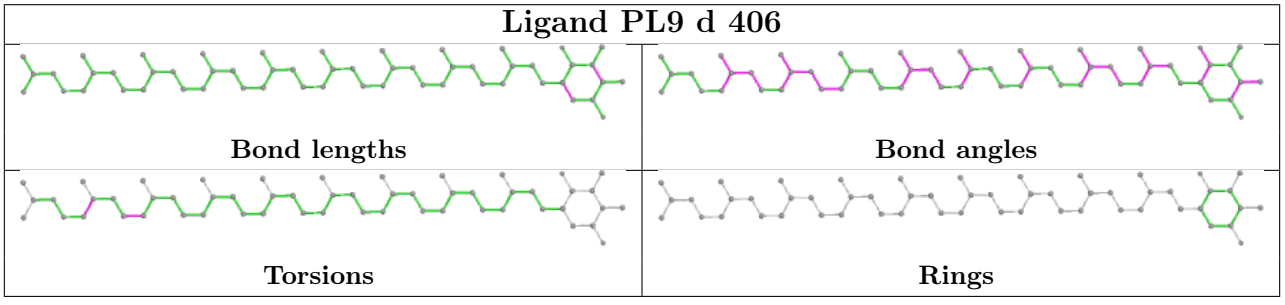
Ligand CLA C 506



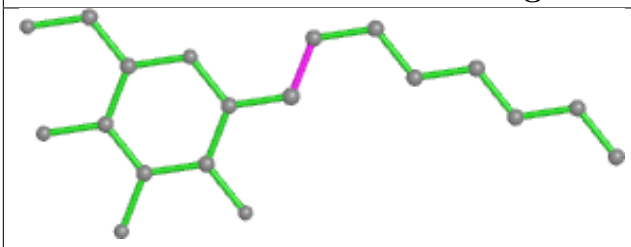
Ligand LMG b 629



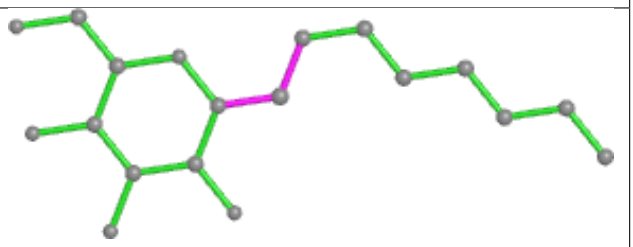
Ligand PL9 d 406



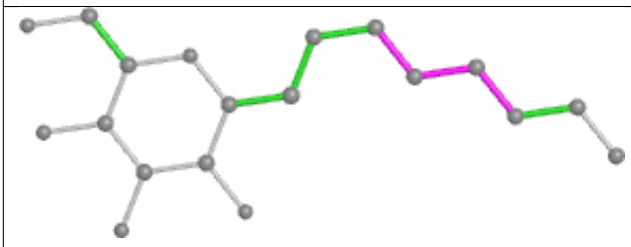
Ligand HTG b 601



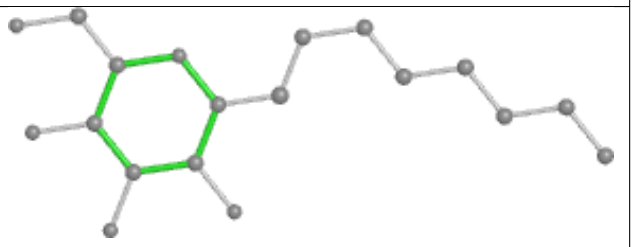
Bond lengths



Bond angles

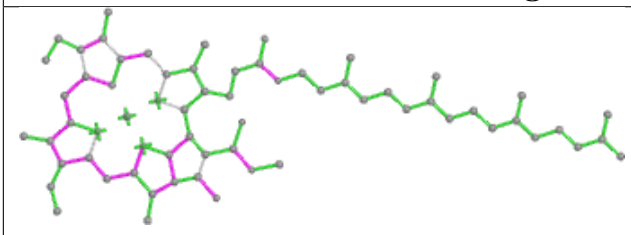


Torsions

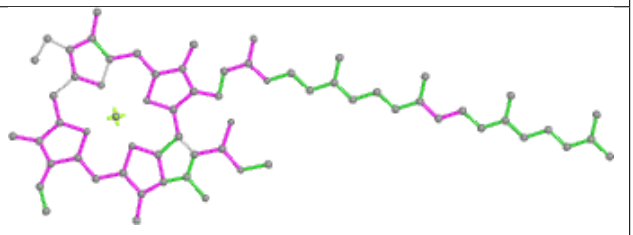


Rings

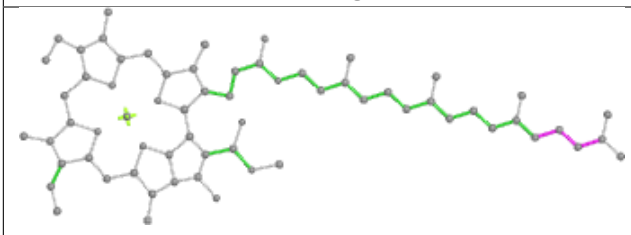
Ligand CLA A 405



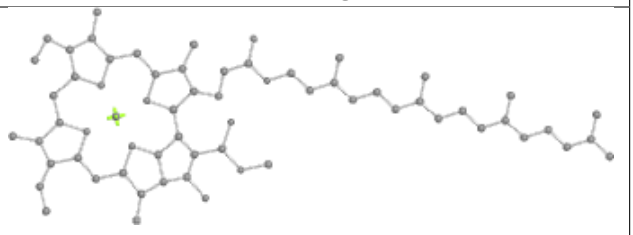
Bond lengths



Bond angles

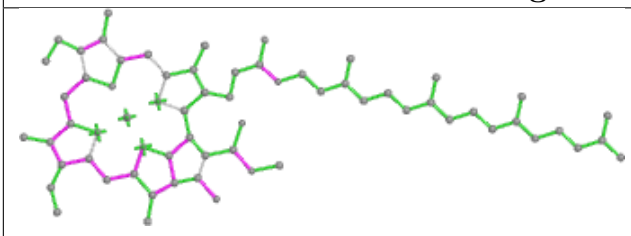


Torsions

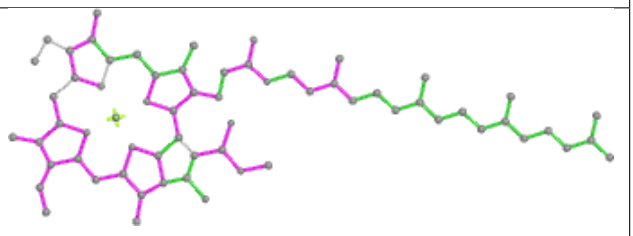


Rings

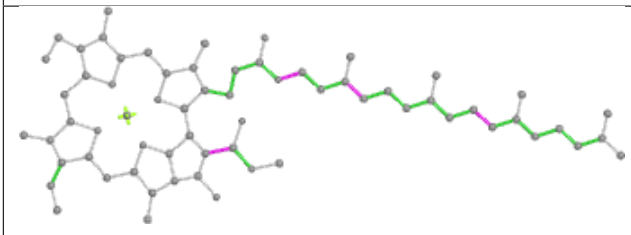
Ligand CLA c 517



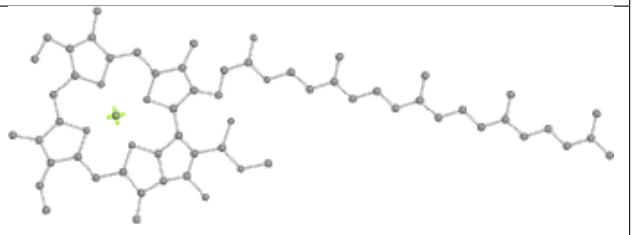
Bond lengths



Bond angles

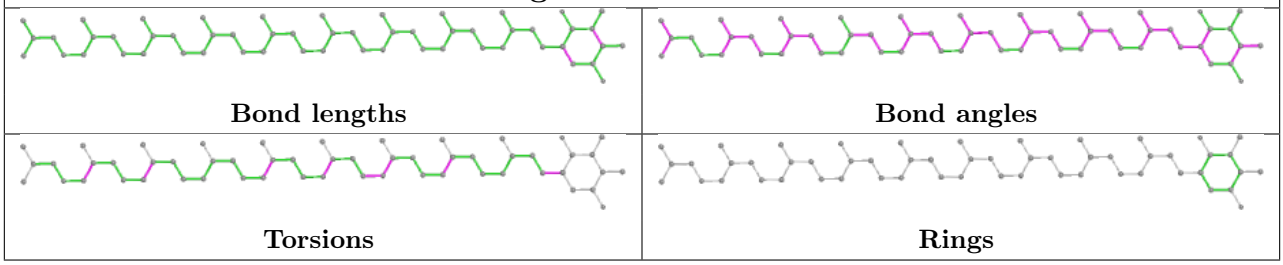


Torsions

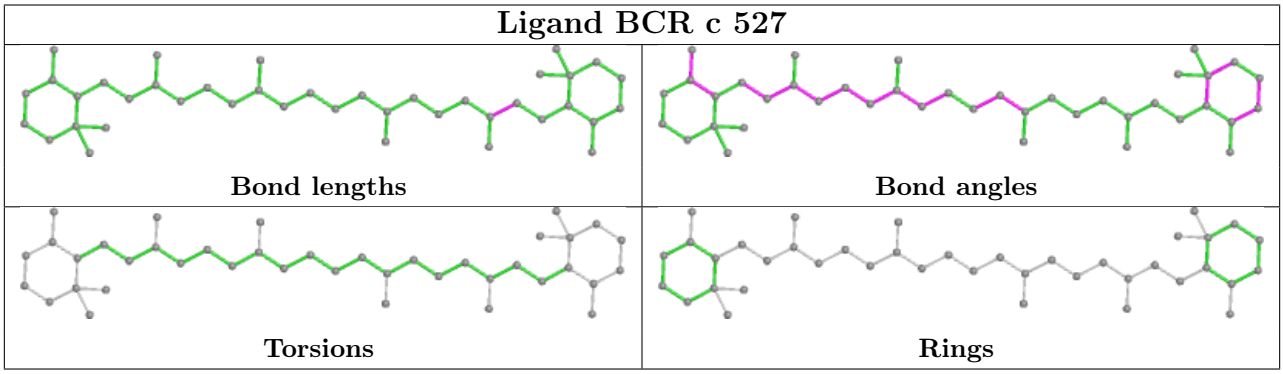


Rings

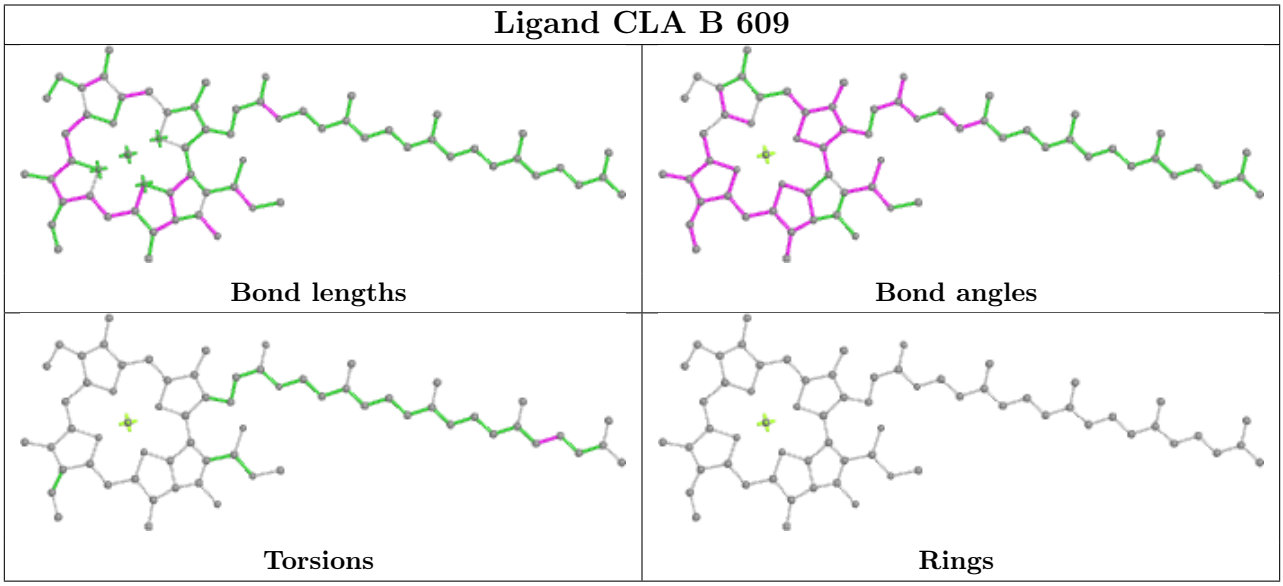
Ligand PL9 A 418



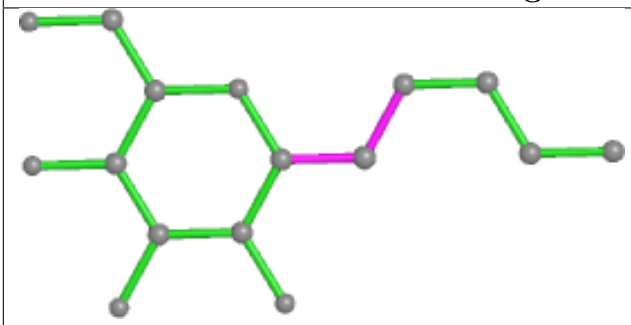
Ligand BCR c 527



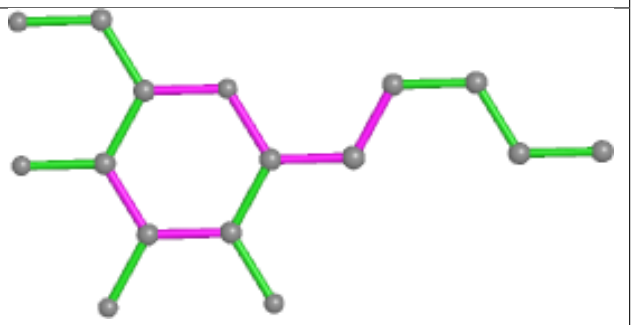
Ligand CLA B 609



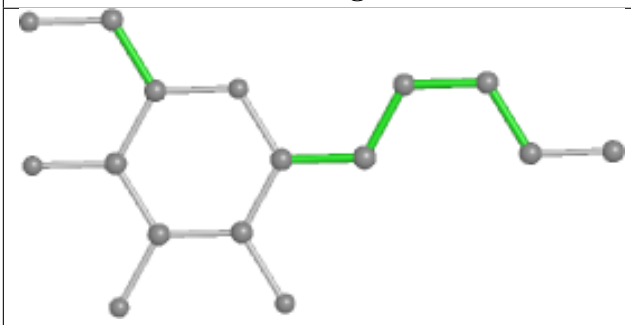
Ligand HTG d 412



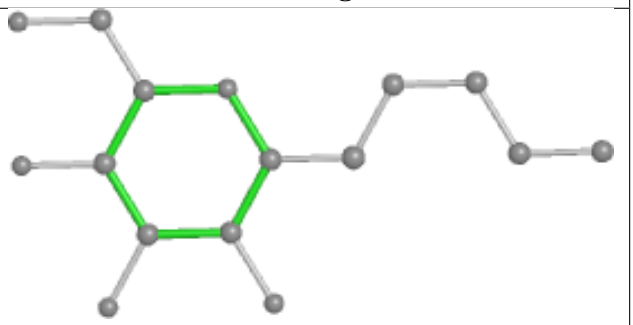
Bond lengths



Bond angles

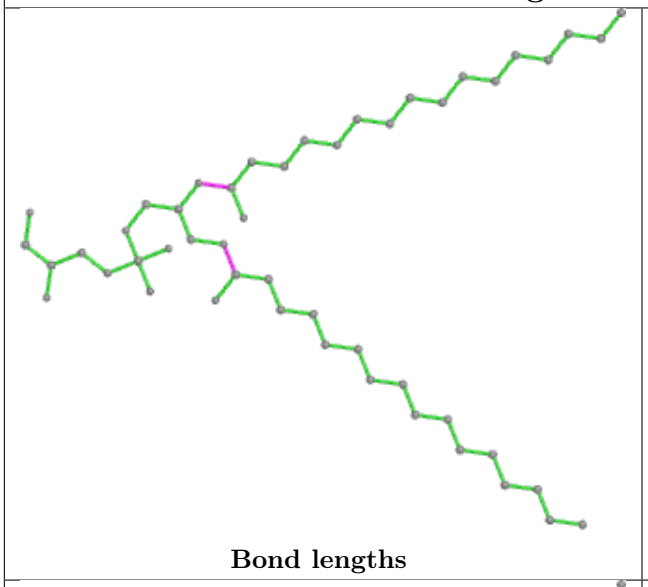


Torsions

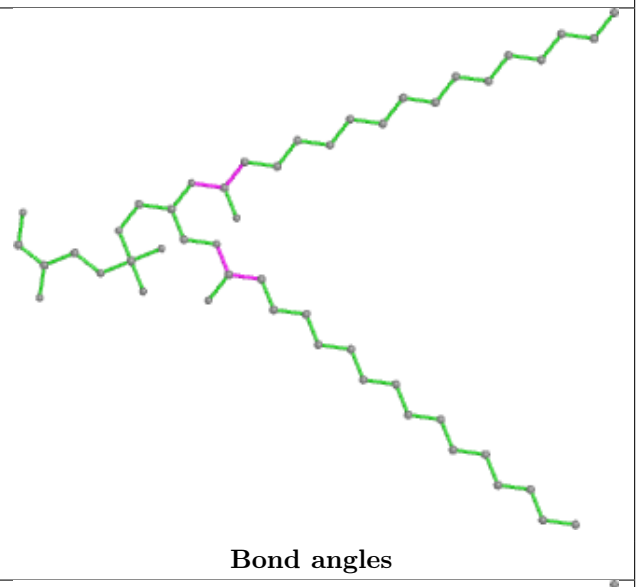


Rings

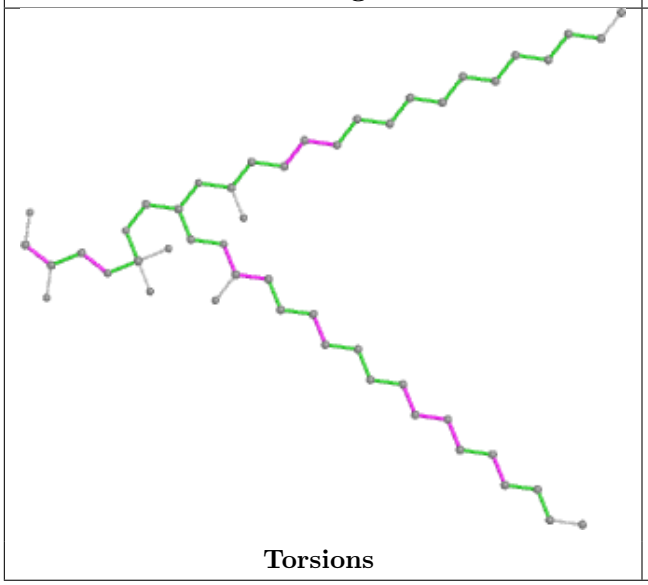
Ligand LHG d 409



Bond lengths



Bond angles



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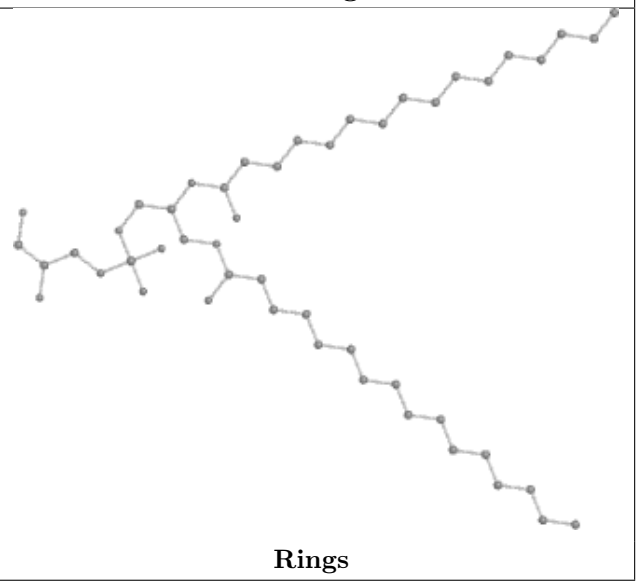
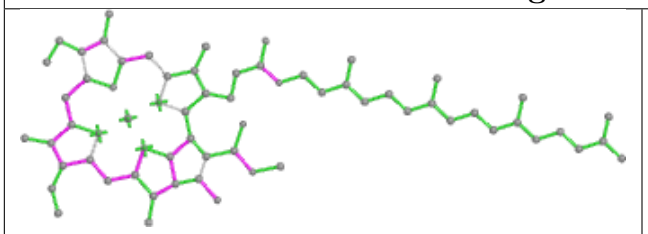
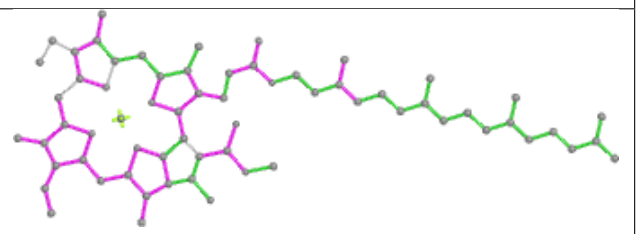


Rings

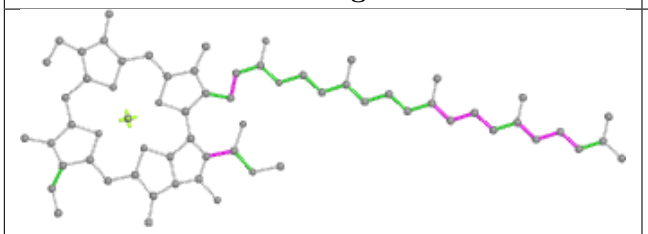
Ligand CLA b 615



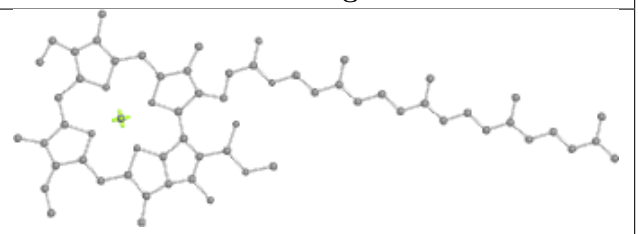
Bond lengths



Bond angles

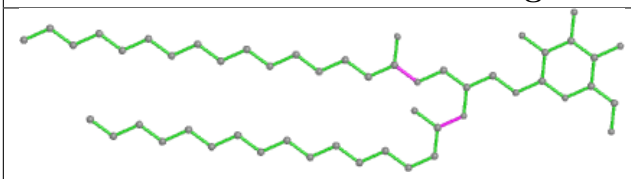


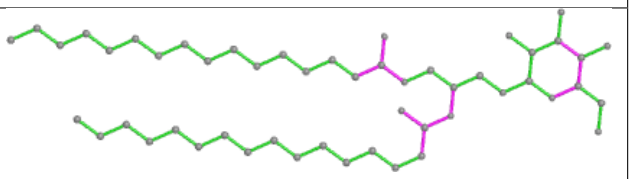
Torsions

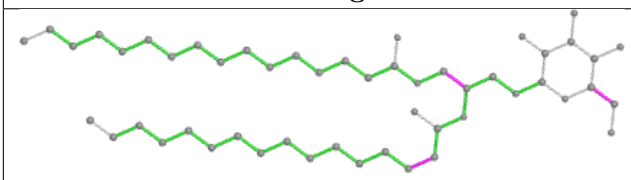


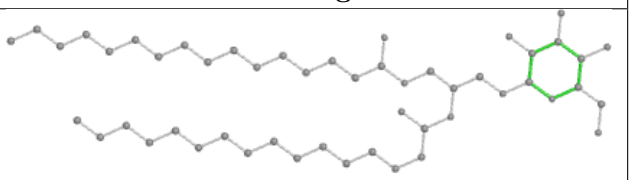
Rings

Ligand LMG c 523

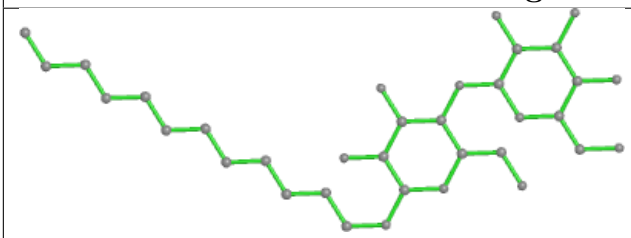

Bond lengths

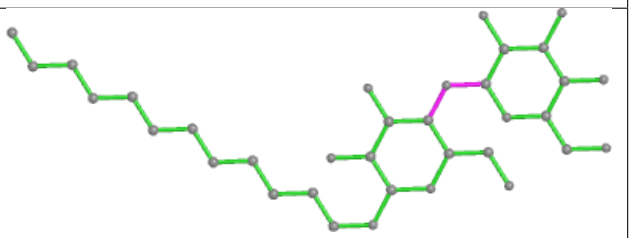

Bond angles

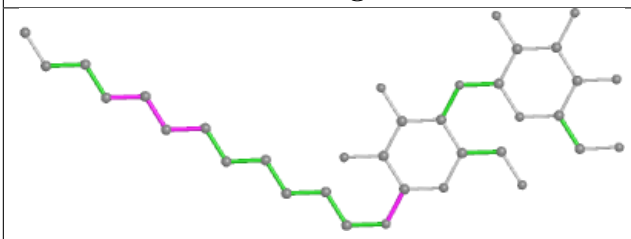

Torsions


Rings

Ligand LMT a 419


Bond lengths


Bond angles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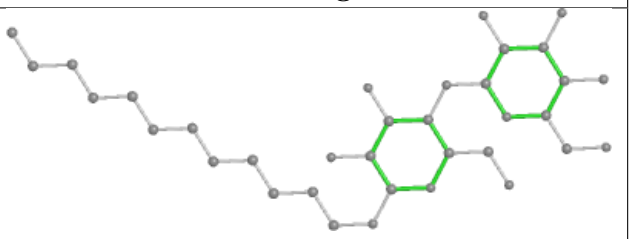
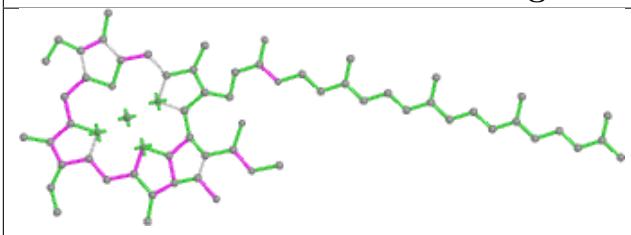
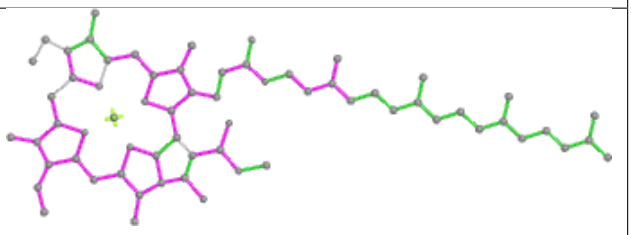
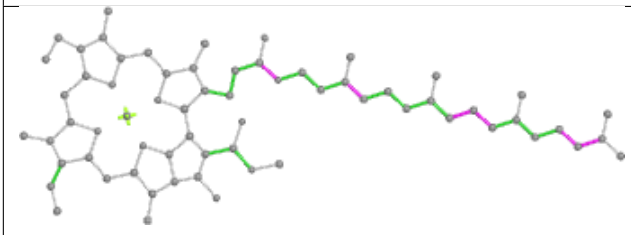
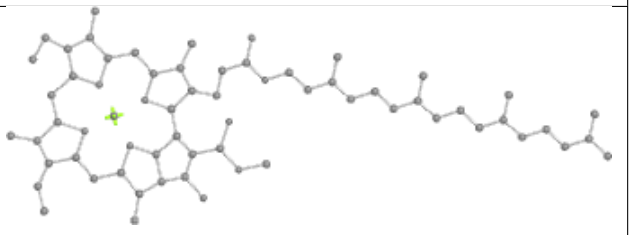

Rings

Ligand CLA a 412

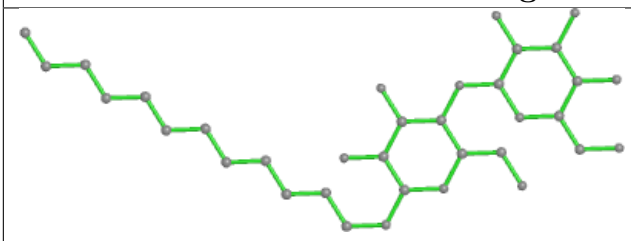

Bond lengths


Bond angles

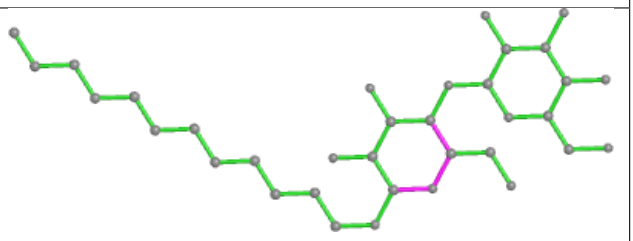

Torsions


Rings

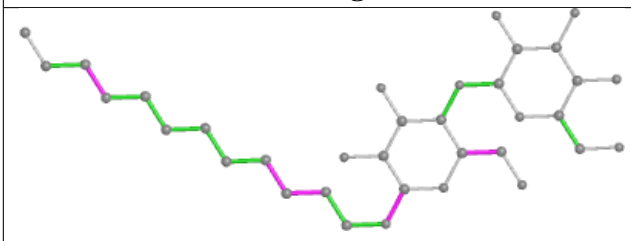
Ligand LMT m 102



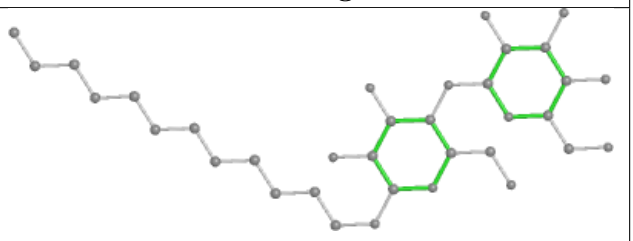
Bond lengths



Bond angles

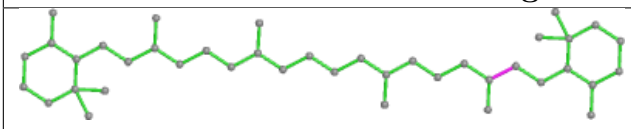


Torsions

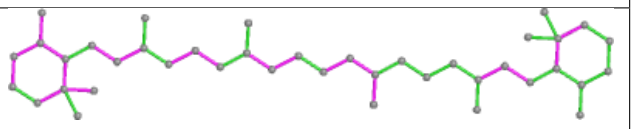


Rings

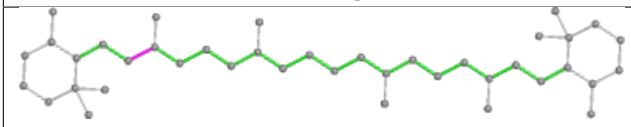
Ligand BCR K 101



Bond lengths



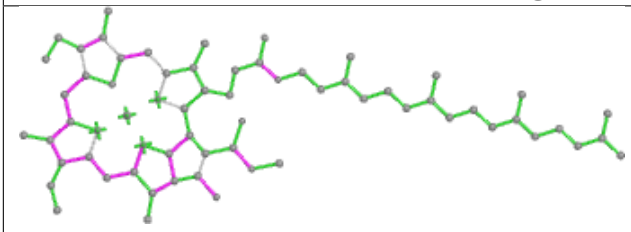
Bond angles



Torsions

Rings

Ligand CLA c 511



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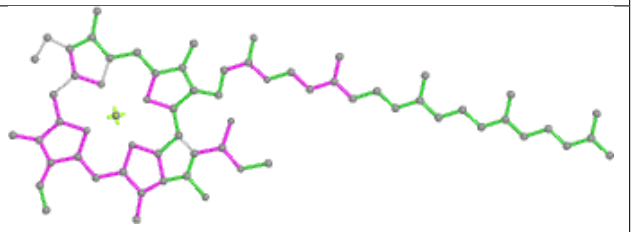
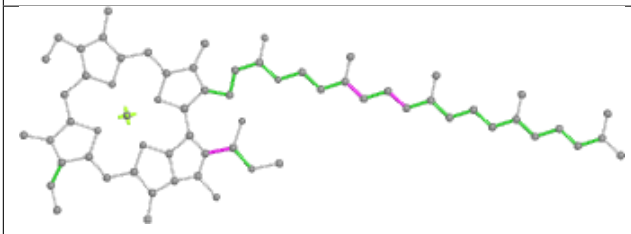
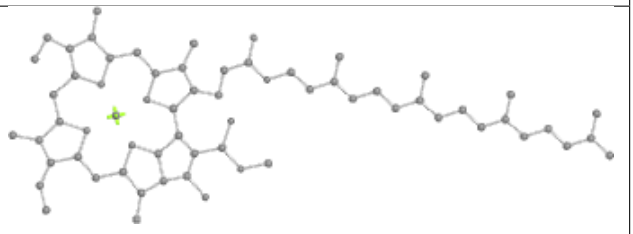


Bond angles

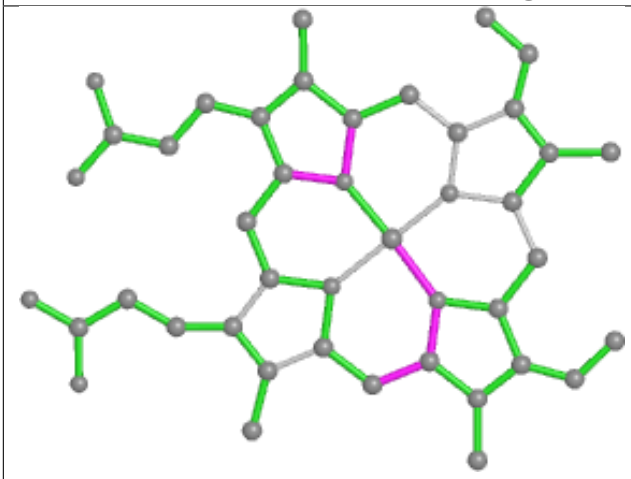


Torsions

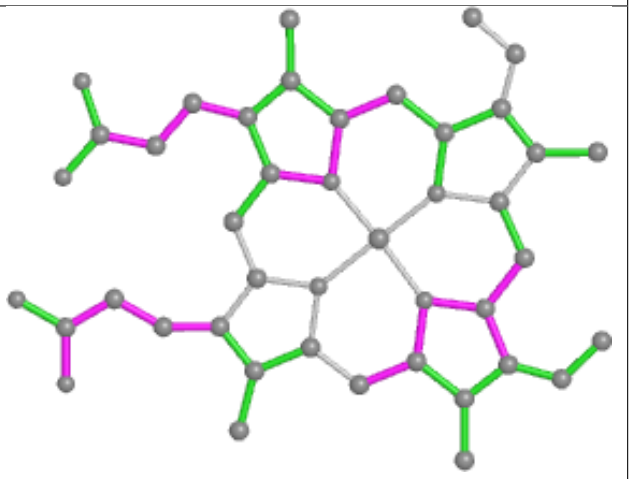


Rings

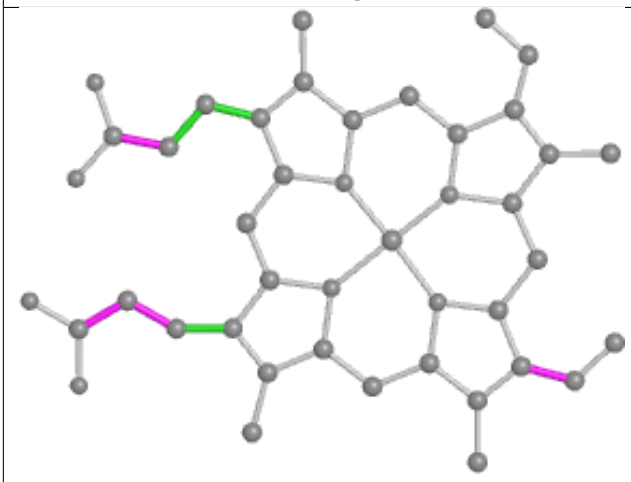
Ligand HEM E 102



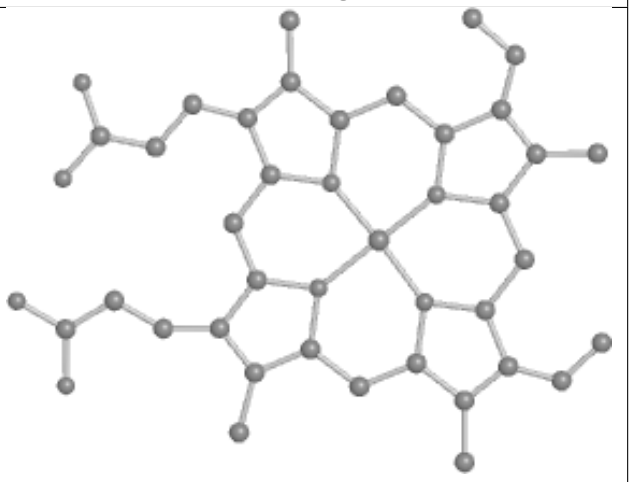
Bond lengths



Bond angles

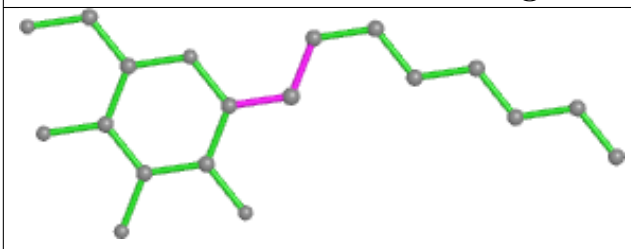


Torsions

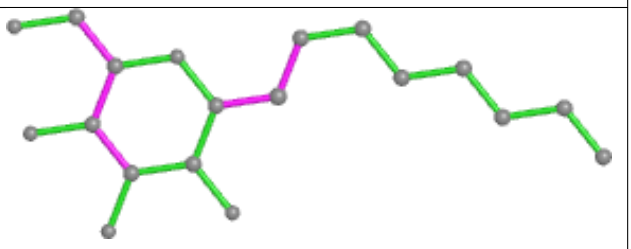


Rings

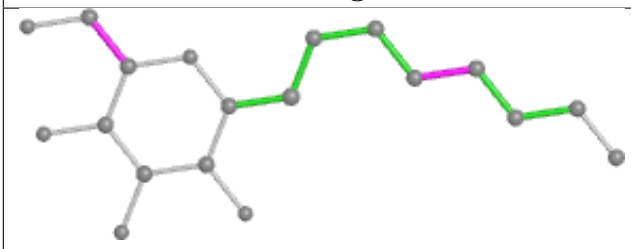
Ligand HTG B 632



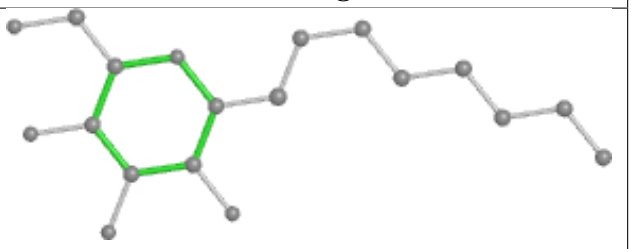
Bond lengths



Bond angles

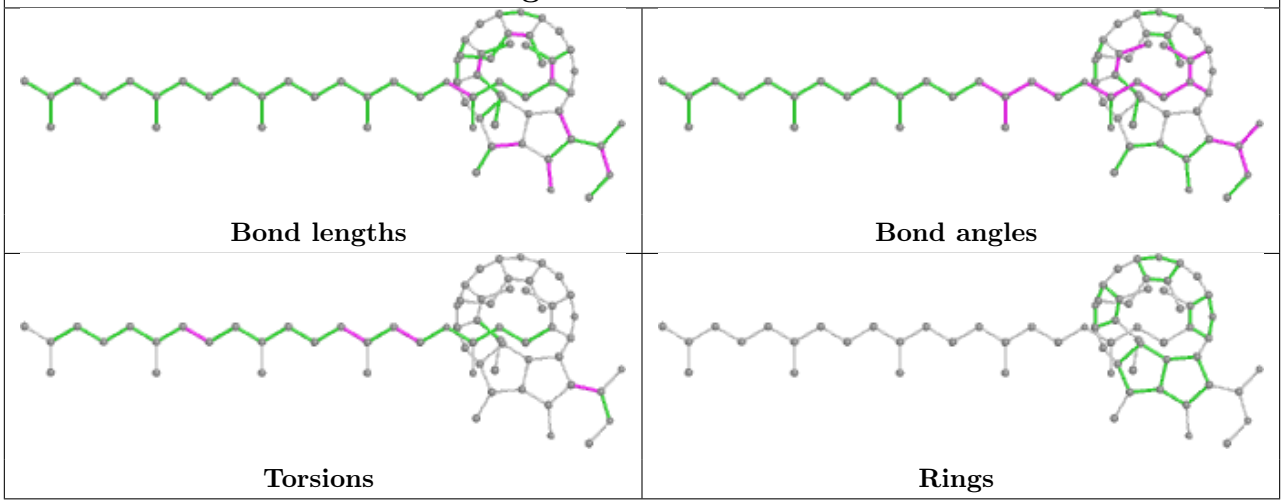


Torsions

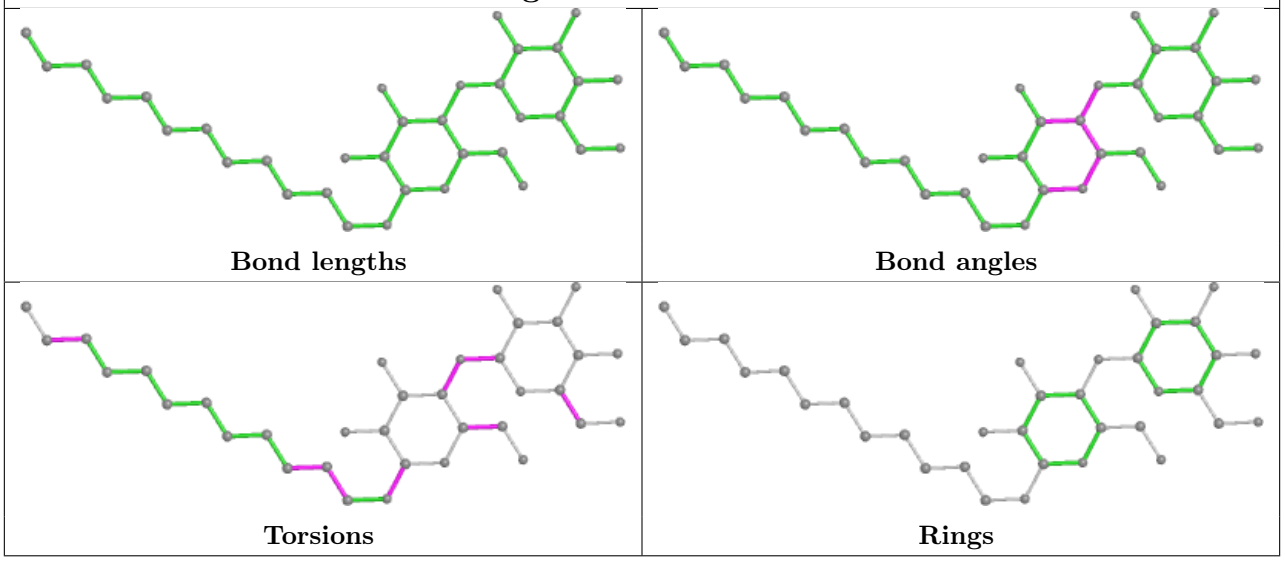


Rings

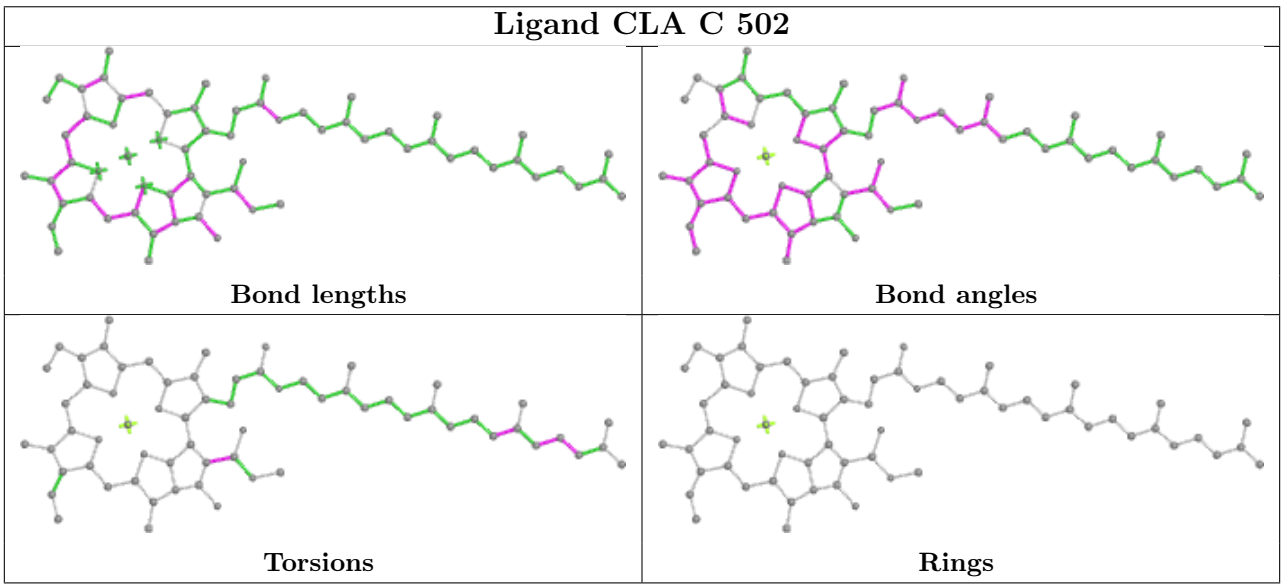
Ligand PHO D 401



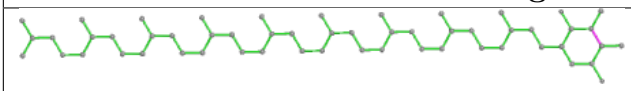
Ligand LMT C 522



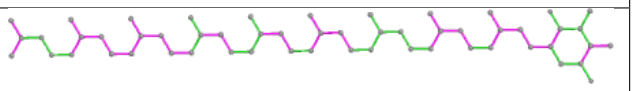
Ligand CLA C 502



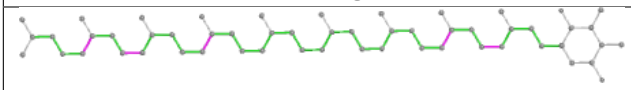
Ligand PL9 D 405



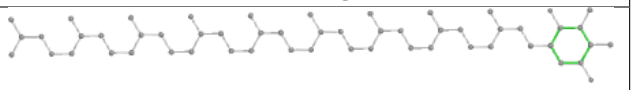
Bond lengths



Bond angles

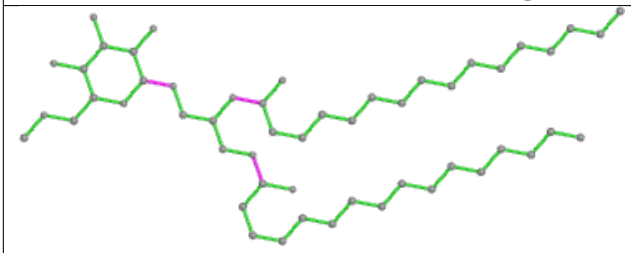


Torsions

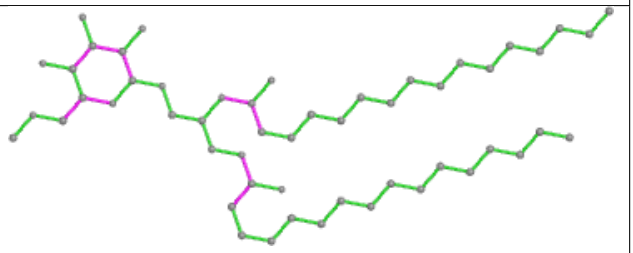


Rings

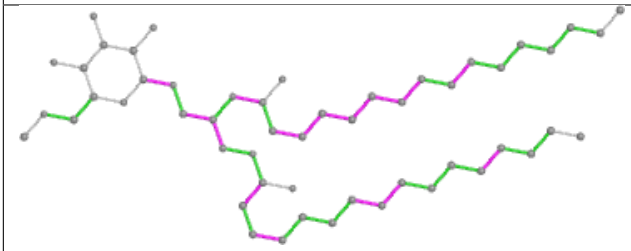
Ligand DGD D 406



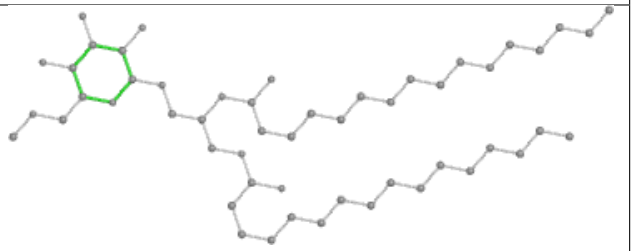
Bond lengths



Bond angles

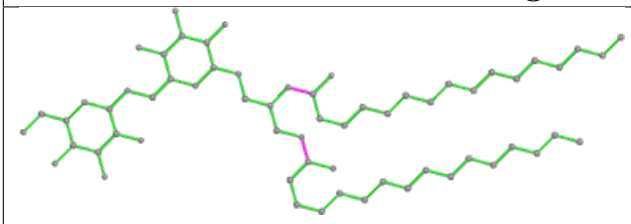


Torsions

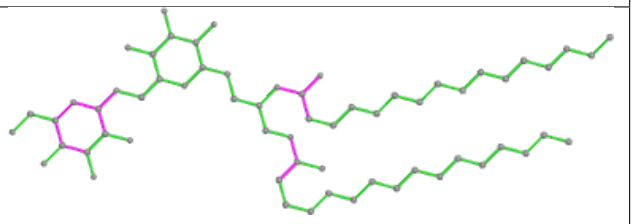


Rings

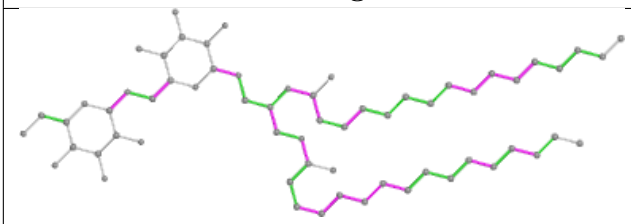
Ligand DGD e 101



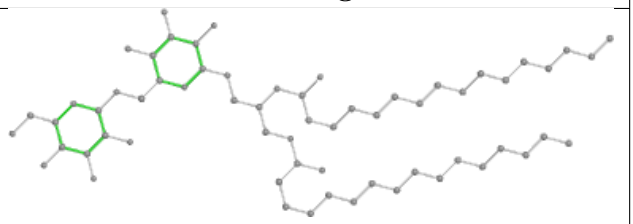
Bond lengths



Bond angles

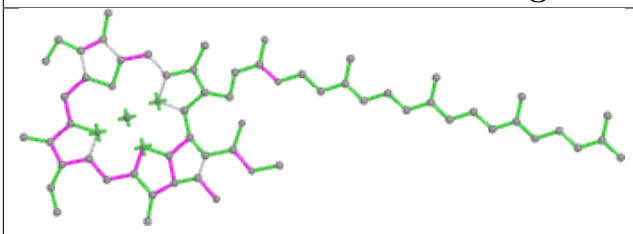


Torsions

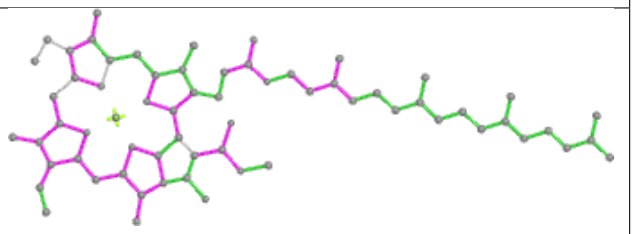


Rings

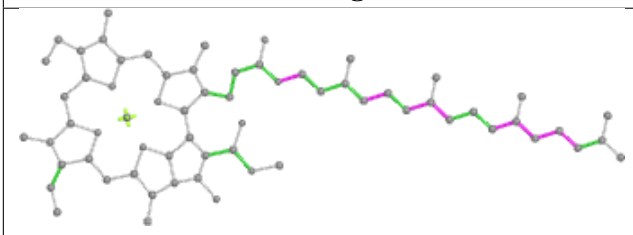
Ligand CLA c 513



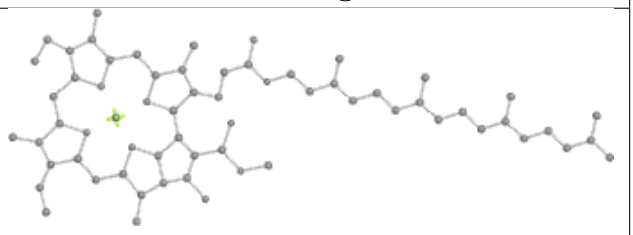
Bond lengths



Bond angles

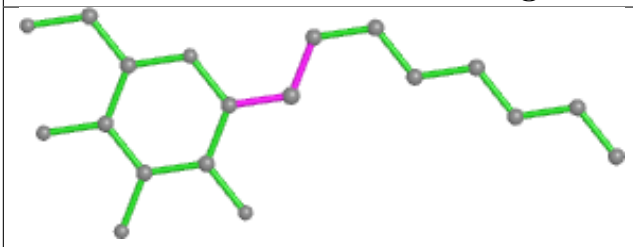


Torsions

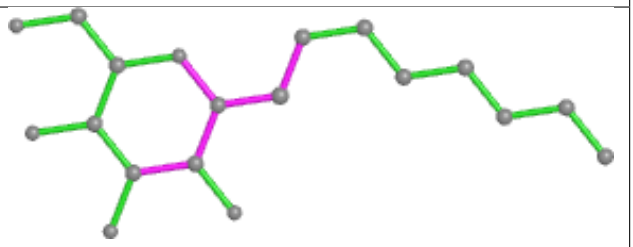


Rings

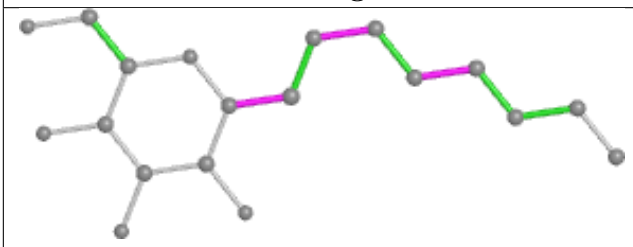
Ligand HTG V 206



Bond lengths



Bond angles



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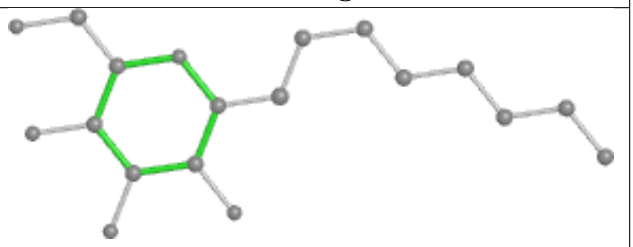
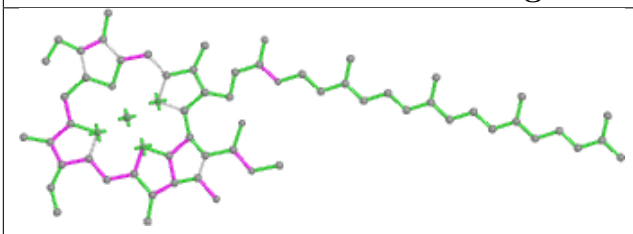
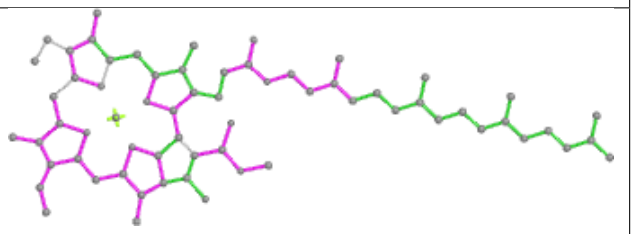


Rings

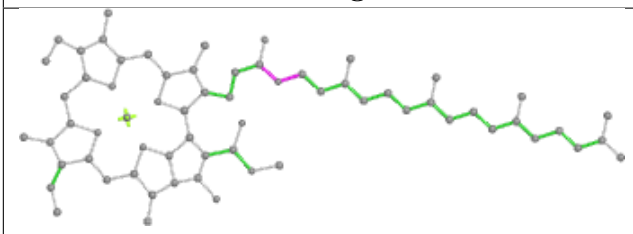
Ligand CLA C 512



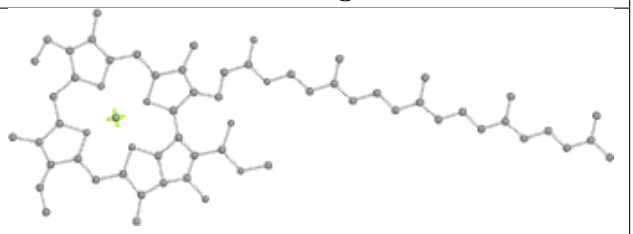
Bond lengths



Bond angles

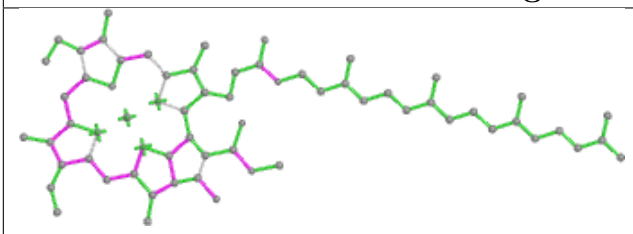


Torsions

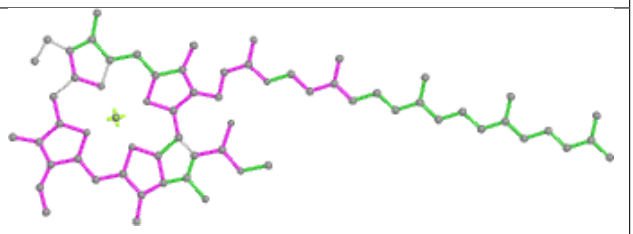


Rings

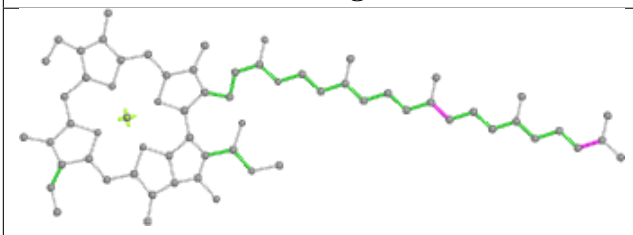
Ligand CLA A 407



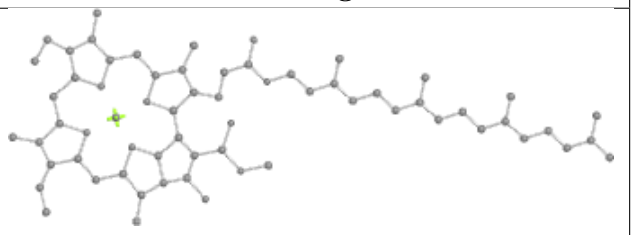
Bond lengths



Bond angles

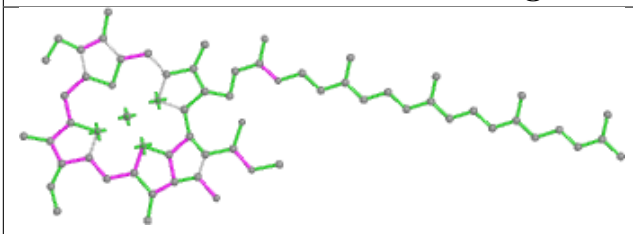


Torsions

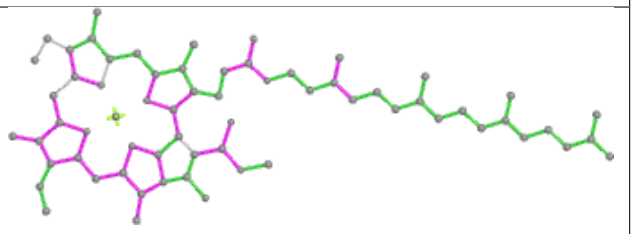


Rings

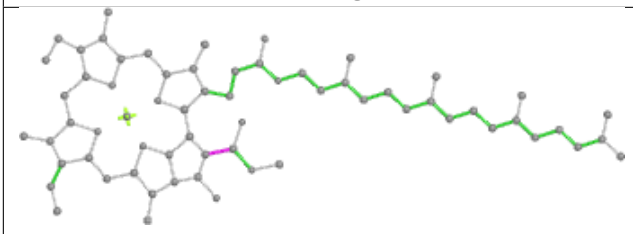
Ligand CLA C 504



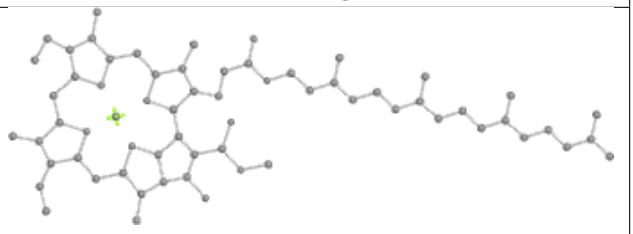
Bond lengths



Bond angles

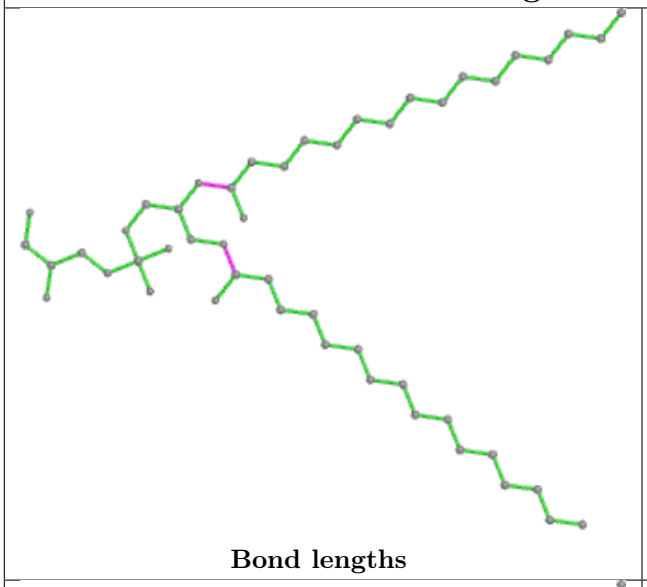


Torsions



Rings

Ligand LHG D 409



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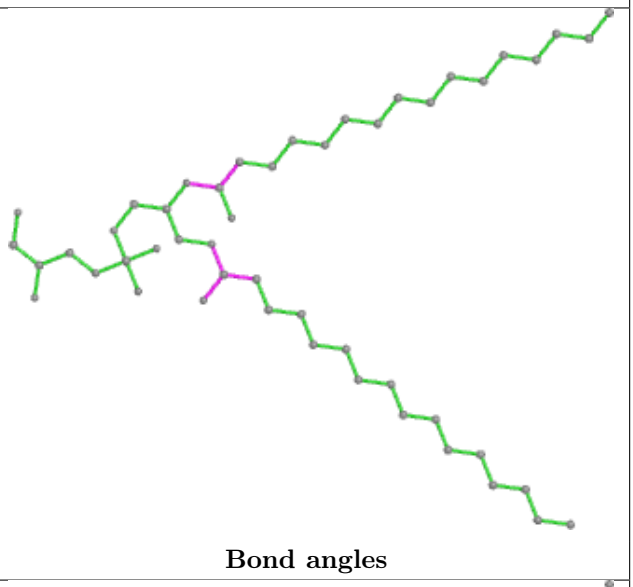
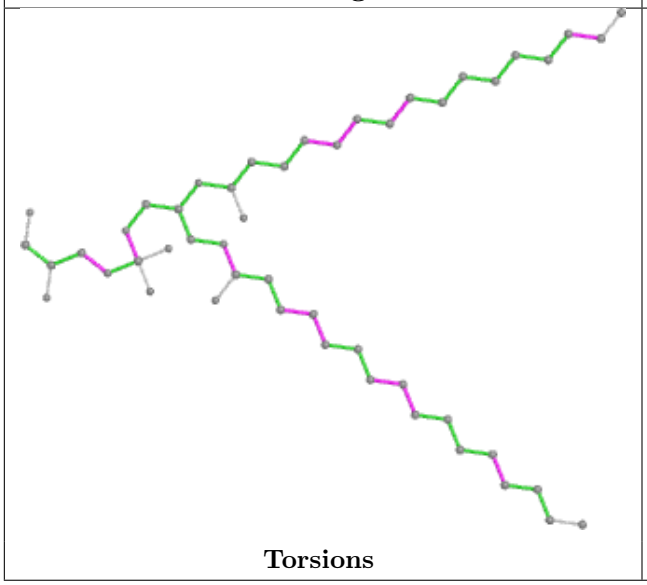
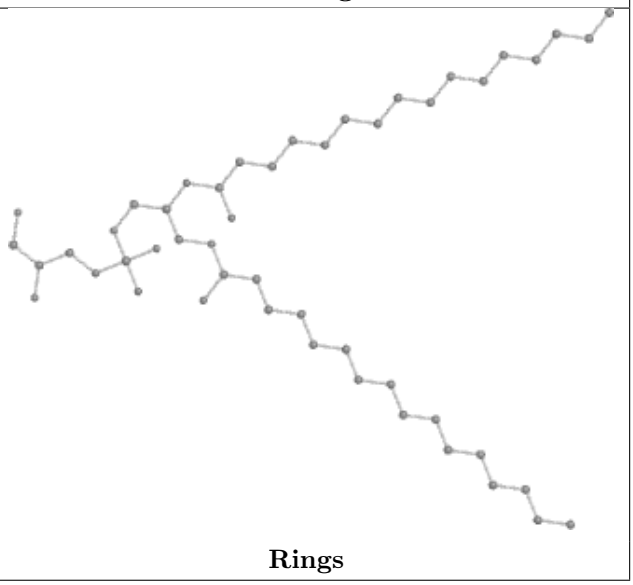


Bond angles

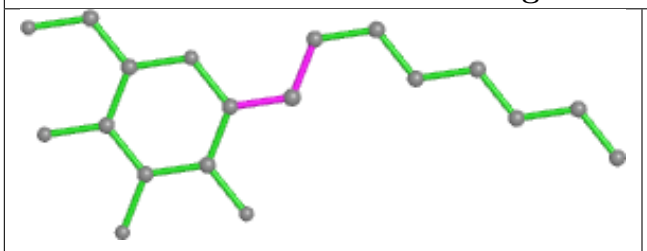


Torsions

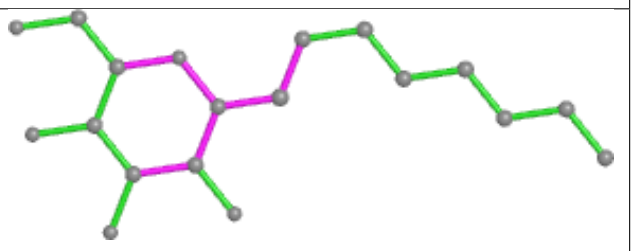


Rings

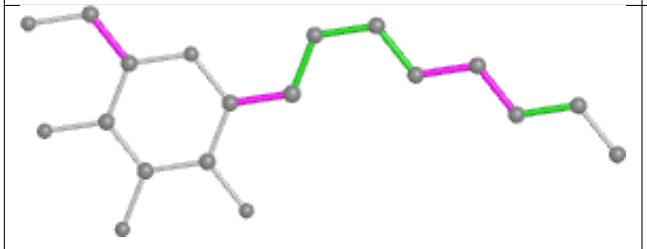
Ligand HTG B 625



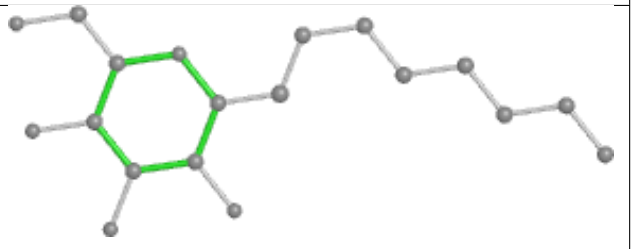
Bond lengths



Bond angles

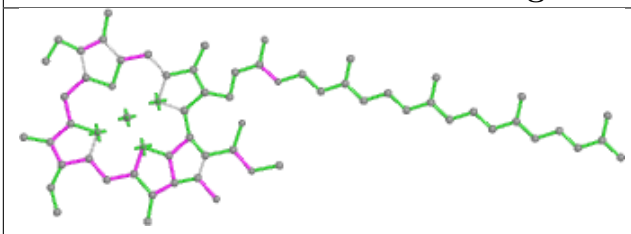


Torsions

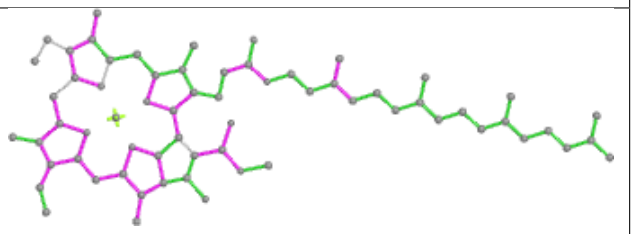


Rings

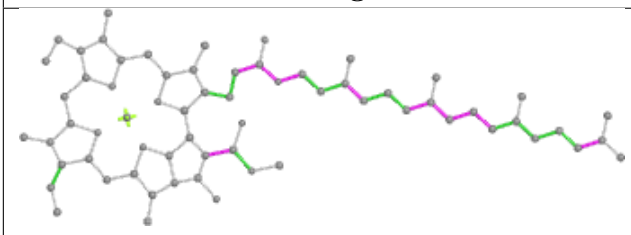
Ligand CLA b 610



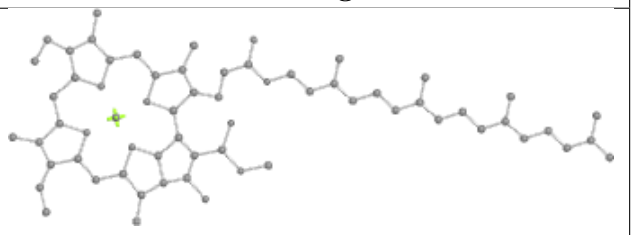
Bond lengths



Bond angles

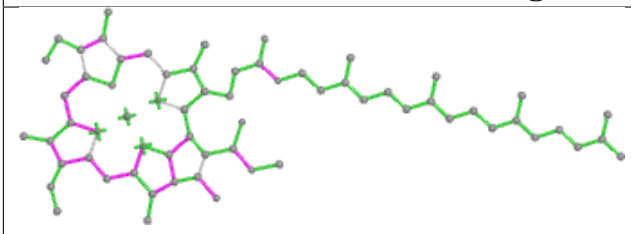


Torsions

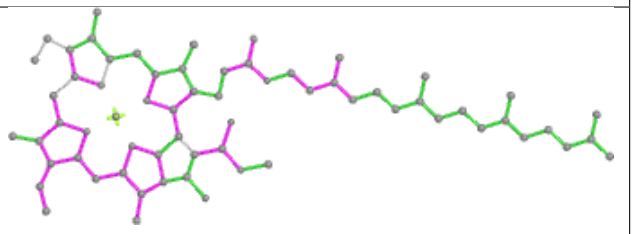


Rings

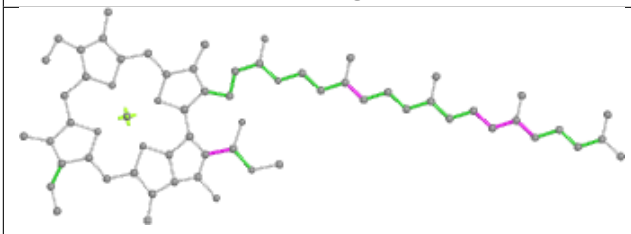
Ligand CLA b 625



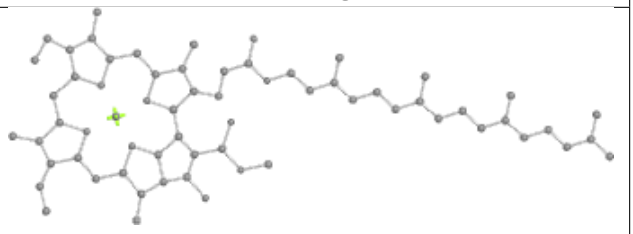
Bond lengths



Bond angles

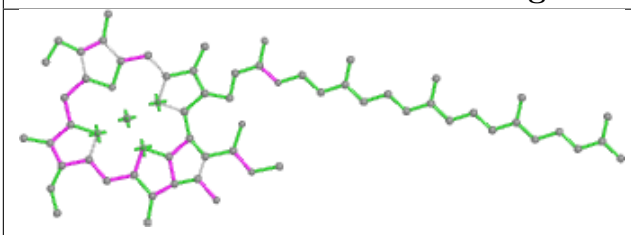


Torsions

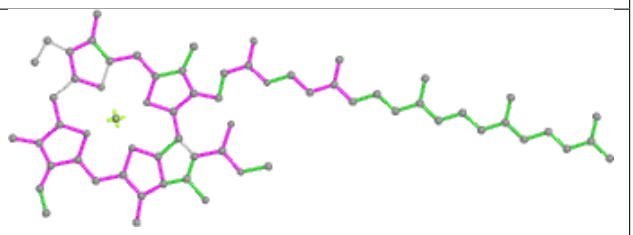


Rings

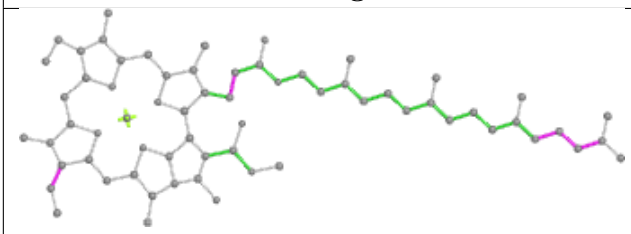
Ligand CLA a 409



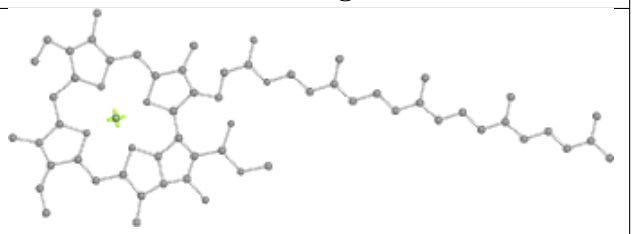
Bond lengths



Bond angles

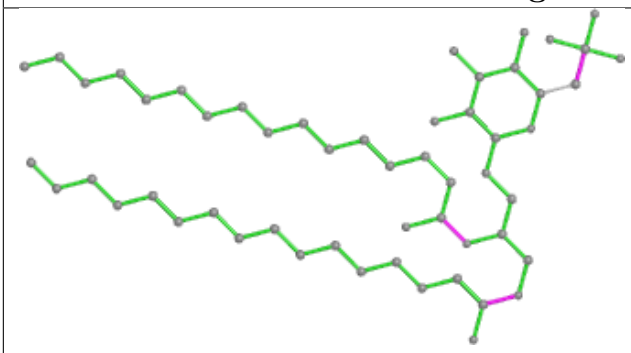


Torsions

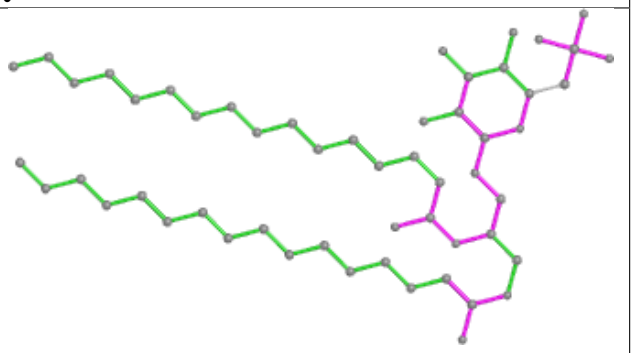


Rings

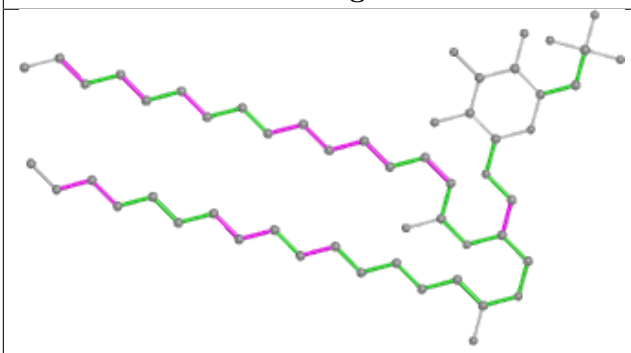
Ligand SQD a 414



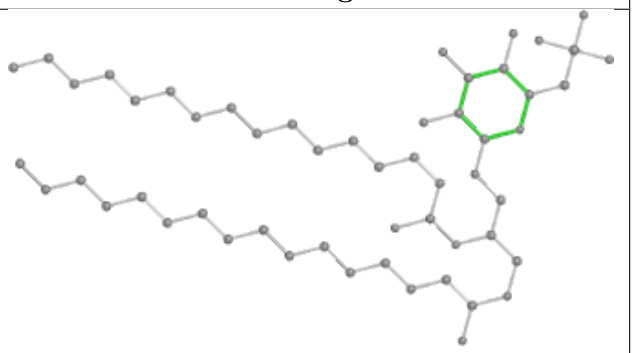
Bond lengths



Bond angles

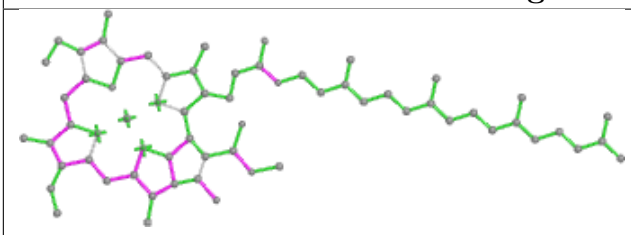


Torsions

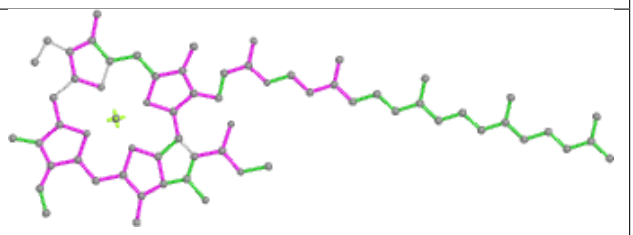


Rings

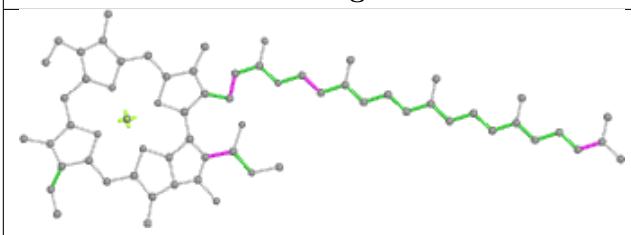
Ligand CLA b 611



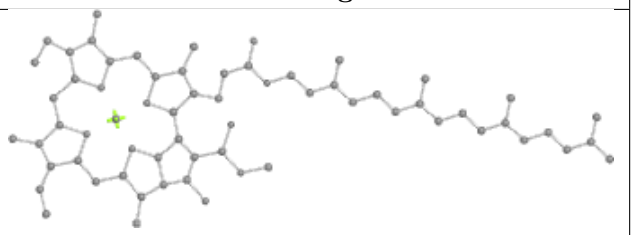
Bond lengths



Bond angles

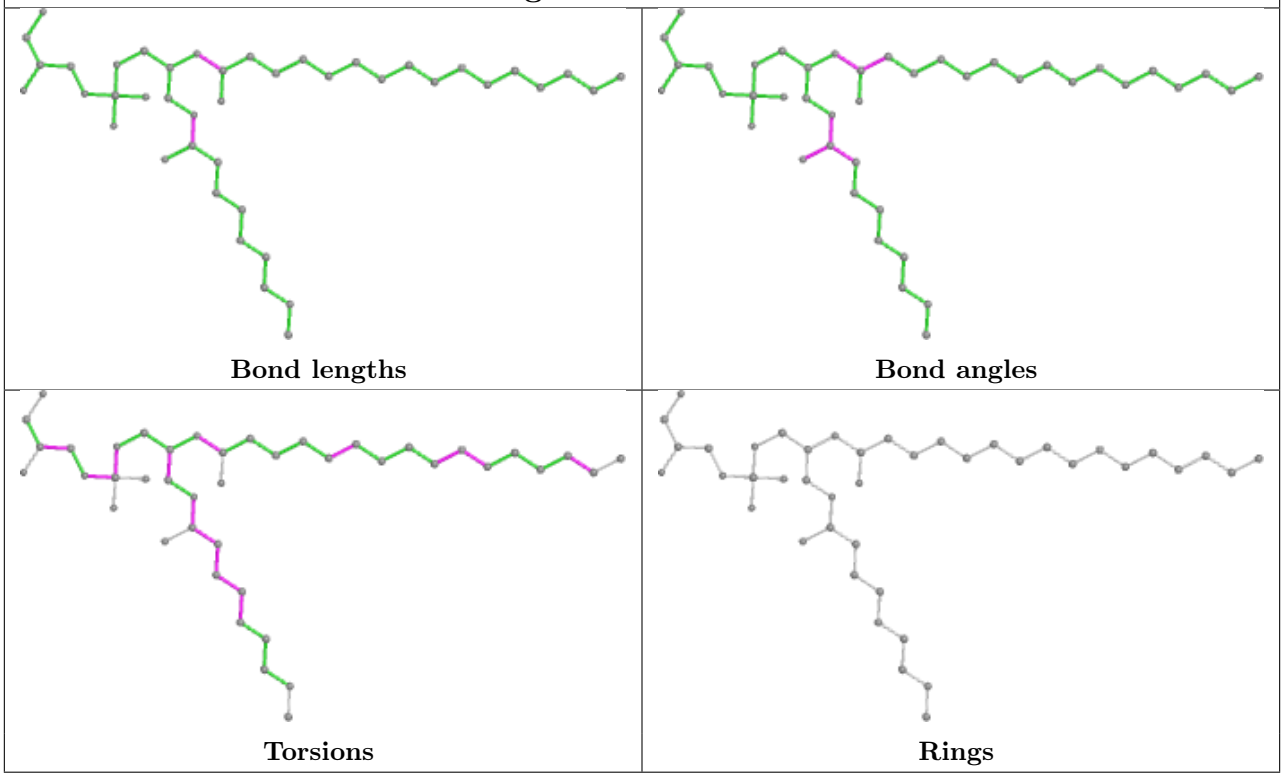


Torsions

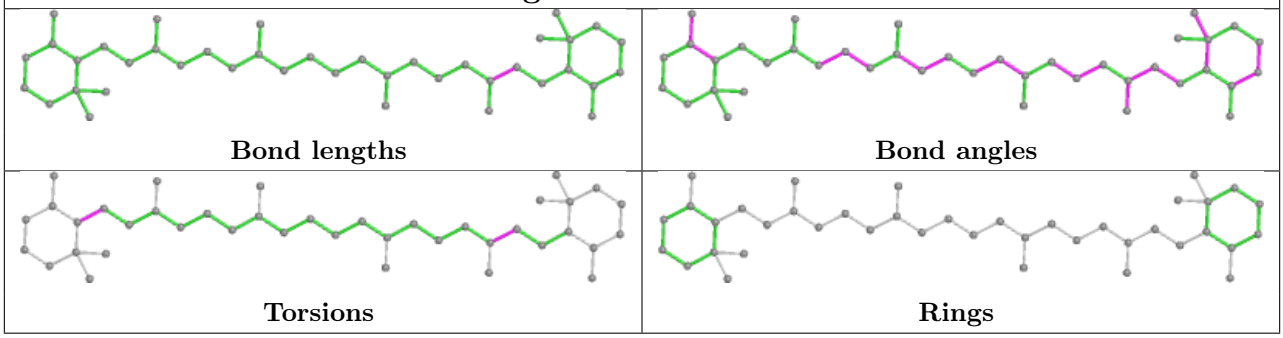


Rings

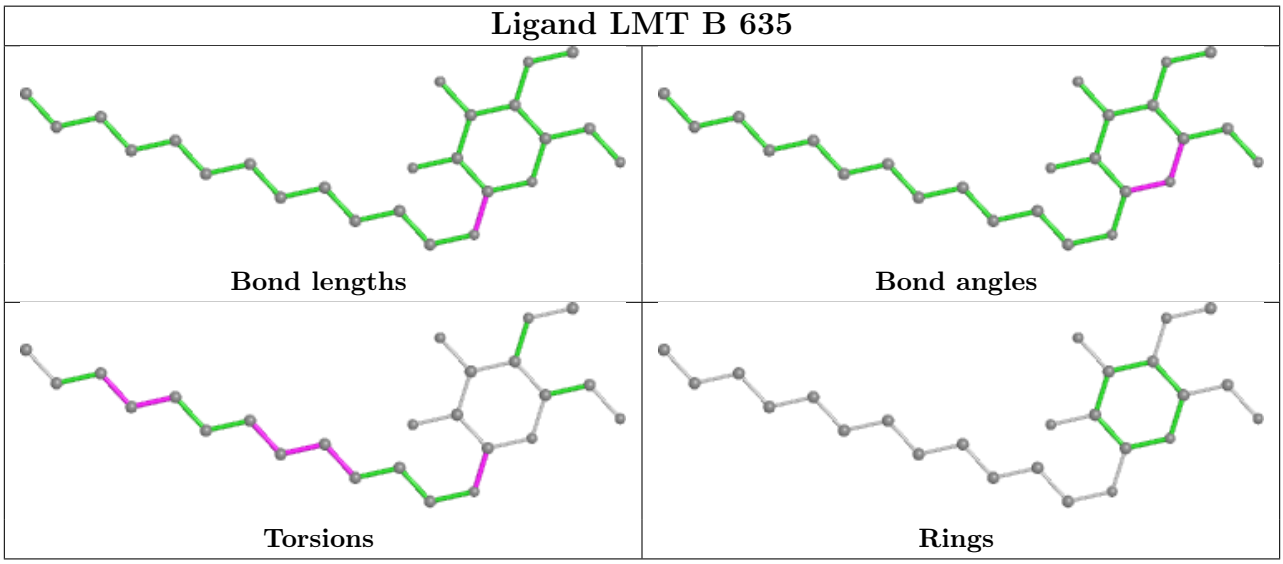
Ligand LHG E 101



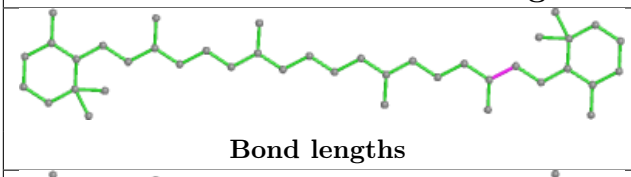
Ligand BCR Y 101



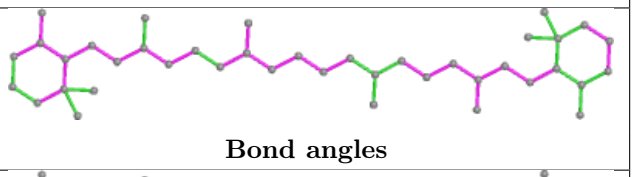
Ligand LMT B 635



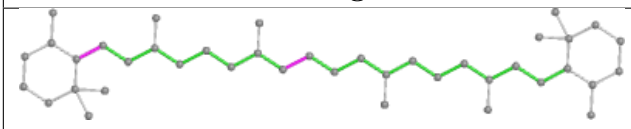
Ligand BCR t 101



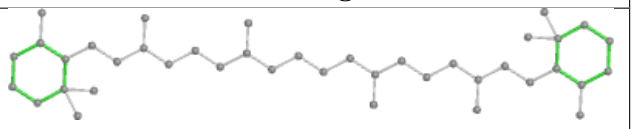
Bond lengths



Bond angles

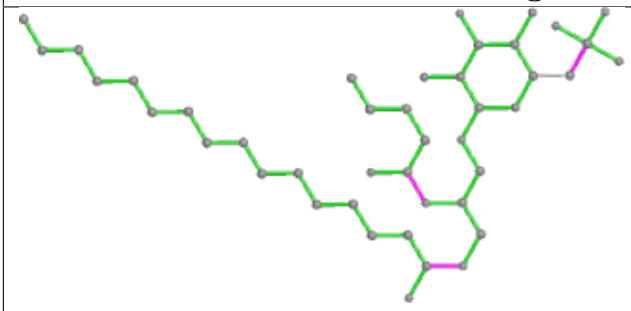


Torsions

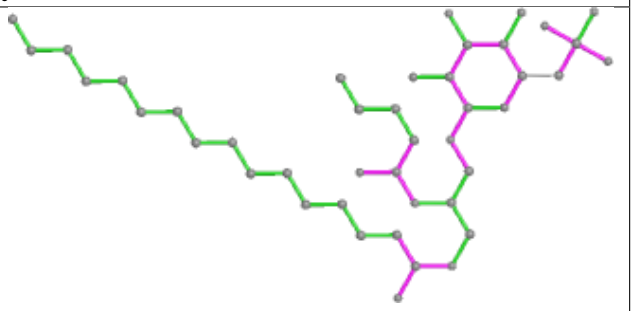


Rings

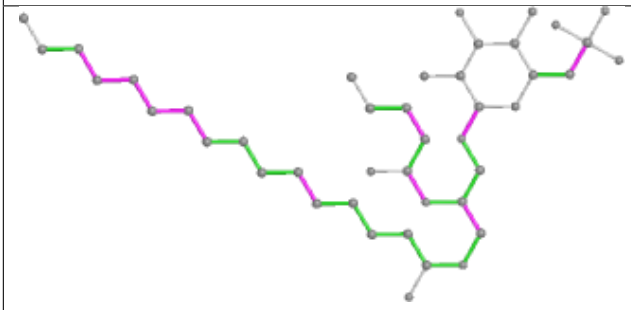
Ligand SQD F 103



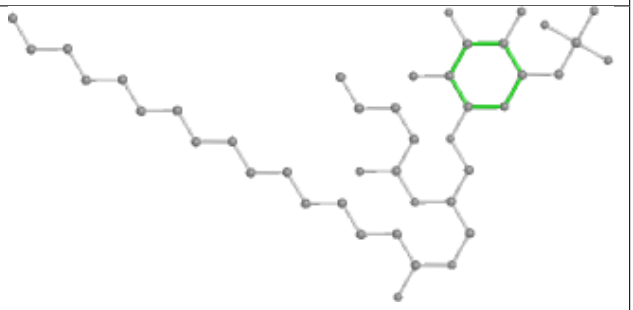
Bond lengths



Bond angles

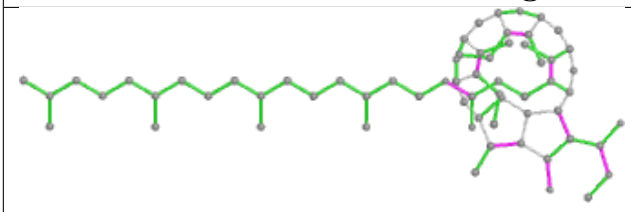


Torsions

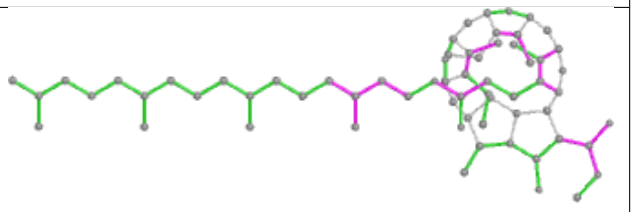


Rings

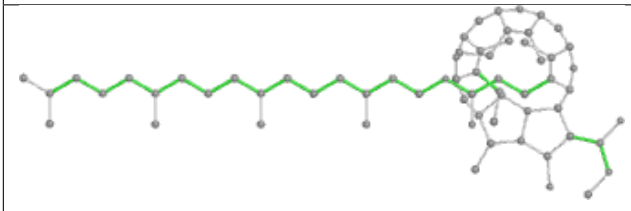
Ligand PHO A 408



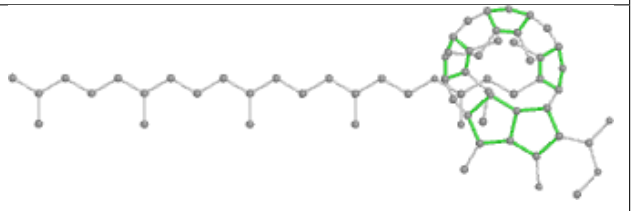
Bond lengths



Bond angles

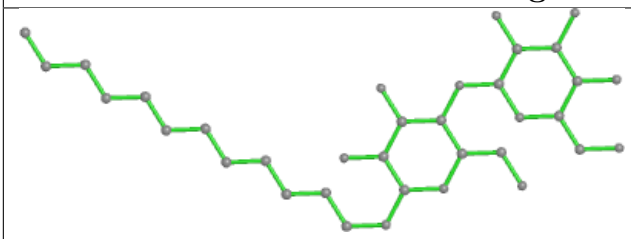


Torsions

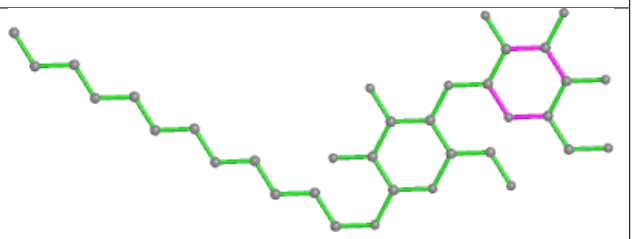


Rings

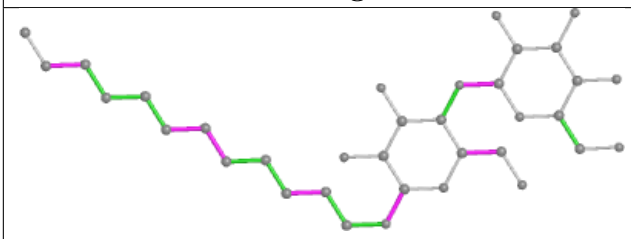
Ligand LMT f 103



Bond lengths



Bond angles



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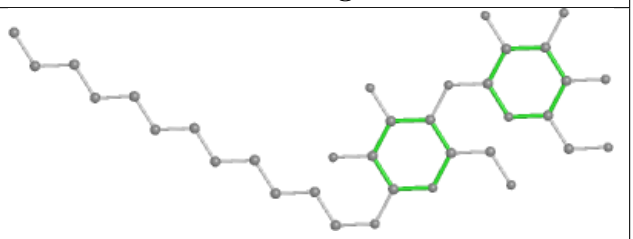
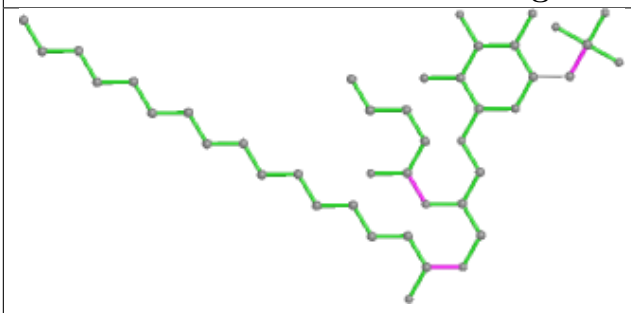


Rings

Ligand SQD f 102



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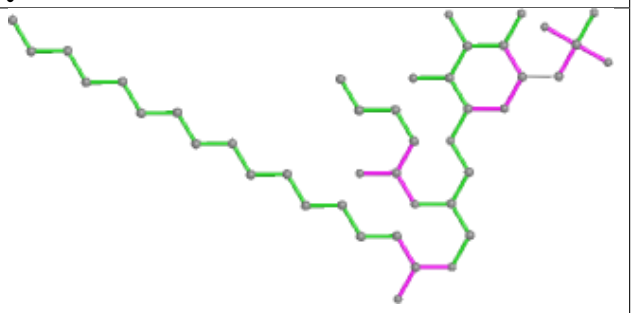
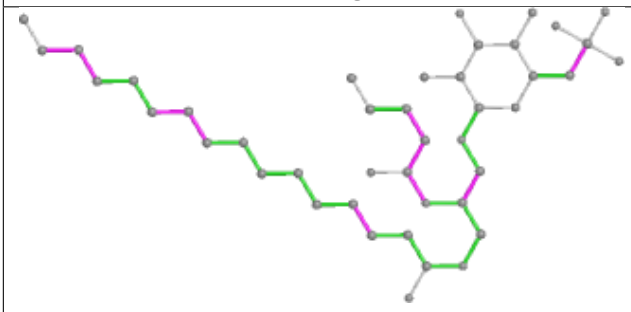
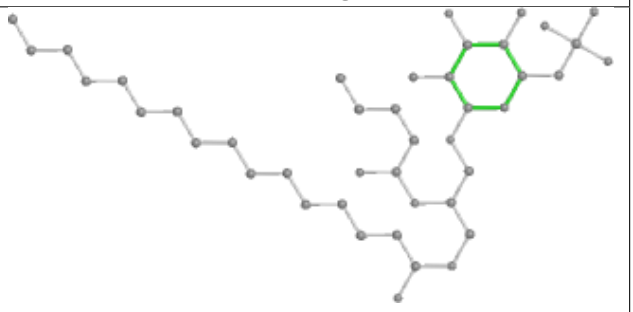


Bond angles

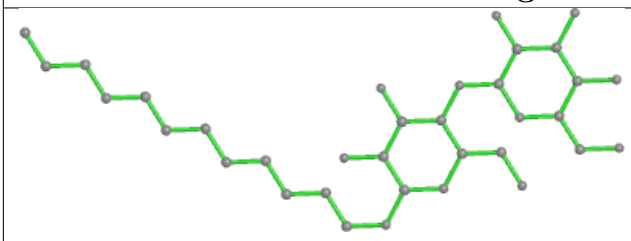


Torsions

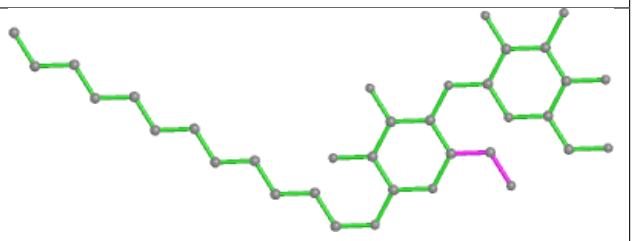


Rings

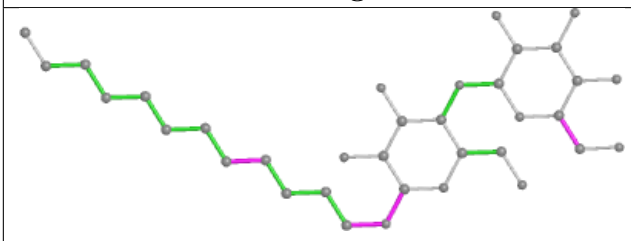
Ligand LMT M 102



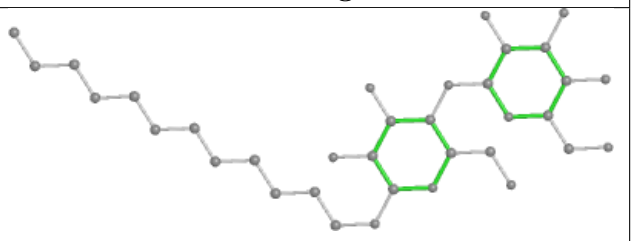
Bond lengths



Bond angles

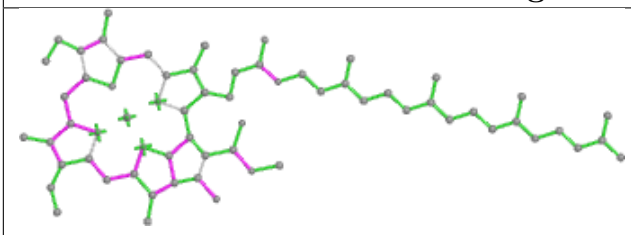


Torsions

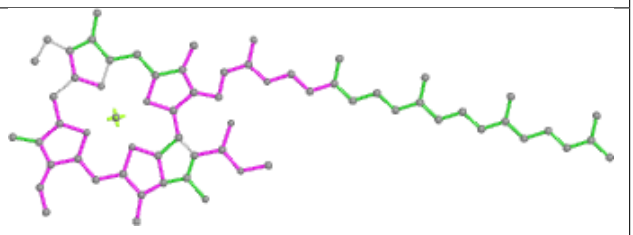


Rings

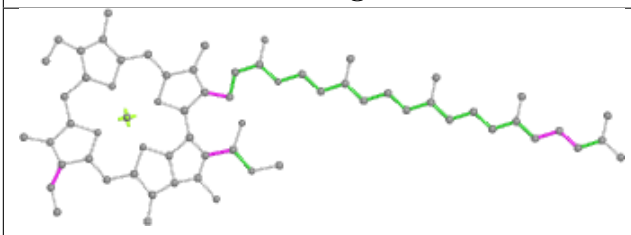
Ligand CLA d 402



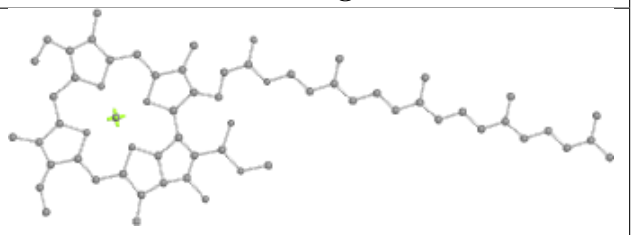
Bond lengths



Bond angles

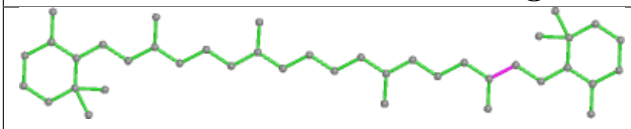


Torsions

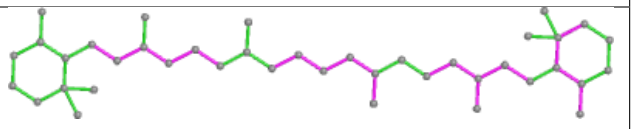


Rings

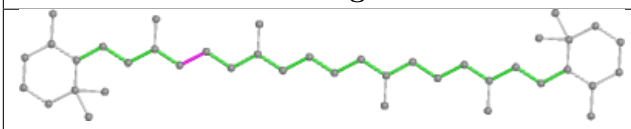
Ligand BCR h 101



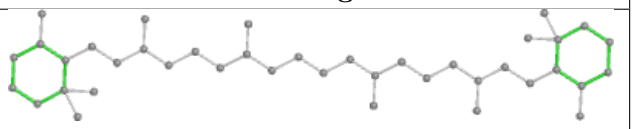
Bond lengths



Bond angles

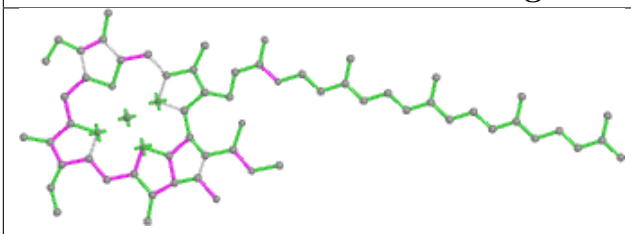


Torsions

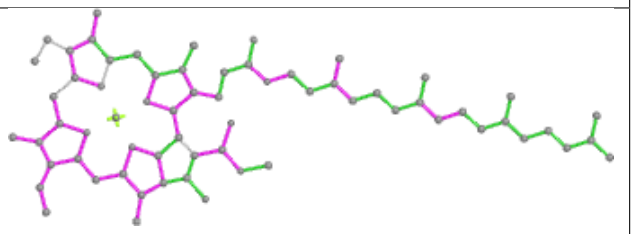


Rings

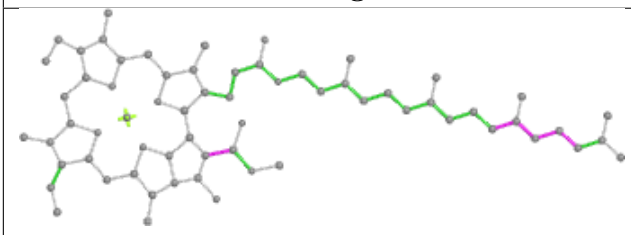
Ligand CLA C 505



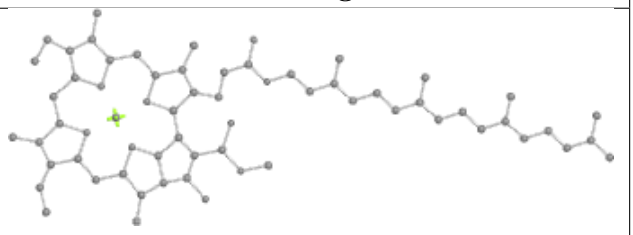
Bond lengths



Bond angles

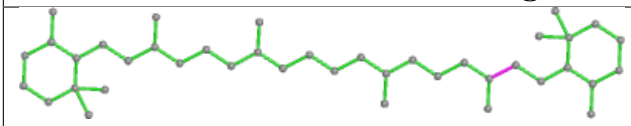


Torsions

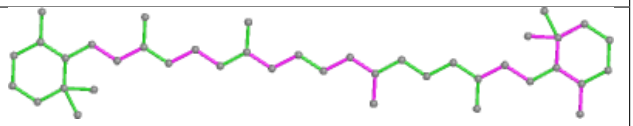


Rings

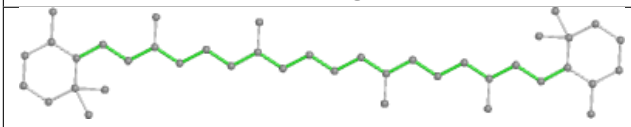
Ligand BCR H 101



Bond lengths



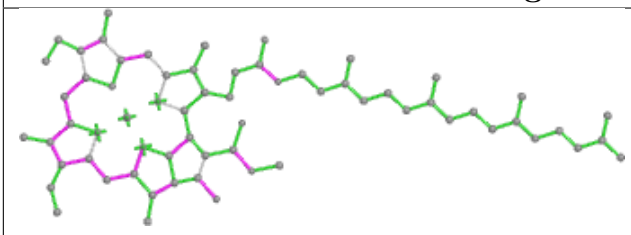
Bond angles



Torsions

Rings

Ligand CLA B 614



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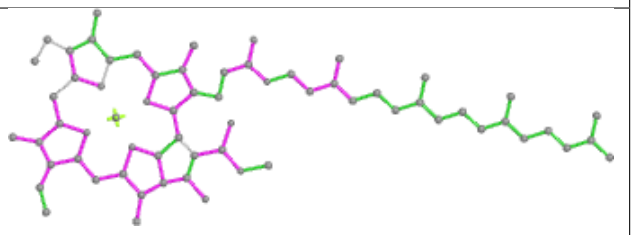
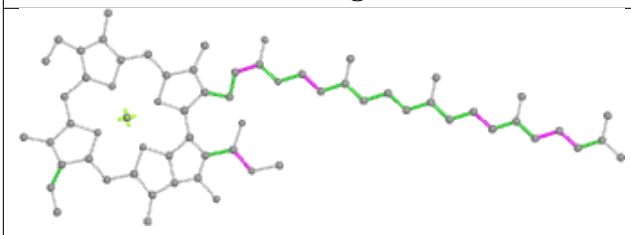
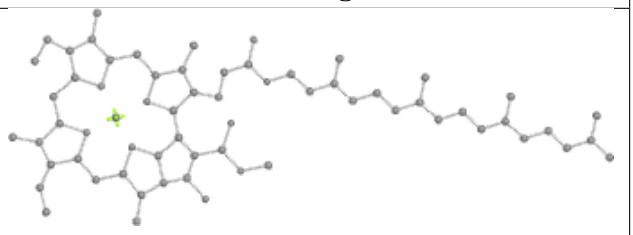


Bond angles

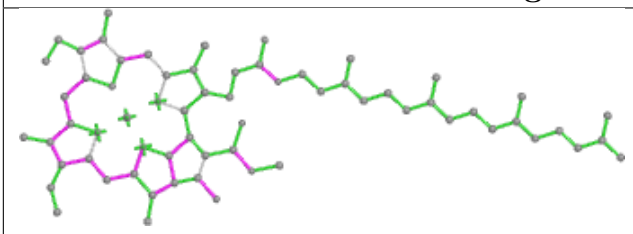


Torsions

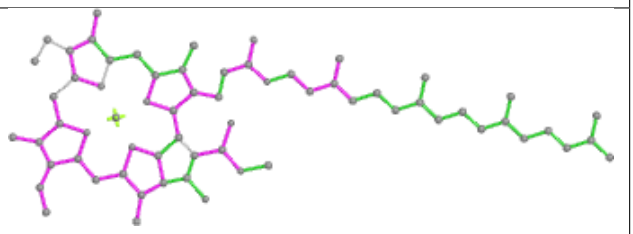


Rings

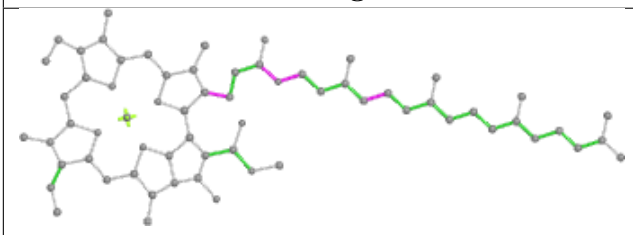
Ligand CLA C 514



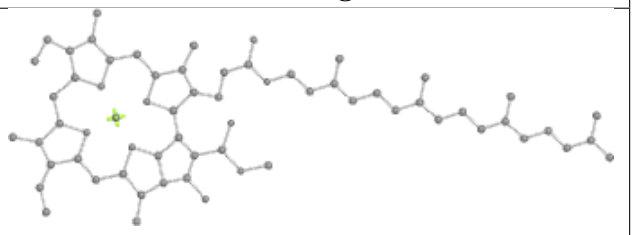
Bond lengths



Bond angles

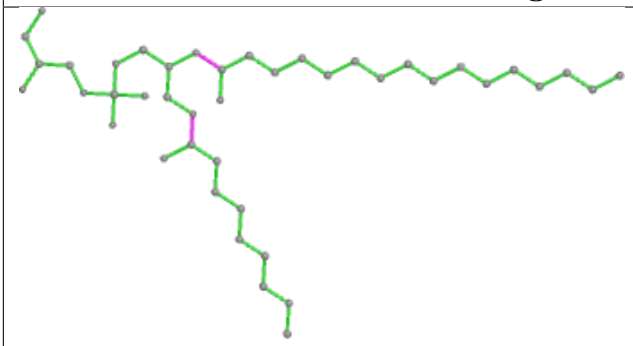


Torsions



Rings

Ligand LHG e 102



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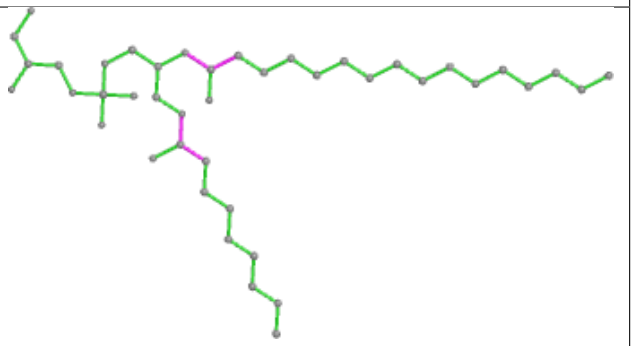
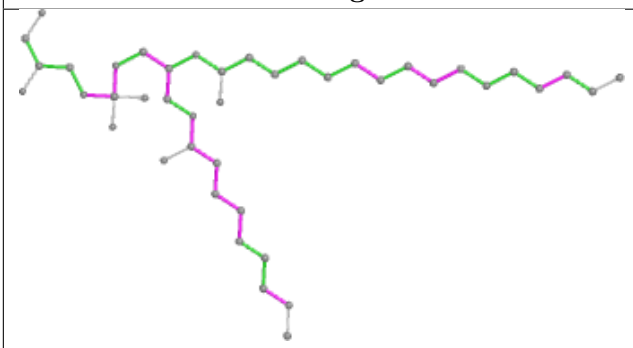


Bond angles



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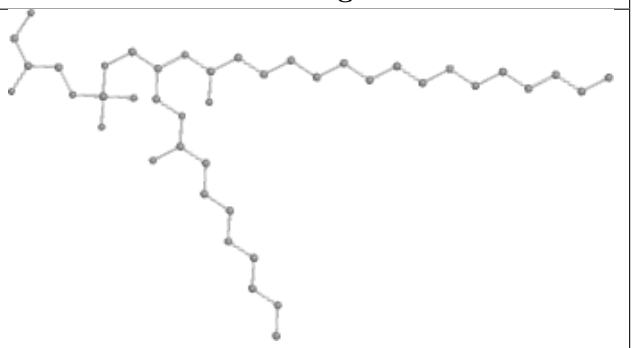
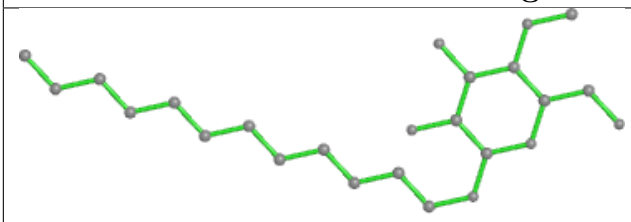
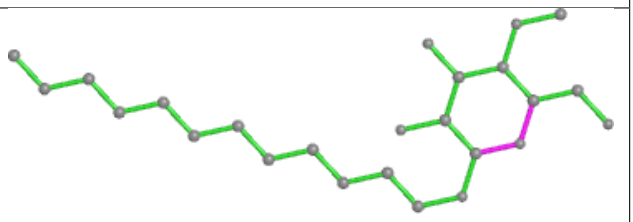


Rings

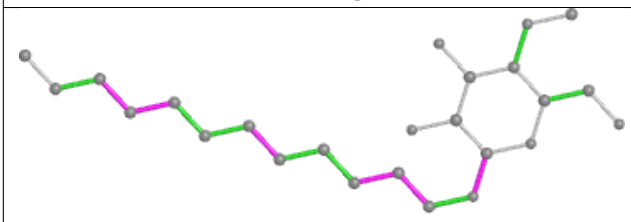
Ligand LMT T 104



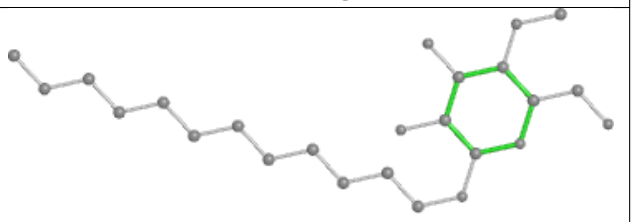
Bond lengths



Bond angles

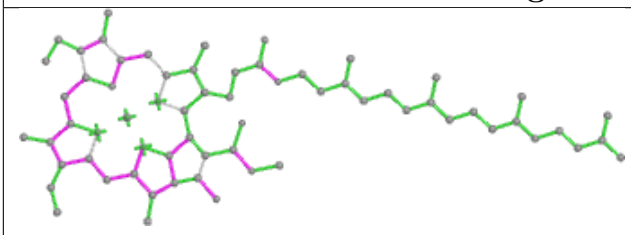


Torsions

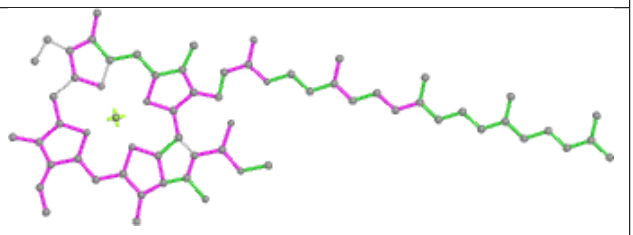


Rings

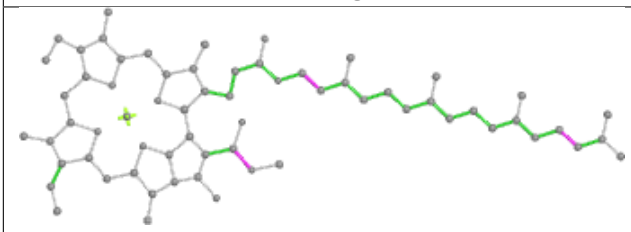
Ligand CLA d 404



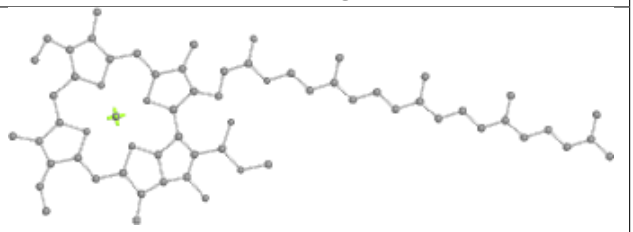
Bond lengths



Bond angles

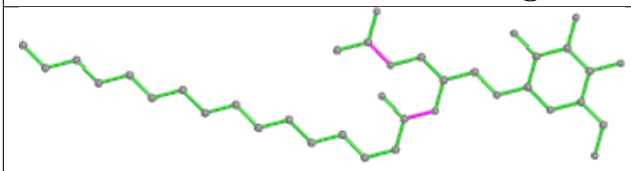


Torsions



Rings

Ligand LMG Z 101



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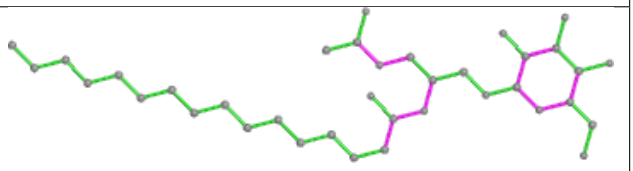
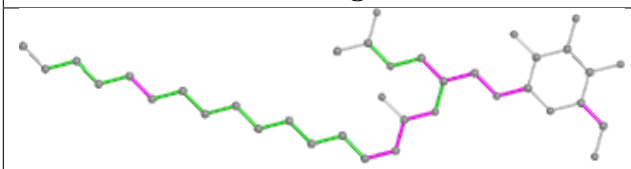
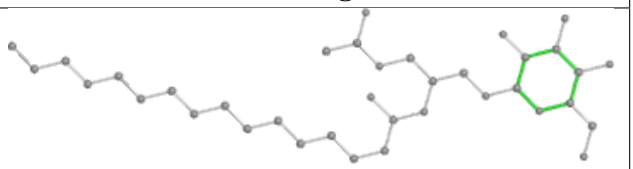


Bond angles

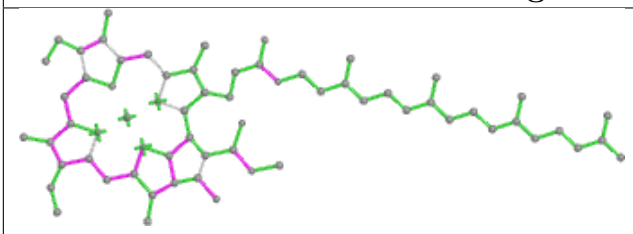


Torsions



Rings

Ligand CLA b 617



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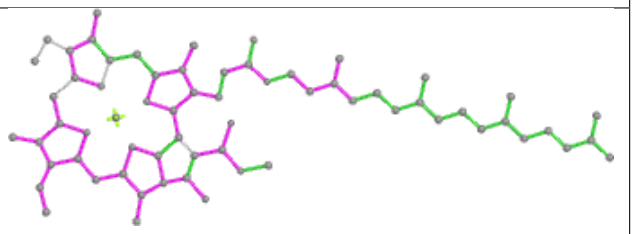
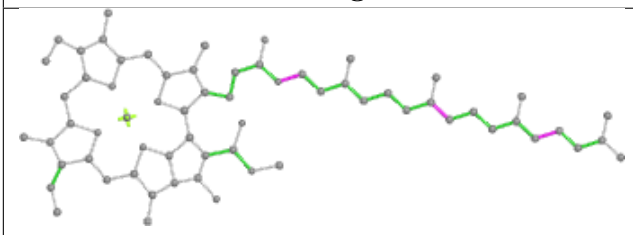
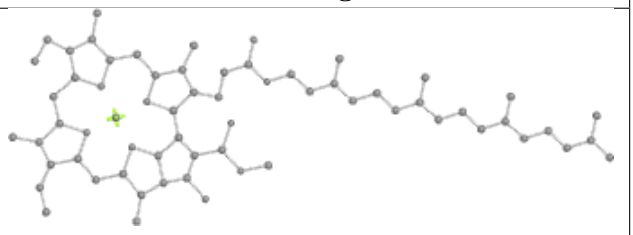


Bond angles

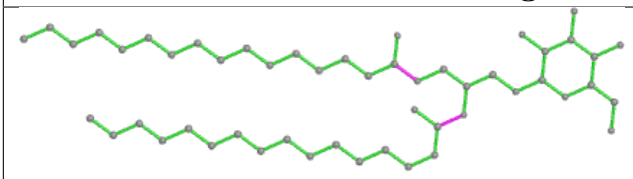


Torsions

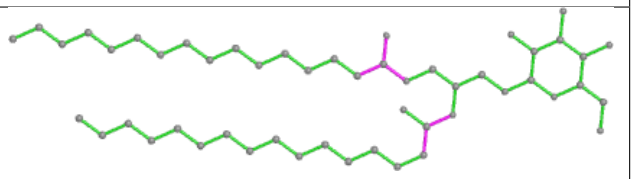


Rings

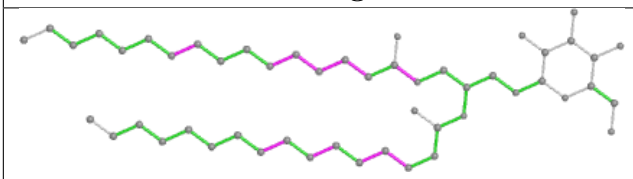
Ligand LMG C 520



Bond lengths



Bond angles



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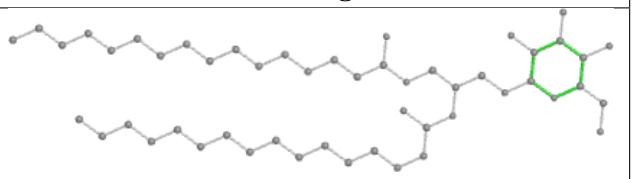
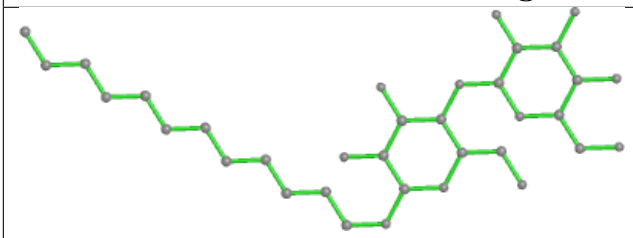
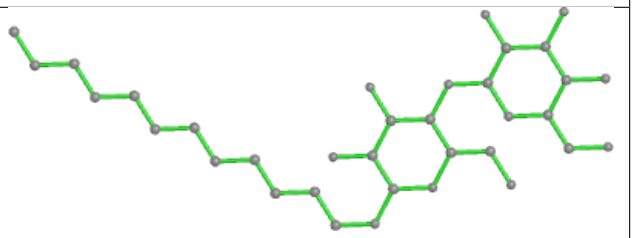


Rings

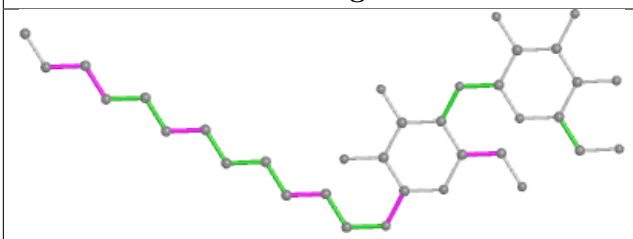
Ligand LMT M 105



Bond lengths



Bond angles



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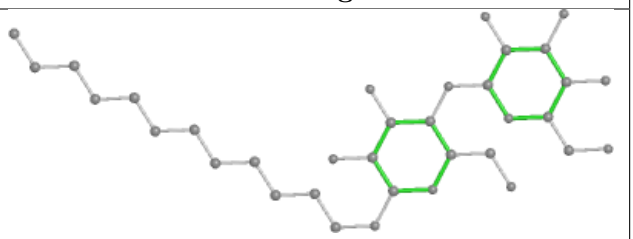
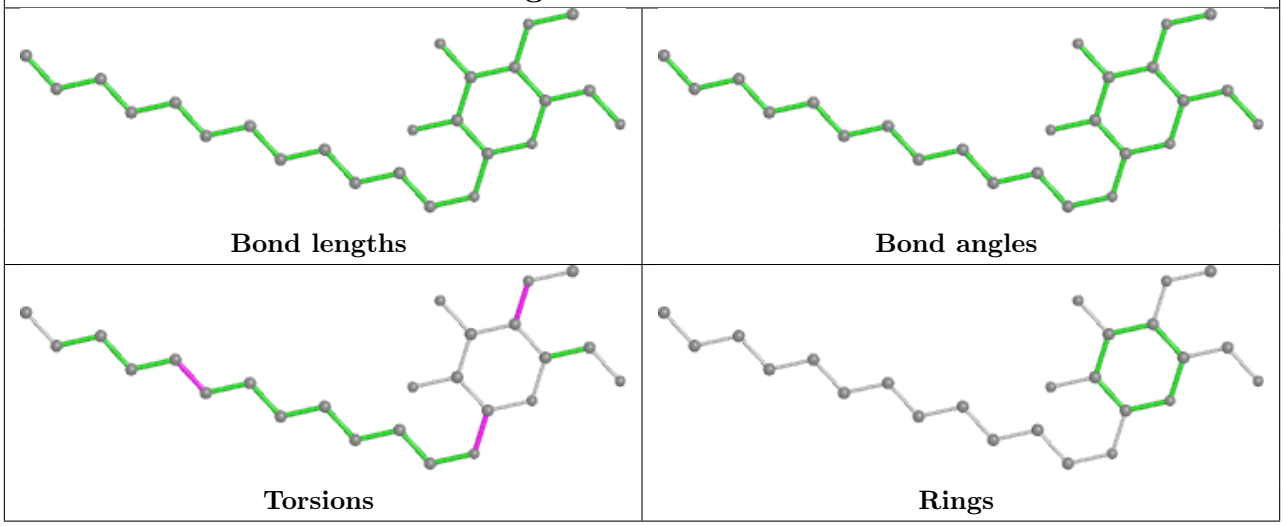
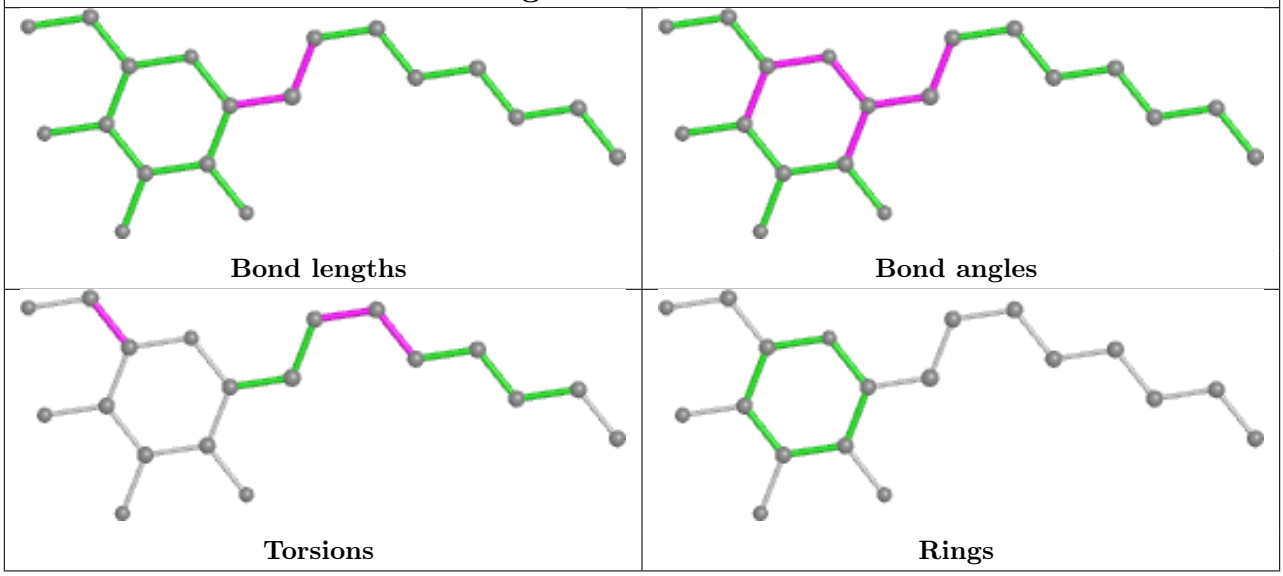


Rings

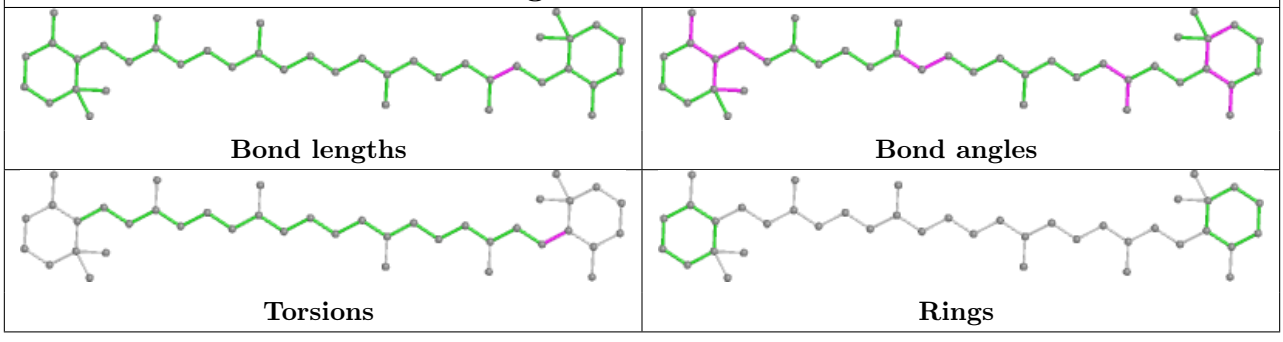
Ligand LMT b 630



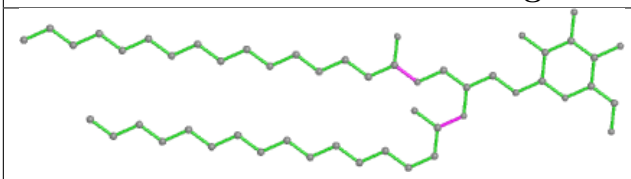
Ligand HTG C 524



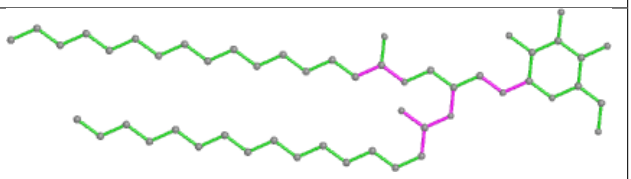
Ligand BCR b 627



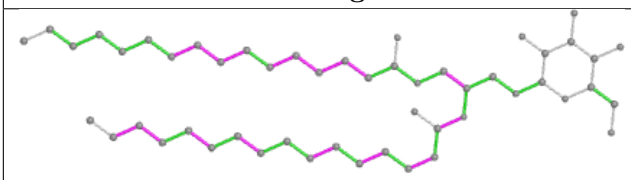
Ligand LMG a 415



Bond lengths



Bond angles



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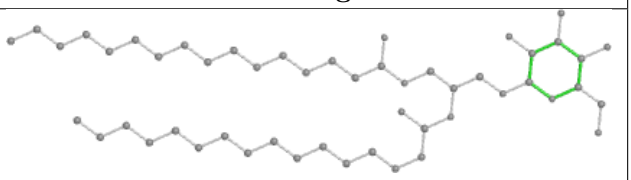
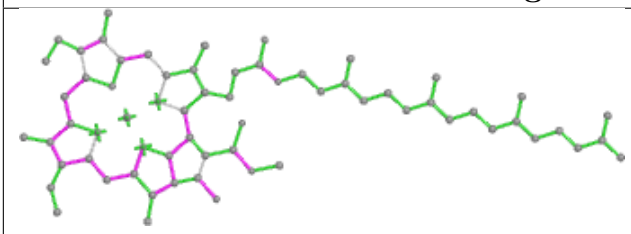


Rings

Ligand CLA B 605



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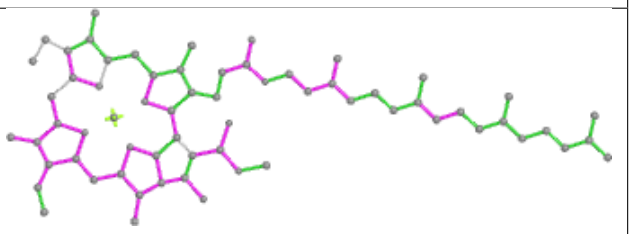
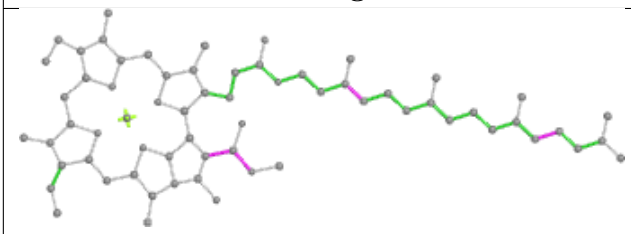
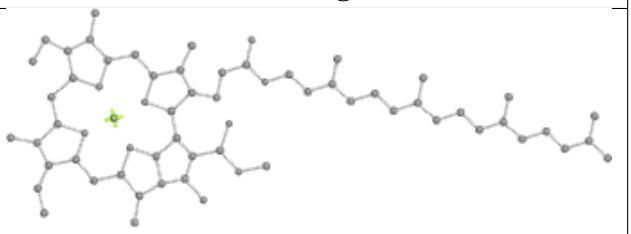


Bond angles

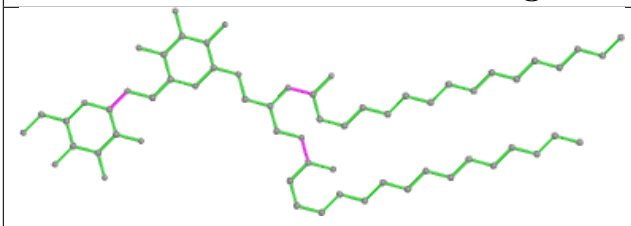


Torsions

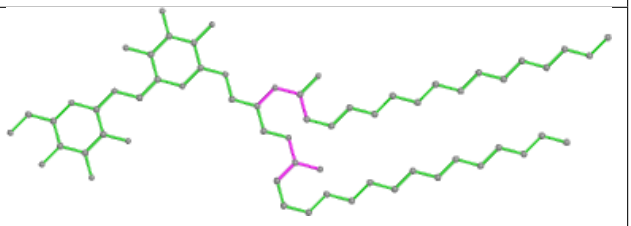


Rings

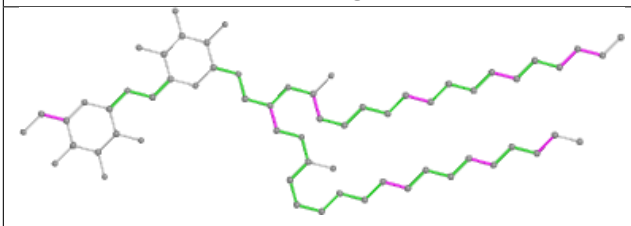
Ligand DGD h 102



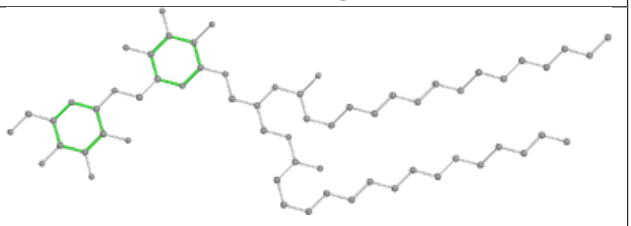
Bond lengths



Bond angles

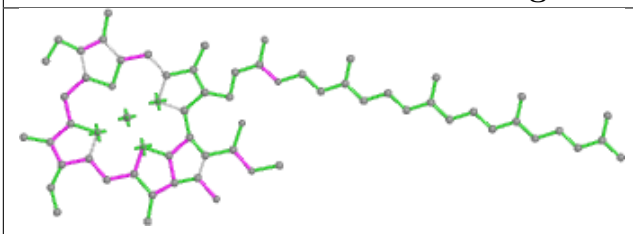


Torsions

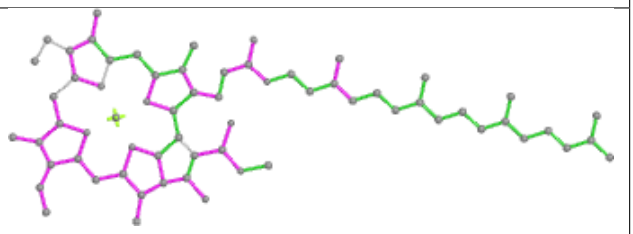


Rings

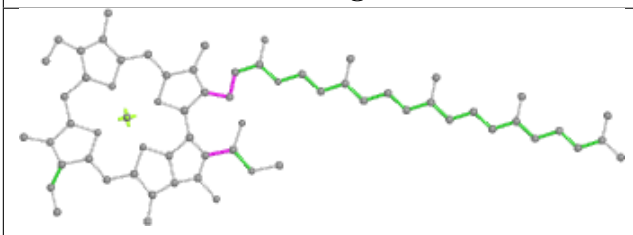
Ligand CLA c 505



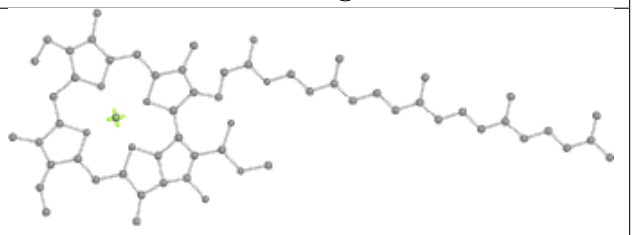
Bond lengths



Bond angles

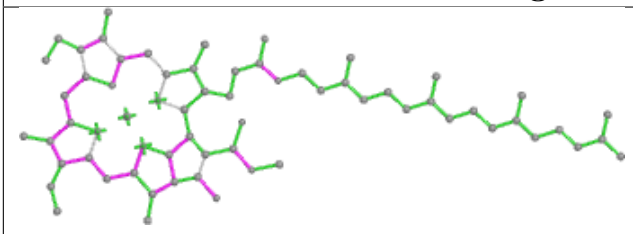


Torsions



Rings

Ligand CLA c 510



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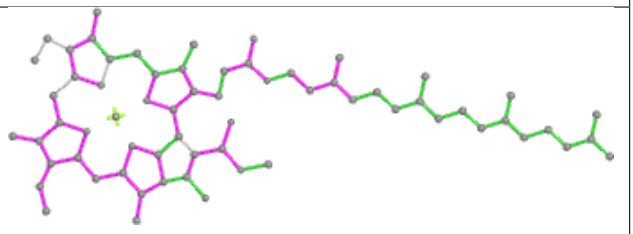
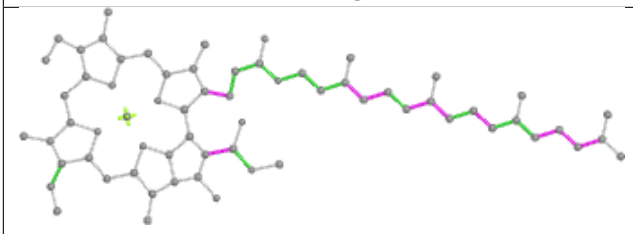
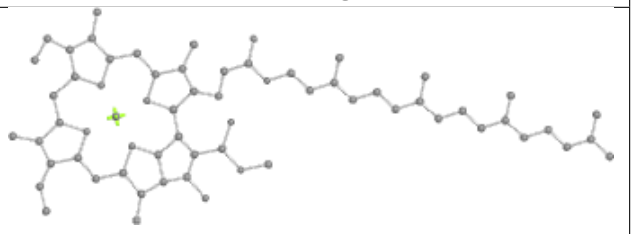


Bond angles

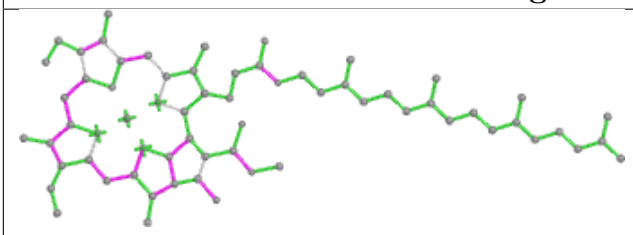


Torsions



Rings

Ligand CLA c 516



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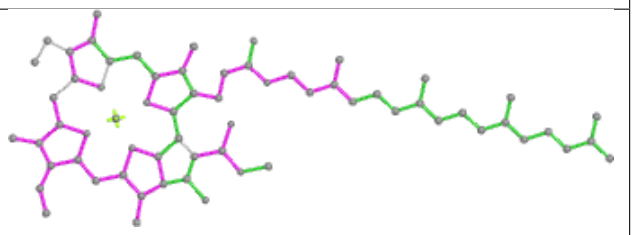
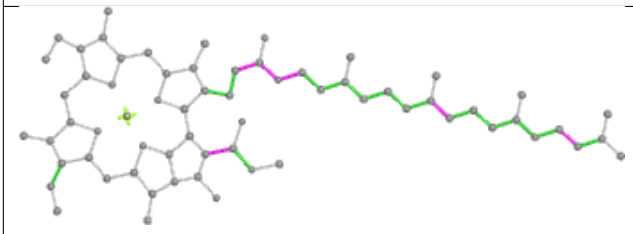
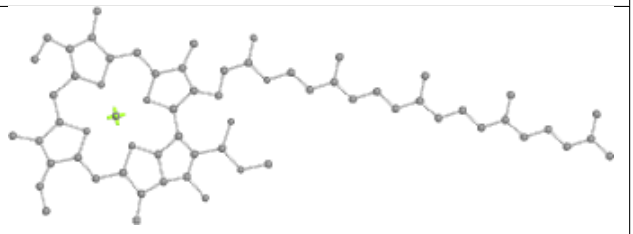


Bond angles

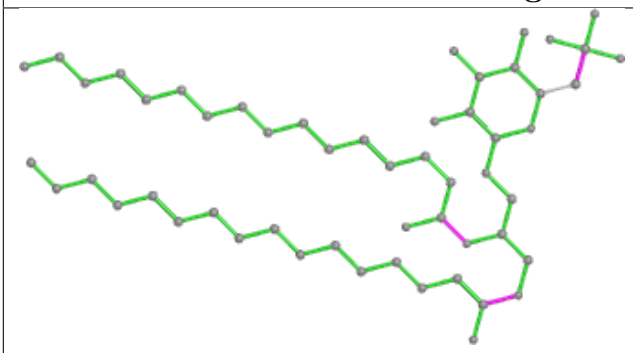


Torsions

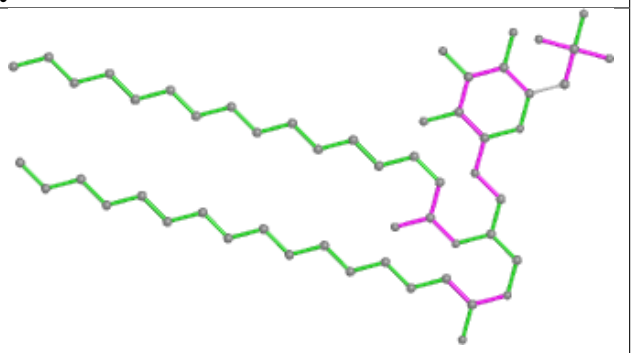


Rings

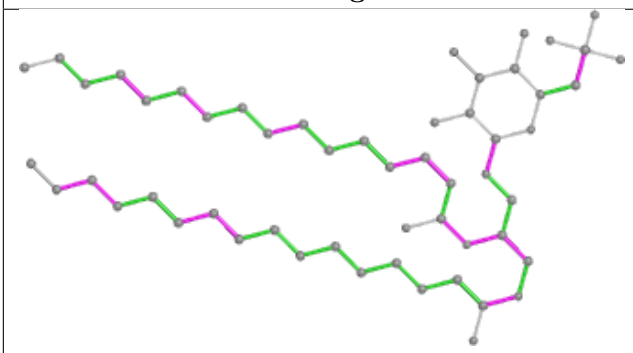
Ligand SQD B 621



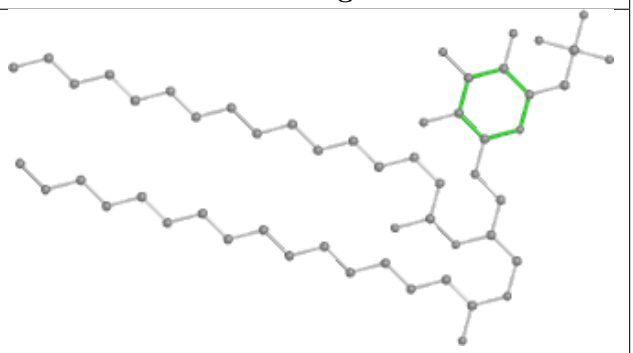
Bond lengths



Bond angles

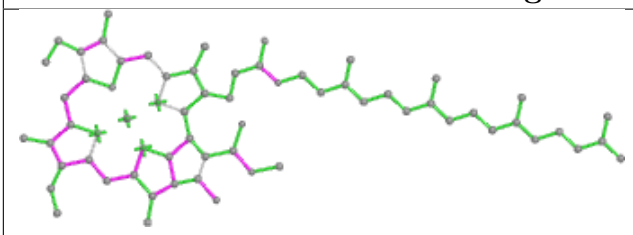


Torsions

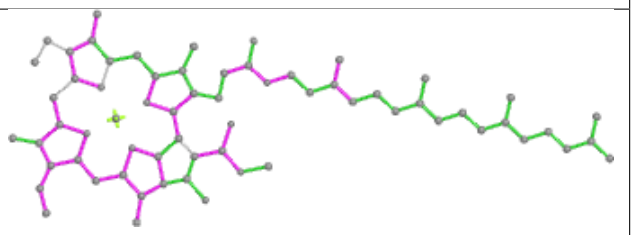


Rings

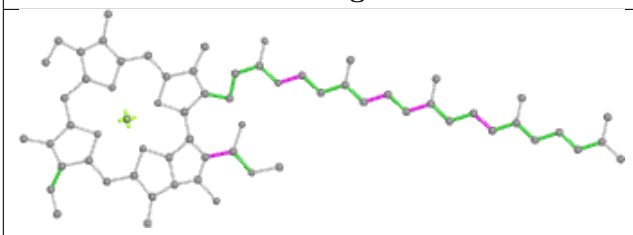
Ligand CLA B 617



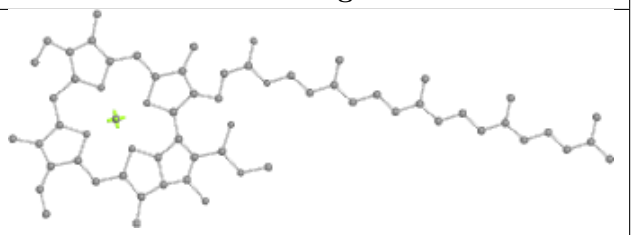
Bond lengths



Bond angles

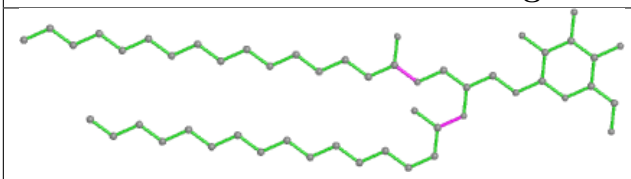


Torsions

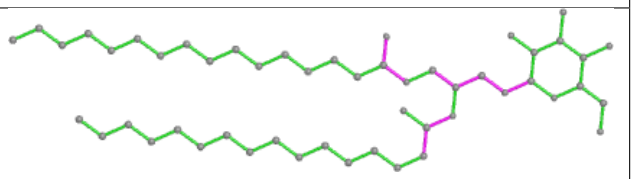


Rings

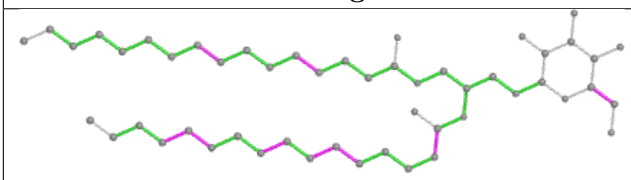
Ligand LMG J 101



Bond lengths



Bond angles



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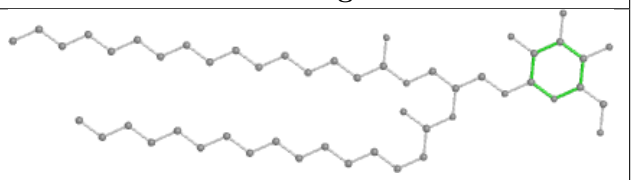
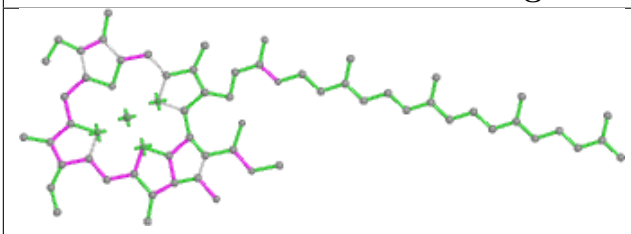
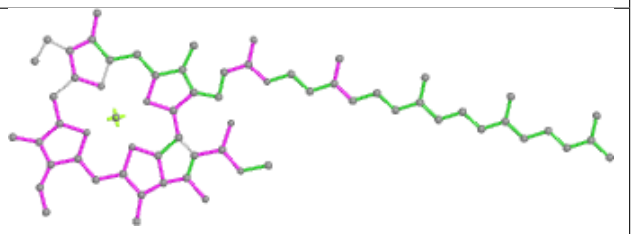


Rings

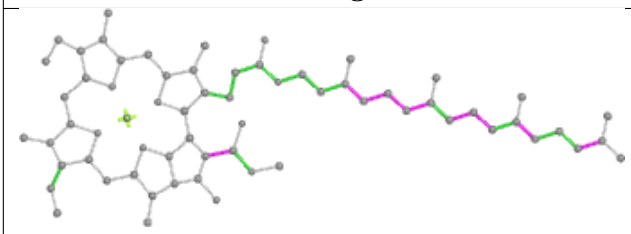
Ligand CLA B 615



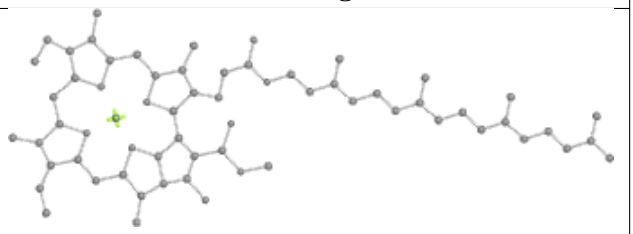
Bond lengths



Bond angles

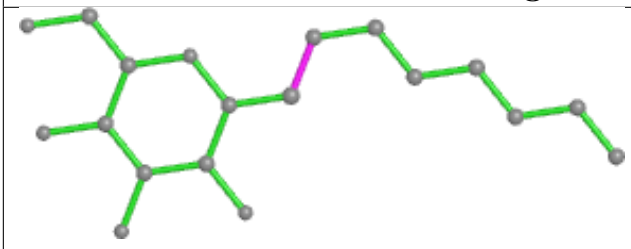


Torsions

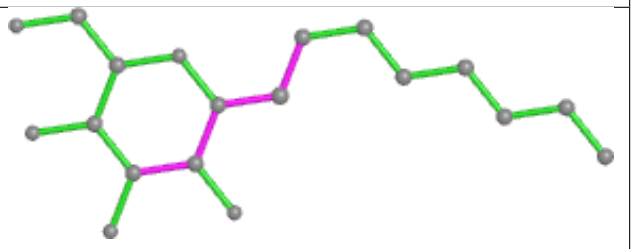


Rings

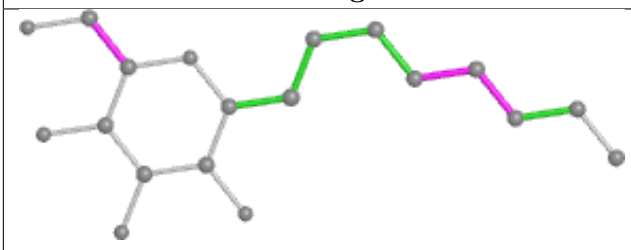
Ligand HTG b 631



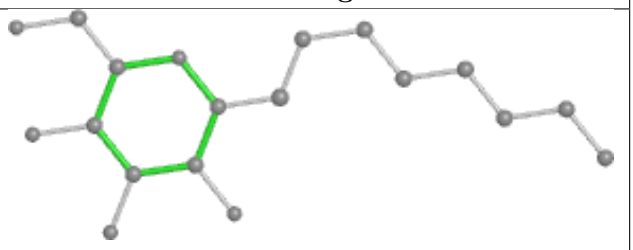
Bond lengths



Bond angles

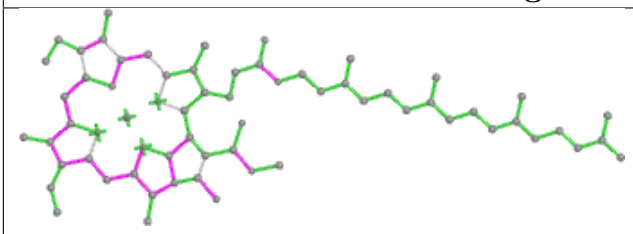


Torsions

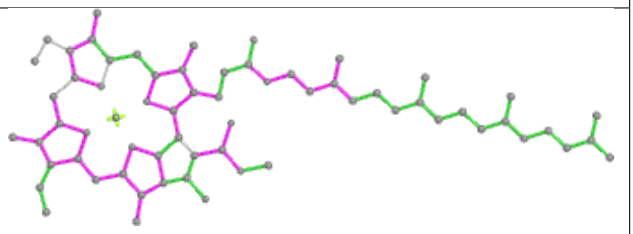


Rings

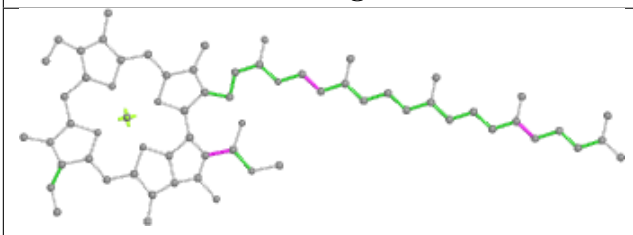
Ligand CLA B 603



Bond lengths



Bond angles



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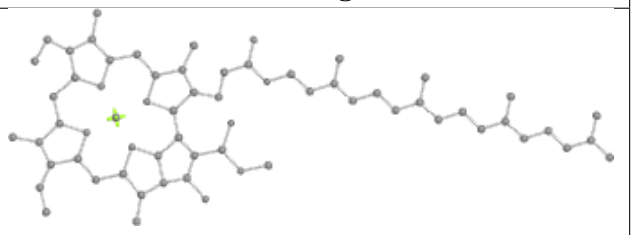
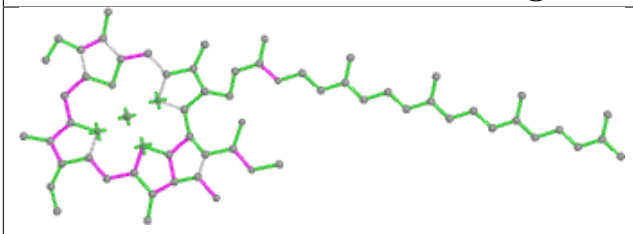
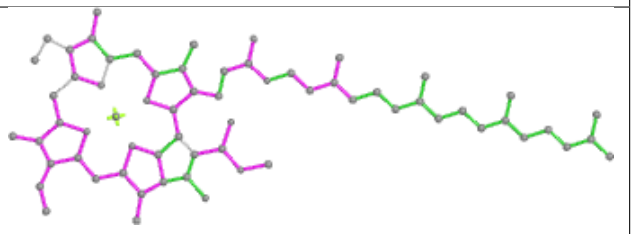


Rings

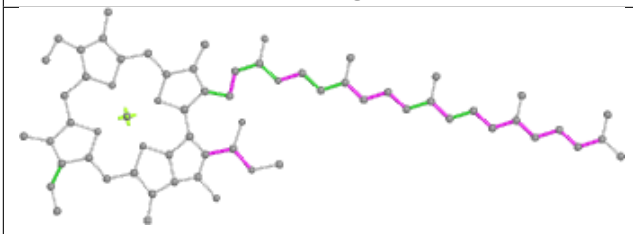
Ligand CLA b 623



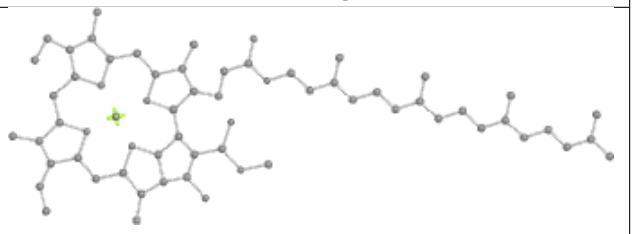
Bond lengths



Bond angles

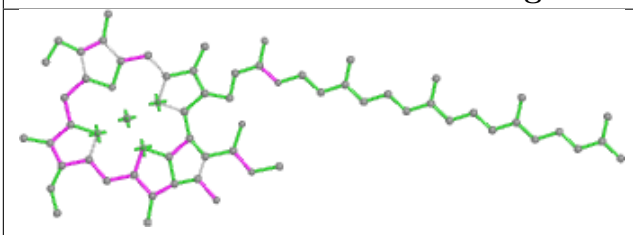


Torsions



Rings

Ligand CLA B 602



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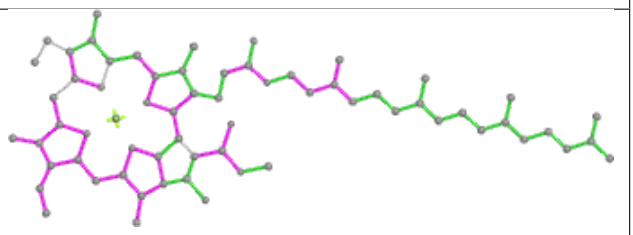
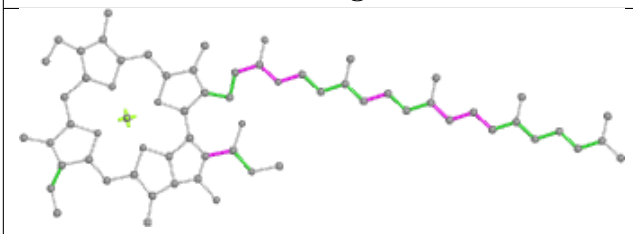


Bond angles



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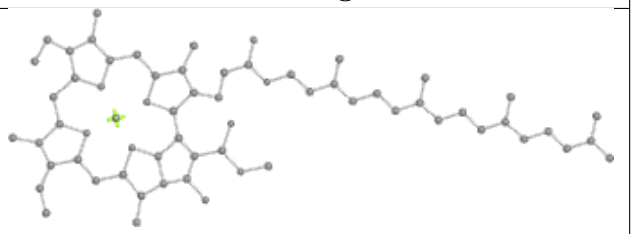
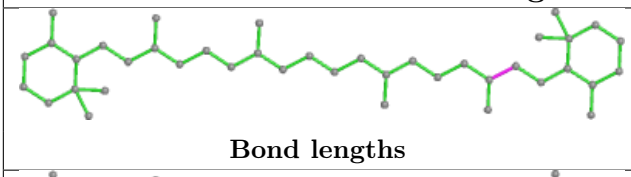


Rings

Ligand BCR c 518



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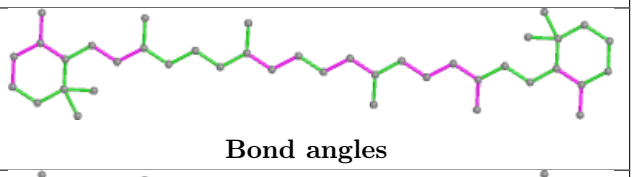
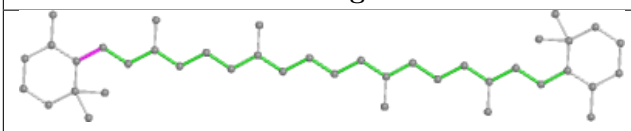


Bond angles



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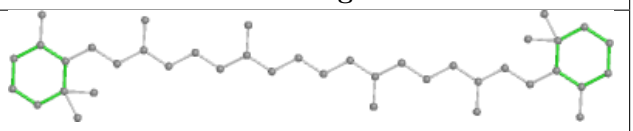
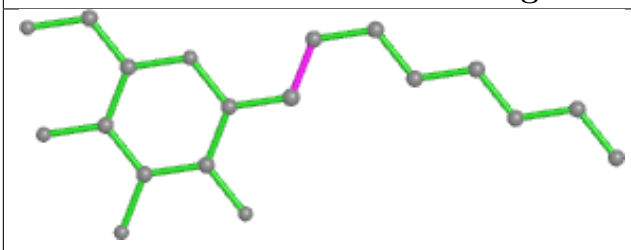
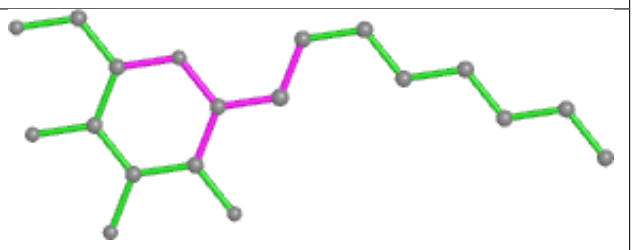


Rings

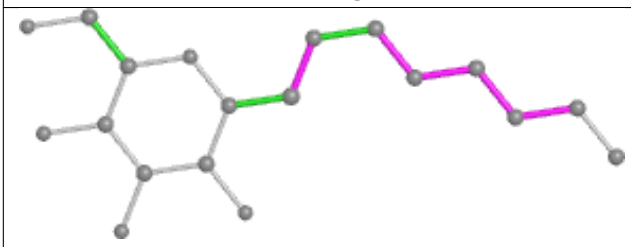
Ligand HTG B 624



Bond lengths



Bond angles



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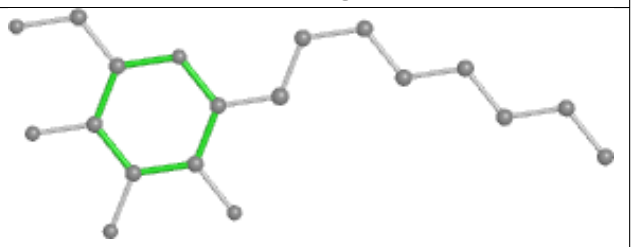
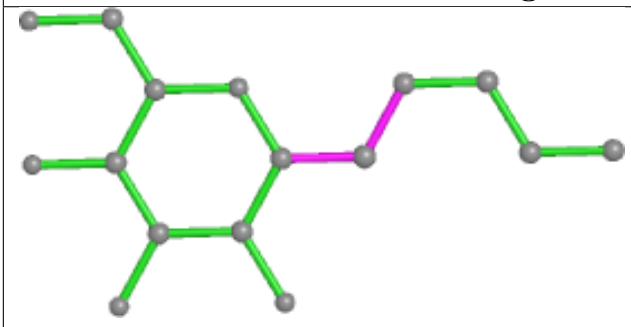


Rings

Ligand HTG D 412



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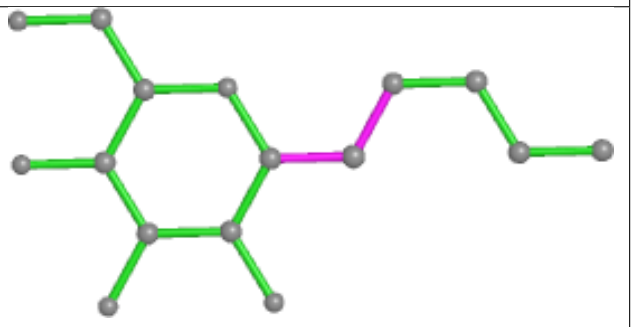
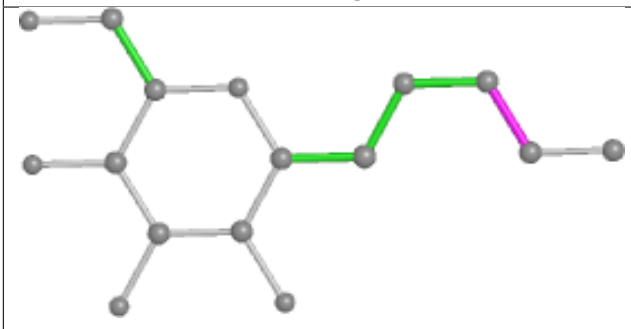


Bond angles



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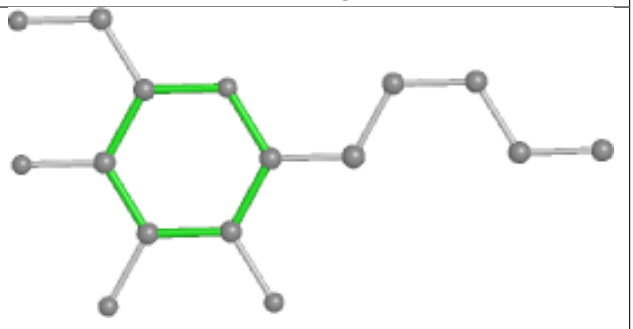
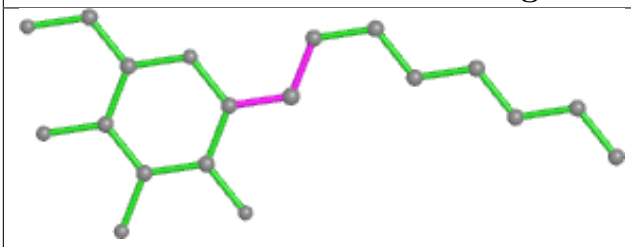
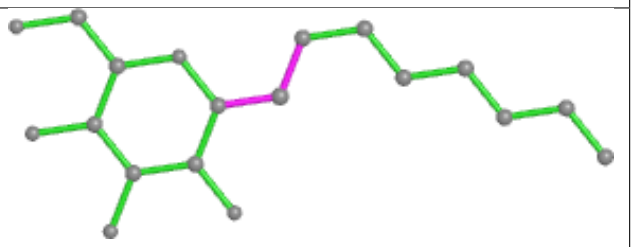


Rings

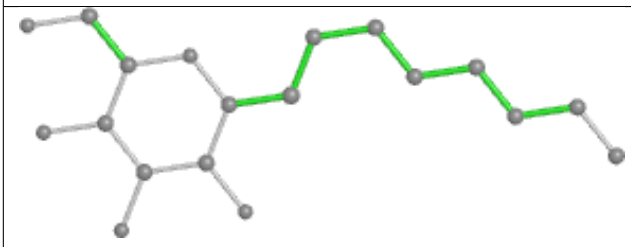
Ligand HTG B 633



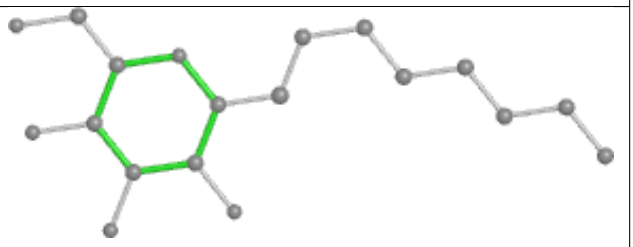
Bond lengths



Bond angles

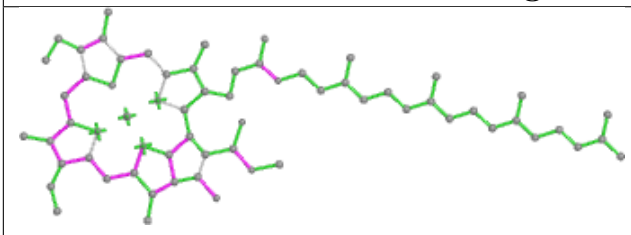


Torsions



Rings

Ligand CLA A 409



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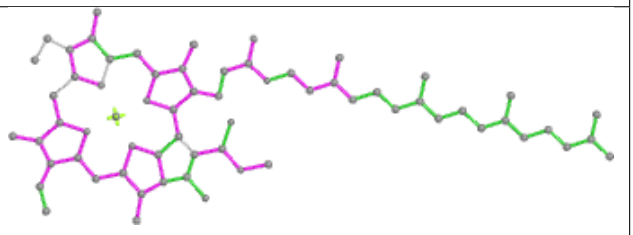
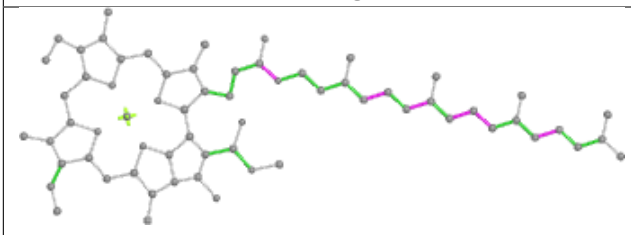
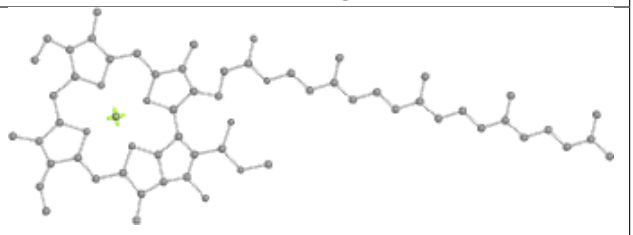


Bond angles

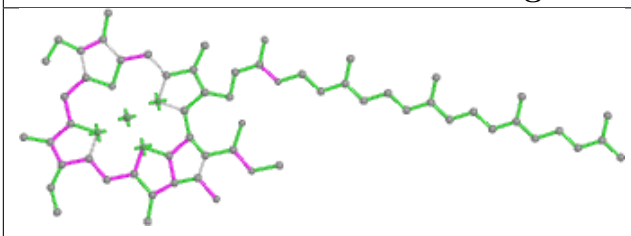


Torsions

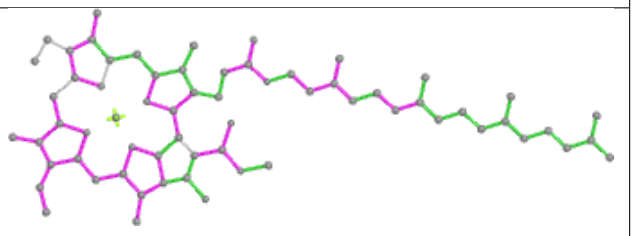


Rings

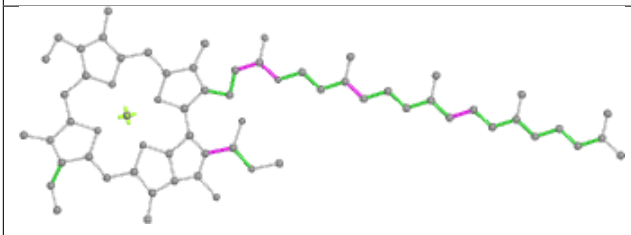
Ligand CLA C 511



Bond lengths



Bond angles



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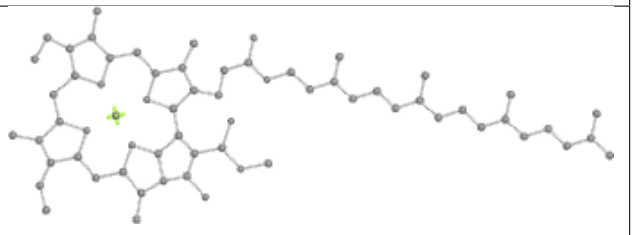
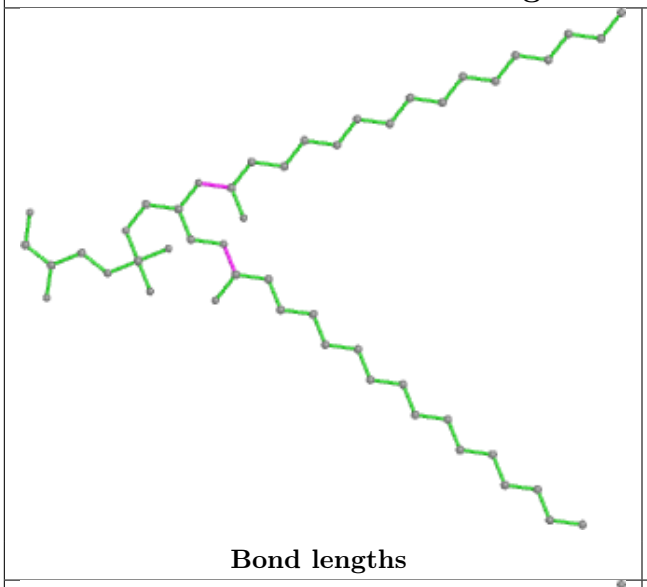


Rings

Ligand LHG D 408



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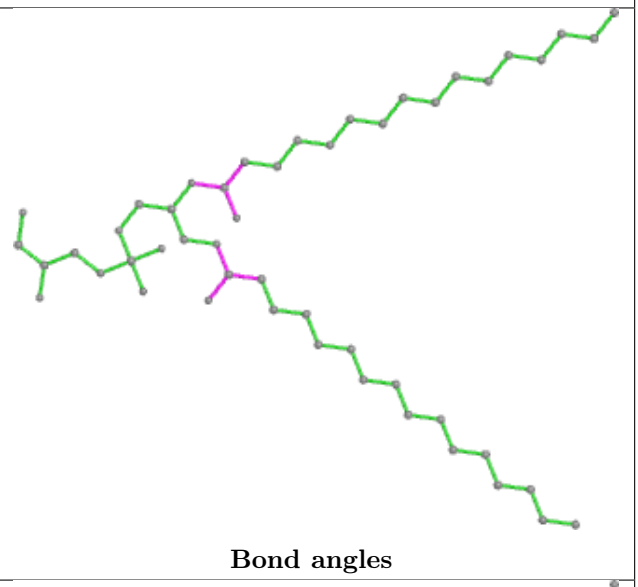
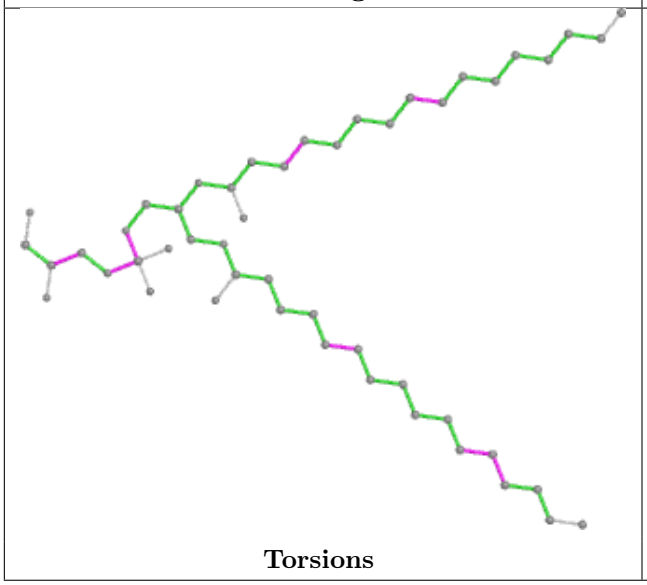


Bond angles



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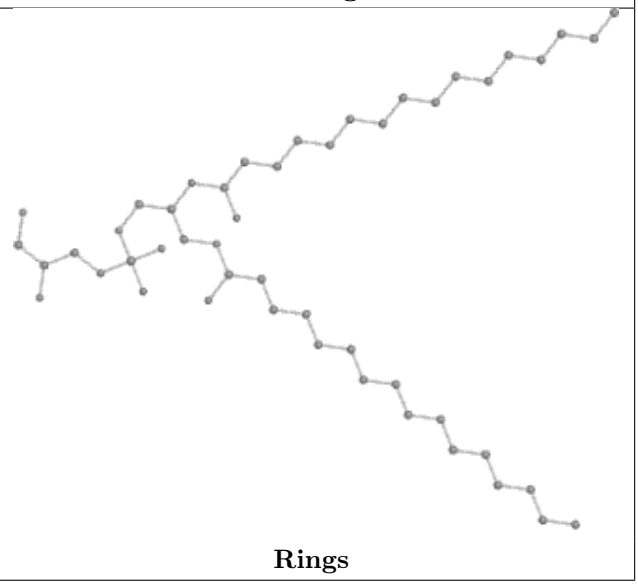
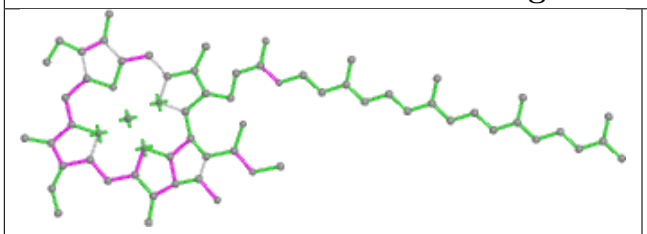
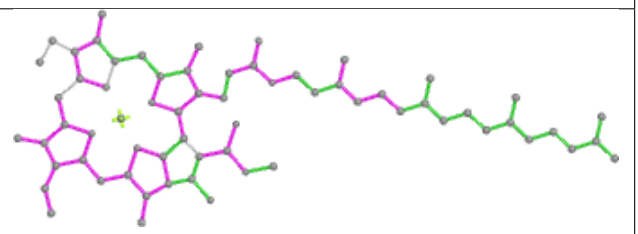


Rings

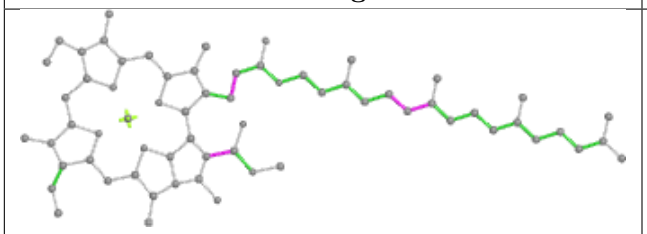
Ligand CLA b 612



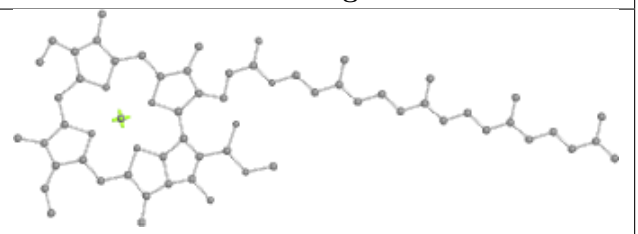
Bond lengths



Bond angles

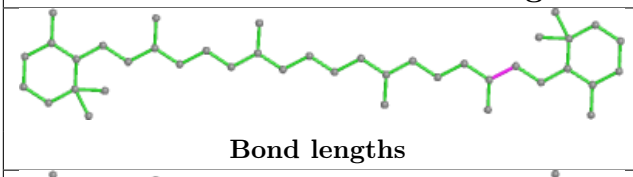


Torsions

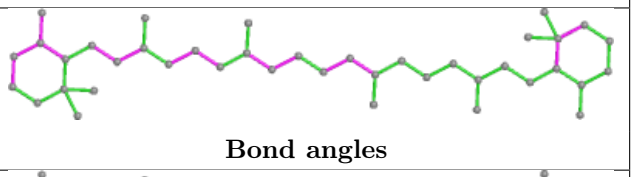


Rings

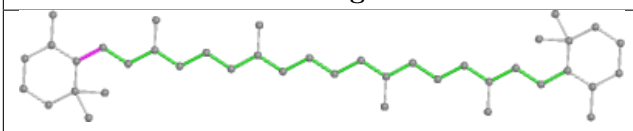
Ligand BCR b 626



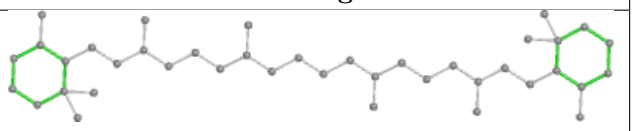
Bond lengths



Bond angles

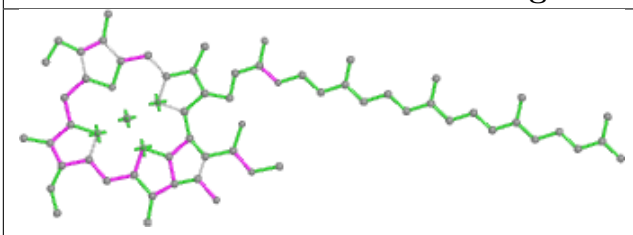


Torsions

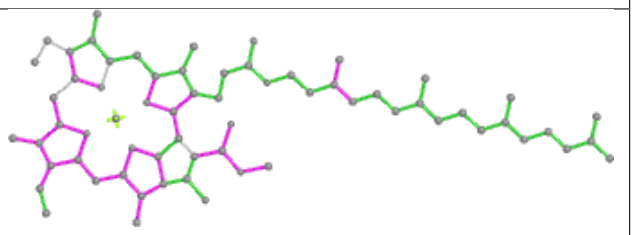


Rings

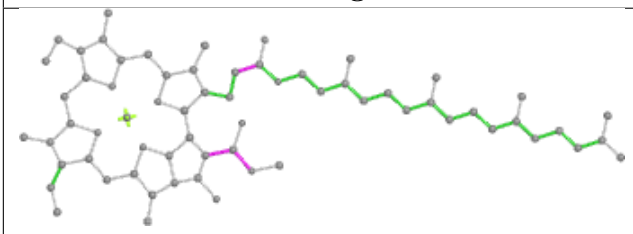
Ligand CLA c 509



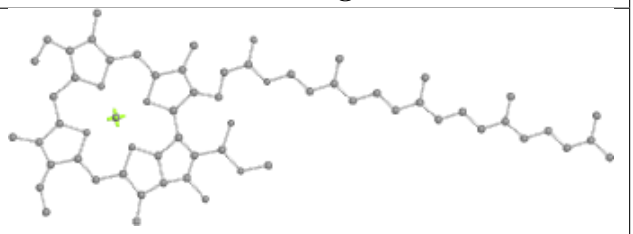
Bond lengths



Bond angles

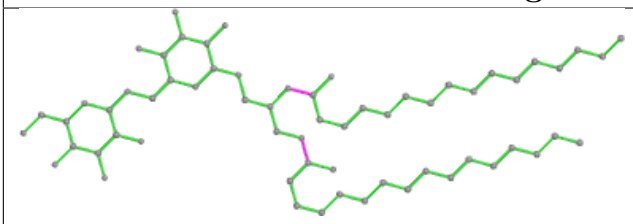


Torsions

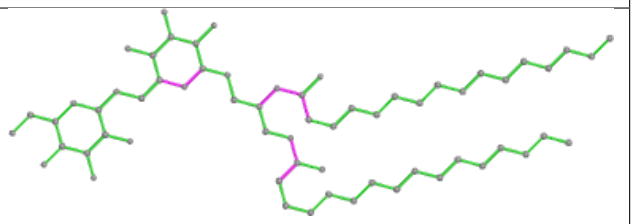


Rings

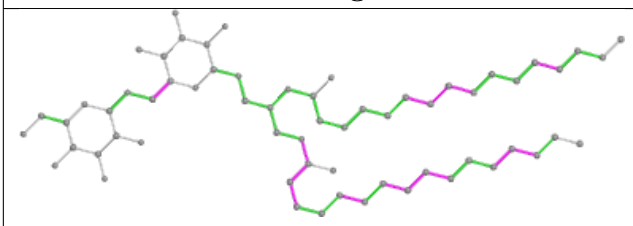
Ligand DGD c 521



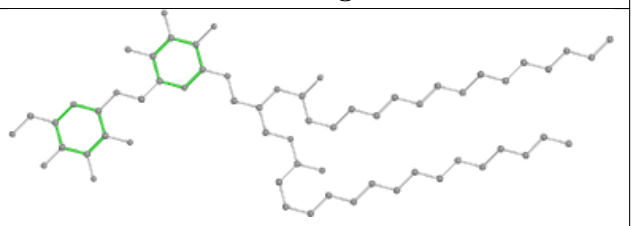
Bond lengths



Bond angles

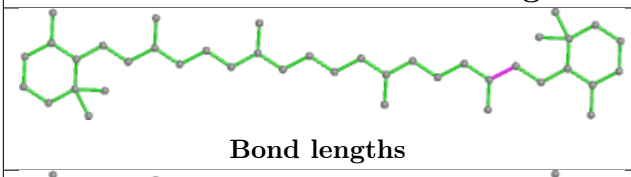


Torsions

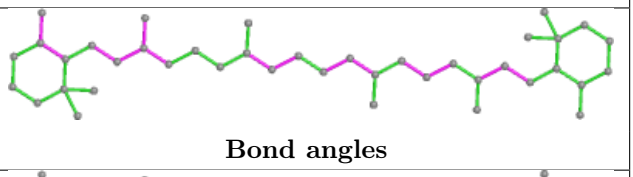


Rings

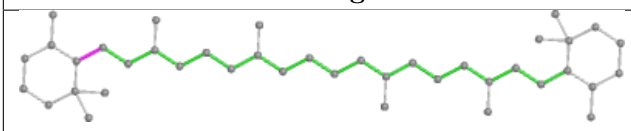
Ligand BCR B 618



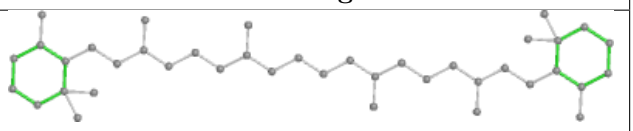
Bond lengths



Bond angles

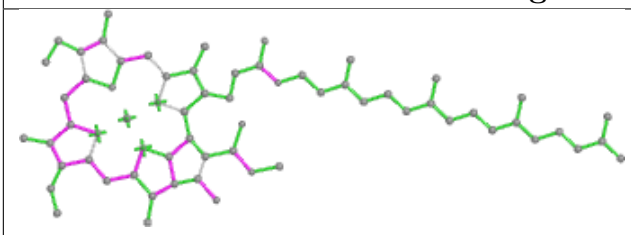


Torsions

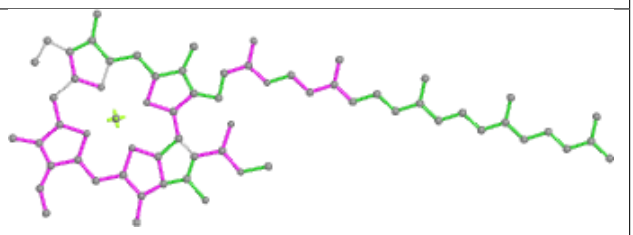


Rings

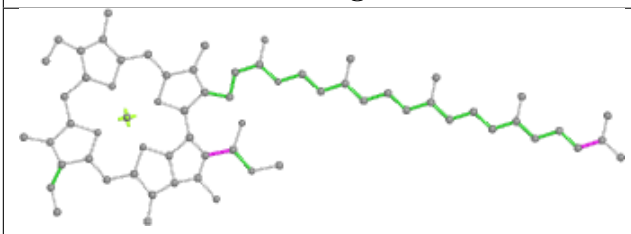
Ligand CLA c 506



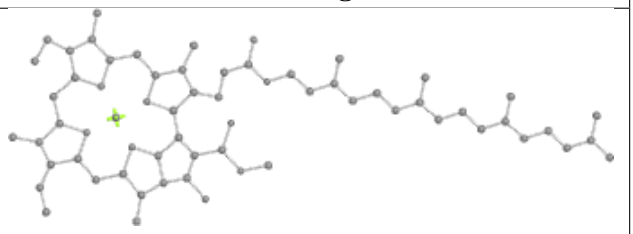
Bond lengths



Bond angles

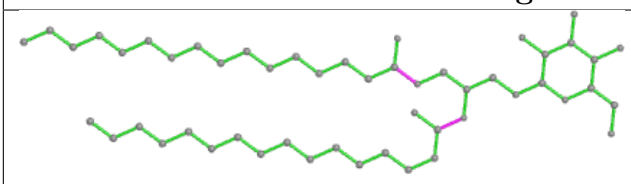


Torsions

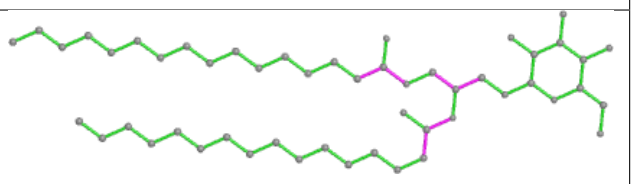


Rings

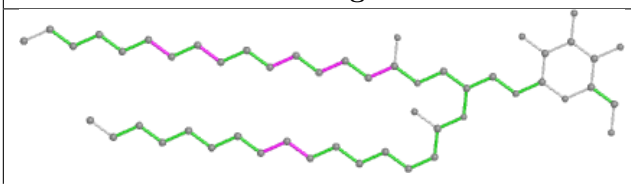
Ligand LMG M 101



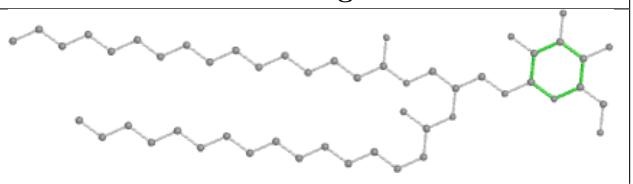
Bond lengths



Bond angles

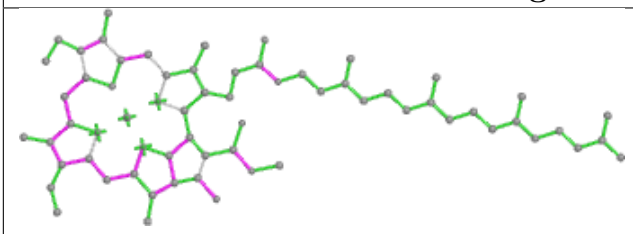


Torsions



Rings

Ligand CLA c 514



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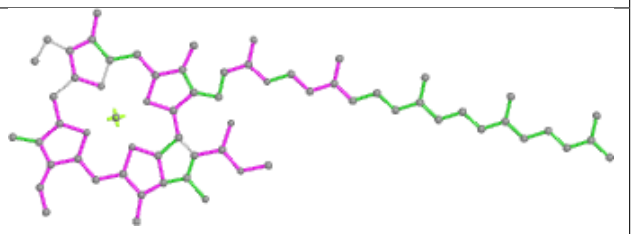
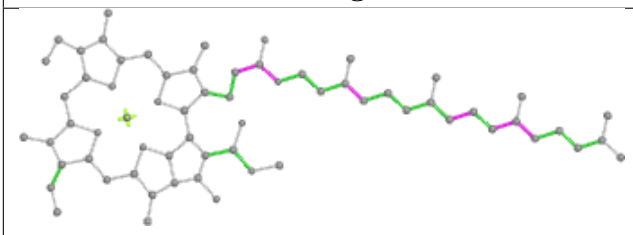


Bond angles



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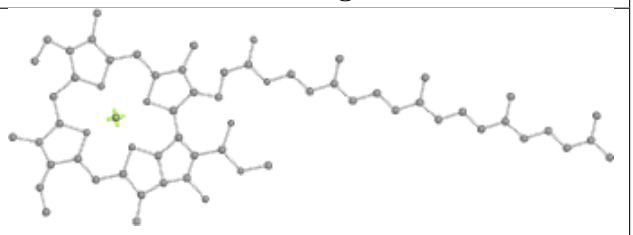
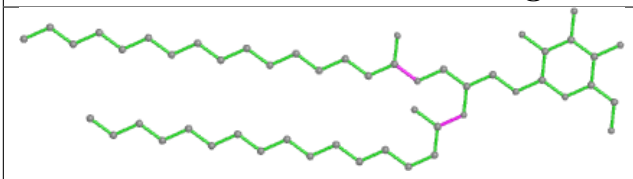
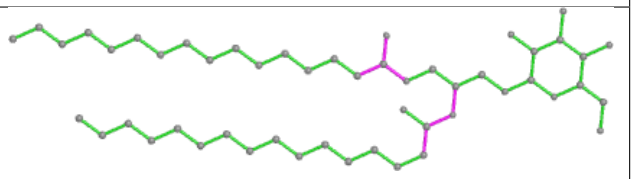


Rings

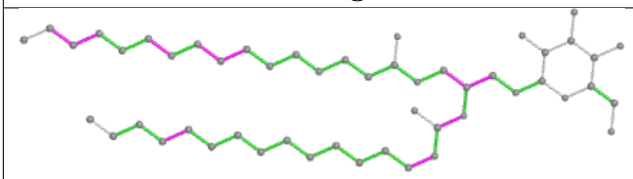
Ligand LMG c 522



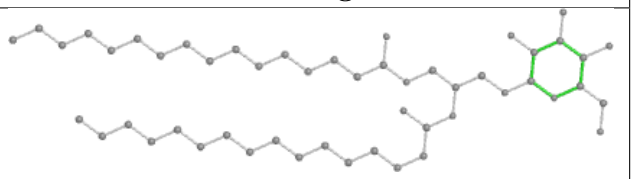
Bond lengths



Bond angles

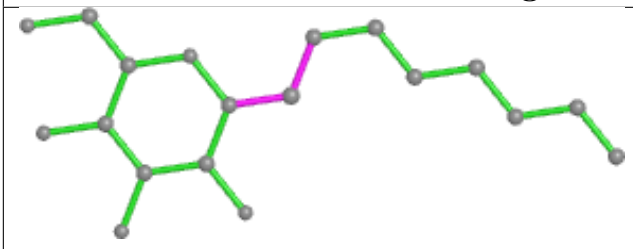


Torsions

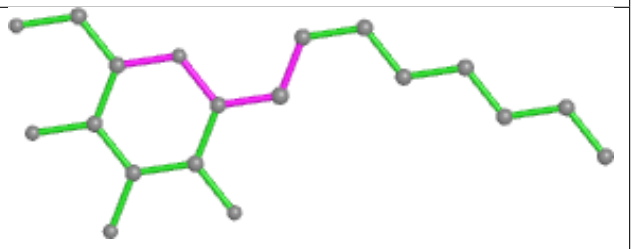


Rings

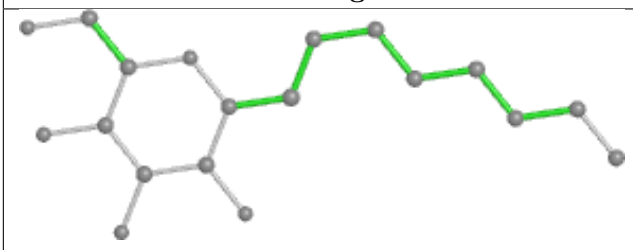
Ligand HTG C 523



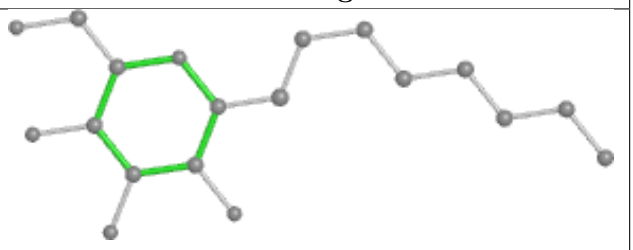
Bond lengths



Bond angles

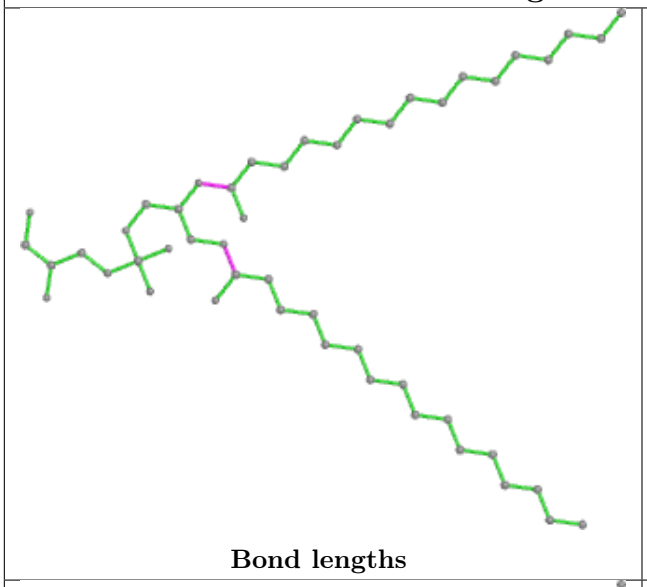


Torsions

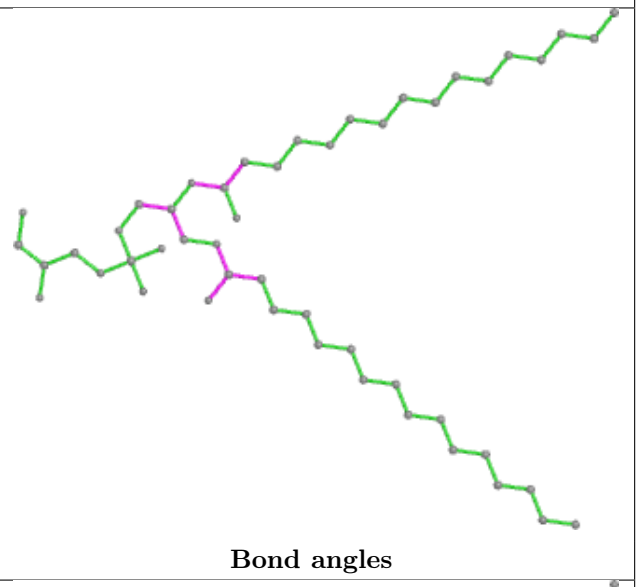


Rings

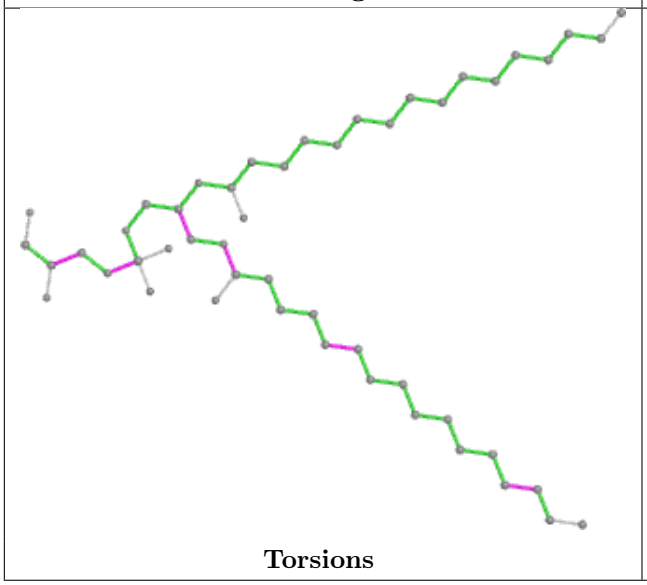
Ligand LHG d 408



Bond lengths



Bond angles



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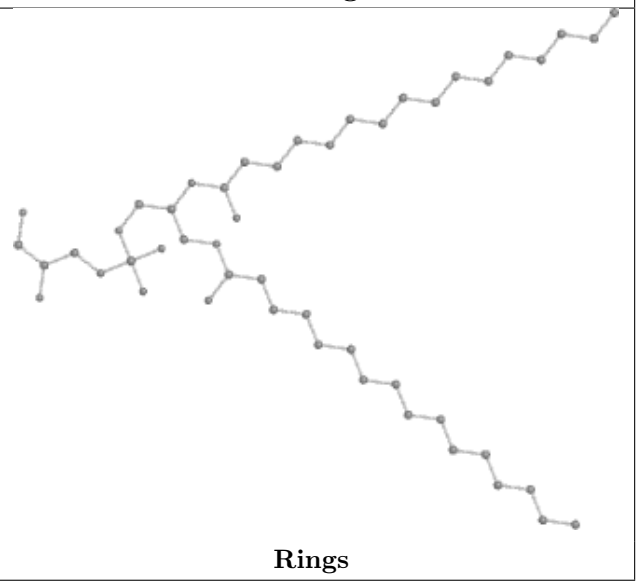
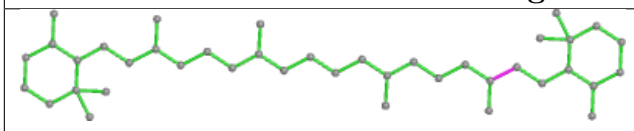
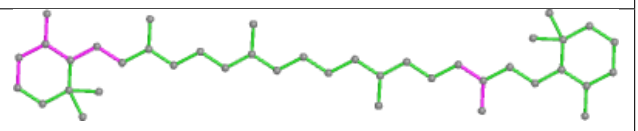


Rings

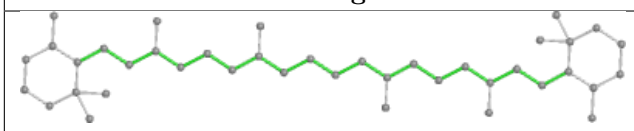
Ligand BCR a 413



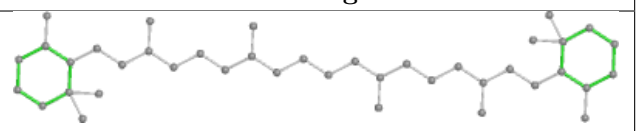
Bond lengths



Bond angles

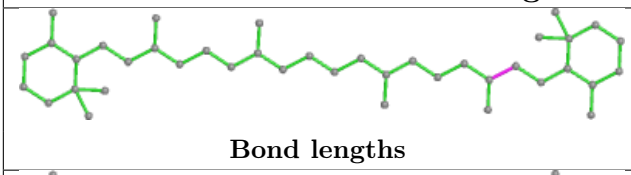


Torsions

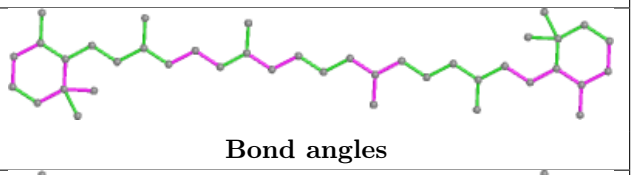


Rings

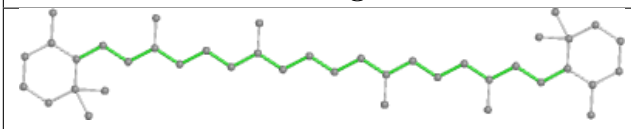
Ligand BCR B 620



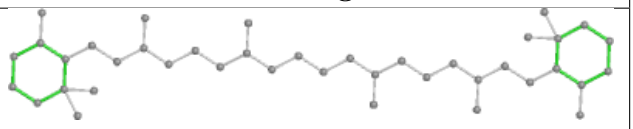
Bond lengths



Bond angles

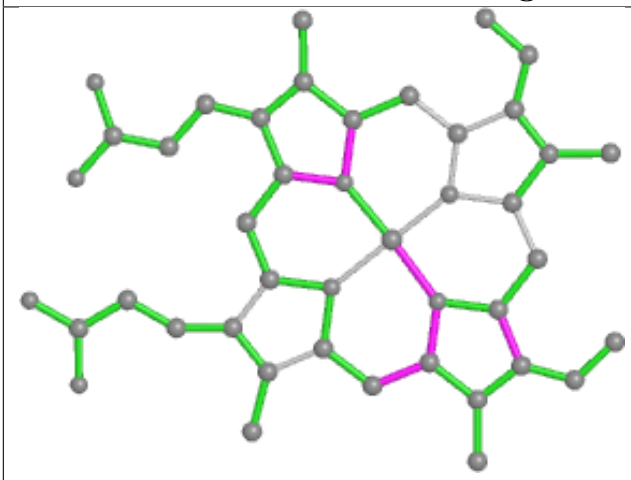


Torsions

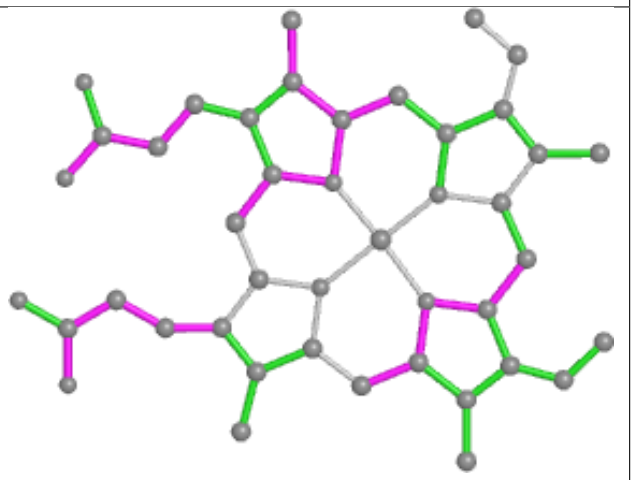


Rings

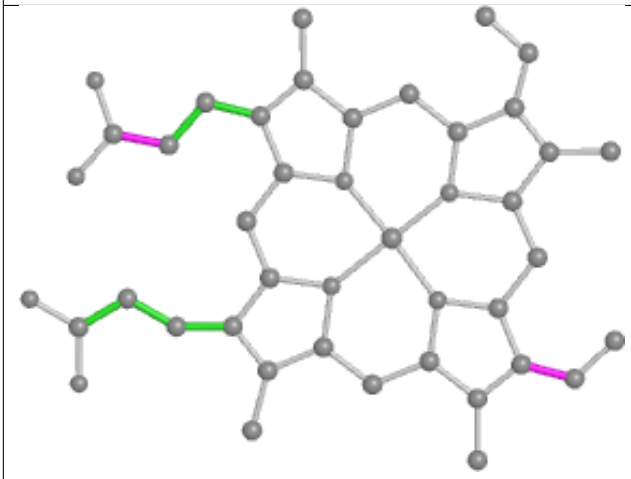
Ligand HEM V 205



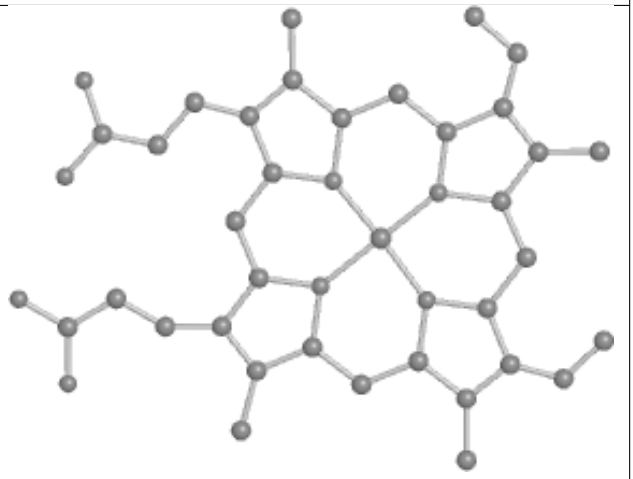
Bond lengths



Bond angles

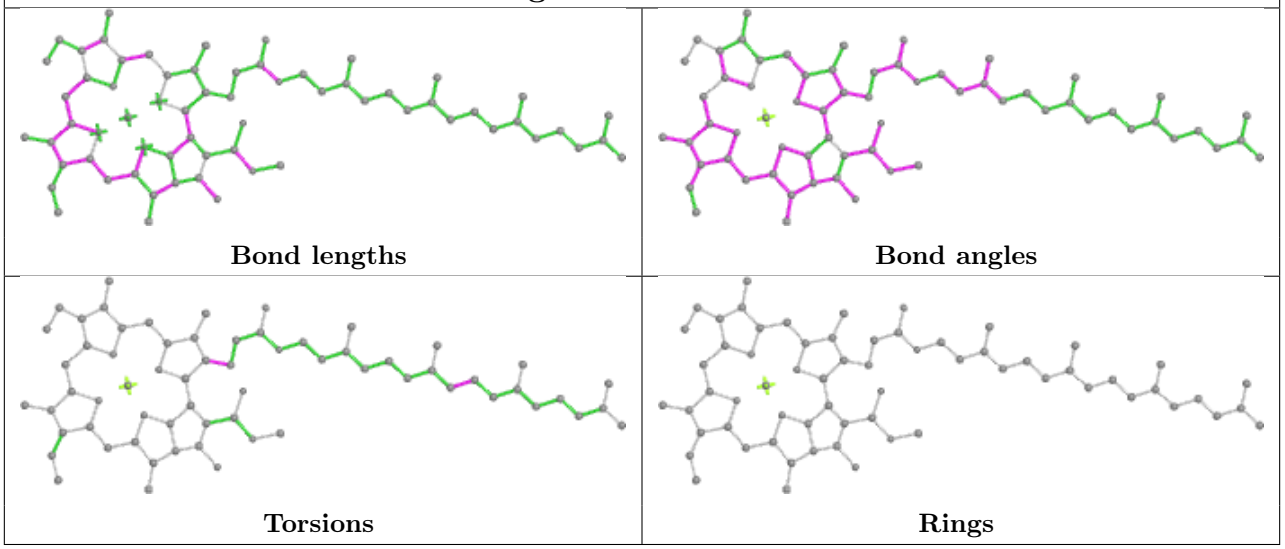


Torsions

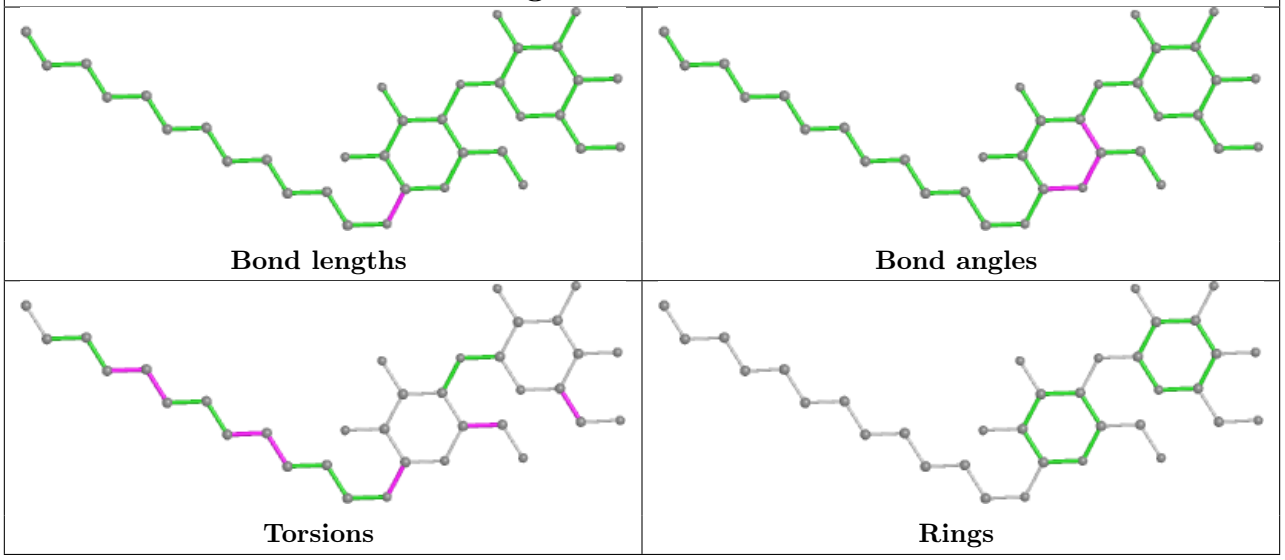


Rings

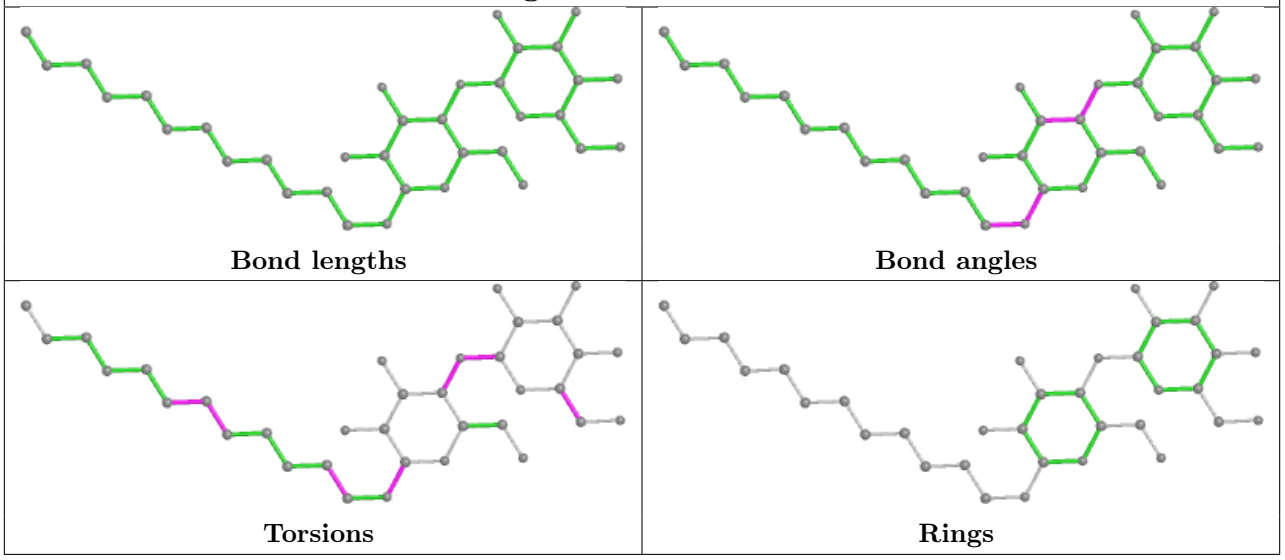
Ligand CLA b 621



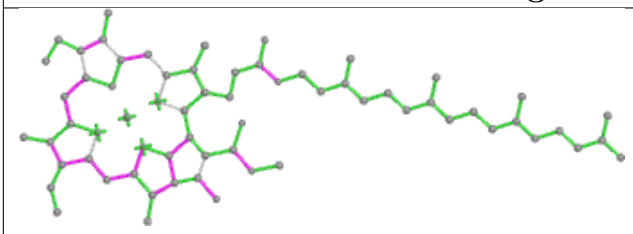
Ligand LMT a 404

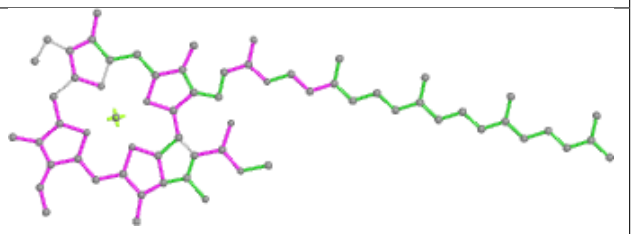


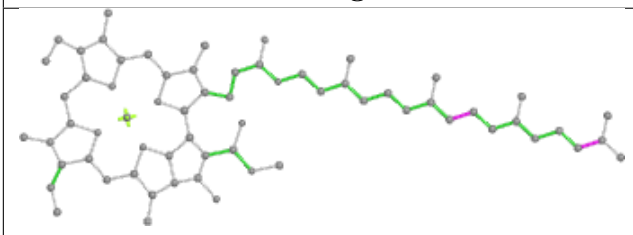
Ligand LMT B 622

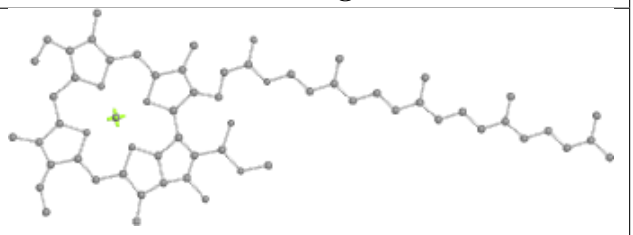


Ligand CLA b 620

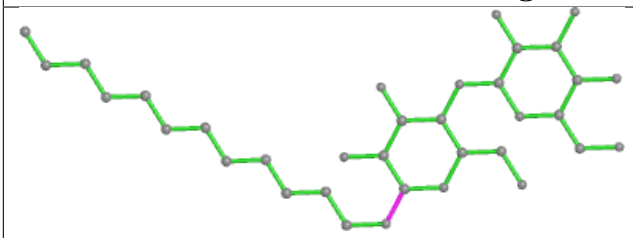

Bond lengths

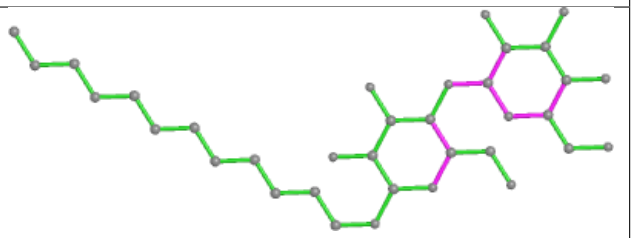

Bond angles

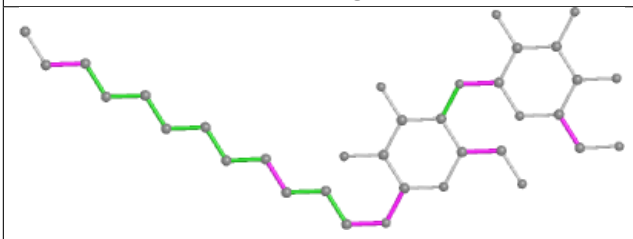

Torsions

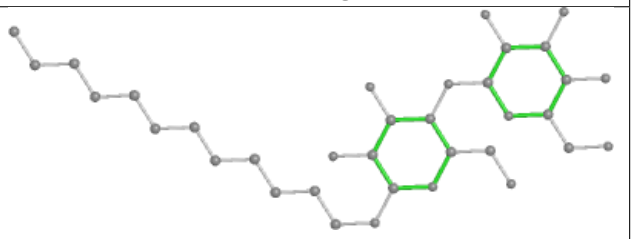

Rings

Ligand LMT M 104

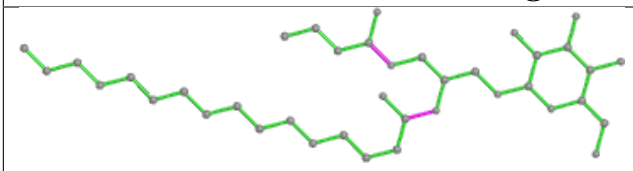

Bond lengths

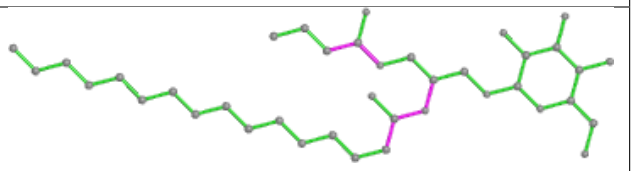

Bond angles

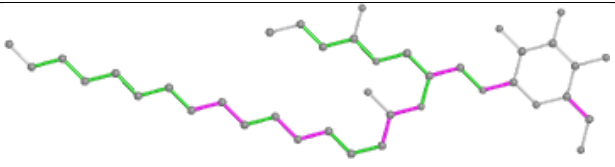

Torsions

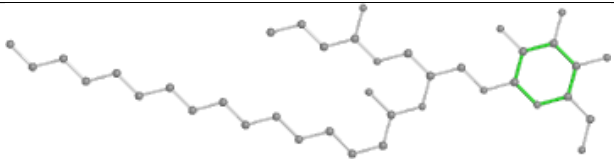

Rings

Ligand LMG z 101

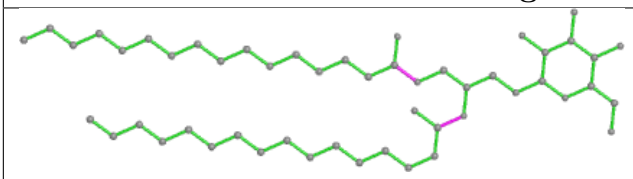

Bond lengths


Bond angles

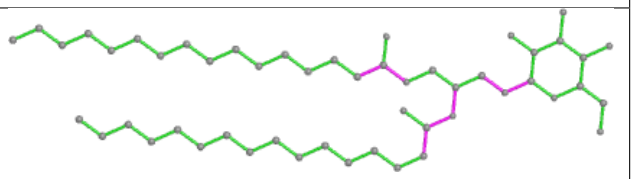

Torsions


Rings

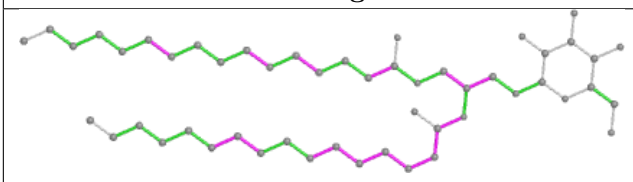
Ligand LMG C 501



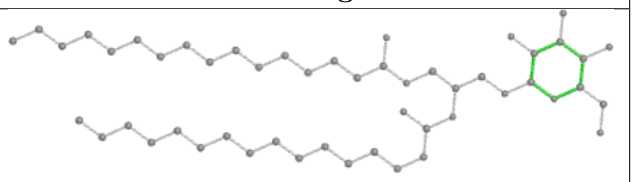
Bond lengths



Bond angles

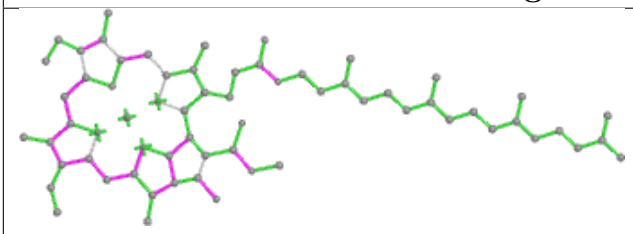


Torsions

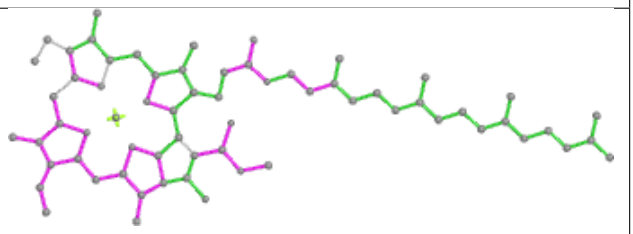


Rings

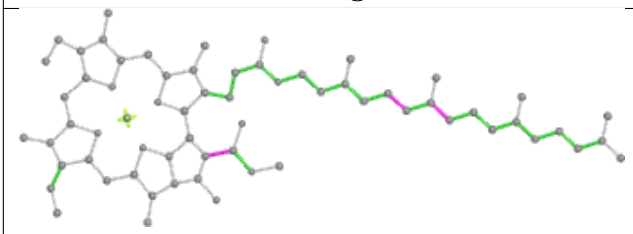
Ligand CLA C 508



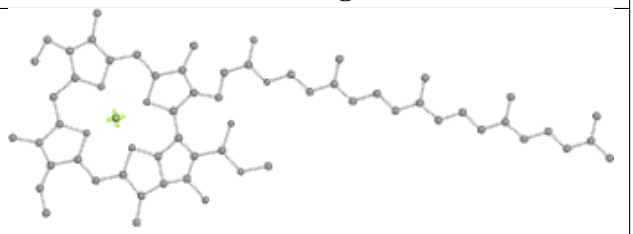
Bond lengths



Bond angles

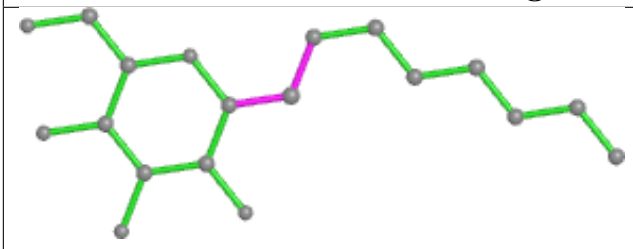


Torsions

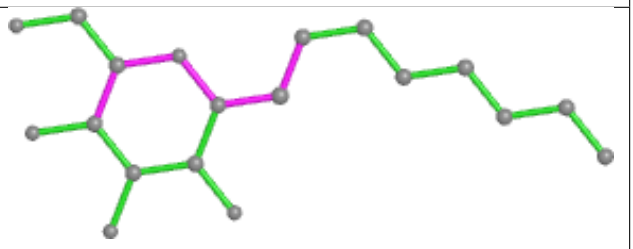


Rings

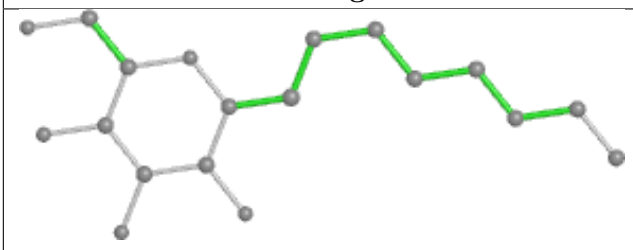
Ligand HTG c 525



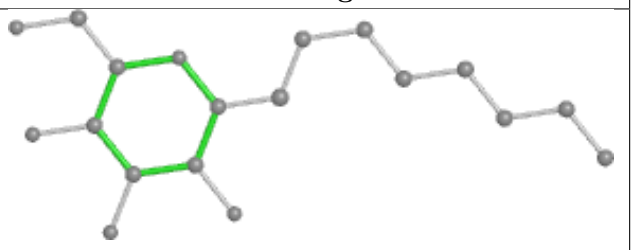
Bond lengths



Bond angles

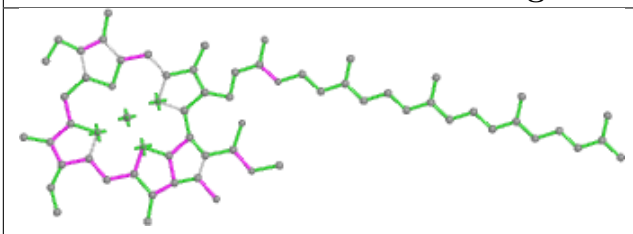


Torsions

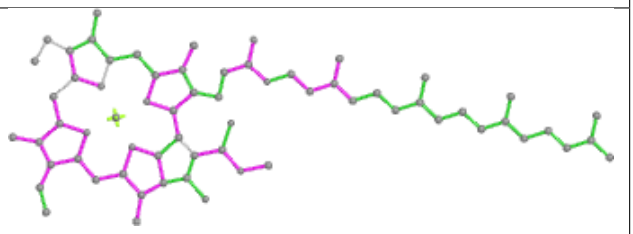


Rings

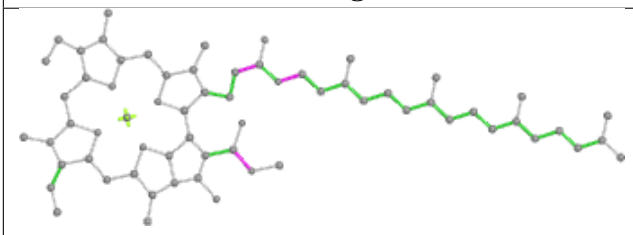
Ligand CLA b 622



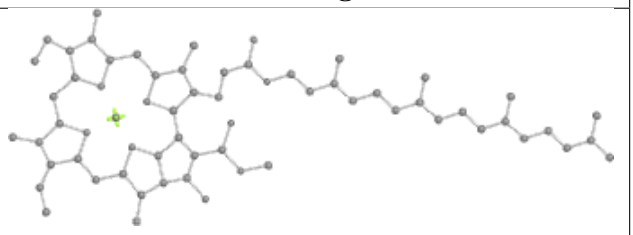
Bond lengths



Bond angles

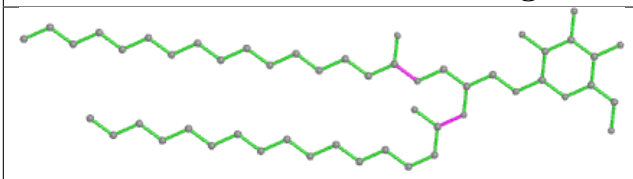


Torsions

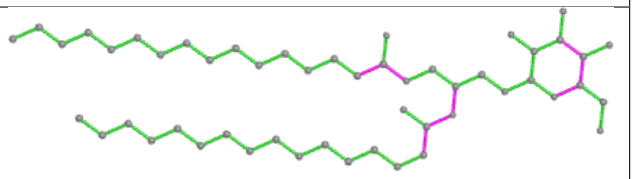


Rings

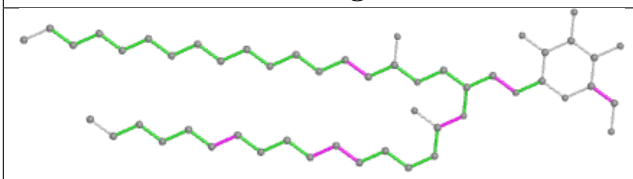
Ligand LMG C 521



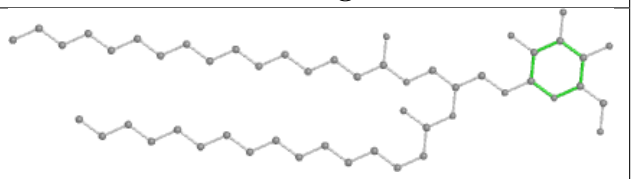
Bond lengths



Bond angles

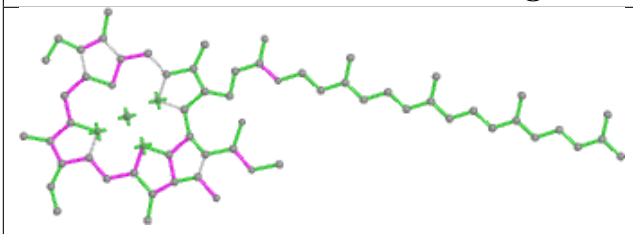


Torsions

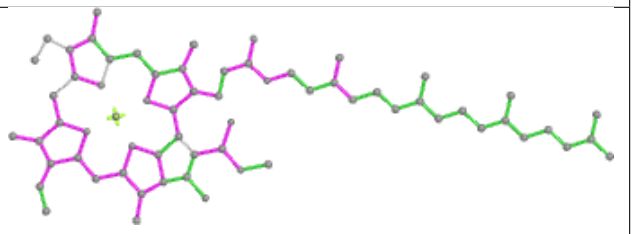


Rings

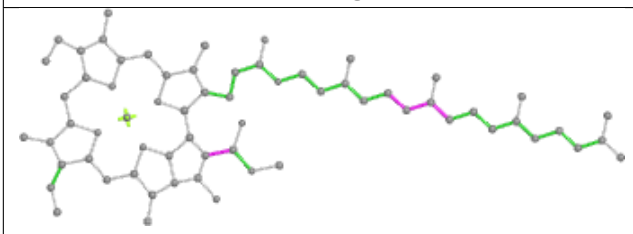
Ligand CLA B 604



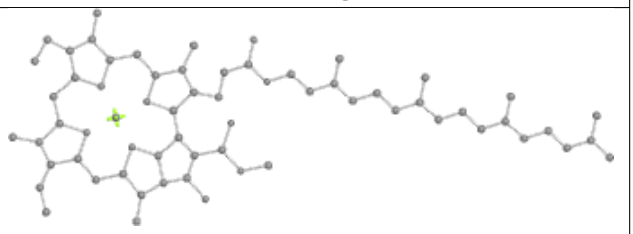
Bond lengths



Bond angles

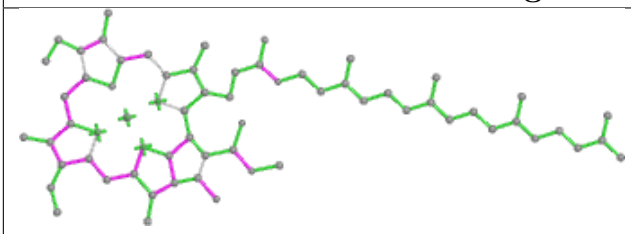


Torsions

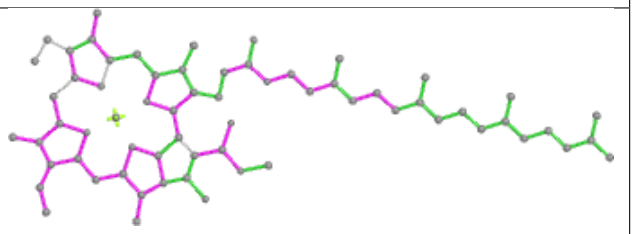


Rings

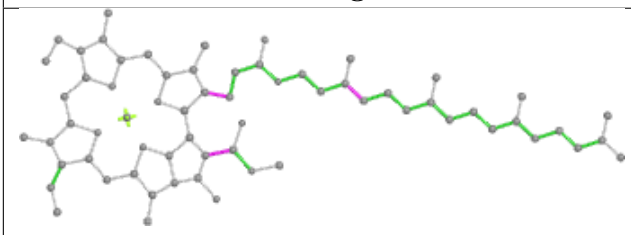
Ligand CLA B 610



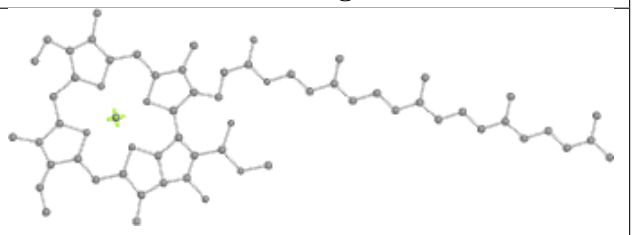
Bond lengths



Bond angles

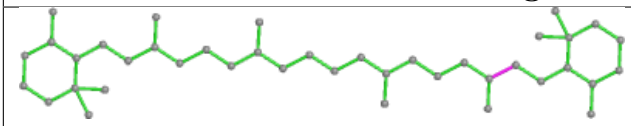


Torsions

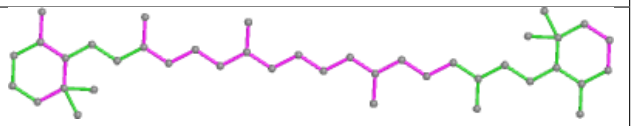


Rings

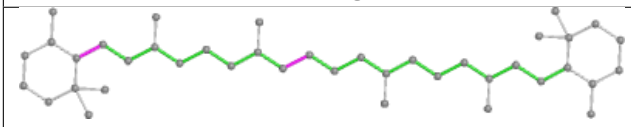
Ligand BCR T 103



Bond lengths



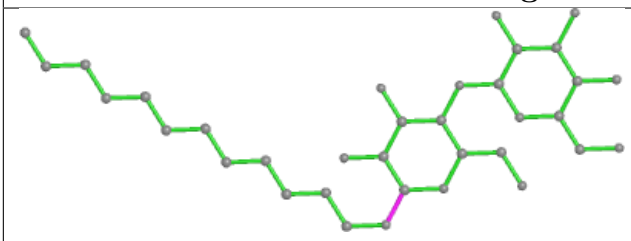
Bond angles



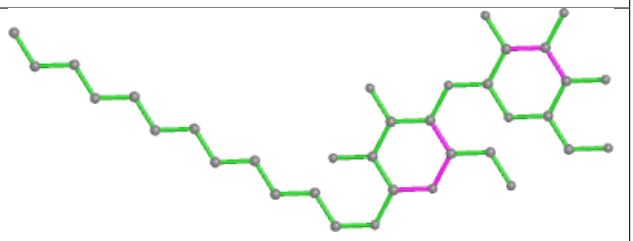
Torsions

Rings

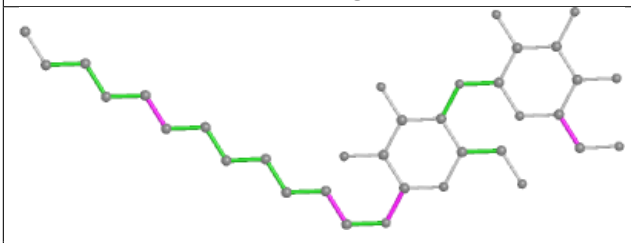
Ligand LMT A 416



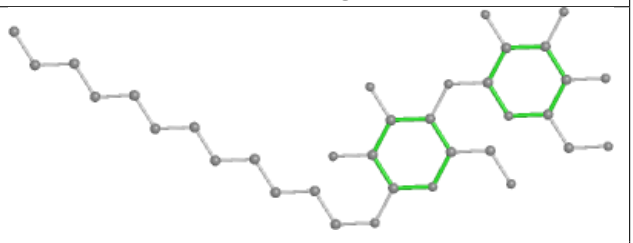
Bond lengths



Bond angles

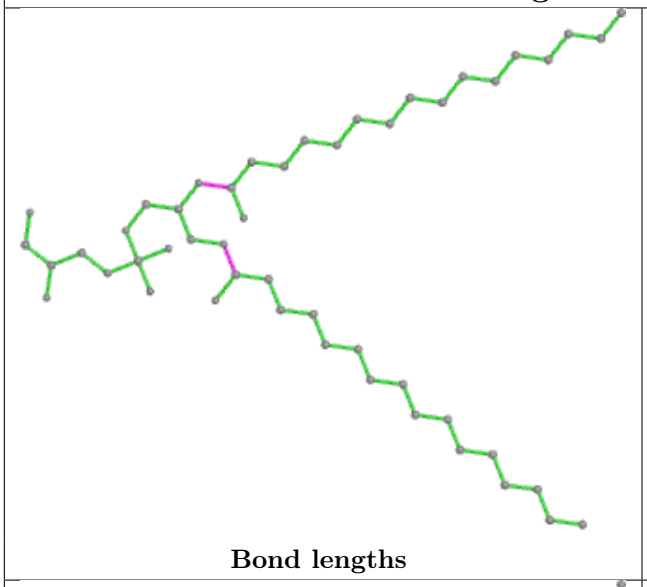


Torsions

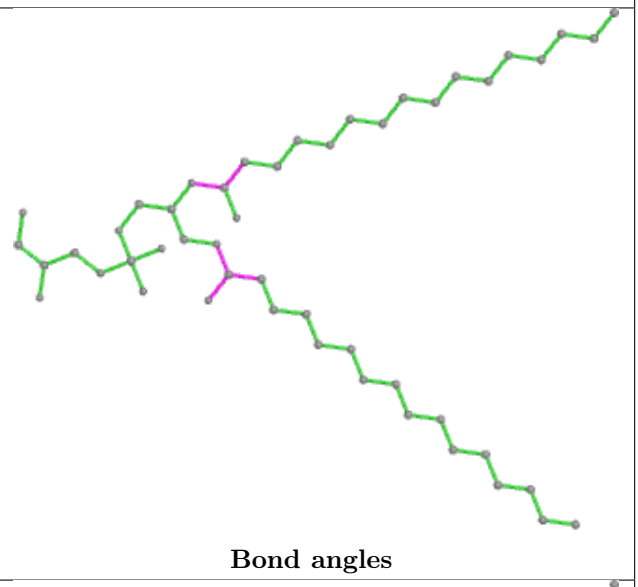


Rings

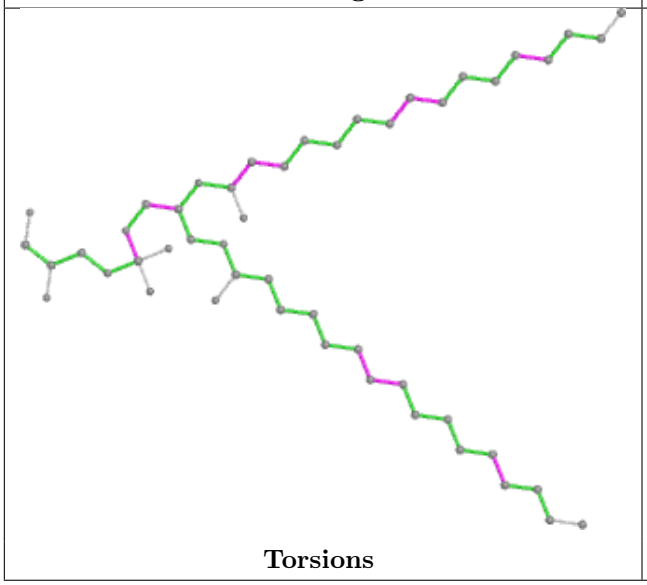
Ligand LHG l 101



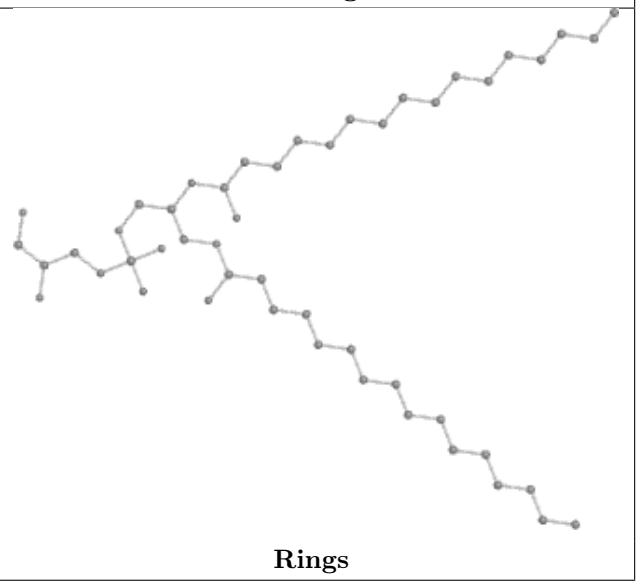
Bond lengths



Bond angles

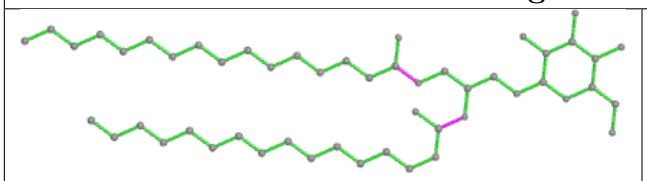


Torsions

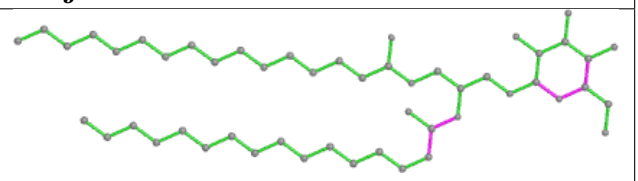


Rings

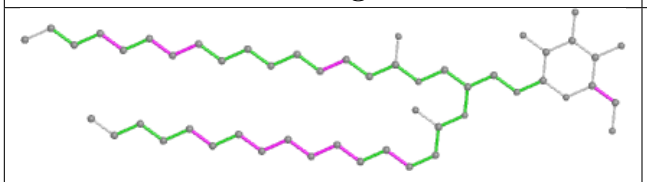
Ligand LMG j 101



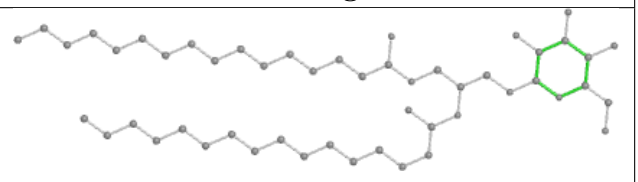
Bond lengths



Bond angles

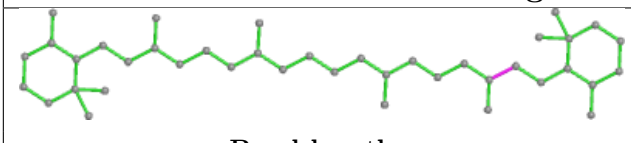


Torsions

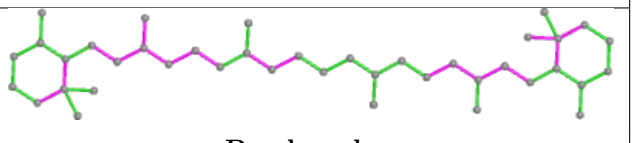


Rings

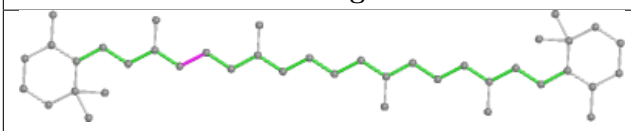
Ligand BCR k 101



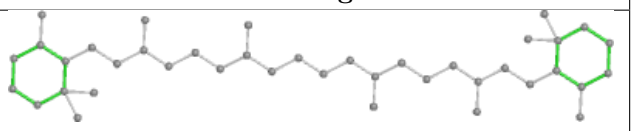
Bond lengths



Bond angles

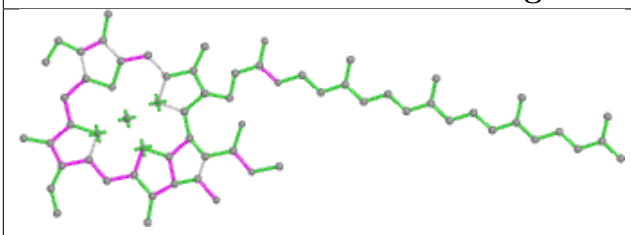


Torsions

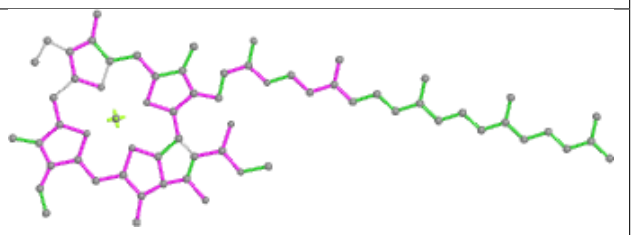


Rings

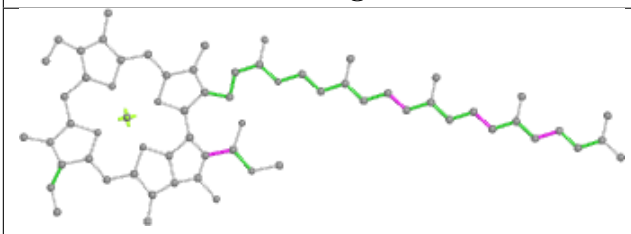
Ligand CLA C 509



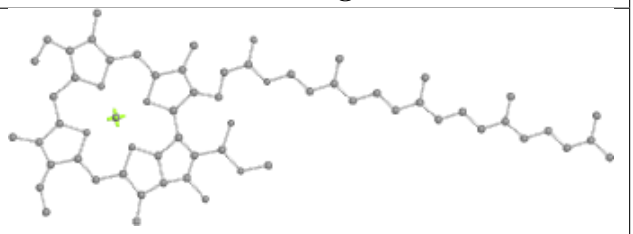
Bond lengths



Bond angles

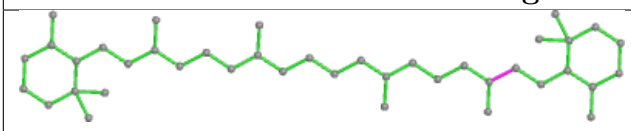


Torsions

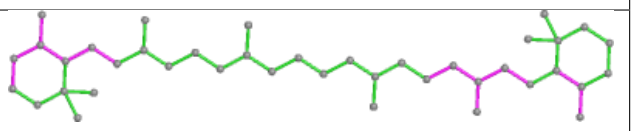


Rings

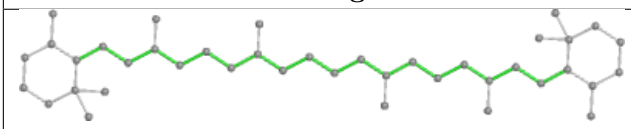
Ligand BCR A 410



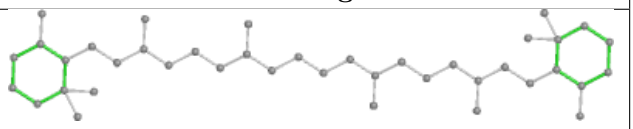
Bond lengths



Bond angles

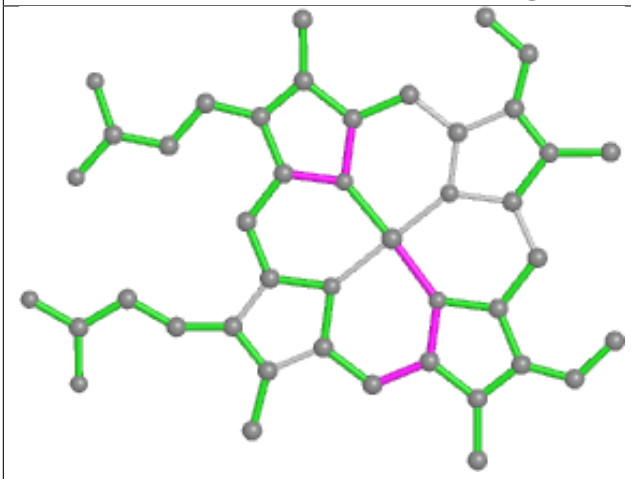


Torsions

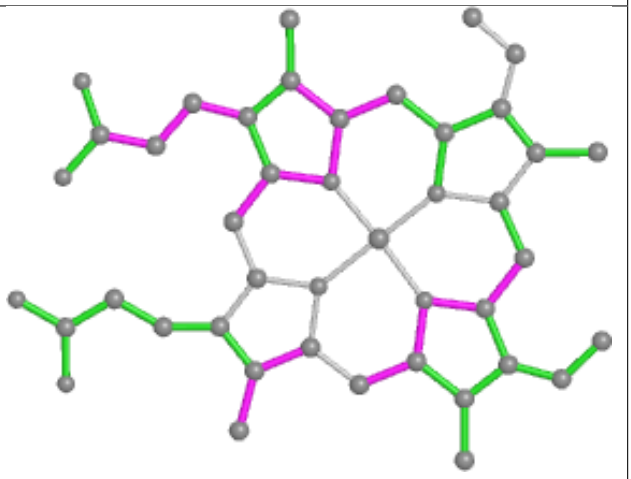


Rings

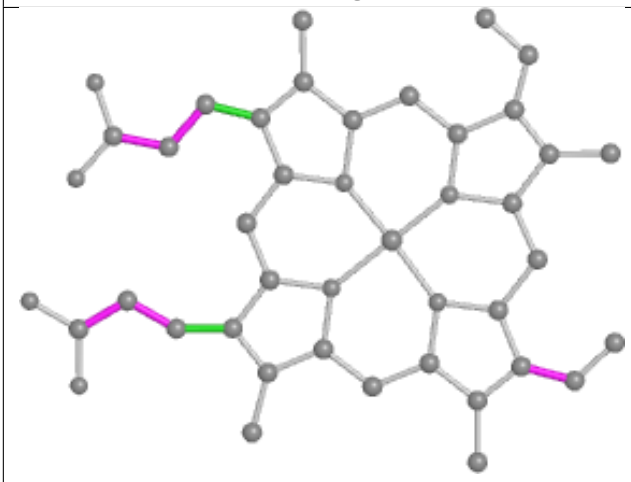
Ligand HEM e 103



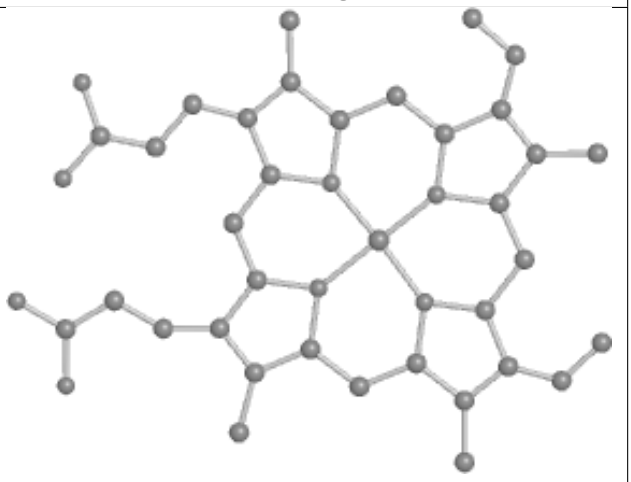
Bond lengths



Bond angles

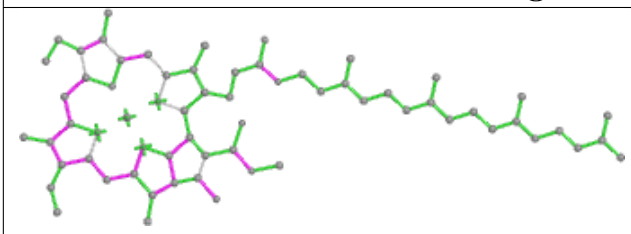


Torsions

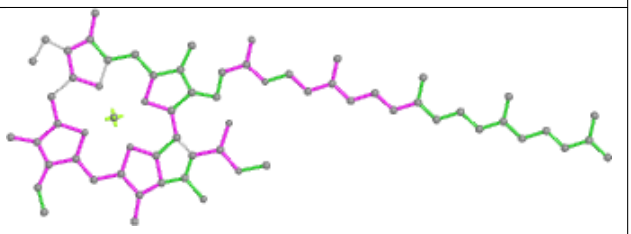


Rings

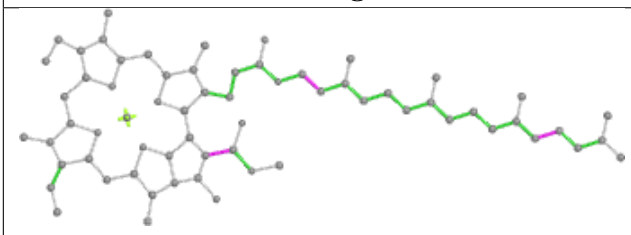
Ligand CLA b 613



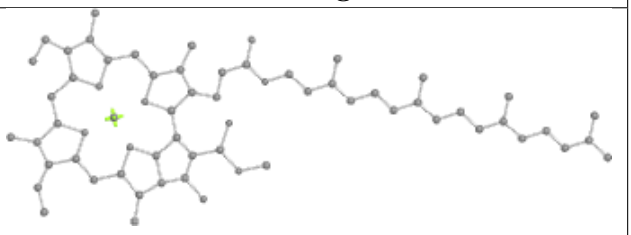
Bond lengths



Bond angles

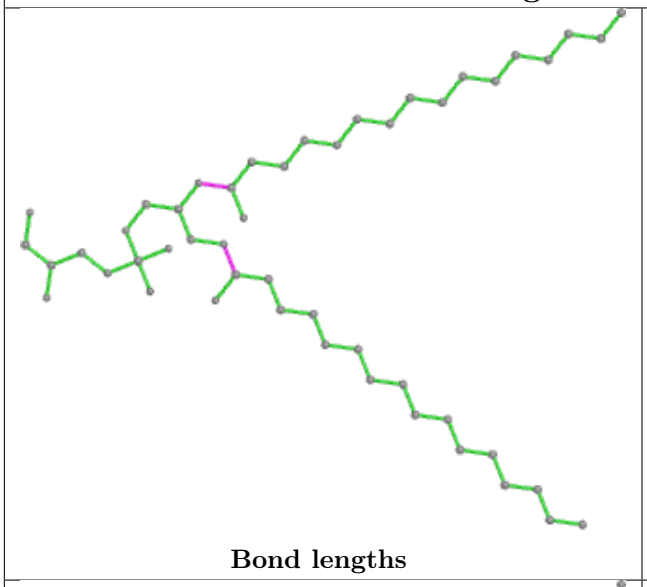


Torsions

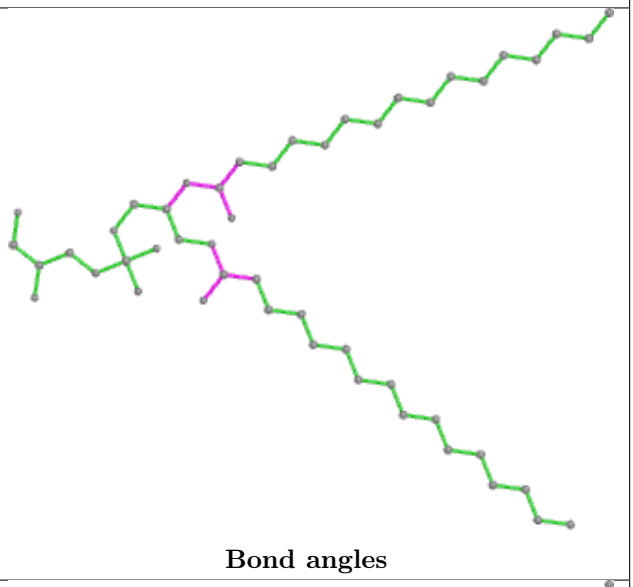


Rings

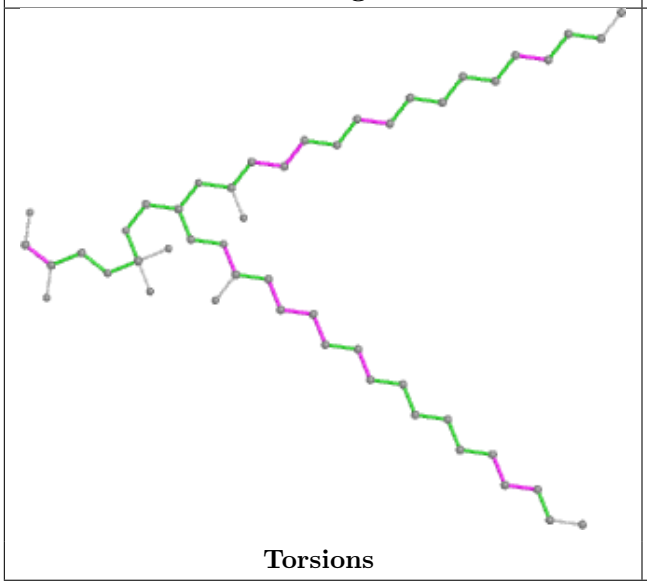
Ligand LHG D 407



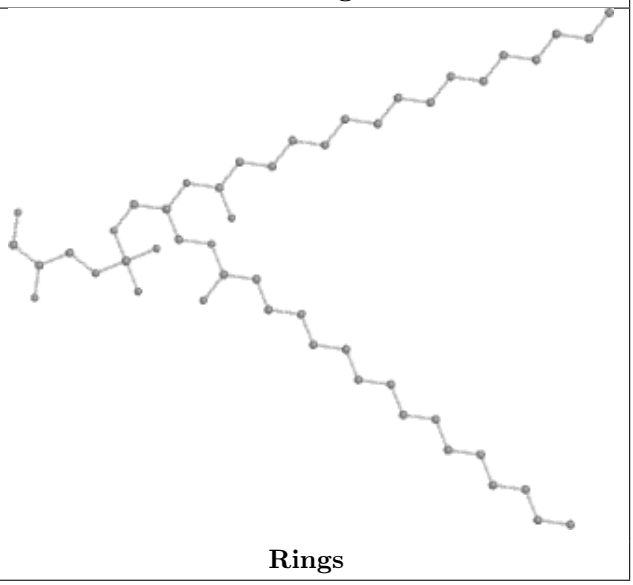
Bond lengths



Bond angles

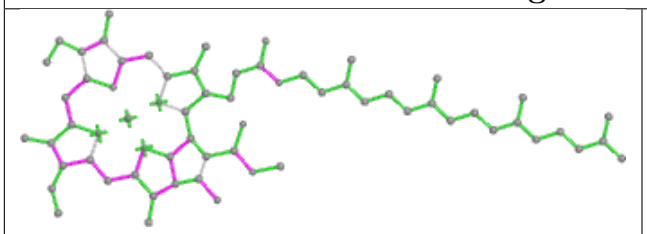


Torsions

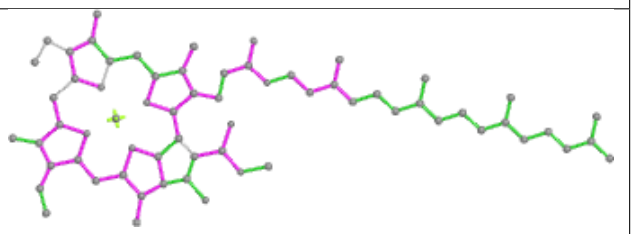


Rings

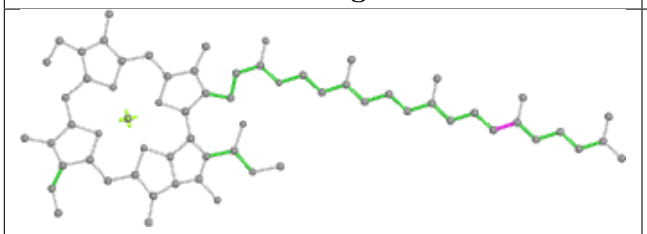
Ligand CLA d 403



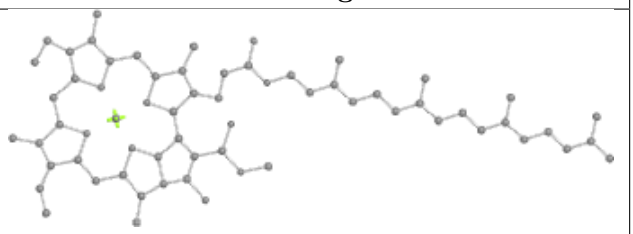
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers (i)

There are no such residues in this entry.

5.8 Polymer linkage issues (i)

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} 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%)	0.07	2 (0%) 89 91	30, 39, 69, 112	0
1	a	334/344 (97%)	0.15	8 (2%) 59 67	31, 40, 74, 141	0
2	B	504/505 (99%)	0.11	8 (1%) 72 77	30, 44, 78, 119	0
2	b	503/505 (99%)	0.21	23 (4%) 32 42	32, 45, 83, 174	0
3	C	451/455 (99%)	0.06	2 (0%) 92 94	35, 52, 70, 120	0
3	c	455/455 (100%)	0.08	3 (0%) 87 91	37, 53, 71, 124	0
4	D	341/342 (99%)	0.05	2 (0%) 89 91	30, 41, 64, 131	0
4	d	341/342 (99%)	0.01	0 100 100	31, 42, 65, 122	0
5	E	81/84 (96%)	0.56	8 (9%) 7 11	46, 64, 95, 127	0
5	e	81/84 (96%)	0.86	9 (11%) 5 7	47, 66, 118, 172	0
6	F	34/44 (77%)	0.32	2 (5%) 22 30	46, 57, 91, 98	0
6	f	32/44 (72%)	0.35	2 (6%) 20 27	47, 57, 115, 139	0
7	H	65/65 (100%)	0.22	3 (4%) 32 42	40, 54, 71, 154	0
7	h	65/65 (100%)	0.07	2 (3%) 49 58	43, 56, 77, 165	0
8	I	37/38 (97%)	0.17	2 (5%) 25 34	43, 53, 107, 152	0
8	i	37/38 (97%)	0.19	2 (5%) 25 34	42, 53, 100, 129	0
9	J	38/39 (97%)	0.52	3 (7%) 12 17	43, 61, 133, 171	0
9	j	39/39 (100%)	0.65	5 (12%) 3 5	48, 61, 130, 168	0
10	K	37/37 (100%)	0.12	0 100 100	53, 62, 77, 105	0
10	k	37/37 (100%)	0.22	0 100 100	53, 62, 80, 105	0
11	L	37/37 (100%)	0.16	0 100 100	30, 37, 101, 123	0
11	l	37/37 (100%)	0.24	2 (5%) 25 34	31, 36, 99, 122	0
12	M	33/36 (91%)	0.27	2 (6%) 21 28	33, 38, 63, 116	0
12	m	33/36 (91%)	0.19	0 100 100	33, 38, 71, 117	0

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Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
13	O	243/244 (99%)	0.07	4 (1%) 72 77	32, 50, 95, 134	0
13	o	243/244 (99%)	0.08	4 (1%) 72 77	33, 51, 102, 167	0
14	T	29/32 (90%)	0.14	0 100 100	31, 38, 65, 135	0
14	t	29/32 (90%)	0.10	0 100 100	32, 38, 66, 135	0
15	U	97/104 (93%)	-0.05	0 100 100	37, 48, 75, 118	0
15	u	97/104 (93%)	-0.05	0 100 100	41, 49, 72, 118	0
16	V	137/137 (100%)	0.04	0 100 100	35, 49, 78, 121	0
16	v	137/137 (100%)	0.06	2 (1%) 73 79	40, 55, 82, 123	0
17	Y	29/30 (96%)	1.76	7 (24%) 0 0	64, 77, 135, 141	0
17	y	29/30 (96%)	0.62	2 (6%) 16 23	67, 80, 135, 142	0
18	X	39/40 (97%)	0.37	1 (2%) 56 64	53, 62, 114, 138	0
18	x	38/40 (95%)	0.63	5 (13%) 3 4	53, 62, 110, 130	0
19	Z	62/62 (100%)	0.64	6 (9%) 7 11	65, 77, 122, 164	0
19	z	62/62 (100%)	1.17	17 (27%) 0 0	68, 79, 122, 165	0
20	R	18/34 (52%)	7.25	18 (100%) 0 0	106, 139, 173, 174	0
All	All	5275/5384 (97%)	0.18	156 (2%) 50 59	30, 48, 91, 174	0

The worst 5 of 156 RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
17	Y	18	VAL	16.7
20	R	15	ALA	13.5
20	R	18	TRP	11.8
5	e	5	THR	11.8
20	R	9	LEU	10.4

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

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
14	FME	T	1	10/11	0.95	0.11	33,38,60,72	0
12	FME	M	1	10/11	0.97	0.14	33,52,85,91	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
8	FME	I	1	10/11	0.97	0.11	36,49,53,57	0
8	FME	i	1	10/11	0.97	0.12	39,51,57,61	0
12	FME	m	1	10/11	0.97	0.16	35,47,107,124	0
14	FME	t	1	10/11	0.97	0.11	28,40,49,83	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, 95^{th} 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
36	DGD	e	101	62/66	0.46	0.39	68,115,177,183	0
29	LMT	F	102	35/35	0.59	0.32	81,117,147,150	0
29	LMT	C	522	35/35	0.60	0.30	83,119,152,161	0
32	UNL	C	528	34/-	0.61	0.23	68,109,132,133	0
37	LHG	e	102	42/49	0.61	0.30	68,134,167,175	0
29	LMT	M	104	35/35	0.63	0.26	44,96,137,144	0
29	LMT	b	630	25/35	0.64	0.28	70,95,151,153	0
34	HTG	d	412	16/19	0.65	0.21	64,114,125,129	0
36	DGD	D	406	52/66	0.65	0.27	62,106,145,154	0
32	UNL	a	403	30/-	0.66	0.24	69,90,128,130	0
29	LMT	a	419	35/35	0.69	0.35	86,112,130,132	0
29	LMT	f	103	35/35	0.69	0.28	74,122,151,156	0
29	LMT	B	622	35/35	0.70	0.28	62,118,148,153	0
32	UNL	j	102	10/-	0.71	0.23	64,78,93,97	0
34	HTG	D	412	16/19	0.71	0.26	70,142,157,160	0
32	UNL	A	419	28/-	0.71	0.19	63,86,104,104	0
27	SQD	f	102	43/54	0.72	0.28	86,119,144,148	0
32	UNL	c	526	32/-	0.72	0.23	63,98,133,141	0
35	LMG	Z	101	37/55	0.73	0.27	50,111,133,137	0
32	UNL	J	102	10/-	0.74	0.21	47,71,94,97	0
29	LMT	m	102	35/35	0.75	0.22	35,98,128,134	0
34	HTG	B	633	19/19	0.75	0.20	53,105,137,170	0
34	HTG	c	525	19/19	0.76	0.33	56,109,121,130	0
37	LHG	E	101	42/49	0.76	0.21	67,98,120,121	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
28	GOL	V	201	6/6	0.76	0.40	69,78,89,95	0
34	HTG	b	608	19/19	0.78	0.21	56,113,148,151	0
34	HTG	B	625	19/19	0.78	0.26	72,118,144,148	0
32	UNL	B	634	33/-	0.78	0.24	57,82,136,141	0
29	LMT	M	105	35/35	0.78	0.21	41,84,106,116	0
28	GOL	v	201	6/6	0.79	0.27	71,93,96,100	0
32	UNL	b	633	33/-	0.79	0.24	41,94,159,162	0
29	LMT	a	404	35/35	0.79	0.22	44,83,115,132	0
34	HTG	C	524	19/19	0.80	0.20	82,92,128,134	0
31	PL9	a	416	55/55	0.80	0.25	64,103,126,128	0
29	LMT	M	102	35/35	0.81	0.21	41,85,110,112	0
27	SQD	B	621	54/54	0.81	0.19	52,88,144,153	0
31	PL9	A	418	55/55	0.81	0.23	56,99,114,133	0
27	SQD	L	102	54/54	0.81	0.18	46,74,126,143	0
32	UNL	m	101	10/-	0.82	0.23	54,59,86,88	0
29	LMT	A	416	35/35	0.82	0.19	40,84,106,133	0
35	LMG	C	520	51/55	0.82	0.20	50,77,108,118	0
27	SQD	A	415	54/54	0.82	0.18	48,74,114,132	0
29	LMT	B	635	25/35	0.83	0.24	42,86,138,141	0
33	CA	b	609	1/1	0.83	0.15	137,137,137,137	0
32	UNL	M	103	10/-	0.83	0.20	48,61,72,79	0
32	UNL	i	101	40/-	0.83	0.22	49,77,144,146	0
27	SQD	a	405	54/54	0.83	0.17	43,78,123,126	0
35	LMG	z	101	39/55	0.84	0.22	63,116,139,159	0
32	UNL	d	411	36/-	0.84	0.18	54,77,132,138	0
35	LMG	C	521	51/55	0.84	0.20	55,109,128,136	0
32	UNL	I	101	40/-	0.84	0.22	41,84,148,161	0
35	LMG	a	415	51/55	0.84	0.20	57,82,99,102	0
35	LMG	c	523	51/55	0.85	0.22	49,107,130,130	0
28	GOL	b	606	6/6	0.85	0.17	63,79,87,89	0
34	HTG	b	632	19/19	0.85	0.23	66,115,147,147	0
28	GOL	T	102	6/6	0.86	0.27	106,113,118,120	0
32	UNL	X	101	18/-	0.86	0.16	56,75,101,102	0
36	DGD	C	518	62/66	0.86	0.15	37,55,95,113	0
34	HTG	B	624	19/19	0.86	0.18	48,66,92,98	0
28	GOL	A	414	6/6	0.86	0.20	53,77,82,88	0
29	LMT	T	104	25/35	0.86	0.22	34,84,134,140	0
35	LMG	b	629	51/55	0.86	0.17	41,51,73,89	0
35	LMG	C	501	51/55	0.87	0.17	49,84,108,116	0
28	GOL	O	301	6/6	0.87	0.11	68,79,81,88	0
35	LMG	c	522	51/55	0.87	0.17	51,86,112,114	0
32	UNL	D	411	40/-	0.87	0.16	56,80,133,139	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
34	HTG	b	631	19/19	0.87	0.23	58,68,84,96	0
28	GOL	V	204	6/6	0.88	0.20	68,81,85,94	0
28	GOL	v	202	6/6	0.88	0.22	74,80,100,114	0
36	DGD	h	102	62/66	0.88	0.16	34,50,68,82	0
27	SQD	F	103	43/54	0.88	0.20	75,102,123,134	0
34	HTG	c	524	19/19	0.88	0.12	89,95,108,128	0
32	UNL	d	413	18/-	0.89	0.18	52,71,109,110	0
28	GOL	B	630	6/6	0.89	0.29	51,67,75,83	0
28	GOL	B	636	6/6	0.89	0.13	48,57,65,65	0
24	CLA	c	517	65/65	0.89	0.17	57,80,96,104	0
33	CA	B	601	1/1	0.89	0.10	143,143,143,143	0
33	CA	F	104	1/1	0.89	0.07	84,84,84,84	0
28	GOL	c	502	6/6	0.89	0.41	75,86,99,108	0
33	CA	f	104	1/1	0.89	0.07	104,104,104,104	0
28	GOL	t	102	6/6	0.89	0.44	54,82,93,98	0
28	GOL	T	101	6/6	0.89	0.41	51,78,96,104	0
24	CLA	C	514	65/65	0.89	0.17	51,65,99,109	0
35	LMG	M	101	51/55	0.89	0.17	35,52,78,95	0
36	DGD	H	102	62/66	0.90	0.16	32,49,69,79	0
36	DGD	c	520	62/66	0.90	0.15	38,55,107,128	0
27	SQD	A	411	54/54	0.90	0.17	45,78,99,103	0
28	GOL	A	412	6/6	0.90	0.14	43,50,53,61	0
34	HTG	B	632	19/19	0.90	0.14	48,69,99,103	0
22	CL	v	204	1/1	0.90	0.08	94,94,94,94	0
34	HTG	V	206	19/19	0.91	0.23	61,91,114,204	0
34	HTG	b	607	19/19	0.91	0.15	46,75,81,82	0
36	DGD	c	521	62/66	0.91	0.15	38,52,94,99	0
24	CLA	c	511	65/65	0.91	0.14	42,55,70,76	0
28	GOL	C	525	6/6	0.91	0.25	54,60,75,81	0
37	LHG	D	407	49/49	0.91	0.19	31,49,67,73	0
36	DGD	C	519	62/66	0.91	0.14	36,48,73,86	0
27	SQD	a	414	54/54	0.91	0.15	49,79,106,110	0
35	LMG	J	101	51/55	0.92	0.17	38,58,111,127	0
24	CLA	b	618	65/65	0.92	0.14	36,48,60,71	0
24	CLA	C	507	65/65	0.92	0.14	46,64,107,116	0
34	HTG	C	523	19/19	0.92	0.15	72,86,102,106	0
24	CLA	C	505	65/65	0.92	0.15	34,48,82,94	0
24	CLA	b	616	65/65	0.92	0.14	24,36,48,52	0
34	HTG	B	623	19/19	0.92	0.15	40,54,75,76	0
35	LMG	j	101	51/55	0.92	0.16	46,58,105,117	0
28	GOL	a	402	6/6	0.92	0.24	73,83,89,92	0
28	GOL	A	413	6/6	0.92	0.27	51,54,63,67	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
32	UNL	d	410	17/-	0.93	0.18	48,69,97,101	0
28	GOL	B	626	6/6	0.93	0.17	44,52,59,85	0
28	GOL	B	628	6/6	0.93	0.14	52,71,84,87	0
34	HTG	b	601	19/19	0.93	0.12	40,50,74,83	0
24	CLA	b	611	65/65	0.93	0.15	33,45,55,59	0
24	CLA	b	615	65/65	0.93	0.14	31,45,89,103	0
24	CLA	C	502	65/65	0.93	0.13	38,51,77,91	0
24	CLA	C	508	65/65	0.93	0.14	42,54,68,76	0
24	CLA	b	625	65/65	0.93	0.14	35,54,102,112	0
24	CLA	c	507	65/65	0.93	0.14	41,53,65,83	0
36	DGD	c	519	62/66	0.93	0.13	38,48,98,105	0
24	CLA	c	510	65/65	0.93	0.13	44,63,92,115	0
24	CLA	C	512	65/65	0.93	0.13	41,57,68,83	0
24	CLA	c	512	65/65	0.93	0.13	36,49,116,129	0
24	CLA	B	602	65/65	0.93	0.15	43,60,100,128	0
26	BCR	b	627	40/40	0.93	0.15	31,41,60,69	0
37	LHG	D	409	49/49	0.93	0.18	36,54,115,128	0
28	GOL	f	101	6/6	0.93	0.21	76,84,86,91	0
37	LHG	d	408	49/49	0.93	0.17	32,41,57,86	0
28	GOL	o	301	6/6	0.93	0.18	71,80,88,106	0
37	LHG	l	101	49/49	0.93	0.16	37,46,58,66	0
24	CLA	B	610	65/65	0.94	0.14	34,47,56,66	0
28	GOL	b	605	6/6	0.94	0.23	67,80,108,110	0
24	CLA	B	614	65/65	0.94	0.14	26,37,63,84	0
24	CLA	b	620	65/65	0.94	0.13	28,40,52,59	0
24	CLA	b	623	65/65	0.94	0.14	27,41,88,115	0
24	CLA	C	509	65/65	0.94	0.13	36,50,110,126	0
32	UNL	D	410	17/-	0.94	0.15	37,68,83,91	0
24	CLA	c	505	65/65	0.94	0.12	42,55,66,70	0
36	DGD	C	517	62/66	0.94	0.14	32,47,94,98	0
24	CLA	B	615	65/65	0.94	0.14	27,41,91,103	0
24	CLA	c	508	65/65	0.94	0.13	38,55,73,80	0
24	CLA	c	509	65/65	0.94	0.13	36,47,70,78	0
24	CLA	C	513	65/65	0.94	0.11	46,63,85,92	0
24	CLA	B	603	65/65	0.94	0.13	33,44,51,54	0
24	CLA	D	403	65/65	0.94	0.14	38,52,104,119	0
28	GOL	B	629	6/6	0.94	0.14	48,57,63,72	0
24	CLA	c	514	65/65	0.94	0.12	41,53,63,77	0
24	CLA	c	515	65/65	0.94	0.13	43,54,75,87	0
24	CLA	c	516	65/65	0.94	0.13	47,65,83,91	0
24	CLA	b	610	65/65	0.94	0.15	43,69,104,133	0
24	CLA	C	504	65/65	0.94	0.14	39,50,60,64	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
37	LHG	L	101	49/49	0.94	0.16	31,44,56,61	0
26	BCR	c	527	40/40	0.94	0.12	57,74,86,89	0
37	LHG	d	409	49/49	0.94	0.18	34,55,108,115	0
26	BCR	y	101	40/40	0.94	0.14	44,61,74,84	0
24	CLA	B	607	65/65	0.94	0.14	31,43,93,105	0
24	CLA	B	616	65/65	0.95	0.13	34,47,65,76	0
28	GOL	F	101	6/6	0.95	0.21	70,74,77,77	0
24	CLA	C	510	65/65	0.95	0.14	41,54,76,80	0
26	BCR	d	405	40/40	0.95	0.15	40,55,77,83	0
26	BCR	k	101	40/40	0.95	0.15	45,62,73,75	0
24	CLA	b	617	65/65	0.95	0.13	34,45,55,58	0
28	GOL	V	202	6/6	0.95	0.14	40,47,51,59	0
28	GOL	V	203	6/6	0.95	0.14	59,61,61,68	0
24	CLA	a	409	65/65	0.95	0.14	28,35,51,55	0
31	PL9	D	405	55/55	0.95	0.16	26,38,51,69	0
24	CLA	B	608	65/65	0.95	0.14	24,36,50,55	0
31	PL9	d	406	55/55	0.95	0.15	26,38,48,58	0
24	CLA	b	621	65/65	0.95	0.13	29,42,50,56	0
24	CLA	c	513	65/65	0.95	0.13	42,54,74,88	0
24	CLA	A	405	65/65	0.95	0.15	25,33,49,67	0
24	CLA	b	624	65/65	0.95	0.12	34,46,60,73	0
24	CLA	b	612	65/65	0.95	0.13	34,44,57,62	0
24	CLA	b	614	65/65	0.95	0.14	29,39,49,58	0
24	CLA	d	402	65/65	0.95	0.13	27,35,43,55	0
24	CLA	d	404	65/65	0.95	0.13	37,52,101,114	0
37	LHG	D	408	49/49	0.95	0.16	27,42,64,86	0
28	GOL	v	203	6/6	0.95	0.19	47,53,61,71	0
26	BCR	B	620	40/40	0.95	0.14	32,46,59,65	0
26	BCR	C	515	40/40	0.95	0.13	49,65,78,83	0
37	LHG	d	407	49/49	0.95	0.17	37,51,64,71	0
26	BCR	D	404	40/40	0.95	0.14	38,51,93,99	0
26	BCR	H	101	40/40	0.95	0.13	36,51,67,73	0
26	BCR	K	101	40/40	0.95	0.14	43,55,63,69	0
26	BCR	T	103	40/40	0.95	0.12	28,47,64,68	0
23	BCT	A	404	4/4	0.96	0.13	52,54,73,86	0
24	CLA	B	611	65/65	0.96	0.14	36,47,54,68	0
24	CLA	B	612	65/65	0.96	0.15	26,37,51,59	0
24	CLA	b	619	65/65	0.96	0.13	36,46,56,60	0
24	CLA	C	511	65/65	0.96	0.12	39,49,62,82	0
24	CLA	d	403	65/65	0.96	0.14	27,38,59,62	0
24	CLA	B	613	65/65	0.96	0.12	28,38,48,55	0
25	PHO	A	408	64/64	0.96	0.14	29,42,52,56	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
25	PHO	D	401	64/64	0.96	0.13	25,35,41,43	0
25	PHO	d	401	64/64	0.96	0.14	29,42,50,56	0
28	GOL	B	627	6/6	0.96	0.19	47,62,83,99	0
26	BCR	B	619	40/40	0.96	0.15	29,41,56,60	0
24	CLA	b	622	65/65	0.96	0.14	26,39,55,61	0
22	CL	U	201	1/1	0.96	0.17	92,92,92,92	0
33	CA	o	302	1/1	0.96	0.07	91,91,91,91	0
24	CLA	B	604	65/65	0.96	0.13	34,44,53,61	0
24	CLA	B	605	65/65	0.96	0.13	26,37,70,75	0
24	CLA	B	617	65/65	0.96	0.15	36,52,114,120	0
24	CLA	c	506	65/65	0.96	0.13	39,54,67,74	0
26	BCR	Y	101	40/40	0.96	0.12	44,60,69,71	0
24	CLA	a	412	65/65	0.96	0.14	32,48,114,123	0
26	BCR	c	518	40/40	0.96	0.14	40,55,67,69	0
24	CLA	B	606	65/65	0.96	0.13	29,40,53,64	0
24	CLA	A	406	65/65	0.96	0.14	24,34,44,58	0
26	BCR	h	101	40/40	0.96	0.11	42,56,70,74	0
28	GOL	a	401	6/6	0.96	0.26	51,66,70,85	0
24	CLA	A	409	65/65	0.96	0.12	33,47,119,128	0
28	GOL	b	603	6/6	0.96	0.17	47,56,83,87	0
26	BCR	t	101	40/40	0.96	0.14	31,46,62,64	0
24	CLA	b	613	65/65	0.96	0.13	26,38,73,79	0
24	CLA	C	506	65/65	0.96	0.13	36,48,70,73	0
24	CLA	B	609	65/65	0.96	0.15	32,43,56,58	0
38	HEM	e	103	43/43	0.96	0.17	55,78,123,153	0
28	GOL	b	604	6/6	0.97	0.21	60,73,79,90	0
25	PHO	a	411	64/64	0.97	0.14	28,36,44,47	0
24	CLA	a	410	65/65	0.97	0.14	31,41,105,116	0
26	BCR	A	410	40/40	0.97	0.14	30,39,45,50	0
26	BCR	B	618	40/40	0.97	0.15	27,40,47,52	0
24	CLA	D	402	65/65	0.97	0.14	24,35,54,58	0
33	CA	O	302	1/1	0.97	0.04	84,84,84,84	0
26	BCR	a	413	40/40	0.97	0.12	30,41,52,56	0
26	BCR	b	626	40/40	0.97	0.15	30,42,49,49	0
24	CLA	C	503	65/65	0.97	0.13	37,46,61,71	0
26	BCR	b	628	40/40	0.97	0.14	39,50,66,77	0
24	CLA	A	407	65/65	0.97	0.13	28,40,98,118	0
28	GOL	B	631	6/6	0.97	0.29	40,73,74,83	0
28	GOL	b	602	6/6	0.97	0.21	56,60,69,93	0
38	HEM	E	102	43/43	0.97	0.14	44,64,81,93	0
26	BCR	C	516	40/40	0.97	0.15	39,54,64,65	0
33	CA	c	504	1/1	0.98	0.05	74,74,74,74	0

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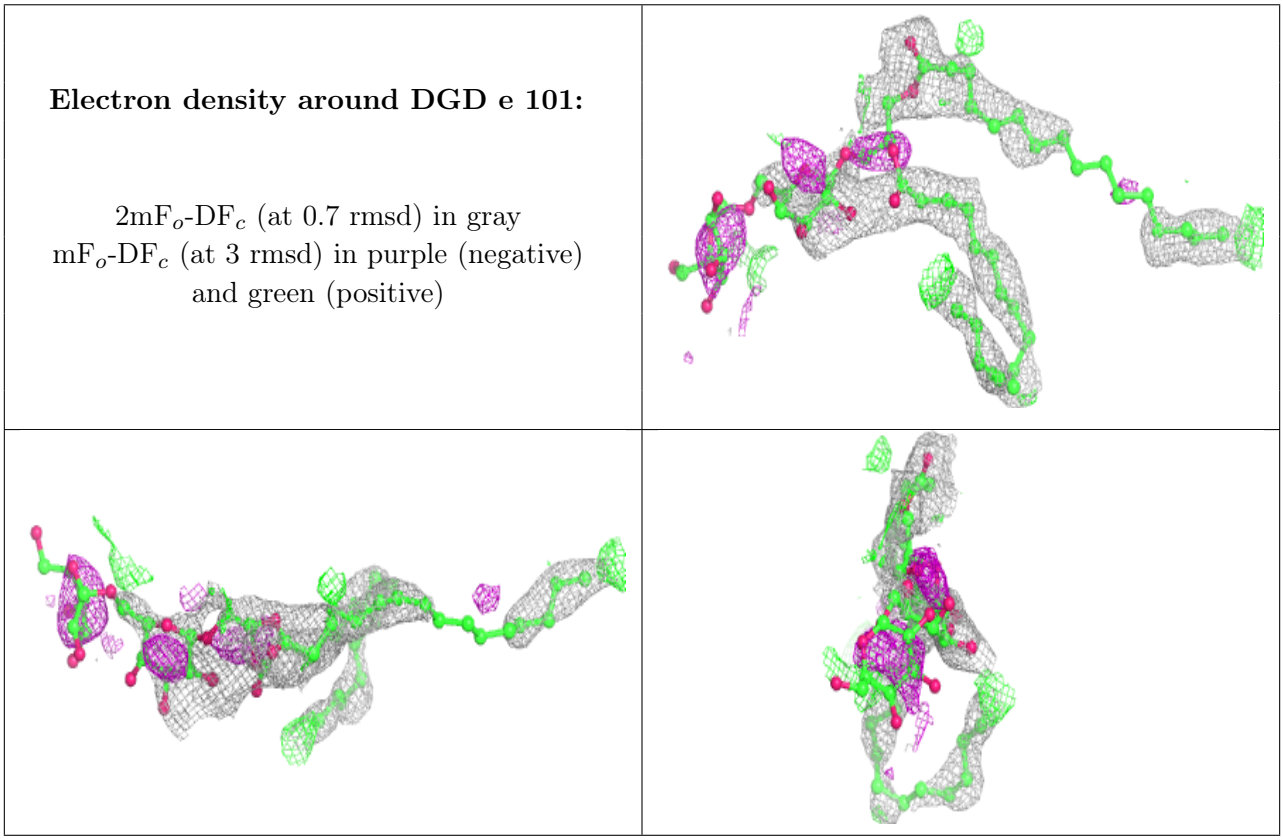
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
38	HEM	V	205	43/43	0.98	0.11	35,41,50,53	0
23	BCT	a	418	4/4	0.98	0.17	60,63,70,83	0
38	HEM	v	205	43/43	0.98	0.12	42,52,61,62	0
39	MG	j	103	1/1	0.98	0.18	57,57,57,57	0
22	CL	A	403	1/1	0.99	0.11	35,35,35,35	0
28	GOL	C	526	6/6	0.99	0.12	33,42,47,49	0
21	FE2	A	401	1/1	0.99	0.16	51,51,51,51	0
22	CL	a	408	1/1	0.99	0.11	41,41,41,41	0
33	CA	C	527	1/1	0.99	0.07	67,67,67,67	0
21	FE2	a	406	1/1	0.99	0.18	49,49,49,49	0
28	GOL	c	501	6/6	0.99	0.13	43,45,47,48	0
30	OEX	A	417	10/10	0.99	0.12	33,36,47,71	0
33	CA	c	503	1/1	0.99	0.07	66,66,66,66	0
30	OEX	a	417	10/10	0.99	0.12	32,40,64,67	0
39	MG	J	103	1/1	0.99	0.08	53,53,53,53	0
22	CL	A	402	1/1	0.99	0.13	32,32,32,32	0
22	CL	a	407	1/1	1.00	0.09	36,36,36,36	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.

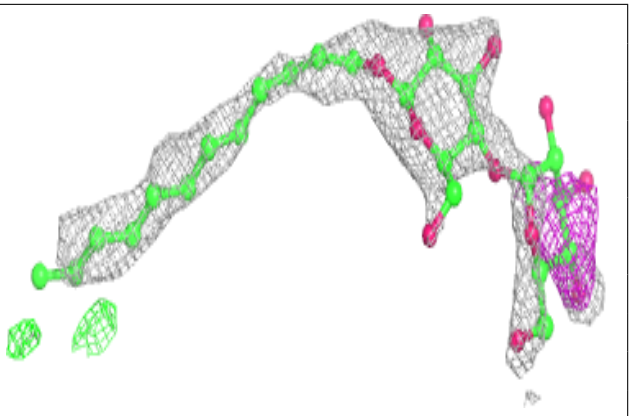
Electron density around DGD e 101:

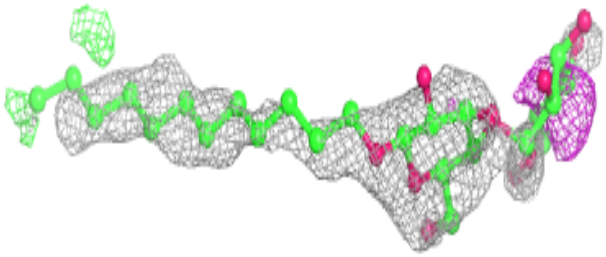
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

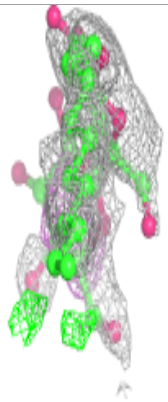


Electron density around LMT F 102:

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

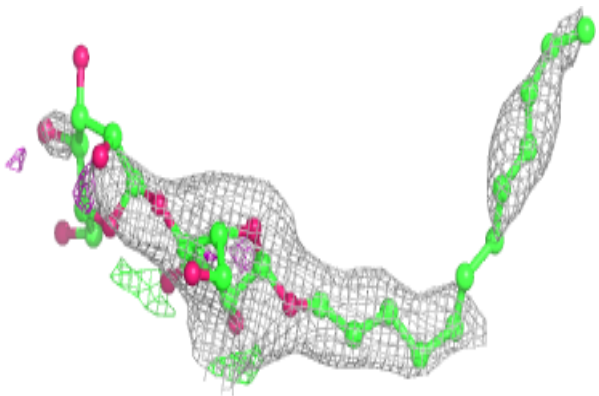


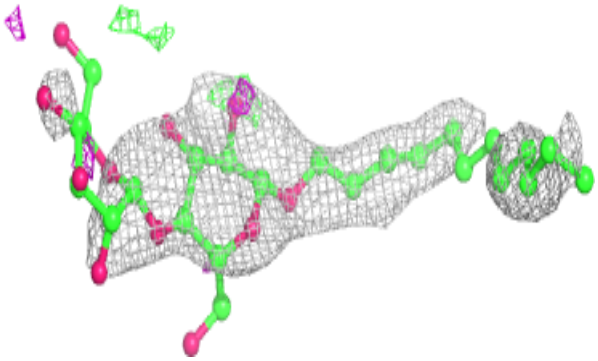


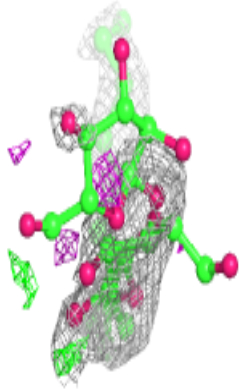


Electron density around LMT C 522:

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

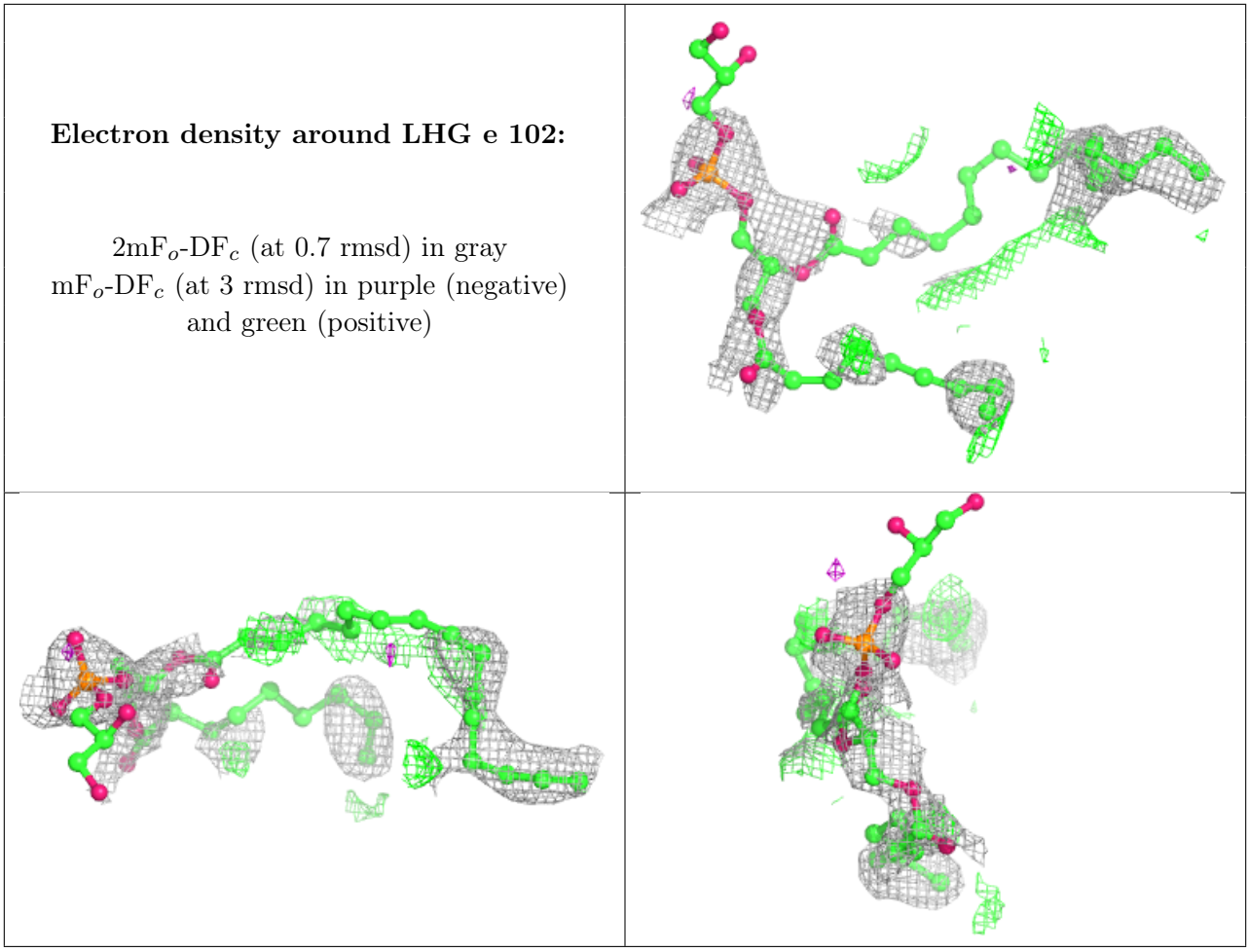






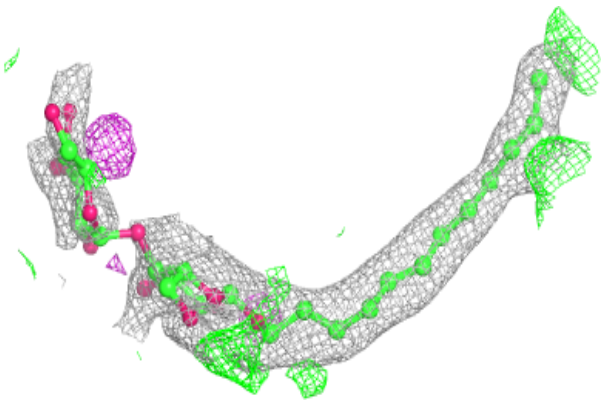
Electron density around LHG e 102:

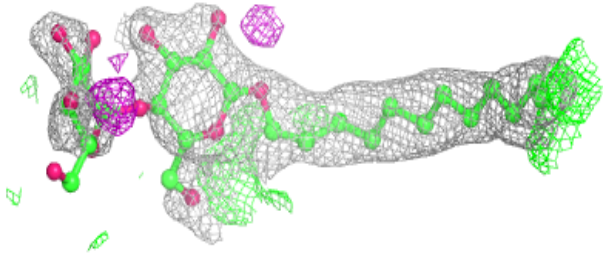
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

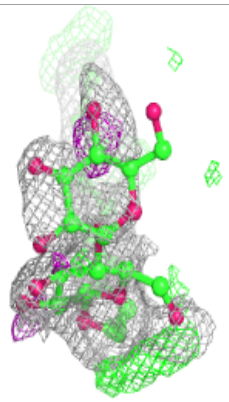


Electron density around LMT M 104:

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

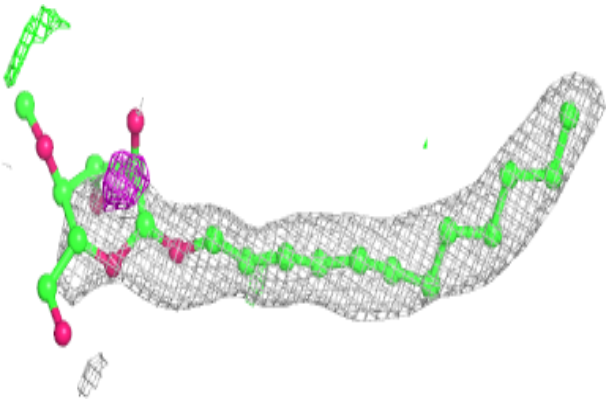


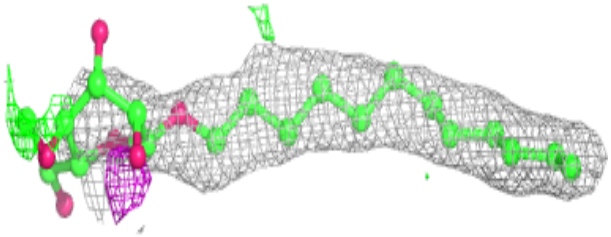


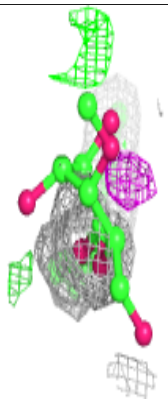


Electron density around LMT b 630:

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

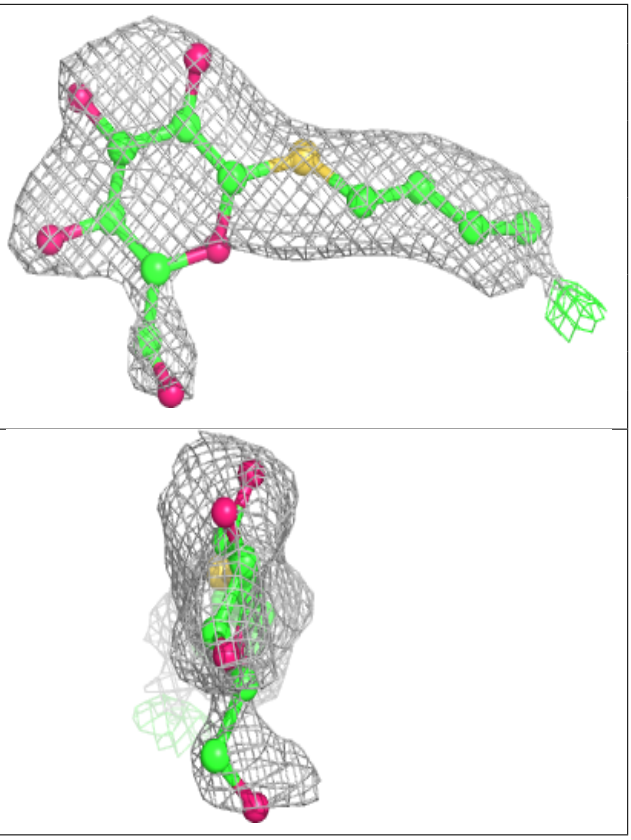






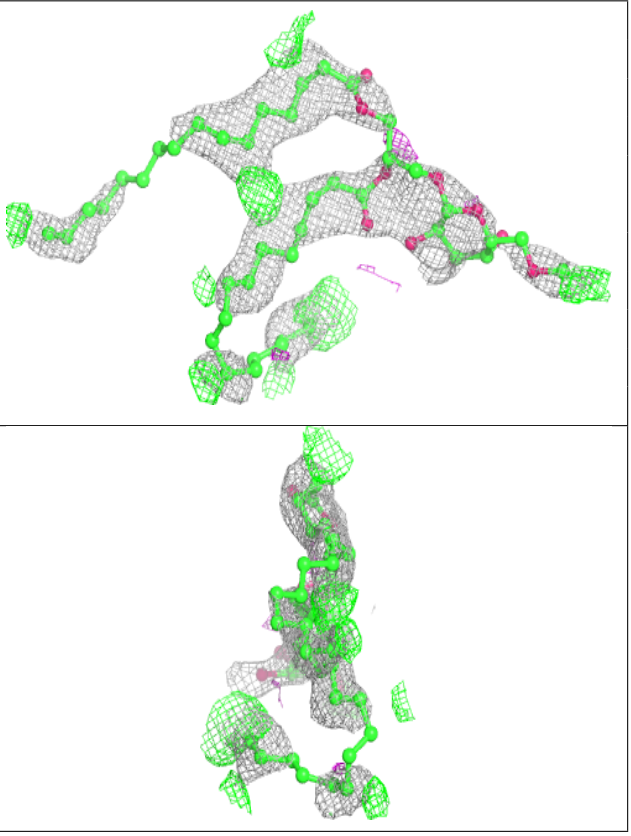
Electron density around HTG d 412:

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



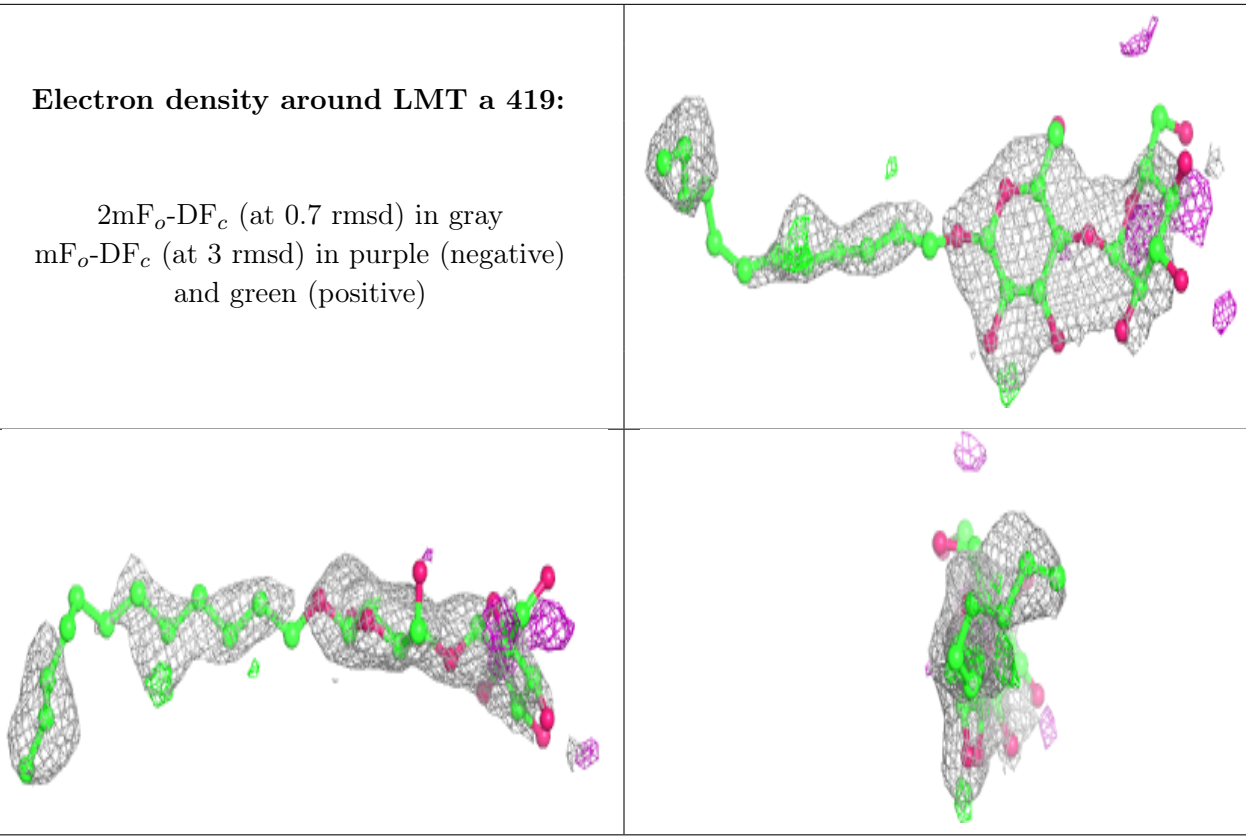
Electron density around DGD D 406:

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



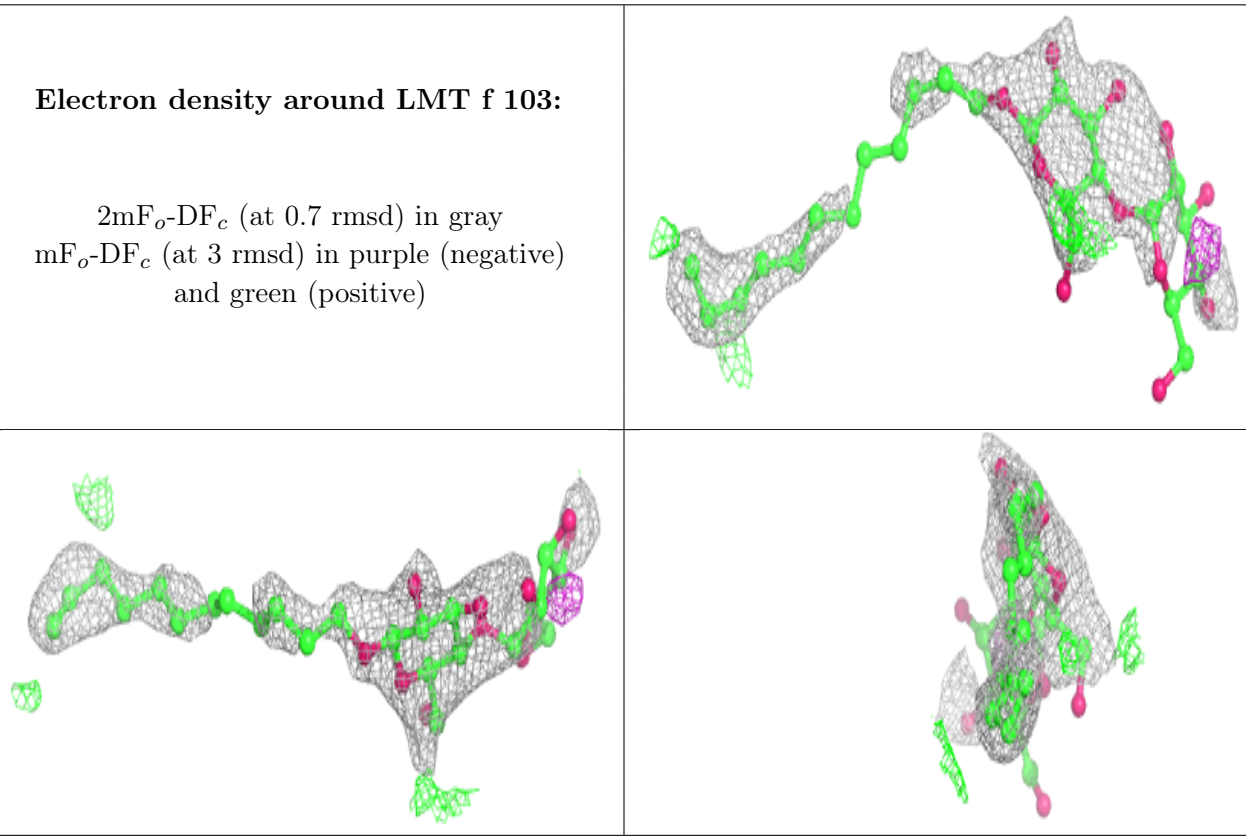
Electron density around LMT a 419:

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



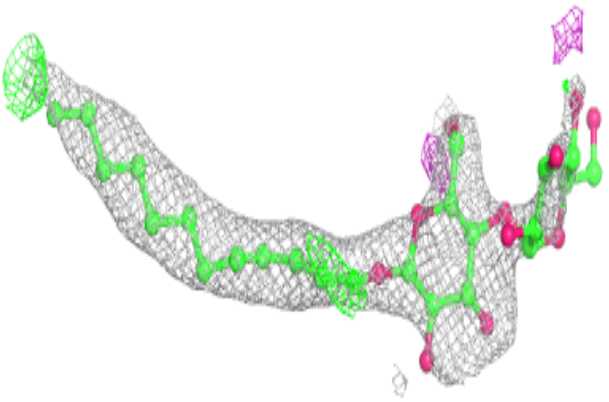
Electron density around LMT f 103:

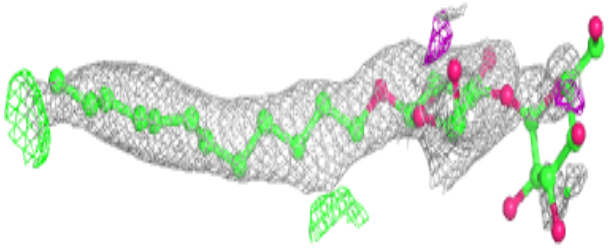
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

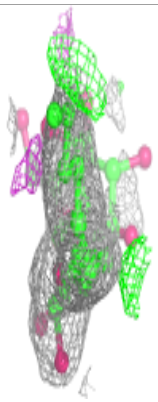


Electron density around LMT B 622:

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

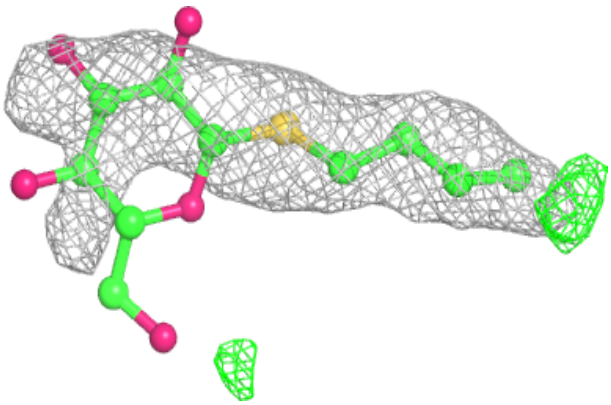


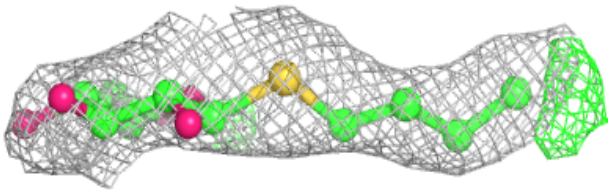


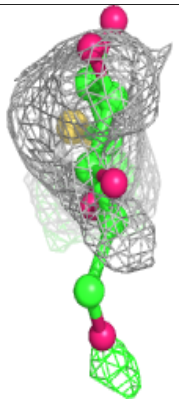


Electron density around HTG D 412:

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

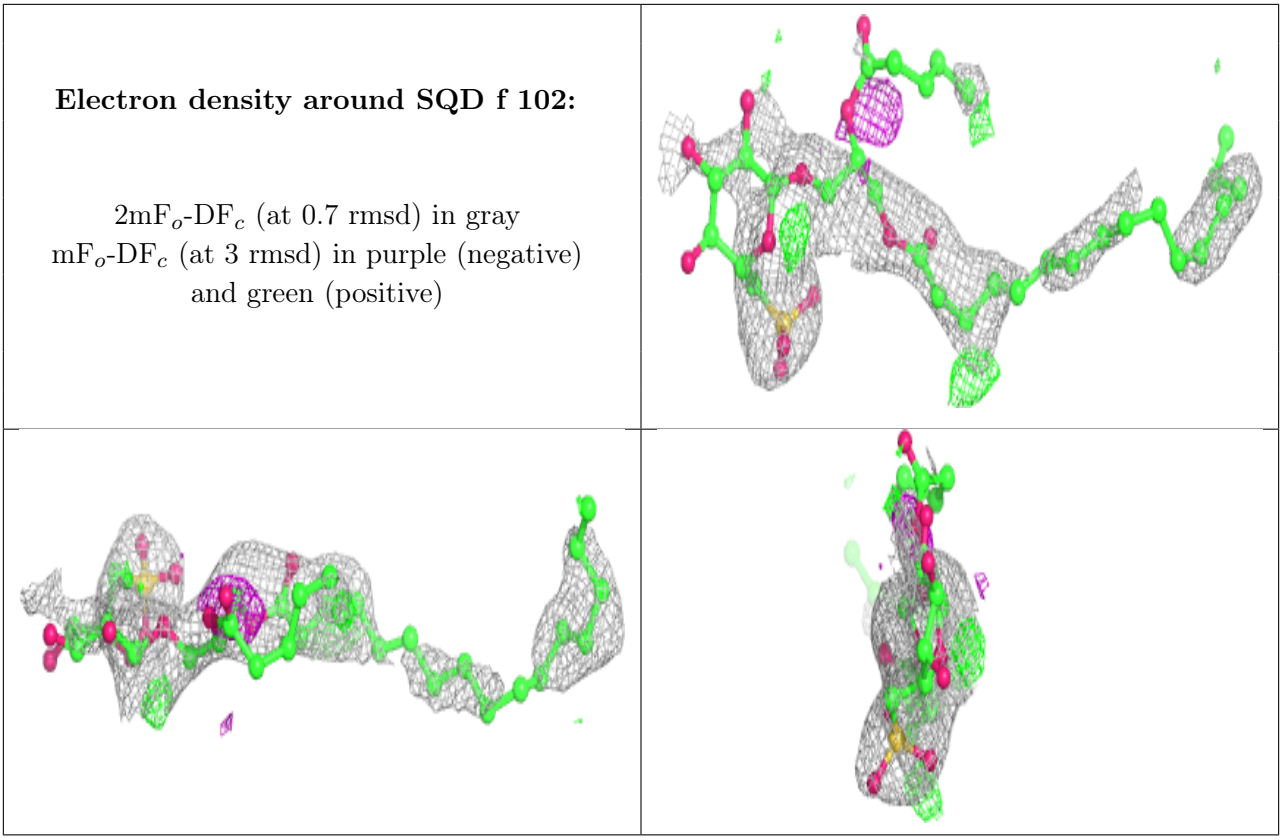






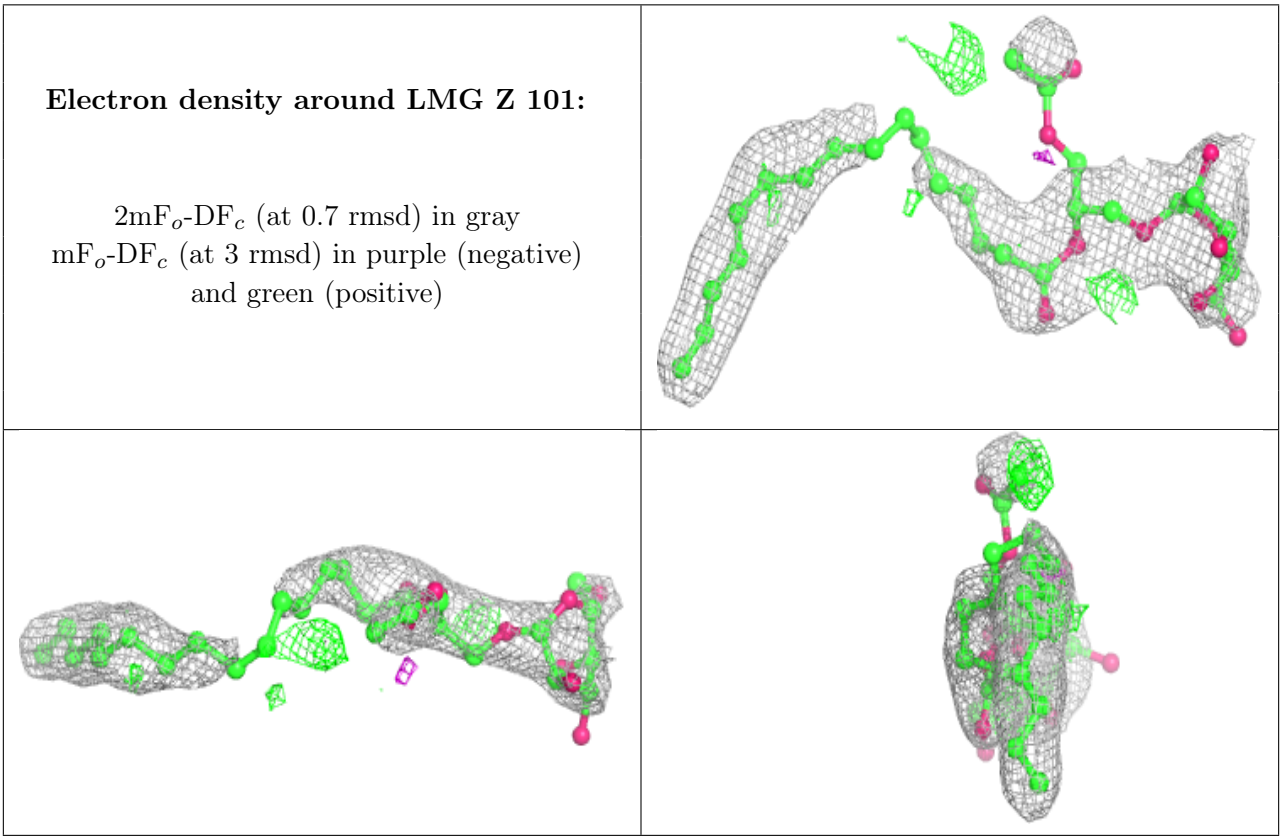
Electron density around SQD f 102:

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



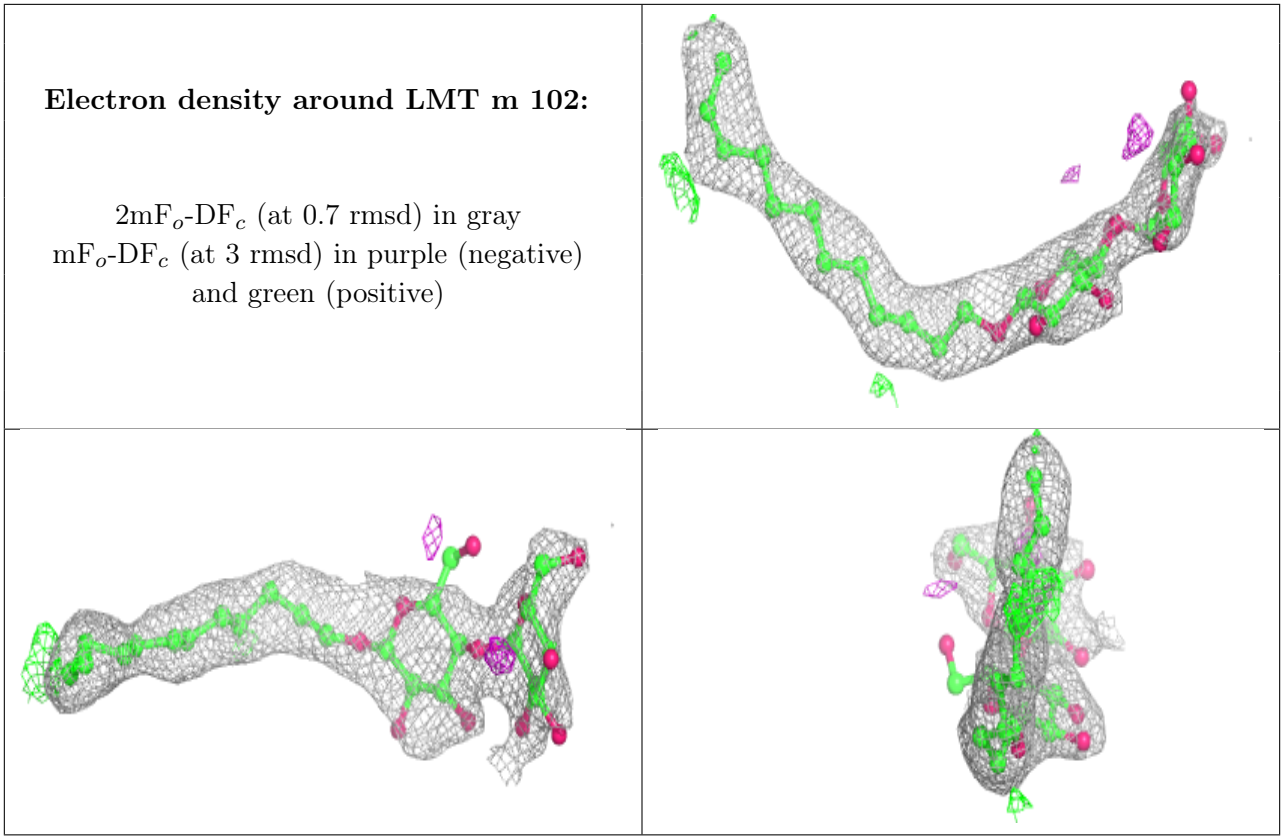
Electron density around LMG Z 101:

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



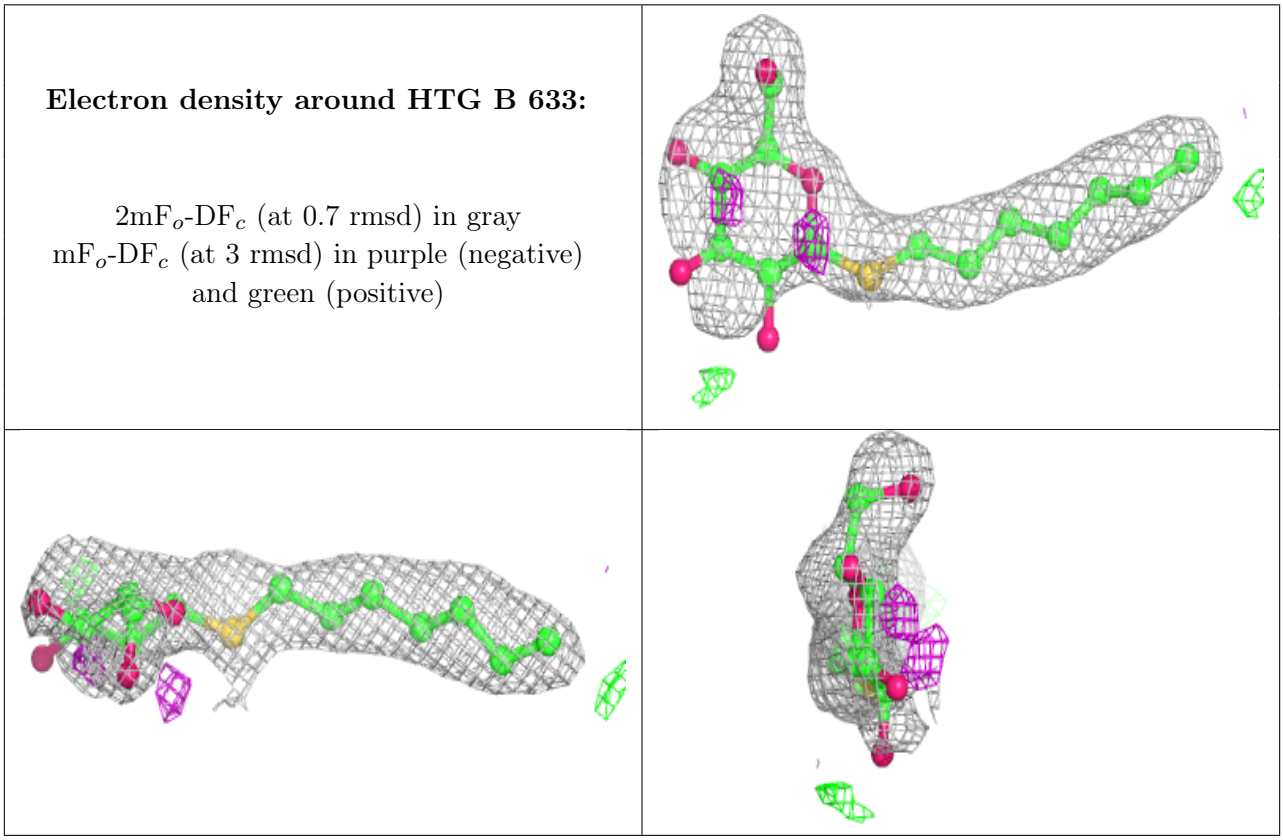
Electron density around LMT m 102:

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



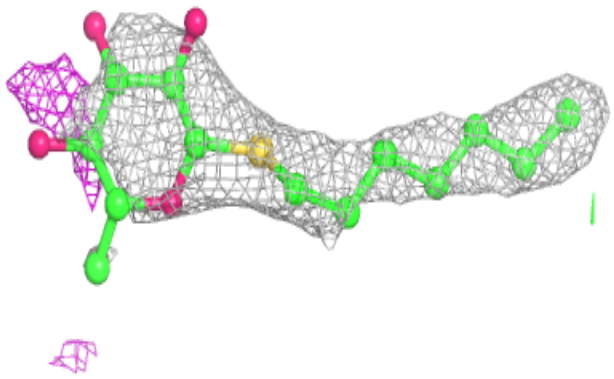
Electron density around HTG B 633:

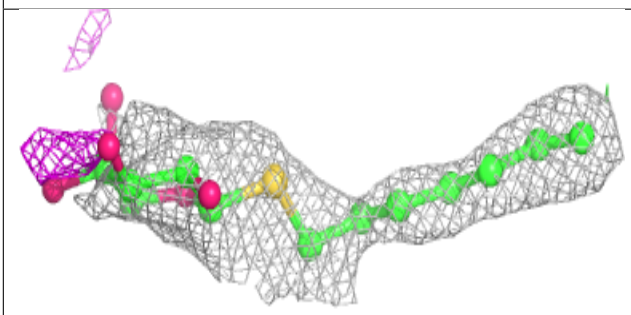
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

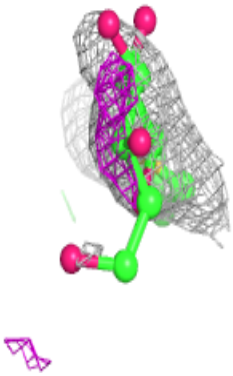


Electron density around HTG c 525:

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

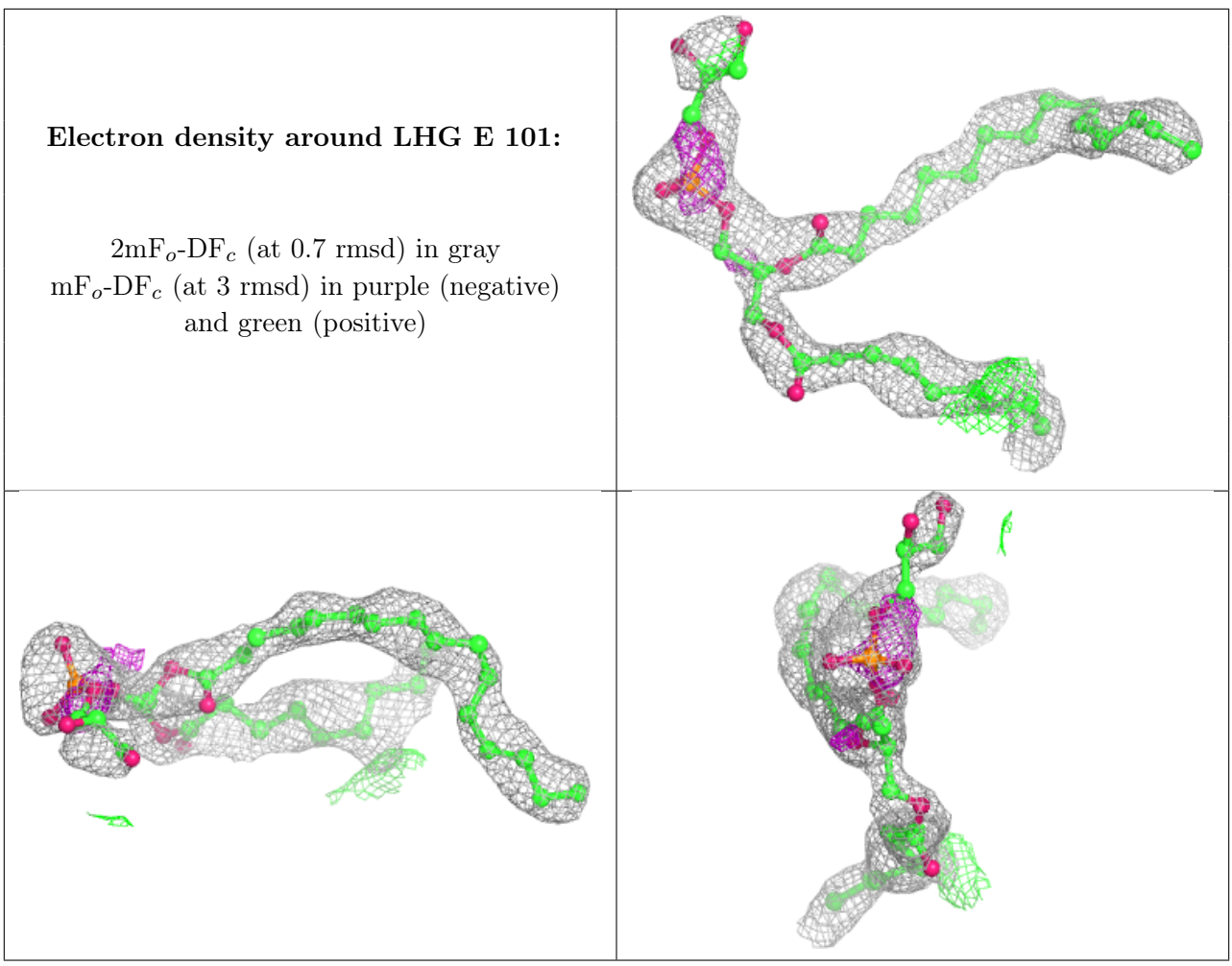






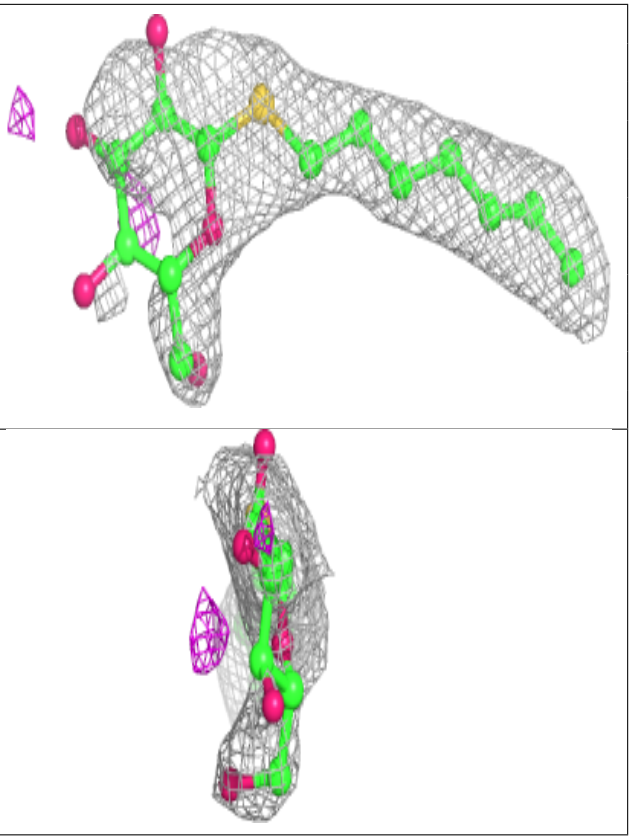
Electron density around LHG E 101:

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



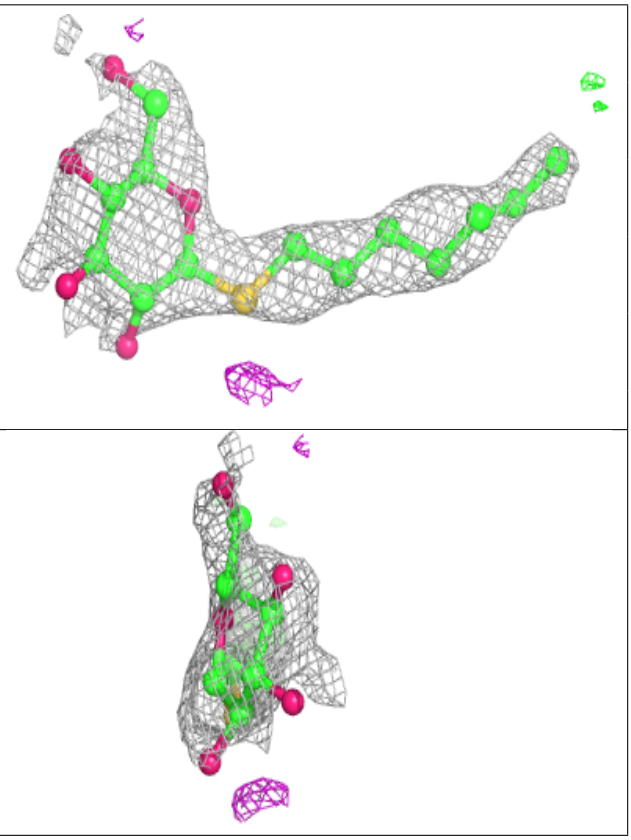
Electron density around HTG b 608:

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



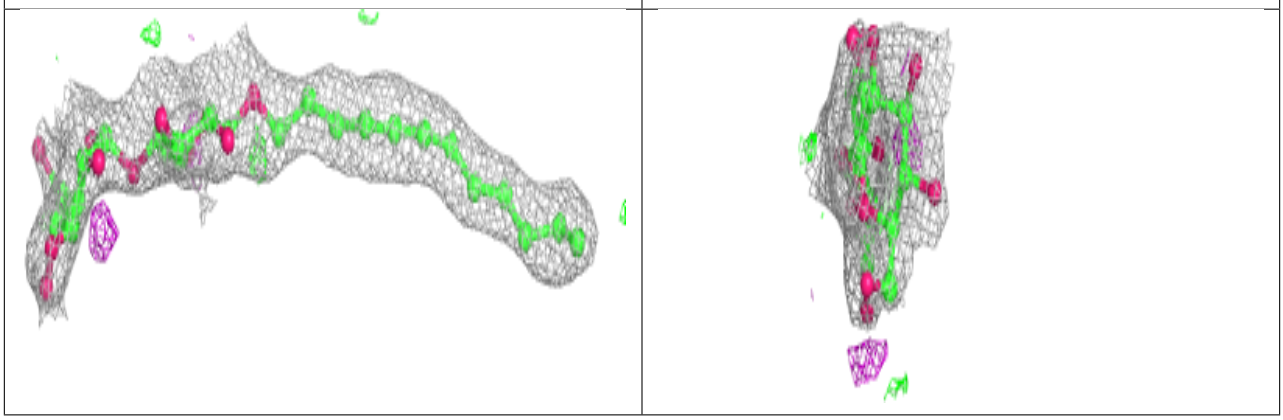
Electron density around HTG B 625:

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



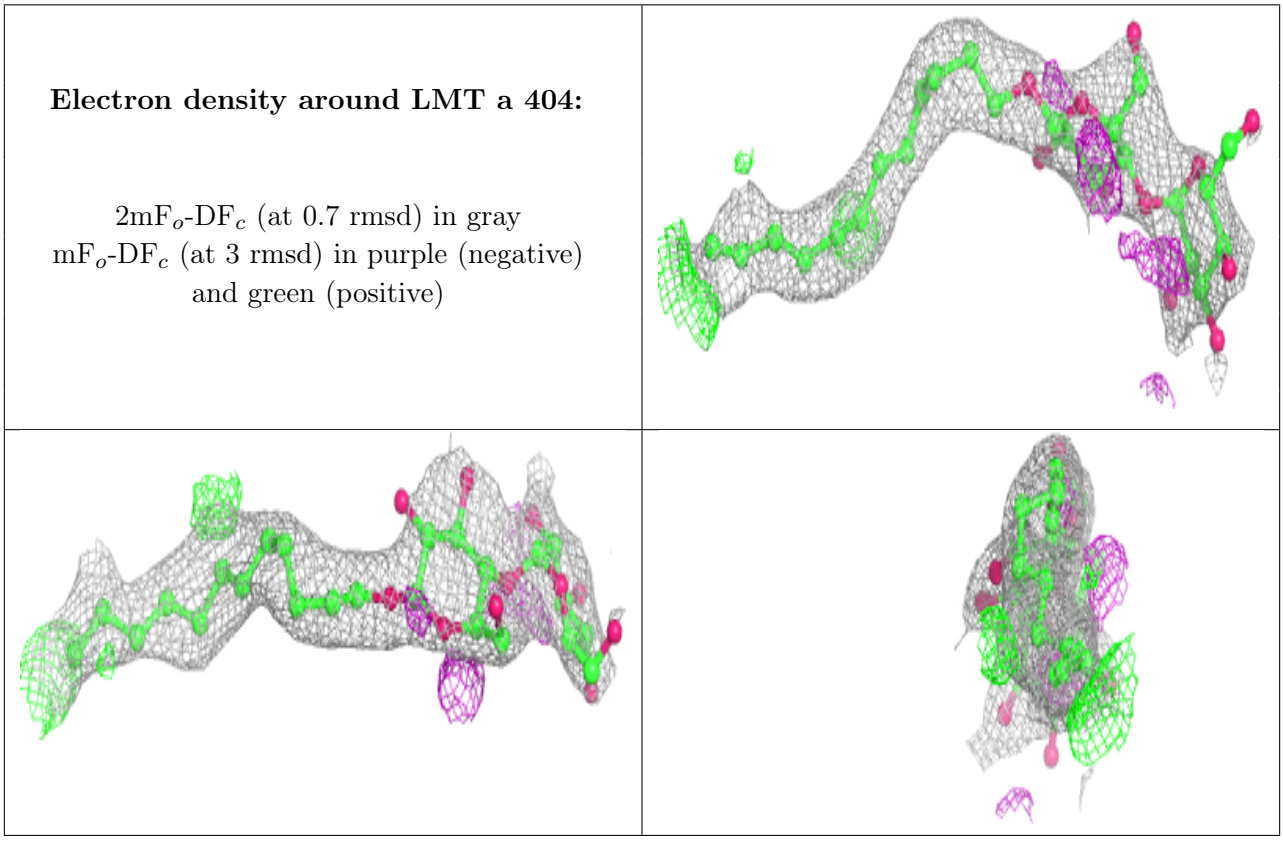
Electron density around LMT M 105:

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



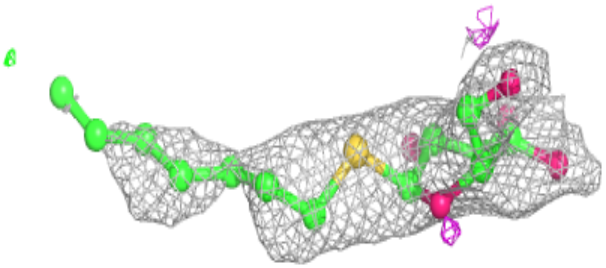
Electron density around LMT a 404:

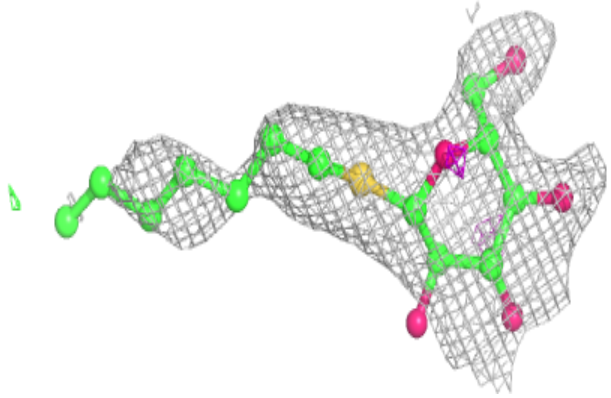
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

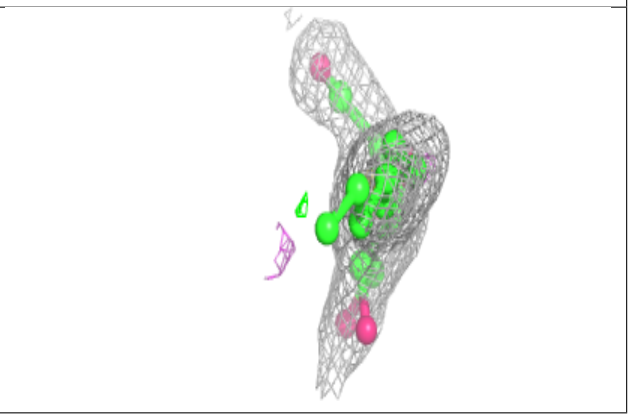


Electron density around HTG C 524:

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

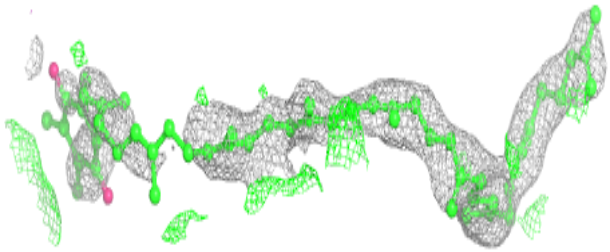


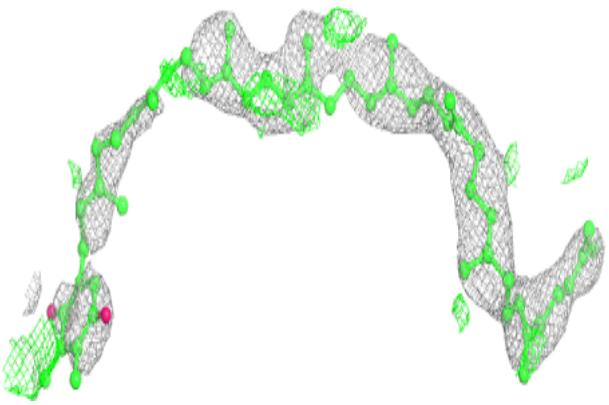


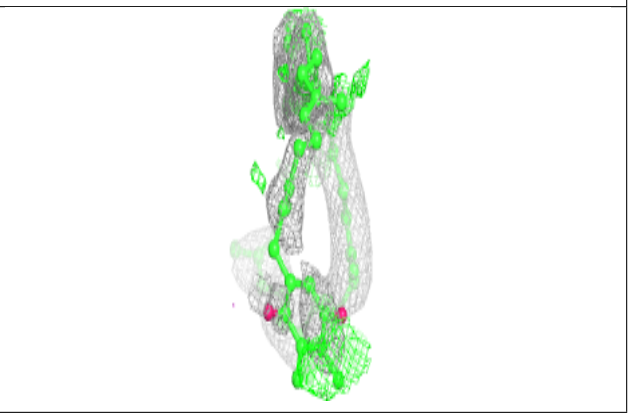


Electron density around PL9 a 416:

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

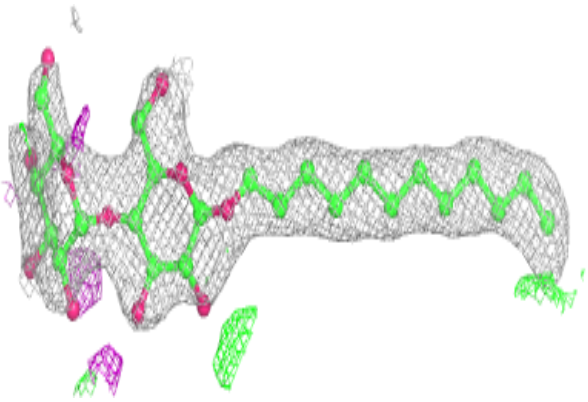


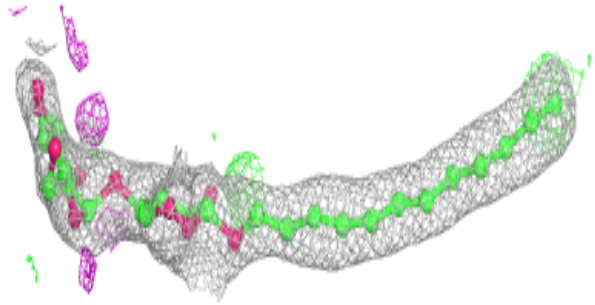


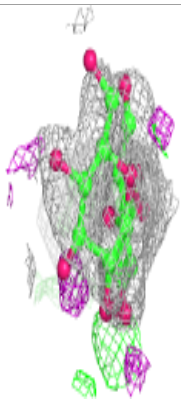


Electron density around LMT M 102:

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

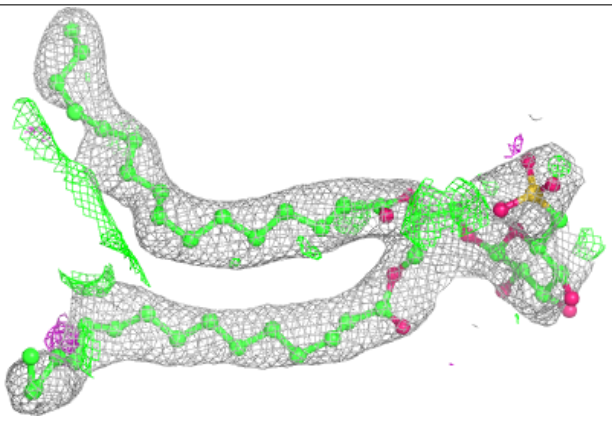


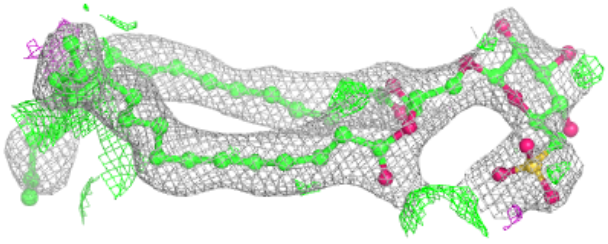


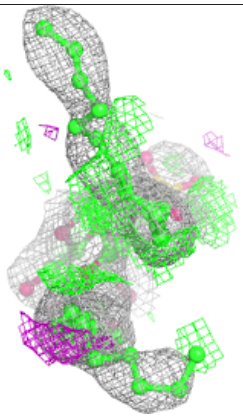


Electron density around SQD B 621:

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

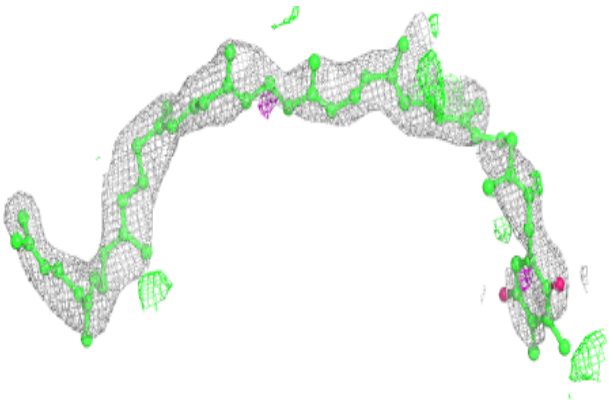


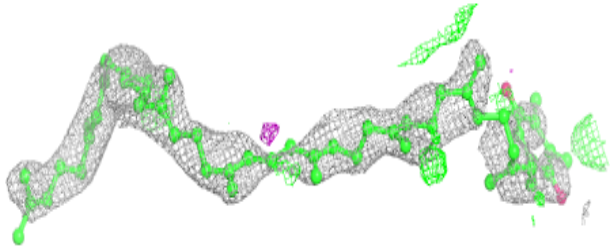


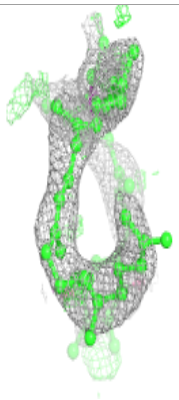


Electron density around PL9 A 418:

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

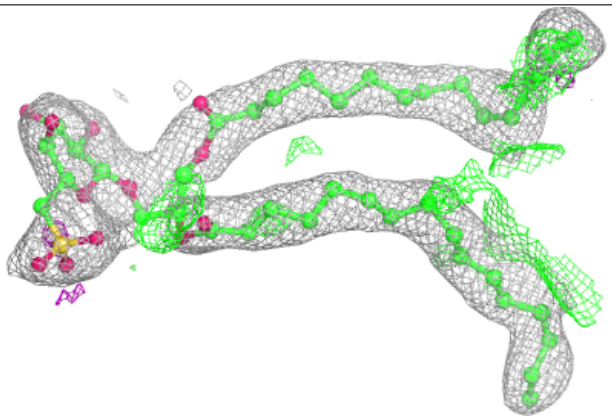


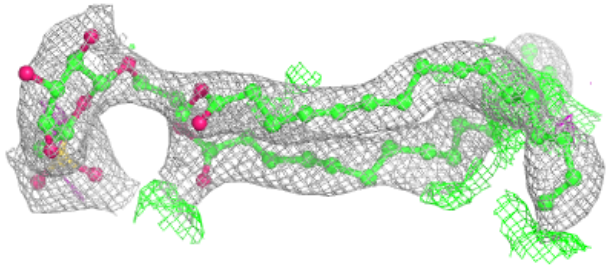




Electron density around SQD L 102:

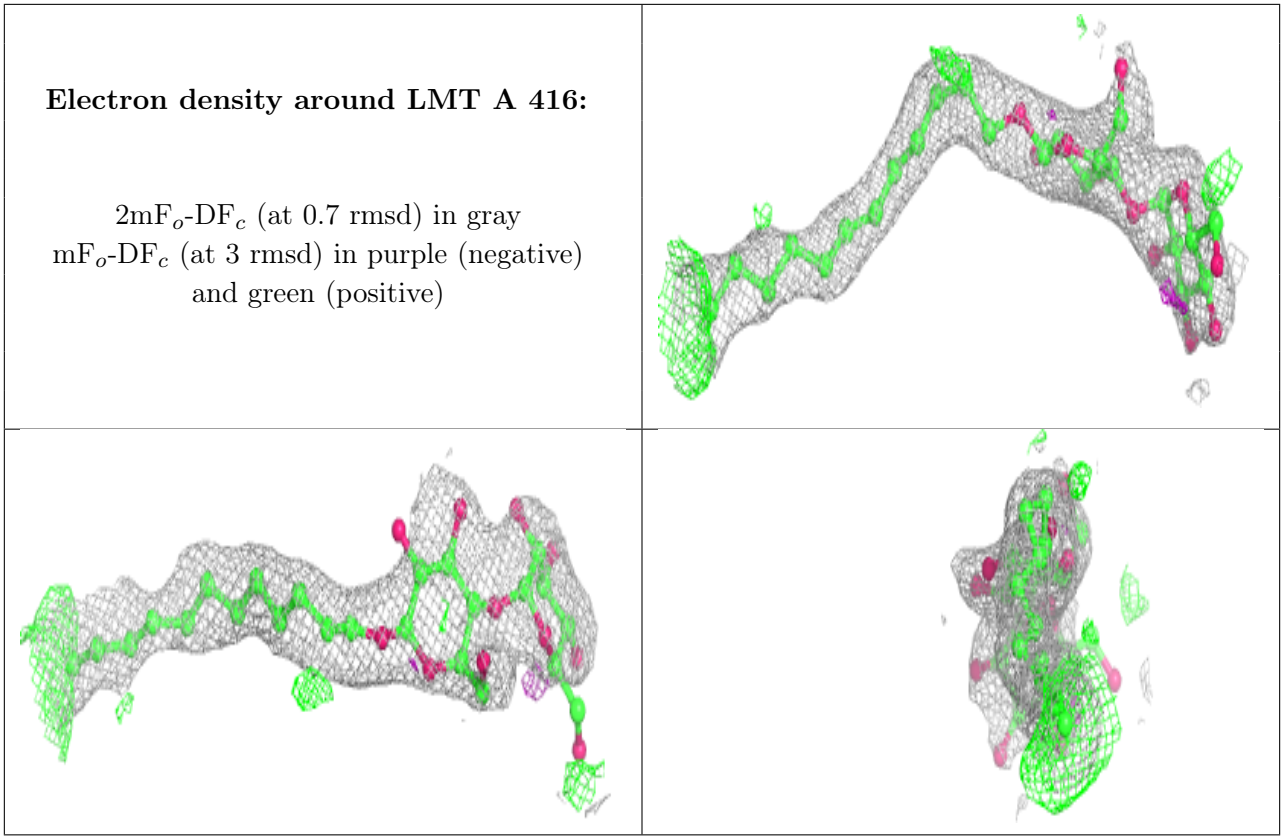
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





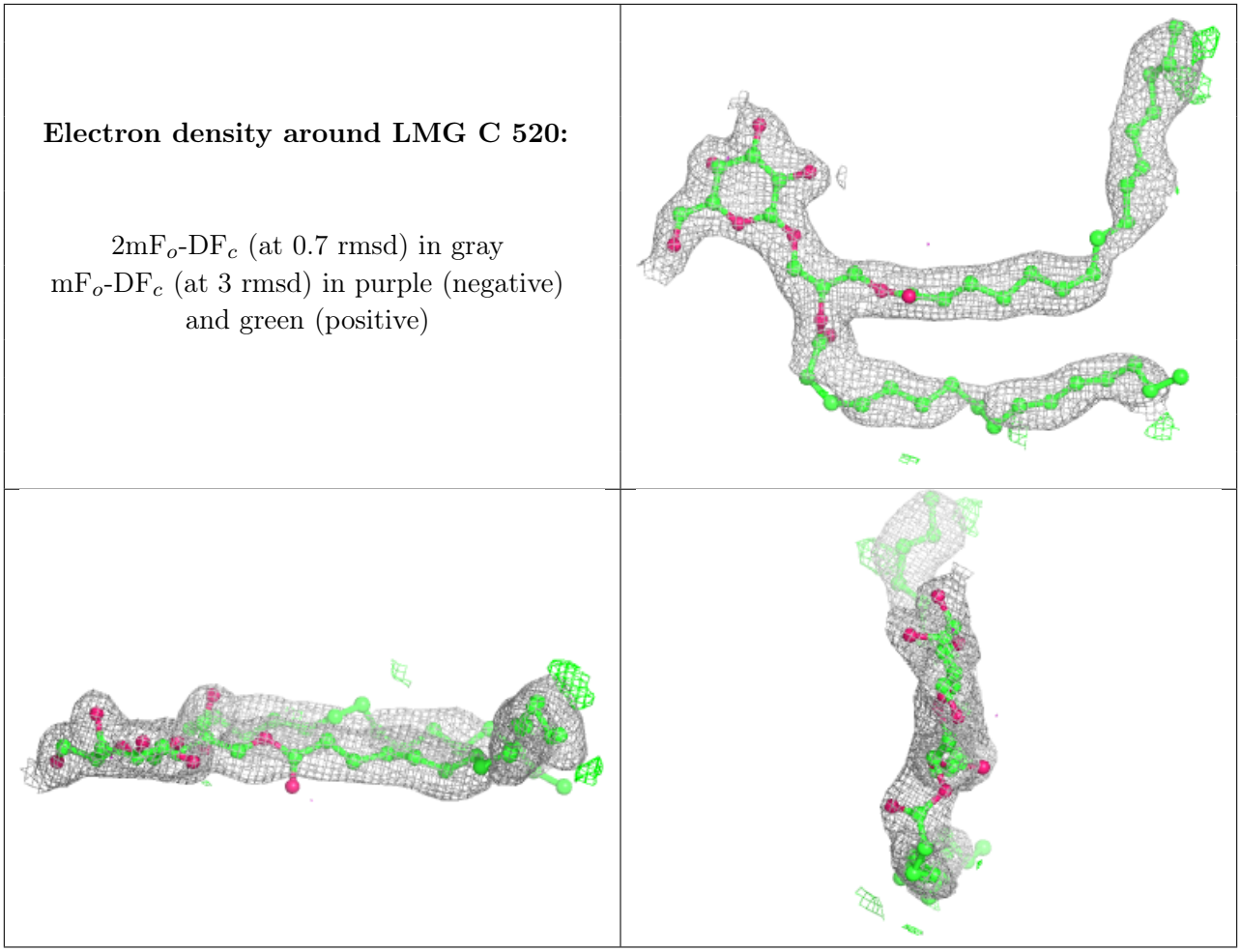
Electron density around LMT A 416:

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



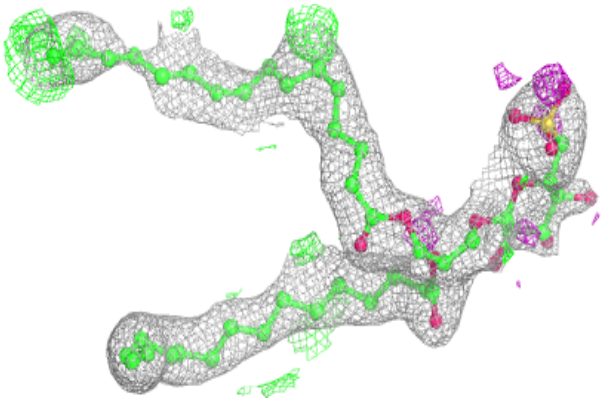
Electron density around LMG C 520:

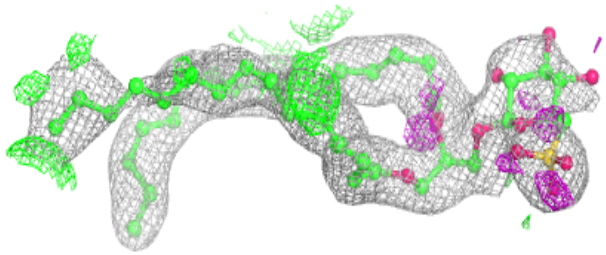
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

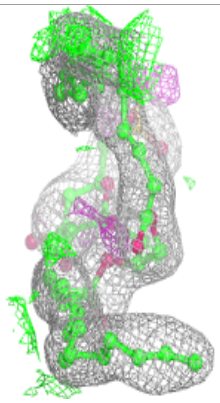


Electron density around SQD A 415:

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

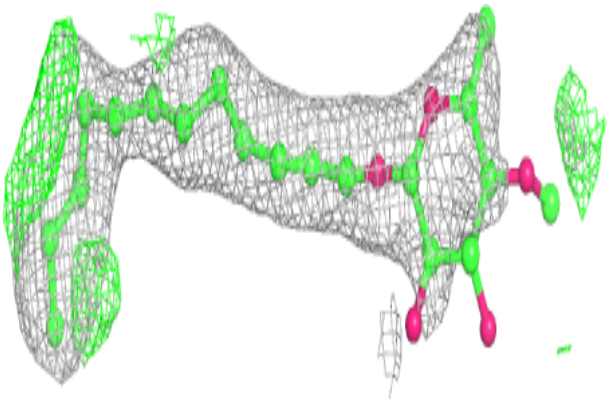


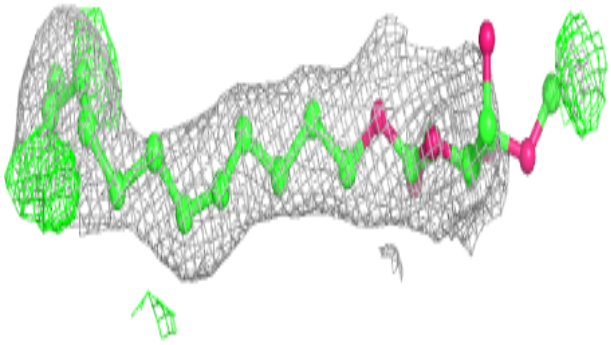


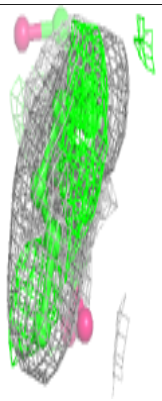


Electron density around LMT B 635:

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

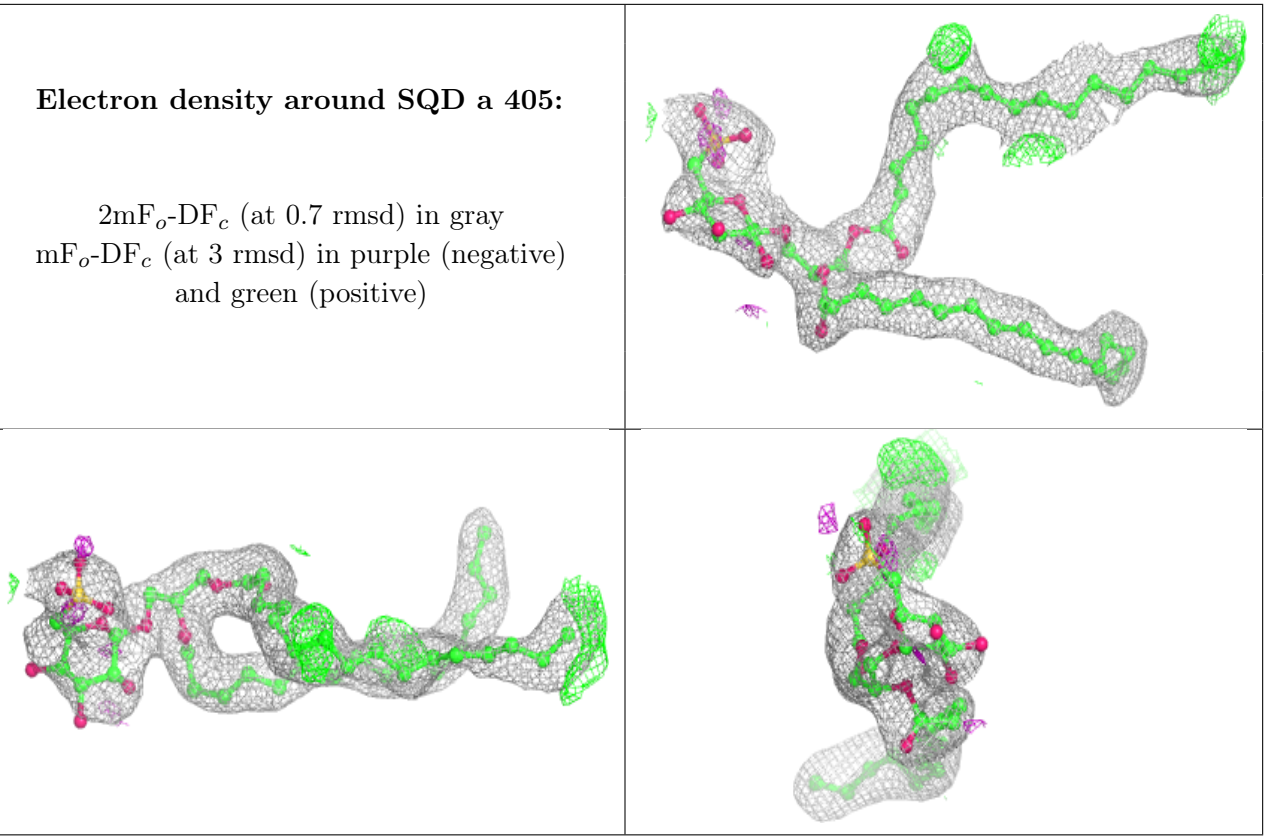






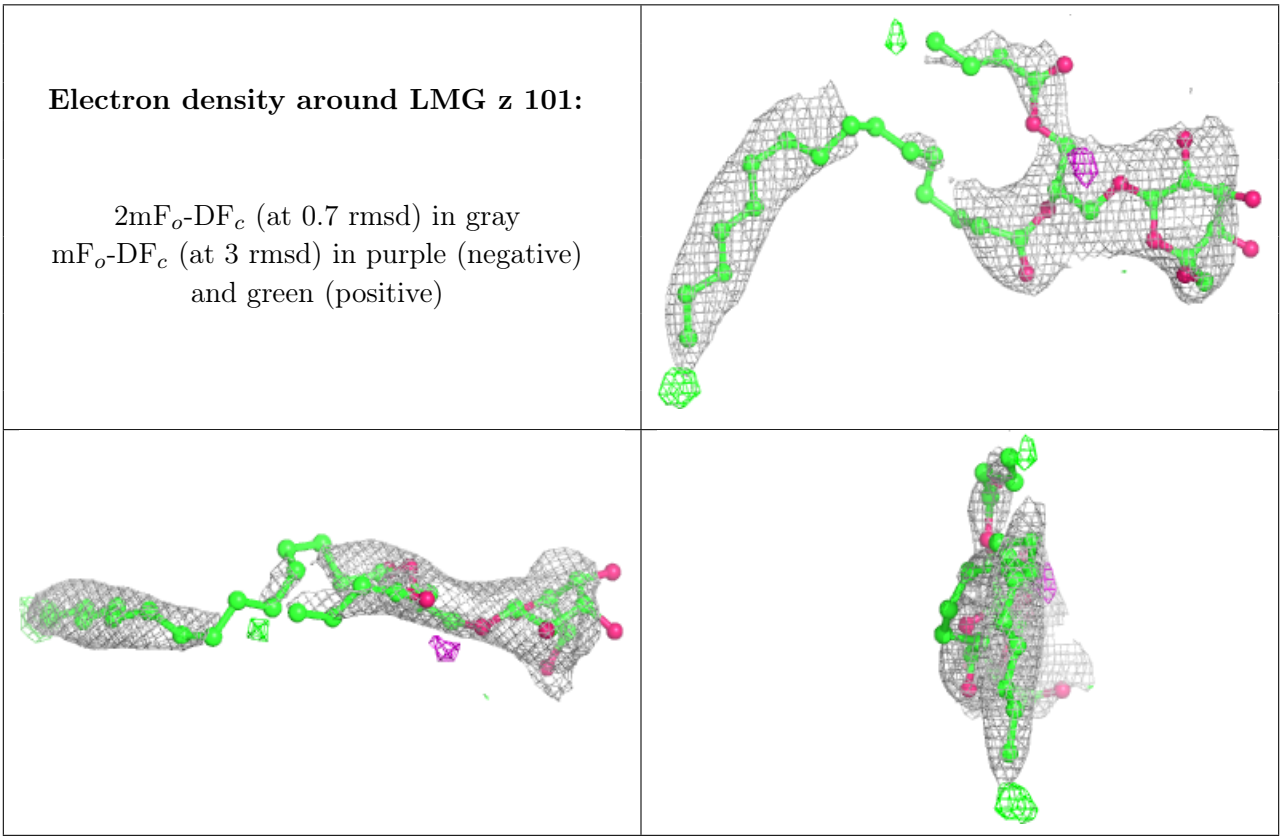
Electron density around SQD a 405:

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



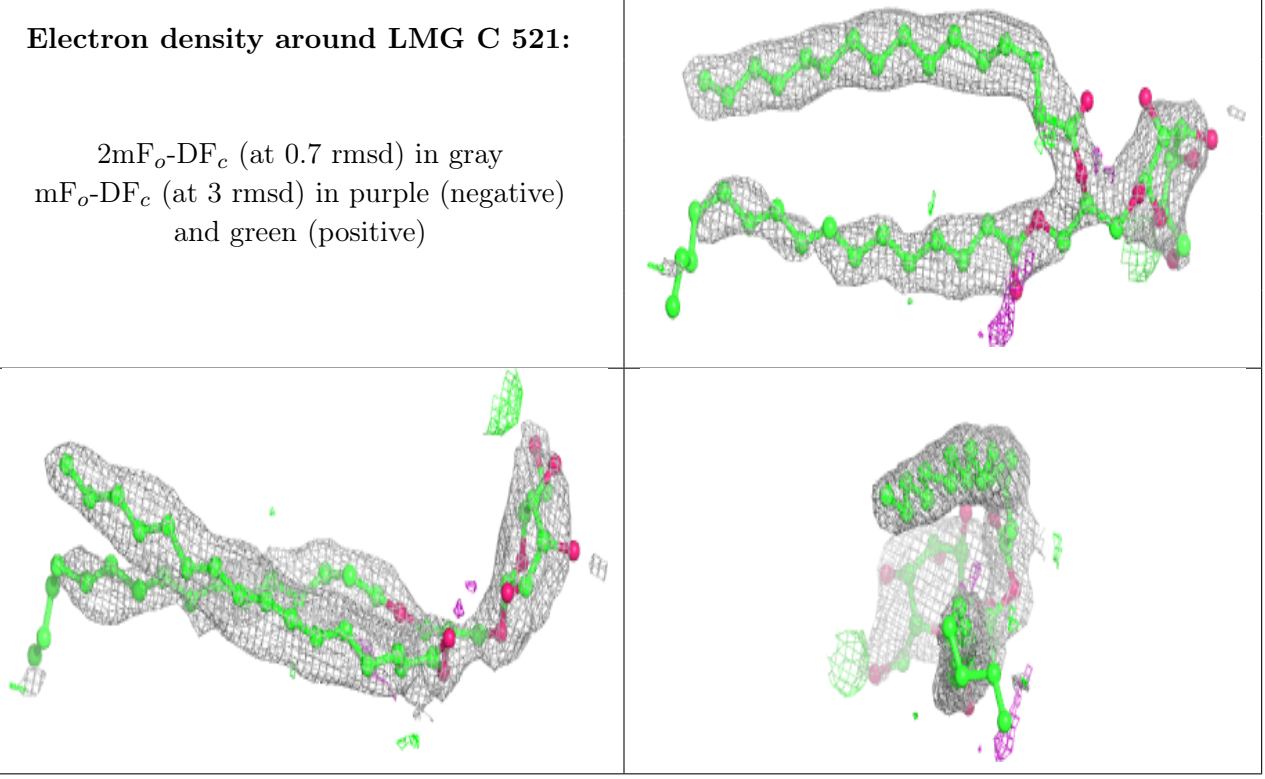
Electron density around LMG z 101:

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



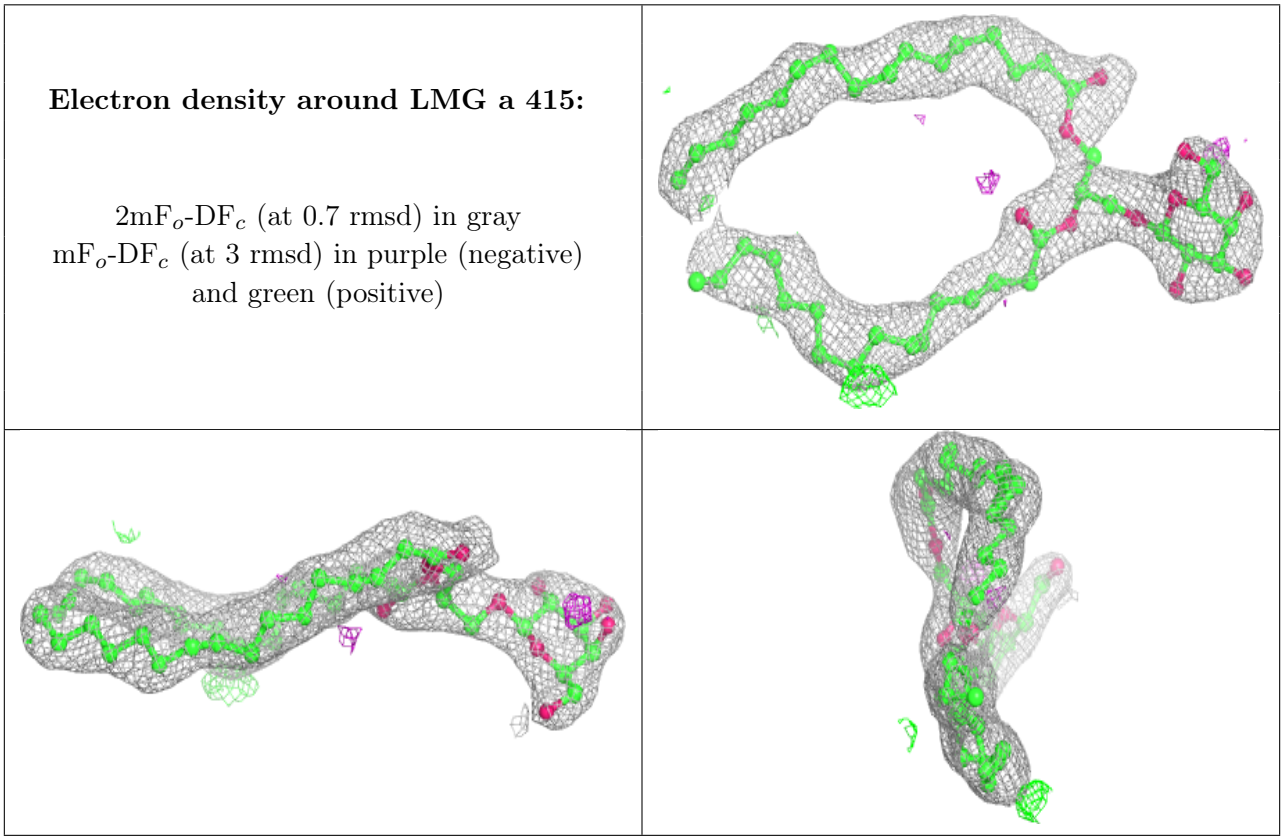
Electron density around LMG C 521:

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



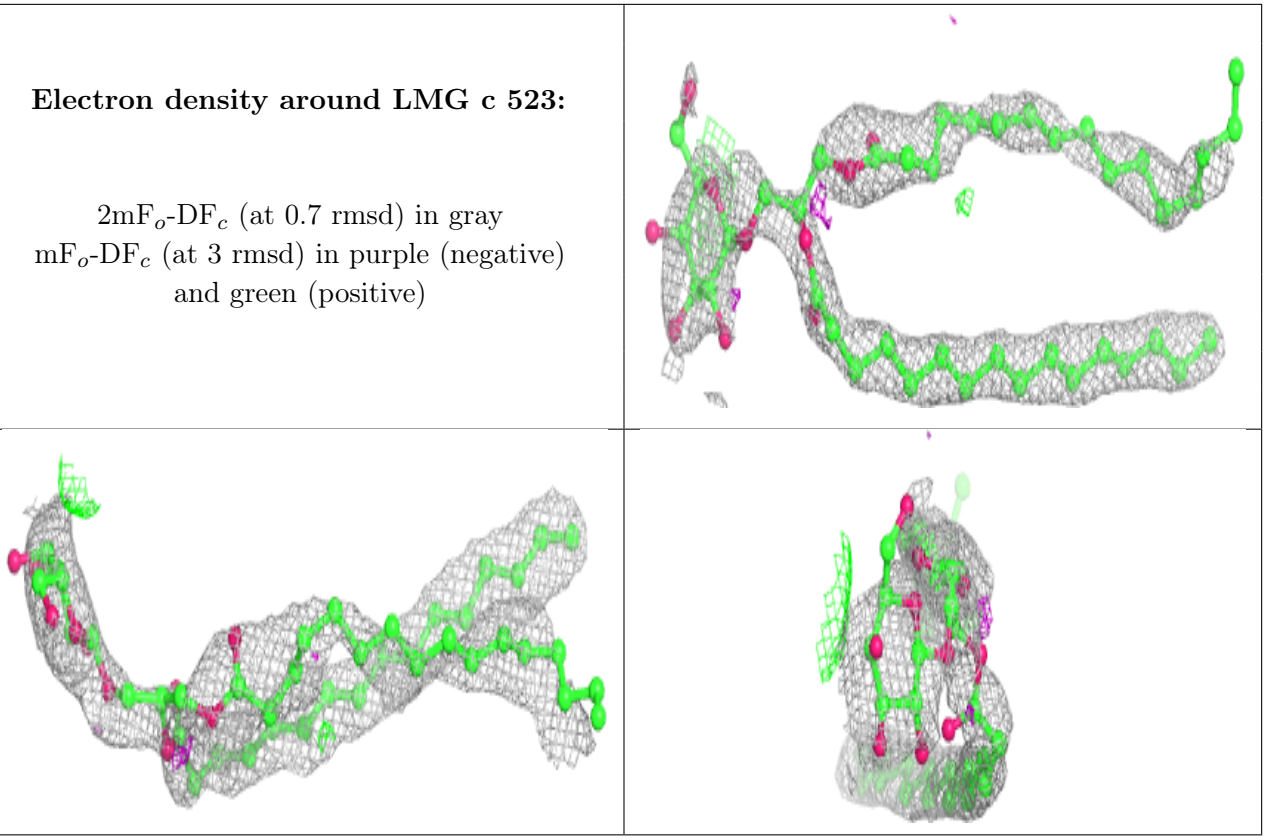
Electron density around LMG a 415:

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



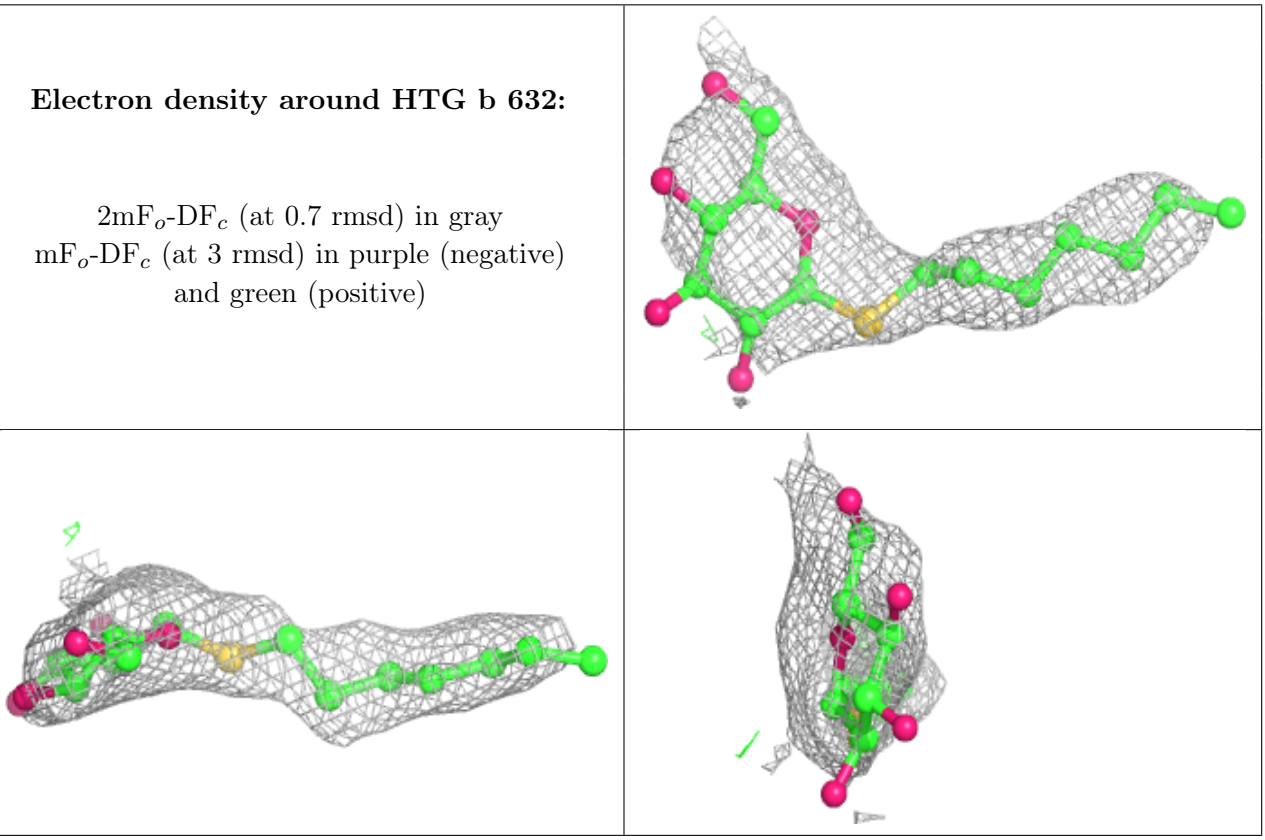
Electron density around LMG c 523:

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



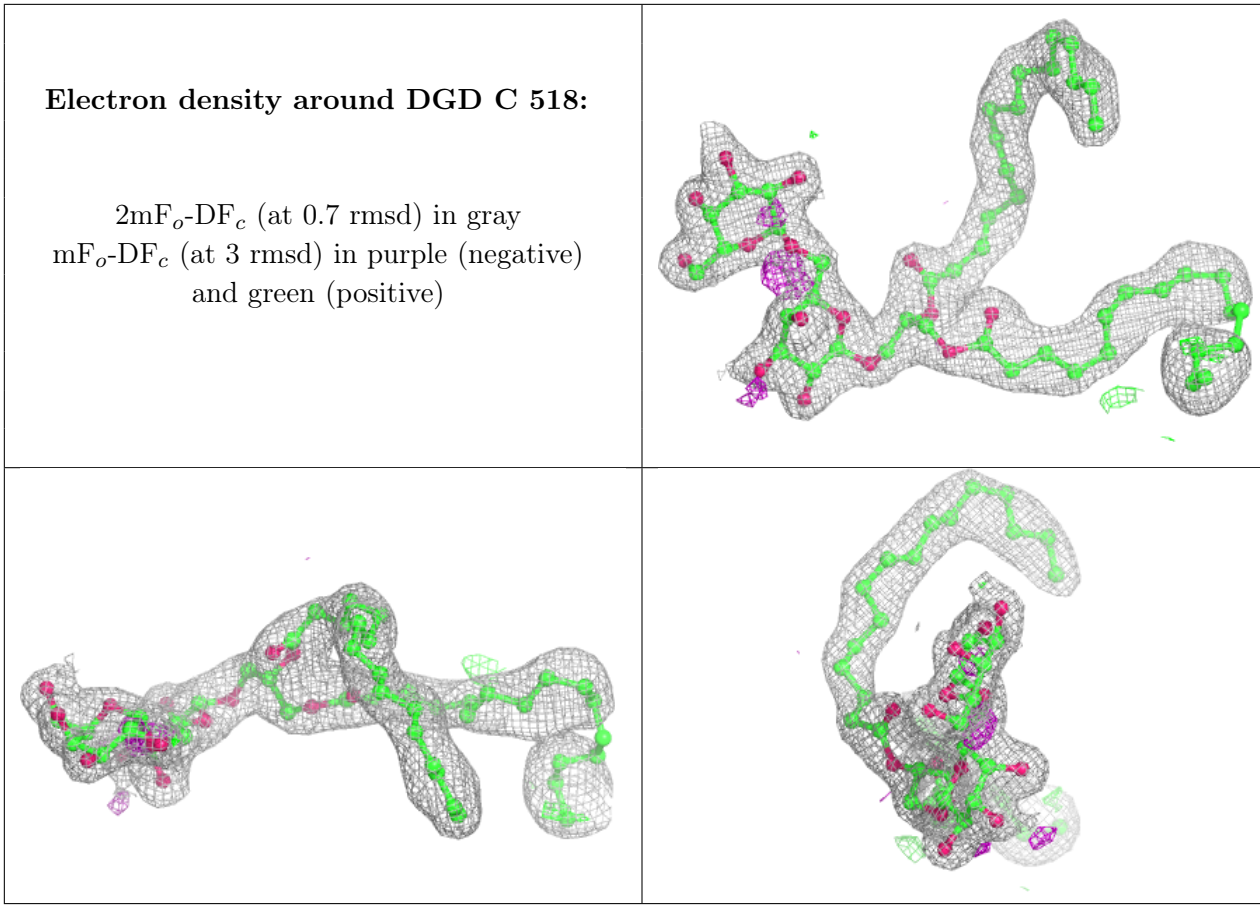
Electron density around HTG b 632:

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



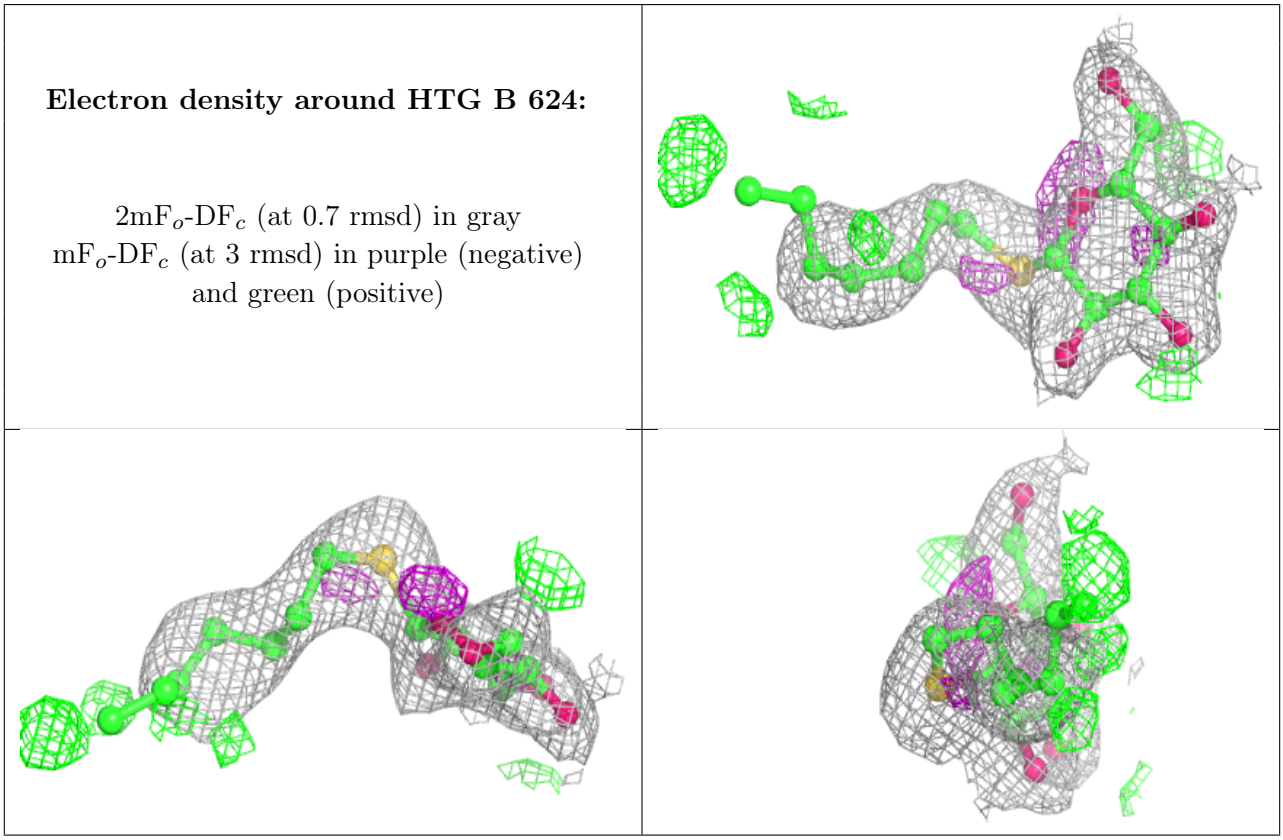
Electron density around DGD C 518:

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



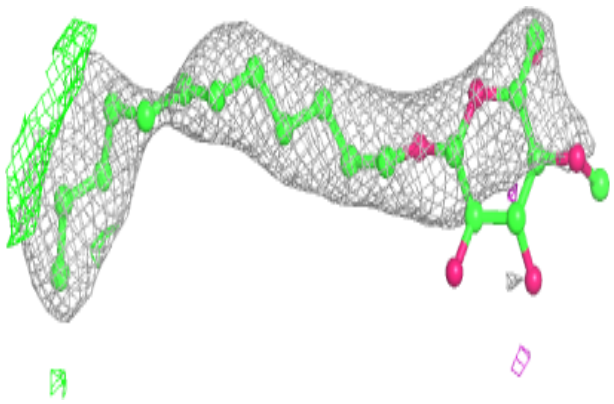
Electron density around HTG B 624:

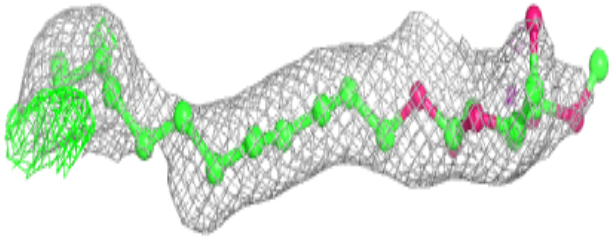
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

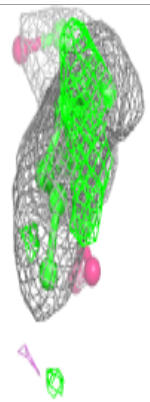


Electron density around LMT T 104:

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

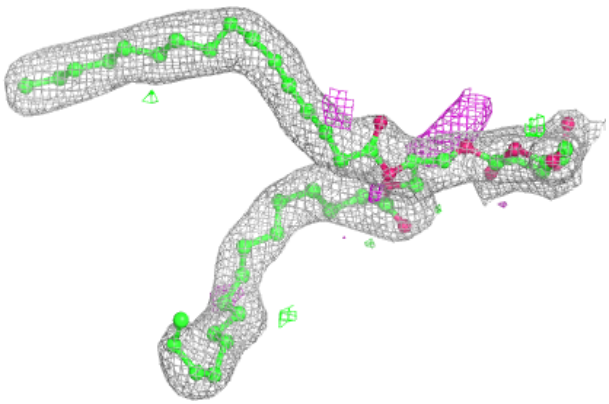


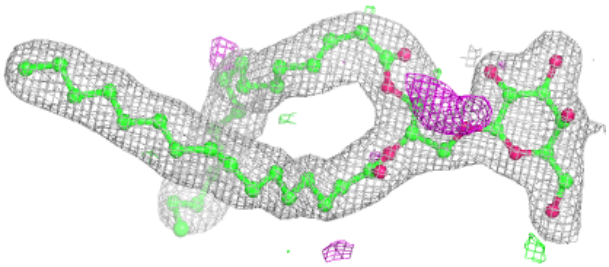


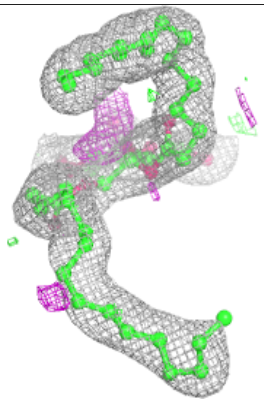


Electron density around LMG b 629:

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

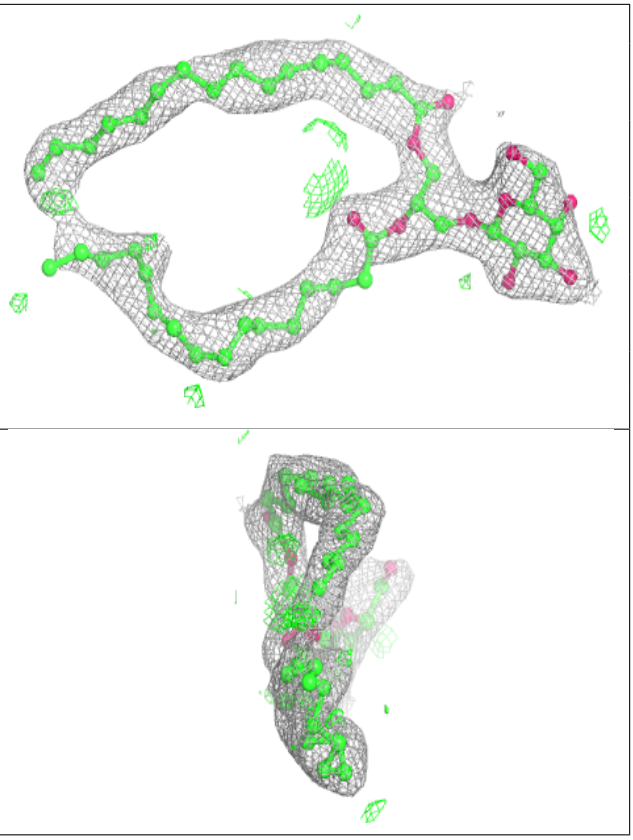


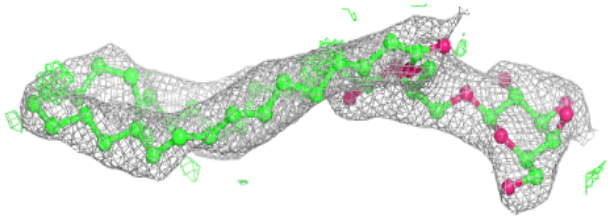




Electron density around LMG C 501:

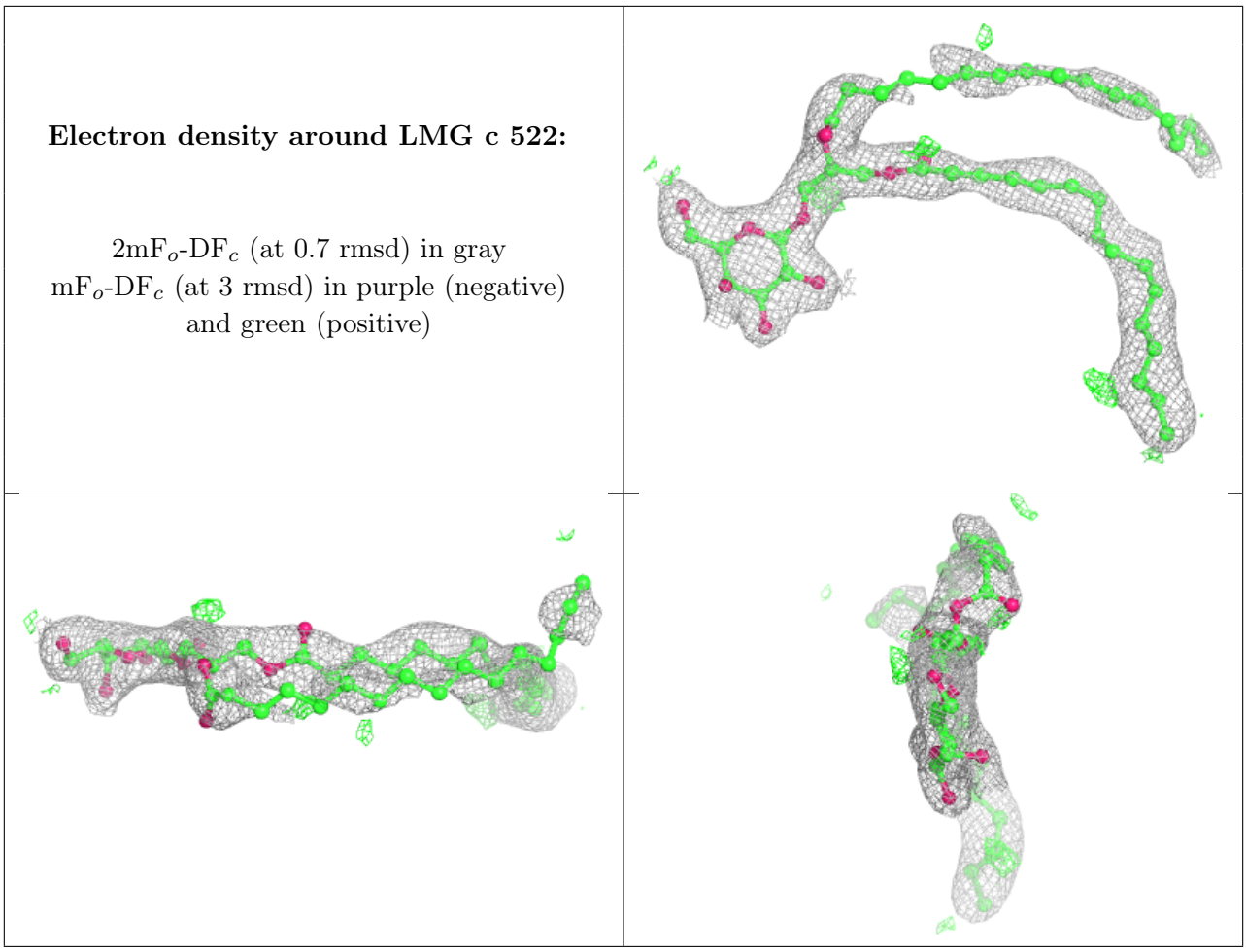
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





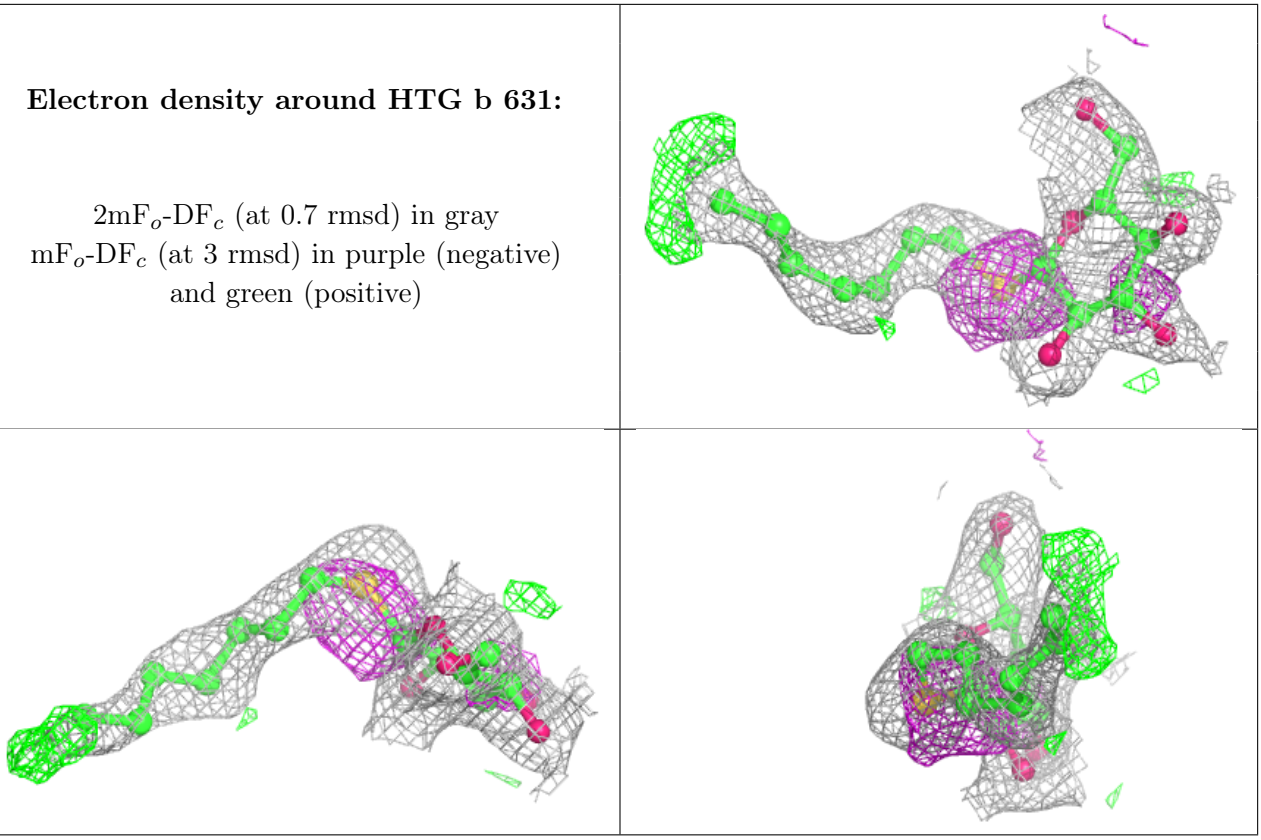
Electron density around LMG c 522:

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



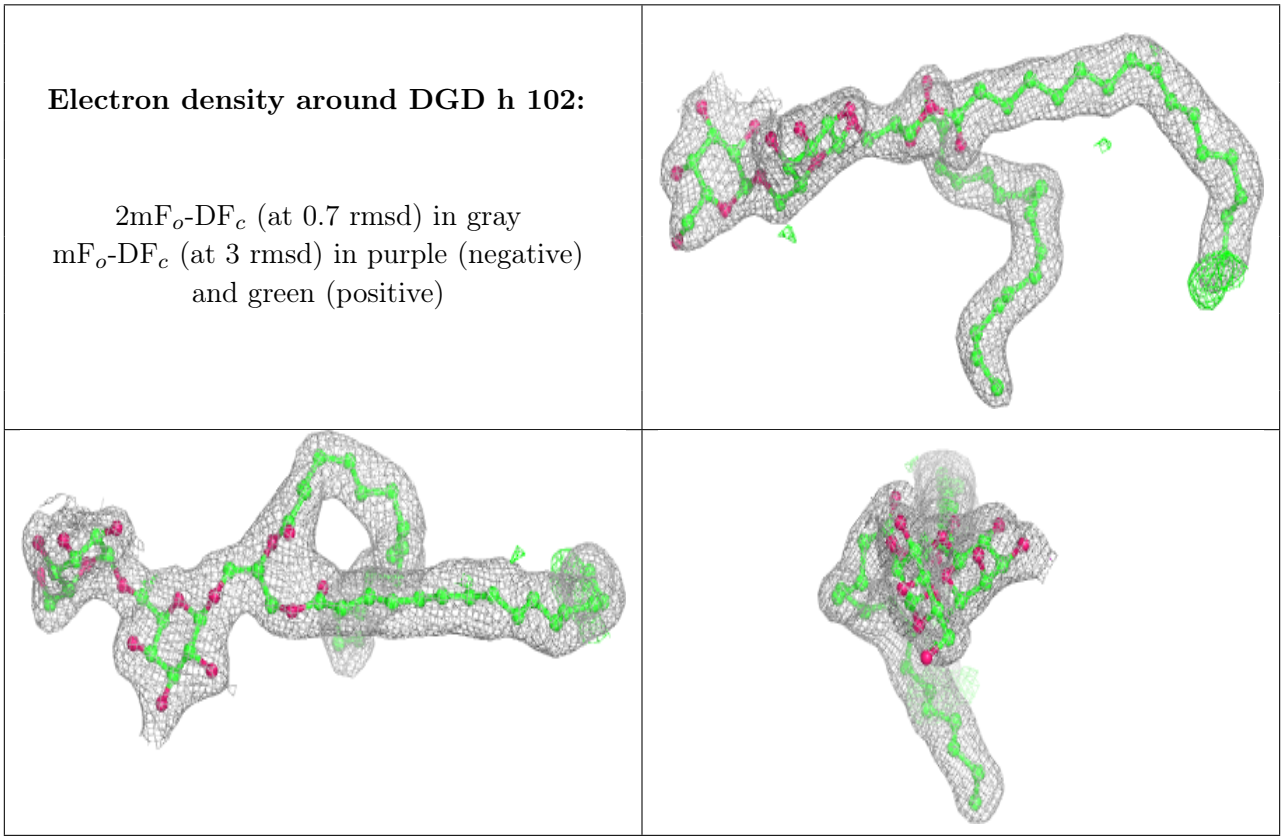
Electron density around HTG b 631:

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



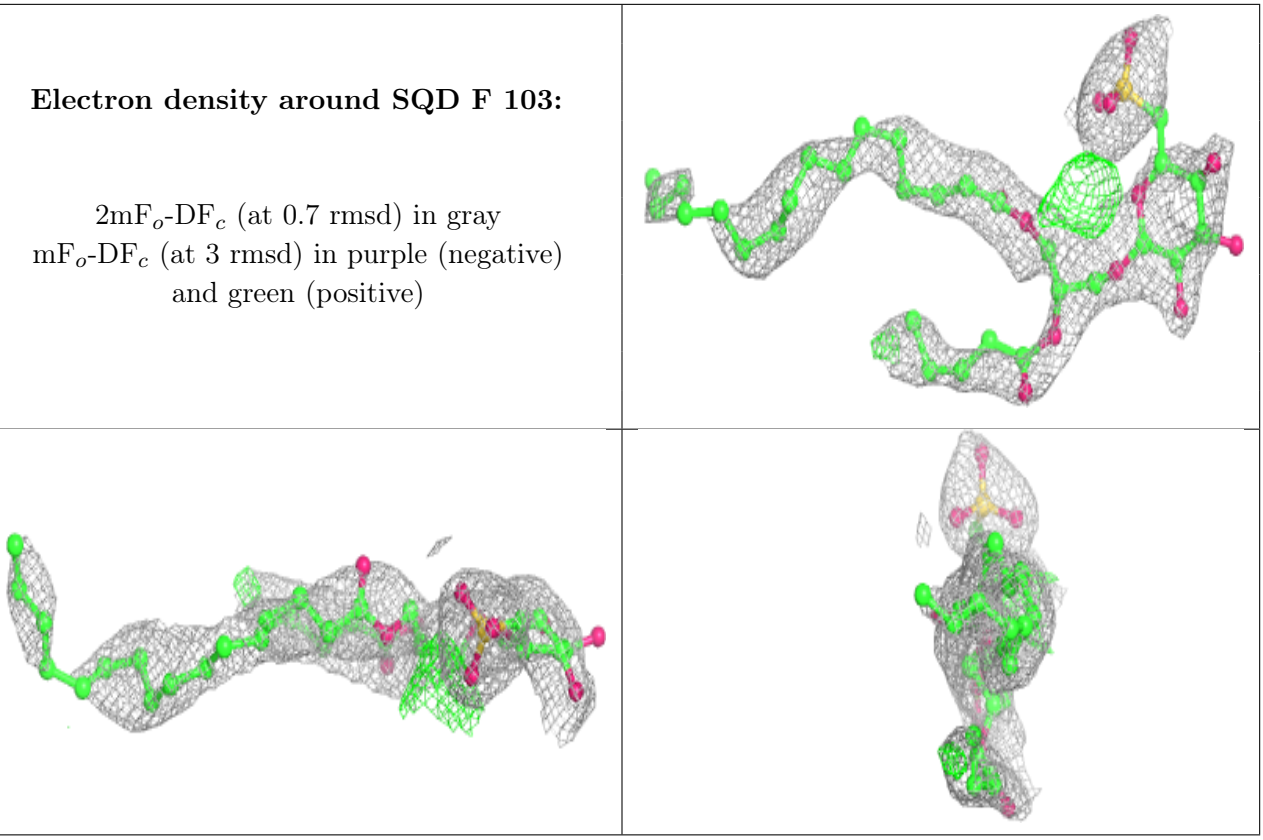
Electron density around DGD h 102:

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



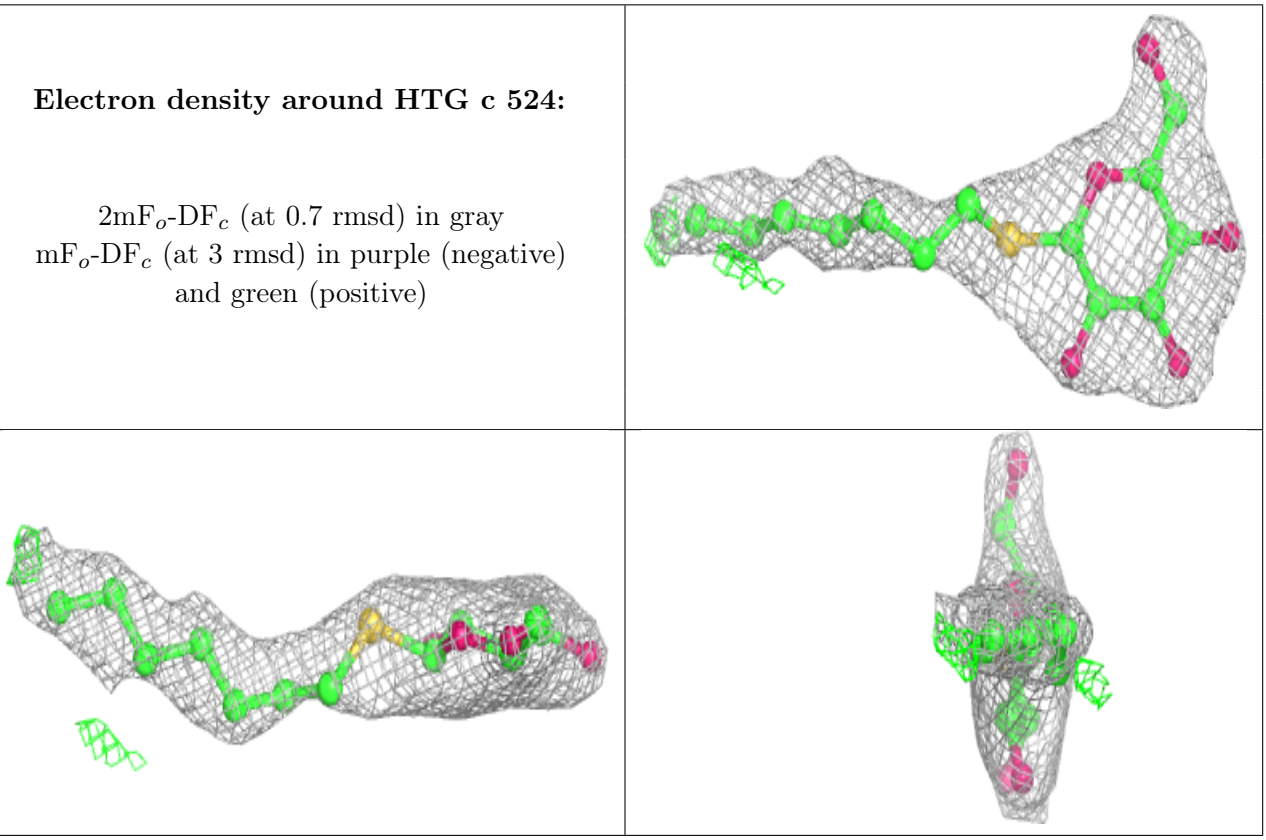
Electron density around SQD F 103:

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



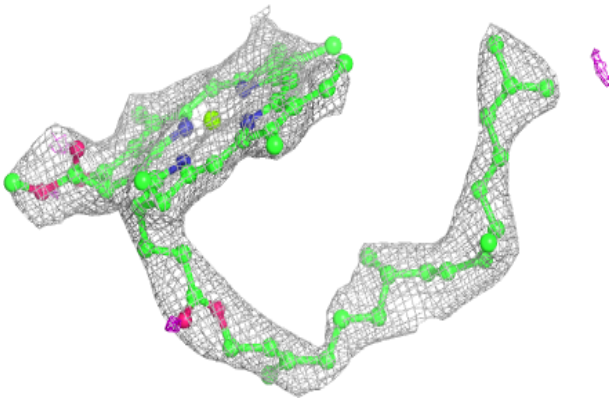
Electron density around HTG c 524:

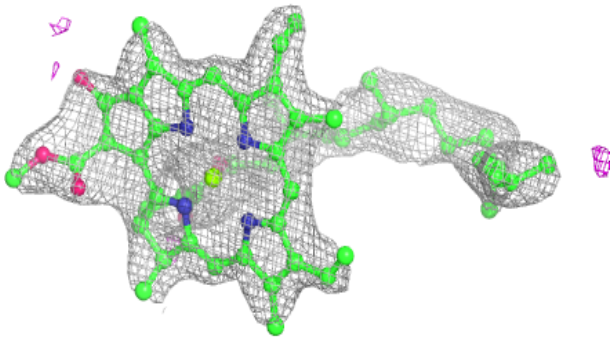
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

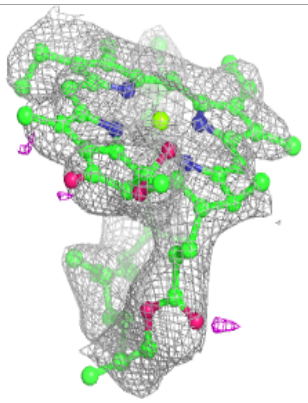


Electron density around CLA c 517:

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

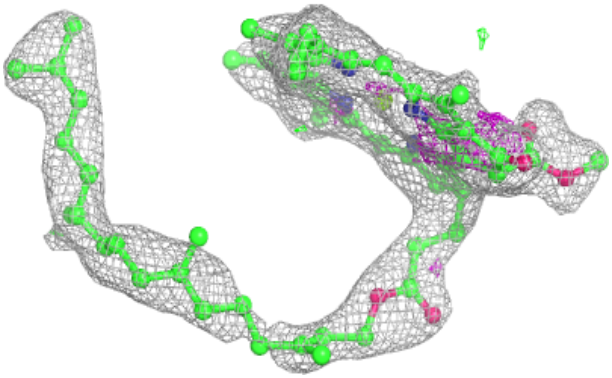


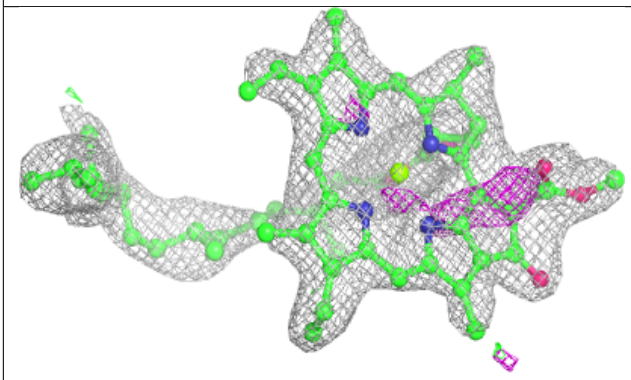


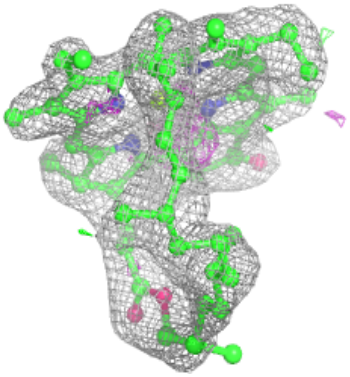


Electron density around CLA C 514:

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

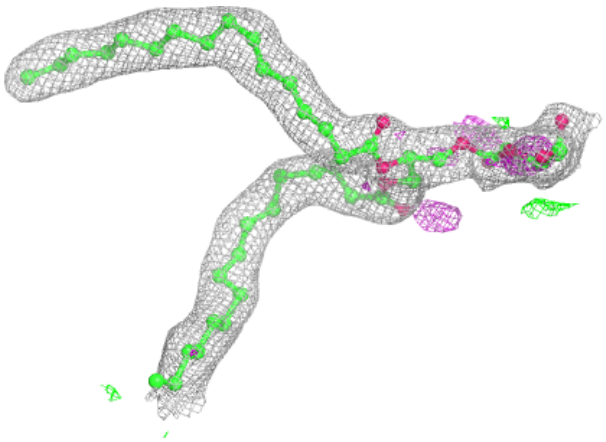


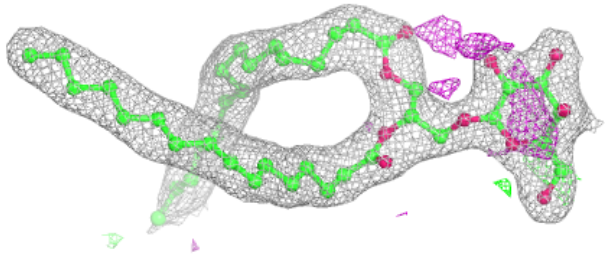


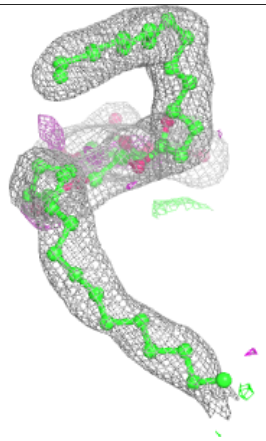


Electron density around LMG M 101:

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

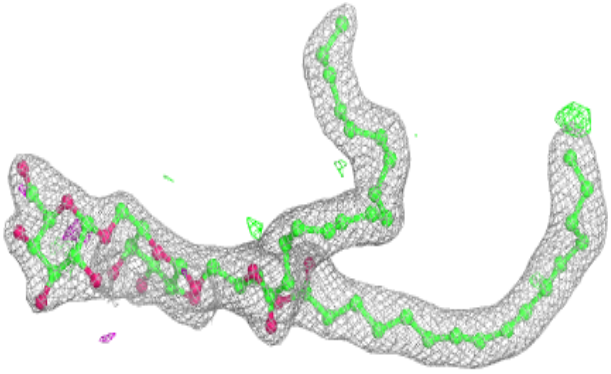


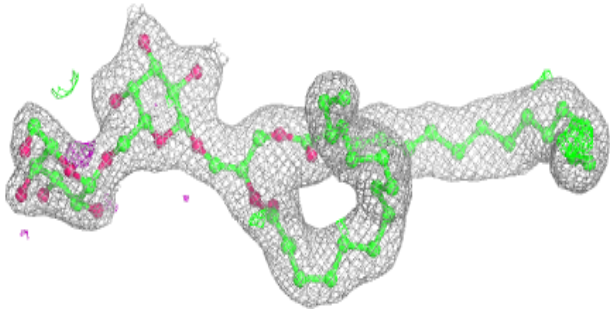


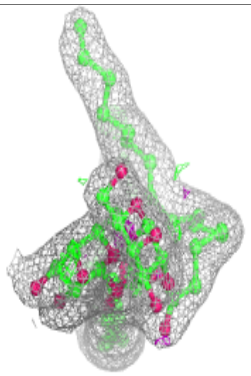


Electron density around DGD H 102:

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

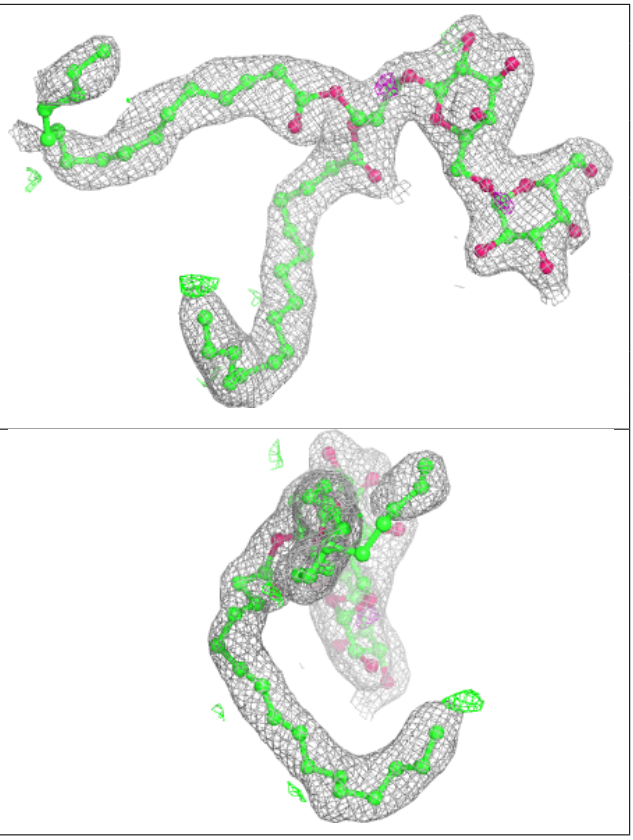


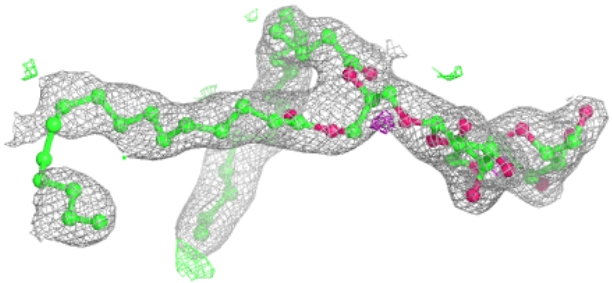




Electron density around DGD c 520:

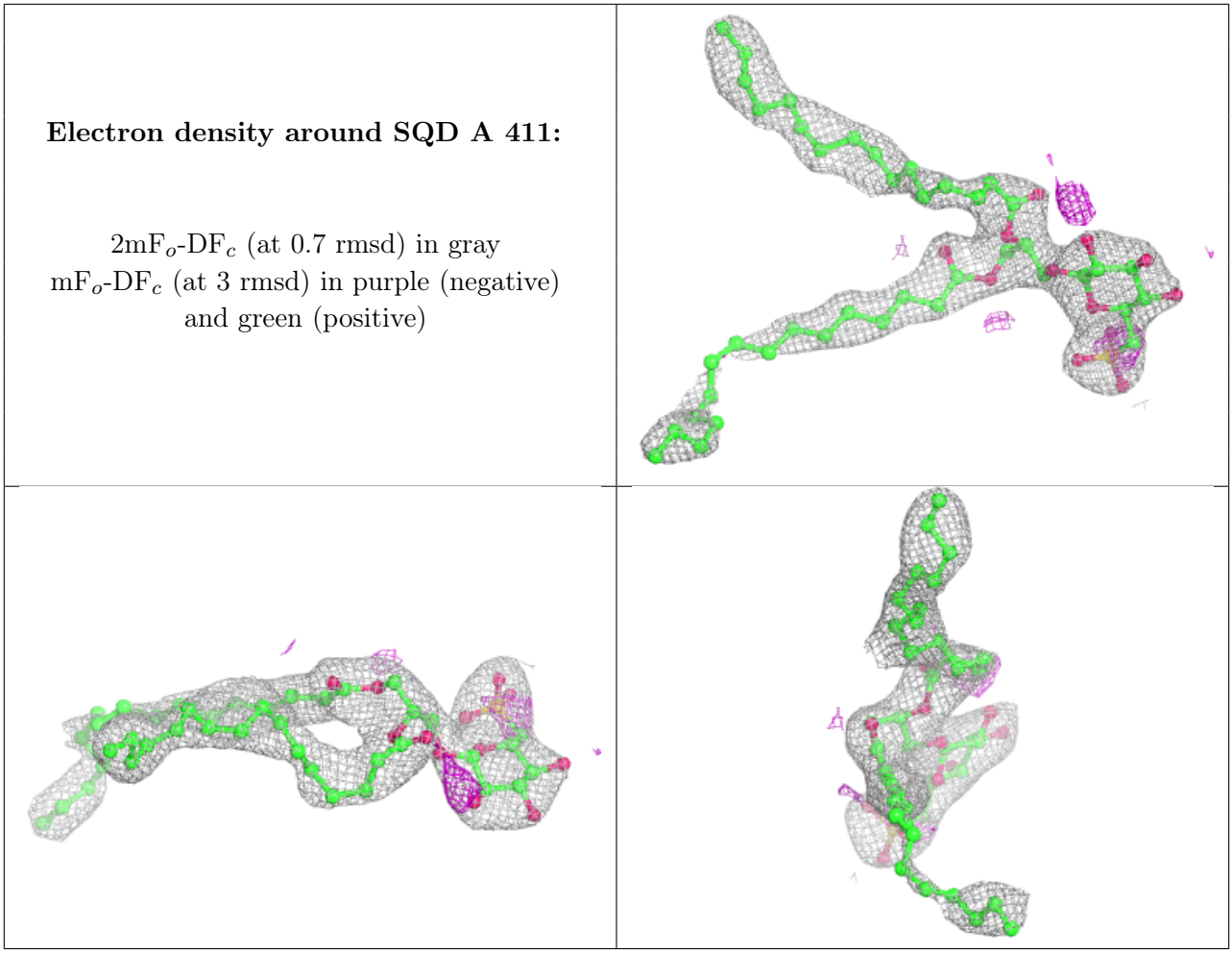
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





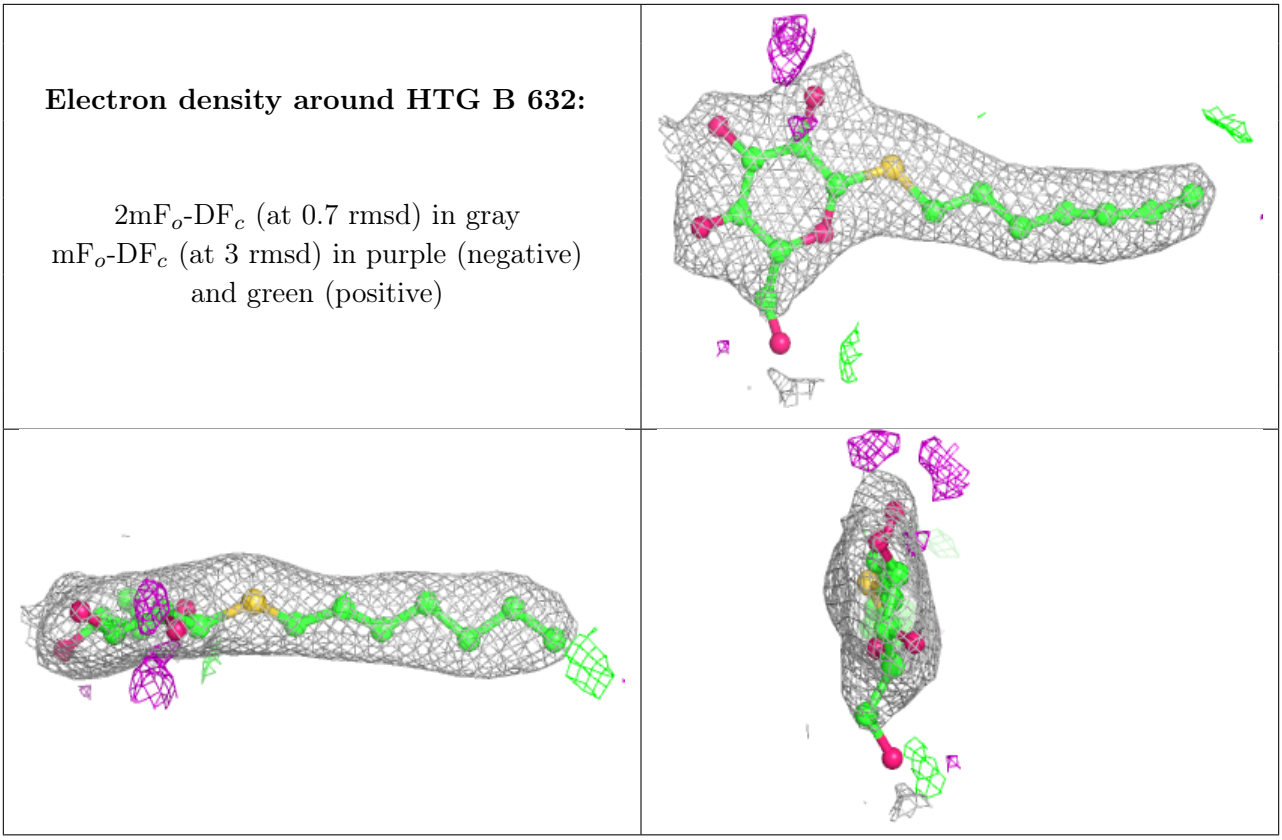
Electron density around SQD A 411:

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



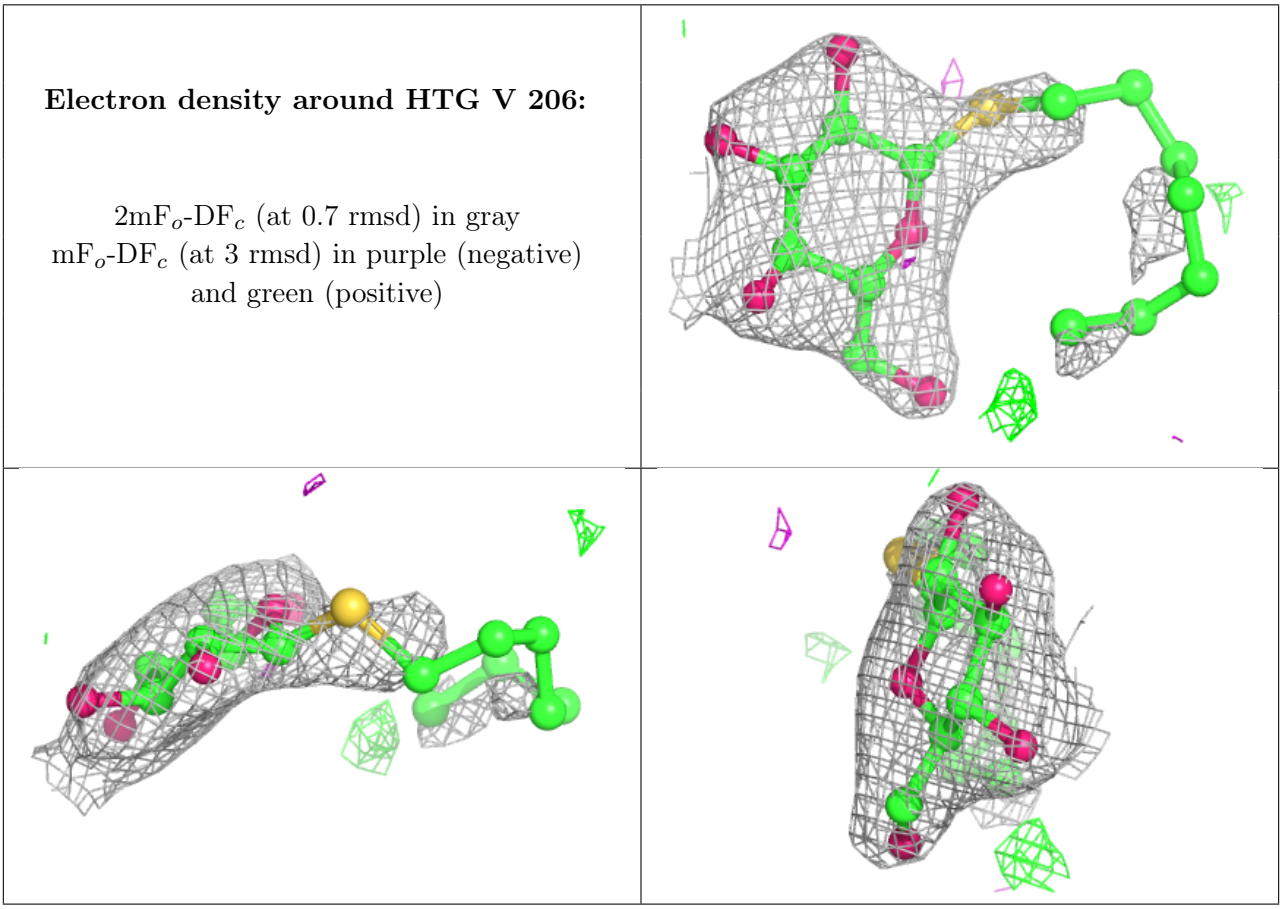
Electron density around HTG B 632:

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



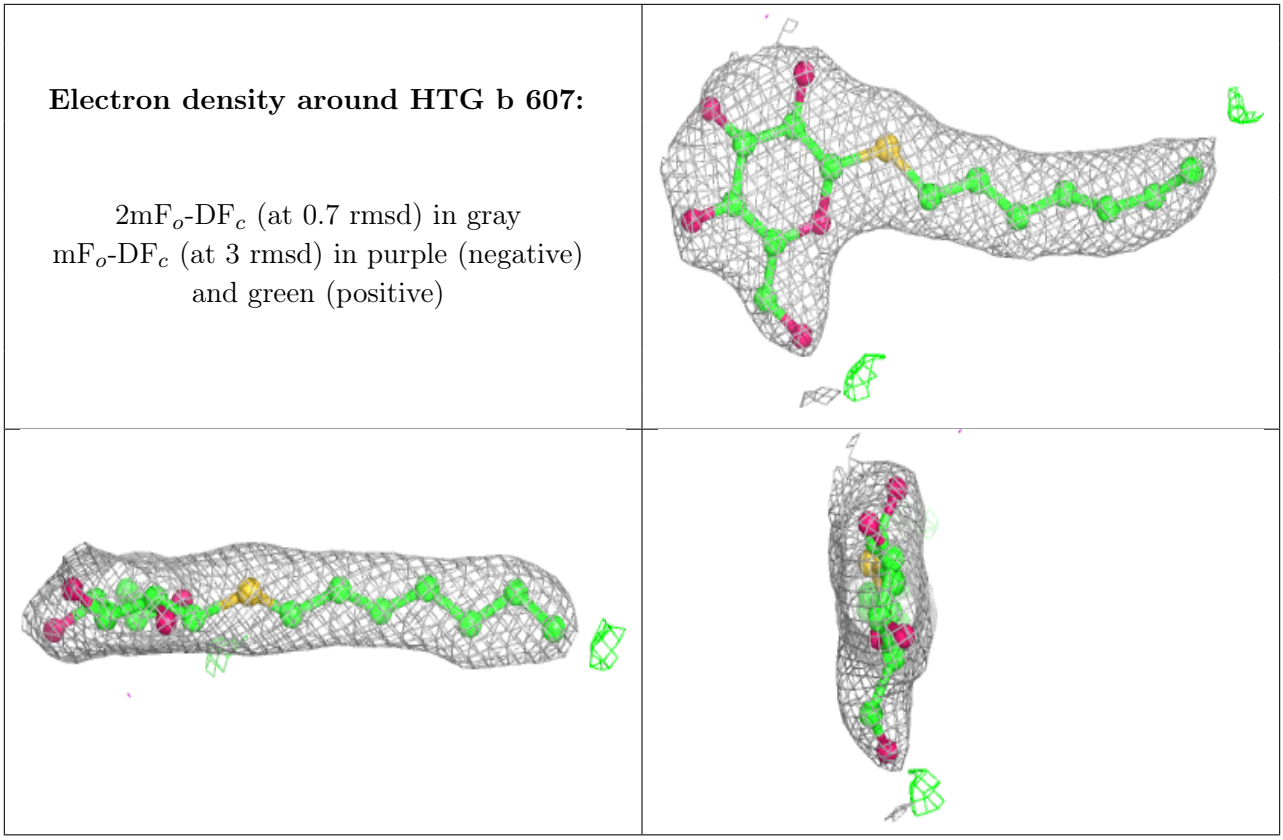
Electron density around HTG V 206:

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



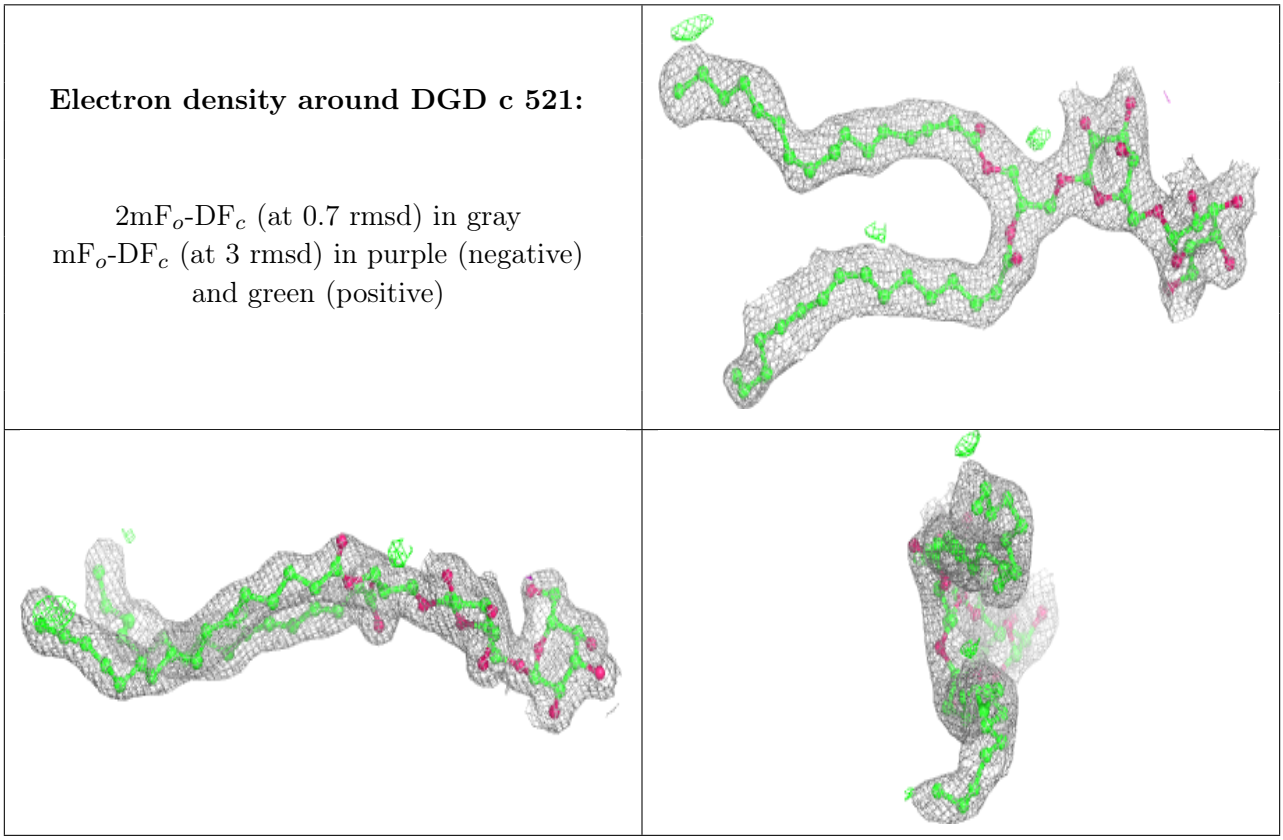
Electron density around HTG b 607:

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



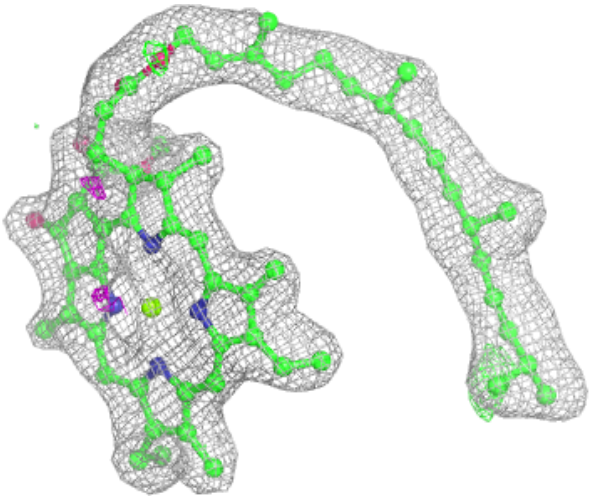
Electron density around DGD c 521:

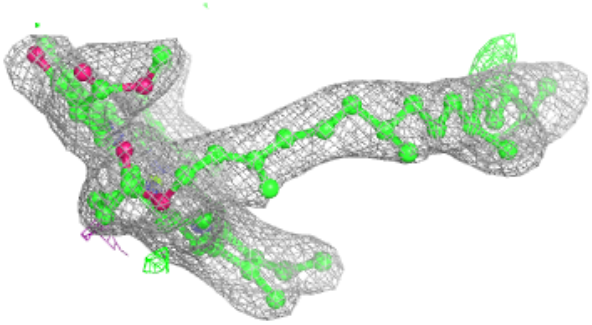
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

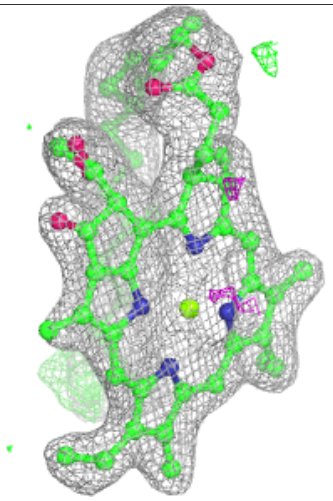


Electron density around CLA c 511:

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

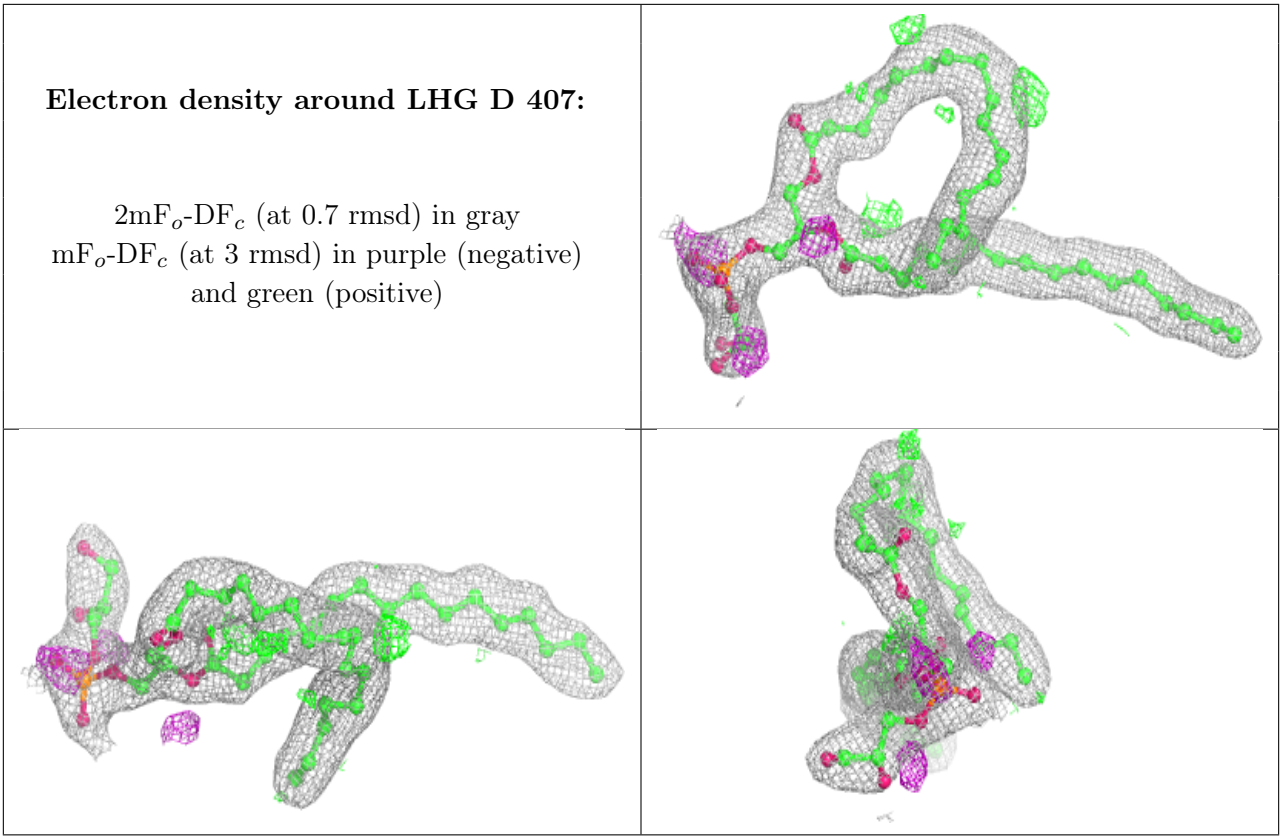






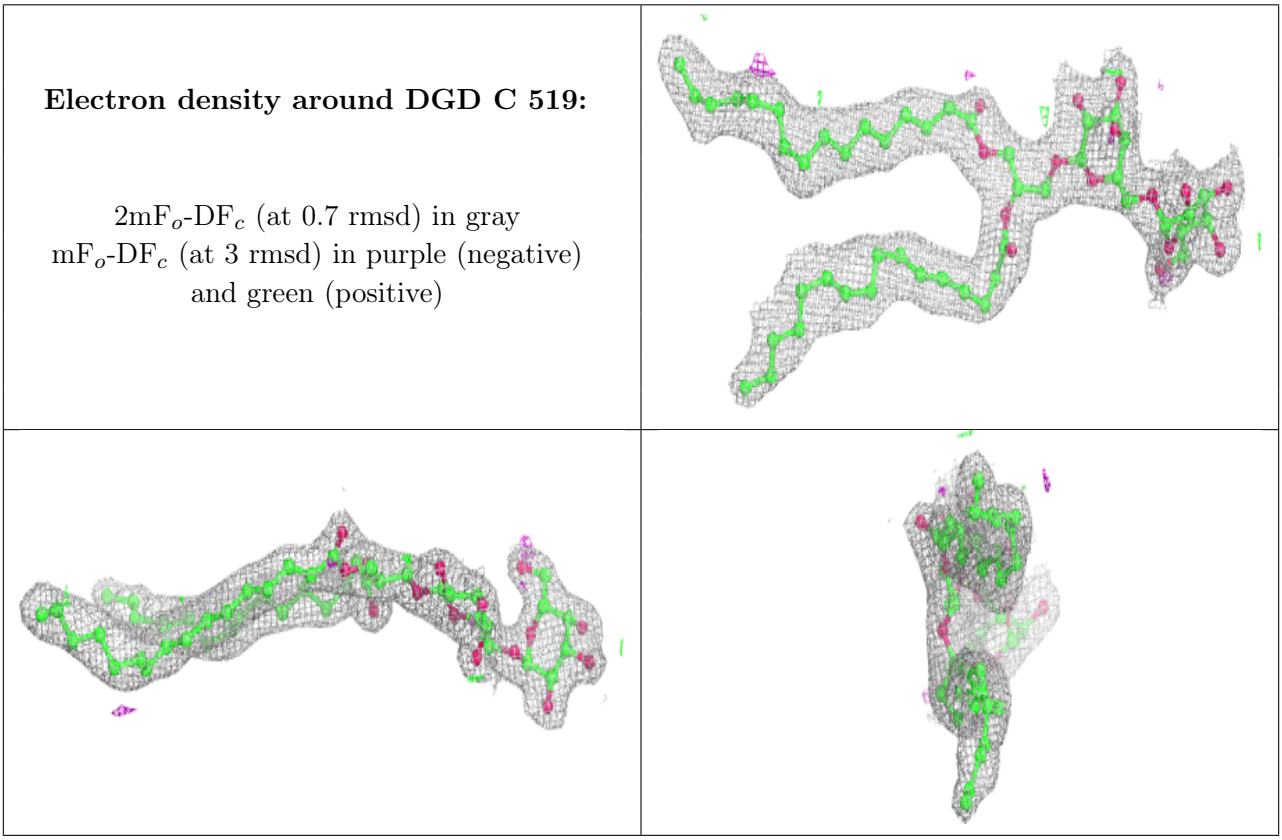
Electron density around LHG D 407:

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



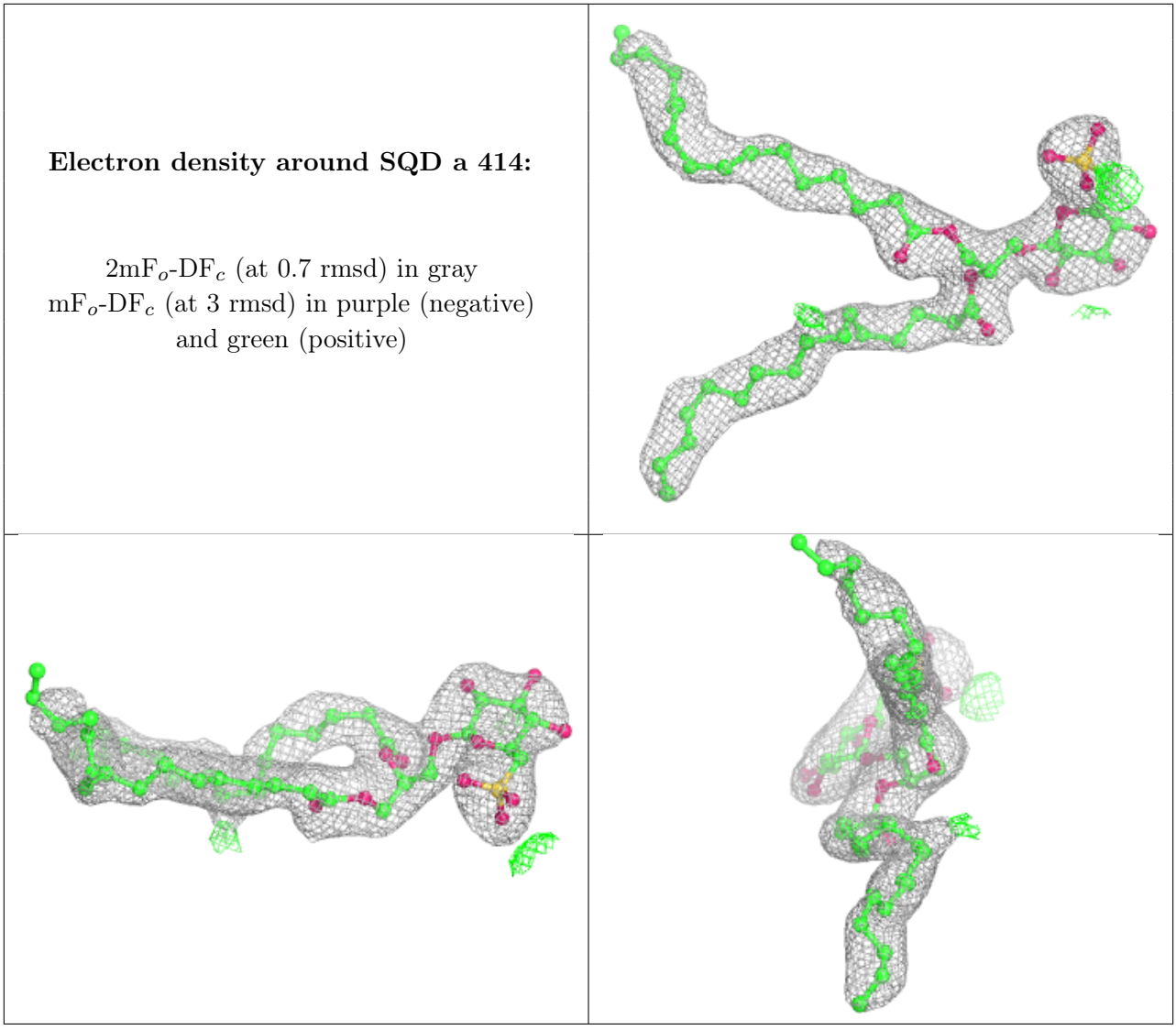
Electron density around DGD C 519:

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



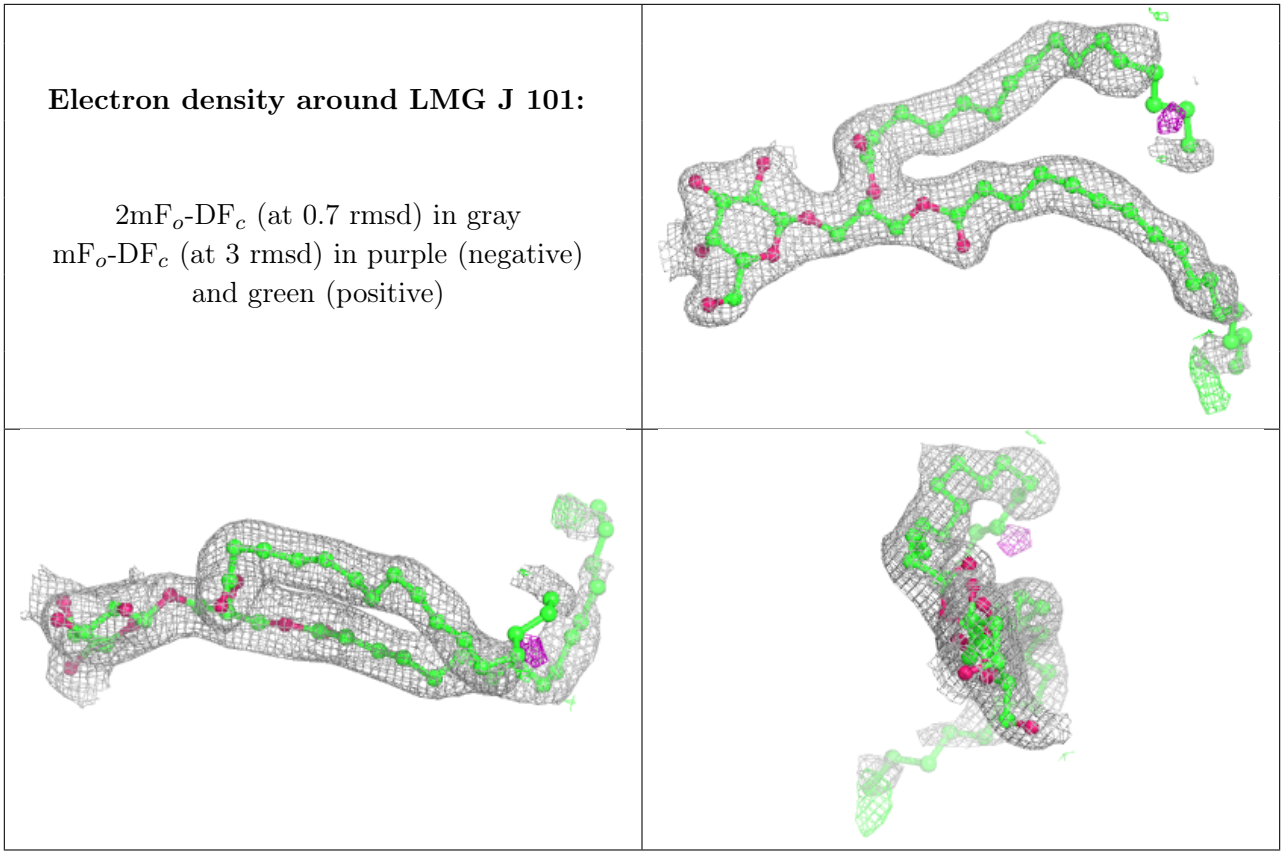
Electron density around SQD a 414:

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



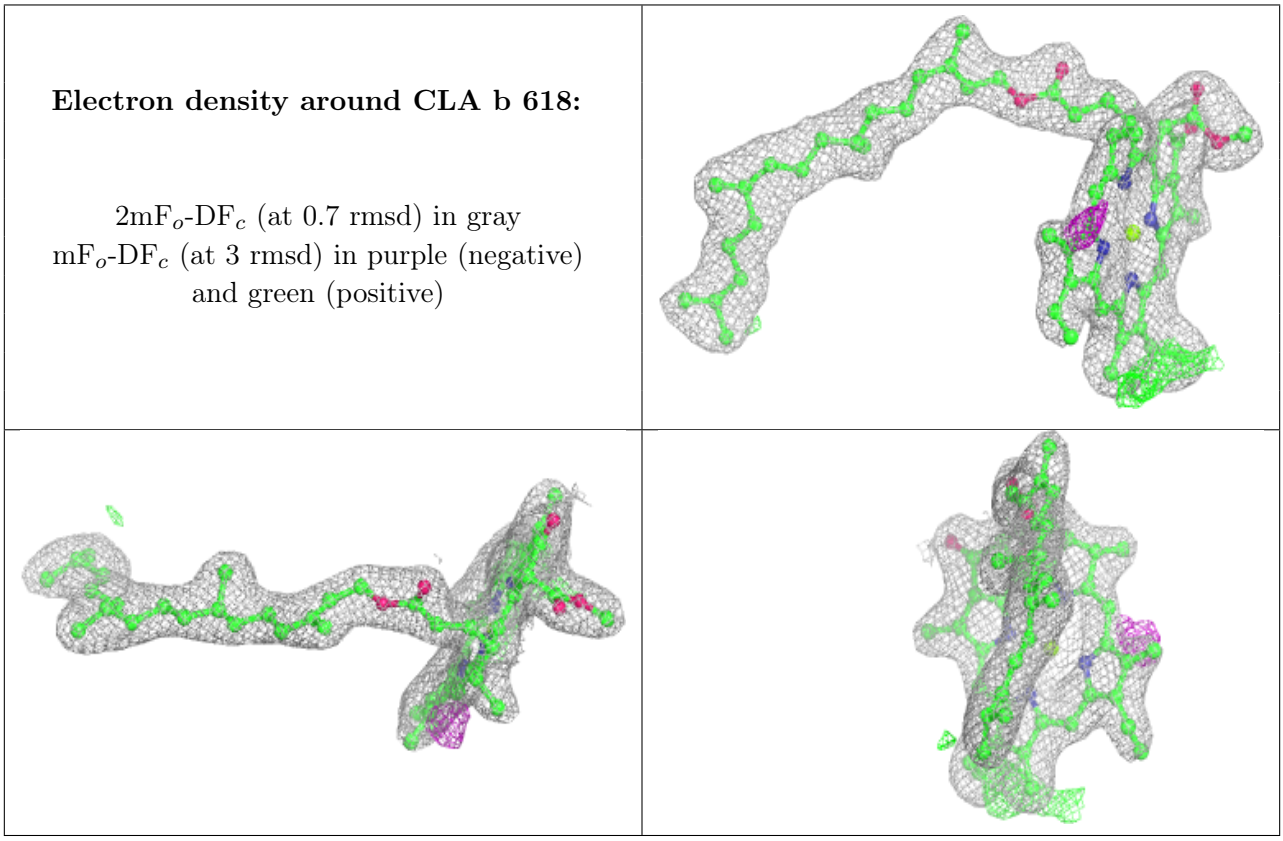
Electron density around LMG J 101:

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



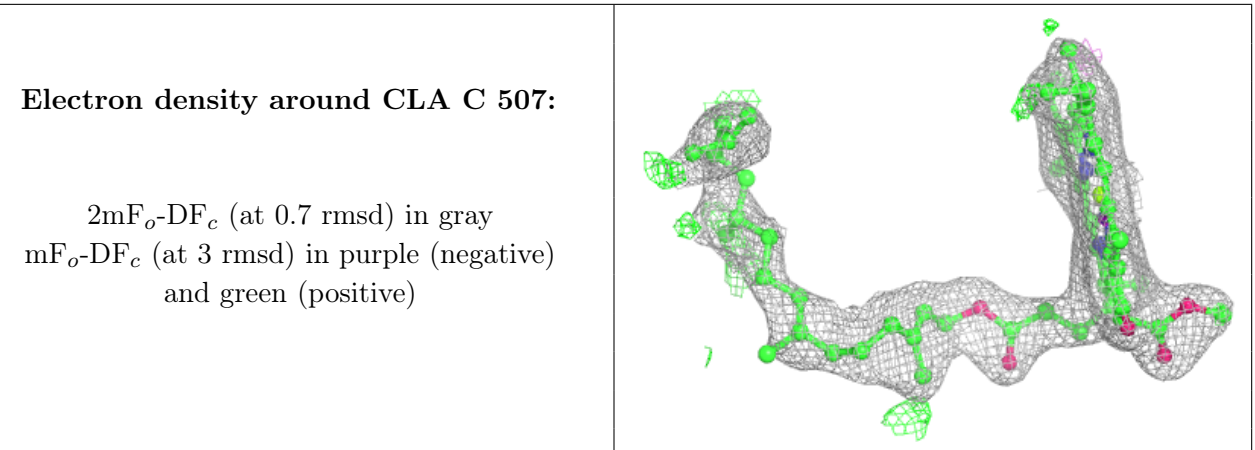
Electron density around CLA b 618:

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



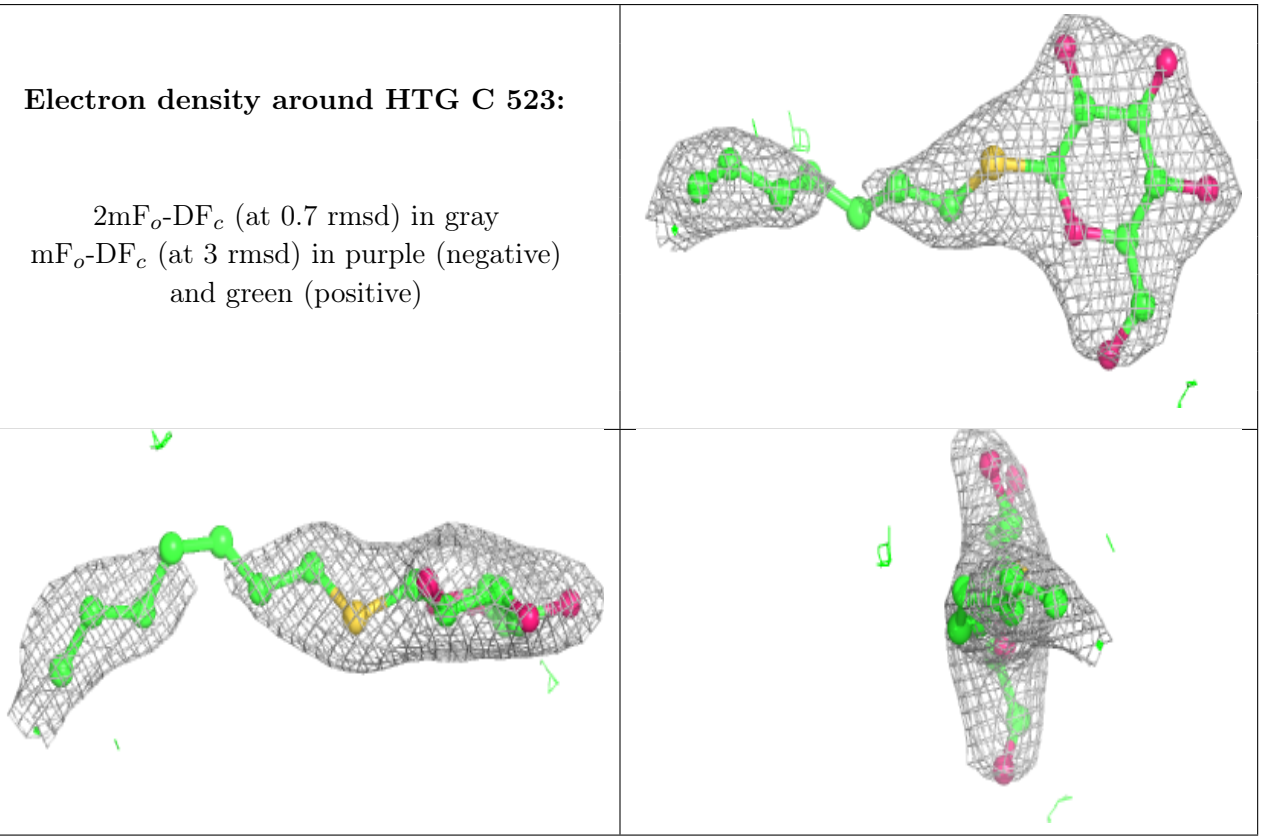
Electron density around CLA C 507:

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



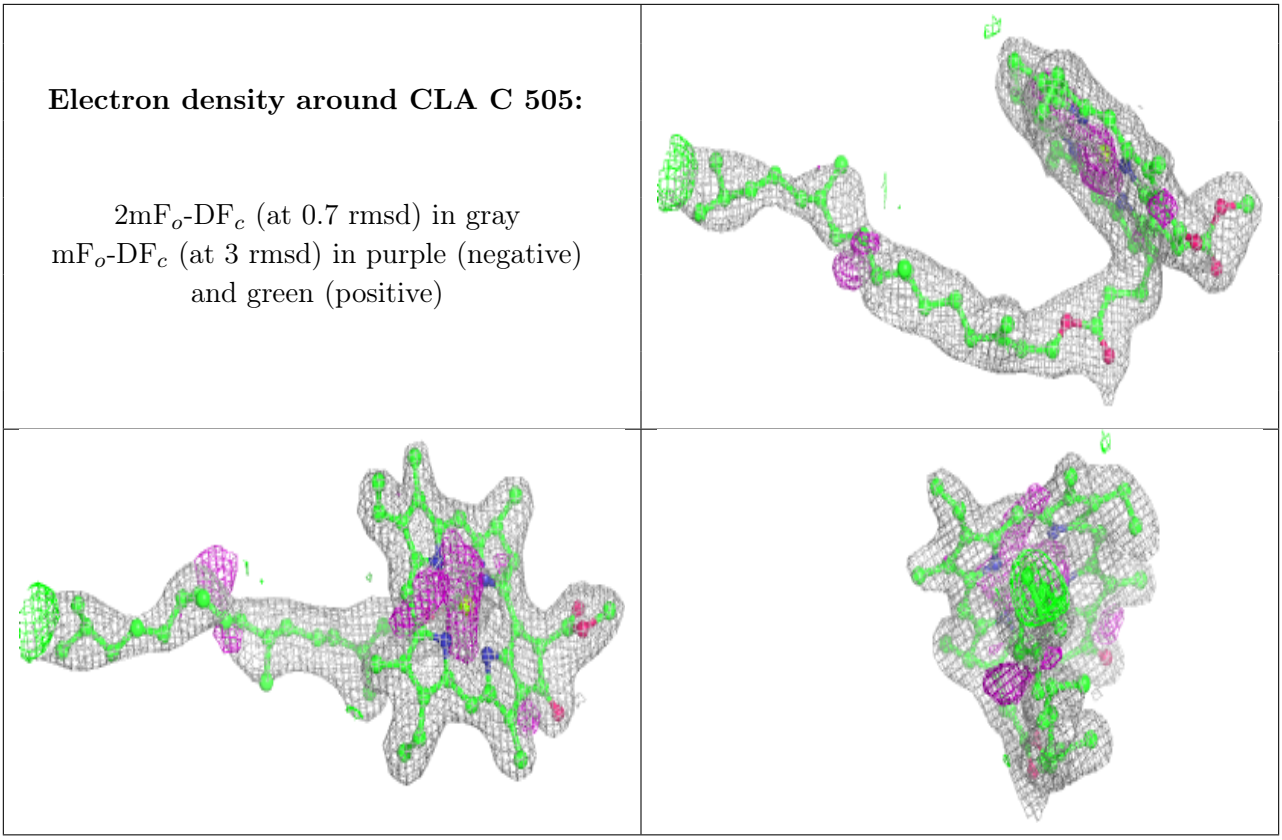
Electron density around HTG C 523:

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



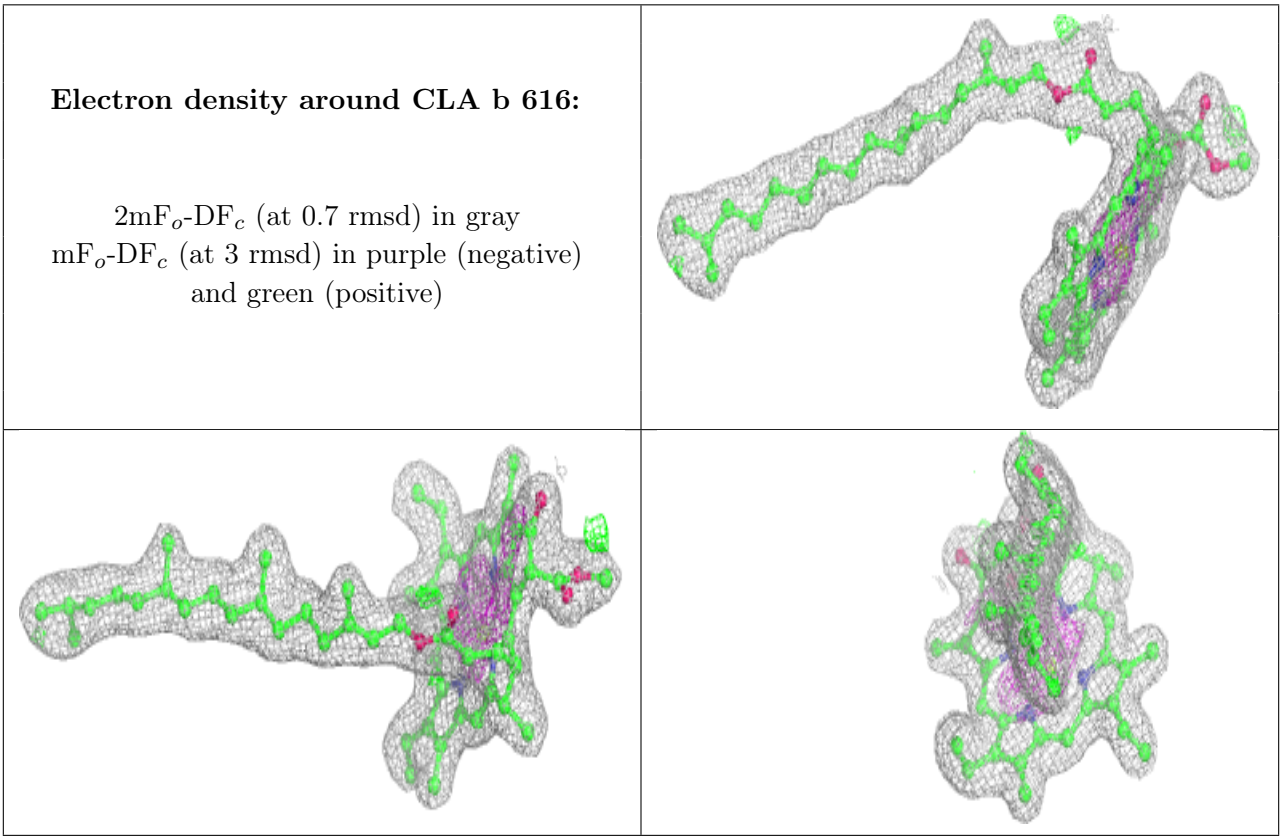
Electron density around CLA C 505:

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



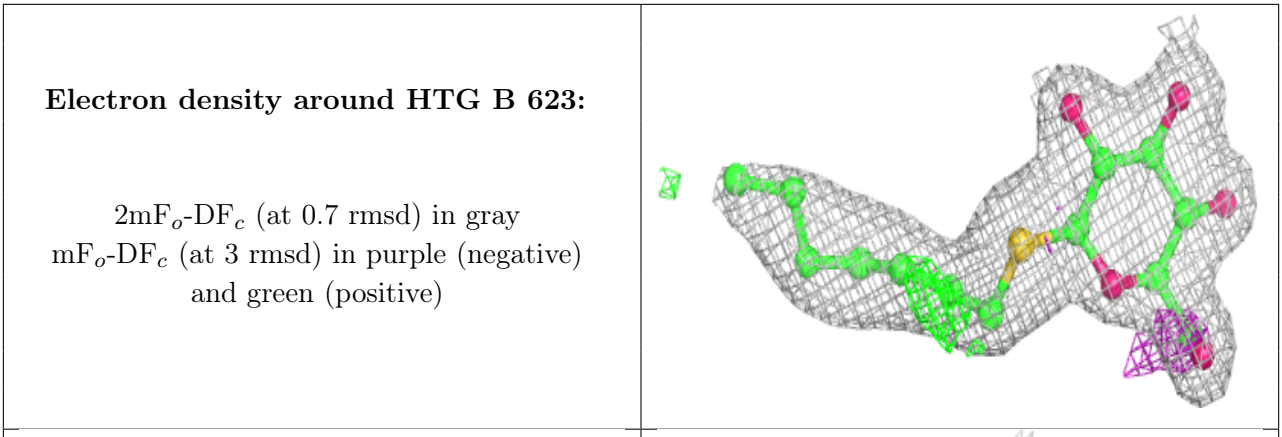
Electron density around CLA b 616:

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



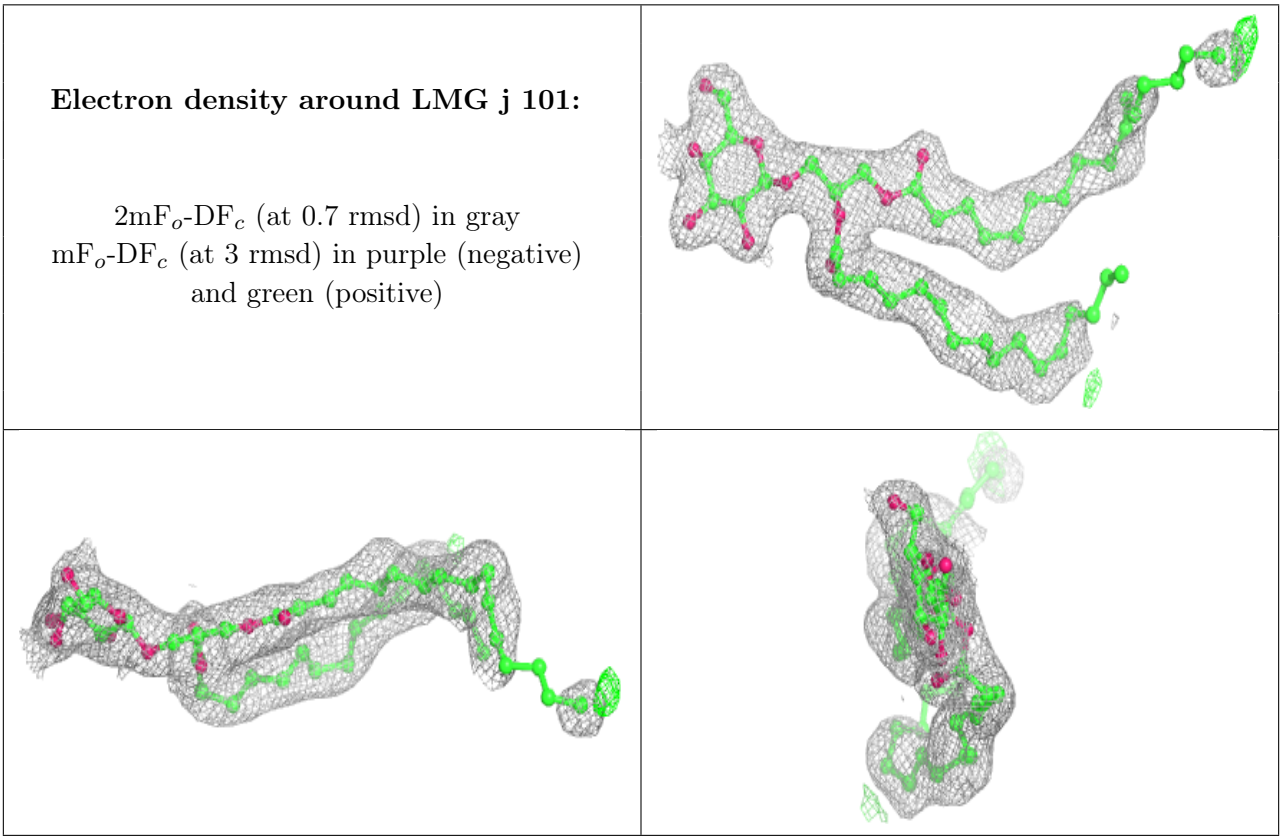
Electron density around HTG B 623:

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



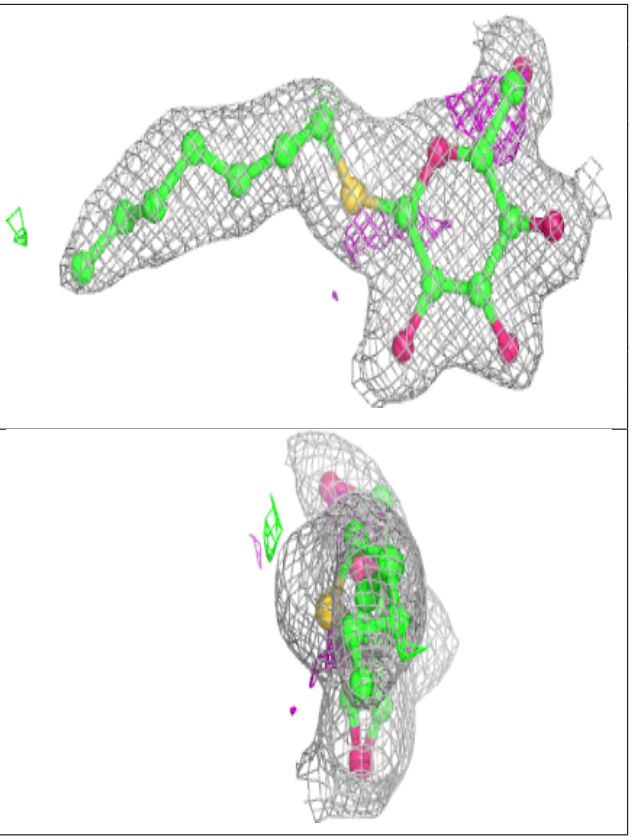
Electron density around LMG j 101:

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



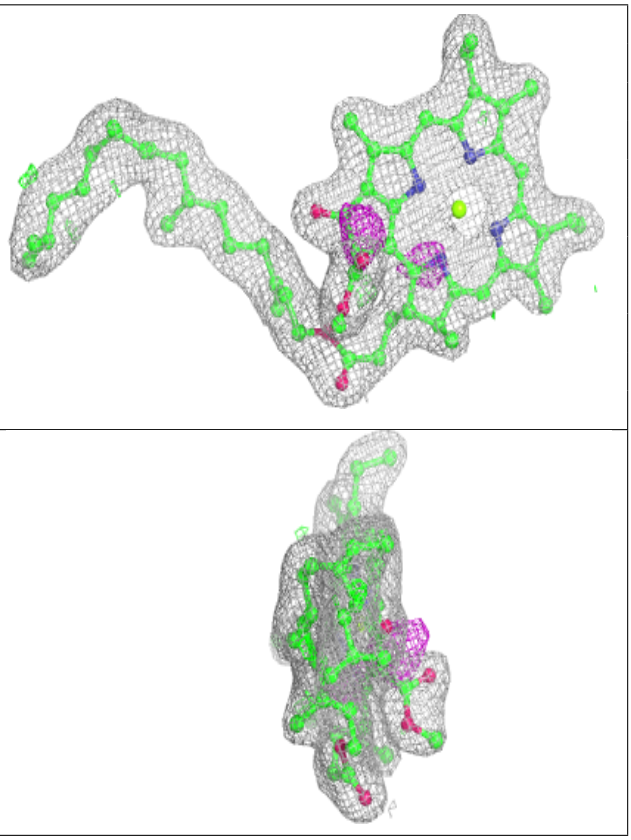
Electron density around HTG b 601:

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



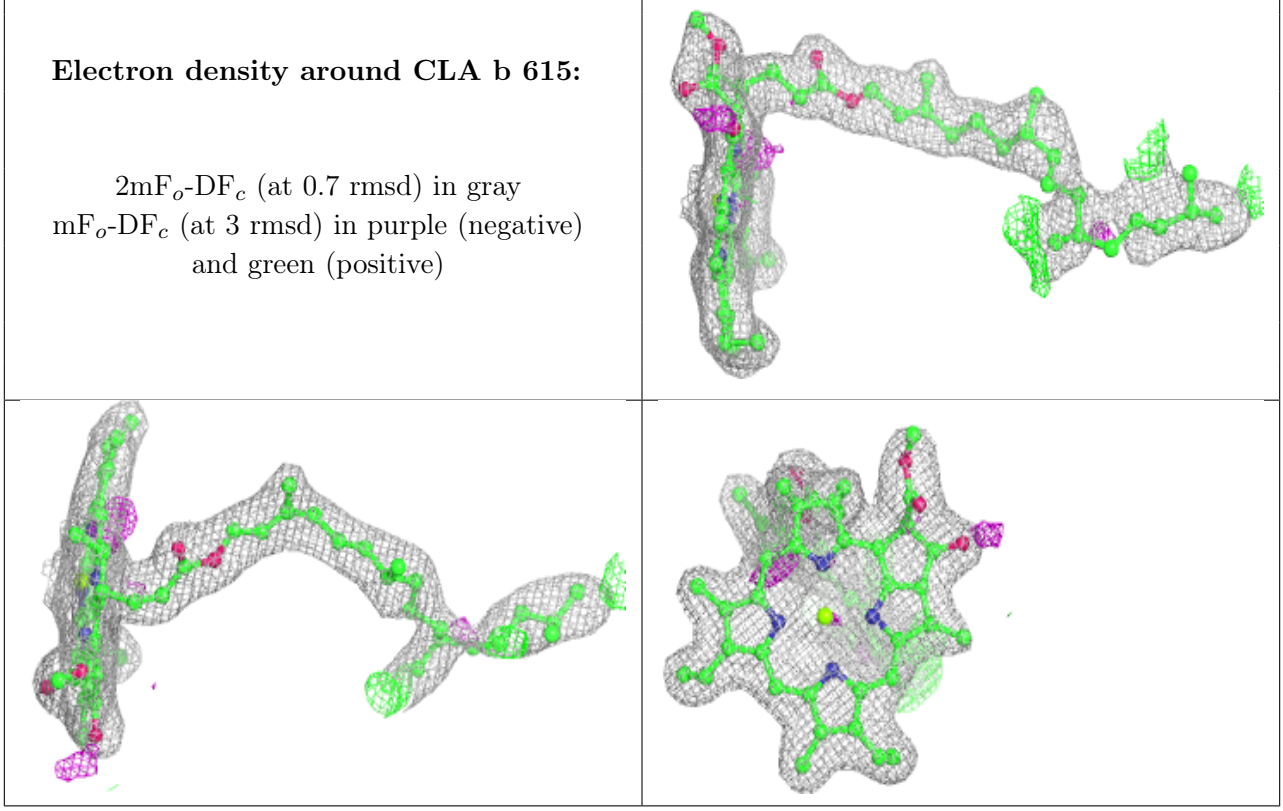
Electron density around CLA b 611:

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



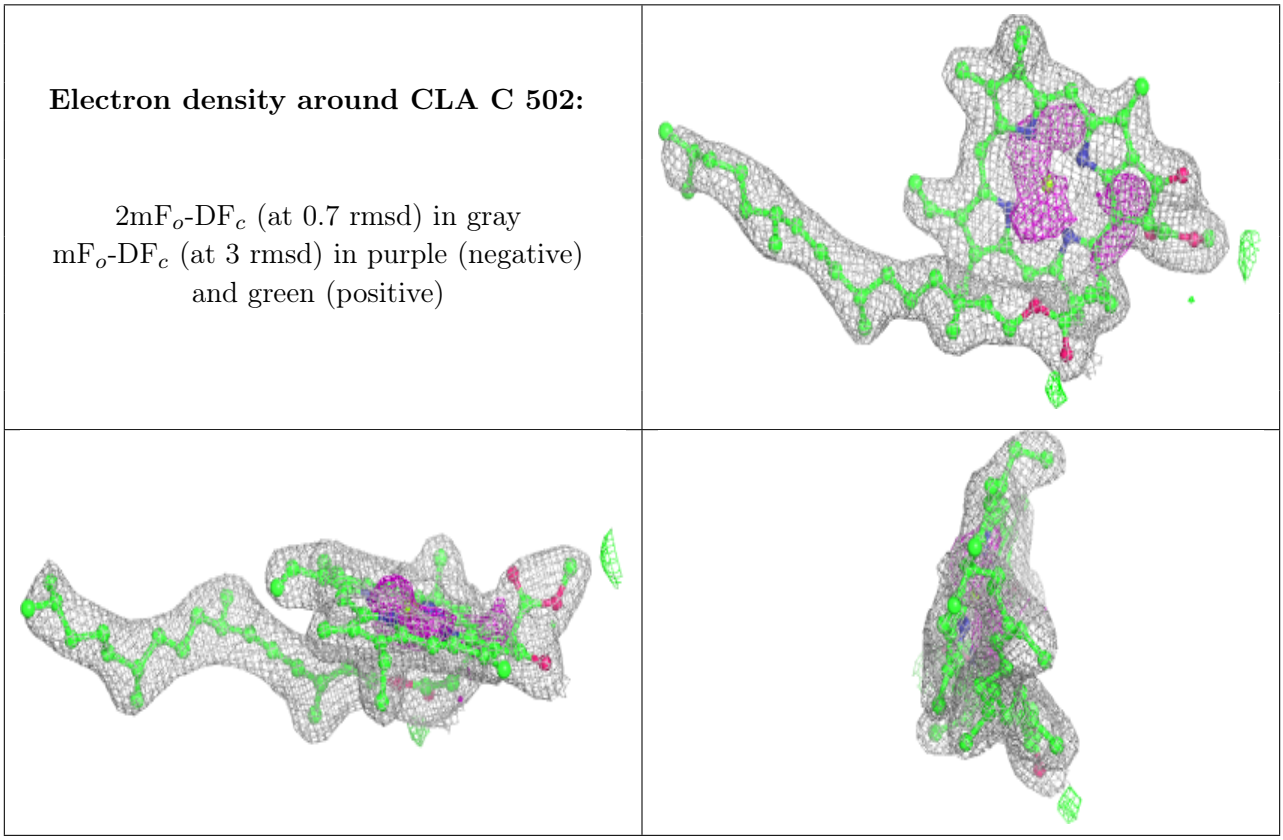
Electron density around CLA b 615:

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



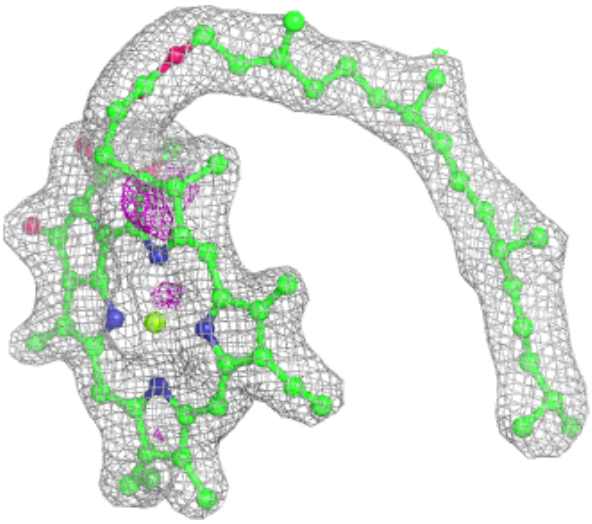
Electron density around CLA C 502:

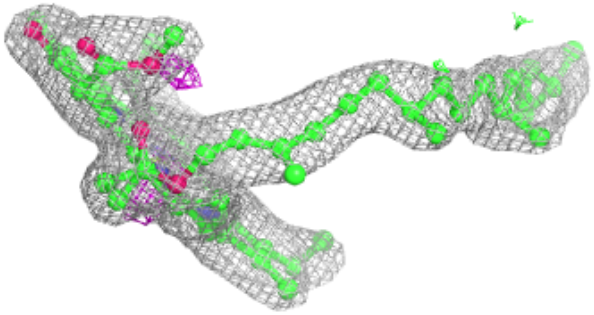
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

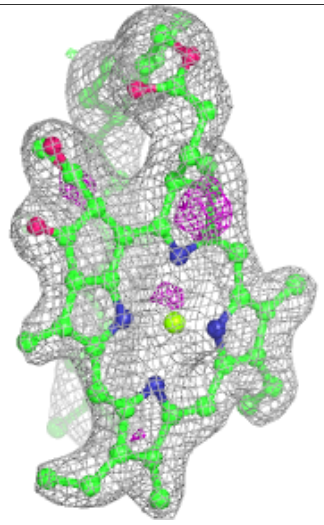


Electron density around CLA C 508:

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

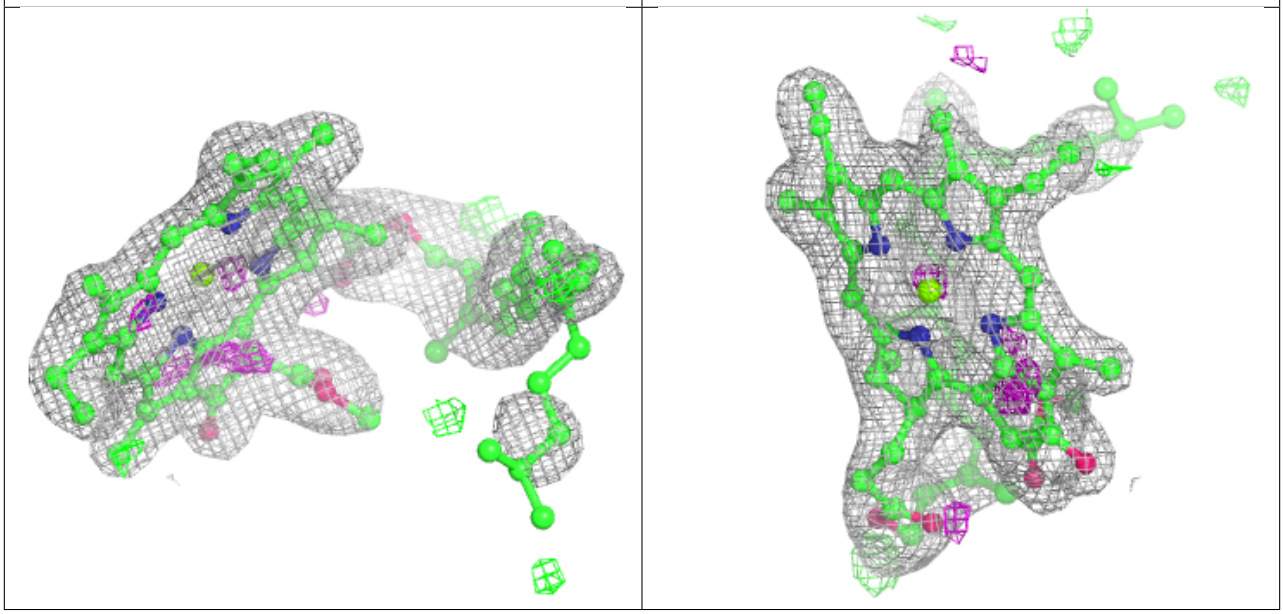






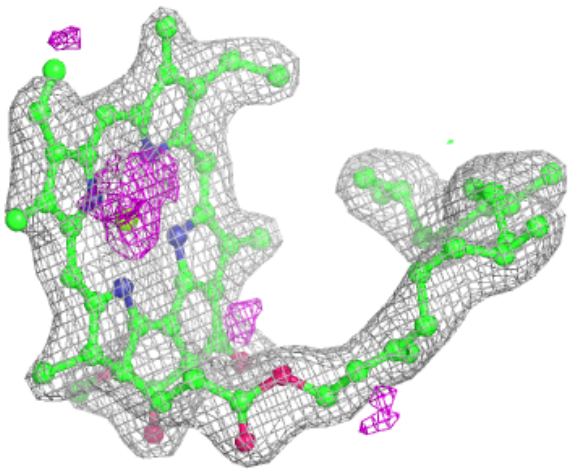
Electron density around CLA b 625:

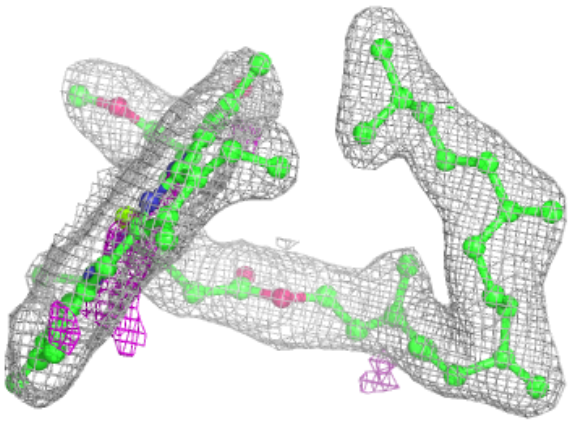
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

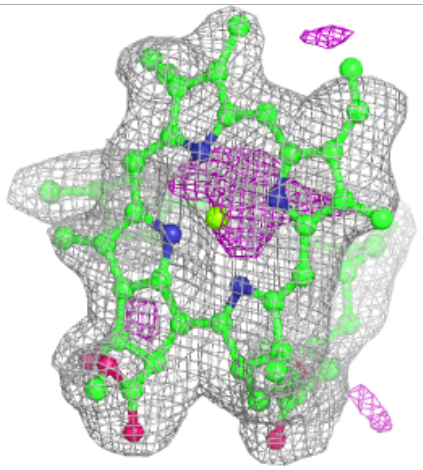


Electron density around CLA c 507:

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

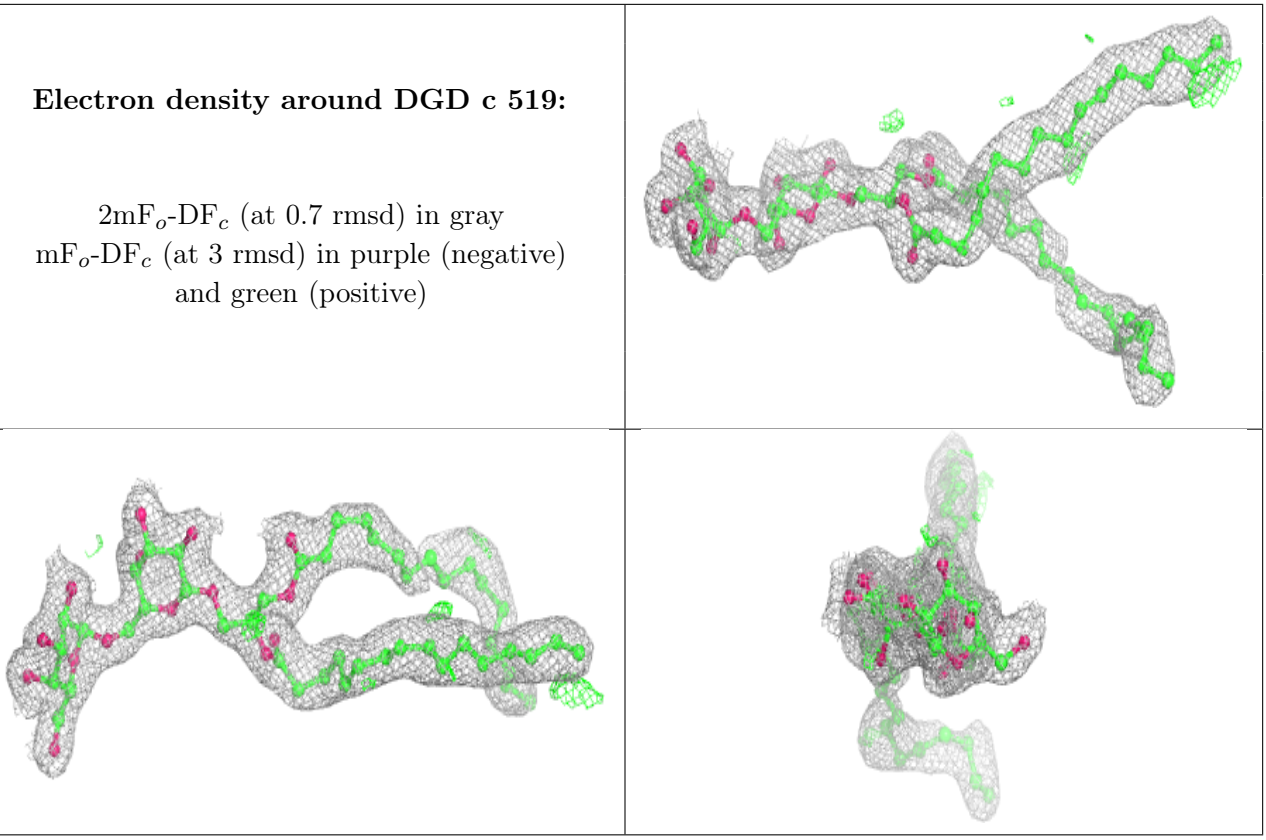






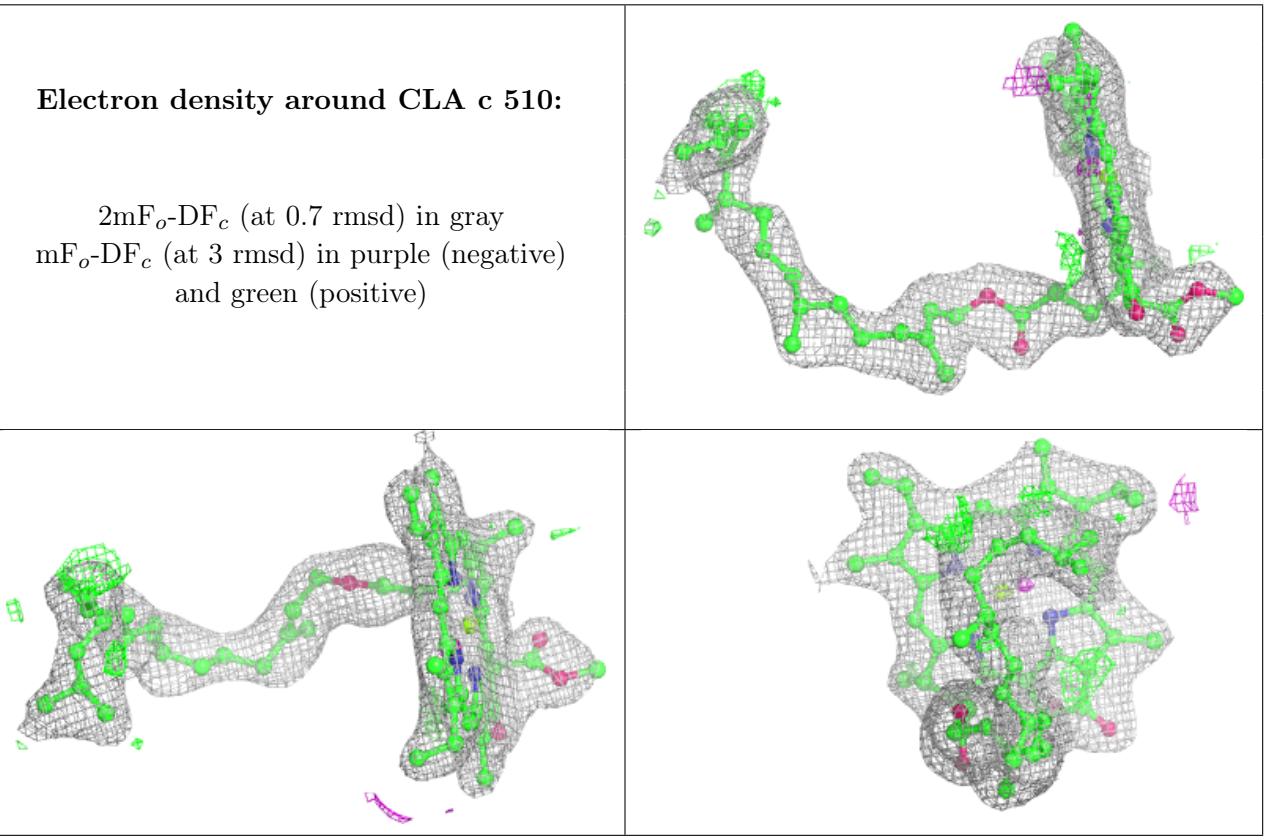
Electron density around DGD c 519:

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



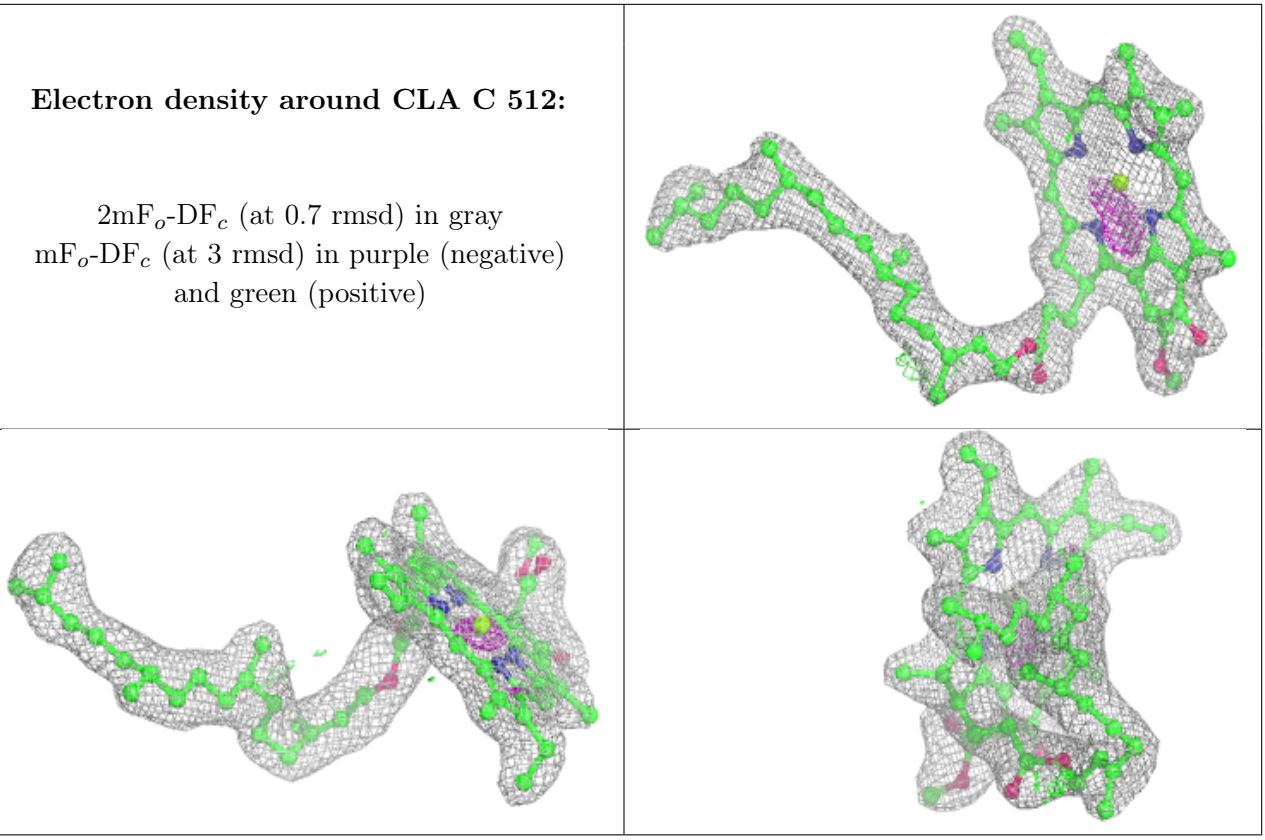
Electron density around CLA c 510:

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



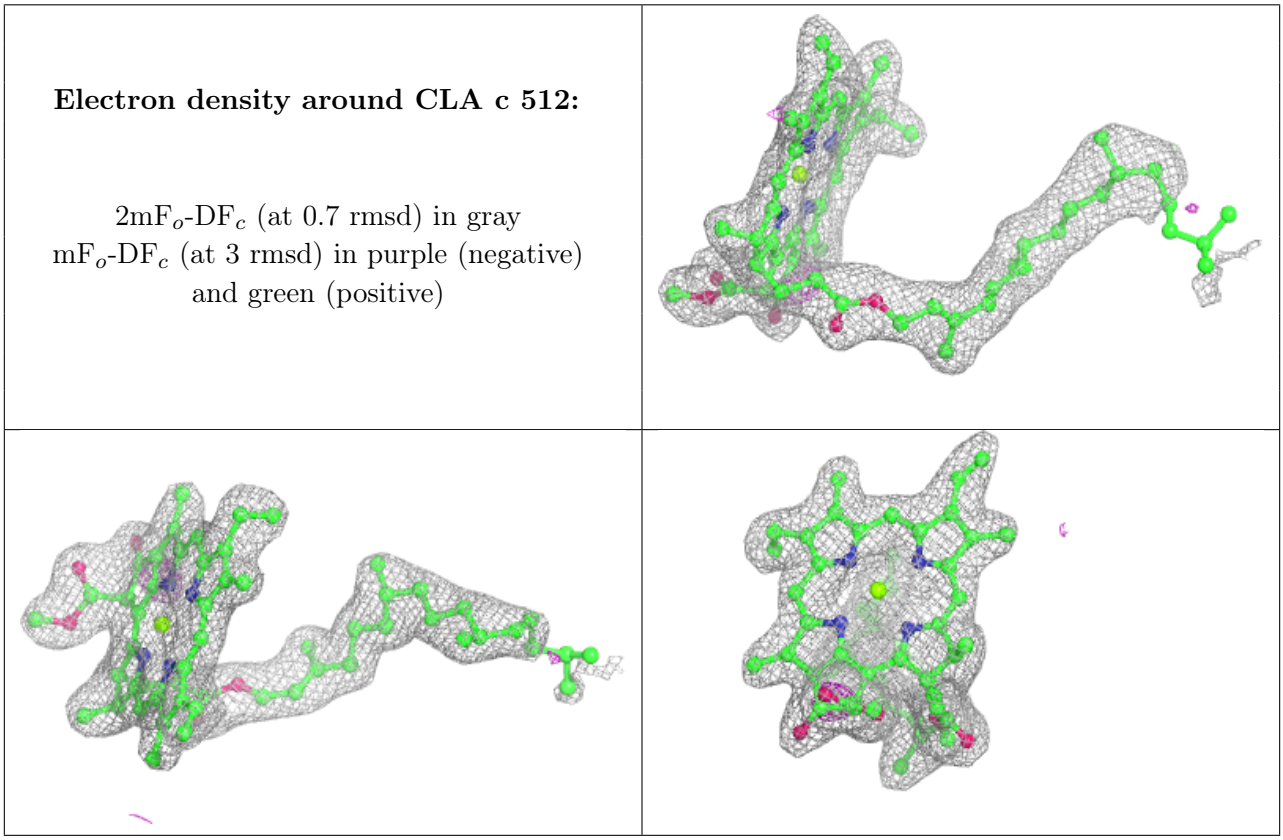
Electron density around CLA C 512:

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



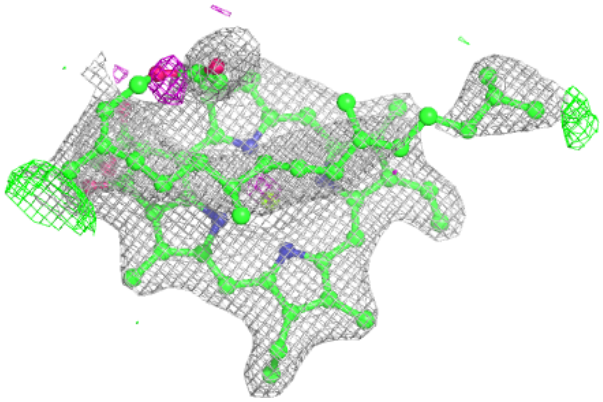
Electron density around CLA c 512:

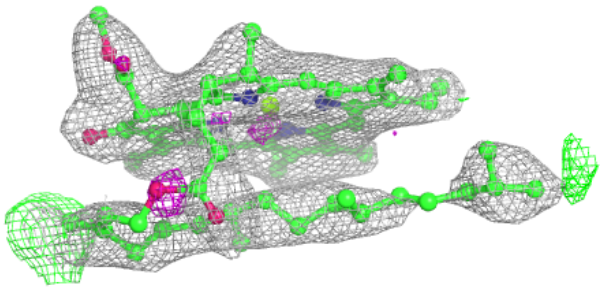
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

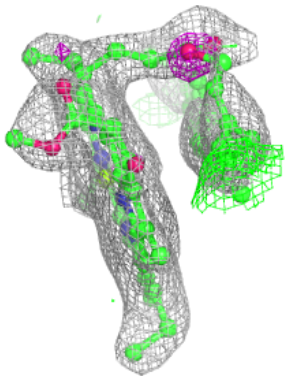


Electron density around CLA B 602:

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

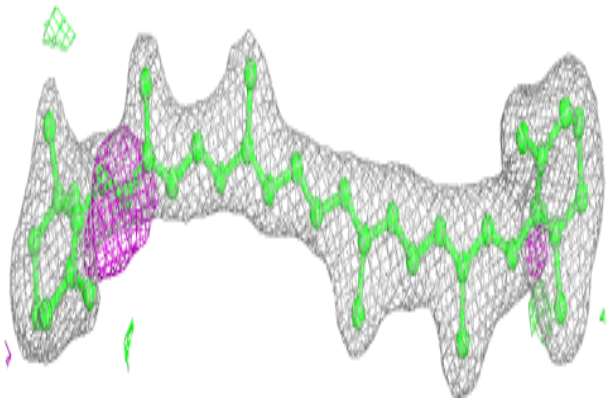


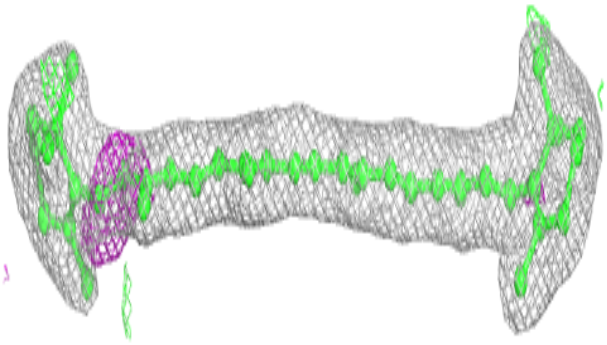


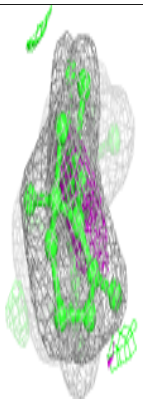


Electron density around BCR b 627:

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

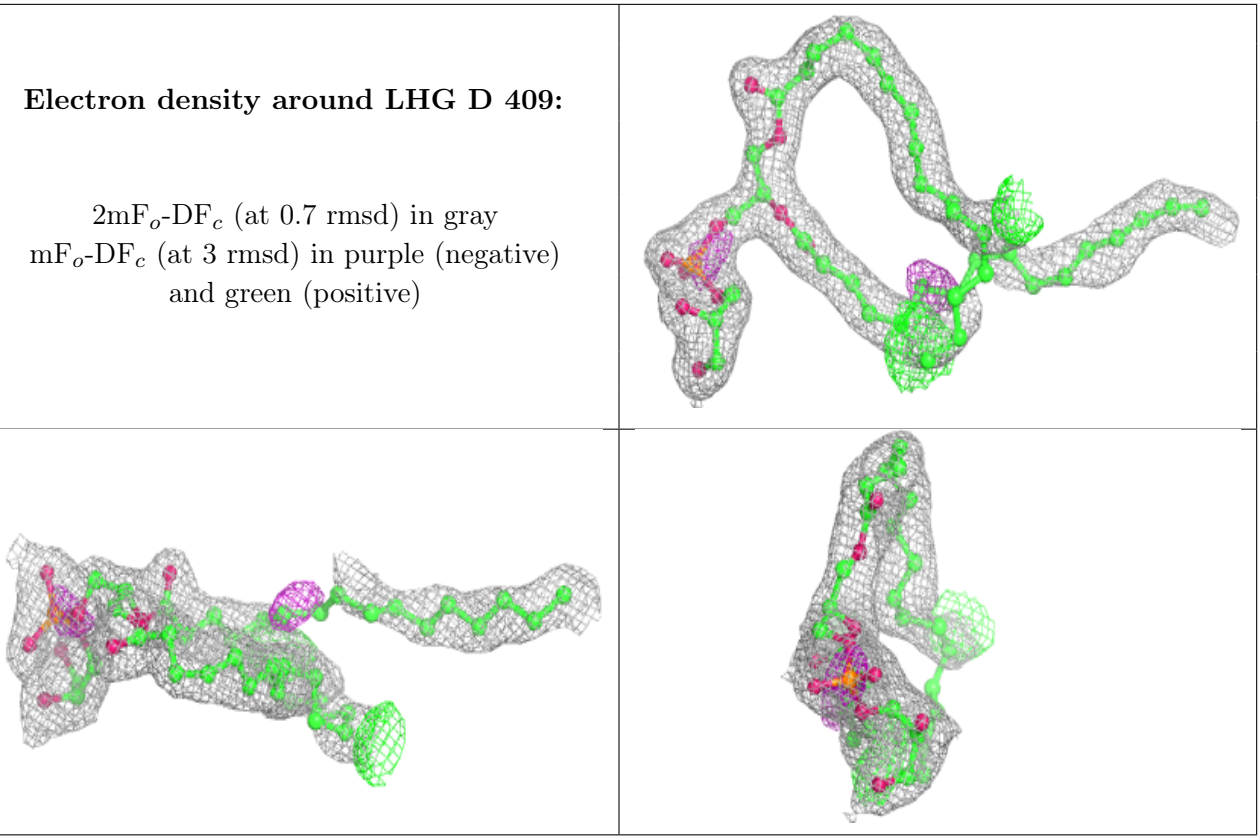






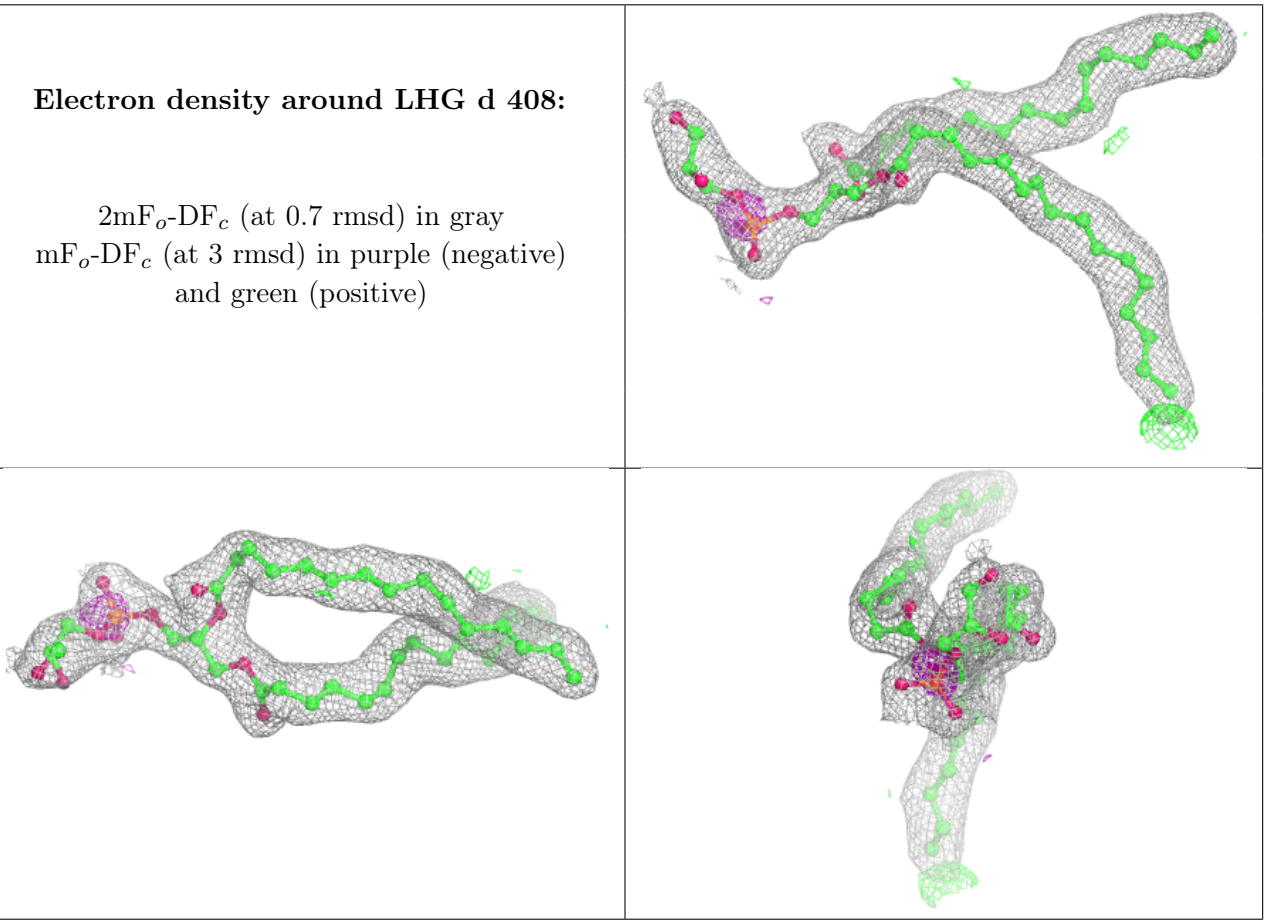
Electron density around LHG D 409:

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



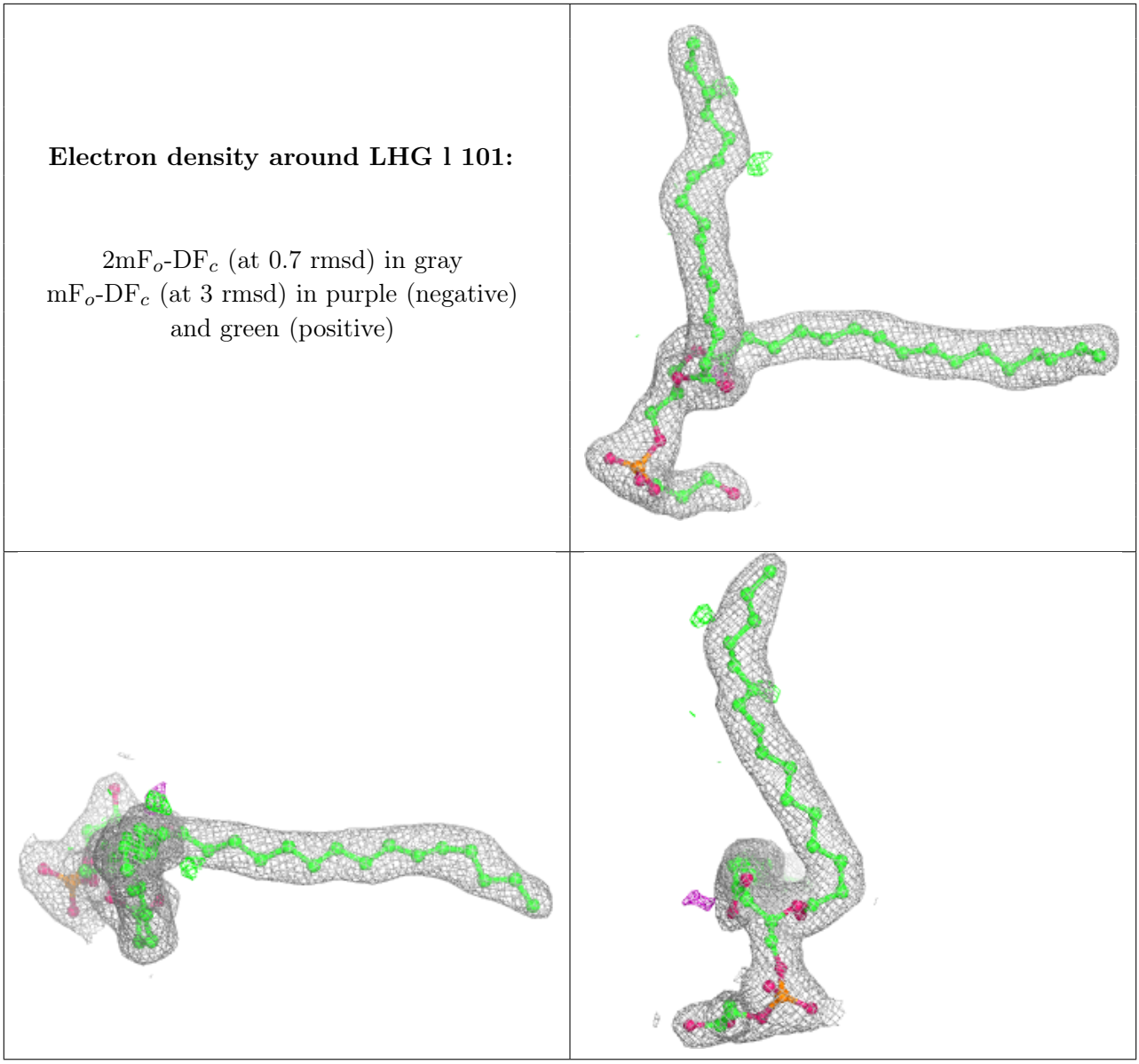
Electron density around LHG d 408:

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



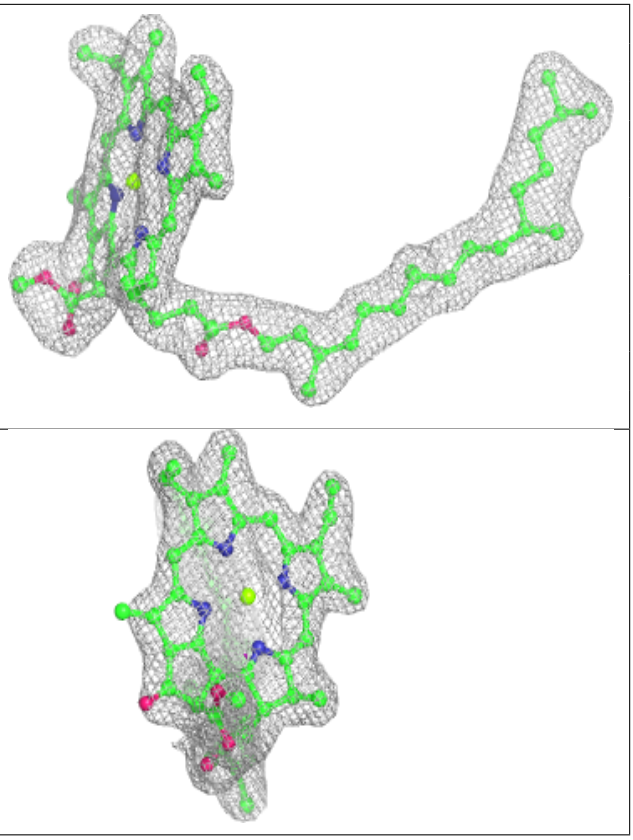
Electron density around LHG l 101:

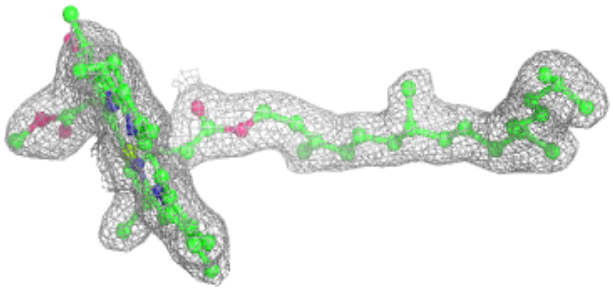
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around CLA B 610:

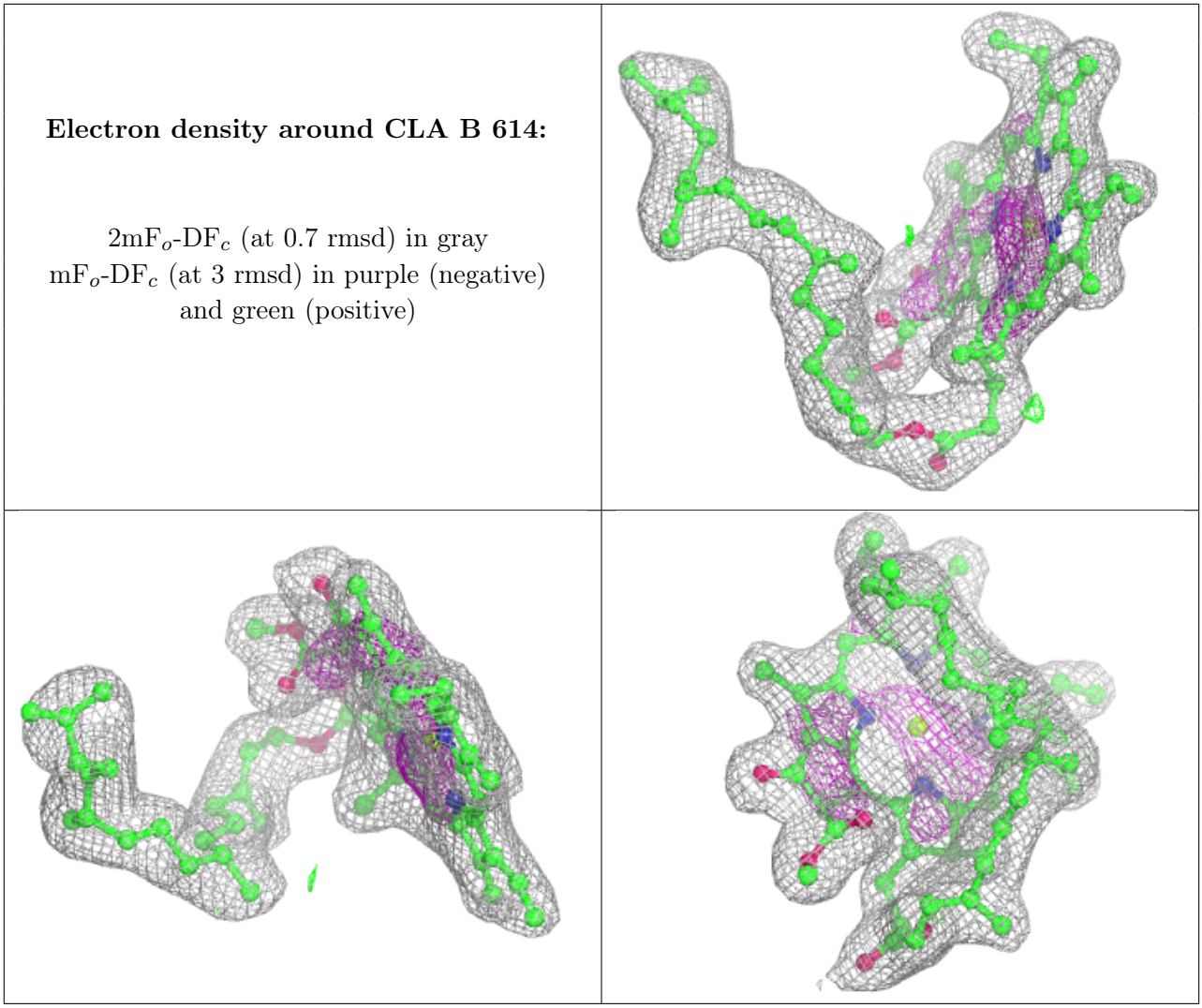
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





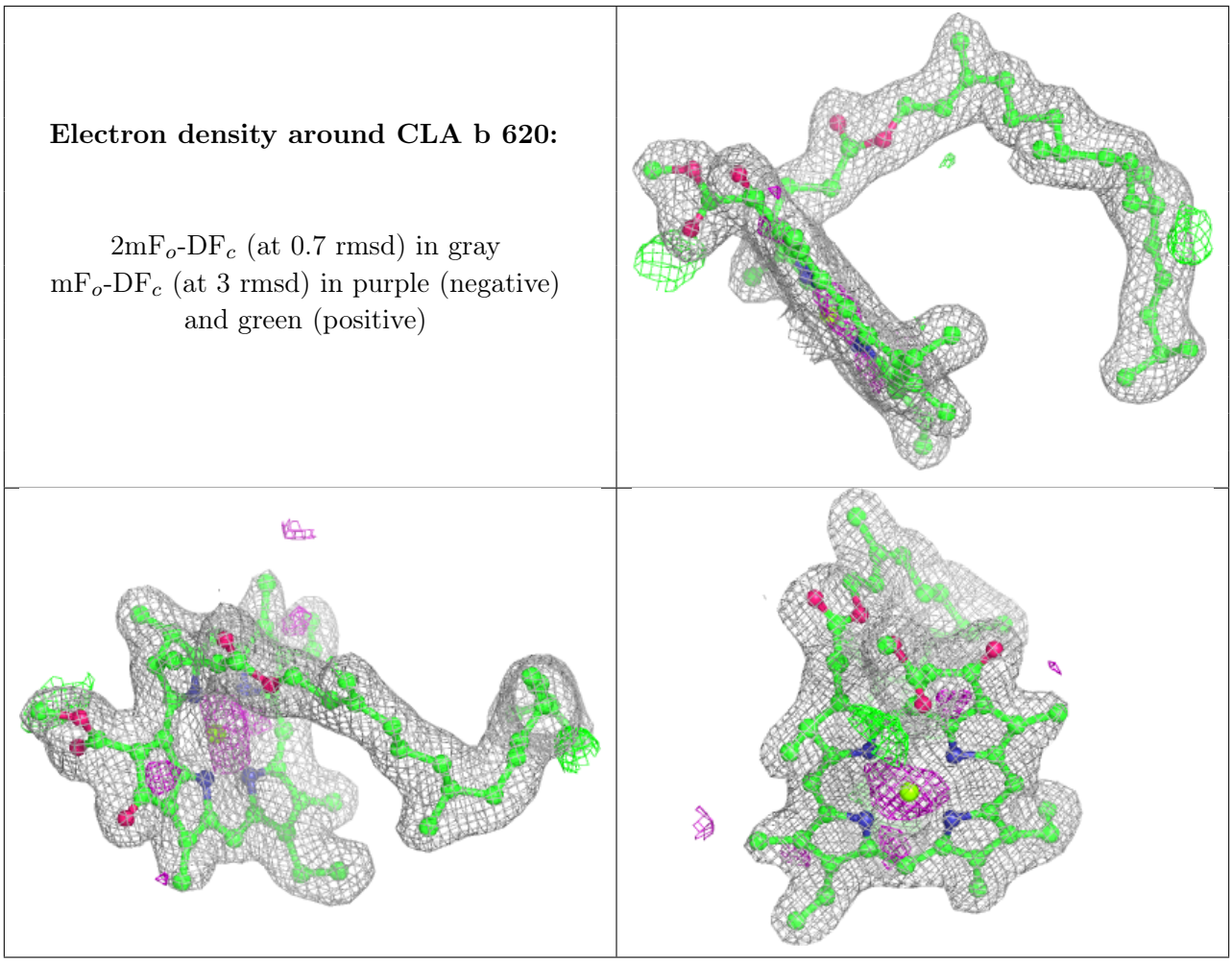
Electron density around CLA B 614:

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



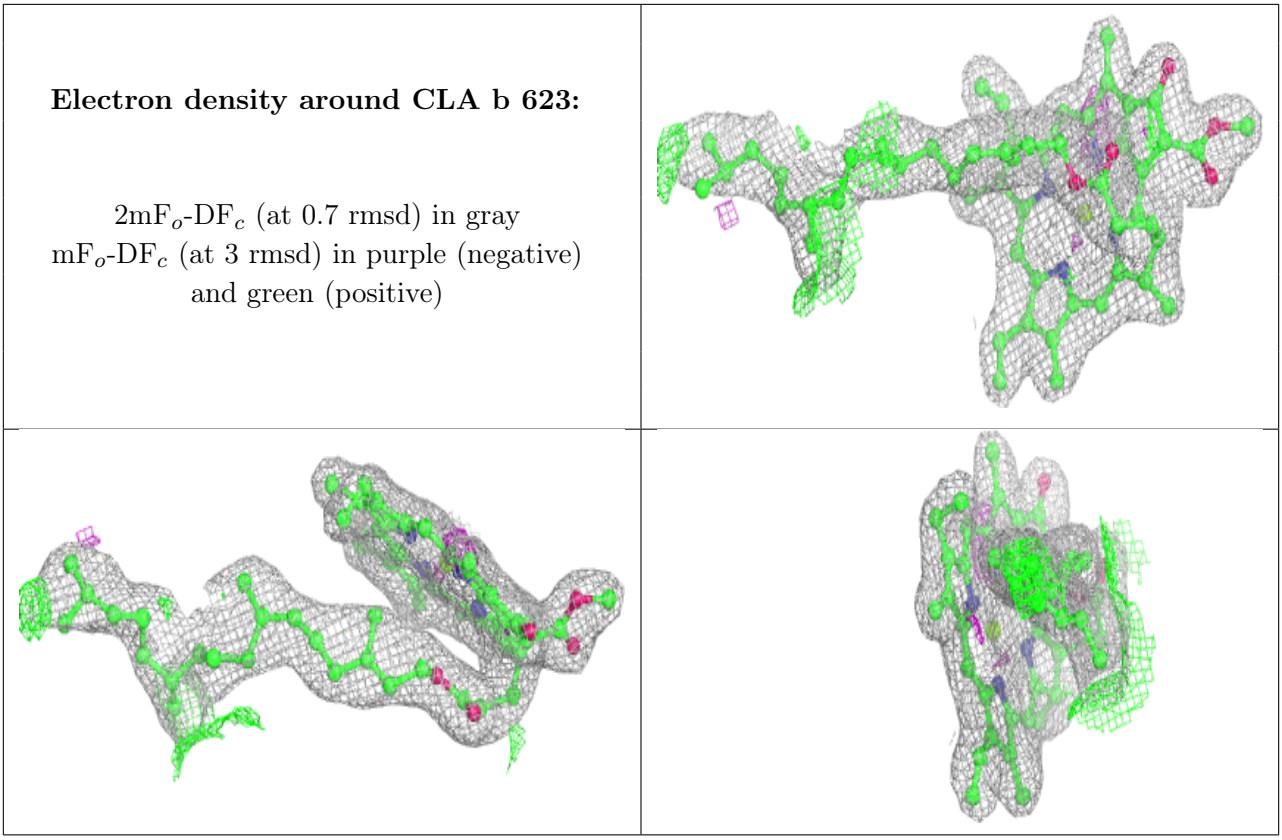
Electron density around CLA b 620:

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



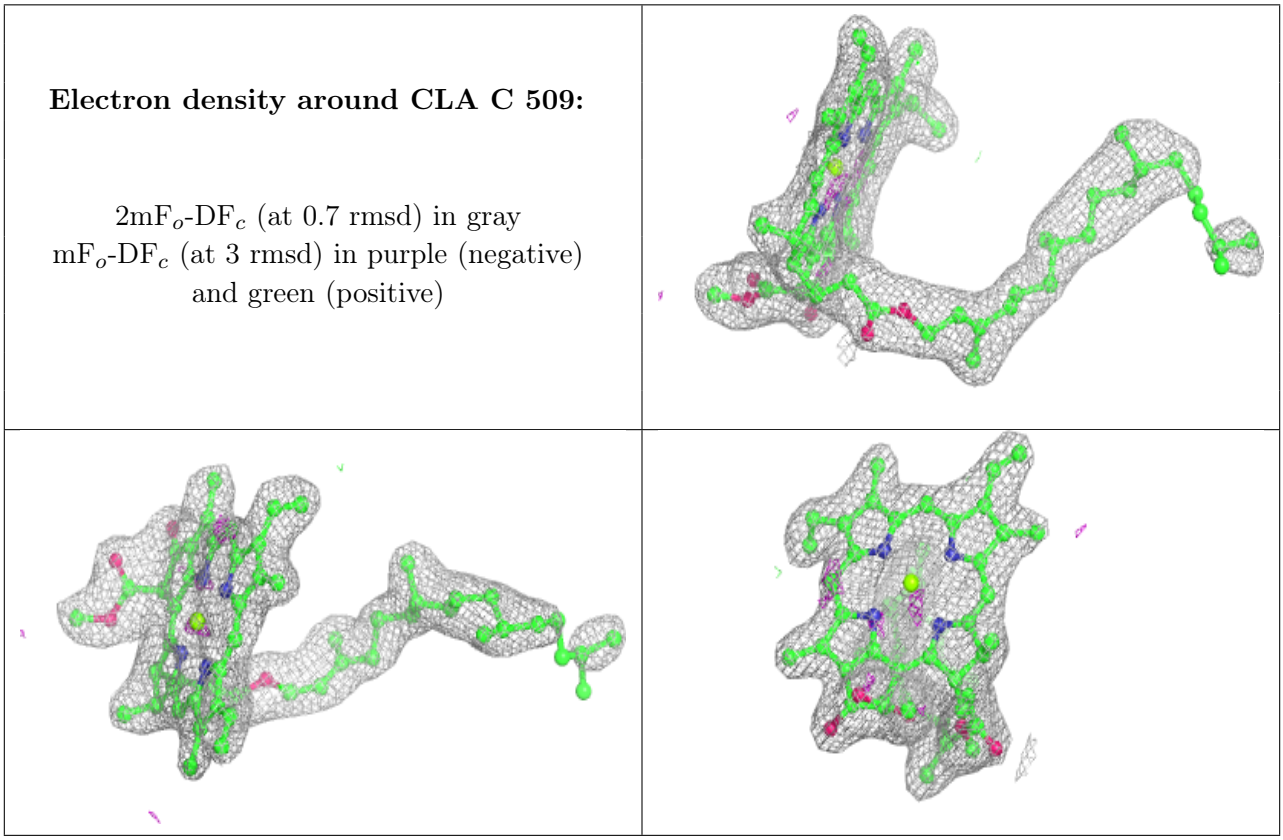
Electron density around CLA b 623:

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



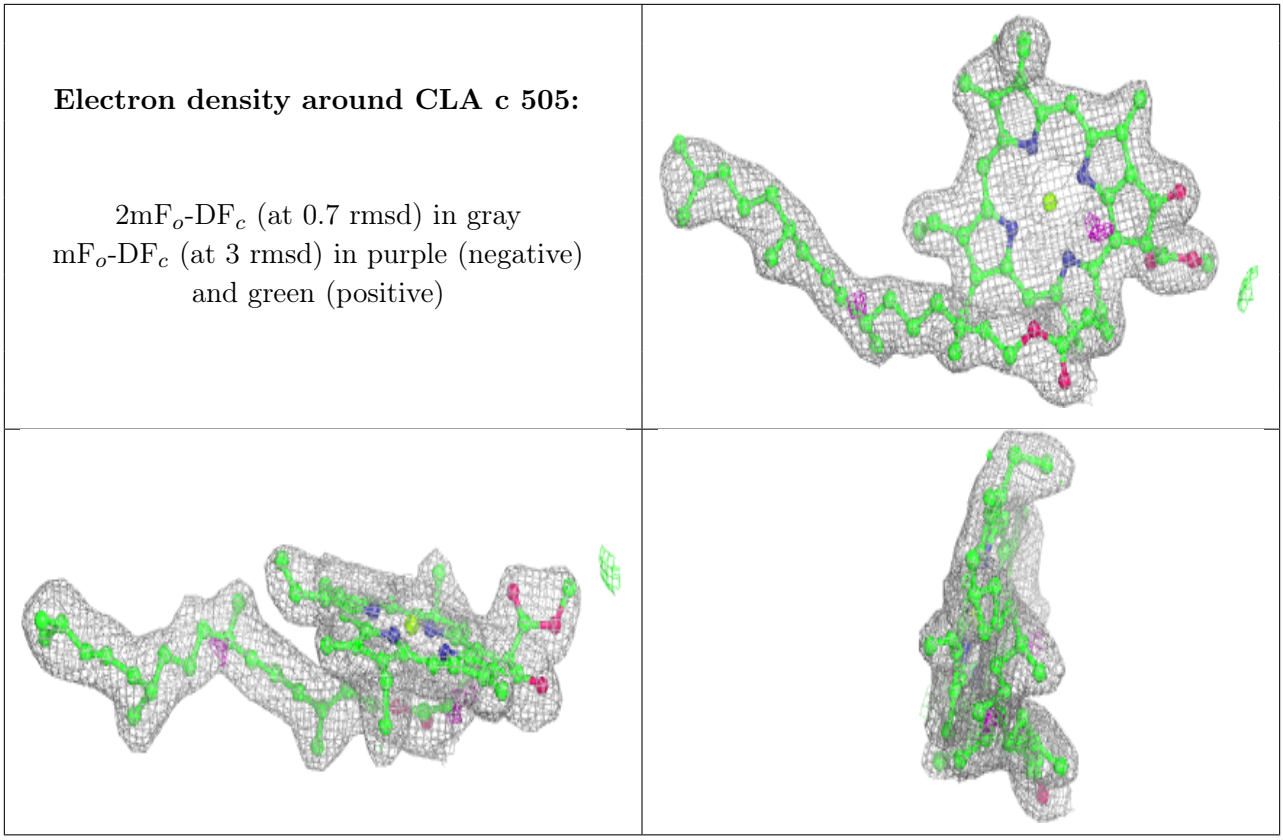
Electron density around CLA C 509:

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



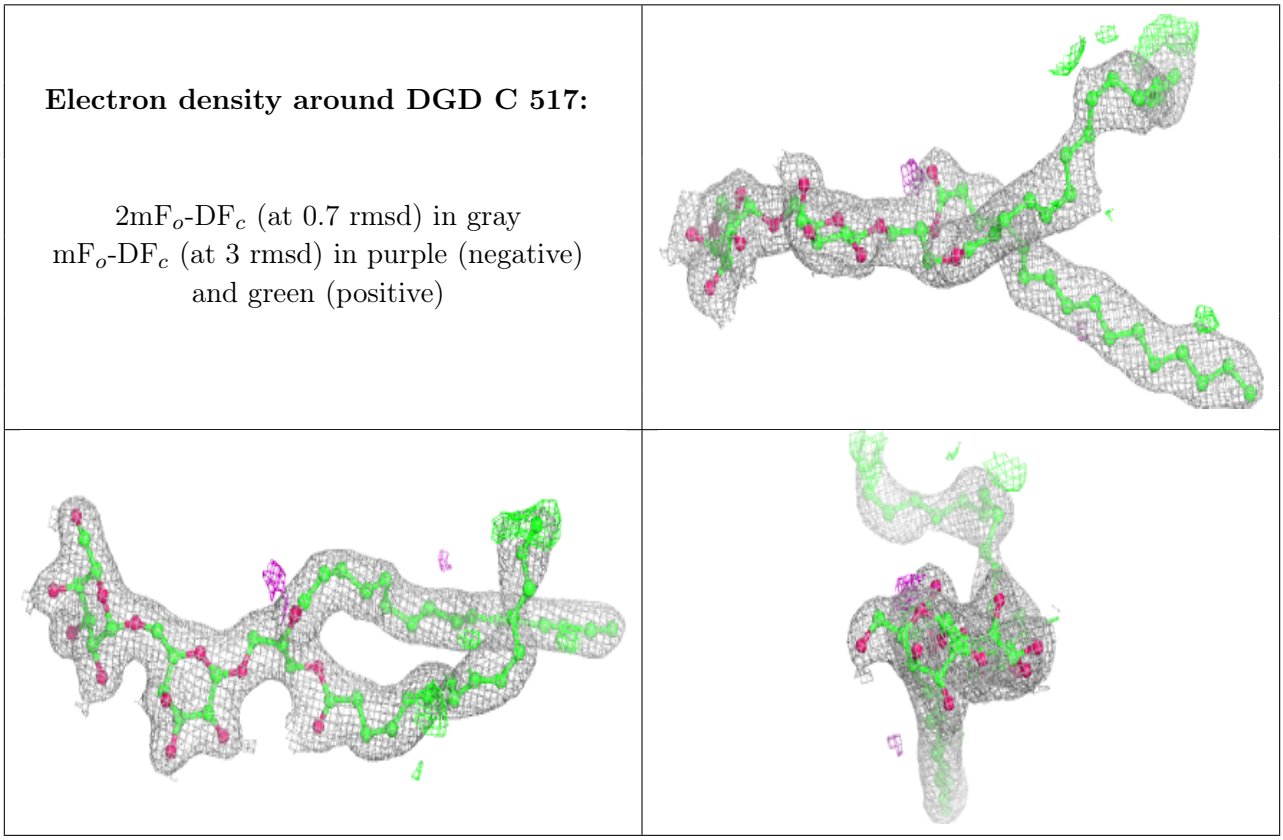
Electron density around CLA c 505:

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



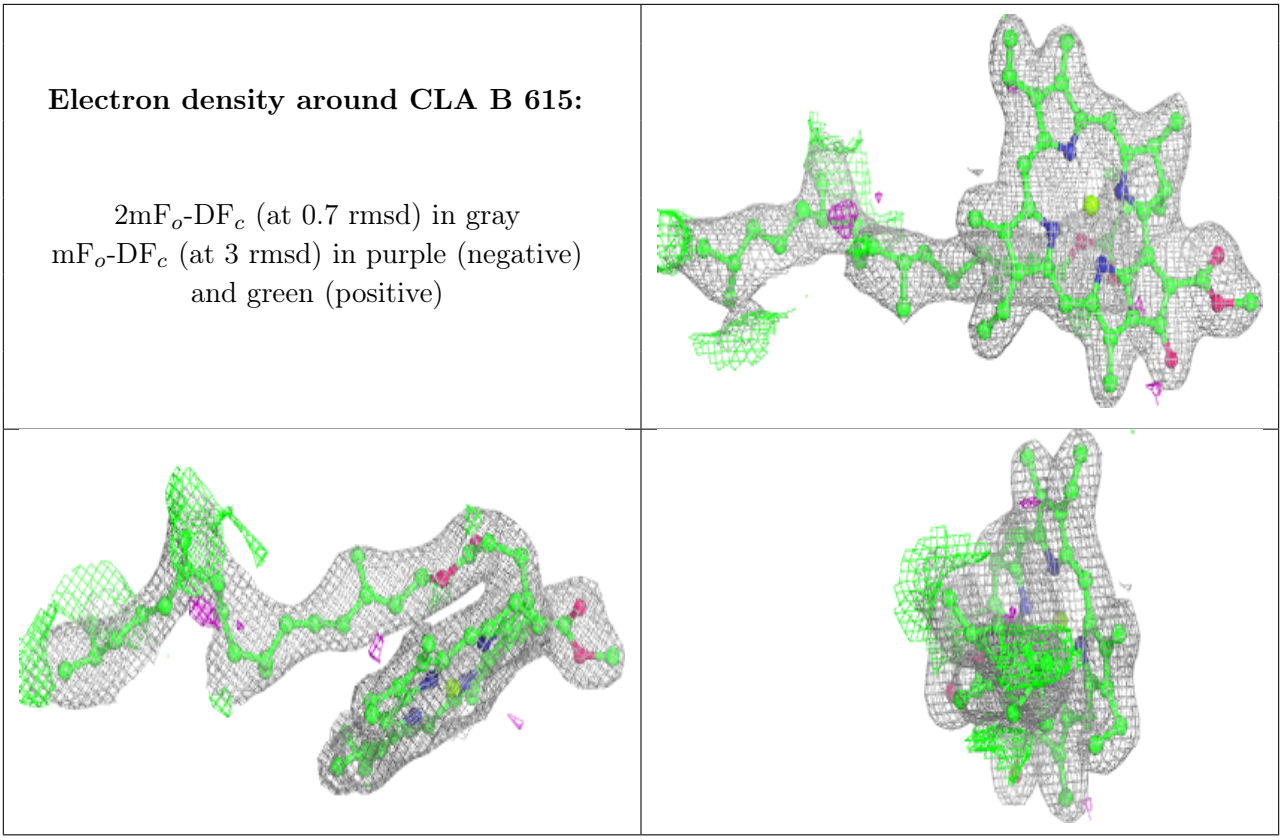
Electron density around DGD C 517:

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



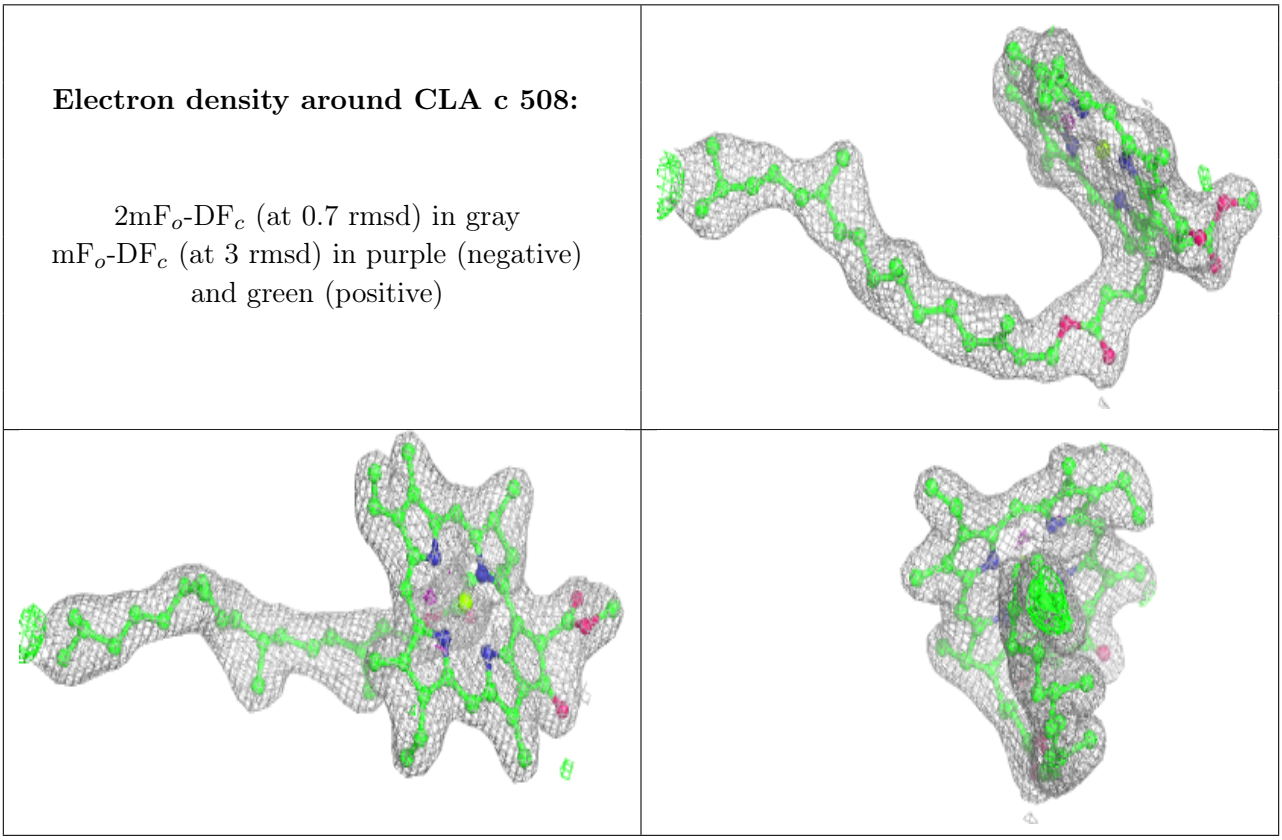
Electron density around CLA B 615:

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



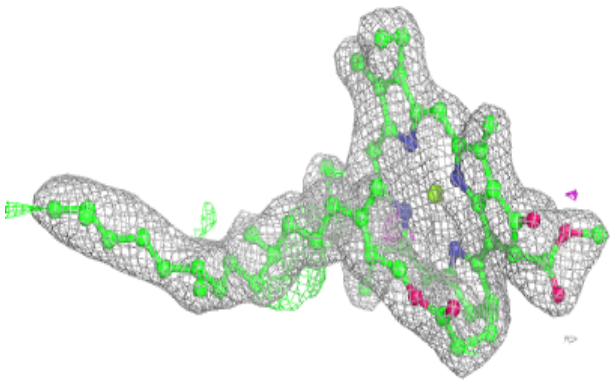
Electron density around CLA c 508:

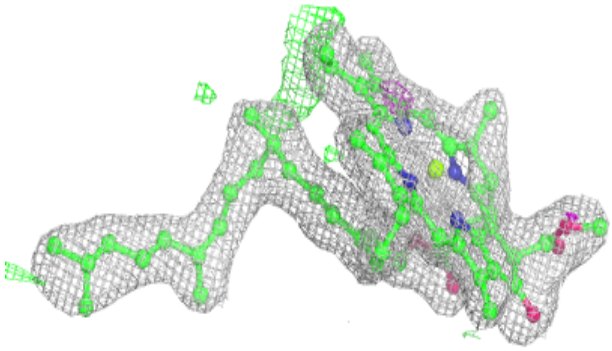
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

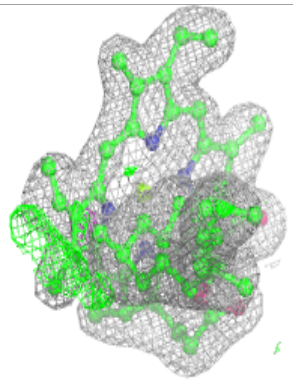


Electron density around CLA c 509:

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

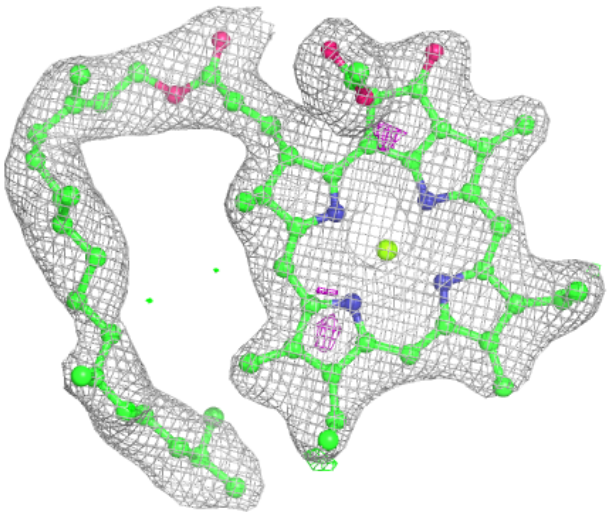


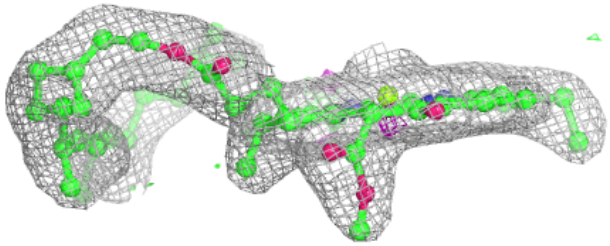


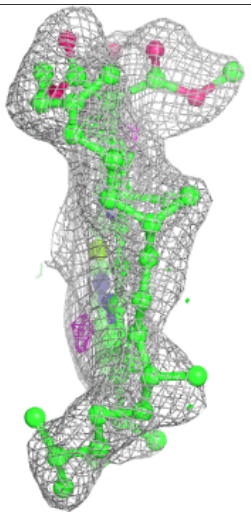


Electron density around CLA C 513:

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

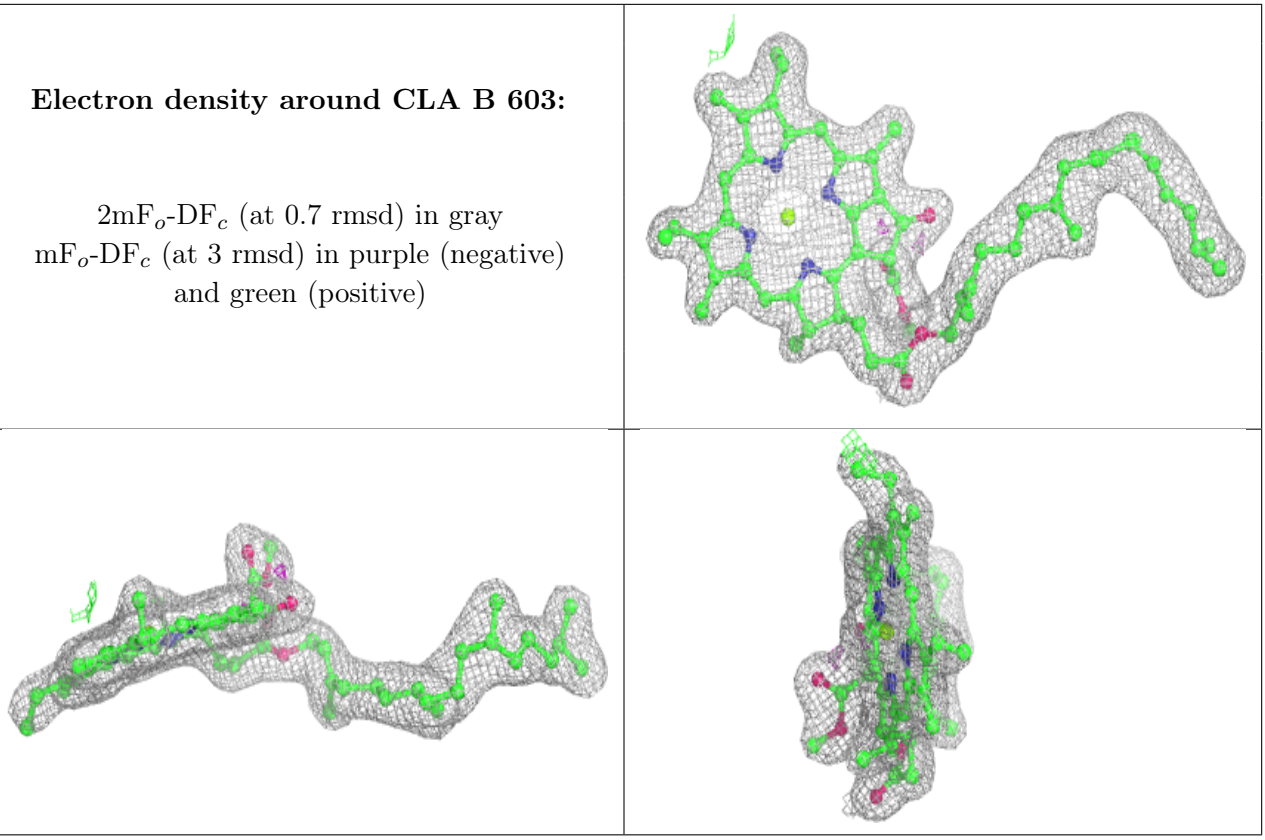






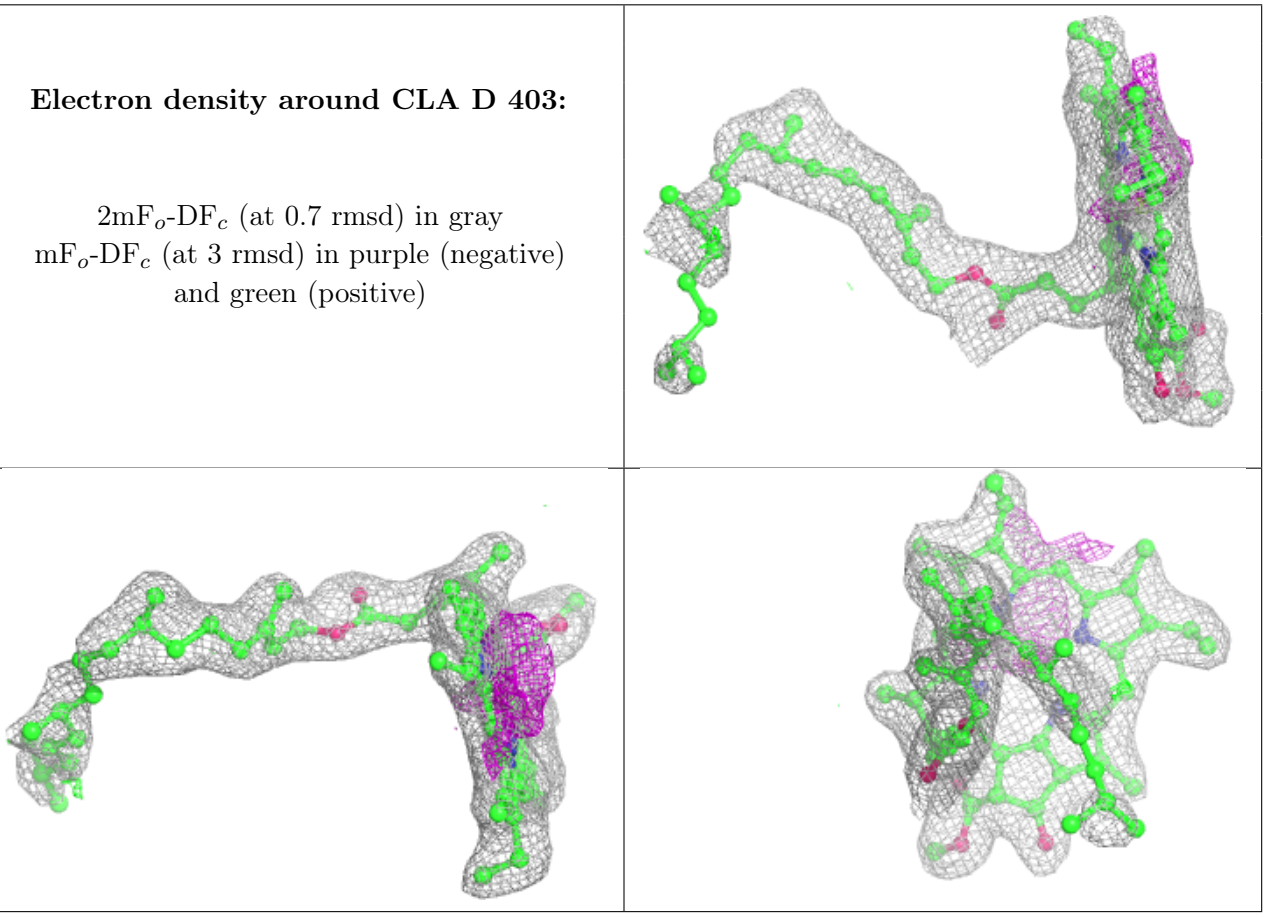
Electron density around CLA B 603:

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



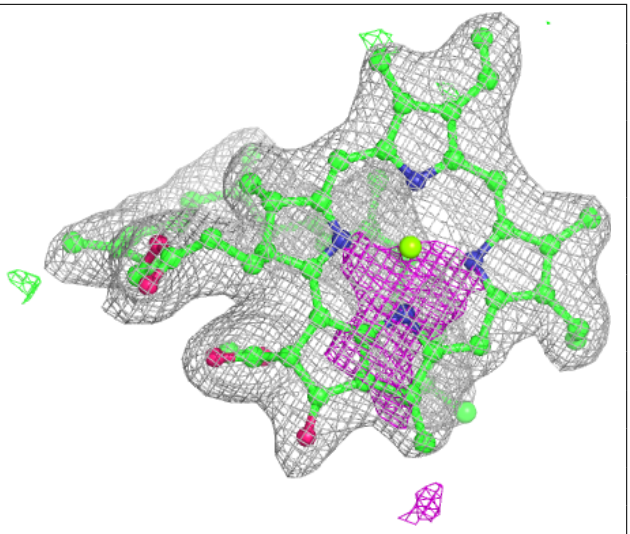
Electron density around CLA D 403:

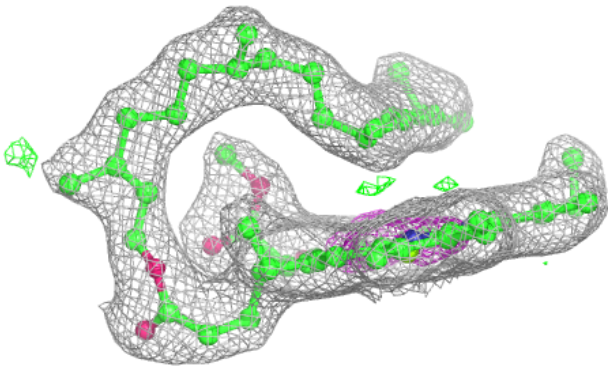
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

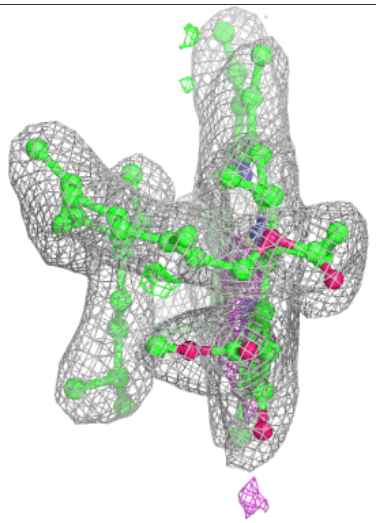


Electron density around CLA c 514:

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

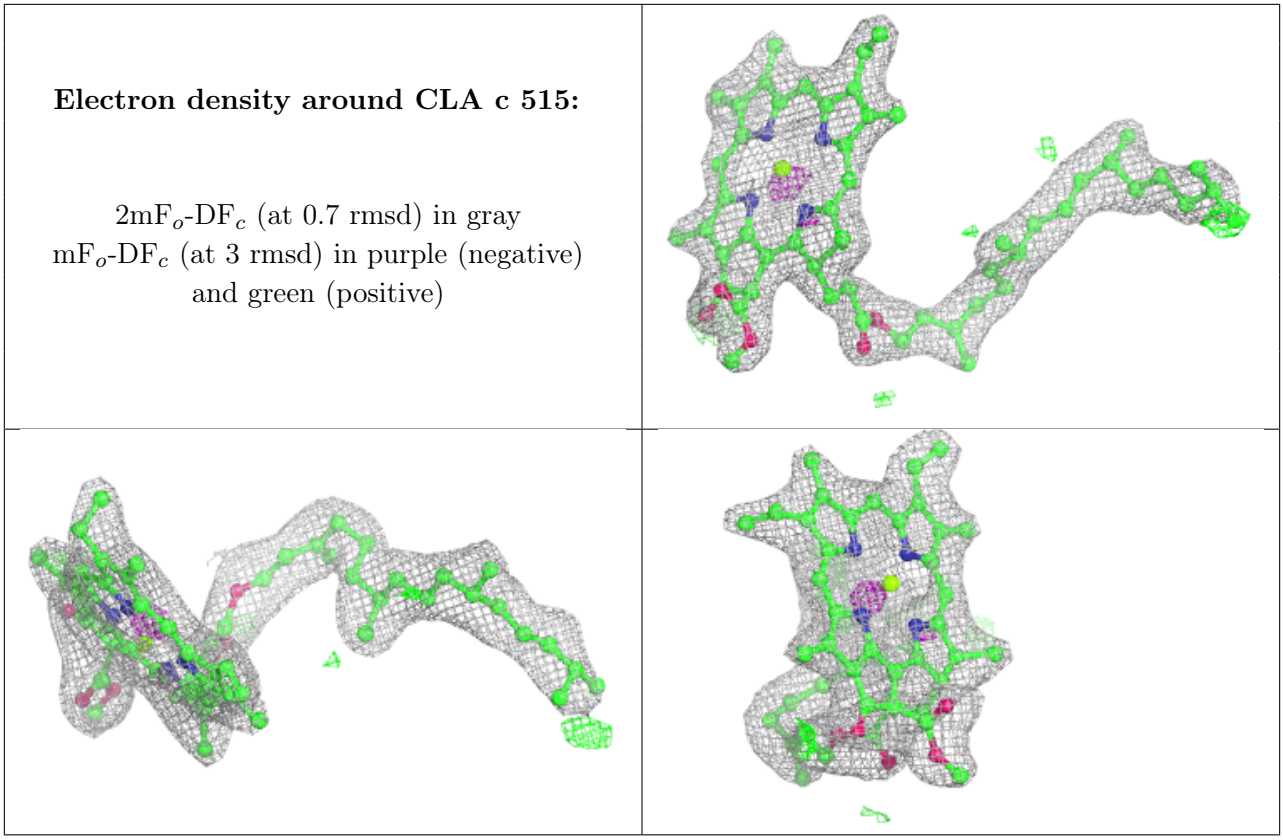






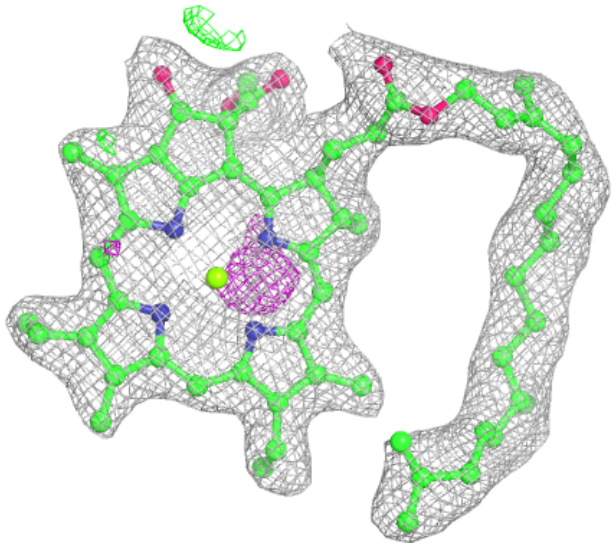
Electron density around CLA c 515:

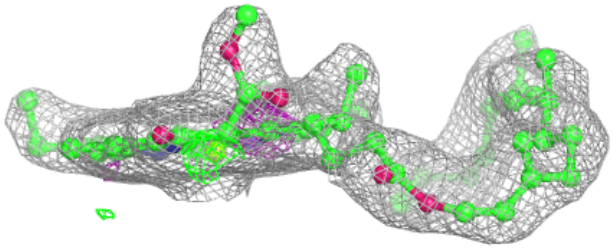
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

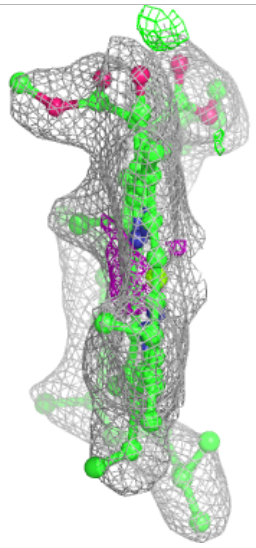


Electron density around CLA c 516:

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

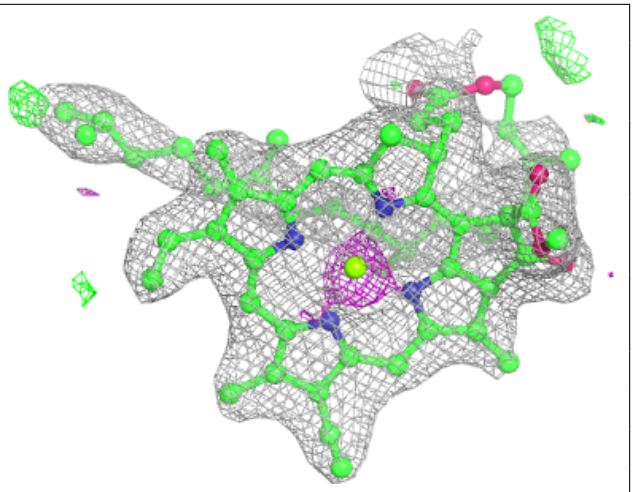


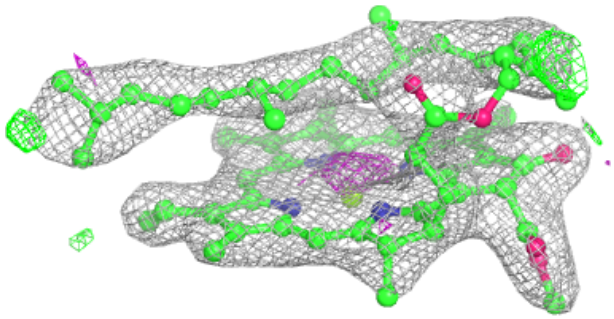


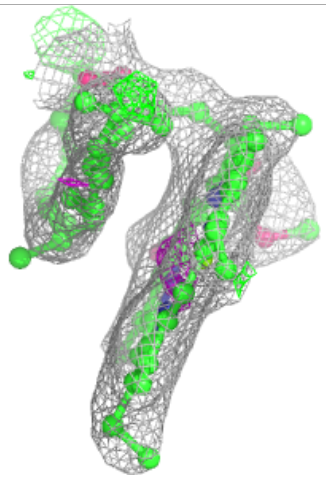


Electron density around CLA b 610:

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

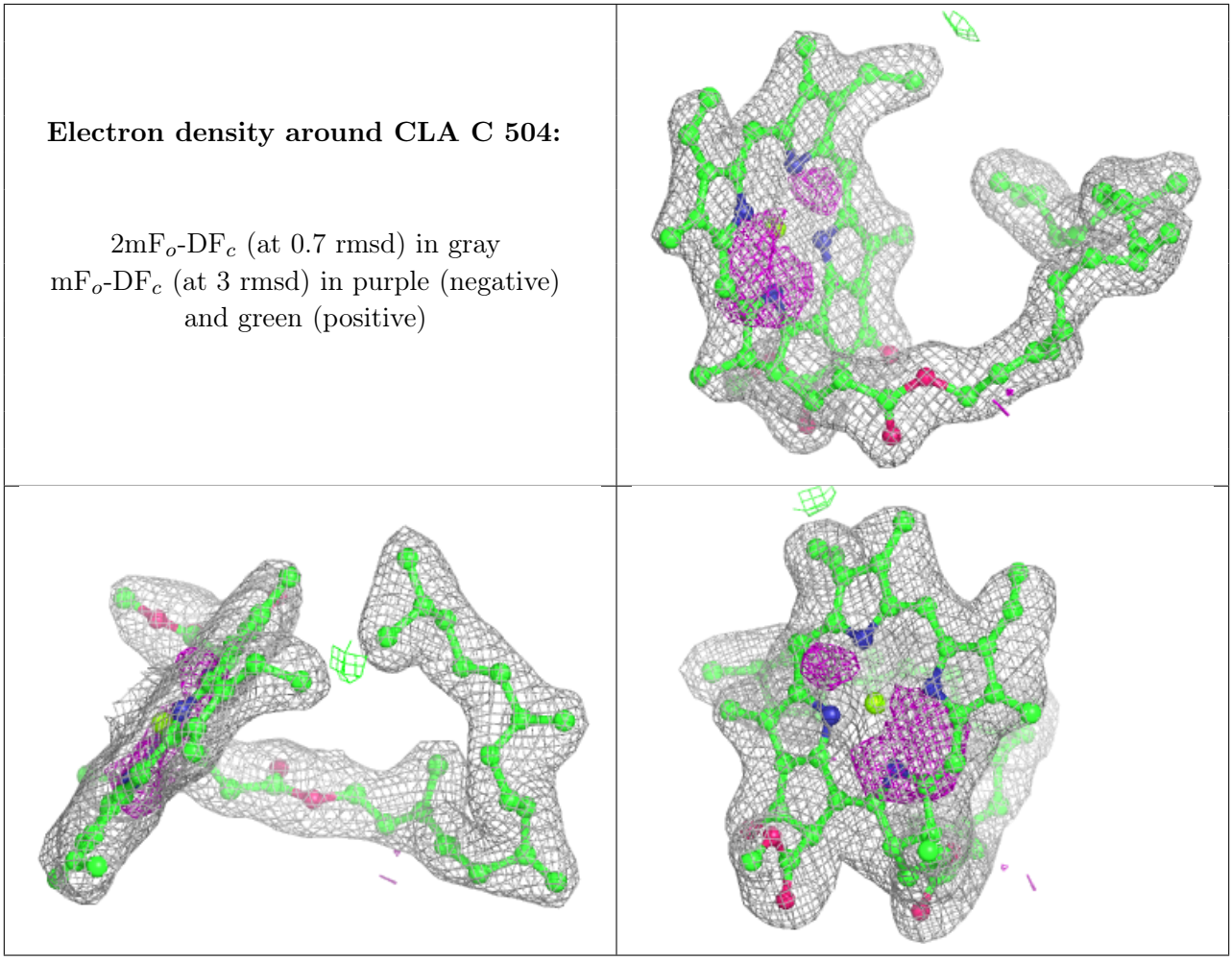






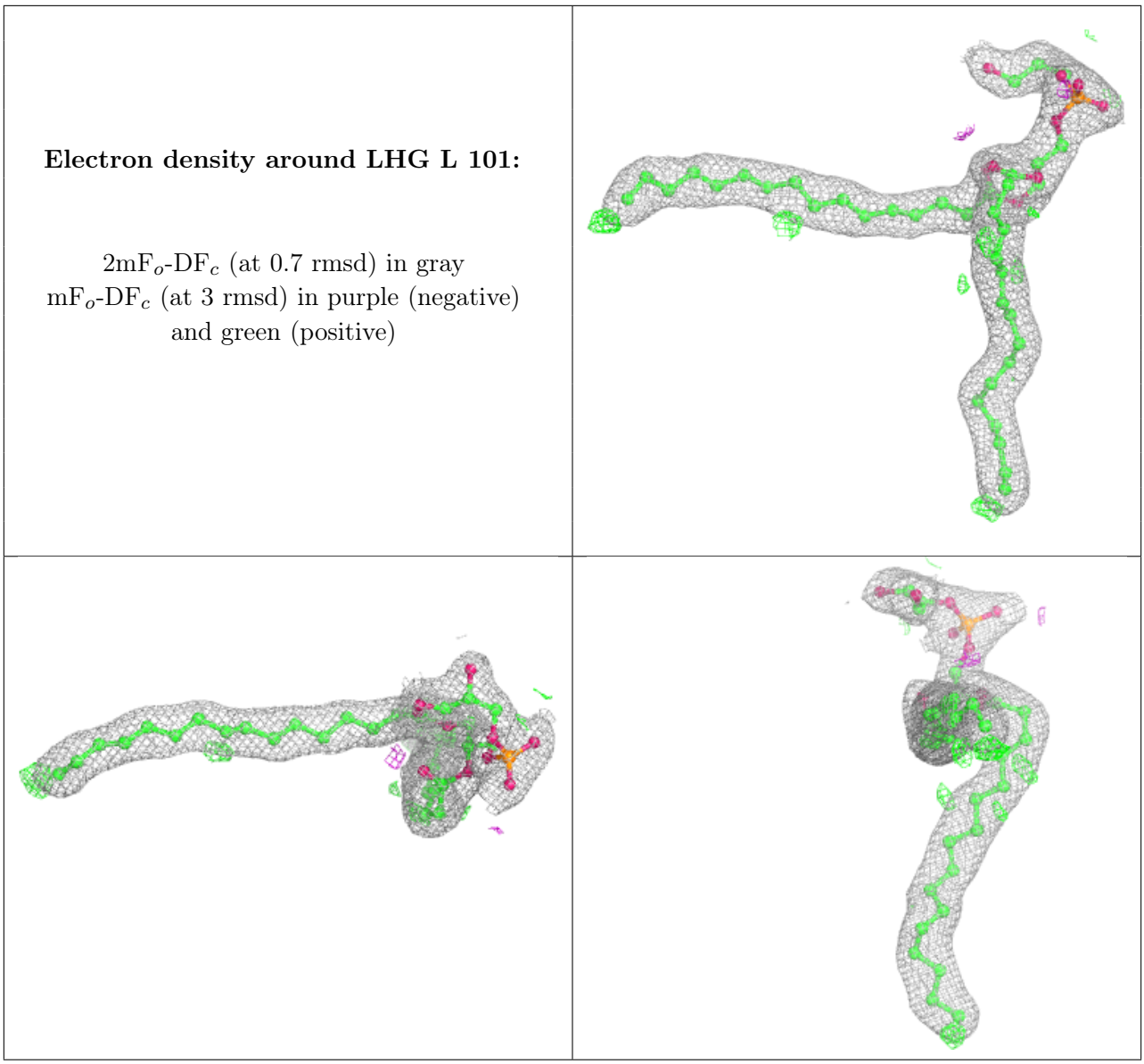
Electron density around CLA C 504:

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



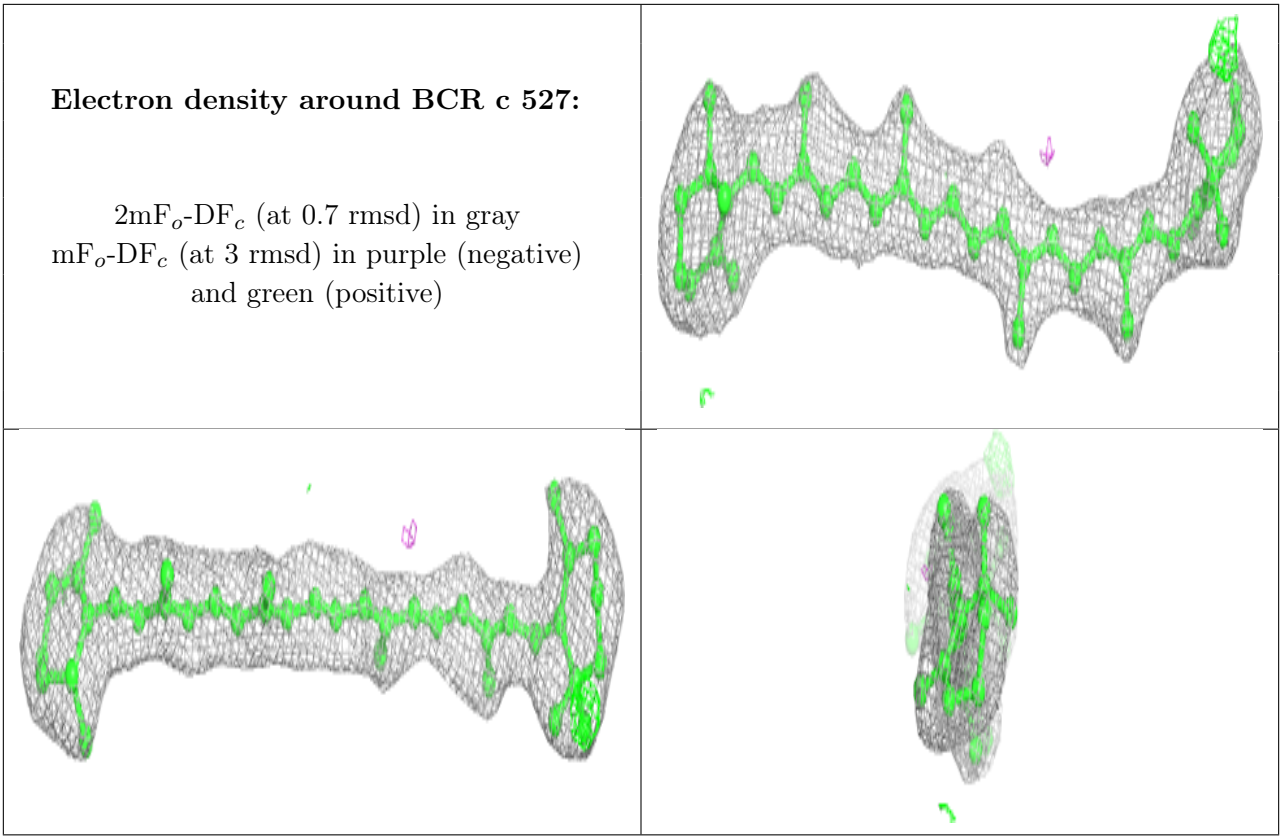
Electron density around LHG L 101:

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



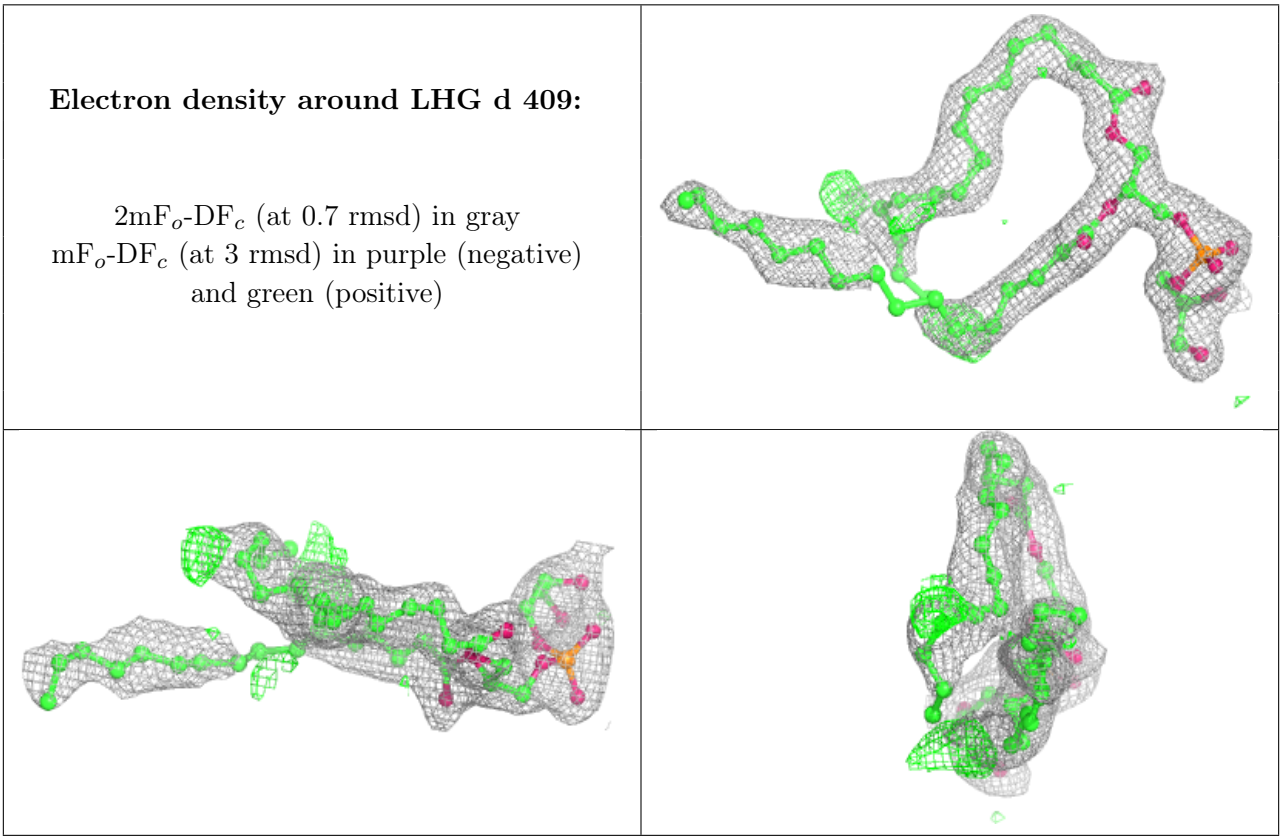
Electron density around BCR c 527:

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



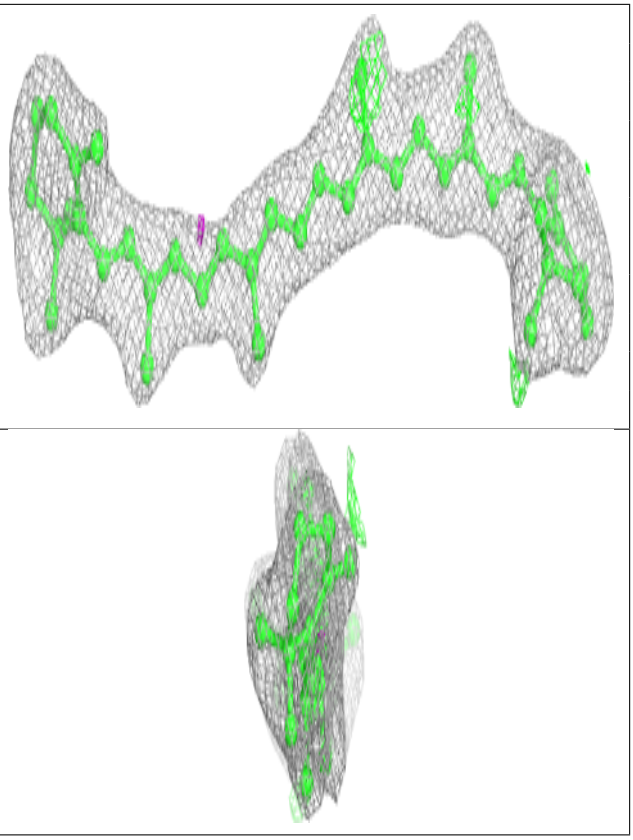
Electron density around LHG d 409:

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



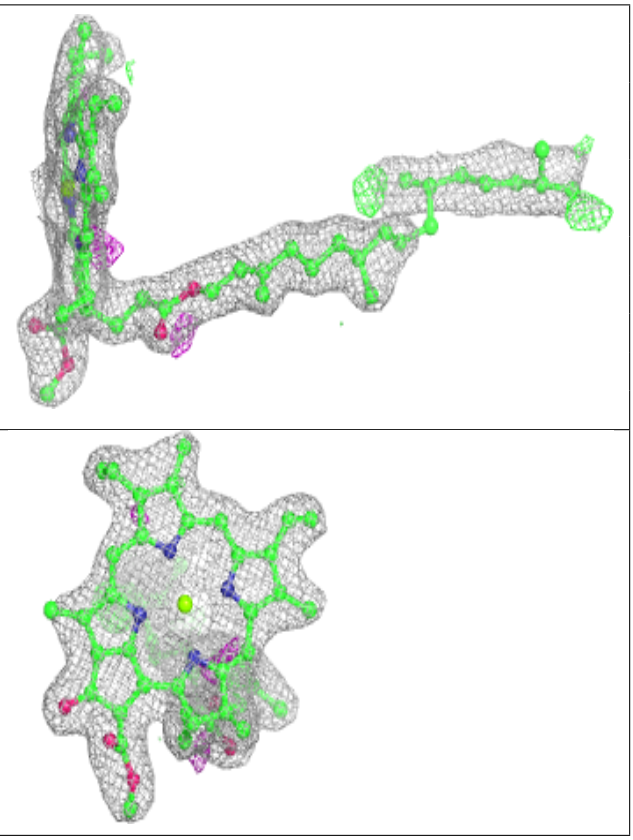
Electron density around BCR y 101:

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



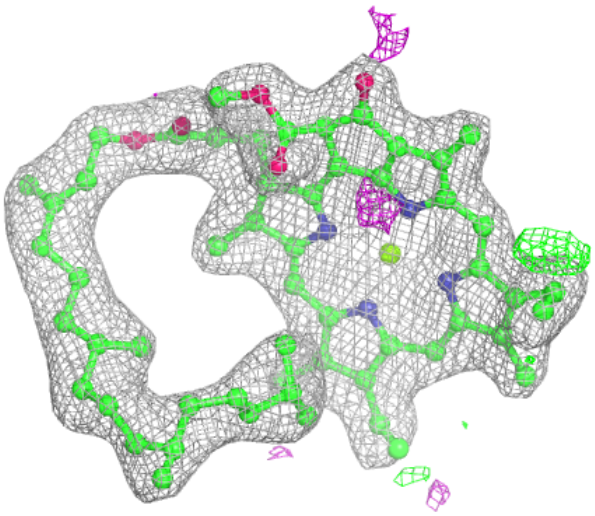
Electron density around CLA B 607:

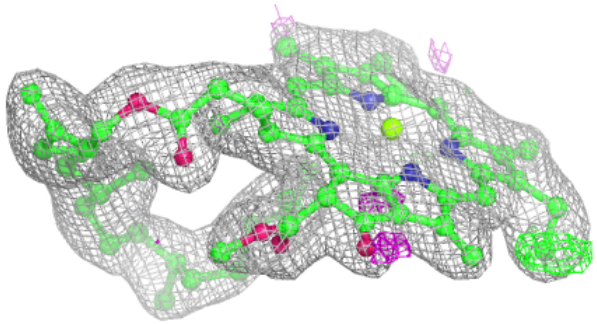
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

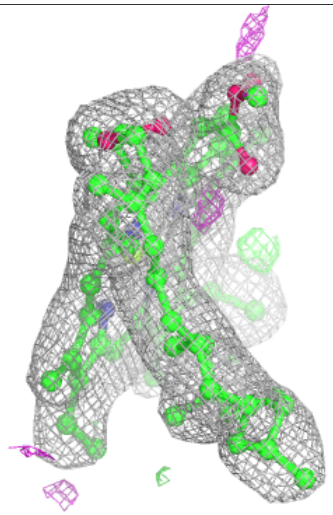


Electron density around CLA B 616:

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

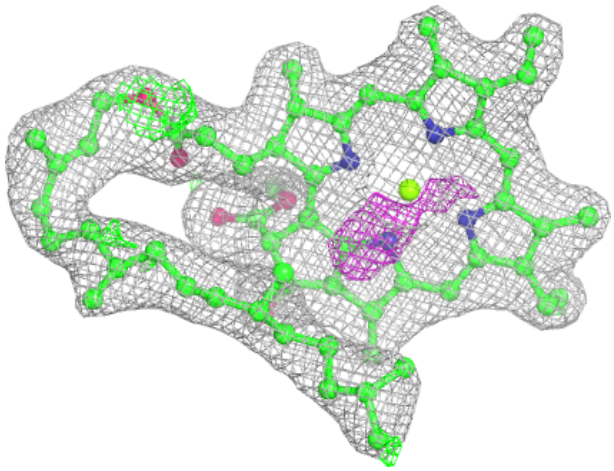


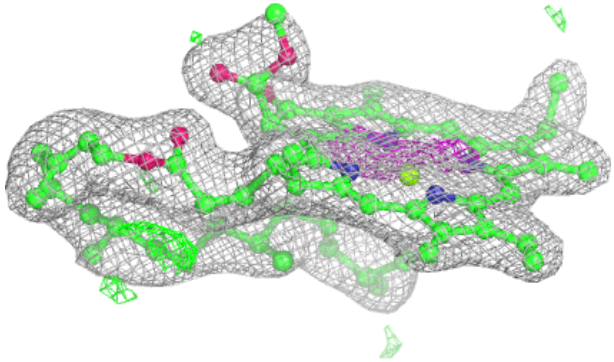


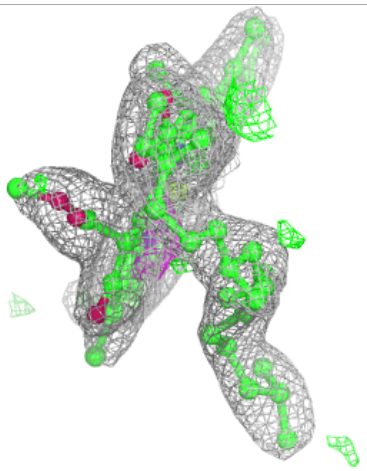


Electron density around CLA C 510:

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

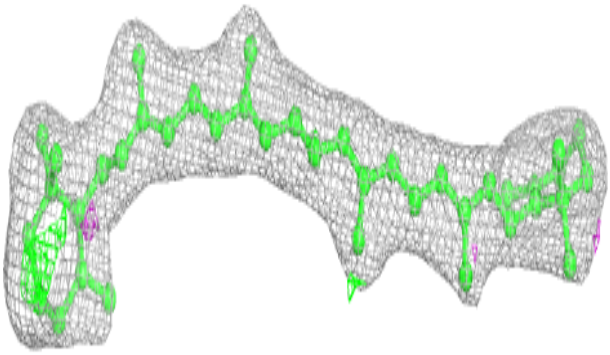


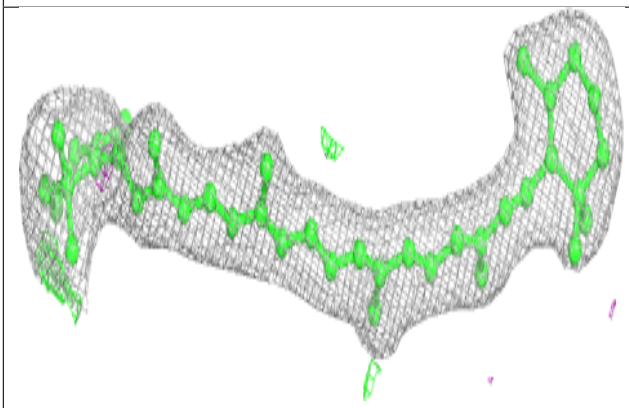


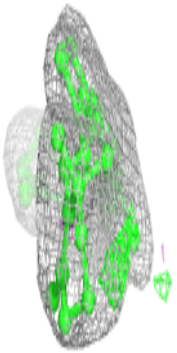


Electron density around BCR d 405:

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

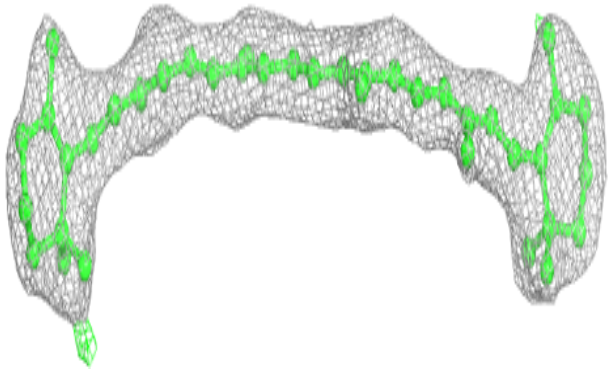


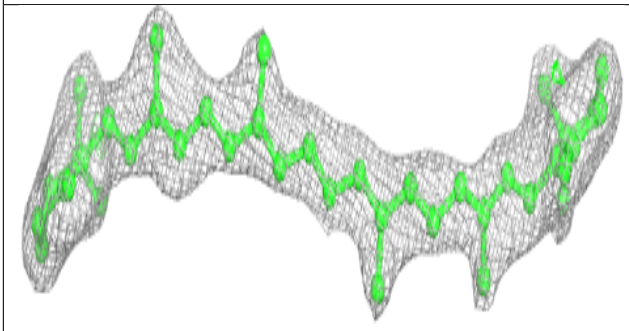


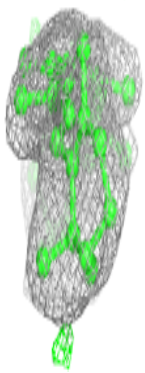


Electron density around BCR k 101:

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

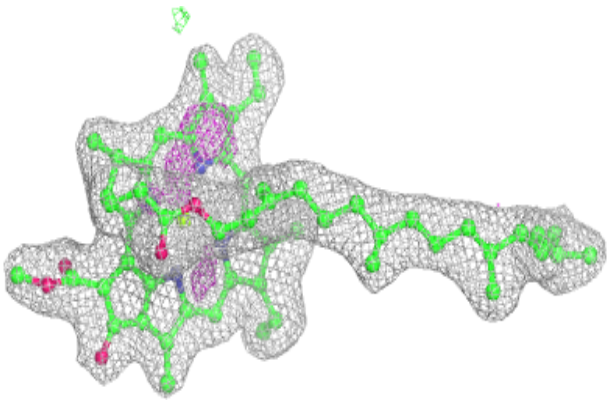


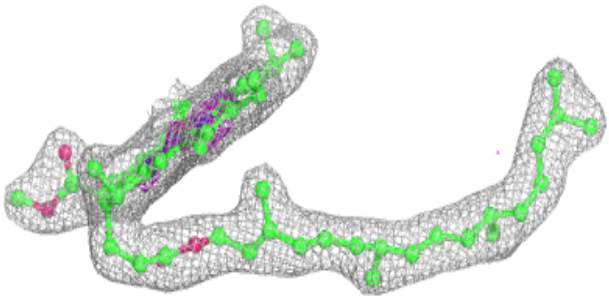


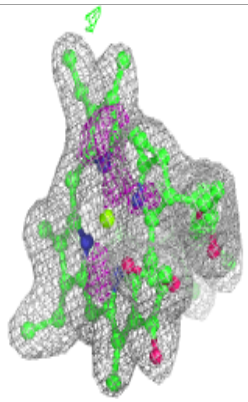


Electron density around CLA b 617:

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

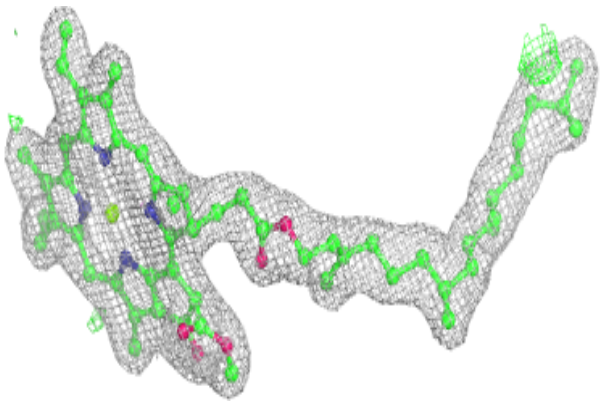


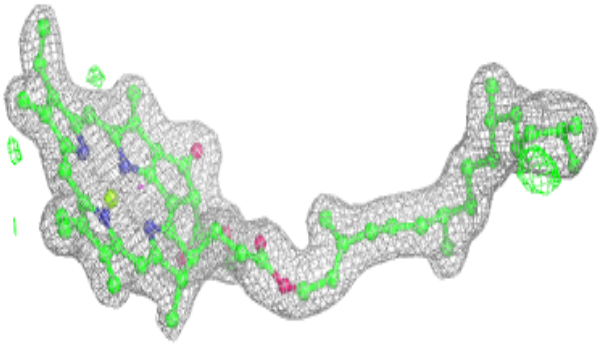


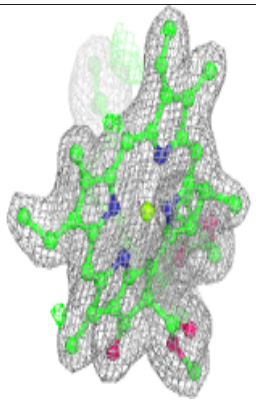


Electron density around CLA a 409:

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

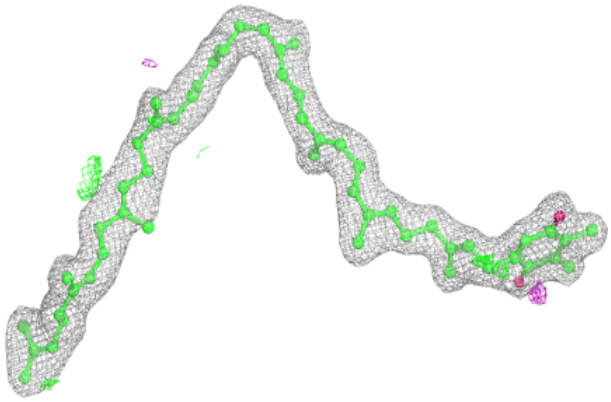


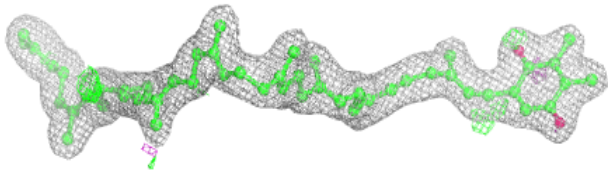


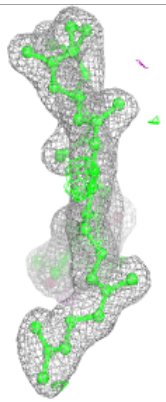


Electron density around PL9 D 405:

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

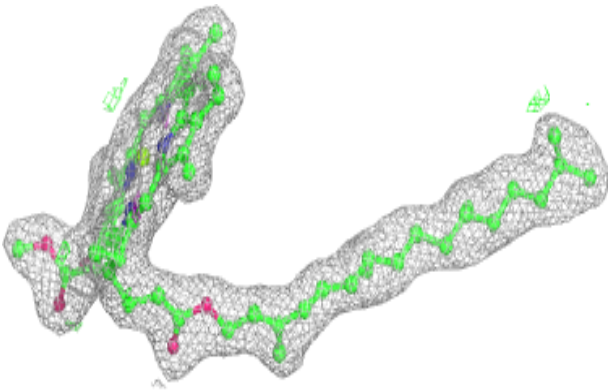


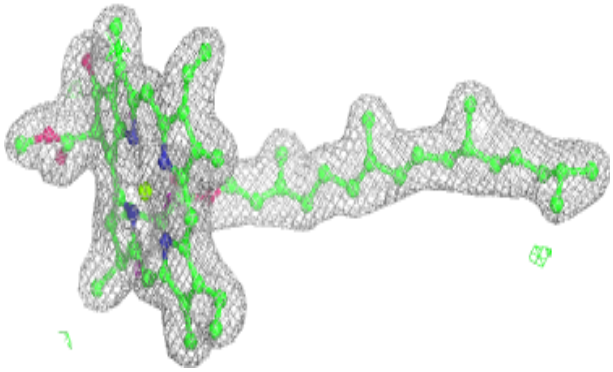


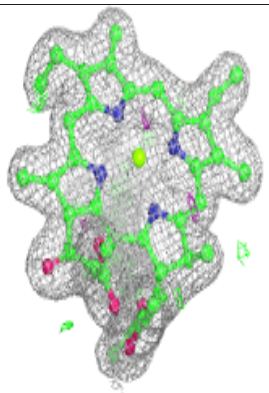


Electron density around CLA B 608:

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

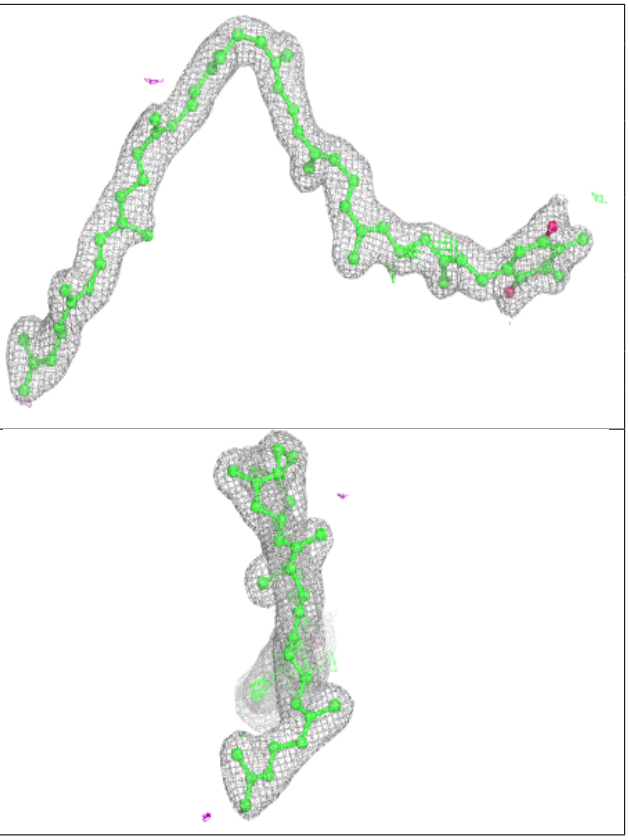






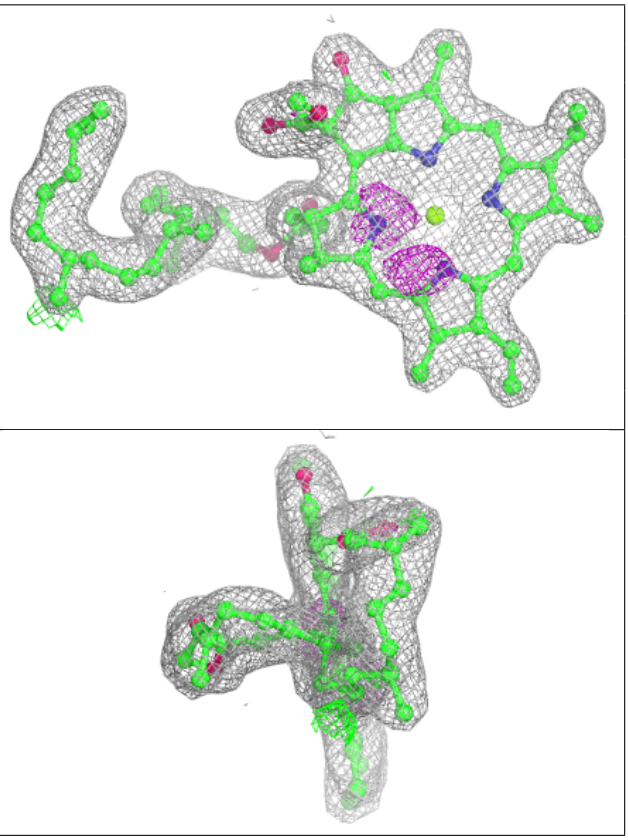
Electron density around PL9 d 406:

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



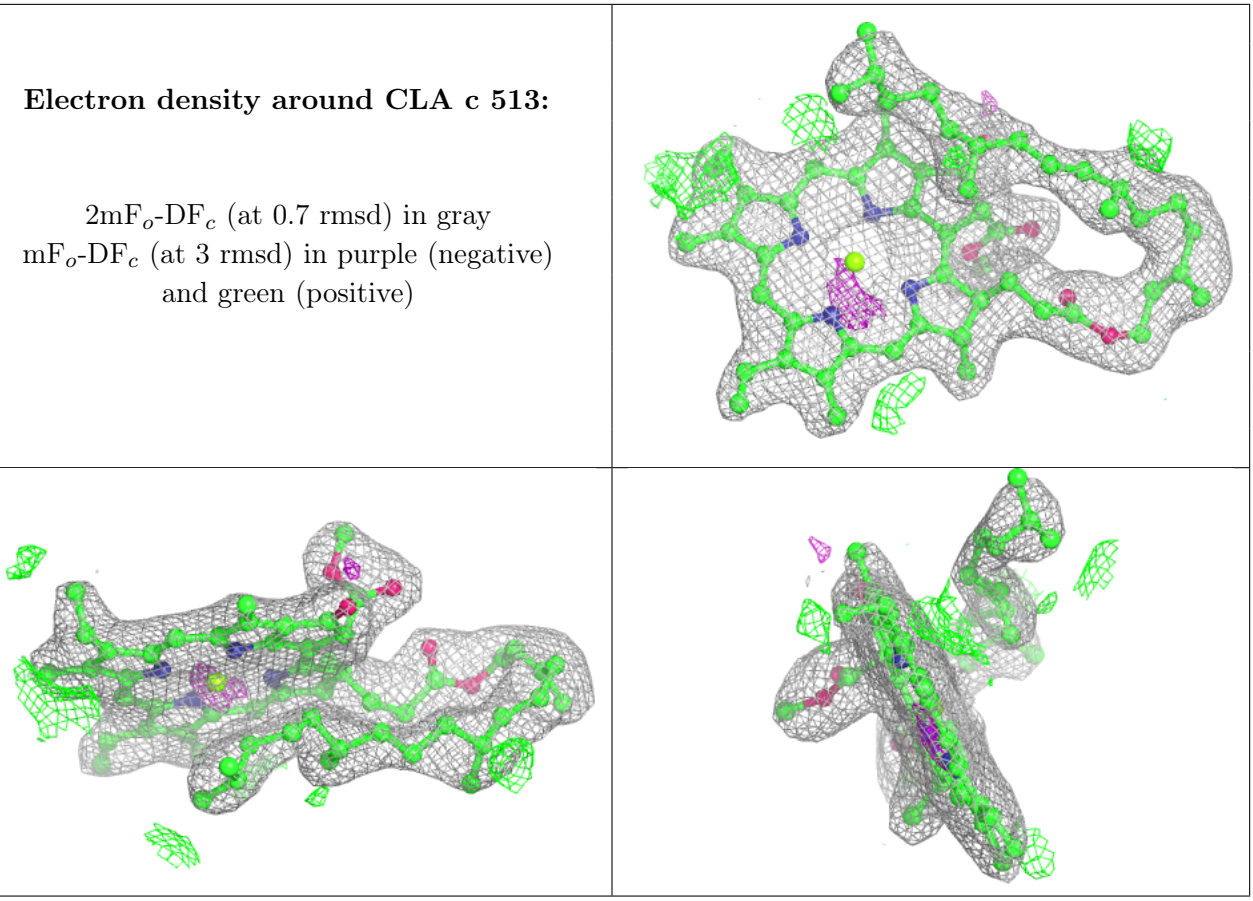
Electron density around CLA b 621:

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



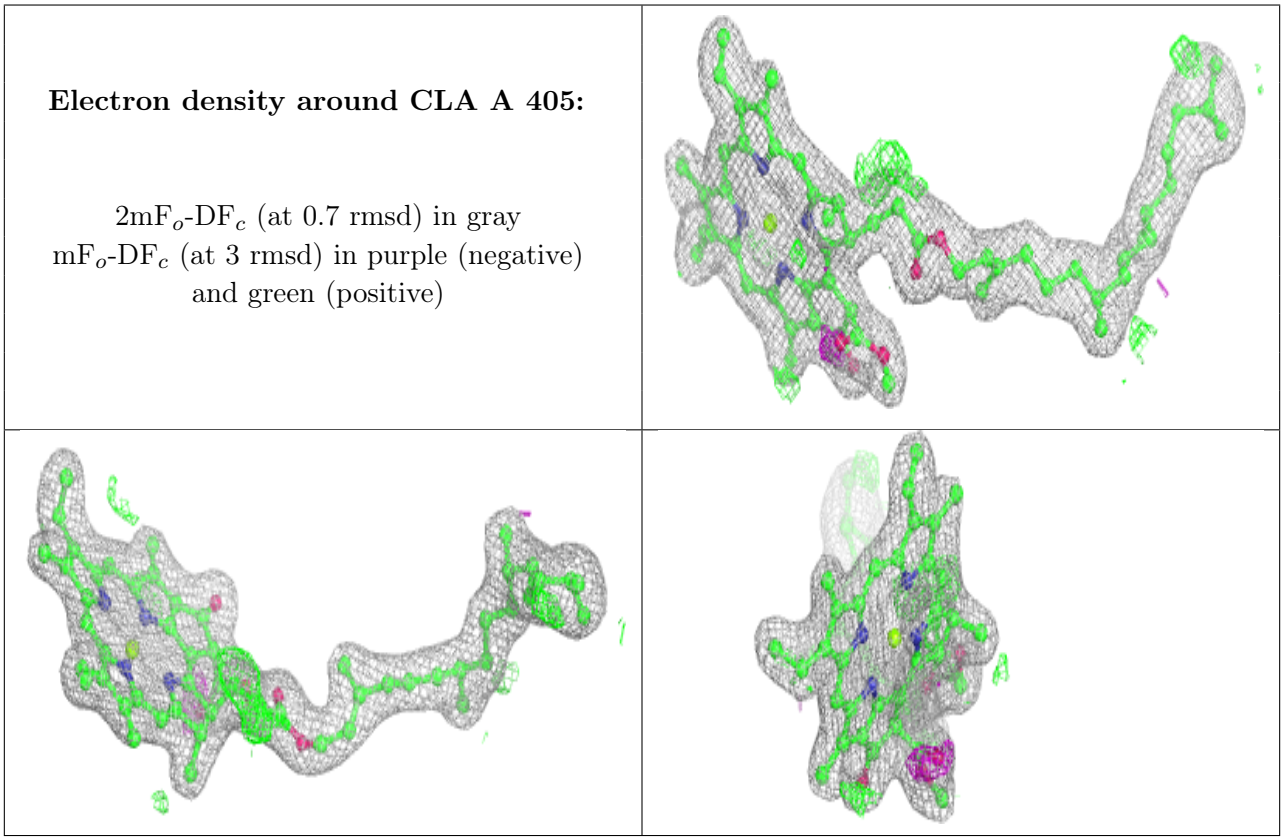
Electron density around CLA c 513:

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



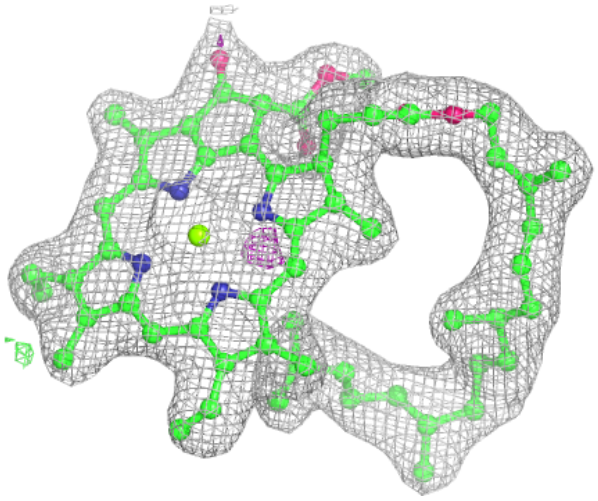
Electron density around CLA A 405:

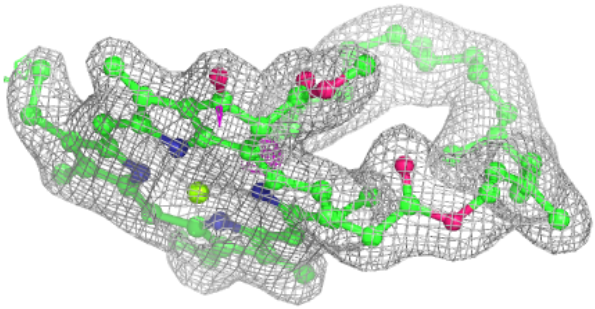
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

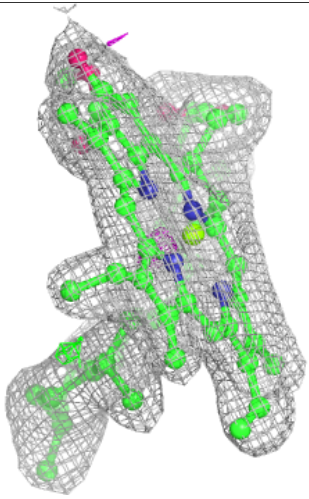


Electron density around CLA b 624:

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

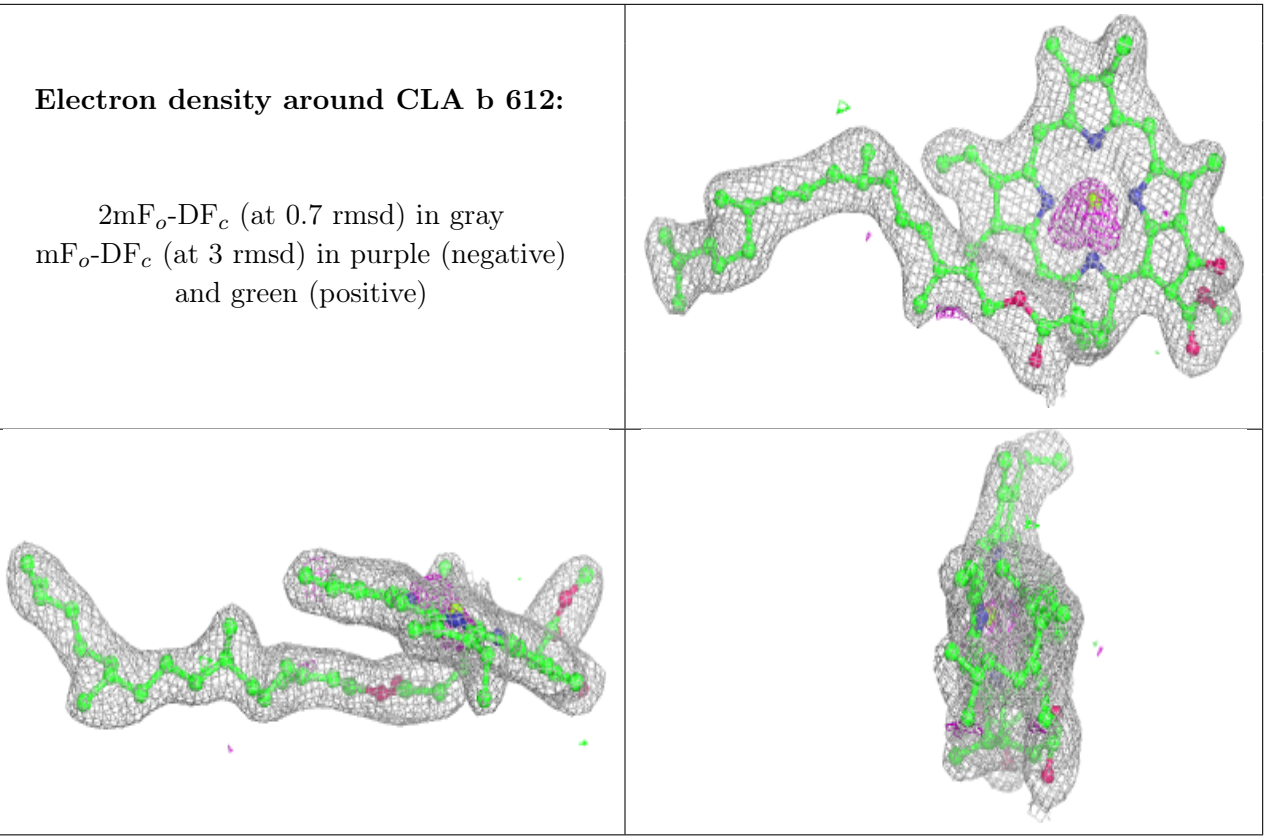






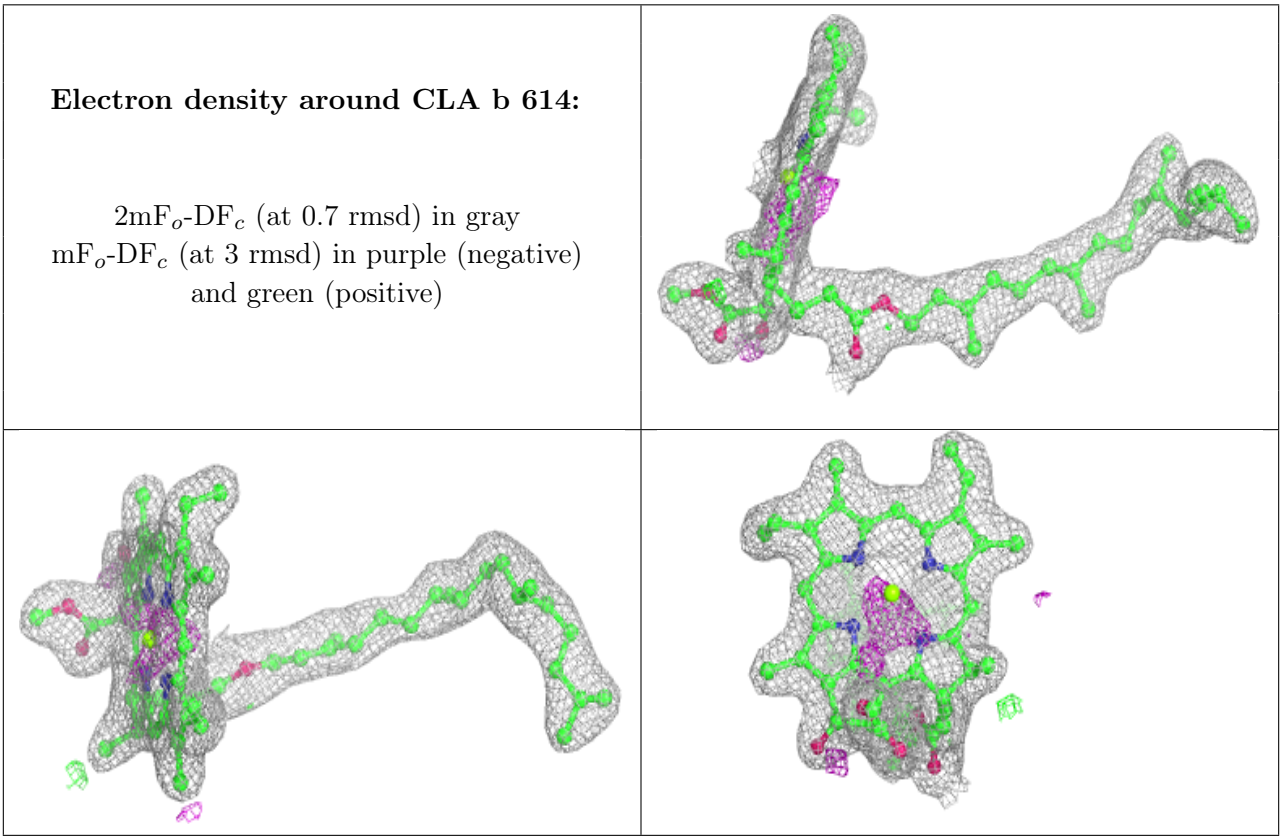
Electron density around CLA b 612:

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



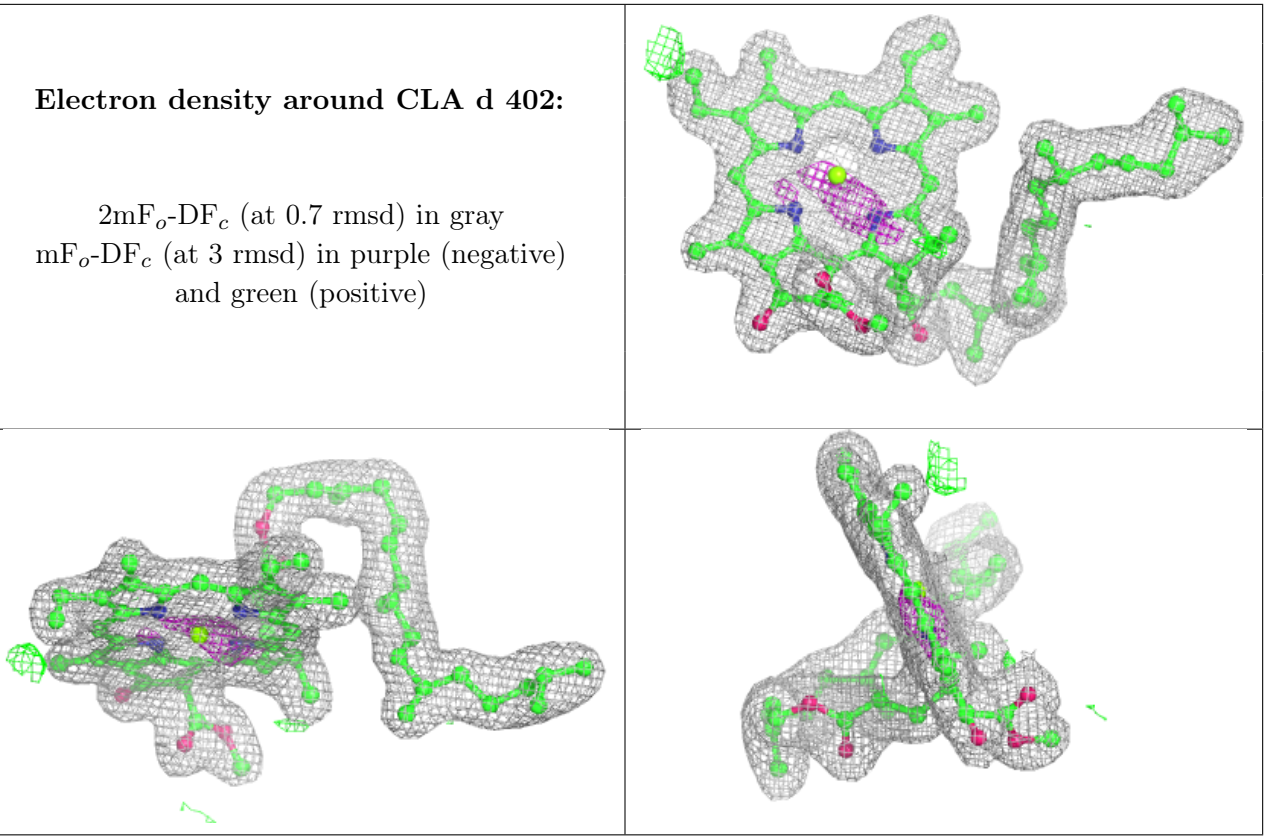
Electron density around CLA b 614:

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



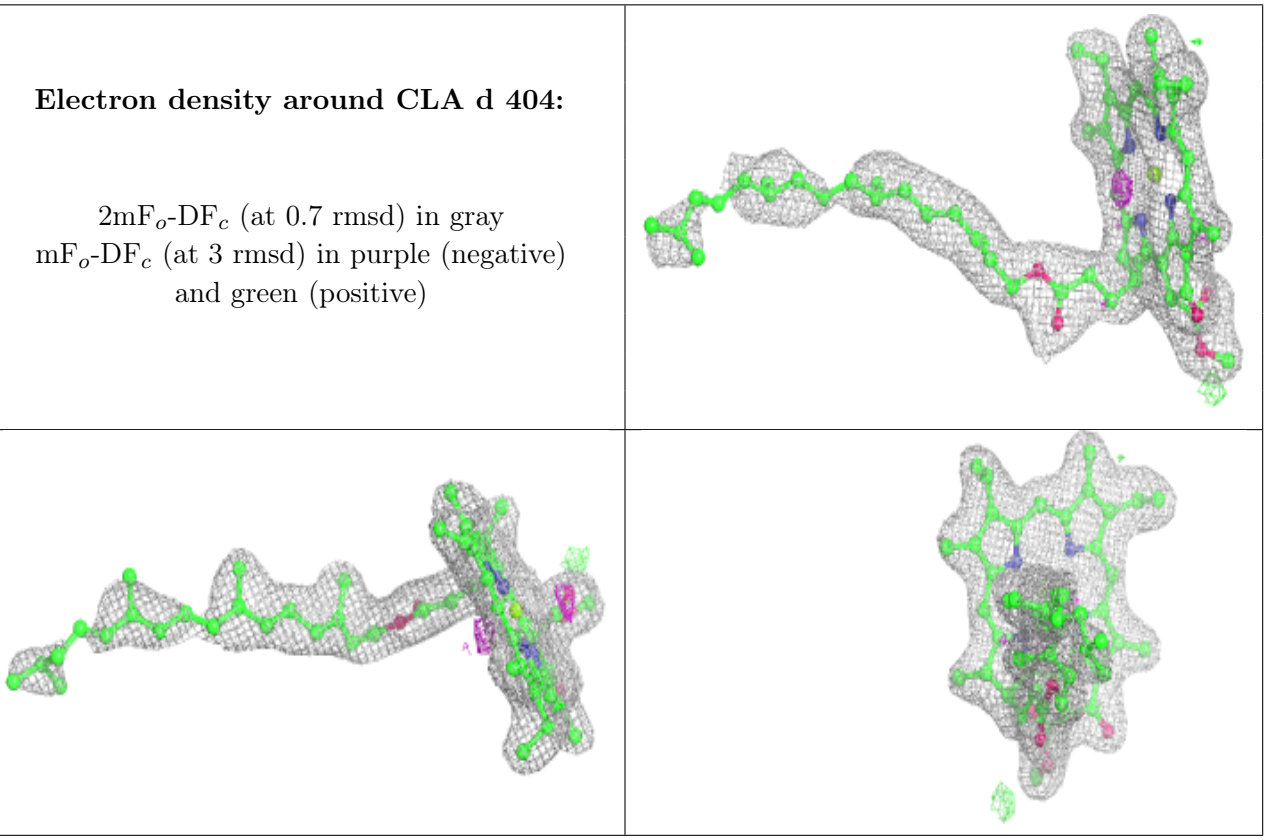
Electron density around CLA d 402:

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



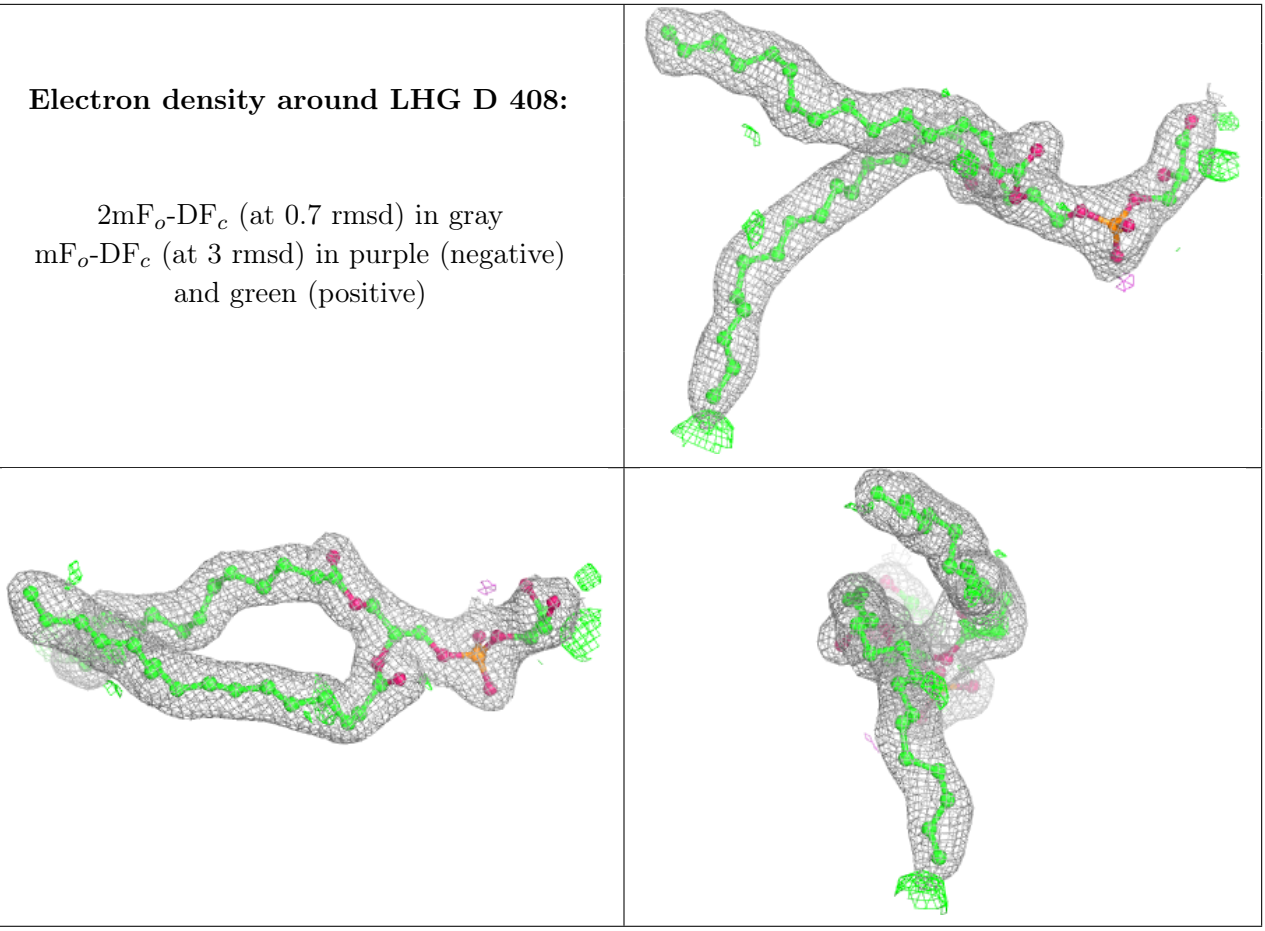
Electron density around CLA d 404:

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



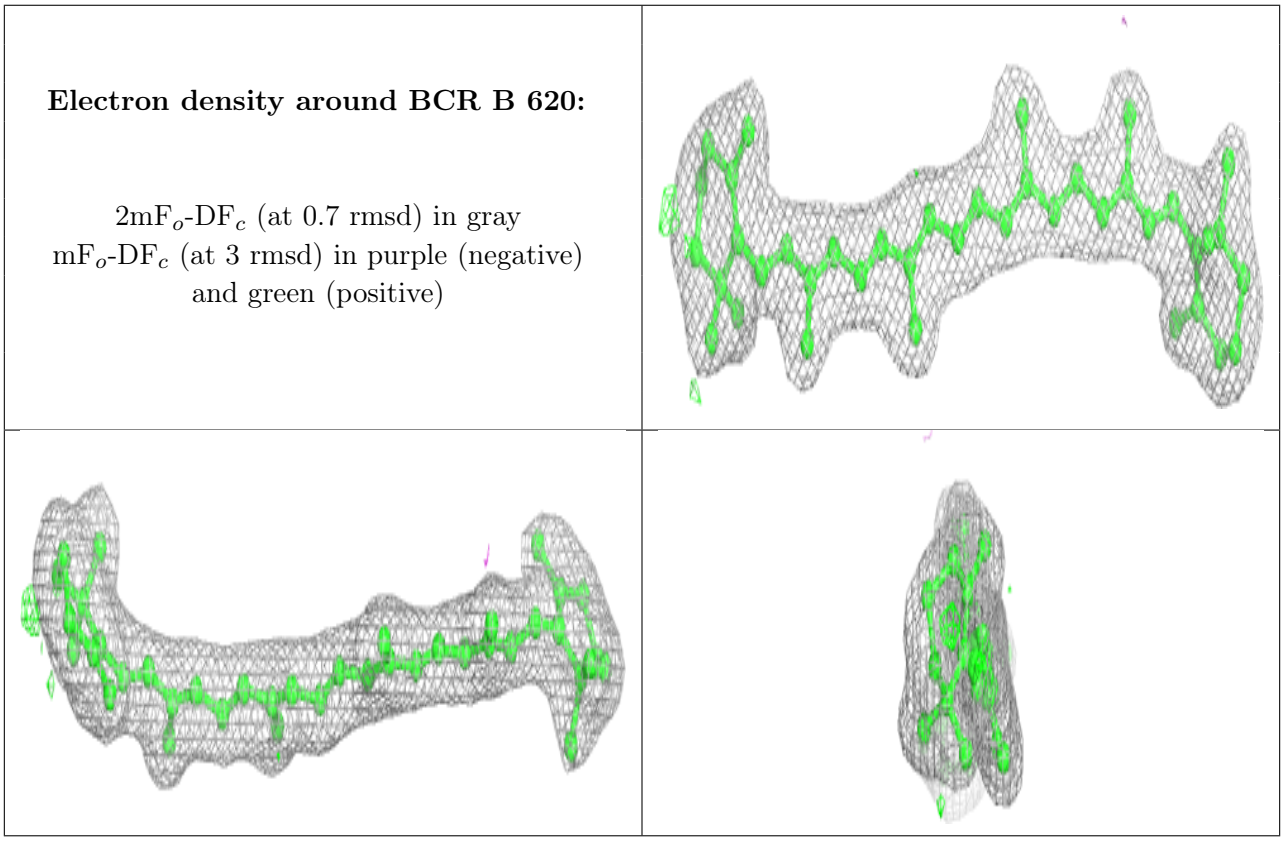
Electron density around LHG D 408:

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



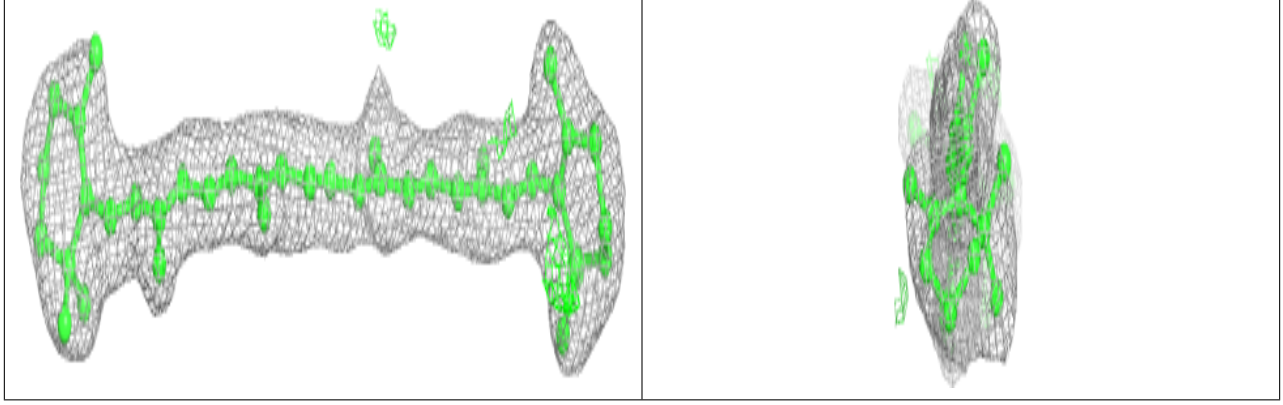
Electron density around BCR B 620:

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



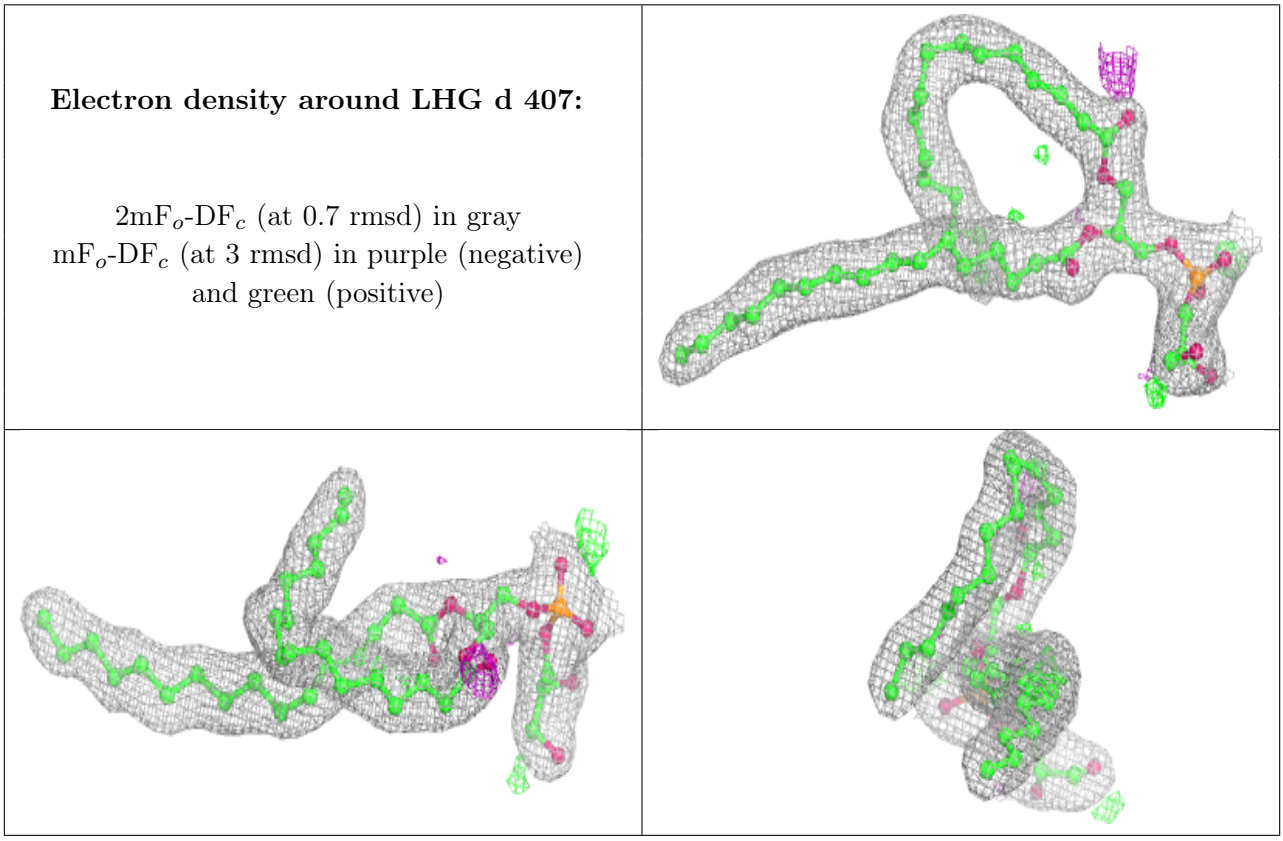
Electron density around BCR C 515:

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



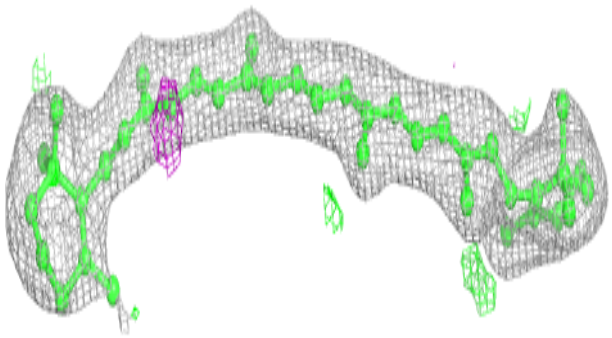
Electron density around LHG d 407:

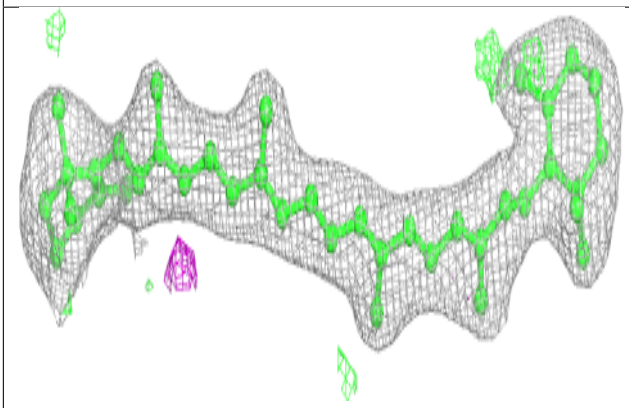
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

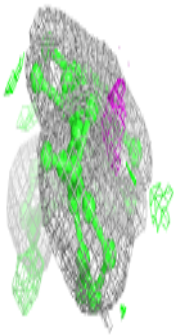


Electron density around BCR D 404:

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

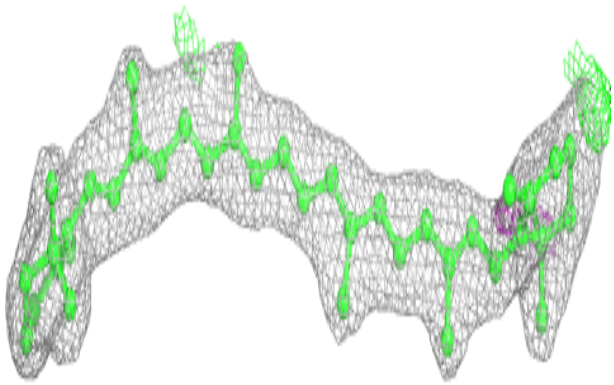


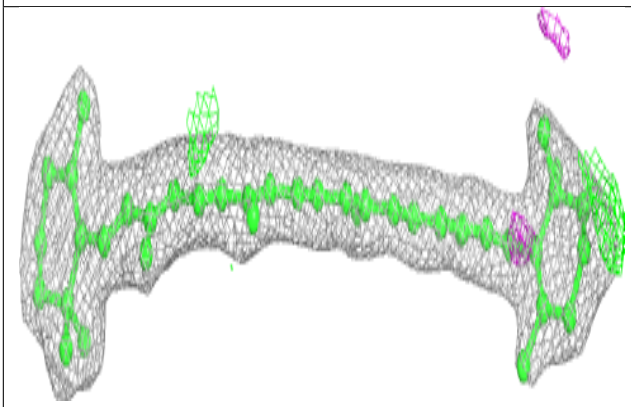


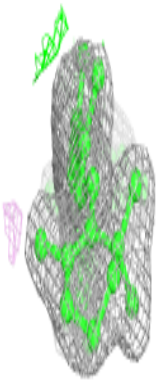


Electron density around BCR H 101:

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

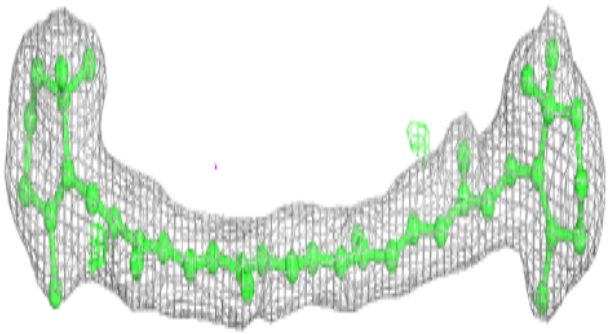


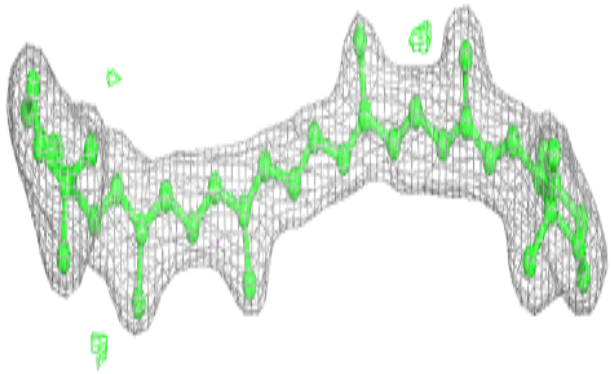


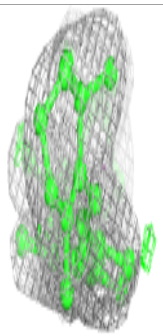


Electron density around BCR K 101:

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

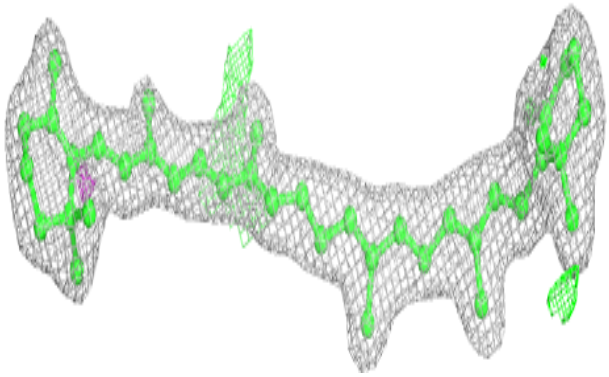


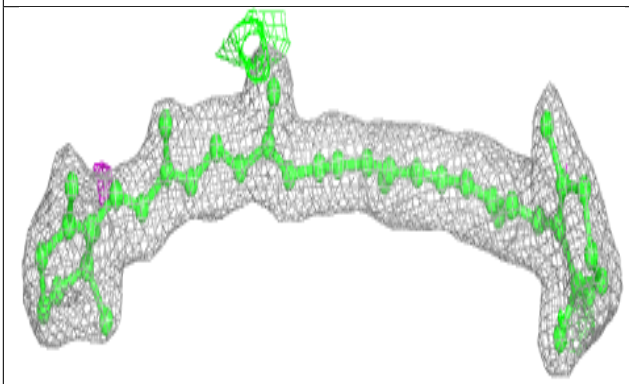


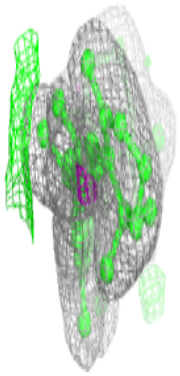


Electron density around BCR T 103:

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

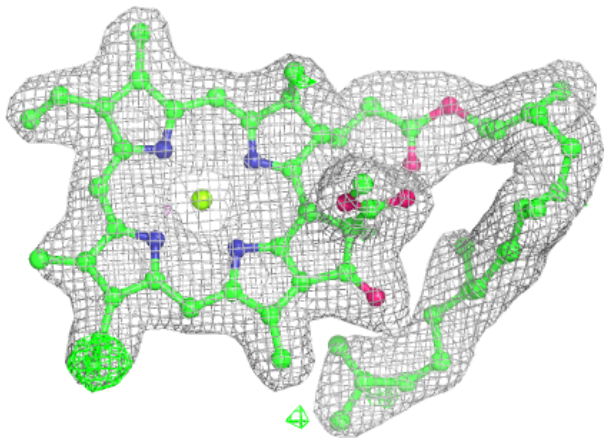


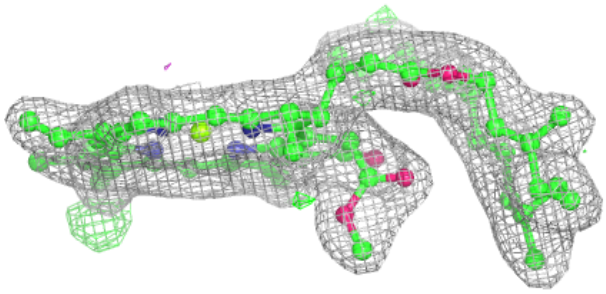


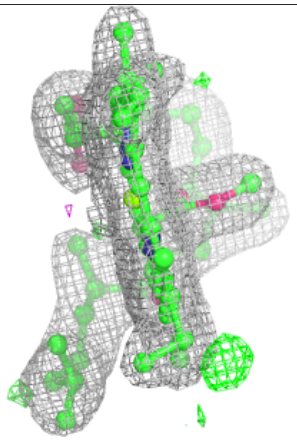


Electron density around CLA B 611:

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

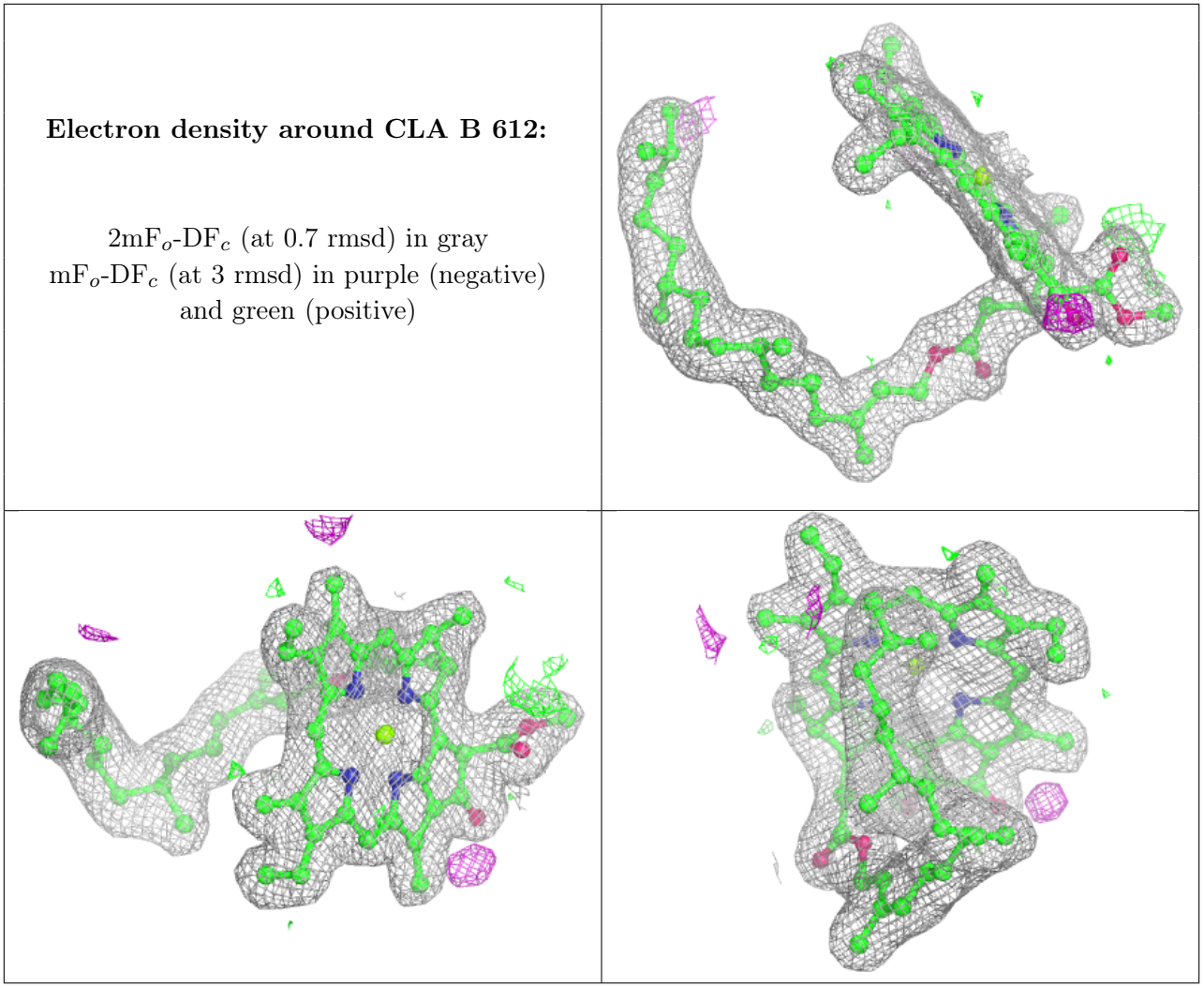






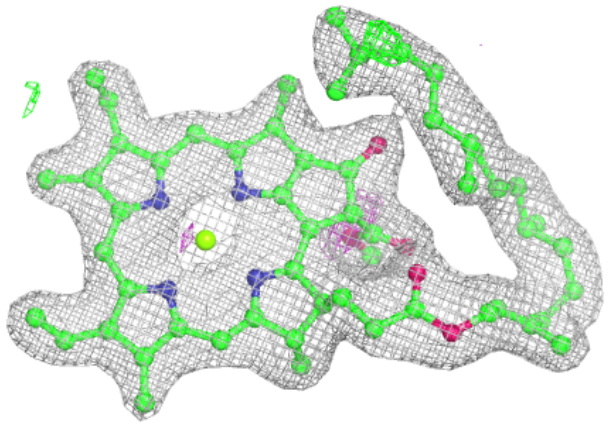
Electron density around CLA B 612:

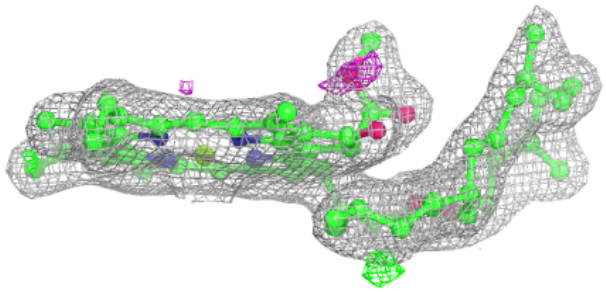
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

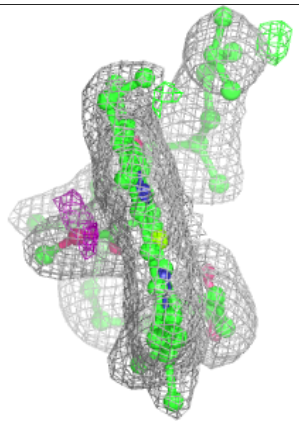


Electron density around CLA b 619:

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

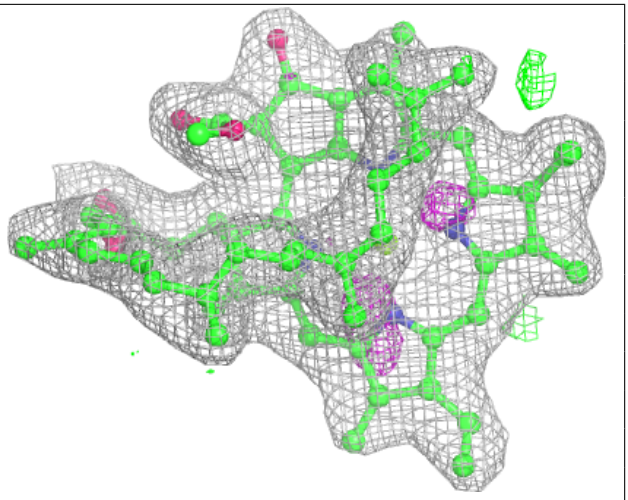


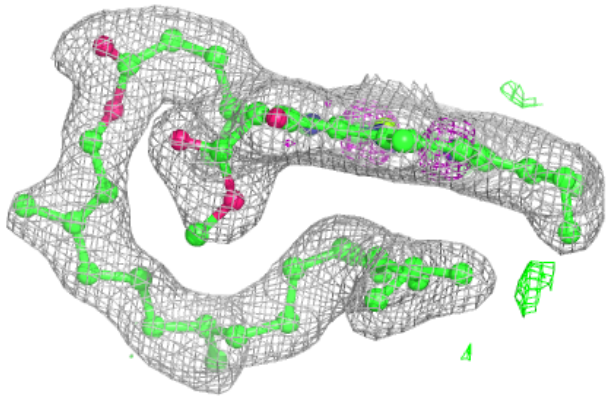


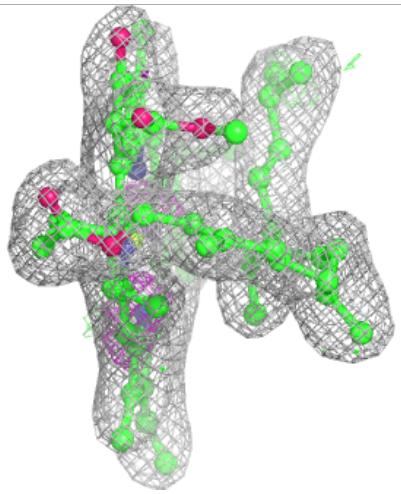


Electron density around CLA C 511:

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

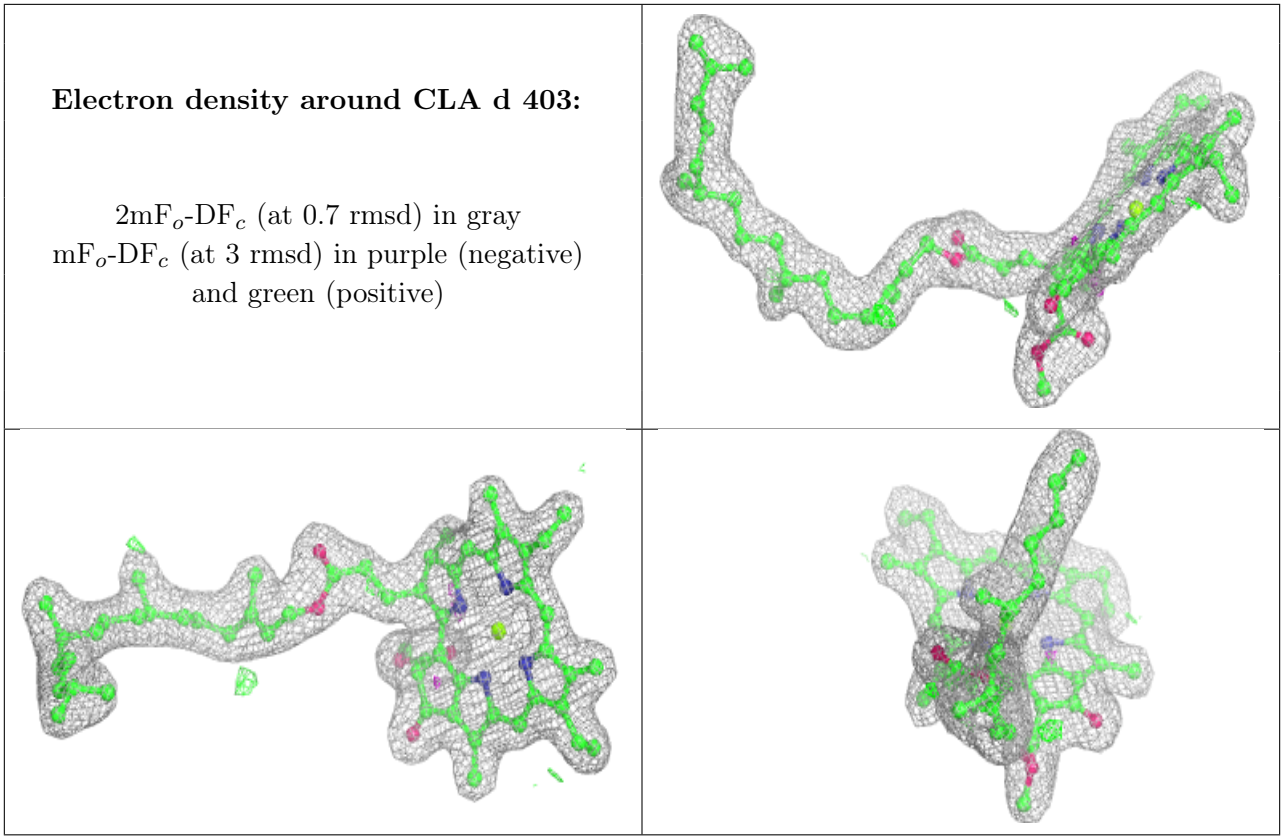






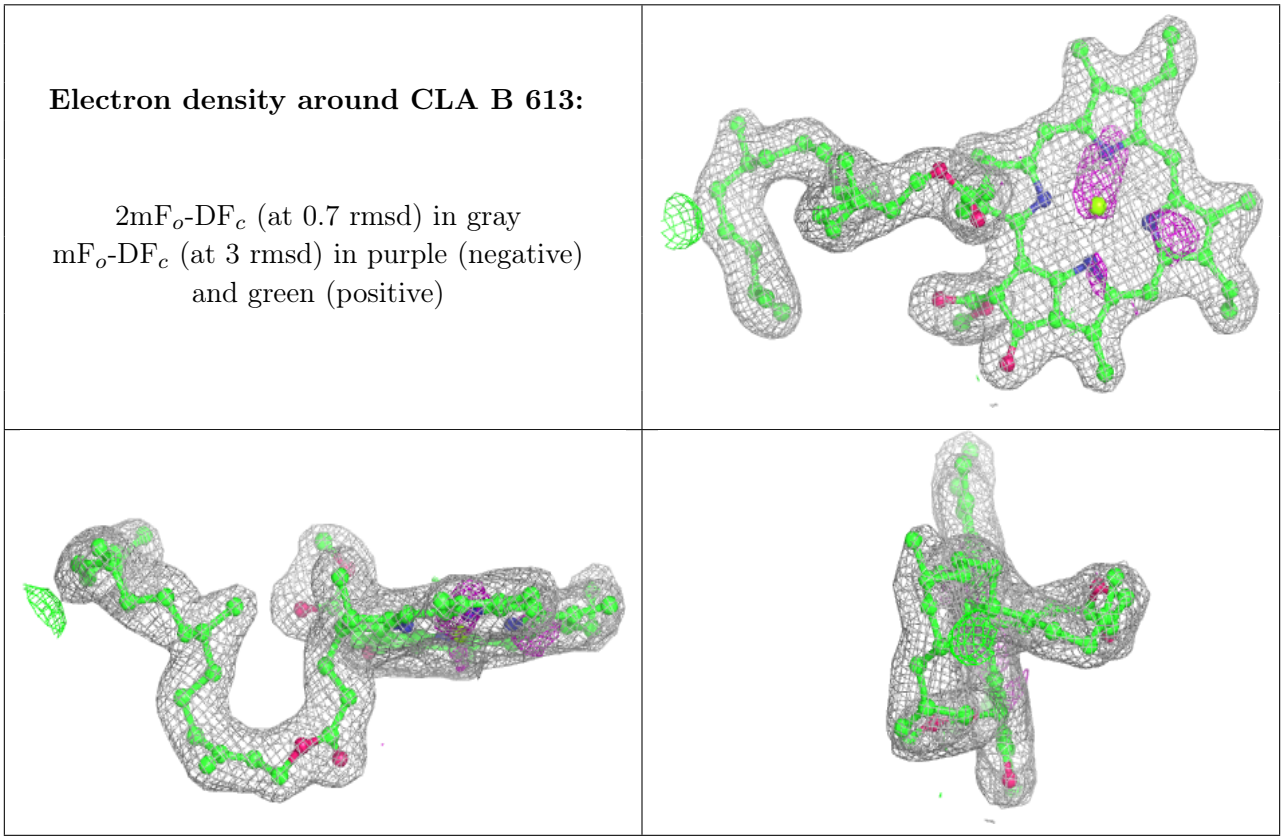
Electron density around CLA d 403:

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



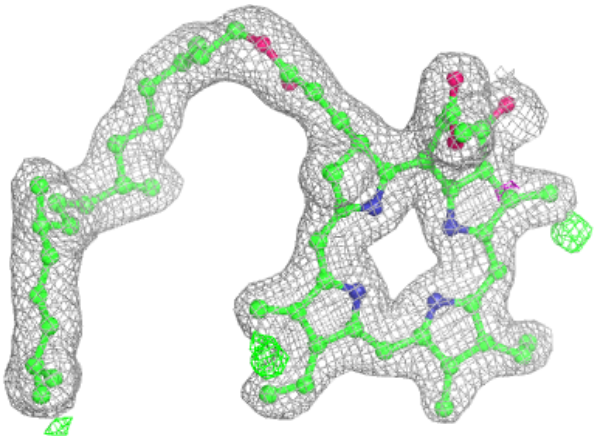
Electron density around CLA B 613:

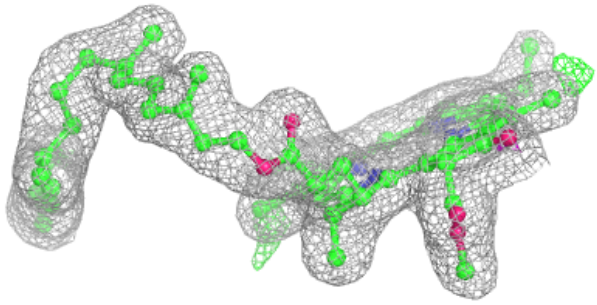
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around PHO A 408:

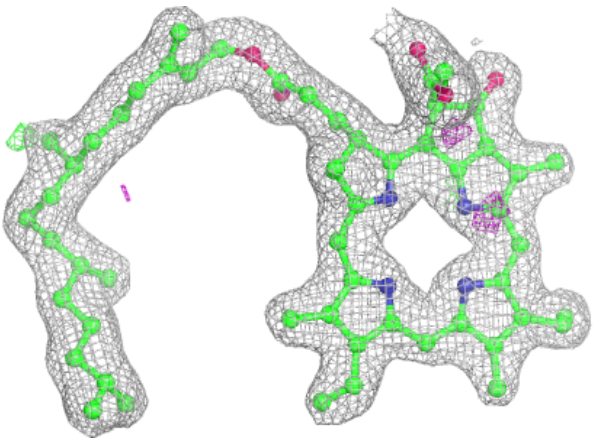
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

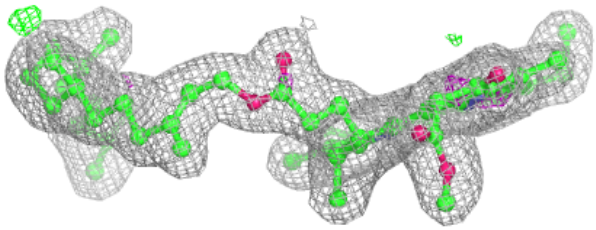


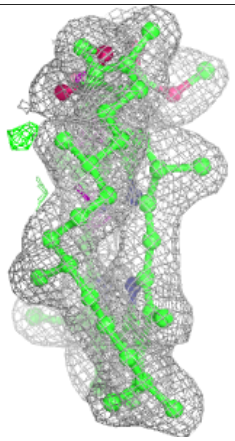


Electron density around PHO D 401:

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

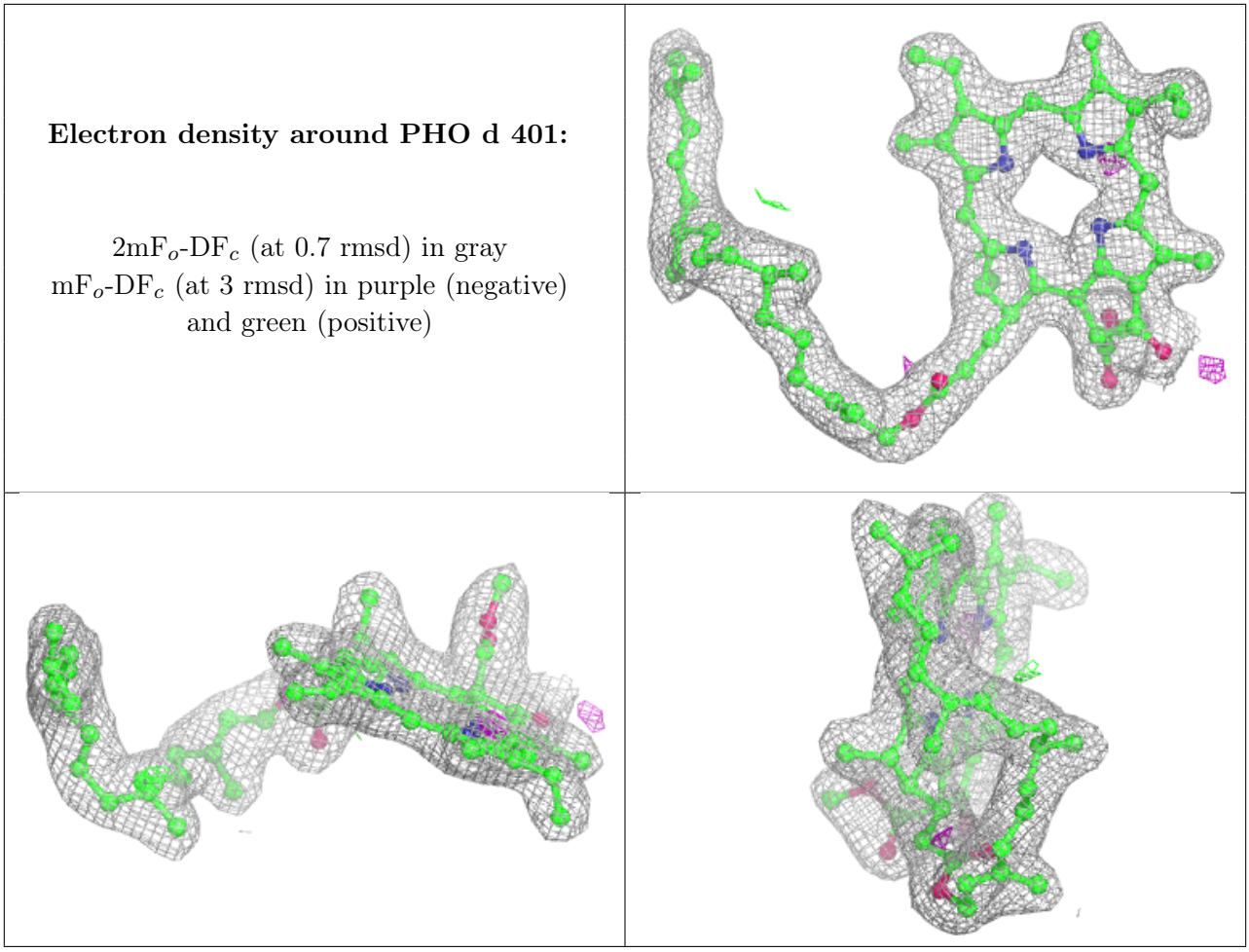






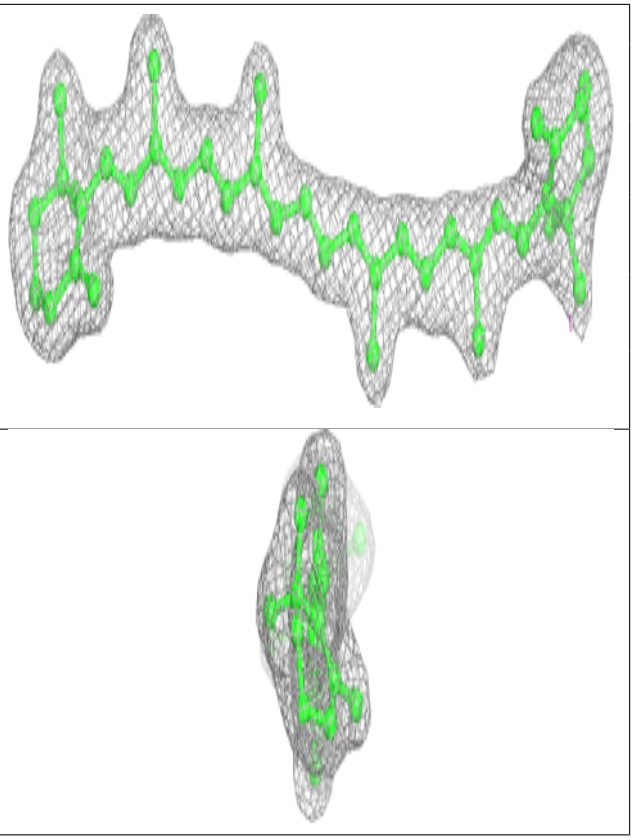
Electron density around PHO d 401:

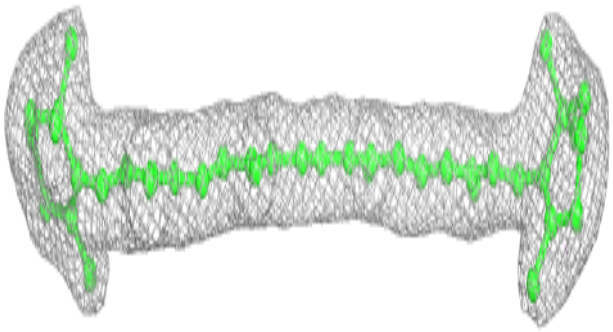
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)



Electron density around BCR B 619:

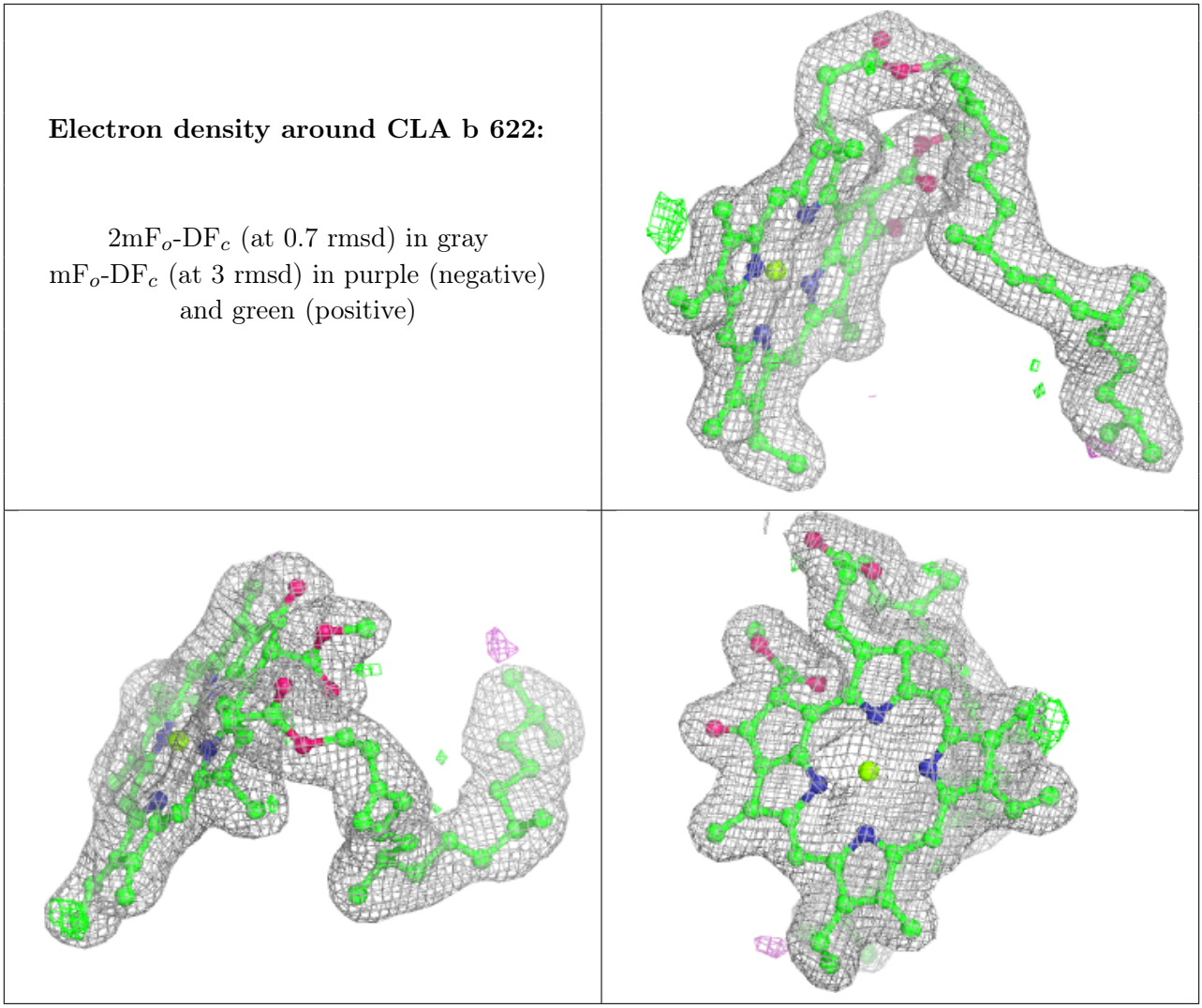
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





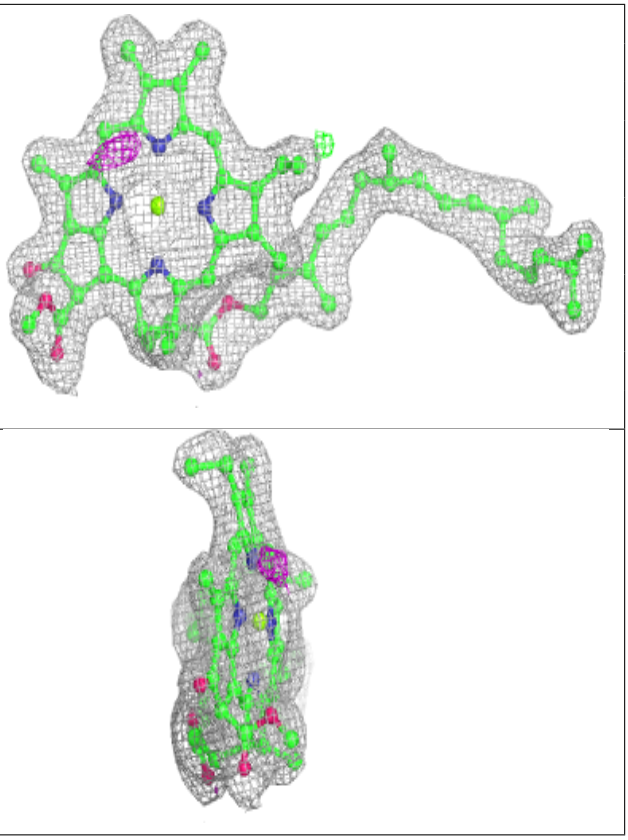
Electron density around CLA b 622:

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



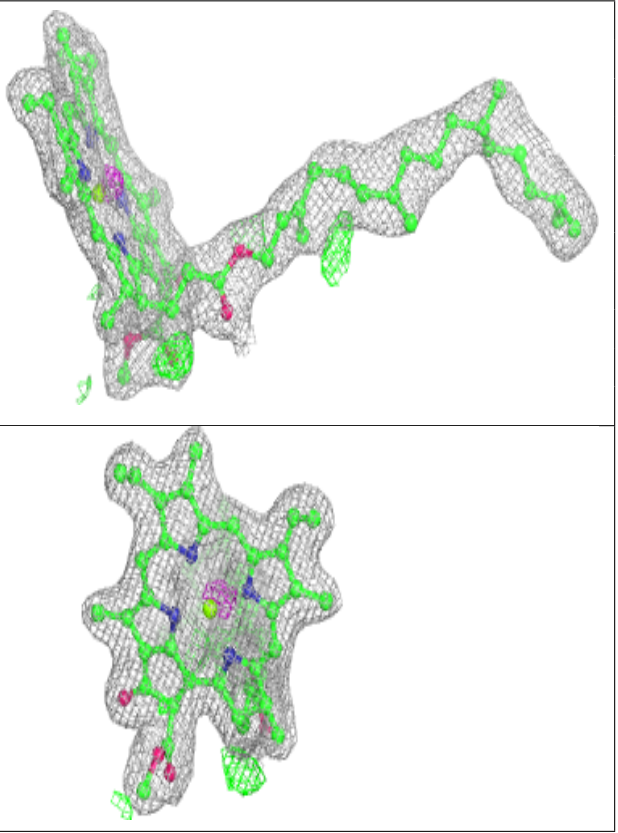
Electron density around CLA B 604:

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



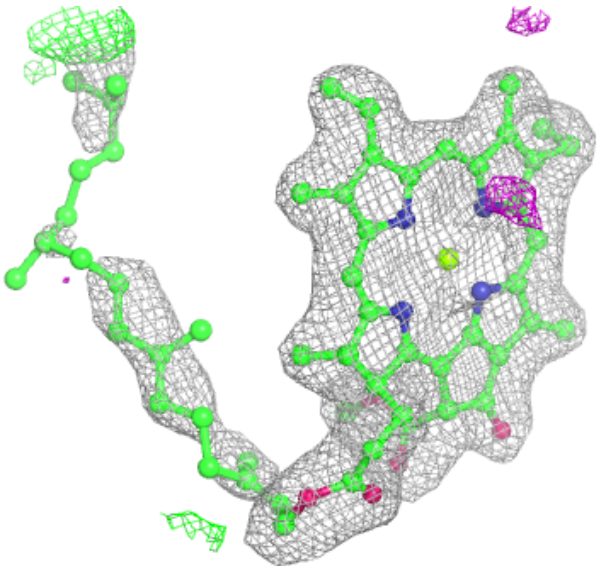
Electron density around CLA B 605:

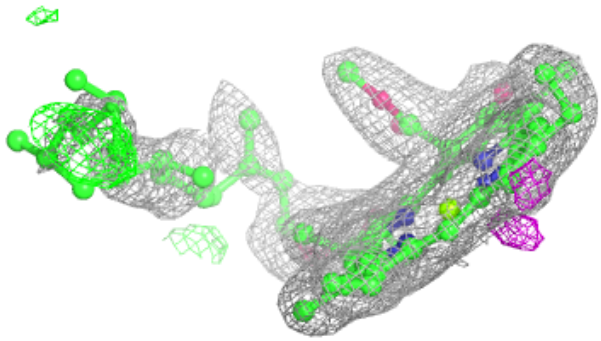
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

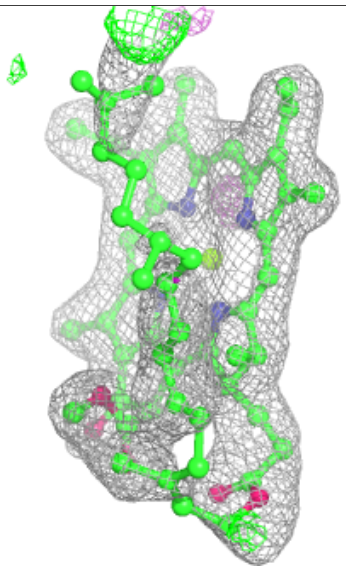


Electron density around CLA B 617:

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

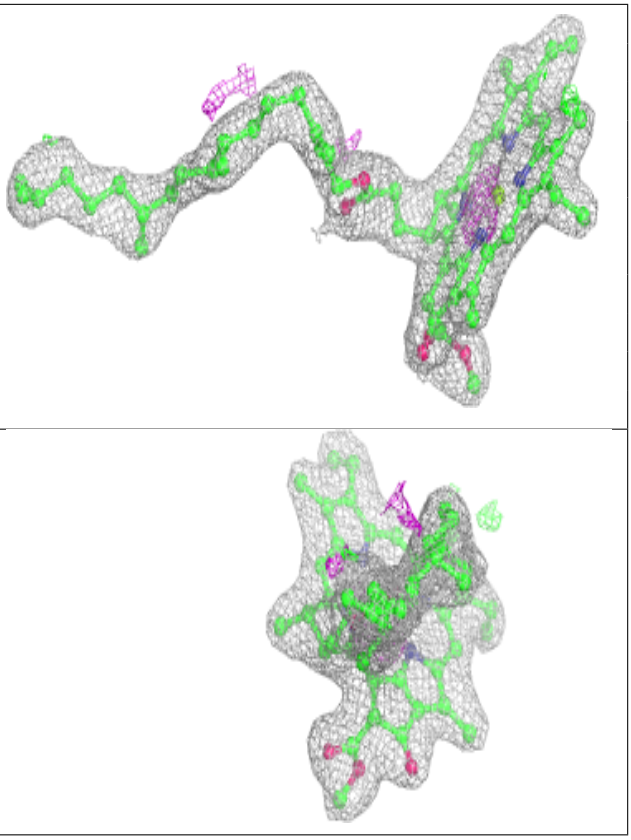






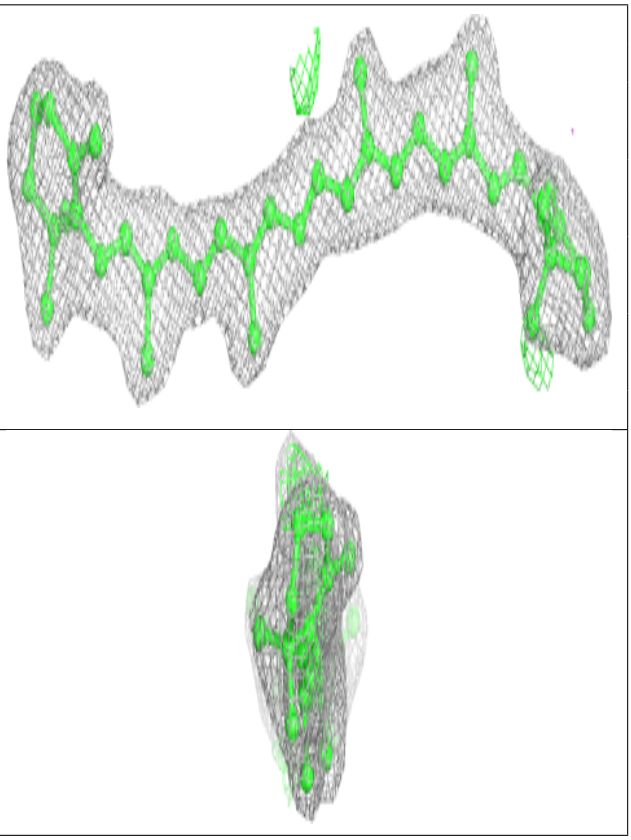
Electron density around CLA c 506:

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



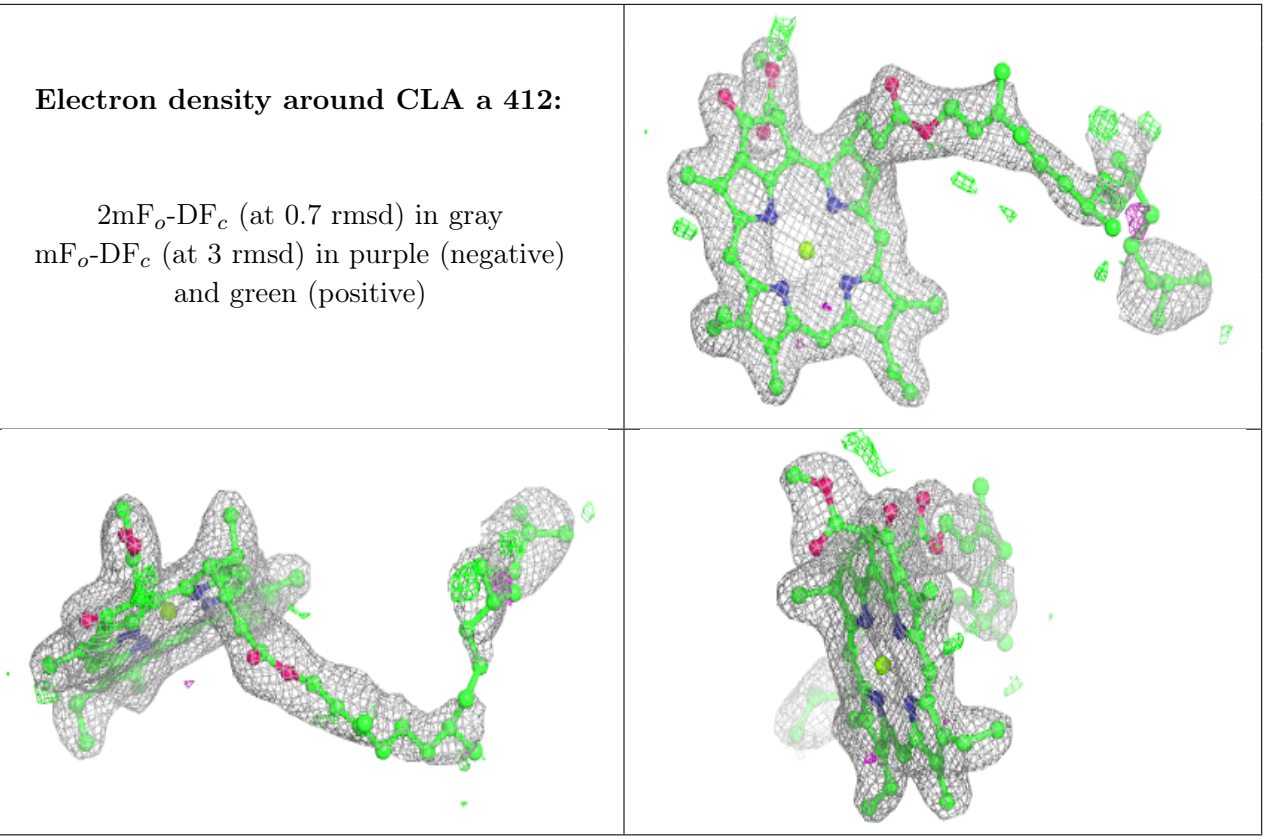
Electron density around BCR Y 101:

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



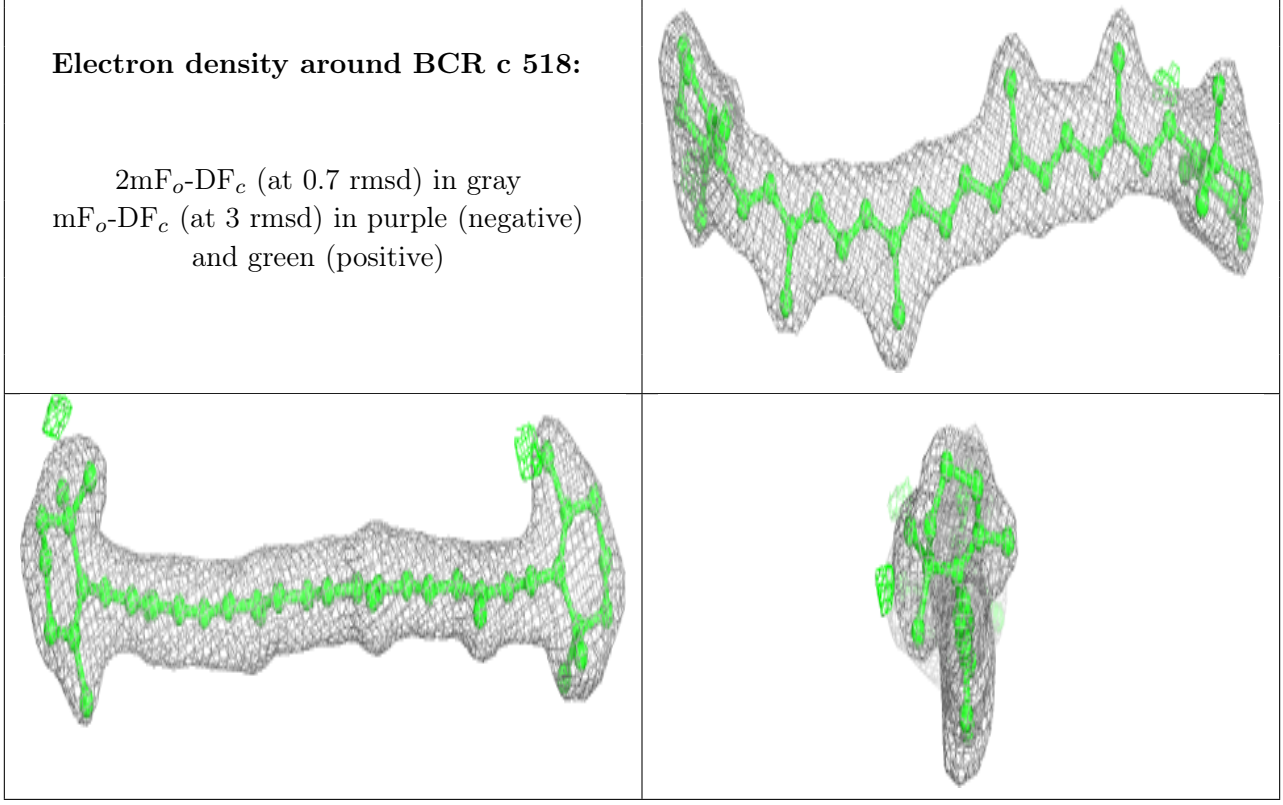
Electron density around CLA a 412:

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



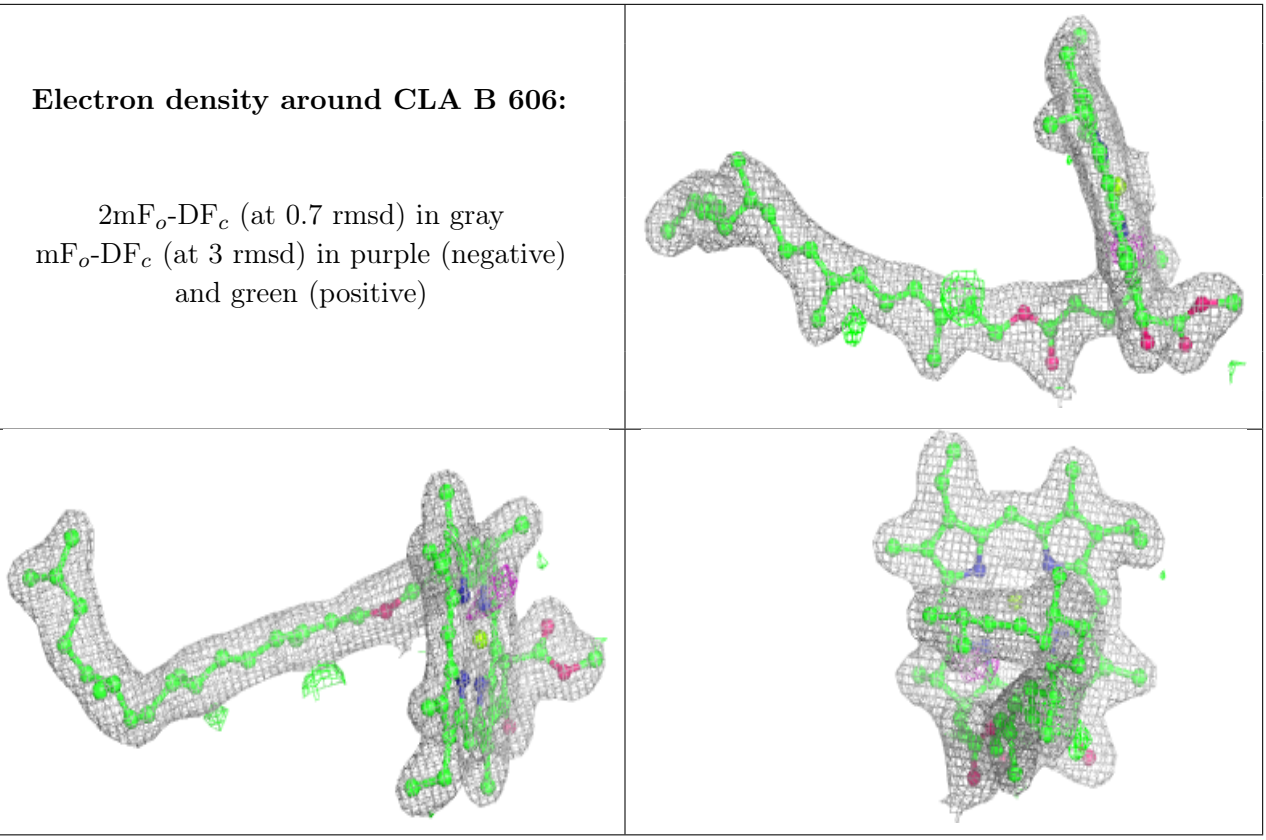
Electron density around BCR c 518:

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



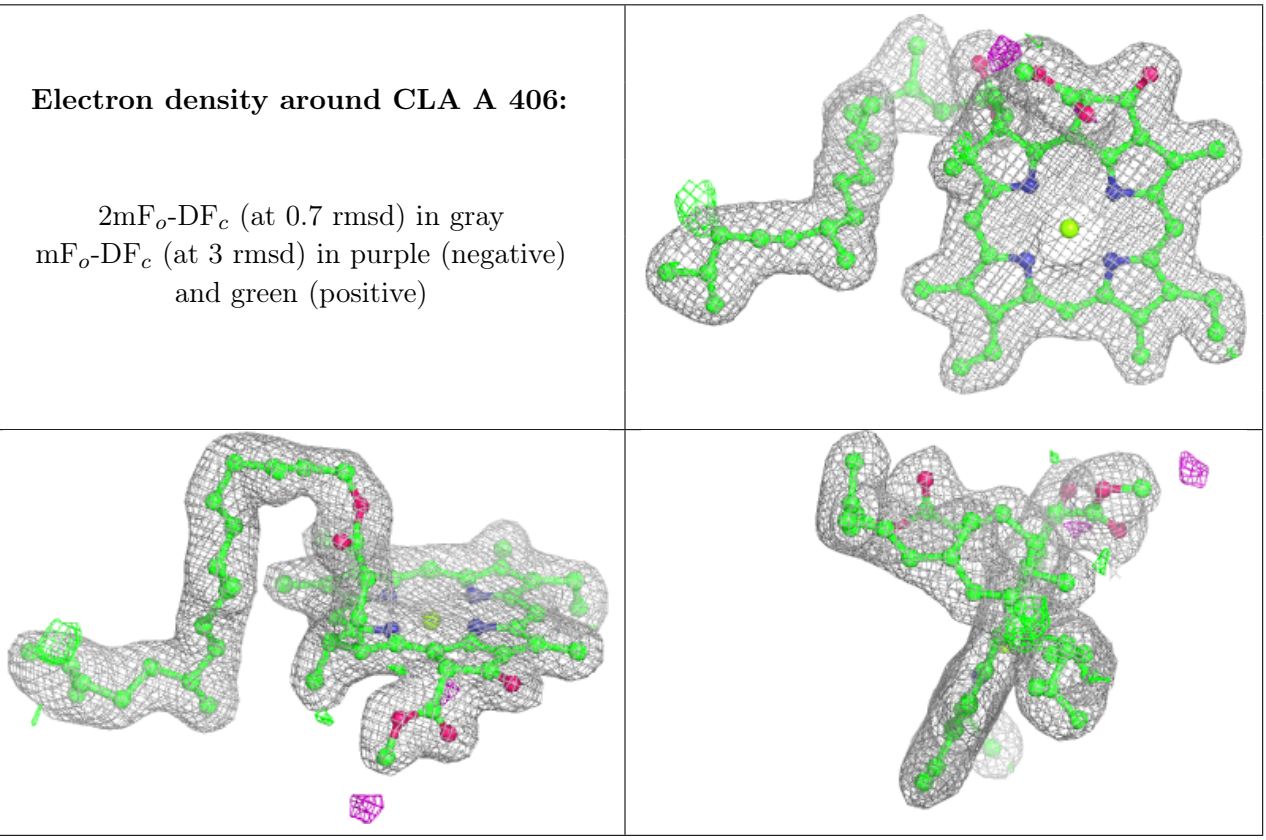
Electron density around CLA B 606:

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



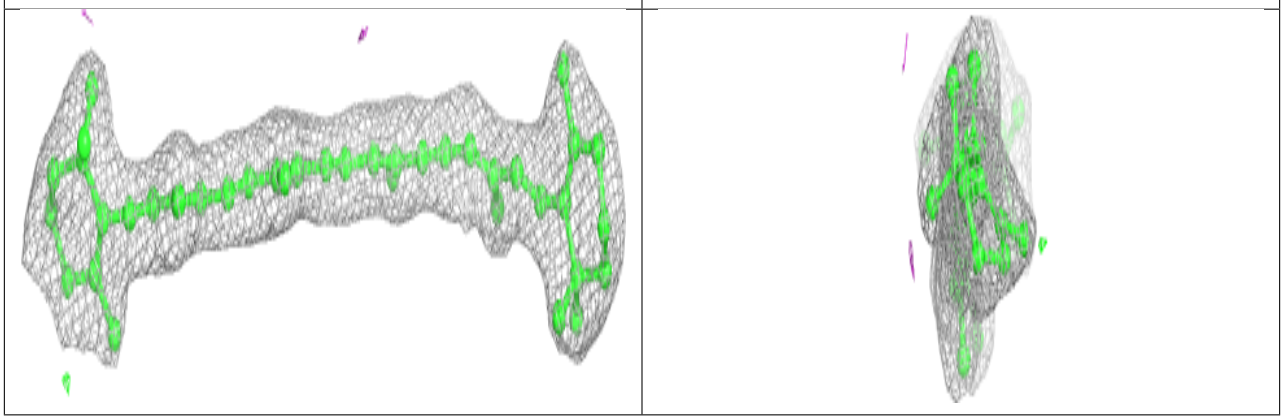
Electron density around CLA A 406:

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



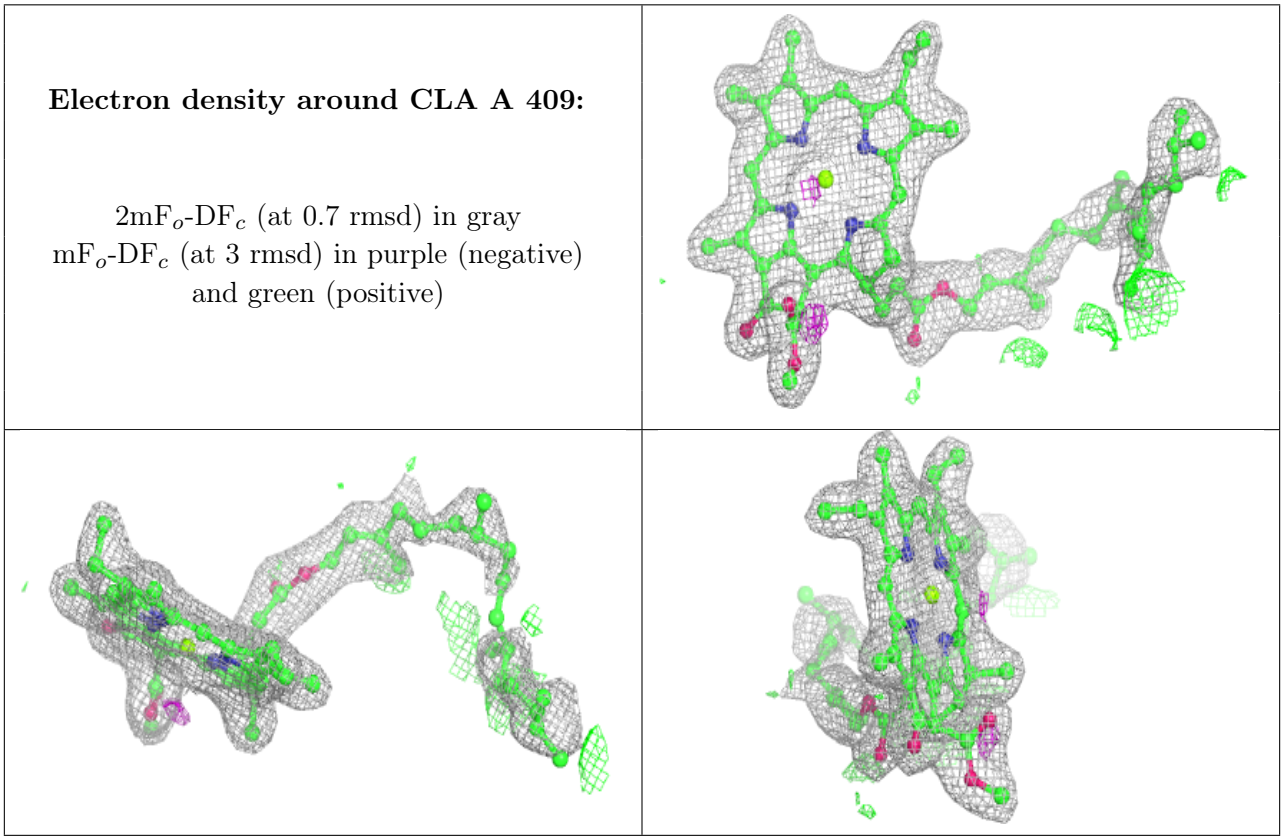
Electron density around BCR h 101:

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



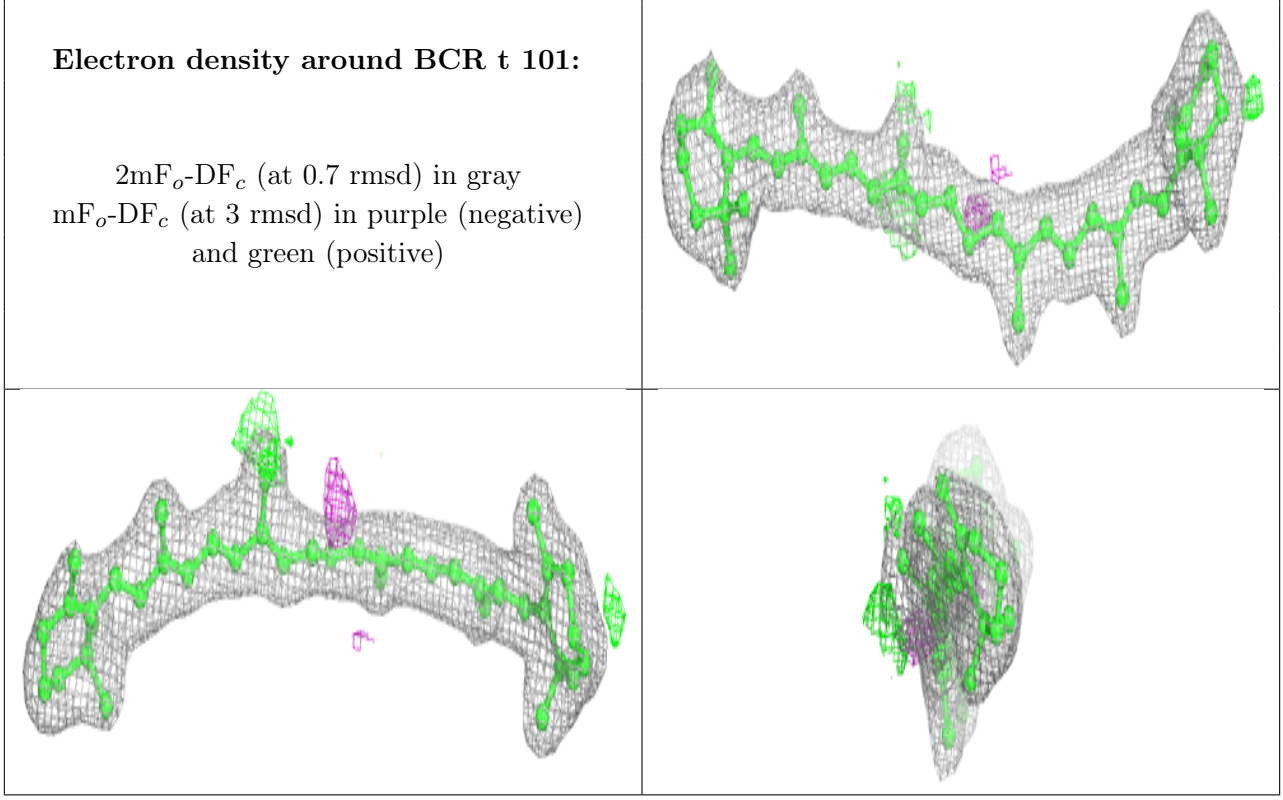
Electron density around CLA A 409:

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



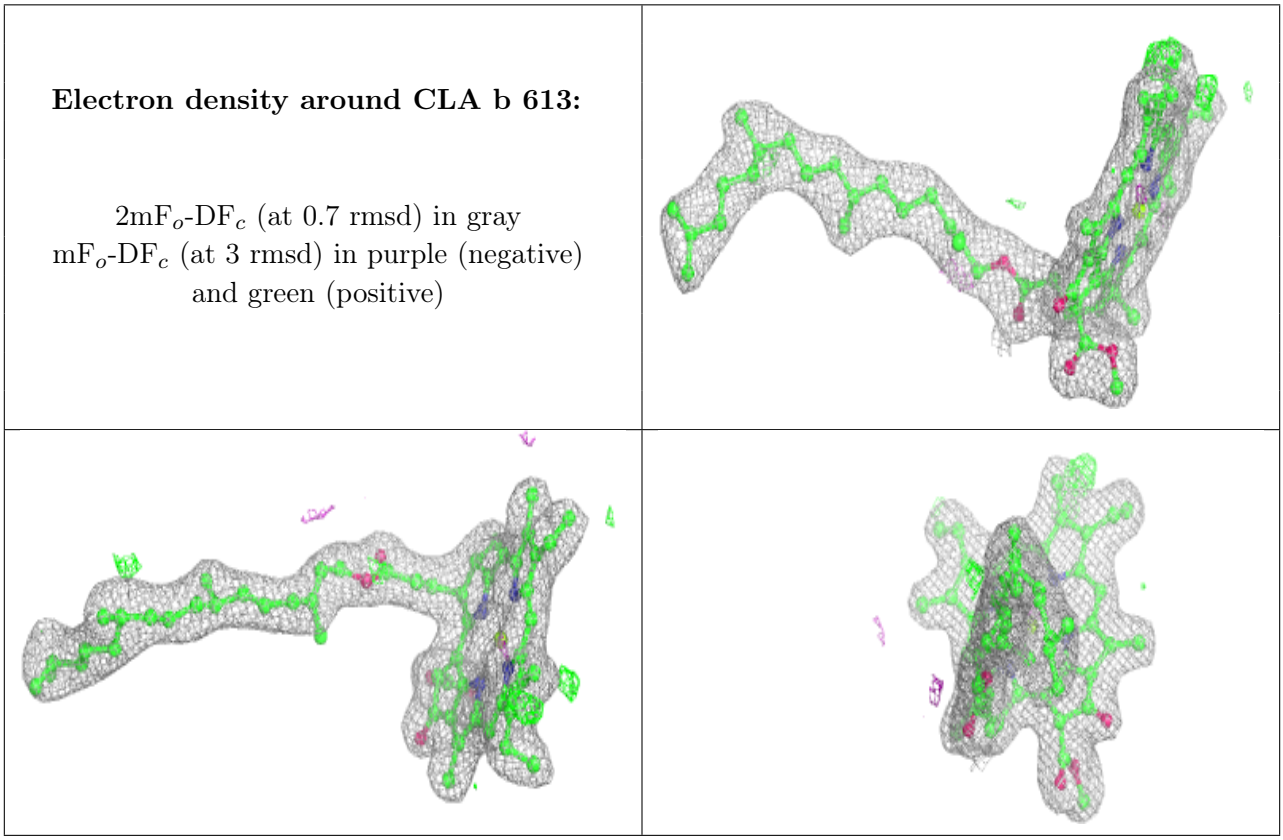
Electron density around BCR t 101:

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



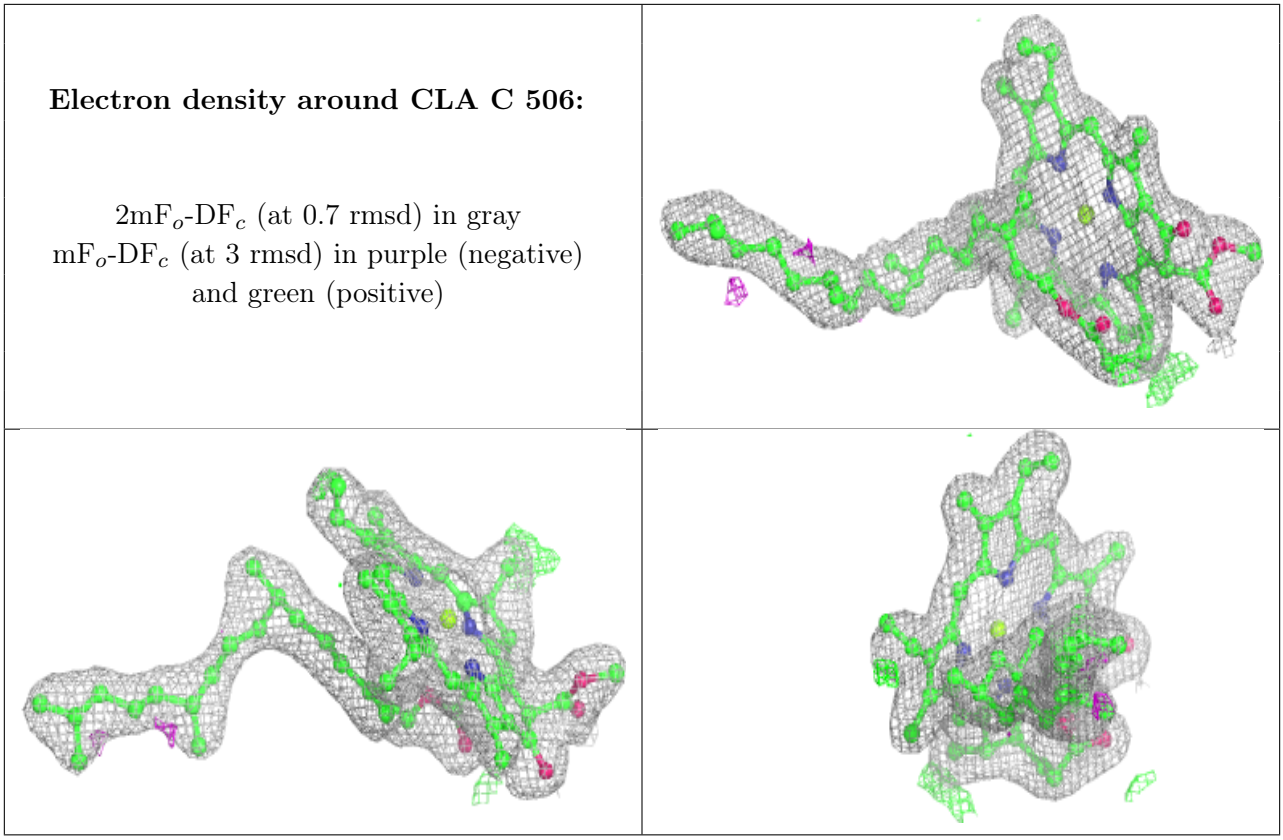
Electron density around CLA b 613:

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



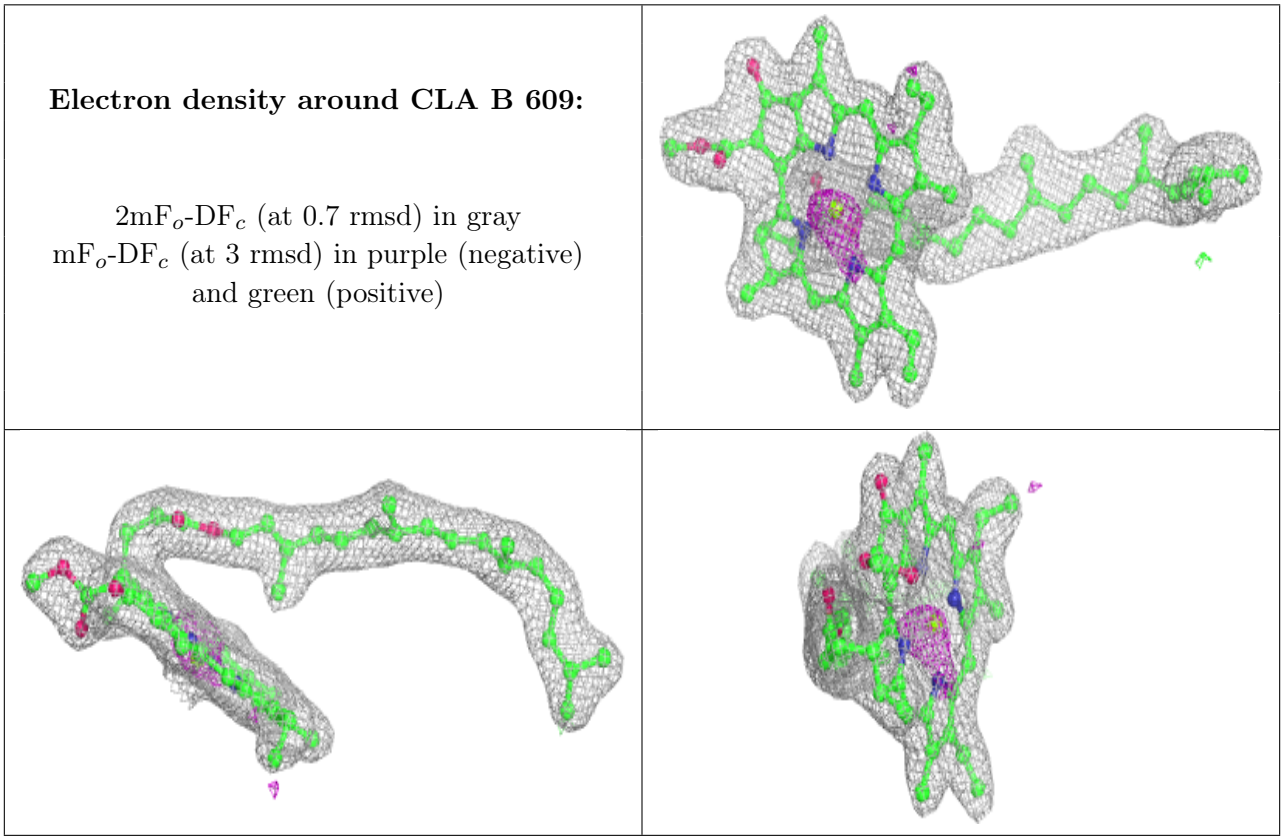
Electron density around CLA C 506:

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



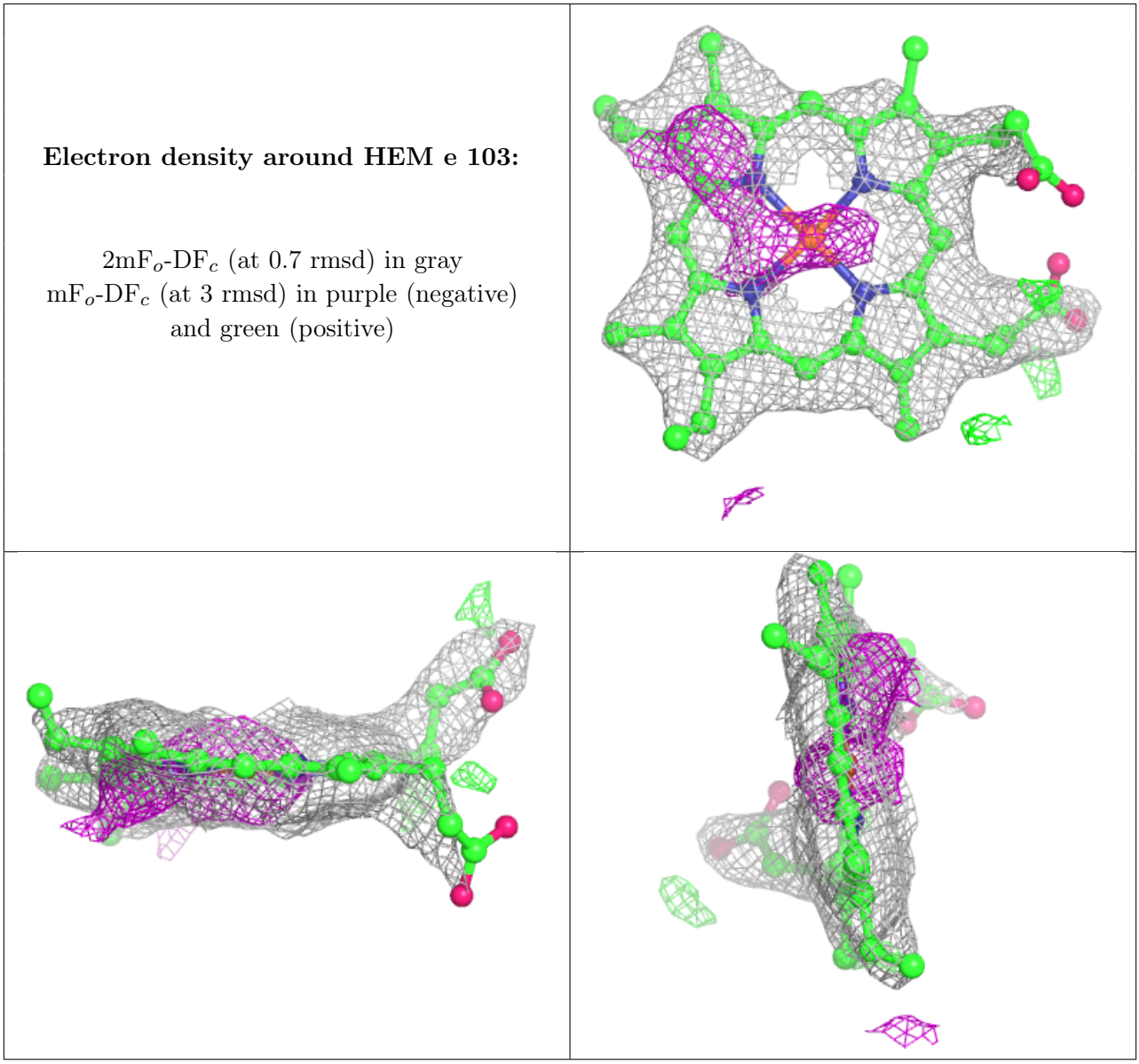
Electron density around CLA B 609:

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



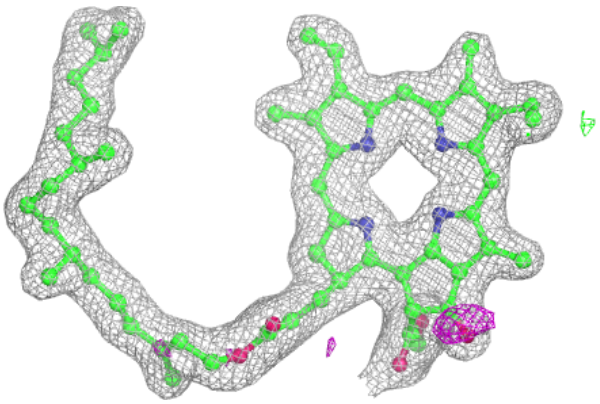
Electron density around HEM e 103:

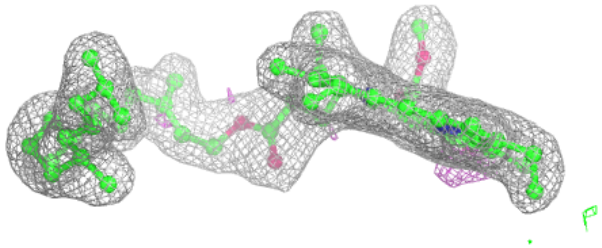
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

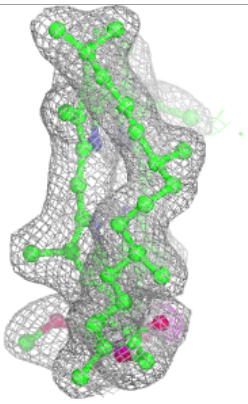


Electron density around PHO a 411:

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

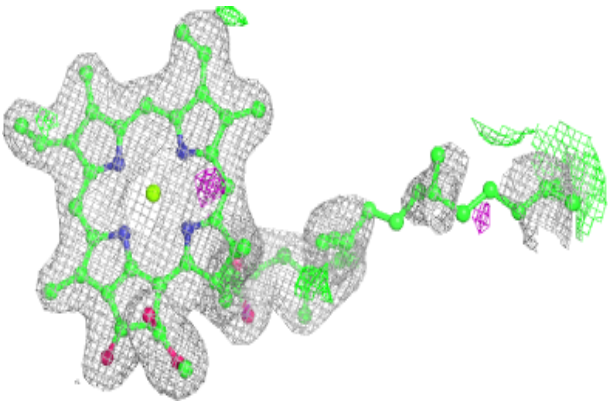


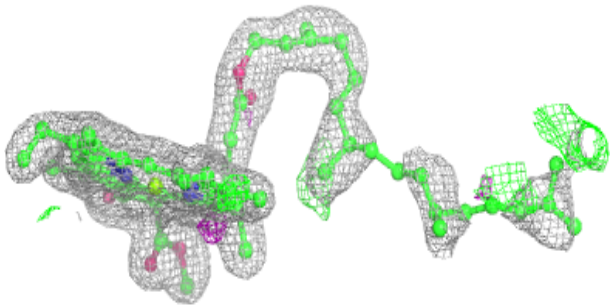


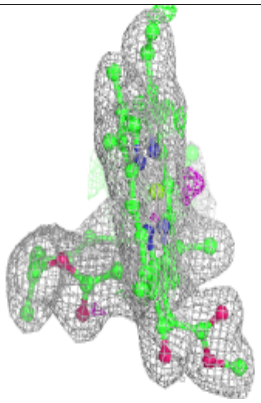


Electron density around CLA a 410:

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

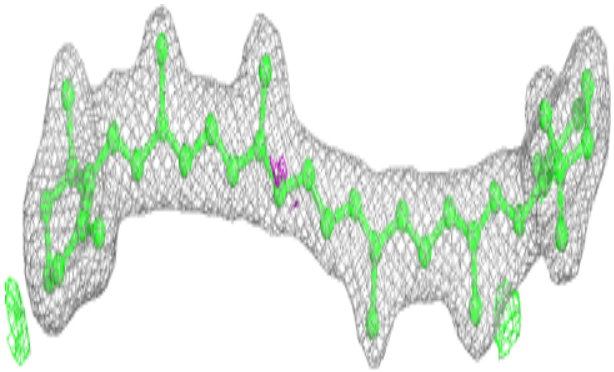


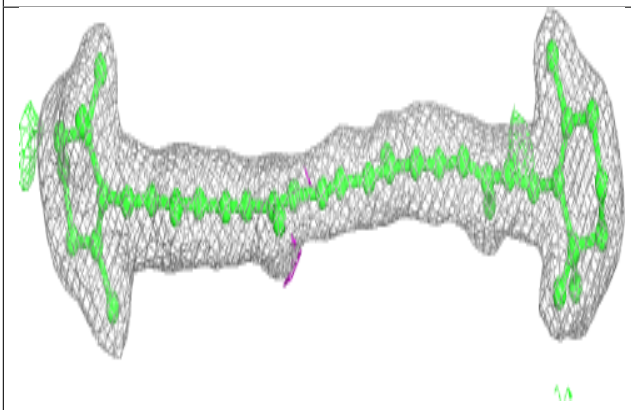


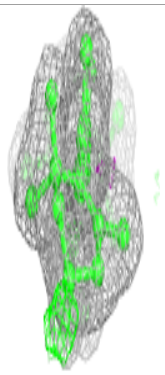


Electron density around BCR A 410:

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

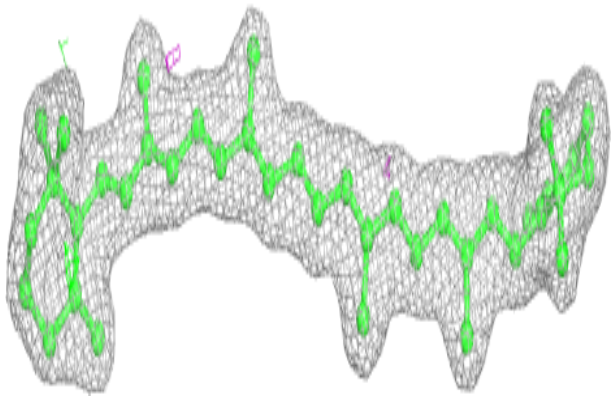


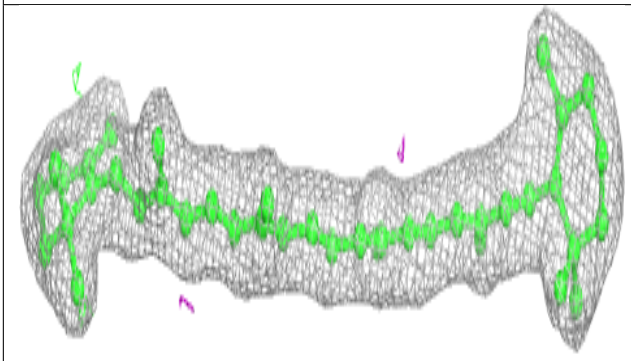


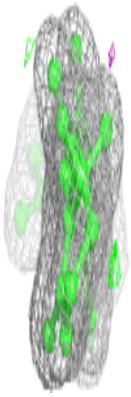


Electron density around BCR B 618:

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

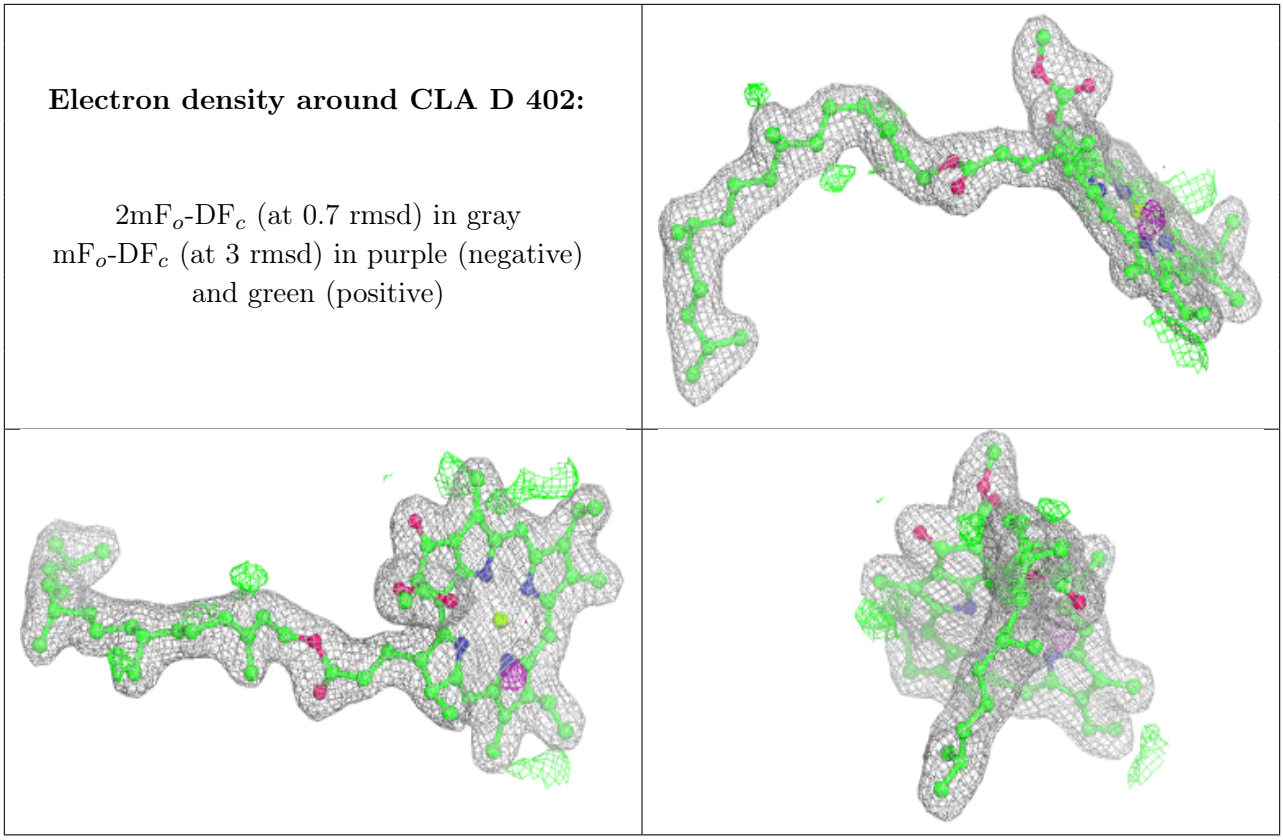






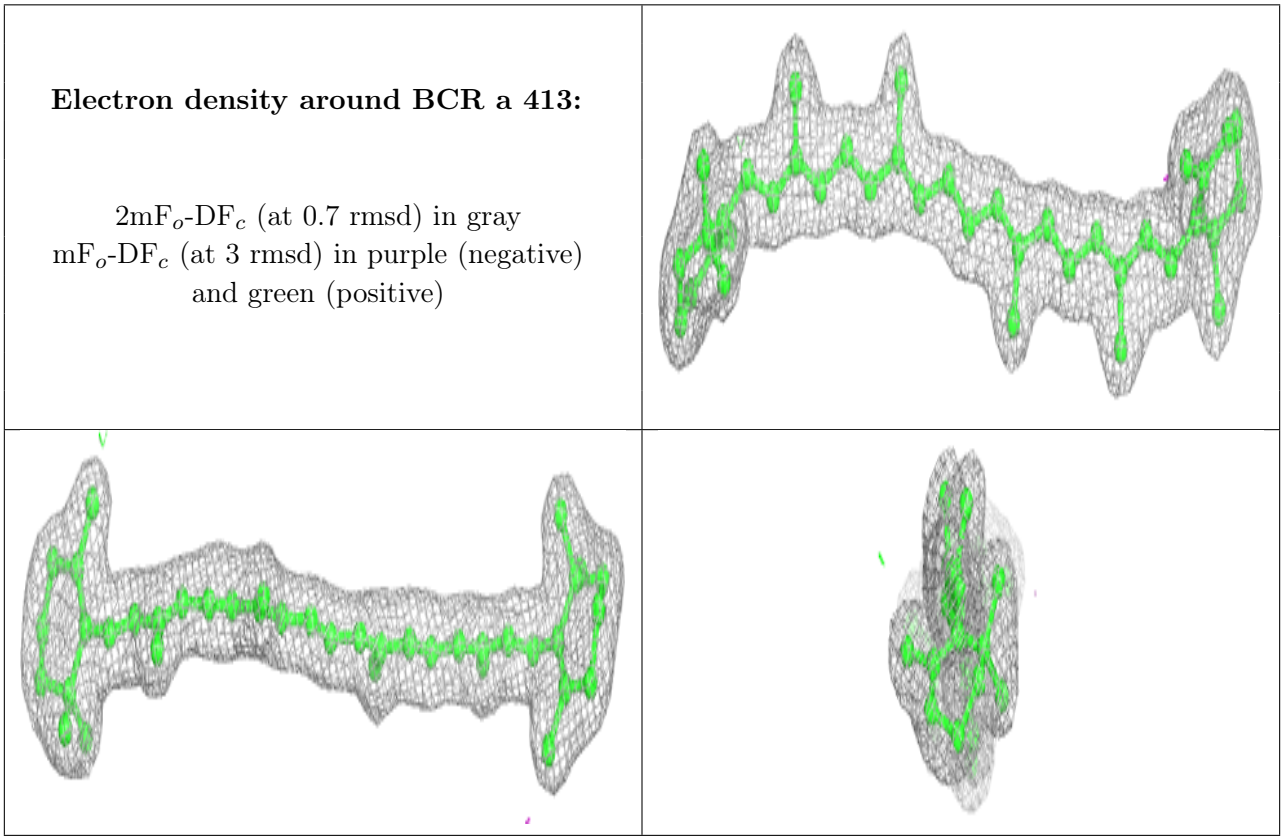
Electron density around CLA D 402:

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



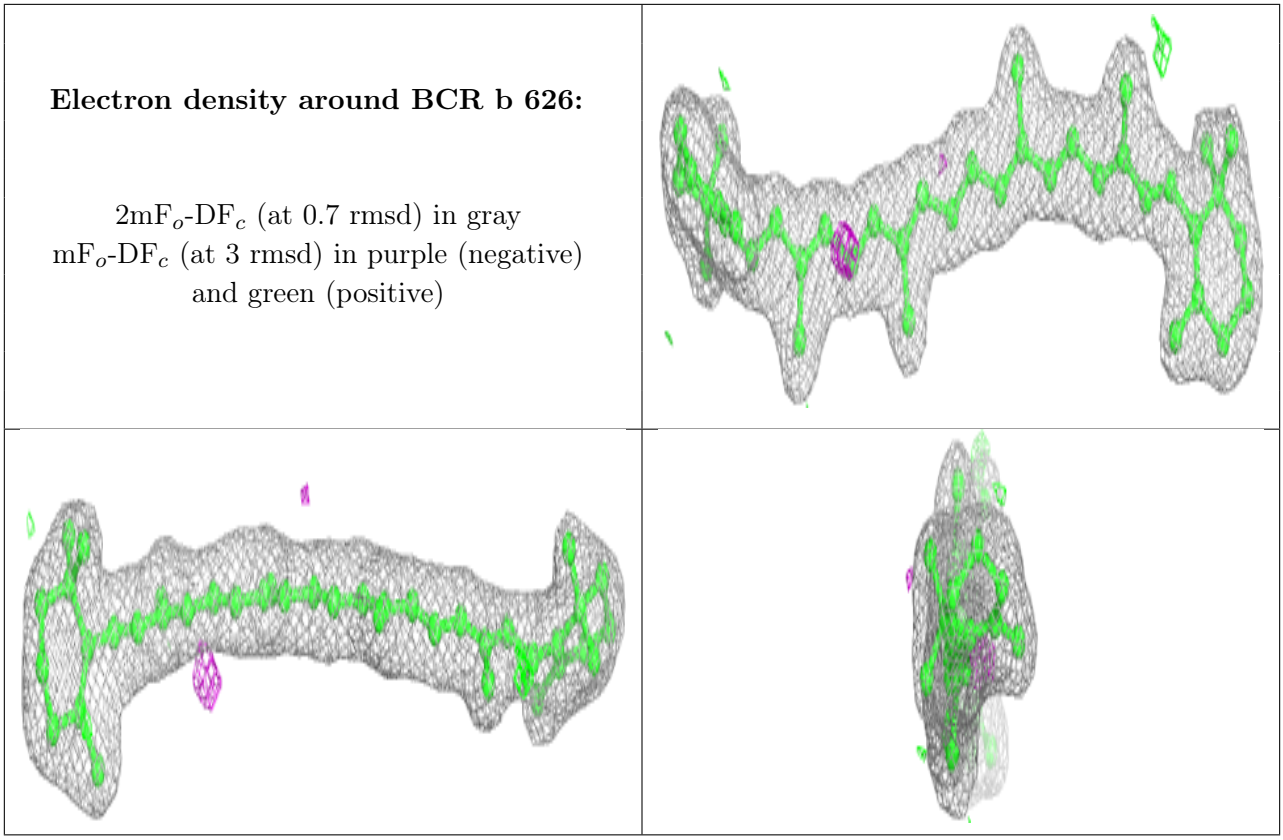
Electron density around BCR a 413:

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



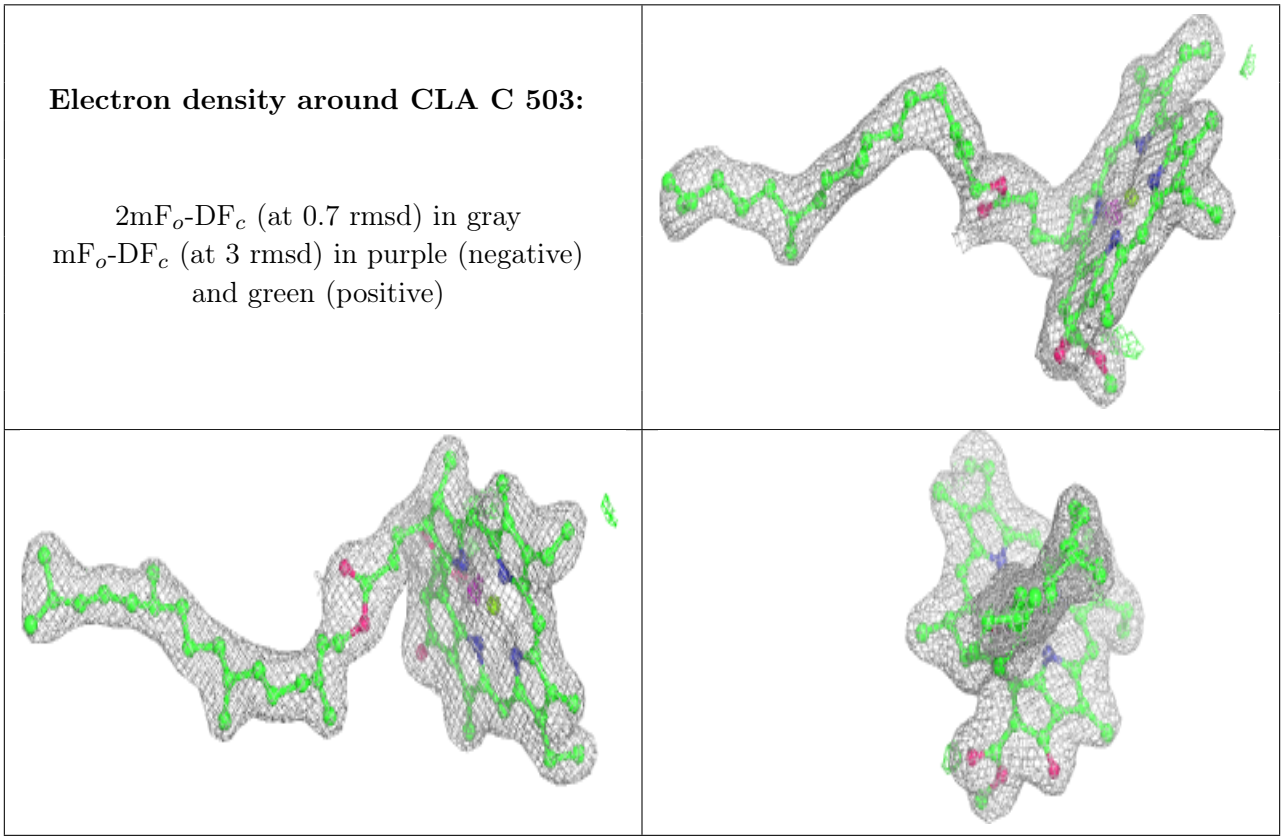
Electron density around BCR b 626:

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



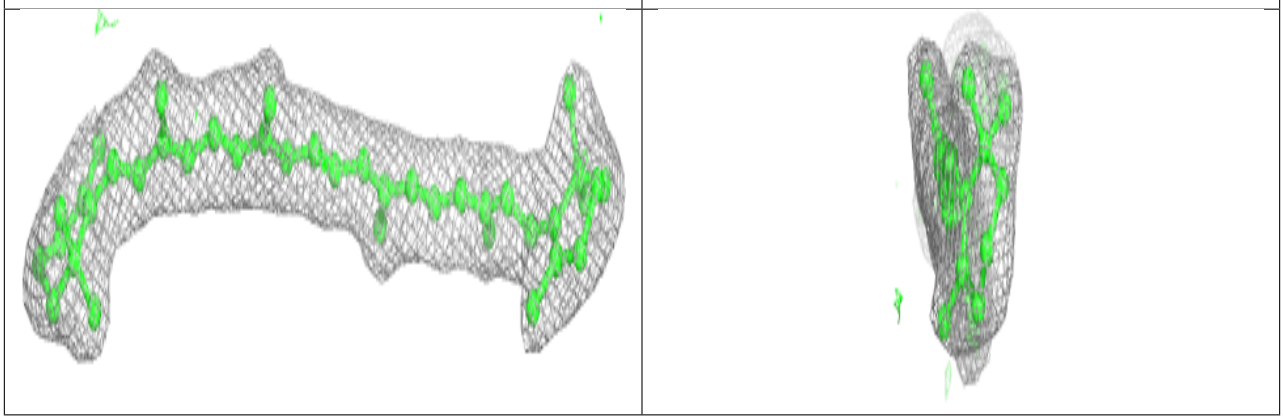
Electron density around CLA C 503:

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



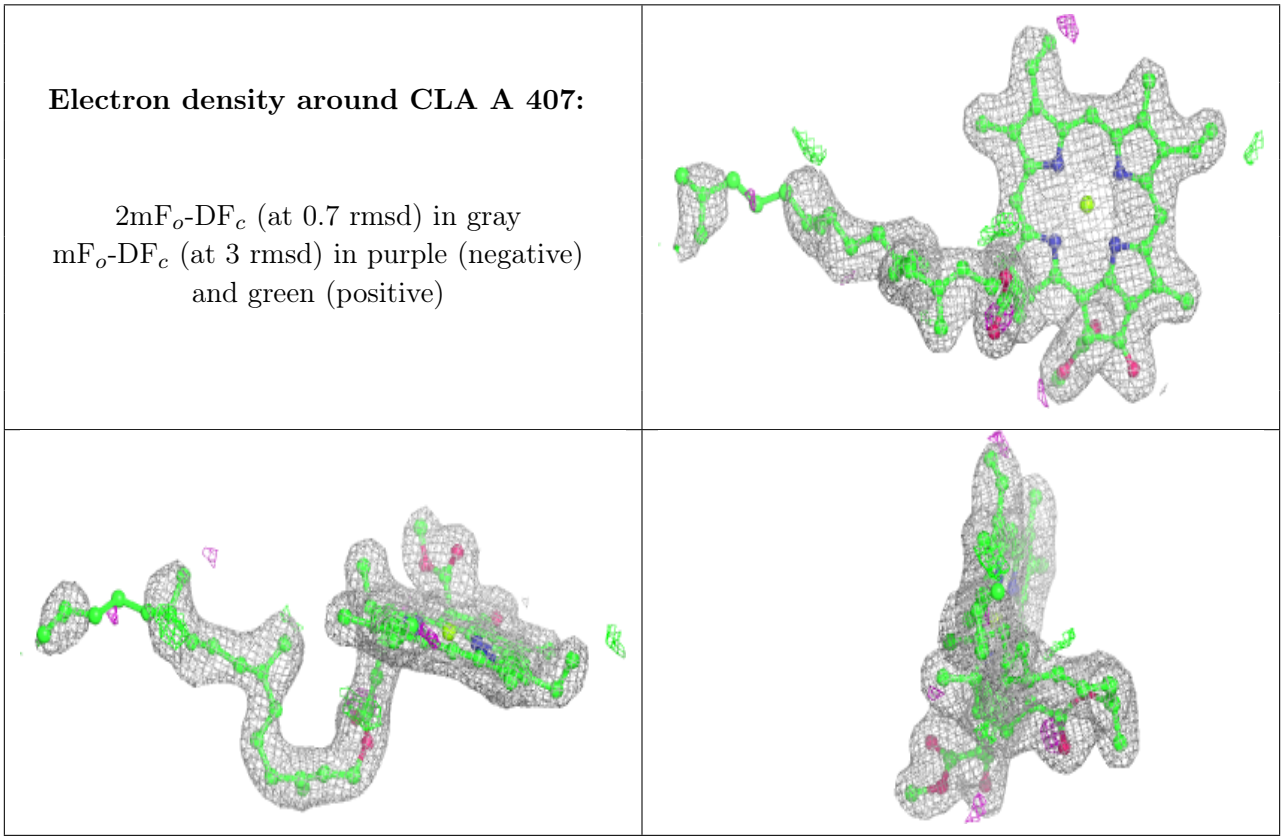
Electron density around BCR b 628:

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



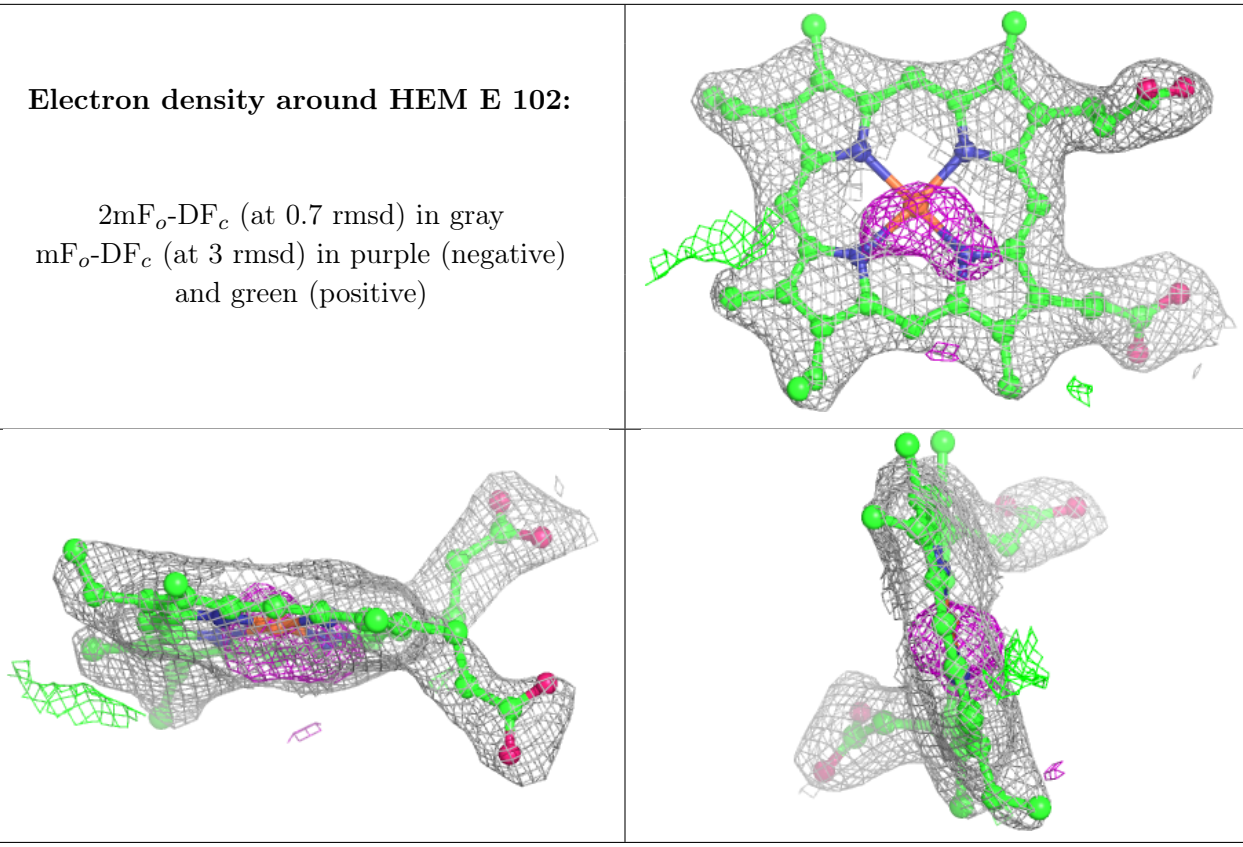
Electron density around CLA A 407:

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



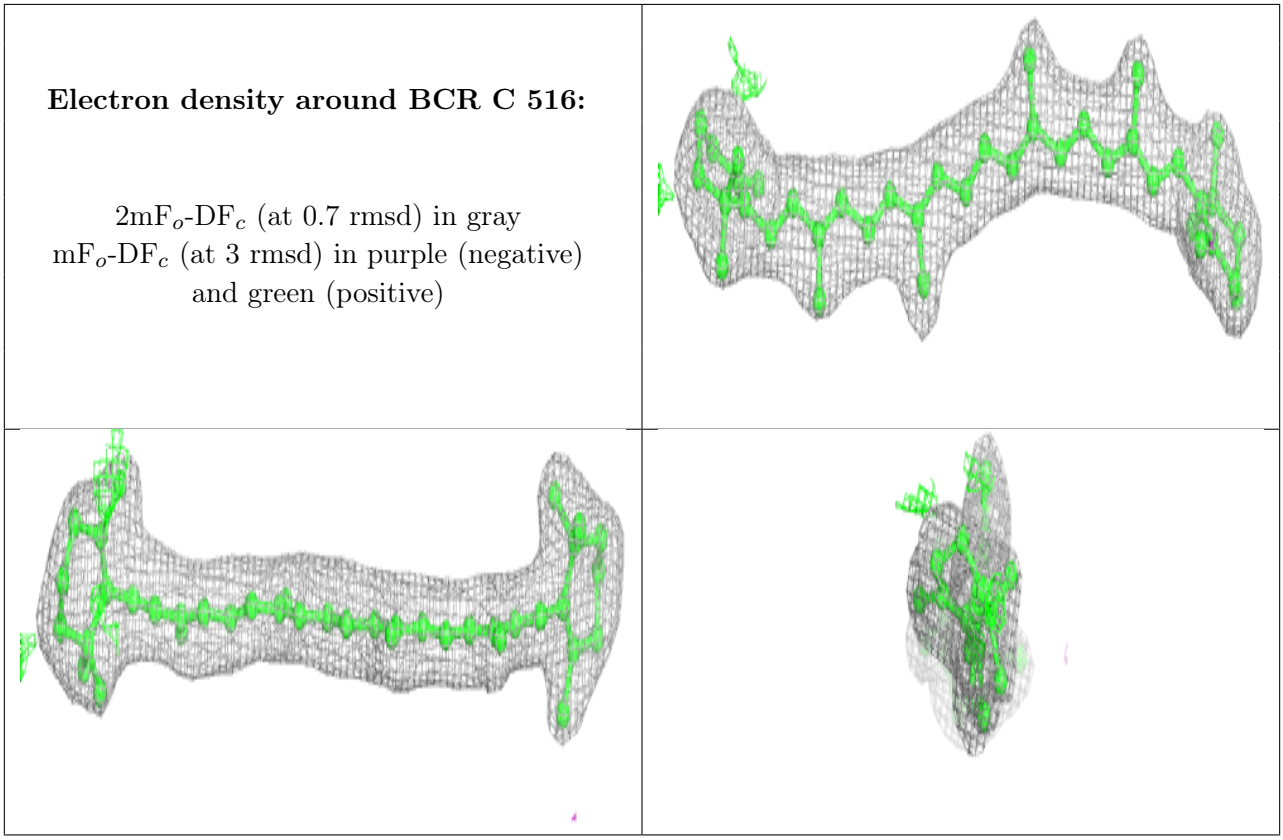
Electron density around HEM E 102:

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



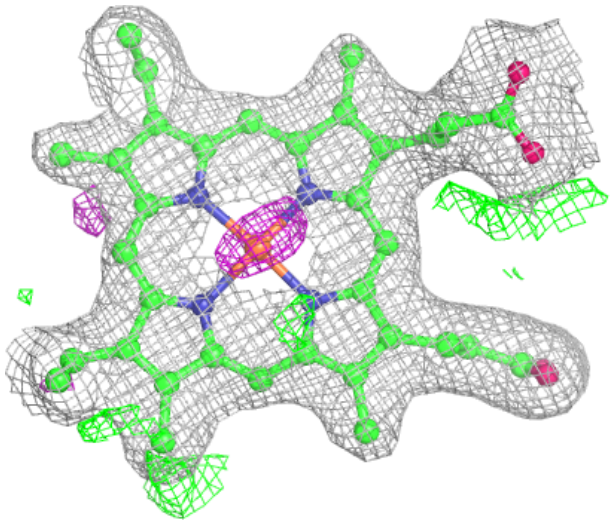
Electron density around BCR C 516:

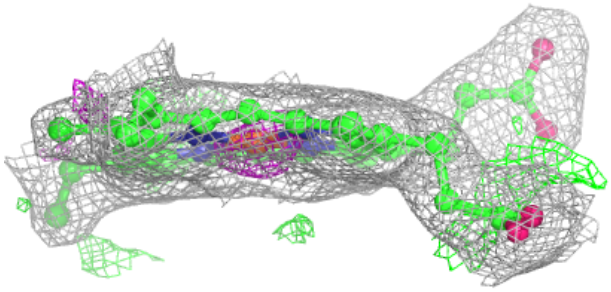
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

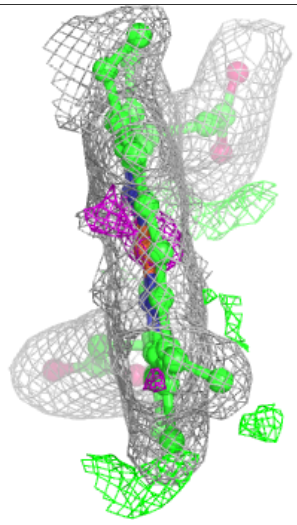


Electron density around HEM V 205:

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

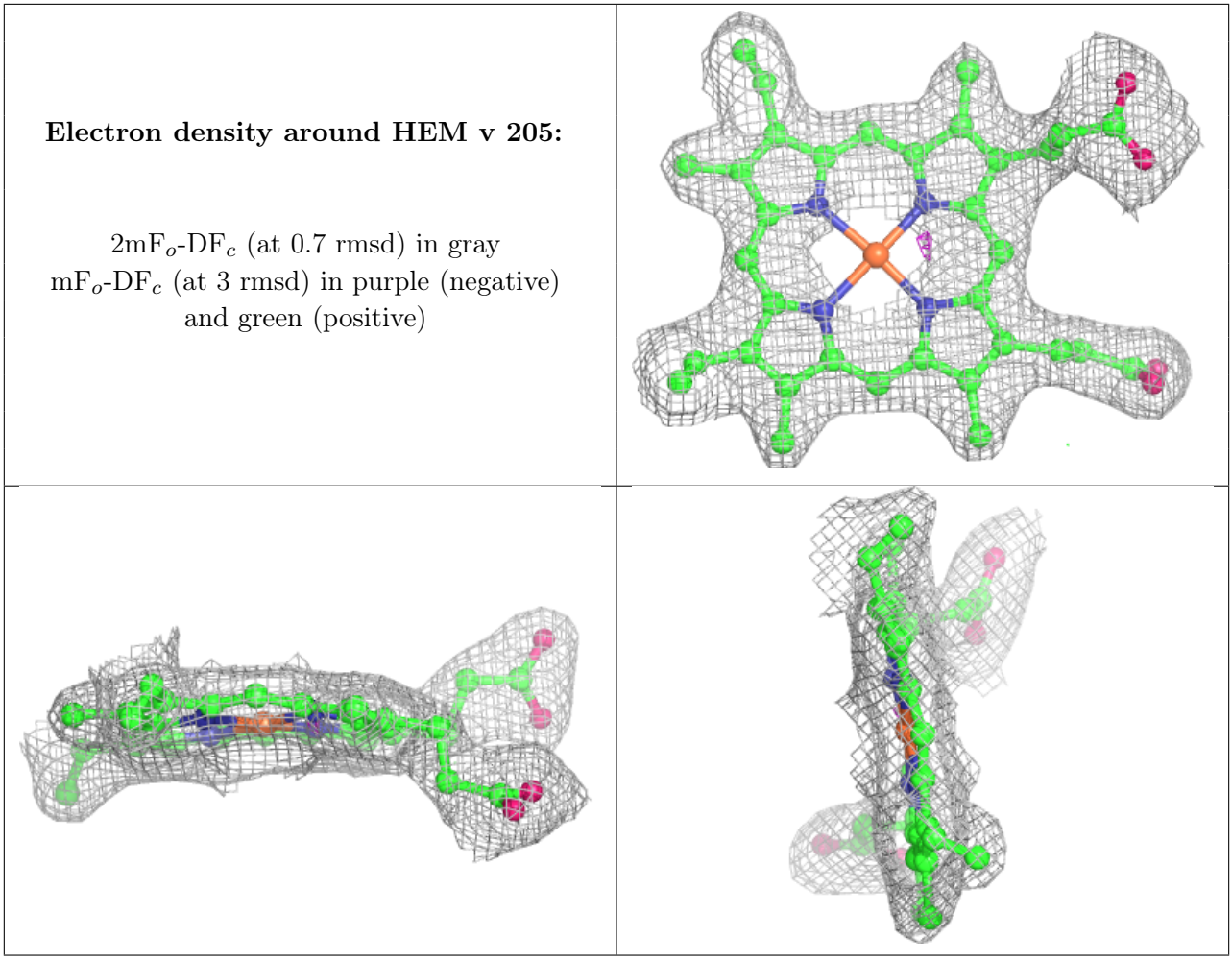






Electron density around HEM v 205:

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



6.5 Other polymers

There are no such residues in this entry.