wwPDB EM Validation Summary Report

Oct 31, 2023 – 03:17 PM JST

PDB ID	:	8IWH
EMDB ID	:	EMD-35766
Title	:	Structure and characteristics of a photosystem II supercomplex containing monomeric LHCX and dimeric FCPII antennae from the diatom Thalassiosira pseudonana
Authors	:	Feng, Y.; Li, Z.H.; Wang, W.D.; Shen, J.R.
Deposited on	:	2023-03-30
Resolution	:	2.68 Å(reported)

This is a wwPDB EM 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/EMValidationReportHelp
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:

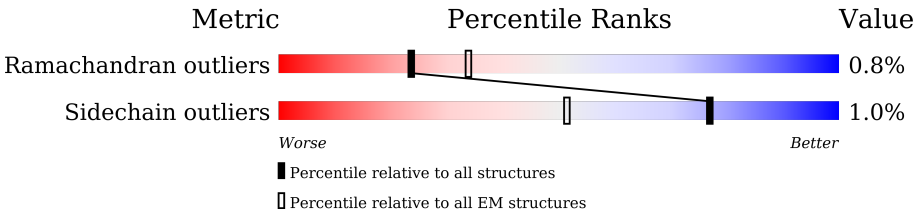
EMDB validation analysis	:	0.0.1.dev70
Mogul	:	1.8.5 (274361), CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (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:
ELECTRON MICROSCOPY

The reported resolution of this entry is 2.68 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)	EM structures (#Entries)
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the 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 EM map (all-atom inclusion < 40%). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	333	99% .
1	a	333	100%
2	B	509	94% 6%
2	b	509	94% 6%
3	C	470	96% .
3	c	470	96% .
4	D	351	97% .
4	d	351	97% . .
5	E	84	90% 10%

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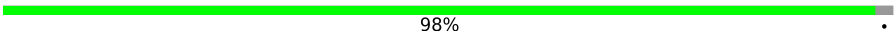
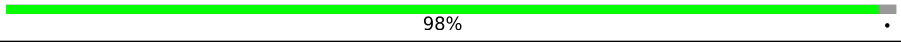
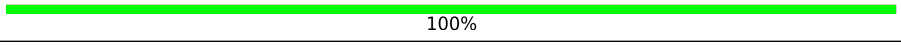
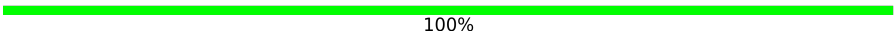
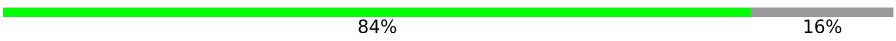
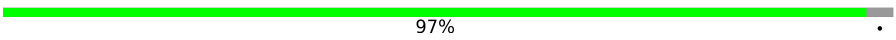
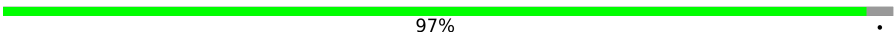
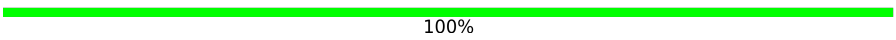
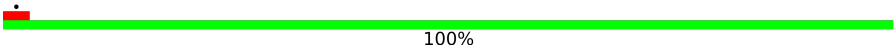
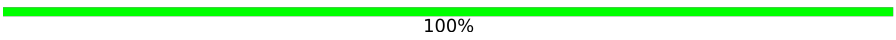
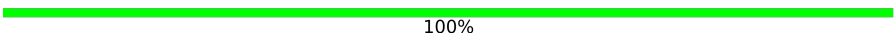
Mol	Chain	Length	Quality of chain
5	e	84	
6	F	43	
6	f	43	
7	G	176	
7	g	176	
8	H	66	
8	h	66	
9	I	34	
9	i	34	
10	J	39	
10	j	39	
11	K	44	
11	k	44	
12	L	38	
12	l	38	
13	M	113	
13	m	113	
14	N	30	
14	n	30	
15	O	305	
15	o	305	
16	T	28	
16	t	28	
17	U	148	
17	u	148	

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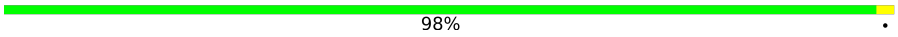
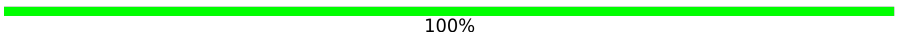
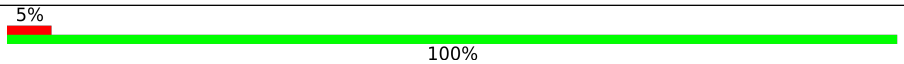
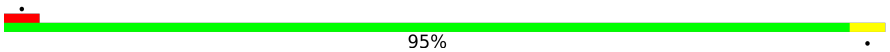
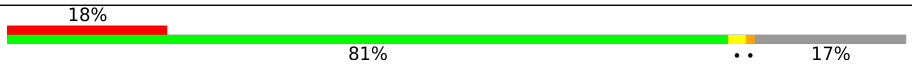
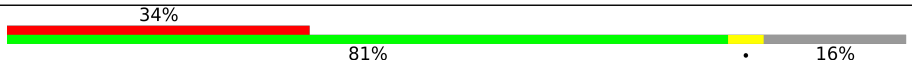
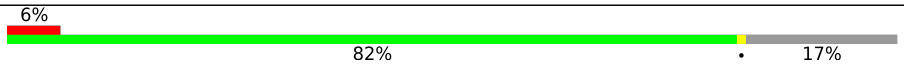
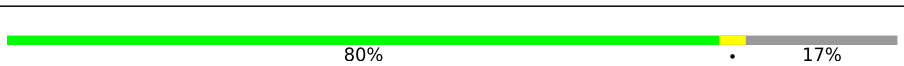
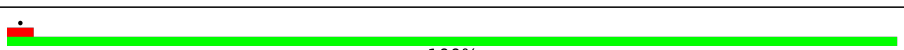
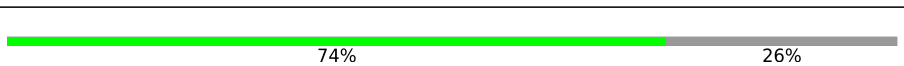
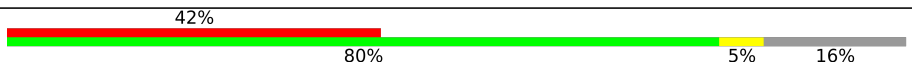
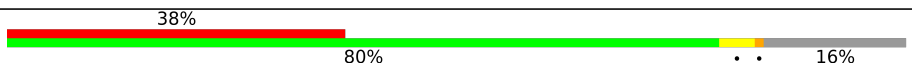
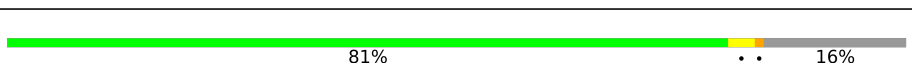
Mol	Chain	Length	Quality of chain
18	V	162	
18	v	162	
19	W	54	
19	w	54	
20	X	38	
20	x	38	
21	Z	61	
21	z	61	
22	3	220	
23	4	196	
24	5	192	
25	6	199	
26	0	199	
26	7	199	
27	Y	34	
27	y	34	
28	Q	211	
28	q	211	
29	1	193	
29	2	193	
29	8	193	
29	9	193	

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
33	CLA	0	304	X	-	-	-
33	CLA	0	305	X	-	-	-
33	CLA	0	307	X	-	-	-
33	CLA	0	308	X	-	-	-
33	CLA	0	309	X	-	-	-
33	CLA	0	310	X	-	-	-
33	CLA	0	311	X	-	-	-
33	CLA	0	312	X	-	-	-
33	CLA	0	313	X	-	-	-
33	CLA	1	305	X	-	-	-
33	CLA	1	306	X	-	-	-
33	CLA	1	307	X	-	-	-
33	CLA	1	308	X	-	-	-
33	CLA	1	309	X	-	-	-
33	CLA	1	310	X	-	-	-
33	CLA	1	311	X	-	-	-
33	CLA	1	312	X	-	-	-
33	CLA	1	313	X	-	-	-
33	CLA	1	314	X	-	-	-
33	CLA	1	315	X	-	-	-
33	CLA	1	316	X	-	-	-
33	CLA	2	305	X	-	-	-
33	CLA	2	306	X	-	-	-
33	CLA	2	307	X	-	-	-
33	CLA	2	308	X	-	-	-
33	CLA	2	309	X	-	-	-
33	CLA	2	310	X	-	-	-
33	CLA	2	311	X	-	-	-
33	CLA	2	312	X	-	-	-
33	CLA	2	314	X	-	-	-
33	CLA	2	315	X	-	-	-
33	CLA	2	316	X	-	-	-
33	CLA	2	317	X	-	-	-
33	CLA	3	302	X	-	-	-
33	CLA	3	303	X	-	-	-
33	CLA	3	304	X	-	-	-
33	CLA	3	305	X	-	-	-
33	CLA	3	306	X	-	-	-
33	CLA	3	307	X	-	-	-
33	CLA	3	308	X	-	-	-
33	CLA	3	309	X	-	-	-
33	CLA	3	311	X	-	-	-
33	CLA	3	312	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
33	CLA	3	313	X	-	-	-
33	CLA	3	319	X	-	-	-
33	CLA	4	305	X	-	-	-
33	CLA	4	306	X	-	-	-
33	CLA	4	308	X	-	-	-
33	CLA	4	309	X	-	-	-
33	CLA	4	310	X	-	-	-
33	CLA	4	311	X	-	-	-
33	CLA	4	312	X	-	-	-
33	CLA	4	313	X	-	-	-
33	CLA	4	314	X	-	-	-
33	CLA	4	315	X	-	-	-
33	CLA	4	316	X	-	-	-
33	CLA	5	308	X	-	-	-
33	CLA	5	309	X	-	-	-
33	CLA	5	311	X	-	-	-
33	CLA	5	312	X	-	-	-
33	CLA	5	313	X	-	-	-
33	CLA	5	314	X	-	-	-
33	CLA	5	316	X	-	-	-
33	CLA	5	317	X	-	-	-
33	CLA	6	307	X	-	-	-
33	CLA	6	308	X	-	-	-
33	CLA	6	310	X	-	-	-
33	CLA	6	311	X	-	-	-
33	CLA	6	312	X	-	-	-
33	CLA	6	313	X	-	-	-
33	CLA	6	315	X	-	-	-
33	CLA	6	316	X	-	-	-
33	CLA	7	304	X	-	-	-
33	CLA	7	305	X	-	-	-
33	CLA	7	307	X	-	-	-
33	CLA	7	308	X	-	-	-
33	CLA	7	309	X	-	-	-
33	CLA	7	310	X	-	-	-
33	CLA	7	311	X	-	-	-
33	CLA	7	312	X	-	-	-
33	CLA	7	313	X	-	-	-
33	CLA	7	314	X	-	-	-
33	CLA	8	305	X	-	-	-
33	CLA	8	306	X	-	-	-
33	CLA	8	307	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
33	CLA	8	308	X	-	-	-
33	CLA	8	309	X	-	-	-
33	CLA	8	310	X	-	-	-
33	CLA	8	311	X	-	-	-
33	CLA	8	312	X	-	-	-
33	CLA	8	313	X	-	-	-
33	CLA	8	314	X	-	-	-
33	CLA	8	315	X	-	-	-
33	CLA	8	316	X	-	-	-
33	CLA	9	305	X	-	-	-
33	CLA	9	306	X	-	-	-
33	CLA	9	307	X	-	-	-
33	CLA	9	308	X	-	-	-
33	CLA	9	309	X	-	-	-
33	CLA	9	310	X	-	-	-
33	CLA	9	311	X	-	-	-
33	CLA	9	312	X	-	-	-
33	CLA	9	313	X	-	-	-
33	CLA	9	314	X	-	-	-
33	CLA	9	315	X	-	-	-
33	CLA	9	316	X	-	-	-
33	CLA	9	317	X	-	-	-
33	CLA	A	404	X	-	-	-
33	CLA	A	405	X	-	-	-
33	CLA	A	408	X	-	-	-
33	CLA	B	601	X	-	-	-
33	CLA	B	602	X	-	-	-
33	CLA	B	603	X	-	-	-
33	CLA	B	604	X	-	-	-
33	CLA	B	605	X	-	-	-
33	CLA	B	606	X	-	-	-
33	CLA	B	607	X	-	-	-
33	CLA	B	608	X	-	-	-
33	CLA	B	609	X	-	-	-
33	CLA	B	610	X	-	-	-
33	CLA	B	611	X	-	-	-
33	CLA	B	612	X	-	-	-
33	CLA	B	613	X	-	-	-
33	CLA	B	614	X	-	-	-
33	CLA	B	615	X	-	-	-
33	CLA	B	616	X	-	-	-
33	CLA	C	501	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
33	CLA	C	502	X	-	-	-
33	CLA	C	503	X	-	-	-
33	CLA	C	504	X	-	-	-
33	CLA	C	505	X	-	-	-
33	CLA	C	506	X	-	-	-
33	CLA	C	507	X	-	-	-
33	CLA	C	508	X	-	-	-
33	CLA	C	509	X	-	-	-
33	CLA	C	510	X	-	-	-
33	CLA	C	511	X	-	-	-
33	CLA	C	512	X	-	-	-
33	CLA	C	513	X	-	-	-
33	CLA	D	402	X	-	-	-
33	CLA	D	405	X	-	-	-
33	CLA	D	406	X	-	-	-
33	CLA	H	103	X	-	-	-
33	CLA	W	303	X	-	-	-
33	CLA	Z	101	X	-	-	-
33	CLA	a	407	X	-	-	-
33	CLA	a	408	X	-	-	-
33	CLA	a	411	X	-	-	-
33	CLA	b	602	X	-	-	-
33	CLA	b	603	X	-	-	-
33	CLA	b	604	X	-	-	-
33	CLA	b	605	X	-	-	-
33	CLA	b	606	X	-	-	-
33	CLA	b	607	X	-	-	-
33	CLA	b	608	X	-	-	-
33	CLA	b	609	X	-	-	-
33	CLA	b	610	X	-	-	-
33	CLA	b	611	X	-	-	-
33	CLA	b	612	X	-	-	-
33	CLA	b	613	X	-	-	-
33	CLA	b	614	X	-	-	-
33	CLA	b	615	X	-	-	-
33	CLA	b	616	X	-	-	-
33	CLA	b	617	X	-	-	-
33	CLA	c	501	X	-	-	-
33	CLA	c	502	X	-	-	-
33	CLA	c	503	X	-	-	-
33	CLA	c	504	X	-	-	-
33	CLA	c	505	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
33	CLA	c	506	X	-	-	-
33	CLA	c	507	X	-	-	-
33	CLA	c	508	X	-	-	-
33	CLA	c	509	X	-	-	-
33	CLA	c	510	X	-	-	-
33	CLA	c	511	X	-	-	-
33	CLA	c	512	X	-	-	-
33	CLA	c	513	X	-	-	-
33	CLA	d	401	X	-	-	-
33	CLA	d	402	X	-	-	-
33	CLA	d	409	X	-	-	-
33	CLA	w	303	X	-	-	-
33	CLA	z	101	X	-	-	-

2 Entry composition (i)

There are 48 unique types of molecules in this entry. The entry contains 75511 atoms, of which 0 are hydrogens and 0 are deuteriums.

In the tables below, 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					AltConf	Trace
1	A	333	Total	C	N	O	S	0	0
			2614	1709	427	462	16		
1	a	333	Total	C	N	O	S	0	0
			2614	1709	427	462	16		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	478	Total	C	N	O	S	0	0
			3772	2466	639	654	13		
2	b	478	Total	C	N	O	S	0	0
			3772	2466	639	654	13		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
3	C	450	Total	C	N	O	S	0	0
			3489	2277	588	608	16		
3	c	450	Total	C	N	O	S	0	0
			3489	2277	588	608	16		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
4	D	341	Total	C	N	O	S	0	0
			2699	1784	442	463	10		
4	d	341	Total	C	N	O	S	0	0
			2699	1784	442	463	10		

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

Mol	Chain	Residues	Atoms				AltConf	Trace
5	E	76	Total 626	C 407	N 103	O 116	0	0
5	e	76	Total 626	C 407	N 103	O 116	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
6	F	31	Total 253	C 173	N 42	O 37	S 1	0	0
6	f	31	Total 253	C 173	N 42	O 37	S 1	0	0

- Molecule 7 is a protein called Photosystem II Psb31 protein domain-containing protein.

Mol	Chain	Residues	Atoms				AltConf	Trace
7	G	120	Total 890	C 556	N 160	O 174	0	0
7	g	120	Total 890	C 556	N 160	O 174	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
8	H	65	Total 512	C 339	N 82	O 89	S 2	0	0
8	h	65	Total 512	C 339	N 82	O 89	S 2	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
9	I	34	Total 279	C 188	N 43	O 47	S 1	0	0
9	i	34	Total 279	C 188	N 43	O 47	S 1	0	0

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

Mol	Chain	Residues	Atoms				AltConf	Trace
10	J	33	Total 243	C 165	N 37	O 41	0	0

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Mol	Chain	Residues	Atoms				AltConf	Trace
10	j	33	Total 243	C 165	N 37	O 41	0	0

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

Mol	Chain	Residues	Atoms				AltConf	Trace
11	K	37	Total 303	C 213	N 45	O 45	0	0
11	k	37	Total 303	C 213	N 45	O 45	0	0

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

Mol	Chain	Residues	Atoms				AltConf	Trace
12	L	37	Total 302	C 203	N 47	O 52	0	0
12	l	37	Total 302	C 203	N 47	O 52	0	0

- Molecule 13 is a protein called Photosystem II reaction center M protein, plastid.

Mol	Chain	Residues	Atoms				AltConf	Trace
13	M	41	Total 317	C 208	N 51	O 58	0	0
13	m	41	Total 317	C 208	N 51	O 58	0	0

- Molecule 14 is a protein called Photosystem II subunit, PsbN..

Mol	Chain	Residues	Atoms				AltConf	Trace
14	n	30	Total 150	C 90	N 30	O 30	0	0
14	N	30	Total 150	C 90	N 30	O 30	0	0

- Molecule 15 is a protein called Oxygen-evolving enhancer protein 1.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	O	248	Total 1867	C 1176	N 309	O 374	S 8	0	0
15	o	248	Total 1867	C 1176	N 309	O 374	S 8	0	0

- Molecule 16 is a protein called Photosystem II reaction center protein T.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	T	28	Total	C	N	O	S	0	0
			233	161	34	36	2		
16	t	28	Total	C	N	O	S	0	0
			233	161	34	36	2		

- Molecule 17 is a protein called PS II complex 12 kDa extrinsic protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	U	92	Total	C	N	O	S	0	0
			708	451	121	134	2		
17	u	92	Total	C	N	O	S	0	0
			708	451	121	134	2		

- Molecule 18 is a protein called Cytochrome c-550.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	V	135	Total	C	N	O	S	0	0
			1029	640	179	206	4		
18	v	135	Total	C	N	O	S	0	0
			1029	640	179	206	4		

- Molecule 19 is a protein called Photosystem II subunit, PsbW.

Mol	Chain	Residues	Atoms				AltConf	Trace
19	W	54	Total	C	N	O	0	0
			434	281	64	89		
19	w	54	Total	C	N	O	0	0
			434	281	64	89		

- Molecule 20 is a protein called Photosystem II reaction center X protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	X	35	Total	C	N	O	S	0	0
			248	160	41	46	1		
20	x	35	Total	C	N	O	S	0	0
			248	160	41	46	1		

- Molecule 21 is a protein called Photosystem II reaction center protein Z.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	Z	61	Total	C	N	O	S	0	0
			453	301	68	83	1		
21	z	61	Total	C	N	O	S	0	0
			453	301	68	83	1		

- Molecule 22 is a protein called Fucoxanthin chl a/c protein, lhca clade.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	3	220	Total	C	N	O	S	0	0
			1710	1110	281	315	4		

- Molecule 23 is a protein called Fucoxanthin-chlorophyll a-c binding protein, plastid.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	4	163	Total	C	N	O	S	0	0
			1249	809	204	232	4		

- Molecule 24 is a protein called Fucoxanthin chlorophyll a/c protein 6.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	5	160	Total	C	N	O	S	0	0
			1229	780	217	227	5		

- Molecule 25 is a protein called Fucoxanthin chlorophyll a/c protein 5.

Mol	Chain	Residues	Atoms					AltConf	Trace
25	6	168	Total	C	N	O	S	0	0
			1296	833	219	238	6		

- Molecule 26 is a protein called Fucoxanthin chlorophyll a/c protein-LI818 clade.

Mol	Chain	Residues	Atoms					AltConf	Trace
26	7	165	Total	C	N	O	S	0	0
			1269	819	213	233	4		
26	0	165	Total	C	N	O	S	0	0
			1269	819	213	233	4		

- Molecule 27 is a protein called Photosystem II reaction center protein Ycf12.

Mol	Chain	Residues	Atoms					AltConf	Trace
27	Y	34	Total	C	N	O	S	0	0
			251	167	41	41	2		

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Mol	Chain	Residues	Atoms					AltConf	Trace
27	y	34	Total	C	N	O	S	0	0
			251	167	41	41	2		

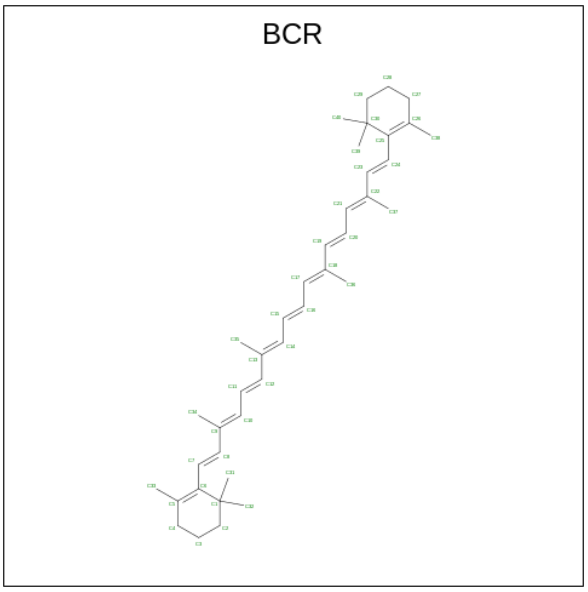
- Molecule 28 is a protein called Photosystem II subunit, PsbQ..

Mol	Chain	Residues	Atoms					AltConf	Trace
28	Q	156	Total	C	N	O	S	0	0
			1198	757	202	237	2		
28	q	156	Total	C	N	O	S	0	0
			1198	757	202	237	2		

- Molecule 29 is a protein called Fucoxanthin chlorophyll a/c light-harvesting protein, major type.

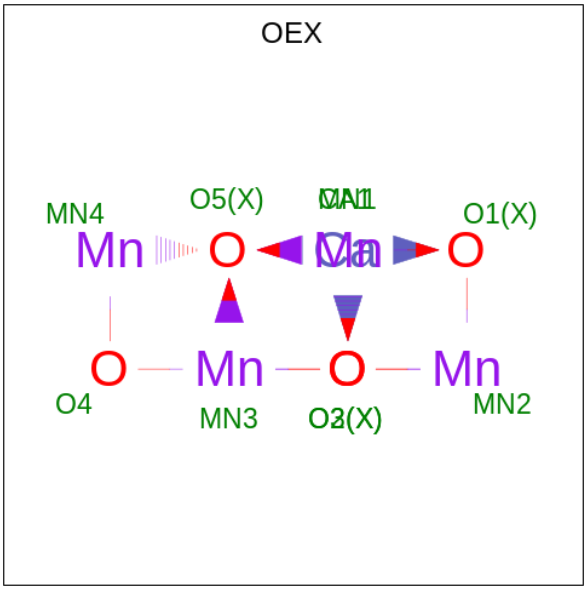
Mol	Chain	Residues	Atoms					AltConf	Trace
29	9	163	Total	C	N	O	S	0	0
			1214	788	206	218	2		
29	2	163	Total	C	N	O	S	0	0
			1214	788	206	218	2		
29	8	163	Total	C	N	O	S	0	0
			1206	783	206	216	1		
29	1	163	Total	C	N	O	S	0	0
			1206	783	206	216	1		

- Molecule 30 is BETA-CAROTENE (three-letter code: BCR) (formula: $C_{40}H_{56}$).



Mol	Chain	Residues	Atoms	AltConf
30	A	1	Total C 40 40	0
30	A	1	Total C 40 40	0
30	B	1	Total C 40 40	0
30	B	1	Total C 40 40	0
30	B	1	Total C 40 40	0
30	C	1	Total C 40 40	0
30	C	1	Total C 40 40	0
30	c	1	Total C 40 40	0
30	c	1	Total C 40 40	0
30	D	1	Total C 40 40	0
30	d	1	Total C 40 40	0
30	H	1	Total C 40 40	0
30	h	1	Total C 40 40	0
30	K	1	Total C 40 40	0
30	K	1	Total C 40 40	0
30	k	1	Total C 40 40	0
30	k	1	Total C 40 40	0
30	a	1	Total C 40 40	0
30	a	1	Total C 40 40	0
30	b	1	Total C 40 40	0
30	b	1	Total C 40 40	0
30	b	1	Total C 40 40	0

- Molecule 31 is CA-MN4-O5 CLUSTER (three-letter code: OEX) (formula: $CaMn_4O_5$).

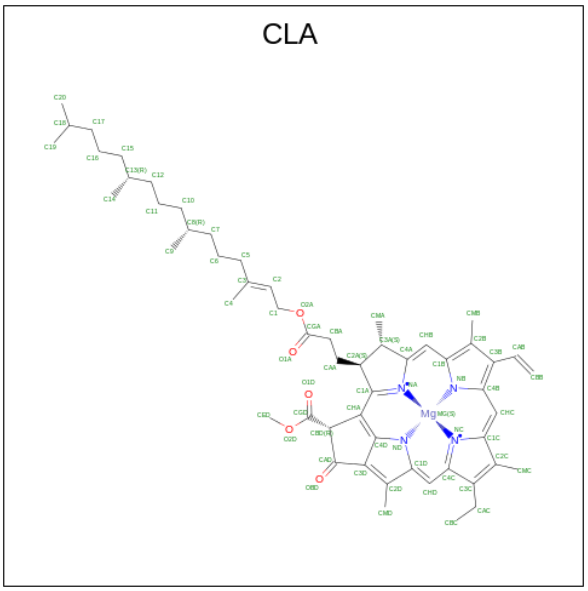


Mol	Chain	Residues	Atoms				AltConf
31	A	1	Total 10	Ca 1	Mn 4	O 5	0
31	a	1	Total 10	Ca 1	Mn 4	O 5	0

- Molecule 32 is CHLORIDE ION (three-letter code: CL) (formula: Cl).

Mol	Chain	Residues	Atoms			AltConf
32	A	1	Total 1	Cl 1		0
32	a	1	Total 1	Cl 1		0

- Molecule 33 is CHLOROPHYLL A (three-letter code: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



Mol	Chain	Residues	Atoms					AltConf
33	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	A	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
33	A	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
33	B	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
33	B	1	Total	C	Mg	N	O	0
			61	52	1	4	4	
33	B	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
33	B	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
33	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	B	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
33	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	B	1	Total	C	Mg	N	O	0
			64	54	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
33	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	B	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
33	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	C	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
33	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	C	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
33	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	C	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
33	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	C	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	C	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
33	C	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
33	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	c	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
33	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
33	c	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
33	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	c	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
33	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	c	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
33	c	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
33	D	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
33	D	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
33	D	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
33	d	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
33	d	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
33	d	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
33	H	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
33	W	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	w	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	Z	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
33	z	1	Total	C	Mg	N	O	0
			51	41	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
33	3	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	3	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	3	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	3	1	Total	C	Mg	N	O	0
			48	38	1	4	5	
33	3	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	3	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	3	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	3	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
33	3	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
33	3	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
33	3	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
33	3	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	4	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	4	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	4	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	4	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	4	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
33	4	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
33	4	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
33	4	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
33	4	1	Total	C	Mg	N	O	0
			56	46	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
33	4	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
33	4	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
33	5	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
33	5	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	5	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	5	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
33	5	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	5	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	5	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
33	5	1	Total	C	Mg	N	O	0
			38	32	1	4	1	
33	6	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
33	6	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
33	6	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
33	6	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
33	6	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	6	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
33	6	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
33	6	1	Total	C	Mg	N	O	0
			39	30	1	4	4	
33	7	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
33	7	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	7	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
33	7	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
33	7	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	7	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
33	7	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
33	7	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	7	1	Total	C	Mg	N	O	0
			34	28	1	4	1	
33	7	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
33	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	a	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
33	a	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
33	b	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
33	b	1	Total	C	Mg	N	O	0
			61	52	1	4	4	
33	b	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
33	b	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
33	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	b	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
33	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	b	1	Total	C	Mg	N	O	0
			64	54	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
33	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	b	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
33	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	0	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
33	0	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	0	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	0	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
33	0	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	0	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
33	0	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
33	0	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	0	1	Total	C	Mg	N	O	0
			34	28	1	4	1	
33	9	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
33	9	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
33	9	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
33	9	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	9	1	Total	C	Mg	N	O	0
			43	33	1	4	5	
33	9	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	9	1	Total	C	Mg	N	O	0
			55	45	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
33	9	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
33	9	1	Total	C	Mg	N	O	0
			36	30	1	4	1	
33	9	1	Total	C	Mg	N	O	0
			38	32	1	4	1	
33	9	1	Total	C	Mg	N	O	0
			38	32	1	4	1	
33	9	1	Total	C	Mg	N	O	0
			38	32	1	4	1	
33	9	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	2	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
33	2	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
33	2	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
33	2	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	2	1	Total	C	Mg	N	O	0
			43	33	1	4	5	
33	2	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	2	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	2	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
33	2	1	Total	C	Mg	N	O	0
			36	30	1	4	1	
33	2	1	Total	C	Mg	N	O	0
			38	32	1	4	1	
33	2	1	Total	C	Mg	N	O	0
			38	32	1	4	1	
33	2	1	Total	C	Mg	N	O	0
			38	32	1	4	1	
33	2	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	8	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
33	8	1	Total	C	Mg	N	O	0
			45	35	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
33	8	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
33	8	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	8	1	Total	C	Mg	N	O	0
			43	33	1	4	5	
33	8	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	8	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	8	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
33	8	1	Total	C	Mg	N	O	0
			36	30	1	4	1	
33	8	1	Total	C	Mg	N	O	0
			38	32	1	4	1	
33	8	1	Total	C	Mg	N	O	0
			38	32	1	4	1	
33	8	1	Total	C	Mg	N	O	0
			38	32	1	4	1	
33	1	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
33	1	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
33	1	1	Total	C	Mg	N	O	0
			44	34	1	4	5	
33	1	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	1	1	Total	C	Mg	N	O	0
			43	33	1	4	5	
33	1	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
33	1	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
33	1	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
33	1	1	Total	C	Mg	N	O	0
			36	30	1	4	1	
33	1	1	Total	C	Mg	N	O	0
			38	32	1	4	1	
33	1	1	Total	C	Mg	N	O	0
			38	32	1	4	1	

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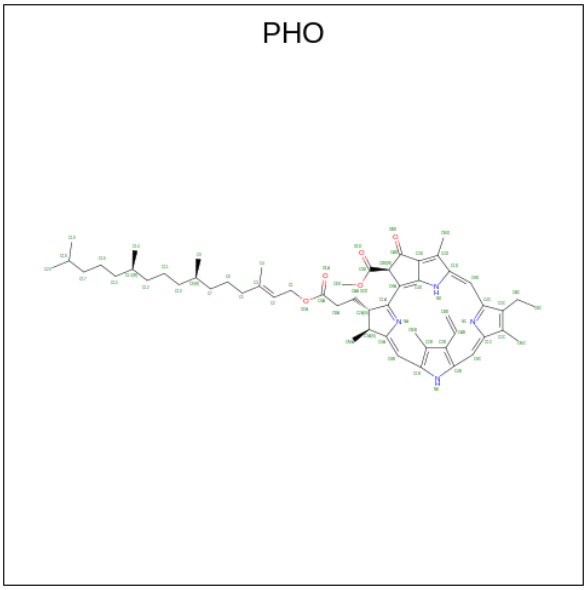
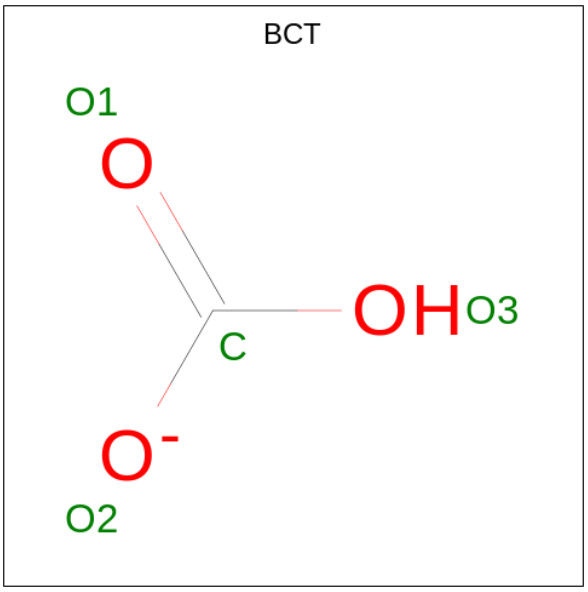
Mol	Chain	Residues	Atoms					AltConf
33	1	1	Total	C	Mg	N	O	0
			38	32	1	4	1	

- Molecule 34 is PHEOPHYTIN A (three-letter code: PHO) (formula: $C_{55}H_{74}N_4O_5$).



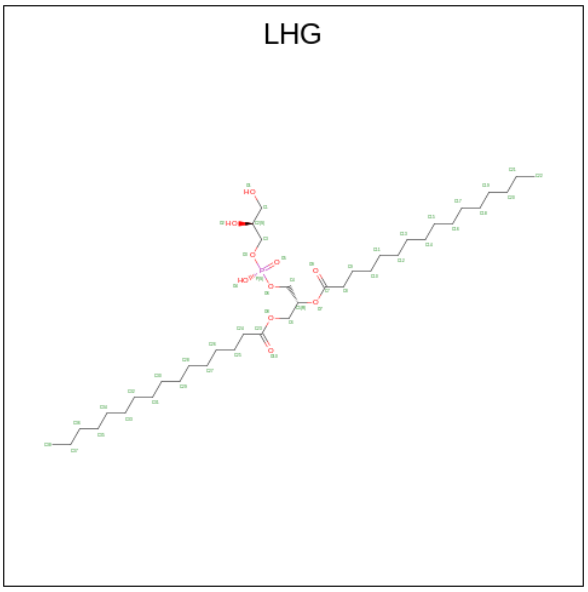
Mol	Chain	Residues	Atoms				AltConf
34	A	1	Total	C	N	O	0
			64	55	4	5	
34	A	1	Total	C	N	O	0
			64	55	4	5	
34	a	1	Total	C	N	O	0
			64	55	4	5	
34	a	1	Total	C	N	O	0
			64	55	4	5	

- Molecule 35 is BICARBONATE ION (three-letter code: BCT) (formula: CHO_3).



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

- Molecule 36 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



Mol	Chain	Residues	Atoms				AltConf
36	A	1	Total	C	O	P	0
			43	32	10	1	

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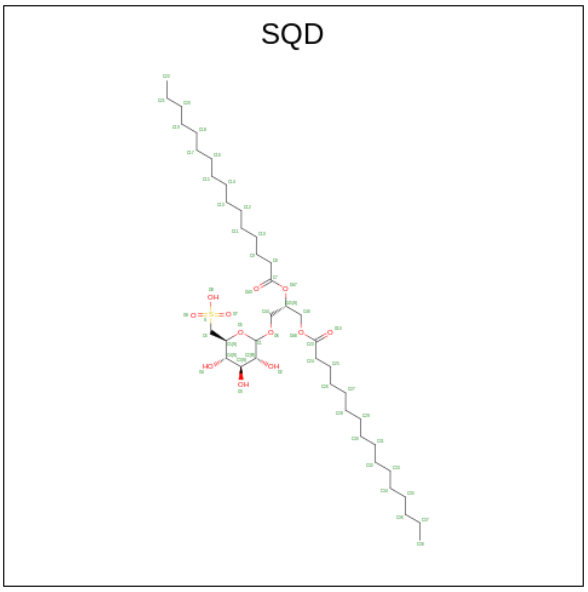
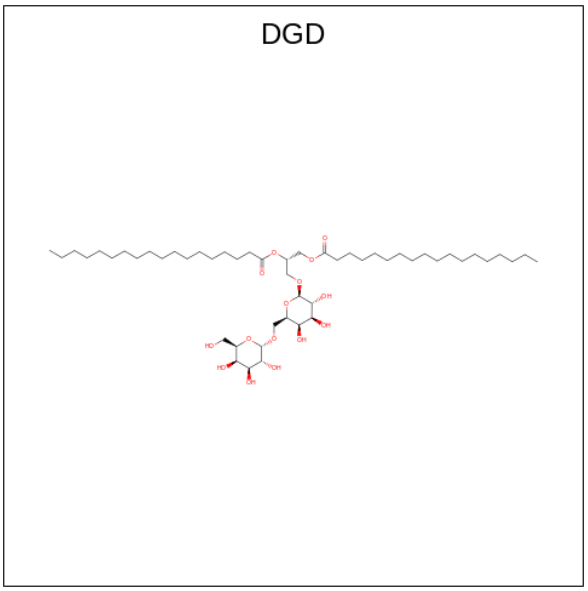
Mol	Chain	Residues	Atoms				AltConf
36	A	1	Total	C	O	P	0
			49	38	10	1	
36	A	1	Total	C	O	P	0
			49	38	10	1	
36	D	1	Total	C	O	P	0
			48	38	9	1	
36	D	1	Total	C	O	P	0
			42	31	10	1	
36	d	1	Total	C	O	P	0
			48	38	9	1	
36	d	1	Total	C	O	P	0
			42	31	10	1	
36	H	1	Total	C	O	P	0
			42	31	10	1	
36	h	1	Total	C	O	P	0
			42	31	10	1	
36	W	1	Total	C	O	P	0
			35	24	10	1	
36	w	1	Total	C	O	P	0
			35	24	10	1	
36	3	1	Total	C	O	P	0
			27	16	10	1	
36	3	1	Total	C	O	P	0
			49	38	10	1	
36	4	1	Total	C	O	P	0
			49	38	10	1	
36	5	1	Total	C	O	P	0
			33	24	8	1	
36	7	1	Total	C	O	P	0
			28	19	8	1	
36	a	1	Total	C	O	P	0
			43	32	10	1	
36	a	1	Total	C	O	P	0
			49	38	10	1	
36	b	1	Total	C	O	P	0
			49	38	10	1	
36	0	1	Total	C	O	P	0
			28	19	8	1	

- Molecule 37 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (three-letter code: SQD) (formula: $C_{41}H_{78}O_{12}S$).



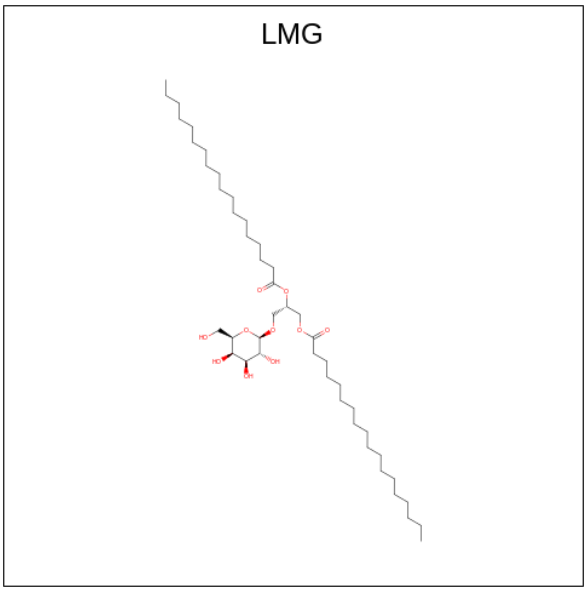
Mol	Chain	Residues	Atoms				AltConf
37	A	1	Total 40	C 27	O 12	S 1	0
37	B	1	Total 54	C 41	O 12	S 1	0
37	D	1	Total 54	C 41	O 12	S 1	0
37	i	1	Total 40	C 27	O 12	S 1	0
37	L	1	Total 54	C 41	O 12	S 1	0
37	l	1	Total 54	C 41	O 12	S 1	0
37	T	1	Total 40	C 27	O 12	S 1	0
37	T	1	Total 54	C 41	O 12	S 1	0
37	t	1	Total 40	C 27	O 12	S 1	0
37	7	1	Total 48	C 35	O 12	S 1	0
37	a	1	Total 54	C 41	O 12	S 1	0
37	0	1	Total 48	C 35	O 12	S 1	0

- Molecule 38 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$).



Mol	Chain	Residues	Atoms	AltConf
38	A	1	Total C O 53 39 14	0
38	C	1	Total C O 55 40 15	0
38	C	1	Total C O 56 41 15	0
38	C	1	Total C O 55 40 15	0
38	c	1	Total C O 55 40 15	0
38	c	1	Total C O 56 41 15	0
38	c	1	Total C O 55 40 15	0
38	H	1	Total C O 62 47 15	0
38	h	1	Total C O 62 47 15	0
38	3	1	Total C O 39 34 5	0
38	a	1	Total C O 53 39 14	0

- Molecule 39 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$).



Mol	Chain	Residues	Atoms	AltConf
39	B	1	Total C O 51 41 10	0
39	B	1	Total C O 28 18 10	0
39	C	1	Total C O 46 36 10	0
39	C	1	Total C O 48 38 10	0
39	C	1	Total C O 27 17 10	0
39	C	1	Total C O 23 13 10	0
39	c	1	Total C O 48 38 10	0
39	c	1	Total C O 27 17 10	0
39	D	1	Total C O 40 30 10	0
39	D	1	Total C O 46 36 10	0
39	d	1	Total C O 46 36 10	0
39	d	1	Total C O 37 27 10	0
39	M	1	Total C O 40 30 10	0
39	m	1	Total C O 40 30 10	0

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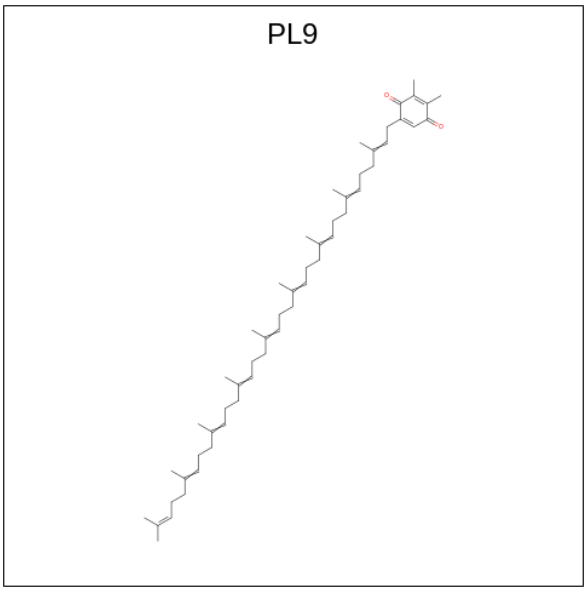
Mol	Chain	Residues	Atoms	AltConf
39	W	1	Total C O 48 38 10	0
39	w	1	Total C O 48 38 10	0
39	3	1	Total C O 31 21 10	0
39	5	1	Total C O 31 21 10	0
39	7	1	Total C O 55 45 10	0
39	b	1	Total C O 51 41 10	0
39	b	1	Total C O 28 18 10	0
39	b	1	Total C O 40 30 10	0
39	Q	1	Total C O 37 27 10	0
39	q	1	Total C O 46 36 10	0
39	q	1	Total C O 37 27 10	0
39	0	1	Total C O 42 32 10	0

- Molecule 40 is FE (II) ION (three-letter code: FE2) (formula: Fe).

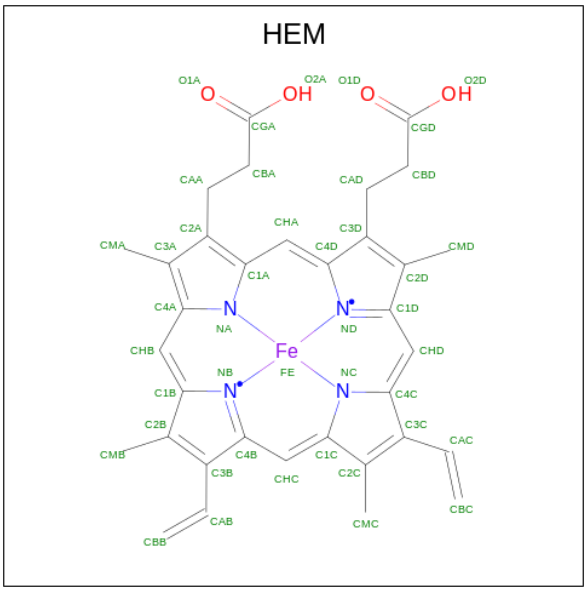
Mol	Chain	Residues	Atoms	AltConf
40	D	1	Total Fe 1 1	0
40	d	1	Total Fe 1 1	0

- Molecule 41 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			AltConf
41	D	1	Total	C	O	0
			55	53	2	
41	d	1	Total	C	O	0
			55	53	2	

- Molecule 42 is PROTOPORPHYRIN IX CONTAINING FE (three-letter code: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).



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

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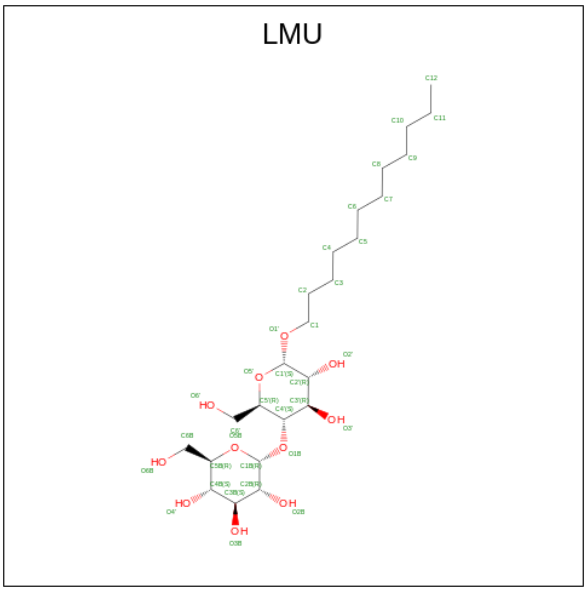
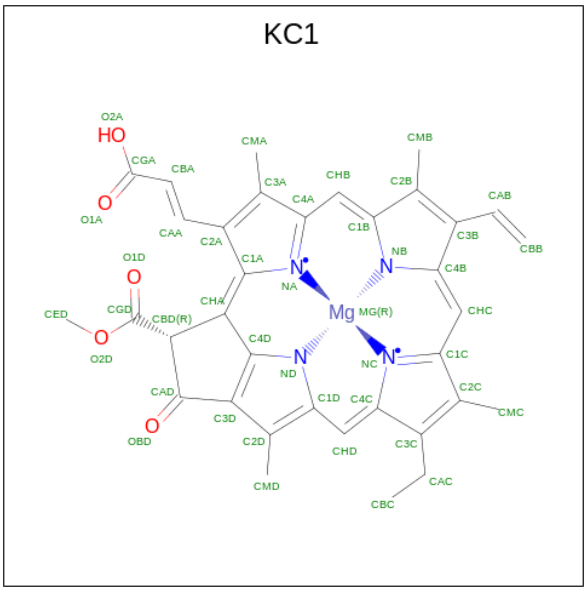
Mol	Chain	Residues	Atoms					AltConf
42	F	1	Total	C	Fe	N	O	0
			43	34	1	4	4	
42	V	1	Total	C	Fe	N	O	0
			43	34	1	4	4	
42	v	1	Total	C	Fe	N	O	0
			43	34	1	4	4	

- Molecule 43 is DODECYL-ALPHA-D-MALTOSIDE (three-letter code: LMU) (formula: $C_{24}H_{46}O_{11}$) (labeled as "Ligand of Interest" by depositor).



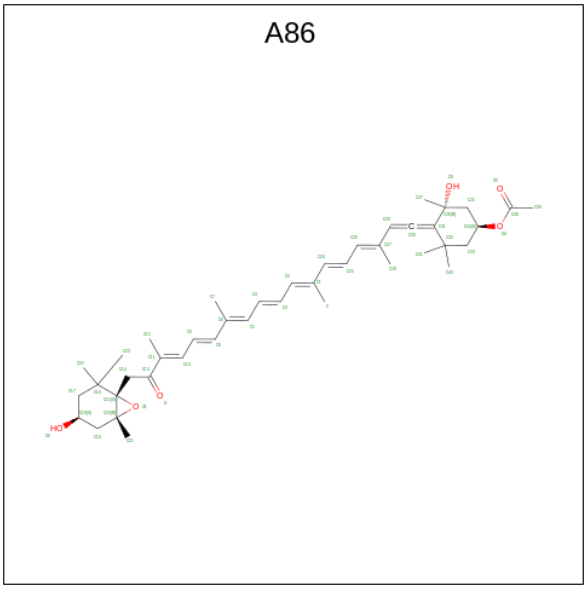
Mol	Chain	Residues	Atoms			AltConf
43	T	1	Total	C	O	0
			31	20	11	
43	t	1	Total	C	O	0
			31	20	11	
43	w	1	Total	C	O	0
			35	24	11	
43	3	1	Total	C	O	0
			35	24	11	
43	4	1	Total	C	O	0
			35	24	11	
43	5	1	Total	C	O	0
			31	20	11	

- Molecule 44 is Chlorophyll c1 (three-letter code: KC1) (formula: $C_{35}H_{30}MgN_4O_5$).



Mol	Chain	Residues	Atoms					AltConf
44	3	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
44	5	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
44	6	1	Total	C	Mg	N	O	0
			45	35	1	4	5	

- Molecule 45 is (3S,3'S,5R,5'R,6S,6'R,8'R)-3,5'-dihydroxy-8-oxo-6',7'-didehydro-5,5',6,6',7,8-hexahydro-5,6-epoxy-beta,beta-caroten-3'- yl acetate (three-letter code: A86) (formula: $C_{42}H_{58}O_6$).



Mol	Chain	Residues	Atoms			AltConf
45	3	1	Total	C	O	0
			48	42	6	
45	4	1	Total	C	O	0
			48	42	6	
45	4	1	Total	C	O	0
			48	42	6	
45	4	1	Total	C	O	0
			48	42	6	
45	5	1	Total	C	O	0
			48	42	6	
45	5	1	Total	C	O	0
			48	42	6	
45	5	1	Total	C	O	0
			48	42	6	
45	5	1	Total	C	O	0
			48	42	6	
45	5	1	Total	C	O	0
			47	41	6	
45	5	1	Total	C	O	0
			48	42	6	
45	5	1	Total	C	O	0
			48	42	6	
45	6	1	Total	C	O	0
			48	42	6	
45	6	1	Total	C	O	0
			48	42	6	
45	6	1	Total	C	O	0
			48	42	6	
45	6	1	Total	C	O	0
			48	42	6	
45	6	1	Total	C	O	0
			48	42	6	
45	6	1	Total	C	O	0
			48	42	6	
45	7	1	Total	C	O	0
			48	42	6	
45	7	1	Total	C	O	0
			48	42	6	
45	0	1	Total	C	O	0
			48	42	6	
45	0	1	Total	C	O	0
			48	42	6	
45	9	1	Total	C	O	0
			48	42	6	

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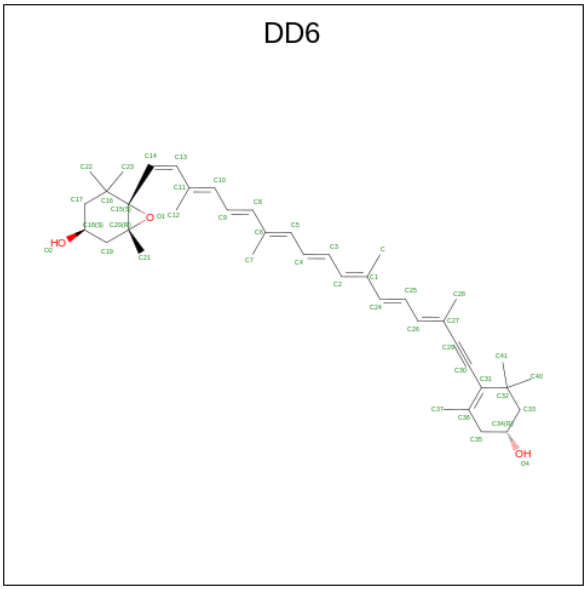
Mol	Chain	Residues	Atoms	AltConf
45	9	1	Total C O 48 42 6	0
45	2	1	Total C O 48 42 6	0
45	2	1	Total C O 48 42 6	0
45	8	1	Total C O 48 42 6	0
45	8	1	Total C O 48 42 6	0
45	1	1	Total C O 48 42 6	0
45	1	1	Total C O 48 42 6	0

- Molecule 46 is (3S,3'R,5R,6S,7cis)-7',8'-didehydro-5,6-dihydro-5,6-epoxy-beta,beta-carotene -3,3'-diol (three-letter code: DD6) (formula: $C_{40}H_{54}O_3$).



Mol	Chain	Residues	Atoms	AltConf
46	3	1	Total C O 43 40 3	0
46	4	1	Total C O 43 40 3	0
46	9	1	Total C O 43 40 3	0
46	9	1	Total C O 43 40 3	0

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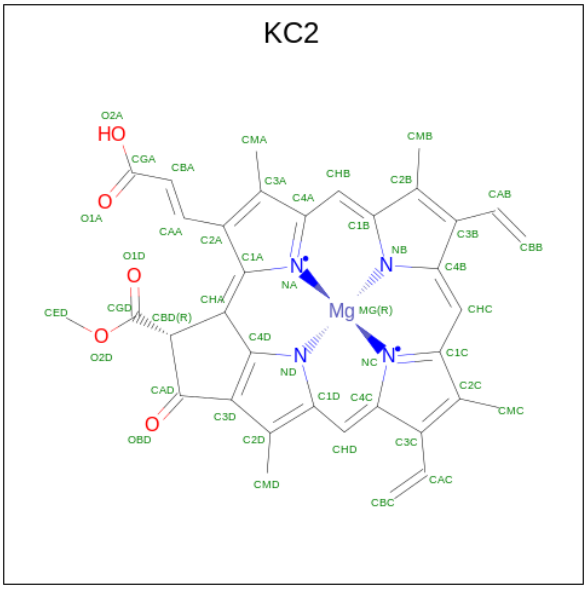
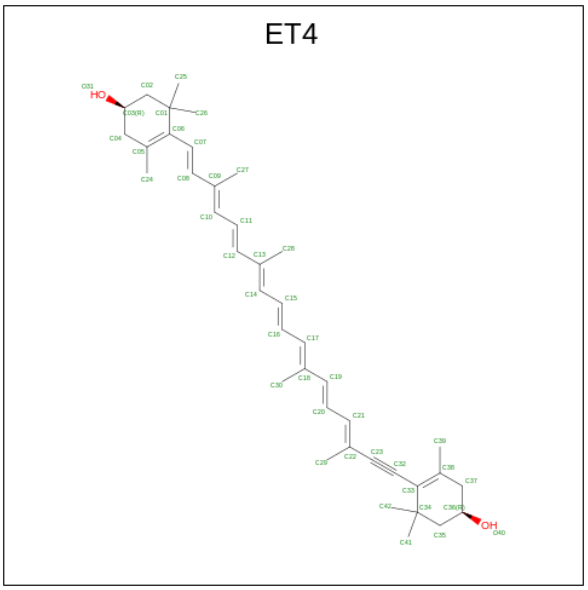
Mol	Chain	Residues	Atoms	AltConf
46	2	1	Total C O 43 40 3	0
46	2	1	Total C O 43 40 3	0
46	8	1	Total C O 43 40 3	0
46	8	1	Total C O 43 40 3	0
46	1	1	Total C O 43 40 3	0
46	1	1	Total C O 43 40 3	0

- Molecule 47 is Chlorophyll c2 (three-letter code: KC2) (formula: $C_{35}H_{28}MgN_4O_5$).



Mol	Chain	Residues	Atoms	AltConf
47	4	1	Total C Mg N O 45 35 1 4 5	0
47	5	1	Total C Mg N O 45 35 1 4 5	0
47	6	1	Total C Mg N O 45 35 1 4 5	0
47	7	1	Total C Mg N O 45 35 1 4 5	0
47	0	1	Total C Mg N O 45 35 1 4 5	0

- Molecule 48 is (1 {R})-3,5,5-trimethyl-4-[(1 {E},3 {E},5 {E},7 {E},9 {E},11 {E},13 {E},15 {E})-3,7,12,16-tetramethyl-18-[(4 {R})-2,6,6-trimethyl-4-oxidanyl-cyclohexen-1-yl]octadeca-1,3,5,7,9,11,13,15-octaen-17-ynyl]cyclohex-3-en-1-ol (three-letter code: ET4) (formula: $C_{40}H_{54}O_2$).



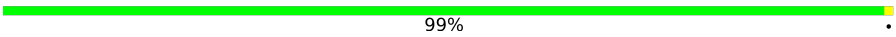
Mol	Chain	Residues	Atoms			AltConf
48	7	1	Total	C	O	0
			42	40	2	
48	0	1	Total	C	O	0
			42	40	2	

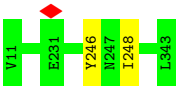
3 Residue-property plots (i)

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 atom inclusion in map 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 diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). 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

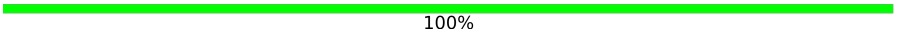
Chain A:

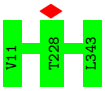




• Molecule 1: Photosystem II protein D1

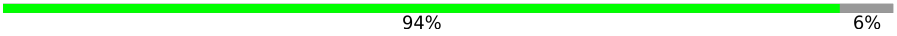
Chain a:





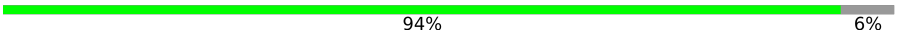
• Molecule 2: Photosystem II CP47 reaction center protein

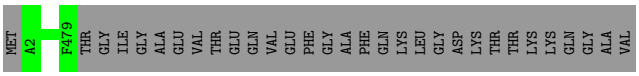
Chain B:



• Molecule 2: Photosystem II CP47 reaction center protein

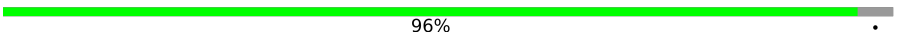
Chain b:

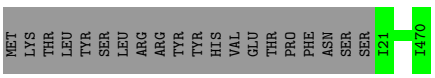




• Molecule 3: Photosystem II CP43 reaction center protein

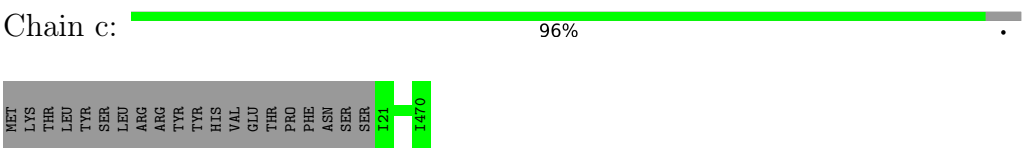
Chain C:





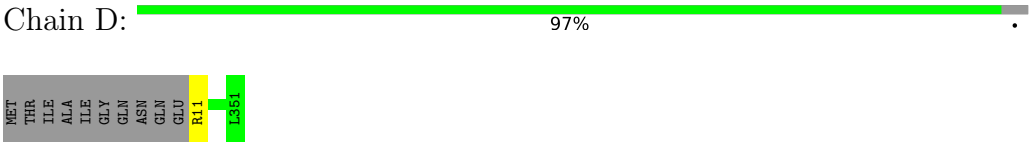
• Molecule 3: Photosystem II CP43 reaction center protein

Chain c:



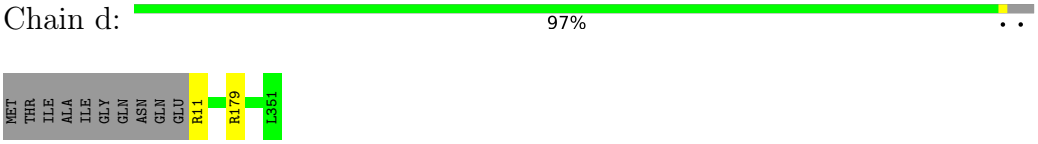
• Molecule 4: Photosystem II D2 protein

Chain D:



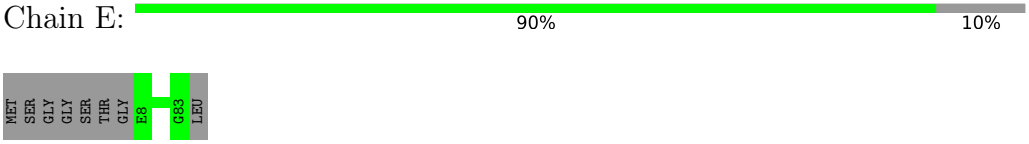
• Molecule 4: Photosystem II D2 protein

Chain d:



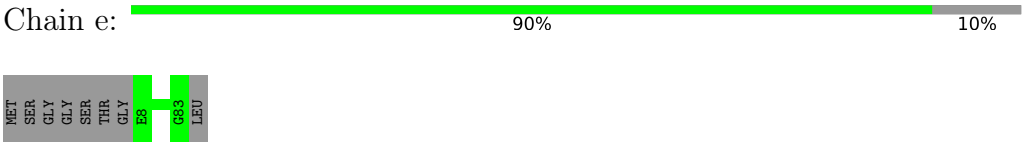
• Molecule 5: Cytochrome b559 subunit alpha

Chain E:



• Molecule 5: Cytochrome b559 subunit alpha

Chain e:

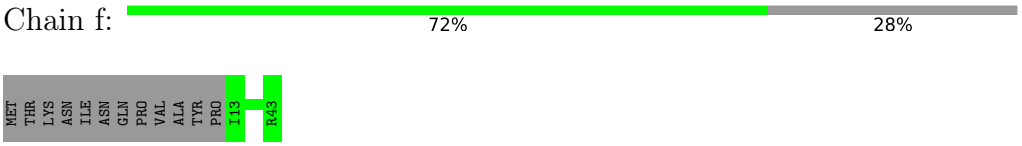


• Molecule 6: Cytochrome b559 subunit beta

Chain F:

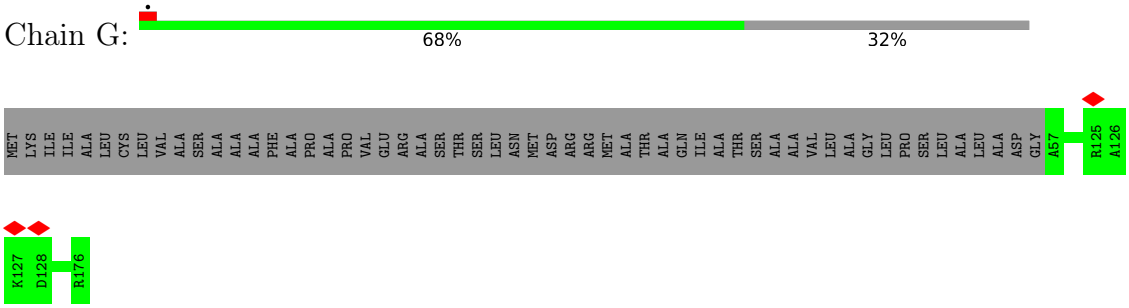
• Molecule 6: Cytochrome b559 subunit beta

Chain f:



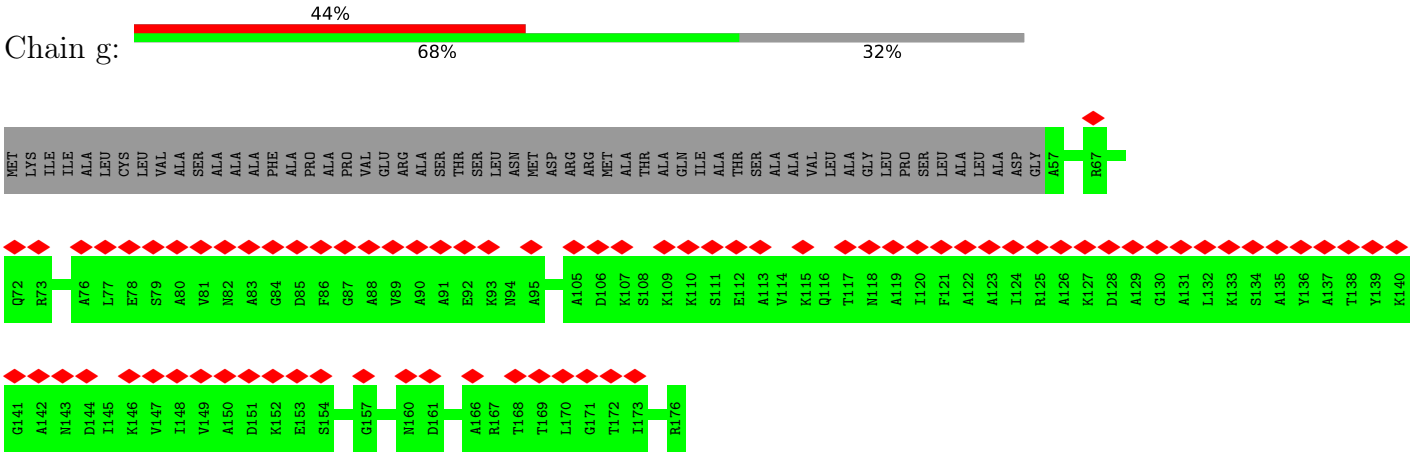
• Molecule 7: Photosystem II Psb31 protein domain-containing protein

Chain G:



• Molecule 7: Photosystem II Psb31 protein domain-containing protein

Chain g:



• Molecule 8: Photosystem II reaction center protein H

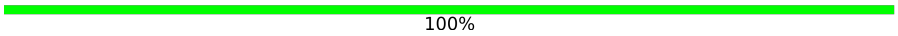
Chain H:

• Molecule 8: Photosystem II reaction center protein H

Chain h:

• Molecule 9: Photosystem II reaction center protein I

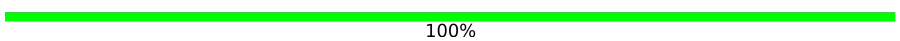
Chain I:



There are no outlier residues recorded for this chain.

• Molecule 9: Photosystem II reaction center protein I

Chain i:



There are no outlier residues recorded for this chain.

• Molecule 10: Photosystem II reaction center protein J

Chain J:

• Molecule 10: Photosystem II reaction center protein J

Chain j:

• Molecule 11: Photosystem II reaction center protein K

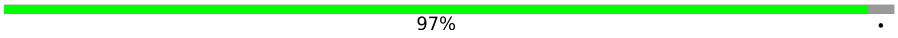
Chain K:

• Molecule 11: Photosystem II reaction center protein K

Chain k:

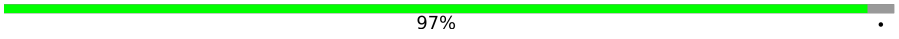
• Molecule 12: Photosystem II reaction center protein L

Chain L:



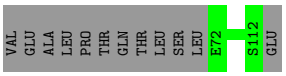
• Molecule 12: Photosystem II reaction center protein L

Chain l:



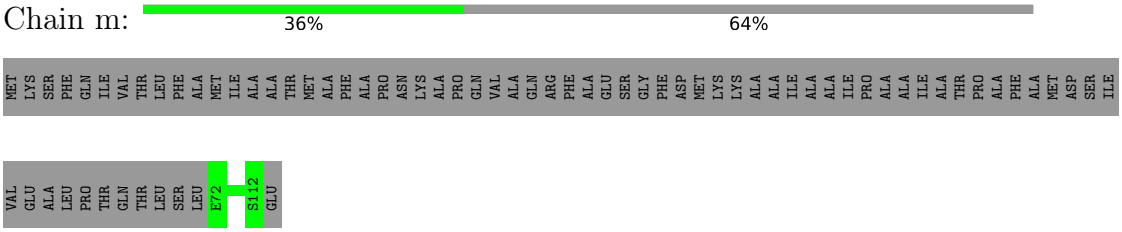
• Molecule 13: Photosystem II reaction center M protein, plastid

Chain M:



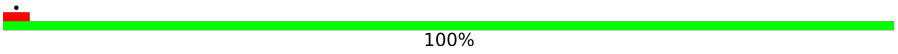
• Molecule 13: Photosystem II reaction center M protein, plastid

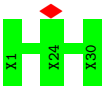
Chain m:



• Molecule 14: Photosystem II subunit, PsbN.

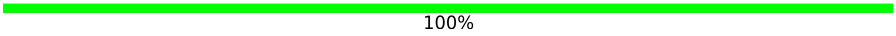
Chain n:





• Molecule 14: Photosystem II subunit, PsbN.

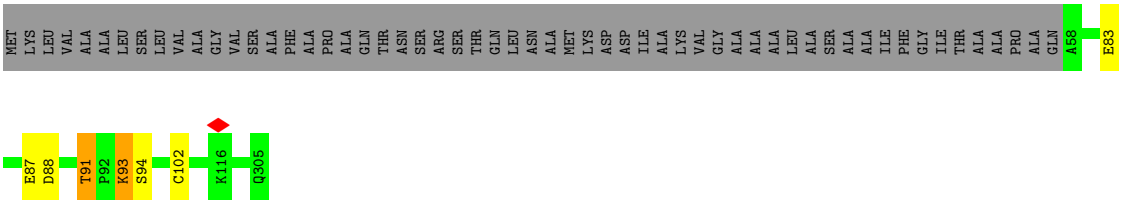
Chain N:



There are no outlier residues recorded for this chain.

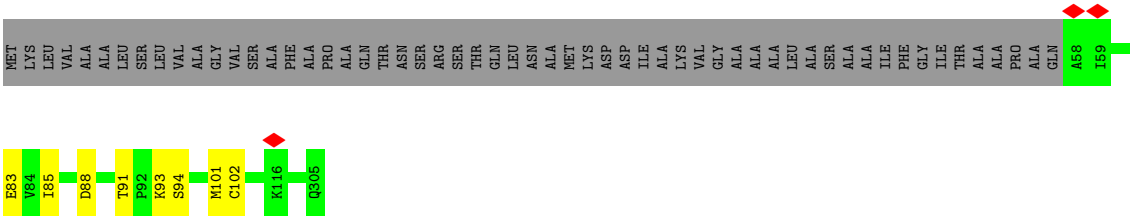
• Molecule 15: Oxygen-evolving enhancer protein 1

Chain O:



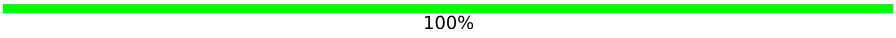
• Molecule 15: Oxygen-evolving enhancer protein 1

Chain o:



• Molecule 16: Photosystem II reaction center protein T

Chain T:



There are no outlier residues recorded for this chain.

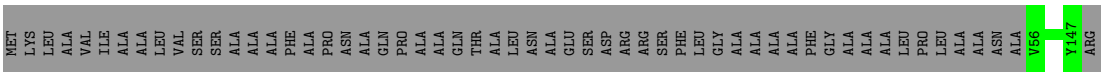
• Molecule 16: Photosystem II reaction center protein T

Chain t:

There are no outlier residues recorded for this chain.

• Molecule 17: PS II complex 12 kDa extrinsic protein

Chain U:



• Molecule 17: PS II complex 12 kDa extrinsic protein

Chain u:

• Molecule 18: Cytochrome c-550

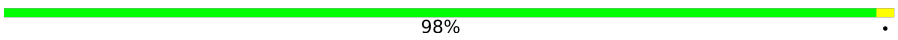
Chain V:

• Molecule 18: Cytochrome c-550

Chain v:

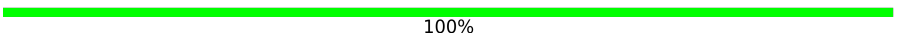
• Molecule 19: Photosystem II subunit, PsbW

Chain W:



• Molecule 19: Photosystem II subunit, PsbW

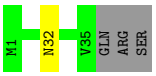
Chain w:



There are no outlier residues recorded for this chain.

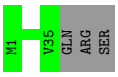
• Molecule 20: Photosystem II reaction center X protein

Chain X:



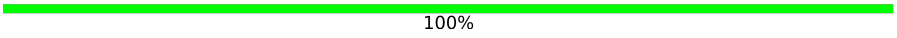
• Molecule 20: Photosystem II reaction center X protein

Chain x:



• Molecule 21: Photosystem II reaction center protein Z

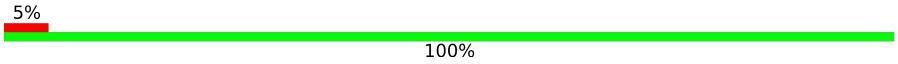
Chain Z:

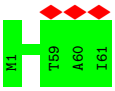


There are no outlier residues recorded for this chain.

• Molecule 21: Photosystem II reaction center protein Z

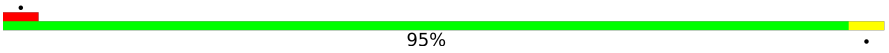
Chain z:

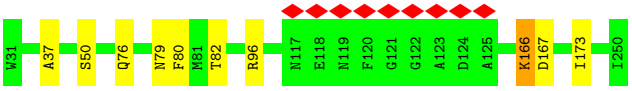




• Molecule 22: Fucoxanthin chl a/c protein, lhca clade

Chain 3:



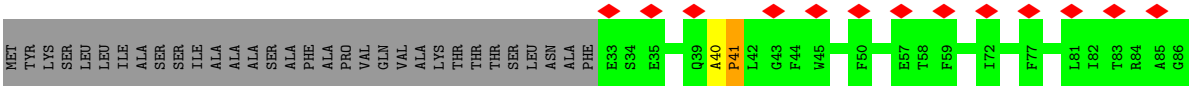


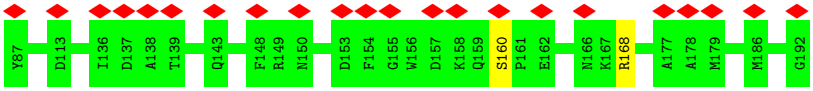
• Molecule 23: Fucoxanthin-chlorophyll a-c binding protein, plastid

Chain 4:

• Molecule 24: Fucoxanthin chlorophyll a/c protein 6

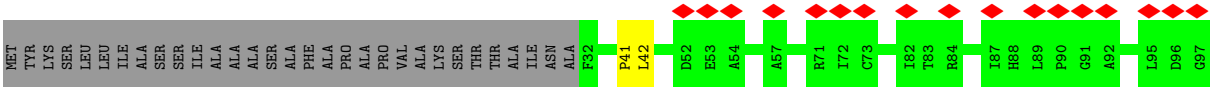
Chain 5:

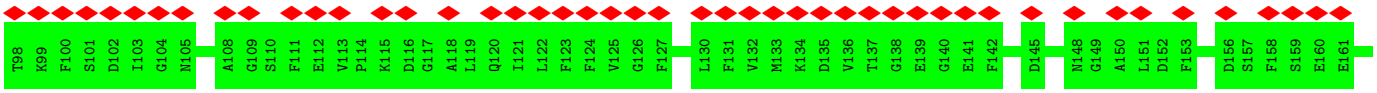




• Molecule 25: Fucoxanthin chlorophyll a/c protein 5

Chain 6:



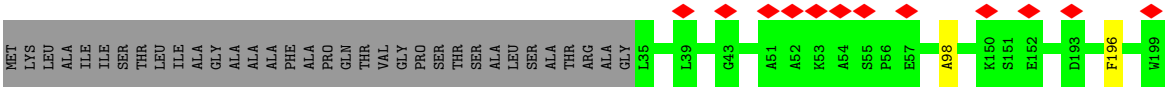


• Molecule 26: Fucoxanthin chlorophyll a/c protein-LI818 clade

Chain 7:

• Molecule 26: Fucoxanthin chlorophyll a/c protein-LI818 clade

Chain 0:



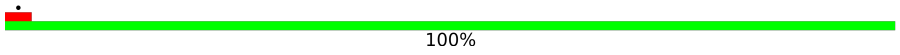
• Molecule 27: Photosystem II reaction center protein Ycf12

Chain Y:

There are no outlier residues recorded for this chain.

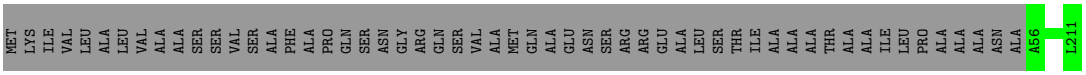
• Molecule 27: Photosystem II reaction center protein Ycf12

Chain y:



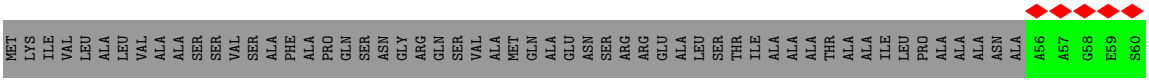
• Molecule 28: Photosystem II subunit, PsbQ.

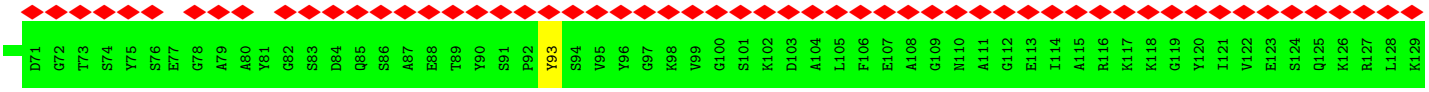
Chain Q:

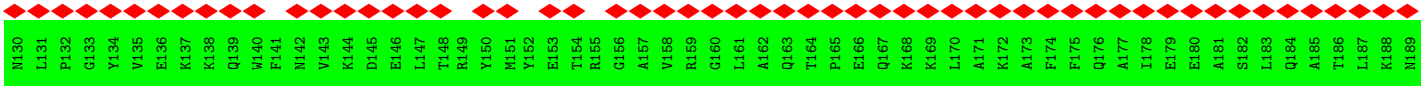


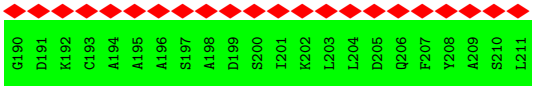
• Molecule 28: Photosystem II subunit, PsbQ.

Chain q:







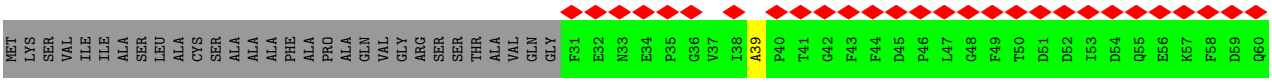


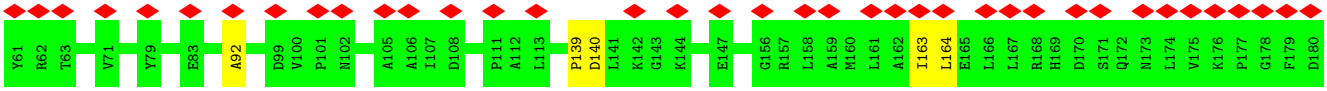
• Molecule 29: Fucoxanthin chlorophyll a/c light-harvesting protein, major type

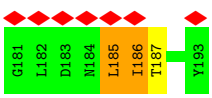
Chain 9:

• Molecule 29: Fucoxanthin chlorophyll a/c light-harvesting protein, major type

Chain 2:





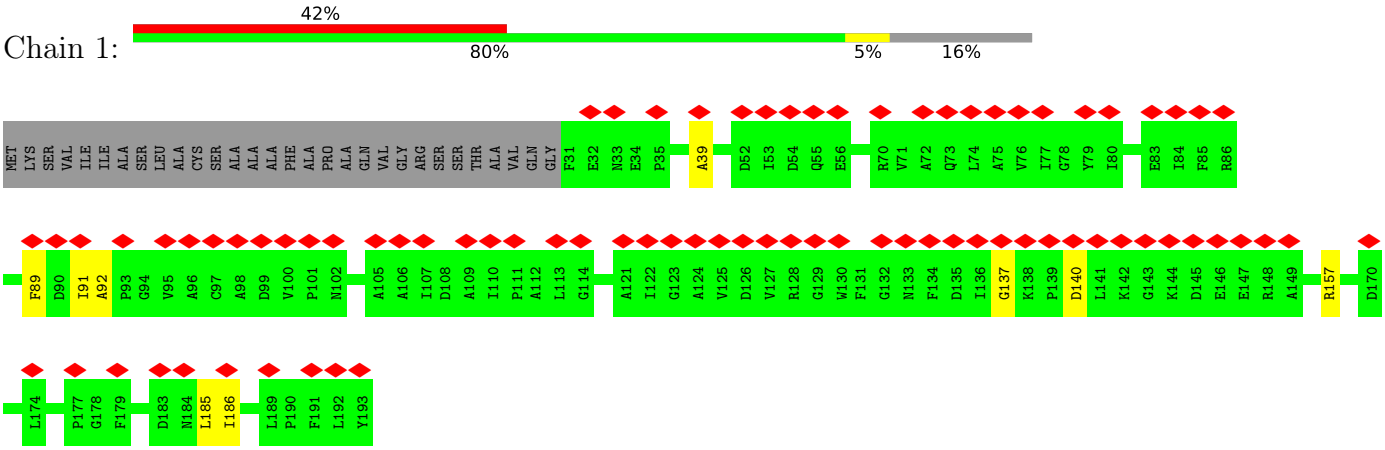


• Molecule 29: Fucoxanthin chlorophyll a/c light-harvesting protein, major type

Chain 8:

• Molecule 29: Fucoxanthin chlorophyll a/c light-harvesting protein, major type

Chain 1:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	97098	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	60	Depositor
Minimum defocus (nm)	1000	Depositor
Maximum defocus (nm)	2000	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	0.719	Depositor
Minimum map value	-0.241	Depositor
Average map value	0.001	Depositor
Map value standard deviation	0.023	Depositor
Recommended contour level	0.088	Depositor
Map size (Å)	440.0, 440.0, 440.0	wwPDB
Map dimensions	500, 500, 500	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.88, 0.88, 0.88	Depositor

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: SQD, BCT, LHG, BCR, HEM, OEX, DD6, PL9, CLA, ET4, KC1, A86, LMG, PHO, KC2, DGD, CL, FE2, LMU

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	0.32	0/2697	0.49	0/3674
1	a	0.31	0/2697	0.47	0/3674
2	B	0.32	0/3901	0.50	0/5308
2	b	0.32	0/3901	0.49	0/5308
3	C	0.33	0/3604	0.49	0/4909
3	c	0.31	0/3604	0.48	0/4909
4	D	0.32	0/2791	0.48	0/3804
4	d	0.33	0/2791	0.50	0/3804
5	E	0.28	0/644	0.47	0/878
5	e	0.29	0/644	0.50	0/878
6	F	0.35	0/261	0.53	0/352
6	f	0.28	0/261	0.48	0/352
7	G	0.26	0/900	0.47	0/1207
7	g	0.25	0/900	0.48	0/1207
8	H	0.30	0/522	0.49	0/712
8	h	0.29	0/522	0.51	0/712
9	I	0.35	0/286	0.50	0/386
9	i	0.31	0/286	0.48	0/386
10	J	0.36	0/249	0.51	0/339
10	j	0.26	0/249	0.43	0/339
11	K	0.33	0/315	0.47	0/432
11	k	0.32	0/315	0.47	0/432
12	L	0.36	0/311	0.42	0/423
12	l	0.33	0/311	0.42	0/423
13	M	0.32	0/322	0.47	0/435
13	m	0.31	0/322	0.48	0/435
15	O	0.33	0/1896	0.50	0/2549
15	o	0.32	0/1896	0.49	0/2549
16	T	0.33	0/239	0.47	0/323
16	t	0.31	0/239	0.46	0/323
17	U	0.33	0/722	0.51	0/982

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	#|Z| >5	RMSZ	#|Z| >5
17	u	0.33	0/722	0.49	0/982
18	V	0.33	0/1047	0.51	0/1422
18	v	0.31	0/1047	0.51	0/1422
19	W	0.33	0/446	0.46	0/606
19	w	0.29	0/446	0.44	0/606
20	X	0.25	0/248	0.45	0/336
20	x	0.25	0/248	0.44	0/336
21	Z	0.27	0/461	0.41	0/633
21	z	0.25	0/461	0.40	0/633
22	3	0.31	0/1765	0.46	0/2405
23	4	0.32	0/1282	0.53	0/1746
24	5	0.30	0/1255	0.52	1/1696 (0.1%)
25	6	0.33	0/1324	0.55	0/1780
26	0	0.27	0/1298	0.48	0/1764
26	7	0.32	0/1298	0.51	0/1764
27	Y	0.24	0/253	0.42	0/341
27	y	0.23	0/253	0.39	0/341
28	Q	0.29	0/1220	0.46	0/1638
28	q	0.28	0/1220	0.49	0/1638
29	1	0.31	0/1237	0.48	0/1687
29	2	0.32	0/1246	0.50	0/1700
29	8	0.31	0/1237	0.48	0/1687
29	9	0.33	0/1246	0.49	0/1700
All	All	0.31	0/59858	0.49	1/81307 (0.0%)

There are no bond length outliers.

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
24	5	41	PRO	N-CA-CB	5.23	109.58	103.30

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

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

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all PDB entries followed by that with respect to all EM entries.

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	331/333 (99%)	311 (94%)	19 (6%)	1 (0%)	41	64
1	a	331/333 (99%)	314 (95%)	17 (5%)	0	100	100
2	B	476/509 (94%)	463 (97%)	13 (3%)	0	100	100
2	b	476/509 (94%)	464 (98%)	12 (2%)	0	100	100
3	C	448/470 (95%)	430 (96%)	18 (4%)	0	100	100
3	c	448/470 (95%)	433 (97%)	15 (3%)	0	100	100
4	D	339/351 (97%)	324 (96%)	15 (4%)	0	100	100
4	d	339/351 (97%)	324 (96%)	15 (4%)	0	100	100
5	E	74/84 (88%)	69 (93%)	5 (7%)	0	100	100
5	e	74/84 (88%)	71 (96%)	3 (4%)	0	100	100
6	F	29/43 (67%)	26 (90%)	0	3 (10%)	0	0
6	f	29/43 (67%)	29 (100%)	0	0	100	100
7	G	118/176 (67%)	108 (92%)	10 (8%)	0	100	100
7	g	118/176 (67%)	108 (92%)	10 (8%)	0	100	100
8	H	63/66 (96%)	58 (92%)	5 (8%)	0	100	100
8	h	63/66 (96%)	56 (89%)	7 (11%)	0	100	100
9	I	32/34 (94%)	32 (100%)	0	0	100	100
9	i	32/34 (94%)	32 (100%)	0	0	100	100
10	J	31/39 (80%)	29 (94%)	2 (6%)	0	100	100
10	j	31/39 (80%)	29 (94%)	2 (6%)	0	100	100
11	K	35/44 (80%)	34 (97%)	1 (3%)	0	100	100
11	k	35/44 (80%)	34 (97%)	1 (3%)	0	100	100
12	L	35/38 (92%)	35 (100%)	0	0	100	100
12	l	35/38 (92%)	35 (100%)	0	0	100	100
13	M	39/113 (34%)	39 (100%)	0	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
13	m	39/113 (34%)	38 (97%)	1 (3%)	0	100	100
15	O	246/305 (81%)	230 (94%)	14 (6%)	2 (1%)	19	40
15	o	246/305 (81%)	228 (93%)	16 (6%)	2 (1%)	19	40
16	T	26/28 (93%)	26 (100%)	0	0	100	100
16	t	26/28 (93%)	26 (100%)	0	0	100	100
17	U	90/148 (61%)	88 (98%)	2 (2%)	0	100	100
17	u	90/148 (61%)	82 (91%)	8 (9%)	0	100	100
18	V	133/162 (82%)	125 (94%)	6 (4%)	2 (2%)	10	23
18	v	133/162 (82%)	123 (92%)	7 (5%)	3 (2%)	6	14
19	W	52/54 (96%)	47 (90%)	5 (10%)	0	100	100
19	w	52/54 (96%)	49 (94%)	3 (6%)	0	100	100
20	X	33/38 (87%)	31 (94%)	1 (3%)	1 (3%)	4	9
20	x	33/38 (87%)	31 (94%)	2 (6%)	0	100	100
21	Z	59/61 (97%)	56 (95%)	3 (5%)	0	100	100
21	z	59/61 (97%)	57 (97%)	2 (3%)	0	100	100
22	3	218/220 (99%)	186 (85%)	27 (12%)	5 (2%)	6	14
23	4	161/196 (82%)	139 (86%)	16 (10%)	6 (4%)	3	6
24	5	158/192 (82%)	137 (87%)	18 (11%)	3 (2%)	8	18
25	6	166/199 (83%)	136 (82%)	27 (16%)	3 (2%)	8	19
26	0	163/199 (82%)	148 (91%)	13 (8%)	2 (1%)	13	29
26	7	163/199 (82%)	148 (91%)	13 (8%)	2 (1%)	13	29
27	Y	32/34 (94%)	30 (94%)	2 (6%)	0	100	100
27	y	32/34 (94%)	30 (94%)	2 (6%)	0	100	100
28	Q	154/211 (73%)	145 (94%)	9 (6%)	0	100	100
28	q	154/211 (73%)	144 (94%)	10 (6%)	0	100	100
29	1	161/193 (83%)	128 (80%)	26 (16%)	7 (4%)	2	4
29	2	161/193 (83%)	141 (88%)	14 (9%)	6 (4%)	3	6
29	8	161/193 (83%)	144 (89%)	13 (8%)	4 (2%)	5	12
29	9	161/193 (83%)	138 (86%)	17 (11%)	6 (4%)	3	6
All	All	7423/8659 (86%)	6918 (93%)	447 (6%)	58 (1%)	24	40

5 of 58 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
23	4	99	THR
24	5	41	PRO
25	6	42	LEU
25	6	196	ILE
29	9	39	ALA

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 PDB entries followed by that with respect to all EM entries.

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	271/271 (100%)	270 (100%)	1 (0%)	91 96
1	a	271/271 (100%)	271 (100%)	0	100 100
2	B	385/408 (94%)	385 (100%)	0	100 100
2	b	385/408 (94%)	385 (100%)	0	100 100
3	C	355/375 (95%)	355 (100%)	0	100 100
3	c	355/375 (95%)	355 (100%)	0	100 100
4	D	272/280 (97%)	271 (100%)	1 (0%)	91 96
4	d	272/280 (97%)	270 (99%)	2 (1%)	84 93
5	E	70/75 (93%)	70 (100%)	0	100 100
5	e	70/75 (93%)	70 (100%)	0	100 100
6	F	25/36 (69%)	24 (96%)	1 (4%)	31 57
6	f	25/36 (69%)	25 (100%)	0	100 100
7	G	84/122 (69%)	84 (100%)	0	100 100
7	g	84/122 (69%)	84 (100%)	0	100 100
8	H	56/57 (98%)	56 (100%)	0	100 100
8	h	56/57 (98%)	56 (100%)	0	100 100
9	I	33/33 (100%)	33 (100%)	0	100 100
9	i	33/33 (100%)	33 (100%)	0	100 100
10	J	26/31 (84%)	26 (100%)	0	100 100
10	j	26/31 (84%)	26 (100%)	0	100 100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
11	K	32/38 (84%)	32 (100%)	0	100	100
11	k	32/38 (84%)	32 (100%)	0	100	100
12	L	33/34 (97%)	33 (100%)	0	100	100
12	l	33/34 (97%)	33 (100%)	0	100	100
13	M	33/86 (38%)	33 (100%)	0	100	100
13	m	33/86 (38%)	33 (100%)	0	100	100
15	O	199/236 (84%)	192 (96%)	7 (4%)	36	62
15	o	199/236 (84%)	193 (97%)	6 (3%)	41	68
16	T	25/25 (100%)	25 (100%)	0	100	100
16	t	25/25 (100%)	25 (100%)	0	100	100
17	U	73/105 (70%)	73 (100%)	0	100	100
17	u	73/105 (70%)	70 (96%)	3 (4%)	30	56
18	V	114/138 (83%)	112 (98%)	2 (2%)	59	81
18	v	114/138 (83%)	109 (96%)	5 (4%)	28	53
19	W	44/44 (100%)	43 (98%)	1 (2%)	50	76
19	w	44/44 (100%)	44 (100%)	0	100	100
20	X	27/30 (90%)	27 (100%)	0	100	100
20	x	27/30 (90%)	27 (100%)	0	100	100
21	Z	49/49 (100%)	49 (100%)	0	100	100
21	z	49/49 (100%)	49 (100%)	0	100	100
22	3	171/171 (100%)	165 (96%)	6 (4%)	36	62
23	4	128/152 (84%)	126 (98%)	2 (2%)	62	83
24	5	120/147 (82%)	119 (99%)	1 (1%)	81	92
25	6	131/152 (86%)	127 (97%)	4 (3%)	40	67
26	0	128/151 (85%)	128 (100%)	0	100	100
26	7	128/151 (85%)	124 (97%)	4 (3%)	40	67
27	Y	27/27 (100%)	27 (100%)	0	100	100
27	y	27/27 (100%)	27 (100%)	0	100	100
28	Q	120/157 (76%)	120 (100%)	0	100	100
28	q	120/157 (76%)	119 (99%)	1 (1%)	81	92
29	1	109/148 (74%)	107 (98%)	2 (2%)	59	81

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
29	2	113/148 (76%)	108 (96%)	5 (4%)	28 53
29	8	109/148 (74%)	106 (97%)	3 (3%)	43 70
29	9	113/148 (76%)	109 (96%)	4 (4%)	36 62
All	All	5956/6830 (87%)	5895 (99%)	61 (1%)	77 90

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

Mol	Chain	Res	Type
19	W	191	ARG
29	2	187	THR
23	4	96	GLU
29	2	186	ILE
29	1	89	PHE

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 16 such sidechains are listed below:

Mol	Chain	Res	Type
26	7	192	GLN
26	7	190	ASN
25	6	39	GLN
26	7	183	ASN
24	5	104	ASN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

Of 347 ligands modelled in this entry, 4 are monoatomic - leaving 343 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	$\#\|Z\| > 2$
33	CLA	b	613	-	65,73,73	1.46	7 (10%)	76,113,113	1.45	7 (9%)
48	ET4	0	302	-	41,43,43	2.13	13 (31%)	54,60,60	2.45	19 (35%)
33	CLA	9	312	-	45,53,73	1.78	5 (11%)	52,89,113	1.56	6 (11%)
33	CLA	d	401	-	57,65,73	1.63	8 (14%)	70,103,113	1.47	10 (14%)
42	HEM	F	101	6	41,50,50	1.46	3 (7%)	45,82,82	1.33	5 (11%)
33	CLA	c	502	-	64,72,73	1.49	8 (12%)	74,111,113	1.37	7 (9%)
33	CLA	c	506	-	45,53,73	1.75	6 (13%)	52,89,113	1.59	7 (13%)
33	CLA	0	312	-	65,73,73	1.48	6 (9%)	76,113,113	1.35	7 (9%)
33	CLA	2	313	29	36,44,73	2.36	9 (25%)	42,77,113	1.66	8 (19%)
33	CLA	6	310	-	52,60,73	1.66	6 (11%)	60,97,113	1.50	7 (11%)
33	CLA	3	308	22	65,73,73	1.46	5 (7%)	76,113,113	1.36	7 (9%)
33	CLA	b	605	-	61,69,73	1.49	7 (11%)	71,108,113	1.49	10 (14%)
33	CLA	D	402	-	59,67,73	1.51	7 (11%)	68,105,113	1.49	8 (11%)
33	CLA	7	305	26	65,73,73	1.46	7 (10%)	76,113,113	1.41	8 (10%)
33	CLA	c	513	-	49,57,73	1.68	7 (14%)	55,93,113	1.62	7 (12%)
33	CLA	1	309	-	44,51,73	1.93	7 (15%)	50,86,113	1.68	8 (16%)
30	BCR	b	620	-	41,41,41	1.16	2 (4%)	56,56,56	1.22	6 (10%)
46	DD6	9	303	-	39,45,45	2.02	3 (7%)	52,67,67	2.18	13 (25%)
33	CLA	b	603	-	61,69,73	1.49	6 (9%)	67,106,113	1.22	5 (7%)
30	BCR	a	414	-	41,41,41	1.11	2 (4%)	56,56,56	1.24	7 (12%)
33	CLA	B	606	-	65,73,73	1.47	7 (10%)	76,113,113	1.37	6 (7%)
36	LHG	3	317	33	26,26,48	0.85	1 (3%)	29,32,54	1.35	3 (10%)
33	CLA	9	308	-	55,63,73	1.60	6 (10%)	64,101,113	1.50	8 (12%)
46	DD6	2	303	-	39,45,45	2.02	3 (7%)	52,67,67	2.17	13 (25%)
33	CLA	a	411	-	60,68,73	1.54	7 (11%)	70,107,113	1.50	9 (12%)
37	SQD	t	102	-	39,40,54	1.14	5 (12%)	48,51,65	2.03	12 (25%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
33	CLA	6	316	-	38,46,73	2.39	8 (21%)	47,79,113	1.61	9 (19%)
33	CLA	9	315	-	37,46,73	1.91	6 (16%)	44,80,113	1.67	7 (15%)
33	CLA	B	615	-	65,73,73	1.49	8 (12%)	76,113,113	1.32	7 (9%)
33	CLA	8	307	-	44,52,73	1.83	7 (15%)	55,88,113	1.61	8 (14%)
45	A86	8	302	-	44,50,50	1.25	3 (6%)	51,76,76	2.25	17 (33%)
33	CLA	c	508	-	65,73,73	1.46	7 (10%)	76,113,113	1.36	7 (9%)
43	LMU	5	320	-	32,32,36	0.37	0	43,43,47	0.74	1 (2%)
33	CLA	9	310	29	65,73,73	1.47	6 (9%)	76,113,113	1.38	8 (10%)
38	DGD	c	516	-	56,56,67	0.96	2 (3%)	70,70,81	1.46	11 (15%)
39	LMG	m	201	-	40,40,55	0.86	1 (2%)	48,48,63	1.29	4 (8%)
34	PHO	A	406	-	51,69,69	1.02	4 (7%)	47,99,99	1.17	6 (12%)
33	CLA	8	309	-	44,51,73	1.89	7 (15%)	50,86,113	1.70	7 (14%)
33	CLA	c	507	-	65,73,73	1.45	7 (10%)	76,113,113	1.40	6 (7%)
33	CLA	3	304	-	65,73,73	1.48	6 (9%)	76,113,113	1.36	6 (7%)
47	KC2	4	307	-	48,53,53	1.78	9 (18%)	54,89,89	2.47	15 (27%)
39	LMG	B	620	-	51,51,55	0.74	0	59,59,63	1.36	7 (11%)
33	CLA	4	316	-	52,60,73	1.64	7 (13%)	60,97,113	1.54	8 (13%)
30	BCR	A	401	-	41,41,41	1.12	2 (4%)	56,56,56	1.21	7 (12%)
39	LMG	B	621	-	28,28,55	0.97	0	36,36,63	1.30	4 (11%)
45	A86	5	307	-	44,50,50	1.24	4 (9%)	51,76,76	11.49	23 (45%)
46	DD6	4	303	-	39,45,45	2.02	3 (7%)	52,67,67	2.77	15 (28%)
33	CLA	2	305	-	41,49,73	1.88	6 (14%)	47,84,113	1.61	8 (17%)
36	LHG	4	318	-	48,48,48	0.57	0	51,54,54	1.26	6 (11%)
33	CLA	8	308	-	55,63,73	1.58	6 (10%)	64,101,113	1.56	8 (12%)
39	LMG	W	301	-	48,48,55	0.79	1 (2%)	56,56,63	1.35	6 (10%)
45	A86	6	303	-	44,50,50	1.24	4 (9%)	51,76,76	8.48	24 (47%)
33	CLA	b	607	-	65,73,73	1.44	7 (10%)	76,113,113	1.36	7 (9%)
39	LMG	b	621	-	51,51,55	0.75	1 (1%)	59,59,63	1.33	6 (10%)
33	CLA	0	307	-	65,73,73	1.45	6 (9%)	76,113,113	1.40	8 (10%)
33	CLA	1	313	29	36,44,73	2.06	7 (19%)	42,77,113	1.77	8 (19%)
38	DGD	a	401	-	54,54,67	1.01	4 (7%)	67,67,81	1.48	13 (19%)
31	OEX	A	402	1,3	0,15,15	-	-	-		
45	A86	6	302	-	44,50,50	1.20	3 (6%)	51,76,76	11.14	24 (47%)
33	CLA	0	309	26	65,73,73	1.48	6 (9%)	76,113,113	1.36	8 (10%)
48	ET4	7	302	-	41,43,43	2.05	14 (34%)	54,60,60	2.39	19 (35%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
39	LMG	Q	301	-	37,37,55	0.87	1 (2%)	45,45,63	1.27	4 (8%)
33	CLA	b	617	-	65,73,73	1.48	8 (12%)	76,113,113	1.38	7 (9%)
42	HEM	V	201	18	41,50,50	1.38	7 (17%)	45,82,82	1.84	8 (17%)
36	LHG	5	318	-	32,32,48	0.83	2 (6%)	36,37,54	1.71	6 (16%)
37	SQD	A	413	-	39,40,54	1.11	5 (12%)	48,51,65	1.76	12 (25%)
33	CLA	8	313	29	36,44,73	2.03	7 (19%)	42,77,113	1.79	9 (21%)
31	OEX	a	405	1,3	0,15,15	-	-	-		
33	CLA	H	103	26	42,51,73	1.79	6 (14%)	50,86,113	1.57	6 (12%)
33	CLA	9	305	-	41,49,73	1.86	5 (12%)	47,84,113	1.62	8 (17%)
42	HEM	v	201	18	41,50,50	1.48	3 (7%)	45,82,82	1.28	4 (8%)
33	CLA	1	310	-	65,73,73	1.46	6 (9%)	76,113,113	1.38	7 (9%)
30	BCR	c	514	-	41,41,41	1.14	2 (4%)	56,56,56	1.24	7 (12%)
33	CLA	7	309	26	65,73,73	1.46	7 (10%)	76,113,113	1.38	8 (10%)
33	CLA	2	309	-	44,51,73	1.88	6 (13%)	50,86,113	1.70	9 (18%)
33	CLA	B	601	-	47,55,73	1.70	7 (14%)	54,91,113	1.53	6 (11%)
30	BCR	d	403	-	41,41,41	1.14	2 (4%)	56,56,56	1.18	4 (7%)
33	CLA	3	307	-	65,73,73	1.48	6 (9%)	76,113,113	1.35	7 (9%)
46	DD6	8	304	-	39,45,45	2.05	3 (7%)	52,67,67	2.52	18 (34%)
47	KC2	6	309	-	48,53,53	1.88	9 (18%)	54,89,89	2.20	14 (25%)
33	CLA	6	311	-	46,54,73	1.77	5 (10%)	53,90,113	1.57	8 (15%)
38	DGD	c	518	-	56,56,67	0.94	2 (3%)	70,70,81	1.38	10 (14%)
33	CLA	B	608	-	65,73,73	1.45	7 (10%)	76,113,113	1.39	8 (10%)
45	A86	5	303	-	44,50,50	1.23	3 (6%)	51,76,76	11.73	23 (45%)
30	BCR	C	514	-	41,41,41	1.15	2 (4%)	56,56,56	1.25	8 (14%)
45	A86	4	302	-	44,50,50	1.25	4 (9%)	51,76,76	12.51	29 (56%)
33	CLA	B	603	-	64,72,73	1.47	7 (10%)	74,111,113	1.36	8 (10%)
36	LHG	A	412	-	48,48,48	0.60	1 (2%)	51,54,54	1.25	6 (11%)
33	CLA	3	309	36	51,59,73	1.66	6 (11%)	59,96,113	1.49	7 (11%)
33	CLA	1	306	29	45,53,73	1.78	5 (11%)	52,89,113	1.62	7 (13%)
33	CLA	C	513	-	49,57,73	1.65	7 (14%)	55,93,113	1.63	8 (14%)
33	CLA	C	504	-	64,72,73	1.44	7 (10%)	74,111,113	1.44	6 (8%)
33	CLA	c	510	-	65,73,73	1.46	7 (10%)	76,113,113	1.41	9 (11%)
33	CLA	5	311	-	55,63,73	1.61	5 (9%)	64,101,113	1.48	8 (12%)
33	CLA	5	308	-	46,54,73	1.74	5 (10%)	53,90,113	1.55	6 (11%)
36	LHG	d	407	-	41,41,48	0.66	1 (2%)	44,47,54	1.28	5 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
33	CLA	4	315	-	47,55,73	1.72	6 (12%)	54,91,113	1.58	8 (14%)
33	CLA	4	306	23	65,73,73	1.46	7 (10%)	76,113,113	1.37	7 (9%)
37	SQD	L	101	-	53,54,54	0.96	5 (9%)	62,65,65	1.51	9 (14%)
36	LHG	A	414	-	48,48,48	0.65	1 (2%)	51,54,54	1.27	6 (11%)
45	A86	7	303	-	44,50,50	1.24	3 (6%)	51,76,76	2.23	16 (31%)
39	LMG	D	404	-	40,40,55	0.83	1 (2%)	48,48,63	1.31	5 (10%)
33	CLA	9	316	29	37,46,73	1.92	6 (16%)	44,80,113	1.66	8 (18%)
33	CLA	6	312	-	65,73,73	1.49	6 (9%)	76,113,113	1.33	6 (7%)
43	LMU	3	301	-	36,36,36	0.38	0	47,47,47	0.81	1 (2%)
38	DGD	c	517	-	57,57,67	0.95	2 (3%)	71,71,81	1.46	12 (16%)
30	BCR	K	101	-	41,41,41	1.14	2 (4%)	56,56,56	1.26	6 (10%)
33	CLA	7	304	-	47,55,73	1.71	6 (12%)	54,91,113	1.58	6 (11%)
33	CLA	B	609	-	65,73,73	1.46	6 (9%)	76,113,113	1.36	7 (9%)
33	CLA	8	315	29	37,46,73	1.86	6 (16%)	44,80,113	1.74	8 (18%)
36	LHG	h	103	-	41,41,48	0.68	1 (2%)	44,47,54	1.30	5 (11%)
33	CLA	b	606	-	65,73,73	1.47	7 (10%)	76,113,113	1.29	8 (10%)
38	DGD	3	320	-	38,38,67	0.63	0	40,40,81	1.49	6 (15%)
33	CLA	3	303	-	65,73,73	1.48	7 (10%)	76,113,113	1.35	8 (10%)
45	A86	9	302	-	44,50,50	1.29	5 (11%)	51,76,76	2.47	18 (35%)
33	CLA	b	614	-	65,73,73	1.47	8 (12%)	76,113,113	1.37	7 (9%)
33	CLA	6	315	-	41,49,73	1.83	6 (14%)	47,84,113	1.68	7 (14%)
38	DGD	A	415	-	54,54,67	1.00	3 (5%)	67,67,81	1.47	12 (17%)
46	DD6	1	303	-	39,45,45	1.96	3 (7%)	52,67,67	2.10	12 (23%)
30	BCR	D	407	-	41,41,41	1.17	3 (7%)	56,56,56	1.20	6 (10%)
33	CLA	B	613	-	65,73,73	1.46	8 (12%)	76,113,113	1.41	7 (9%)
45	A86	5	301	-	44,50,50	1.24	4 (9%)	51,76,76	11.32	26 (50%)
39	LMG	b	622	-	28,28,55	0.98	0	36,36,63	1.31	5 (13%)
33	CLA	9	306	-	45,53,73	1.77	6 (13%)	52,89,113	1.60	6 (11%)
47	KC2	0	306	-	48,53,53	1.82	9 (18%)	54,89,89	2.27	15 (27%)
33	CLA	0	310	-	45,53,73	1.75	6 (13%)	52,89,113	1.65	7 (13%)
39	LMG	b	623	-	40,40,55	0.86	1 (2%)	48,48,63	1.30	5 (10%)
45	A86	5	305	-	43,49,50	1.42	5 (11%)	48,74,76	7.05	25 (52%)
30	BCR	K	102	-	41,41,41	1.18	2 (4%)	56,56,56	1.21	7 (12%)
36	LHG	A	411	-	42,42,48	0.68	1 (2%)	45,48,54	1.21	4 (8%)
33	CLA	w	303	-	65,73,73	1.51	7 (10%)	76,113,113	1.38	8 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
37	SQD	T	101	-	39,40,54	1.14	5 (12%)	48,51,65	2.02	11 (22%)
33	CLA	C	508	-	65,73,73	1.46	7 (10%)	76,113,113	1.38	8 (10%)
33	CLA	c	512	-	64,72,73	1.46	7 (10%)	74,111,113	1.39	7 (9%)
35	BCT	A	410	40	2,3,3	1.32	0	2,3,3	4.05	2 (100%)
33	CLA	4	314	23	56,64,73	1.58	6 (10%)	65,102,113	1.45	7 (10%)
33	CLA	c	505	-	65,73,73	1.46	7 (10%)	76,113,113	1.33	7 (9%)
36	LHG	w	301	-	34,34,48	0.73	1 (2%)	37,40,54	1.23	4 (10%)
33	CLA	9	311	29	55,63,73	1.61	6 (10%)	64,101,113	1.48	7 (10%)
30	BCR	C	515	-	41,41,41	0.75	0	56,56,56	1.92	15 (26%)
33	CLA	1	316	29	37,46,73	1.93	5 (13%)	44,80,113	1.67	7 (15%)
30	BCR	k	101	-	41,41,41	1.13	2 (4%)	56,56,56	1.22	5 (8%)
33	CLA	2	311	29	55,63,73	1.61	5 (9%)	64,101,113	1.44	6 (9%)
39	LMG	7	315	-	55,55,55	0.73	1 (1%)	63,63,63	1.35	6 (9%)
33	CLA	3	306	-	65,73,73	1.51	5 (7%)	76,113,113	1.34	8 (10%)
45	A86	5	304	-	44,50,50	1.23	3 (6%)	51,76,76	11.21	22 (43%)
47	KC2	5	310	-	48,53,53	1.81	9 (18%)	54,89,89	2.31	13 (24%)
33	CLA	C	501	-	65,73,73	1.43	7 (10%)	76,113,113	1.39	7 (9%)
45	A86	1	302	-	44,50,50	1.25	3 (6%)	51,76,76	2.25	17 (33%)
33	CLA	B	602	-	61,69,73	1.47	7 (11%)	67,106,113	1.40	6 (8%)
30	BCR	b	619	-	41,41,41	1.15	2 (4%)	56,56,56	1.20	6 (10%)
33	CLA	b	604	-	64,72,73	1.46	7 (10%)	74,111,113	1.37	8 (10%)
33	CLA	d	409	-	59,67,73	1.50	7 (11%)	68,105,113	1.53	8 (11%)
39	LMG	w	304	-	48,48,55	0.77	1 (2%)	56,56,63	1.33	6 (10%)
45	A86	4	301	-	44,50,50	1.29	4 (9%)	51,76,76	2.20	13 (25%)
33	CLA	A	408	-	60,68,73	1.52	7 (11%)	70,107,113	1.42	8 (11%)
30	BCR	H	101	-	41,41,41	1.16	3 (7%)	56,56,56	1.18	3 (5%)
33	CLA	B	607	-	41,49,73	1.77	7 (17%)	47,84,113	1.73	7 (14%)
33	CLA	8	306	29	45,53,73	1.76	6 (13%)	52,89,113	1.62	7 (13%)
33	CLA	z	101	-	51,59,73	1.69	5 (9%)	59,96,113	1.48	7 (11%)
33	CLA	5	314	24	55,63,73	1.60	5 (9%)	64,101,113	1.45	7 (10%)
37	SQD	i	101	-	39,40,54	1.12	5 (12%)	48,51,65	1.73	11 (22%)
33	CLA	9	313	-	36,44,73	2.09	6 (16%)	42,77,113	1.79	9 (21%)
46	DD6	2	304	-	39,45,45	2.05	3 (7%)	52,67,67	2.23	15 (28%)
45	A86	6	306	-	44,50,50	1.20	3 (6%)	51,76,76	8.91	22 (43%)
33	CLA	B	605	-	65,73,73	1.45	7 (10%)	76,113,113	1.31	8 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
33	CLA	C	512	-	64,72,73	1.44	7 (10%)	74,111,113	1.42	6 (8%)
33	CLA	D	405	-	57,65,73	1.63	8 (14%)	70,103,113	1.49	10 (14%)
33	CLA	3	319	-	55,63,73	1.60	6 (10%)	64,101,113	1.46	6 (9%)
33	CLA	4	312	-	51,59,73	1.68	7 (13%)	59,96,113	1.52	7 (11%)
33	CLA	2	308	-	55,63,73	1.60	5 (9%)	64,101,113	1.49	8 (12%)
33	CLA	b	609	-	65,73,73	1.46	7 (10%)	76,113,113	1.39	7 (9%)
45	A86	7	301	-	44,50,50	1.33	5 (11%)	51,76,76	2.05	16 (31%)
39	LMG	q	301	-	46,46,55	0.76	1 (2%)	54,54,63	1.33	6 (11%)
33	CLA	6	307	-	53,61,73	1.63	6 (11%)	61,98,113	1.57	9 (14%)
33	CLA	5	312	-	46,54,73	1.77	5 (10%)	53,90,113	1.52	7 (13%)
33	CLA	8	305	-	41,49,73	1.84	5 (12%)	47,84,113	1.64	7 (14%)
39	LMG	C	521	-	27,27,55	1.06	1 (3%)	35,35,63	1.15	5 (14%)
33	CLA	b	608	-	41,49,73	1.77	7 (17%)	47,84,113	1.74	7 (14%)
38	DGD	C	516	-	56,56,67	0.98	2 (3%)	70,70,81	1.44	11 (15%)
43	LMU	T	102	-	32,32,36	0.35	0	43,43,47	0.83	0
47	KC2	7	306	-	48,53,53	1.84	9 (18%)	54,89,89	2.29	14 (25%)
33	CLA	9	317	-	55,63,73	1.62	7 (12%)	64,101,113	1.48	7 (10%)
45	A86	8	301	-	44,50,50	1.23	3 (6%)	51,76,76	2.15	16 (31%)
30	BCR	B	618	-	41,41,41	1.14	2 (4%)	56,56,56	1.16	4 (7%)
33	CLA	a	407	-	65,73,73	1.45	7 (10%)	76,113,113	1.42	6 (7%)
33	CLA	2	314	-	37,46,73	1.91	5 (13%)	44,80,113	1.66	7 (15%)
30	BCR	a	412	-	41,41,41	1.17	2 (4%)	56,56,56	1.16	3 (5%)
33	CLA	1	307	-	44,52,73	1.87	6 (13%)	55,88,113	1.61	8 (14%)
39	LMG	q	302	-	37,37,55	0.84	0	45,45,63	1.27	5 (11%)
33	CLA	c	504	-	64,72,73	1.46	7 (10%)	74,111,113	1.43	6 (8%)
33	CLA	2	316	29	37,46,73	1.93	6 (16%)	44,80,113	1.65	7 (15%)
33	CLA	4	308	-	65,73,73	1.47	6 (9%)	76,113,113	1.41	8 (10%)
33	CLA	D	406	-	60,68,73	1.48	7 (11%)	70,107,113	1.53	7 (10%)
36	LHG	D	411	-	41,41,48	0.65	1 (2%)	44,47,54	1.28	4 (9%)
33	CLA	8	312	-	45,53,73	1.77	6 (13%)	52,89,113	1.62	6 (11%)
33	CLA	9	314	-	37,46,73	1.91	6 (16%)	44,80,113	1.62	7 (15%)
43	LMU	4	317	-	36,36,36	0.38	0	47,47,47	0.85	2 (4%)
37	SQD	7	317	-	47,48,54	1.03	5 (10%)	56,59,65	1.55	10 (17%)
33	CLA	4	313	23	41,49,73	1.82	6 (14%)	47,84,113	1.66	8 (17%)
33	CLA	7	307	-	65,73,73	1.42	6 (9%)	76,113,113	1.45	8 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
45	A86	6	301	-	44,50,50	1.25	5 (11%)	51,76,76	11.60	24 (47%)
45	A86	5	302	-	44,50,50	1.26	4 (9%)	51,76,76	12.11	24 (47%)
33	CLA	A	404	-	65,73,73	1.44	7 (10%)	76,113,113	1.43	7 (9%)
33	CLA	5	313	-	65,73,73	1.48	6 (9%)	76,113,113	1.39	7 (9%)
37	SQD	0	316	-	47,48,54	1.03	5 (10%)	56,59,65	1.52	9 (16%)
33	CLA	2	310	29	65,73,73	1.47	6 (9%)	76,113,113	1.43	7 (9%)
33	CLA	C	503	-	65,73,73	1.47	7 (10%)	76,113,113	1.39	8 (10%)
44	KC1	5	315	-	48,53,53	1.51	7 (14%)	55,89,89	1.77	11 (20%)
38	DGD	h	102	-	63,63,67	0.90	3 (4%)	77,77,81	1.38	9 (11%)
33	CLA	2	315	-	37,46,73	1.93	6 (16%)	44,80,113	1.69	8 (18%)
45	A86	6	304	-	44,50,50	1.24	3 (6%)	51,76,76	11.87	21 (41%)
33	CLA	C	502	-	64,72,73	1.48	8 (12%)	74,111,113	1.36	8 (10%)
33	CLA	2	317	-	55,63,73	1.61	6 (10%)	64,101,113	1.45	8 (12%)
33	CLA	d	402	-	60,68,73	1.51	7 (11%)	70,107,113	1.53	8 (11%)
45	A86	1	301	-	44,50,50	1.22	3 (6%)	51,76,76	1.99	13 (25%)
33	CLA	0	305	26	65,73,73	1.47	6 (9%)	76,113,113	1.42	8 (10%)
33	CLA	C	506	-	45,53,73	1.76	7 (15%)	52,89,113	1.59	7 (13%)
33	CLA	b	612	-	64,72,73	1.47	7 (10%)	74,111,113	1.44	9 (12%)
37	SQD	B	622	-	53,54,54	0.96	5 (9%)	62,65,65	1.78	10 (16%)
37	SQD	T	103	-	53,54,54	0.94	5 (9%)	62,65,65	1.59	11 (17%)
45	A86	0	301	-	44,50,50	1.32	5 (11%)	51,76,76	2.05	16 (31%)
33	CLA	2	307	-	44,52,73	1.88	7 (15%)	55,88,113	1.62	8 (14%)
46	DD6	1	304	-	39,45,45	2.10	4 (10%)	52,67,67	2.35	16 (30%)
36	LHG	D	409	-	46,47,48	0.64	2 (4%)	45,51,54	1.18	5 (11%)
33	CLA	B	614	-	64,72,73	1.45	7 (10%)	74,111,113	1.40	7 (9%)
36	LHG	a	403	-	42,42,48	0.68	1 (2%)	45,48,54	1.21	4 (8%)
33	CLA	b	615	-	64,72,73	1.45	7 (10%)	74,111,113	1.40	7 (9%)
33	CLA	B	616	-	65,73,73	1.51	8 (12%)	76,113,113	1.36	8 (10%)
36	LHG	3	318	-	48,48,48	0.62	1 (2%)	51,54,54	1.26	6 (11%)
36	LHG	W	302	-	34,34,48	0.75	1 (2%)	37,40,54	1.21	3 (8%)
45	A86	4	304	-	44,50,50	1.22	3 (6%)	51,76,76	2.21	17 (33%)
44	KC1	6	314	25	48,53,53	1.59	7 (14%)	55,89,89	1.88	12 (21%)
33	CLA	b	616	-	65,73,73	1.48	8 (12%)	76,113,113	1.34	7 (9%)
45	A86	3	314	-	44,50,50	1.24	3 (6%)	51,76,76	2.23	17 (33%)
33	CLA	b	611	-	65,73,73	1.47	8 (12%)	76,113,113	1.38	7 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
33	CLA	9	307	-	44,52,73	1.86	7 (15%)	55,88,113	1.60	8 (14%)
33	CLA	1	312	-	45,53,73	1.79	5 (11%)	52,89,113	1.61	6 (11%)
33	CLA	7	312	-	65,73,73	1.47	6 (9%)	76,113,113	1.35	7 (9%)
30	BCR	B	619	-	41,41,41	1.17	2 (4%)	56,56,56	1.20	4 (7%)
33	CLA	B	604	-	61,69,73	1.49	6 (9%)	71,108,113	1.47	9 (12%)
35	BCT	a	402	40	2,3,3	1.17	0	2,3,3	4.27	2 (100%)
37	SQD	D	403	-	53,54,54	0.95	5 (9%)	62,65,65	1.48	9 (14%)
33	CLA	9	309	29	44,51,73	1.91	7 (15%)	50,86,113	1.68	8 (16%)
39	LMG	C	519	-	46,46,55	0.77	1 (2%)	54,54,63	1.37	7 (12%)
39	LMG	D	410	-	46,46,55	0.81	1 (2%)	54,54,63	1.34	5 (9%)
46	DD6	8	303	-	39,45,45	1.96	3 (7%)	52,67,67	2.10	12 (23%)
33	CLA	1	311	29	55,63,73	1.61	5 (9%)	64,101,113	1.47	8 (12%)
45	A86	6	305	-	44,50,50	1.25	4 (9%)	51,76,76	9.10	23 (45%)
33	CLA	5	317	-	37,46,73	1.92	5 (13%)	44,80,113	1.67	8 (18%)
45	A86	2	302	-	44,50,50	1.29	5 (11%)	51,76,76	2.47	18 (35%)
33	CLA	C	507	-	65,73,73	1.44	7 (10%)	76,113,113	1.41	7 (9%)
45	A86	2	301	-	44,50,50	1.20	3 (6%)	51,76,76	2.17	16 (31%)
39	LMG	M	201	-	40,40,55	0.85	2 (5%)	48,48,63	1.31	5 (10%)
33	CLA	1	308	-	55,63,73	1.59	5 (9%)	64,101,113	1.51	8 (12%)
30	BCR	B	617	-	41,41,41	1.21	3 (7%)	56,56,56	1.21	7 (12%)
33	CLA	3	305	-	48,56,73	1.70	7 (14%)	55,92,113	1.59	8 (14%)
33	CLA	1	315	-	37,46,73	1.89	5 (13%)	44,80,113	1.69	7 (15%)
30	BCR	h	101	-	41,41,41	1.15	3 (7%)	56,56,56	1.19	4 (7%)
39	LMG	d	410	-	37,37,55	0.86	0	45,45,63	1.28	6 (13%)
33	CLA	W	303	-	65,73,73	1.50	7 (10%)	76,113,113	1.41	10 (13%)
33	CLA	8	310	29	65,73,73	1.50	7 (10%)	76,113,113	1.39	6 (7%)
33	CLA	4	305	-	55,63,73	1.60	6 (10%)	64,101,113	1.45	7 (10%)
46	DD6	3	315	-	39,45,45	1.99	3 (7%)	52,67,67	1.99	15 (28%)
33	CLA	C	505	-	65,73,73	1.47	6 (9%)	76,113,113	1.29	7 (9%)
33	CLA	7	314	-	42,51,73	1.75	6 (14%)	50,86,113	1.61	6 (12%)
33	CLA	c	509	-	65,73,73	1.45	6 (9%)	76,113,113	1.44	7 (9%)
45	A86	9	301	-	44,50,50	1.19	3 (6%)	51,76,76	2.18	16 (31%)
30	BCR	k	102	-	41,41,41	1.16	2 (4%)	56,56,56	1.23	6 (10%)
33	CLA	0	304	-	47,55,73	1.70	6 (12%)	54,91,113	1.57	7 (12%)
34	PHO	a	410	-	51,69,69	1.01	4 (7%)	47,99,99	1.22	6 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
30	BCR	b	618	-	41,41,41	1.20	3 (7%)	56,56,56	1.23	7 (12%)
33	CLA	8	311	29	55,63,73	1.59	6 (10%)	64,101,113	1.46	8 (12%)
33	CLA	a	408	-	49,57,73	1.66	8 (16%)	55,93,113	1.59	8 (14%)
33	CLA	5	316	-	41,49,73	1.84	5 (12%)	47,84,113	1.65	8 (17%)
33	CLA	6	308	25	54,62,73	1.63	5 (9%)	62,99,113	1.51	8 (12%)
33	CLA	2	306	-	45,53,73	1.77	5 (11%)	52,89,113	1.64	6 (11%)
45	A86	5	306	-	44,50,50	1.24	4 (9%)	51,76,76	7.71	25 (49%)
46	DD6	9	304	-	39,45,45	2.05	3 (7%)	52,67,67	2.23	15 (28%)
33	CLA	Z	101	-	51,59,73	1.66	6 (11%)	59,96,113	1.49	7 (11%)
33	CLA	3	312	-	56,64,73	1.62	6 (10%)	65,102,113	1.45	7 (10%)
43	LMU	t	101	-	32,32,36	0.35	0	43,43,47	0.80	1 (2%)
33	CLA	4	309	23	65,73,73	1.48	5 (7%)	76,113,113	1.37	6 (7%)
33	CLA	B	611	-	64,72,73	1.46	7 (10%)	74,111,113	1.38	10 (13%)
33	CLA	c	511	3	65,73,73	1.44	7 (10%)	76,113,113	1.43	7 (9%)
39	LMG	c	519	-	48,48,55	0.86	2 (4%)	56,56,63	1.28	5 (8%)
38	DGD	H	102	-	63,63,67	0.89	2 (3%)	77,77,81	1.39	10 (12%)
38	DGD	C	518	-	56,56,67	0.99	2 (3%)	70,70,81	1.40	10 (14%)
44	KC1	3	310	-	48,53,53	1.50	7 (14%)	55,89,89	1.88	9 (16%)
33	CLA	C	511	3	65,73,73	1.46	7 (10%)	76,113,113	1.41	7 (9%)
33	CLA	5	309	24	55,63,73	1.59	5 (9%)	64,101,113	1.49	7 (10%)
33	CLA	3	302	-	65,73,73	1.46	6 (9%)	76,113,113	1.40	7 (9%)
39	LMG	c	520	-	27,27,55	1.03	0	35,35,63	1.18	5 (14%)
39	LMG	C	520	-	48,48,55	0.80	1 (2%)	56,56,63	1.33	6 (10%)
45	A86	0	303	-	44,50,50	1.26	4 (9%)	51,76,76	2.07	14 (27%)
42	HEM	e	101	6	41,50,50	1.35	6 (14%)	45,82,82	1.86	9 (20%)
33	CLA	1	314	-	37,46,73	1.95	5 (13%)	44,80,113	1.61	7 (15%)
36	LHG	a	404	-	48,48,48	0.61	1 (2%)	51,54,54	1.25	6 (11%)
39	LMG	C	522	-	23,23,55	1.37	2 (8%)	31,31,63	1.50	7 (22%)
34	PHO	a	409	-	51,69,69	1.00	4 (7%)	47,99,99	1.20	6 (12%)
33	CLA	0	308	-	41,49,73	1.82	6 (14%)	47,84,113	1.67	9 (19%)
33	CLA	0	313	-	35,42,73	2.41	8 (22%)	41,73,113	1.67	8 (19%)
33	CLA	C	509	-	65,73,73	1.44	7 (10%)	76,113,113	1.43	7 (9%)
39	LMG	5	319	-	31,31,55	0.95	0	39,39,63	1.33	5 (12%)
36	LHG	b	601	-	48,48,48	0.65	1 (2%)	51,54,54	1.28	6 (11%)
39	LMG	0	314	-	42,42,55	0.92	2 (4%)	50,50,63	1.26	3 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
33	CLA	7	311	-	51,59,73	1.62	6 (11%)	59,96,113	1.60	6 (10%)
34	PHO	A	407	-	51,69,69	1.01	4 (7%)	47,99,99	1.17	6 (12%)
33	CLA	c	503	-	65,73,73	1.47	7 (10%)	76,113,113	1.39	7 (9%)
33	CLA	b	610	-	65,73,73	1.44	7 (10%)	76,113,113	1.43	8 (10%)
36	LHG	H	104	-	41,41,48	0.67	1 (2%)	44,47,54	1.30	5 (11%)
33	CLA	C	510	-	65,73,73	1.46	6 (9%)	76,113,113	1.43	8 (10%)
33	CLA	7	308	26	41,49,73	1.83	6 (14%)	47,84,113	1.63	8 (17%)
41	PL9	d	404	-	55,55,55	1.28	5 (9%)	68,69,69	1.48	10 (14%)
33	CLA	4	310	-	46,54,73	1.73	7 (15%)	53,90,113	1.59	6 (11%)
39	LMG	d	406	-	46,46,55	0.80	1 (2%)	54,54,63	1.35	6 (11%)
33	CLA	B	612	-	65,73,73	1.45	7 (10%)	76,113,113	1.43	8 (10%)
33	CLA	3	311	-	41,49,73	1.81	6 (14%)	47,84,113	1.69	7 (14%)
33	CLA	3	313	-	61,69,73	1.52	6 (9%)	71,108,113	1.40	7 (9%)
33	CLA	0	311	-	51,59,73	1.65	6 (11%)	59,96,113	1.60	7 (11%)
36	LHG	d	405	-	46,47,48	0.63	2 (4%)	45,51,54	1.18	5 (11%)
33	CLA	2	312	-	45,53,73	1.79	6 (13%)	52,89,113	1.58	6 (11%)
33	CLA	8	314	-	37,46,73	1.93	6 (16%)	44,80,113	1.63	7 (15%)
33	CLA	B	610	-	65,73,73	1.47	8 (12%)	76,113,113	1.37	7 (9%)
33	CLA	7	313	26	35,42,73	2.42	8 (22%)	41,73,113	1.68	7 (17%)
37	SQD	l	101	-	53,54,54	0.96	5 (9%)	62,65,65	1.46	9 (14%)
33	CLA	b	602	-	47,55,73	1.67	6 (12%)	54,91,113	1.60	7 (12%)
33	CLA	8	316	29	37,46,73	1.91	6 (16%)	44,80,113	1.67	7 (15%)
36	LHG	7	316	-	27,27,48	0.88	2 (7%)	31,32,54	1.70	4 (12%)
43	LMU	w	302	-	36,36,36	0.34	0	47,47,47	1.02	3 (6%)
33	CLA	4	311	23	60,68,73	1.52	7 (11%)	70,107,113	1.39	8 (11%)
30	BCR	c	515	-	41,41,41	0.80	1 (2%)	56,56,56	2.00	15 (26%)
33	CLA	6	313	25	46,54,73	1.75	5 (10%)	53,90,113	1.54	7 (13%)
33	CLA	A	405	-	49,57,73	1.65	7 (14%)	55,93,113	1.62	8 (14%)
33	CLA	7	310	26	45,53,73	1.76	6 (13%)	52,89,113	1.62	7 (13%)
38	DGD	C	517	-	57,57,67	0.99	2 (3%)	71,71,81	1.46	10 (14%)
39	LMG	3	316	-	31,31,55	0.93	0	39,39,63	1.25	5 (12%)
33	CLA	1	305	-	41,49,73	1.86	5 (12%)	47,84,113	1.64	7 (14%)
33	CLA	c	501	-	65,73,73	1.46	7 (10%)	76,113,113	1.32	6 (7%)
41	PL9	D	408	-	55,55,55	1.32	5 (9%)	68,69,69	1.50	12 (17%)
36	LHG	0	315	-	27,27,48	0.91	2 (7%)	31,32,54	1.68	4 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
30	BCR	A	409	-	41,41,41	1.16	2 (4%)	56,56,56	1.15	4 (7%)
37	SQD	a	413	-	53,54,54	0.94	5 (9%)	62,65,65	1.60	11 (17%)

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
33	CLA	b	613	-	1/1/15/20	15/37/115/115	-
48	ET4	0	302	-	-	13/25/67/67	0/2/2/2
33	CLA	9	312	-	1/1/11/20	5/13/91/115	-
33	CLA	d	401	-	1/1/13/20	6/28/104/115	-
42	HEM	F	101	6	-	3/12/54/54	-
33	CLA	c	502	-	1/1/14/20	14/35/113/115	-
33	CLA	c	506	-	1/1/11/20	5/13/91/115	-
33	CLA	0	312	-	1/1/15/20	18/37/115/115	-
33	CLA	2	313	29	-	0/0/78/115	-
33	CLA	6	310	-	1/1/12/20	7/22/100/115	-
33	CLA	3	308	22	1/1/15/20	16/37/115/115	-
33	CLA	b	605	-	1/1/14/20	9/33/111/115	-
33	CLA	D	402	-	1/1/13/20	4/30/108/115	-
33	CLA	7	305	26	1/1/15/20	21/37/115/115	-
33	CLA	c	513	-	1/1/11/20	5/18/96/115	-
33	CLA	1	309	-	1/1/11/20	7/11/89/115	-
30	BCR	b	620	-	-	8/29/63/63	0/2/2/2
46	DD6	9	303	-	-	4/26/80/80	0/3/3/3
33	CLA	b	603	-	1/1/12/20	9/27/107/115	-
30	BCR	a	414	-	-	4/29/63/63	0/2/2/2
33	CLA	B	606	-	1/1/15/20	8/37/115/115	-
36	LHG	3	317	33	-	12/31/31/53	-
33	CLA	9	308	-	1/1/13/20	11/25/103/115	-
46	DD6	2	303	-	-	4/26/80/80	0/3/3/3
33	CLA	a	411	-	1/1/14/20	5/31/109/115	-
37	SQD	t	102	-	-	18/34/54/69	0/1/1/1
33	CLA	6	316	-	1/1/9/20	2/8/80/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
33	CLA	9	315	-	1/1/9/20	0/2/80/115	-
33	CLA	B	615	-	1/1/15/20	6/37/115/115	-
33	CLA	8	307	-	1/1/11/20	5/13/89/115	-
45	A86	8	302	-	-	8/34/90/90	0/3/3/3
33	CLA	c	508	-	1/1/15/20	10/37/115/115	-
43	LMU	5	320	-	-	9/17/57/61	0/2/2/2
33	CLA	9	310	29	1/1/15/20	15/37/115/115	-
38	DGD	c	516	-	-	14/44/84/95	0/2/2/2
39	LMG	m	201	-	-	16/35/55/70	0/1/1/1
34	PHO	A	406	-	-	14/37/103/103	0/5/6/6
33	CLA	8	309	-	1/1/11/20	6/11/89/115	-
33	CLA	c	507	-	1/1/15/20	13/37/115/115	-
33	CLA	3	304	-	1/1/15/20	12/37/115/115	-
47	KC2	4	307	-	-	8/15/71/71	-
39	LMG	B	620	-	-	19/46/66/70	0/1/1/1
33	CLA	4	316	-	1/1/12/20	4/22/100/115	-
30	BCR	A	401	-	-	5/29/63/63	0/2/2/2
39	LMG	B	621	-	-	6/23/43/70	0/1/1/1
45	A86	5	307	-	-	8/34/90/90	0/3/3/3
46	DD6	4	303	-	-	3/26/80/80	0/3/3/3
33	CLA	2	305	-	1/1/10/20	2/8/86/115	-
36	LHG	4	318	-	-	31/53/53/53	-
33	CLA	8	308	-	1/1/13/20	11/25/103/115	-
39	LMG	W	301	-	-	18/43/63/70	0/1/1/1
45	A86	6	303	-	-	8/34/90/90	0/3/3/3
33	CLA	b	607	-	1/1/15/20	8/37/115/115	-
39	LMG	b	621	-	-	20/46/66/70	0/1/1/1
33	CLA	0	307	-	1/1/15/20	13/37/115/115	-
33	CLA	1	313	29	1/1/9/20	0/0/78/115	-
38	DGD	a	401	-	-	27/43/79/95	0/2/2/2
45	A86	6	302	-	-	8/34/90/90	0/3/3/3
33	CLA	0	309	26	1/1/15/20	13/37/115/115	-
48	ET4	7	302	-	-	11/25/67/67	0/2/2/2
39	LMG	Q	301	-	-	16/32/52/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
33	CLA	b	617	-	1/1/15/20	16/37/115/115	-
42	HEM	V	201	18	-	4/12/54/54	-
36	LHG	5	318	-	-	13/34/34/53	-
37	SQD	A	413	-	-	13/35/55/69	0/1/1/1
33	CLA	8	313	29	1/1/9/20	0/0/78/115	-
33	CLA	H	103	26	1/1/10/20	4/9/87/115	-
33	CLA	9	305	-	1/1/10/20	2/8/86/115	-
42	HEM	v	201	18	-	5/12/54/54	-
33	CLA	1	310	-	1/1/15/20	17/37/115/115	-
33	CLA	7	309	26	1/1/15/20	18/37/115/115	-
30	BCR	c	514	-	-	5/29/63/63	0/2/2/2
33	CLA	2	309	-	1/1/11/20	6/11/89/115	-
33	CLA	B	601	-	1/1/11/20	7/16/94/115	-
30	BCR	d	403	-	-	8/29/63/63	0/2/2/2
33	CLA	3	307	-	1/1/15/20	11/37/115/115	-
46	DD6	8	304	-	-	10/26/80/80	0/3/3/3
47	KC2	6	309	-	-	7/15/71/71	-
33	CLA	6	311	-	1/1/11/20	8/15/93/115	-
38	DGD	c	518	-	-	15/44/84/95	0/2/2/2
33	CLA	B	608	-	1/1/15/20	5/37/115/115	-
45	A86	5	303	-	-	9/34/90/90	0/3/3/3
30	BCR	C	514	-	-	4/29/63/63	0/2/2/2
45	A86	4	302	-	-	9/34/90/90	0/3/3/3
33	CLA	B	603	-	1/1/14/20	11/35/113/115	-
36	LHG	A	412	-	-	27/53/53/53	-
33	CLA	3	309	36	1/1/12/20	5/21/99/115	-
33	CLA	1	306	29	1/1/11/20	6/13/91/115	-
33	CLA	C	513	-	1/1/11/20	5/18/96/115	-
33	CLA	C	504	-	1/1/14/20	13/35/113/115	-
33	CLA	c	510	-	1/1/15/20	12/37/115/115	-
33	CLA	5	311	-	1/1/13/20	7/25/103/115	-
33	CLA	5	308	-	1/1/11/20	9/15/93/115	-
36	LHG	d	407	-	-	18/46/46/53	-
33	CLA	4	315	-	1/1/11/20	4/16/94/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
33	CLA	4	306	23	1/1/15/20	5/37/115/115	-
37	SQD	L	101	-	-	23/49/69/69	0/1/1/1
36	LHG	A	414	-	-	17/53/53/53	-
45	A86	7	303	-	-	6/34/90/90	0/3/3/3
39	LMG	D	404	-	-	20/35/55/70	0/1/1/1
33	CLA	9	316	29	1/1/9/20	0/2/80/115	-
33	CLA	6	312	-	1/1/15/20	11/37/115/115	-
43	LMU	3	301	-	-	17/21/61/61	0/2/2/2
38	DGD	c	517	-	-	21/45/85/95	0/2/2/2
30	BCR	K	101	-	-	19/29/63/63	0/2/2/2
33	CLA	7	304	-	1/1/11/20	7/16/94/115	-
33	CLA	B	609	-	1/1/15/20	11/37/115/115	-
33	CLA	8	315	29	1/1/9/20	0/2/80/115	-
36	LHG	h	103	-	-	18/46/46/53	-
33	CLA	b	606	-	1/1/15/20	10/37/115/115	-
38	DGD	3	320	-	-	20/40/40/95	-
33	CLA	3	303	-	1/1/15/20	15/37/115/115	-
45	A86	9	302	-	-	8/34/90/90	0/3/3/3
33	CLA	b	614	-	1/1/15/20	12/37/115/115	-
33	CLA	6	315	-	1/1/10/20	3/8/86/115	-
38	DGD	A	415	-	-	24/43/79/95	0/2/2/2
46	DD6	1	303	-	-	3/26/80/80	0/3/3/3
30	BCR	D	407	-	-	4/29/63/63	0/2/2/2
33	CLA	B	613	-	1/1/15/20	14/37/115/115	-
45	A86	5	301	-	-	11/34/90/90	0/3/3/3
39	LMG	b	622	-	-	4/23/43/70	0/1/1/1
33	CLA	9	306	-	1/1/11/20	7/13/91/115	-
47	KC2	0	306	-	-	11/15/71/71	-
33	CLA	0	310	-	1/1/11/20	8/13/91/115	-
39	LMG	b	623	-	-	22/35/55/70	0/1/1/1
45	A86	5	305	-	-	8/33/89/90	0/3/3/3
30	BCR	K	102	-	-	4/29/63/63	0/2/2/2
36	LHG	A	411	-	-	14/47/47/53	-
33	CLA	w	303	-	1/1/15/20	17/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
37	SQD	T	101	-	-	16/34/54/69	0/1/1/1
33	CLA	C	508	-	1/1/15/20	7/37/115/115	-
33	CLA	c	512	-	1/1/14/20	11/35/113/115	-
33	CLA	4	314	23	1/1/13/20	5/27/105/115	-
33	CLA	c	505	-	1/1/15/20	16/37/115/115	-
36	LHG	w	301	-	-	22/39/39/53	-
33	CLA	9	311	29	1/1/13/20	8/25/103/115	-
30	BCR	C	515	-	-	9/29/63/63	0/2/2/2
33	CLA	1	316	29	1/1/9/20	0/2/80/115	-
30	BCR	k	101	-	-	24/29/63/63	0/2/2/2
33	CLA	2	311	29	1/1/13/20	9/25/103/115	-
39	LMG	7	315	-	-	26/50/70/70	0/1/1/1
33	CLA	3	306	-	1/1/15/20	12/37/115/115	-
45	A86	5	304	-	-	8/34/90/90	0/3/3/3
47	KC2	5	310	-	-	6/15/71/71	-
33	CLA	C	501	-	1/1/15/20	21/37/115/115	-
45	A86	1	302	-	-	8/34/90/90	0/3/3/3
33	CLA	B	602	-	1/1/12/20	12/27/107/115	-
30	BCR	b	619	-	-	5/29/63/63	0/2/2/2
33	CLA	b	604	-	1/1/14/20	14/35/113/115	-
33	CLA	d	409	-	1/1/13/20	6/30/108/115	-
39	LMG	w	304	-	-	20/43/63/70	0/1/1/1
45	A86	4	301	-	-	9/34/90/90	0/3/3/3
33	CLA	A	408	-	1/1/14/20	7/31/109/115	-
30	BCR	H	101	-	-	5/29/63/63	0/2/2/2
33	CLA	B	607	-	1/1/10/20	3/8/86/115	-
33	CLA	8	306	29	1/1/11/20	6/13/91/115	-
33	CLA	z	101	-	1/1/12/20	4/21/99/115	-
33	CLA	5	314	24	1/1/13/20	4/25/103/115	-
37	SQD	i	101	-	-	9/35/55/69	0/1/1/1
33	CLA	9	313	-	1/1/9/20	0/0/78/115	-
46	DD6	2	304	-	-	10/26/80/80	0/3/3/3
45	A86	6	306	-	-	8/34/90/90	0/3/3/3
33	CLA	B	605	-	1/1/15/20	15/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
33	CLA	C	512	-	1/1/14/20	12/35/113/115	-
33	CLA	D	405	-	1/1/13/20	5/28/104/115	-
33	CLA	3	319	-	1/1/13/20	9/25/103/115	-
33	CLA	4	312	-	1/1/12/20	7/21/99/115	-
33	CLA	2	308	-	1/1/13/20	13/25/103/115	-
33	CLA	b	609	-	1/1/15/20	5/37/115/115	-
45	A86	7	301	-	-	8/34/90/90	0/3/3/3
39	LMG	q	301	-	-	22/41/61/70	0/1/1/1
33	CLA	6	307	-	1/1/12/20	6/23/101/115	-
33	CLA	5	312	-	1/1/11/20	7/15/93/115	-
33	CLA	8	305	-	1/1/10/20	2/8/86/115	-
39	LMG	C	521	-	-	4/21/41/70	0/1/1/1
33	CLA	b	608	-	1/1/10/20	5/8/86/115	-
38	DGD	C	516	-	-	19/44/84/95	0/2/2/2
43	LMU	T	102	-	-	9/17/57/61	0/2/2/2
47	KC2	7	306	-	-	8/15/71/71	-
33	CLA	9	317	-	1/1/13/20	9/25/103/115	-
45	A86	8	301	-	-	8/34/90/90	0/3/3/3
30	BCR	B	618	-	-	5/29/63/63	0/2/2/2
33	CLA	a	407	-	1/1/15/20	8/37/115/115	-
33	CLA	2	314	-	1/1/9/20	0/2/80/115	-
30	BCR	a	412	-	-	4/29/63/63	0/2/2/2
33	CLA	1	307	-	1/1/11/20	3/13/89/115	-
39	LMG	q	302	-	-	18/32/52/70	0/1/1/1
33	CLA	c	504	-	1/1/14/20	12/35/113/115	-
33	CLA	2	316	29	1/1/9/20	0/2/80/115	-
33	CLA	4	308	-	1/1/15/20	10/37/115/115	-
33	CLA	D	406	-	1/1/14/20	10/31/109/115	-
36	LHG	D	411	-	-	19/46/46/53	-
33	CLA	8	312	-	1/1/11/20	4/13/91/115	-
33	CLA	9	314	-	1/1/9/20	0/2/80/115	-
43	LMU	4	317	-	-	14/21/61/61	0/2/2/2
37	SQD	7	317	-	-	13/43/63/69	0/1/1/1
33	CLA	4	313	23	1/1/10/20	0/8/86/115	-
33	CLA	7	307	-	1/1/15/20	13/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
45	A86	6	301	-	-	7/34/90/90	0/3/3/3
45	A86	5	302	-	-	9/34/90/90	0/3/3/3
33	CLA	A	404	-	1/1/15/20	9/37/115/115	-
33	CLA	5	313	-	1/1/15/20	11/37/115/115	-
37	SQD	0	316	-	-	14/43/63/69	0/1/1/1
33	CLA	2	310	29	1/1/15/20	13/37/115/115	-
33	CLA	C	503	-	1/1/15/20	15/37/115/115	-
44	KC1	5	315	-	-	8/15/71/71	-
38	DGD	h	102	-	-	16/51/91/95	0/2/2/2
33	CLA	2	315	-	1/1/9/20	0/2/80/115	-
45	A86	6	304	-	-	9/34/90/90	0/3/3/3
33	CLA	C	502	-	1/1/14/20	17/35/113/115	-
33	CLA	2	317	-	1/1/13/20	8/25/103/115	-
33	CLA	d	402	-	1/1/14/20	10/31/109/115	-
45	A86	1	301	-	-	5/34/90/90	0/3/3/3
33	CLA	0	305	26	1/1/15/20	18/37/115/115	-
33	CLA	C	506	-	1/1/11/20	5/13/91/115	-
33	CLA	b	612	-	1/1/14/20	6/35/113/115	-
37	SQD	B	622	-	-	21/49/69/69	0/1/1/1
37	SQD	T	103	-	-	21/49/69/69	0/1/1/1
45	A86	0	301	-	-	8/34/90/90	0/3/3/3
33	CLA	2	307	-	1/1/11/20	7/13/89/115	-
46	DD6	1	304	-	-	7/26/80/80	0/3/3/3
36	LHG	D	409	-	-	18/47/51/53	-
33	CLA	B	614	-	1/1/14/20	13/35/113/115	-
36	LHG	a	403	-	-	12/47/47/53	-
33	CLA	b	615	-	1/1/14/20	14/35/113/115	-
33	CLA	B	616	-	1/1/15/20	12/37/115/115	-
36	LHG	3	318	-	-	23/53/53/53	-
36	LHG	W	302	-	-	23/39/39/53	-
45	A86	4	304	-	-	3/34/90/90	0/3/3/3
44	KC1	6	314	25	-	7/15/71/71	-
33	CLA	b	616	-	1/1/15/20	6/37/115/115	-
45	A86	3	314	-	-	7/34/90/90	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
33	CLA	b	611	-	1/1/15/20	7/37/115/115	-
33	CLA	9	307	-	1/1/11/20	5/13/89/115	-
33	CLA	1	312	-	1/1/11/20	6/13/91/115	-
33	CLA	7	312	-	1/1/15/20	15/37/115/115	-
30	BCR	B	619	-	-	8/29/63/63	0/2/2/2
33	CLA	B	604	-	1/1/14/20	10/33/111/115	-
37	SQD	D	403	-	-	21/49/69/69	0/1/1/1
33	CLA	9	309	29	1/1/11/20	5/11/89/115	-
39	LMG	C	519	-	-	18/41/61/70	0/1/1/1
39	LMG	D	410	-	-	15/41/61/70	0/1/1/1
46	DD6	8	303	-	-	3/26/80/80	0/3/3/3
33	CLA	1	311	29	1/1/13/20	7/25/103/115	-
45	A86	6	305	-	-	8/34/90/90	0/3/3/3
33	CLA	5	317	-	1/1/9/20	0/2/80/115	-
45	A86	2	302	-	-	8/34/90/90	0/3/3/3
33	CLA	C	507	-	1/1/15/20	15/37/115/115	-
45	A86	2	301	-	-	7/34/90/90	0/3/3/3
39	LMG	M	201	-	-	14/35/55/70	0/1/1/1
33	CLA	1	308	-	1/1/13/20	8/25/103/115	-
30	BCR	B	617	-	-	2/29/63/63	0/2/2/2
33	CLA	3	305	-	1/1/11/20	10/17/95/115	-
33	CLA	1	315	-	1/1/9/20	0/2/80/115	-
30	BCR	h	101	-	-	4/29/63/63	0/2/2/2
39	LMG	d	410	-	-	17/32/52/70	0/1/1/1
33	CLA	W	303	-	1/1/15/20	15/37/115/115	-
33	CLA	8	310	29	1/1/15/20	16/37/115/115	-
33	CLA	4	305	-	1/1/13/20	7/25/103/115	-
46	DD6	3	315	-	-	5/26/80/80	0/3/3/3
33	CLA	C	505	-	1/1/15/20	16/37/115/115	-
33	CLA	7	314	-	1/1/10/20	4/9/87/115	-
33	CLA	c	509	-	1/1/15/20	6/37/115/115	-
45	A86	9	301	-	-	7/34/90/90	0/3/3/3
30	BCR	k	102	-	-	4/29/63/63	0/2/2/2
33	CLA	0	304	-	1/1/11/20	10/16/94/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
34	PHO	a	410	-	-	3/37/103/103	0/5/6/6
30	BCR	b	618	-	-	3/29/63/63	0/2/2/2
33	CLA	8	311	29	1/1/13/20	6/25/103/115	-
33	CLA	a	408	-	1/1/11/20	4/18/96/115	-
33	CLA	5	316	-	1/1/10/20	2/8/86/115	-
33	CLA	6	308	25	1/1/12/20	4/24/102/115	-
33	CLA	2	306	-	1/1/11/20	5/13/91/115	-
45	A86	5	306	-	-	8/34/90/90	0/3/3/3
46	DD6	9	304	-	-	10/26/80/80	0/3/3/3
33	CLA	Z	101	-	1/1/12/20	2/21/99/115	-
33	CLA	3	312	-	1/1/13/20	12/27/105/115	-
43	LMU	t	101	-	-	12/17/57/61	0/2/2/2
33	CLA	4	309	23	1/1/15/20	3/37/115/115	-
33	CLA	B	611	-	1/1/14/20	10/35/113/115	-
33	CLA	c	511	3	1/1/15/20	8/37/115/115	-
39	LMG	c	519	-	-	21/43/63/70	0/1/1/1
38	DGD	H	102	-	-	16/51/91/95	0/2/2/2
38	DGD	C	518	-	-	13/44/84/95	0/2/2/2
44	KC1	3	310	-	-	9/15/71/71	-
33	CLA	C	511	3	1/1/15/20	9/37/115/115	-
33	CLA	5	309	24	1/1/13/20	3/25/103/115	-
33	CLA	3	302	-	1/1/15/20	18/37/115/115	-
39	LMG	c	520	-	-	7/21/41/70	0/1/1/1
39	LMG	C	520	-	-	19/43/63/70	0/1/1/1
45	A86	0	303	-	-	4/34/90/90	0/3/3/3
42	HEM	e	101	6	-	7/12/54/54	-
33	CLA	1	314	-	1/1/9/20	0/2/80/115	-
36	LHG	a	404	-	-	26/53/53/53	-
39	LMG	C	522	-	-	7/16/36/70	0/1/1/1
34	PHO	a	409	-	-	13/37/103/103	0/5/6/6
33	CLA	0	308	-	1/1/10/20	2/8/86/115	-
33	CLA	0	313	-	1/1/8/20	0/2/74/115	-
33	CLA	C	509	-	1/1/15/20	10/37/115/115	-
39	LMG	5	319	-	-	13/26/46/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
36	LHG	b	601	-	-	21/53/53/53	-
39	LMG	0	314	-	-	20/37/57/70	0/1/1/1
33	CLA	7	311	-	1/1/12/20	11/21/99/115	-
34	PHO	A	407	-	-	8/37/103/103	0/5/6/6
33	CLA	c	503	-	1/1/15/20	13/37/115/115	-
33	CLA	b	610	-	1/1/15/20	10/37/115/115	-
36	LHG	H	104	-	-	20/46/46/53	-
33	CLA	C	510	-	1/1/15/20	8/37/115/115	-
33	CLA	7	308	26	1/1/10/20	2/8/86/115	-
41	PL9	d	404	-	-	7/53/73/73	0/1/1/1
33	CLA	4	310	-	1/1/11/20	5/15/93/115	-
39	LMG	d	406	-	-	16/41/61/70	0/1/1/1
33	CLA	B	612	-	1/1/15/20	12/37/115/115	-
33	CLA	3	311	-	1/1/10/20	3/8/86/115	-
33	CLA	3	313	-	1/1/14/20	16/33/111/115	-
33	CLA	0	311	-	1/1/12/20	7/21/99/115	-
36	LHG	d	405	-	-	22/47/51/53	-
33	CLA	2	312	-	1/1/11/20	3/13/91/115	-
33	CLA	8	314	-	1/1/9/20	0/2/80/115	-
33	CLA	B	610	-	1/1/15/20	5/37/115/115	-
33	CLA	7	313	26	1/1/8/20	0/2/74/115	-
33	CLA	b	602	-	1/1/11/20	8/16/94/115	-
36	LHG	7	316	-	-	15/29/29/53	-
33	CLA	8	316	29	1/1/9/20	0/2/80/115	-
37	SQD	l	101	-	-	21/49/69/69	0/1/1/1
43	LMU	w	302	-	-	13/21/61/61	0/2/2/2
33	CLA	4	311	23	1/1/14/20	13/31/109/115	-
30	BCR	c	515	-	-	6/29/63/63	0/2/2/2
33	CLA	6	313	25	1/1/11/20	5/15/93/115	-
33	CLA	A	405	-	1/1/11/20	3/18/96/115	-
33	CLA	7	310	26	1/1/11/20	6/13/91/115	-
38	DGD	C	517	-	-	18/45/85/95	0/2/2/2
39	LMG	3	316	-	-	7/26/46/70	0/1/1/1
33	CLA	1	305	-	1/1/10/20	4/8/86/115	-
33	CLA	c	501	-	1/1/15/20	21/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
41	PL9	D	408	-	-	5/53/73/73	0/1/1/1
36	LHG	0	315	-	-	17/29/29/53	-
30	BCR	A	409	-	-	4/29/63/63	0/2/2/2
37	SQD	a	413	-	-	17/49/69/69	0/1/1/1

The worst 5 of 1627 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	2	313	CLA	C4B-NB	9.58	1.43	1.35
46	9	304	DD6	C29-C27	-8.81	1.25	1.42
46	1	304	DD6	C29-C27	-8.79	1.25	1.42
46	2	304	DD6	C29-C27	-8.78	1.25	1.42
46	8	304	DD6	C29-C27	-8.72	1.25	1.42

The worst 5 of 2908 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
45	5	302	A86	C23-C16-C22	-71.43	2.00	107.37
45	6	304	A86	C23-C16-C22	-71.27	2.25	107.37
45	5	303	A86	C23-C16-C22	-70.78	2.97	107.37
45	4	302	A86	C23-C16-C22	-70.28	3.70	107.37
45	5	307	A86	C23-C16-C22	-68.88	5.76	107.37

5 of 182 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
33	A	404	CLA	ND
33	A	405	CLA	ND
33	A	408	CLA	ND
33	B	601	CLA	ND
33	B	602	CLA	ND

5 of 3309 torsion outliers are listed below:

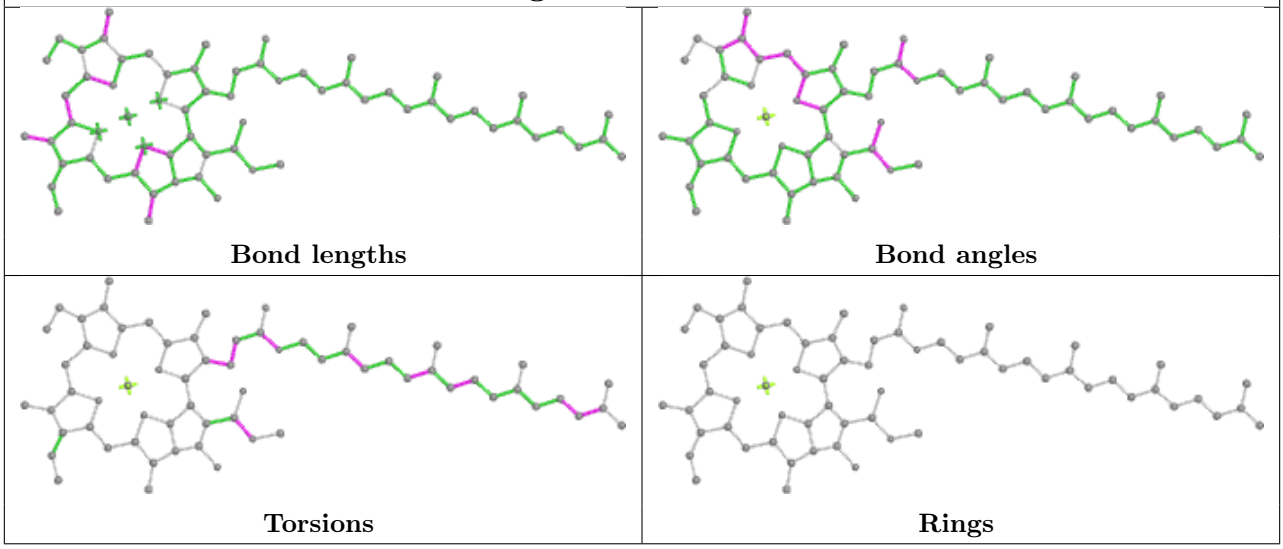
Mol	Chain	Res	Type	Atoms
30	A	401	BCR	C1-C6-C7-C8
30	B	618	BCR	C7-C8-C9-C34
30	B	619	BCR	C7-C8-C9-C10
30	B	619	BCR	C21-C22-C23-C24
30	B	619	BCR	C37-C22-C23-C24

There are no ring outliers.

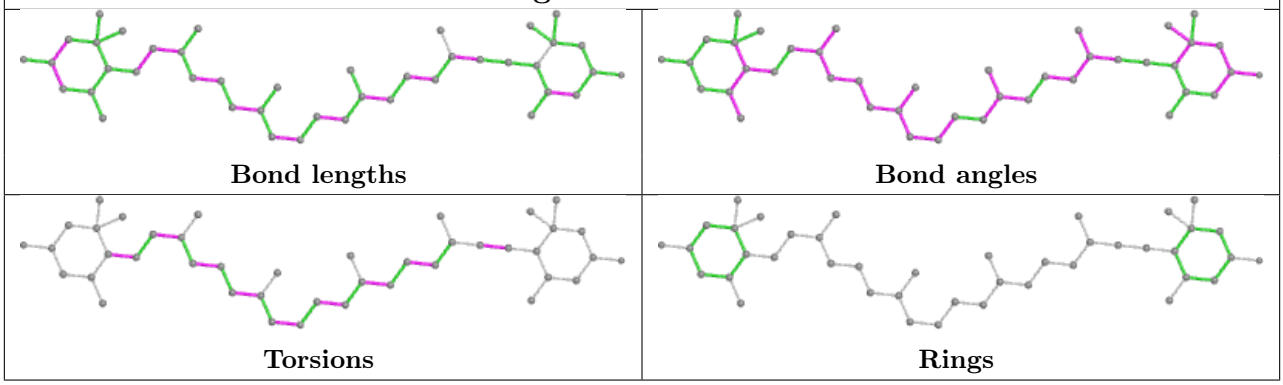
No monomer is involved in short contacts.

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

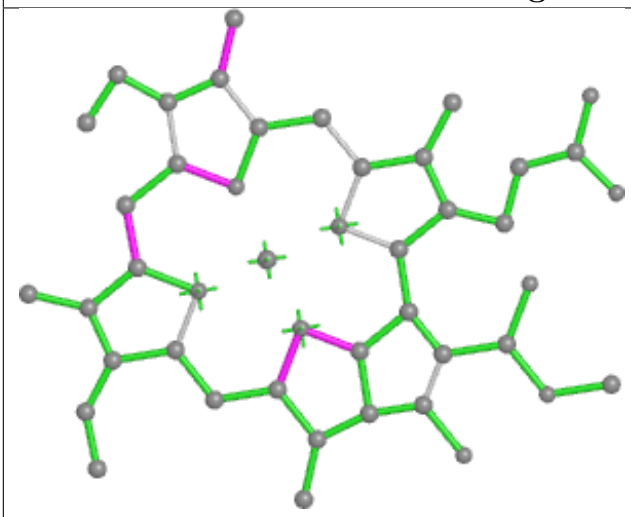
Ligand CLA b 613



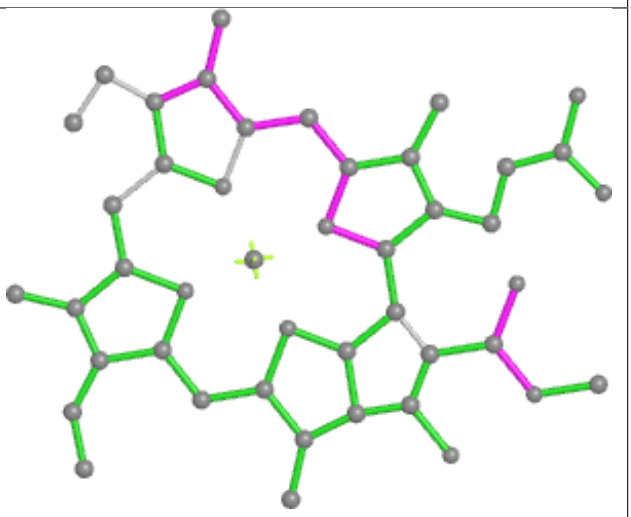
Ligand ET4 0 302



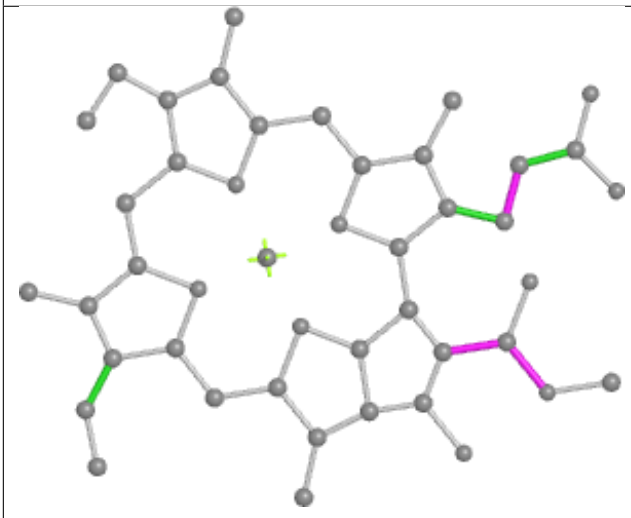
Ligand CLA 9 312



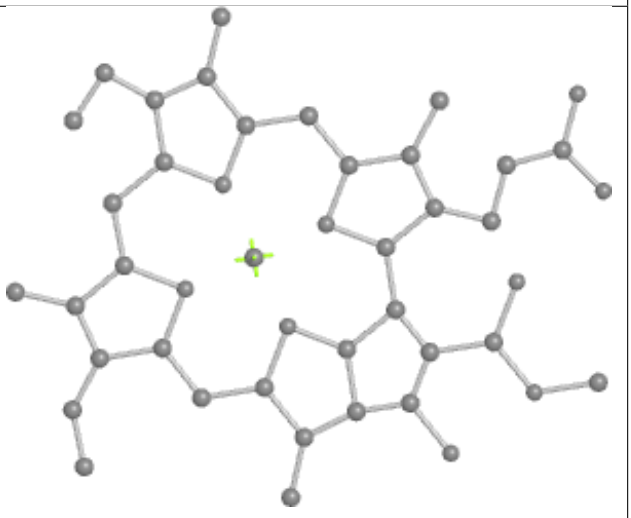
Bond lengths



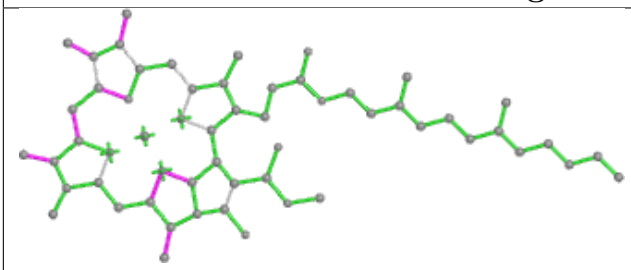
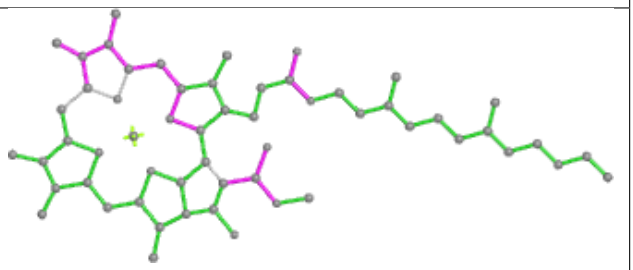
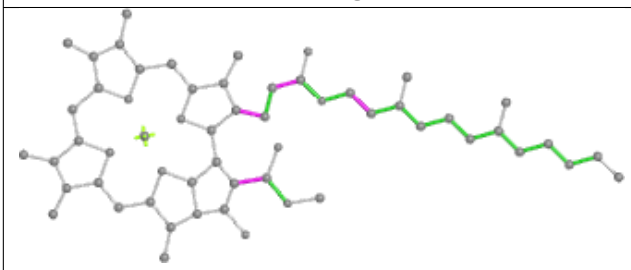
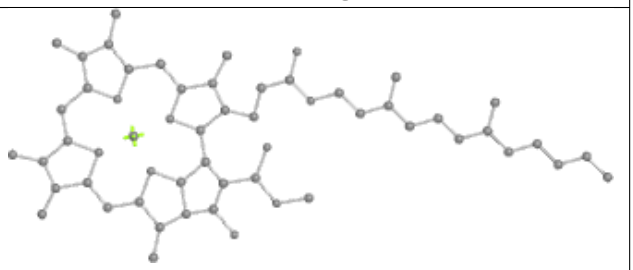
Bond angles

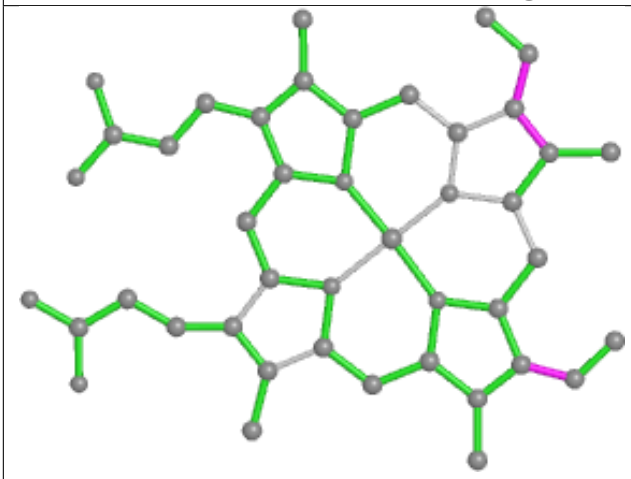
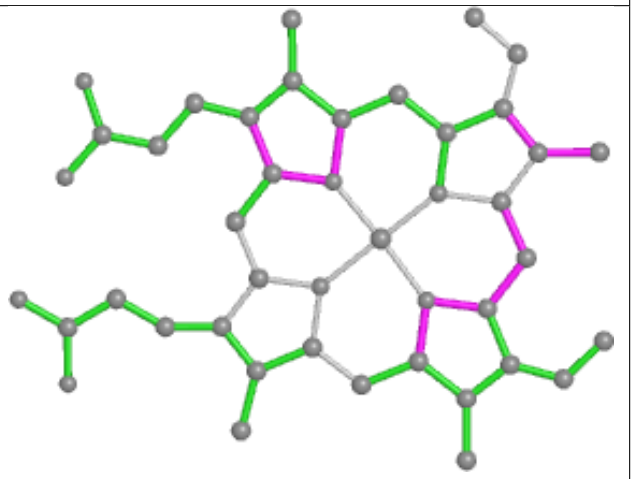
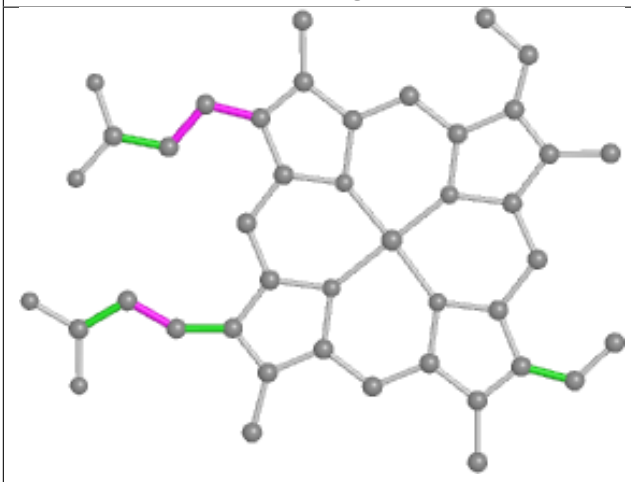
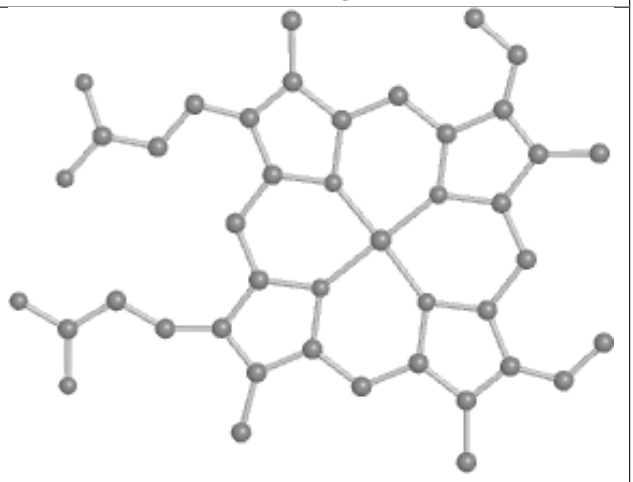


Torsions

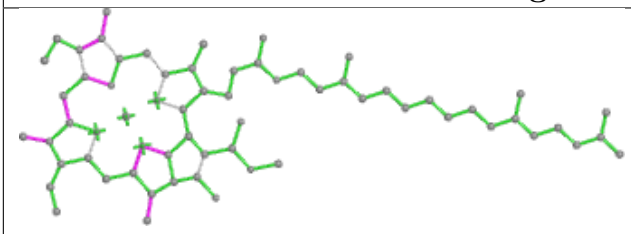


Rings

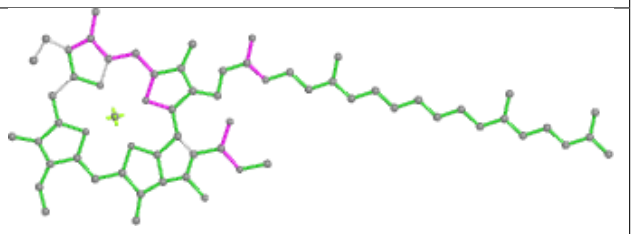
Ligand CLA d 401	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand HEM F 101	
 Bond lengths	 Bond angles
 Torsions	 Rings

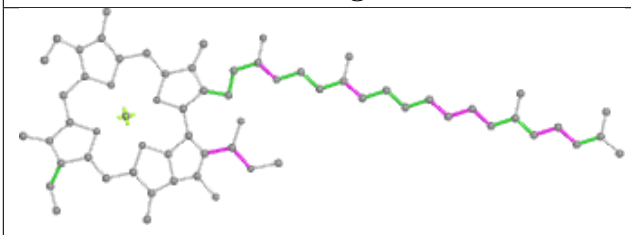
Ligand CLA c 502



Bond lengths



Bond angles



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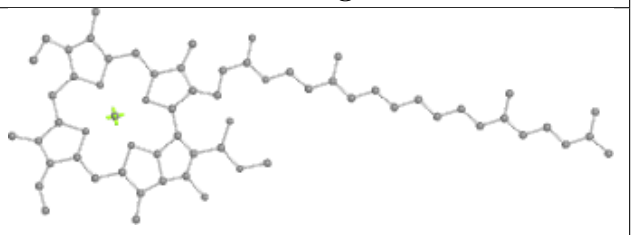
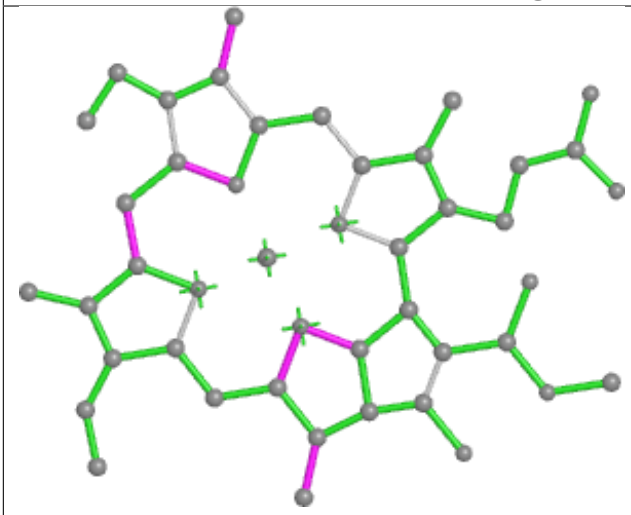


Rings

Ligand CLA c 506



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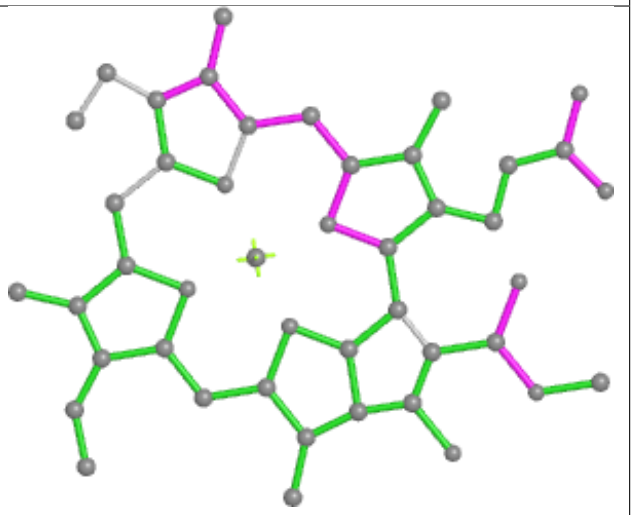

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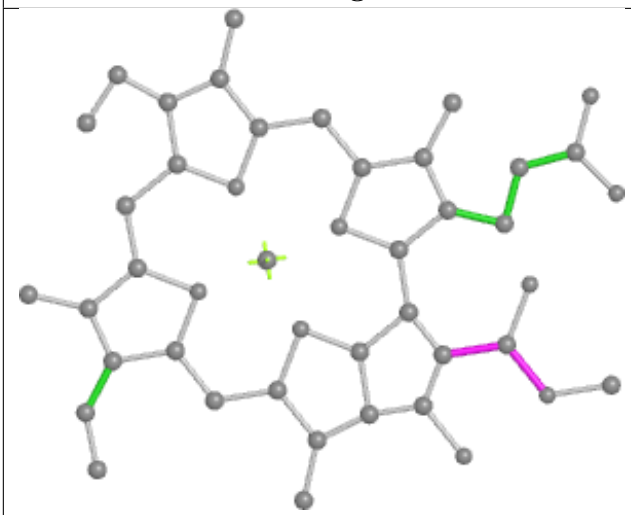

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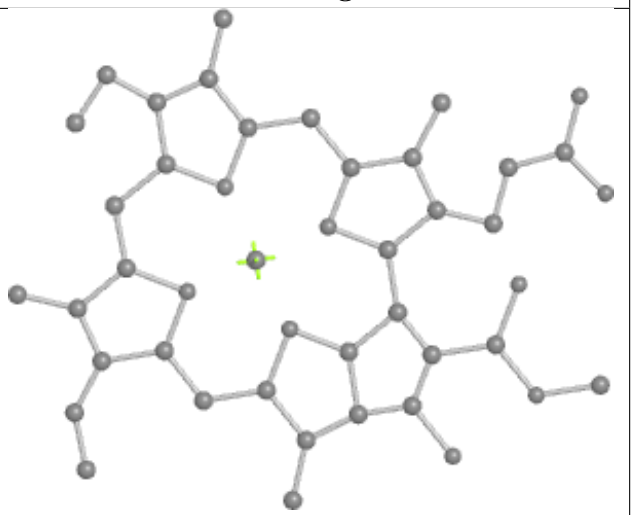
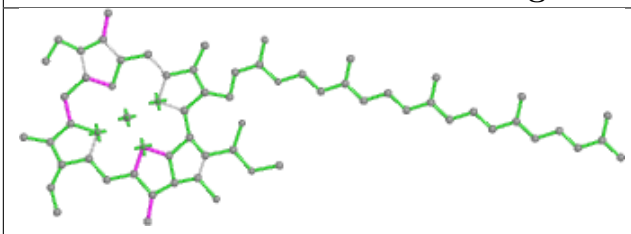


Rings

Ligand CLA 0 312



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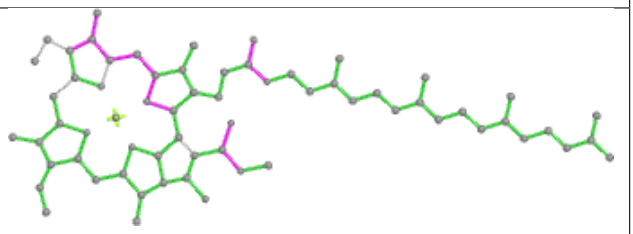
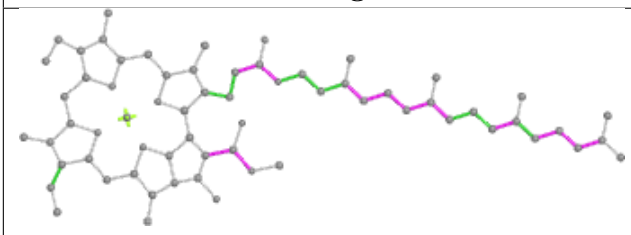


Bond angles



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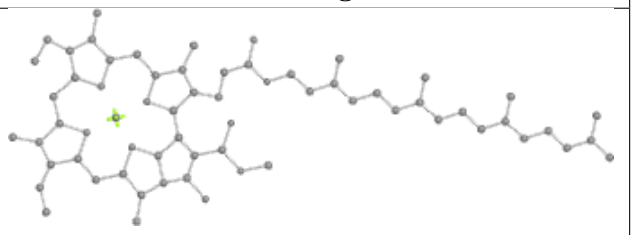
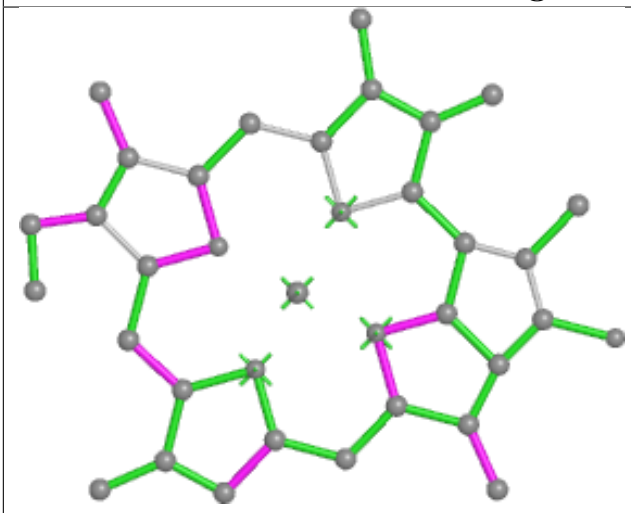
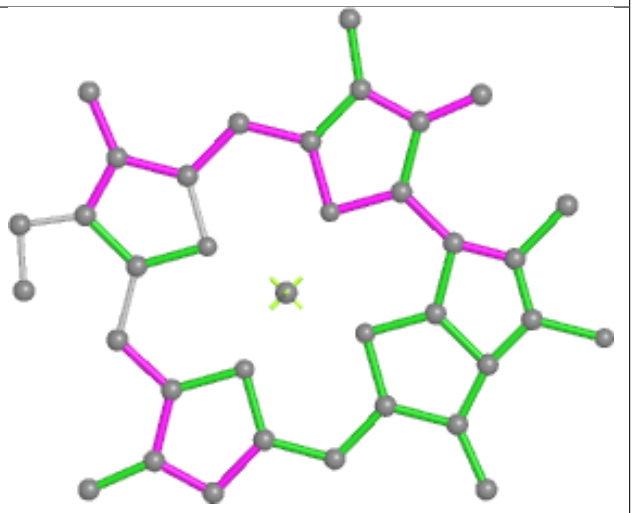


Rings

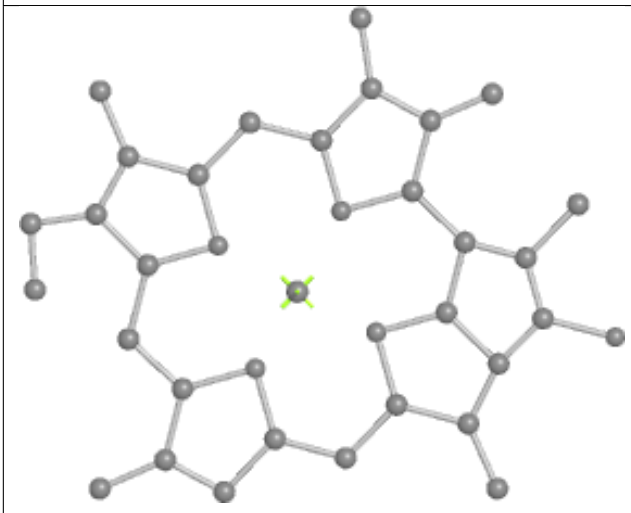
Ligand CLA 2 313



Bond lengths



Bond angles



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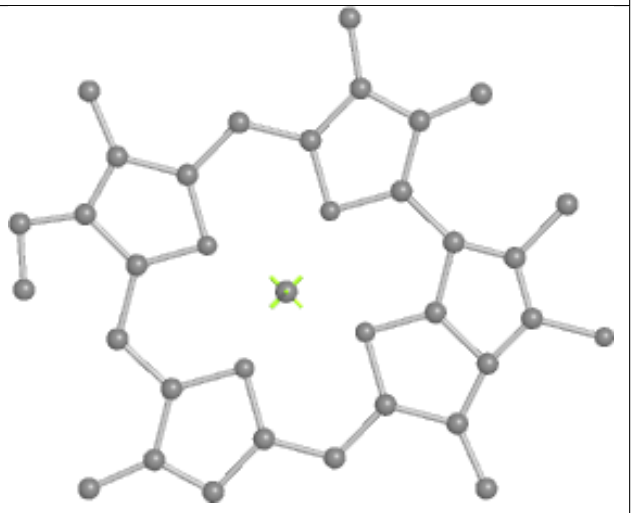
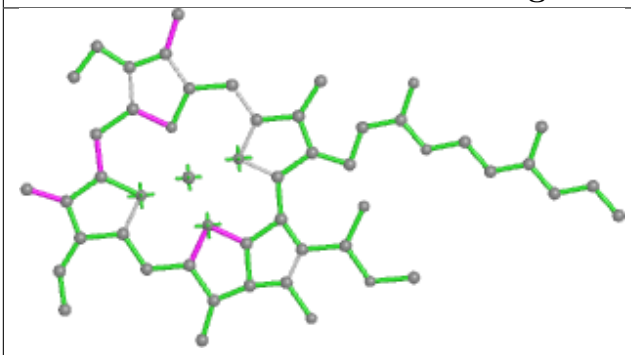
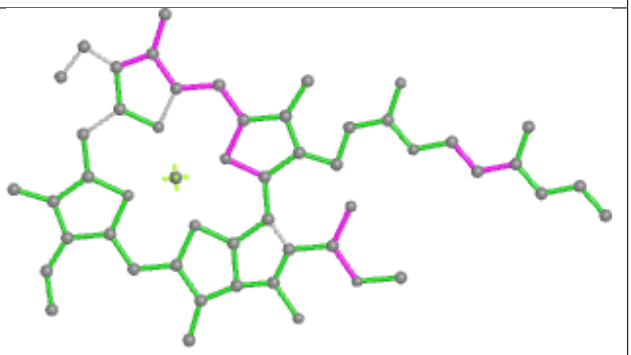
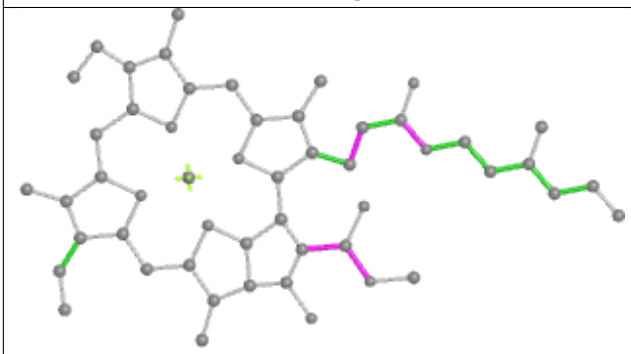
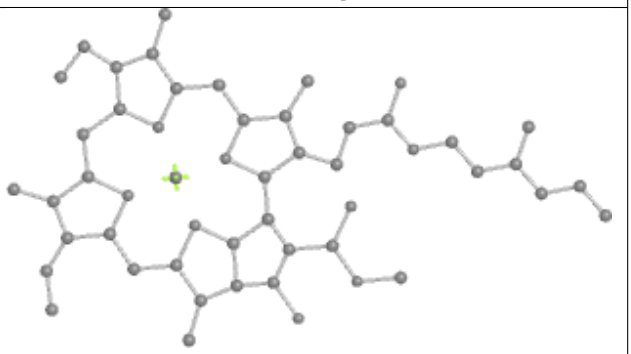
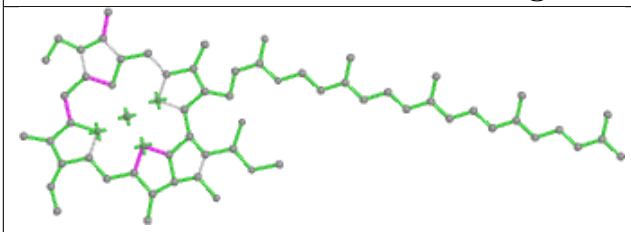
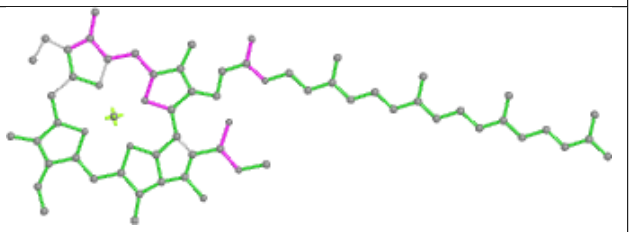
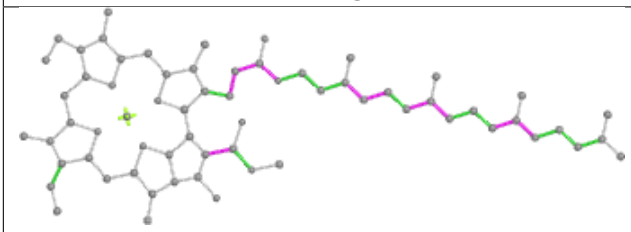
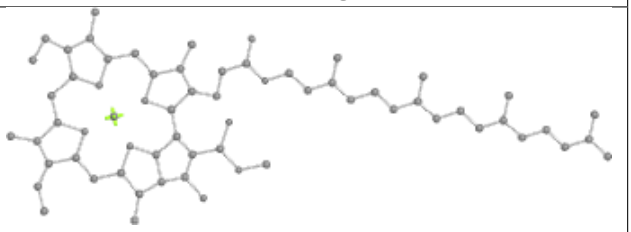
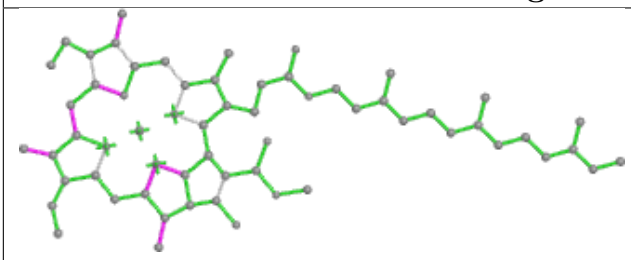


Rings

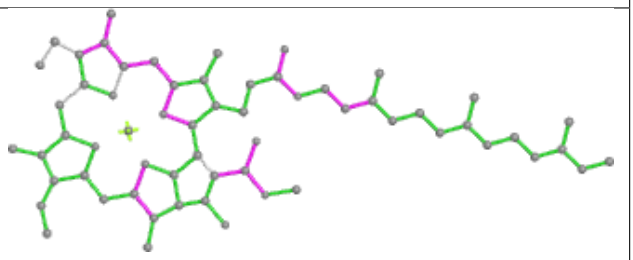
Ligand CLA 6 310	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA 3 308	
	
Bond lengths	Bond angles
	
Torsions	Rings

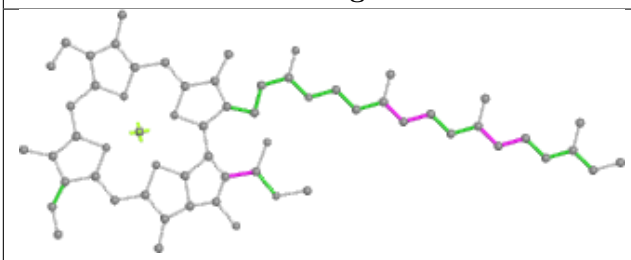
Ligand CLA b 605



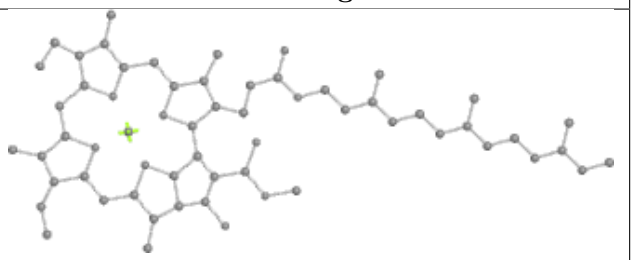
Bond lengths



Bond angles

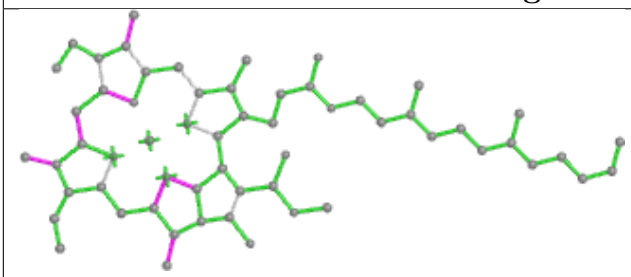


Torsions

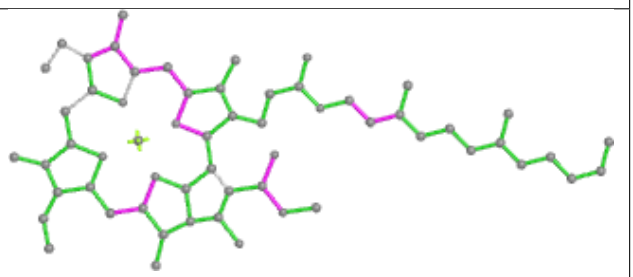


Rings

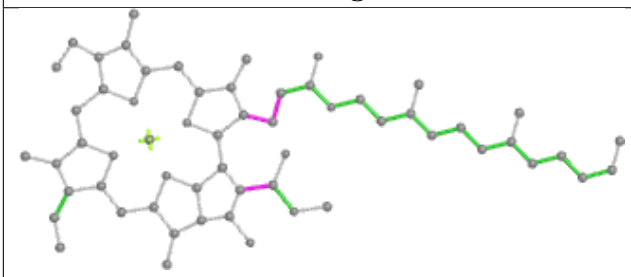
Ligand CLA D 402



Bond lengths



Bond angles



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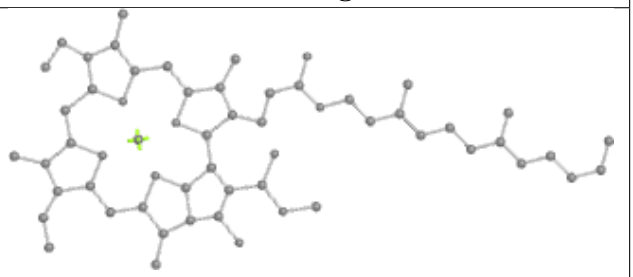
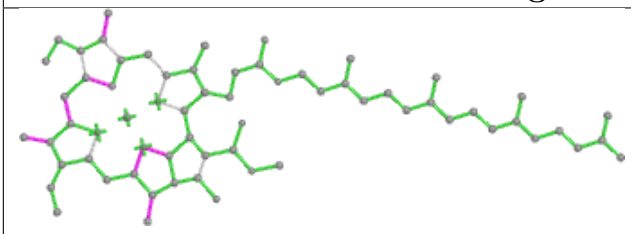
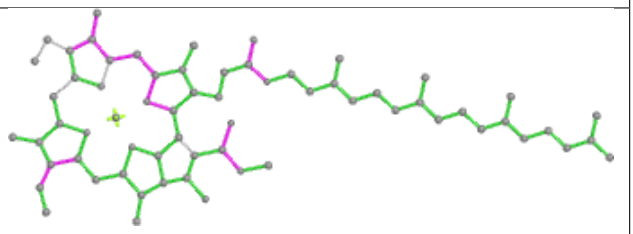


Rings

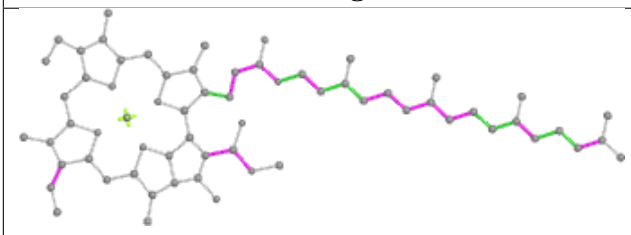
Ligand CLA 7 305



Bond lengths



Bond angles



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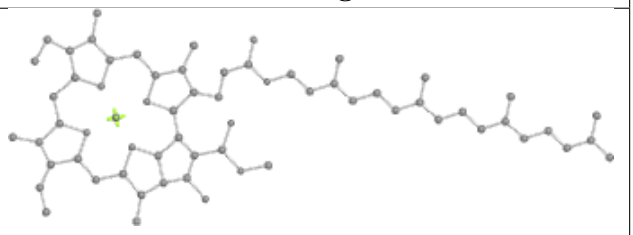
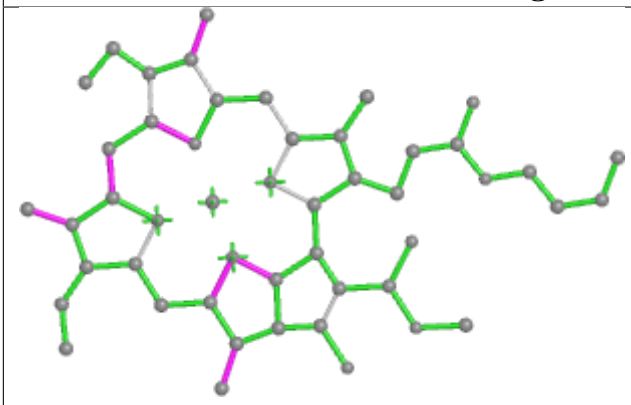
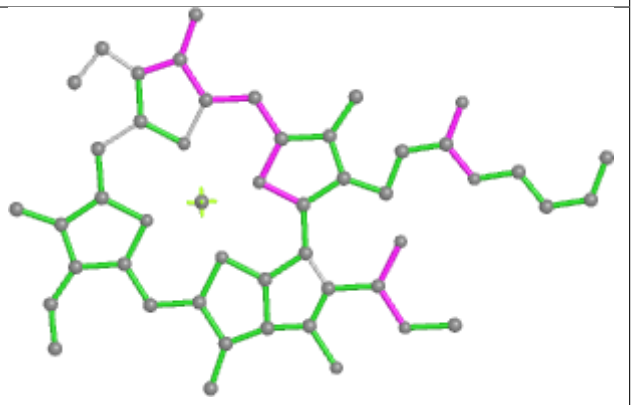


Rings

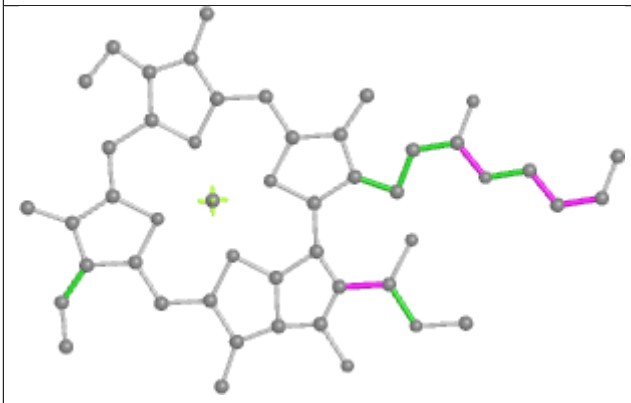
Ligand CLA c 513



Bond lengths



Bond angles



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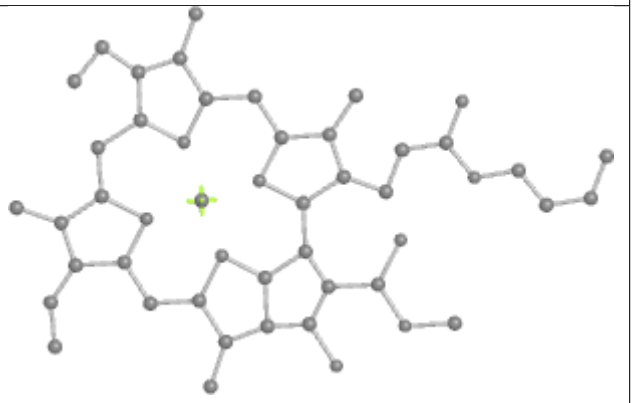
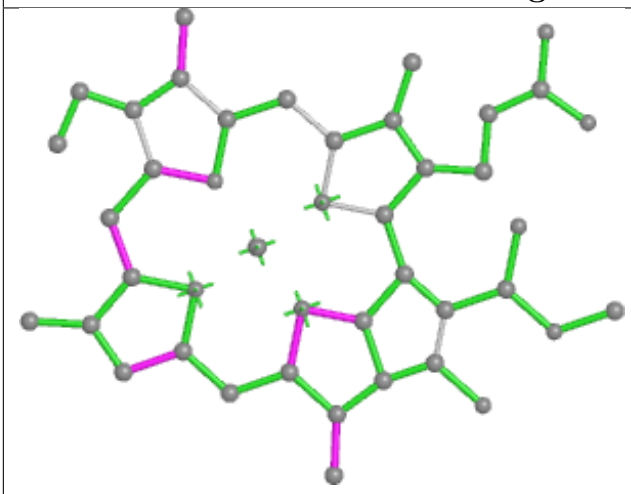
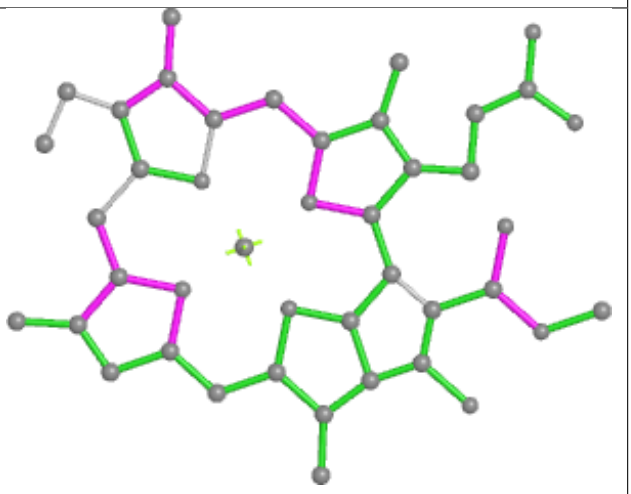


Rings

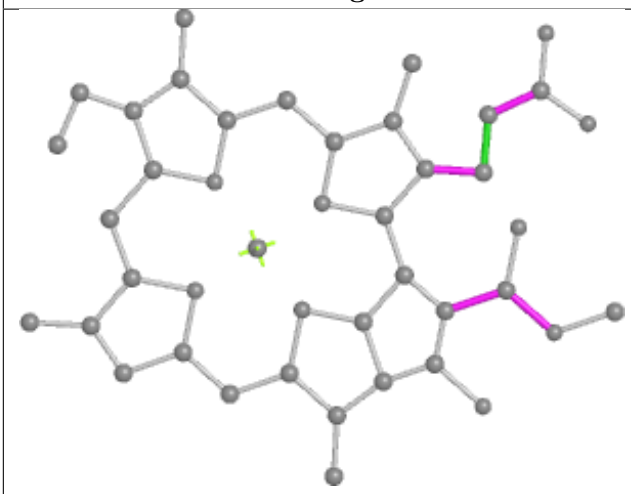
Ligand CLA 1 309



Bond lengths



Bond angles



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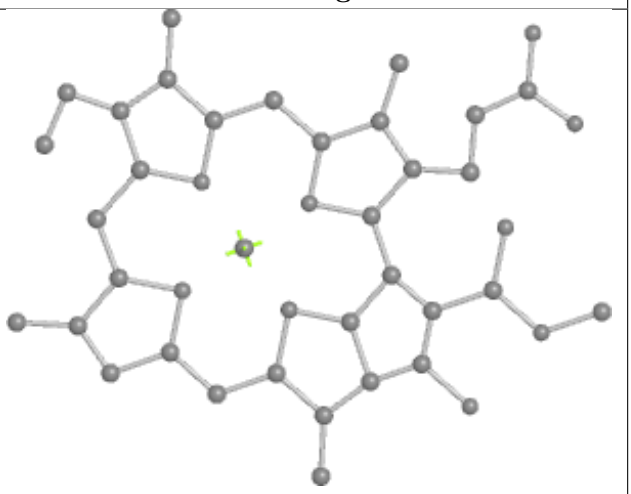
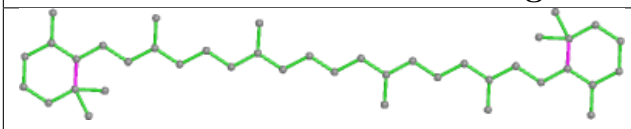
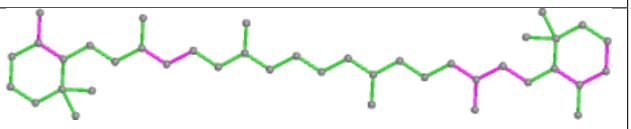


Rings

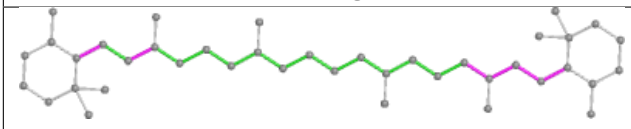
Ligand BCR b 620



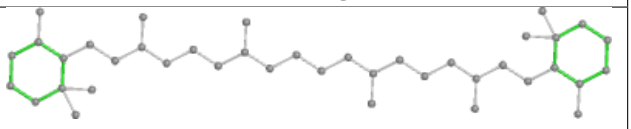
Bond lengths



Bond angles

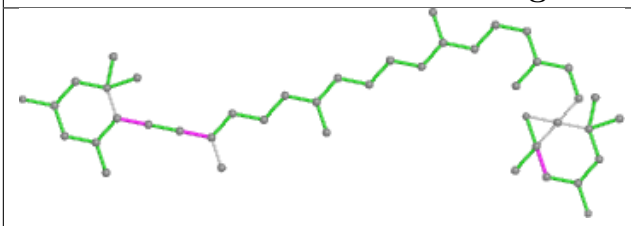


Torsions

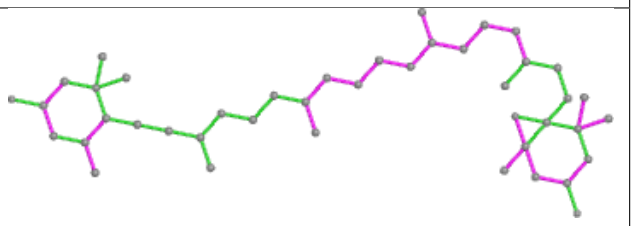


Rings

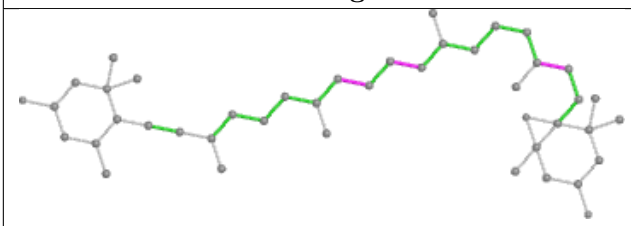
Ligand DD6 9 303



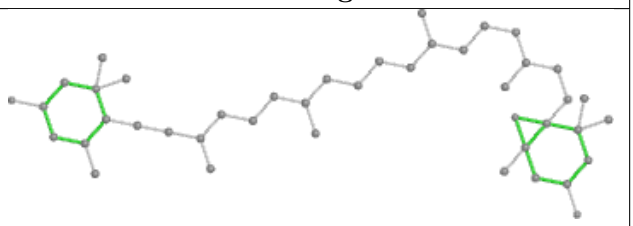
Bond lengths



Bond angles

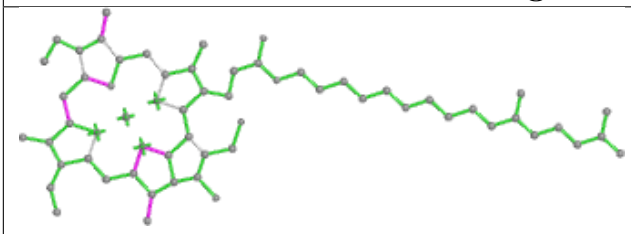


Torsions

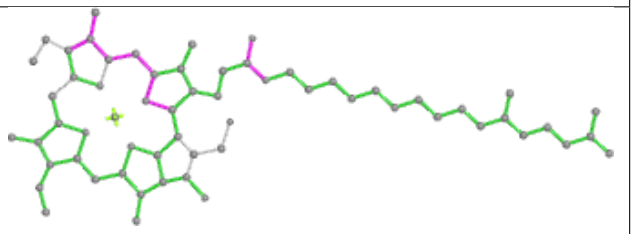


Rings

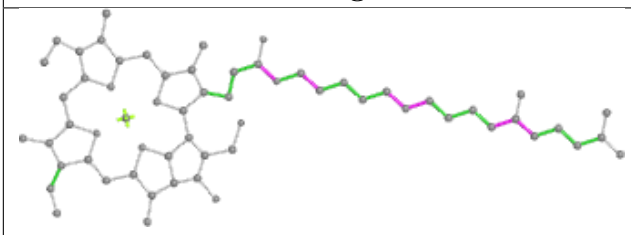
Ligand CLA b 603



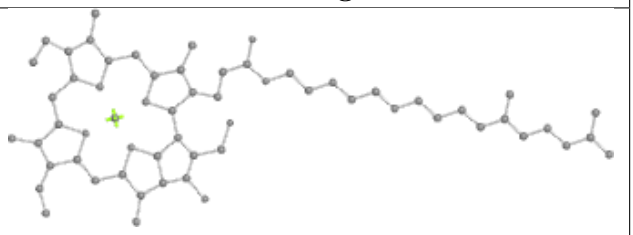
Bond lengths



Bond angles

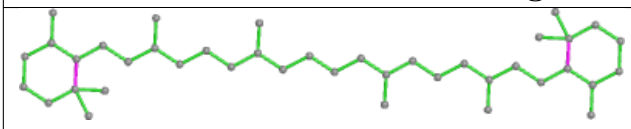


Torsions

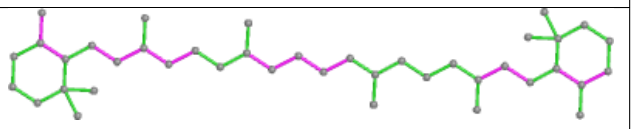


Rings

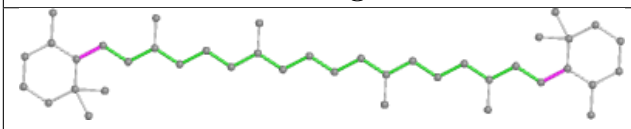
Ligand BCR a 414



Bond lengths



Bond angles



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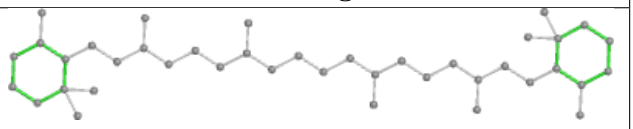
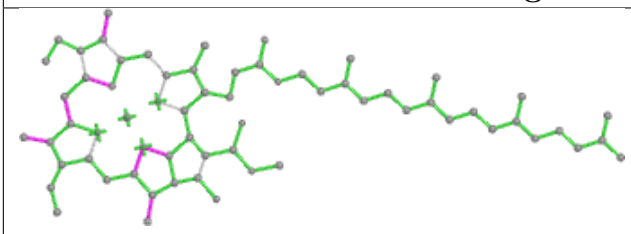
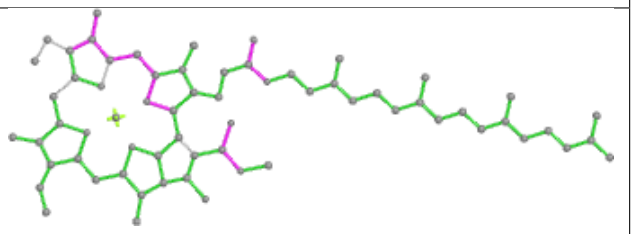


Rings

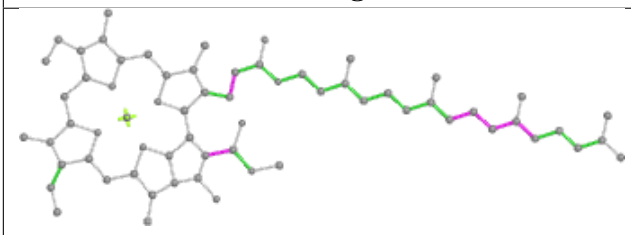
Ligand CLA B 606



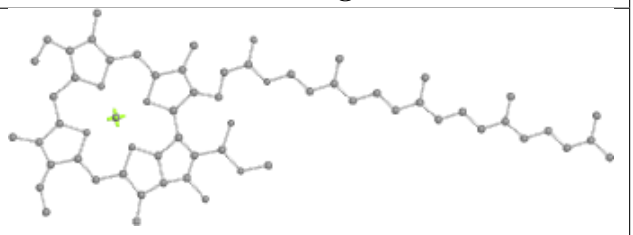
Bond lengths



Bond angles

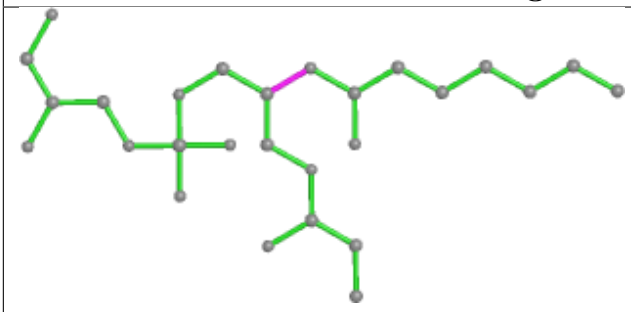


Torsions



Rings

Ligand LHG 3 317



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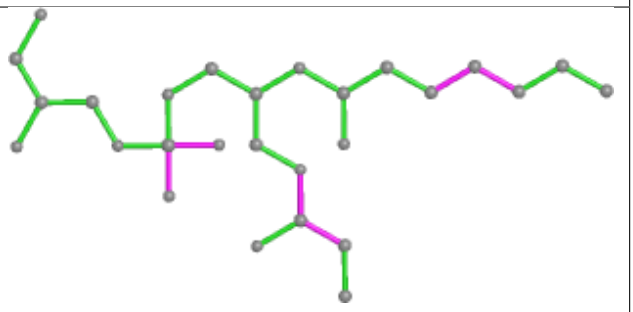
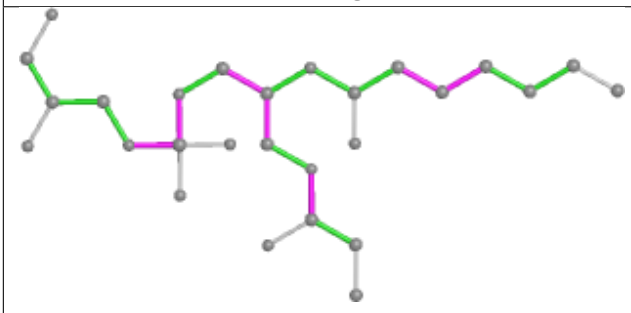


Bond angles



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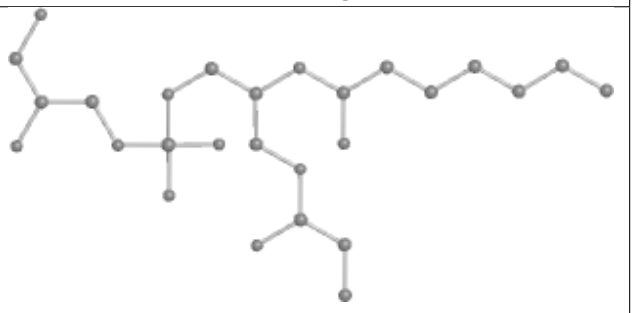
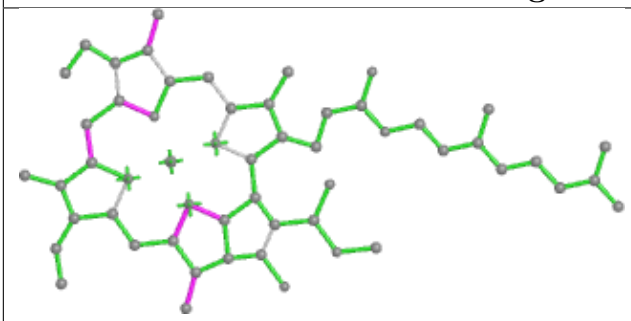


Rings

Ligand CLA 9 308



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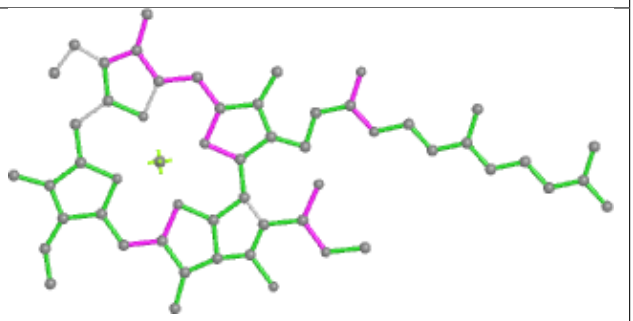
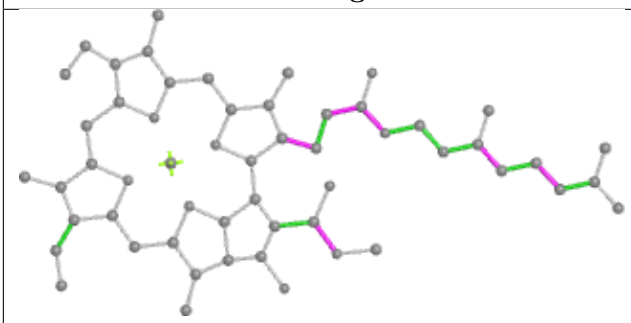


Bond angles



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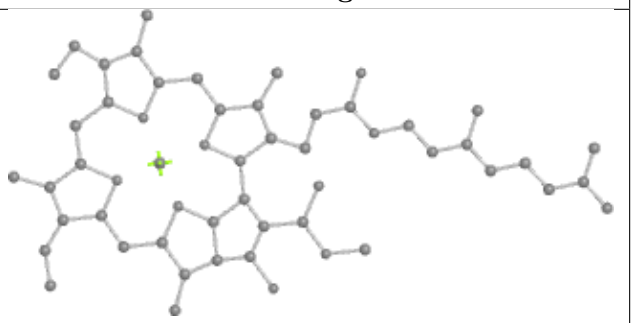
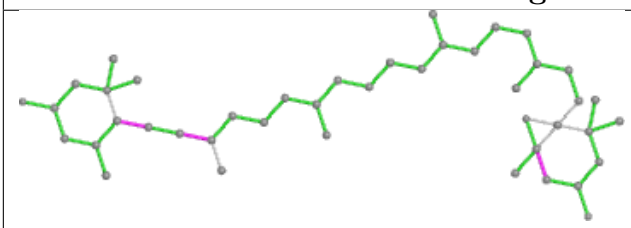


Rings

Ligand DD6 2 303



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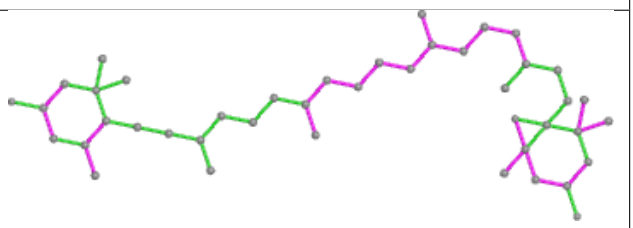
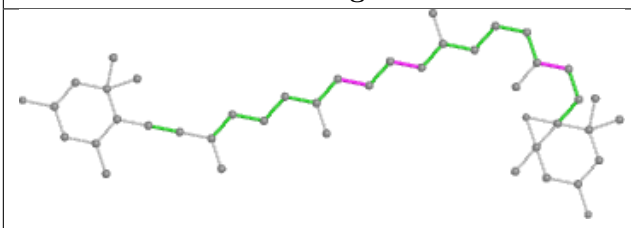


Bond angles



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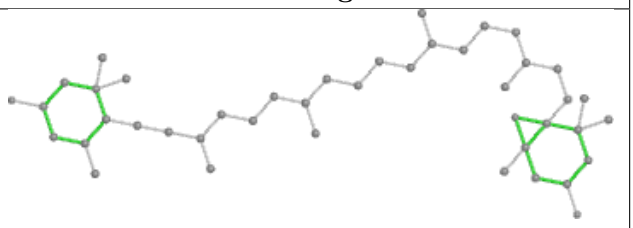
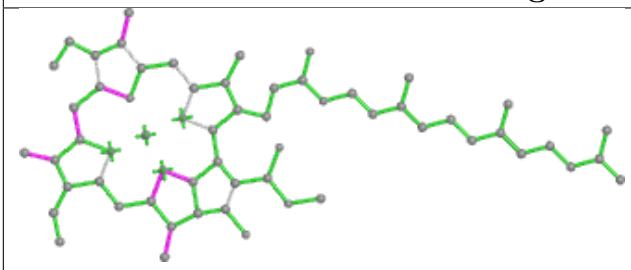


Rings

Ligand CLA a 411



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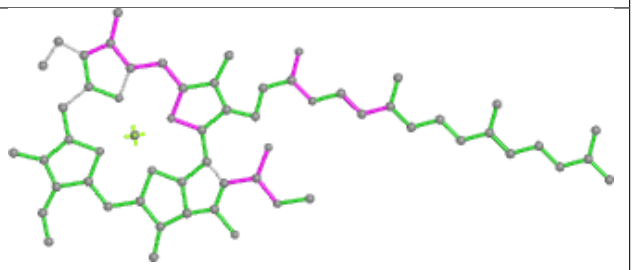
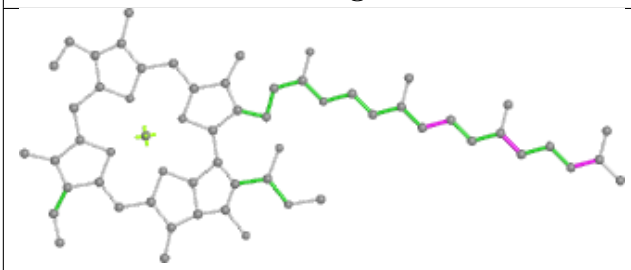


Bond angles



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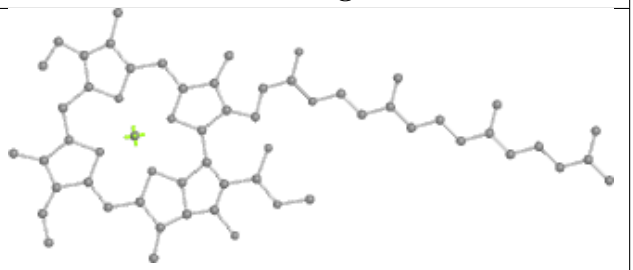
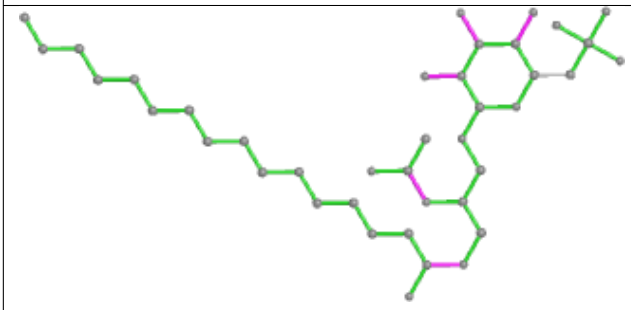
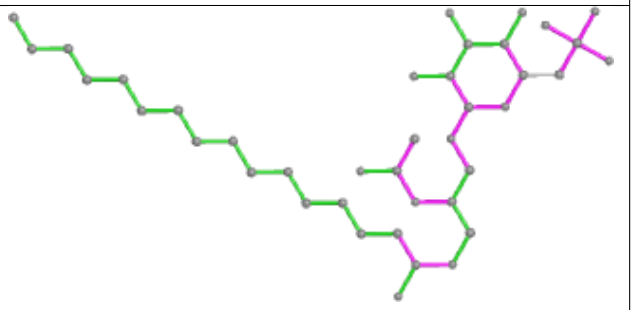


Rings

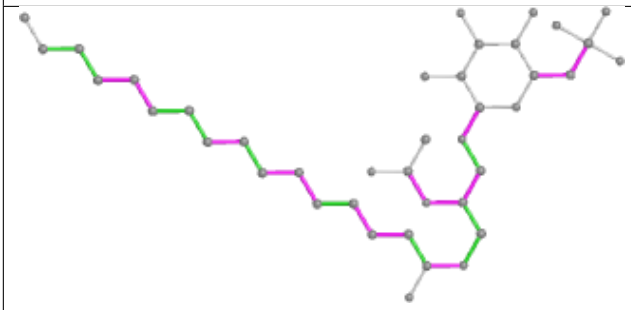
Ligand SQD t 102



Bond lengths



Bond angles



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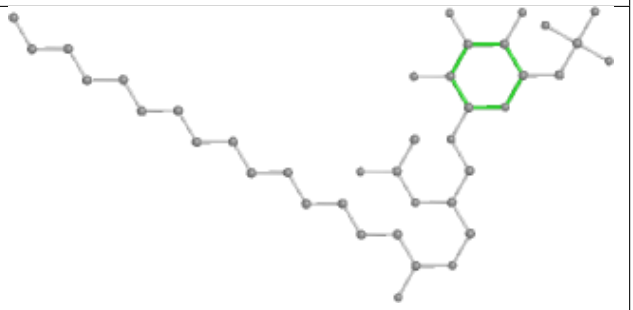
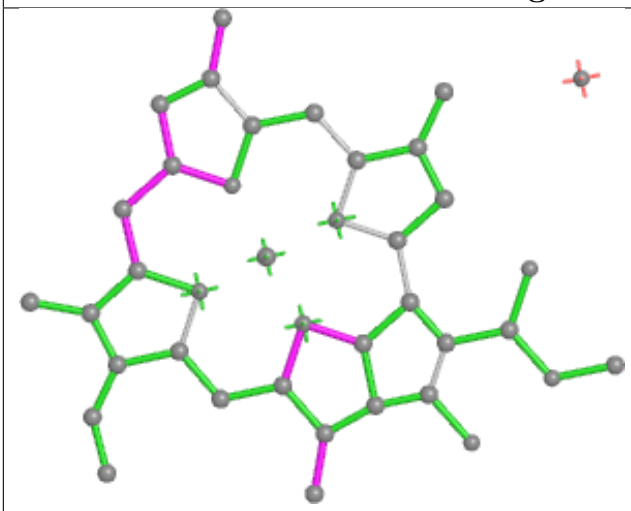


Rings

Ligand CLA 6 316



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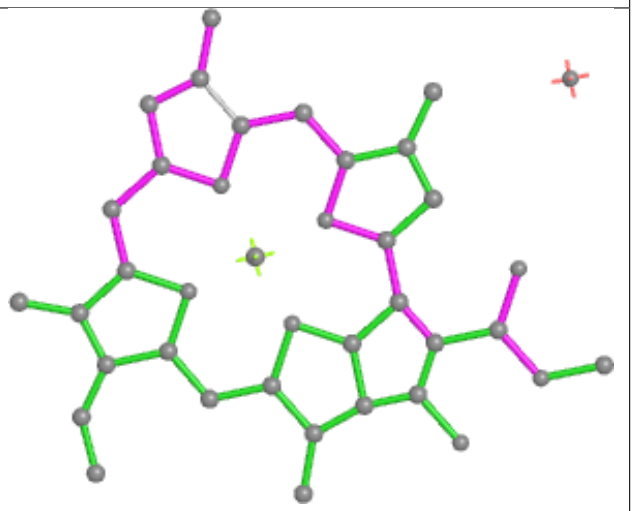
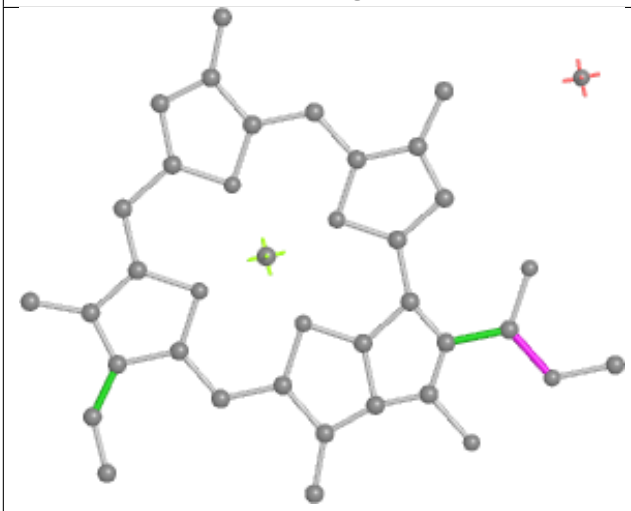


Bond angles



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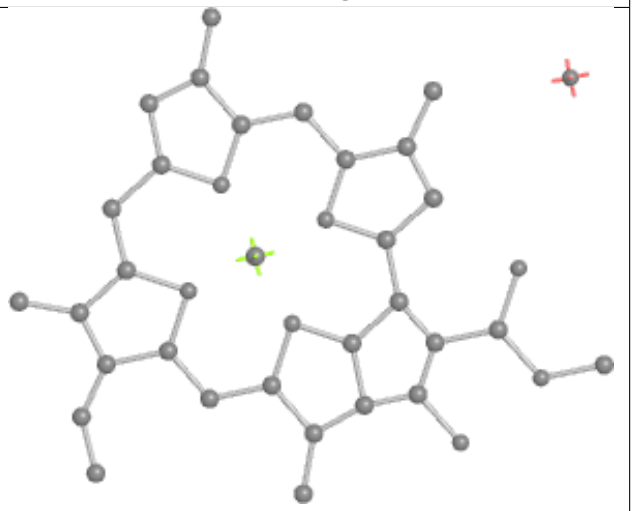
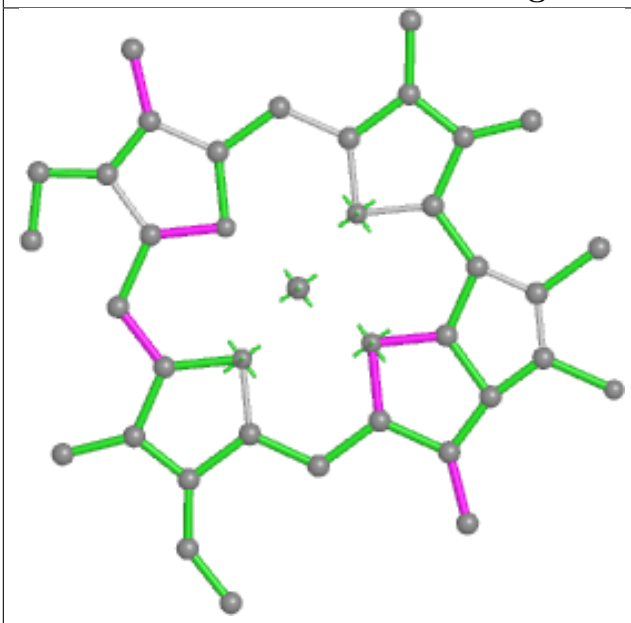


Rings

Ligand CLA 9 315



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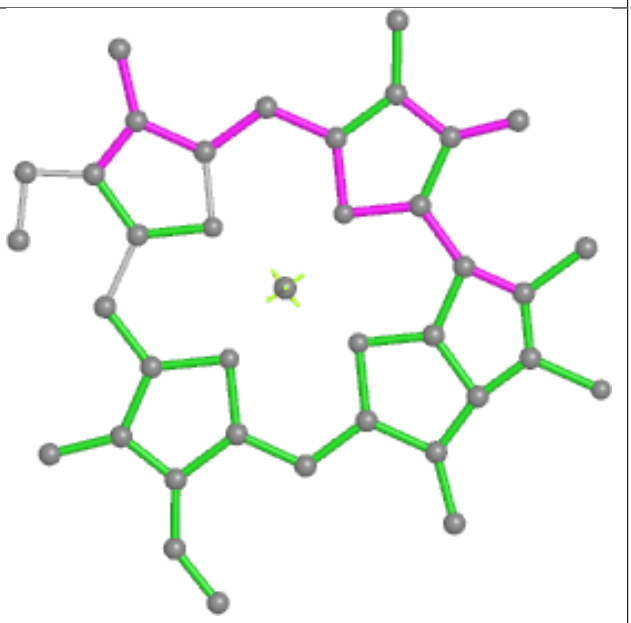
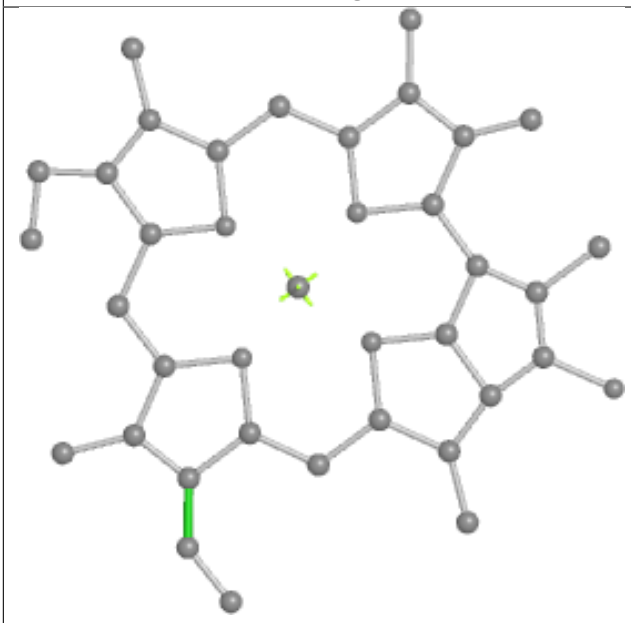


Bond angles



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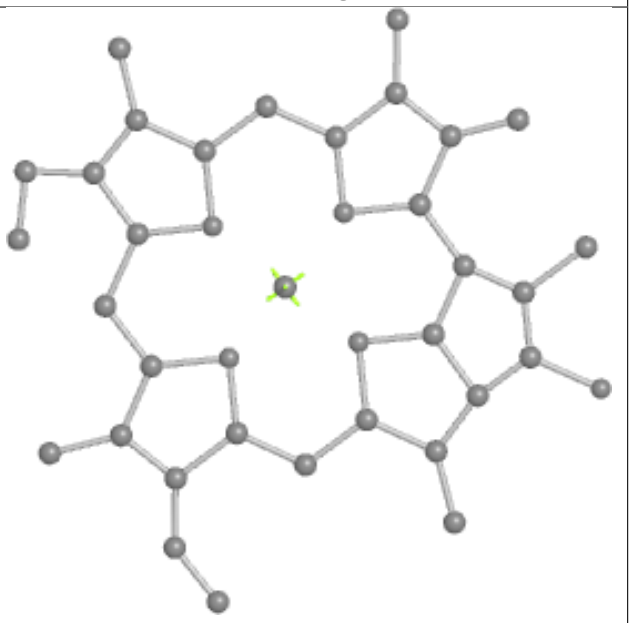
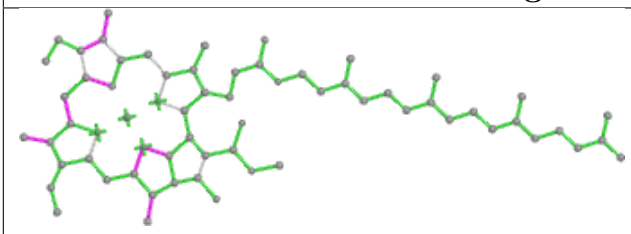


Rings

Ligand CLA B 615



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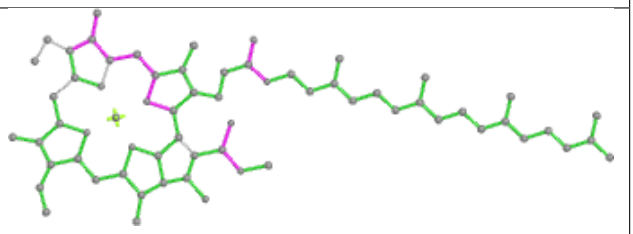
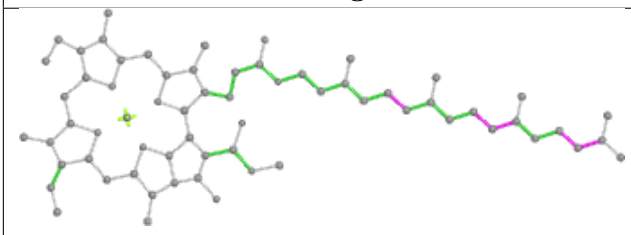


Bond angles



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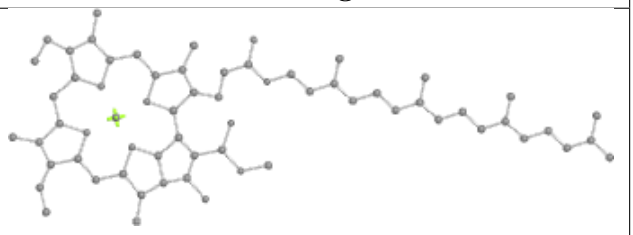
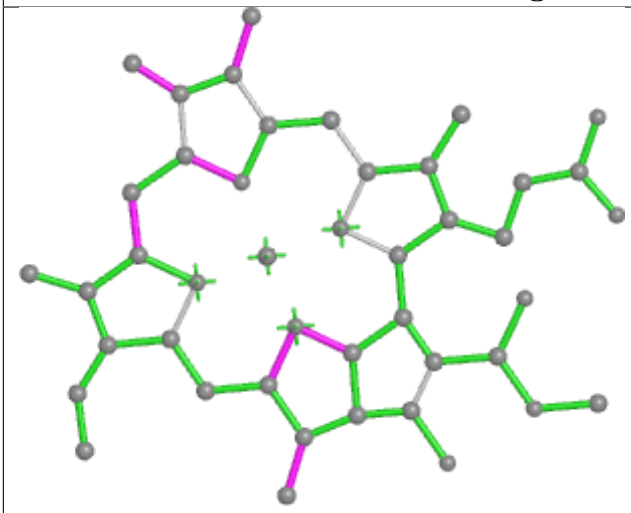
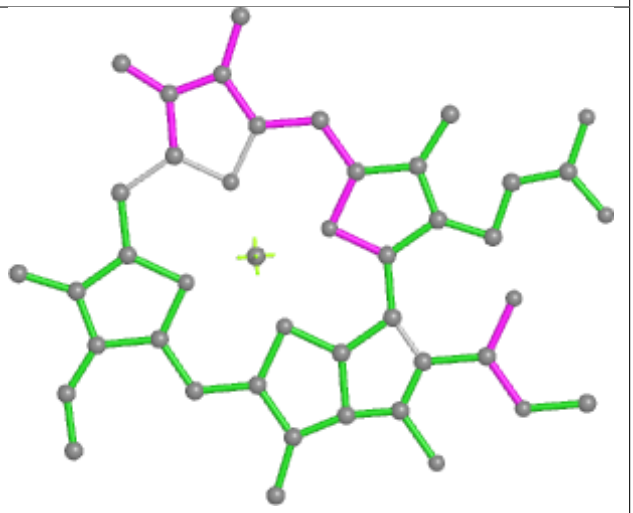


Rings

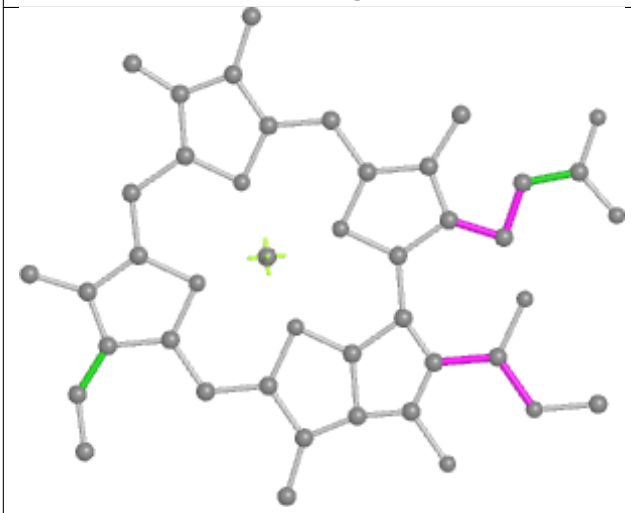
Ligand CLA 8 307



Bond lengths



Bond angles



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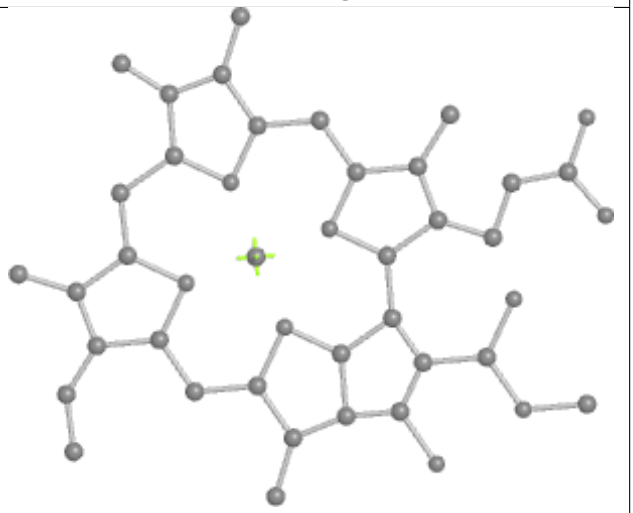
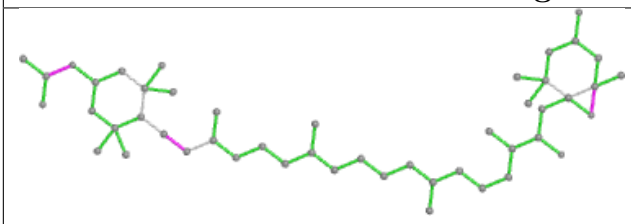
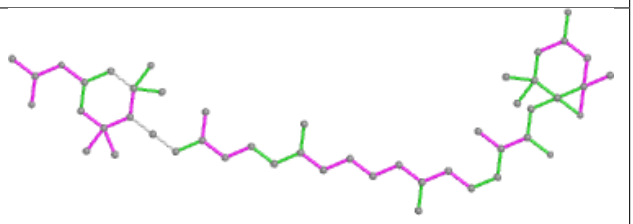
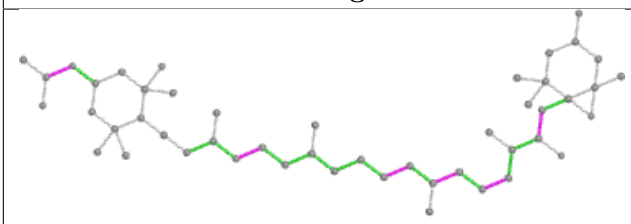


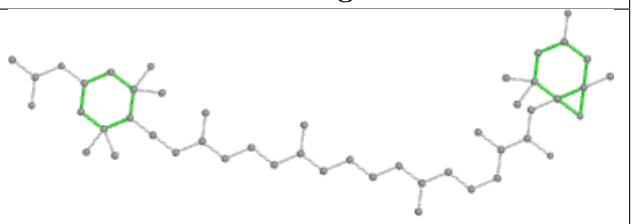
Rings

Ligand A86 8 302

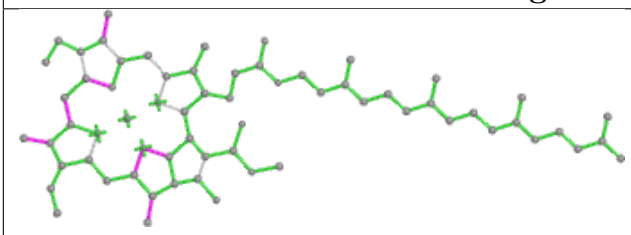

Bond lengths

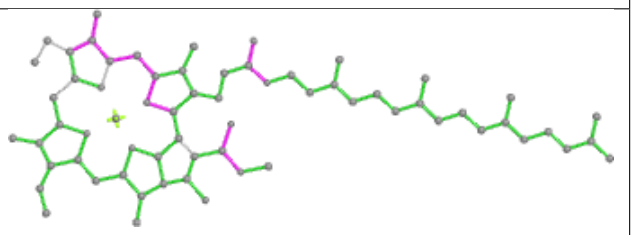

Bond angles

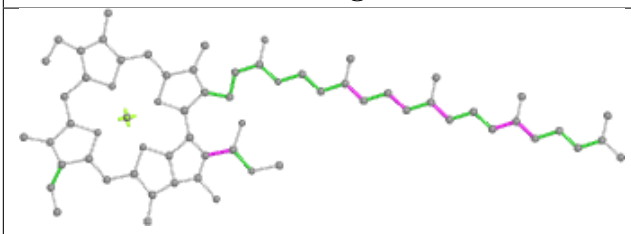

Torsions

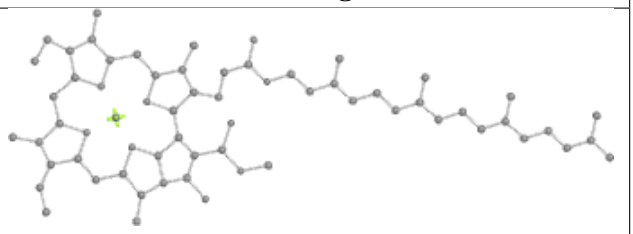

Rings

Ligand CLA c 508

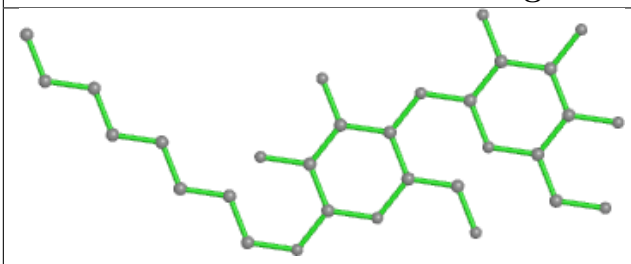

Bond lengths


Bond angles


Torsions


Rings

Ligand LMU 5 320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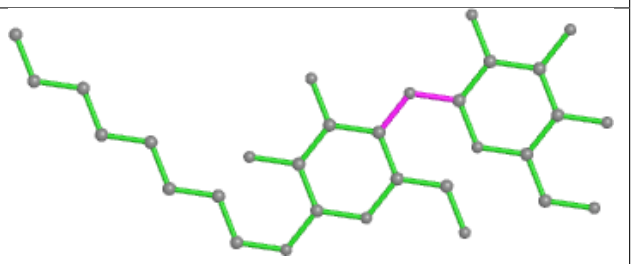
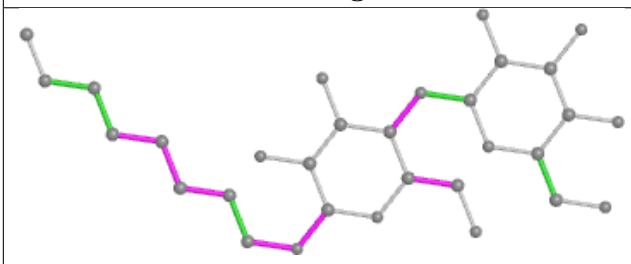
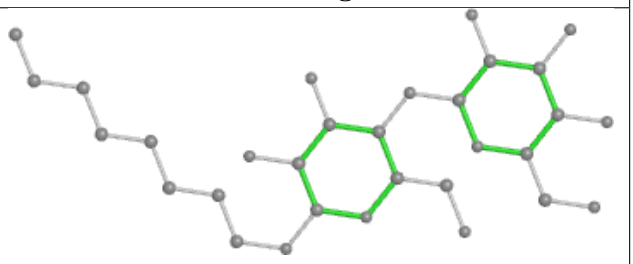
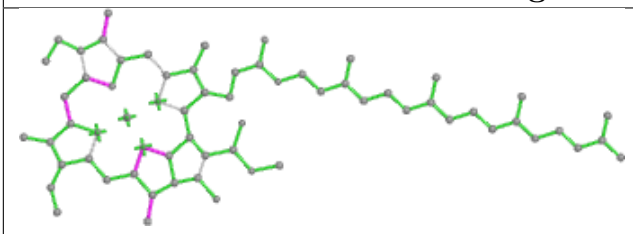

Bond angles

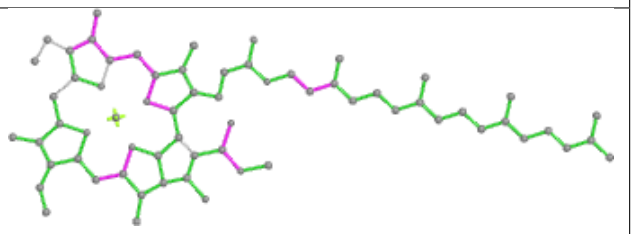

Torsions


Rings

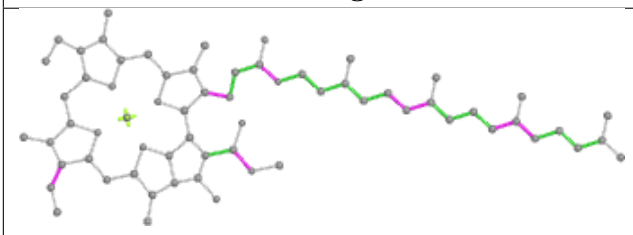
Ligand CLA 9 310



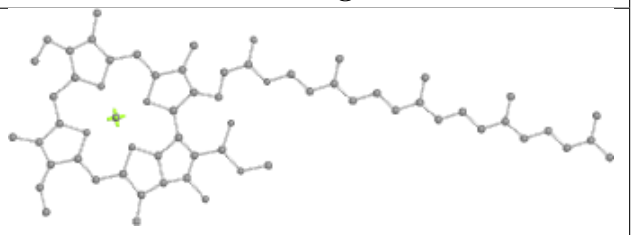
Bond lengths



Bond angles

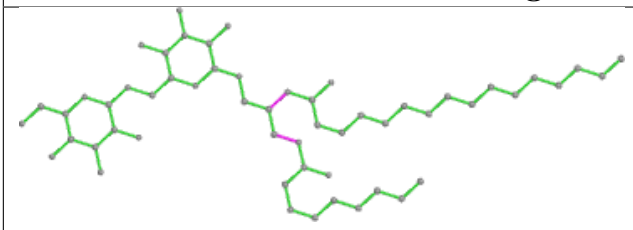


Torsions



Rings

Ligand DGD c 516



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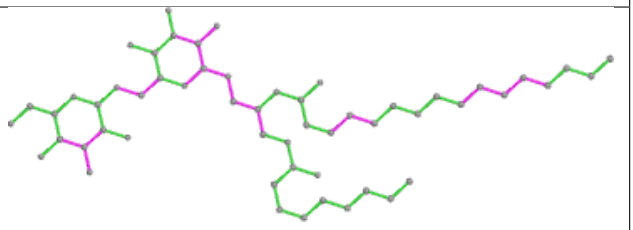
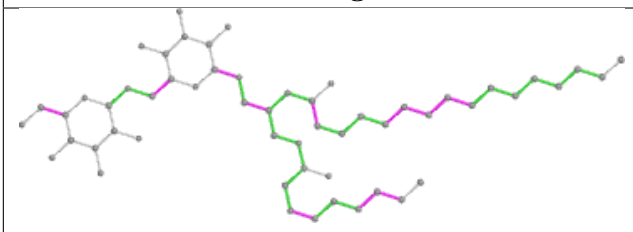
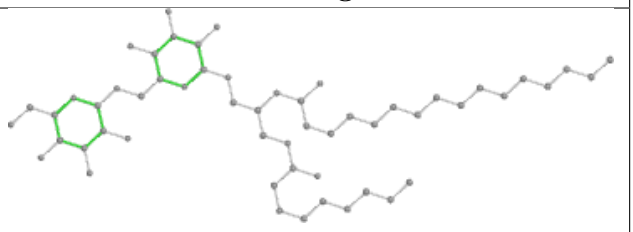


Bond angles

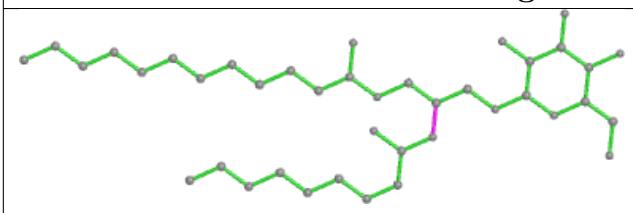


Torsions

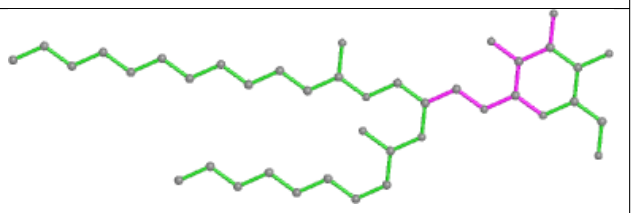


Rings

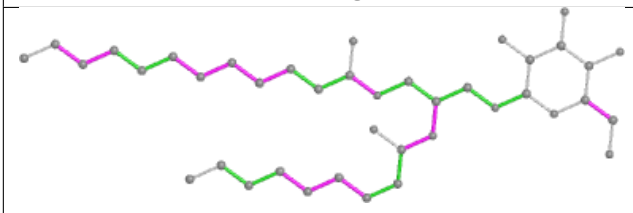
Ligand LMG m 201



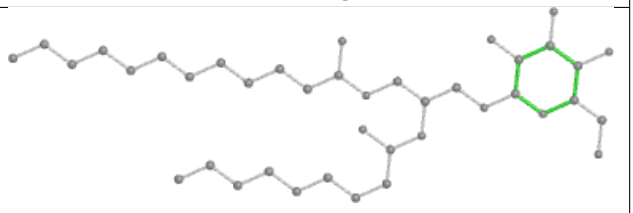
Bond lengths



Bond angles

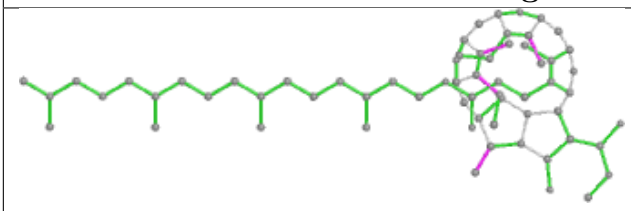


Torsions

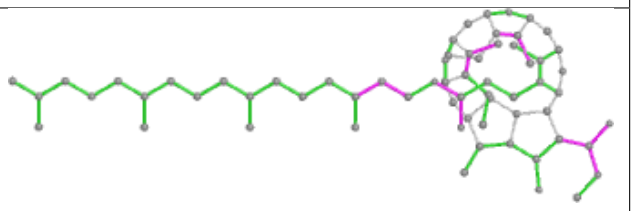


Rings

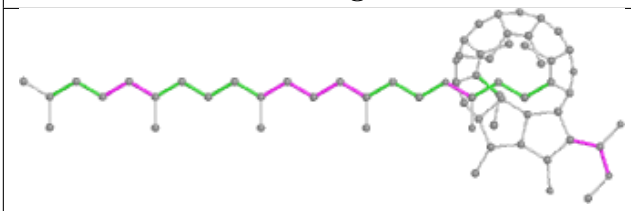
Ligand PHO A 406



Bond lengths



Bond angles



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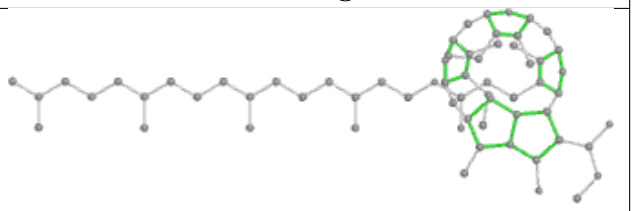
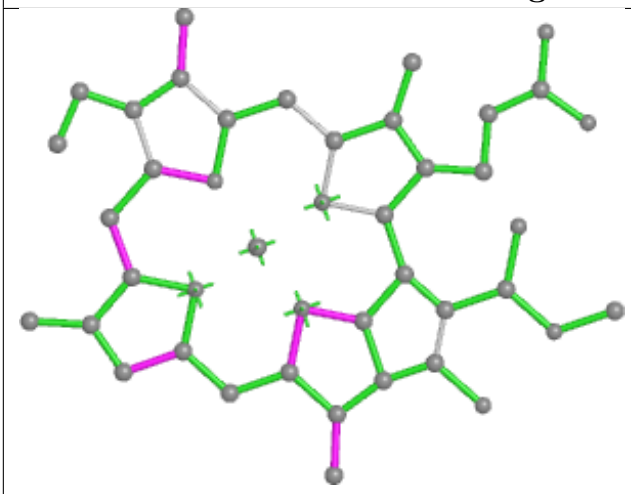


Rings

Ligand CLA 8 309



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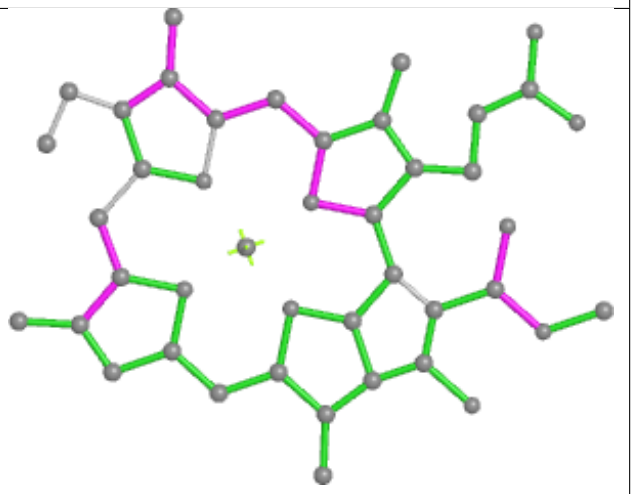
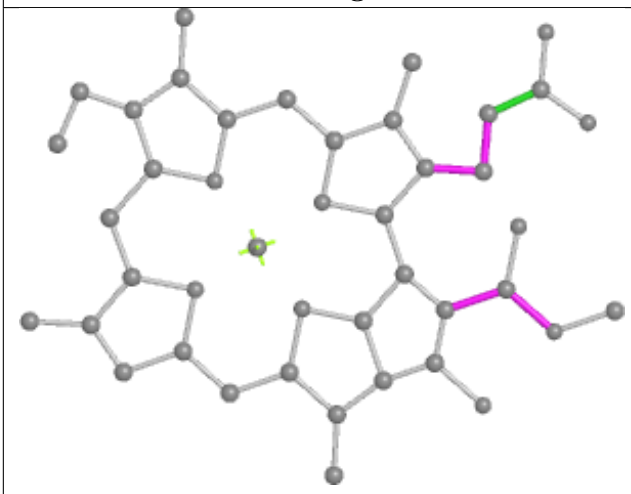
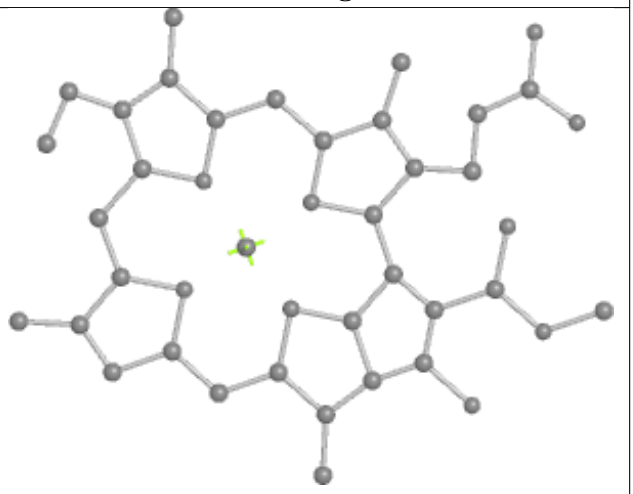


Bond angles

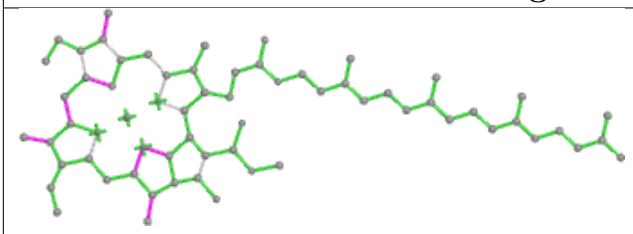


Torsions

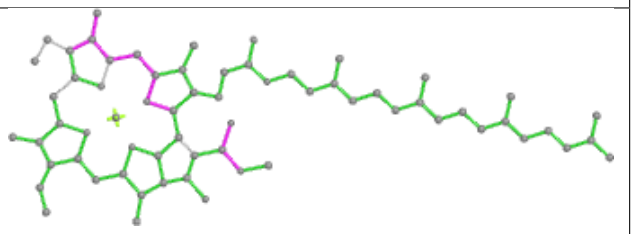


Rings

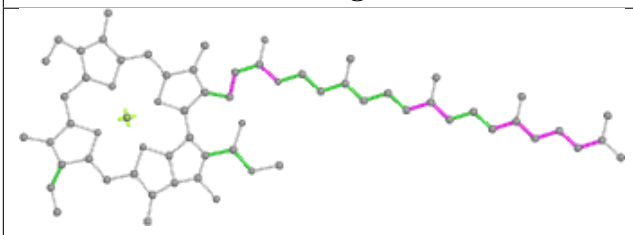
Ligand CLA c 507



Bond lengths



Bond angles



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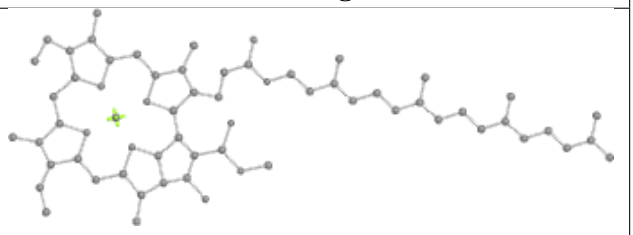
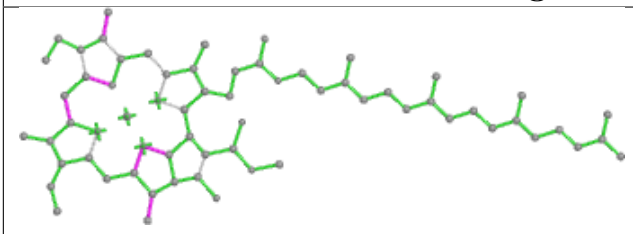
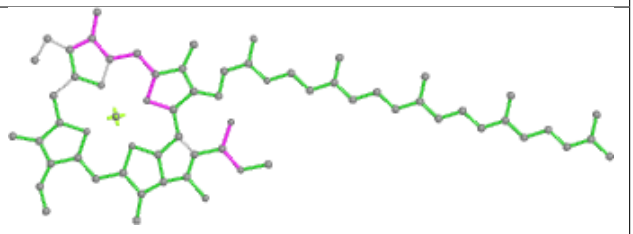


Rings

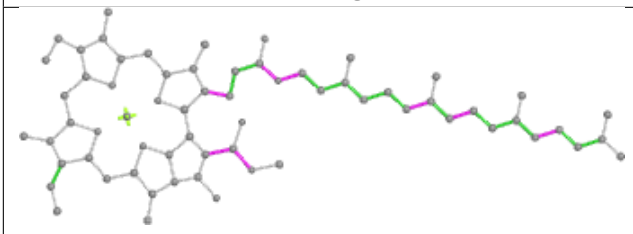
Ligand CLA 3 304



Bond lengths



Bond angles



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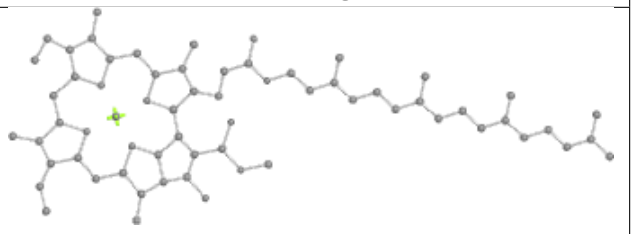
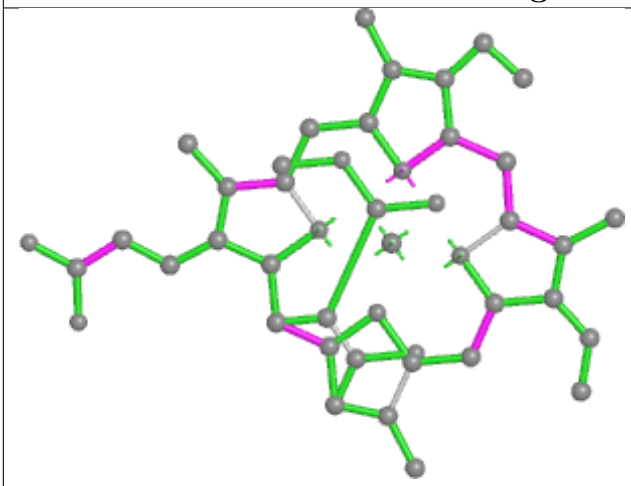
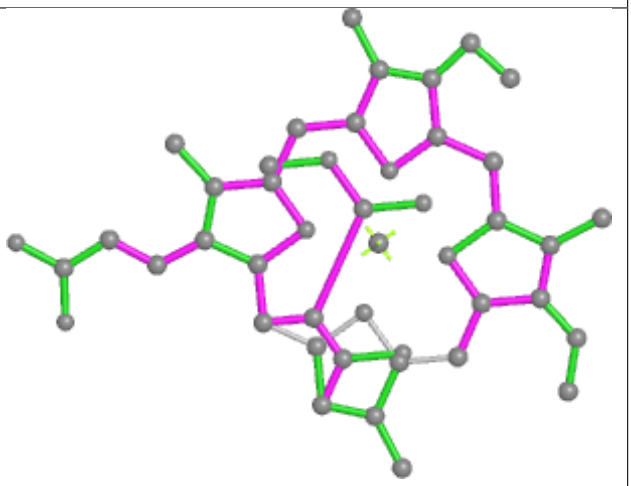


Rings

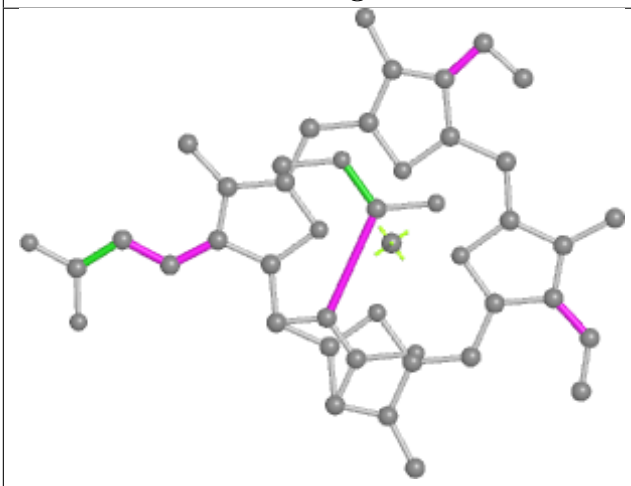
Ligand KC2 4 307



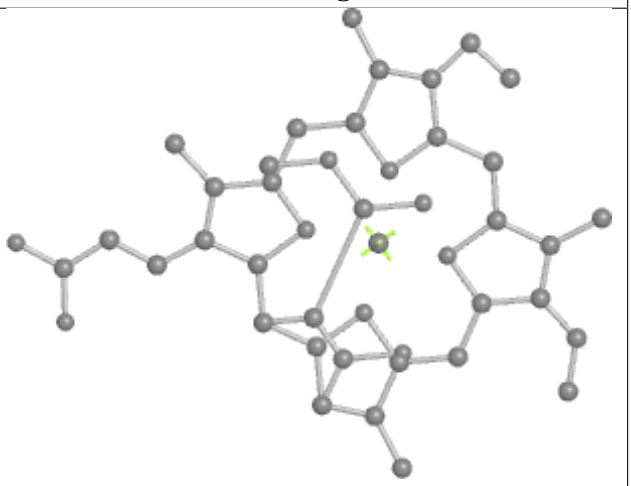
Bond lengths



Bond angles

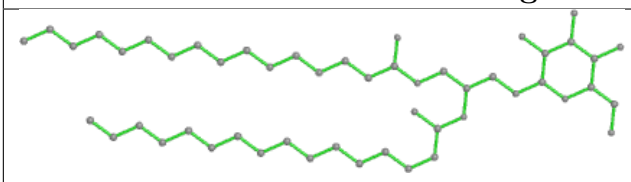


Torsions

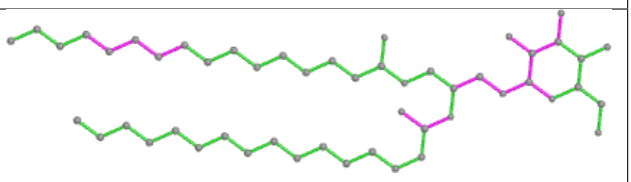


Rings

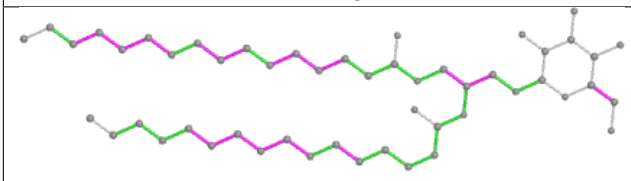
Ligand LMG B 620



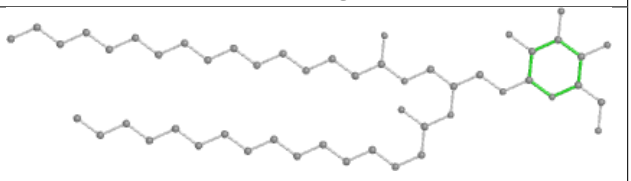
Bond lengths



Bond angles

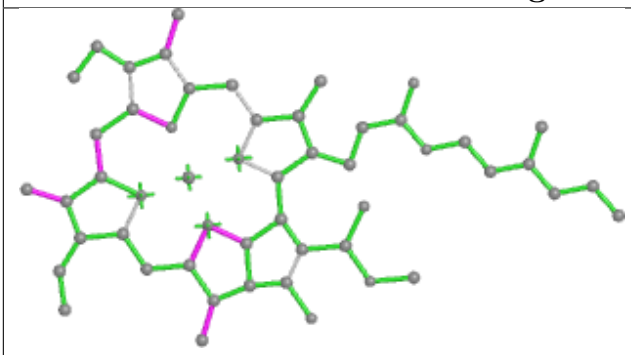


Torsions

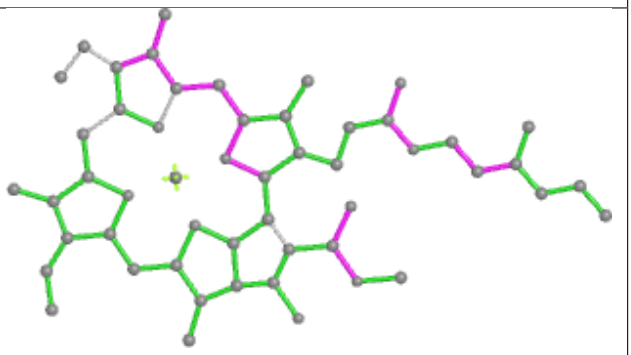


Rings

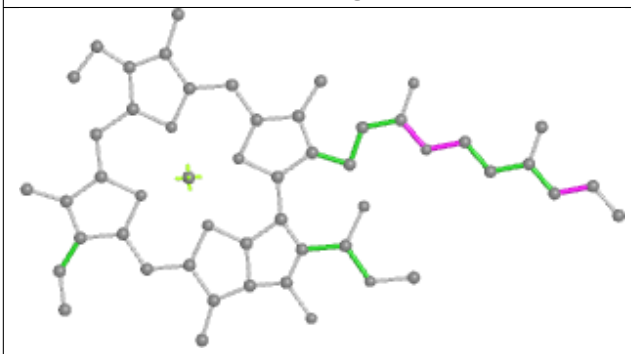
Ligand CLA 4 316



Bond lengths



Bond angles



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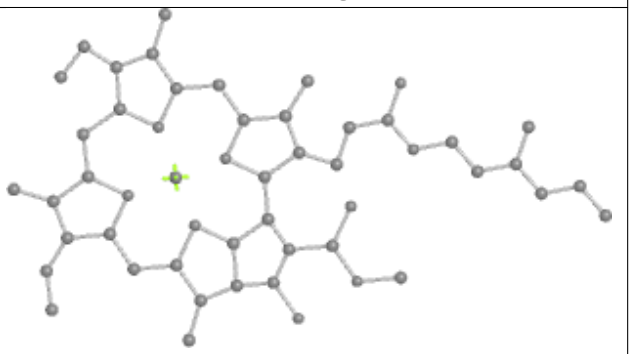
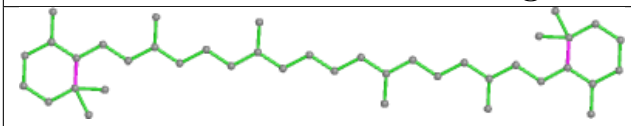
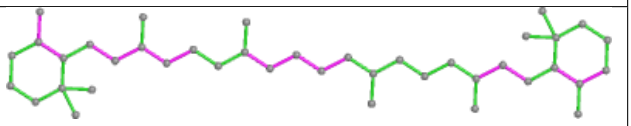


Rings

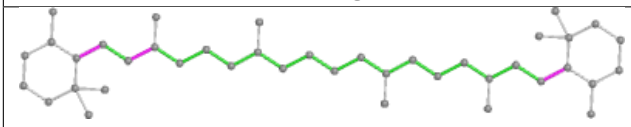
Ligand BCR A 401



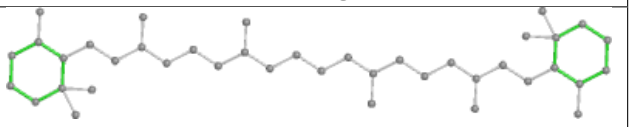
Bond lengths



Bond angles

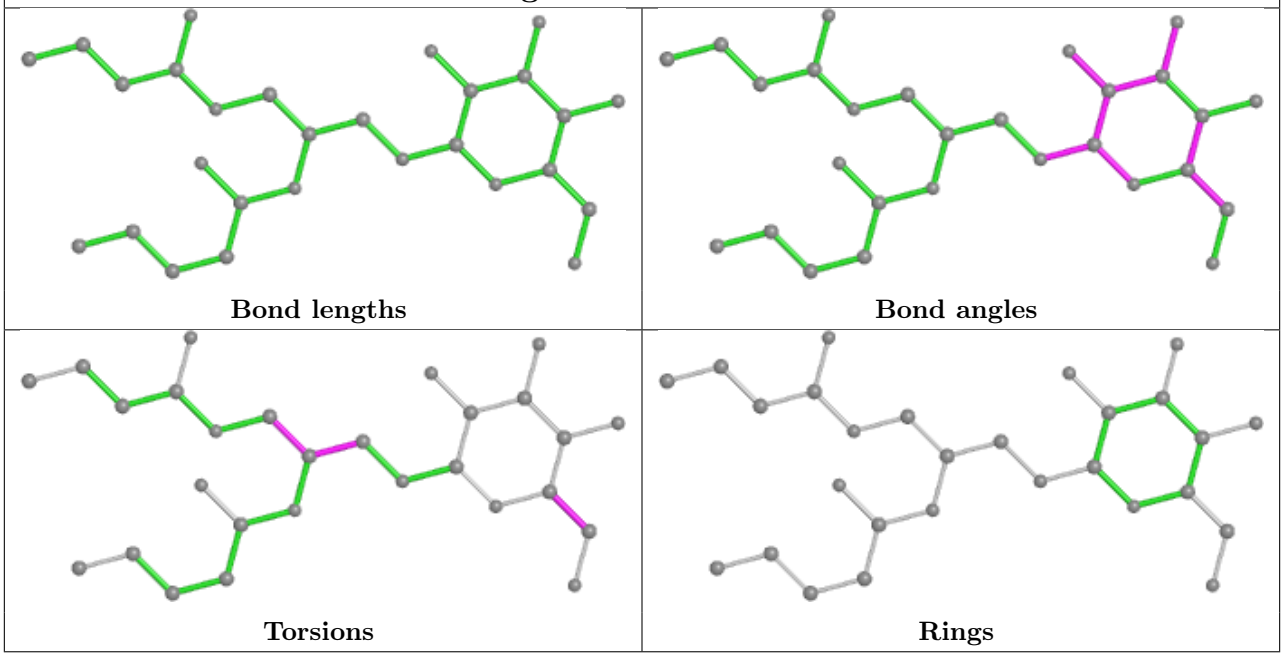


Torsions

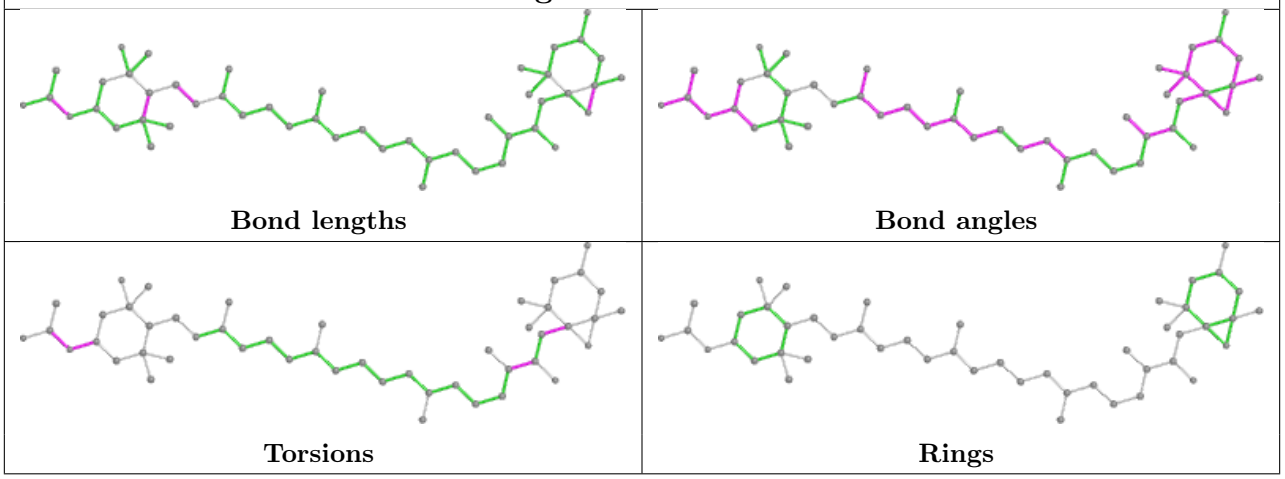


Rings

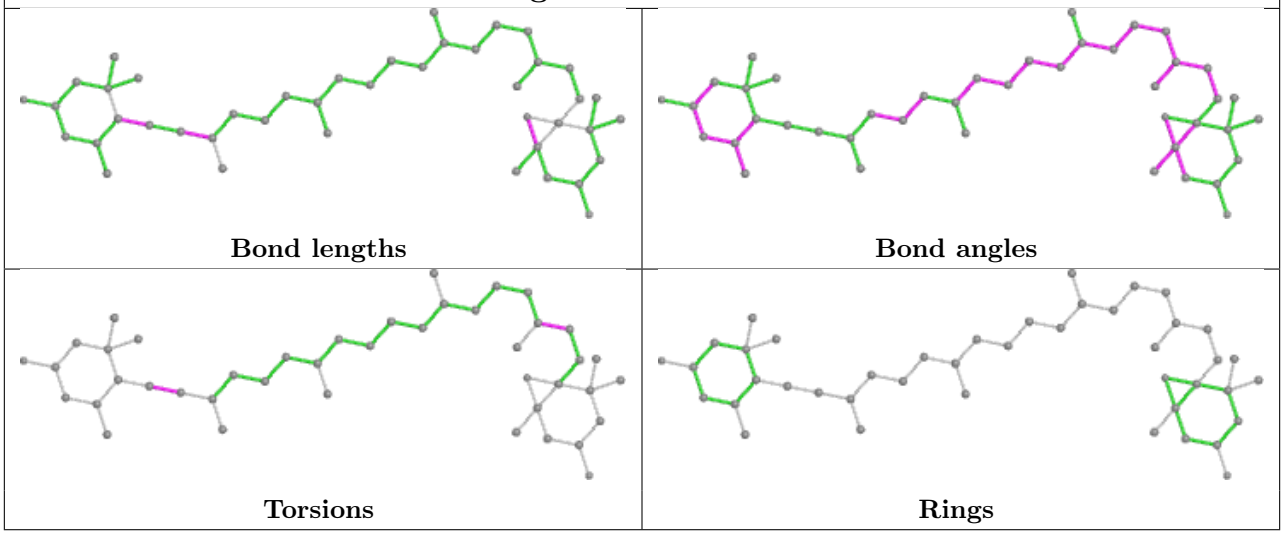
Ligand LMG B 621



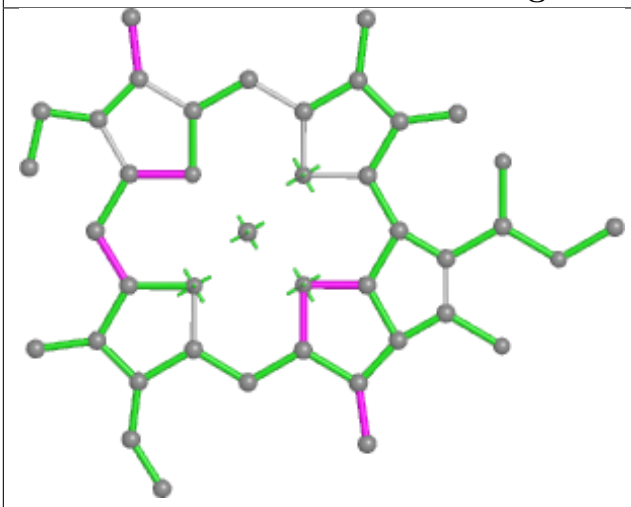
Ligand A86 5 307



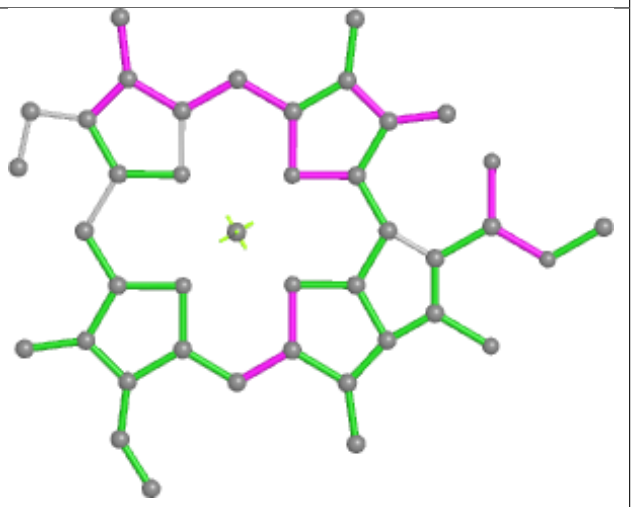
Ligand DD6 4 303



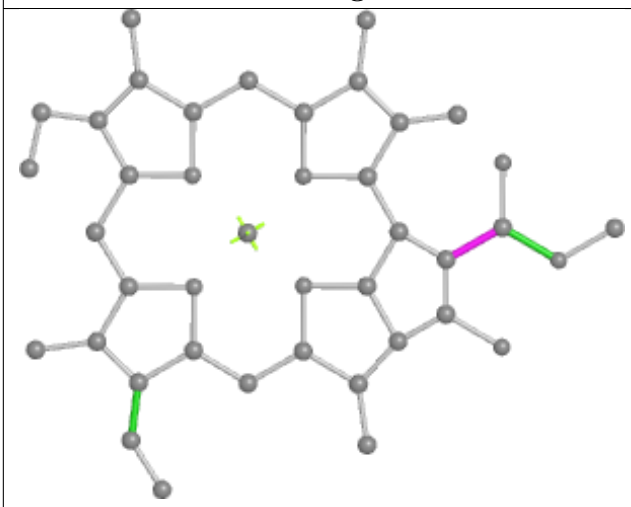
Ligand CLA 2 305



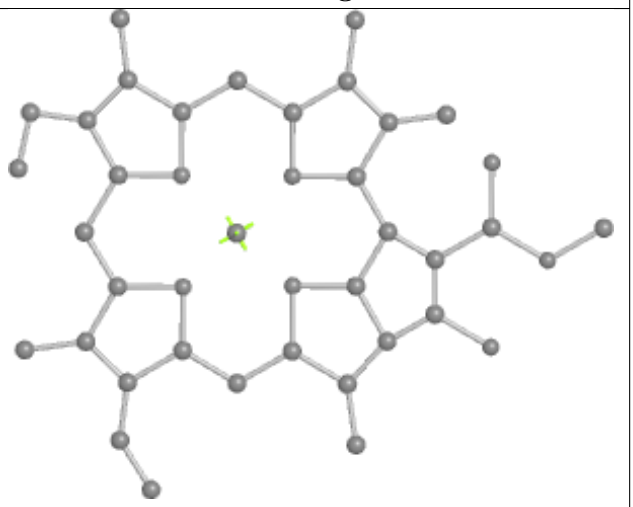
Bond lengths



Bond angles

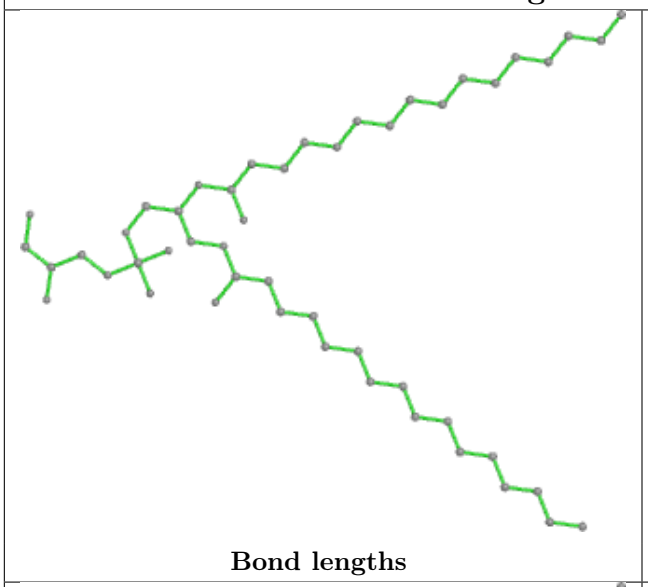


Torsions

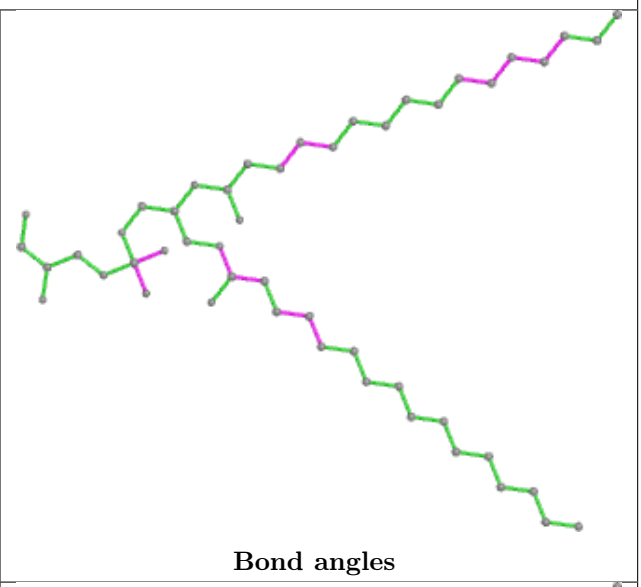


Rings

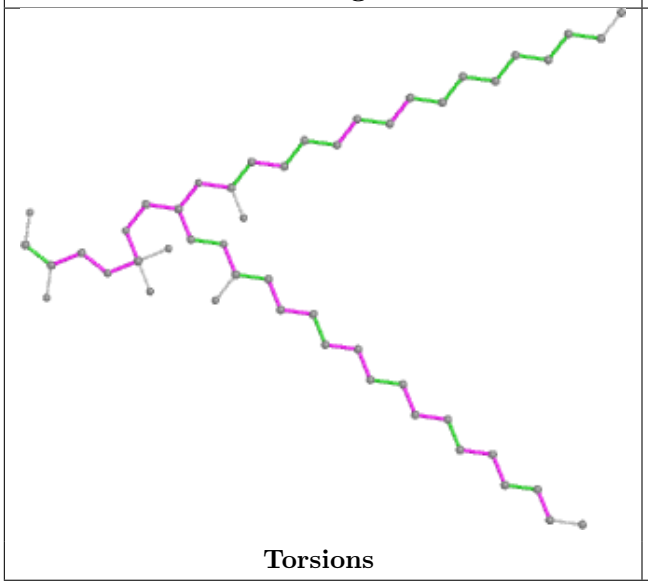
Ligand LHG 4 318



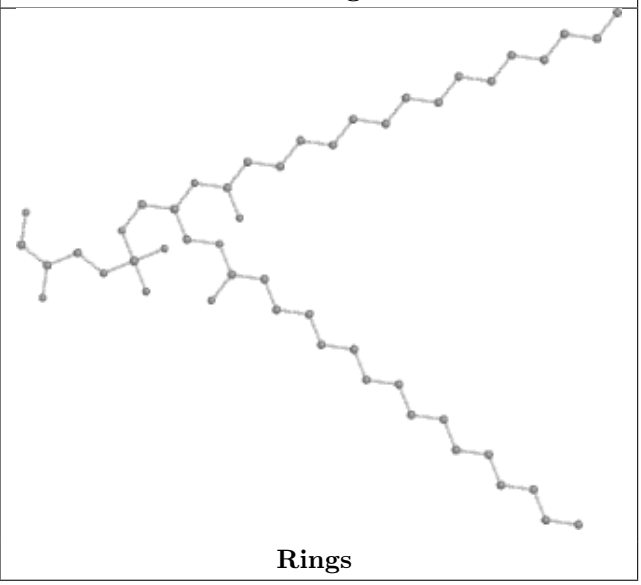
Bond lengths



Bond angles

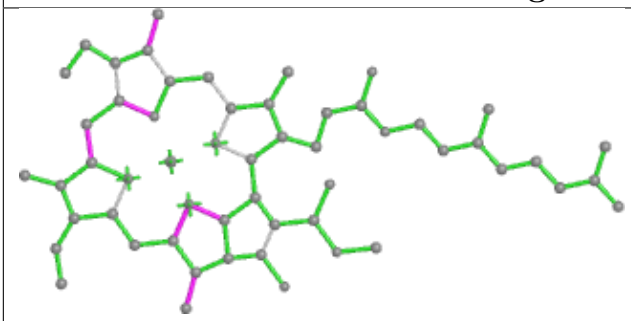


Torsions

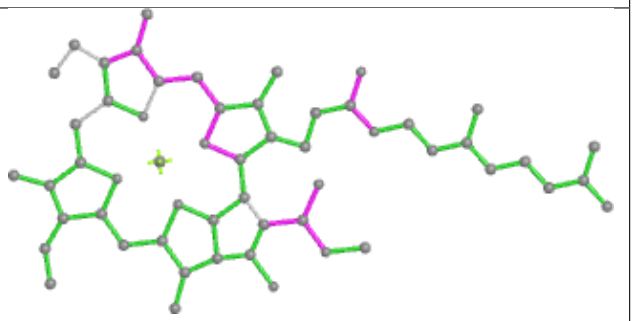


Rings

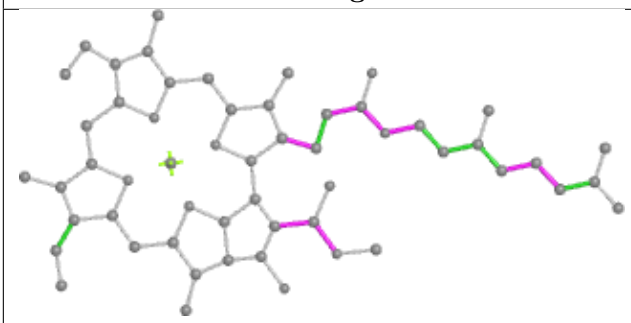
Ligand CLA 8 308



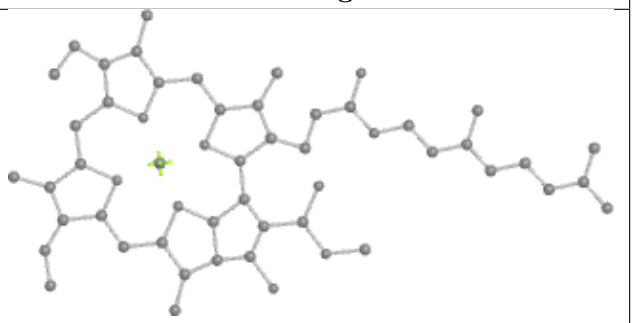
Bond lengths



Bond angles

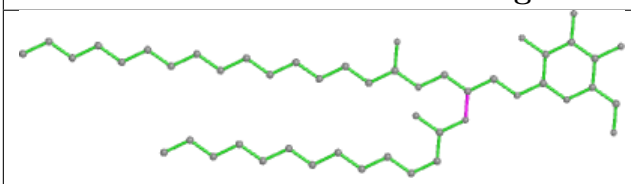


Torsions



Rings

Ligand LMG W 301



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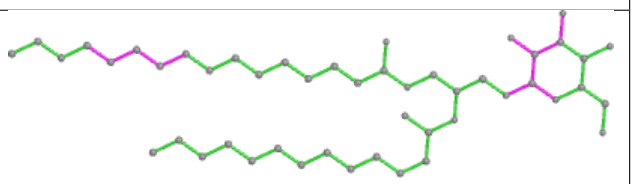
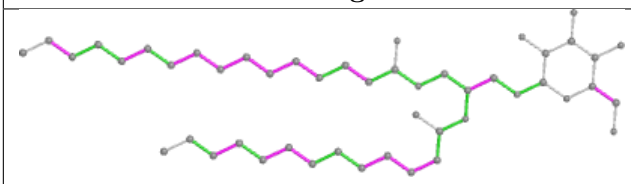
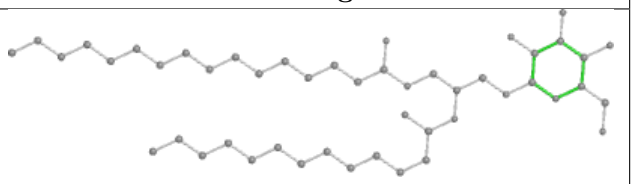


Bond angles

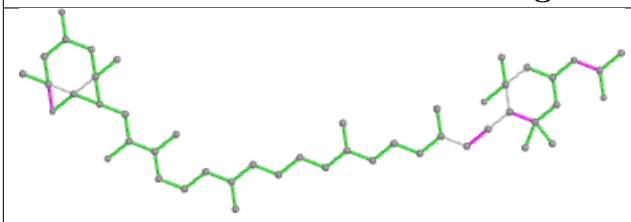


Torsions



Rings

Ligand A86 6 303



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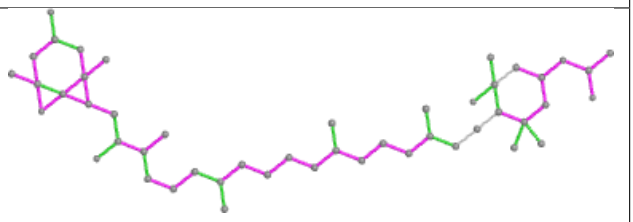

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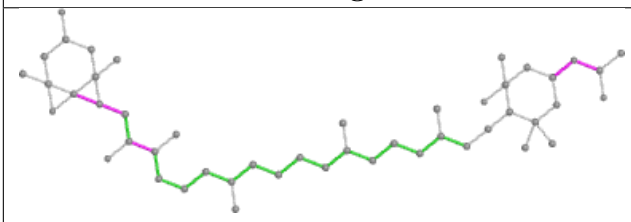
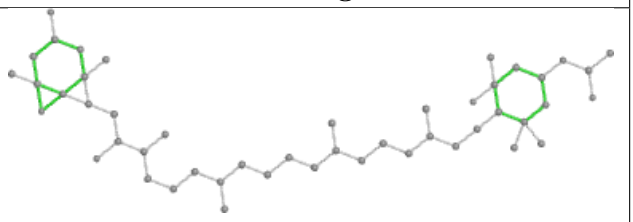
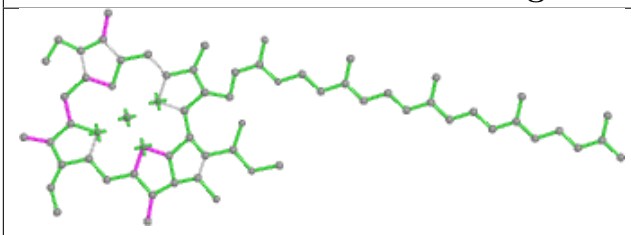


Torsions



Rings

Ligand CLA b 607



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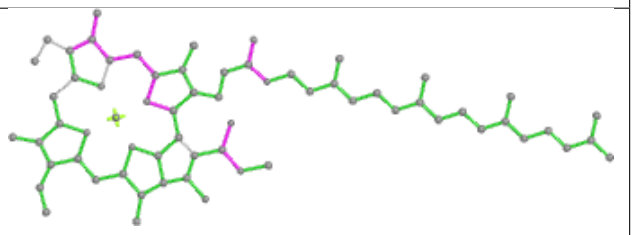
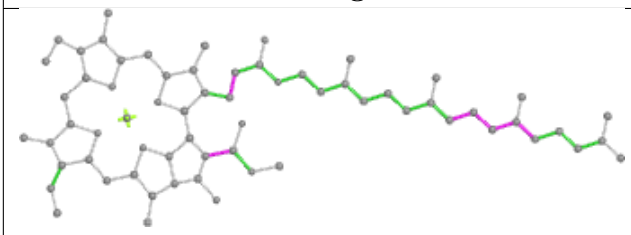


Bond angles



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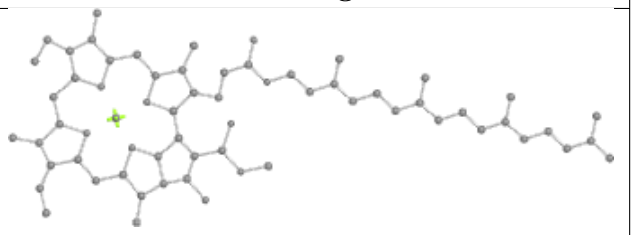
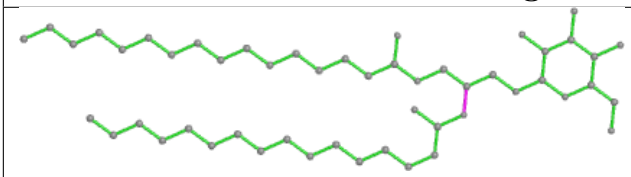
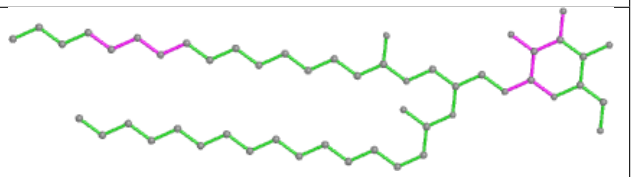


Rings

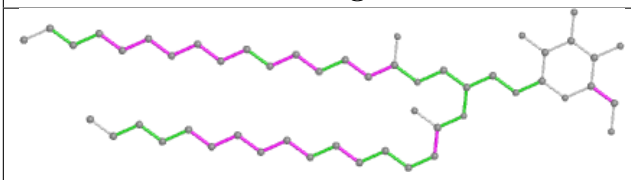
Ligand LMG b 621



Bond lengths



Bond angles



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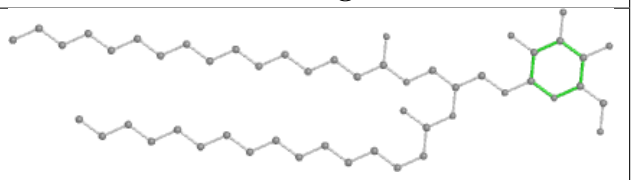
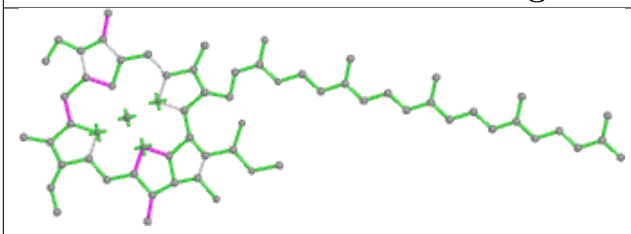


Rings

Ligand CLA 0 307



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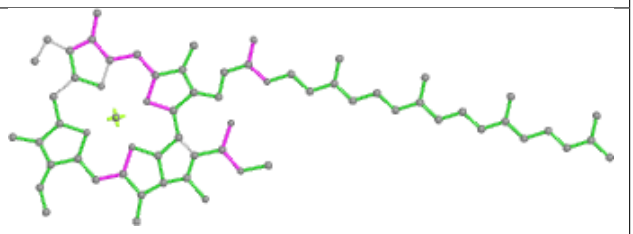
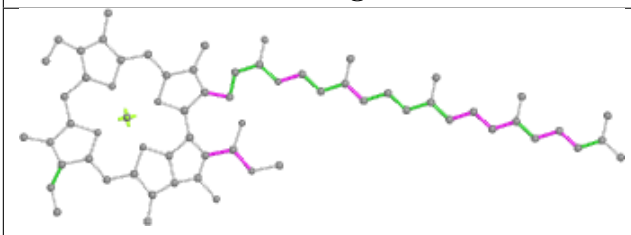


Bond angles



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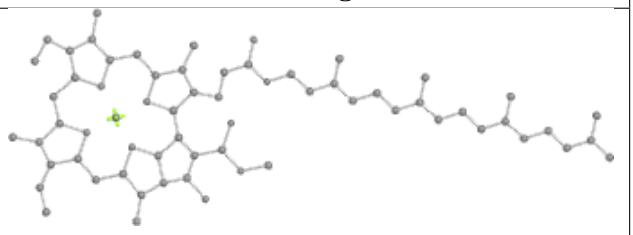
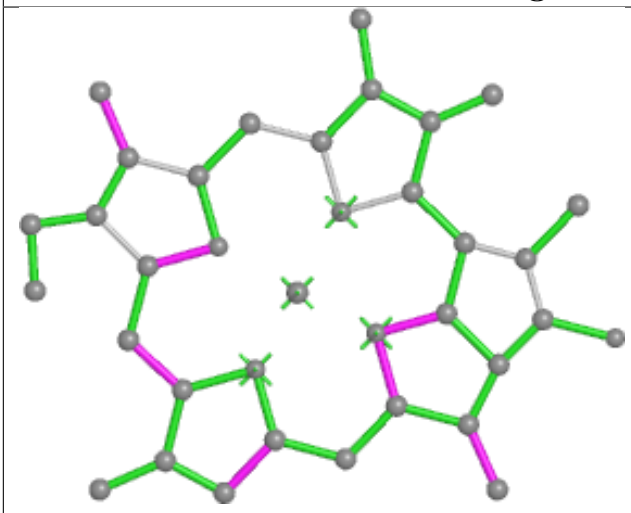
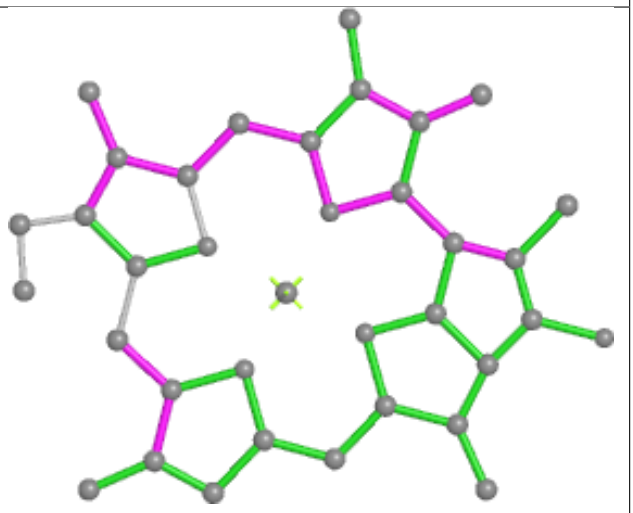


Rings

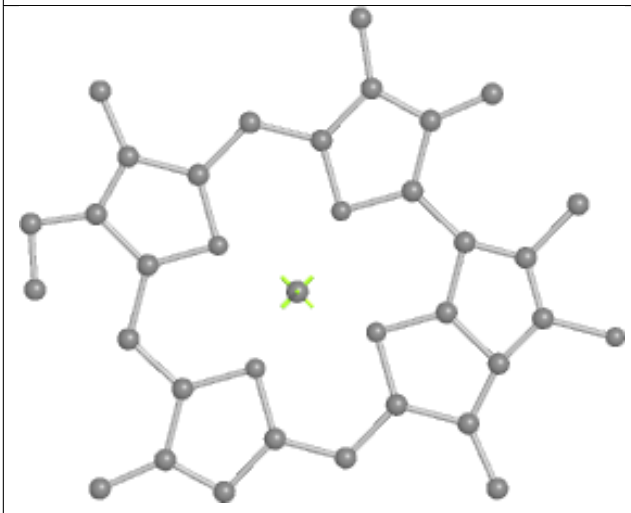
Ligand CLA 1 313



Bond lengths



Bond angles



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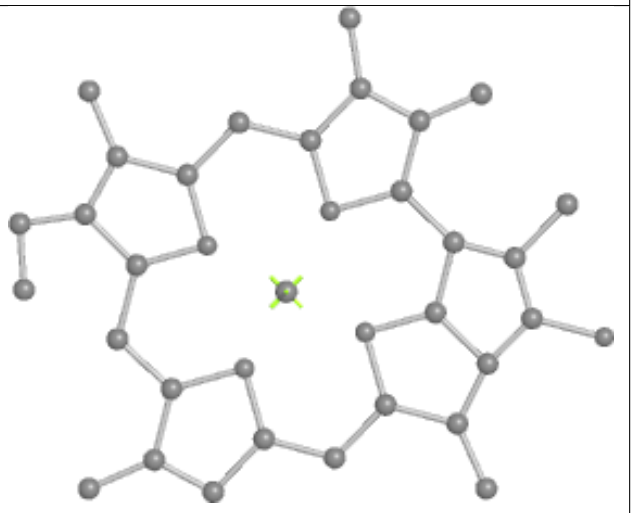
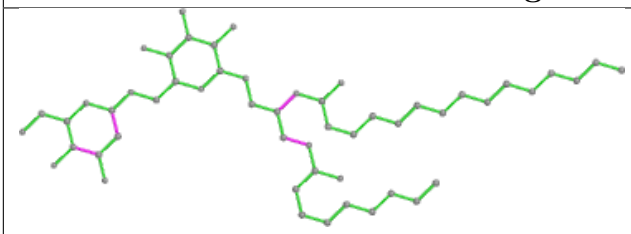


Rings

Ligand DGD a 401



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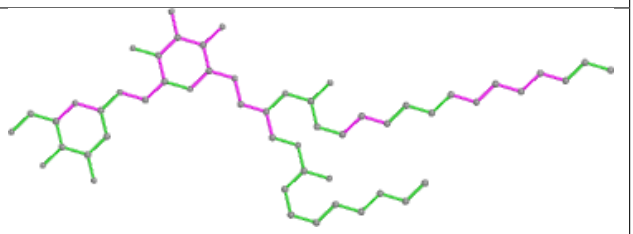
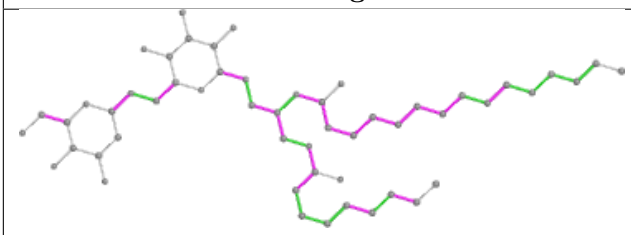
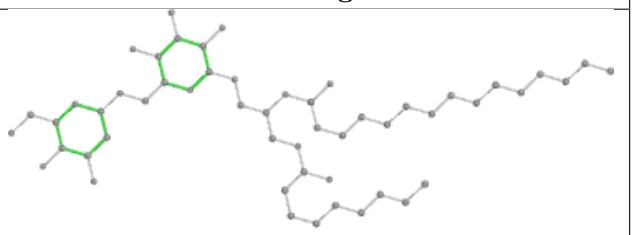


Bond angles

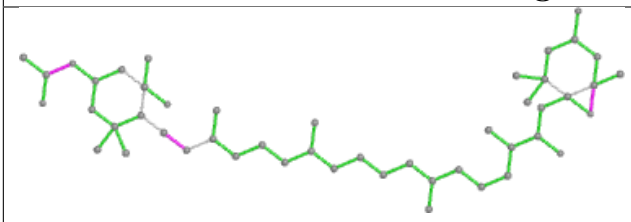


Torsions

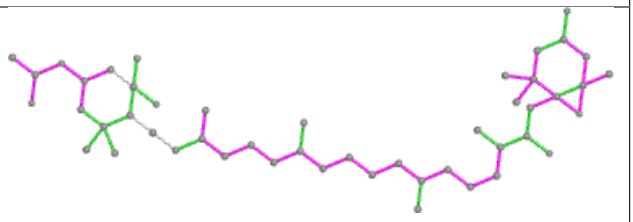


Rings

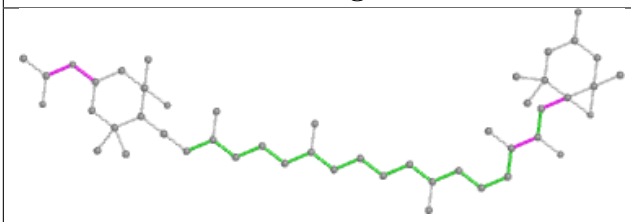
Ligand A86 6 302



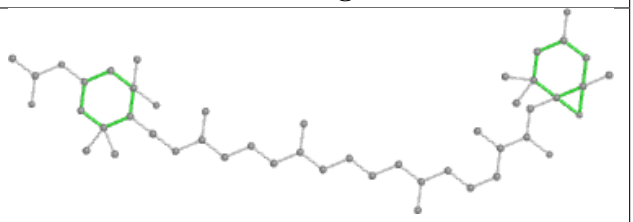
Bond lengths



Bond angles

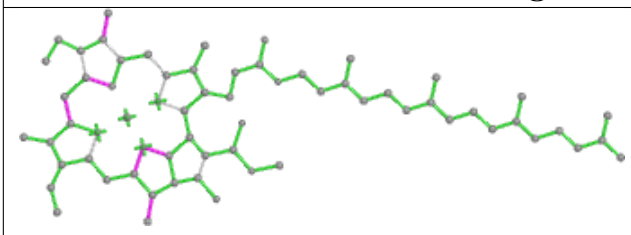


Torsions



Rings

Ligand CLA 0 309



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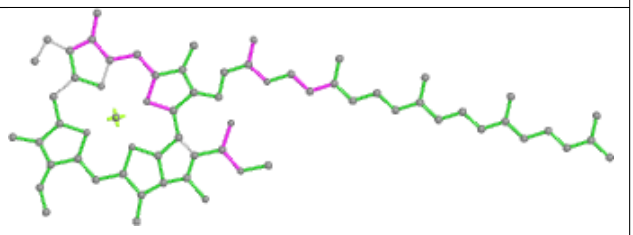
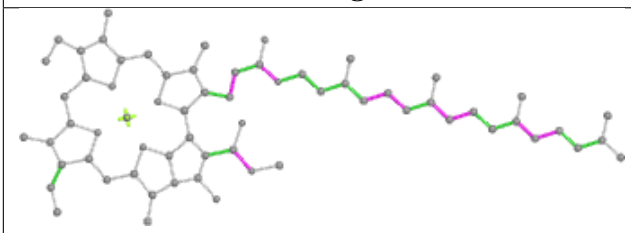


Bond angles



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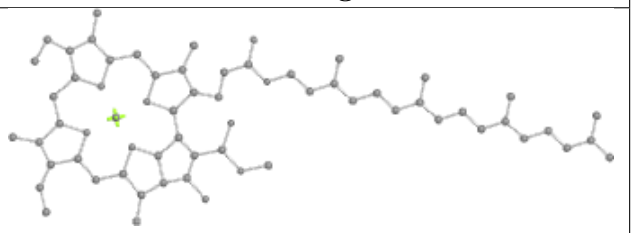
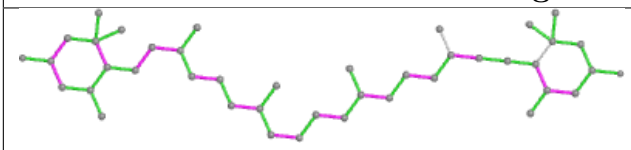


Rings

Ligand ET4 7 302



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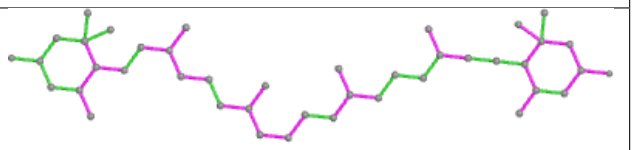
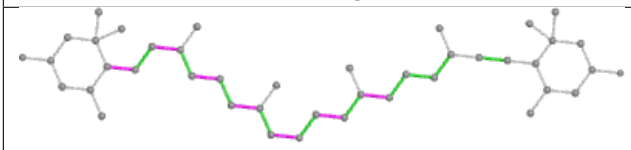


Bond angles



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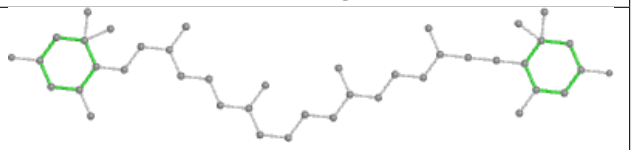
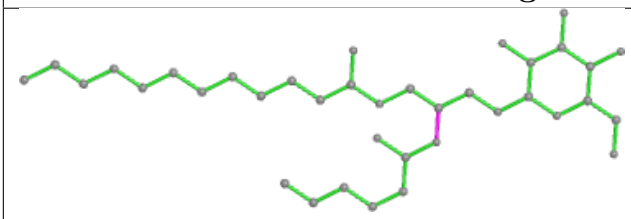
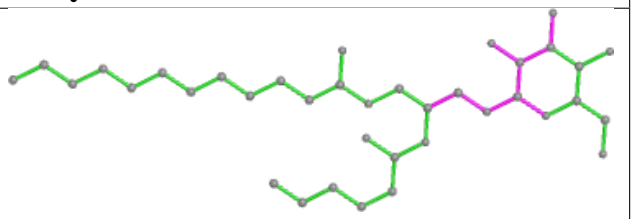


Rings

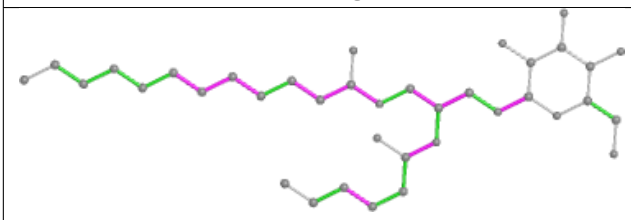
Ligand LMG Q 301



Bond lengths



Bond angles



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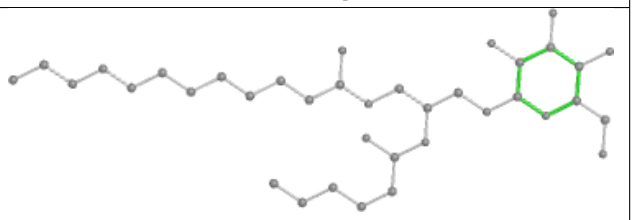
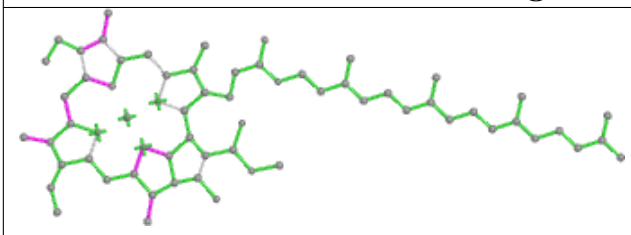
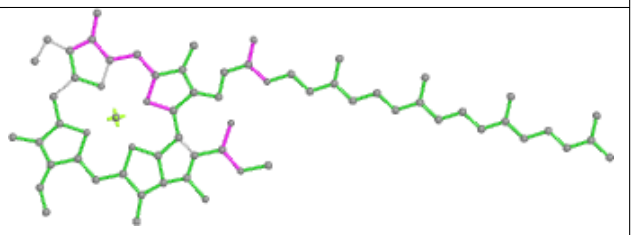


Rings

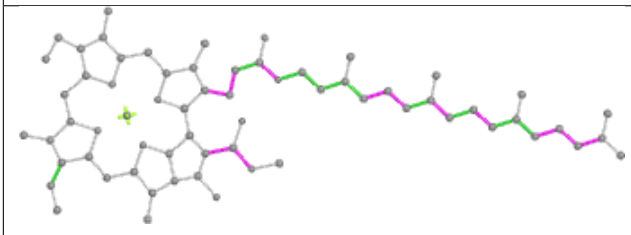
Ligand CLA b 617



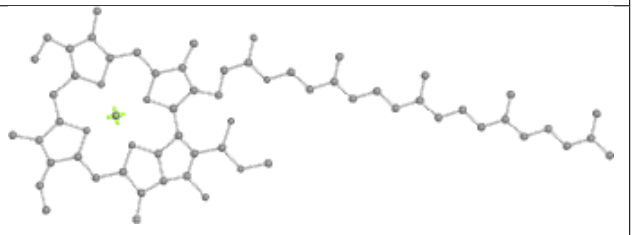
Bond lengths



Bond angles

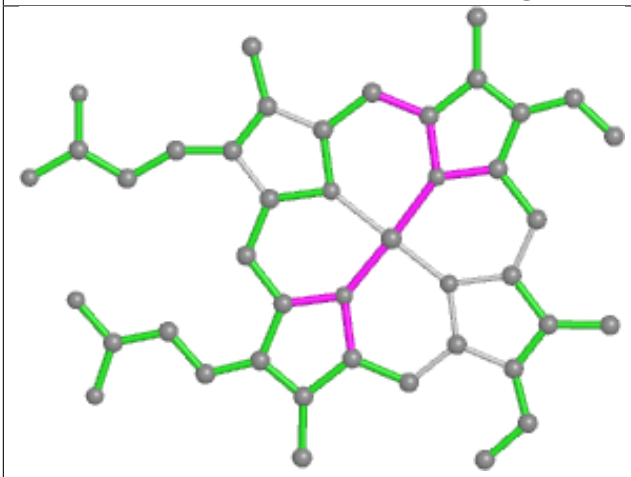


Torsions

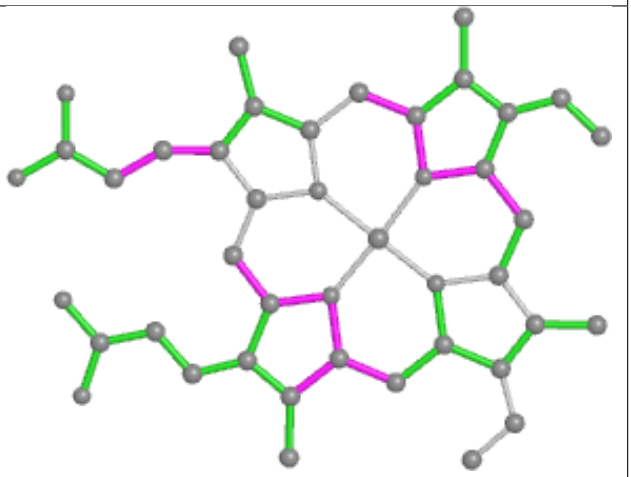


Rings

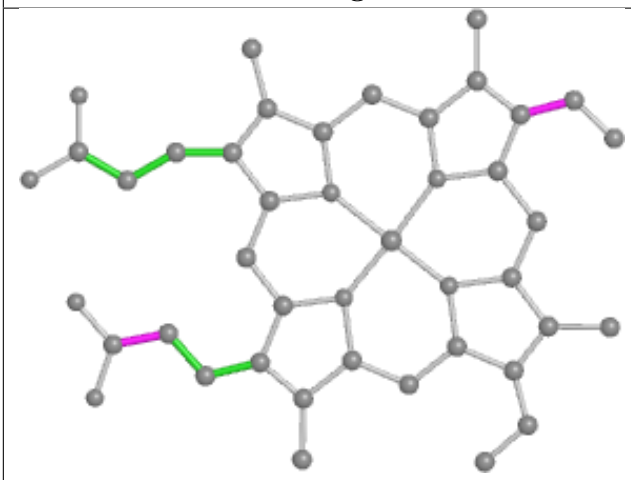
Ligand HEM V 201



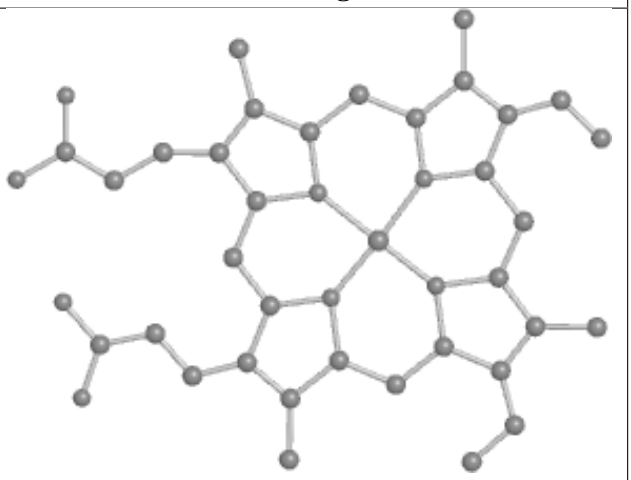
Bond lengths



Bond angles

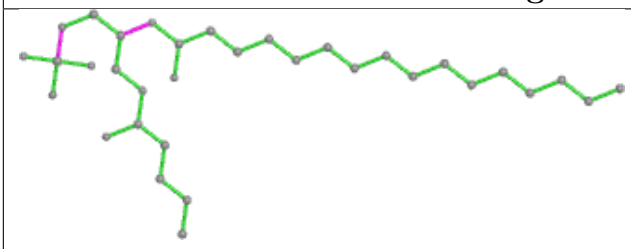


Torsions

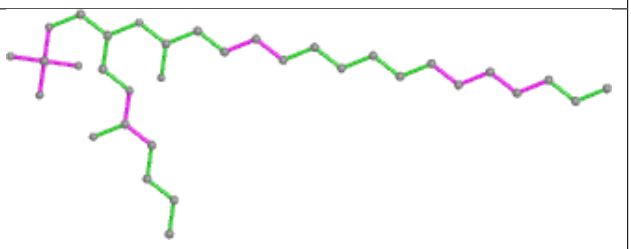


Rings

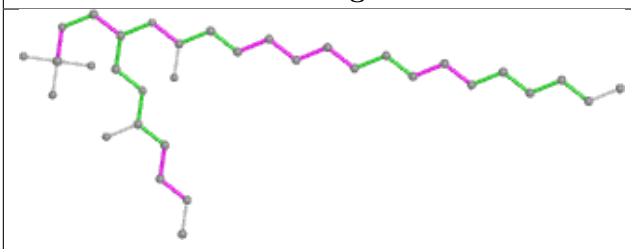
Ligand LHG 5 318



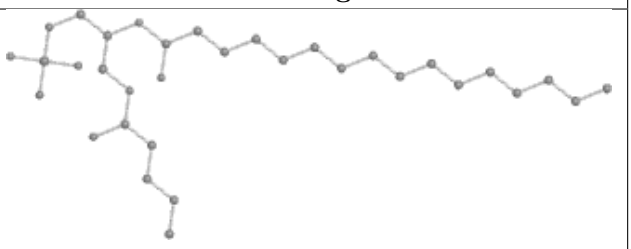
Bond lengths



Bond angles

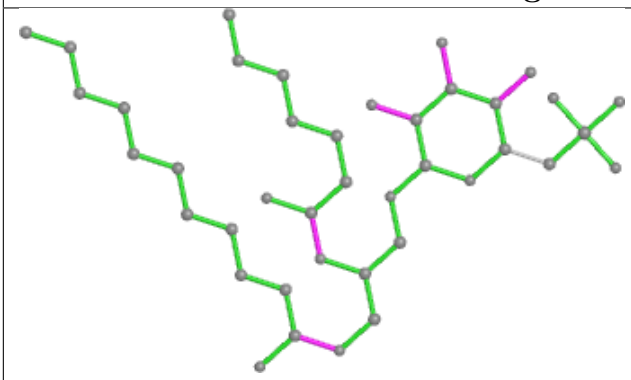


Torsions



Rings

Ligand SQD A 413



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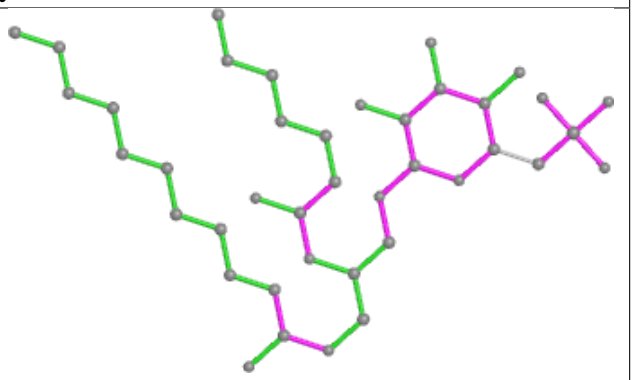
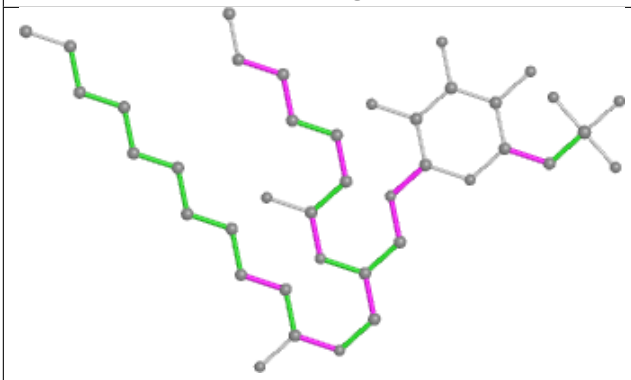


Bond angles



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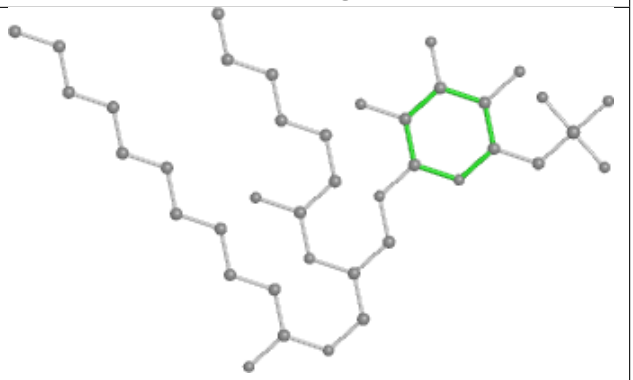
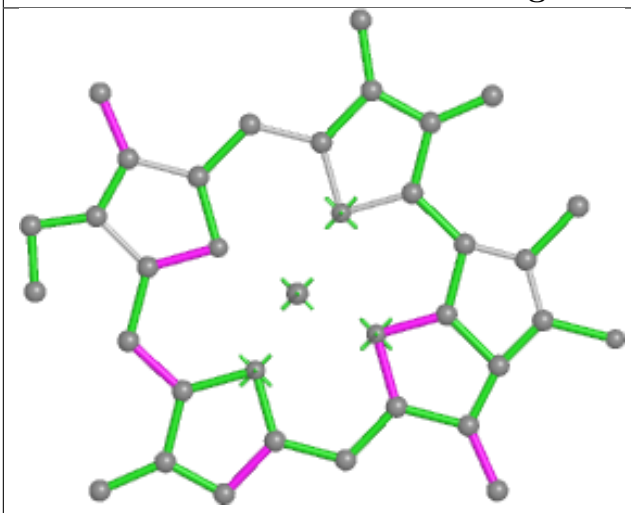


Rings

Ligand CLA 8 313



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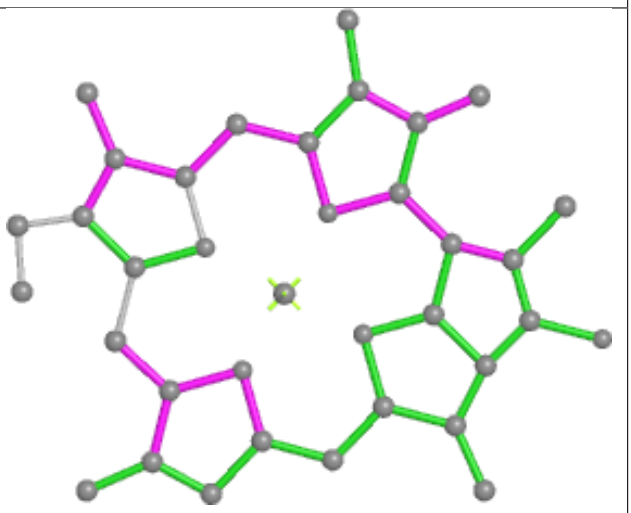
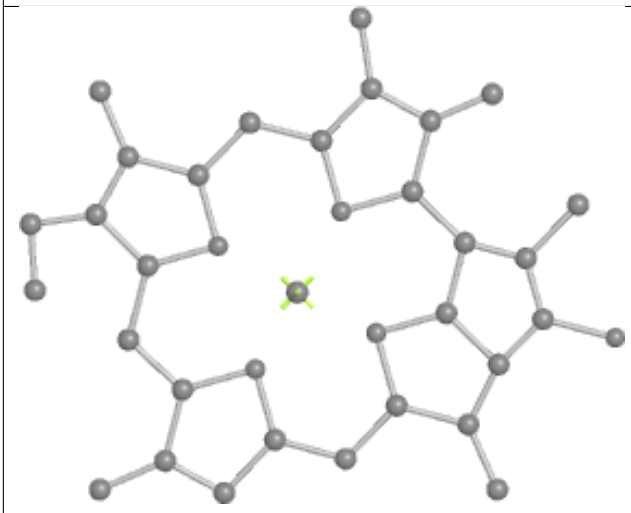


Bond angles



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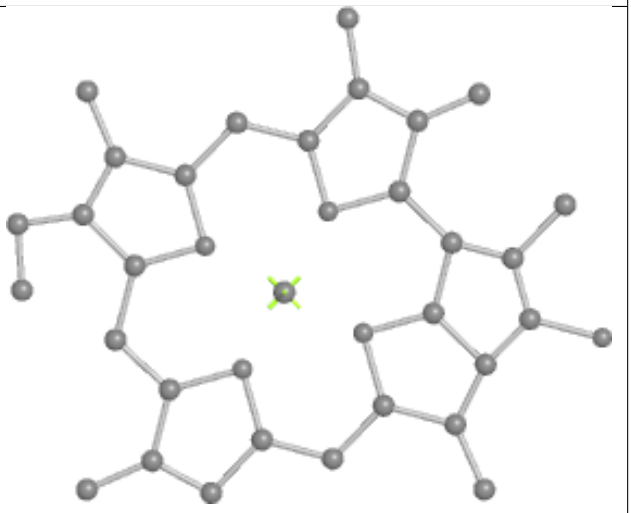
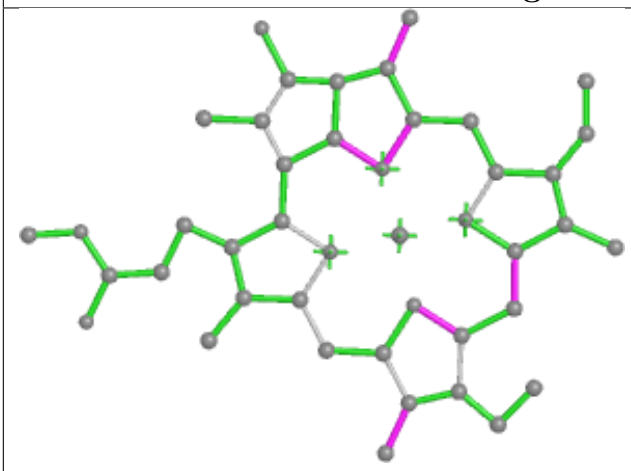


Rings

Ligand CLA H 103



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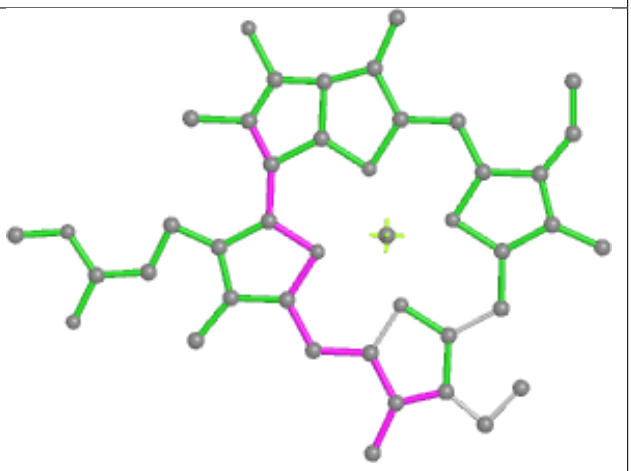
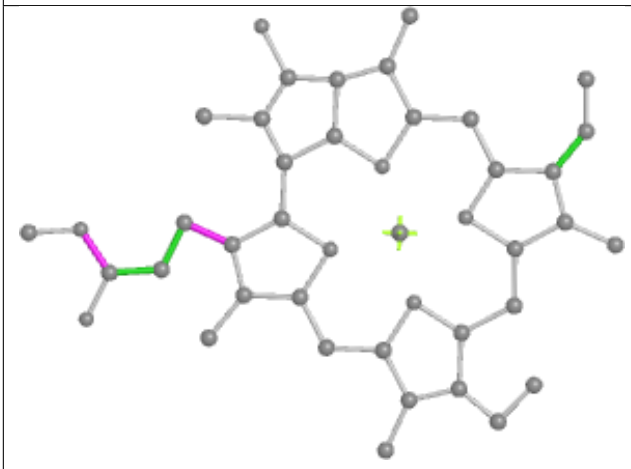
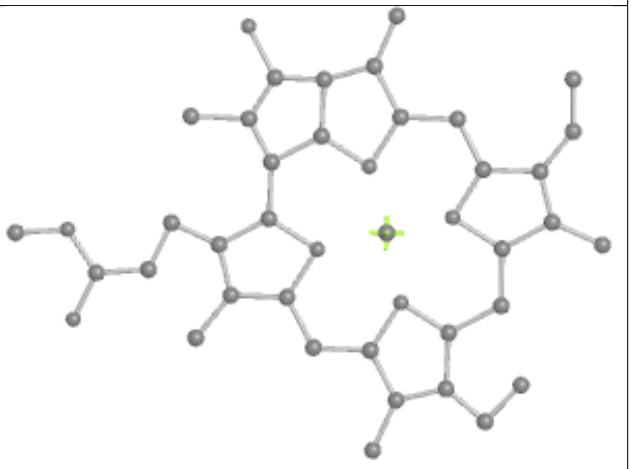


Bond angles

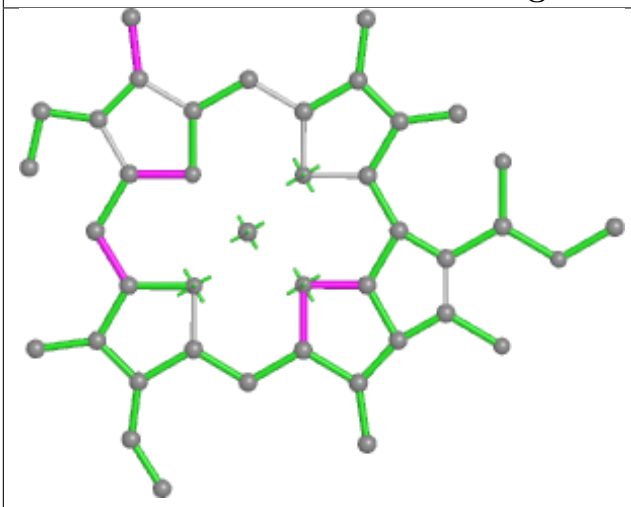


Torsions

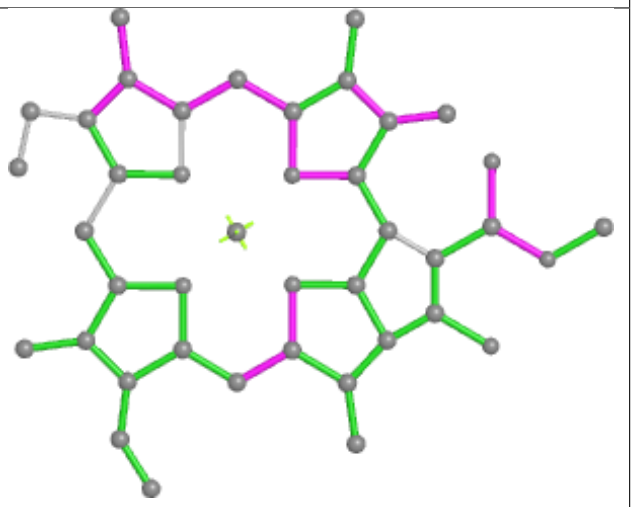


Rings

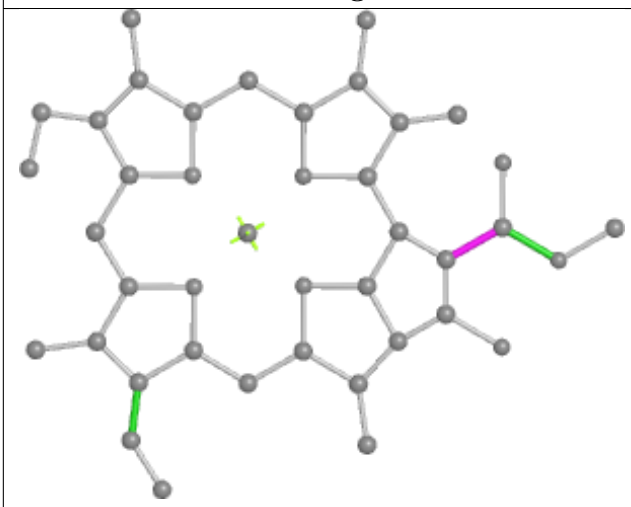
Ligand CLA 9 305



Bond lengths



Bond angles



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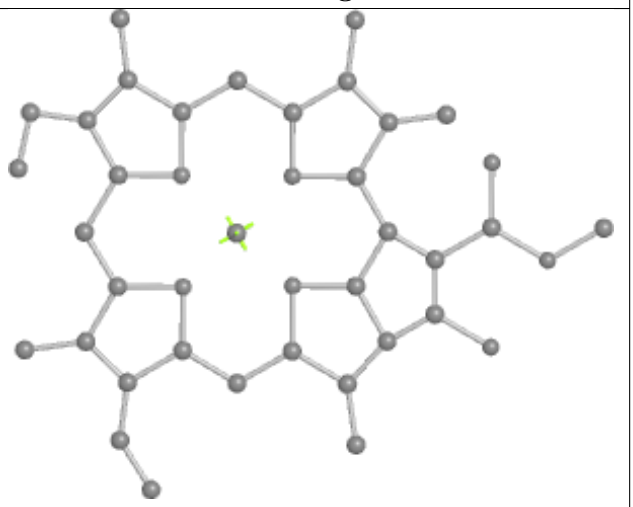
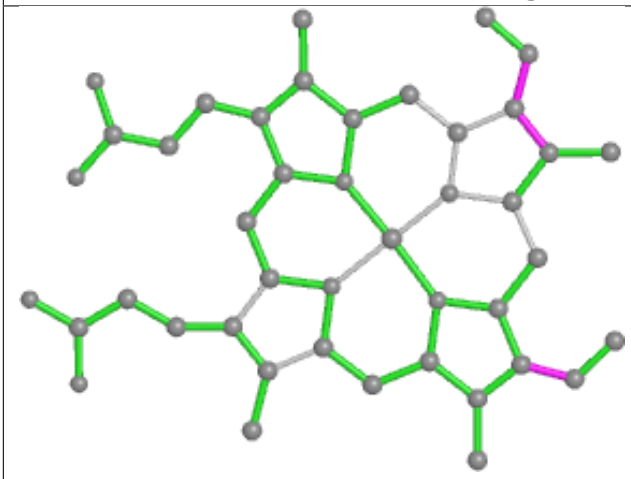


Rings

Ligand HEM v 201



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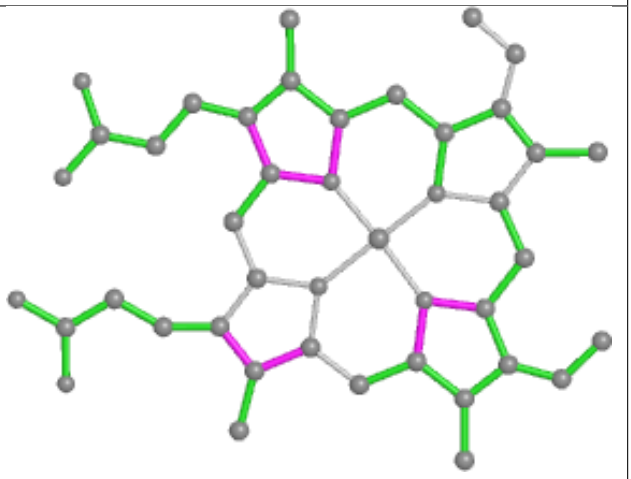
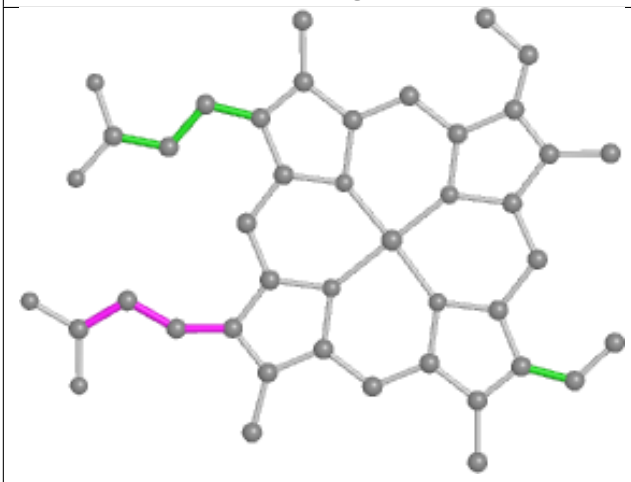


Bond angles



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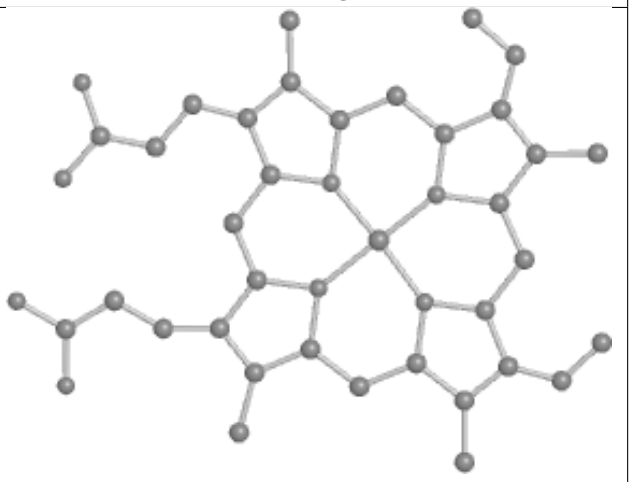
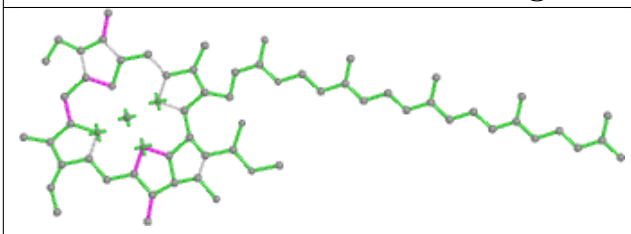
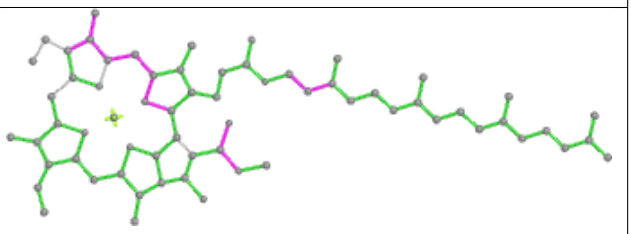


Rings

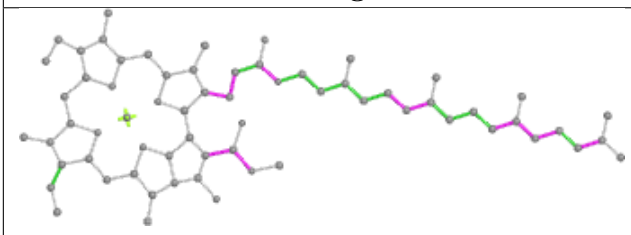
Ligand CLA 1 310



Bond lengths



Bond angles



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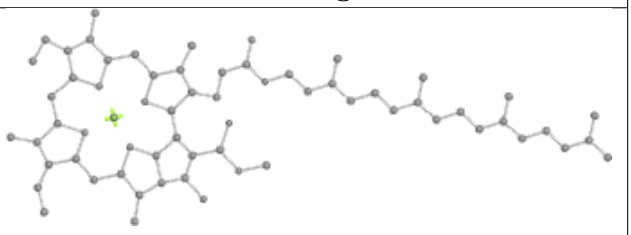
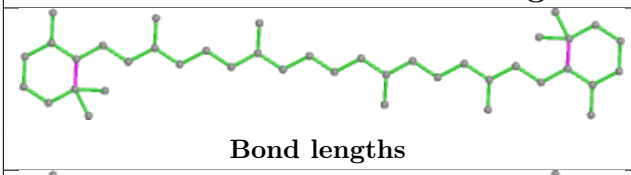
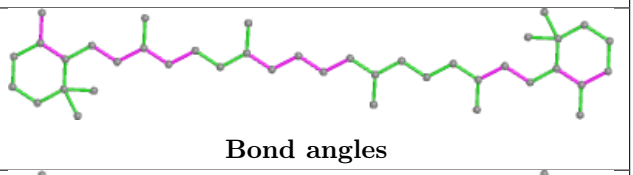


Rings

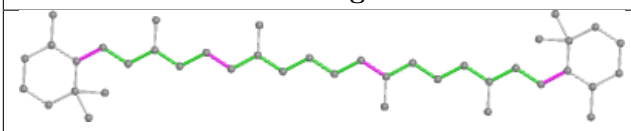
Ligand BCR c 514



Bond lengths



Bond angles



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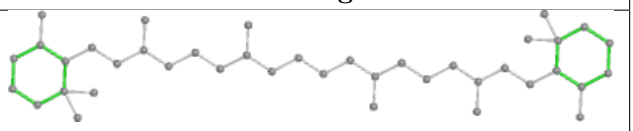
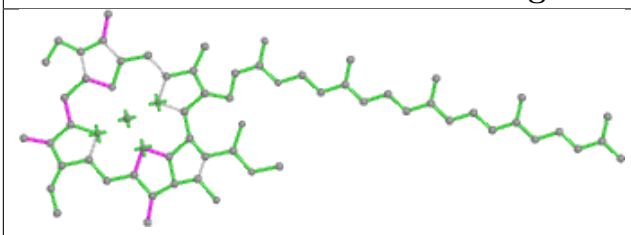


Rings

Ligand CLA 7 309



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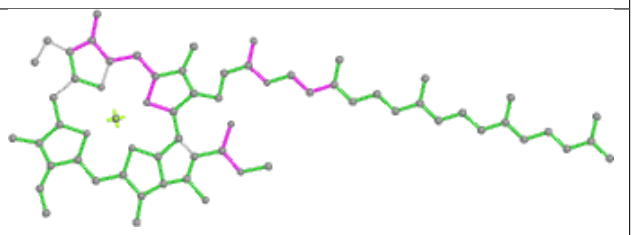
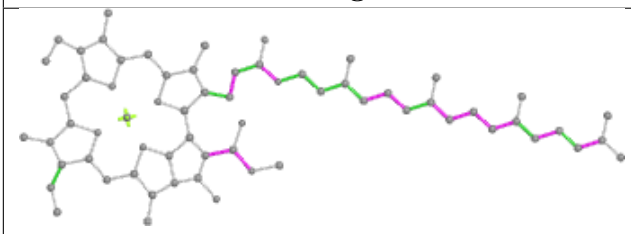
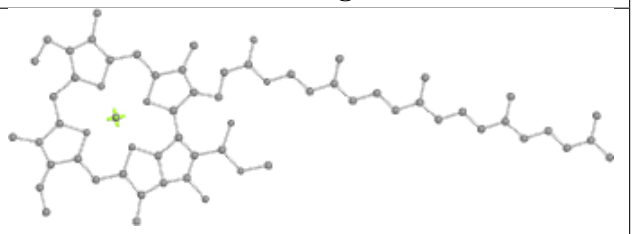


Bond angles

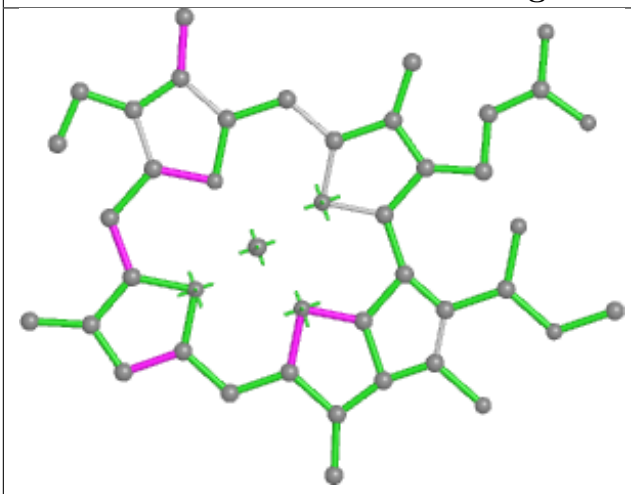


Torsions

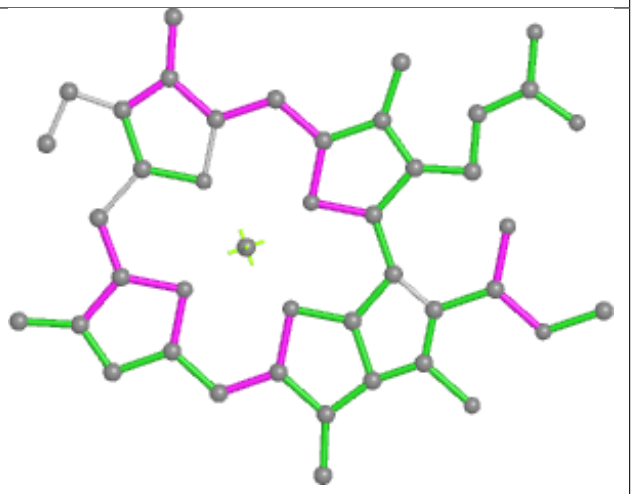


Rings

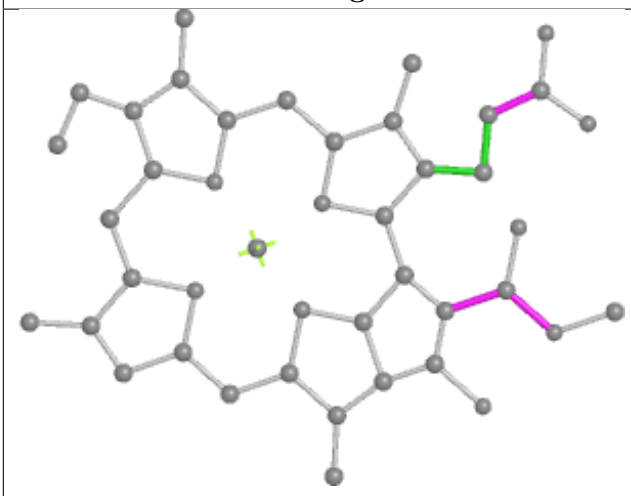
Ligand CLA 2 309



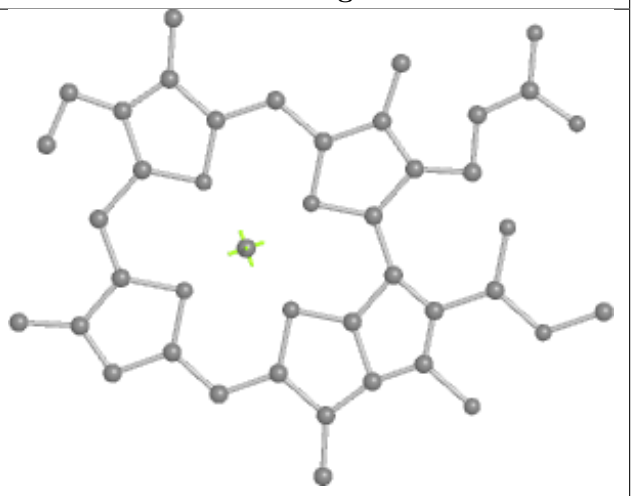
Bond lengths



Bond angles

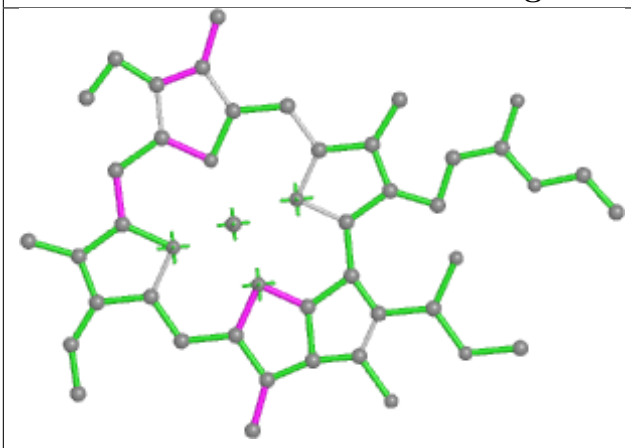


Torsions

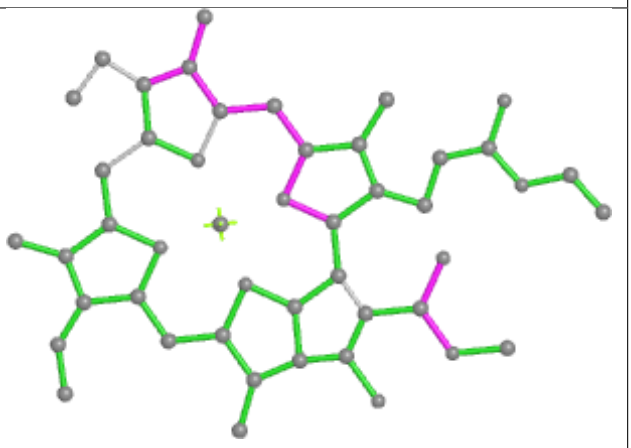


Rings

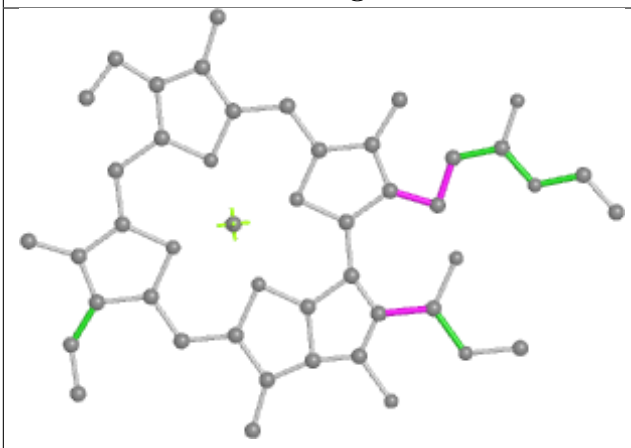
Ligand CLA B 601



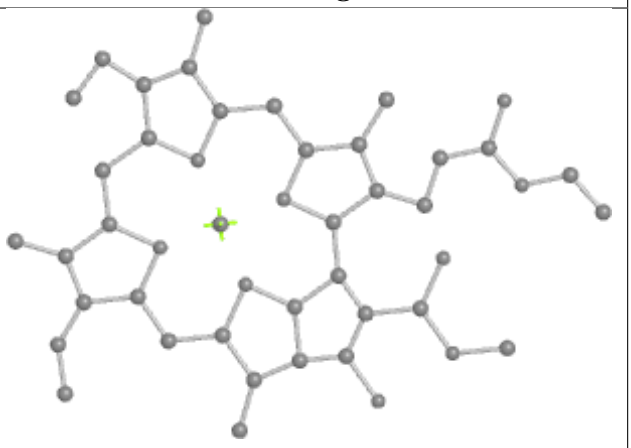
Bond lengths



Bond angles

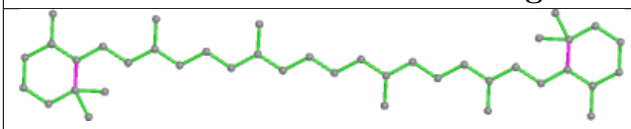


Torsions



Rings

Ligand BCR d 403



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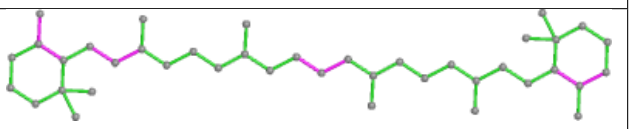
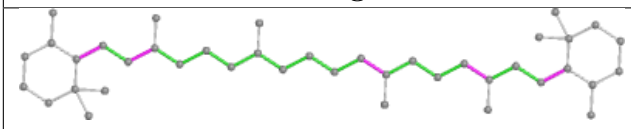


Bond angles



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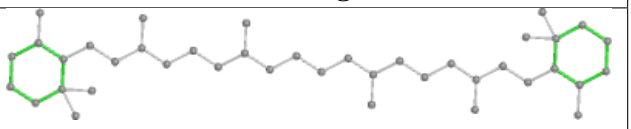
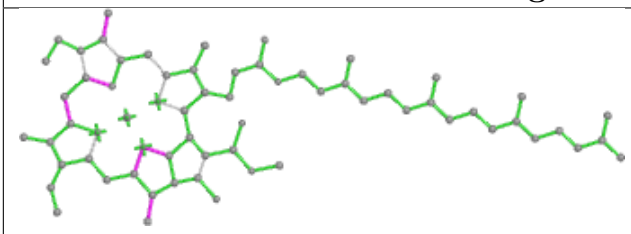


Rings

Ligand CLA 3 307



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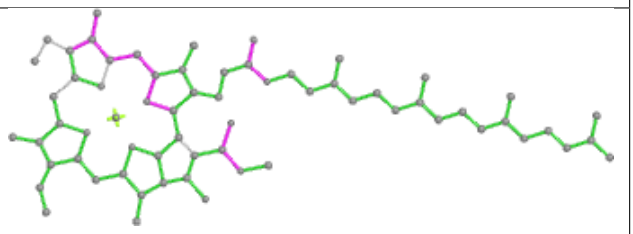
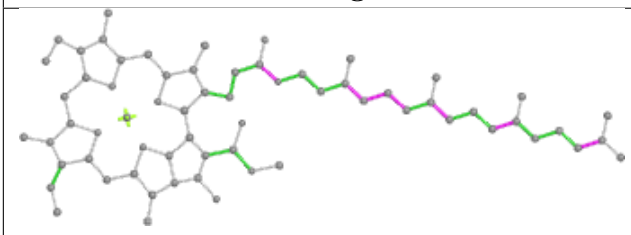


Bond angles



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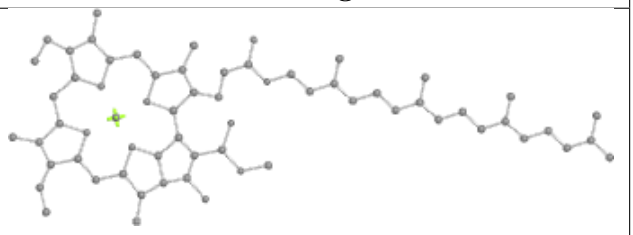
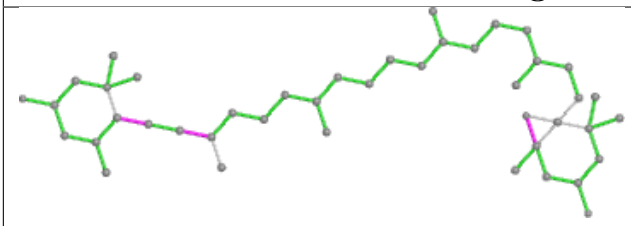


Rings

Ligand DD6 8 304



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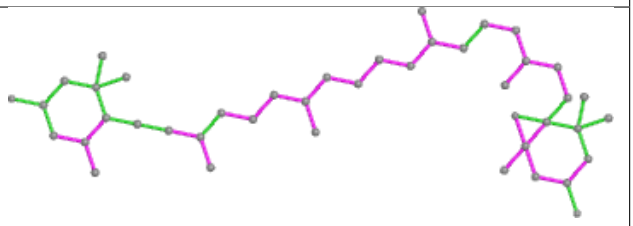
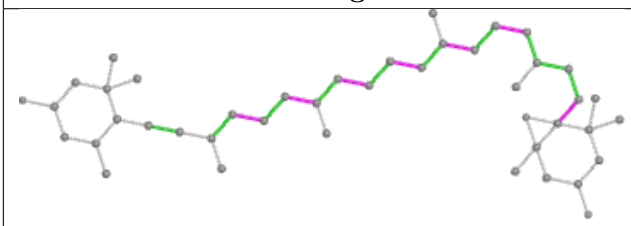


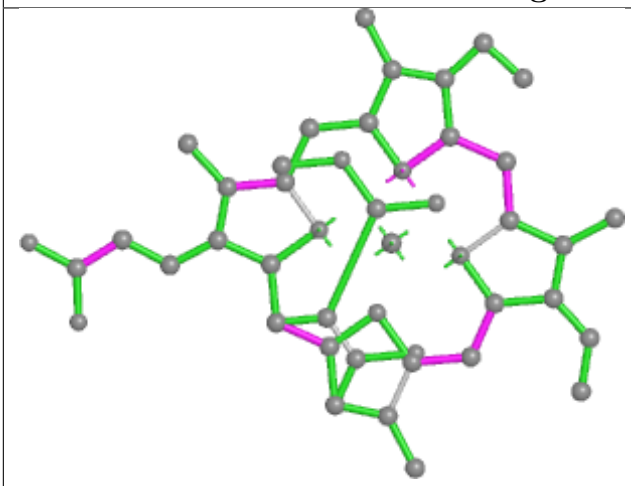
Bond angles



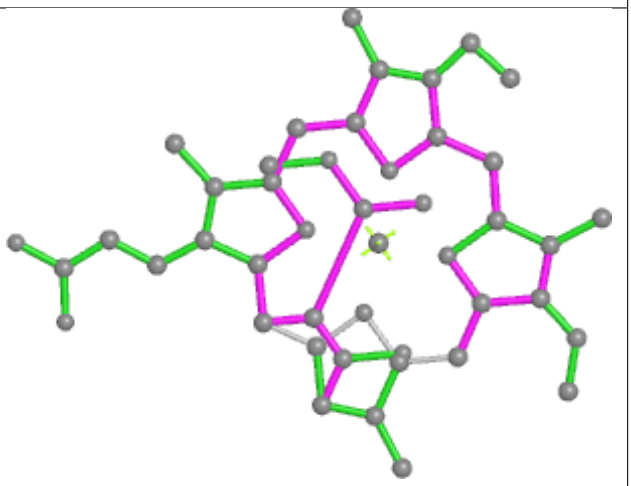
Torsions

Rings

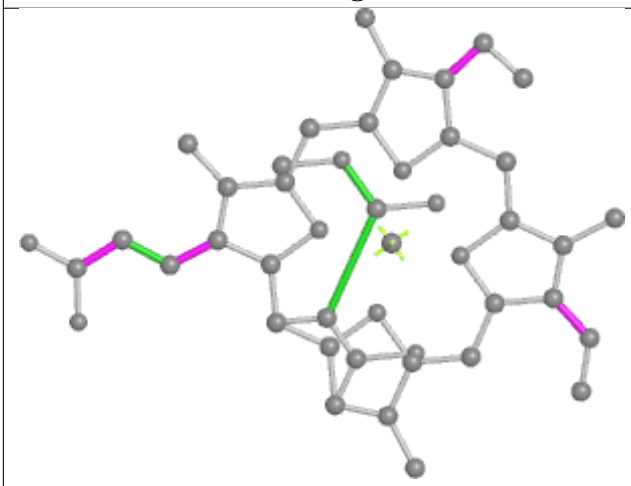
Ligand KC2 6 309



Bond lengths



Bond angles



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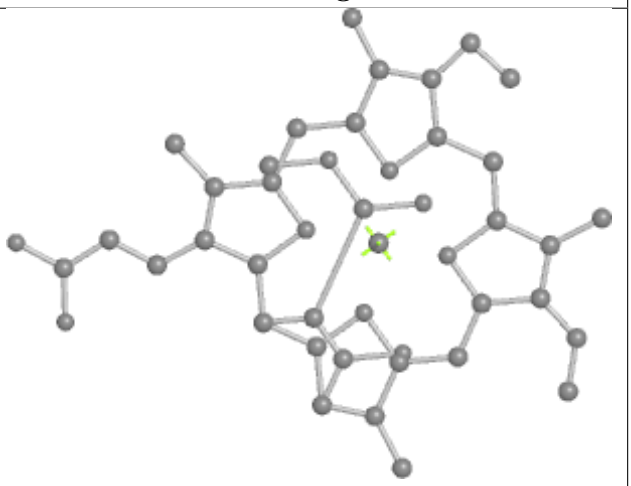
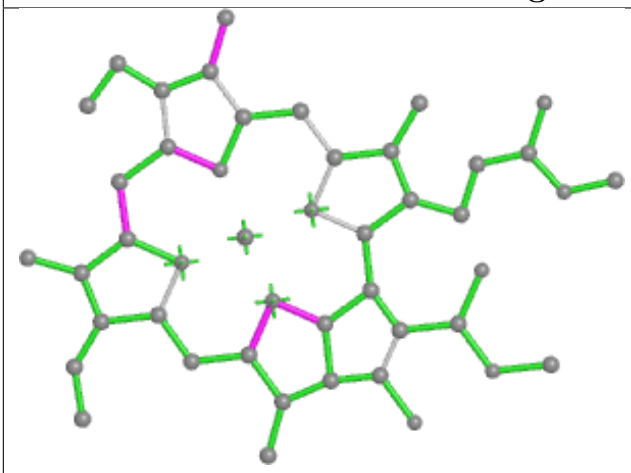
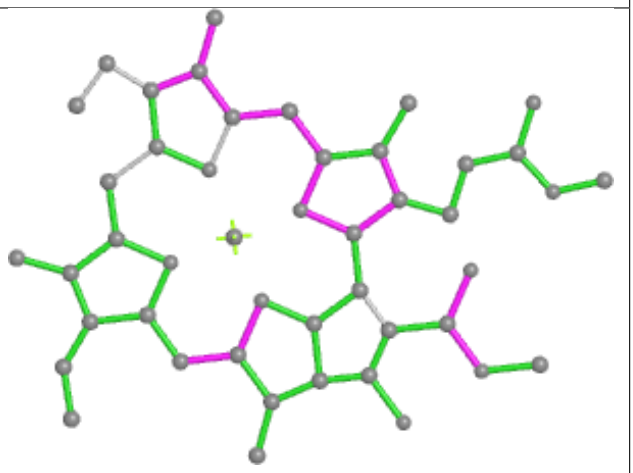


Rings

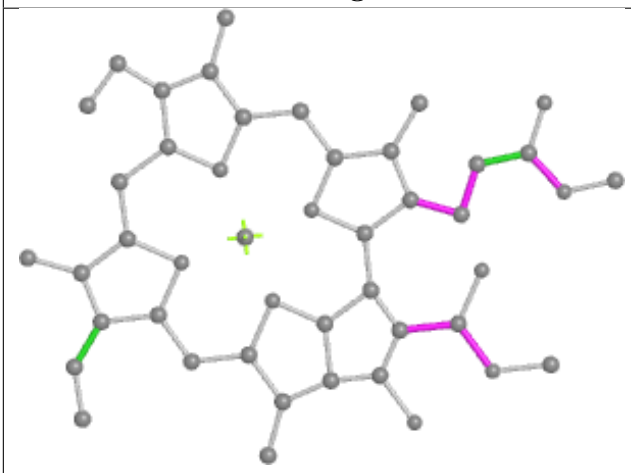
Ligand CLA 6 311



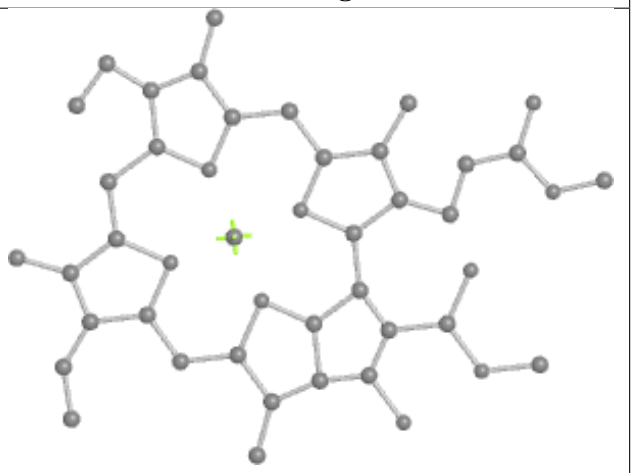
Bond lengths



Bond angles

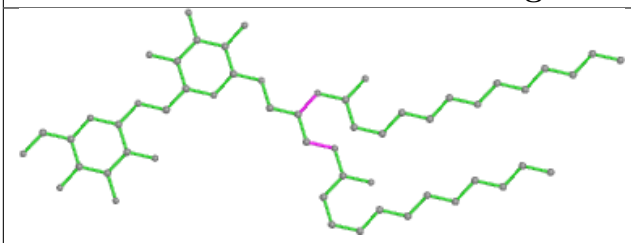


Torsions



Rings

Ligand DGD c 518



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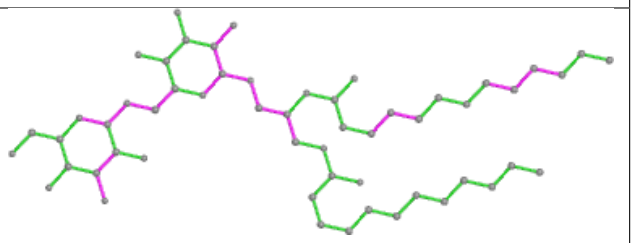
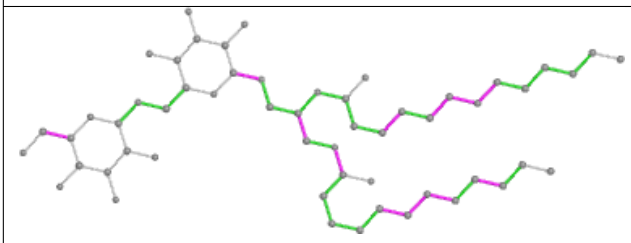


Bond angles



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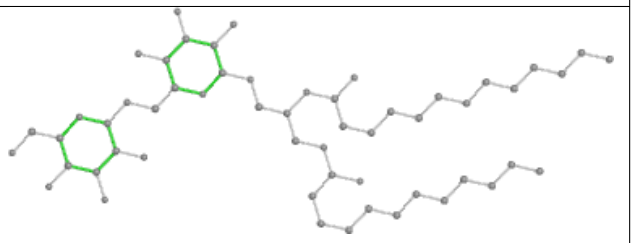
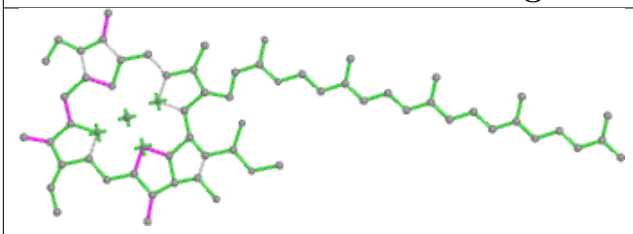


Rings

Ligand CLA B 608



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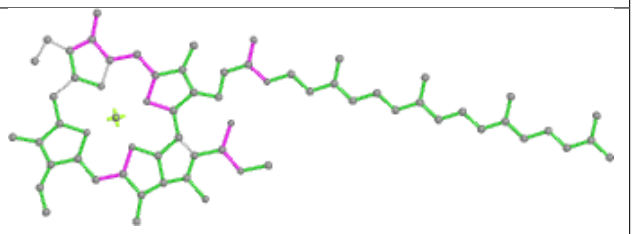
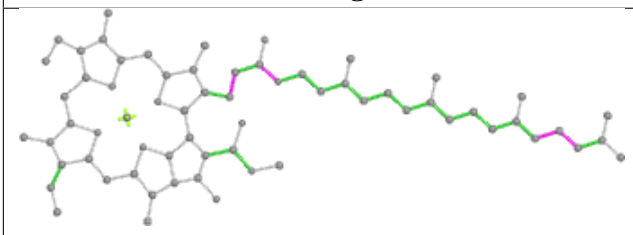
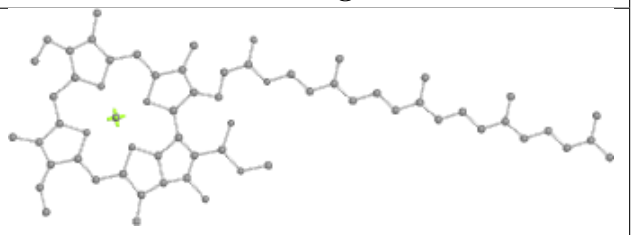


Bond angles

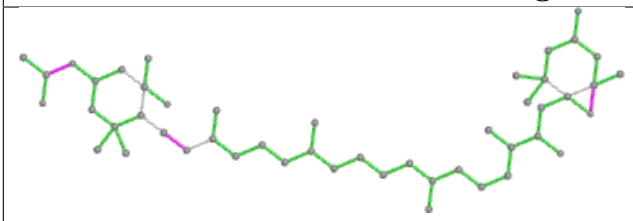


Torsions



Rings

Ligand A86 5 303



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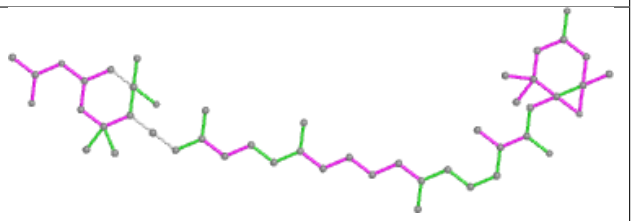
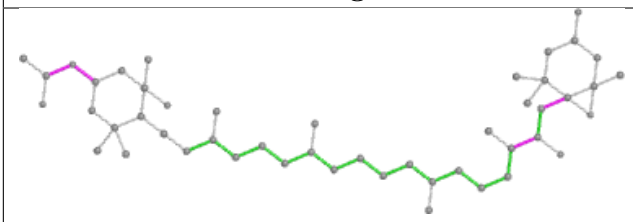
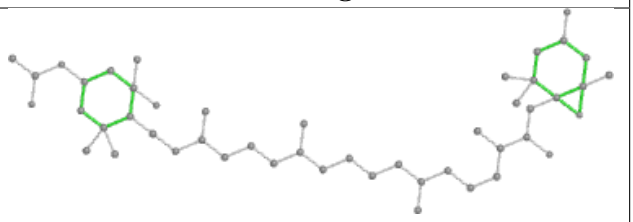


Bond angles

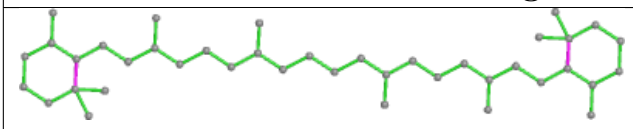


Torsions



Rings

Ligand BCR C 514



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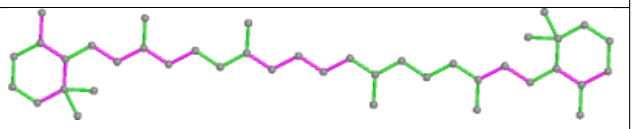
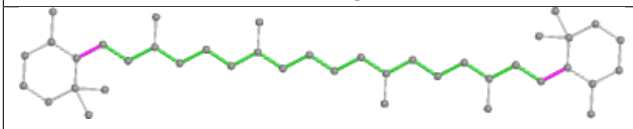


Bond angles



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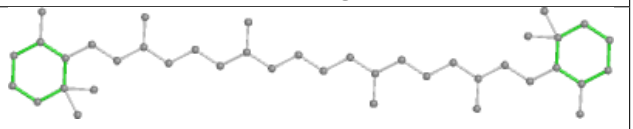
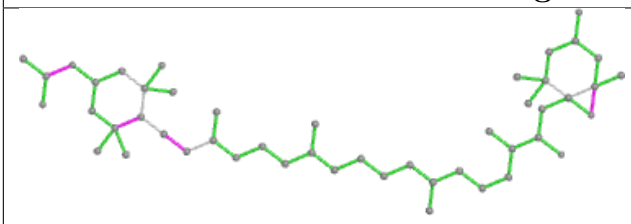


Rings

Ligand A86 4 302



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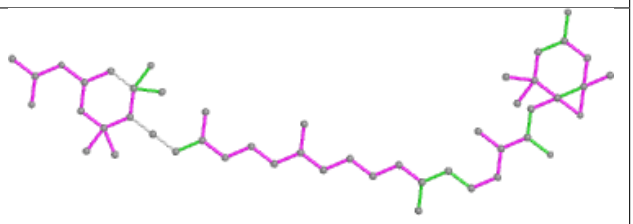
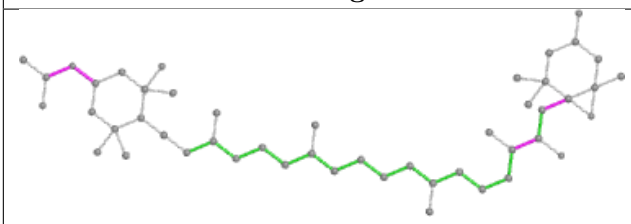


Bond angles



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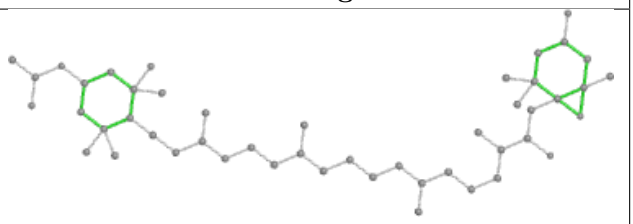
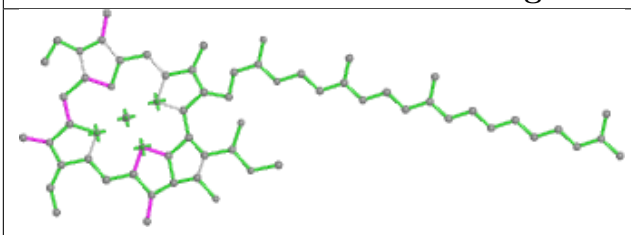


Rings

Ligand CLA B 603



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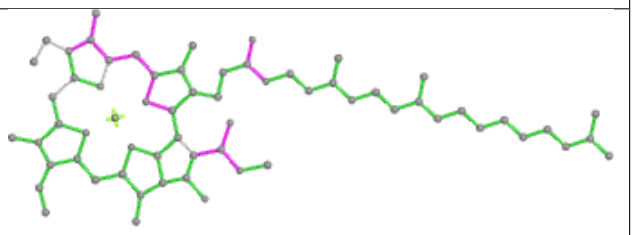
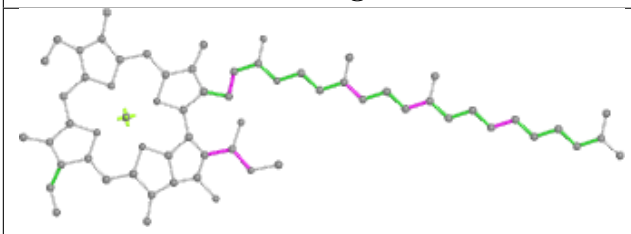


Bond angles



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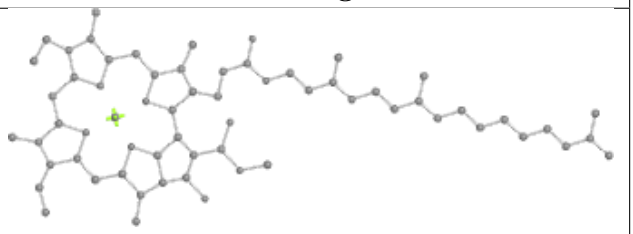
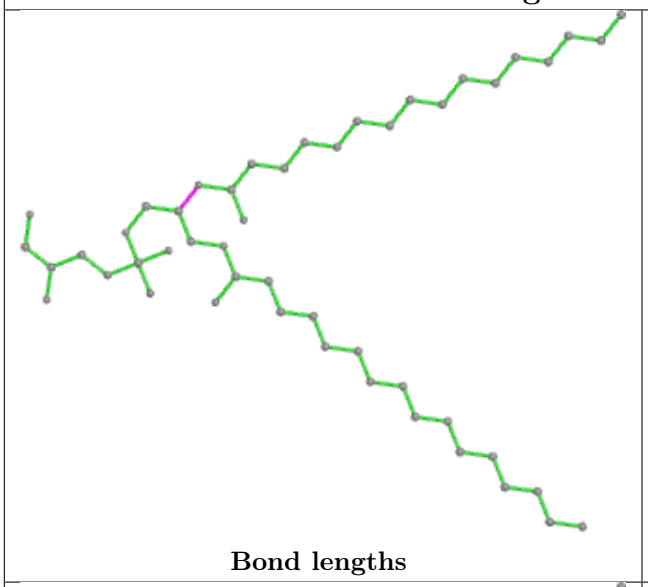
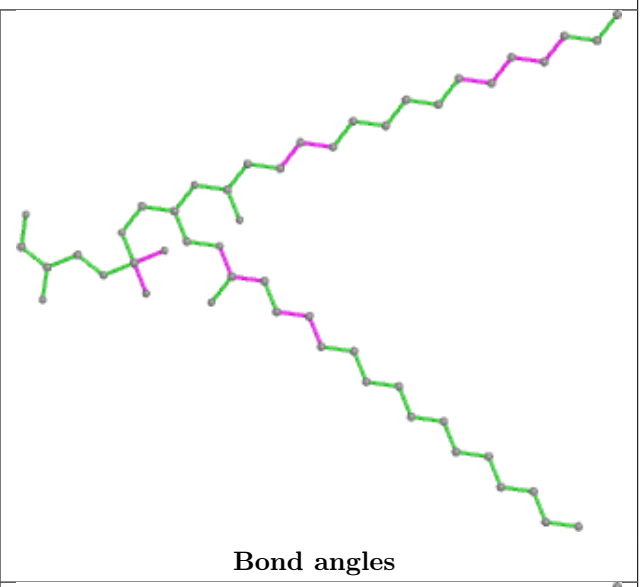


Rings

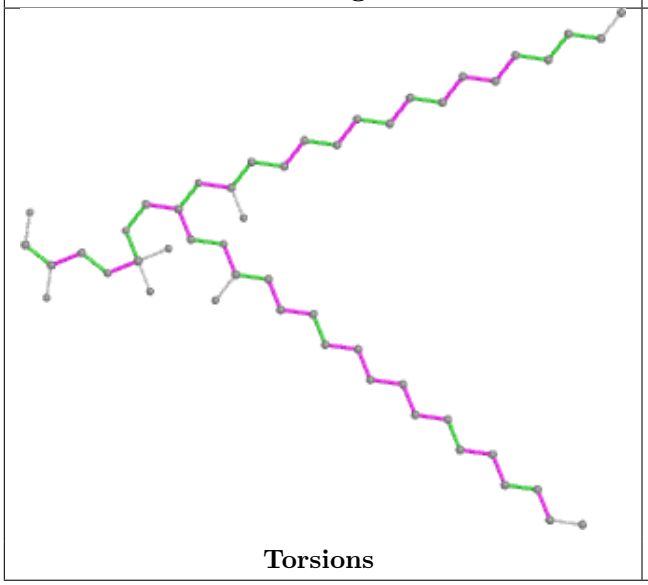
Ligand LHG A 412



Bond lengths



Bond angles



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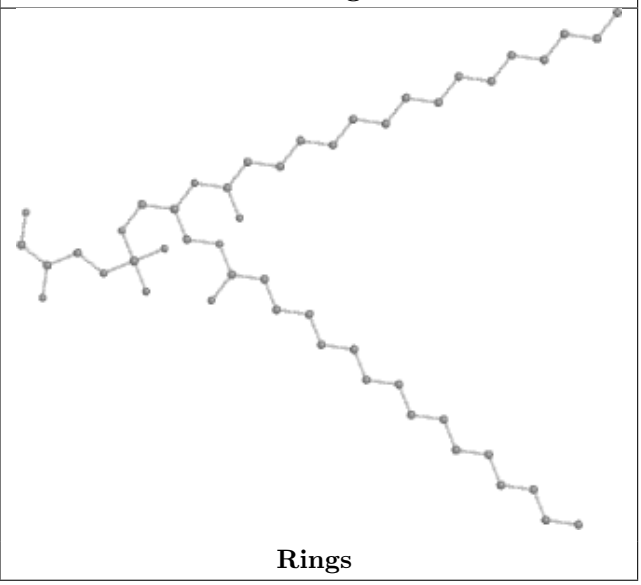
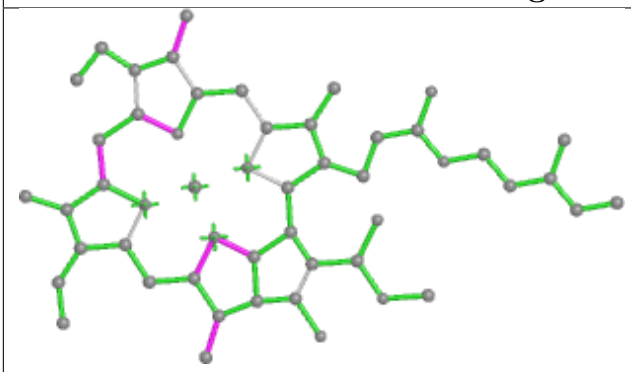


Rings

Ligand CLA 3 309



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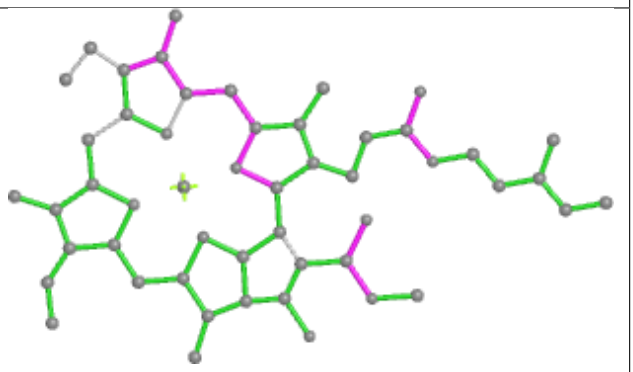
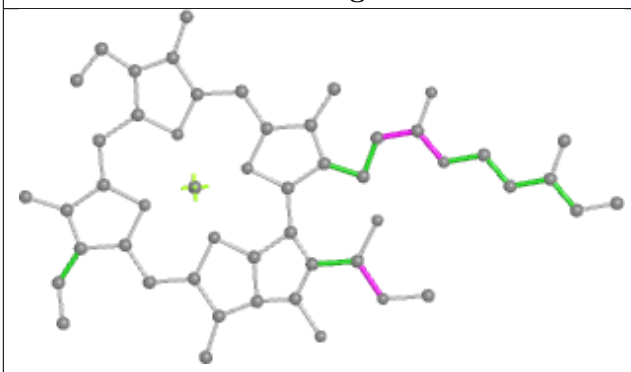


Bond angles



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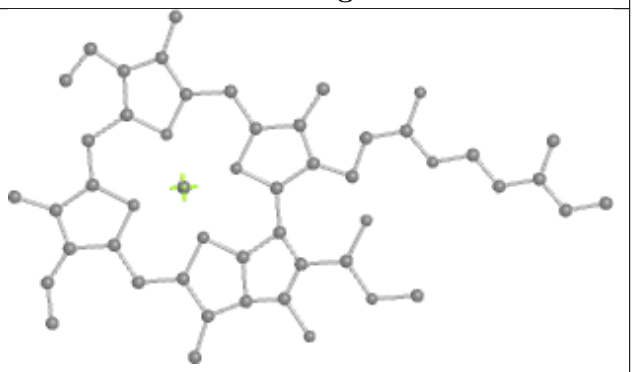
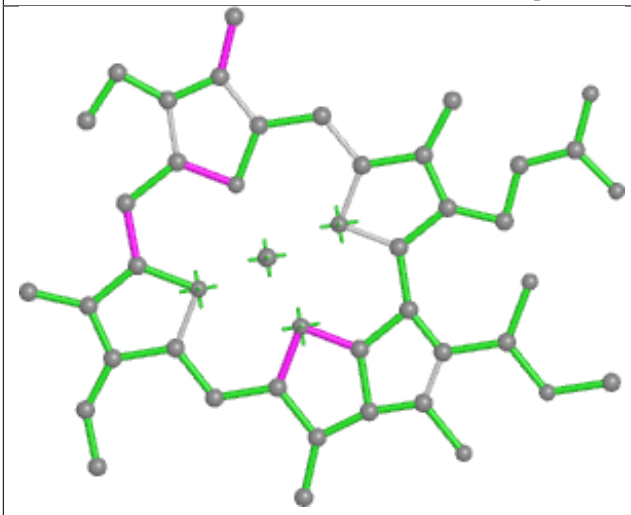
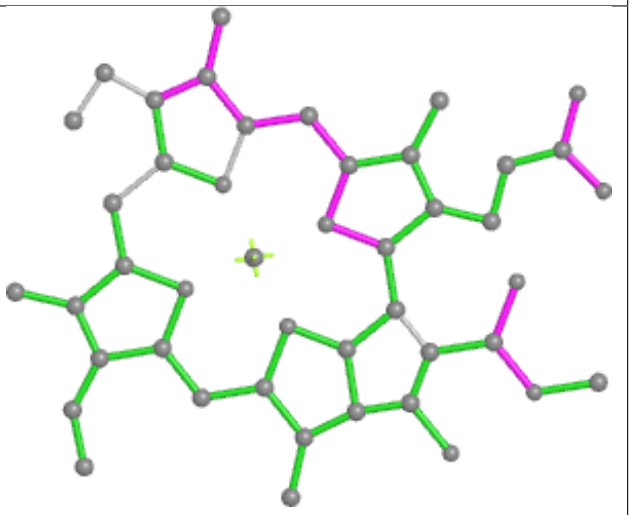


Rings

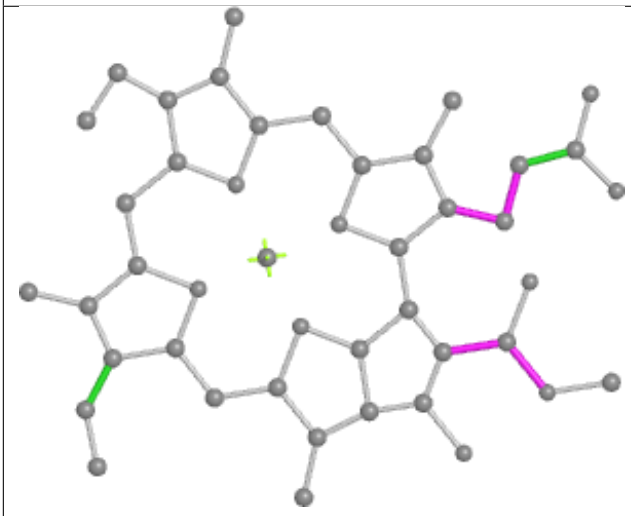
Ligand CLA 1 306



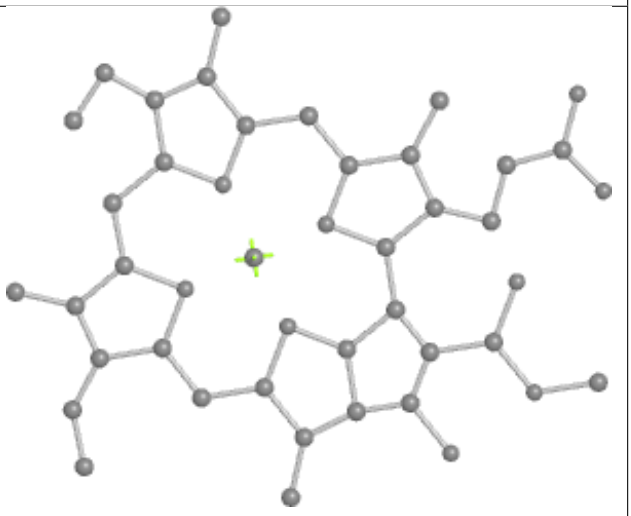
Bond lengths



Bond angles

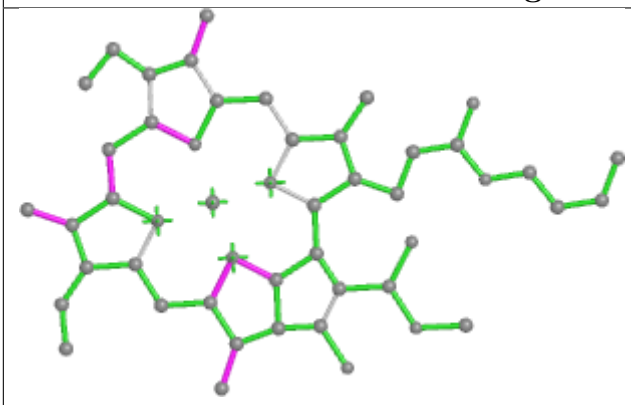


Torsions

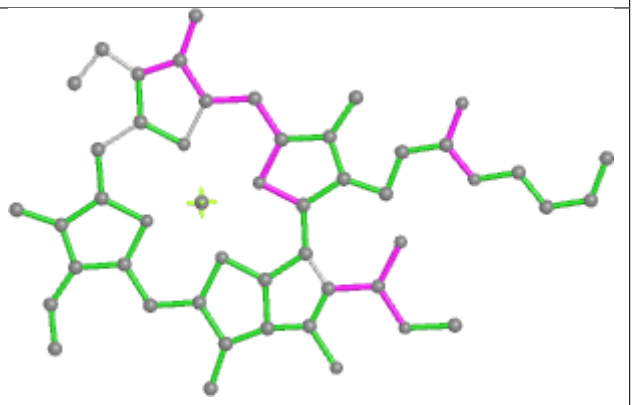


Rings

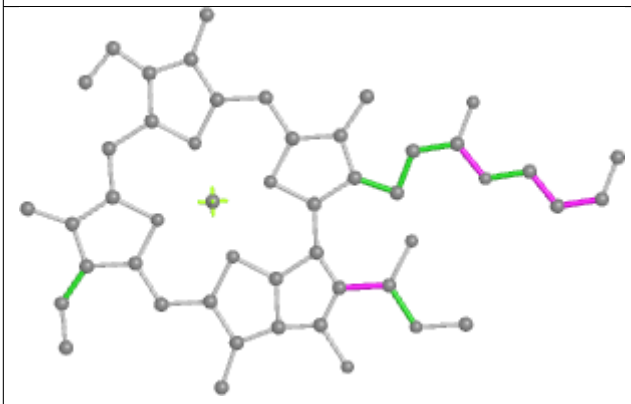
Ligand CLA C 513



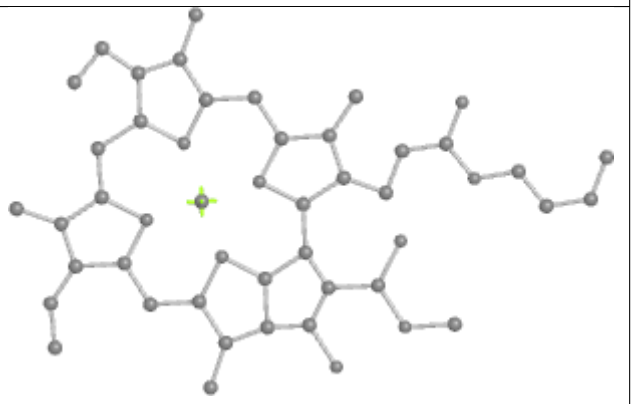
Bond lengths



Bond angles

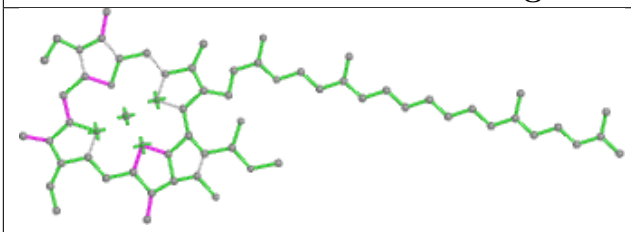


Torsions

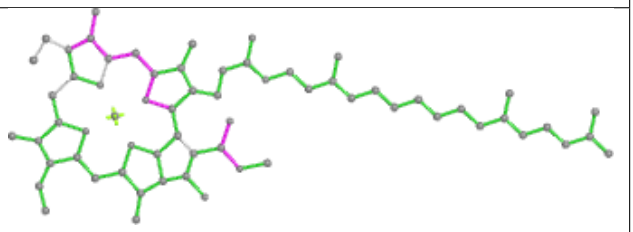


Rings

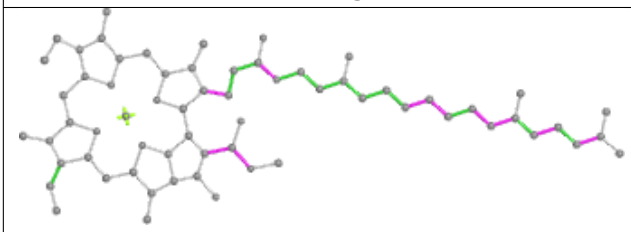
Ligand CLA C 504



Bond lengths



Bond angles



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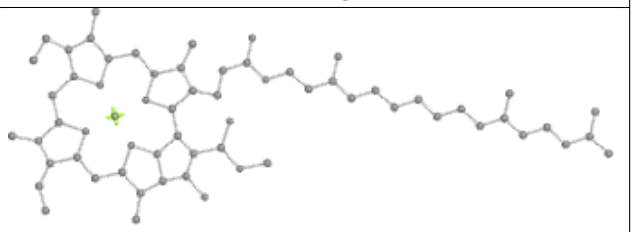
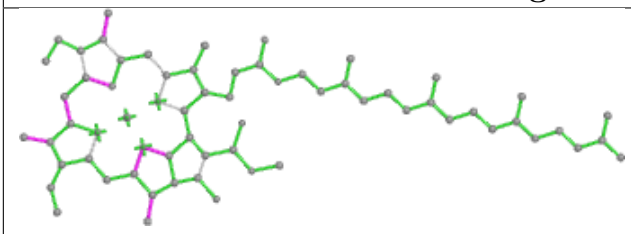
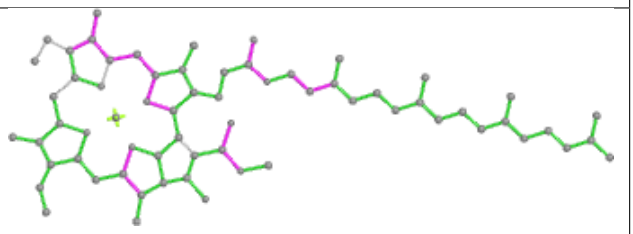


Rings

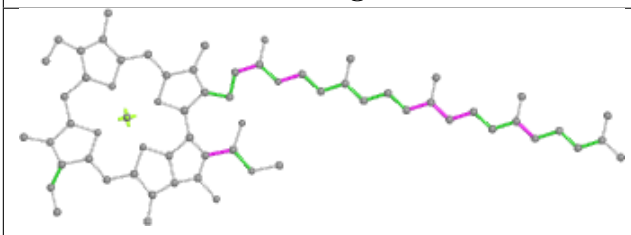
Ligand CLA c 510



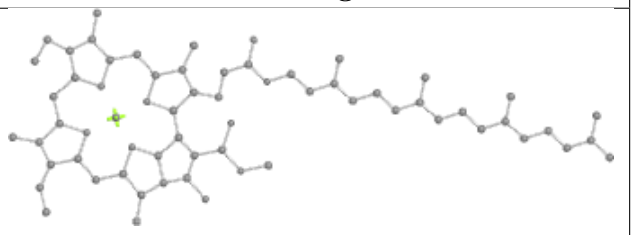
Bond lengths



Bond angles

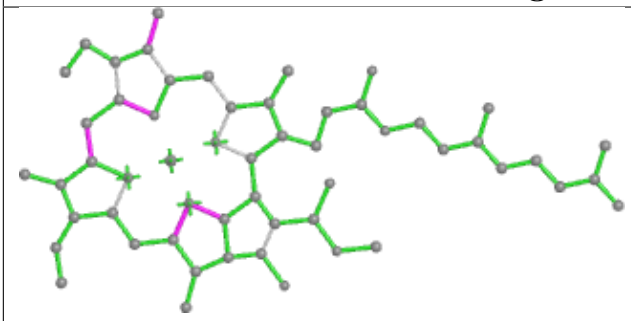


Torsions

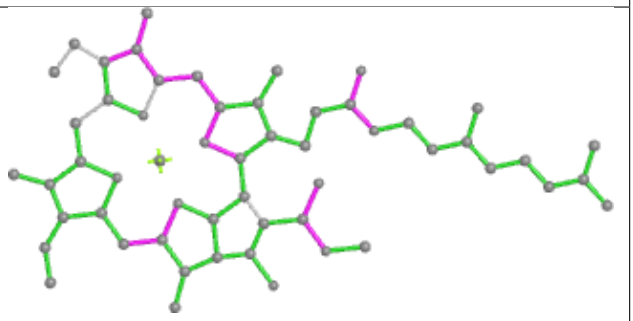


Rings

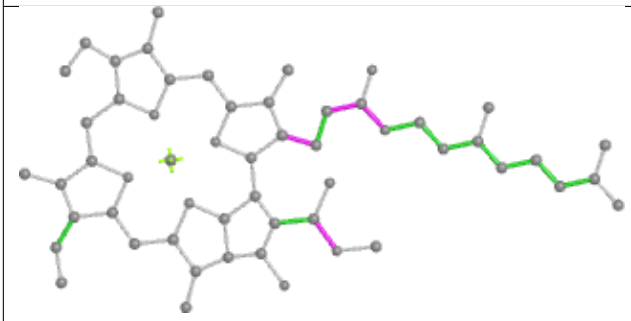
Ligand CLA 5 311



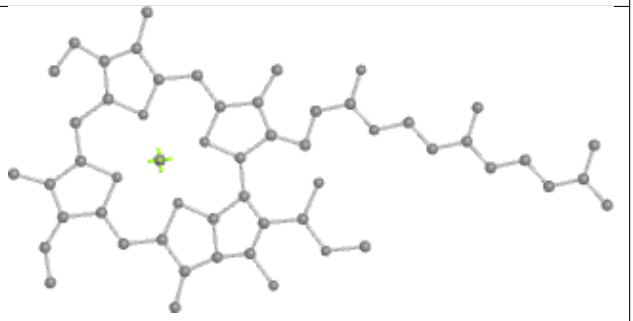
Bond lengths



Bond angles

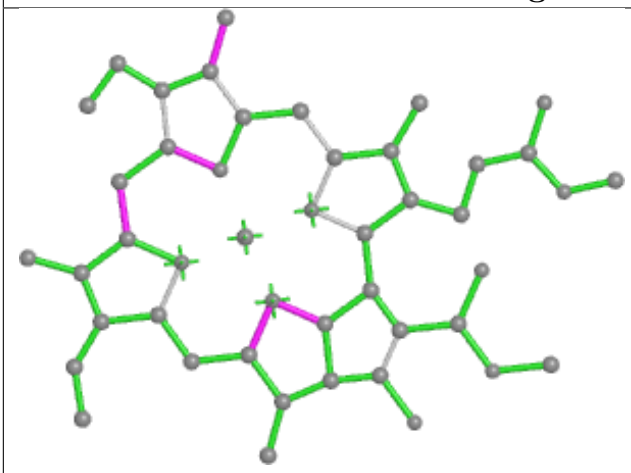


Torsions

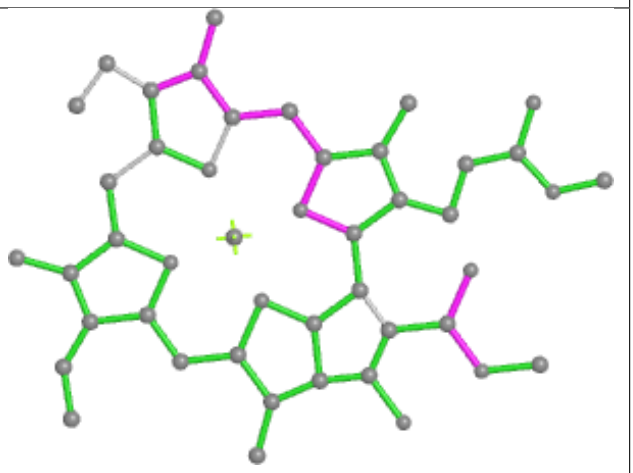


Rings

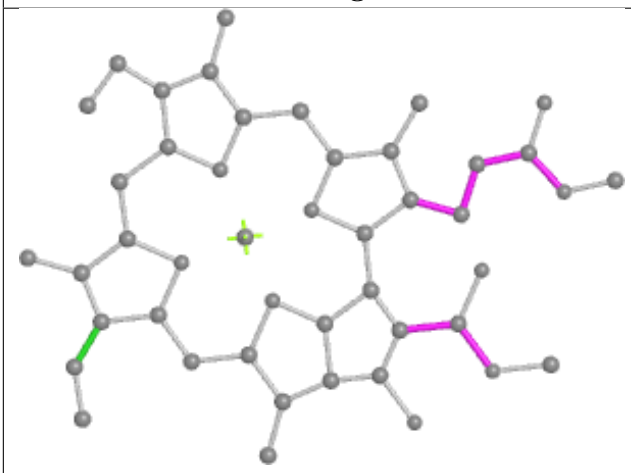
Ligand CLA 5 308



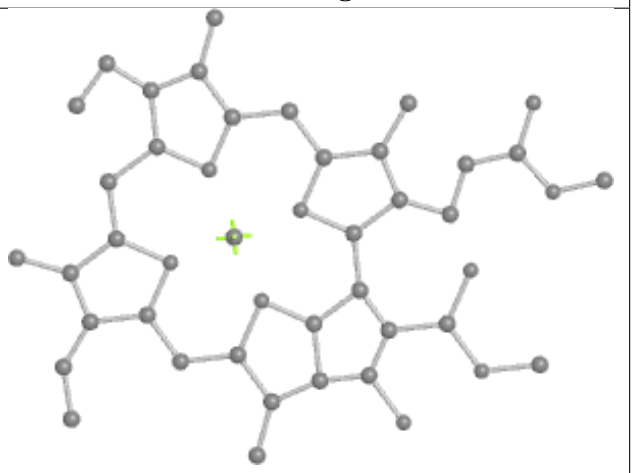
Bond lengths



Bond angles

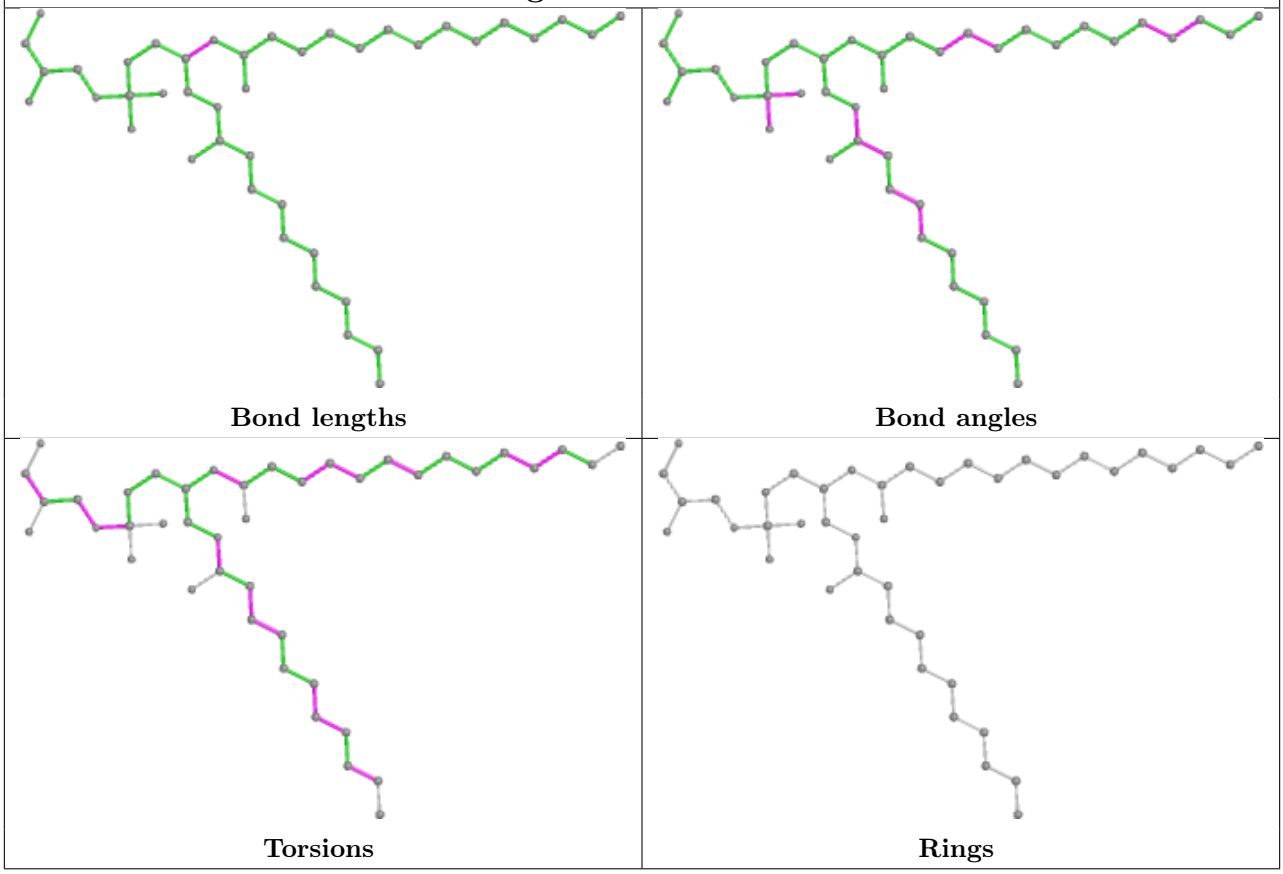


Torsions

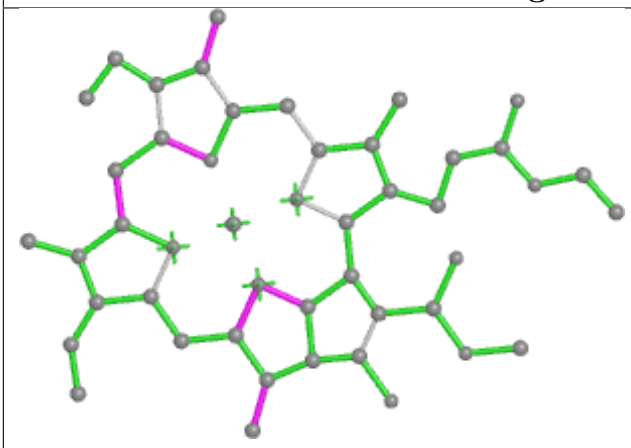


Rings

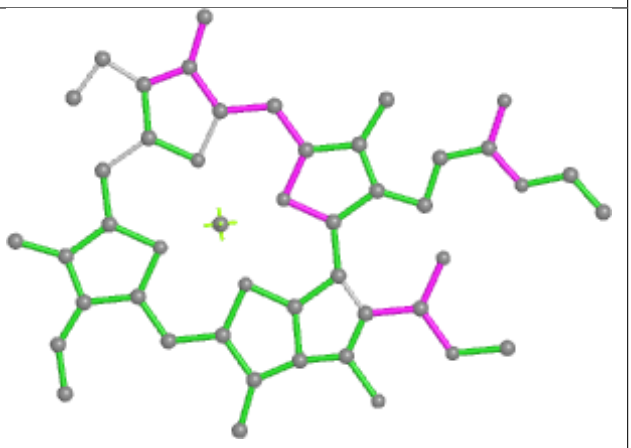
Ligand LHG d 407



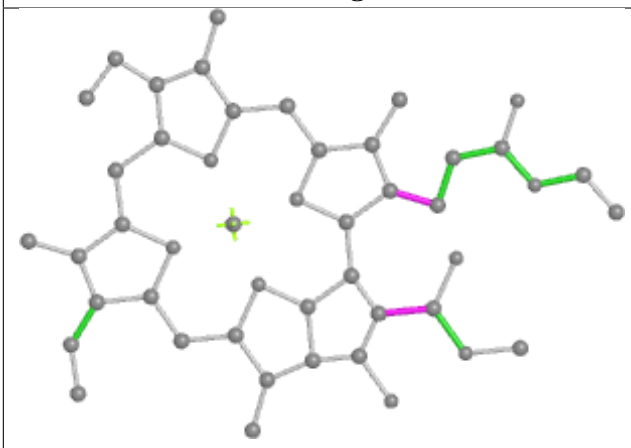
Ligand CLA 4 315



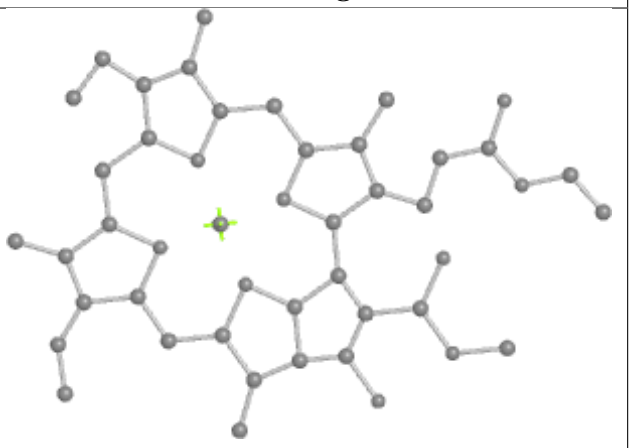
Bond lengths



Bond angles

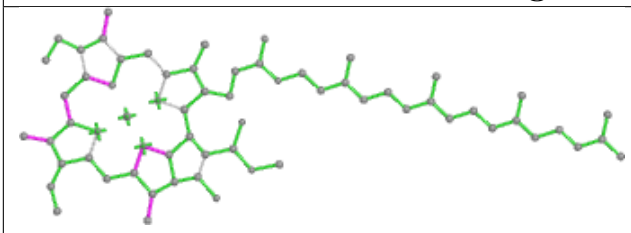


Torsions



Rings

Ligand CLA 4 306



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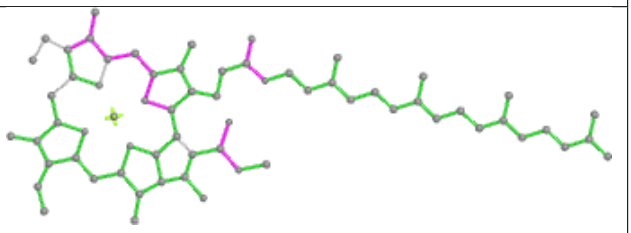

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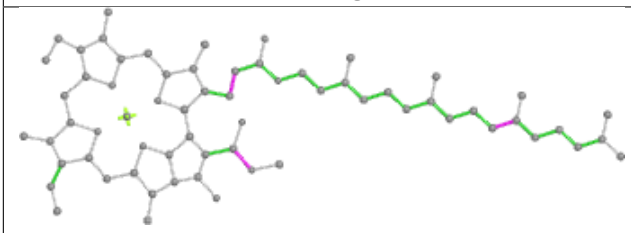

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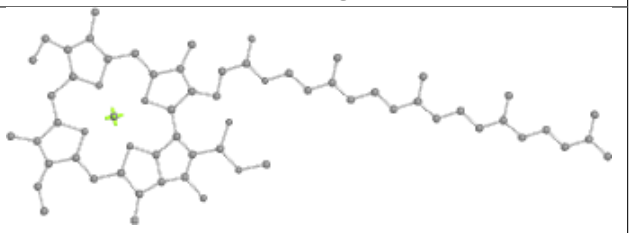
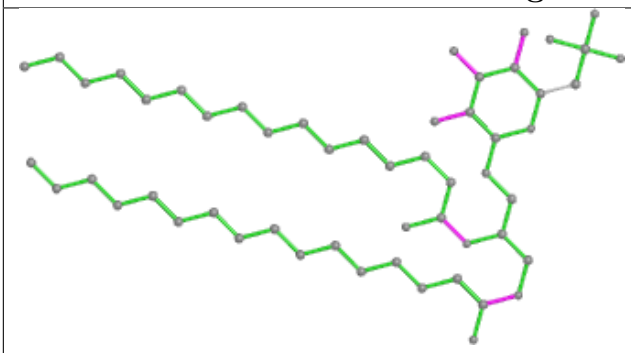


Rings

Ligand SQD L 101



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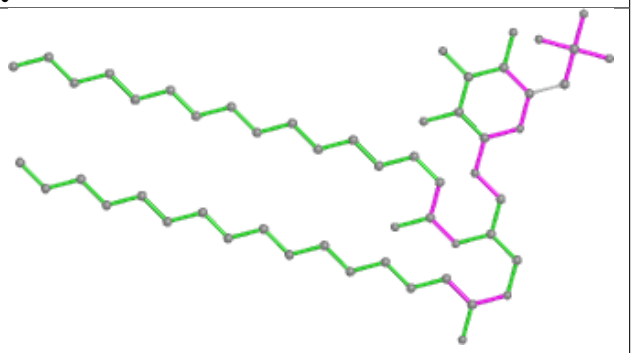
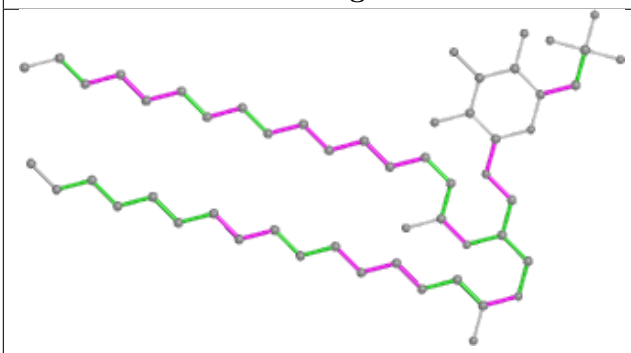
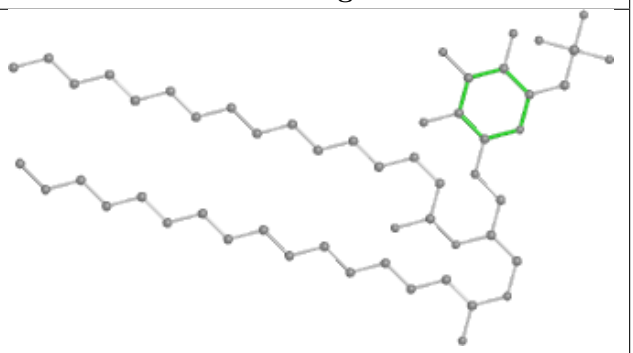


Bond angles

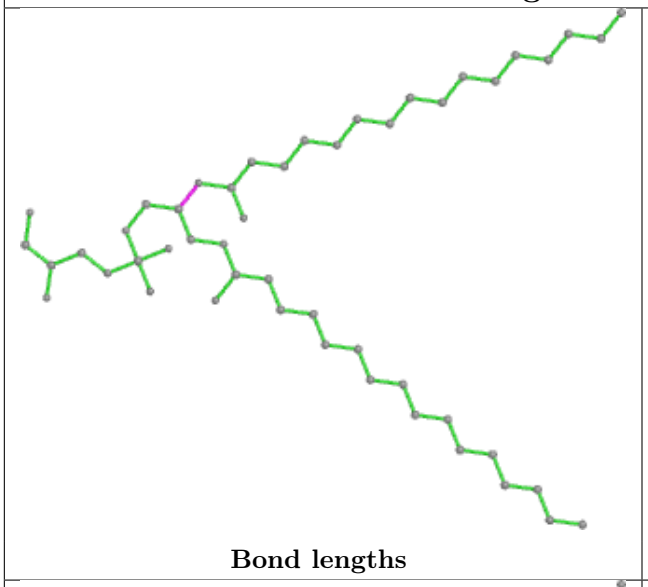


Torsions



Rings

Ligand LHG A 414



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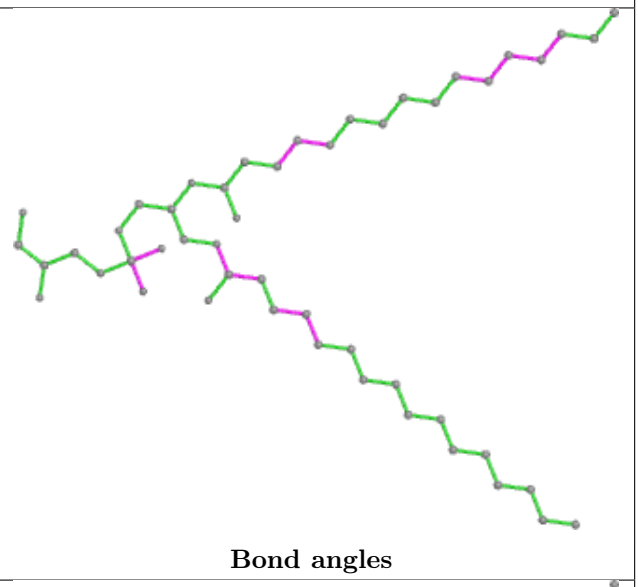

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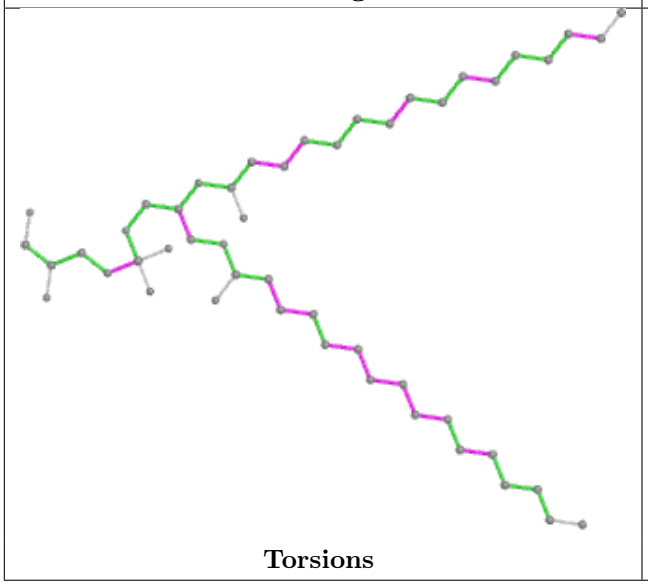

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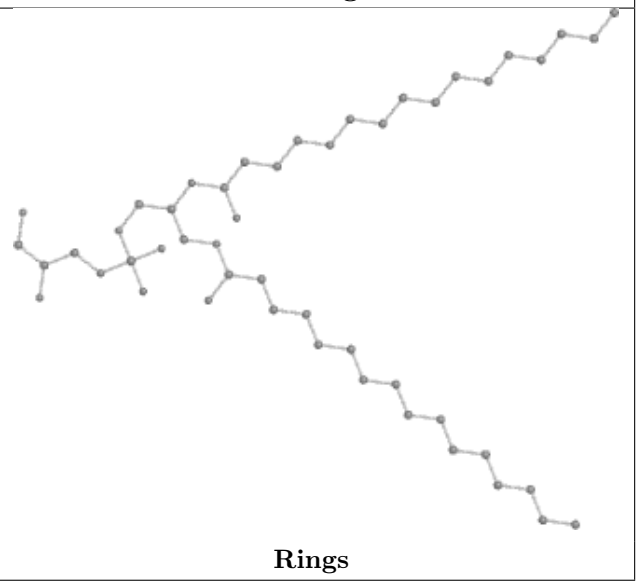
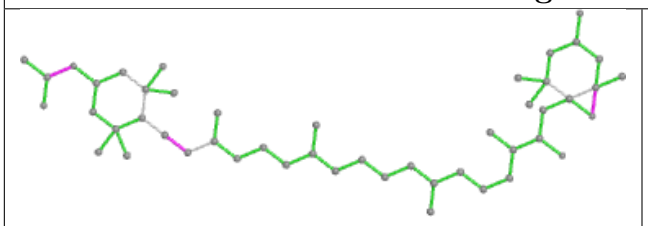


Rings

Ligand A86 7 303



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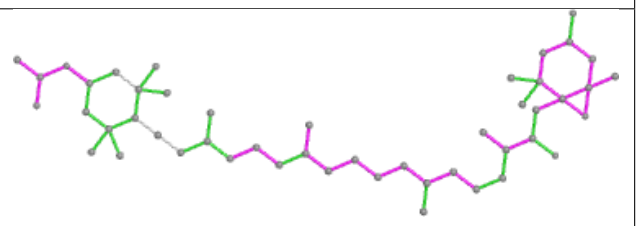

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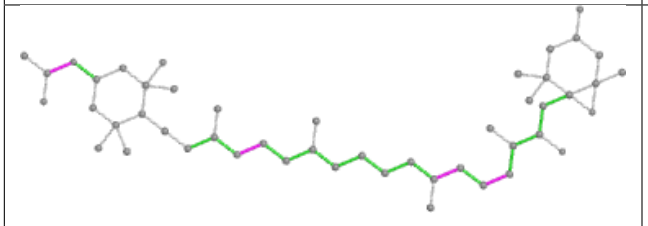

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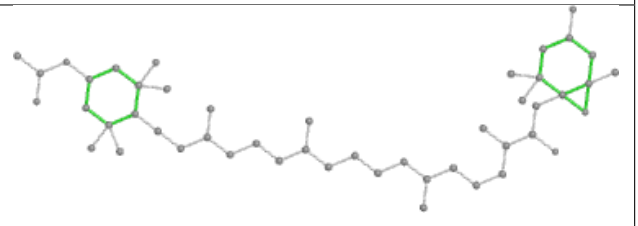
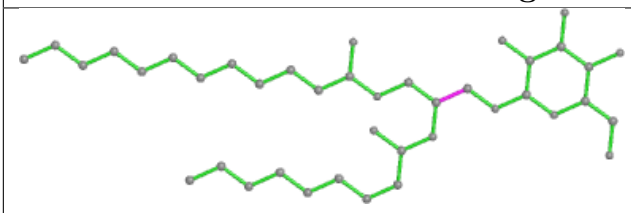
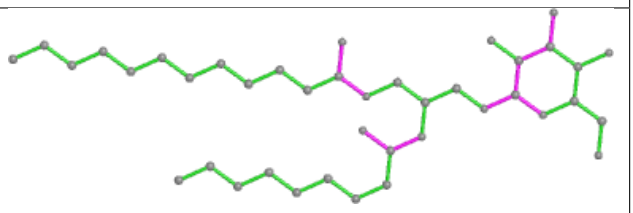
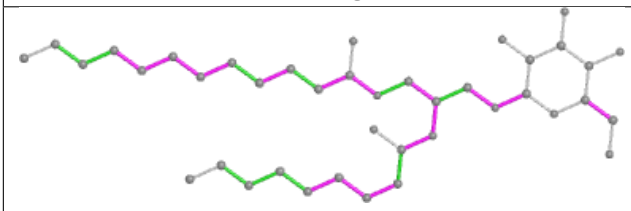
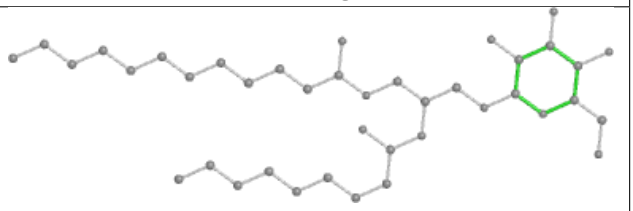
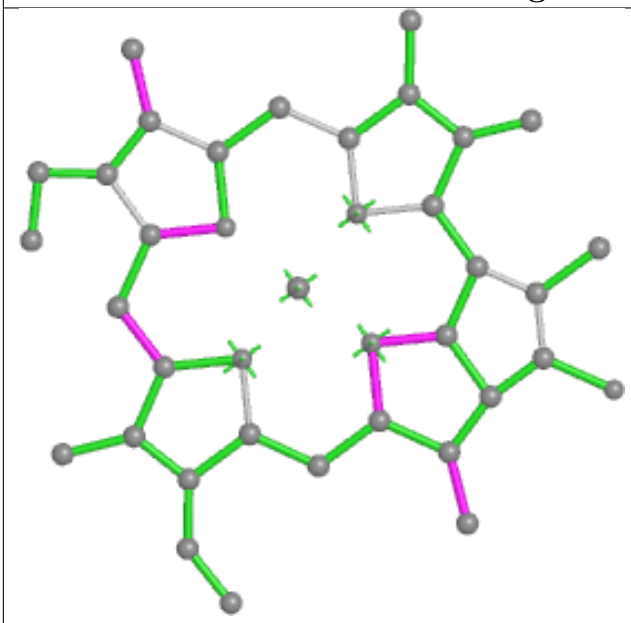


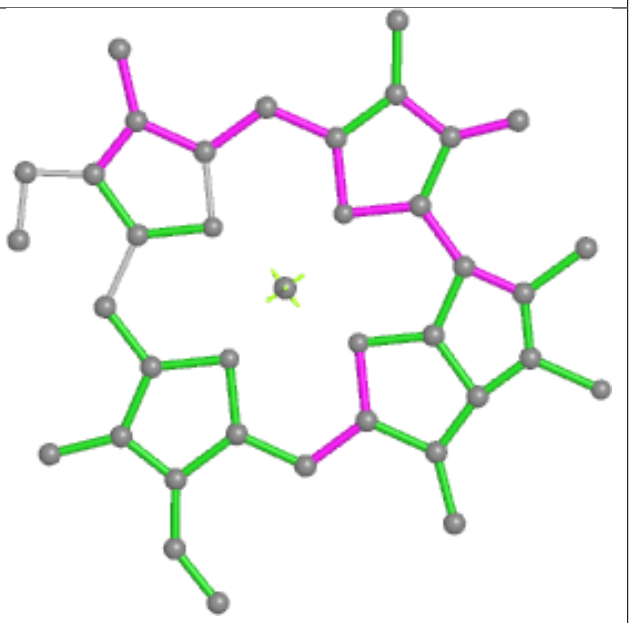
Rings

Ligand LMG D 404	
 Bond lengths	 Bond angles
 Torsions	 Rings

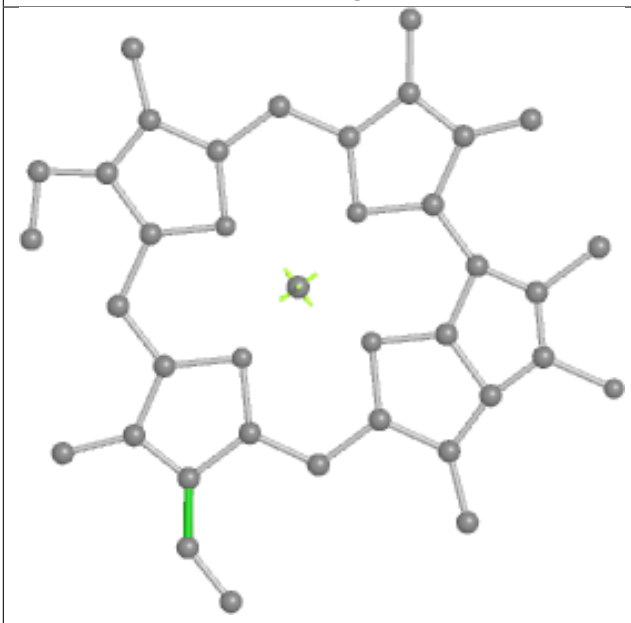
Ligand CLA 9 316



Bond lengths



Bond angles



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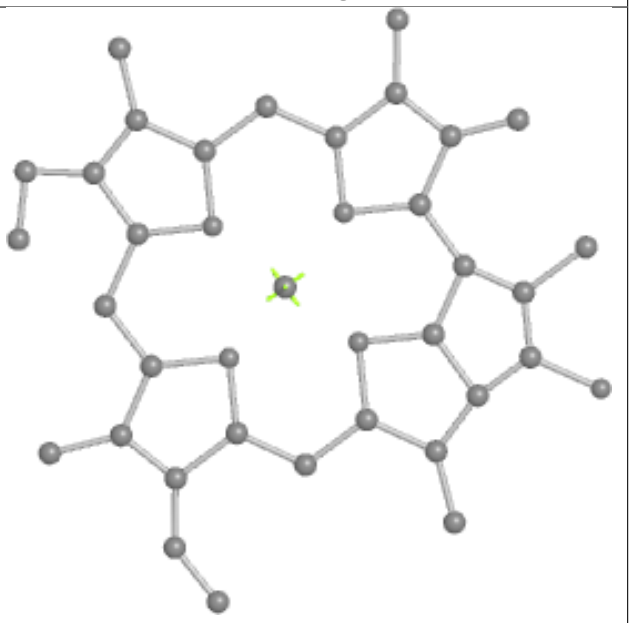
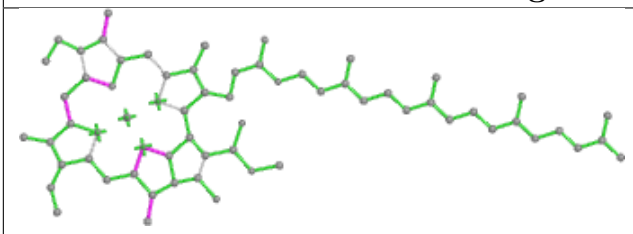


Rings

Ligand CLA 6 312



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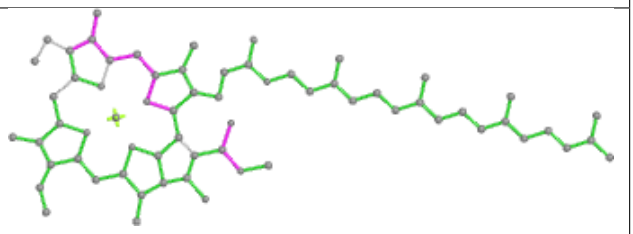

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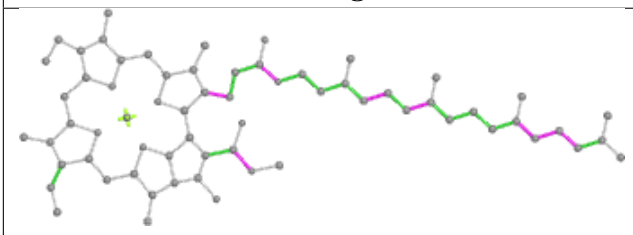

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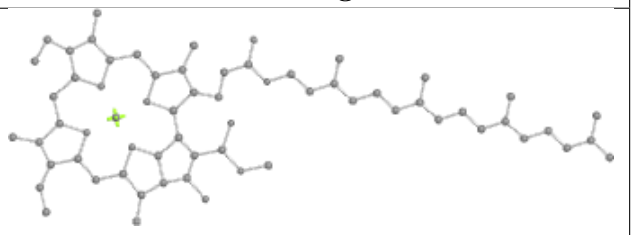
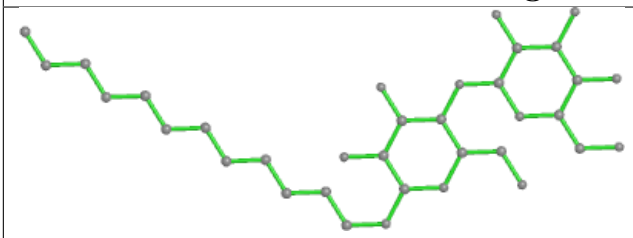
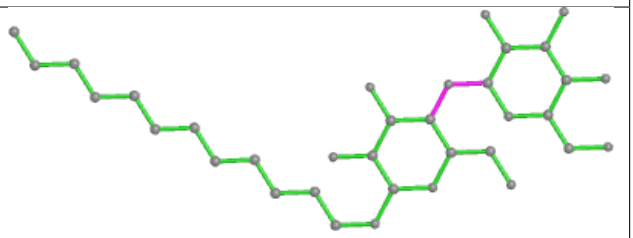


Rings

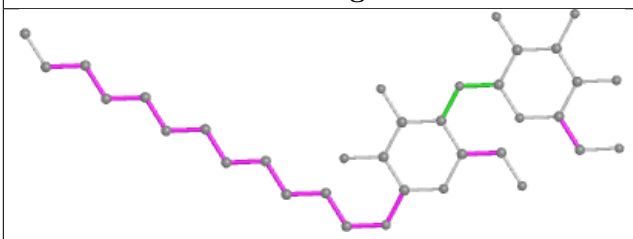
Ligand LMU 3 301



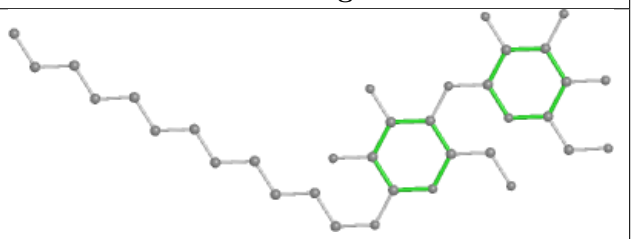
Bond lengths



Bond angles

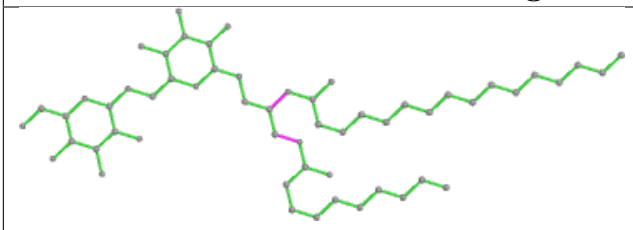


Torsions



Rings

Ligand DGD c 517



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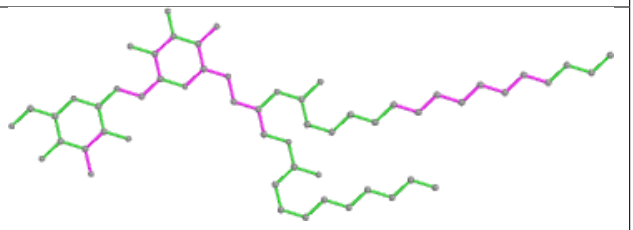
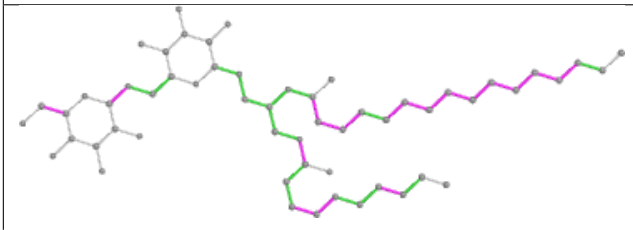


Bond angles



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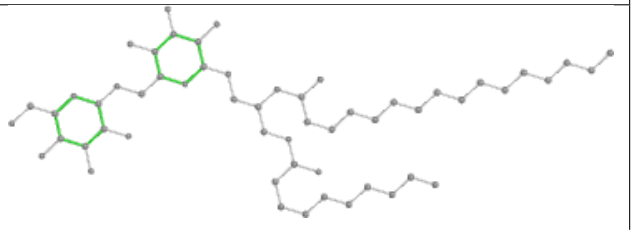
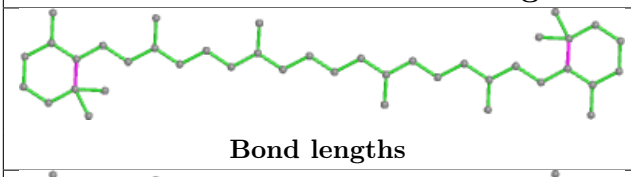


Rings

Ligand BCR K 101



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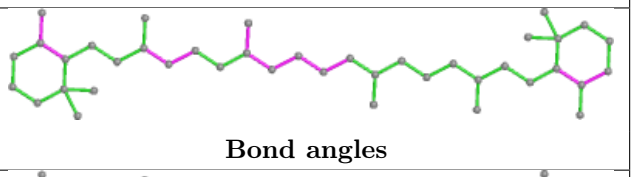

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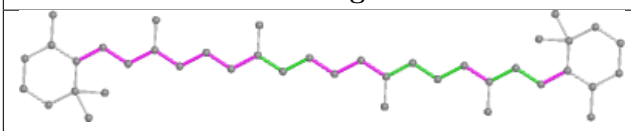

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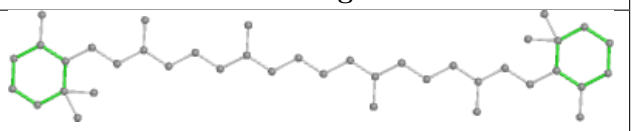
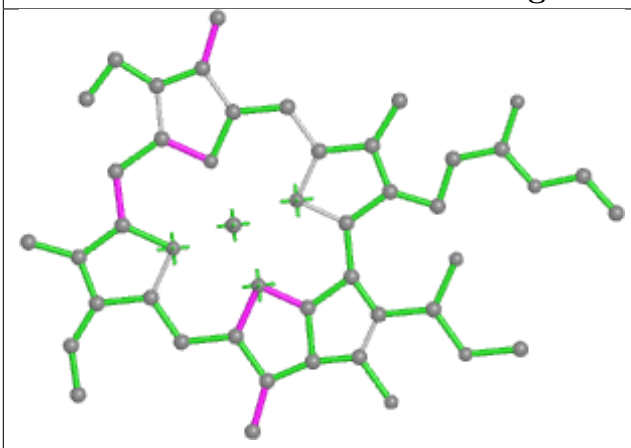


Rings

Ligand CLA 7 304



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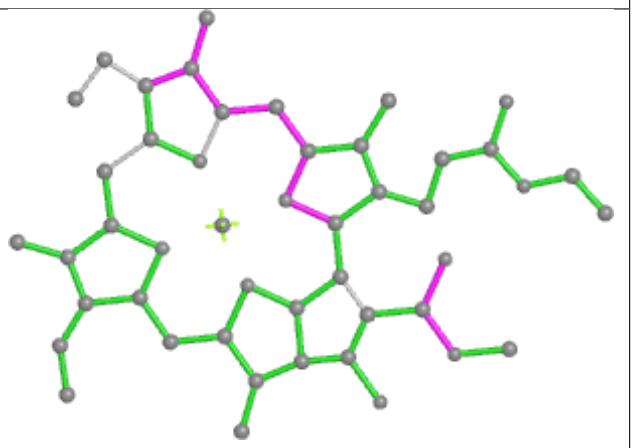
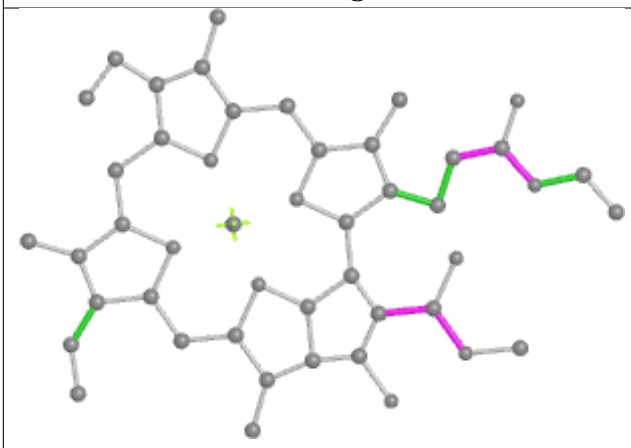


Bond angles



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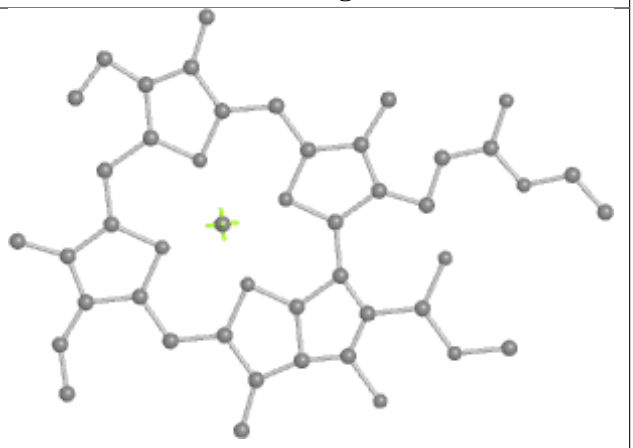
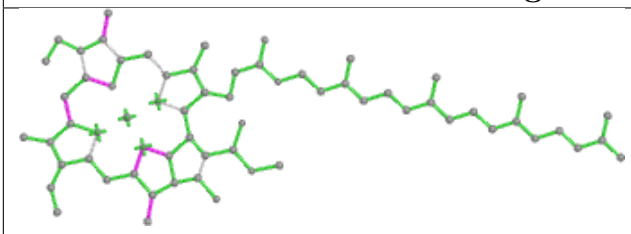
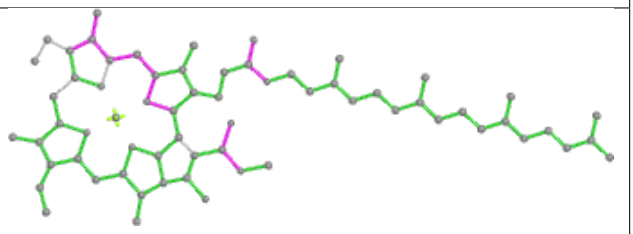


Rings

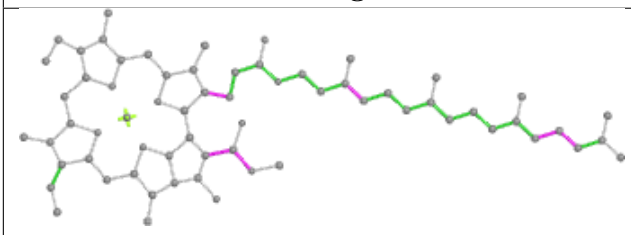
Ligand CLA B 609



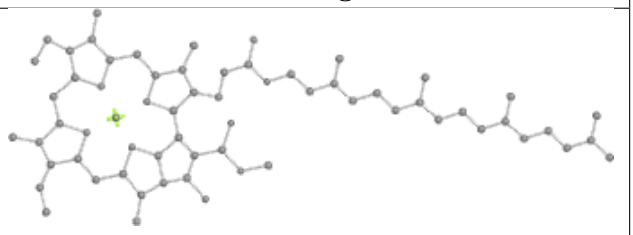
Bond lengths



Bond angles

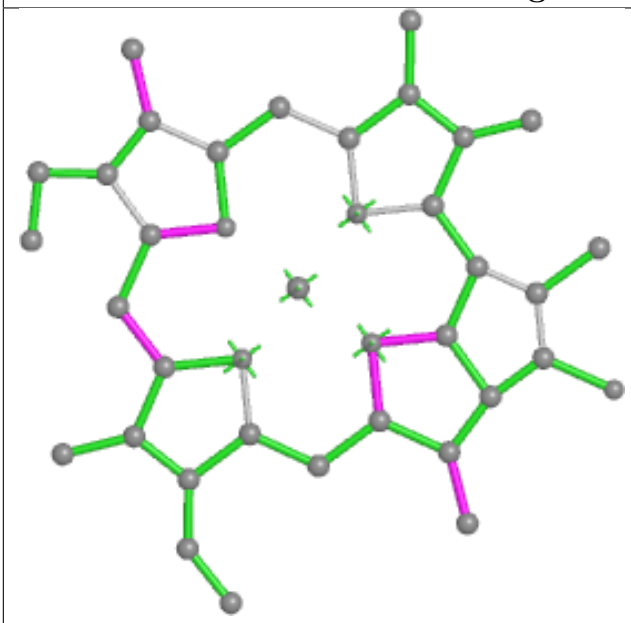


Torsions

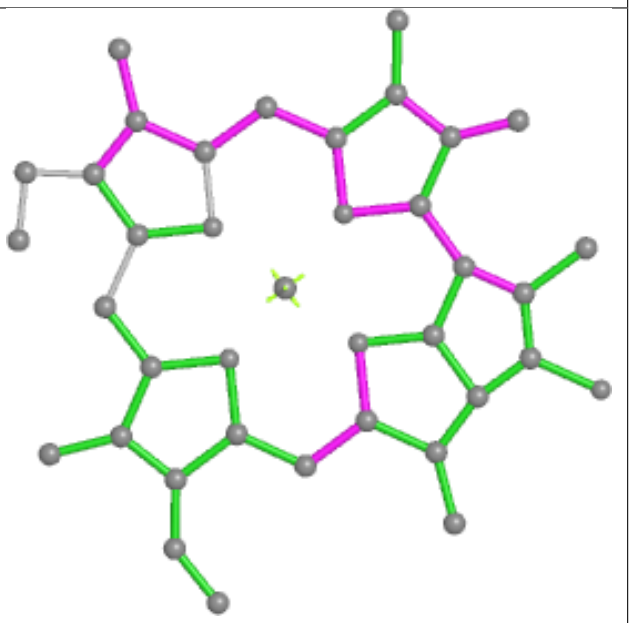


Rings

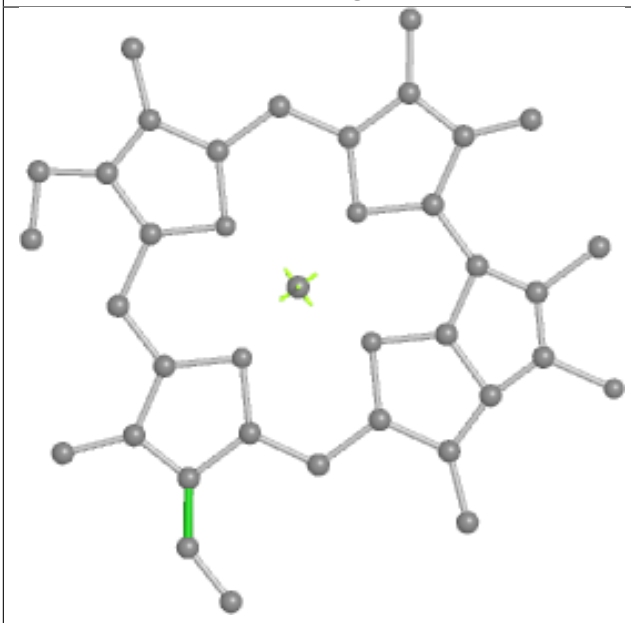
Ligand CLA 8 315



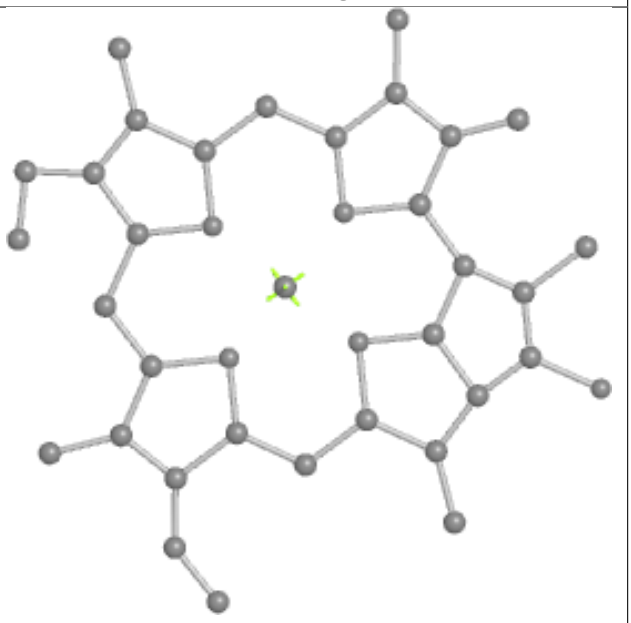
Bond lengths



Bond angles

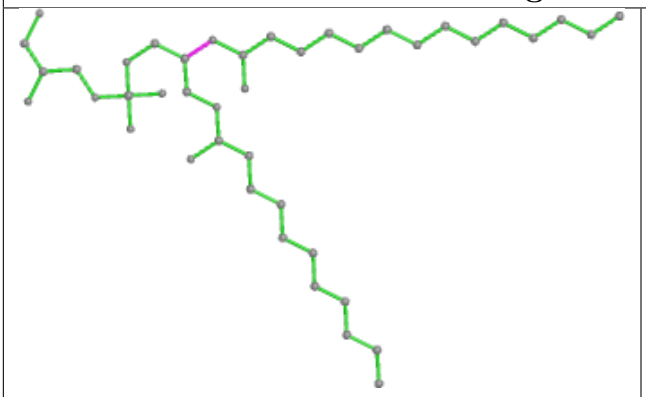


Torsions

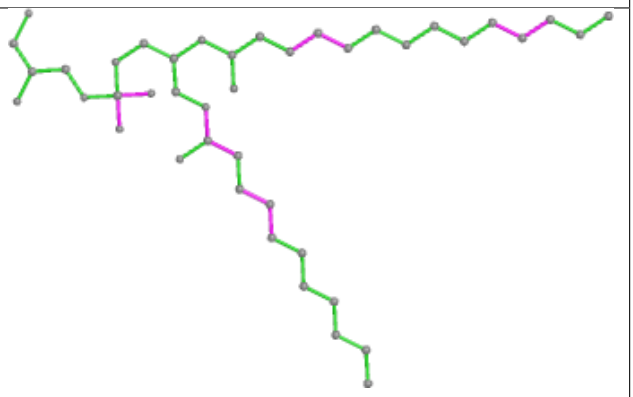


Rings

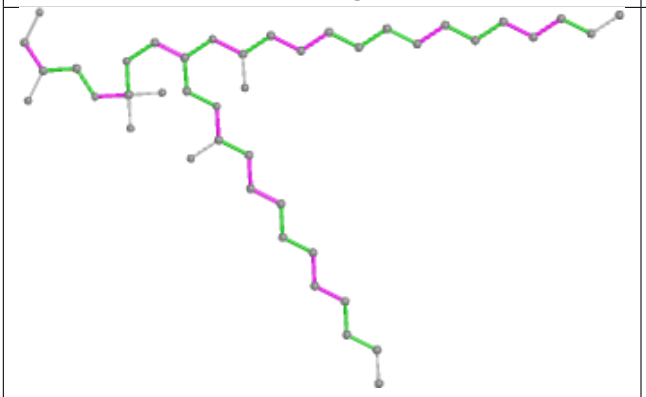
Ligand LHG h 103



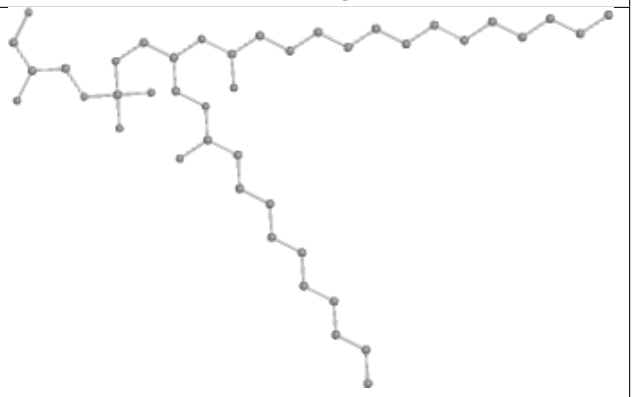
Bond lengths



Bond angles

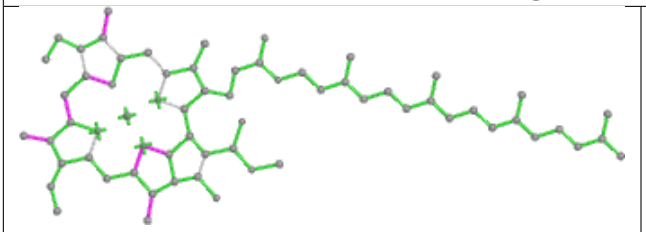


Torsions

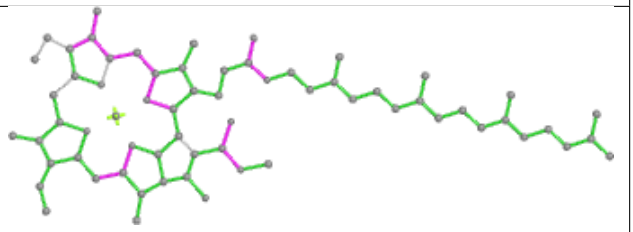


Rings

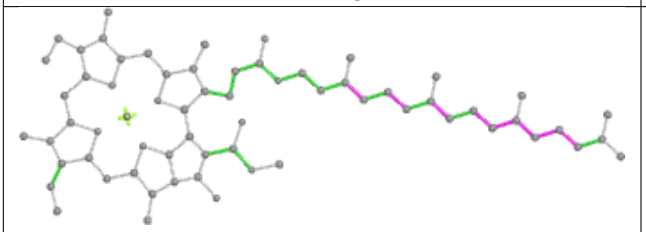
Ligand CLA b 606



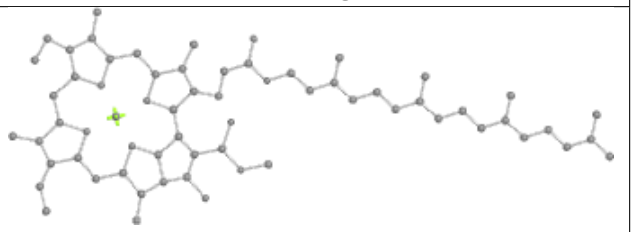
Bond lengths



Bond angles

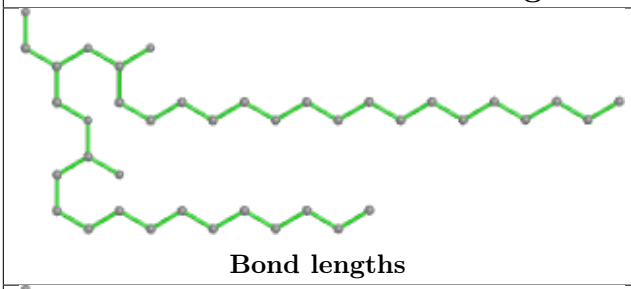


Torsions

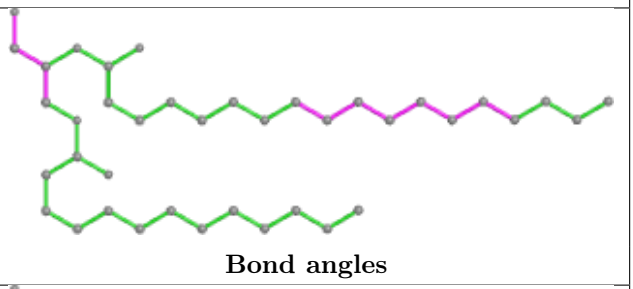


Rings

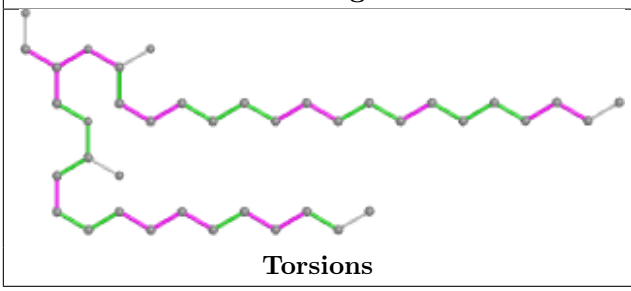
Ligand DGD 3 320



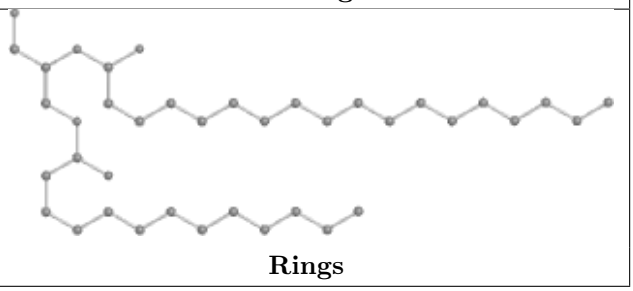
Bond lengths



Bond angles

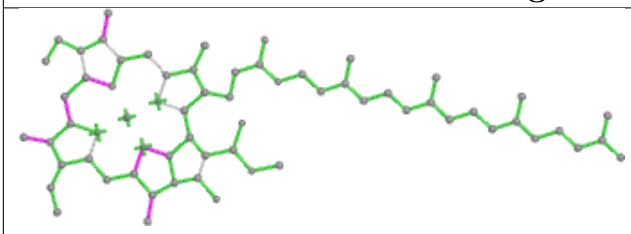


Torsions

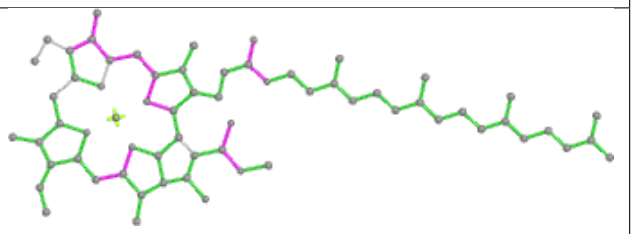


Rings

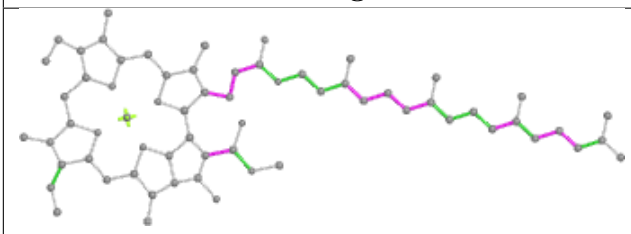
Ligand CLA 3 303



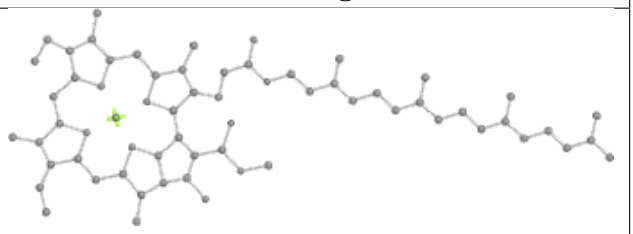
Bond lengths



Bond angles

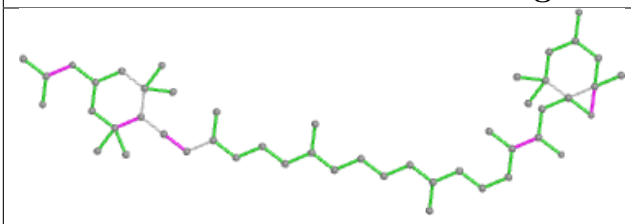


Torsions



Rings

Ligand A86 9 302



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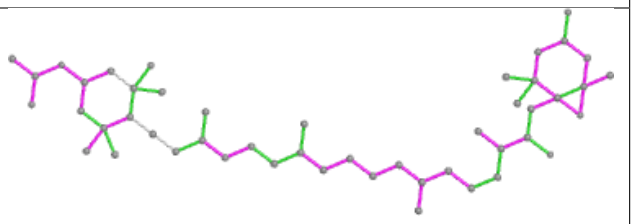
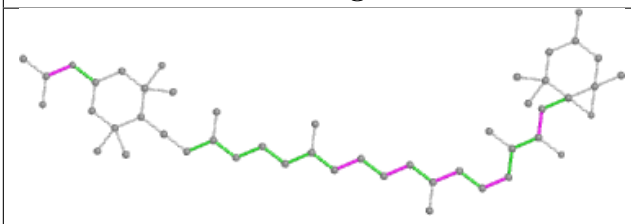
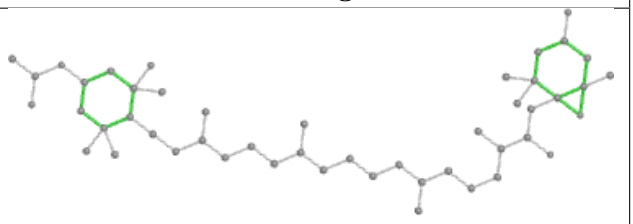


Bond angles

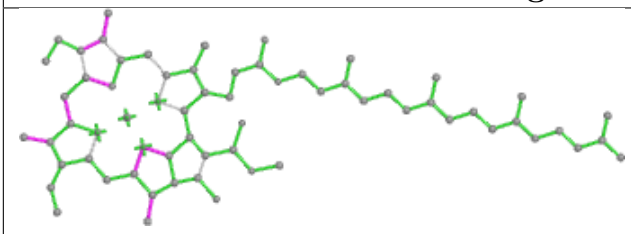


Torsions

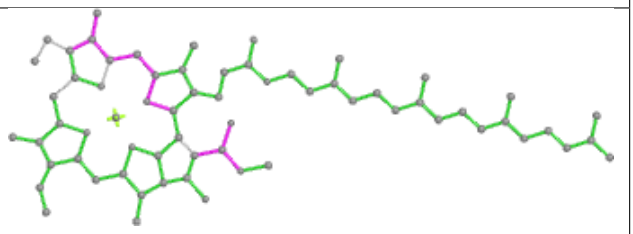


Rings

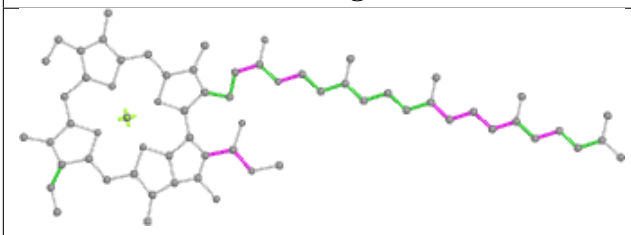
Ligand CLA b 614



Bond lengths



Bond angles



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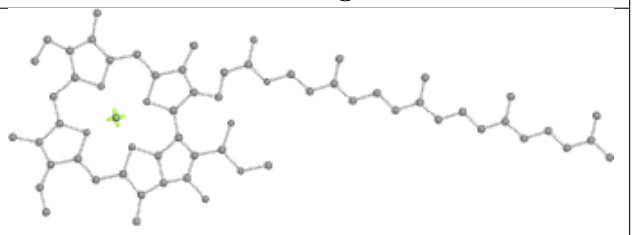
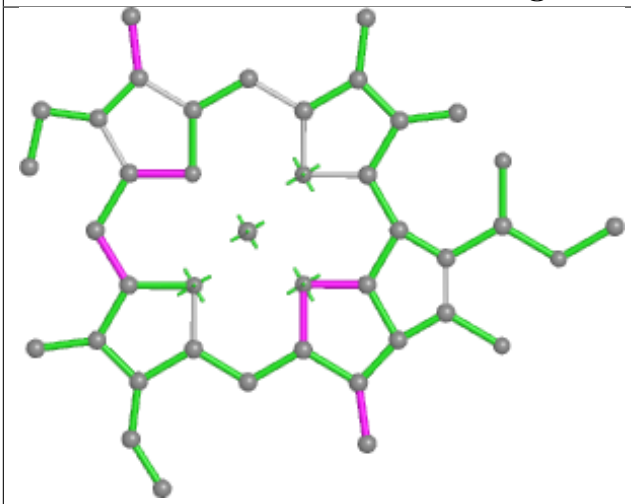
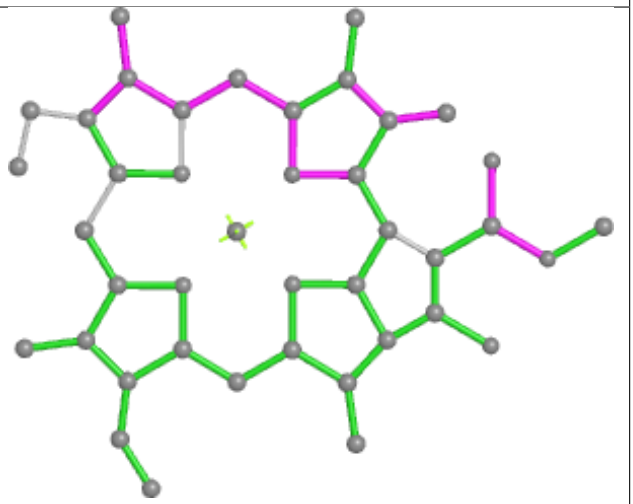


Rings

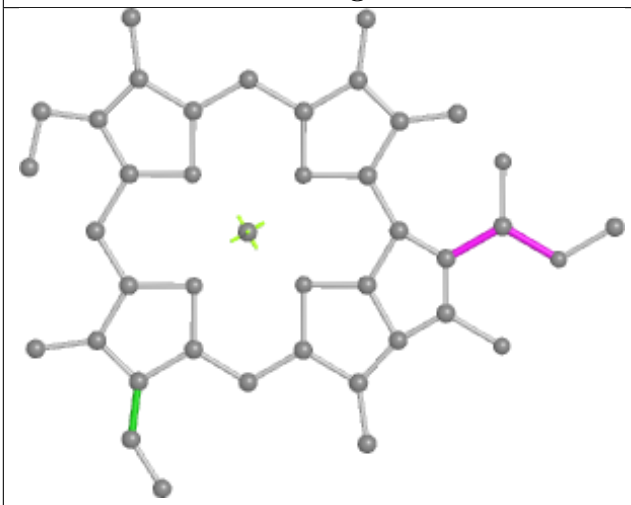
Ligand CLA 6 315



Bond lengths



Bond angles



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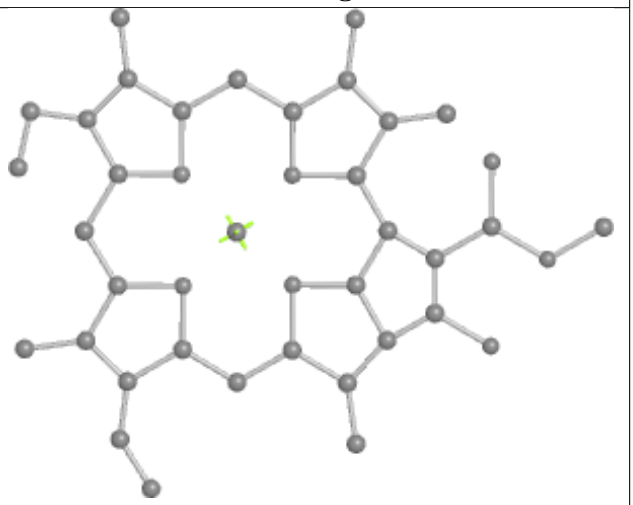
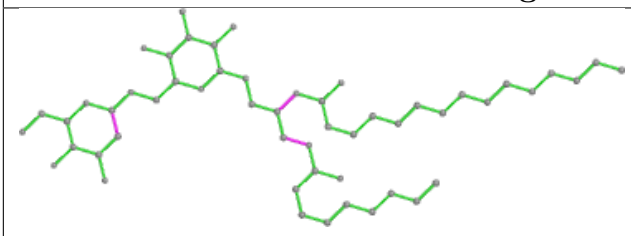
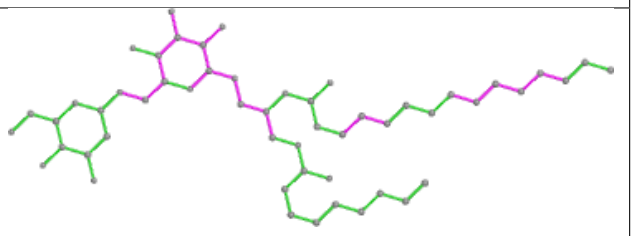


Rings

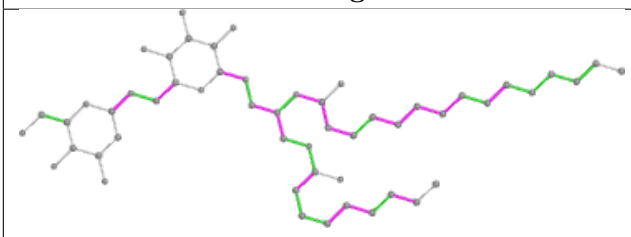
Ligand DGD A 415



Bond lengths



Bond angles



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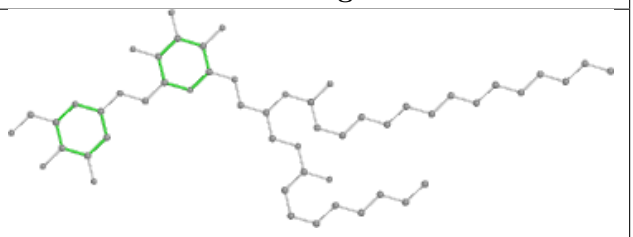
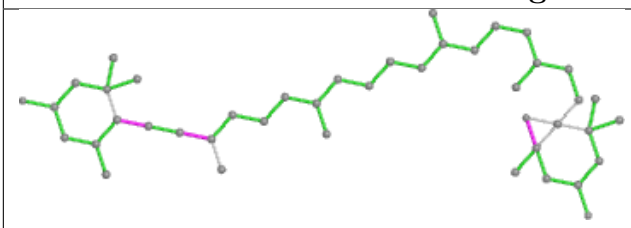
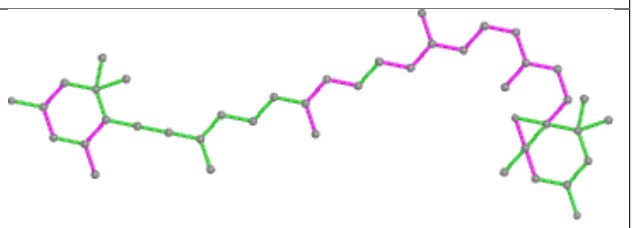


Rings

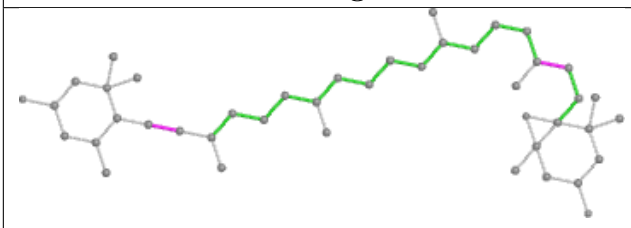
Ligand DD6 1 303



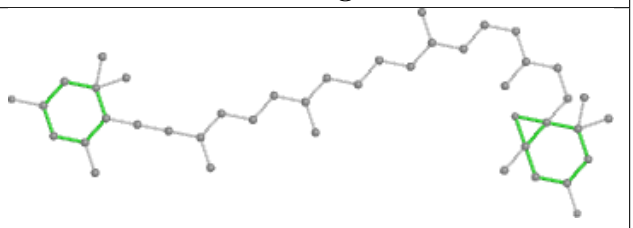
Bond lengths



Bond angles

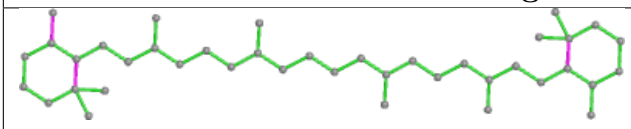


Torsions

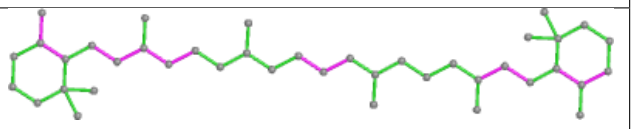


Rings

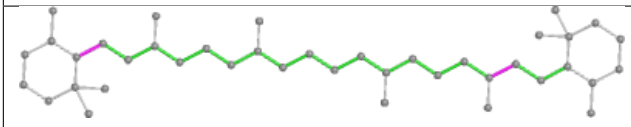
Ligand BCR D 407



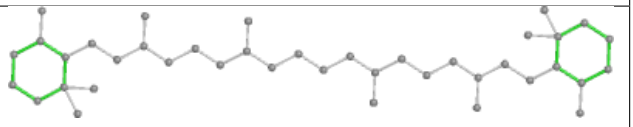
Bond lengths



Bond angles

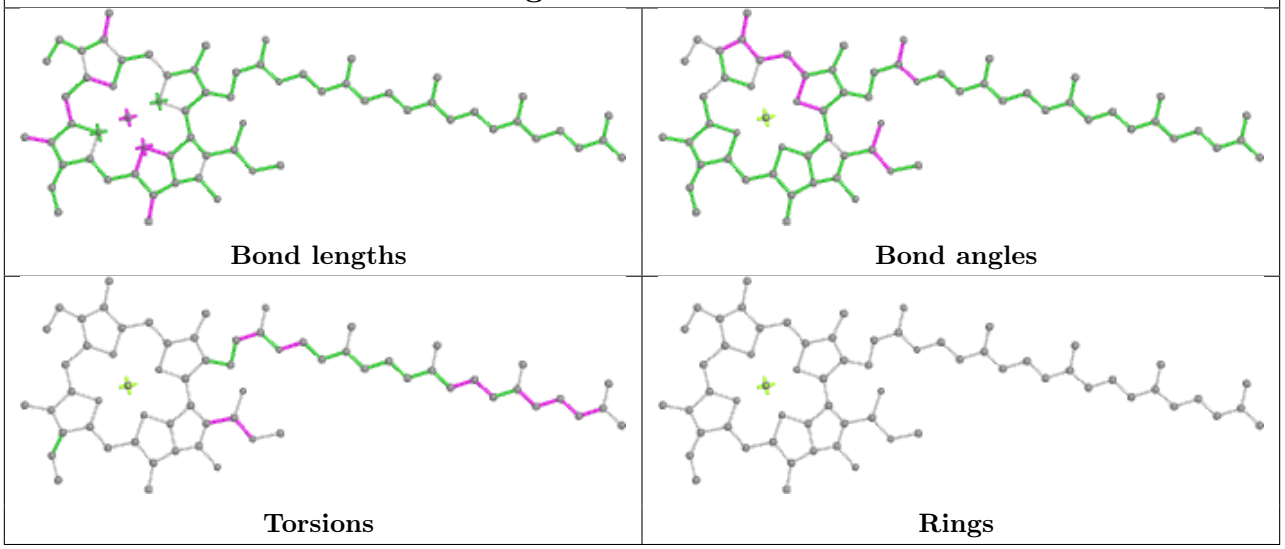


Torsions

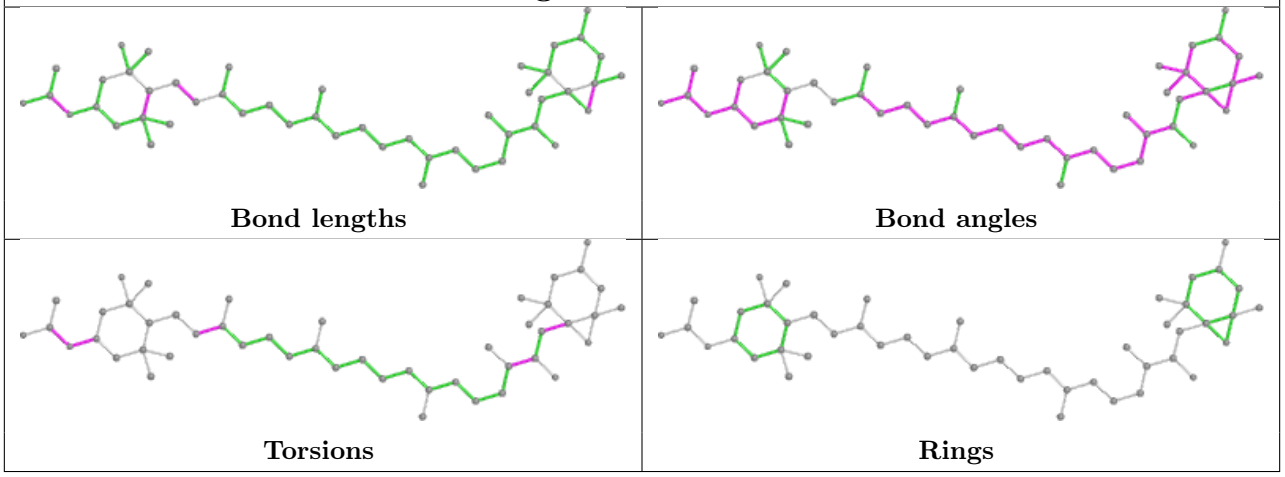


Rings

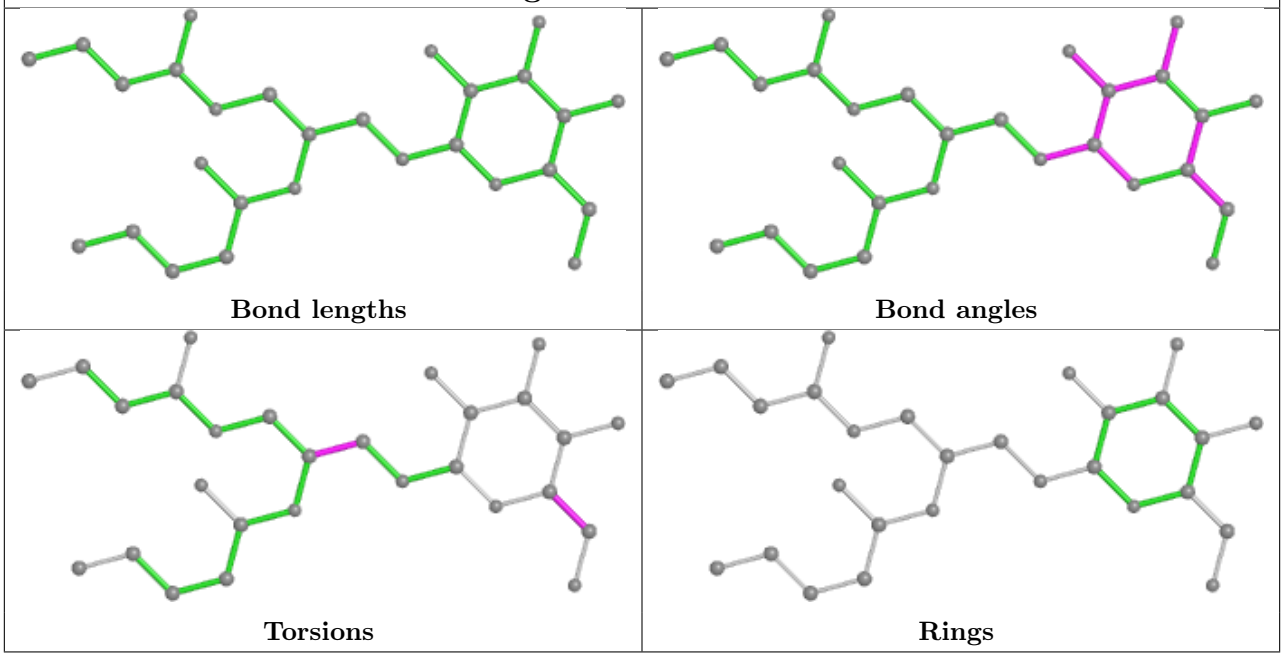
Ligand CLA B 613



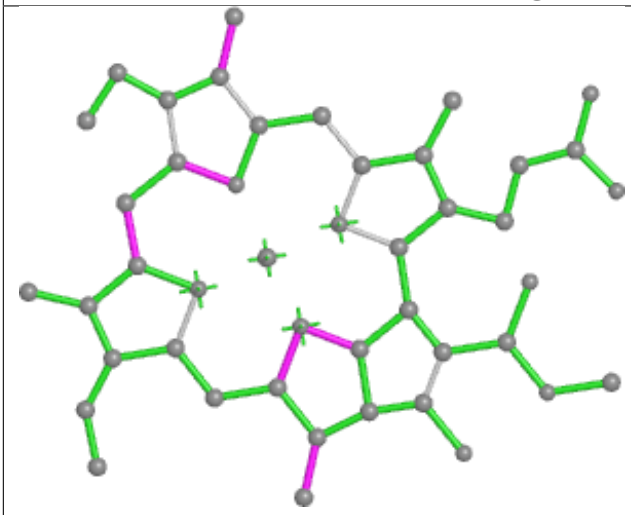
Ligand A86 5 301



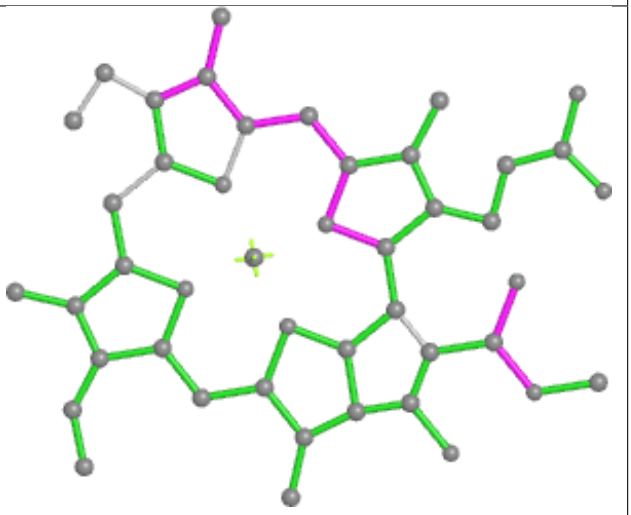
Ligand LMG b 622



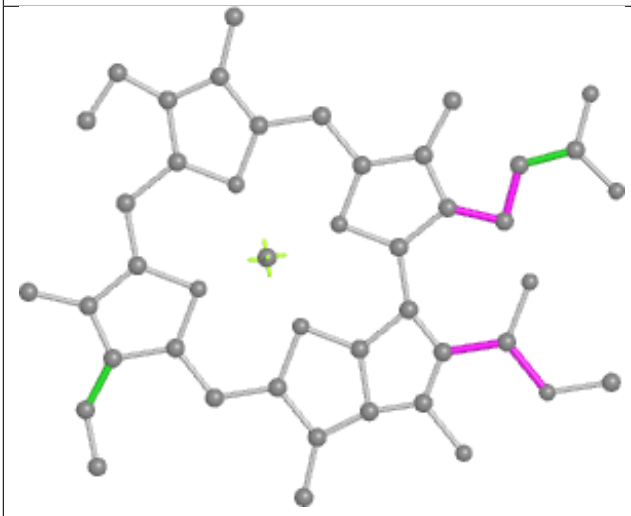
Ligand CLA 9 306



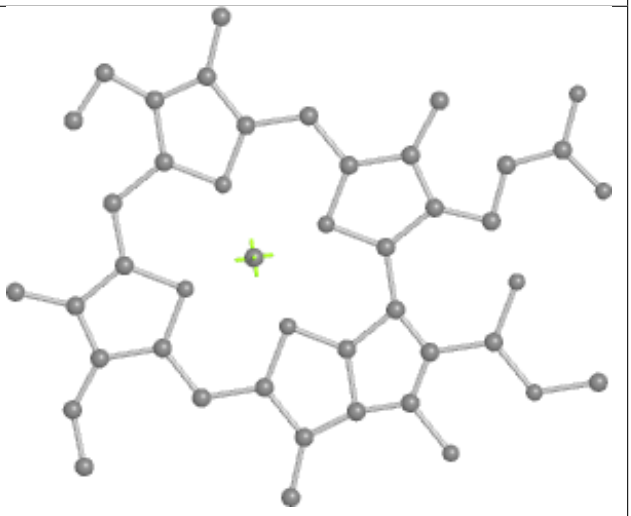
Bond lengths



Bond angles

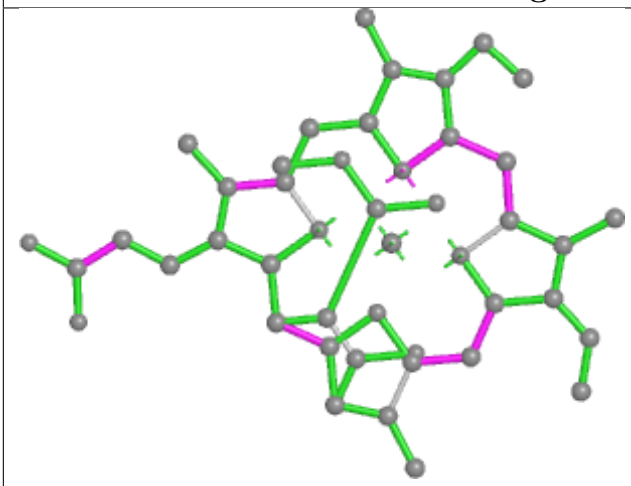


Torsions

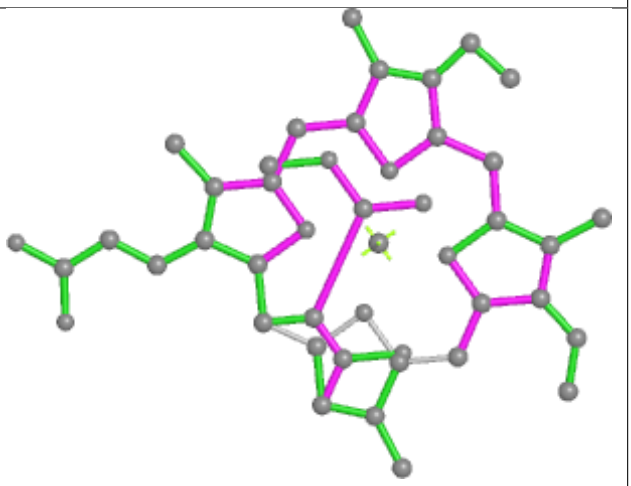


Rings

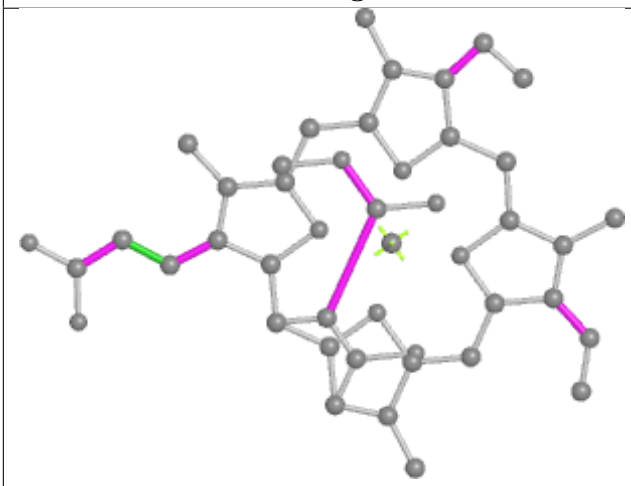
Ligand KC2 0 306



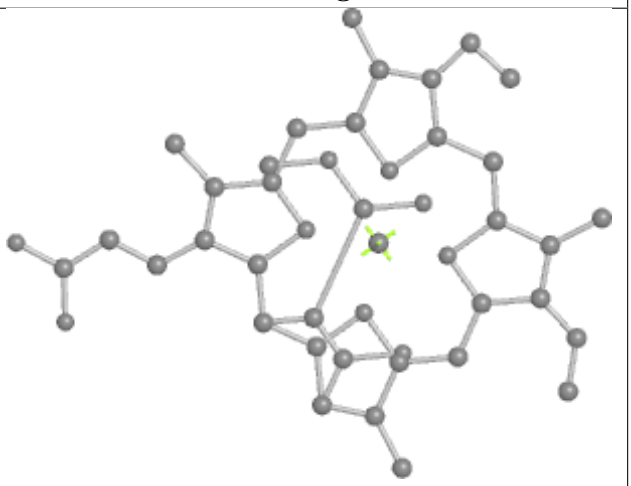
Bond lengths



Bond angles

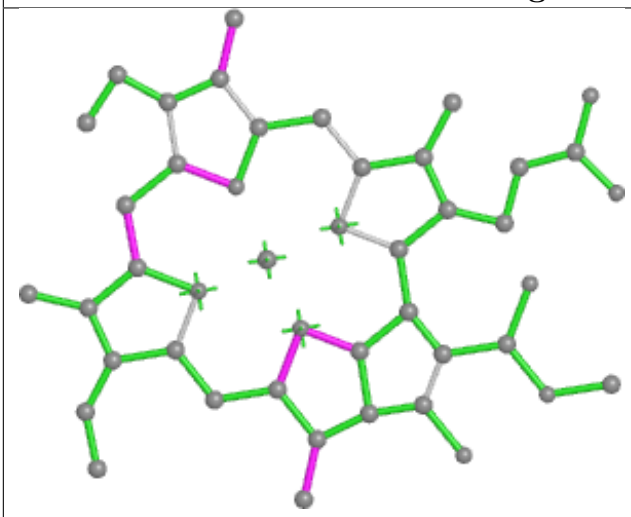


Torsions

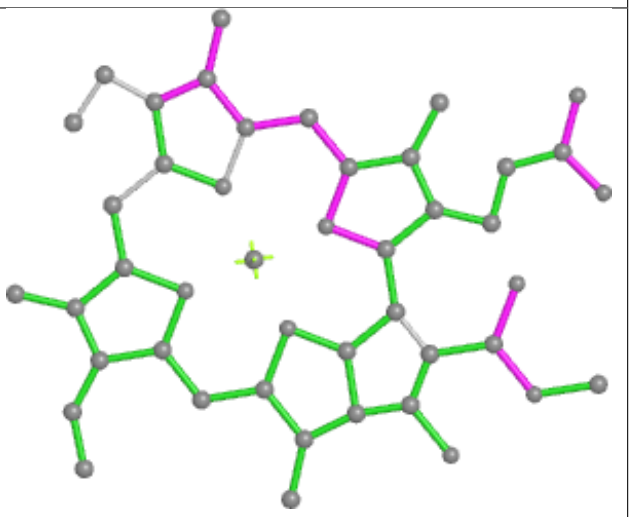


Rings

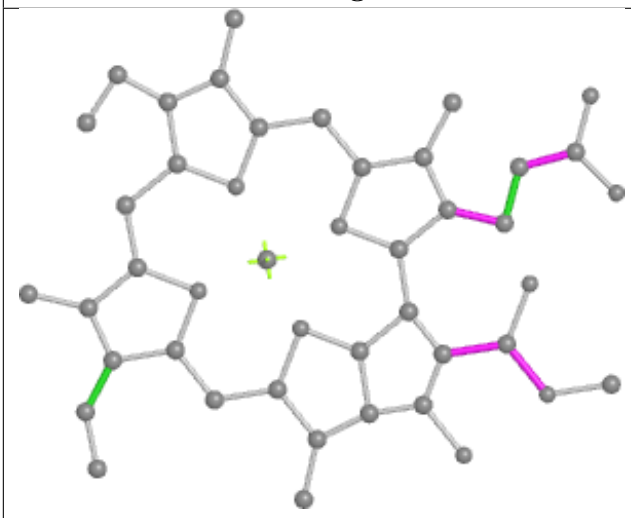
Ligand CLA 0 310



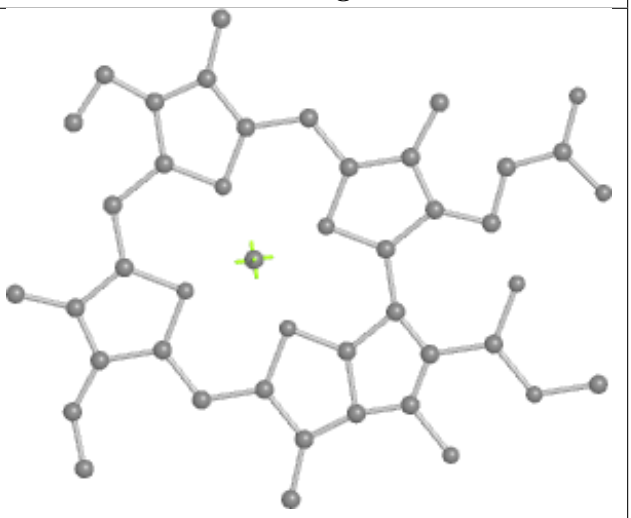
Bond lengths



Bond angles

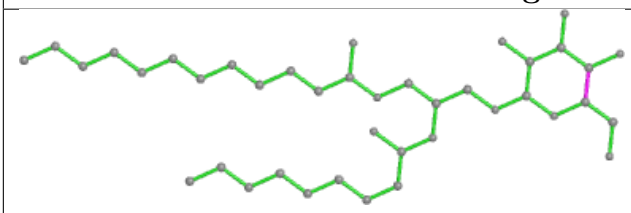


Torsions

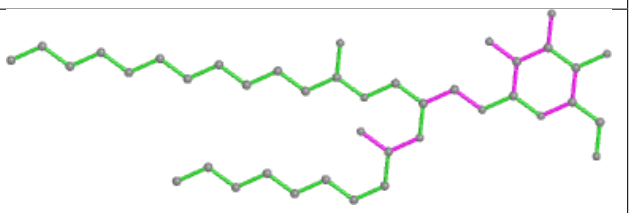


Rings

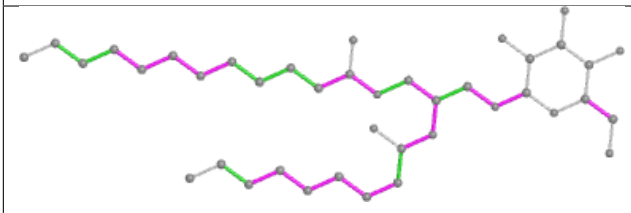
Ligand LMG b 623



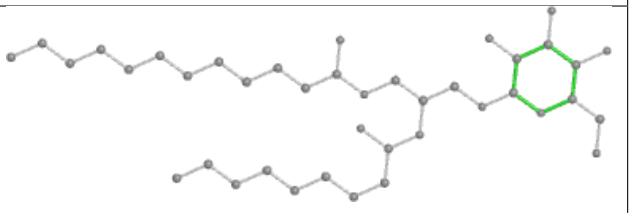
Bond lengths



Bond angles

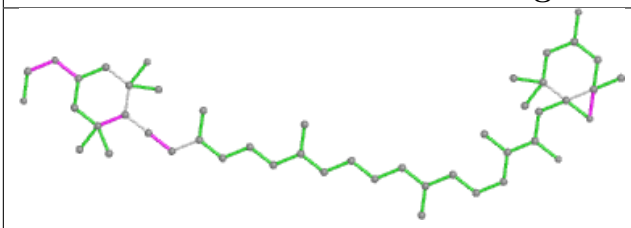


Torsions

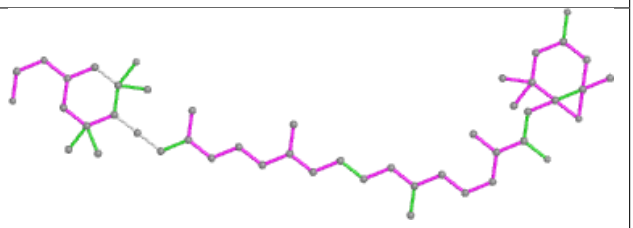


Rings

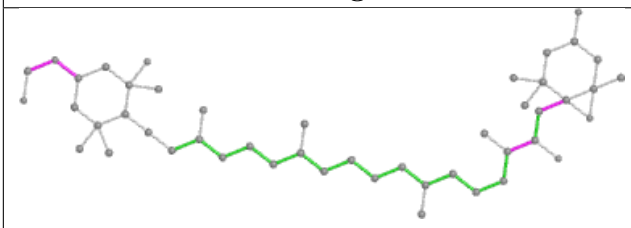
Ligand A86 5 305



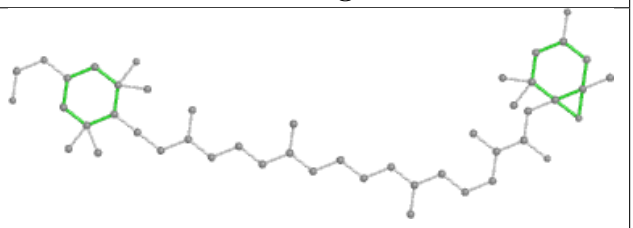
Bond lengths



Bond angles

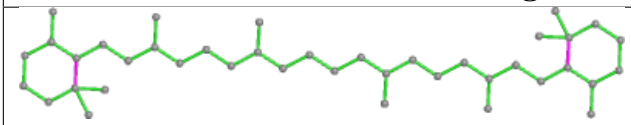


Torsions

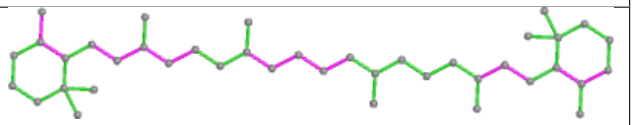


Rings

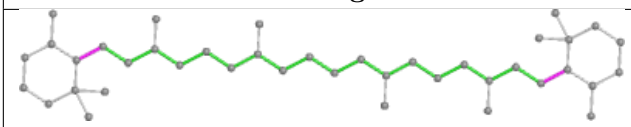
Ligand BCR K 102



Bond lengths



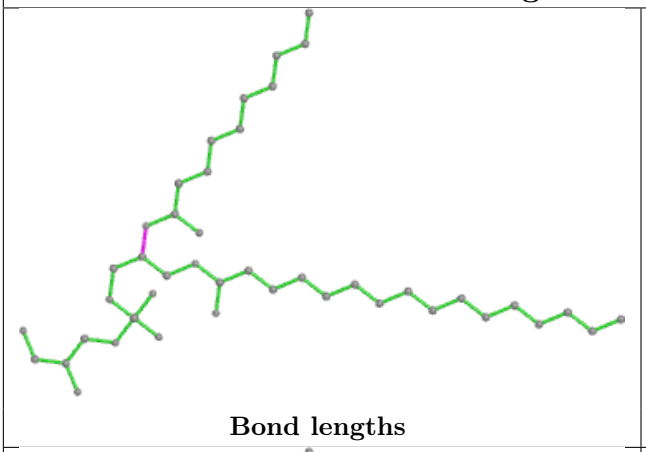
Bond angles



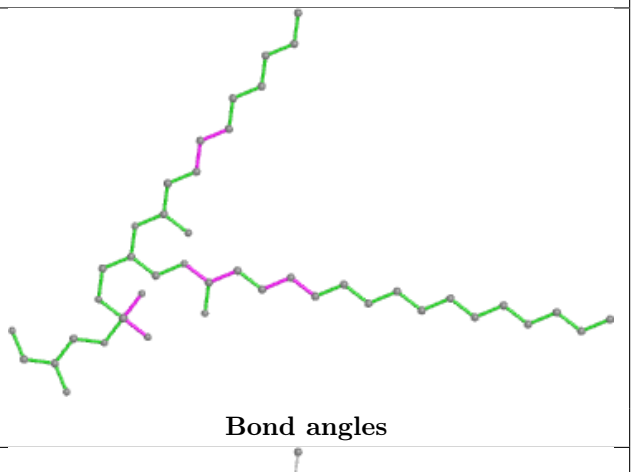
Torsions

Rings

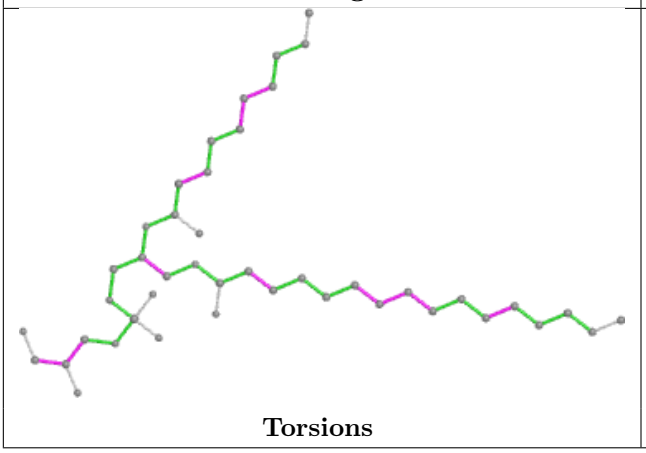
Ligand LHG A 411



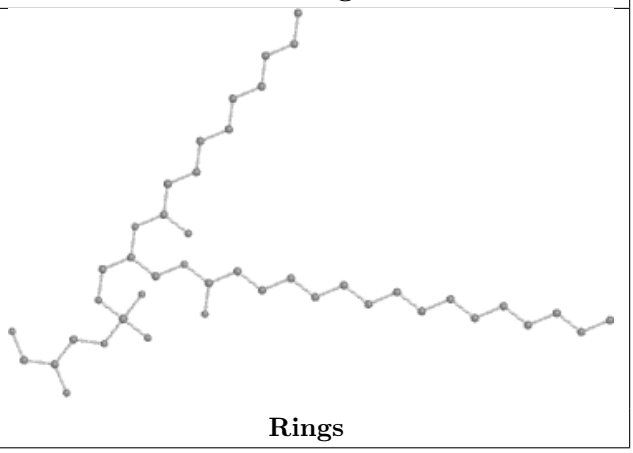
Bond lengths



Bond angles

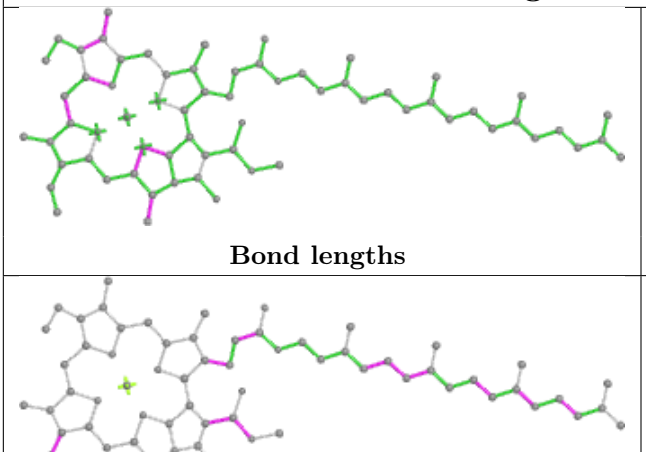


Torsions

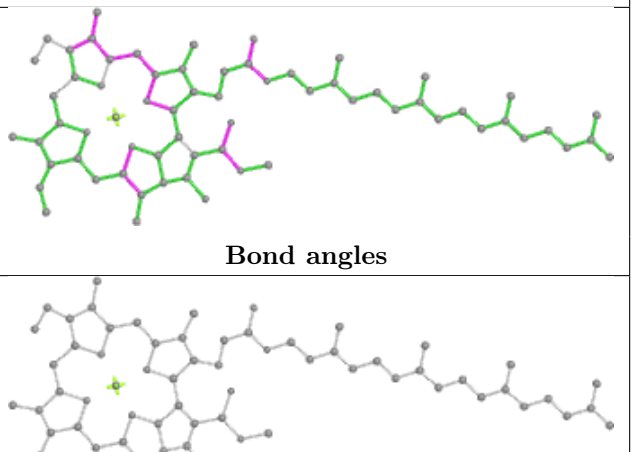


Rings

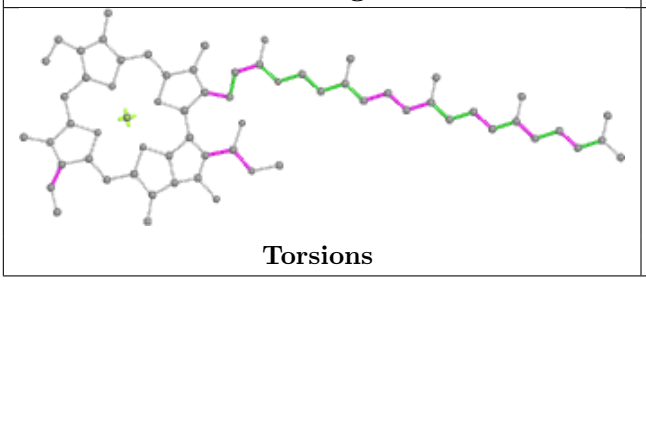
Ligand CLA w 303



Bond lengths



Bond angles



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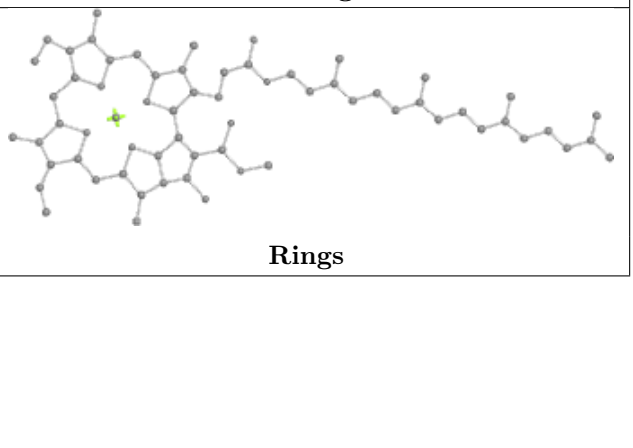
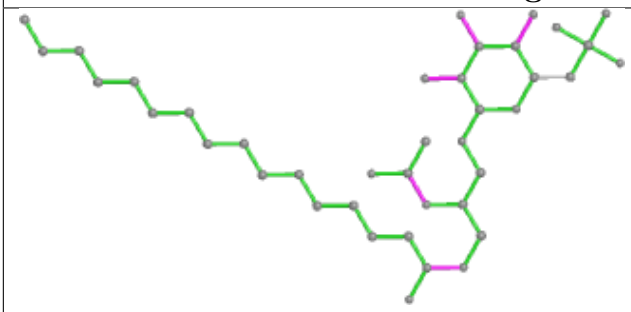
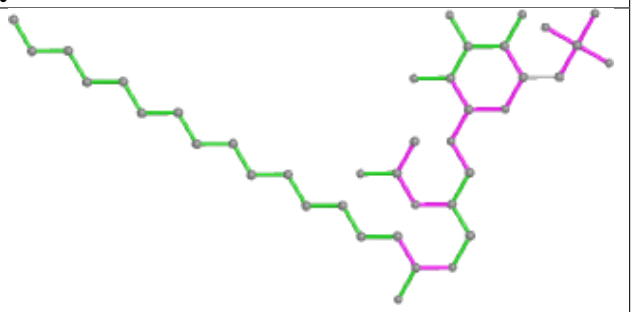


Rings

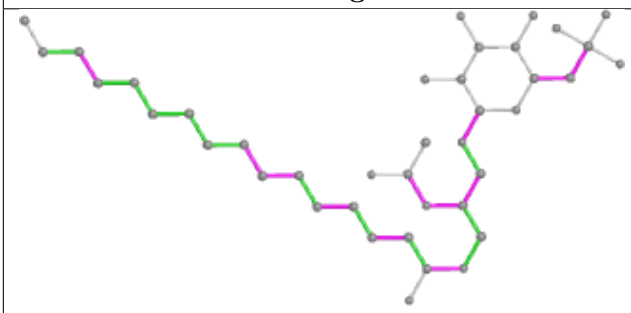
Ligand SQD T 101



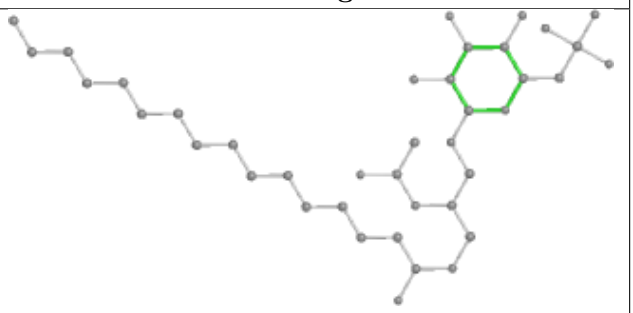
Bond lengths



Bond angles

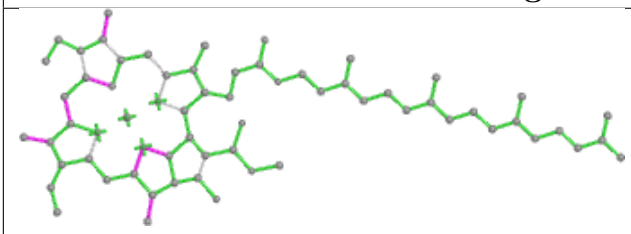


Torsions

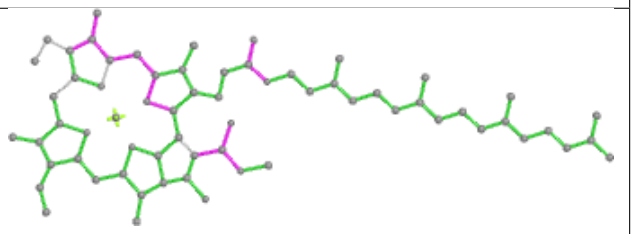


Rings

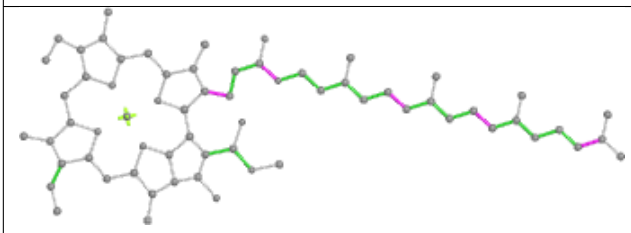
Ligand CLA C 508



Bond lengths



Bond angles



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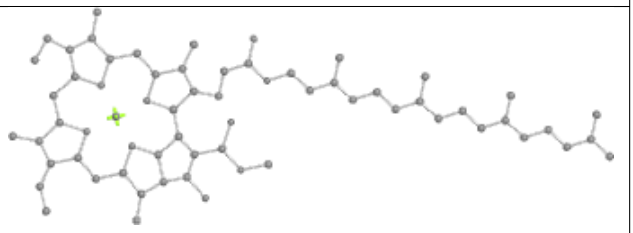
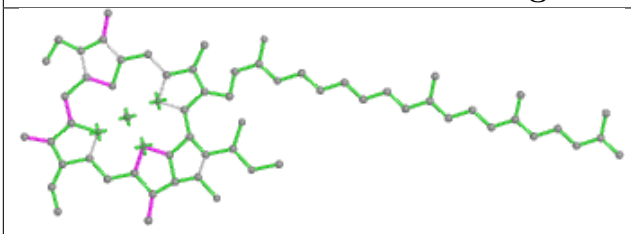
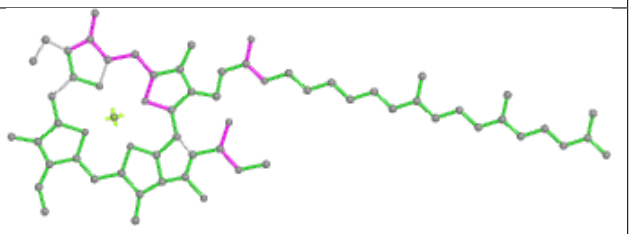


Rings

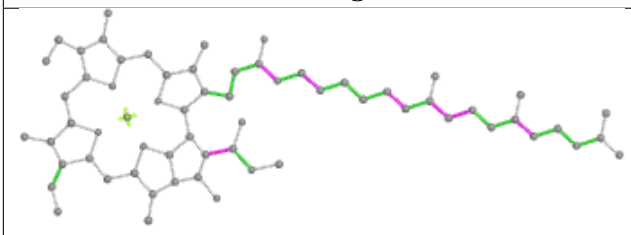
Ligand CLA c 512



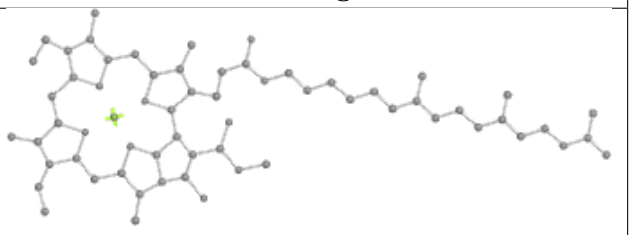
Bond lengths



Bond angles

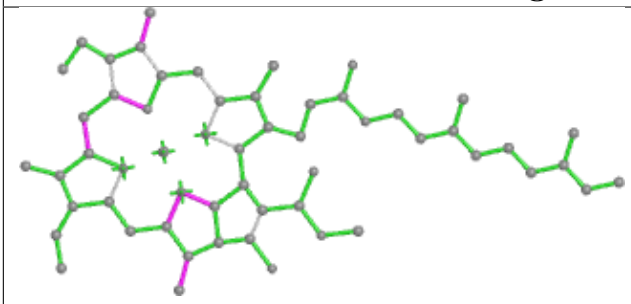


Torsions

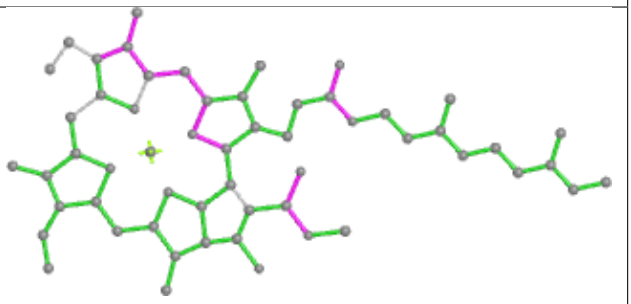


Rings

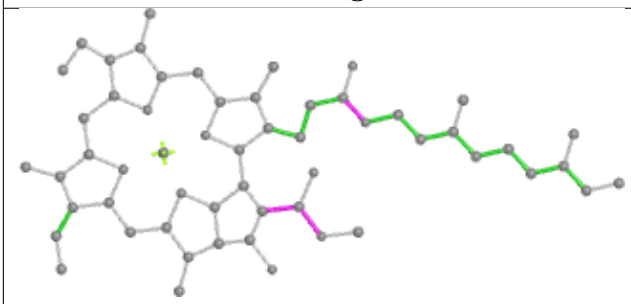
Ligand CLA 4 314



Bond lengths



Bond angles



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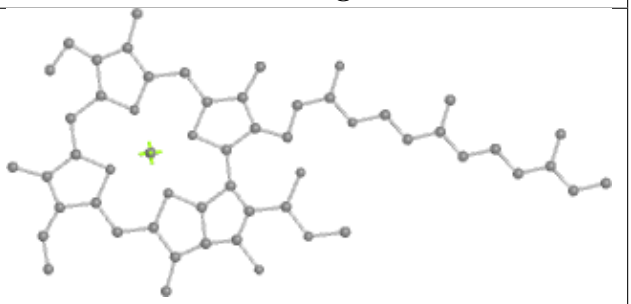
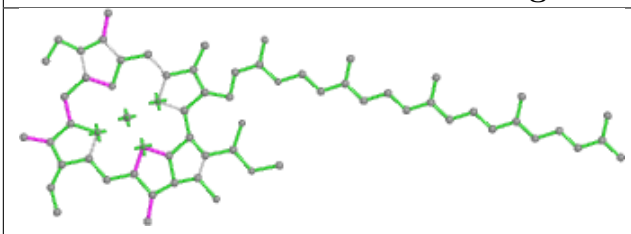
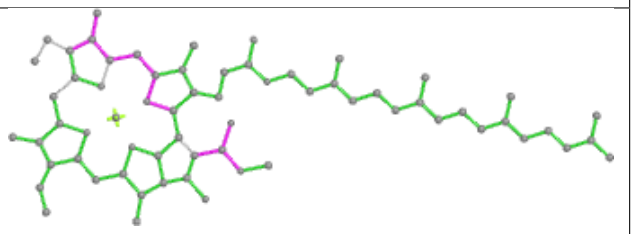


Rings

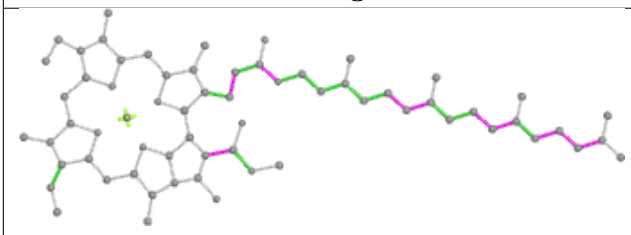
Ligand CLA c 505



Bond lengths



Bond angles



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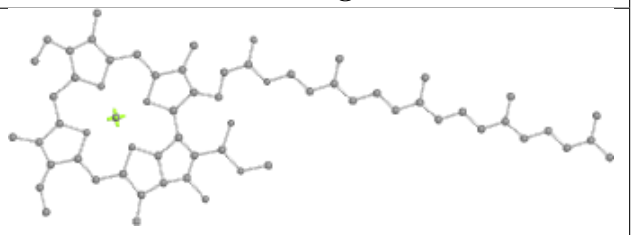
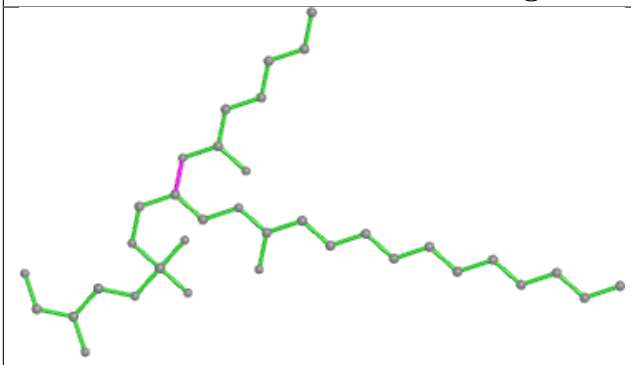
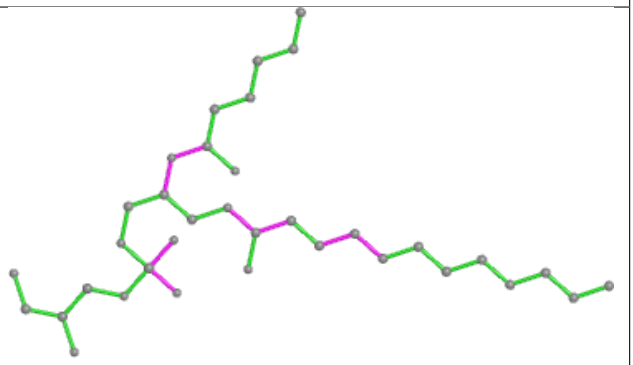


Rings

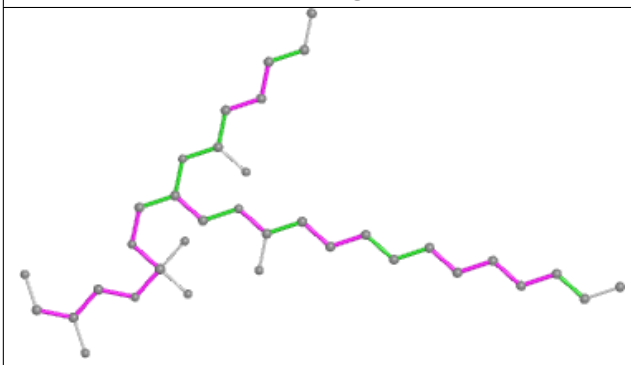
Ligand LHG w 301



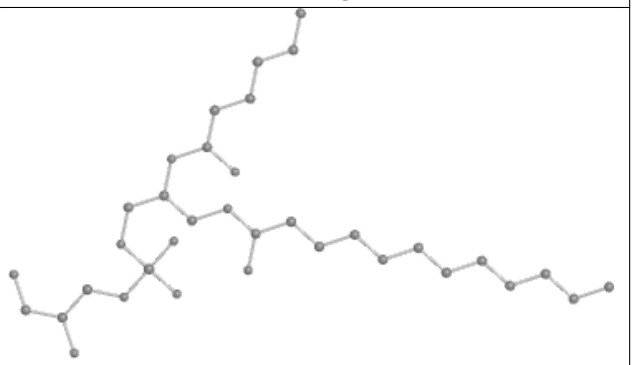
Bond lengths



Bond angles

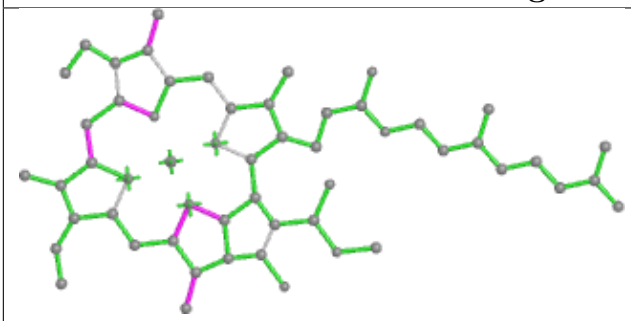


Torsions

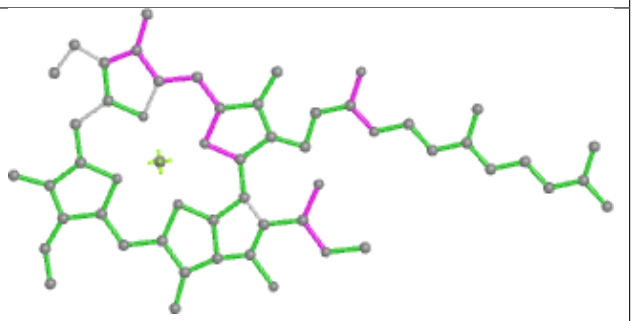


Rings

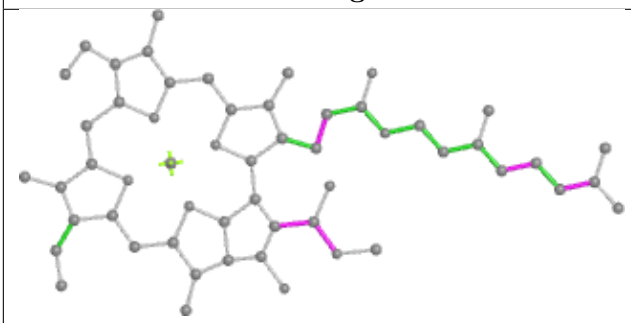
Ligand CLA 9 311



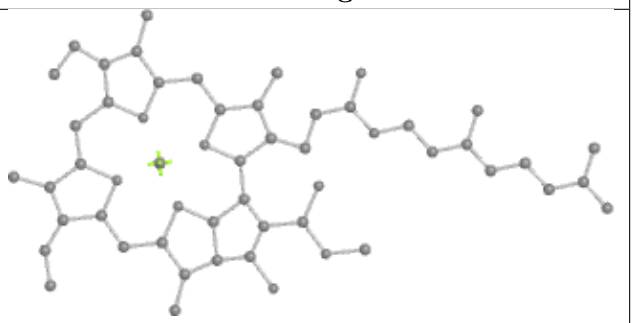
Bond lengths



Bond angles

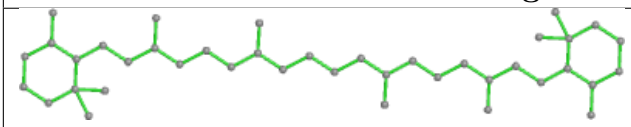


Torsions

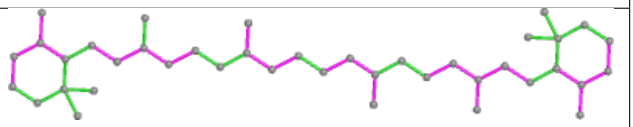


Rings

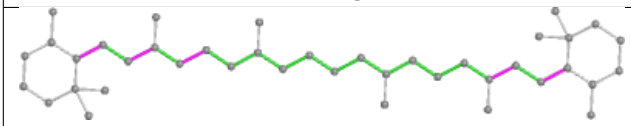
Ligand BCR C 515



Bond lengths



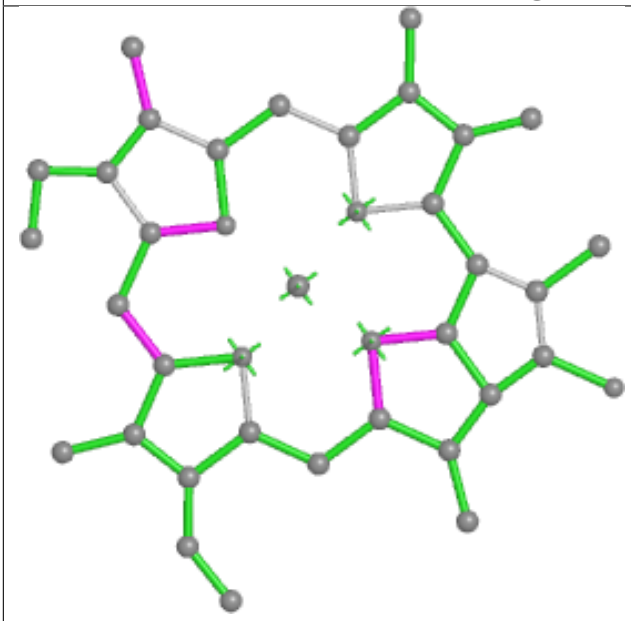
Bond angles



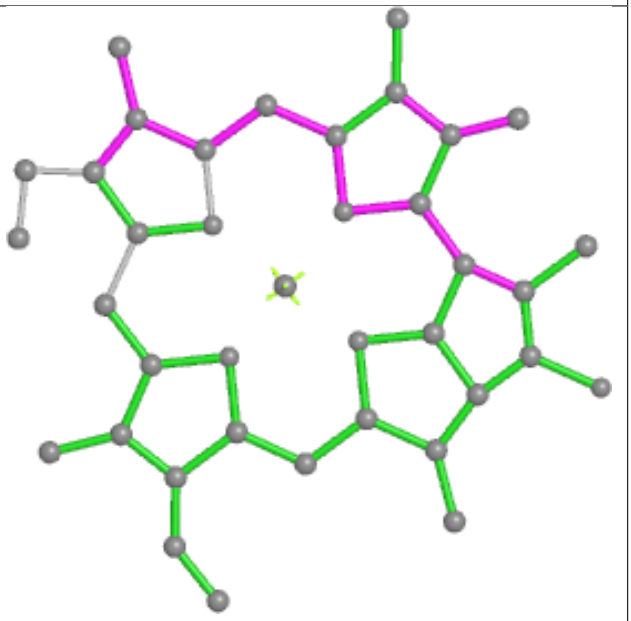
Torsions

Rings

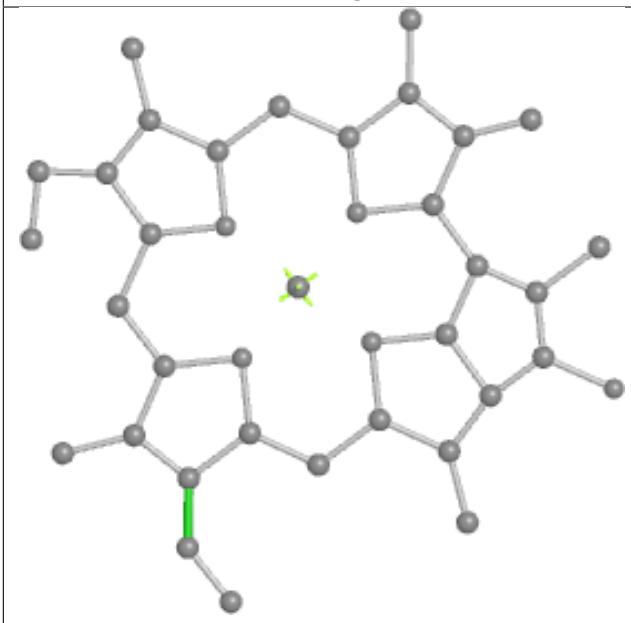
Ligand CLA 1 316



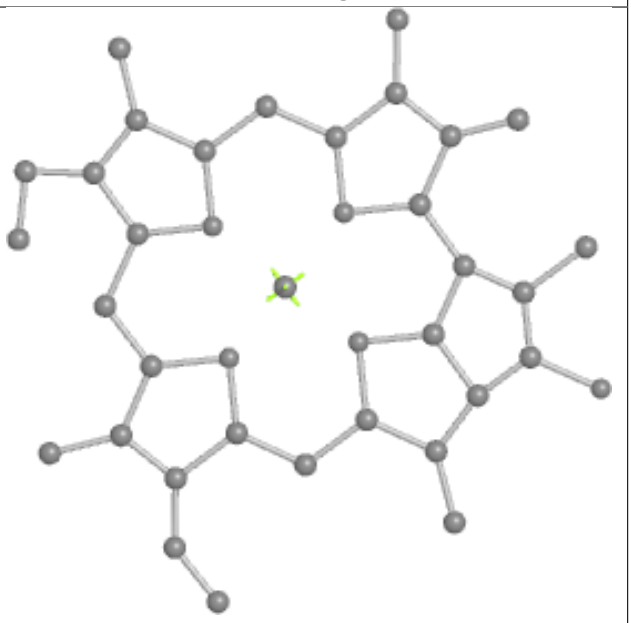
Bond lengths



Bond angles

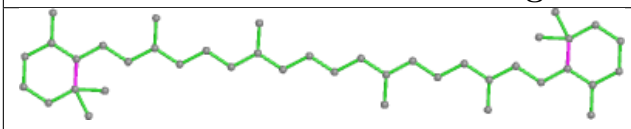


Torsions

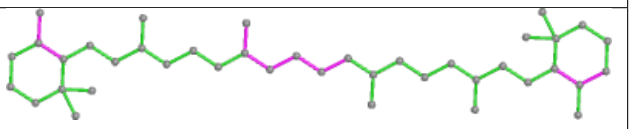


Rings

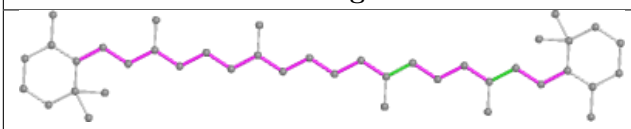
Ligand BCR k 101



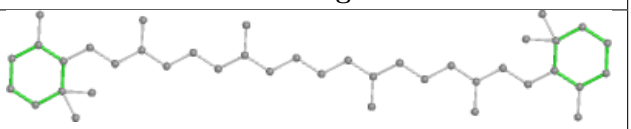
Bond lengths



Bond angles

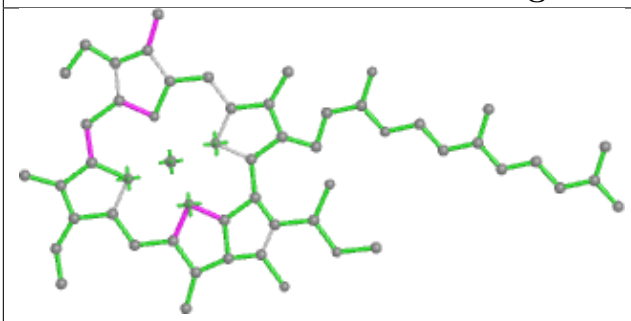


Torsions

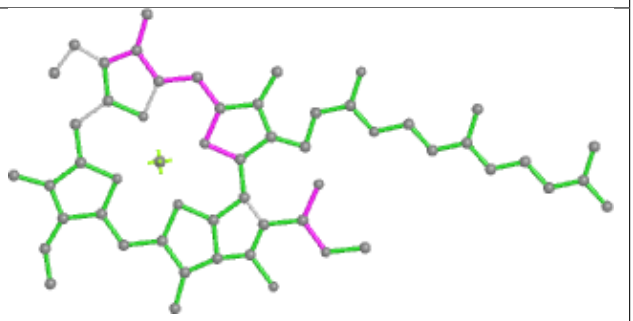


Rings

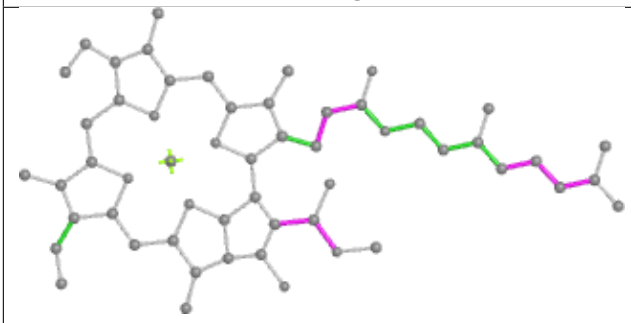
Ligand CLA 2 311



Bond lengths



Bond angles



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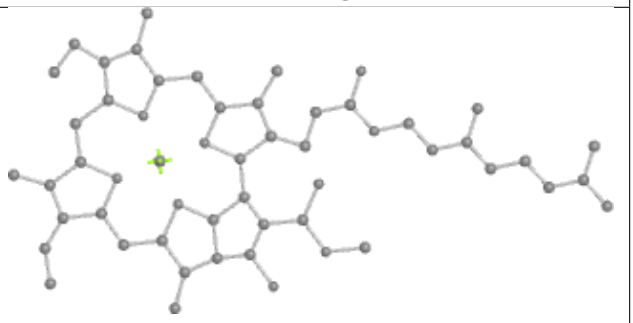
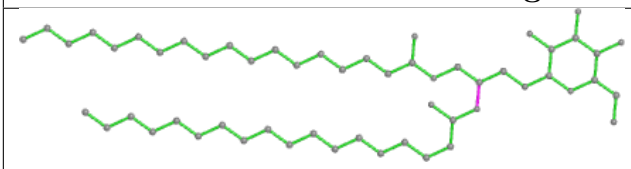
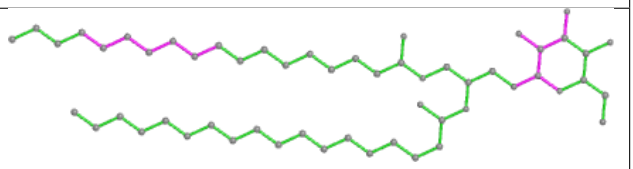


Rings

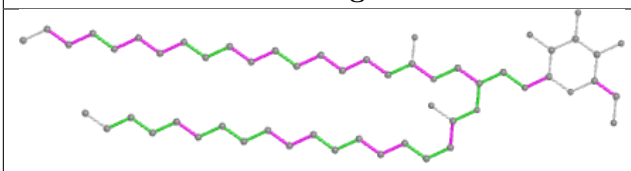
Ligand LMG 7 315



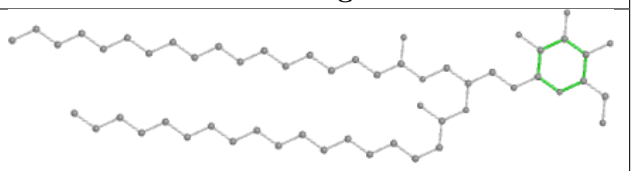
Bond lengths



Bond angles

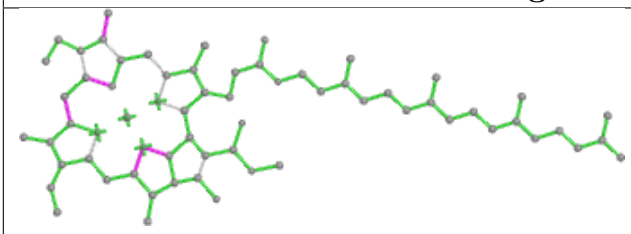


Torsions

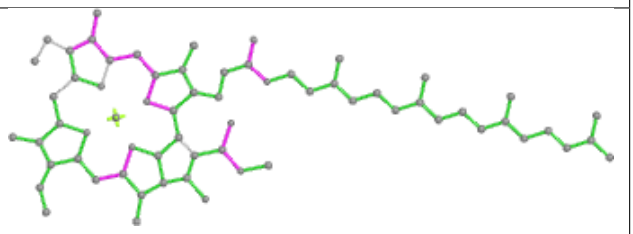


Rings

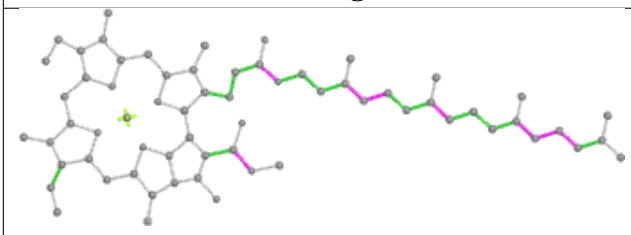
Ligand CLA 3 306



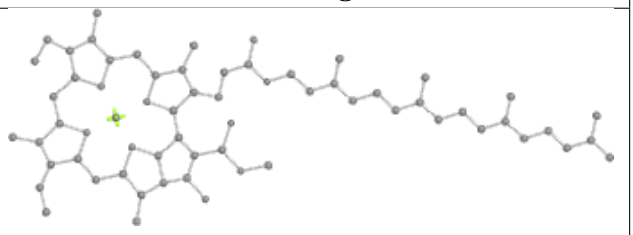
Bond lengths



Bond angles

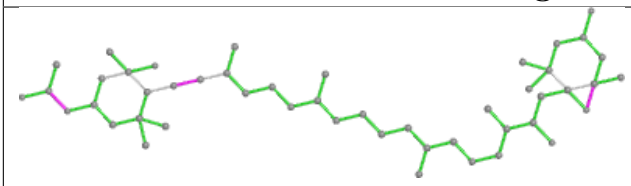


Torsions



Rings

Ligand A86 5 304



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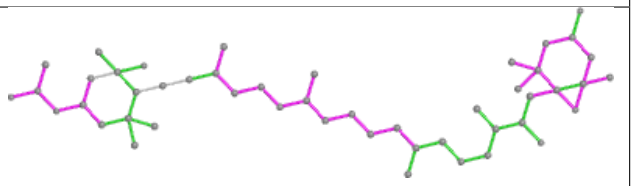
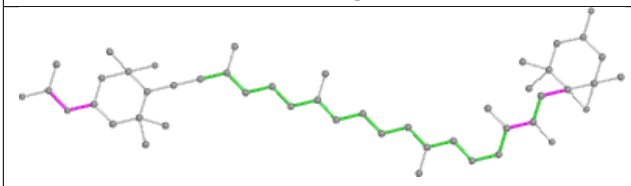
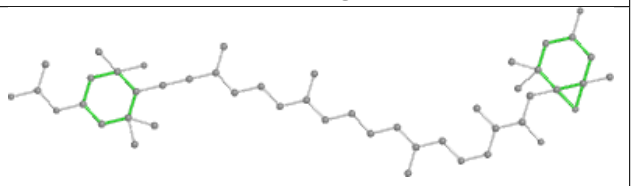


Bond angles

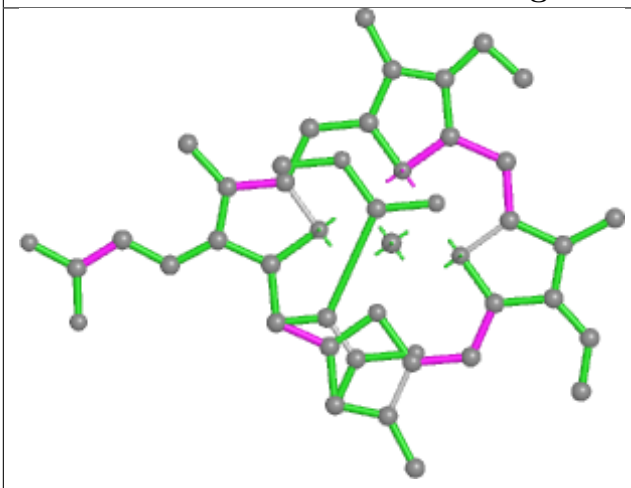


Torsions



Rings

Ligand KC2 5 310



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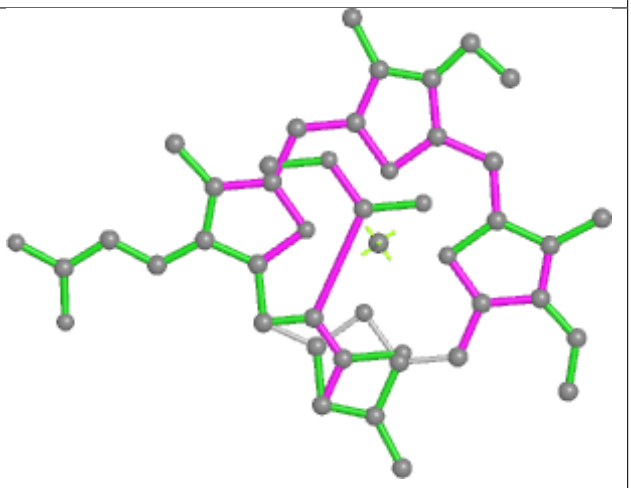
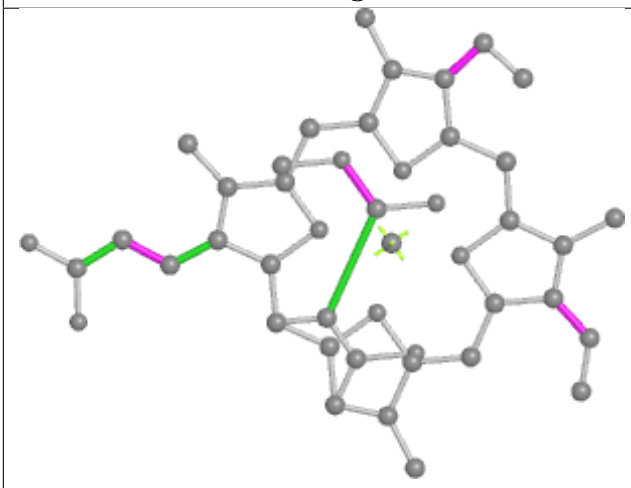


Bond angles



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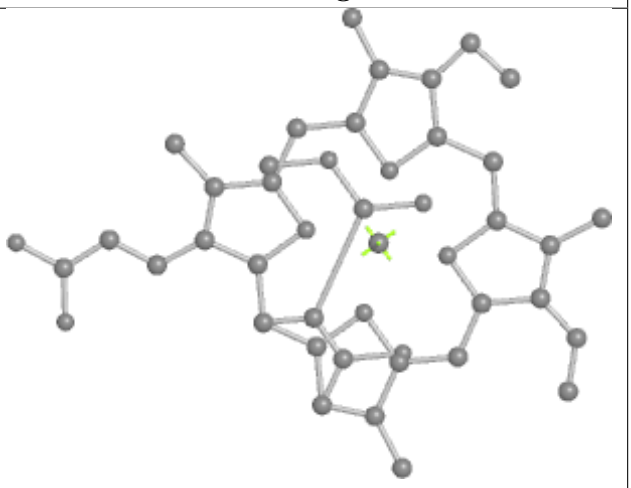
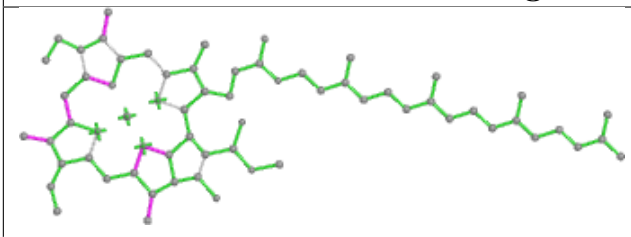
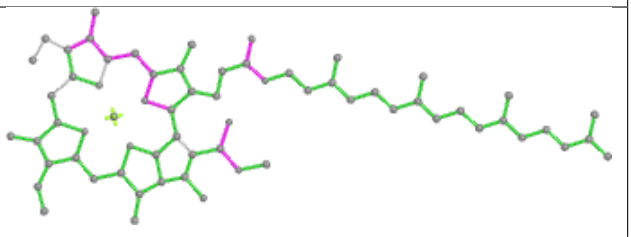


Rings

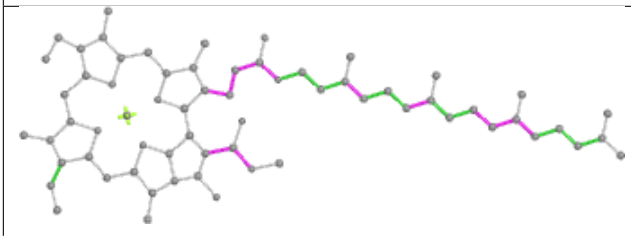
Ligand CLA C 501



Bond lengths



Bond angles



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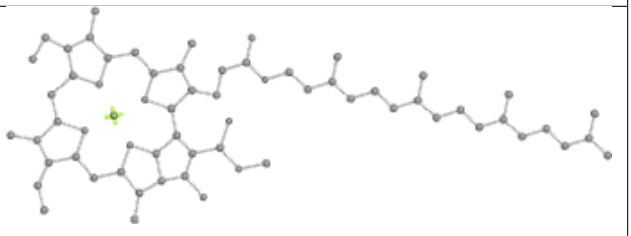
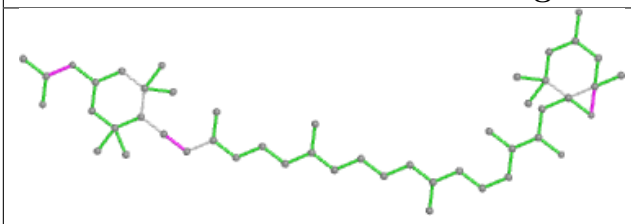


Rings

Ligand A86 1 302



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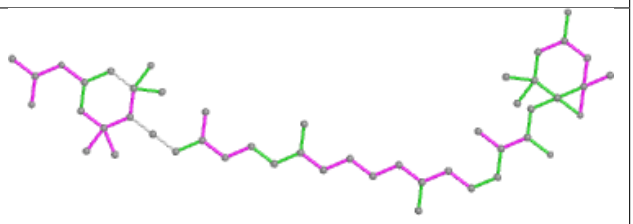
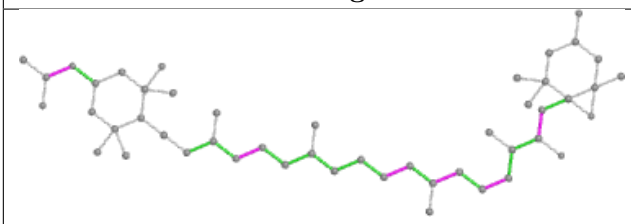


Bond angles



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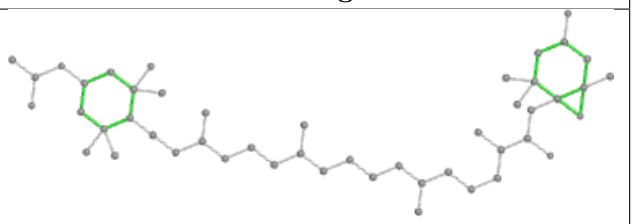
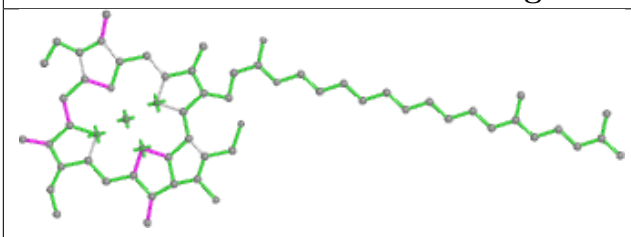
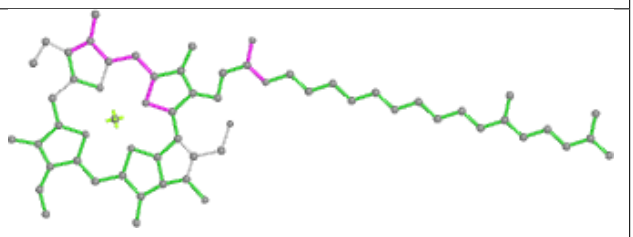


Rings

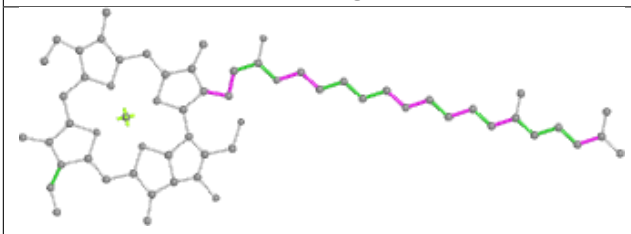
Ligand CLA B 602



Bond lengths



Bond angles



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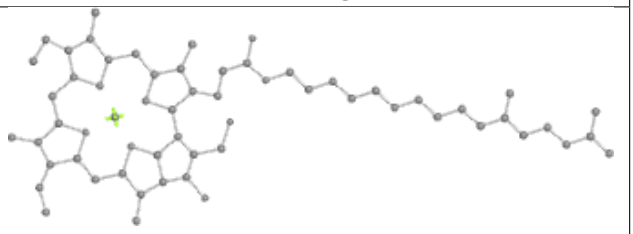
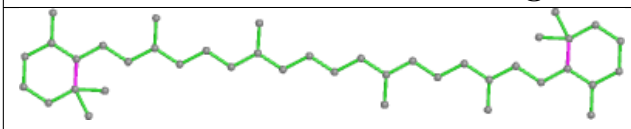


Rings

Ligand BCR b 619



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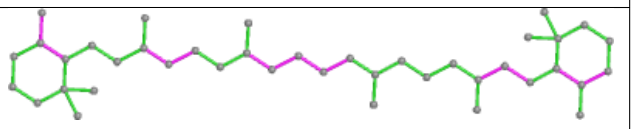
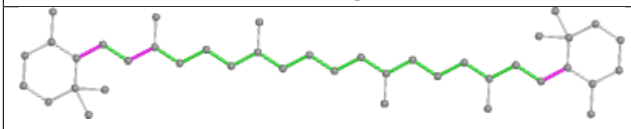


Bond angles



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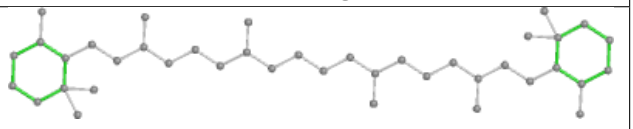
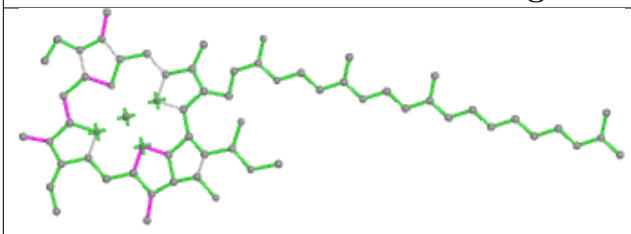
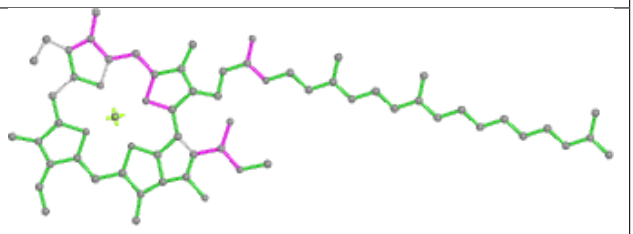


Rings

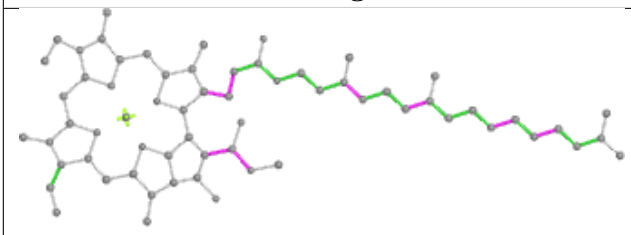
Ligand CLA b 604



Bond lengths



Bond angles



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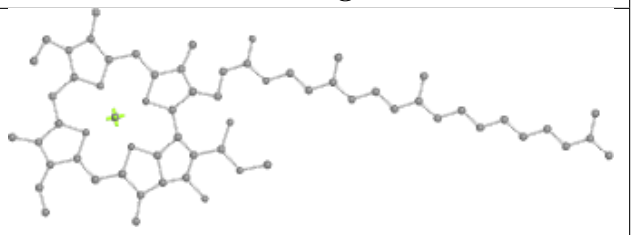
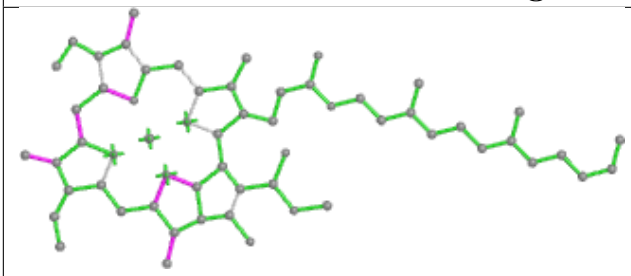
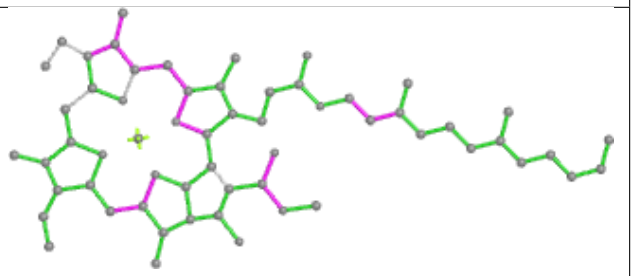


Rings

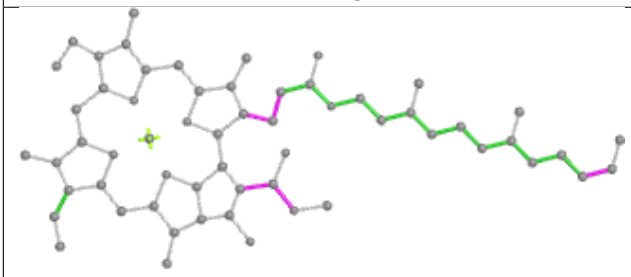
Ligand CLA d 409



Bond lengths



Bond angles



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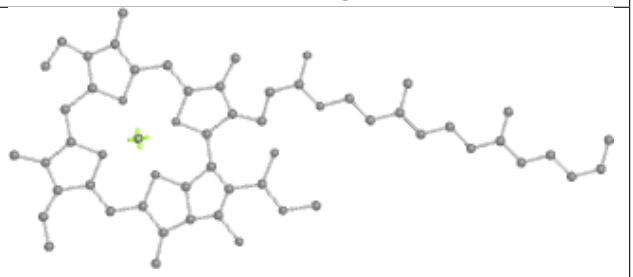
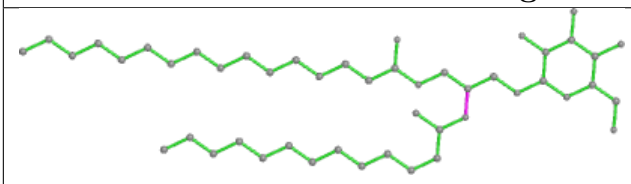
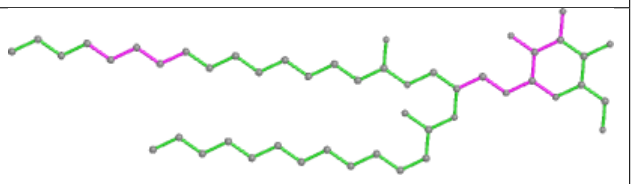


Rings

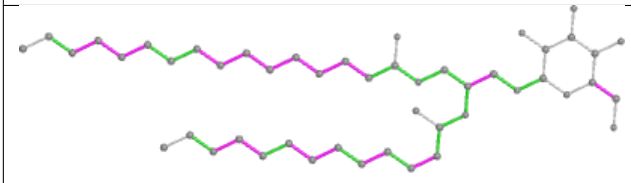
Ligand LMG w 304



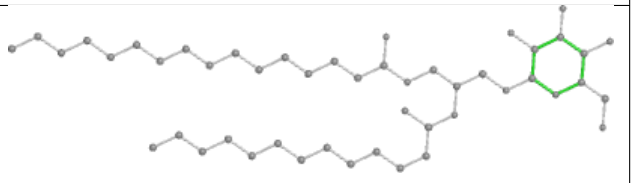
Bond lengths



Bond angles

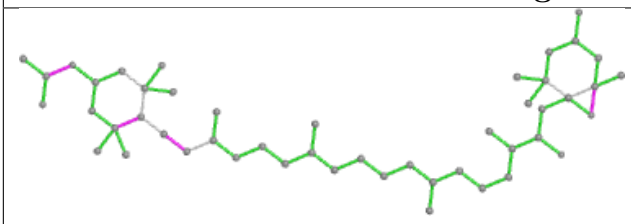


Torsions

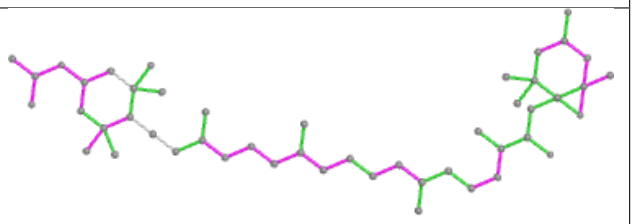


Rings

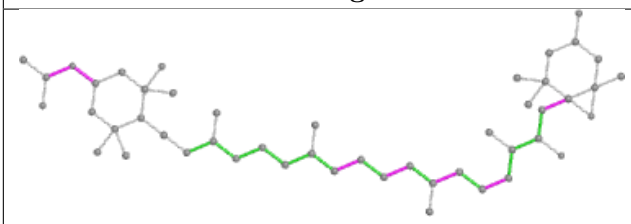
Ligand A86 4 301



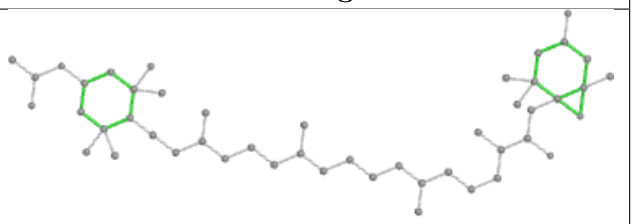
Bond lengths



Bond angles

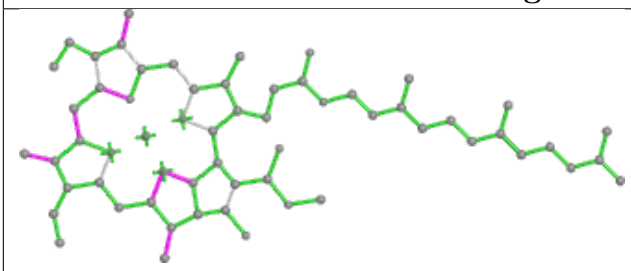


Torsions

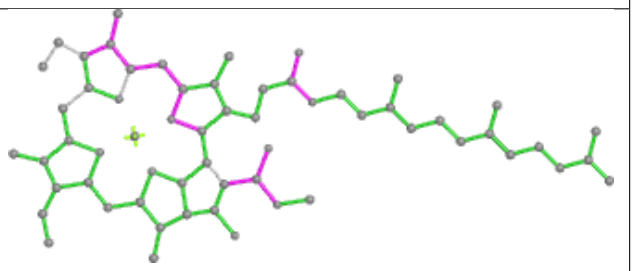


Rings

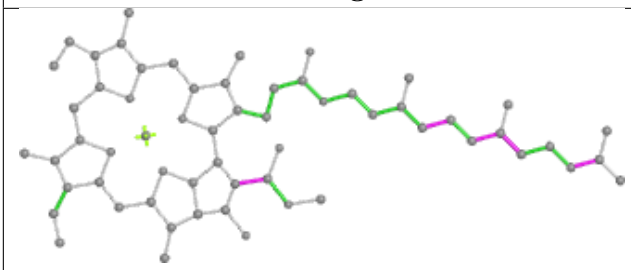
Ligand CLA A 408



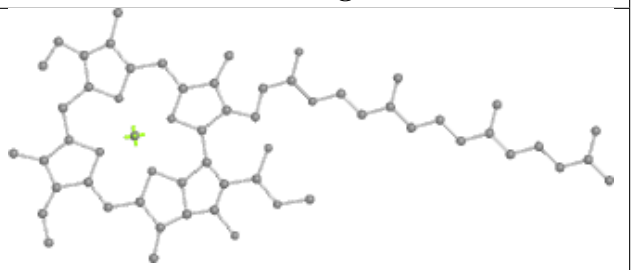
Bond lengths



Bond angles

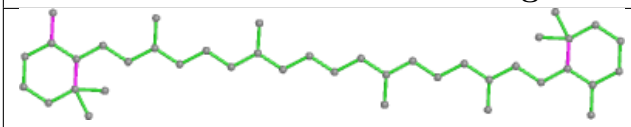


Torsions



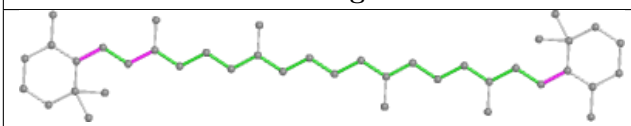
Rings

Ligand BCR H 101

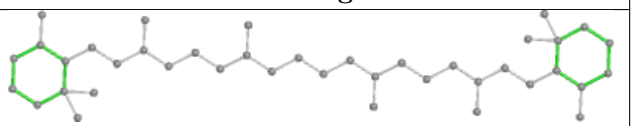


Bond lengths

Bond angles

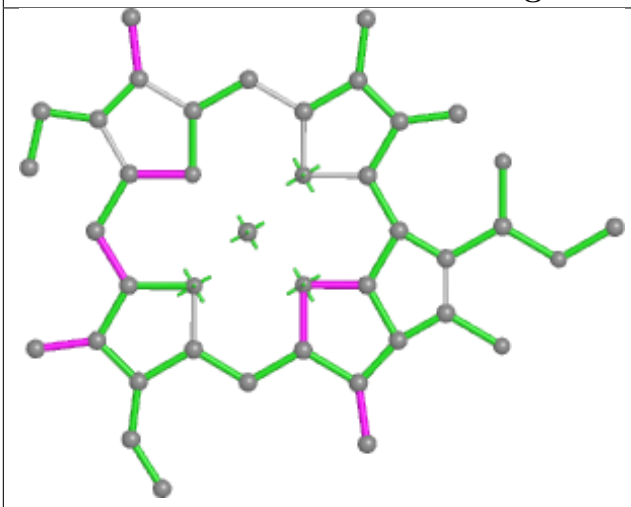


Torsions

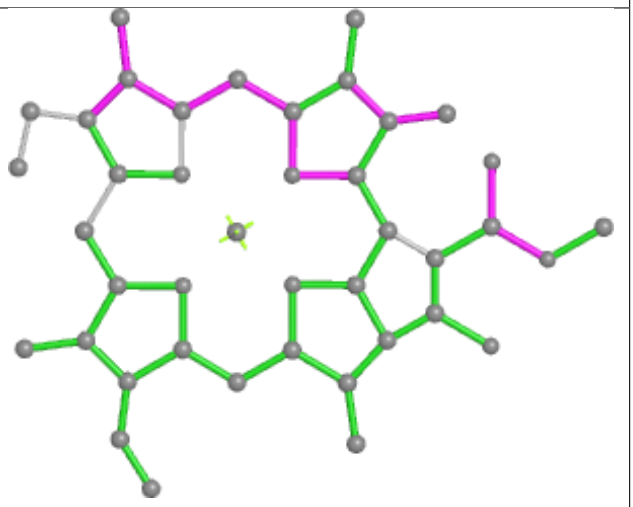


Rings

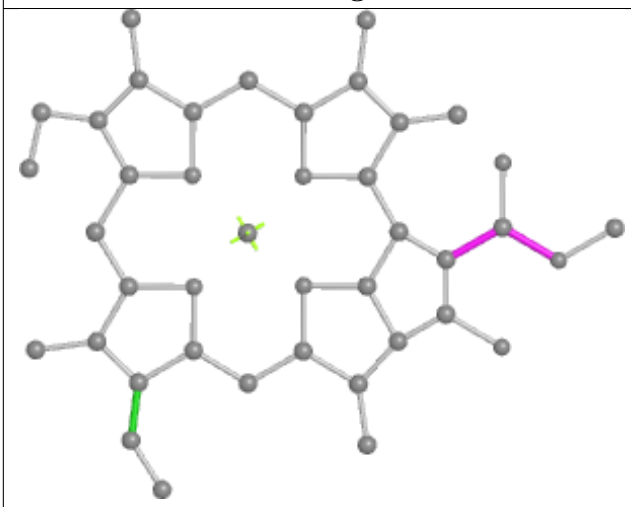
Ligand CLA B 607



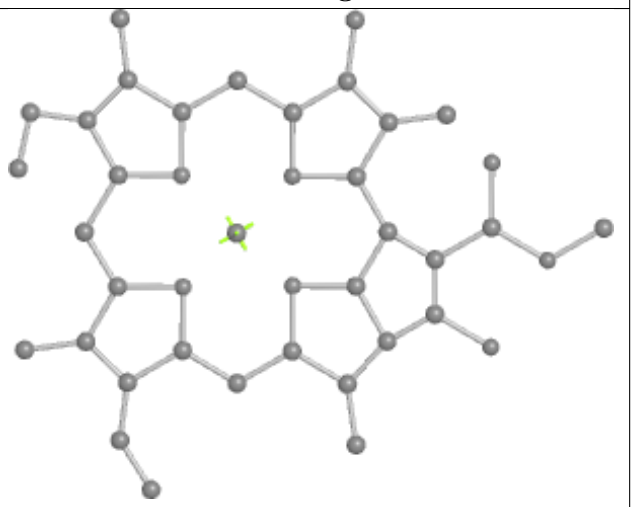
Bond lengths



Bond angles

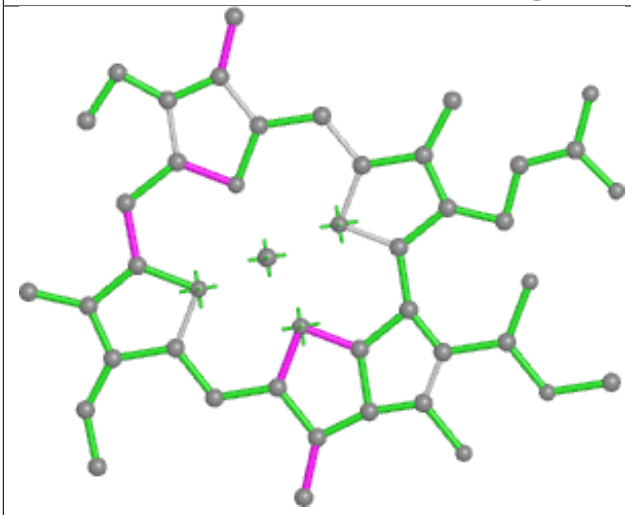


Torsions

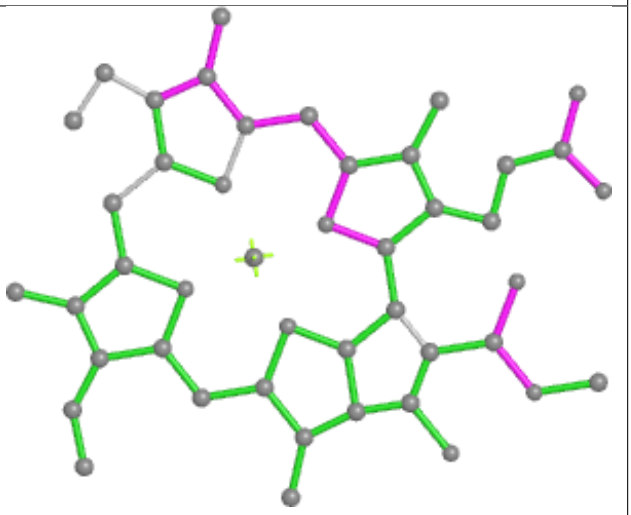


Rings

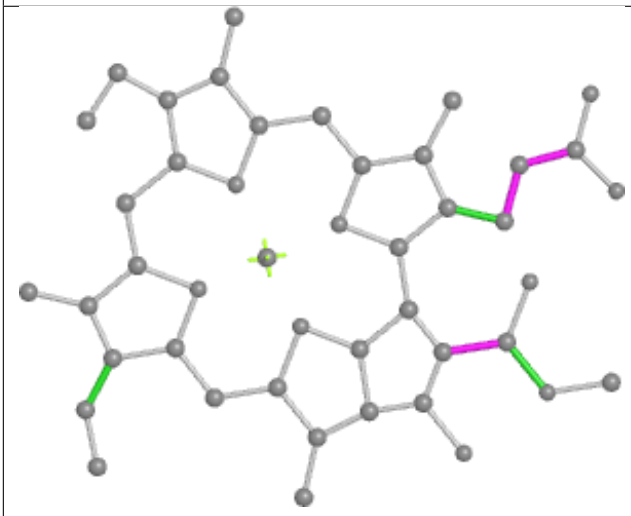
Ligand CLA 8 306



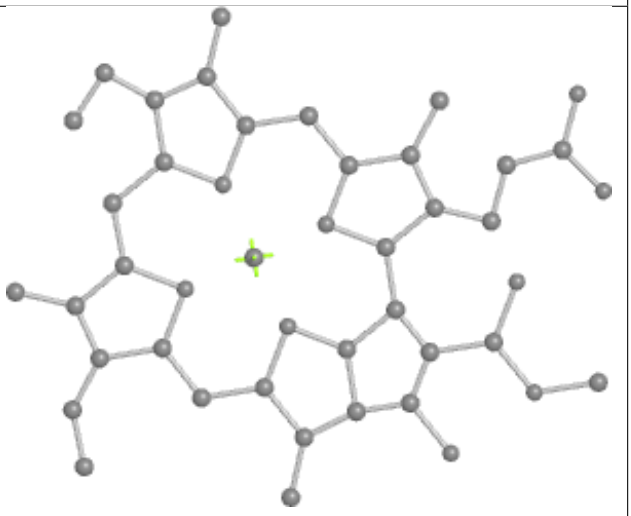
Bond lengths



Bond angles

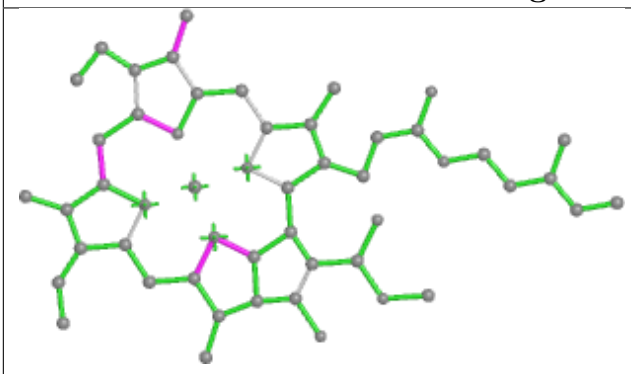


Torsions

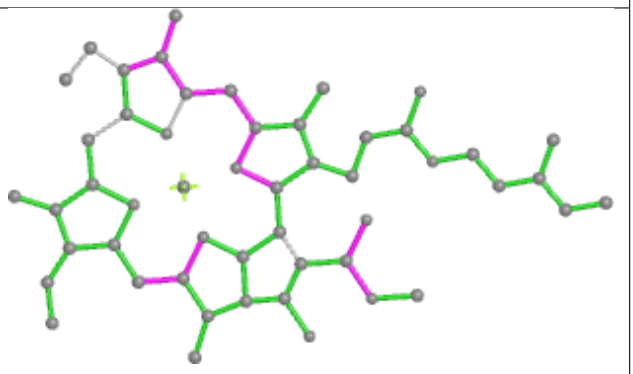


Rings

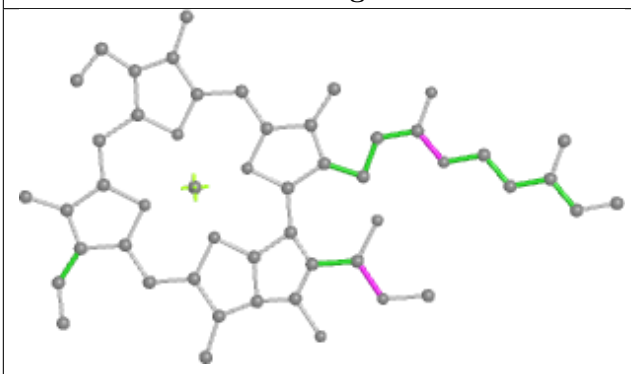
Ligand CLA z 101



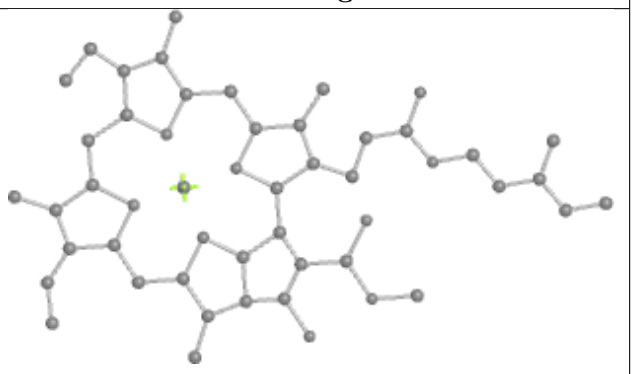
Bond lengths



Bond angles

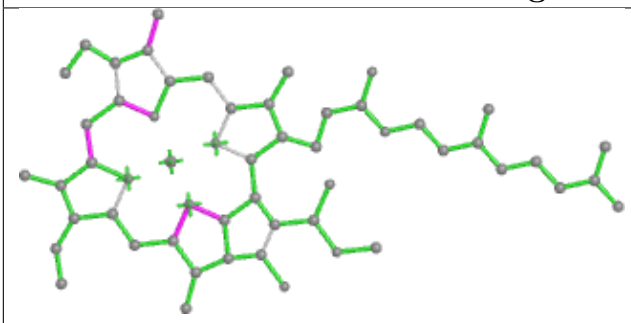


Torsions

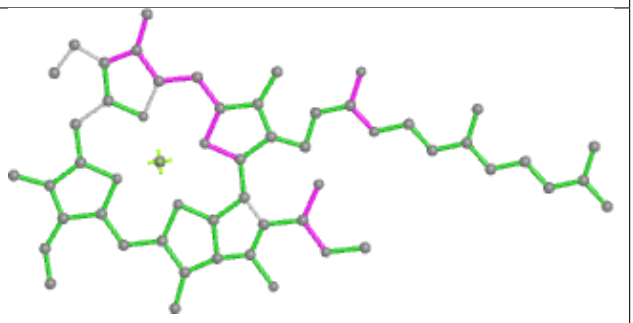


Rings

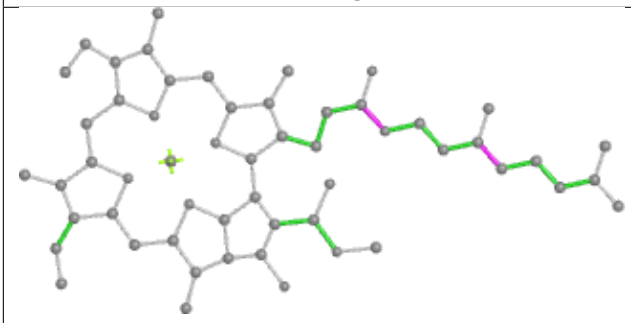
Ligand CLA 5 314



Bond lengths



Bond angles



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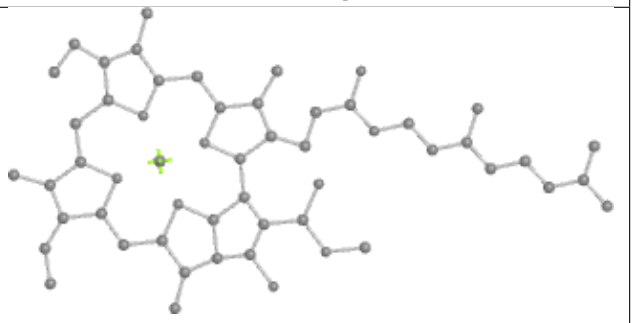
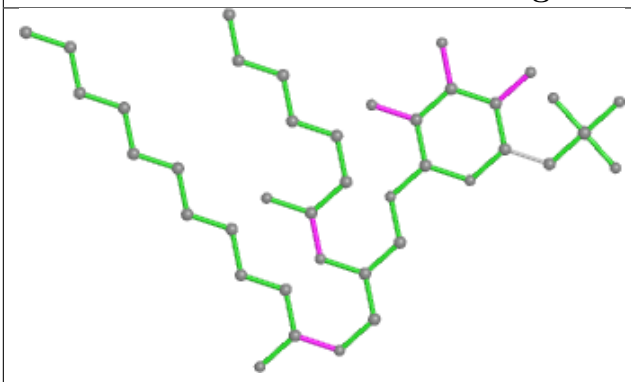
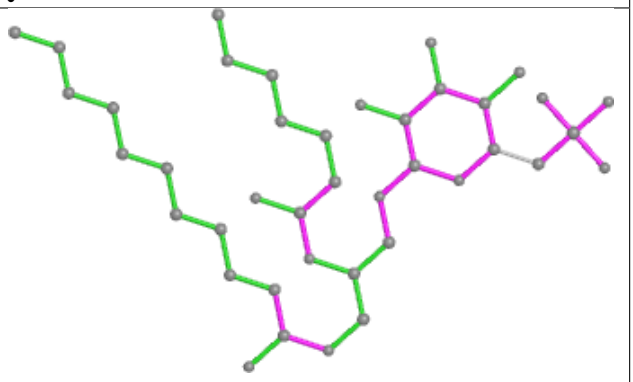


Rings

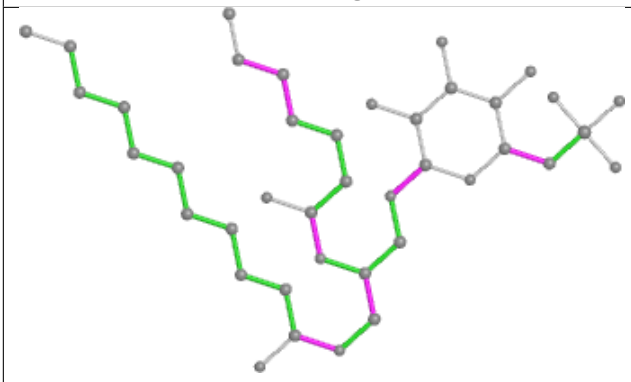
Ligand SQD i 101



Bond lengths



Bond angles



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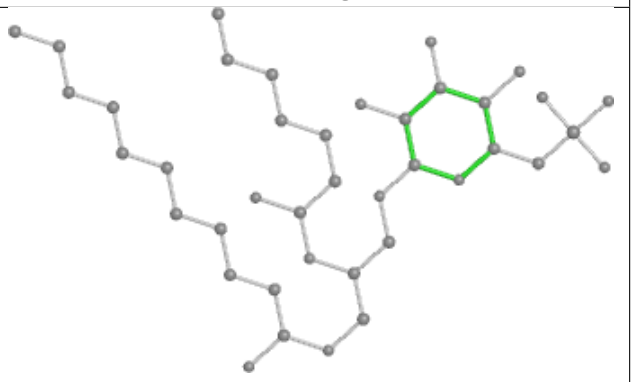
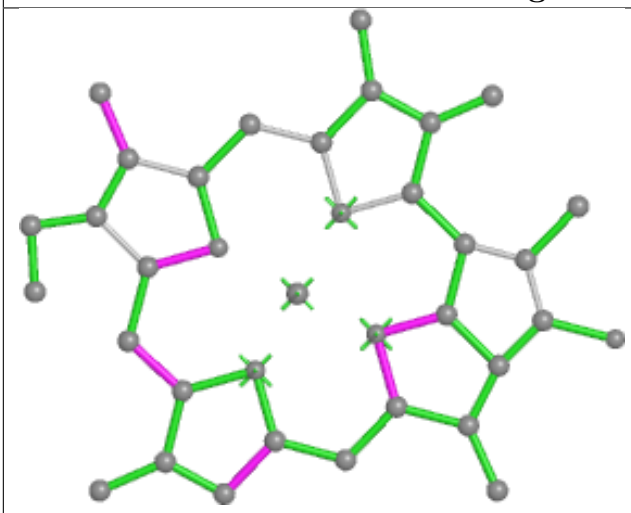
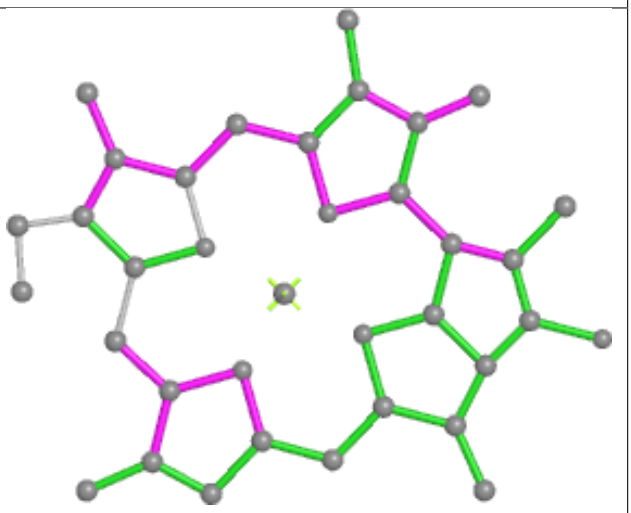


Rings

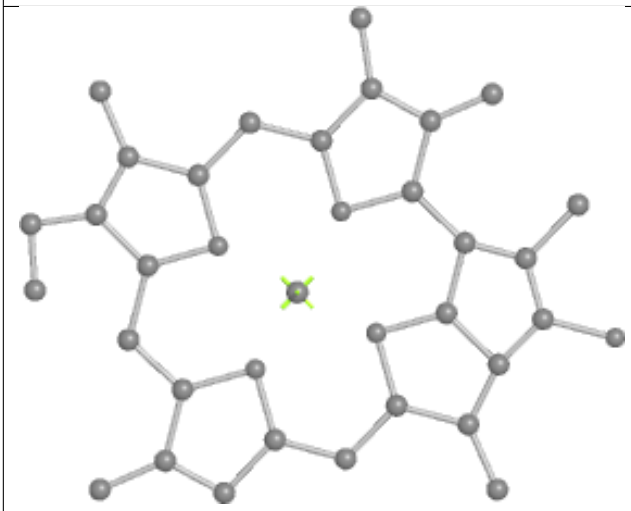
Ligand CLA 9 313



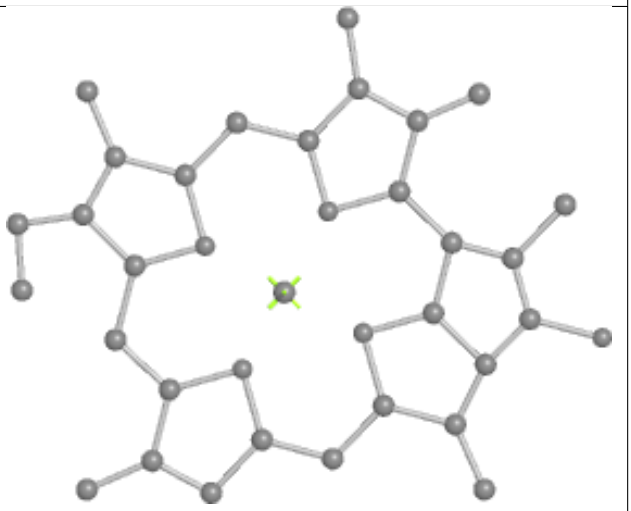
Bond lengths



Bond angles

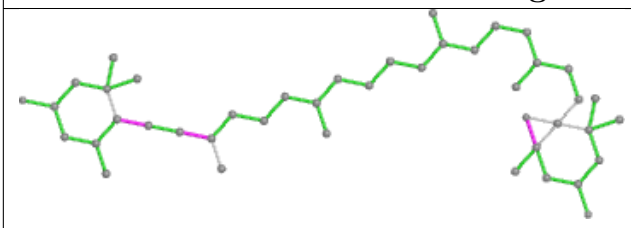


Torsions

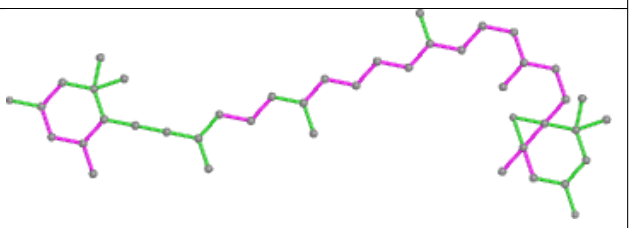


Rings

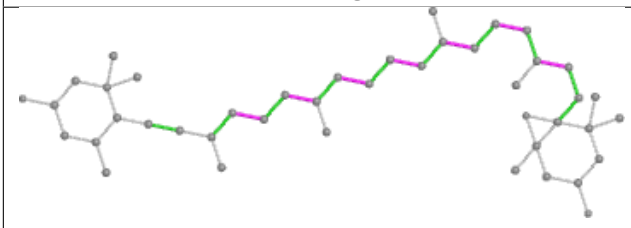
Ligand DD6 2 304



Bond lengths



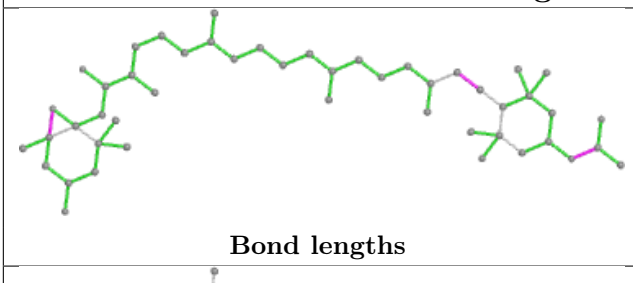
Bond angles



Torsions

Rings

Ligand A86 6 306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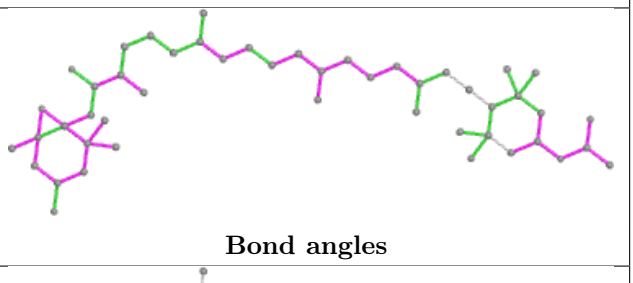
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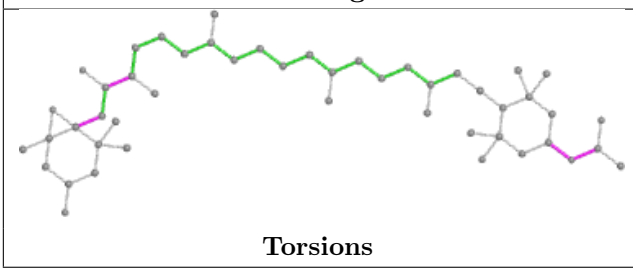
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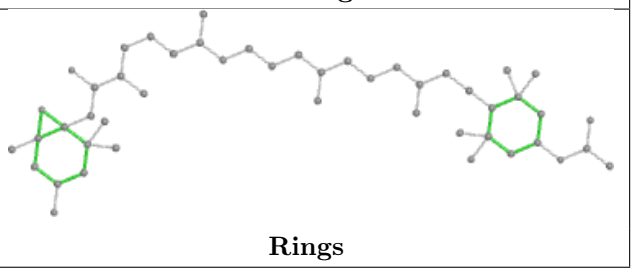
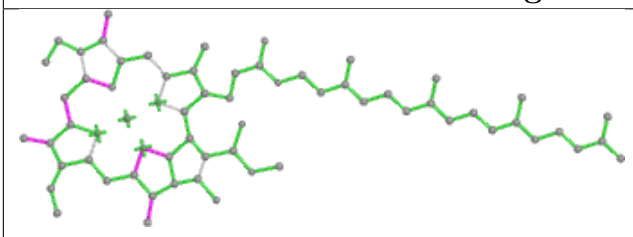
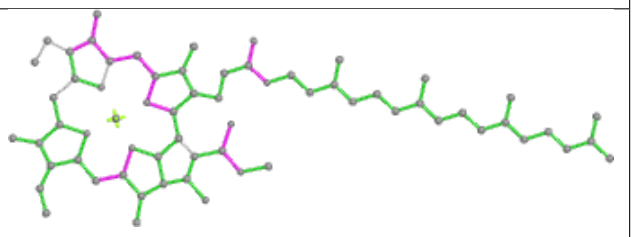
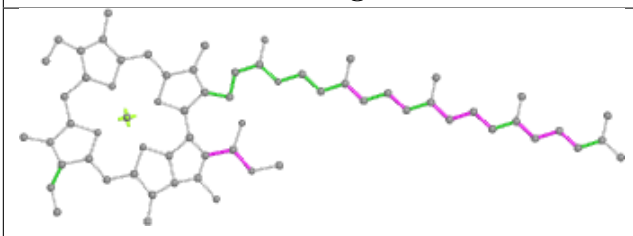
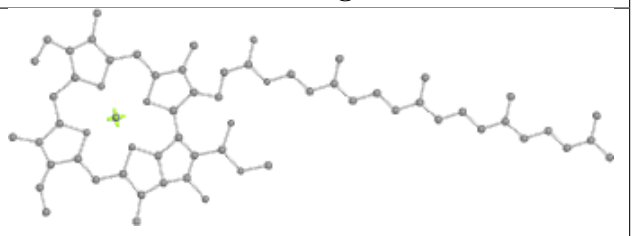

Rings

Ligand CLA B 605

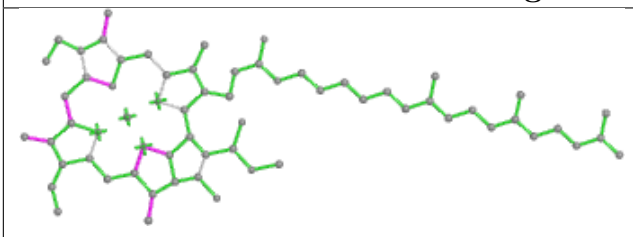

Bond lengths

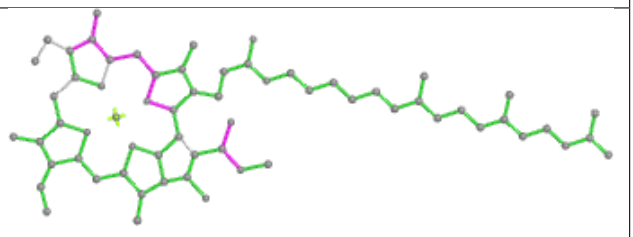

Bond angles

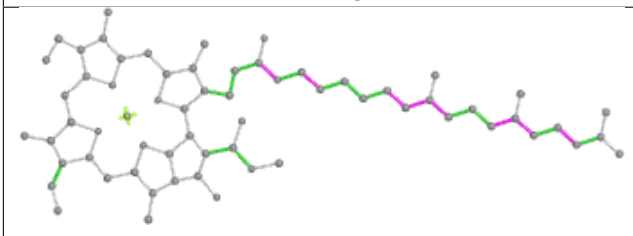

Torsions


Rings

Ligand CLA C 512


Bond lengths


Bond angles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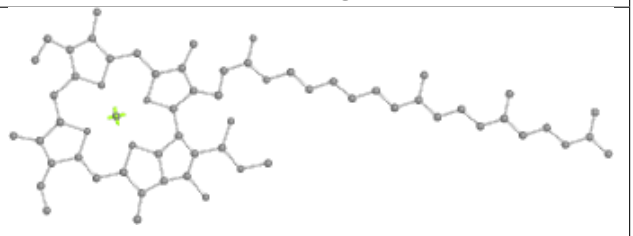
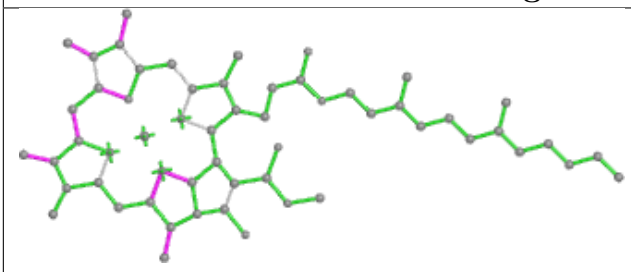
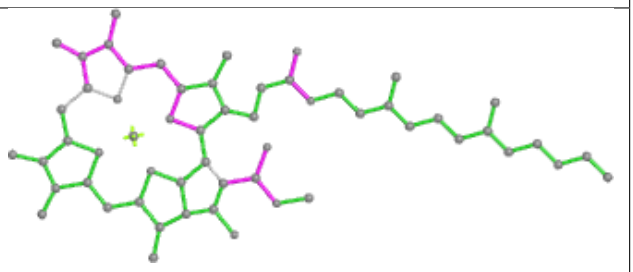
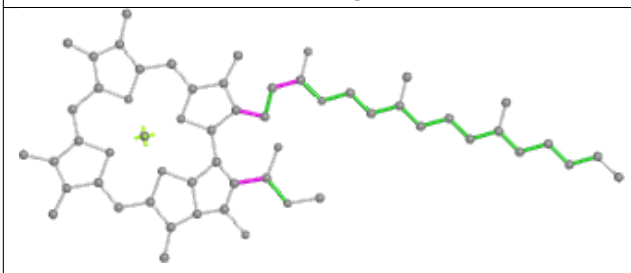
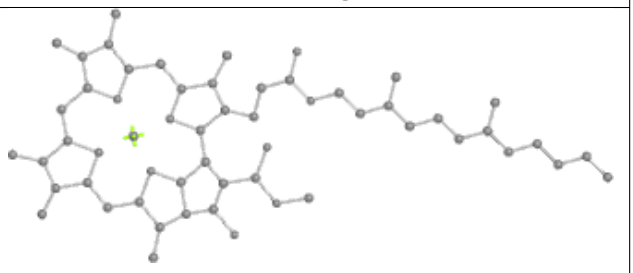
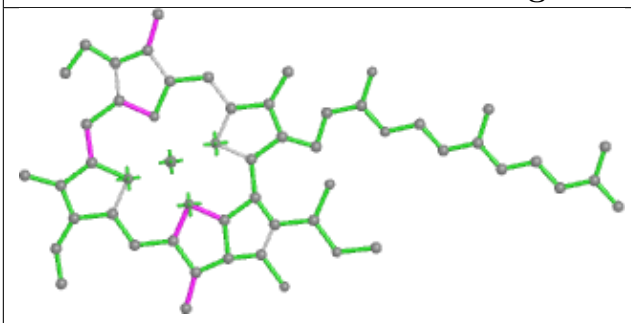
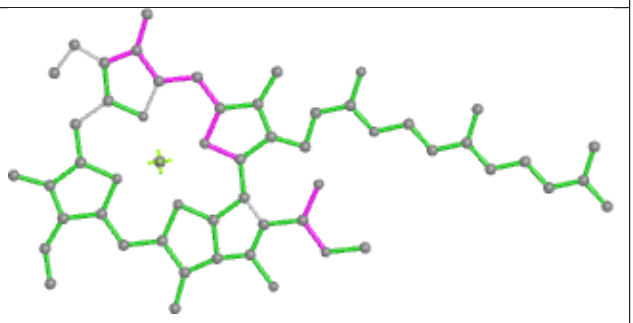
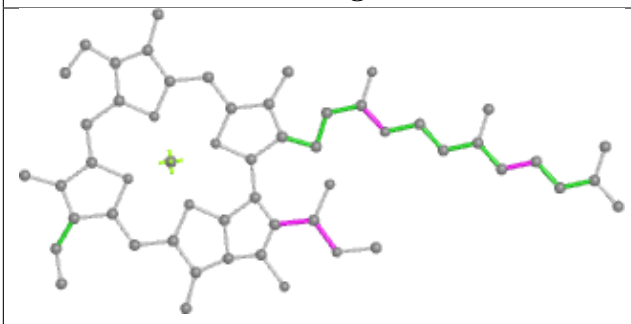
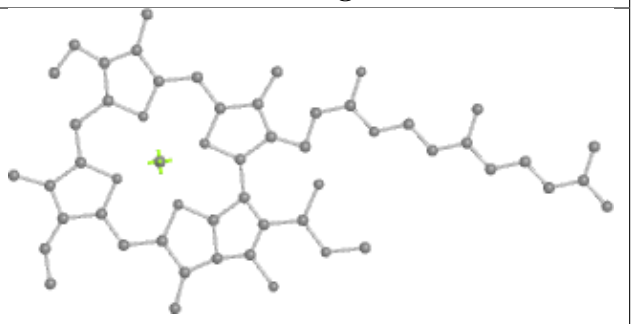
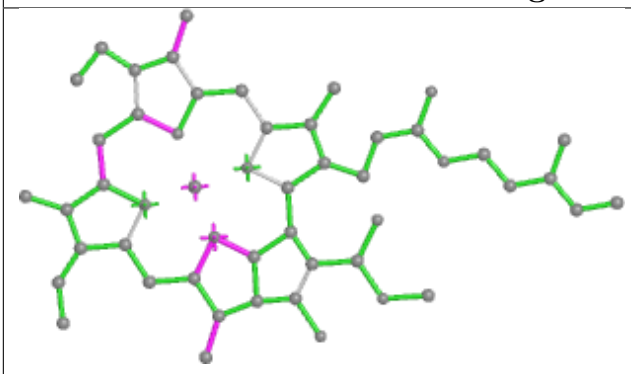

Rings

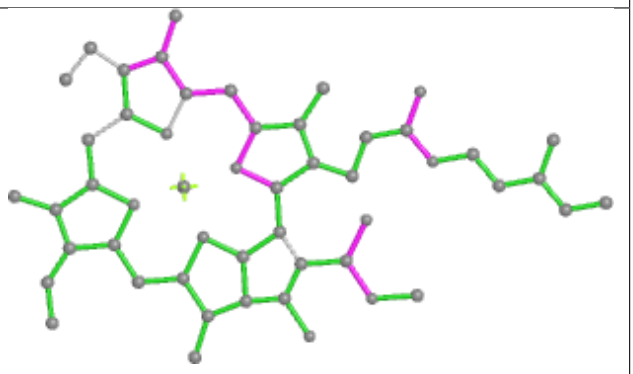
Ligand CLA D 405	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA 3 319	
 Bond lengths	 Bond angles
 Torsions	 Rings

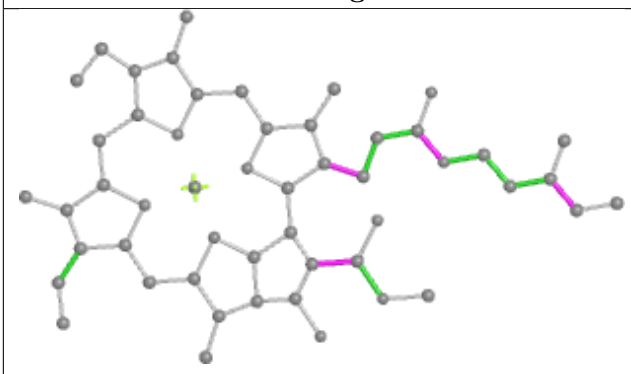
Ligand CLA 4 312



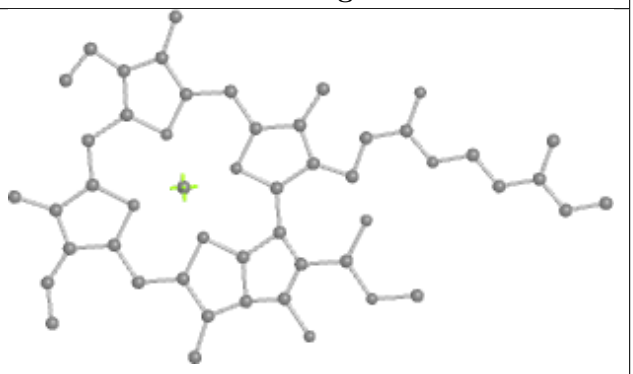
Bond lengths



Bond angles

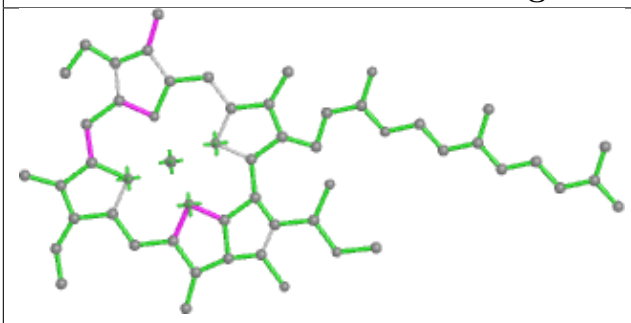


Torsions

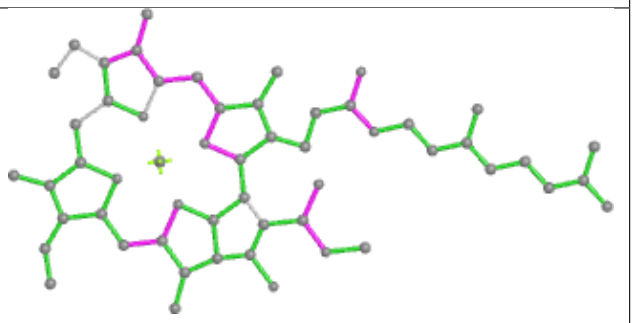


Rings

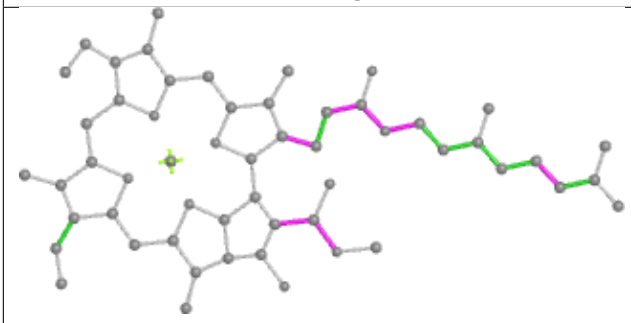
Ligand CLA 2 308



Bond lengths



Bond angles



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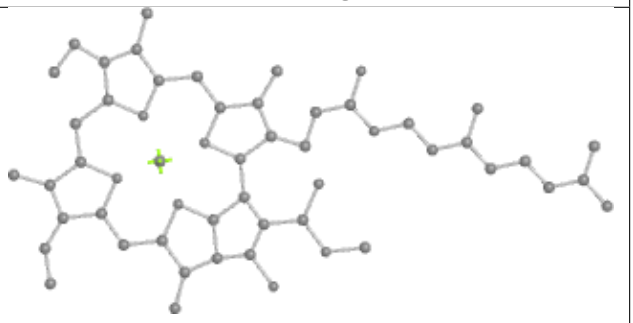
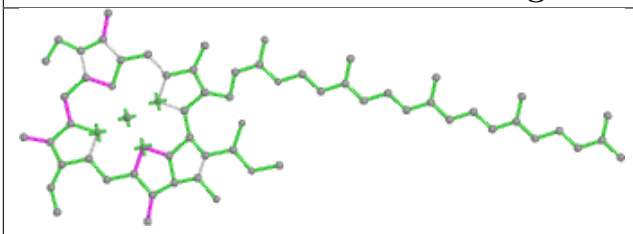
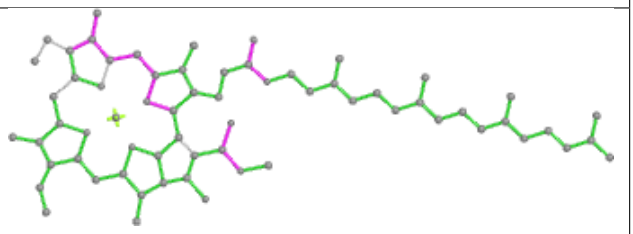


Rings

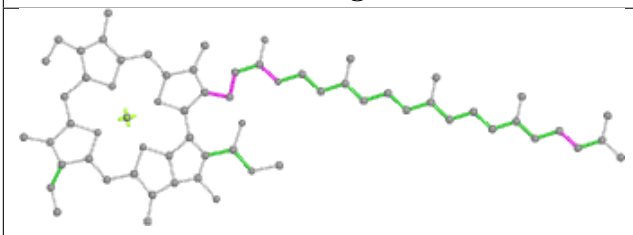
Ligand CLA b 609



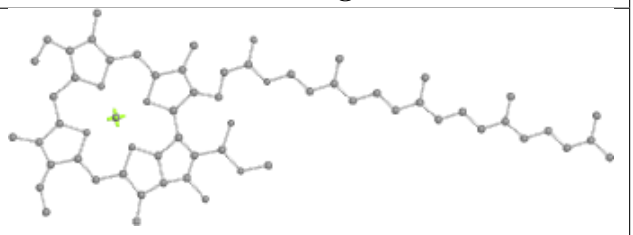
Bond lengths



Bond angles

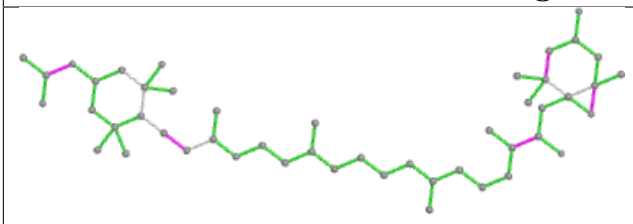


Torsions

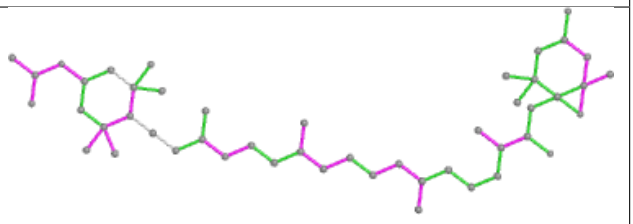


Rings

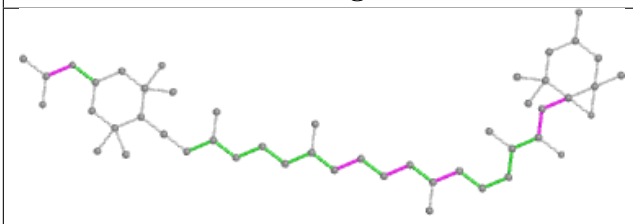
Ligand A86 7 301



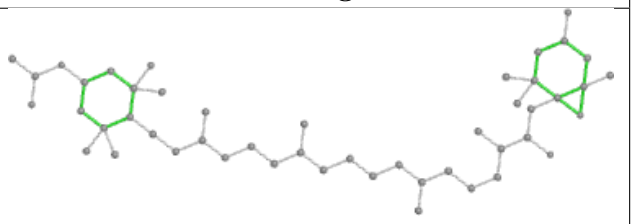
Bond lengths



Bond angles

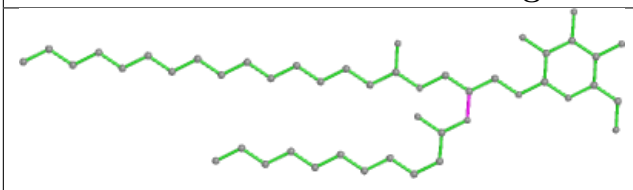


Torsions

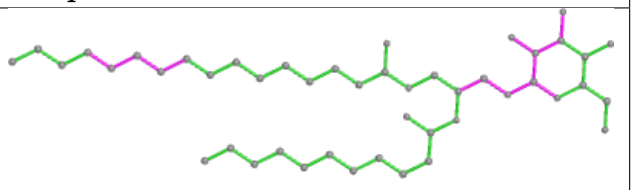


Rings

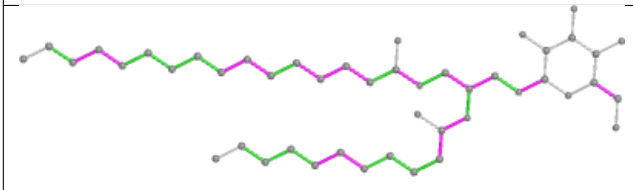
Ligand LMG q 301



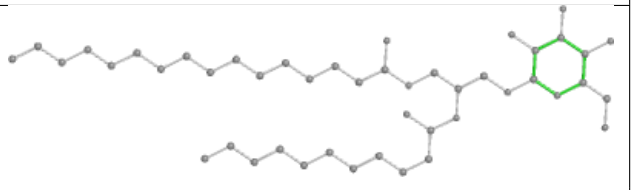
Bond lengths



Bond angles

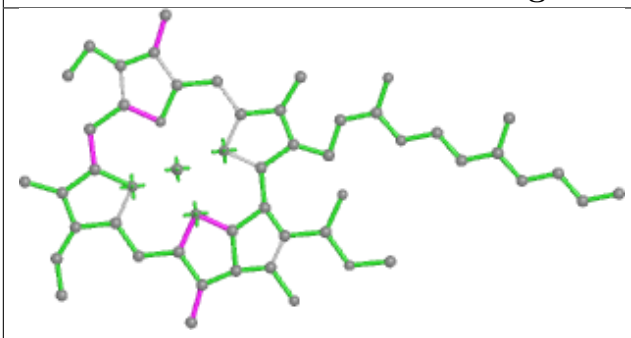


Torsions

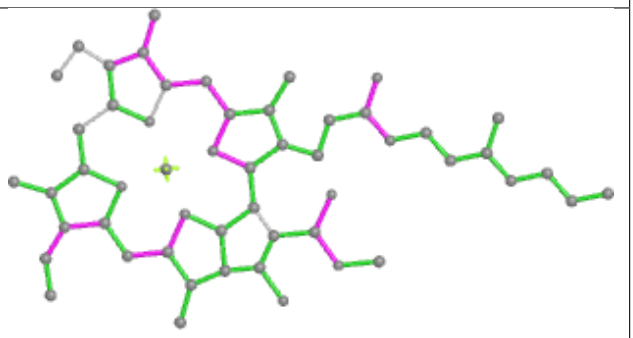


Rings

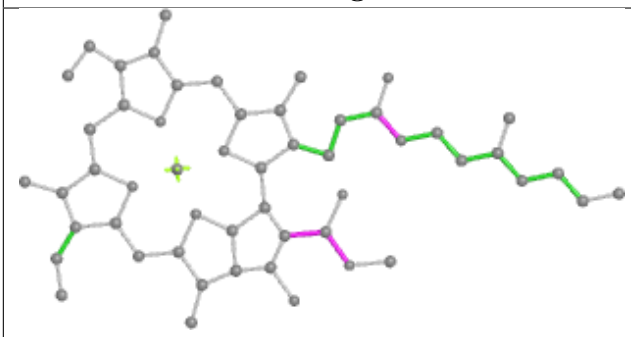
Ligand CLA 6 307



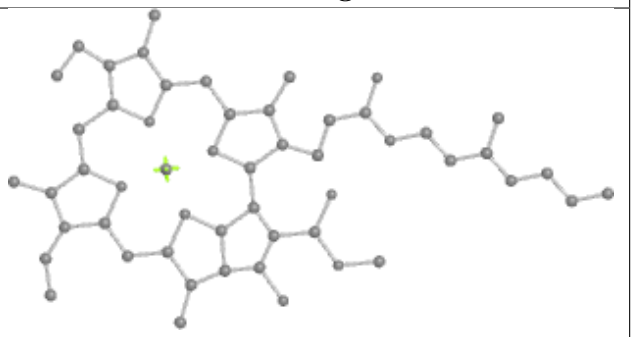
Bond lengths



Bond angles

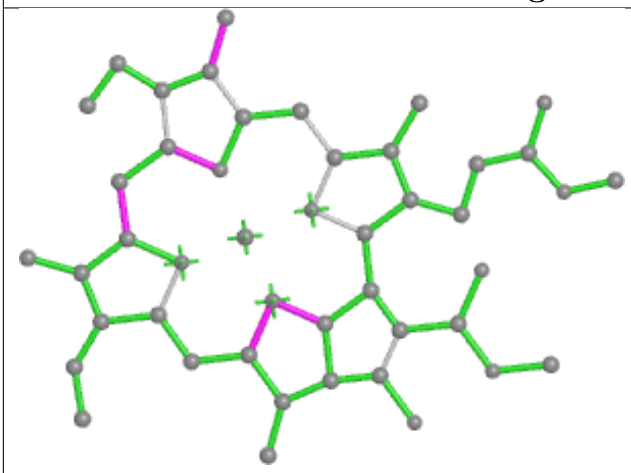


Torsions

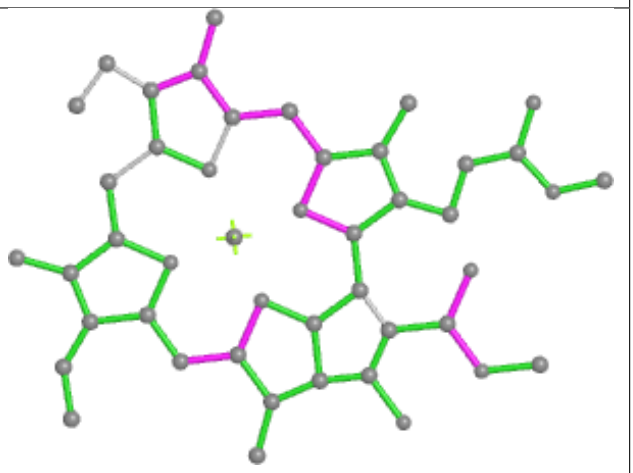


Rings

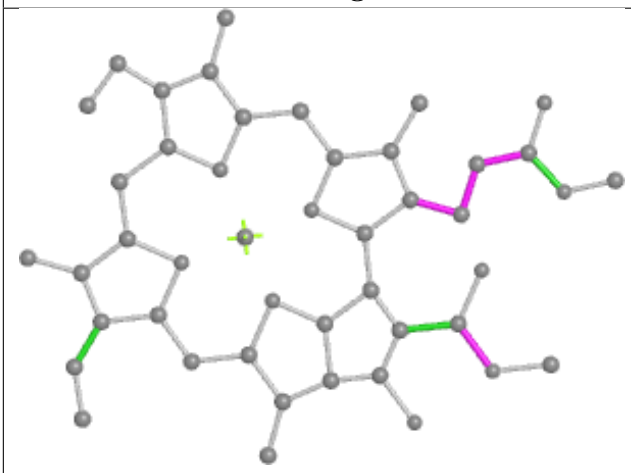
Ligand CLA 5 312



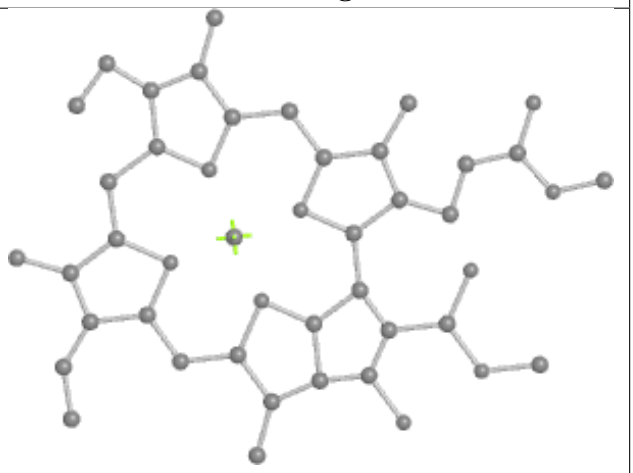
Bond lengths



Bond angles

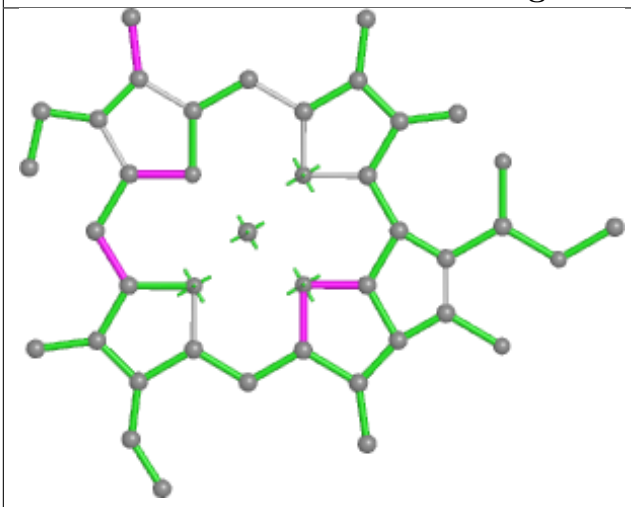


Torsions

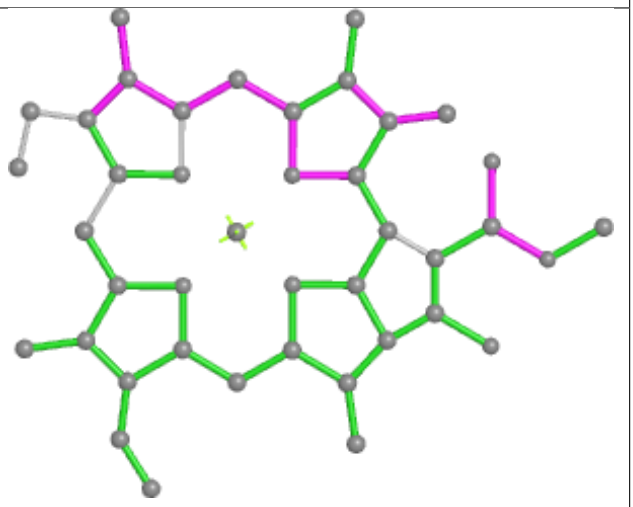


Rings

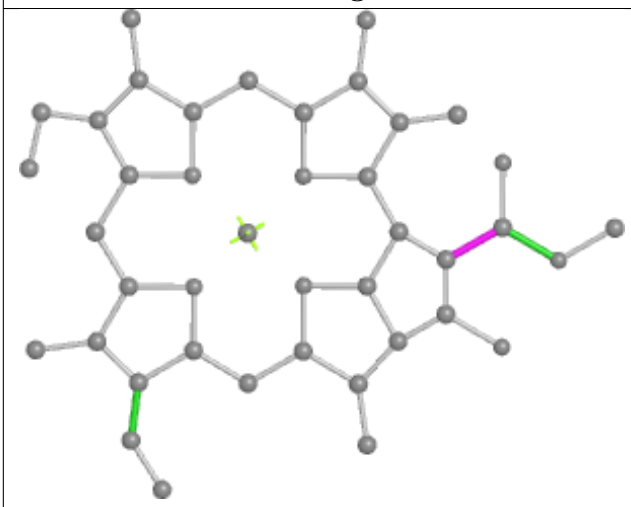
Ligand CLA 8 305



Bond lengths



Bond angles



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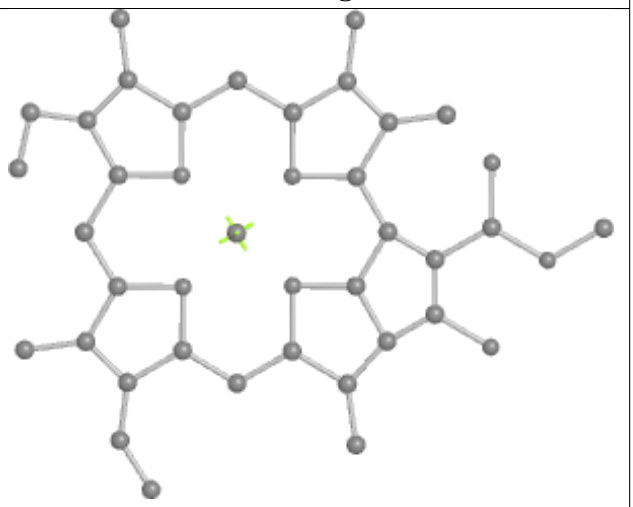
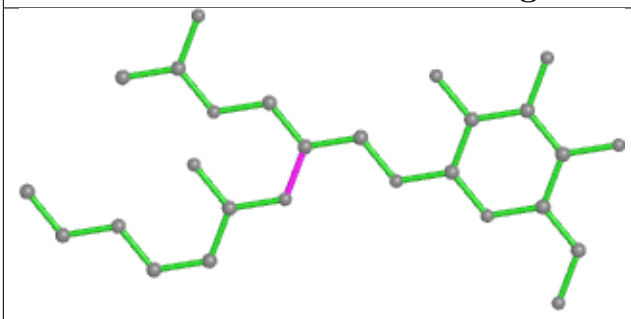
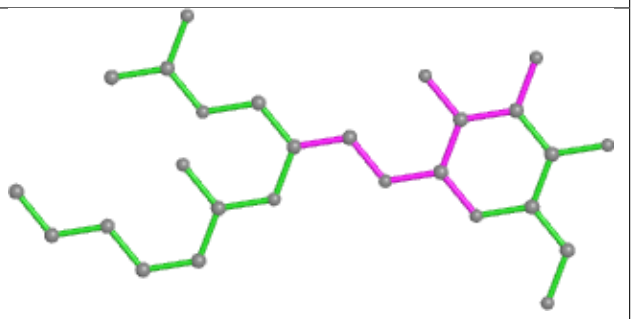


Rings

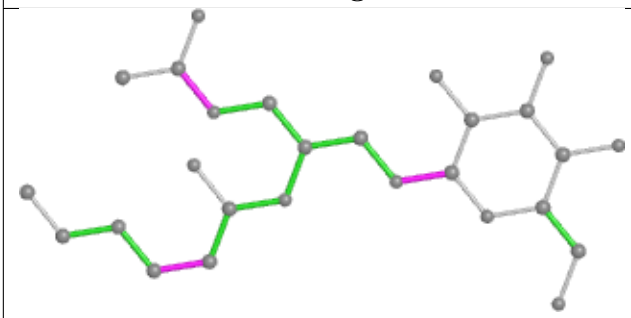
Ligand LMG C 521



Bond lengths



Bond angles



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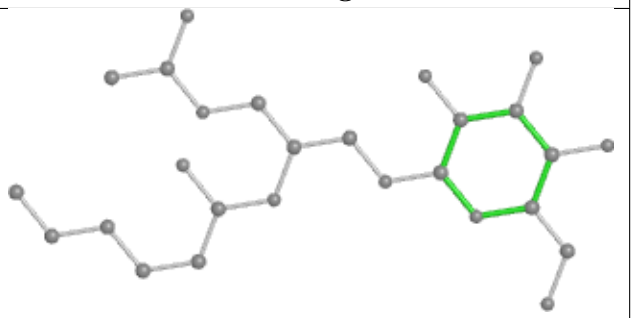
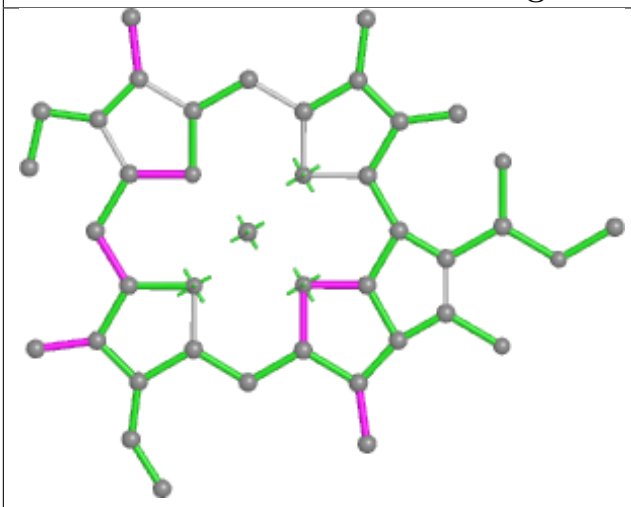
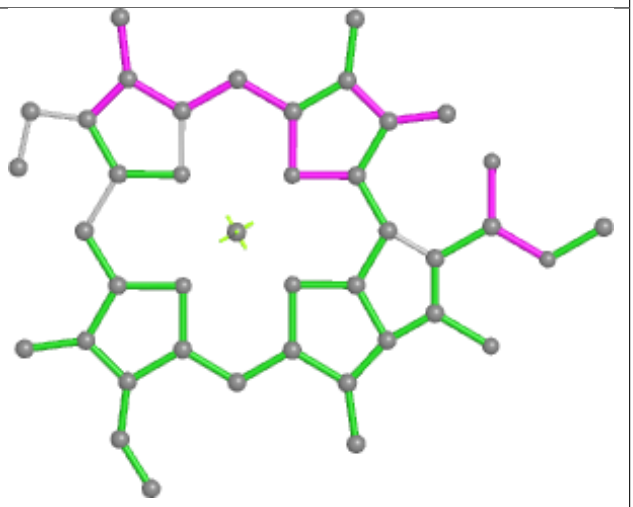


Rings

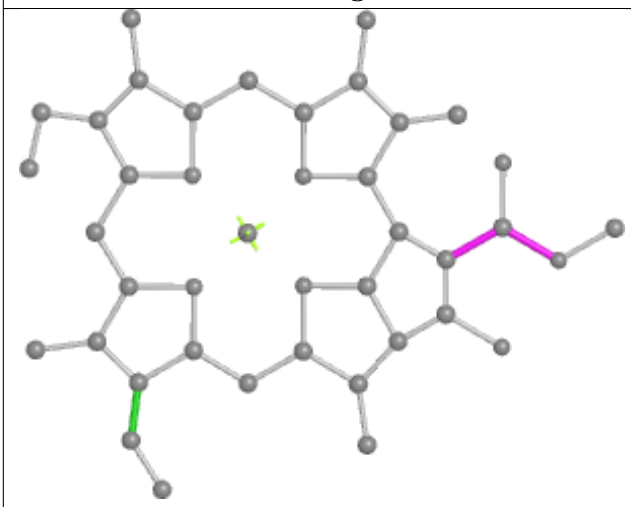
Ligand CLA b 608



Bond lengths



Bond angles



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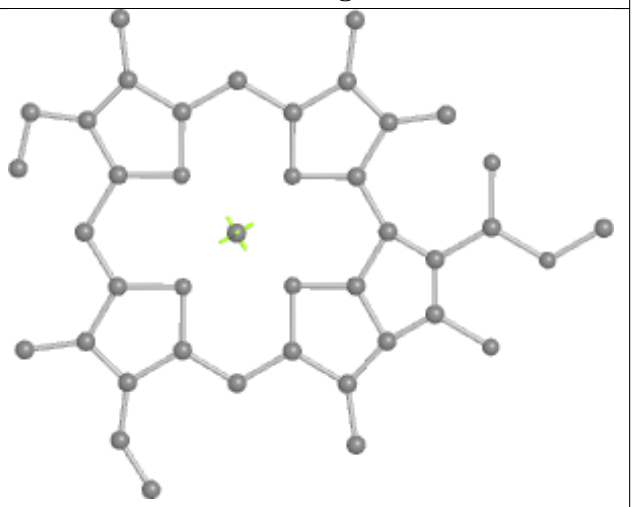
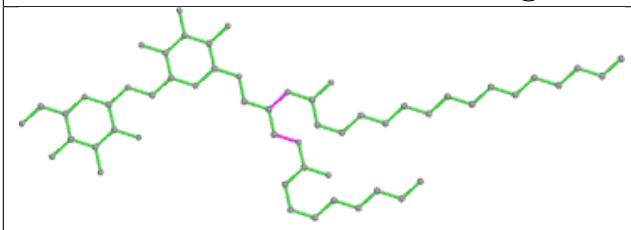
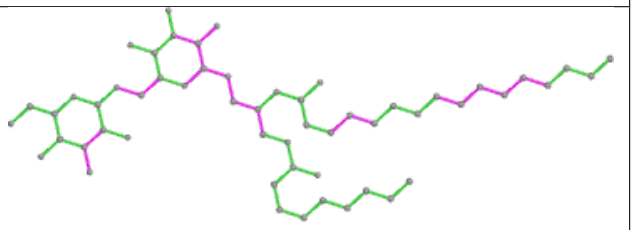


Rings

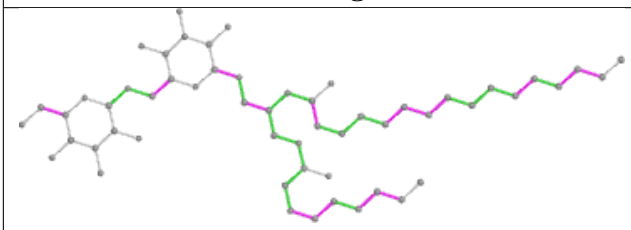
Ligand DGD C 516



Bond lengths



Bond angles



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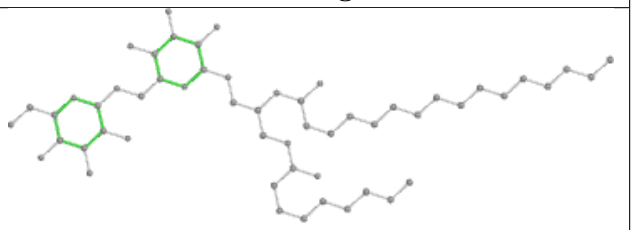
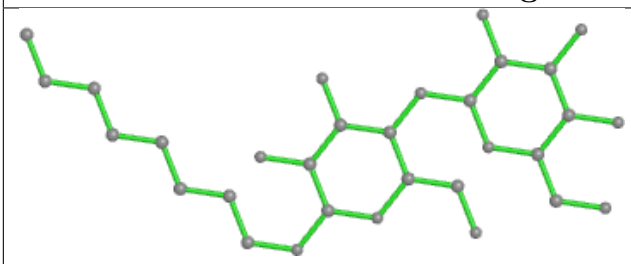
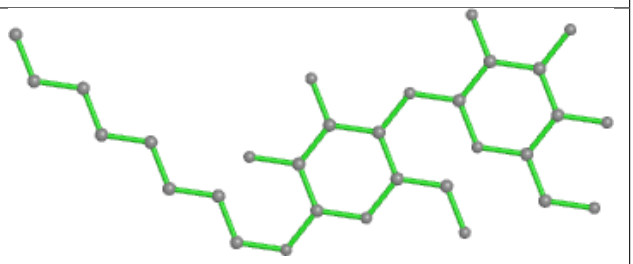


Rings

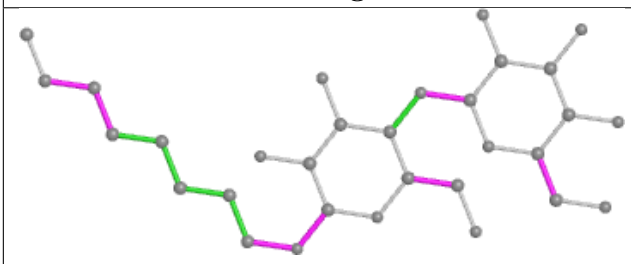
Ligand LMU T 102



Bond lengths



Bond angles



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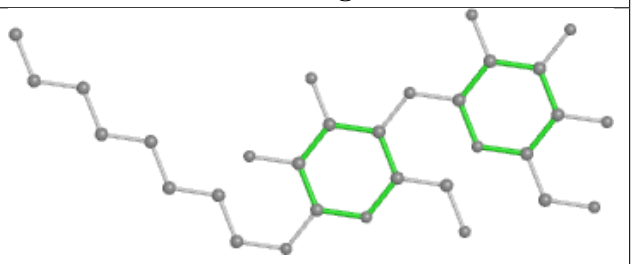
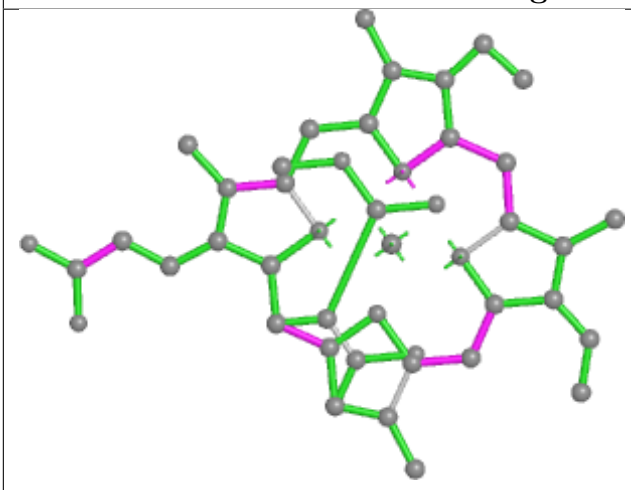


Rings

Ligand KC2 7 306



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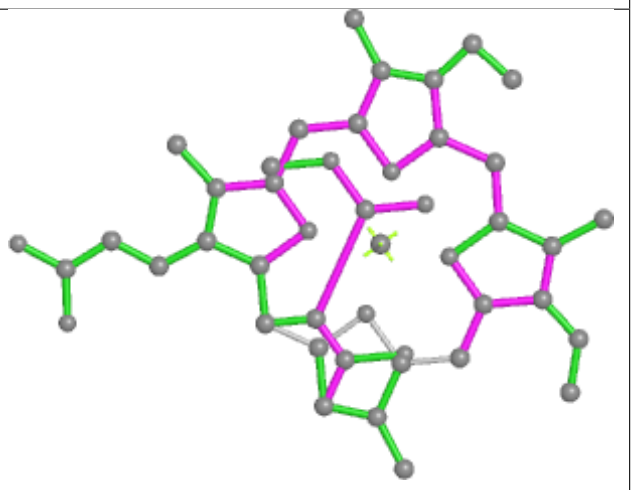
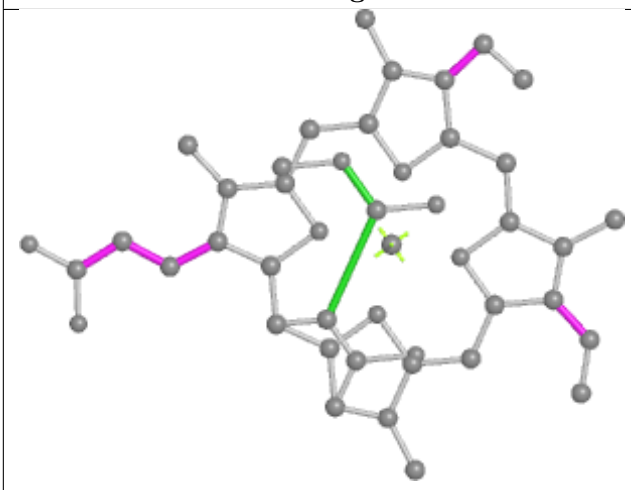


Bond angles



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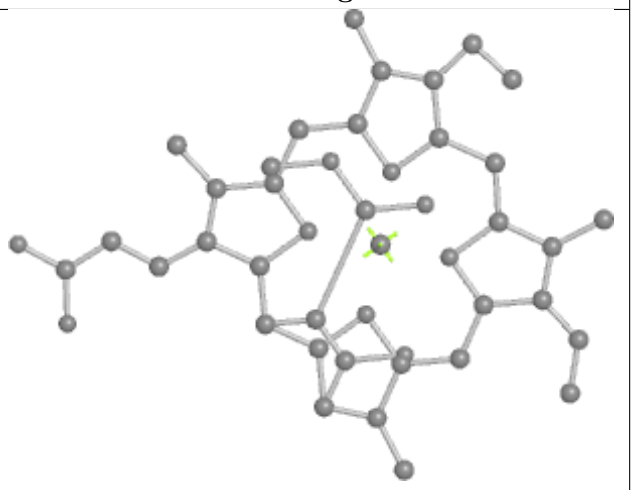
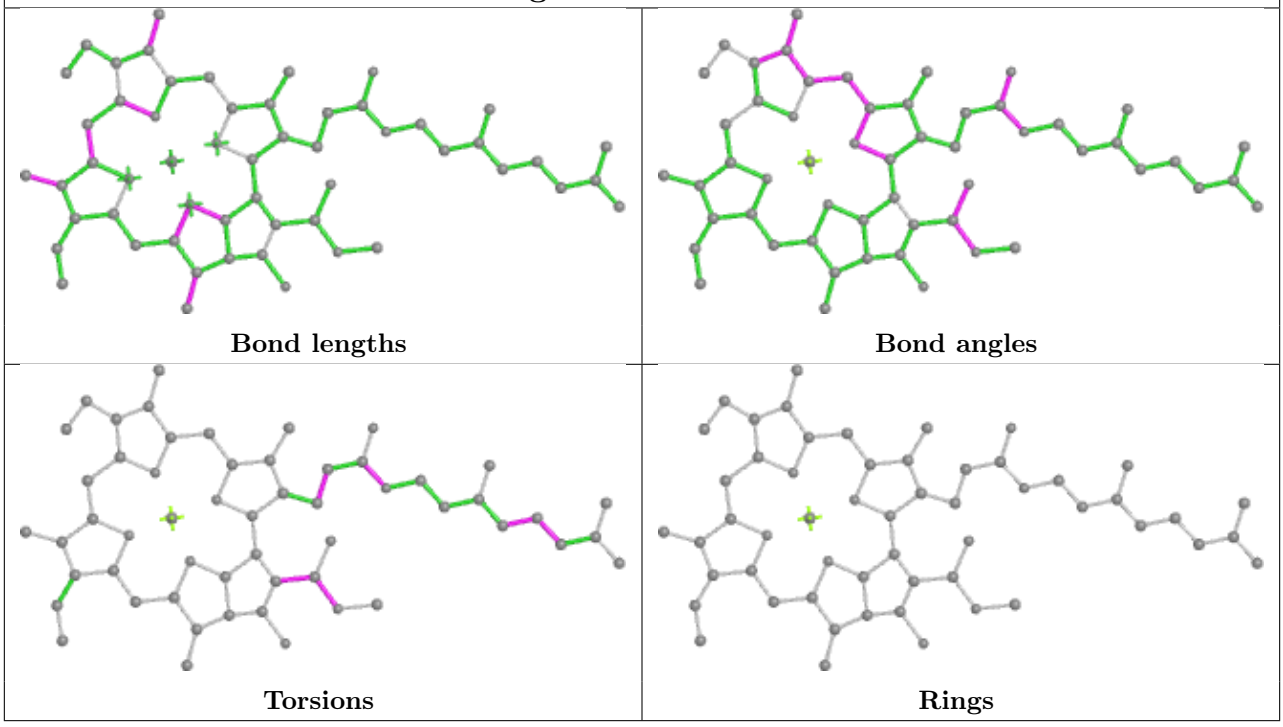
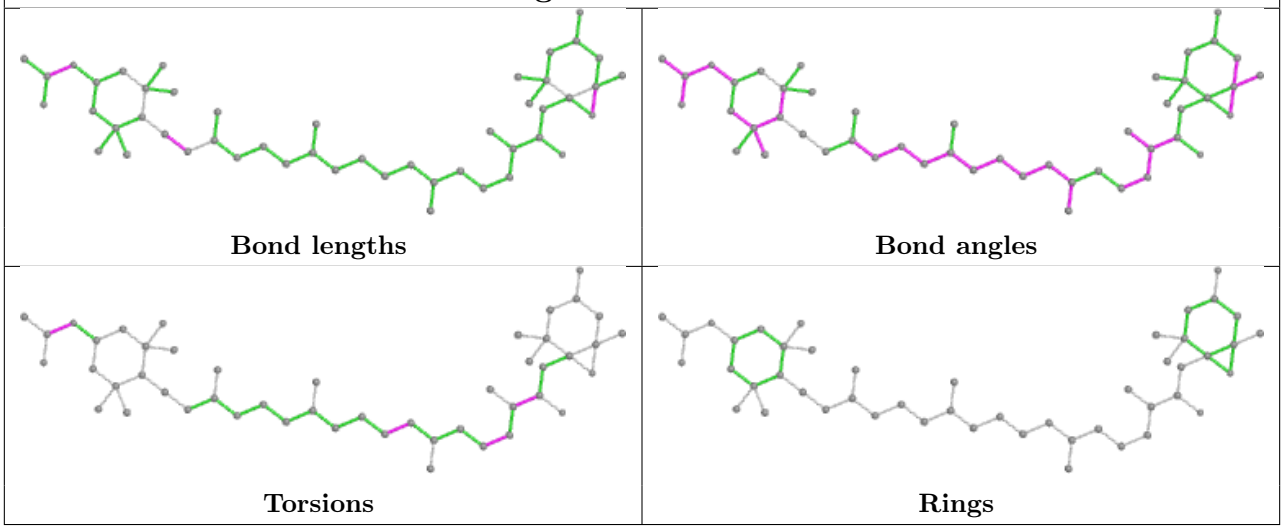


Rings

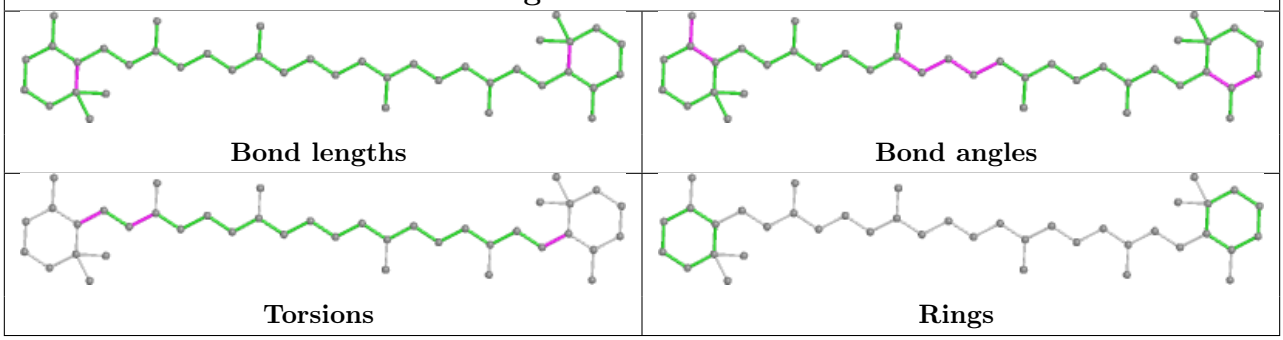
Ligand CLA 9 317



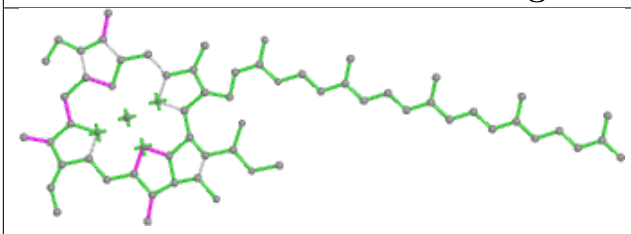
Ligand A86 8 301



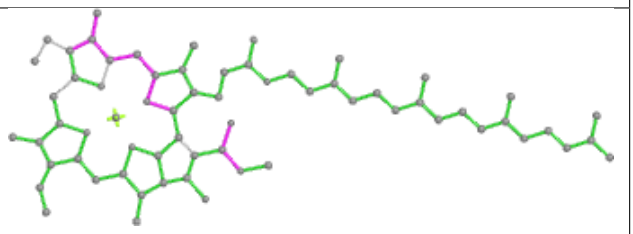
Ligand BCR B 618



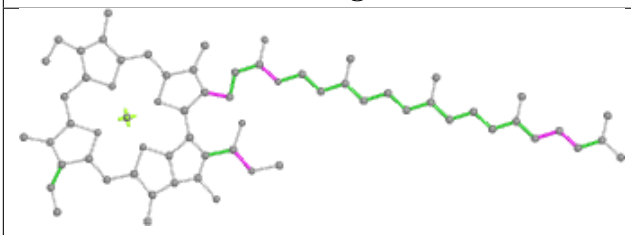
Ligand CLA a 407



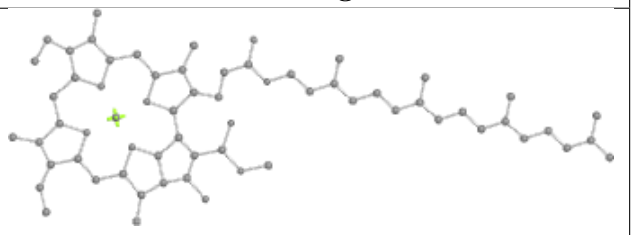
Bond lengths



Bond angles

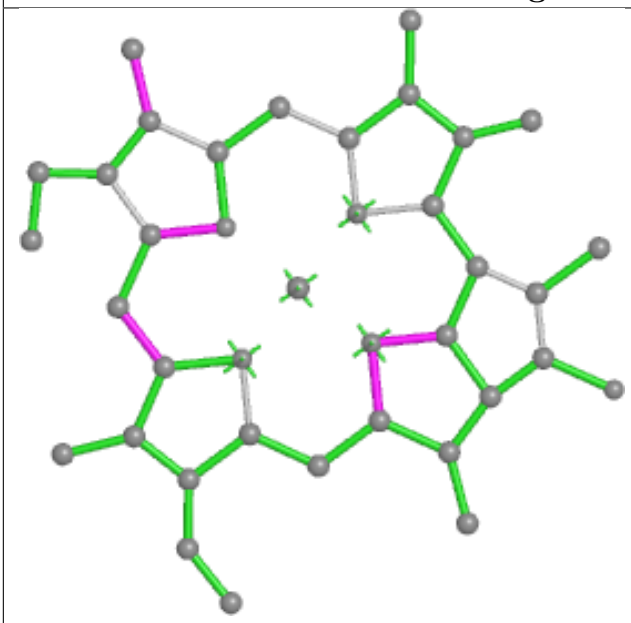


Torsions

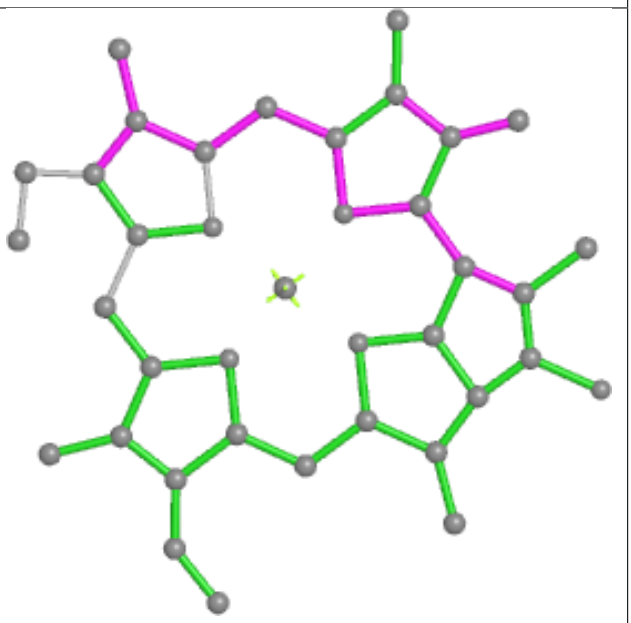


Rings

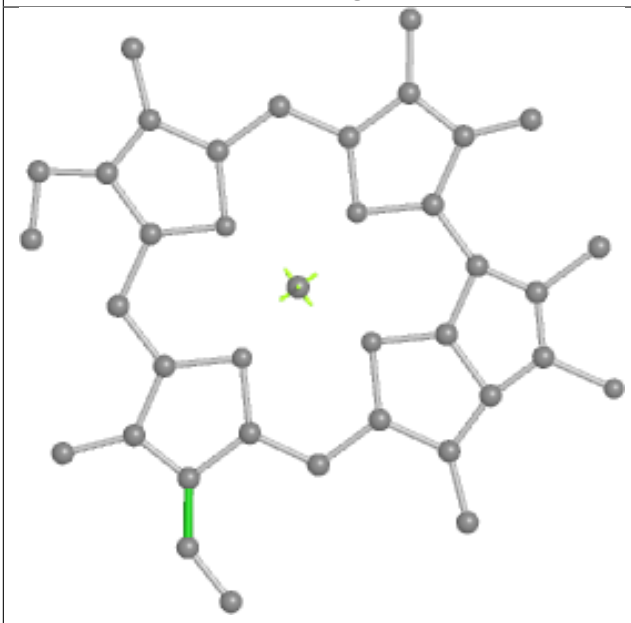
Ligand CLA 2 314



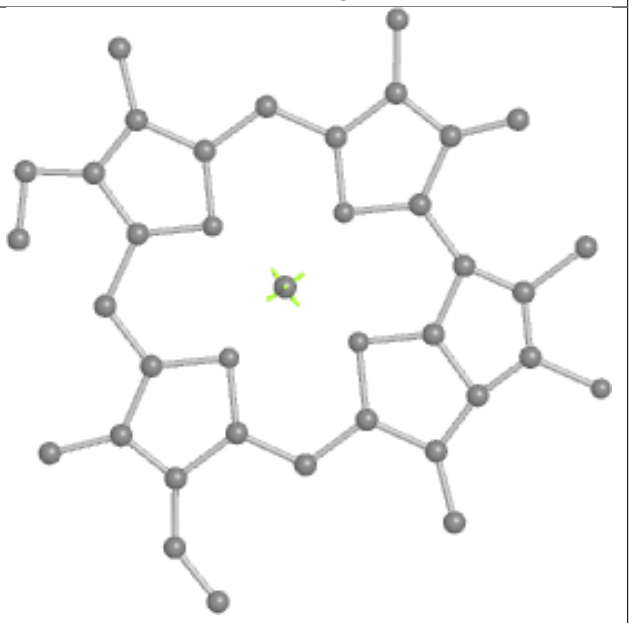
Bond lengths



Bond angles

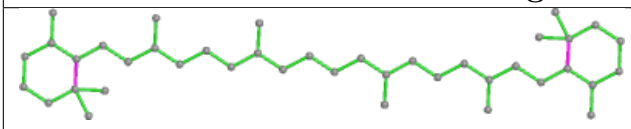


Torsions

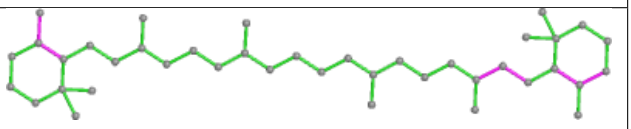


Rings

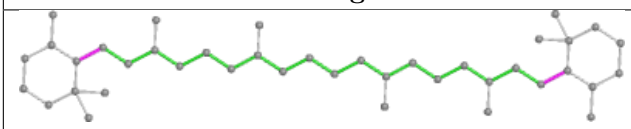
Ligand BCR a 412



Bond lengths



Bond angles



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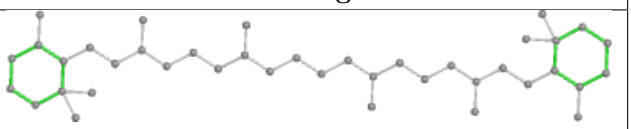
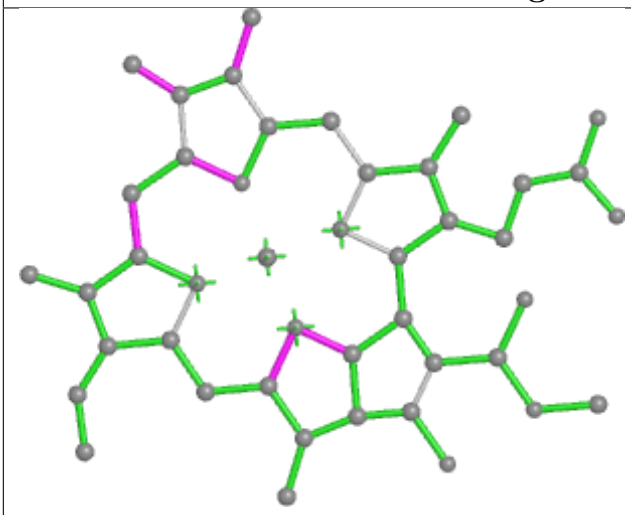
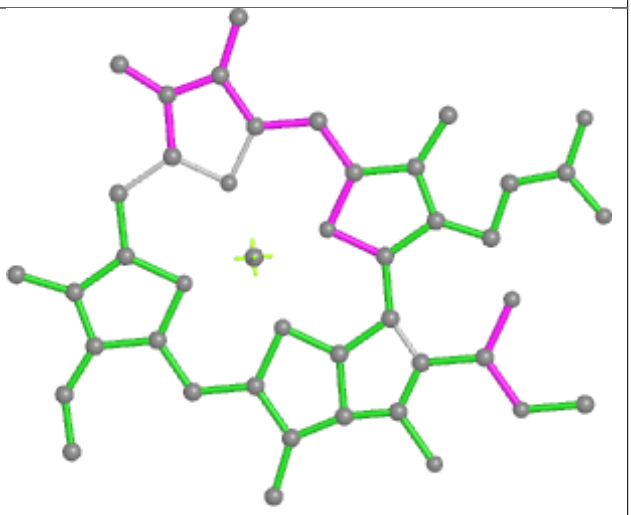


Rings

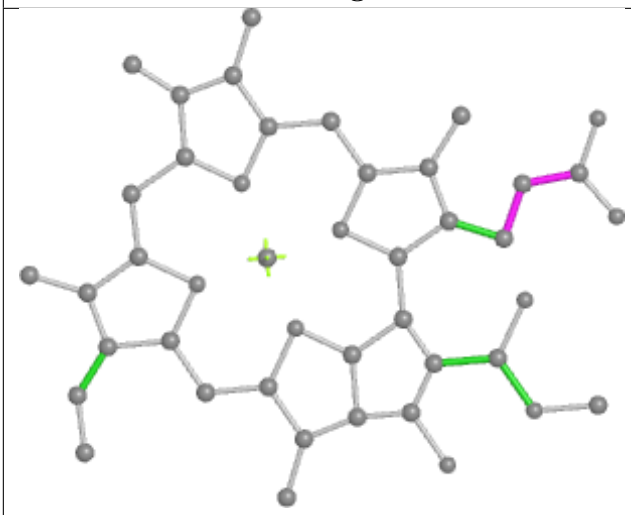
Ligand CLA 1 307



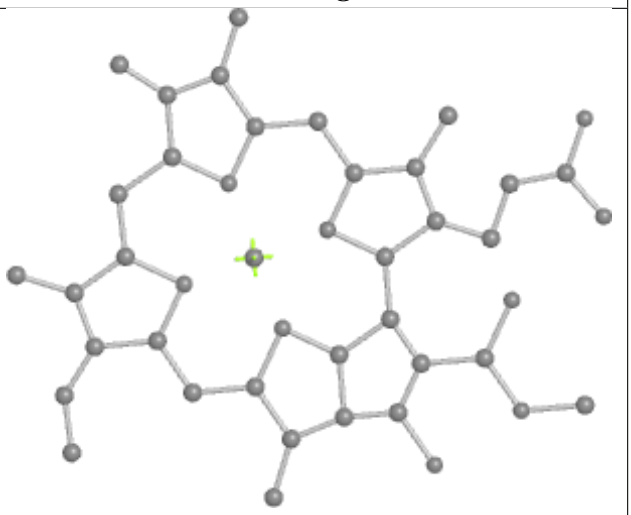
Bond lengths



Bond angles

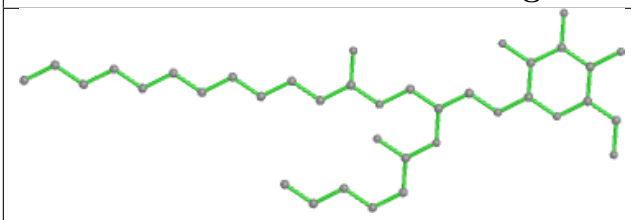


Torsions

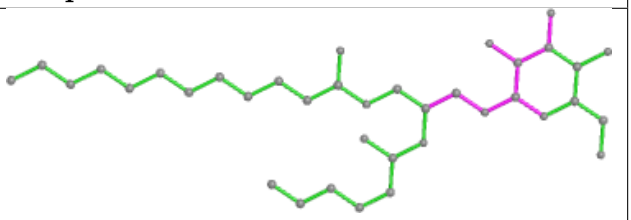


Rings

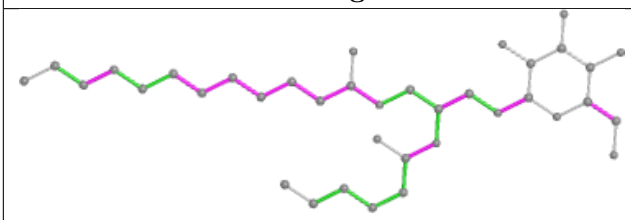
Ligand LMG q 302



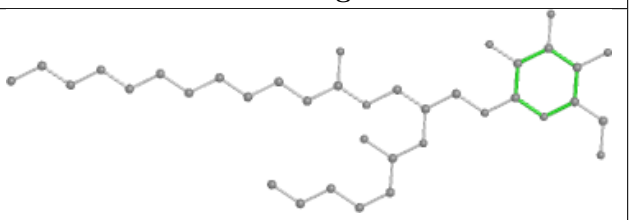
Bond lengths



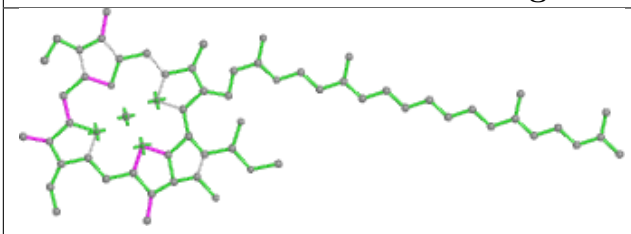
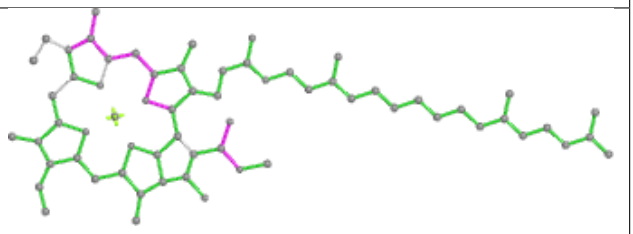
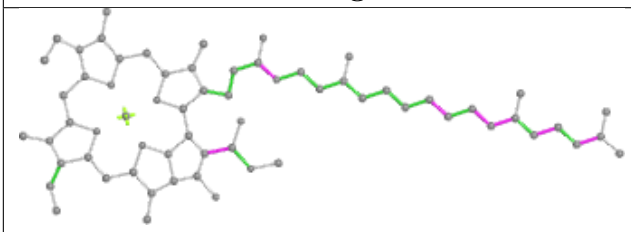
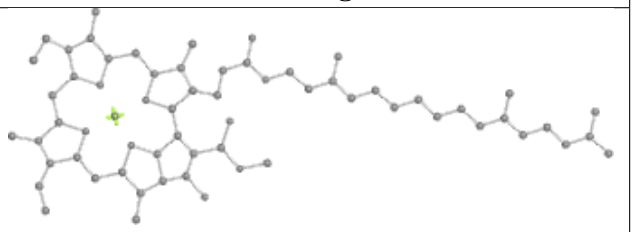
Bond angles



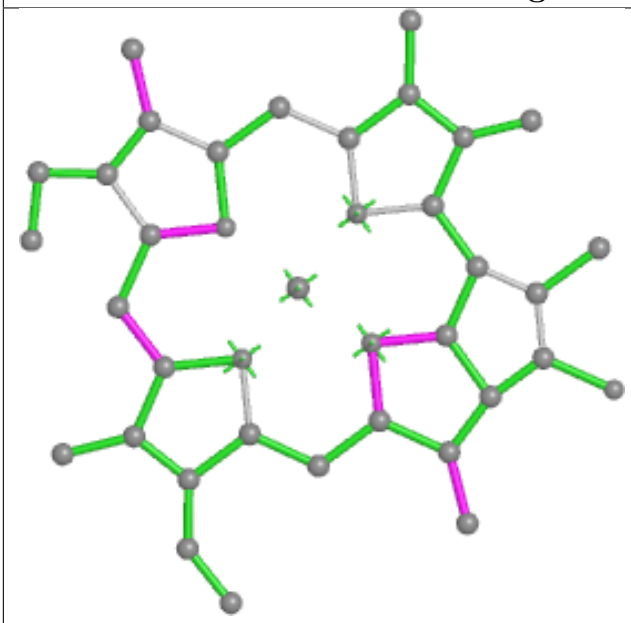
Torsions



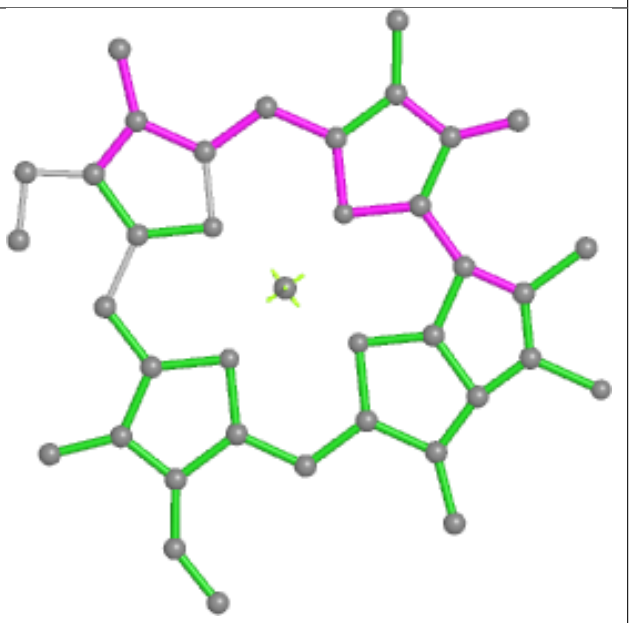
Rings

Ligand CLA c 504	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

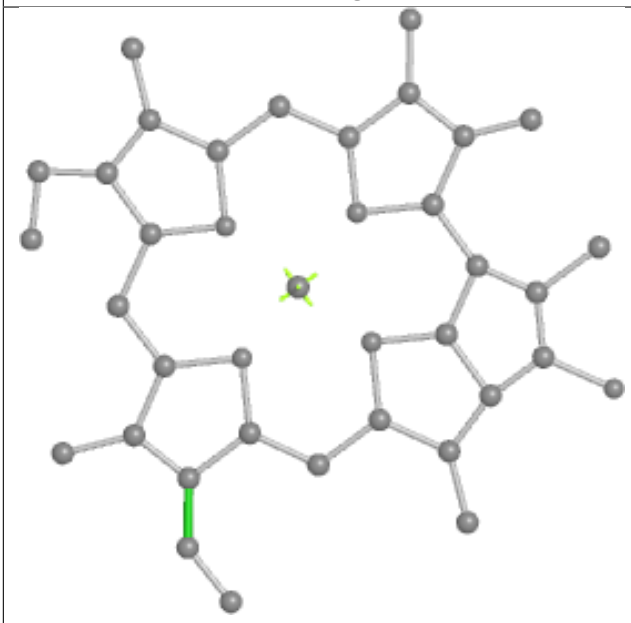
Ligand CLA 2 316



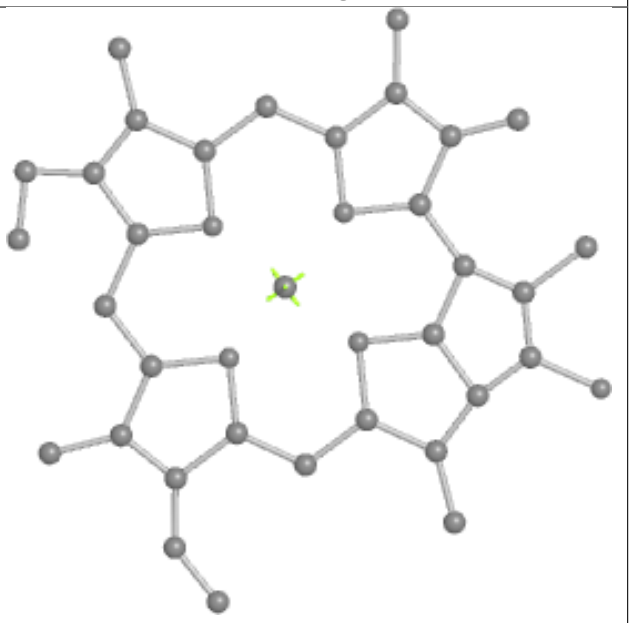
Bond lengths



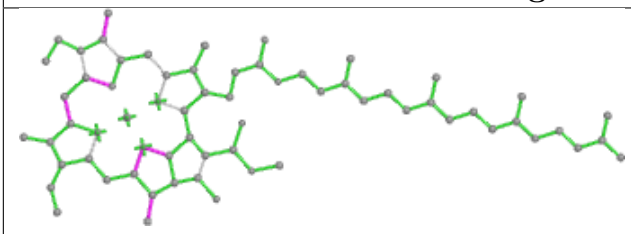
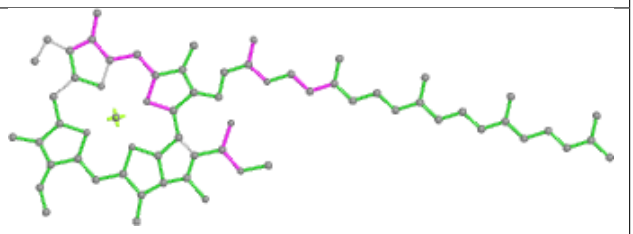
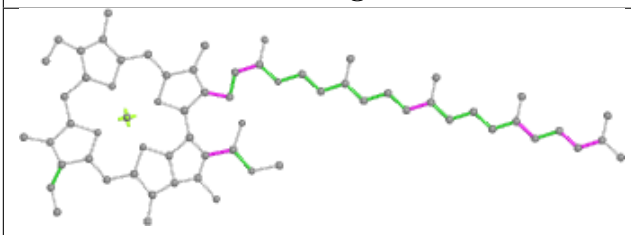
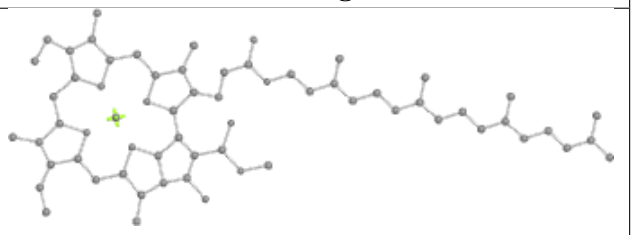
Bond angles

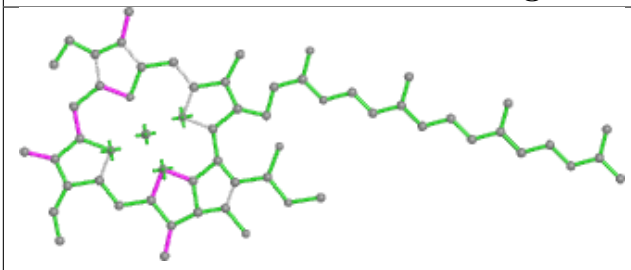
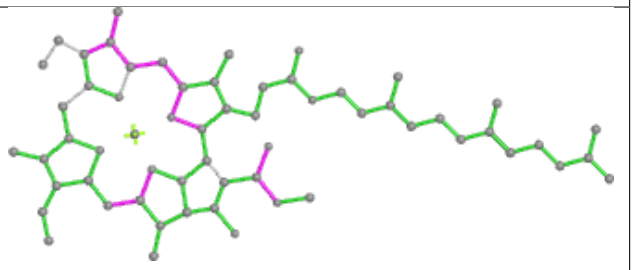
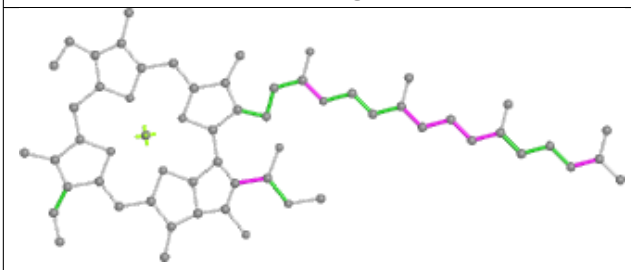
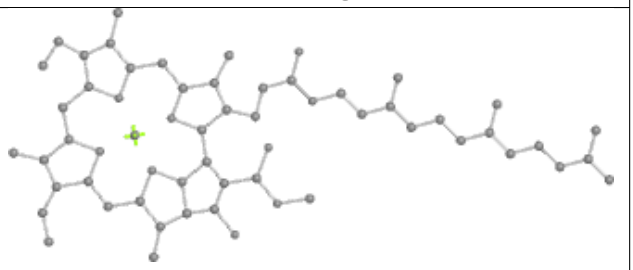


Torsions

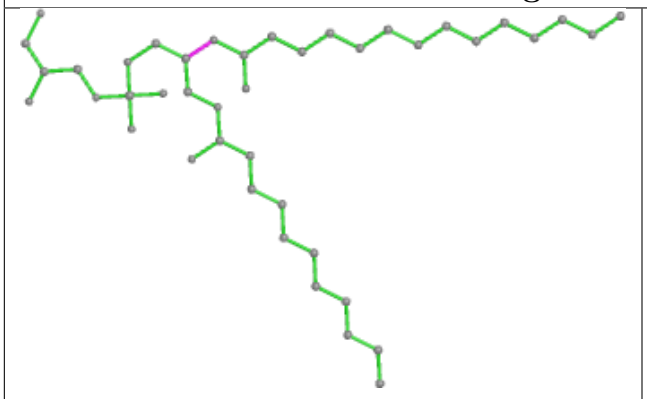


Rings

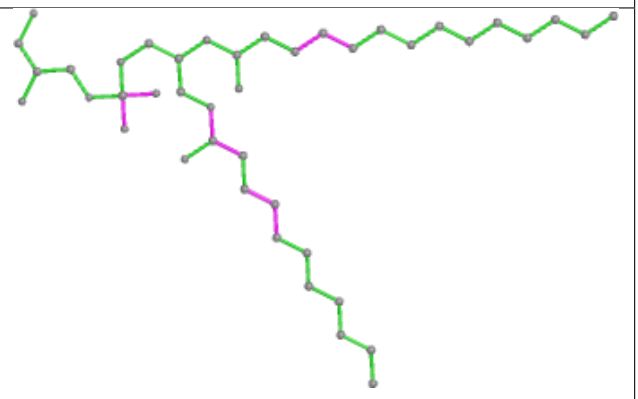
Ligand CLA 4 308	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA D 406	
 Bond lengths	 Bond angles
 Torsions	 Rings

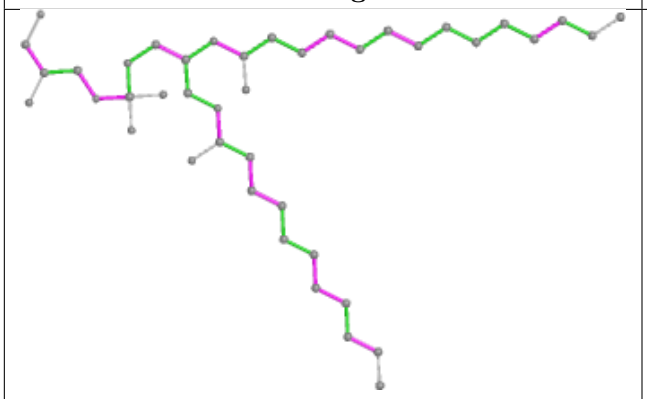
Ligand LHG D 411



Bond lengths



Bond angles



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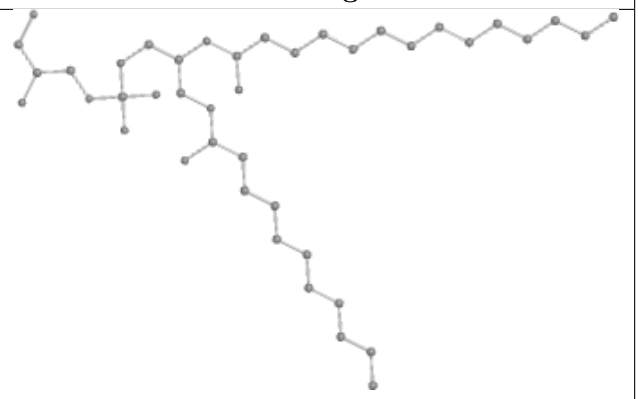
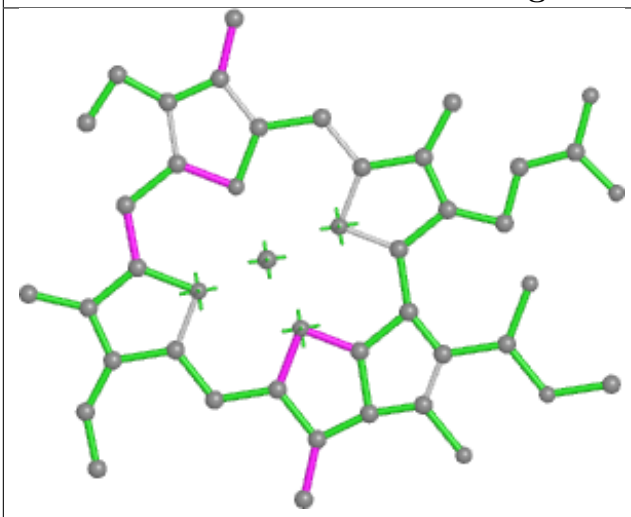
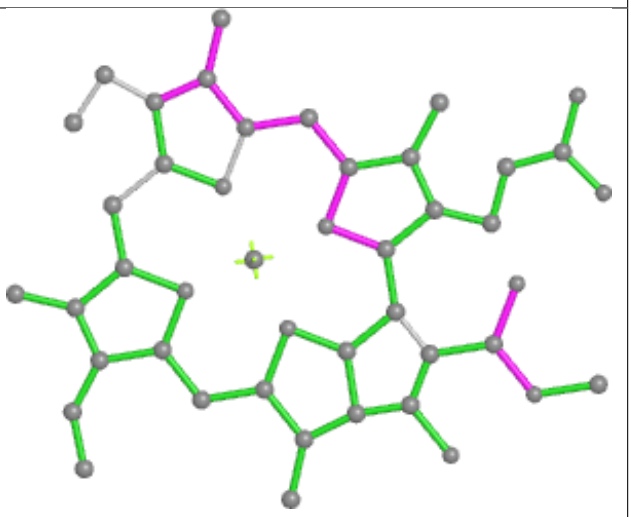


Rings

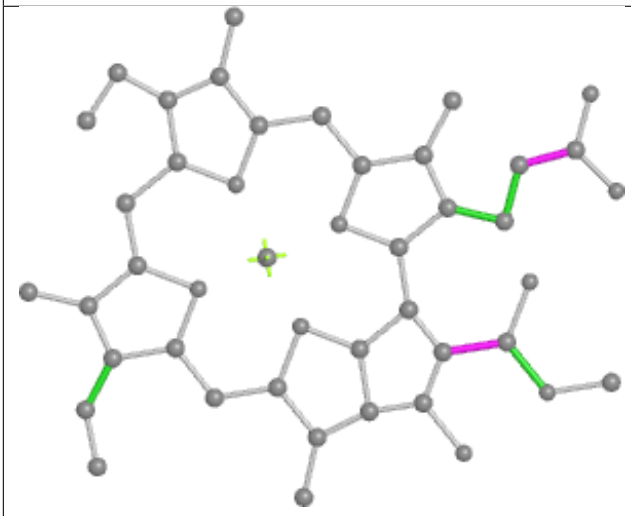
Ligand CLA 8 312



Bond lengths



Bond angles



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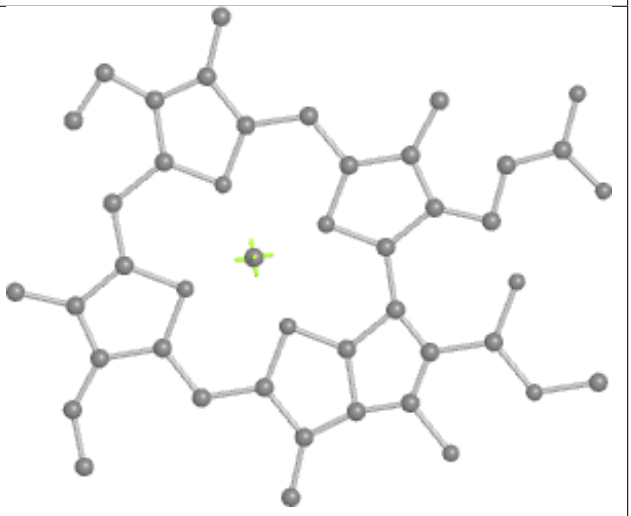
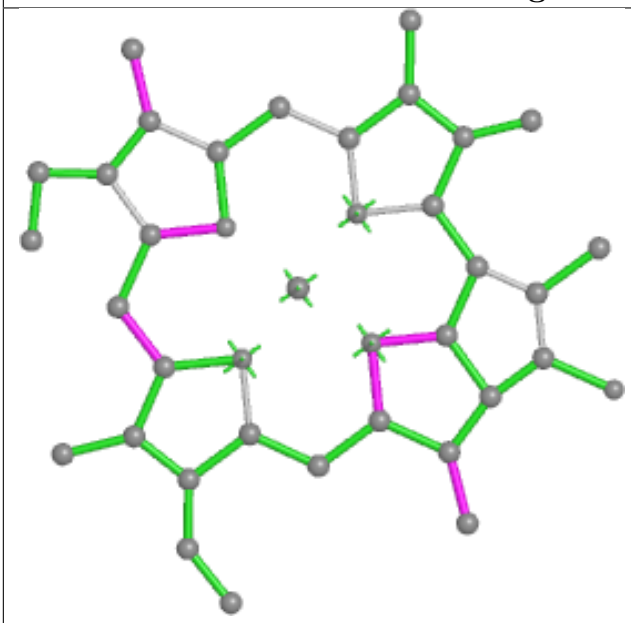


Rings

Ligand CLA 9 314



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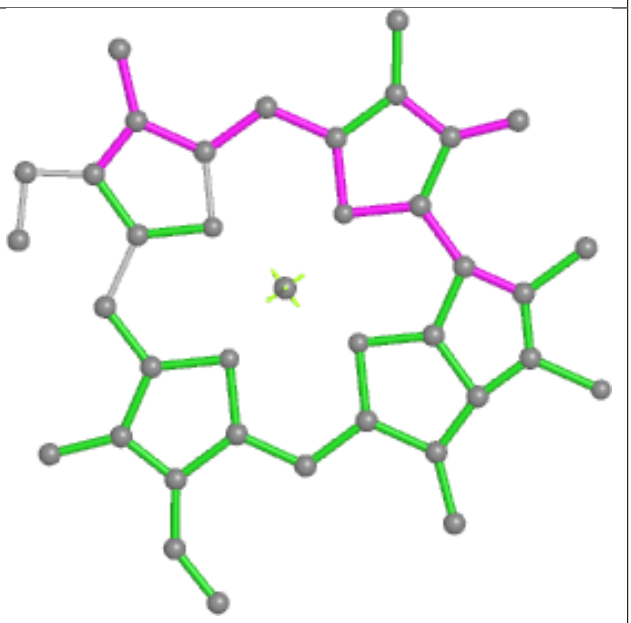

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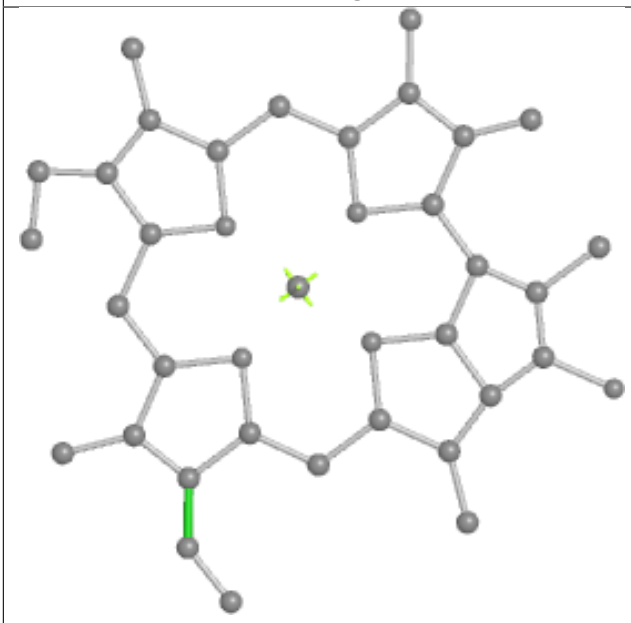

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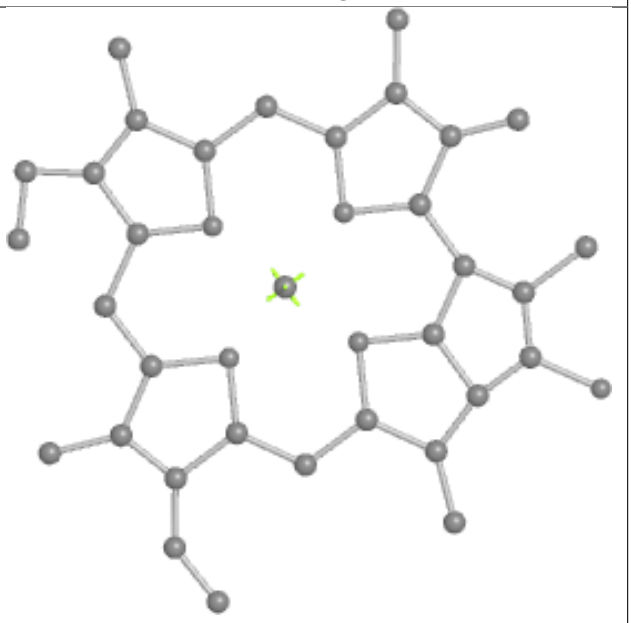
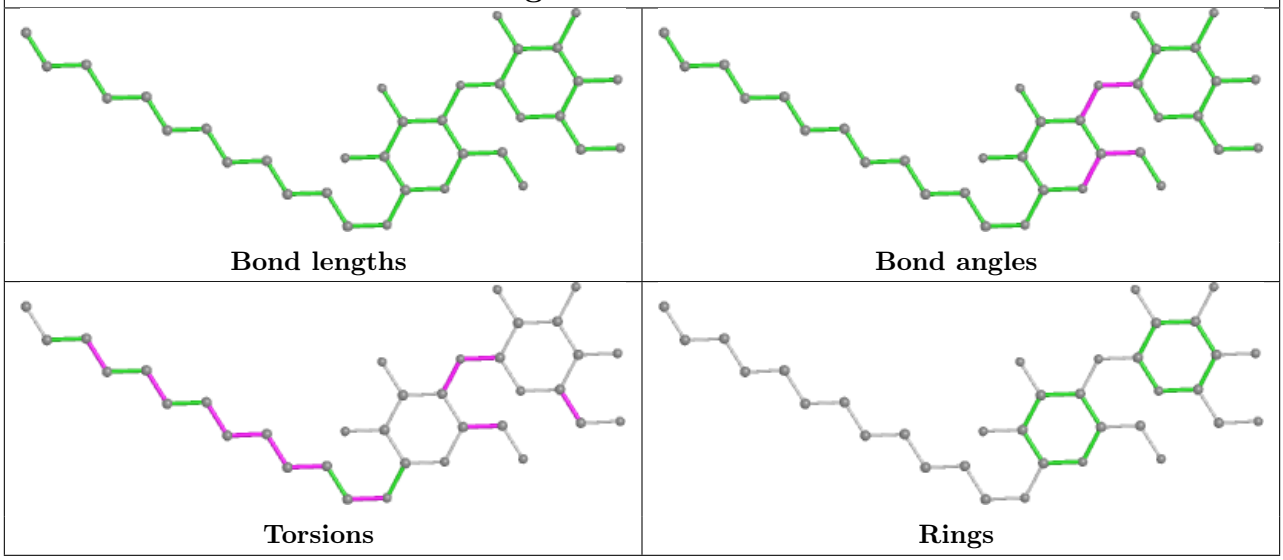
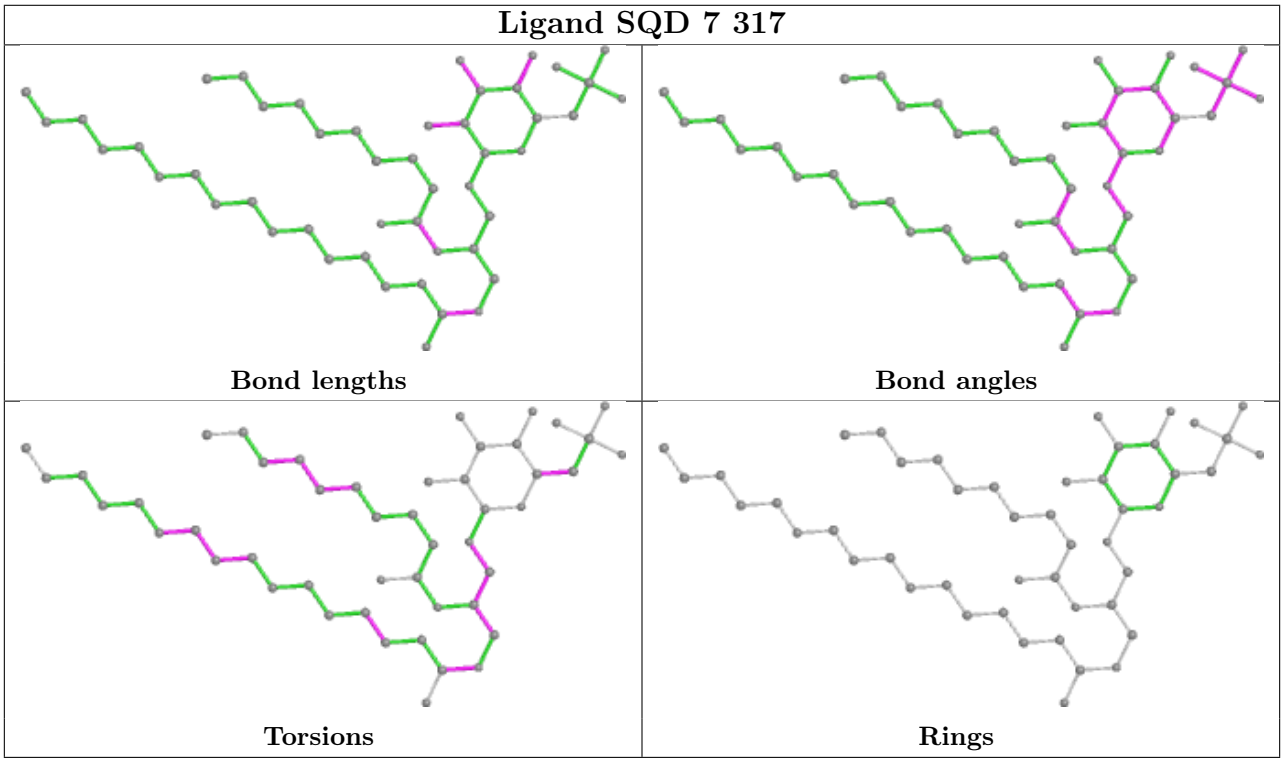


Rings

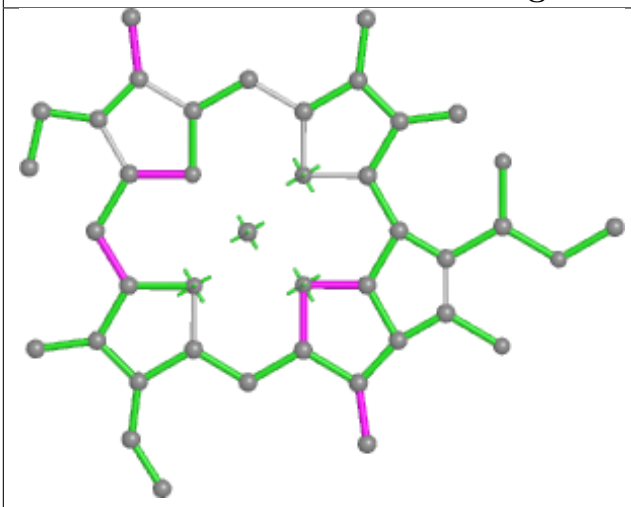
Ligand LMU 4 317



Ligand SQD 7 317



Ligand CLA 4 313



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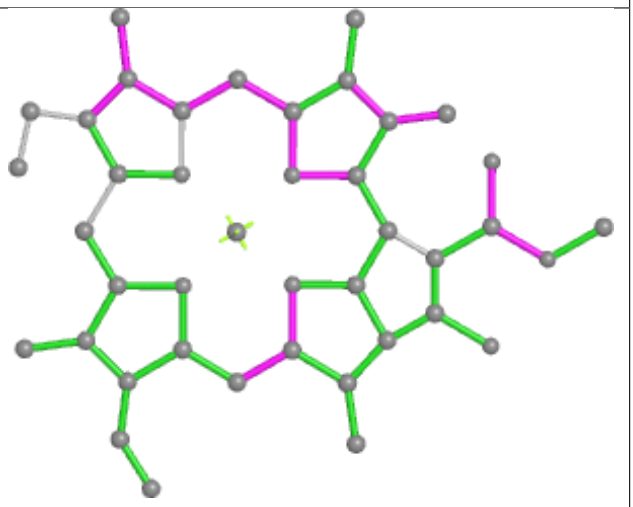
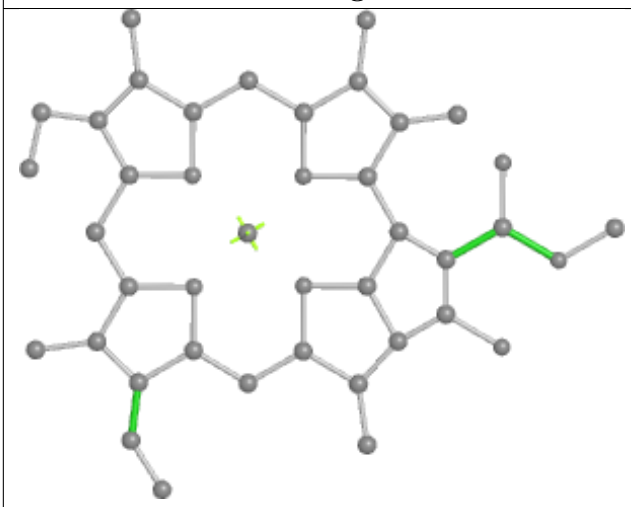


Bond angles



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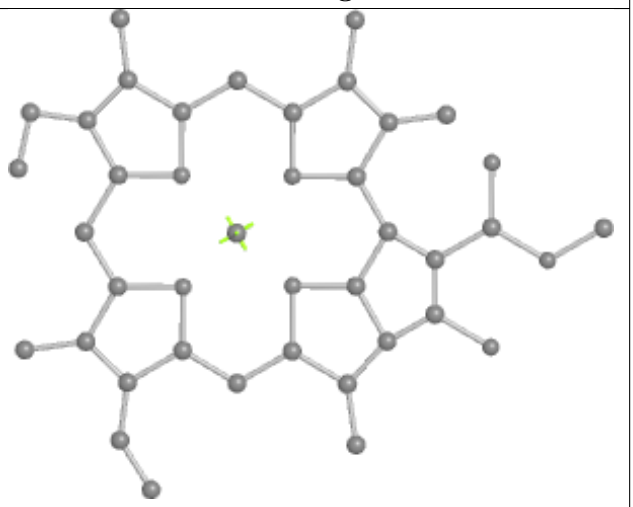
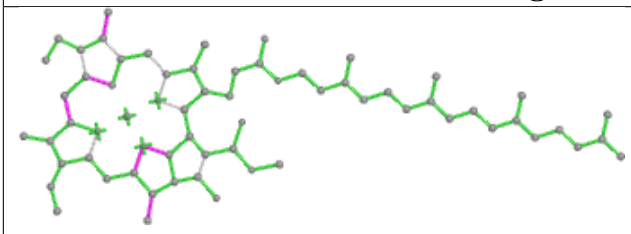


Rings

Ligand CLA 7 307



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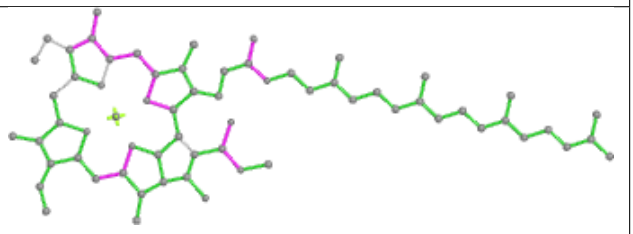

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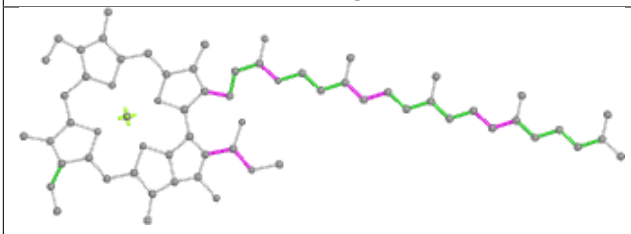

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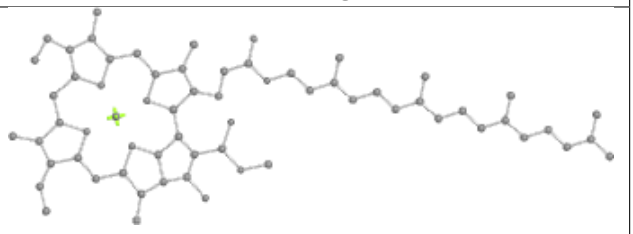
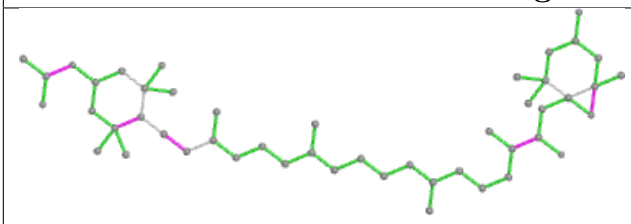
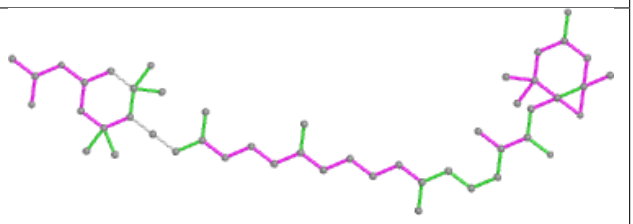


Rings

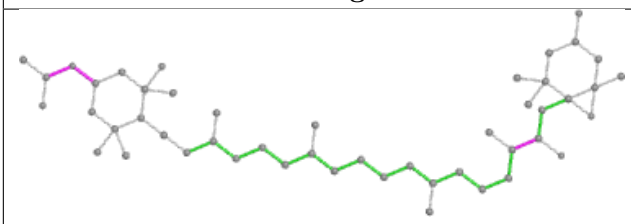
Ligand A86 6 301



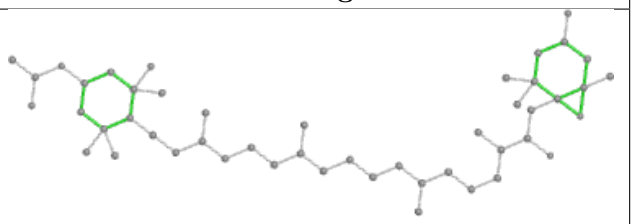
Bond lengths



Bond angles

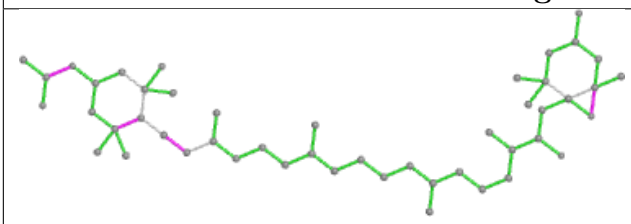


Torsions



Rings

Ligand A86 5 302



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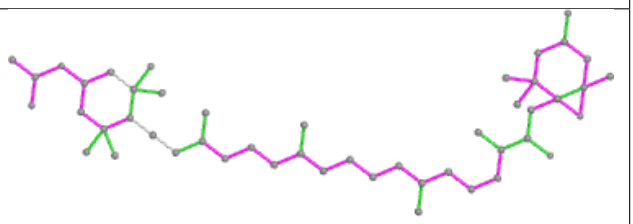
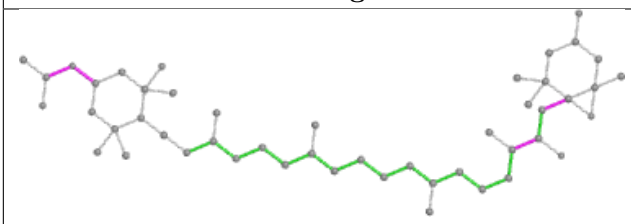
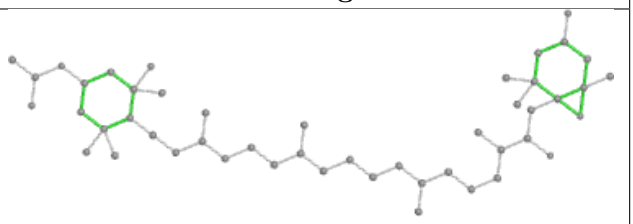


Bond angles

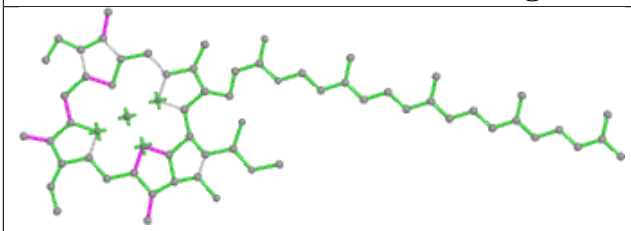


Torsions



Rings

Ligand CLA A 404



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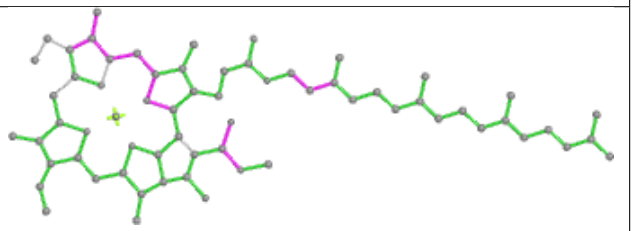
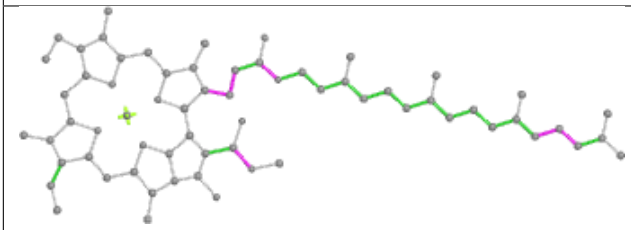


Bond angles



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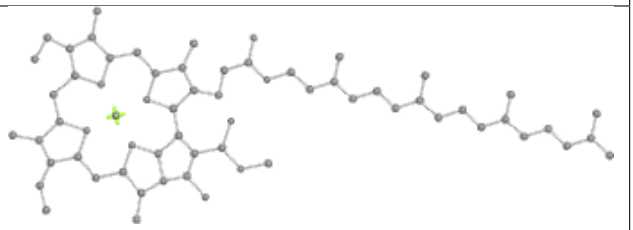
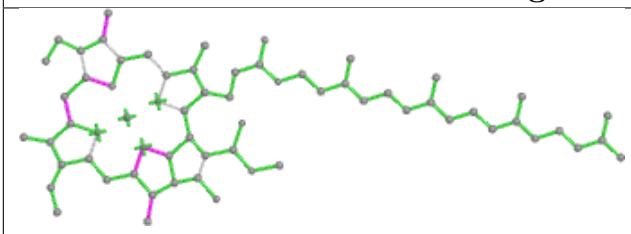


Rings

Ligand CLA 5 313



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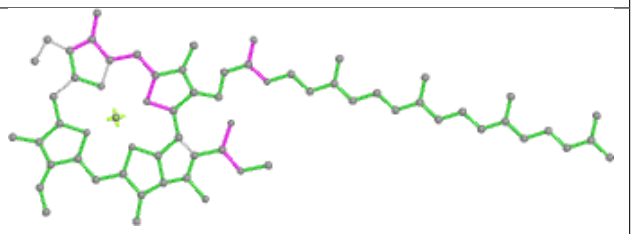
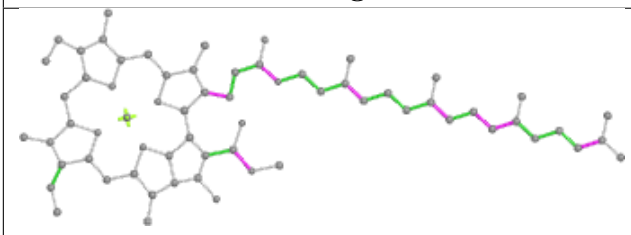


Bond angles



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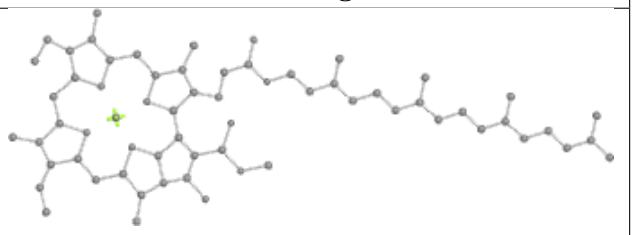
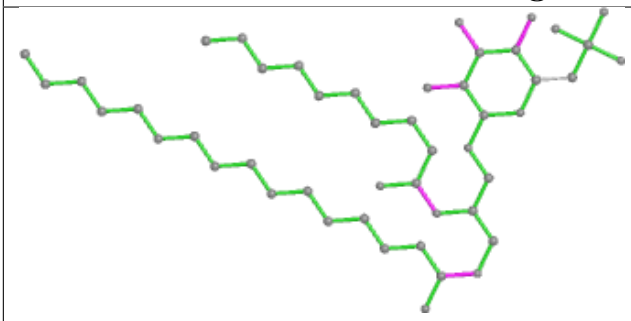


Rings

Ligand SQD 0 316



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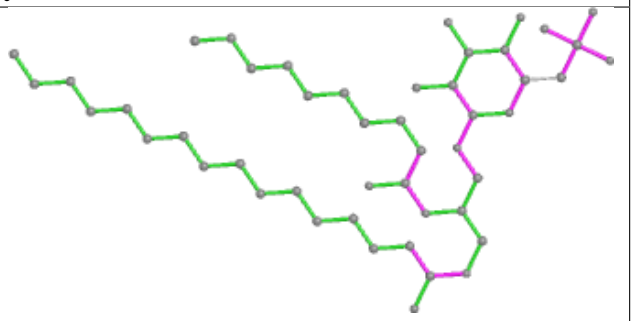
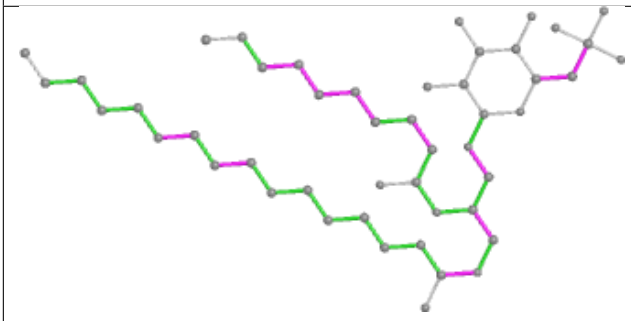
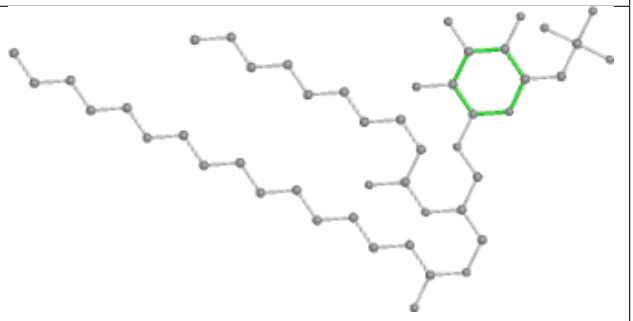


Bond angles

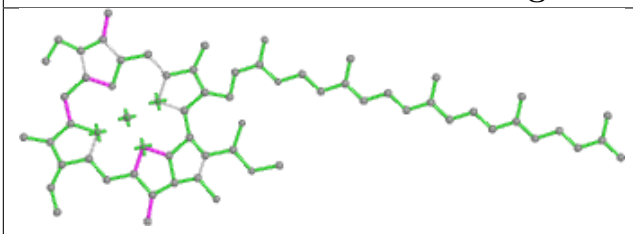


Torsions

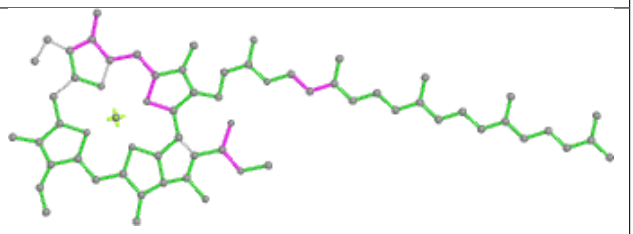


Rings

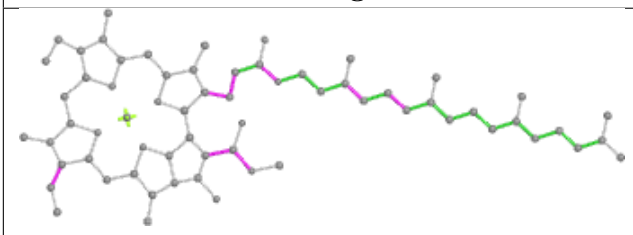
Ligand CLA 2 310



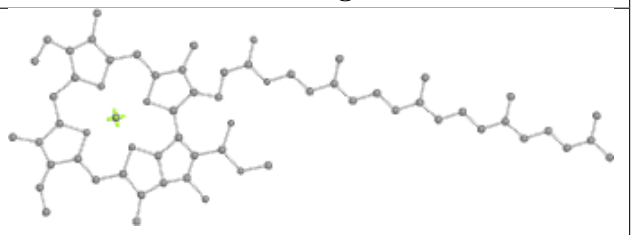
Bond lengths



Bond angles

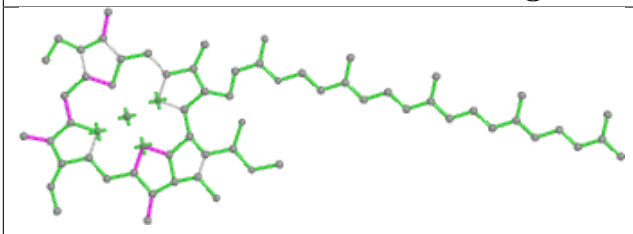


Torsions

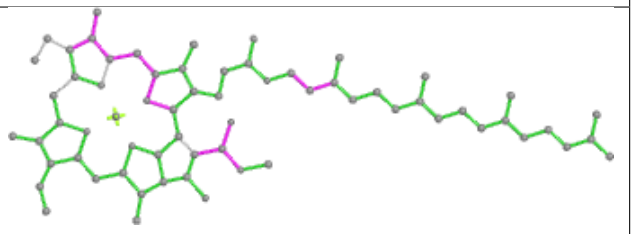


Rings

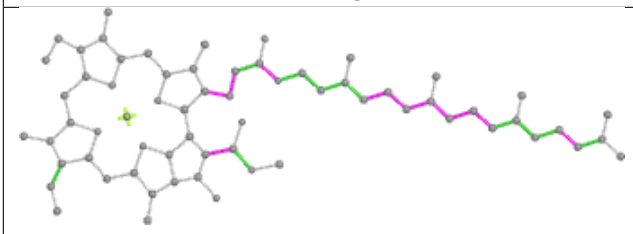
Ligand CLA C 503



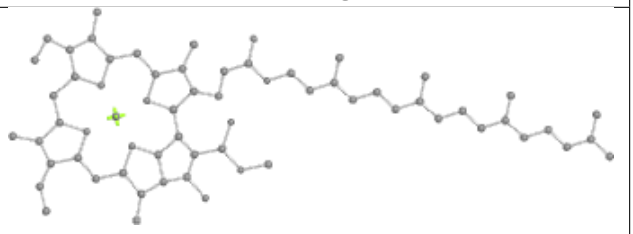
Bond lengths



Bond angles

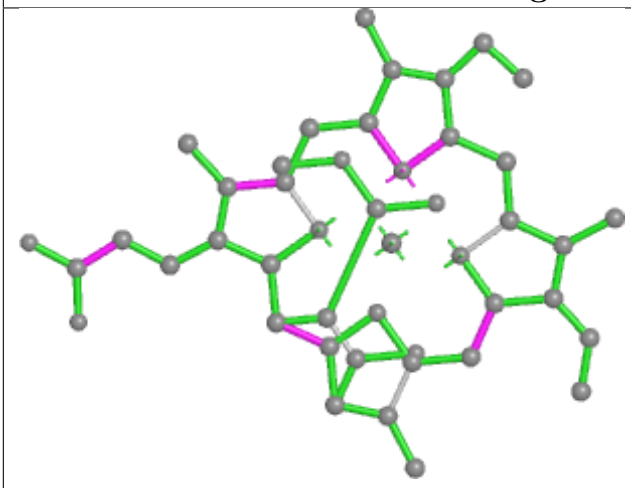


Torsions

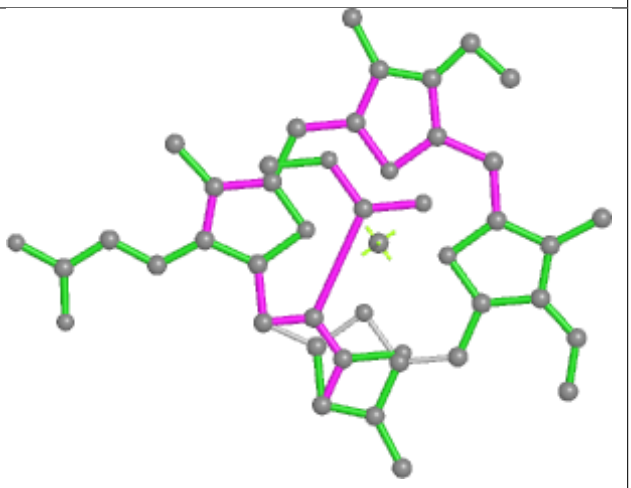


Rings

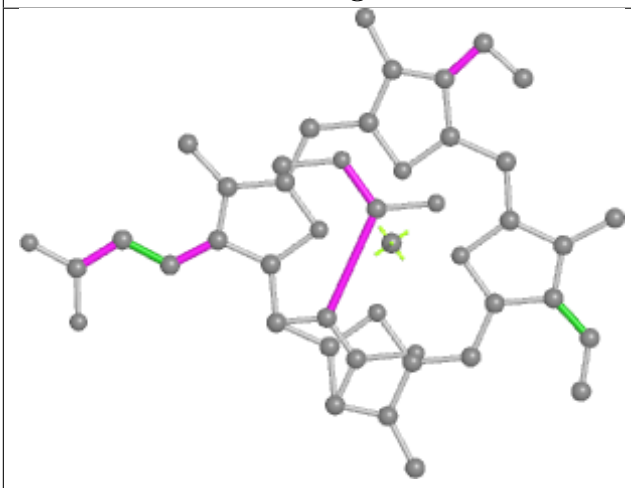
Ligand KC1 5 315



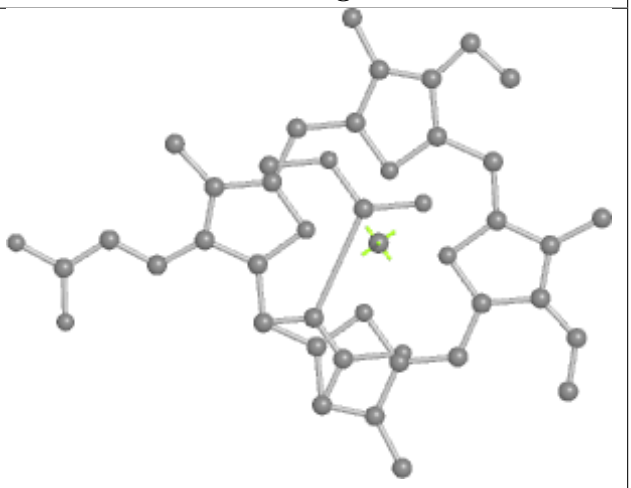
Bond lengths



Bond angles

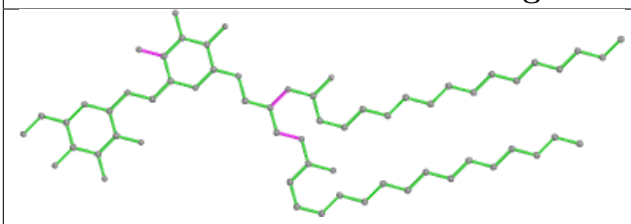


Torsions



Rings

Ligand DGD h 102



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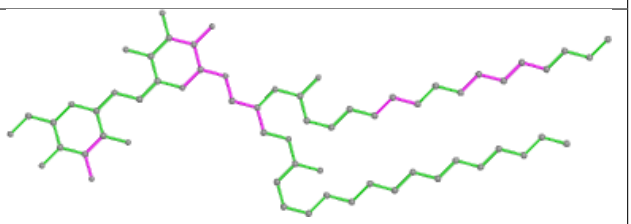
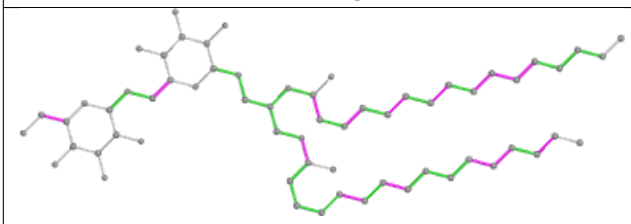


Bond angles



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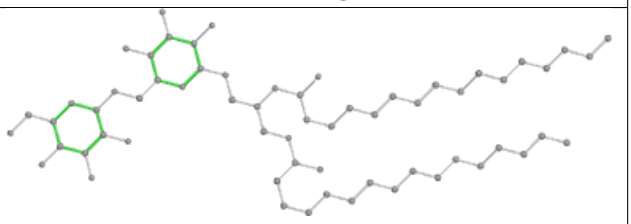
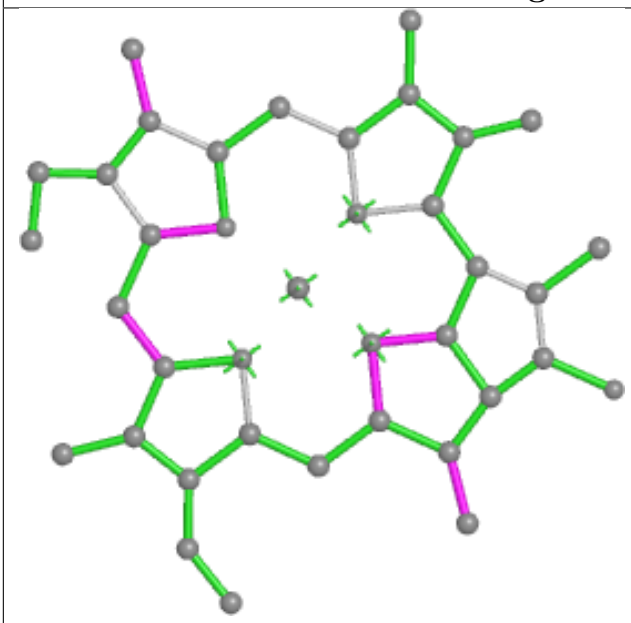


Rings

Ligand CLA 2 315



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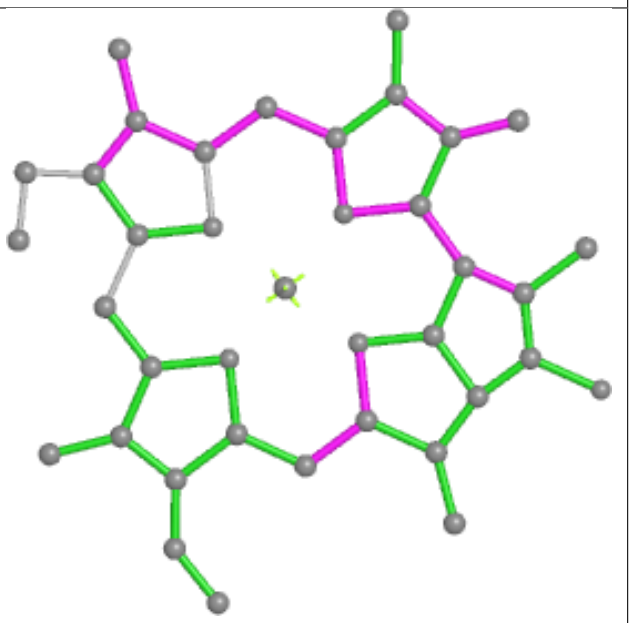
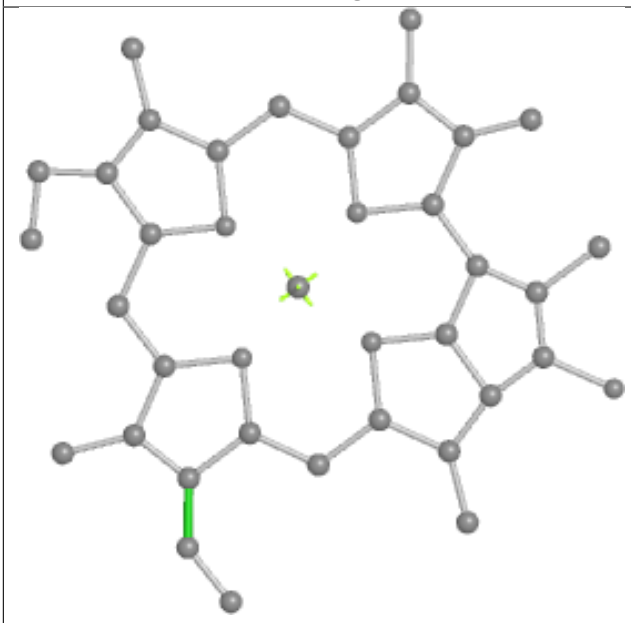


Bond angles



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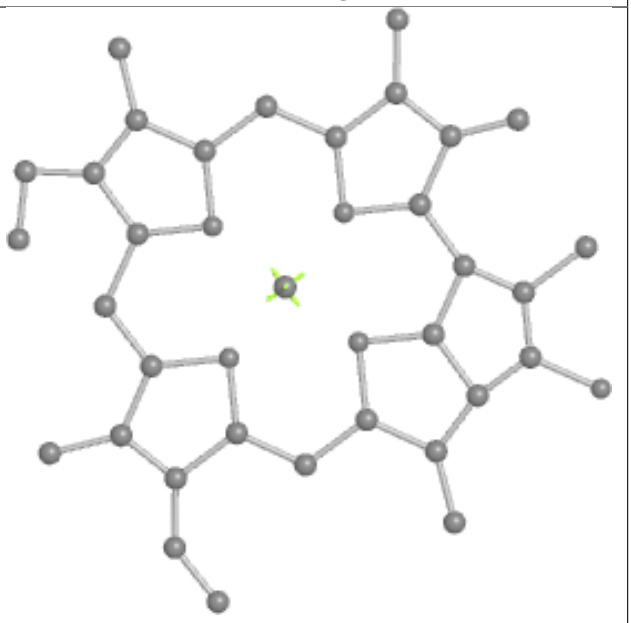
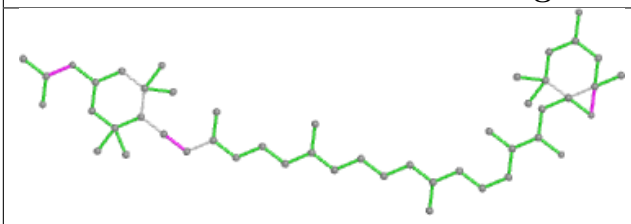


Rings

Ligand A86 6 304



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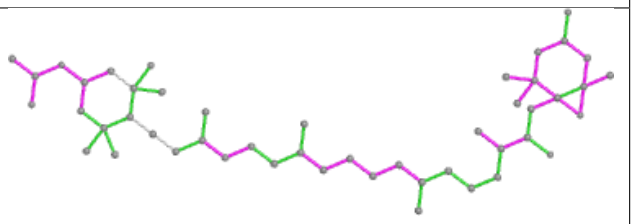
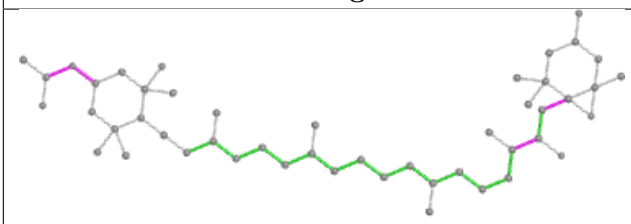


Bond angles



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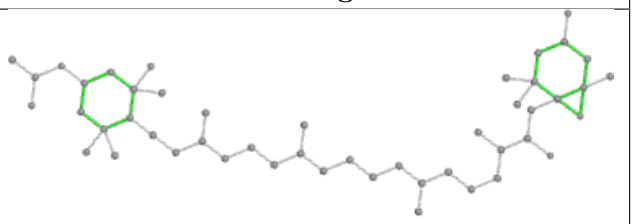
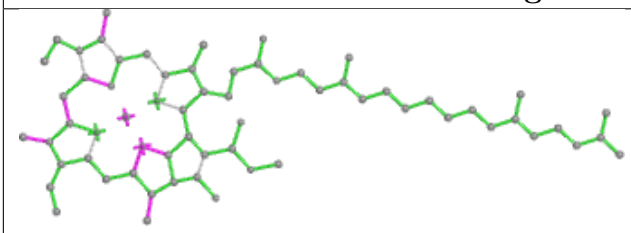


Rings

Ligand CLA C 502



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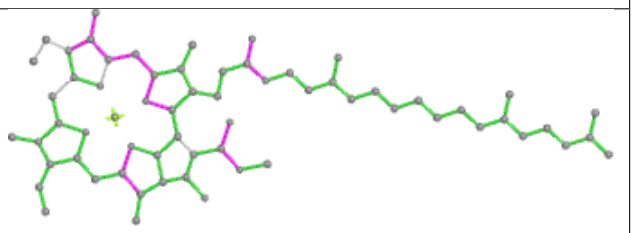

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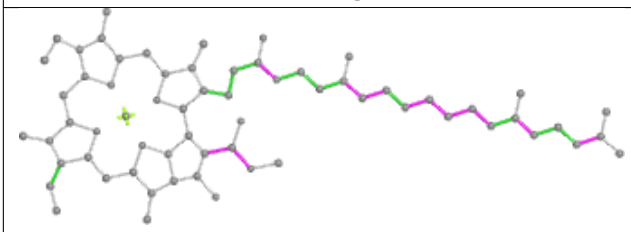

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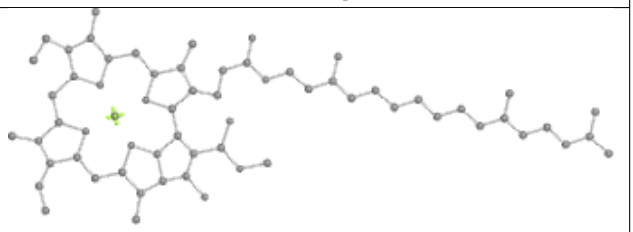
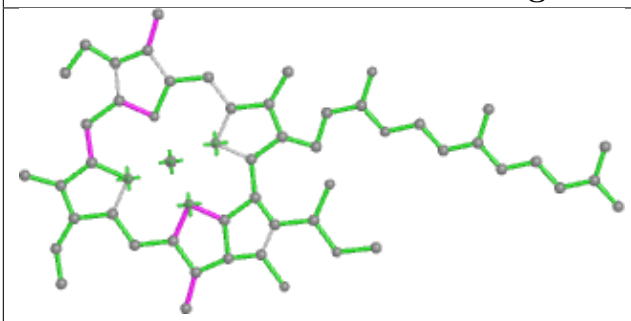
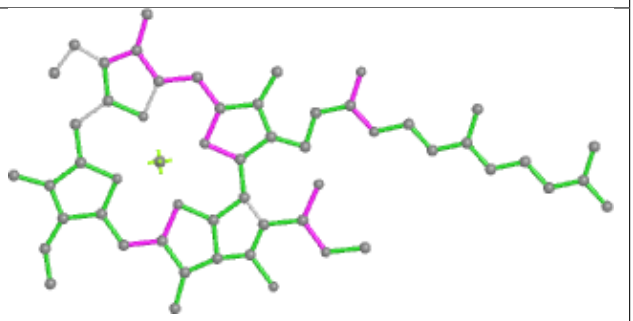


Rings

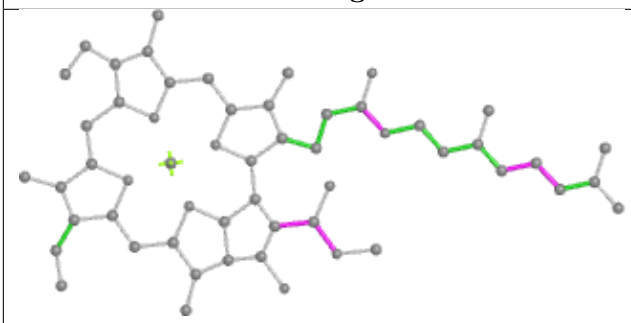
Ligand CLA 2 317



Bond lengths



Bond angles



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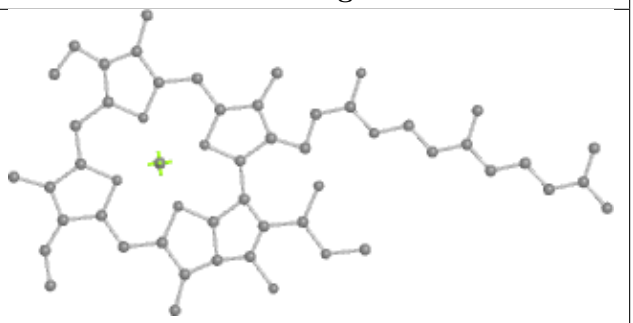
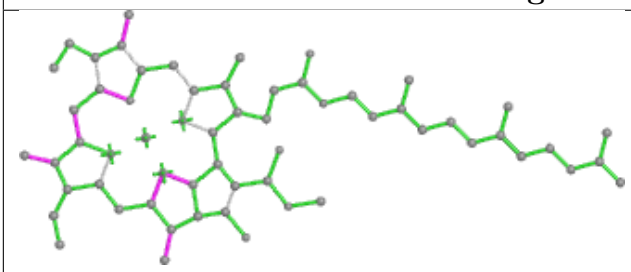


Rings

Ligand CLA d 402



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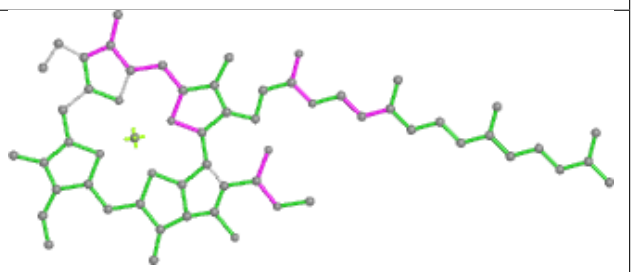

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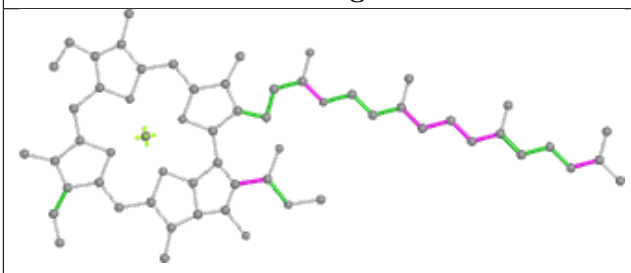

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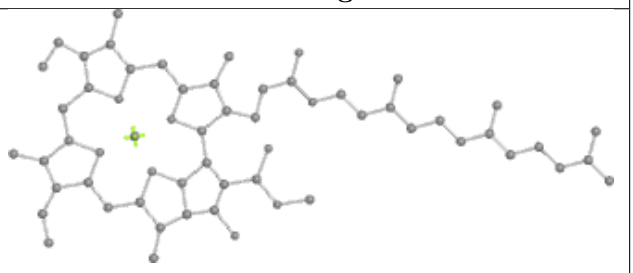
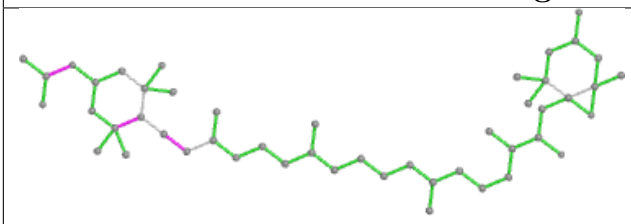


Rings

Ligand A86 1 301



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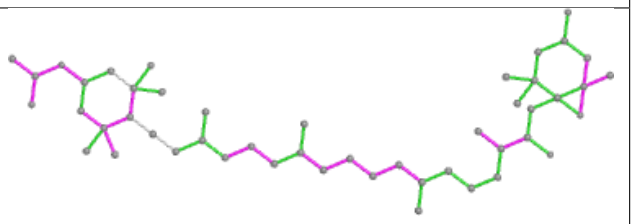
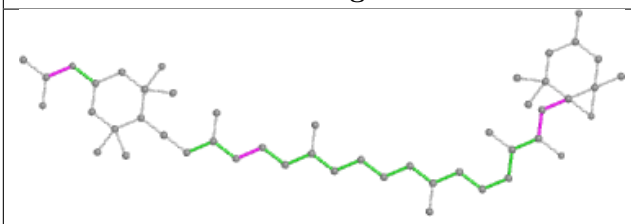


Bond angles



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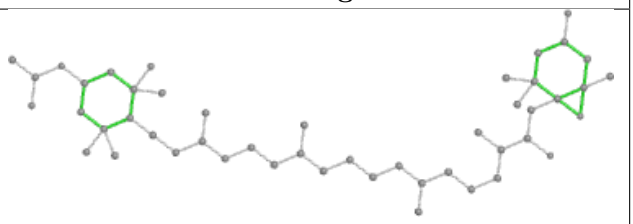
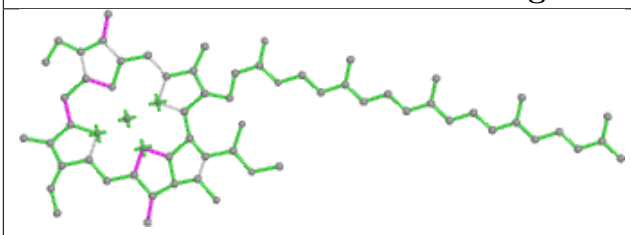


Rings

Ligand CLA 0 305



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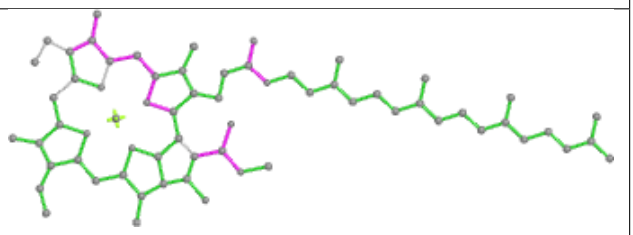
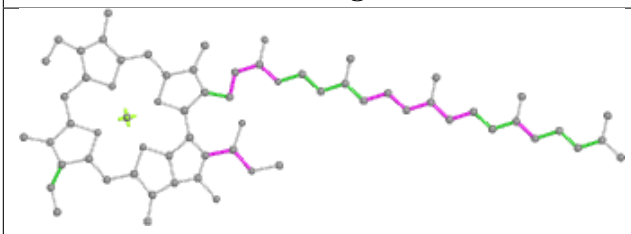
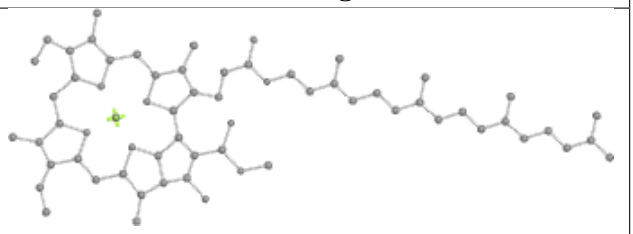


Bond angles

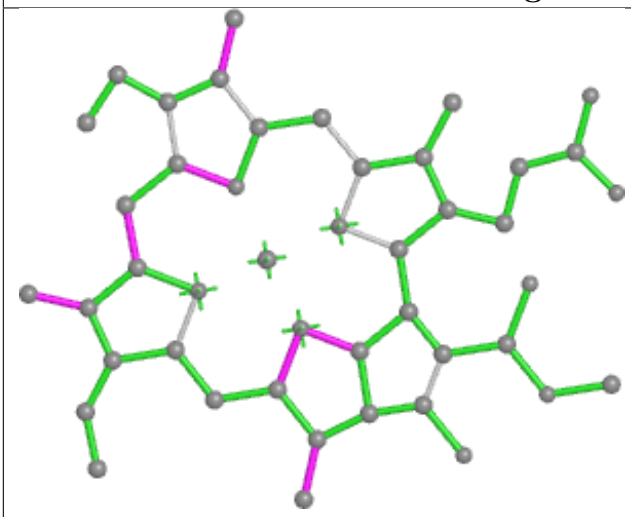


Torsions

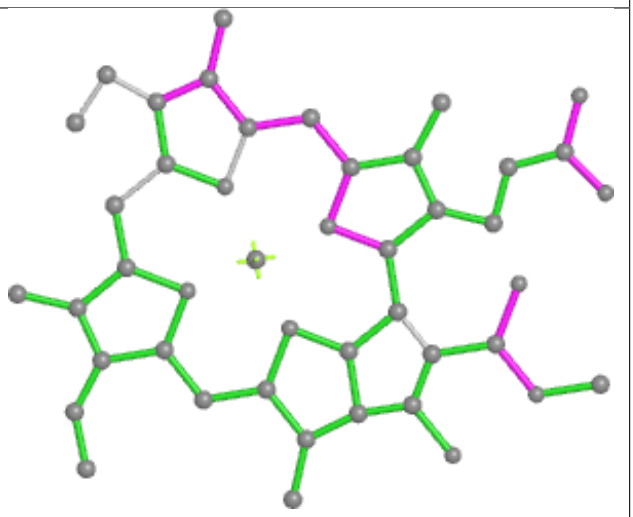


Rings

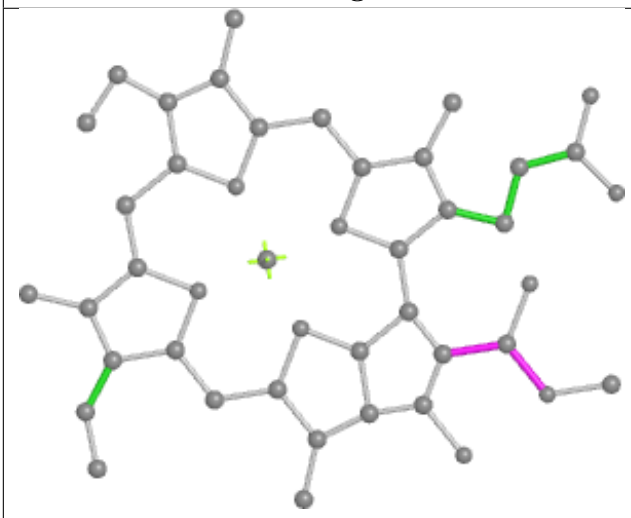
Ligand CLA C 506



Bond lengths



Bond angles



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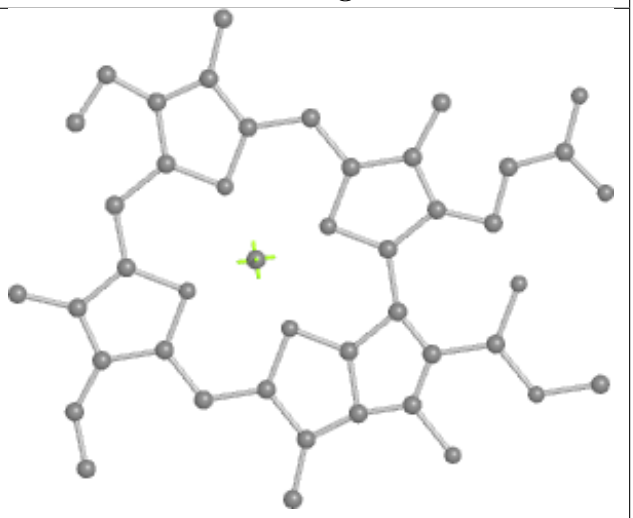
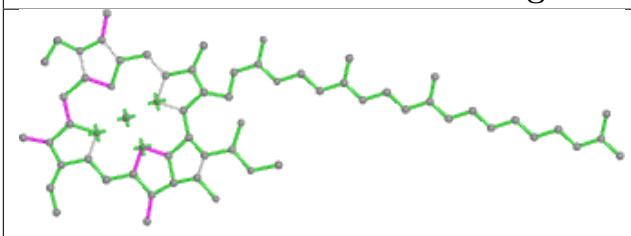


Rings

Ligand CLA b 612



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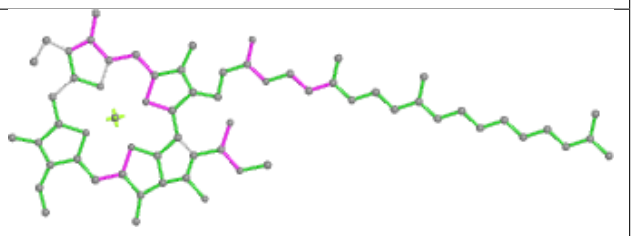
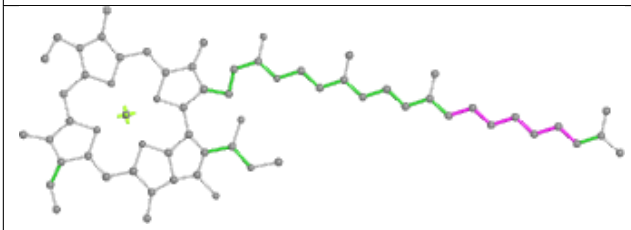


Bond angles



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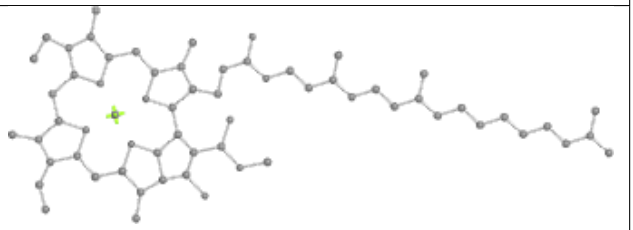
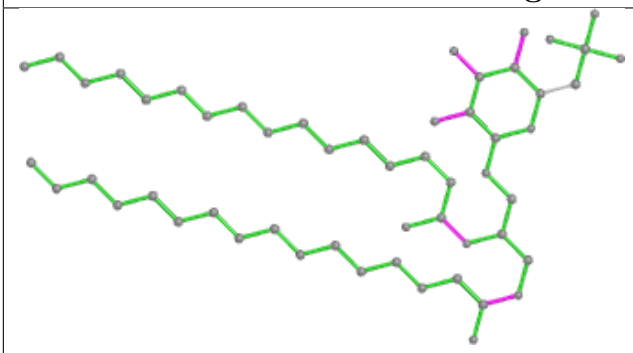
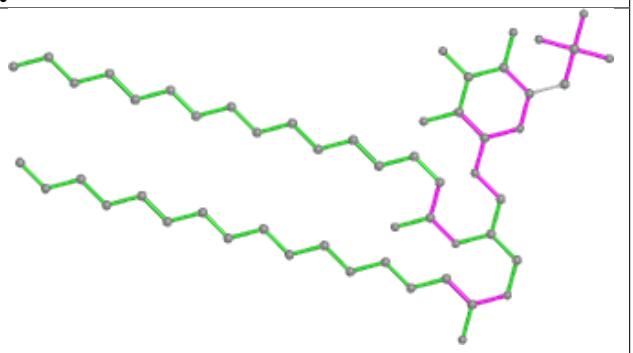


Rings

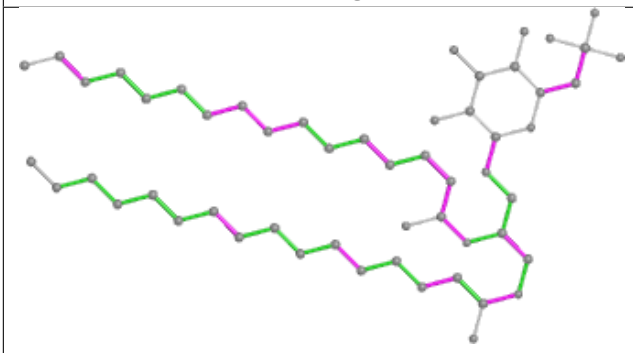
Ligand SQD B 622



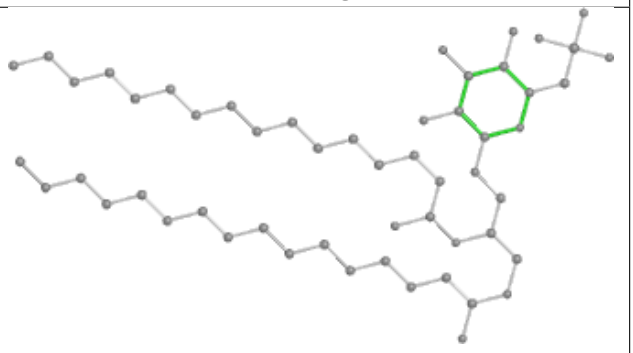
Bond lengths



Bond angles

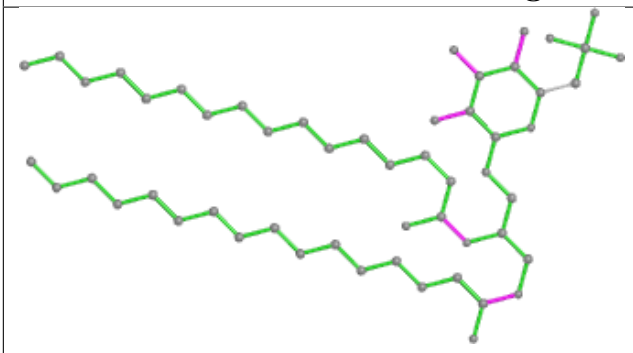


Torsions



Rings

Ligand SQD T 103



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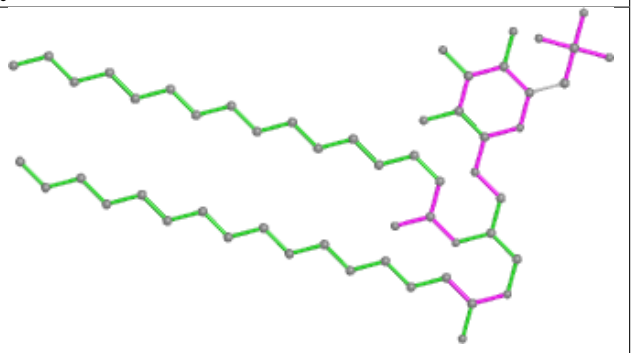
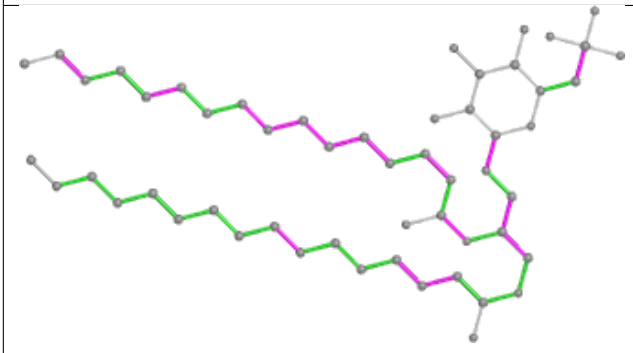


Bond angles



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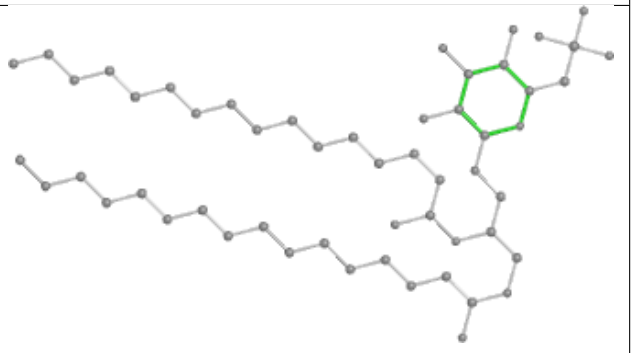
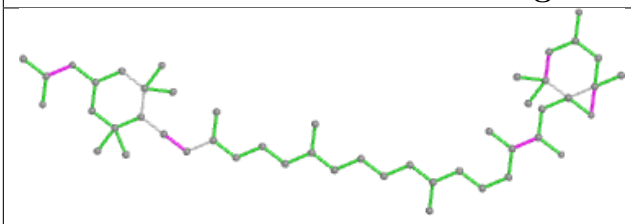
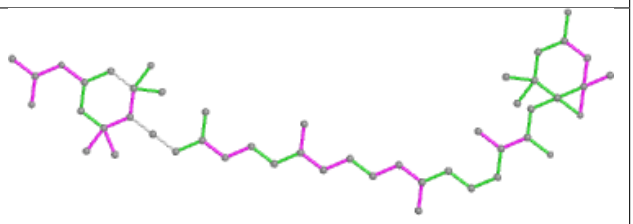


Rings

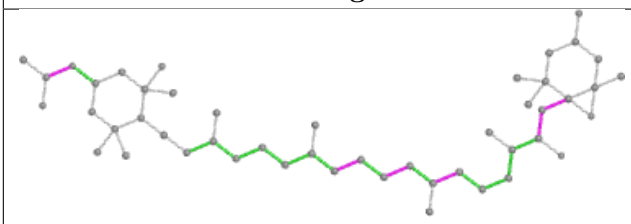
Ligand A86 0 301



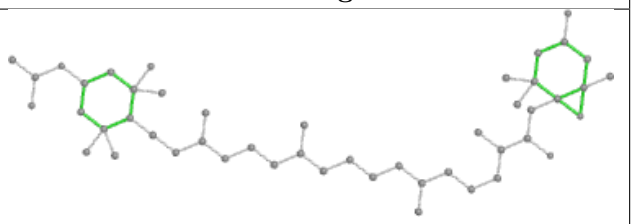
Bond lengths



Bond angles

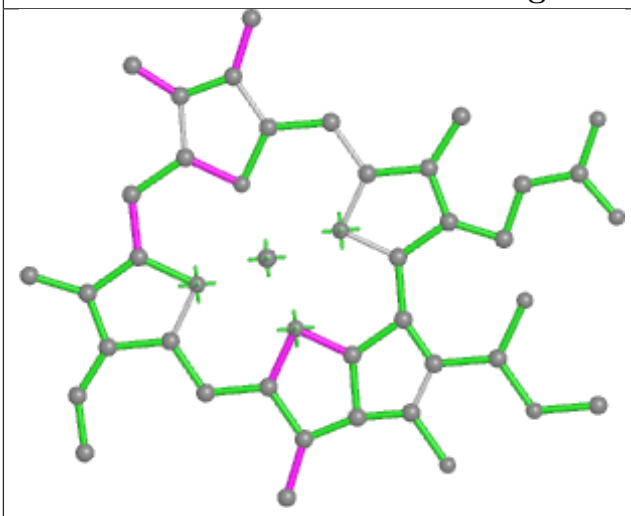


Torsions

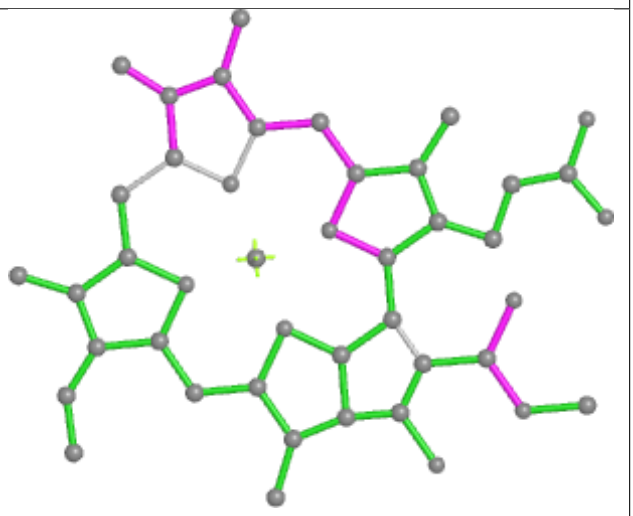


Rings

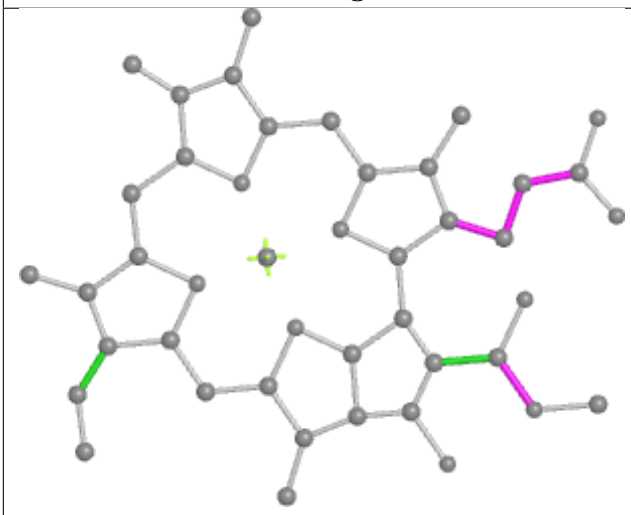
Ligand CLA 2 307



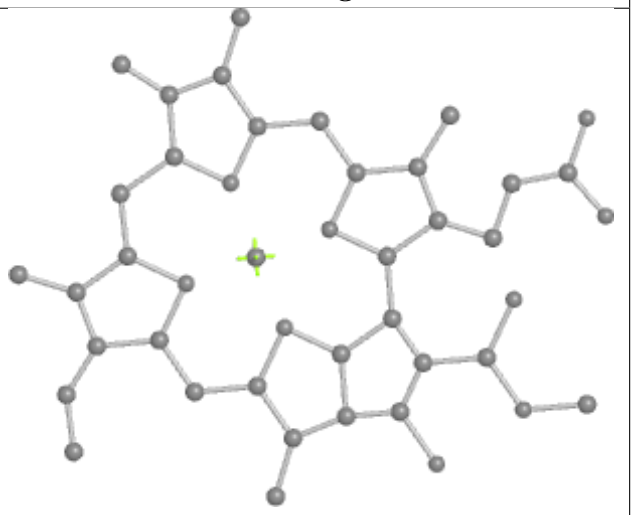
Bond lengths



Bond angles

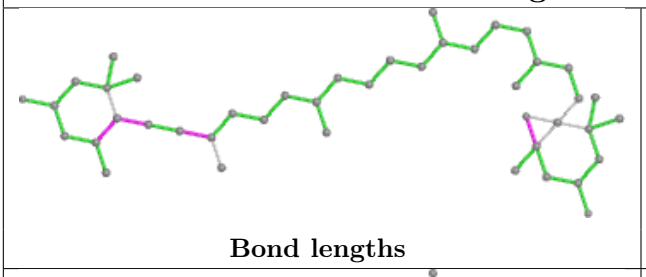


Torsions

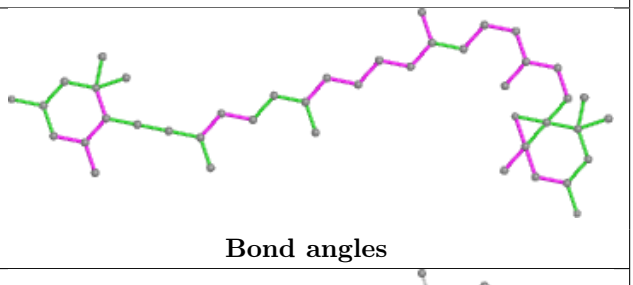


Rings

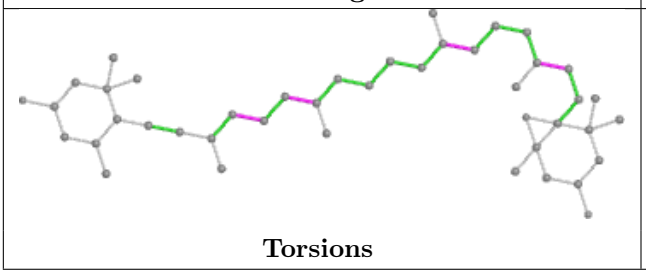
Ligand DD6 1 304



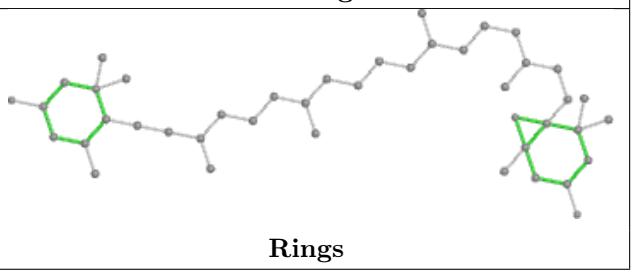
Bond lengths



Bond angles

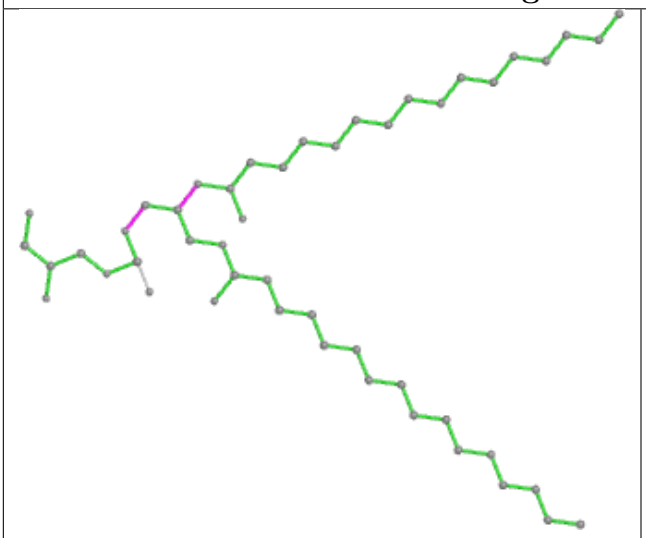


Torsions

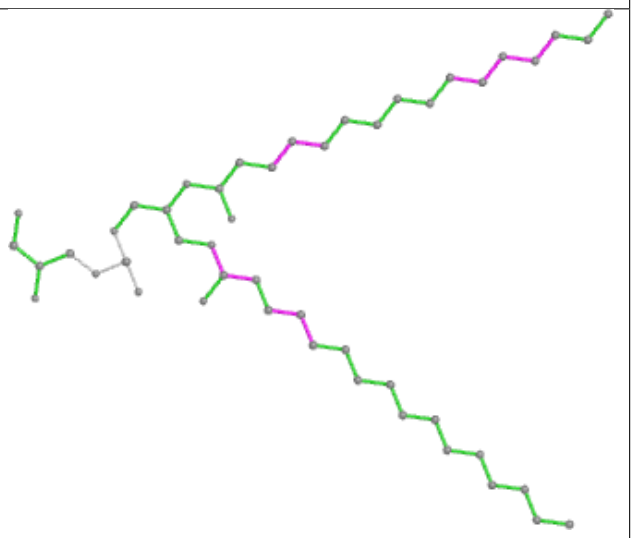


Rings

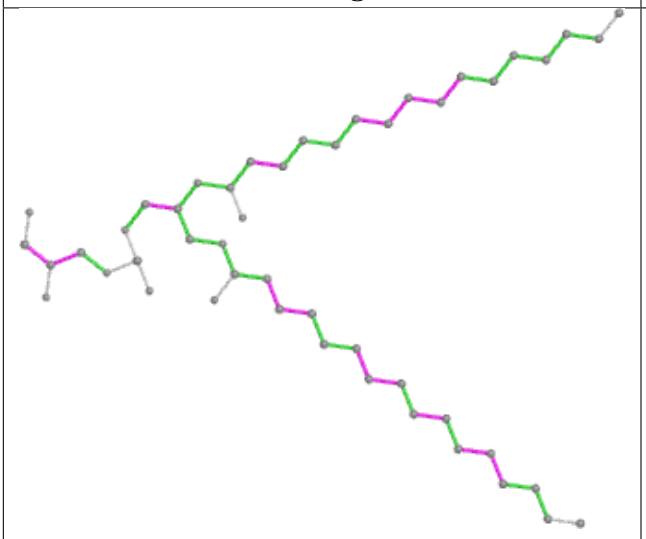
Ligand LHG D 409



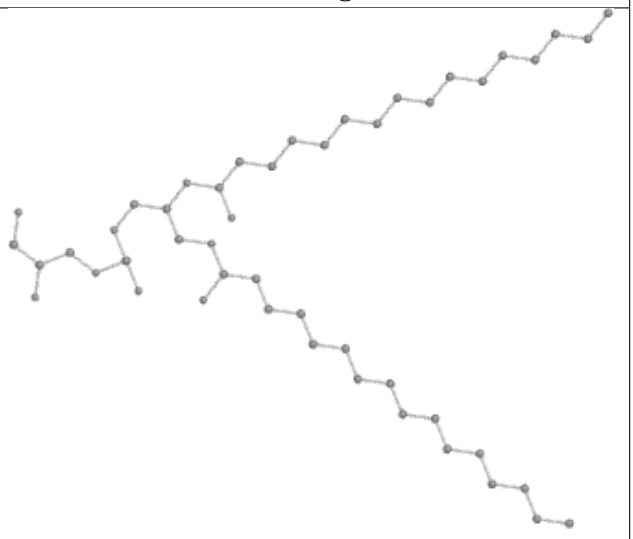
Bond lengths



Bond angles

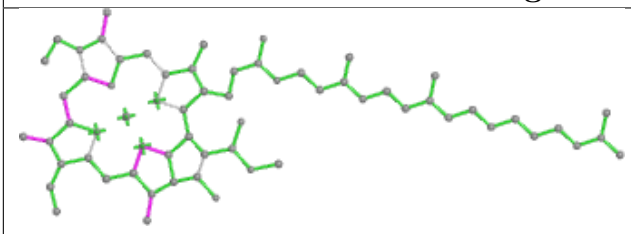


Torsions

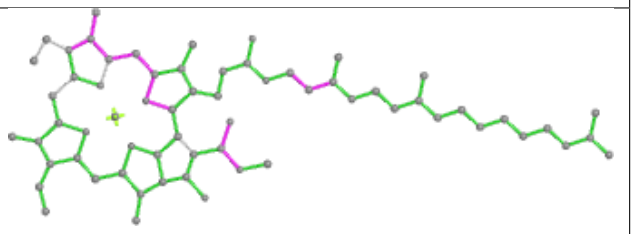


Rings

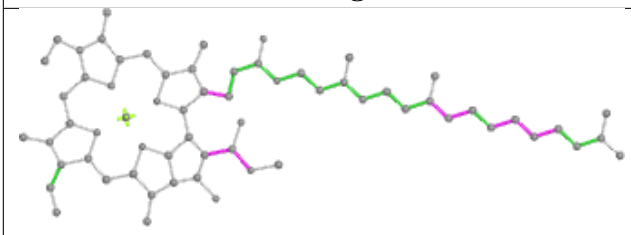
Ligand CLA B 614



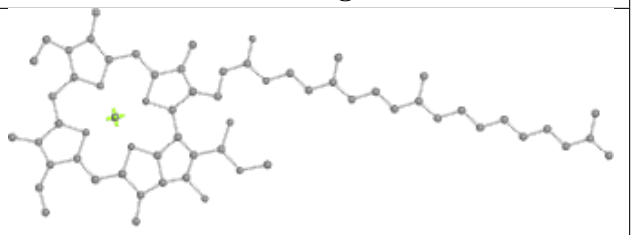
Bond lengths



Bond angles

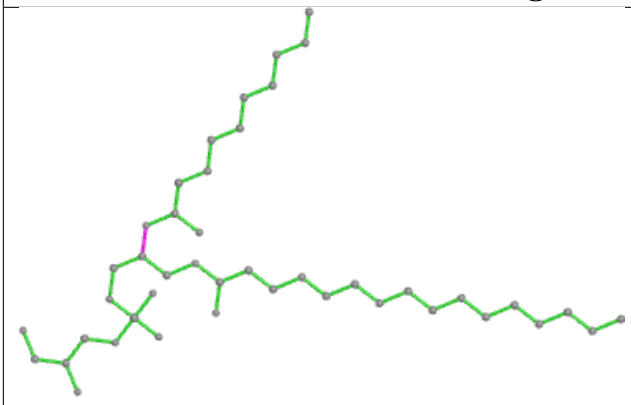


Torsions

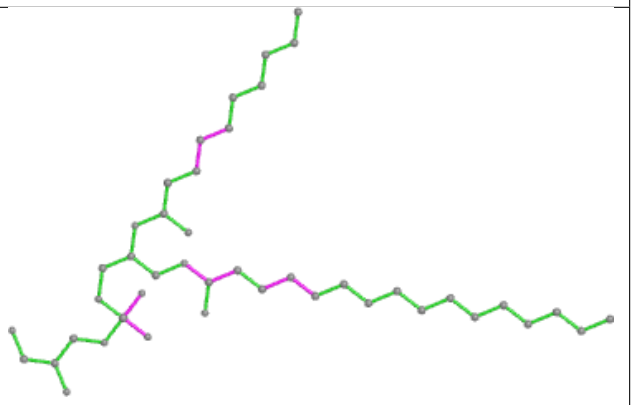


Rings

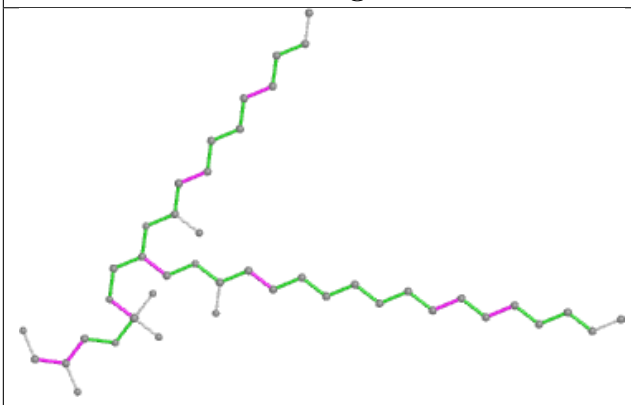
Ligand LHG a 403



Bond lengths



Bond angles



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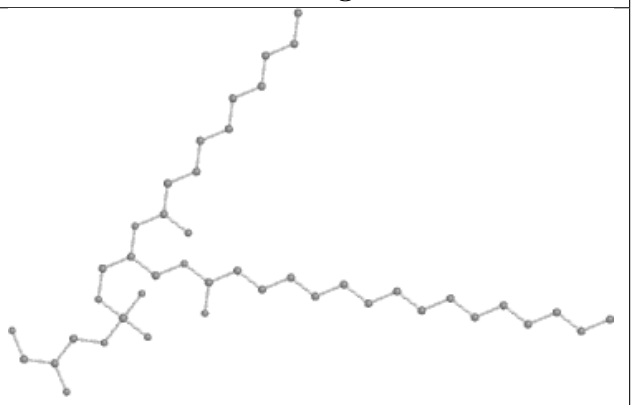
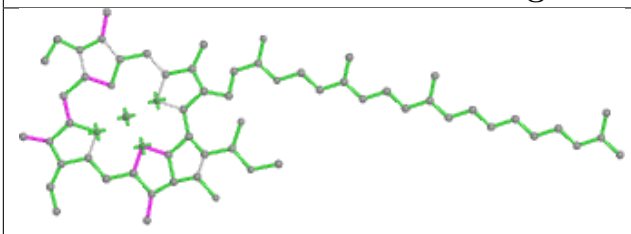
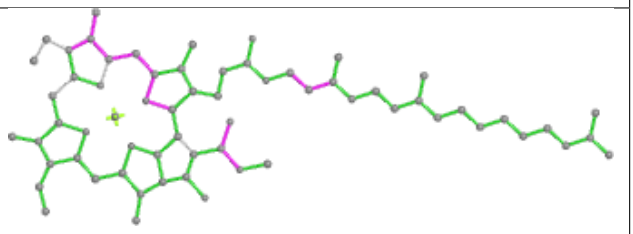


Rings

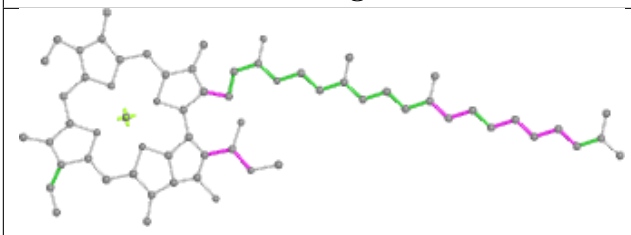
Ligand CLA b 615



Bond lengths



Bond angles



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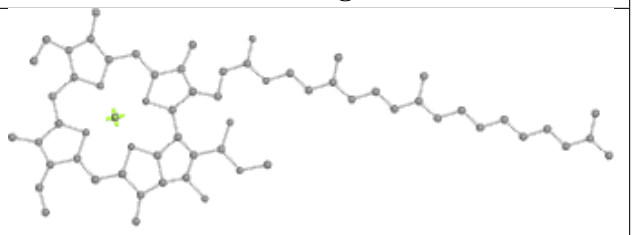
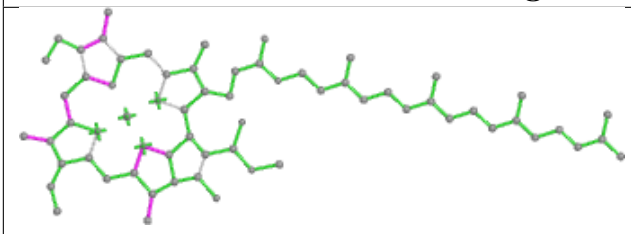


Rings

Ligand CLA B 616



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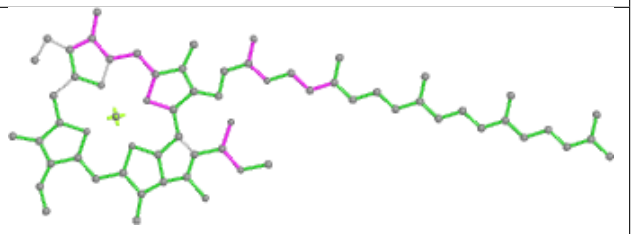
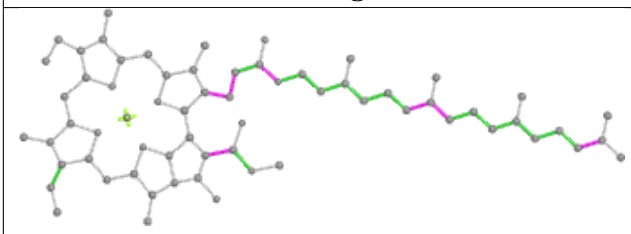
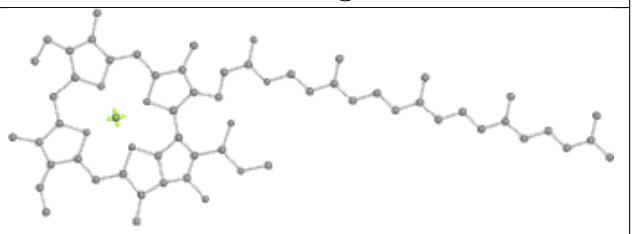


Bond angles

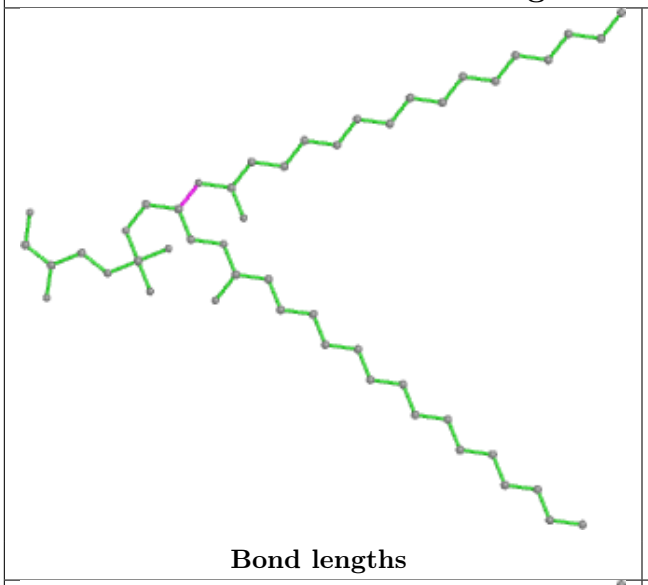


Torsions

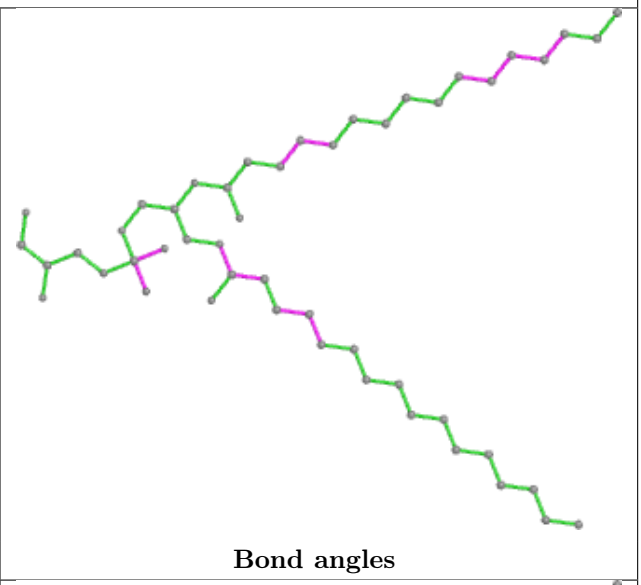


Rings

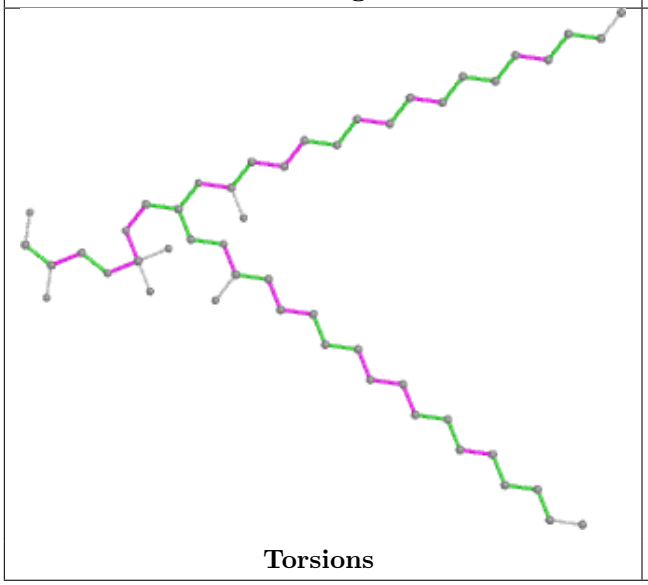
Ligand LHG 3 318



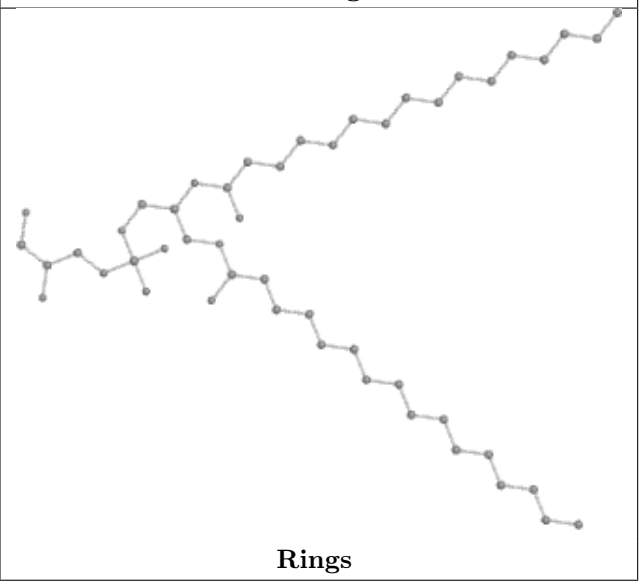
Bond lengths



Bond angles

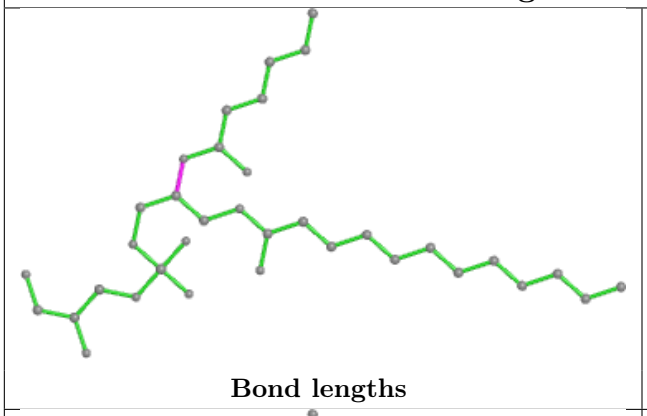


Torsions

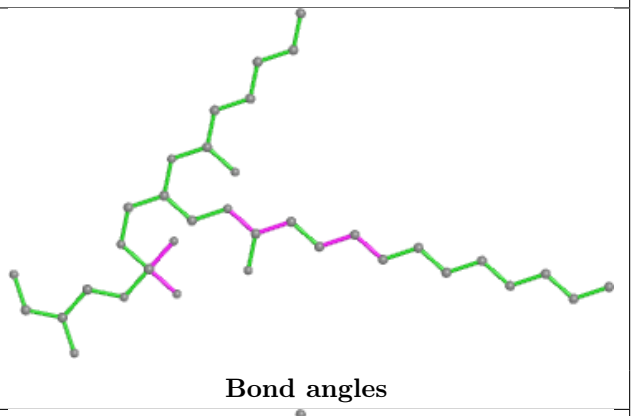


Rings

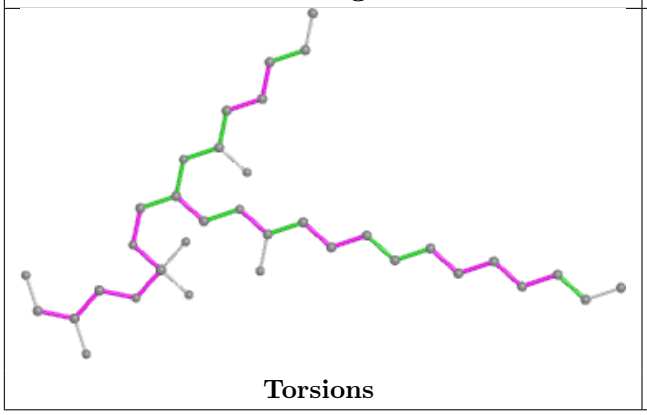
Ligand LHG W 302



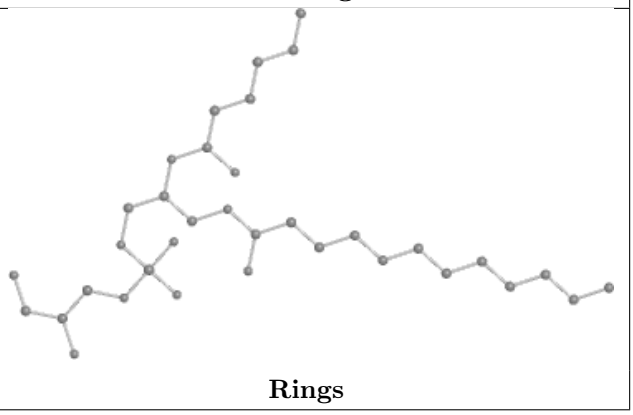
Bond lengths



Bond angles

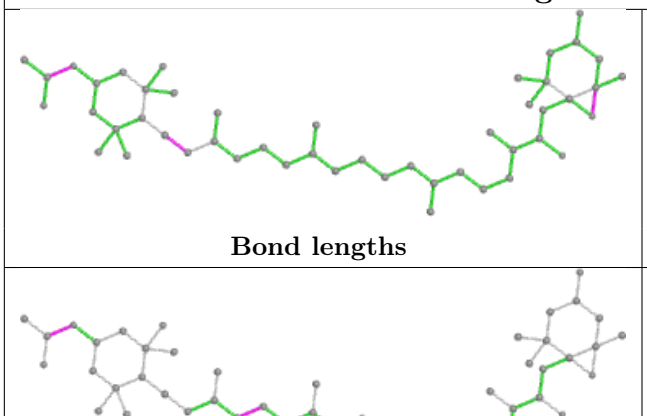


Torsions

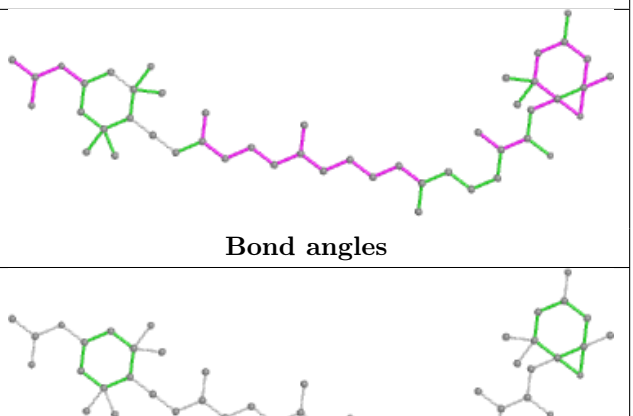


Rings

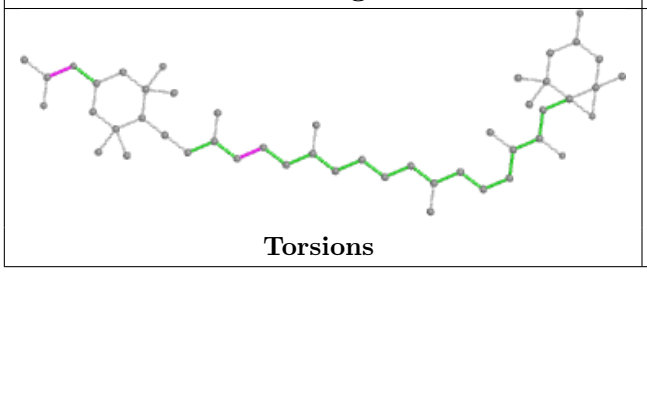
Ligand A86 4 304



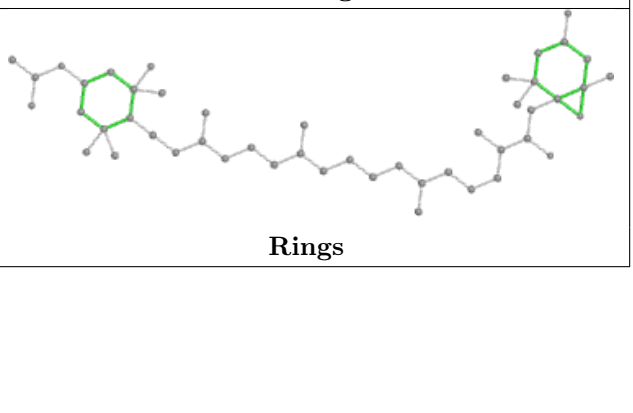
Bond lengths



Bond angles

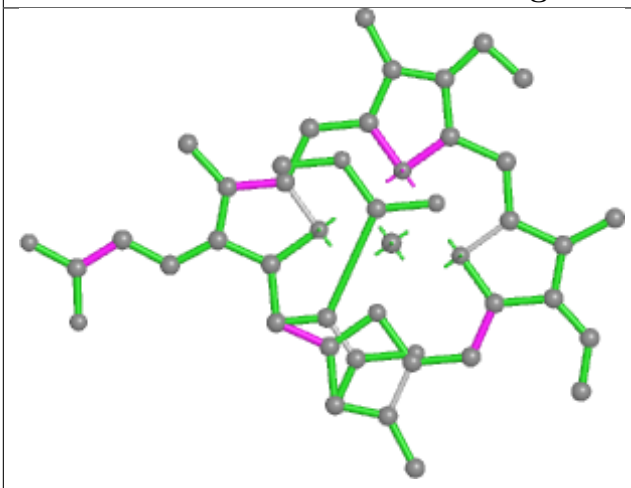


Torsions

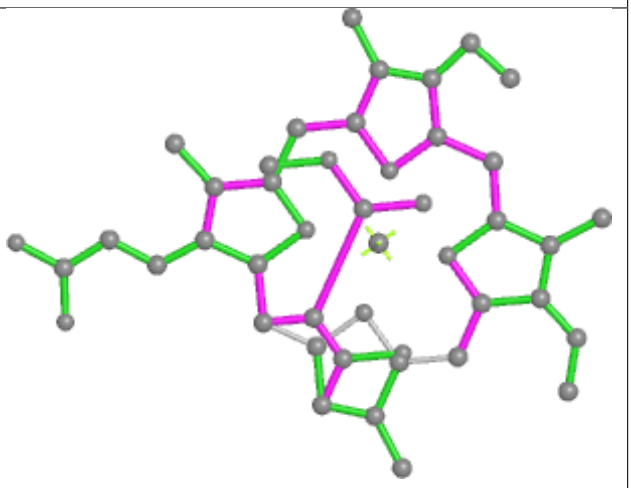


Rings

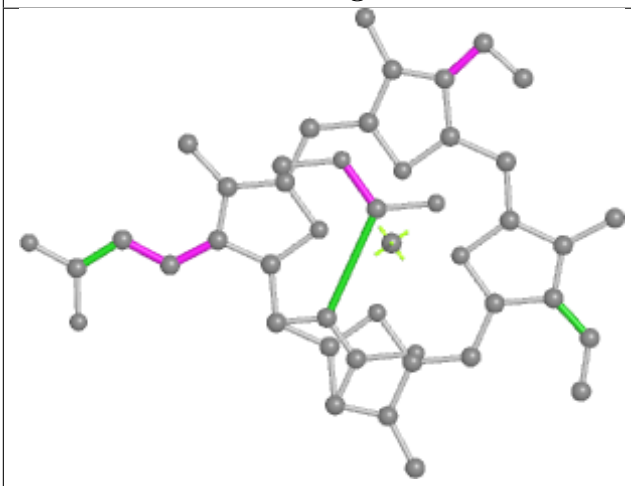
Ligand KC1 6 314



Bond lengths



Bond angles



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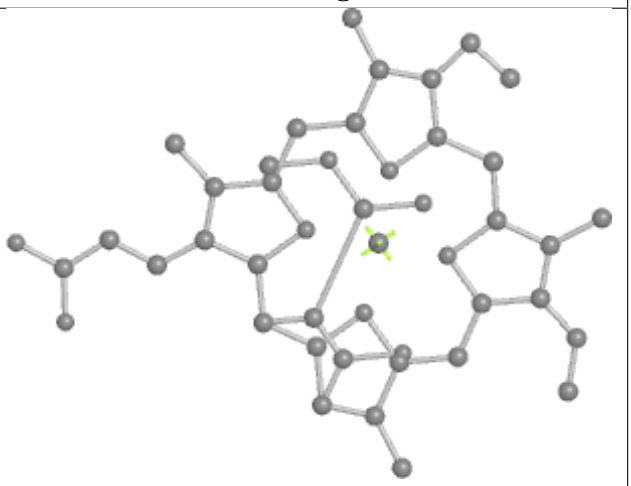
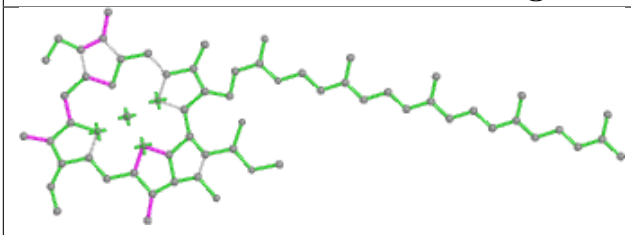
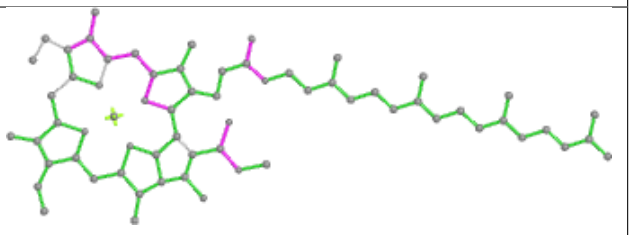


Rings

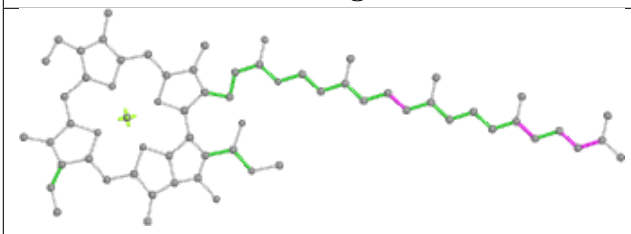
Ligand CLA b 616



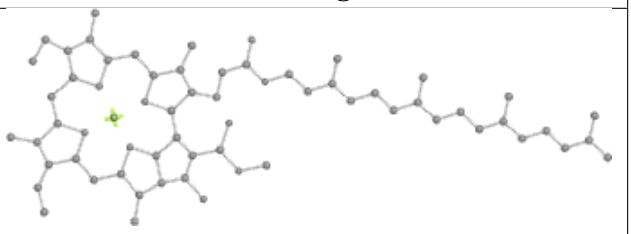
Bond lengths



Bond angles

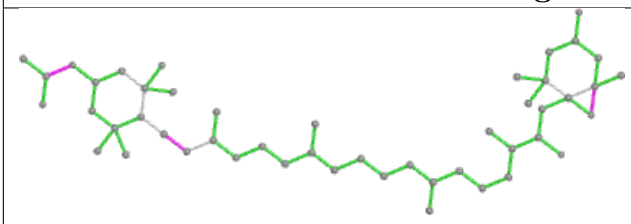


Torsions

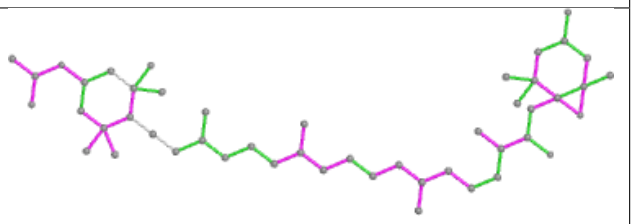


Rings

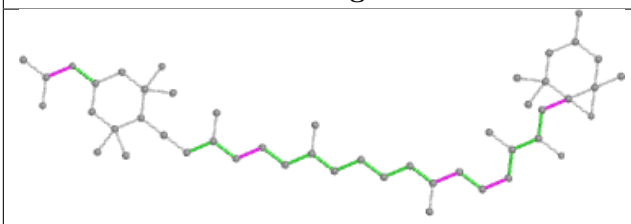
Ligand A86 3 314



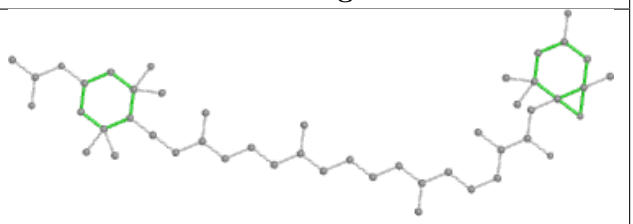
Bond lengths



Bond angles

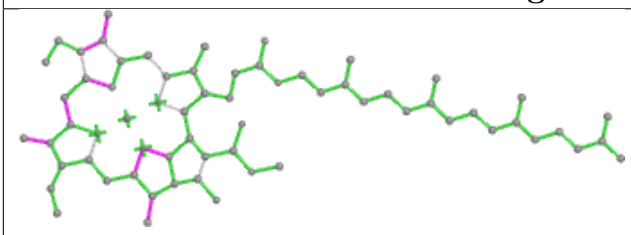


Torsions

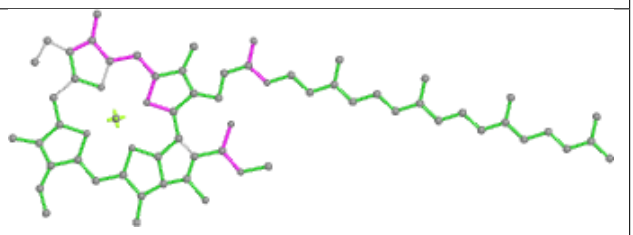


Rings

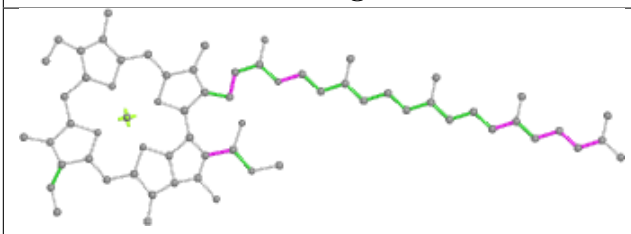
Ligand CLA b 611



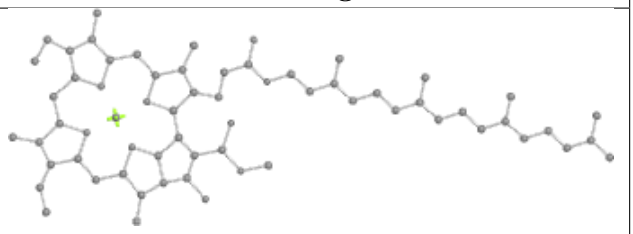
Bond lengths



Bond angles

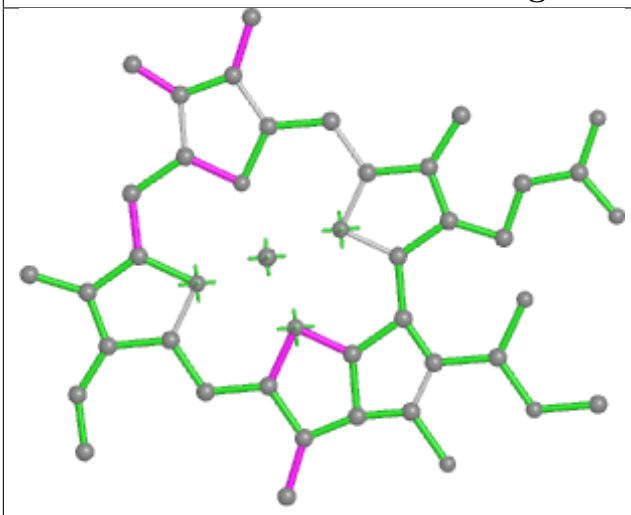


Torsions

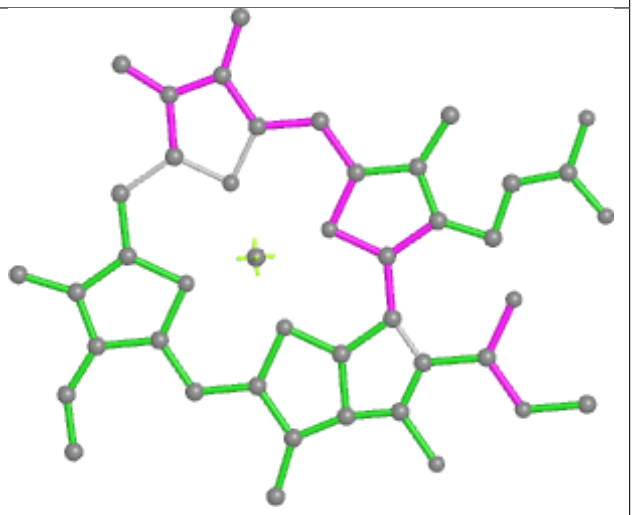


Rings

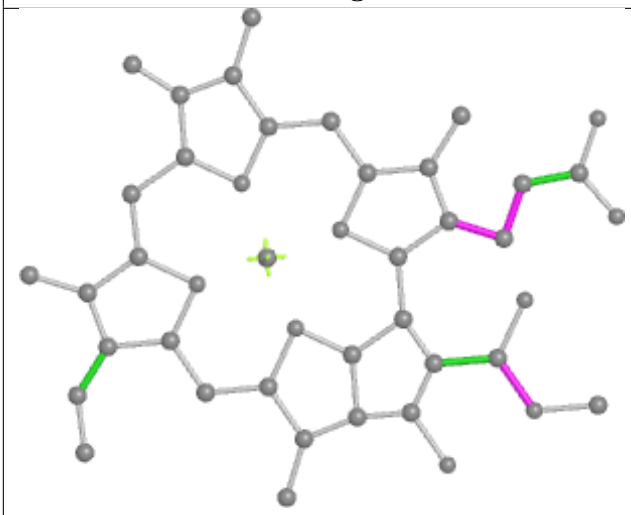
Ligand CLA 9 307



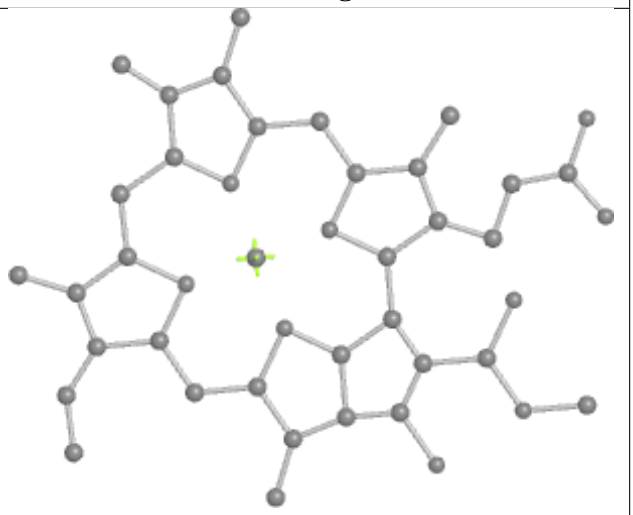
Bond lengths



Bond angles

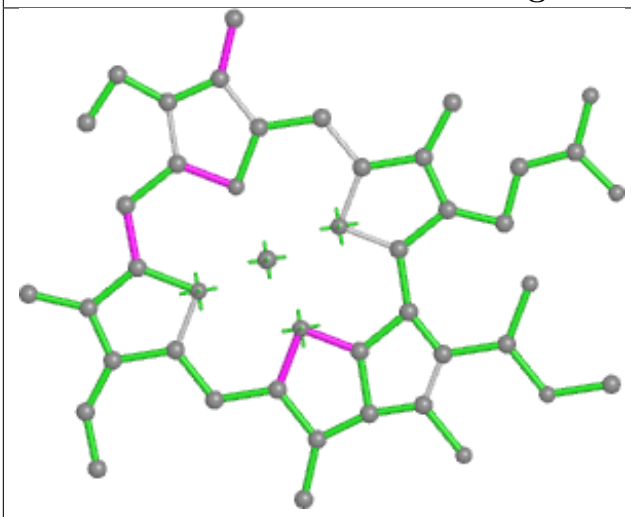


Torsions

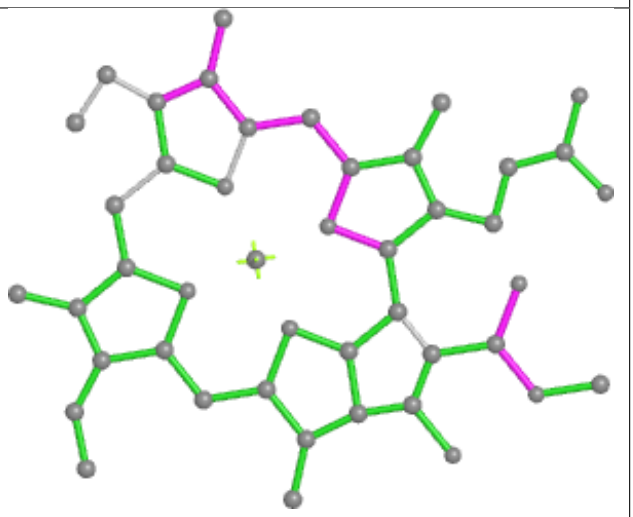


Rings

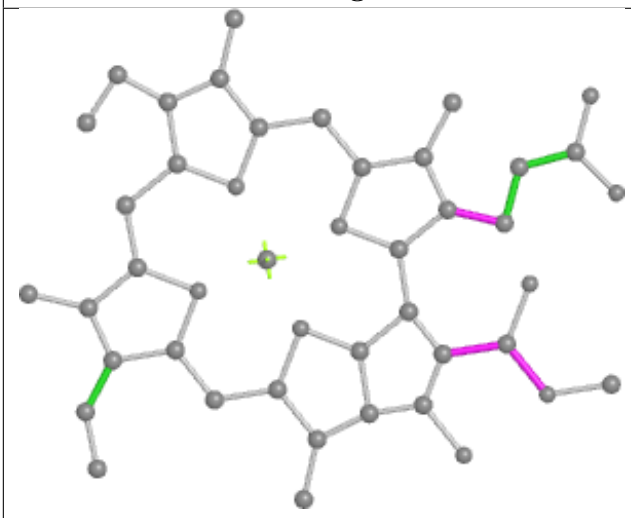
Ligand CLA 1 312



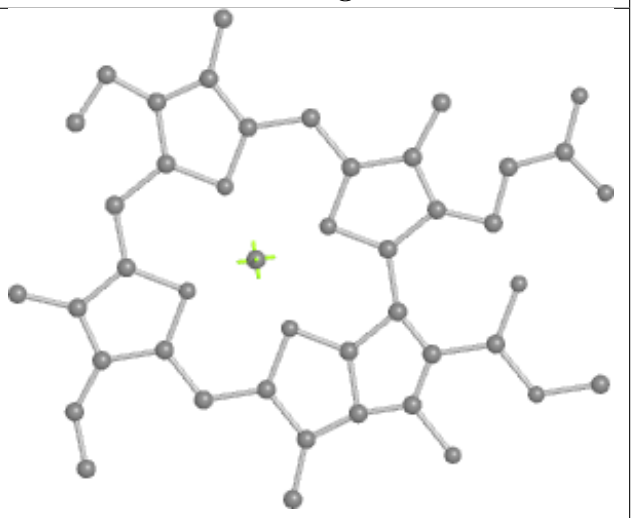
Bond lengths



Bond angles

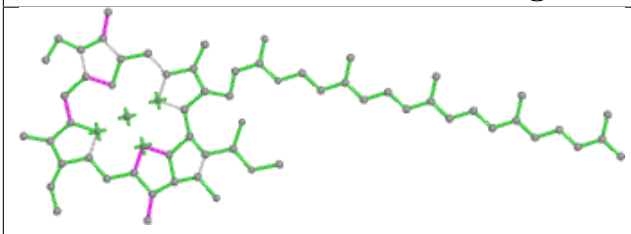


Torsions



Rings

Ligand CLA 7 312



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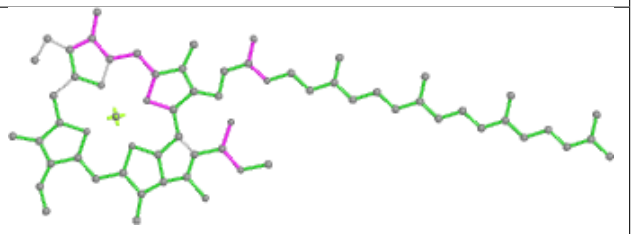
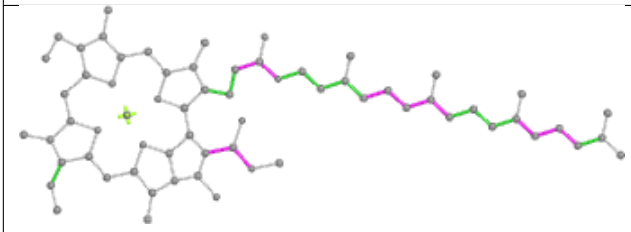
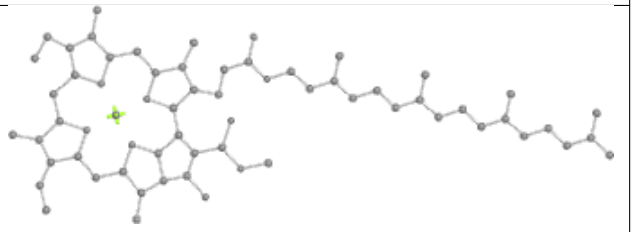


Bond angles

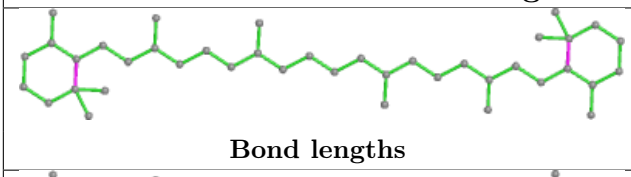


Torsions

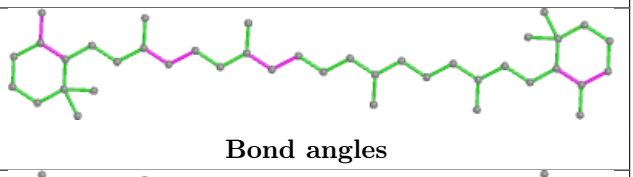


Rings

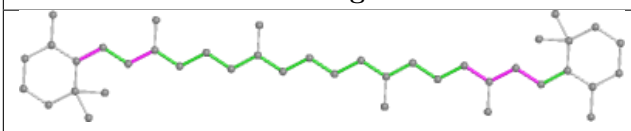
Ligand BCR B 619



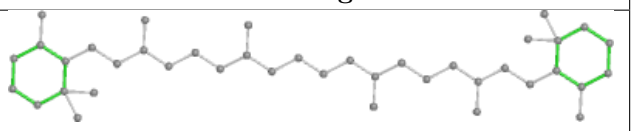
Bond lengths



Bond angles

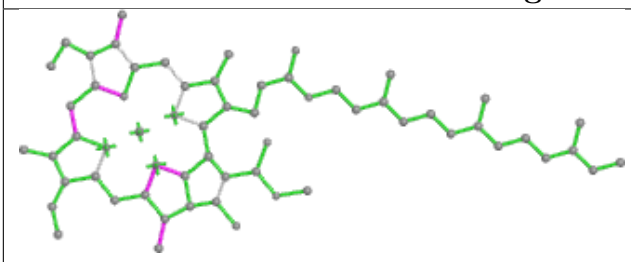


Torsions

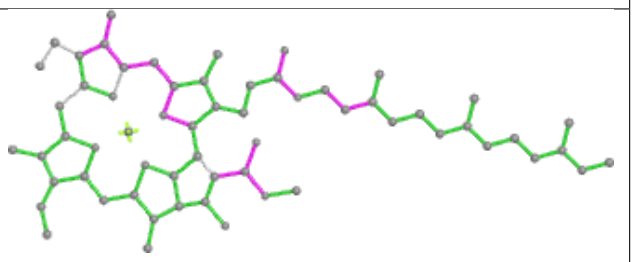


Rings

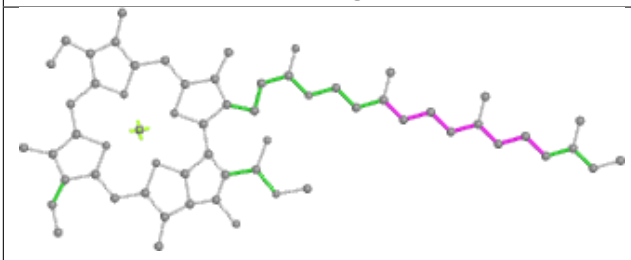
Ligand CLA B 604



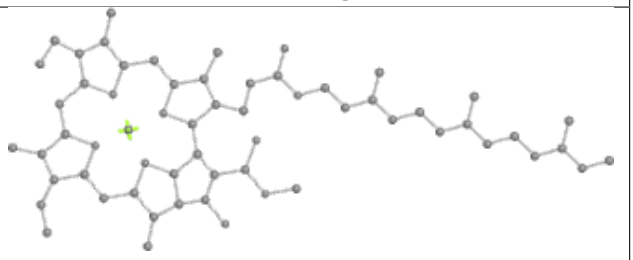
Bond lengths



Bond angles

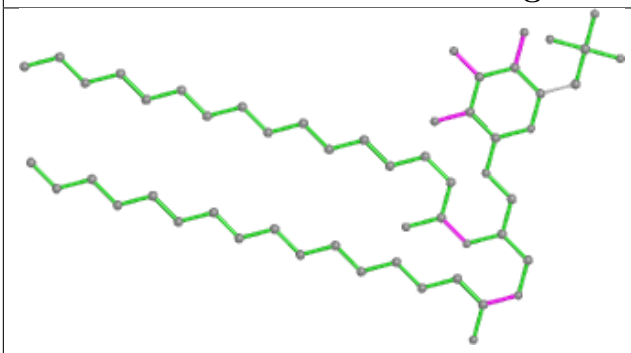


Torsions



Rings

Ligand SQD D 403



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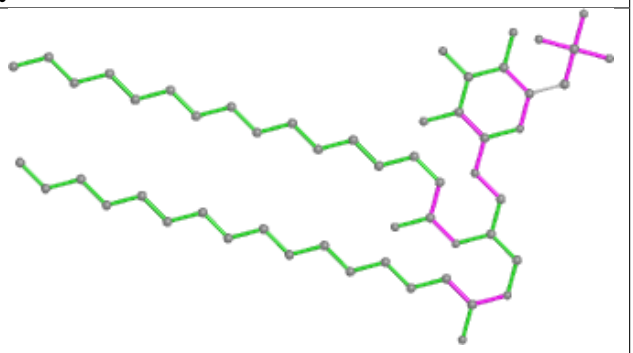
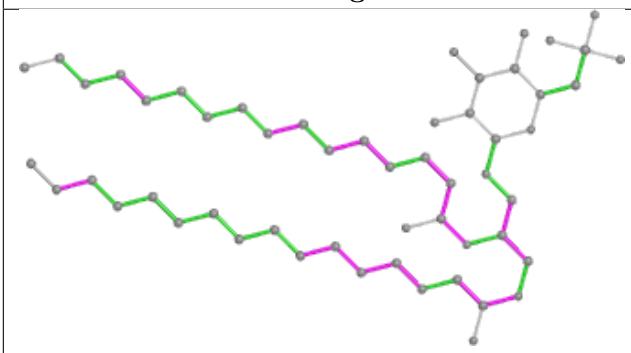


Bond angles



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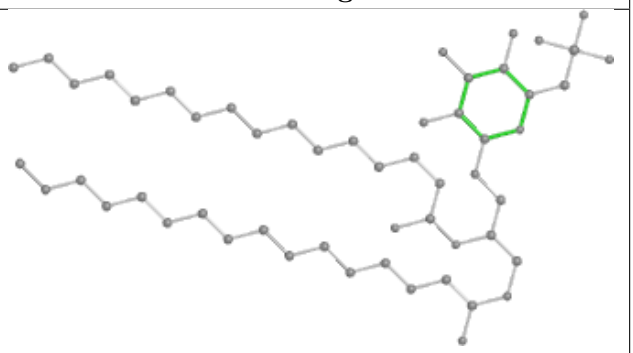
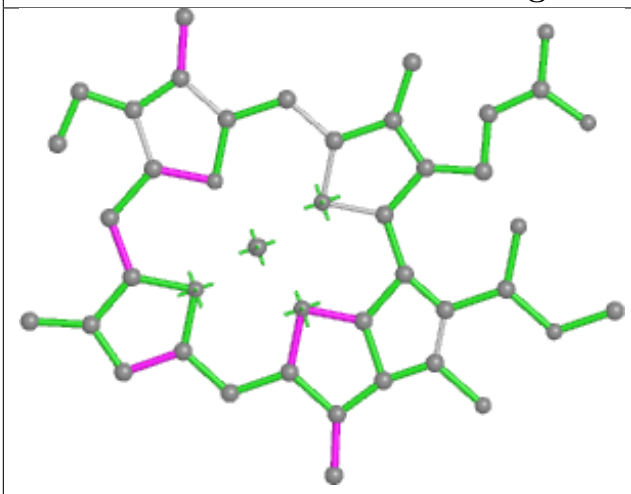


Rings

Ligand CLA 9 309



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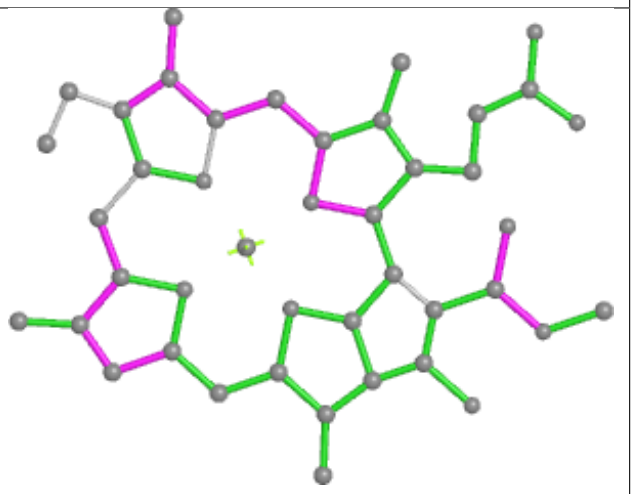
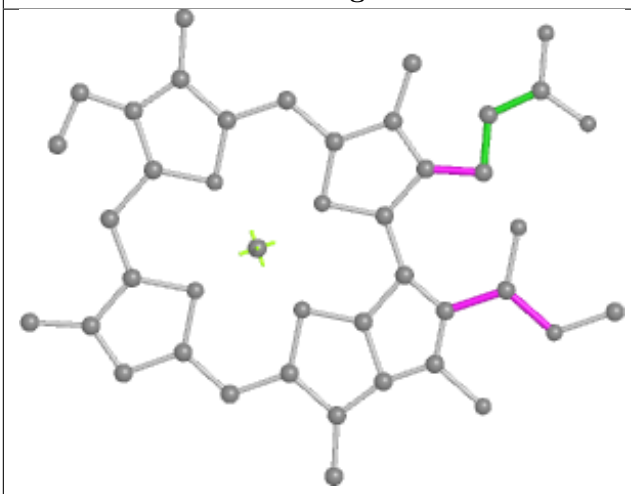


Bond angles



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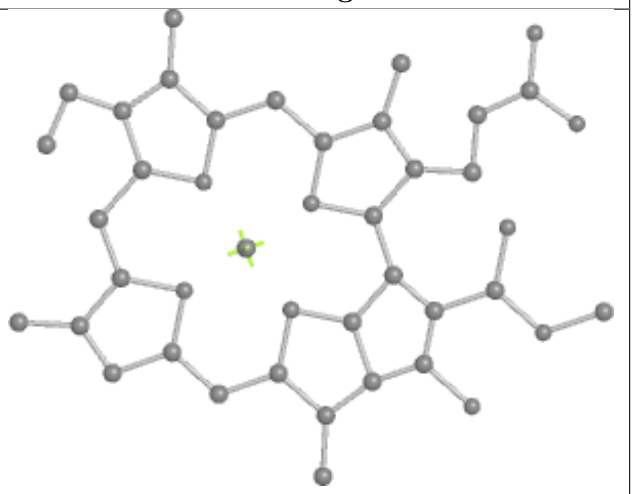
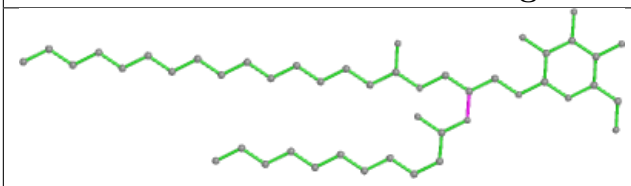
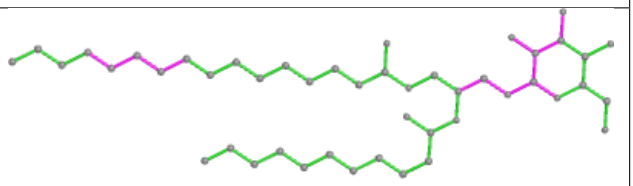


Rings

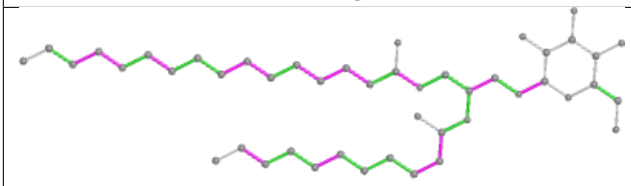
Ligand LMG C 519



Bond lengths



Bond angles



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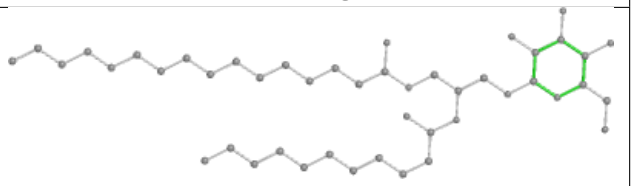
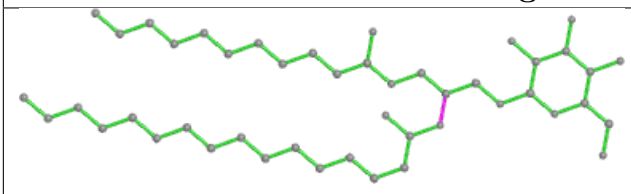


Rings

Ligand LMG D 410



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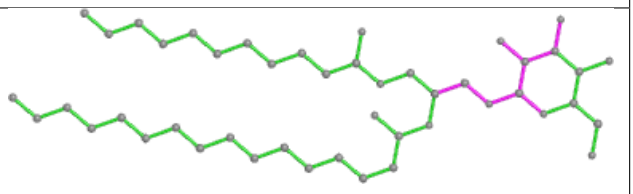
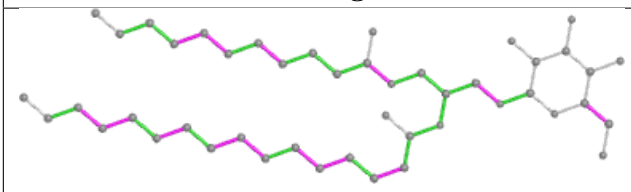


Bond angles



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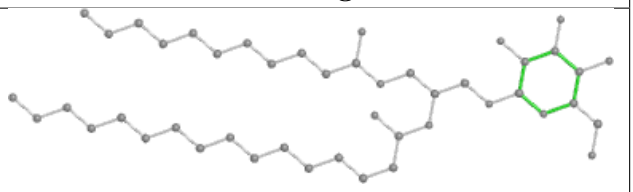
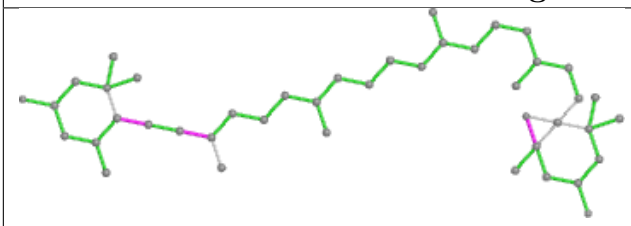
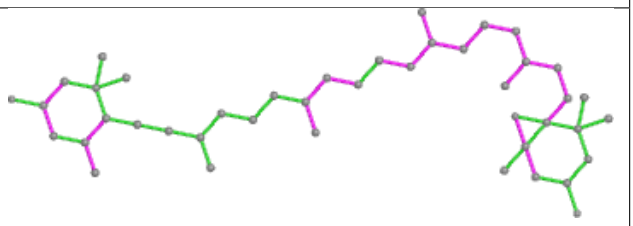


Rings

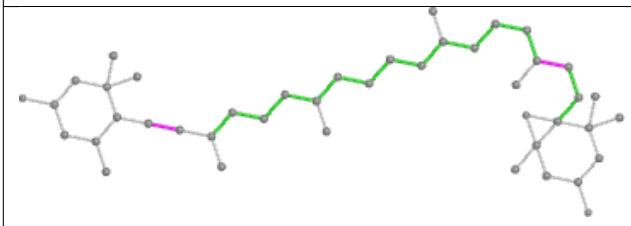
Ligand DD6 8 303



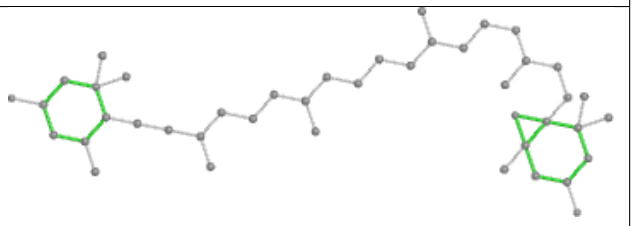
Bond lengths



Bond angles

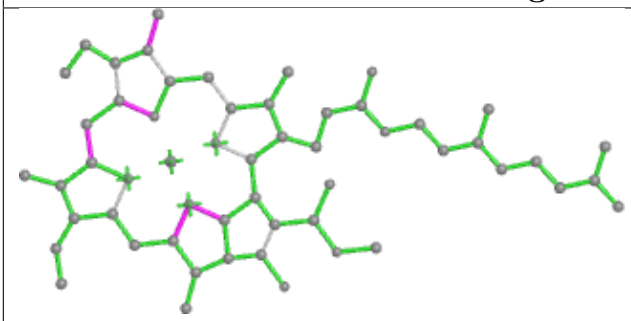


Torsions



Rings

Ligand CLA 1 311



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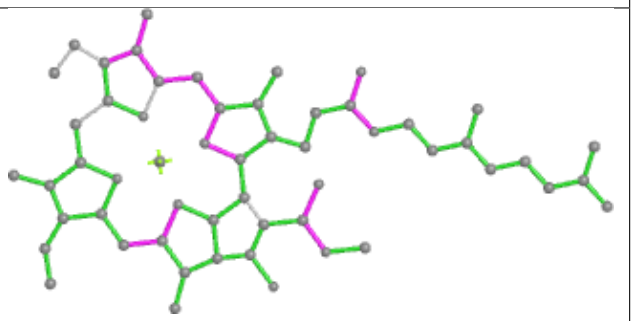
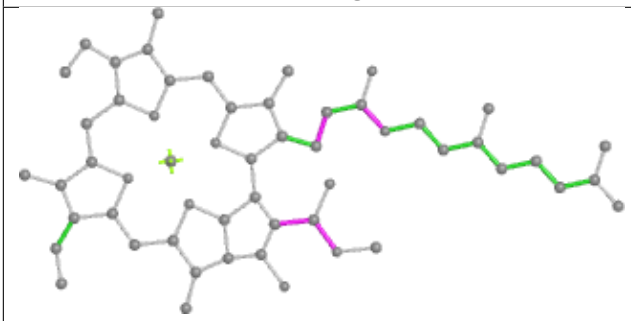
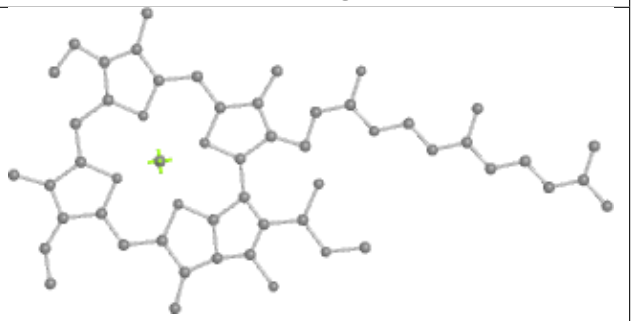


Bond angles

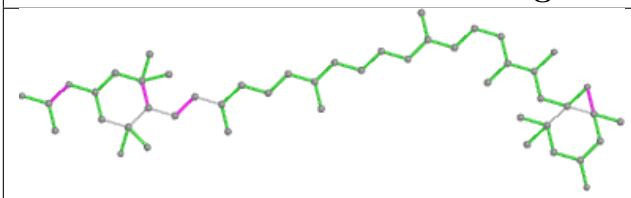


Torsions



Rings

Ligand A86 6 305



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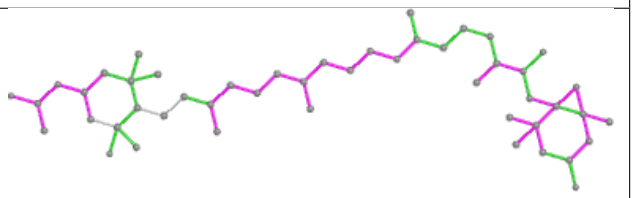
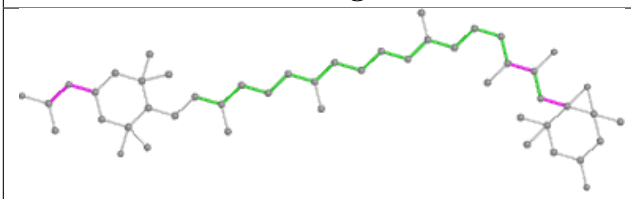
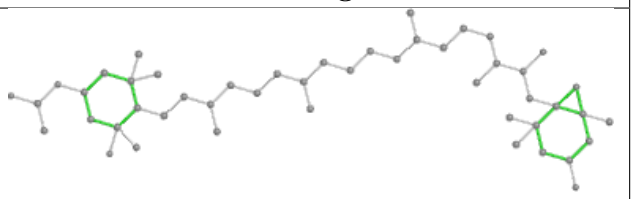


Bond angles

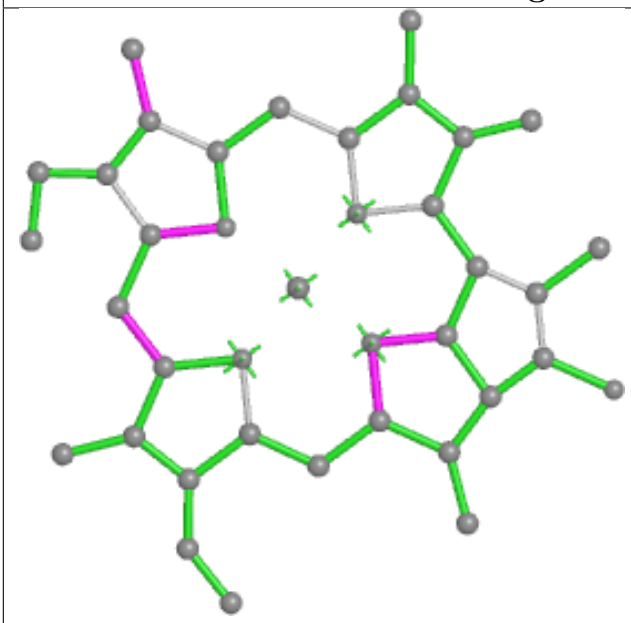


Torsions



Rings

Ligand CLA 5 317



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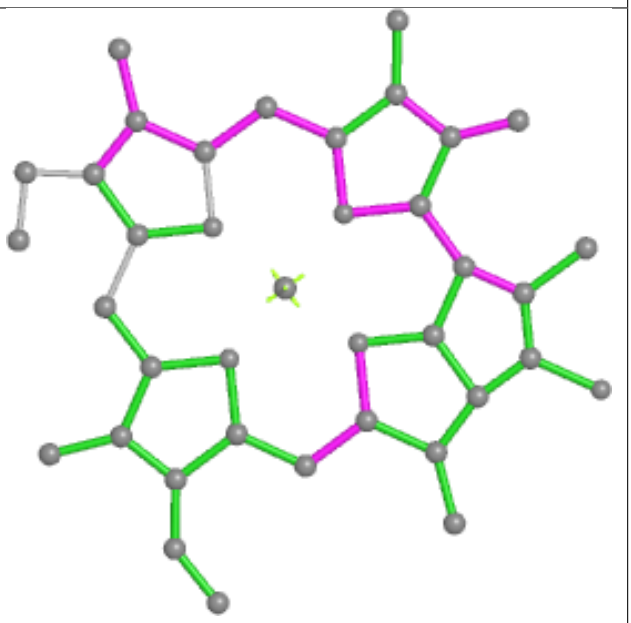
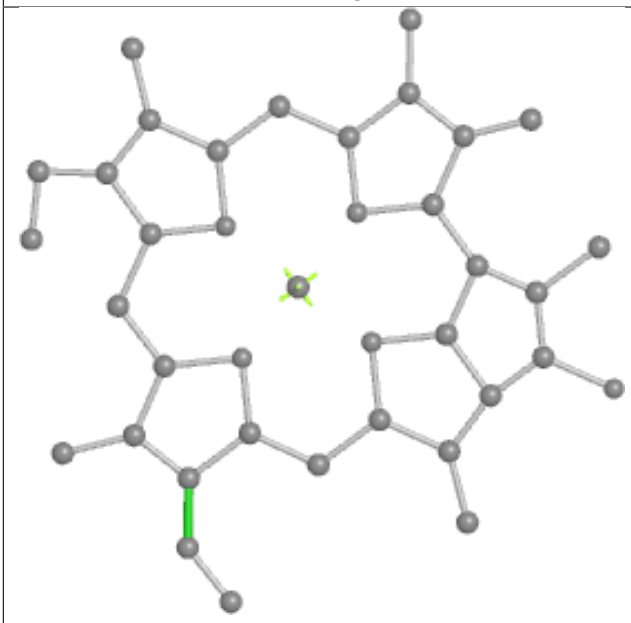
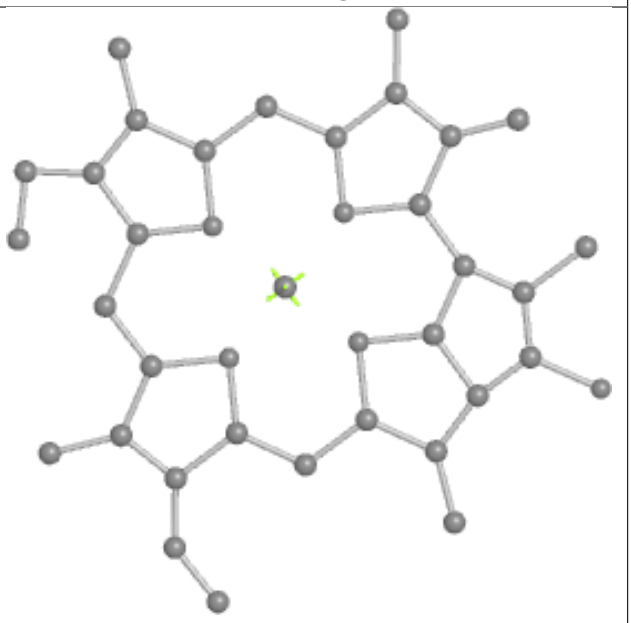


Bond angles

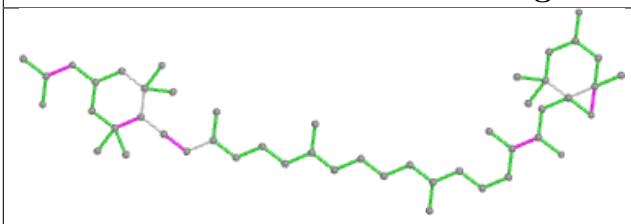


Torsions

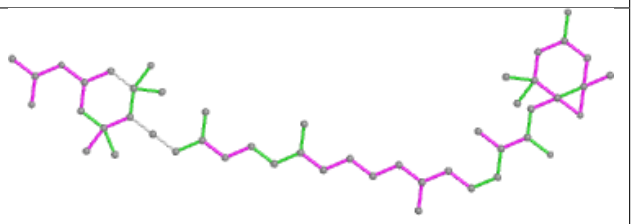


Rings

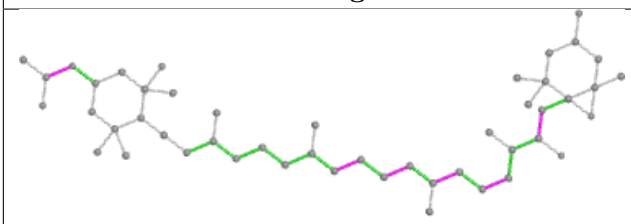
Ligand A86 2 302



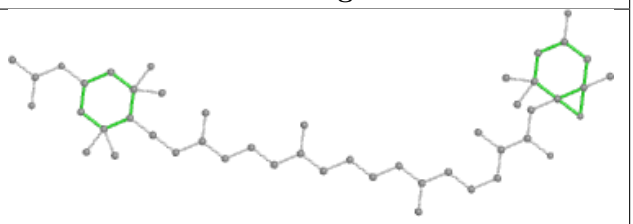
Bond lengths



Bond angles

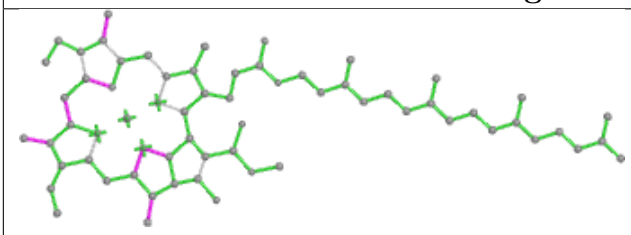


Torsions

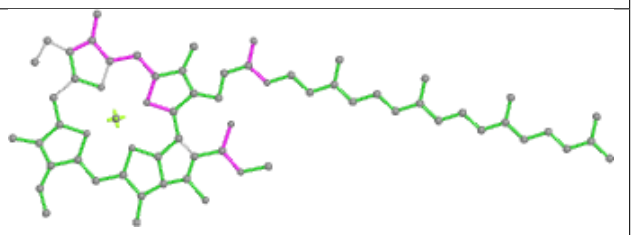


Rings

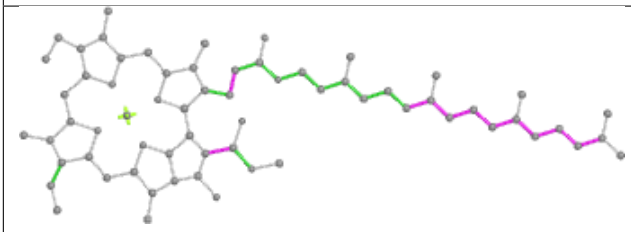
Ligand CLA C 507



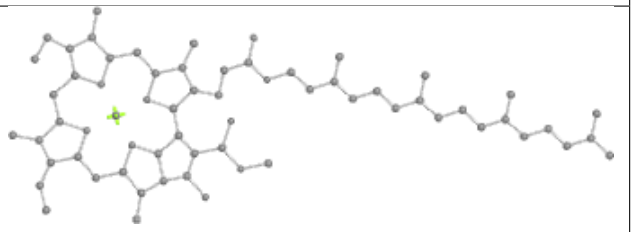
Bond lengths



Bond angles

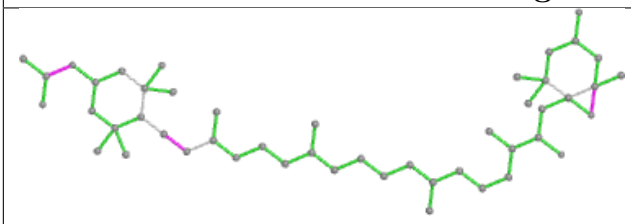


Torsions

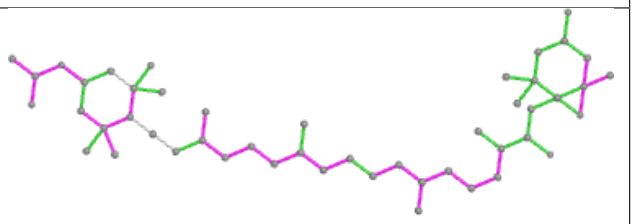


Rings

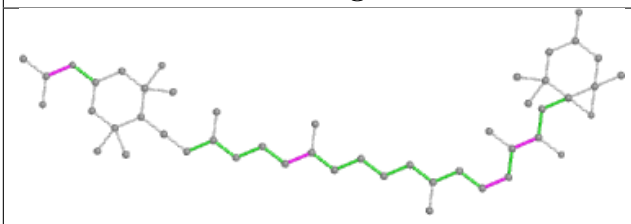
Ligand A86 2 301



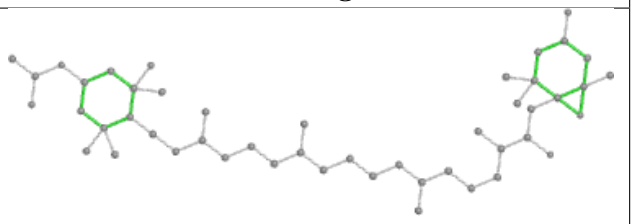
Bond lengths



Bond angles

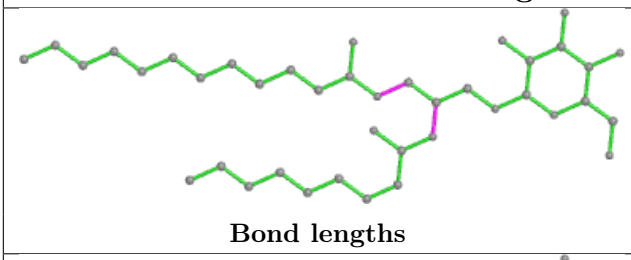


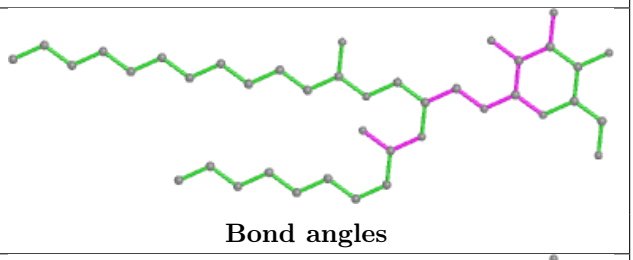
Torsions

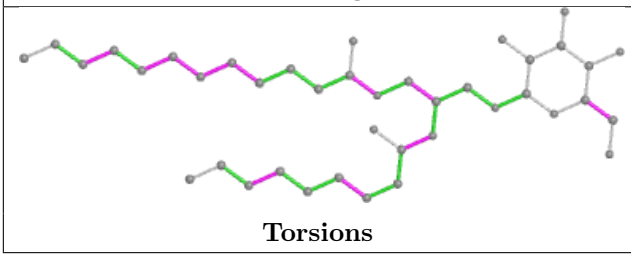


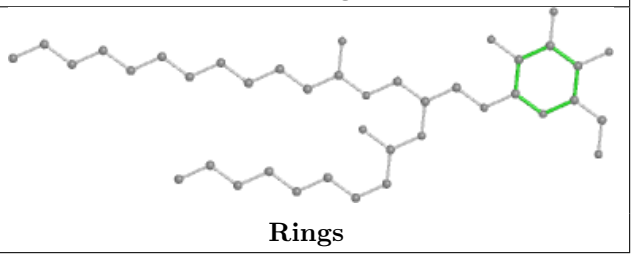
Rings

Ligand LMG M 201

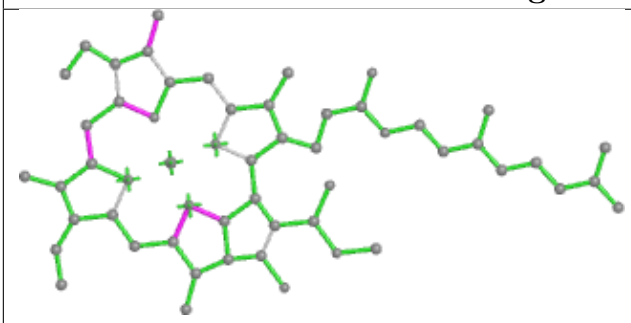

Bond lengths


Bond angles


Torsions


Rings

Ligand CLA 1 308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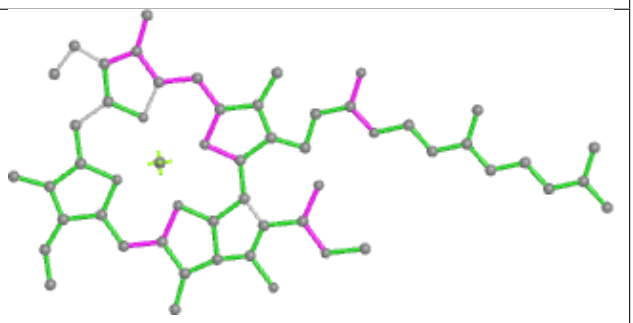
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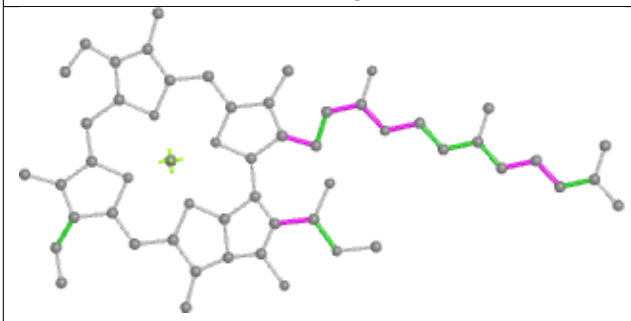
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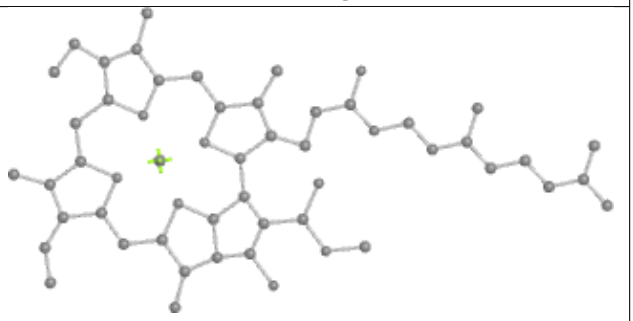
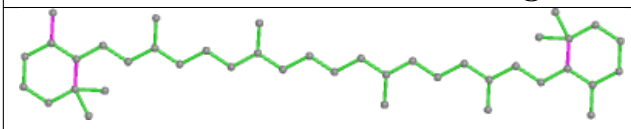

Rings

Ligand BCR B 617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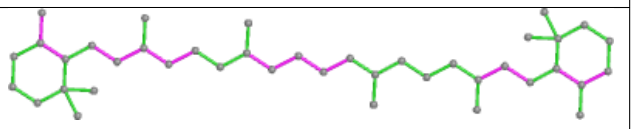
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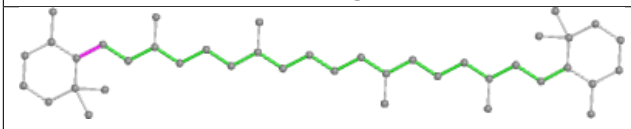
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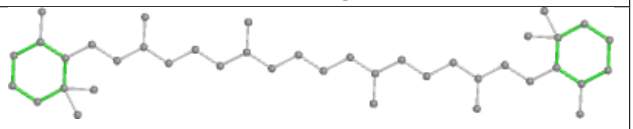
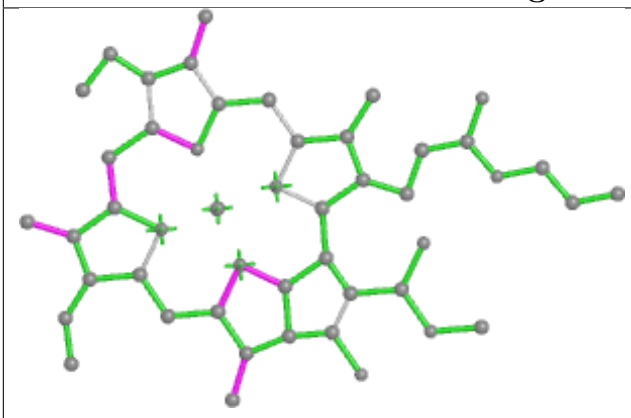

Rings

Ligand CLA 3 305



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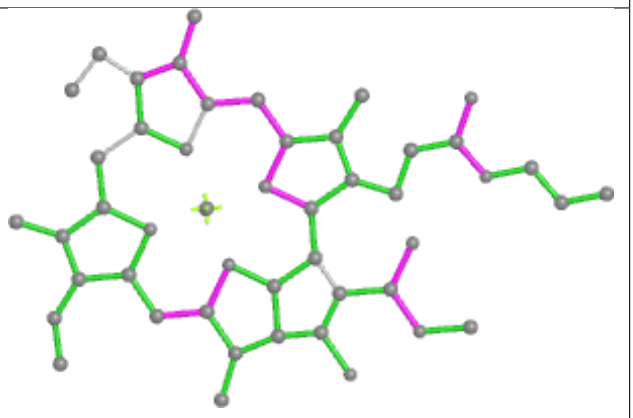
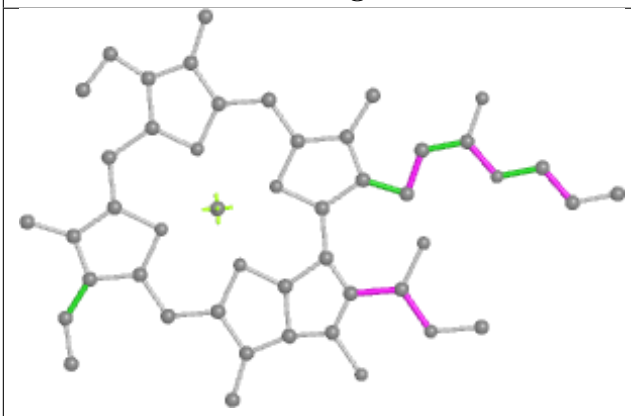


Bond angles



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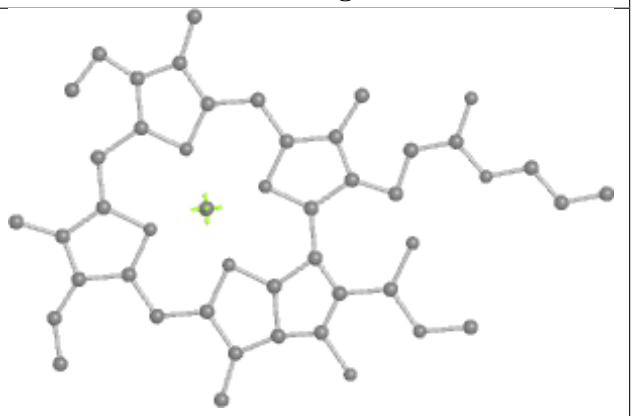
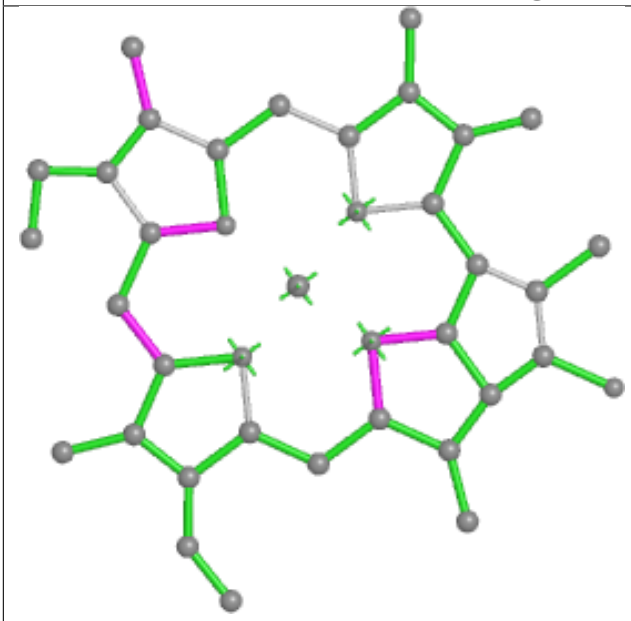


Rings

Ligand CLA 1 315



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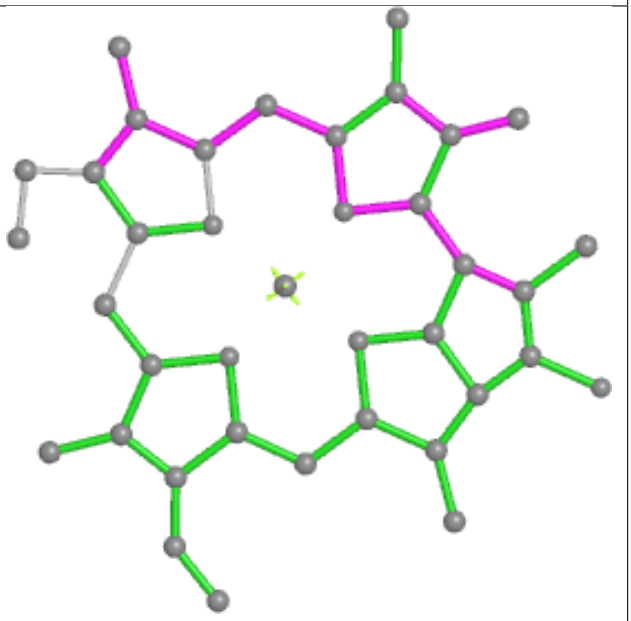

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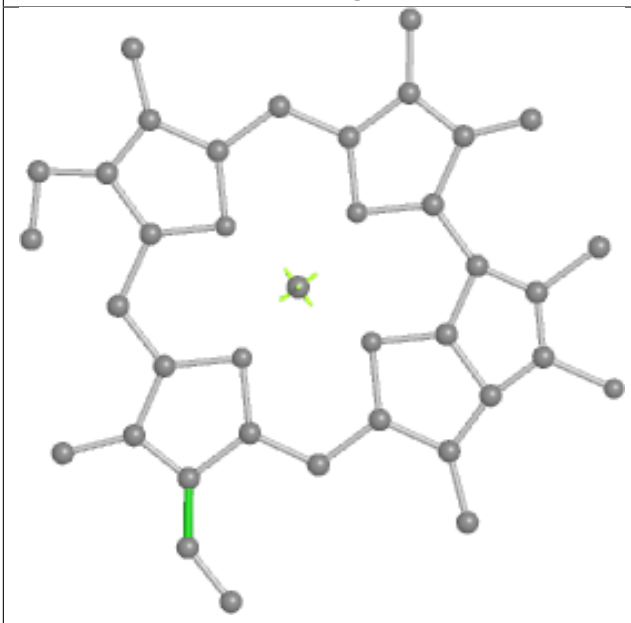

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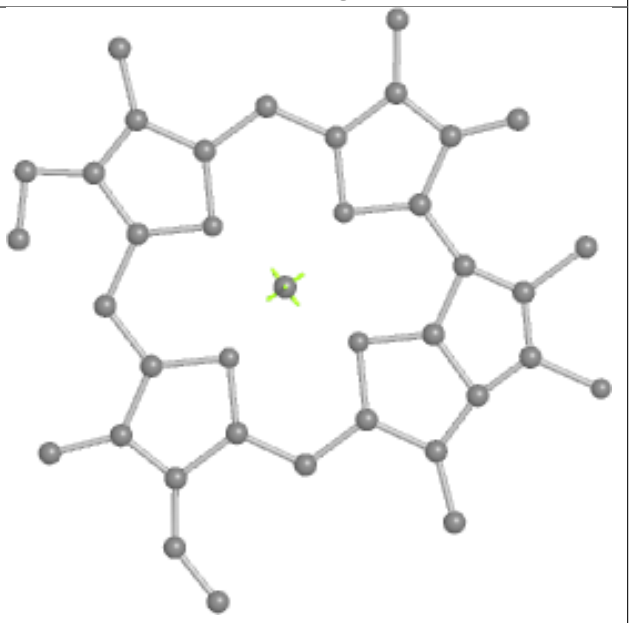
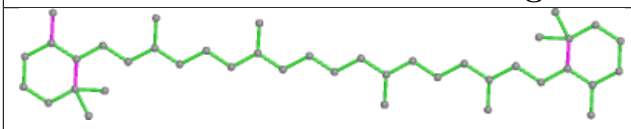


Rings

Ligand BCR h 101



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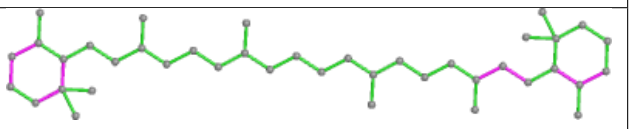

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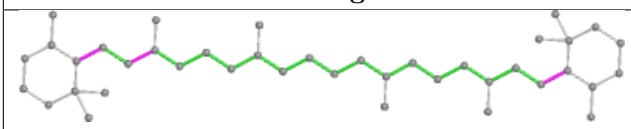

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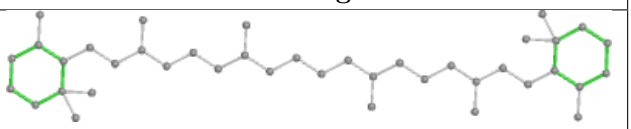
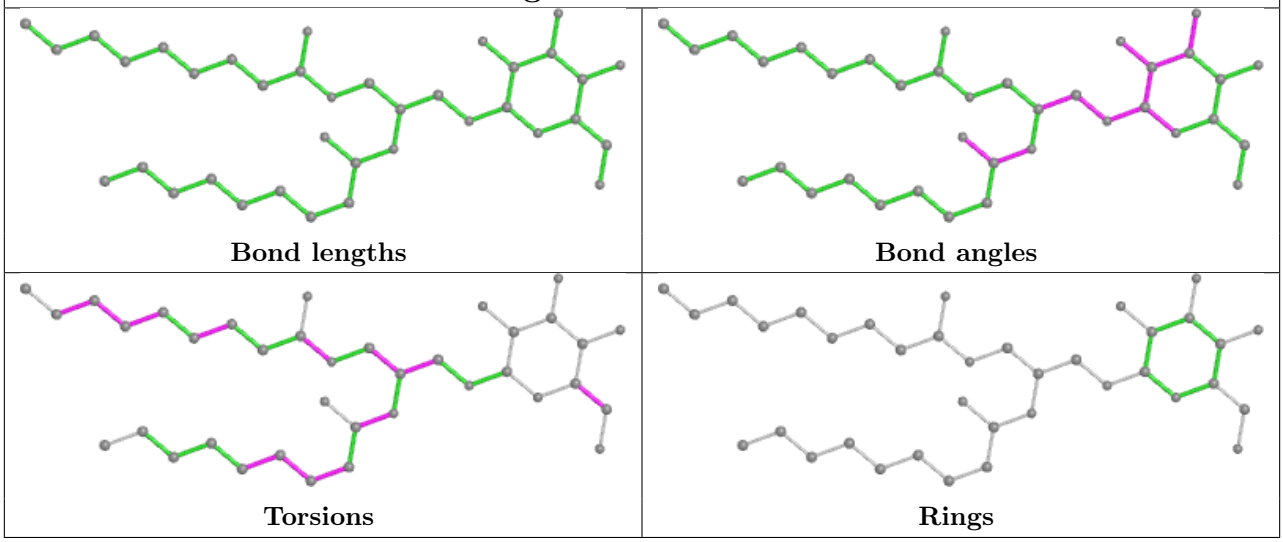


Rings

Ligand LMG d 410



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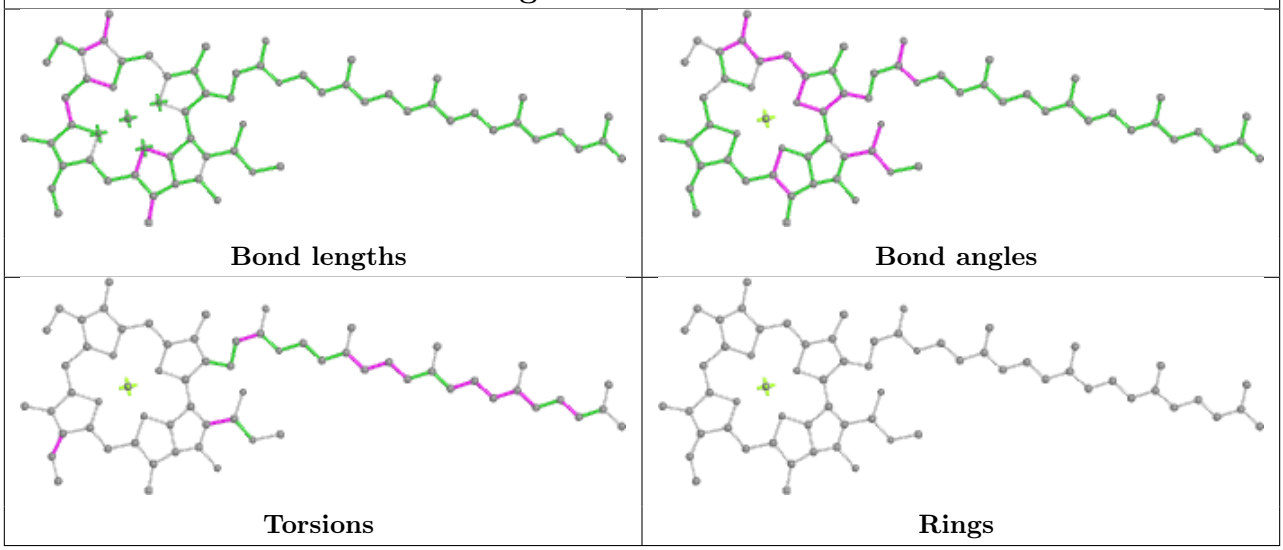

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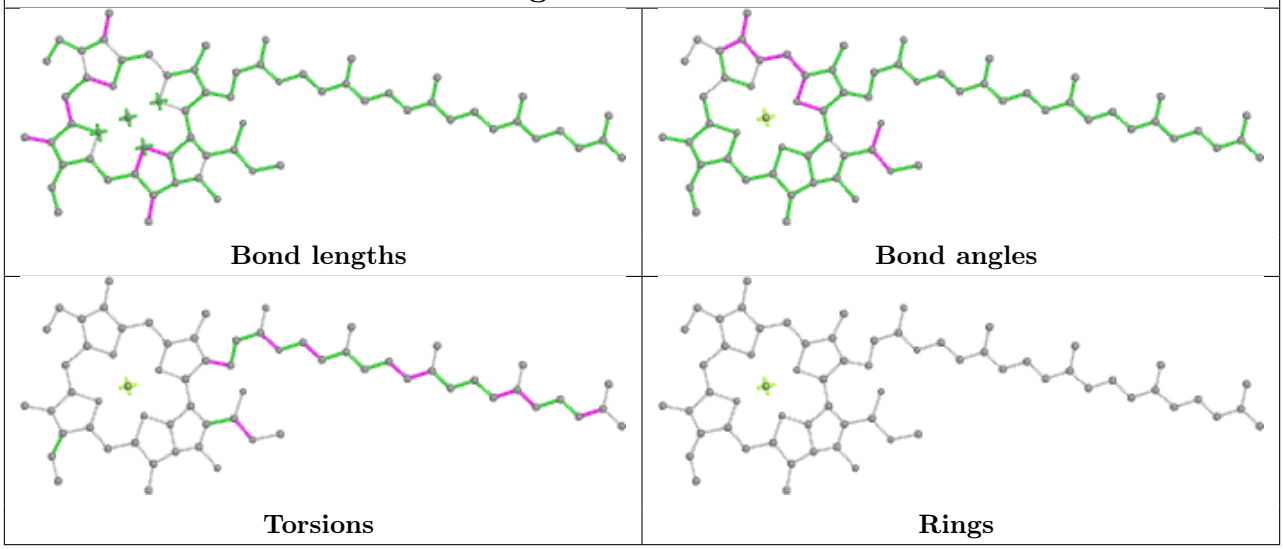

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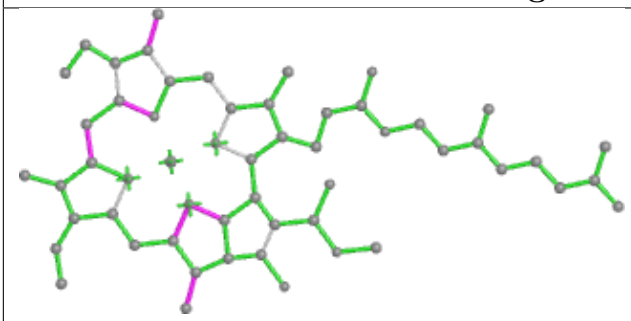

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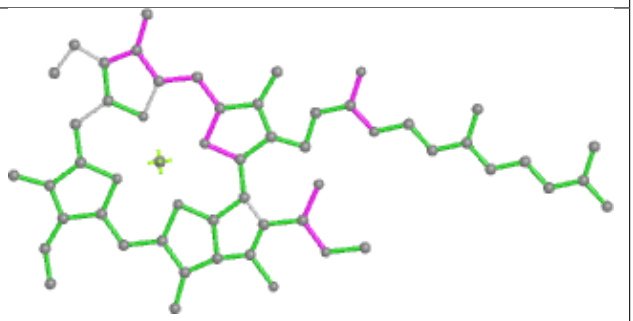
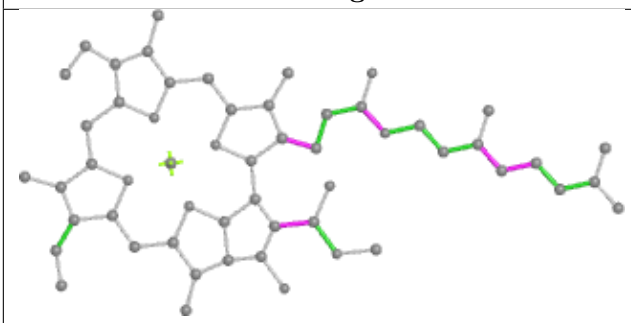


Bond angles



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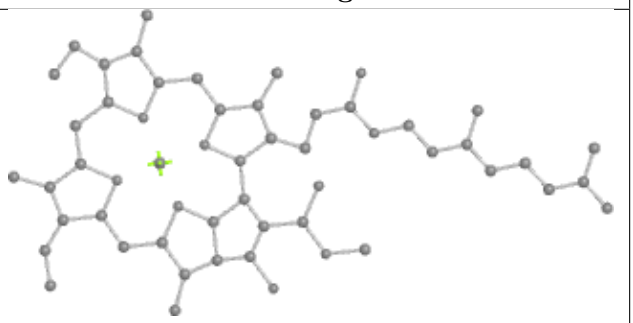
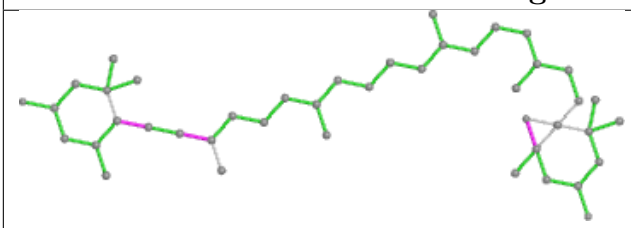


Rings

Ligand DD6 3 315



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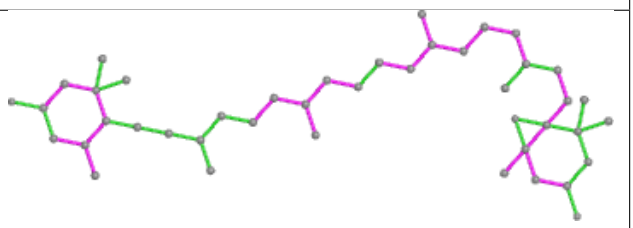
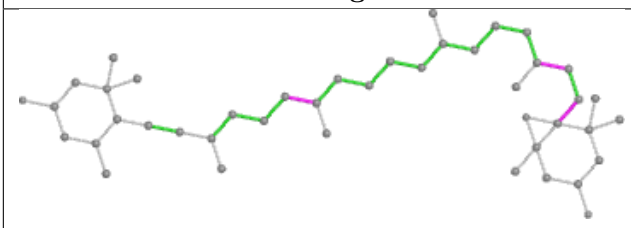


Bond angles



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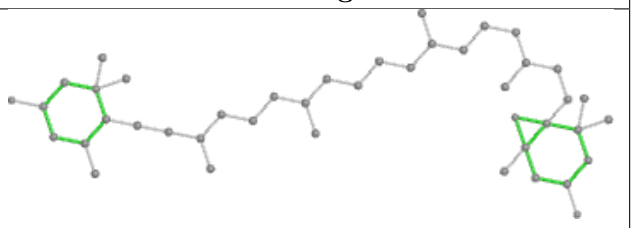
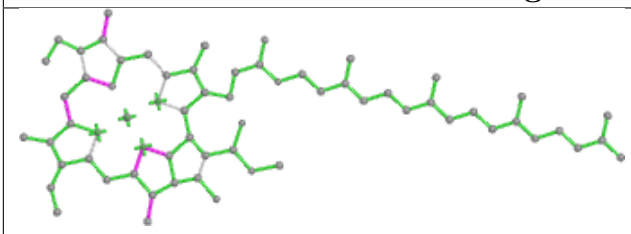


Rings

Ligand CLA C 505



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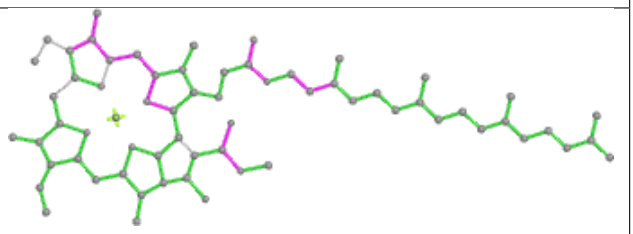
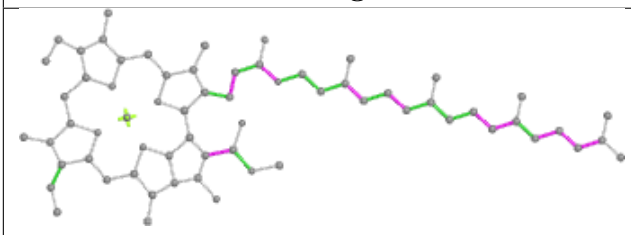


Bond angles



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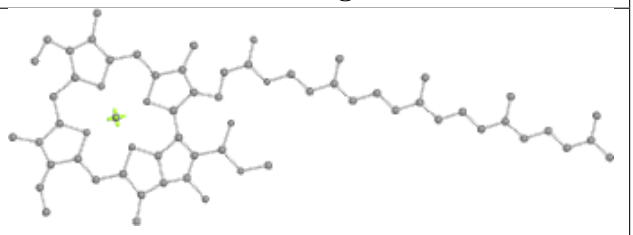
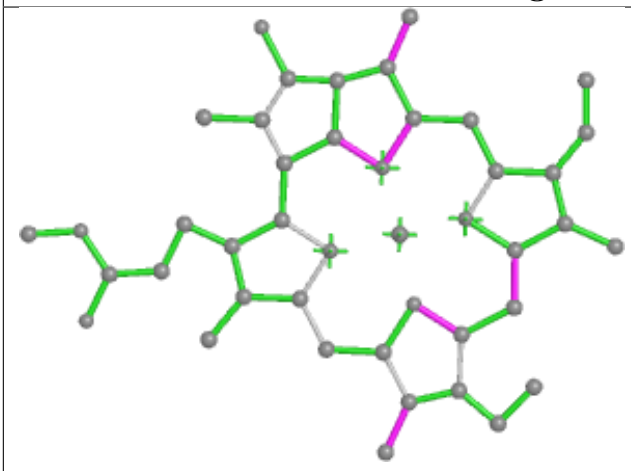


Rings

Ligand CLA 7 314



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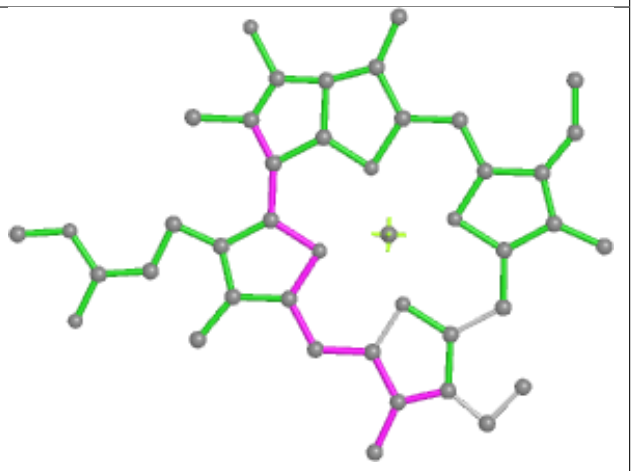
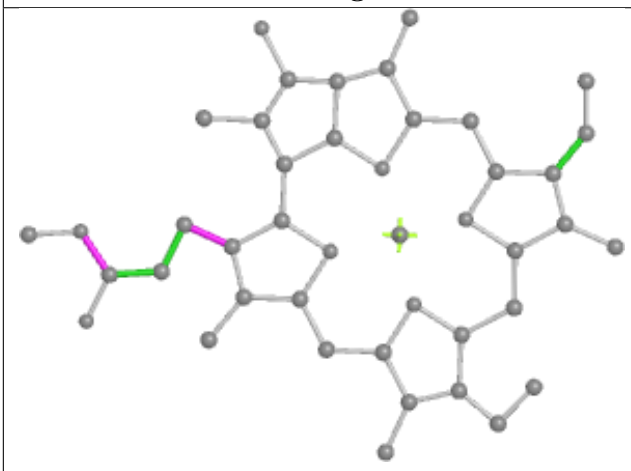


Bond angles



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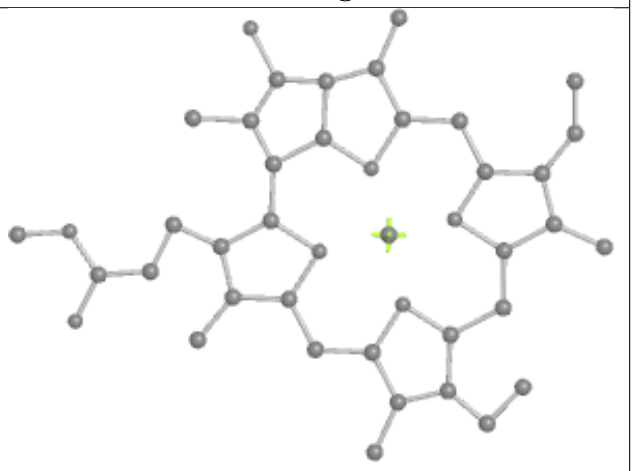
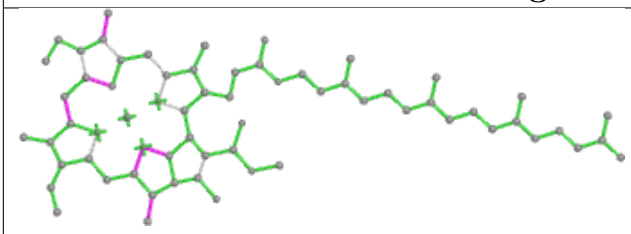


Rings

Ligand CLA c 509



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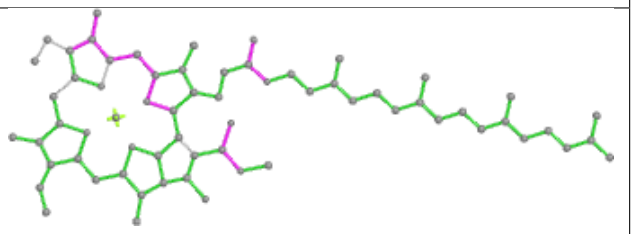
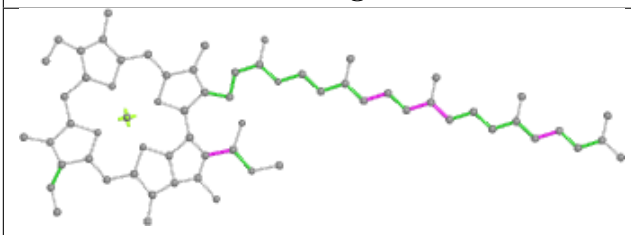


Bond angles



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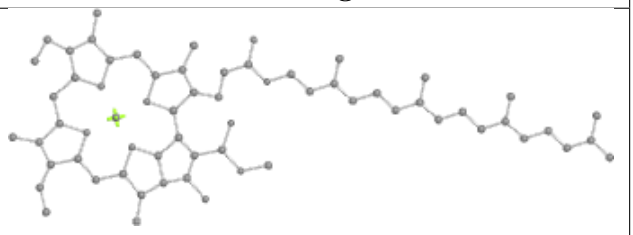
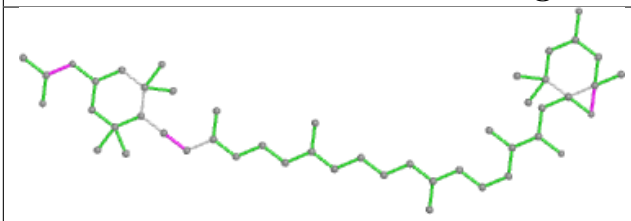
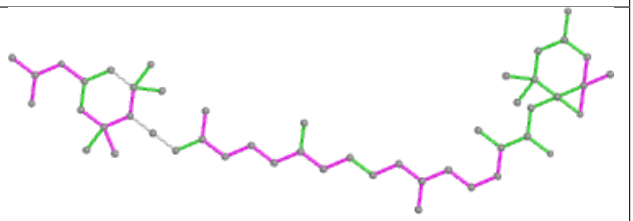


Rings

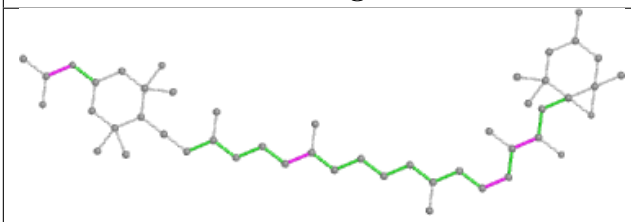
Ligand A86 9 301



Bond lengths



Bond angles



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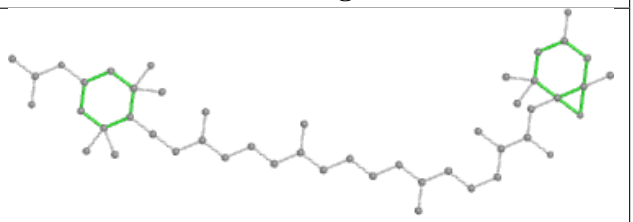
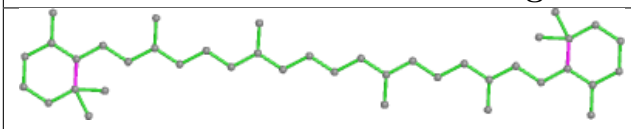


Rings

Ligand BCR k 102



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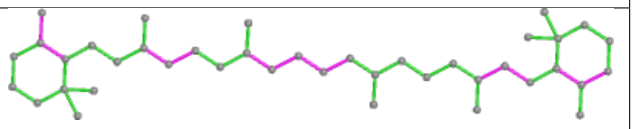
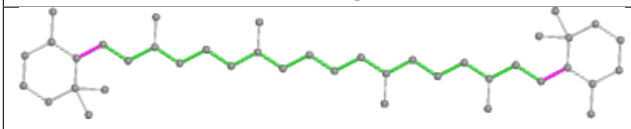


Bond angles



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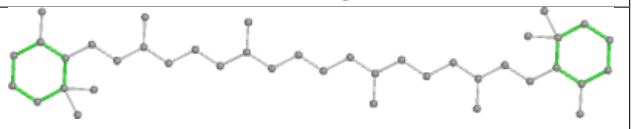
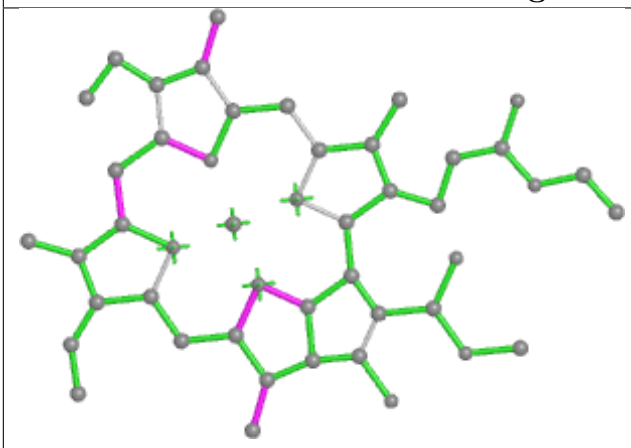
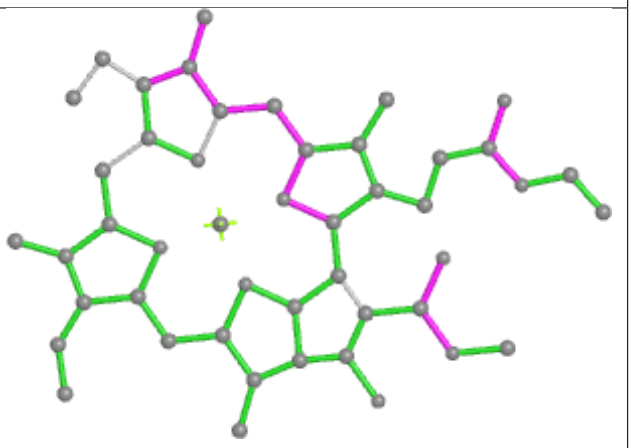


Rings

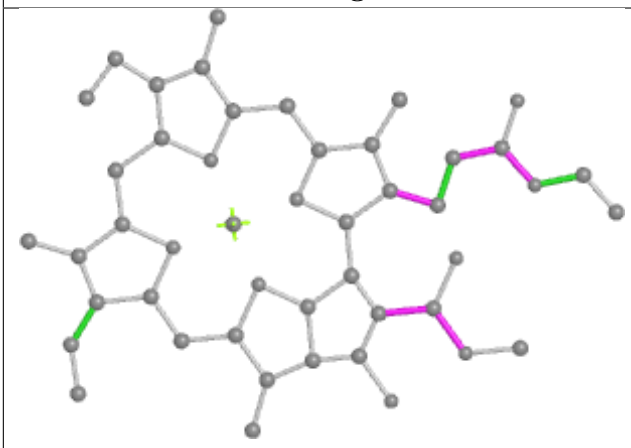
Ligand CLA 0 304



Bond lengths



Bond angles



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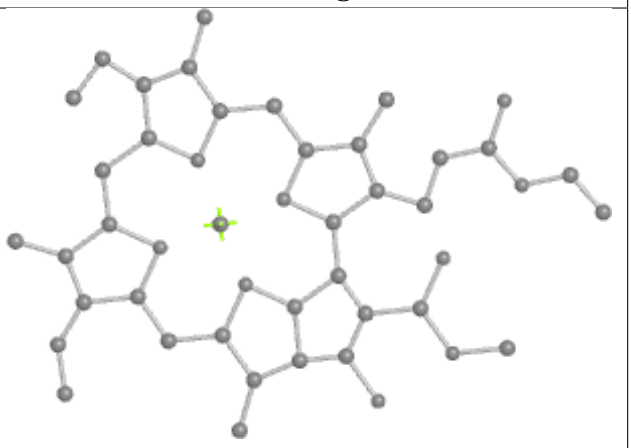
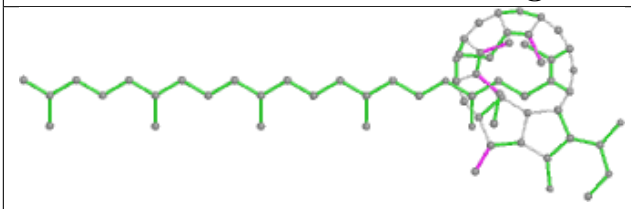
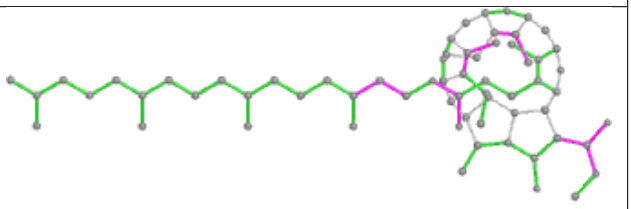


Rings

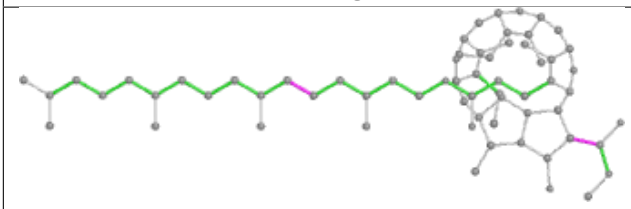
Ligand PHO a 410



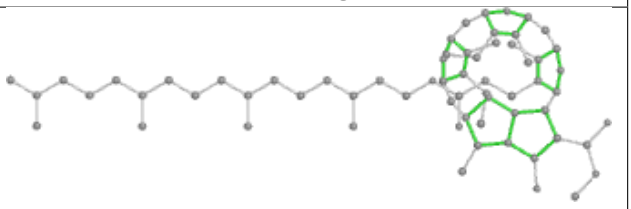
Bond lengths



Bond angles

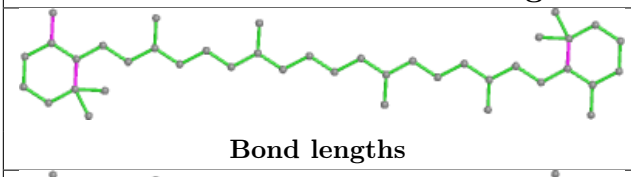


Torsions



Rings

Ligand BCR b 618



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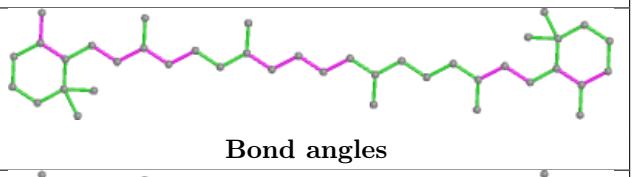

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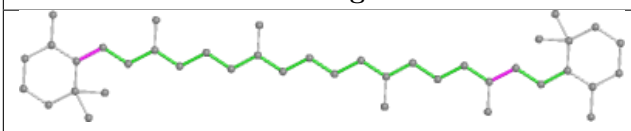

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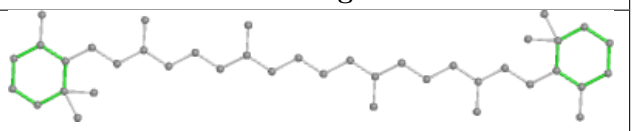

Rings

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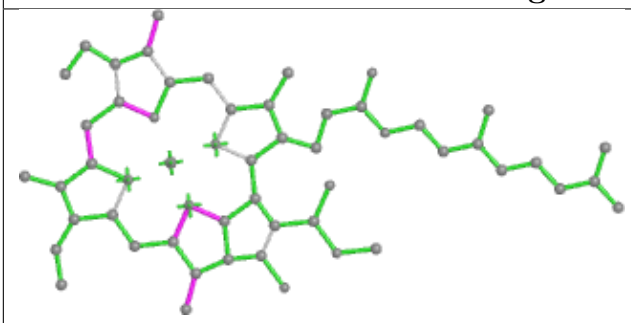

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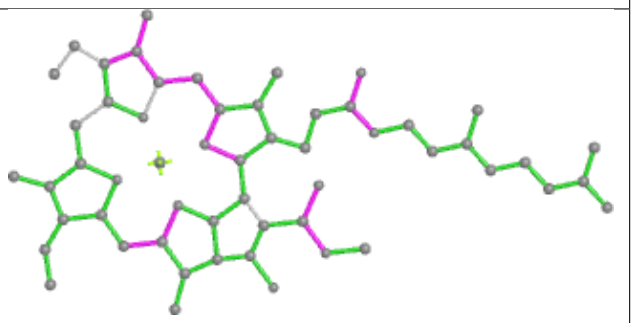

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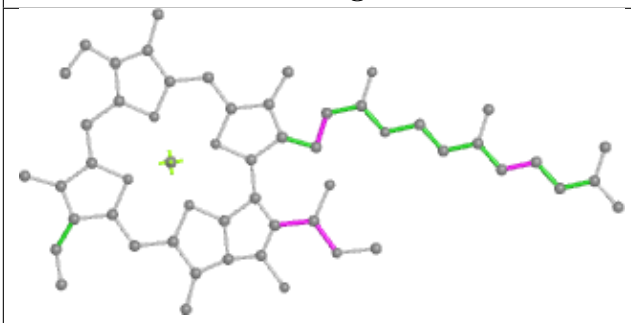

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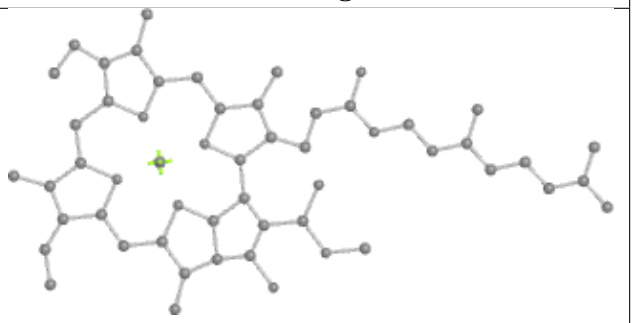

Rings

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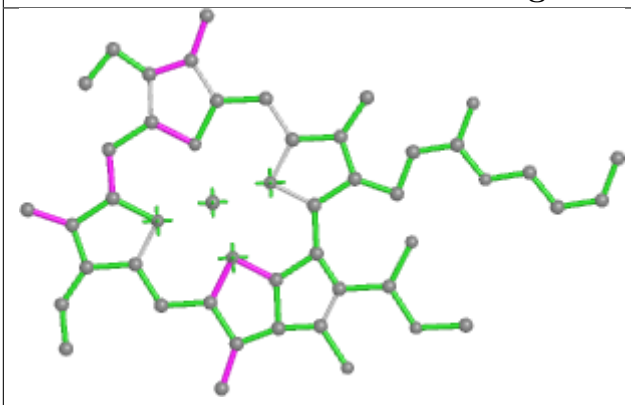

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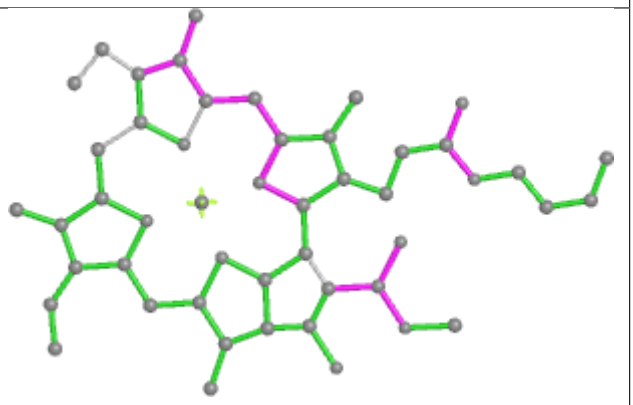

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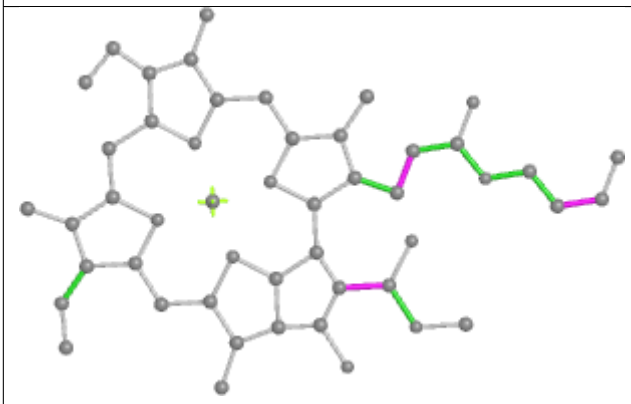

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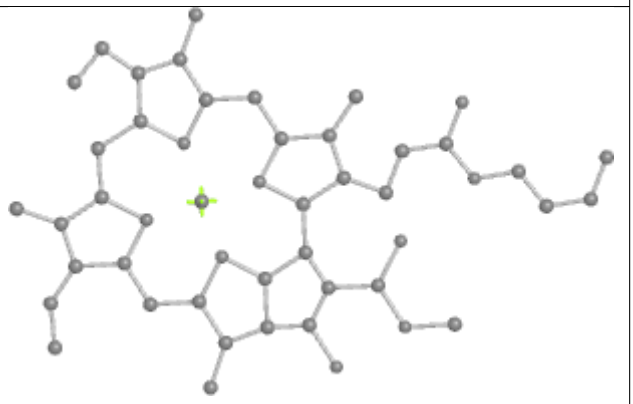
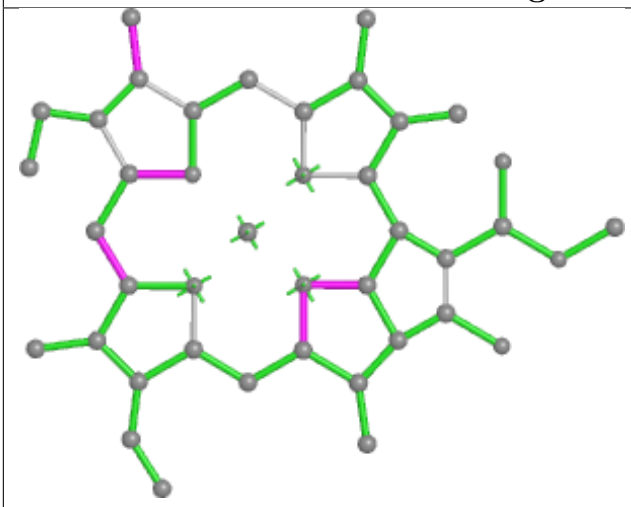


Rings

Ligand CLA 5 316



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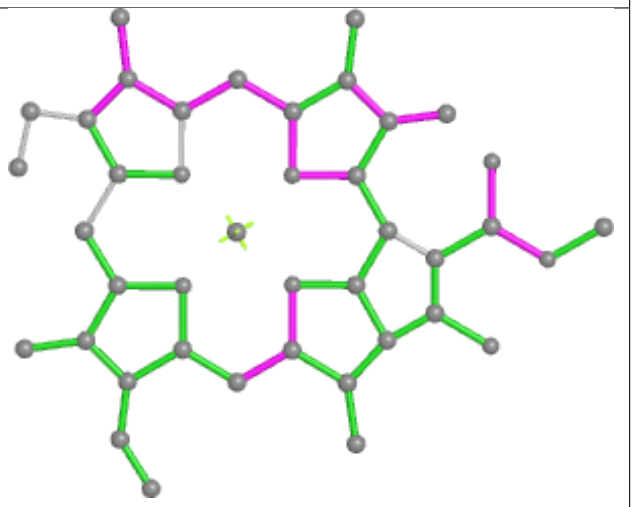

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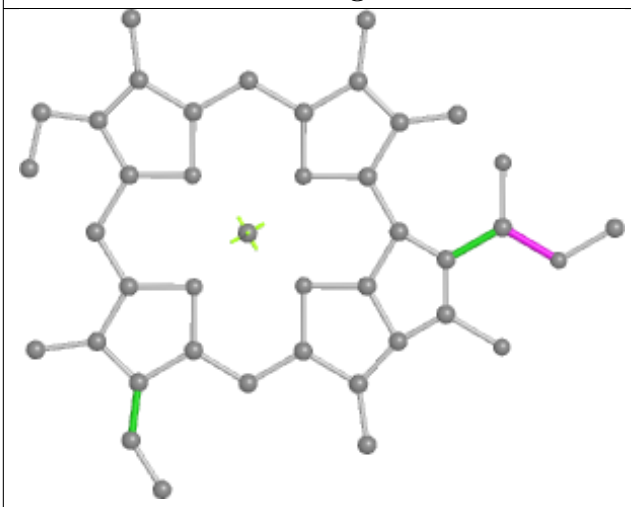

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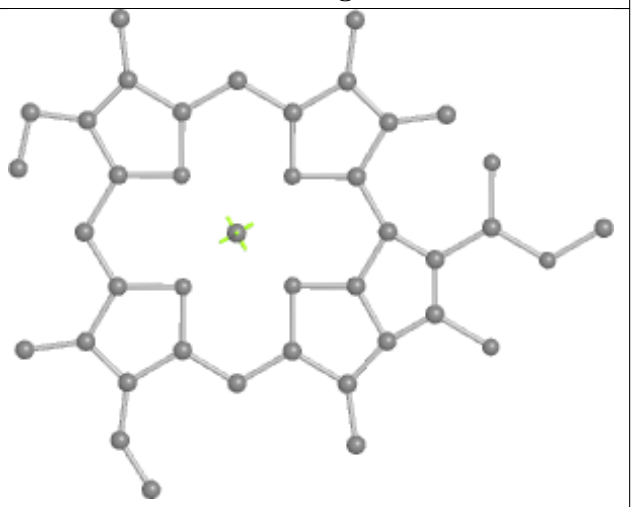
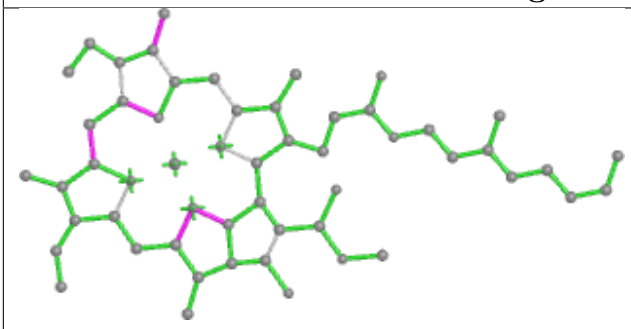


Rings

Ligand CLA 6 308



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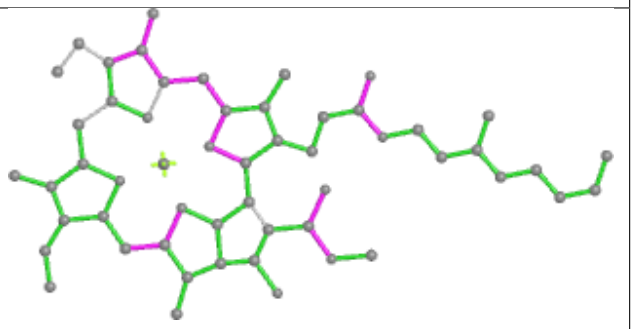

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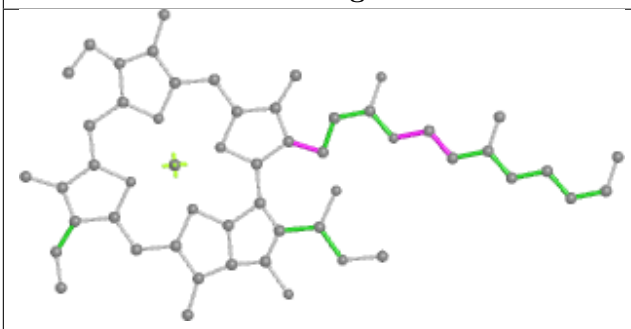

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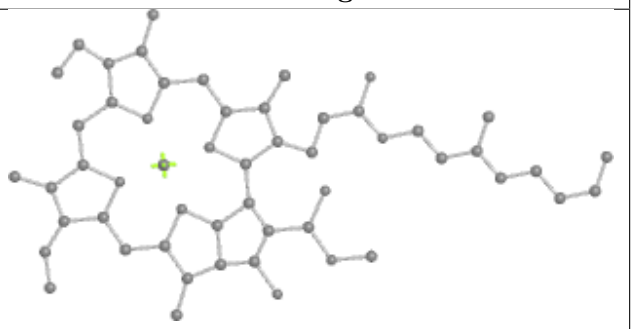

Rings

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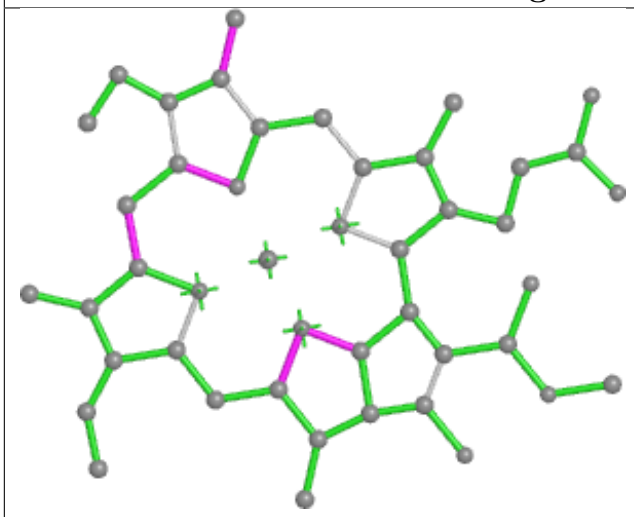

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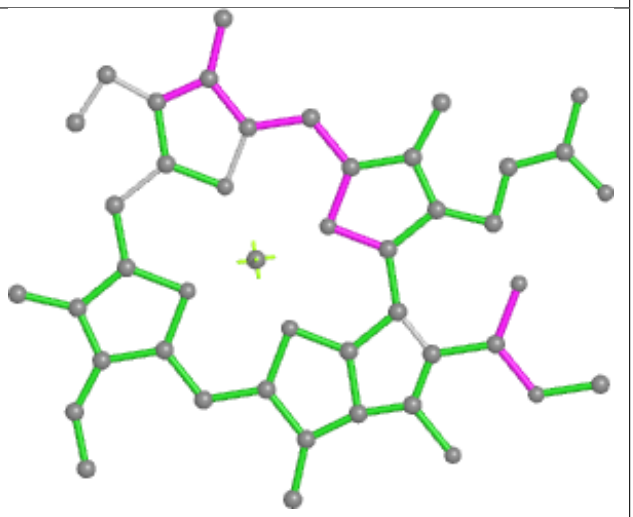

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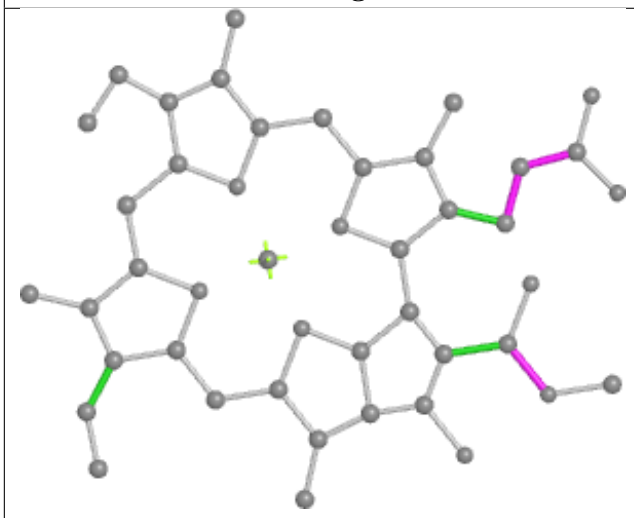

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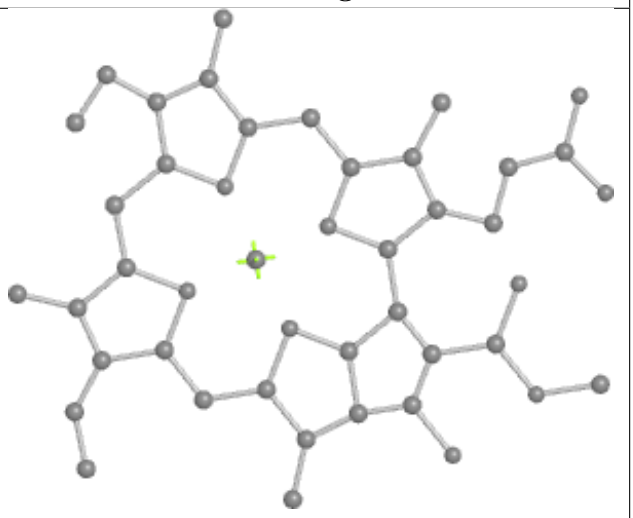

Rings

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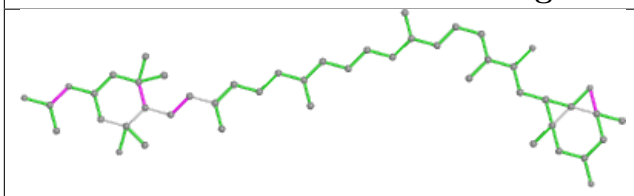

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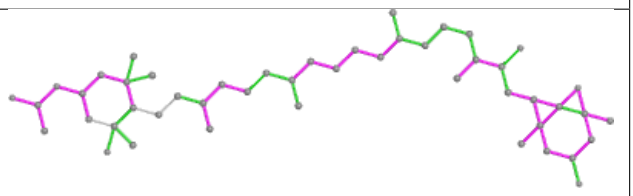

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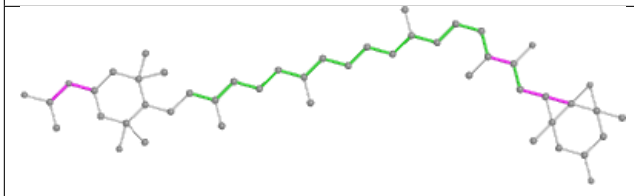

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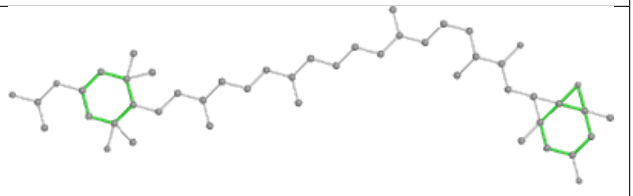
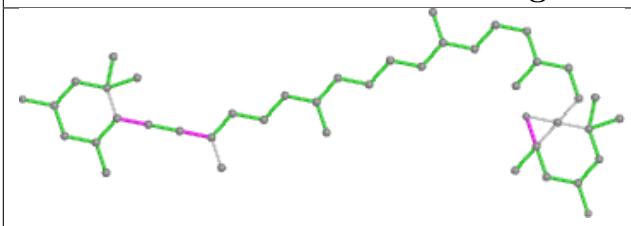


Rings

Ligand DD6 9 304



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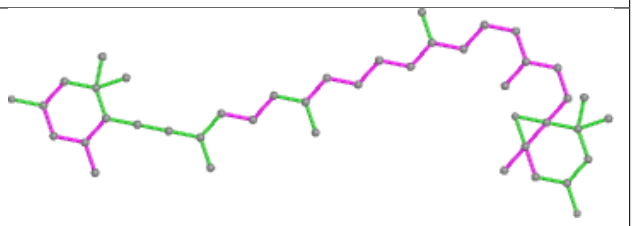

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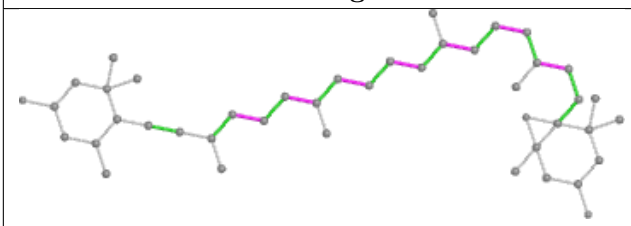

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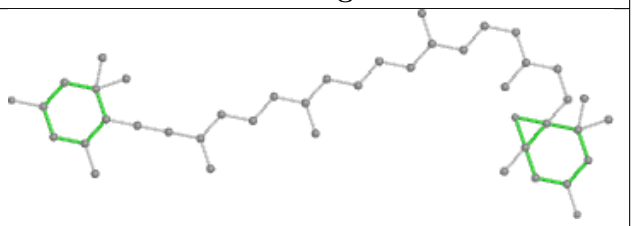
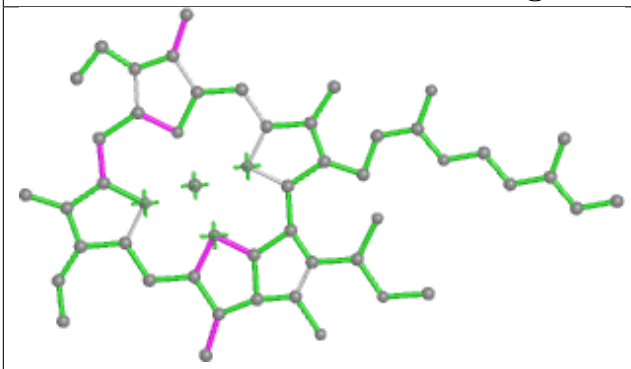


Rings

Ligand CLA Z 101



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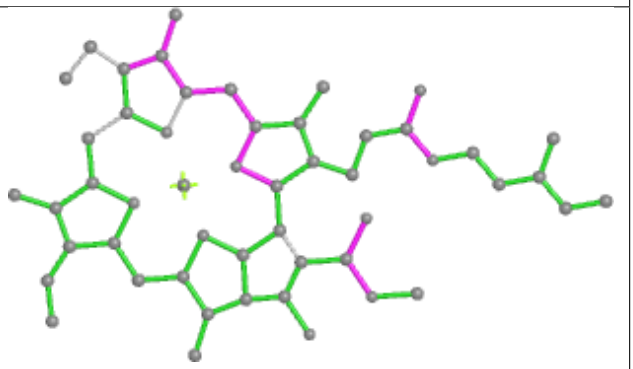

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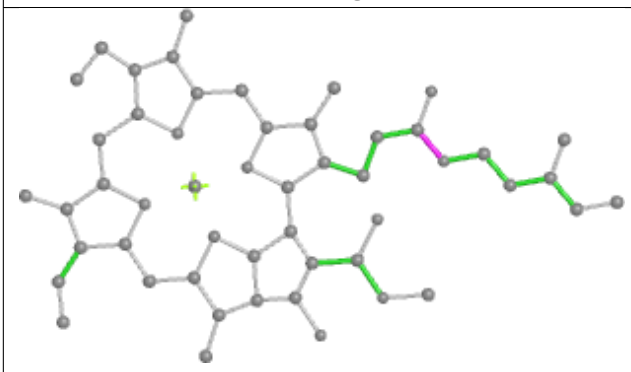

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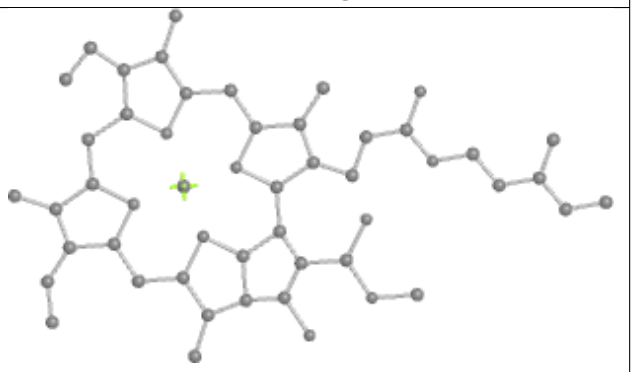
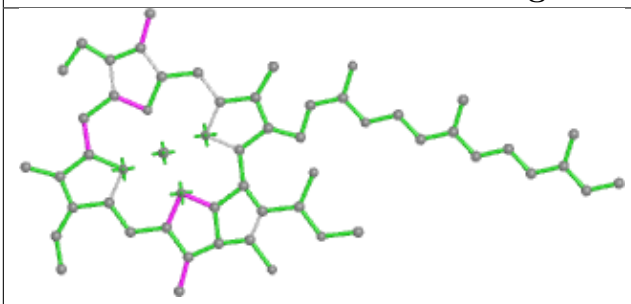


Rings

Ligand CLA 3 312



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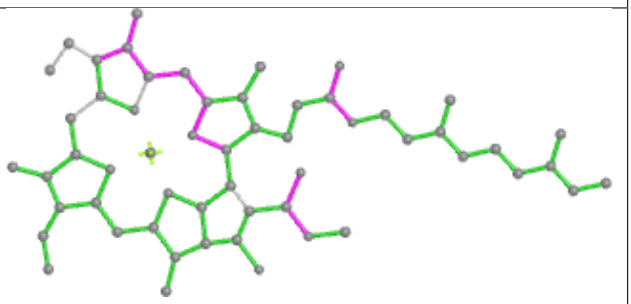

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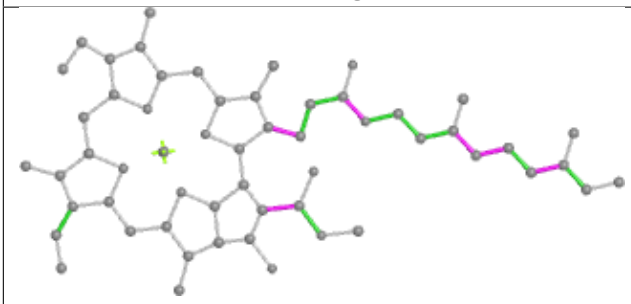

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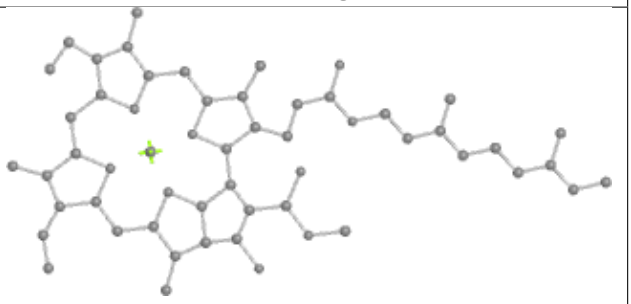
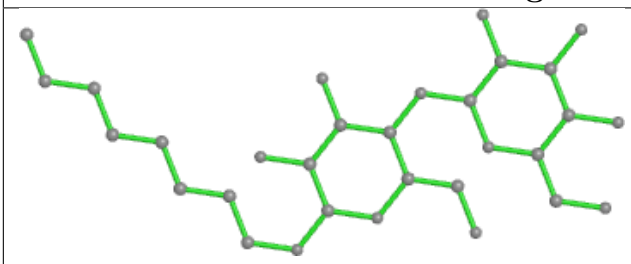


Rings

Ligand LMU t 101



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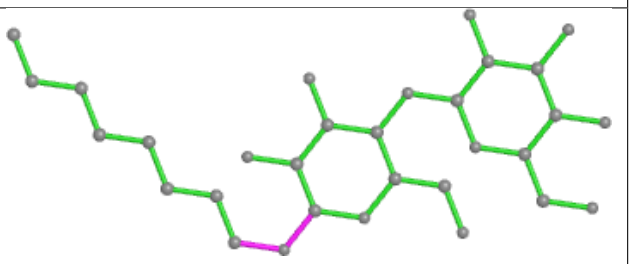

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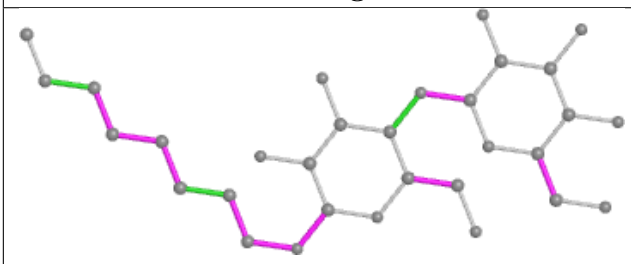

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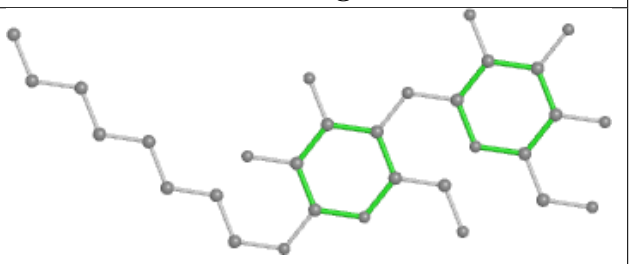
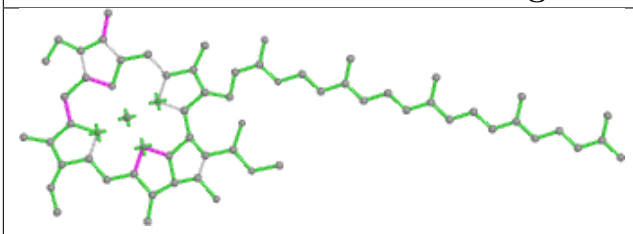


Rings

Ligand CLA 4 309



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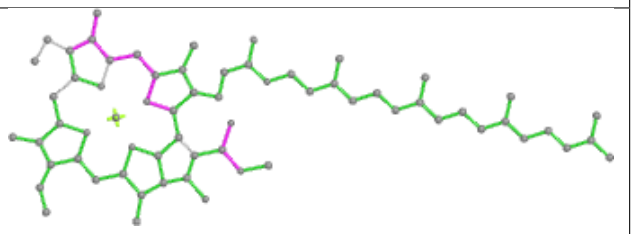
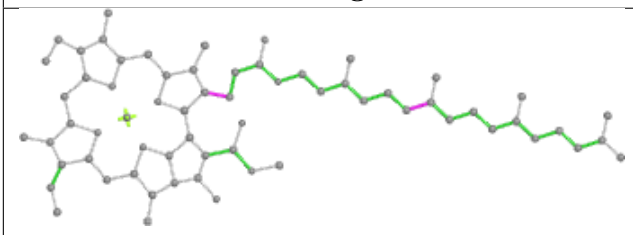


Bond angles



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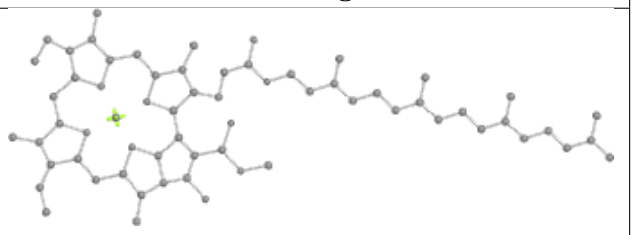
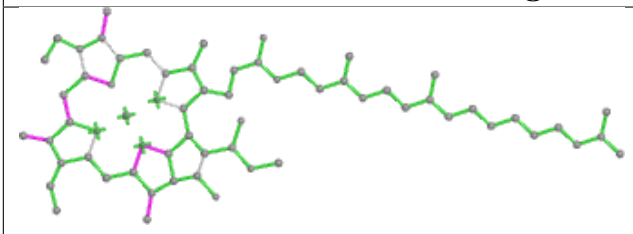


Rings

Ligand CLA B 611



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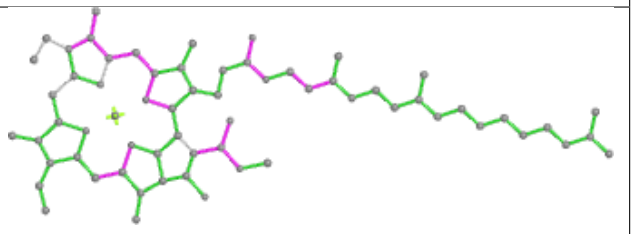
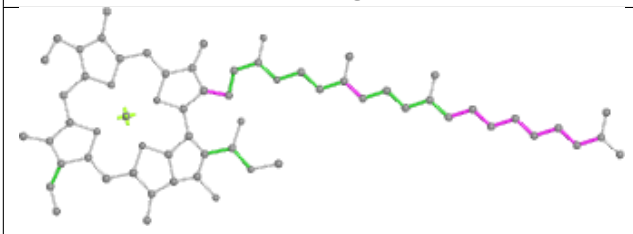


Bond angles



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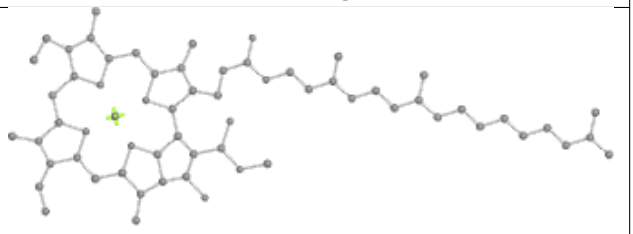
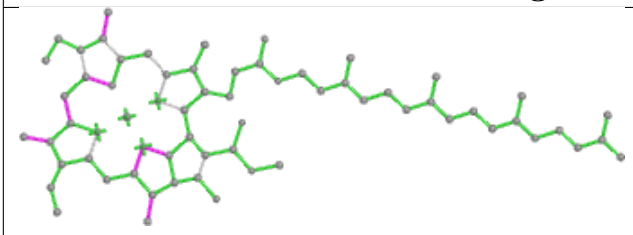
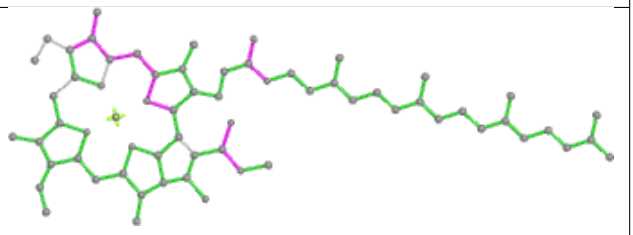


Rings

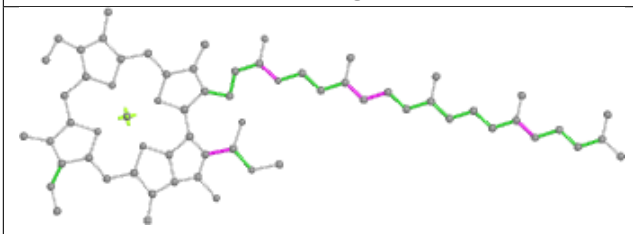
Ligand CLA c 511



Bond lengths



Bond angles



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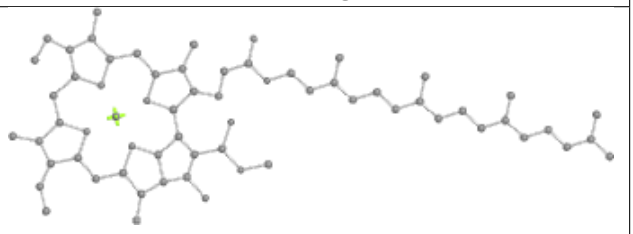
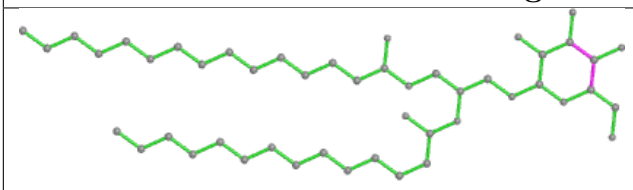
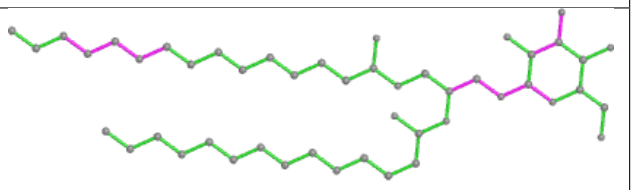


Rings

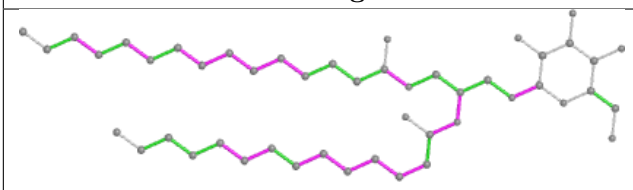
Ligand LMG c 519



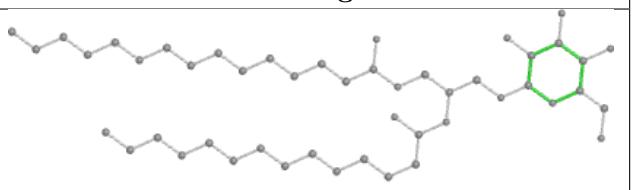
Bond lengths



Bond angles

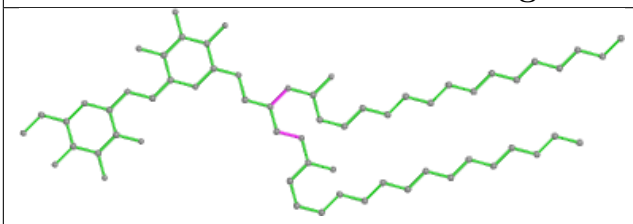


Torsions



Rings

Ligand DGD H 102



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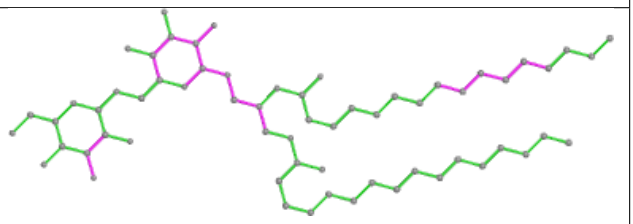

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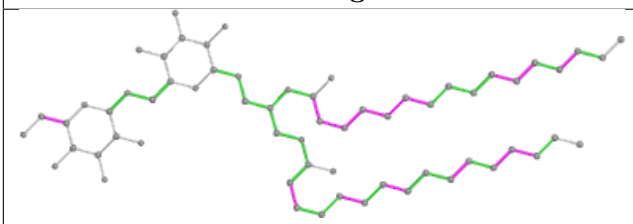

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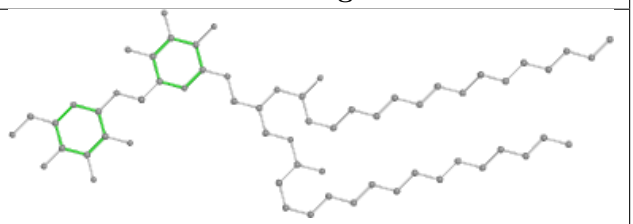
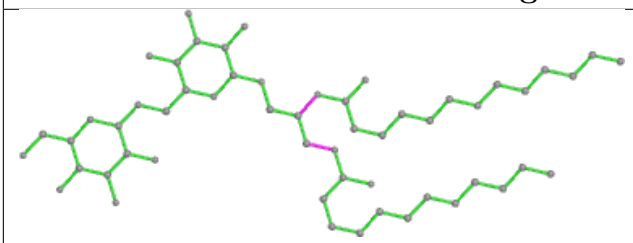


Rings

Ligand DGD C 518



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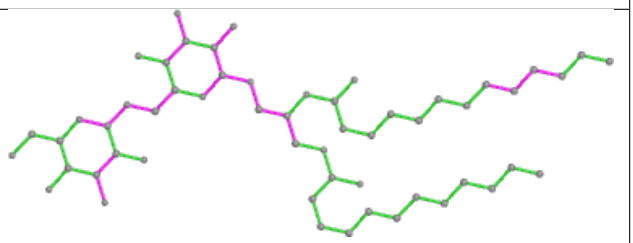
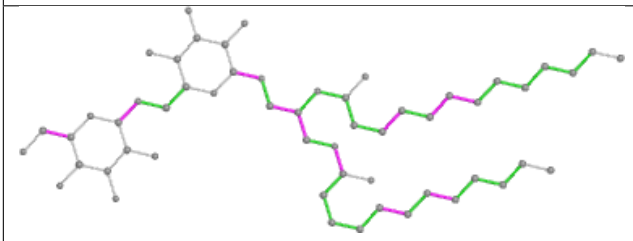


Bond angles



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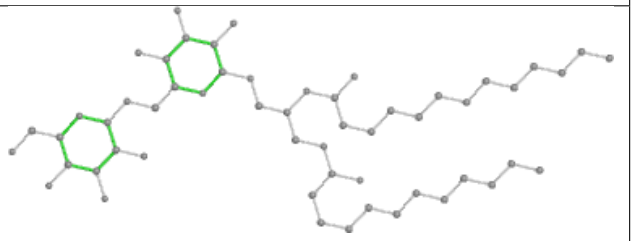
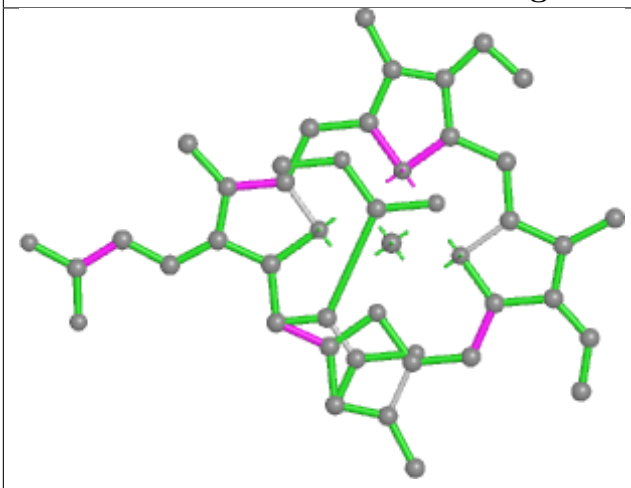


Rings

Ligand KC1 3 310



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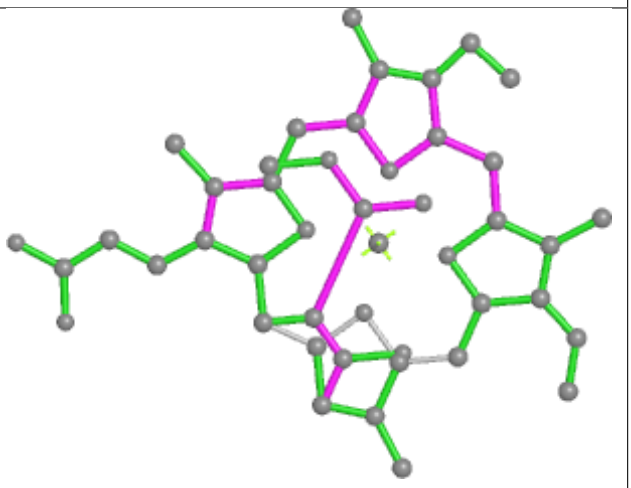
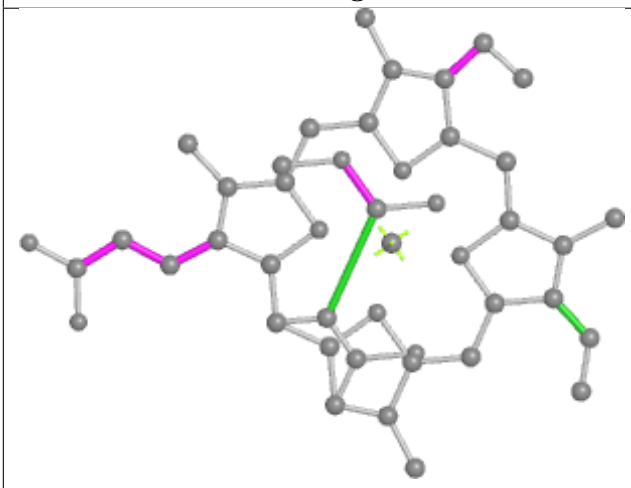


Bond angles



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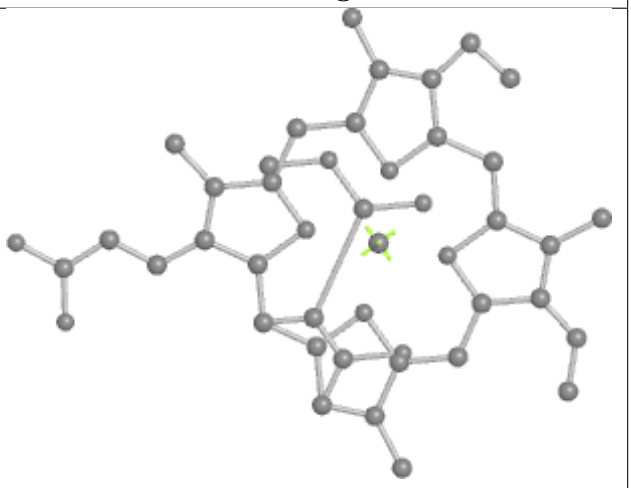
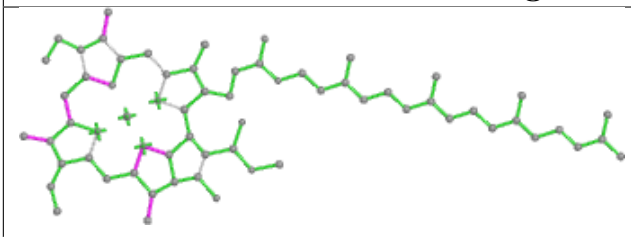


Rings

Ligand CLA C 511



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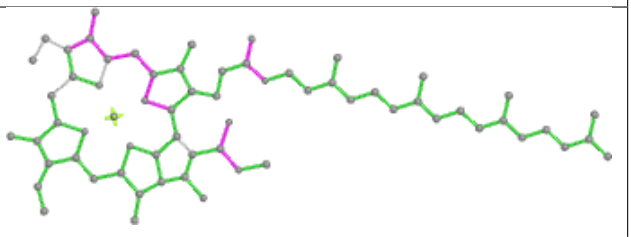
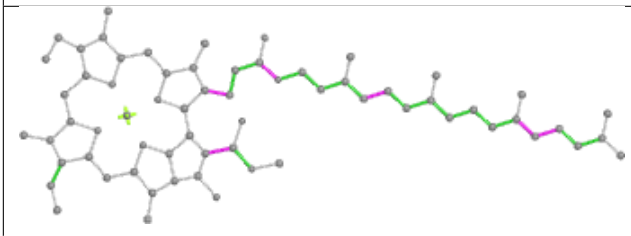


Bond angles



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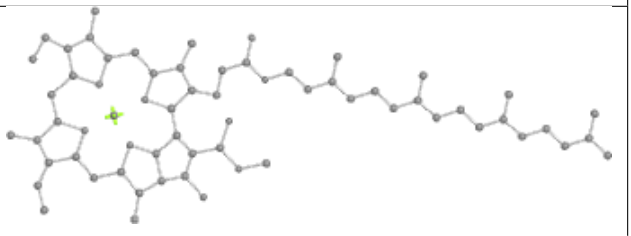
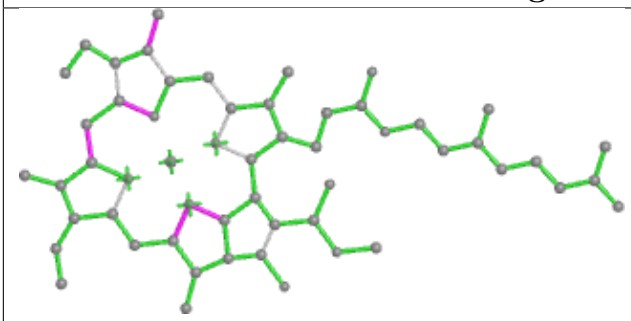


Rings

Ligand CLA 5 309



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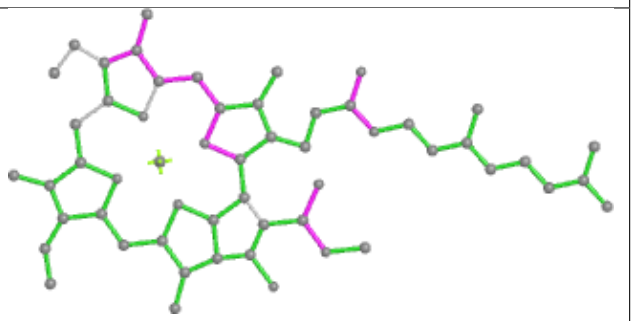
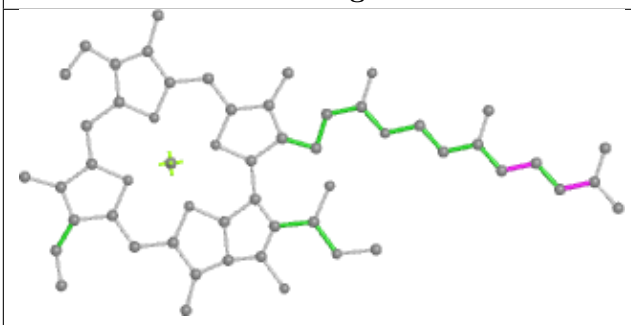


Bond angles



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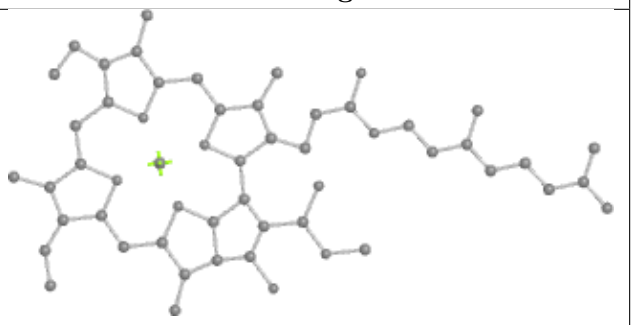
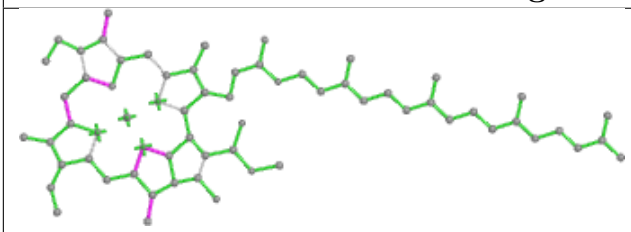
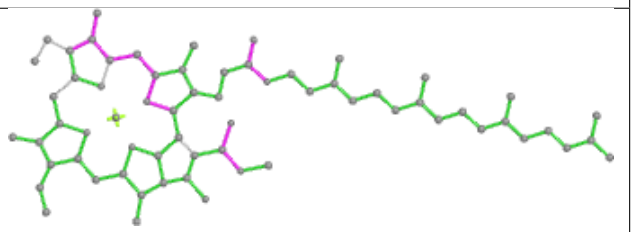


Rings

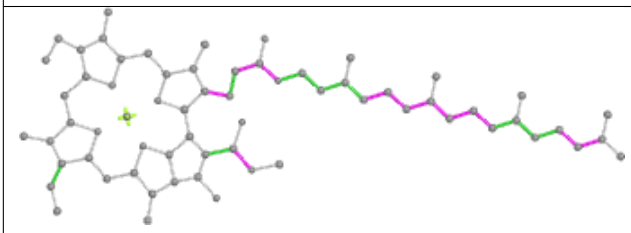
Ligand CLA 3 302



Bond lengths



Bond angles



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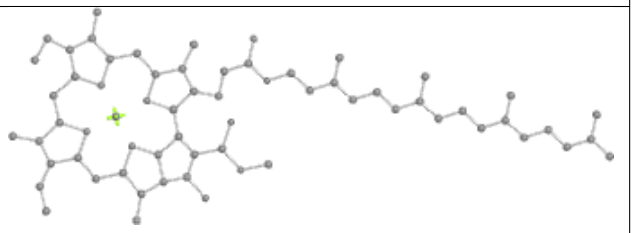
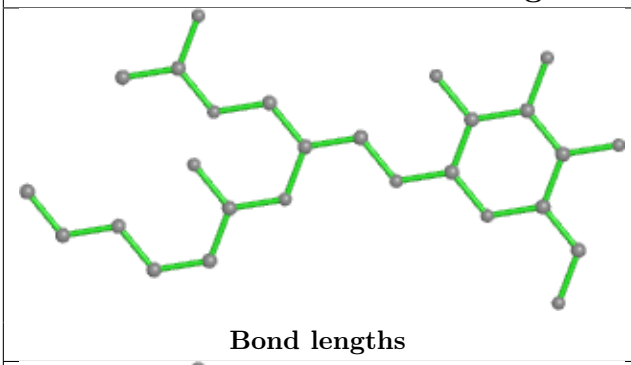


Rings

Ligand LMG c 520



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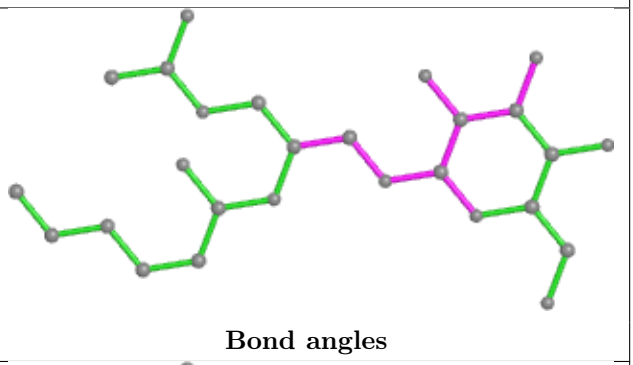
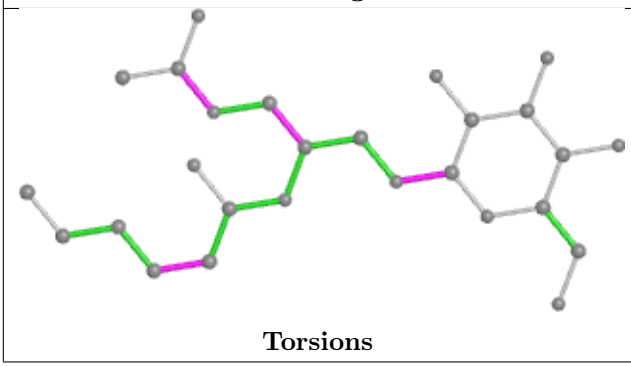


Bond angles



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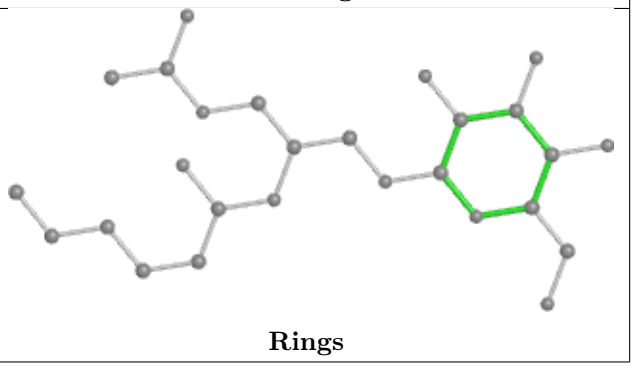
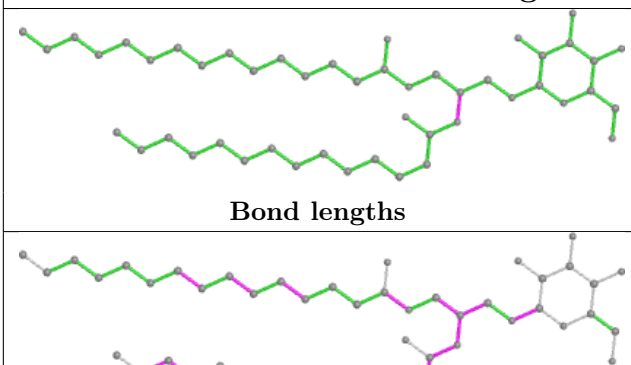
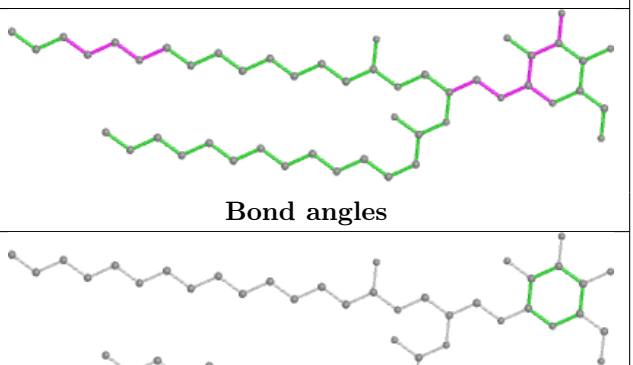


Rings

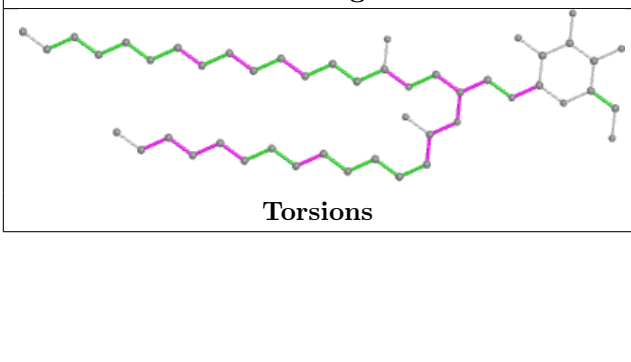
Ligand LMG C 520



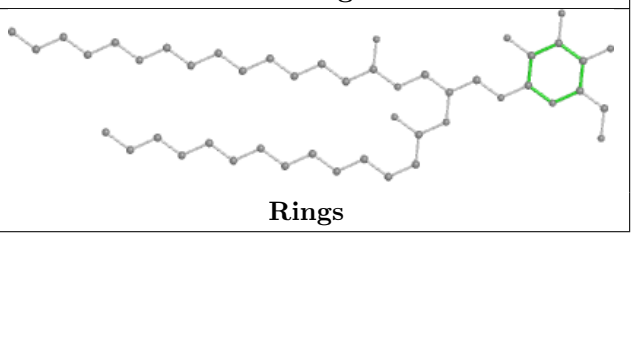
Bond lengths



Bond angles

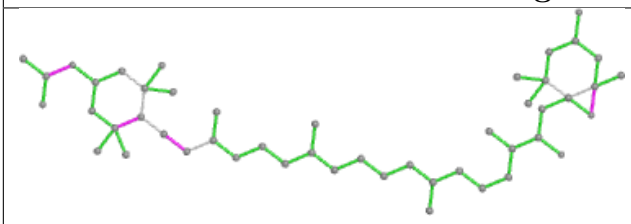


Torsions



Rings

Ligand A86 0 303



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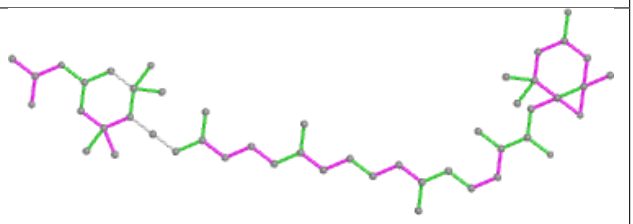
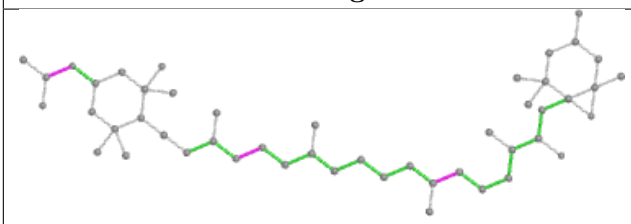


Bond angles



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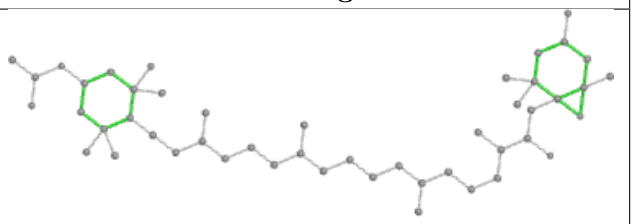
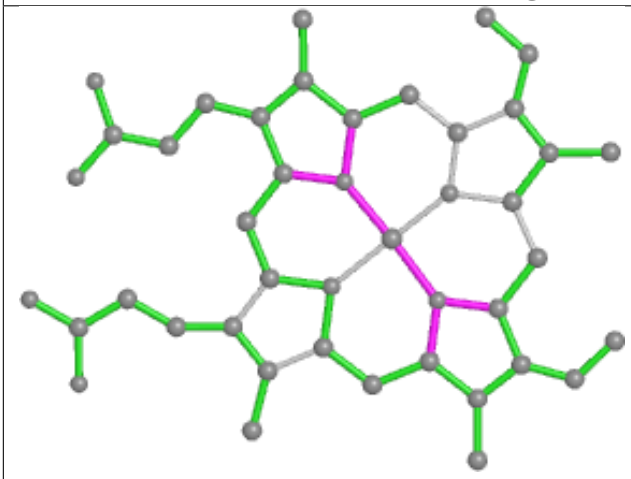
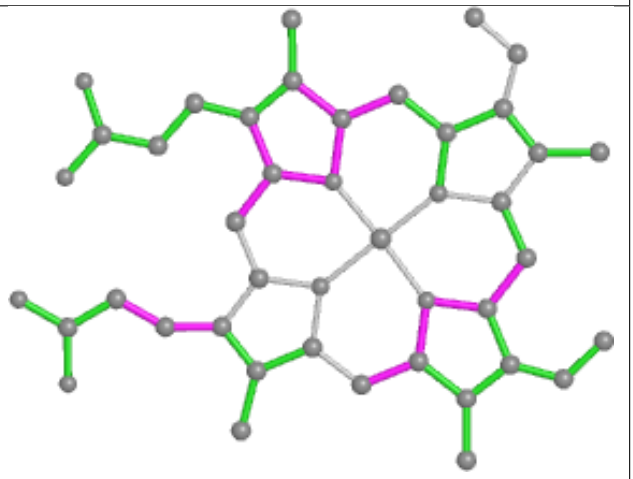


Rings

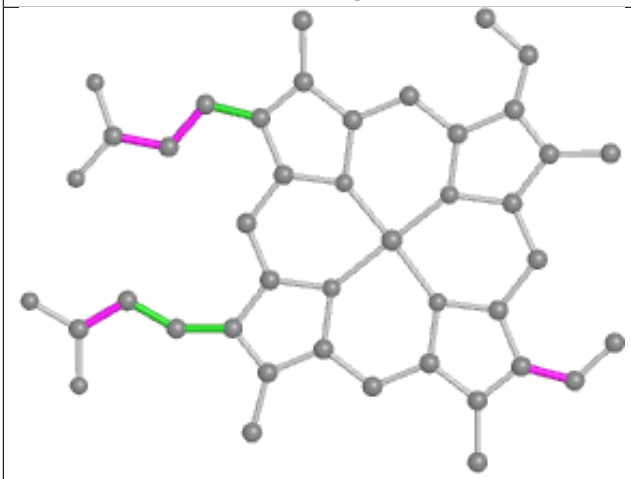
Ligand HEM e 101



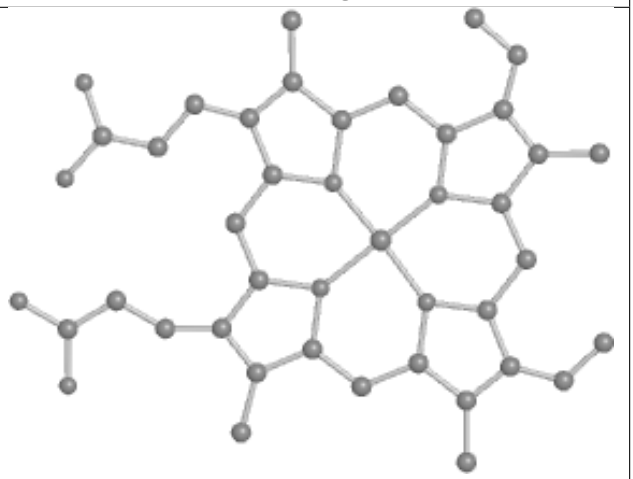
Bond lengths



Bond angles

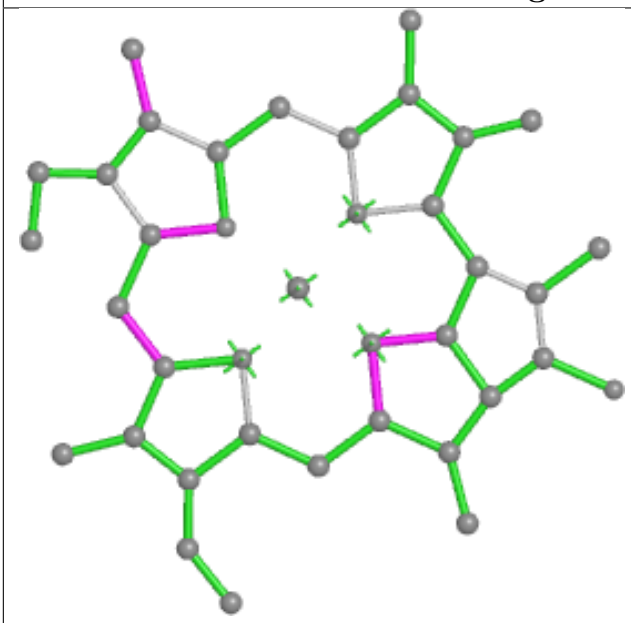


Torsions



Rings

Ligand CLA 1 314



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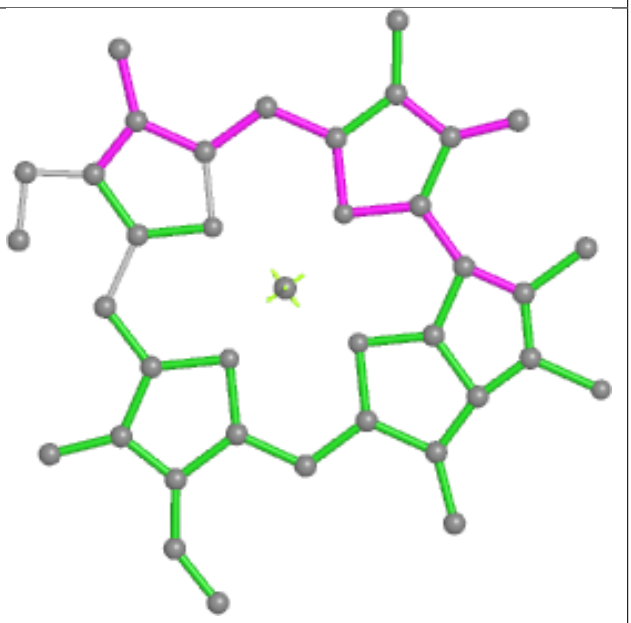
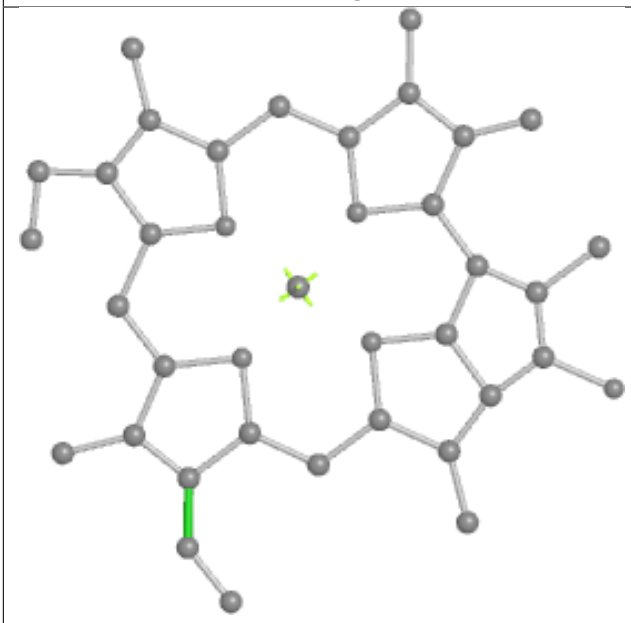


Bond angles



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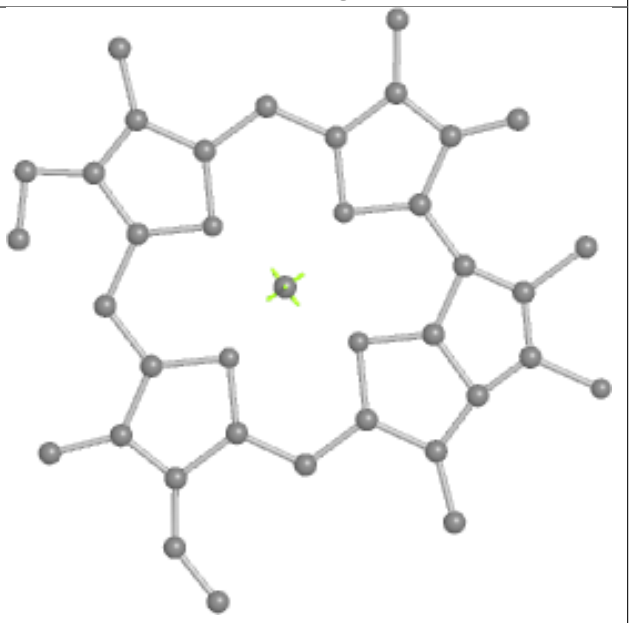
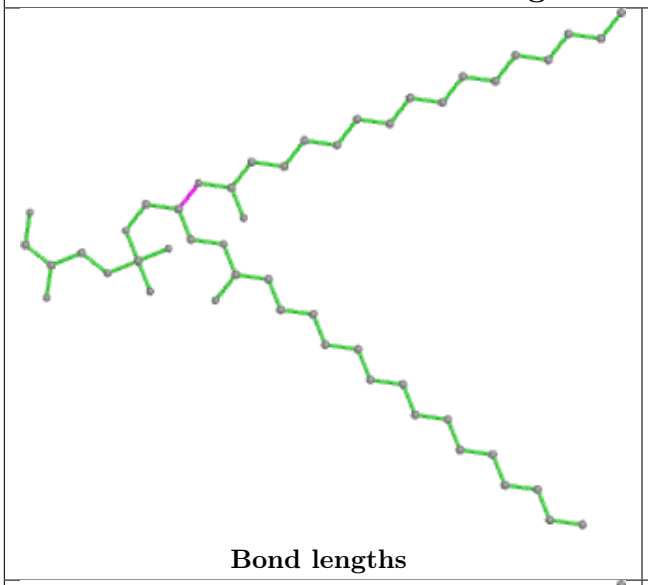
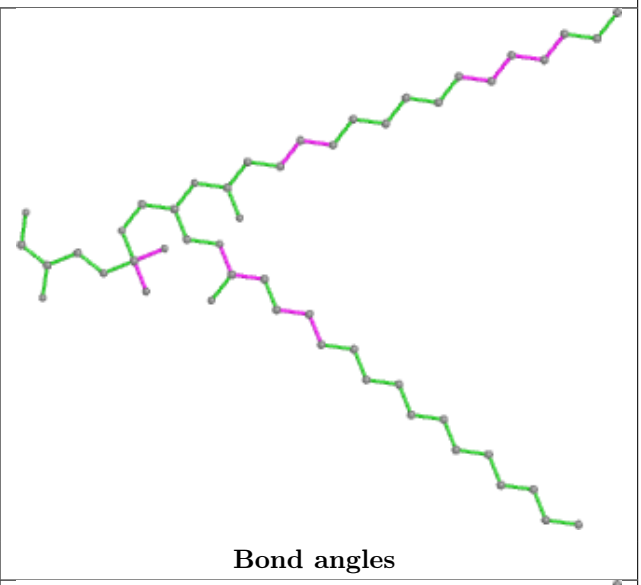


Rings

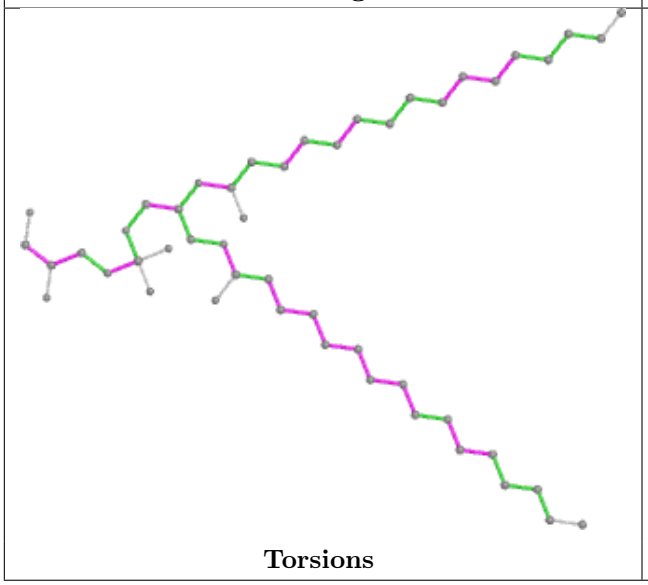
Ligand LHG a 404



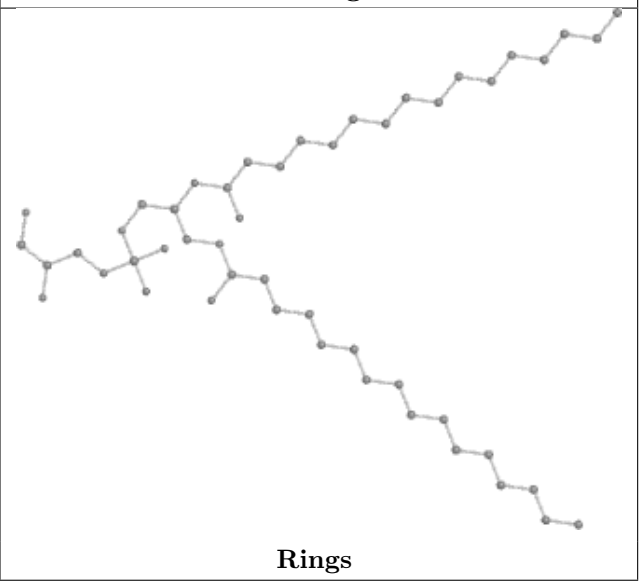
Bond lengths



Bond angles

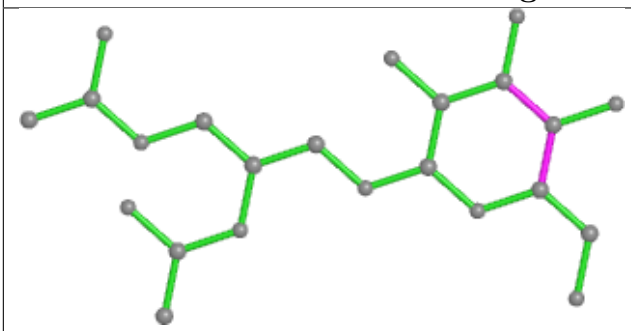


Torsions

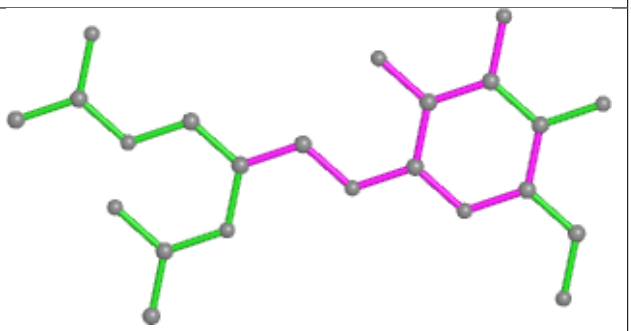


Rings

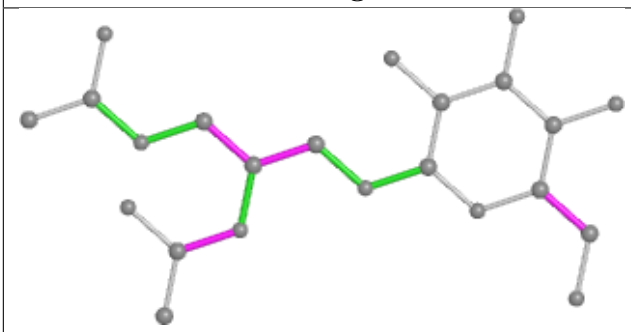
Ligand LMG C 522



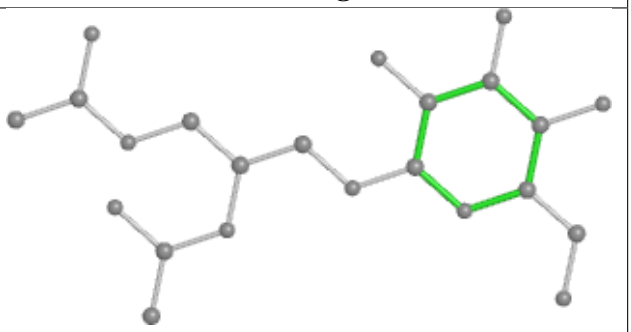
Bond lengths



Bond angles

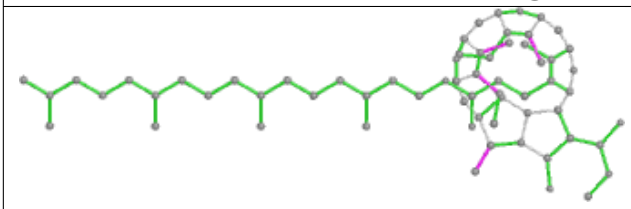


Torsions

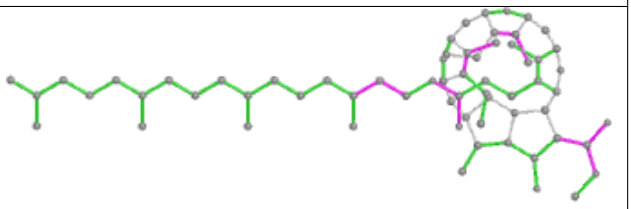


Rings

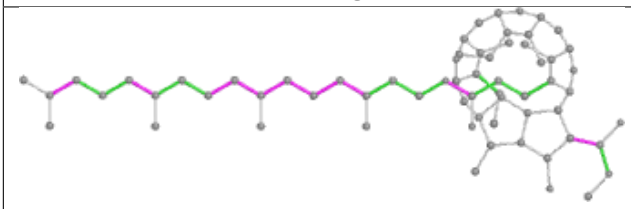
Ligand PHO a 409



Bond lengths



Bond angles



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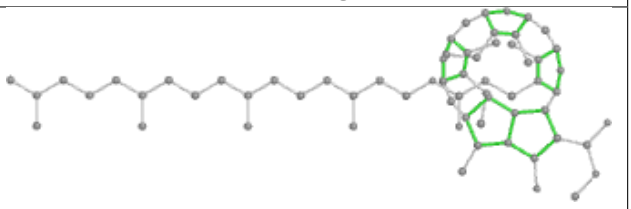
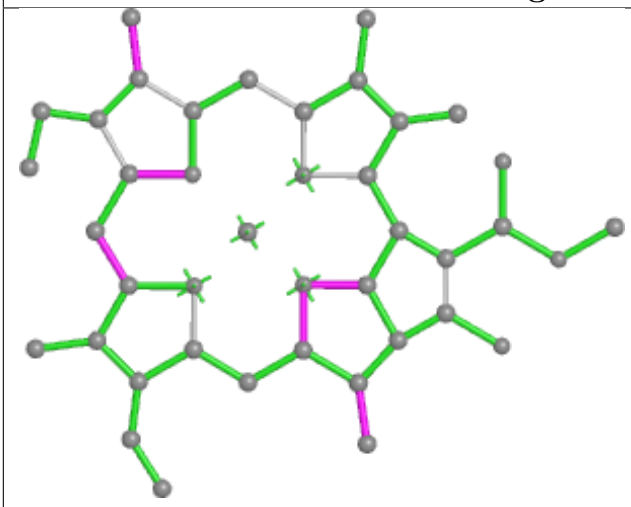
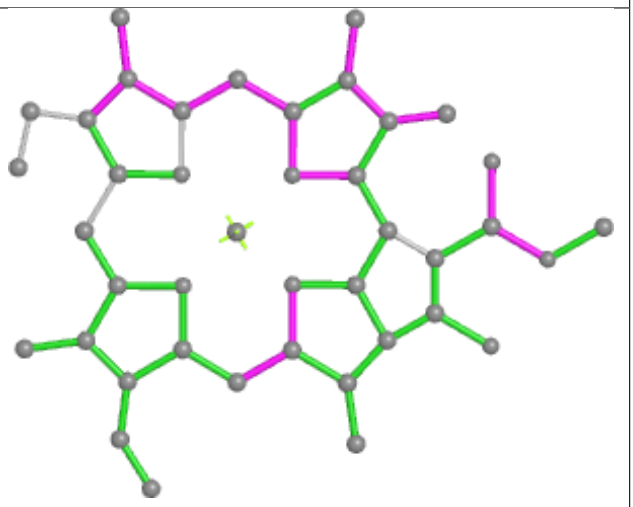


Rings

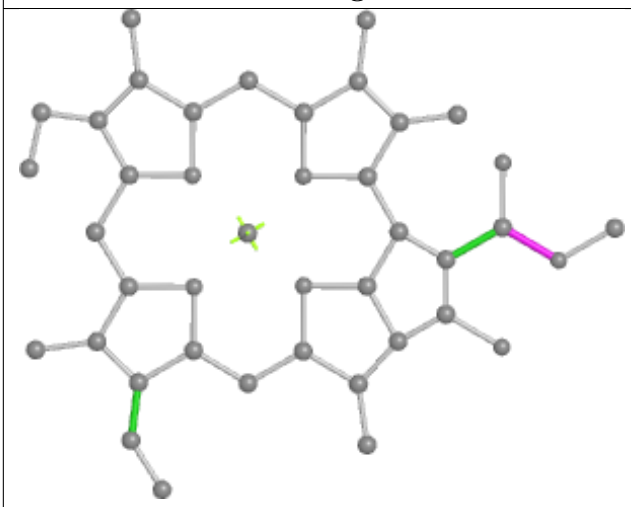
Ligand CLA 0 308



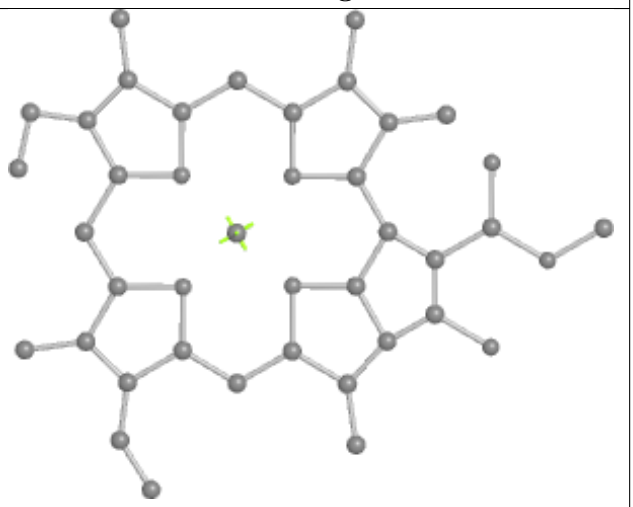
Bond lengths



Bond angles

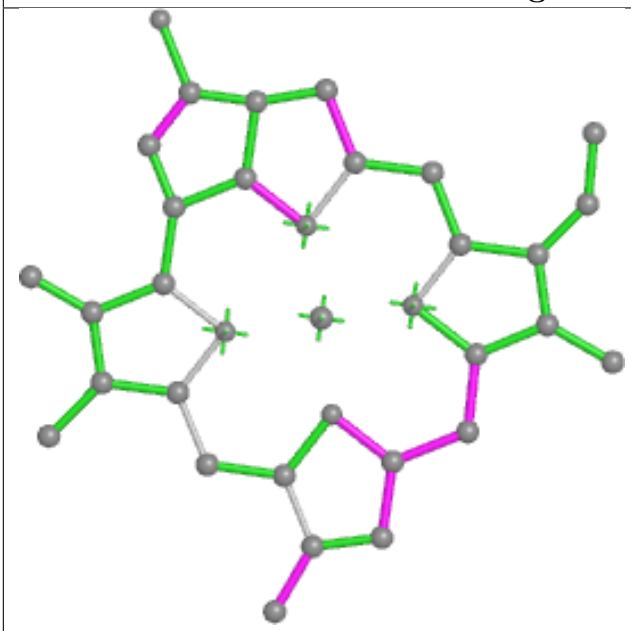


Torsions

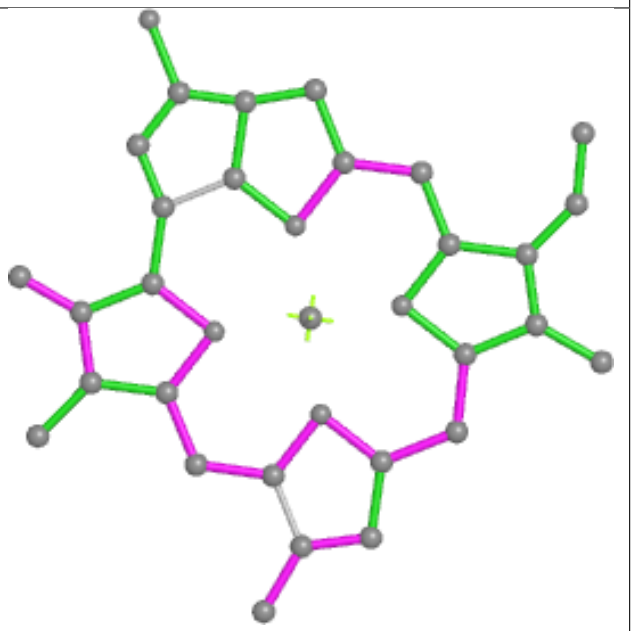


Rings

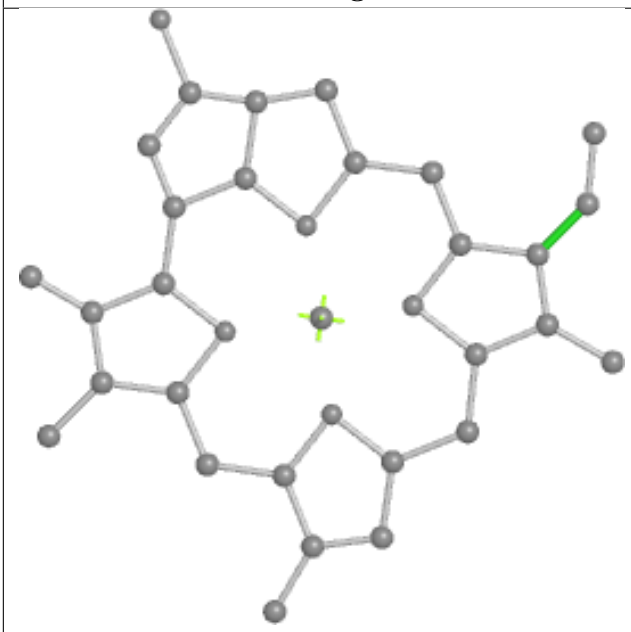
Ligand CLA 0 313



Bond lengths



Bond angles



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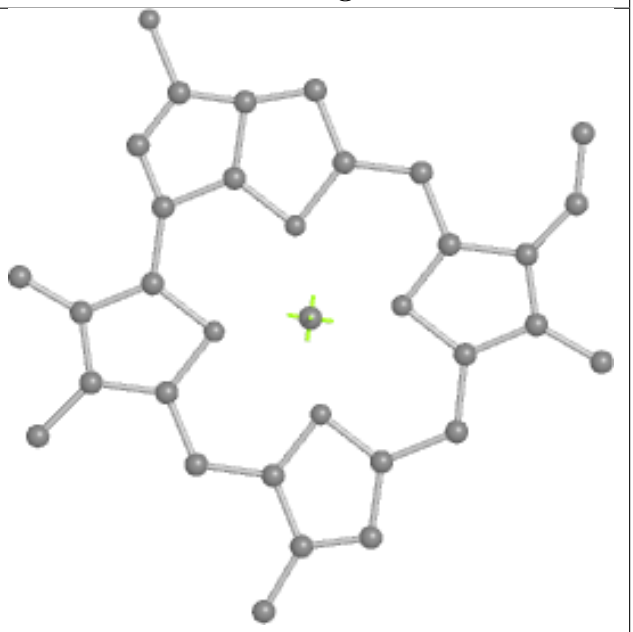
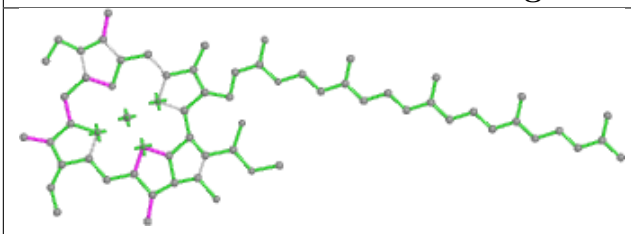


Rings

Ligand CLA C 509



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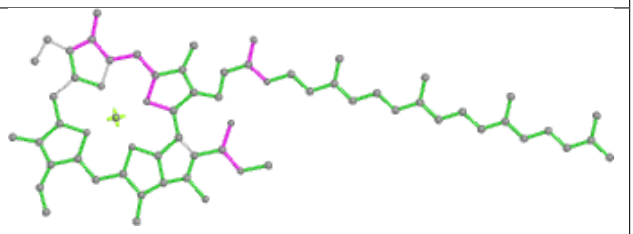
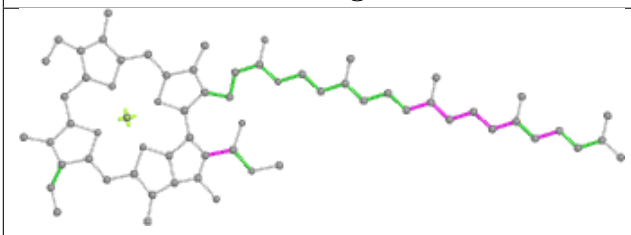
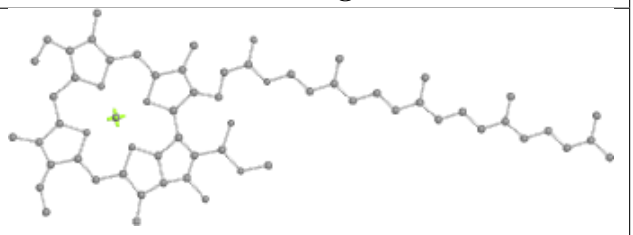


Bond angles

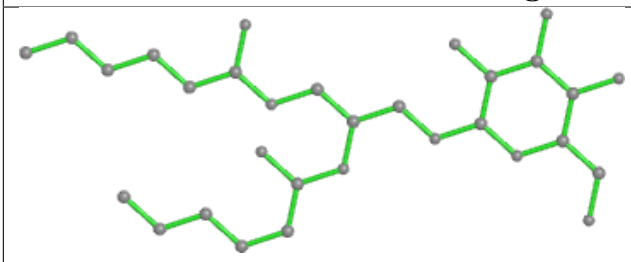


Torsions

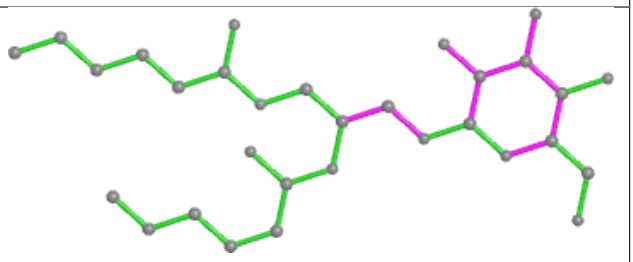


Rings

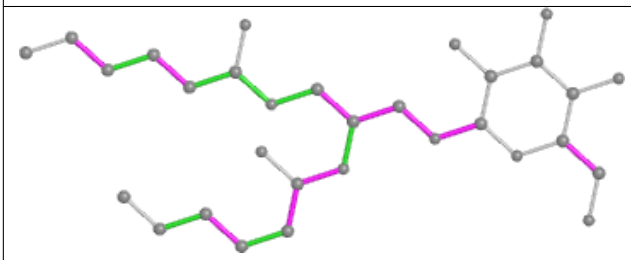
Ligand LMG 5 319



Bond lengths



Bond angles



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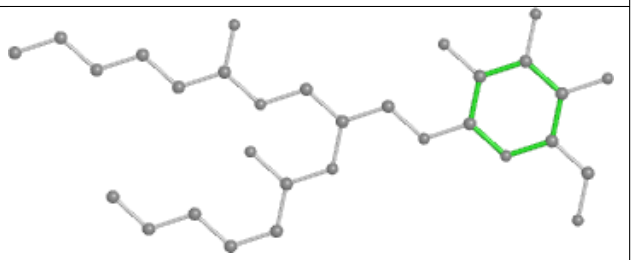
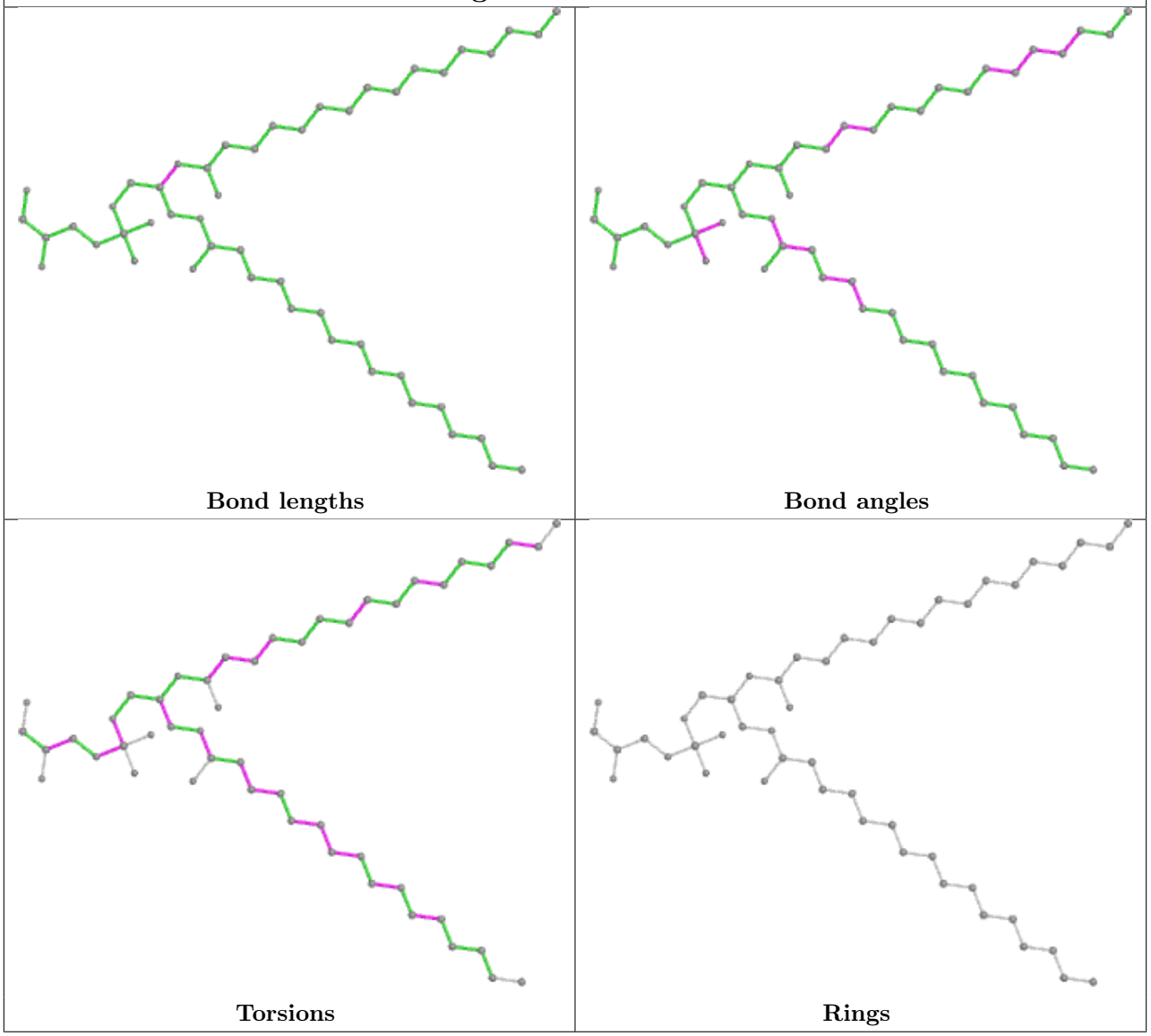
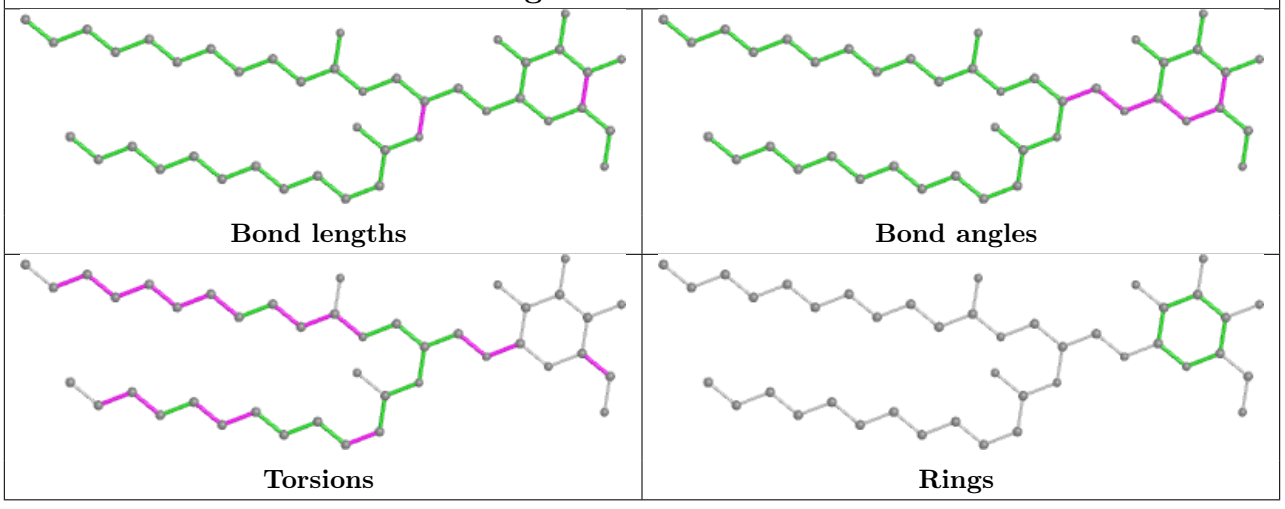


Rings

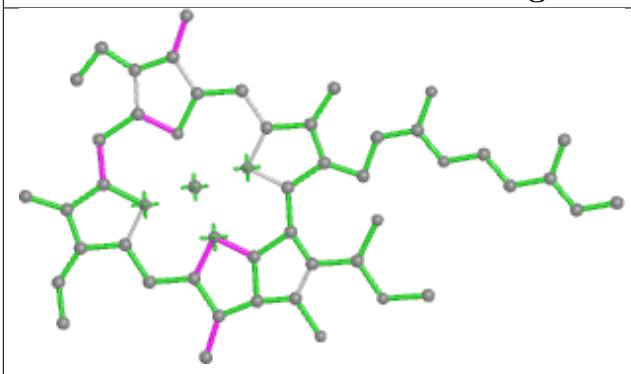
Ligand LHG b 601



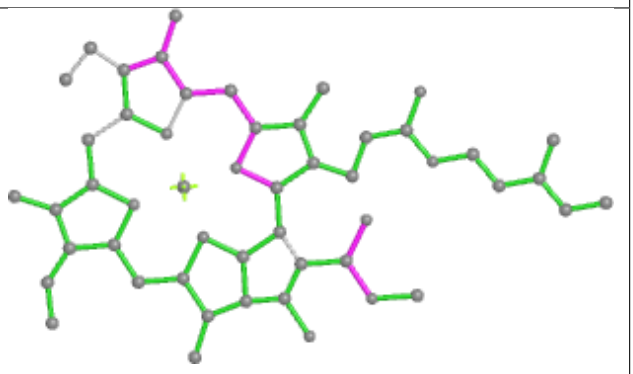
Ligand LMG 0 314



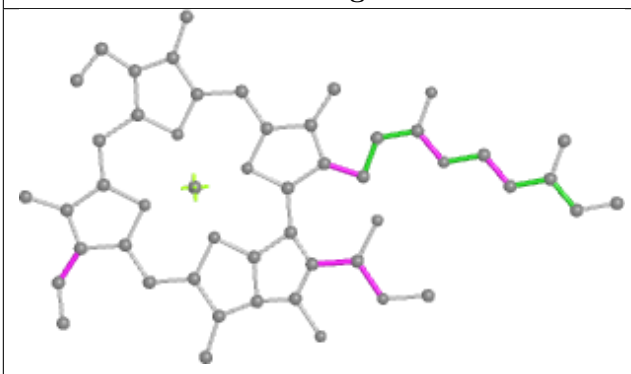
Ligand CLA 7 311



Bond lengths



Bond angles



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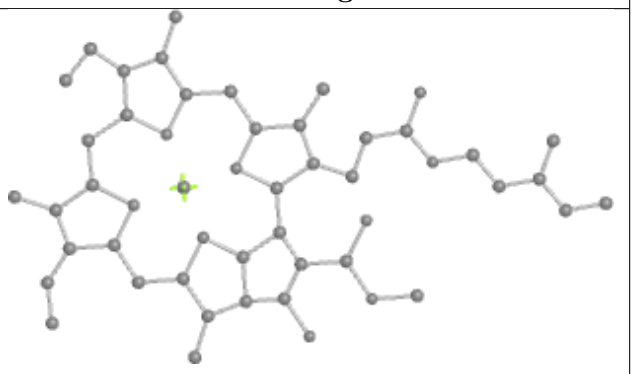
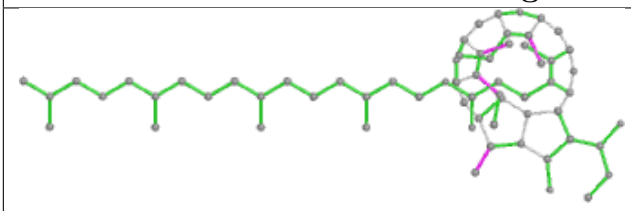
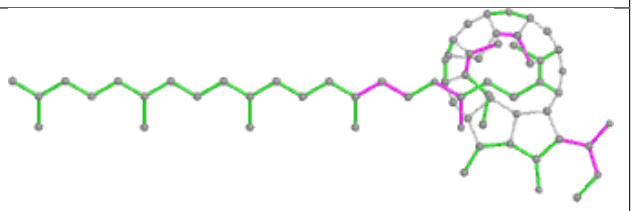


Rings

Ligand PHO A 407

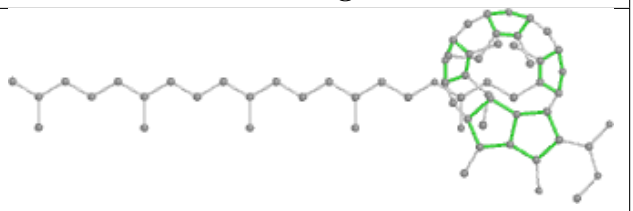


Bond lengths



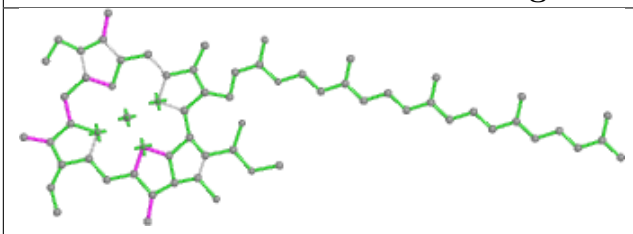
Bond angles

Torsions



Rings

Ligand CLA c 503



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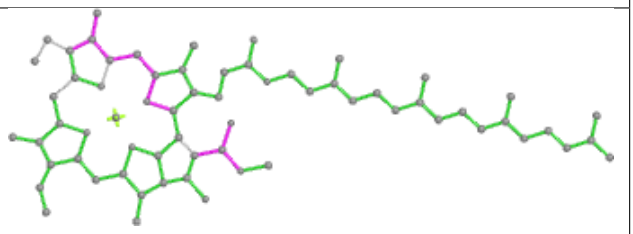
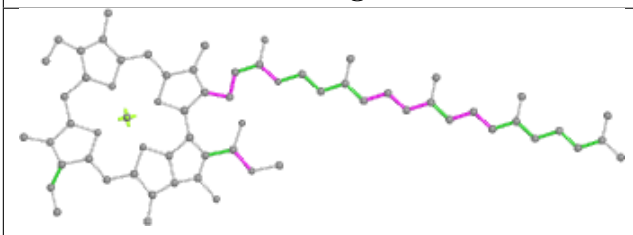


Bond angles



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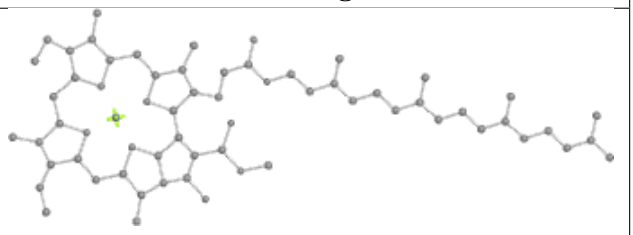
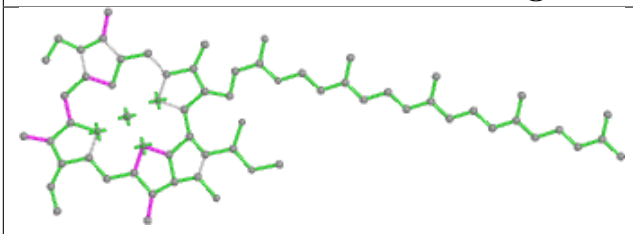


Rings

Ligand CLA b 610



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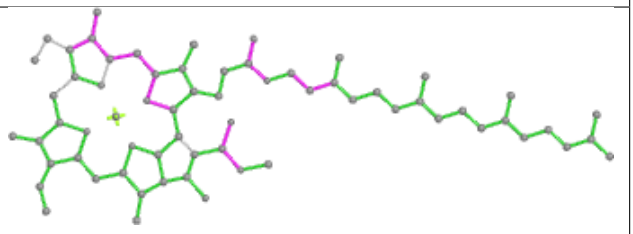
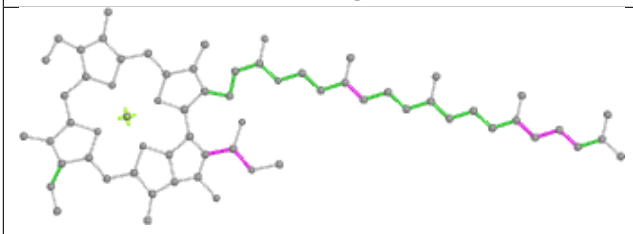
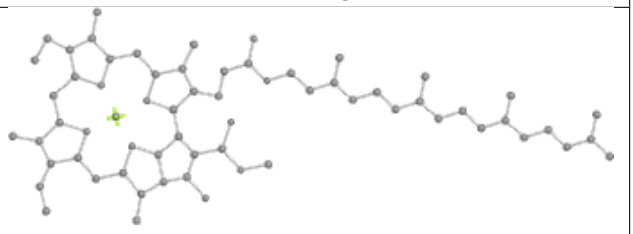


Bond angles

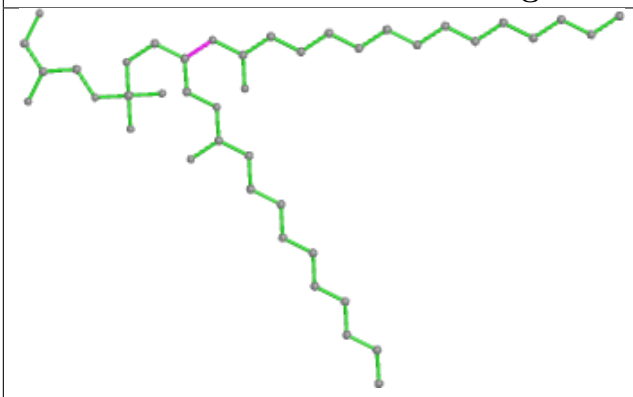


Torsions

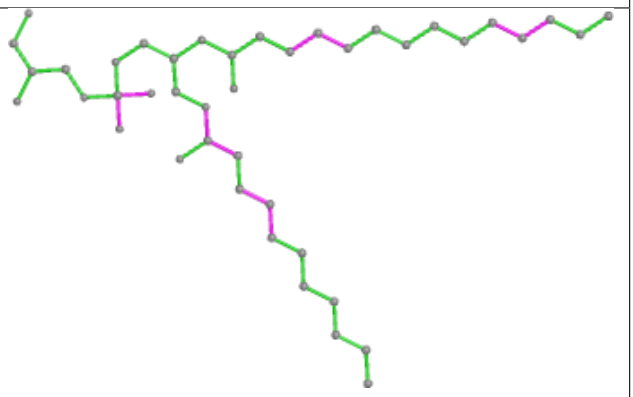


Rings

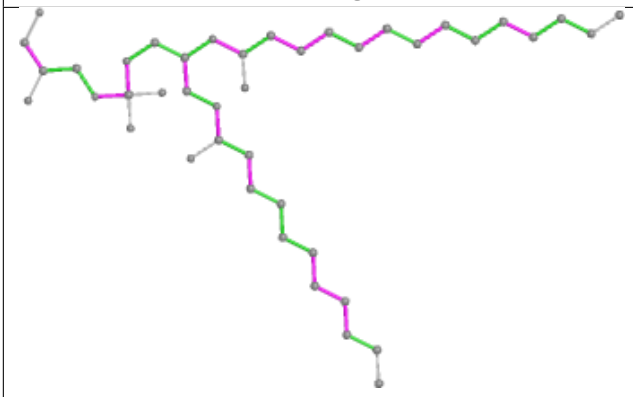
Ligand LHG H 104



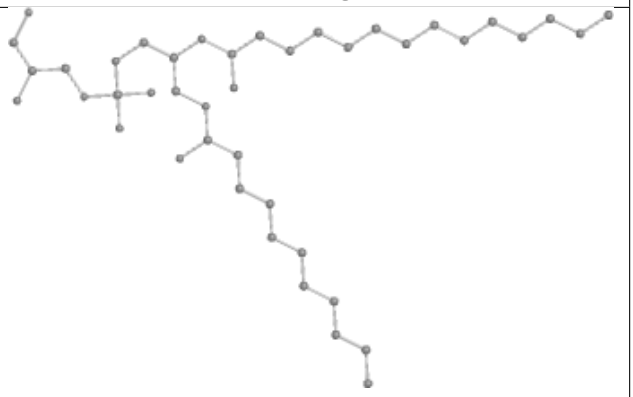
Bond lengths



Bond angles

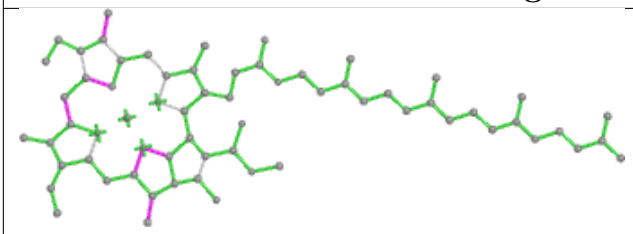


Torsions



Rings

Ligand CLA C 510



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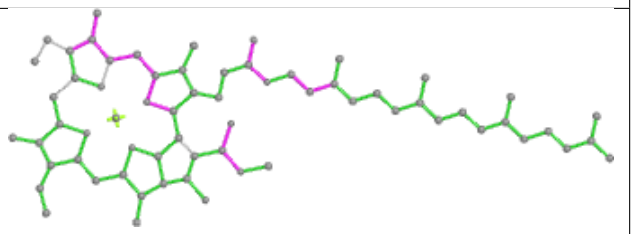
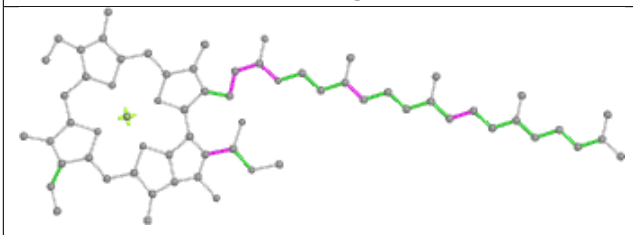
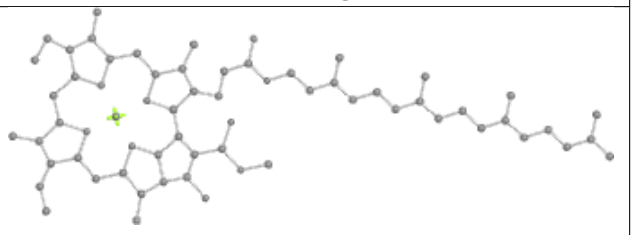


Bond angles

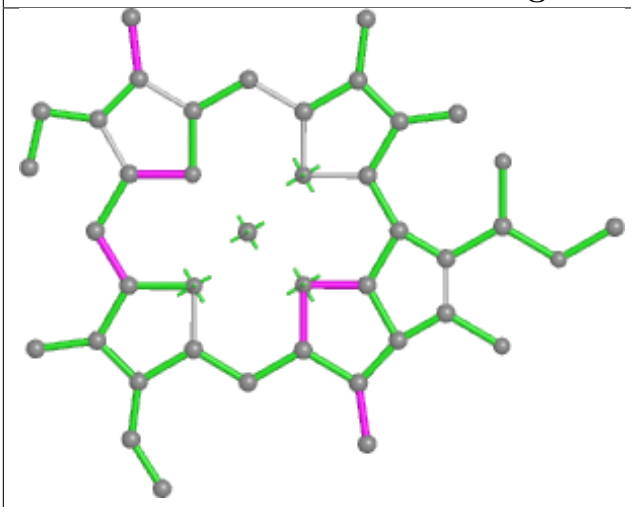


Torsions



Rings

Ligand CLA 7 308



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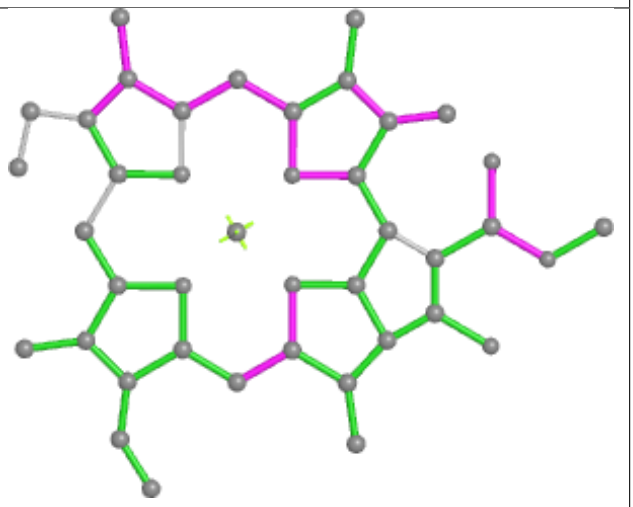
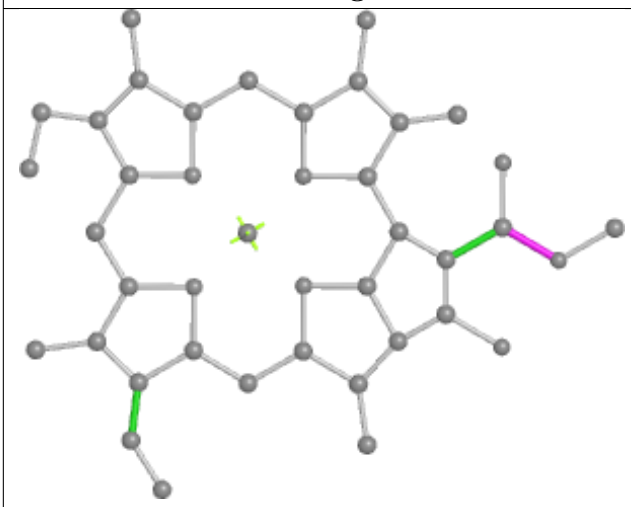


Bond angles



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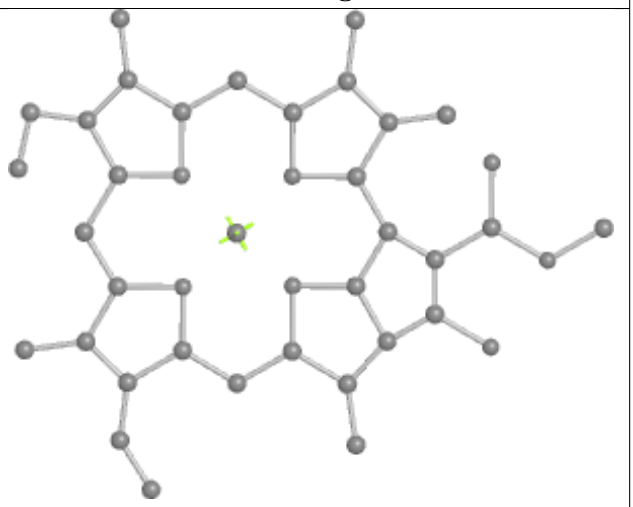
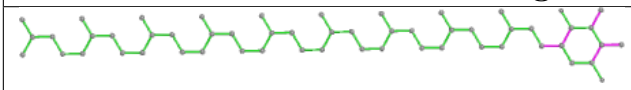


Rings

Ligand PL9 d 404



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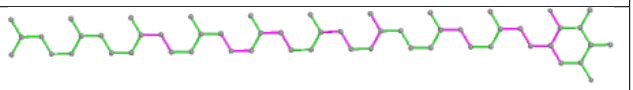
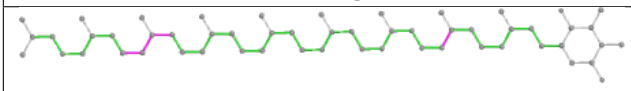


Bond angles



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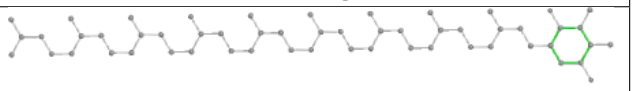
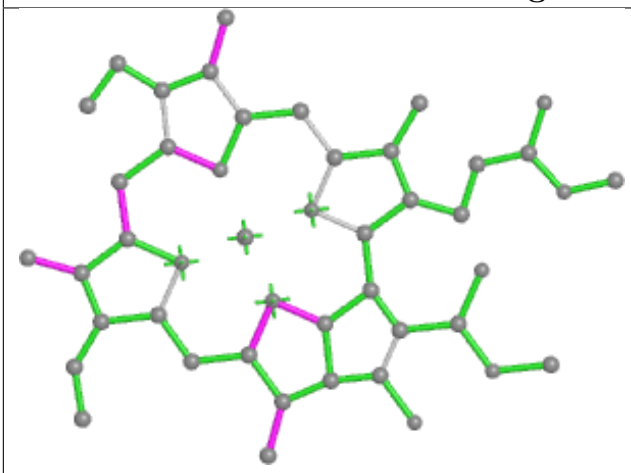


Rings

Ligand CLA 4 310



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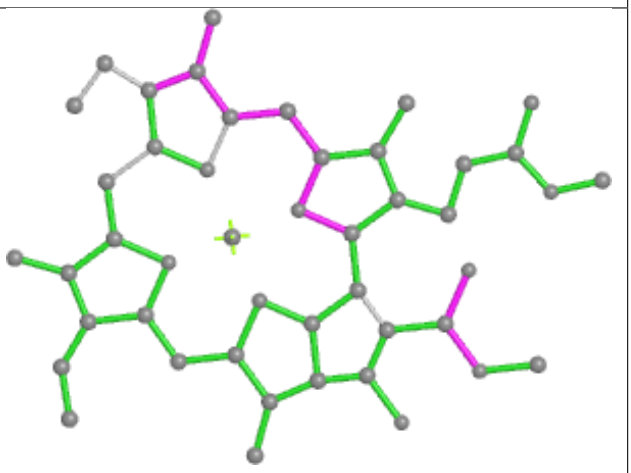
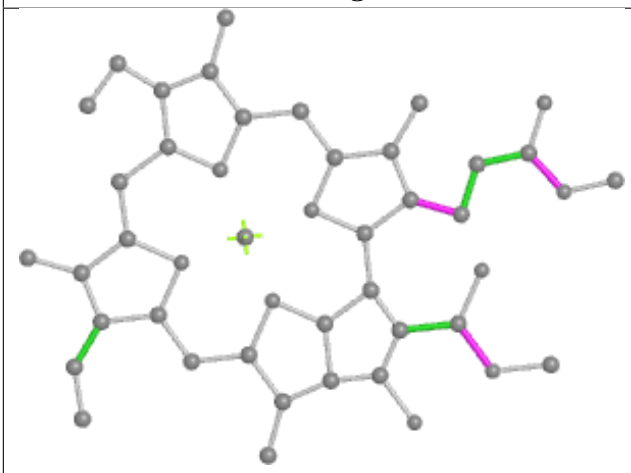
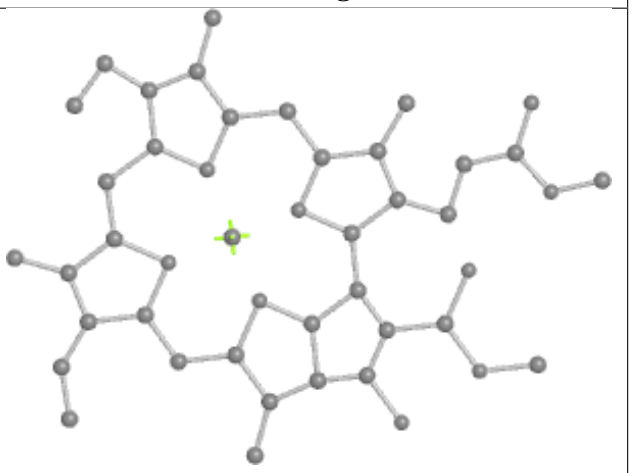


Bond angles

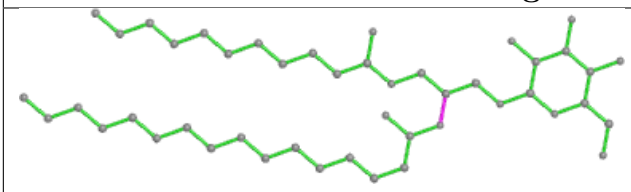


Torsions

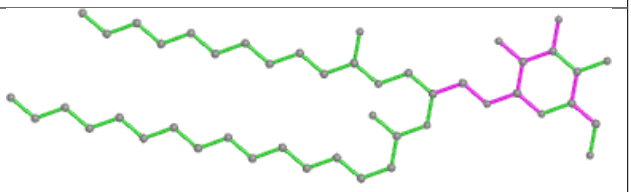


Rings

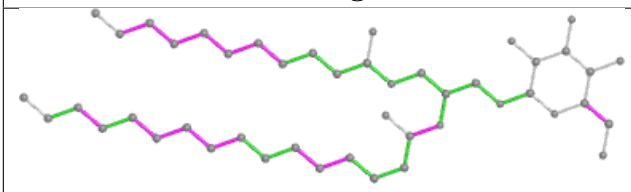
Ligand LMG d 406



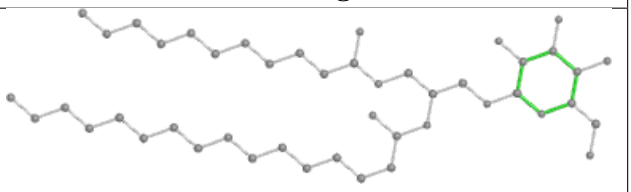
Bond lengths



Bond angles

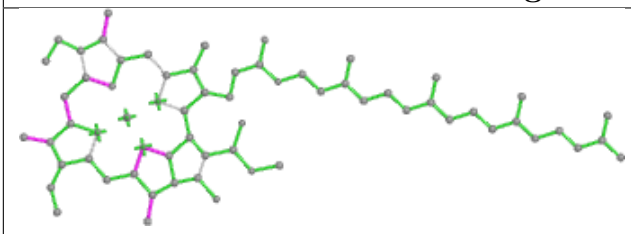


Torsions

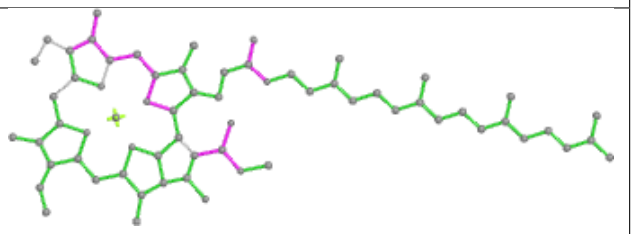


Rings

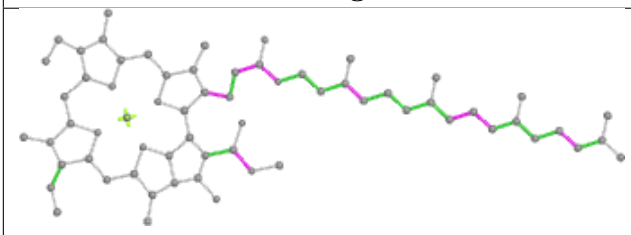
Ligand CLA B 612



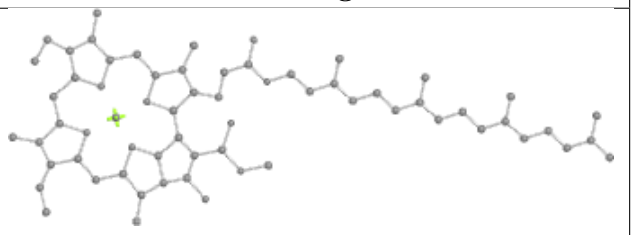
Bond lengths



Bond angles

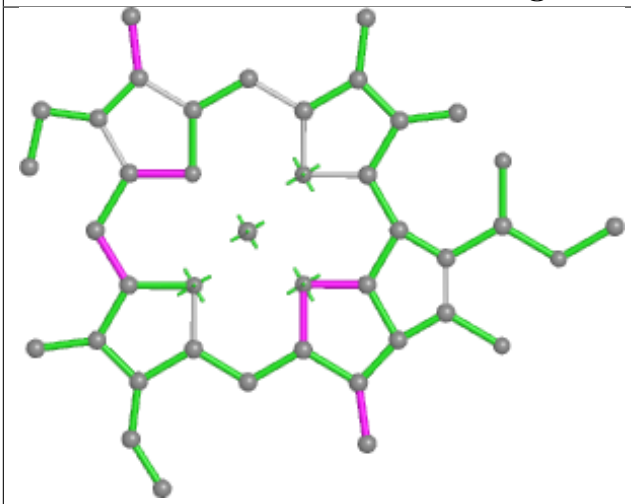


Torsions

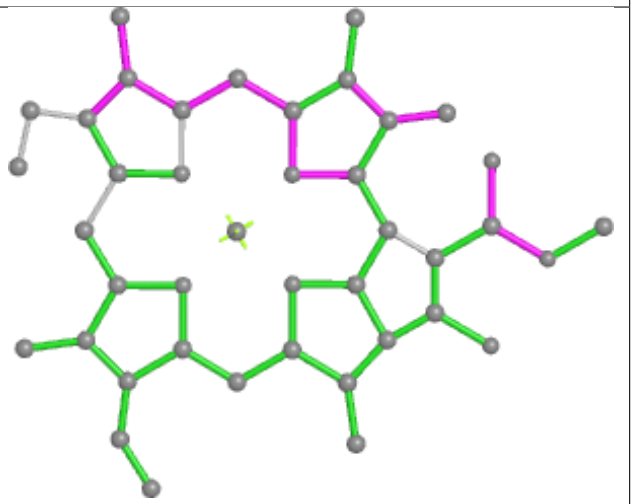


Rings

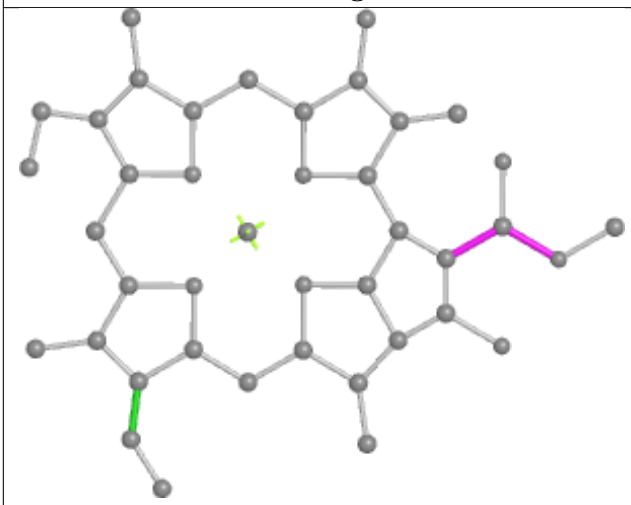
Ligand CLA 3 311



Bond lengths



Bond angles



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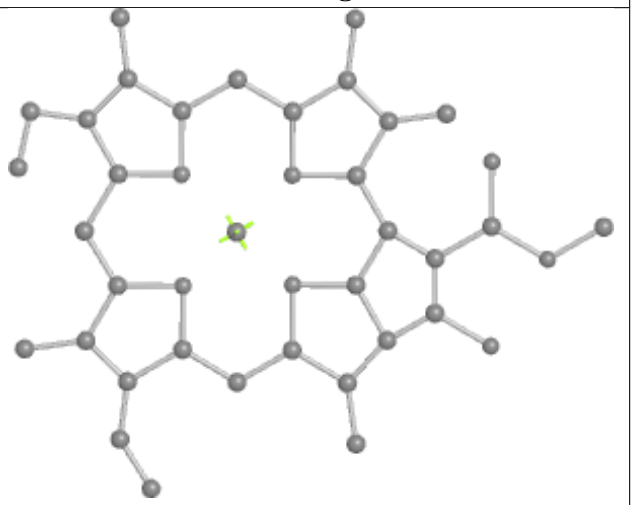
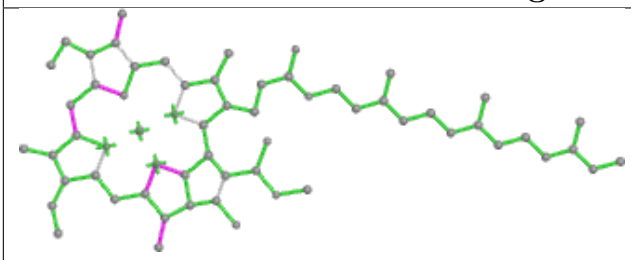


Rings

Ligand CLA 3 313



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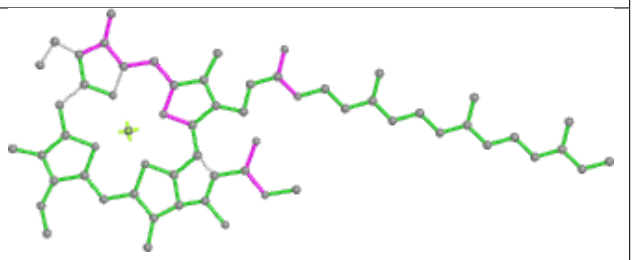
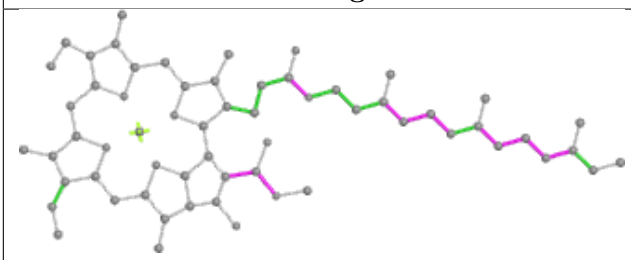
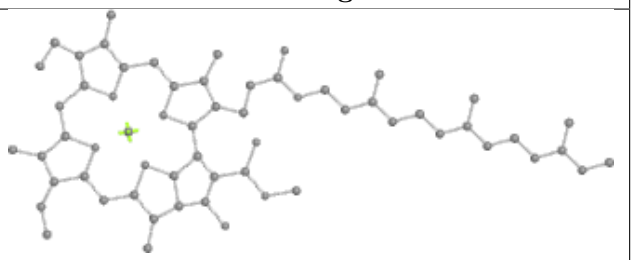


Bond angles

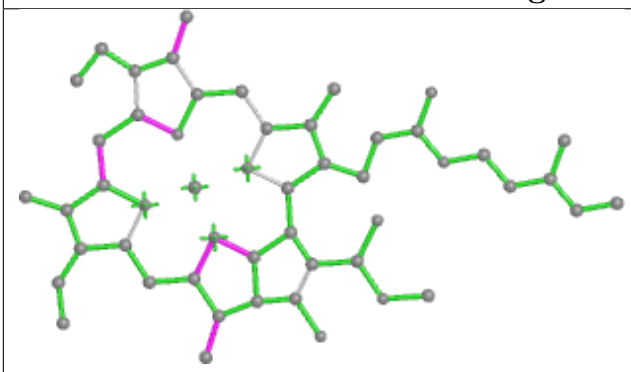


Torsions



Rings

Ligand CLA 0 311



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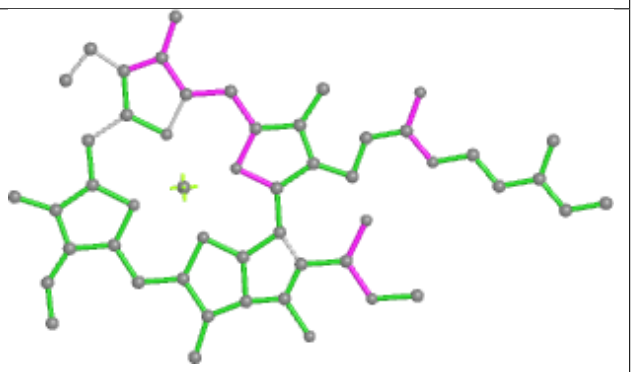
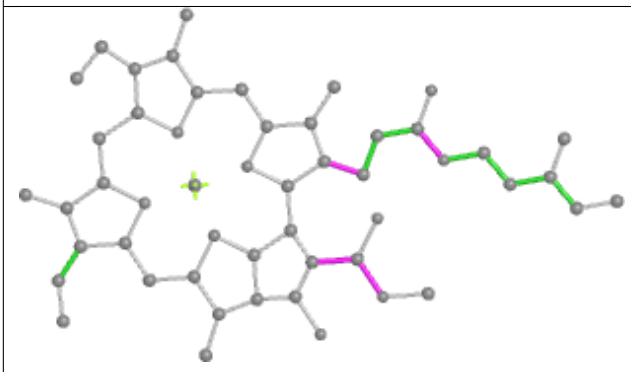
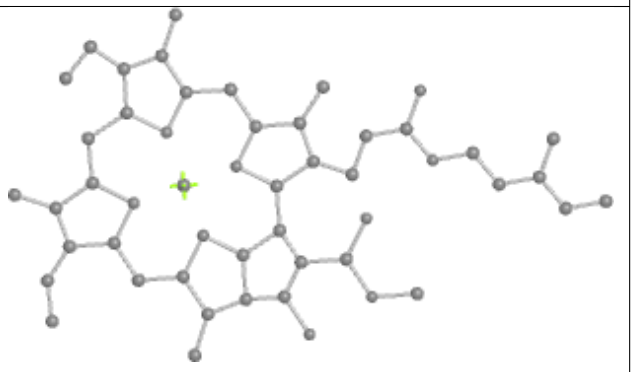


Bond angles

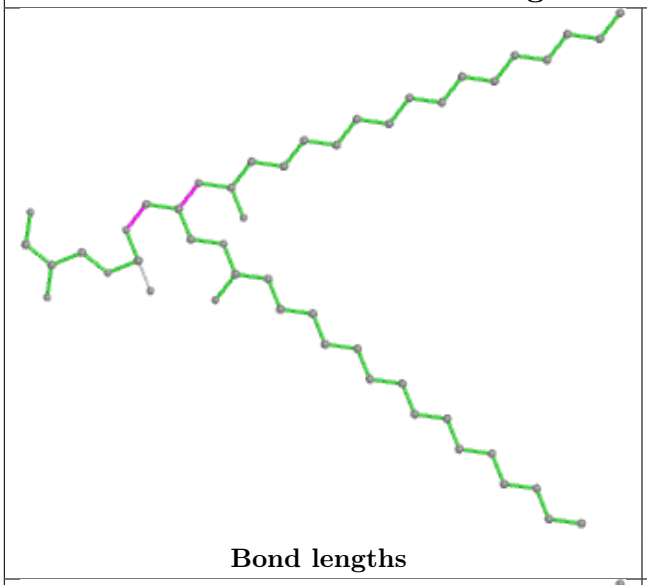


Torsions



Rings

Ligand LHG d 405



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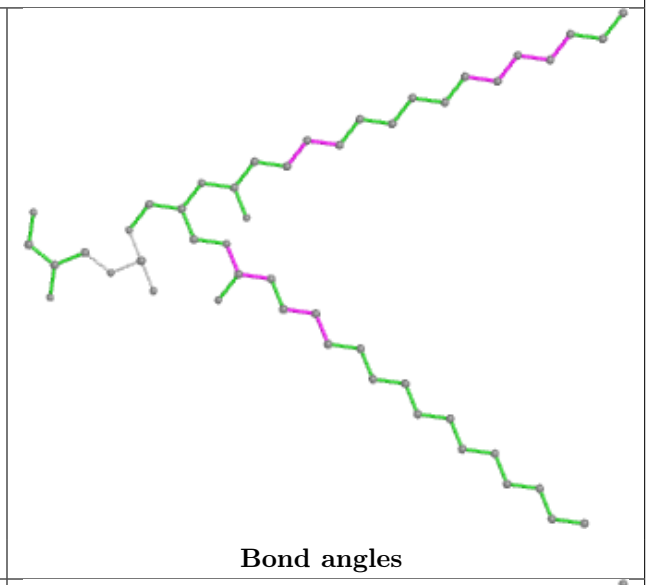
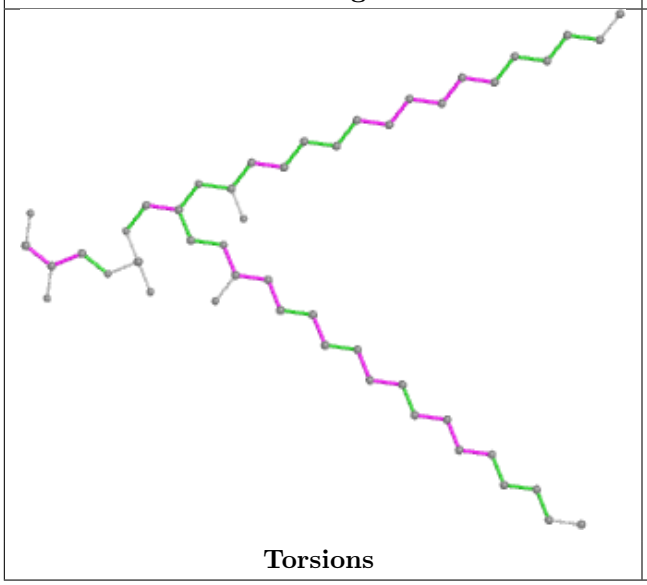


Bond angles



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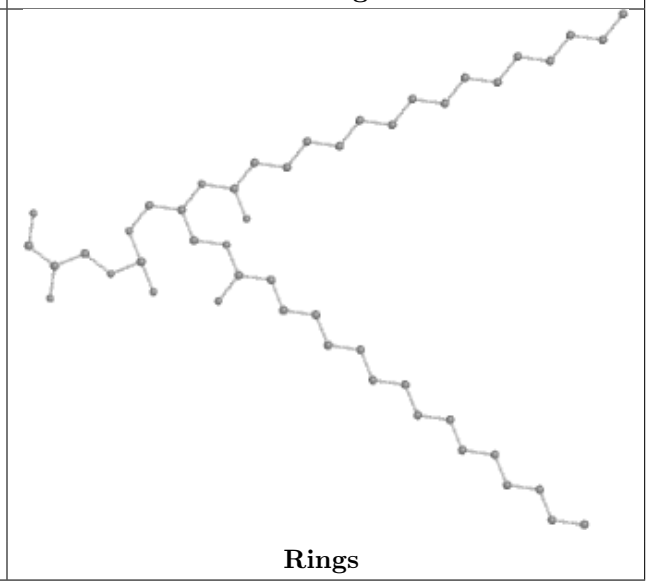
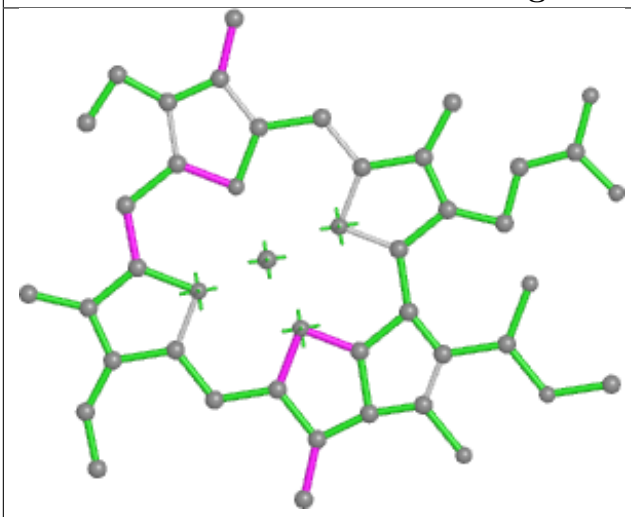


Rings

Ligand CLA 2 312



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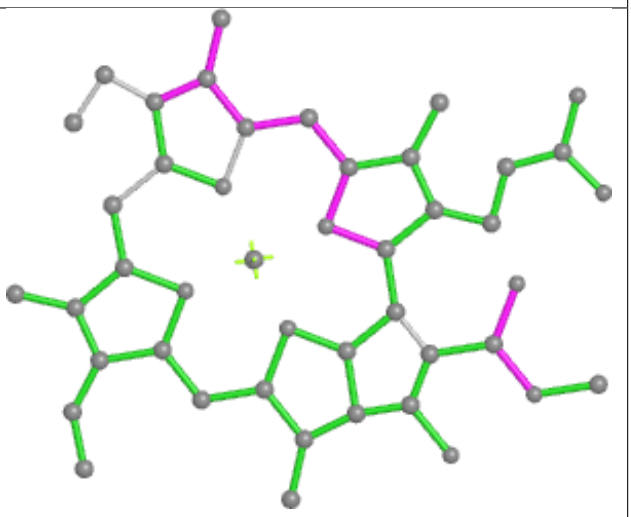
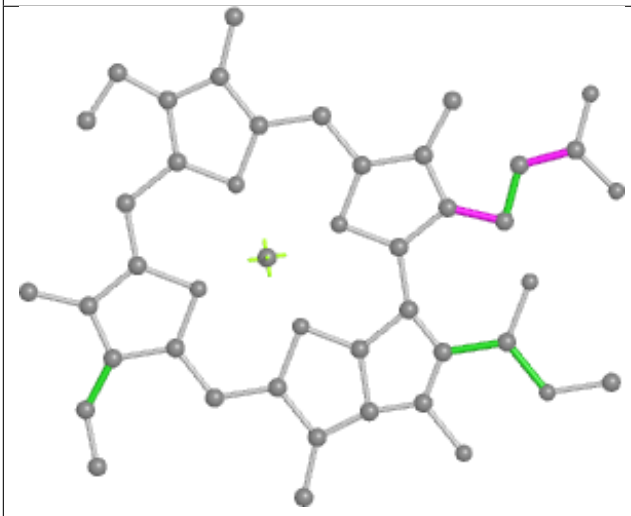


Bond angles



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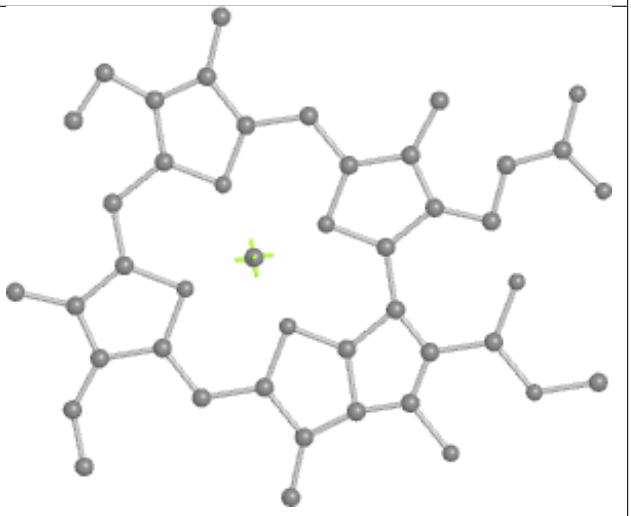
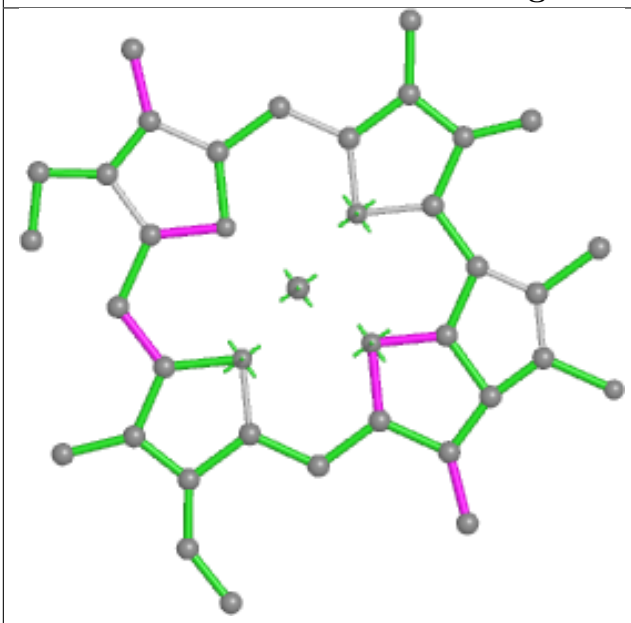
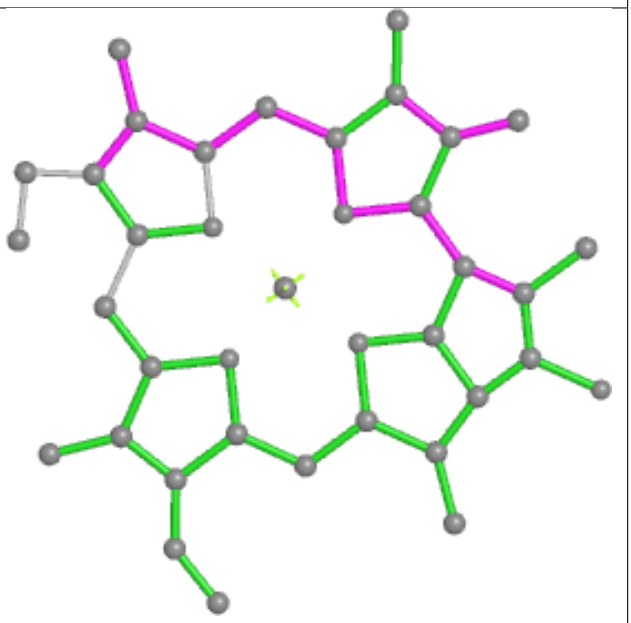


Rings

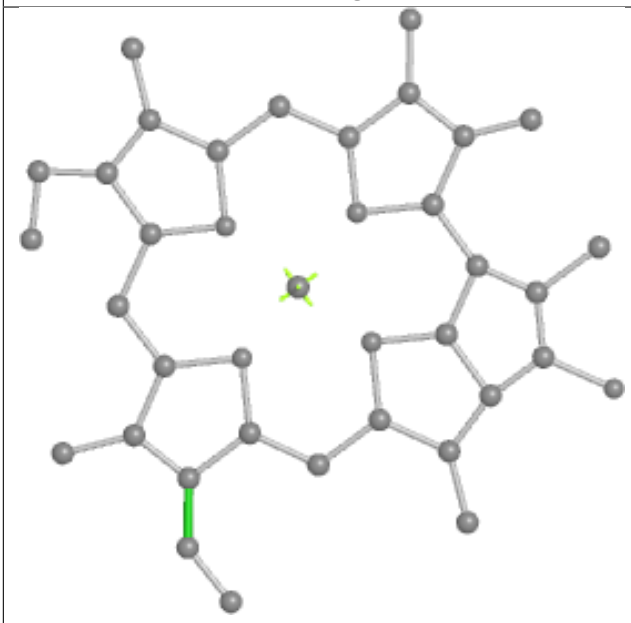
Ligand CLA 8 314



Bond lengths



Bond angles



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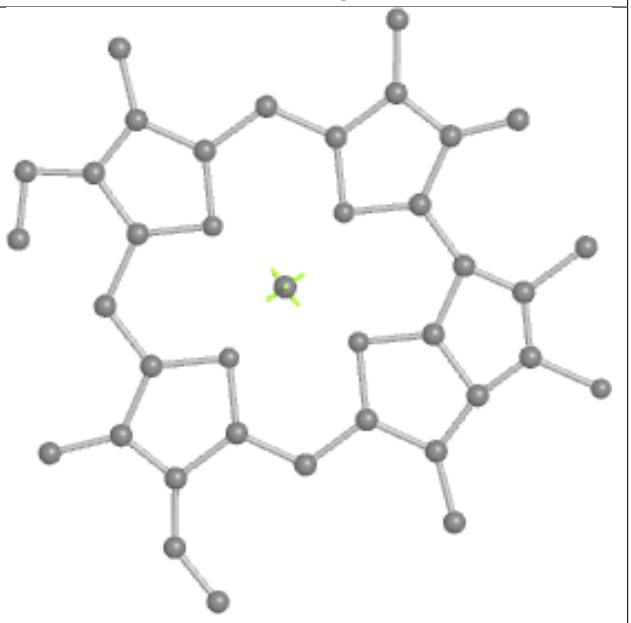
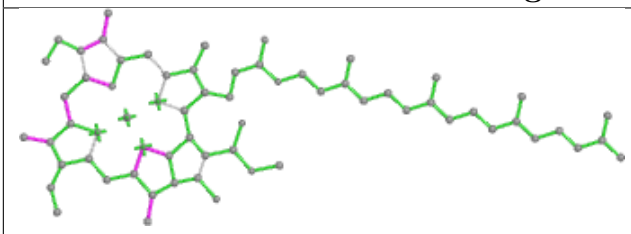
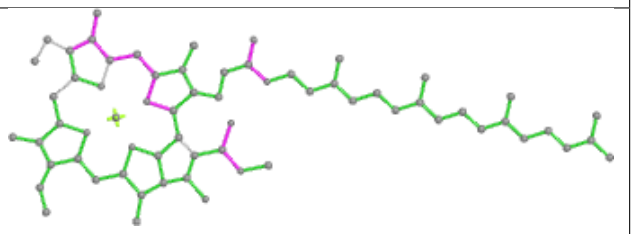


Rings

Ligand CLA B 610	
	
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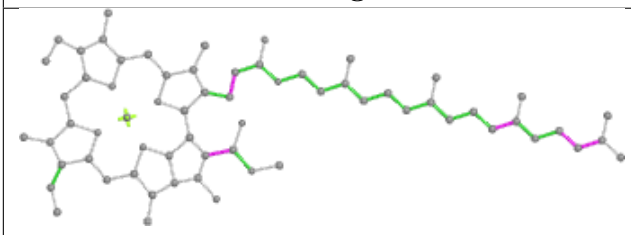
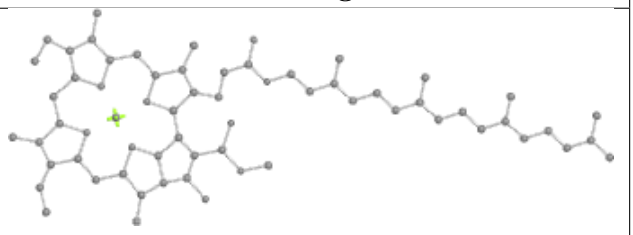
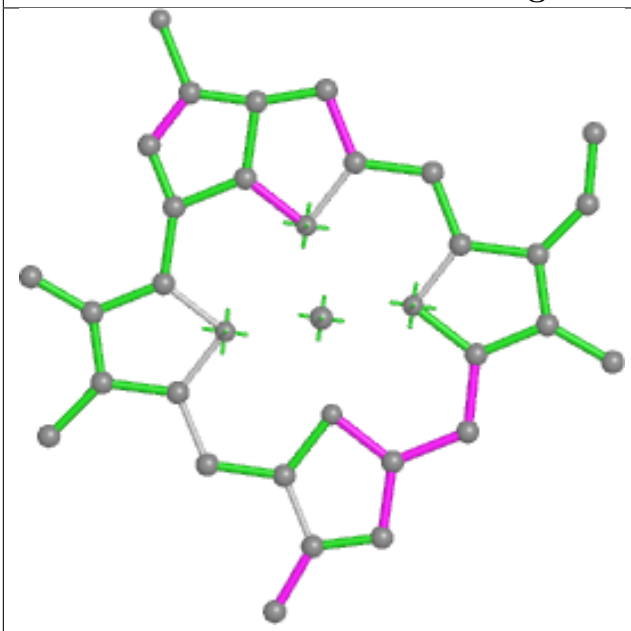
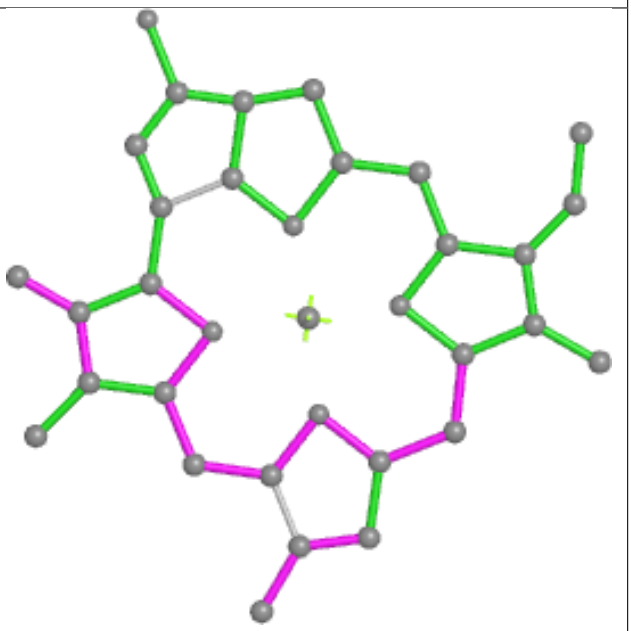
	
Torsions	**Rings**

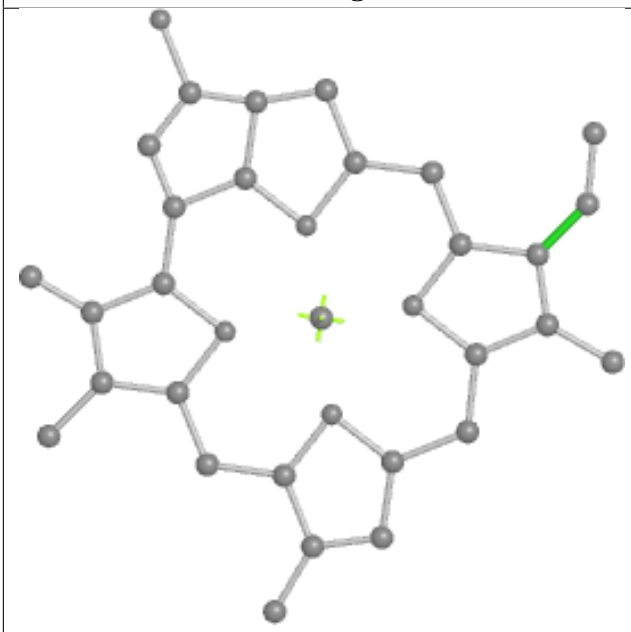
Ligand CLA 7 313



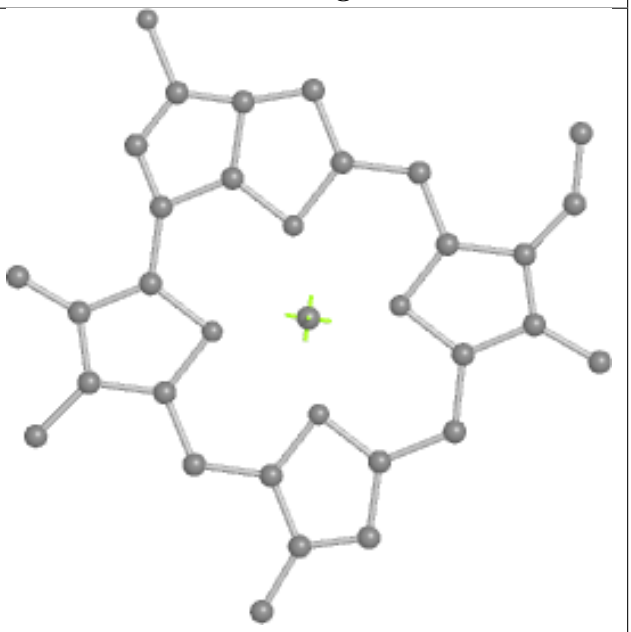
Bond lengths



Bond angles

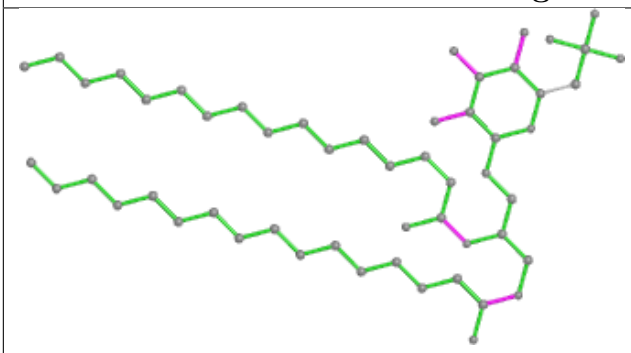


Torsions

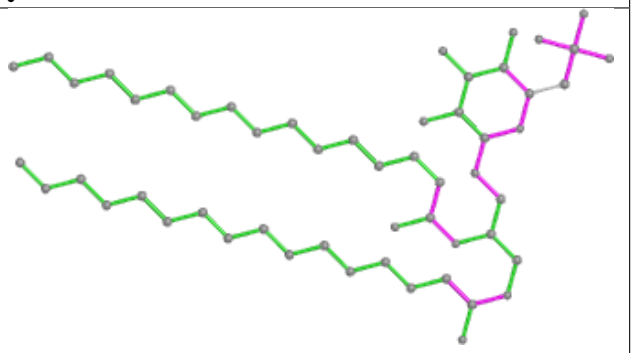


Rings

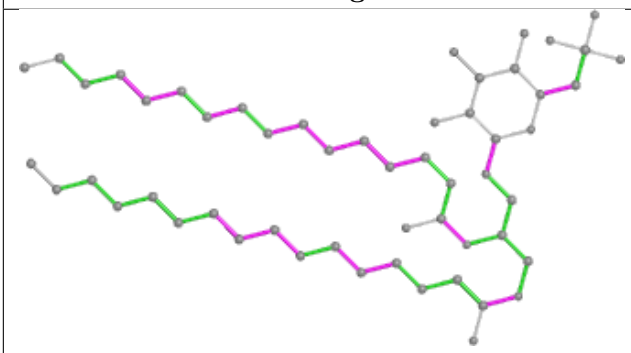
Ligand SQD l 101



Bond lengths



Bond angles



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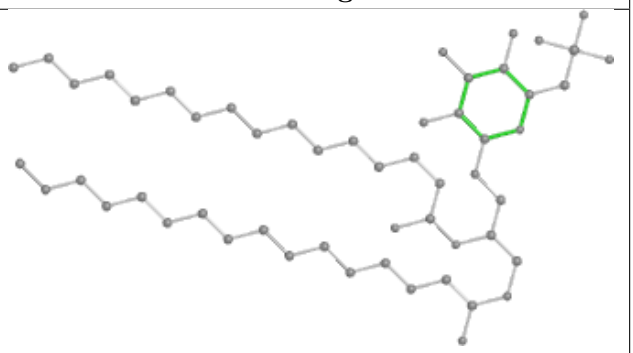
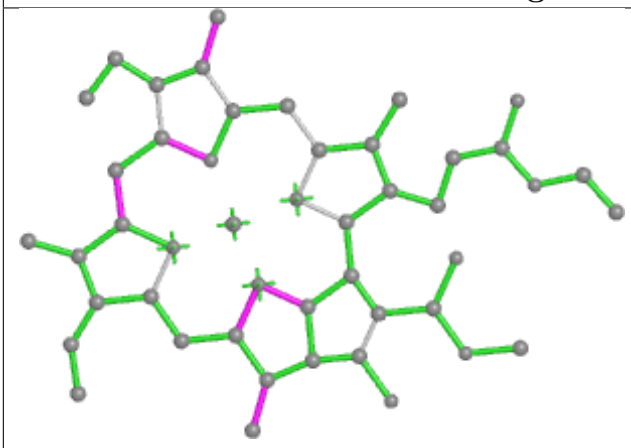
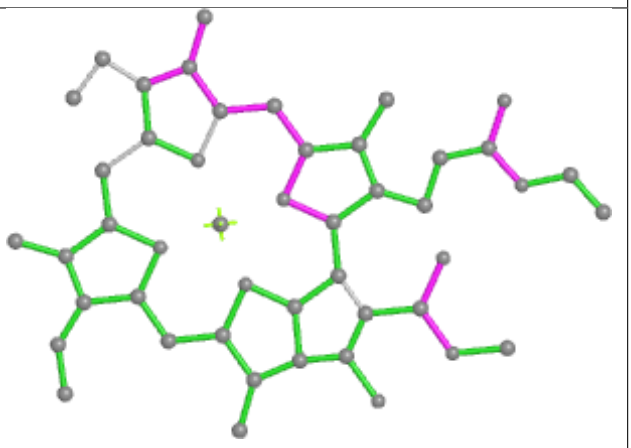


Rings

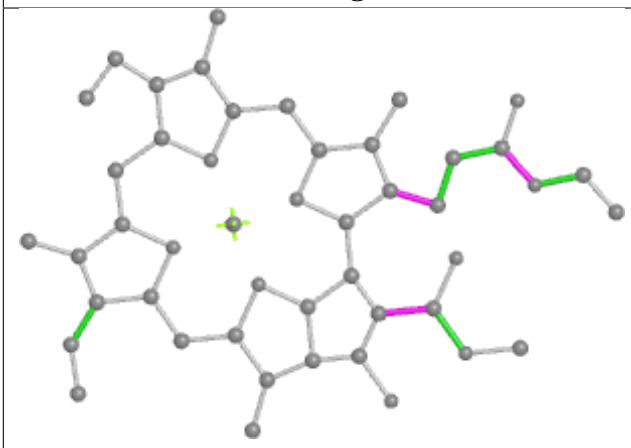
Ligand CLA b 602



Bond lengths



Bond angles



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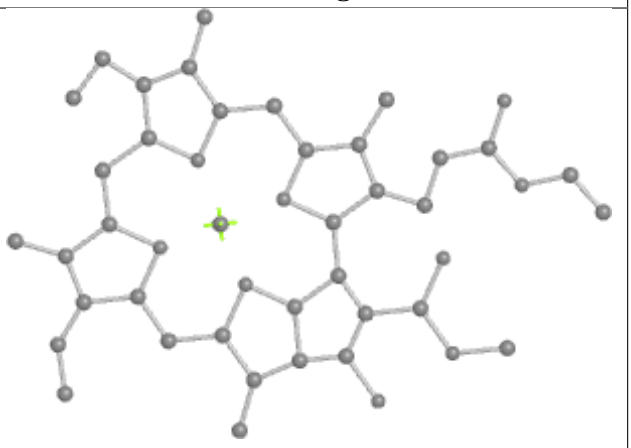
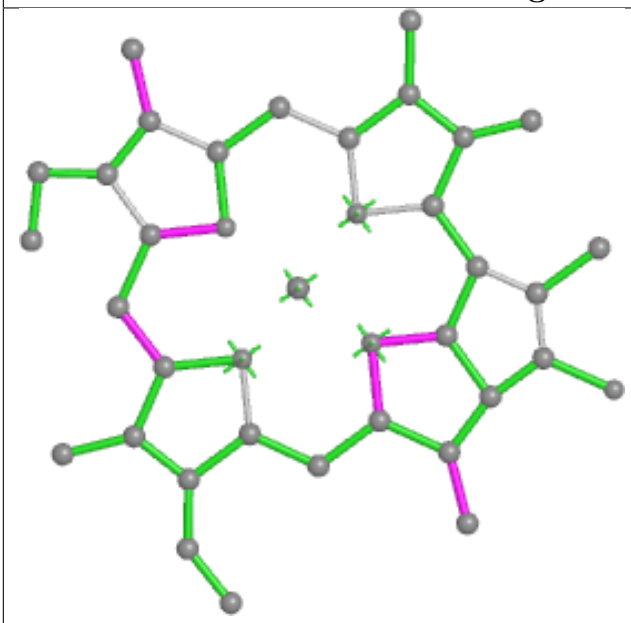
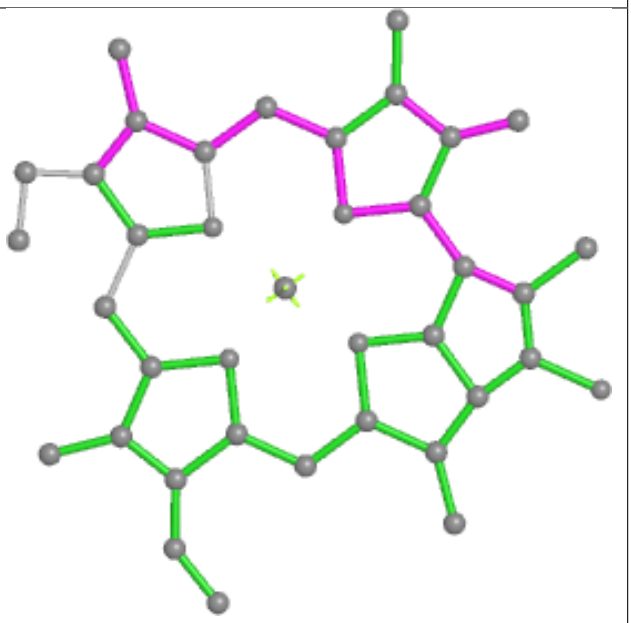


Rings

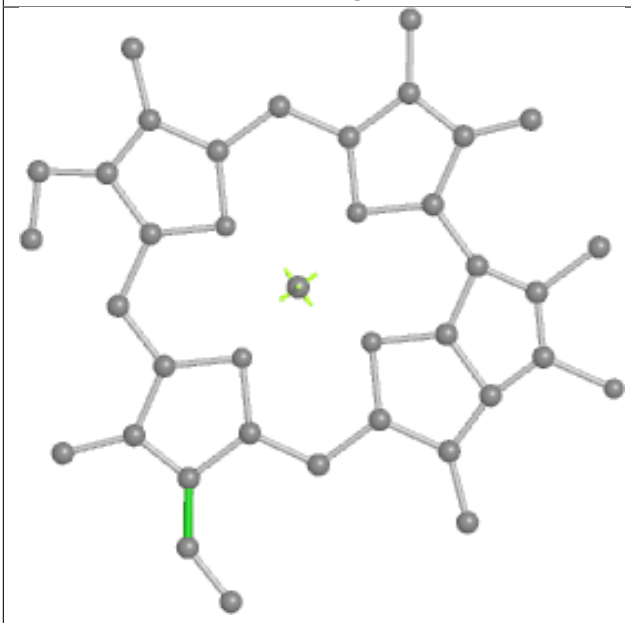
Ligand CLA 8 316



Bond lengths



Bond angles



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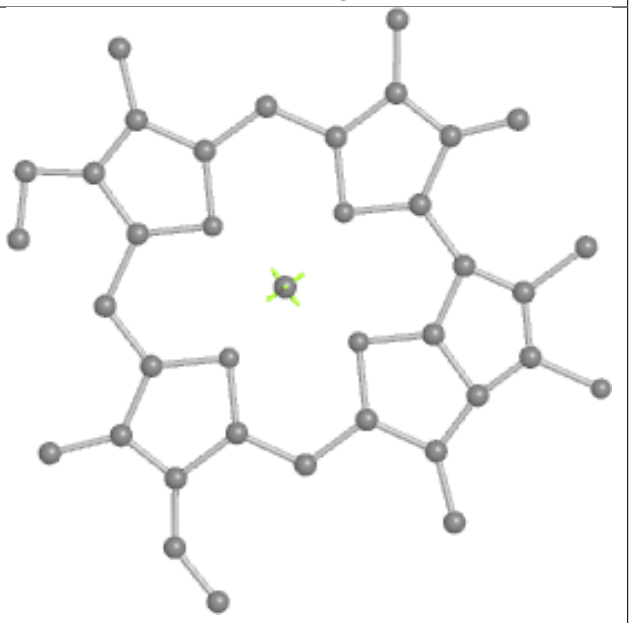
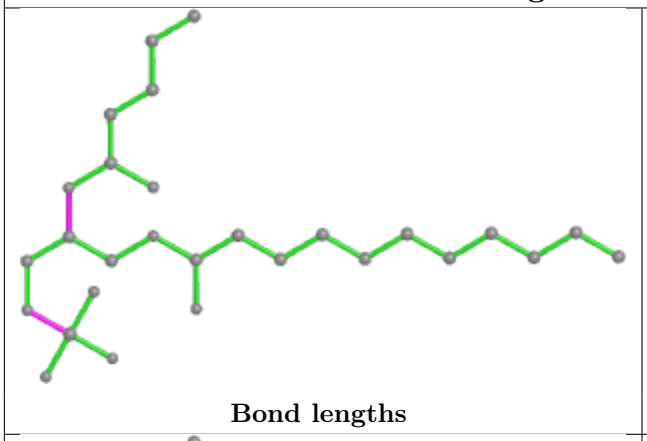


Rings

Ligand LHG 7 316



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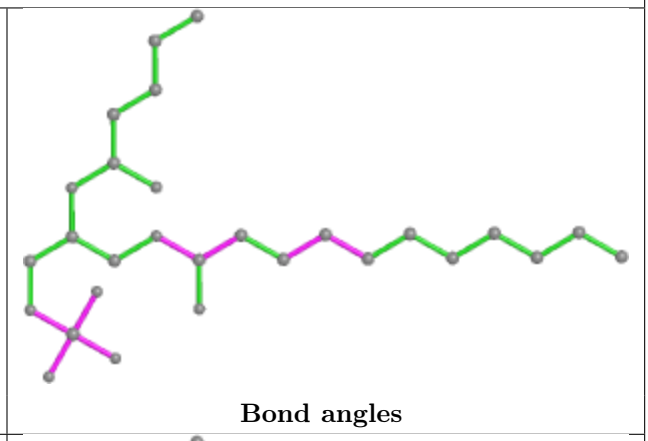
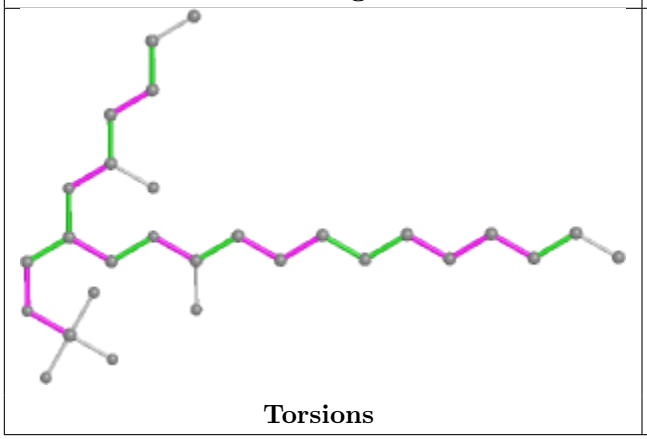
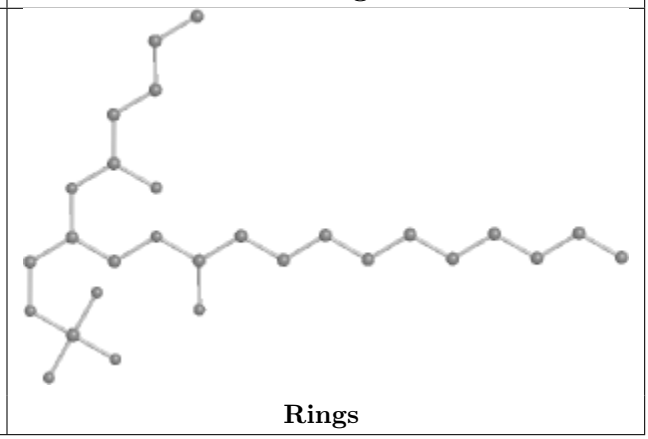


Bond angles

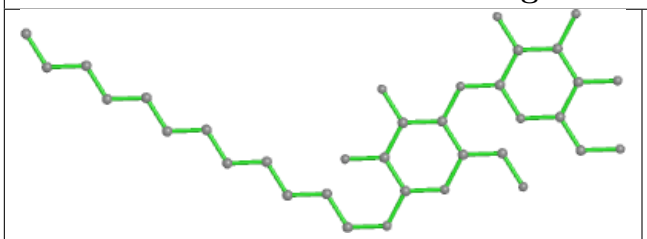


Torsions

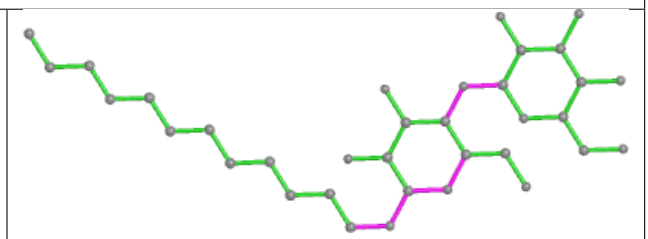


Rings

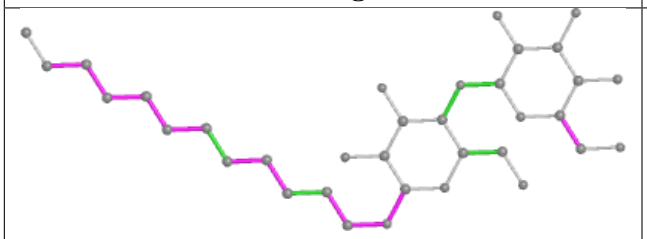
Ligand LMU w 302



Bond lengths



Bond angles



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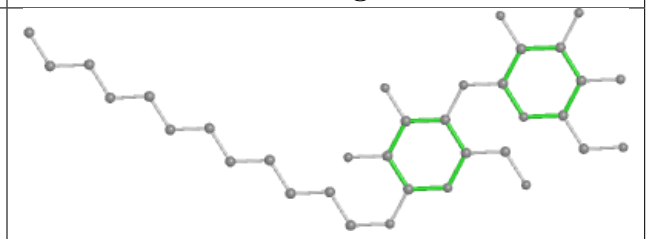
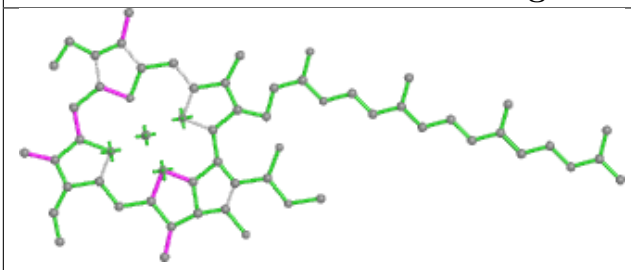
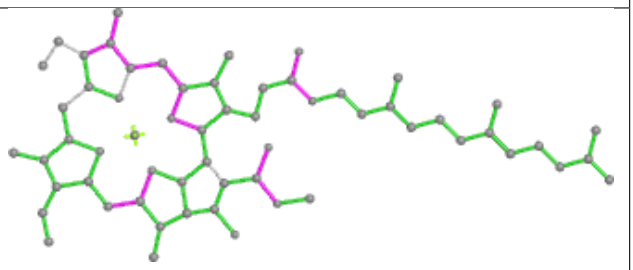


Rings

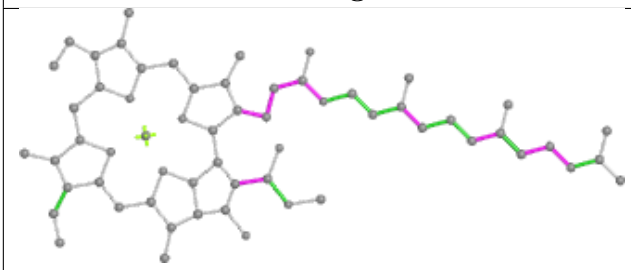
Ligand CLA 4 311



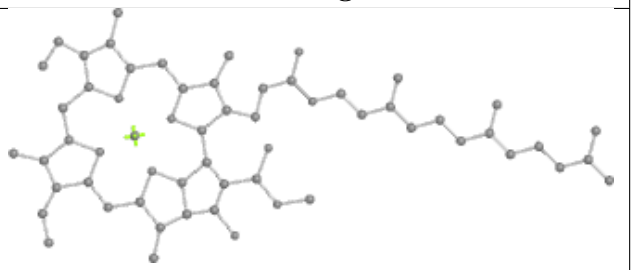
Bond lengths



Bond angles

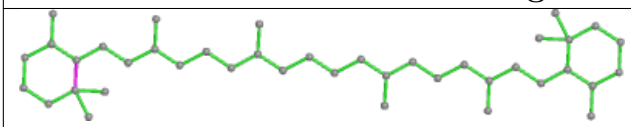


Torsions

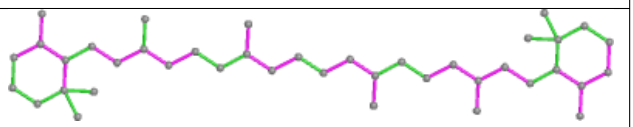


Rings

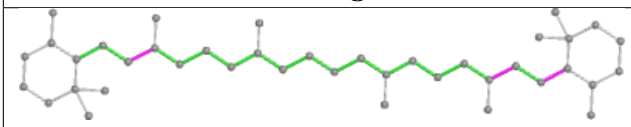
Ligand BCR c 515



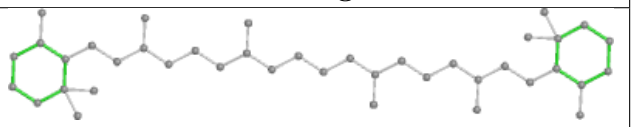
Bond lengths



Bond angles

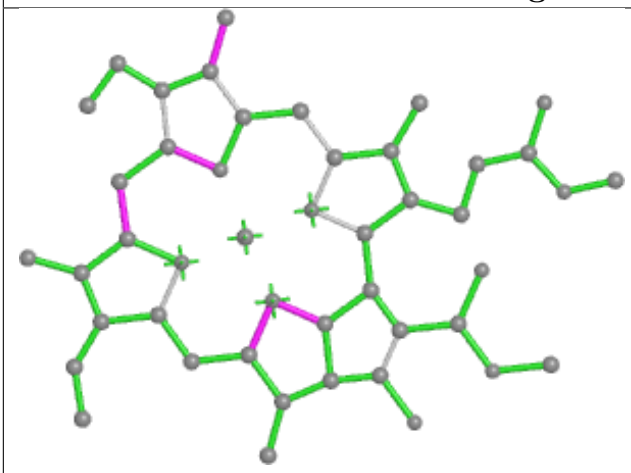


Torsions

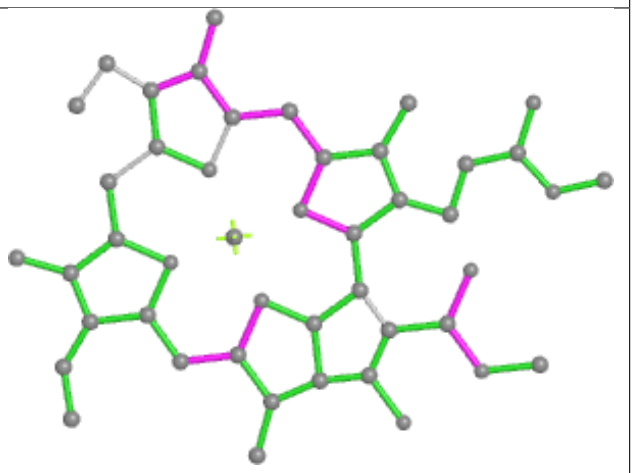


Rings

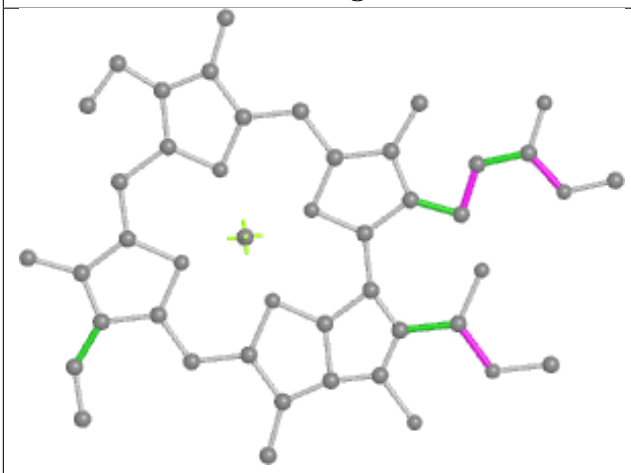
Ligand CLA 6 313



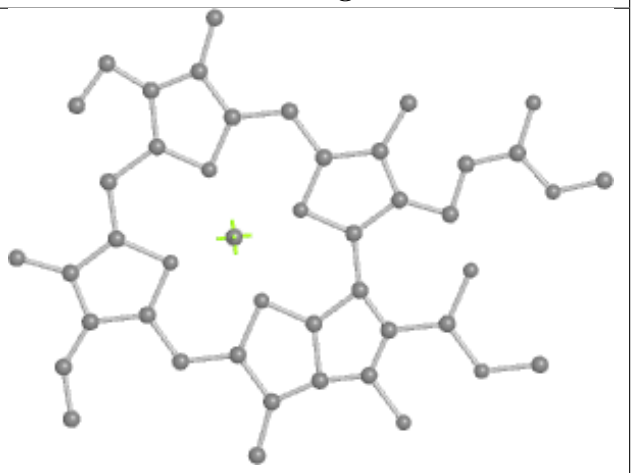
Bond lengths



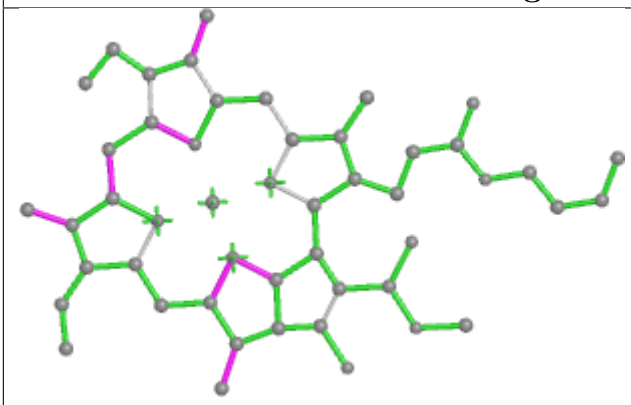
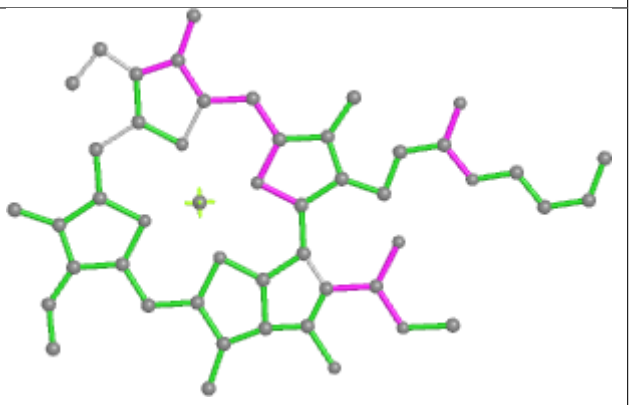
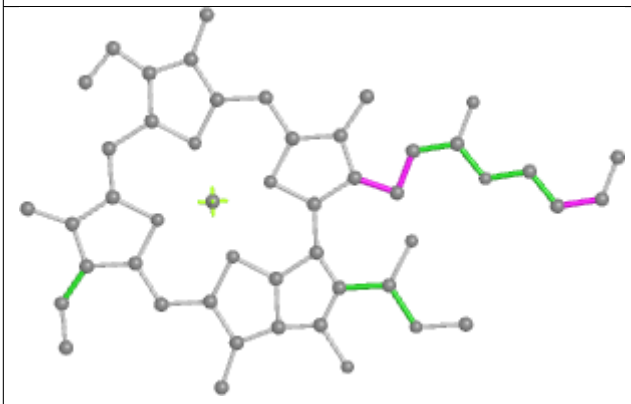
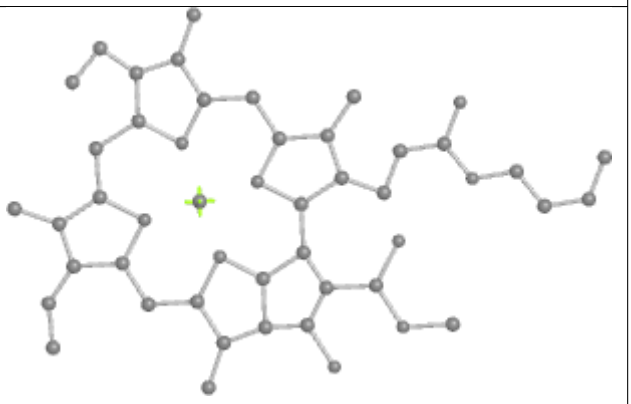
Bond angles



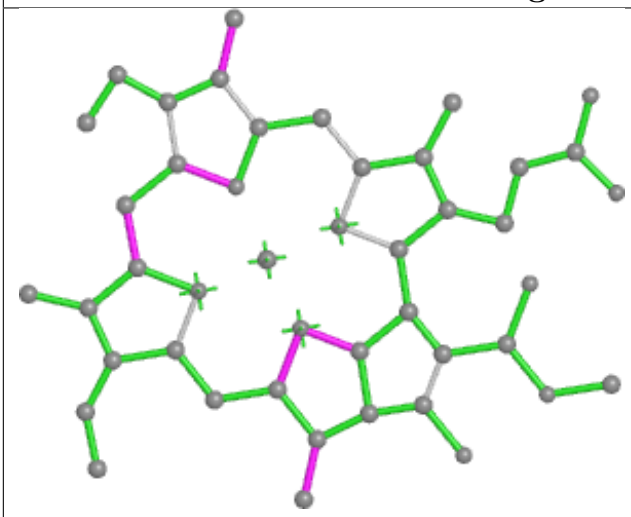
Torsions



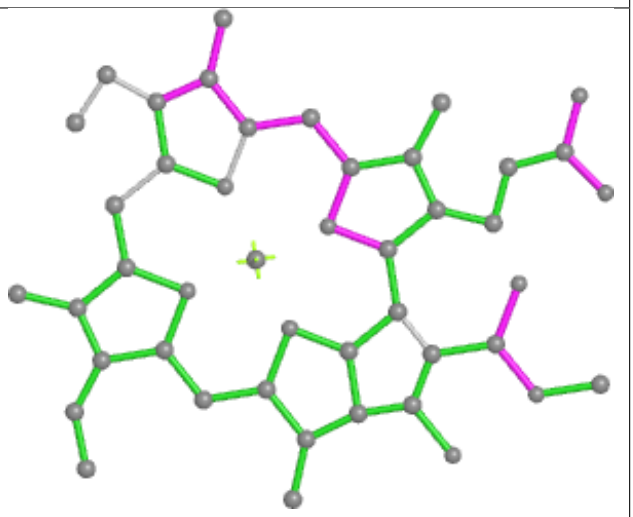
Rings

Ligand CLA A 405	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

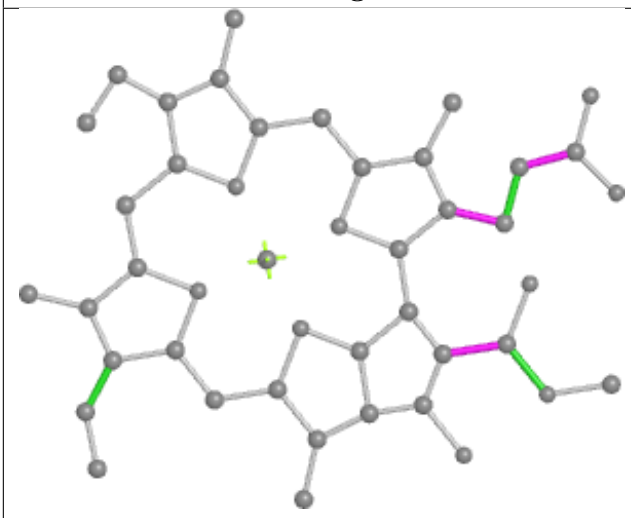
Ligand CLA 7 310



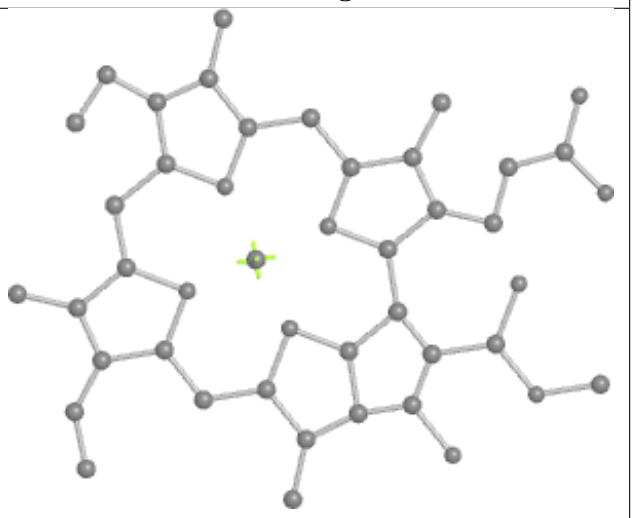
Bond lengths



Bond angles

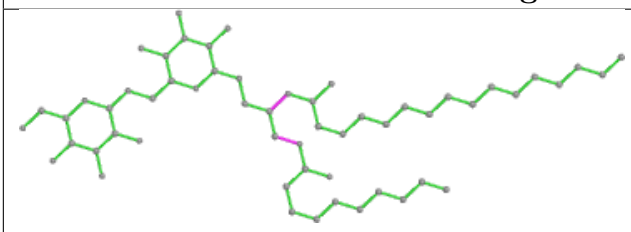


Torsions

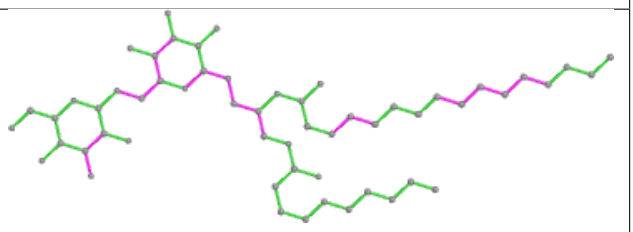


Rings

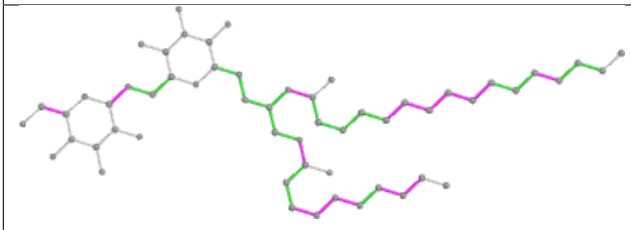
Ligand DGD C 517



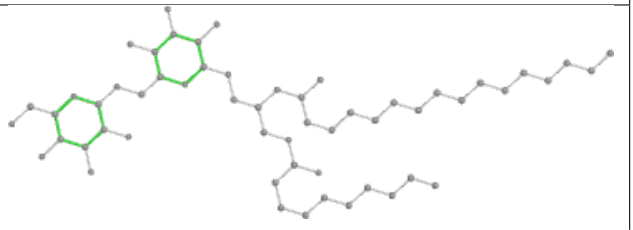
Bond lengths



Bond angles

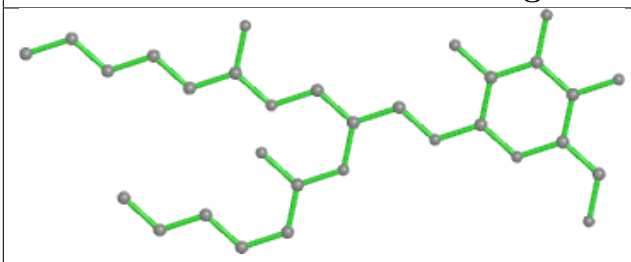


Torsions

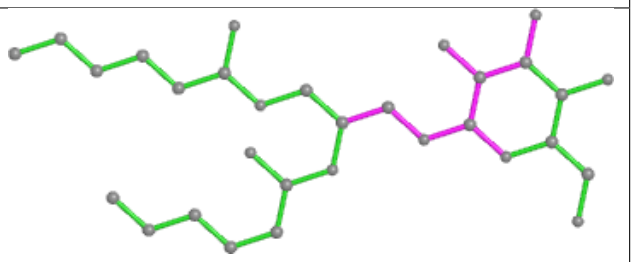


Rings

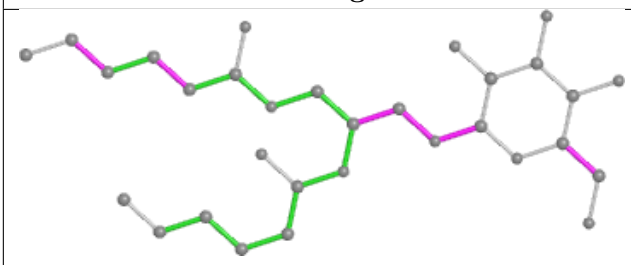
Ligand LMG 3 316



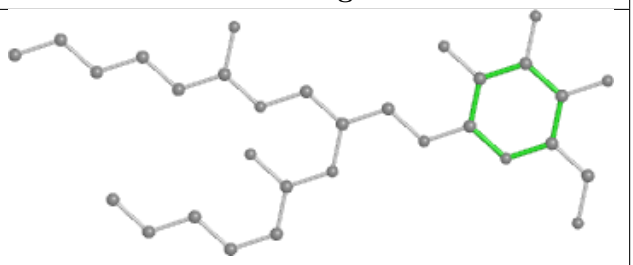
Bond lengths



Bond angles

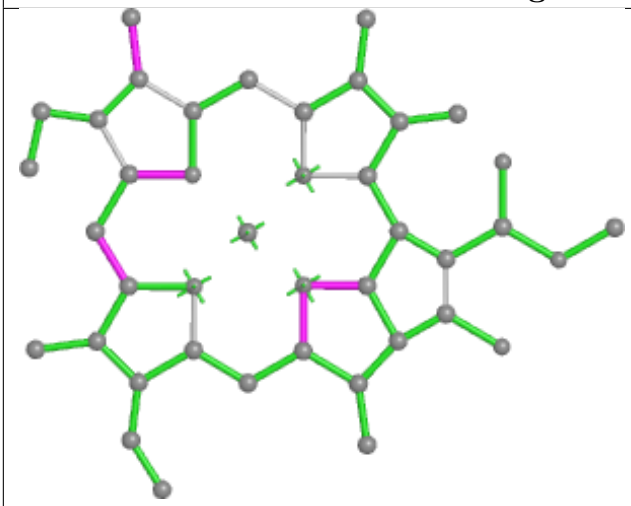


Torsions

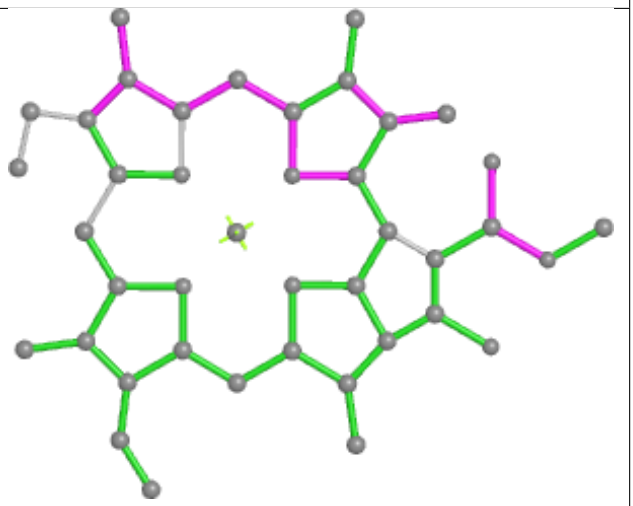


Rings

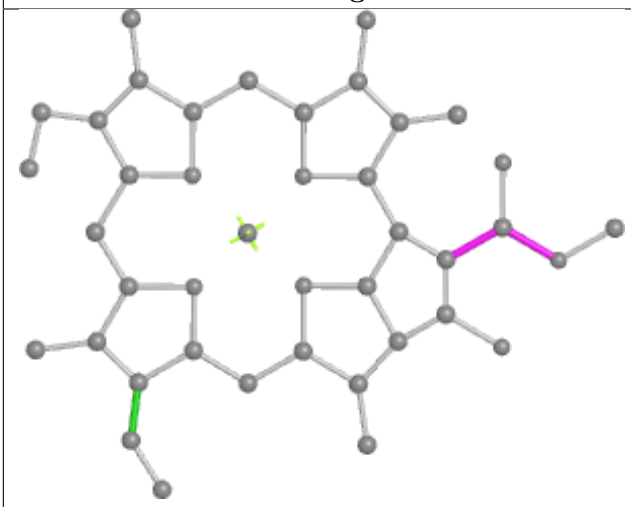
Ligand CLA 1 305



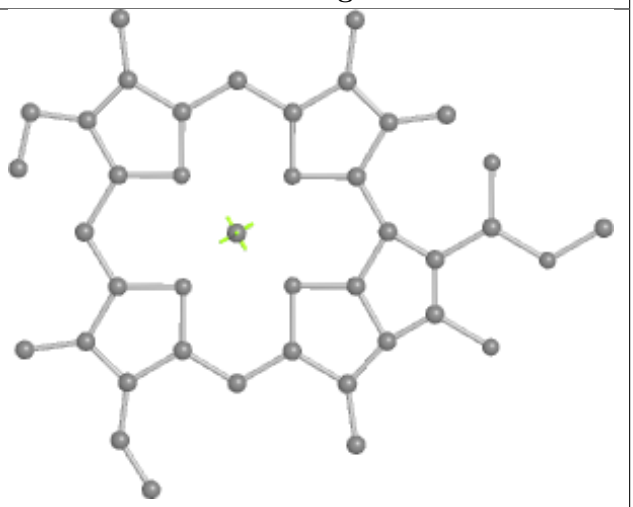
Bond lengths



Bond angles

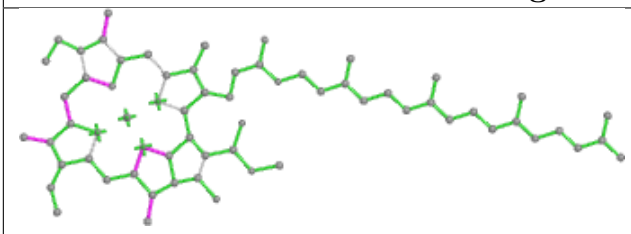


Torsions

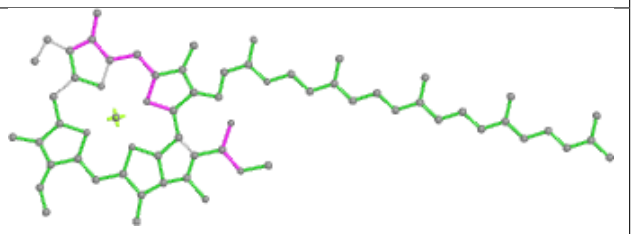


Rings

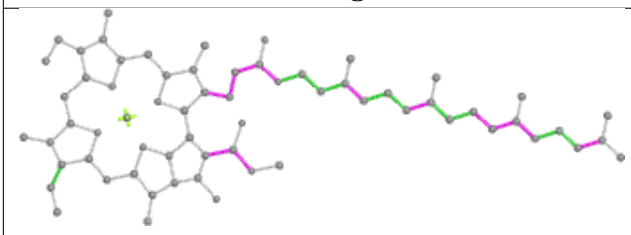
Ligand CLA c 501



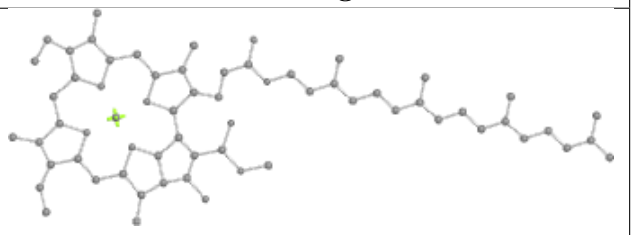
Bond lengths



Bond angles

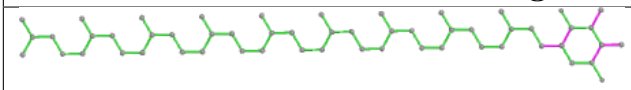


Torsions

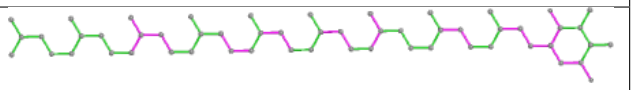


Rings

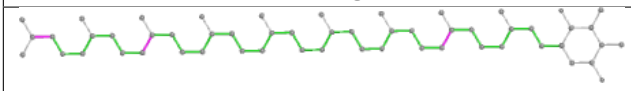
Ligand PL9 D 408



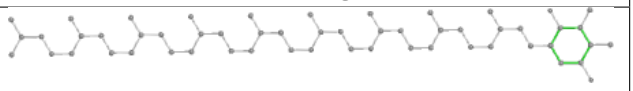
Bond lengths



Bond angles

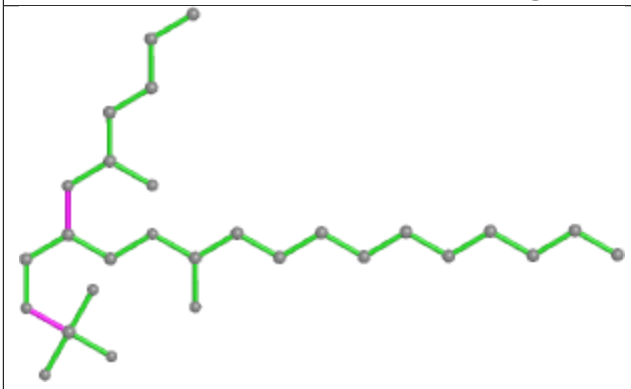


Torsions

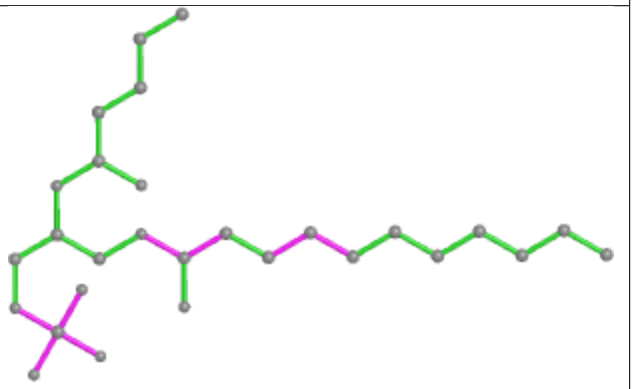


Rings

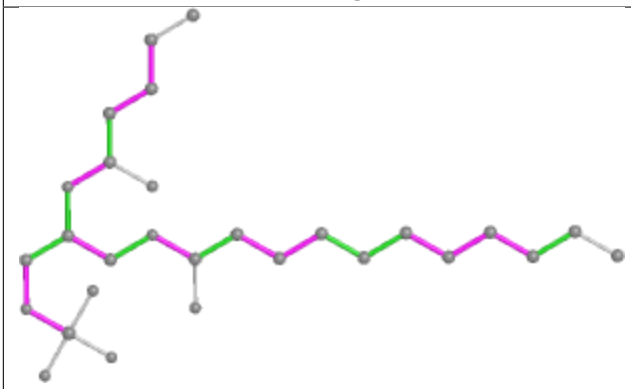
Ligand LHG 0 315



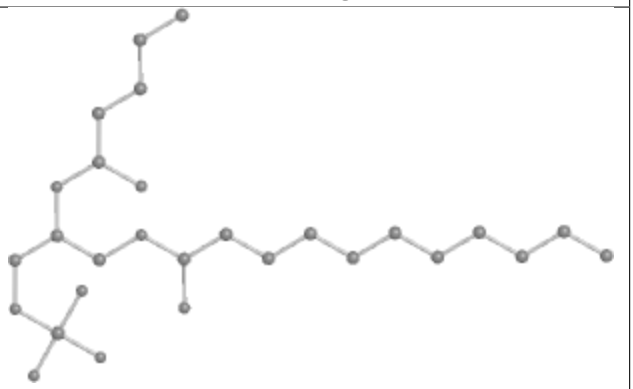
Bond lengths



Bond angles

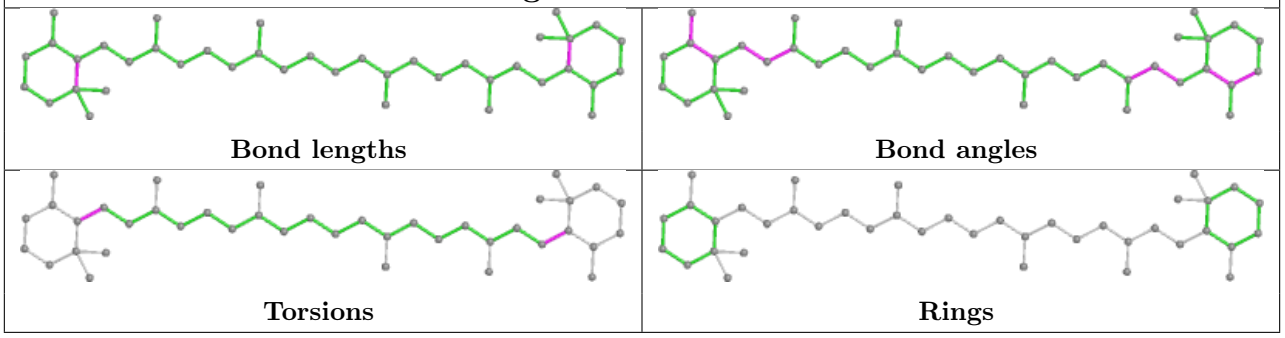


Torsions

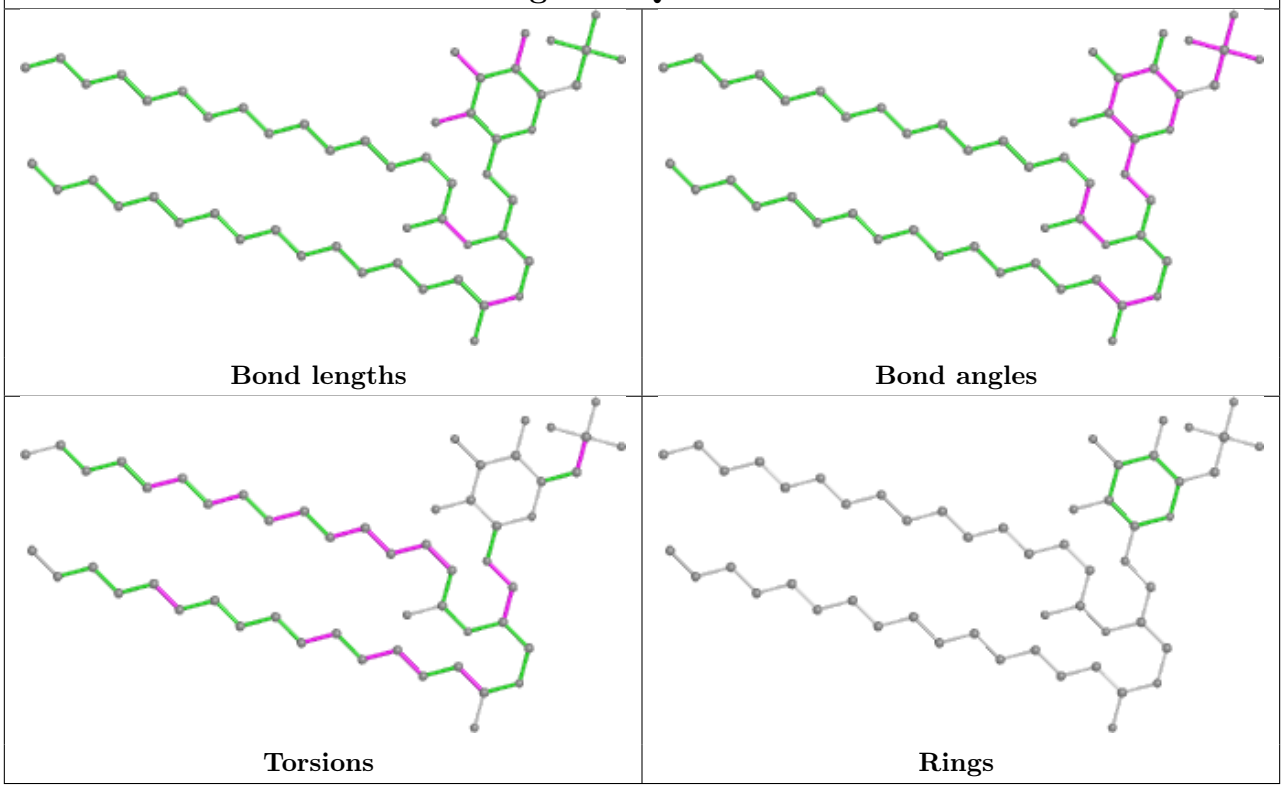


Rings

Ligand BCR A 409



Ligand SQD a 413



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.

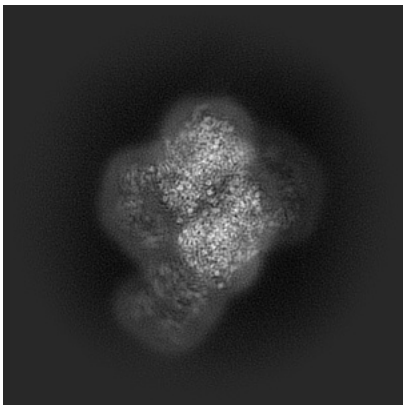
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-35766. These allow visual inspection of the internal detail of the map and identification of artifacts.

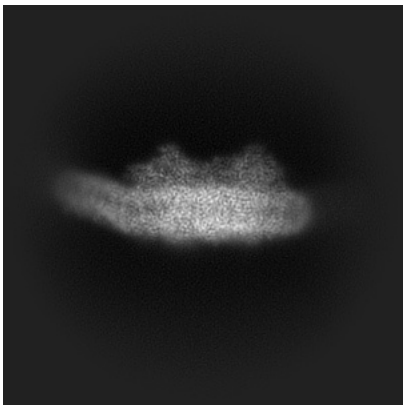
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

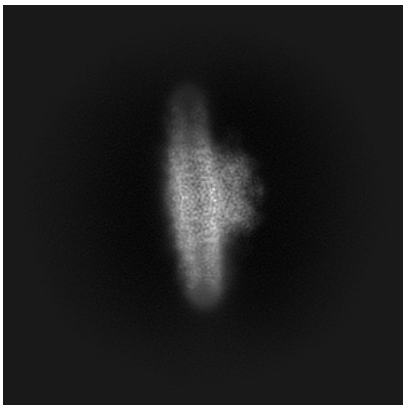
6.1.1 Primary map



X

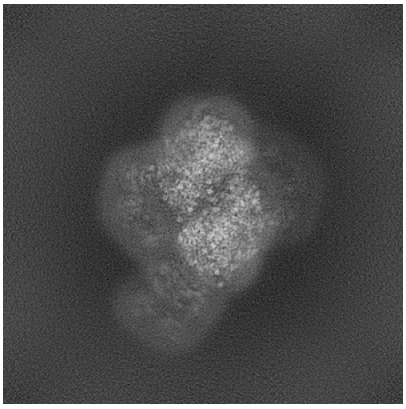


Y

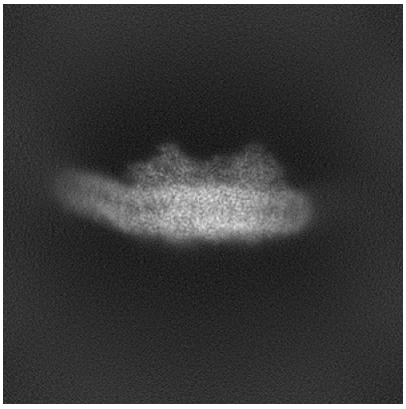


Z

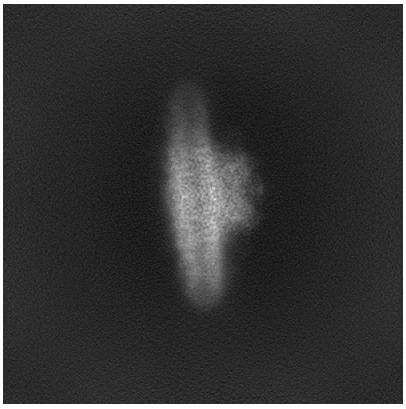
6.1.2 Raw map



X



Y

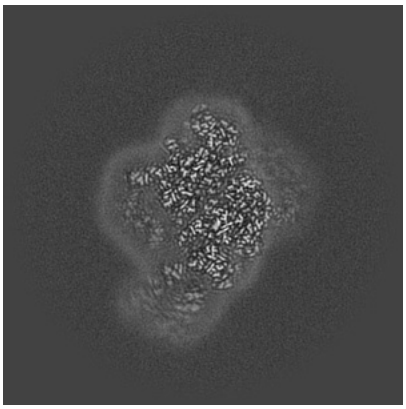


Z

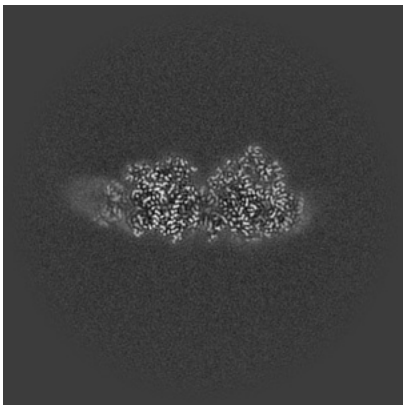
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

6.2.1 Primary map



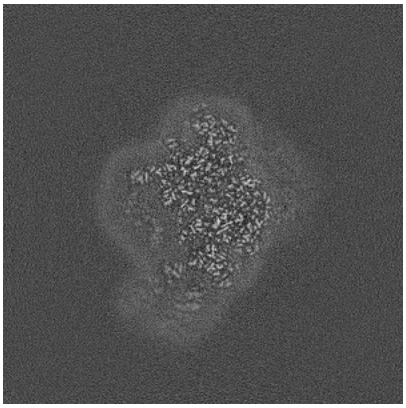
X Index: 250



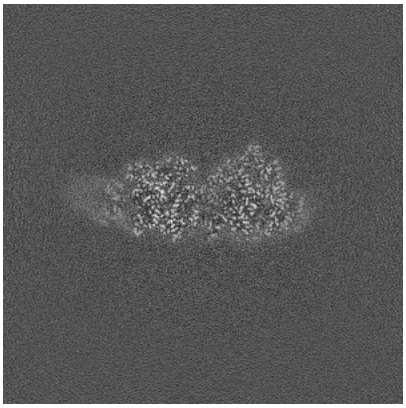
Y Index: 250

Z Index: 250

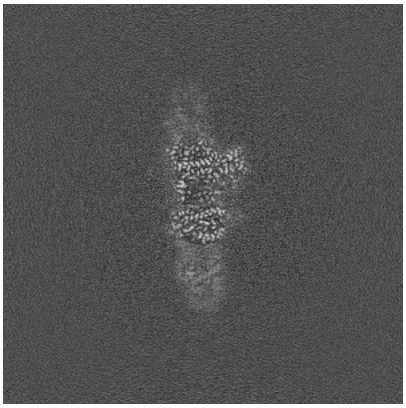
6.2.2 Raw map



X Index: 250



Y Index: 250

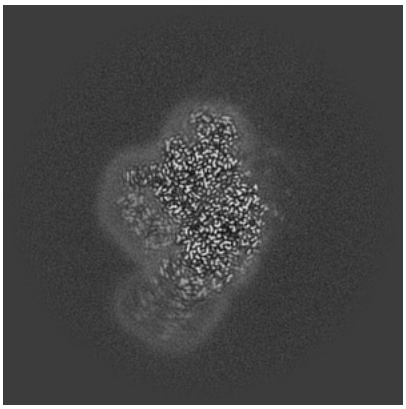


Z Index: 250

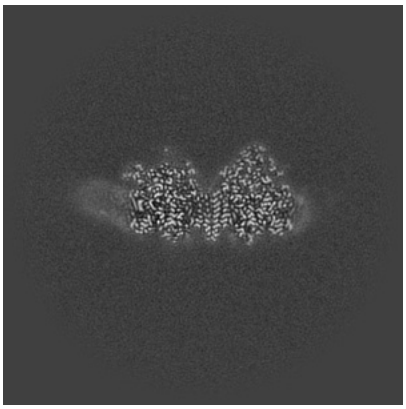
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

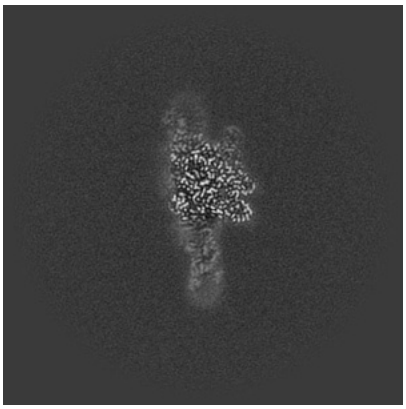
6.3.1 Primary map



X Index: 259

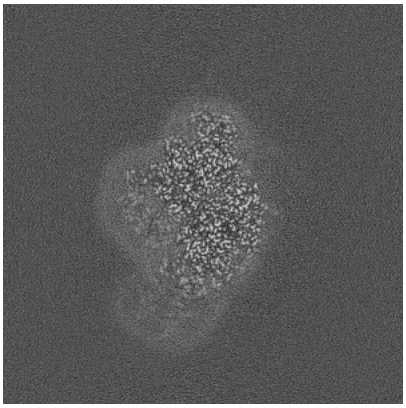


Y Index: 259

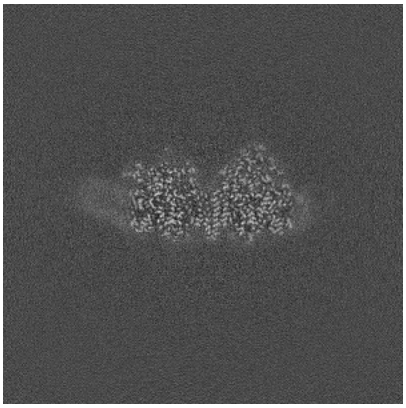


Z Index: 223

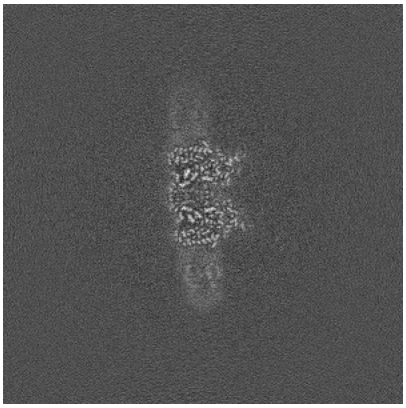
6.3.2 Raw map



X Index: 259



Y Index: 259

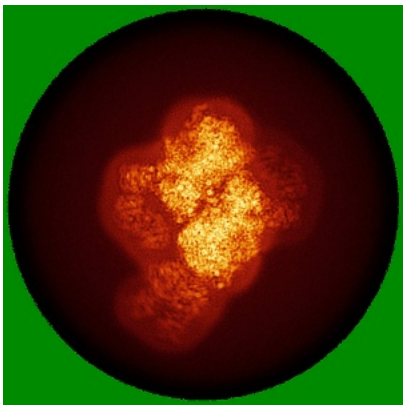


Z Index: 260

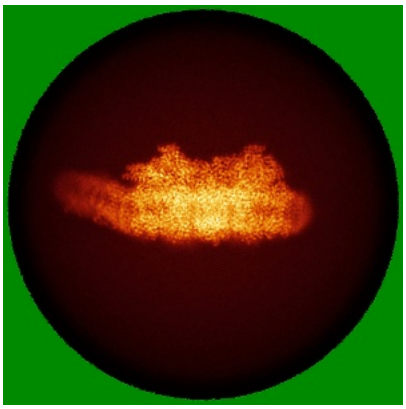
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) (i)

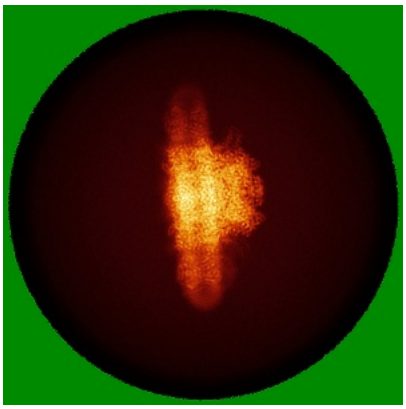
6.4.1 Primary map



X

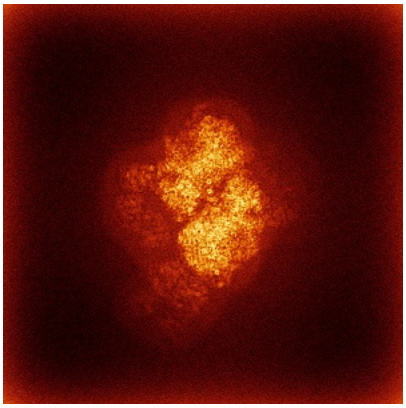


Y

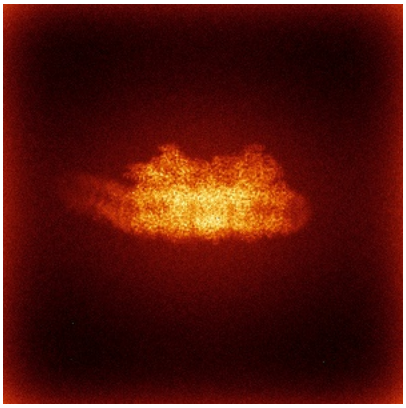


Z

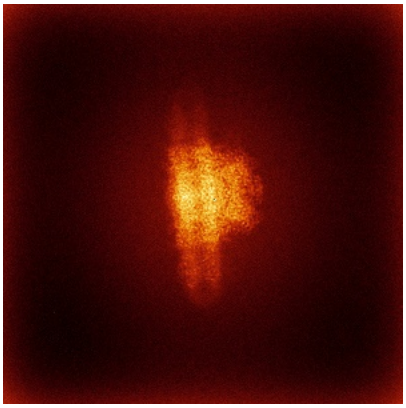
6.4.2 Raw map



X



Y

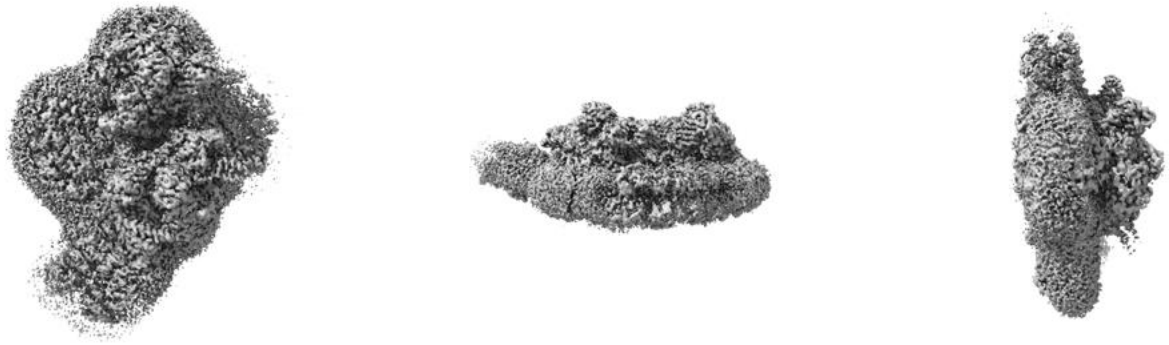


Z

The images above show the map standard deviation projections with false color in three orthogonal directions. Minimum values are shown in green, max in blue, and dark to light orange shades represent small to large values respectively.

6.5 Orthogonal surface views (i)

6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.088. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map

X Y Z

These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

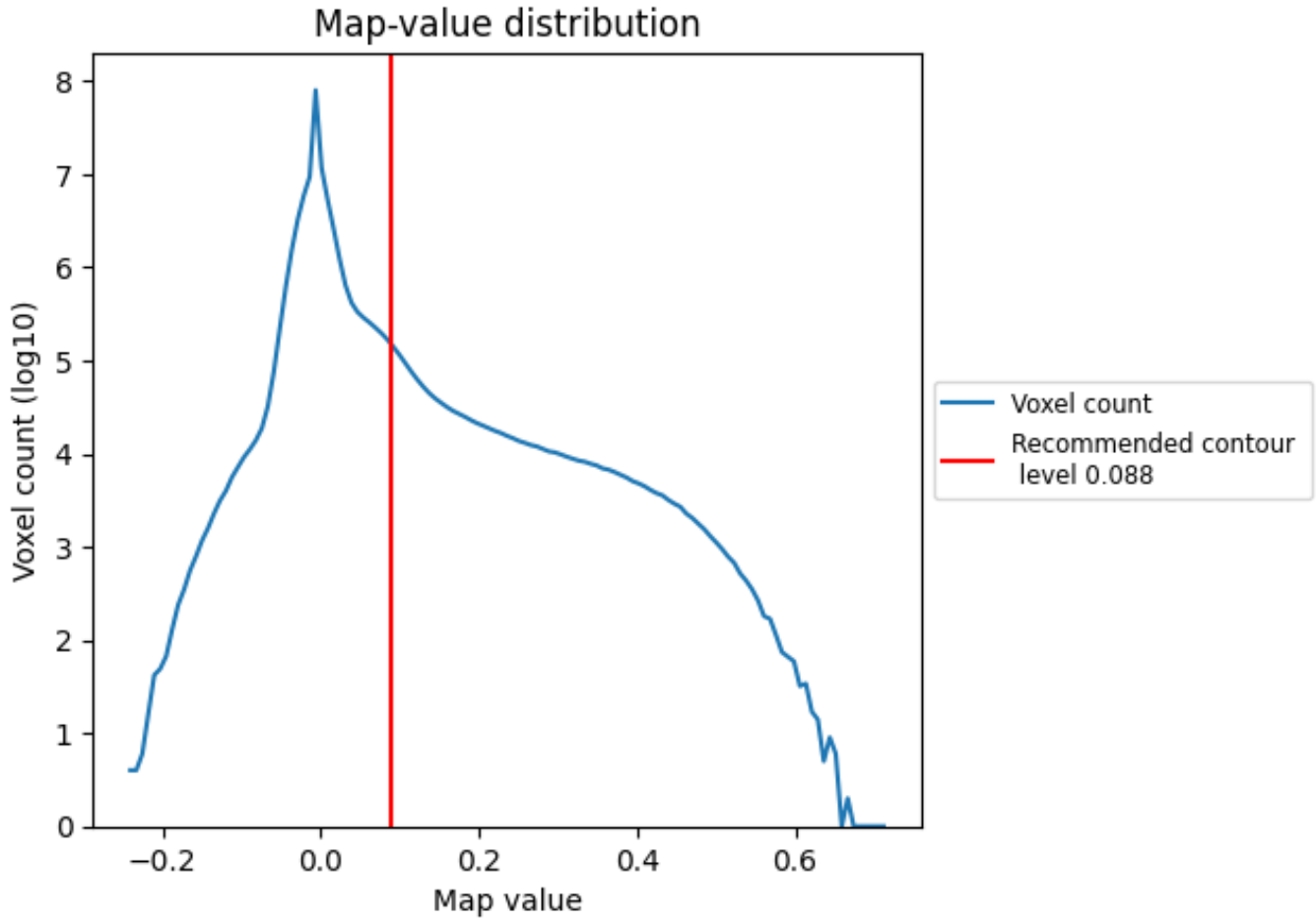
6.6 Mask visualisation (i)

This section was not generated. No masks/segmentation were deposited.

7 Map analysis

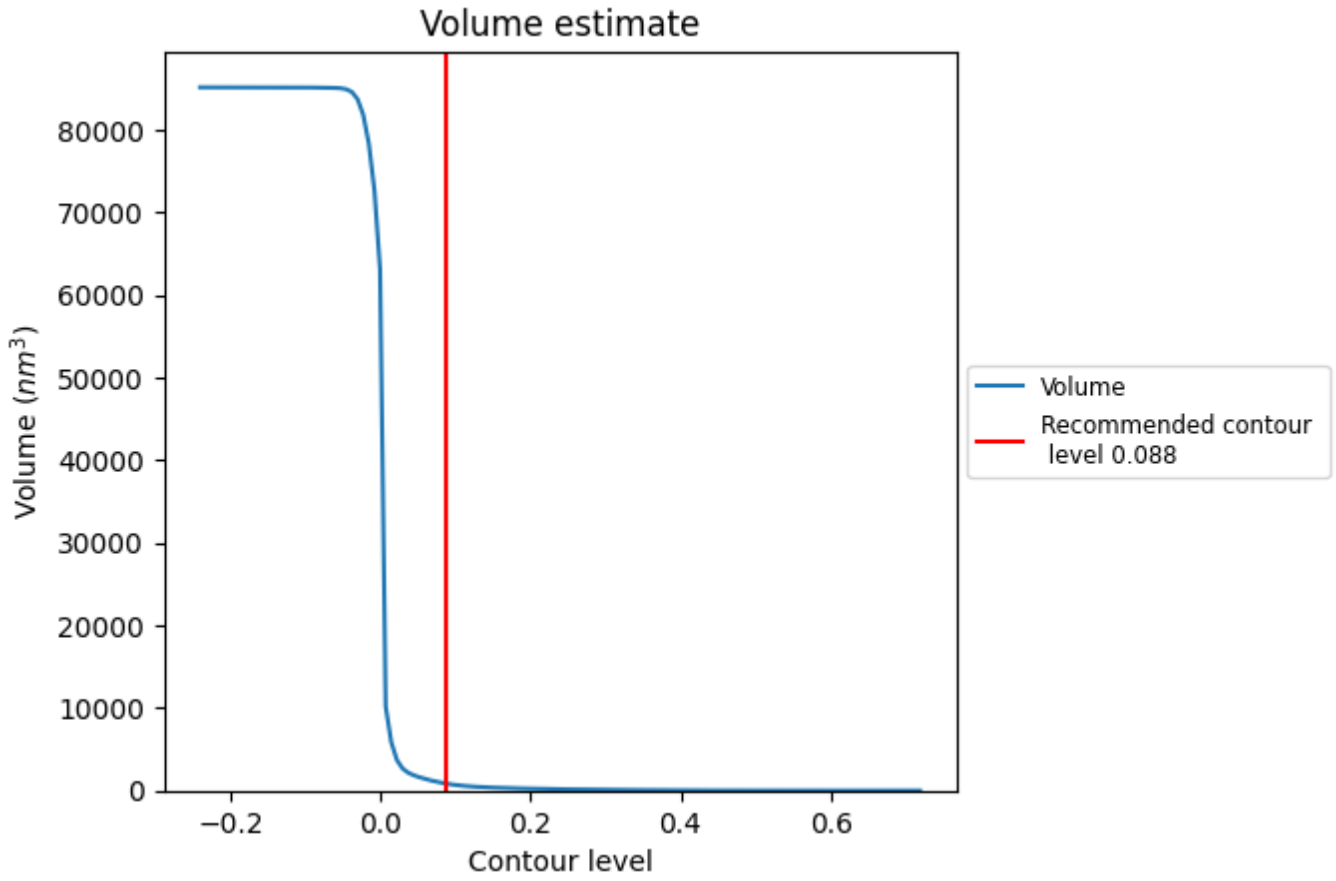
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution



The map-value distribution is plotted in 128 intervals along the x-axis. The y-axis is logarithmic. A spike in this graph at zero usually indicates that the volume has been masked.

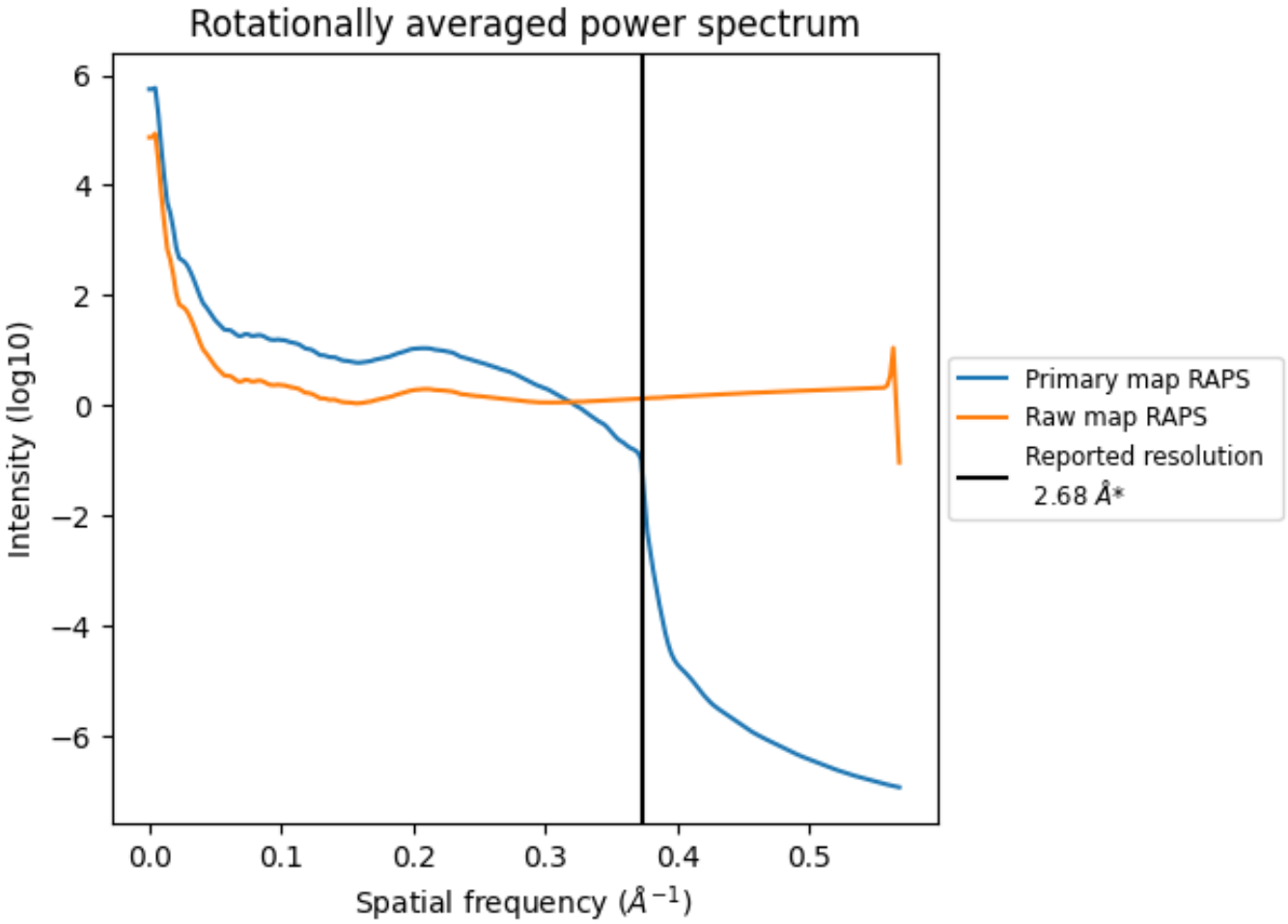
7.2 Volume estimate (i)



The volume at the recommended contour level is 833 nm^3; this corresponds to an approximate mass of 752 kDa.

The volume estimate graph shows how the enclosed volume varies with the contour level. The recommended contour level is shown as a vertical line and the intersection between the line and the curve gives the volume of the enclosed surface at the given level.

7.3 Rotationally averaged power spectrum (i)

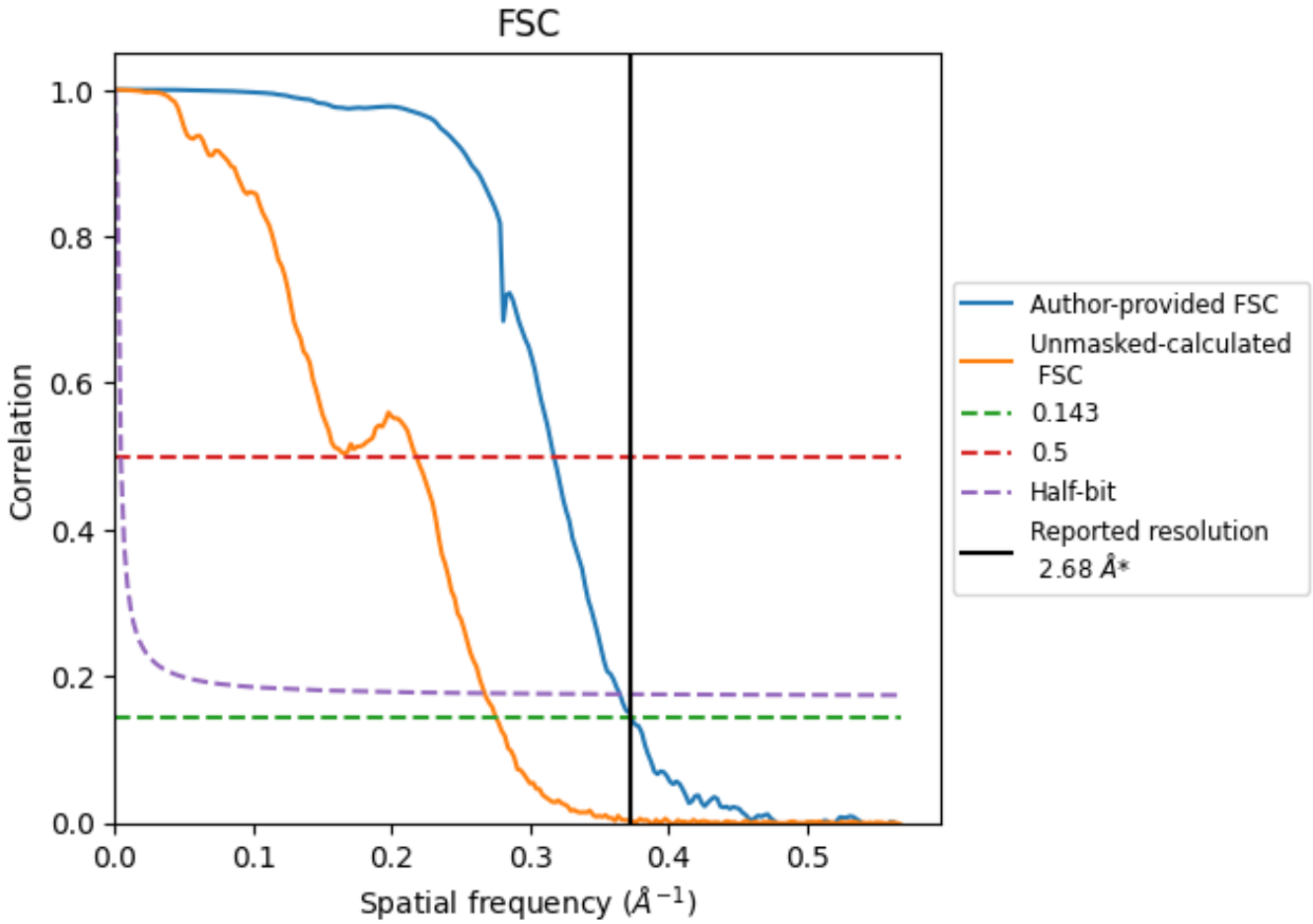


*Reported resolution corresponds to spatial frequency of 0.373 Å^{-1}

8 Fourier-Shell correlation

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC



*Reported resolution corresponds to spatial frequency of 0.373 Å^{-1}

8.2 Resolution estimates (i)

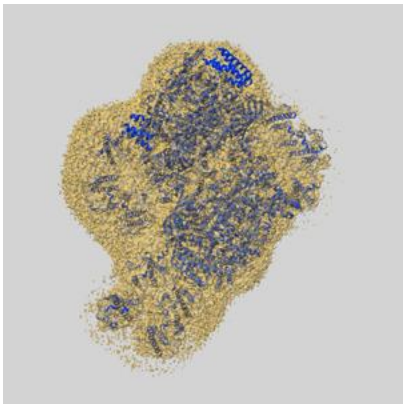
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.68	-	-
Author-provided FSC curve	2.68	3.15	2.74
Unmasked-calculated*	3.63	4.59	3.74

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 3.63 differs from the reported value 2.68 by more than 10 %

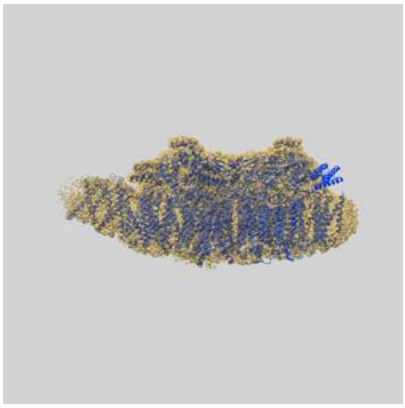
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-35766 and PDB model 8IWH. Per-residue inclusion information can be found in section 3 on page 41.

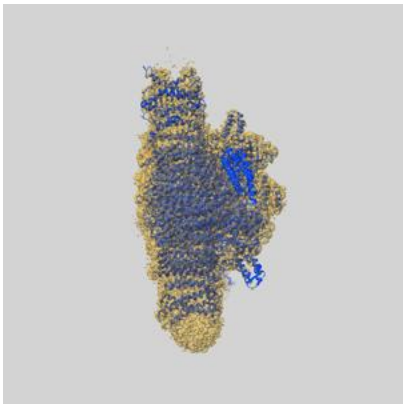
9.1 Map-model overlay



X



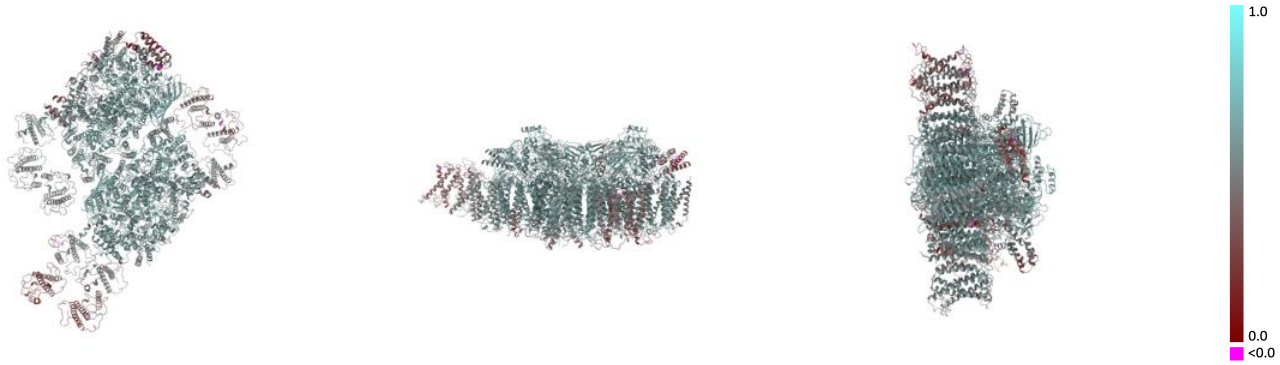
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.088 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

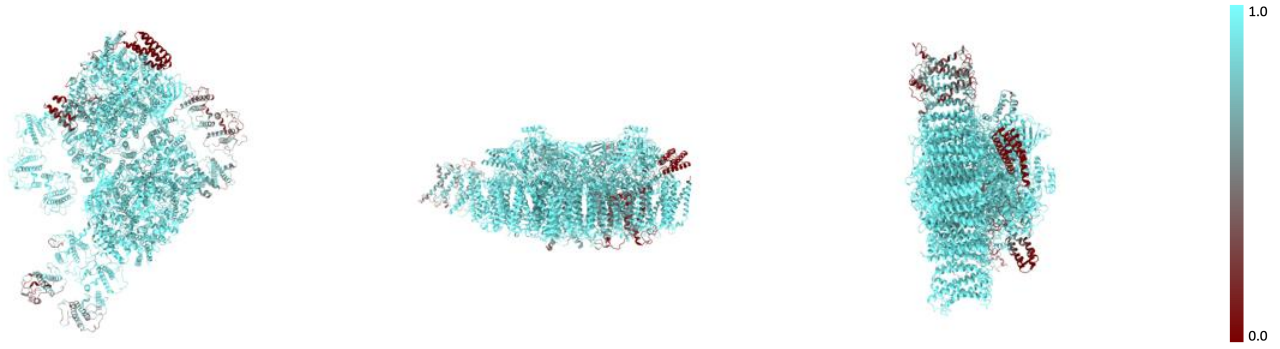
9.2 Q-score mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions at which atoms can be resolved. Low Q-score values may therefore be expected for many entries.

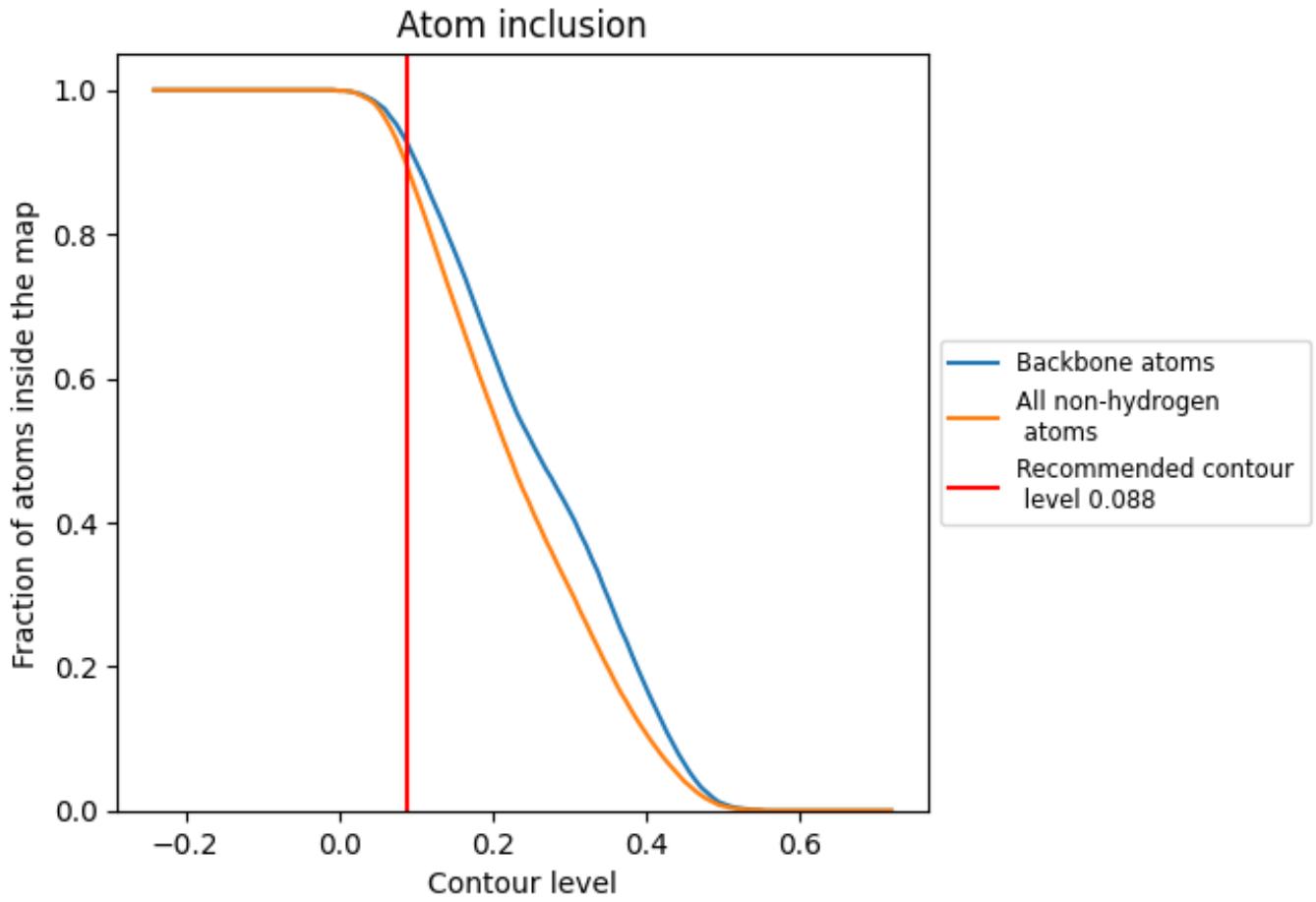
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.088).

9.4 Atom inclusion (i)



At the recommended contour level, 93% of all backbone atoms, 90% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

The table lists the average atom inclusion at the recommended contour level (0.088) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8960	0.5410
0	0.7820	0.5060
1	0.4420	0.4020
2	0.5170	0.3360
3	0.9120	0.4840
4	0.9310	0.4850
5	0.5590	0.3090
6	0.5250	0.2970
7	0.9750	0.5430
8	0.9550	0.4950
9	0.9390	0.4550
A	0.9800	0.5990
B	0.9920	0.6150
C	0.9920	0.6110
D	0.9880	0.6130
E	0.9710	0.5170
F	0.9930	0.5420
G	0.7830	0.5380
H	0.9830	0.5900
I	0.9930	0.6130
J	0.9410	0.5150
K	0.9840	0.5810
L	0.9970	0.6040
M	0.9940	0.6050
N	0.9600	0.4960
O	0.9680	0.6000
Q	0.9690	0.5810
T	0.9860	0.5800
U	0.9870	0.5970
V	0.9890	0.5950
W	0.9620	0.5820
X	0.9840	0.5500
Y	0.9760	0.5170
Z	0.9760	0.5180
a	0.9740	0.5910

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Chain	Atom inclusion	Q-score
b	0.9910	0.6160
c	0.9870	0.5950
d	0.9920	0.6130
e	0.9720	0.5010
f	0.9640	0.5140
g	0.3360	0.4630
h	0.9850	0.6030
i	0.9900	0.5840
j	0.9160	0.4460
k	0.9810	0.5700
l	0.9940	0.6040
m	0.9920	0.5980
n	0.9600	0.4800
o	0.9480	0.5870
q	0.1580	0.3360
t	0.9870	0.5710
u	0.9740	0.5960
v	0.9680	0.5730
w	0.9360	0.5310
x	0.9760	0.5460
y	0.8920	0.4190
z	0.9220	0.4740