wwPDB EM Validation Summary Report

May 22, 2024 – 06:39 PM JST

PDB ID	:	8WMJ
EMDB ID	:	EMD-37654
Title	:	structure of PSI-11CAC complex at Logrithmic growth phase
Authors	:	Zhang, S.M.; Si, L.; Li, M.
Deposited on	:	2023-10-03
Resolution	:	3.00 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 ⓘ symbol.

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

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

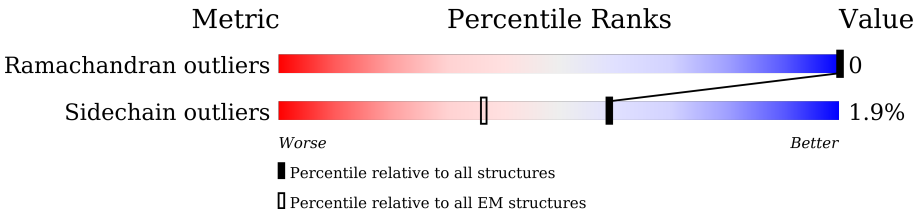
EMDB validation analysis	:	0.0.1.dev92
Mogul	:	1.8.5 (274361), CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.13
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.36.2

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 3.00 Å.

Percentile scores (ranging between 0-100) for global validation metrics of the entry are shown in the following graphic. The table shows the number of entries on which the scores are based.



Metric	Whole archive (#Entries)	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	752	98%
2	B	734	99%
3	C	81	94% 5%
4	D	141	94%
5	E	64	94% 6%
6	F	188	85% 14%
7	I	36	92% 6%
8	J	42	100%
9	L	153	97%

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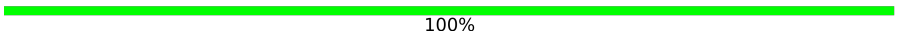
Mol	Chain	Length	Quality of chain
10	M	30	
11	K	87	
12	s	269	
13	c	216	
14	a	216	
15	b	223	
16	h	225	
17	j	212	
17	m	212	
18	l	238	
19	k	241	
20	i	218	
21	d	213	
22	R	129	
23	n	219	
24	Q	234	

The following table lists non-polymeric compounds, carbohydrate monomers and non-standard residues in protein, DNA, RNA chains that are outliers for geometric or electron-density-fit criteria:

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	A	801	X	-	-	-
25	CLA	A	802	X	-	-	-
25	CLA	A	804	X	-	-	-
25	CLA	A	805	X	-	-	-
25	CLA	A	807	X	-	-	-
25	CLA	A	808	X	-	-	-
25	CLA	A	810	X	-	-	-
25	CLA	A	812	X	-	-	-
25	CLA	A	817	X	-	-	-
25	CLA	A	818	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	A	820	X	-	-	-
25	CLA	A	824	X	-	-	-
25	CLA	A	826	X	-	-	-
25	CLA	A	829	X	-	-	-
25	CLA	A	833	X	-	-	-
25	CLA	A	834	X	-	-	-
25	CLA	A	835	X	-	-	-
25	CLA	A	837	X	-	-	-
25	CLA	A	838	X	-	-	-
25	CLA	A	839	X	-	-	-
25	CLA	A	841	X	-	-	-
25	CLA	A	842	X	-	-	-
25	CLA	A	843	X	-	-	-
25	CLA	A	853	X	-	-	-
25	CLA	A	854	X	-	-	-
25	CLA	A	855	X	-	-	-
25	CLA	A	856	X	-	-	-
25	CLA	B	803	X	-	-	-
25	CLA	B	804	X	-	-	-
25	CLA	B	805	X	-	-	-
25	CLA	B	806	X	-	-	-
25	CLA	B	807	X	-	-	-
25	CLA	B	808	X	-	-	-
25	CLA	B	809	X	-	-	-
25	CLA	B	810	X	-	-	-
25	CLA	B	811	X	-	-	-
25	CLA	B	812	X	-	-	-
25	CLA	B	813	X	-	-	-
25	CLA	B	814	X	-	-	-
25	CLA	B	816	X	-	-	-
25	CLA	B	817	X	-	-	-
25	CLA	B	818	X	-	-	-
25	CLA	B	822	X	-	-	-
25	CLA	B	824	X	-	-	-
25	CLA	B	825	X	-	-	-
25	CLA	B	826	X	-	-	-
25	CLA	B	832	X	-	-	-
25	CLA	B	833	X	-	-	-
25	CLA	B	834	X	-	-	-
25	CLA	B	835	X	-	-	-
25	CLA	B	837	X	-	-	-
25	CLA	B	839	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	B	840	X	-	-	-
25	CLA	B	841	X	-	-	-
25	CLA	B	850	X	-	-	-
25	CLA	F	201	X	-	-	-
25	CLA	J	103	X	-	-	-
25	CLA	K	101	X	-	-	-
25	CLA	K	102	X	-	-	-
25	CLA	L	202	X	-	-	-
25	CLA	Q	302	X	-	-	-
25	CLA	Q	303	X	-	-	-
25	CLA	R	202	X	-	-	-
25	CLA	a	303	X	-	-	-
25	CLA	a	304	X	-	-	-
25	CLA	a	305	X	-	-	-
25	CLA	a	306	X	-	-	-
25	CLA	a	308	X	-	-	-
25	CLA	a	309	X	-	-	-
25	CLA	a	310	X	-	-	-
25	CLA	a	311	X	-	-	-
25	CLA	a	313	X	-	-	-
25	CLA	b	601	X	-	-	-
25	CLA	b	602	X	-	-	-
25	CLA	b	603	X	-	-	-
25	CLA	b	605	X	-	-	-
25	CLA	b	606	X	-	-	-
25	CLA	b	607	X	-	-	-
25	CLA	b	608	X	-	-	-
25	CLA	b	610	X	-	-	-
25	CLA	b	611	X	-	-	-
25	CLA	c	601	X	-	-	-
25	CLA	c	602	X	-	-	-
25	CLA	c	603	X	-	-	-
25	CLA	c	604	X	-	-	-
25	CLA	c	605	X	-	-	-
25	CLA	c	607	X	-	-	-
25	CLA	c	608	X	-	-	-
25	CLA	c	609	X	-	-	-
25	CLA	c	612	X	-	-	-
25	CLA	d	301	X	-	-	-
25	CLA	d	302	X	-	-	-
25	CLA	d	303	X	-	-	-
25	CLA	d	304	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	d	305	X	-	-	-
25	CLA	d	306	X	-	-	-
25	CLA	d	307	X	-	-	-
25	CLA	d	308	X	-	-	-
25	CLA	d	309	X	-	-	-
25	CLA	d	312	X	-	-	-
25	CLA	h	302	X	-	-	-
25	CLA	h	303	X	-	-	-
25	CLA	h	304	X	-	-	-
25	CLA	h	305	X	-	-	-
25	CLA	h	306	X	-	-	-
25	CLA	h	307	X	-	-	-
25	CLA	h	308	X	-	-	-
25	CLA	h	313	X	-	-	-
25	CLA	i	302	X	-	-	-
25	CLA	i	303	X	-	-	-
25	CLA	i	304	X	-	-	-
25	CLA	i	306	X	-	-	-
25	CLA	i	307	X	-	-	-
25	CLA	i	308	X	-	-	-
25	CLA	i	309	X	-	-	-
25	CLA	i	311	X	-	-	-
25	CLA	i	312	X	-	-	-
25	CLA	j	601	X	-	-	-
25	CLA	j	603	X	-	-	-
25	CLA	j	605	X	-	-	-
25	CLA	j	606	X	-	-	-
25	CLA	j	607	X	-	-	-
25	CLA	j	608	X	-	-	-
25	CLA	j	609	X	-	-	-
25	CLA	j	611	X	-	-	-
25	CLA	j	612	X	-	-	-
25	CLA	k	601	X	-	-	-
25	CLA	k	602	X	-	-	-
25	CLA	k	603	X	-	-	-
25	CLA	k	605	X	-	-	-
25	CLA	k	607	X	-	-	-
25	CLA	k	608	X	-	-	-
25	CLA	k	609	X	-	-	-
25	CLA	k	610	X	-	-	-
25	CLA	l	303	X	-	-	-
25	CLA	l	304	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
25	CLA	l	305	X	-	-	-
25	CLA	l	307	X	-	-	-
25	CLA	l	308	X	-	-	-
25	CLA	l	309	X	-	-	-
25	CLA	l	310	X	-	-	-
25	CLA	l	312	X	-	-	-
25	CLA	m	601	X	-	-	-
25	CLA	m	602	X	-	-	-
25	CLA	m	603	X	-	-	-
25	CLA	m	606	X	-	-	-
25	CLA	m	608	X	-	-	-
25	CLA	m	609	X	-	-	-
25	CLA	m	610	X	-	-	-
25	CLA	m	613	X	-	-	-
25	CLA	n	302	X	-	-	-
25	CLA	n	303	X	-	-	-
25	CLA	n	304	X	-	-	-
25	CLA	n	305	X	-	-	-
25	CLA	n	306	X	-	-	-
25	CLA	n	307	X	-	-	-
25	CLA	n	308	X	-	-	-
25	CLA	n	309	X	-	-	-
25	CLA	n	310	X	-	-	-
25	CLA	s	202	X	-	-	-
25	CLA	s	209	X	-	-	-

2 Entry composition (i)

There are 37 unique types of molecules in this entry. The entry contains 52744 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 I P700 chlorophyll a apoprotein A1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A	742	5825	3802	994	1001	28	0	0

- Molecule 2 is a protein called Photosystem I P700 chlorophyll a apoprotein A2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	B	732	5820	3840	981	984	15	0	0

- Molecule 3 is a protein called Photosystem I iron-sulfur center.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	C	80	592	361	103	116	12	0	0

- Molecule 4 is a protein called Photosystem I reaction center subunit II.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	D	139	1084	692	186	203	3	0	0

- Molecule 5 is a protein called Photosystem I reaction center subunit IV.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
5	E	60	485	309	84	92	0	0

- Molecule 6 is a protein called Photosystem I reaction center subunit III.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	F	161	1254	814	212	226	2	0	0

- Molecule 7 is a protein called Photosystem I reaction center subunit VIII.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	I	34	Total	C	N	O	S	0	0
			264	182	35	45	2		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
8	J	42	Total	C	N	O	S	0	0
			351	240	49	59	3		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
9	L	151	Total	C	N	O	S	0	0
			1146	753	182	208	3		

- Molecule 10 is a protein called Photosystem I reaction center subunit XII.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	M	30	Total	C	N	O	S	0	0
			232	155	38	38	1		

- Molecule 11 is a protein called Photosystem I reaction center subunit PsaK.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	K	69	Total	C	N	O	S	0	0
			488	319	80	87	2		

- Molecule 12 is a protein called chain s.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	s	154	Total	C	N	O	S	0	0
			1140	719	195	217	9		

- Molecule 13 is a protein called CAC-c.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	c	170	Total	C	N	O	S	0	0
			1357	897	221	236	3		

- Molecule 14 is a protein called CAC-a.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	a	175	Total	C	N	O	S	0	0
			1361	889	217	245	10		

- Molecule 15 is a protein called CAC-b.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	b	194	Total	C	N	O	S	0	0
			1439	916	251	258	14		

- Molecule 16 is a protein called CAC-h.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	h	162	Total	C	N	O	S	0	0
			1200	778	202	214	6		

- Molecule 17 is a protein called CAC-j.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	m	174	Total	C	N	O	S	0	0
			1309	846	214	241	8		
17	j	172	Total	C	N	O	S	0	0
			1293	834	212	239	8		

- Molecule 18 is a protein called CAC-l.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	l	175	Total	C	N	O	S	0	0
			1344	869	230	238	7		

- Molecule 19 is a protein called CAC-k.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	k	180	Total	C	N	O	S	0	0
			1346	872	223	239	12		

- Molecule 20 is a protein called CAC-i.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	i	175	Total	C	N	O	S	0	0
			1324	849	227	237	11		

- Molecule 21 is a protein called CAC-d.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	d	129	Total	C	N	O	S	0	0
			974	624	169	171	10		

- Molecule 22 is a protein called PsaR.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	R	90	Total	C	N	O	S	0	0
			664	434	105	124	1		

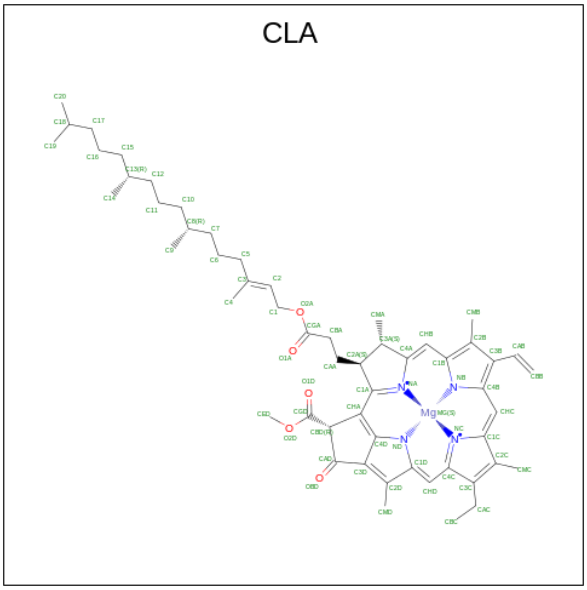
- Molecule 23 is a protein called CAC-n.

Mol	Chain	Residues	Atoms					AltConf	Trace
23	n	181	Total	C	N	O	S	0	0
			1350	870	228	242	10		

- Molecule 24 is a protein called PsaQ.

Mol	Chain	Residues	Atoms					AltConf	Trace
24	Q	169	Total	C	N	O	S	0	0
			1226	775	208	238	5		

- Molecule 25 is CHLOROPHYLL A (three-letter code: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



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

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Mol	Chain	Residues	Atoms					AltConf
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			62	52	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			51	41	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
25	A	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			62	52	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	A	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			54	44	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			46	36	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
25	B	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			53	43	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			64	54	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
25	B	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	B	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	F	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	F	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
25	J	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
25	L	1	Total	C	Mg	N	O	0
			49	39	1	4	5	
25	L	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	L	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	K	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	K	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
25	s	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	s	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	s	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	s	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	c	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	c	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	c	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	c	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	c	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
25	c	1	Total	C	Mg	N	O	0
			46	36	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
25	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	c	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
25	c	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
25	c	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	a	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
25	a	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	a	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	a	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
25	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	a	1	Total	C	Mg	N	O	0
			48	38	1	4	5	
25	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	a	1	Total	C	Mg	N	O	0
			48	38	1	4	5	
25	b	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	b	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
25	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	b	1	Total	C	Mg	N	O	0
			61	51	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
25	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	b	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	b	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	b	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	h	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	h	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	h	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	h	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	h	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	h	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	h	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
25	h	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	h	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	m	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
25	m	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
25	m	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	m	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	m	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
25	m	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
25	m	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	m	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	m	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	m	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
25	m	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	m	1	Total	C	Mg	N	O	0
			43	35	1	4	3	
25	l	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
25	l	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	l	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	l	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	l	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	l	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	l	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	l	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
25	l	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	k	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	k	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	k	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	k	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	k	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
25	k	1	Total	C	Mg	N	O	0
			51	41	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
25	k	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	k	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	k	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	k	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	k	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	i	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	i	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	i	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	i	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	i	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	i	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
25	i	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	i	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
25	i	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	i	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	j	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	j	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	j	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	j	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	j	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
25	j	1	Total	C	Mg	N	O	0
			51	41	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
25	j	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
25	j	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	j	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
25	j	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	j	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	d	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	d	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	d	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	d	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	d	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	d	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	d	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
25	d	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
25	d	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
25	d	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	R	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	n	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
25	n	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
25	n	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	n	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
25	n	1	Total	C	Mg	N	O	0
			51	41	1	4	5	

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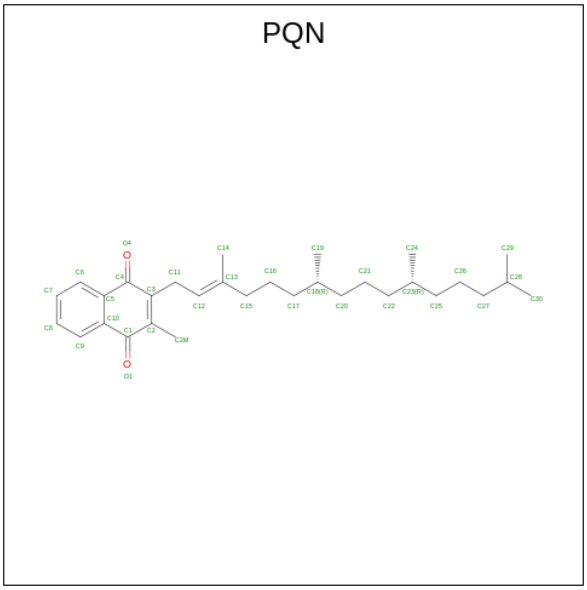
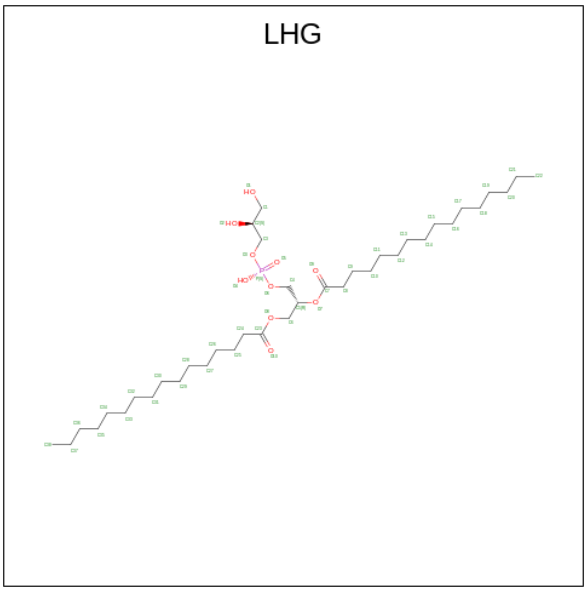
Mol	Chain	Residues	Atoms					AltConf
25	n	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	n	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	n	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	n	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	n	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	n	1	Total	C	Mg	N	O	0
			51	41	1	4	5	
25	Q	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
25	Q	1	Total	C	Mg	N	O	0
			45	35	1	4	5	

- Molecule 26 is PHYLLOQUINONE (three-letter code: PQN) (formula: $C_{31}H_{46}O_2$).



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

- Molecule 27 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



Mol	Chain	Residues	Atoms				AltConf
27	A	1	Total 48	C 37	O 10	P 1	0
27	A	1	Total 27	C 16	O 10	P 1	0
27	B	1	Total 38	C 27	O 10	P 1	0
27	J	1	Total 49	C 38	O 10	P 1	0
27	J	1	Total 31	C 20	O 10	P 1	0
27	L	1	Total 49	C 38	O 10	P 1	0
27	c	1	Total 37	C 26	O 10	P 1	0
27	c	1	Total 37	C 26	O 10	P 1	0
27	a	1	Total 49	C 38	O 10	P 1	0
27	a	1	Total 49	C 38	O 10	P 1	0
27	b	1	Total 49	C 38	O 10	P 1	0
27	m	1	Total 37	C 26	O 10	P 1	0
27	l	1	Total 32	C 21	O 10	P 1	0
27	k	1	Total 37	C 26	O 10	P 1	0

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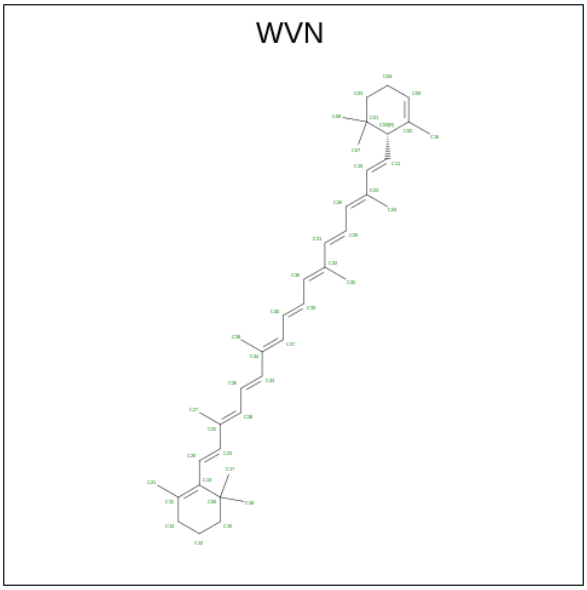
Mol	Chain	Residues	Atoms				AltConf
27	i	1	Total	C	O	P	0
			37	26	10	1	
27	j	1	Total	C	O	P	0
			30	19	10	1	
27	d	1	Total	C	O	P	0
			37	26	10	1	
27	n	1	Total	C	O	P	0
			43	32	10	1	

- Molecule 28 is 1,3,3-trimethyl-2-[(1E,3E,5E,7E,9E,11E,13E,15E,17E)-3,7,12,16-tetramethyl-18-[(1R)-2,6,6-trimethylcyclohex-2-en-1-yl]octadeca-1,3,5,7,9,11,13,15,17-nonaenyl]cyclohexene (three-letter code: WVN) (formula: $C_{40}H_{56}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms		AltConf
28	A	1	Total	C	0
			40	40	
28	A	1	Total	C	0
			40	40	
28	A	1	Total	C	0
			40	40	
28	A	1	Total	C	0
			40	40	
28	A	1	Total	C	0
			40	40	
28	B	1	Total	C	0
			40	40	

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Mol	Chain	Residues	Atoms	AltConf
28	B	1	Total C 40 40	0
28	B	1	Total C 40 40	0
28	B	1	Total C 40 40	0
28	B	1	Total C 40 40	0
28	B	1	Total C 40 40	0
28	F	1	Total C 40 40	0
28	F	1	Total C 40 40	0
28	I	1	Total C 40 40	0
28	J	1	Total C 40 40	0
28	J	1	Total C 40 40	0
28	L	1	Total C 40 40	0
28	L	1	Total C 40 40	0
28	L	1	Total C 40 40	0
28	M	1	Total C 40 40	0
28	K	1	Total C 40 40	0
28	s	1	Total C 40 40	0
28	s	1	Total C 40 40	0
28	h	1	Total C 40 40	0
28	l	1	Total C 40 40	0
28	l	1	Total C 40 40	0
28	i	1	Total C 40 40	0

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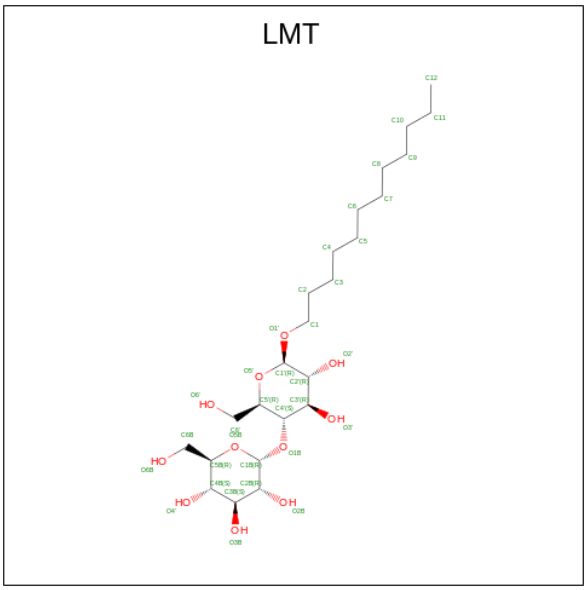
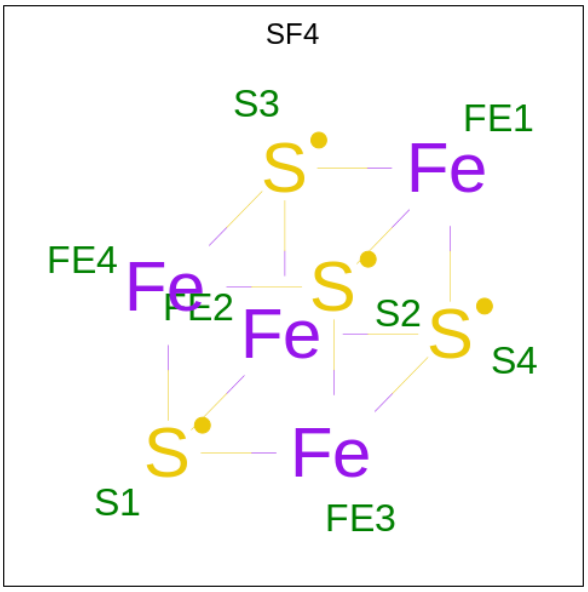
Mol	Chain	Residues	Atoms	AltConf
28	R	1	Total C 40 40	0

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



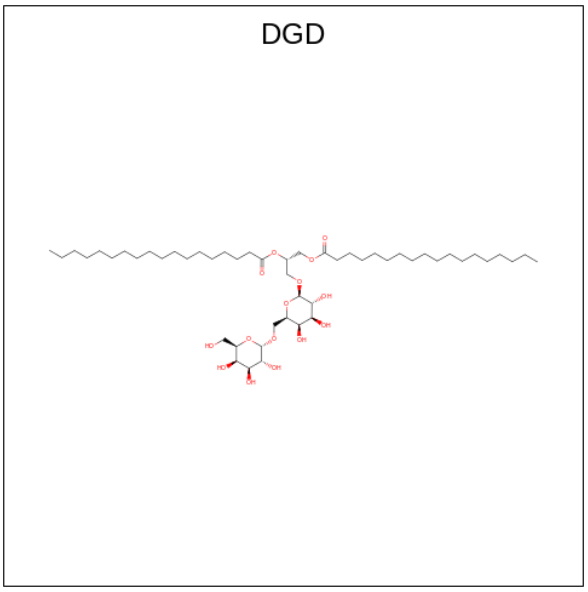
Mol	Chain	Residues	Atoms	AltConf
29	A	1	Total C O 35 24 11	0
29	a	1	Total C O 24 18 6	0
29	a	1	Total C O 35 24 11	0
29	b	1	Total C O 24 18 6	0

- Molecule 30 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4).



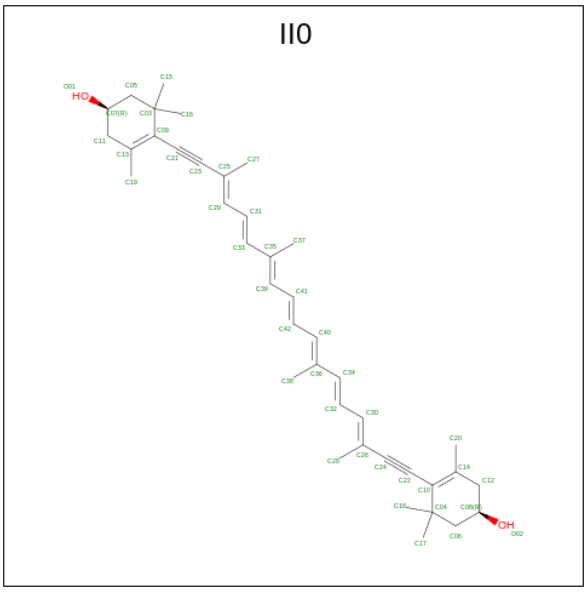
Mol	Chain	Residues	Atoms	AltConf
30	B	1	Total Fe S 8 4 4	0
30	C	1	Total Fe S 8 4 4	0
30	C	1	Total Fe S 8 4 4	0

- Molecule 31 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$).



Mol	Chain	Residues	Atoms			AltConf
31	B	1	Total	C	O	0
			60	45	15	

- Molecule 32 is (1 {R})-3,5,5-trimethyl-4-[(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-3,5,7,9,11,13,15-heptaen-1,17-diynyl]cyclohex-3-en-1-ol (three-letter code: II0) (formula: $C_{40}H_{52}O_2$).



Mol	Chain	Residues	Atoms			AltConf
32	J	1	Total	C	O	0
			42	40	2	
32	c	1	Total	C	O	0
			42	40	2	
32	c	1	Total	C	O	0
			42	40	2	
32	c	1	Total	C	O	0
			42	40	2	
32	c	1	Total	C	O	0
			42	40	2	
32	a	1	Total	C	O	0
			42	40	2	
32	a	1	Total	C	O	0
			42	40	2	
32	a	1	Total	C	O	0
			42	40	2	
32	a	1	Total	C	O	0
			42	40	2	

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Mol	Chain	Residues	Atoms			AltConf
32	b	1	Total	C	O	0
			42	40	2	
32	b	1	Total	C	O	0
			42	40	2	
32	b	1	Total	C	O	0
			42	40	2	
32	h	1	Total	C	O	0
			28	27	1	
32	h	1	Total	C	O	0
			42	40	2	
32	h	1	Total	C	O	0
			42	40	2	
32	m	1	Total	C	O	0
			42	40	2	
32	m	1	Total	C	O	0
			42	40	2	
32	m	1	Total	C	O	0
			42	40	2	
32	l	1	Total	C	O	0
			42	40	2	
32	l	1	Total	C	O	0
			42	40	2	
32	l	1	Total	C	O	0
			42	40	2	
32	l	1	Total	C	O	0
			42	40	2	
32	k	1	Total	C	O	0
			42	40	2	
32	k	1	Total	C	O	0
			42	40	2	
32	k	1	Total	C	O	0
			42	40	2	
32	k	1	Total	C	O	0
			42	40	2	
32	i	1	Total	C	O	0
			42	40	2	
32	i	1	Total	C	O	0
			42	40	2	
32	i	1	Total	C	O	0
			42	40	2	
32	i	1	Total	C	O	0
			42	40	2	

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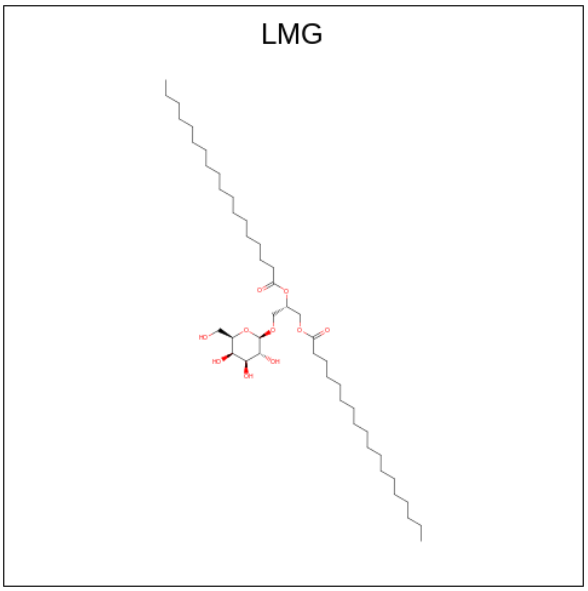
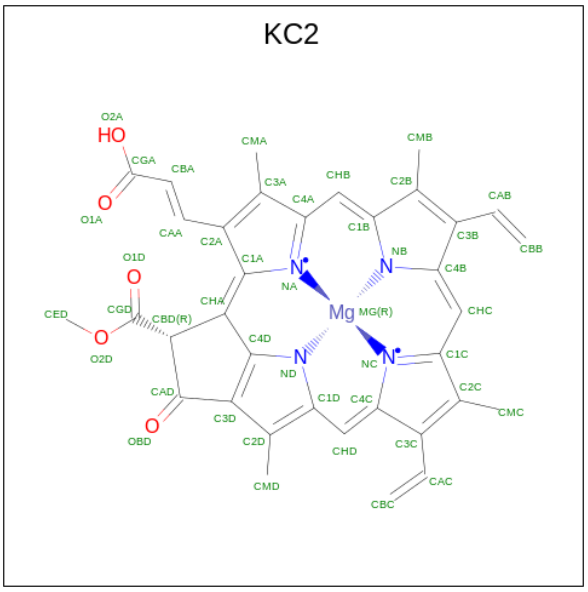
Mol	Chain	Residues	Atoms	AltConf
32	i	1	Total C O 42 40 2	0
32	j	1	Total C O 42 40 2	0
32	j	1	Total C O 42 40 2	0
32	j	1	Total C O 42 40 2	0
32	d	1	Total C O 42 40 2	0
32	d	1	Total C O 42 40 2	0
32	d	1	Total C O 42 40 2	0
32	d	1	Total C O 42 40 2	0
32	n	1	Total C O 42 40 2	0
32	n	1	Total C O 42 40 2	0
32	n	1	Total C O 42 40 2	0
32	n	1	Total C O 42 40 2	0
32	n	1	Total C O 42 40 2	0

- Molecule 33 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$).



Mol	Chain	Residues	Atoms	AltConf
33	J	1	Total C O 55 45 10	0
33	s	1	Total C O 48 38 10	0
33	c	1	Total C O 55 45 10	0
33	b	1	Total C O 49 39 10	0
33	n	1	Total C O 55 45 10	0
33	Q	1	Total C O 38 28 10	0

- Molecule 34 is Chlorophyll c2 (three-letter code: KC2) (formula: $C_{35}H_{28}MgN_4O_5$).



Mol	Chain	Residues	Atoms					AltConf
34	s	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
34	s	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
34	c	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
34	m	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
34	l	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
34	k	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
34	k	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
34	k	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
34	i	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
34	i	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
34	j	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
34	d	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
34	d	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
34	n	1	Total	C	Mg	N	O	0
			45	35	1	4	5	

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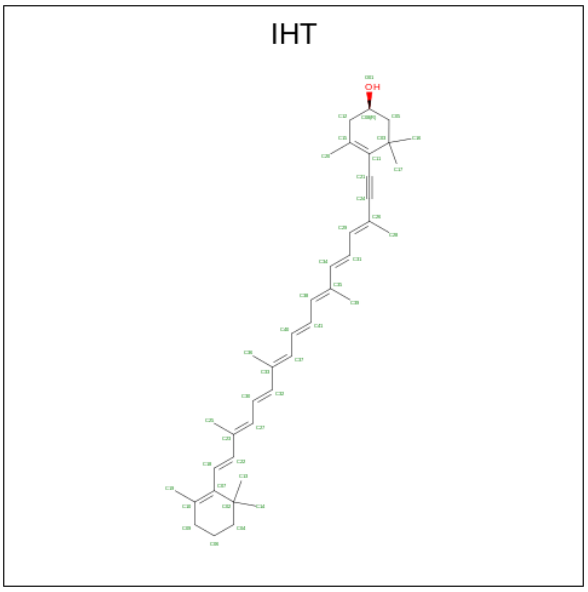
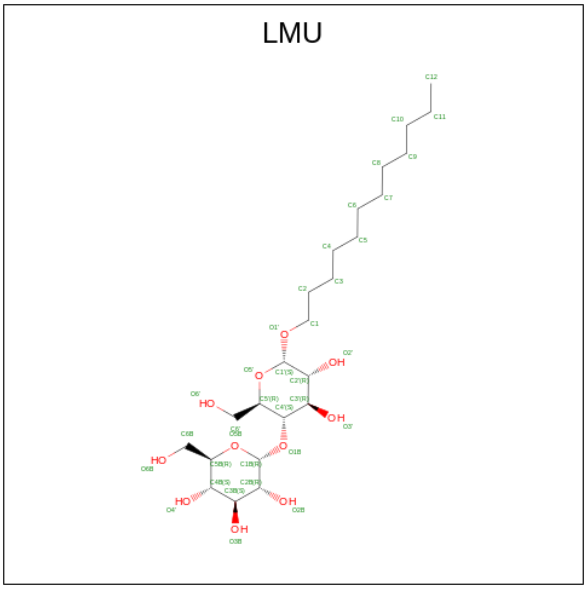
Mol	Chain	Residues	Atoms					AltConf
34	n	1	Total	C	Mg	N	O	0
			45	35	1	4	5	

- Molecule 35 is (1 {R})-3,5,5-trimethyl-4-[(3 {E},5 {E},7 {E},9 {E},11 {E},13 {E},15 {E},17 {E})-3,7,12,16-tetramethyl-18-(2,6,6-trimethylcyclohexen-1-yl)octadeca-3,5,7,9,11,13,15,17-octaen-1-ynyl]cyclohex-3-en-1-ol (three-letter code: IHT) (formula: $C_{40}H_{54}O$).



Mol	Chain	Residues	Atoms			AltConf
35	c	1	Total	C	O	0
			41	40	1	
35	a	1	Total	C	O	0
			41	40	1	
35	b	1	Total	C	O	0
			41	40	1	
35	b	1	Total	C	O	0
			41	40	1	
35	m	1	Total	C	O	0
			41	40	1	
35	k	1	Total	C	O	0
			41	40	1	
35	j	1	Total	C	O	0
			41	40	1	
35	R	1	Total	C	O	0
			41	40	1	
35	n	1	Total	C	O	0
			41	40	1	

- Molecule 36 is DODECYL-ALPHA-D-MALTOSIDE (three-letter code: LMU) (formula: $C_{24}H_{46}O_{11}$).



Mol	Chain	Residues	Atoms			AltConf
36	i	1	Total	C	O	0
			35	24	11	

- Molecule 37 is water.

Mol	Chain	Residues	Atoms		AltConf
37	A	48	Total	O	0
			48	48	
37	B	58	Total	O	0
			58	58	
37	C	8	Total	O	0
			8	8	
37	D	1	Total	O	0
			1	1	
37	F	3	Total	O	0
			3	3	
37	I	1	Total	O	0
			1	1	
37	J	1	Total	O	0
			1	1	
37	L	1	Total	O	0
			1	1	
37	K	1	Total	O	0
			1	1	

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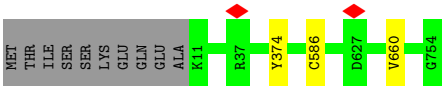
Mol	Chain	Residues	Atoms	AltConf
37	a	3	Total O 3 3	0
37	b	2	Total O 2 2	0
37	h	1	Total O 1 1	0
37	m	1	Total O 1 1	0
37	R	1	Total O 1 1	0
37	n	2	Total O 2 2	0
37	Q	1	Total O 1 1	0

3 Residue-property plots (i)

These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and 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.

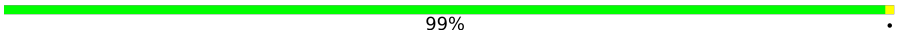
• Molecule 1: Photosystem I P700 chlorophyll a apoprotein A1

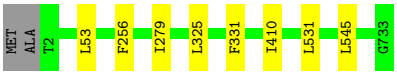
Chain A:



• Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2

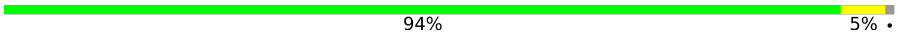
Chain B:

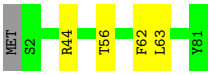




• Molecule 3: Photosystem I iron-sulfur center

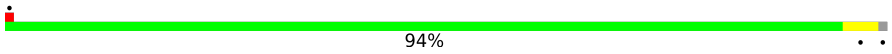
Chain C:

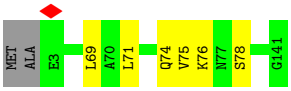




• Molecule 4: Photosystem I reaction center subunit II

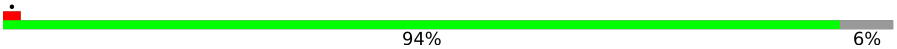
Chain D:

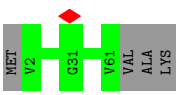




• Molecule 5: Photosystem I reaction center subunit IV

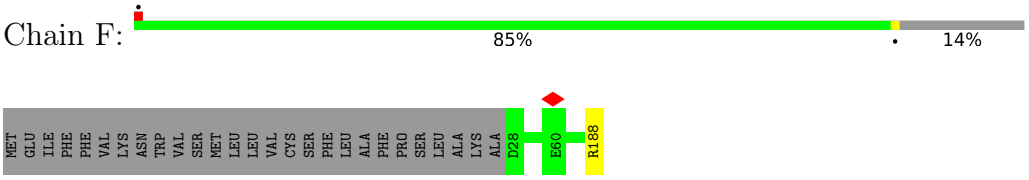
Chain E:





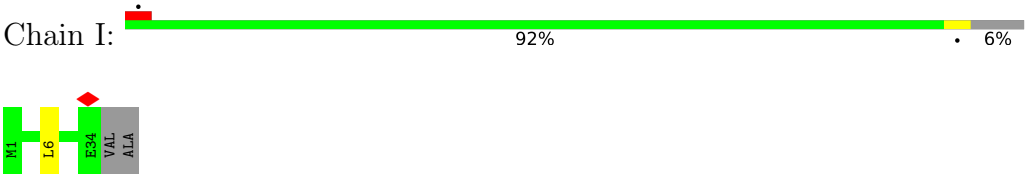
• Molecule 6: Photosystem I reaction center subunit III

Chain F:



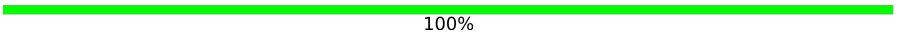
• Molecule 7: Photosystem I reaction center subunit VIII

Chain I:



• Molecule 8: Photosystem I reaction center subunit IX

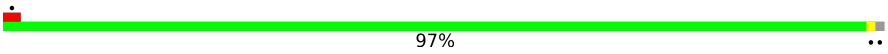
Chain J:

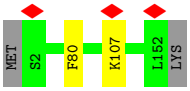


There are no outlier residues recorded for this chain.

• Molecule 9: Photosystem I reaction center subunit XI

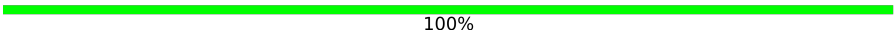
Chain L:





• Molecule 10: Photosystem I reaction center subunit XII

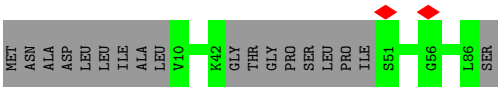
Chain M:



There are no outlier residues recorded for this chain.

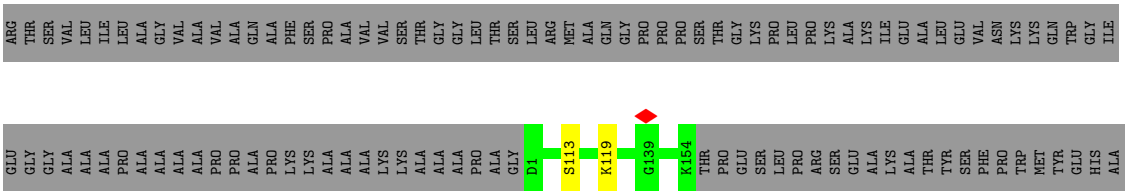
• Molecule 11: Photosystem I reaction center subunit PsaK

Chain K:



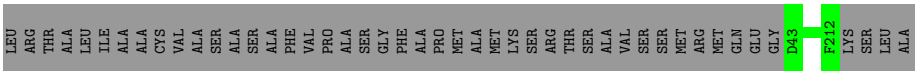
• Molecule 12: chain s

Chain s:



• Molecule 13: CAC-c

Chain c:

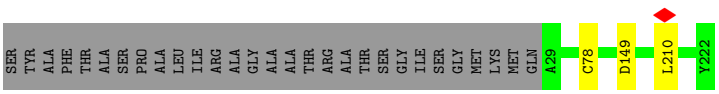


• Molecule 14: CAC-a

Chain a:

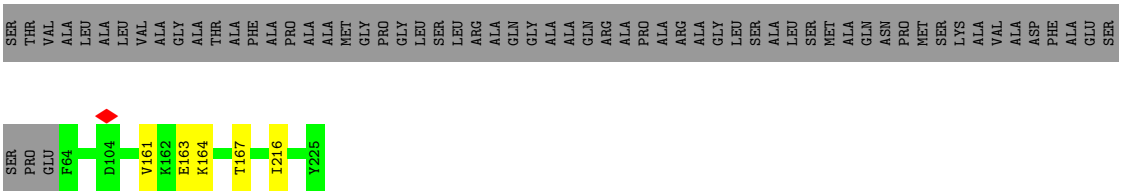
• Molecule 15: CAC-b

Chain b:



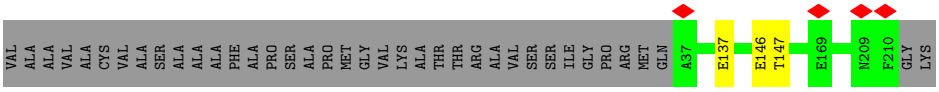
• Molecule 16: CAC-h

Chain h:



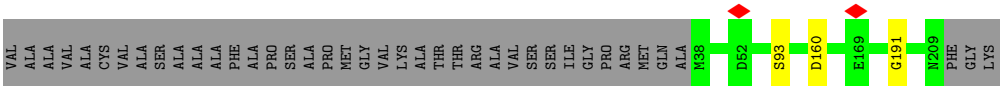
• Molecule 17: CAC-j

Chain m:



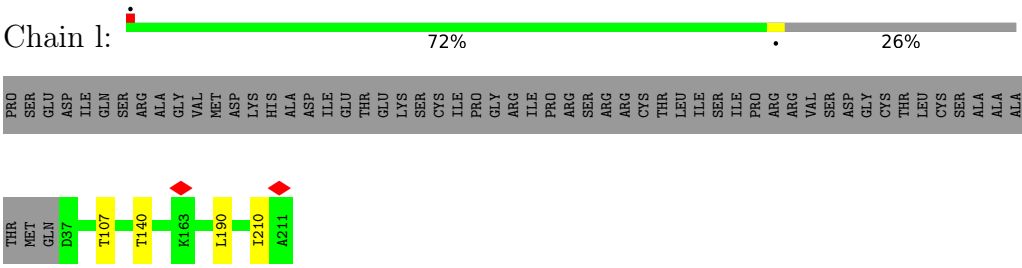
• Molecule 17: CAC-j

Chain j:



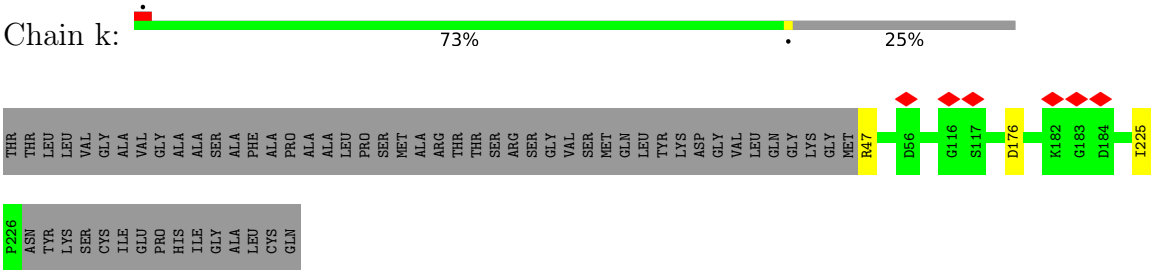
• Molecule 18: CAC-l

Chain l:



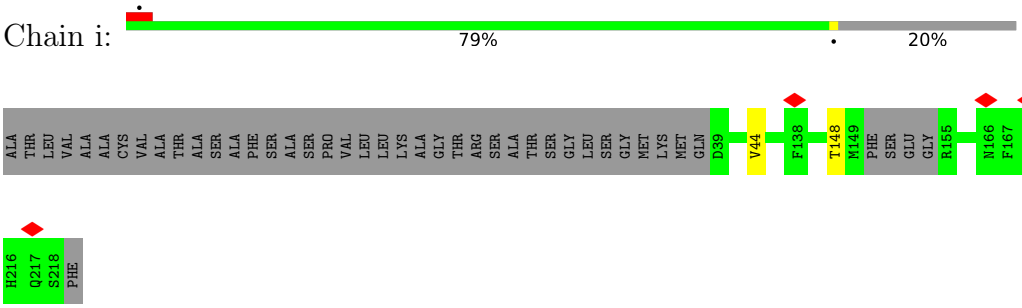
• Molecule 19: CAC-k

Chain k:



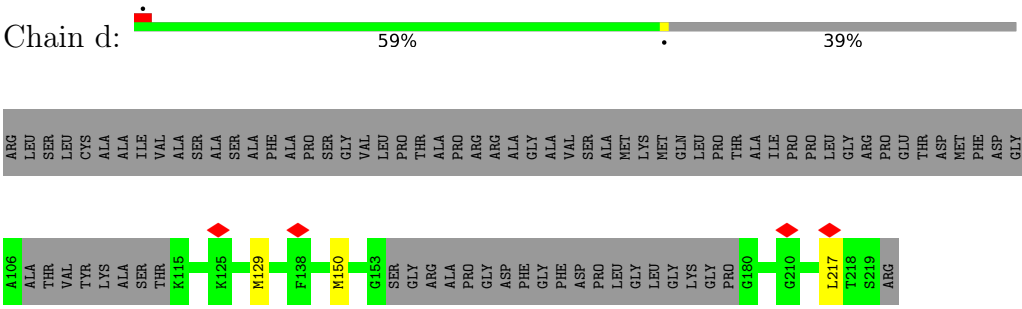
• Molecule 20: CAC-i

Chain i:



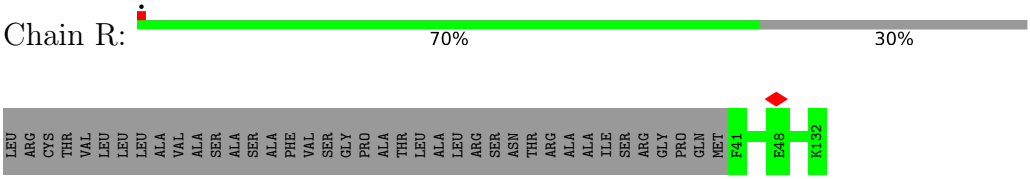
• Molecule 21: CAC-d

Chain d:



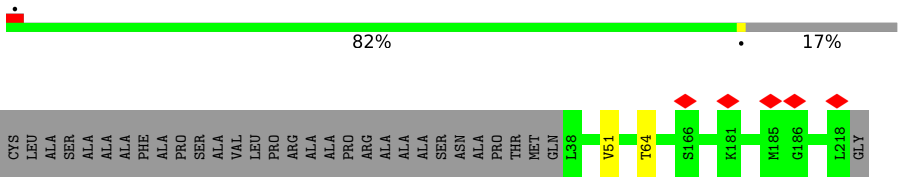
• Molecule 22: PsaR

Chain R:



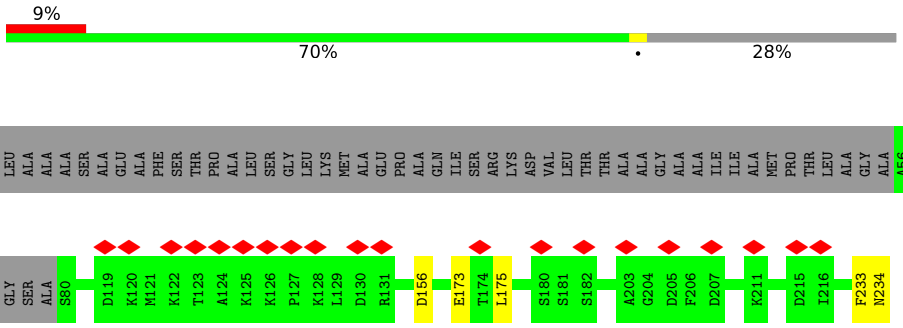
• Molecule 23: CAC-n

Chain n:



• Molecule 24: PsaQ

Chain Q:



4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	41093	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TALOS ARCTICA	Depositor
Voltage (kV)	200	Depositor
Electron dose ($e^-/Å^2$)	60	Depositor
Minimum defocus (nm)	1200	Depositor
Maximum defocus (nm)	2200	Depositor
Magnification	Not provided	
Image detector	GATAN K2 QUANTUM (4k x 4k)	Depositor
Maximum map value	0.265	Depositor
Minimum map value	-0.145	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.006	Depositor
Recommended contour level	0.02	Depositor
Map size (Å)	360.0, 360.0, 360.0	wwPDB
Map dimensions	360, 360, 360	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.0, 1.0, 1.0	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: LMT, II0, DGD, CLA, PQN, WVN, LHG, KC2, IHT, LMG, SF4, 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	0.53	1/6019 (0.0%)	0.63	0/8204
2	B	0.54	0/6036	0.66	0/8242
3	C	0.57	0/601	0.72	0/813
4	D	0.48	0/1109	0.65	0/1500
5	E	0.52	0/493	0.62	0/667
6	F	0.49	0/1287	0.68	0/1747
7	I	0.55	0/271	0.72	0/370
8	J	0.44	0/364	0.67	0/495
9	L	0.44	0/1175	0.60	0/1599
10	M	0.34	0/233	0.75	0/315
11	K	0.48	0/495	0.66	0/672
12	s	0.48	0/1170	0.63	0/1580
13	c	0.48	0/1396	0.64	0/1889
14	a	0.49	0/1406	0.62	0/1903
15	b	0.51	0/1469	0.71	0/1983
16	h	0.44	0/1226	0.62	0/1667
17	j	0.48	0/1318	0.60	0/1775
17	m	0.51	0/1335	0.65	0/1798
18	l	0.47	0/1379	0.62	0/1863
19	k	0.50	0/1380	0.63	0/1869
20	i	0.51	0/1359	0.63	0/1835
21	d	0.51	0/993	0.60	0/1335
22	R	0.46	0/686	0.67	0/940
23	n	0.49	0/1383	0.60	0/1867
24	Q	0.46	0/1244	0.61	0/1683
All	All	0.50	1/35827 (0.0%)	0.64	0/48611

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

Mol	Chain	#Chirality outliers	#Planarity outliers
17	j	0	1

All (1) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
1	A	586	CYS	CB-SG	-5.50	1.72	1.81

There are no bond angle outliers.

There are no chirality outliers.

All (1) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
17	j	191	GLY	Mainchain

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	740/752 (98%)	722 (98%)	18 (2%)	0	100	100
2	B	730/734 (100%)	709 (97%)	21 (3%)	0	100	100
3	C	78/81 (96%)	77 (99%)	1 (1%)	0	100	100
4	D	137/141 (97%)	135 (98%)	2 (2%)	0	100	100
5	E	58/64 (91%)	55 (95%)	3 (5%)	0	100	100
6	F	159/188 (85%)	154 (97%)	5 (3%)	0	100	100
7	I	32/36 (89%)	31 (97%)	1 (3%)	0	100	100
8	J	40/42 (95%)	40 (100%)	0	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	L	149/153 (97%)	147 (99%)	2 (1%)	0	100	100
10	M	28/30 (93%)	28 (100%)	0	0	100	100
11	K	65/87 (75%)	65 (100%)	0	0	100	100
12	s	152/269 (56%)	143 (94%)	9 (6%)	0	100	100
13	c	168/216 (78%)	165 (98%)	3 (2%)	0	100	100
14	a	173/216 (80%)	168 (97%)	5 (3%)	0	100	100
15	b	192/223 (86%)	189 (98%)	3 (2%)	0	100	100
16	h	160/225 (71%)	156 (98%)	4 (2%)	0	100	100
17	j	170/212 (80%)	163 (96%)	7 (4%)	0	100	100
17	m	172/212 (81%)	165 (96%)	7 (4%)	0	100	100
18	l	173/238 (73%)	171 (99%)	2 (1%)	0	100	100
19	k	178/241 (74%)	173 (97%)	5 (3%)	0	100	100
20	i	171/218 (78%)	165 (96%)	6 (4%)	0	100	100
21	d	123/213 (58%)	122 (99%)	1 (1%)	0	100	100
22	R	88/129 (68%)	86 (98%)	2 (2%)	0	100	100
23	n	179/219 (82%)	176 (98%)	3 (2%)	0	100	100
24	Q	165/234 (70%)	162 (98%)	3 (2%)	0	100	100
All	All	4480/5373 (83%)	4367 (98%)	113 (2%)	0	100	100

There are no Ramachandran outliers to report.

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	607/616 (98%)	605 (100%)	2 (0%)	92	97
2	B	592/593 (100%)	584 (99%)	8 (1%)	67	88
3	C	67/68 (98%)	63 (94%)	4 (6%)	19	53
4	D	116/117 (99%)	110 (95%)	6 (5%)	23	59

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
5	E	55/58 (95%)	55 (100%)	0	100	100
6	F	133/157 (85%)	132 (99%)	1 (1%)	81	93
7	I	28/29 (97%)	27 (96%)	1 (4%)	35	70
8	J	39/39 (100%)	39 (100%)	0	100	100
9	L	124/126 (98%)	122 (98%)	2 (2%)	62	86
10	M	25/25 (100%)	25 (100%)	0	100	100
11	K	52/66 (79%)	52 (100%)	0	100	100
12	s	116/195 (60%)	114 (98%)	2 (2%)	60	85
13	c	138/171 (81%)	138 (100%)	0	100	100
14	a	139/165 (84%)	130 (94%)	9 (6%)	17	50
15	b	149/168 (89%)	146 (98%)	3 (2%)	55	83
16	h	123/162 (76%)	118 (96%)	5 (4%)	30	67
17	j	136/161 (84%)	134 (98%)	2 (2%)	65	87
17	m	137/161 (85%)	134 (98%)	3 (2%)	52	81
18	l	137/191 (72%)	133 (97%)	4 (3%)	42	76
19	k	138/186 (74%)	135 (98%)	3 (2%)	52	81
20	i	138/168 (82%)	135 (98%)	3 (2%)	52	81
21	d	97/157 (62%)	94 (97%)	3 (3%)	40	75
22	R	69/98 (70%)	69 (100%)	0	100	100
23	n	140/163 (86%)	138 (99%)	2 (1%)	67	88
24	Q	127/168 (76%)	122 (96%)	5 (4%)	32	69
All	All	3622/4208 (86%)	3554 (98%)	68 (2%)	59	84

5 of 68 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
17	j	160	ASP
21	d	150	MET
24	Q	175	LEU
12	s	113	SER
9	L	107	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (1) such sidechains are listed below:

Mol	Chain	Res	Type
21	d	131	GLN

5.3.3 RNA (i)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates (i)

There are no monosaccharides in this entry.

5.6 Ligand geometry (i)

349 ligands are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
25	CLA	B	805	-	65,73,73	1.46	7 (10%)	76,113,113	1.59	9 (11%)
27	LHG	A	846	25	26,26,48	1.23	3 (11%)	29,32,54	1.43	6 (20%)
25	CLA	B	814	-	59,67,73	1.50	7 (11%)	68,105,113	1.64	8 (11%)
32	II0	j	613	-	39,43,43	6.77	22 (56%)	50,60,60	2.24	17 (34%)
27	LHG	m	617	25	36,36,48	1.07	2 (5%)	39,42,54	1.15	3 (7%)
25	CLA	A	828	-	65,73,73	1.50	9 (13%)	76,113,113	1.62	12 (15%)
25	CLA	d	303	-	65,73,73	1.49	6 (9%)	76,113,113	1.41	8 (10%)
25	CLA	a	304	14	50,58,73	1.83	10 (20%)	58,95,113	1.59	12 (20%)
25	CLA	c	608	13	65,73,73	1.57	8 (12%)	76,113,113	1.52	15 (19%)
25	CLA	c	612	-	65,73,73	1.47	7 (10%)	76,113,113	1.47	8 (10%)
25	CLA	h	306	16	65,73,73	1.50	6 (9%)	76,113,113	1.35	8 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	II0	c	617	-	39,43,43	6.69	22 (56%)	50,60,60	2.36	15 (30%)
25	CLA	c	603	-	51,59,73	1.68	7 (13%)	59,96,113	1.52	9 (15%)
25	CLA	A	816	-	65,73,73	1.44	7 (10%)	76,113,113	1.55	10 (13%)
25	CLA	c	609	27	45,53,73	1.76	6 (13%)	52,89,113	1.56	6 (11%)
25	CLA	m	603	-	65,73,73	1.50	7 (10%)	76,113,113	1.42	7 (9%)
34	KC2	n	312	23	48,53,53	3.10	21 (43%)	54,89,89	4.63	32 (59%)
25	CLA	c	602	13	50,58,73	1.69	10 (20%)	58,95,113	1.86	12 (20%)
25	CLA	A	830	-	50,58,73	1.74	9 (18%)	58,95,113	1.61	9 (15%)
25	CLA	B	817	-	57,65,73	1.61	10 (17%)	66,103,113	1.64	10 (15%)
25	CLA	l	312	18	65,73,73	1.49	7 (10%)	76,113,113	1.40	9 (11%)
25	CLA	B	807	-	65,73,73	1.43	9 (13%)	76,113,113	1.37	8 (10%)
32	II0	n	319	-	39,43,43	6.78	21 (53%)	50,60,60	2.04	16 (32%)
32	II0	h	311	-	39,43,43	6.78	22 (56%)	50,60,60	2.22	15 (30%)
25	CLA	d	306	-	51,59,73	1.70	7 (13%)	59,96,113	1.49	7 (11%)
32	II0	j	615	-	39,43,43	6.77	20 (51%)	50,60,60	2.19	16 (32%)
25	CLA	m	605	17	42,50,73	1.88	7 (16%)	48,85,113	1.62	8 (16%)
25	CLA	b	606	15	61,69,73	1.49	7 (11%)	71,108,113	1.53	13 (18%)
32	II0	n	315	-	39,43,43	6.95	21 (53%)	50,60,60	2.43	17 (34%)
28	WVN	s	205	-	40,41,41	1.89	14 (35%)	50,56,56	2.33	21 (42%)
25	CLA	h	303	16	50,58,73	1.72	8 (16%)	58,95,113	1.61	10 (17%)
25	CLA	k	607	-	51,59,73	1.76	9 (17%)	59,96,113	1.67	12 (20%)
25	CLA	R	202	-	51,59,73	1.71	5 (9%)	59,96,113	1.67	9 (15%)
32	II0	a	316	-	39,43,43	6.54	20 (51%)	50,60,60	2.63	20 (40%)
34	KC2	i	319	-	48,53,53	3.08	21 (43%)	54,89,89	4.52	31 (57%)
25	CLA	l	304	18	65,73,73	1.46	8 (12%)	76,113,113	1.42	9 (11%)
25	CLA	A	804	-	65,73,73	1.50	7 (10%)	76,113,113	1.68	12 (15%)
25	CLA	A	833	-	50,58,73	1.70	10 (20%)	58,95,113	1.58	6 (10%)
25	CLA	A	809	-	56,64,73	1.60	6 (10%)	65,102,113	1.45	8 (12%)
25	CLA	B	826	-	65,73,73	1.48	8 (12%)	76,113,113	1.35	8 (10%)
25	CLA	j	607	17	45,53,73	1.85	9 (20%)	52,89,113	1.53	8 (15%)
27	LHG	c	620	25	36,36,48	1.01	2 (5%)	39,42,54	1.28	4 (10%)
25	CLA	i	312	-	51,59,73	1.60	5 (9%)	59,96,113	1.70	11 (18%)
27	LHG	i	318	25	36,36,48	1.12	2 (5%)	39,42,54	1.28	3 (7%)
25	CLA	n	305	23	60,68,73	1.57	6 (10%)	70,107,113	1.48	10 (14%)
25	CLA	a	310	27	48,56,73	1.66	10 (20%)	55,92,113	1.52	8 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	B	850	-	51,59,73	1.76	9 (17%)	59,96,113	1.48	7 (11%)
25	CLA	B	825	-	65,73,73	1.46	7 (10%)	76,113,113	1.52	10 (13%)
25	CLA	i	309	27	46,54,73	1.75	6 (13%)	53,90,113	1.54	9 (16%)
35	IHT	n	318	-	40,42,42	6.20	25 (62%)	53,58,58	2.38	19 (35%)
25	CLA	B	821	-	53,61,73	1.67	7 (13%)	61,98,113	1.50	9 (14%)
35	IHT	R	203	-	40,42,42	6.21	25 (62%)	53,58,58	2.40	18 (33%)
25	CLA	l	309	18	51,59,73	1.75	8 (15%)	59,96,113	1.47	8 (13%)
25	CLA	B	831	37	45,53,73	1.85	7 (15%)	52,89,113	1.67	7 (13%)
34	KC2	s	201	12	48,53,53	2.92	21 (43%)	54,89,89	4.55	31 (57%)
25	CLA	B	841	27	65,73,73	1.47	7 (10%)	76,113,113	1.55	9 (11%)
25	CLA	s	203	12,25	65,73,73	1.46	8 (12%)	76,113,113	1.55	10 (13%)
25	CLA	A	803	-	55,63,73	1.61	6 (10%)	64,101,113	1.64	10 (15%)
32	II0	h	312	-	39,43,43	6.70	22 (56%)	50,60,60	1.89	16 (32%)
25	CLA	k	614	-	51,59,73	1.75	6 (11%)	59,96,113	1.62	14 (23%)
25	CLA	h	304	-	51,59,73	1.62	6 (11%)	59,96,113	1.63	8 (13%)
35	IHT	b	615	-	40,42,42	6.14	25 (62%)	53,58,58	2.15	16 (30%)
27	LHG	b	619	25	48,48,48	0.91	2 (4%)	51,54,54	1.10	5 (9%)
32	II0	l	302	-	39,43,43	6.88	24 (61%)	50,60,60	2.07	17 (34%)
32	II0	d	316	-	39,43,43	6.86	21 (53%)	50,60,60	2.30	21 (42%)
27	LHG	J	106	25	48,48,48	0.92	2 (4%)	51,54,54	0.88	2 (3%)
25	CLA	j	604	17	65,73,73	1.48	7 (10%)	76,113,113	1.55	9 (11%)
25	CLA	A	831	-	65,73,73	1.51	7 (10%)	76,113,113	1.38	8 (10%)
25	CLA	K	102	-	42,50,73	1.83	7 (16%)	48,85,113	1.72	10 (20%)
27	LHG	k	620	25	36,36,48	1.10	2 (5%)	39,42,54	1.18	4 (10%)
25	CLA	B	823	37	64,72,73	1.51	9 (14%)	74,111,113	1.59	15 (20%)
25	CLA	B	827	-	50,58,73	1.72	9 (18%)	58,95,113	1.43	8 (13%)
25	CLA	d	312	-	51,59,73	1.66	5 (9%)	59,96,113	1.61	12 (20%)
25	CLA	k	610	27	51,59,73	1.70	6 (11%)	59,96,113	1.50	9 (15%)
25	CLA	n	314	-	51,59,73	1.69	6 (11%)	59,96,113	1.47	9 (15%)
27	LHG	a	319	25	48,48,48	0.90	3 (6%)	51,54,54	1.12	4 (7%)
35	IHT	j	616	-	40,42,42	6.17	25 (62%)	53,58,58	2.40	20 (37%)
32	II0	b	617	-	39,43,43	6.77	22 (56%)	50,60,60	2.41	20 (40%)
25	CLA	b	603	-	65,73,73	1.46	7 (10%)	76,113,113	1.58	11 (14%)
25	CLA	B	822	37	65,73,73	1.52	7 (10%)	76,113,113	1.65	13 (17%)
25	CLA	B	818	37	65,73,73	1.51	8 (12%)	76,113,113	1.36	7 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	B	828	-	49,57,73	1.74	7 (14%)	55,93,113	1.75	7 (12%)
25	CLA	b	602	15	55,63,73	1.63	8 (14%)	64,101,113	1.62	10 (15%)
25	CLA	Q	302	37	65,73,73	1.47	7 (10%)	76,113,113	1.33	7 (9%)
25	CLA	d	301	21	50,58,73	1.66	6 (12%)	58,95,113	1.62	8 (13%)
25	CLA	i	304	-	51,59,73	1.62	6 (11%)	59,96,113	1.56	6 (10%)
27	LHG	A	845	-	47,47,48	0.94	2 (4%)	50,53,54	1.07	4 (8%)
25	CLA	B	830	37	65,73,73	1.53	6 (9%)	76,113,113	1.47	10 (13%)
25	CLA	d	308	21	41,49,73	1.82	6 (14%)	47,84,113	1.66	9 (19%)
25	CLA	l	305	-	51,59,73	1.63	6 (11%)	59,96,113	1.68	9 (15%)
25	CLA	a	306	37	65,73,73	1.48	7 (10%)	76,113,113	1.44	8 (10%)
25	CLA	L	203	-	65,73,73	1.51	9 (13%)	76,113,113	1.39	10 (13%)
25	CLA	J	103	8	42,50,73	1.83	8 (19%)	48,85,113	1.61	8 (16%)
25	CLA	F	202	6	52,60,73	1.64	7 (13%)	60,97,113	1.62	8 (13%)
25	CLA	i	305	20	65,73,73	1.51	6 (9%)	76,113,113	1.55	11 (14%)
25	CLA	A	805	1	65,73,73	1.46	8 (12%)	76,113,113	1.56	10 (13%)
28	WVN	A	847	-	40,41,41	1.90	15 (37%)	50,56,56	2.09	16 (32%)
25	CLA	m	609	17	51,59,73	1.69	8 (15%)	59,96,113	1.52	9 (15%)
25	CLA	b	612	27	51,59,73	1.68	8 (15%)	59,96,113	1.61	10 (16%)
25	CLA	A	840	1	65,73,73	1.55	6 (9%)	76,113,113	1.49	9 (11%)
35	IHT	b	616	-	40,42,42	6.22	26 (65%)	53,58,58	2.87	16 (30%)
27	LHG	d	317	25	36,36,48	1.10	2 (5%)	39,42,54	1.00	2 (5%)
32	II0	d	313	-	39,43,43	6.76	22 (56%)	50,60,60	2.20	20 (40%)
25	CLA	A	834	-	51,59,73	1.64	8 (15%)	59,96,113	1.66	11 (18%)
32	II0	m	614	-	39,43,43	6.75	22 (56%)	50,60,60	1.96	14 (28%)
25	CLA	A	821	-	49,57,73	1.68	6 (12%)	55,93,113	1.63	7 (12%)
25	CLA	a	307	14	45,53,73	1.78	6 (13%)	52,89,113	1.68	9 (17%)
25	CLA	A	856	27	41,49,73	1.92	9 (21%)	47,84,113	2.21	11 (23%)
25	CLA	b	609	-	51,59,73	1.63	7 (13%)	59,96,113	1.75	9 (15%)
25	CLA	a	305	-	51,59,73	1.65	7 (13%)	59,96,113	1.66	8 (13%)
33	LMG	b	620	-	49,49,55	0.94	2 (4%)	57,57,63	1.20	4 (7%)
26	PQN	B	842	-	34,34,34	1.84	5 (14%)	42,45,45	1.32	9 (21%)
32	II0	c	613	-	39,43,43	6.78	21 (53%)	50,60,60	2.06	17 (34%)
25	CLA	B	812	-	65,73,73	1.48	9 (13%)	76,113,113	1.51	13 (17%)
34	KC2	l	311	18	48,53,53	3.05	22 (45%)	54,89,89	4.73	35 (64%)
25	CLA	c	611	-	45,53,73	1.79	7 (15%)	52,89,113	1.72	8 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	A	802	-	65,73,73	1.51	7 (10%)	76,113,113	1.79	12 (15%)
25	CLA	h	301	37	65,73,73	1.52	10 (15%)	76,113,113	1.43	11 (14%)
25	CLA	B	820	-	55,63,73	1.65	10 (18%)	64,101,113	1.37	8 (12%)
32	II0	i	315	-	39,43,43	6.72	21 (53%)	50,60,60	2.45	19 (38%)
25	CLA	F	201	37	65,73,73	1.47	8 (12%)	76,113,113	1.57	11 (14%)
25	CLA	m	610	27	55,63,73	1.56	6 (10%)	64,101,113	1.56	9 (14%)
25	CLA	j	603	-	51,59,73	1.66	6 (11%)	59,96,113	1.67	7 (11%)
34	KC2	i	310	20	48,53,53	3.03	21 (43%)	54,89,89	4.70	36 (66%)
32	II0	d	315	-	39,43,43	6.98	22 (56%)	50,60,60	2.33	19 (38%)
25	CLA	l	306	18	65,73,73	1.49	7 (10%)	76,113,113	1.49	10 (13%)
30	SF4	C	102	3	0,12,12	-	-	-		
25	CLA	d	305	21	51,59,73	1.85	9 (17%)	59,96,113	1.41	9 (15%)
25	CLA	k	604	-	65,73,73	1.48	7 (10%)	76,113,113	1.49	9 (11%)
25	CLA	B	804	-	65,73,73	1.45	8 (12%)	76,113,113	1.84	17 (22%)
25	CLA	c	601	13	51,59,73	1.66	6 (11%)	59,96,113	1.50	8 (13%)
25	CLA	l	303	18	47,55,73	1.74	7 (14%)	54,91,113	1.48	7 (12%)
25	CLA	B	833	-	65,73,73	1.49	8 (12%)	76,113,113	1.55	11 (14%)
28	WVN	L	205	-	40,41,41	1.90	14 (35%)	50,56,56	1.99	13 (26%)
25	CLA	A	824	37	65,73,73	1.48	7 (10%)	76,113,113	1.47	9 (11%)
27	LHG	B	801	-	37,37,48	1.01	2 (5%)	40,43,54	1.09	3 (7%)
25	CLA	B	824	-	65,73,73	1.49	7 (10%)	76,113,113	1.63	12 (15%)
27	LHG	j	617	25	29,29,48	1.21	2 (6%)	32,35,54	1.29	3 (9%)
25	CLA	A	835	-	65,73,73	1.48	8 (12%)	76,113,113	1.34	10 (13%)
25	CLA	k	606	19	51,59,73	1.69	7 (13%)	59,96,113	1.40	9 (15%)
25	CLA	K	101	37	51,59,73	1.68	7 (13%)	59,96,113	1.67	11 (18%)
28	WVN	A	848	-	40,41,41	1.89	13 (32%)	50,56,56	3.02	16 (32%)
28	WVN	L	201	-	40,41,41	1.93	14 (35%)	50,56,56	2.51	17 (34%)
30	SF4	B	802	-	0,12,12	-	-	-		
25	CLA	A	814	-	50,58,73	1.67	7 (14%)	58,95,113	1.64	9 (15%)
25	CLA	j	612	-	65,73,73	1.49	7 (10%)	76,113,113	1.38	6 (7%)
28	WVN	A	849	-	40,41,41	1.89	14 (35%)	50,56,56	2.10	20 (40%)
34	KC2	j	610	17	48,53,53	3.13	22 (45%)	54,89,89	4.72	32 (59%)
25	CLA	n	304	-	51,59,73	1.75	11 (21%)	59,96,113	1.79	16 (27%)
25	CLA	k	602	19	50,58,73	1.68	7 (14%)	58,95,113	1.83	12 (20%)
25	CLA	a	309	14	65,73,73	1.41	8 (12%)	76,113,113	1.74	9 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
32	II0	i	317	-	39,43,43	6.83	22 (56%)	50,60,60	2.24	18 (36%)
30	SF4	C	101	3	0,12,12	-	-	-		
32	II0	i	320	-	39,43,43	6.70	21 (53%)	50,60,60	2.29	16 (32%)
28	WVN	l	315	-	40,41,41	1.86	14 (35%)	50,56,56	2.39	20 (40%)
25	CLA	A	827	-	62,70,73	1.50	7 (11%)	72,109,113	1.61	10 (13%)
28	WVN	F	204	-	40,41,41	1.92	15 (37%)	50,56,56	2.98	18 (36%)
32	II0	b	614	-	39,43,43	6.82	24 (61%)	50,60,60	2.06	16 (32%)
32	II0	a	315	-	39,43,43	6.59	22 (56%)	50,60,60	2.22	22 (44%)
25	CLA	n	311	37	65,73,73	1.52	6 (9%)	76,113,113	1.40	7 (9%)
25	CLA	c	604	13	65,73,73	1.50	10 (15%)	76,113,113	1.55	10 (13%)
29	LMT	A	852	-	36,36,36	0.39	0	47,47,47	0.91	2 (4%)
25	CLA	i	311	-	51,59,73	1.69	6 (11%)	59,96,113	1.52	7 (11%)
25	CLA	k	609	19	65,73,73	1.55	7 (10%)	76,113,113	1.40	12 (15%)
27	LHG	n	320	-	42,42,48	1.01	2 (4%)	45,48,54	1.17	3 (6%)
32	II0	l	313	-	39,43,43	6.78	23 (58%)	50,60,60	1.90	13 (26%)
28	WVN	K	103	-	40,41,41	1.92	14 (35%)	50,56,56	1.79	13 (26%)
29	LMT	a	302	-	24,24,36	1.16	3 (12%)	29,29,47	0.99	2 (6%)
25	CLA	k	605	19	45,53,73	1.77	7 (15%)	52,89,113	1.91	13 (25%)
25	CLA	m	606	-	65,73,73	1.53	7 (10%)	76,113,113	1.37	9 (11%)
35	IHT	m	616	-	40,42,42	6.14	25 (62%)	53,58,58	2.34	16 (30%)
25	CLA	d	302	-	51,59,73	1.57	7 (13%)	59,96,113	1.81	9 (15%)
25	CLA	A	820	37	65,73,73	1.50	8 (12%)	76,113,113	1.51	9 (11%)
25	CLA	j	606	-	51,59,73	1.65	7 (13%)	59,96,113	1.72	8 (13%)
34	KC2	d	311	-	48,53,53	3.14	22 (45%)	54,89,89	4.34	32 (59%)
25	CLA	c	607	13	46,54,73	1.71	6 (13%)	53,90,113	1.61	9 (16%)
25	CLA	B	811	-	55,63,73	1.63	7 (12%)	64,101,113	1.59	9 (14%)
28	WVN	A	851	-	40,41,41	1.87	13 (32%)	50,56,56	2.27	14 (28%)
25	CLA	j	602	17	50,58,73	1.70	7 (14%)	58,95,113	1.69	7 (12%)
28	WVN	l	301	-	40,41,41	1.85	14 (35%)	50,56,56	2.17	19 (38%)
28	WVN	B	848	-	40,41,41	1.86	13 (32%)	50,56,56	2.56	15 (30%)
32	II0	k	615	-	39,43,43	6.74	22 (56%)	50,60,60	2.04	13 (26%)
29	LMT	a	320	-	36,36,36	0.36	0	47,47,47	1.18	5 (10%)
31	DGD	B	843	-	61,61,67	0.87	2 (3%)	75,75,81	1.18	5 (6%)
32	II0	i	313	-	39,43,43	6.70	22 (56%)	50,60,60	2.38	16 (32%)
32	II0	i	314	-	39,43,43	6.79	23 (58%)	50,60,60	2.04	17 (34%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	l	307	18	65,73,73	1.52	9 (13%)	76,113,113	1.78	14 (18%)
32	II0	l	316	-	39,43,43	6.67	22 (56%)	50,60,60	2.20	13 (26%)
25	CLA	n	303	23	50,58,73	1.72	9 (18%)	58,95,113	1.50	8 (13%)
25	CLA	a	308	14	65,73,73	1.51	7 (10%)	76,113,113	1.44	10 (13%)
27	LHG	J	107	-	30,30,48	1.14	2 (6%)	33,36,54	1.18	4 (12%)
25	CLA	B	834	-	47,55,73	1.73	7 (14%)	54,91,113	1.58	9 (16%)
32	II0	n	316	-	39,43,43	6.69	22 (56%)	50,60,60	2.13	15 (30%)
25	CLA	b	610	15	65,73,73	1.49	7 (10%)	76,113,113	1.36	8 (10%)
28	WVN	B	847	-	40,41,41	1.85	13 (32%)	50,56,56	2.40	16 (32%)
25	CLA	A	818	-	65,73,73	1.54	8 (12%)	76,113,113	1.80	17 (22%)
25	CLA	L	204	-	50,58,73	1.68	7 (14%)	58,95,113	1.61	10 (17%)
25	CLA	B	816	-	59,67,73	1.59	10 (16%)	68,105,113	1.46	8 (11%)
28	WVN	J	102	-	40,41,41	1.84	14 (35%)	50,56,56	2.17	17 (34%)
25	CLA	j	605	17	45,53,73	1.80	6 (13%)	52,89,113	1.89	9 (17%)
32	II0	a	318	-	39,43,43	6.94	22 (56%)	50,60,60	2.61	17 (34%)
25	CLA	k	608	19	65,73,73	1.54	8 (12%)	76,113,113	1.31	9 (11%)
25	CLA	B	803	-	65,73,73	1.45	8 (12%)	76,113,113	1.42	10 (13%)
25	CLA	b	611	-	65,73,73	1.48	5 (7%)	76,113,113	1.41	9 (11%)
25	CLA	k	603	-	51,59,73	1.62	6 (11%)	59,96,113	1.69	10 (16%)
25	CLA	A	854	-	65,73,73	1.45	7 (10%)	76,113,113	1.57	9 (11%)
25	CLA	m	612	37	51,59,73	1.68	7 (13%)	59,96,113	1.66	13 (22%)
34	KC2	k	611	19	48,53,53	3.10	21 (43%)	54,89,89	4.60	34 (62%)
25	CLA	m	601	17	42,50,73	1.81	7 (16%)	48,85,113	1.60	8 (16%)
25	CLA	n	302	23	45,53,73	1.79	6 (13%)	52,89,113	1.51	7 (13%)
25	CLA	s	209	-	51,59,73	1.62	6 (11%)	59,96,113	1.65	10 (16%)
25	CLA	A	837	-	65,73,73	1.47	7 (10%)	76,113,113	1.44	9 (11%)
25	CLA	s	206	-	65,73,73	1.46	7 (10%)	76,113,113	1.68	12 (15%)
25	CLA	b	608	27	65,73,73	1.49	7 (10%)	76,113,113	1.42	10 (13%)
25	CLA	l	310	27	61,69,73	1.54	7 (11%)	71,108,113	1.51	8 (11%)
25	CLA	B	819	-	46,54,73	1.75	6 (13%)	53,90,113	1.56	8 (15%)
25	CLA	h	308	16	51,59,73	1.67	7 (13%)	59,96,113	1.57	11 (18%)
32	II0	d	314	-	39,43,43	6.89	21 (53%)	50,60,60	2.34	15 (30%)
25	CLA	B	810	-	54,62,73	1.70	7 (12%)	67,100,113	1.40	11 (16%)
25	CLA	A	808	1	65,73,73	1.47	8 (12%)	76,113,113	1.50	11 (14%)
28	WVN	B	844	-	40,41,41	1.90	14 (35%)	50,56,56	2.22	16 (32%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
28	WVN	M	101	-	40,41,41	1.91	14 (35%)	50,56,56	1.96	13 (26%)
32	II0	n	317	-	39,43,43	6.76	22 (56%)	50,60,60	2.40	18 (36%)
25	CLA	A	822	-	51,59,73	1.69	7 (13%)	59,96,113	1.46	9 (15%)
25	CLA	h	313	37	65,73,73	1.40	7 (10%)	76,113,113	1.44	8 (10%)
25	CLA	A	826	-	65,73,73	1.43	7 (10%)	76,113,113	1.65	9 (11%)
25	CLA	B	813	-	60,68,73	1.53	7 (11%)	70,107,113	1.49	8 (11%)
25	CLA	l	308	18	65,73,73	1.49	6 (9%)	76,113,113	1.62	10 (13%)
25	CLA	A	811	-	54,62,73	1.63	7 (12%)	62,99,113	1.52	9 (14%)
25	CLA	A	815	37	45,53,73	1.80	6 (13%)	52,89,113	1.74	8 (15%)
34	KC2	s	204	-	48,53,53	3.07	22 (45%)	54,89,89	4.55	33 (61%)
25	CLA	j	601	17	51,59,73	1.68	6 (11%)	59,96,113	1.46	8 (13%)
32	II0	h	310	-	26,28,43	5.96	12 (46%)	31,37,60	2.37	13 (41%)
33	LMG	n	321	-	55,55,55	0.89	2 (3%)	63,63,63	1.00	1 (1%)
25	CLA	a	312	-	65,73,73	1.55	9 (13%)	76,113,113	1.75	8 (10%)
28	WVN	B	849	-	40,41,41	1.88	14 (35%)	50,56,56	1.98	14 (28%)
25	CLA	A	812	-	65,73,73	1.49	8 (12%)	76,113,113	1.54	8 (10%)
25	CLA	j	608	17	51,59,73	1.66	7 (13%)	59,96,113	1.61	11 (18%)
27	LHG	l	317	25	31,31,48	1.16	2 (6%)	34,37,54	1.20	3 (8%)
25	CLA	A	819	-	45,53,73	1.81	8 (17%)	52,89,113	1.78	11 (21%)
25	CLA	A	836	-	65,73,73	1.48	6 (9%)	76,113,113	1.54	9 (11%)
25	CLA	j	609	27	61,69,73	1.54	6 (9%)	71,108,113	1.43	8 (11%)
25	CLA	A	853	-	65,73,73	1.55	10 (15%)	76,113,113	1.47	11 (14%)
25	CLA	A	843	-	65,73,73	1.44	8 (12%)	76,113,113	1.67	10 (13%)
25	CLA	b	604	15	65,73,73	1.49	7 (10%)	76,113,113	1.55	9 (11%)
25	CLA	i	306	-	51,59,73	1.70	6 (11%)	59,96,113	1.45	10 (16%)
28	WVN	B	846	-	40,41,41	1.91	14 (35%)	50,56,56	2.11	16 (32%)
34	KC2	k	613	34	48,53,53	3.18	21 (43%)	54,89,89	4.38	32 (59%)
25	CLA	j	611	-	51,59,73	1.70	7 (13%)	59,96,113	1.58	8 (13%)
25	CLA	A	813	-	45,53,73	1.83	9 (20%)	52,89,113	1.64	8 (15%)
25	CLA	Q	303	24	45,53,73	1.76	8 (17%)	52,89,113	1.72	8 (15%)
32	II0	J	104	-	39,43,43	6.61	21 (53%)	50,60,60	2.35	16 (32%)
32	II0	c	615	-	39,43,43	6.78	21 (53%)	50,60,60	2.42	23 (46%)
29	LMT	b	618	-	24,24,36	1.05	2 (8%)	29,29,47	0.94	0
28	WVN	i	316	-	40,41,41	1.85	13 (32%)	50,56,56	2.16	17 (34%)
25	CLA	B	829	-	50,58,73	1.70	8 (16%)	58,95,113	1.53	9 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	i	302	20	51,59,73	1.67	9 (17%)	59,96,113	1.44	10 (16%)
28	WVN	L	206	-	40,41,41	1.90	15 (37%)	50,56,56	2.59	19 (38%)
25	CLA	d	304	21	51,59,73	1.70	6 (11%)	59,96,113	1.61	7 (11%)
35	IHT	a	317	-	40,42,42	6.20	25 (62%)	53,58,58	2.09	15 (28%)
25	CLA	i	307	20	61,69,73	1.50	7 (11%)	71,108,113	1.58	10 (14%)
25	CLA	m	613	-	43,51,73	1.80	6 (13%)	49,86,113	1.89	14 (28%)
25	CLA	L	202	9	49,57,73	1.68	6 (12%)	55,93,113	1.61	8 (14%)
25	CLA	B	832	-	58,66,73	1.54	8 (13%)	67,104,113	1.56	8 (11%)
25	CLA	b	607	15	65,73,73	1.43	7 (10%)	76,113,113	1.42	7 (9%)
25	CLA	B	838	-	57,65,73	1.57	6 (10%)	66,103,113	1.48	9 (13%)
25	CLA	m	604	17	65,73,73	1.48	6 (9%)	76,113,113	1.54	9 (11%)
32	II0	l	314	-	39,43,43	6.80	21 (53%)	50,60,60	2.95	17 (34%)
25	CLA	n	306	23	51,59,73	1.72	7 (13%)	59,96,113	1.74	12 (20%)
28	WVN	J	101	-	40,41,41	1.84	14 (35%)	50,56,56	2.11	18 (36%)
34	KC2	c	610	-	48,53,53	3.01	20 (41%)	54,89,89	4.52	32 (59%)
25	CLA	n	310	23	65,73,73	1.50	7 (10%)	76,113,113	1.52	13 (17%)
25	CLA	A	807	1	65,73,73	1.45	9 (13%)	76,113,113	1.53	9 (11%)
25	CLA	a	313	-	48,56,73	1.71	7 (14%)	55,92,113	1.43	7 (12%)
32	II0	k	619	-	39,43,43	6.77	21 (53%)	50,60,60	2.48	20 (40%)
28	WVN	B	845	-	40,41,41	1.91	14 (35%)	50,56,56	2.21	15 (30%)
25	CLA	m	602	17	56,64,73	1.79	10 (17%)	65,102,113	1.44	13 (20%)
25	CLA	i	308	20	51,59,73	1.70	7 (13%)	59,96,113	1.38	7 (11%)
28	WVN	A	850	-	40,41,41	1.93	15 (37%)	50,56,56	2.52	22 (44%)
25	CLA	A	842	37	65,73,73	1.51	8 (12%)	76,113,113	1.45	10 (13%)
32	II0	n	301	-	39,43,43	6.69	20 (51%)	50,60,60	2.33	18 (36%)
25	CLA	A	839	37	65,73,73	1.50	8 (12%)	76,113,113	1.48	11 (14%)
25	CLA	B	839	-	65,73,73	1.53	8 (12%)	76,113,113	1.41	8 (10%)
32	II0	m	615	-	39,43,43	6.57	22 (56%)	50,60,60	2.32	22 (44%)
25	CLA	d	309	27	41,49,73	1.85	6 (14%)	47,84,113	1.71	7 (14%)
34	KC2	k	612	34	48,53,53	3.06	20 (41%)	54,89,89	4.68	38 (70%)
25	CLA	m	607	-	51,59,73	1.84	11 (21%)	59,96,113	1.85	14 (23%)
33	LMG	Q	301	-	38,38,55	1.07	2 (5%)	46,46,63	1.16	3 (6%)
28	WVN	F	203	-	40,41,41	2.01	13 (32%)	50,56,56	2.69	22 (44%)
25	CLA	A	810	-	62,70,73	1.50	9 (14%)	72,109,113	1.37	10 (13%)
25	CLA	A	832	-	65,73,73	1.49	9 (13%)	76,113,113	1.56	12 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
27	LHG	a	301	25	48,48,48	0.95	3 (6%)	51,54,54	1.19	5 (9%)
25	CLA	B	835	37	65,73,73	1.52	9 (13%)	76,113,113	1.43	10 (13%)
25	CLA	A	806	-	65,73,73	1.48	6 (9%)	76,113,113	1.41	9 (11%)
25	CLA	B	806	-	65,73,73	1.49	7 (10%)	76,113,113	1.41	8 (10%)
25	CLA	m	608	17	65,73,73	1.57	9 (13%)	76,113,113	1.34	11 (14%)
26	PQN	A	844	-	34,34,34	1.85	5 (14%)	42,45,45	1.39	7 (16%)
32	II0	m	618	-	39,43,43	6.48	22 (56%)	50,60,60	2.60	25 (50%)
28	WVN	I	101	-	40,41,41	1.82	14 (35%)	50,56,56	2.06	16 (32%)
25	CLA	c	606	-	52,60,73	1.78	10 (19%)	60,97,113	1.66	11 (18%)
27	LHG	L	207	-	48,48,48	0.92	2 (4%)	51,54,54	1.06	3 (5%)
25	CLA	d	307	-	46,54,73	1.78	7 (15%)	53,90,113	1.45	7 (13%)
25	CLA	n	309	23	51,59,73	1.70	7 (13%)	59,96,113	1.74	10 (16%)
28	WVN	h	309	-	40,41,41	1.88	14 (35%)	50,56,56	2.23	17 (34%)
25	CLA	B	840	-	65,73,73	1.46	6 (9%)	76,113,113	1.56	9 (11%)
25	CLA	a	311	14	65,73,73	1.45	7 (10%)	76,113,113	1.52	13 (17%)
28	WVN	R	201	-	40,41,41	1.89	14 (35%)	50,56,56	2.45	16 (32%)
25	CLA	h	307	16	57,65,73	1.59	6 (10%)	66,103,113	1.32	9 (13%)
32	II0	j	614	-	39,43,43	6.64	22 (56%)	50,60,60	2.26	20 (40%)
33	LMG	c	619	-	55,55,55	0.98	3 (5%)	63,63,63	1.69	14 (22%)
25	CLA	A	829	-	65,73,73	1.54	9 (13%)	76,113,113	1.41	7 (9%)
25	CLA	B	809	2	65,73,73	1.56	10 (15%)	76,113,113	1.47	7 (9%)
25	CLA	n	308	-	65,73,73	1.46	9 (13%)	76,113,113	1.65	12 (15%)
32	II0	k	617	-	39,43,43	6.81	21 (53%)	50,60,60	2.49	20 (40%)
34	KC2	n	313	-	48,53,53	3.11	21 (43%)	54,89,89	4.48	33 (61%)
25	CLA	A	838	27	52,60,73	1.62	7 (13%)	60,97,113	1.56	8 (13%)
32	II0	b	613	-	39,43,43	6.66	22 (56%)	50,60,60	2.26	17 (34%)
25	CLA	b	605	37,25	65,73,73	1.52	11 (16%)	76,113,113	1.49	14 (18%)
25	CLA	k	601	19	51,59,73	1.74	7 (13%)	59,96,113	1.54	8 (13%)
25	CLA	h	302	16	50,58,73	1.71	7 (14%)	58,95,113	1.59	10 (17%)
25	CLA	B	837	-	65,73,73	1.49	6 (9%)	76,113,113	1.30	7 (9%)
25	CLA	a	303	14	52,60,73	1.62	8 (15%)	60,97,113	1.69	9 (15%)
32	II0	k	616	-	39,43,43	6.63	21 (53%)	50,60,60	2.52	23 (46%)
25	CLA	s	202	12	65,73,73	1.49	7 (10%)	76,113,113	1.68	17 (22%)
32	II0	c	614	-	39,43,43	6.62	21 (53%)	50,60,60	2.32	17 (34%)
35	IHT	c	616	-	40,42,42	6.10	25 (62%)	53,58,58	2.40	18 (33%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
25	CLA	B	808	-	65,73,73	1.49	10 (15%)	76,113,113	1.47	9 (11%)
25	CLA	B	815	-	55,63,73	1.60	5 (9%)	64,101,113	1.56	8 (12%)
33	LMG	J	105	-	55,55,55	0.87	3 (5%)	63,63,63	0.94	3 (4%)
25	CLA	c	605	13	51,59,73	1.74	11 (21%)	59,96,113	1.48	8 (13%)
25	CLA	A	841	-	65,73,73	1.52	7 (10%)	76,113,113	1.40	9 (11%)
25	CLA	A	825	37	65,73,73	1.51	6 (9%)	76,113,113	1.40	9 (11%)
25	CLA	i	303	20	50,58,73	1.66	7 (14%)	58,95,113	1.70	9 (15%)
33	LMG	s	208	-	48,48,55	0.96	2 (4%)	56,56,63	1.28	5 (8%)
32	II0	a	314	-	39,43,43	6.62	24 (61%)	50,60,60	1.98	18 (36%)
25	CLA	h	305	16	51,59,73	1.65	6 (11%)	59,96,113	1.52	8 (13%)
25	CLA	n	307	23	51,59,73	1.71	8 (15%)	59,96,113	1.48	9 (15%)
25	CLA	b	601	15	51,59,73	1.62	7 (13%)	59,96,113	1.61	8 (13%)
35	IHT	k	618	-	40,42,42	6.19	25 (62%)	53,58,58	2.28	16 (30%)
25	CLA	B	836	-	65,73,73	1.47	9 (13%)	76,113,113	1.64	10 (13%)
34	KC2	d	310	21	48,53,53	3.16	21 (43%)	54,89,89	4.53	31 (57%)
25	CLA	A	855	37	65,73,73	1.56	8 (12%)	76,113,113	1.36	11 (14%)
27	LHG	c	618	25	36,36,48	1.08	2 (5%)	39,42,54	1.21	4 (10%)
25	CLA	A	817	-	65,73,73	1.53	8 (12%)	76,113,113	1.56	10 (13%)
28	WVN	s	207	-	40,41,41	1.90	14 (35%)	50,56,56	2.30	13 (26%)
36	LMU	i	301	-	36,36,36	1.19	3 (8%)	47,47,47	1.22	4 (8%)
25	CLA	A	801	-	65,73,73	1.47	7 (10%)	76,113,113	1.42	10 (13%)
34	KC2	m	611	17	48,53,53	3.10	21 (43%)	54,89,89	4.72	32 (59%)
25	CLA	A	823	-	55,63,73	1.63	7 (12%)	64,101,113	1.47	9 (14%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	B	805	-	1/1/15/20	9/37/115/115	-
27	LHG	A	846	25	-	7/31/31/53	-
25	CLA	B	814	-	1/1/13/20	15/30/108/115	-
32	II0	j	613	-	-	7/21/67/67	0/2/2/2
27	LHG	m	617	25	-	19/41/41/53	-
25	CLA	A	828	-	-	6/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	d	303	-	1/1/15/20	18/37/115/115	-
25	CLA	a	304	14	1/1/12/20	3/19/97/115	-
25	CLA	c	608	13	1/1/15/20	14/37/115/115	-
25	CLA	c	612	-	1/1/15/20	14/37/115/115	-
25	CLA	h	306	16	1/1/15/20	17/37/115/115	-
32	II0	c	617	-	-	4/21/67/67	0/2/2/2
25	CLA	c	603	-	1/1/12/20	9/21/99/115	-
25	CLA	A	816	-	-	18/37/115/115	-
25	CLA	c	609	27	1/1/11/20	8/13/91/115	-
25	CLA	m	603	-	1/1/15/20	21/37/115/115	-
34	KC2	n	312	23	-	4/15/71/71	-
25	CLA	c	602	13	1/1/12/20	9/19/97/115	-
25	CLA	A	830	-	-	6/19/97/115	-
25	CLA	B	817	-	1/1/13/20	10/28/106/115	-
25	CLA	l	312	18	1/1/15/20	11/37/115/115	-
25	CLA	B	807	-	1/1/15/20	14/37/115/115	-
32	II0	n	319	-	-	6/21/67/67	0/2/2/2
32	II0	h	311	-	-	8/21/67/67	0/2/2/2
25	CLA	d	306	-	1/1/12/20	10/21/99/115	-
32	II0	j	615	-	-	9/21/67/67	0/2/2/2
25	CLA	m	605	17	-	5/10/88/115	-
25	CLA	b	606	15	1/1/14/20	11/33/111/115	-
32	II0	n	315	-	-	1/21/67/67	0/2/2/2
28	WVN	s	205	-	-	4/29/63/63	0/2/2/2
25	CLA	h	303	16	1/1/12/20	7/19/97/115	-
25	CLA	k	607	-	1/1/12/20	9/21/99/115	-
25	CLA	R	202	-	1/1/12/20	10/21/99/115	-
32	II0	a	316	-	-	2/21/67/67	0/2/2/2
34	KC2	i	319	-	-	6/15/71/71	-
25	CLA	l	304	18	1/1/15/20	16/37/115/115	-
25	CLA	A	804	-	1/1/15/20	15/37/115/115	-
25	CLA	A	833	-	1/1/12/20	5/19/97/115	-
25	CLA	A	809	-	-	10/27/105/115	-
25	CLA	B	826	-	1/1/15/20	15/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	j	607	17	1/1/11/20	5/13/91/115	-
27	LHG	c	620	25	-	25/41/41/53	-
25	CLA	i	312	-	1/1/12/20	7/21/99/115	-
27	LHG	i	318	25	-	13/41/41/53	-
25	CLA	n	305	23	1/1/14/20	10/31/109/115	-
25	CLA	a	310	27	1/1/11/20	9/17/95/115	-
25	CLA	B	850	-	1/1/12/20	5/21/99/115	-
25	CLA	B	825	-	1/1/15/20	14/37/115/115	-
25	CLA	i	309	27	1/1/11/20	4/15/93/115	-
35	IHT	n	318	-	-	9/25/65/65	0/2/2/2
25	CLA	B	821	-	-	9/23/101/115	-
35	IHT	R	203	-	-	4/25/65/65	0/2/2/2
25	CLA	l	309	18	1/1/12/20	5/21/99/115	-
25	CLA	B	831	37	-	2/13/91/115	-
34	KC2	s	201	12	-	9/15/71/71	-
25	CLA	B	841	27	1/1/15/20	13/37/115/115	-
25	CLA	s	203	12,25	-	15/37/115/115	-
25	CLA	A	803	-	-	8/25/103/115	-
32	II0	h	312	-	-	7/21/67/67	0/2/2/2
25	CLA	k	614	-	-	9/21/99/115	-
25	CLA	h	304	-	1/1/12/20	6/21/99/115	-
35	IHT	b	615	-	-	6/25/65/65	0/2/2/2
27	LHG	b	619	25	-	22/53/53/53	-
32	II0	l	302	-	-	8/21/67/67	0/2/2/2
32	II0	d	316	-	-	7/21/67/67	0/2/2/2
27	LHG	J	106	25	-	21/53/53/53	-
25	CLA	j	604	17	-	16/37/115/115	-
25	CLA	A	831	-	-	12/37/115/115	-
25	CLA	K	102	-	1/1/10/20	5/10/88/115	-
27	LHG	k	620	25	-	12/41/41/53	-
25	CLA	B	823	37	-	15/36/114/115	-
25	CLA	B	827	-	-	7/19/97/115	-
25	CLA	d	312	-	1/1/12/20	8/21/99/115	-
25	CLA	k	610	27	1/1/12/20	8/21/99/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	n	314	-	-	9/21/99/115	-
27	LHG	a	319	25	-	15/53/53/53	-
35	IHT	j	616	-	-	7/25/65/65	0/2/2/2
32	II0	b	617	-	-	0/21/67/67	0/2/2/2
25	CLA	b	603	-	1/1/15/20	8/37/115/115	-
25	CLA	B	822	37	1/1/15/20	17/37/115/115	-
25	CLA	B	818	37	1/1/15/20	19/37/115/115	-
25	CLA	B	828	-	-	5/18/96/115	-
25	CLA	b	602	15	1/1/13/20	11/25/103/115	-
25	CLA	Q	302	37	1/1/15/20	13/37/115/115	-
25	CLA	d	301	21	1/1/12/20	2/19/97/115	-
25	CLA	i	304	-	1/1/12/20	4/21/99/115	-
27	LHG	A	845	-	-	22/52/52/53	-
25	CLA	B	830	37	-	18/37/115/115	-
25	CLA	d	308	21	1/1/10/20	3/8/86/115	-
25	CLA	l	305	-	1/1/12/20	4/21/99/115	-
25	CLA	a	306	37	1/1/15/20	15/37/115/115	-
25	CLA	L	203	-	-	14/37/115/115	-
25	CLA	J	103	8	1/1/10/20	2/10/88/115	-
25	CLA	F	202	6	-	8/22/100/115	-
25	CLA	i	305	20	-	13/37/115/115	-
25	CLA	A	805	1	1/1/15/20	11/37/115/115	-
28	WVN	A	847	-	-	9/29/63/63	0/2/2/2
25	CLA	m	609	17	1/1/12/20	9/21/99/115	-
25	CLA	b	612	27	-	5/21/99/115	-
25	CLA	A	840	1	-	19/37/115/115	-
35	IHT	b	616	-	-	6/25/65/65	0/2/2/2
27	LHG	d	317	25	-	16/41/41/53	-
32	II0	d	313	-	-	7/21/67/67	0/2/2/2
25	CLA	A	834	-	1/1/12/20	7/21/99/115	-
32	II0	m	614	-	-	3/21/67/67	0/2/2/2
25	CLA	A	821	-	-	9/18/96/115	-
25	CLA	a	307	14	-	7/13/91/115	-
25	CLA	A	856	27	1/1/10/20	4/8/86/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	b	609	-	-	5/21/99/115	-
25	CLA	a	305	-	1/1/12/20	7/21/99/115	-
33	LMG	b	620	-	-	17/44/64/70	0/1/1/1
26	PQN	B	842	-	-	12/23/43/43	0/2/2/2
32	II0	c	613	-	-	4/21/67/67	0/2/2/2
25	CLA	B	812	-	1/1/15/20	21/37/115/115	-
34	KC2	l	311	18	-	10/15/71/71	-
25	CLA	c	611	-	-	10/13/91/115	-
25	CLA	A	802	-	1/1/15/20	12/37/115/115	-
25	CLA	h	301	37	-	12/37/115/115	-
25	CLA	B	820	-	-	10/25/103/115	-
32	II0	i	315	-	-	6/21/67/67	0/2/2/2
25	CLA	F	201	37	1/1/15/20	12/37/115/115	-
25	CLA	m	610	27	1/1/13/20	13/25/103/115	-
25	CLA	j	603	-	1/1/12/20	8/21/99/115	-
34	KC2	i	310	20	-	9/15/71/71	-
32	II0	d	315	-	-	6/21/67/67	0/2/2/2
25	CLA	l	306	18	-	20/37/115/115	-
30	SF4	C	102	3	-	-	0/6/5/5
25	CLA	d	305	21	1/1/12/20	5/21/99/115	-
25	CLA	k	604	-	-	17/37/115/115	-
25	CLA	B	804	-	1/1/15/20	14/37/115/115	-
25	CLA	c	601	13	1/1/12/20	10/21/99/115	-
25	CLA	l	303	18	1/1/11/20	7/16/94/115	-
25	CLA	B	833	-	1/1/15/20	16/37/115/115	-
28	WVN	L	205	-	-	6/29/63/63	0/2/2/2
25	CLA	A	824	37	1/1/15/20	11/37/115/115	-
27	LHG	B	801	-	-	27/42/42/53	-
25	CLA	B	824	-	1/1/15/20	13/37/115/115	-
27	LHG	j	617	25	-	5/34/34/53	-
25	CLA	A	835	-	1/1/15/20	17/37/115/115	-
25	CLA	k	606	19	-	10/21/99/115	-
25	CLA	K	101	37	1/1/12/20	7/21/99/115	-
28	WVN	A	848	-	-	12/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	WVN	L	201	-	-	9/29/63/63	0/2/2/2
30	SF4	B	802	-	-	-	0/6/5/5
25	CLA	A	814	-	-	9/19/97/115	-
25	CLA	j	612	-	1/1/15/20	11/37/115/115	-
28	WVN	A	849	-	-	8/29/63/63	0/2/2/2
34	KC2	j	610	17	-	7/15/71/71	-
25	CLA	n	304	-	1/1/12/20	8/21/99/115	-
25	CLA	k	602	19	1/1/12/20	8/19/97/115	-
25	CLA	a	309	14	1/1/15/20	8/37/115/115	-
32	II0	i	317	-	-	6/21/67/67	0/2/2/2
30	SF4	C	101	3	-	-	0/6/5/5
32	II0	i	320	-	-	6/21/67/67	0/2/2/2
28	WVN	l	315	-	-	9/29/63/63	0/2/2/2
28	WVN	F	204	-	-	11/29/63/63	0/2/2/2
32	II0	b	614	-	-	9/21/67/67	0/2/2/2
32	II0	a	315	-	-	3/21/67/67	0/2/2/2
25	CLA	n	311	37	-	16/37/115/115	-
25	CLA	c	604	13	1/1/15/20	19/37/115/115	-
29	LMT	A	852	-	-	13/21/61/61	0/2/2/2
25	CLA	i	311	-	1/1/12/20	11/21/99/115	-
25	CLA	k	609	19	1/1/15/20	16/37/115/115	-
27	LHG	n	320	-	-	16/47/47/53	-
32	II0	l	313	-	-	4/21/67/67	0/2/2/2
28	WVN	K	103	-	-	6/29/63/63	0/2/2/2
29	LMT	a	302	-	-	4/15/35/61	0/1/1/2
25	CLA	k	605	19	1/1/11/20	7/13/91/115	-
25	CLA	m	606	-	1/1/15/20	12/37/115/115	-
35	IHT	m	616	-	-	7/25/65/65	0/2/2/2
25	CLA	d	302	-	1/1/12/20	6/21/99/115	-
25	CLA	A	820	37	1/1/15/20	15/37/115/115	-
25	CLA	j	606	-	1/1/12/20	9/21/99/115	-
34	KC2	d	311	-	-	6/15/71/71	-
25	CLA	c	607	13	1/1/11/20	6/15/93/115	-
25	CLA	B	811	-	1/1/13/20	8/25/103/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
28	WVN	A	851	-	-	14/29/63/63	0/2/2/2
25	CLA	j	602	17	-	4/19/97/115	-
28	WVN	l	301	-	-	3/29/63/63	0/2/2/2
28	WVN	B	848	-	-	7/29/63/63	0/2/2/2
32	II0	k	615	-	-	6/21/67/67	0/2/2/2
29	LMT	a	320	-	-	9/21/61/61	0/2/2/2
31	DGD	B	843	-	-	5/49/89/95	0/2/2/2
32	II0	i	313	-	-	7/21/67/67	0/2/2/2
32	II0	i	314	-	-	6/21/67/67	0/2/2/2
25	CLA	l	307	18	1/1/15/20	17/37/115/115	-
32	II0	l	316	-	-	5/21/67/67	0/2/2/2
25	CLA	n	303	23	1/1/12/20	7/19/97/115	-
25	CLA	a	308	14	1/1/15/20	16/37/115/115	-
27	LHG	J	107	-	-	9/35/35/53	-
25	CLA	B	834	-	1/1/11/20	2/16/94/115	-
32	II0	n	316	-	-	3/21/67/67	0/2/2/2
25	CLA	b	610	15	1/1/15/20	19/37/115/115	-
28	WVN	B	847	-	-	10/29/63/63	0/2/2/2
25	CLA	A	818	-	1/1/15/20	22/37/115/115	-
25	CLA	L	204	-	-	8/19/97/115	-
25	CLA	B	816	-	1/1/13/20	10/30/108/115	-
28	WVN	J	102	-	-	8/29/63/63	0/2/2/2
25	CLA	j	605	17	1/1/11/20	9/13/91/115	-
32	II0	a	318	-	-	7/21/67/67	0/2/2/2
25	CLA	k	608	19	1/1/15/20	15/37/115/115	-
25	CLA	B	803	-	1/1/15/20	20/37/115/115	-
25	CLA	b	611	-	1/1/15/20	17/37/115/115	-
25	CLA	k	603	-	1/1/12/20	7/21/99/115	-
25	CLA	A	854	-	1/1/15/20	21/37/115/115	-
25	CLA	m	612	37	-	8/21/99/115	-
34	KC2	k	611	19	-	9/15/71/71	-
25	CLA	m	601	17	1/1/10/20	1/10/88/115	-
25	CLA	n	302	23	1/1/11/20	4/13/91/115	-
25	CLA	s	209	-	1/1/12/20	4/21/99/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	A	837	-	1/1/15/20	18/37/115/115	-
25	CLA	b	608	27	1/1/15/20	11/37/115/115	-
25	CLA	s	206	-	-	15/37/115/115	-
25	CLA	l	310	27	1/1/14/20	15/33/111/115	-
25	CLA	h	308	16	1/1/12/20	9/21/99/115	-
25	CLA	B	819	-	-	4/15/93/115	-
32	II0	d	314	-	-	3/21/67/67	0/2/2/2
25	CLA	B	810	-	1/1/13/20	4/25/101/115	-
25	CLA	A	808	1	1/1/15/20	13/37/115/115	-
28	WVN	B	844	-	-	6/29/63/63	0/2/2/2
28	WVN	M	101	-	-	9/29/63/63	0/2/2/2
32	II0	n	317	-	-	3/21/67/67	0/2/2/2
25	CLA	h	313	37	1/1/15/20	9/37/115/115	-
25	CLA	A	822	-	-	8/21/99/115	-
25	CLA	A	826	-	1/1/15/20	12/37/115/115	-
25	CLA	B	813	-	1/1/14/20	16/31/109/115	-
25	CLA	l	308	18	1/1/15/20	9/37/115/115	-
25	CLA	A	811	-	-	8/24/102/115	-
25	CLA	A	815	37	-	7/13/91/115	-
34	KC2	s	204	-	-	6/15/71/71	-
25	CLA	j	601	17	1/1/12/20	5/21/99/115	-
32	II0	h	310	-	-	2/17/40/67	0/1/1/2
33	LMG	n	321	-	-	9/50/70/70	0/1/1/1
25	CLA	a	312	-	-	20/37/115/115	-
28	WVN	B	849	-	-	12/29/63/63	0/2/2/2
25	CLA	A	812	-	1/1/15/20	24/37/115/115	-
25	CLA	j	608	17	1/1/12/20	0/21/99/115	-
27	LHG	l	317	25	-	14/36/36/53	-
25	CLA	A	819	-	-	6/13/91/115	-
25	CLA	j	609	27	1/1/14/20	14/33/111/115	-
25	CLA	A	836	-	-	16/37/115/115	-
25	CLA	A	853	-	1/1/15/20	11/37/115/115	-
25	CLA	A	843	-	1/1/15/20	22/37/115/115	-
25	CLA	i	306	-	1/1/12/20	9/21/99/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	b	604	15	-	15/37/115/115	-
28	WVN	B	846	-	-	6/29/63/63	0/2/2/2
34	KC2	k	613	34	-	13/15/71/71	-
25	CLA	j	611	-	1/1/12/20	9/21/99/115	-
25	CLA	A	813	-	-	7/13/91/115	-
25	CLA	Q	303	24	1/1/11/20	8/13/91/115	-
32	II0	J	104	-	-	7/21/67/67	0/2/2/2
32	II0	c	615	-	-	5/21/67/67	0/2/2/2
29	LMT	b	618	-	-	9/15/35/61	0/1/1/2
28	WVN	i	316	-	-	9/29/63/63	0/2/2/2
25	CLA	B	829	-	-	5/19/97/115	-
25	CLA	i	302	20	1/1/12/20	6/21/99/115	-
28	WVN	L	206	-	-	3/29/63/63	0/2/2/2
25	CLA	d	304	21	1/1/12/20	9/21/99/115	-
35	IHT	a	317	-	-	10/25/65/65	0/2/2/2
25	CLA	i	307	20	1/1/14/20	13/33/111/115	-
25	CLA	m	613	-	1/1/10/20	8/11/89/115	-
25	CLA	L	202	9	1/1/11/20	9/18/96/115	-
25	CLA	B	832	-	1/1/13/20	10/29/107/115	-
25	CLA	b	607	15	1/1/15/20	15/37/115/115	-
25	CLA	B	838	-	-	11/28/106/115	-
25	CLA	m	604	17	-	19/37/115/115	-
32	II0	l	314	-	-	7/21/67/67	0/2/2/2
25	CLA	n	306	23	1/1/12/20	8/21/99/115	-
28	WVN	J	101	-	-	8/29/63/63	0/2/2/2
34	KC2	c	610	-	-	7/15/71/71	-
25	CLA	n	310	23	1/1/15/20	16/37/115/115	-
25	CLA	A	807	1	1/1/15/20	14/37/115/115	-
25	CLA	a	313	-	1/1/11/20	8/17/95/115	-
32	II0	k	619	-	-	6/21/67/67	0/2/2/2
28	WVN	B	845	-	-	0/29/63/63	0/2/2/2
25	CLA	m	602	17	1/1/13/20	9/27/105/115	-
25	CLA	i	308	20	1/1/12/20	9/21/99/115	-
28	WVN	A	850	-	-	8/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	A	842	37	1/1/15/20	17/37/115/115	-
32	II0	n	301	-	-	4/21/67/67	0/2/2/2
25	CLA	A	839	37	1/1/15/20	17/37/115/115	-
25	CLA	B	839	-	1/1/15/20	21/37/115/115	-
32	II0	m	615	-	-	7/21/67/67	0/2/2/2
25	CLA	d	309	27	1/1/10/20	4/8/86/115	-
34	KC2	k	612	34	-	8/15/71/71	-
25	CLA	m	607	-	-	5/21/99/115	-
33	LMG	Q	301	-	-	10/33/53/70	0/1/1/1
28	WVN	F	203	-	-	11/29/63/63	0/2/2/2
25	CLA	A	810	-	1/1/14/20	8/34/112/115	-
25	CLA	A	832	-	-	11/37/115/115	-
27	LHG	a	301	25	-	14/53/53/53	-
25	CLA	B	835	37	1/1/15/20	12/37/115/115	-
25	CLA	A	806	-	-	12/37/115/115	-
25	CLA	B	806	-	1/1/15/20	20/37/115/115	-
25	CLA	m	608	17	1/1/15/20	17/37/115/115	-
26	PQN	A	844	-	-	9/23/43/43	0/2/2/2
32	II0	m	618	-	-	4/21/67/67	0/2/2/2
28	WVN	I	101	-	-	9/29/63/63	0/2/2/2
25	CLA	c	606	-	-	11/22/100/115	-
27	LHG	L	207	-	-	22/53/53/53	-
25	CLA	d	307	-	1/1/11/20	4/15/93/115	-
25	CLA	n	309	23	1/1/12/20	5/21/99/115	-
28	WVN	h	309	-	-	8/29/63/63	0/2/2/2
25	CLA	B	840	-	1/1/15/20	17/37/115/115	-
25	CLA	a	311	14	1/1/15/20	11/37/115/115	-
28	WVN	R	201	-	-	10/29/63/63	0/2/2/2
25	CLA	h	307	16	1/1/13/20	8/28/106/115	-
32	II0	j	614	-	-	4/21/67/67	0/2/2/2
33	LMG	c	619	-	-	20/50/70/70	0/1/1/1
25	CLA	A	829	-	1/1/15/20	18/37/115/115	-
25	CLA	B	809	2	1/1/15/20	15/37/115/115	-
25	CLA	n	308	-	1/1/15/20	15/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	II0	k	617	-	-	2/21/67/67	0/2/2/2
34	KC2	n	313	-	-	7/15/71/71	-
25	CLA	A	838	27	1/1/12/20	6/22/100/115	-
32	II0	b	613	-	-	2/21/67/67	0/2/2/2
25	CLA	b	605	37,25	1/1/15/20	10/37/115/115	-
25	CLA	k	601	19	1/1/12/20	7/21/99/115	-
25	CLA	h	302	16	1/1/12/20	8/19/97/115	-
25	CLA	B	837	-	1/1/15/20	16/37/115/115	-
25	CLA	a	303	14	1/1/12/20	9/22/100/115	-
32	II0	k	616	-	-	9/21/67/67	0/2/2/2
25	CLA	s	202	12	1/1/15/20	18/37/115/115	-
32	II0	c	614	-	-	1/21/67/67	0/2/2/2
35	IHT	c	616	-	-	9/25/65/65	0/2/2/2
25	CLA	B	808	-	1/1/15/20	14/37/115/115	-
25	CLA	B	815	-	-	9/25/103/115	-
33	LMG	J	105	-	-	13/50/70/70	0/1/1/1
25	CLA	c	605	13	1/1/12/20	7/21/99/115	-
25	CLA	A	841	-	1/1/15/20	18/37/115/115	-
25	CLA	A	825	37	-	9/37/115/115	-
25	CLA	i	303	20	1/1/12/20	10/19/97/115	-
33	LMG	s	208	-	-	11/43/63/70	0/1/1/1
32	II0	a	314	-	-	4/21/67/67	0/2/2/2
25	CLA	h	305	16	1/1/12/20	7/21/99/115	-
25	CLA	n	307	23	1/1/12/20	4/21/99/115	-
25	CLA	b	601	15	1/1/12/20	7/21/99/115	-
35	IHT	k	618	-	-	10/25/65/65	0/2/2/2
25	CLA	B	836	-	-	23/37/115/115	-
34	KC2	d	310	21	-	8/15/71/71	-
25	CLA	A	823	-	-	14/25/103/115	-
25	CLA	A	855	37	1/1/15/20	28/37/115/115	-
27	LHG	c	618	25	-	14/41/41/53	-
25	CLA	A	817	-	1/1/15/20	18/37/115/115	-
28	WVN	s	207	-	-	7/29/63/63	0/2/2/2
36	LMU	i	301	-	-	9/21/61/61	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	CLA	A	801	-	1/1/15/20	12/37/115/115	-
34	KC2	m	611	17	-	7/15/71/71	-
25	CLA	A	827	-	-	17/34/112/115	-

The worst 5 of 3548 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
35	R	203	IHT	C15-C11	25.22	1.63	1.34
35	b	616	IHT	C15-C11	25.18	1.63	1.34
35	a	317	IHT	C15-C11	25.04	1.62	1.34
35	k	618	IHT	C15-C11	24.88	1.62	1.34
35	n	318	IHT	C15-C11	24.85	1.62	1.34

The worst 5 of 4083 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
34	m	611	KC2	C1A-NA-C4A	-12.79	100.95	106.71
34	j	610	KC2	C1A-NA-C4A	-12.62	101.03	106.71
34	s	204	KC2	C1A-NA-C4A	-12.36	101.15	106.71
34	l	311	KC2	C1A-NA-C4A	-12.13	101.25	106.71
34	n	312	KC2	C1A-NA-C4A	-12.10	101.27	106.71

5 of 161 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
25	A	801	CLA	ND
25	A	802	CLA	ND
25	A	804	CLA	ND
25	A	805	CLA	ND
25	A	807	CLA	ND

5 of 3458 torsion outliers are listed below:

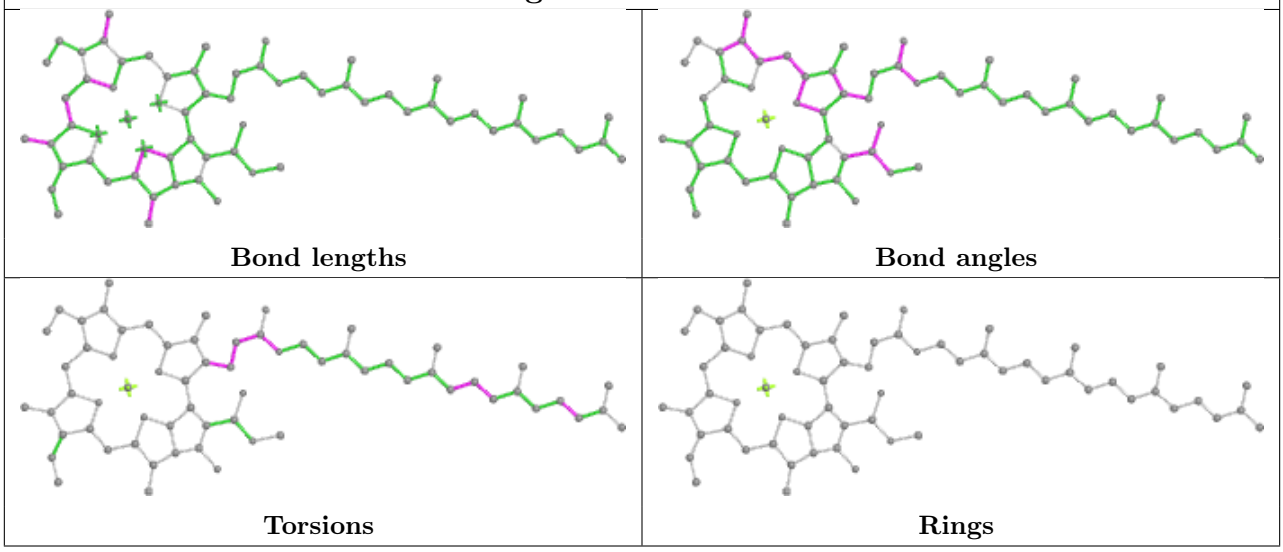
Mol	Chain	Res	Type	Atoms
25	A	801	CLA	CBD-CGD-O2D-CED
25	A	802	CLA	CBA-CGA-O2A-C1
25	A	802	CLA	O1A-CGA-O2A-C1
25	A	803	CLA	C1A-C2A-CAA-CBA
25	A	803	CLA	C3A-C2A-CAA-CBA

There are no ring outliers.

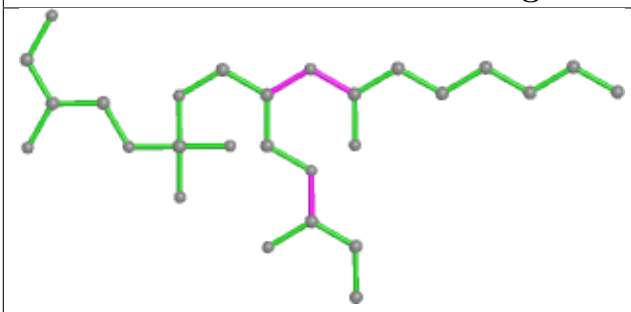
No monomer is involved in short contacts.

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.

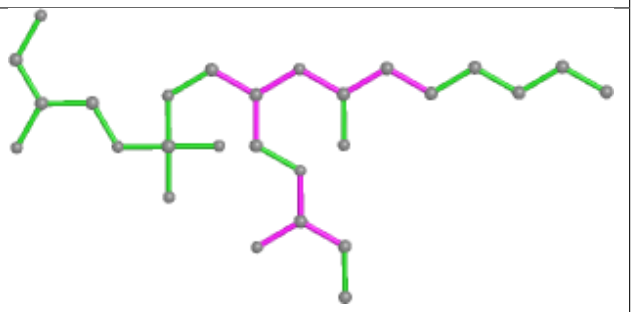
Ligand CLA B 805



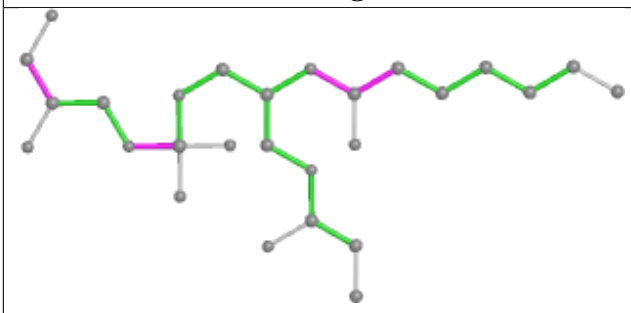
Ligand LHG A 846



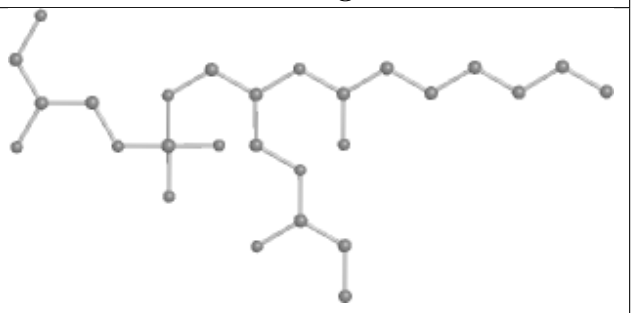
Bond lengths



Bond angles

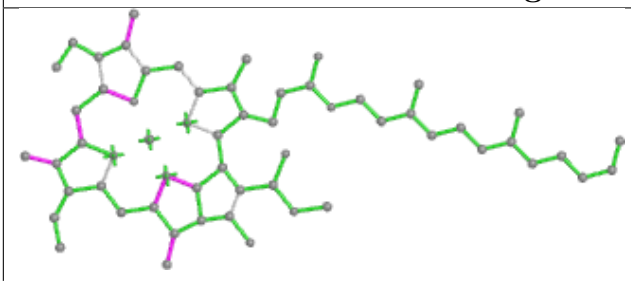


Torsions

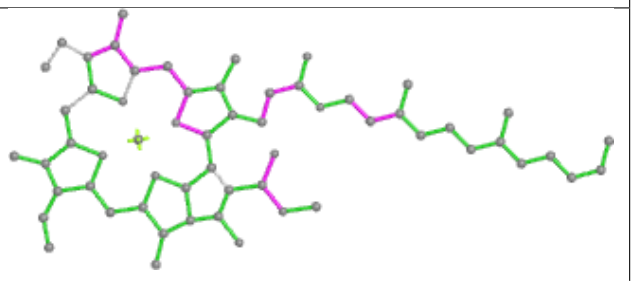


Rings

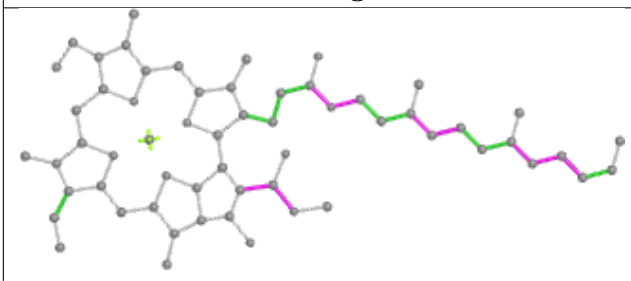
Ligand CLA B 814



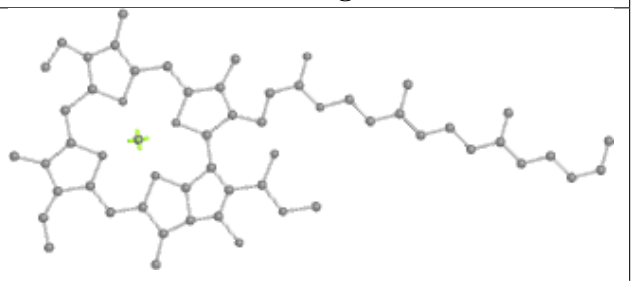
Bond lengths



Bond angles

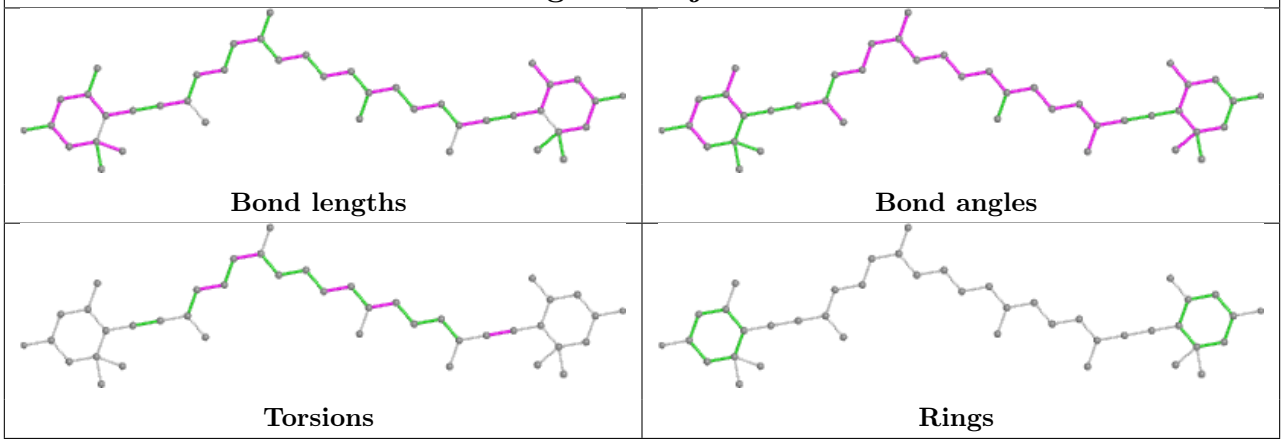


Torsions

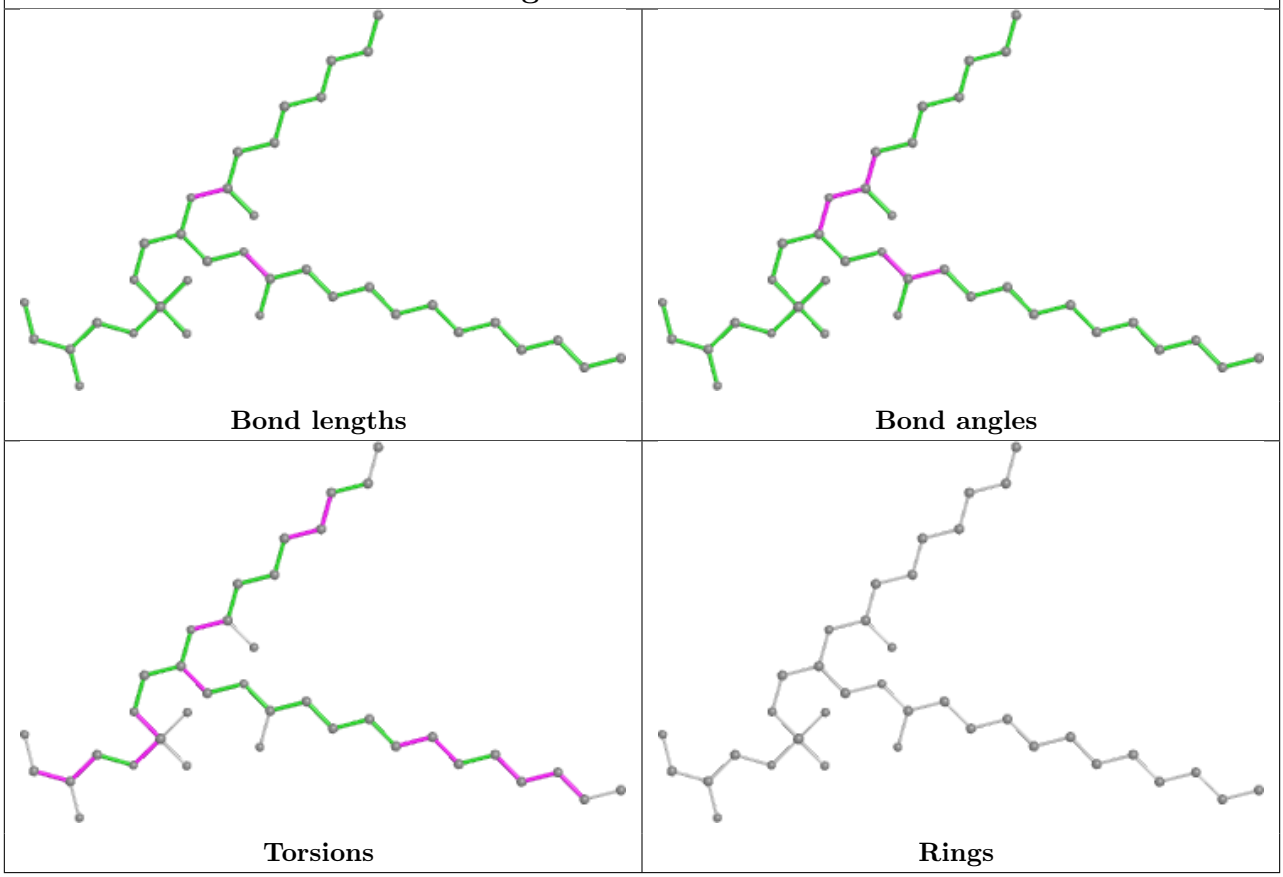


Rings

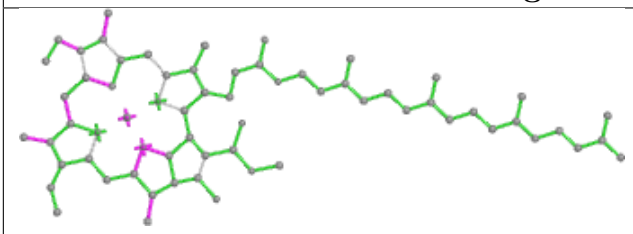
Ligand II0 j 613



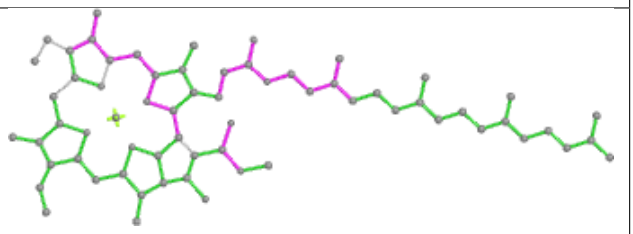
Ligand LHG m 617



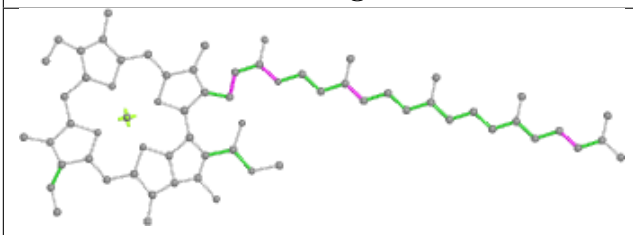
Ligand CLA A 828



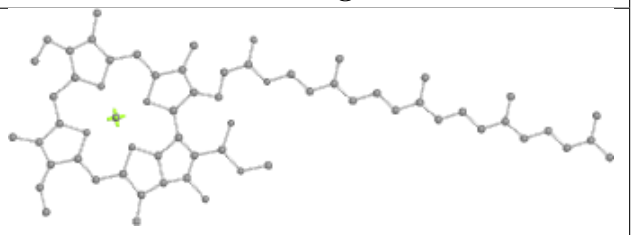
Bond lengths



Bond angles

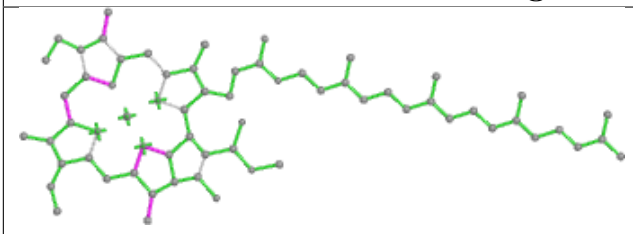


Torsions

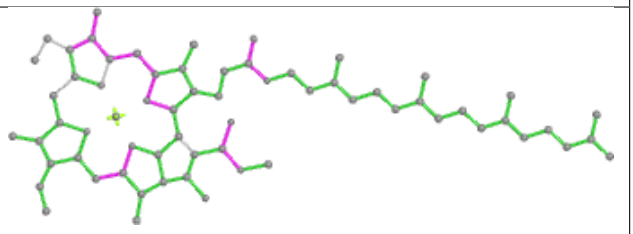


Rings

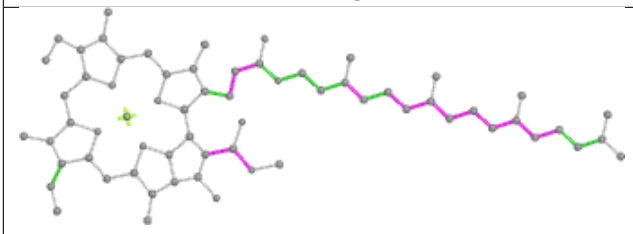
Ligand CLA d 303



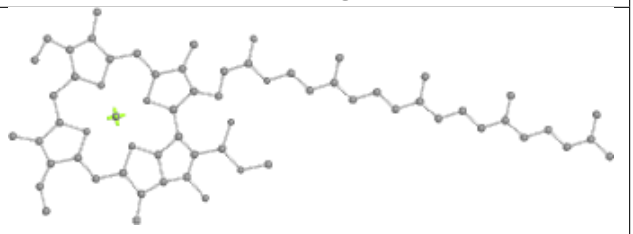
Bond lengths



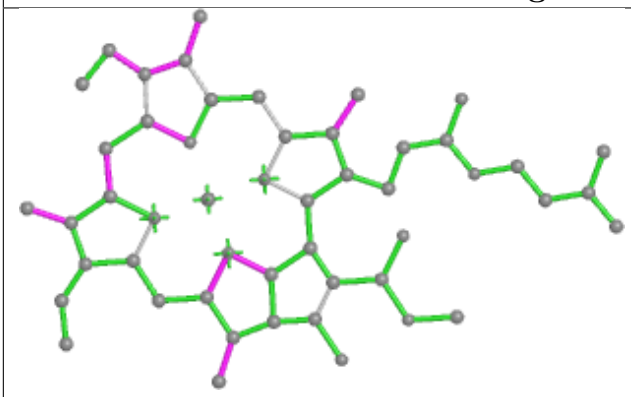
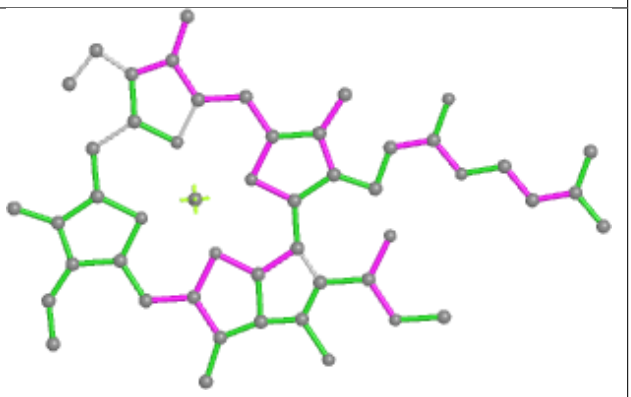
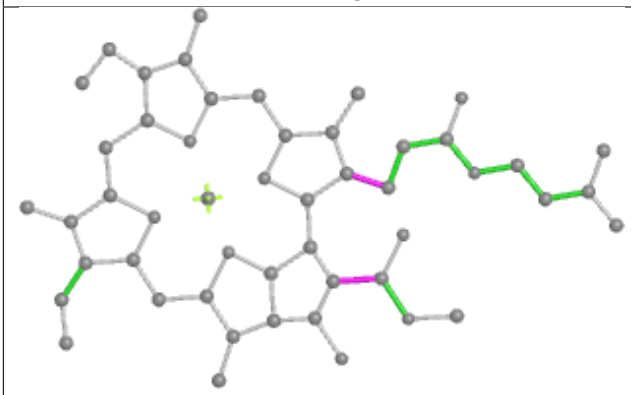
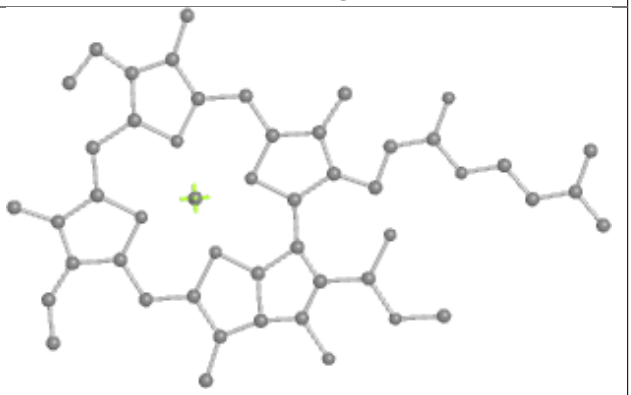
Bond angles

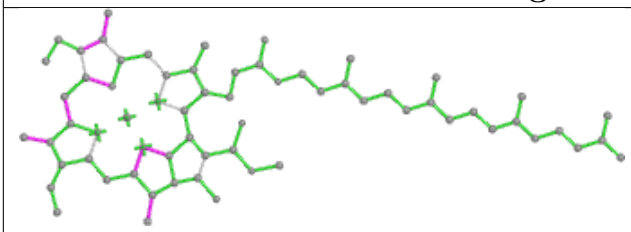
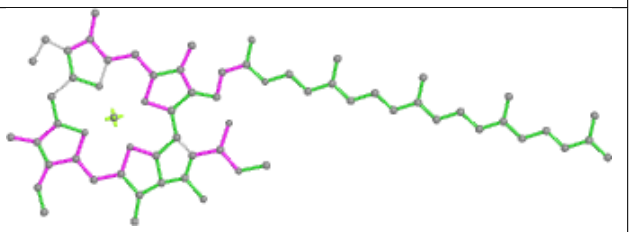
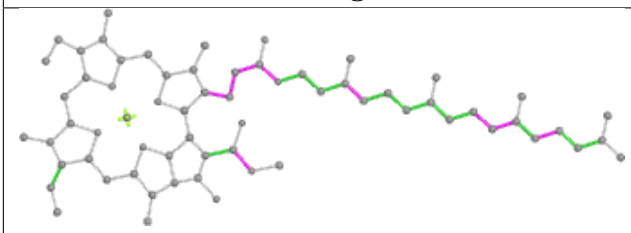
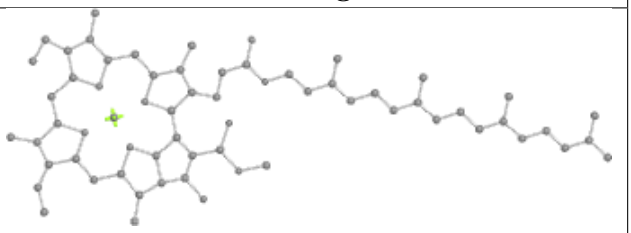


Torsions

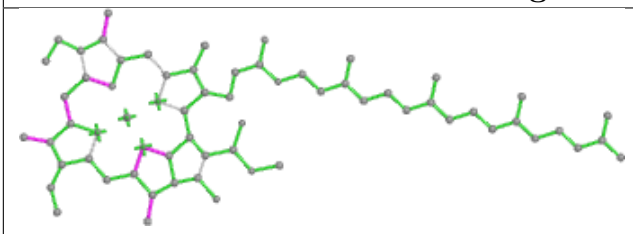


Rings

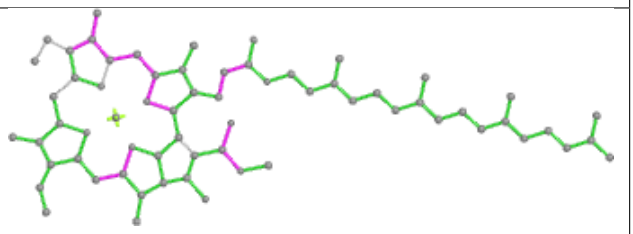
Ligand CLA a 304	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA c 608	
 Bond lengths	 Bond angles
 Torsions	 Rings

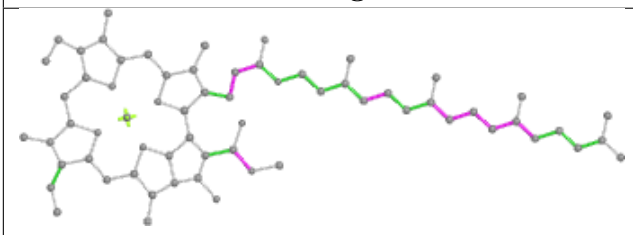
Ligand CLA c 612



Bond lengths



Bond angles



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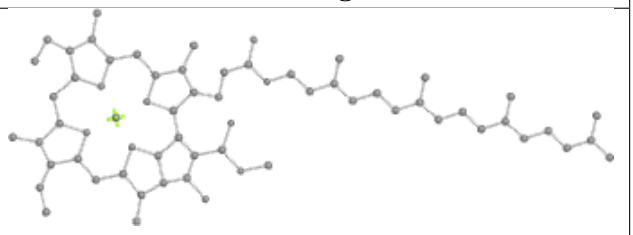
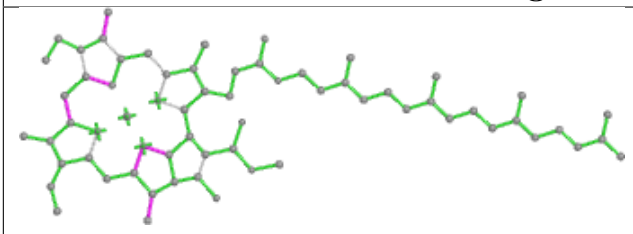


Rings

Ligand CLA h 306



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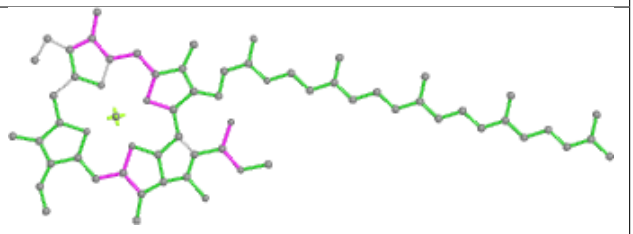
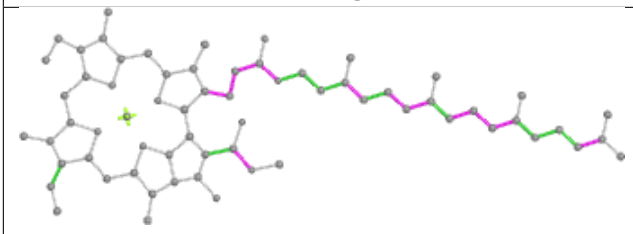


Bond angles



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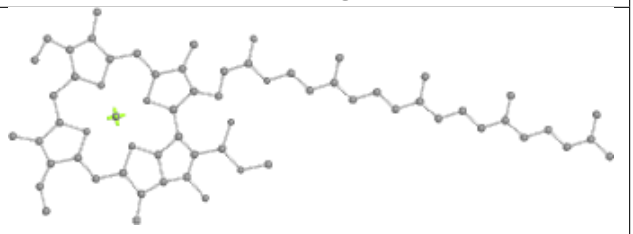
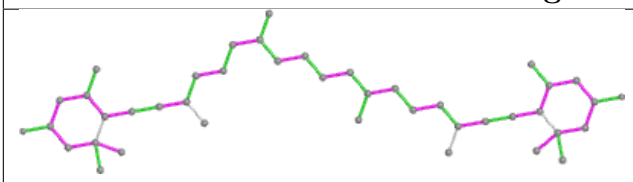


Rings

Ligand II0 c 617



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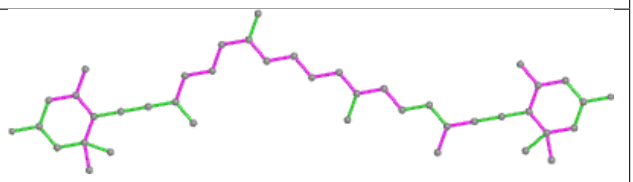
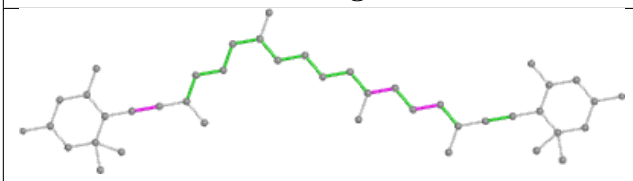


Bond angles



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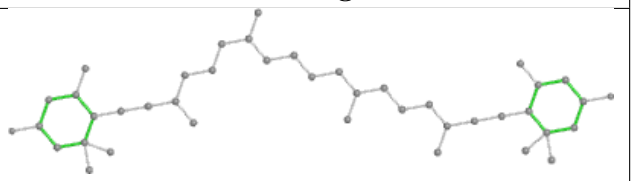
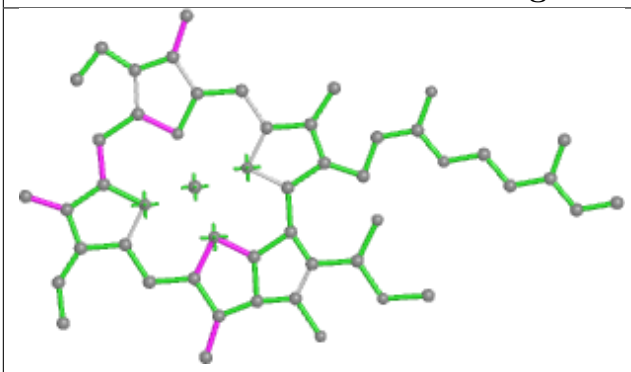


Rings

Ligand CLA c 603



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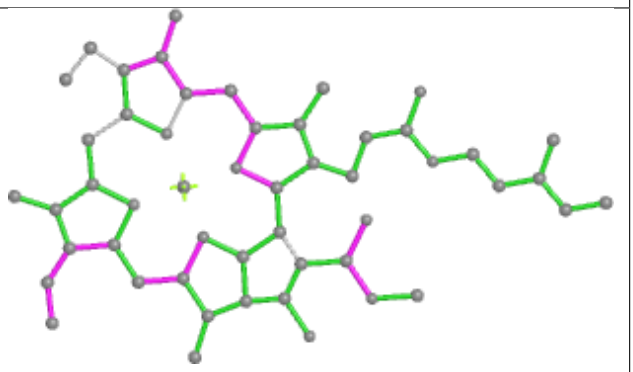
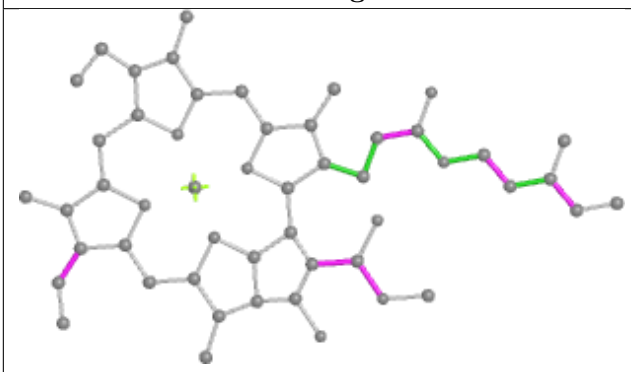


Bond angles



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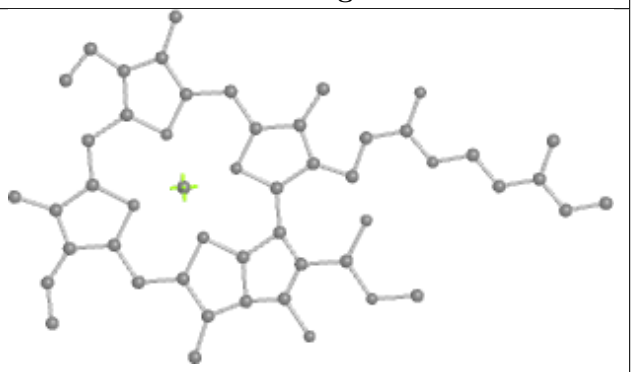
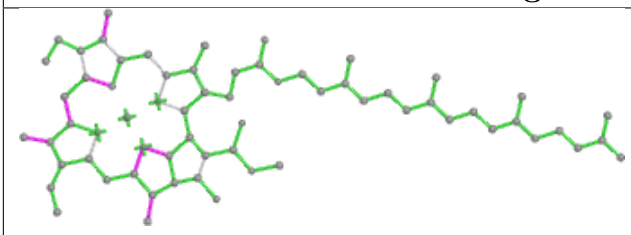


Rings

Ligand CLA A 816



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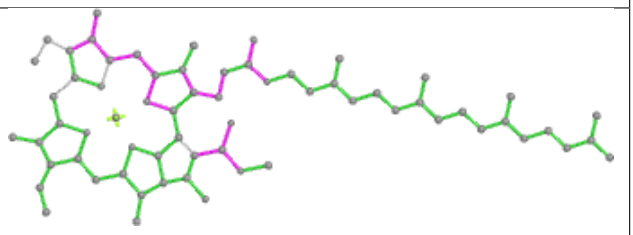
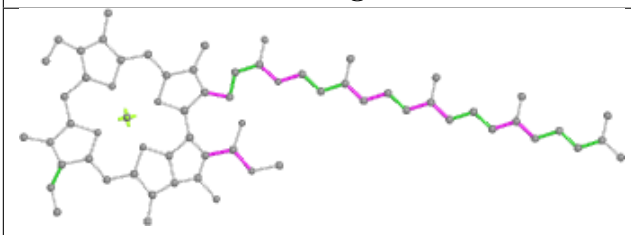


Bond angles



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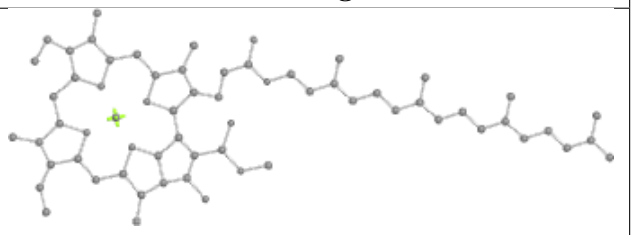
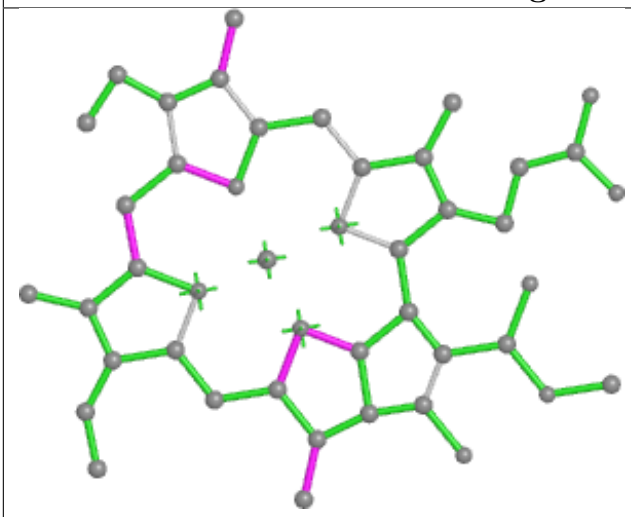


Rings

Ligand CLA c 609



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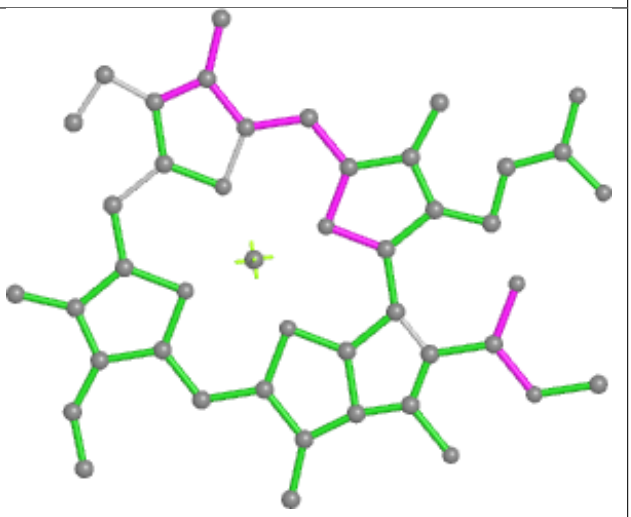
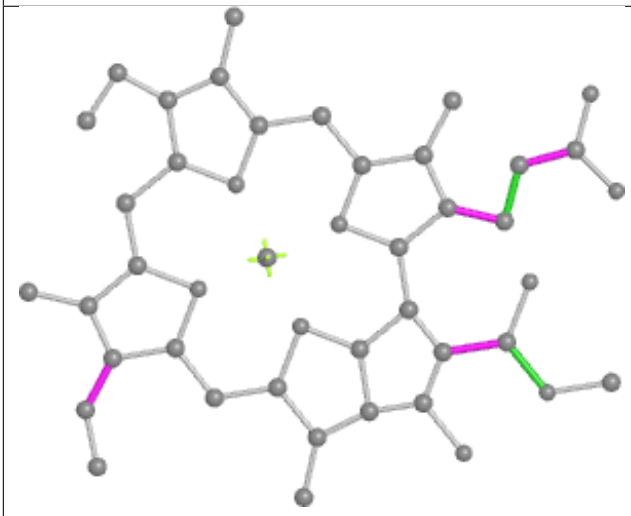


Bond angles



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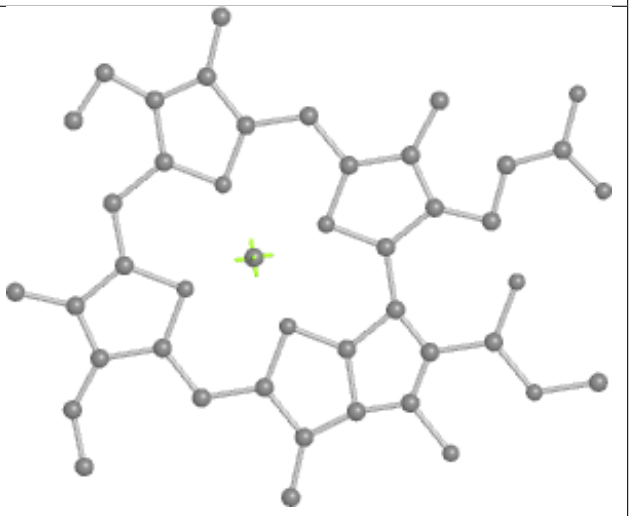
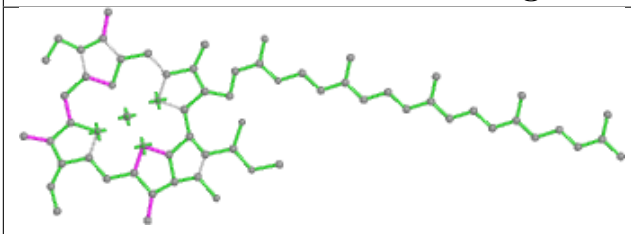


Rings

Ligand CLA m 603



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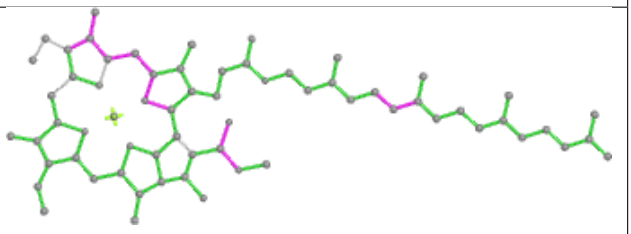
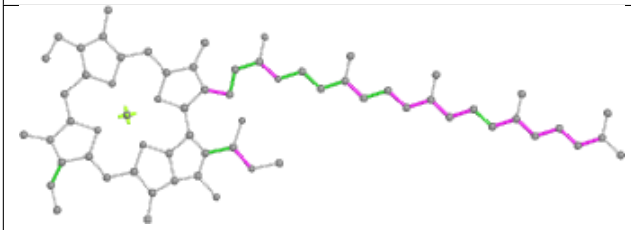


Bond angles



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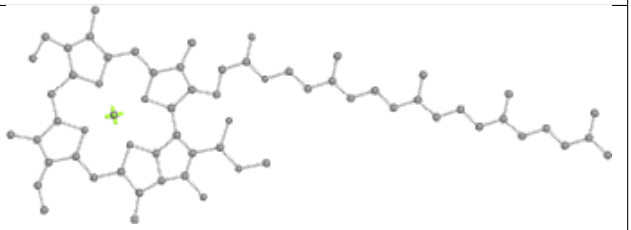
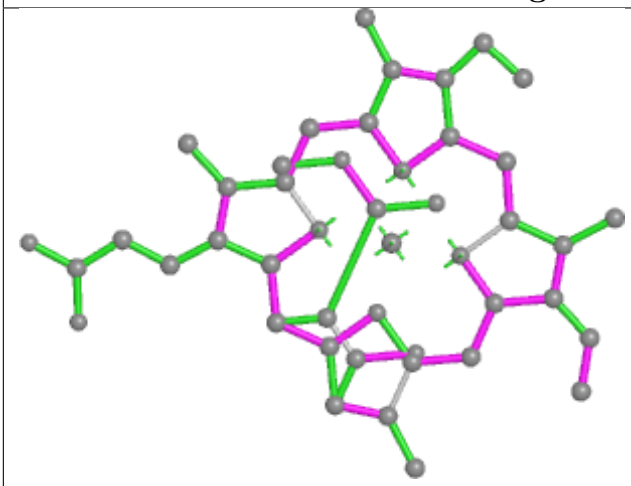


Rings

Ligand KC2 n 312



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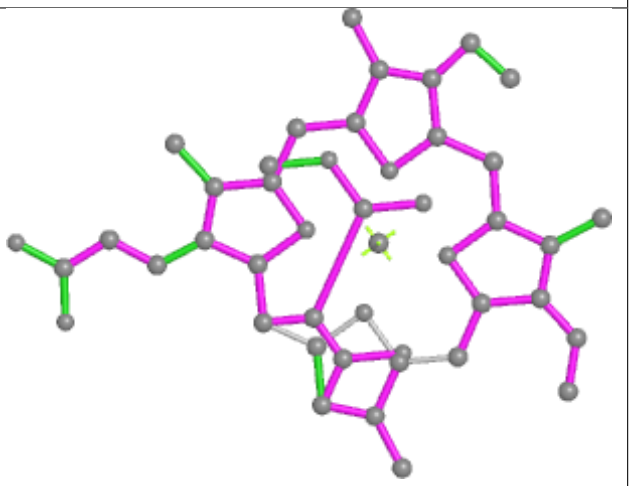
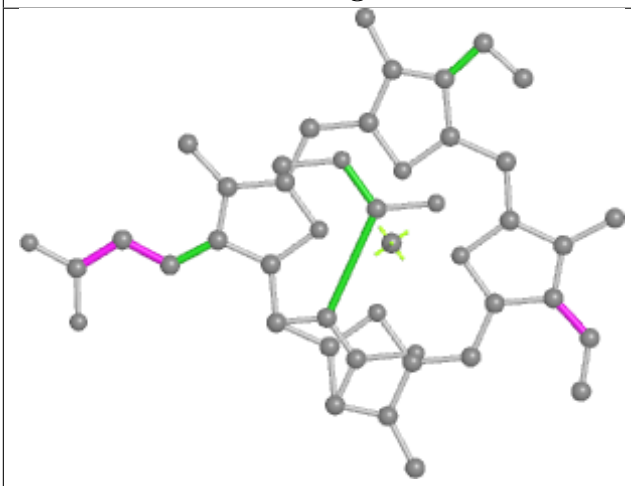


Bond angles



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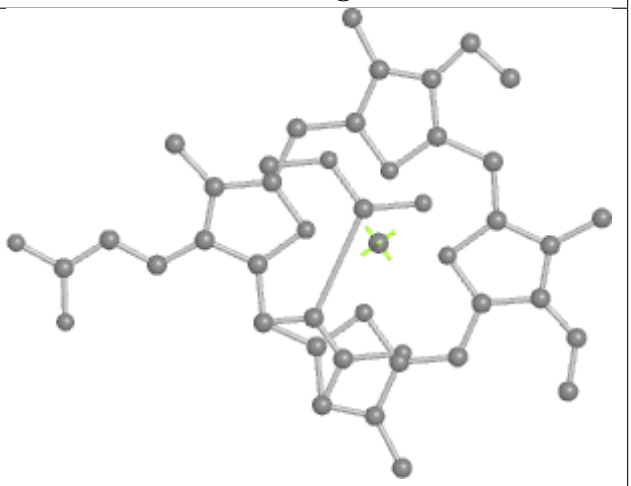
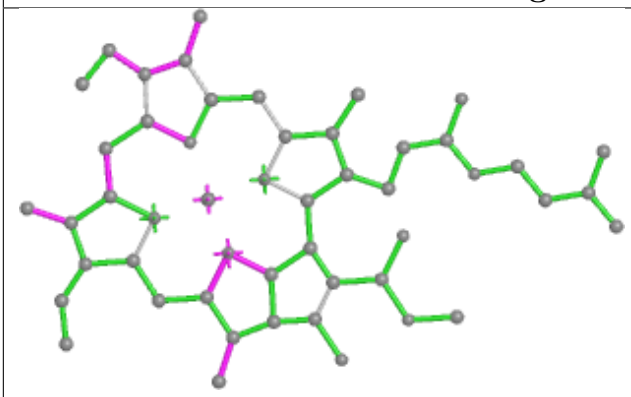


Rings

Ligand CLA c 602



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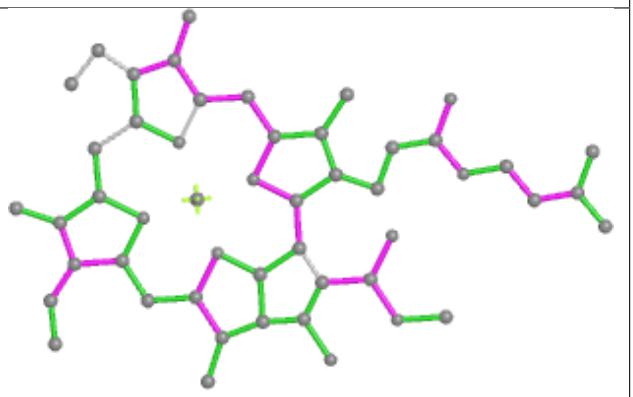
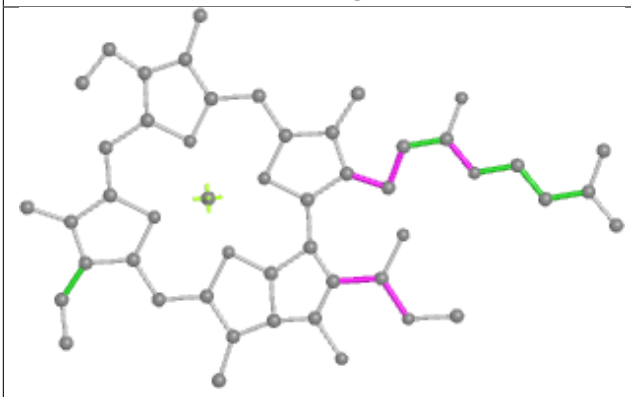


Bond angles



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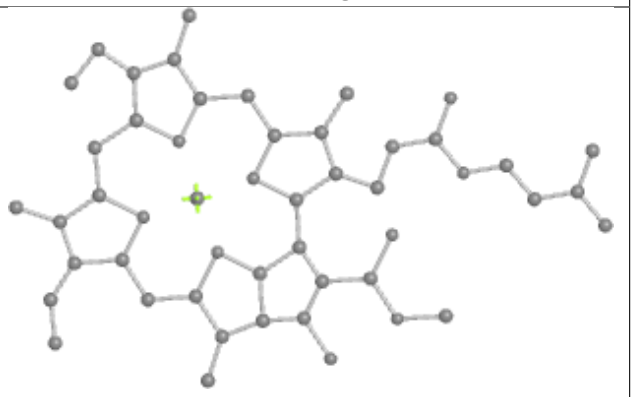
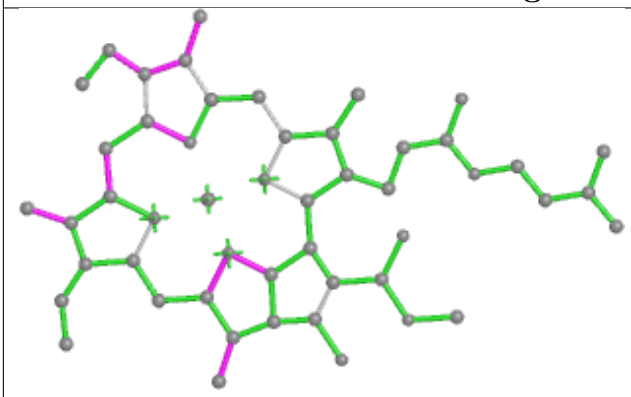


Rings

Ligand CLA A 830



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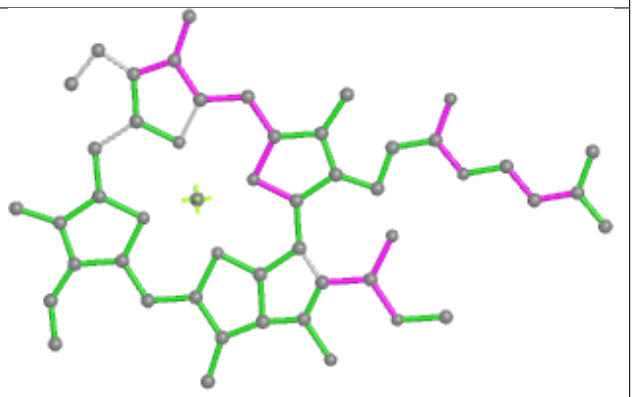
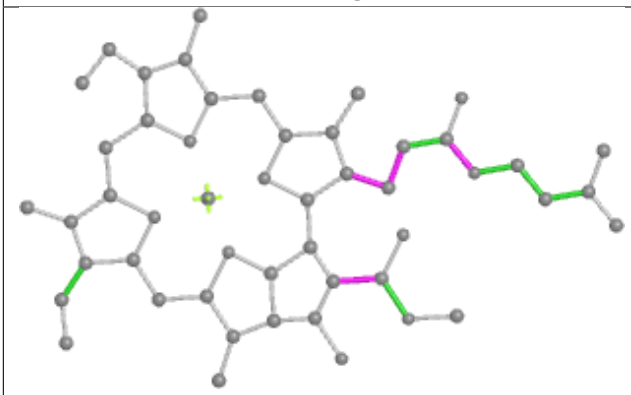


Bond angles



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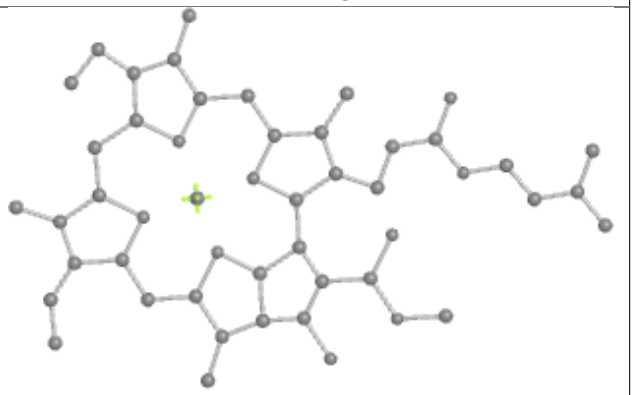
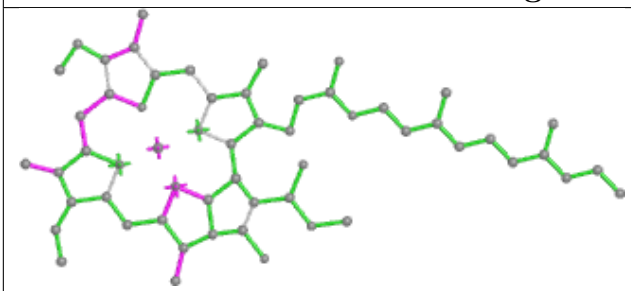


Rings

Ligand CLA B 817



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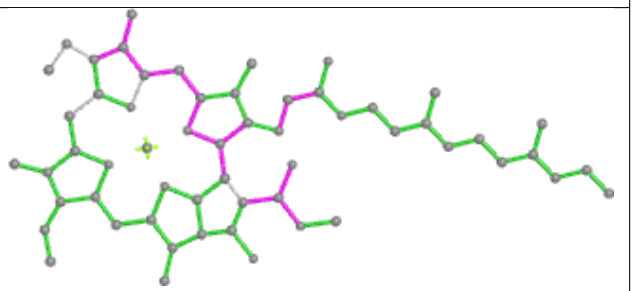
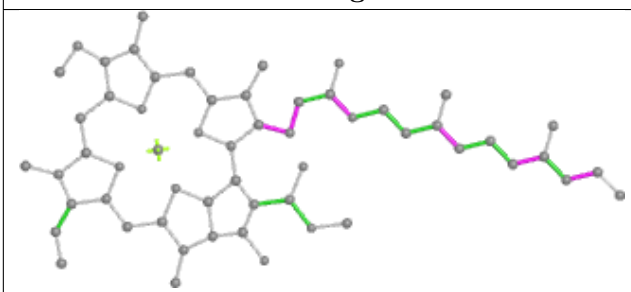


Bond angles



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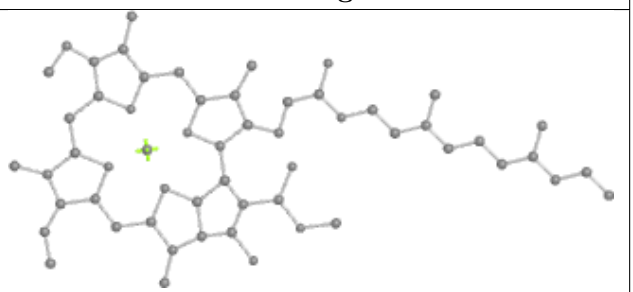
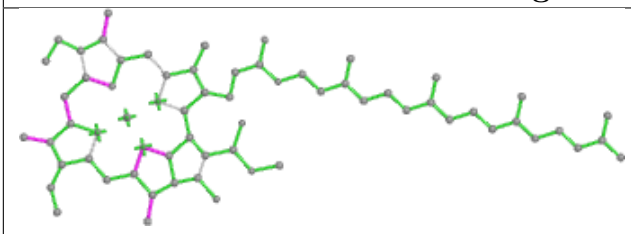


Rings

Ligand CLA l 312



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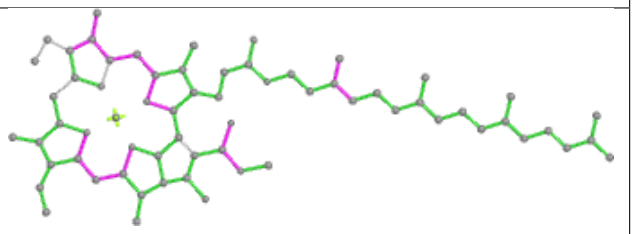
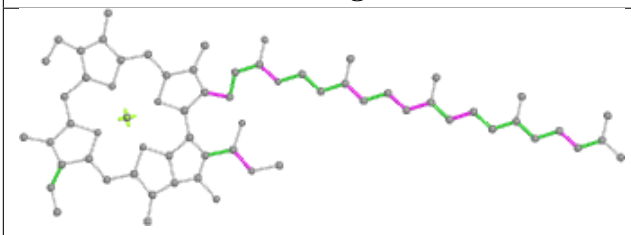


Bond angles



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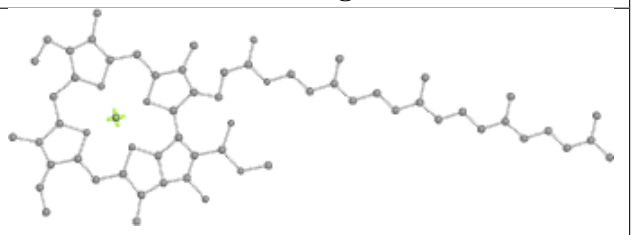
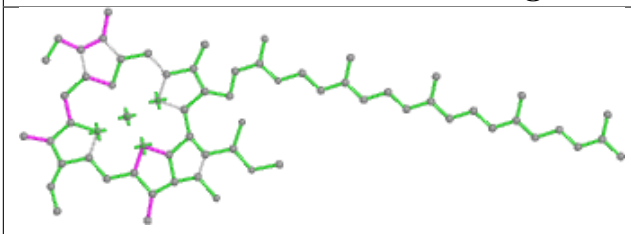
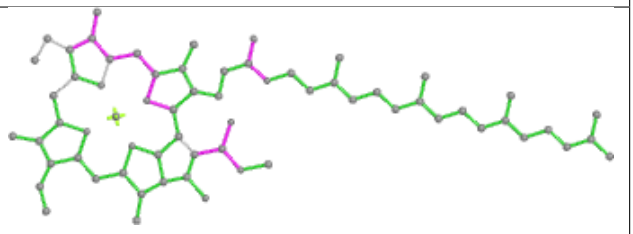


Rings

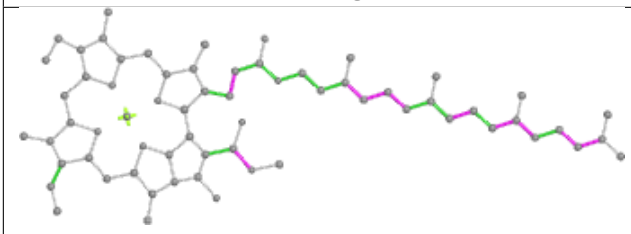
Ligand CLA B 807



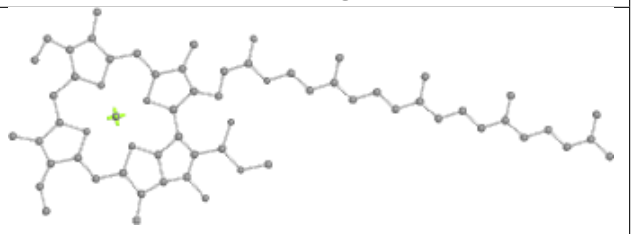
Bond lengths



Bond angles

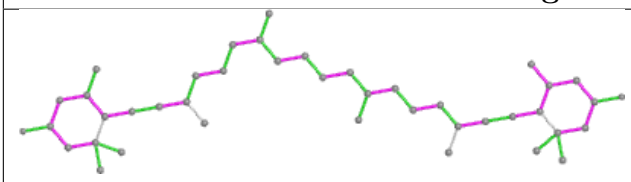


Torsions

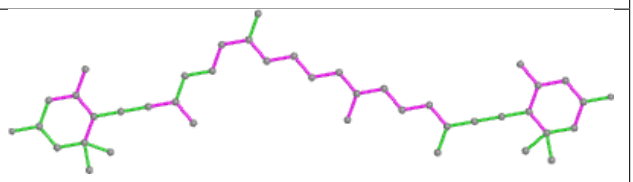


Rings

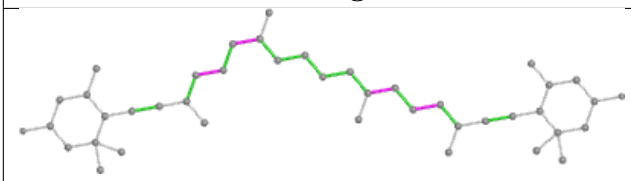
Ligand II0 n 319



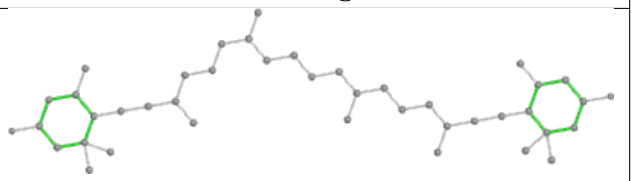
Bond lengths



Bond angles

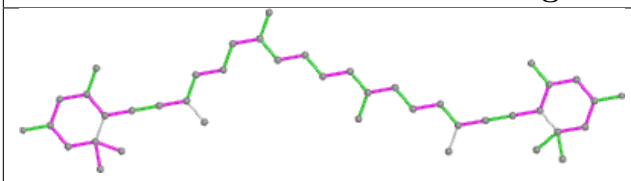


Torsions



Rings

Ligand II0 h 311



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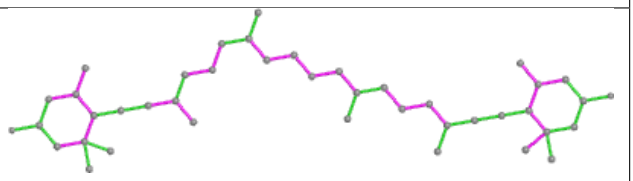
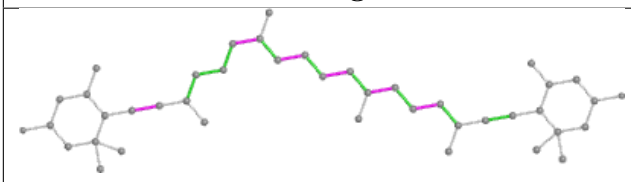
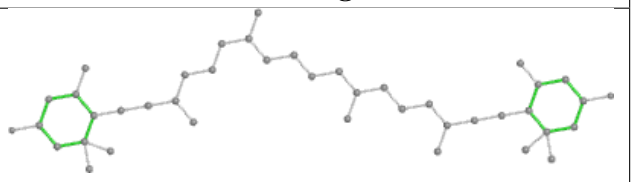


Bond angles

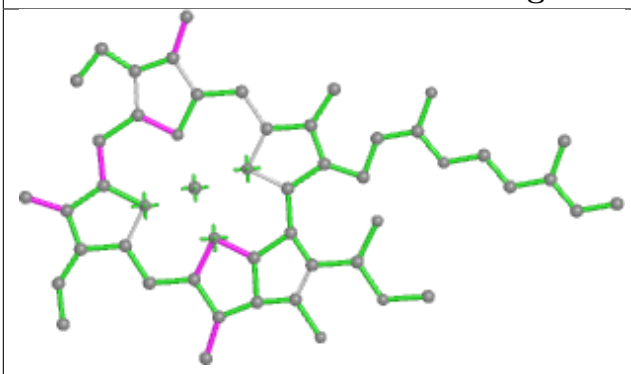


Torsions



Rings

Ligand CLA d 306



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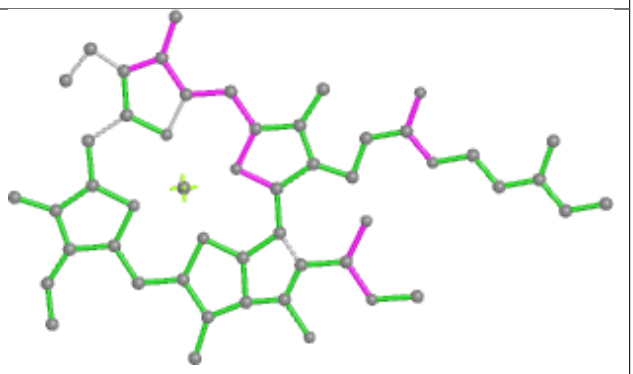
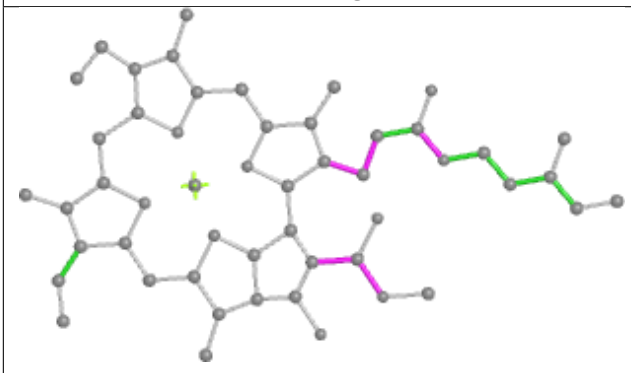


Bond angles



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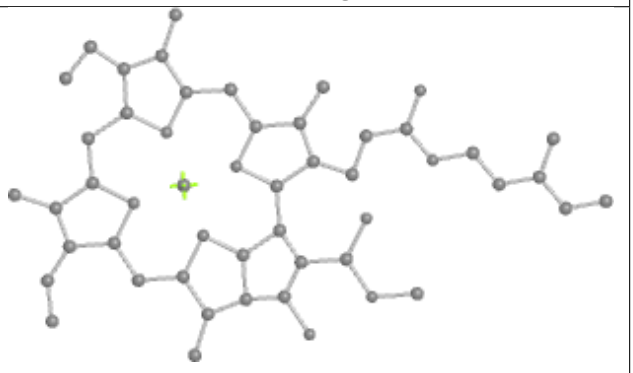
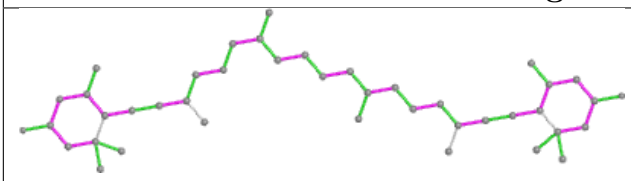


Rings

Ligand II0 j 615



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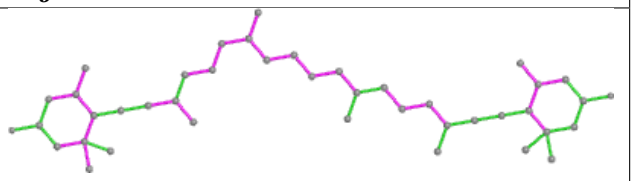
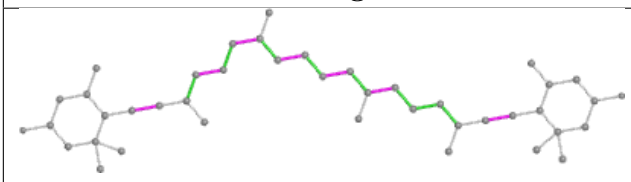


Bond angles



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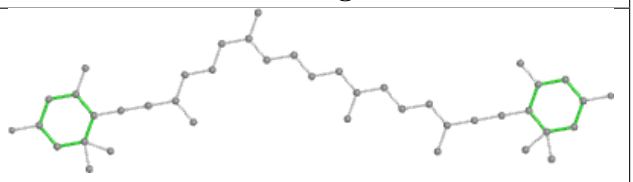
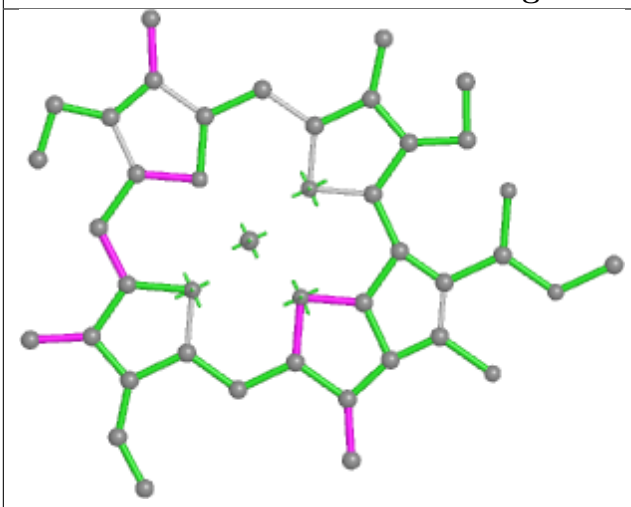


Rings

Ligand CLA m 605



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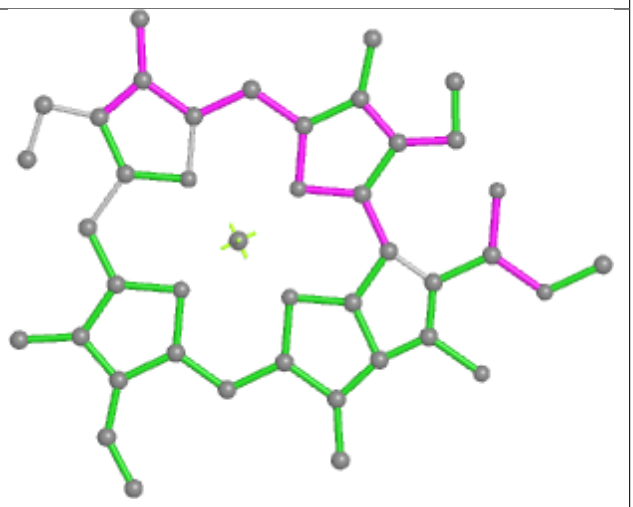
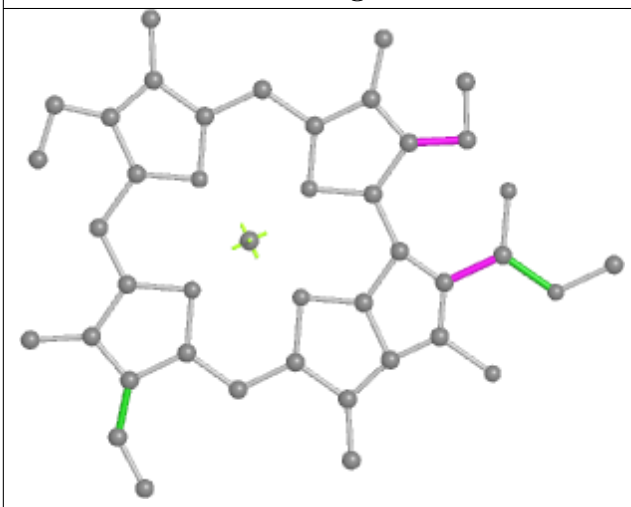


Bond angles



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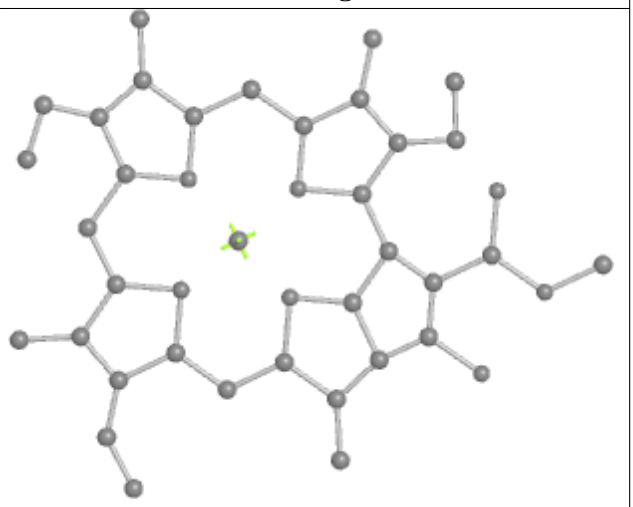
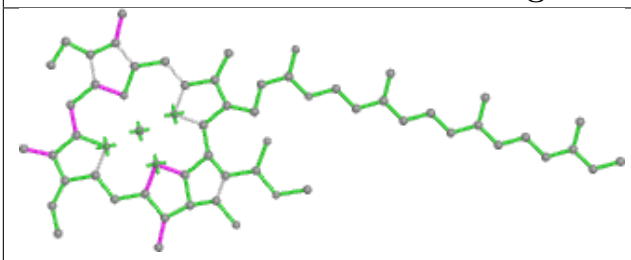


Rings

Ligand CLA b 606



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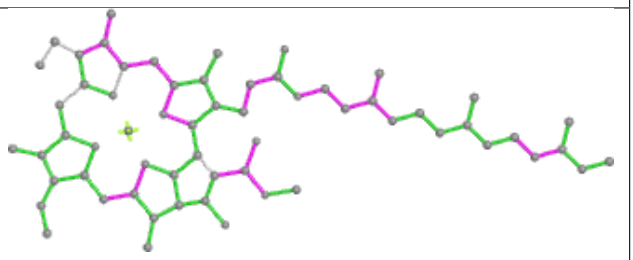
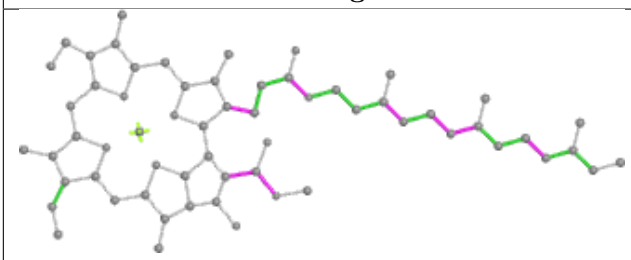


Bond angles



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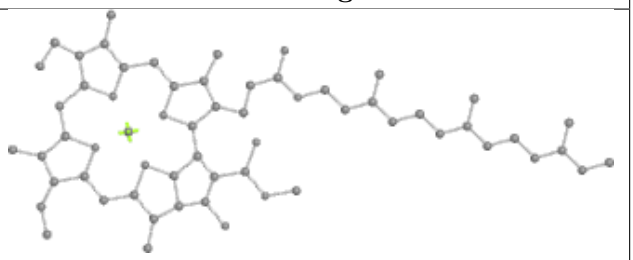
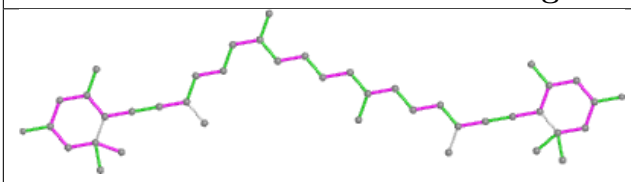


Rings

Ligand II0 n 315



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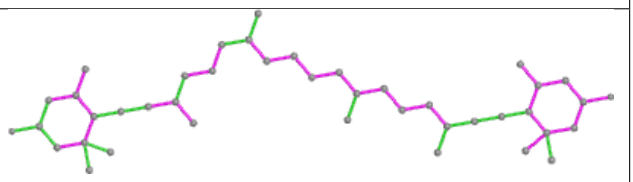
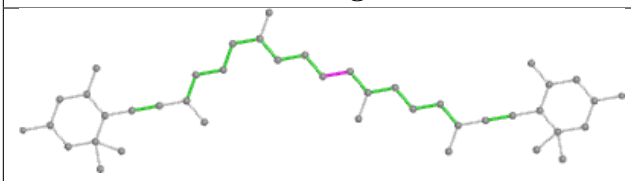


Bond angles



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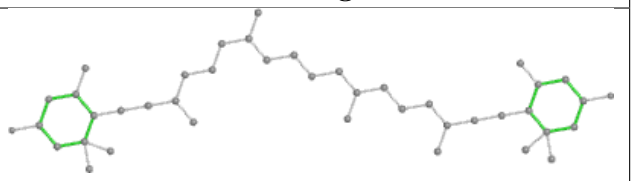
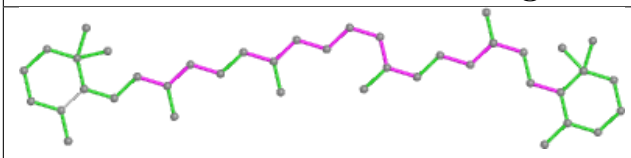


Rings

Ligand WVN s 205



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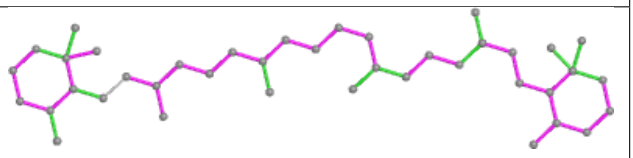
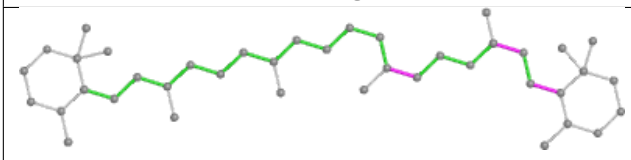


Bond angles



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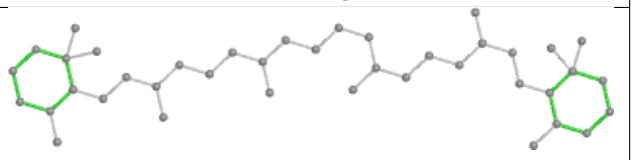
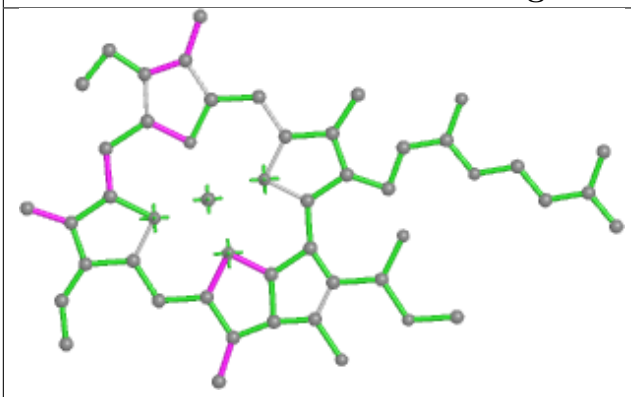


Rings

Ligand CLA h 303



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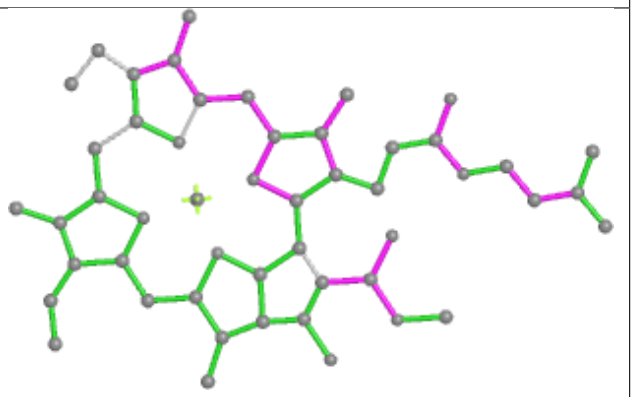
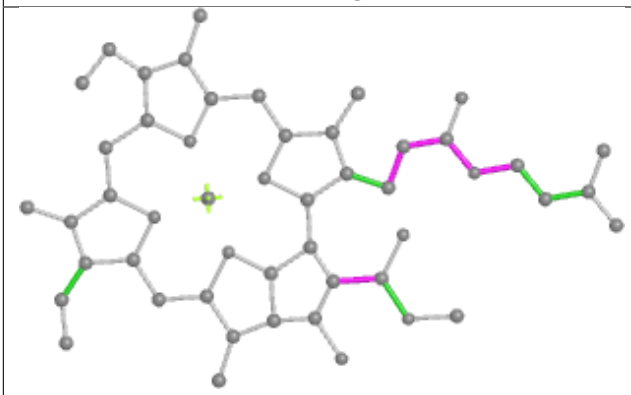


Bond angles



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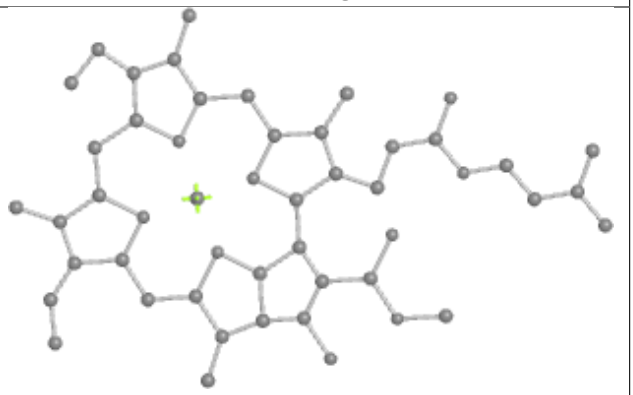
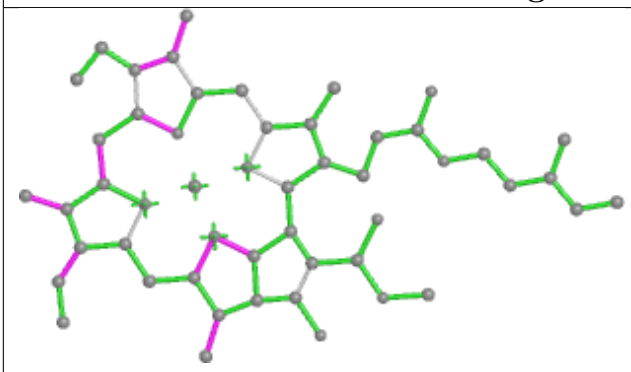


Rings

Ligand CLA k 607



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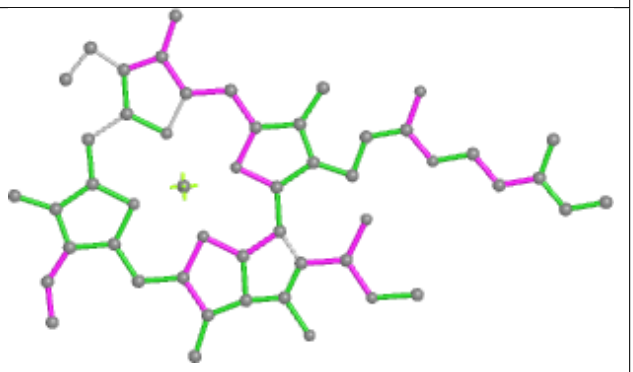
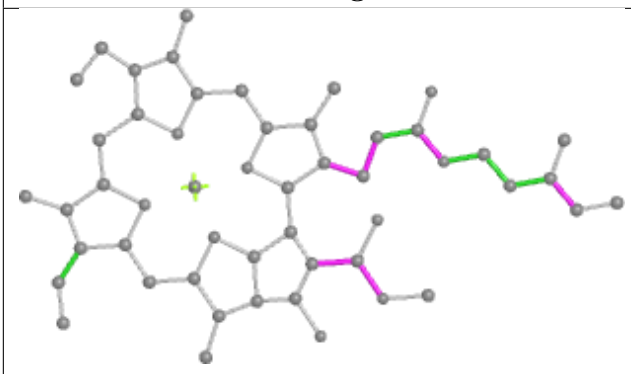


Bond angles



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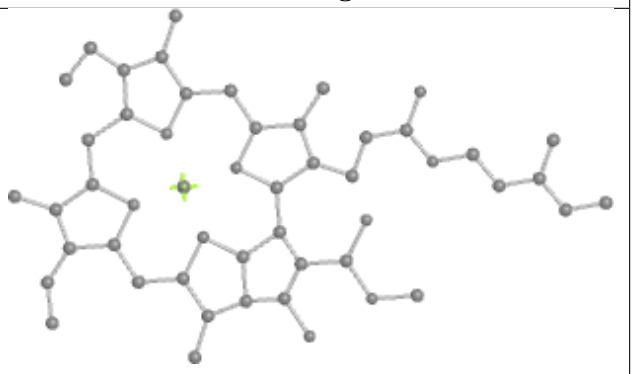
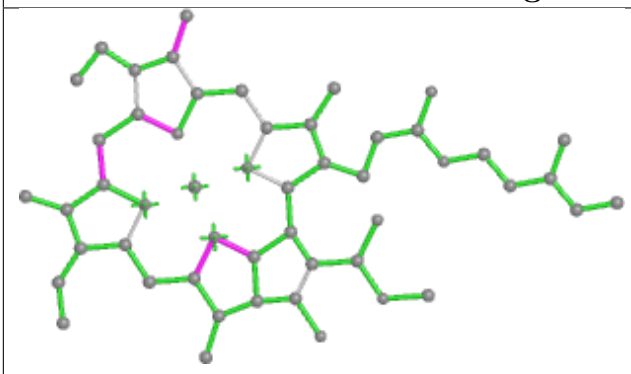


Rings

Ligand CLA R 202



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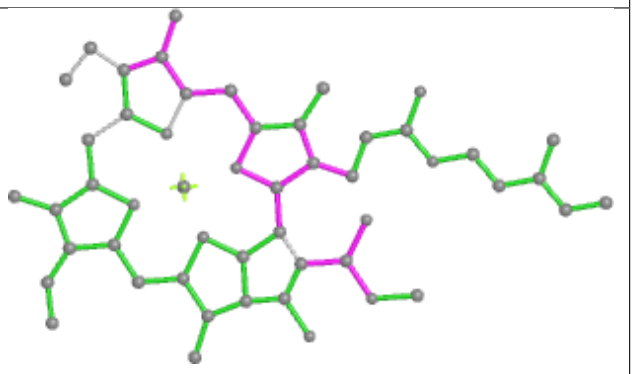
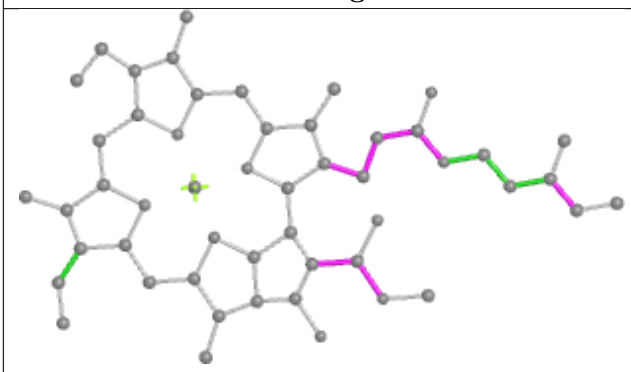


Bond angles



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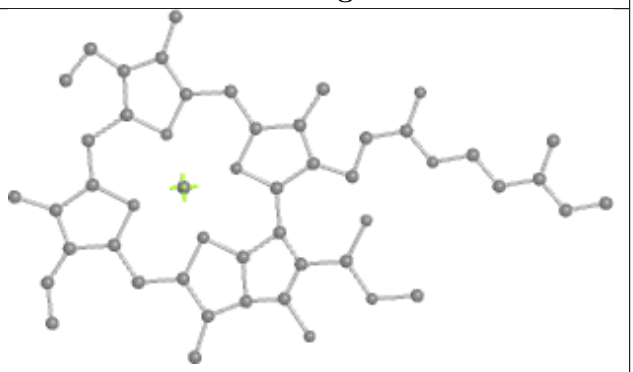
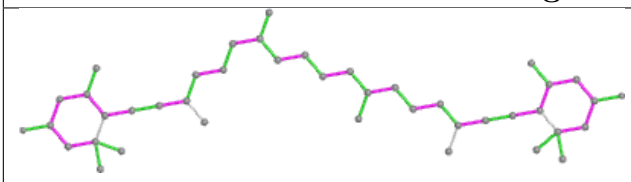


Rings

Ligand II0 a 316



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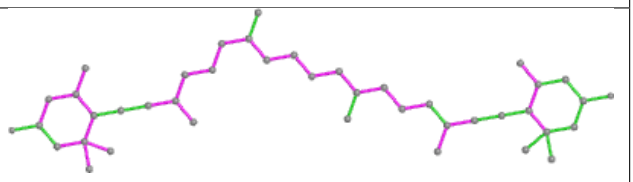
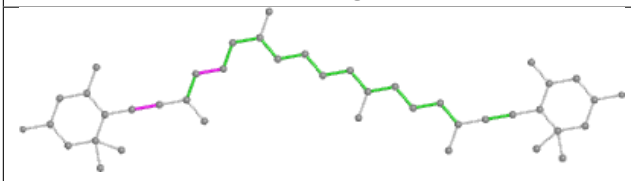


Bond angles



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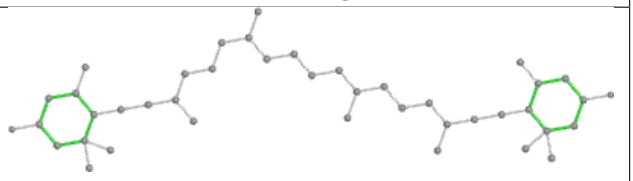
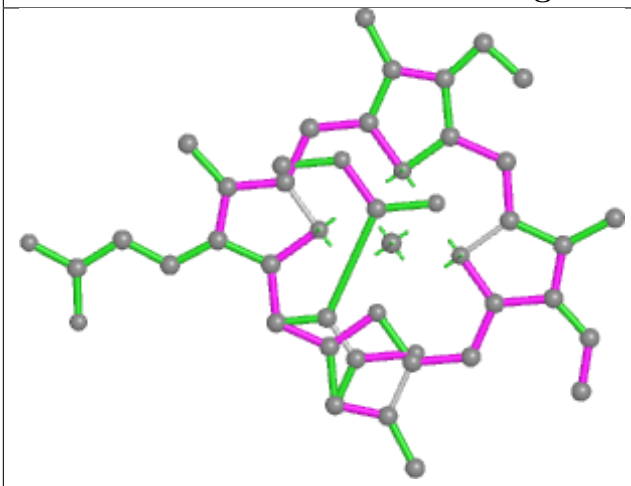


Rings

Ligand KC2 i 319



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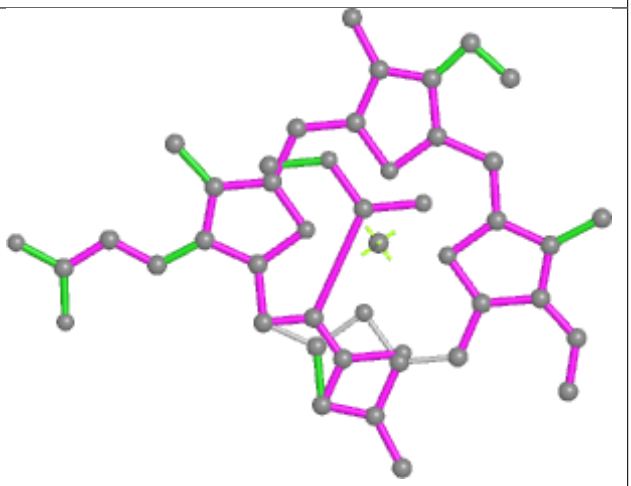
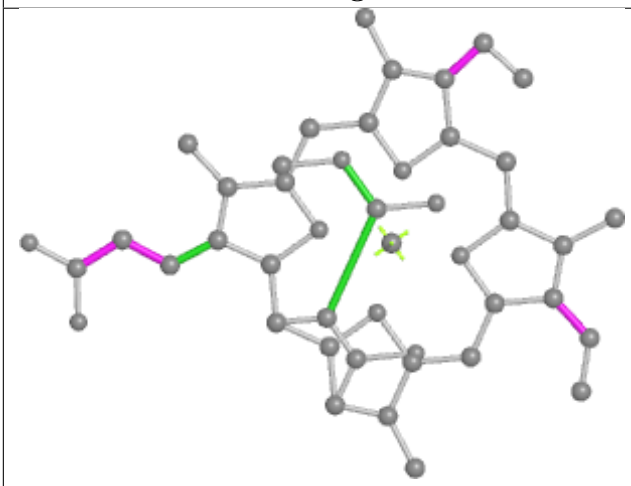


Bond angles



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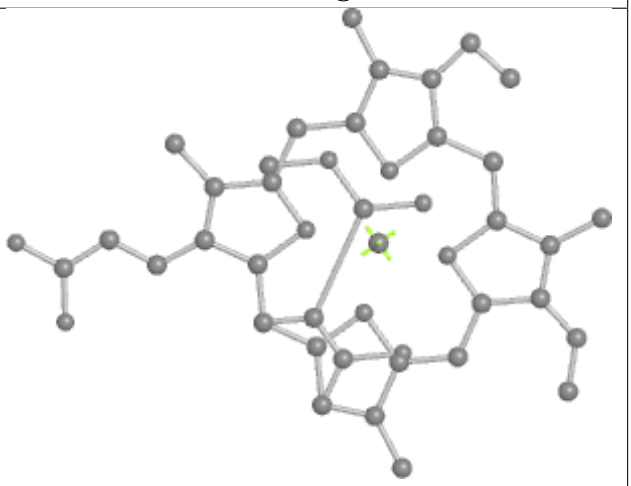
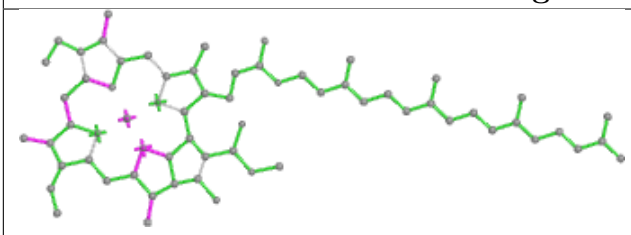
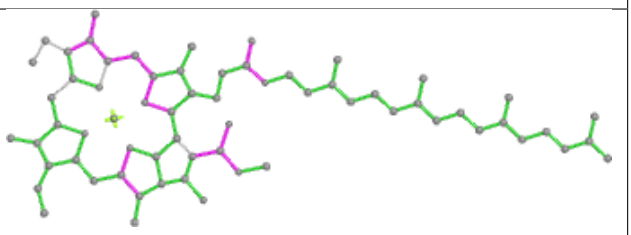


Rings

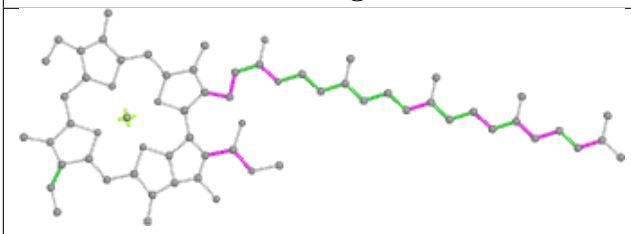
Ligand CLA l 304



Bond lengths



Bond angles



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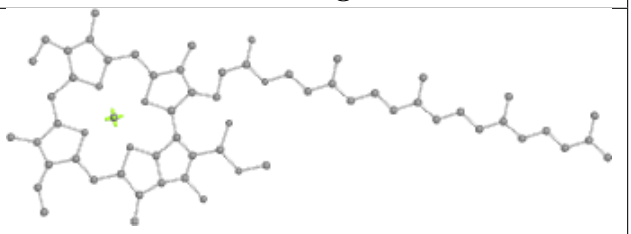
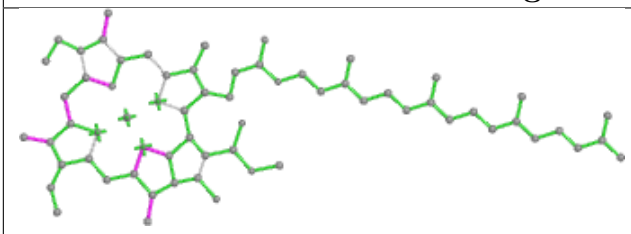
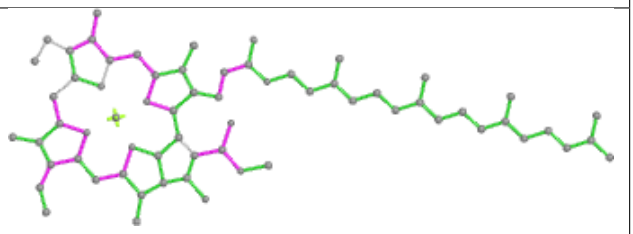


Rings

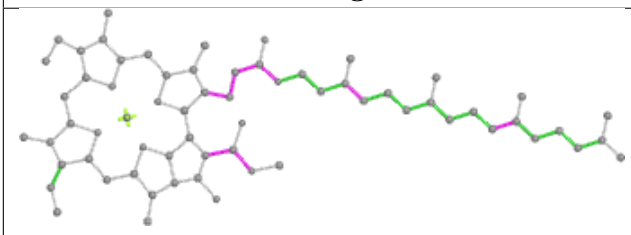
Ligand CLA A 804



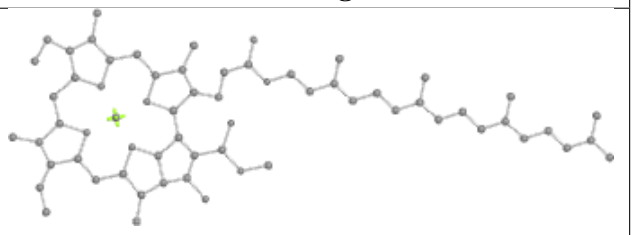
Bond lengths



Bond angles

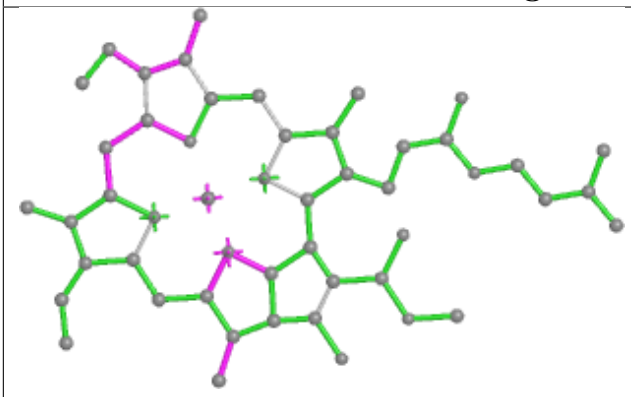


Torsions

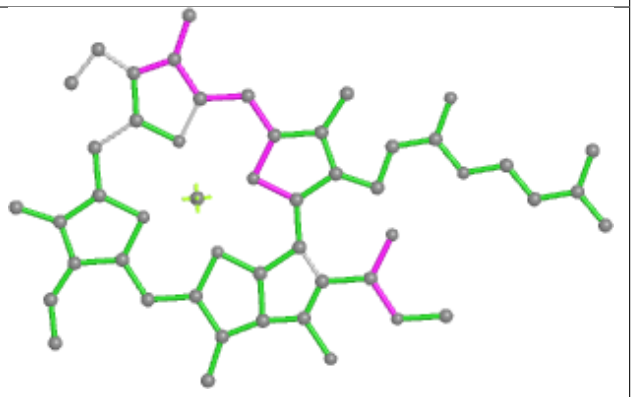


Rings

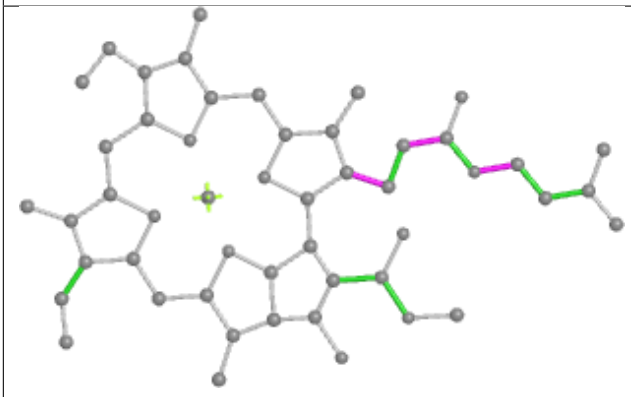
Ligand CLA A 833



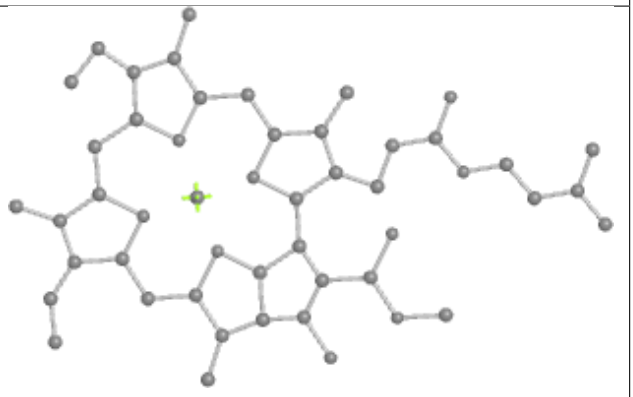
Bond lengths



Bond angles

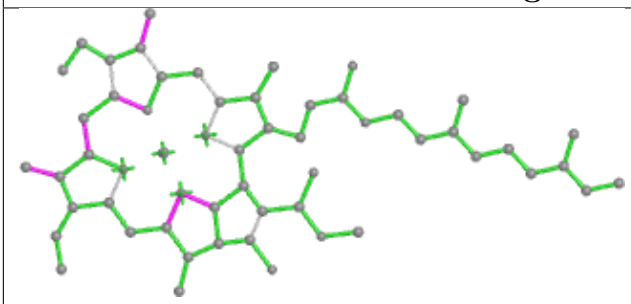


Torsions

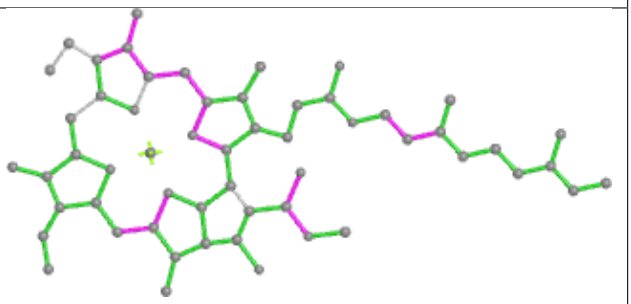


Rings

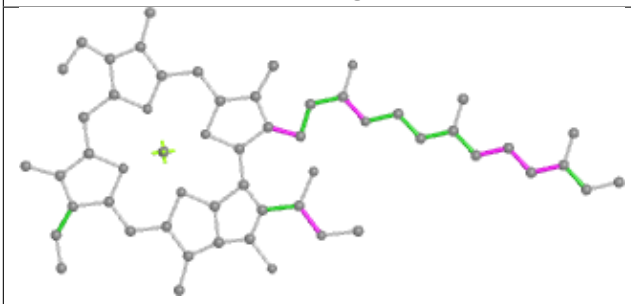
Ligand CLA A 809



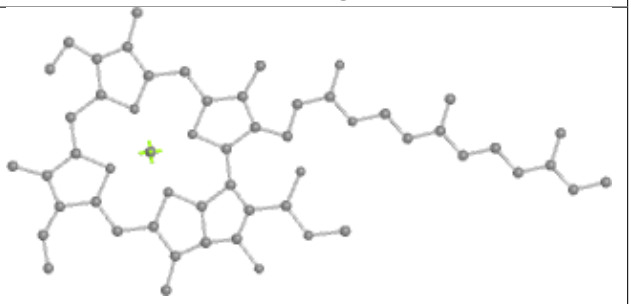
Bond lengths



Bond angles

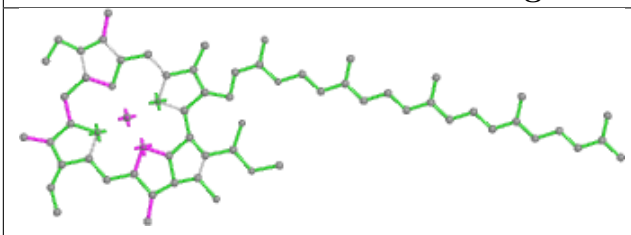


Torsions

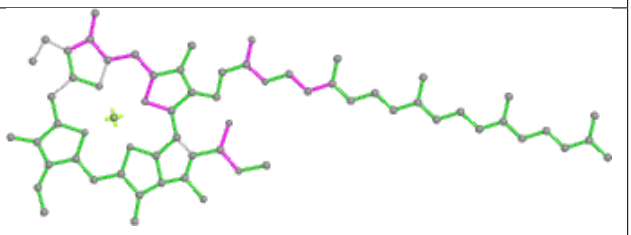


Rings

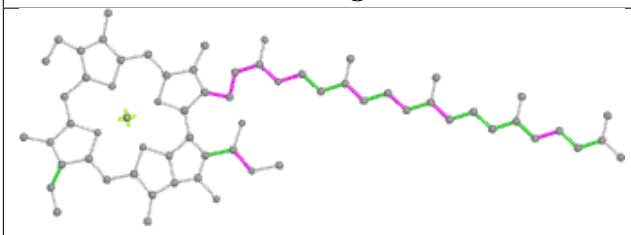
Ligand CLA B 826



Bond lengths



Bond angles



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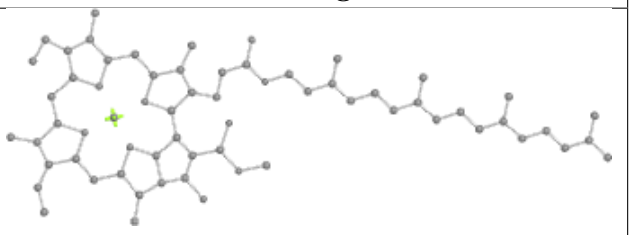
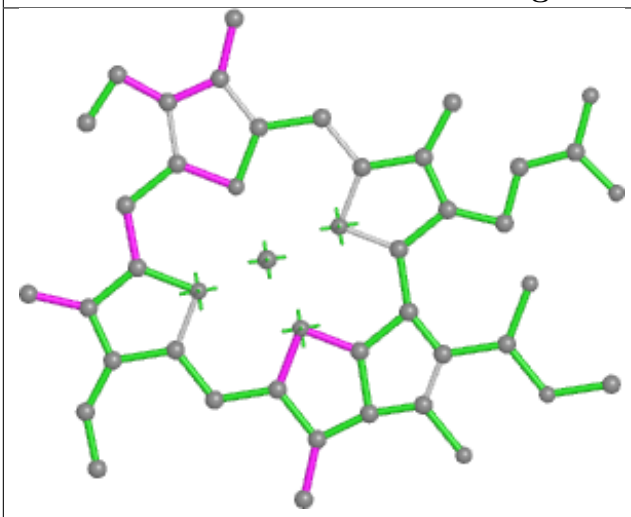
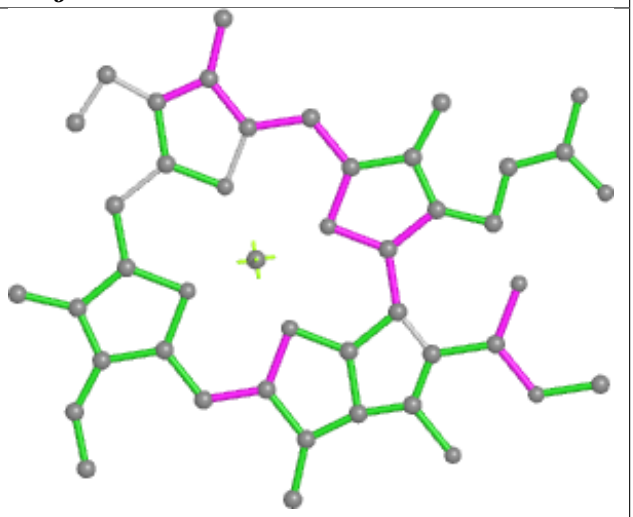


Rings

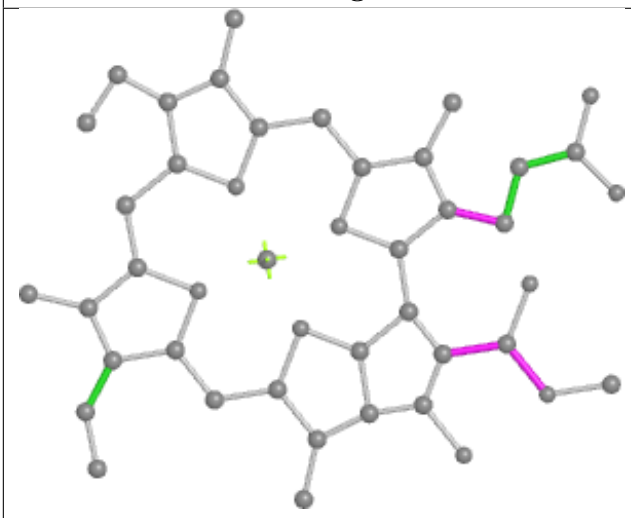
Ligand CLA j 607



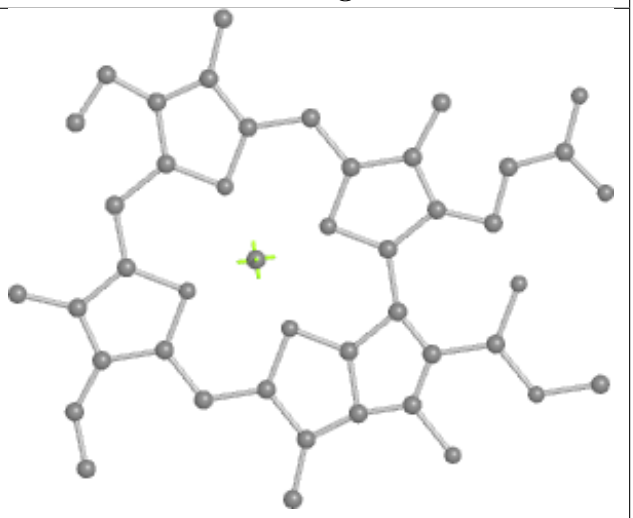
Bond lengths



Bond angles

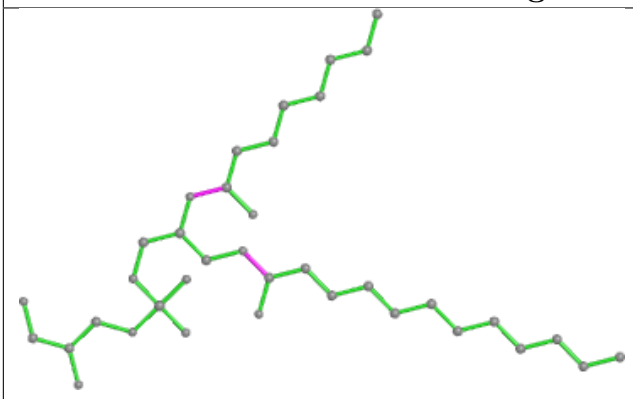


Torsions

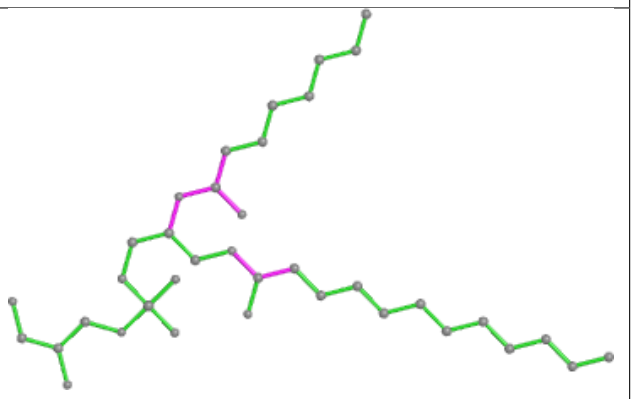


Rings

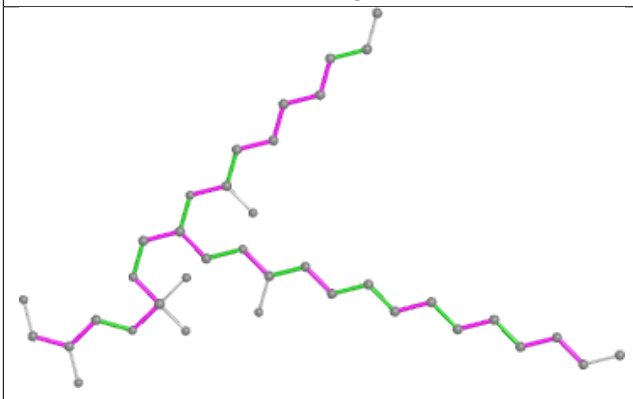
Ligand LHG c 620



Bond lengths



Bond angles



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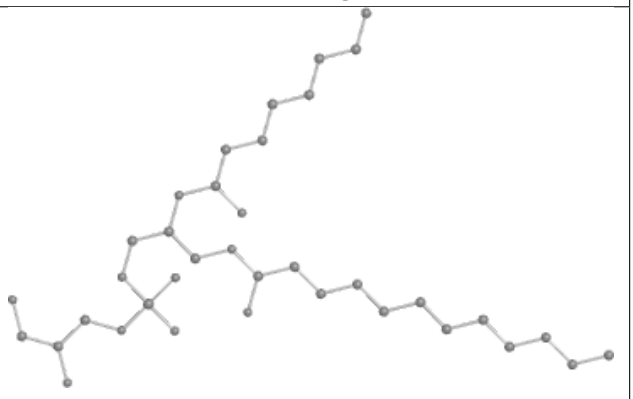
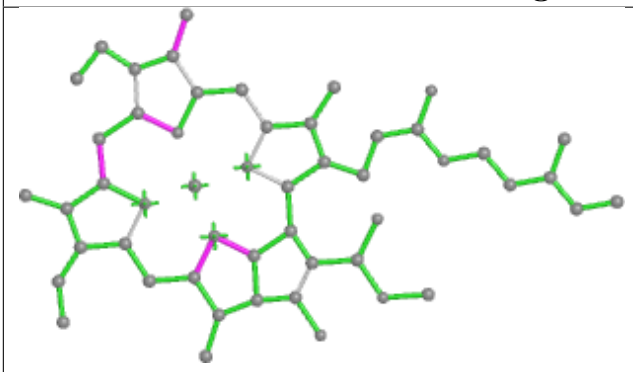
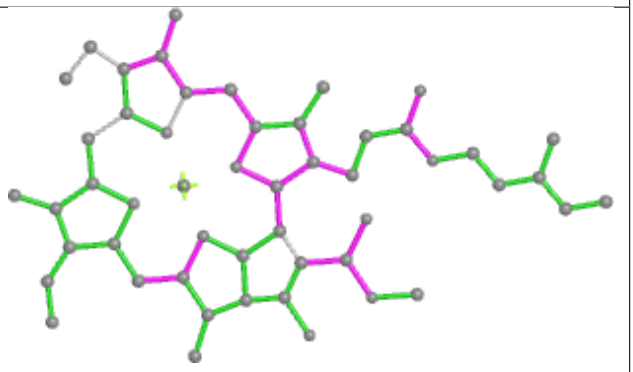


Rings

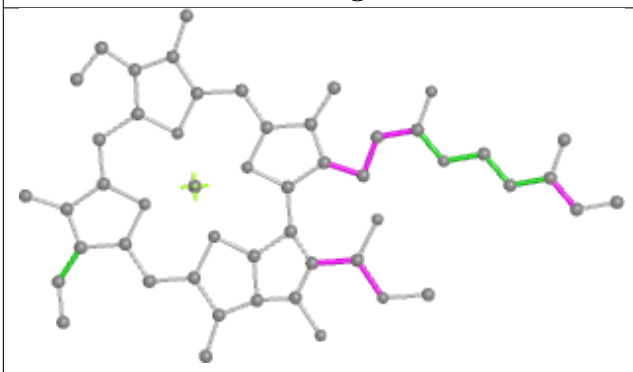
Ligand CLA i 312



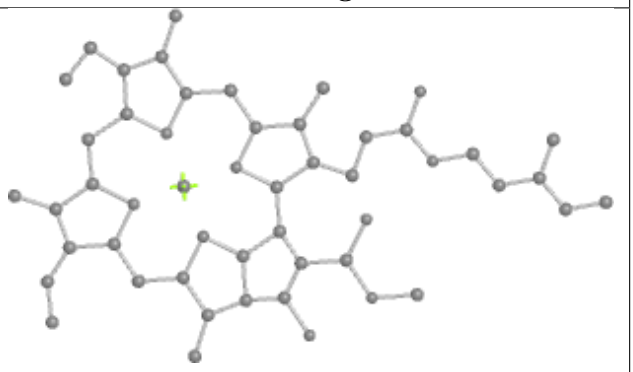
Bond lengths



Bond angles

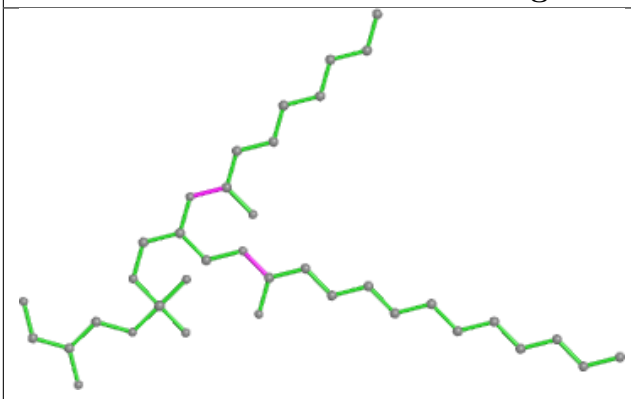


Torsions



Rings

Ligand LHG i 318



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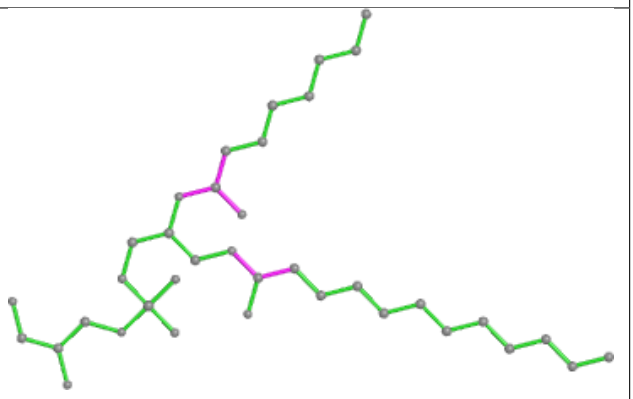
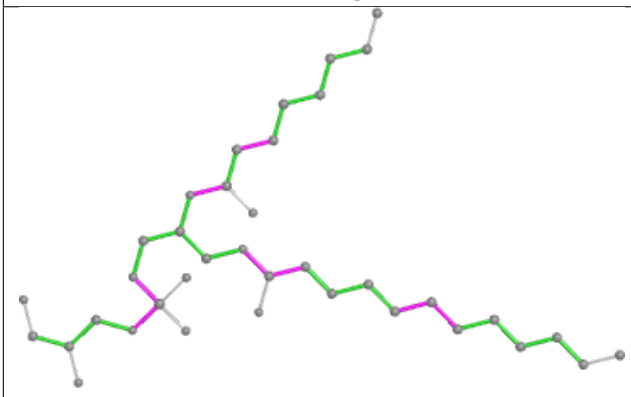
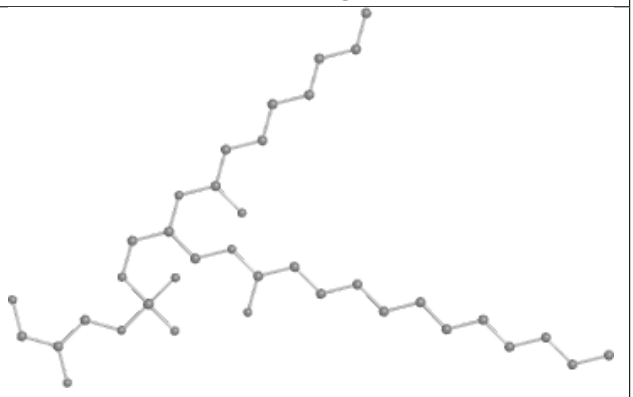


Bond angles

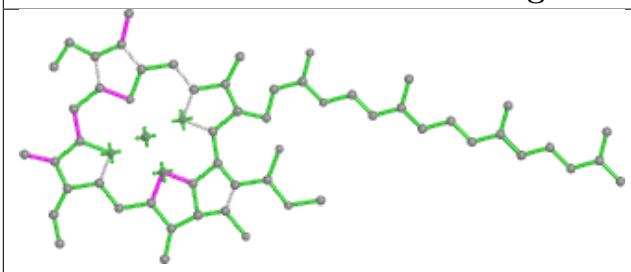


Torsions

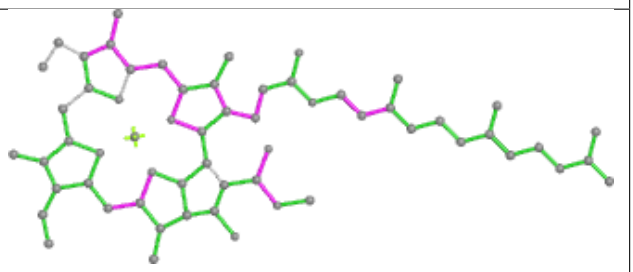


Rings

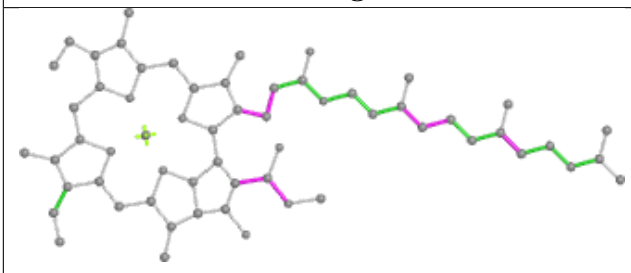
Ligand CLA n 305



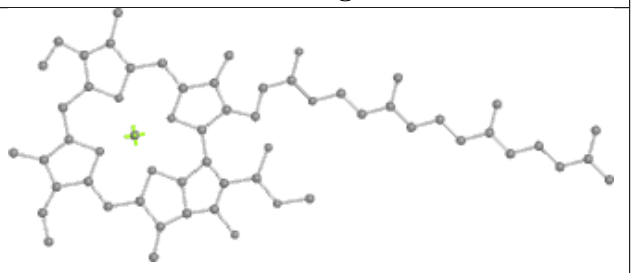
Bond lengths



Bond angles

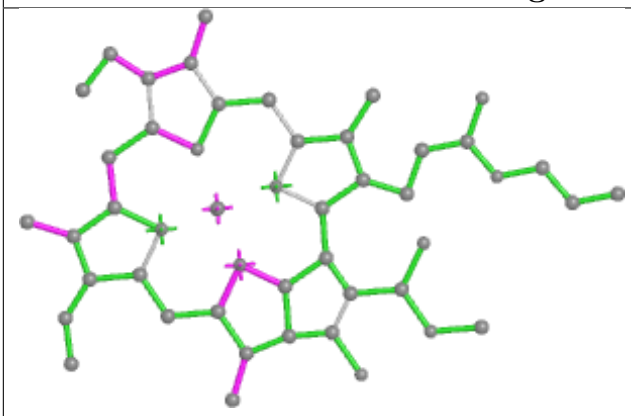


Torsions

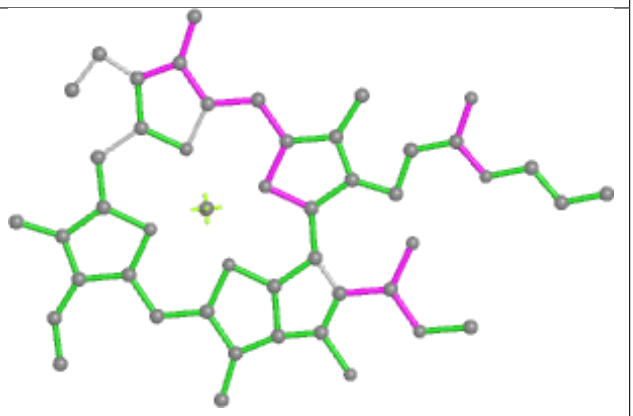


Rings

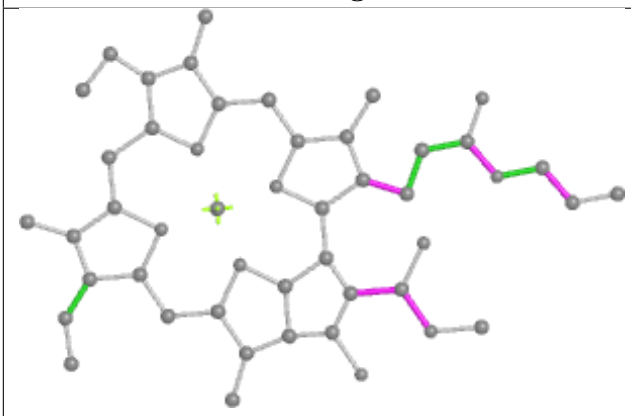
Ligand CLA a 310



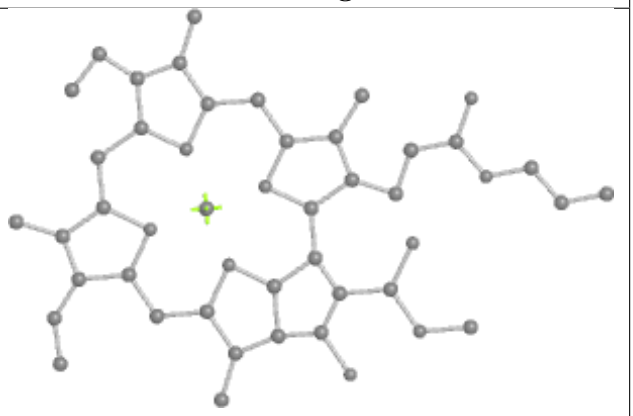
Bond lengths



Bond angles

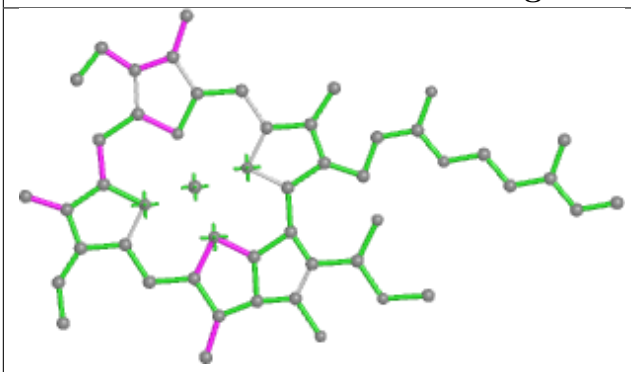


Torsions



Rings

Ligand CLA B 850



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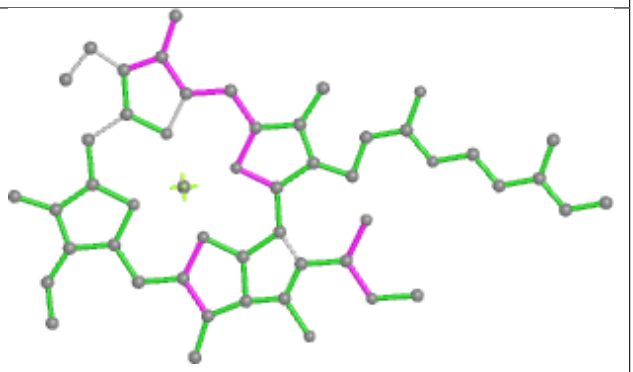
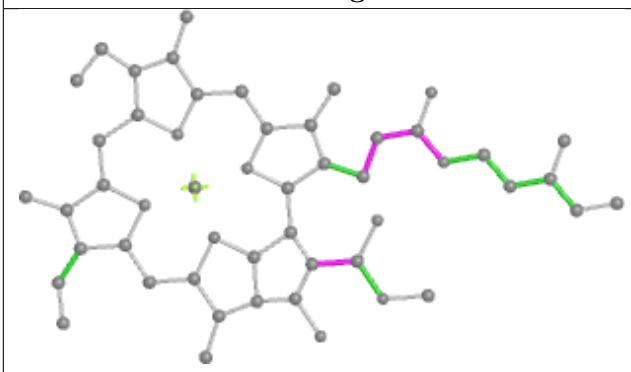
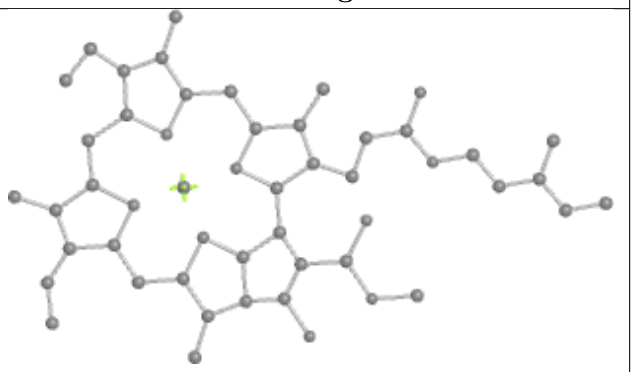


Bond angles

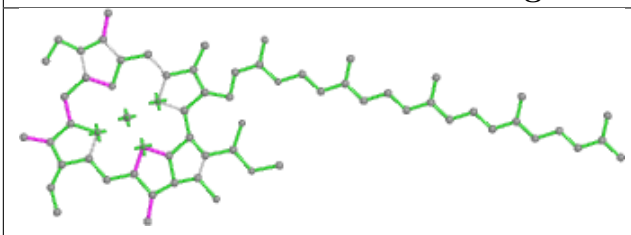


Torsions

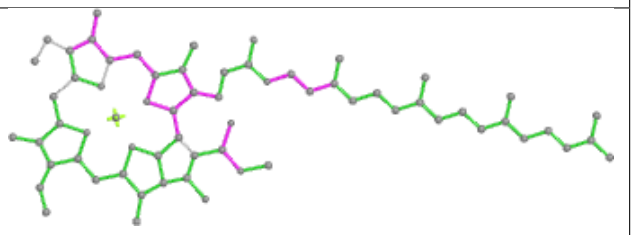


Rings

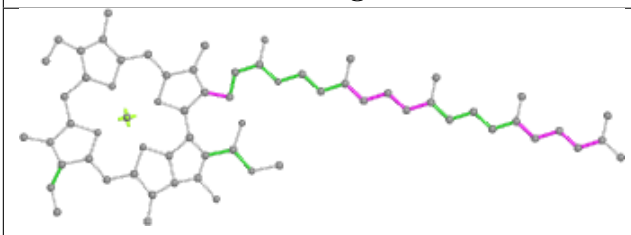
Ligand CLA B 825



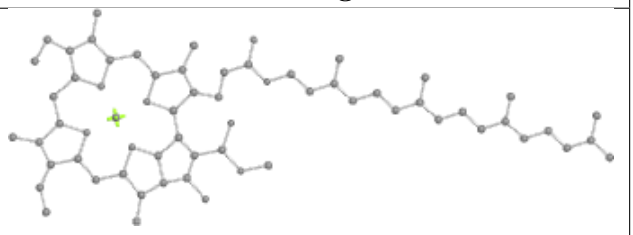
Bond lengths



Bond angles

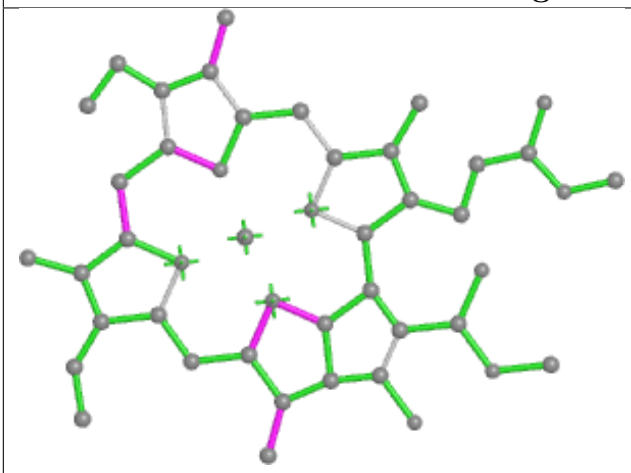


Torsions

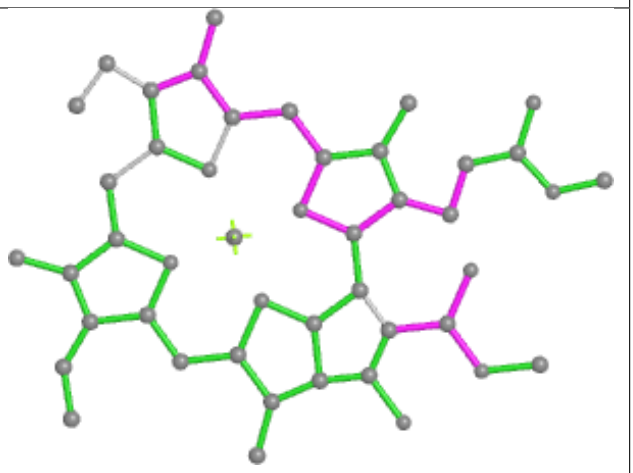


Rings

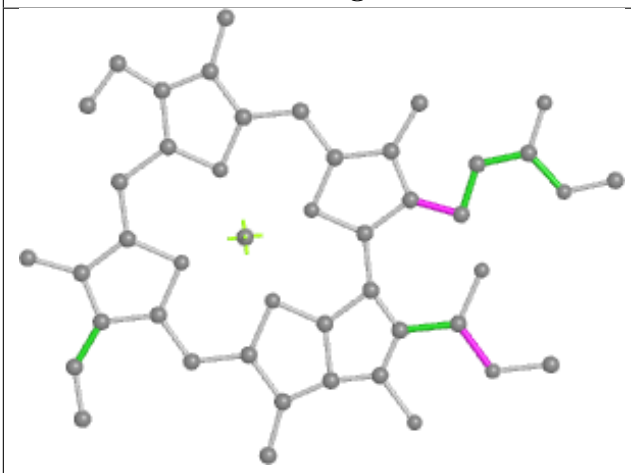
Ligand CLA i 309



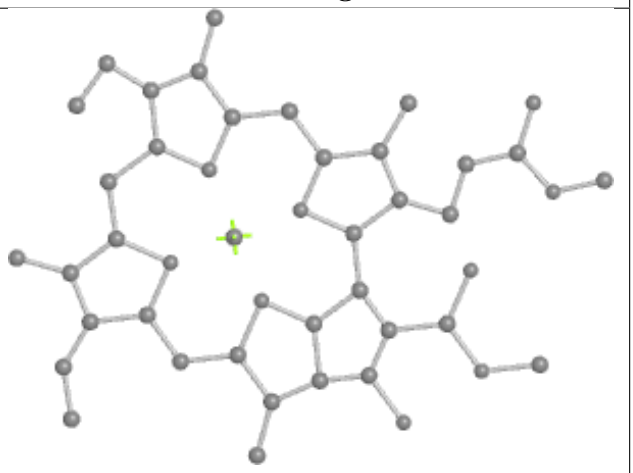
Bond lengths



Bond angles

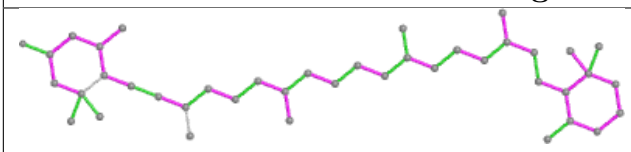


Torsions

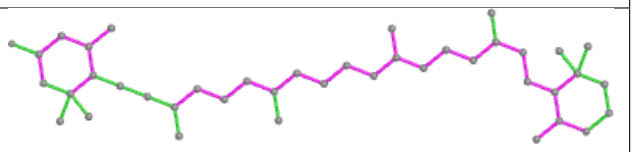


Rings

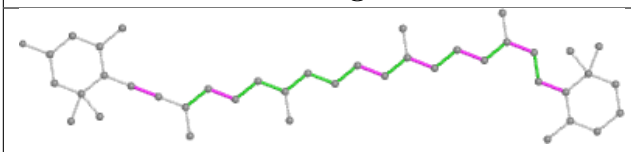
Ligand IHT n 318



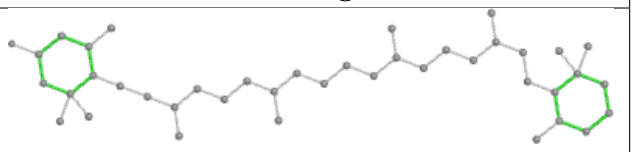
Bond lengths



Bond angles

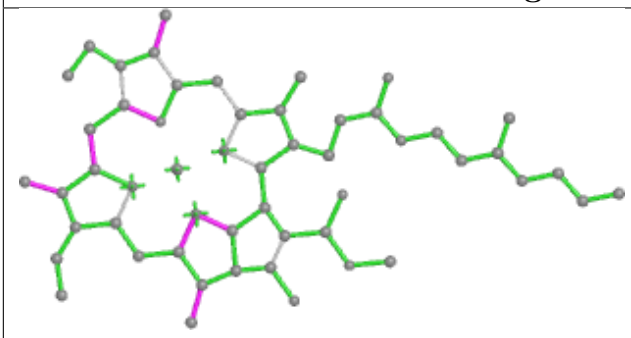


Torsions

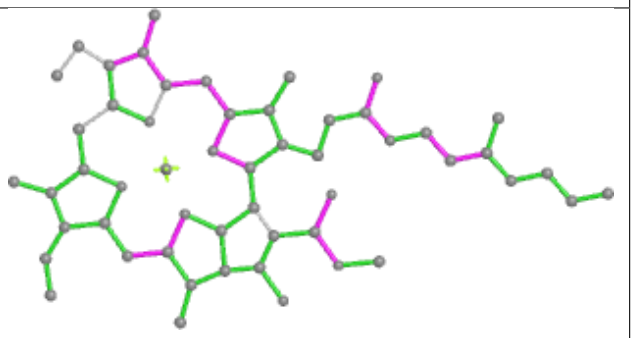


Rings

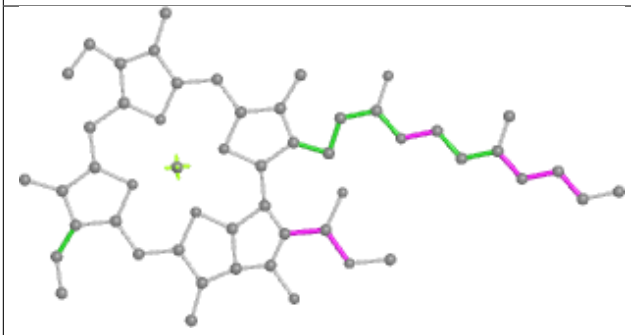
Ligand CLA B 821



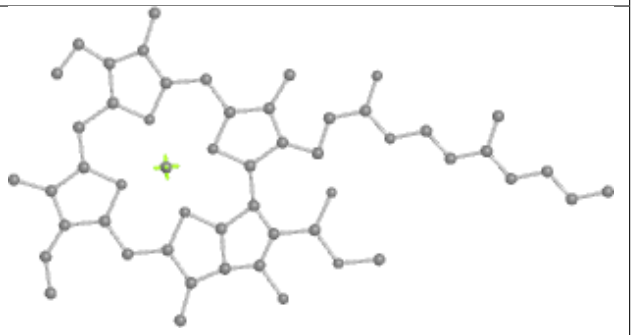
Bond lengths



Bond angles

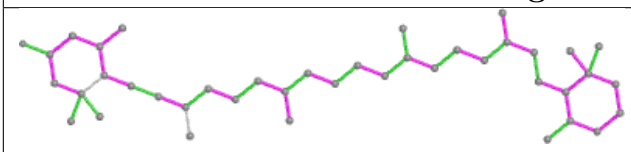


Torsions

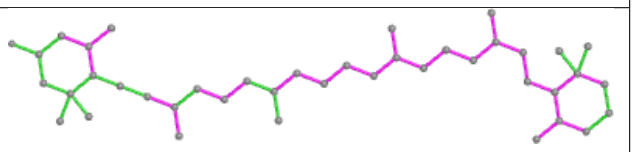


Rings

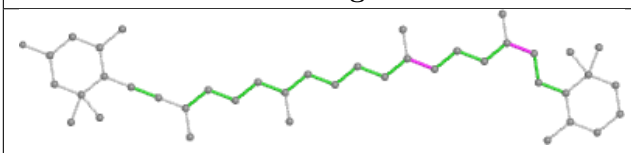
Ligand IHT R 203



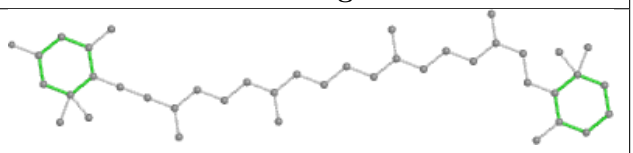
Bond lengths



Bond angles

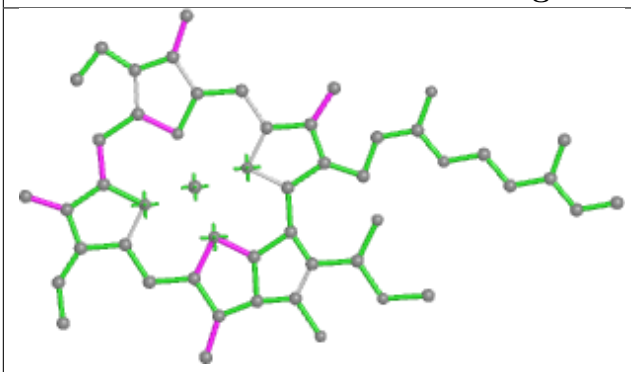


Torsions

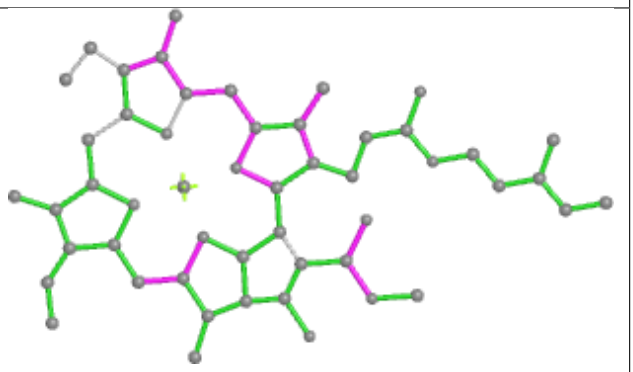


Rings

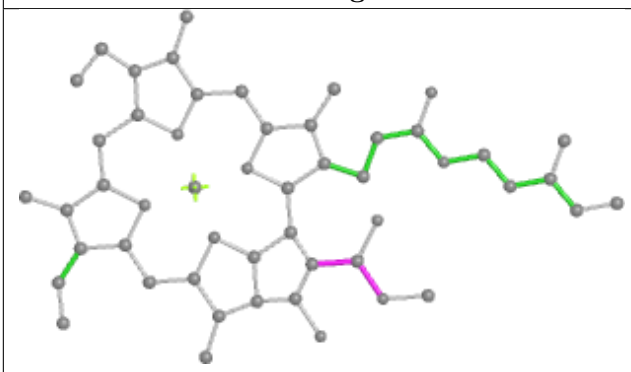
Ligand CLA l 309



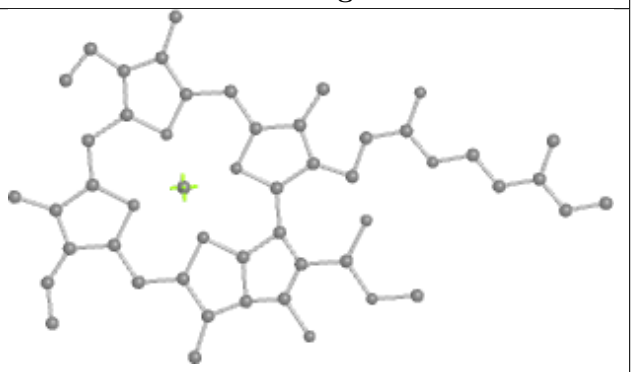
Bond lengths



Bond angles

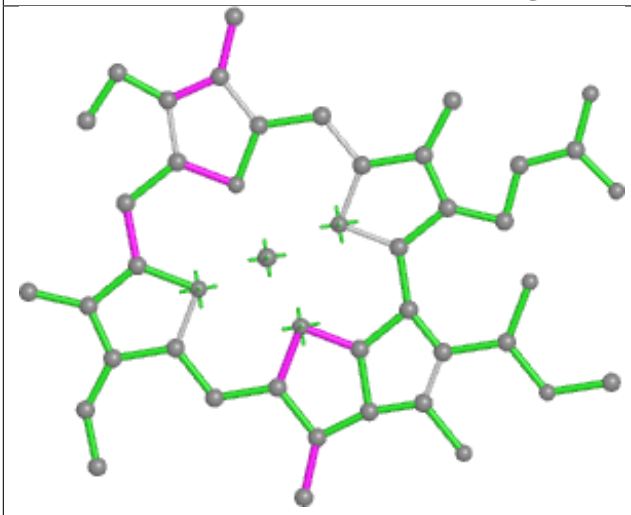


Torsions

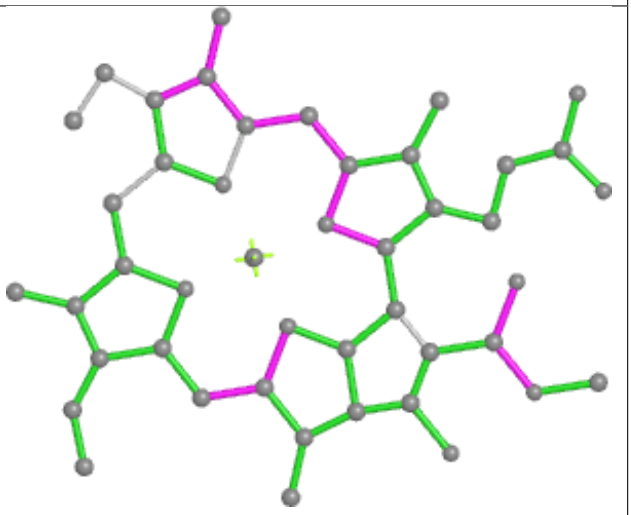


Rings

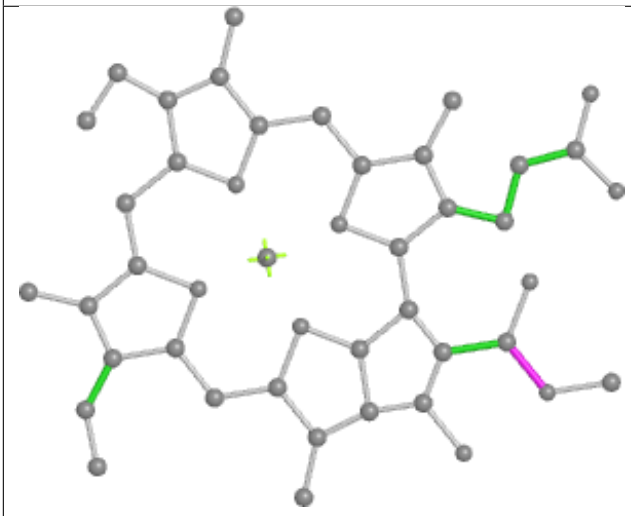
Ligand CLA B 831



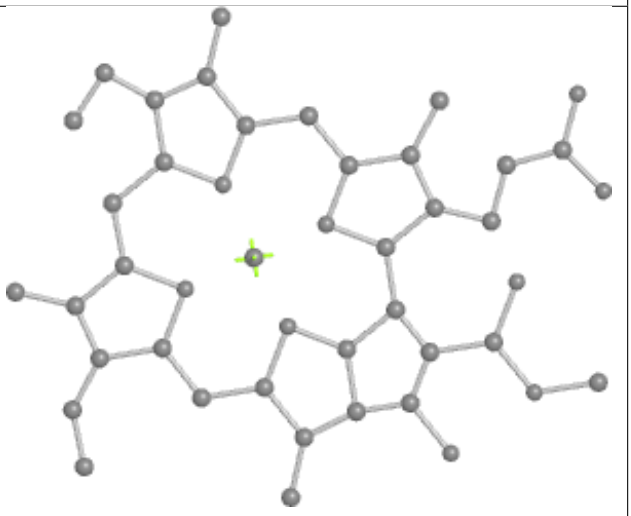
Bond lengths



Bond angles

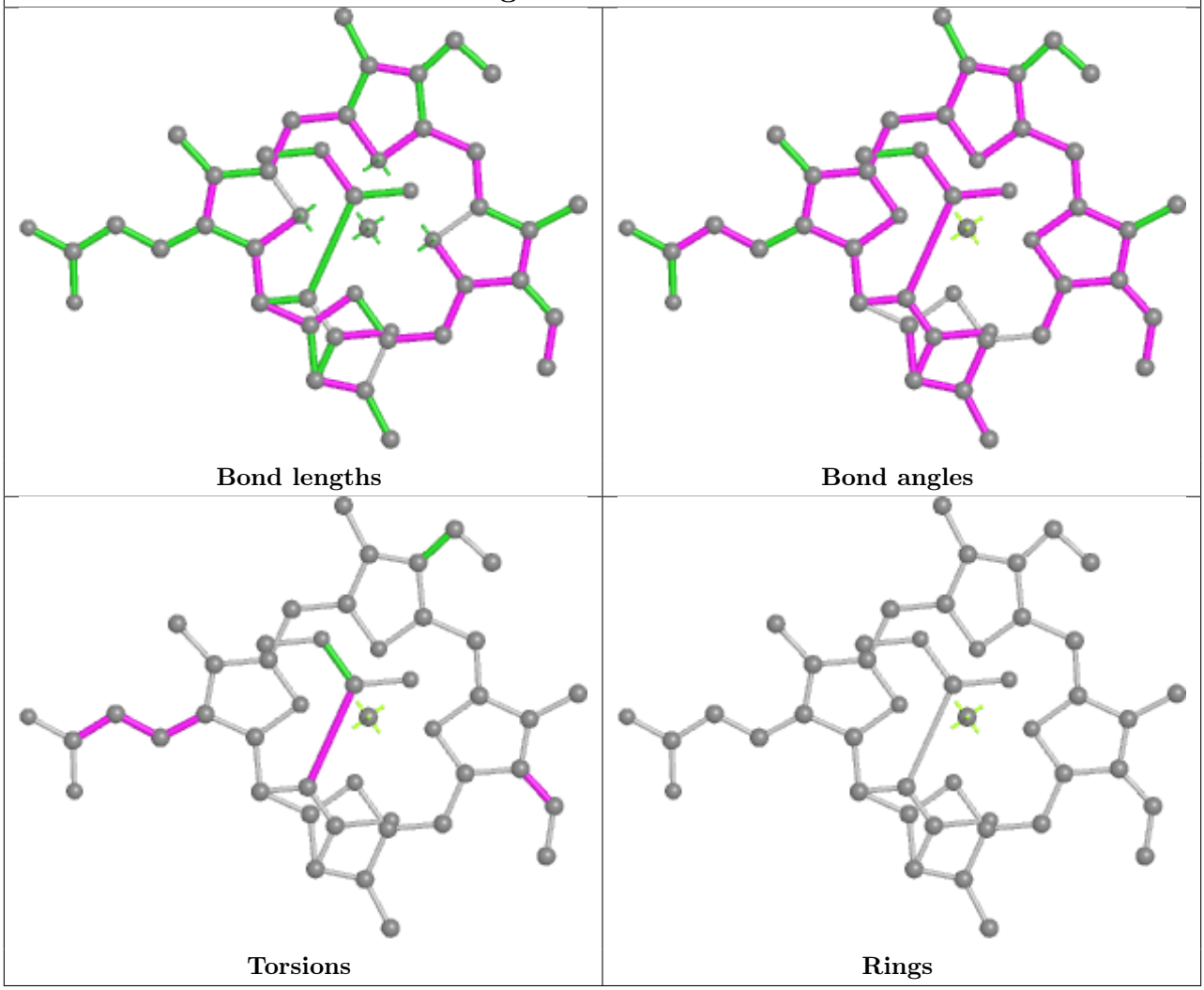


Torsions



Rings

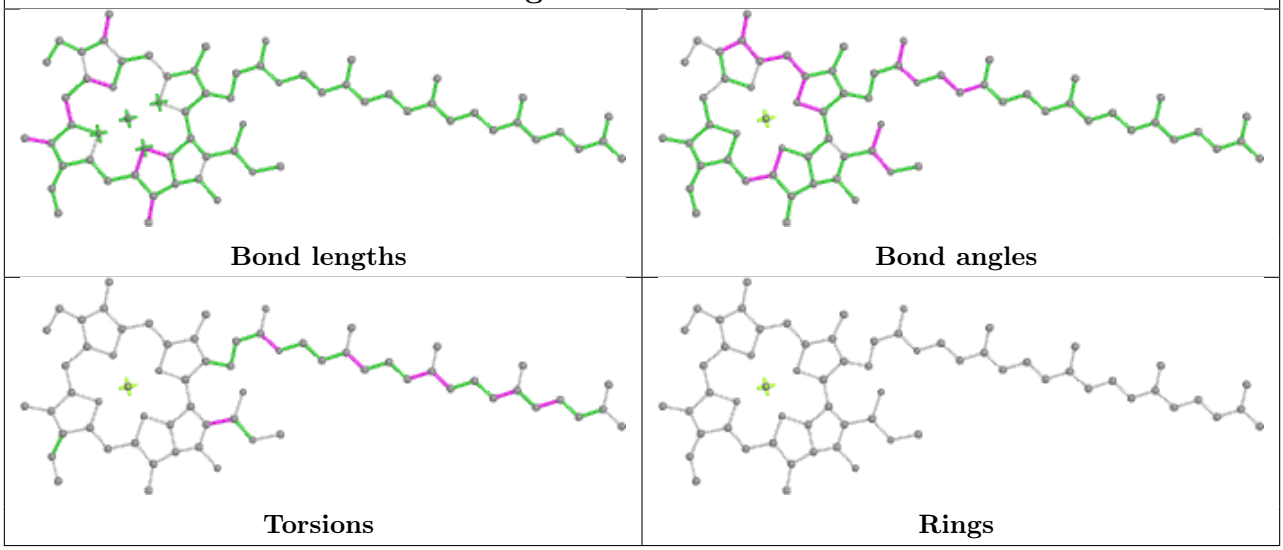
Ligand KC2 s 201



Bond lengths | Bond angles

Torsions | Rings

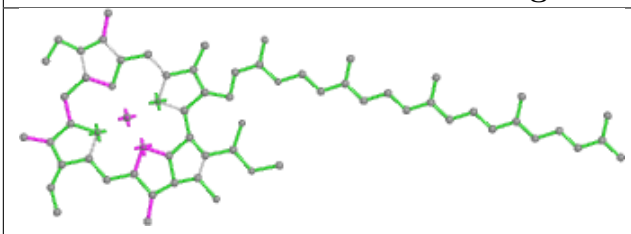
Ligand CLA B 841



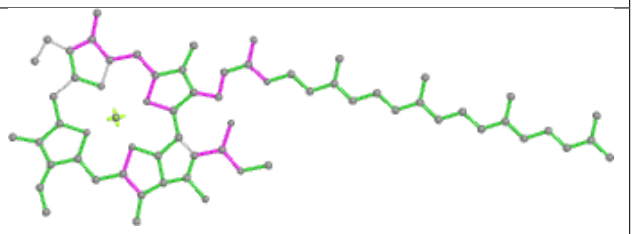
Bond lengths | Bond angles

Torsions | Rings

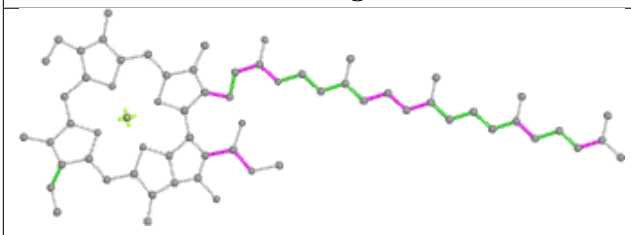
Ligand CLA s 203



Bond lengths



Bond angles



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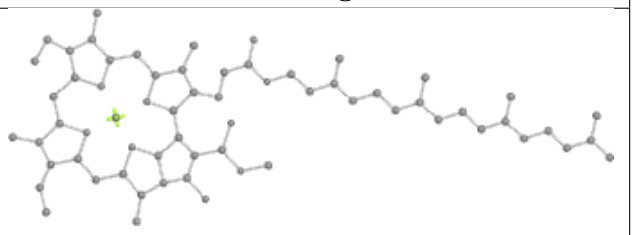
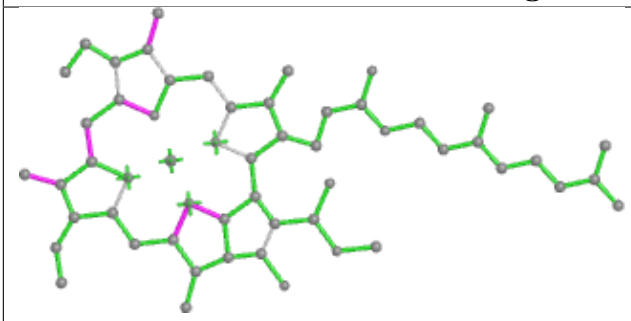
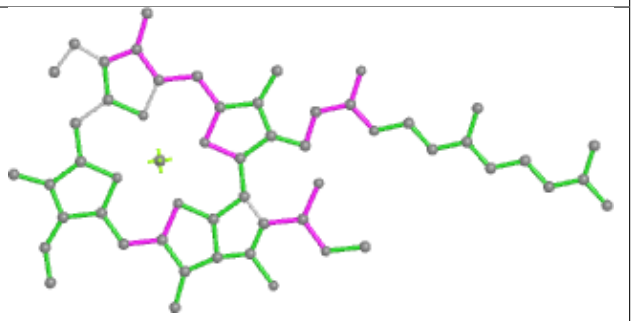


Rings

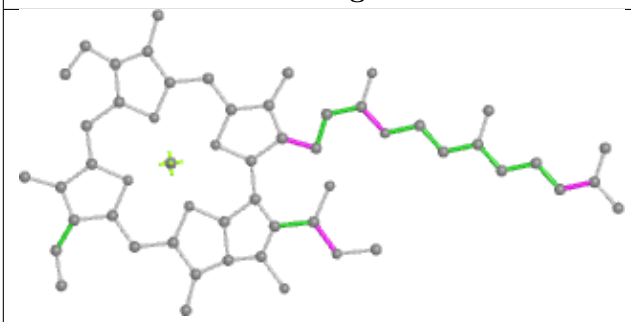
Ligand CLA A 803



Bond lengths



Bond angles



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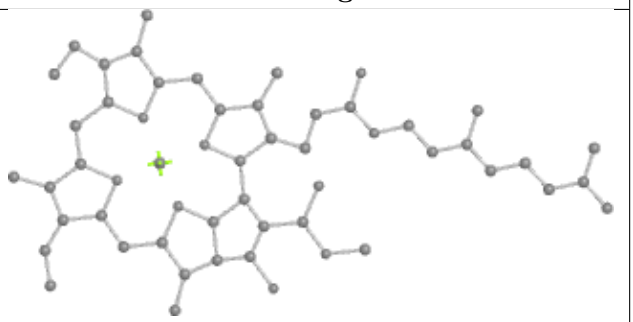
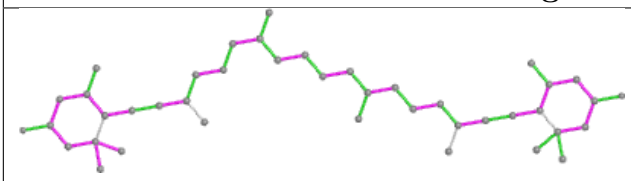
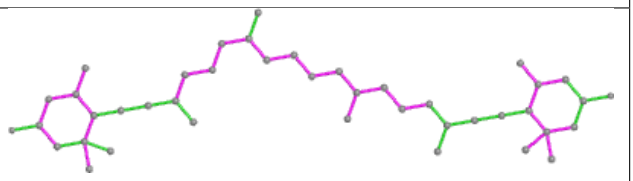


Rings

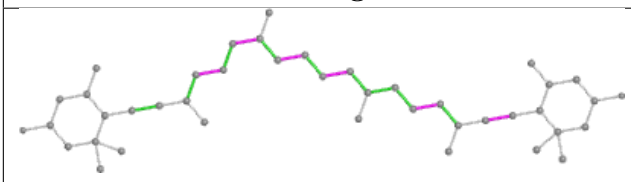
Ligand II0 h 312



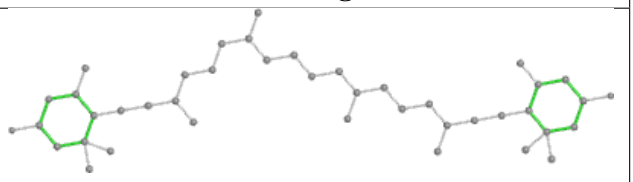
Bond lengths



Bond angles

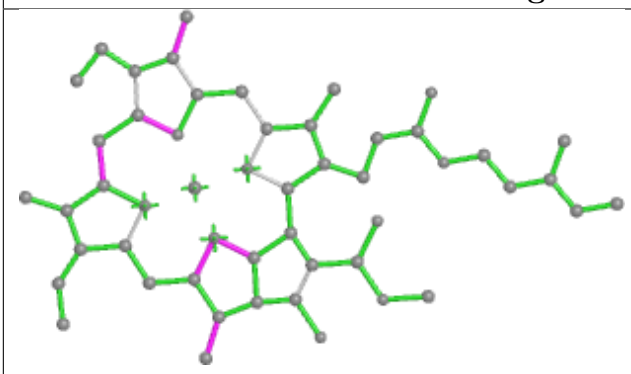


Torsions

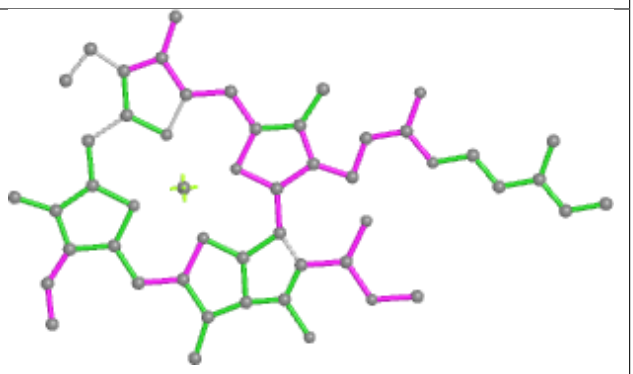


Rings

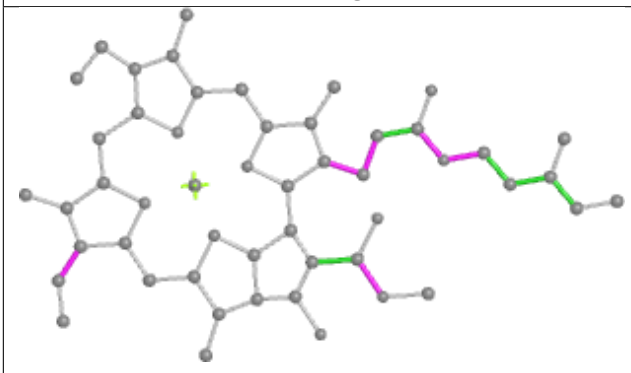
Ligand CLA k 614



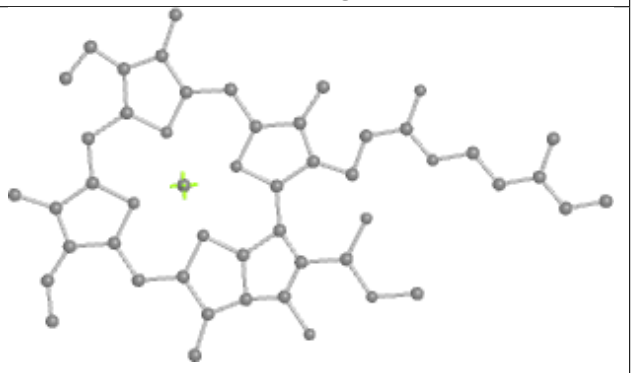
Bond lengths



Bond angles

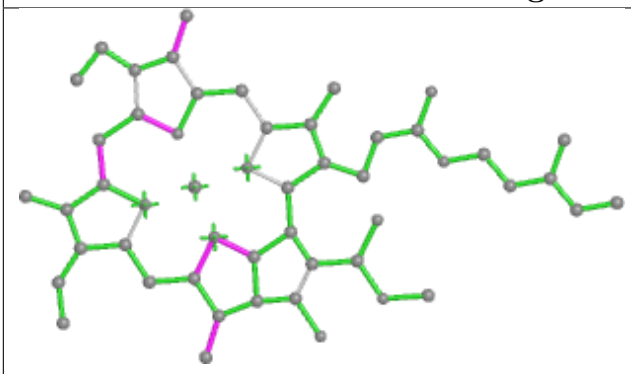


Torsions

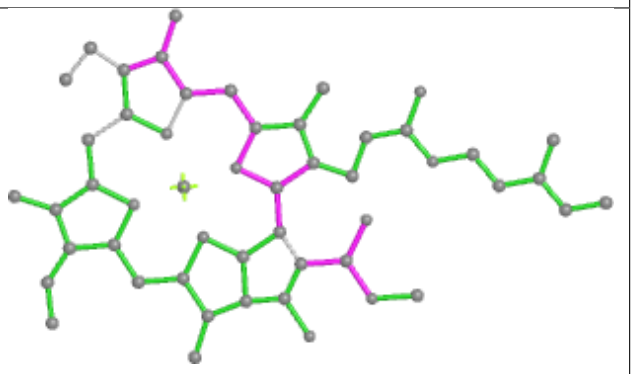


Rings

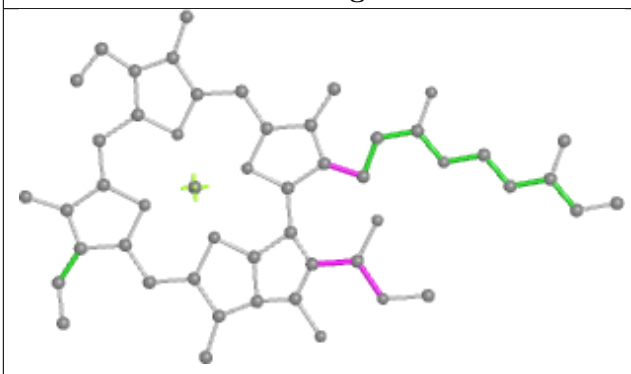
Ligand CLA h 304



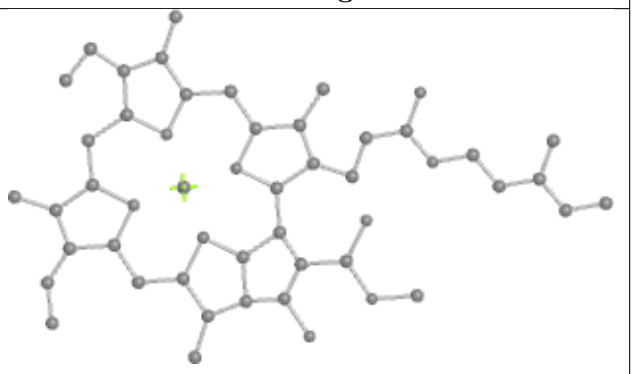
Bond lengths



Bond angles

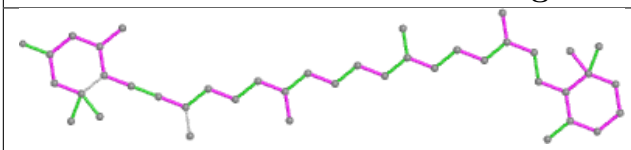


Torsions



Rings

Ligand IHT b 615



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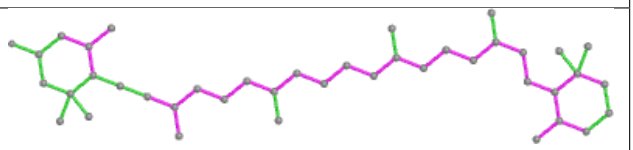
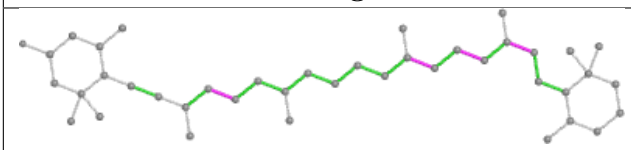
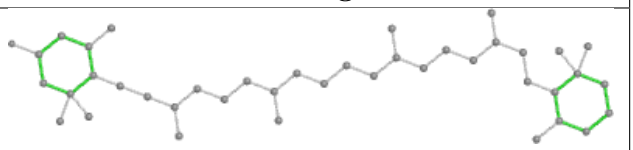


Bond angles

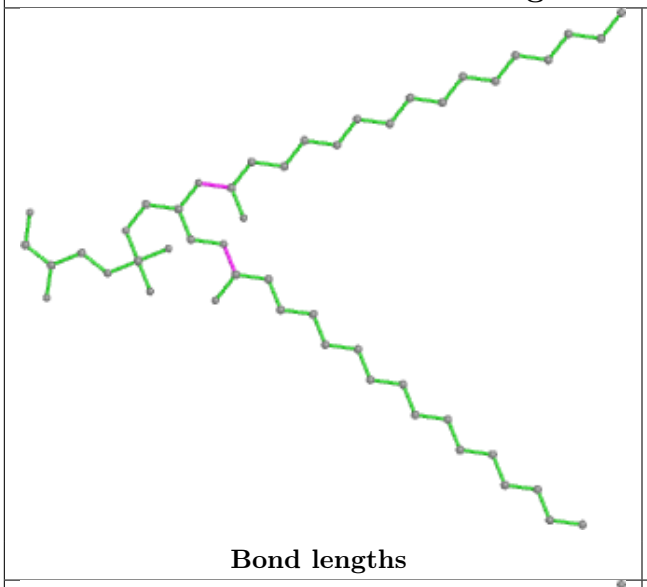


Torsions



Rings

Ligand LHG b 619



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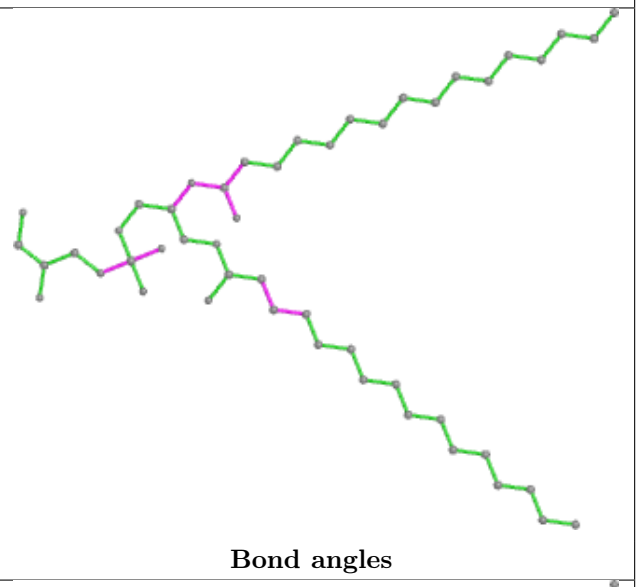
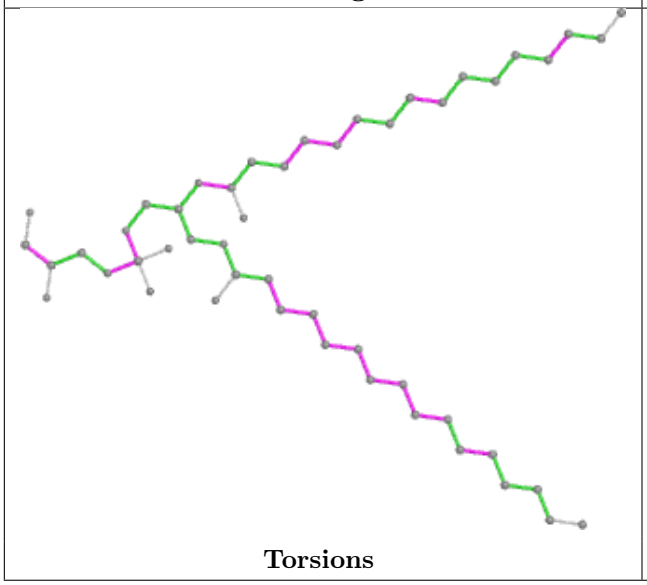


Bond angles



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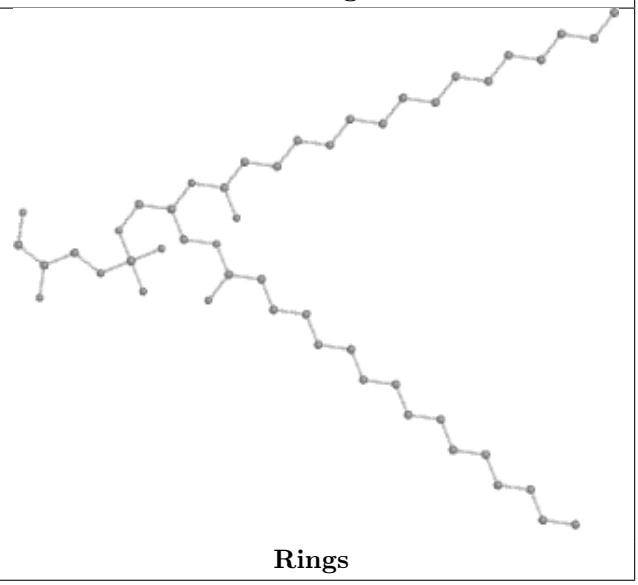
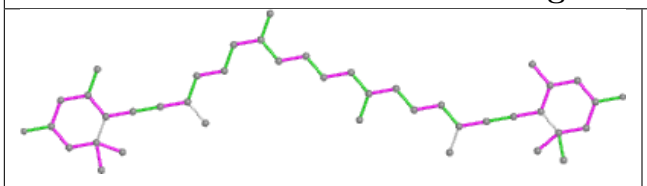


Rings

Ligand II0 l 302



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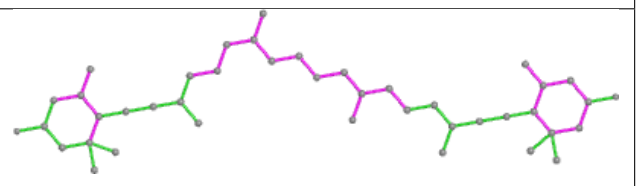
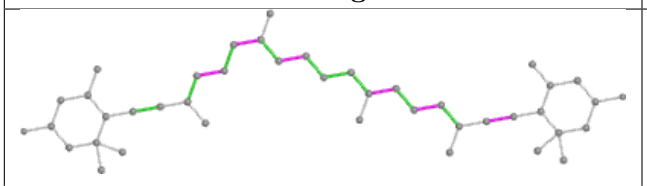
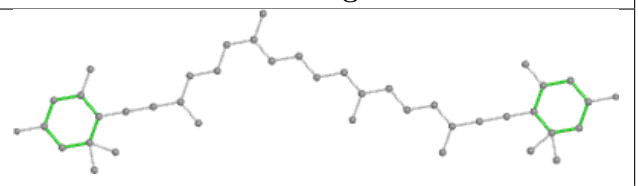


Bond angles

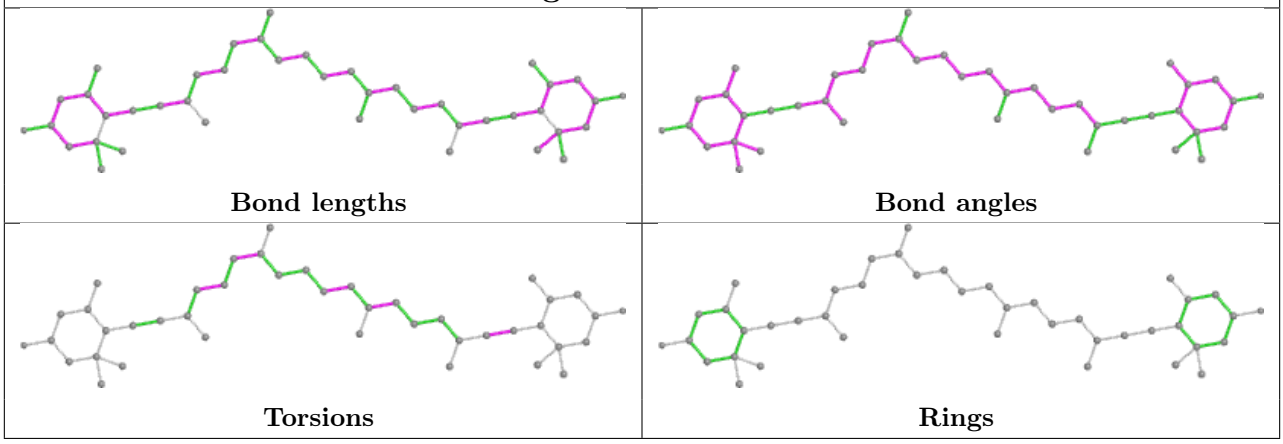


Torsions

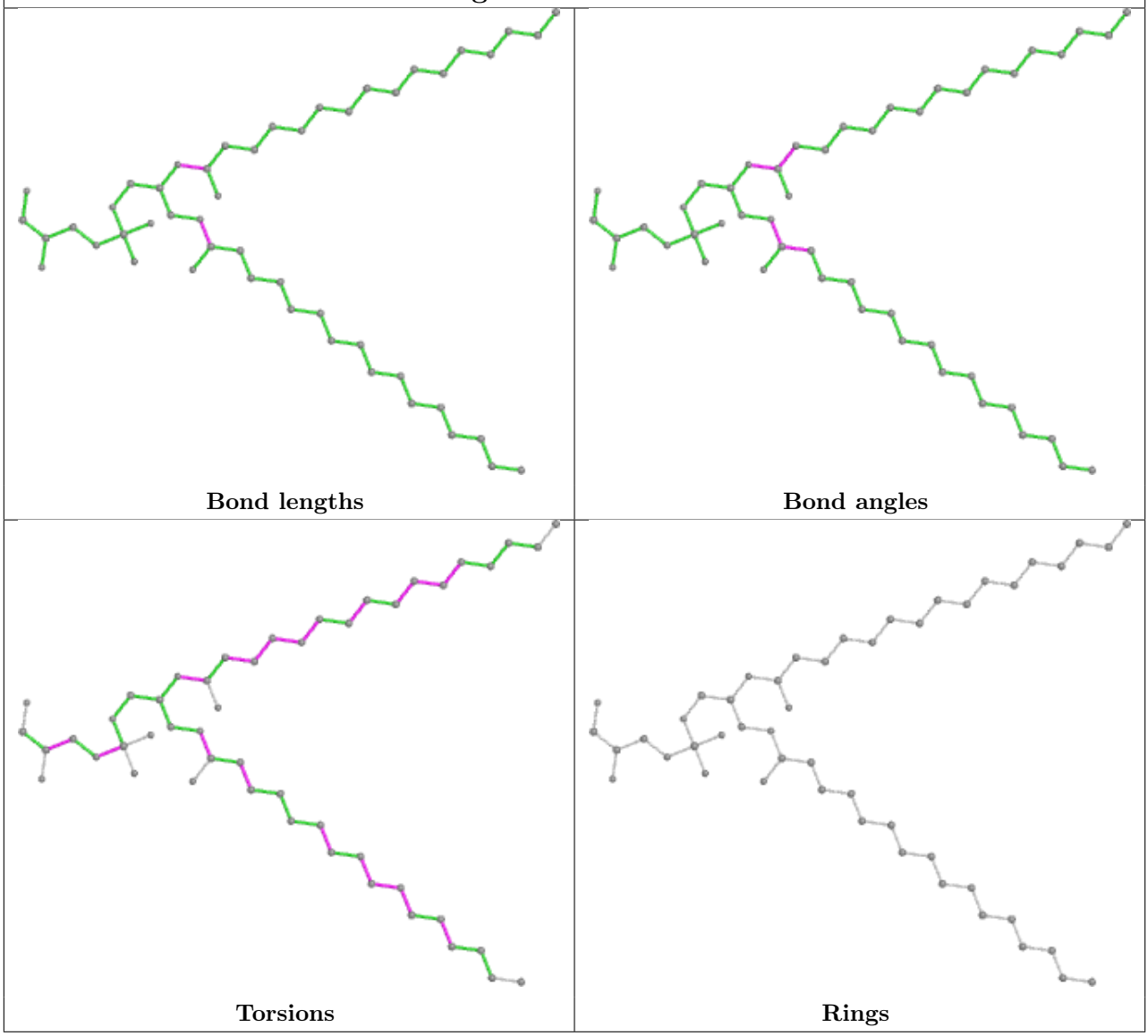


Rings

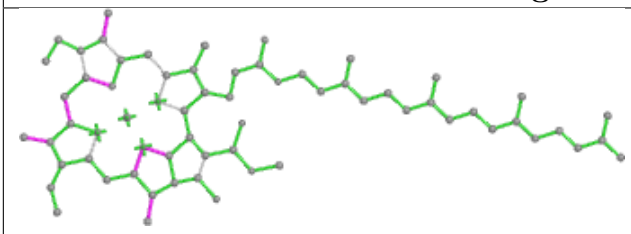
Ligand II0 d 316



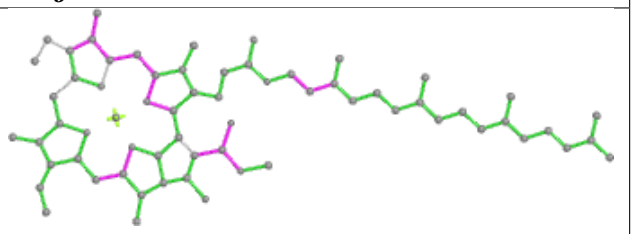
Ligand LHG J 106



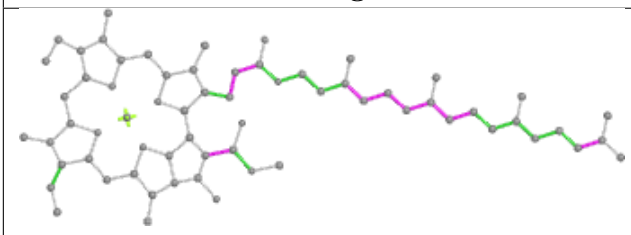
Ligand CLA j 604



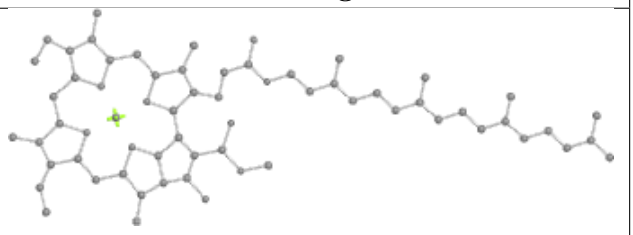
Bond lengths



Bond angles

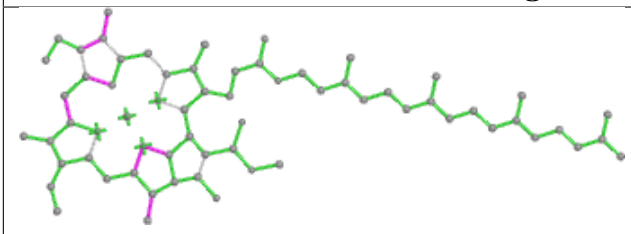


Torsions

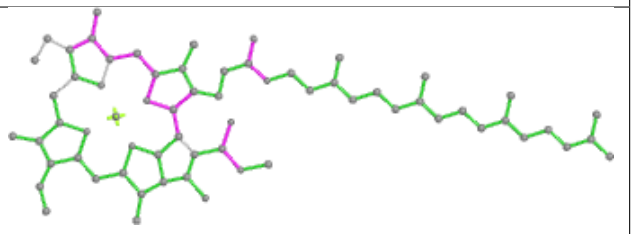


Rings

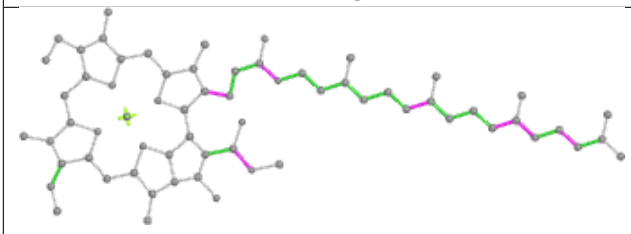
Ligand CLA A 831



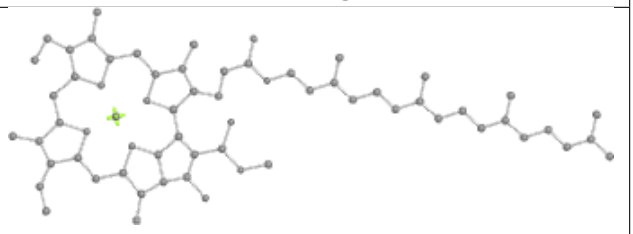
Bond lengths



Bond angles

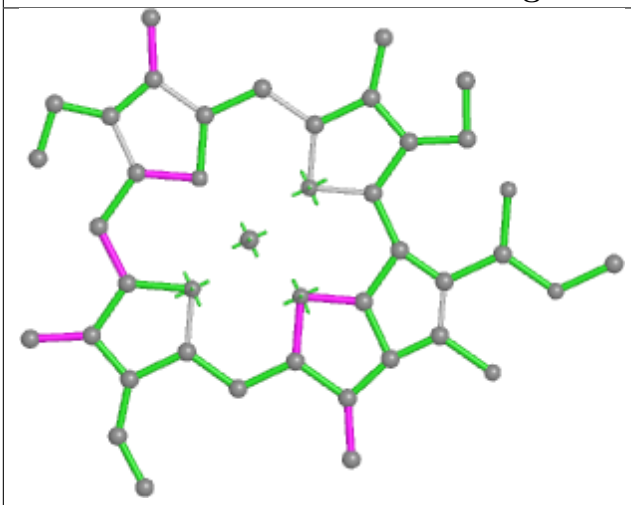


Torsions

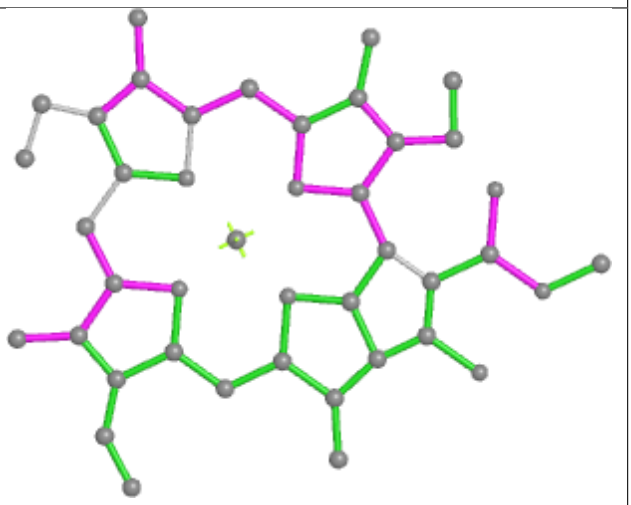


Rings

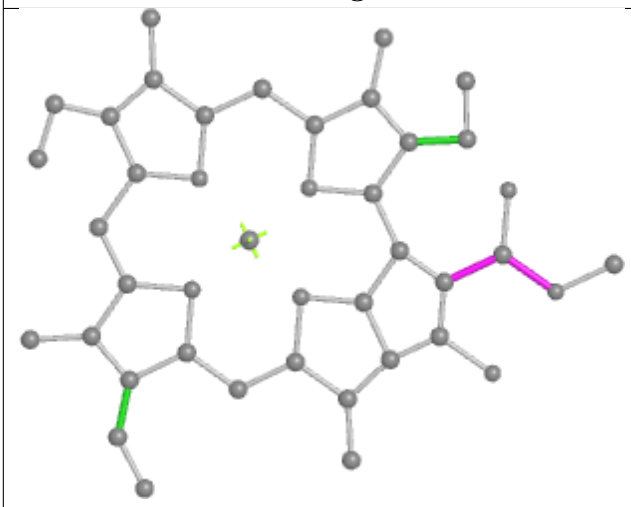
Ligand CLA K 102



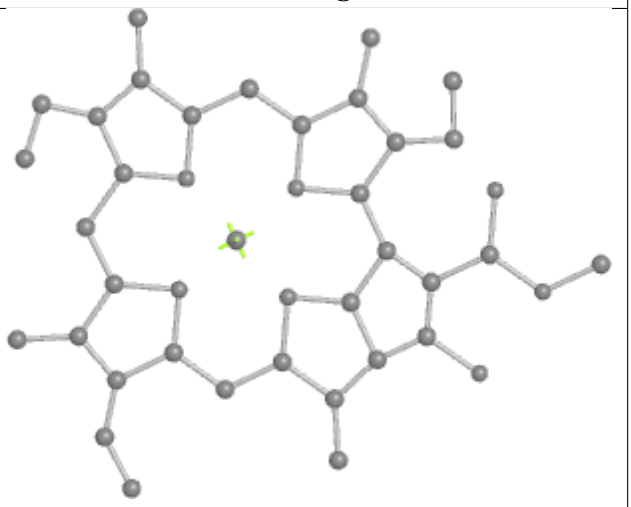
Bond lengths



Bond angles

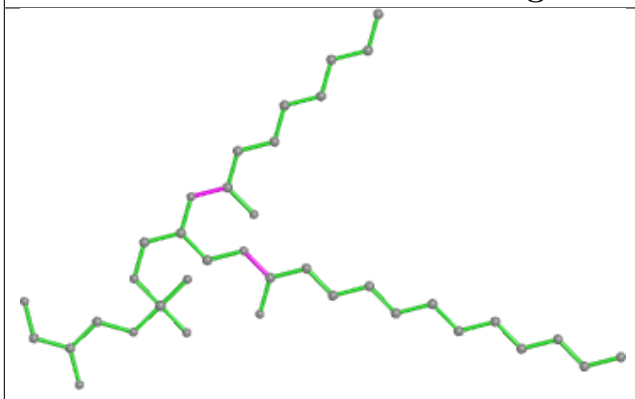


Torsions

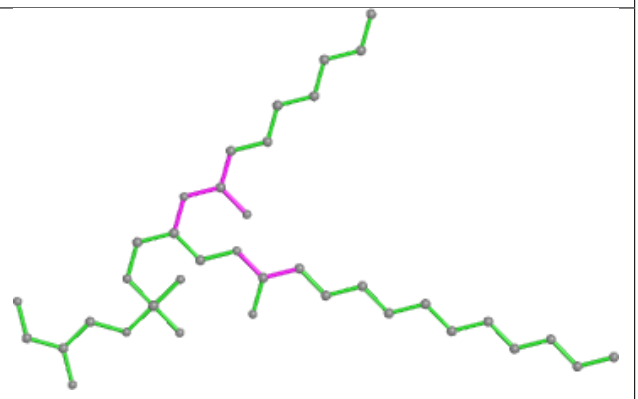


Rings

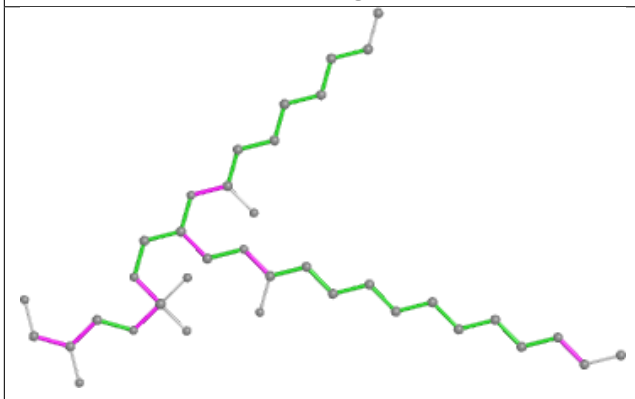
Ligand LHG k 620



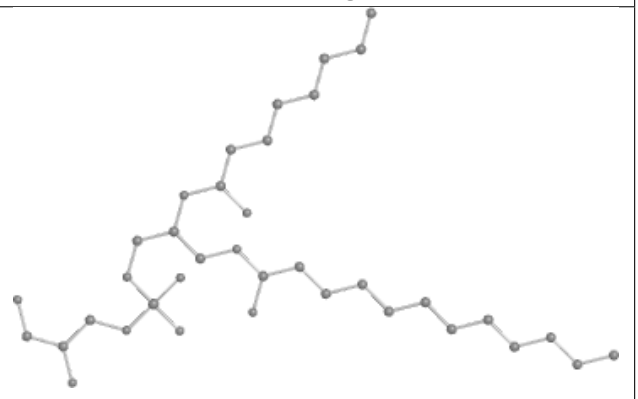
Bond lengths



Bond angles

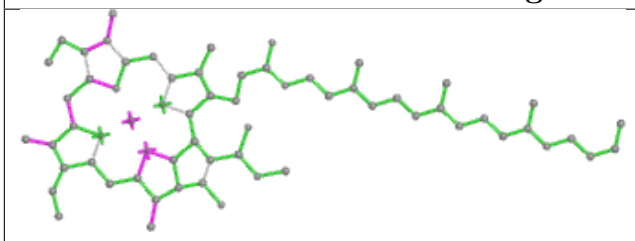


Torsions

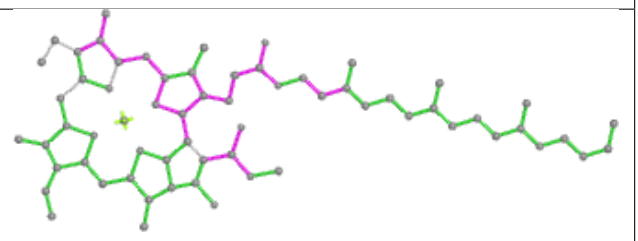


Rings

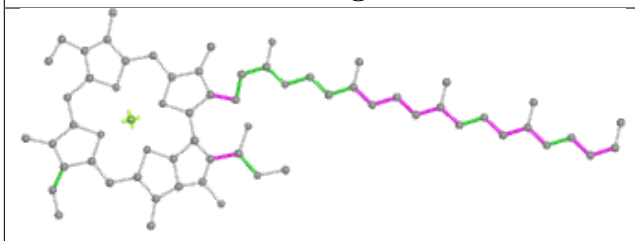
Ligand CLA B 823



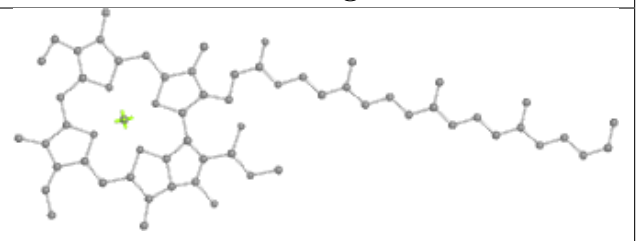
Bond lengths



Bond angles

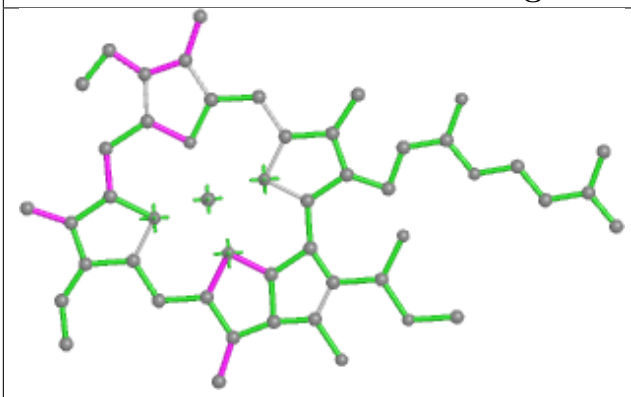


Torsions



Rings

Ligand CLA B 827



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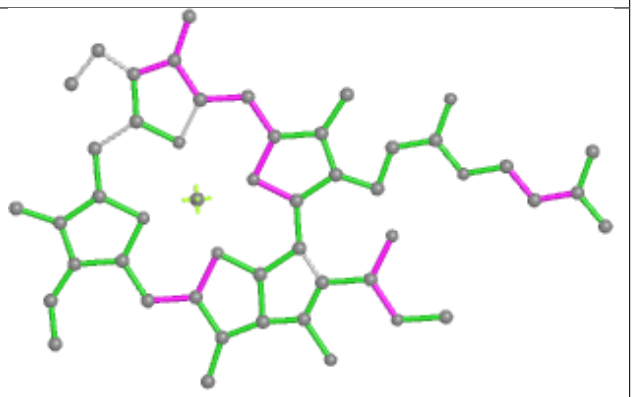
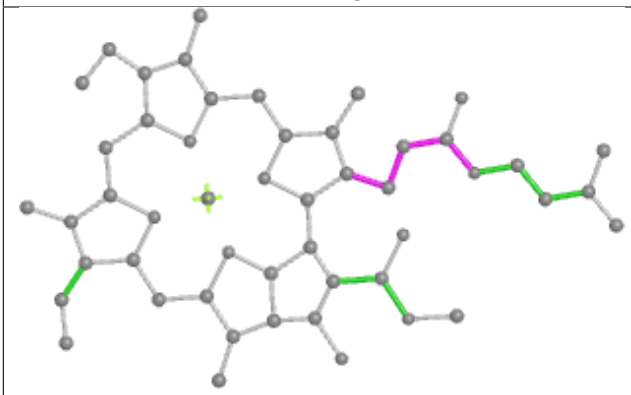
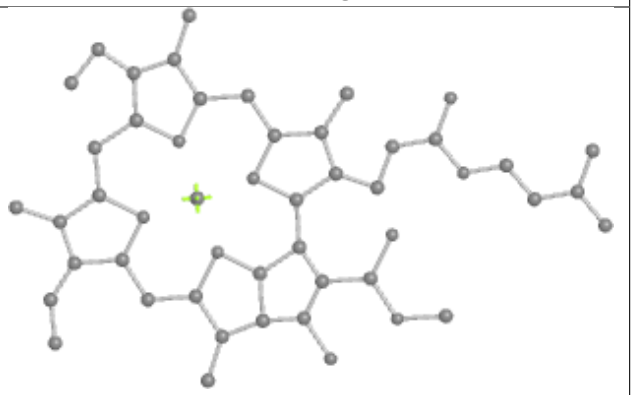


Bond angles

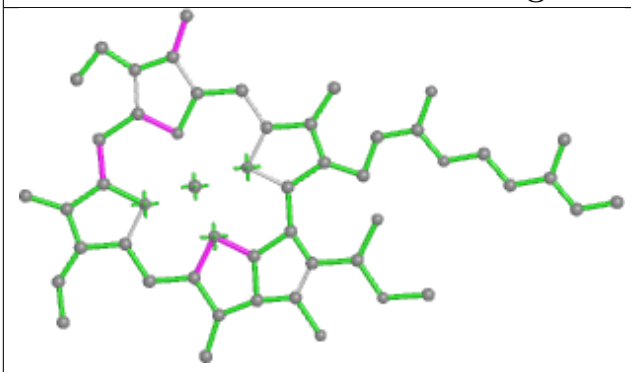


Torsions

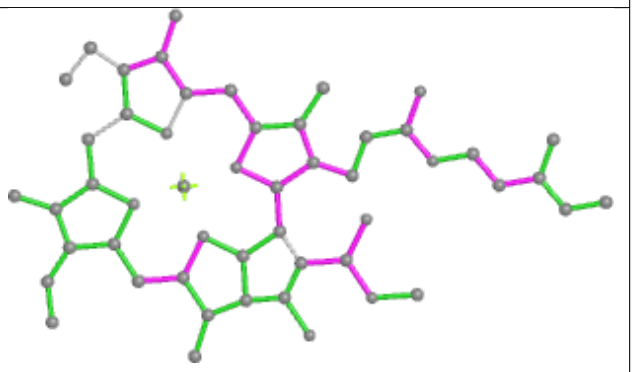


Rings

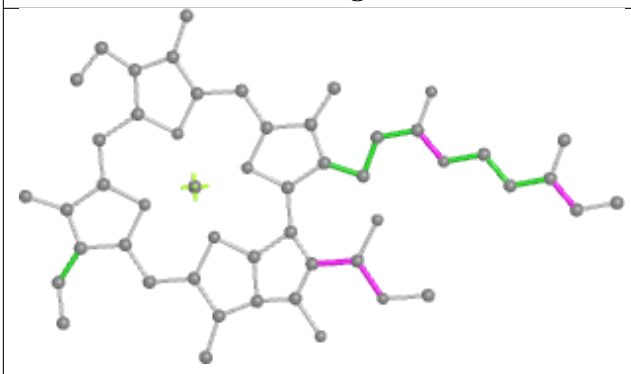
Ligand CLA d 312



Bond lengths



Bond angles



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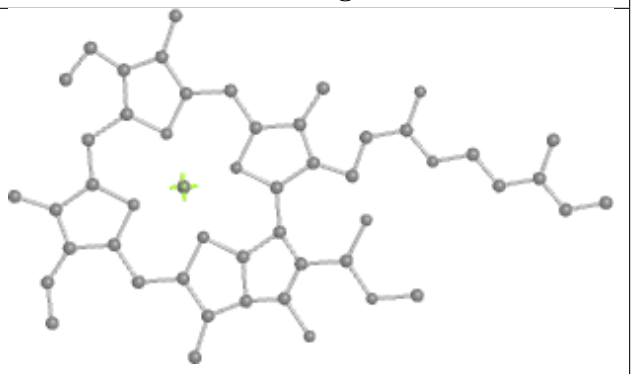
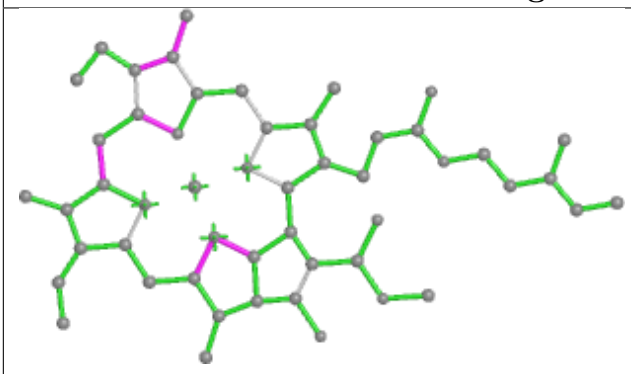
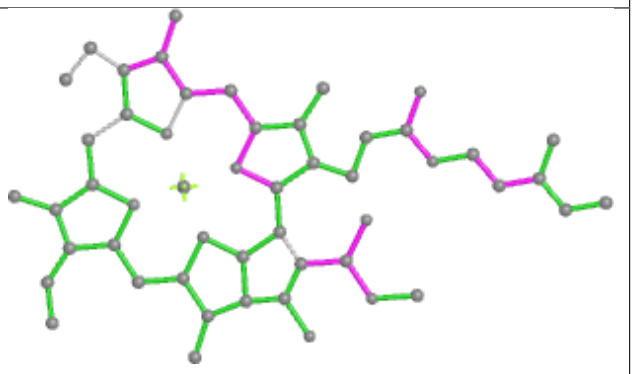


Rings

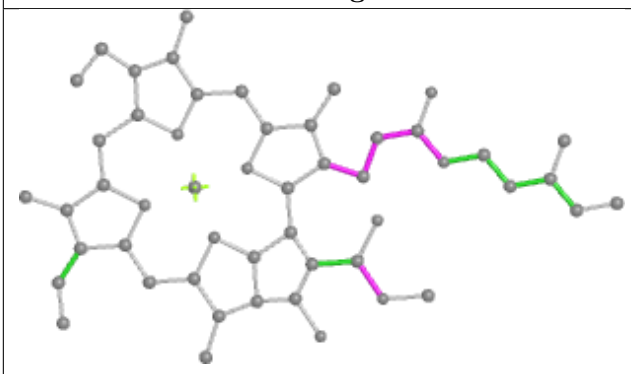
Ligand CLA k 610



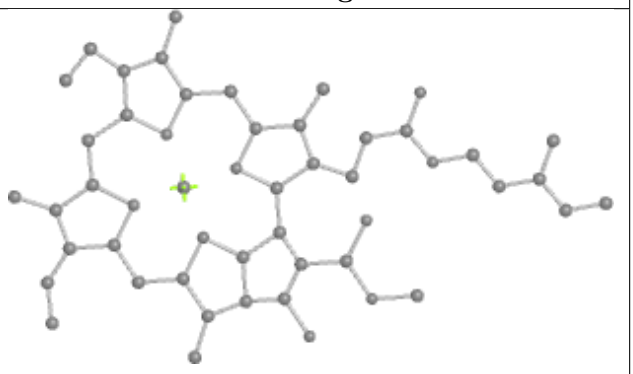
Bond lengths



Bond angles

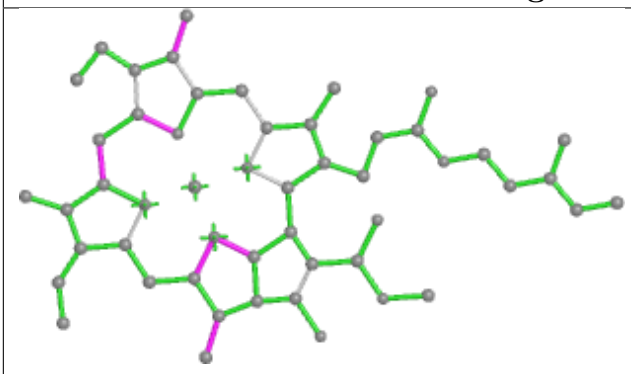


Torsions

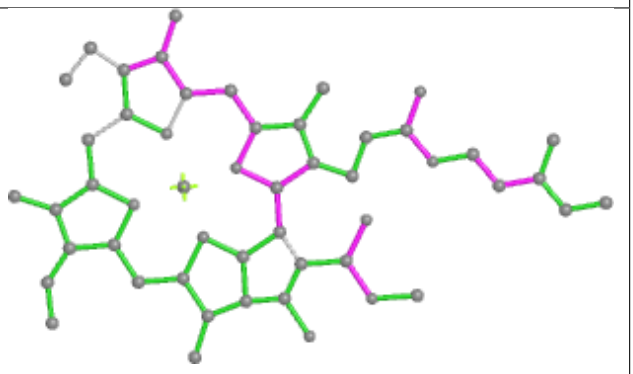


Rings

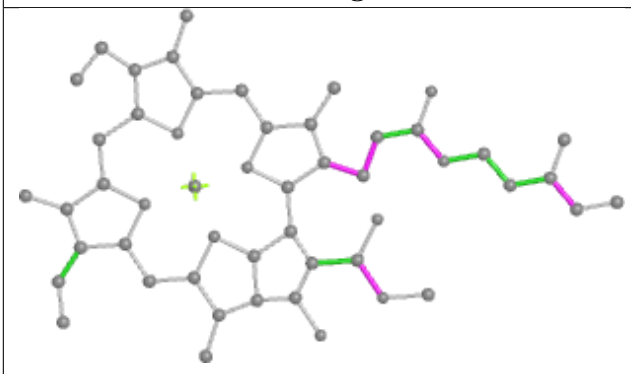
Ligand CLA n 314



Bond lengths



Bond angles



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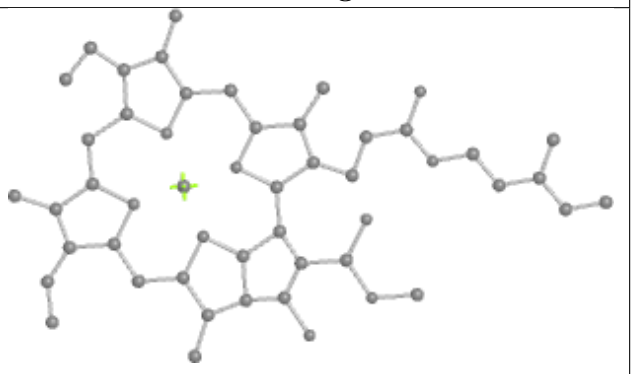
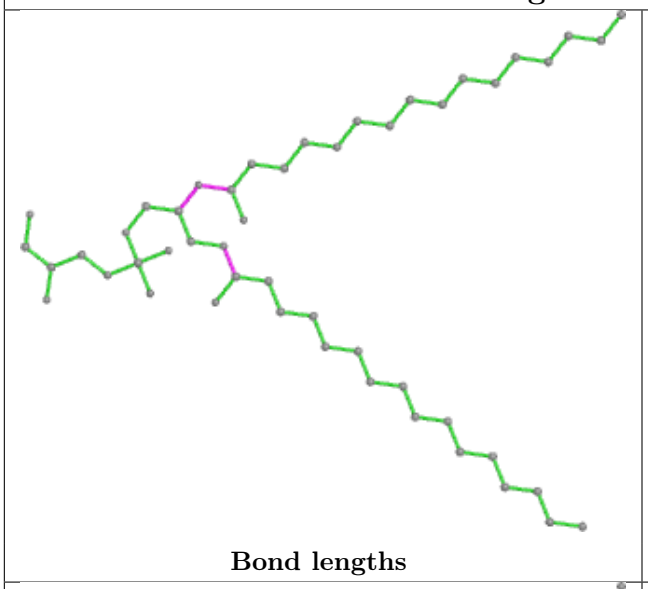


Rings

Ligand LHG a 319



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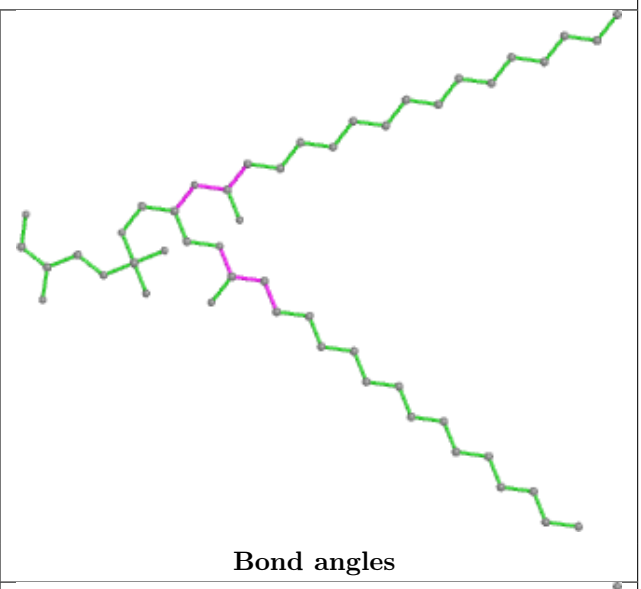
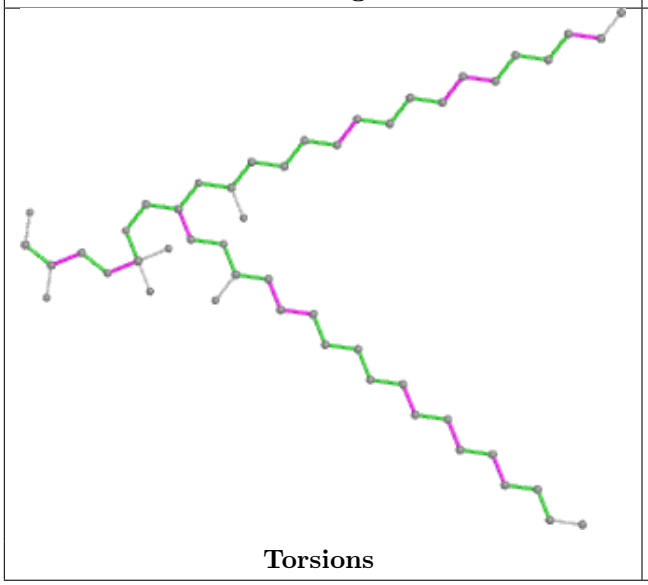


Bond angles



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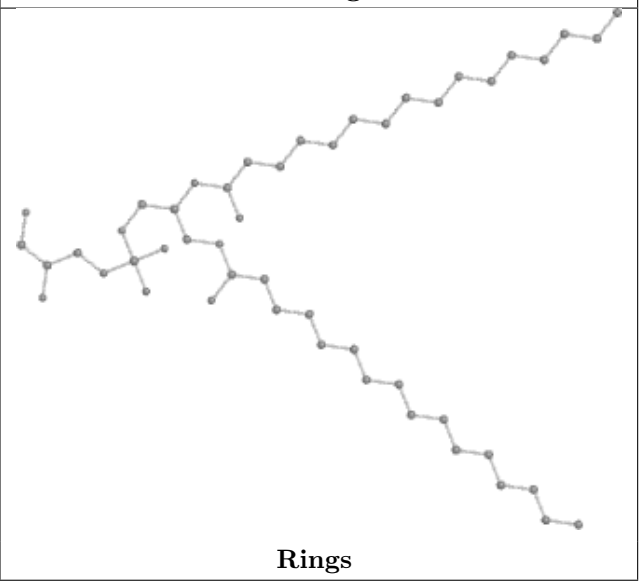
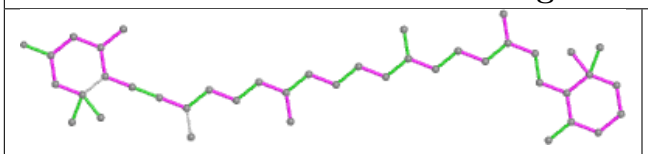
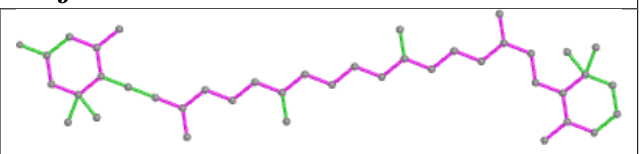


Rings

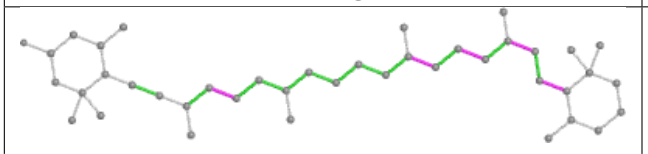
Ligand IHT j 616



Bond lengths



Bond angles



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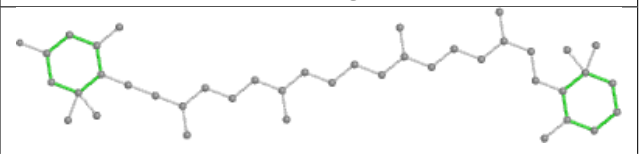
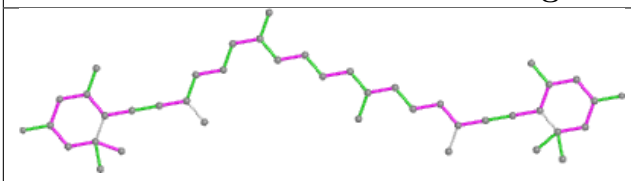


Rings

Ligand II0 b 617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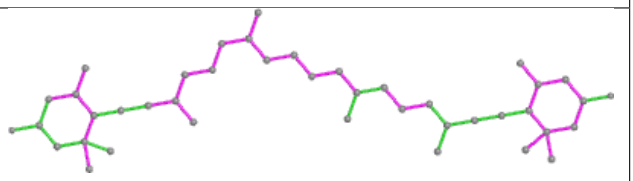
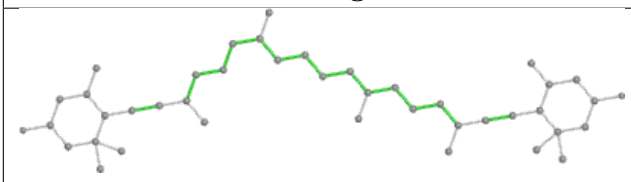

Bond angles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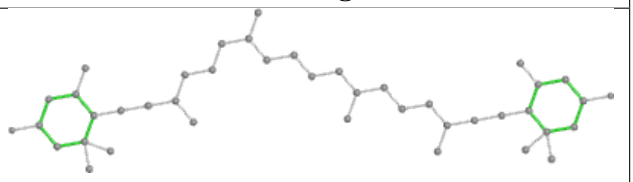
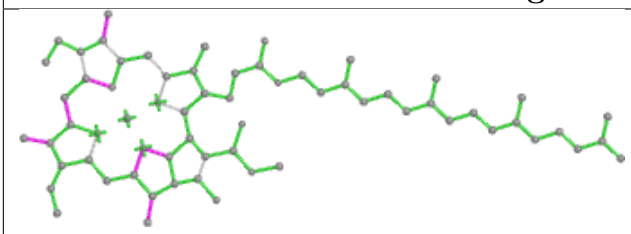

Rings

Ligand CLA b 603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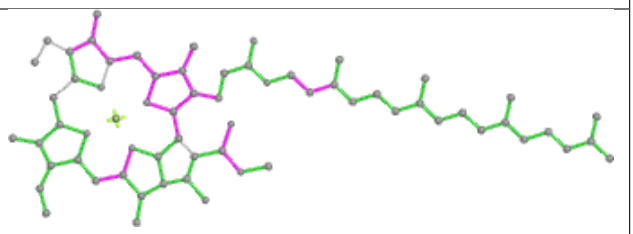
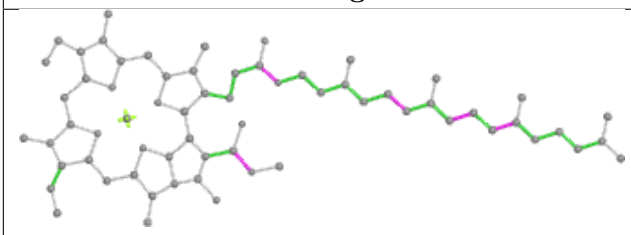

Bond angles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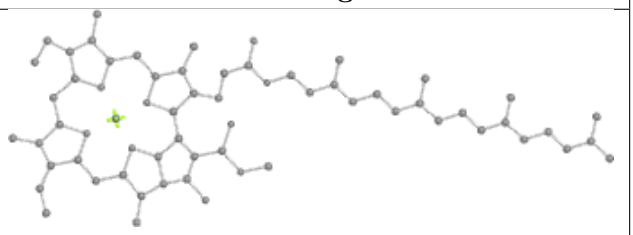
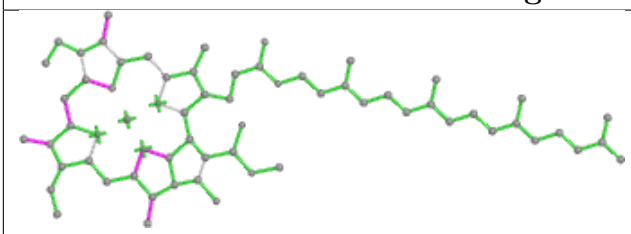

Rings

Ligand CLA B 822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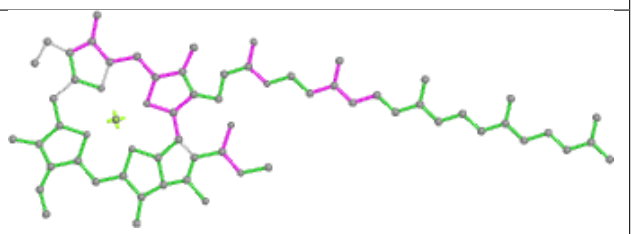
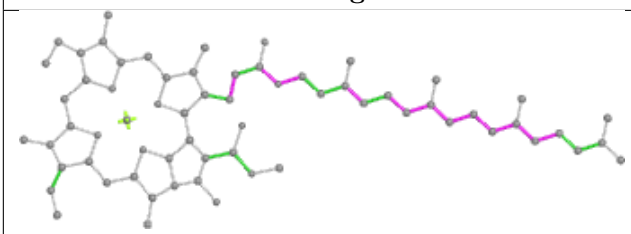

Bond angles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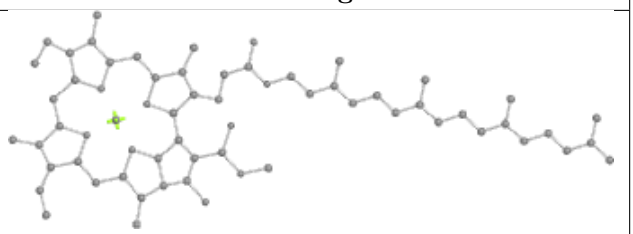
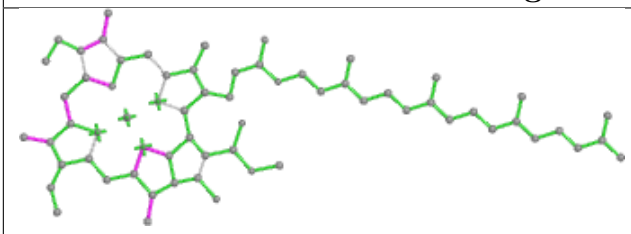
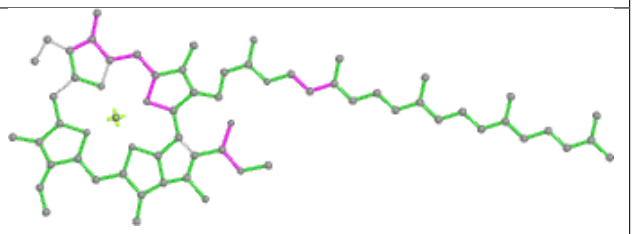

Rings

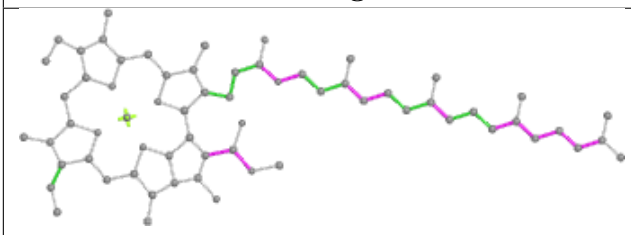
Ligand CLA B 818



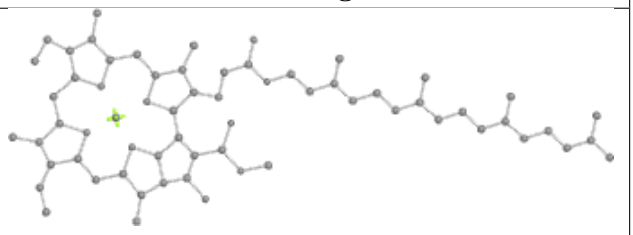
Bond lengths



Bond angles

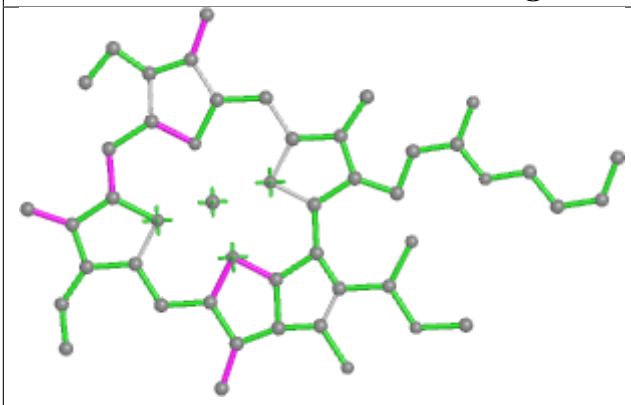


Torsions

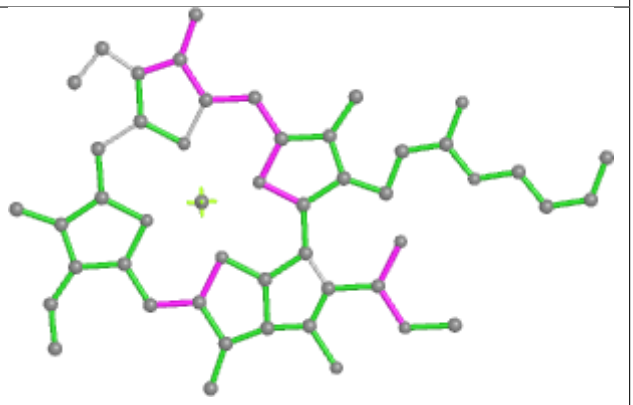


Rings

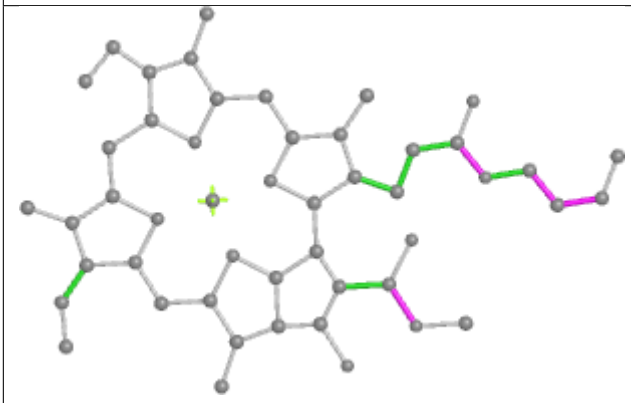
Ligand CLA B 828



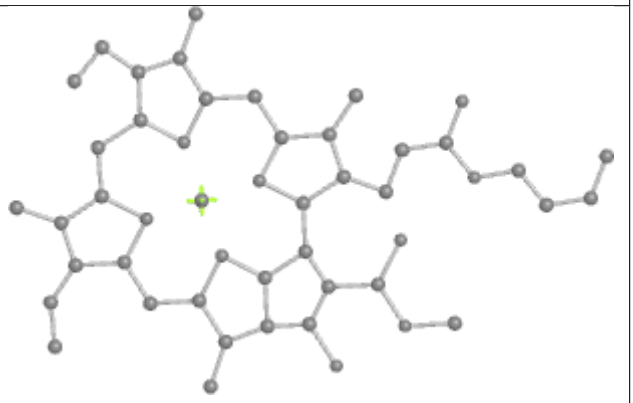
Bond lengths



Bond angles

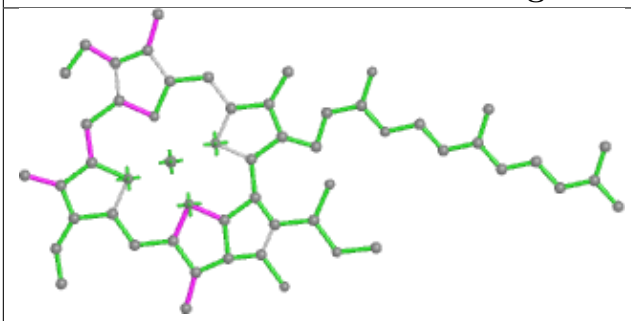


Torsions

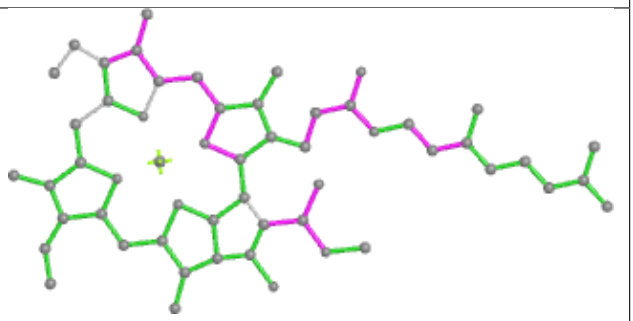


Rings

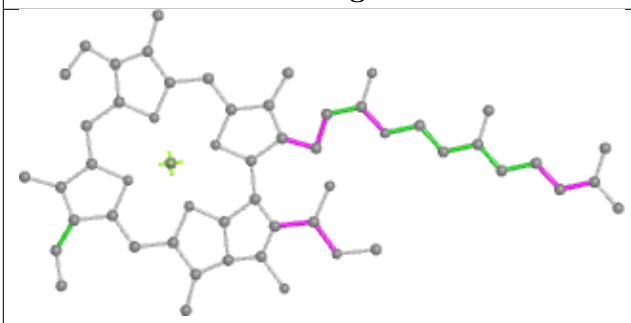
Ligand CLA b 602



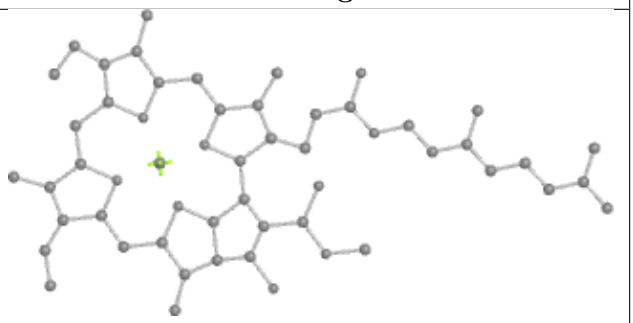
Bond lengths



Bond angles

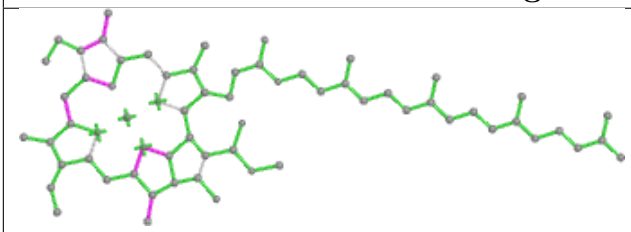


Torsions

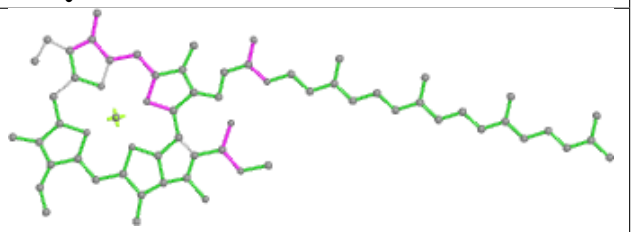


Rings

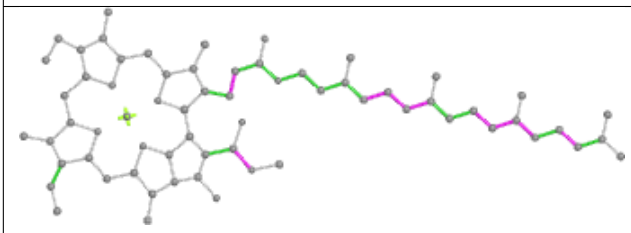
Ligand CLA Q 302



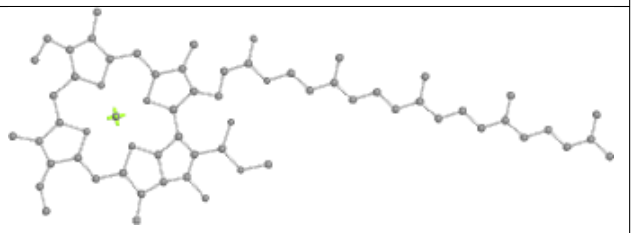
Bond lengths



Bond angles

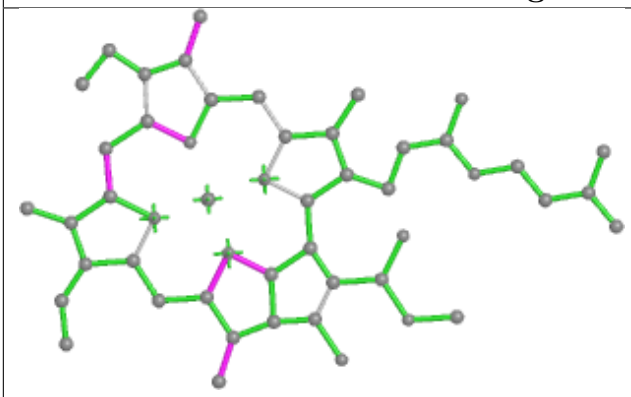


Torsions

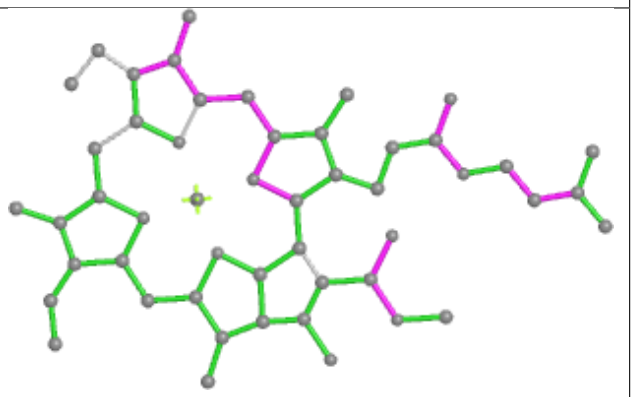


Rings

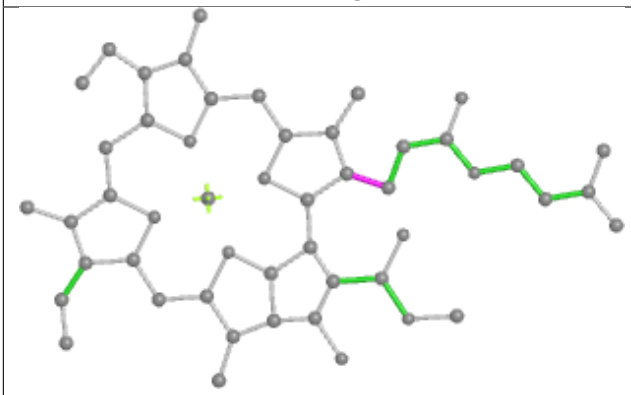
Ligand CLA d 301



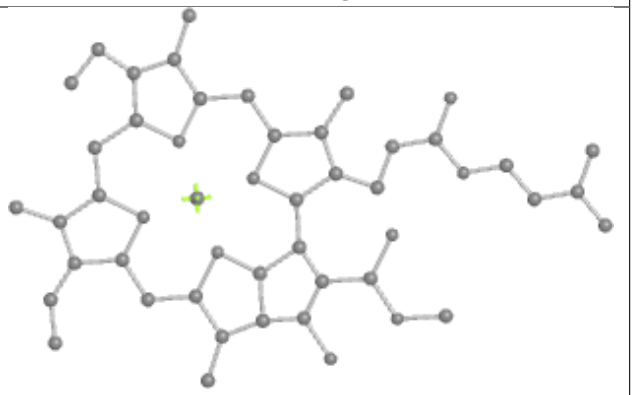
Bond lengths



Bond angles

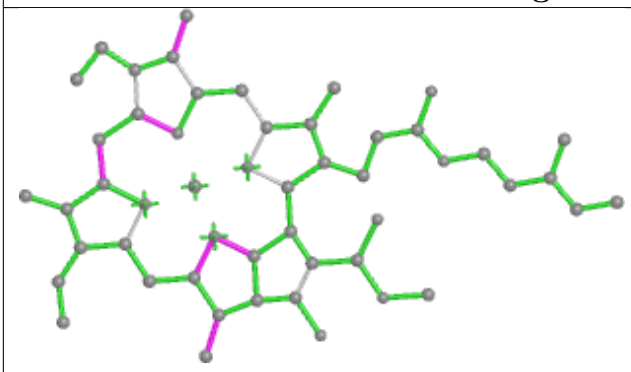


Torsions

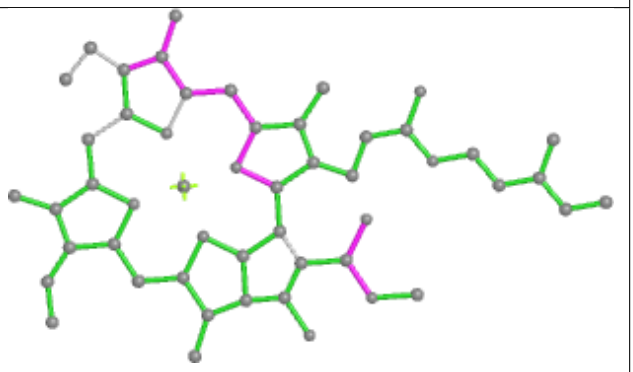


Rings

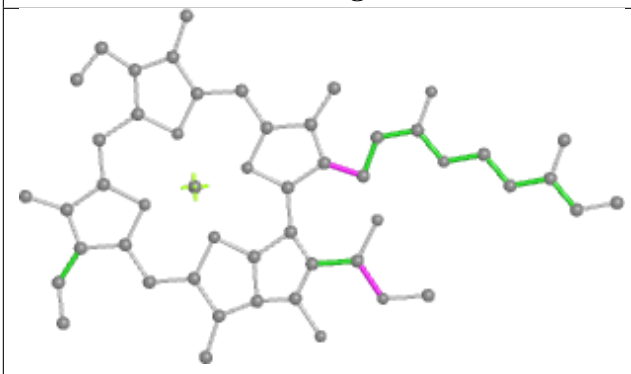
Ligand CLA i 304



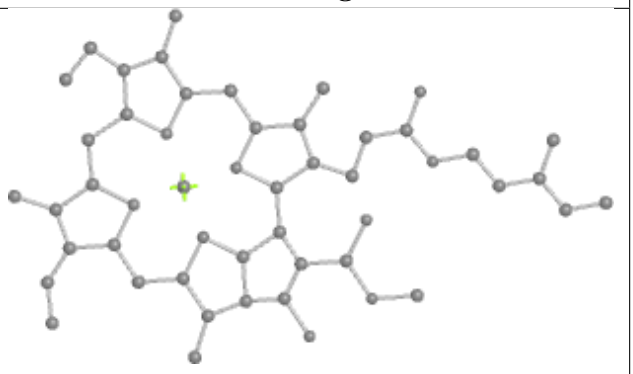
Bond lengths



Bond angles

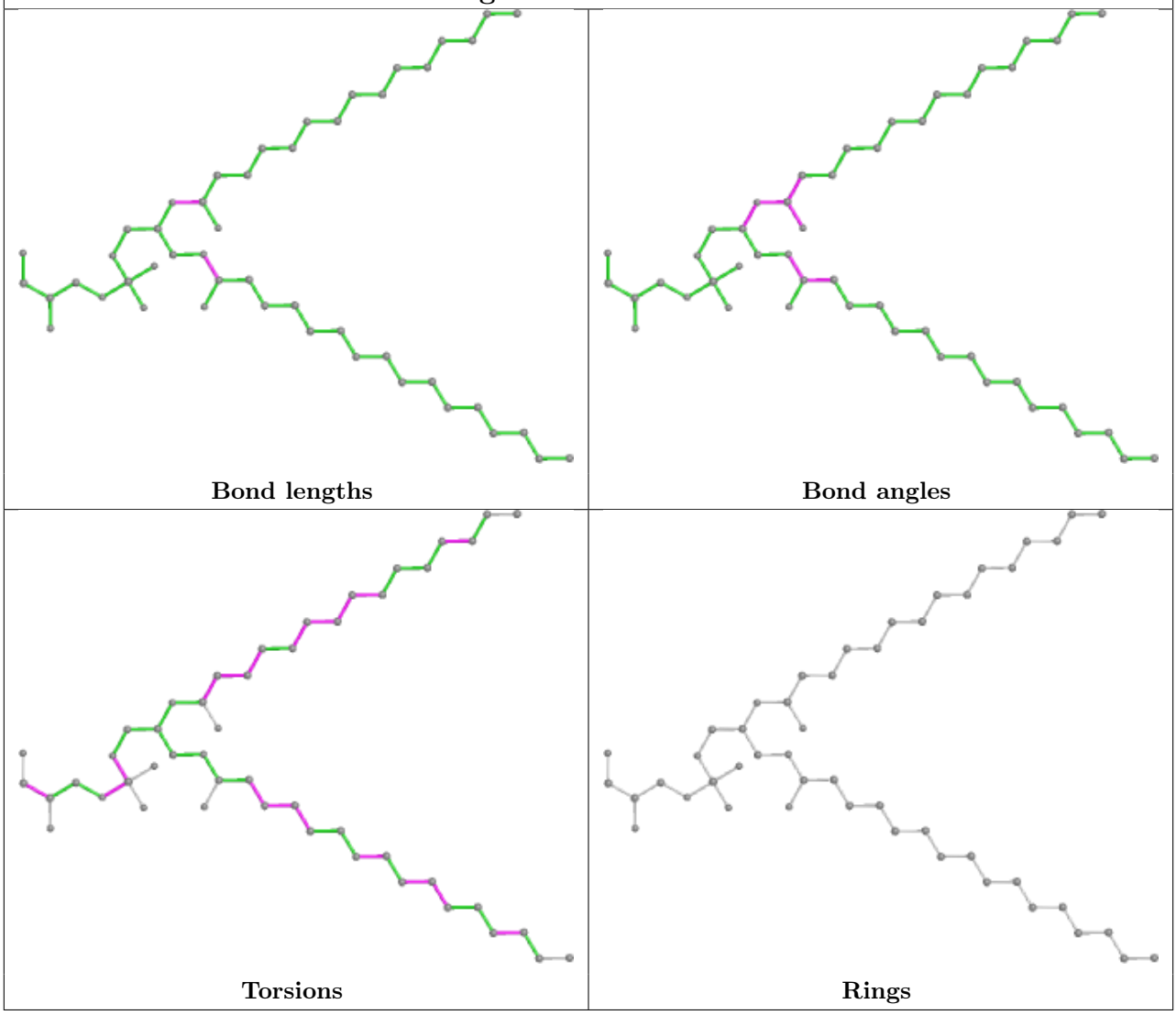


Torsions

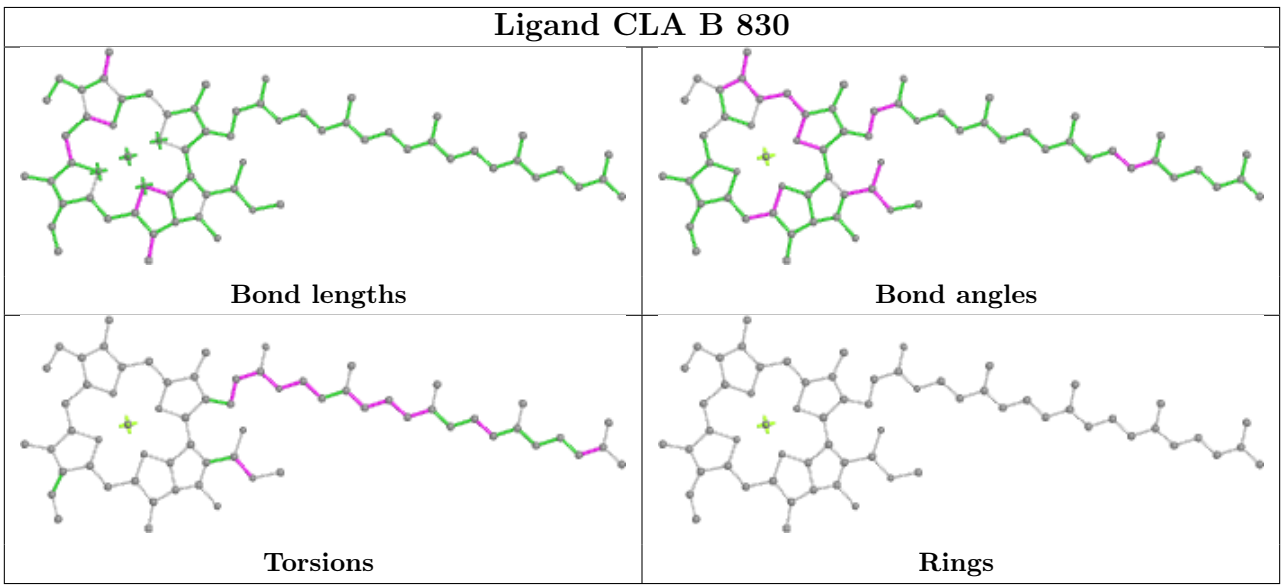


Rings

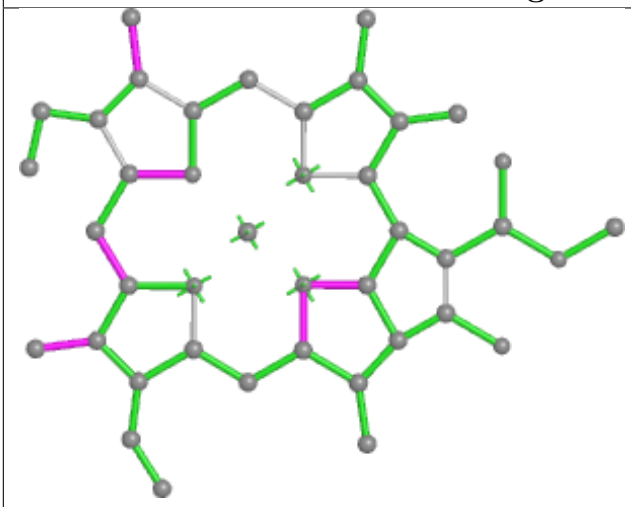
Ligand LHG A 845



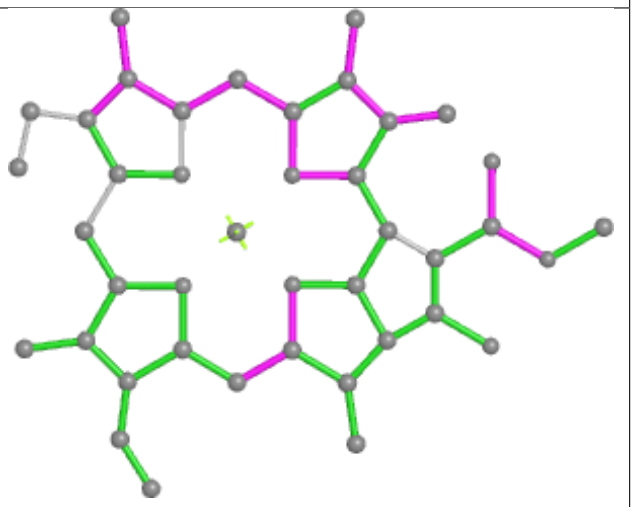
Ligand CLA B 830



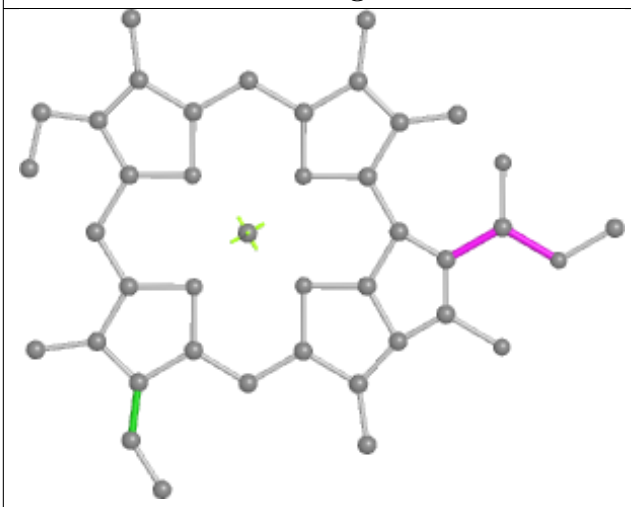
Ligand CLA d 308



Bond lengths



Bond angles



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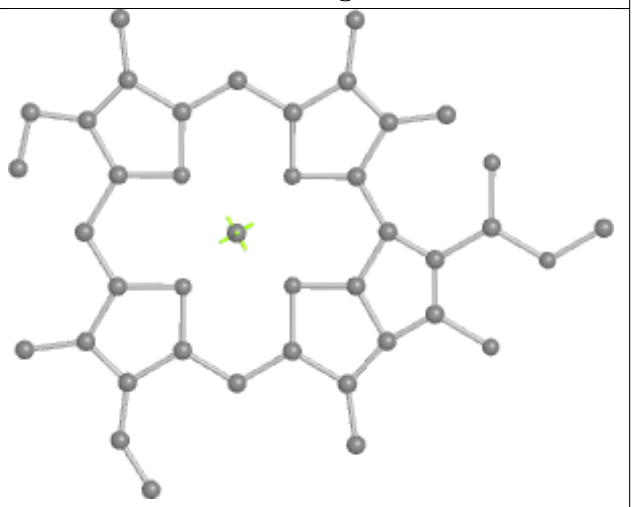
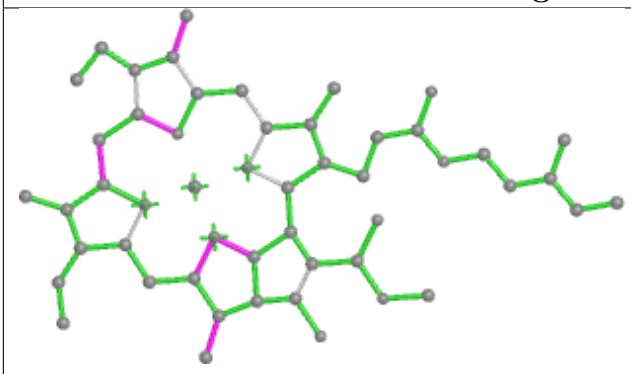
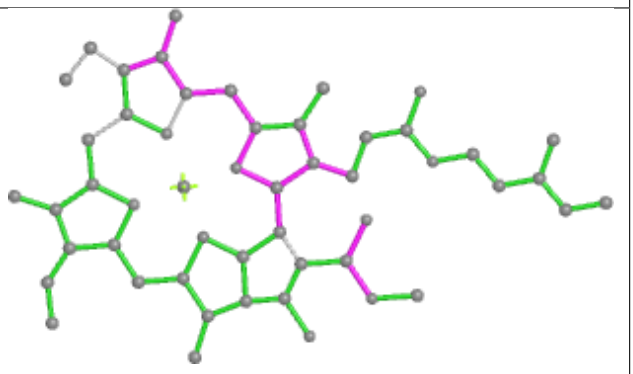


Rings

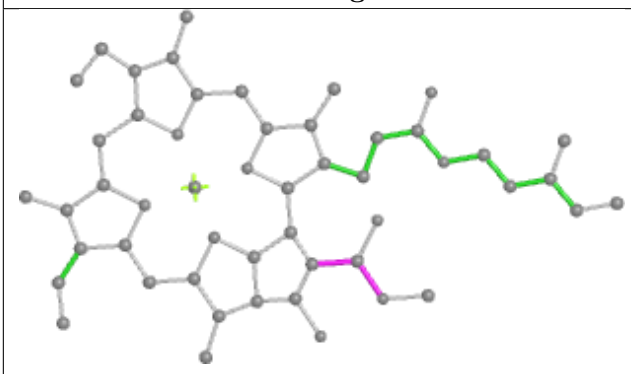
Ligand CLA l 305



Bond lengths



Bond angles



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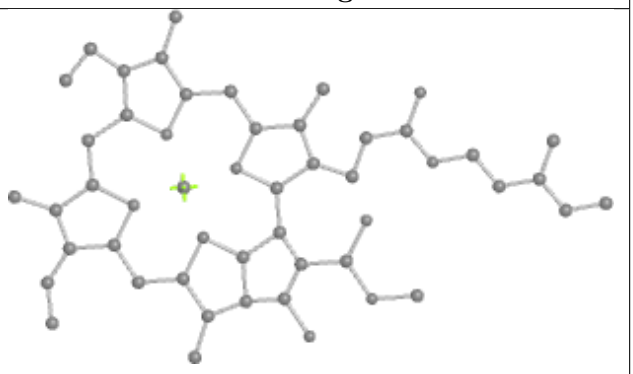
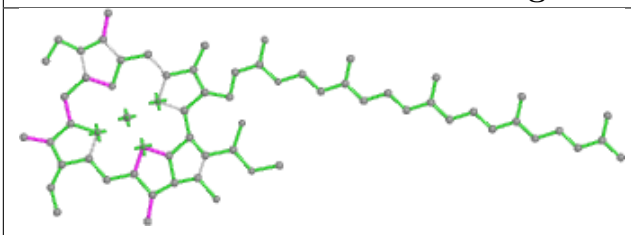


Rings

Ligand CLA a 306



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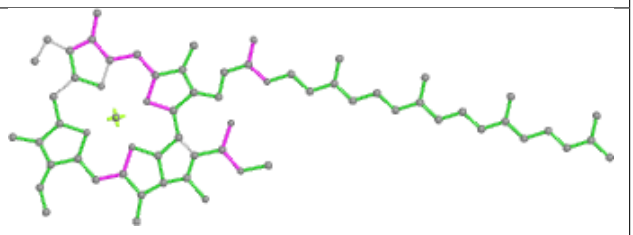
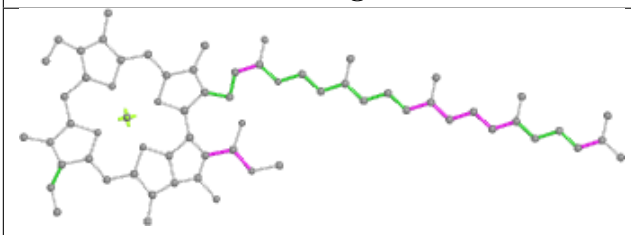


Bond angles



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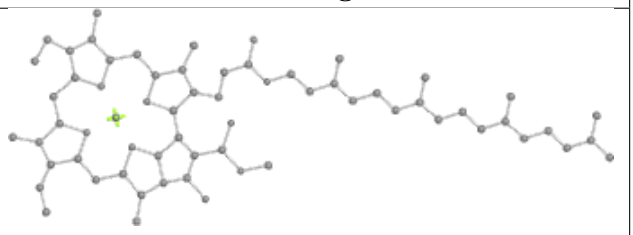
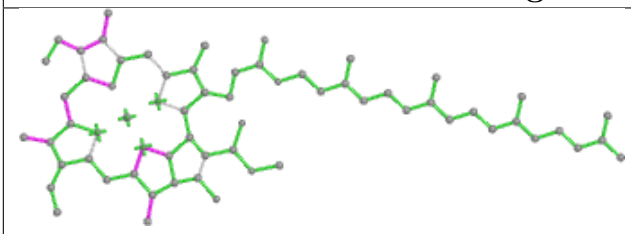
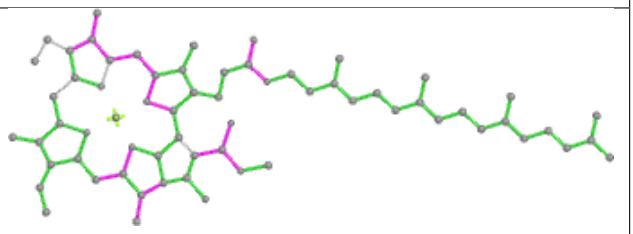


Rings

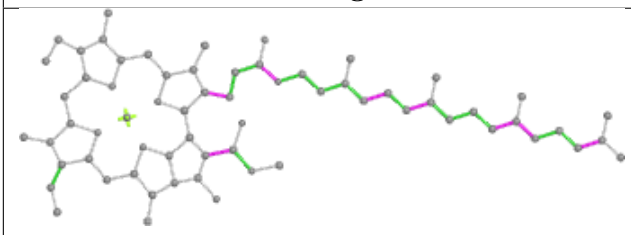
Ligand CLA L 203



Bond lengths



Bond angles



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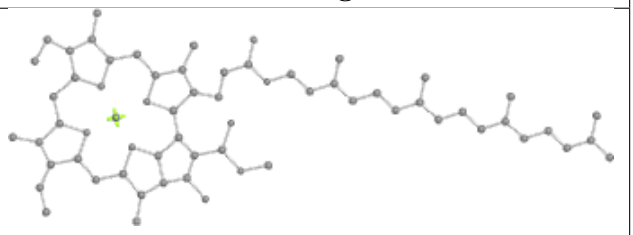
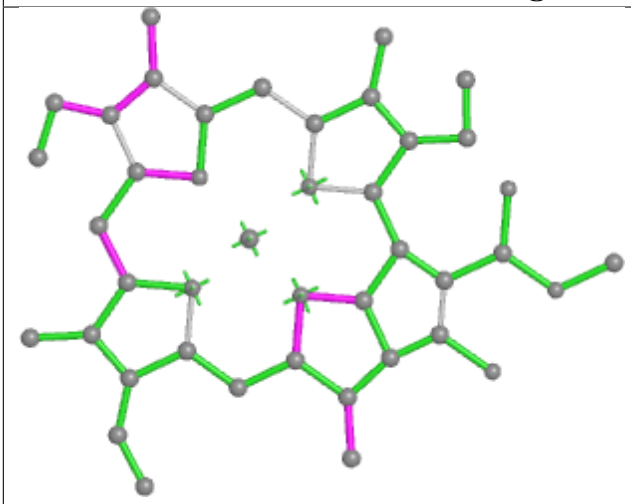
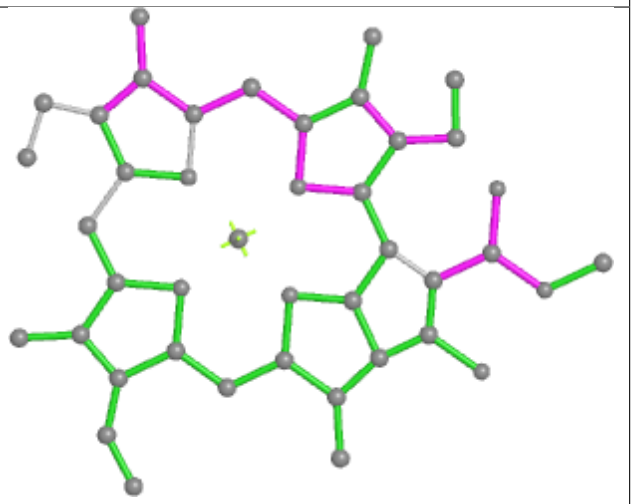


Rings

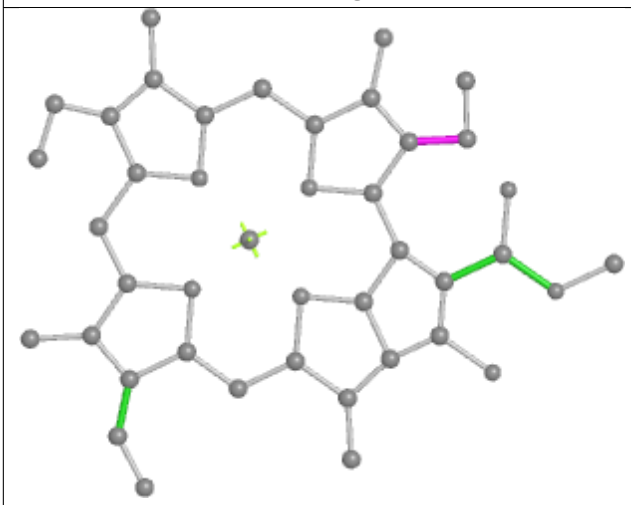
Ligand CLA J 103



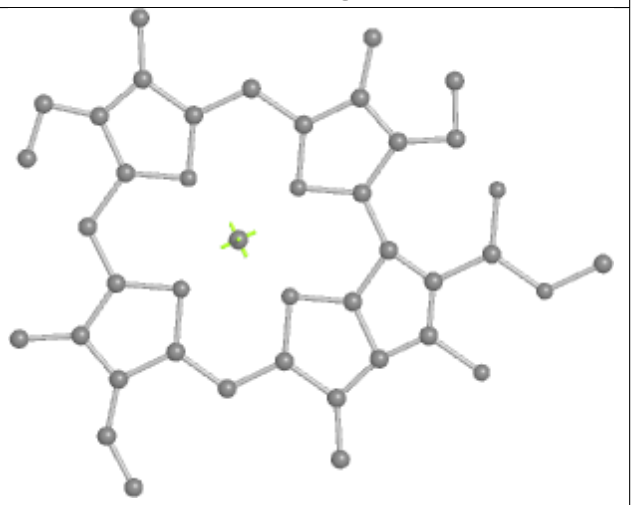
Bond lengths



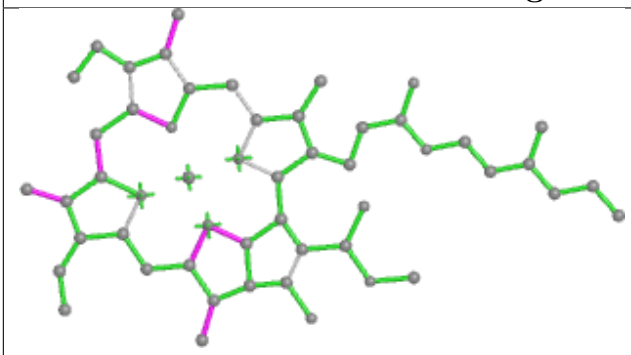
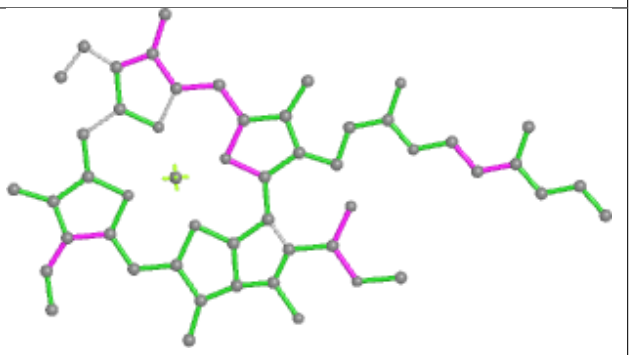
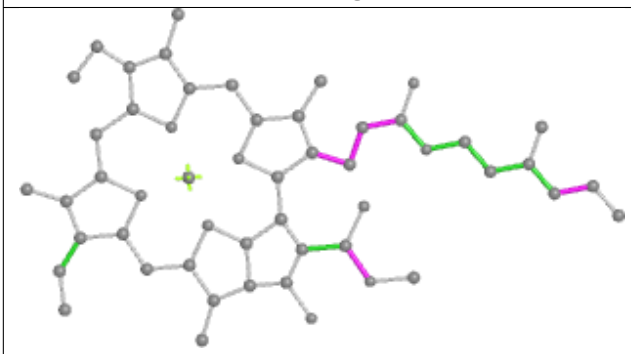
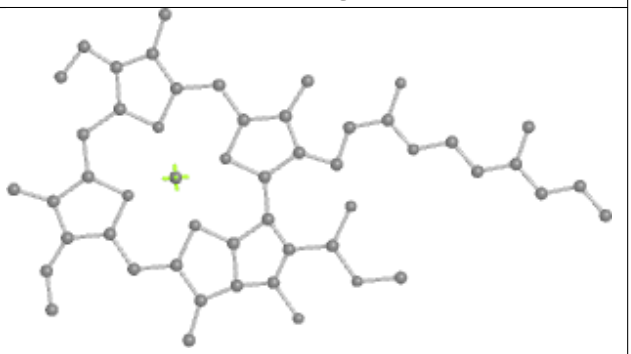
Bond angles

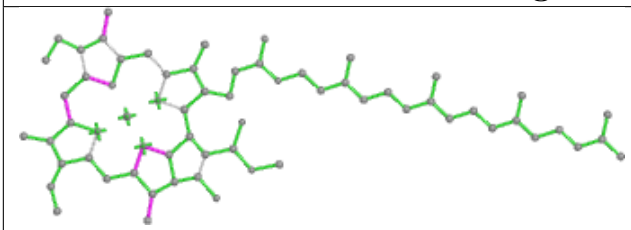
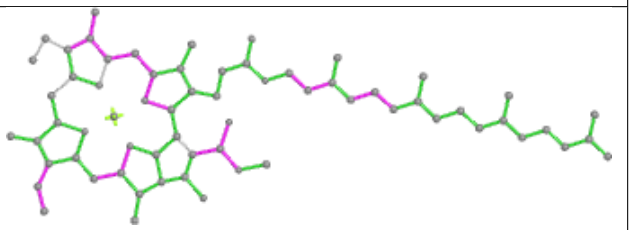
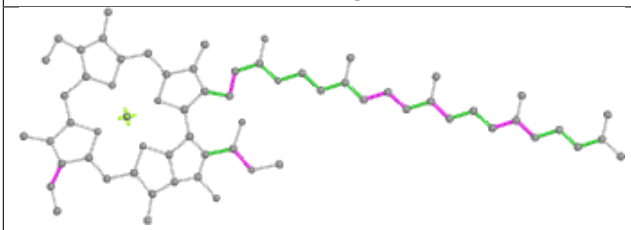
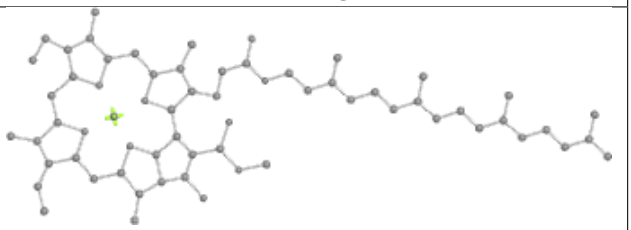


Torsions

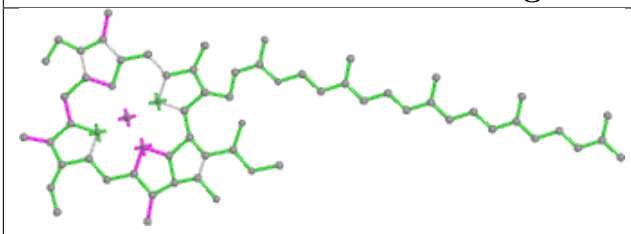


Rings

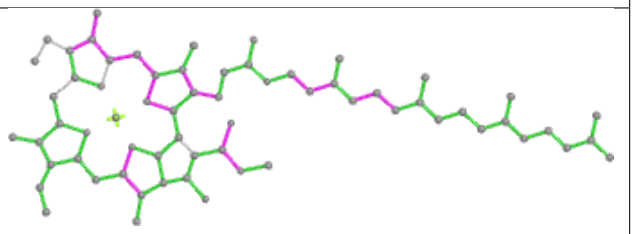
Ligand CLA F 202	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA i 305	
 Bond lengths	 Bond angles
 Torsions	 Rings

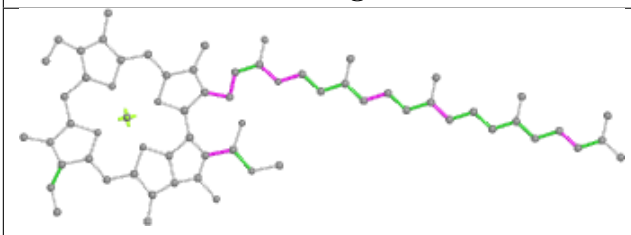
Ligand CLA A 805



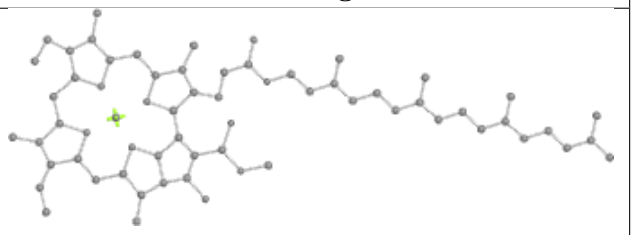
Bond lengths



Bond angles

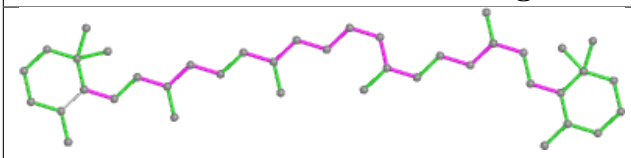


Torsions

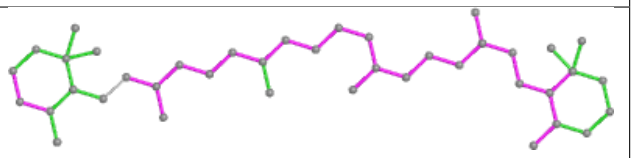


Rings

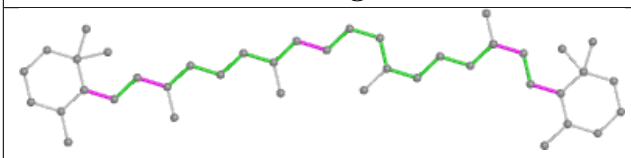
Ligand WVN A 847



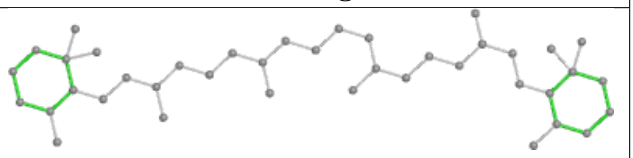
Bond lengths



Bond angles

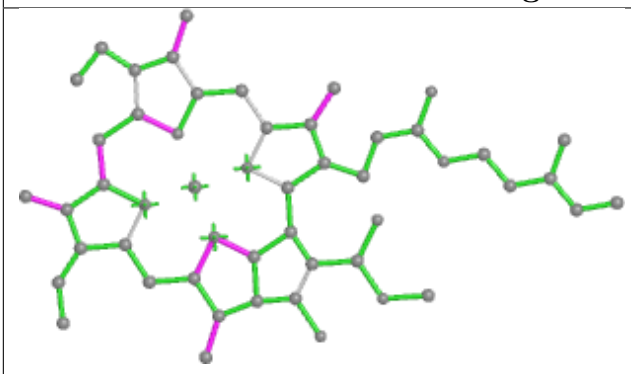


Torsions

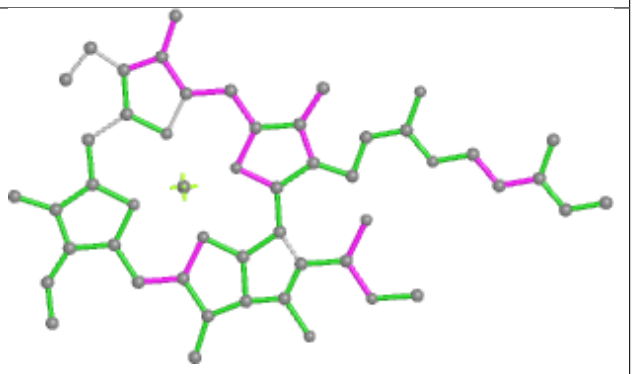


Rings

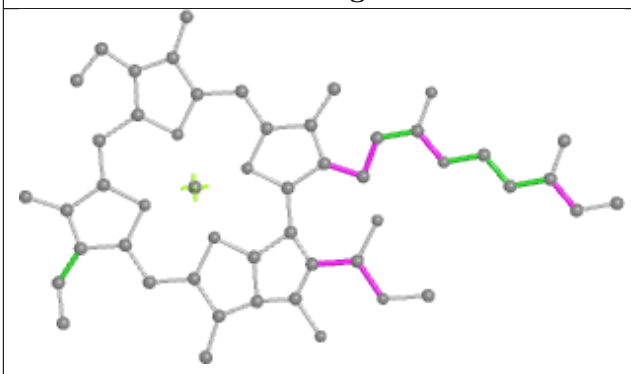
Ligand CLA m 609



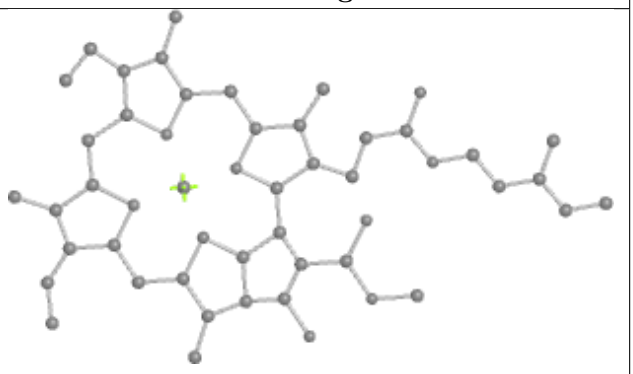
Bond lengths



Bond angles

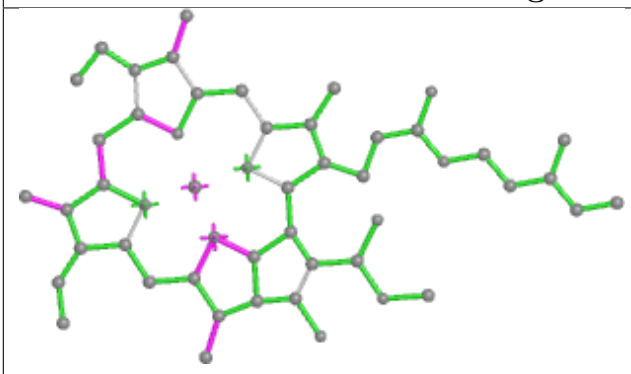


Torsions

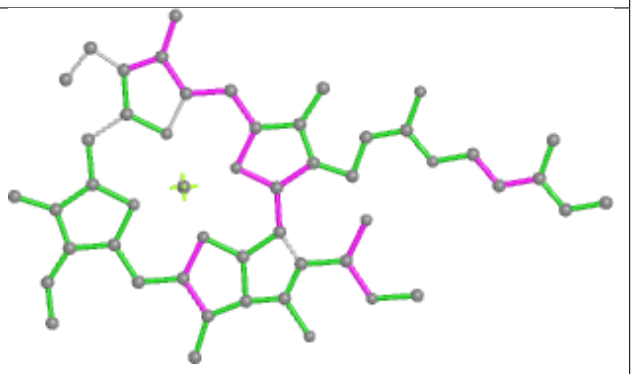


Rings

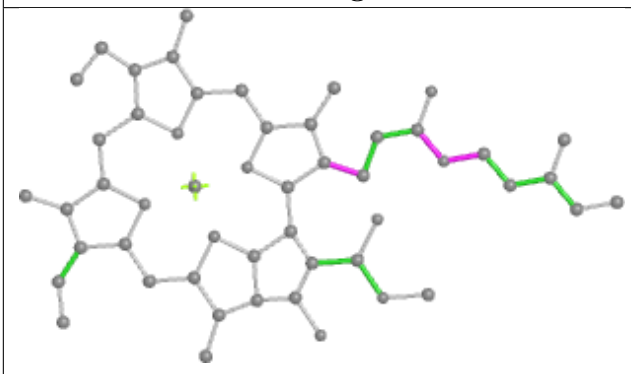
Ligand CLA b 612



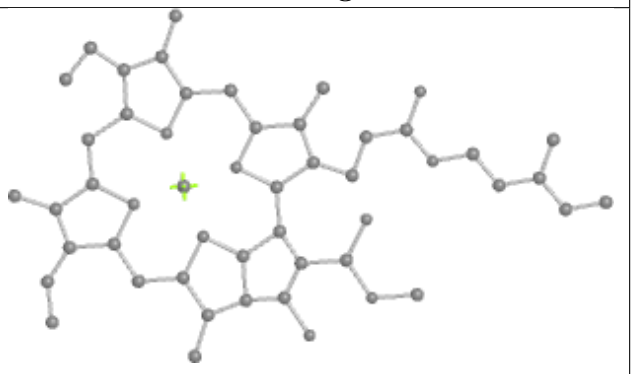
Bond lengths



Bond angles

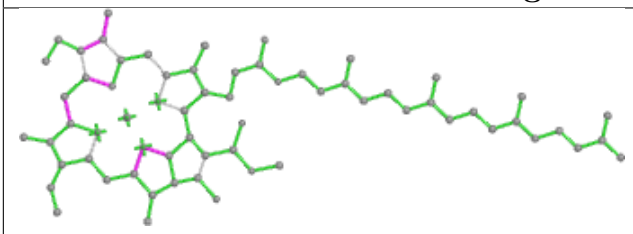


Torsions

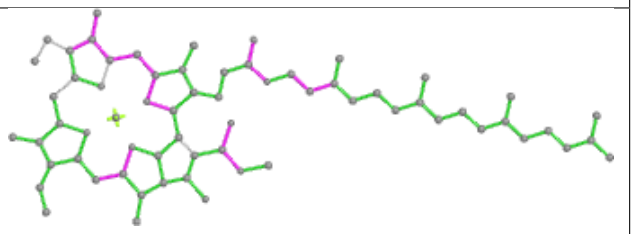


Rings

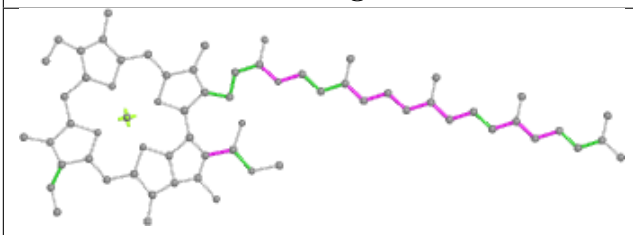
Ligand CLA A 840



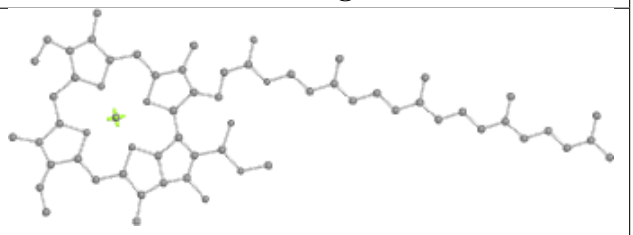
Bond lengths



Bond angles

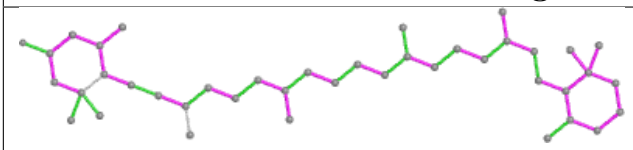


Torsions



Rings

Ligand IHT b 616



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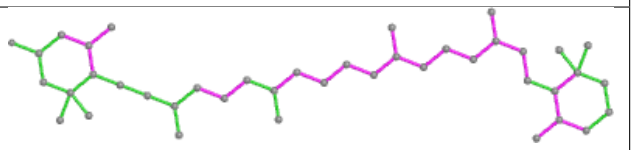
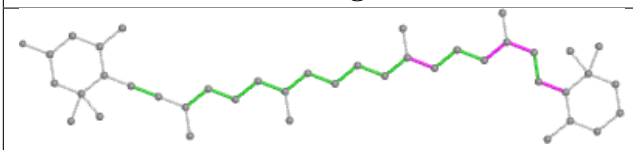


Bond angles



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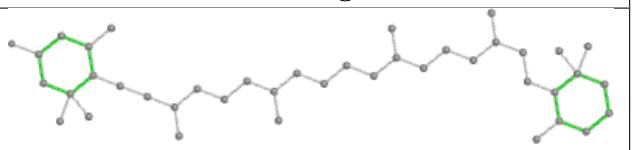
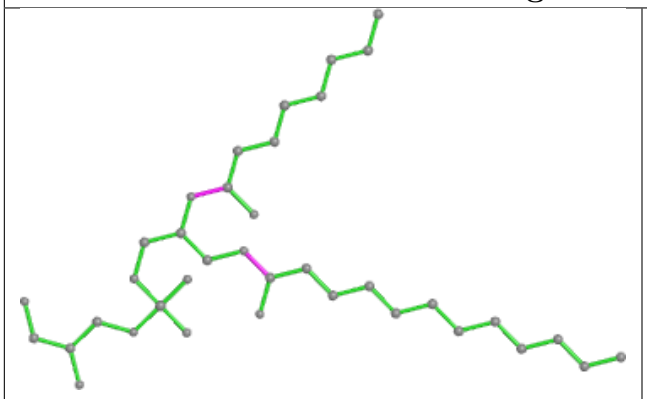


Rings

Ligand LHG d 317



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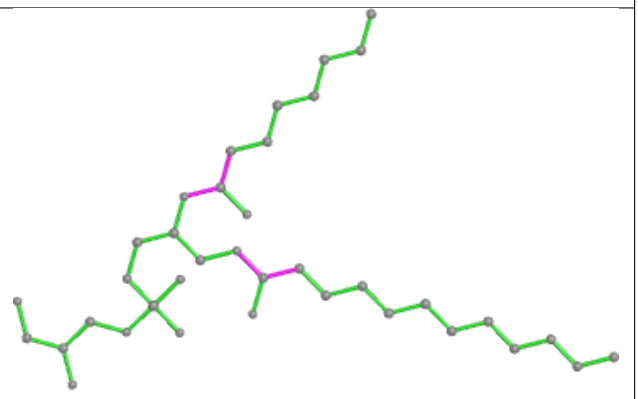
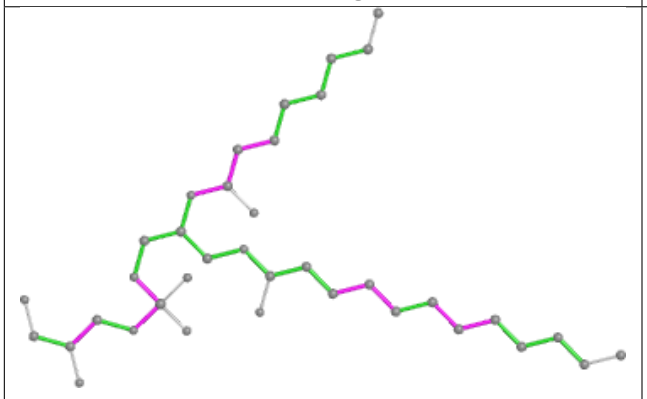


Bond angles



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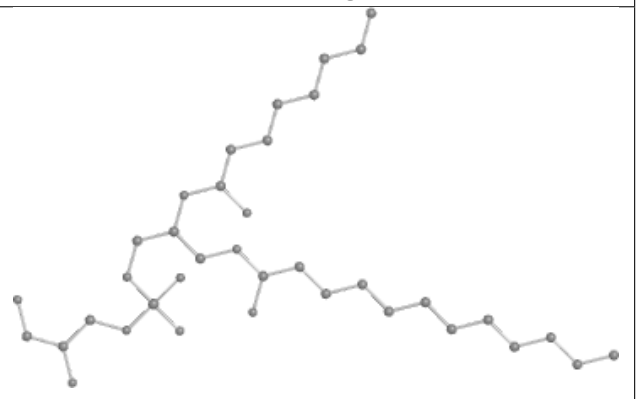
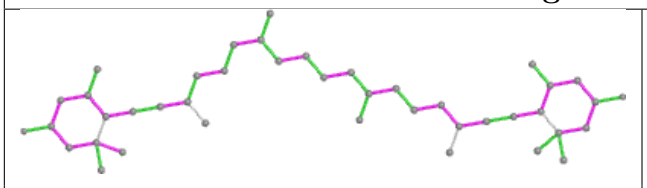
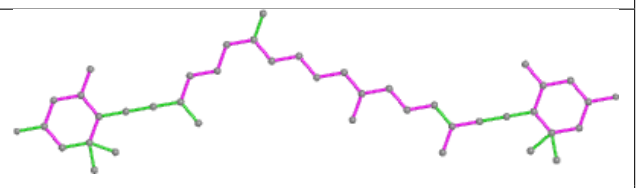


Rings

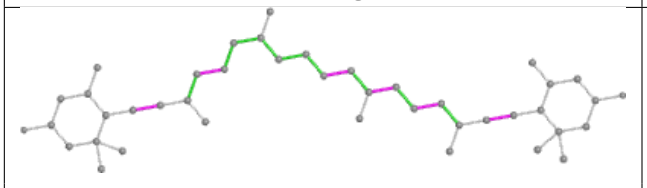
Ligand II0 d 313



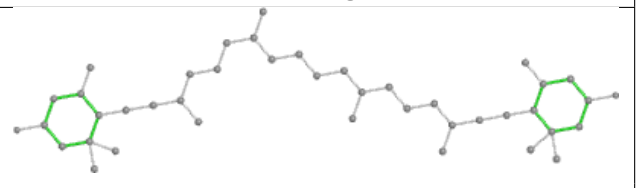
Bond lengths



Bond angles

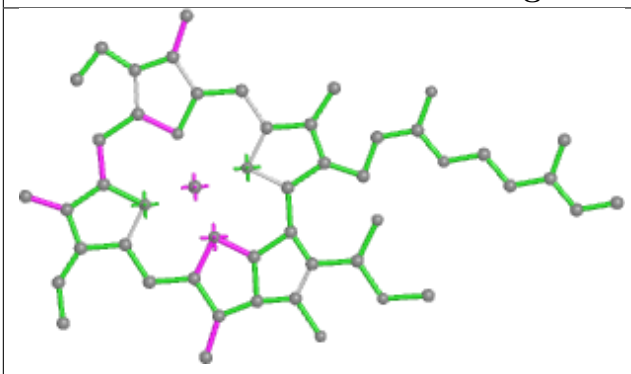


Torsions



Rings

Ligand CLA A 834



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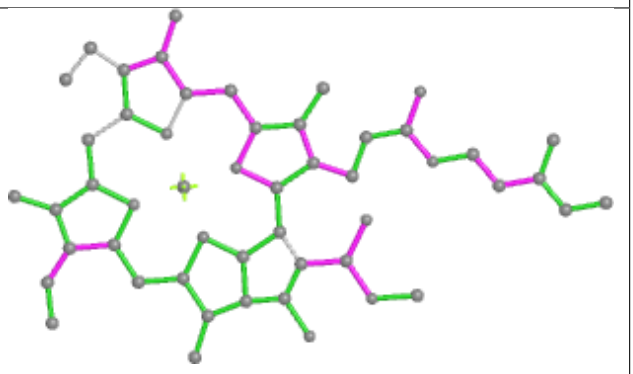
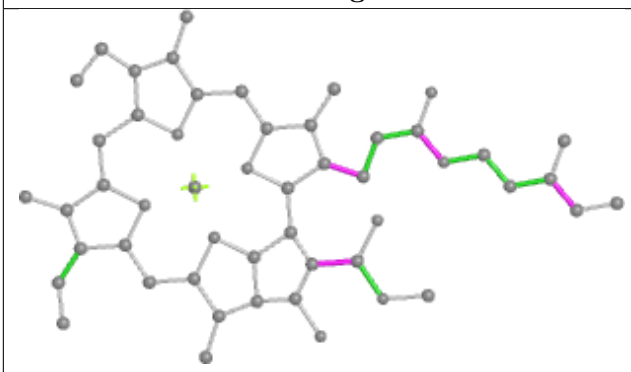


Bond angles



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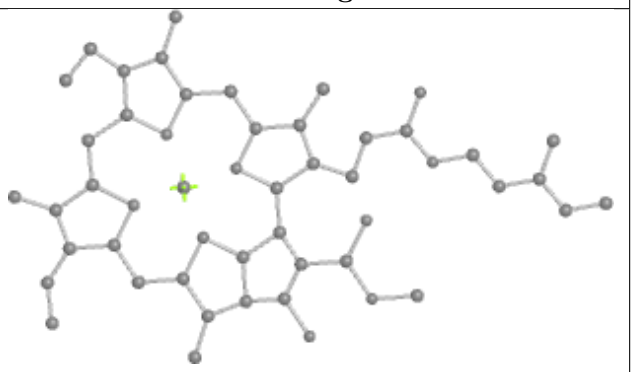
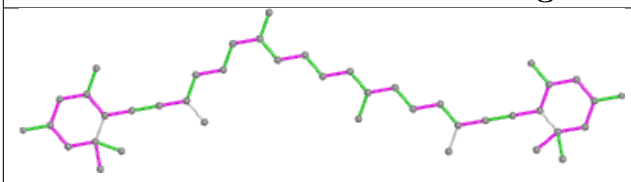


Rings

Ligand II0 m 614



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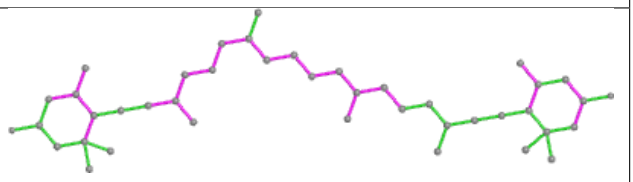
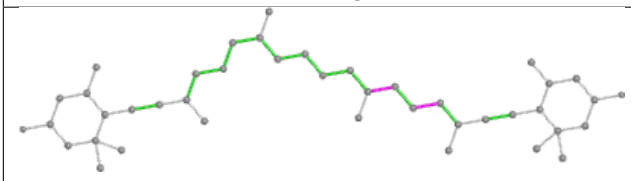


Bond angles



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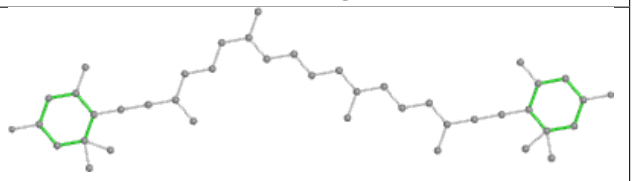
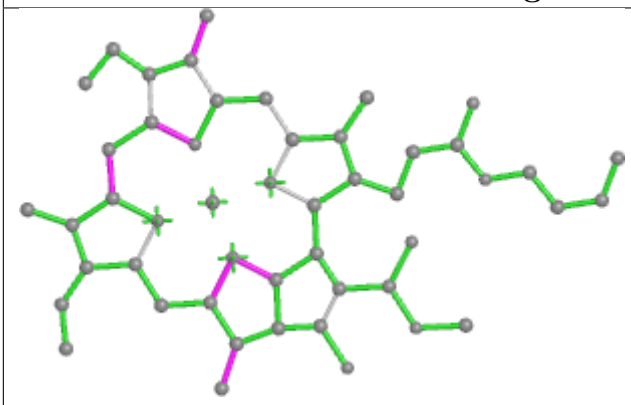
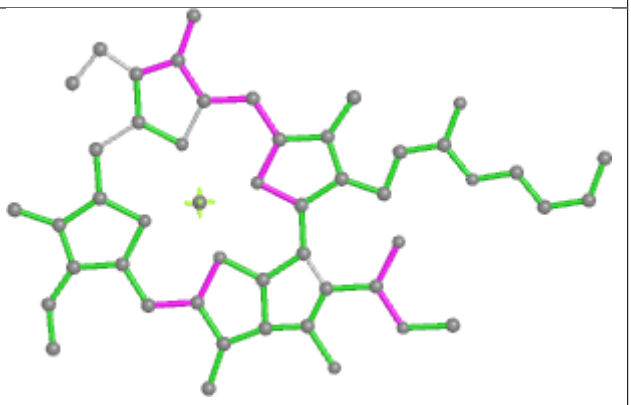
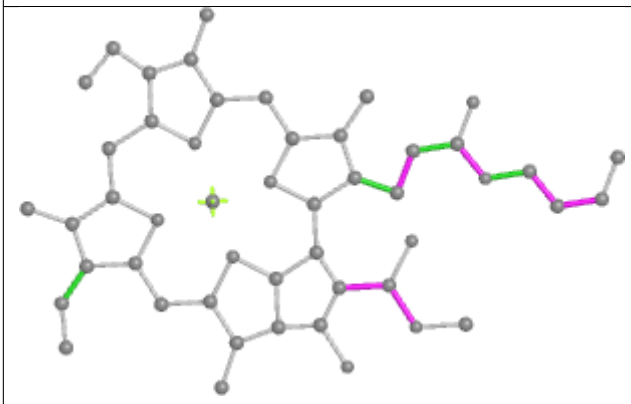
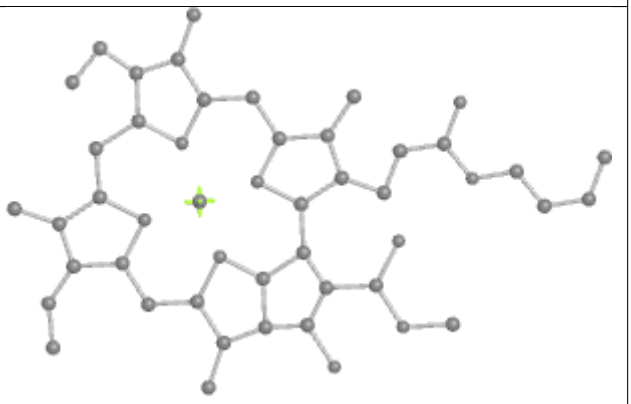
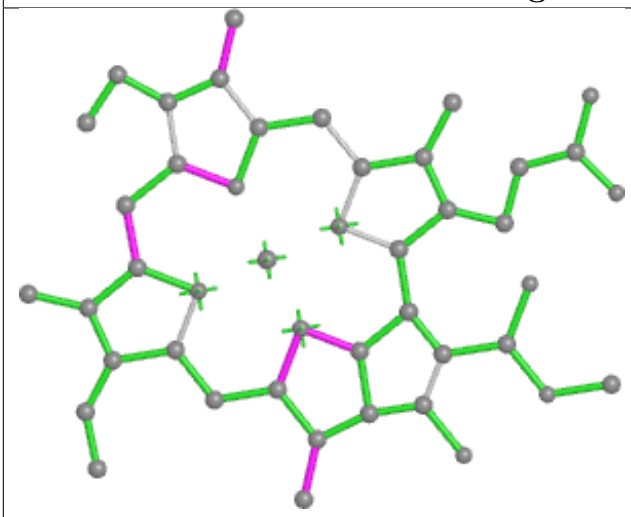


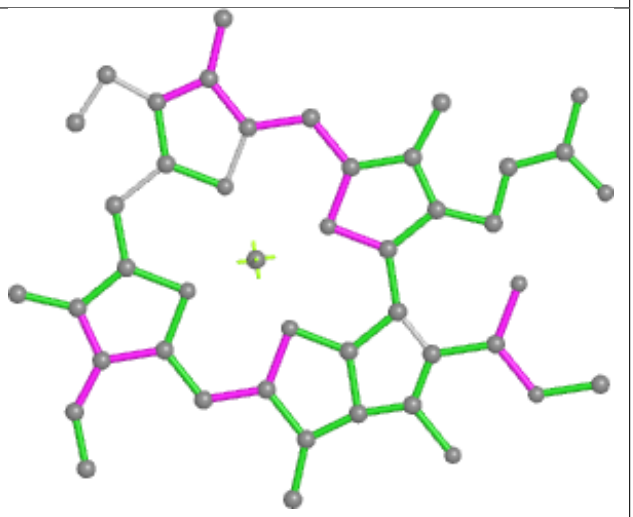
Rings

Ligand CLA A 821	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

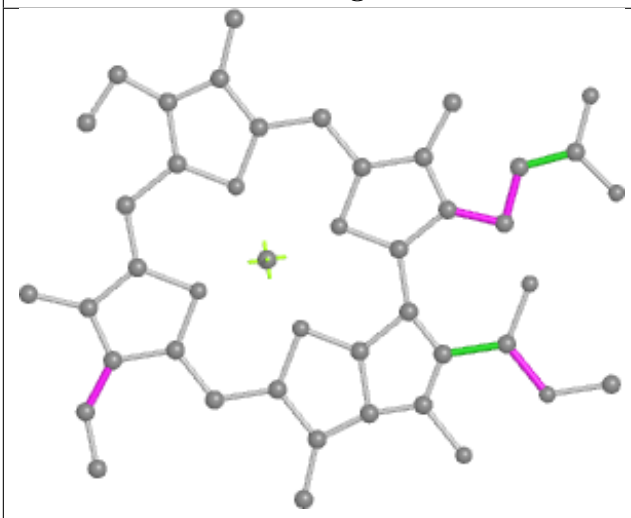
Ligand CLA a 307



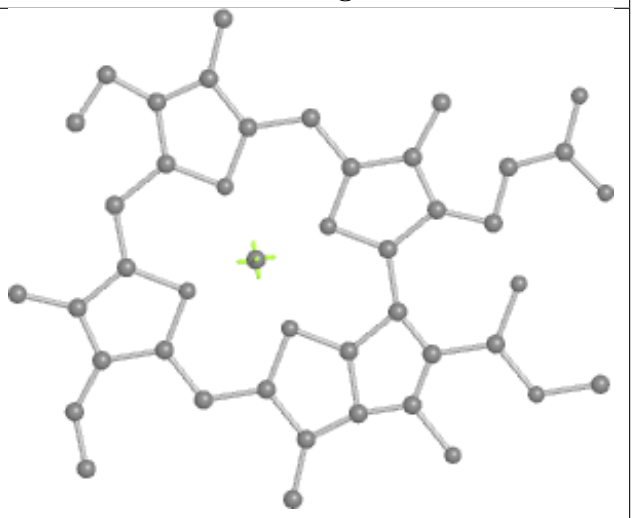
Bond lengths



Bond angles

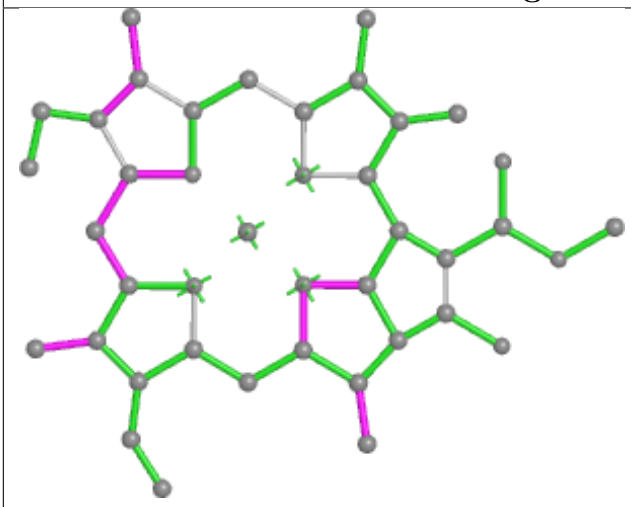


Torsions



Rings

Ligand CLA A 856



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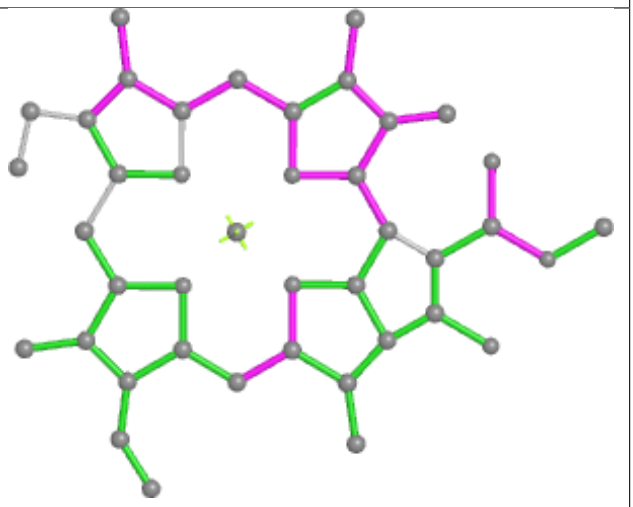
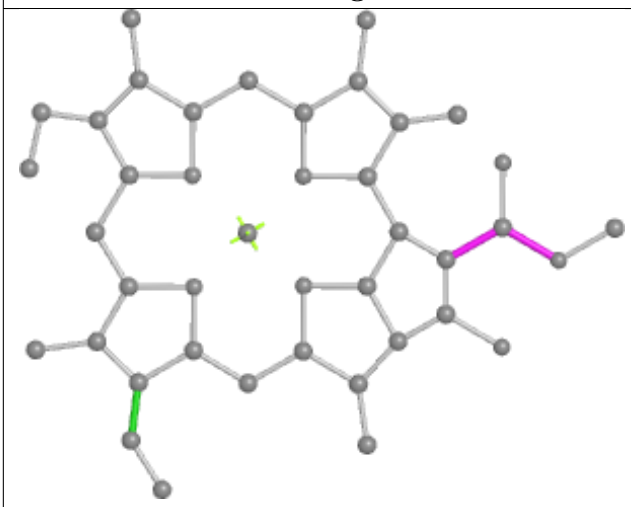


Bond angles



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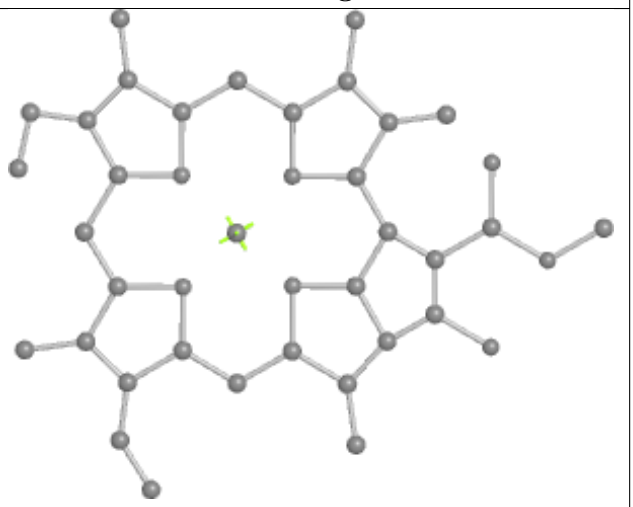
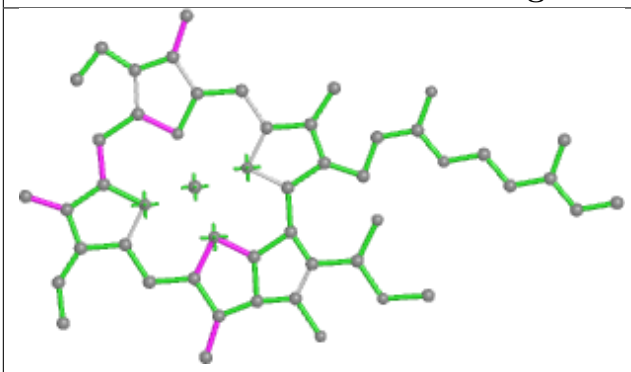


Rings

Ligand CLA b 609



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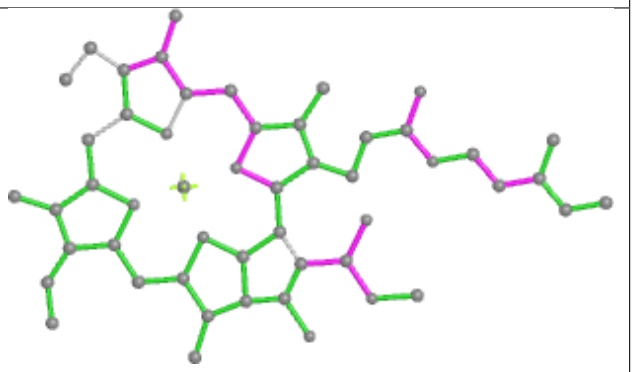
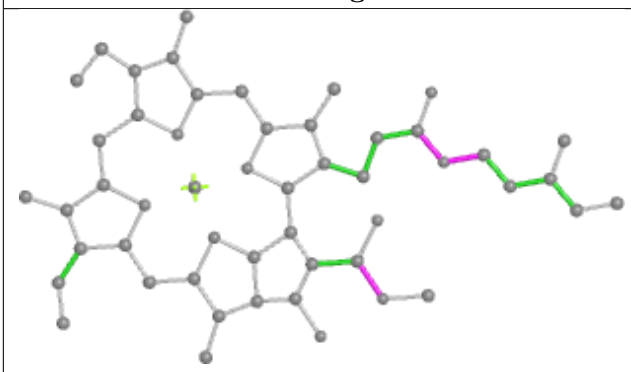
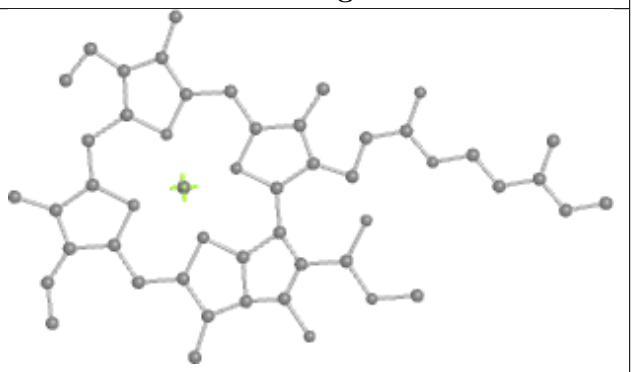


Bond angles

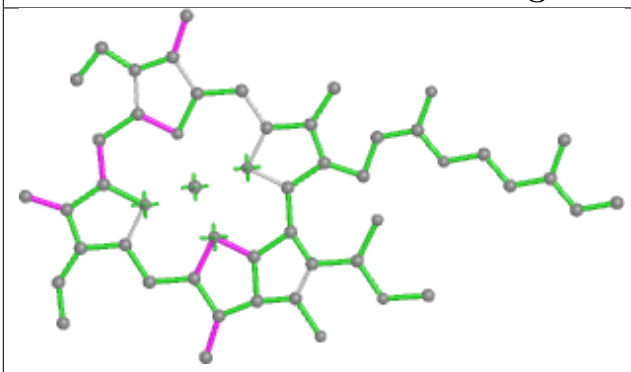


Torsions

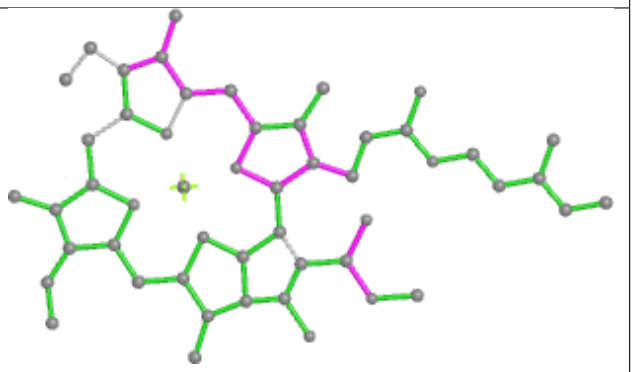


Rings

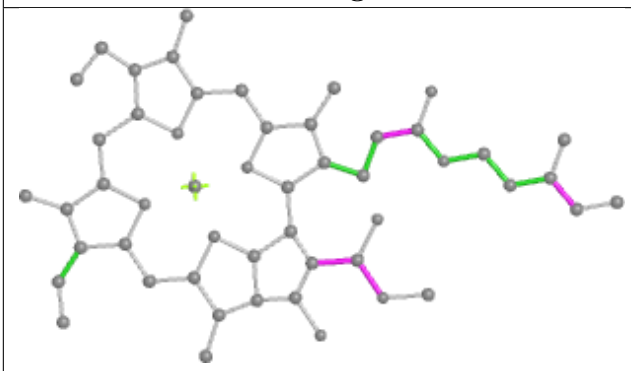
Ligand CLA a 305



Bond lengths



Bond angles



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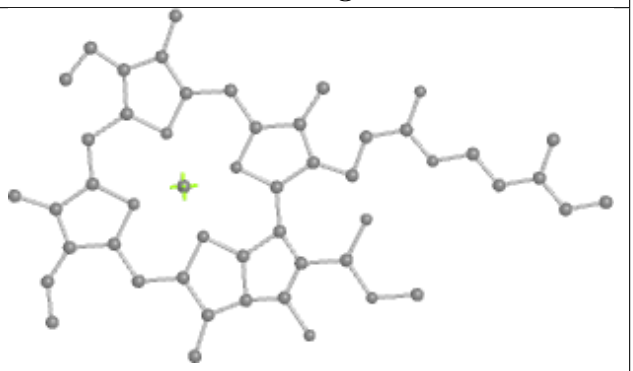
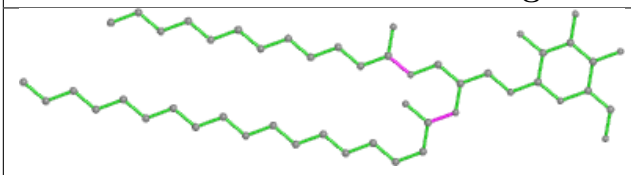
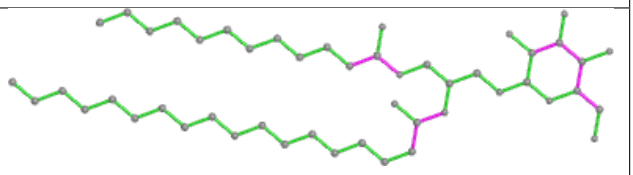
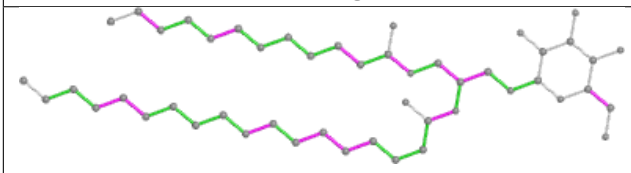


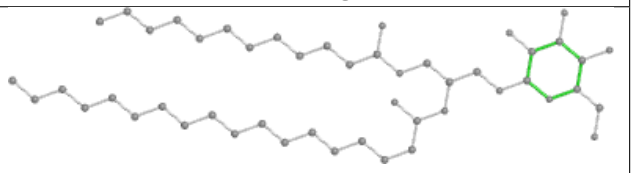
Rings

Ligand LMG b 620

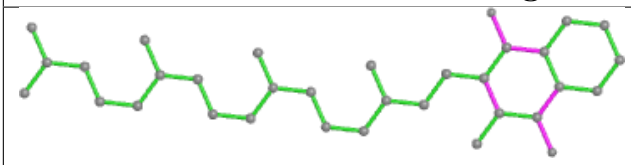

Bond lengths

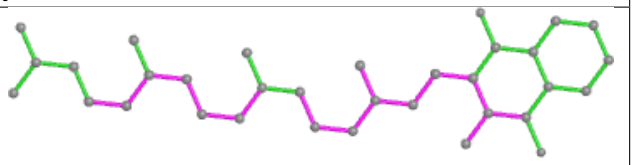

Bond angles

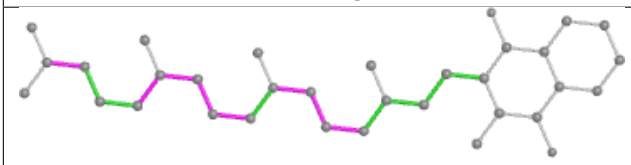

Torsions

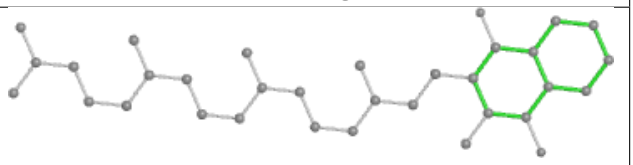

Rings

Ligand PQN B 842

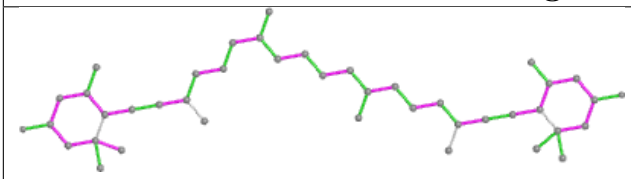

Bond lengths

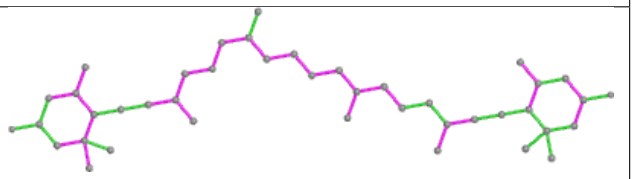

Bond angles

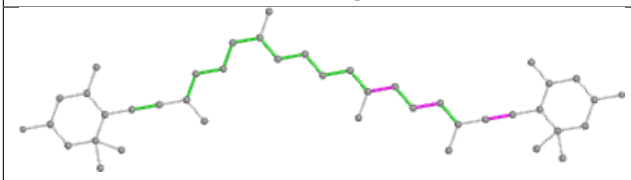

Torsions

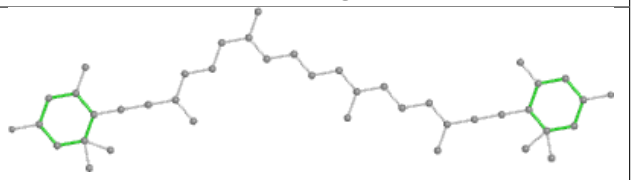

Rings

Ligand II0 c 613

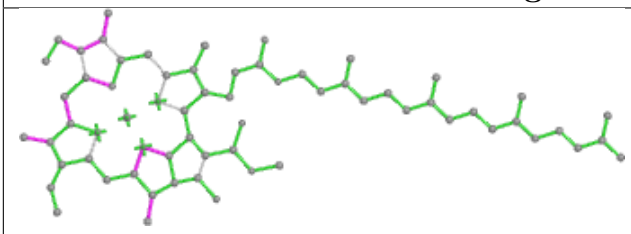

Bond lengths


Bond angles

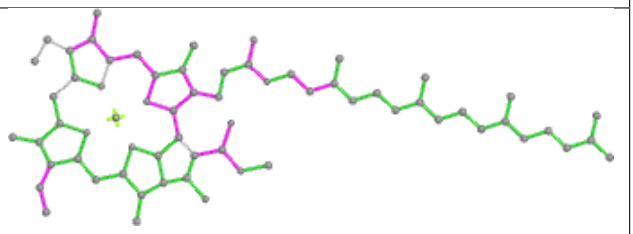

Torsions


Rings

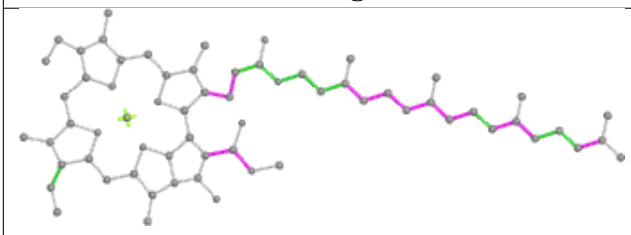
Ligand CLA B 812



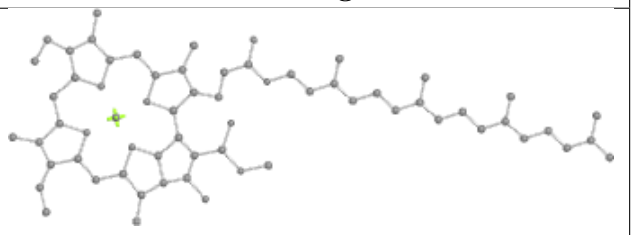
Bond lengths



Bond angles

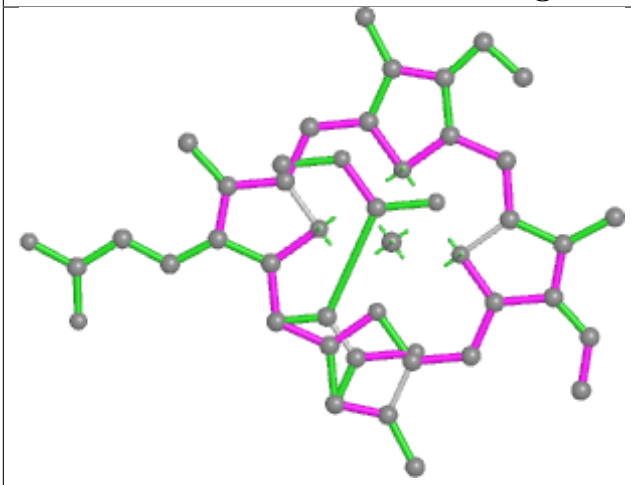


Torsions



Rings

Ligand KC2 l 311



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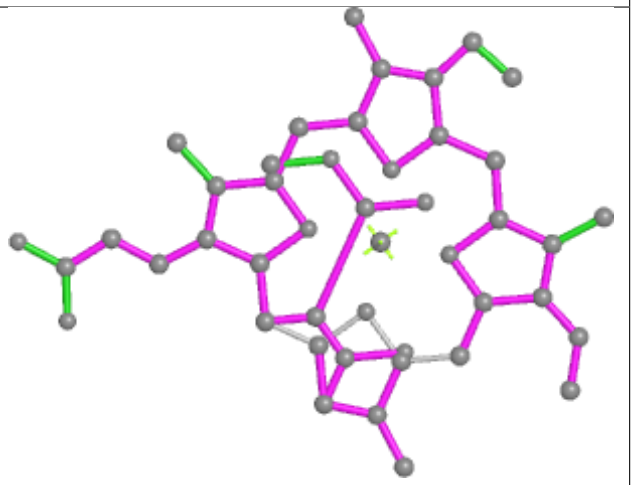
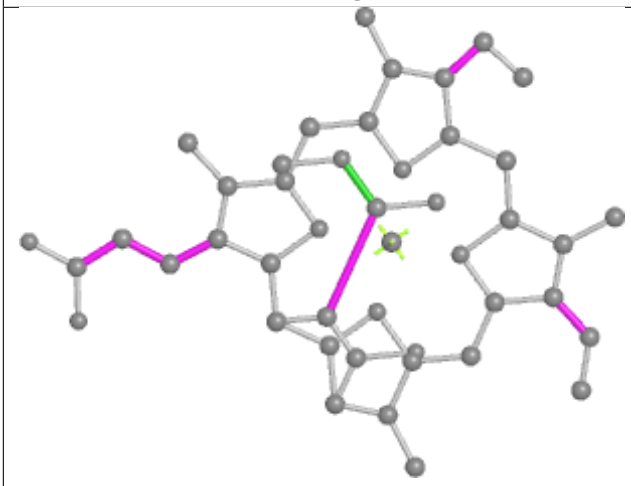
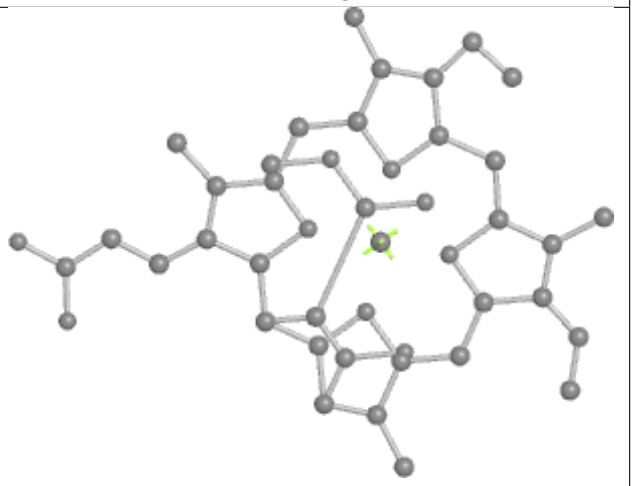


Bond angles

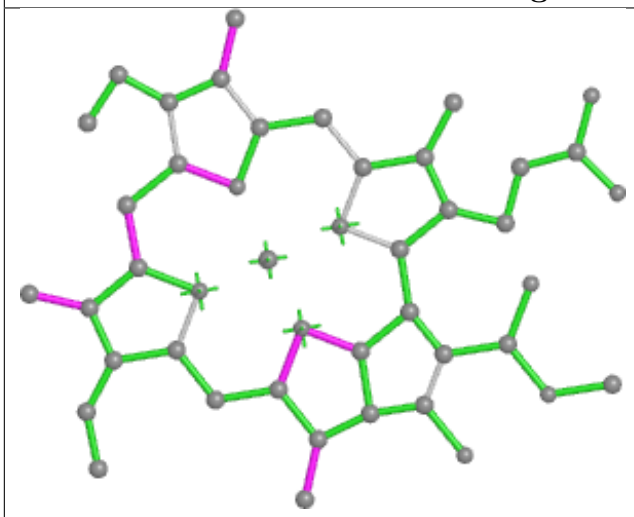


Torsions



Rings

Ligand CLA c 611



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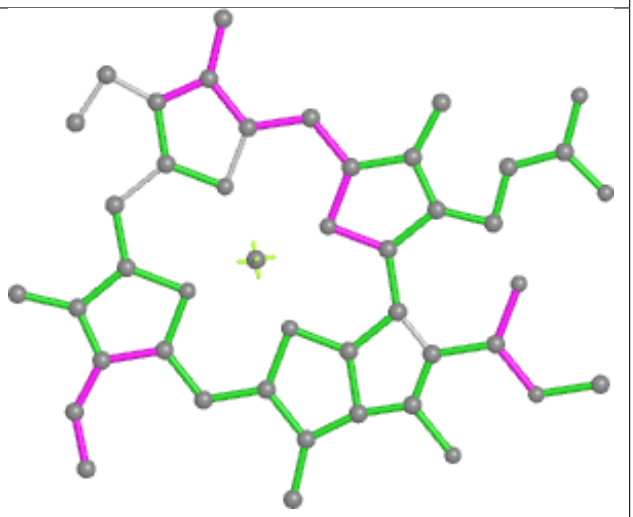

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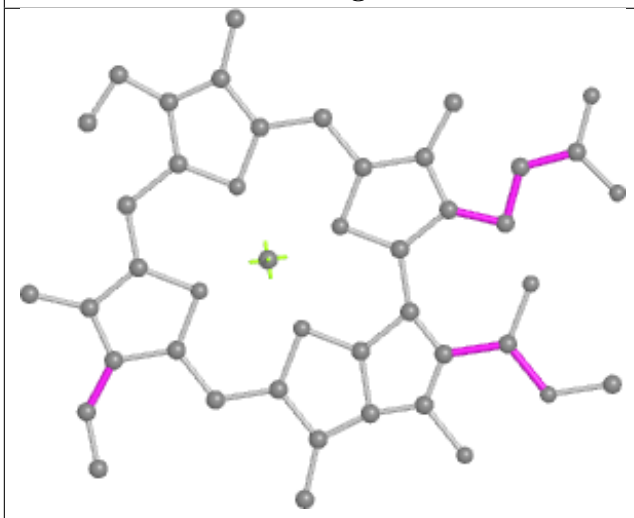

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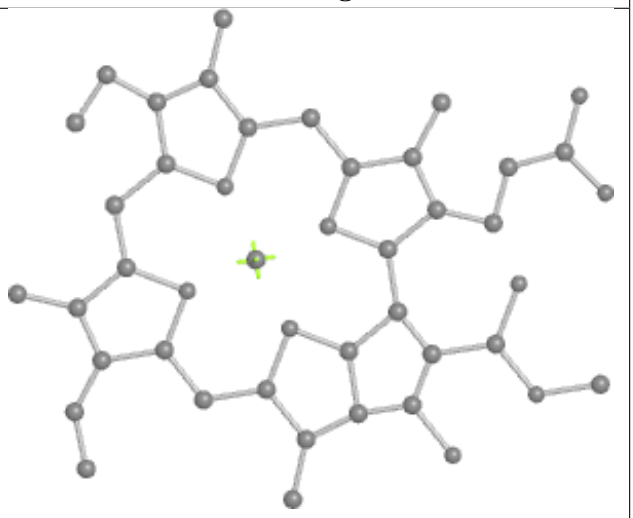
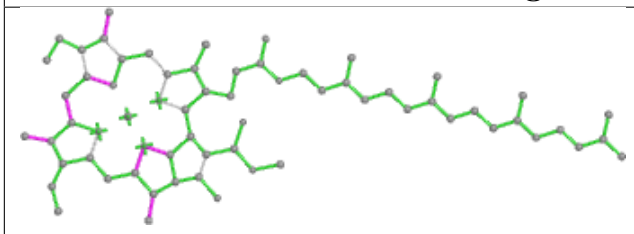


Rings

Ligand CLA A 802



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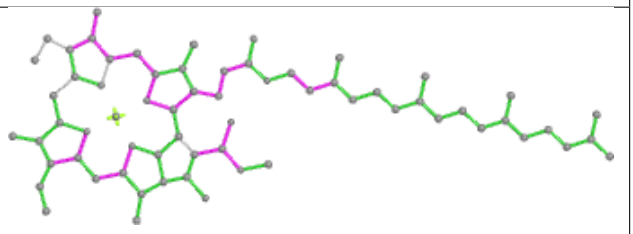

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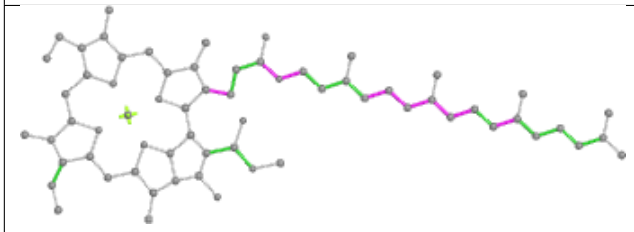

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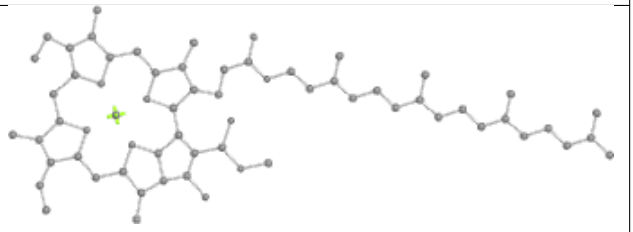
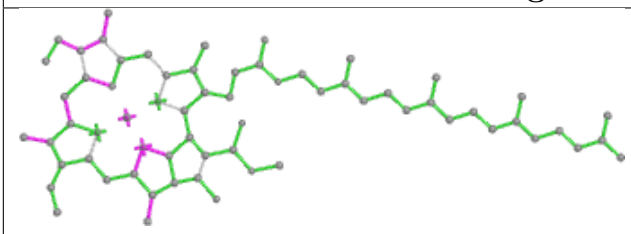


Rings

Ligand CLA h 301



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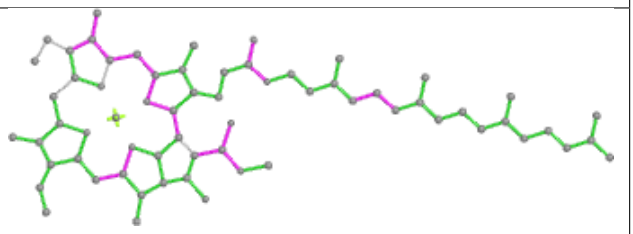

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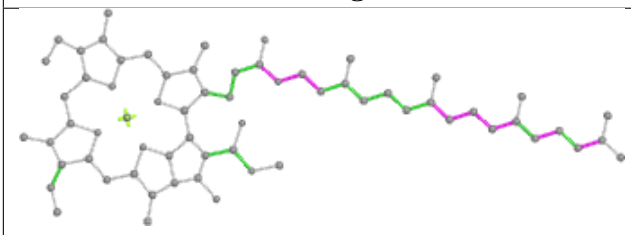

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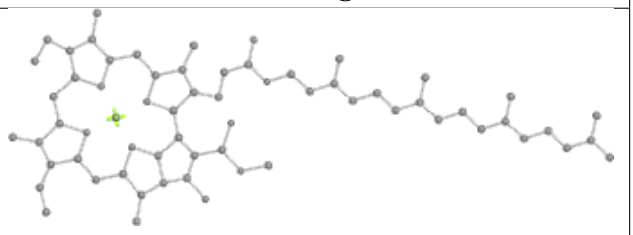
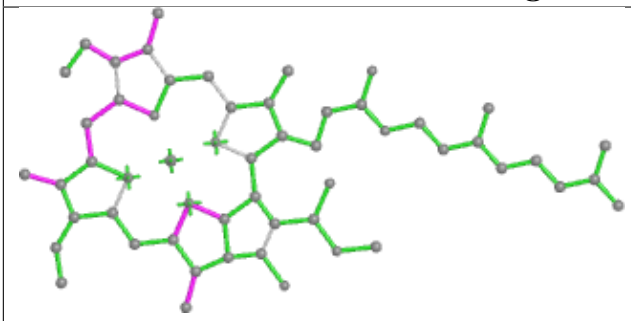


Rings

Ligand CLA B 820



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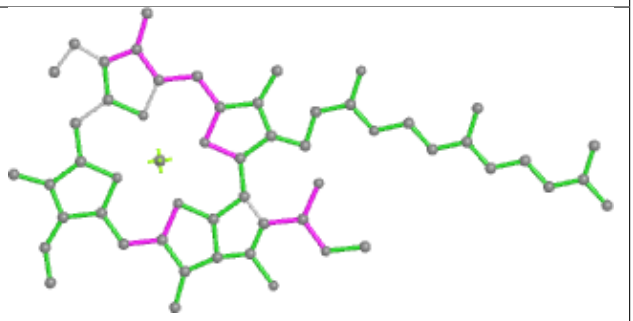
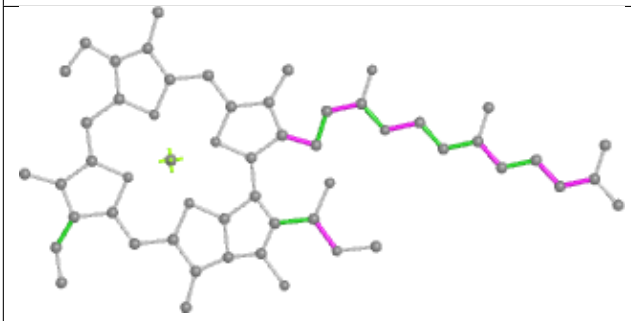


Bond angles



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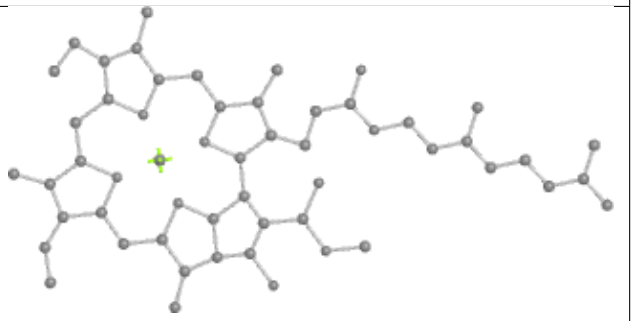
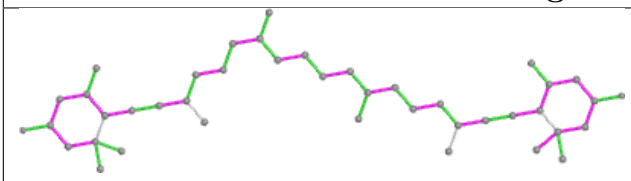


Rings

Ligand II0 i 315



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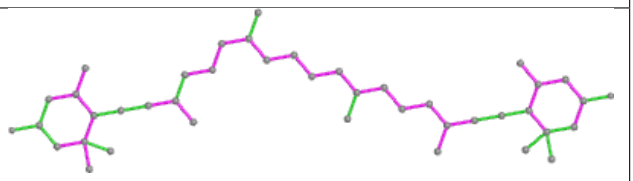
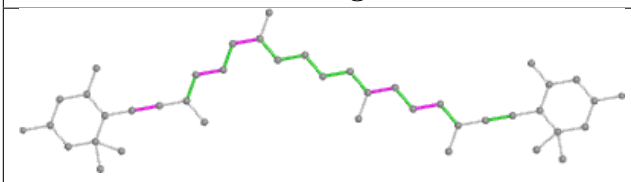


Bond angles



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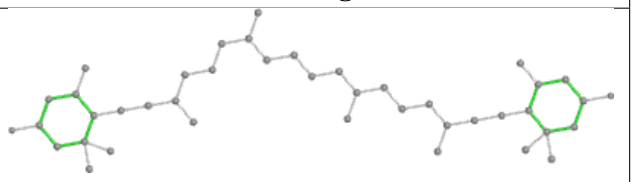
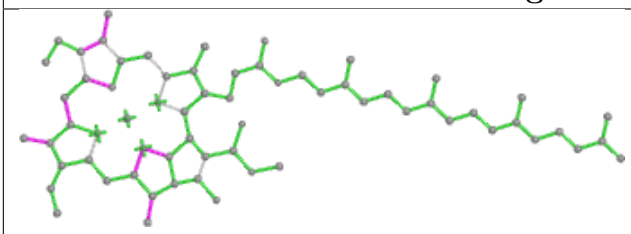
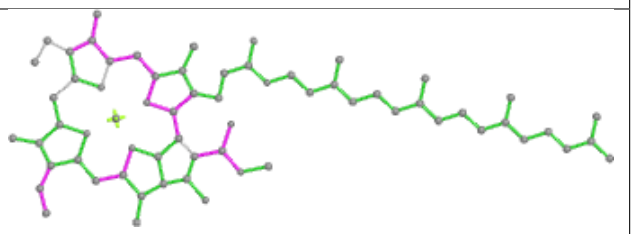


Rings

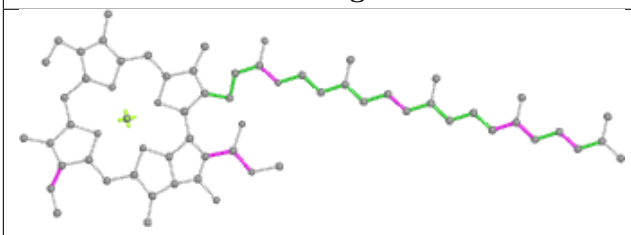
Ligand CLA F 201



Bond lengths



Bond angles



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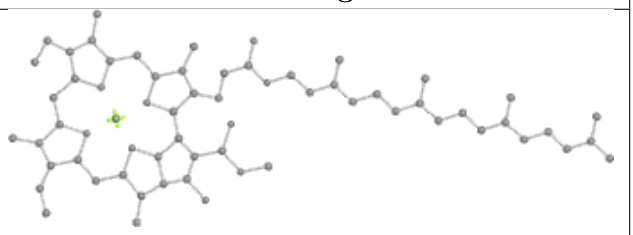
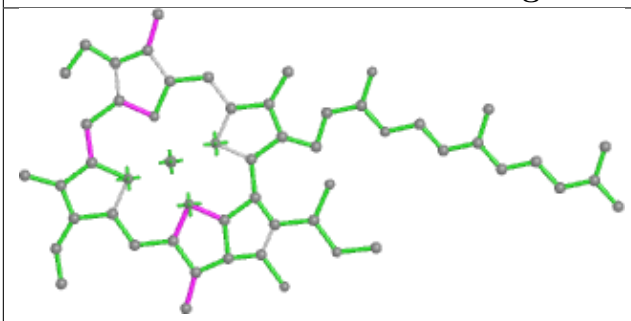


Rings

Ligand CLA m 610



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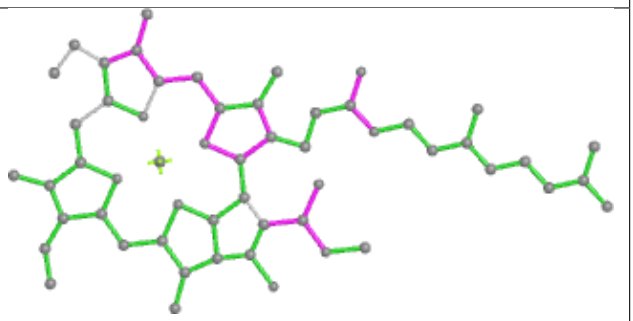
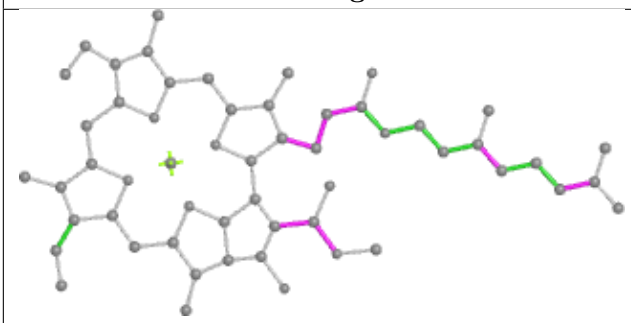


Bond angles



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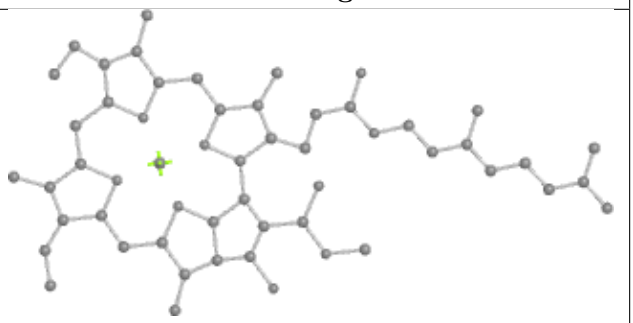
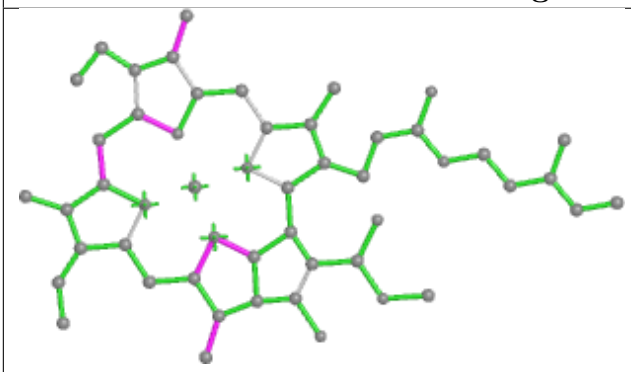


Rings

Ligand CLA j 603



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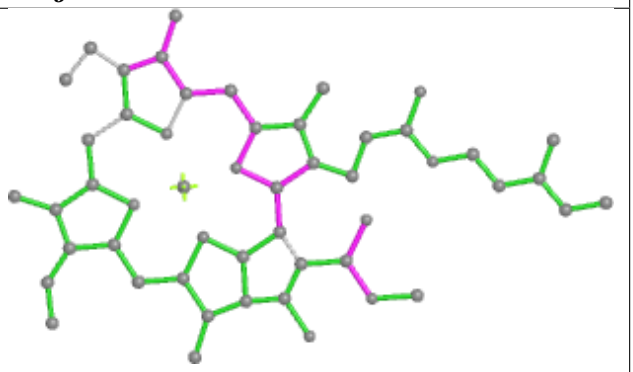
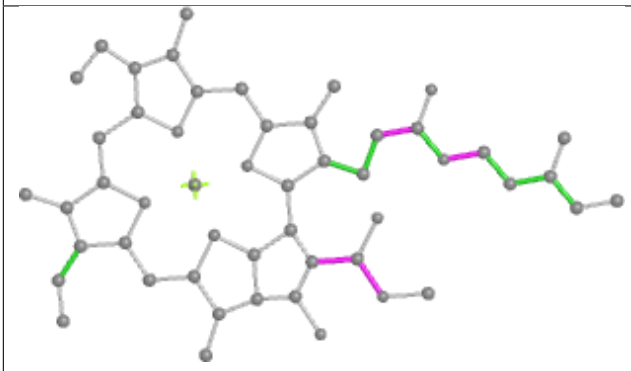


Bond angles



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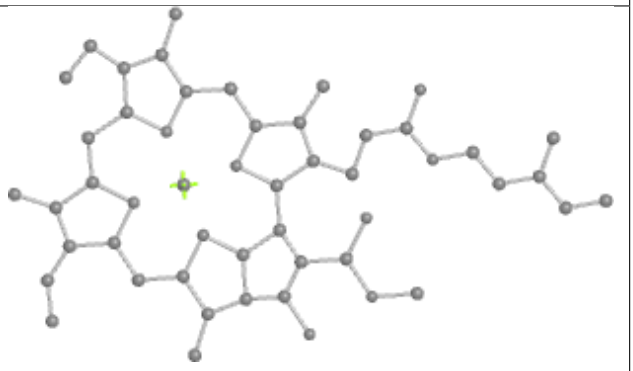
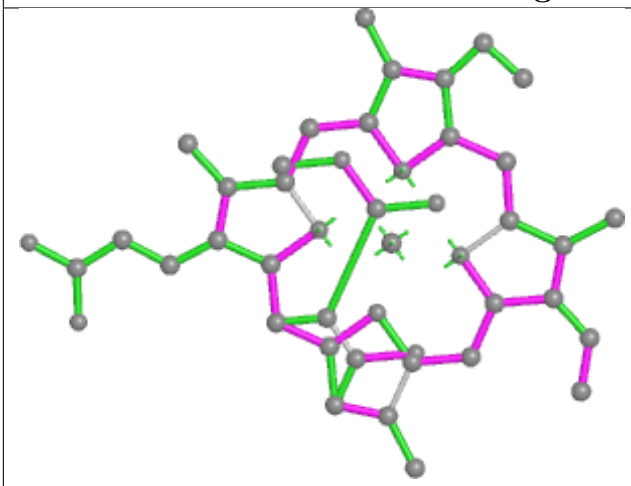


Rings

Ligand KC2 i 310



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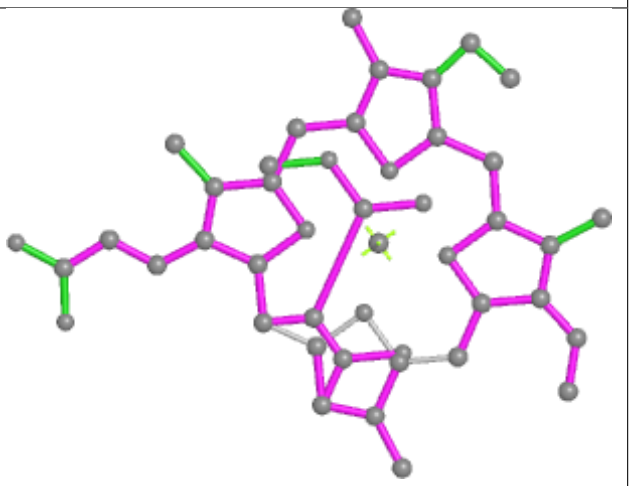
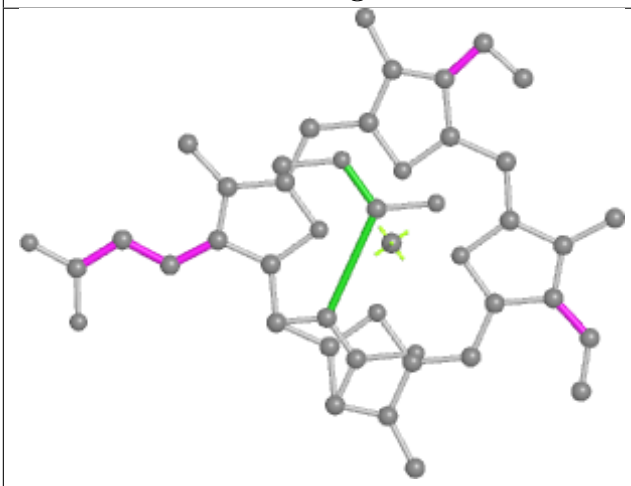


Bond angles



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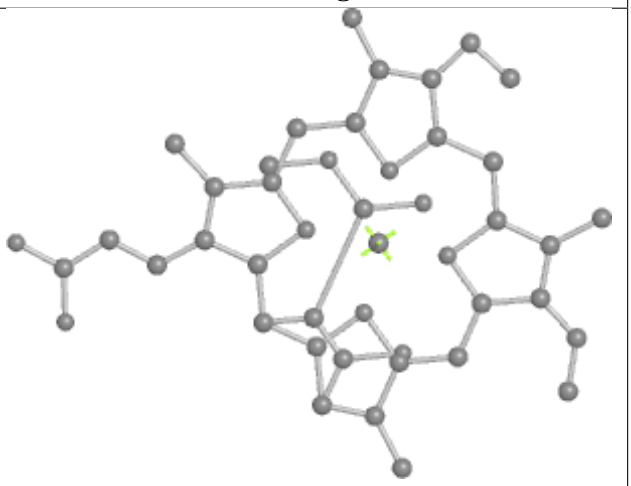
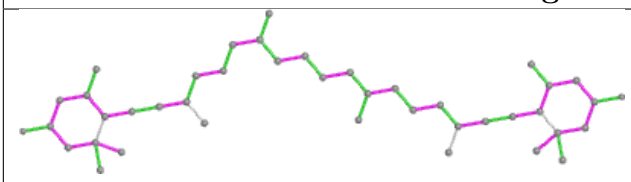


Rings

Ligand II0 d 315



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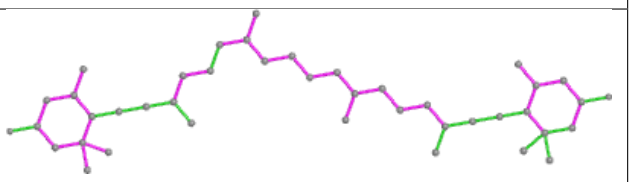
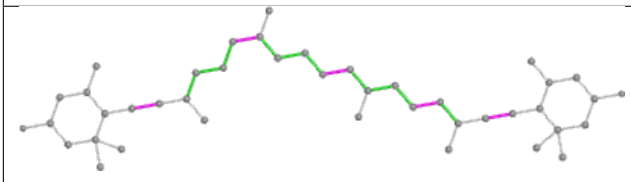


Bond angles



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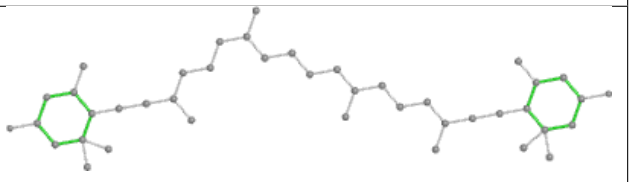
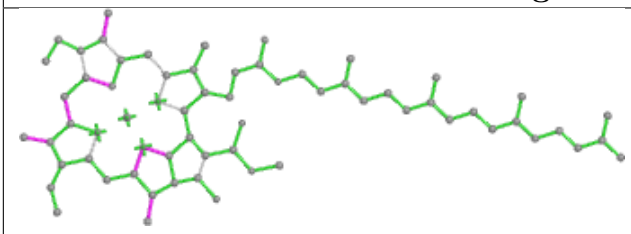


Rings

Ligand CLA l 306



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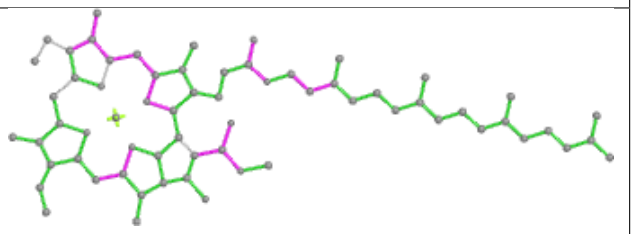
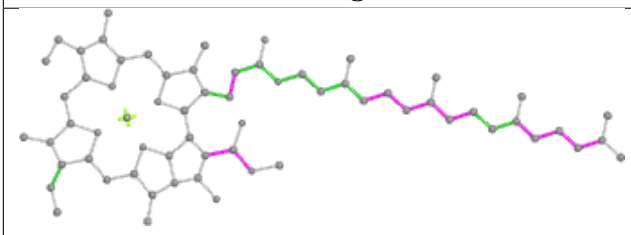


Bond angles



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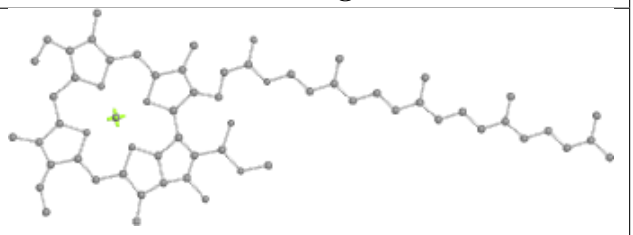
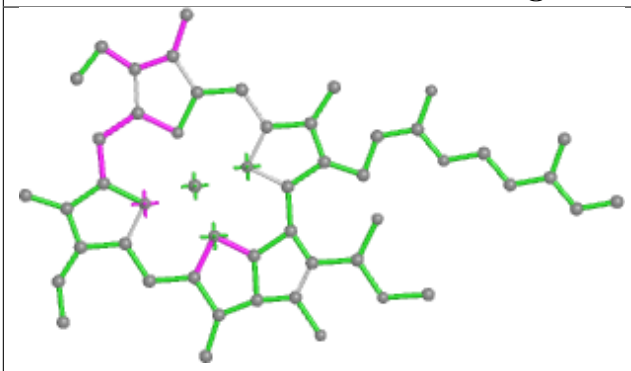
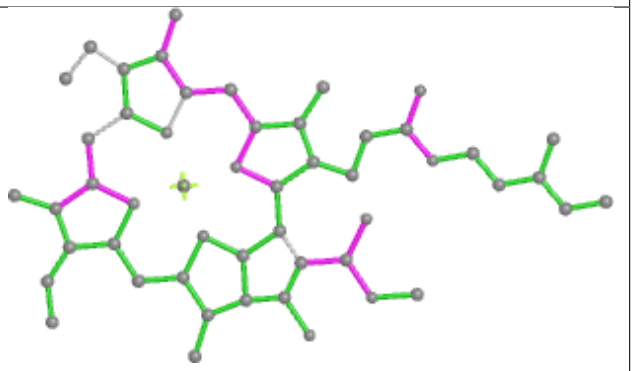


Rings

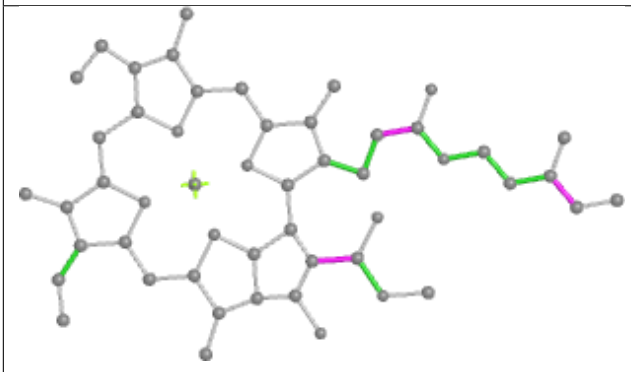
Ligand CLA d 305



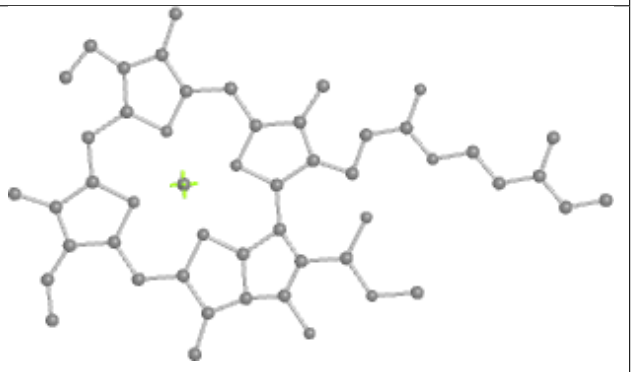
Bond lengths



Bond angles

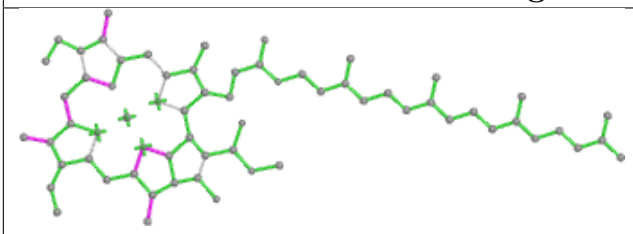


Torsions

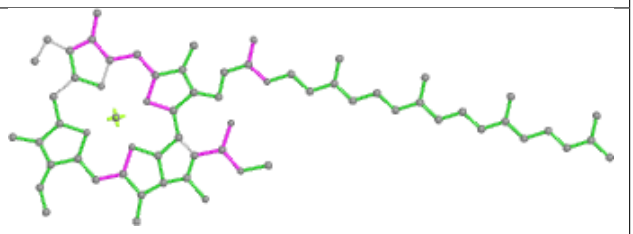


Rings

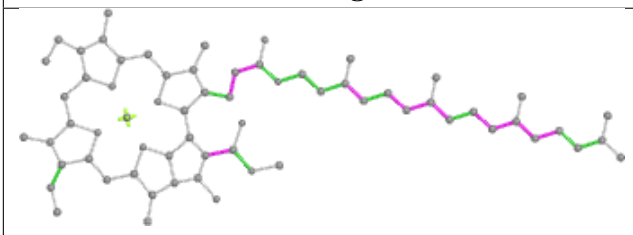
Ligand CLA k 604



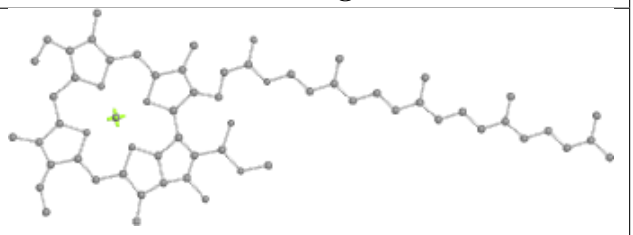
Bond lengths



Bond angles

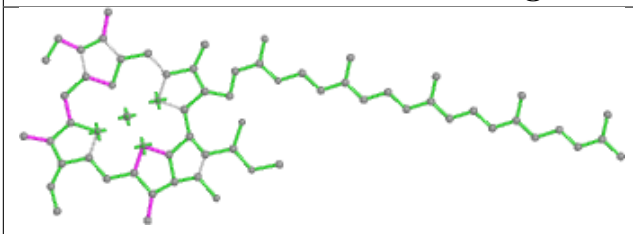


Torsions



Rings

Ligand CLA B 804



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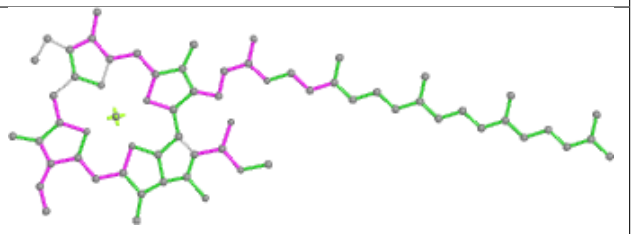
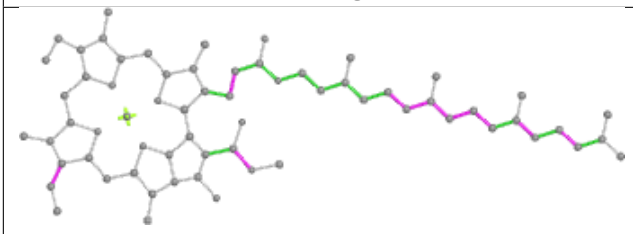
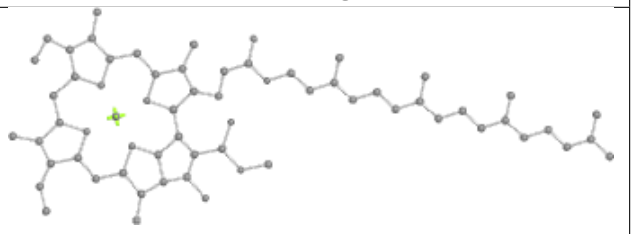


Bond angles

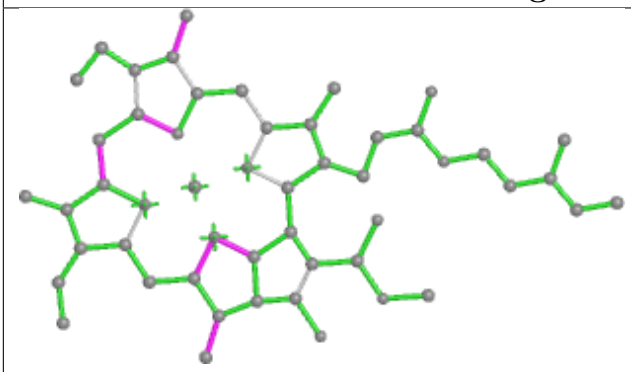


Torsions



Rings

Ligand CLA c 601



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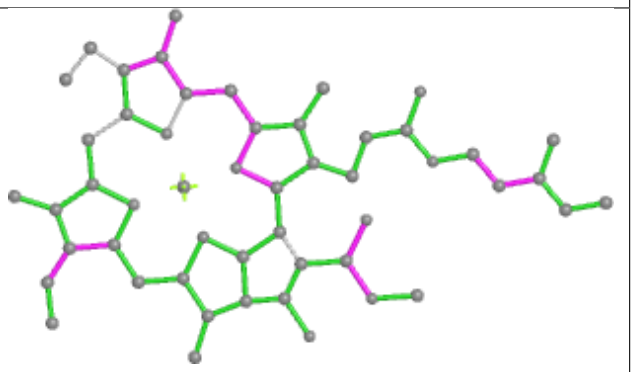
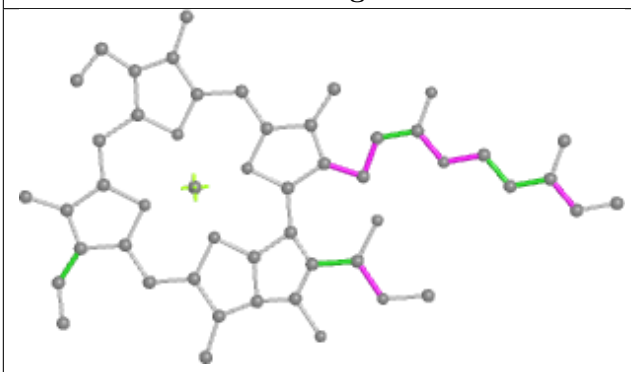
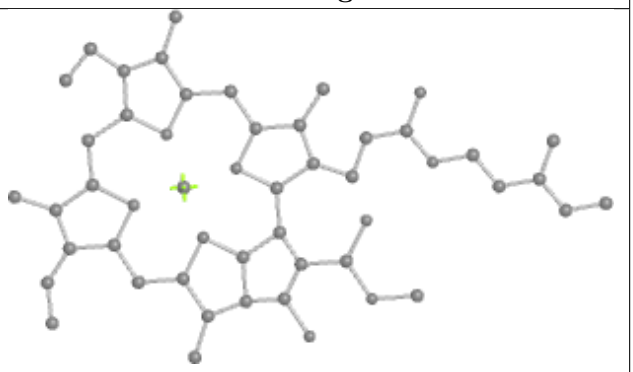


Bond angles

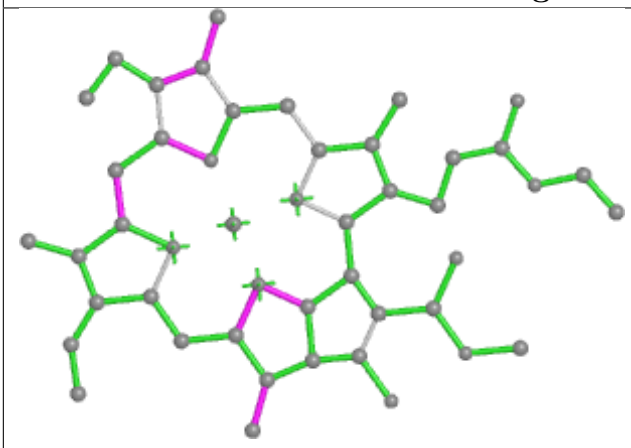


Torsions

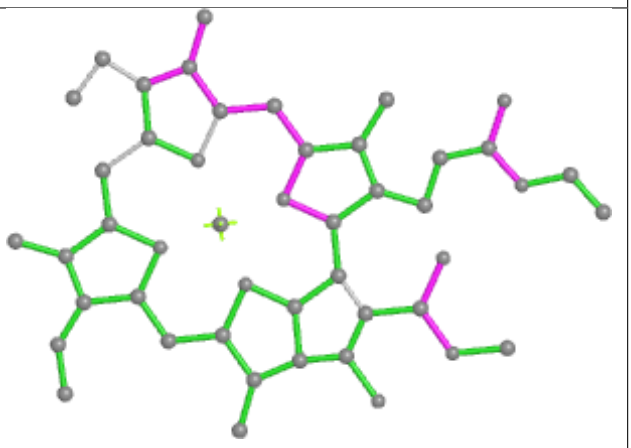


Rings

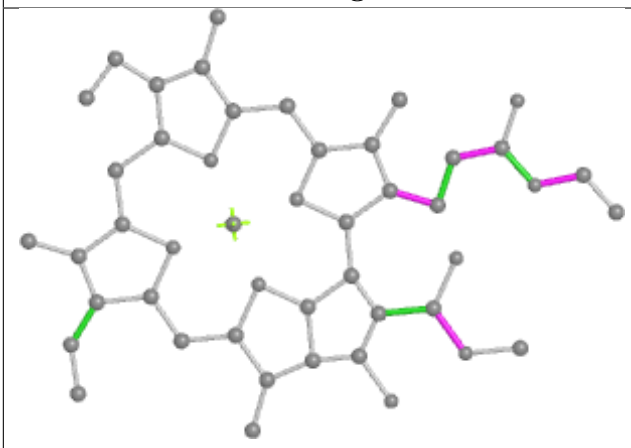
Ligand CLA l 303



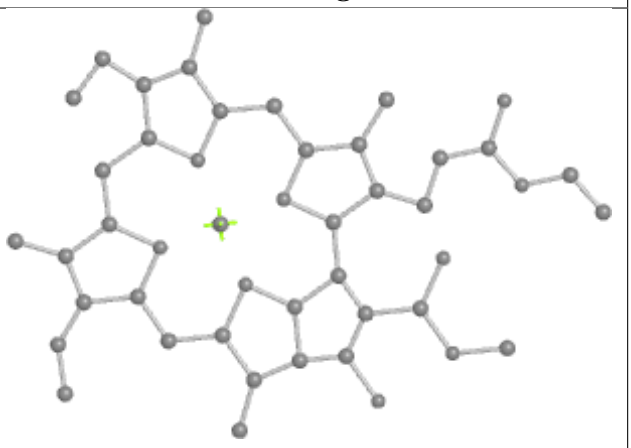
Bond lengths



Bond angles

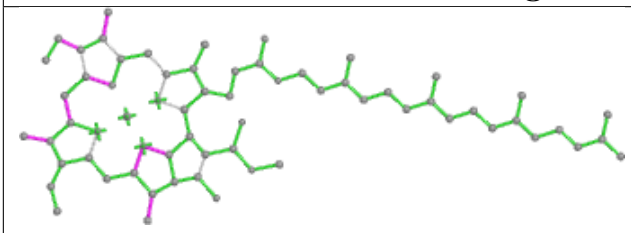


Torsions

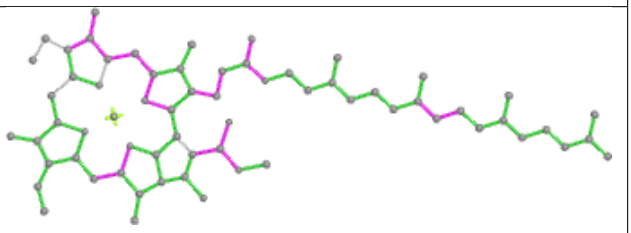


Rings

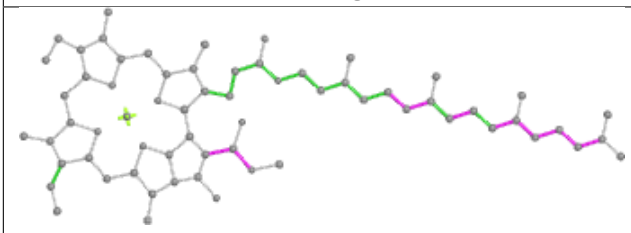
Ligand CLA B 833



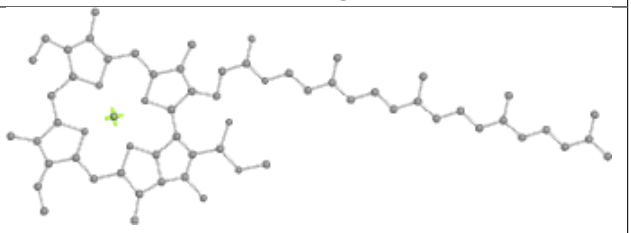
Bond lengths



Bond angles

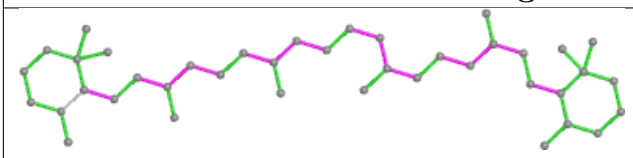


Torsions



Rings

Ligand WVN L 205



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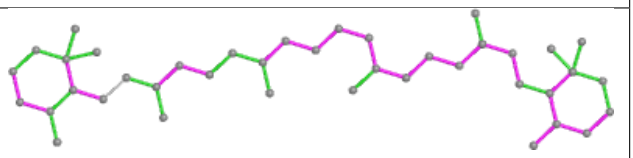
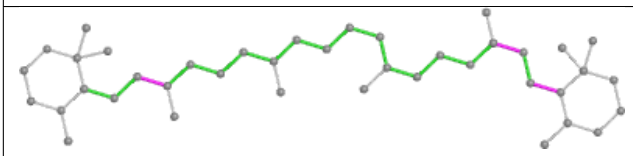


Bond angles



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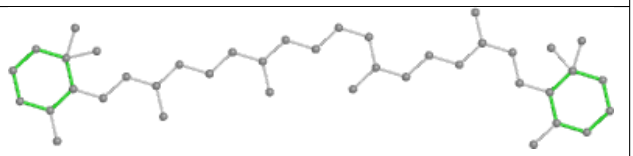
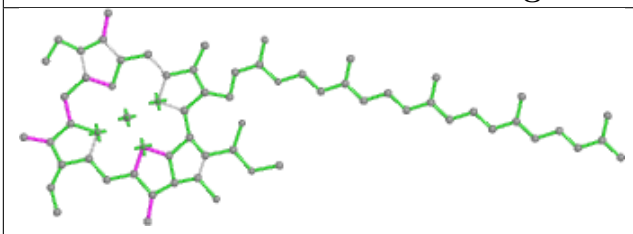


Rings

Ligand CLA A 824



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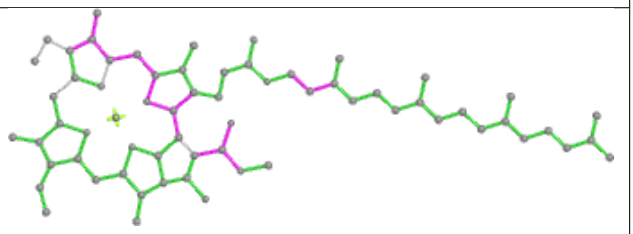
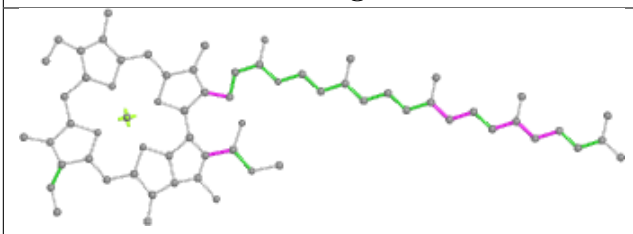
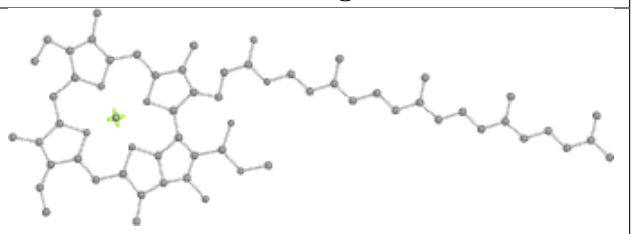


Bond angles

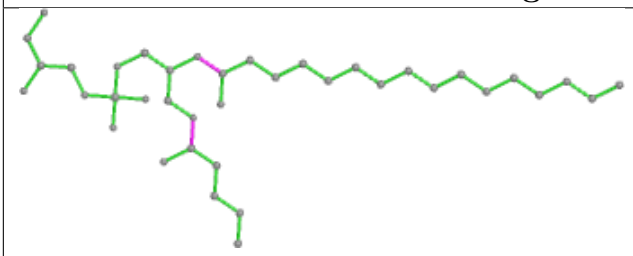


Torsions



Rings

Ligand LHG B 801



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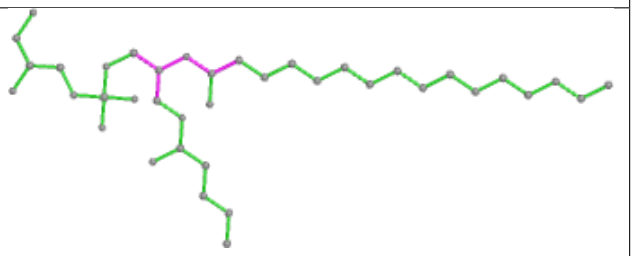
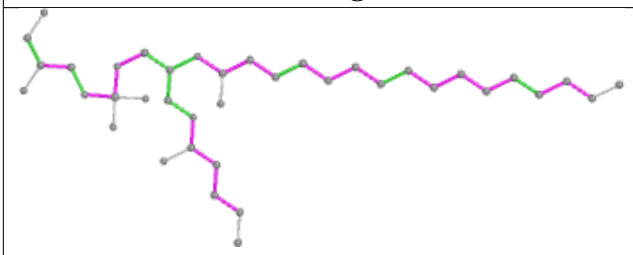


Bond angles



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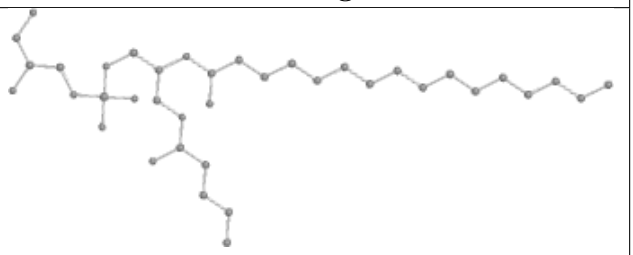
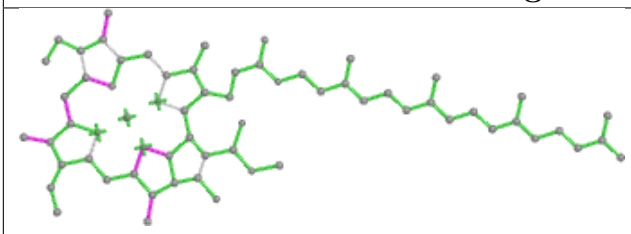
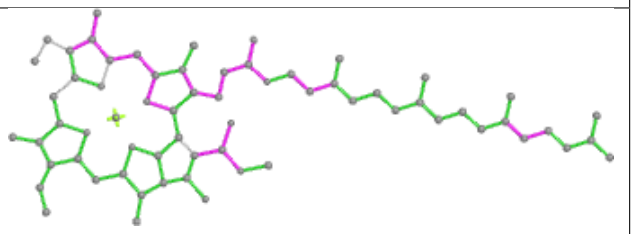


Rings

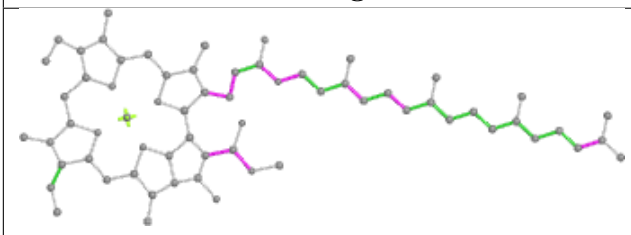
Ligand CLA B 824



Bond lengths



Bond angles



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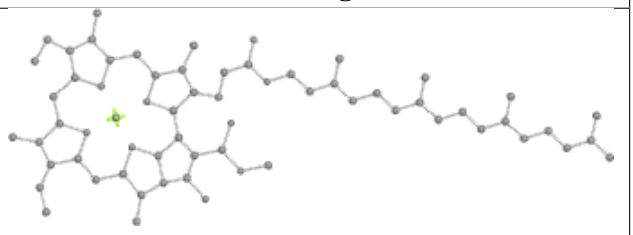
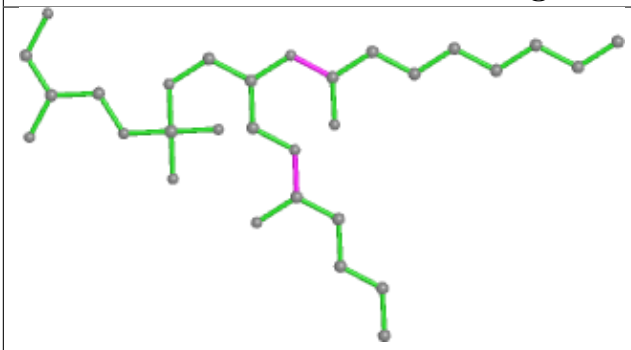
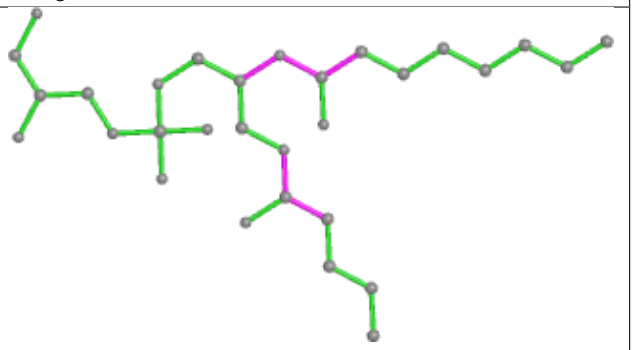


Rings

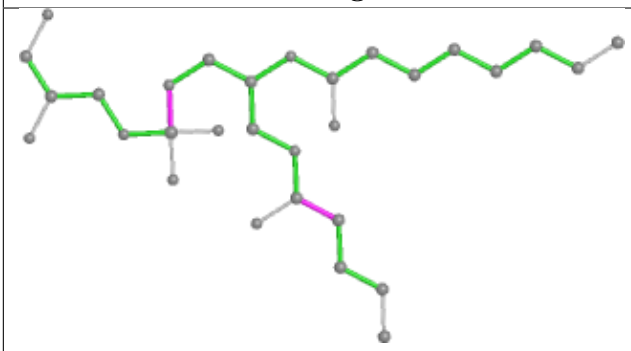
Ligand LHG j 617



Bond lengths



Bond angles



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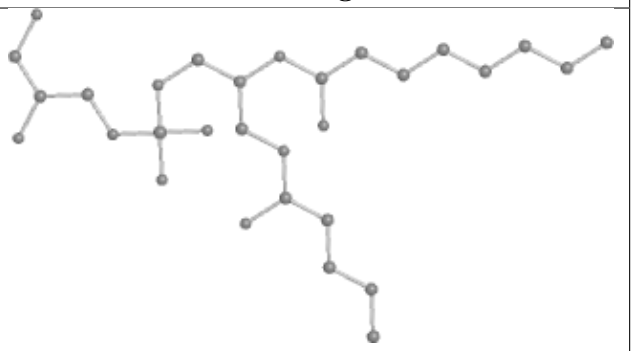
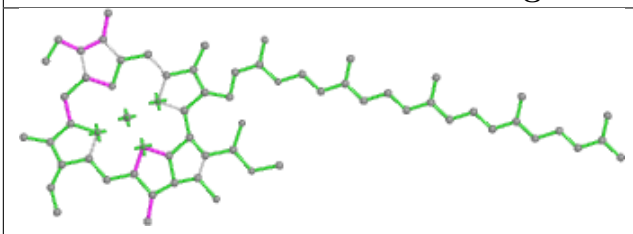


Rings

Ligand CLA A 835



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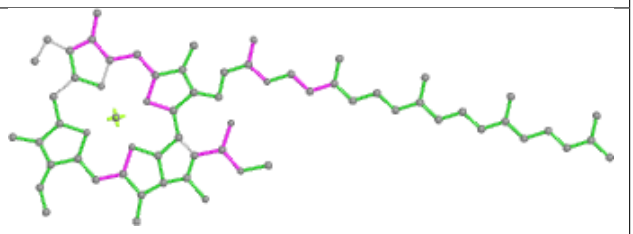
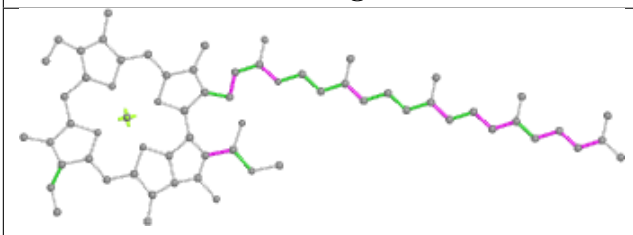


Bond angles



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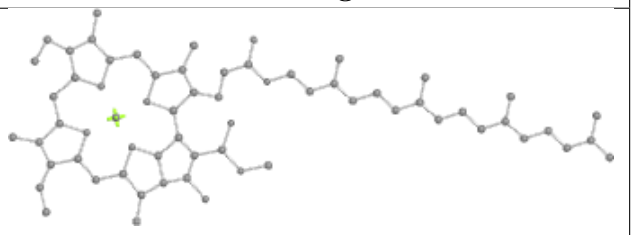
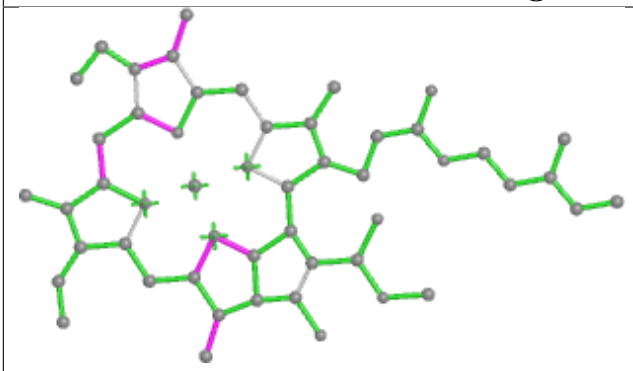


Rings

Ligand CLA k 606



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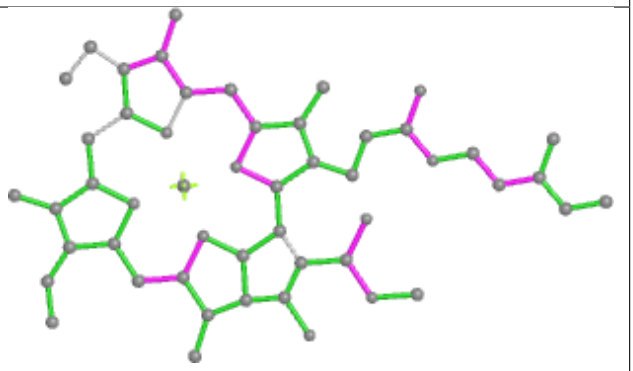
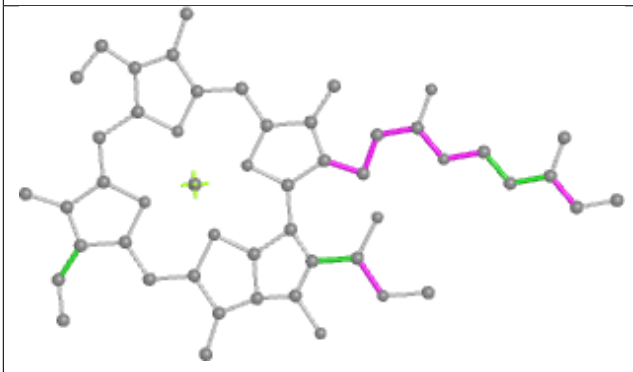


Bond angles



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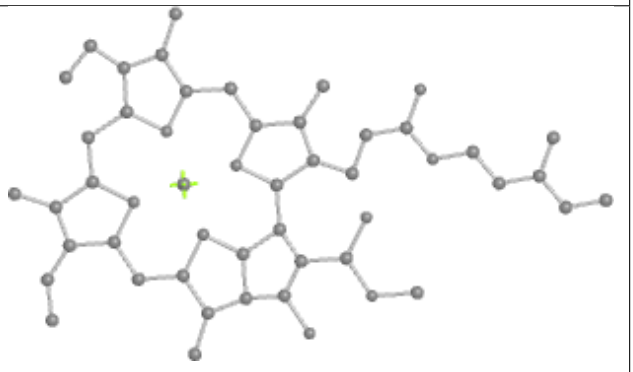
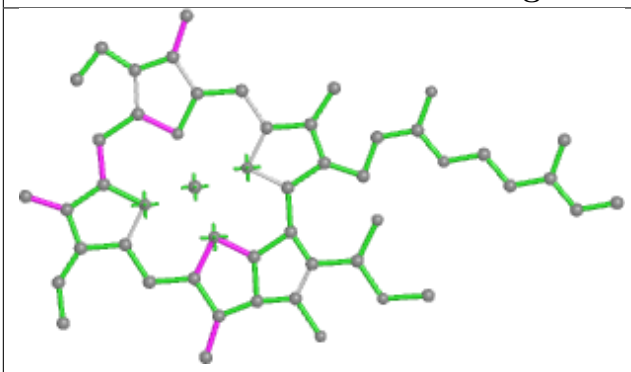
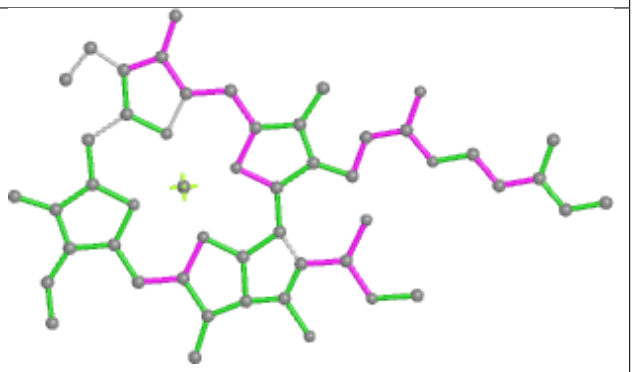


Rings

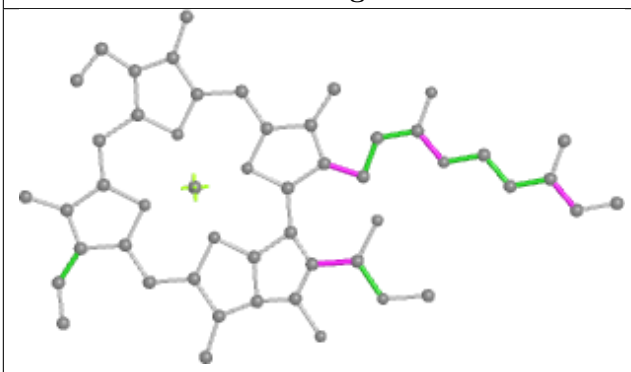
Ligand CLA K 101



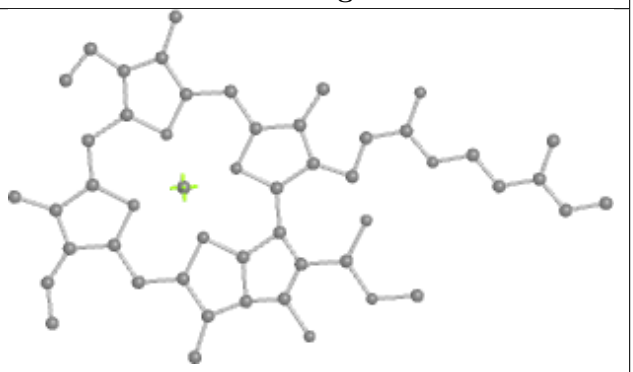
Bond lengths



Bond angles

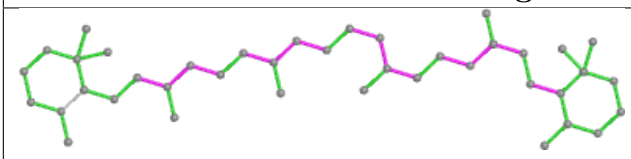


Torsions

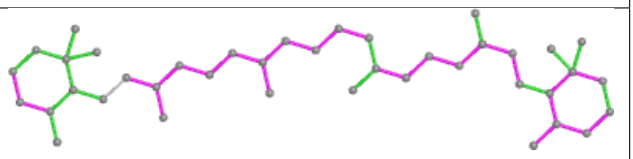


Rings

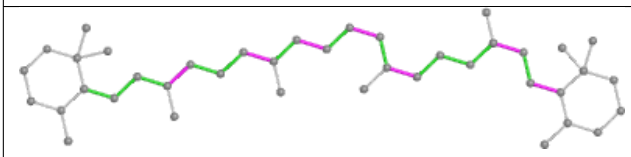
Ligand WVN A 848



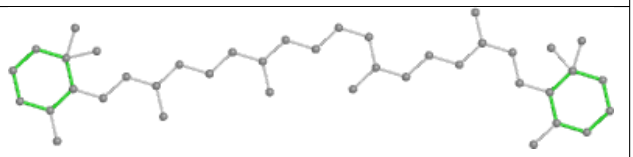
Bond lengths



Bond angles

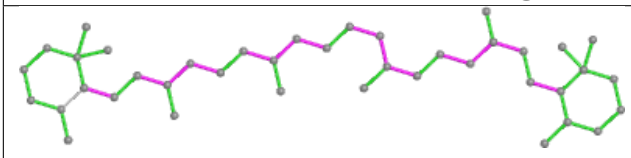


Torsions

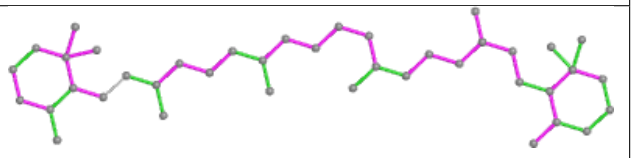


Rings

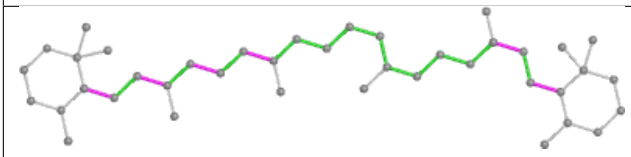
Ligand WVN L 201



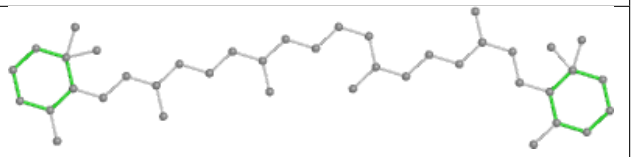
Bond lengths



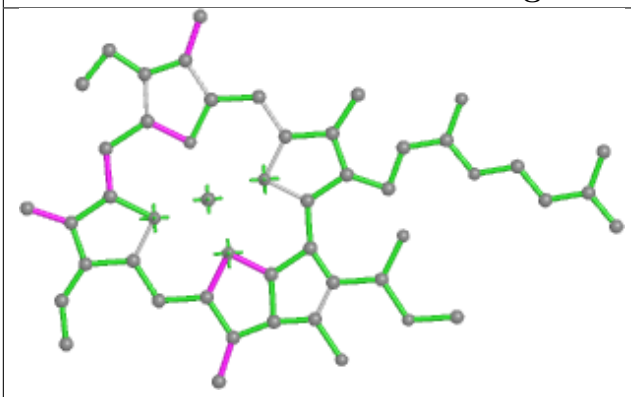
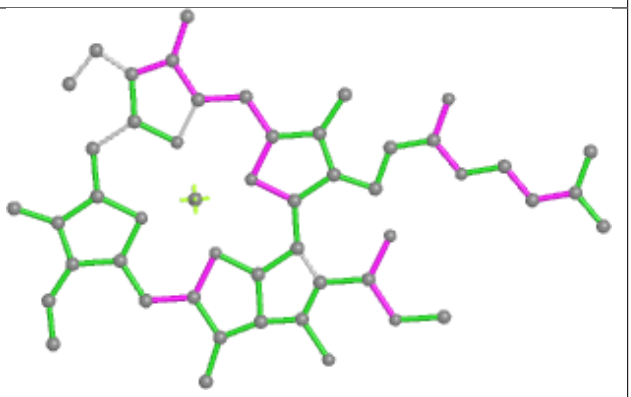
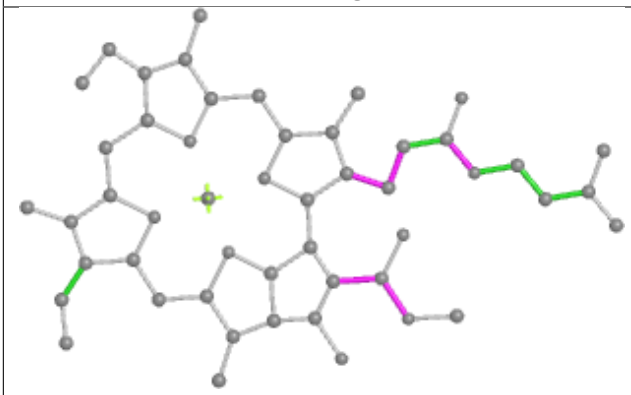
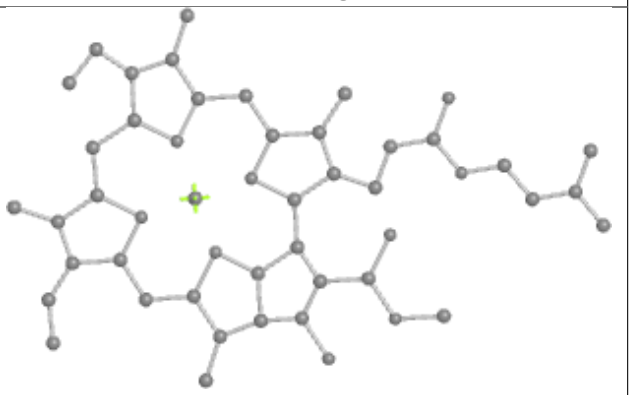
Bond angles

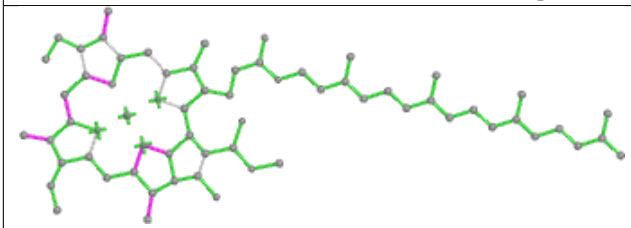
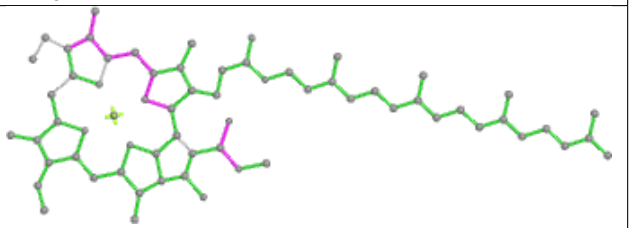
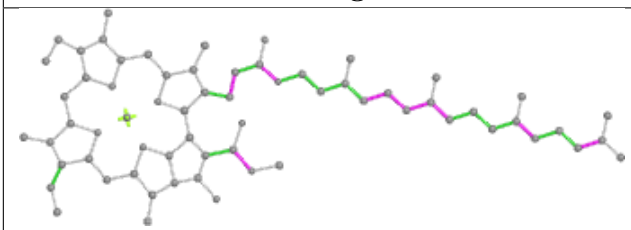
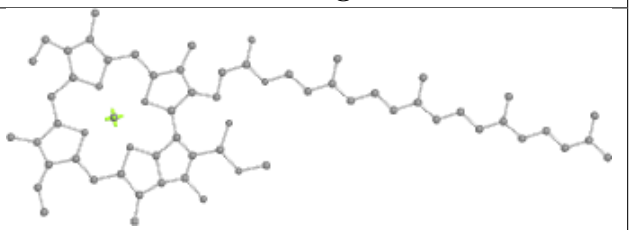


Torsions

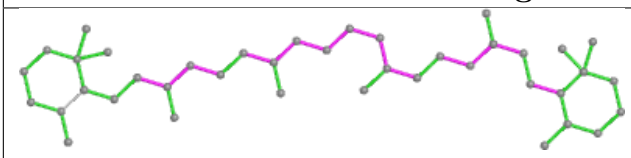


Rings

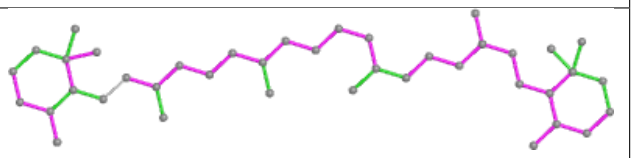
Ligand CLA A 814	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA j 612	
 Bond lengths	 Bond angles
 Torsions	 Rings

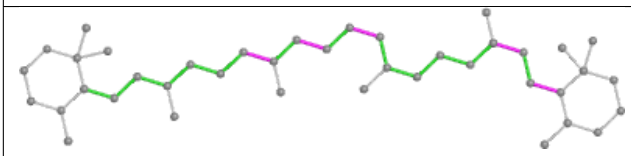
Ligand WVN A 849



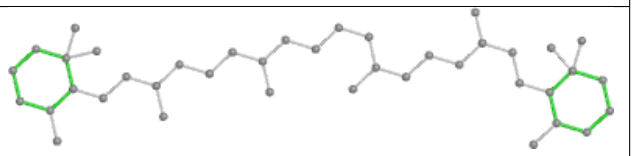
Bond lengths



Bond angles

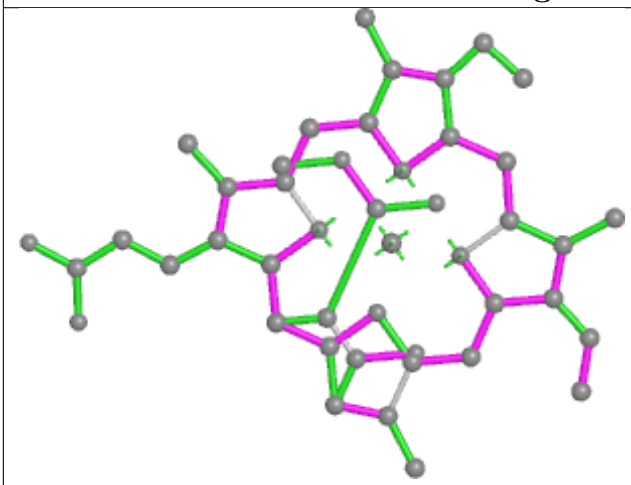


Torsions



Rings

Ligand KC2 j 610



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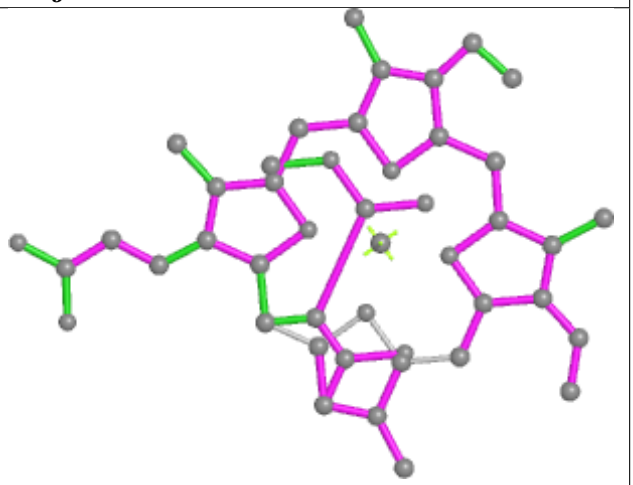
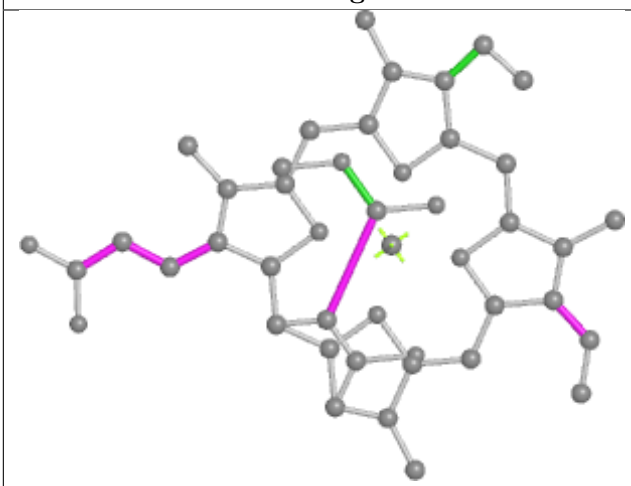


Bond angles



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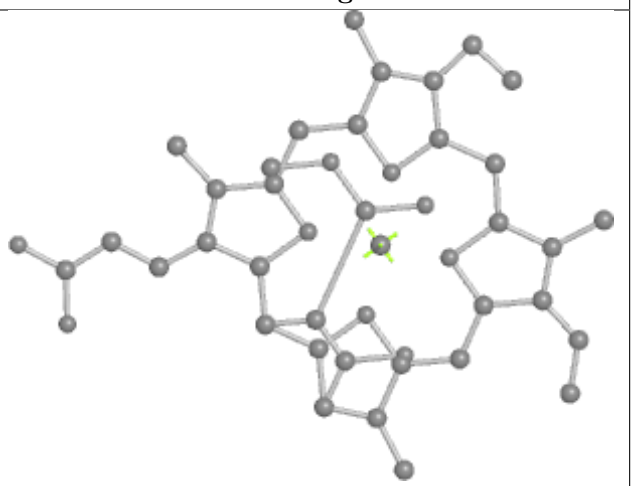
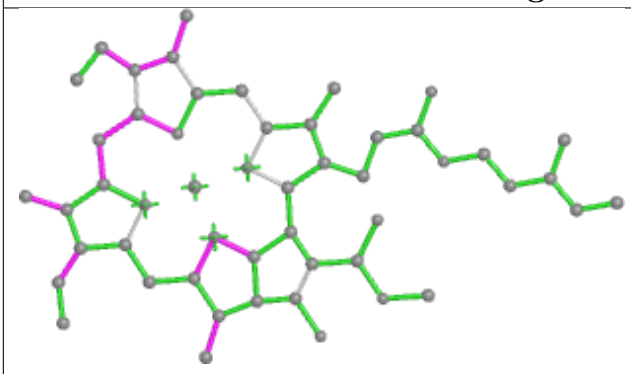
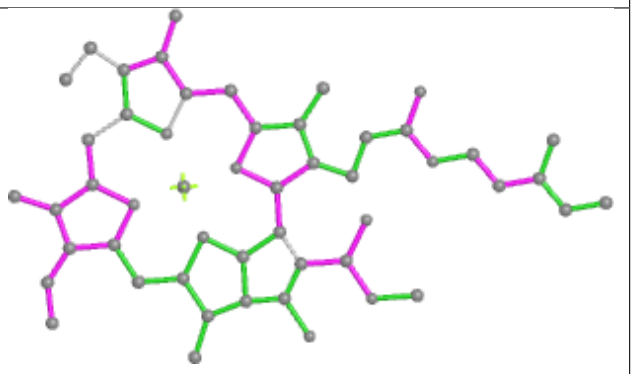


Rings

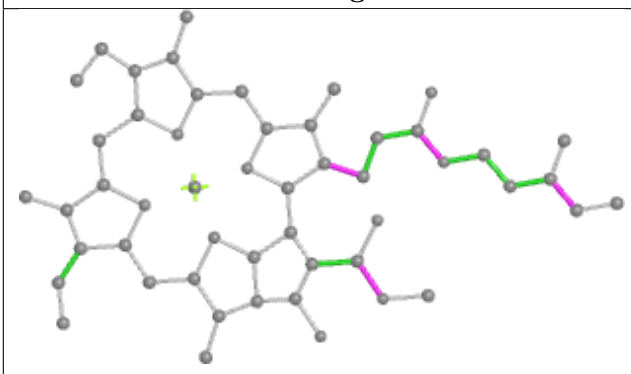
Ligand CLA n 304



Bond lengths



Bond angles



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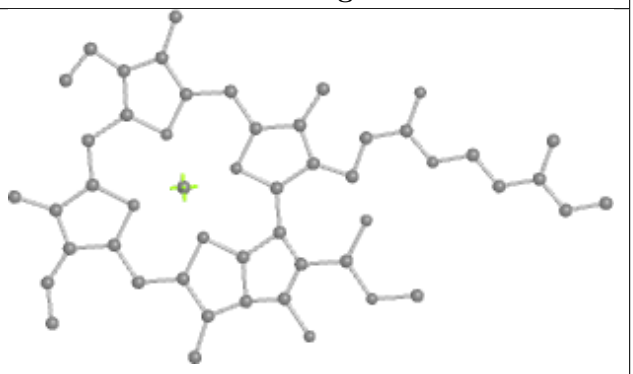
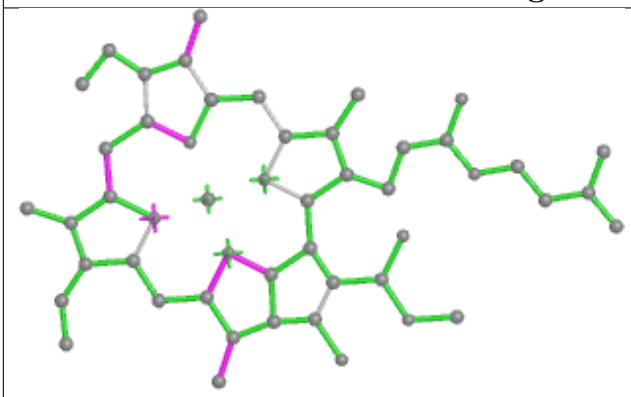


Rings

Ligand CLA k 602



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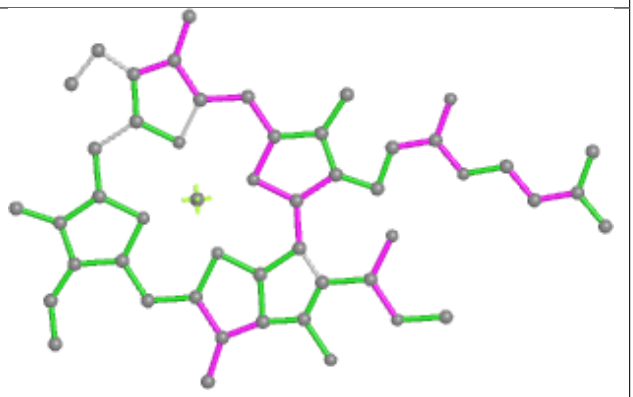
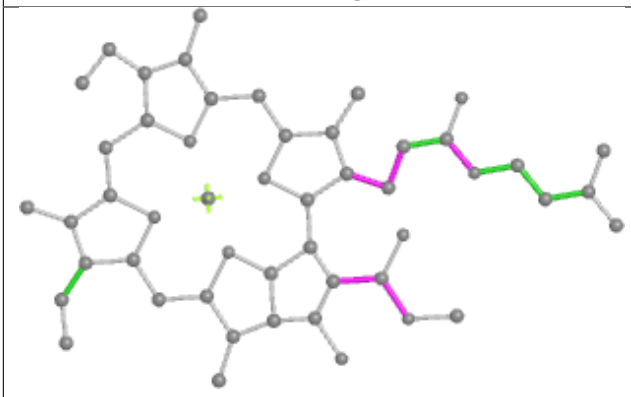


Bond angles



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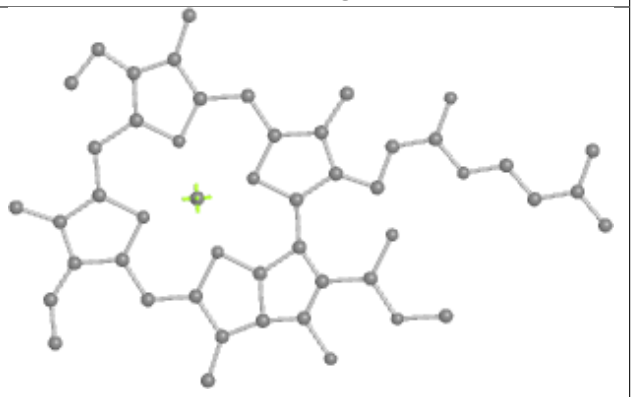
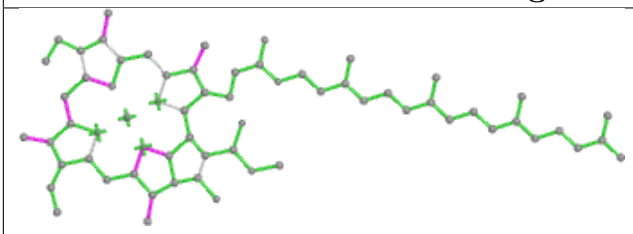


Rings

Ligand CLA a 309



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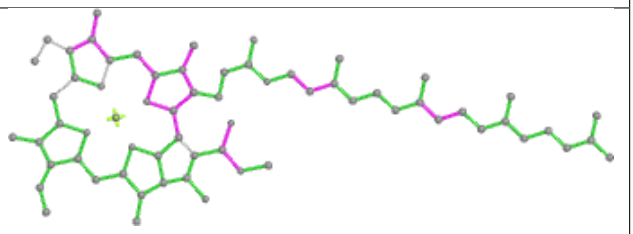
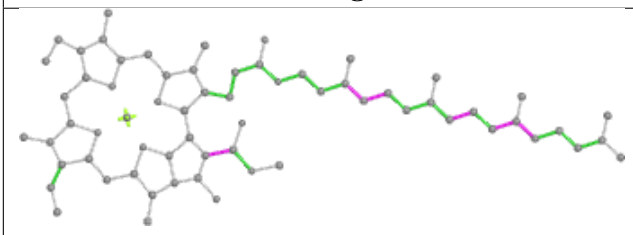


Bond angles



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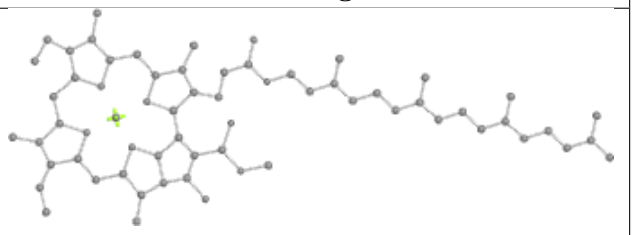
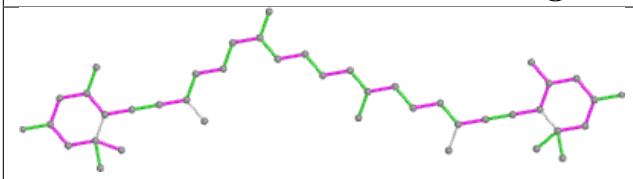


Rings

Ligand II0 i 317



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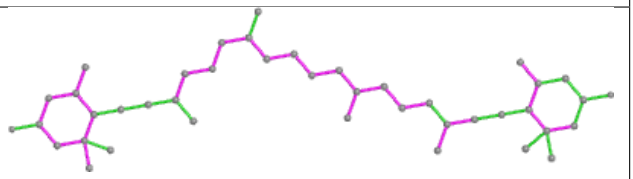
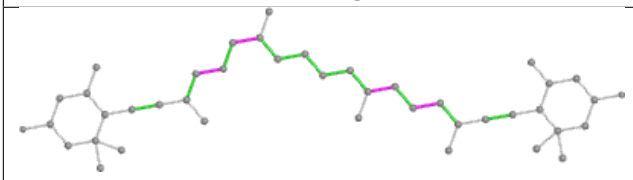


Bond angles



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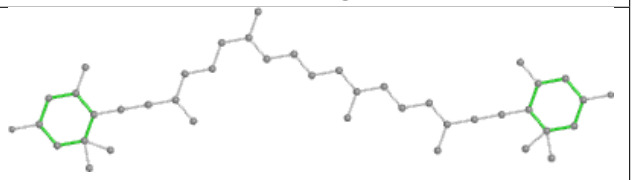
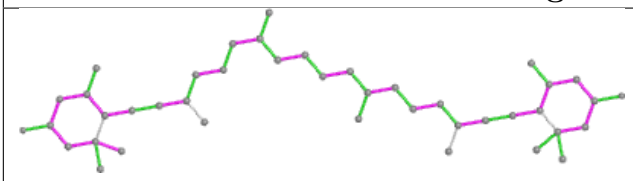


Rings

Ligand II0 i 320



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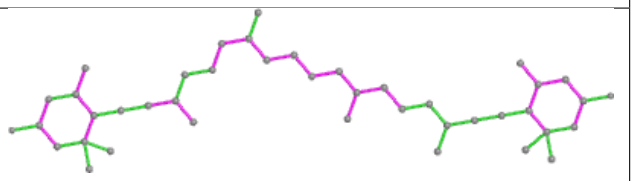
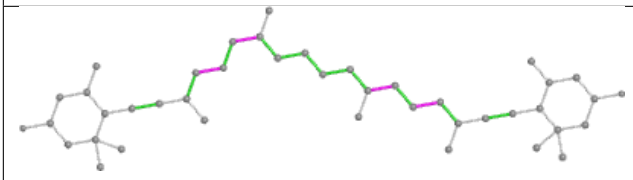


Bond angles



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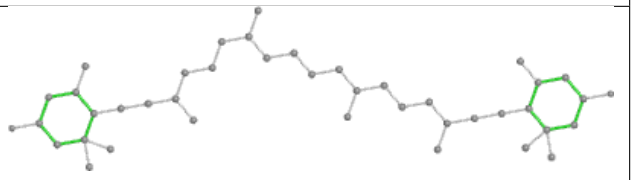
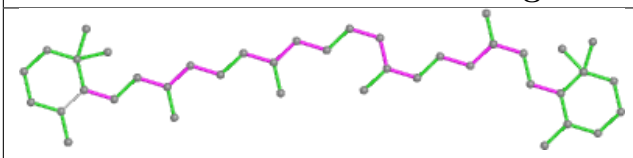


Rings

Ligand WVN l 315



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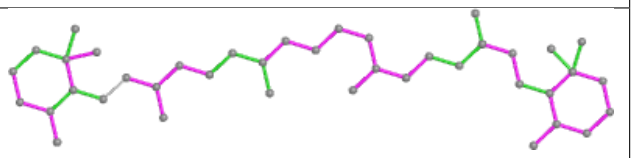
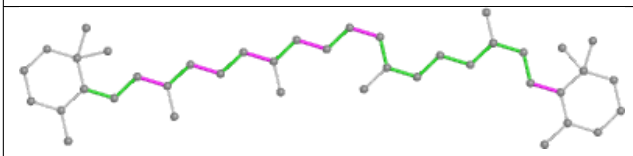


Bond angles



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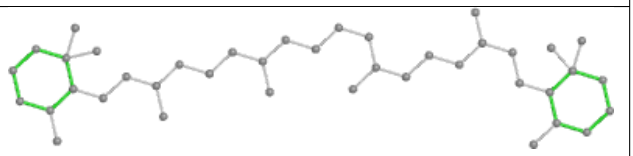
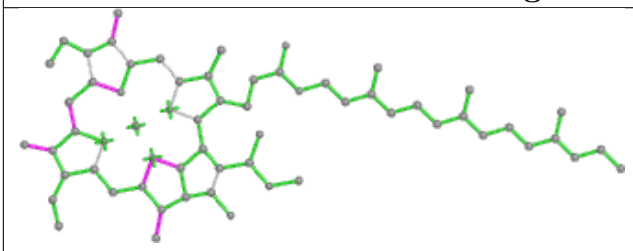


Rings

Ligand CLA A 827



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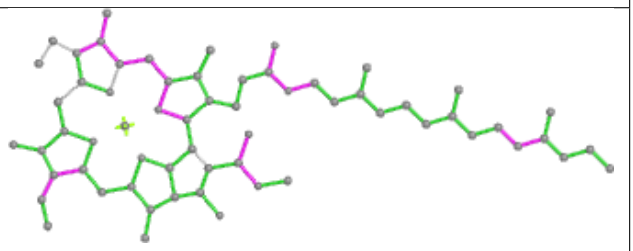
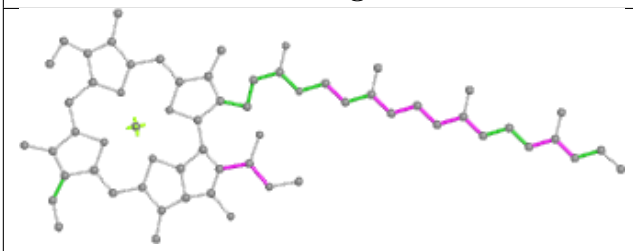


Bond angles



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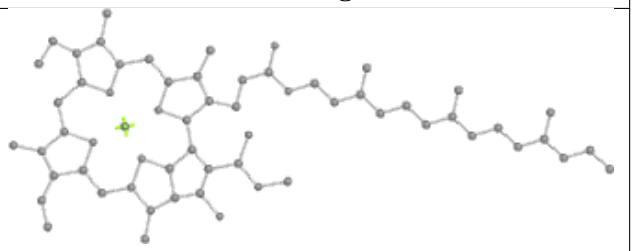
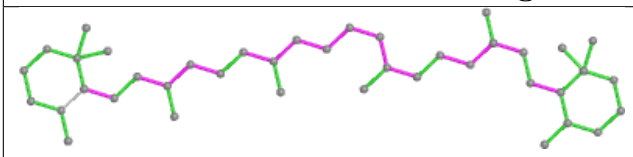
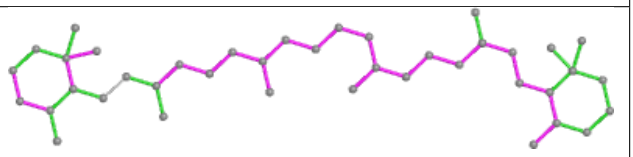


Rings

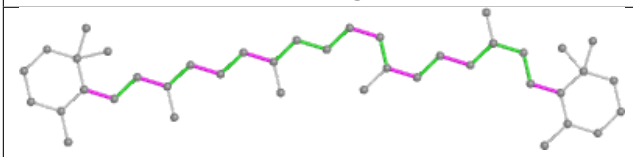
Ligand WVN F 204



Bond lengths



Bond angles



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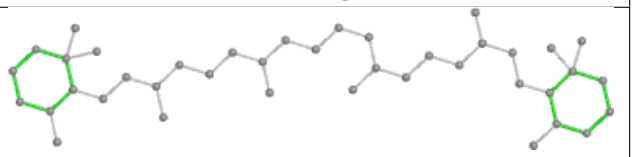
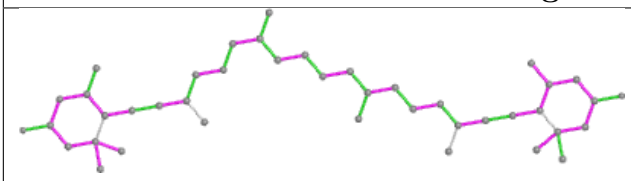
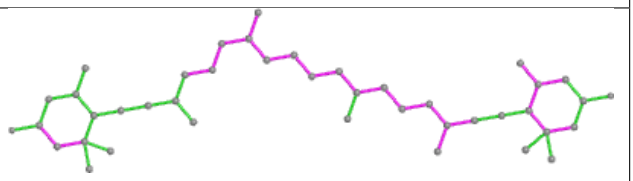
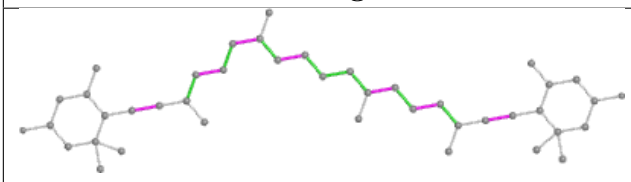


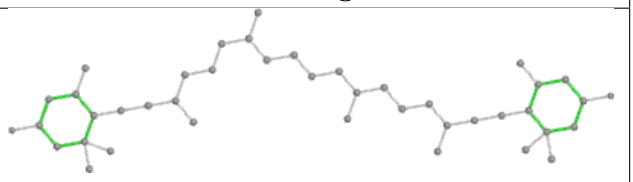
Rings

Ligand II0 b 614

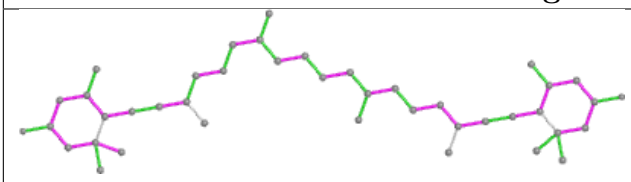

Bond lengths

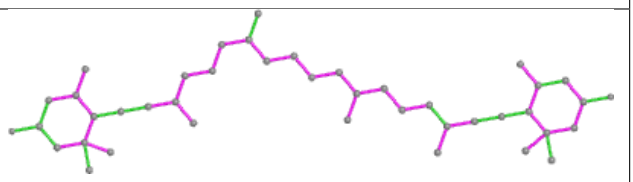

Bond angles

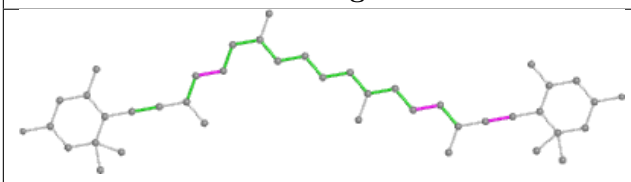

Torsions

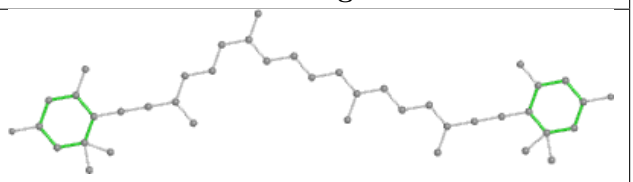

Rings

Ligand II0 a 315

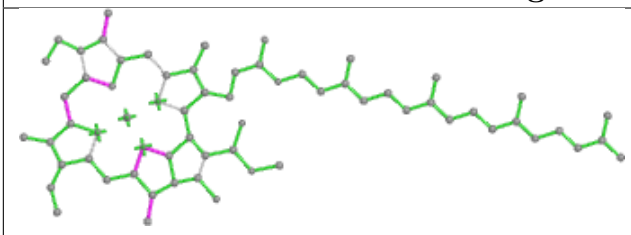

Bond lengths

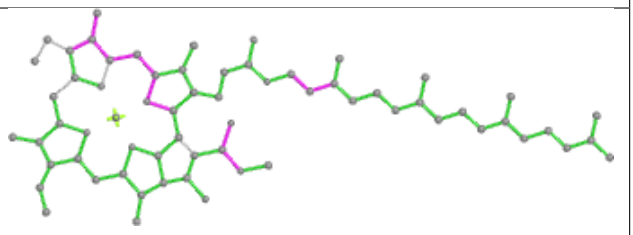

Bond angles


Torsions


Rings

Ligand CLA n 311


Bond lengths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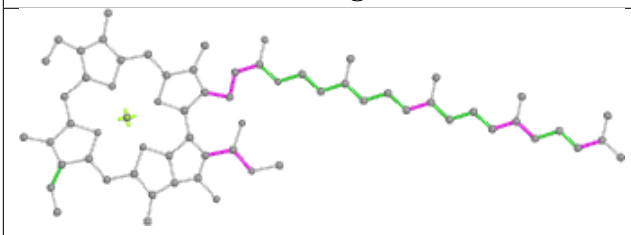
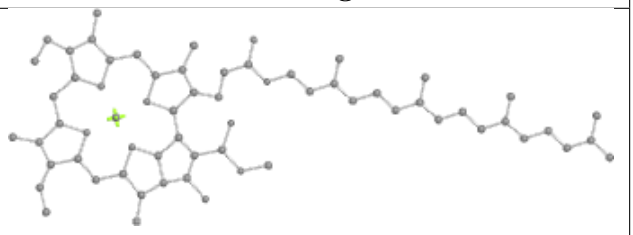
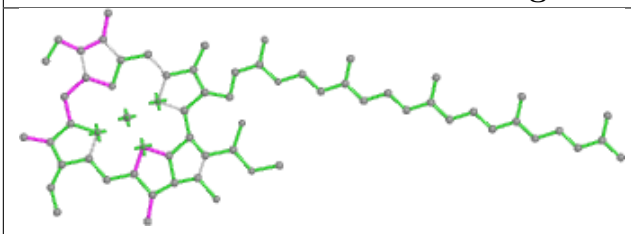

Torsions


Rings

Ligand CLA c 604



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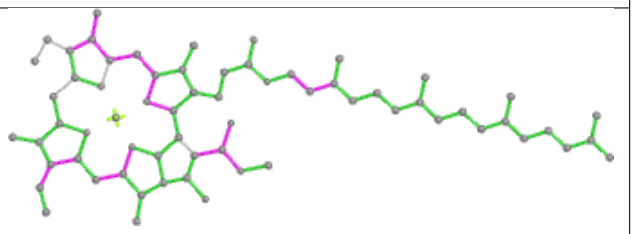
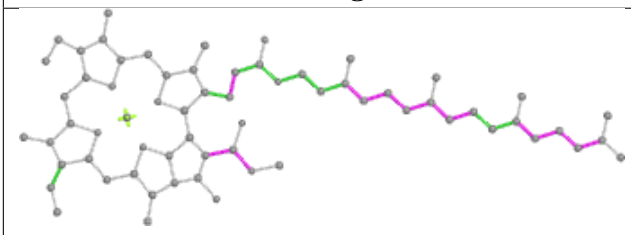


Bond angles



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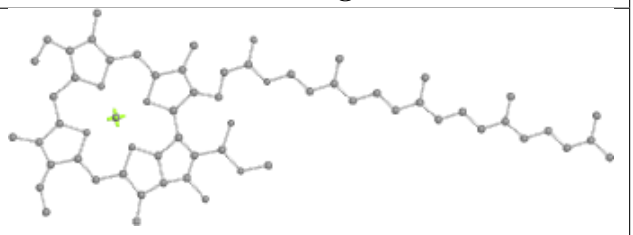
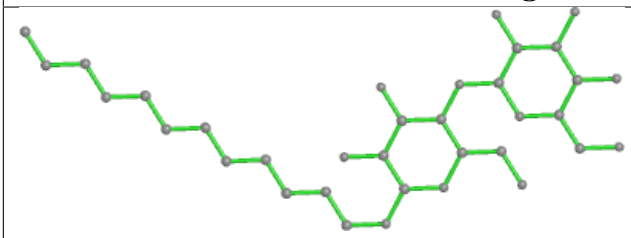


Rings

Ligand LMT A 852



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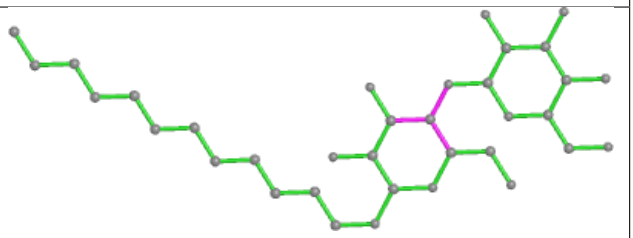
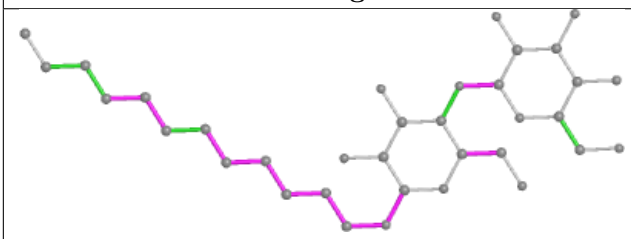


Bond angles



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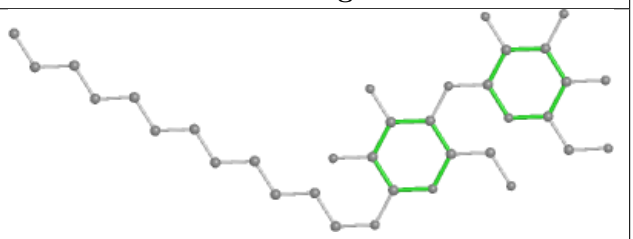
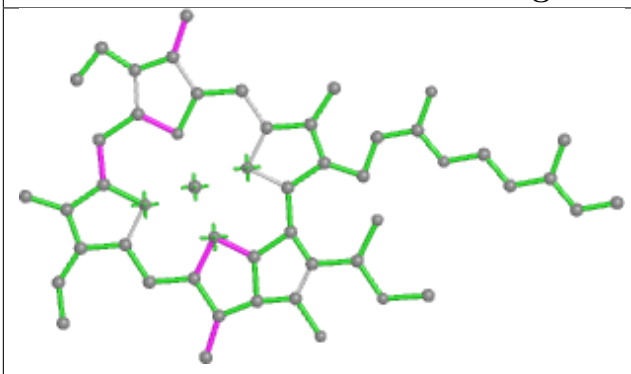


Rings

Ligand CLA i 311



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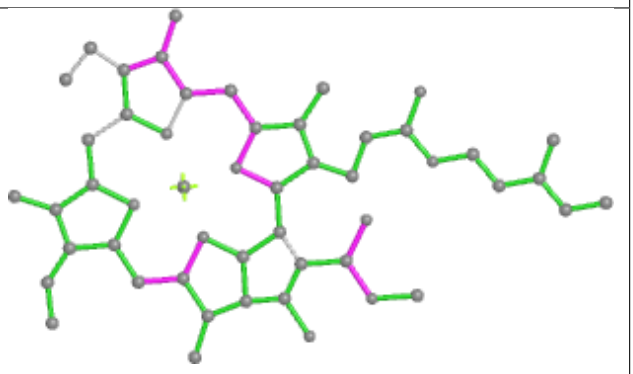
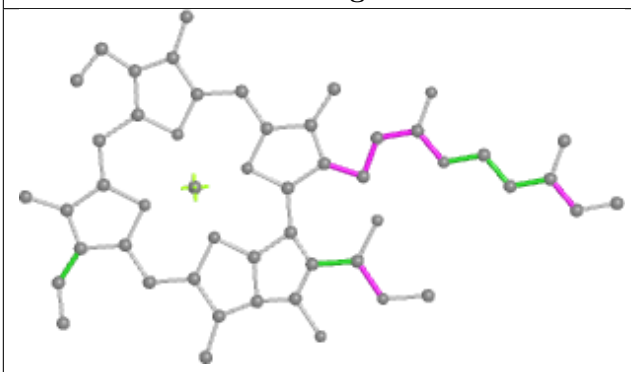


Bond angles



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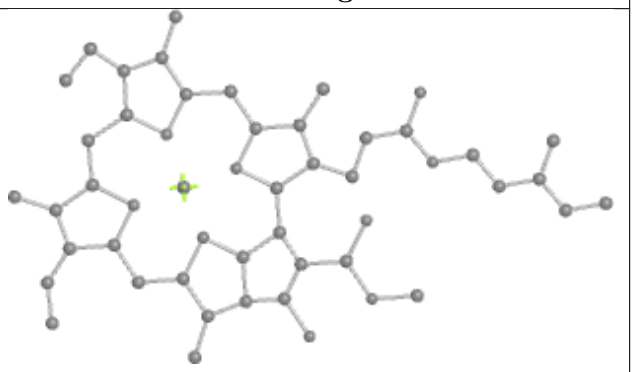
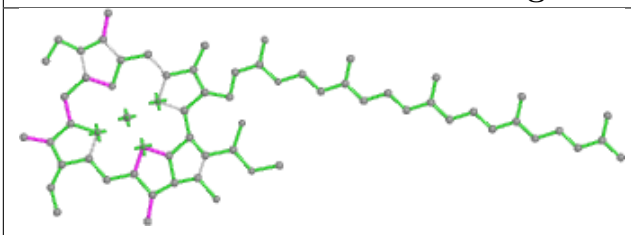


Rings

Ligand CLA k 609



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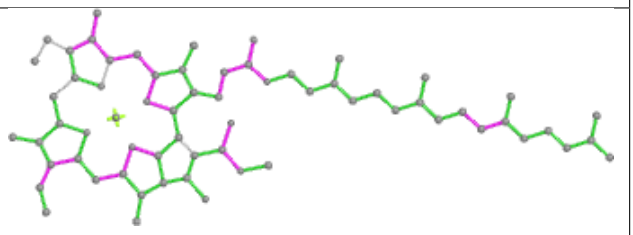
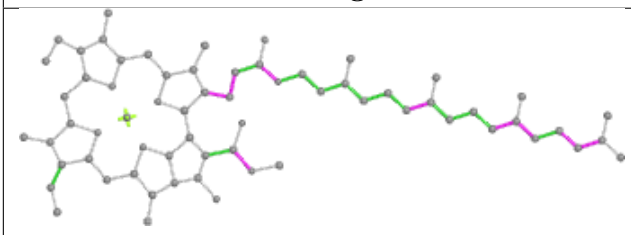


Bond angles



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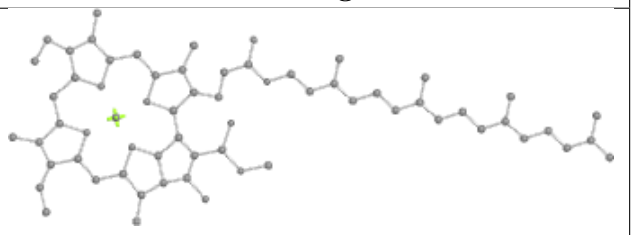
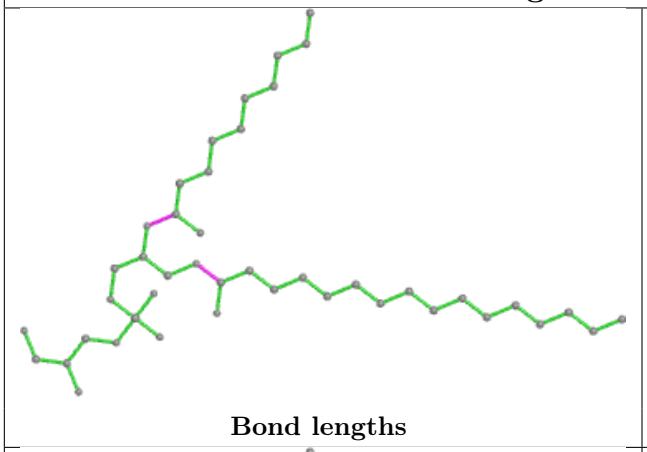


Rings

Ligand LHG n 320



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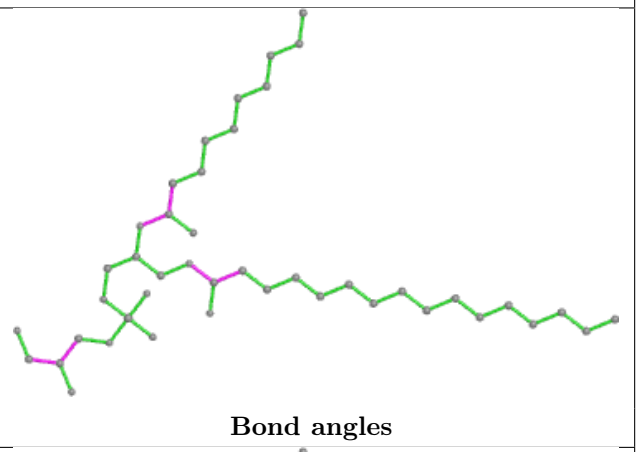
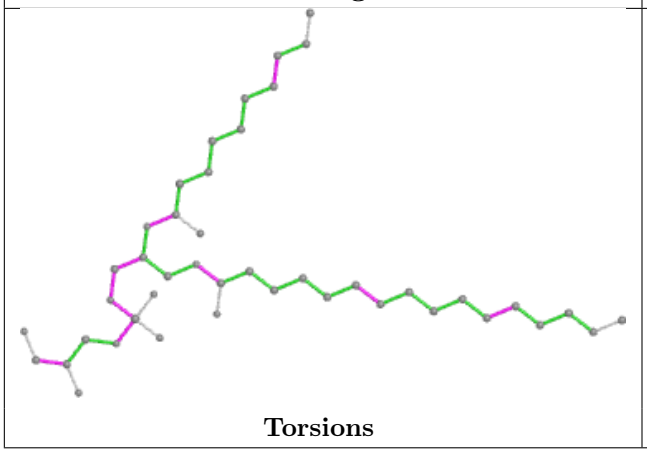


Bond angles



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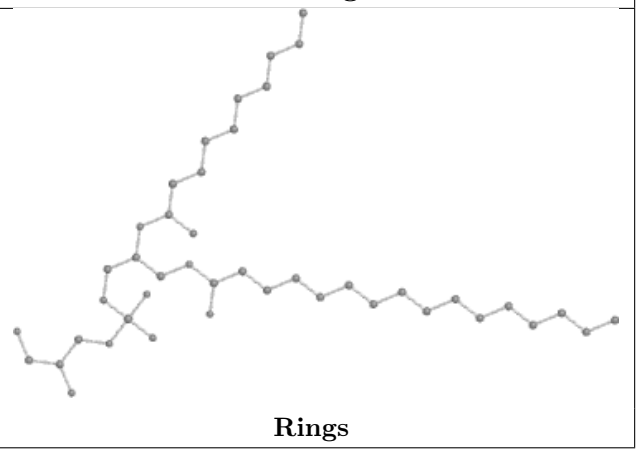
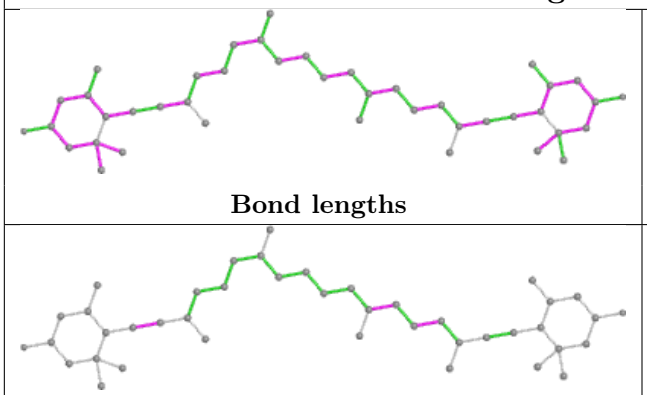


Rings

Ligand II0 l 313



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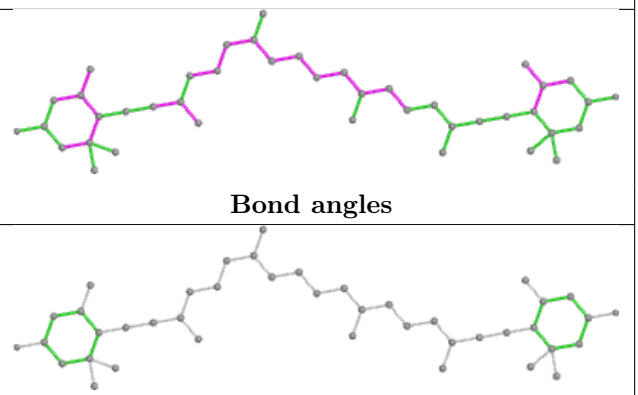
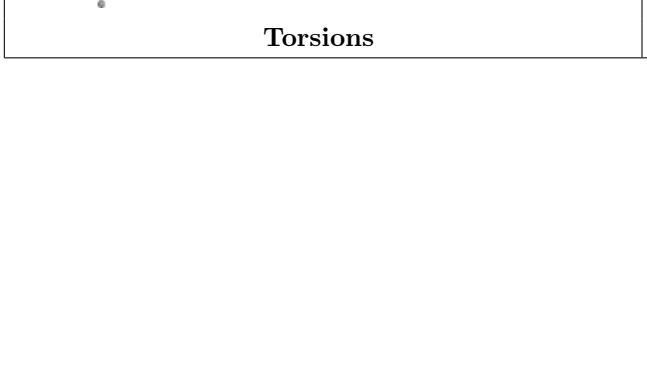


Bond angles



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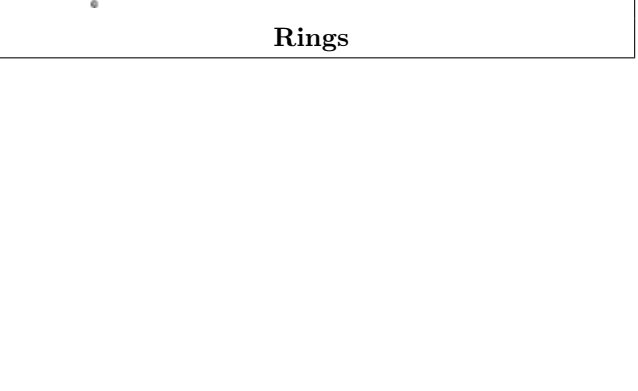
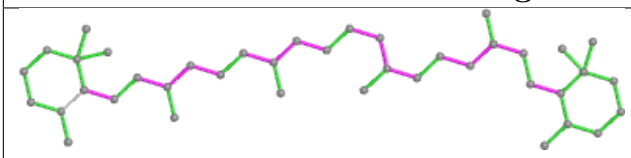


Rings

Ligand WVN K 103



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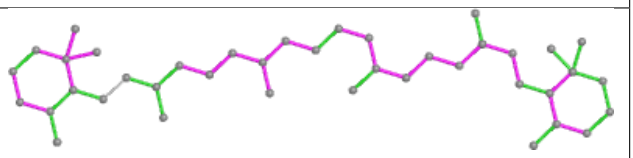
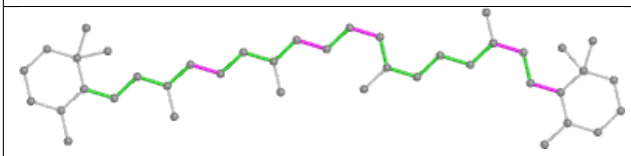


Bond angles



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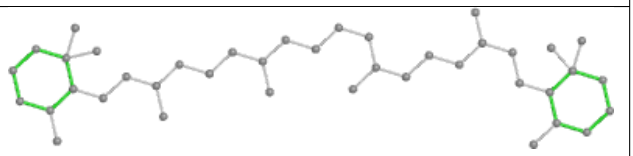
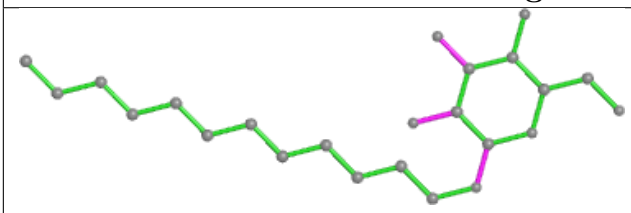


Rings

Ligand LMT a 302



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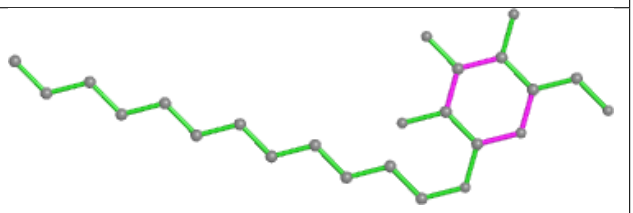
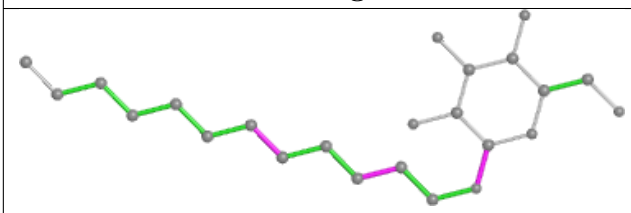


Bond angles



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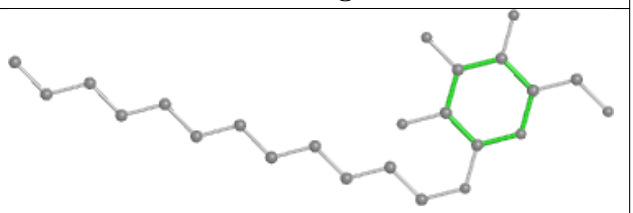
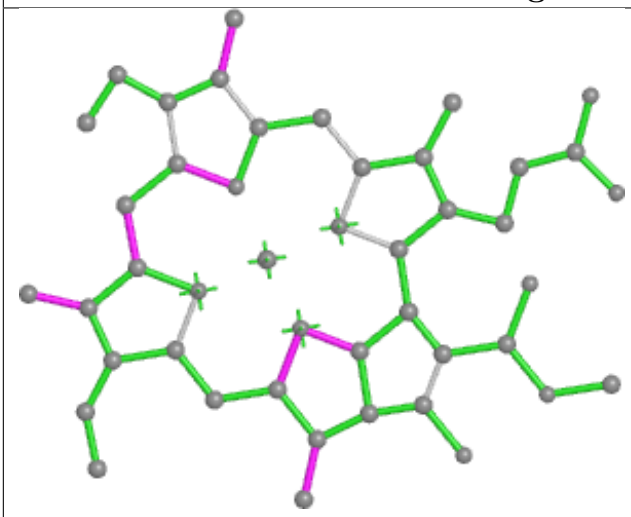


Rings

Ligand CLA k 605



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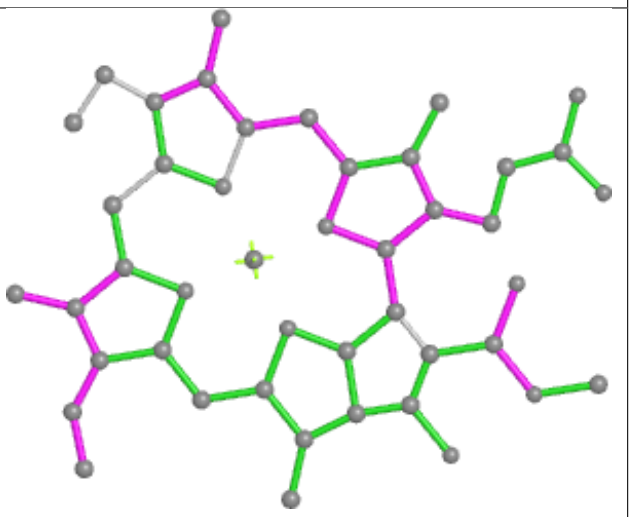
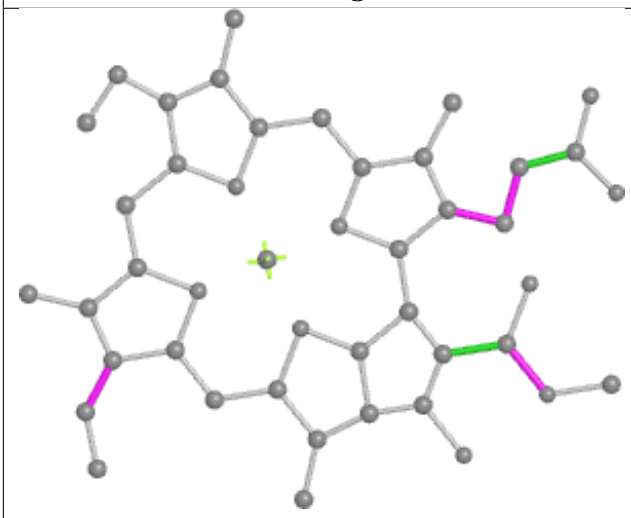


Bond angles



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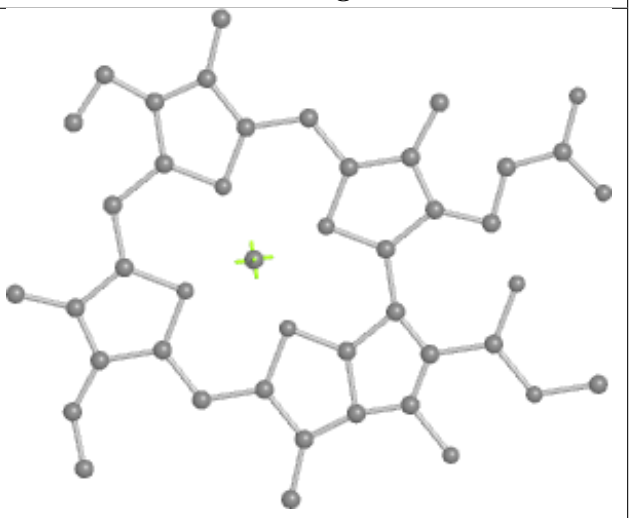
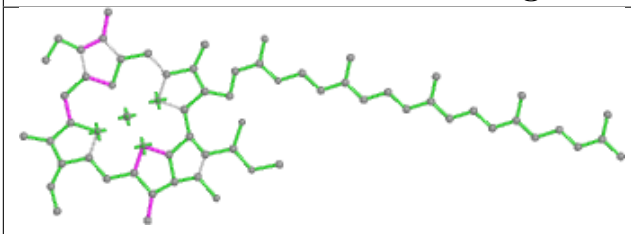


Rings

Ligand CLA m 606



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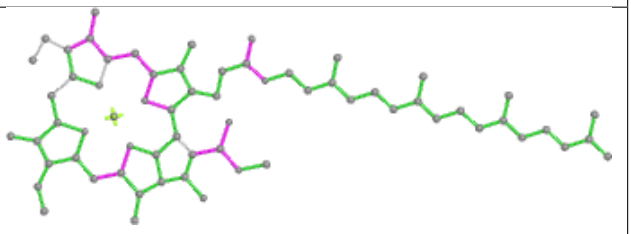
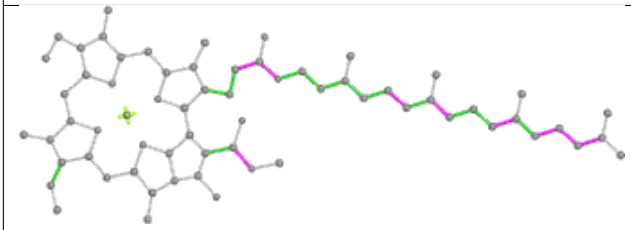


Bond angles



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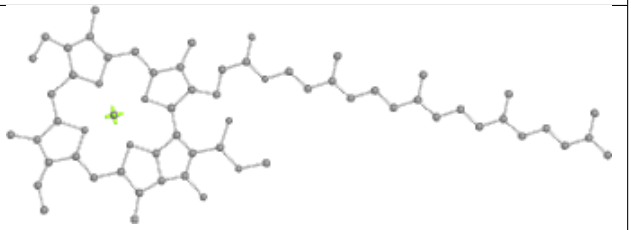
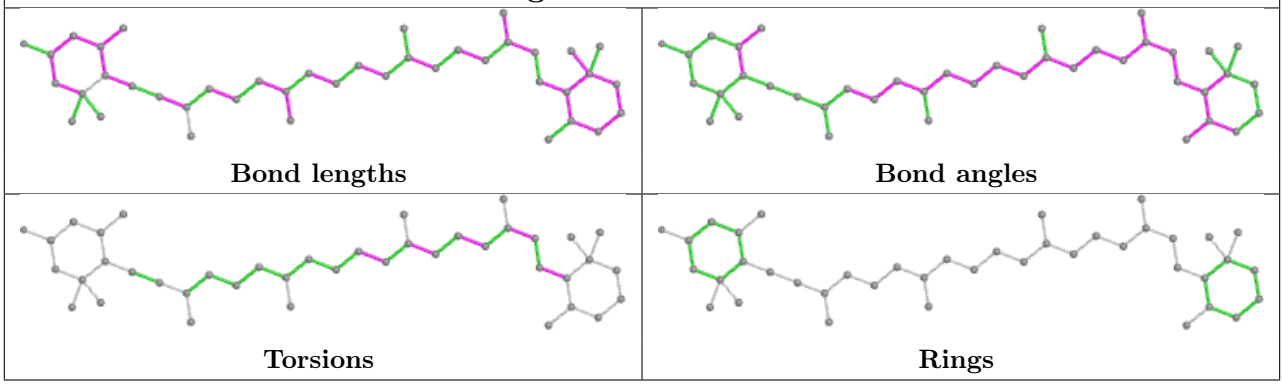
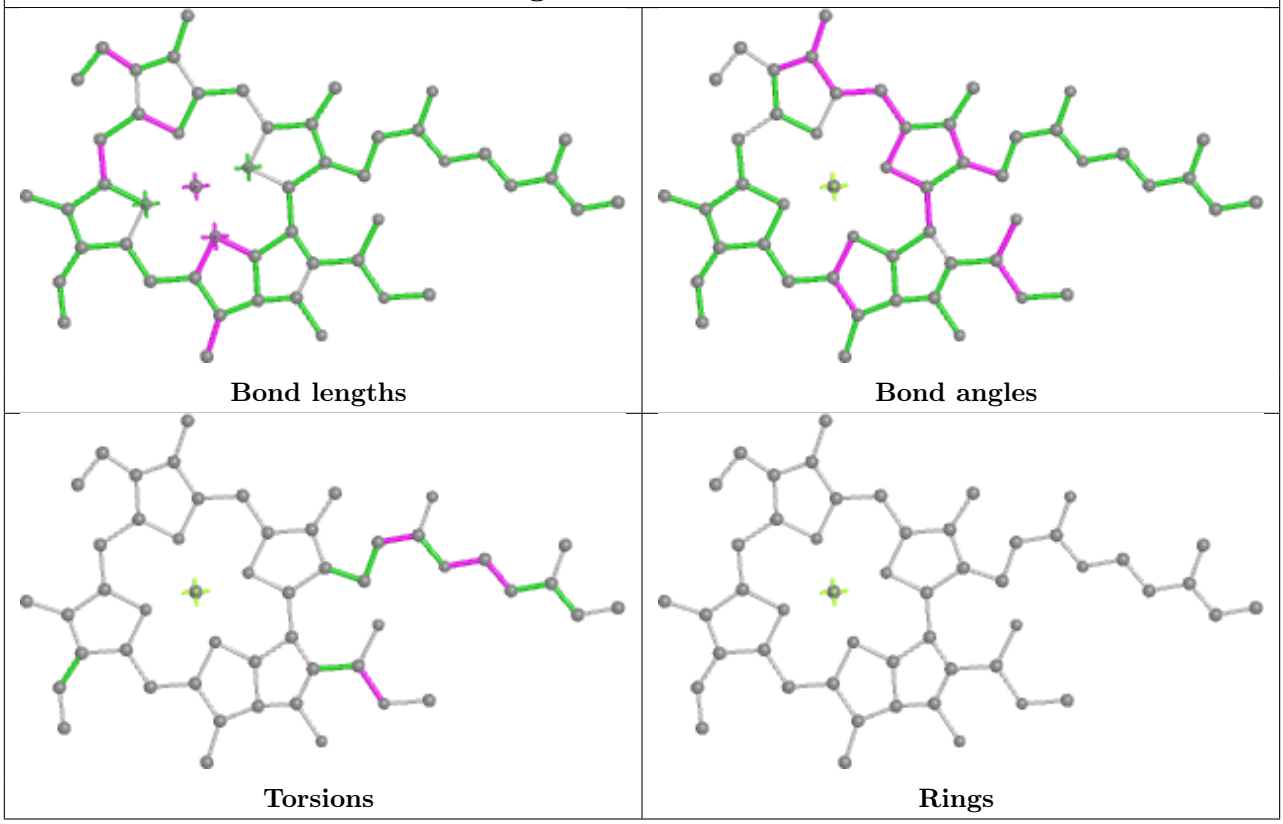


Rings

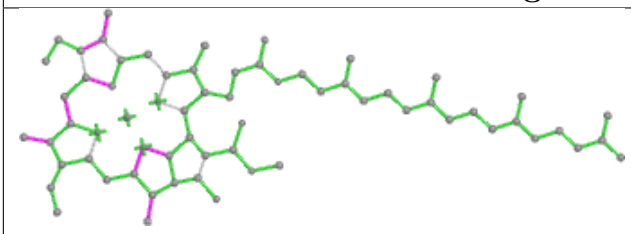
Ligand IHT m 616



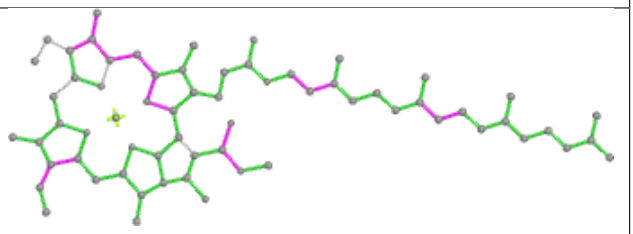
Ligand CLA d 302



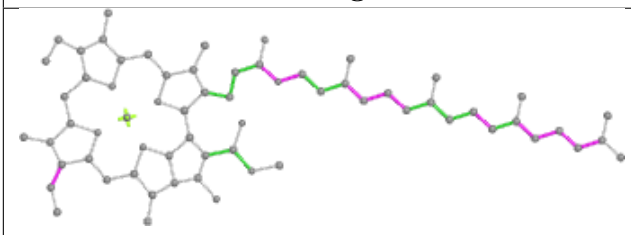
Ligand CLA A 820



Bond lengths



Bond angles



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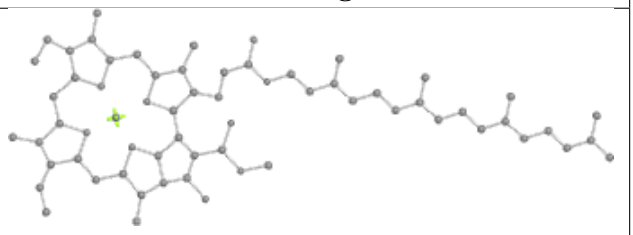
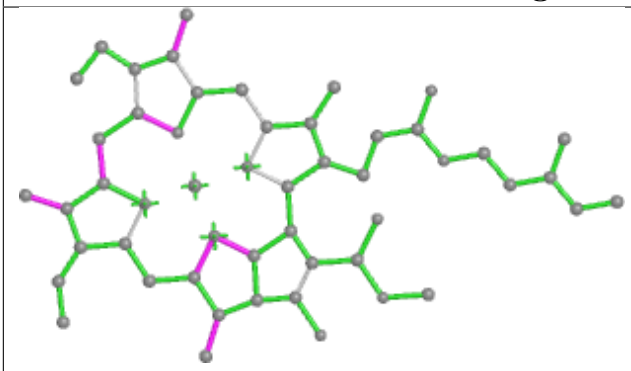


Rings

Ligand CLA j 606



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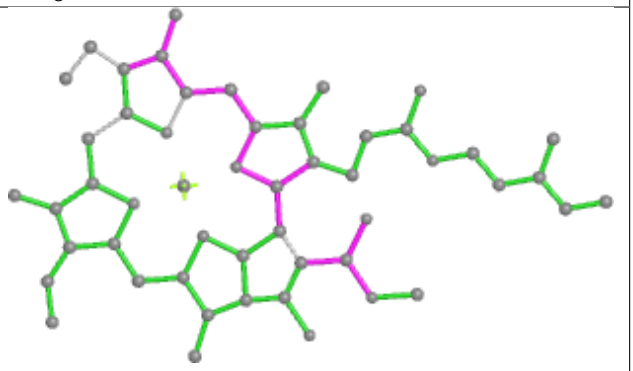
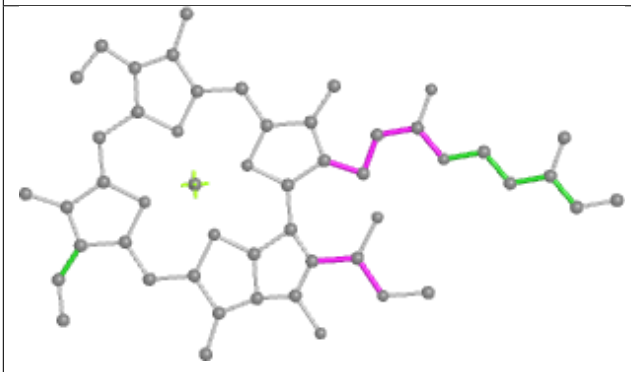


Bond angles



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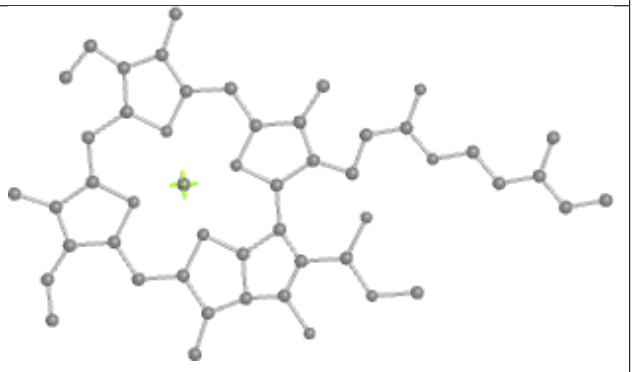
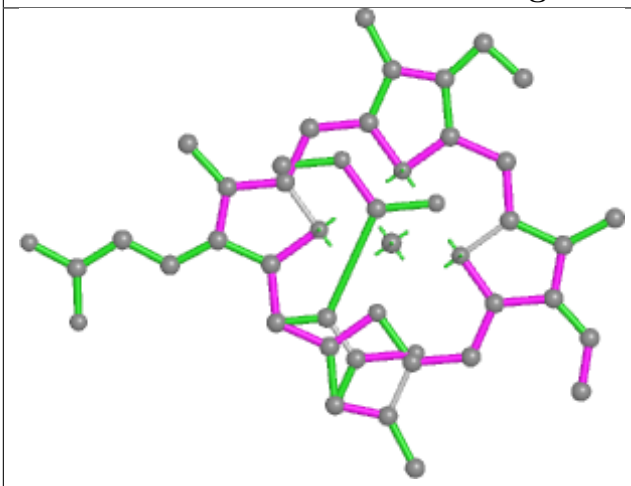


Rings

Ligand KC2 d 311



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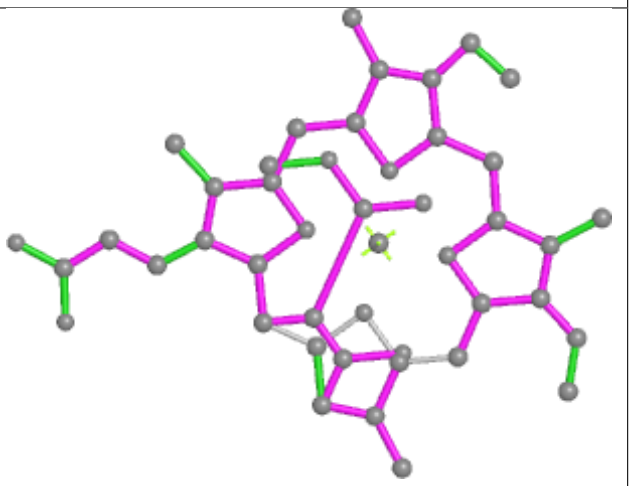
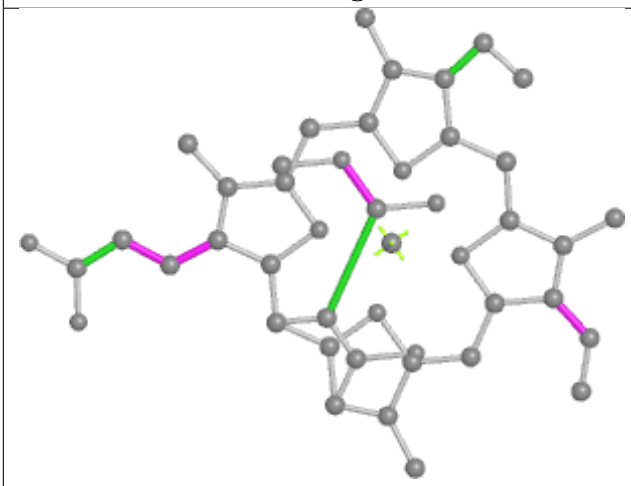


Bond angles



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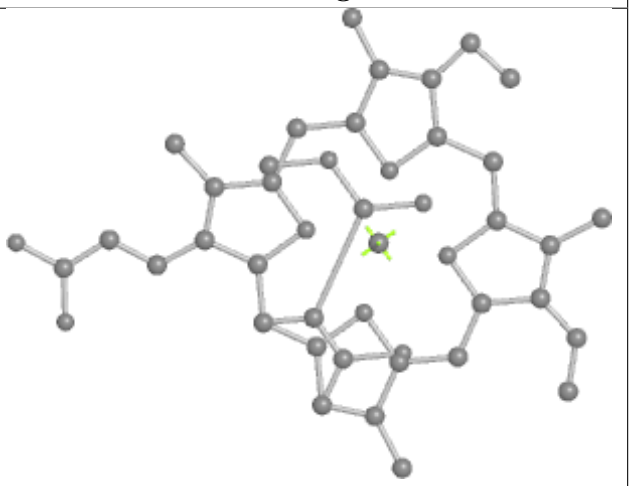
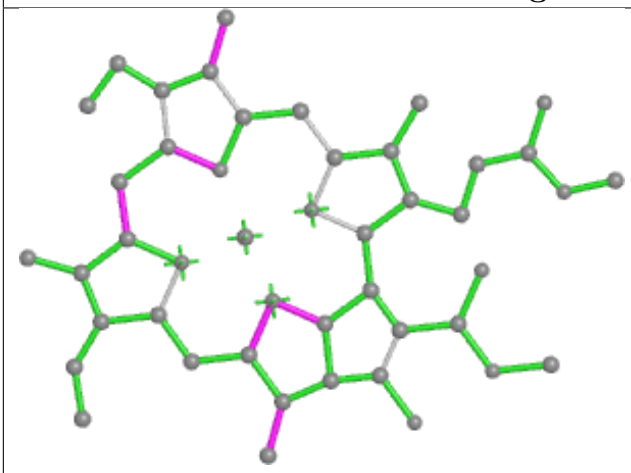
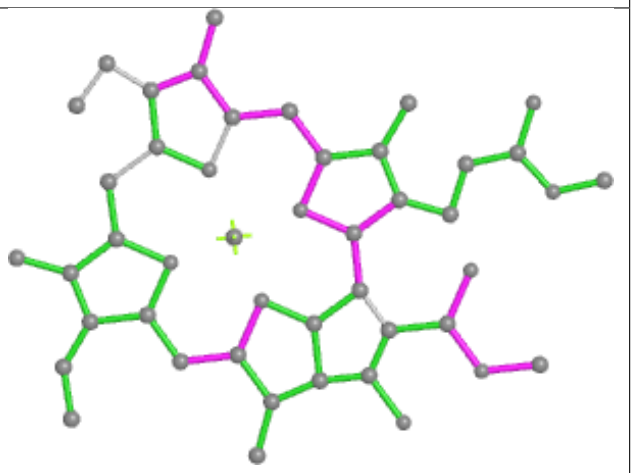


Rings

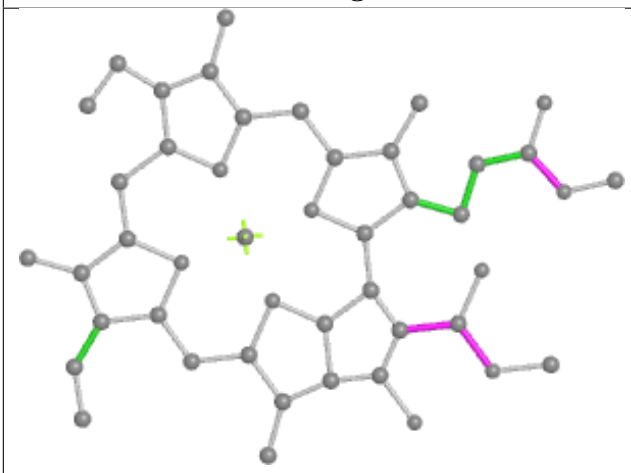
Ligand CLA c 607



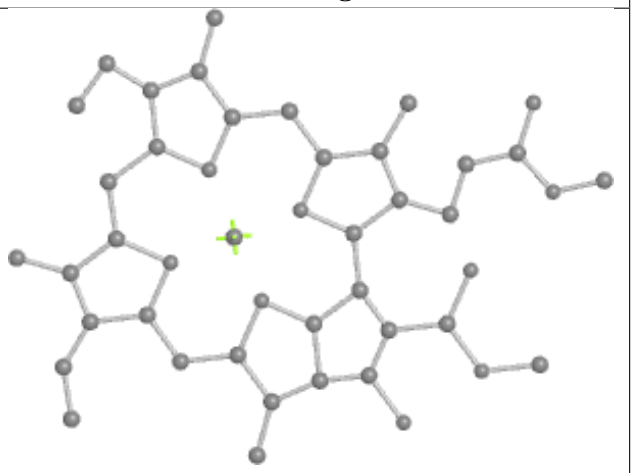
Bond lengths



Bond angles

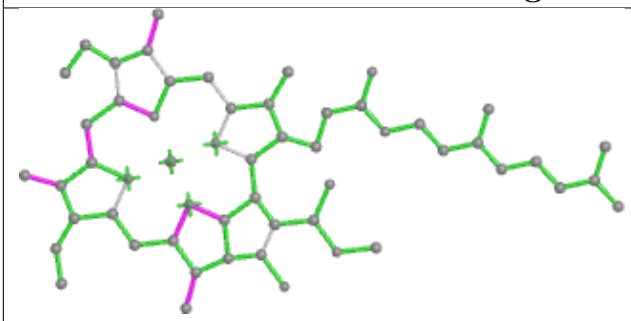


Torsions

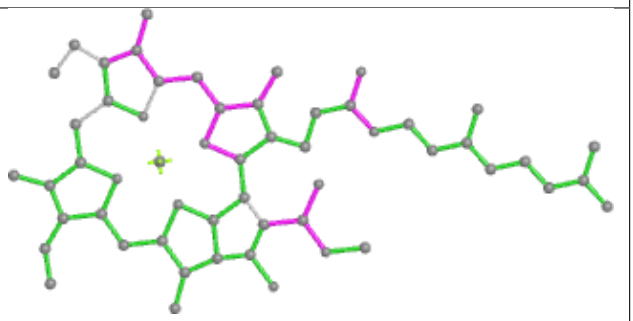


Rings

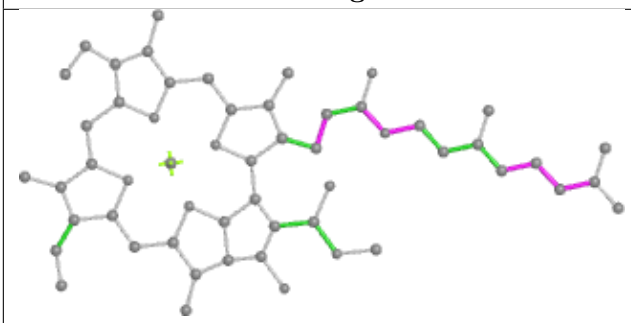
Ligand CLA B 811



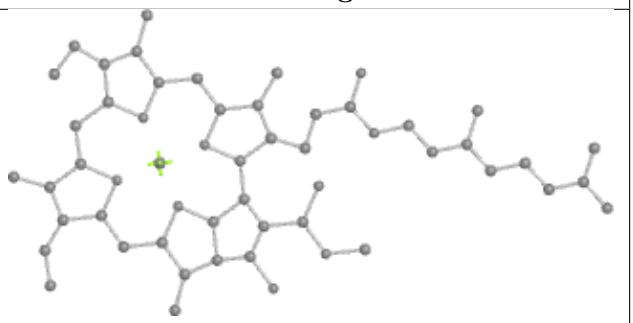
Bond lengths



Bond angles

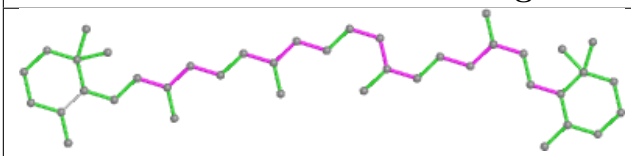


Torsions

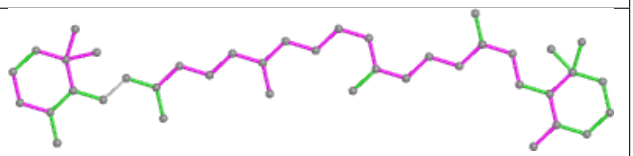


Rings

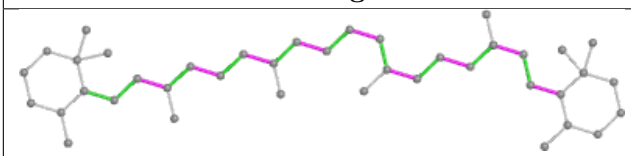
Ligand WVN A 851



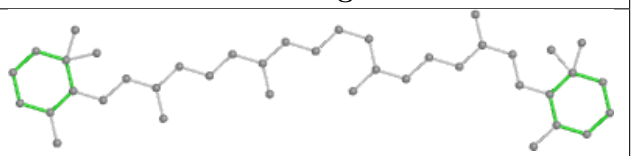
Bond lengths



Bond angles

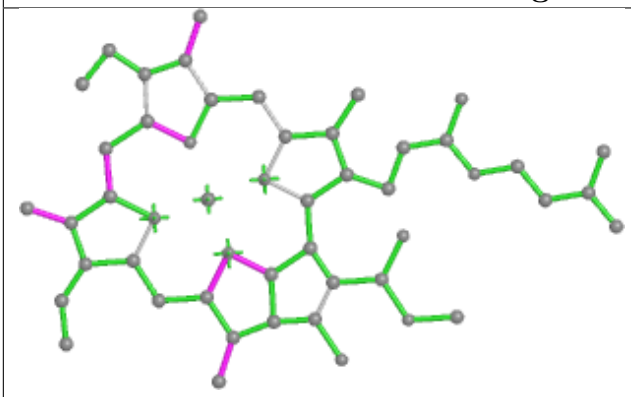


Torsions

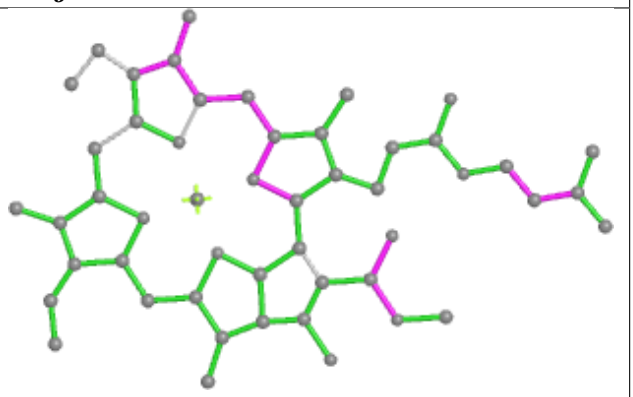


Rings

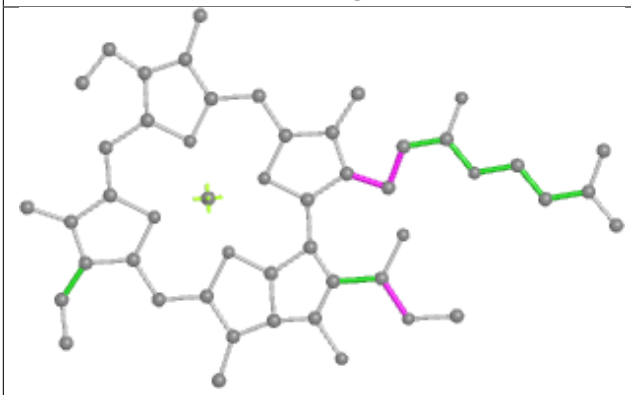
Ligand CLA j 602



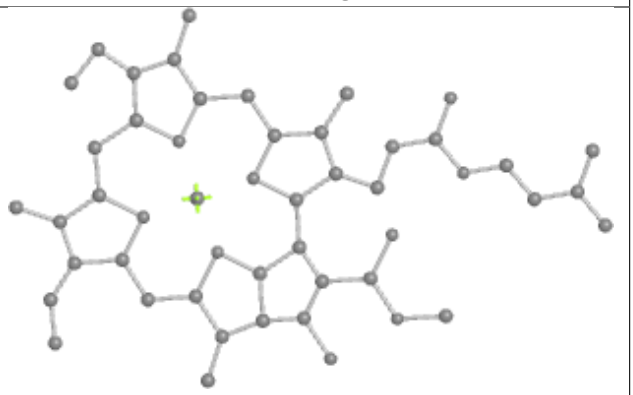
Bond lengths



Bond angles

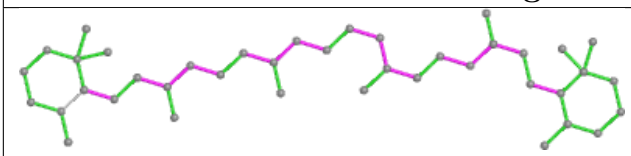


Torsions

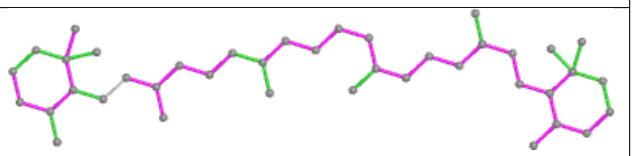


Rings

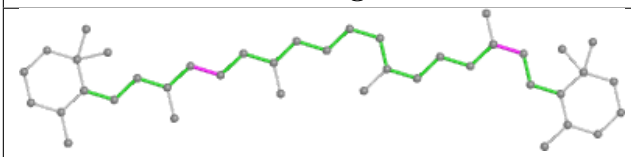
Ligand WVN l 301



Bond lengths



Bond angles



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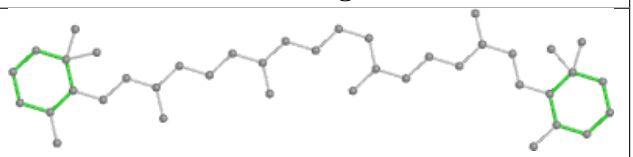
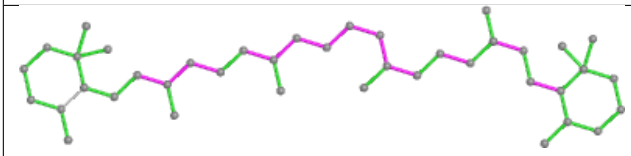
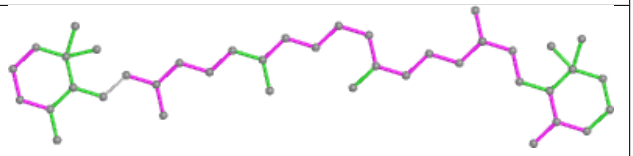


Rings

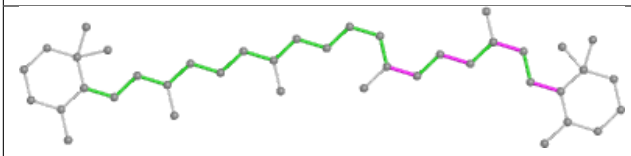
Ligand WVN B 848



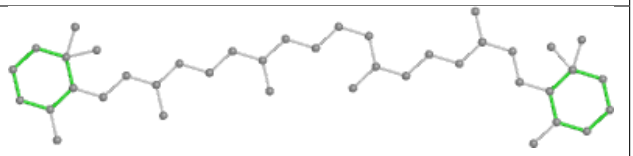
Bond lengths



Bond angles

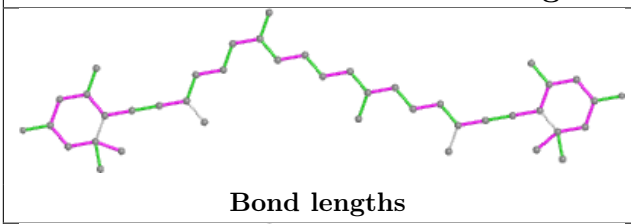


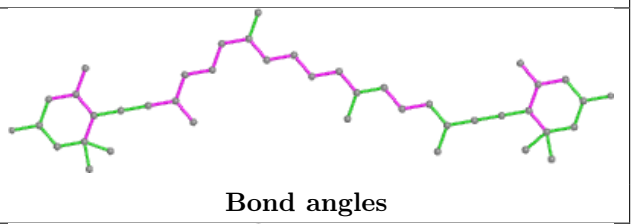
Torsions

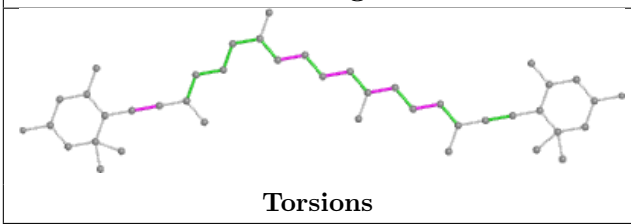


Rings

Ligand II0 k 615


Bond lengths


Bond angles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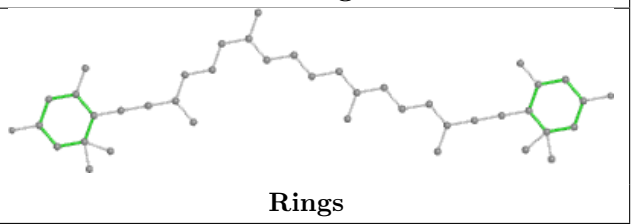
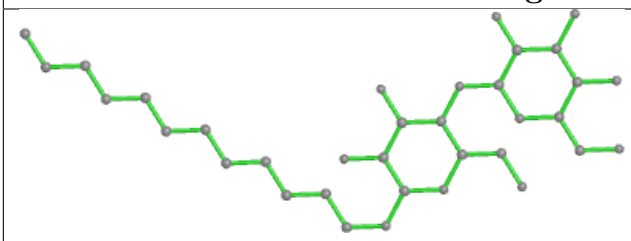
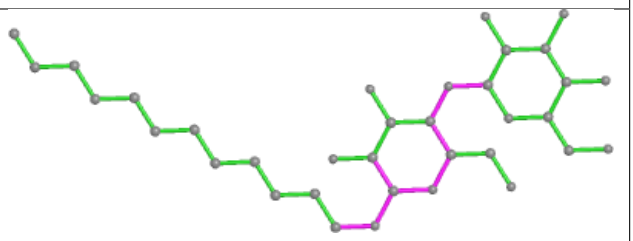
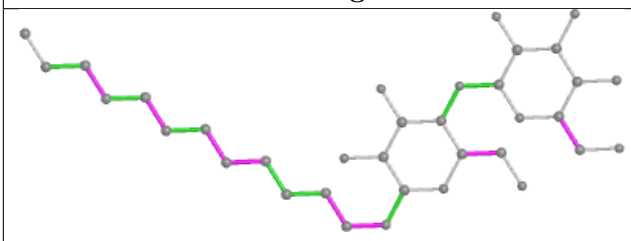
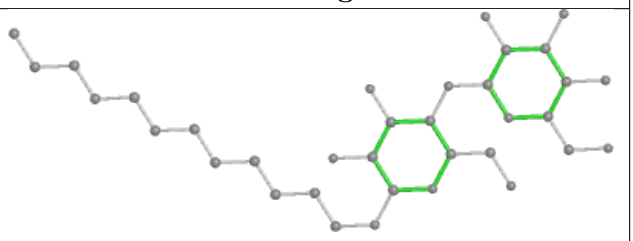

Rings

Ligand LMT a 320

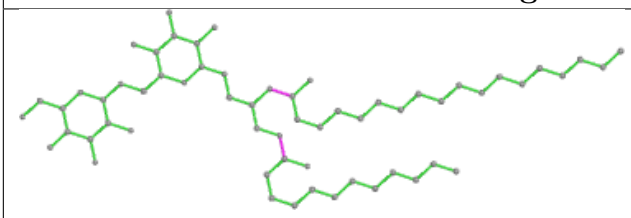

Bond lengths

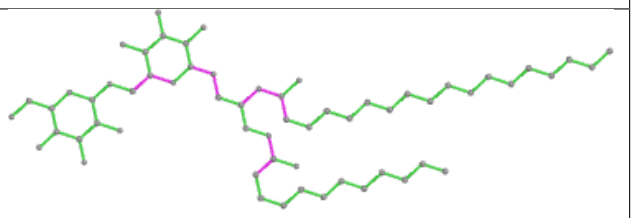

Bond angles

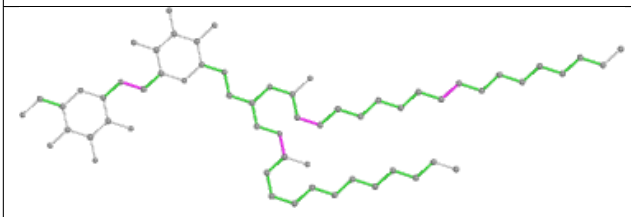

Torsions


Rings

Ligand DGD B 843


Bond lengths


Bond angles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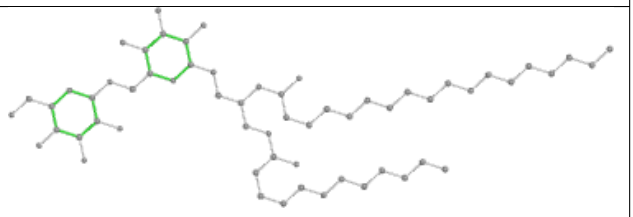
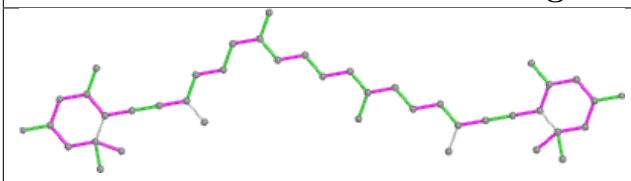
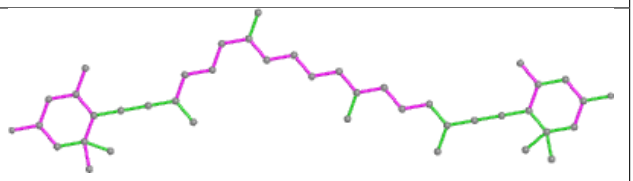

Rings

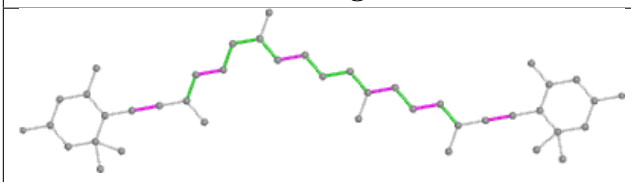
Ligand II0 i 313



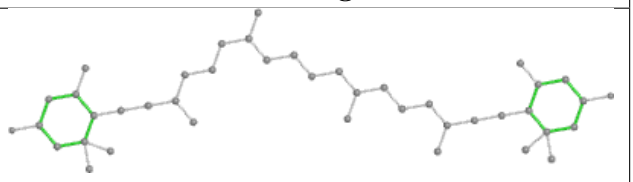
Bond lengths



Bond angles

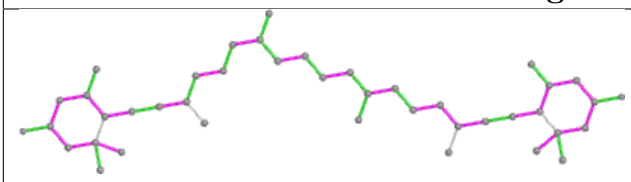


Torsions

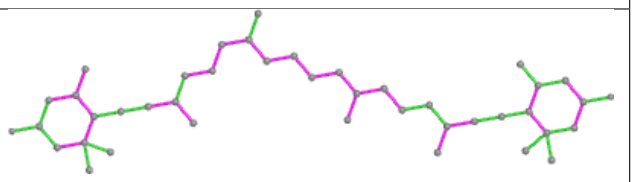


Rings

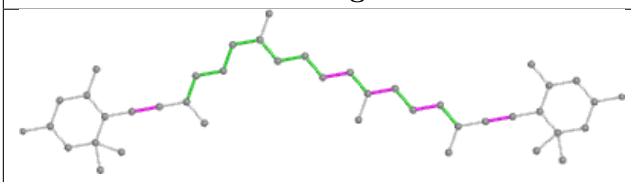
Ligand II0 i 314



Bond lengths



Bond angles



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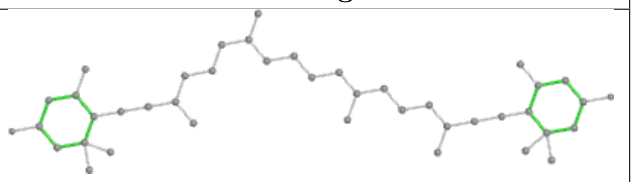
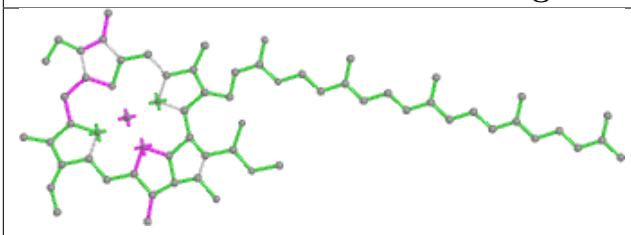
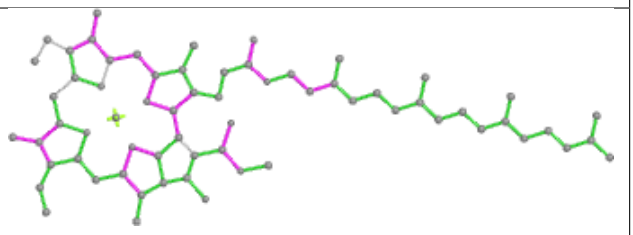


Rings

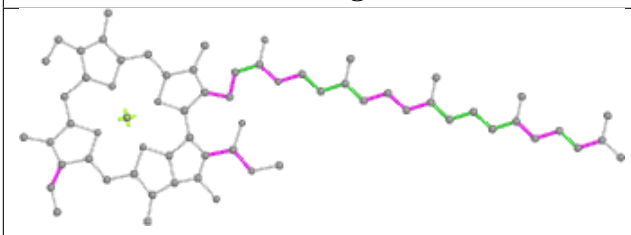
Ligand CLA l 307



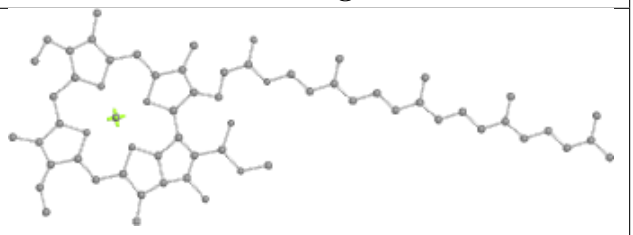
Bond lengths



Bond angles

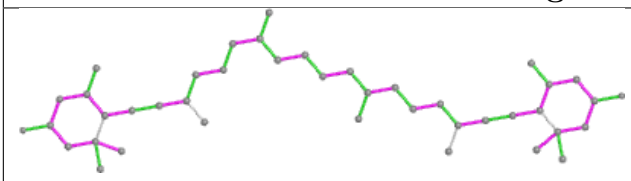


Torsions

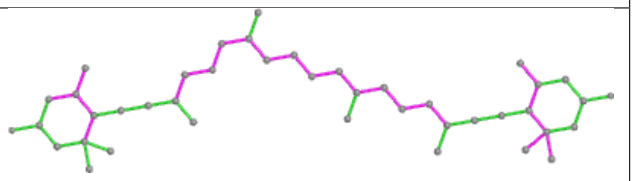


Rings

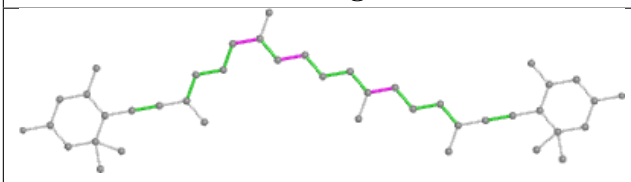
Ligand II0 l 316



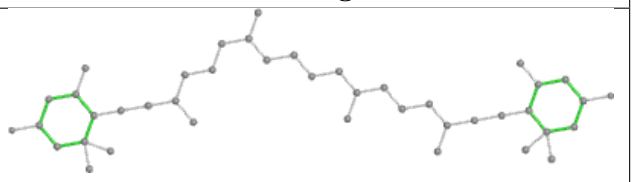
Bond lengths



Bond angles

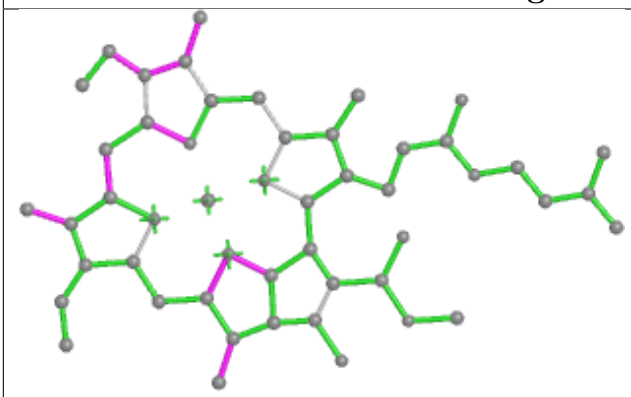


Torsions

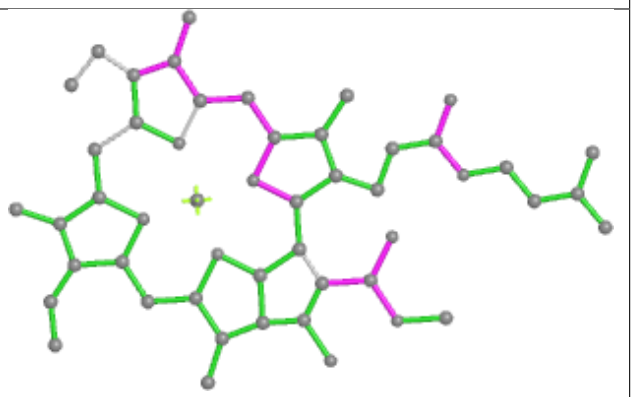


Rings

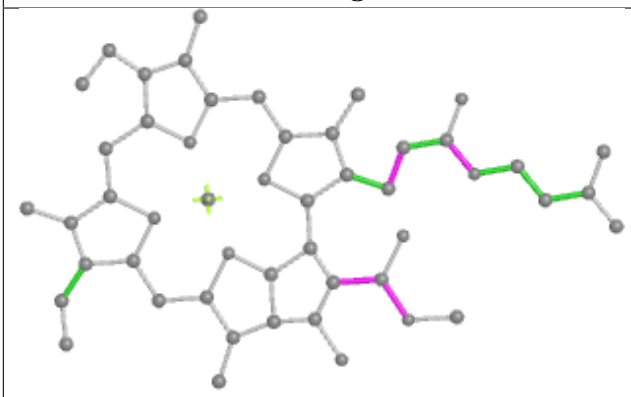
Ligand CLA n 303



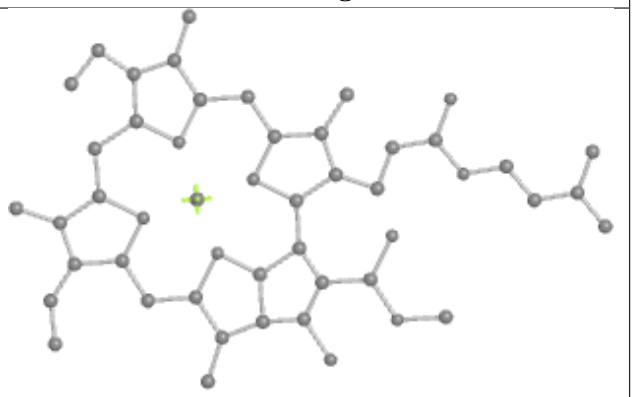
Bond lengths



Bond angles

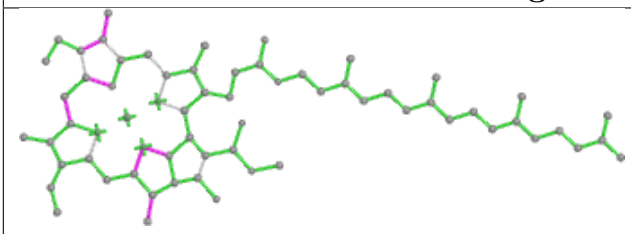


Torsions

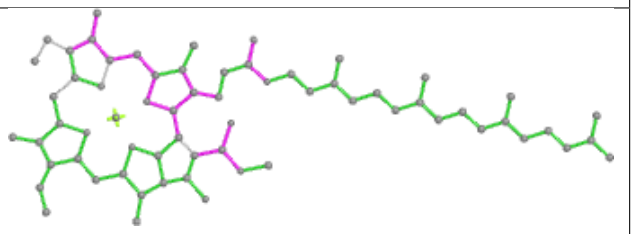


Rings

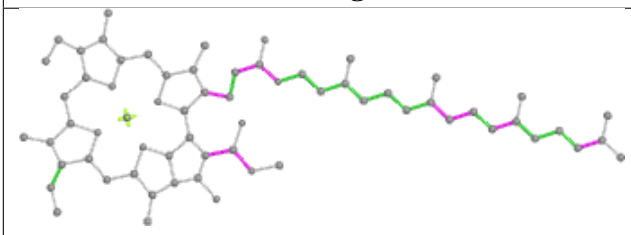
Ligand CLA a 308



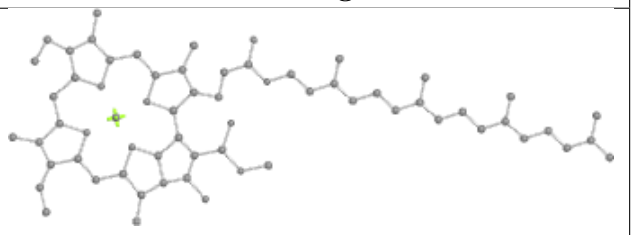
Bond lengths



Bond angles

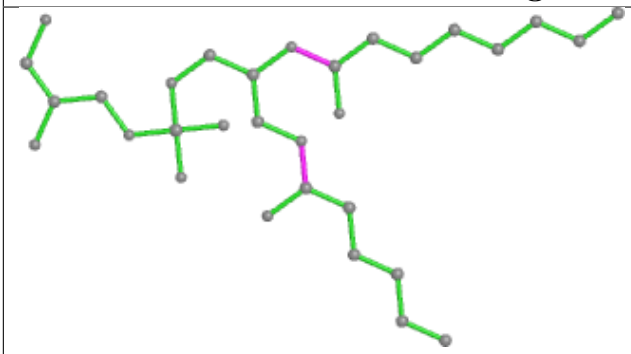


Torsions

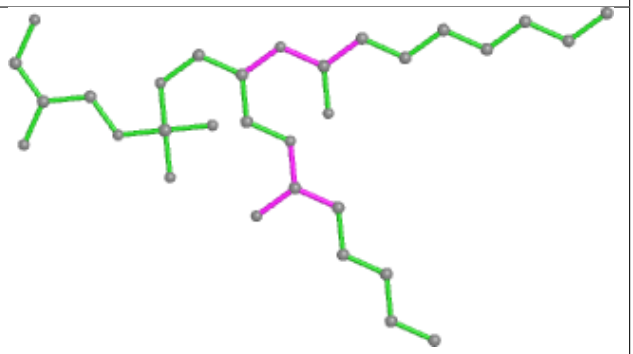


Rings

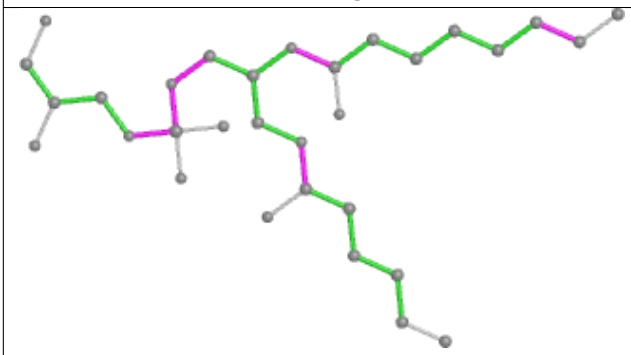
Ligand LHG J 107



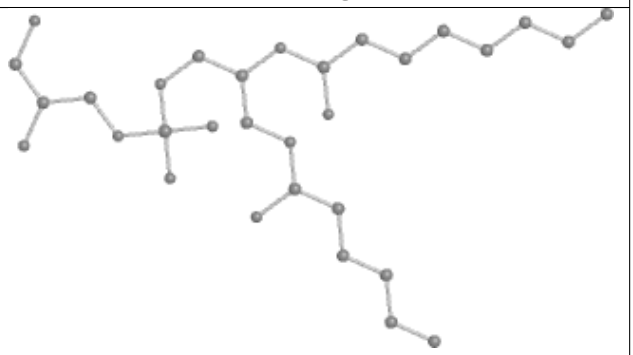
Bond lengths



Bond angles

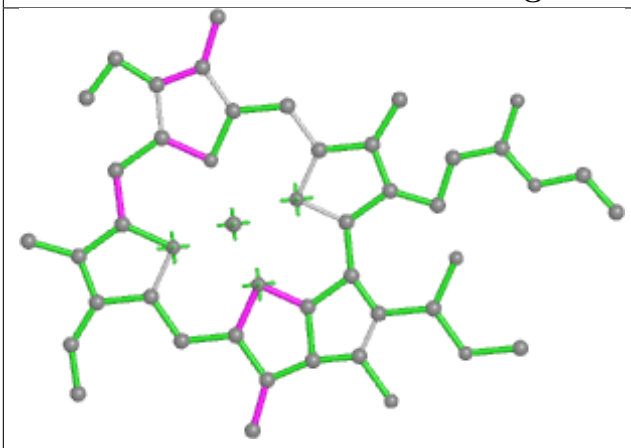


Torsions



Rings

Ligand CLA B 834



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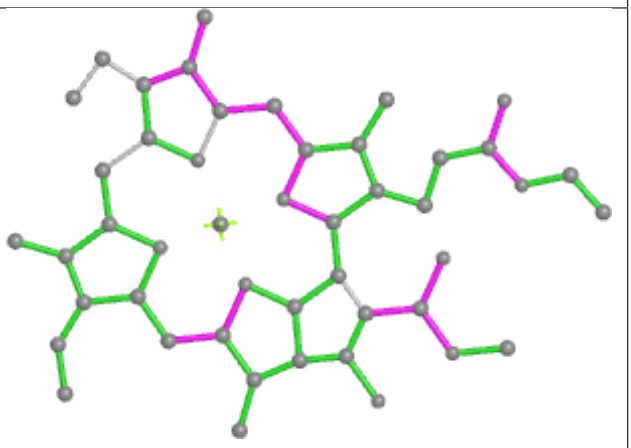
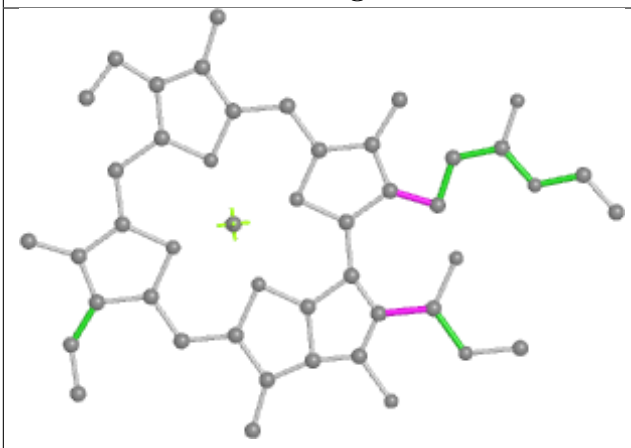
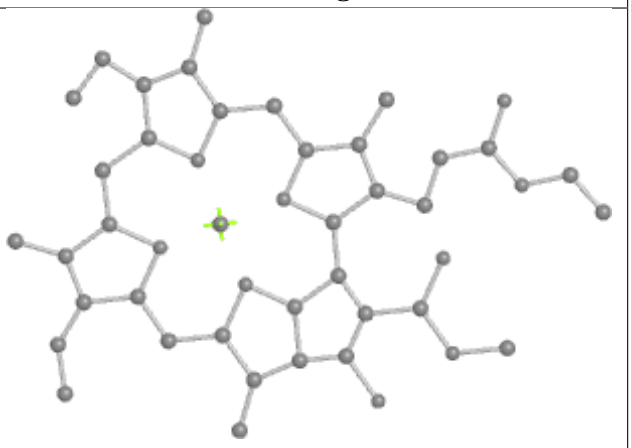


Bond angles

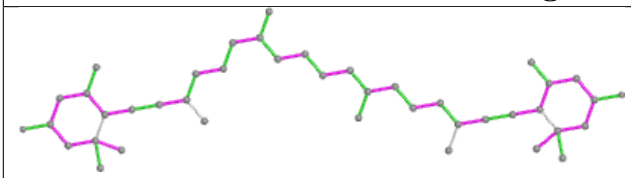


Torsions



Rings

Ligand II0 n 316



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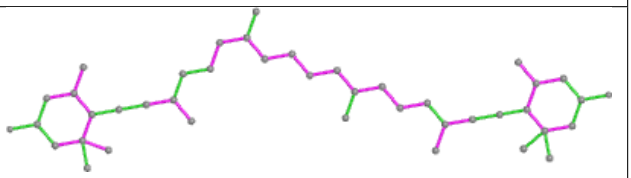
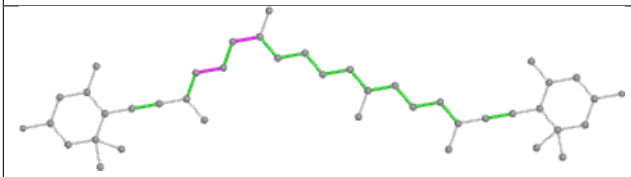
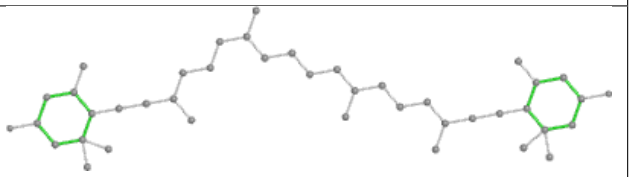


Bond angles

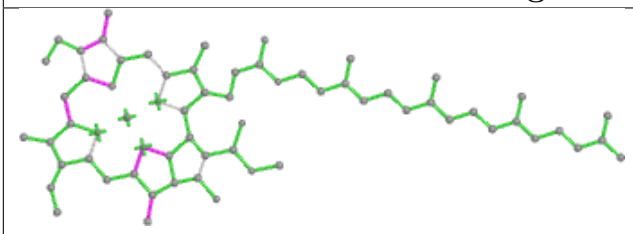


Torsions

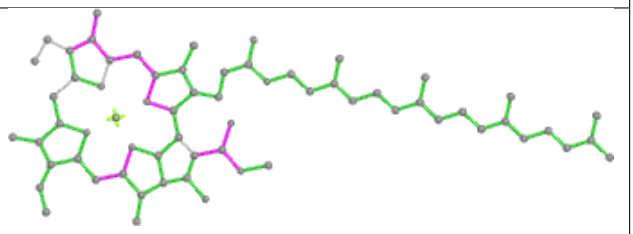


Rings

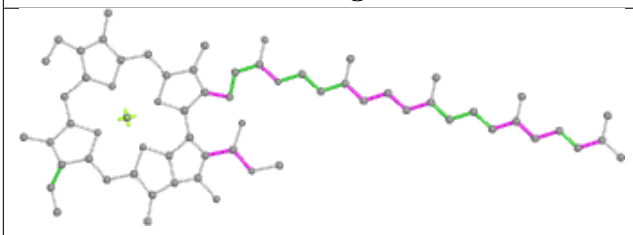
Ligand CLA b 610



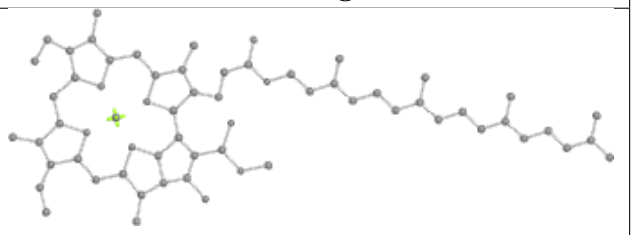
Bond lengths



Bond angles

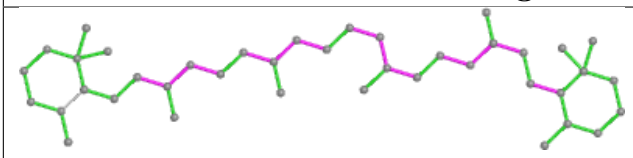


Torsions

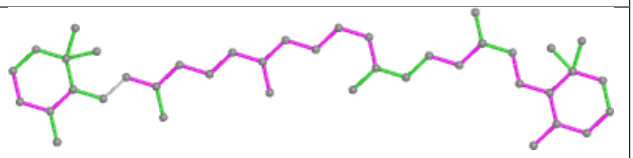


Rings

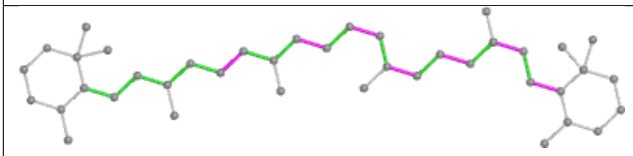
Ligand WVN B 847



Bond lengths



Bond angles



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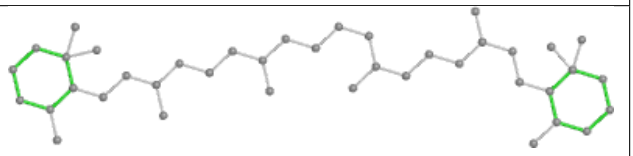
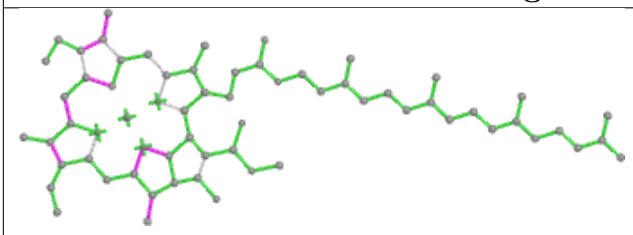


Rings

Ligand CLA A 818



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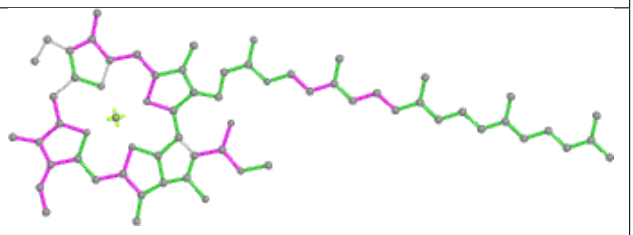
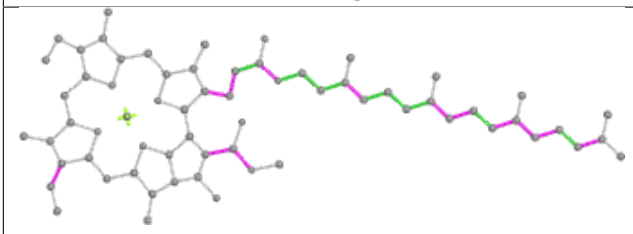
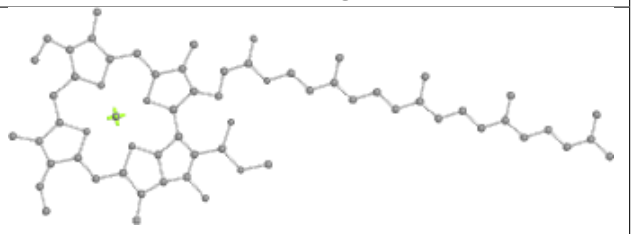


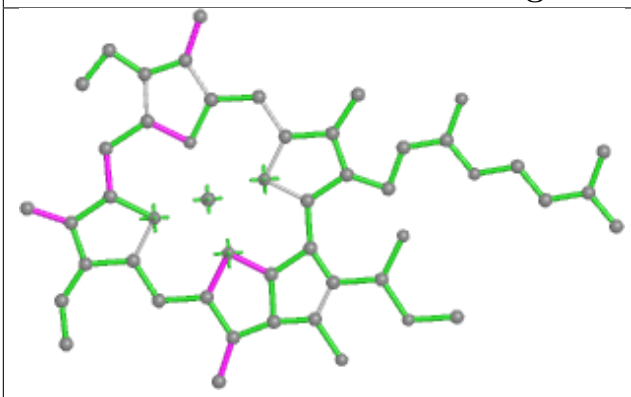
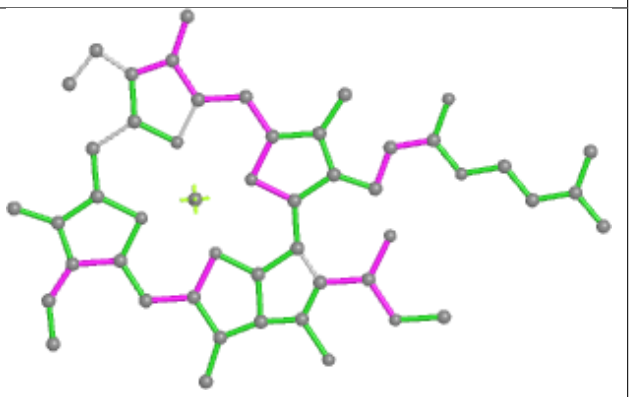
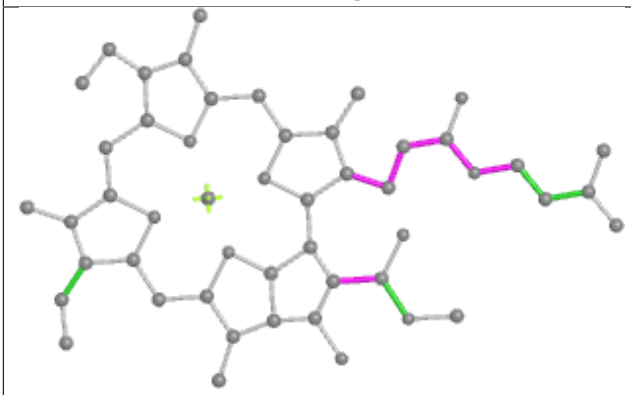
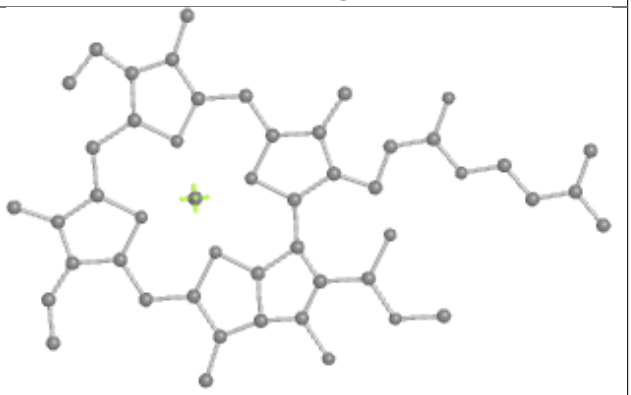
Bond angles

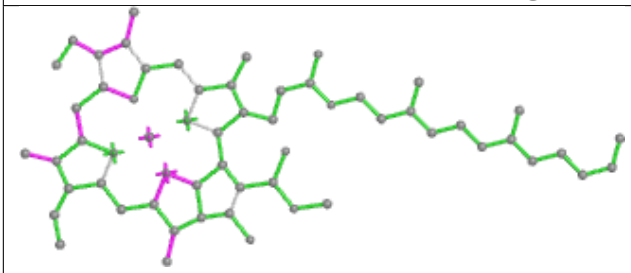
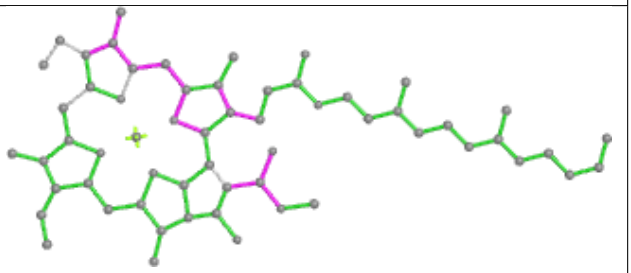
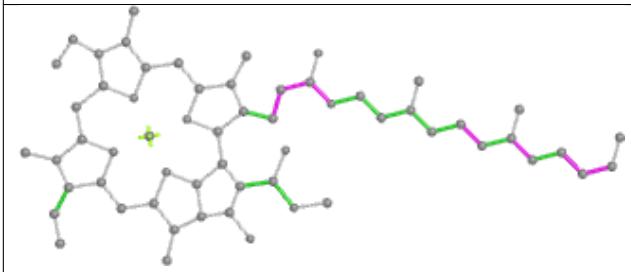
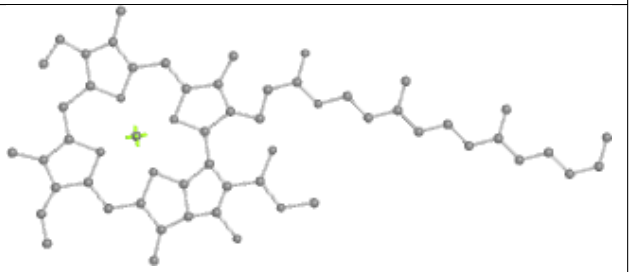


Torsions

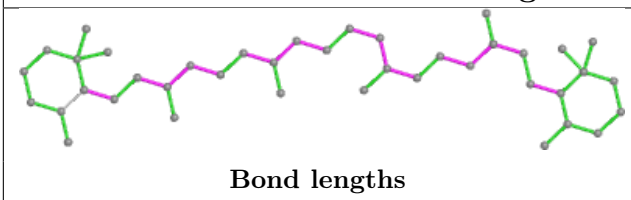


Rings

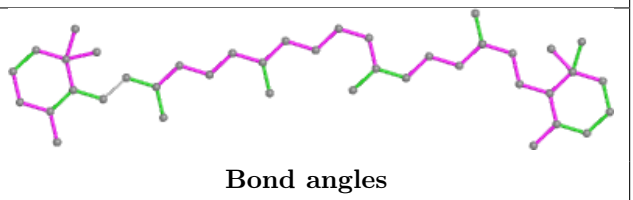
Ligand CLA L 204	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 816	
 Bond lengths	 Bond angles
 Torsions	 Rings

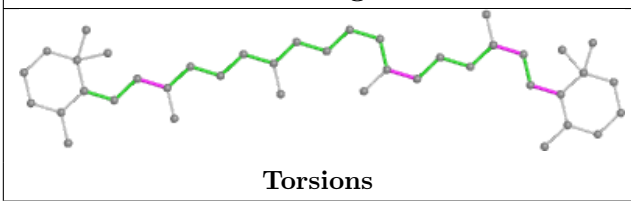
Ligand WVN J 102



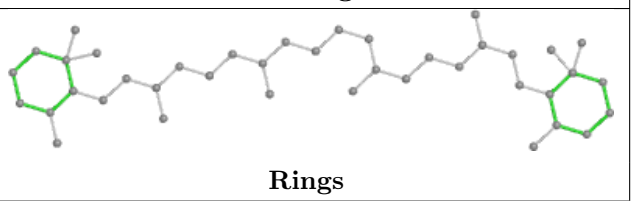
Bond lengths



Bond angles

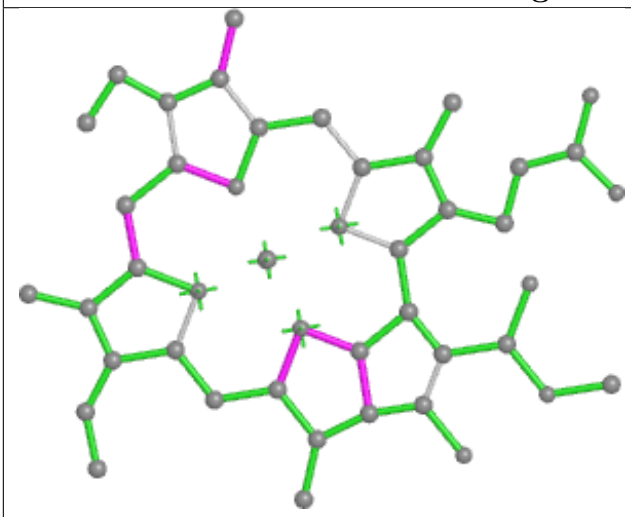


Torsions

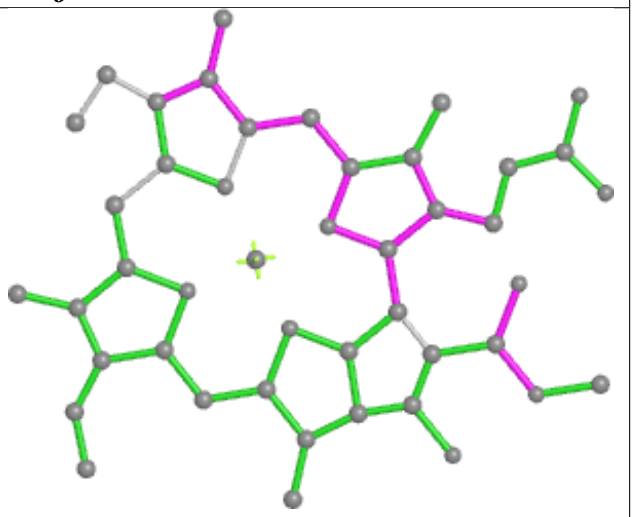


Rings

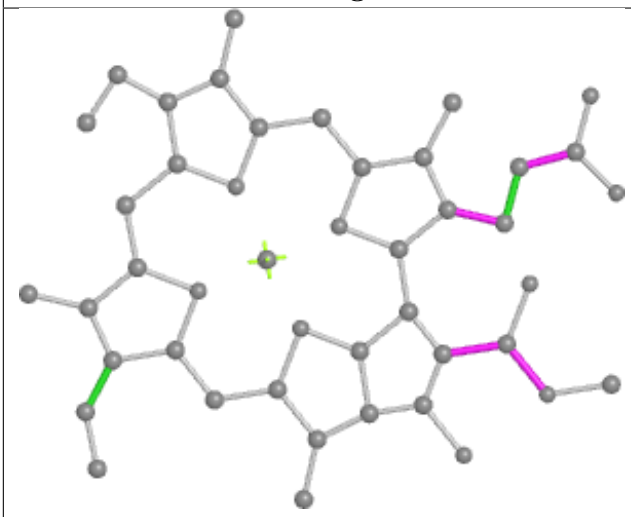
Ligand CLA j 605



Bond lengths



Bond angles



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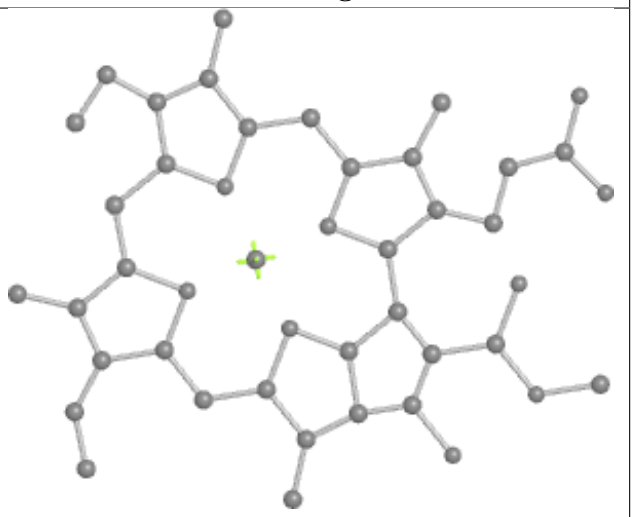
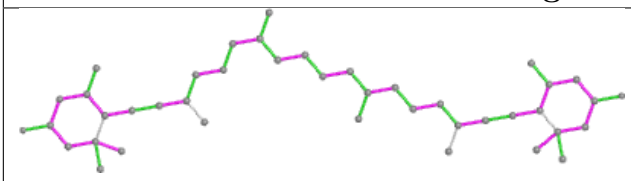
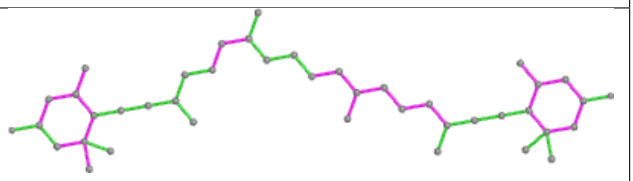
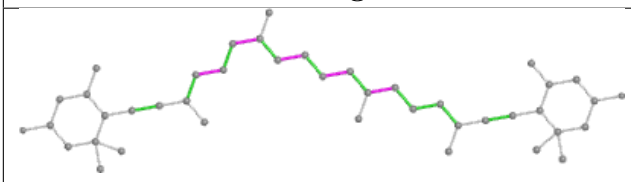


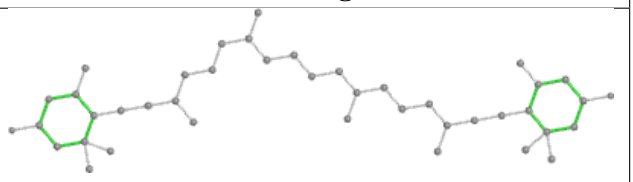
Rings

Ligand II0 a 318

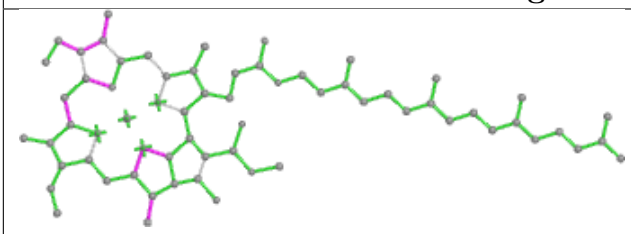

Bond lengths

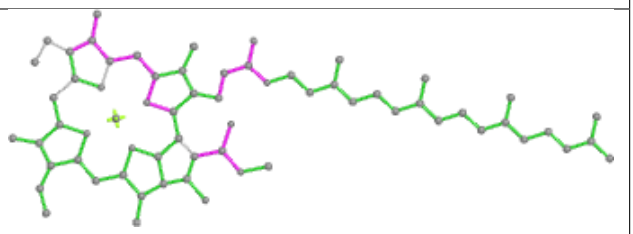

Bond angles

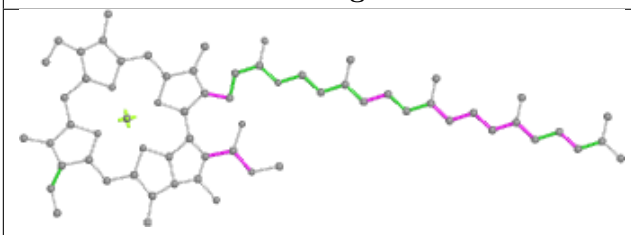

Torsions

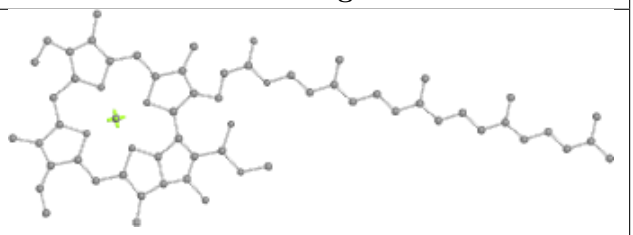

Rings

Ligand CLA k 608

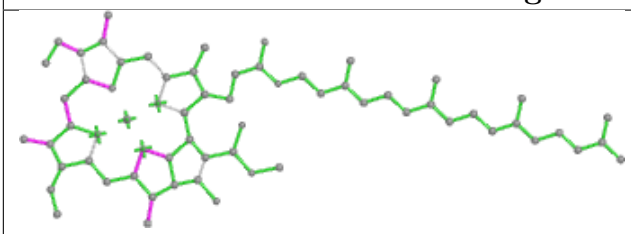

Bond lengths

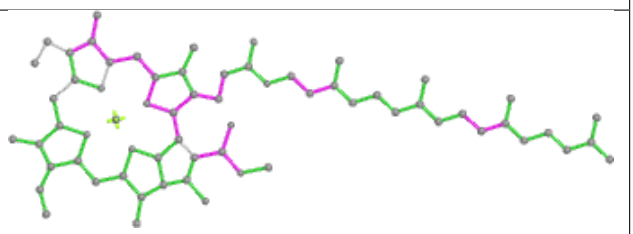

Bond angles

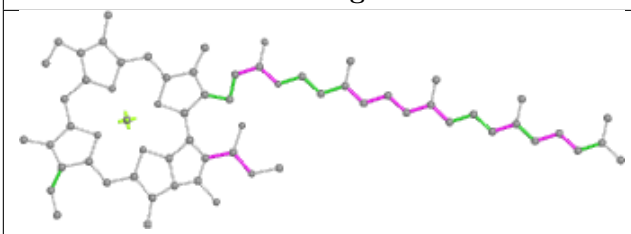

Torsions

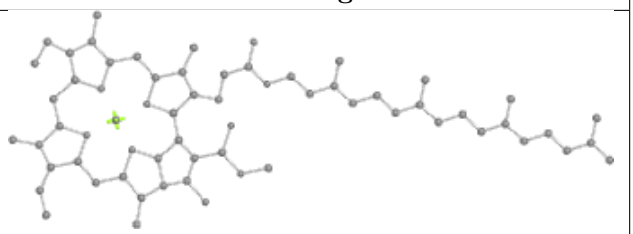

Rings

Ligand CLA B 803

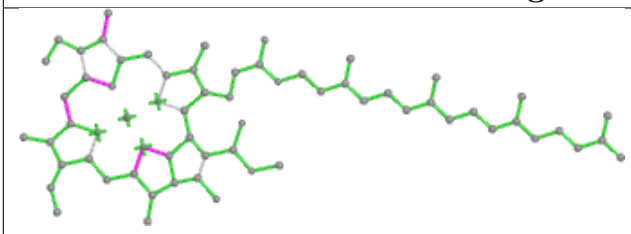

Bond lengths


Bond angles

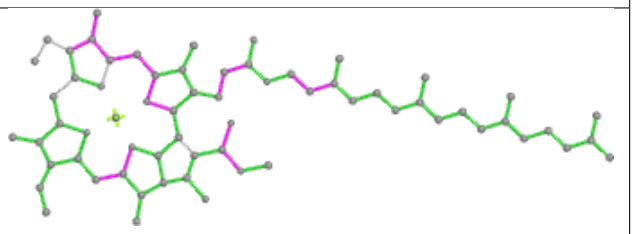

Torsions


Rings

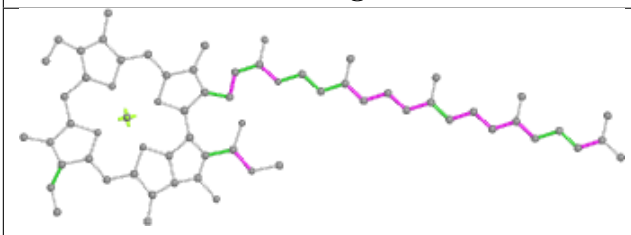
Ligand CLA b 611



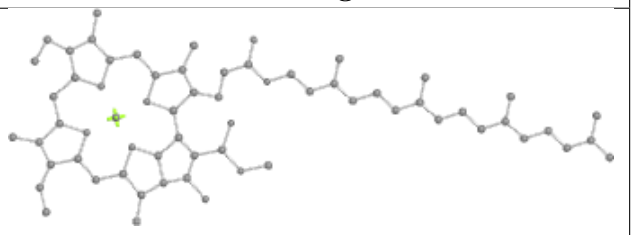
Bond lengths



Bond angles

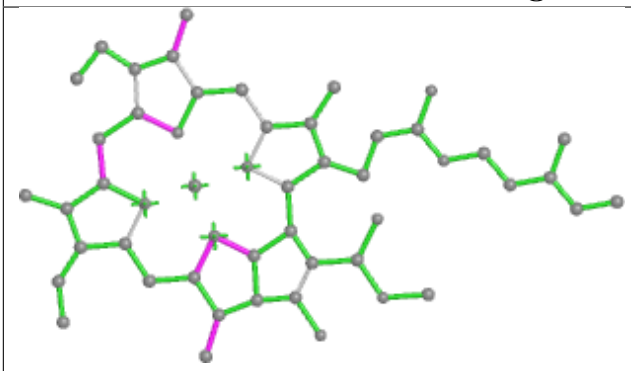


Torsions

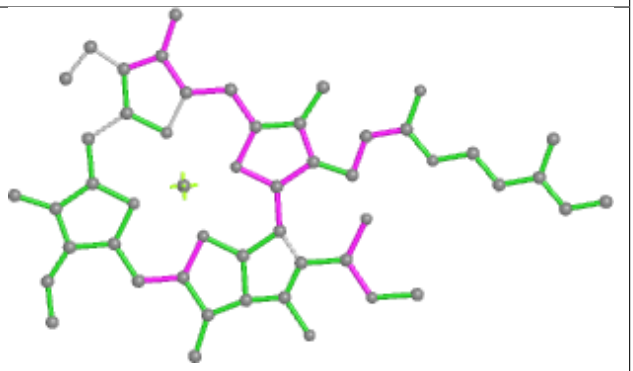


Rings

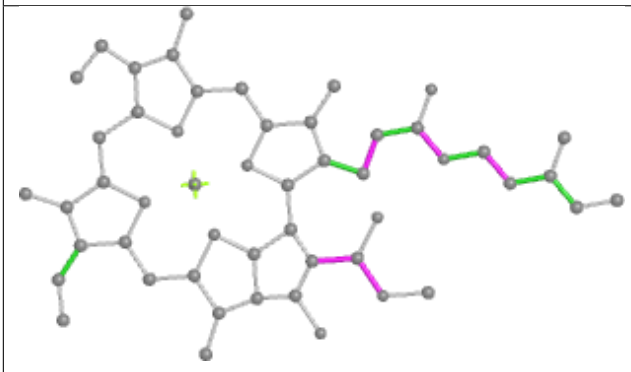
Ligand CLA k 603



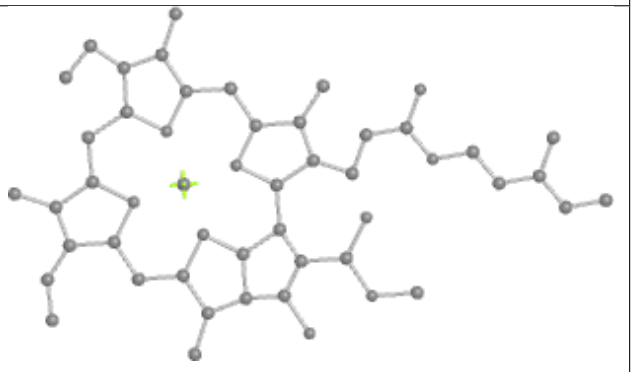
Bond lengths



Bond angles

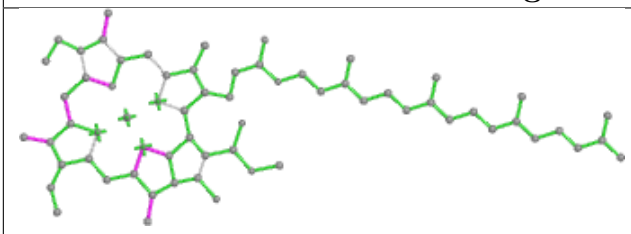


Torsions



Rings

Ligand CLA A 854



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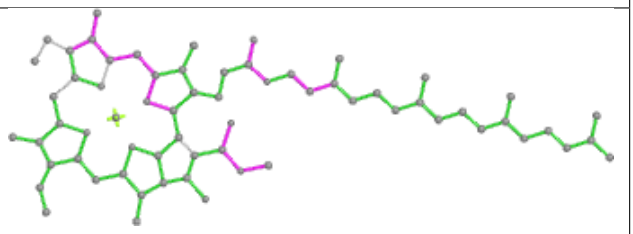
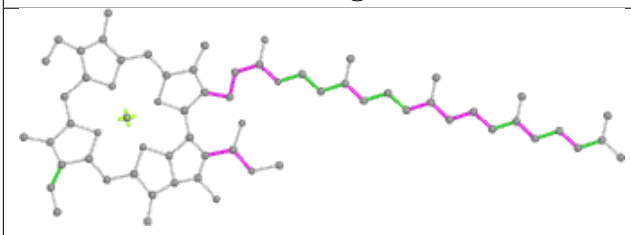


Bond angles



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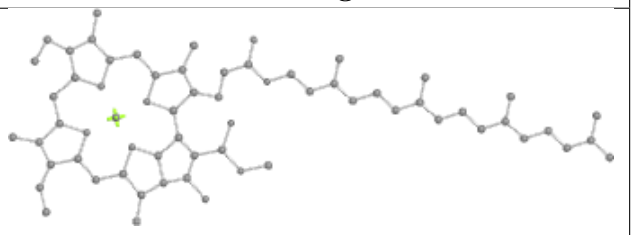
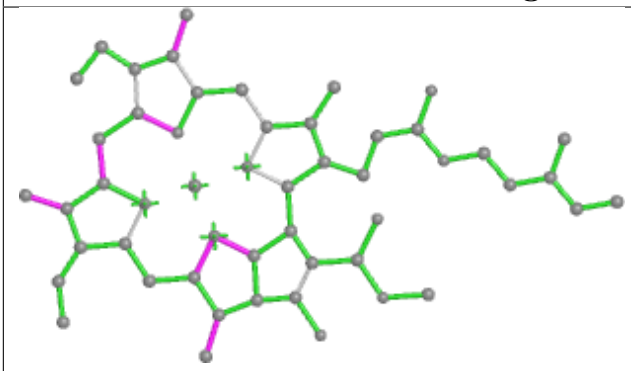


Rings

Ligand CLA m 612



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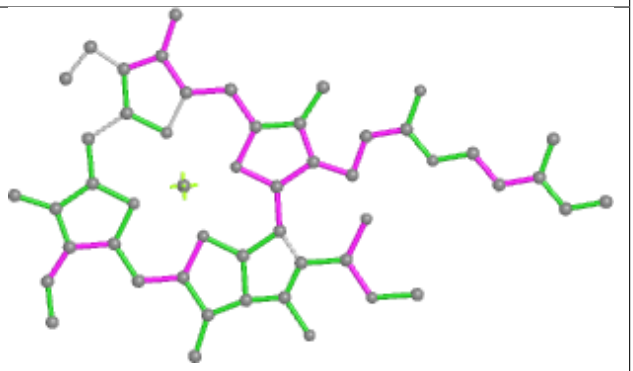
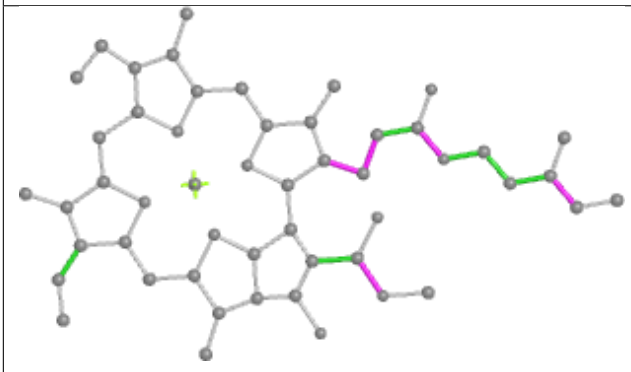


Bond angles



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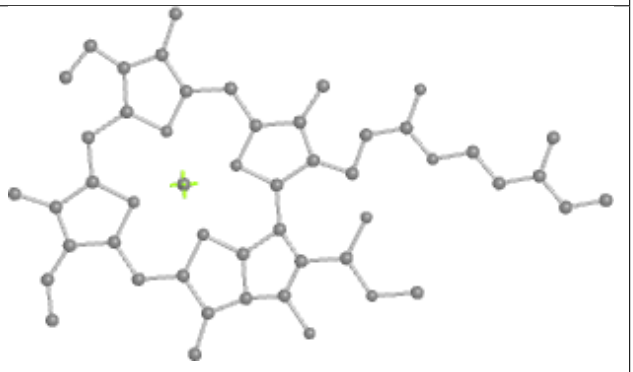
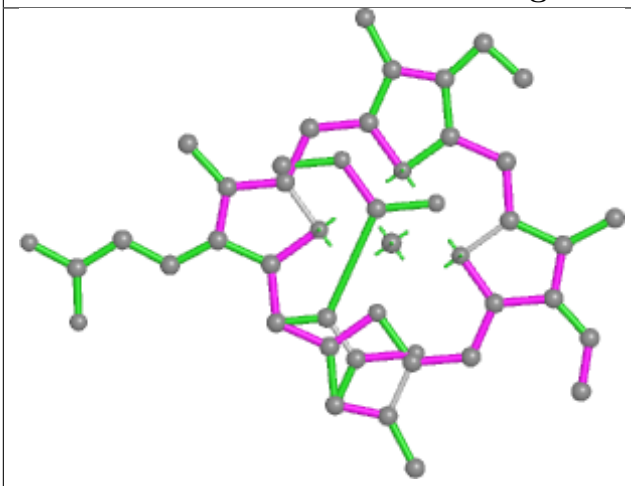


Rings

Ligand KC2 k 611



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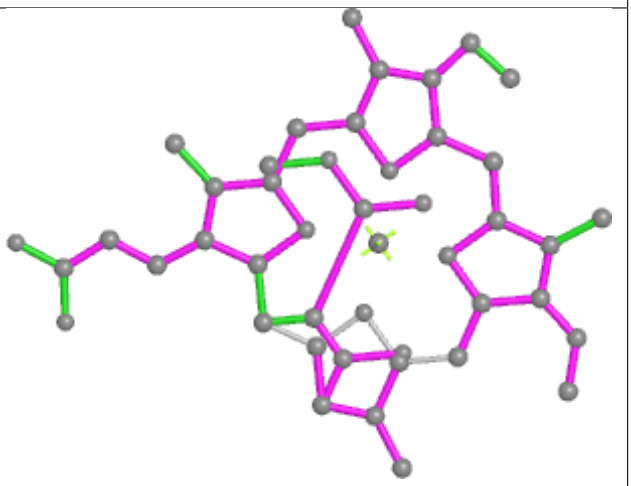
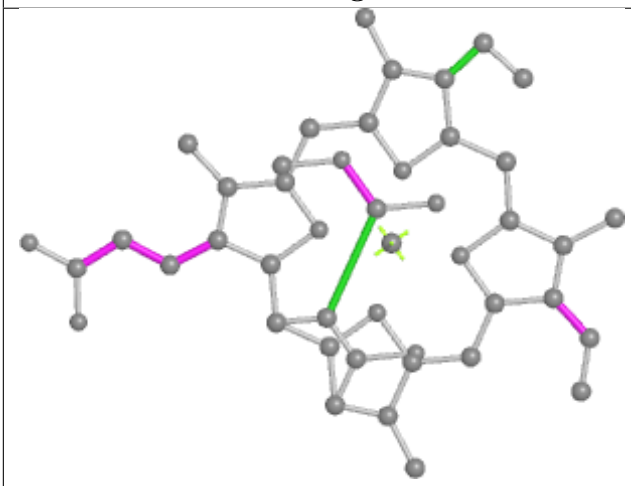


Bond angles



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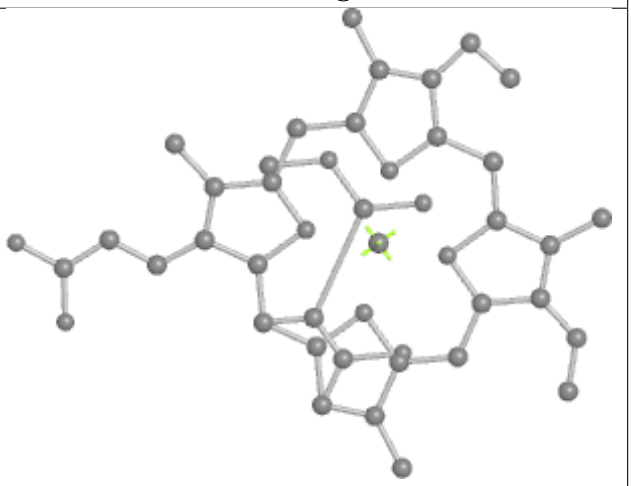
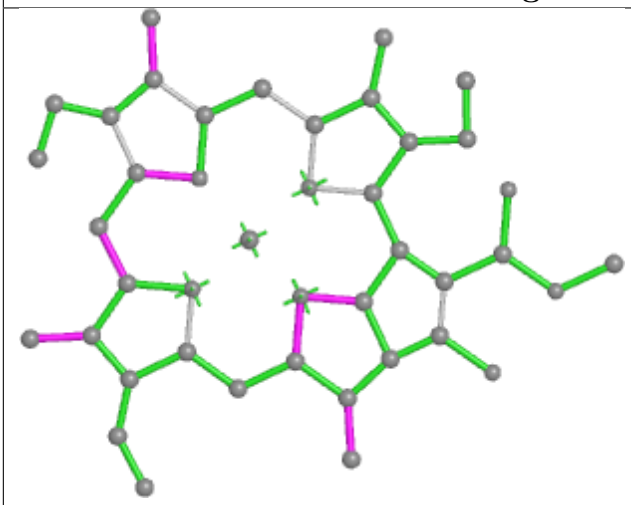


Rings

Ligand CLA m 601



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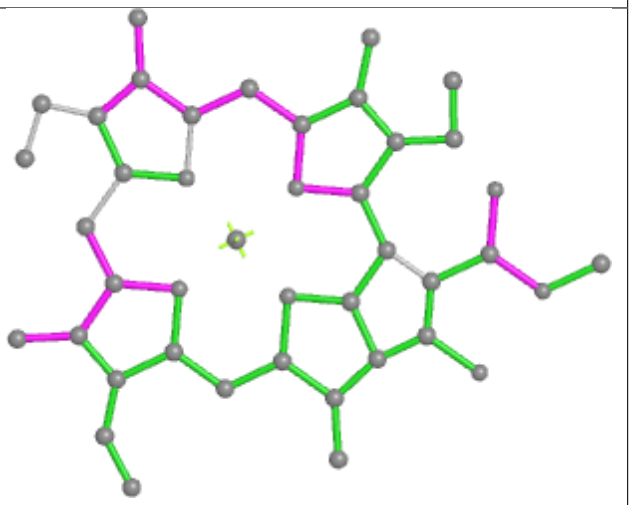
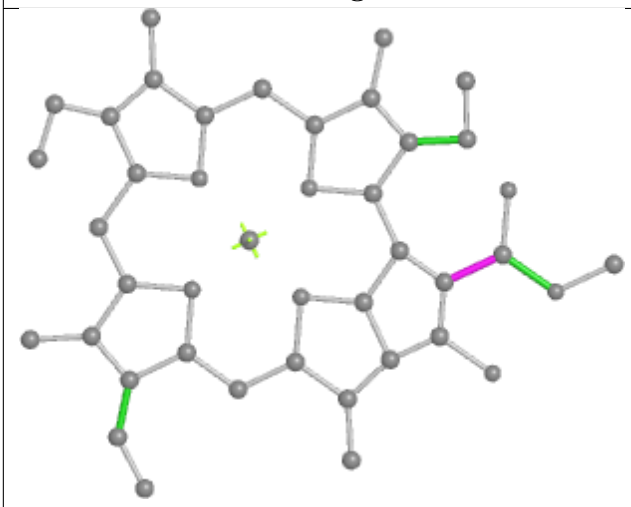


Bond angles



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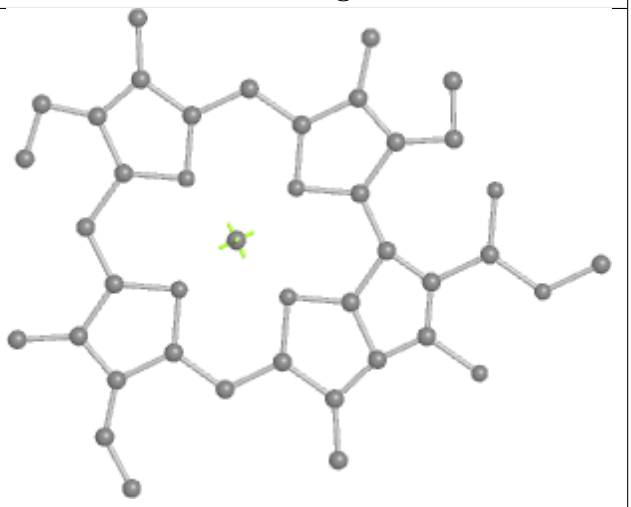
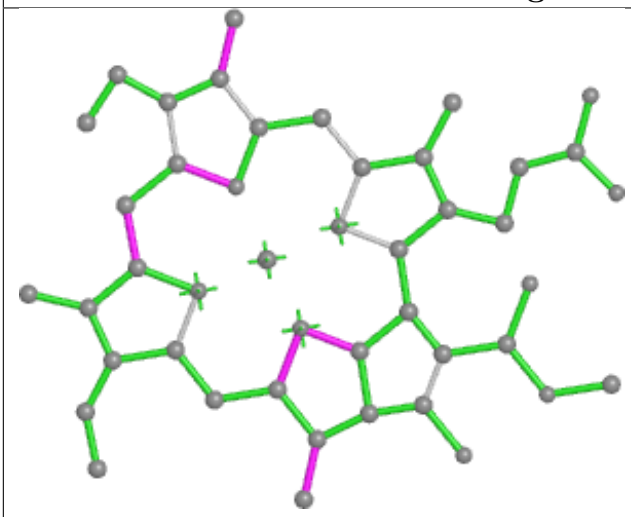


Rings

Ligand CLA n 302



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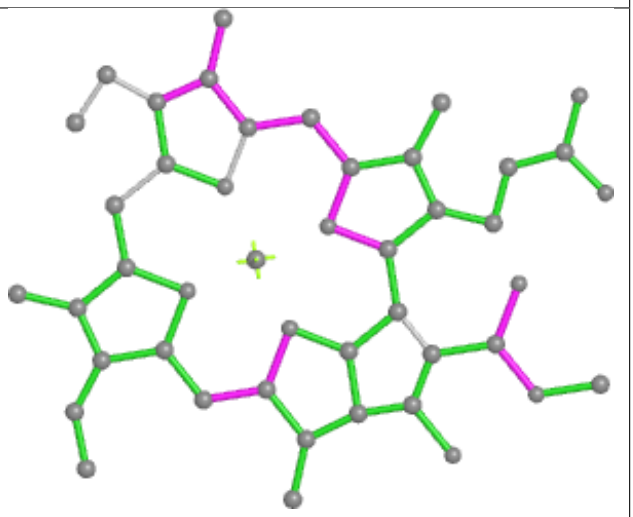
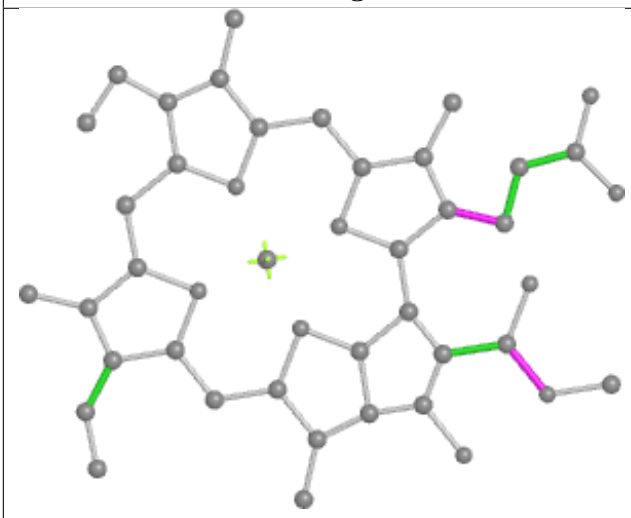


Bond angles



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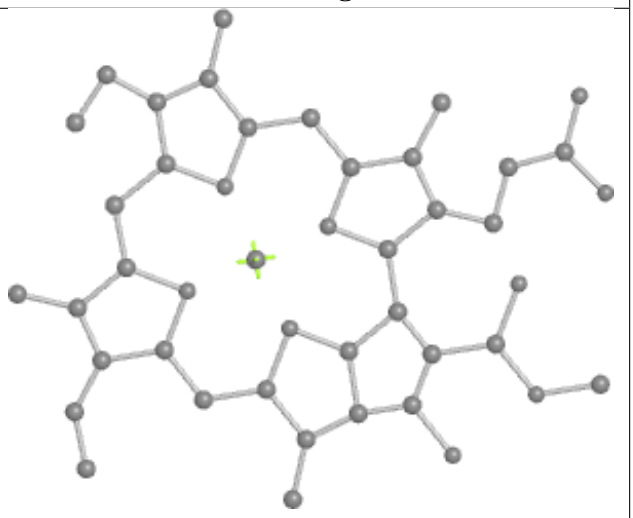
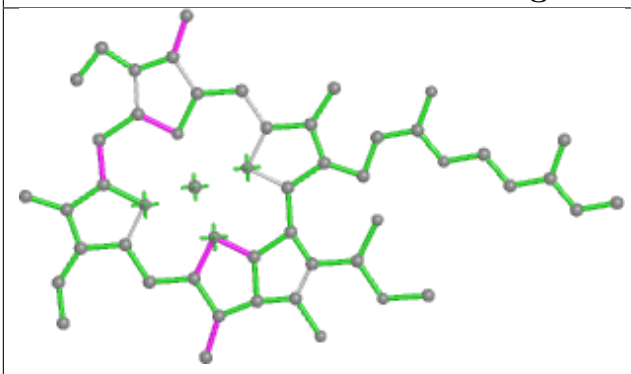


Rings

Ligand CLA s 209



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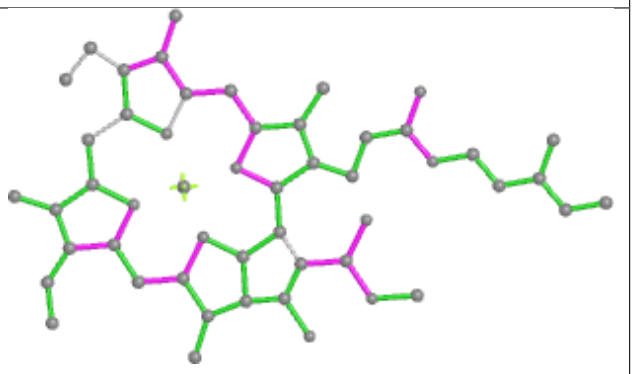
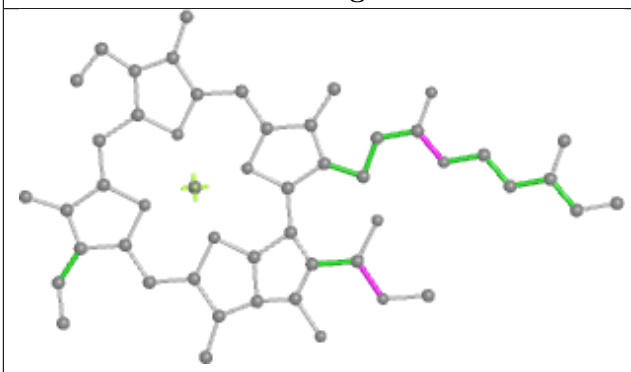


Bond angles



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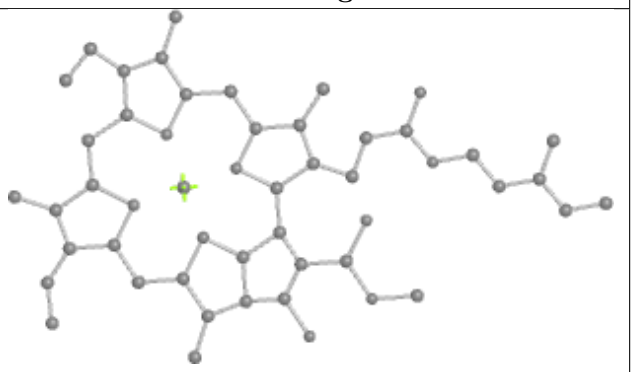
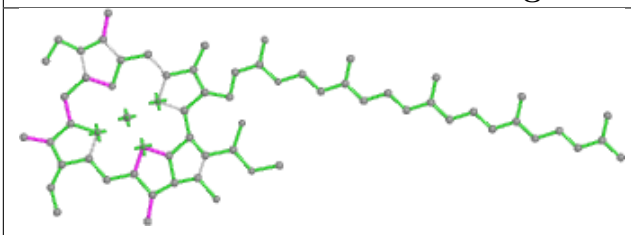


Rings

Ligand CLA A 837



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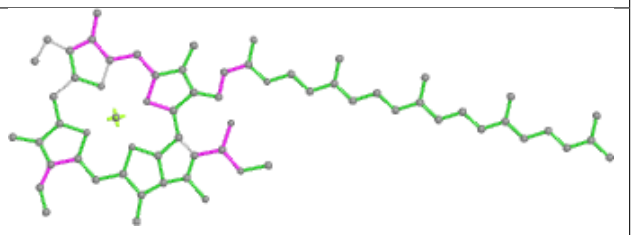
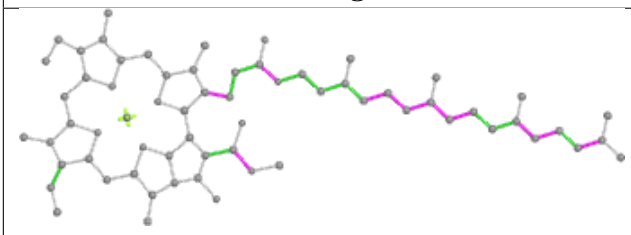


Bond angles



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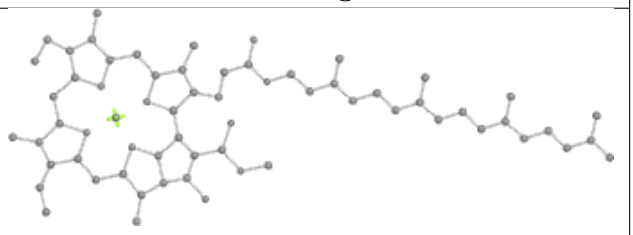
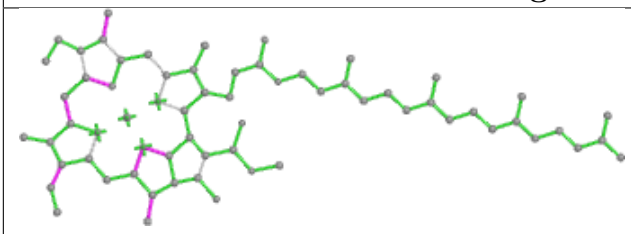


Rings

Ligand CLA s 206



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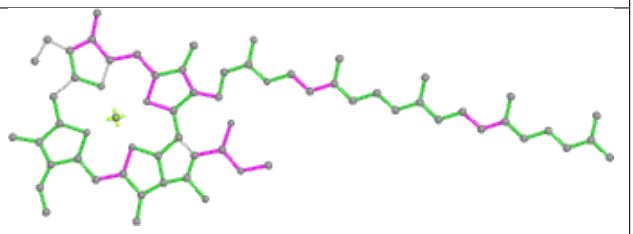
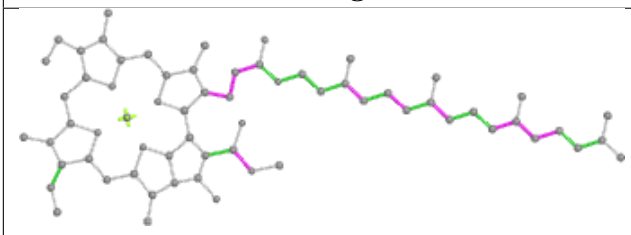


Bond angles



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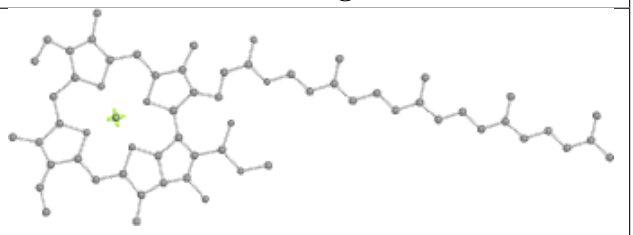
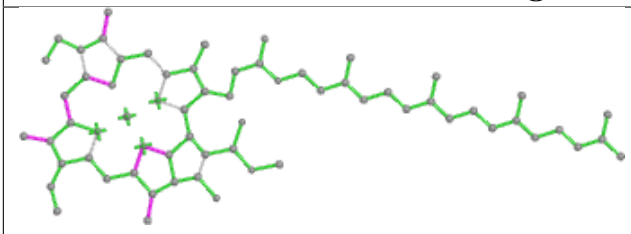


Rings

Ligand CLA b 608



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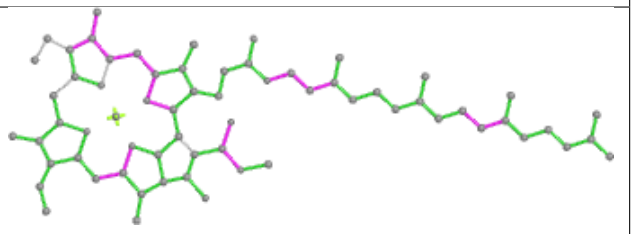
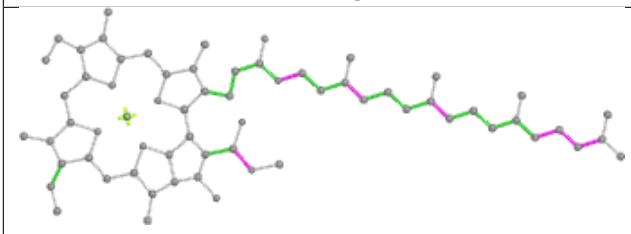


Bond angles



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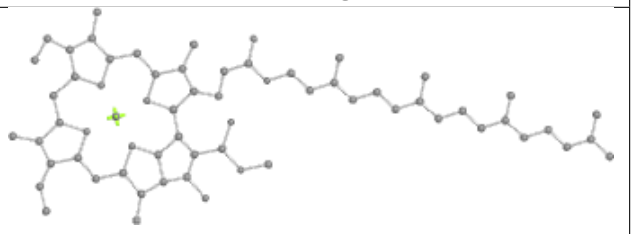
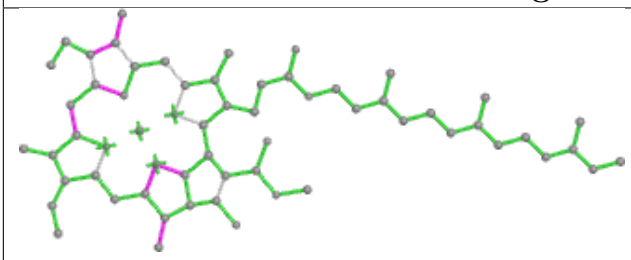


Rings

Ligand CLA l 310



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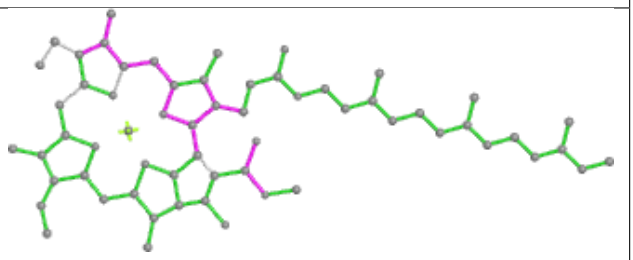
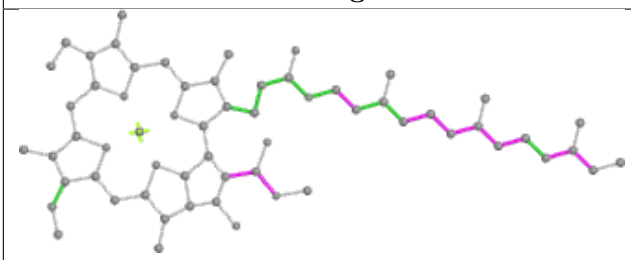


Bond angles



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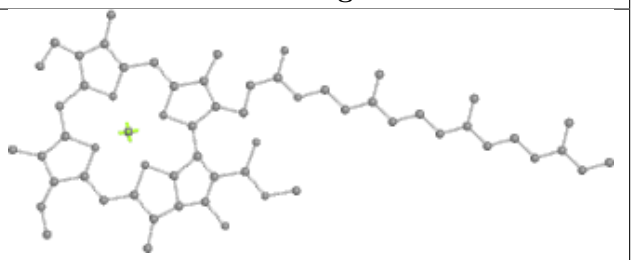
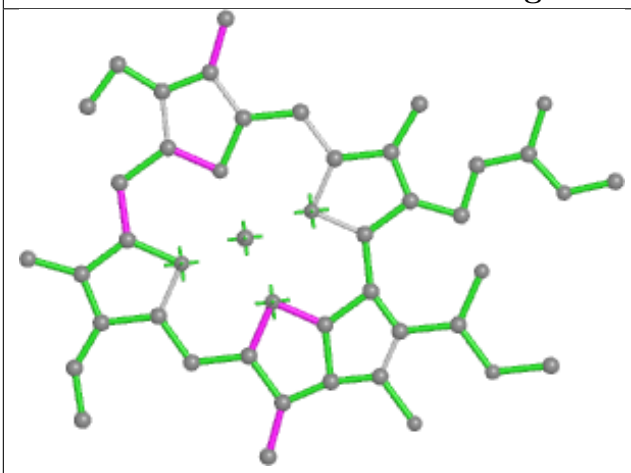


Rings

Ligand CLA B 819



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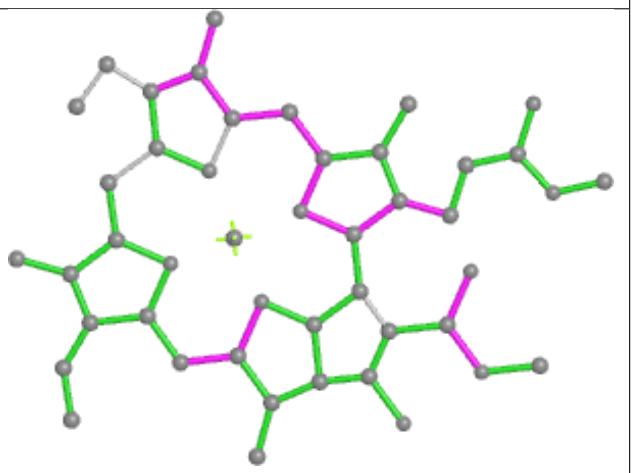
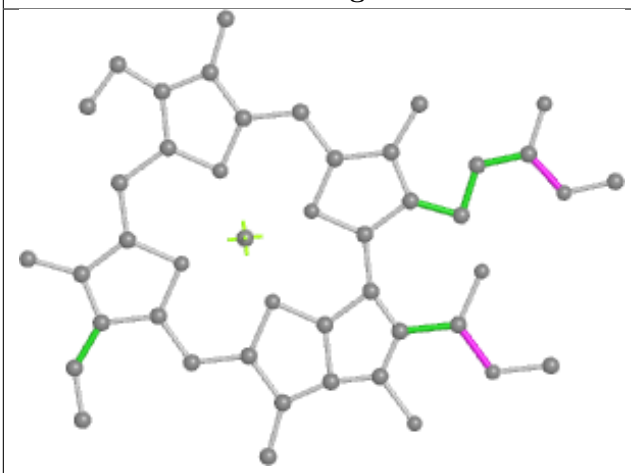


Bond angles



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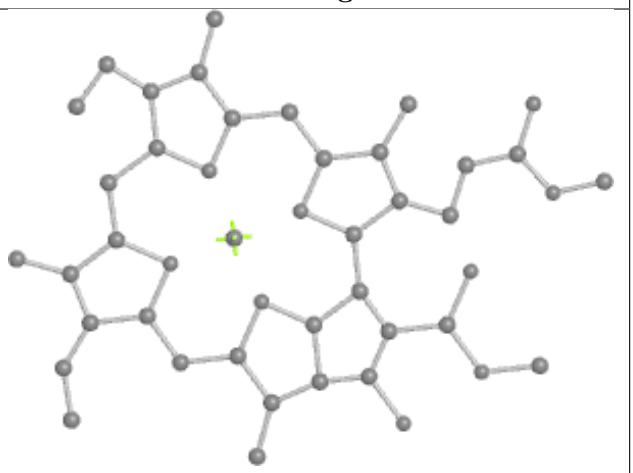
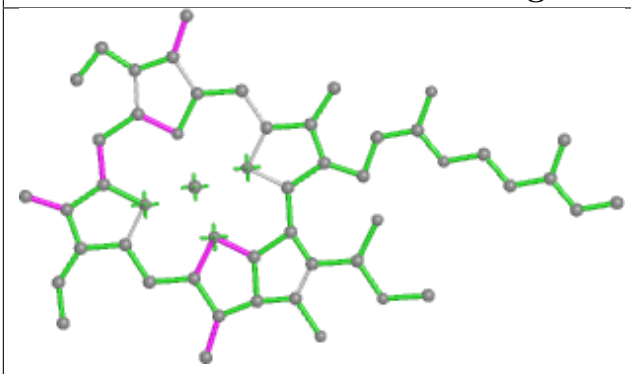
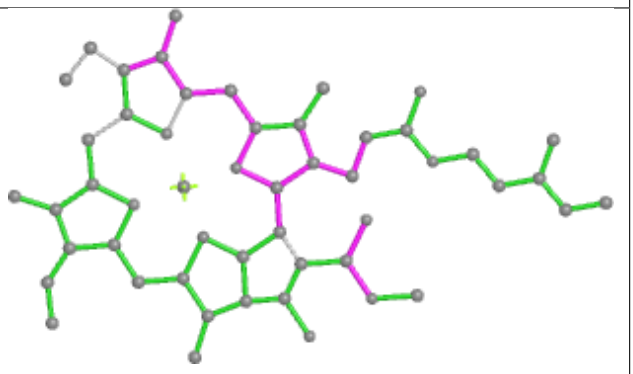


Rings

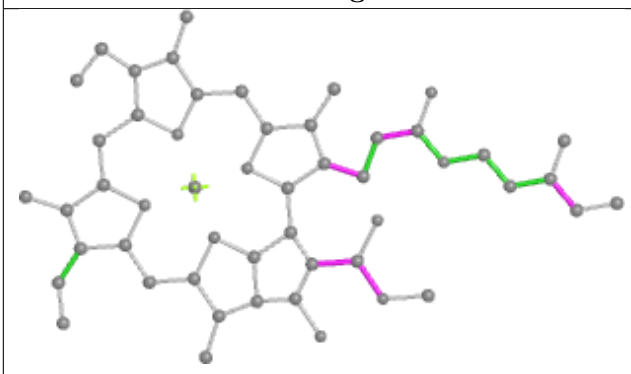
Ligand CLA h 308



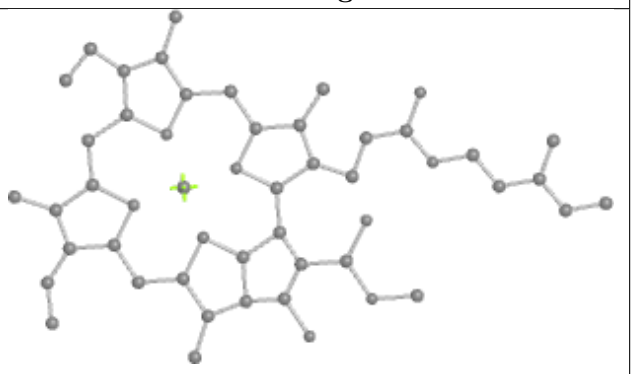
Bond lengths



Bond angles

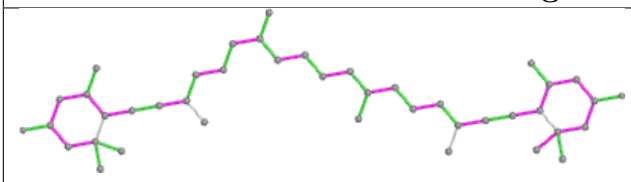


Torsions

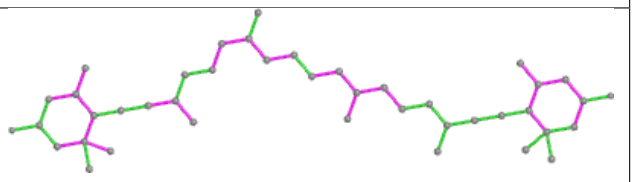


Rings

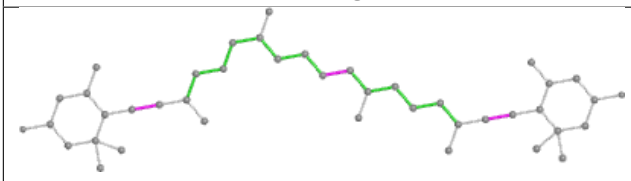
Ligand II0 d 314



Bond lengths



Bond angles



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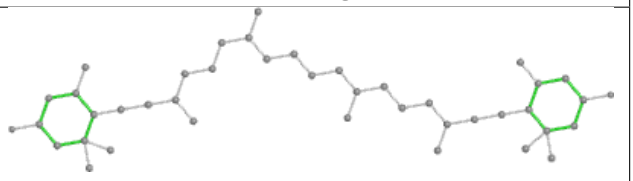
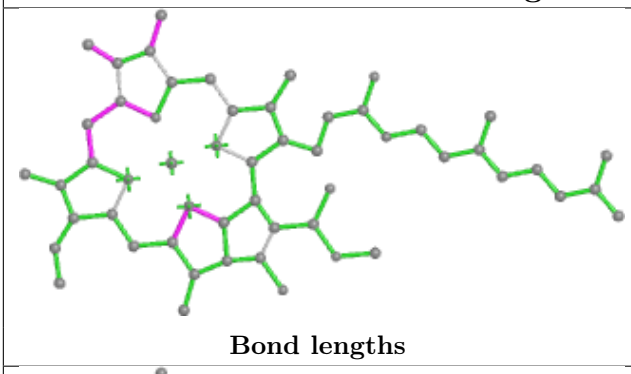
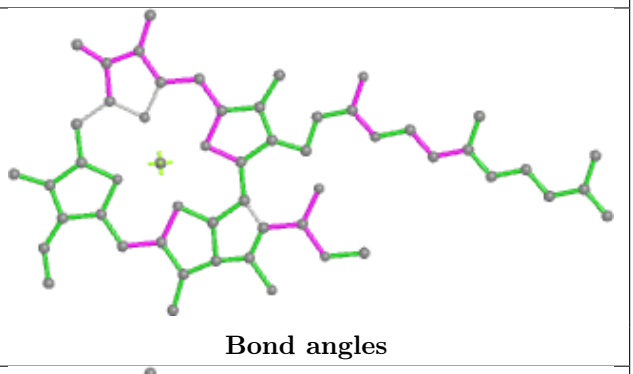


Rings

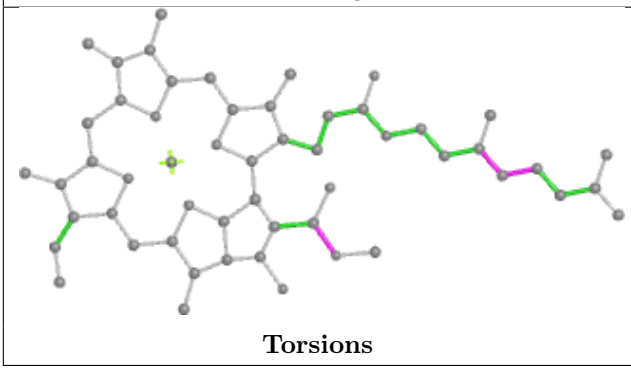
Ligand CLA B 810



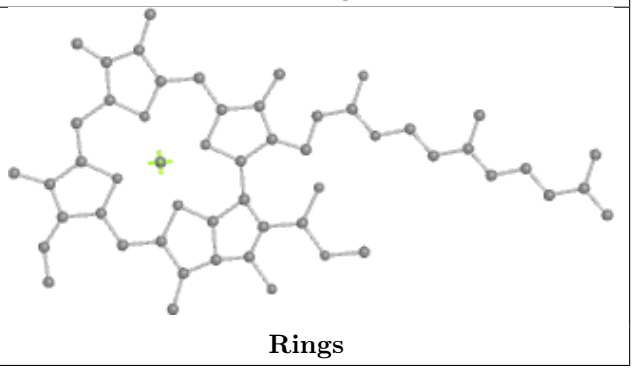
Bond lengths



Bond angles

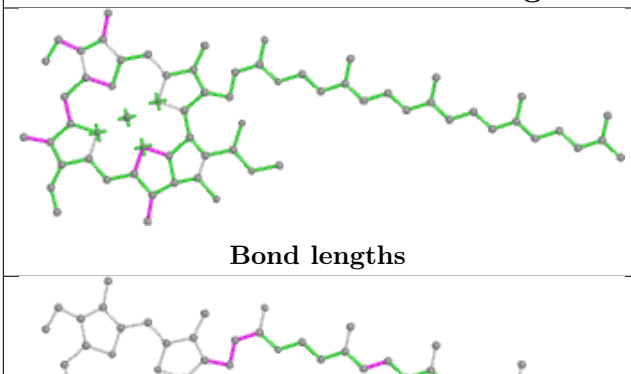


Torsions

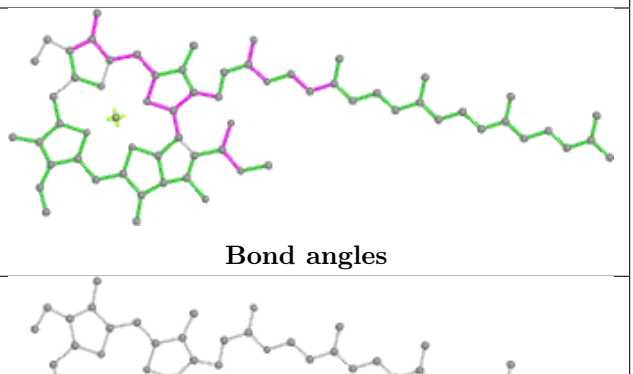


Rings

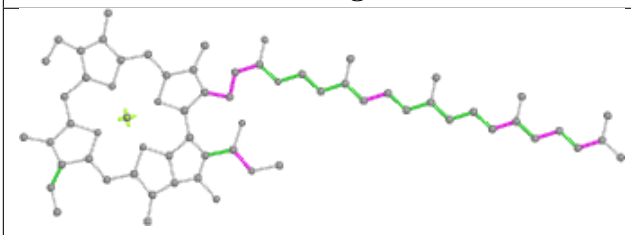
Ligand CLA A 808



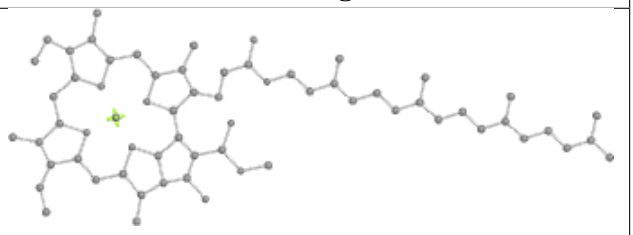
Bond lengths



Bond angles

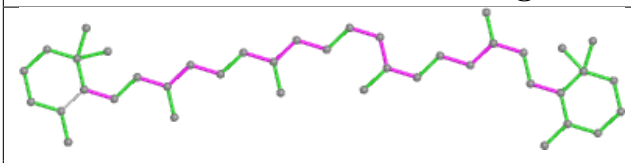


Torsions

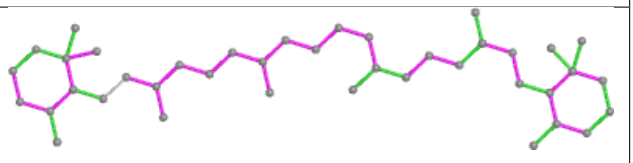


Rings

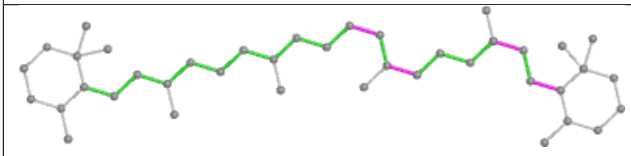
Ligand WVN B 844



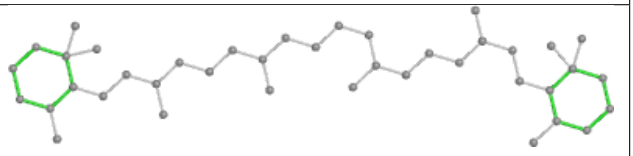
Bond lengths



Bond angles

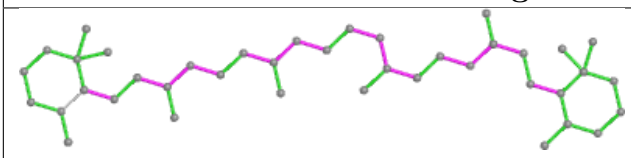


Torsions



Rings

Ligand WVN M 101



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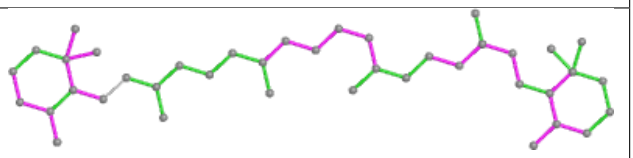
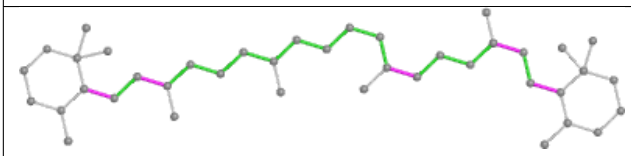
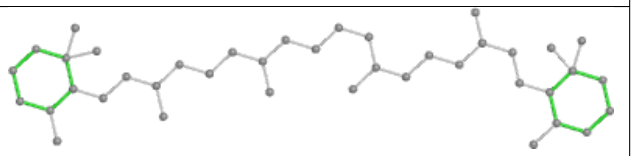


Bond angles

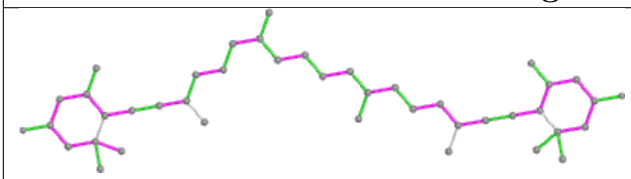


Torsions

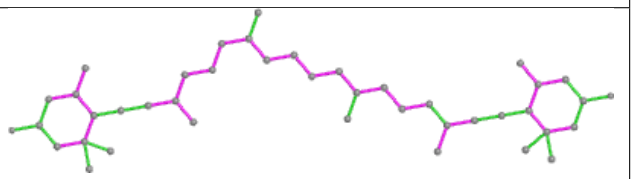


Rings

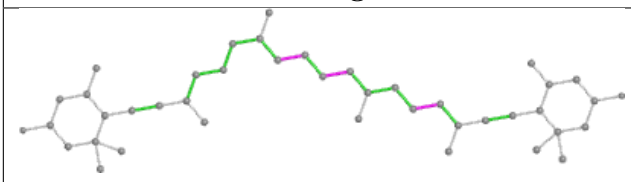
Ligand II0 n 317



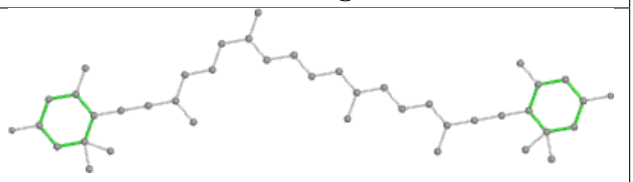
Bond lengths



Bond angles

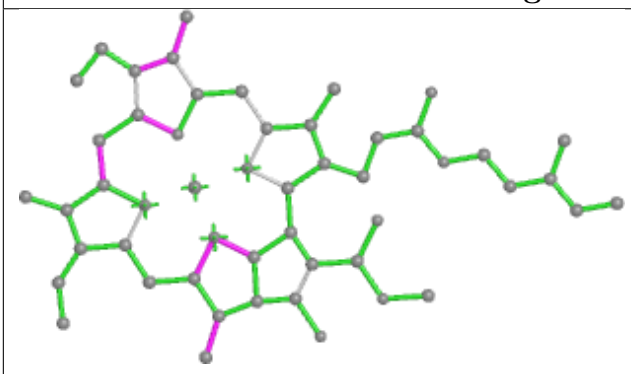


Torsions



Rings

Ligand CLA A 822



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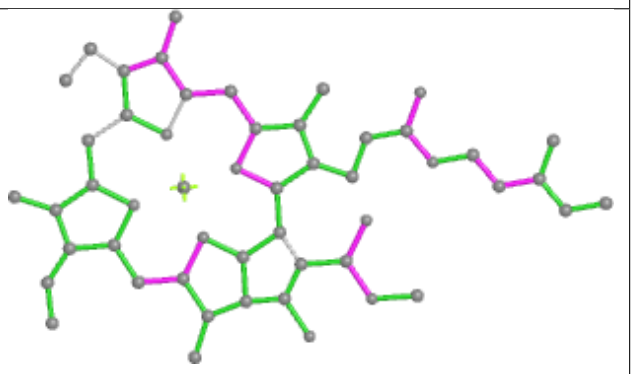
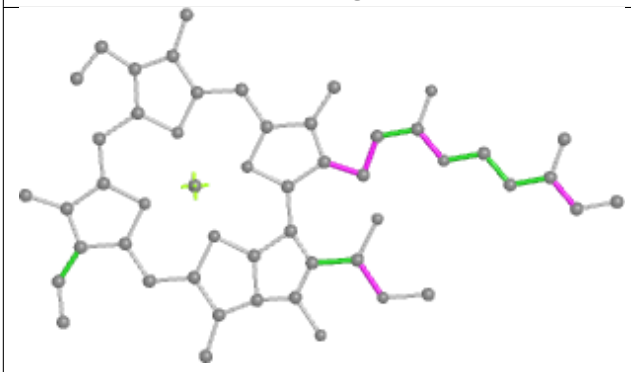


Bond angles



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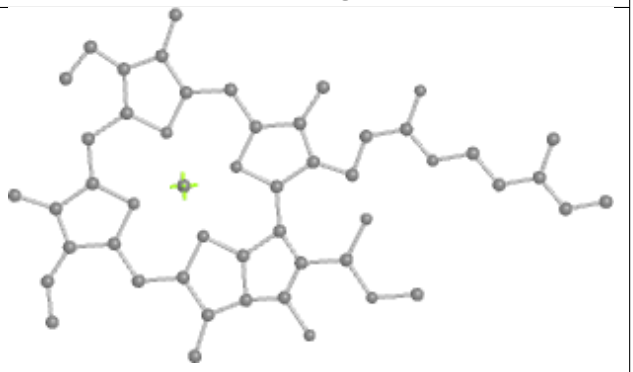
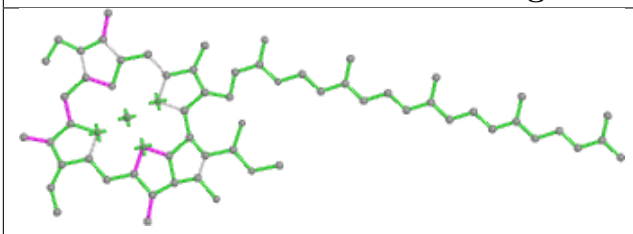
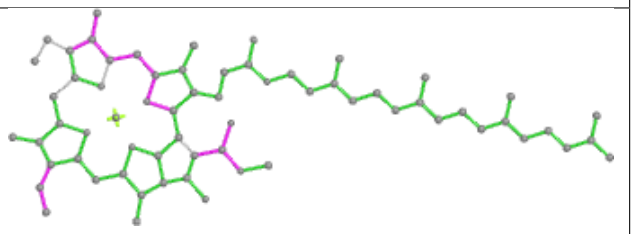


Rings

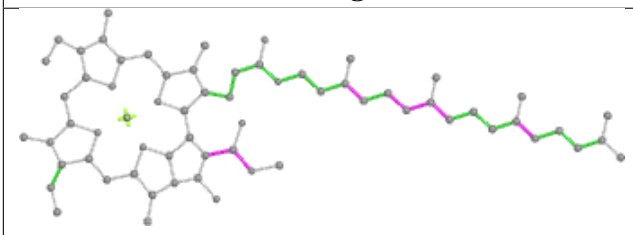
Ligand CLA h 313



Bond lengths



Bond angles



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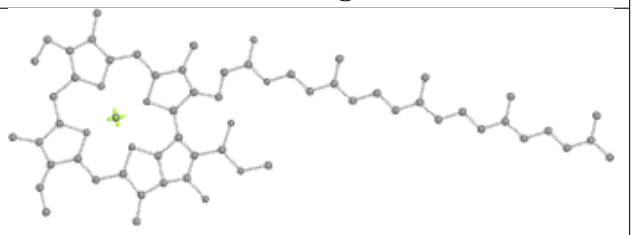
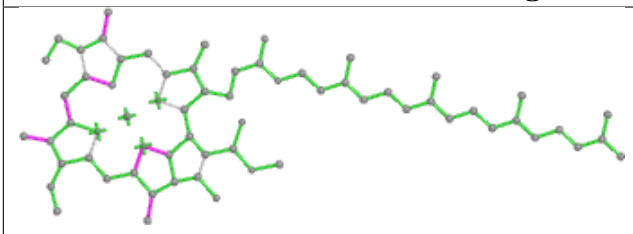
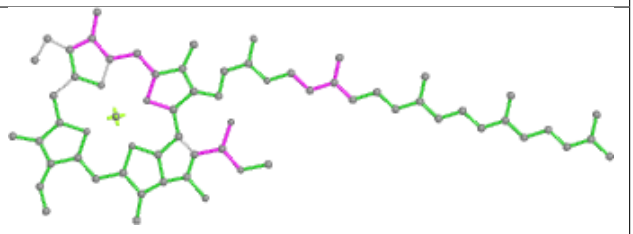


Rings

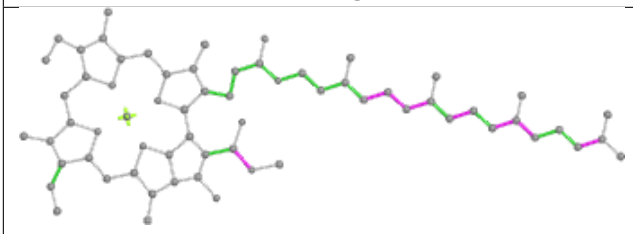
Ligand CLA A 826



Bond lengths



Bond angles



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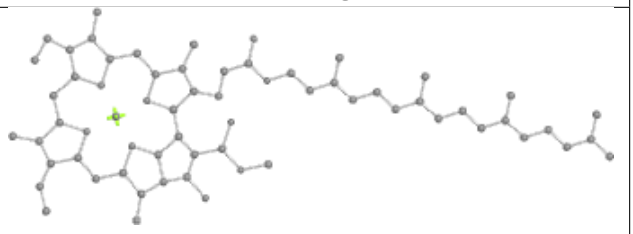
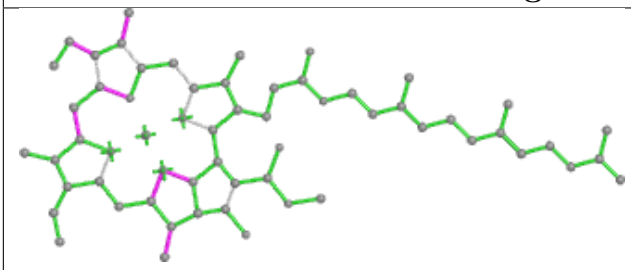
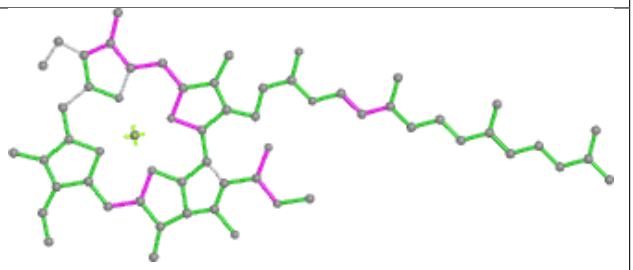


Rings

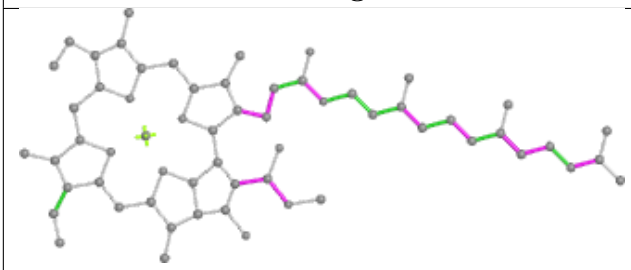
Ligand CLA B 813



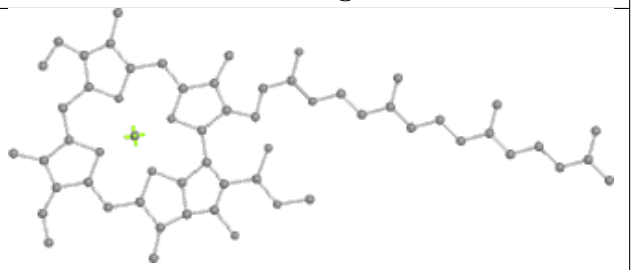
Bond lengths



Bond angles

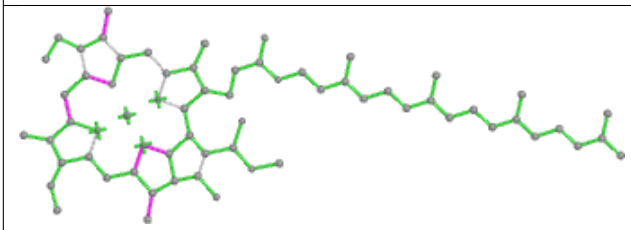


Torsions

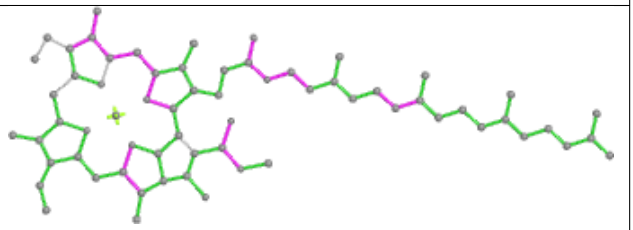


Rings

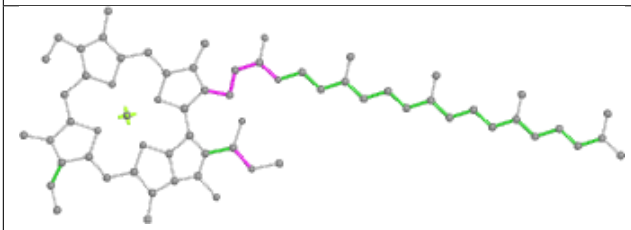
Ligand CLA l 308



Bond lengths



Bond angles



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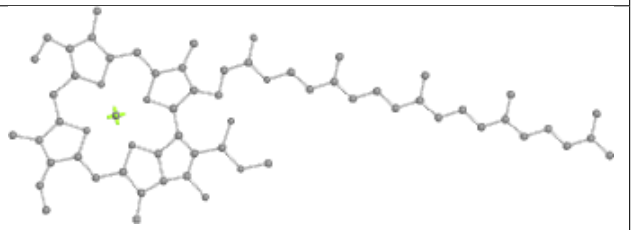
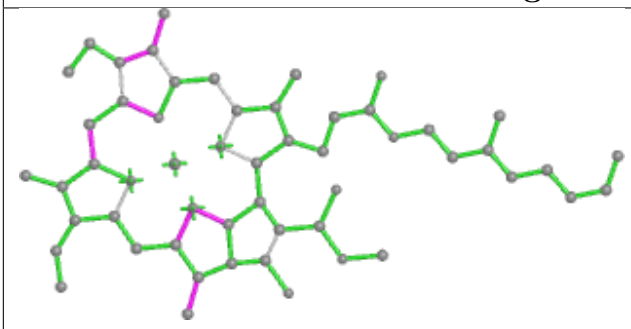
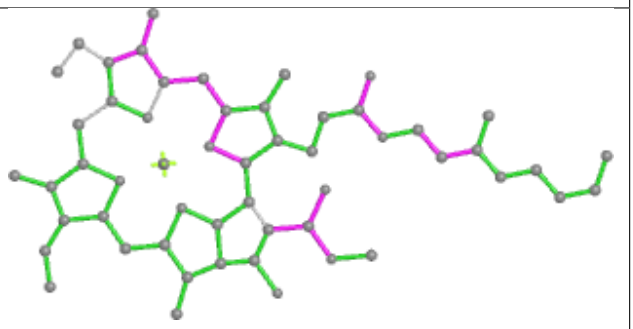


Rings

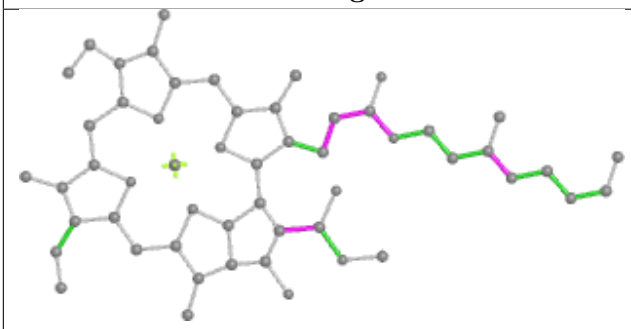
Ligand CLA A 811



Bond lengths



Bond angles



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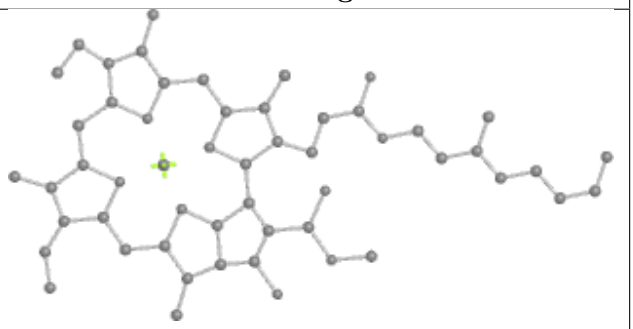
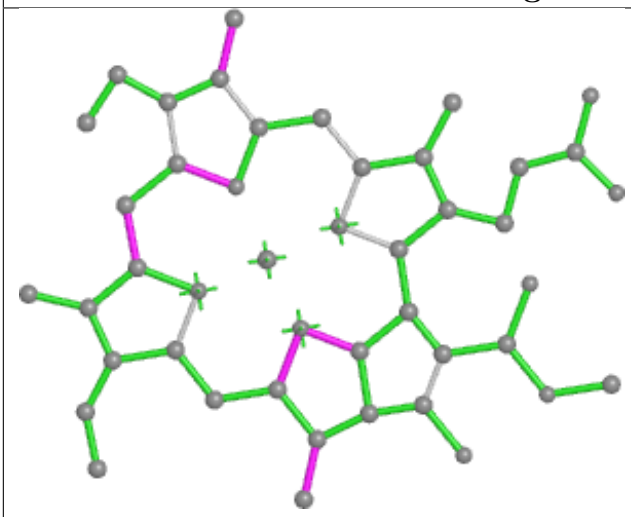
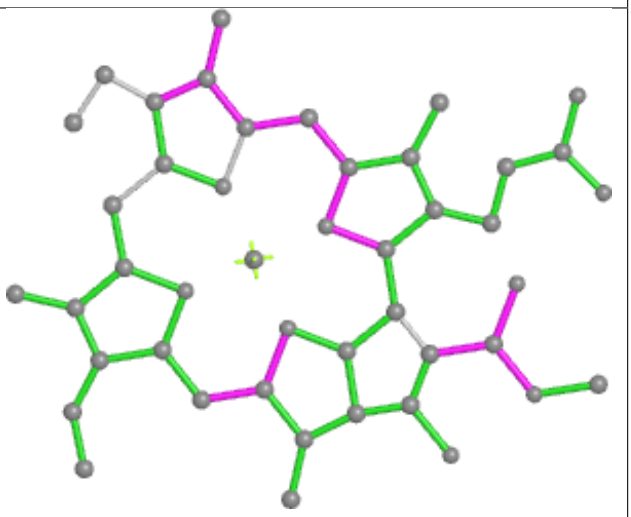


Rings

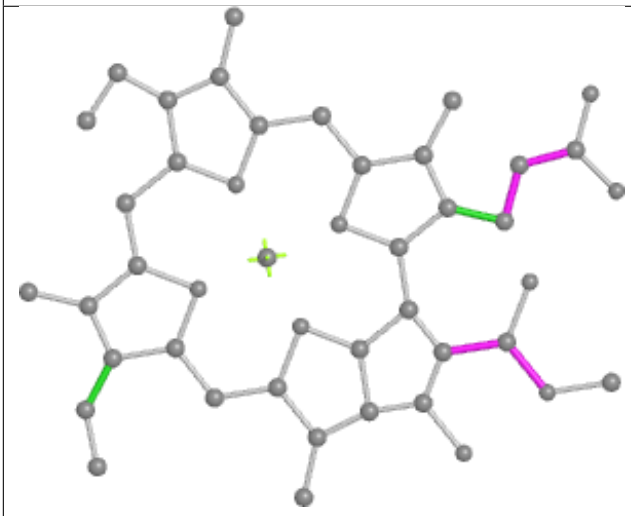
Ligand CLA A 815



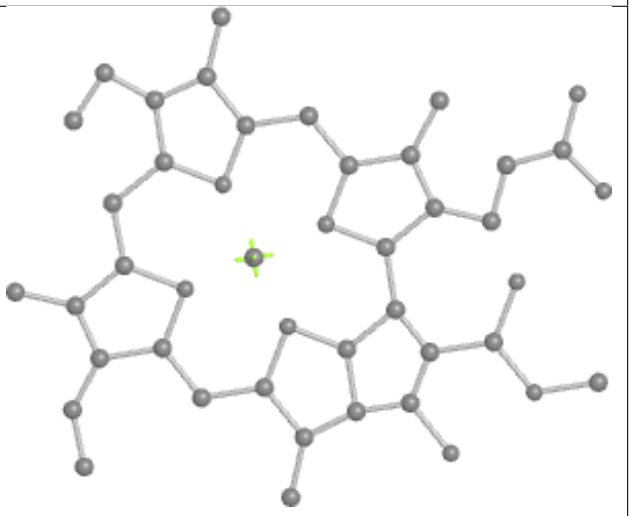
Bond lengths



Bond angles

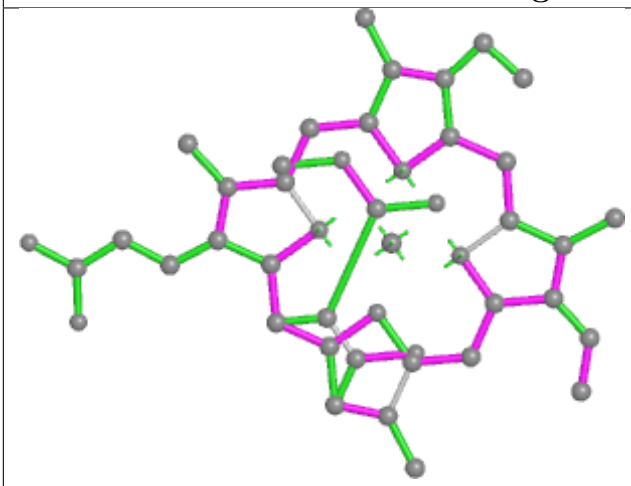


Torsions

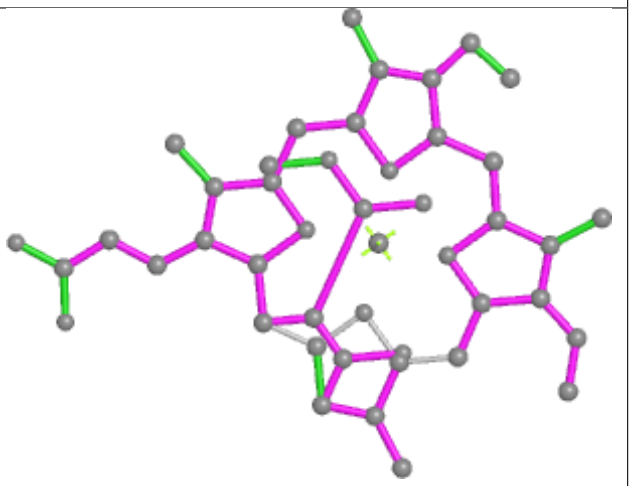


Rings

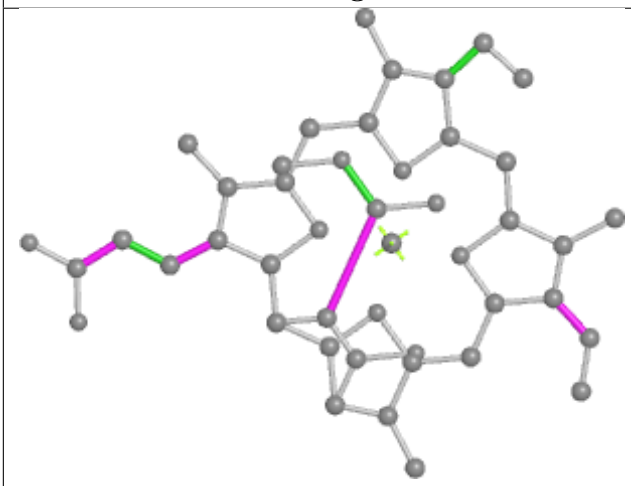
Ligand KC2 s 204



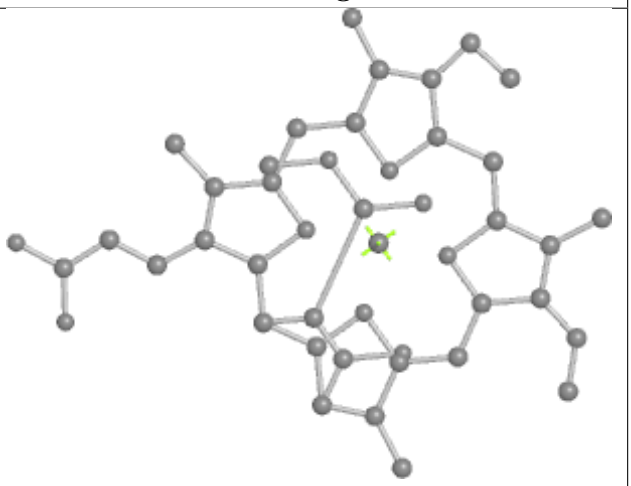
Bond lengths



Bond angles

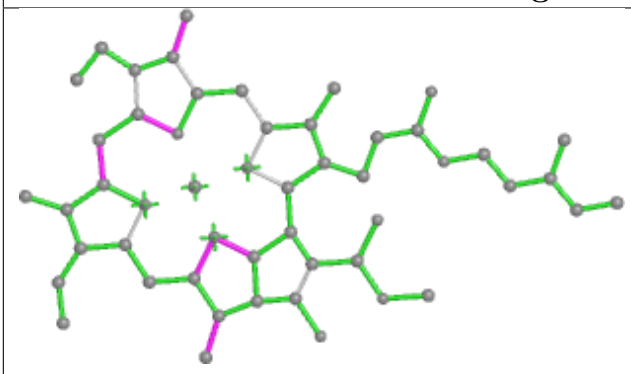


Torsions

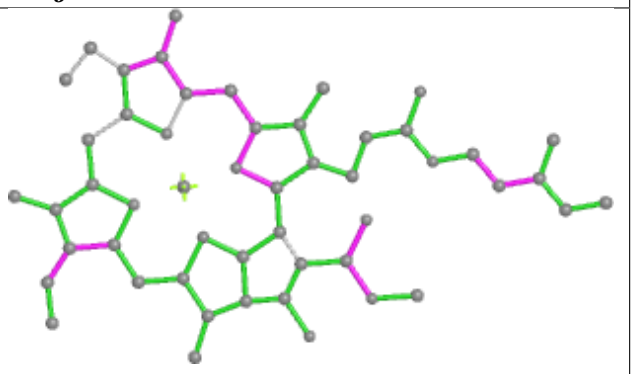


Rings

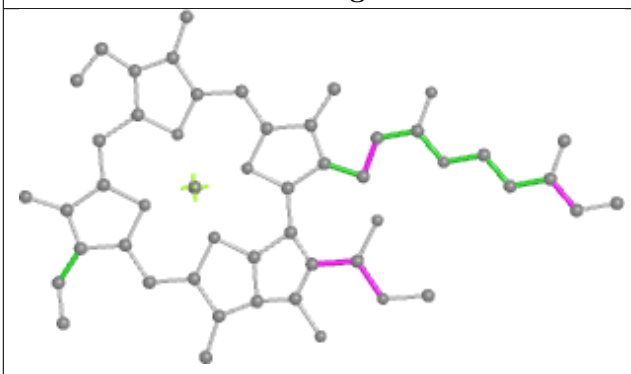
Ligand CLA j 601



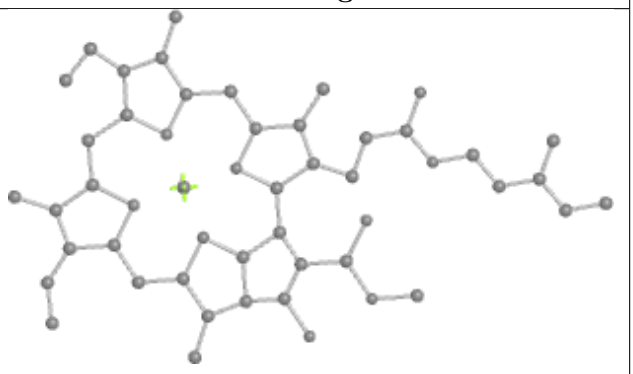
Bond lengths



Bond angles

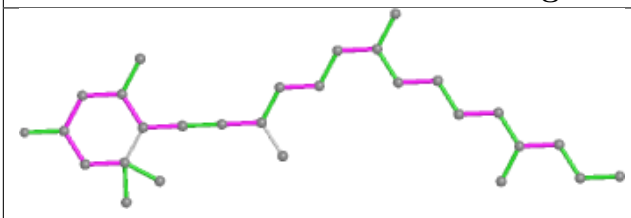


Torsions

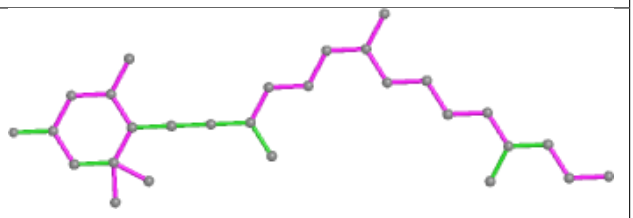


Rings

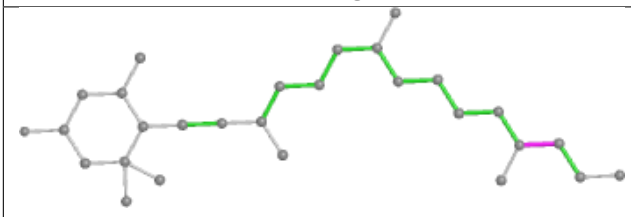
Ligand II0 h 310



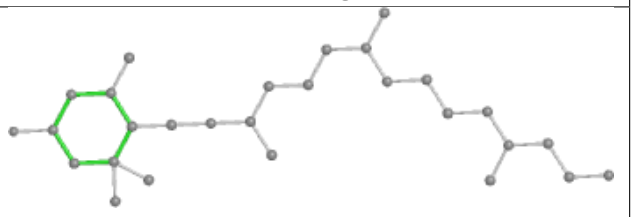
Bond lengths



Bond angles

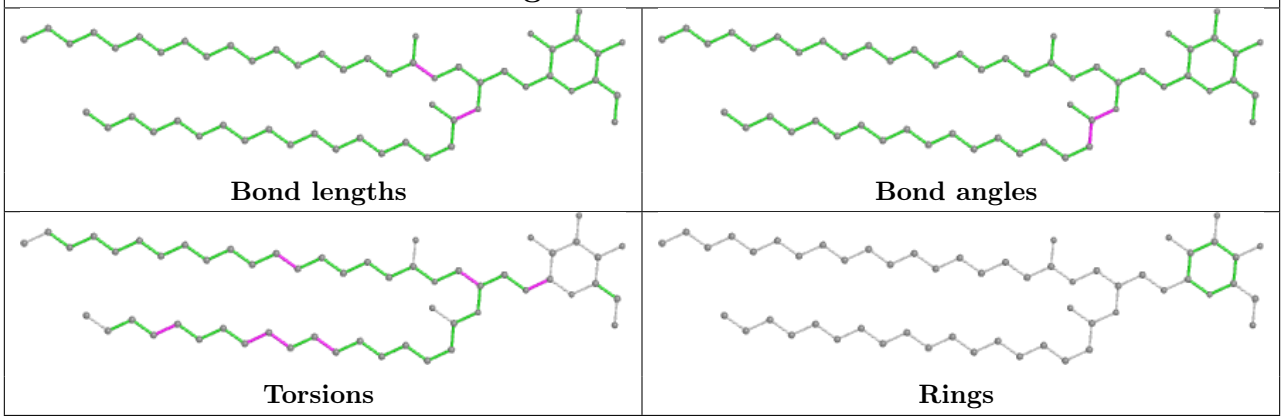


Torsions

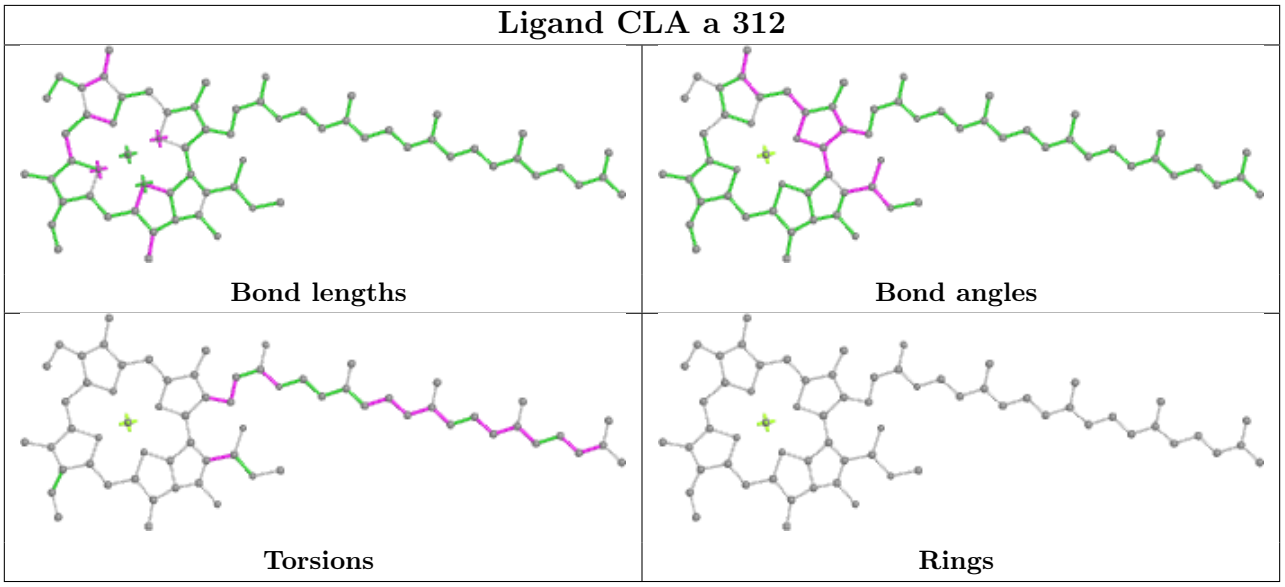


Rings

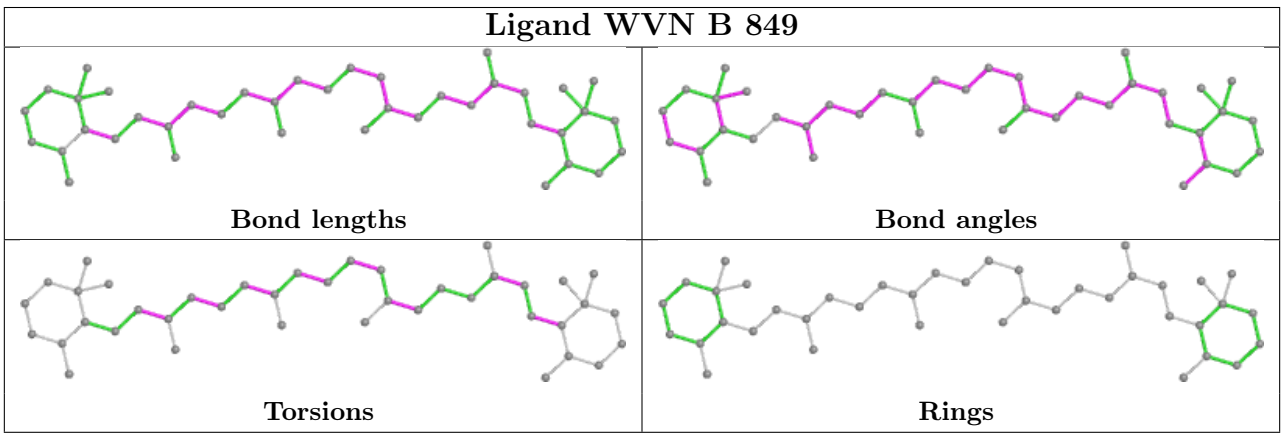
Ligand LMG n 321



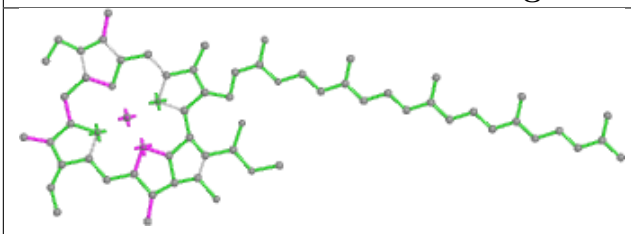
Ligand CLA a 312



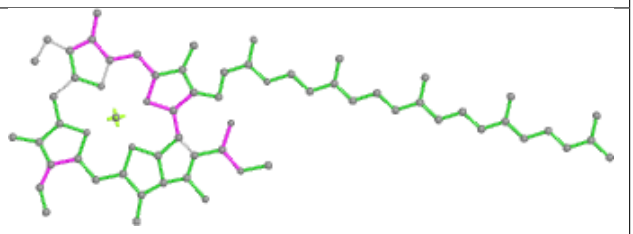
Ligand WVN B 849



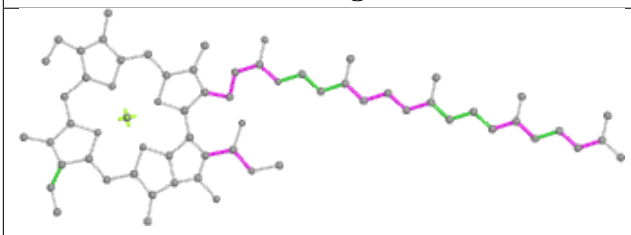
Ligand CLA A 812



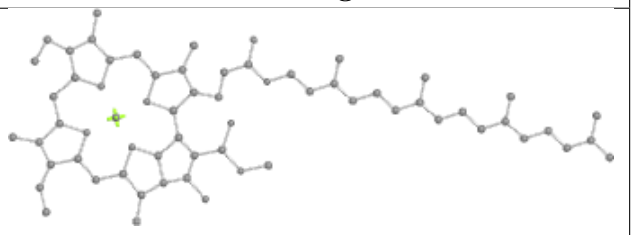
Bond lengths



Bond angles

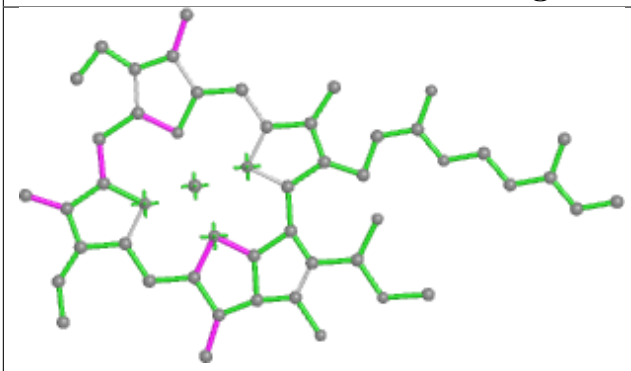


Torsions

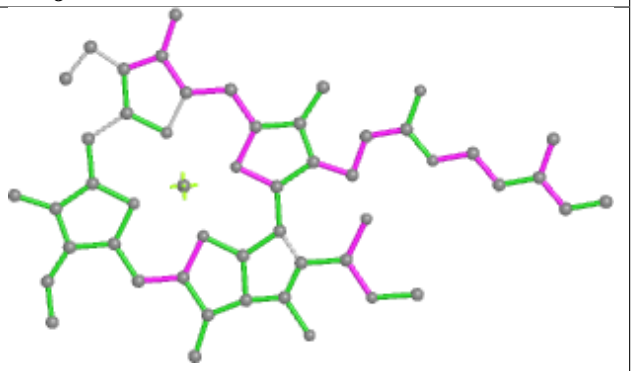


Rings

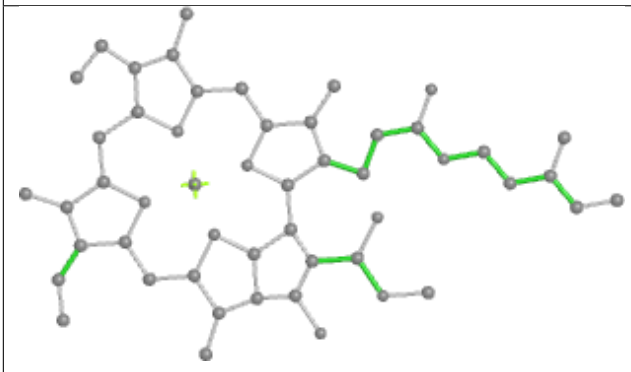
Ligand CLA j 608



Bond lengths



Bond angles



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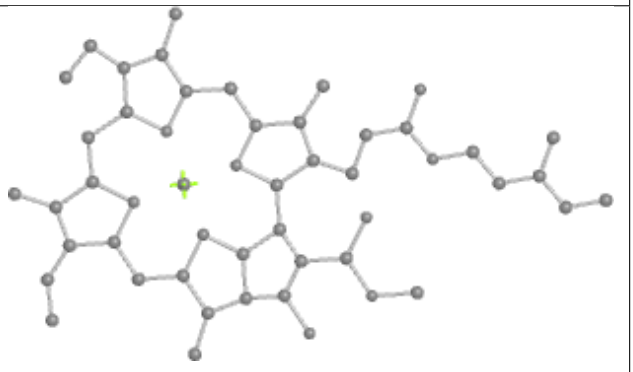
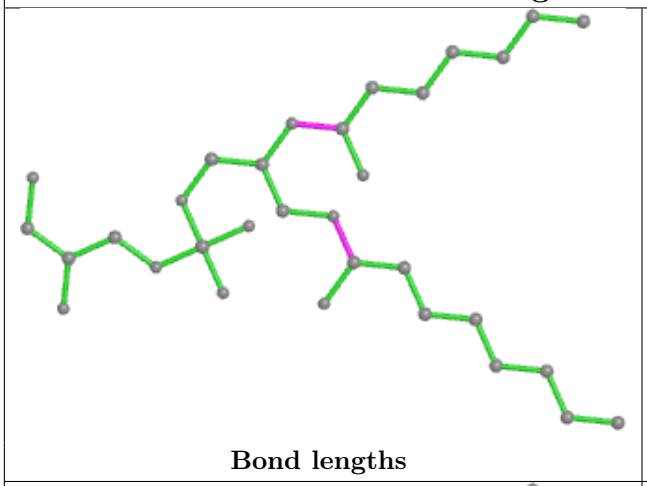


Rings

Ligand LHG l 317



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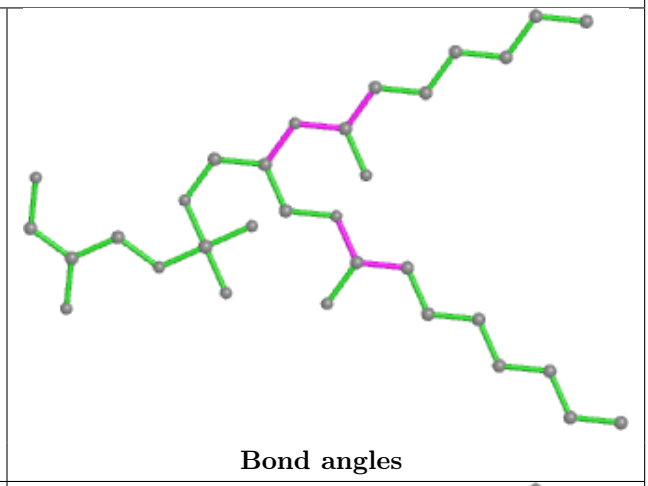
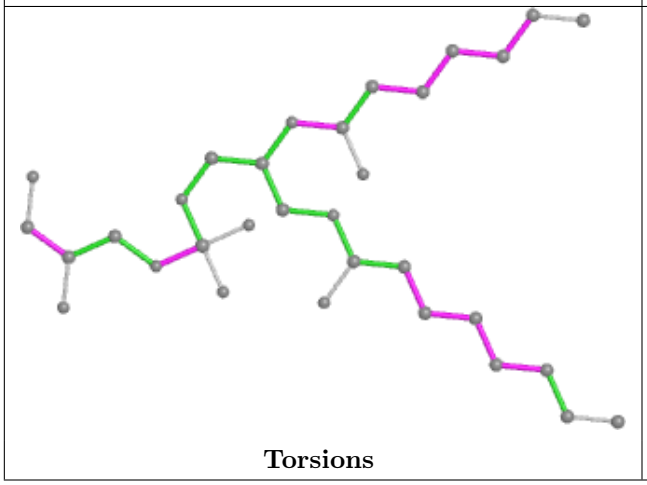


Bond angles



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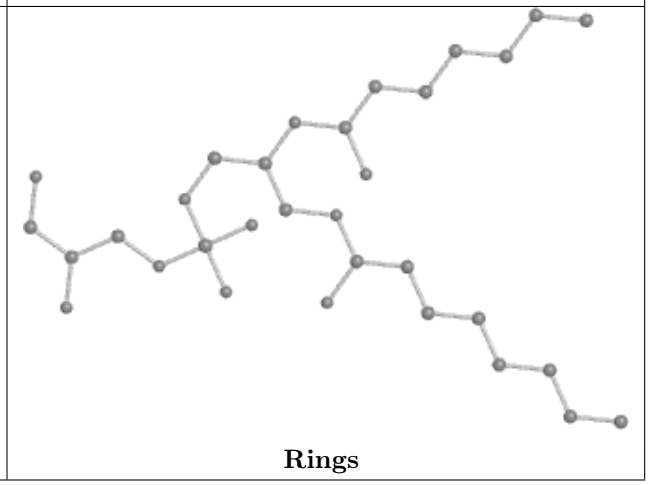
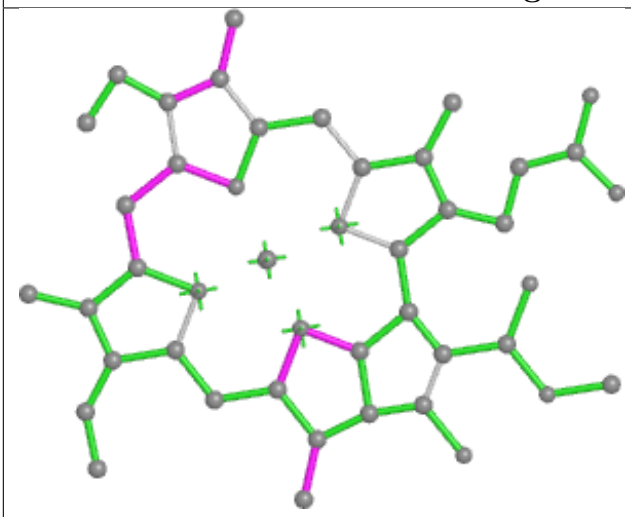


Rings

Ligand CLA A 819



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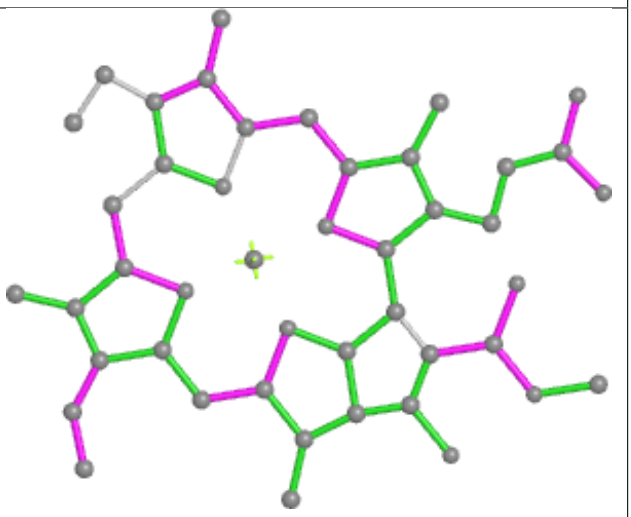
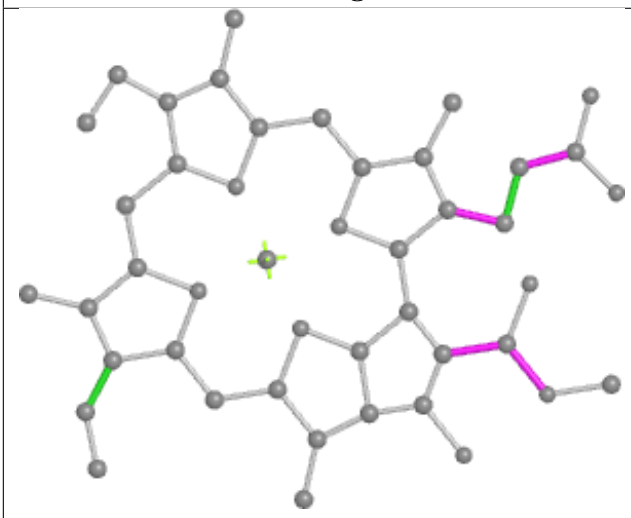


Bond angles



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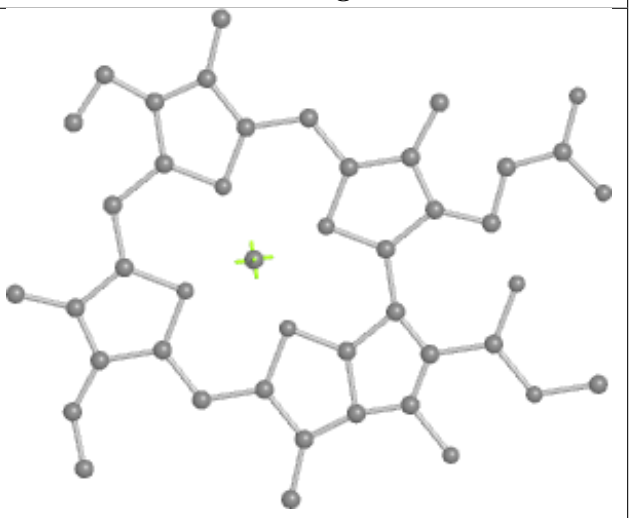
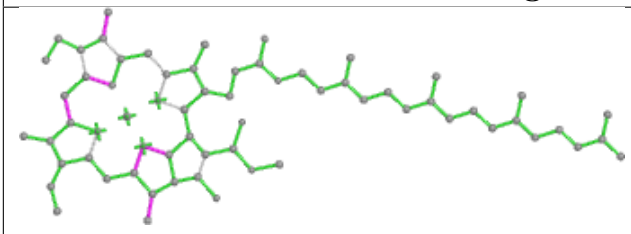


Rings

Ligand CLA A 836



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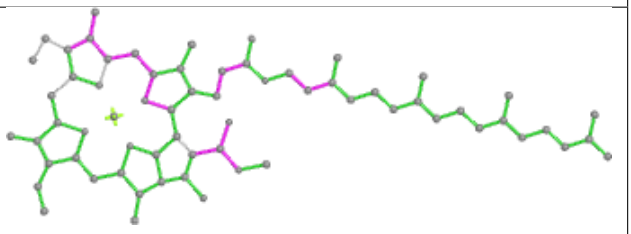
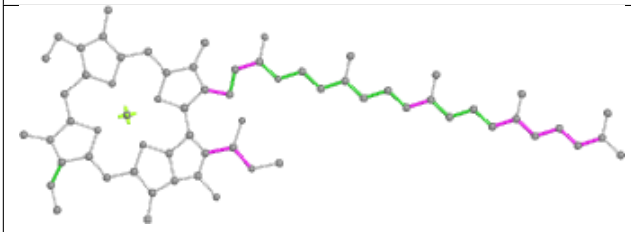


Bond angles



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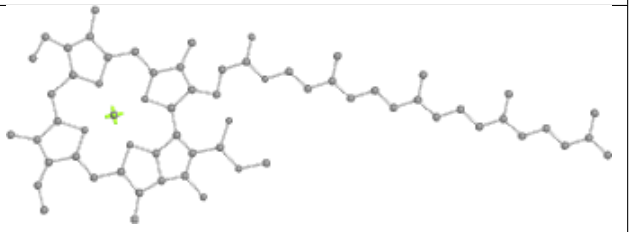
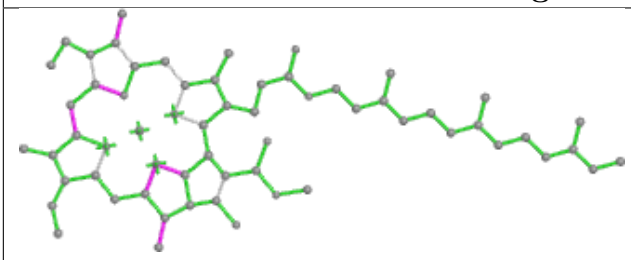


Rings

Ligand CLA j 609



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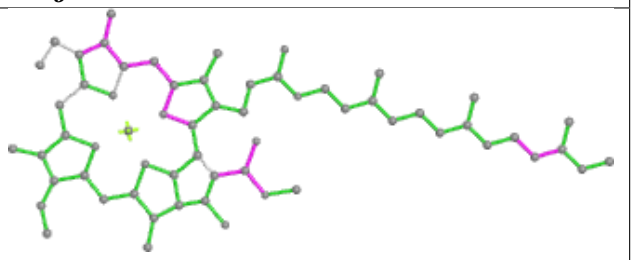

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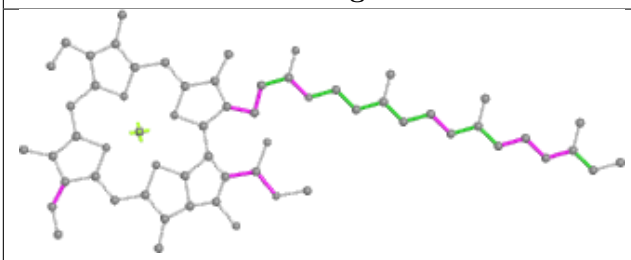

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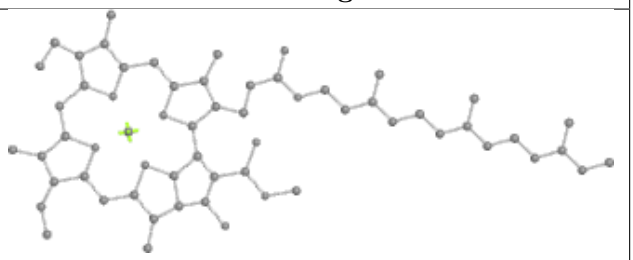
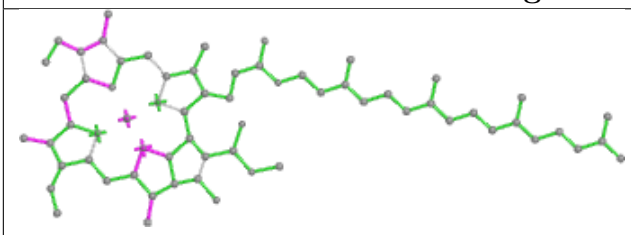


Rings

Ligand CLA A 853



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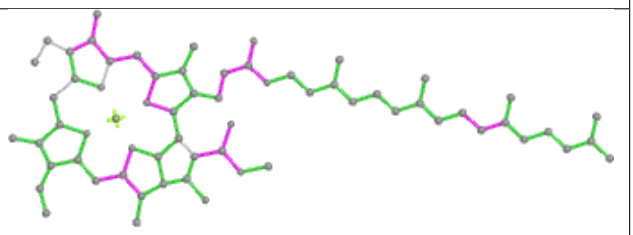
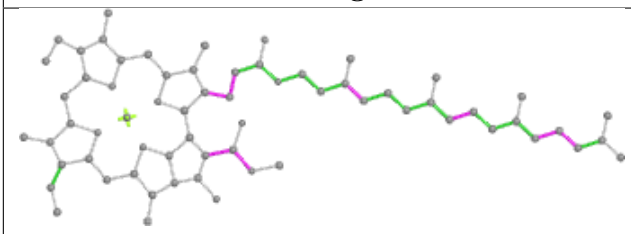


Bond angles



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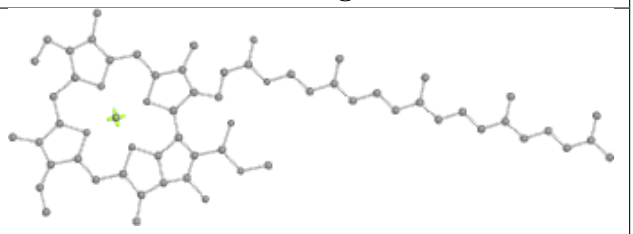
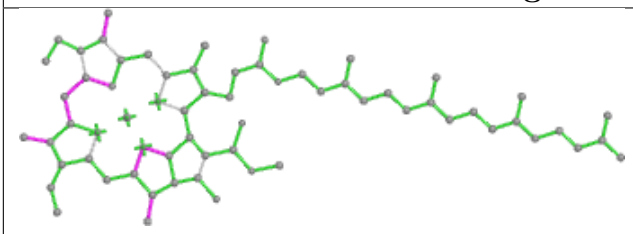


Rings

Ligand CLA A 843



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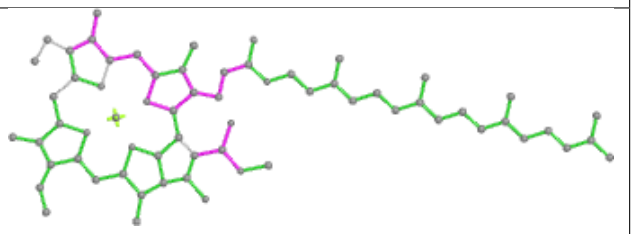
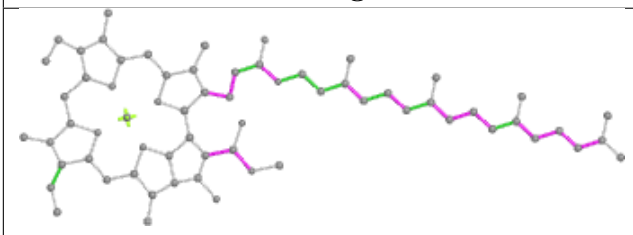


Bond angles



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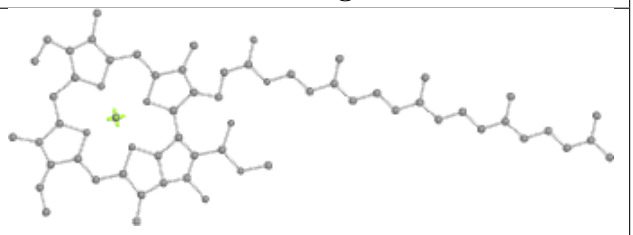
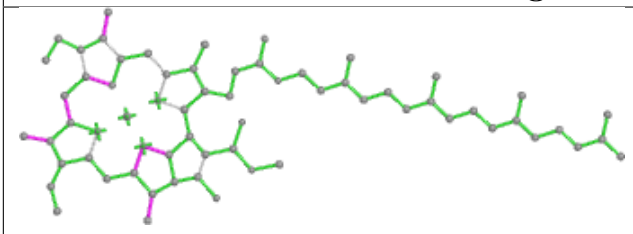


Rings

Ligand CLA b 604



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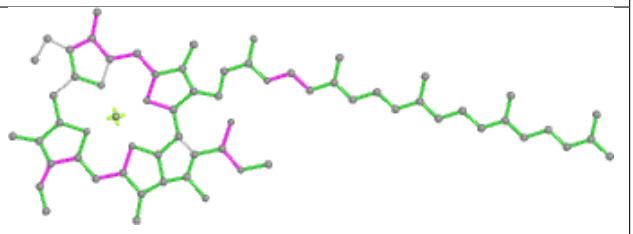
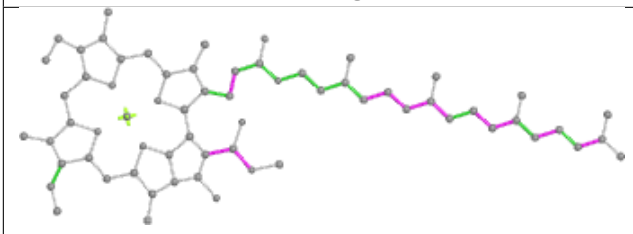


Bond angles



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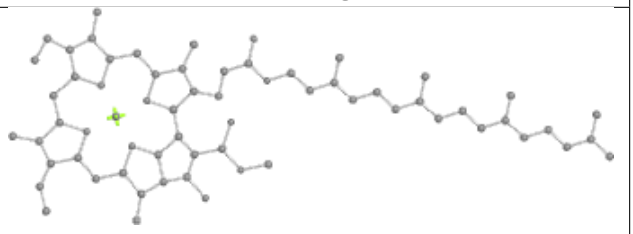
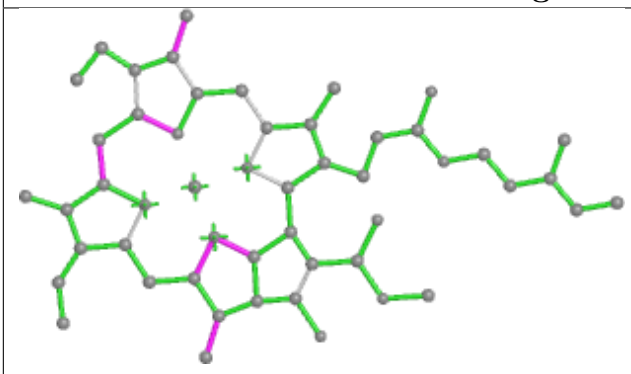


Rings

Ligand CLA i 306



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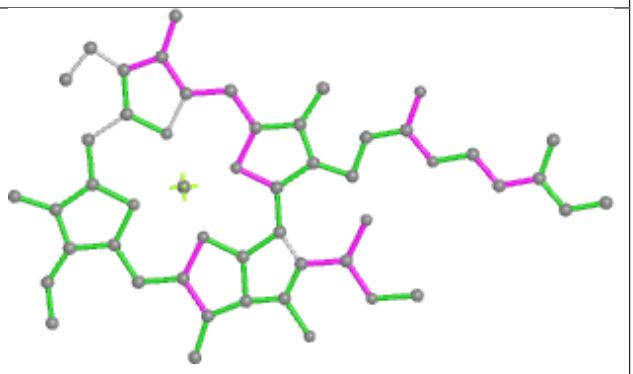
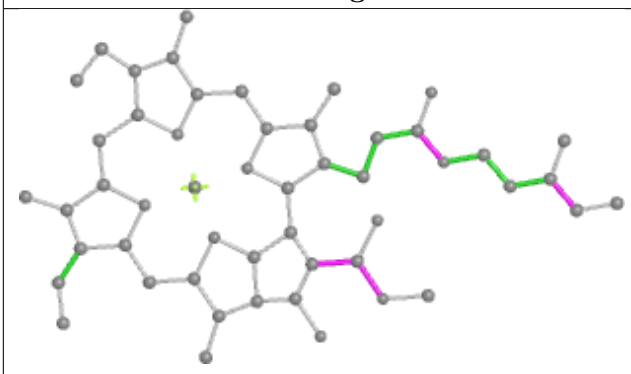


Bond angles



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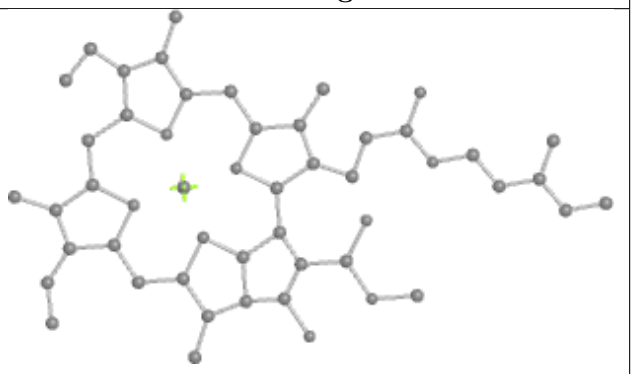
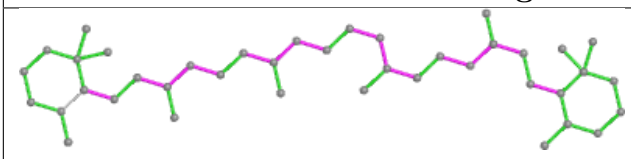


Rings

Ligand WVN B 846



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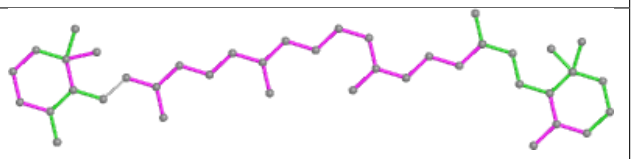
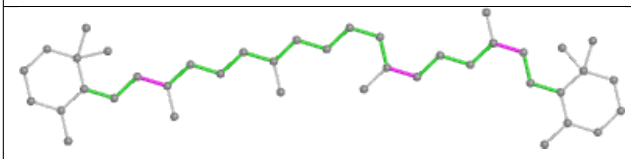


Bond angles



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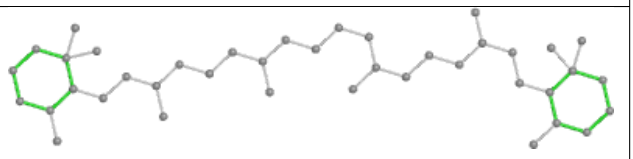
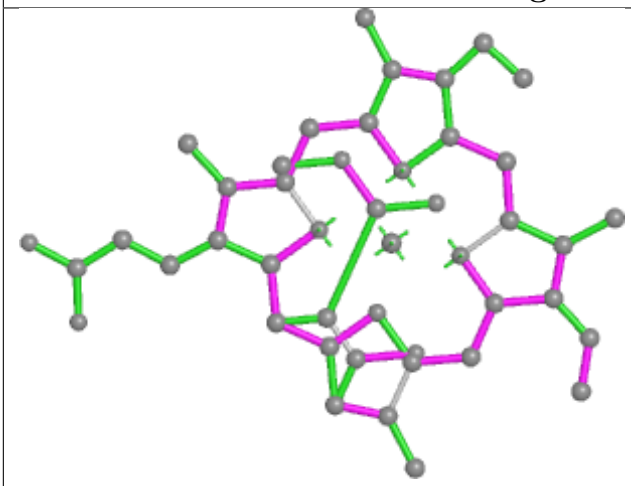
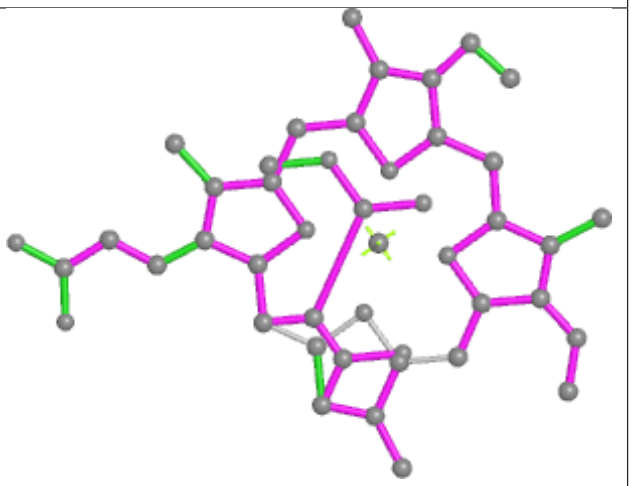


Rings

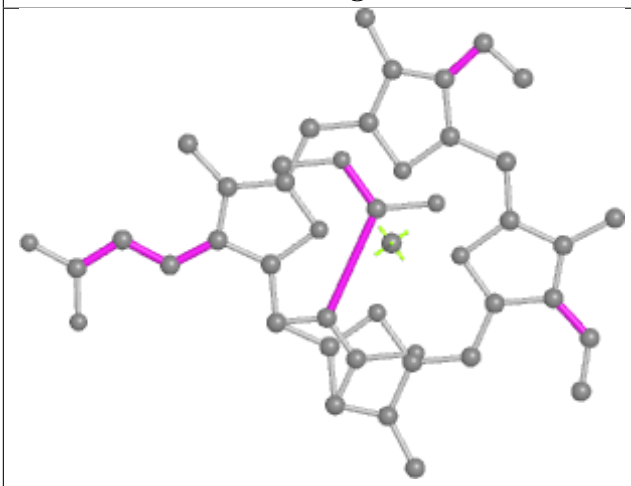
Ligand KC2 k 613



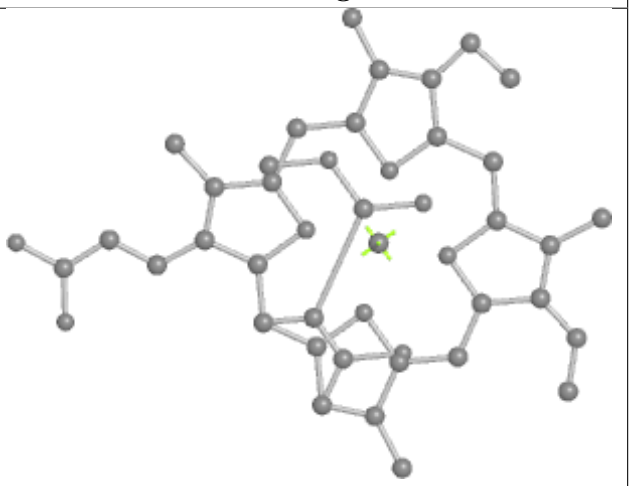
Bond lengths



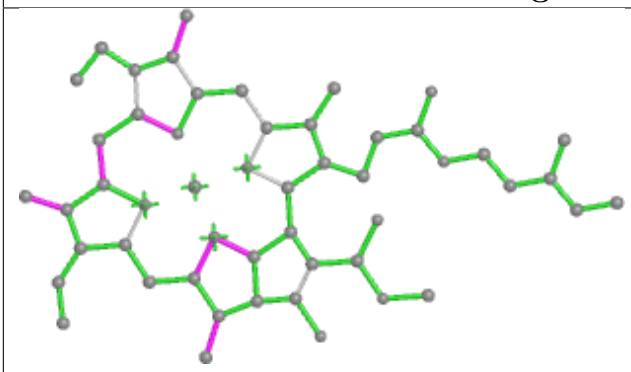
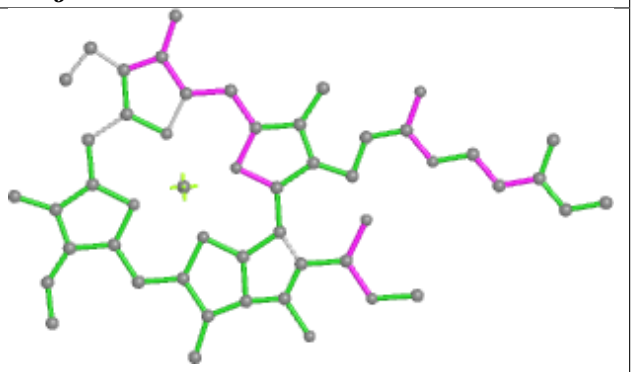
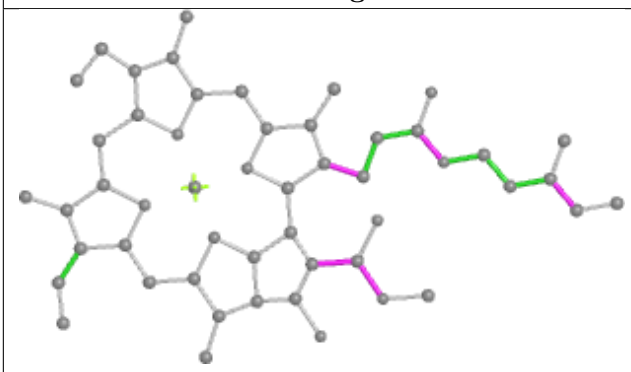
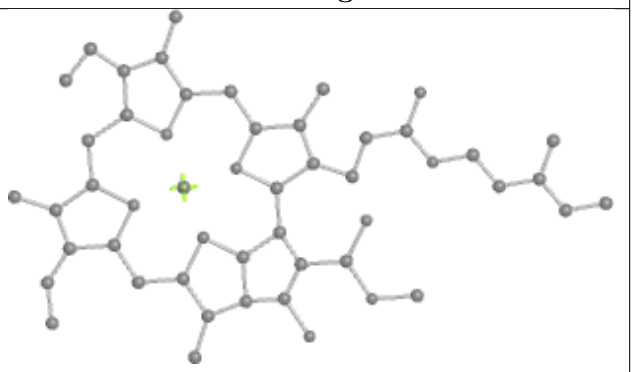
Bond angles



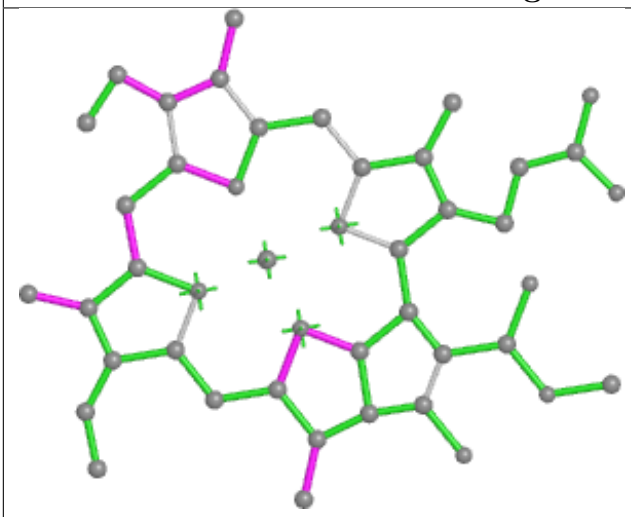
Torsions



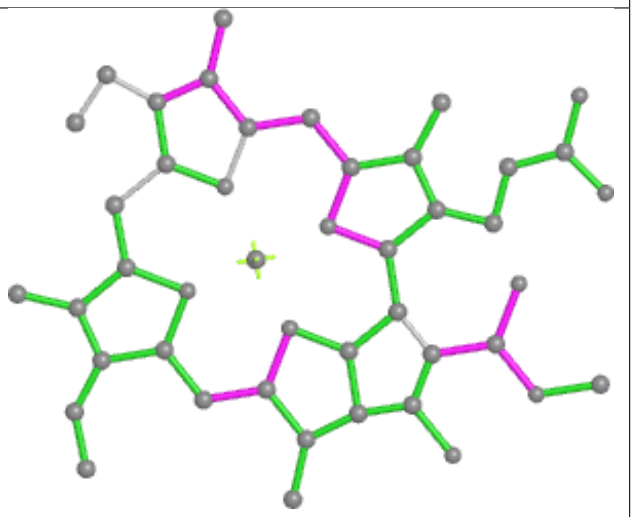
Rings

Ligand CLA j 611	
	
Bond lengths	**Bond angles**
	
Torsions	**Rings**

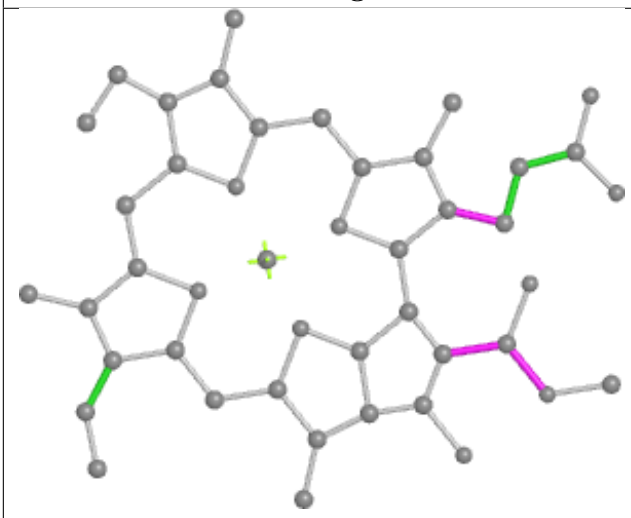
Ligand CLA A 813



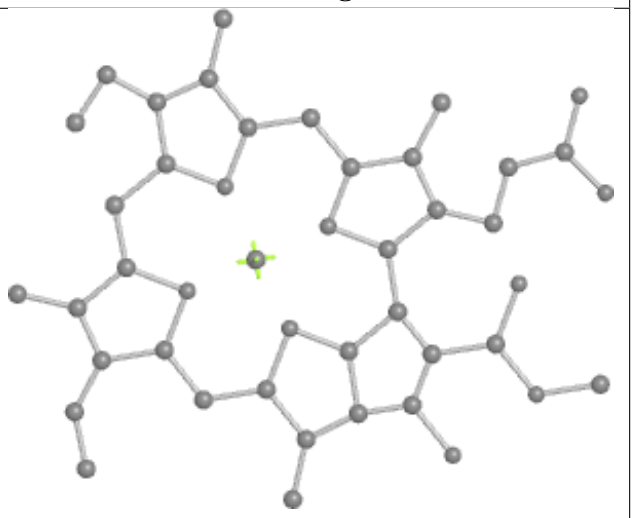
Bond lengths



Bond angles

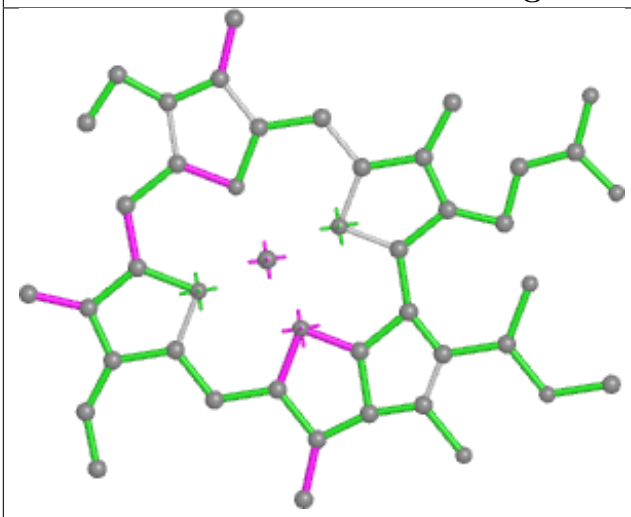


Torsions



Rings

Ligand CLA Q 303



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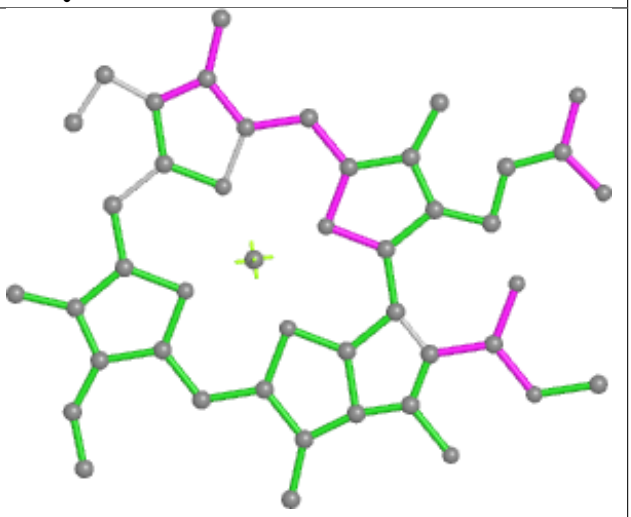
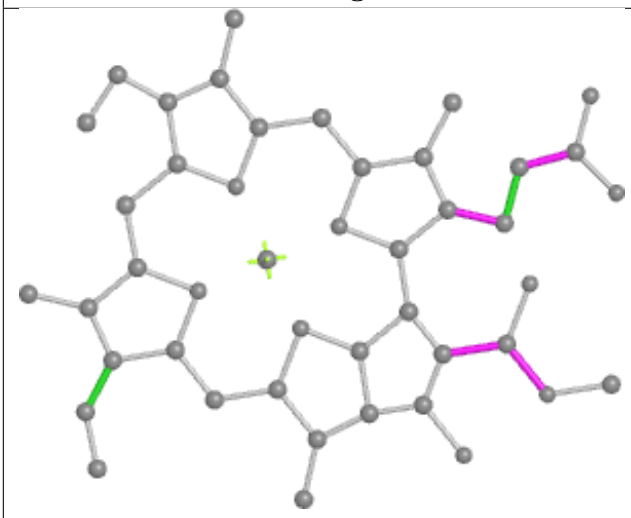
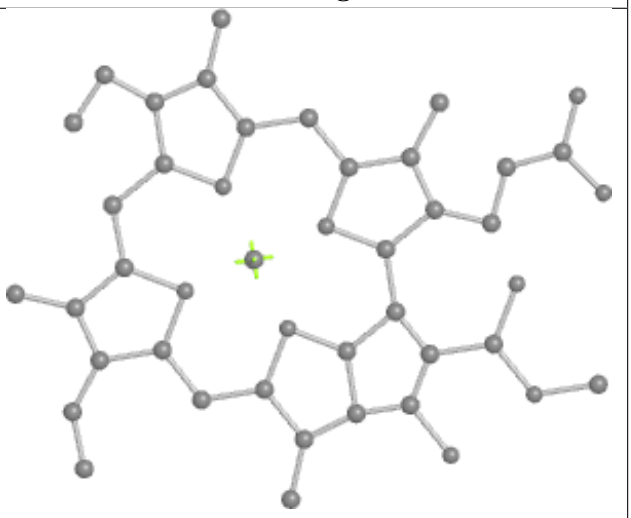


Bond angles

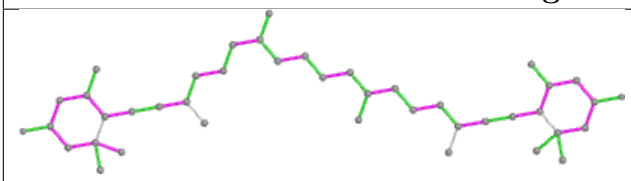


Torsions

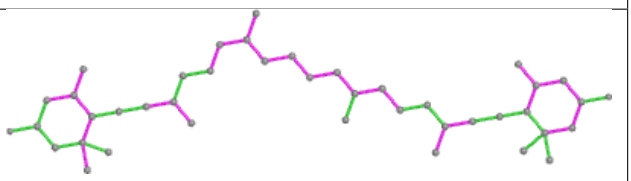


Rings

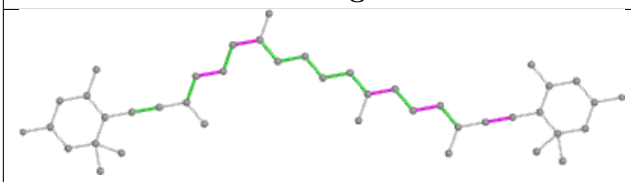
Ligand II0 J 104



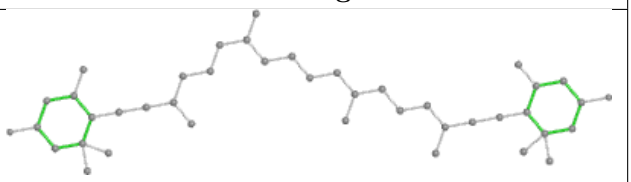
Bond lengths



Bond angles

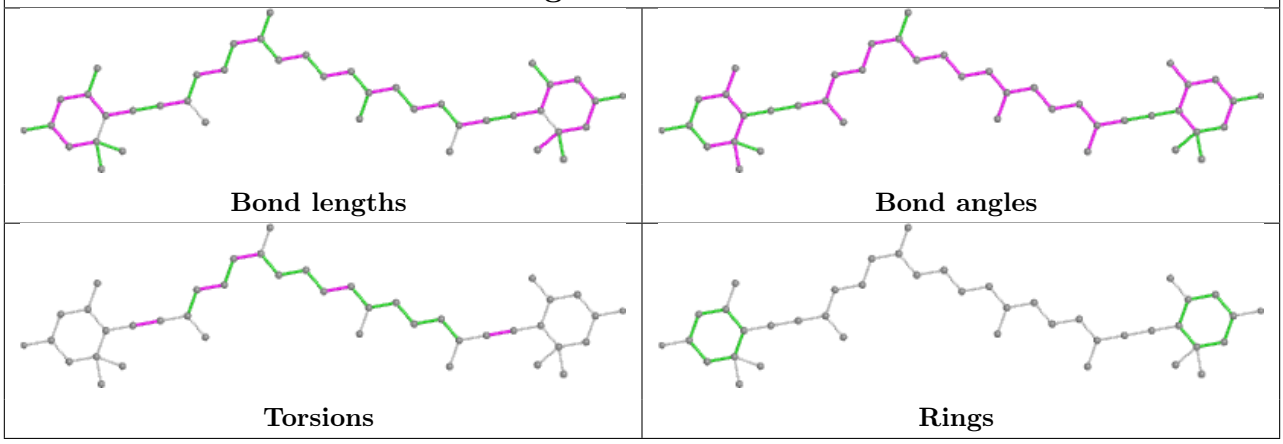


Torsions

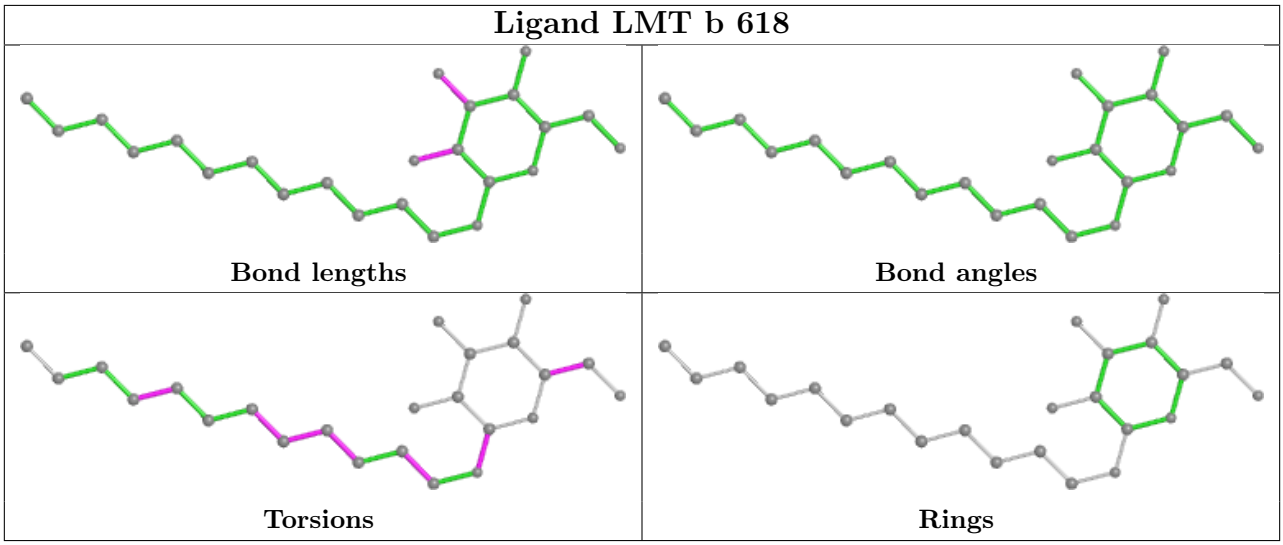


Rings

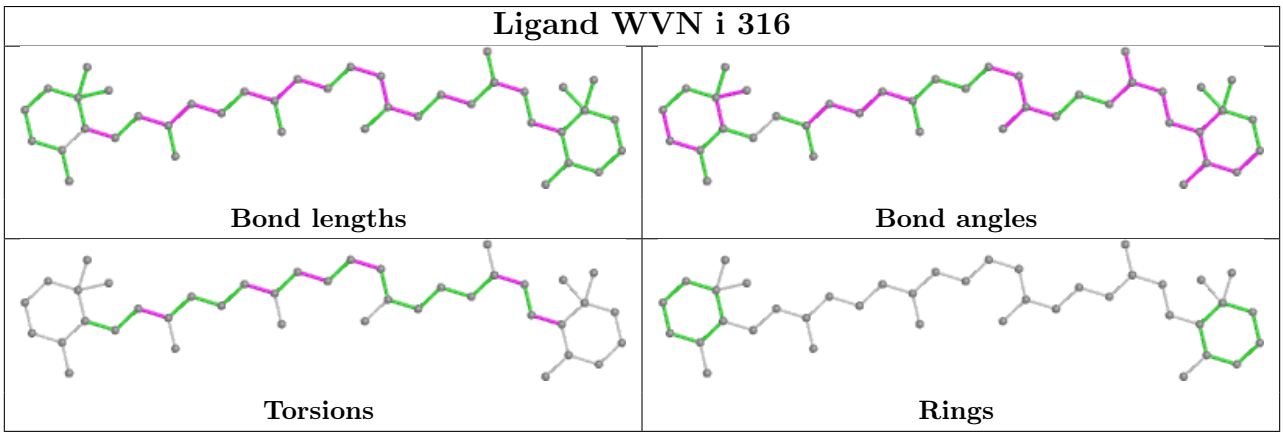
Ligand II0 c 615



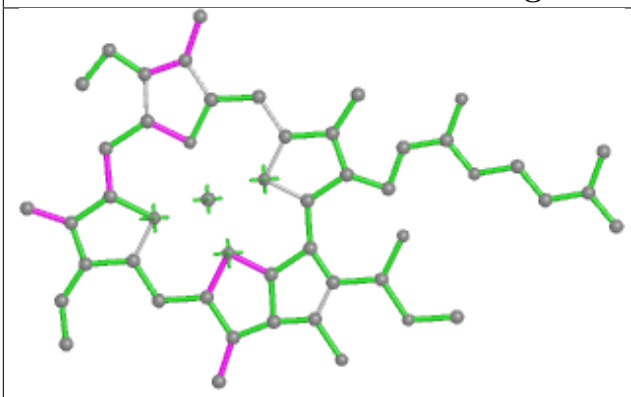
Ligand LMT b 618



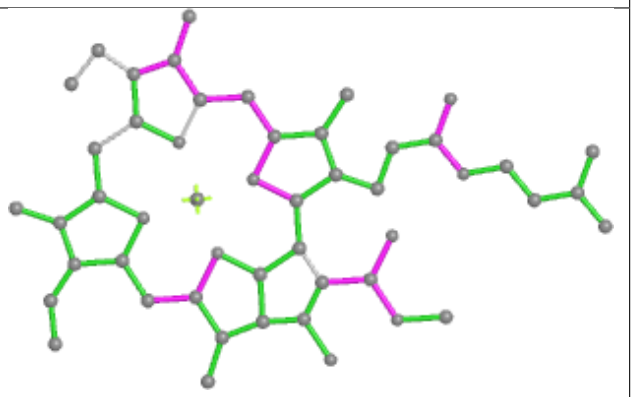
Ligand WVN i 316



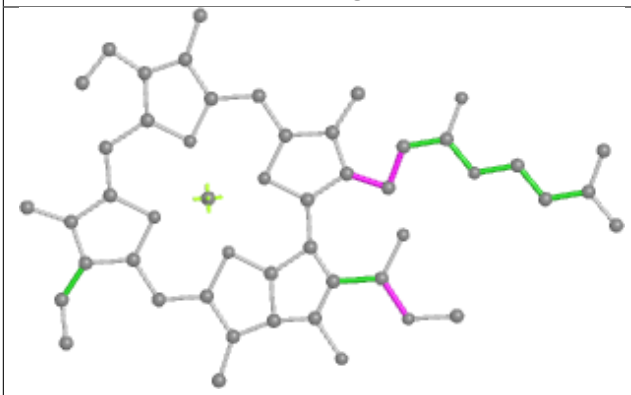
Ligand CLA B 829



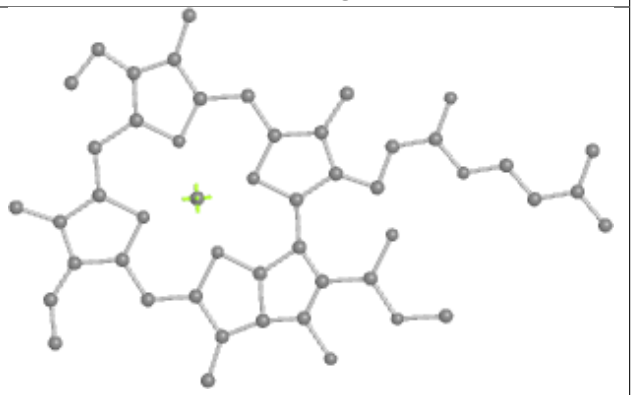
Bond lengths



Bond angles

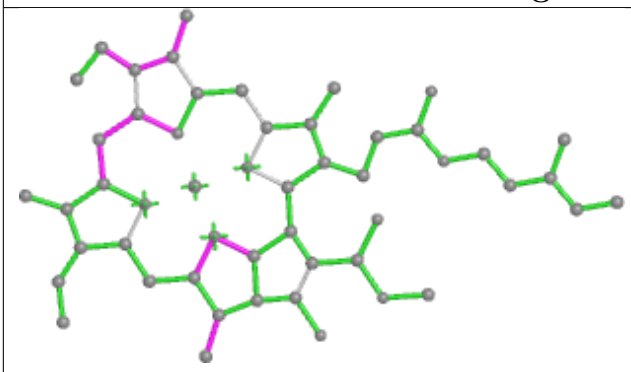


Torsions

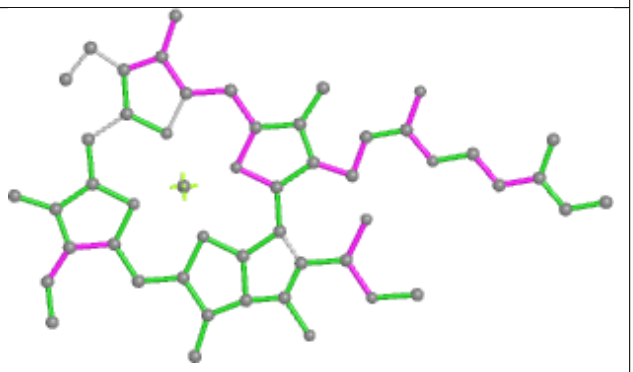


Rings

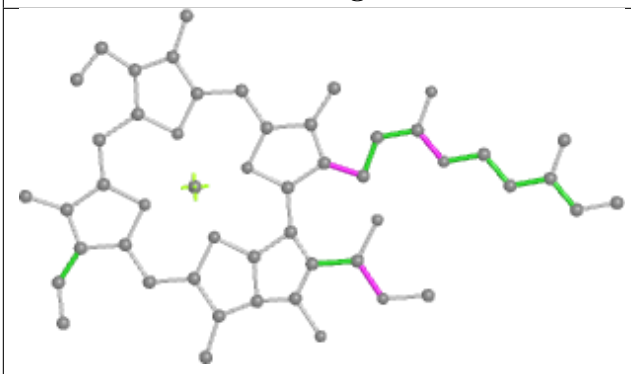
Ligand CLA i 302



Bond lengths



Bond angles



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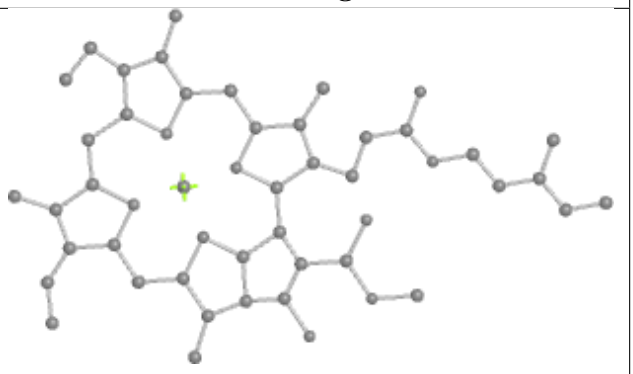
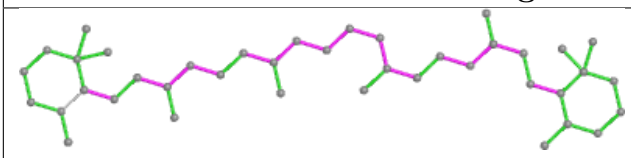
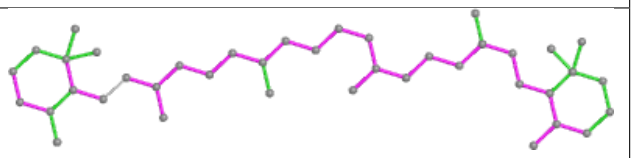


Rings

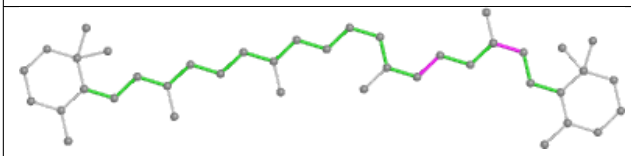
Ligand WVN L 206



Bond lengths



Bond angles



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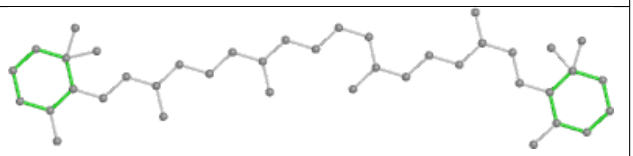
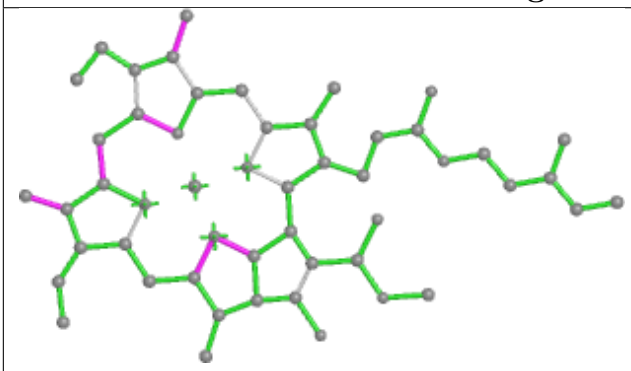


Rings

Ligand CLA d 304



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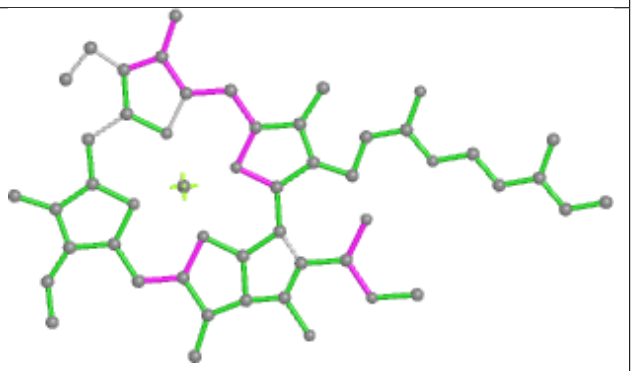
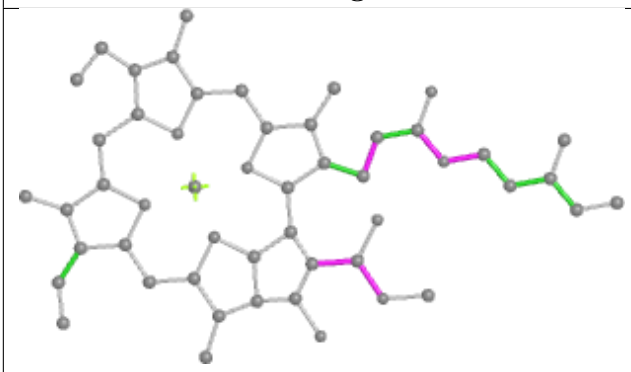
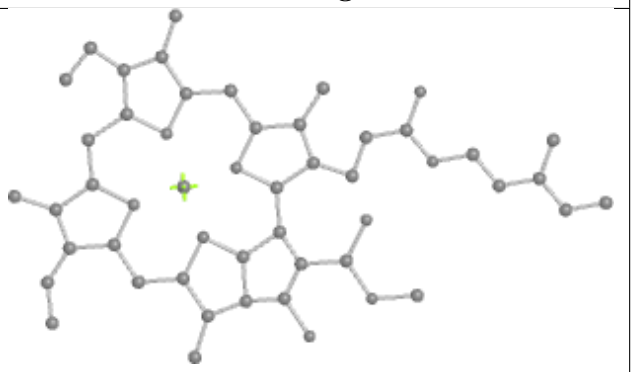


Bond angles

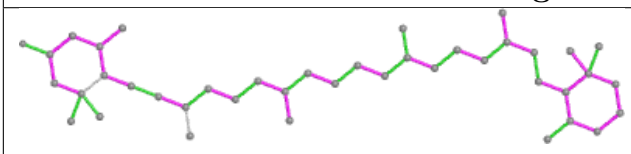


Torsions



Rings

Ligand IHT a 317



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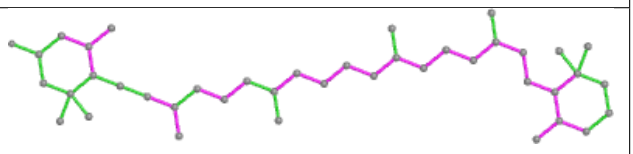
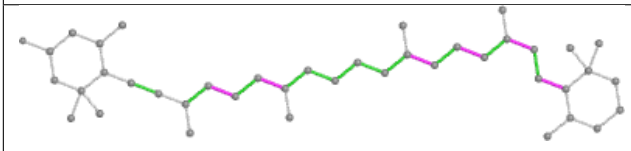
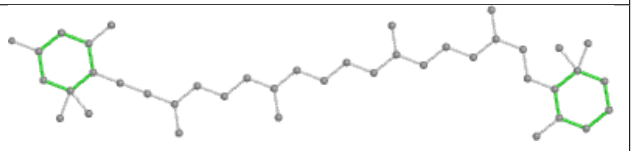


Bond angles

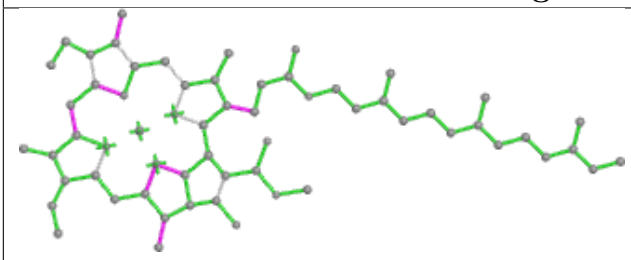


Torsions

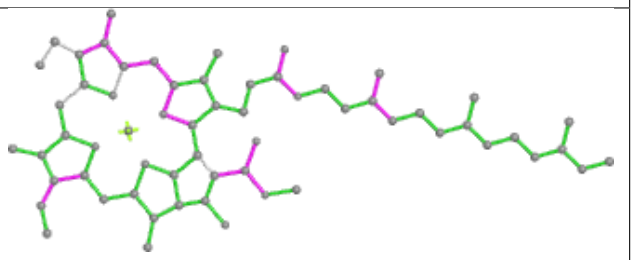


Rings

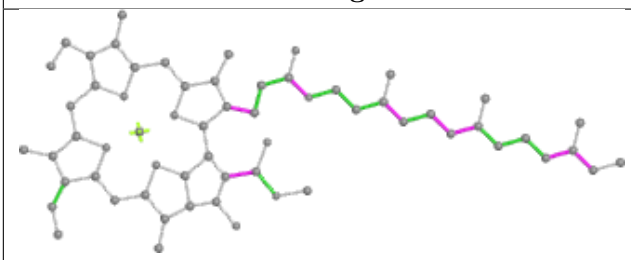
Ligand CLA i 307



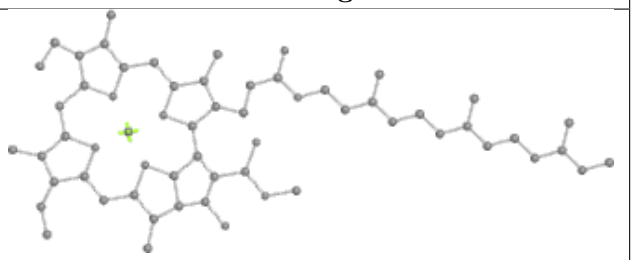
Bond lengths



Bond angles

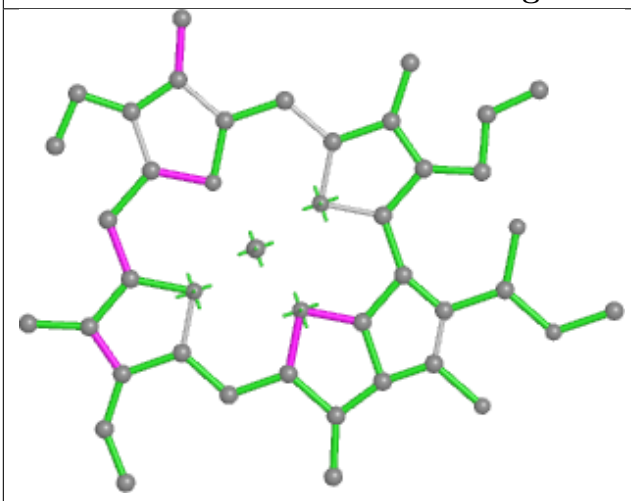


Torsions



Rings

Ligand CLA m 613



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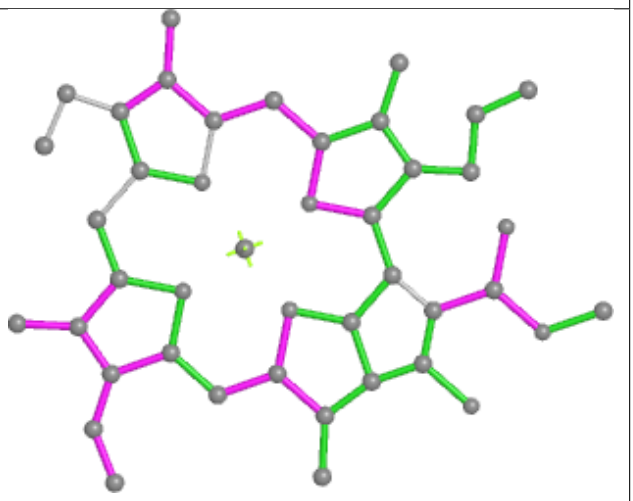
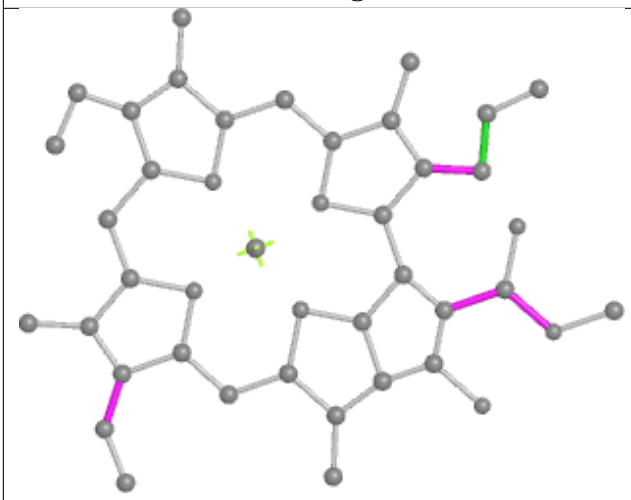
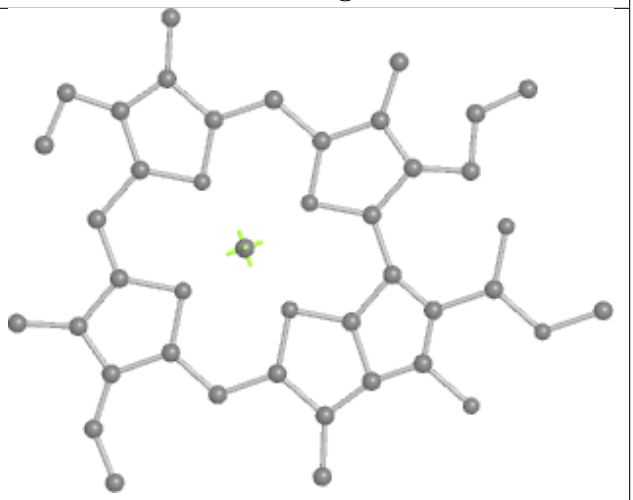


Bond angles

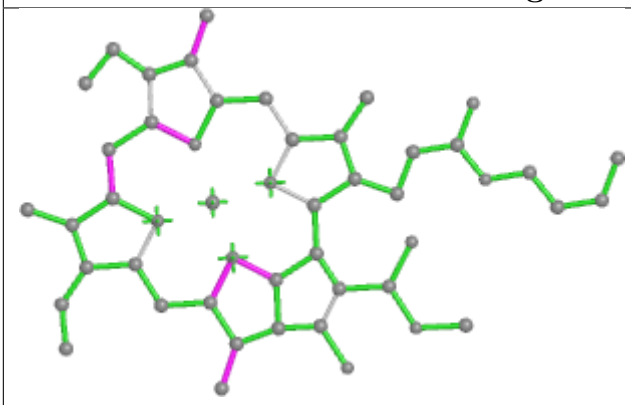


Torsions



Rings

Ligand CLA L 202



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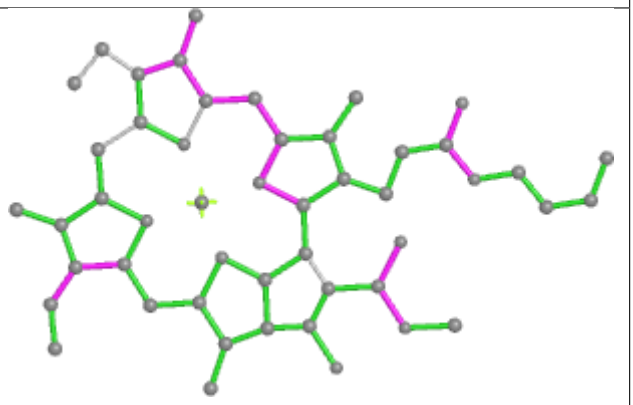
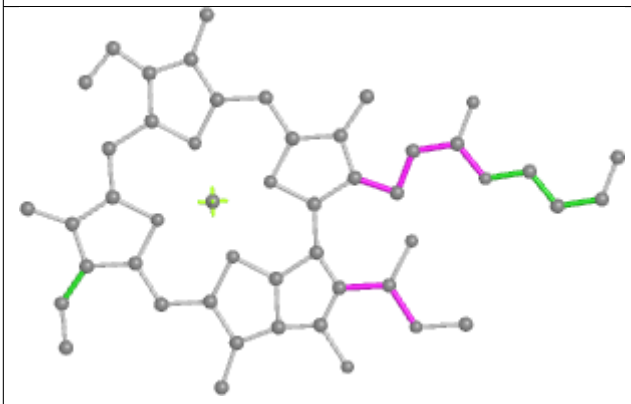


Bond angles



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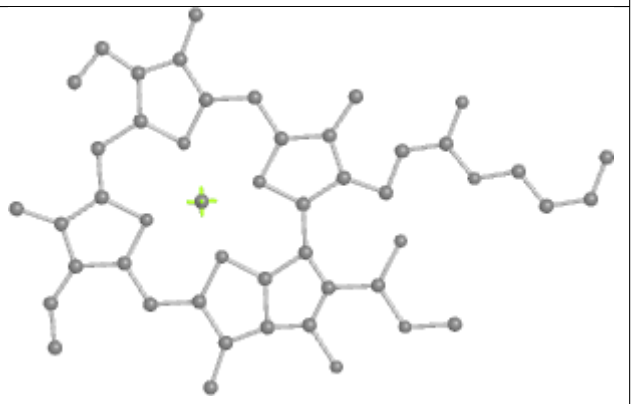
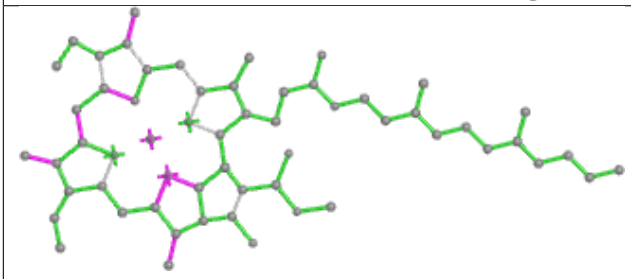
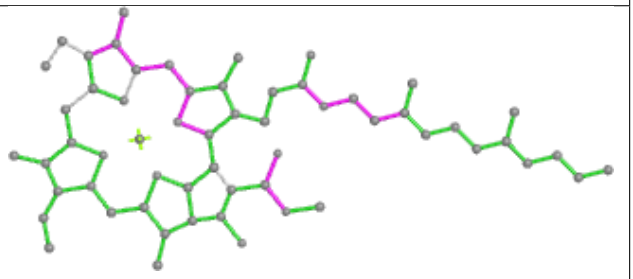


Rings

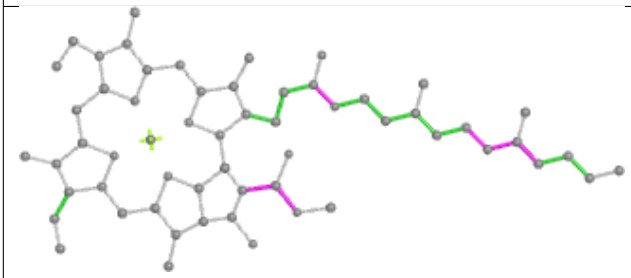
Ligand CLA B 832



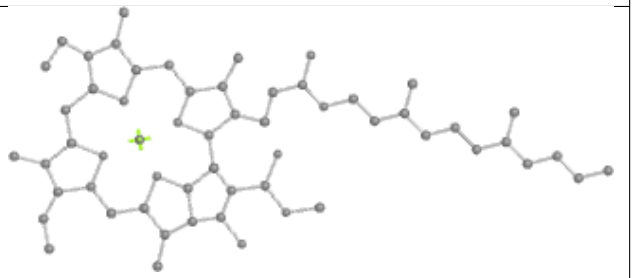
Bond lengths



Bond angles

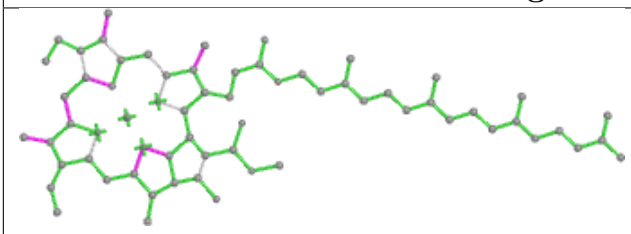


Torsions

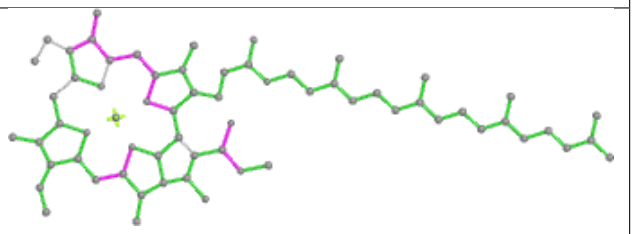


Rings

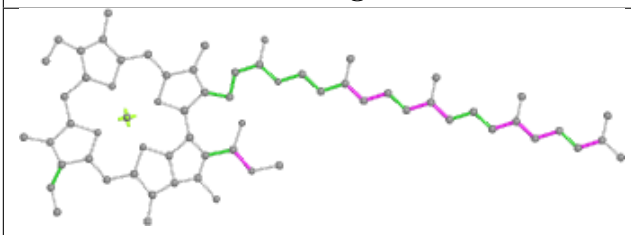
Ligand CLA b 607



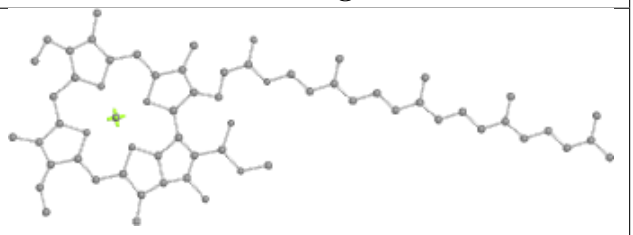
Bond lengths



Bond angles

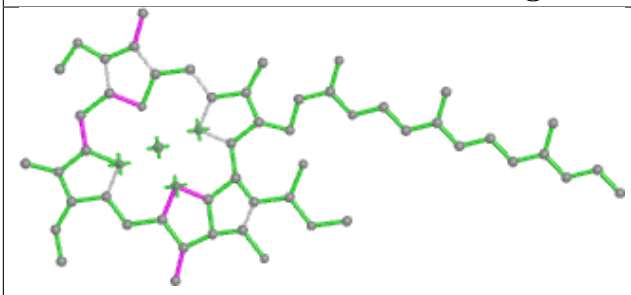


Torsions

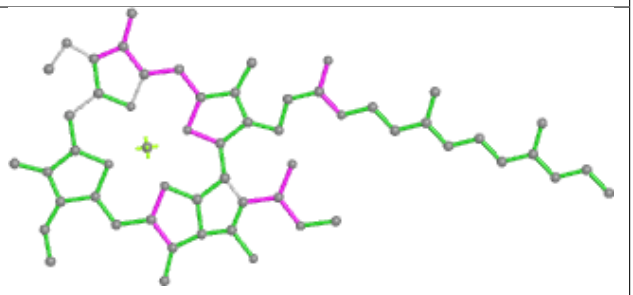


Rings

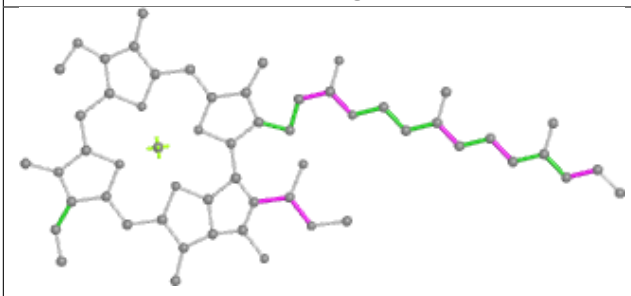
Ligand CLA B 838



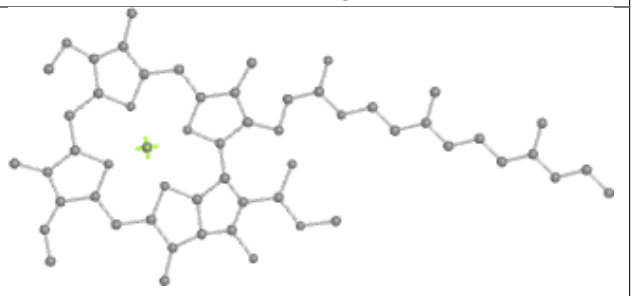
Bond lengths



Bond angles

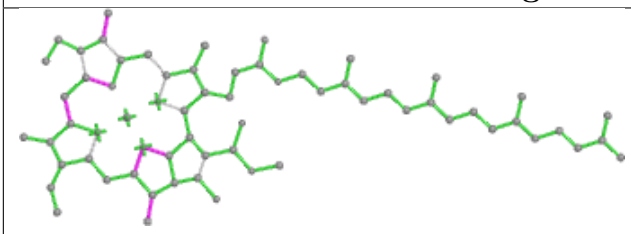


Torsions

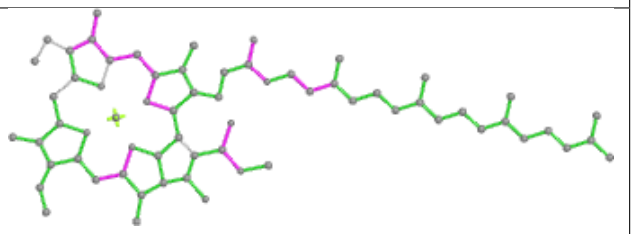


Rings

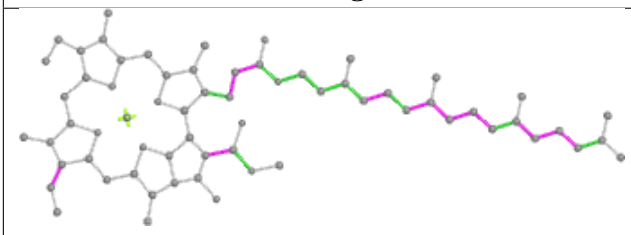
Ligand CLA m 604



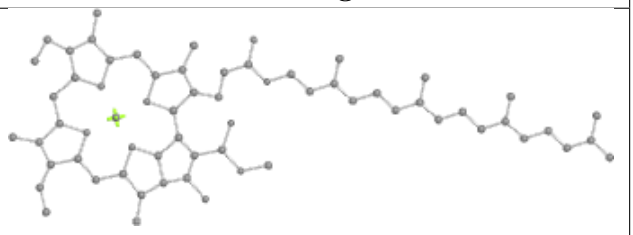
Bond lengths



Bond angles

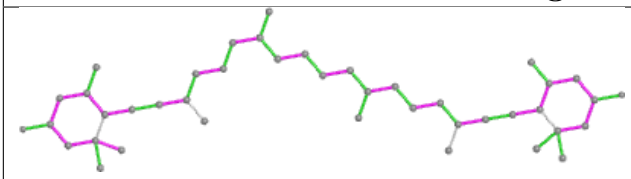


Torsions



Rings

Ligand II0 l 314



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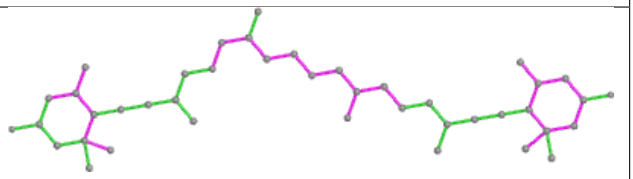

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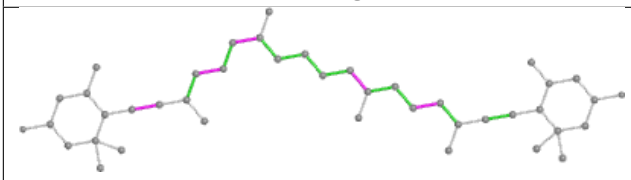
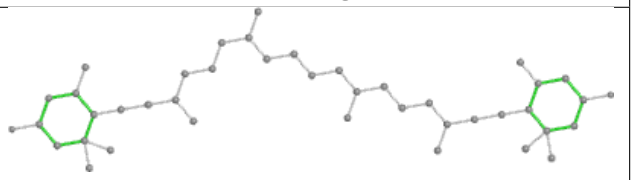
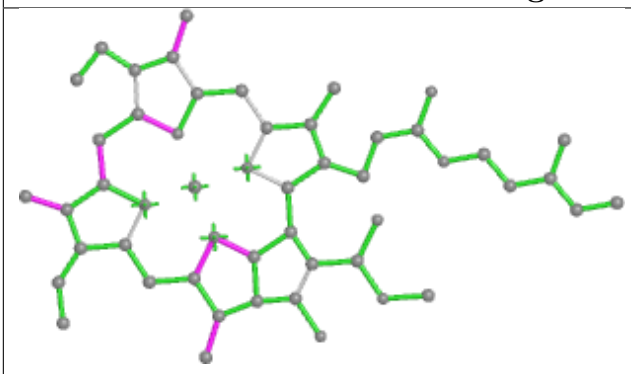


Torsions



Rings

Ligand CLA n 306



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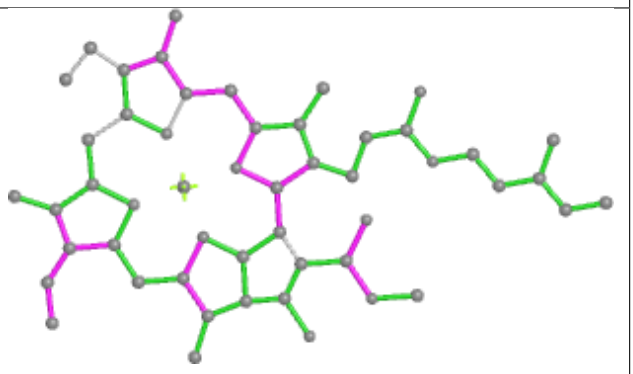

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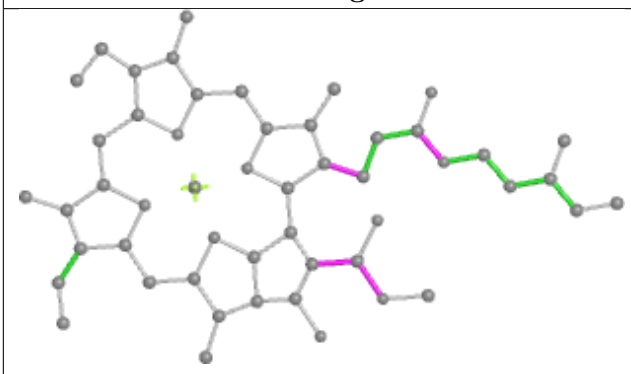
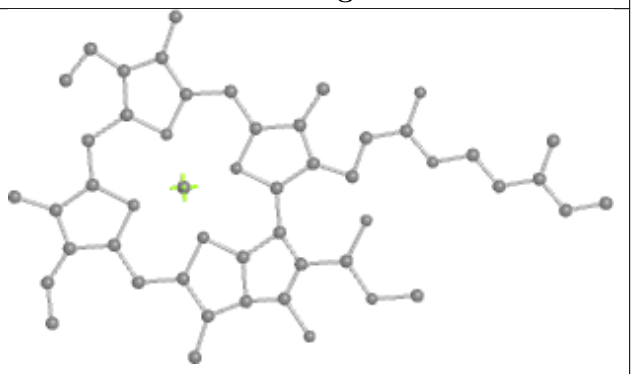
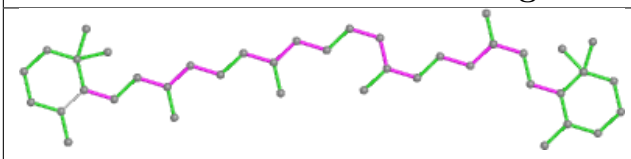


Torsions



Rings

Ligand WVN J 101



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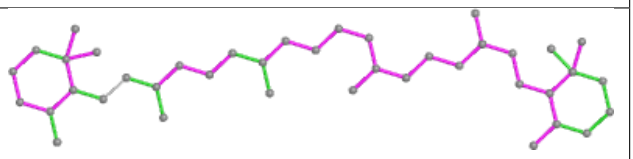
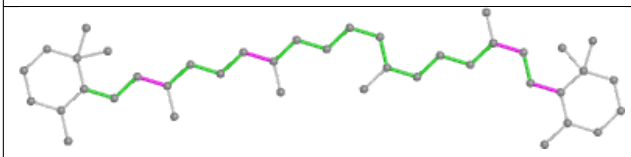


Bond angles



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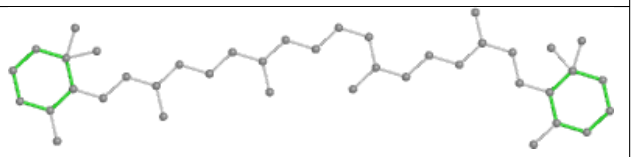
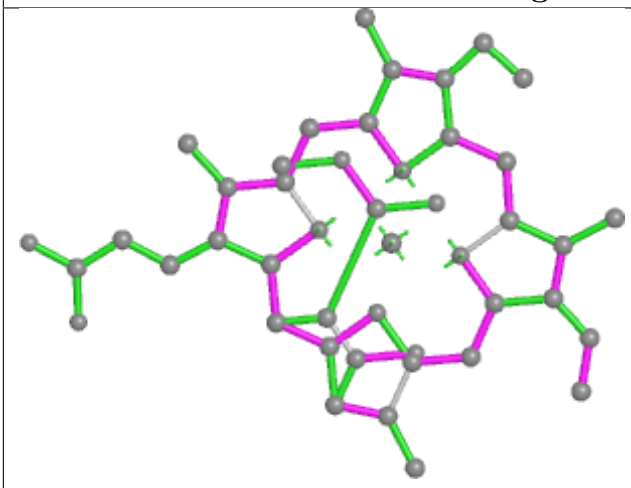


Rings

Ligand KC2 c 610



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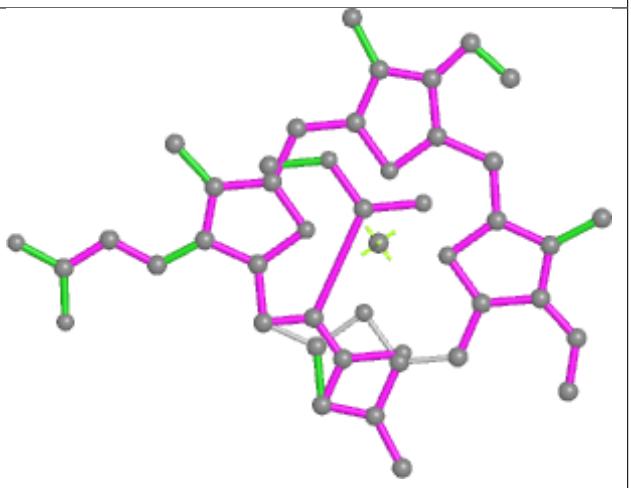

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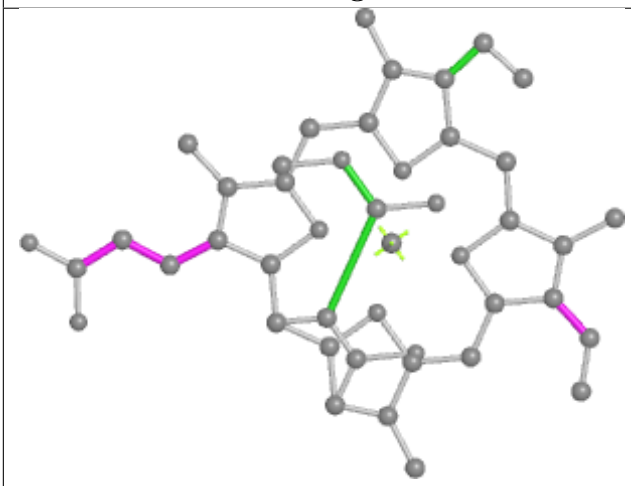

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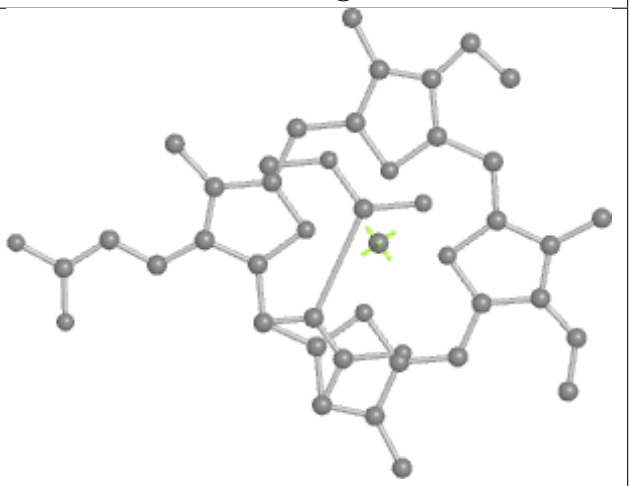
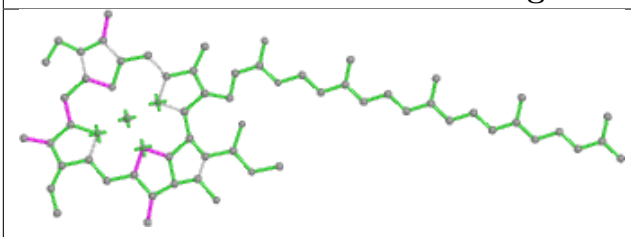


Rings

Ligand CLA n 310



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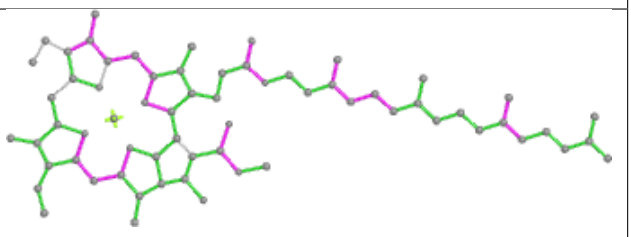
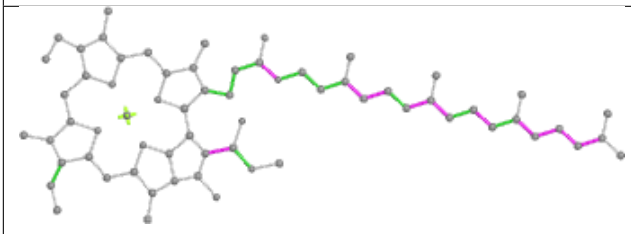


Bond angles



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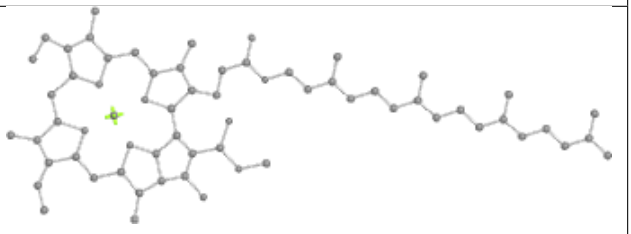
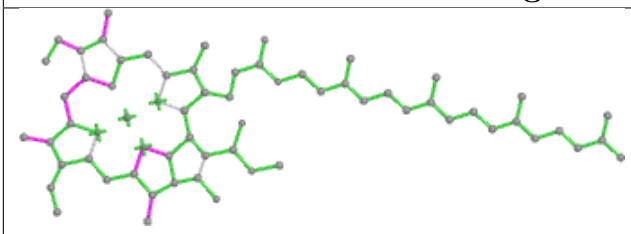


Rings

Ligand CLA A 807



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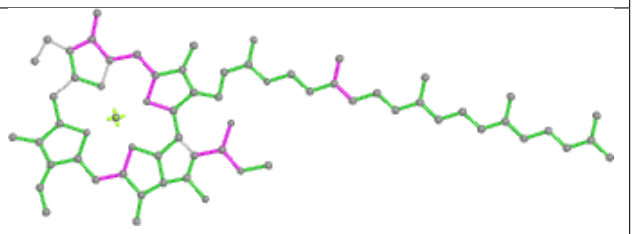

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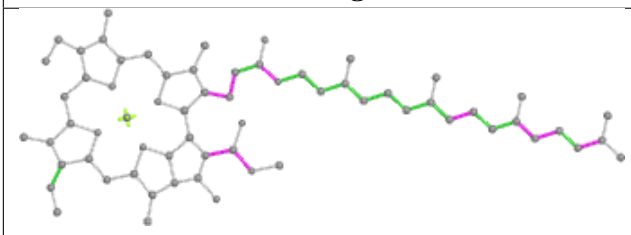

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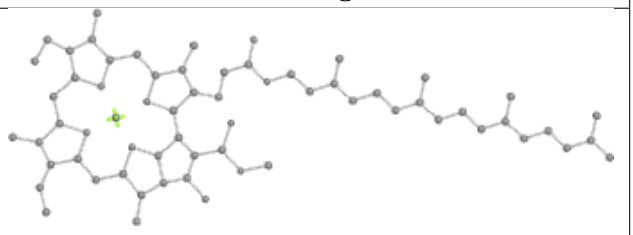
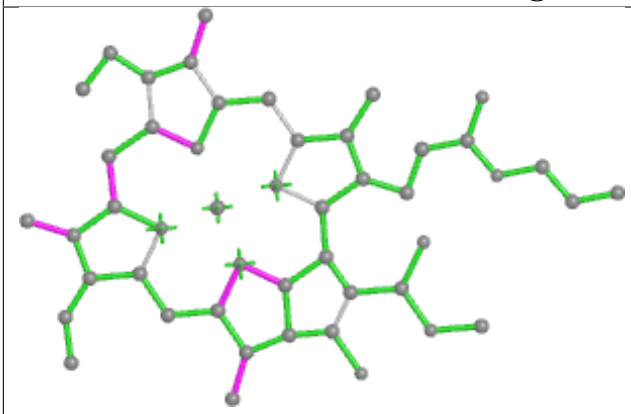


Rings

Ligand CLA a 313



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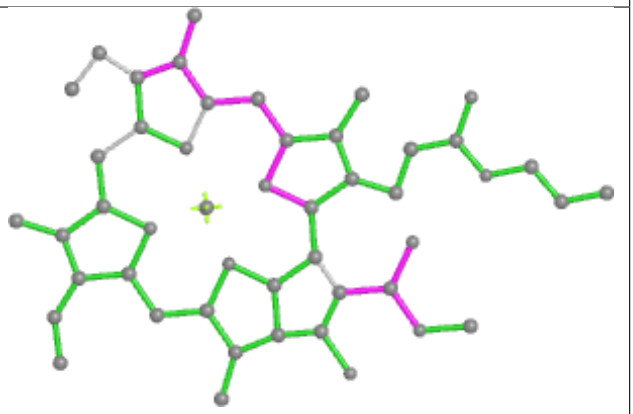
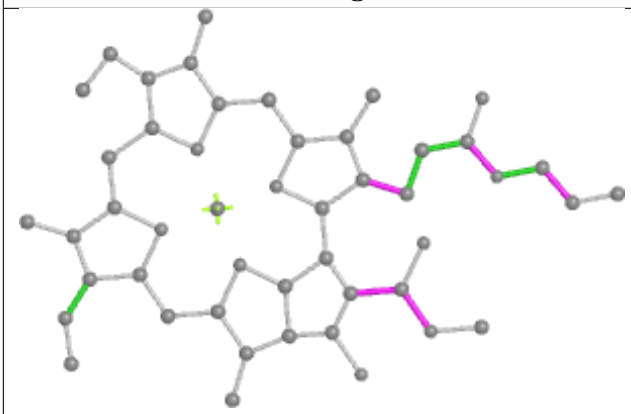
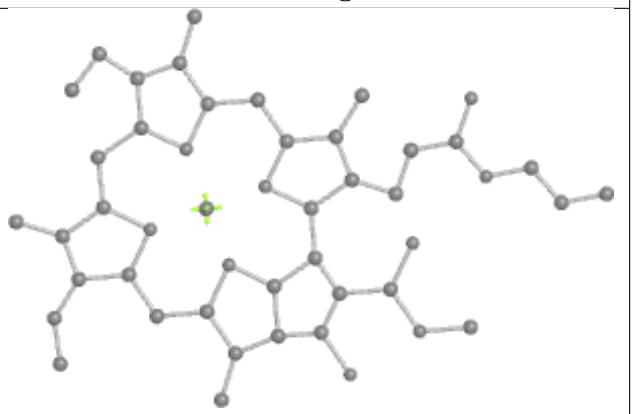


Bond angles

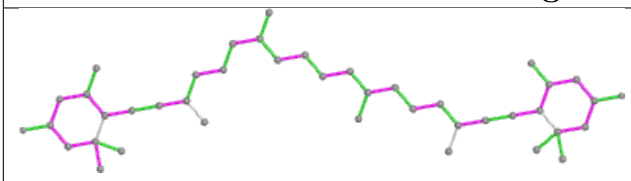


Torsions

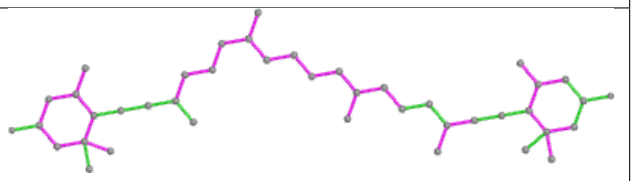


Rings

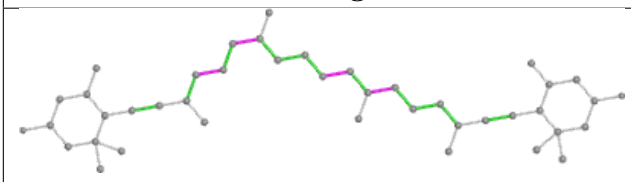
Ligand II0 k 619



Bond lengths



Bond angles



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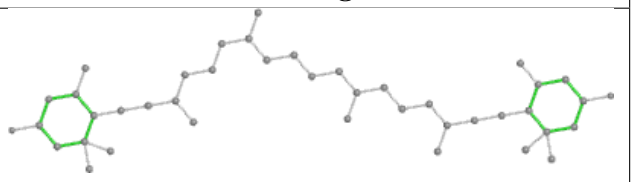
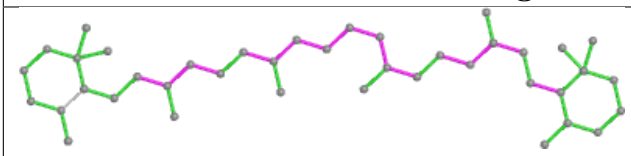


Rings

Ligand WVN B 845



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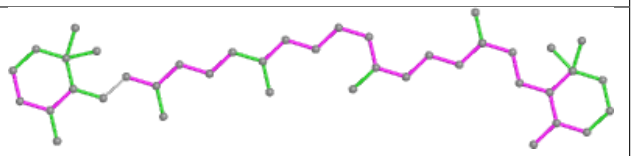
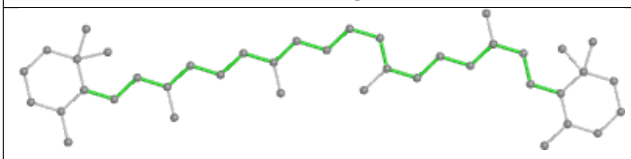


Bond angles



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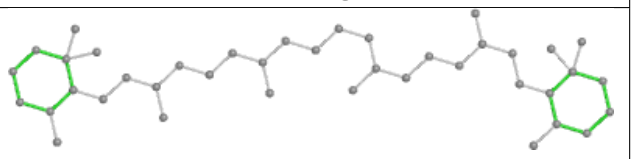
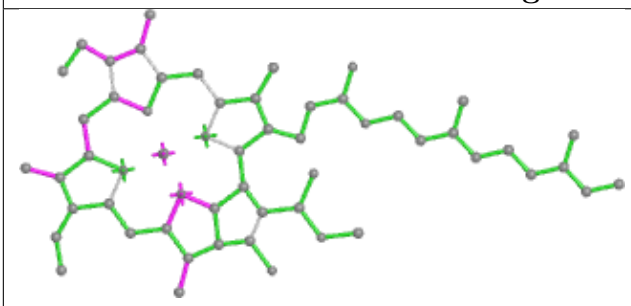


Rings

Ligand CLA m 602



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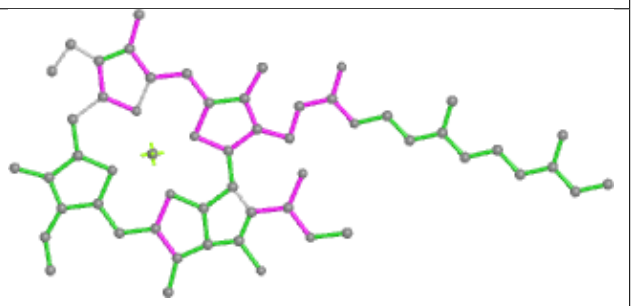
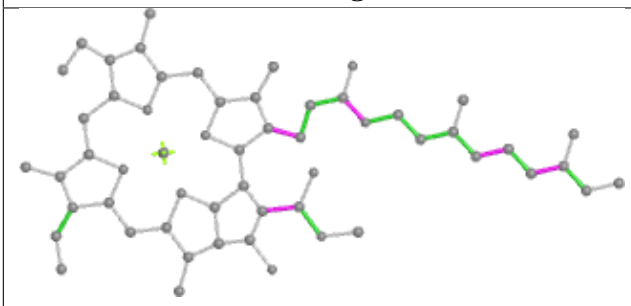


Bond angles



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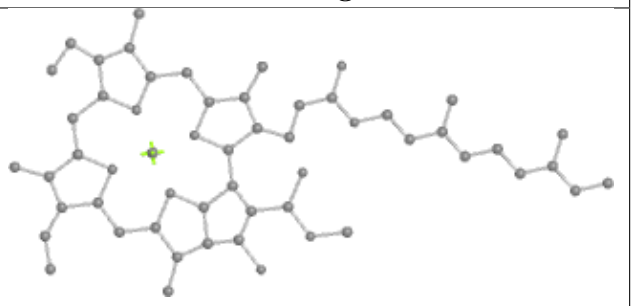
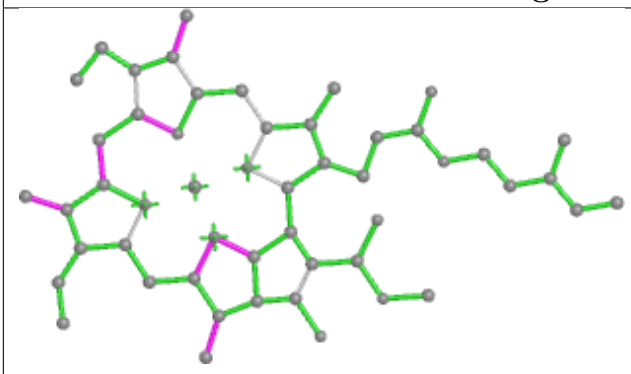


Rings

Ligand CLA i 308



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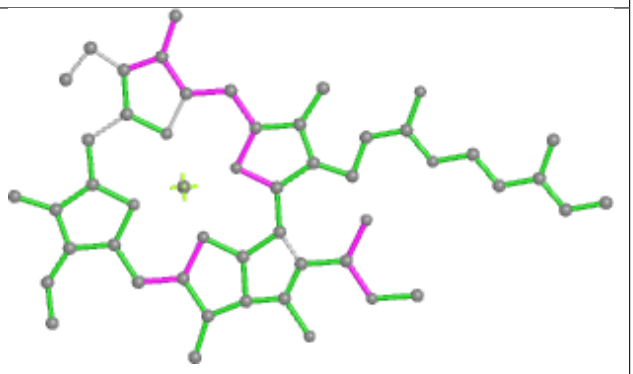
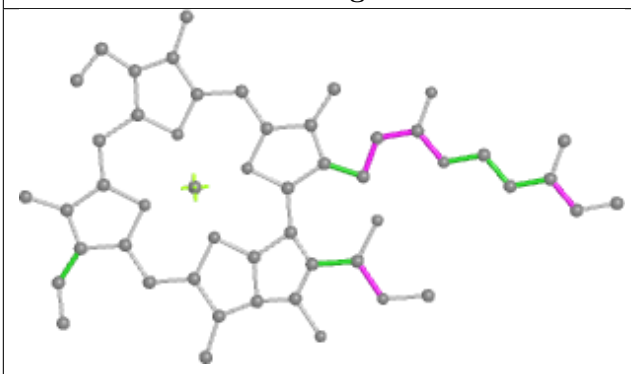
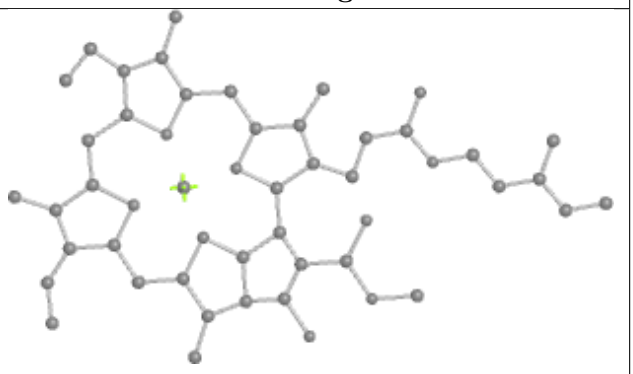


Bond angles

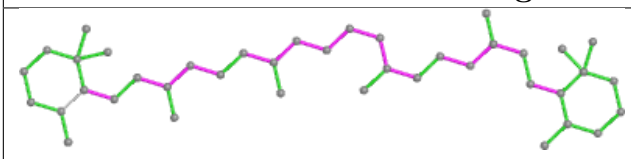


Torsions



Rings

Ligand WVN A 850



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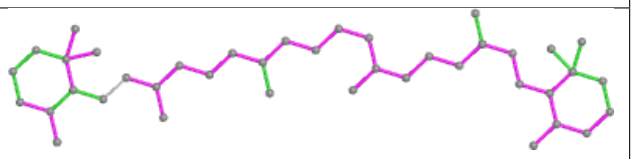
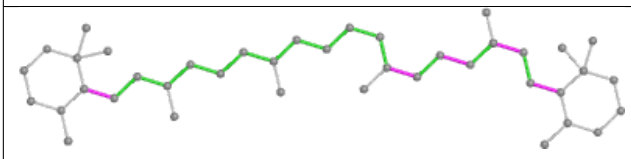
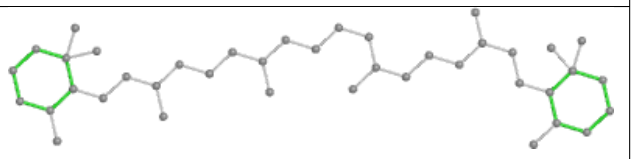


Bond angles

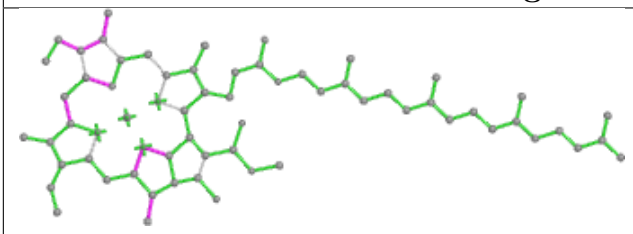


Torsions



Rings

Ligand CLA A 842



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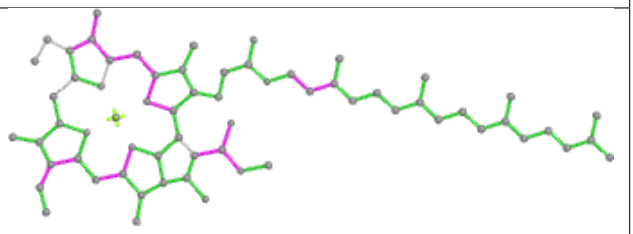
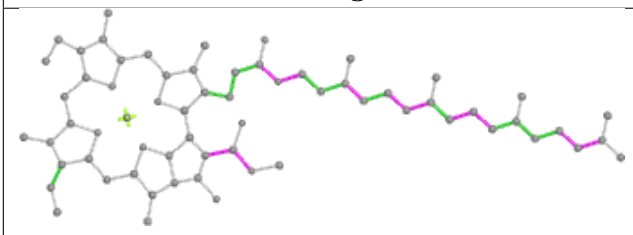
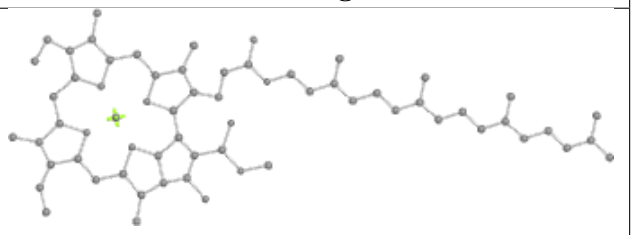


Bond angles

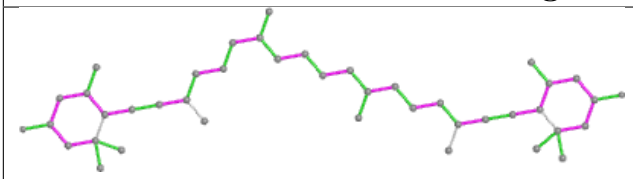


Torsions

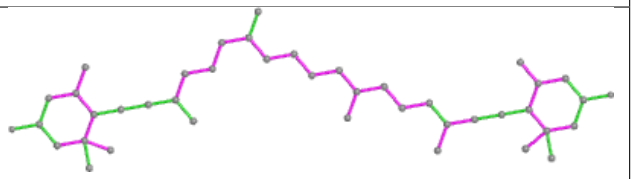


Rings

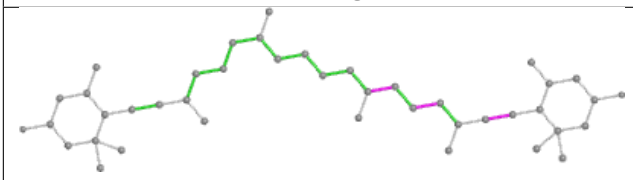
Ligand II0 n 301



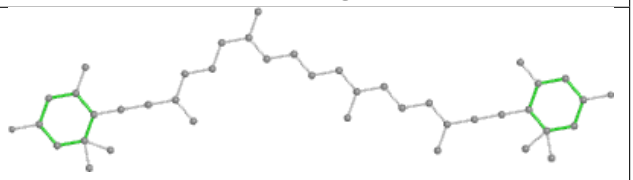
Bond lengths



Bond angles

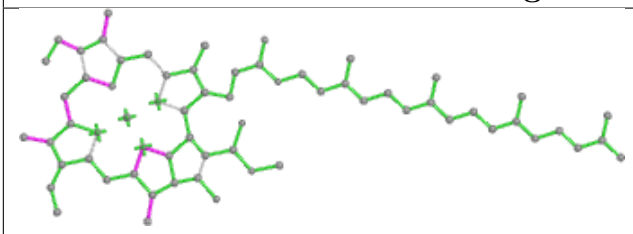


Torsions

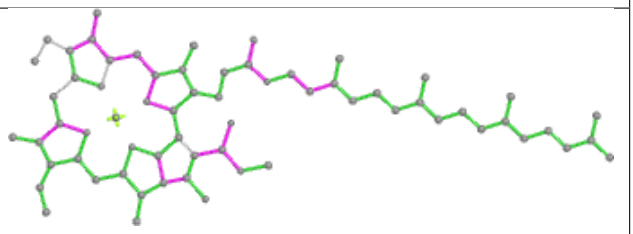


Rings

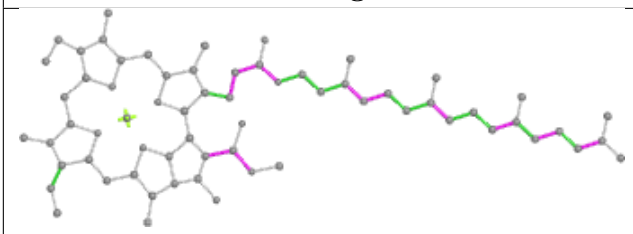
Ligand CLA A 839



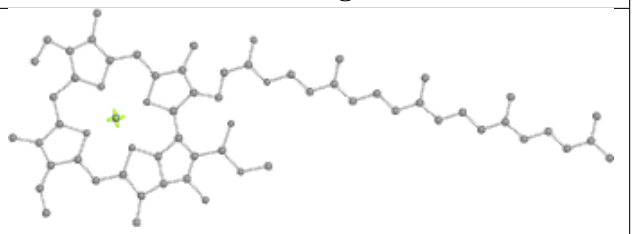
Bond lengths



Bond angles

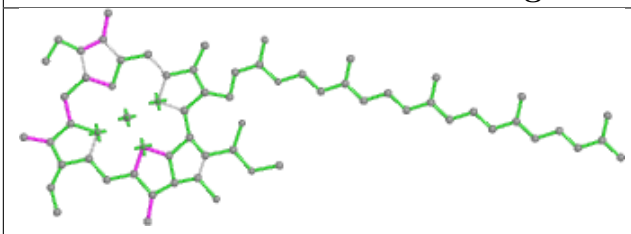


Torsions



Rings

Ligand CLA B 839



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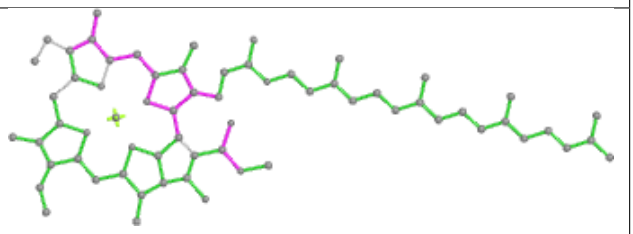
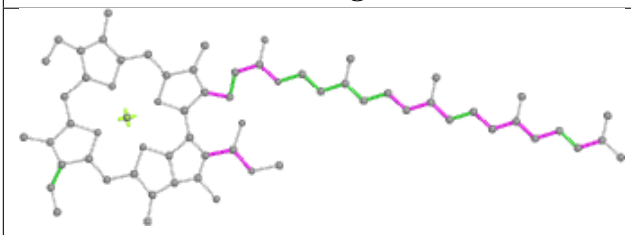
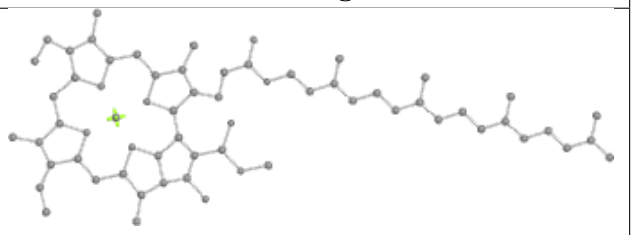


Bond angles

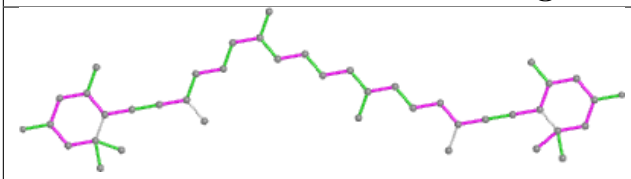


Torsions



Rings

Ligand II0 m 615



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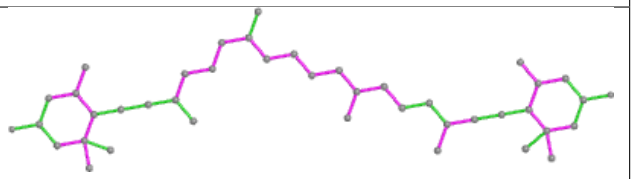
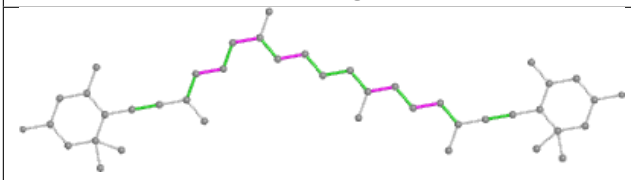


Bond angles



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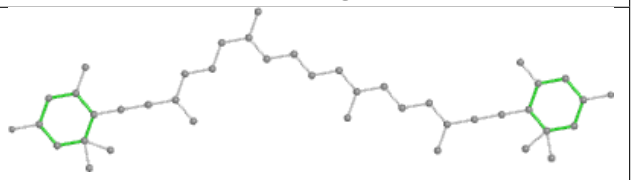
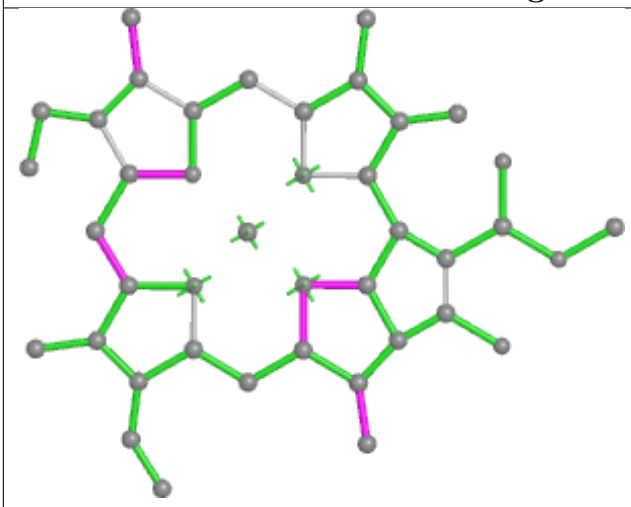


Rings

Ligand CLA d 309



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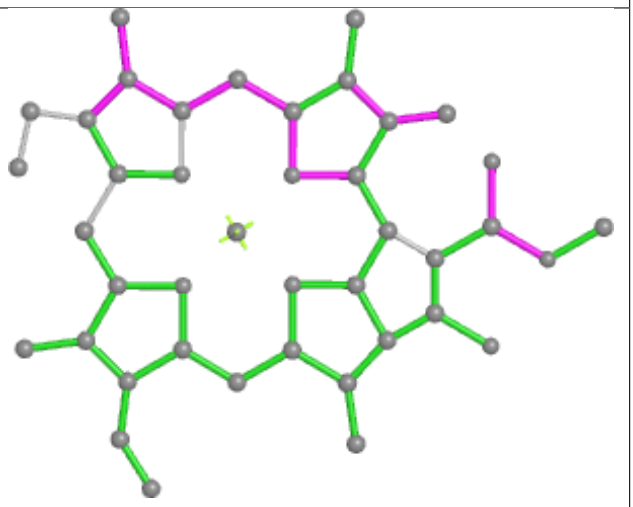
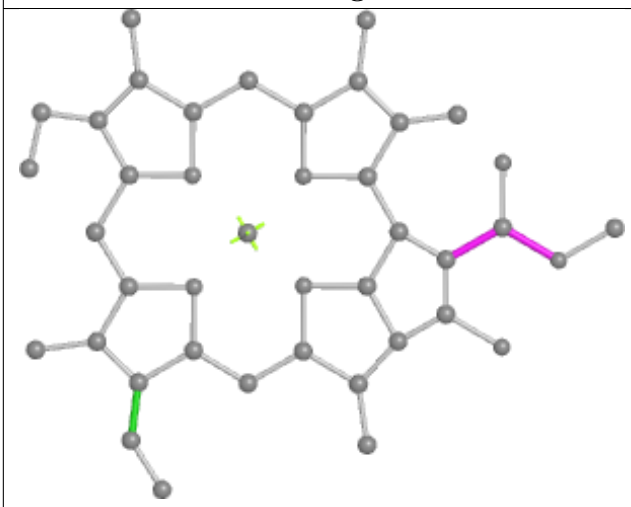


Bond angles



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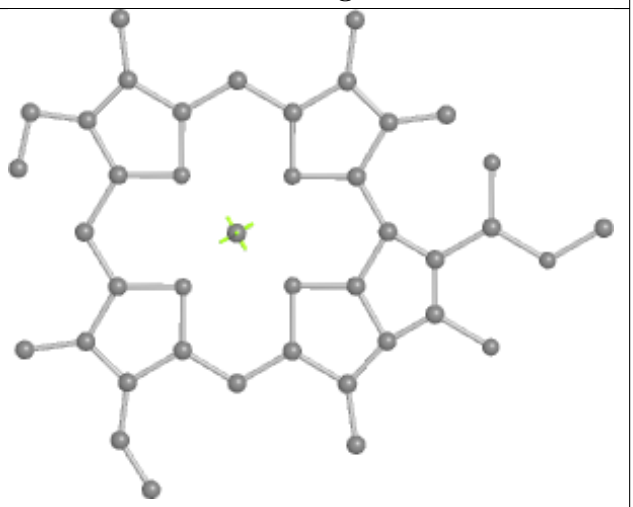
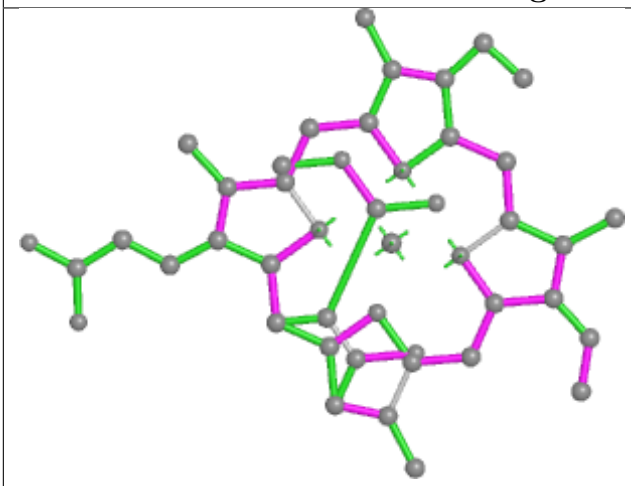


Rings

Ligand KC2 k 612



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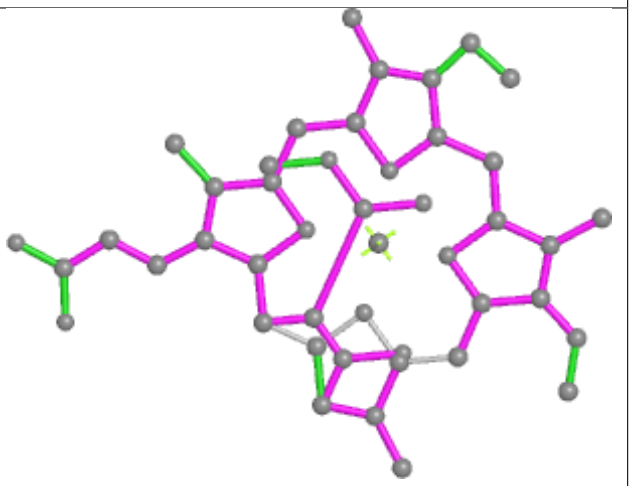
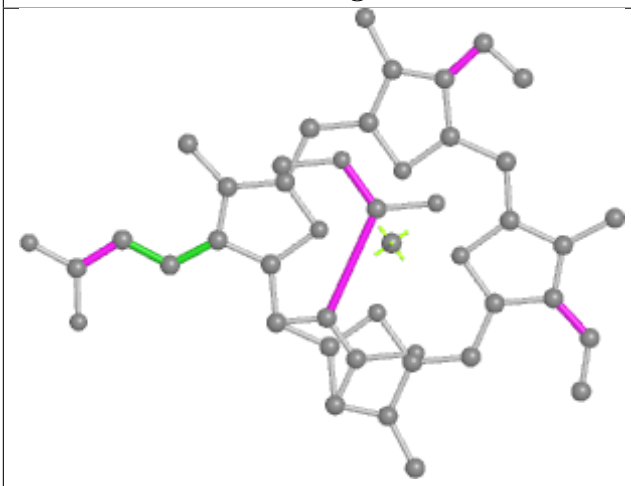


Bond angles



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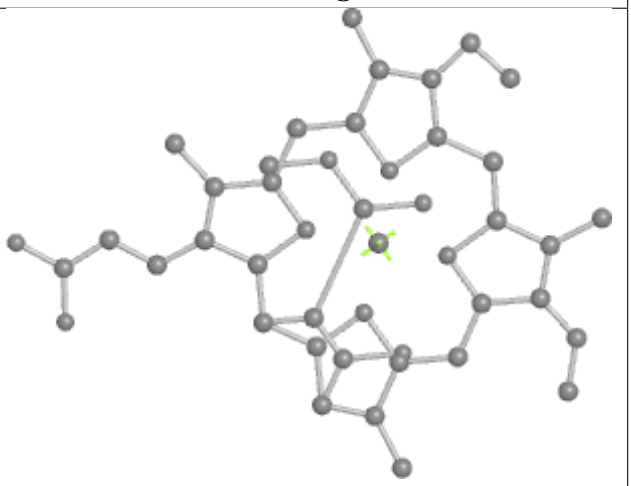
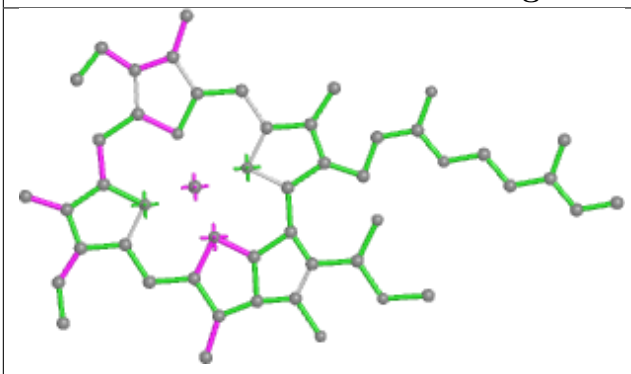


Rings

Ligand CLA m 607



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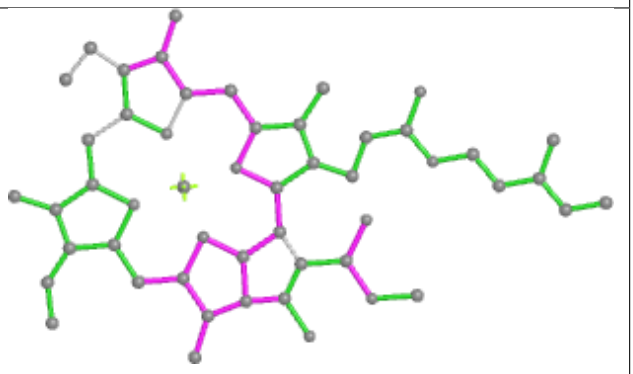
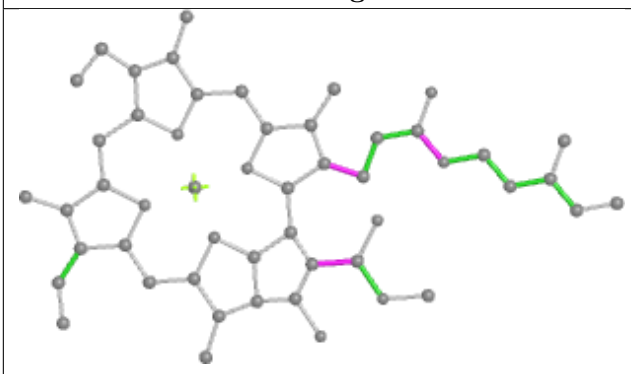


Bond angles



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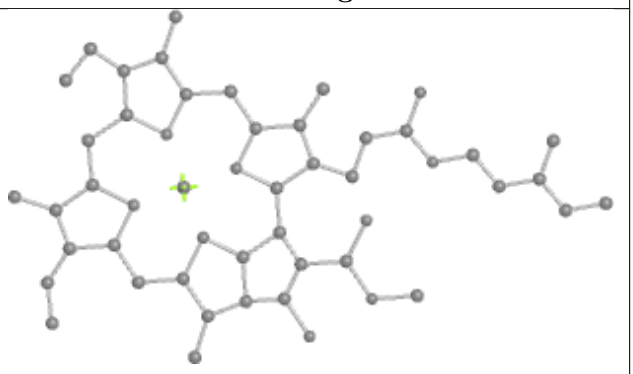
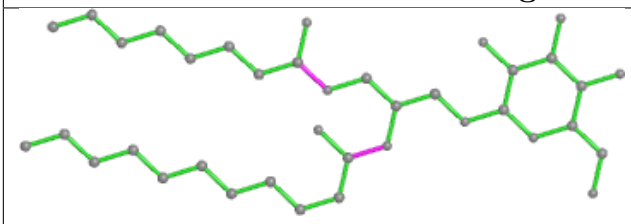


Rings

Ligand LMG Q 301



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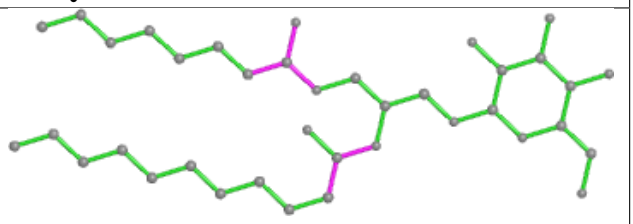
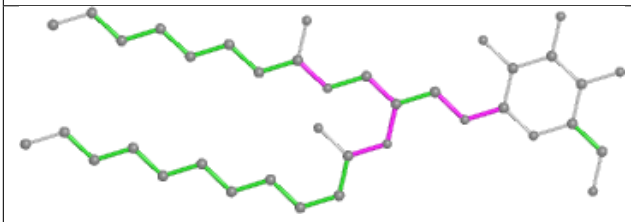


Bond angles



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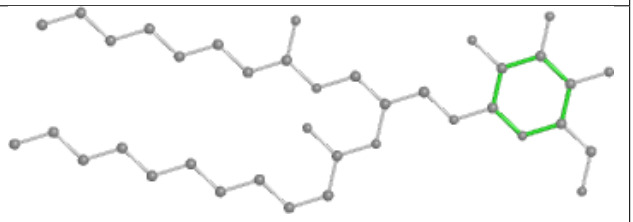
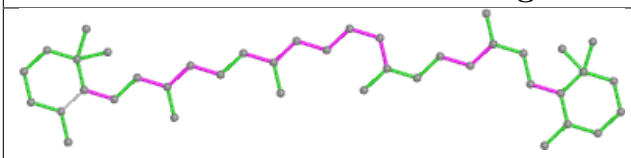


Rings

Ligand WVN F 203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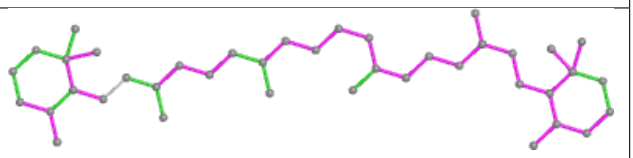
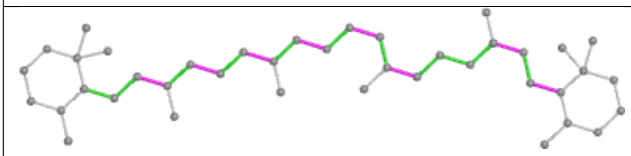

Bond angles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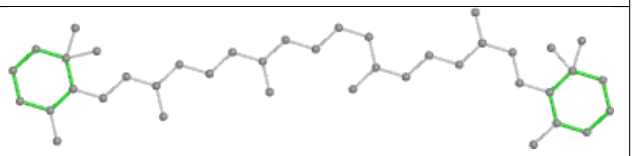
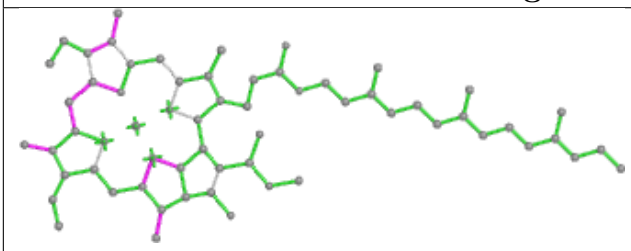
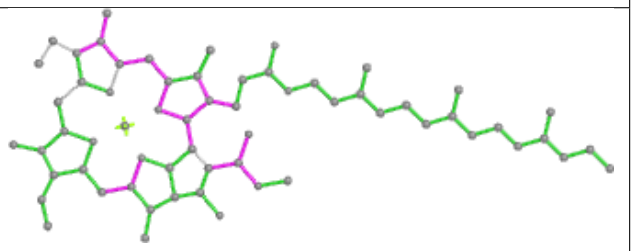
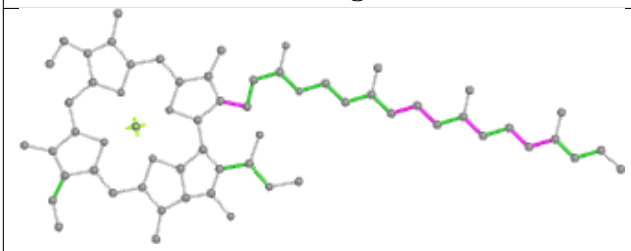

Rings

Ligand CLA A 810


Bond lengths


Bond angles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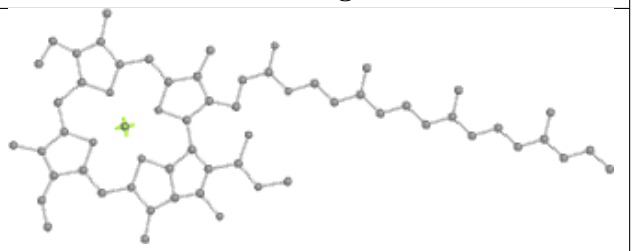
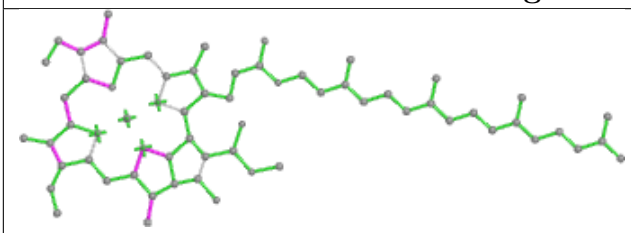

Rings

Ligand CLA A 832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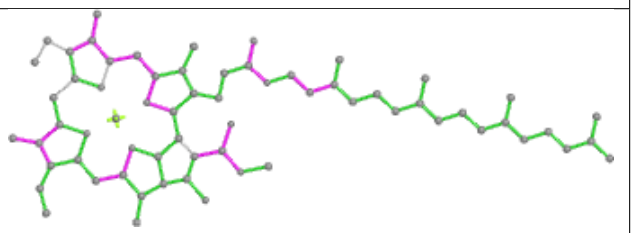
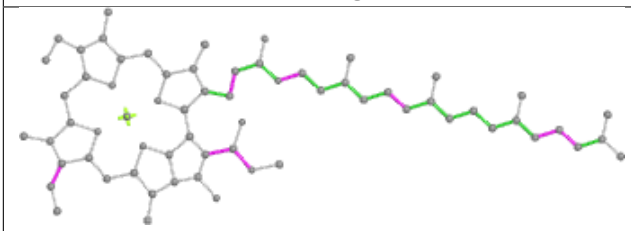

Bond angles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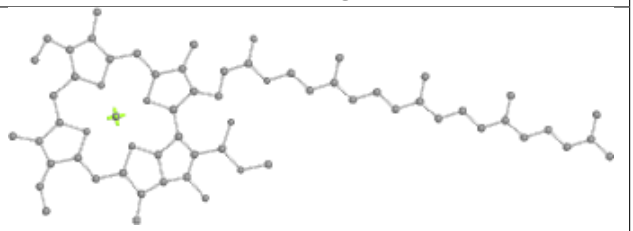
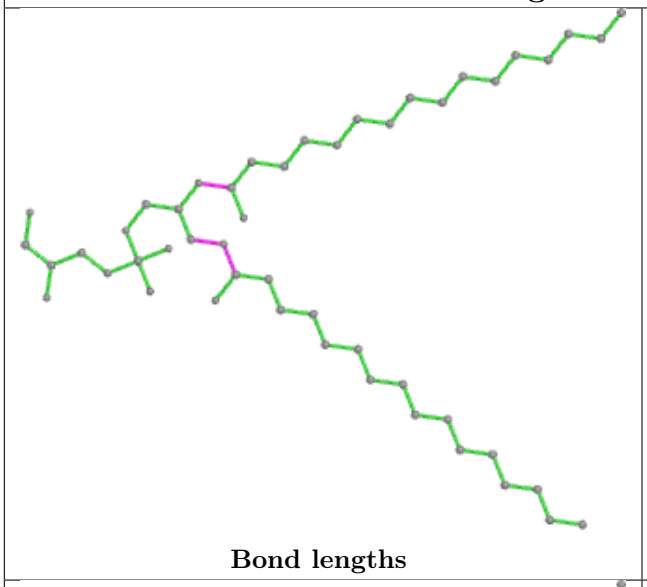

Rings

Ligand LHG a 301



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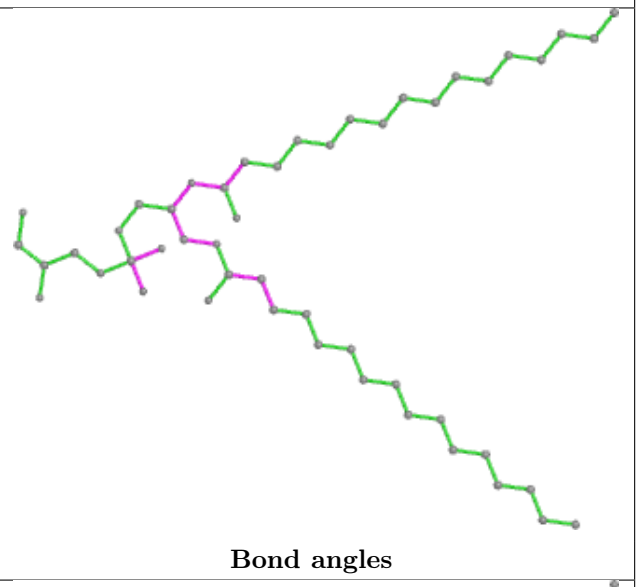
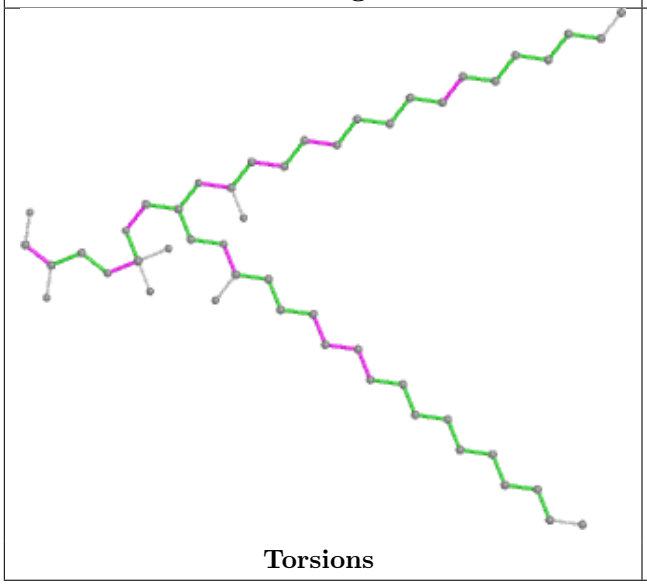


Bond angles



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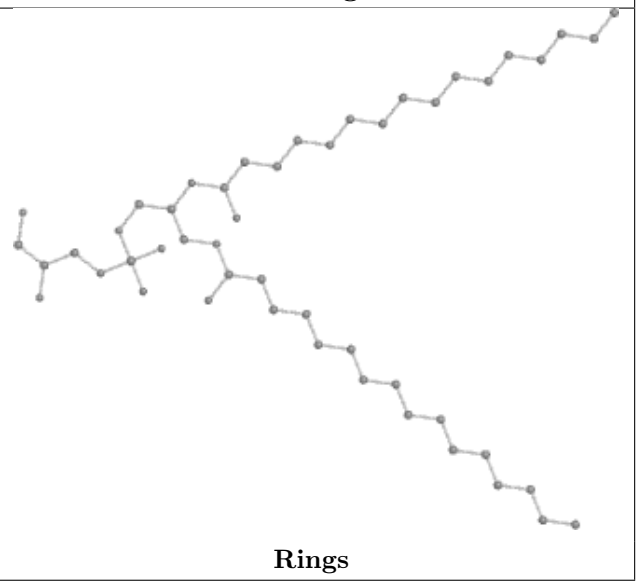
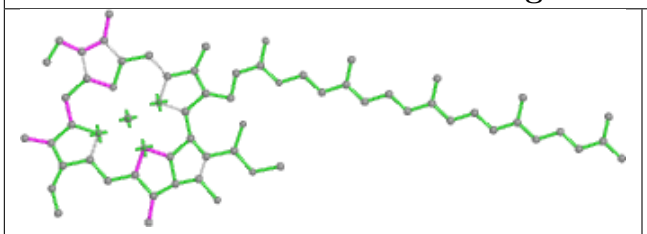


Rings

Ligand CLA B 835



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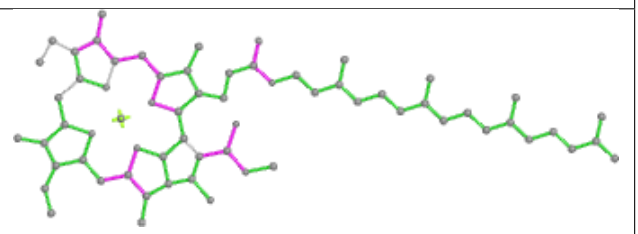
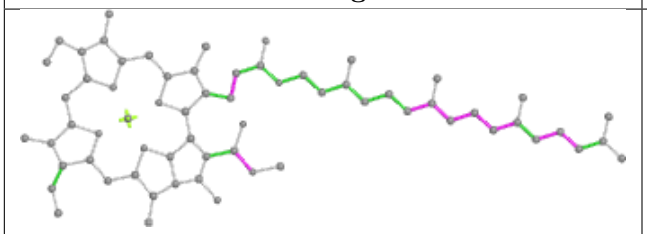


Bond angles



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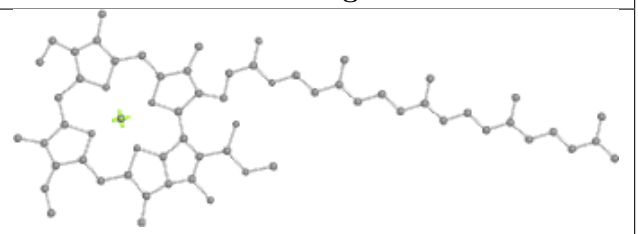
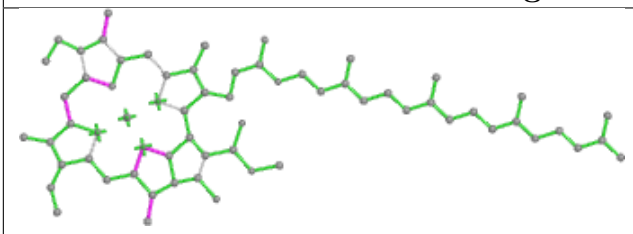
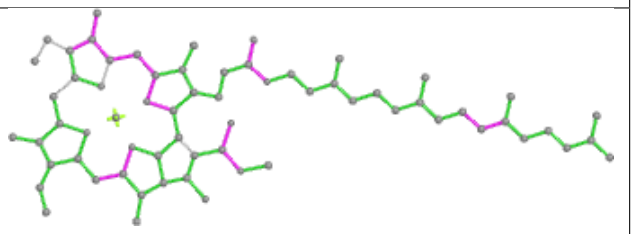


Rings

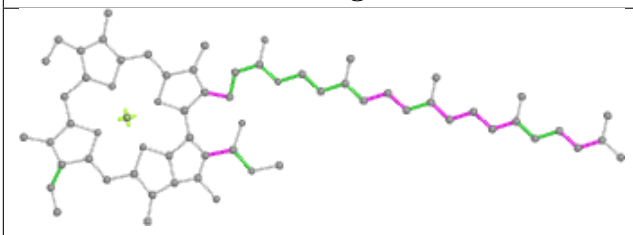
Ligand CLA A 806



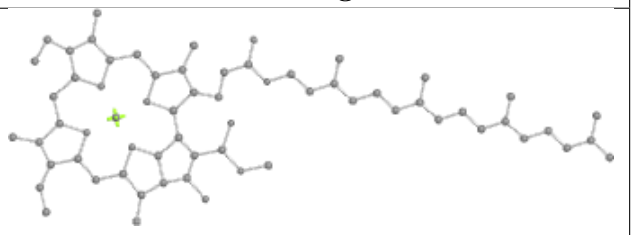
Bond lengths



Bond angles

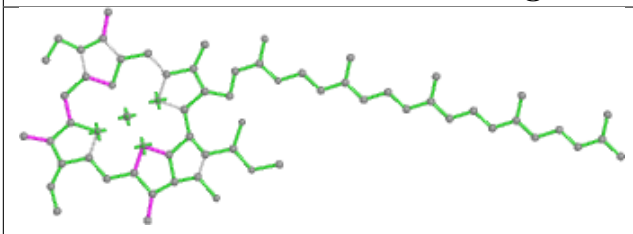


Torsions



Rings

Ligand CLA B 806



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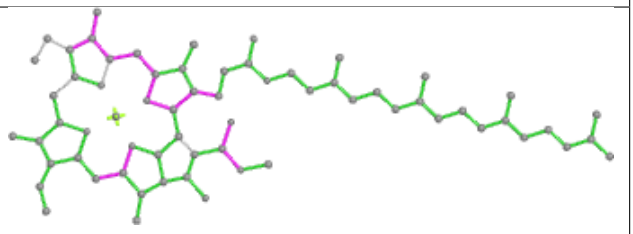
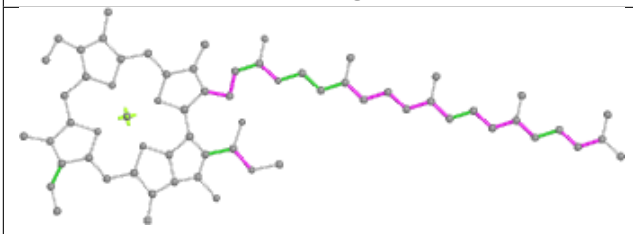


Bond angles



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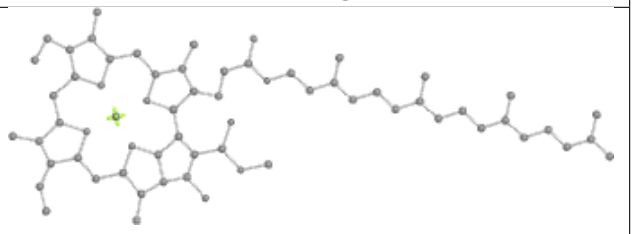
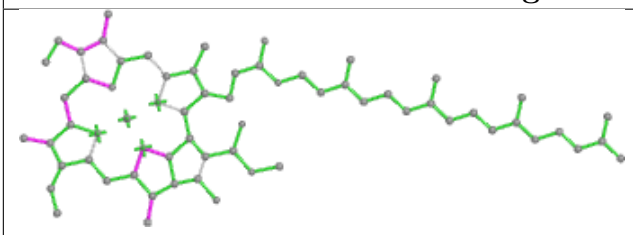
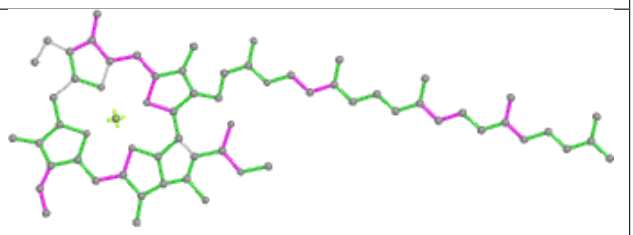


Rings

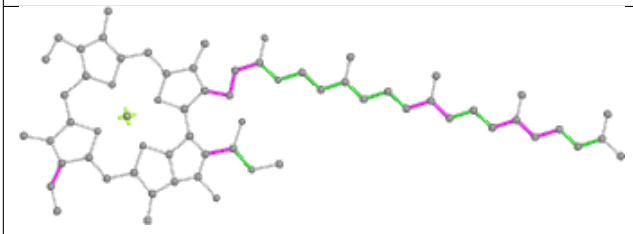
Ligand CLA m 608



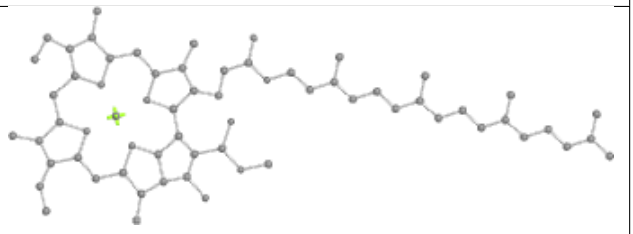
Bond lengths



Bond angles

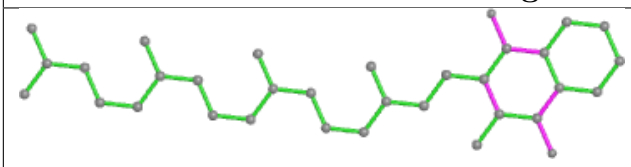


Torsions



Rings

Ligand PQN A 844



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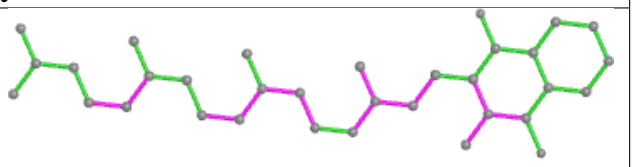
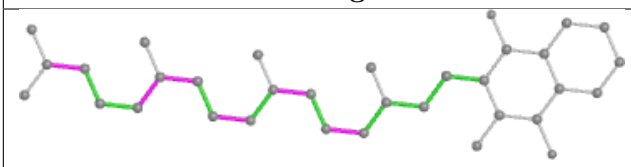
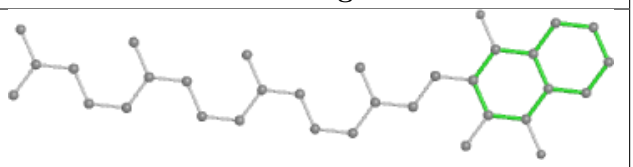


Bond angles

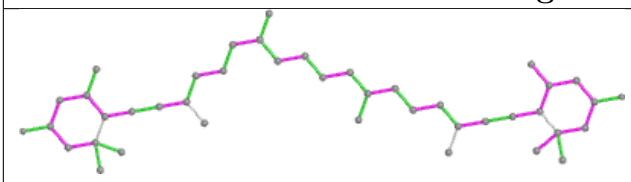


Torsions



Rings

Ligand II0 m 618



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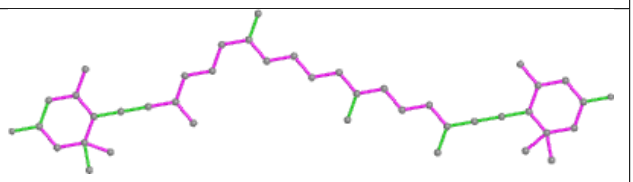
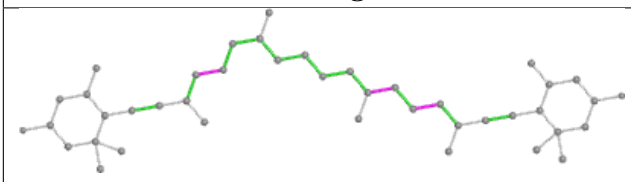


Bond angles



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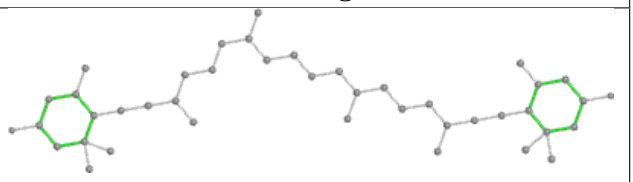
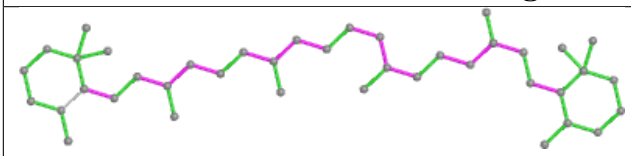


Rings

Ligand WVN I 101



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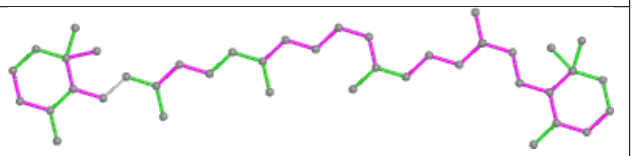
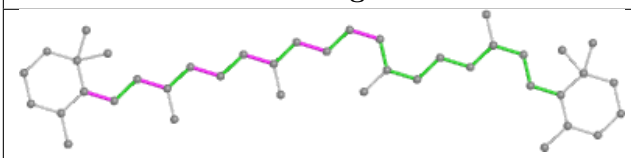


Bond angles



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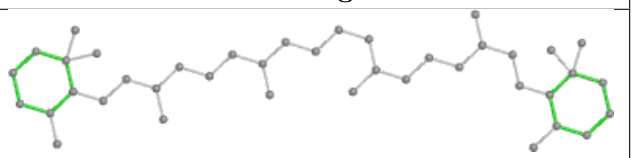
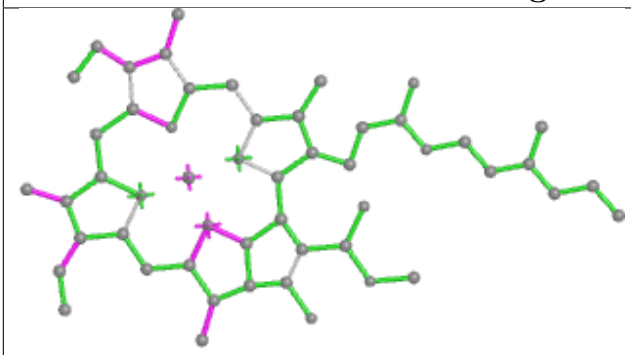


Rings

Ligand CLA c 606



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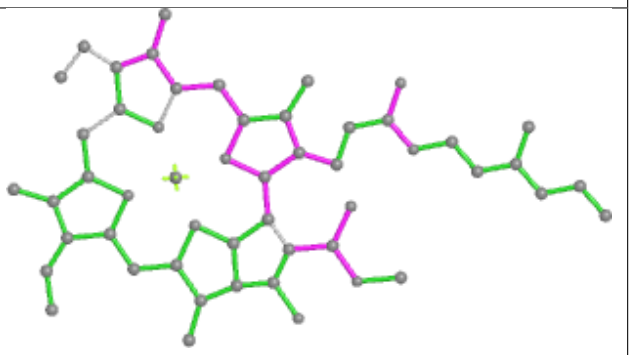
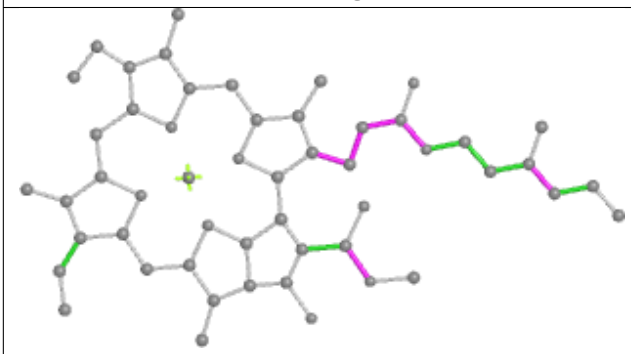


Bond angles



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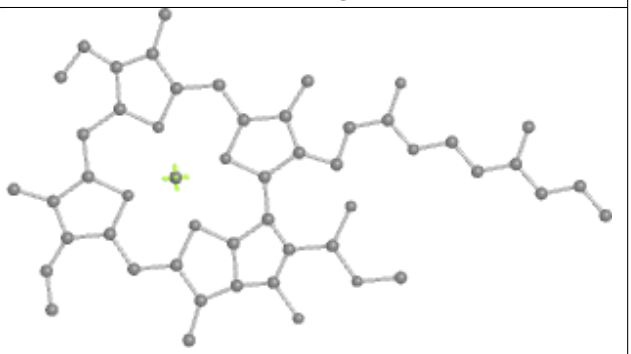
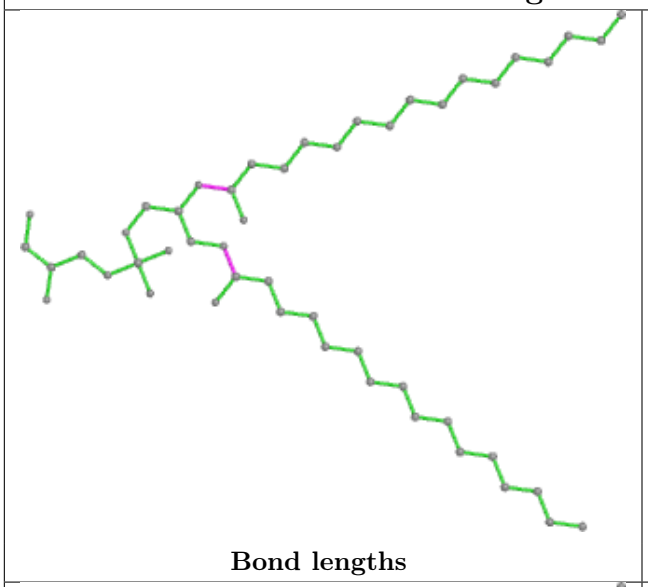


Rings

Ligand LHG L 207



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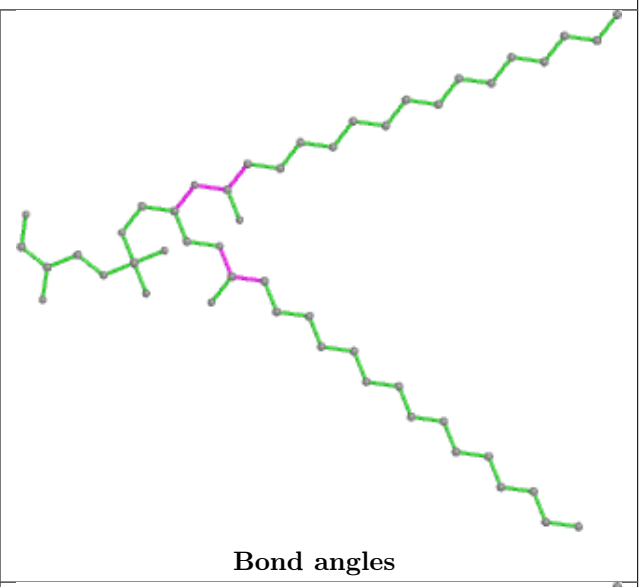
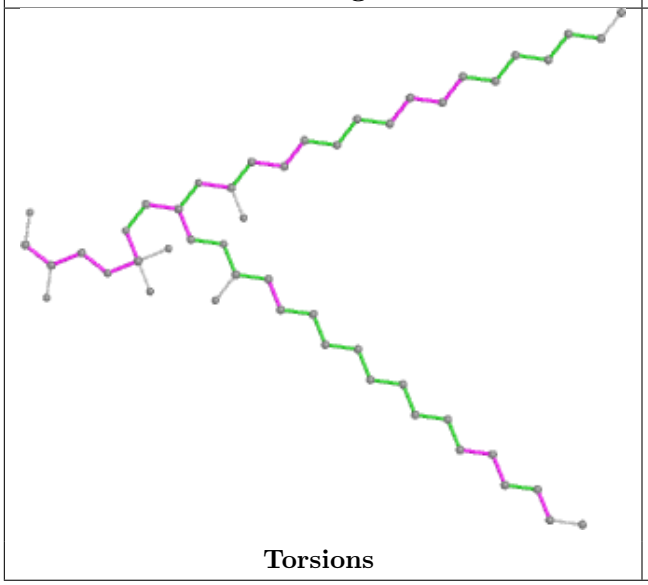


Bond angles



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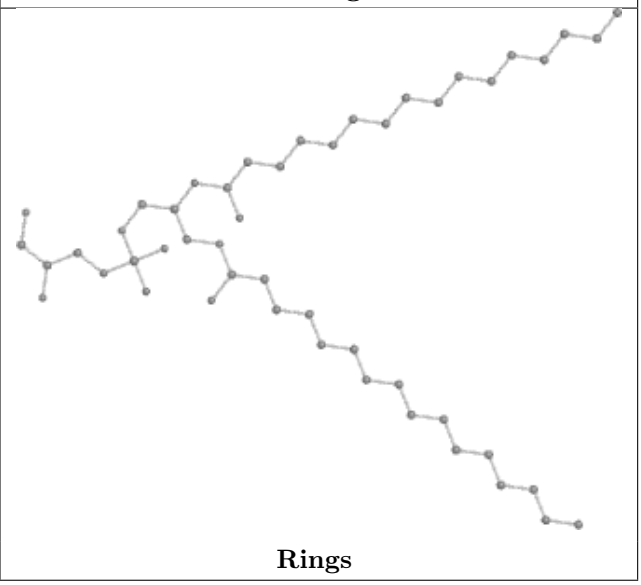
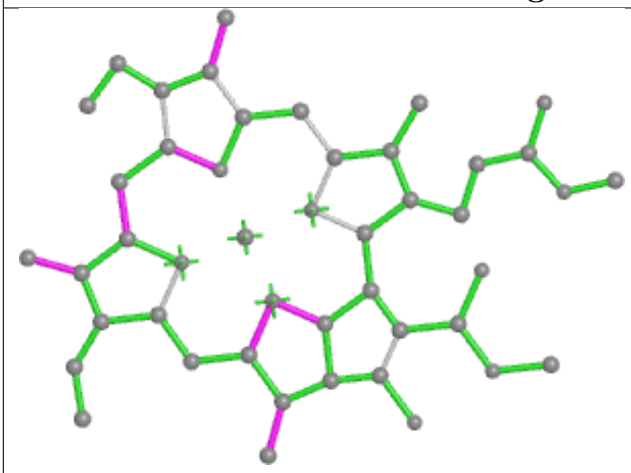


Rings

Ligand CLA d 307



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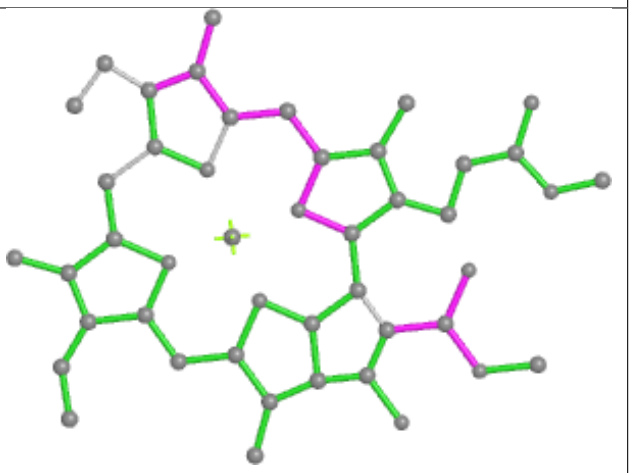

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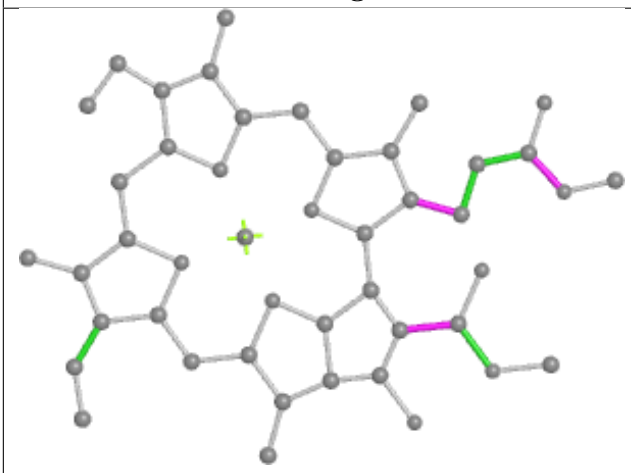

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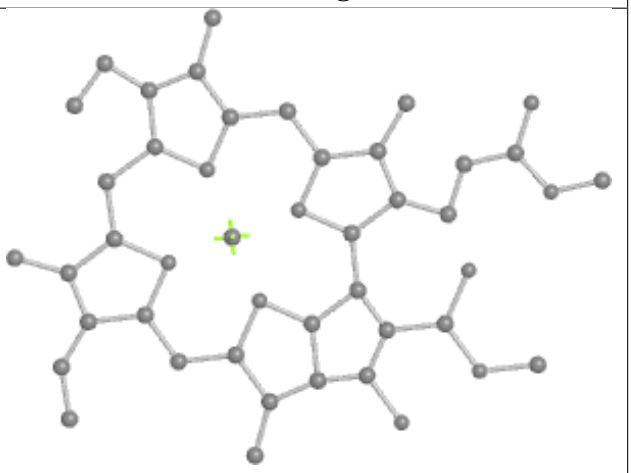
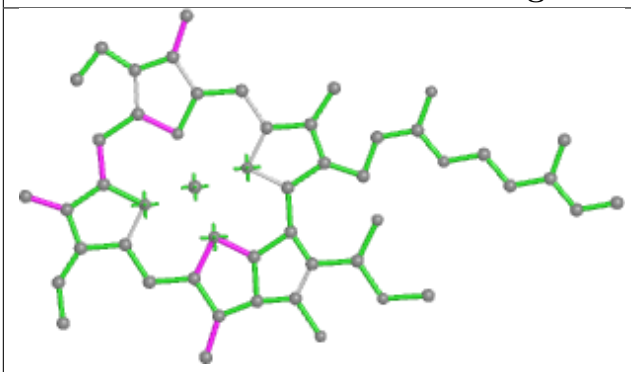


Rings

Ligand CLA n 309



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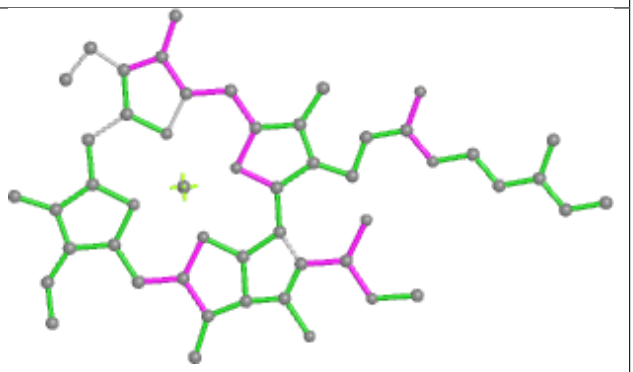
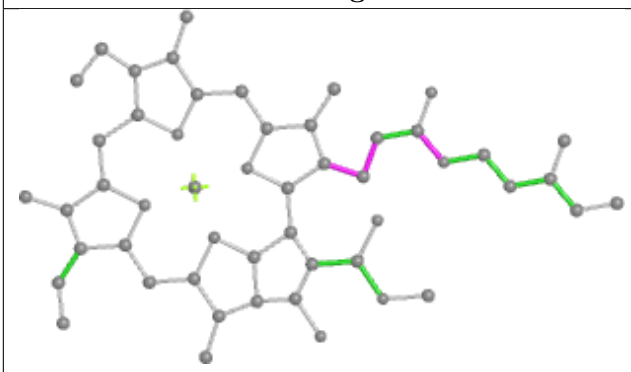


Bond angles



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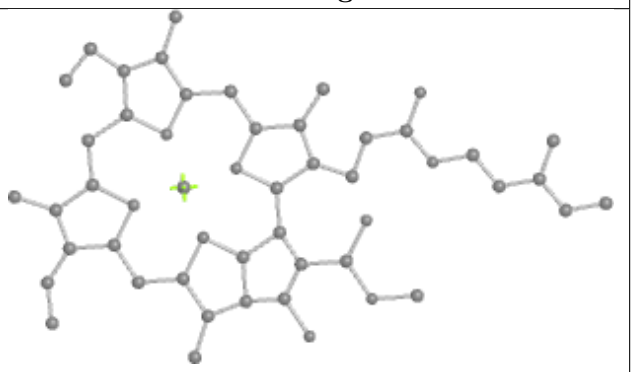
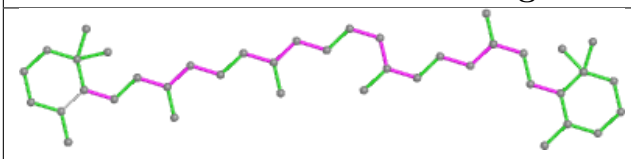


Rings

Ligand WVN h 309



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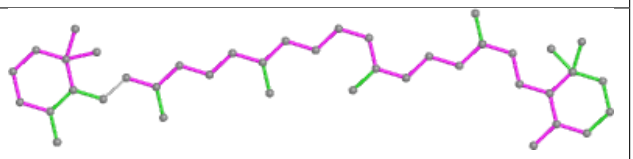
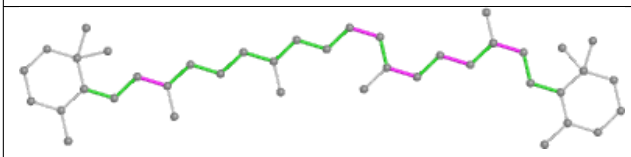


Bond angles



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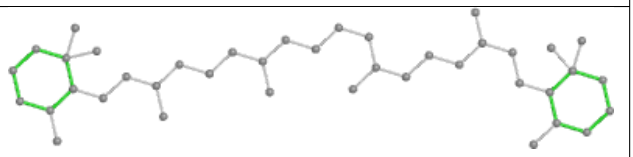
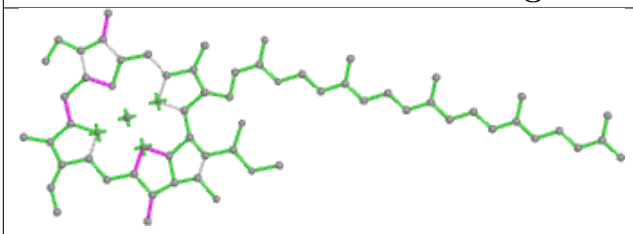


Rings

Ligand CLA B 840



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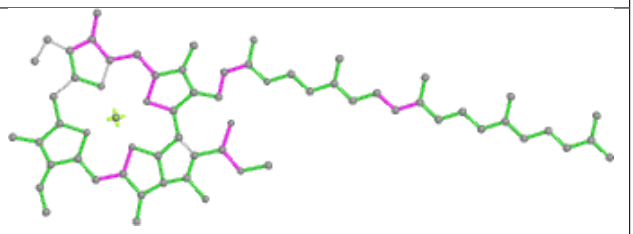
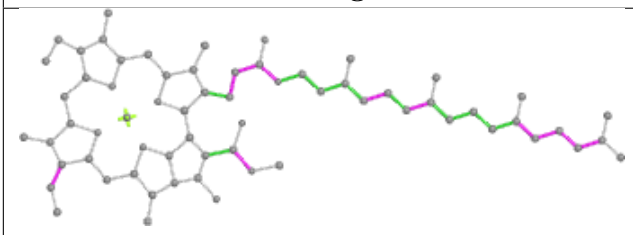


Bond angles



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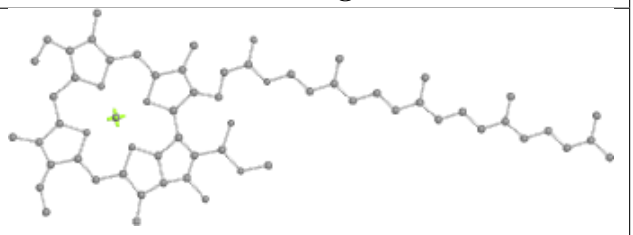
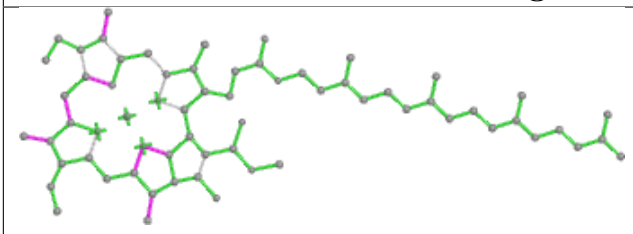


Rings

Ligand CLA a 311



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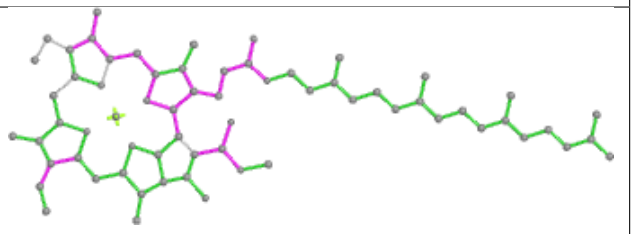
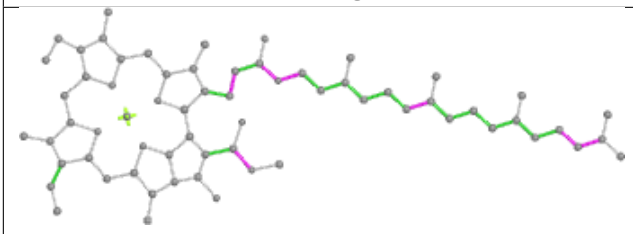


Bond angles



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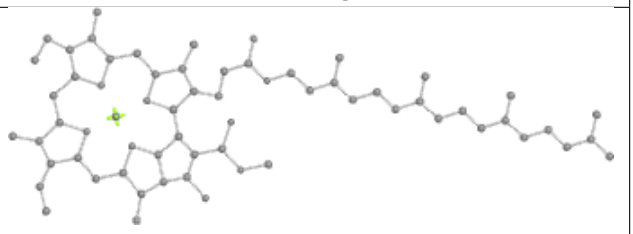
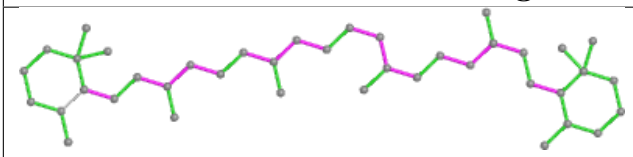


Rings

Ligand WVN R 201



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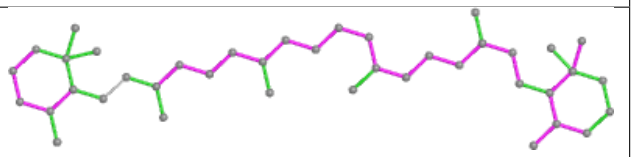
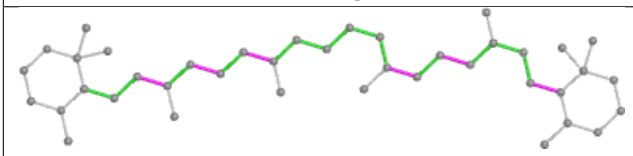


Bond angles



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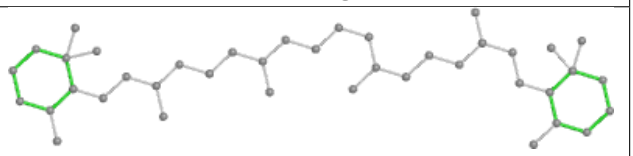
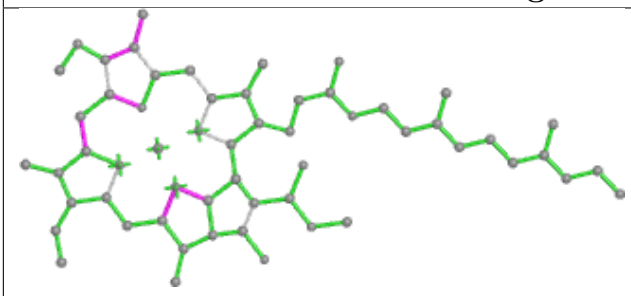


Rings

Ligand CLA h 307



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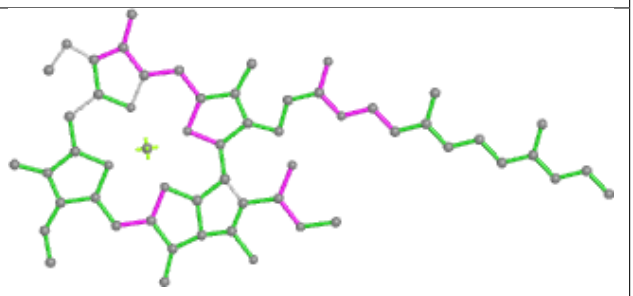
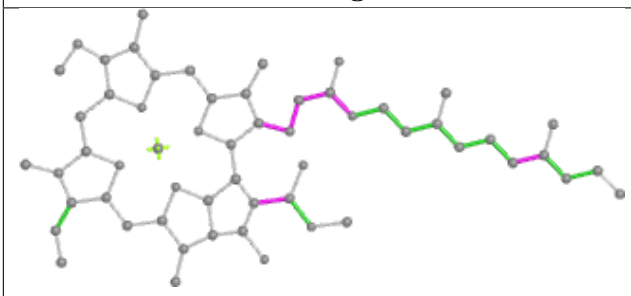


Bond angles



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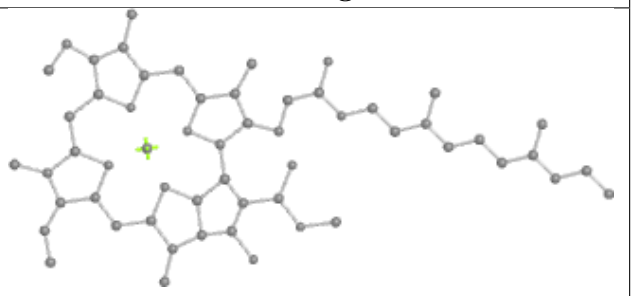
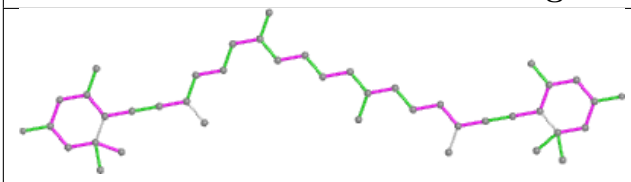


Rings

Ligand II0 j 614



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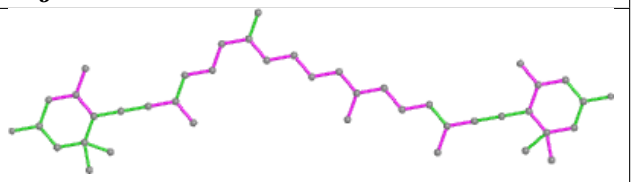
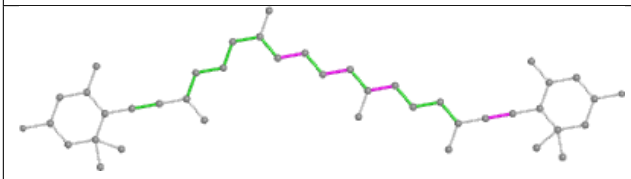


Bond angles



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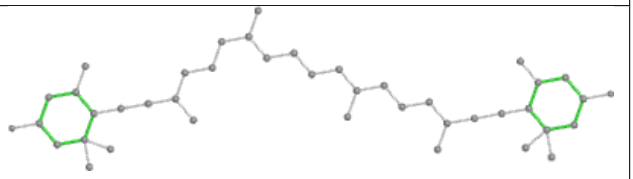
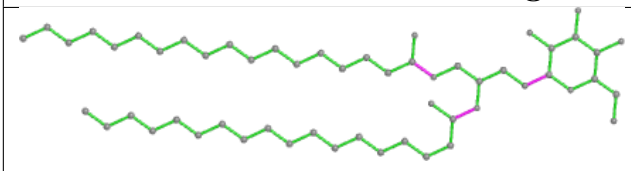
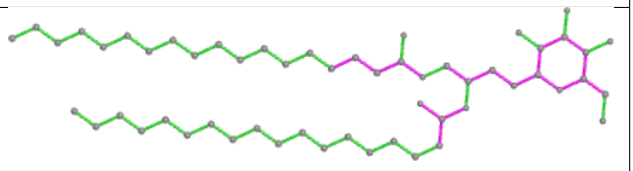


Rings

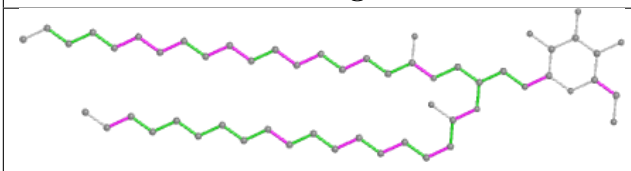
Ligand LMG c 619



Bond lengths



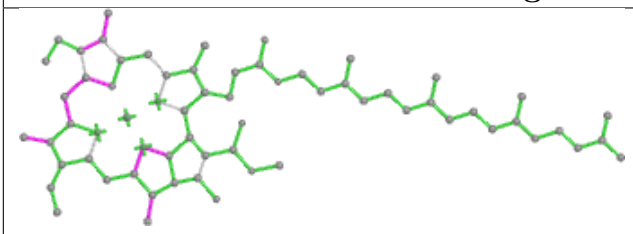
Bond angles



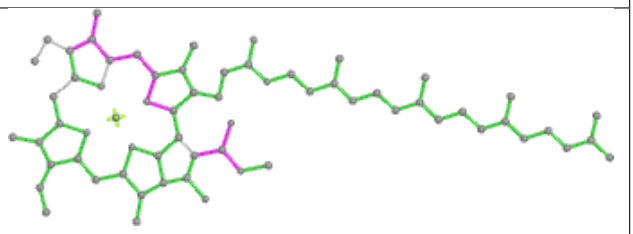
Torsions

Rings

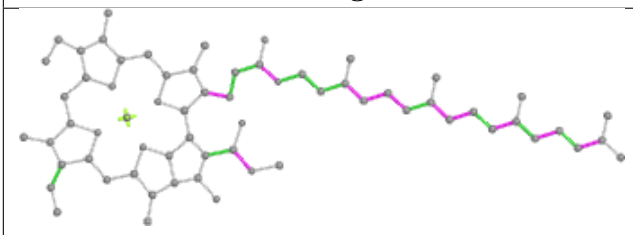
Ligand CLA A 829



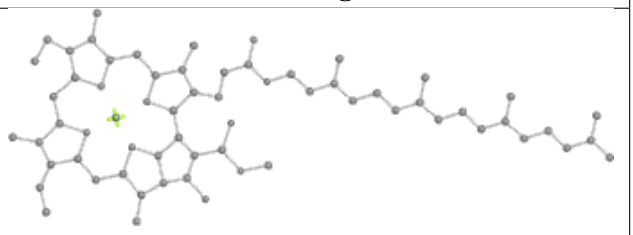
Bond lengths



Bond angles

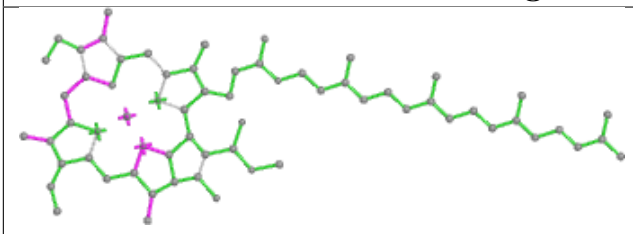


Torsions

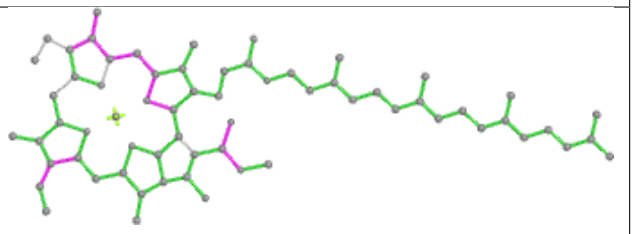


Rings

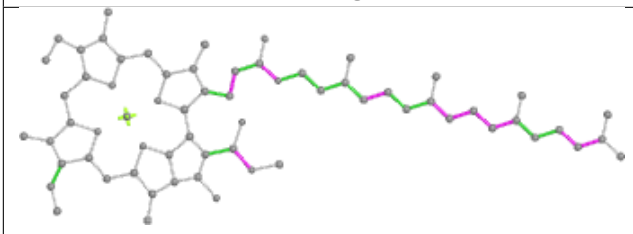
Ligand CLA B 809



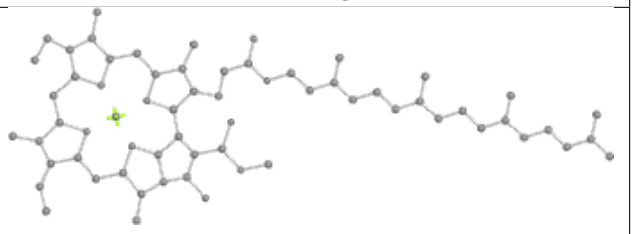
Bond lengths



Bond angles

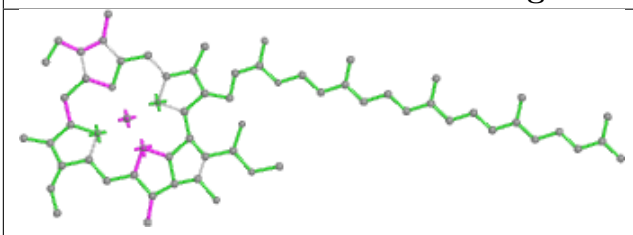


Torsions

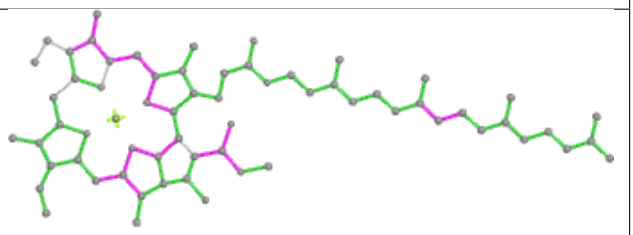


Rings

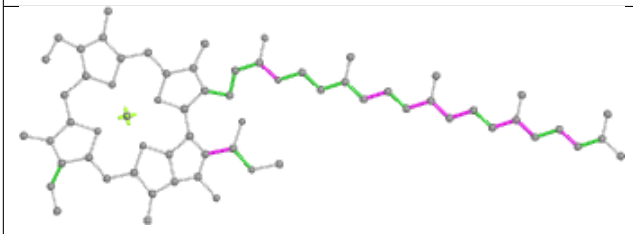
Ligand CLA n 308



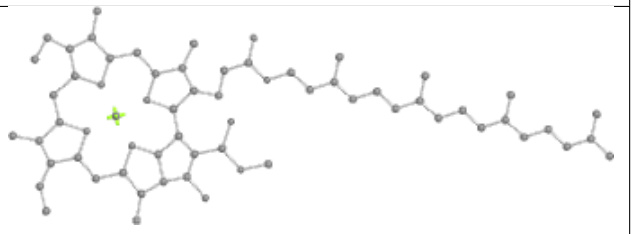
Bond lengths



Bond angles

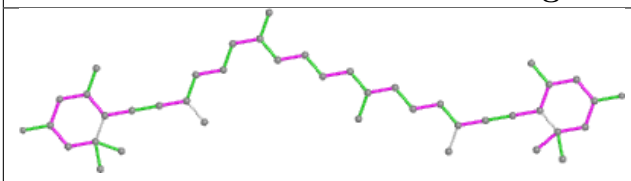


Torsions

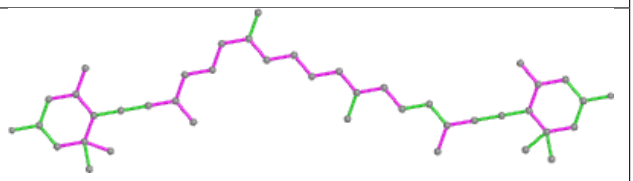


Rings

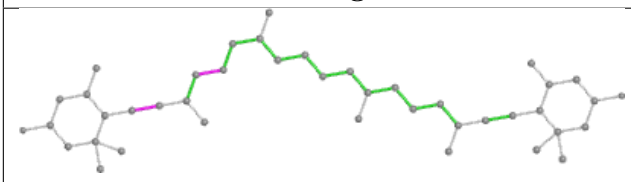
Ligand II0 k 617



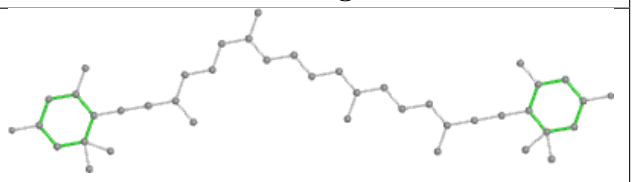
Bond lengths



Bond angles

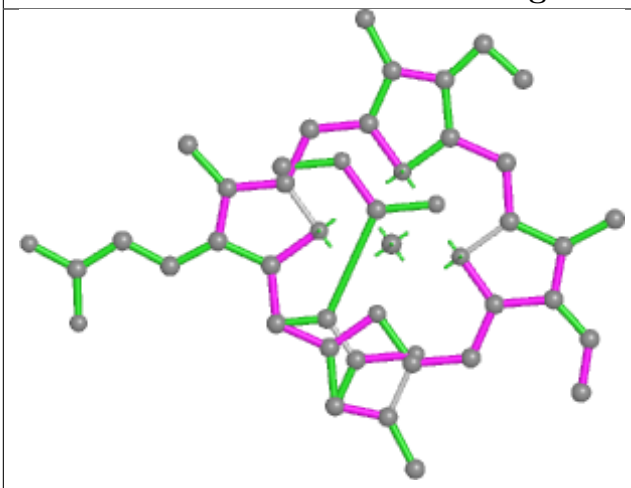


Torsions

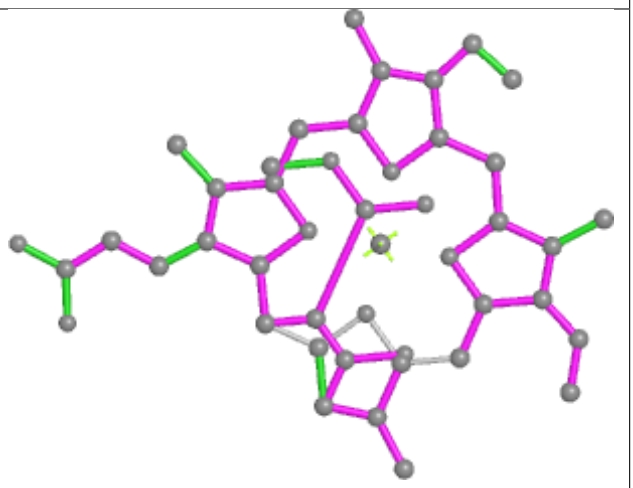


Rings

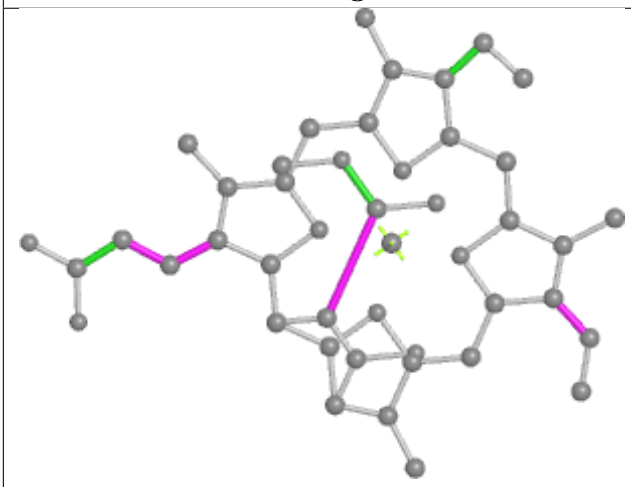
Ligand KC2 n 313



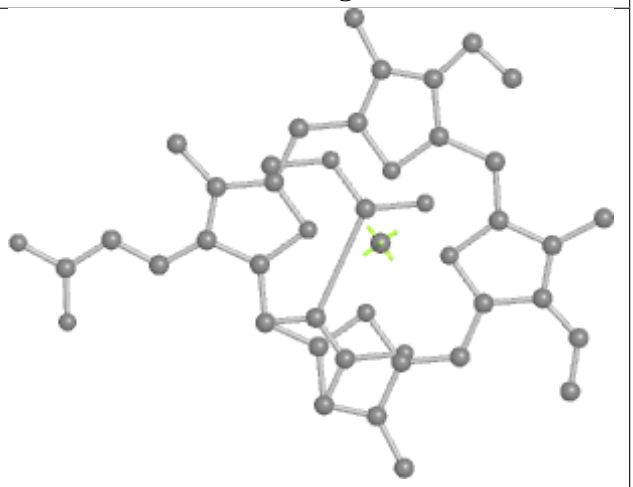
Bond lengths



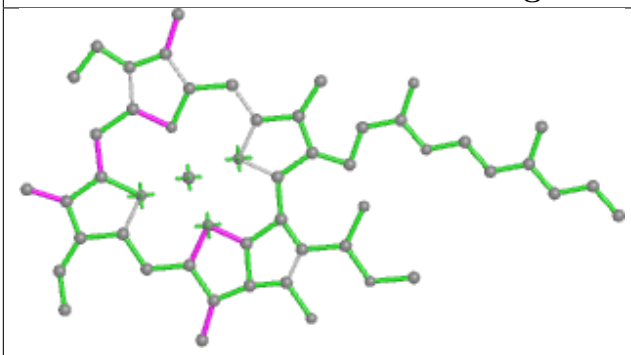
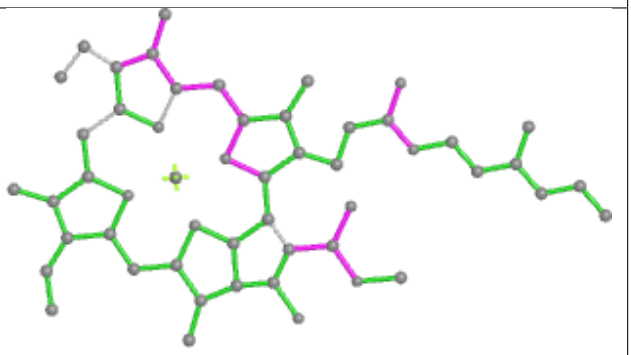
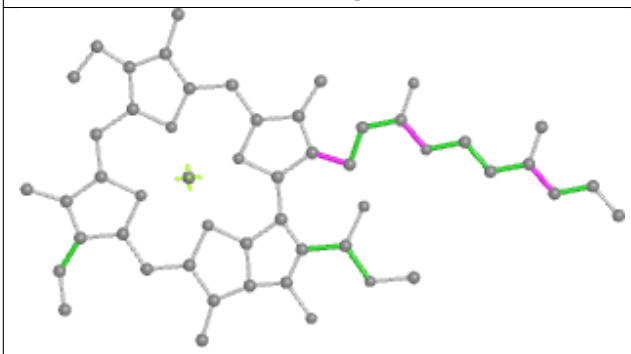
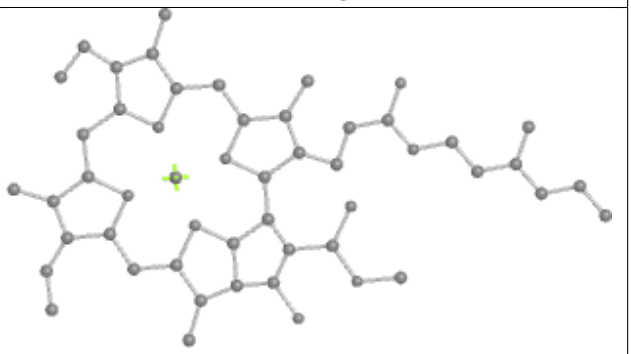
Bond angles

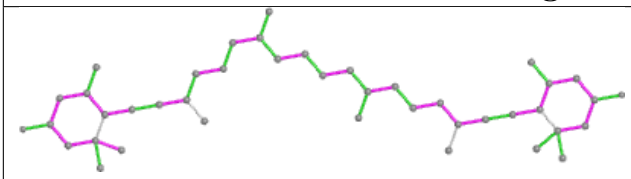
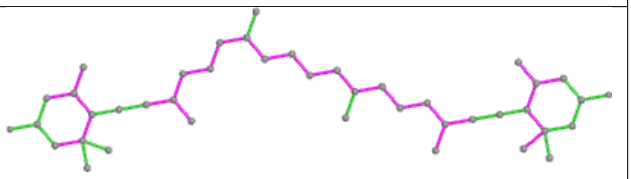
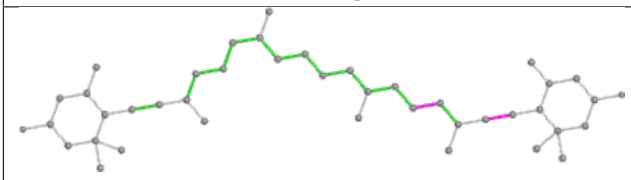
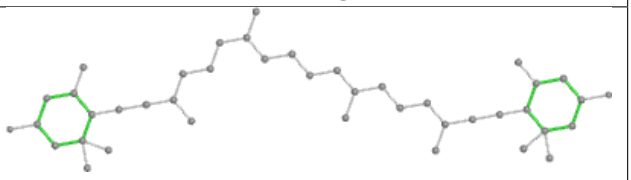


Torsions

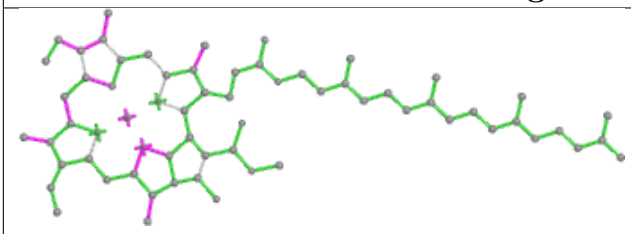


Rings

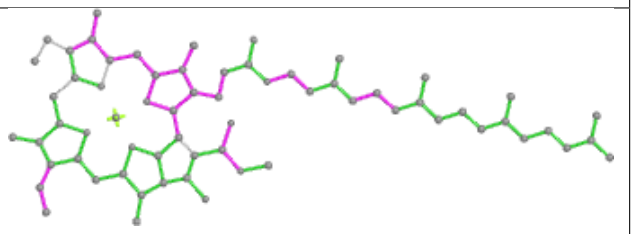
Ligand CLA A 838	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand II0 b 613	
 Bond lengths	 Bond angles
 Torsions	 Rings

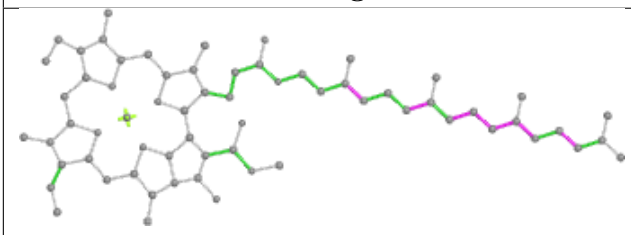
Ligand CLA b 605



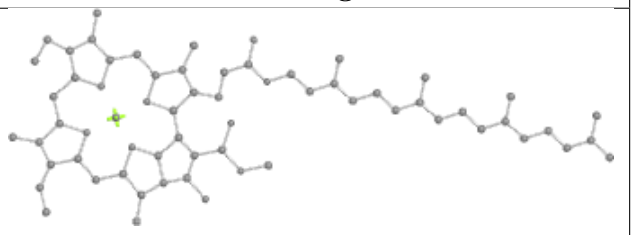
Bond lengths



Bond angles

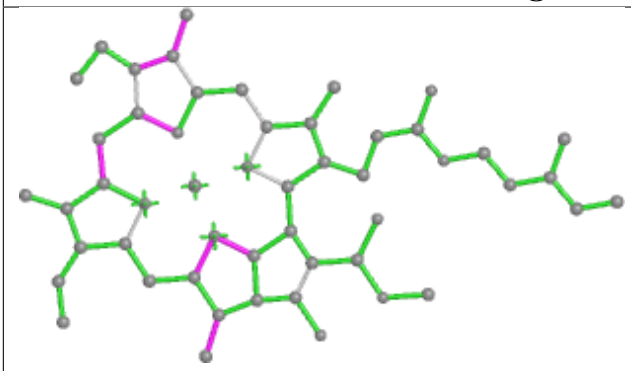


Torsions

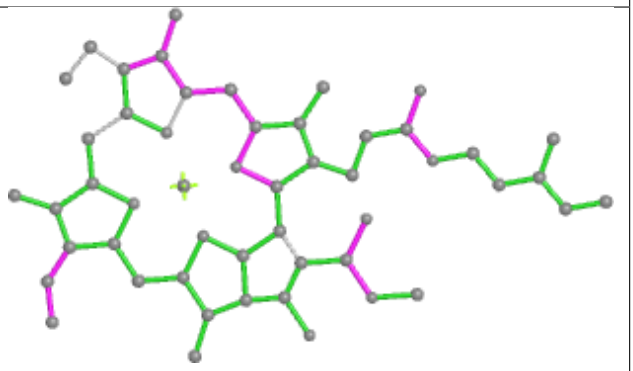


Rings

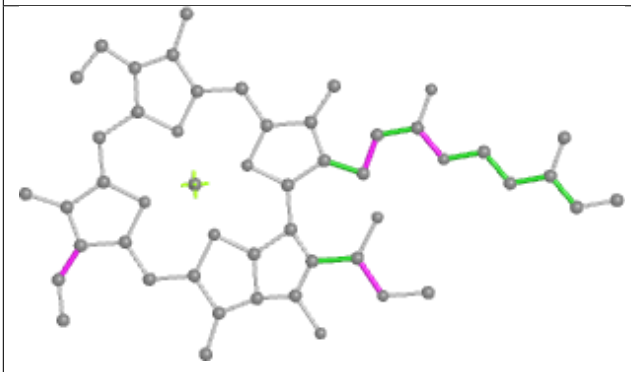
Ligand CLA k 601



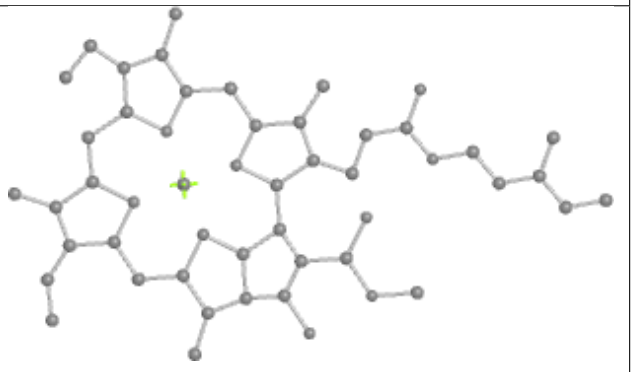
Bond lengths



Bond angles

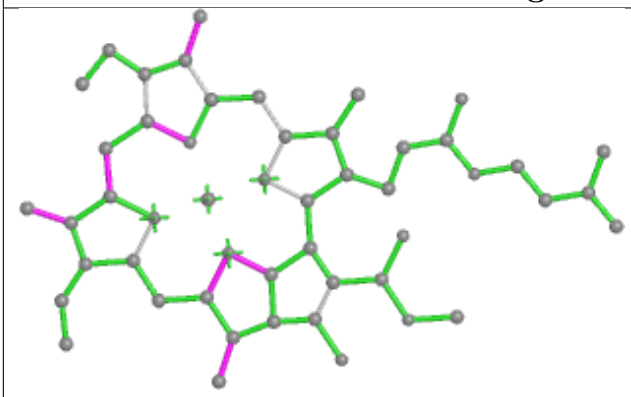


Torsions

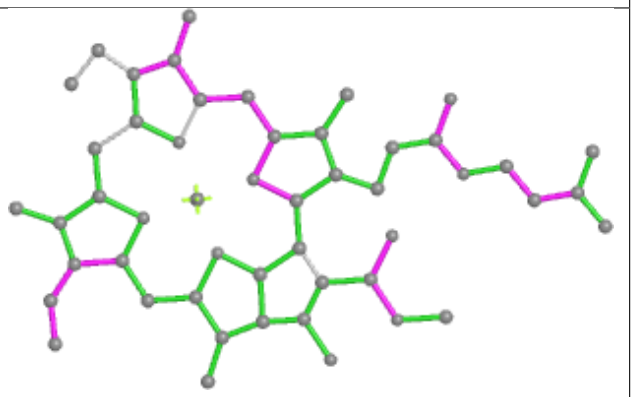


Rings

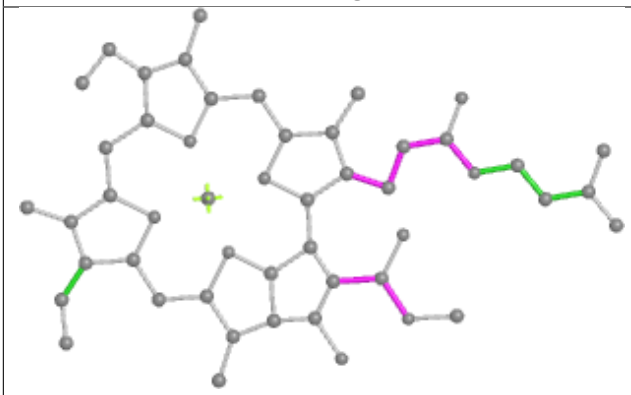
Ligand CLA h 302



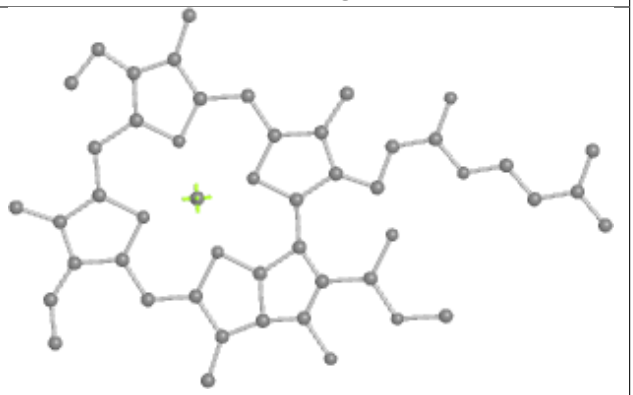
Bond lengths



Bond angles

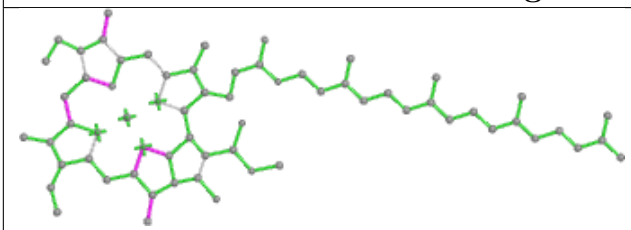


Torsions

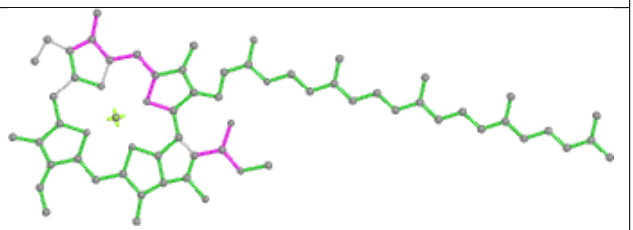


Rings

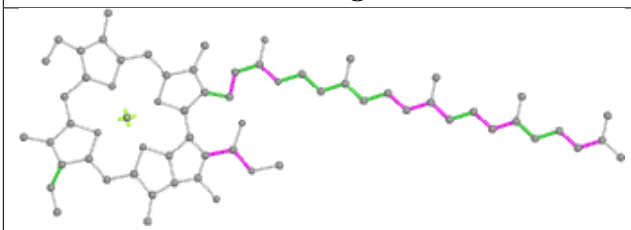
Ligand CLA B 837



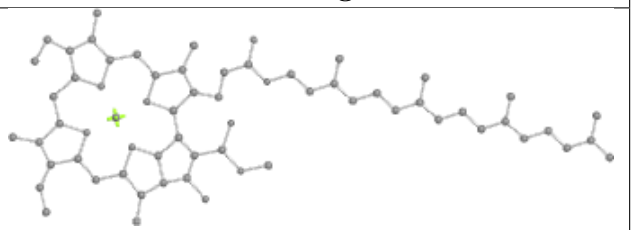
Bond lengths



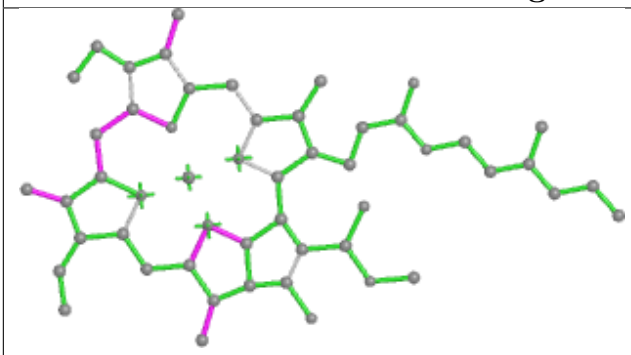
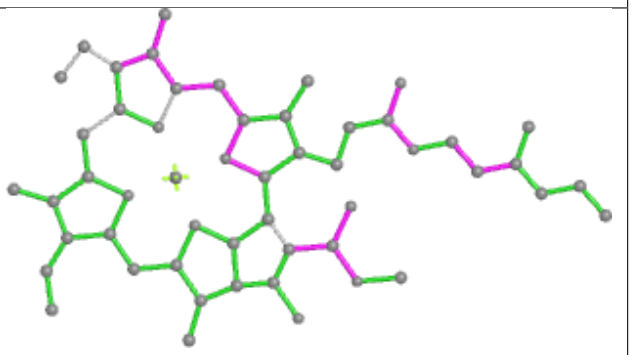
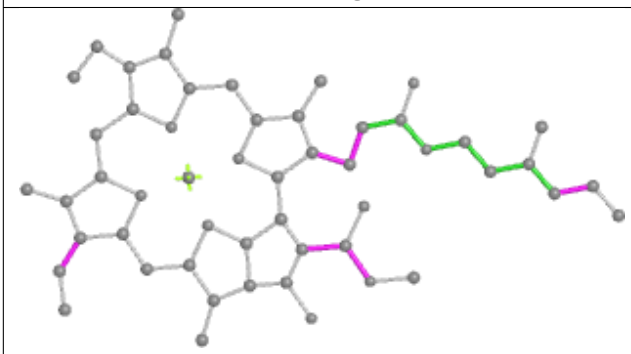
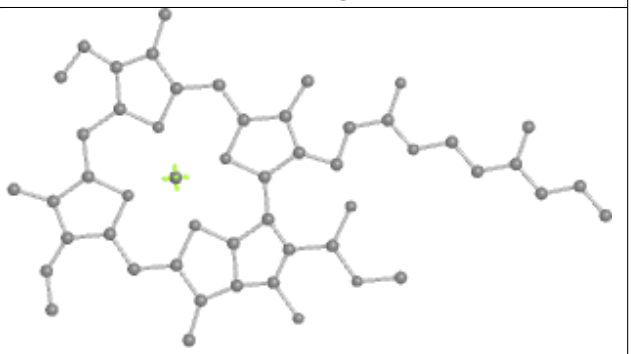
Bond angles

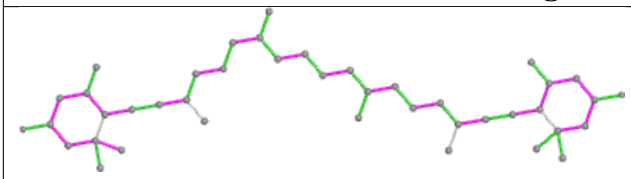
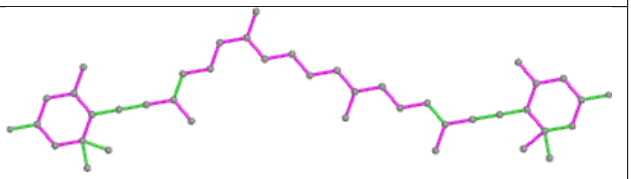
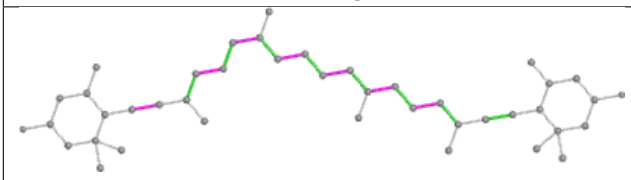
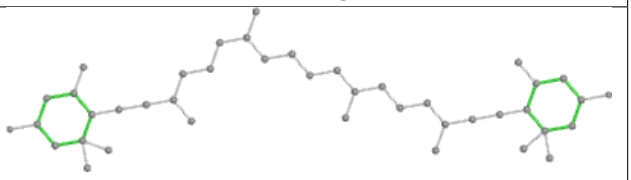


Torsions

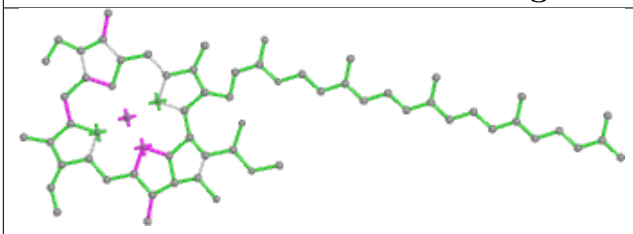


Rings

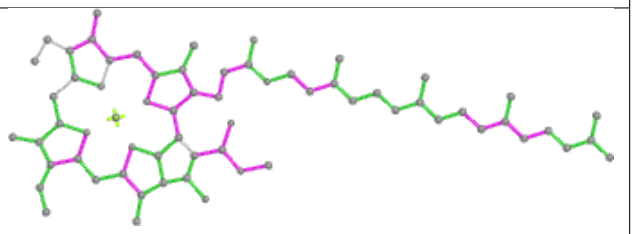
Ligand CLA a 303	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand II0 k 616	
 Bond lengths	 Bond angles
 Torsions	 Rings

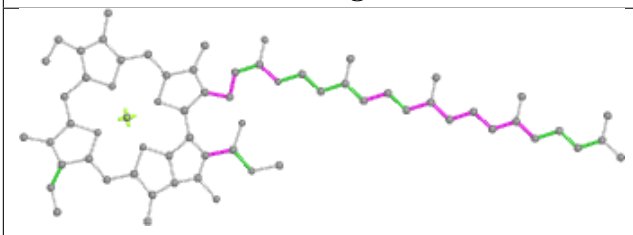
Ligand CLA s 202



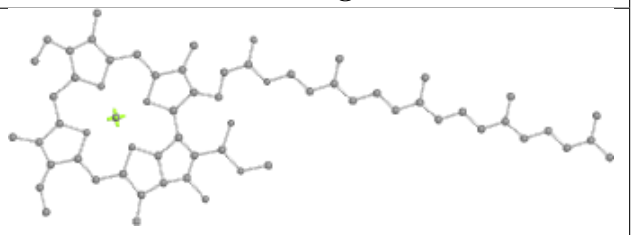
Bond lengths



Bond angles

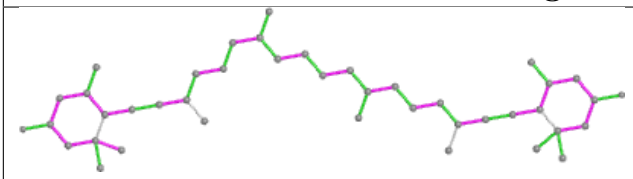


Torsions

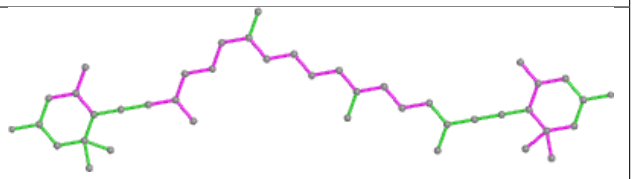


Rings

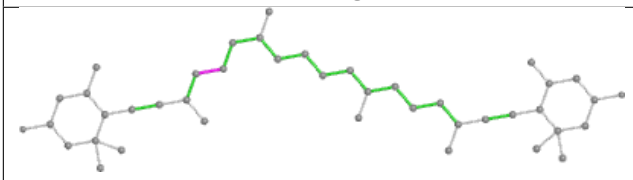
Ligand II0 c 614



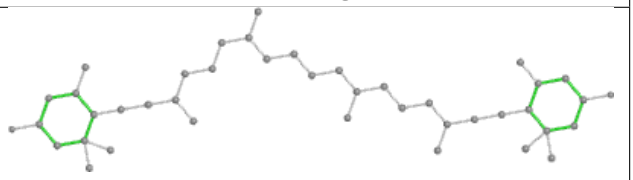
Bond lengths



Bond angles

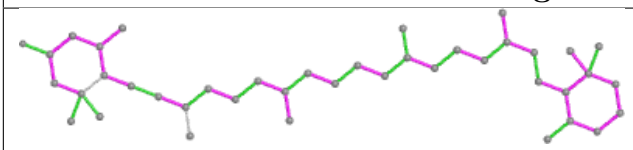


Torsions

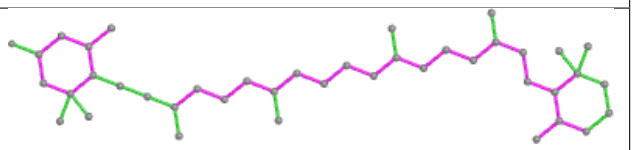


Rings

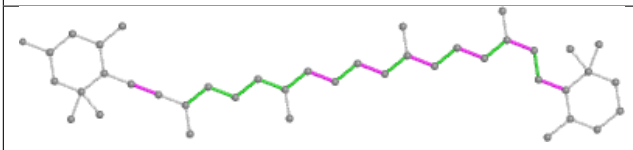
Ligand IHT c 616



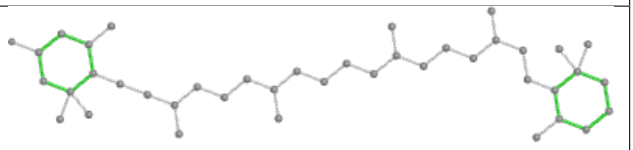
Bond lengths



Bond angles

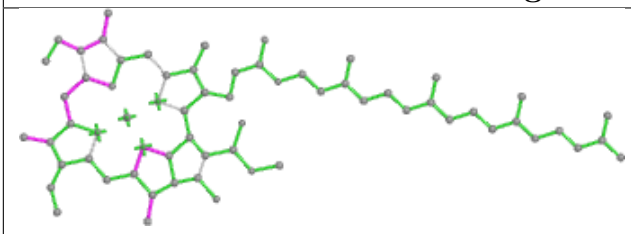


Torsions



Rings

Ligand CLA B 808



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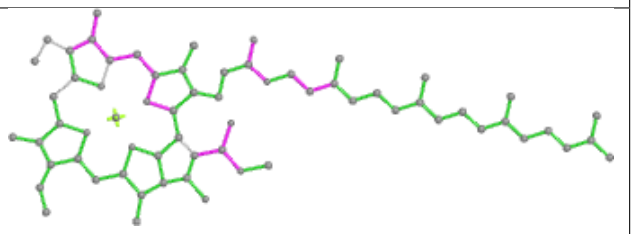
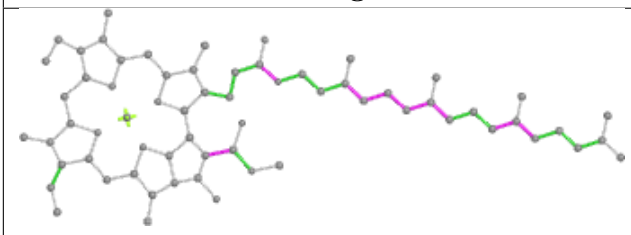


Bond angles



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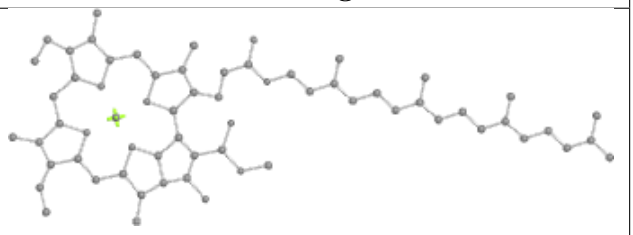
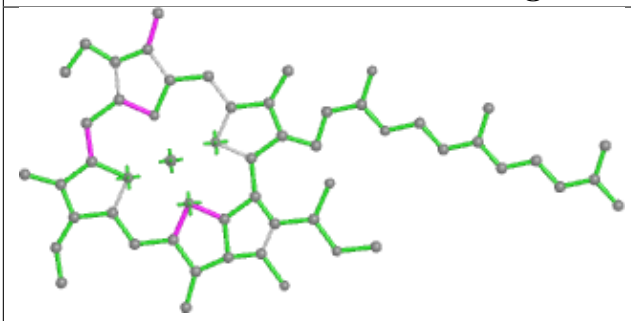
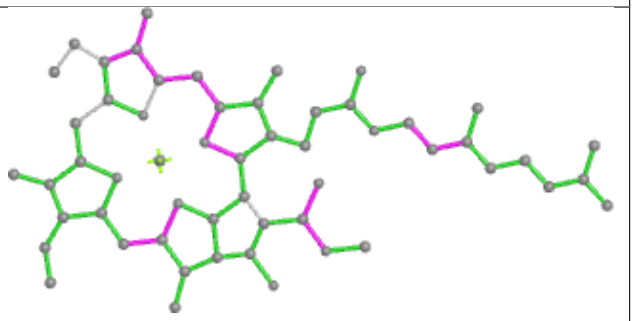


Rings

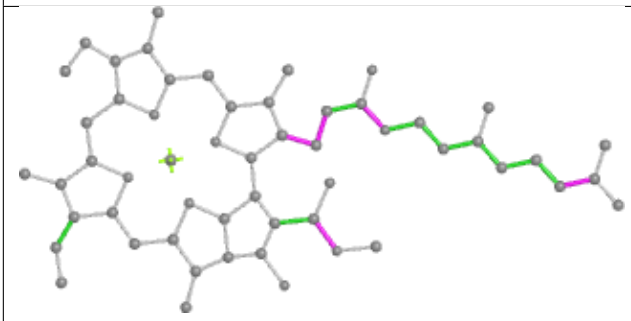
Ligand CLA B 815



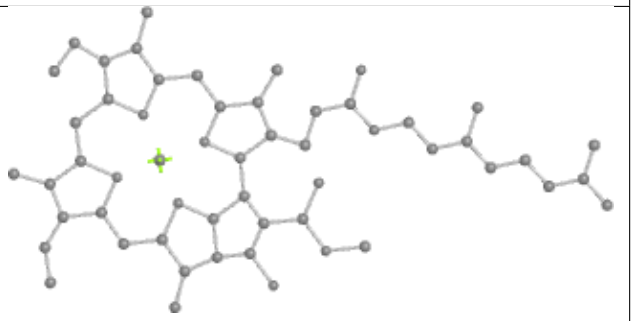
Bond lengths



Bond angles

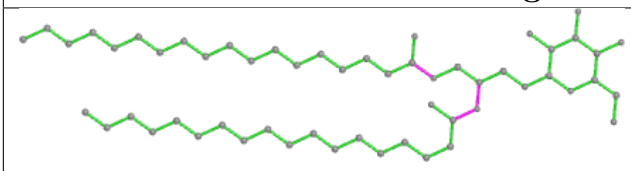


Torsions

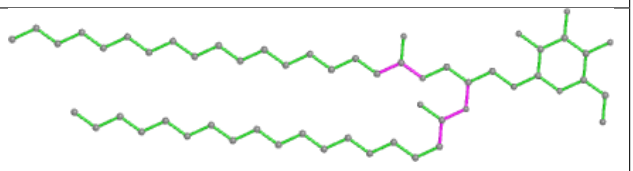


Rings

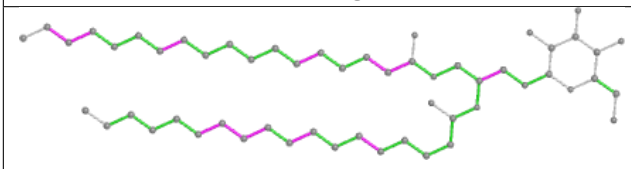
Ligand LMG J 105



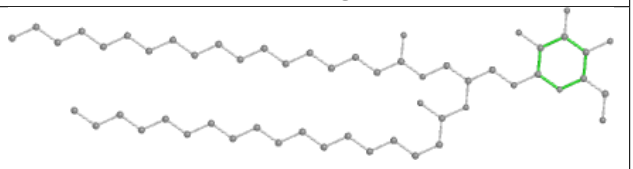
Bond lengths



Bond angles

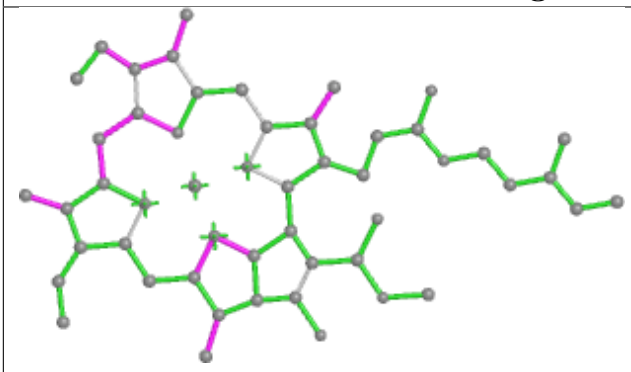


Torsions



Rings

Ligand CLA c 605



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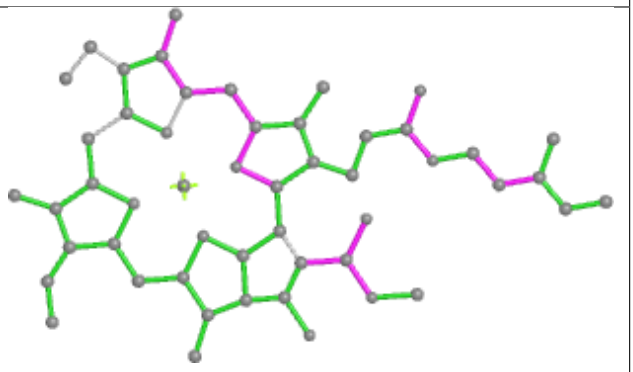
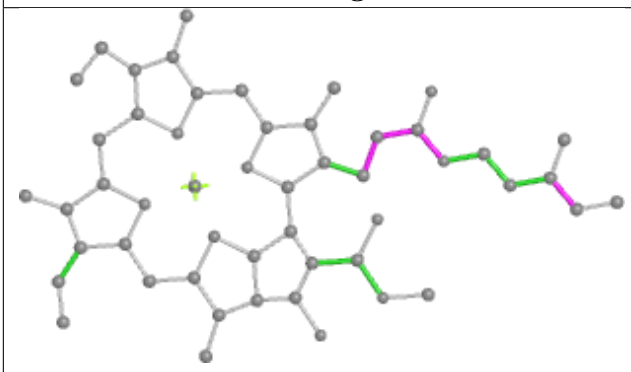


Bond angles



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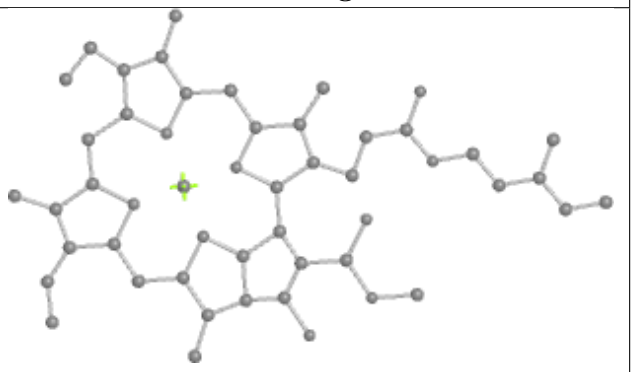
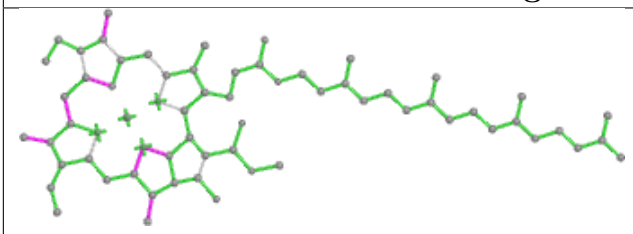
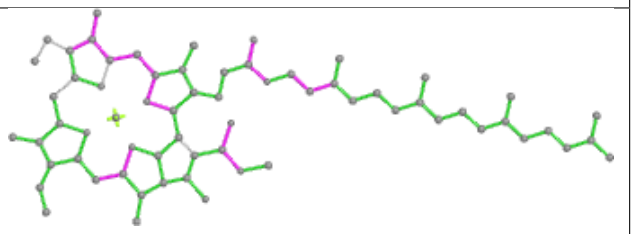


Rings

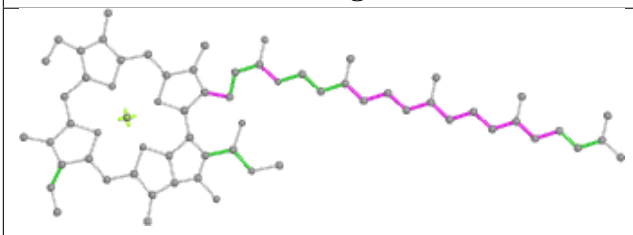
Ligand CLA A 841



Bond lengths



Bond angles



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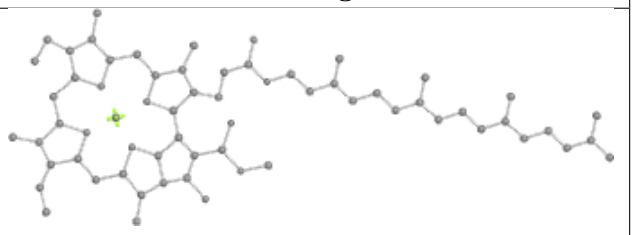
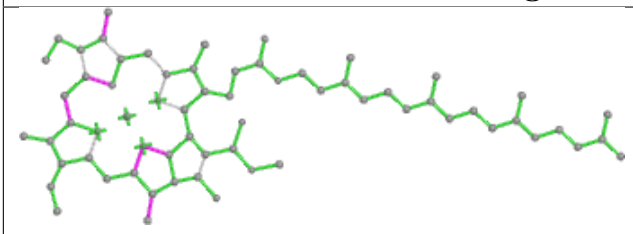
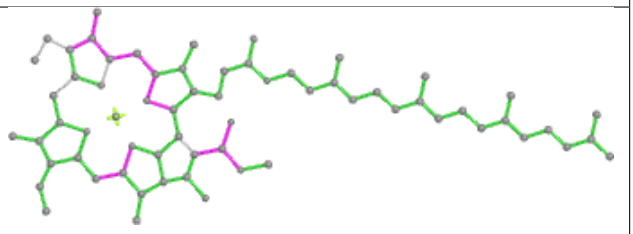


Rings

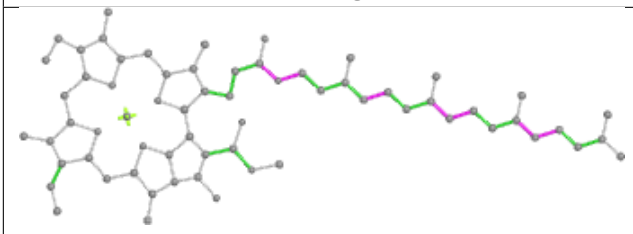
Ligand CLA A 825



Bond lengths



Bond angles



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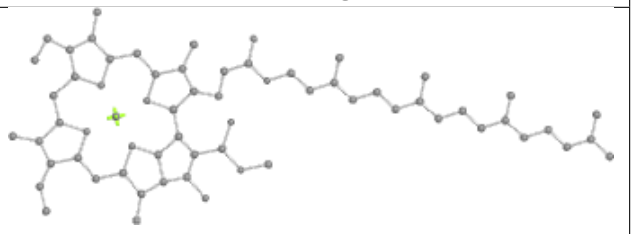
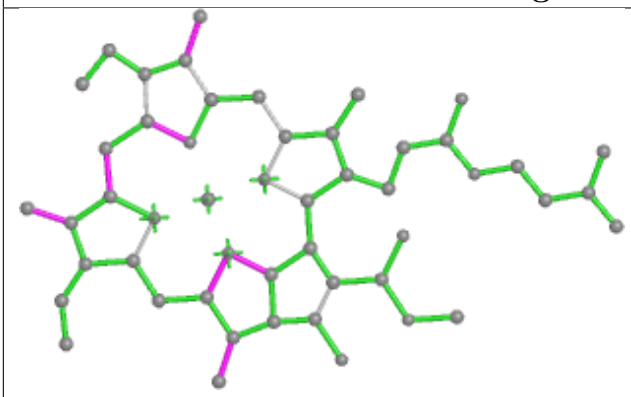
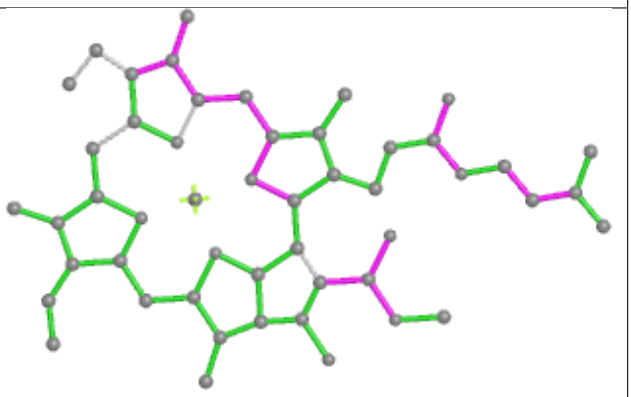
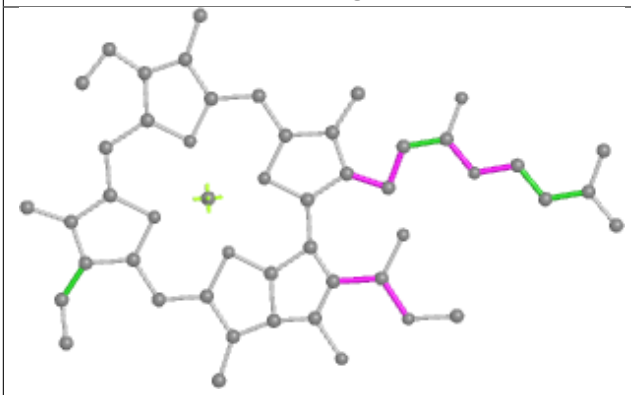
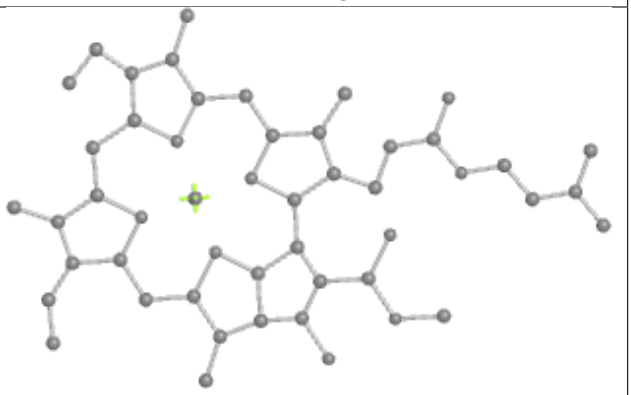
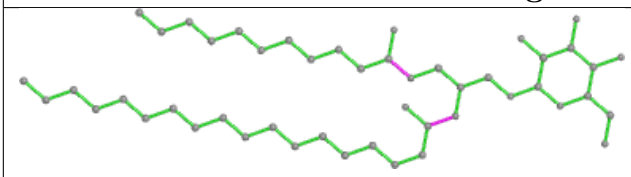
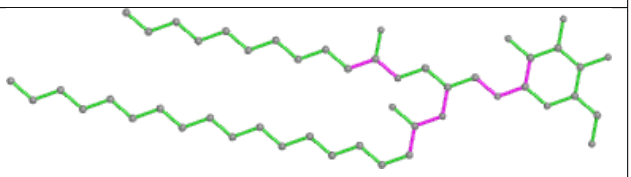
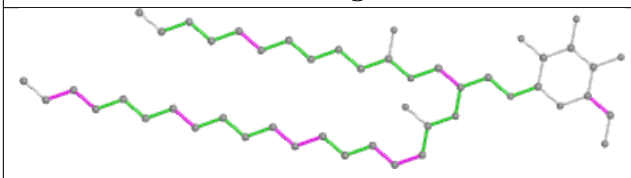
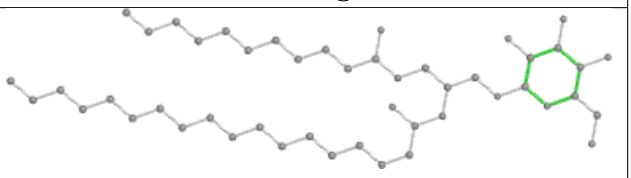
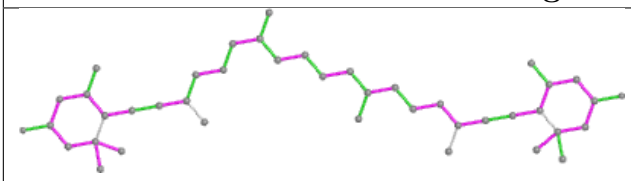


Rings

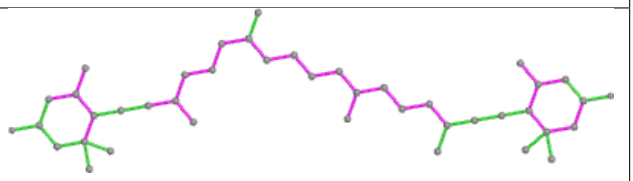
Ligand CLA i 303	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand LMG s 208	
 Bond lengths	 Bond angles
 Torsions	 Rings

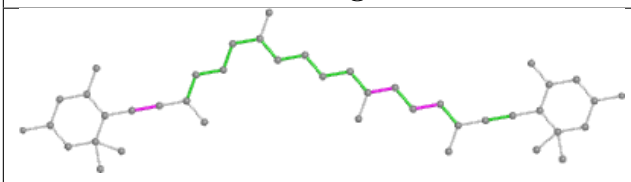
Ligand II0 a 314



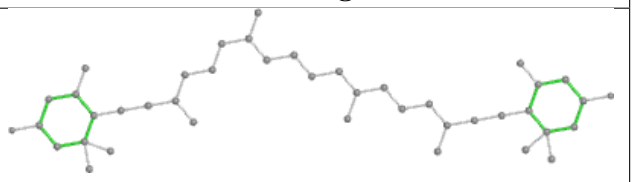
Bond lengths



Bond angles

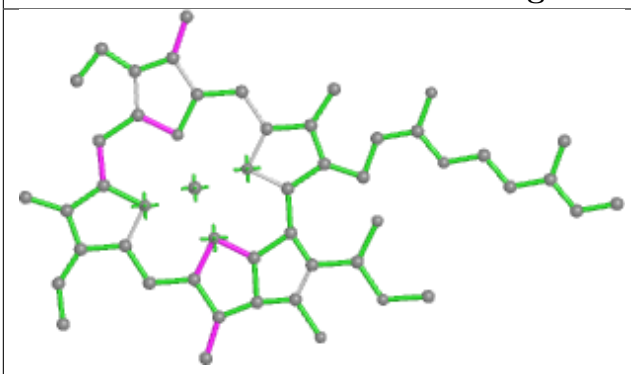


Torsions

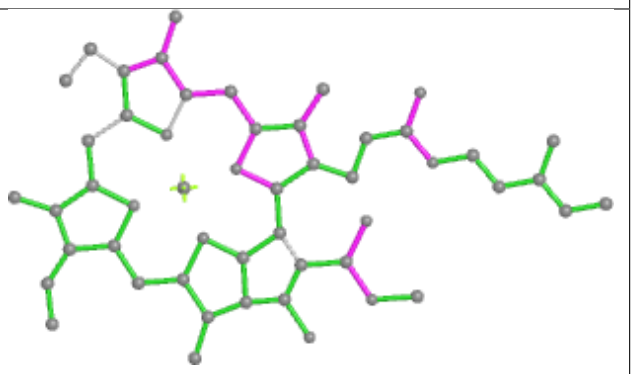


Rings

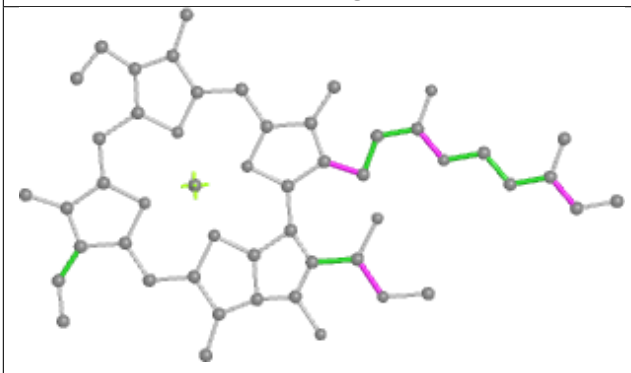
Ligand CLA h 305



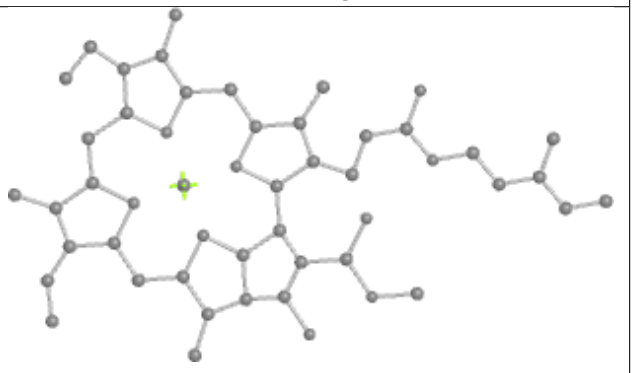
Bond lengths



Bond angles

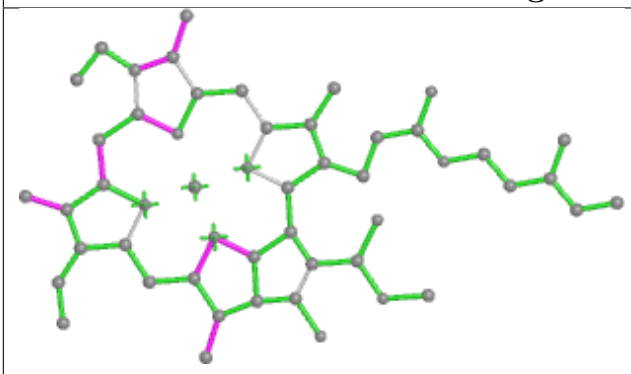


Torsions

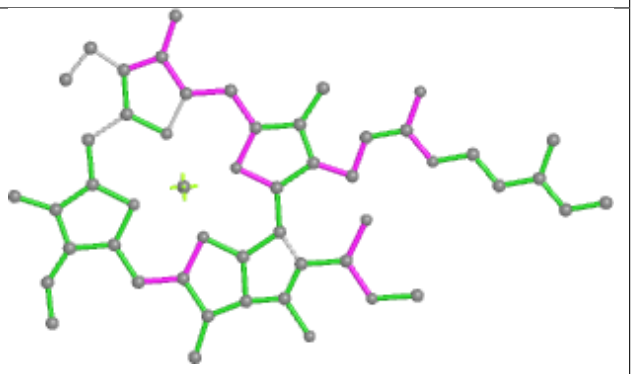


Rings

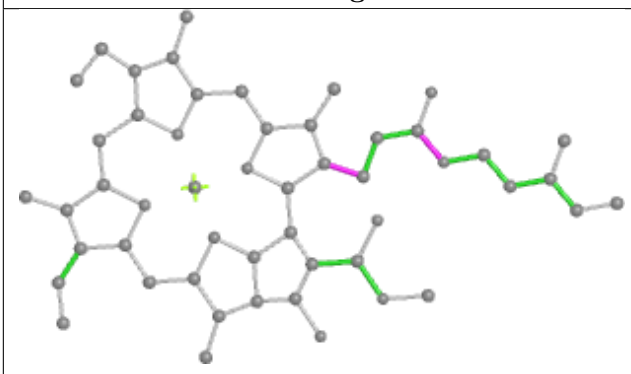
Ligand CLA n 307



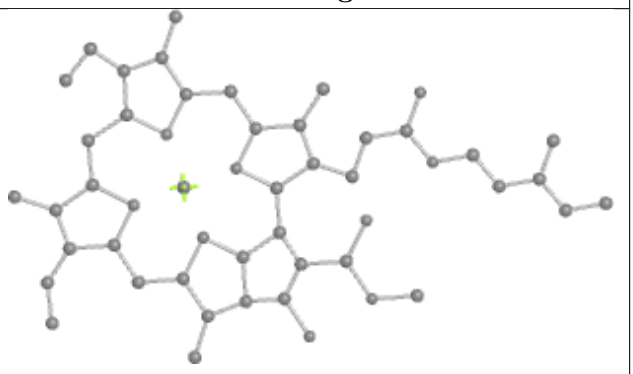
Bond lengths



Bond angles

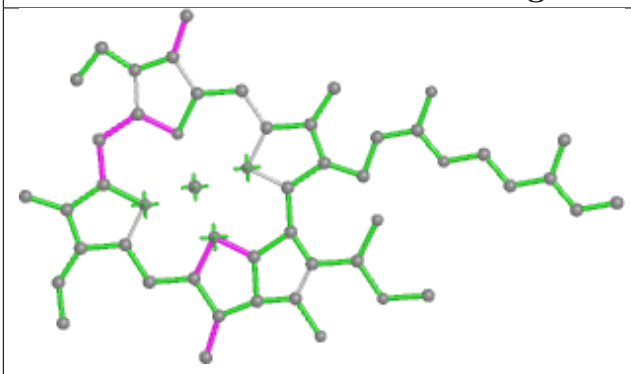


Torsions

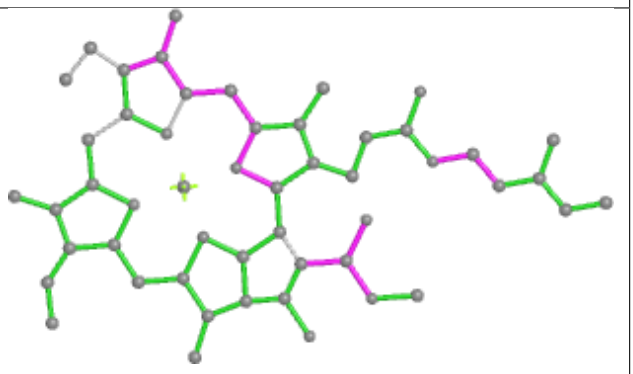


Rings

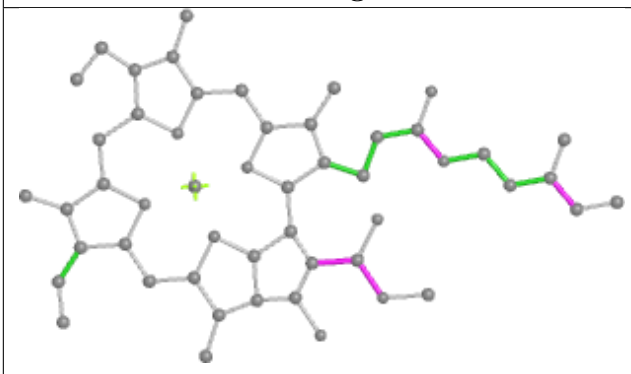
Ligand CLA b 601



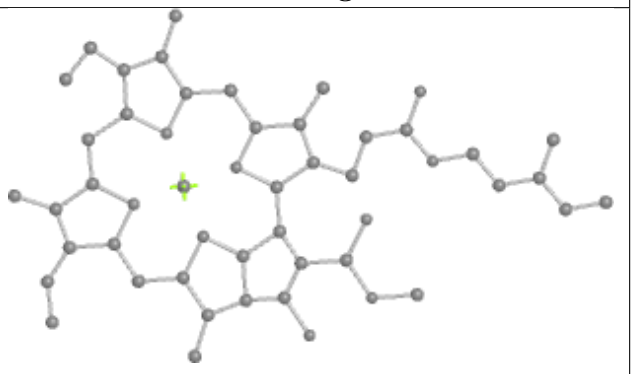
Bond lengths



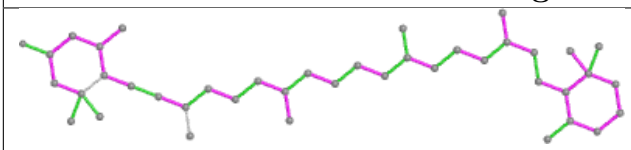
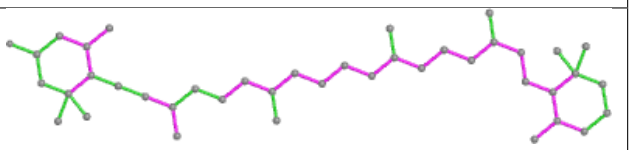
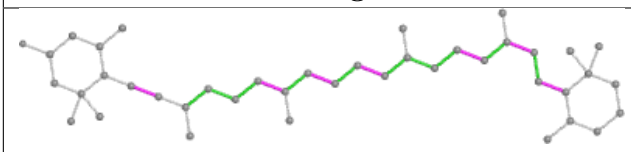
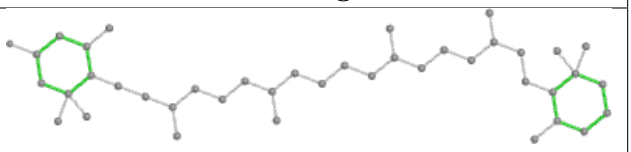
Bond angles

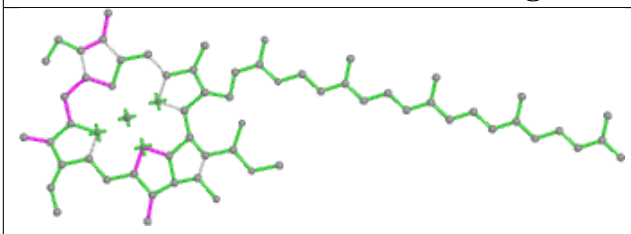
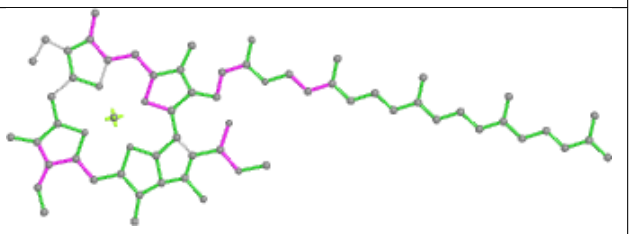
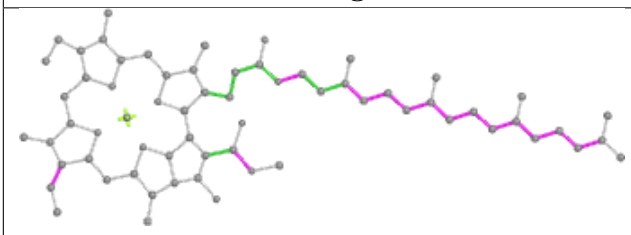
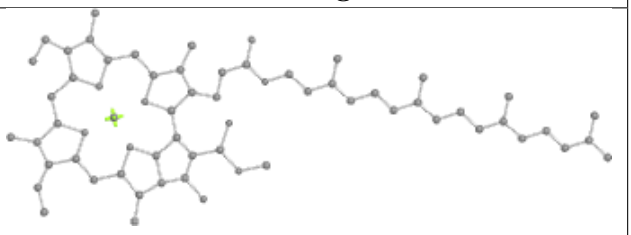


Torsions

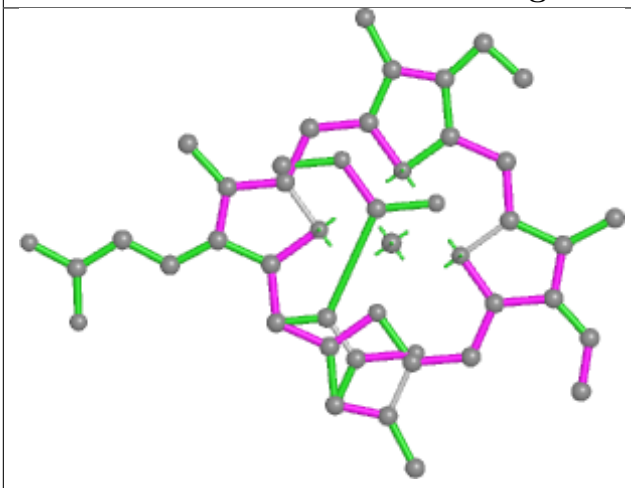


Rings

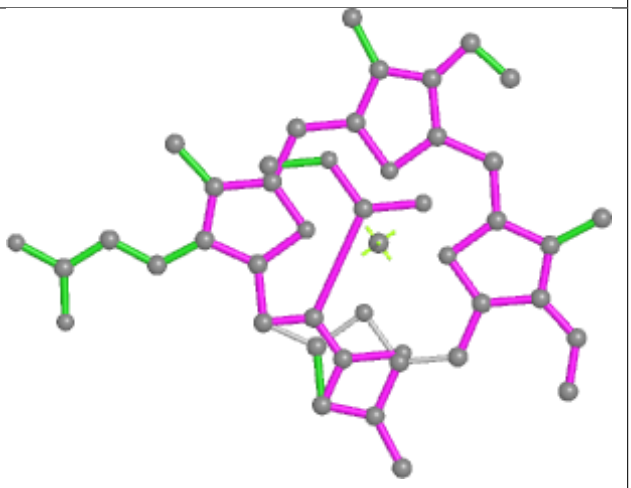
Ligand IHT k 618	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA B 836	
 Bond lengths	 Bond angles
 Torsions	 Rings

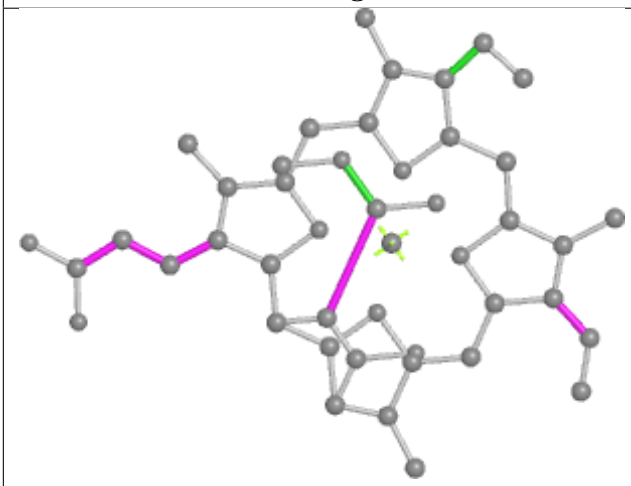
Ligand KC2 d 310



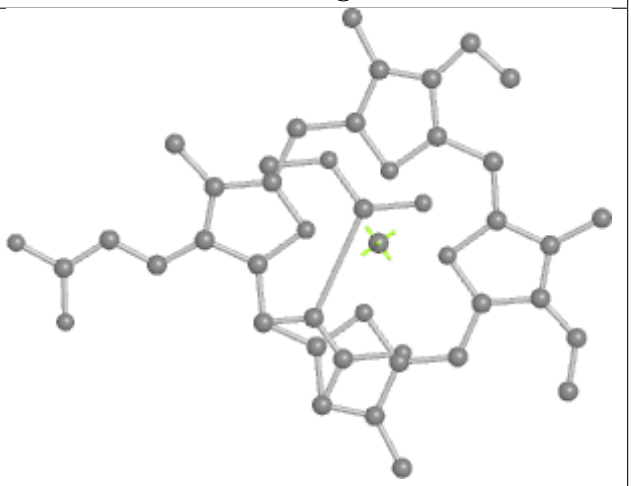
Bond lengths



Bond angles

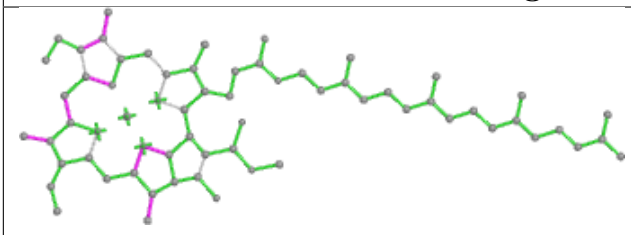


Torsions

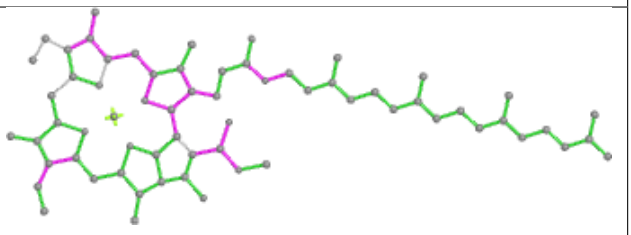


Rings

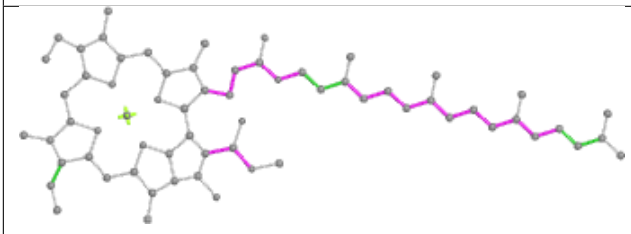
Ligand CLA A 855



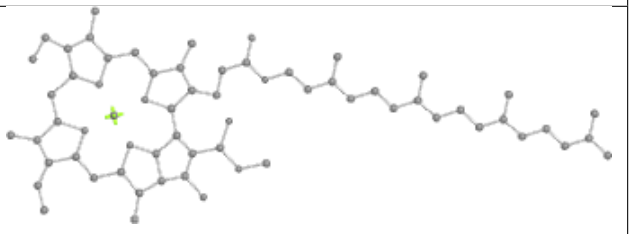
Bond lengths



Bond angles

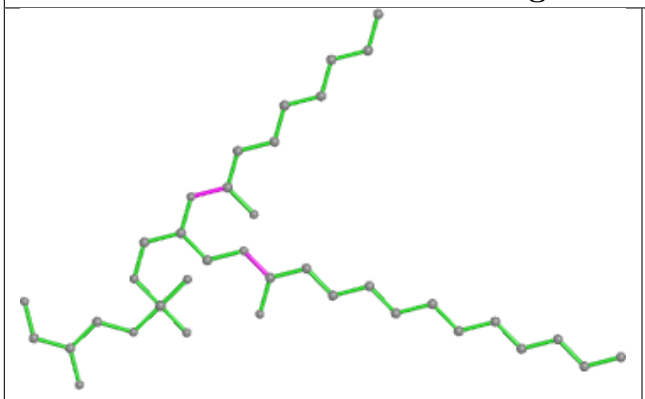


Torsions

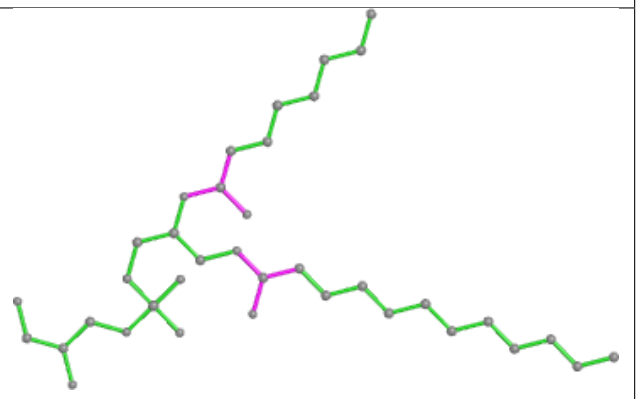


Rings

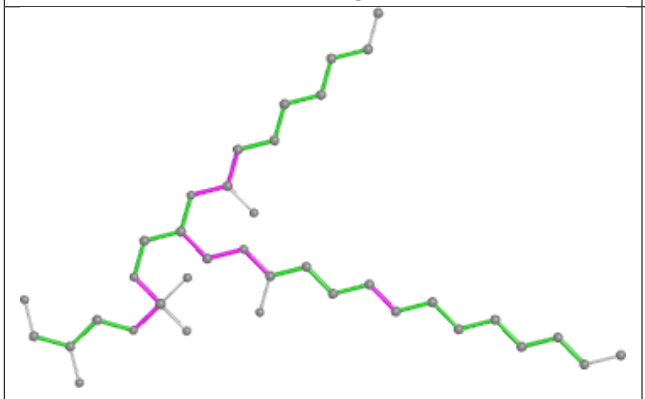
Ligand LHG c 618



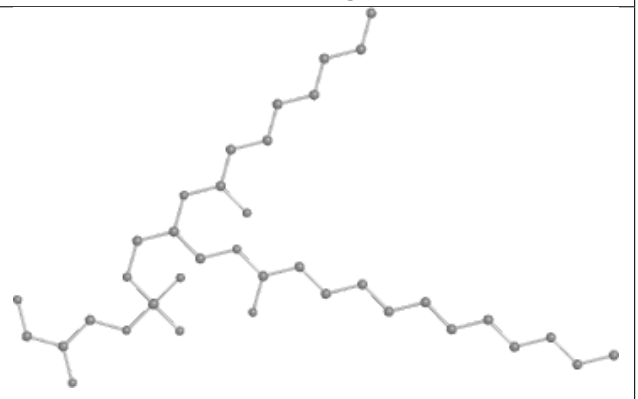
Bond lengths



Bond angles

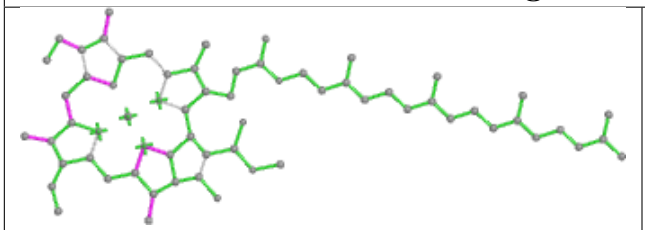


Torsions

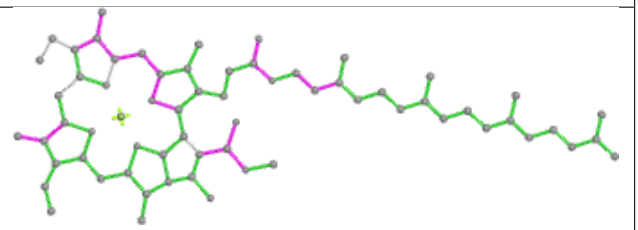


Rings

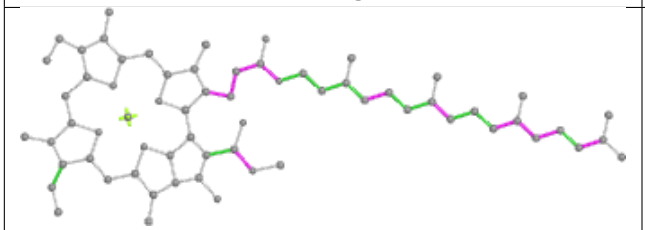
Ligand CLA A 817



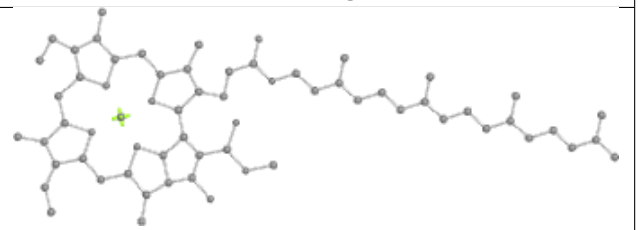
Bond lengths



Bond angles

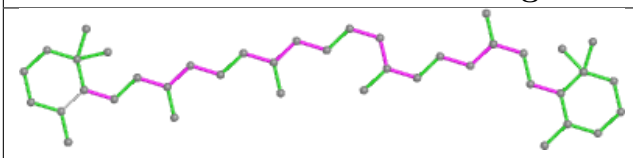


Torsions

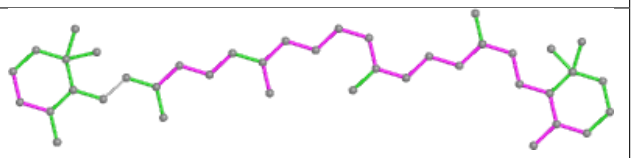


Rings

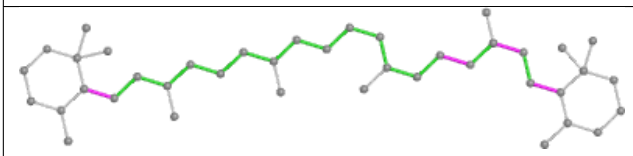
Ligand WVN s 207



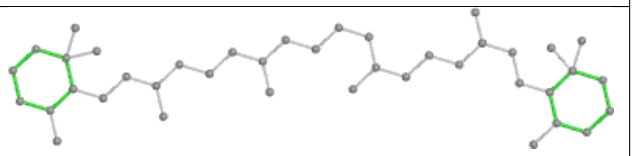
Bond lengths



Bond angles

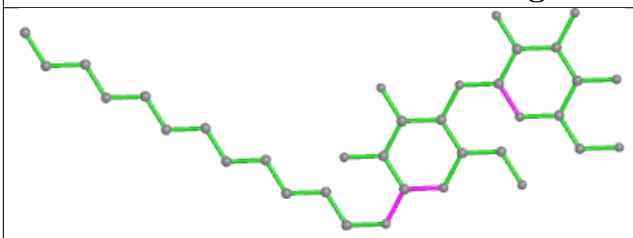


Torsions

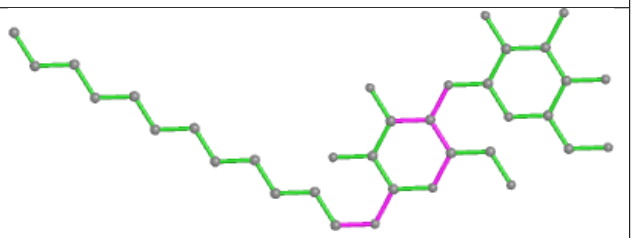


Rings

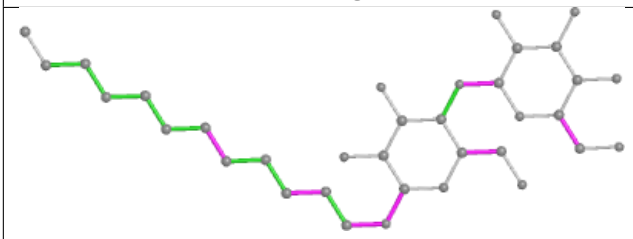
Ligand LMU i 301



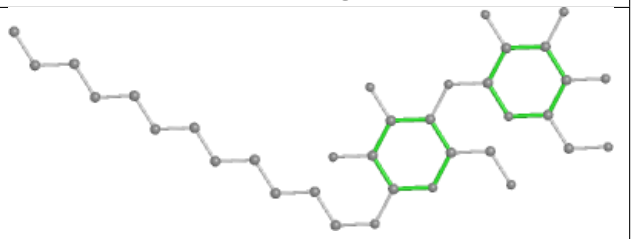
Bond lengths



Bond angles

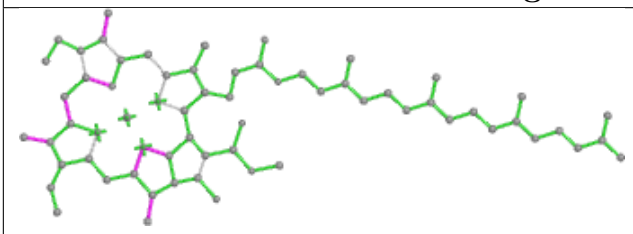


Torsions

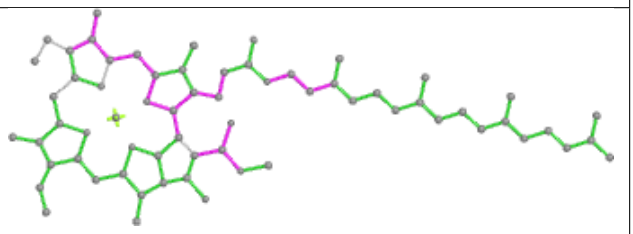


Rings

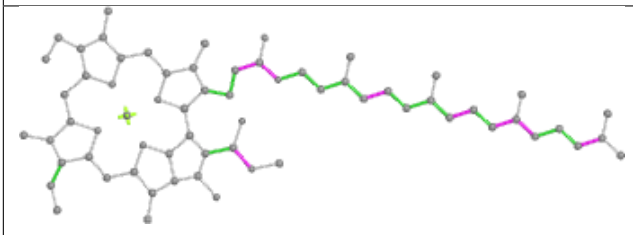
Ligand CLA A 801



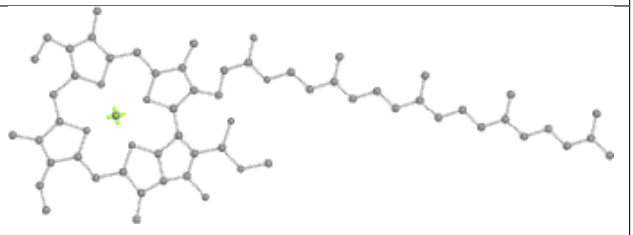
Bond lengths



Bond angles

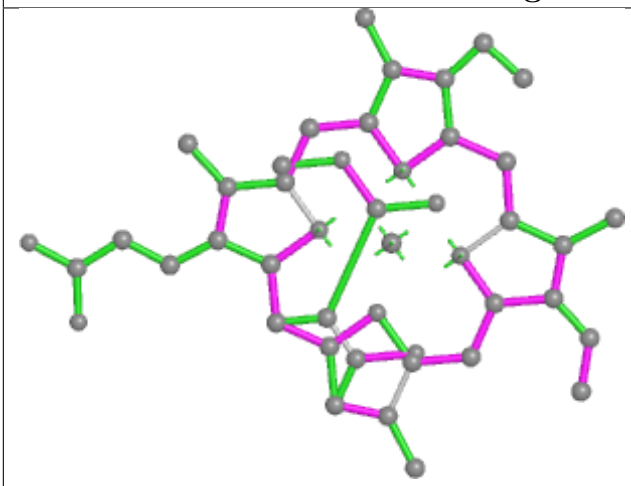


Torsions

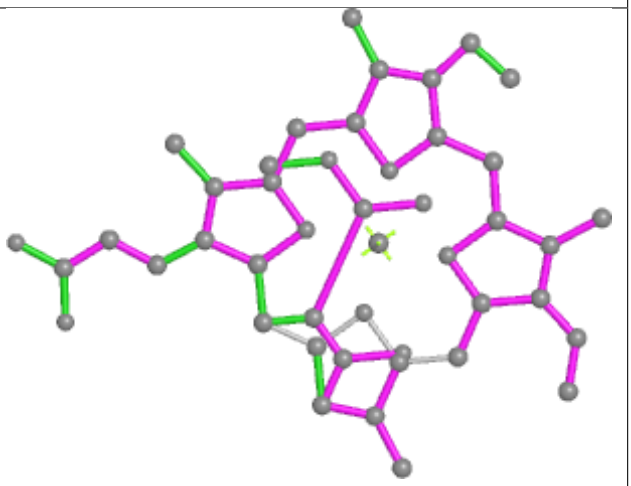


Rings

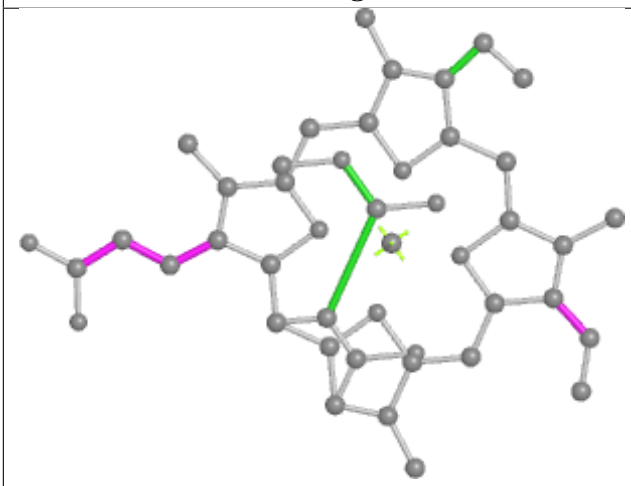
Ligand KC2 m 611



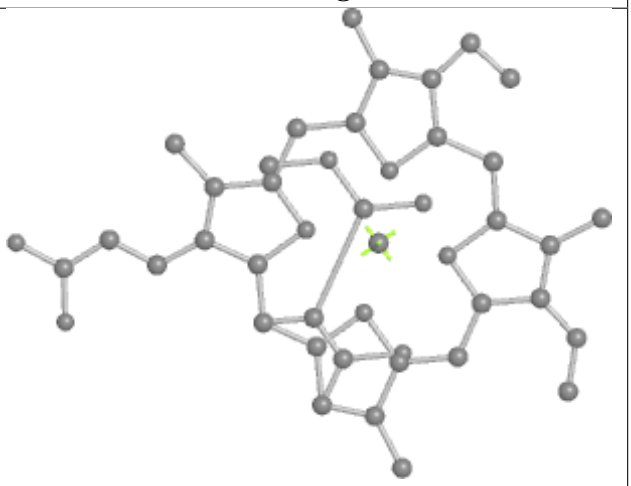
Bond lengths



Bond angles

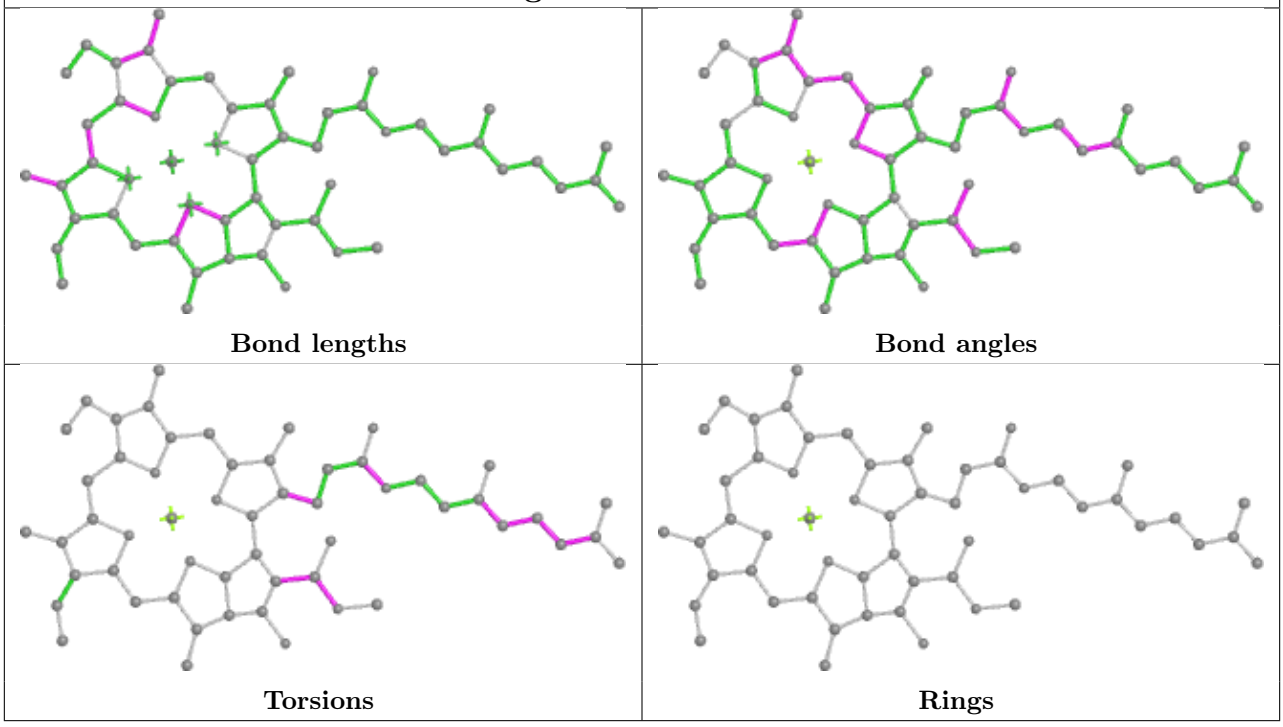


Torsions



Rings

Ligand CLA A 823



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.

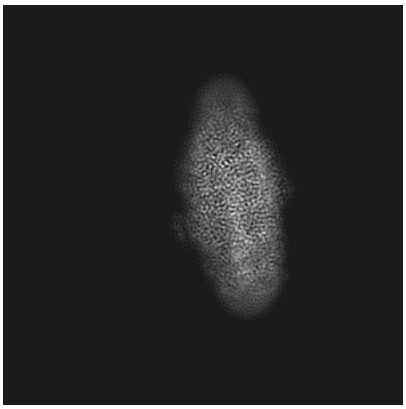
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-37654. These allow visual inspection of the internal detail of the map and identification of artifacts.

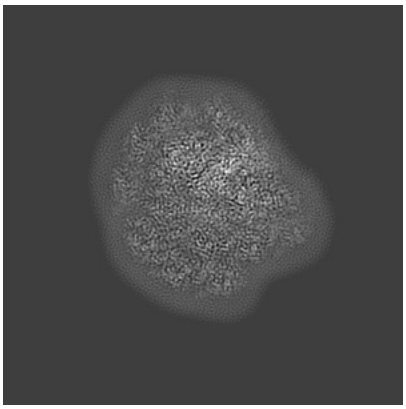
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections

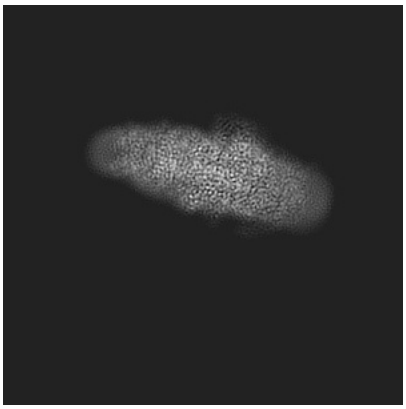
6.1.1 Primary map



X

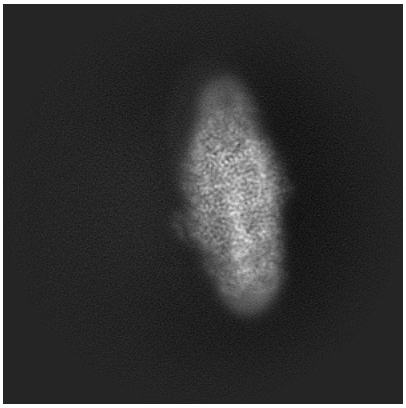


Y

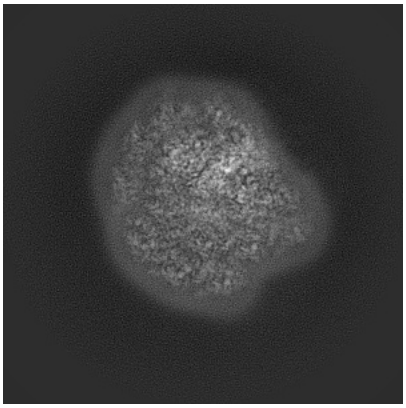


Z

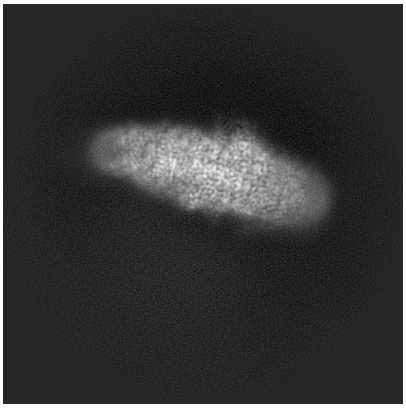
6.1.2 Raw map



X



Y

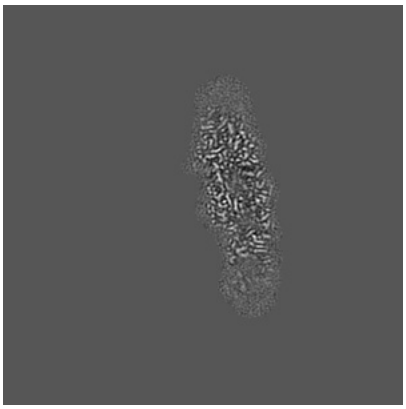


Z

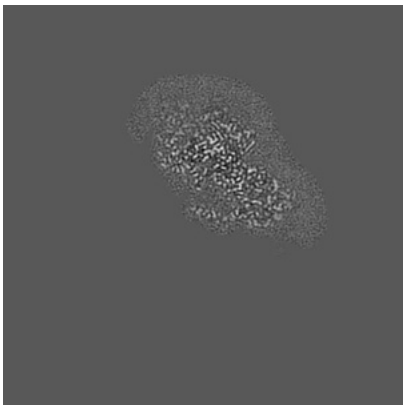
The images above show the map projected in three orthogonal directions.

6.2 Central slices (i)

6.2.1 Primary map



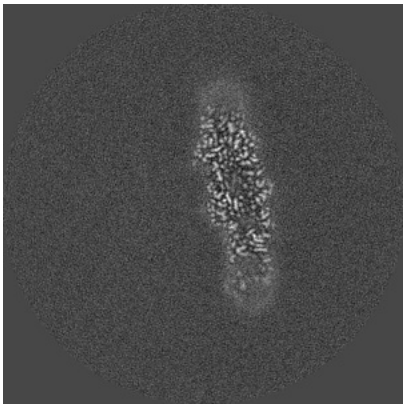
X Index: 180



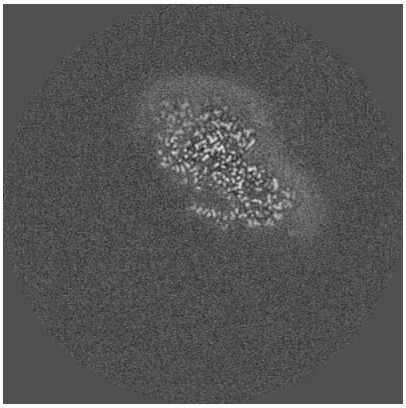
Y Index: 180

Z Index: 180

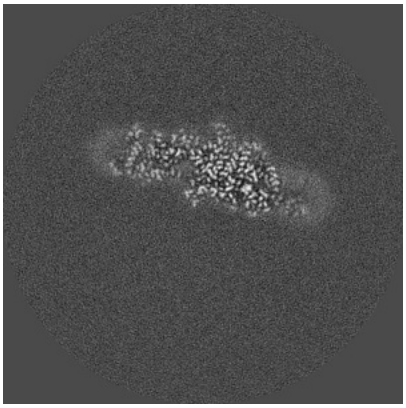
6.2.2 Raw map



X Index: 180



Y Index: 180

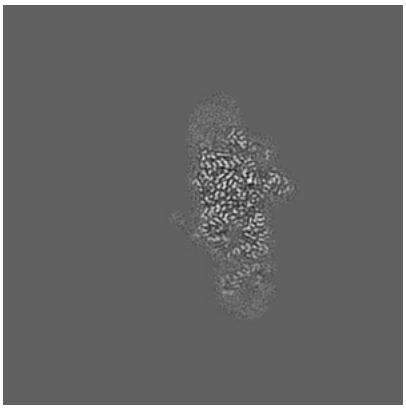


Z Index: 180

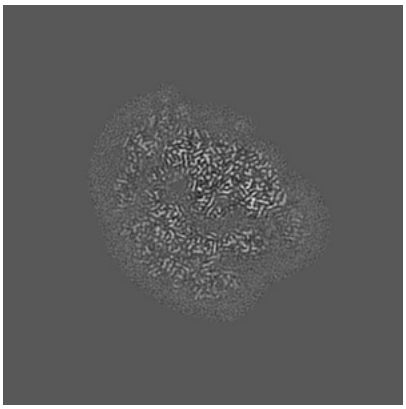
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

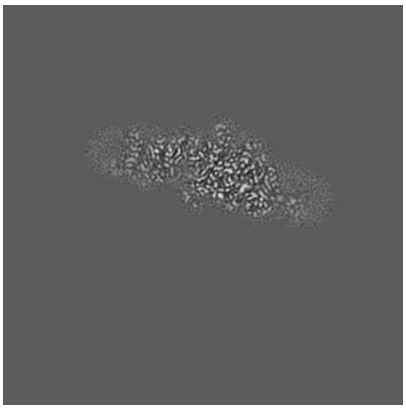
6.3.1 Primary map



X Index: 210

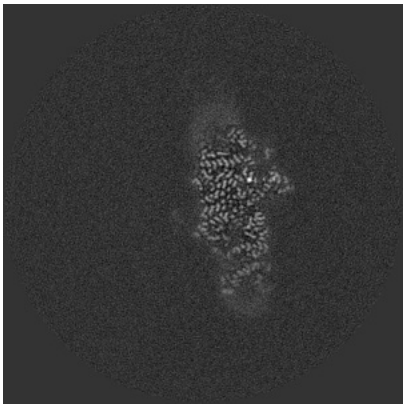


Y Index: 214

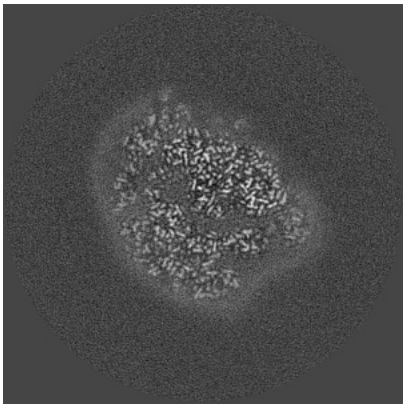


Z Index: 181

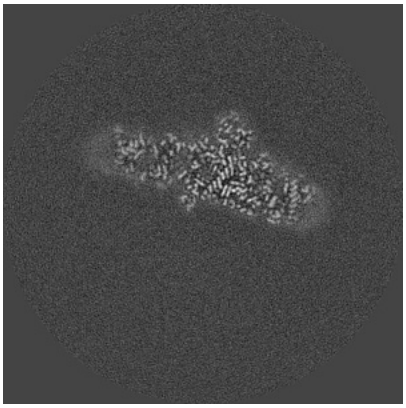
6.3.2 Raw map



X Index: 210



Y Index: 214

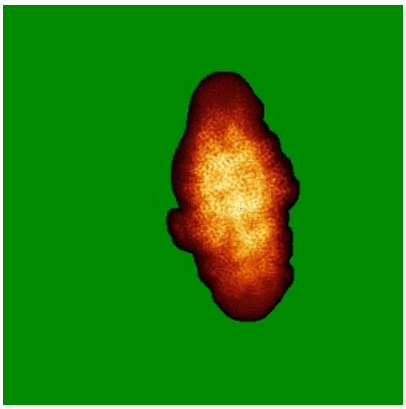


Z Index: 195

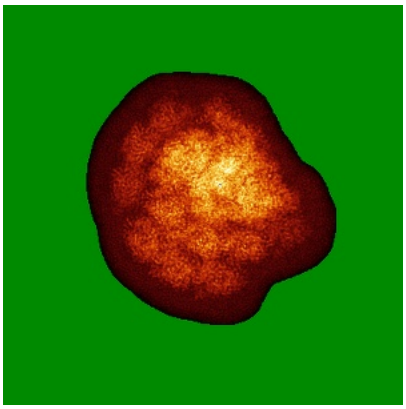
The images above show the largest variance slices of the map in three orthogonal directions.

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

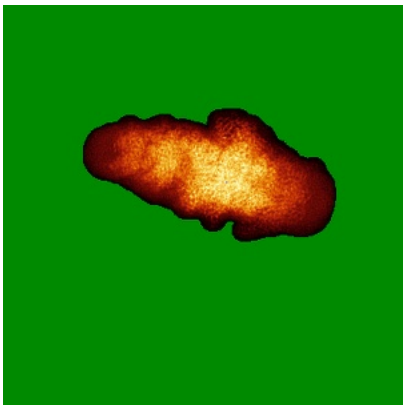
6.4.1 Primary map



X

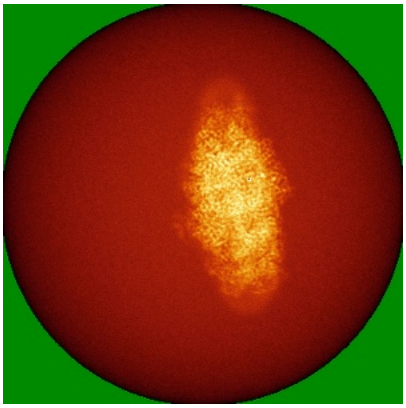


Y

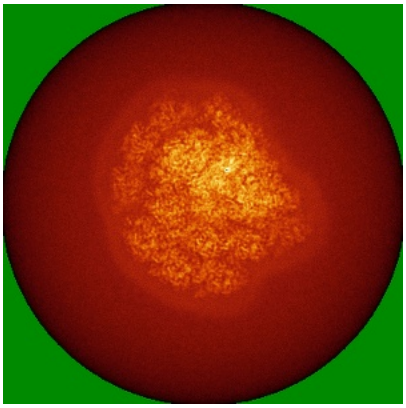


Z

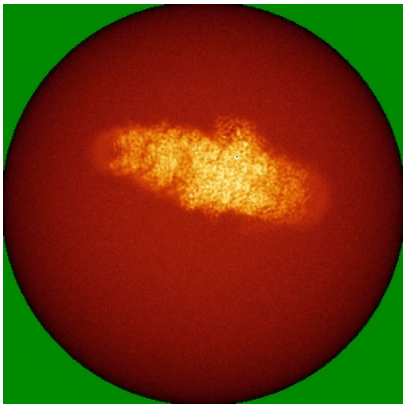
6.4.2 Raw map



X



Y

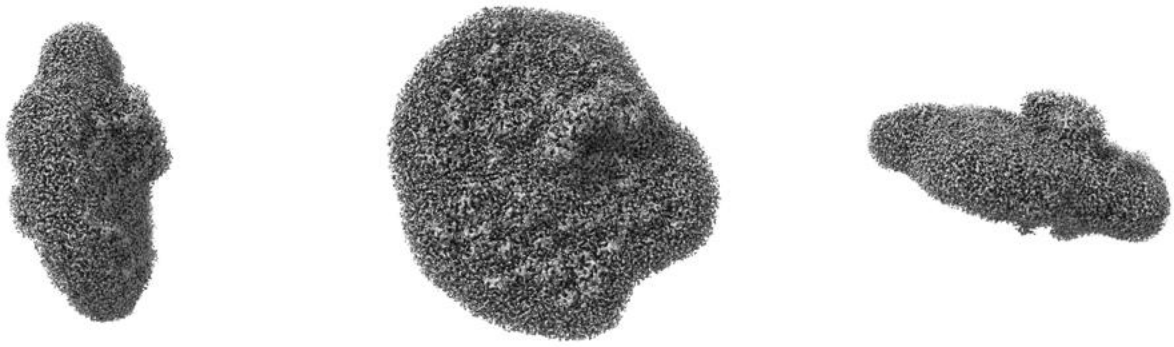


Z

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)

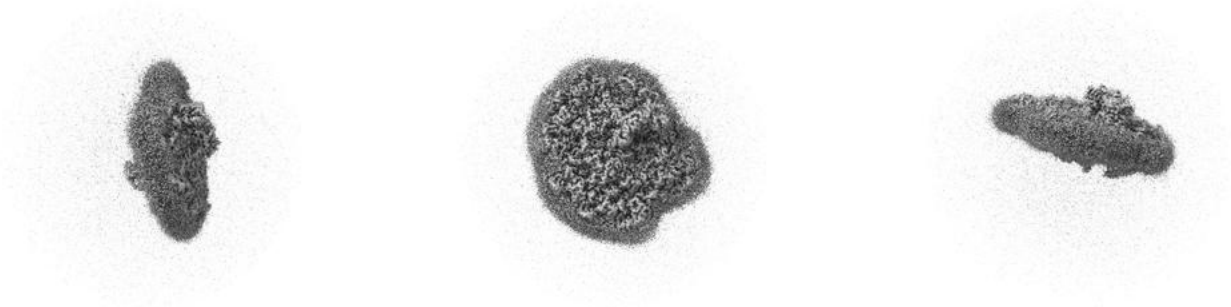
6.5.1 Primary map



X Y Z

The images above show the 3D surface view of the map at the recommended contour level 0.02. 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.

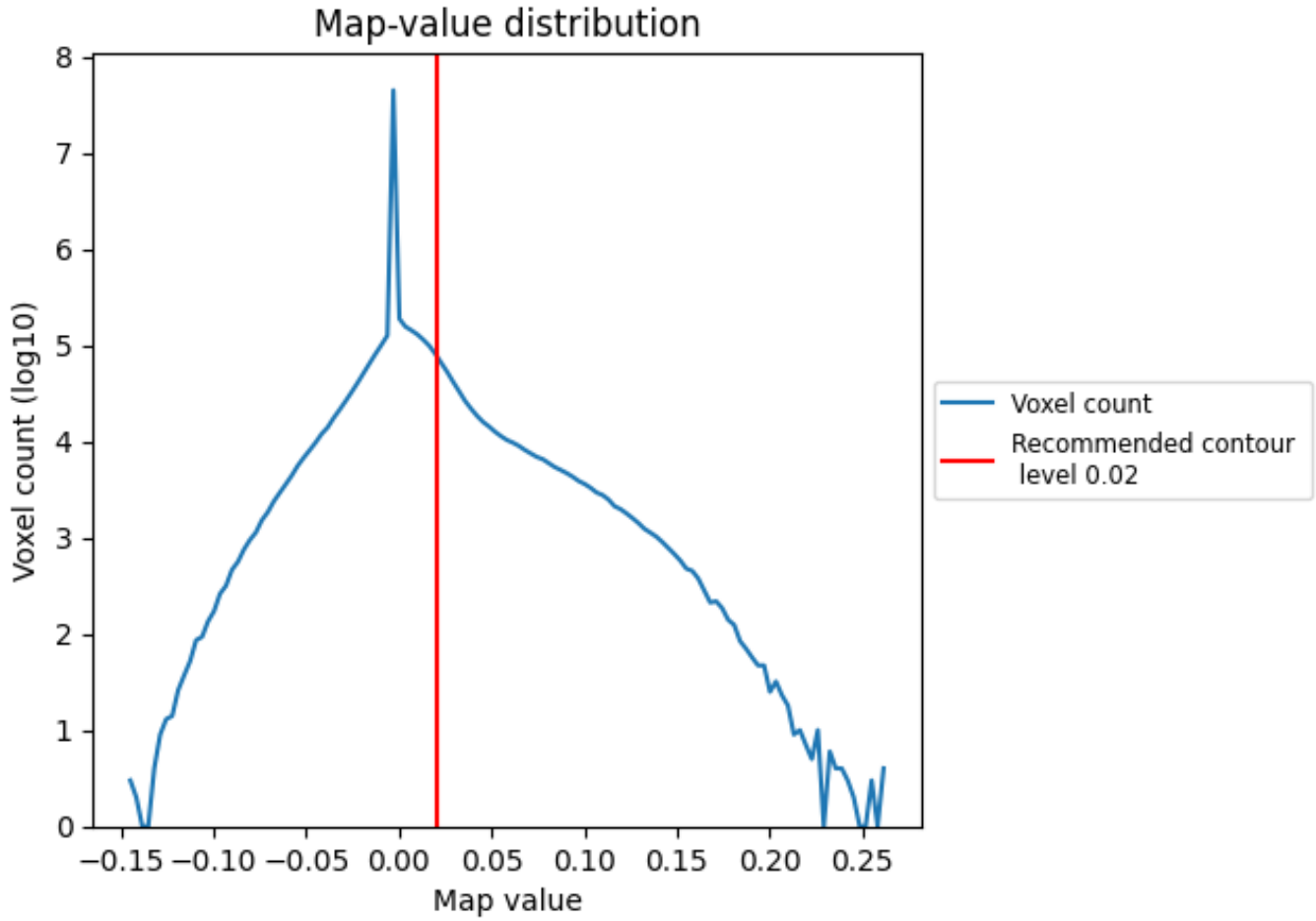
6.6 Mask visualisation (i)

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

7 Map analysis

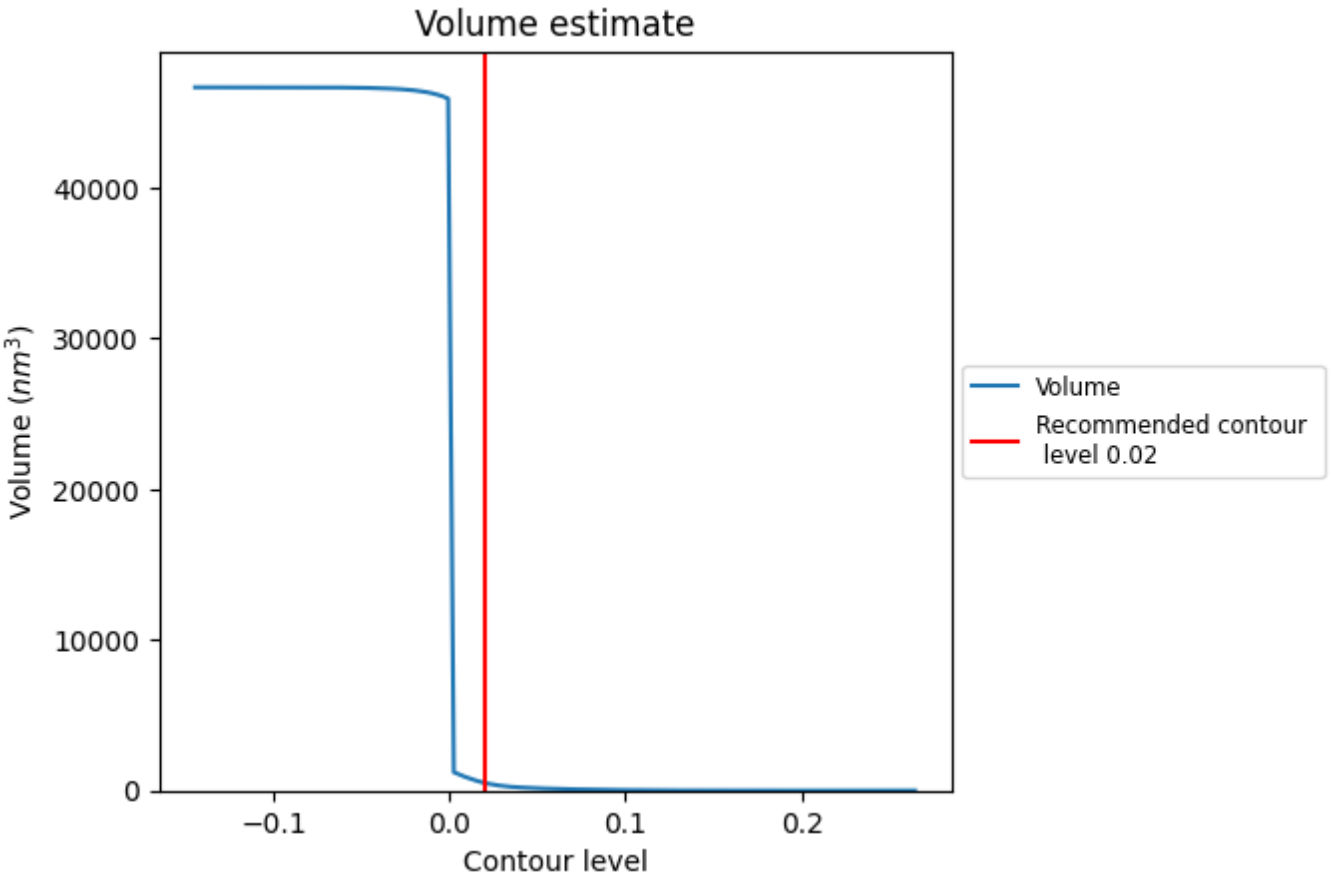
This section contains the results of statistical analysis of the map.

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.

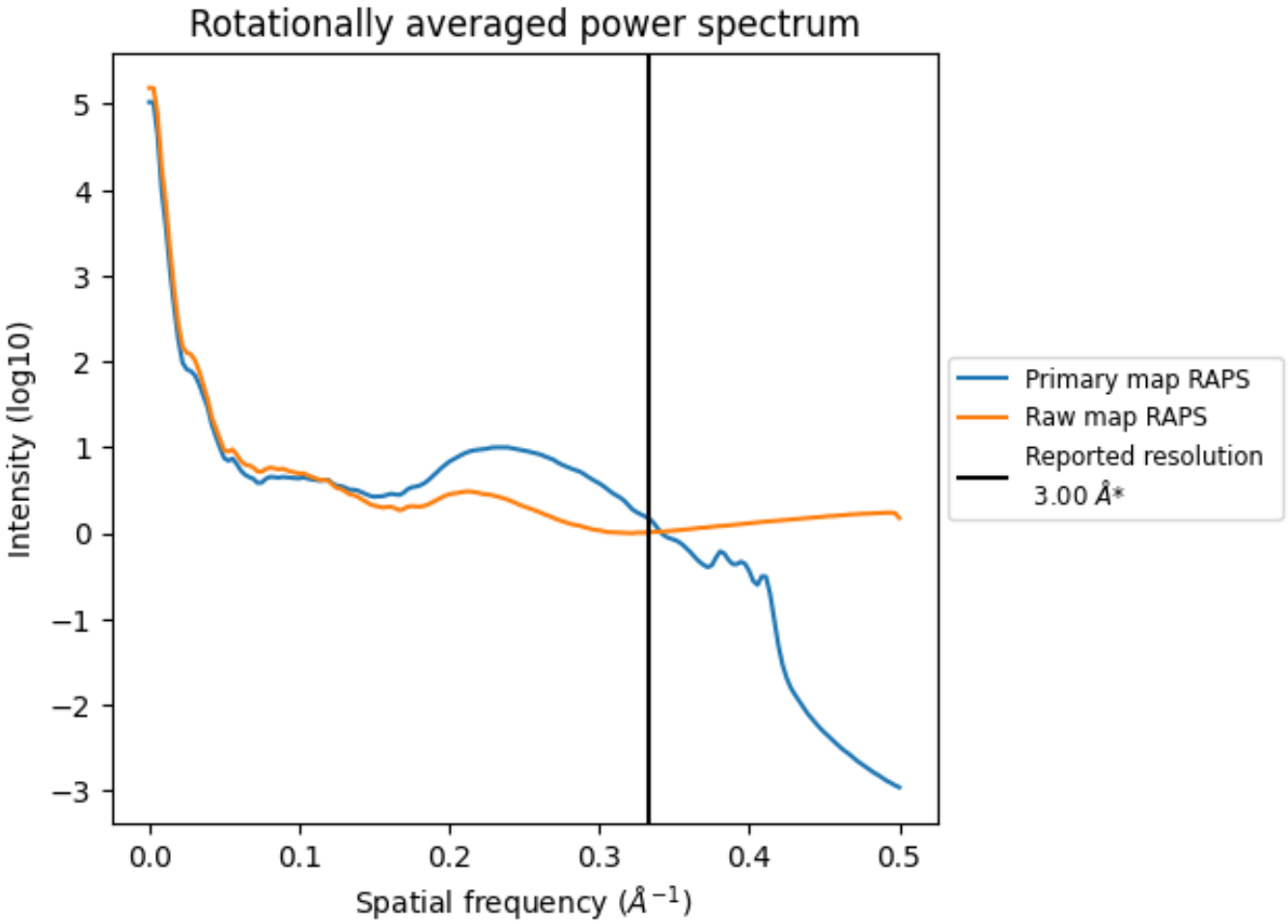
7.2 Volume estimate (i)



The volume at the recommended contour level is 508 nm^3; this corresponds to an approximate mass of 459 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)

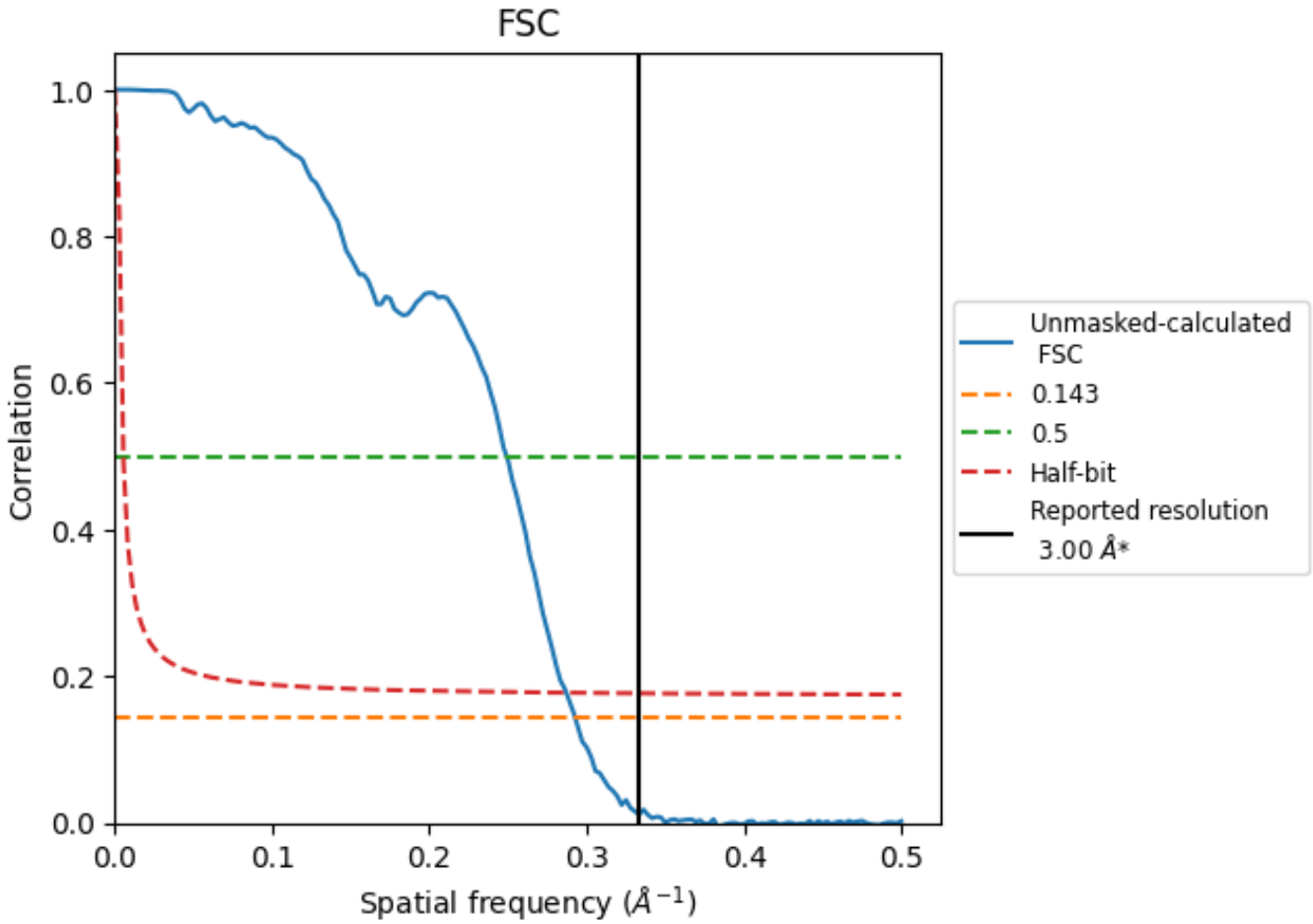


*Reported resolution corresponds to spatial frequency of 0.333 Å^{-1}

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 0.333 Å^{-1}

8.2 Resolution estimates (i)

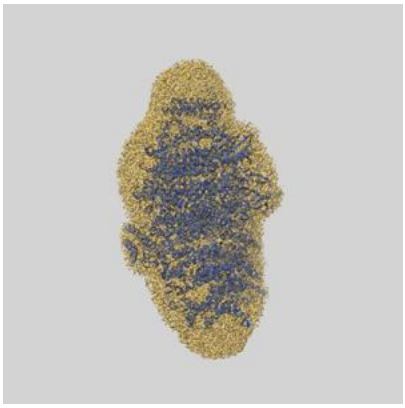
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	3.00	-	-
Author-provided FSC curve	-	-	-
Unmasked-calculated*	3.42	4.01	3.48

*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 3.42 differs from the reported value 3.0 by more than 10 %

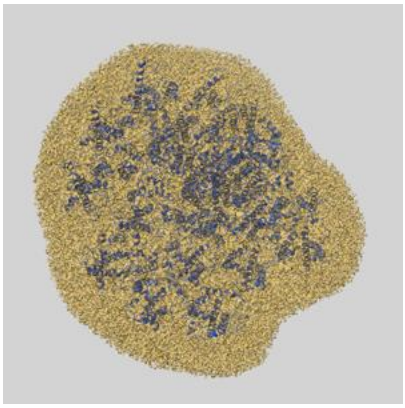
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-37654 and PDB model 8WMJ. Per-residue inclusion information can be found in section 3 on page 36.

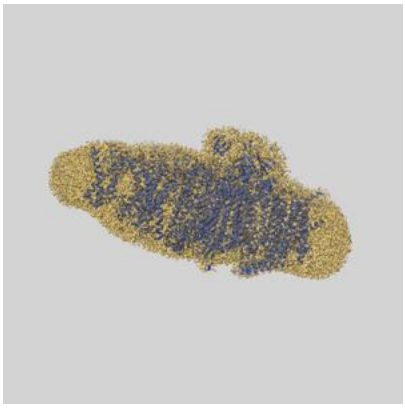
9.1 Map-model overlay



X



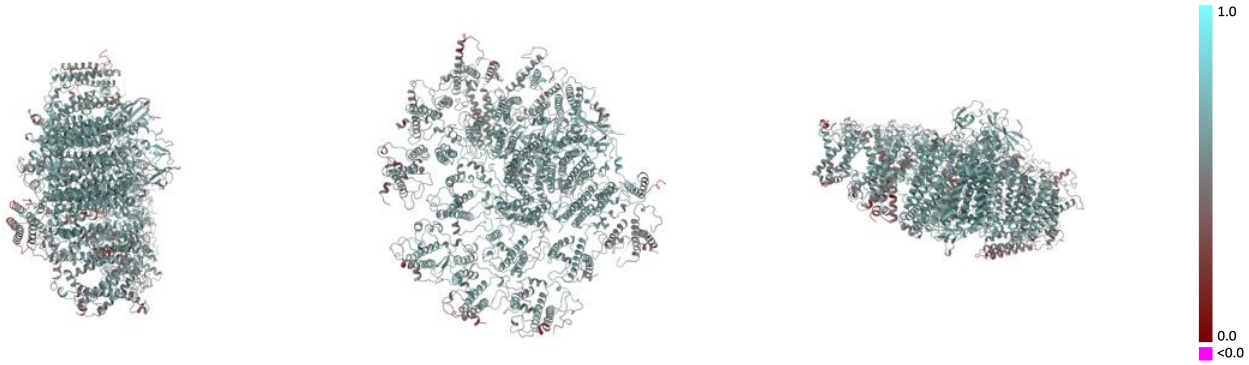
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.02 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.

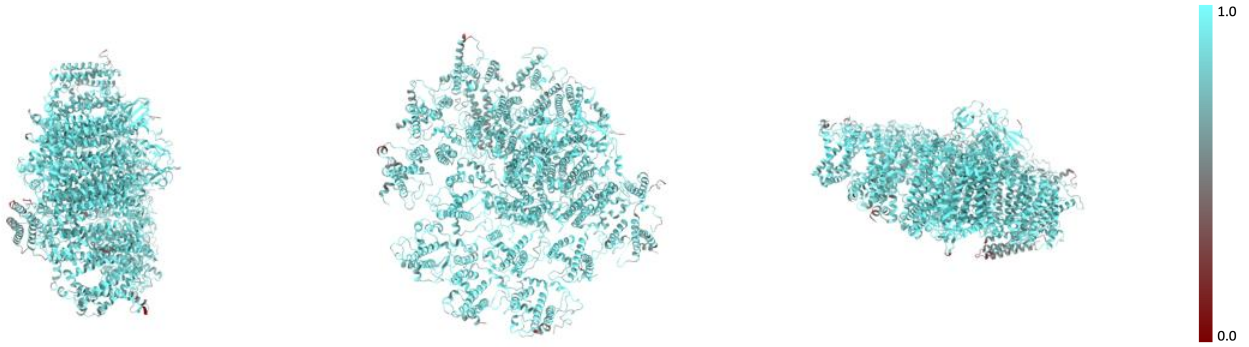
9.2 Q-score mapped to coordinate model



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.

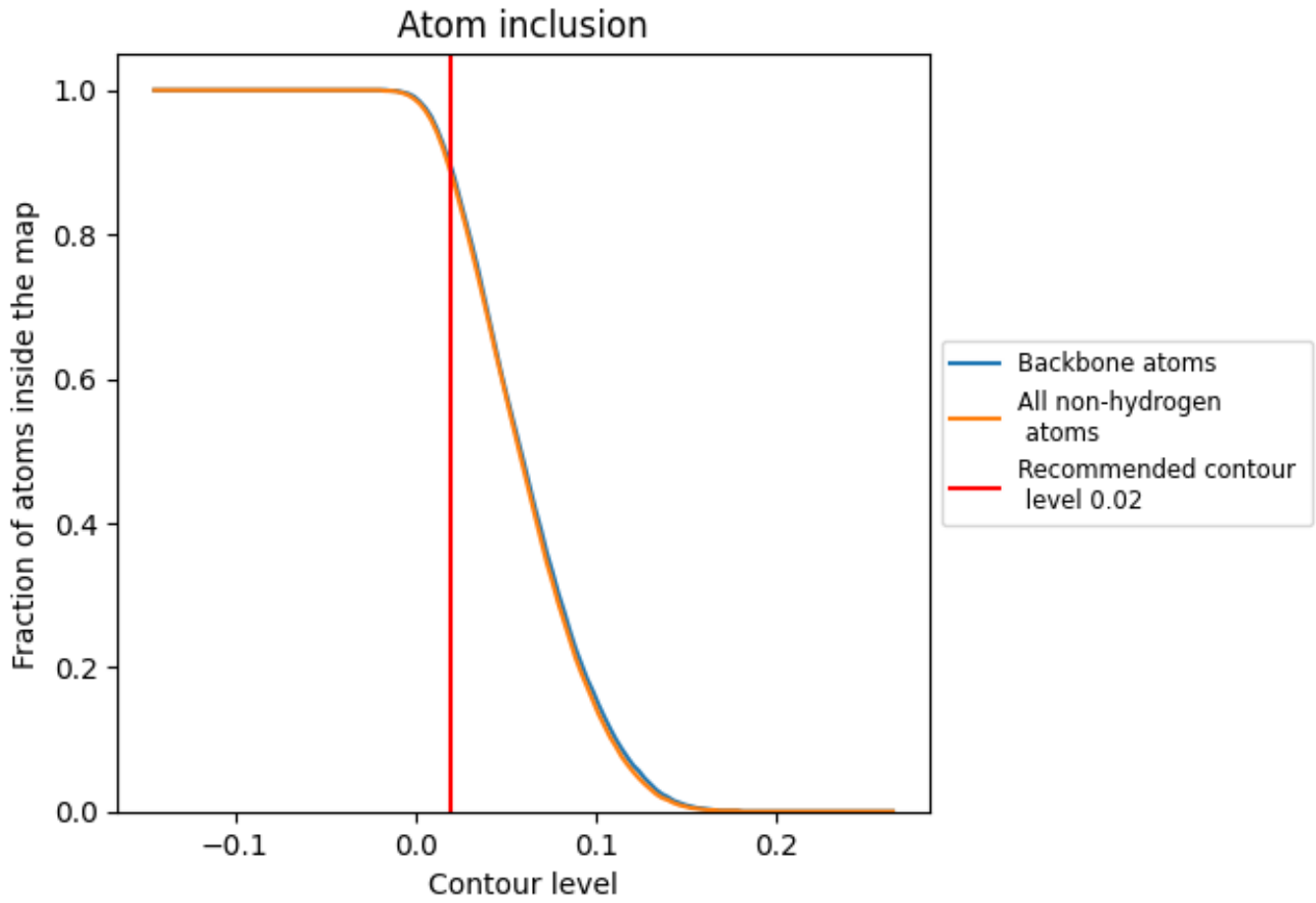
9.3 Atom inclusion mapped to coordinate model



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 (0.02).

9.4 Atom inclusion (i)



At the recommended contour level, 89% of all backbone atoms, 88% 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 (0.02) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.8830	0.5530
A	0.9460	0.6100
B	0.9530	0.6120
C	0.9410	0.5910
D	0.8900	0.5580
E	0.8850	0.5500
F	0.9220	0.5840
I	0.8940	0.5780
J	0.9300	0.5920
K	0.8240	0.5130
L	0.8430	0.5350
M	0.8910	0.5650
Q	0.6840	0.4300
R	0.9010	0.5660
a	0.9300	0.5780
b	0.9160	0.5800
c	0.8770	0.5500
d	0.7380	0.4250
h	0.8570	0.5310
i	0.7650	0.4540
j	0.8170	0.4980
k	0.7670	0.4580
l	0.8590	0.5230
m	0.8690	0.5300
n	0.8230	0.5000
s	0.9030	0.5690