wwPDB EM Validation Summary Report (i)

Nov 23, 2022 – 09:21 AM EST

PDB ID	:	7S3D
EMDB ID	:	EMD-24821
Title	:	Structure of photosystem I with bound ferredoxin from Synechococcus sp. PCC 7335 acclimated to far-red light
Authors	:	Gisriel, C.J.; Flesher, D.A.; Shen, G.; Wang, J.; Ho, M.; Brudvig, G.W.; Bryant, D.A.
Deposited on	:	2021-09-05
Resolution	:	2.91 Å(reported)

This is a wwPDB EM Validation Summary Report for a publicly released PDB entry.

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

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

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

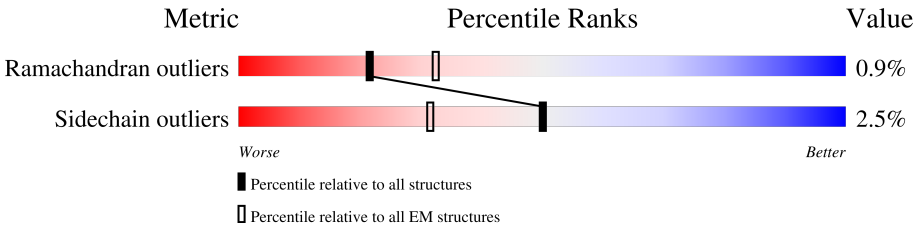
EMDB validation analysis	:	0.0.1.dev43
Mogul	:	1.8.5 (274361), CSD as541be (2020)
MolProbity	:	4.02b-467
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
MapQ	:	1.9.9
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.31.2

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 2.91 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	782	9% 93%
1	G	782	9% 93%
1	a	782	8% 93%
2	B	743	99%
2	H	743	99%
2	b	743	99%
3	C	81	98%
3	N	81	98%
3	c	81	98%

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Mol	Chain	Length	Quality of chain
4	D	155	12% 85% 6% 8%
4	O	155	12% 85% 6% 8%
4	d	155	12% 85% 6% 8%
5	E	71	23% 90% 10%
5	P	71	21% 90% 10%
5	e	71	24% 90% 10%
6	F	168	74% 71% 26%
6	Q	168	74% 71% 26%
6	f	168	74% 71% 26%
7	I	70	59% 40%
7	R	70	59% 40%
7	i	70	59% 40%
8	J	46	89% 83% 7% 11%
8	S	46	89% 83% 7% 11%
8	j	46	89% 83% 7% 11%
9	K	84	31% 75% 12% 11%
9	T	84	30% 75% 12% 11%
9	k	84	30% 75% 12% 11%
10	L	174	97%
10	U	174	97%
10	l	174	97%
11	M	31	100%
11	V	31	100%
11	m	31	100%
12	W	99	98% 83% 15%

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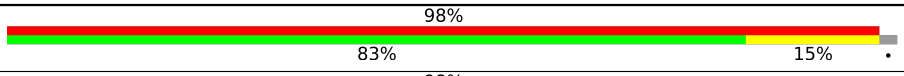
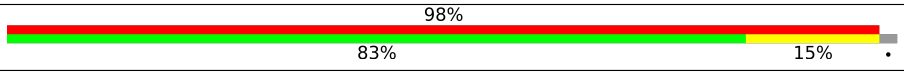
Mol	Chain	Length	Quality of chain
12	X	99	
12	x	99	

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
13	CL0	A	1011	X	-	-	-
13	CL0	G	1011	X	-	-	-
13	CL0	a	1011	X	-	-	-
14	CLA	A	1012	X	-	-	-
14	CLA	A	1013	X	-	-	-
14	CLA	A	1101	X	-	-	-
14	CLA	A	1102	X	-	-	-
14	CLA	A	1103	X	-	-	-
14	CLA	A	1104	X	-	-	-
14	CLA	A	1105	X	-	-	-
14	CLA	A	1106	X	-	-	-
14	CLA	A	1107	X	-	-	-
14	CLA	A	1108	X	-	-	-
14	CLA	A	1109	X	-	-	-
14	CLA	A	1110	X	-	-	-
14	CLA	A	1111	X	-	-	-
14	CLA	A	1112	X	-	-	-
14	CLA	A	1113	X	-	-	-
14	CLA	A	1114	X	-	-	-
14	CLA	A	1115	X	-	-	-
14	CLA	A	1116	X	-	-	-
14	CLA	A	1117	X	-	-	-
14	CLA	A	1118	X	-	-	-
14	CLA	A	1119	X	-	-	-
14	CLA	A	1120	X	-	-	-
14	CLA	A	1122	X	-	-	-
14	CLA	A	1123	X	-	-	-
14	CLA	A	1124	X	-	-	-
14	CLA	A	1125	X	-	-	-
14	CLA	A	1126	X	-	-	-
14	CLA	A	1127	X	-	-	-
14	CLA	A	1128	X	-	-	-
14	CLA	A	1129	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	A	1130	X	-	-	-
14	CLA	A	1131	X	-	-	-
14	CLA	A	1132	X	-	-	-
14	CLA	A	1133	X	-	-	-
14	CLA	A	1134	X	-	-	-
14	CLA	A	1135	X	-	-	-
14	CLA	A	1136	X	-	-	-
14	CLA	A	1137	X	-	-	-
14	CLA	A	1138	X	-	-	-
14	CLA	A	1139	X	-	-	-
14	CLA	A	1140	X	-	-	-
14	CLA	A	1141	X	-	-	-
14	CLA	B	1021	X	-	-	-
14	CLA	B	1022	X	-	-	-
14	CLA	B	1023	X	-	-	-
14	CLA	B	1201	X	-	-	-
14	CLA	B	1202	X	-	-	-
14	CLA	B	1203	X	-	-	-
14	CLA	B	1204	X	-	-	-
14	CLA	B	1205	X	-	-	-
14	CLA	B	1206	X	-	-	-
14	CLA	B	1208	X	-	-	-
14	CLA	B	1209	X	-	-	-
14	CLA	B	1210	X	-	-	-
14	CLA	B	1211	X	-	-	-
14	CLA	B	1212	X	-	-	-
14	CLA	B	1213	X	-	-	-
14	CLA	B	1214	X	-	-	-
14	CLA	B	1215	X	-	-	-
14	CLA	B	1216	X	-	-	-
14	CLA	B	1217	X	-	-	-
14	CLA	B	1218	X	-	-	-
14	CLA	B	1220	X	-	-	-
14	CLA	B	1221	X	-	-	-
14	CLA	B	1222	X	-	-	-
14	CLA	B	1223	X	-	-	-
14	CLA	B	1224	X	-	-	-
14	CLA	B	1225	X	-	-	-
14	CLA	B	1226	X	-	-	-
14	CLA	B	1227	X	-	-	-
14	CLA	B	1228	X	-	-	-
14	CLA	B	1229	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	B	1231	X	-	-	-
14	CLA	B	1232	X	-	-	-
14	CLA	B	1233	X	-	-	-
14	CLA	B	1234	X	-	-	-
14	CLA	B	1235	X	-	-	-
14	CLA	B	1236	X	-	-	-
14	CLA	B	1239	X	-	-	-
14	CLA	B	1240	X	-	-	-
14	CLA	G	1012	X	-	-	-
14	CLA	G	1013	X	-	-	-
14	CLA	G	1101	X	-	-	-
14	CLA	G	1102	X	-	-	-
14	CLA	G	1103	X	-	-	-
14	CLA	G	1104	X	-	-	-
14	CLA	G	1105	X	-	-	-
14	CLA	G	1106	X	-	-	-
14	CLA	G	1107	X	-	-	-
14	CLA	G	1108	X	-	-	-
14	CLA	G	1109	X	-	-	-
14	CLA	G	1110	X	-	-	-
14	CLA	G	1111	X	-	-	-
14	CLA	G	1112	X	-	-	-
14	CLA	G	1113	X	-	-	-
14	CLA	G	1114	X	-	-	-
14	CLA	G	1115	X	-	-	-
14	CLA	G	1116	X	-	-	-
14	CLA	G	1117	X	-	-	-
14	CLA	G	1118	X	-	-	-
14	CLA	G	1119	X	-	-	-
14	CLA	G	1120	X	-	-	-
14	CLA	G	1122	X	-	-	-
14	CLA	G	1123	X	-	-	-
14	CLA	G	1124	X	-	-	-
14	CLA	G	1125	X	-	-	-
14	CLA	G	1126	X	-	-	-
14	CLA	G	1127	X	-	-	-
14	CLA	G	1128	X	-	-	-
14	CLA	G	1129	X	-	-	-
14	CLA	G	1130	X	-	-	-
14	CLA	G	1131	X	-	-	-
14	CLA	G	1132	X	-	-	-
14	CLA	G	1133	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	G	1134	X	-	-	-
14	CLA	G	1135	X	-	-	-
14	CLA	G	1136	X	-	-	-
14	CLA	G	1137	X	-	-	-
14	CLA	G	1138	X	-	-	-
14	CLA	G	1139	X	-	-	-
14	CLA	G	1140	X	-	-	-
14	CLA	G	1141	X	-	-	-
14	CLA	H	1021	X	-	-	-
14	CLA	H	1022	X	-	-	-
14	CLA	H	1023	X	-	-	-
14	CLA	H	1201	X	-	-	-
14	CLA	H	1202	X	-	-	-
14	CLA	H	1203	X	-	-	-
14	CLA	H	1204	X	-	-	-
14	CLA	H	1205	X	-	-	-
14	CLA	H	1206	X	-	-	-
14	CLA	H	1208	X	-	-	-
14	CLA	H	1209	X	-	-	-
14	CLA	H	1210	X	-	-	-
14	CLA	H	1211	X	-	-	-
14	CLA	H	1212	X	-	-	-
14	CLA	H	1213	X	-	-	-
14	CLA	H	1214	X	-	-	-
14	CLA	H	1215	X	-	-	-
14	CLA	H	1216	X	-	-	-
14	CLA	H	1217	X	-	-	-
14	CLA	H	1218	X	-	-	-
14	CLA	H	1220	X	-	-	-
14	CLA	H	1221	X	-	-	-
14	CLA	H	1222	X	-	-	-
14	CLA	H	1223	X	-	-	-
14	CLA	H	1224	X	-	-	-
14	CLA	H	1225	X	-	-	-
14	CLA	H	1226	X	-	-	-
14	CLA	H	1227	X	-	-	-
14	CLA	H	1228	X	-	-	-
14	CLA	H	1229	X	-	-	-
14	CLA	H	1231	X	-	-	-
14	CLA	H	1232	X	-	-	-
14	CLA	H	1233	X	-	-	-
14	CLA	H	1234	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	H	1235	X	-	-	-
14	CLA	H	1236	X	-	-	-
14	CLA	H	1239	X	-	-	-
14	CLA	H	1240	X	-	-	-
14	CLA	K	1401	X	-	-	-
14	CLA	L	1501	X	-	-	-
14	CLA	L	1502	X	-	-	-
14	CLA	L	1503	X	-	-	-
14	CLA	M	1501	X	-	-	-
14	CLA	T	1401	X	-	-	-
14	CLA	U	1501	X	-	-	-
14	CLA	U	1502	X	-	-	-
14	CLA	U	1503	X	-	-	-
14	CLA	V	1501	X	-	-	-
14	CLA	a	1012	X	-	-	-
14	CLA	a	1013	X	-	-	-
14	CLA	a	1101	X	-	-	-
14	CLA	a	1102	X	-	-	-
14	CLA	a	1103	X	-	-	-
14	CLA	a	1104	X	-	-	-
14	CLA	a	1105	X	-	-	-
14	CLA	a	1106	X	-	-	-
14	CLA	a	1107	X	-	-	-
14	CLA	a	1108	X	-	-	-
14	CLA	a	1109	X	-	-	-
14	CLA	a	1110	X	-	-	-
14	CLA	a	1111	X	-	-	-
14	CLA	a	1112	X	-	-	-
14	CLA	a	1113	X	-	-	-
14	CLA	a	1114	X	-	-	-
14	CLA	a	1115	X	-	-	-
14	CLA	a	1116	X	-	-	-
14	CLA	a	1117	X	-	-	-
14	CLA	a	1118	X	-	-	-
14	CLA	a	1119	X	-	-	-
14	CLA	a	1120	X	-	-	-
14	CLA	a	1122	X	-	-	-
14	CLA	a	1123	X	-	-	-
14	CLA	a	1124	X	-	-	-
14	CLA	a	1125	X	-	-	-
14	CLA	a	1126	X	-	-	-
14	CLA	a	1127	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	a	1128	X	-	-	-
14	CLA	a	1129	X	-	-	-
14	CLA	a	1130	X	-	-	-
14	CLA	a	1131	X	-	-	-
14	CLA	a	1132	X	-	-	-
14	CLA	a	1133	X	-	-	-
14	CLA	a	1134	X	-	-	-
14	CLA	a	1135	X	-	-	-
14	CLA	a	1136	X	-	-	-
14	CLA	a	1137	X	-	-	-
14	CLA	a	1138	X	-	-	-
14	CLA	a	1139	X	-	-	-
14	CLA	a	1140	X	-	-	-
14	CLA	a	1141	X	-	-	-
14	CLA	b	1021	X	-	-	-
14	CLA	b	1022	X	-	-	-
14	CLA	b	1023	X	-	-	-
14	CLA	b	1201	X	-	-	-
14	CLA	b	1202	X	-	-	-
14	CLA	b	1203	X	-	-	-
14	CLA	b	1204	X	-	-	-
14	CLA	b	1205	X	-	-	-
14	CLA	b	1206	X	-	-	-
14	CLA	b	1208	X	-	-	-
14	CLA	b	1209	X	-	-	-
14	CLA	b	1210	X	-	-	-
14	CLA	b	1211	X	-	-	-
14	CLA	b	1212	X	-	-	-
14	CLA	b	1213	X	-	-	-
14	CLA	b	1214	X	-	-	-
14	CLA	b	1215	X	-	-	-
14	CLA	b	1216	X	-	-	-
14	CLA	b	1217	X	-	-	-
14	CLA	b	1218	X	-	-	-
14	CLA	b	1220	X	-	-	-
14	CLA	b	1221	X	-	-	-
14	CLA	b	1222	X	-	-	-
14	CLA	b	1223	X	-	-	-
14	CLA	b	1224	X	-	-	-
14	CLA	b	1225	X	-	-	-
14	CLA	b	1226	X	-	-	-
14	CLA	b	1227	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	b	1228	X	-	-	-
14	CLA	b	1229	X	-	-	-
14	CLA	b	1231	X	-	-	-
14	CLA	b	1232	X	-	-	-
14	CLA	b	1233	X	-	-	-
14	CLA	b	1234	X	-	-	-
14	CLA	b	1235	X	-	-	-
14	CLA	b	1236	X	-	-	-
14	CLA	b	1239	X	-	-	-
14	CLA	b	1240	X	-	-	-
14	CLA	k	1401	X	-	-	-
14	CLA	l	1501	X	-	-	-
14	CLA	l	1502	X	-	-	-
14	CLA	l	1503	X	-	-	-
14	CLA	m	1501	X	-	-	-

2 Entry composition (i)

There are 25 unique types of molecules in this entry. The entry contains 75150 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
1	A	749	Total	C	N	O	S	0	0
			5849	3818	1005	991	35		
1	G	749	Total	C	N	O	S	0	0
			5849	3818	1005	991	35		
1	a	749	Total	C	N	O	S	0	0
			5849	3818	1005	991	35		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
2	B	742	Total	C	N	O	S	0	0
			5900	3883	988	1008	21		
2	H	742	Total	C	N	O	S	0	0
			5900	3883	988	1008	21		
2	b	742	Total	C	N	O	S	0	0
			5900	3883	988	1008	21		

- Molecule 3 is a protein called PsaC.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	C	80	Total	C	N	O	S	0	0
			598	365	105	117	11		
3	N	80	Total	C	N	O	S	0	0
			598	365	105	117	11		
3	c	80	Total	C	N	O	S	0	0
			598	365	105	117	11		

- Molecule 4 is a protein called Photosystem I 16 kDa polypeptide.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	D	143	Total	C	N	O	S	0	0
			1102	695	189	213	5		

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Mol	Chain	Residues	Atoms					AltConf	Trace
4	O	143	Total	C	N	O	S	0	0
			1102	695	189	213	5		
4	d	143	Total	C	N	O	S	0	0
			1102	695	189	213	5		

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

Mol	Chain	Residues	Atoms				AltConf	Trace
5	E	64	Total	C	N	O	0	0
			506	322	89	95		
5	P	64	Total	C	N	O	0	0
			506	322	89	95		
5	e	64	Total	C	N	O	0	0
			506	322	89	95		

- Molecule 6 is a protein called PSI-F.

Mol	Chain	Residues	Atoms					AltConf	Trace
6	F	124	Total	C	N	O	S	0	0
			826	542	134	148	2		
6	Q	124	Total	C	N	O	S	0	0
			826	542	134	148	2		
6	f	124	Total	C	N	O	S	0	0
			826	542	134	148	2		

- Molecule 7 is a protein called PsaI2.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	I	42	Total	C	N	O	S	0	0
			343	237	49	55	2		
7	R	42	Total	C	N	O	S	0	0
			343	237	49	55	2		
7	i	42	Total	C	N	O	S	0	0
			343	237	49	55	2		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
8	J	41	Total	C	N	O	S	0	0
			296	197	46	52	1		
8	S	41	Total	C	N	O	S	0	0
			296	197	46	52	1		

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Mol	Chain	Residues	Atoms					AltConf	Trace
8	j	41	Total	C	N	O	S	0	0
			296	197	46	52	1		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
9	K	75	Total	C	N	O	S	0	0
			516	343	85	86	2		
9	T	75	Total	C	N	O	S	0	0
			516	343	85	86	2		
9	k	75	Total	C	N	O	S	0	0
			516	343	85	86	2		

- Molecule 10 is a protein called PSI subunit V.

Mol	Chain	Residues	Atoms					AltConf	Trace
10	L	170	Total	C	N	O	S	0	0
			1291	830	220	238	3		
10	U	170	Total	C	N	O	S	0	0
			1291	830	220	238	3		
10	l	170	Total	C	N	O	S	0	0
			1291	830	220	238	3		

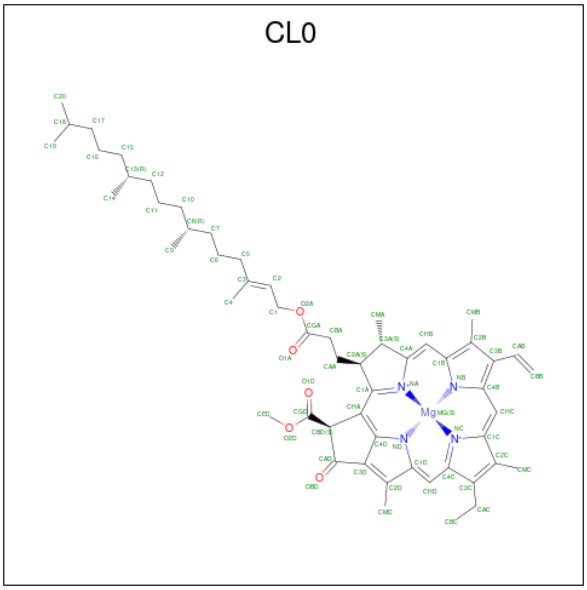
- Molecule 11 is a protein called PsaM.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	M	31	Total	C	N	O	S	0	0
			232	156	35	40	1		
11	V	31	Total	C	N	O	S	0	0
			232	156	35	40	1		
11	m	31	Total	C	N	O	S	0	0
			232	156	35	40	1		

- Molecule 12 is a protein called 2Fe-2S ferredoxin-type domain-containing protein.

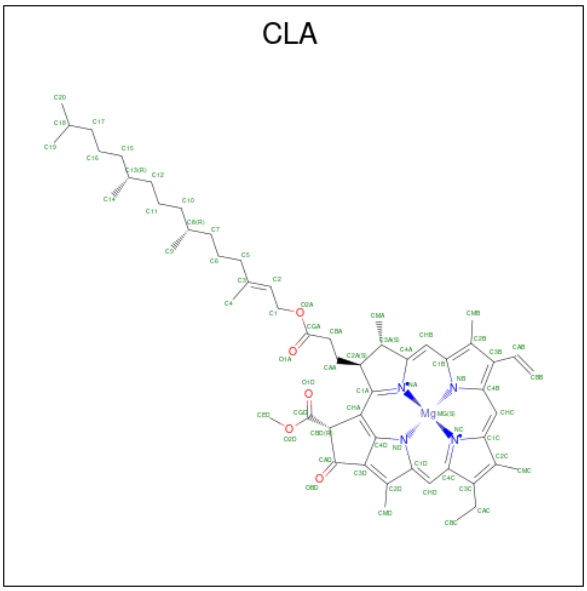
Mol	Chain	Residues	Atoms					AltConf	Trace
12	X	97	Total	C	N	O	S	0	0
			649	405	107	132	5		
12	W	97	Total	C	N	O	S	0	0
			649	405	107	132	5		
12	x	97	Total	C	N	O	S	0	0
			649	405	107	132	5		

- Molecule 13 is CHLOROPHYLL A ISOMER (three-letter code: CL0) (formula: $C_{55}H_{72}MgN_4O_5$).



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

- Molecule 14 is CHLOROPHYLL A (three-letter code: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



Mol	Chain	Residues	Atoms	AltConf
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0
14	A	1	Total C Mg N O 2330 1910 42 168 210	0

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Mol	Chain	Residues	Atoms					AltConf
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	A	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0

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Mol	Chain	Residues	Atoms					AltConf
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	B	1	Total 2255	C 1875	Mg 38	N 152	O 190	0

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Mol	Chain	Residues	Atoms	AltConf
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	B	1	Total C Mg N O 2255 1875 38 152 190	0
14	K	1	Total C Mg N O 45 35 1 4 5	0
14	L	1	Total C Mg N O 190 160 3 12 15	0
14	L	1	Total C Mg N O 190 160 3 12 15	0
14	L	1	Total C Mg N O 190 160 3 12 15	0
14	M	1	Total C Mg N O 50 40 1 4 5	0

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Mol	Chain	Residues	Atoms					AltConf
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0

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Mol	Chain	Residues	Atoms					AltConf
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	G	1	Total 2330	C 1910	Mg 42	N 168	O 210	0

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Mol	Chain	Residues	Atoms					AltConf
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0
14	H	1	Total 2255	C 1875	Mg 38	N 152	O 190	0

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Mol	Chain	Residues	Atoms	AltConf
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	H	1	Total C Mg N O 2255 1875 38 152 190	0
14	T	1	Total C Mg N O 45 35 1 4 5	0
14	U	1	Total C Mg N O 190 160 3 12 15	0
14	U	1	Total C Mg N O 190 160 3 12 15	0
14	U	1	Total C Mg N O 190 160 3 12 15	0

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Mol	Chain	Residues	Atoms	AltConf
14	V	1	Total C Mg N O 50 40 1 4 5	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	a	1	Total C Mg N O 2330 1910 42 168 210	0

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Mol	Chain	Residues	Atoms					AltConf
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0
14	a	1	Total 2330	C 1910	Mg 42	N 168	O 210	0

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Mol	Chain	Residues	Atoms	AltConf
14	a	1	Total C Mg N O 2330 1910 42 168 210	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0

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Mol	Chain	Residues	Atoms	AltConf
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	b	1	Total C Mg N O 2255 1875 38 152 190	0
14	k	1	Total C Mg N O 45 35 1 4 5	0
14	l	1	Total C Mg N O 190 160 3 12 15	0
14	l	1	Total C Mg N O 190 160 3 12 15	0

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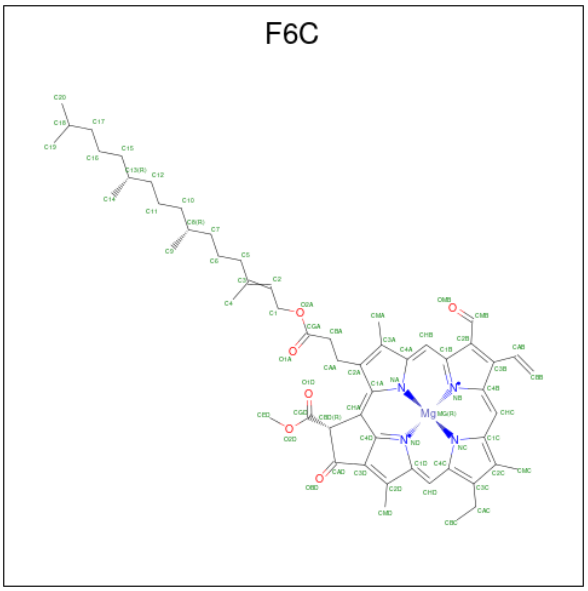
Mol	Chain	Residues	Atoms	AltConf
14	l	1	Total C Mg N O 190 160 3 12 15	0
14	m	1	Total C Mg N O 50 40 1 4 5	0

- Molecule 15 is Chlorophyll F (three-letter code: F6C) (formula: $C_{55}H_{68}MgN_4O_6$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
15	A	1	Total C Mg N O 46 35 1 4 6	0
15	B	1	Total C Mg N O 300 245 5 20 30	0
15	B	1	Total C Mg N O 300 245 5 20 30	0
15	B	1	Total C Mg N O 300 245 5 20 30	0
15	B	1	Total C Mg N O 300 245 5 20 30	0
15	B	1	Total C Mg N O 300 245 5 20 30	0
15	G	1	Total C Mg N O 46 35 1 4 6	0
15	H	1	Total C Mg N O 300 245 5 20 30	0
15	H	1	Total C Mg N O 300 245 5 20 30	0

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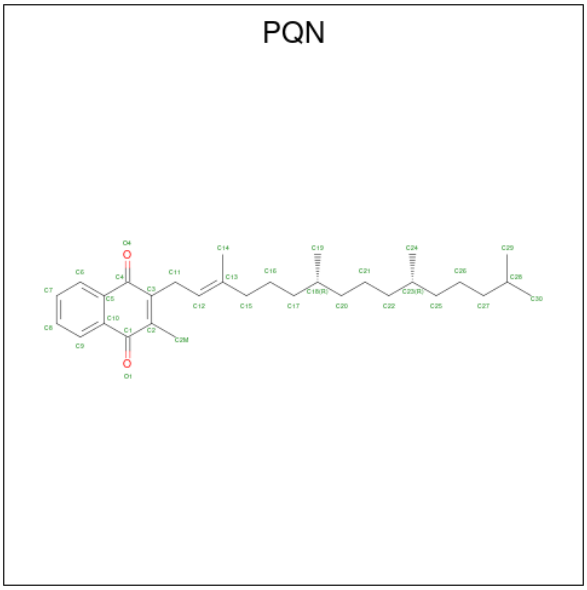
Mol	Chain	Residues	Atoms					AltConf
15	H	1	Total	C	Mg	N	O	0
			300	245	5	20	30	
15	H	1	Total	C	Mg	N	O	0
			300	245	5	20	30	
15	H	1	Total	C	Mg	N	O	0
			300	245	5	20	30	
15	a	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
15	b	1	Total	C	Mg	N	O	0
			300	245	5	20	30	
15	b	1	Total	C	Mg	N	O	0
			300	245	5	20	30	
15	b	1	Total	C	Mg	N	O	0
			300	245	5	20	30	
15	b	1	Total	C	Mg	N	O	0
			300	245	5	20	30	
15	b	1	Total	C	Mg	N	O	0
			300	245	5	20	30	

- Molecule 16 is PHYLLOQUINONE (three-letter code: PQN) (formula: $C_{31}H_{46}O_2$).



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

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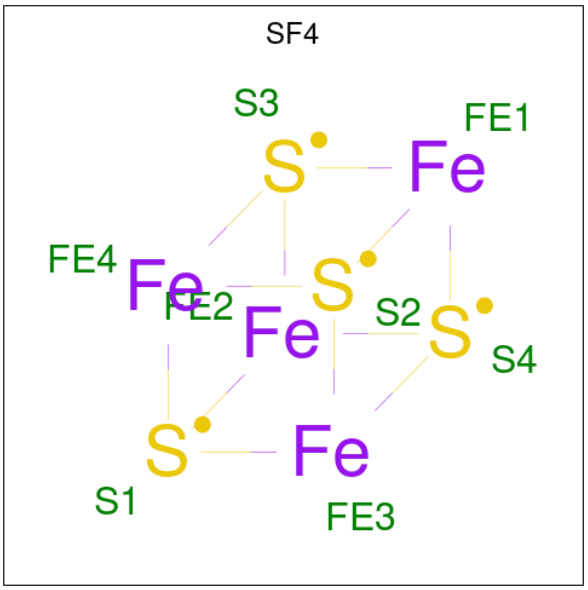
Mol	Chain	Residues	Atoms	AltConf
16	G	1	Total C O 33 31 2	0
16	H	1	Total C O 33 31 2	0
16	a	1	Total C O 33 31 2	0
16	b	1	Total C O 33 31 2	0

- Molecule 17 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe_4S_4).



Mol	Chain	Residues	Atoms	AltConf
17	A	1	Total Fe S 8 4 4	0
17	C	1	Total Fe S 16 8 8	0
17	C	1	Total Fe S 16 8 8	0
17	G	1	Total Fe S 8 4 4	0
17	N	1	Total Fe S 16 8 8	0
17	N	1	Total Fe S 16 8 8	0
17	a	1	Total Fe S 8 4 4	0

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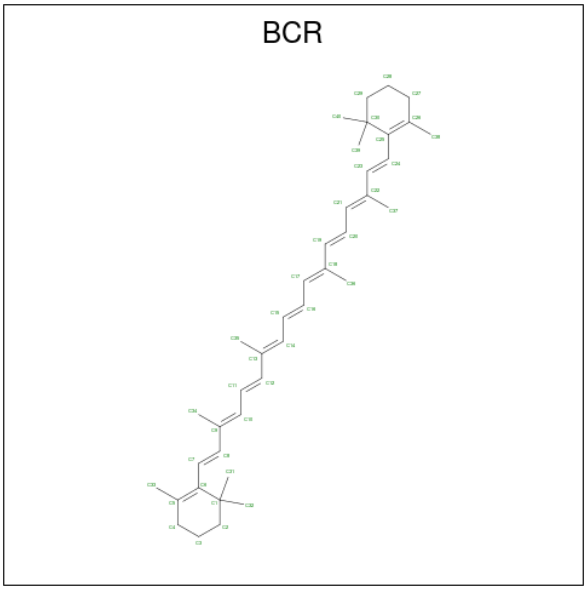
Mol	Chain	Residues	Atoms	AltConf
17	c	1	Total Fe S 16 8 8	0
17	c	1	Total Fe S 16 8 8	0

- Molecule 18 is BETA-CAROTENE (three-letter code: BCR) (formula: $C_{40}H_{56}$).



Mol	Chain	Residues	Atoms	AltConf
18	A	1	Total C 240 240	0
18	A	1	Total C 240 240	0
18	A	1	Total C 240 240	0
18	A	1	Total C 240 240	0
18	A	1	Total C 240 240	0
18	A	1	Total C 240 240	0
18	B	1	Total C 280 280	0
18	B	1	Total C 280 280	0
18	B	1	Total C 280 280	0

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Mol	Chain	Residues	Atoms	AltConf
18	B	1	Total C 280 280	0
18	B	1	Total C 280 280	0
18	B	1	Total C 280 280	0
18	B	1	Total C 280 280	0
18	I	1	Total C 80 80	0
18	I	1	Total C 80 80	0
18	K	1	Total C 40 40	0
18	L	1	Total C 80 80	0
18	L	1	Total C 80 80	0
18	M	1	Total C 40 40	0
18	G	1	Total C 240 240	0
18	G	1	Total C 240 240	0
18	G	1	Total C 240 240	0
18	G	1	Total C 240 240	0
18	G	1	Total C 240 240	0
18	G	1	Total C 240 240	0
18	H	1	Total C 280 280	0
18	H	1	Total C 280 280	0
18	H	1	Total C 280 280	0
18	H	1	Total C 280 280	0
18	H	1	Total C 280 280	0

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Mol	Chain	Residues	Atoms	AltConf
18	H	1	Total C 280 280	0
18	H	1	Total C 280 280	0
18	R	1	Total C 80 80	0
18	R	1	Total C 80 80	0
18	T	1	Total C 40 40	0
18	U	1	Total C 80 80	0
18	U	1	Total C 80 80	0
18	V	1	Total C 40 40	0
18	a	1	Total C 240 240	0
18	a	1	Total C 240 240	0
18	a	1	Total C 240 240	0
18	a	1	Total C 240 240	0
18	a	1	Total C 240 240	0
18	a	1	Total C 240 240	0
18	b	1	Total C 280 280	0
18	b	1	Total C 280 280	0
18	b	1	Total C 280 280	0
18	b	1	Total C 280 280	0
18	b	1	Total C 280 280	0
18	b	1	Total C 280 280	0
18	b	1	Total C 280 280	0

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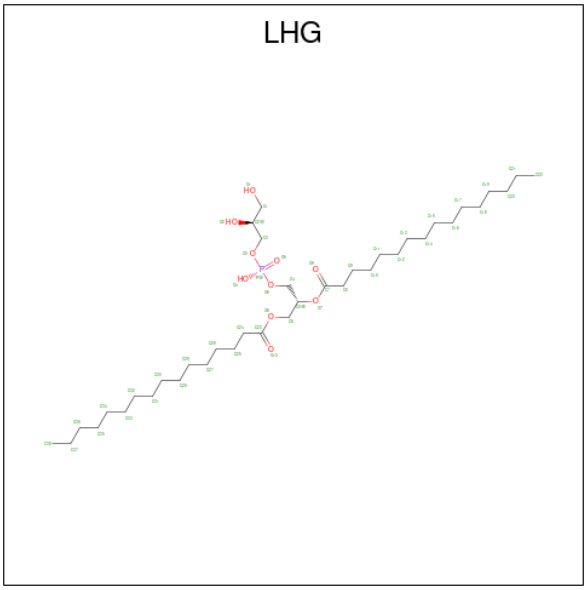
Mol	Chain	Residues	Atoms	AltConf
18	i	1	Total C 80 80	0
18	i	1	Total C 80 80	0
18	k	1	Total C 40 40	0
18	l	1	Total C 80 80	0
18	l	1	Total C 80 80	0
18	m	1	Total C 40 40	0

- Molecule 19 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: $C_{38}H_{75}O_{10}P$).



Mol	Chain	Residues	Atoms	AltConf
19	A	1	Total C O P 86 66 18 2	0
19	A	1	Total C O P 86 66 18 2	0
19	L	1	Total C O P 74 58 15 1	0
19	L	1	Total C O P 74 58 15 1	0
19	G	1	Total C O P 86 66 18 2	0

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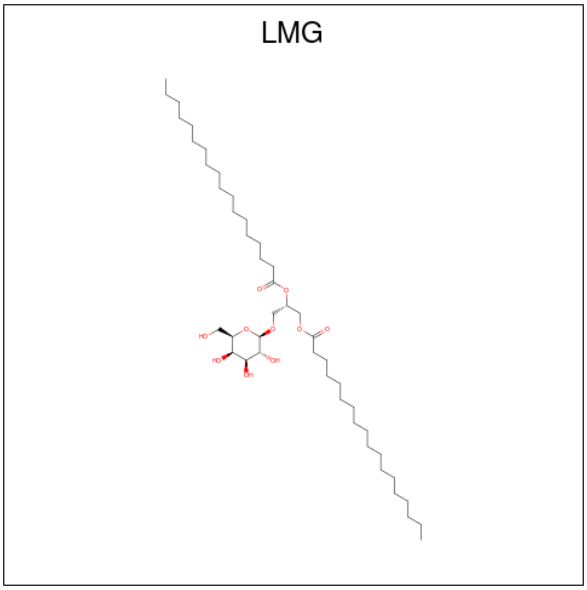
Mol	Chain	Residues	Atoms				AltConf
19	G	1	Total	C	O	P	0
			86	66	18	2	
19	U	1	Total	C	O	P	0
			74	58	15	1	
19	U	1	Total	C	O	P	0
			74	58	15	1	
19	a	1	Total	C	O	P	0
			86	66	18	2	
19	a	1	Total	C	O	P	0
			86	66	18	2	
19	l	1	Total	C	O	P	0
			74	58	15	1	
19	l	1	Total	C	O	P	0
			74	58	15	1	

- Molecule 20 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$).



Mol	Chain	Residues	Atoms			AltConf
20	A	1	Total	C	O	0
			46	36	10	
20	B	1	Total	C	O	0
			46	36	10	
20	I	1	Total	C	O	0
			37	27	10	
20	G	1	Total	C	O	0
			46	36	10	

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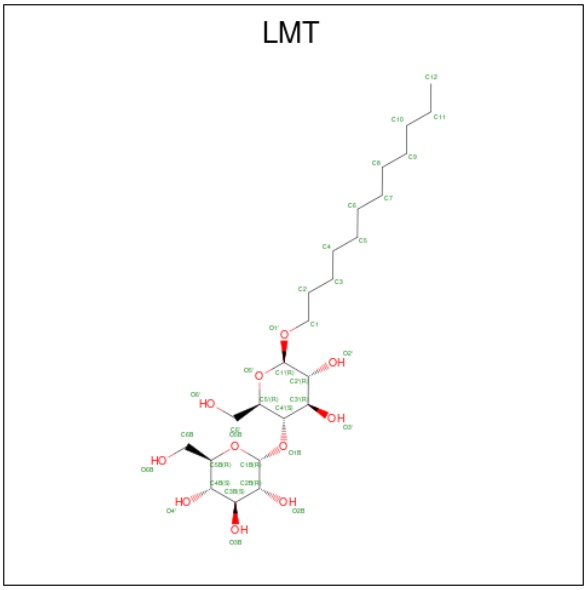
Mol	Chain	Residues	Atoms	AltConf
20	H	1	Total C O 46 36 10	0
20	R	1	Total C O 37 27 10	0
20	a	1	Total C O 46 36 10	0
20	b	1	Total C O 46 36 10	0
20	i	1	Total C O 37 27 10	0

- Molecule 21 is DODECYL-BETA-D-MALTOSIDE (three-letter code: LMT) (formula: $C_{24}H_{46}O_{11}$).



Mol	Chain	Residues	Atoms	AltConf
21	A	1	Total C O 115 76 39	0
21	A	1	Total C O 115 76 39	0
21	A	1	Total C O 115 76 39	0
21	A	1	Total C O 115 76 39	0
21	B	1	Total C O 136 92 44	0
21	B	1	Total C O 136 92 44	0

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Mol	Chain	Residues	Atoms	AltConf
21	B	1	Total C O 136 92 44	0
21	B	1	Total C O 136 92 44	0
21	I	1	Total C O 35 24 11	0
21	L	1	Total C O 84 61 23	0
21	L	1	Total C O 84 61 23	0
21	L	1	Total C O 84 61 23	0
21	M	1	Total C O 35 24 11	0
21	G	1	Total C O 115 76 39	0
21	G	1	Total C O 115 76 39	0
21	G	1	Total C O 115 76 39	0
21	G	1	Total C O 115 76 39	0
21	H	1	Total C O 136 92 44	0
21	H	1	Total C O 136 92 44	0
21	H	1	Total C O 136 92 44	0
21	H	1	Total C O 136 92 44	0
21	R	1	Total C O 35 24 11	0
21	U	1	Total C O 84 61 23	0
21	U	1	Total C O 84 61 23	0
21	U	1	Total C O 84 61 23	0
21	V	1	Total C O 35 24 11	0
21	a	1	Total C O 115 76 39	0

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Mol	Chain	Residues	Atoms	AltConf
21	a	1	Total C O 115 76 39	0
21	a	1	Total C O 115 76 39	0
21	a	1	Total C O 115 76 39	0
21	b	1	Total C O 136 92 44	0
21	b	1	Total C O 136 92 44	0
21	b	1	Total C O 136 92 44	0
21	b	1	Total C O 136 92 44	0
21	i	1	Total C O 35 24 11	0
21	l	1	Total C O 84 61 23	0
21	l	1	Total C O 84 61 23	0
21	l	1	Total C O 84 61 23	0
21	m	1	Total C O 35 24 11	0

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

Mol	Chain	Residues	Atoms	AltConf
22	A	1	Total Cl 1 1	0
22	G	1	Total Cl 1 1	0
22	a	1	Total Cl 1 1	0

- Molecule 23 is CALCIUM ION (three-letter code: CA) (formula: Ca).

Mol	Chain	Residues	Atoms	AltConf
23	L	1	Total Ca 1 1	0
23	U	1	Total Ca 1 1	0

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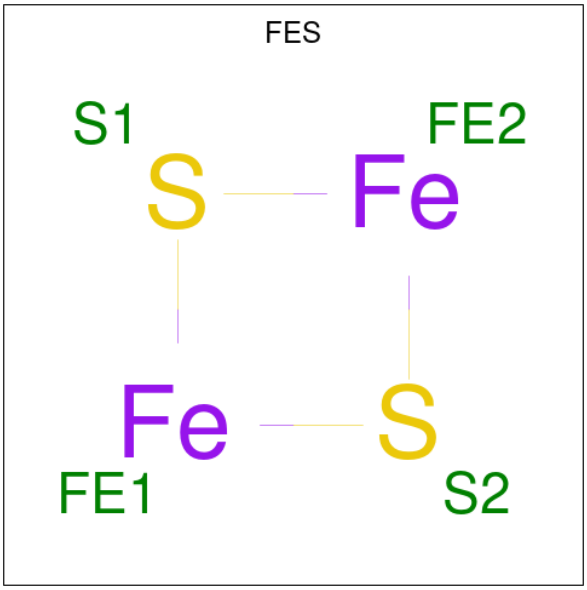
Mol	Chain	Residues	Atoms	AltConf
23	l	1	Total Ca 1 1	0

- Molecule 24 is FE2/S2 (INORGANIC) CLUSTER (three-letter code: FES) (formula: Fe_2S_2).



Mol	Chain	Residues	Atoms	AltConf
24	X	1	Total Fe S 4 2 2	0
24	W	1	Total Fe S 4 2 2	0
24	x	1	Total Fe S 4 2 2	0

- Molecule 25 is water.

Mol	Chain	Residues	Atoms	AltConf
25	A	35	Total O 35 35	0
25	B	35	Total O 35 35	0
25	C	9	Total O 9 9	0
25	D	13	Total O 13 13	0
25	I	4	Total O 4 4	0

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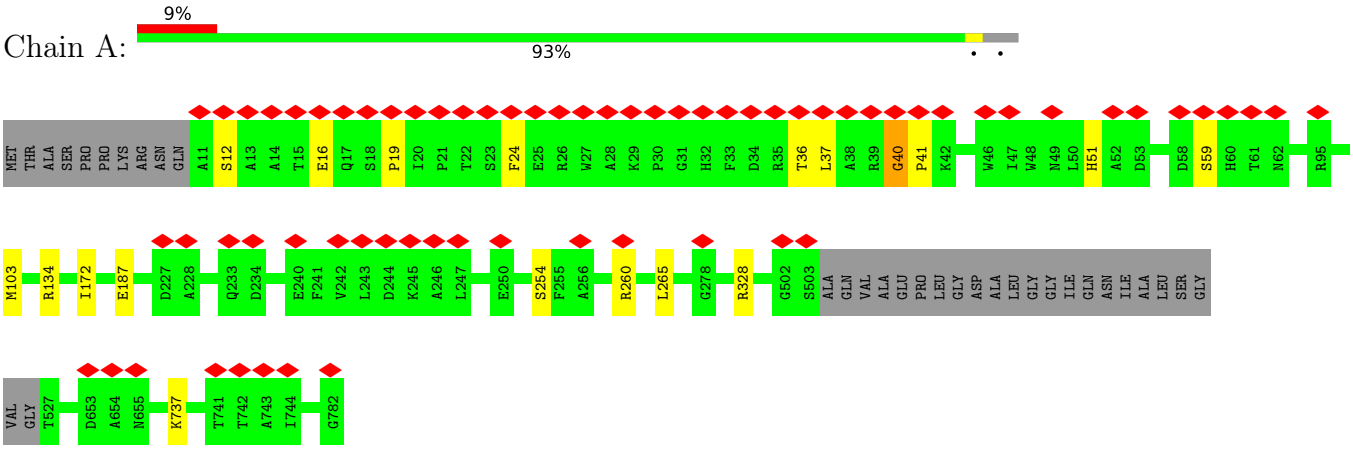
Mol	Chain	Residues	Atoms	AltConf
25	L	15	Total O 15 15	0
25	G	35	Total O 35 35	0
25	H	35	Total O 35 35	0
25	N	9	Total O 9 9	0
25	O	13	Total O 13 13	0
25	R	4	Total O 4 4	0
25	U	15	Total O 15 15	0
25	a	35	Total O 35 35	0
25	b	35	Total O 35 35	0
25	c	9	Total O 9 9	0
25	d	13	Total O 13 13	0
25	i	4	Total O 4 4	0
25	l	15	Total O 15 15	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.

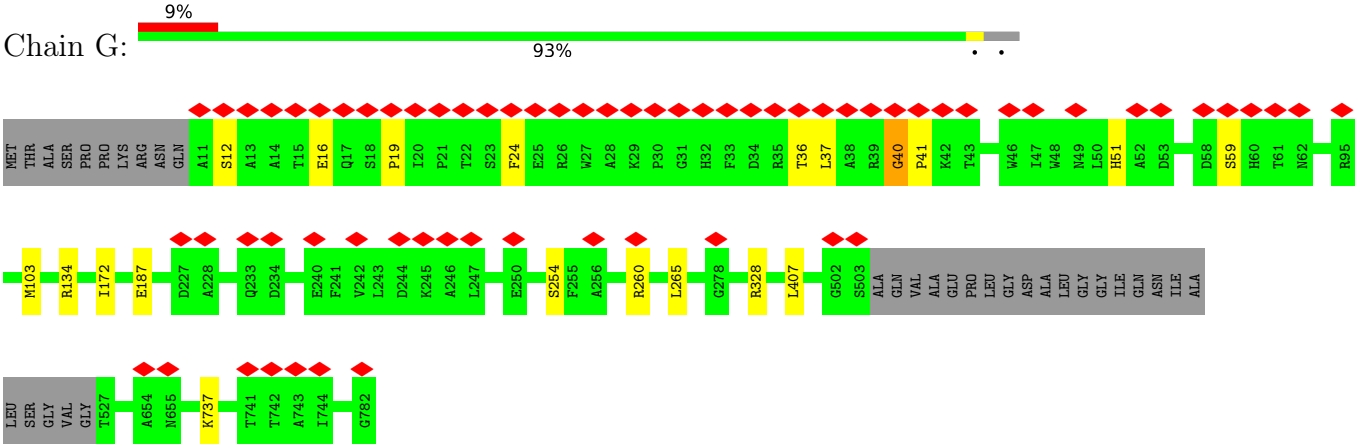
• Molecule 1: Photosystem I P700 chlorophyll a apoprotein A1

Chain A:



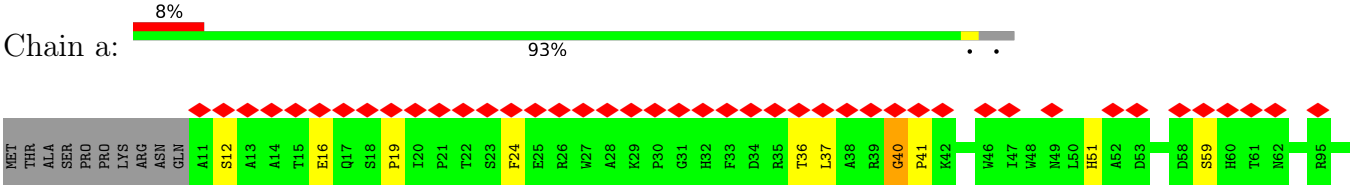
• Molecule 1: Photosystem I P700 chlorophyll a apoprotein A1

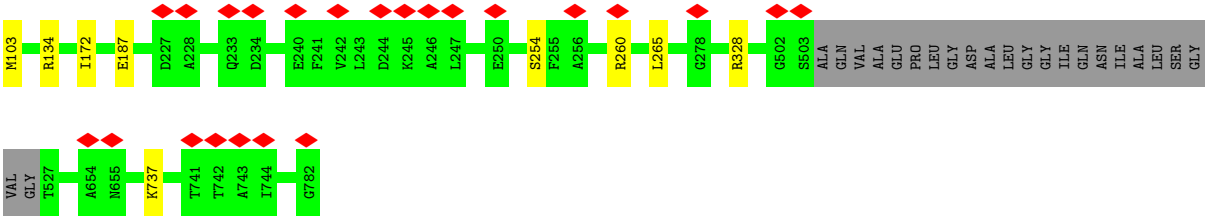
Chain G:



• Molecule 1: Photosystem I P700 chlorophyll a apoprotein A1

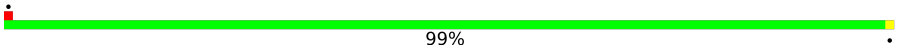
Chain a:

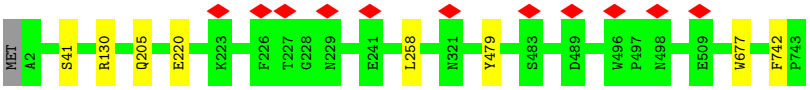




• Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2

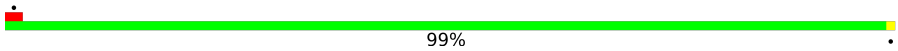
Chain B:

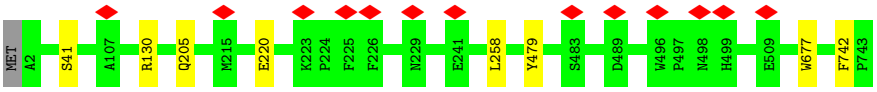




• Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2

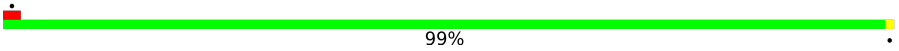
Chain H:

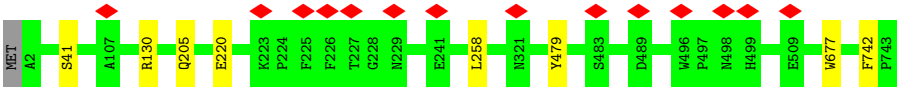




• Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2

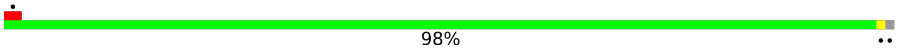
Chain b:

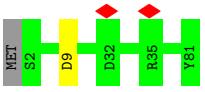




• Molecule 3: PsaC

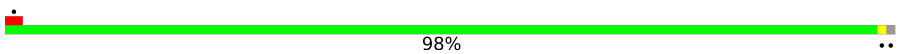
Chain C:

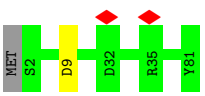




• Molecule 3: PsaC

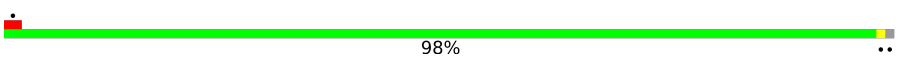
Chain N:

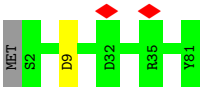




• Molecule 3: PsaC

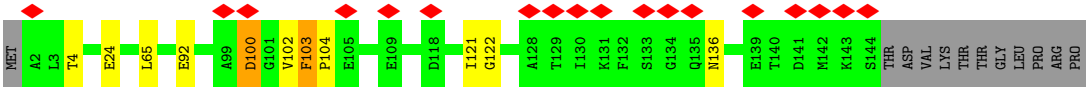
Chain c:





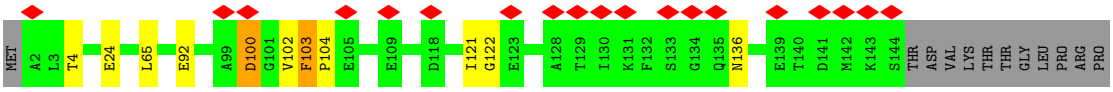
• Molecule 4: Photosystem I 16 kDa polypeptide

Chain D:



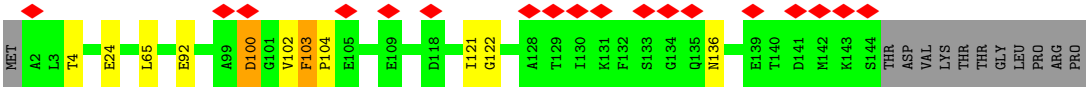
• Molecule 4: Photosystem I 16 kDa polypeptide

Chain O:



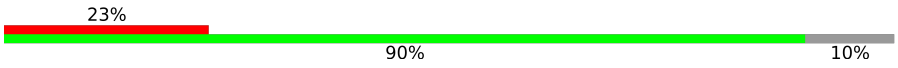
• Molecule 4: Photosystem I 16 kDa polypeptide

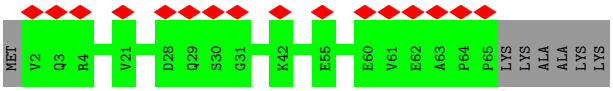
Chain d:



• Molecule 5: Photosystem I reaction center subunit IV

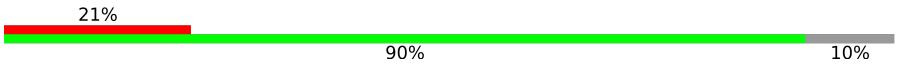
Chain E:

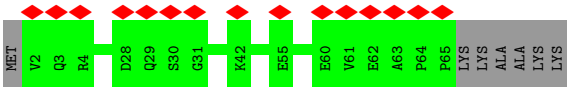




• Molecule 5: Photosystem I reaction center subunit IV

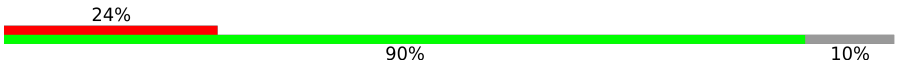
Chain P:

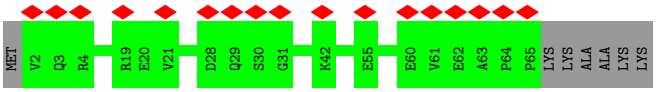




• Molecule 5: Photosystem I reaction center subunit IV

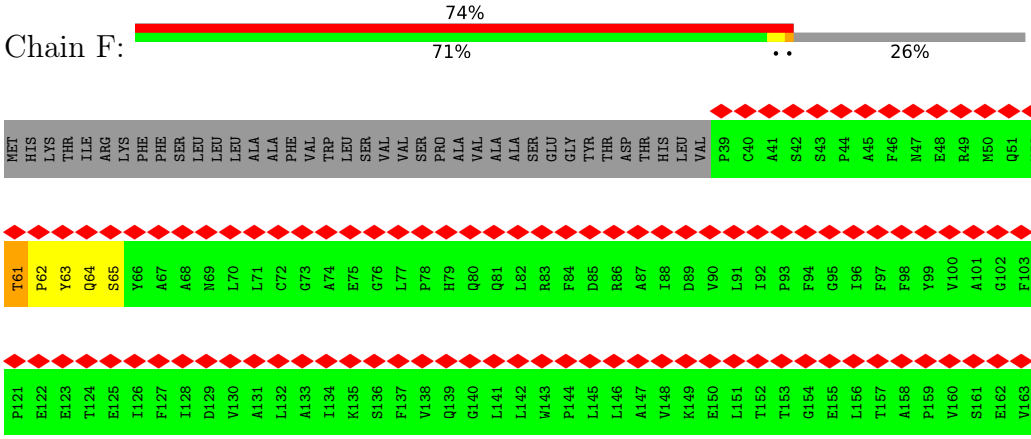
Chain e:





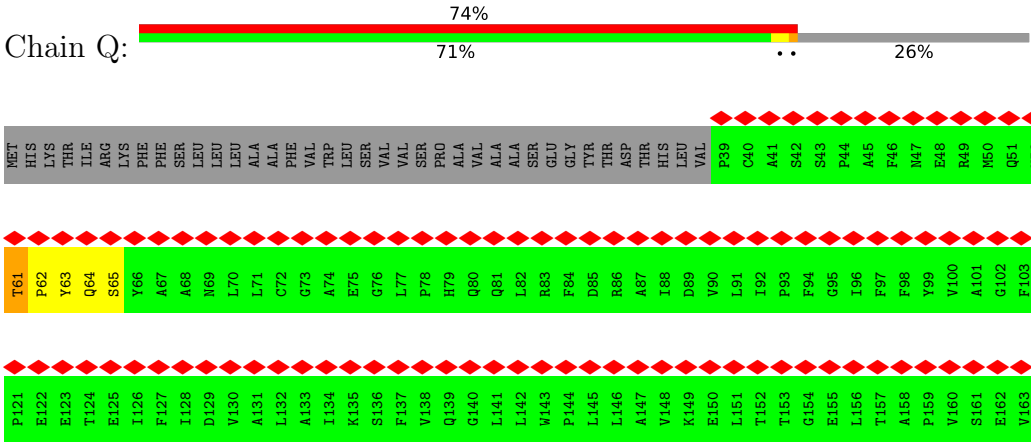
• Molecule 6: PSI-F

Chain F:



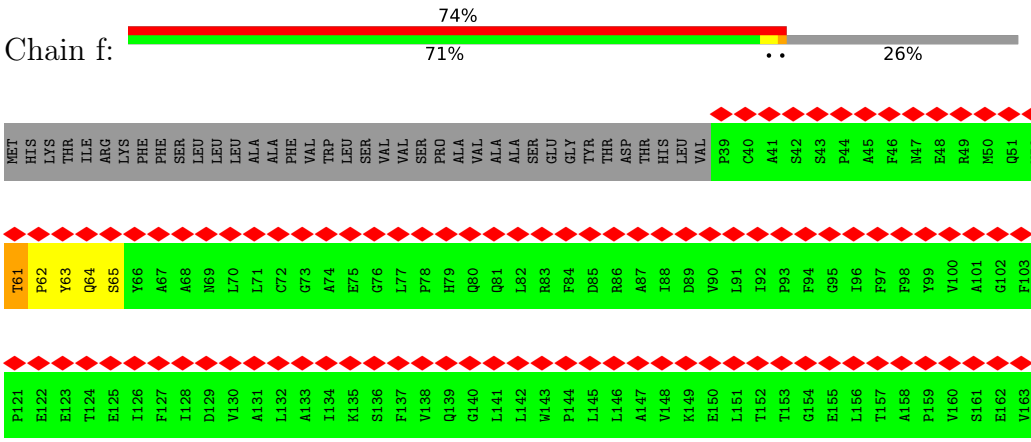
• Molecule 6: PSI-F

Chain Q:



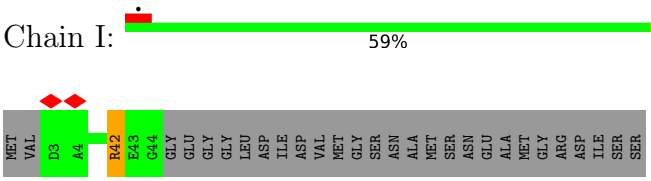
• Molecule 6: PSI-F

Chain f:



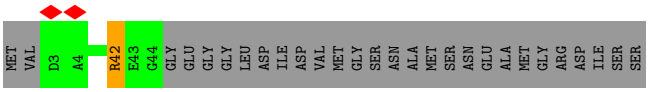
• Molecule 7: PsaI2

Chain I:



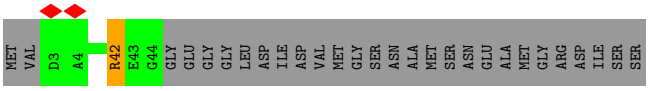
• Molecule 7: PsaI2

Chain R:



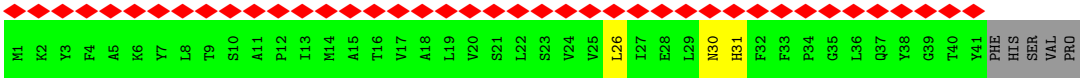
• Molecule 7: PsaI2

Chain i:



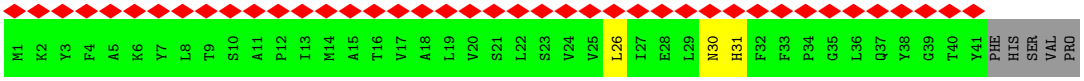
• Molecule 8: Photosystem I reaction center subunit IX

Chain J:



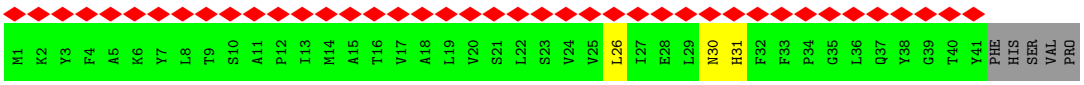
• Molecule 8: Photosystem I reaction center subunit IX

Chain S:



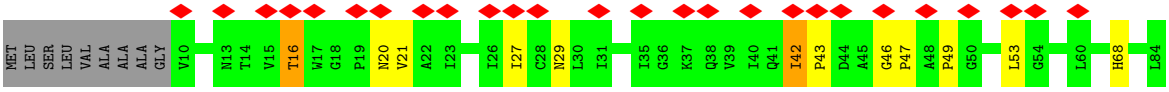
• Molecule 8: Photosystem I reaction center subunit IX

Chain j:



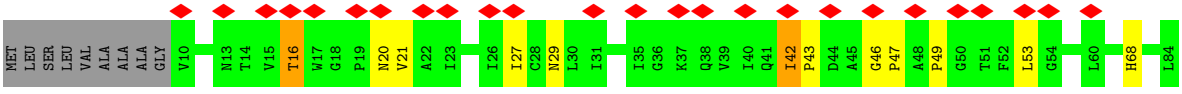
• Molecule 9: Photosystem I reaction center subunit PsaK

Chain K:



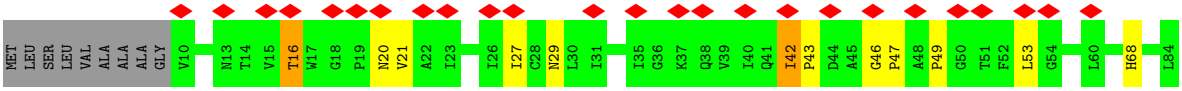
• Molecule 9: Photosystem I reaction center subunit PsaK

Chain T:



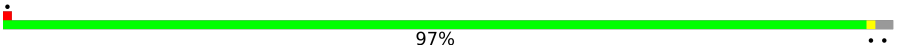
• Molecule 9: Photosystem I reaction center subunit PsaK

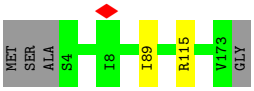
Chain k:



• Molecule 10: PSI subunit V

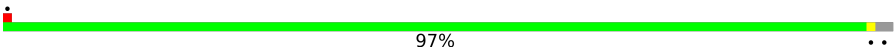
Chain L:

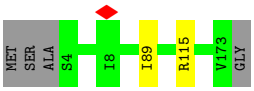




• Molecule 10: PSI subunit V

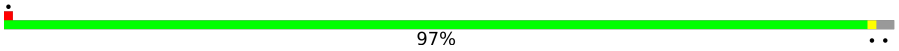
Chain U:

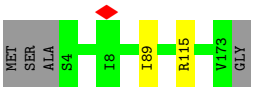




• Molecule 10: PSI subunit V

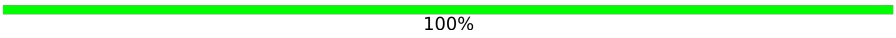
Chain l:





• Molecule 11: PsaM

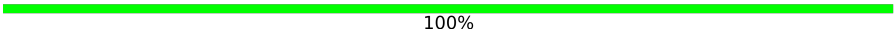
Chain M:



There are no outlier residues recorded for this chain.

• Molecule 11: PsaM

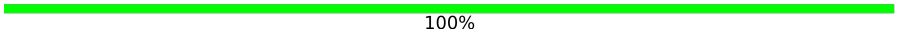
Chain V:



There are no outlier residues recorded for this chain.

• Molecule 11: PsaM

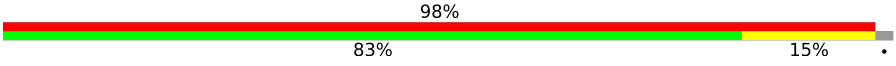
Chain m:

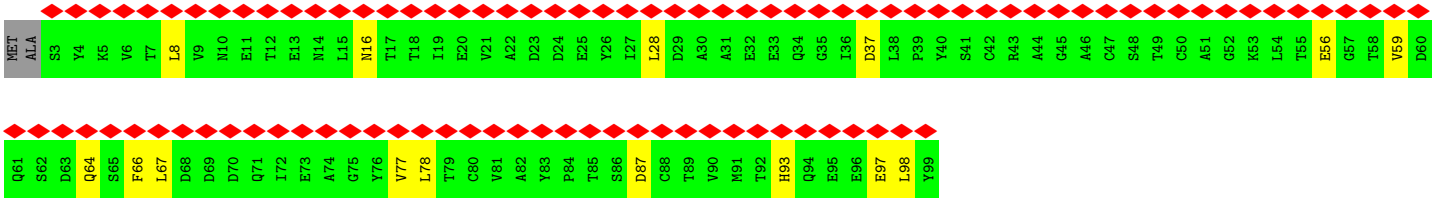


There are no outlier residues recorded for this chain.

• Molecule 12: 2Fe-2S ferredoxin-type domain-containing protein

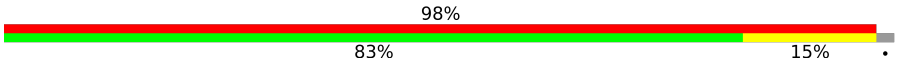
Chain X:

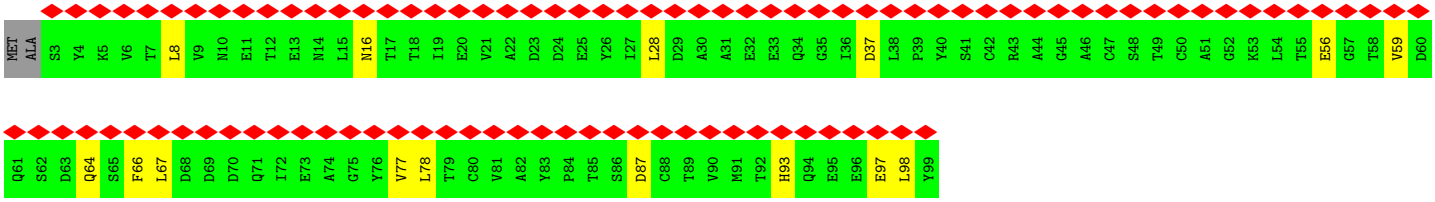




• Molecule 12: 2Fe-2S ferredoxin-type domain-containing protein

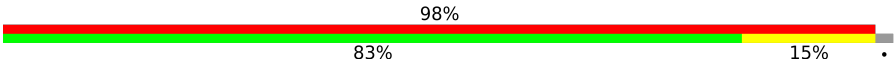
Chain W:

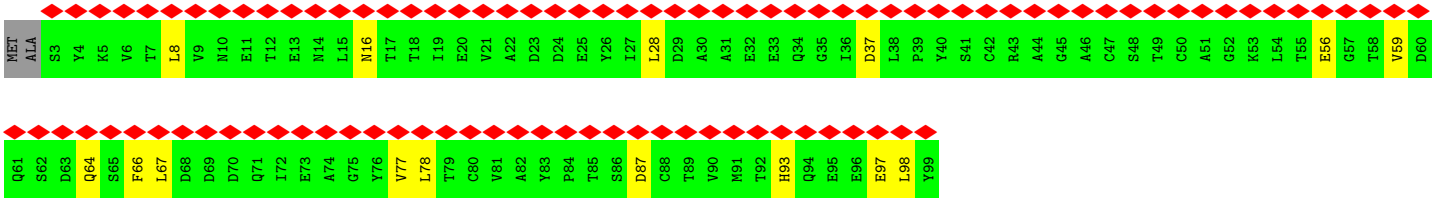




• Molecule 12: 2Fe-2S ferredoxin-type domain-containing protein

Chain x:





4 Experimental information (i)

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	286672	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TITAN KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/Å^2$)	40.8	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	0.315	Depositor
Minimum map value	-0.201	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.010	Depositor
Recommended contour level	0.0302	Depositor
Map size (Å)	316.8, 316.8, 316.8	wwPDB
Map dimensions	384, 384, 384	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.825, 0.825, 0.825	Depositor

5 Model quality (i)

5.1 Standard geometry (i)

Bond lengths and bond angles in the following residue types are not validated in this section: F6C, LHG, BCR, LMG, CLA, PQN, CA, FES, LMT, CL, CL0, SF4

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	0.48	0/6045	0.62	4/8233 (0.0%)
1	G	0.49	0/6045	0.62	5/8233 (0.1%)
1	a	0.48	0/6045	0.62	4/8233 (0.0%)
2	B	0.47	0/6124	0.59	1/8377 (0.0%)
2	H	0.47	0/6124	0.59	1/8377 (0.0%)
2	b	0.47	0/6124	0.59	1/8377 (0.0%)
3	C	0.50	0/608	0.65	1/823 (0.1%)
3	N	0.50	0/608	0.65	1/823 (0.1%)
3	c	0.50	0/608	0.65	1/823 (0.1%)
4	D	0.44	0/1125	0.63	1/1515 (0.1%)
4	O	0.44	0/1125	0.63	1/1515 (0.1%)
4	d	0.44	0/1125	0.63	1/1515 (0.1%)
5	E	0.38	0/517	0.48	0/702
5	P	0.38	0/517	0.48	0/702
5	e	0.38	0/517	0.48	0/702
6	F	0.31	0/847	0.90	1/1168 (0.1%)
6	Q	0.31	0/847	0.90	1/1168 (0.1%)
6	f	0.31	0/847	0.90	1/1168 (0.1%)
7	I	0.52	0/357	0.83	1/491 (0.2%)
7	R	0.52	0/357	0.83	1/491 (0.2%)
7	i	0.52	0/357	0.83	1/491 (0.2%)
8	J	0.31	0/302	0.71	1/414 (0.2%)
8	S	0.31	0/302	0.72	1/414 (0.2%)
8	j	0.31	0/302	0.71	1/414 (0.2%)
9	K	0.47	0/526	1.37	3/724 (0.4%)
9	T	0.47	0/526	1.37	3/724 (0.4%)
9	k	0.47	0/526	1.37	3/724 (0.4%)
10	L	0.50	0/1322	0.59	1/1797 (0.1%)
10	U	0.50	0/1322	0.59	1/1797 (0.1%)
10	l	0.50	0/1322	0.59	1/1797 (0.1%)
11	M	0.34	0/235	0.62	0/319
11	V	0.34	0/235	0.62	0/319

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	$\#\|Z\| > 5$	RMSZ	$\#\|Z\| > 5$
11	m	0.34	0/235	0.62	0/319
12	W	0.66	0/657	0.58	0/900
12	X	0.66	0/657	0.58	0/900
12	x	0.67	0/657	0.58	0/900
All	All	0.48	0/55995	0.66	43/76389 (0.1%)

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
2	B	0	2
2	H	0	2
2	b	0	2
4	D	0	2
4	O	0	2
4	d	0	2
All	All	0	12

There are no bond length outliers.

The worst 5 of 43 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
9	K	42	ILE	C-N-CD	-24.85	65.92	120.60
9	k	42	ILE	C-N-CD	-24.85	65.92	120.60
9	T	42	ILE	C-N-CD	-24.84	65.96	120.60
6	Q	61	THR	C-N-CD	-24.79	66.07	120.60
6	f	61	THR	C-N-CD	-24.78	66.09	120.60

There are no chirality outliers.

5 of 12 planarity outliers are listed below:

Mol	Chain	Res	Type	Group
2	B	677	TRP	Peptide
2	B	742	PHE	Mainchain
4	D	100	ASP	Peptide
4	D	136	ASN	Peptide
2	H	677	TRP	Peptide

5.2 Too-close contacts

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

5.3 Torsion angles

5.3.1 Protein backbone

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	745/782 (95%)	708 (95%)	31 (4%)	6 (1%)	19	49
1	G	745/782 (95%)	708 (95%)	31 (4%)	6 (1%)	19	49
1	a	745/782 (95%)	708 (95%)	31 (4%)	6 (1%)	19	49
2	B	740/743 (100%)	703 (95%)	37 (5%)	0	100	100
2	H	740/743 (100%)	702 (95%)	38 (5%)	0	100	100
2	b	740/743 (100%)	702 (95%)	38 (5%)	0	100	100
3	C	78/81 (96%)	74 (95%)	4 (5%)	0	100	100
3	N	78/81 (96%)	74 (95%)	4 (5%)	0	100	100
3	c	78/81 (96%)	74 (95%)	4 (5%)	0	100	100
4	D	141/155 (91%)	119 (84%)	17 (12%)	5 (4%)	3	13
4	O	141/155 (91%)	119 (84%)	17 (12%)	5 (4%)	3	13
4	d	141/155 (91%)	119 (84%)	17 (12%)	5 (4%)	3	13
5	E	62/71 (87%)	60 (97%)	2 (3%)	0	100	100
5	P	62/71 (87%)	60 (97%)	2 (3%)	0	100	100
5	e	62/71 (87%)	60 (97%)	2 (3%)	0	100	100
6	F	120/168 (71%)	106 (88%)	10 (8%)	4 (3%)	4	14
6	Q	120/168 (71%)	106 (88%)	10 (8%)	4 (3%)	4	14
6	f	120/168 (71%)	106 (88%)	10 (8%)	4 (3%)	4	14
7	I	40/70 (57%)	36 (90%)	4 (10%)	0	100	100
7	R	40/70 (57%)	36 (90%)	4 (10%)	0	100	100
7	i	40/70 (57%)	36 (90%)	4 (10%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
8	J	39/46 (85%)	34 (87%)	5 (13%)	0	100 100
8	S	39/46 (85%)	34 (87%)	5 (13%)	0	100 100
8	j	39/46 (85%)	34 (87%)	5 (13%)	0	100 100
9	K	73/84 (87%)	57 (78%)	12 (16%)	4 (6%)	2 5
9	T	73/84 (87%)	57 (78%)	12 (16%)	4 (6%)	2 5
9	k	73/84 (87%)	57 (78%)	12 (16%)	4 (6%)	2 5
10	L	168/174 (97%)	165 (98%)	3 (2%)	0	100 100
10	U	168/174 (97%)	165 (98%)	3 (2%)	0	100 100
10	l	168/174 (97%)	165 (98%)	3 (2%)	0	100 100
11	M	29/31 (94%)	27 (93%)	2 (7%)	0	100 100
11	V	29/31 (94%)	27 (93%)	2 (7%)	0	100 100
11	m	29/31 (94%)	27 (93%)	2 (7%)	0	100 100
12	W	95/99 (96%)	80 (84%)	13 (14%)	2 (2%)	7 24
12	X	95/99 (96%)	80 (84%)	13 (14%)	2 (2%)	7 24
12	x	95/99 (96%)	80 (84%)	13 (14%)	2 (2%)	7 24
All	All	6990/7512 (93%)	6505 (93%)	422 (6%)	63 (1%)	21 46

5 of 63 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	A	41	PRO
6	F	62	PRO
9	K	43	PRO
9	K	47	PRO
1	G	41	PRO

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	593/626 (95%)	582 (98%)	11 (2%)	57 83

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	G	593/626 (95%)	582 (98%)	11 (2%)	57 83
1	a	593/626 (95%)	582 (98%)	11 (2%)	57 83
2	B	598/599 (100%)	593 (99%)	5 (1%)	81 93
2	H	598/599 (100%)	593 (99%)	5 (1%)	81 93
2	b	598/599 (100%)	593 (99%)	5 (1%)	81 93
3	C	67/68 (98%)	67 (100%)	0	100 100
3	N	67/68 (98%)	67 (100%)	0	100 100
3	c	67/68 (98%)	67 (100%)	0	100 100
4	D	115/127 (91%)	110 (96%)	5 (4%)	29 61
4	O	115/127 (91%)	110 (96%)	5 (4%)	29 61
4	d	115/127 (91%)	110 (96%)	5 (4%)	29 61
5	E	56/61 (92%)	56 (100%)	0	100 100
5	P	56/61 (92%)	56 (100%)	0	100 100
5	e	56/61 (92%)	56 (100%)	0	100 100
6	F	63/140 (45%)	62 (98%)	1 (2%)	62 85
6	Q	63/140 (45%)	62 (98%)	1 (2%)	62 85
6	f	63/140 (45%)	62 (98%)	1 (2%)	62 85
7	I	33/54 (61%)	32 (97%)	1 (3%)	41 73
7	R	33/54 (61%)	32 (97%)	1 (3%)	41 73
7	i	33/54 (61%)	32 (97%)	1 (3%)	41 73
8	J	29/40 (72%)	27 (93%)	2 (7%)	15 40
8	S	29/40 (72%)	27 (93%)	2 (7%)	15 40
8	j	29/40 (72%)	27 (93%)	2 (7%)	15 40
9	K	53/59 (90%)	46 (87%)	7 (13%)	4 11
9	T	53/59 (90%)	46 (87%)	7 (13%)	4 11
9	k	53/59 (90%)	46 (87%)	7 (13%)	4 11
10	L	135/137 (98%)	134 (99%)	1 (1%)	84 95
10	U	135/137 (98%)	134 (99%)	1 (1%)	84 95
10	l	135/137 (98%)	134 (99%)	1 (1%)	84 95
11	M	23/24 (96%)	23 (100%)	0	100 100
11	V	23/24 (96%)	23 (100%)	0	100 100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
11	m	23/24 (96%)	23 (100%)	0	100 100
12	W	52/85 (61%)	39 (75%)	13 (25%)	0 1
12	X	52/85 (61%)	39 (75%)	13 (25%)	0 1
12	x	52/85 (61%)	39 (75%)	13 (25%)	0 1
All	All	5451/6060 (90%)	5313 (98%)	138 (2%)	50 77

5 of 138 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
8	j	30	ASN
9	k	21	VAL
12	x	59	VAL
1	G	37	LEU
1	G	36	THR

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 94 such sidechains are listed below:

Mol	Chain	Res	Type
10	U	14	GLN
1	a	428	ASN
10	U	172	ASN
1	a	108	HIS
1	a	745	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)

Of 417 ligands modelled in this entry, 6 are monoatomic - leaving 411 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
14	CLA	H	1223	-	65,73,73	2.23	18 (27%)	76,113,113	2.62	26 (34%)
14	CLA	a	1101	-	45,53,73	2.58	19 (42%)	52,89,113	2.95	22 (42%)
15	F6C	H	1238	25	69,74,74	2.73	24 (34%)	70,114,114	3.11	29 (41%)
21	LMT	b	6003	-	36,36,36	1.18	4 (11%)	47,47,47	1.60	7 (14%)
14	CLA	a	1123	-	60,68,73	2.33	18 (30%)	70,107,113	2.77	24 (34%)
14	CLA	A	1103	-	65,73,73	2.21	18 (27%)	76,113,113	2.64	26 (34%)
13	CL0	A	1011	-	65,73,73	2.26	20 (30%)	76,113,113	2.54	25 (32%)
14	CLA	G	1133	1	60,68,73	2.32	18 (30%)	70,107,113	2.77	20 (28%)
18	BCR	H	4006	-	41,41,41	2.82	6 (14%)	56,56,56	6.58	18 (32%)
14	CLA	H	1220	-	65,73,73	2.22	19 (29%)	76,113,113	2.58	22 (28%)
18	BCR	b	4004	-	41,41,41	2.82	6 (14%)	56,56,56	6.51	22 (39%)
14	CLA	a	1138	-	55,63,73	2.38	20 (36%)	64,101,113	2.89	26 (40%)
20	LMG	i	5006	-	37,37,55	1.13	3 (8%)	45,45,63	1.21	5 (11%)
14	CLA	G	1107	-	45,53,73	2.56	17 (37%)	52,89,113	2.93	21 (40%)
14	CLA	B	1227	-	45,53,73	2.53	18 (40%)	52,89,113	2.99	19 (36%)
14	CLA	a	1122	-	55,63,73	2.35	19 (34%)	64,101,113	2.71	24 (37%)
14	CLA	A	1112	-	55,63,73	2.44	20 (36%)	64,101,113	2.79	22 (34%)
20	LMG	B	5002	-	46,46,55	1.29	6 (13%)	54,54,63	1.24	6 (11%)
21	LMT	U	6101	-	36,36,36	1.18	5 (13%)	47,47,47	1.32	4 (8%)
21	LMT	l	6101	-	36,36,36	1.18	5 (13%)	47,47,47	1.32	4 (8%)
14	CLA	G	1120	-	45,53,73	2.53	18 (40%)	52,89,113	3.11	19 (36%)
18	BCR	V	4021	-	41,41,41	2.91	6 (14%)	56,56,56	6.64	19 (33%)
14	CLA	b	1233	-	45,53,73	2.57	19 (42%)	52,89,113	2.91	20 (38%)
14	CLA	A	1013	-	60,68,73	2.30	19 (31%)	70,107,113	2.80	22 (31%)
15	F6C	H	1230	-	49,54,74	3.18	25 (51%)	46,90,114	3.80	25 (54%)
21	LMT	A	6001	-	32,32,36	1.30	6 (18%)	43,43,47	1.10	5 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	F6C	H	1219	-	59,64,74	2.96	26 (44%)	58,102,114	3.52	28 (48%)
21	LMT	U	6001	-	13,13,36	0.44	0	12,12,47	0.90	0
14	CLA	H	1218	-	45,53,73	2.57	18 (40%)	52,89,113	3.08	21 (40%)
14	CLA	H	1221	-	65,73,73	2.24	20 (30%)	76,113,113	2.55	23 (30%)
14	CLA	A	1136	-	65,73,73	2.19	19 (29%)	76,113,113	2.62	22 (28%)
14	CLA	H	1239	-	65,73,73	2.23	20 (30%)	76,113,113	2.62	28 (36%)
14	CLA	a	1106	1	60,68,73	2.31	19 (31%)	70,107,113	2.76	25 (35%)
14	CLA	G	1140	-	55,63,73	2.42	18 (32%)	64,101,113	2.69	20 (31%)
14	CLA	b	1209	-	45,53,73	2.56	18 (40%)	52,89,113	2.80	20 (38%)
14	CLA	H	1233	-	45,53,73	2.56	19 (42%)	52,89,113	2.90	20 (38%)
14	CLA	A	1109	-	65,73,73	2.24	20 (30%)	76,113,113	2.67	23 (30%)
19	LHG	A	5002	-	43,43,48	1.00	2 (4%)	47,48,54	1.14	2 (4%)
14	CLA	B	1229	-	60,68,73	2.33	19 (31%)	70,107,113	2.69	23 (32%)
14	CLA	L	1503	-	65,73,73	2.23	19 (29%)	76,113,113	2.56	23 (30%)
14	CLA	B	1222	25	65,73,73	2.22	19 (29%)	76,113,113	2.66	24 (31%)
18	BCR	I	4018	-	41,41,41	2.94	6 (14%)	56,56,56	6.59	16 (28%)
21	LMT	B	6004	-	32,32,36	1.22	5 (15%)	43,43,47	1.16	4 (9%)
21	LMT	G	6003	-	33,33,36	1.22	5 (15%)	44,44,47	0.95	1 (2%)
14	CLA	a	1110	-	45,53,73	2.60	18 (40%)	52,89,113	2.89	19 (36%)
14	CLA	G	1117	-	65,73,73	2.14	19 (29%)	76,113,113	2.62	29 (38%)
14	CLA	U	1501	10	65,73,73	2.18	18 (27%)	76,113,113	2.61	23 (30%)
15	F6C	b	1207	-	69,74,74	2.75	24 (34%)	70,114,114	3.17	28 (40%)
14	CLA	B	1224	-	65,73,73	2.22	17 (26%)	76,113,113	2.64	24 (31%)
14	CLA	b	1231	-	65,73,73	2.18	19 (29%)	76,113,113	2.57	21 (27%)
14	CLA	b	1221	-	65,73,73	2.24	19 (29%)	76,113,113	2.55	23 (30%)
14	CLA	B	1206	-	65,73,73	2.23	18 (27%)	76,113,113	2.60	24 (31%)
17	SF4	C	3003	3	0,12,12	-	-	-		
18	BCR	B	4004	-	41,41,41	2.82	6 (14%)	56,56,56	6.52	22 (39%)
19	LHG	L	5101	-	24,24,48	1.27	2 (8%)	26,26,54	1.48	4 (15%)
14	CLA	b	1223	-	65,73,73	2.23	18 (27%)	76,113,113	2.62	26 (34%)
15	F6C	H	1207	-	69,74,74	2.75	24 (34%)	70,114,114	3.17	27 (38%)
14	CLA	a	1141	-	45,53,73	2.54	20 (44%)	52,89,113	2.98	21 (40%)
14	CLA	a	1131	-	60,68,73	2.30	19 (31%)	70,107,113	2.72	22 (31%)
14	CLA	H	1227	-	45,53,73	2.53	18 (40%)	52,89,113	3.00	19 (36%)
14	CLA	B	1023	-	65,73,73	2.24	20 (30%)	76,113,113	2.85	30 (39%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
16	PQN	B	2002	-	34,34,34	1.55	2 (5%)	42,45,45	1.12	2 (4%)
14	CLA	B	1233	-	45,53,73	2.57	19 (42%)	52,89,113	2.90	20 (38%)
14	CLA	G	1111	-	60,68,73	2.29	18 (30%)	70,107,113	4.77	28 (40%)
14	CLA	a	1119	-	65,73,73	2.22	18 (27%)	76,113,113	2.48	21 (27%)
18	BCR	A	4005	-	41,41,41	3.02	6 (14%)	56,56,56	6.52	23 (41%)
21	LMT	b	6002	-	36,36,36	1.21	6 (16%)	47,47,47	1.03	1 (2%)
14	CLA	B	1235	-	60,68,73	2.29	19 (31%)	70,107,113	2.77	26 (37%)
14	CLA	B	1240	2	65,73,73	2.27	20 (30%)	76,113,113	2.59	22 (28%)
21	LMT	G	6001	-	32,32,36	1.30	6 (18%)	43,43,47	1.10	5 (11%)
18	BCR	G	4001	-	41,41,41	2.88	6 (14%)	56,56,56	6.56	17 (30%)
19	LHG	a	5001	-	41,41,48	1.05	2 (4%)	44,47,54	0.98	2 (4%)
18	BCR	G	4006	-	41,41,41	2.94	6 (14%)	56,56,56	6.57	23 (41%)
21	LMT	B	6001	-	36,36,36	1.19	5 (13%)	47,47,47	0.96	2 (4%)
14	CLA	a	1111	-	60,68,73	2.30	18 (30%)	70,107,113	4.77	27 (38%)
17	SF4	c	3002	3	0,12,12	-	-	-		
21	LMT	R	6001	-	36,36,36	1.17	5 (13%)	47,47,47	1.03	2 (4%)
15	F6C	A	1121	-	49,54,74	3.13	24 (48%)	46,90,114	3.77	27 (58%)
15	F6C	b	1237	25	69,74,74	2.68	23 (33%)	70,114,114	3.17	30 (42%)
21	LMT	A	6002	-	29,29,36	1.46	6 (20%)	40,40,47	1.24	4 (10%)
14	CLA	l	1501	10	65,73,73	2.18	18 (27%)	76,113,113	2.60	23 (30%)
14	CLA	B	1231	-	65,73,73	2.19	19 (29%)	76,113,113	2.57	21 (27%)
21	LMT	H	6003	-	36,36,36	1.18	3 (8%)	47,47,47	1.60	7 (14%)
18	BCR	b	4014	-	41,41,41	2.81	6 (14%)	56,56,56	6.63	20 (35%)
14	CLA	A	1102	-	50,58,73	2.59	21 (42%)	58,95,113	2.95	24 (41%)
14	CLA	a	1130	-	55,63,73	2.46	19 (34%)	64,101,113	2.66	21 (32%)
14	CLA	b	1206	-	65,73,73	2.23	19 (29%)	76,113,113	2.61	24 (31%)
21	LMT	H	6004	-	32,32,36	1.21	4 (12%)	43,43,47	1.16	4 (9%)
14	CLA	H	1224	-	65,73,73	2.23	17 (26%)	76,113,113	2.65	24 (31%)
14	CLA	b	1205	-	65,73,73	2.17	17 (26%)	76,113,113	2.67	24 (31%)
16	PQN	A	2001	-	34,34,34	1.50	2 (5%)	42,45,45	1.19	4 (9%)
20	LMG	a	5003	-	46,46,55	1.29	5 (10%)	54,54,63	1.25	4 (7%)
14	CLA	V	1501	-	50,58,73	2.53	18 (36%)	58,95,113	2.91	24 (41%)
14	CLA	G	1109	-	65,73,73	2.24	20 (30%)	76,113,113	2.66	23 (30%)
14	CLA	H	1231	-	65,73,73	2.19	19 (29%)	76,113,113	2.57	21 (27%)
14	CLA	A	1120	-	45,53,73	2.53	18 (40%)	52,89,113	3.11	19 (36%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
14	CLA	G	1119	-	65,73,73	2.23	18 (27%)	76,113,113	2.48	21 (27%)
14	CLA	a	1135	-	50,58,73	2.56	20 (40%)	58,95,113	2.94	24 (41%)
14	CLA	H	1236	-	55,63,73	2.33	19 (34%)	64,101,113	2.98	23 (35%)
15	F6C	B	1237	25	69,74,74	2.68	23 (33%)	70,114,114	3.17	30 (42%)
14	CLA	a	1013	-	60,68,73	2.31	19 (31%)	70,107,113	2.79	22 (31%)
18	BCR	A	4003	-	41,41,41	2.96	6 (14%)	56,56,56	6.84	25 (44%)
21	LMT	m	6000	-	36,36,36	1.19	6 (16%)	47,47,47	0.97	1 (2%)
14	CLA	a	1107	-	45,53,73	2.56	17 (37%)	52,89,113	2.92	21 (40%)
19	LHG	G	5001	-	41,41,48	1.05	2 (4%)	44,47,54	0.98	2 (4%)
14	CLA	A	1108	-	45,53,73	2.62	19 (42%)	52,89,113	2.91	22 (42%)
18	BCR	b	4006	-	41,41,41	2.82	6 (14%)	56,56,56	6.58	18 (32%)
14	CLA	b	1217	-	45,53,73	2.53	18 (40%)	52,89,113	2.96	20 (38%)
21	LMT	G	6004	-	24,24,36	1.05	3 (12%)	29,29,47	1.07	2 (6%)
14	CLA	B	1204	-	65,73,73	2.21	19 (29%)	76,113,113	2.60	23 (30%)
14	CLA	A	1141	-	45,53,73	2.55	20 (44%)	52,89,113	2.98	21 (40%)
14	CLA	A	1137	-	50,58,73	2.52	18 (36%)	58,95,113	3.01	22 (37%)
20	LMG	H	5002	-	46,46,55	1.29	6 (13%)	54,54,63	1.24	6 (11%)
21	LMT	U	6002	-	36,36,36	1.29	5 (13%)	47,47,47	1.21	7 (14%)
14	CLA	b	1215	-	60,68,73	2.28	19 (31%)	70,107,113	2.62	20 (28%)
17	SF4	a	3001	2,1	0,12,12	-	-	-		
18	BCR	l	4019	-	41,41,41	3.08	7 (17%)	56,56,56	6.50	28 (50%)
14	CLA	A	1129	-	50,58,73	2.51	19 (38%)	58,95,113	3.08	25 (43%)
18	BCR	G	4005	-	41,41,41	3.02	7 (17%)	56,56,56	6.51	23 (41%)
15	F6C	B	1238	25	69,74,74	2.73	24 (34%)	70,114,114	3.12	29 (41%)
18	BCR	R	4018	-	41,41,41	2.94	6 (14%)	56,56,56	6.59	16 (28%)
14	CLA	H	1201	-	65,73,73	2.20	20 (30%)	76,113,113	2.71	25 (32%)
21	LMT	l	6002	-	36,36,36	1.29	5 (13%)	47,47,47	1.22	7 (14%)
15	F6C	H	1237	25	69,74,74	2.68	23 (33%)	70,114,114	3.18	30 (42%)
14	CLA	a	1116	-	55,63,73	2.42	19 (34%)	64,101,113	2.75	23 (35%)
14	CLA	G	1129	-	50,58,73	2.51	19 (38%)	58,95,113	3.08	25 (43%)
14	CLA	a	1105	-	45,53,73	2.61	19 (42%)	52,89,113	2.94	20 (38%)
14	CLA	b	1021	-	65,73,73	2.22	19 (29%)	76,113,113	2.47	27 (35%)
20	LMG	G	5003	-	46,46,55	1.29	5 (10%)	54,54,63	1.25	4 (7%)
14	CLA	A	1133	1	60,68,73	2.31	18 (30%)	70,107,113	2.76	20 (28%)
14	CLA	G	1126	-	60,68,73	2.34	17 (28%)	70,107,113	2.59	20 (28%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
14	CLA	B	1215	-	60,68,73	2.27	19 (31%)	70,107,113	2.62	20 (28%)
14	CLA	a	1114	-	45,53,73	2.58	19 (42%)	52,89,113	2.88	19 (36%)
14	CLA	b	1023	-	65,73,73	2.24	20 (30%)	76,113,113	2.86	30 (39%)
14	CLA	G	1124	25	55,63,73	2.40	18 (32%)	64,101,113	2.83	21 (32%)
14	CLA	B	1214	-	60,68,73	2.34	21 (35%)	70,107,113	2.67	28 (40%)
14	CLA	a	1128	-	60,68,73	2.34	19 (31%)	70,107,113	2.69	23 (32%)
14	CLA	a	1126	-	60,68,73	2.33	17 (28%)	70,107,113	2.59	20 (28%)
14	CLA	a	1118	-	55,63,73	2.42	18 (32%)	64,101,113	2.79	22 (34%)
14	CLA	b	1232	-	45,53,73	2.58	20 (44%)	52,89,113	2.89	20 (38%)
21	LMT	H	6001	-	36,36,36	1.19	5 (13%)	47,47,47	0.96	1 (2%)
14	CLA	B	1203	-	65,73,73	2.17	19 (29%)	76,113,113	2.69	22 (28%)
21	LMT	L	6001	-	13,13,36	0.44	0	12,12,47	0.90	0
14	CLA	H	1206	-	65,73,73	2.24	19 (29%)	76,113,113	2.60	24 (31%)
14	CLA	a	1103	-	65,73,73	2.21	18 (27%)	76,113,113	2.64	26 (34%)
14	CLA	G	1122	-	55,63,73	2.35	19 (34%)	64,101,113	2.71	25 (39%)
18	BCR	B	4014	-	41,41,41	2.81	6 (14%)	56,56,56	6.63	20 (35%)
19	LHG	L	5102	-	48,48,48	0.90	2 (4%)	51,54,54	1.04	3 (5%)
14	CLA	B	1217	-	45,53,73	2.53	18 (40%)	52,89,113	2.95	20 (38%)
14	CLA	b	1234	-	65,73,73	2.22	19 (29%)	76,113,113	2.54	24 (31%)
14	CLA	B	1226	-	65,73,73	2.27	18 (27%)	76,113,113	2.62	24 (31%)
18	BCR	U	4019	-	41,41,41	3.09	7 (17%)	56,56,56	6.49	28 (50%)
14	CLA	H	1023	-	65,73,73	2.24	20 (30%)	76,113,113	2.85	30 (39%)
14	CLA	A	1140	-	55,63,73	2.42	18 (32%)	64,101,113	2.69	21 (32%)
16	PQN	H	2002	-	34,34,34	1.56	2 (5%)	42,45,45	1.12	2 (4%)
14	CLA	G	1102	-	50,58,73	2.59	21 (42%)	58,95,113	2.96	24 (41%)
21	LMT	A	6004	-	24,24,36	1.06	3 (12%)	29,29,47	1.07	2 (6%)
14	CLA	G	1116	-	55,63,73	2.41	19 (34%)	64,101,113	2.74	22 (34%)
13	CL0	a	1011	-	65,73,73	2.26	20 (30%)	76,113,113	2.54	25 (32%)
18	BCR	G	4003	-	41,41,41	2.95	6 (14%)	56,56,56	6.84	25 (44%)
16	PQN	a	2001	-	34,34,34	1.50	2 (5%)	42,45,45	1.19	4 (9%)
14	CLA	G	1103	-	65,73,73	2.21	18 (27%)	76,113,113	2.64	26 (34%)
14	CLA	L	1501	10	65,73,73	2.18	18 (27%)	76,113,113	2.61	23 (30%)
14	CLA	A	1123	-	60,68,73	2.32	18 (30%)	70,107,113	2.77	24 (34%)
14	CLA	H	1240	2	65,73,73	2.27	20 (30%)	76,113,113	2.59	22 (28%)
14	CLA	A	1111	-	60,68,73	2.29	18 (30%)	70,107,113	4.77	28 (40%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	F6C	B	1219	-	59,64,74	2.96	26 (44%)	58,102,114	3.52	27 (46%)
14	CLA	a	1125	-	65,73,73	2.16	18 (27%)	76,113,113	2.69	23 (30%)
18	BCR	B	4009	-	41,41,41	2.94	6 (14%)	56,56,56	6.51	23 (41%)
18	BCR	A	4001	-	41,41,41	2.88	6 (14%)	56,56,56	6.56	17 (30%)
18	BCR	T	4001	-	41,41,41	2.90	6 (14%)	56,56,56	6.45	22 (39%)
14	CLA	G	1138	-	55,63,73	2.38	20 (36%)	64,101,113	2.89	26 (40%)
14	CLA	k	1401	-	45,53,73	2.59	19 (42%)	52,89,113	3.03	22 (42%)
14	CLA	A	1138	-	55,63,73	2.38	20 (36%)	64,101,113	2.89	26 (40%)
14	CLA	b	1236	-	55,63,73	2.32	18 (32%)	64,101,113	2.98	23 (35%)
14	CLA	b	1216	-	65,73,73	2.22	19 (29%)	76,113,113	2.42	21 (27%)
14	CLA	a	1102	-	50,58,73	2.59	21 (42%)	58,95,113	2.96	24 (41%)
14	CLA	b	1201	-	65,73,73	2.20	20 (30%)	76,113,113	2.71	25 (32%)
14	CLA	a	1109	-	65,73,73	2.24	20 (30%)	76,113,113	2.67	23 (30%)
18	BCR	b	4017	-	41,41,41	3.05	8 (19%)	56,56,56	6.72	20 (35%)
14	CLA	H	1226	-	65,73,73	2.27	18 (27%)	76,113,113	2.63	24 (31%)
18	BCR	m	4021	-	41,41,41	2.91	6 (14%)	56,56,56	6.64	19 (33%)
17	SF4	C	3002	3	0,12,12	-	-	-		
14	CLA	a	1139	-	45,53,73	2.57	20 (44%)	52,89,113	2.84	20 (38%)
24	FES	X	101	12	0,4,4	-	-	-		
14	CLA	b	1228	-	55,63,73	2.45	20 (36%)	64,101,113	2.66	26 (40%)
14	CLA	A	1101	-	45,53,73	2.57	19 (42%)	52,89,113	2.94	22 (42%)
14	CLA	b	1022	-	55,63,73	2.38	17 (30%)	64,101,113	2.73	24 (37%)
14	CLA	H	1210	-	65,73,73	2.21	18 (27%)	76,113,113	2.82	25 (32%)
14	CLA	G	1104	-	65,73,73	2.15	19 (29%)	76,113,113	2.80	24 (31%)
14	CLA	a	1120	-	45,53,73	2.53	18 (40%)	52,89,113	3.10	19 (36%)
18	BCR	b	4005	-	41,41,41	2.84	6 (14%)	56,56,56	6.53	20 (35%)
14	CLA	G	1139	-	45,53,73	2.56	20 (44%)	52,89,113	2.84	20 (38%)
14	CLA	U	1502	-	60,68,73	2.28	18 (30%)	70,107,113	2.69	21 (30%)
14	CLA	a	1012	25	65,73,73	2.20	17 (26%)	76,113,113	2.52	25 (32%)
14	CLA	a	1132	-	65,73,73	2.19	18 (27%)	76,113,113	2.65	23 (30%)
18	BCR	I	4020	-	41,41,41	3.17	9 (21%)	56,56,56	6.78	21 (37%)
21	LMT	l	6001	-	13,13,36	0.44	0	12,12,47	0.91	0
13	CL0	G	1011	-	65,73,73	2.26	20 (30%)	76,113,113	2.54	25 (32%)
14	CLA	G	1134	1	45,53,73	2.55	20 (44%)	52,89,113	2.92	20 (38%)
14	CLA	B	1234	-	65,73,73	2.22	19 (29%)	76,113,113	2.54	24 (31%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	BCR	G	4004	-	41,41,41	3.04	6 (14%)	56,56,56	6.67	25 (44%)
14	CLA	b	1224	-	65,73,73	2.22	17 (26%)	76,113,113	2.64	23 (30%)
14	CLA	A	1106	1	60,68,73	2.31	18 (30%)	70,107,113	2.76	25 (35%)
14	CLA	a	1108	-	45,53,73	2.61	19 (42%)	52,89,113	2.90	22 (42%)
21	LMT	L	6002	-	36,36,36	1.29	5 (13%)	47,47,47	1.21	7 (14%)
14	CLA	G	1112	-	55,63,73	2.44	20 (36%)	64,101,113	2.79	22 (34%)
14	CLA	b	1210	-	65,73,73	2.21	19 (29%)	76,113,113	2.82	25 (32%)
15	F6C	B	1207	-	69,74,74	2.75	24 (34%)	70,114,114	3.16	28 (40%)
18	BCR	L	4022	-	41,41,41	3.00	6 (14%)	56,56,56	6.39	22 (39%)
14	CLA	A	1134	1	45,53,73	2.54	20 (44%)	52,89,113	2.92	20 (38%)
14	CLA	b	1239	-	65,73,73	2.23	19 (29%)	76,113,113	2.63	27 (35%)
21	LMT	V	6000	-	36,36,36	1.19	6 (16%)	47,47,47	0.97	1 (2%)
14	CLA	G	1135	-	50,58,73	2.56	20 (40%)	58,95,113	2.95	25 (43%)
14	CLA	b	1227	-	45,53,73	2.52	18 (40%)	52,89,113	2.99	19 (36%)
18	BCR	M	4021	-	41,41,41	2.91	6 (14%)	56,56,56	6.65	19 (33%)
14	CLA	B	1216	-	65,73,73	2.21	19 (29%)	76,113,113	2.42	21 (27%)
14	CLA	B	1236	-	55,63,73	2.33	18 (32%)	64,101,113	2.98	23 (35%)
18	BCR	B	4010	-	41,41,41	3.03	7 (17%)	56,56,56	6.85	21 (37%)
14	CLA	B	1210	-	65,73,73	2.21	19 (29%)	76,113,113	2.82	25 (32%)
14	CLA	b	1220	-	65,73,73	2.22	19 (29%)	76,113,113	2.57	22 (28%)
14	CLA	H	1214	-	60,68,73	2.34	21 (35%)	70,107,113	2.66	28 (40%)
14	CLA	a	1117	-	65,73,73	2.15	19 (29%)	76,113,113	2.62	28 (36%)
14	CLA	H	1021	-	65,73,73	2.22	19 (29%)	76,113,113	2.47	27 (35%)
18	BCR	B	4017	-	41,41,41	3.05	8 (19%)	56,56,56	6.71	20 (35%)
18	BCR	a	4002	-	41,41,41	2.85	6 (14%)	56,56,56	6.52	25 (44%)
14	CLA	B	1221	-	65,73,73	2.24	19 (29%)	76,113,113	2.55	23 (30%)
14	CLA	a	1127	-	65,73,73	2.22	19 (29%)	76,113,113	2.54	21 (27%)
21	LMT	a	6002	-	29,29,36	1.46	6 (20%)	40,40,47	1.23	4 (10%)
21	LMT	I	6001	-	36,36,36	1.18	5 (13%)	47,47,47	1.03	2 (4%)
18	BCR	L	4019	-	41,41,41	3.09	7 (17%)	56,56,56	6.50	28 (50%)
14	CLA	b	1225	-	65,73,73	2.26	19 (29%)	76,113,113	2.48	19 (25%)
14	CLA	G	1123	-	60,68,73	2.33	18 (30%)	70,107,113	2.77	24 (34%)
14	CLA	G	1101	-	45,53,73	2.57	19 (42%)	52,89,113	2.94	22 (42%)
14	CLA	l	1502	-	60,68,73	2.27	18 (30%)	70,107,113	2.69	21 (30%)
15	F6C	G	1121	-	49,54,74	3.13	24 (48%)	46,90,114	3.77	27 (58%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	BCR	G	4002	-	41,41,41	2.85	6 (14%)	56,56,56	6.52	25 (44%)
14	CLA	G	1106	1	60,68,73	2.31	18 (30%)	70,107,113	2.77	25 (35%)
18	BCR	B	4005	-	41,41,41	2.83	6 (14%)	56,56,56	6.53	20 (35%)
18	BCR	a	4001	-	41,41,41	2.88	6 (14%)	56,56,56	6.56	17 (30%)
14	CLA	b	1229	-	60,68,73	2.33	19 (31%)	70,107,113	2.69	23 (32%)
21	LMT	B	6003	-	36,36,36	1.18	4 (11%)	47,47,47	1.60	7 (14%)
21	LMT	G	6002	-	29,29,36	1.46	6 (20%)	40,40,47	1.23	4 (10%)
14	CLA	T	1401	-	45,53,73	2.59	20 (44%)	52,89,113	3.03	22 (42%)
14	CLA	A	1124	25	55,63,73	2.40	18 (32%)	64,101,113	2.83	21 (32%)
14	CLA	B	1223	-	65,73,73	2.23	18 (27%)	76,113,113	2.62	26 (34%)
14	CLA	b	1203	-	65,73,73	2.17	19 (29%)	76,113,113	2.69	22 (28%)
21	LMT	b	6004	-	32,32,36	1.22	5 (15%)	43,43,47	1.17	4 (9%)
14	CLA	A	1117	-	65,73,73	2.15	19 (29%)	76,113,113	2.62	28 (36%)
14	CLA	G	1110	-	45,53,73	2.61	18 (40%)	52,89,113	2.89	19 (36%)
14	CLA	H	1212	-	45,53,73	2.54	18 (40%)	52,89,113	2.96	22 (42%)
18	BCR	i	4018	-	41,41,41	2.94	6 (14%)	56,56,56	6.59	16 (28%)
14	CLA	A	1122	-	55,63,73	2.35	19 (34%)	64,101,113	2.71	24 (37%)
14	CLA	H	1203	-	65,73,73	2.17	19 (29%)	76,113,113	2.69	22 (28%)
14	CLA	H	1209	-	45,53,73	2.55	18 (40%)	52,89,113	2.80	20 (38%)
18	BCR	A	4002	-	41,41,41	2.85	6 (14%)	56,56,56	6.53	25 (44%)
21	LMT	B	6002	-	36,36,36	1.20	6 (16%)	47,47,47	1.02	1 (2%)
17	SF4	N	3002	3	0,12,12	-	-	-		
18	BCR	H	4014	-	41,41,41	2.81	6 (14%)	56,56,56	6.63	20 (35%)
18	BCR	A	4006	-	41,41,41	2.94	6 (14%)	56,56,56	6.57	24 (42%)
14	CLA	b	1226	-	65,73,73	2.27	18 (27%)	76,113,113	2.62	24 (31%)
14	CLA	H	1022	-	55,63,73	2.38	18 (32%)	64,101,113	2.73	24 (37%)
18	BCR	i	4020	-	41,41,41	3.17	9 (21%)	56,56,56	6.78	21 (37%)
21	LMT	a	6001	-	32,32,36	1.31	6 (18%)	43,43,47	1.10	5 (11%)
14	CLA	a	1136	-	65,73,73	2.19	19 (29%)	76,113,113	2.61	22 (28%)
14	CLA	B	1228	-	55,63,73	2.45	20 (36%)	64,101,113	2.66	26 (40%)
14	CLA	b	1208	-	60,68,73	2.34	19 (31%)	70,107,113	2.75	26 (37%)
14	CLA	H	1216	-	65,73,73	2.21	19 (29%)	76,113,113	2.41	21 (27%)
19	LHG	A	5001	-	41,41,48	1.05	2 (4%)	44,47,54	0.98	2 (4%)
14	CLA	G	1127	-	65,73,73	2.22	19 (29%)	76,113,113	2.53	21 (27%)
14	CLA	H	1225	-	65,73,73	2.26	19 (29%)	76,113,113	2.48	19 (25%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
18	BCR	K	4001	-	41,41,41	2.90	6 (14%)	56,56,56	6.45	22 (39%)
14	CLA	m	1501	-	50,58,73	2.52	18 (36%)	58,95,113	2.91	24 (41%)
18	BCR	b	4010	-	41,41,41	3.03	7 (17%)	56,56,56	6.86	21 (37%)
14	CLA	H	1229	-	60,68,73	2.33	19 (31%)	70,107,113	2.70	23 (32%)
18	BCR	A	4004	-	41,41,41	3.04	6 (14%)	56,56,56	6.67	25 (44%)
19	LHG	a	5002	-	43,43,48	1.00	2 (4%)	47,48,54	1.13	2 (4%)
14	CLA	A	1104	-	65,73,73	2.15	19 (29%)	76,113,113	2.79	24 (31%)
14	CLA	H	1228	-	55,63,73	2.44	20 (36%)	64,101,113	2.66	26 (40%)
14	CLA	b	1222	25	65,73,73	2.21	19 (29%)	76,113,113	2.67	25 (32%)
14	CLA	B	1212	-	45,53,73	2.55	19 (42%)	52,89,113	2.97	22 (42%)
14	CLA	A	1113	-	45,53,73	2.55	18 (40%)	52,89,113	2.87	21 (40%)
21	LMT	b	6001	-	36,36,36	1.18	5 (13%)	47,47,47	0.96	2 (4%)
24	FES	W	101	12	0,4,4	-	-	-		
14	CLA	H	1215	-	60,68,73	2.27	19 (31%)	70,107,113	2.62	20 (28%)
21	LMT	H	6002	-	36,36,36	1.20	6 (16%)	47,47,47	1.02	1 (2%)
14	CLA	B	1022	-	55,63,73	2.38	18 (32%)	64,101,113	2.74	24 (37%)
14	CLA	G	1132	-	65,73,73	2.19	18 (27%)	76,113,113	2.64	23 (30%)
15	F6C	b	1230	-	49,54,74	3.18	25 (51%)	46,90,114	3.79	25 (54%)
14	CLA	B	1225	-	65,73,73	2.27	19 (29%)	76,113,113	2.48	19 (25%)
20	LMG	A	5003	-	46,46,55	1.29	5 (10%)	54,54,63	1.25	4 (7%)
14	CLA	B	1205	-	65,73,73	2.17	17 (26%)	76,113,113	2.67	24 (31%)
14	CLA	B	1201	-	65,73,73	2.20	20 (30%)	76,113,113	2.71	25 (32%)
14	CLA	G	1130	-	55,63,73	2.46	19 (34%)	64,101,113	2.65	21 (32%)
14	CLA	b	1240	2	65,73,73	2.27	20 (30%)	76,113,113	2.59	22 (28%)
21	LMT	L	6101	-	36,36,36	1.18	5 (13%)	47,47,47	1.32	4 (8%)
14	CLA	L	1502	-	60,68,73	2.27	18 (30%)	70,107,113	2.69	21 (30%)
14	CLA	A	1115	-	65,73,73	2.26	18 (27%)	76,113,113	2.64	26 (34%)
14	CLA	a	1112	-	55,63,73	2.44	20 (36%)	64,101,113	2.80	22 (34%)
14	CLA	H	1208	-	60,68,73	2.33	19 (31%)	70,107,113	2.76	26 (37%)
18	BCR	l	4022	-	41,41,41	3.01	6 (14%)	56,56,56	6.40	22 (39%)
18	BCR	a	4005	-	41,41,41	3.03	7 (17%)	56,56,56	6.52	23 (41%)
14	CLA	G	1013	-	60,68,73	2.30	19 (31%)	70,107,113	2.80	22 (31%)
14	CLA	A	1110	-	45,53,73	2.60	18 (40%)	52,89,113	2.89	19 (36%)
14	CLA	A	1107	-	45,53,73	2.57	17 (37%)	52,89,113	2.92	21 (40%)
20	LMG	R	5006	-	37,37,55	1.13	3 (8%)	45,45,63	1.21	5 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
14	CLA	H	1217	-	45,53,73	2.53	18 (40%)	52,89,113	2.95	20 (38%)
21	LMT	a	6003	-	33,33,36	1.22	5 (15%)	44,44,47	0.95	1 (2%)
14	CLA	H	1235	-	60,68,73	2.29	19 (31%)	70,107,113	2.76	26 (37%)
24	FES	x	101	12	0,4,4	-	-	-		
15	F6C	a	1121	-	49,54,74	3.13	24 (48%)	46,90,114	3.77	27 (58%)
18	BCR	B	4006	-	41,41,41	2.82	6 (14%)	56,56,56	6.58	18 (32%)
14	CLA	G	1115	-	65,73,73	2.26	18 (27%)	76,113,113	2.64	26 (34%)
14	CLA	b	1212	-	45,53,73	2.54	19 (42%)	52,89,113	2.97	22 (42%)
14	CLA	A	1012	25	65,73,73	2.19	17 (26%)	76,113,113	2.52	25 (32%)
14	CLA	M	1501	-	50,58,73	2.53	18 (36%)	58,95,113	2.91	24 (41%)
17	SF4	N	3003	3	0,12,12	-	-	-		
14	CLA	H	1234	-	65,73,73	2.22	19 (29%)	76,113,113	2.54	24 (31%)
17	SF4	c	3003	3	0,12,12	-	-	-		
14	CLA	A	1118	-	55,63,73	2.42	18 (32%)	64,101,113	2.79	22 (34%)
21	LMT	i	6001	-	36,36,36	1.18	5 (13%)	47,47,47	1.03	2 (4%)
14	CLA	A	1119	-	65,73,73	2.23	18 (27%)	76,113,113	2.49	21 (27%)
14	CLA	a	1124	25	55,63,73	2.40	19 (34%)	64,101,113	2.82	21 (32%)
14	CLA	G	1113	-	45,53,73	2.55	18 (40%)	52,89,113	2.88	21 (40%)
17	SF4	A	3001	2,1	0,12,12	-	-	-		
14	CLA	b	1218	-	45,53,73	2.57	18 (40%)	52,89,113	3.09	21 (40%)
14	CLA	a	1115	-	65,73,73	2.26	18 (27%)	76,113,113	2.64	26 (34%)
18	BCR	H	4009	-	41,41,41	2.94	6 (14%)	56,56,56	6.51	23 (41%)
14	CLA	U	1503	-	65,73,73	2.23	19 (29%)	76,113,113	2.56	23 (30%)
14	CLA	b	1204	-	65,73,73	2.21	19 (29%)	76,113,113	2.59	23 (30%)
14	CLA	B	1208	-	60,68,73	2.34	19 (31%)	70,107,113	2.76	26 (37%)
14	CLA	b	1213	-	45,53,73	2.58	19 (42%)	52,89,113	2.93	20 (38%)
14	CLA	H	1232	-	45,53,73	2.58	20 (44%)	52,89,113	2.89	20 (38%)
18	BCR	H	4010	-	41,41,41	3.03	7 (17%)	56,56,56	6.86	21 (37%)
15	F6C	B	1230	-	49,54,74	3.18	25 (51%)	46,90,114	3.79	25 (54%)
18	BCR	H	4017	-	41,41,41	3.05	8 (19%)	56,56,56	6.71	20 (35%)
14	CLA	H	1204	-	65,73,73	2.21	19 (29%)	76,113,113	2.59	23 (30%)
14	CLA	A	1135	-	50,58,73	2.56	20 (40%)	58,95,113	2.95	25 (43%)
18	BCR	a	4006	-	41,41,41	2.94	6 (14%)	56,56,56	6.58	24 (42%)
14	CLA	B	1213	-	45,53,73	2.58	19 (42%)	52,89,113	2.93	20 (38%)
14	CLA	H	1222	25	65,73,73	2.22	19 (29%)	76,113,113	2.67	24 (31%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
21	LMT	M	6000	-	36,36,36	1.19	6 (16%)	47,47,47	0.97	1 (2%)
14	CLA	A	1116	-	55,63,73	2.42	19 (34%)	64,101,113	2.75	22 (34%)
15	F6C	b	1238	25	69,74,74	2.74	24 (34%)	70,114,114	3.12	29 (41%)
14	CLA	a	1129	-	50,58,73	2.52	19 (38%)	58,95,113	3.08	25 (43%)
14	CLA	B	1021	-	65,73,73	2.22	19 (29%)	76,113,113	2.47	27 (35%)
14	CLA	B	1239	-	65,73,73	2.23	19 (29%)	76,113,113	2.63	27 (35%)
14	CLA	A	1114	-	45,53,73	2.58	19 (42%)	52,89,113	2.88	19 (36%)
16	PQN	G	2001	-	34,34,34	1.50	2 (5%)	42,45,45	1.19	4 (9%)
14	CLA	l	1503	-	65,73,73	2.23	19 (29%)	76,113,113	2.56	23 (30%)
14	CLA	G	1136	-	65,73,73	2.19	19 (29%)	76,113,113	2.62	22 (28%)
21	LMT	A	6003	-	33,33,36	1.22	5 (15%)	44,44,47	0.95	1 (2%)
14	CLA	B	1209	-	45,53,73	2.56	18 (40%)	52,89,113	2.80	20 (38%)
18	BCR	H	4004	-	41,41,41	2.83	6 (14%)	56,56,56	6.52	22 (39%)
19	LHG	l	5102	-	48,48,48	0.90	2 (4%)	51,54,54	1.04	3 (5%)
19	LHG	U	5102	-	48,48,48	0.90	2 (4%)	51,54,54	1.04	3 (5%)
14	CLA	A	1125	-	65,73,73	2.16	18 (27%)	76,113,113	2.69	23 (30%)
18	BCR	R	4020	-	41,41,41	3.17	9 (21%)	56,56,56	6.77	21 (37%)
18	BCR	a	4003	-	41,41,41	2.95	6 (14%)	56,56,56	6.84	25 (44%)
14	CLA	a	1104	-	65,73,73	2.15	19 (29%)	76,113,113	2.79	24 (31%)
14	CLA	G	1114	-	45,53,73	2.57	19 (42%)	52,89,113	2.89	19 (36%)
14	CLA	b	1211	-	65,73,73	2.24	20 (30%)	76,113,113	2.52	25 (32%)
14	CLA	B	1232	-	45,53,73	2.58	20 (44%)	52,89,113	2.89	20 (38%)
20	LMG	b	5002	-	46,46,55	1.29	6 (13%)	54,54,63	1.24	6 (11%)
18	BCR	H	4005	-	41,41,41	2.83	6 (14%)	56,56,56	6.53	20 (35%)
14	CLA	G	1108	-	45,53,73	2.62	19 (42%)	52,89,113	2.91	21 (40%)
14	CLA	b	1214	-	60,68,73	2.34	21 (35%)	70,107,113	2.66	28 (40%)
17	SF4	G	3001	2,1	0,12,12	-	-	-		
14	CLA	A	1131	-	60,68,73	2.30	19 (31%)	70,107,113	2.72	21 (30%)
14	CLA	H	1211	-	65,73,73	2.23	20 (30%)	76,113,113	2.52	25 (32%)
14	CLA	b	1235	-	60,68,73	2.29	19 (31%)	70,107,113	2.76	26 (37%)
14	CLA	G	1118	-	55,63,73	2.42	18 (32%)	64,101,113	2.80	22 (34%)
16	PQN	b	2002	-	34,34,34	1.55	2 (5%)	42,45,45	1.12	2 (4%)
14	CLA	a	1137	-	50,58,73	2.52	18 (36%)	58,95,113	3.01	22 (37%)
14	CLA	H	1202	-	65,73,73	2.22	18 (27%)	76,113,113	2.61	24 (31%)
20	LMG	I	5006	-	37,37,55	1.13	3 (8%)	45,45,63	1.21	5 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
14	CLA	b	1202	-	65,73,73	2.22	18 (27%)	76,113,113	2.61	24 (31%)
14	CLA	G	1137	-	50,58,73	2.52	18 (36%)	58,95,113	3.01	22 (37%)
14	CLA	A	1139	-	45,53,73	2.56	20 (44%)	52,89,113	2.84	20 (38%)
19	LHG	U	5101	-	24,24,48	1.27	2 (8%)	26,26,54	1.48	4 (15%)
14	CLA	G	1141	-	45,53,73	2.54	20 (44%)	52,89,113	2.97	21 (40%)
14	CLA	G	1105	-	45,53,73	2.61	18 (40%)	52,89,113	2.94	20 (38%)
14	CLA	a	1134	1	45,53,73	2.55	20 (44%)	52,89,113	2.93	20 (38%)
19	LHG	G	5002	-	43,43,48	1.00	2 (4%)	47,48,54	1.14	2 (4%)
14	CLA	G	1012	25	65,73,73	2.19	17 (26%)	76,113,113	2.52	25 (32%)
14	CLA	H	1205	-	65,73,73	2.18	17 (26%)	76,113,113	2.67	24 (31%)
21	LMT	a	6004	-	24,24,36	1.06	3 (12%)	29,29,47	1.07	2 (6%)
14	CLA	a	1133	1	60,68,73	2.31	19 (31%)	70,107,113	2.75	20 (28%)
14	CLA	G	1128	-	60,68,73	2.35	19 (31%)	70,107,113	2.70	23 (32%)
14	CLA	H	1213	-	45,53,73	2.58	19 (42%)	52,89,113	2.94	20 (38%)
18	BCR	k	4001	-	41,41,41	2.89	6 (14%)	56,56,56	6.45	22 (39%)
15	F6C	b	1219	-	59,64,74	2.96	26 (44%)	58,102,114	3.52	27 (46%)
18	BCR	b	4009	-	41,41,41	2.93	6 (14%)	56,56,56	6.51	23 (41%)
14	CLA	G	1125	-	65,73,73	2.16	18 (27%)	76,113,113	2.69	23 (30%)
18	BCR	a	4004	-	41,41,41	3.04	6 (14%)	56,56,56	6.66	25 (44%)
14	CLA	B	1202	-	65,73,73	2.22	18 (27%)	76,113,113	2.62	24 (31%)
14	CLA	B	1211	-	65,73,73	2.24	20 (30%)	76,113,113	2.53	25 (32%)
14	CLA	a	1113	-	45,53,73	2.54	18 (40%)	52,89,113	2.87	20 (38%)
14	CLA	B	1218	-	45,53,73	2.57	18 (40%)	52,89,113	3.08	21 (40%)
14	CLA	B	1220	-	65,73,73	2.22	19 (29%)	76,113,113	2.57	22 (28%)
14	CLA	A	1130	-	55,63,73	2.46	19 (34%)	64,101,113	2.66	21 (32%)
14	CLA	K	1401	-	45,53,73	2.59	19 (42%)	52,89,113	3.03	23 (44%)
14	CLA	A	1105	-	45,53,73	2.61	18 (40%)	52,89,113	2.94	20 (38%)
14	CLA	G	1131	-	60,68,73	2.31	19 (31%)	70,107,113	2.72	21 (30%)
14	CLA	A	1127	-	65,73,73	2.22	19 (29%)	76,113,113	2.54	21 (27%)
19	LHG	l	5101	-	24,24,48	1.27	2 (8%)	26,26,54	1.48	4 (15%)
18	BCR	U	4022	-	41,41,41	3.00	6 (14%)	56,56,56	6.39	22 (39%)
14	CLA	A	1132	-	65,73,73	2.18	18 (27%)	76,113,113	2.64	23 (30%)
14	CLA	A	1128	-	60,68,73	2.35	19 (31%)	70,107,113	2.69	23 (32%)
14	CLA	A	1126	-	60,68,73	2.33	17 (28%)	70,107,113	2.58	20 (28%)
14	CLA	a	1140	-	55,63,73	2.42	18 (32%)	64,101,113	2.69	21 (32%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	H	1223	-	1/1/15/20	11/37/115/115	-
14	CLA	a	1101	-	1/1/11/20	6/13/91/115	-
15	F6C	H	1238	25	-	15/41/97/97	-
21	LMT	b	6003	-	-	11/21/61/61	0/2/2/2
14	CLA	a	1123	-	1/1/14/20	14/31/109/115	-
14	CLA	A	1103	-	1/1/15/20	23/37/115/115	-
13	CL0	A	1011	-	3/3/20/25	15/37/135/135	-
14	CLA	G	1133	1	1/1/14/20	21/31/109/115	-
18	BCR	H	4006	-	-	16/29/63/63	0/2/2/2
14	CLA	H	1220	-	1/1/15/20	14/37/115/115	-
18	BCR	b	4004	-	-	12/29/63/63	0/2/2/2
14	CLA	a	1138	-	1/1/13/20	13/25/103/115	-
20	LMG	i	5006	-	-	13/32/52/70	0/1/1/1
14	CLA	G	1107	-	1/1/11/20	5/13/91/115	-
14	CLA	B	1227	-	1/1/11/20	7/13/91/115	-
14	CLA	a	1122	-	1/1/13/20	12/25/103/115	-
14	CLA	A	1112	-	1/1/13/20	12/25/103/115	-
20	LMG	B	5002	-	-	17/41/61/70	0/1/1/1
21	LMT	U	6101	-	-	8/21/61/61	0/2/2/2
21	LMT	l	6101	-	-	8/21/61/61	0/2/2/2
14	CLA	G	1120	-	1/1/11/20	6/13/91/115	-
18	BCR	V	4021	-	-	14/29/63/63	0/2/2/2
14	CLA	b	1233	-	1/1/11/20	8/13/91/115	-
14	CLA	A	1013	-	1/1/14/20	10/31/109/115	-
15	F6C	H	1230	-	-	9/17/73/97	-
21	LMT	A	6001	-	-	9/17/57/61	0/2/2/2
15	F6C	H	1219	-	-	15/29/85/97	-
21	LMT	U	6001	-	-	5/11/11/61	-
14	CLA	H	1218	-	1/1/11/20	6/13/91/115	-
14	CLA	H	1221	-	1/1/15/20	20/37/115/115	-
14	CLA	A	1136	-	1/1/15/20	18/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	H	1239	-	1/1/15/20	20/37/115/115	-
14	CLA	a	1106	1	1/1/14/20	10/31/109/115	-
14	CLA	G	1140	-	1/1/13/20	14/25/103/115	-
14	CLA	b	1209	-	1/1/11/20	2/13/91/115	-
14	CLA	H	1233	-	1/1/11/20	8/13/91/115	-
14	CLA	A	1109	-	1/1/15/20	13/37/115/115	-
19	LHG	A	5002	-	-	24/45/45/53	-
14	CLA	B	1229	-	1/1/14/20	15/31/109/115	-
14	CLA	L	1503	-	1/1/15/20	13/37/115/115	-
14	CLA	B	1222	25	1/1/15/20	15/37/115/115	-
18	BCR	I	4018	-	-	11/29/63/63	0/2/2/2
21	LMT	B	6004	-	-	10/17/57/61	0/2/2/2
21	LMT	G	6003	-	-	7/18/58/61	0/2/2/2
14	CLA	a	1110	-	1/1/11/20	4/13/91/115	-
14	CLA	G	1117	-	1/1/15/20	21/37/115/115	-
14	CLA	U	1501	10	1/1/15/20	8/37/115/115	-
15	F6C	b	1207	-	-	19/41/97/97	-
14	CLA	B	1224	-	1/1/15/20	19/37/115/115	-
14	CLA	b	1231	-	1/1/15/20	17/37/115/115	-
14	CLA	b	1221	-	1/1/15/20	20/37/115/115	-
14	CLA	B	1206	-	1/1/15/20	20/37/115/115	-
17	SF4	C	3003	3	-	-	0/6/5/5
18	BCR	B	4004	-	-	12/29/63/63	0/2/2/2
19	LHG	L	5101	-	-	15/26/26/53	-
14	CLA	b	1223	-	1/1/15/20	11/37/115/115	-
15	F6C	H	1207	-	-	19/41/97/97	-
14	CLA	a	1141	-	1/1/11/20	10/13/91/115	-
14	CLA	a	1131	-	1/1/14/20	12/31/109/115	-
14	CLA	H	1227	-	1/1/11/20	7/13/91/115	-
14	CLA	B	1023	-	1/1/15/20	10/37/115/115	-
16	PQN	B	2002	-	-	9/23/43/43	0/2/2/2
14	CLA	B	1233	-	1/1/11/20	8/13/91/115	-
14	CLA	G	1111	-	1/1/14/20	16/31/109/115	-
14	CLA	a	1119	-	1/1/15/20	16/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	BCR	A	4005	-	-	10/29/63/63	0/2/2/2
21	LMT	b	6002	-	-	3/21/61/61	0/2/2/2
14	CLA	B	1235	-	1/1/14/20	14/31/109/115	-
14	CLA	B	1240	2	1/1/15/20	18/37/115/115	-
21	LMT	G	6001	-	-	9/17/57/61	0/2/2/2
18	BCR	G	4001	-	-	12/29/63/63	0/2/2/2
19	LHG	a	5001	-	-	23/46/46/53	-
18	BCR	G	4006	-	-	16/29/63/63	0/2/2/2
21	LMT	B	6001	-	-	7/21/61/61	0/2/2/2
14	CLA	a	1111	-	1/1/14/20	16/31/109/115	-
17	SF4	c	3002	3	-	-	0/6/5/5
21	LMT	R	6001	-	-	11/21/61/61	0/2/2/2
15	F6C	A	1121	-	-	10/17/73/97	-
15	F6C	b	1237	25	-	24/41/97/97	-
21	LMT	A	6002	-	-	9/14/54/61	0/2/2/2
14	CLA	l	1501	10	1/1/15/20	8/37/115/115	-
14	CLA	B	1231	-	1/1/15/20	17/37/115/115	-
21	LMT	H	6003	-	-	11/21/61/61	0/2/2/2
18	BCR	b	4014	-	-	6/29/63/63	0/2/2/2
14	CLA	A	1102	-	1/1/12/20	10/19/97/115	-
14	CLA	a	1130	-	1/1/13/20	9/25/103/115	-
14	CLA	b	1206	-	1/1/15/20	20/37/115/115	-
21	LMT	H	6004	-	-	10/17/57/61	0/2/2/2
14	CLA	H	1224	-	1/1/15/20	19/37/115/115	-
14	CLA	b	1205	-	1/1/15/20	13/37/115/115	-
16	PQN	A	2001	-	-	8/23/43/43	0/2/2/2
20	LMG	a	5003	-	-	15/41/61/70	0/1/1/1
14	CLA	V	1501	-	1/1/12/20	6/19/97/115	-
14	CLA	G	1109	-	1/1/15/20	13/37/115/115	-
14	CLA	H	1231	-	1/1/15/20	17/37/115/115	-
14	CLA	A	1120	-	1/1/11/20	6/13/91/115	-
14	CLA	G	1119	-	1/1/15/20	16/37/115/115	-
14	CLA	a	1135	-	1/1/12/20	8/19/97/115	-
14	CLA	H	1236	-	1/1/13/20	15/25/103/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	F6C	B	1237	25	-	24/41/97/97	-
14	CLA	a	1013	-	1/1/14/20	10/31/109/115	-
18	BCR	A	4003	-	-	9/29/63/63	0/2/2/2
21	LMT	m	6000	-	-	5/21/61/61	0/2/2/2
14	CLA	a	1107	-	1/1/11/20	5/13/91/115	-
19	LHG	G	5001	-	-	23/46/46/53	-
14	CLA	A	1108	-	1/1/11/20	5/13/91/115	-
18	BCR	b	4006	-	-	16/29/63/63	0/2/2/2
14	CLA	b	1217	-	1/1/11/20	7/13/91/115	-
21	LMT	G	6004	-	-	6/15/35/61	0/1/1/2
14	CLA	B	1204	-	1/1/15/20	11/37/115/115	-
14	CLA	A	1141	-	1/1/11/20	10/13/91/115	-
14	CLA	A	1137	-	1/1/12/20	6/19/97/115	-
20	LMG	H	5002	-	-	17/41/61/70	0/1/1/1
21	LMT	U	6002	-	-	6/21/61/61	0/2/2/2
14	CLA	b	1215	-	1/1/14/20	16/31/109/115	-
17	SF4	a	3001	2,1	-	-	0/6/5/5
18	BCR	l	4019	-	-	10/29/63/63	0/2/2/2
14	CLA	A	1129	-	1/1/12/20	6/19/97/115	-
18	BCR	G	4005	-	-	10/29/63/63	0/2/2/2
15	F6C	B	1238	25	-	15/41/97/97	-
18	BCR	R	4018	-	-	11/29/63/63	0/2/2/2
14	CLA	H	1201	-	1/1/15/20	18/37/115/115	-
21	LMT	l	6002	-	-	6/21/61/61	0/2/2/2
15	F6C	H	1237	25	-	24/41/97/97	-
14	CLA	a	1116	-	1/1/13/20	12/25/103/115	-
14	CLA	G	1129	-	1/1/12/20	6/19/97/115	-
14	CLA	a	1105	-	1/1/11/20	3/13/91/115	-
14	CLA	b	1021	-	1/1/15/20	14/37/115/115	-
20	LMG	G	5003	-	-	15/41/61/70	0/1/1/1
14	CLA	A	1133	1	1/1/14/20	21/31/109/115	-
14	CLA	G	1126	-	1/1/14/20	15/31/109/115	-
14	CLA	B	1215	-	1/1/14/20	16/31/109/115	-
14	CLA	a	1114	-	1/1/11/20	4/13/91/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	b	1023	-	1/1/15/20	10/37/115/115	-
14	CLA	G	1124	25	1/1/13/20	5/25/103/115	-
14	CLA	B	1214	-	1/1/14/20	11/31/109/115	-
14	CLA	a	1128	-	1/1/14/20	15/31/109/115	-
14	CLA	a	1126	-	1/1/14/20	15/31/109/115	-
14	CLA	a	1118	-	1/1/13/20	11/25/103/115	-
14	CLA	b	1232	-	1/1/11/20	2/13/91/115	-
21	LMT	H	6001	-	-	7/21/61/61	0/2/2/2
14	CLA	B	1203	-	1/1/15/20	22/37/115/115	-
21	LMT	L	6001	-	-	5/11/11/61	-
14	CLA	H	1206	-	1/1/15/20	20/37/115/115	-
14	CLA	a	1103	-	1/1/15/20	23/37/115/115	-
14	CLA	G	1122	-	1/1/13/20	12/25/103/115	-
18	BCR	B	4014	-	-	6/29/63/63	0/2/2/2
19	LHG	L	5102	-	-	26/53/53/53	-
14	CLA	B	1217	-	1/1/11/20	7/13/91/115	-
14	CLA	b	1234	-	1/1/15/20	15/37/115/115	-
14	CLA	B	1226	-	1/1/15/20	18/37/115/115	-
18	BCR	U	4019	-	-	9/29/63/63	0/2/2/2
14	CLA	H	1023	-	1/1/15/20	10/37/115/115	-
14	CLA	A	1140	-	1/1/13/20	14/25/103/115	-
16	PQN	H	2002	-	-	9/23/43/43	0/2/2/2
14	CLA	G	1102	-	1/1/12/20	10/19/97/115	-
21	LMT	A	6004	-	-	6/15/35/61	0/1/1/2
14	CLA	G	1116	-	1/1/13/20	12/25/103/115	-
13	CL0	a	1011	-	3/3/20/25	15/37/135/135	-
18	BCR	G	4003	-	-	9/29/63/63	0/2/2/2
16	PQN	a	2001	-	-	8/23/43/43	0/2/2/2
14	CLA	G	1103	-	1/1/15/20	23/37/115/115	-
14	CLA	L	1501	10	1/1/15/20	8/37/115/115	-
14	CLA	A	1123	-	1/1/14/20	14/31/109/115	-
14	CLA	H	1240	2	1/1/15/20	18/37/115/115	-
14	CLA	A	1111	-	1/1/14/20	16/31/109/115	-
15	F6C	B	1219	-	-	15/29/85/97	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	a	1125	-	1/1/15/20	20/37/115/115	-
18	BCR	B	4009	-	-	4/29/63/63	0/2/2/2
18	BCR	A	4001	-	-	12/29/63/63	0/2/2/2
18	BCR	T	4001	-	-	16/29/63/63	0/2/2/2
14	CLA	G	1138	-	1/1/13/20	13/25/103/115	-
14	CLA	k	1401	-	1/1/11/20	9/13/91/115	-
14	CLA	A	1138	-	1/1/13/20	13/25/103/115	-
14	CLA	b	1236	-	1/1/13/20	15/25/103/115	-
14	CLA	b	1216	-	1/1/15/20	18/37/115/115	-
14	CLA	a	1102	-	1/1/12/20	10/19/97/115	-
14	CLA	b	1201	-	1/1/15/20	18/37/115/115	-
14	CLA	a	1109	-	1/1/15/20	13/37/115/115	-
18	BCR	b	4017	-	-	15/29/63/63	0/2/2/2
14	CLA	H	1226	-	1/1/15/20	18/37/115/115	-
18	BCR	m	4021	-	-	14/29/63/63	0/2/2/2
17	SF4	C	3002	3	-	-	0/6/5/5
14	CLA	a	1139	-	1/1/11/20	8/13/91/115	-
24	FES	X	101	12	-	-	0/1/1/1
14	CLA	b	1228	-	1/1/13/20	15/25/103/115	-
14	CLA	A	1101	-	1/1/11/20	6/13/91/115	-
14	CLA	b	1022	-	1/1/13/20	11/25/103/115	-
14	CLA	H	1210	-	1/1/15/20	17/37/115/115	-
14	CLA	G	1104	-	1/1/15/20	19/37/115/115	-
14	CLA	a	1120	-	1/1/11/20	6/13/91/115	-
18	BCR	b	4005	-	-	6/29/63/63	0/2/2/2
14	CLA	G	1139	-	1/1/11/20	8/13/91/115	-
14	CLA	U	1502	-	1/1/14/20	10/31/109/115	-
14	CLA	a	1012	25	1/1/15/20	7/37/115/115	-
14	CLA	a	1132	-	1/1/15/20	10/37/115/115	-
18	BCR	I	4020	-	-	9/29/63/63	0/2/2/2
21	LMT	l	6001	-	-	5/11/11/61	-
13	CL0	G	1011	-	3/3/20/25	15/37/135/135	-
14	CLA	G	1134	1	1/1/11/20	9/13/91/115	-
14	CLA	B	1234	-	1/1/15/20	15/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	BCR	G	4004	-	-	11/29/63/63	0/2/2/2
14	CLA	b	1224	-	1/1/15/20	19/37/115/115	-
14	CLA	A	1106	1	1/1/14/20	10/31/109/115	-
14	CLA	a	1108	-	1/1/11/20	5/13/91/115	-
21	LMT	L	6002	-	-	6/21/61/61	0/2/2/2
14	CLA	G	1112	-	1/1/13/20	12/25/103/115	-
14	CLA	b	1210	-	1/1/15/20	17/37/115/115	-
15	F6C	B	1207	-	-	19/41/97/97	-
18	BCR	L	4022	-	-	8/29/63/63	0/2/2/2
14	CLA	A	1134	1	1/1/11/20	9/13/91/115	-
14	CLA	b	1239	-	1/1/15/20	20/37/115/115	-
21	LMT	V	6000	-	-	5/21/61/61	0/2/2/2
14	CLA	G	1135	-	1/1/12/20	8/19/97/115	-
14	CLA	b	1227	-	1/1/11/20	7/13/91/115	-
18	BCR	M	4021	-	-	14/29/63/63	0/2/2/2
14	CLA	B	1216	-	1/1/15/20	18/37/115/115	-
14	CLA	B	1236	-	1/1/13/20	15/25/103/115	-
18	BCR	B	4010	-	-	7/29/63/63	0/2/2/2
14	CLA	B	1210	-	1/1/15/20	17/37/115/115	-
14	CLA	b	1220	-	1/1/15/20	14/37/115/115	-
14	CLA	H	1214	-	1/1/14/20	11/31/109/115	-
14	CLA	a	1117	-	1/1/15/20	21/37/115/115	-
14	CLA	H	1021	-	1/1/15/20	14/37/115/115	-
18	BCR	B	4017	-	-	15/29/63/63	0/2/2/2
18	BCR	a	4002	-	-	12/29/63/63	0/2/2/2
14	CLA	B	1221	-	1/1/15/20	20/37/115/115	-
14	CLA	a	1127	-	1/1/15/20	18/37/115/115	-
21	LMT	a	6002	-	-	9/14/54/61	0/2/2/2
21	LMT	I	6001	-	-	11/21/61/61	0/2/2/2
18	BCR	L	4019	-	-	10/29/63/63	0/2/2/2
14	CLA	b	1225	-	1/1/15/20	17/37/115/115	-
14	CLA	G	1123	-	1/1/14/20	14/31/109/115	-
14	CLA	G	1101	-	1/1/11/20	6/13/91/115	-
14	CLA	l	1502	-	1/1/14/20	10/31/109/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	F6C	G	1121	-	-	10/17/73/97	-
18	BCR	G	4002	-	-	12/29/63/63	0/2/2/2
14	CLA	G	1106	1	1/1/14/20	10/31/109/115	-
18	BCR	B	4005	-	-	6/29/63/63	0/2/2/2
18	BCR	a	4001	-	-	12/29/63/63	0/2/2/2
14	CLA	b	1229	-	1/1/14/20	15/31/109/115	-
21	LMT	B	6003	-	-	11/21/61/61	0/2/2/2
21	LMT	G	6002	-	-	9/14/54/61	0/2/2/2
14	CLA	T	1401	-	1/1/11/20	9/13/91/115	-
14	CLA	A	1124	25	1/1/13/20	5/25/103/115	-
14	CLA	B	1223	-	1/1/15/20	11/37/115/115	-
14	CLA	b	1203	-	1/1/15/20	22/37/115/115	-
21	LMT	b	6004	-	-	10/17/57/61	0/2/2/2
14	CLA	A	1117	-	1/1/15/20	21/37/115/115	-
14	CLA	G	1110	-	1/1/11/20	4/13/91/115	-
14	CLA	H	1212	-	1/1/11/20	8/13/91/115	-
18	BCR	i	4018	-	-	11/29/63/63	0/2/2/2
14	CLA	A	1122	-	1/1/13/20	12/25/103/115	-
14	CLA	H	1203	-	1/1/15/20	22/37/115/115	-
14	CLA	H	1209	-	1/1/11/20	2/13/91/115	-
18	BCR	A	4002	-	-	12/29/63/63	0/2/2/2
21	LMT	B	6002	-	-	3/21/61/61	0/2/2/2
18	BCR	H	4014	-	-	6/29/63/63	0/2/2/2
17	SF4	N	3002	3	-	-	0/6/5/5
18	BCR	A	4006	-	-	16/29/63/63	0/2/2/2
14	CLA	b	1226	-	1/1/15/20	18/37/115/115	-
14	CLA	H	1022	-	1/1/13/20	11/25/103/115	-
18	BCR	i	4020	-	-	9/29/63/63	0/2/2/2
21	LMT	a	6001	-	-	9/17/57/61	0/2/2/2
14	CLA	a	1136	-	1/1/15/20	18/37/115/115	-
14	CLA	B	1228	-	1/1/13/20	15/25/103/115	-
14	CLA	b	1208	-	1/1/14/20	9/31/109/115	-
14	CLA	H	1216	-	1/1/15/20	18/37/115/115	-
19	LHG	A	5001	-	-	23/46/46/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	G	1127	-	1/1/15/20	18/37/115/115	-
14	CLA	H	1225	-	1/1/15/20	18/37/115/115	-
18	BCR	K	4001	-	-	16/29/63/63	0/2/2/2
14	CLA	m	1501	-	1/1/12/20	6/19/97/115	-
18	BCR	b	4010	-	-	7/29/63/63	0/2/2/2
14	CLA	H	1229	-	1/1/14/20	15/31/109/115	-
18	BCR	A	4004	-	-	11/29/63/63	0/2/2/2
19	LHG	a	5002	-	-	24/45/45/53	-
14	CLA	A	1104	-	1/1/15/20	19/37/115/115	-
14	CLA	H	1228	-	1/1/13/20	15/25/103/115	-
14	CLA	b	1222	25	1/1/15/20	15/37/115/115	-
14	CLA	B	1212	-	1/1/11/20	8/13/91/115	-
14	CLA	A	1113	-	1/1/11/20	7/13/91/115	-
21	LMT	b	6001	-	-	7/21/61/61	0/2/2/2
24	FES	W	101	12	-	-	0/1/1/1
14	CLA	H	1215	-	1/1/14/20	16/31/109/115	-
21	LMT	H	6002	-	-	3/21/61/61	0/2/2/2
14	CLA	B	1022	-	1/1/13/20	11/25/103/115	-
14	CLA	G	1132	-	1/1/15/20	10/37/115/115	-
15	F6C	b	1230	-	-	9/17/73/97	-
14	CLA	B	1225	-	1/1/15/20	18/37/115/115	-
20	LMG	A	5003	-	-	15/41/61/70	0/1/1/1
14	CLA	B	1205	-	1/1/15/20	13/37/115/115	-
14	CLA	B	1201	-	1/1/15/20	18/37/115/115	-
14	CLA	G	1130	-	1/1/13/20	9/25/103/115	-
14	CLA	b	1240	2	1/1/15/20	18/37/115/115	-
21	LMT	L	6101	-	-	8/21/61/61	0/2/2/2
14	CLA	L	1502	-	1/1/14/20	10/31/109/115	-
14	CLA	A	1115	-	1/1/15/20	19/37/115/115	-
14	CLA	a	1112	-	1/1/13/20	12/25/103/115	-
14	CLA	H	1208	-	1/1/14/20	9/31/109/115	-
18	BCR	l	4022	-	-	8/29/63/63	0/2/2/2
18	BCR	a	4005	-	-	10/29/63/63	0/2/2/2
14	CLA	G	1013	-	1/1/14/20	10/31/109/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	A	1110	-	1/1/11/20	4/13/91/115	-
14	CLA	A	1107	-	1/1/11/20	5/13/91/115	-
20	LMG	R	5006	-	-	13/32/52/70	0/1/1/1
14	CLA	H	1217	-	1/1/11/20	7/13/91/115	-
21	LMT	a	6003	-	-	7/18/58/61	0/2/2/2
14	CLA	H	1235	-	1/1/14/20	14/31/109/115	-
24	FES	x	101	12	-	-	0/1/1/1
15	F6C	a	1121	-	-	10/17/73/97	-
18	BCR	B	4006	-	-	16/29/63/63	0/2/2/2
14	CLA	G	1115	-	1/1/15/20	19/37/115/115	-
14	CLA	b	1212	-	1/1/11/20	8/13/91/115	-
14	CLA	A	1012	25	1/1/15/20	7/37/115/115	-
14	CLA	M	1501	-	1/1/12/20	6/19/97/115	-
17	SF4	N	3003	3	-	-	0/6/5/5
14	CLA	H	1234	-	1/1/15/20	15/37/115/115	-
17	SF4	c	3003	3	-	-	0/6/5/5
14	CLA	A	1118	-	1/1/13/20	11/25/103/115	-
21	LMT	i	6001	-	-	11/21/61/61	0/2/2/2
14	CLA	A	1119	-	1/1/15/20	16/37/115/115	-
14	CLA	a	1124	25	1/1/13/20	5/25/103/115	-
14	CLA	G	1113	-	1/1/11/20	7/13/91/115	-
17	SF4	A	3001	2,1	-	-	0/6/5/5
14	CLA	b	1218	-	1/1/11/20	6/13/91/115	-
14	CLA	a	1115	-	1/1/15/20	19/37/115/115	-
18	BCR	H	4009	-	-	4/29/63/63	0/2/2/2
14	CLA	U	1503	-	1/1/15/20	13/37/115/115	-
14	CLA	b	1204	-	1/1/15/20	11/37/115/115	-
14	CLA	B	1208	-	1/1/14/20	9/31/109/115	-
14	CLA	b	1213	-	1/1/11/20	2/13/91/115	-
14	CLA	H	1232	-	1/1/11/20	2/13/91/115	-
18	BCR	H	4010	-	-	7/29/63/63	0/2/2/2
15	F6C	B	1230	-	-	9/17/73/97	-
18	BCR	H	4017	-	-	15/29/63/63	0/2/2/2
14	CLA	H	1204	-	1/1/15/20	11/37/115/115	-
14	CLA	A	1135	-	1/1/12/20	8/19/97/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	BCR	a	4006	-	-	16/29/63/63	0/2/2/2
14	CLA	B	1213	-	1/1/11/20	2/13/91/115	-
14	CLA	H	1222	25	1/1/15/20	15/37/115/115	-
21	LMT	M	6000	-	-	5/21/61/61	0/2/2/2
14	CLA	A	1116	-	1/1/13/20	12/25/103/115	-
15	F6C	b	1238	25	-	15/41/97/97	-
14	CLA	a	1129	-	1/1/12/20	6/19/97/115	-
14	CLA	B	1021	-	1/1/15/20	14/37/115/115	-
14	CLA	B	1239	-	1/1/15/20	20/37/115/115	-
14	CLA	A	1114	-	1/1/11/20	4/13/91/115	-
16	PQN	G	2001	-	-	8/23/43/43	0/2/2/2
14	CLA	l	1503	-	1/1/15/20	13/37/115/115	-
14	CLA	G	1136	-	1/1/15/20	18/37/115/115	-
21	LMT	A	6003	-	-	7/18/58/61	0/2/2/2
14	CLA	B	1209	-	1/1/11/20	2/13/91/115	-
18	BCR	H	4004	-	-	12/29/63/63	0/2/2/2
19	LHG	l	5102	-	-	26/53/53/53	-
19	LHG	U	5102	-	-	26/53/53/53	-
14	CLA	A	1125	-	1/1/15/20	20/37/115/115	-
18	BCR	R	4020	-	-	9/29/63/63	0/2/2/2
18	BCR	a	4003	-	-	9/29/63/63	0/2/2/2
14	CLA	a	1104	-	1/1/15/20	19/37/115/115	-
14	CLA	G	1114	-	1/1/11/20	4/13/91/115	-
14	CLA	b	1211	-	1/1/15/20	15/37/115/115	-
14	CLA	B	1232	-	1/1/11/20	2/13/91/115	-
20	LMG	b	5002	-	-	17/41/61/70	0/1/1/1
18	BCR	H	4005	-	-	6/29/63/63	0/2/2/2
14	CLA	G	1108	-	1/1/11/20	5/13/91/115	-
14	CLA	b	1214	-	1/1/14/20	11/31/109/115	-
17	SF4	G	3001	2,1	-	-	0/6/5/5
14	CLA	A	1131	-	1/1/14/20	12/31/109/115	-
14	CLA	H	1211	-	1/1/15/20	15/37/115/115	-
14	CLA	b	1235	-	1/1/14/20	14/31/109/115	-
14	CLA	G	1118	-	1/1/13/20	11/25/103/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
16	PQN	b	2002	-	-	9/23/43/43	0/2/2/2
14	CLA	a	1137	-	1/1/12/20	6/19/97/115	-
14	CLA	H	1202	-	1/1/15/20	16/37/115/115	-
20	LMG	I	5006	-	-	13/32/52/70	0/1/1/1
14	CLA	b	1202	-	1/1/15/20	16/37/115/115	-
14	CLA	G	1137	-	1/1/12/20	6/19/97/115	-
14	CLA	A	1139	-	1/1/11/20	8/13/91/115	-
19	LHG	U	5101	-	-	15/26/26/53	-
14	CLA	G	1141	-	1/1/11/20	10/13/91/115	-
14	CLA	G	1105	-	1/1/11/20	3/13/91/115	-
14	CLA	a	1134	1	1/1/11/20	9/13/91/115	-
19	LHG	G	5002	-	-	24/45/45/53	-
14	CLA	G	1012	25	1/1/15/20	7/37/115/115	-
14	CLA	H	1205	-	1/1/15/20	13/37/115/115	-
21	LMT	a	6004	-	-	6/15/35/61	0/1/1/2
14	CLA	a	1133	1	1/1/14/20	21/31/109/115	-
14	CLA	G	1128	-	1/1/14/20	15/31/109/115	-
14	CLA	H	1213	-	1/1/11/20	2/13/91/115	-
18	BCR	k	4001	-	-	16/29/63/63	0/2/2/2
15	F6C	b	1219	-	-	15/29/85/97	-
18	BCR	b	4009	-	-	4/29/63/63	0/2/2/2
14	CLA	G	1125	-	1/1/15/20	20/37/115/115	-
18	BCR	a	4004	-	-	11/29/63/63	0/2/2/2
14	CLA	B	1202	-	1/1/15/20	16/37/115/115	-
14	CLA	B	1211	-	1/1/15/20	15/37/115/115	-
14	CLA	a	1113	-	1/1/11/20	7/13/91/115	-
14	CLA	B	1218	-	1/1/11/20	6/13/91/115	-
14	CLA	B	1220	-	1/1/15/20	14/37/115/115	-
14	CLA	A	1130	-	1/1/13/20	9/25/103/115	-
14	CLA	K	1401	-	1/1/11/20	9/13/91/115	-
14	CLA	A	1105	-	1/1/11/20	3/13/91/115	-
14	CLA	G	1131	-	1/1/14/20	12/31/109/115	-
14	CLA	A	1127	-	1/1/15/20	18/37/115/115	-
19	LHG	l	5101	-	-	15/26/26/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	BCR	U	4022	-	-	8/29/63/63	0/2/2/2
14	CLA	A	1132	-	1/1/15/20	10/37/115/115	-
14	CLA	A	1128	-	1/1/14/20	15/31/109/115	-
14	CLA	A	1126	-	1/1/14/20	15/31/109/115	-
14	CLA	a	1140	-	1/1/13/20	14/25/103/115	-

The worst 5 of 5905 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	b	1207	F6C	MG-NA	9.22	2.24	2.05
15	H	1207	F6C	MG-NA	9.19	2.24	2.05
15	B	1207	F6C	MG-NA	9.18	2.24	2.05
15	H	1219	F6C	MG-NA	9.11	2.23	2.05
15	B	1219	F6C	MG-NA	9.08	2.23	2.05

The worst 5 of 7844 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	i	4020	BCR	C20-C21-C22	27.22	166.15	127.31
18	I	4020	BCR	C20-C21-C22	27.20	166.13	127.31
18	R	4020	BCR	C20-C21-C22	27.18	166.10	127.31
18	b	4010	BCR	C16-C17-C18	27.11	166.00	127.31
18	H	4010	BCR	C16-C17-C18	27.09	165.97	127.31

5 of 264 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
13	A	1011	CL0	NA
13	A	1011	CL0	NC
13	A	1011	CL0	ND
13	G	1011	CL0	NA
13	G	1011	CL0	NC

5 of 4777 torsion outliers are listed below:

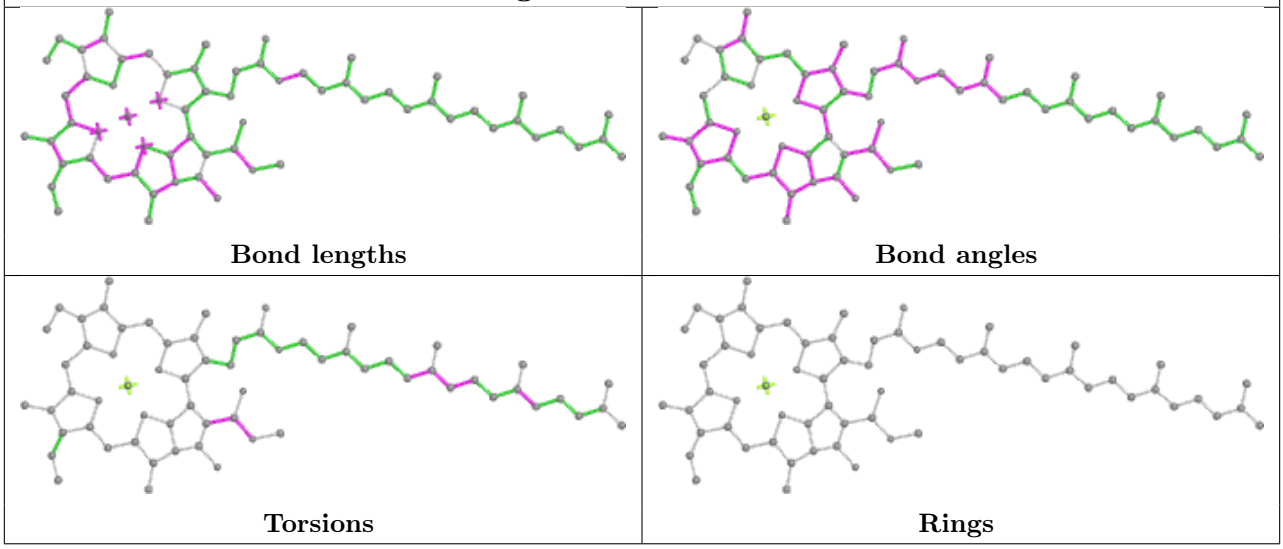
Mol	Chain	Res	Type	Atoms
14	A	1013	CLA	C1A-C2A-CAA-CBA
14	A	1013	CLA	C3A-C2A-CAA-CBA
14	A	1101	CLA	CHA-CBD-CGD-O2D
14	A	1102	CLA	CHA-CBD-CGD-O1D
14	A	1102	CLA	CHA-CBD-CGD-O2D

There are no ring outliers.

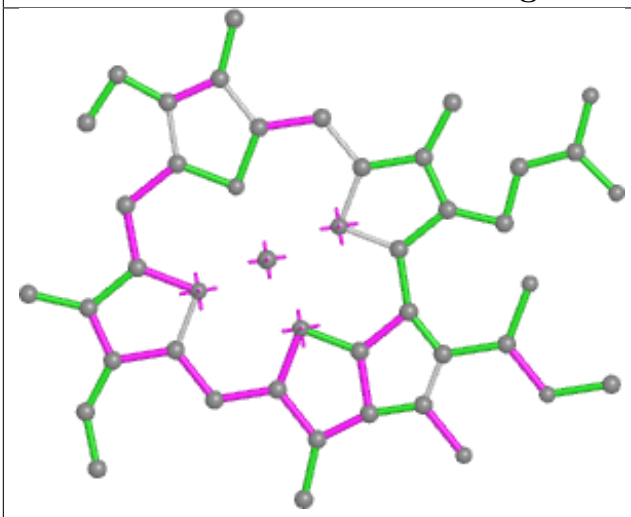
No monomer is involved in short contacts.

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.

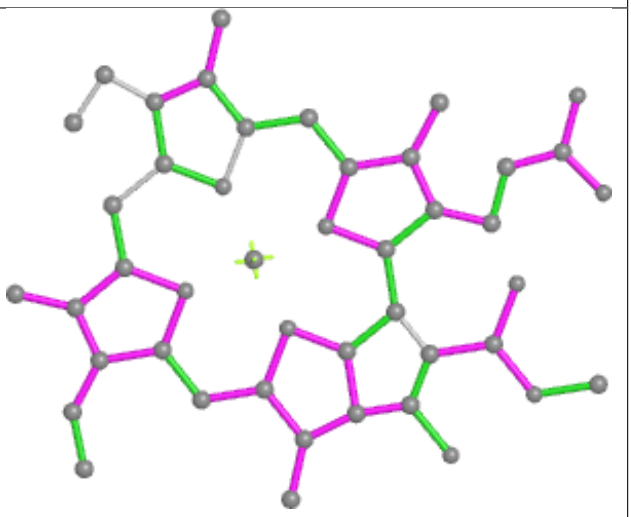
Ligand CLA H 1223



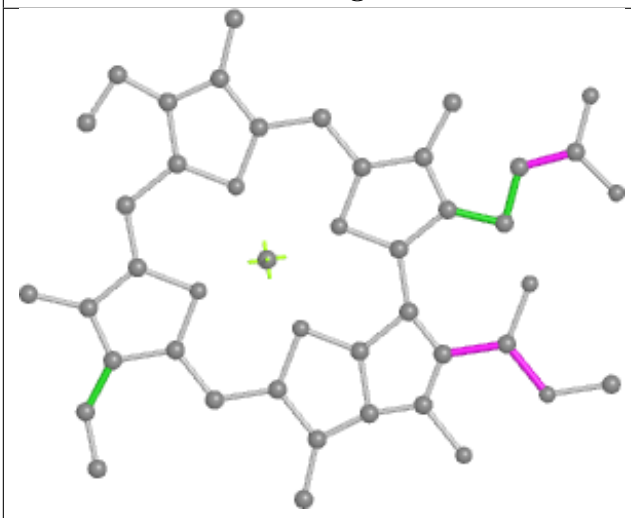
Ligand CLA a 1101



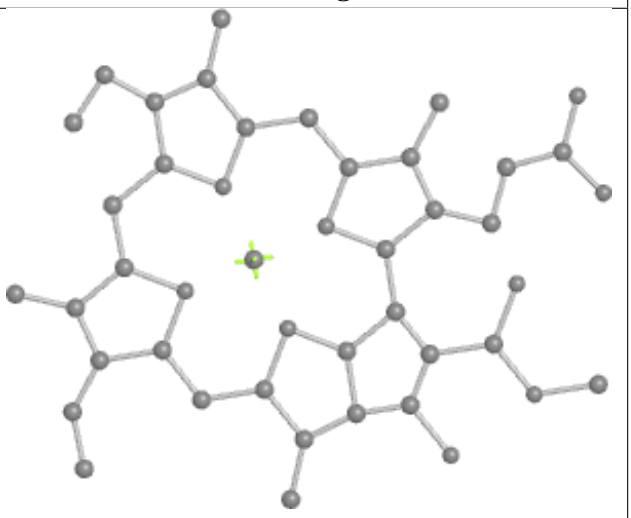
Bond lengths



Bond angles

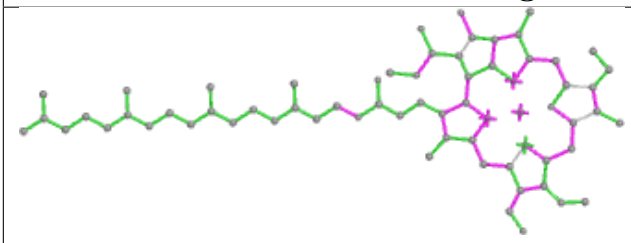


Torsions

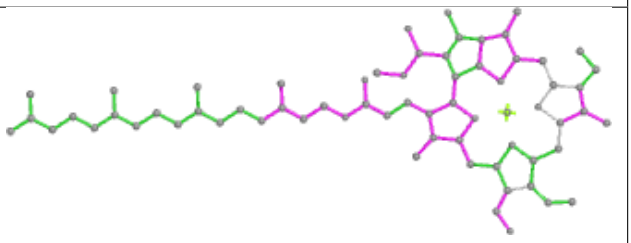


Rings

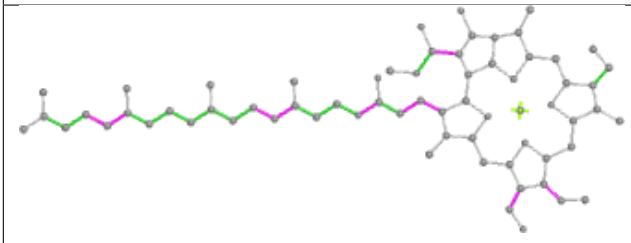
Ligand F6C H 1238



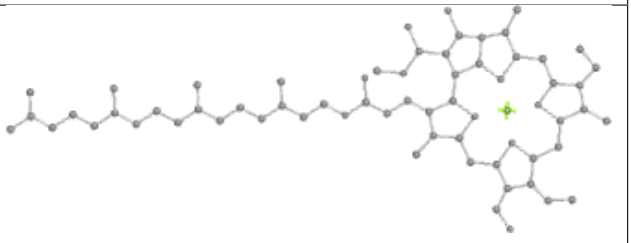
Bond lengths



Bond angles

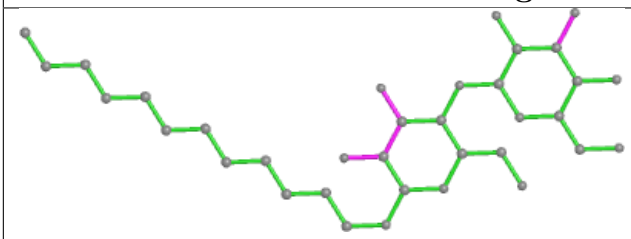


Torsions

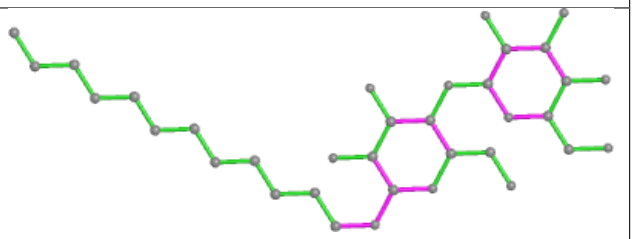


Rings

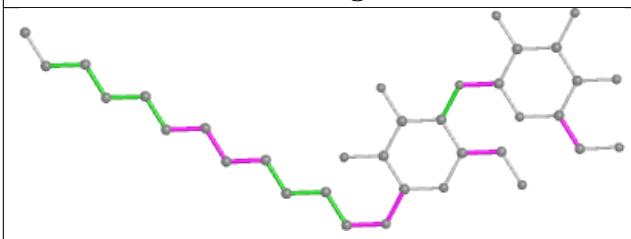
Ligand LMT b 6003



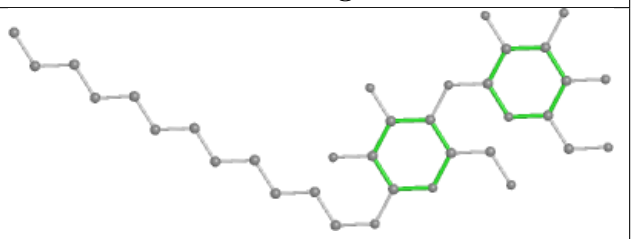
Bond lengths



Bond angles

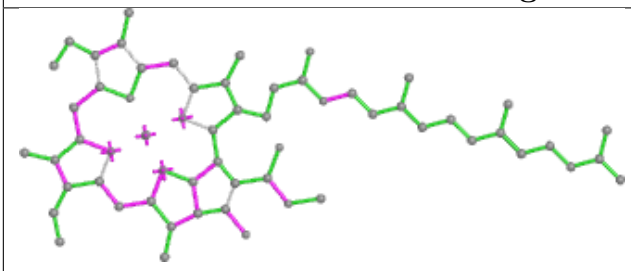


Torsions



Rings

Ligand CLA a 1123



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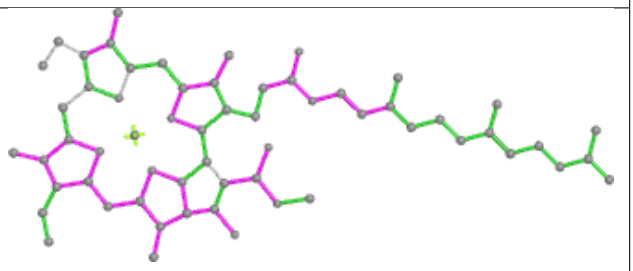
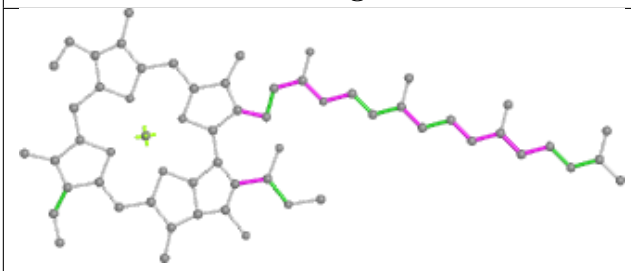
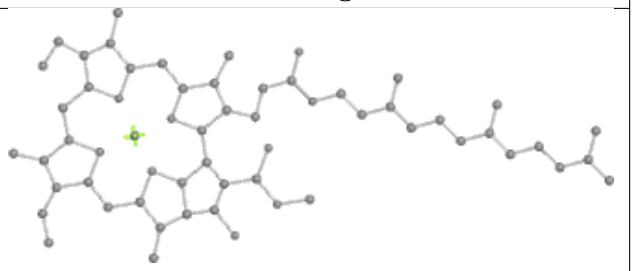


Bond angles

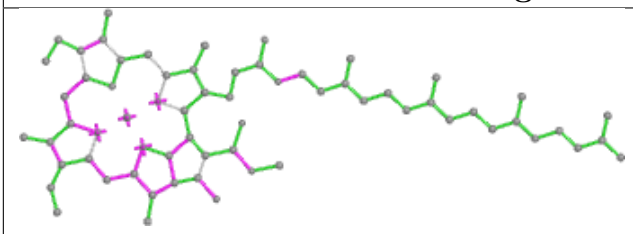


Torsions

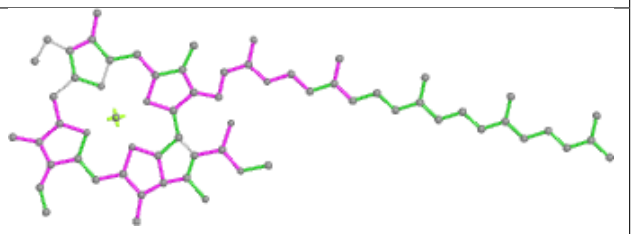


Rings

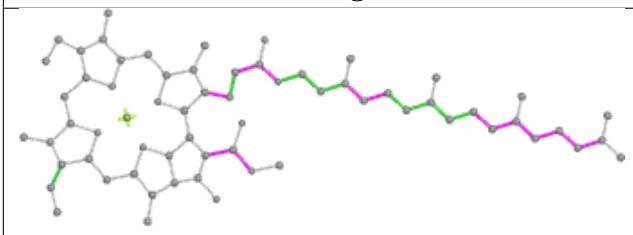
Ligand CLA A 1103



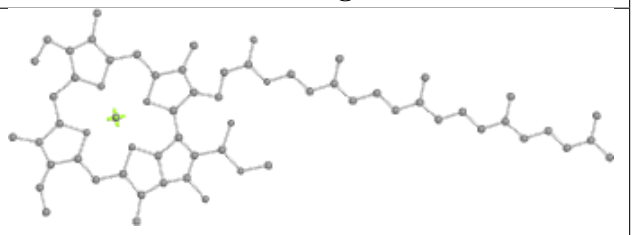
Bond lengths



Bond angles

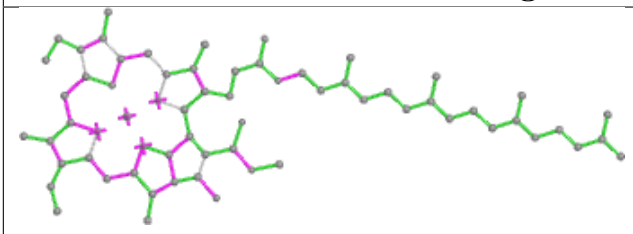


Torsions

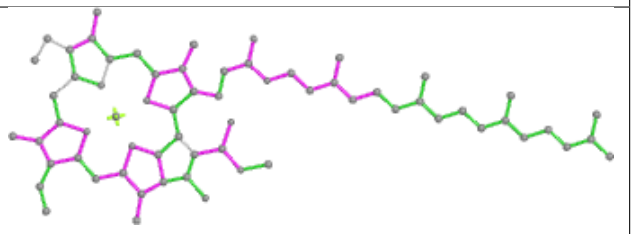


Rings

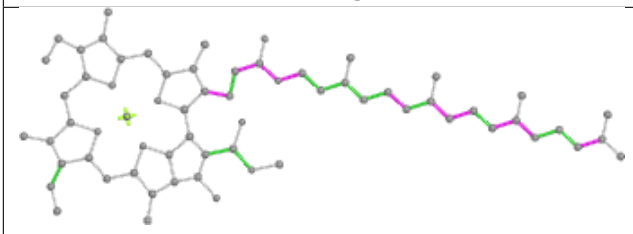
Ligand CL0 A 1011



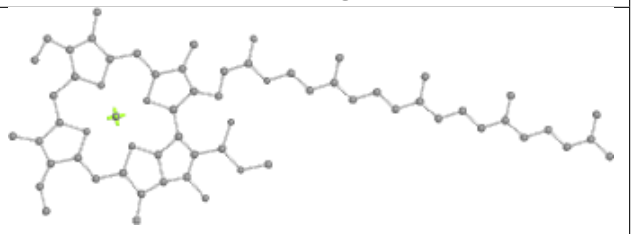
Bond lengths



Bond angles

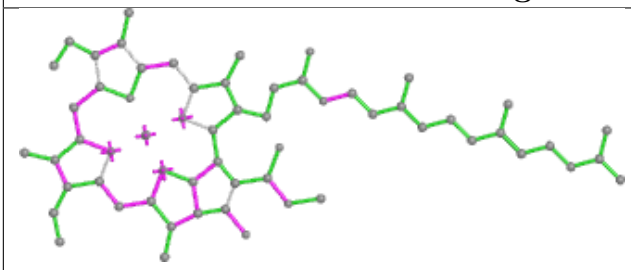


Torsions

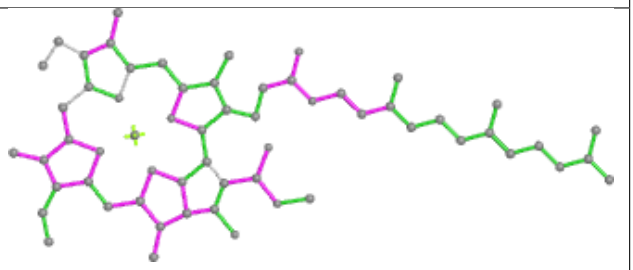


Rings

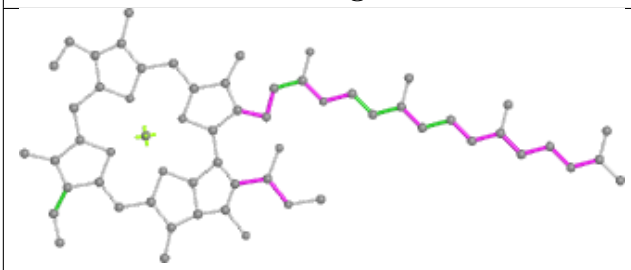
Ligand CLA G 1133



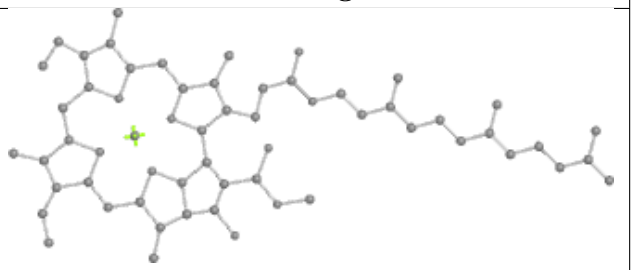
Bond lengths



Bond angles

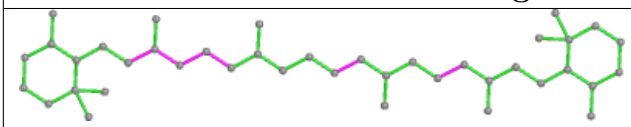


Torsions

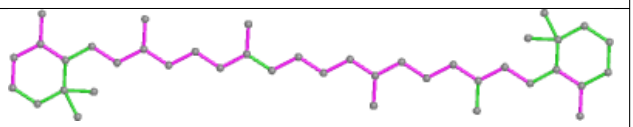


Rings

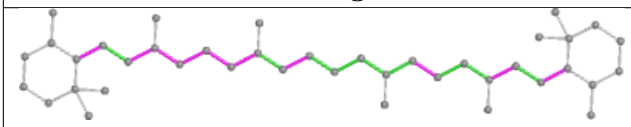
Ligand BCR H 4006



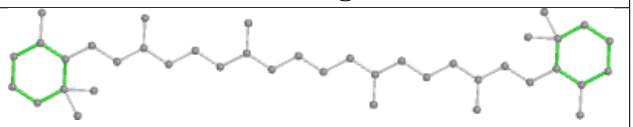
Bond lengths



Bond angles

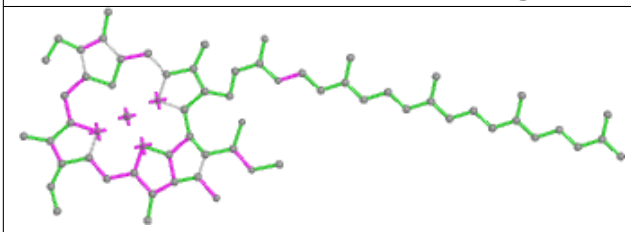


Torsions

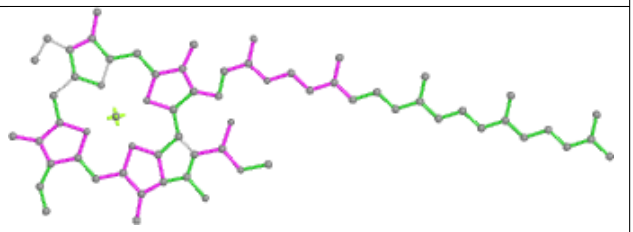


Rings

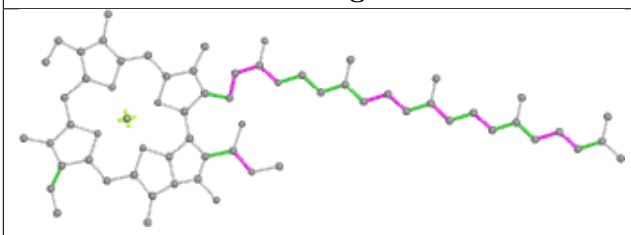
Ligand CLA H 1220



Bond lengths



Bond angles



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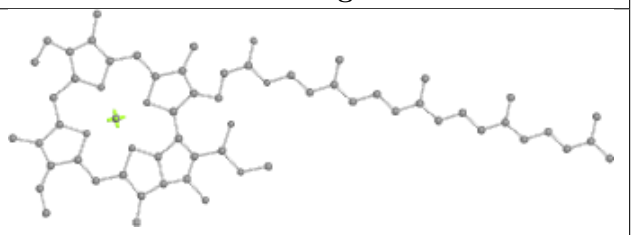
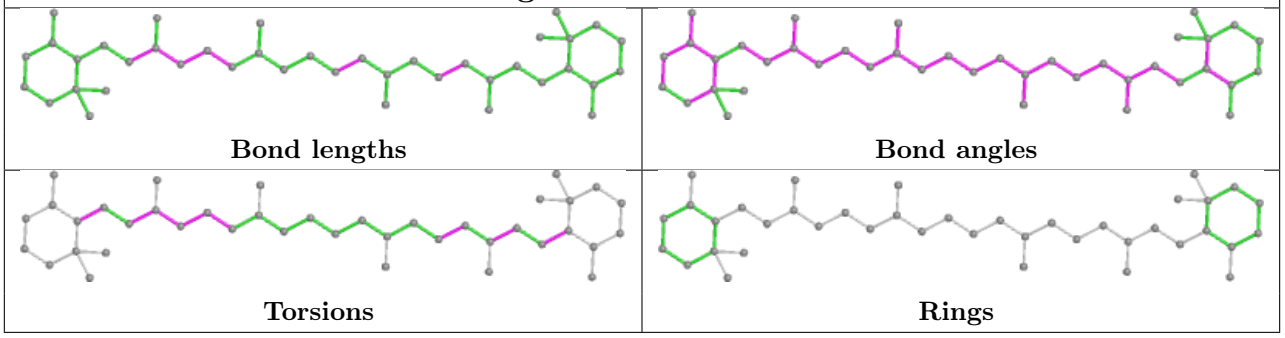
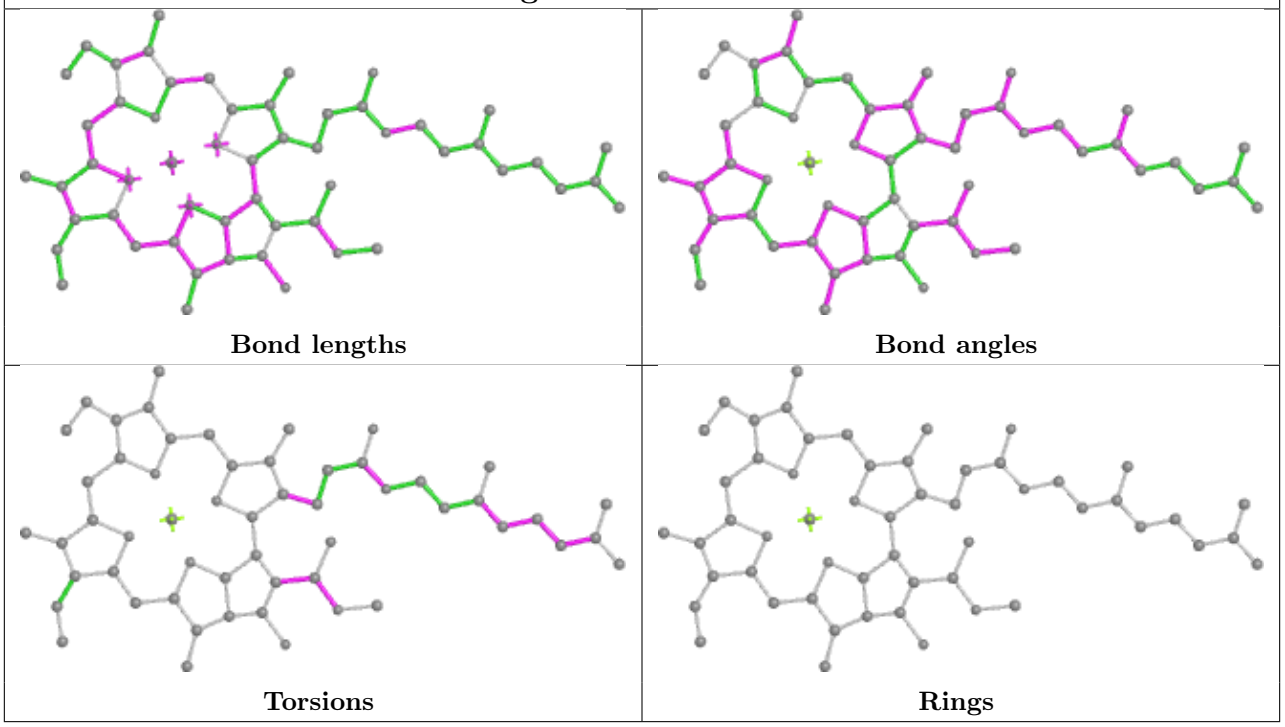


Rings

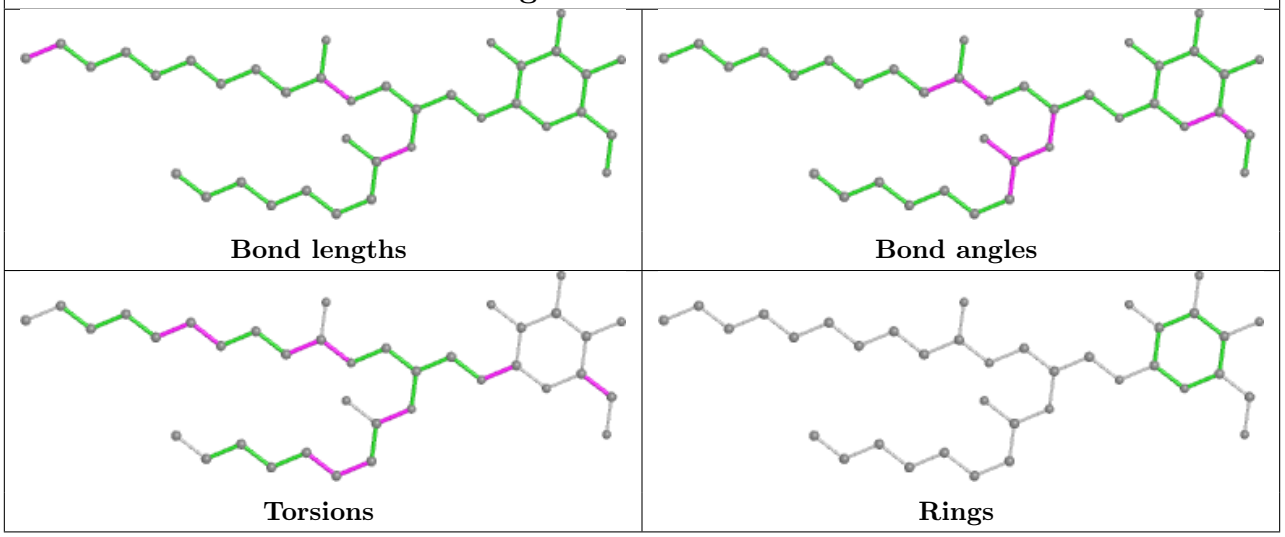
Ligand BCR b 4004



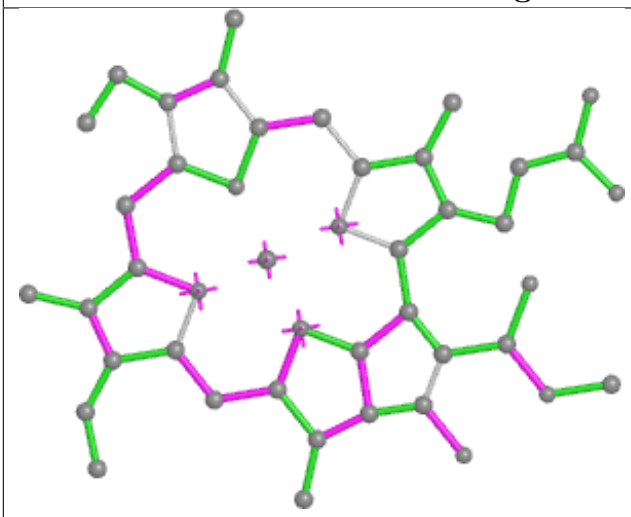
Ligand CLA a 1138



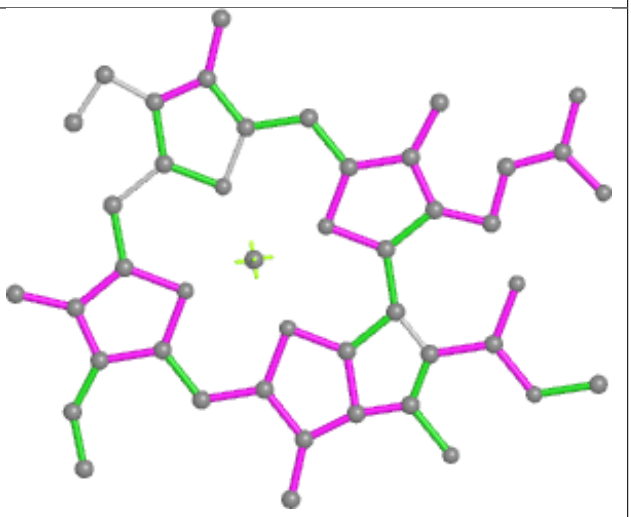
Ligand LMG i 5006



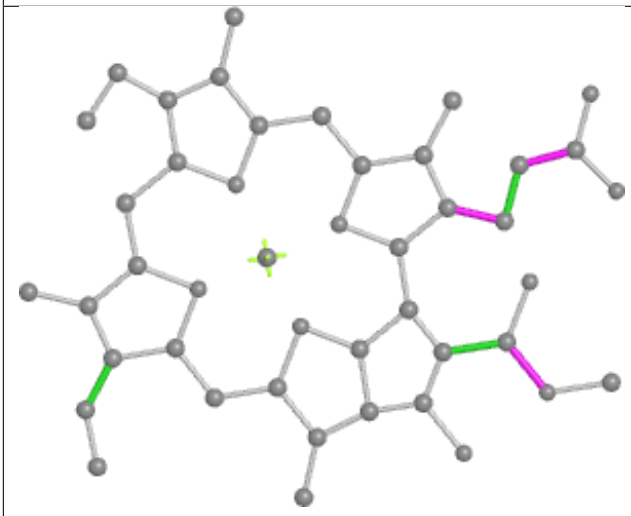
Ligand CLA G 1107



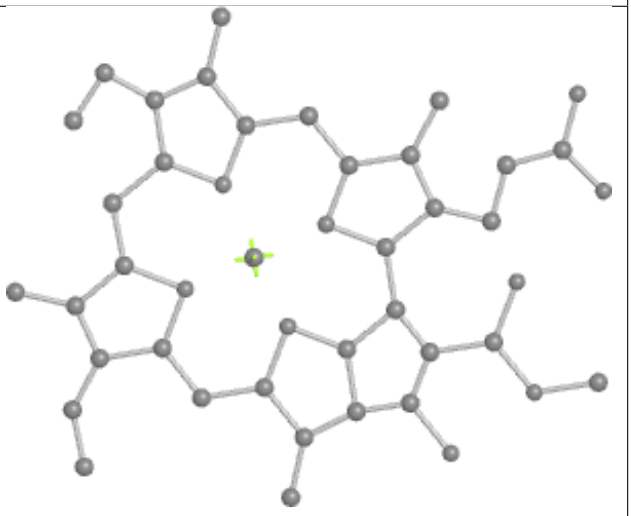
Bond lengths



Bond angles

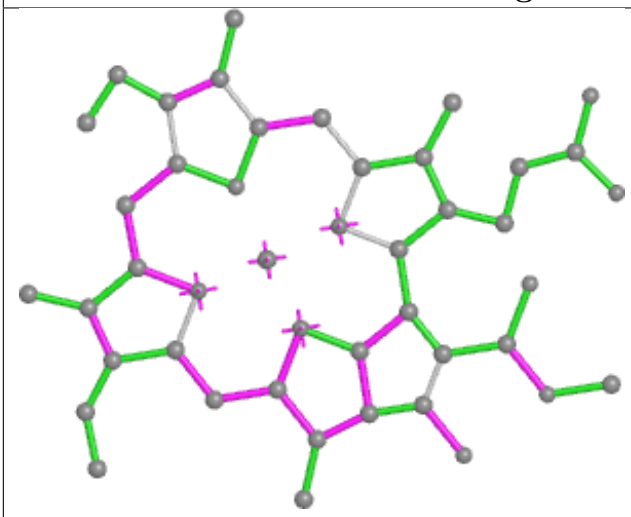


Torsions

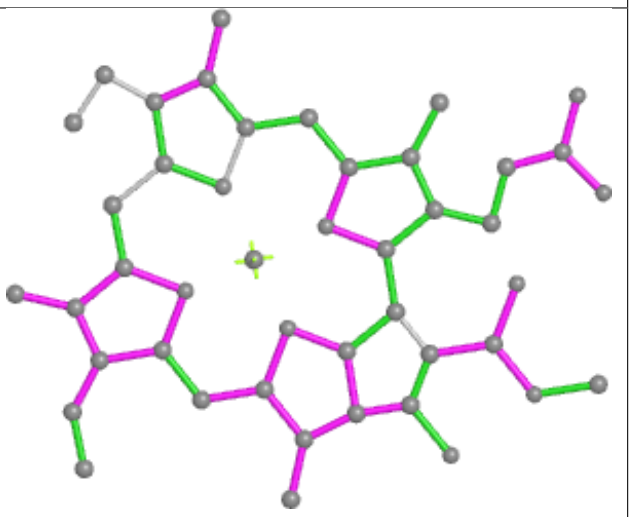


Rings

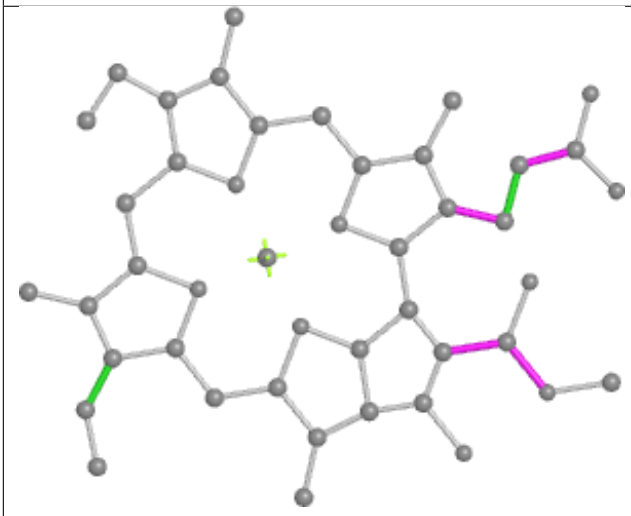
Ligand CLA B 1227



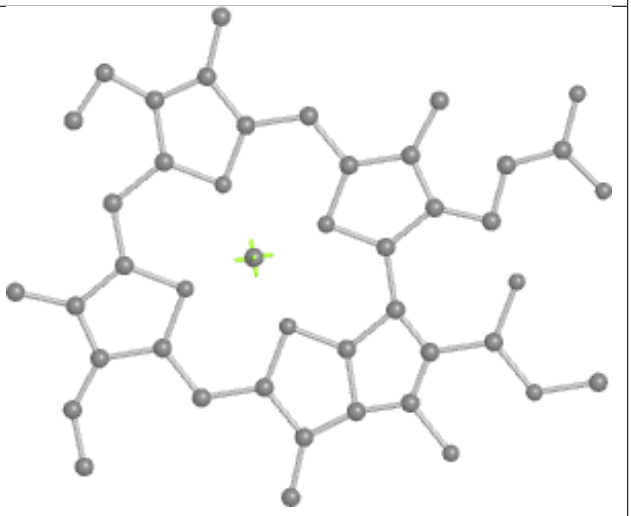
Bond lengths



Bond angles

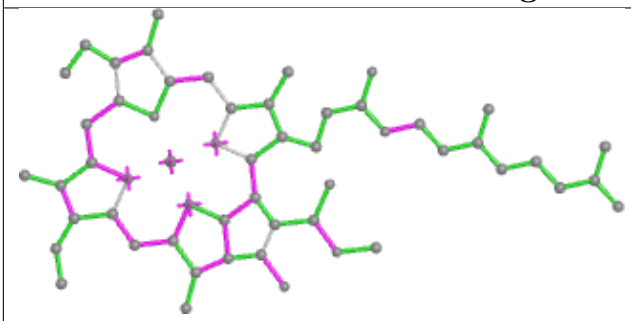


Torsions

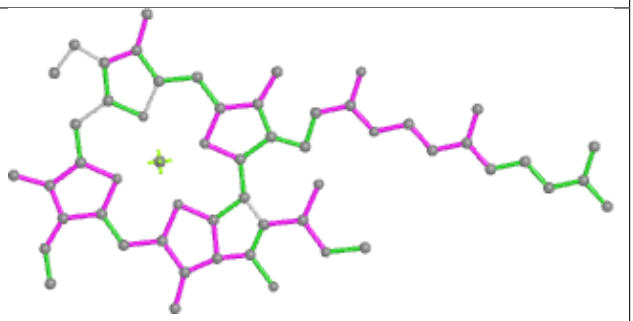


Rings

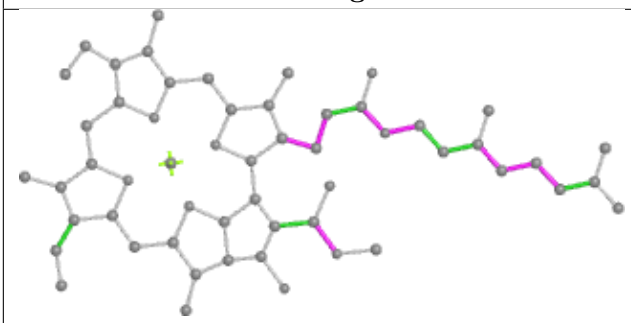
Ligand CLA a 1122



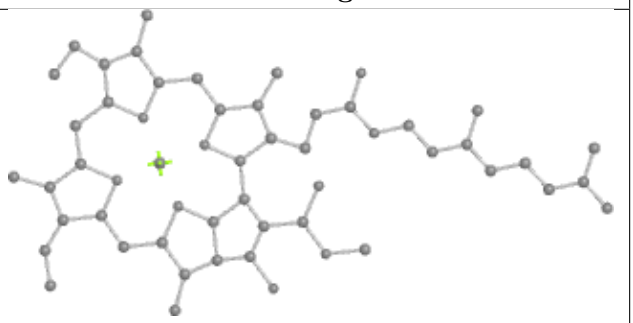
Bond lengths



Bond angles

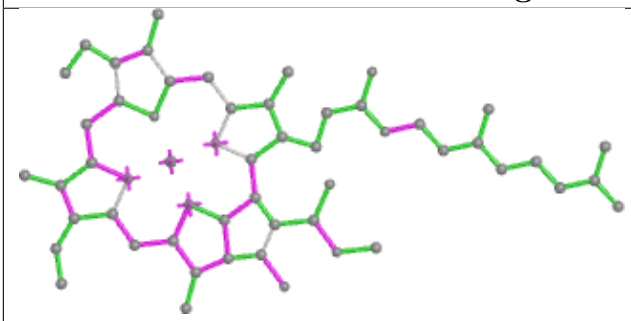


Torsions



Rings

Ligand CLA A 1112



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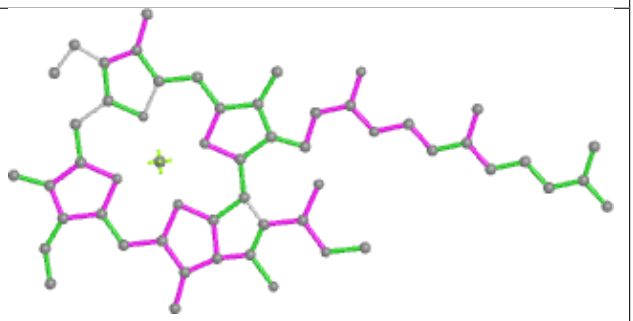
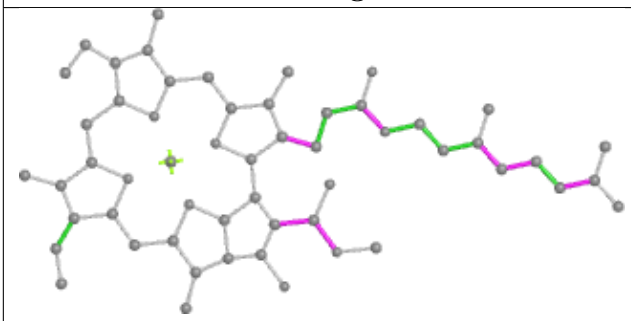
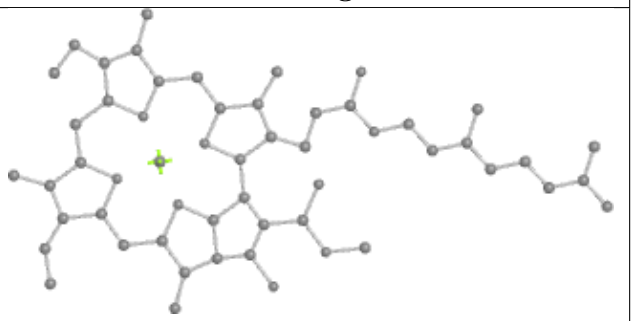


Bond angles

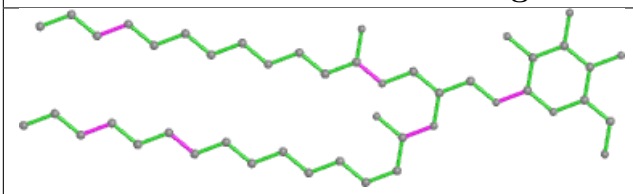


Torsions



Rings

Ligand LMG B 5002



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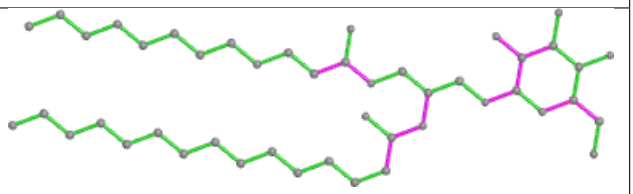
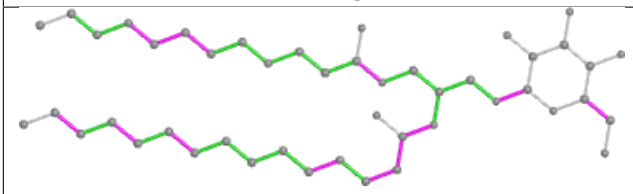
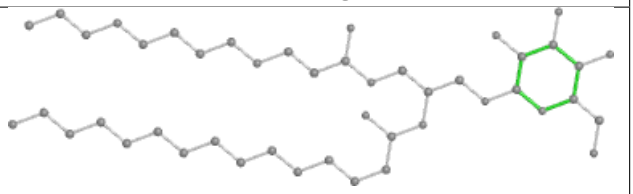


Bond angles

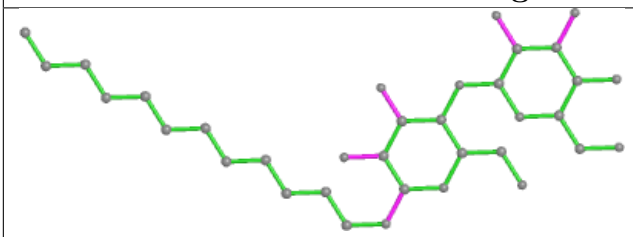


Torsions

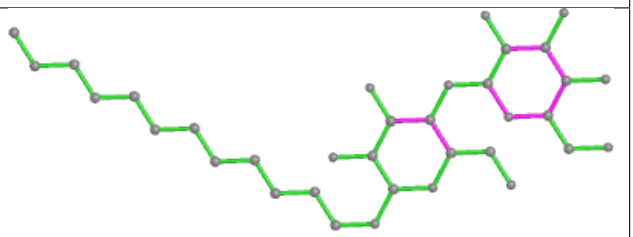


Rings

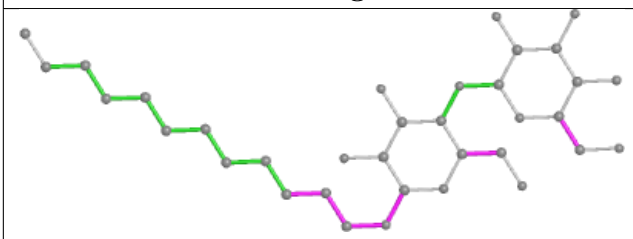
Ligand LMT U 6101



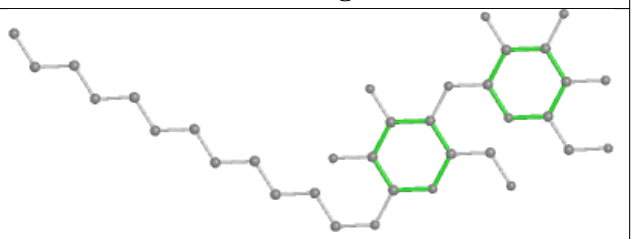
Bond lengths



Bond angles

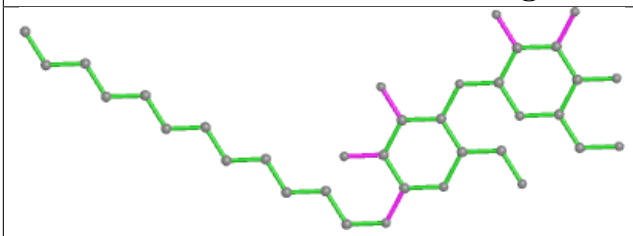


Torsions



Rings

Ligand LMT l 6101



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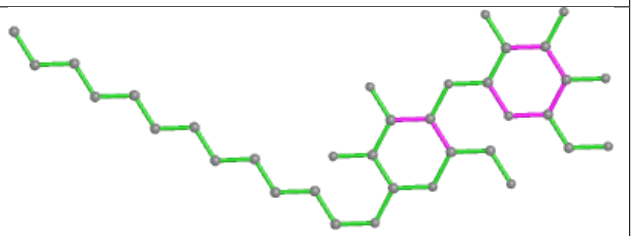
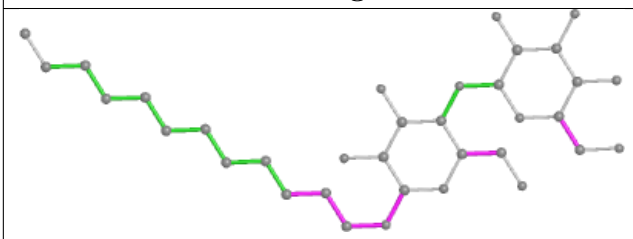
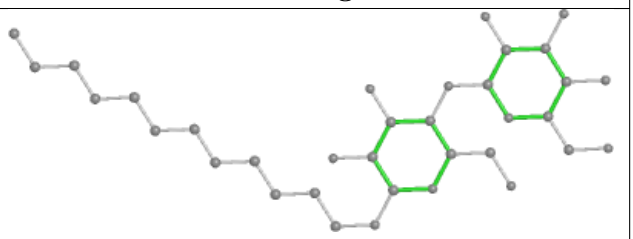


Bond angles

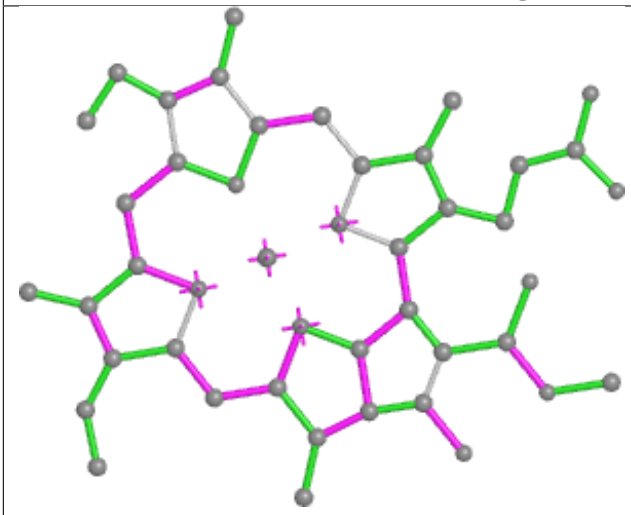


Torsions

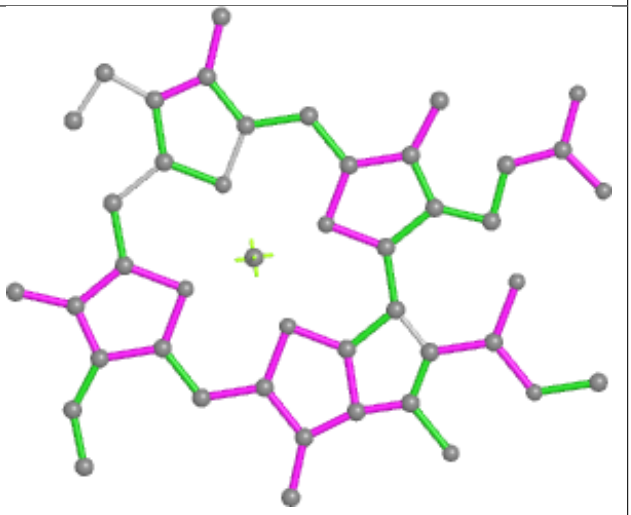


Rings

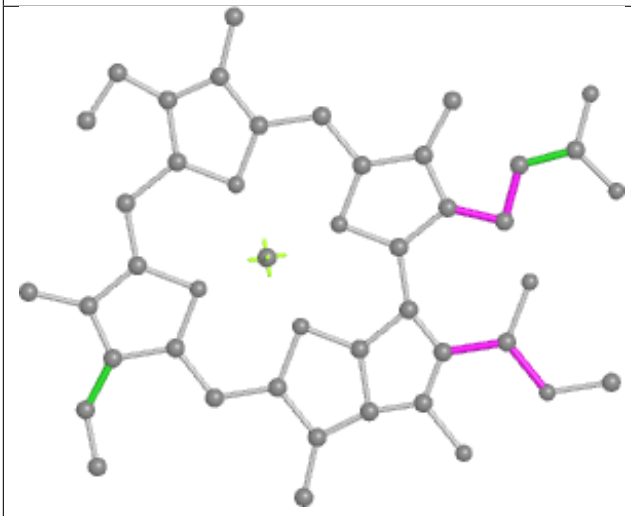
Ligand CLA G 1120



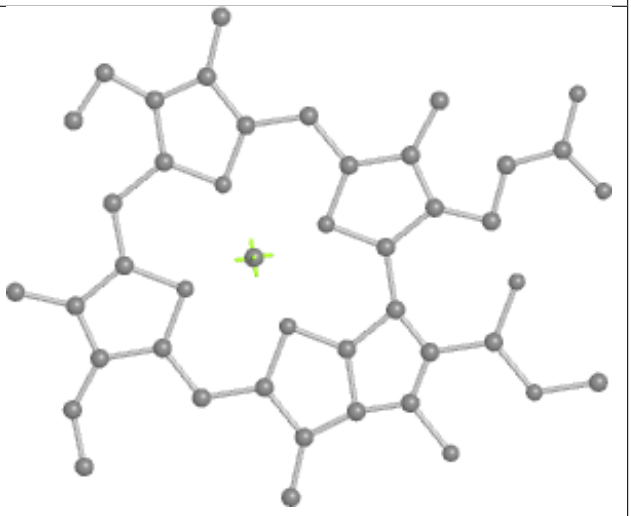
Bond lengths



Bond angles

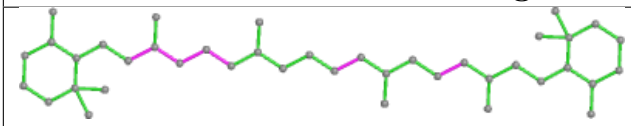


Torsions

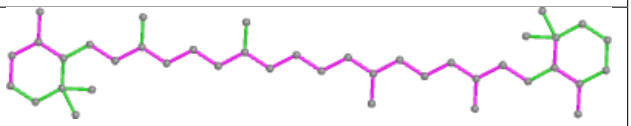


Rings

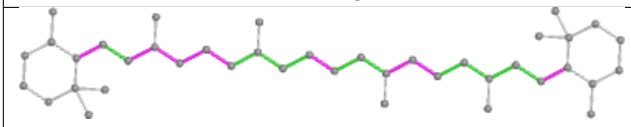
Ligand BCR V 4021



Bond lengths



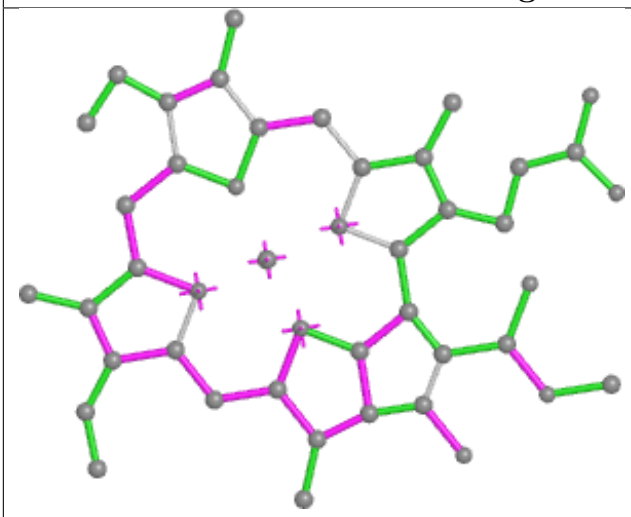
Bond angles



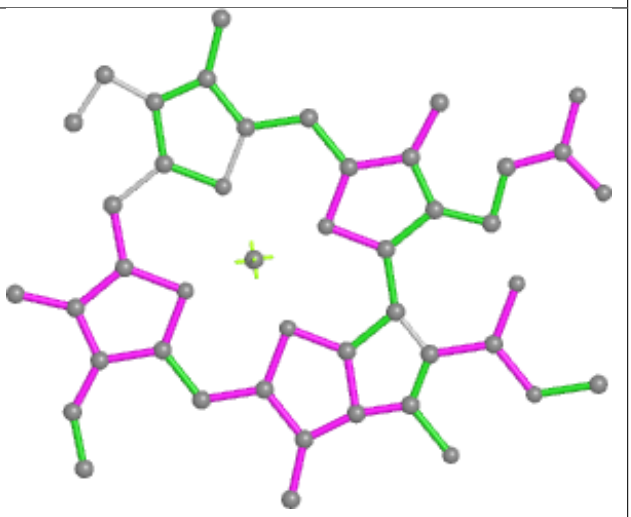
Torsions

Rings

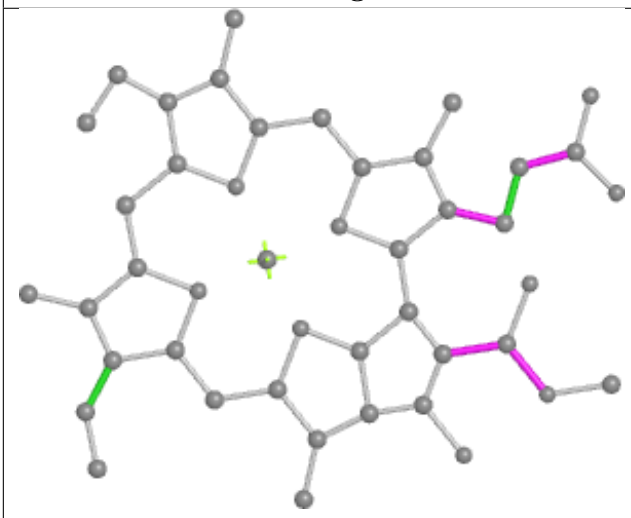
Ligand CLA b 1233



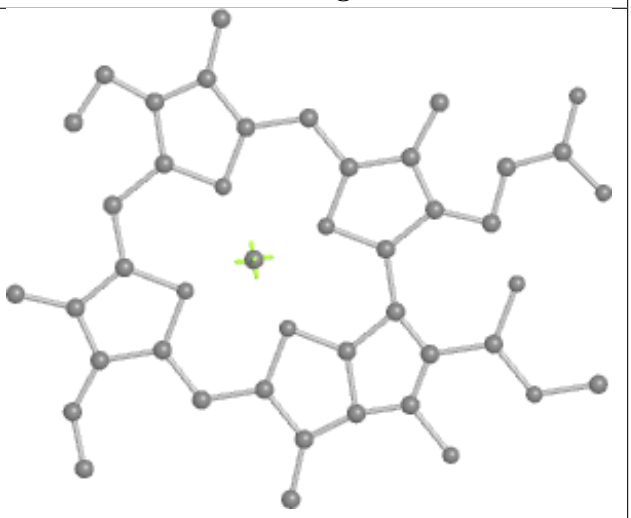
Bond lengths



Bond angles

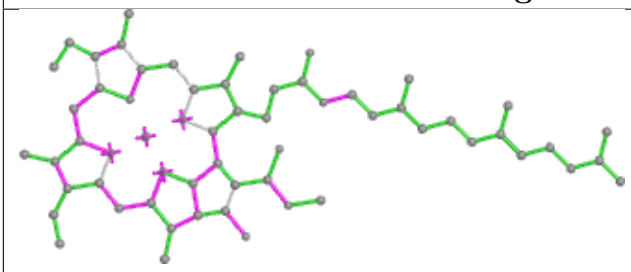


Torsions

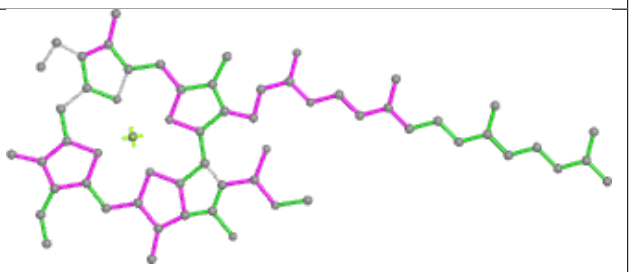


Rings

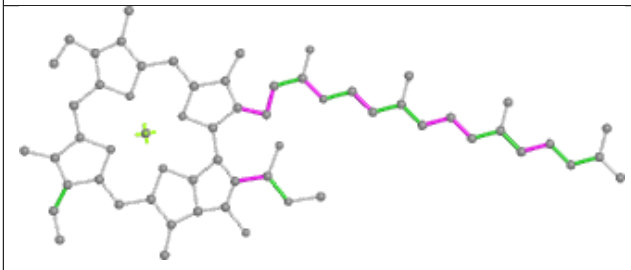
Ligand CLA A 1013



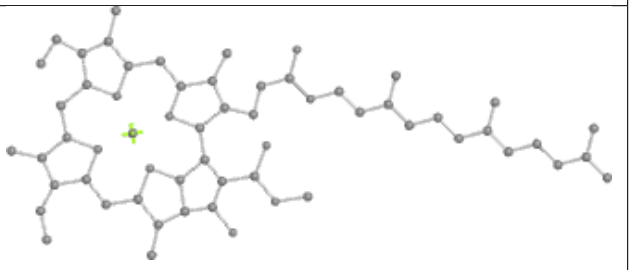
Bond lengths



Bond angles

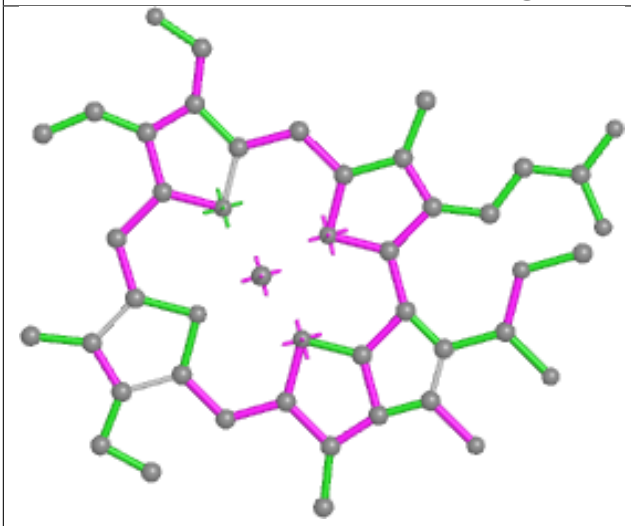


Torsions

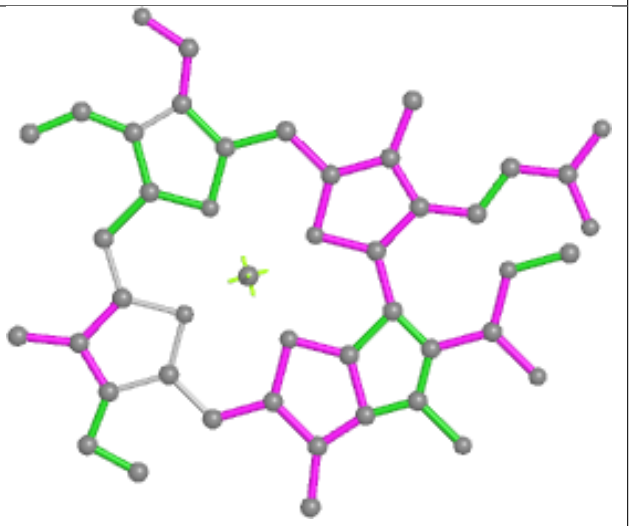


Rings

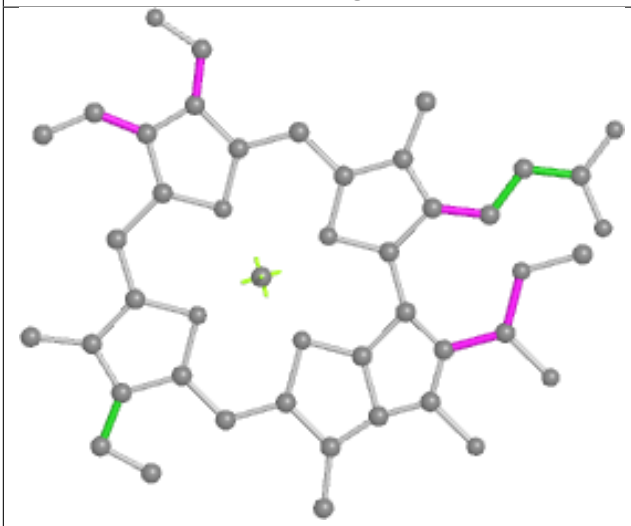
Ligand F6C H 1230



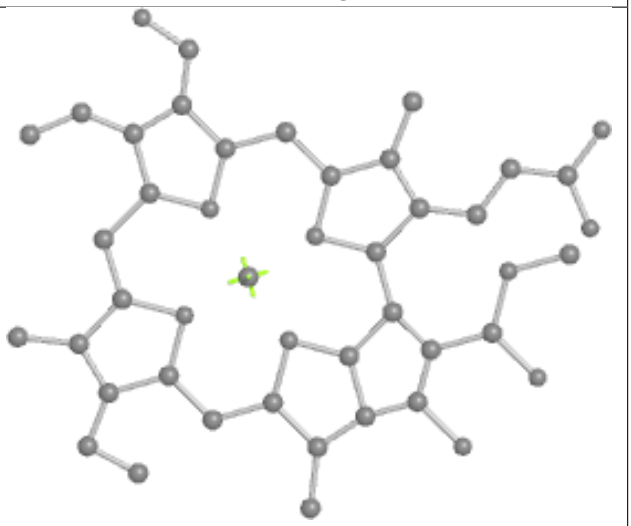
Bond lengths



Bond angles

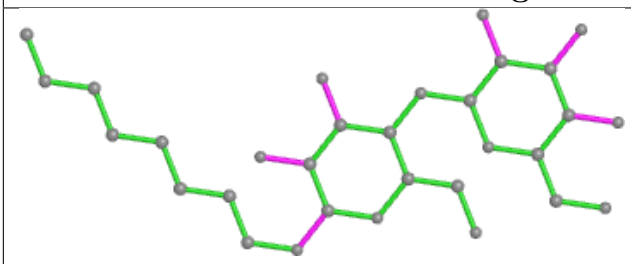


Torsions

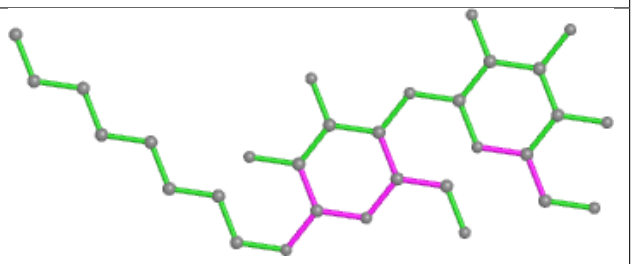


Rings

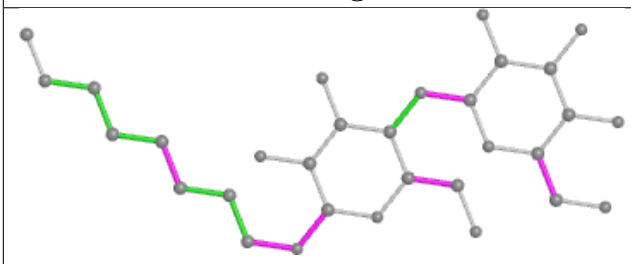
Ligand LMT A 6001



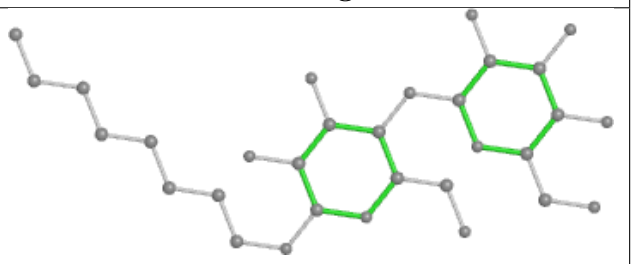
Bond lengths



Bond angles

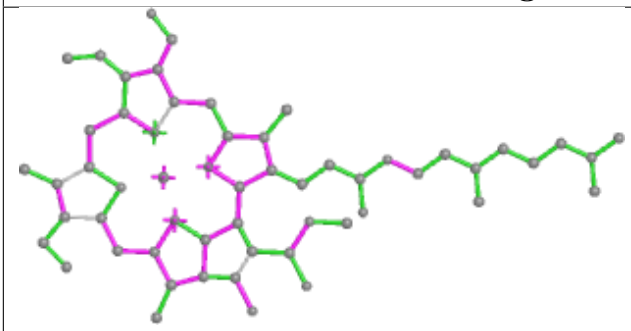


Torsions



Rings

Ligand F6C H 1219



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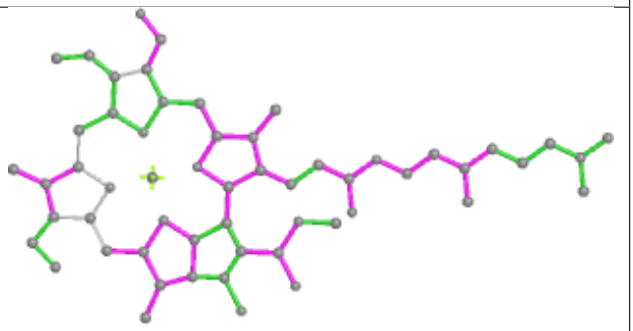
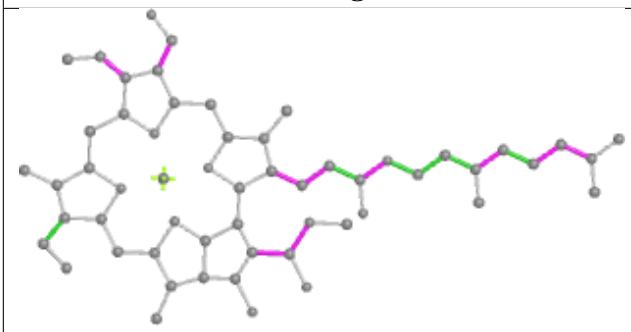
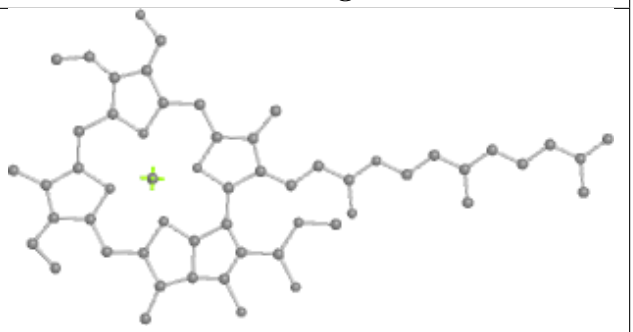


Bond angles

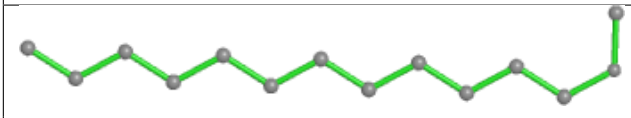


Torsions



Rings

Ligand LMT U 6001



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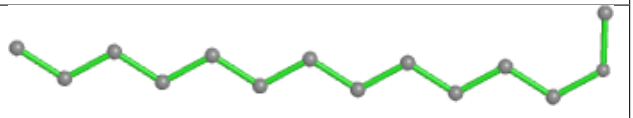
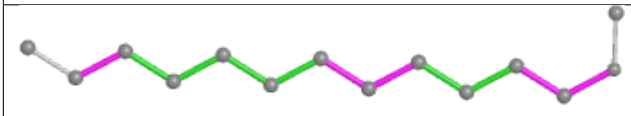
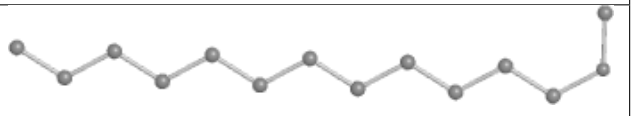


Bond angles

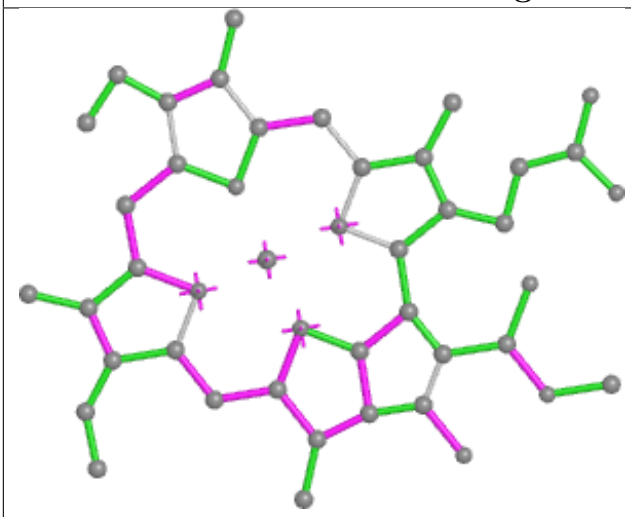


Torsions

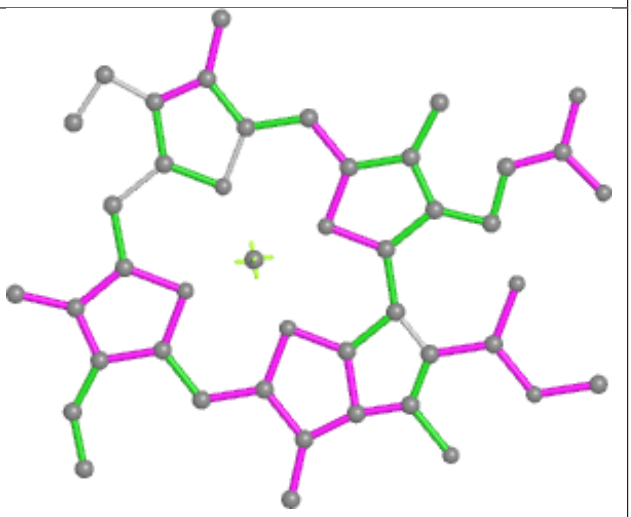


Rings

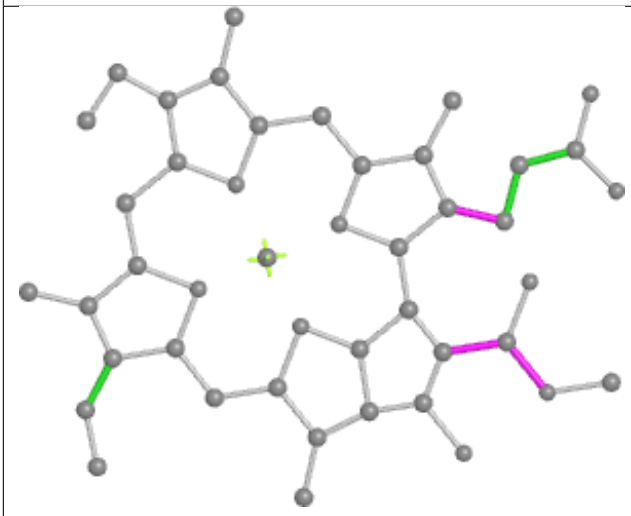
Ligand CLA H 1218



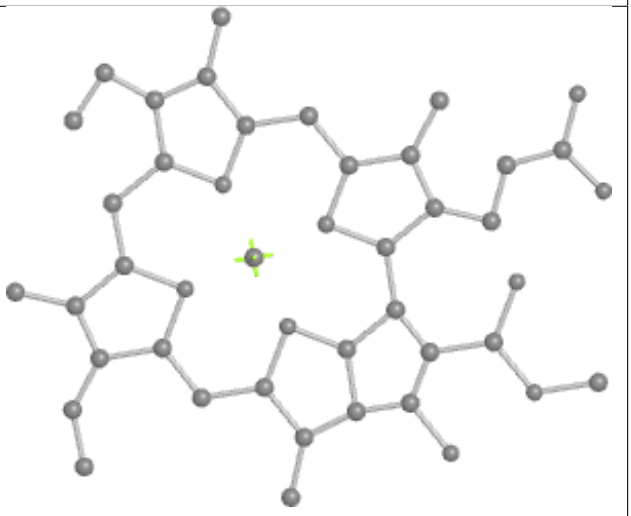
Bond lengths



Bond angles

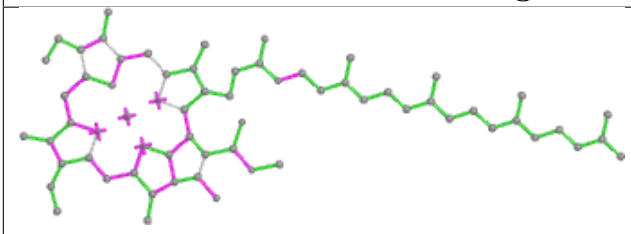


Torsions

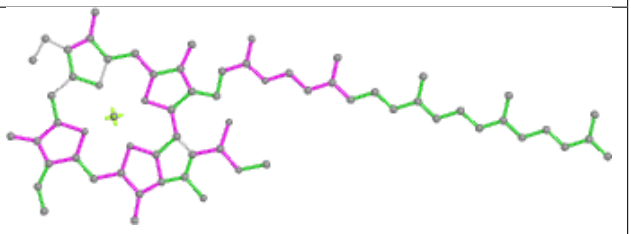


Rings

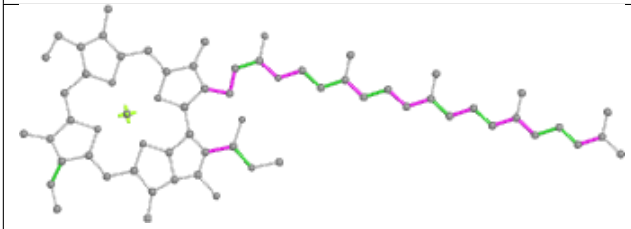
Ligand CLA H 1221



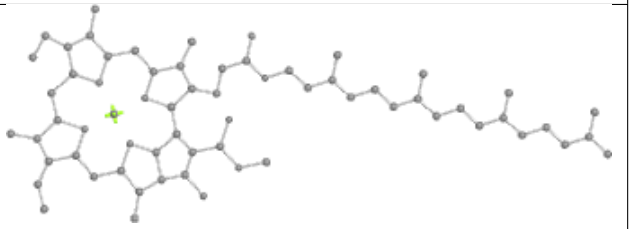
Bond lengths



Bond angles

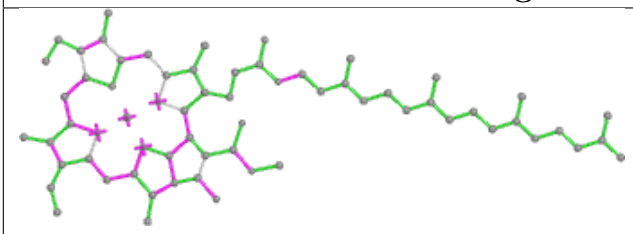


Torsions

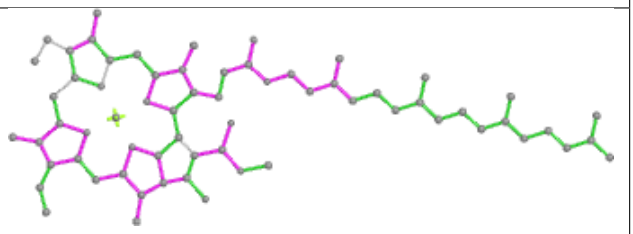


Rings

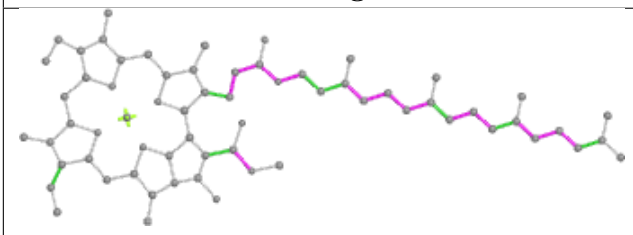
Ligand CLA A 1136



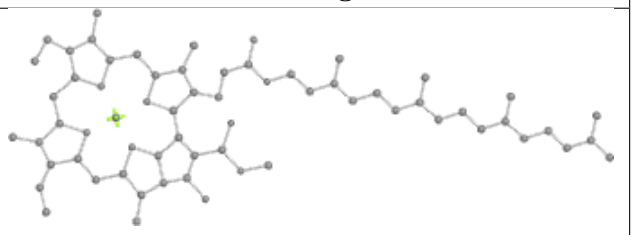
Bond lengths



Bond angles

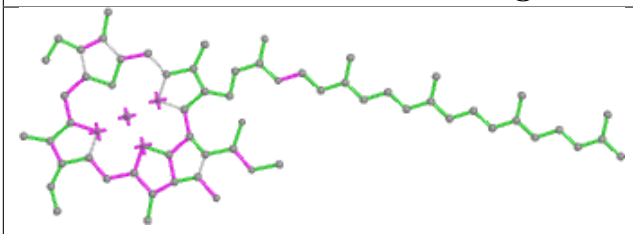


Torsions

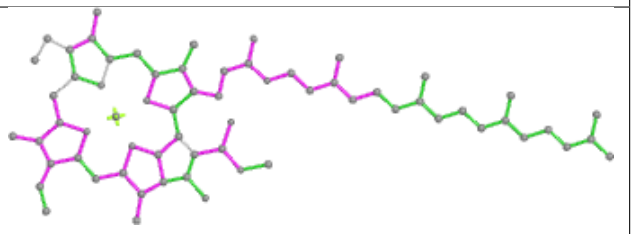


Rings

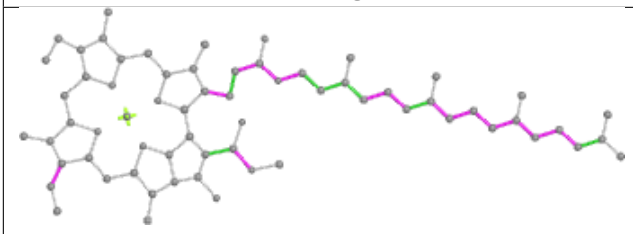
Ligand CLA H 1239



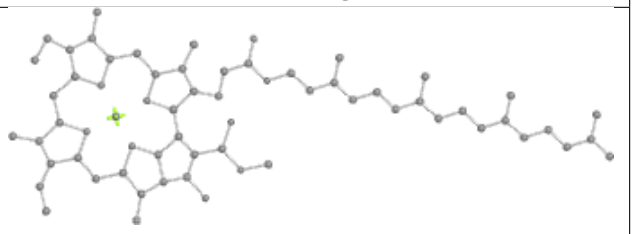
Bond lengths



Bond angles

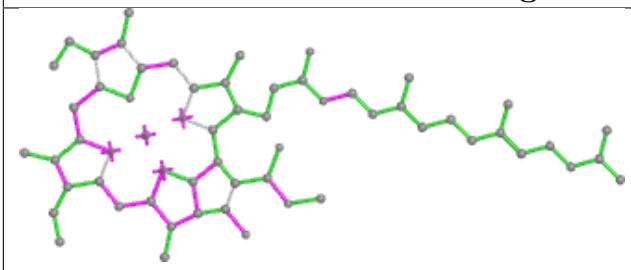


Torsions

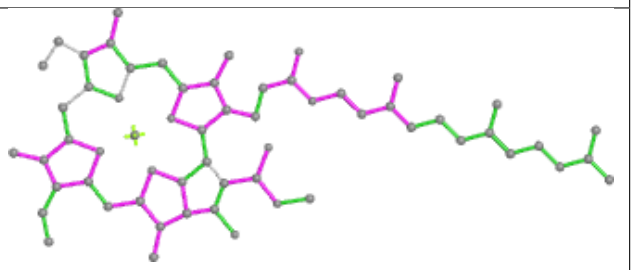


Rings

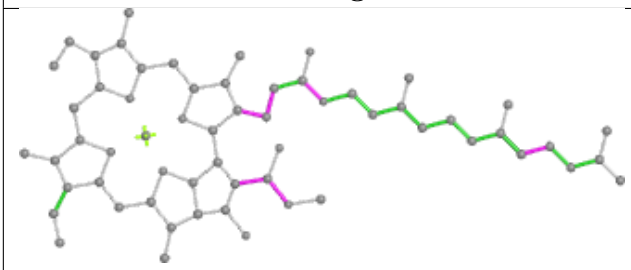
Ligand CLA a 1106



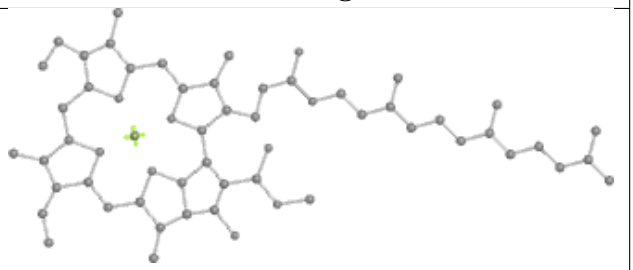
Bond lengths



Bond angles

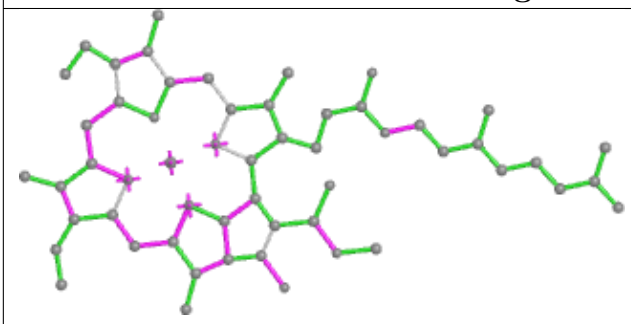


Torsions

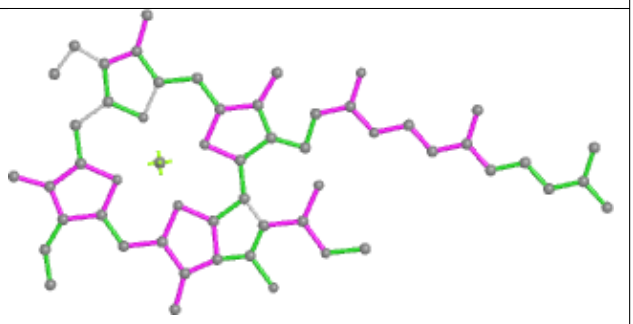


Rings

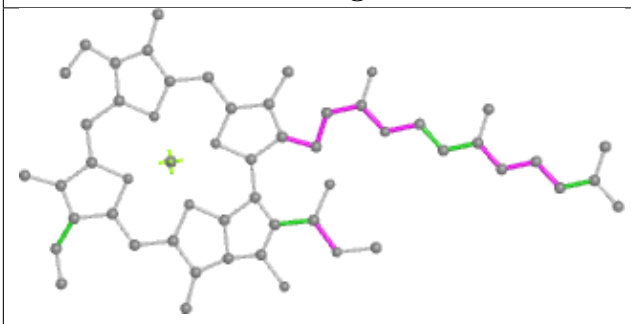
Ligand CLA G 1140



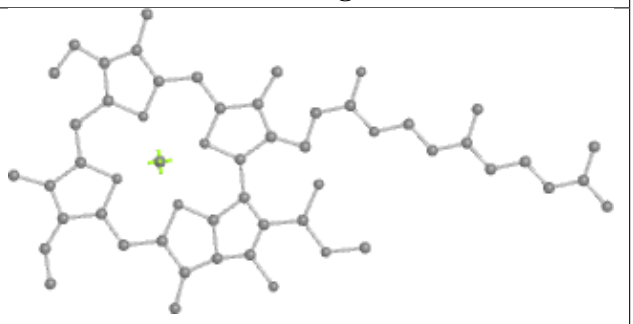
Bond lengths



Bond angles

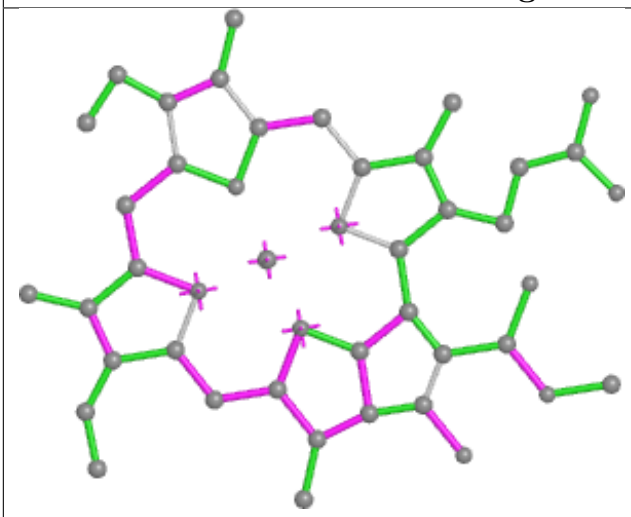


Torsions

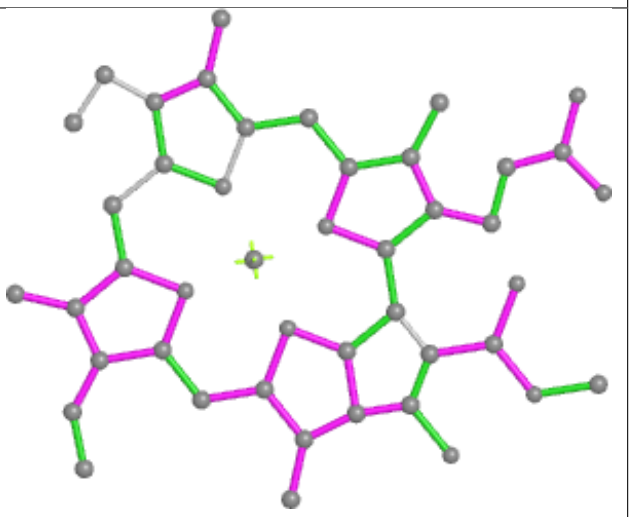


Rings

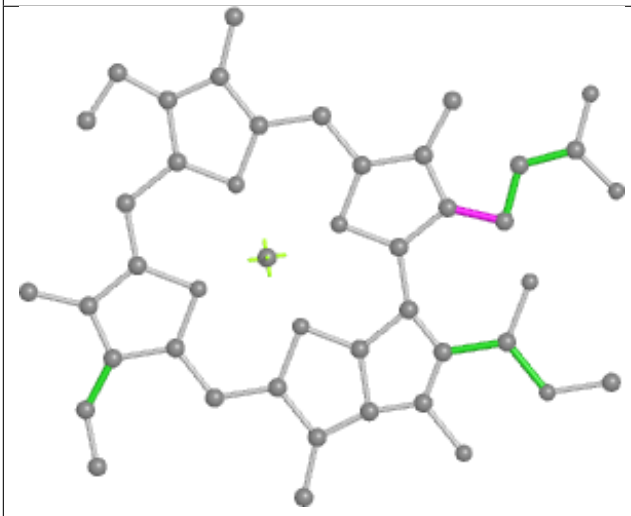
Ligand CLA b 1209



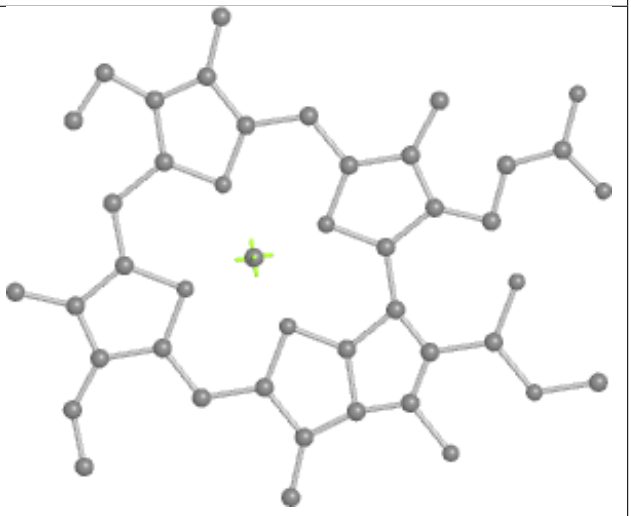
Bond lengths



Bond angles

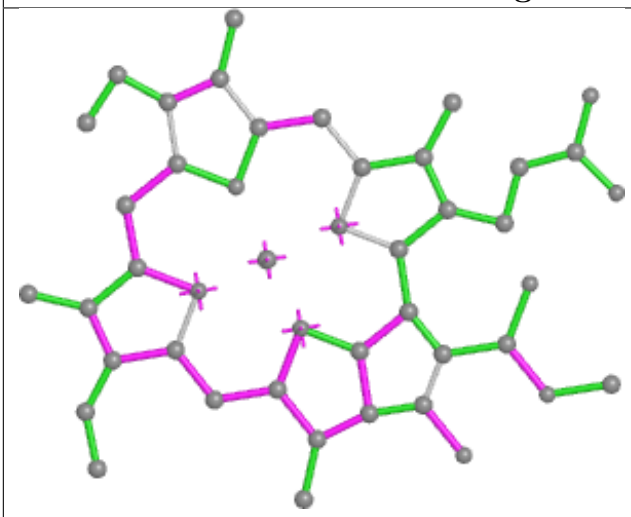


Torsions

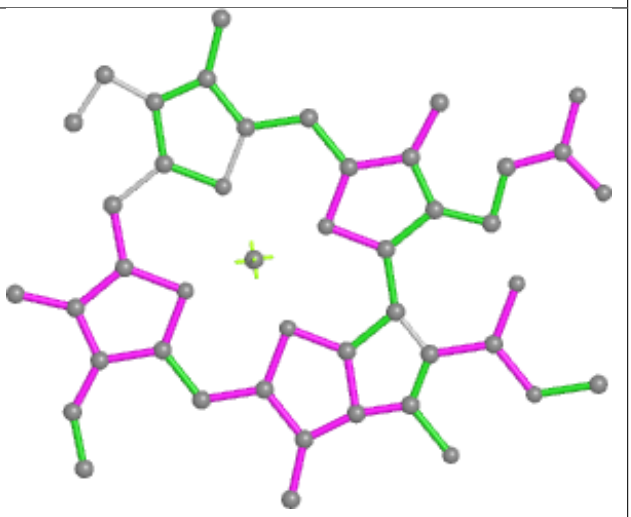


Rings

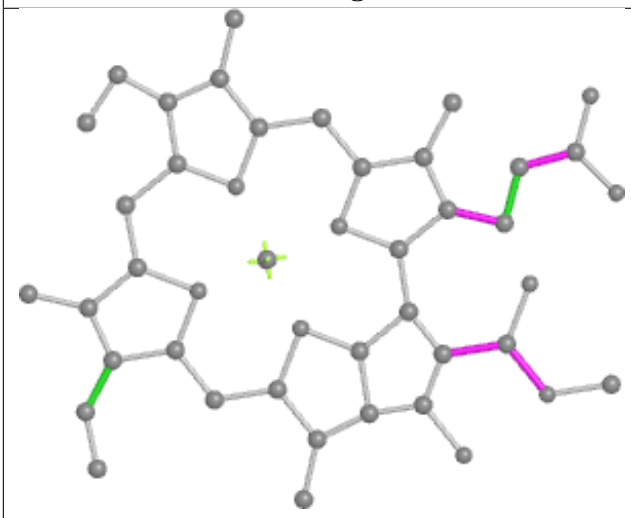
Ligand CLA H 1233



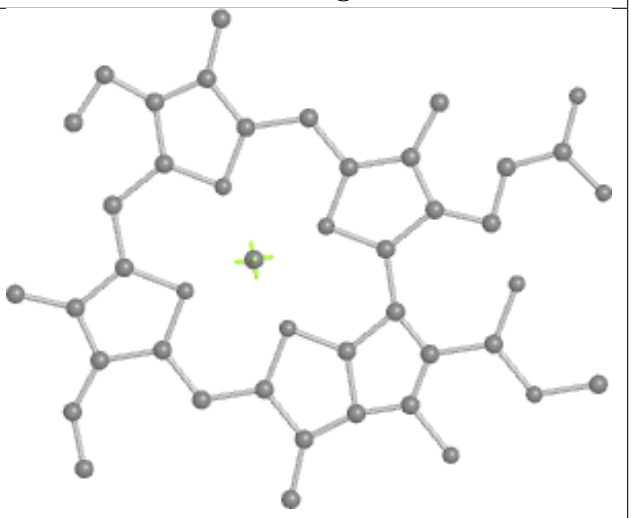
Bond lengths



Bond angles

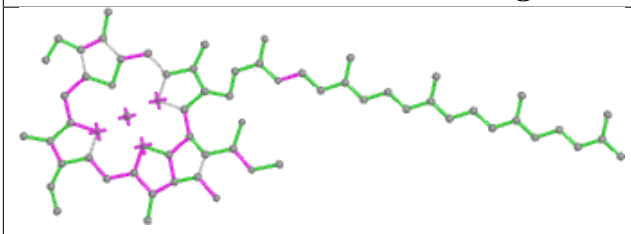


Torsions

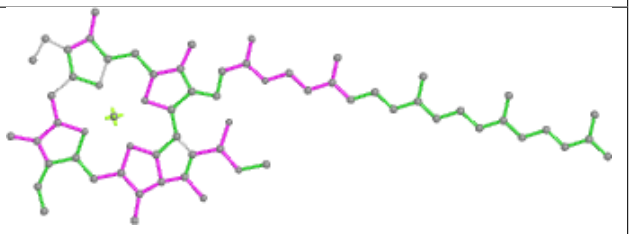


Rings

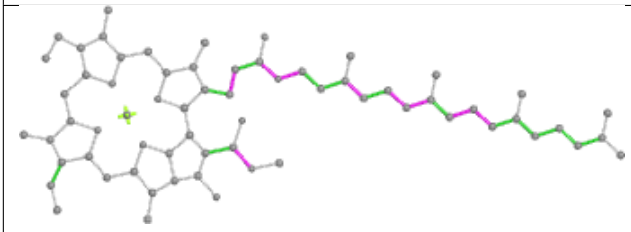
Ligand CLA A 1109



Bond lengths



Bond angles



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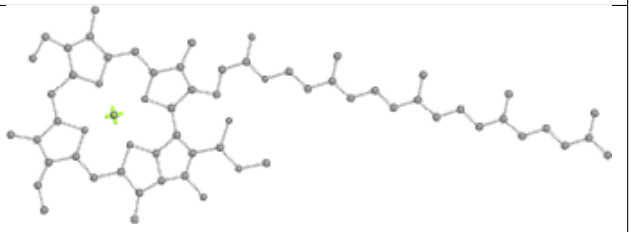
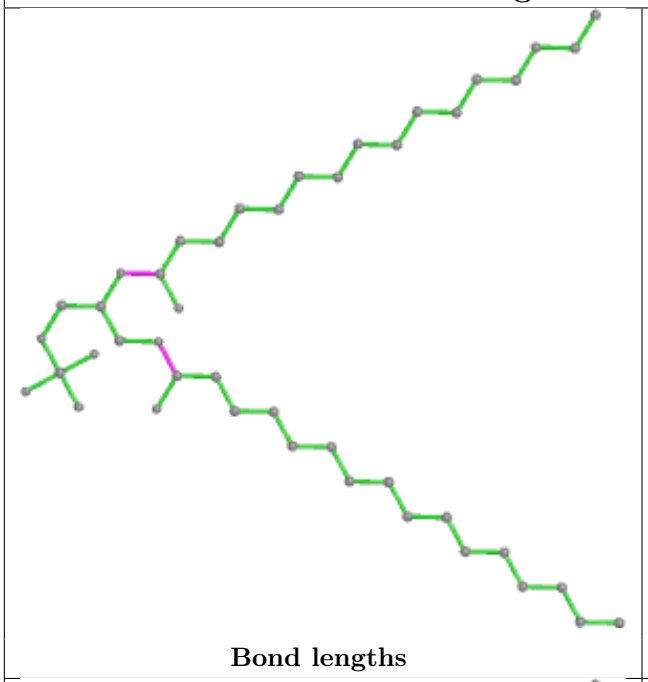
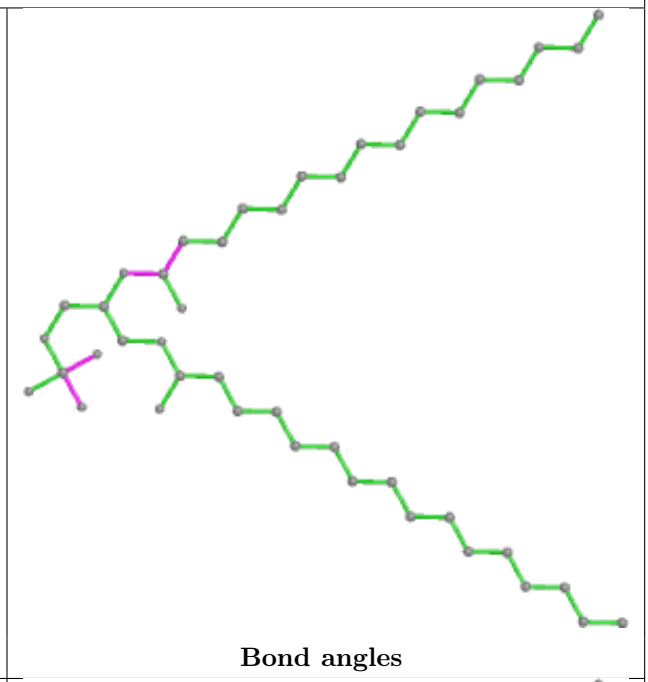


Rings

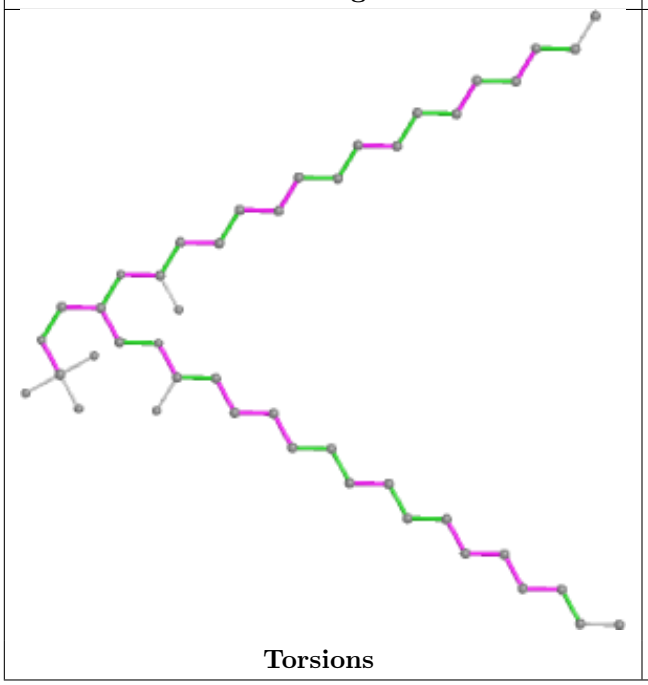
Ligand LHG A 5002



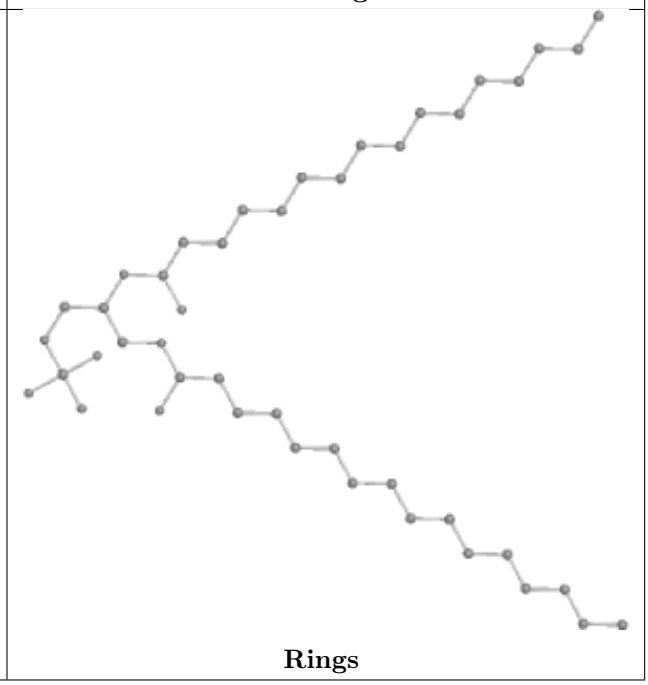
Bond lengths



Bond angles

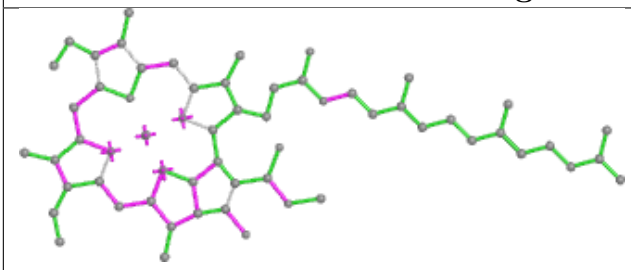


Torsions



Rings

Ligand CLA B 1229



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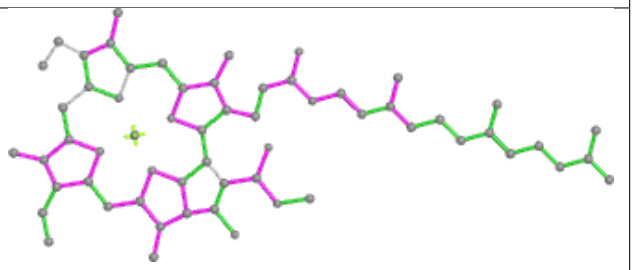
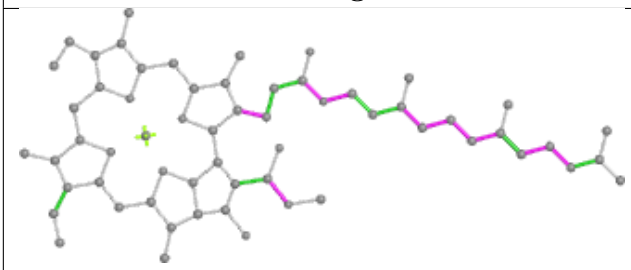
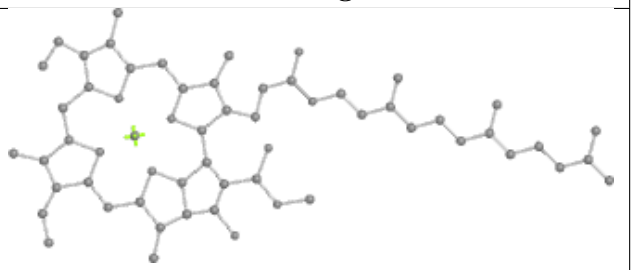


Bond angles

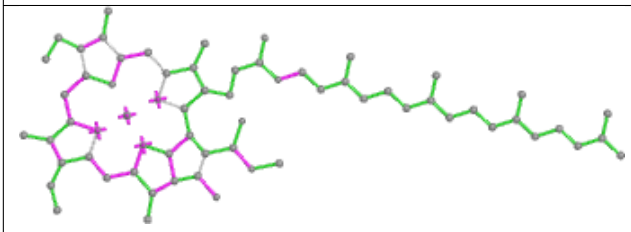


Torsions

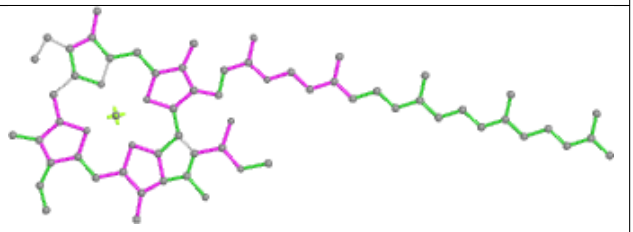


Rings

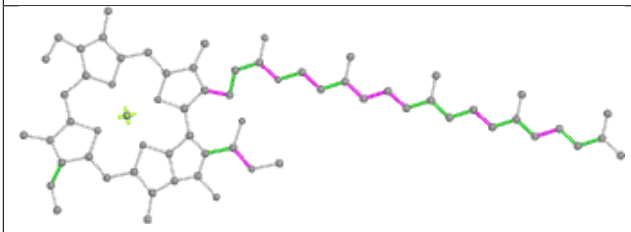
Ligand CLA L 1503



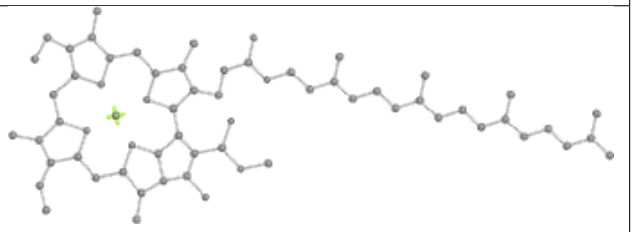
Bond lengths



Bond angles

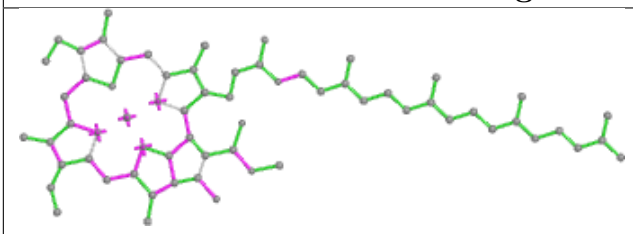


Torsions



Rings

Ligand CLA B 1222



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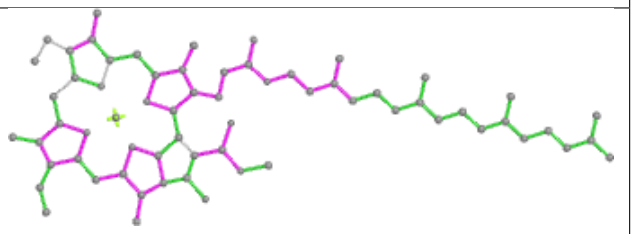
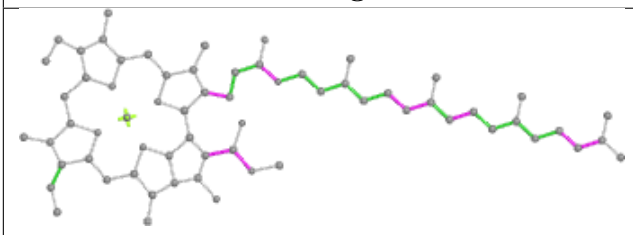


Bond angles



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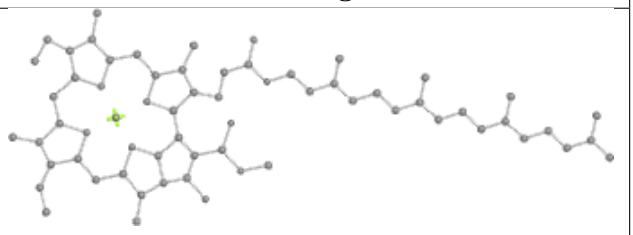
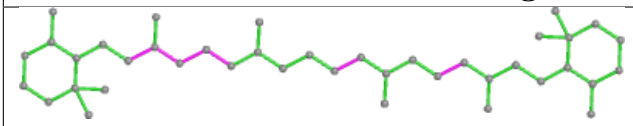


Rings

Ligand BCR I 4018



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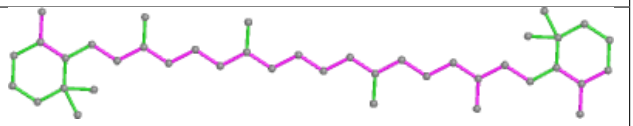
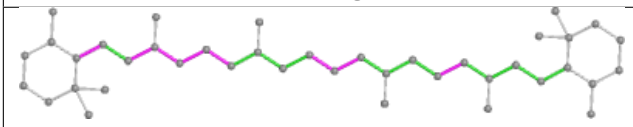


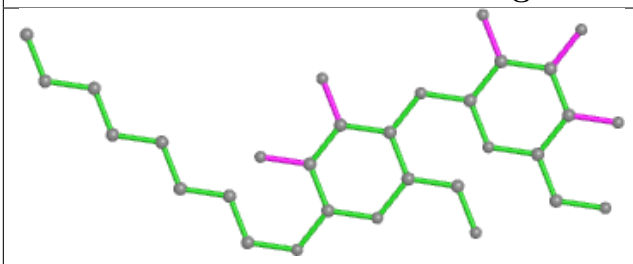
Bond angles



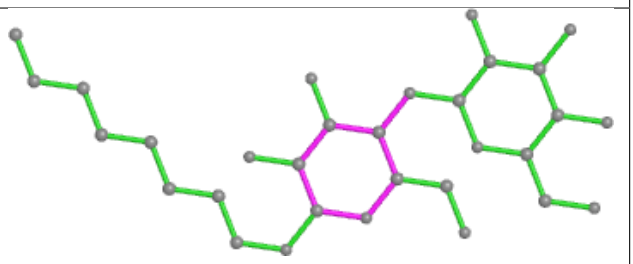
Torsions

Rings

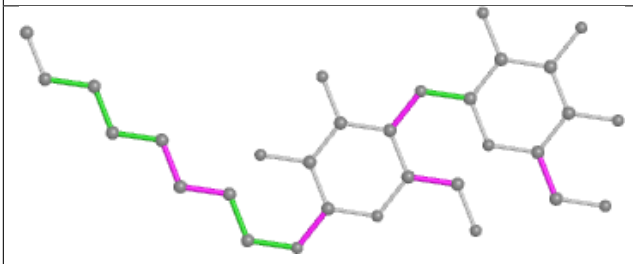
Ligand LMT B 6004



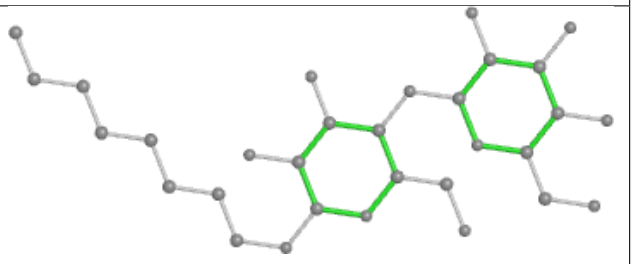
Bond lengths



Bond angles

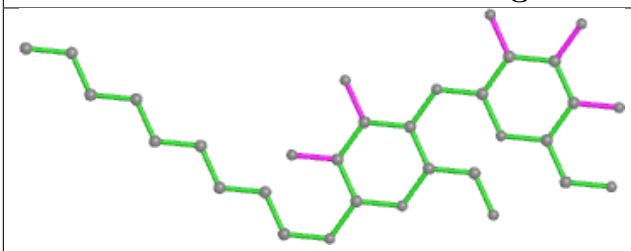


Torsions



Rings

Ligand LMT G 6003



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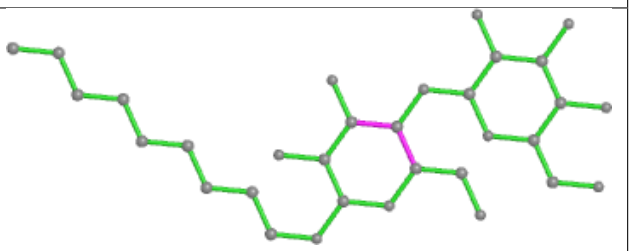
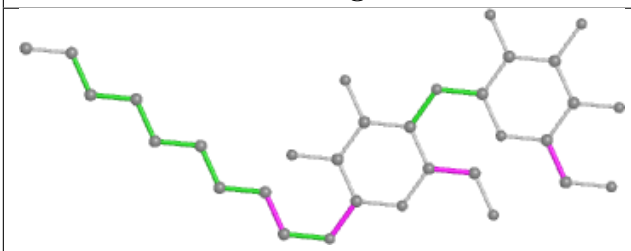


Bond angles



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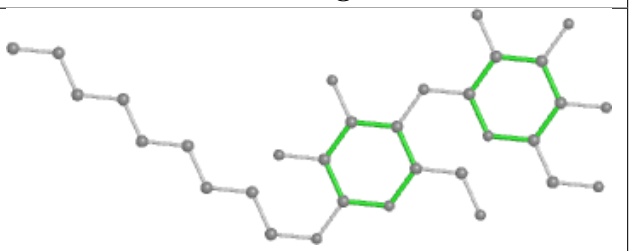
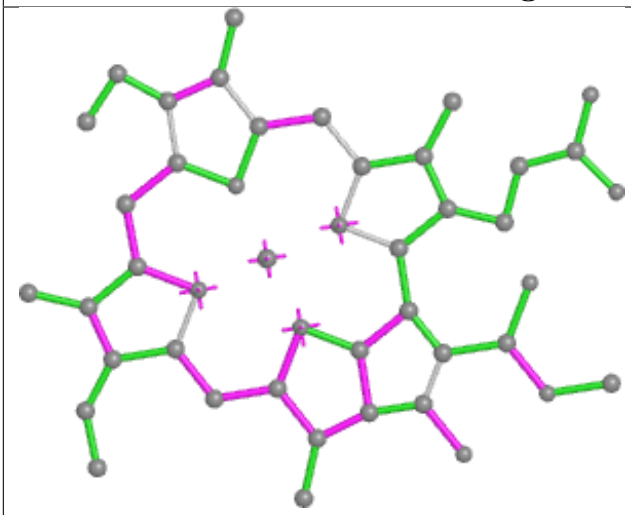


Rings

Ligand CLA a 1110



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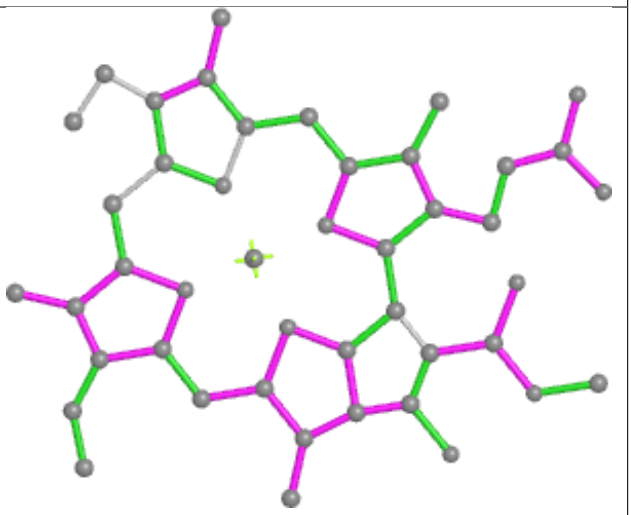
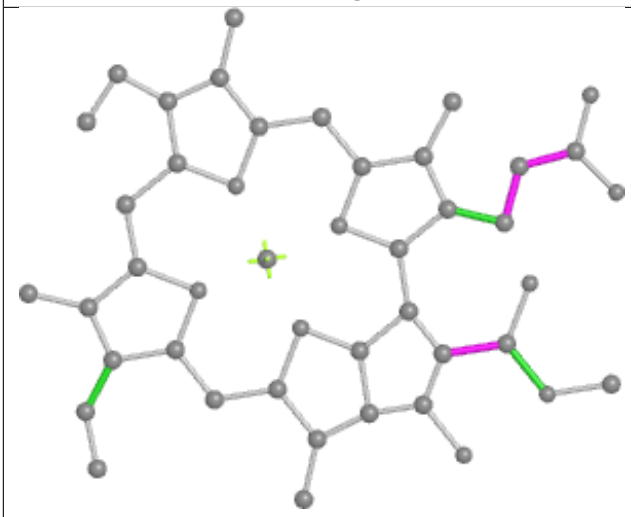
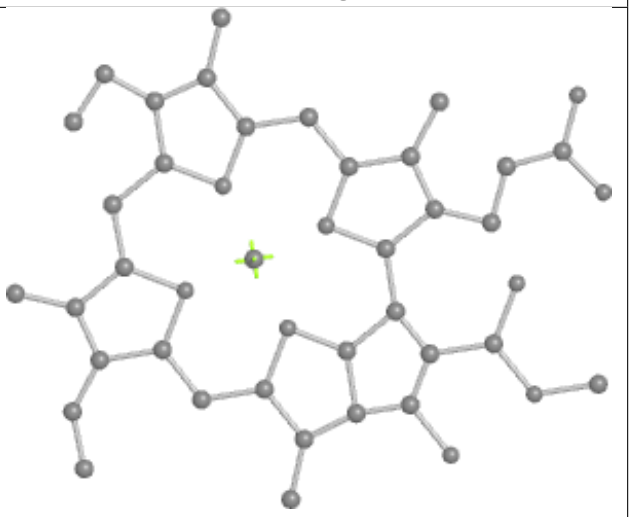


Bond angles

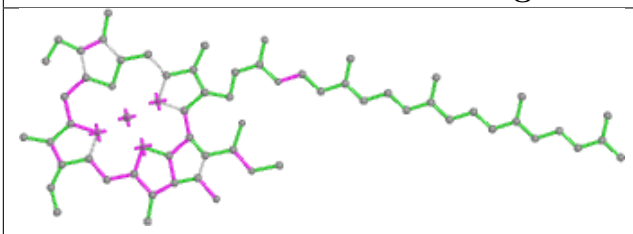


Torsions



Rings

Ligand CLA G 1117



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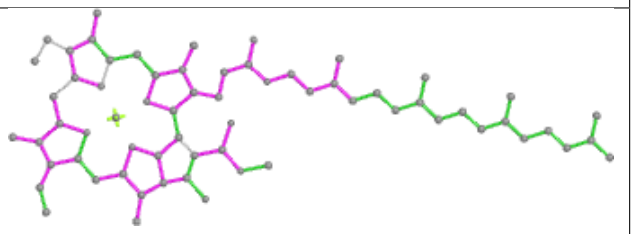
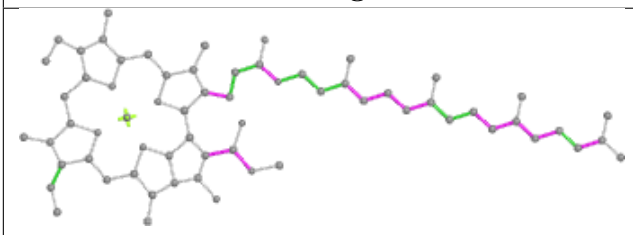


Bond angles



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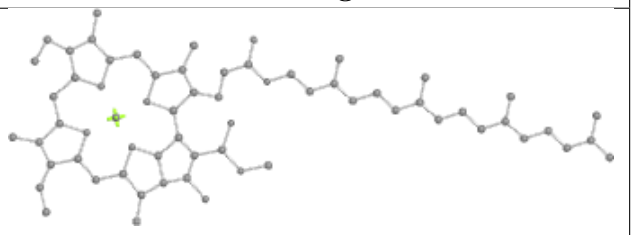
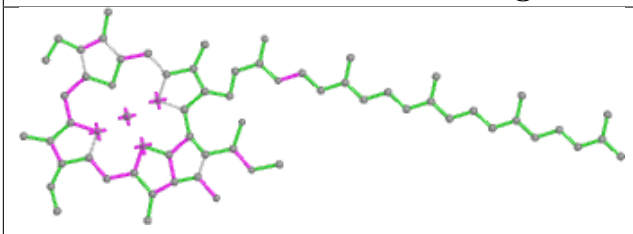


Rings

Ligand CLA U 1501



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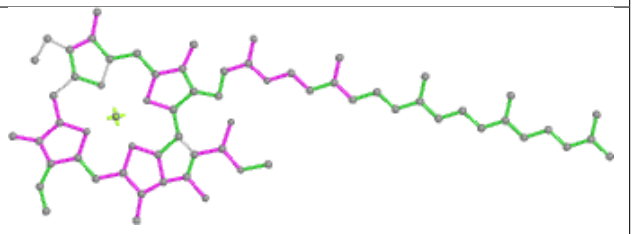
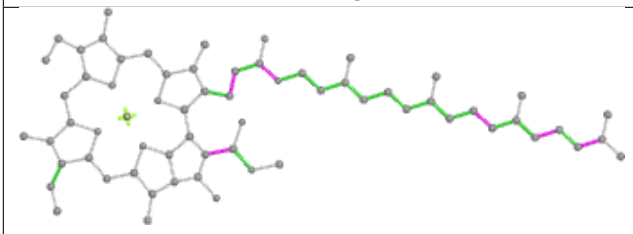


Bond angles



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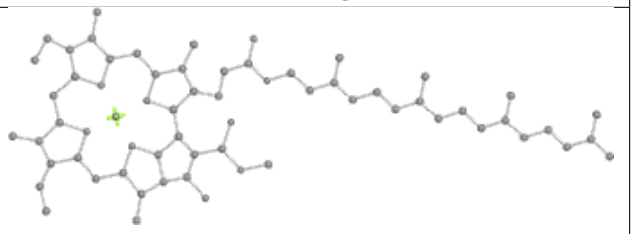
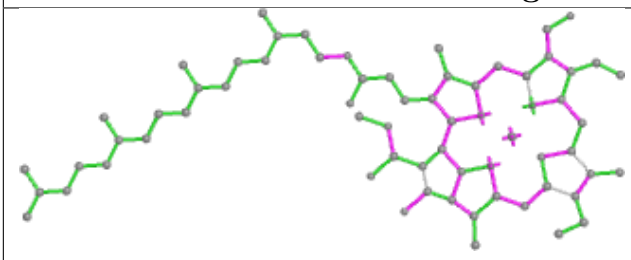


Rings

Ligand F6C b 1207



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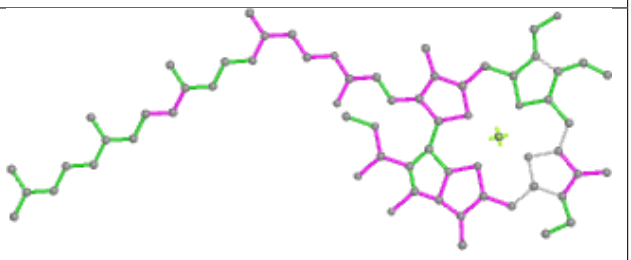
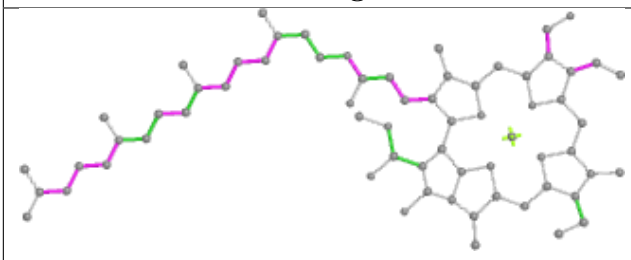
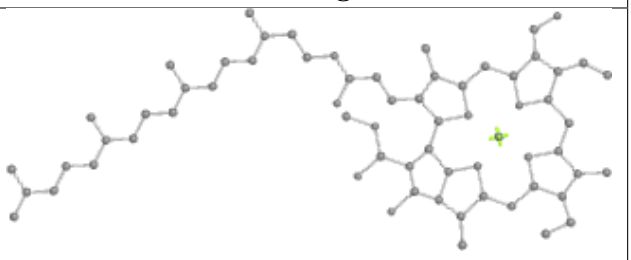


Bond angles

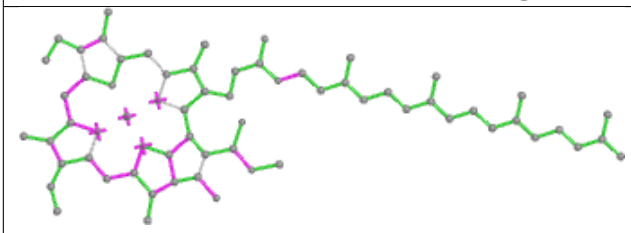


Torsions

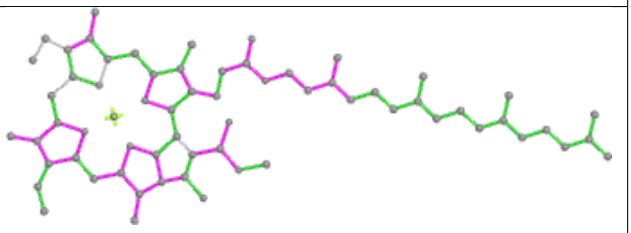


Rings

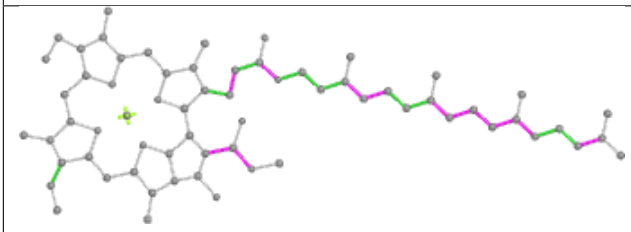
Ligand CLA B 1224



Bond lengths



Bond angles



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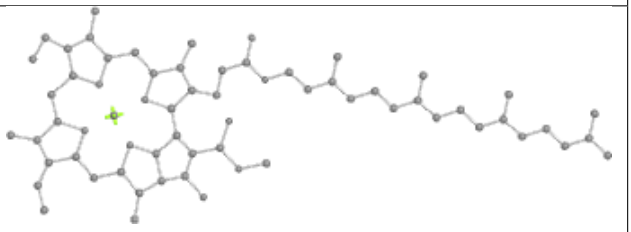
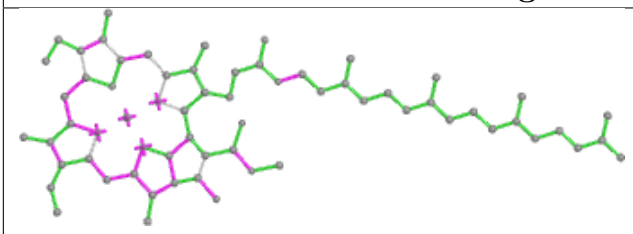
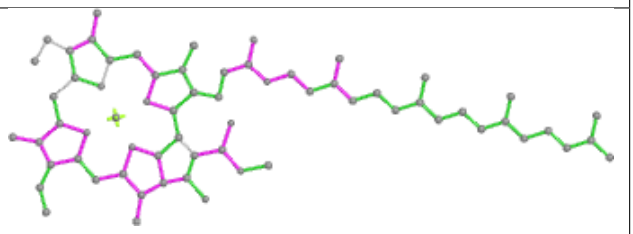


Rings

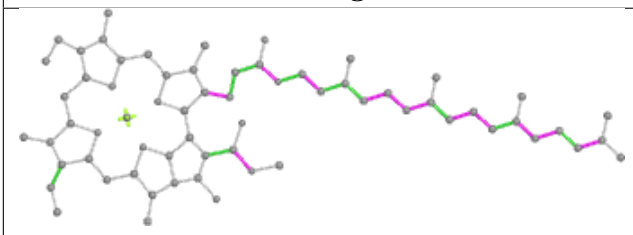
Ligand CLA b 1231



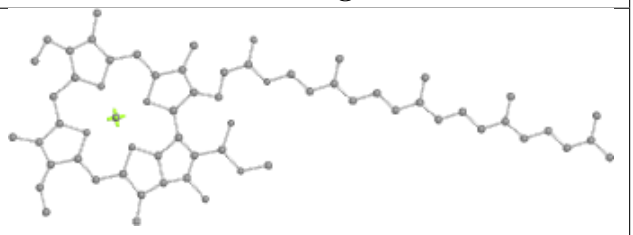
Bond lengths



Bond angles

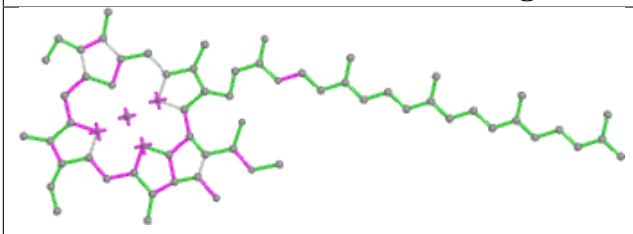


Torsions

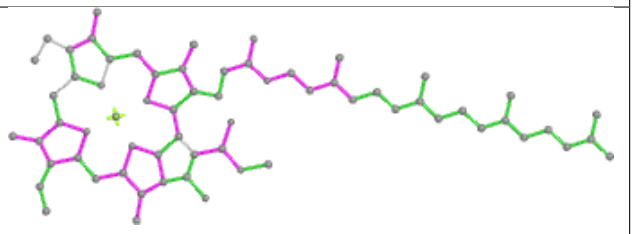


Rings

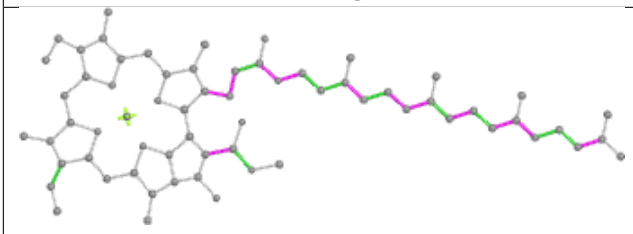
Ligand CLA b 1221



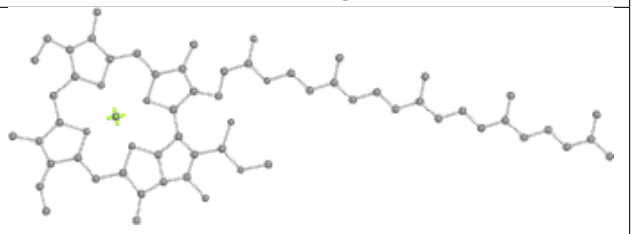
Bond lengths



Bond angles

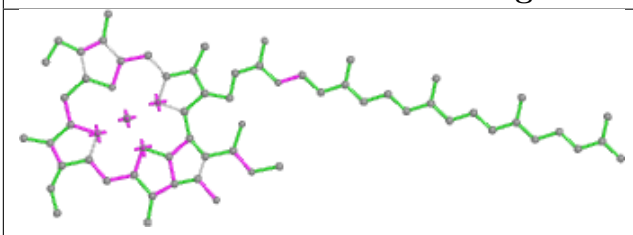


Torsions

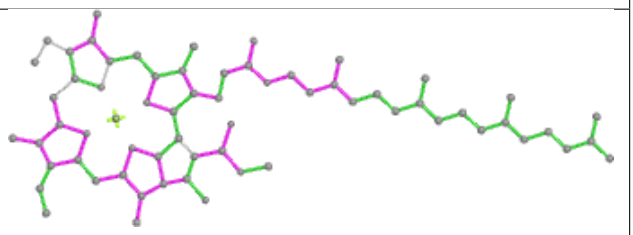


Rings

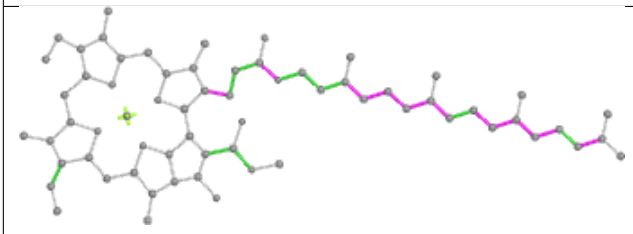
Ligand CLA B 1206



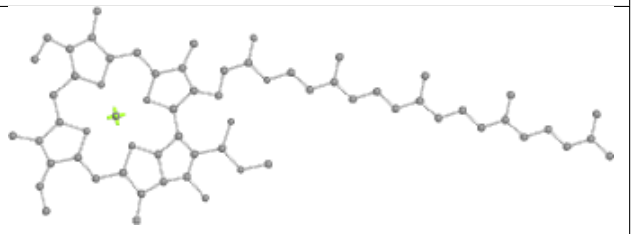
Bond lengths



Bond angles

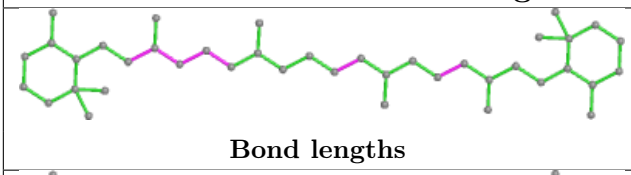


Torsions

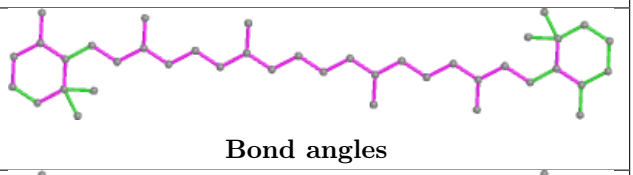


Rings

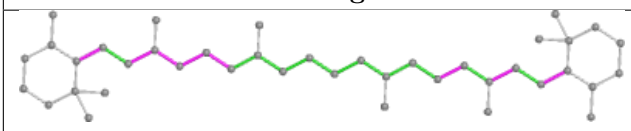
Ligand BCR B 4004



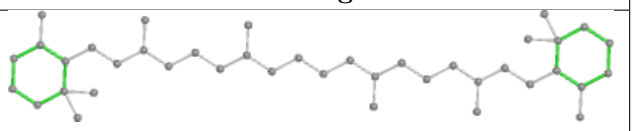
Bond lengths



Bond angles

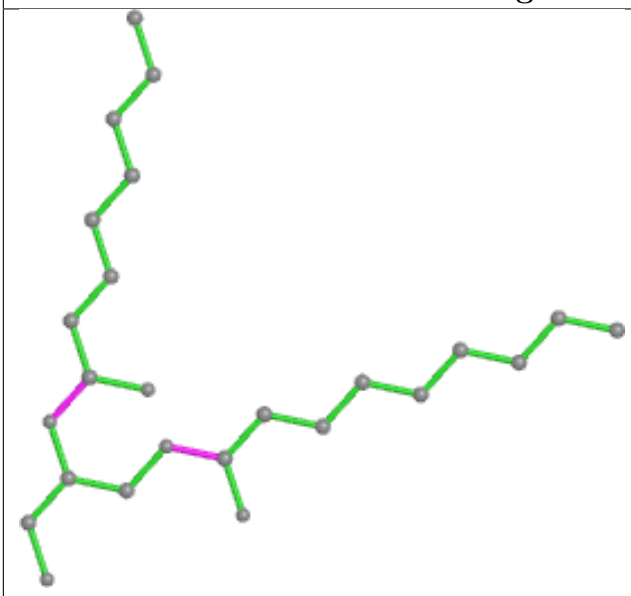


Torsions

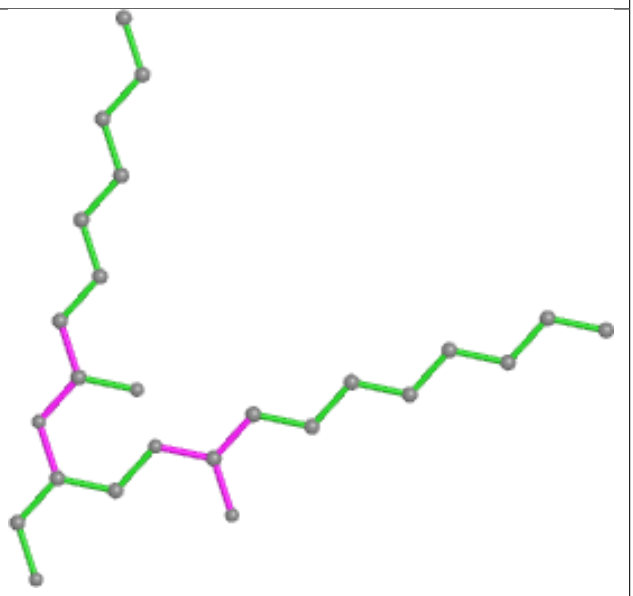


Rings

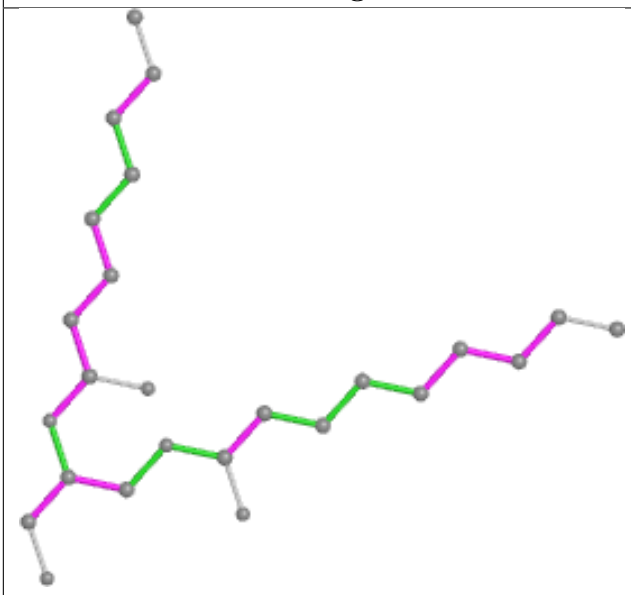
Ligand LHG L 5101



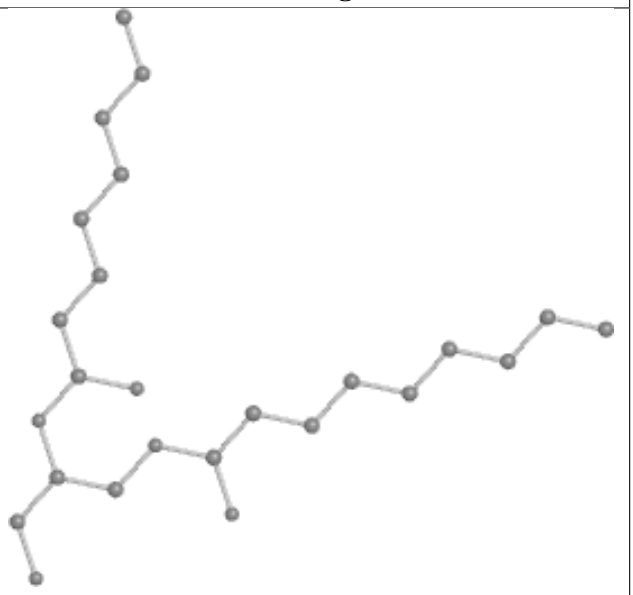
Bond lengths



Bond angles

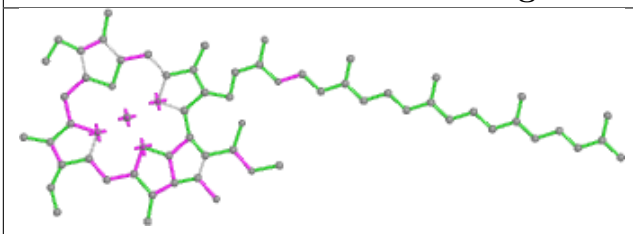


Torsions

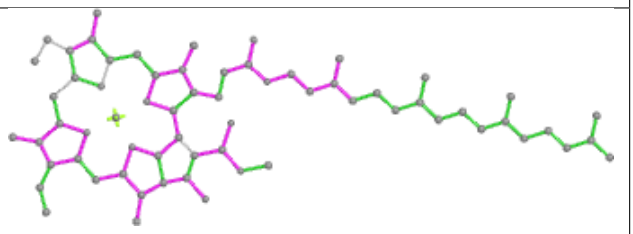


Rings

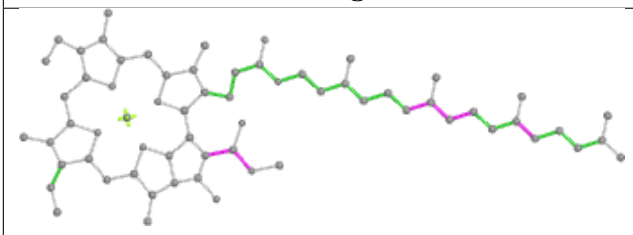
Ligand CLA b 1223



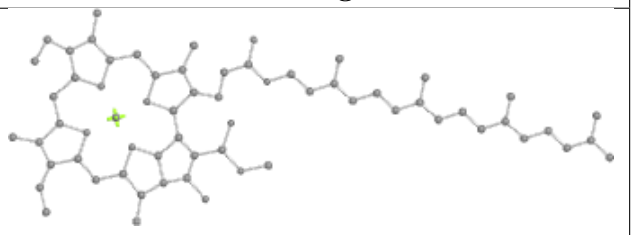
Bond lengths



Bond angles

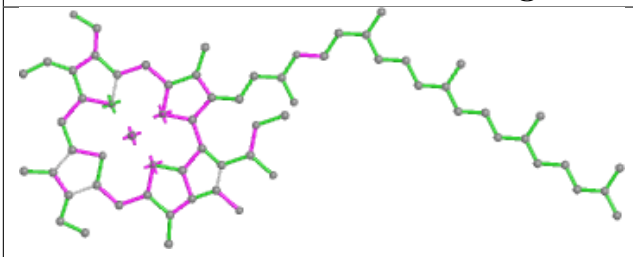


Torsions

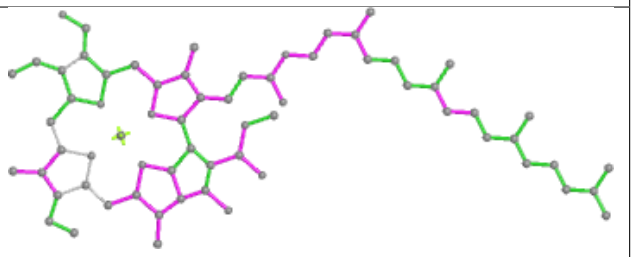


Rings

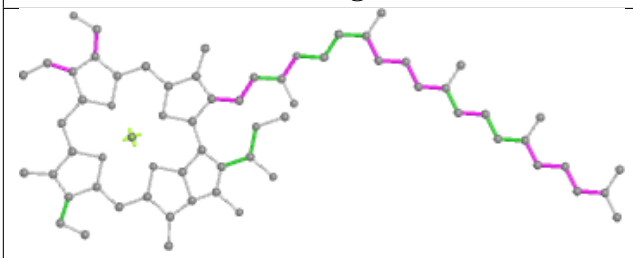
Ligand F6C H 1207



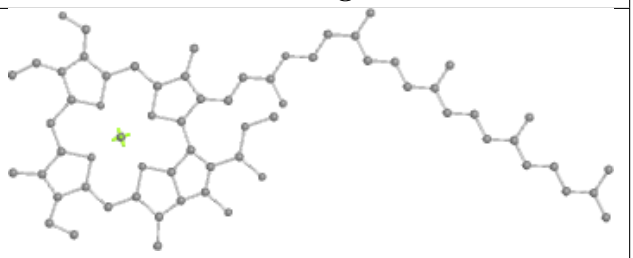
Bond lengths



Bond angles

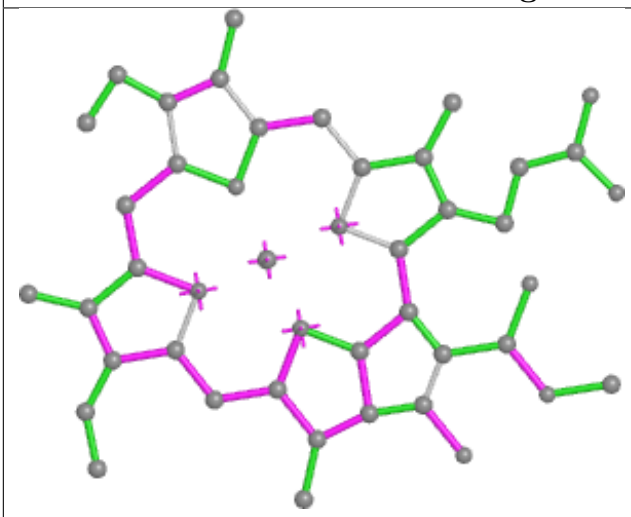


Torsions



Rings

Ligand CLA a 1141



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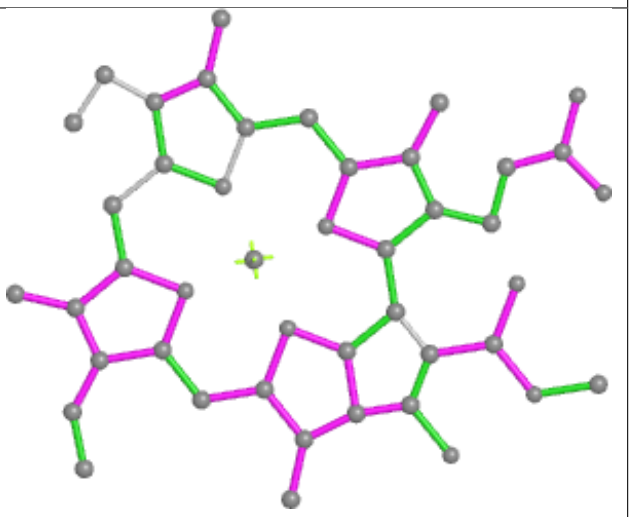
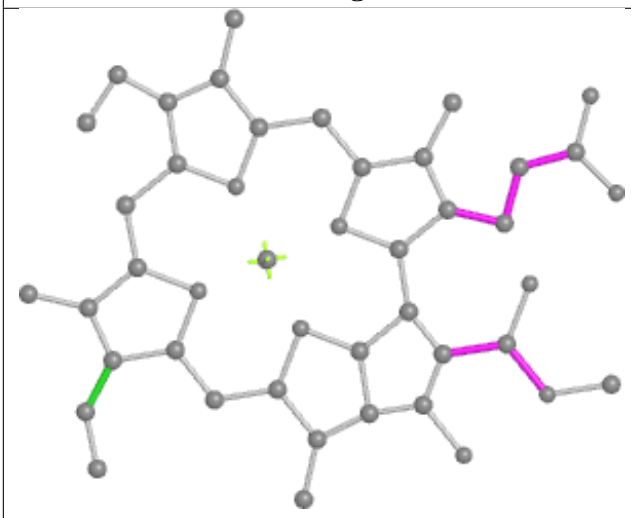
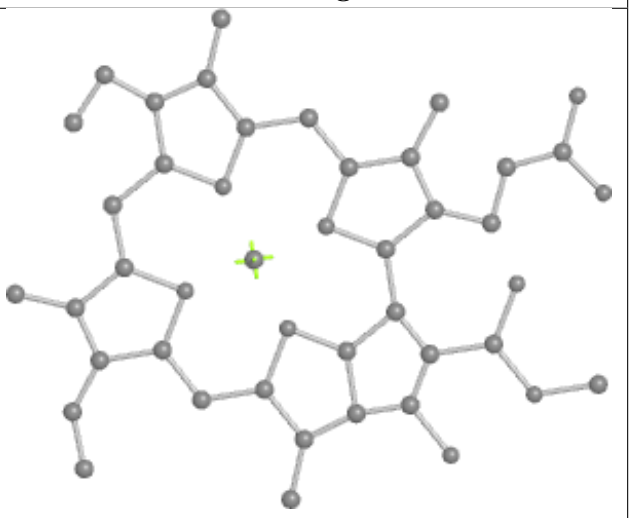


Bond angles

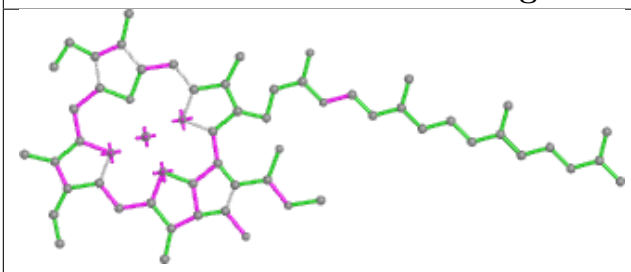


Torsions

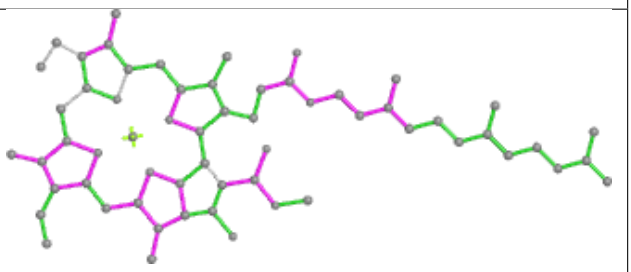


Rings

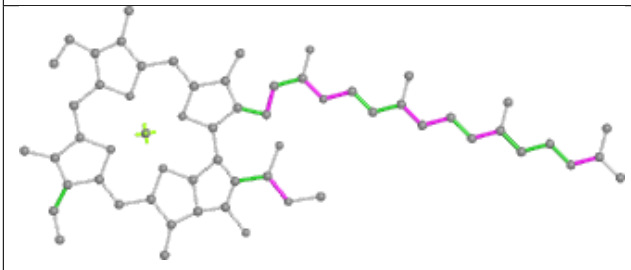
Ligand CLA a 1131



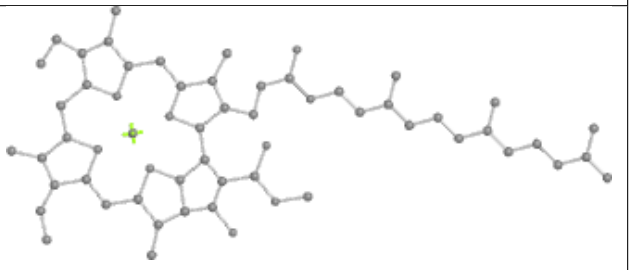
Bond lengths



Bond angles

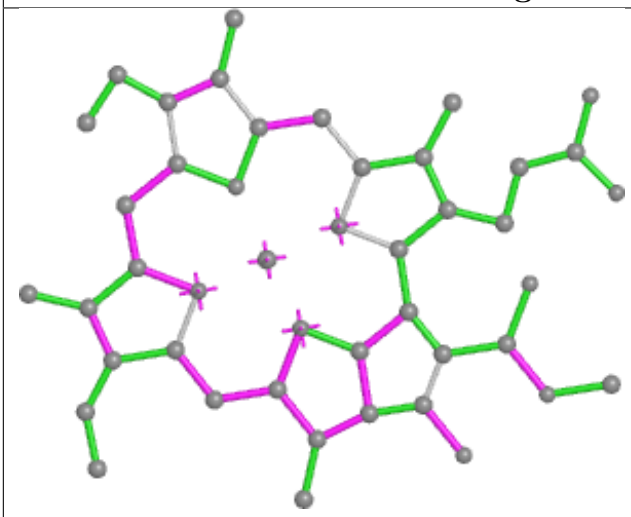


Torsions

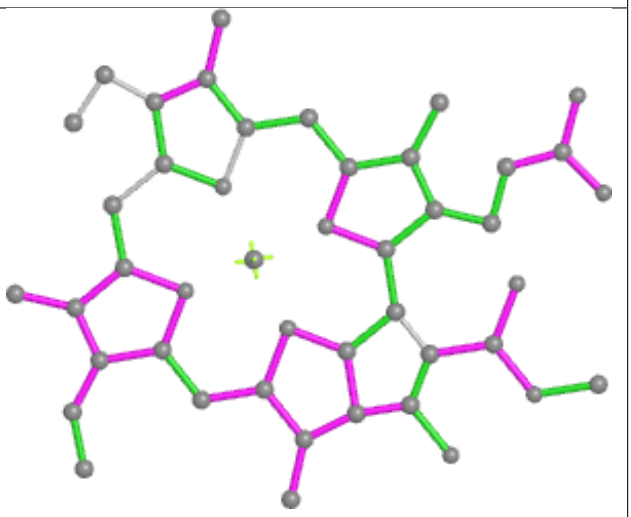


Rings

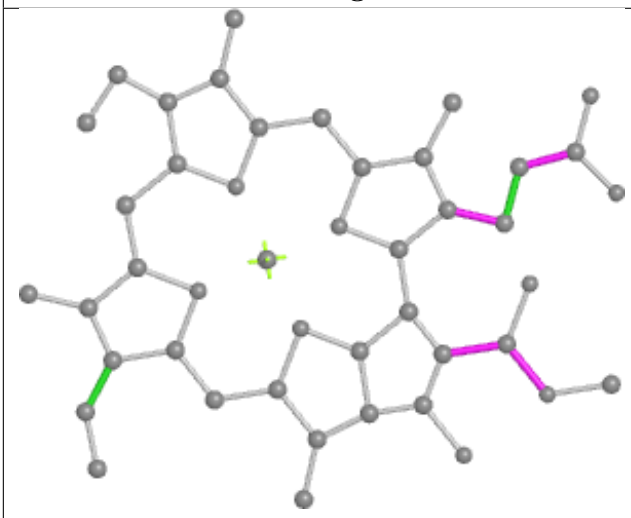
Ligand CLA H 1227



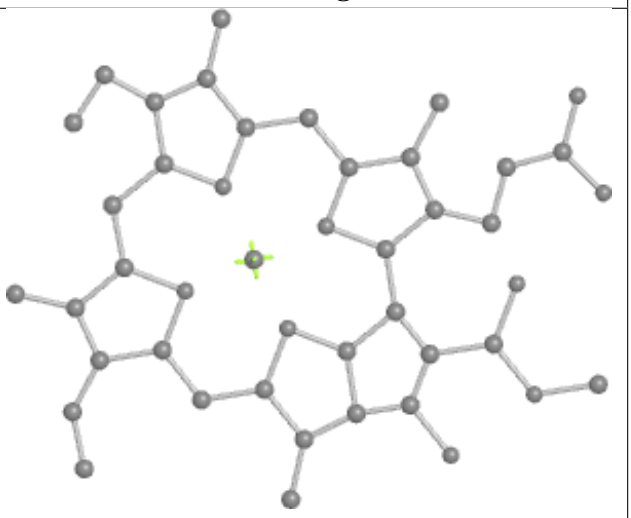
Bond lengths



Bond angles

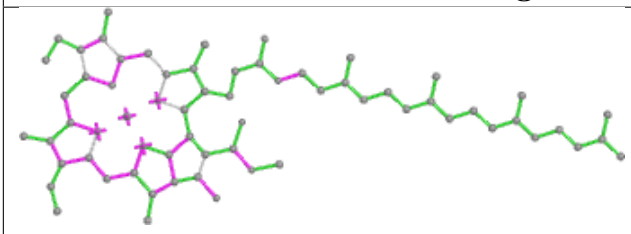


Torsions

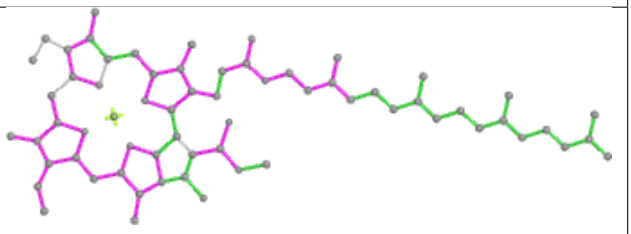


Rings

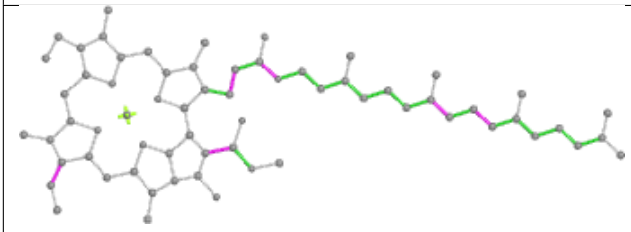
Ligand CLA B 1023



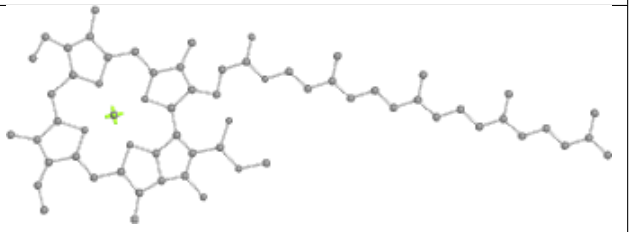
Bond lengths



Bond angles

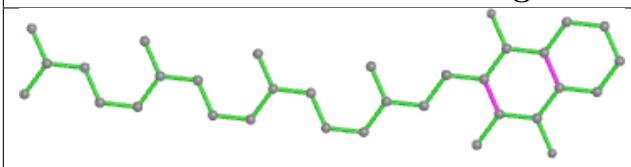


Torsions

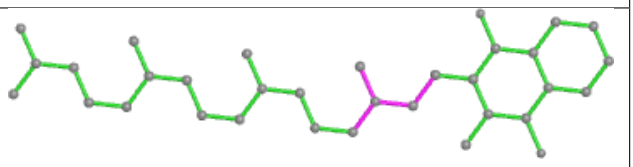


Rings

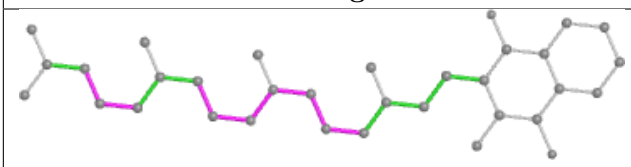
Ligand PQN B 2002



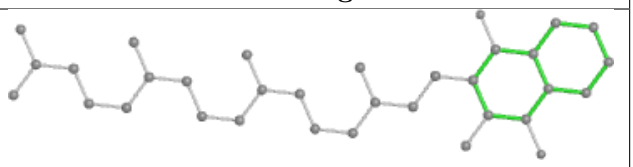
Bond lengths



Bond angles

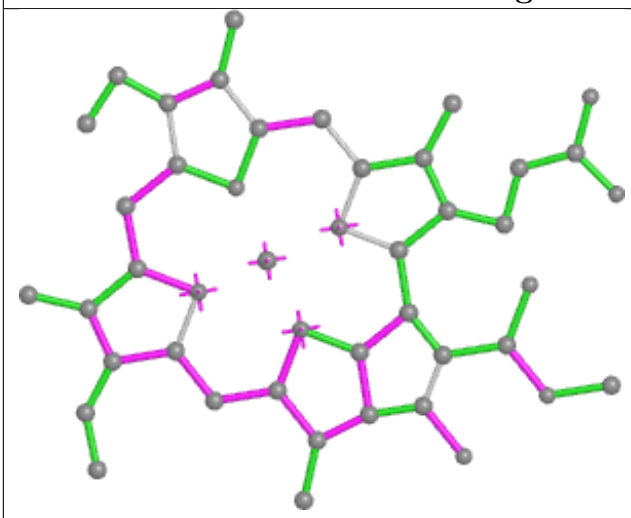


Torsions

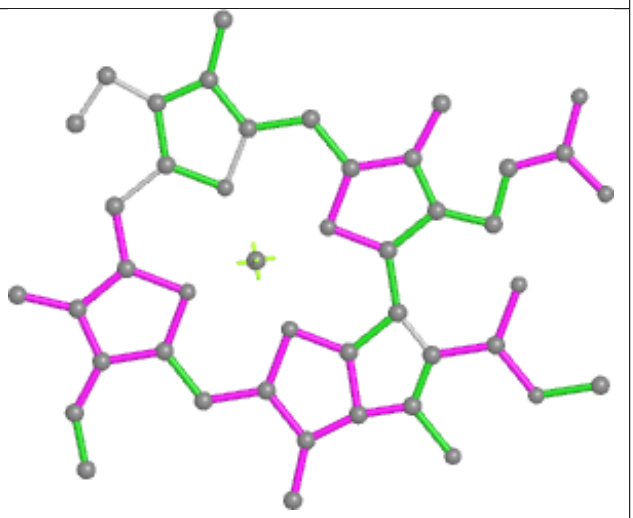


Rings

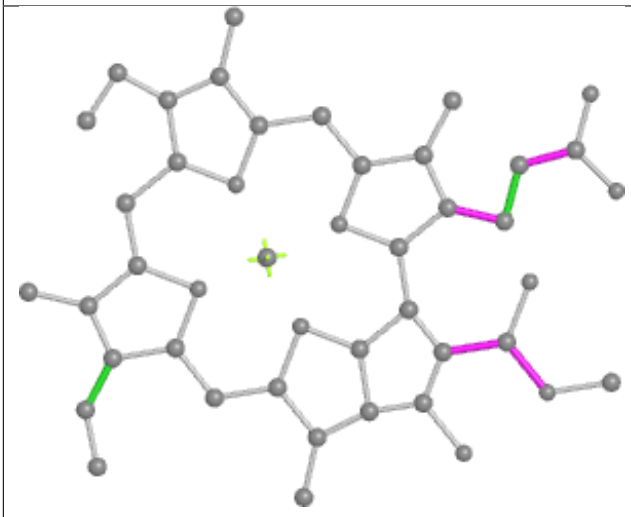
Ligand CLA B 1233



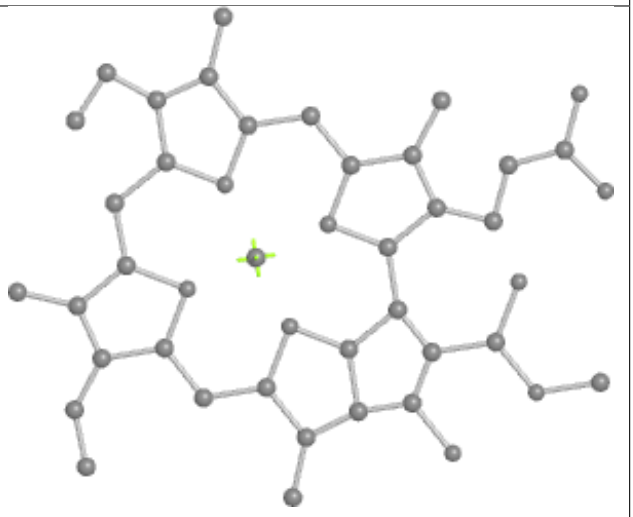
Bond lengths



Bond angles

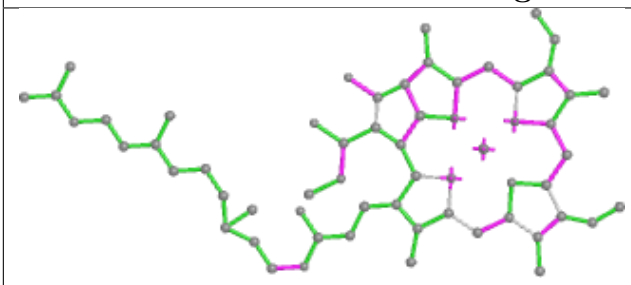


Torsions

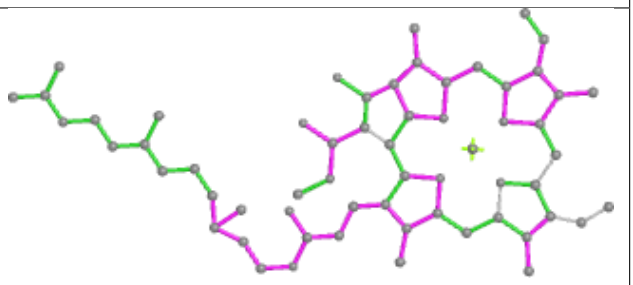


Rings

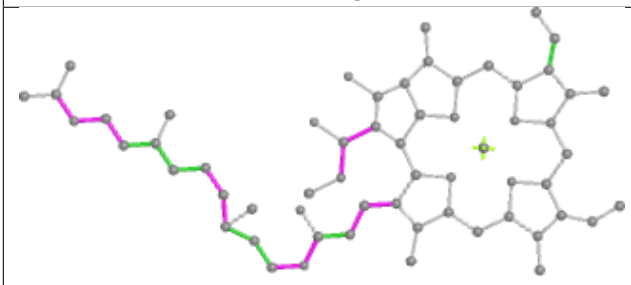
Ligand CLA G 1111



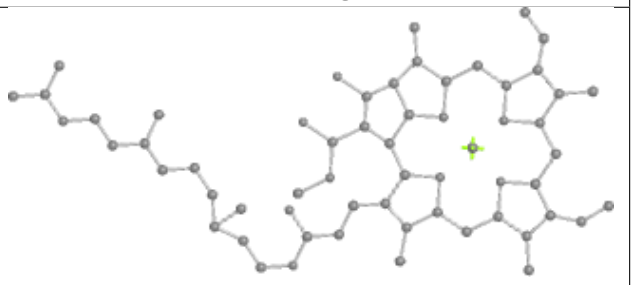
Bond lengths



Bond angles

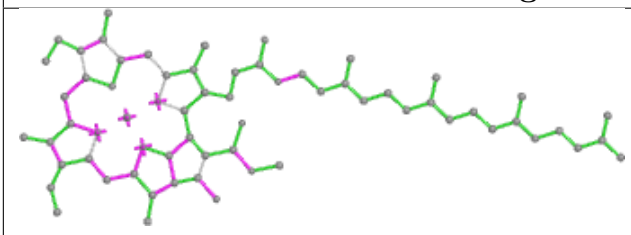


Torsions

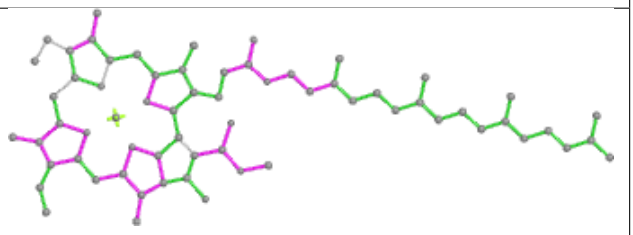


Rings

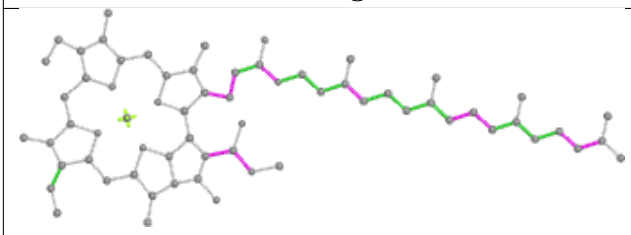
Ligand CLA a 1119



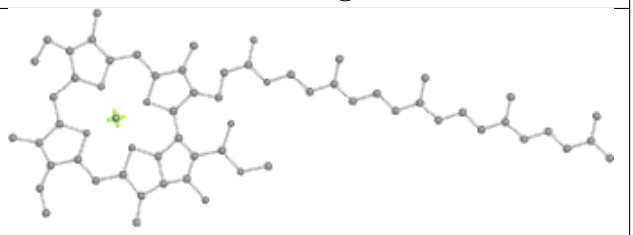
Bond lengths



Bond angles

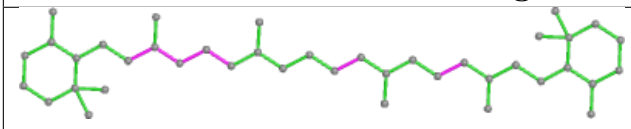


Torsions

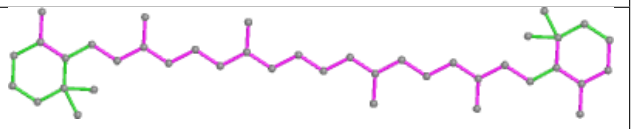


Rings

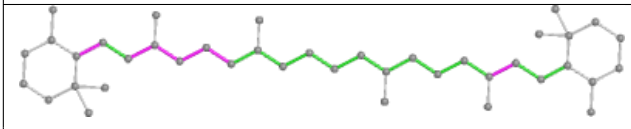
Ligand BCR A 4005



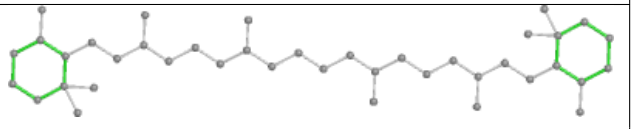
Bond lengths



Bond angles

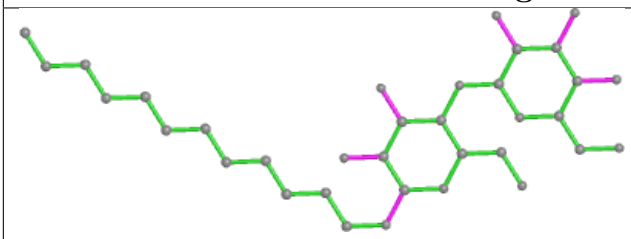


Torsions

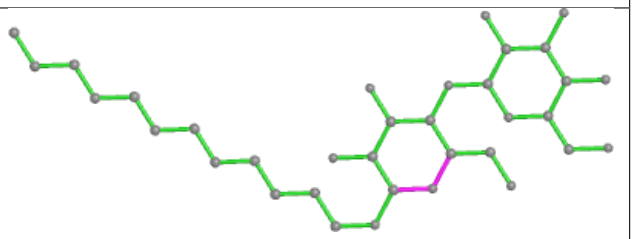


Rings

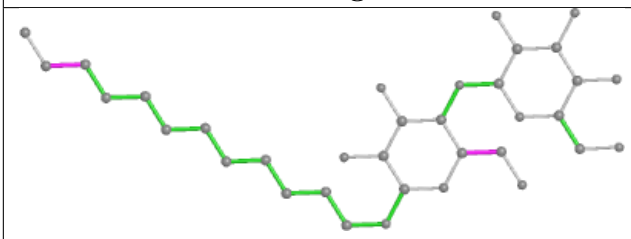
Ligand LMT b 6002



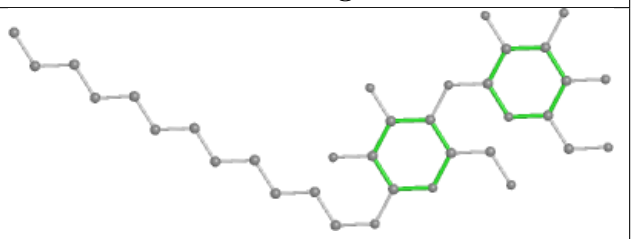
Bond lengths



Bond angles

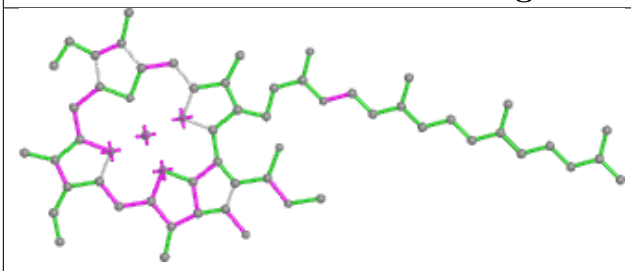


Torsions

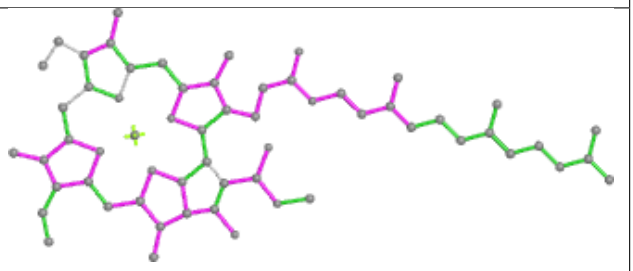


Rings

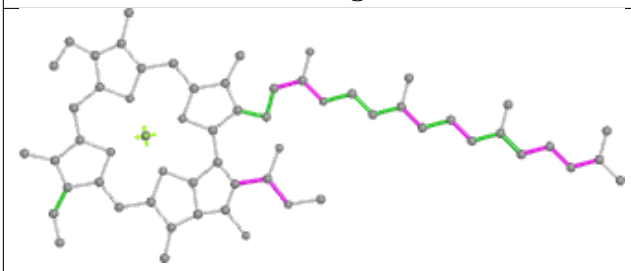
Ligand CLA B 1235



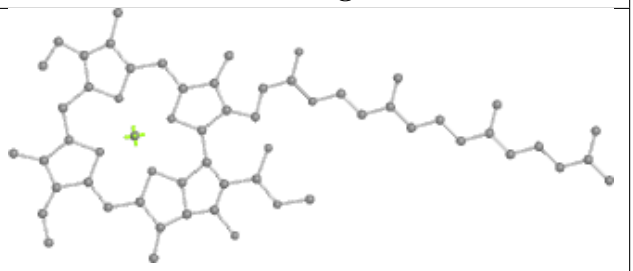
Bond lengths



Bond angles

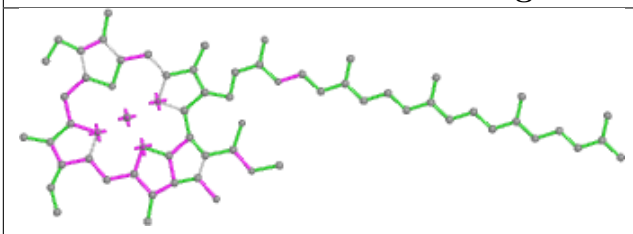


Torsions

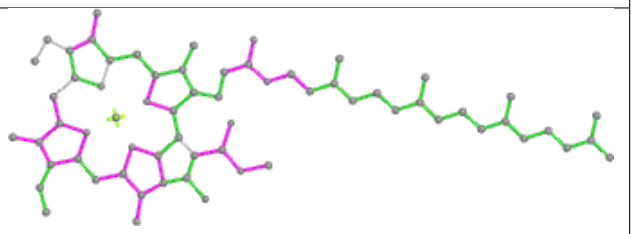


Rings

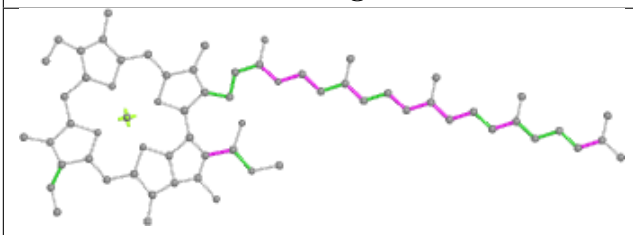
Ligand CLA B 1240



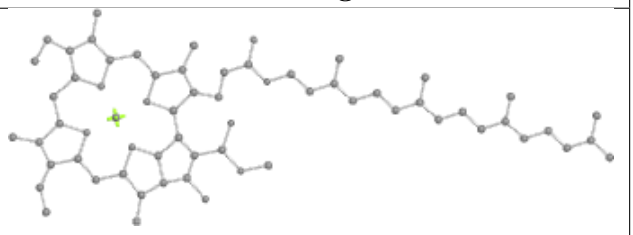
Bond lengths



Bond angles

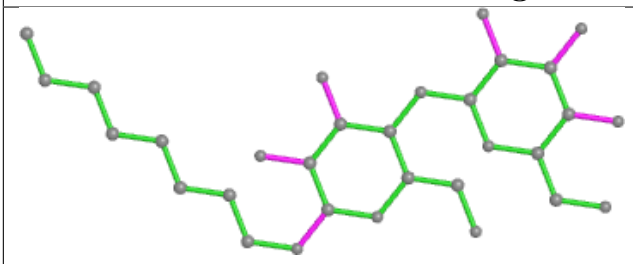


Torsions

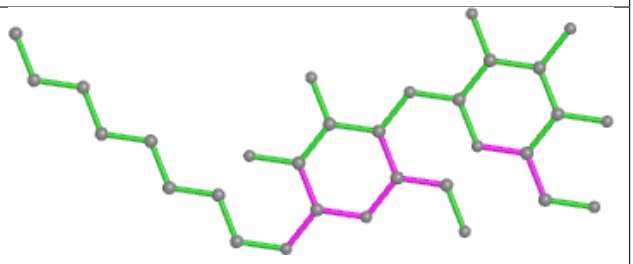


Rings

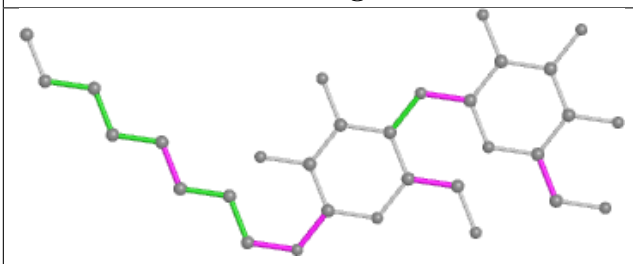
Ligand LMT G 6001



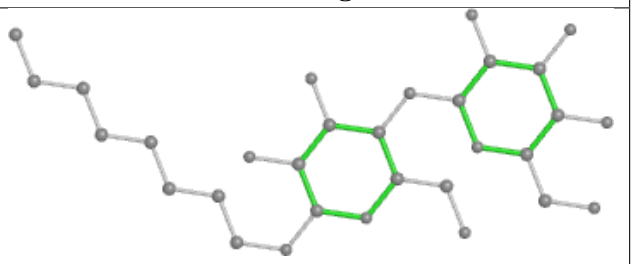
Bond lengths



Bond angles

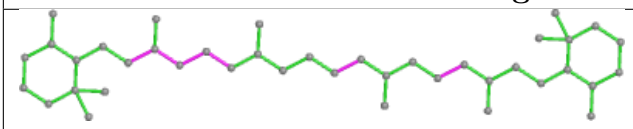


Torsions

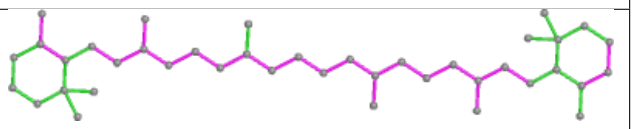


Rings

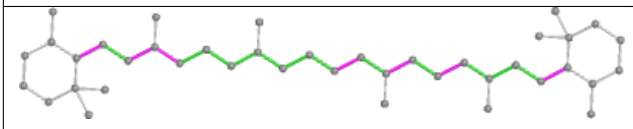
Ligand BCR G 4001



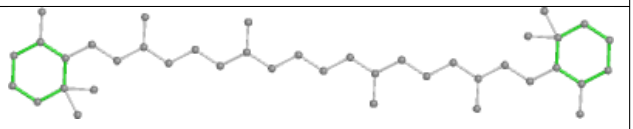
Bond lengths



Bond angles

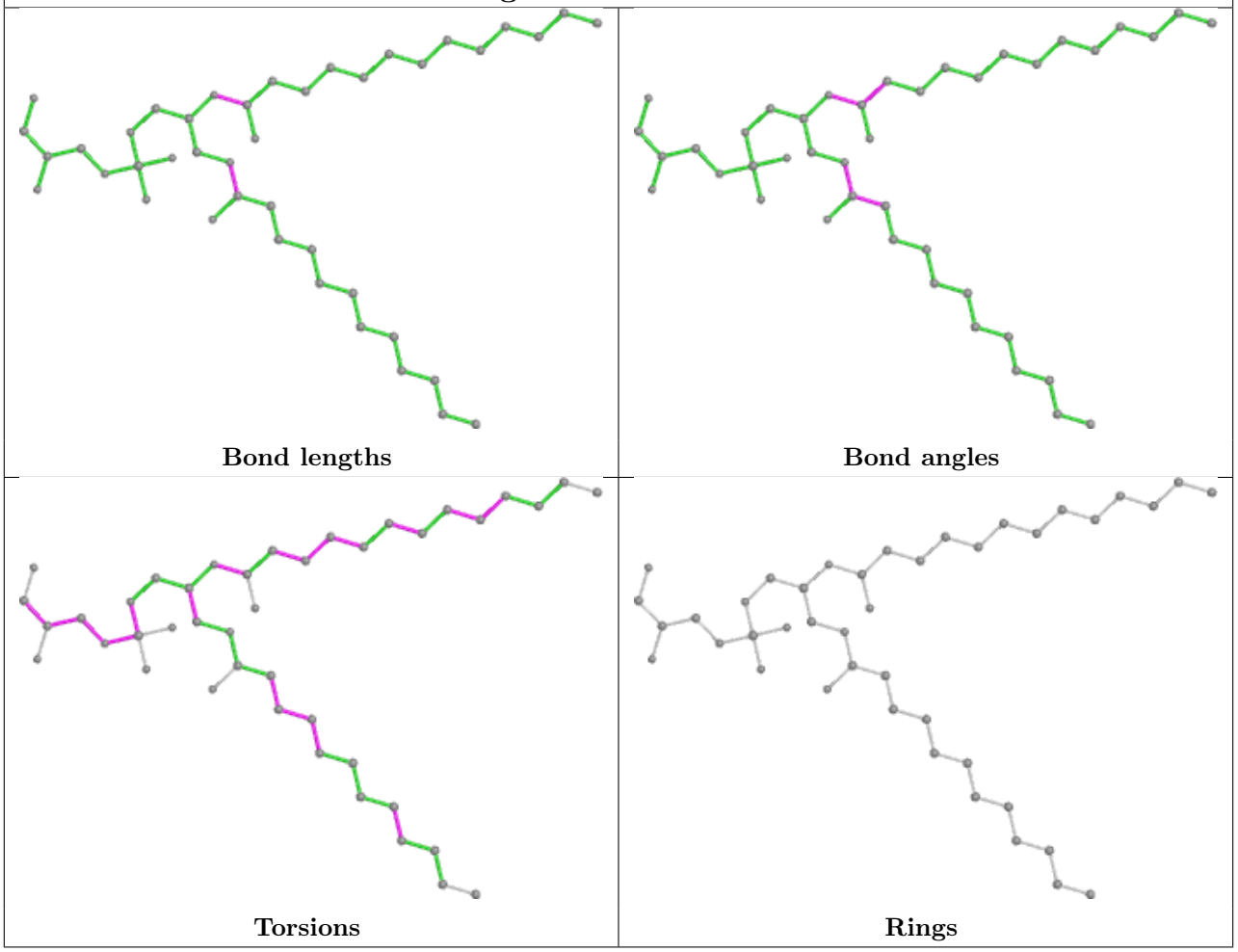


Torsions

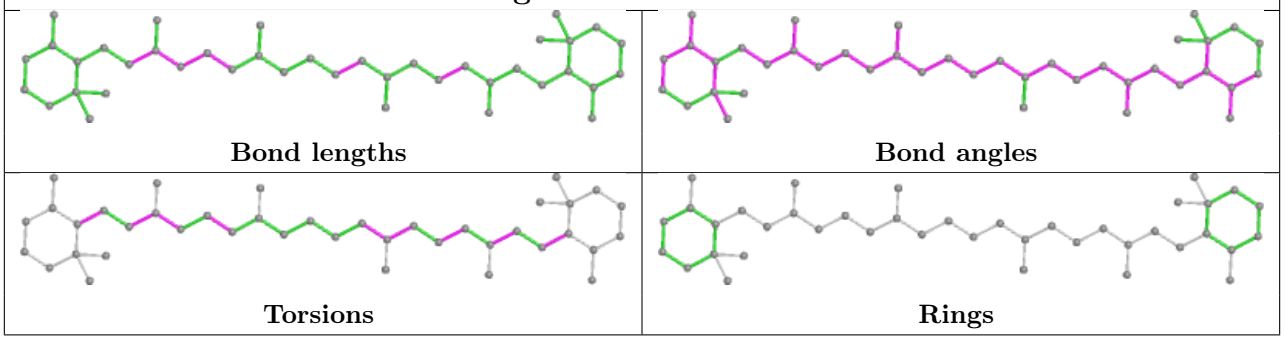


Rings

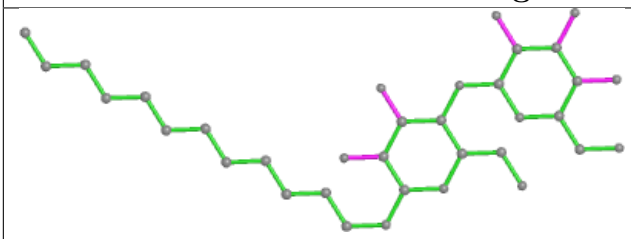
Ligand LHG a 5001



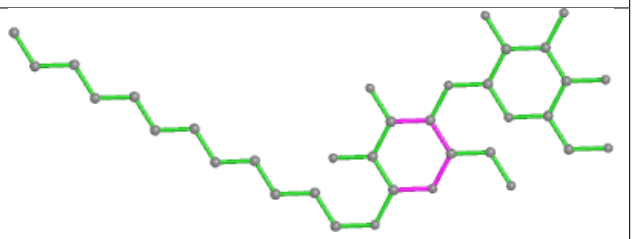
Ligand BCR G 4006



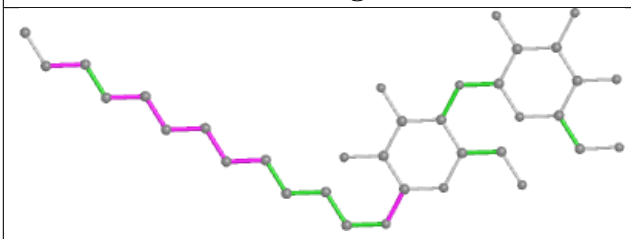
Ligand LMT B 6001



Bond lengths



Bond angles



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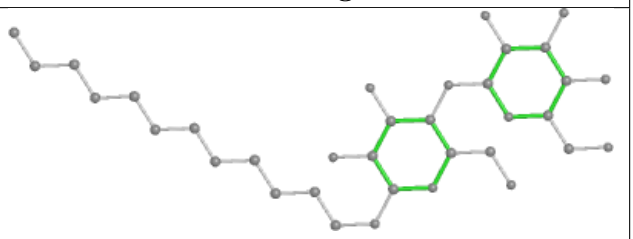
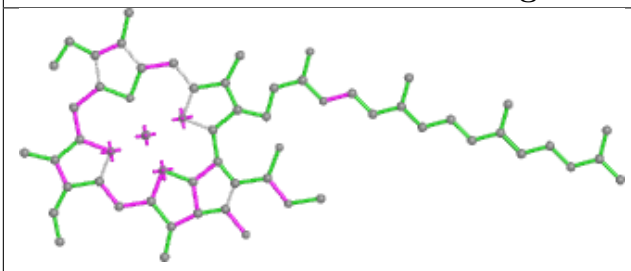
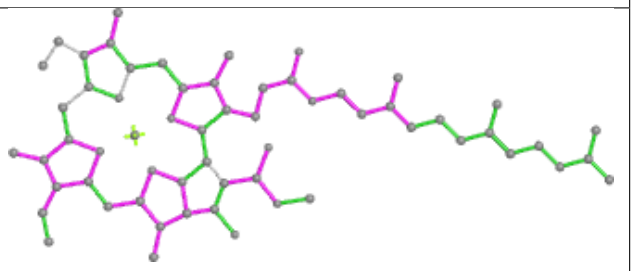


Rings

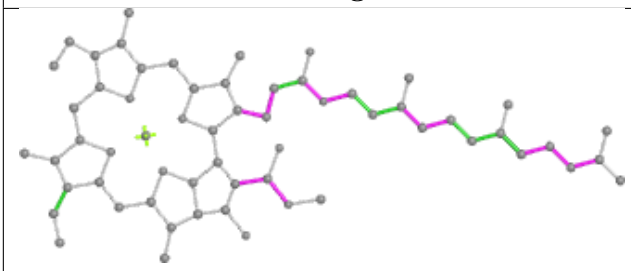
Ligand CLA a 1111



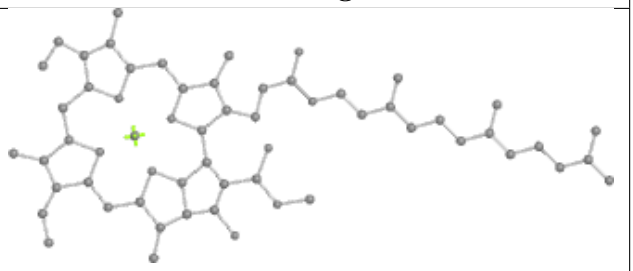
Bond lengths



Bond angles

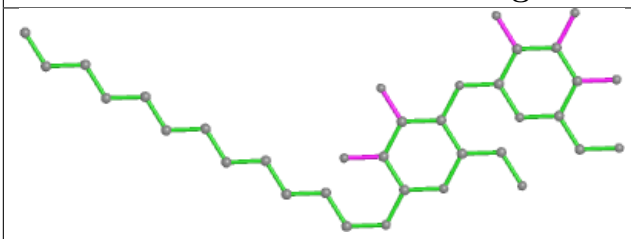


Torsions

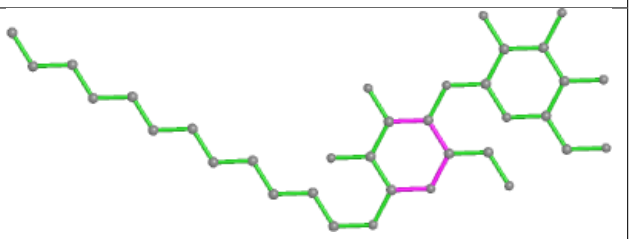


Rings

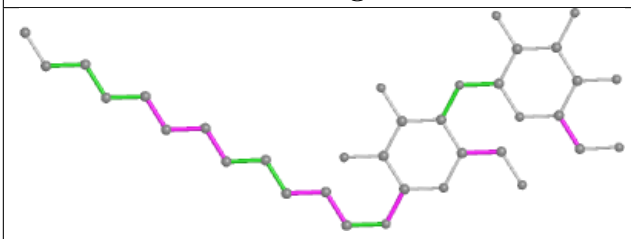
Ligand LMT R 6001



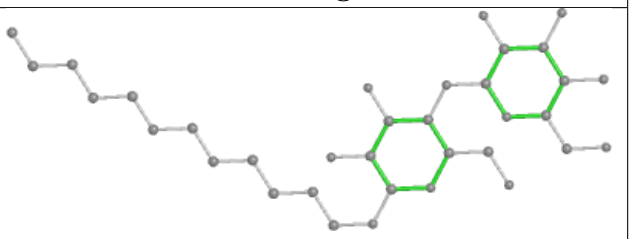
Bond lengths



Bond angles

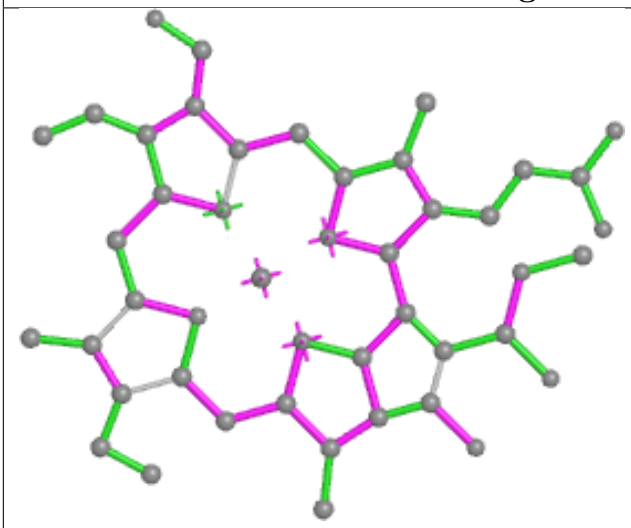


Torsions

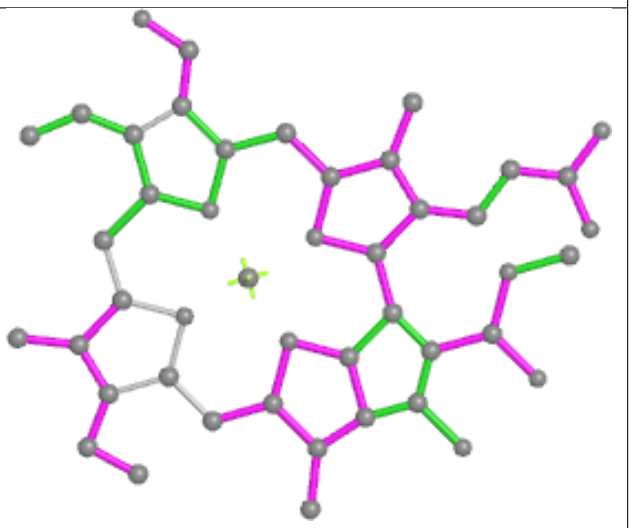


Rings

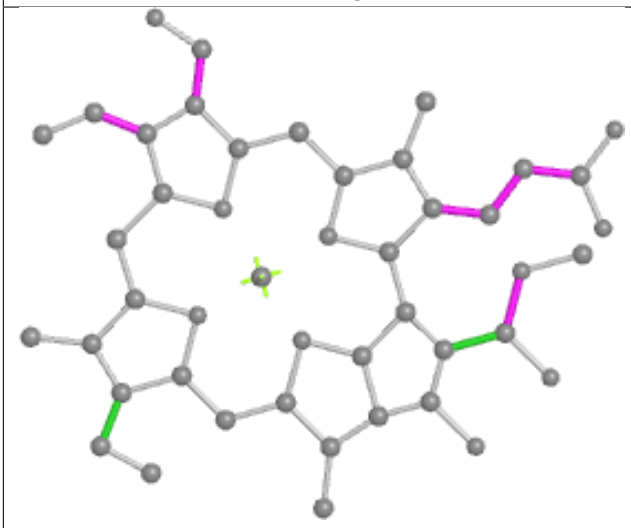
Ligand F6C A 1121



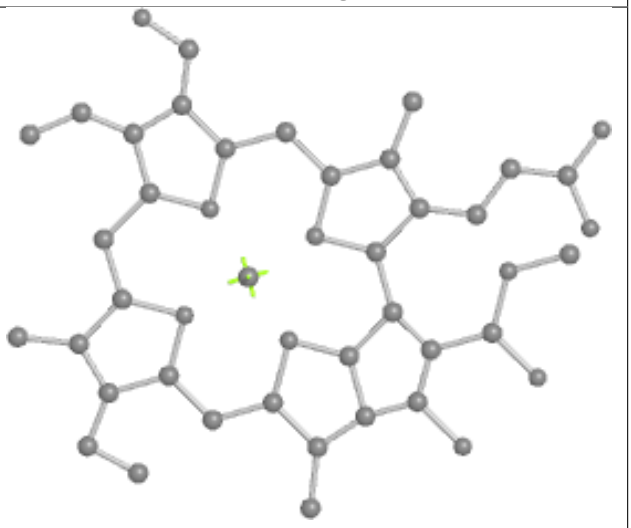
Bond lengths



Bond angles

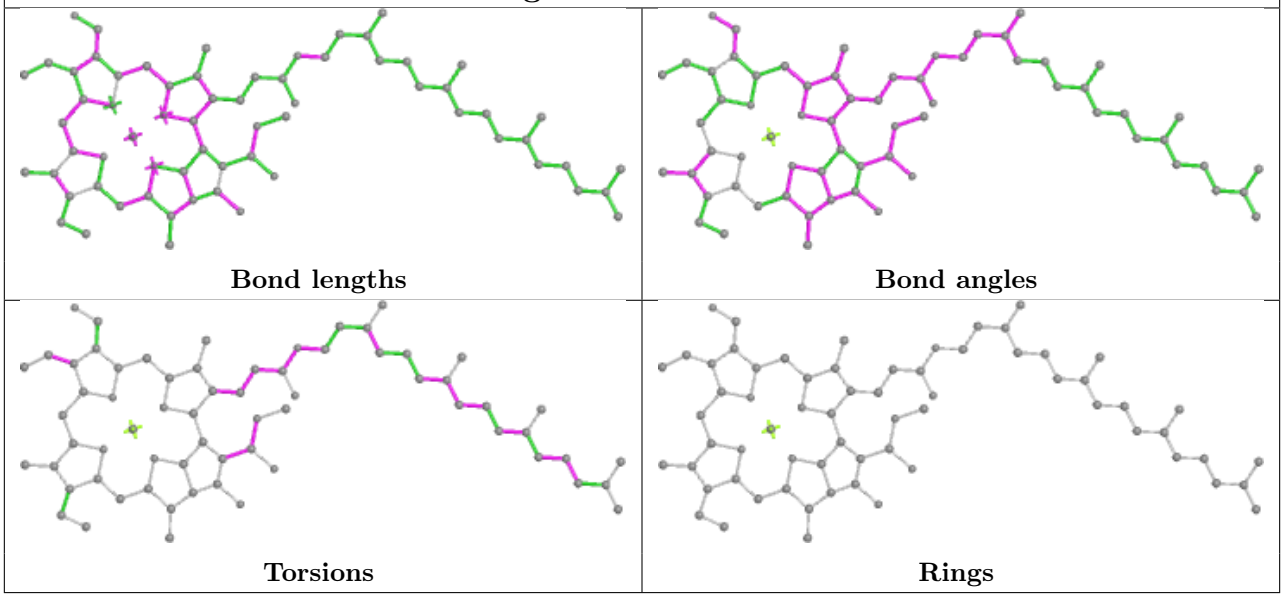


Torsions

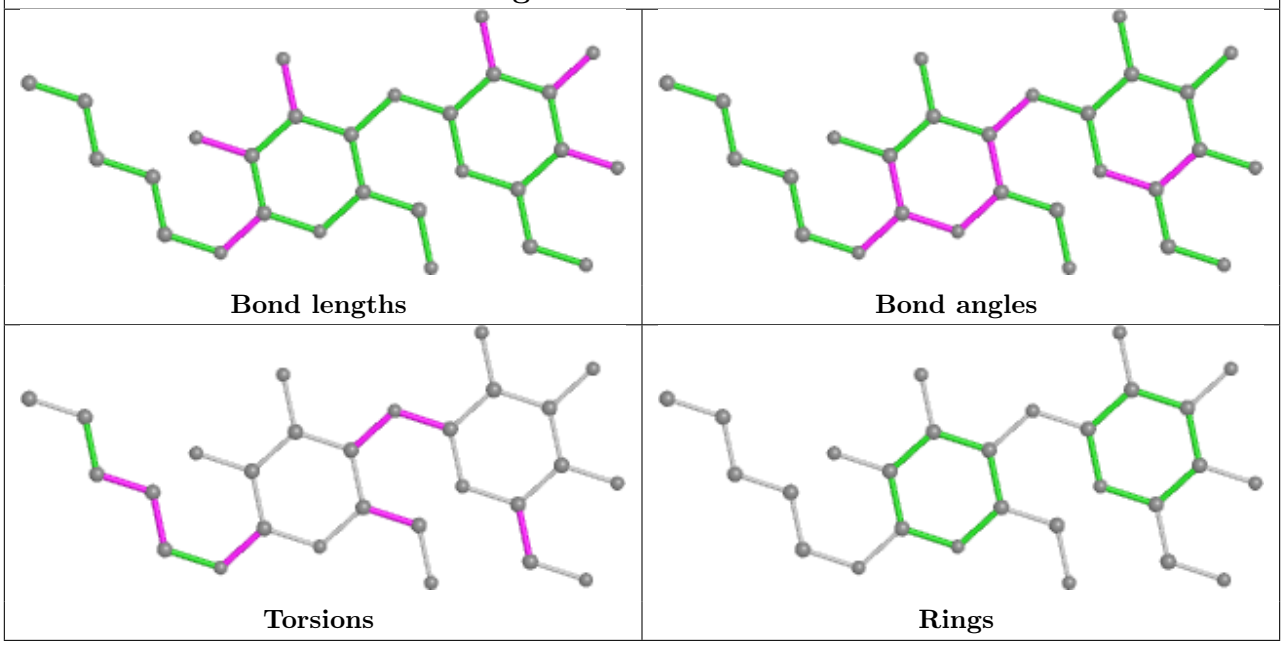


Rings

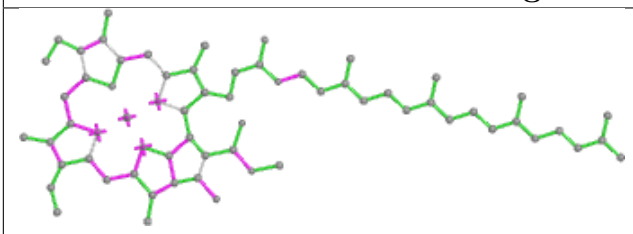
Ligand F6C b 1237



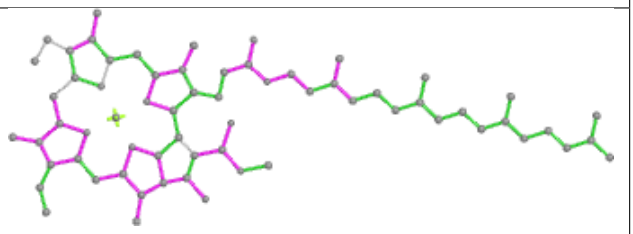
Ligand LMT A 6002



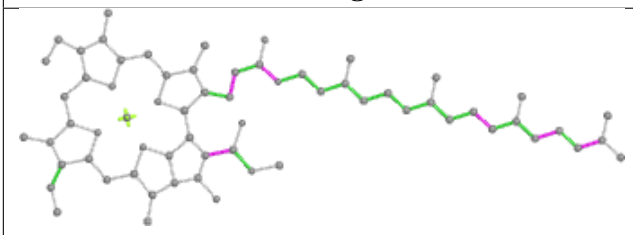
Ligand CLA l 1501



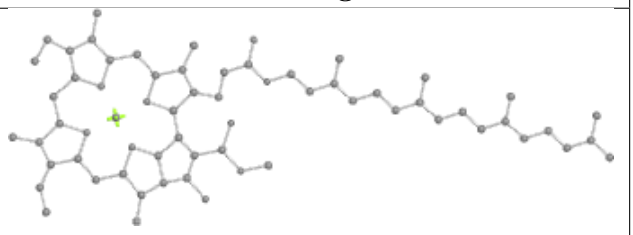
Bond lengths



Bond angles

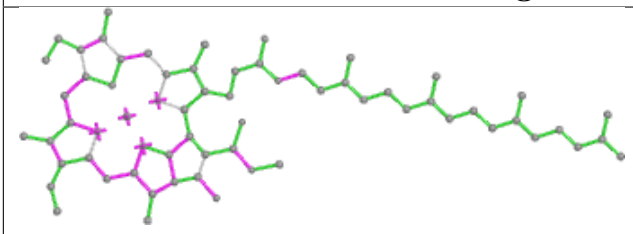


Torsions

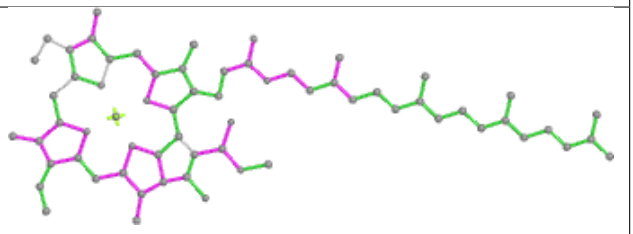


Rings

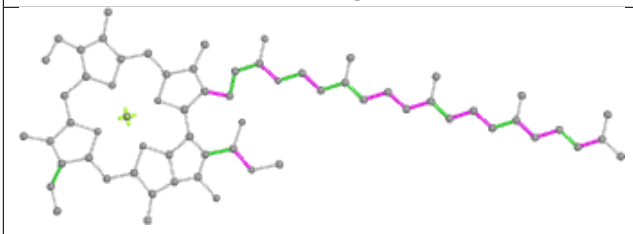
Ligand CLA B 1231



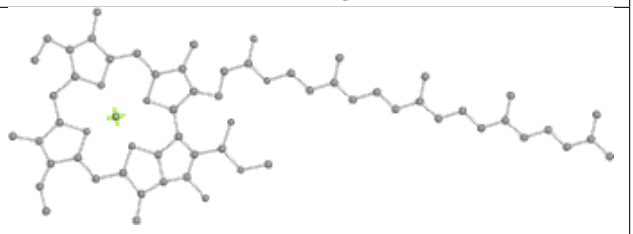
Bond lengths



Bond angles

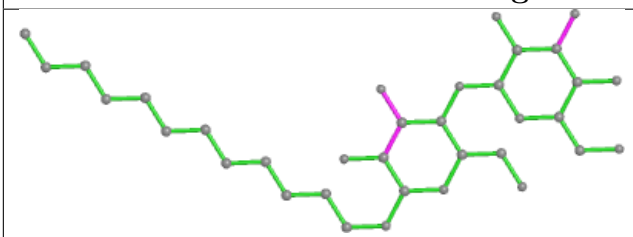


Torsions

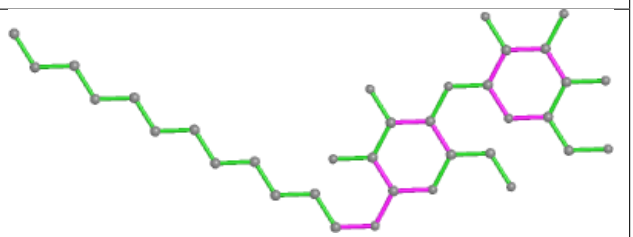


Rings

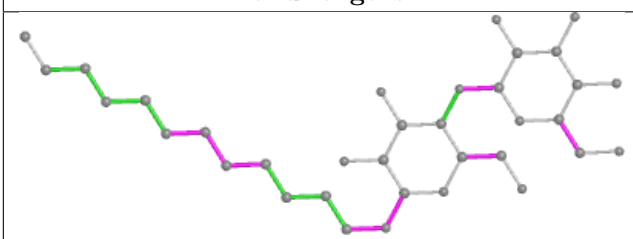
Ligand LMT H 6003



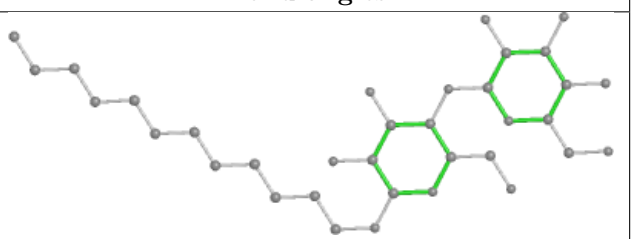
Bond lengths



Bond angles



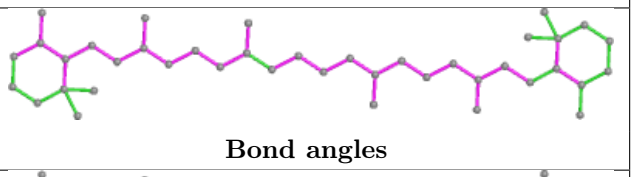
Torsions



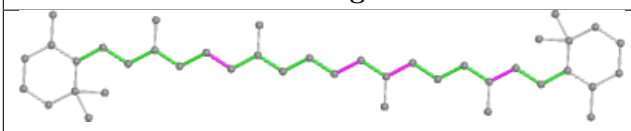
Rings

Ligand BCR b 4014

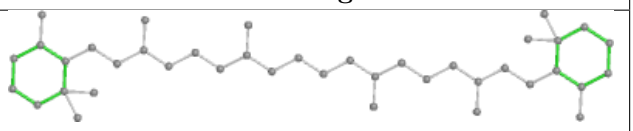
Bond lengths



Bond angles

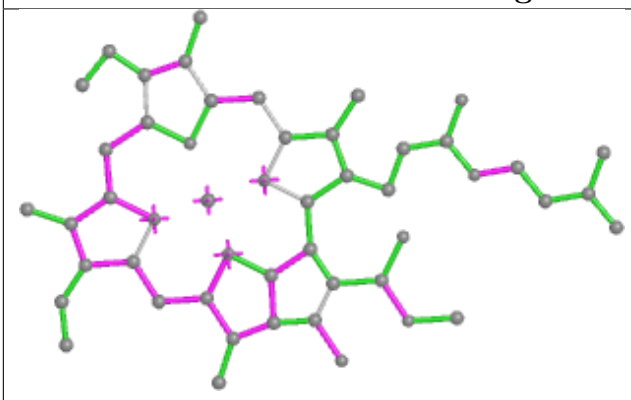


Torsions

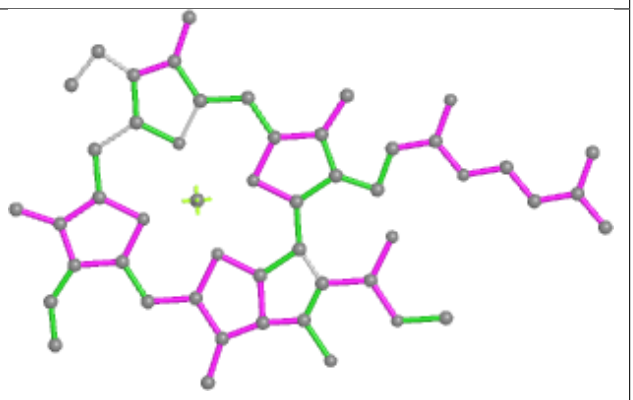


Rings

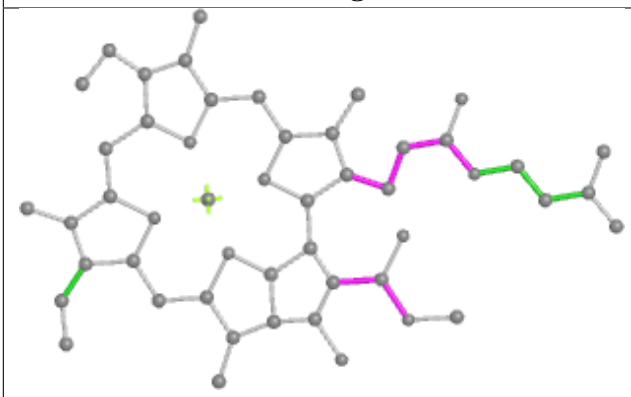
Ligand CLA A 1102



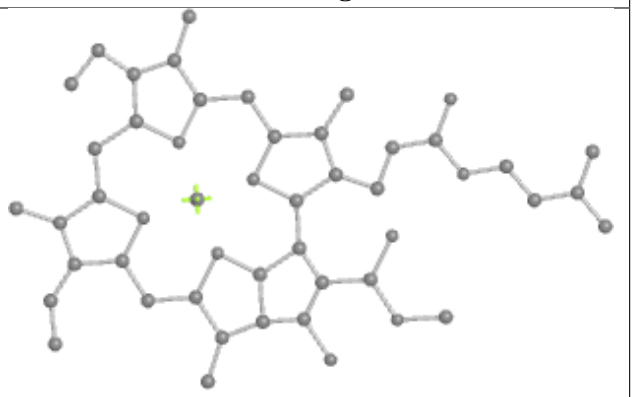
Bond lengths



Bond angles

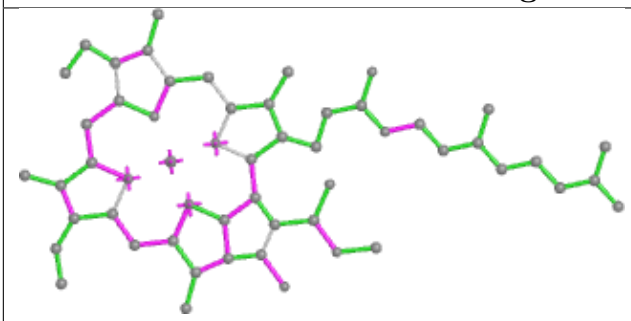


Torsions

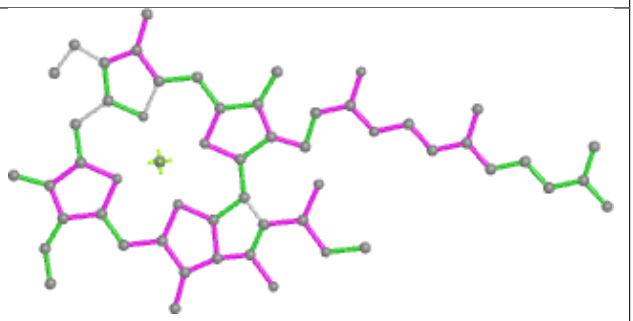


Rings

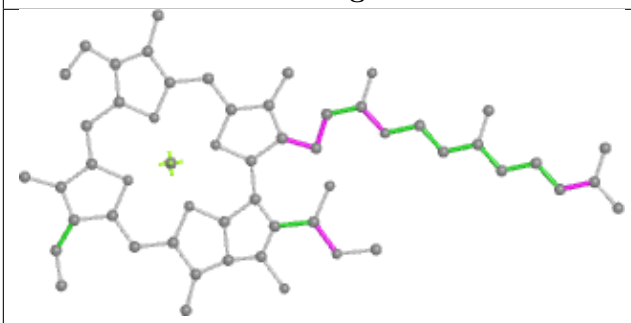
Ligand CLA a 1130



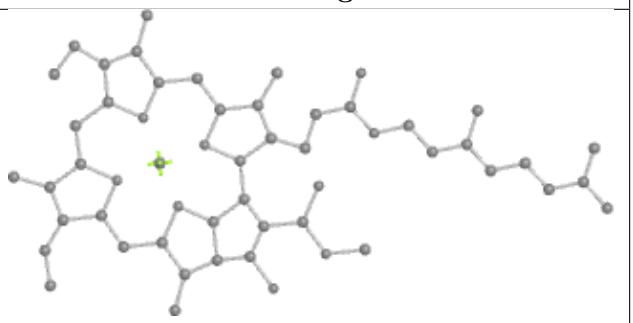
Bond lengths



Bond angles

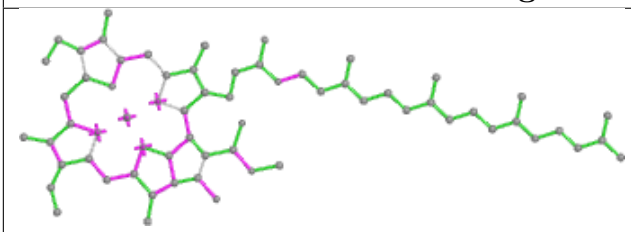


Torsions

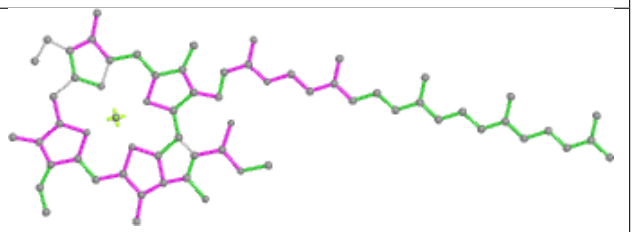


Rings

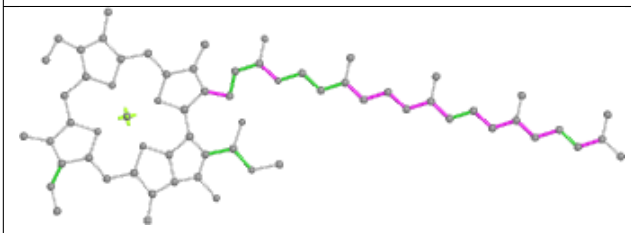
Ligand CLA b 1206



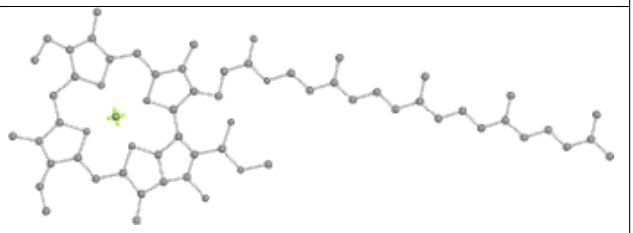
Bond lengths



Bond angles

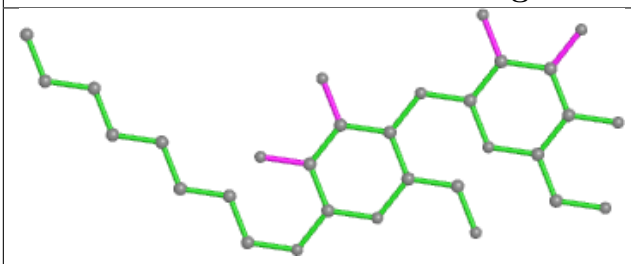


Torsions



Rings

Ligand LMT H 6004



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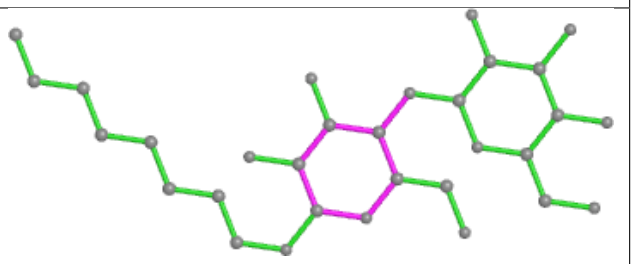
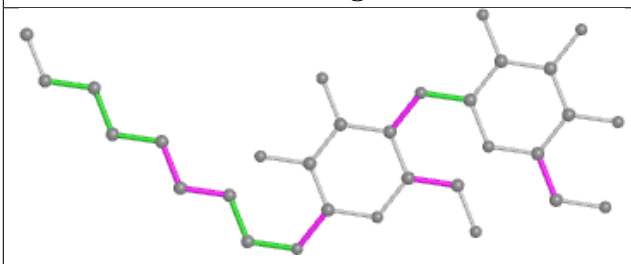
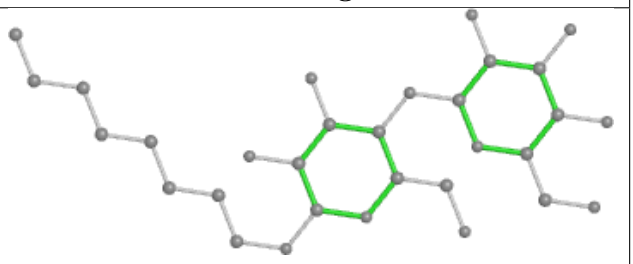


Bond angles

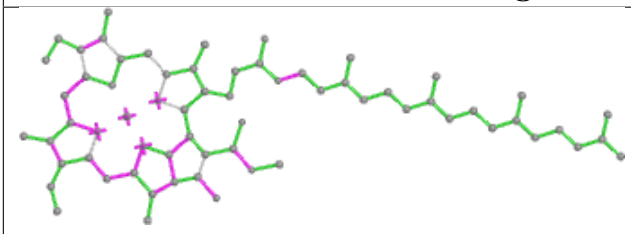


Torsions

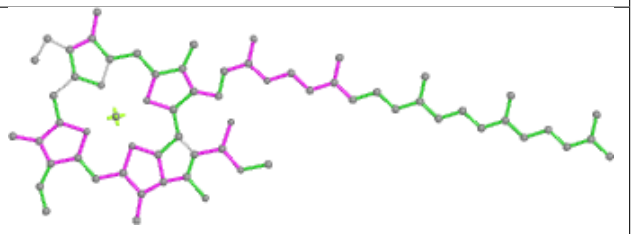


Rings

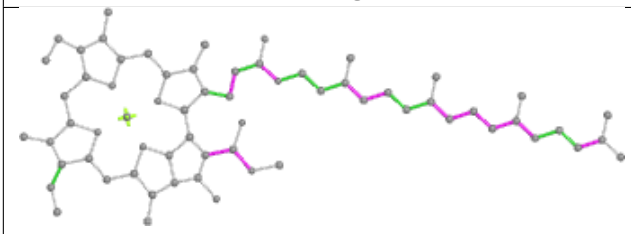
Ligand CLA H 1224



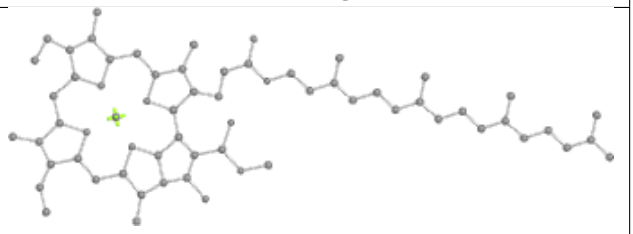
Bond lengths



Bond angles

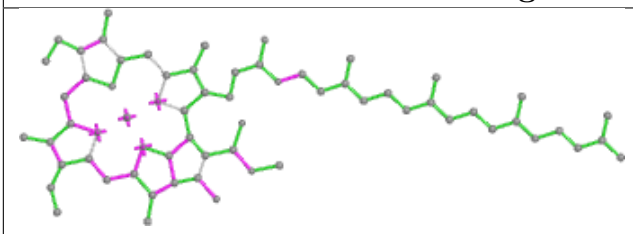


Torsions

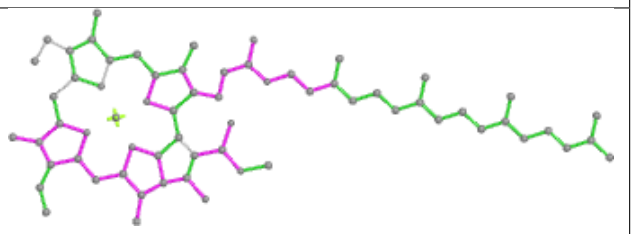


Rings

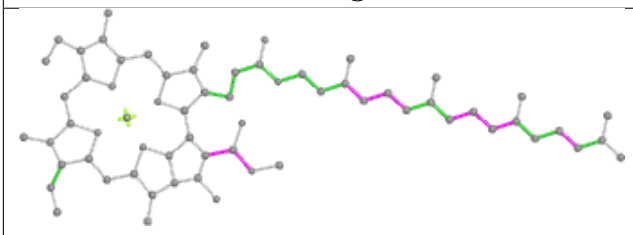
Ligand CLA b 1205



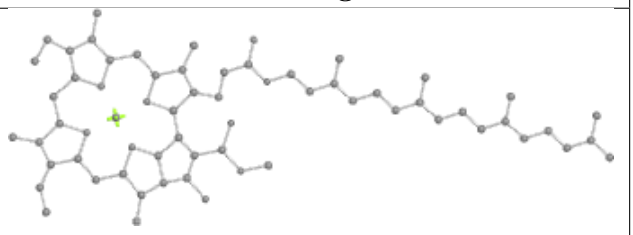
Bond lengths



Bond angles

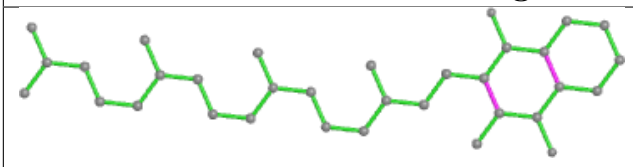


Torsions



Rings

Ligand PQN A 2001



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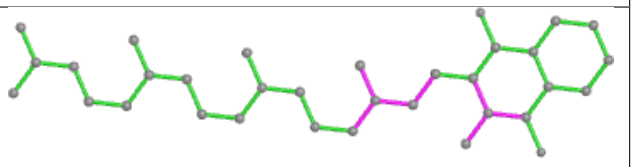
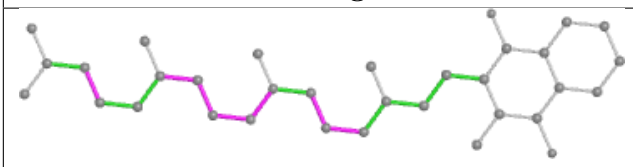
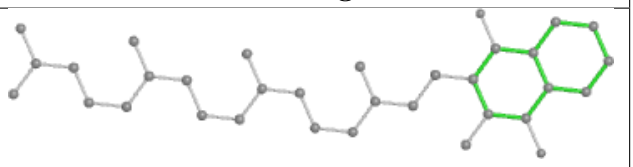


Bond angles

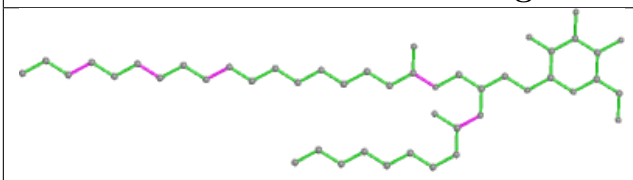


Torsions



Rings

Ligand LMG a 5003



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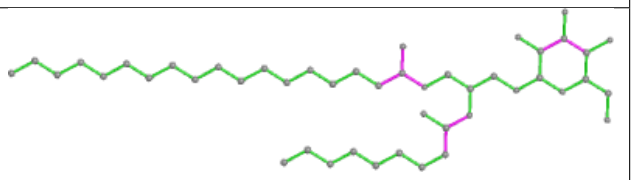
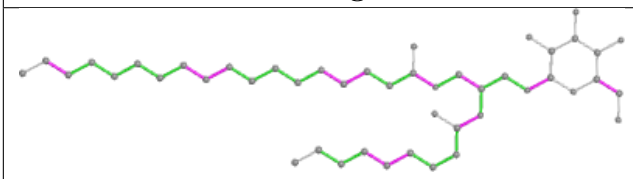


Bond angles



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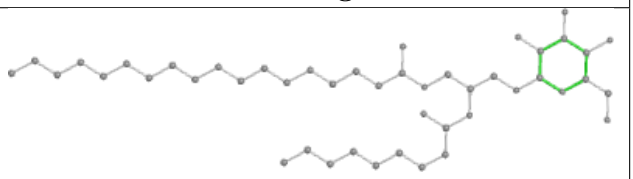
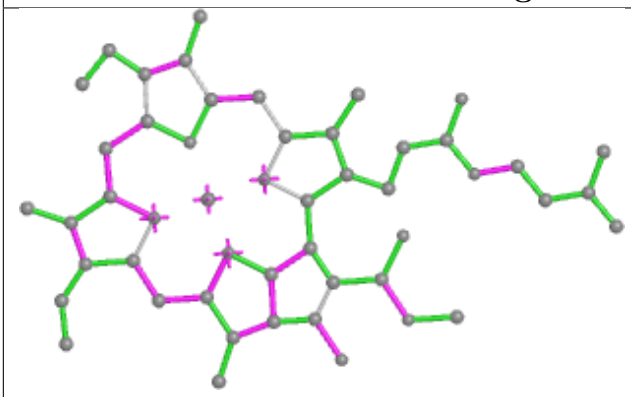
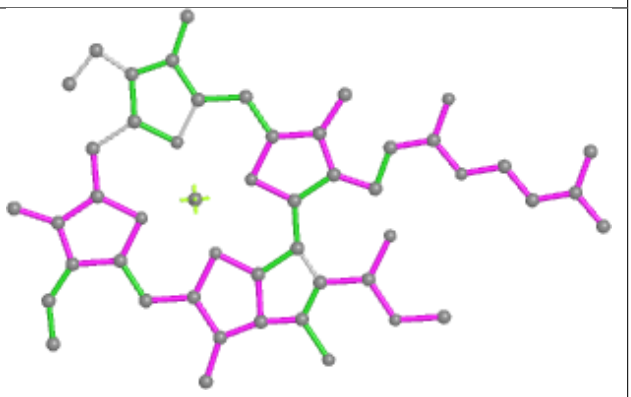
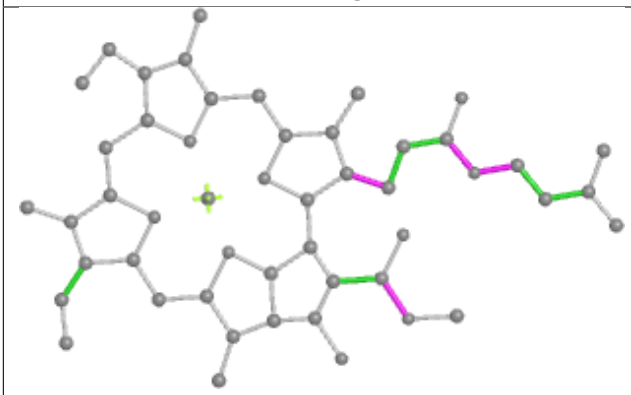
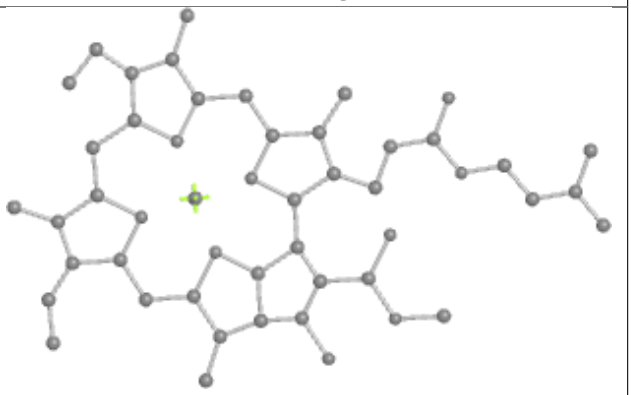
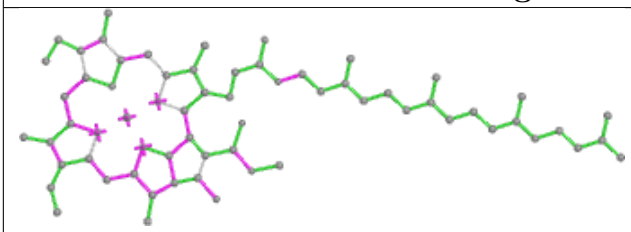
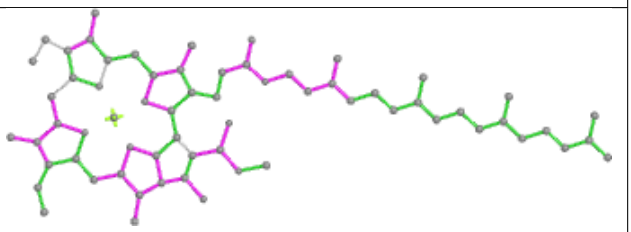
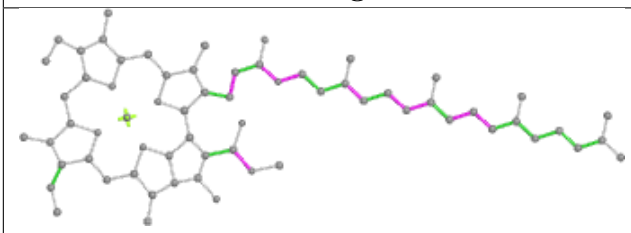
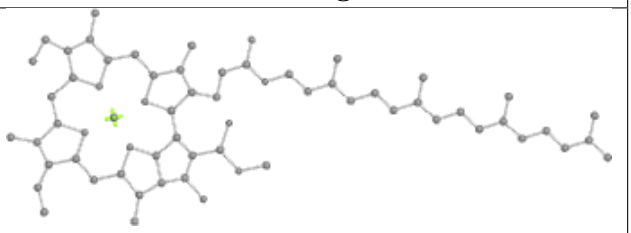
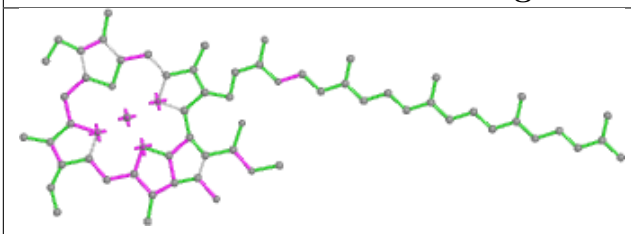


Rings

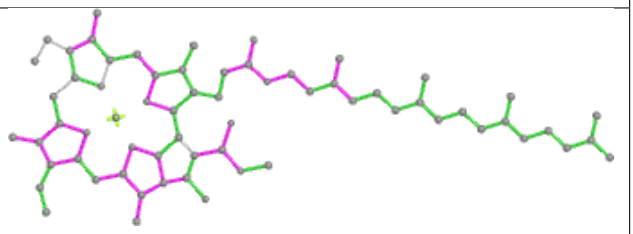
Ligand CLA V 1501	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA G 1109	
	
Bond lengths	Bond angles
	
Torsions	Rings

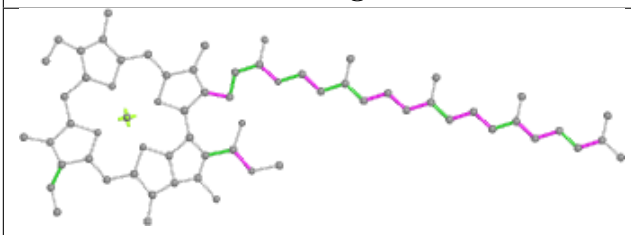
Ligand CLA H 1231



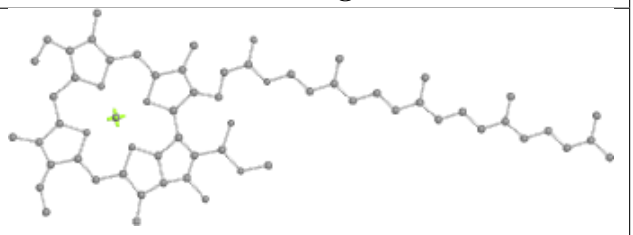
Bond lengths



Bond angles

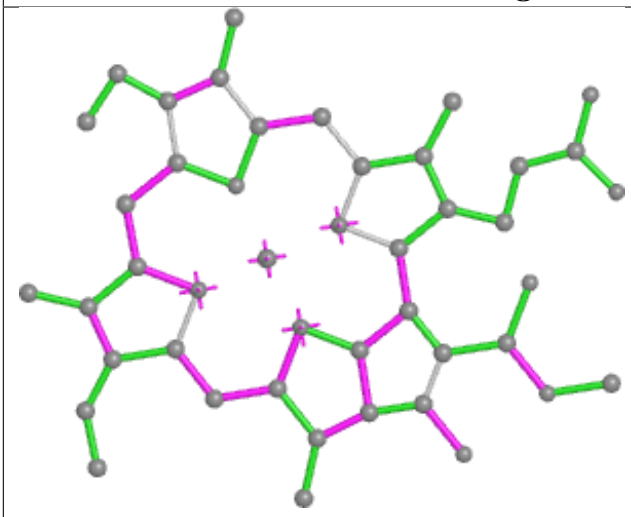


Torsions



Rings

Ligand CLA A 1120



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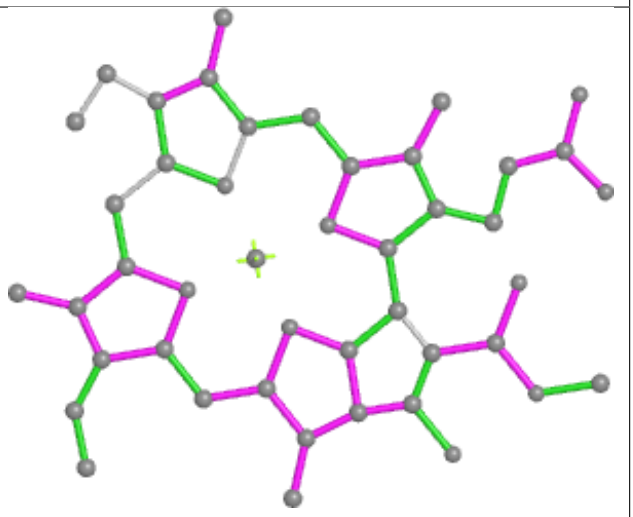
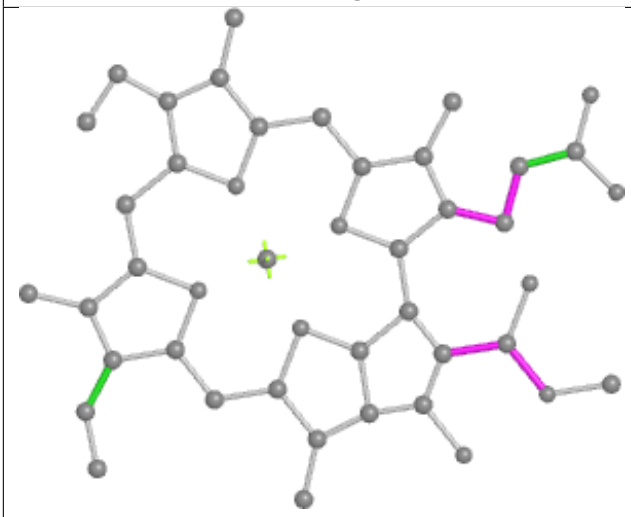
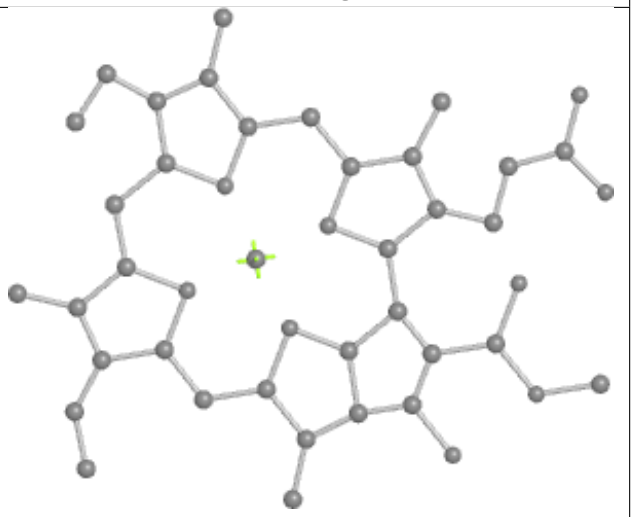


Bond angles

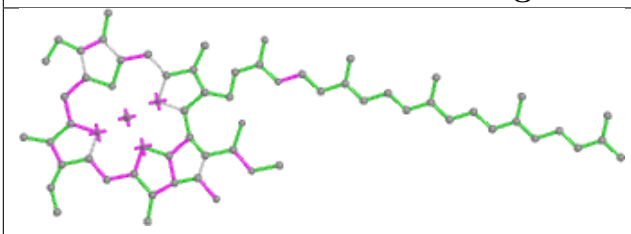


Torsions



Rings

Ligand CLA G 1119



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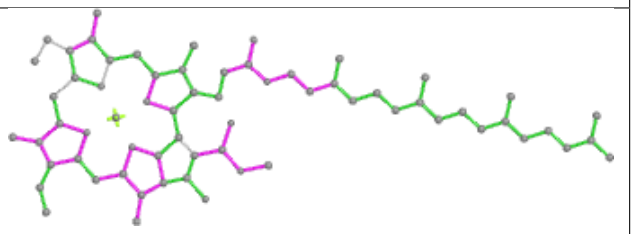
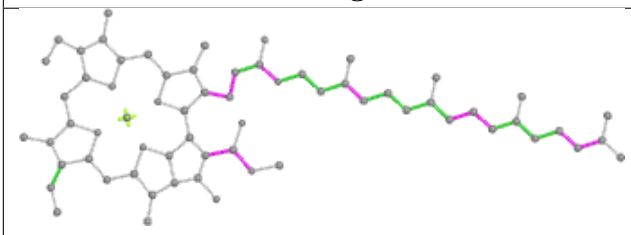
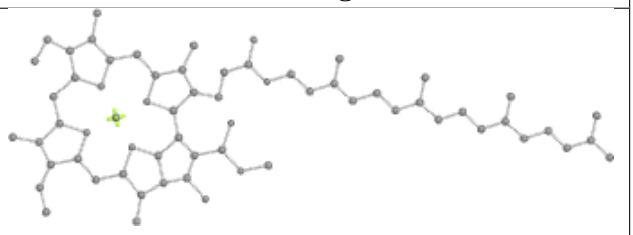


Bond angles

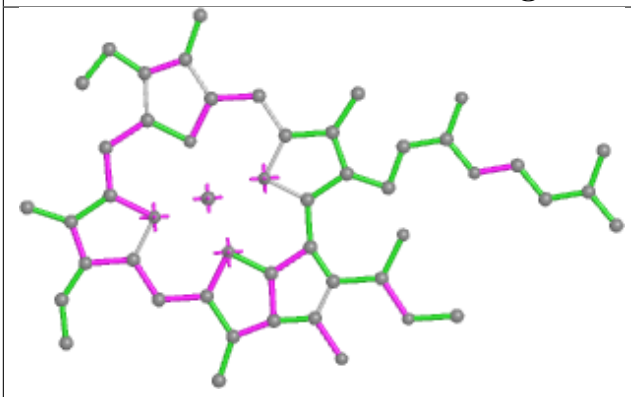


Torsions



Rings

Ligand CLA a 1135



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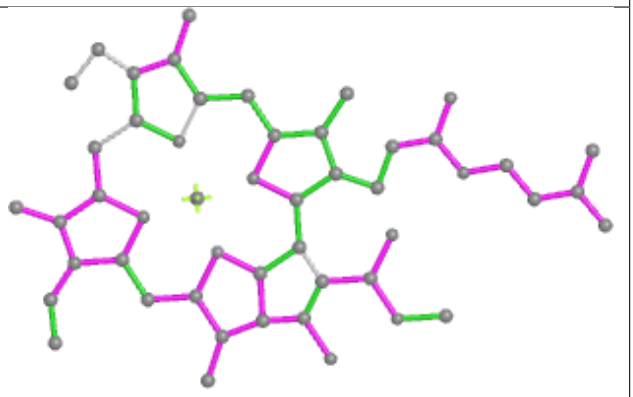
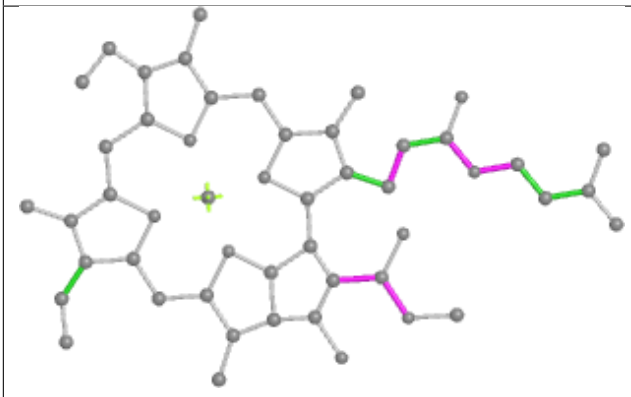
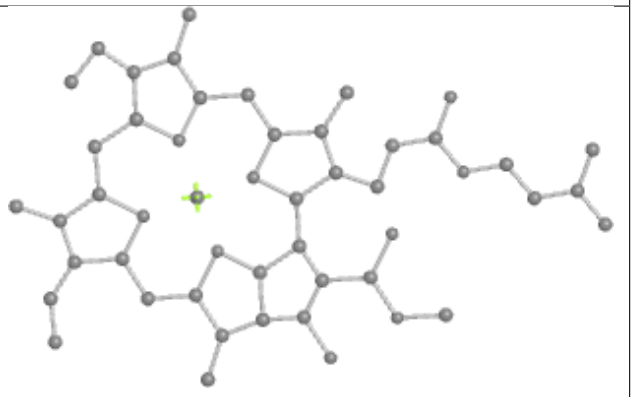


Bond angles

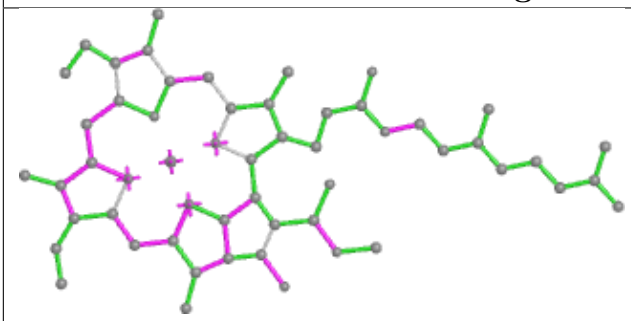


Torsions

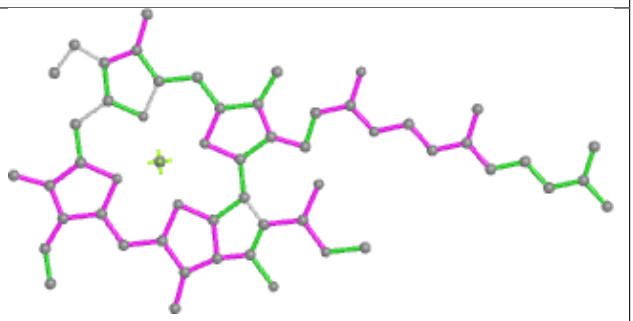


Rings

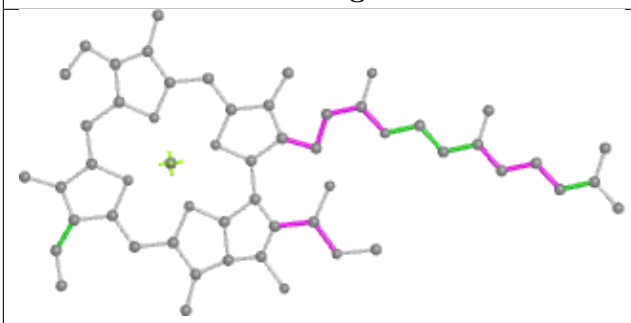
Ligand CLA H 1236



Bond lengths



Bond angles



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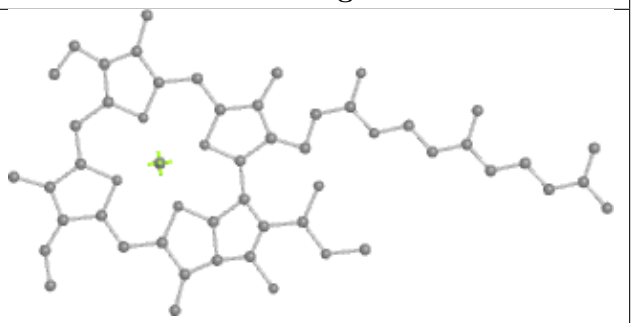
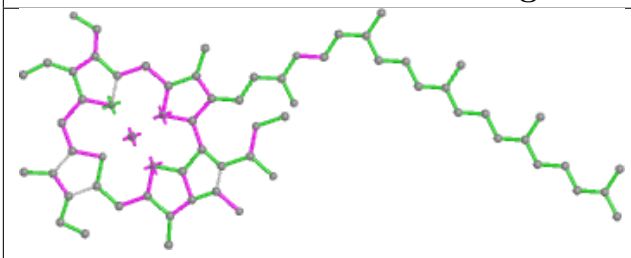
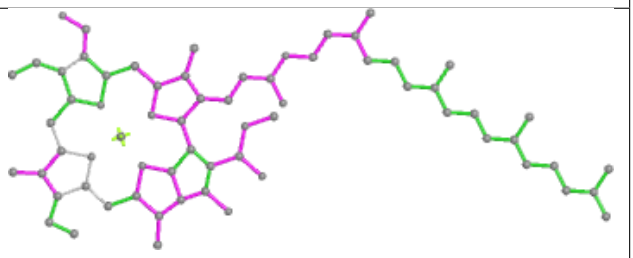


Rings

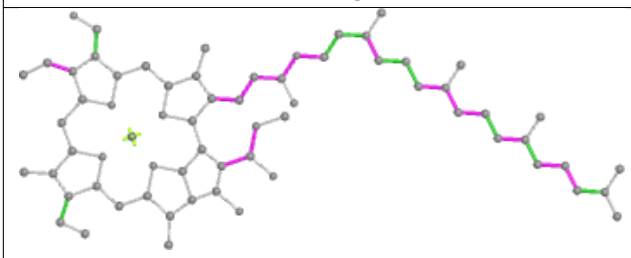
Ligand F6C B 1237



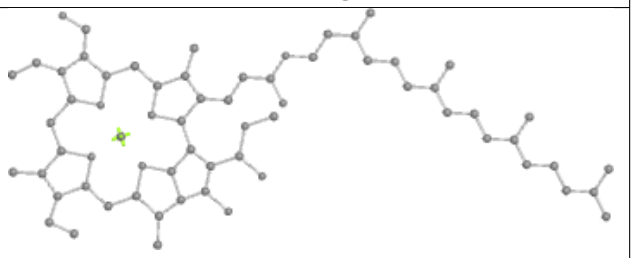
Bond lengths



Bond angles

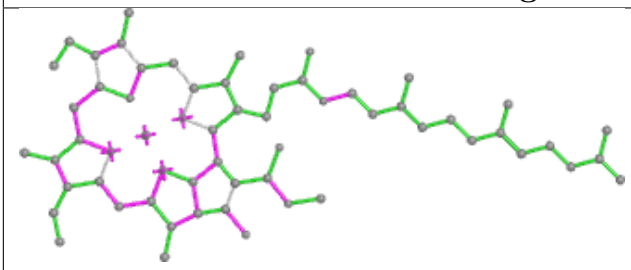


Torsions

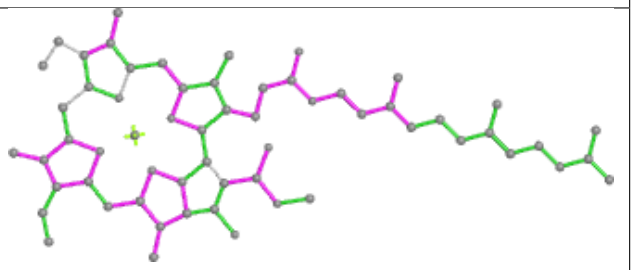


Rings

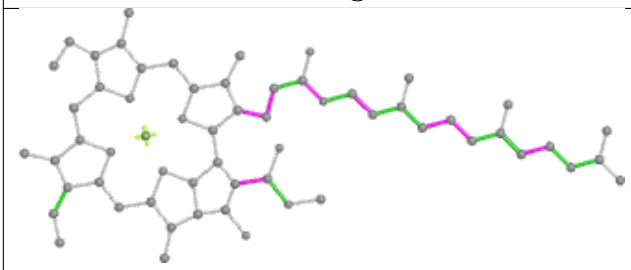
Ligand CLA a 1013



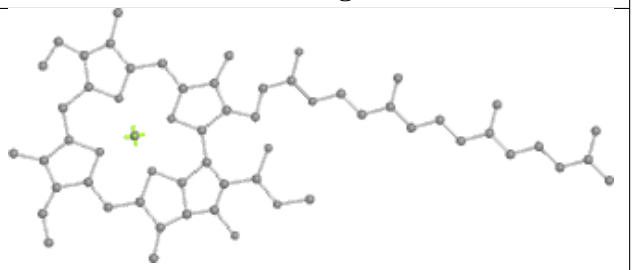
Bond lengths



Bond angles

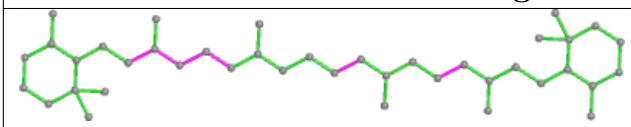


Torsions

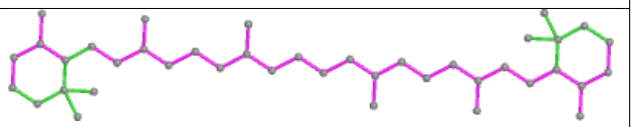


Rings

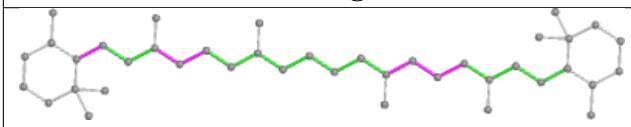
Ligand BCR A 4003



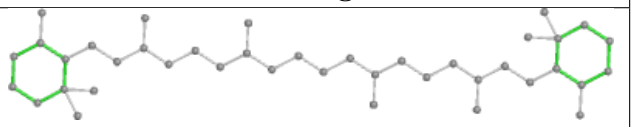
Bond lengths



Bond angles

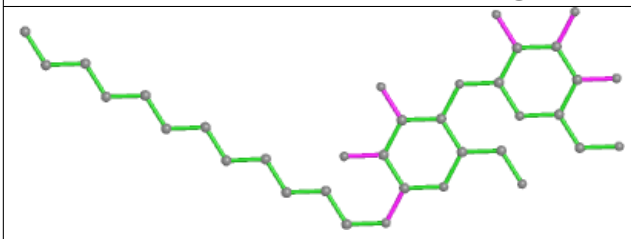


Torsions

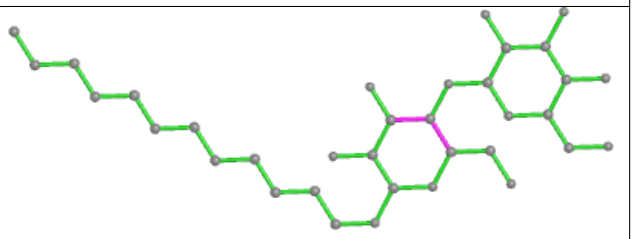


Rings

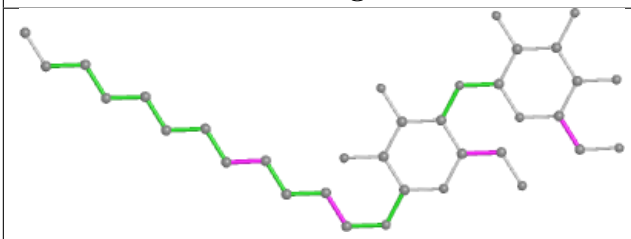
Ligand LMT m 6000



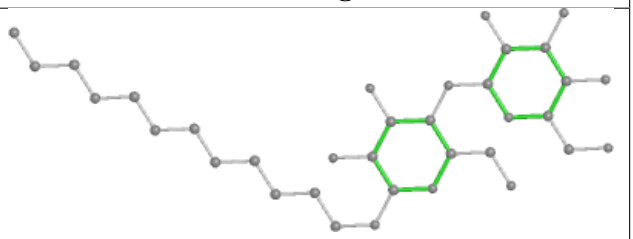
Bond lengths



Bond angles

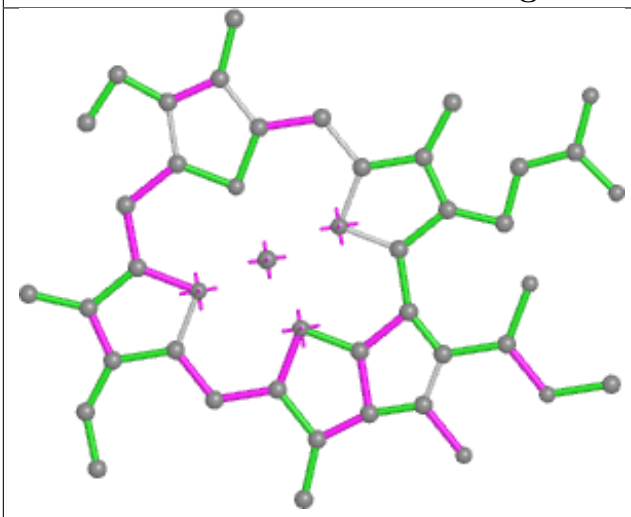


Torsions

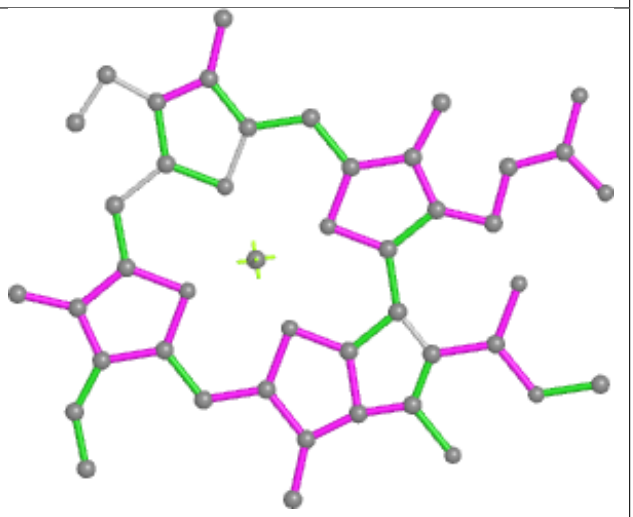


Rings

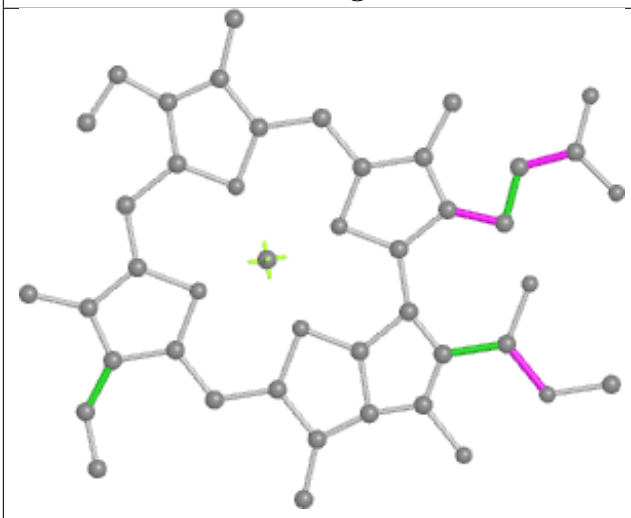
Ligand CLA a 1107



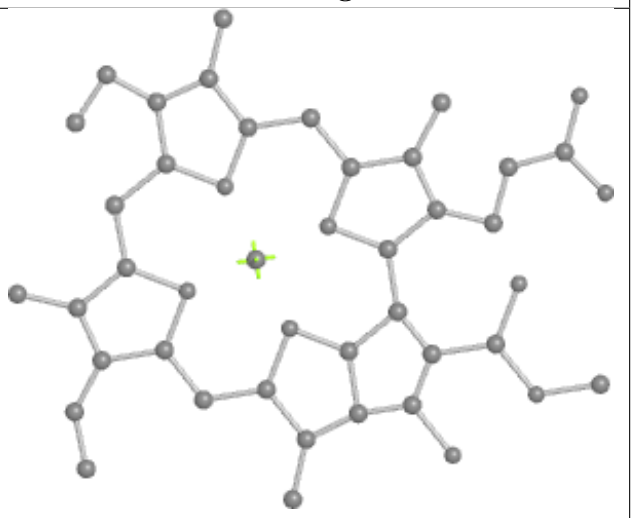
Bond lengths



Bond angles

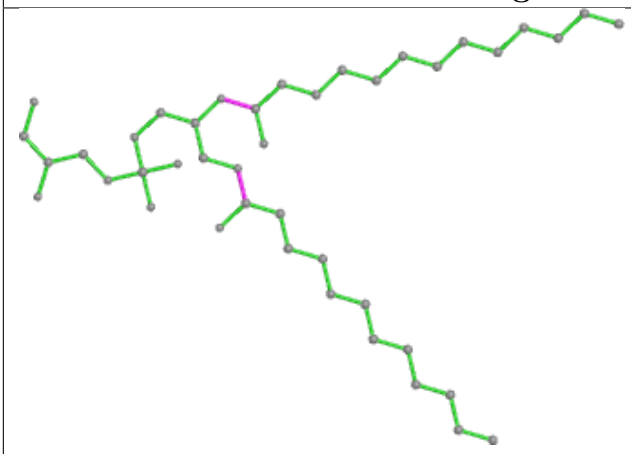


Torsions

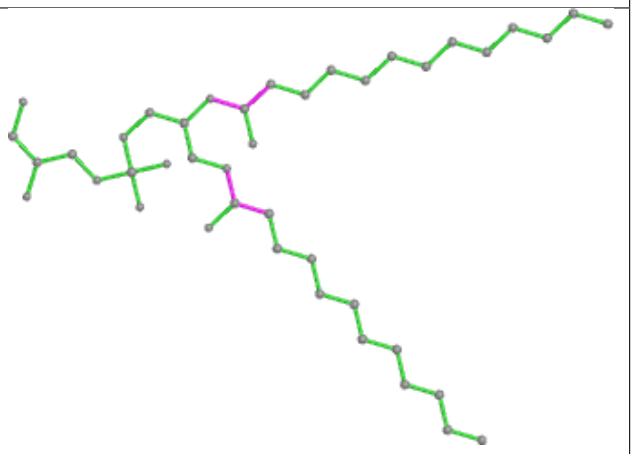


Rings

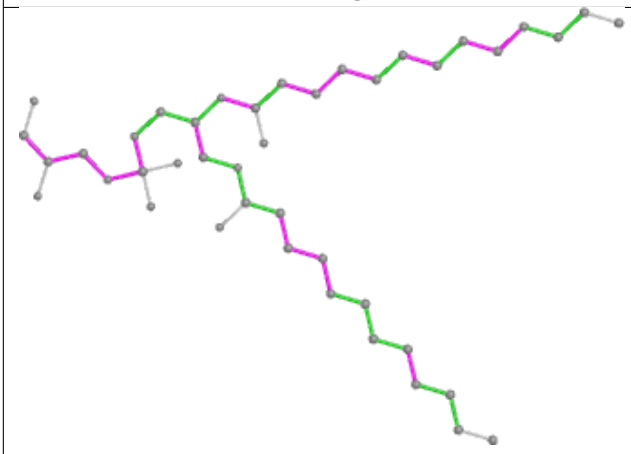
Ligand LHG G 5001



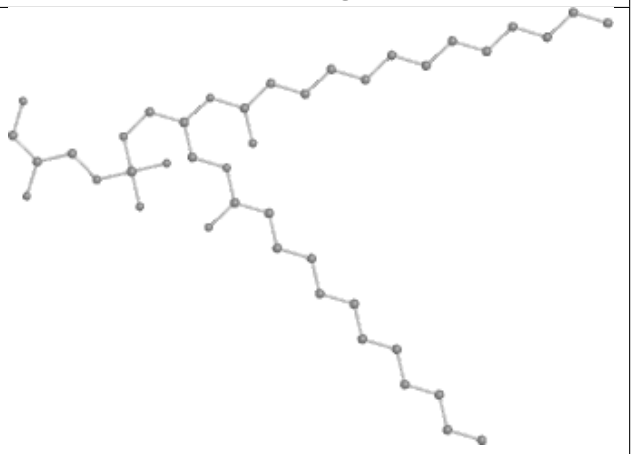
Bond lengths



Bond angles

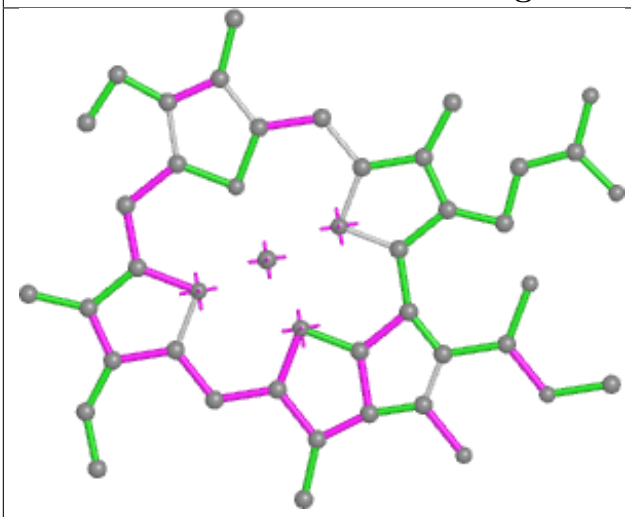


Torsions

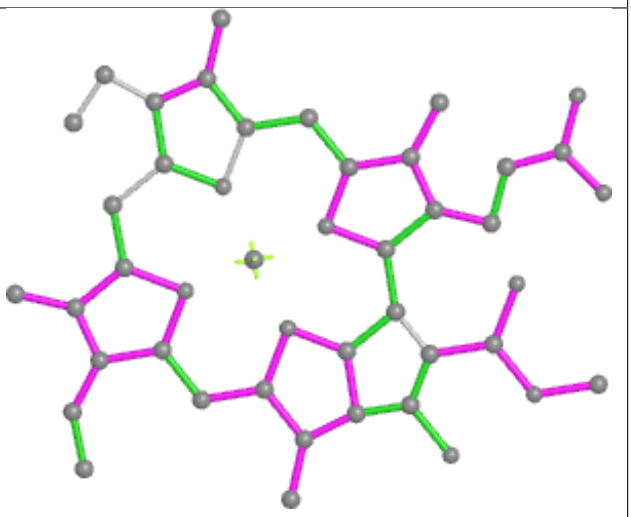


Rings

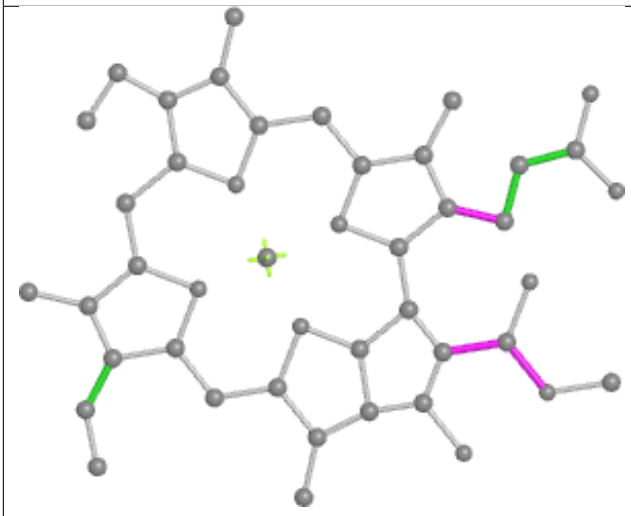
Ligand CLA A 1108



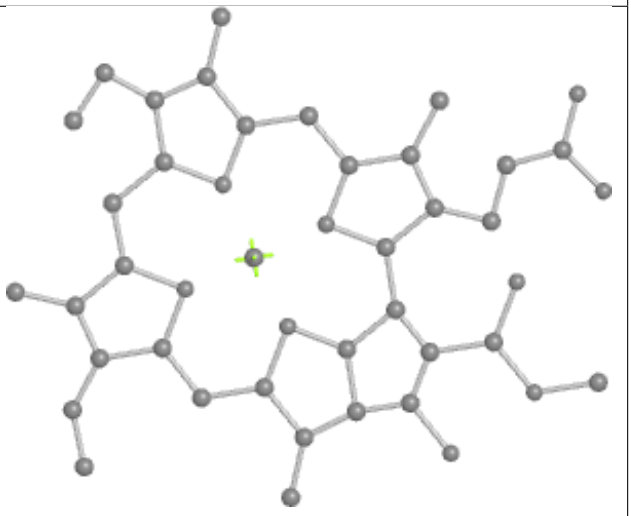
Bond lengths



Bond angles

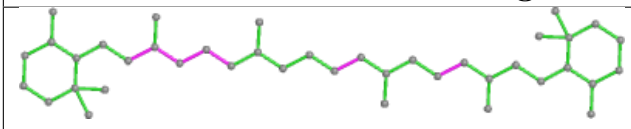


Torsions



Rings

Ligand BCR b 4006



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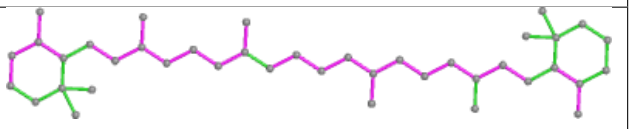
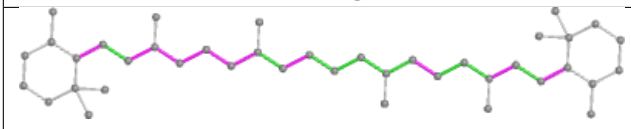


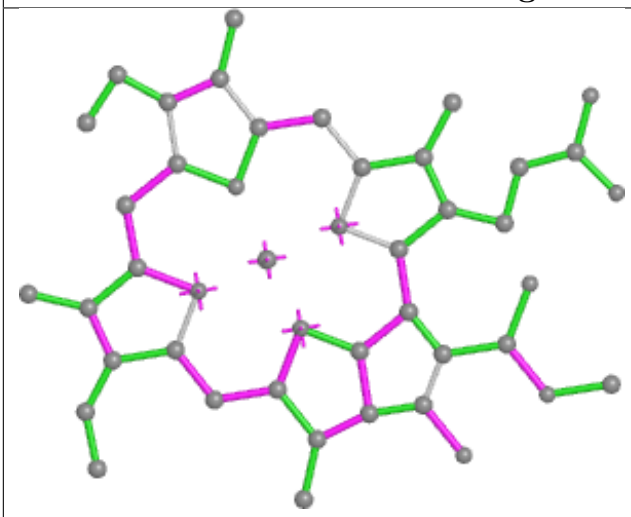
Bond angles



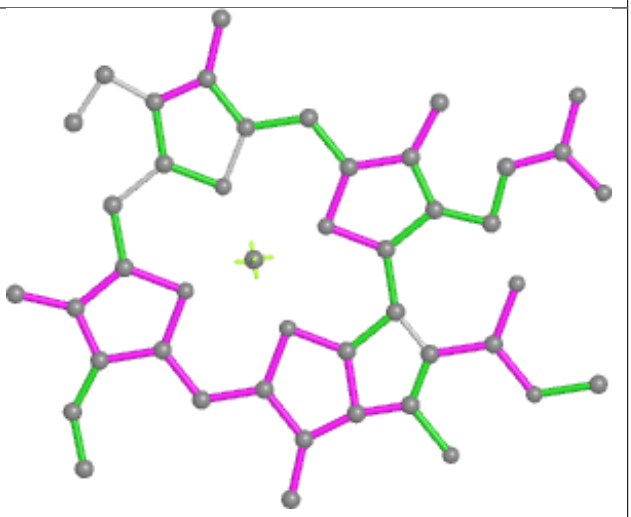
Torsions

Rings

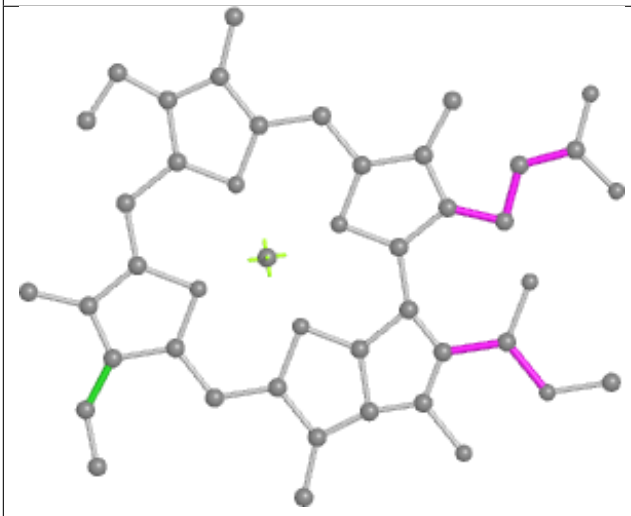
Ligand CLA b 1217



Bond lengths



Bond angles



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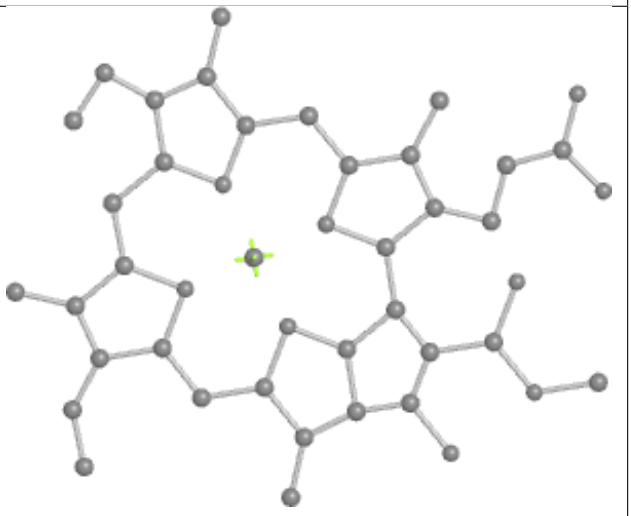
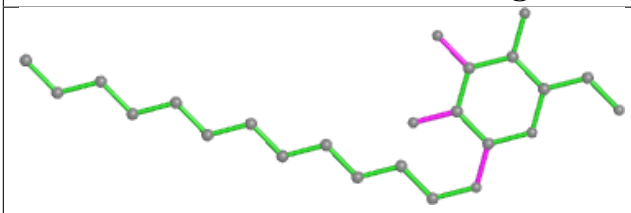


Rings

Ligand LMT G 6004



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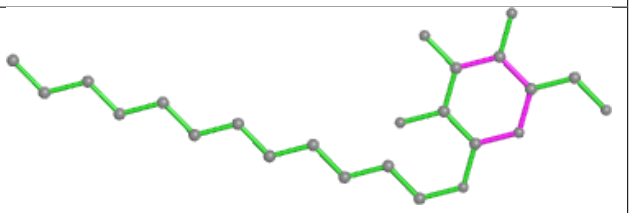
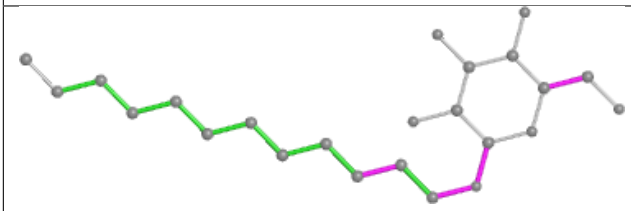
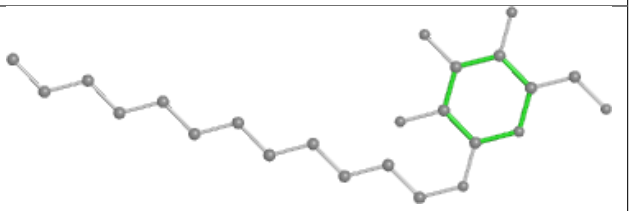


Bond angles

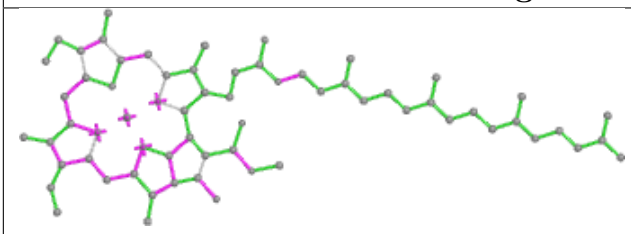


Torsions

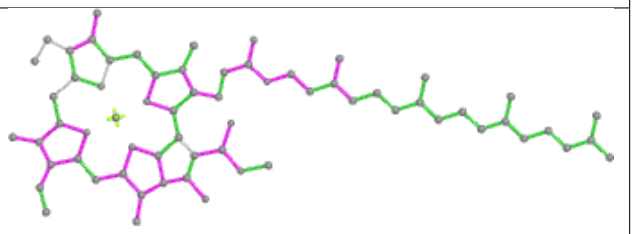


Rings

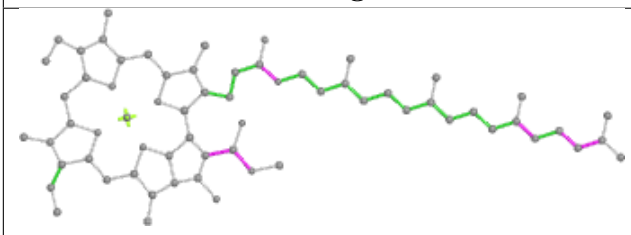
Ligand CLA B 1204



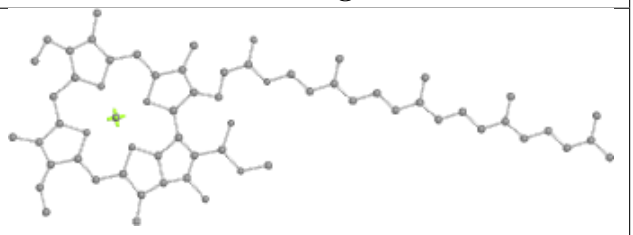
Bond lengths



Bond angles

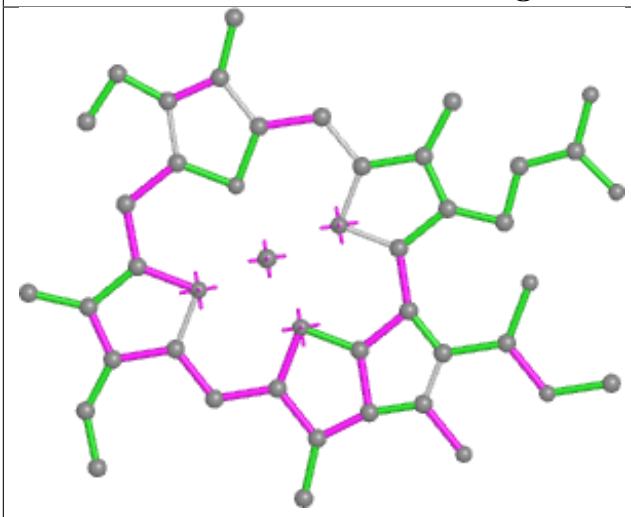


Torsions

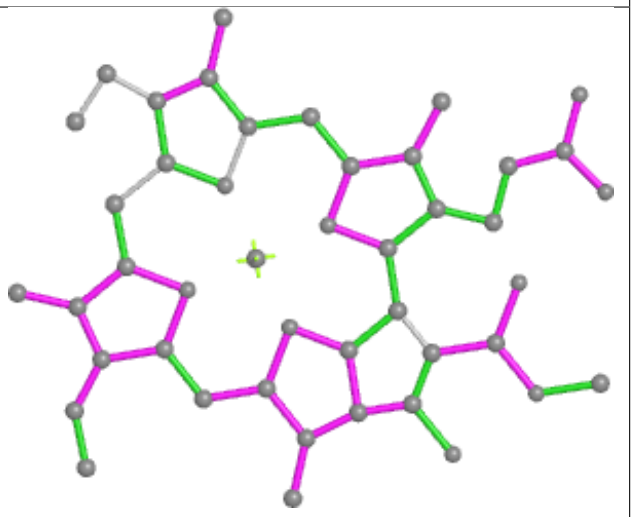


Rings

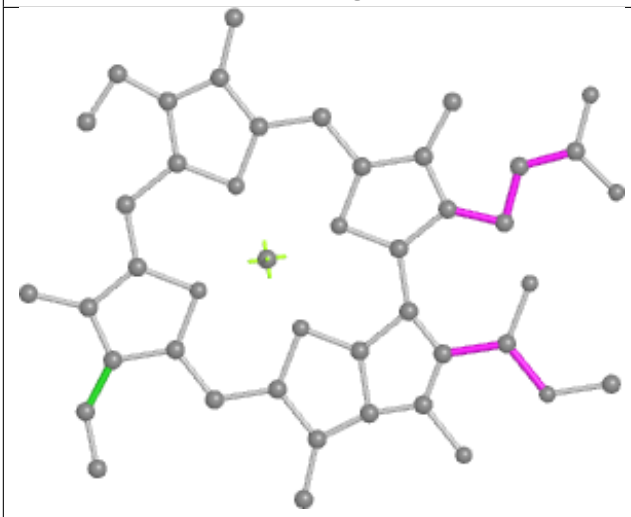
Ligand CLA A 1141



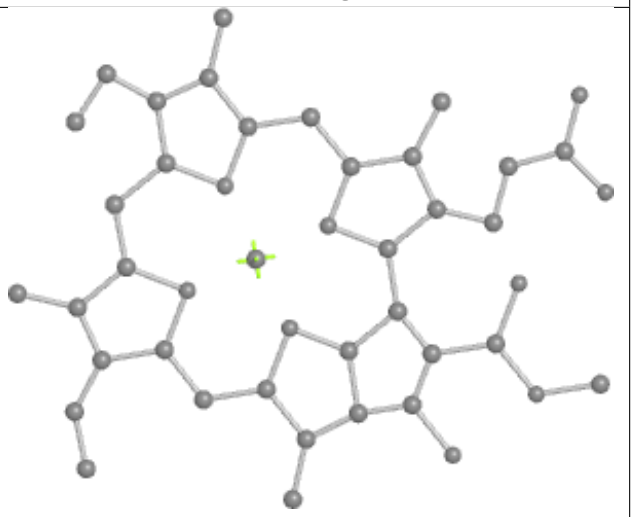
Bond lengths



Bond angles

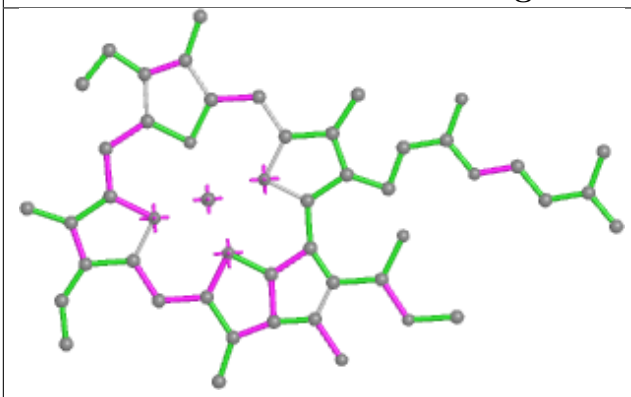


Torsions



Rings

Ligand CLA A 1137



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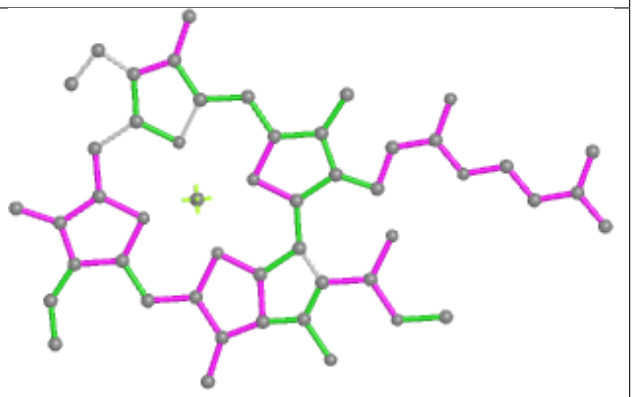
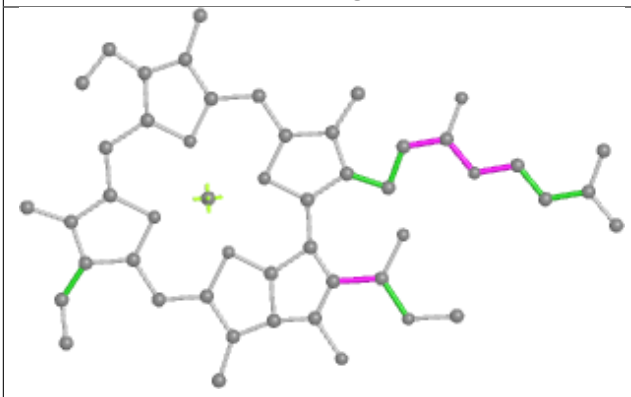
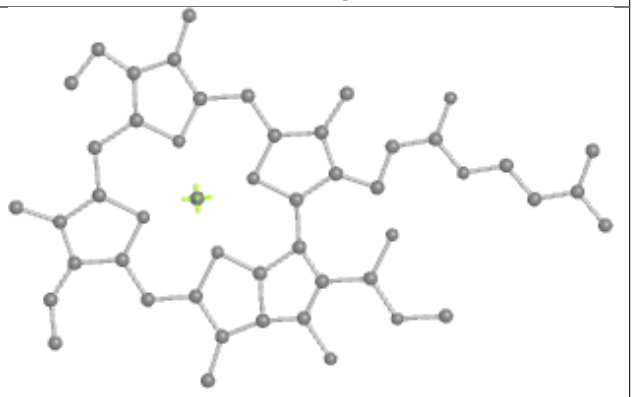


Bond angles

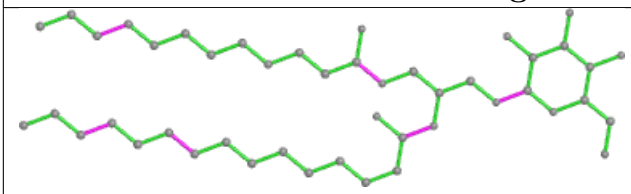


Torsions



Rings

Ligand LMG H 5002



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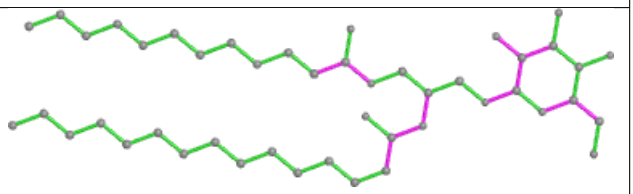
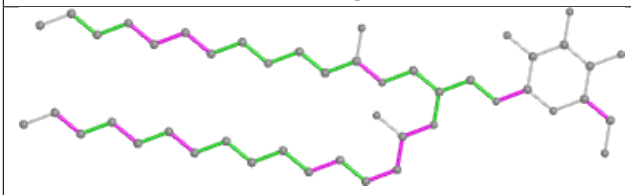


Bond angles



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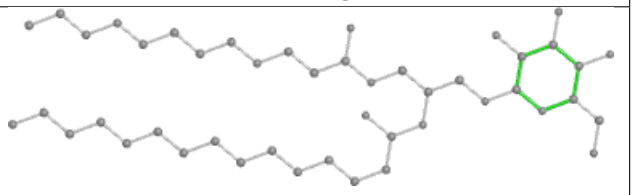
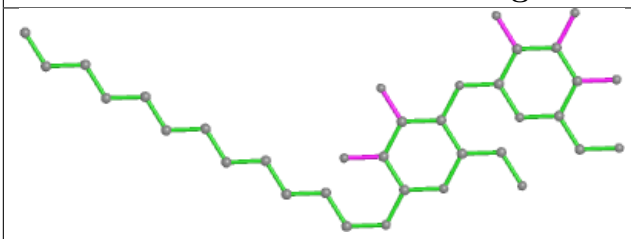


Rings

Ligand LMT U 6002



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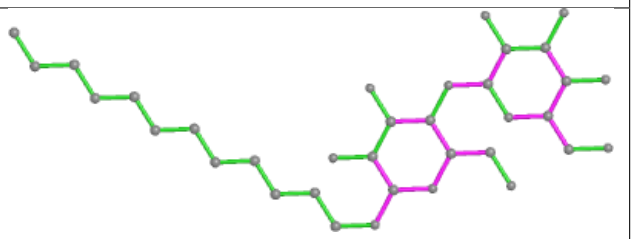
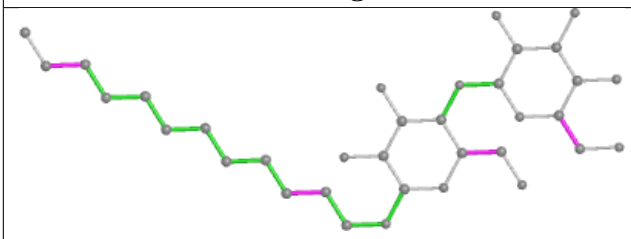
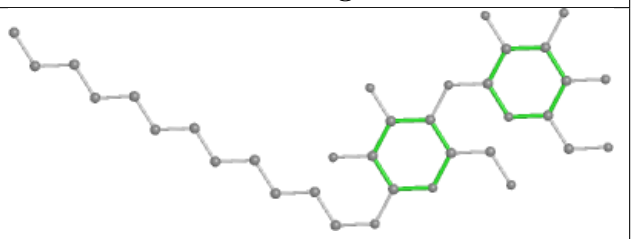


Bond angles

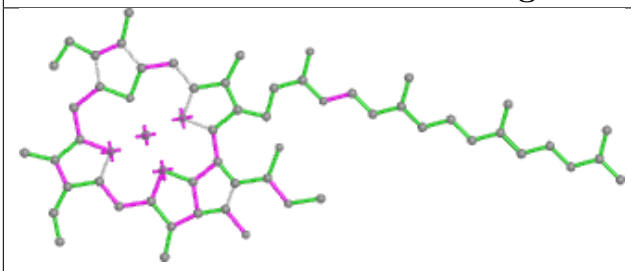


Torsions

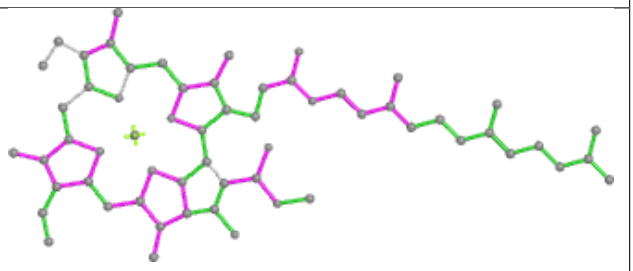


Rings

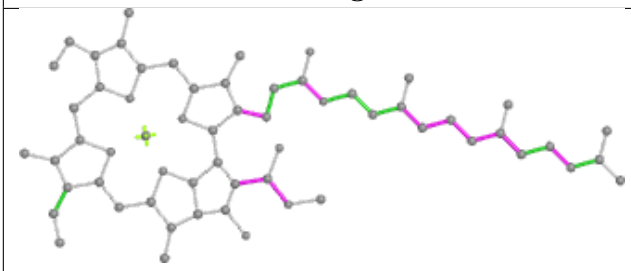
Ligand CLA b 1215



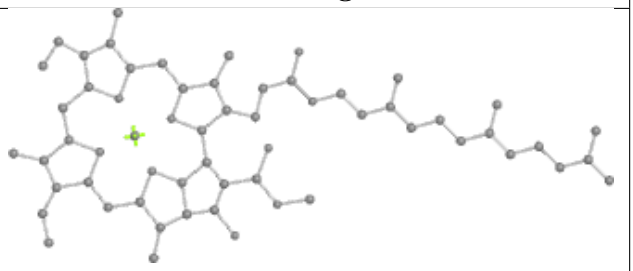
Bond lengths



Bond angles

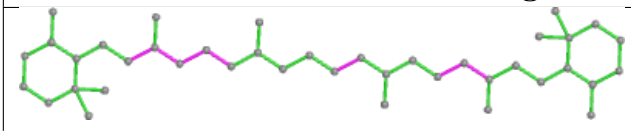


Torsions

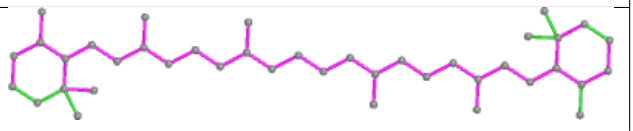


Rings

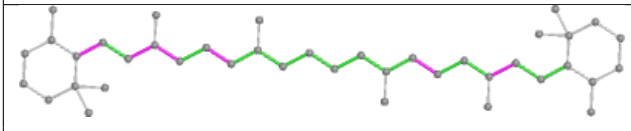
Ligand BCR l 4019



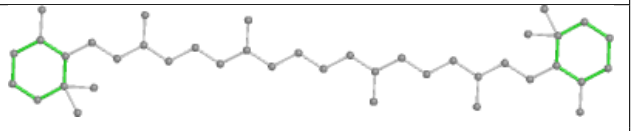
Bond lengths



Bond angles

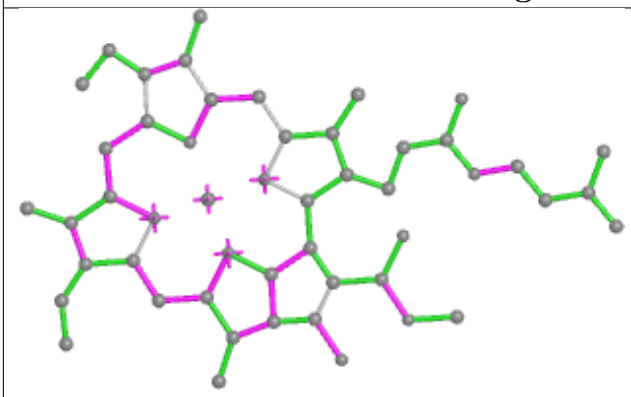


Torsions

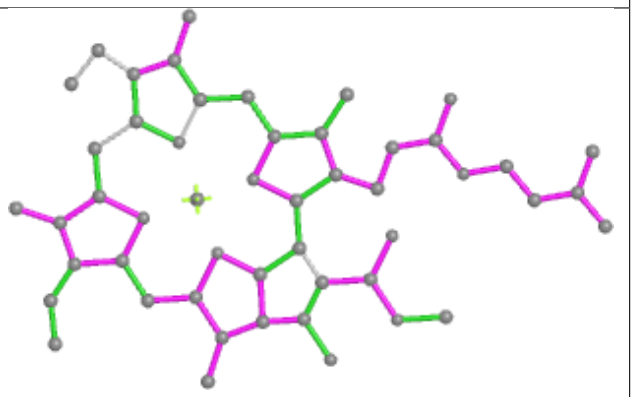


Rings

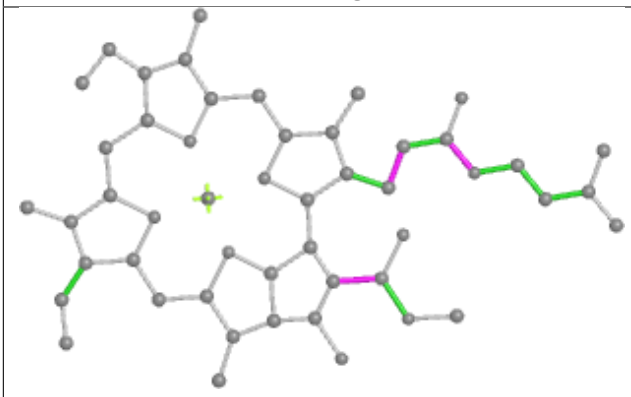
Ligand CLA A 1129



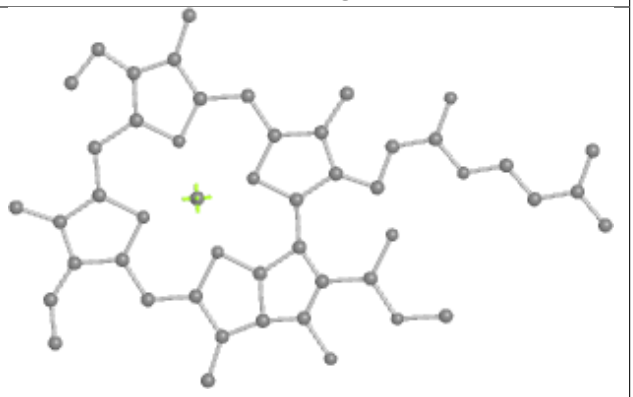
Bond lengths



Bond angles

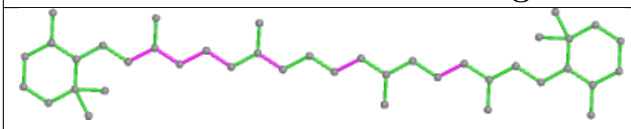


Torsions

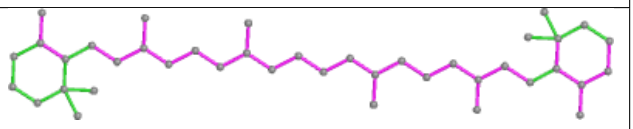


Rings

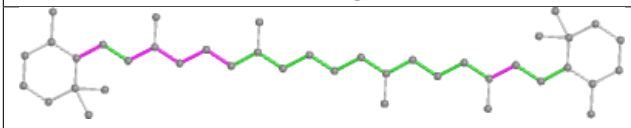
Ligand BCR G 4005



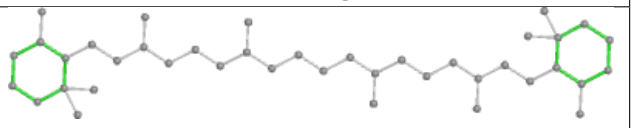
Bond lengths



Bond angles

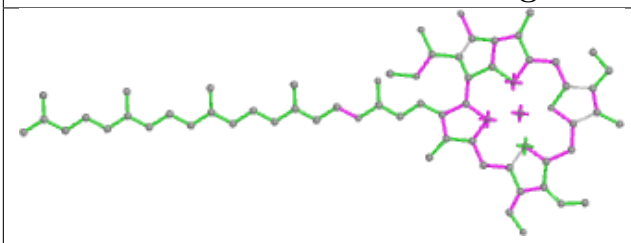


Torsions

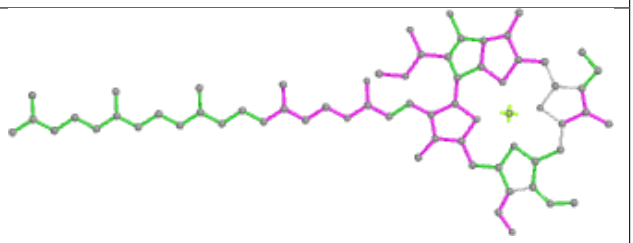


Rings

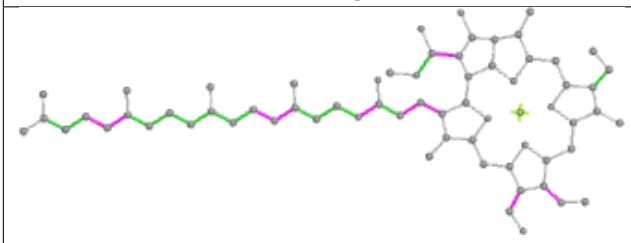
Ligand F6C B 1238



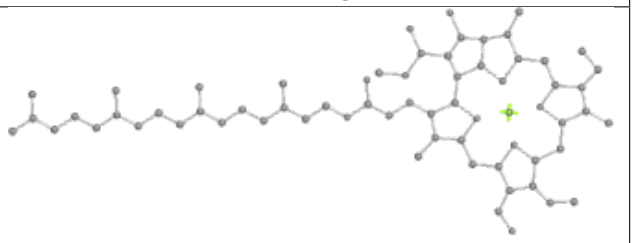
Bond lengths



Bond angles

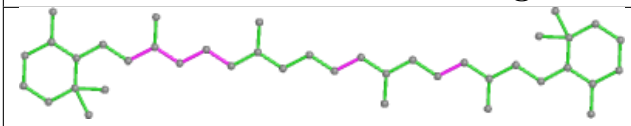


Torsions

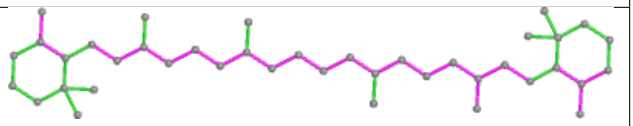


Rings

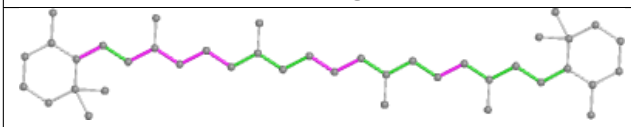
Ligand BCR R 4018



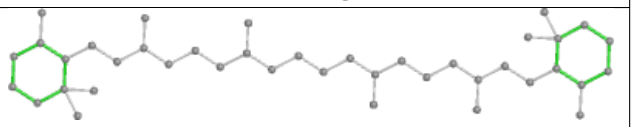
Bond lengths



Bond angles

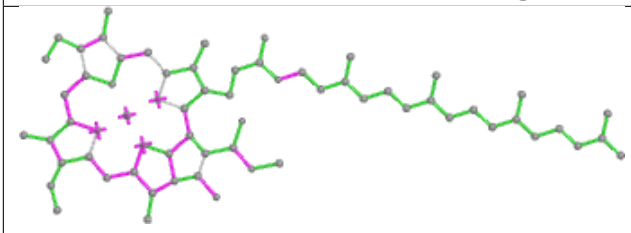


Torsions

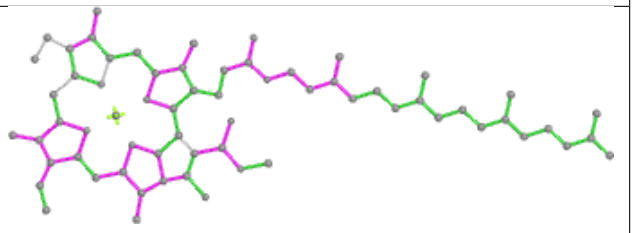


Rings

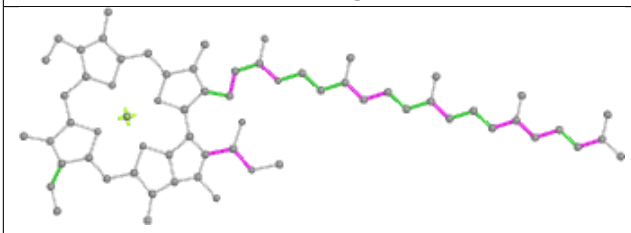
Ligand CLA H 1201



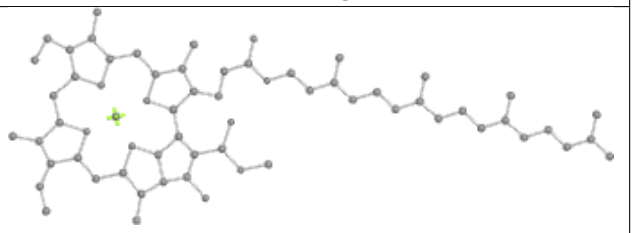
Bond lengths



Bond angles

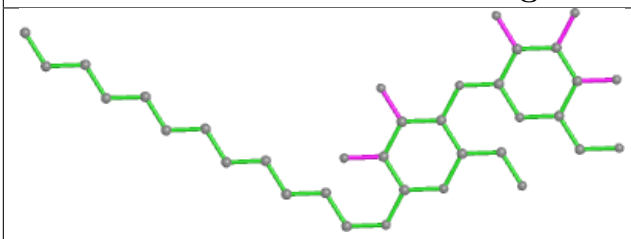


Torsions

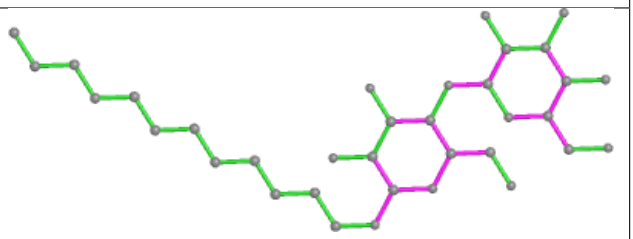


Rings

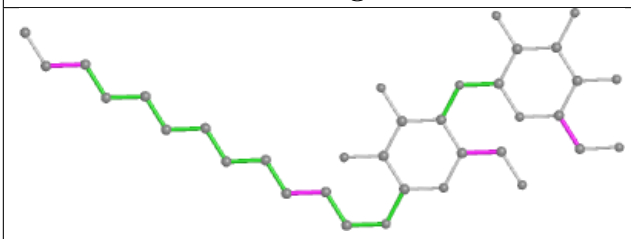
Ligand LMT l 6002



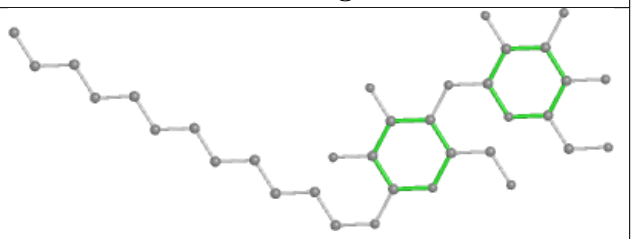
Bond lengths



Bond angles

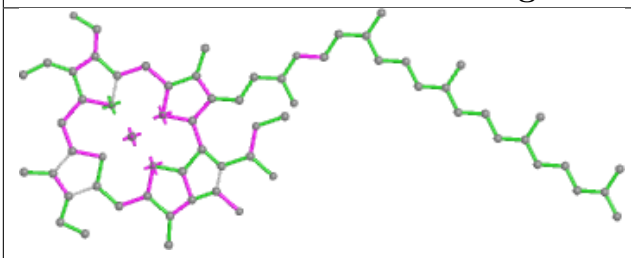


Torsions



Rings

Ligand F6C H 1237



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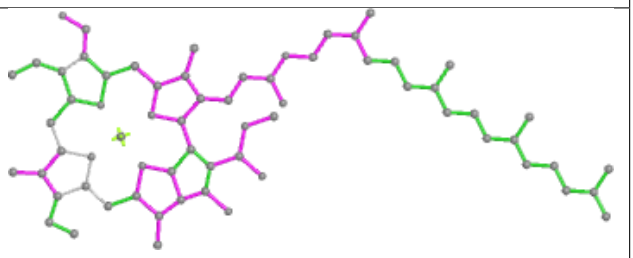
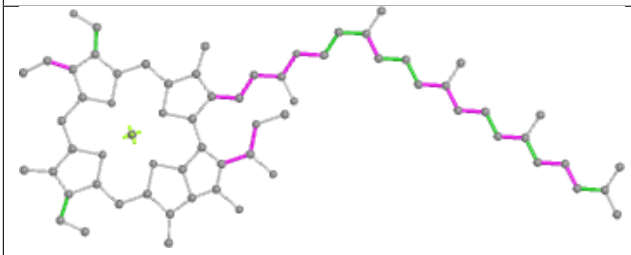
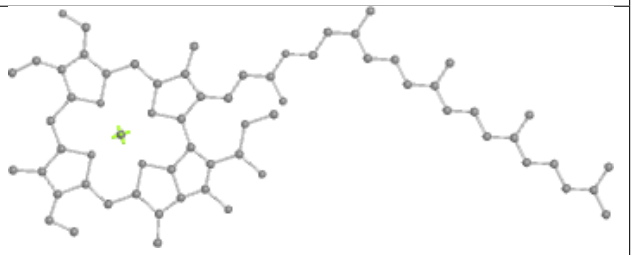


Bond angles

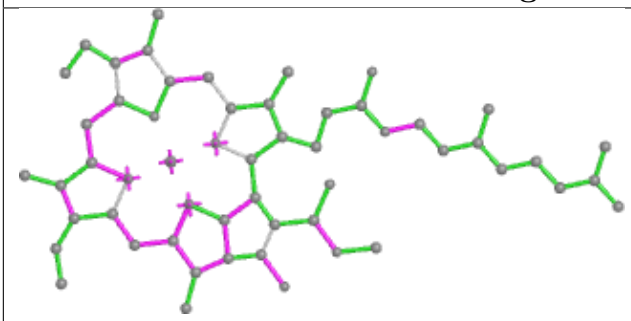


Torsions



Rings

Ligand CLA a 1116



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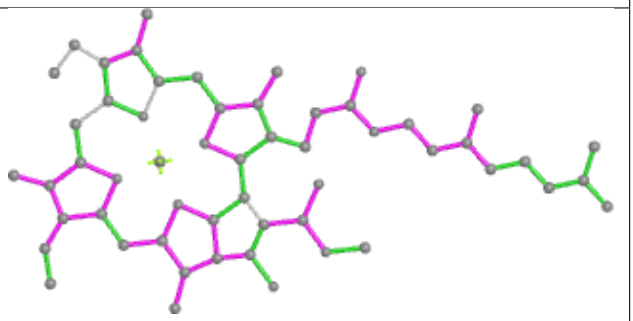
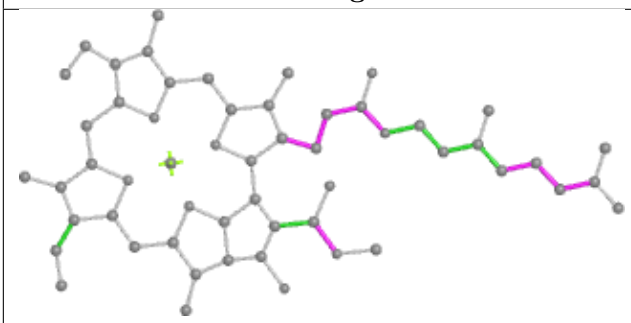


Bond angles



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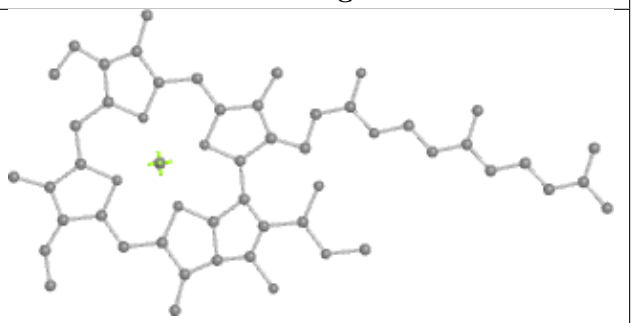
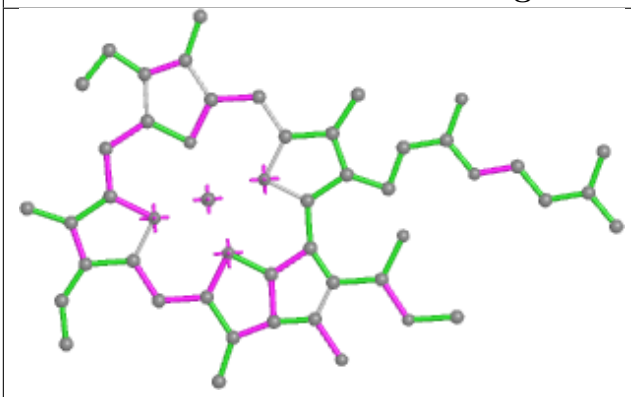
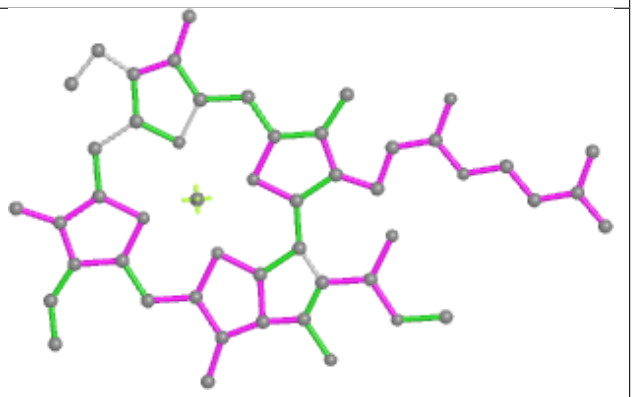


Rings

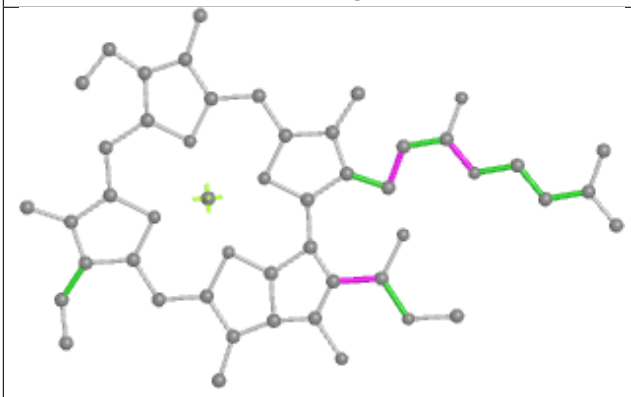
Ligand CLA G 1129



Bond lengths



Bond angles



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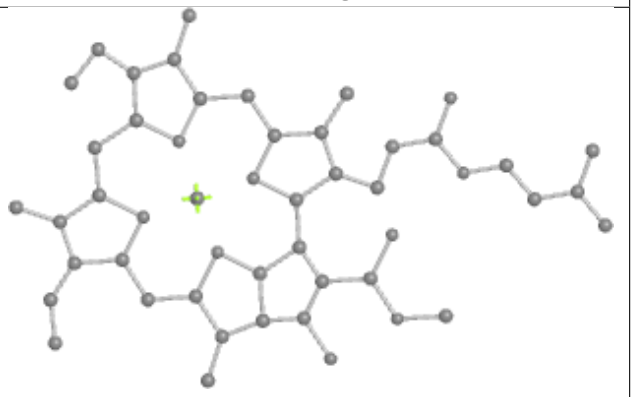
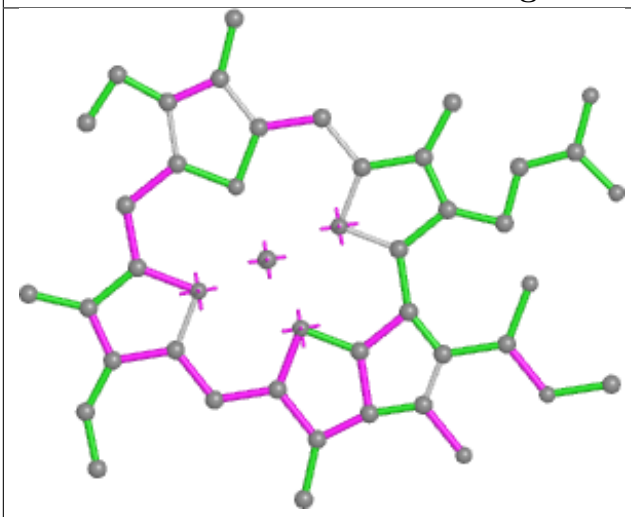
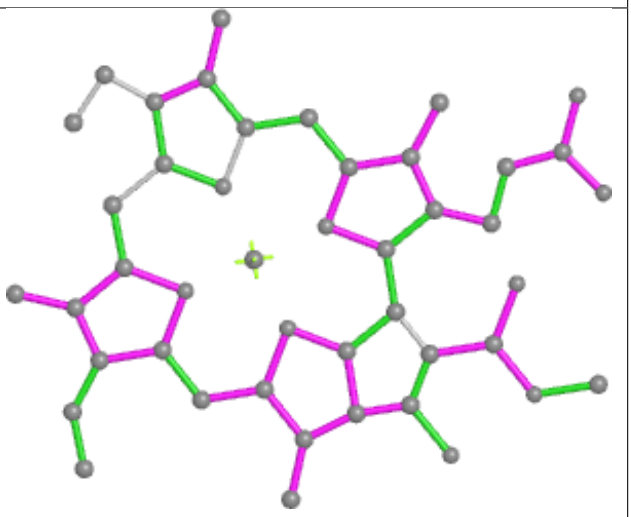


Rings

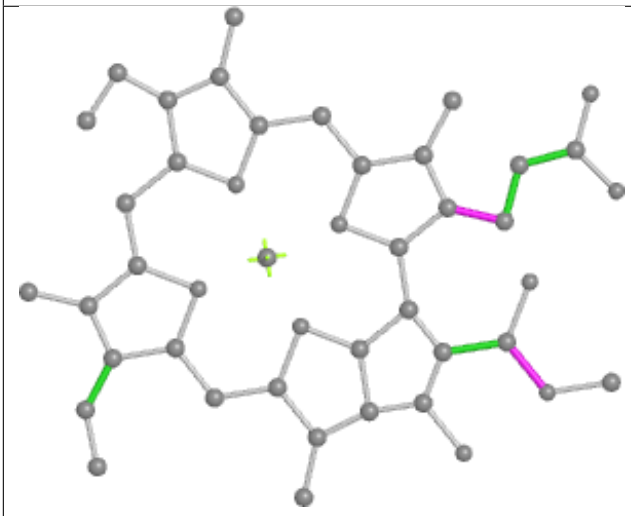
Ligand CLA a 1105



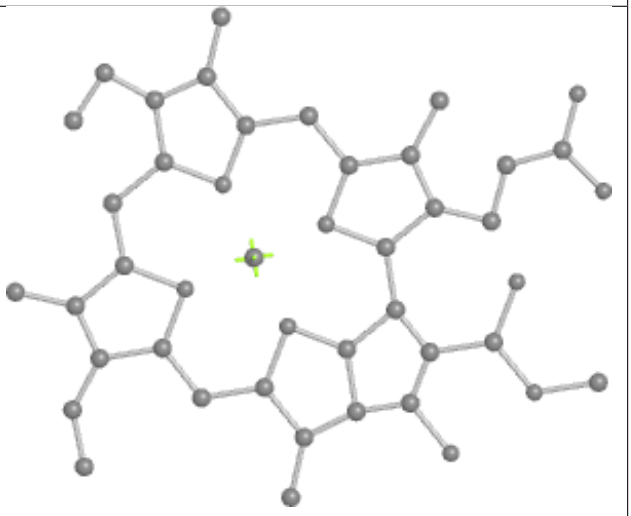
Bond lengths



Bond angles

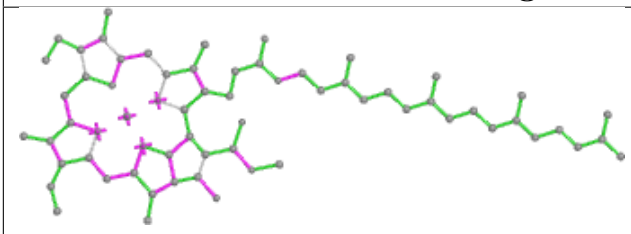


Torsions

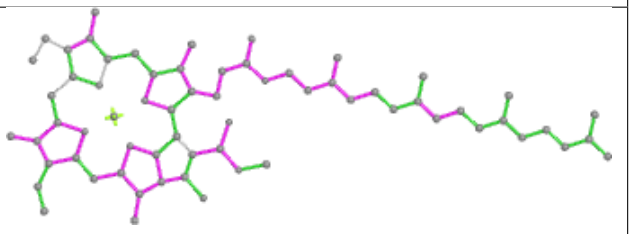


Rings

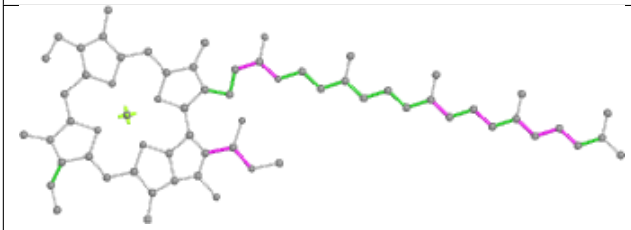
Ligand CLA b 1021



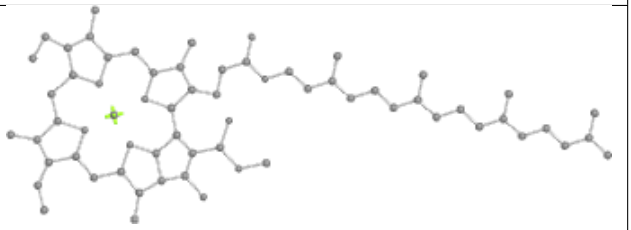
Bond lengths



Bond angles

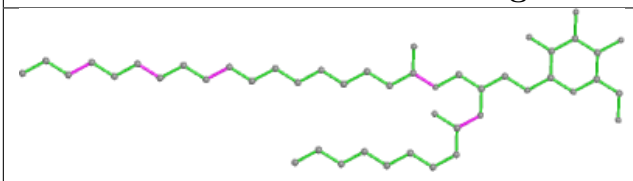


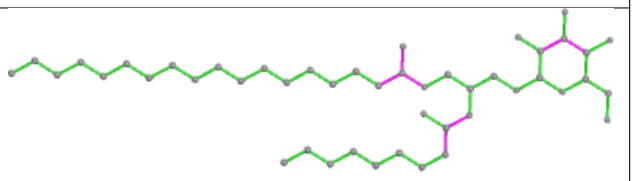
Torsions

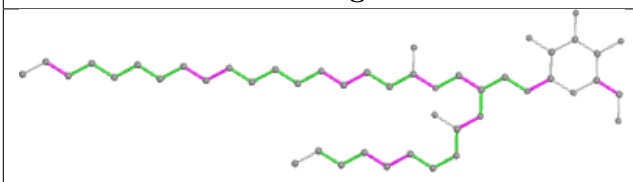


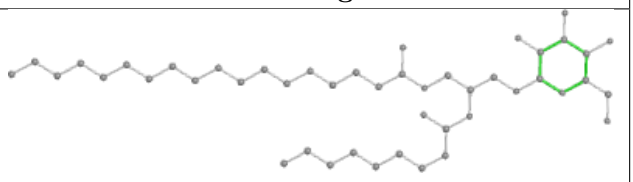
Rings

Ligand LMG G 5003

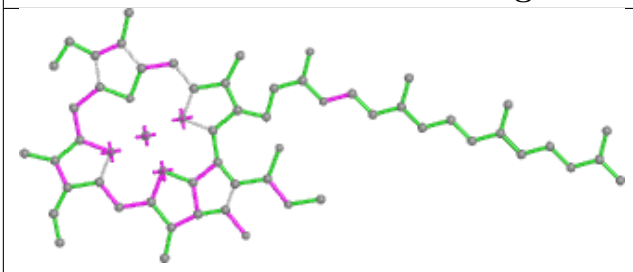

Bond lengths


Bond angles


Torsions


Rings

Ligand CLA A 1133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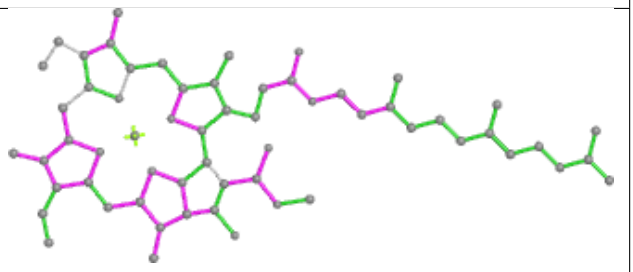
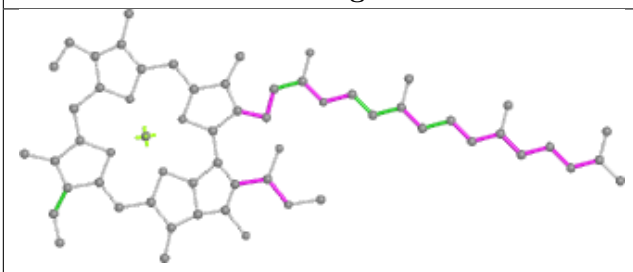
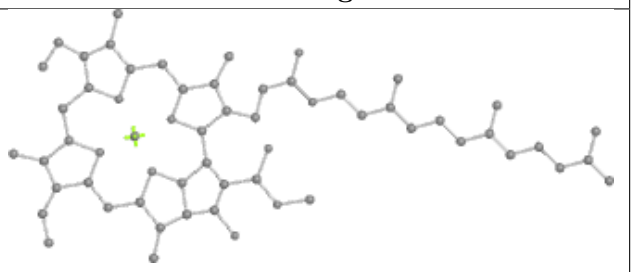
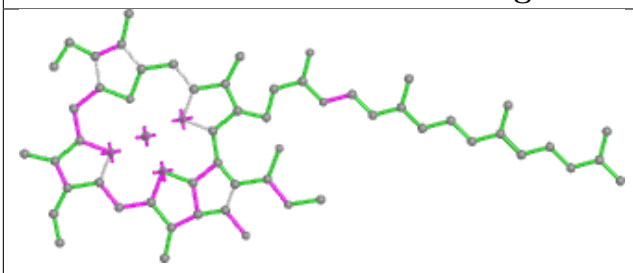
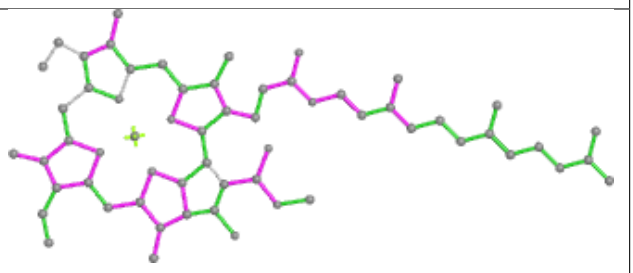

Bond angles

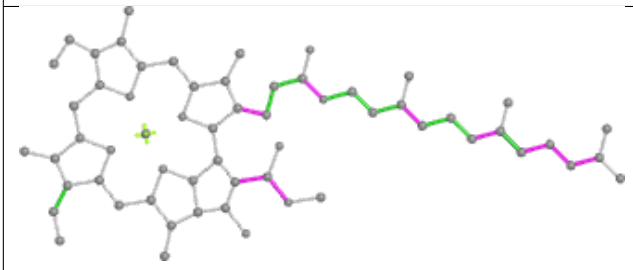

Torsions

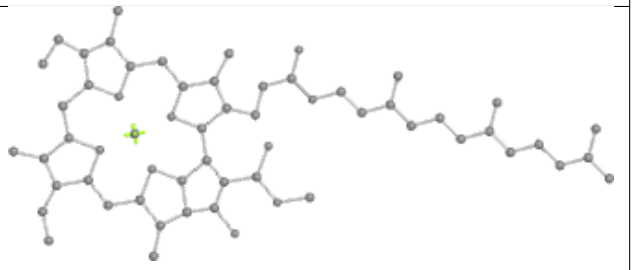

Rings

Ligand CLA G 1126

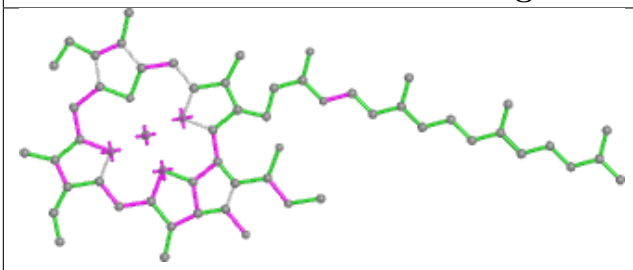

Bond lengths


Bond angles

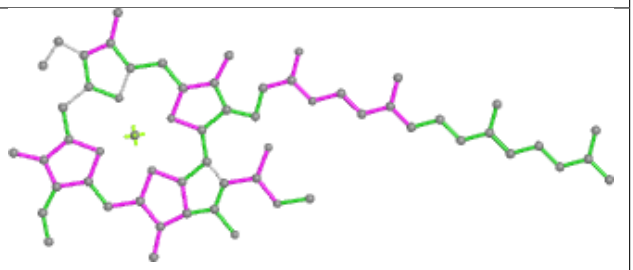

Torsions


Rings

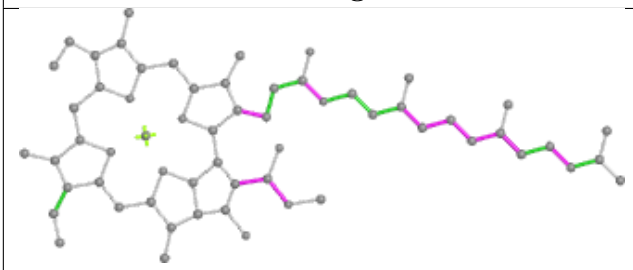
Ligand CLA B 1215



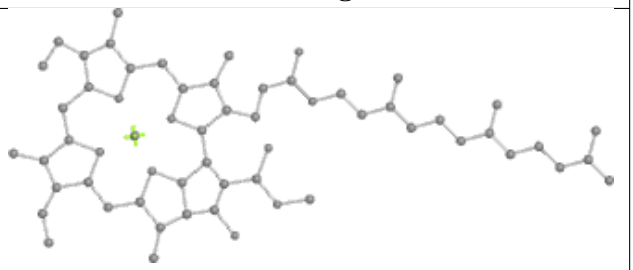
Bond lengths



Bond angles

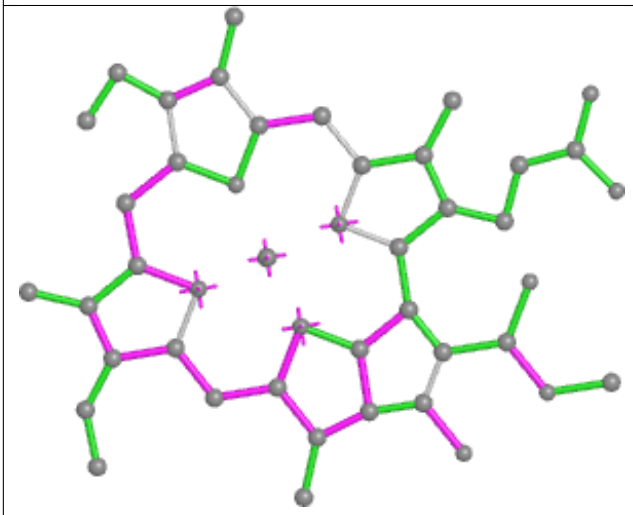


Torsions

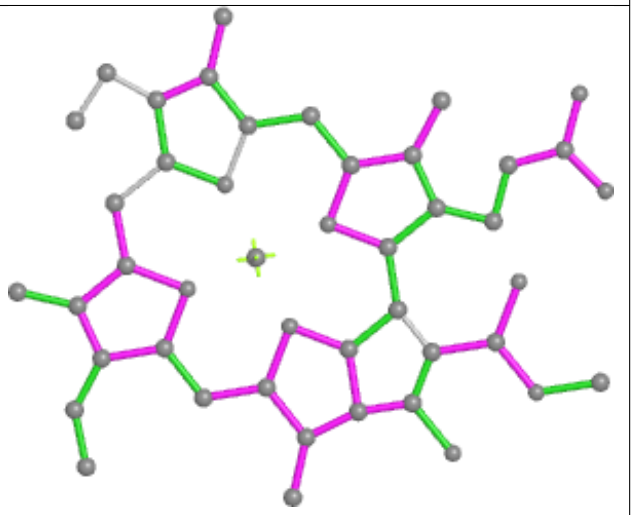


Rings

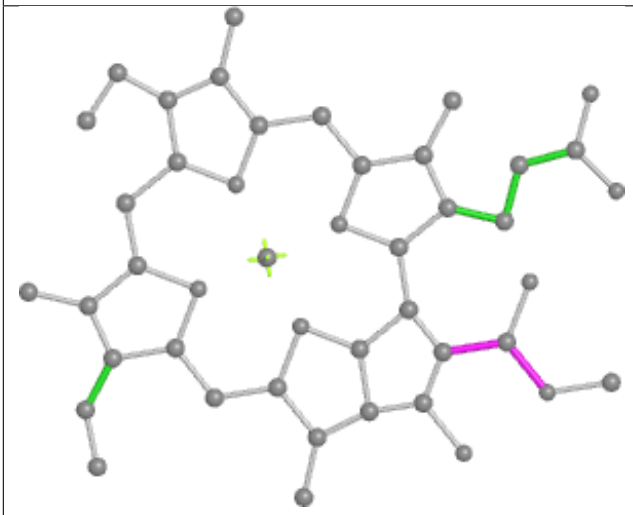
Ligand CLA a 1114



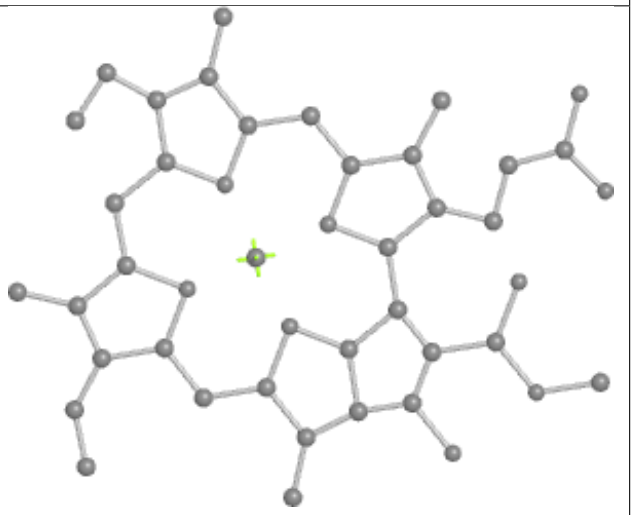
Bond lengths



Bond angles

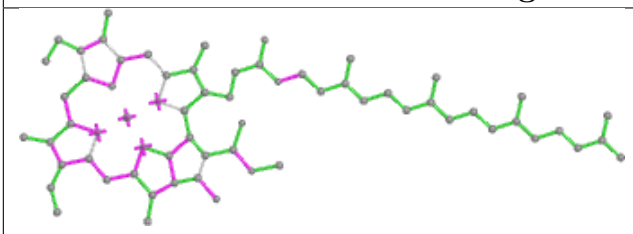


Torsions

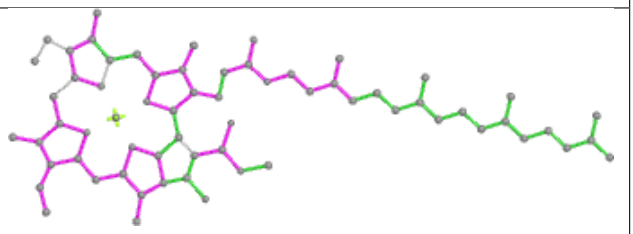


Rings

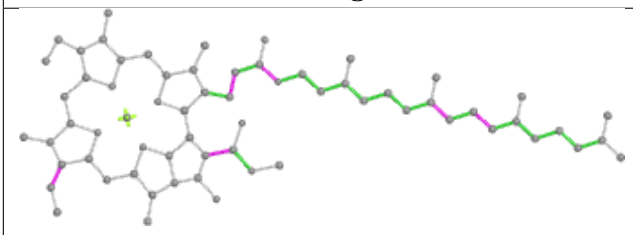
Ligand CLA b 1023



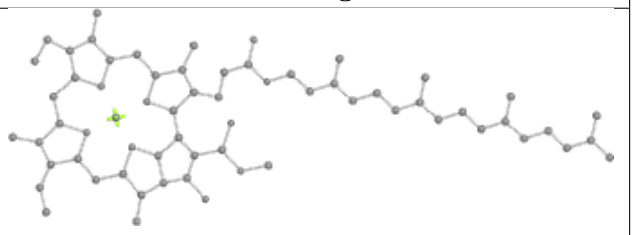
Bond lengths



Bond angles

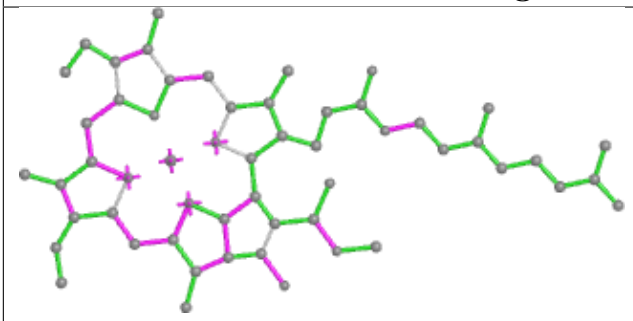


Torsions

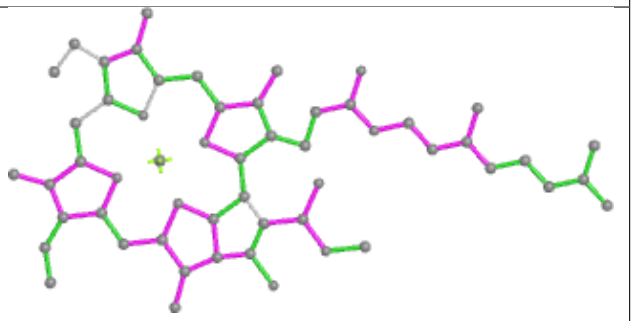


Rings

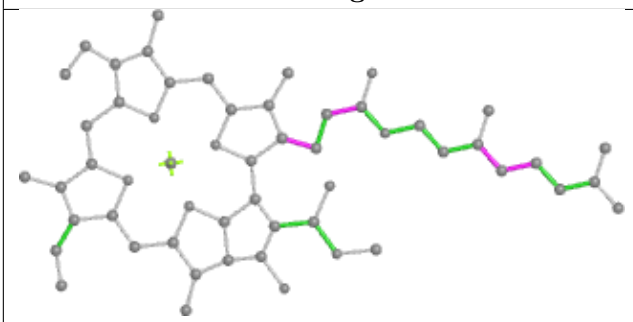
Ligand CLA G 1124



Bond lengths



Bond angles



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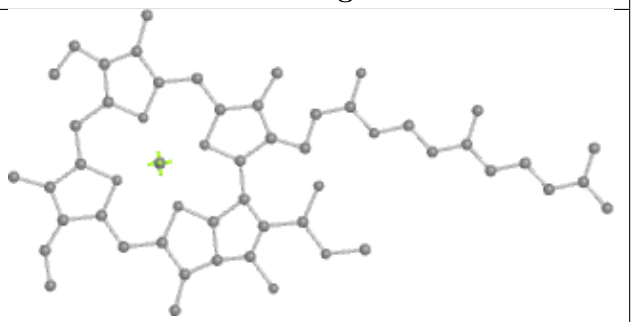
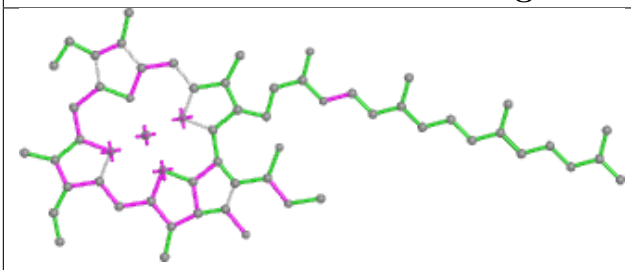
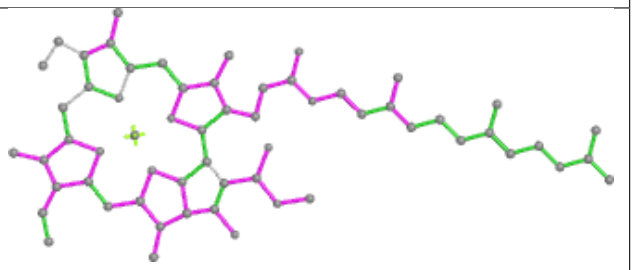
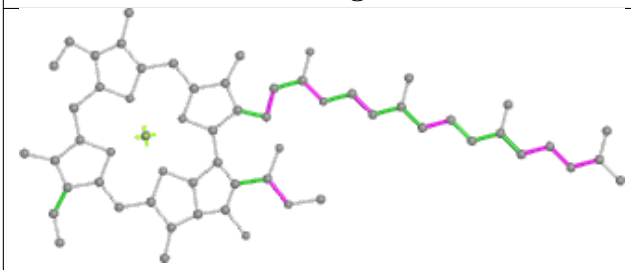
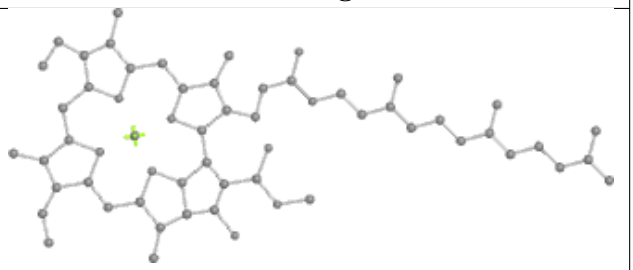
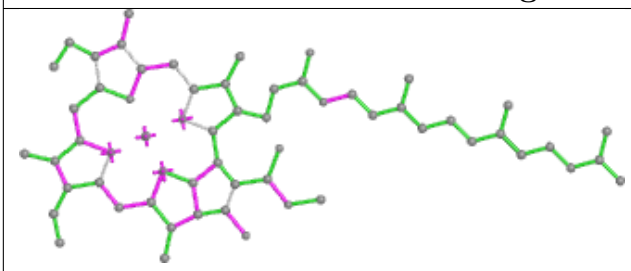
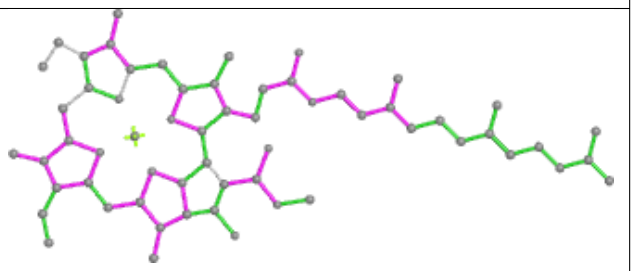
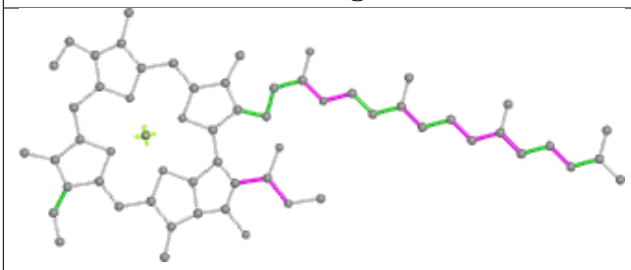
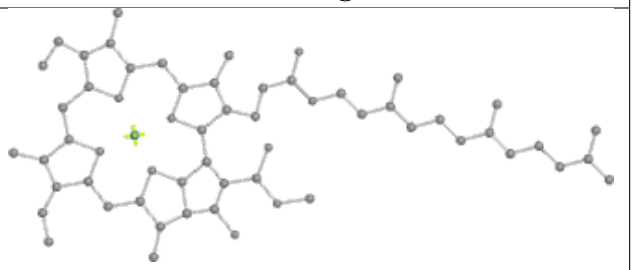
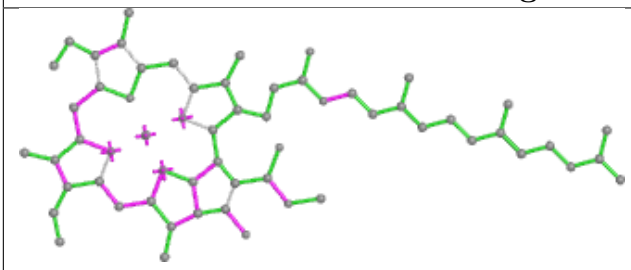


Rings

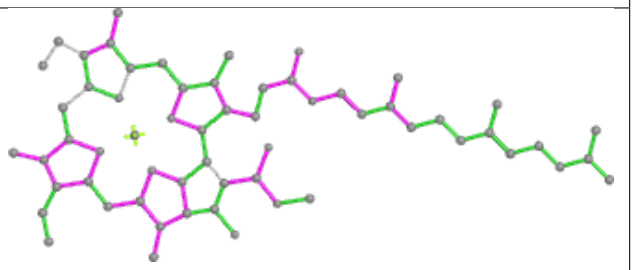
Ligand CLA B 1214	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA a 1128	
 Bond lengths	 Bond angles
 Torsions	 Rings

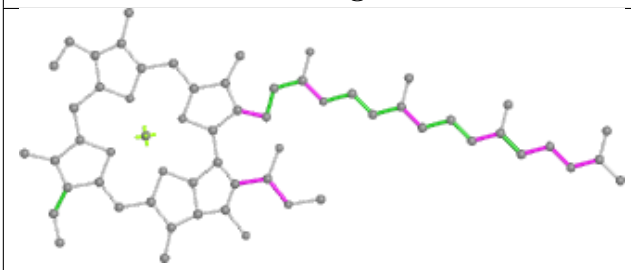
Ligand CLA a 1126



Bond lengths



Bond angles



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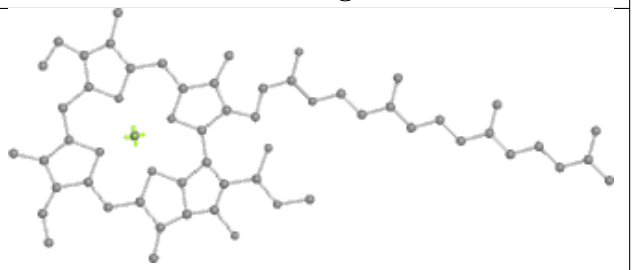
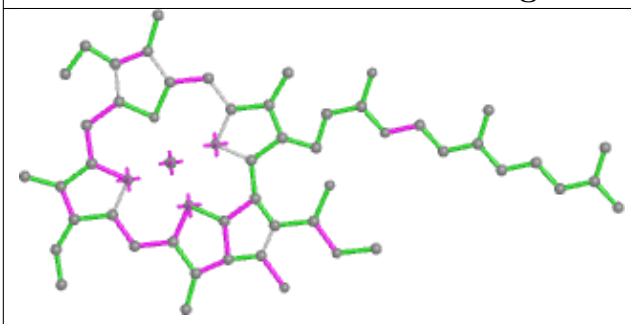
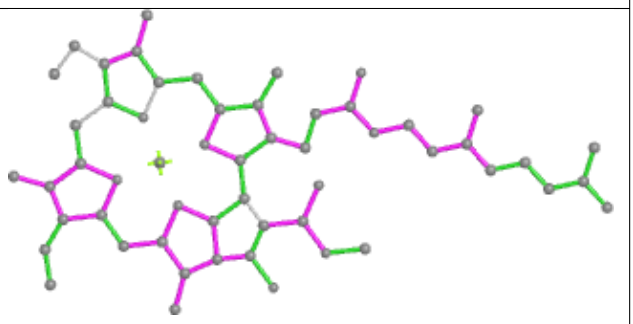


Rings

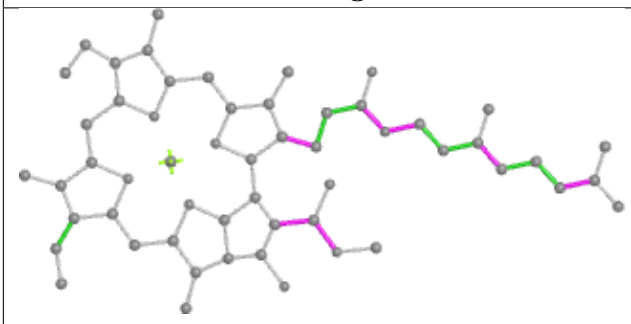
Ligand CLA a 1118



Bond lengths



Bond angles



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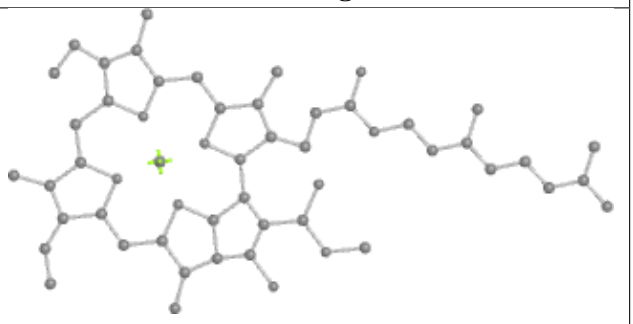
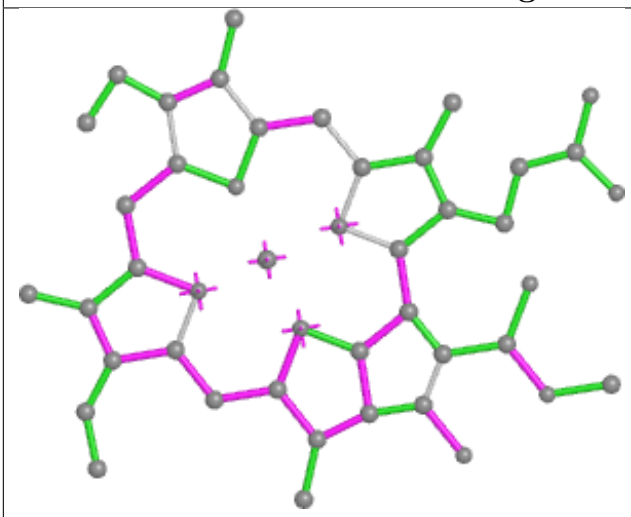
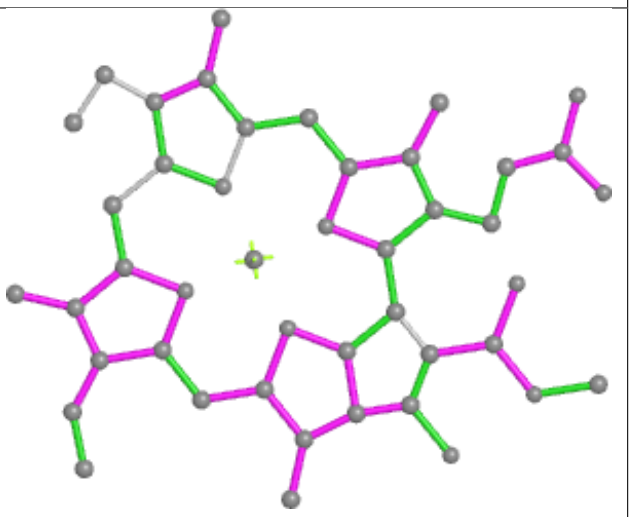


Rings

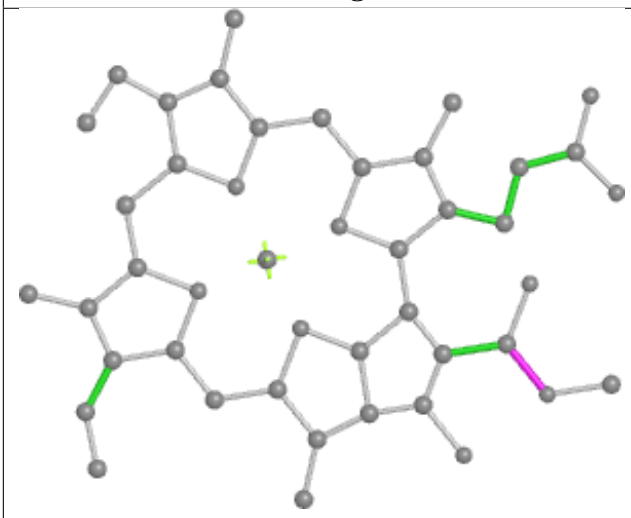
Ligand CLA b 1232



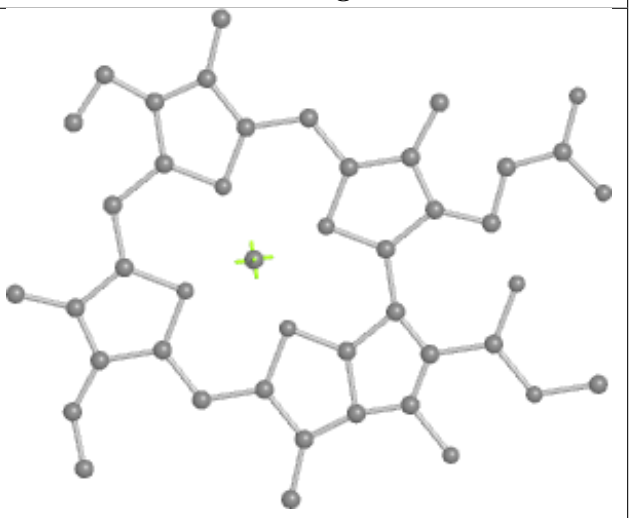
Bond lengths



Bond angles

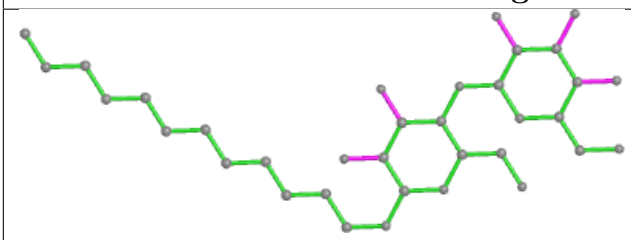


Torsions

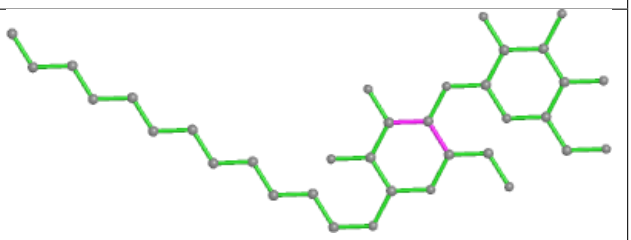


Rings

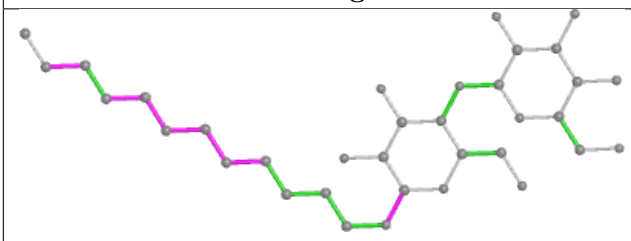
Ligand LMT H 6001



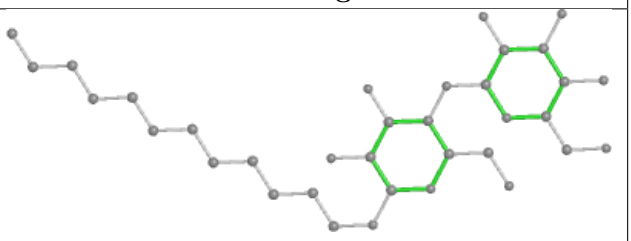
Bond lengths



Bond angles

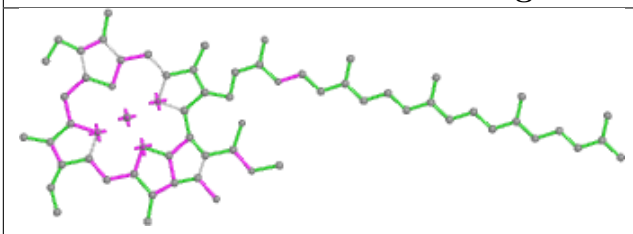


Torsions

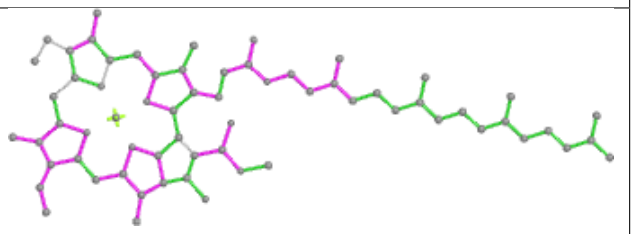


Rings

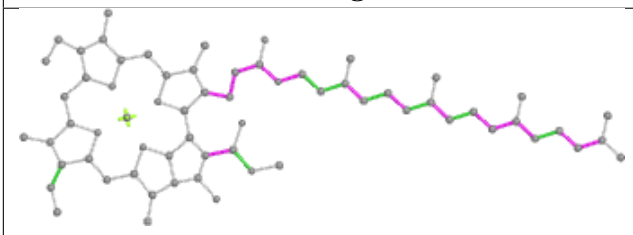
Ligand CLA B 1203



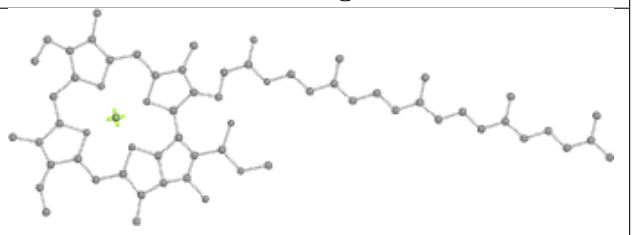
Bond lengths



Bond angles

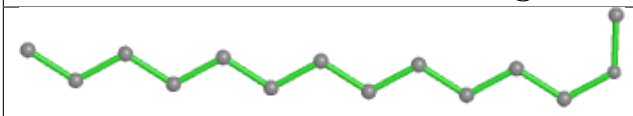


Torsions



Rings

Ligand LMT L 6001



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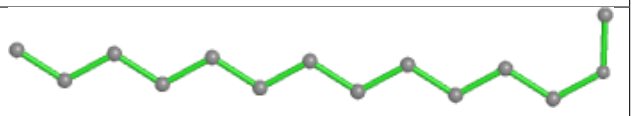
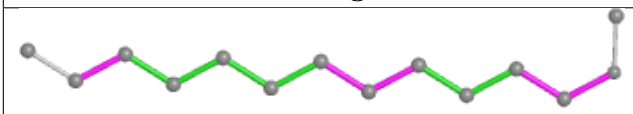
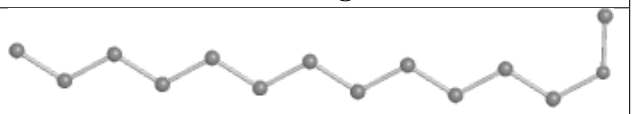


Bond angles

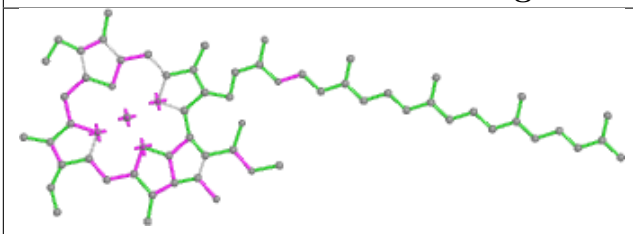


Torsions

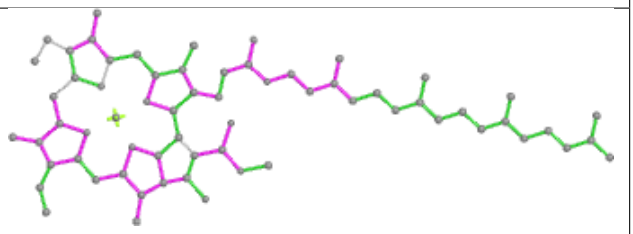


Rings

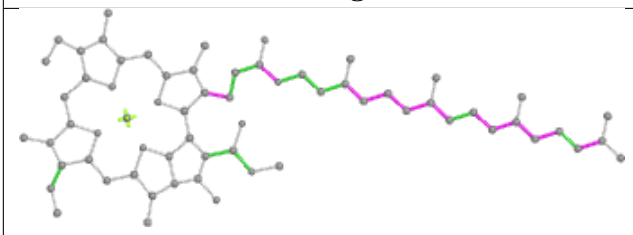
Ligand CLA H 1206



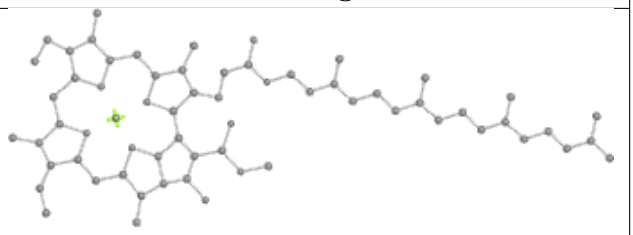
Bond lengths



Bond angles

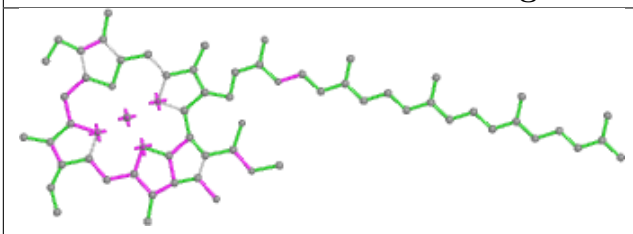


Torsions

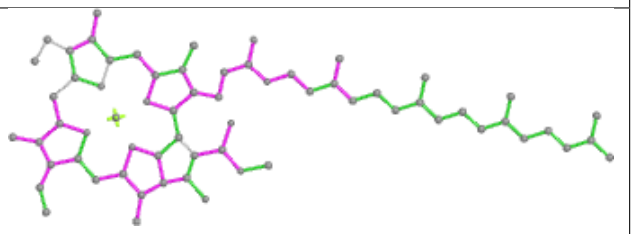


Rings

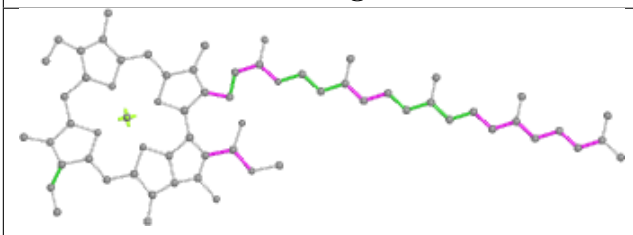
Ligand CLA a 1103



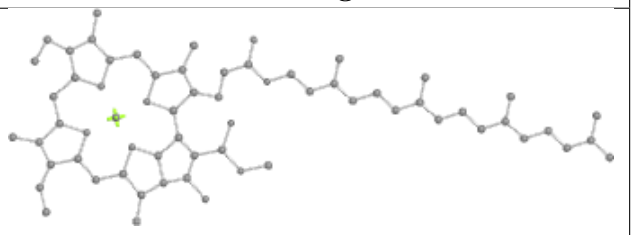
Bond lengths



Bond angles

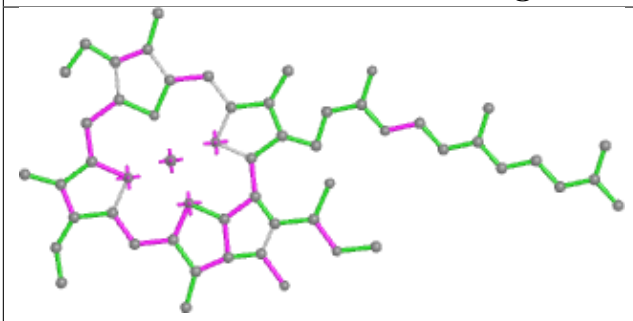


Torsions

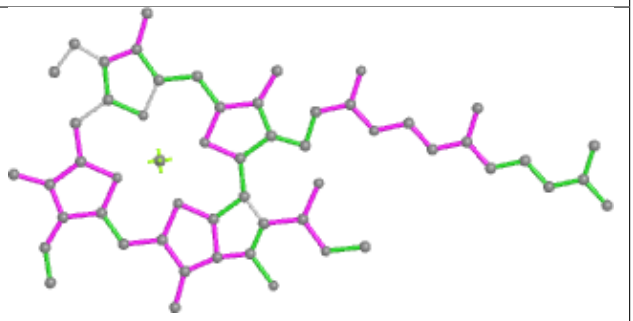


Rings

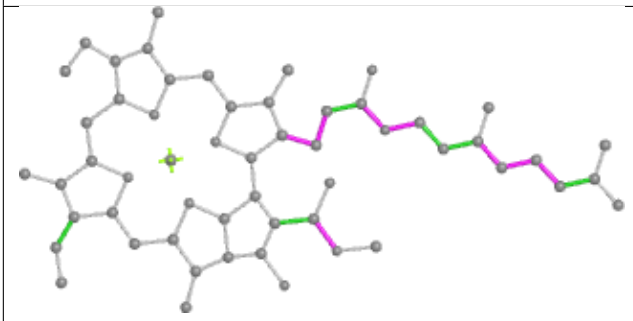
Ligand CLA G 1122



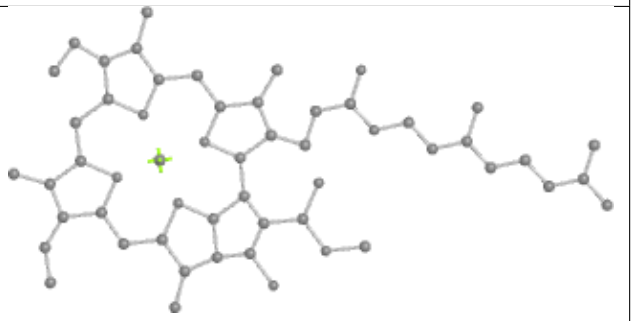
Bond lengths



Bond angles

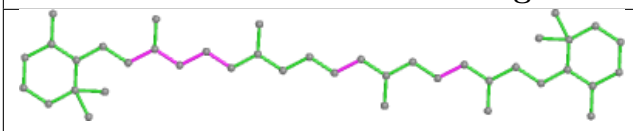


Torsions

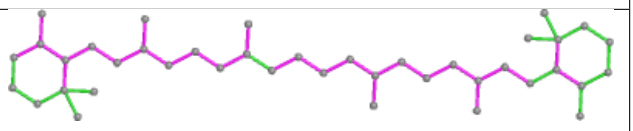


Rings

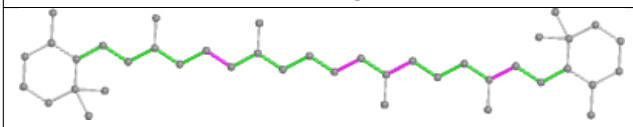
Ligand BCR B 4014



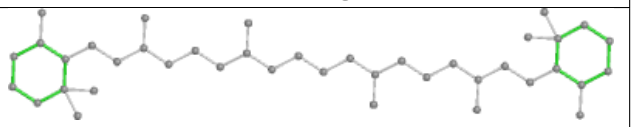
Bond lengths



Bond angles

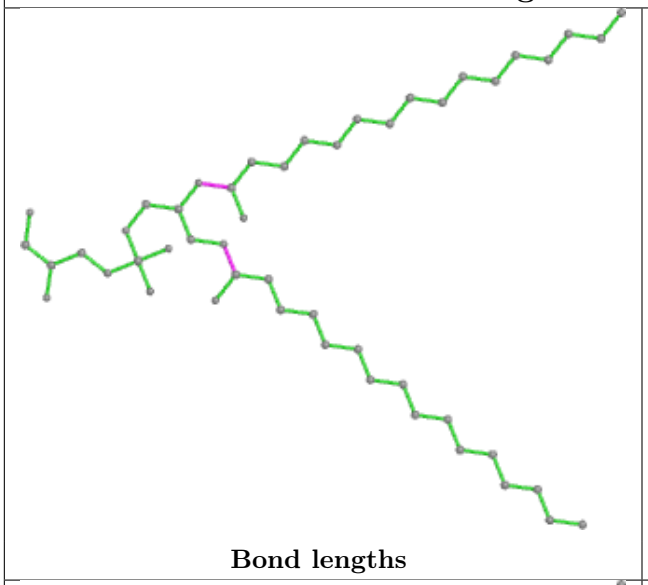


Torsions

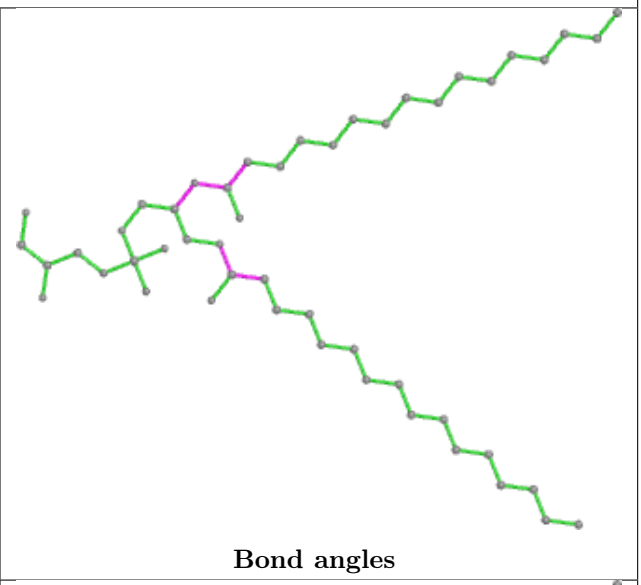


Rings

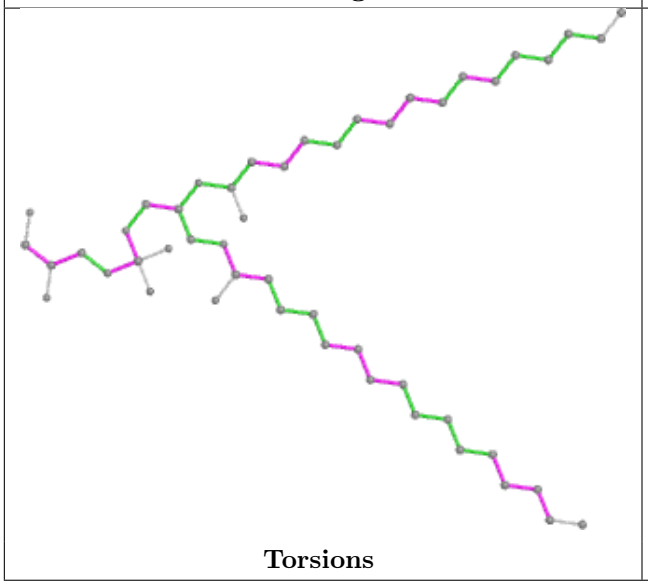
Ligand LHG L 5102



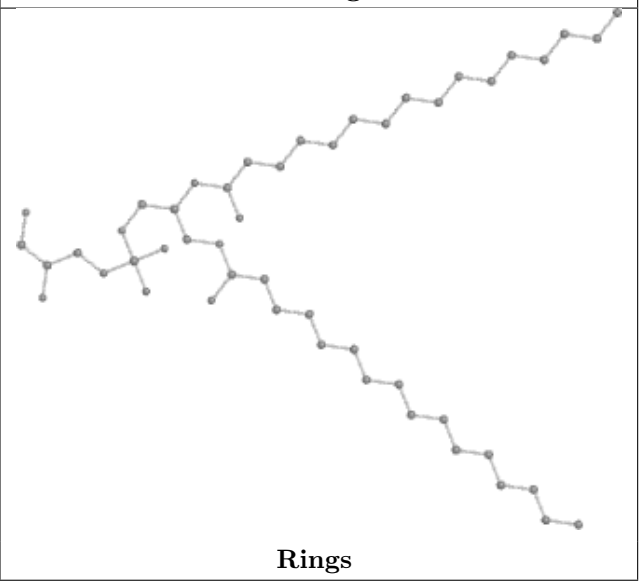
Bond lengths



Bond angles

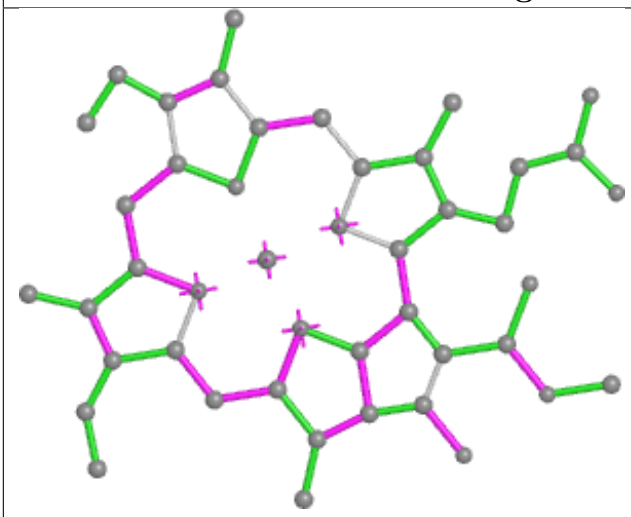


Torsions

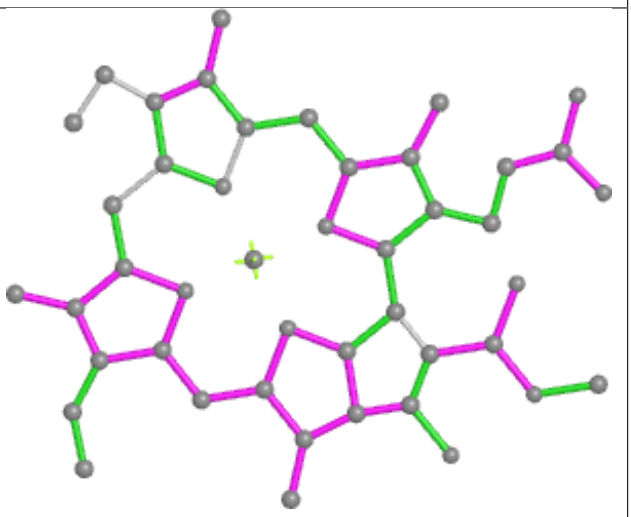


Rings

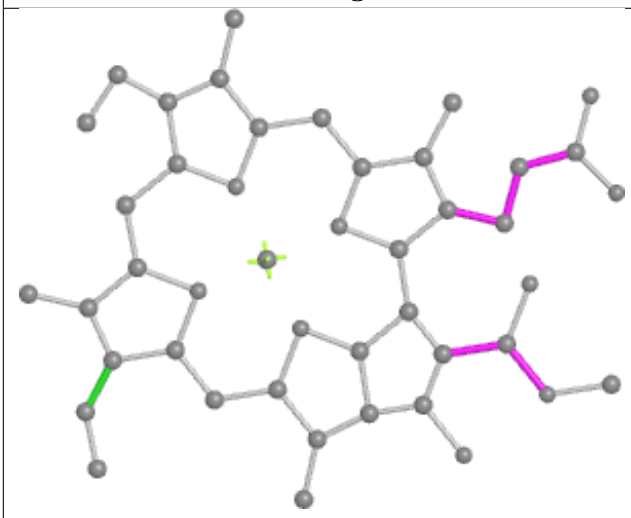
Ligand CLA B 1217



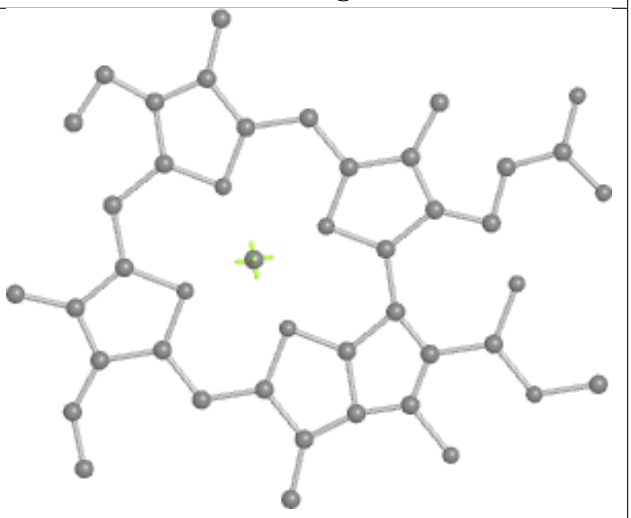
Bond lengths



Bond angles

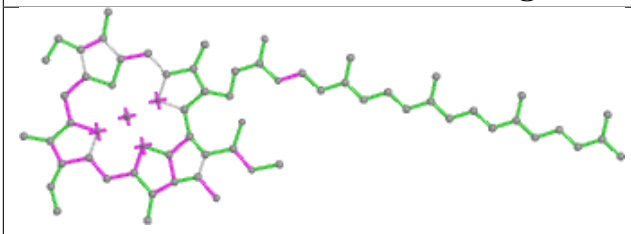


Torsions

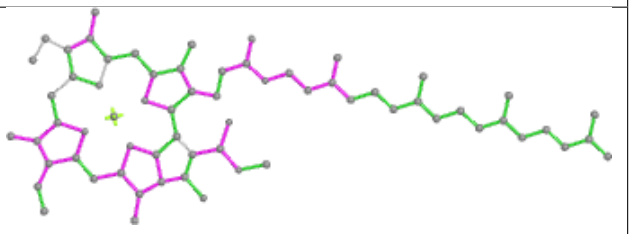


Rings

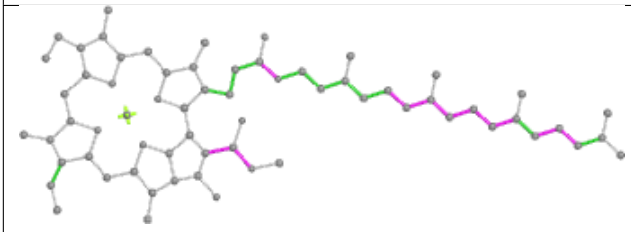
Ligand CLA b 1234



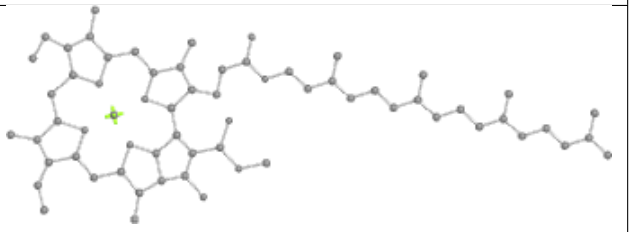
Bond lengths



Bond angles

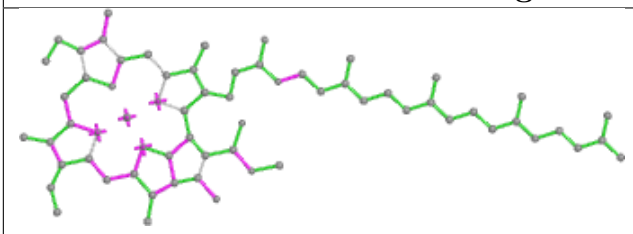


Torsions



Rings

Ligand CLA B 1226



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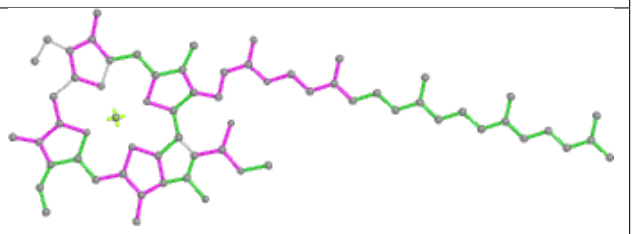

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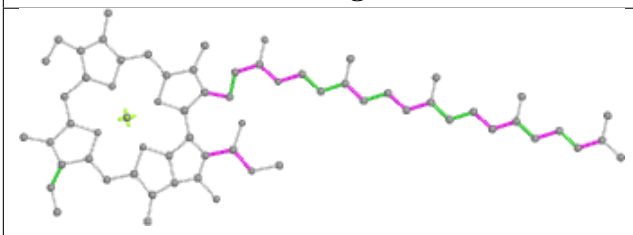
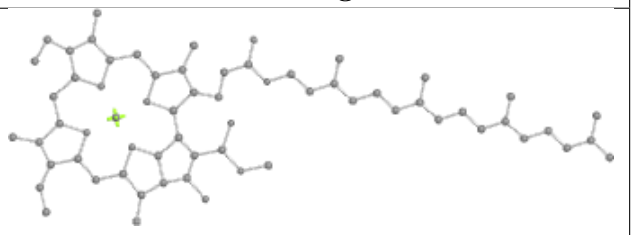
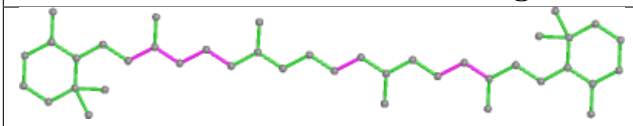


Torsions



Rings

Ligand BCR U 4019



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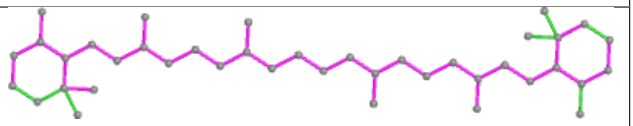
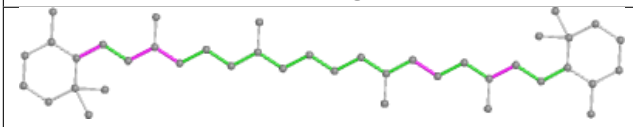


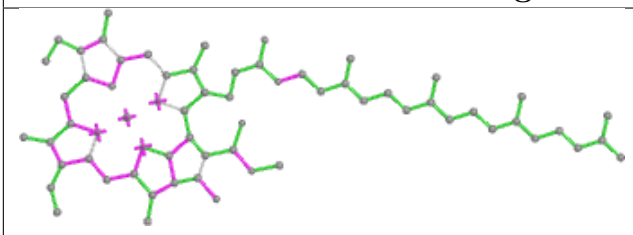
Bond angles



Torsions

Rings

Ligand CLA H 1023



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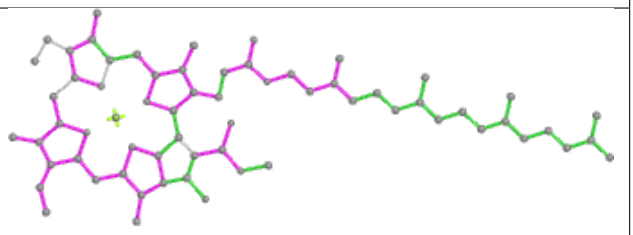
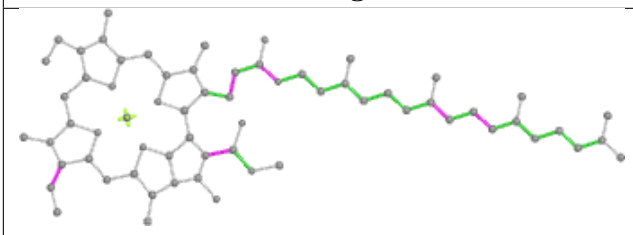


Bond angles



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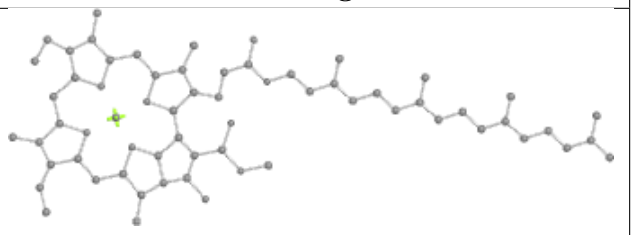
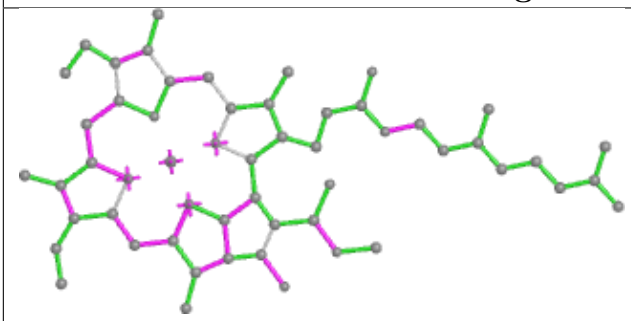


Rings

Ligand CLA A 1140



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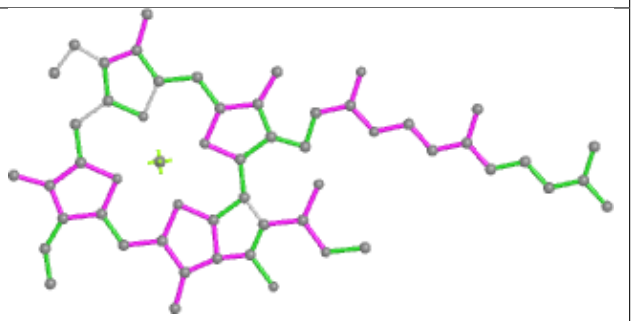
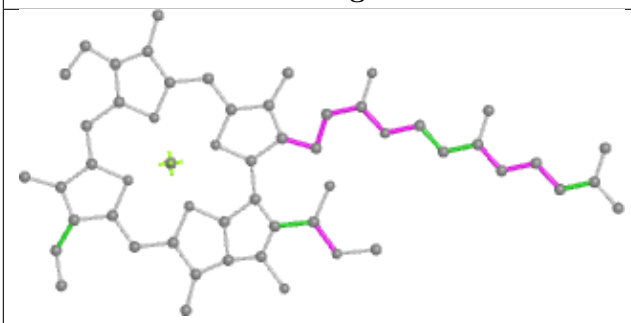
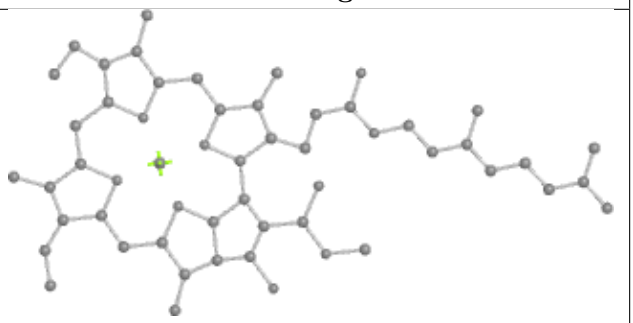


Bond angles

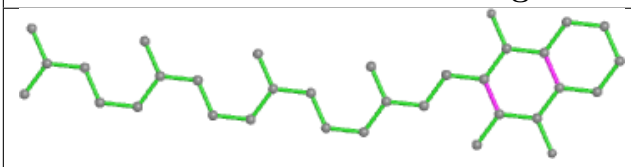


Torsions



Rings

Ligand PQN H 2002



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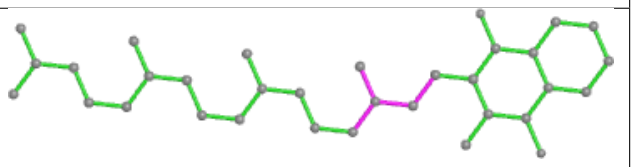
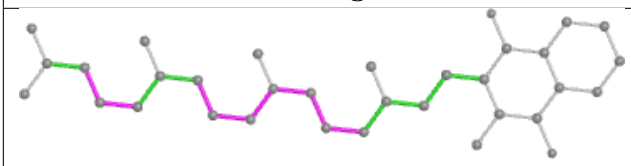


Bond angles



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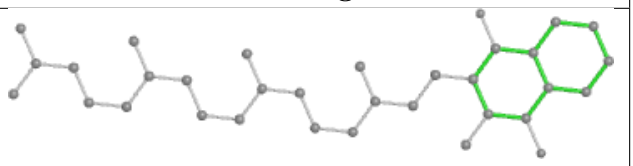
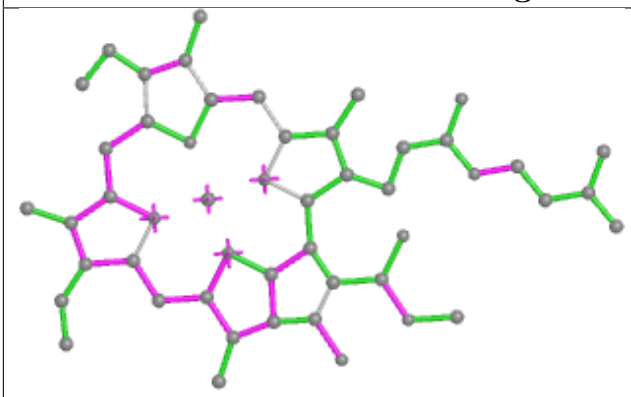


Rings

Ligand CLA G 1102



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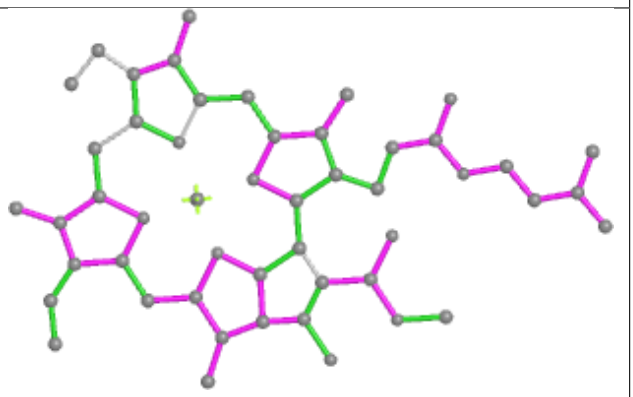
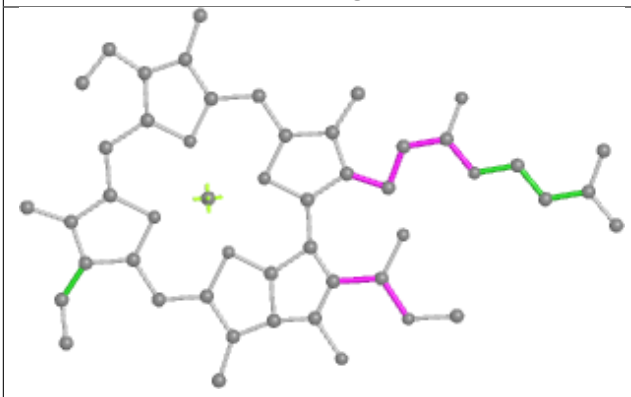


Bond angles



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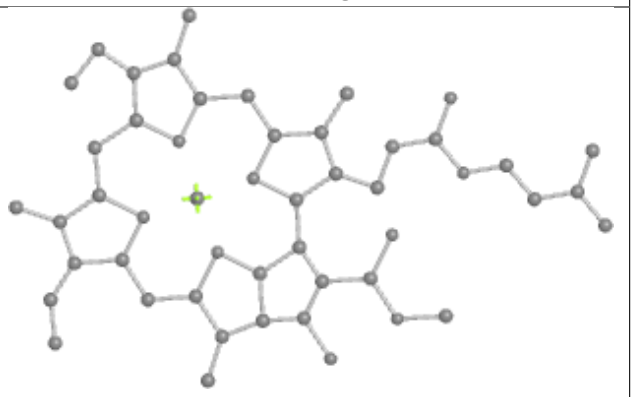
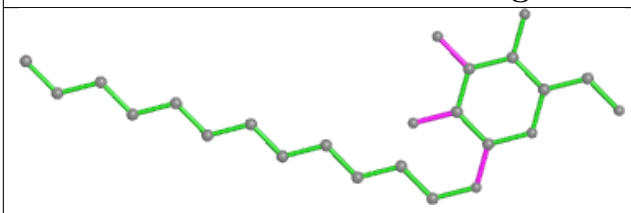


Rings

Ligand LMT A 6004



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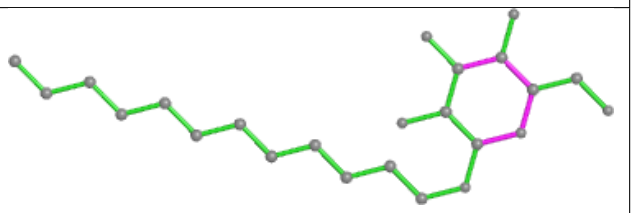
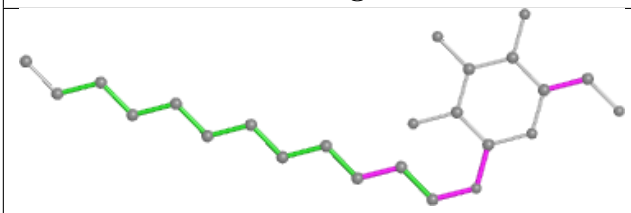


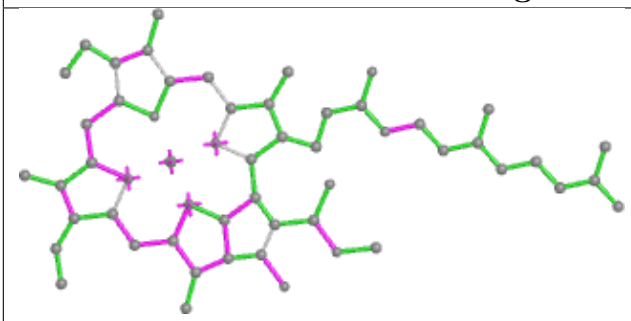
Bond angles



Torsions

Rings

Ligand CLA G 1116



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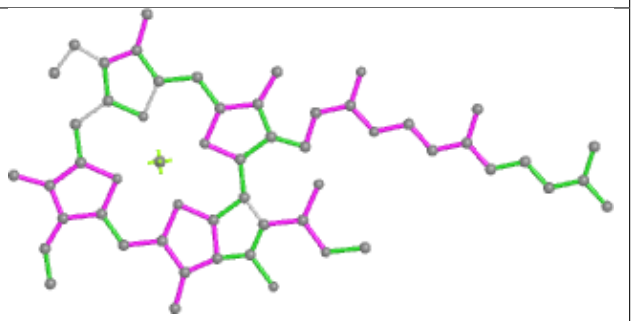
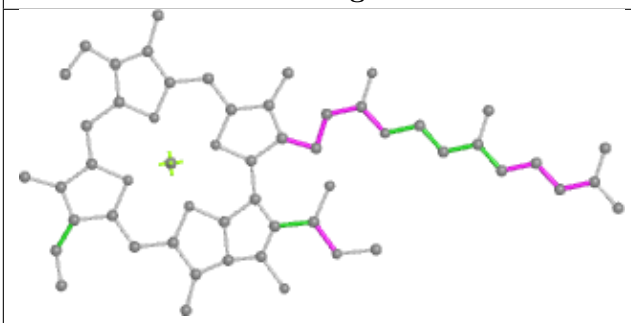


Bond angles



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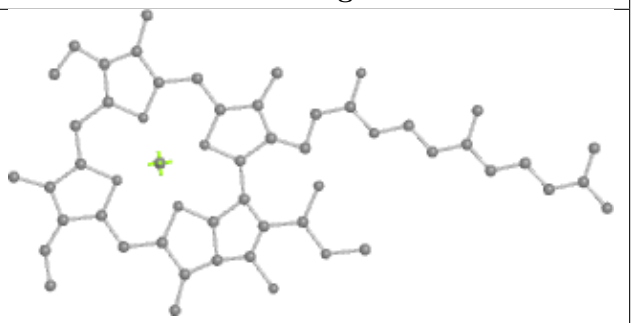
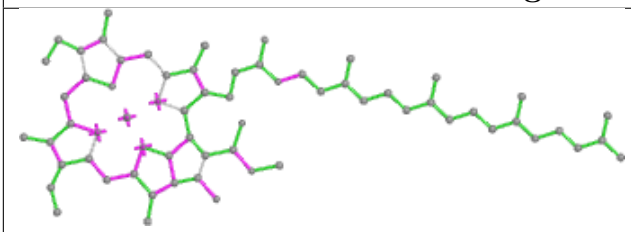


Rings

Ligand CL0 a 1011



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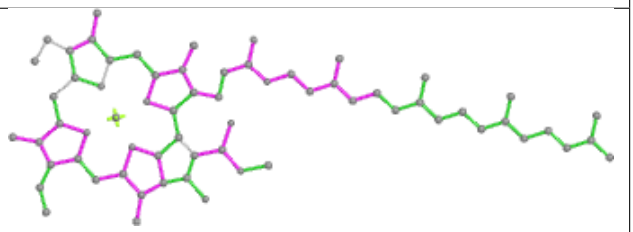
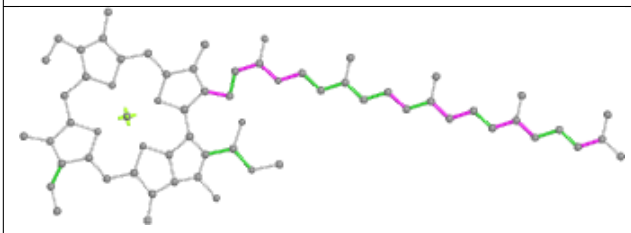


Bond angles



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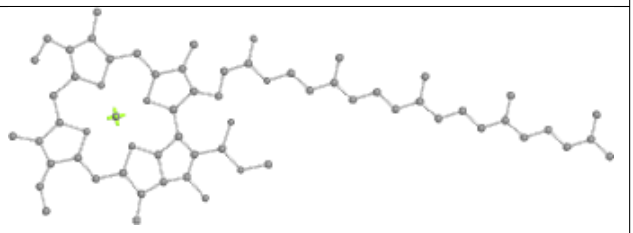
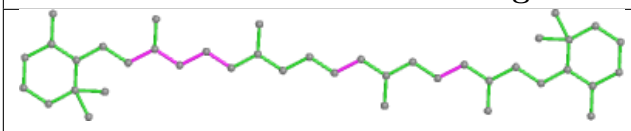


Rings

Ligand BCR G 4003



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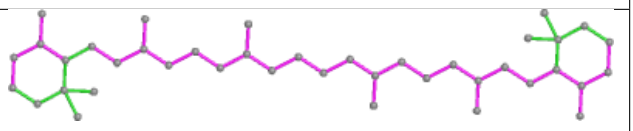
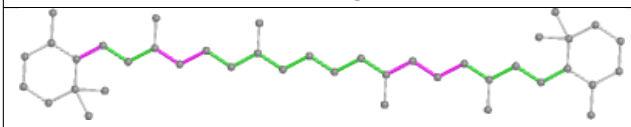


Bond angles



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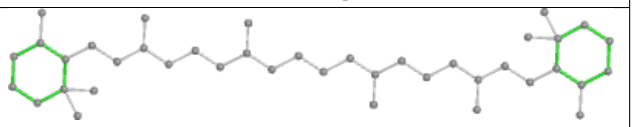
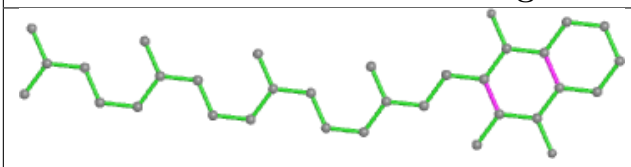


Rings

Ligand PQN a 2001



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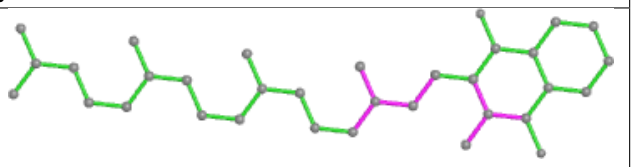
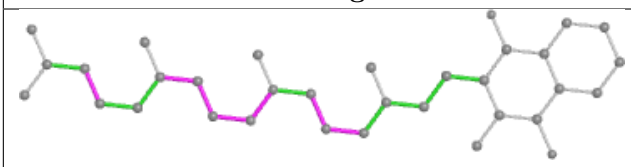


Bond angles



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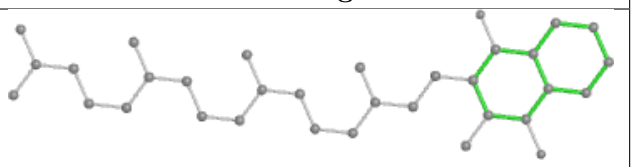
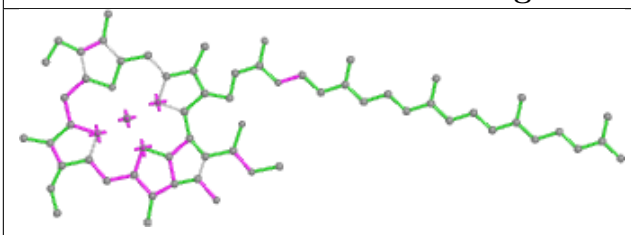


Rings

Ligand CLA G 1103



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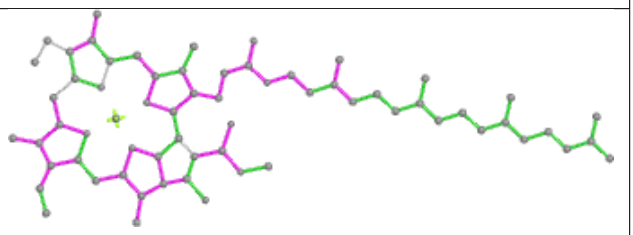
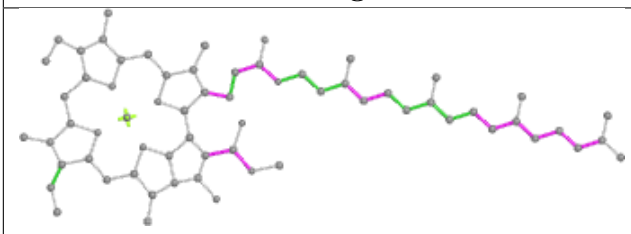
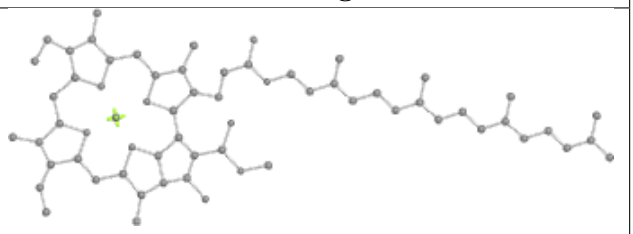


Bond angles

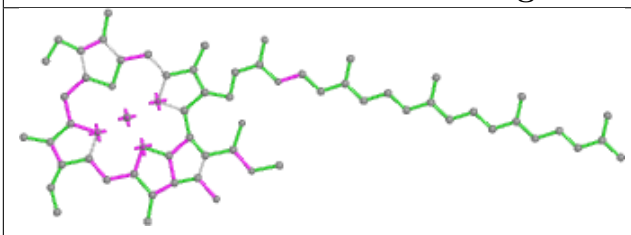


Torsions



Rings

Ligand CLA L 1501



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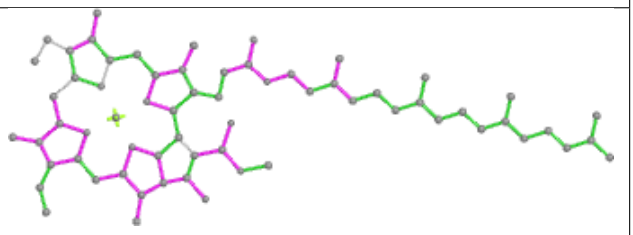
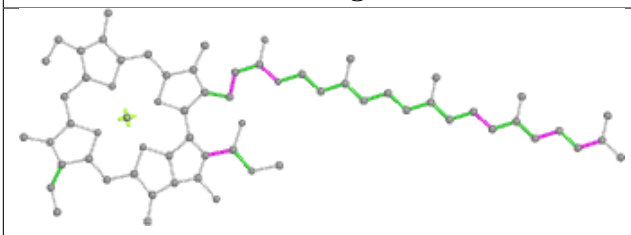


Bond angles



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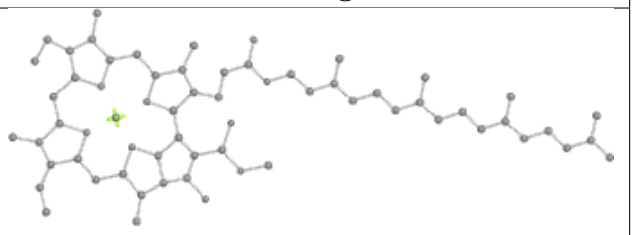
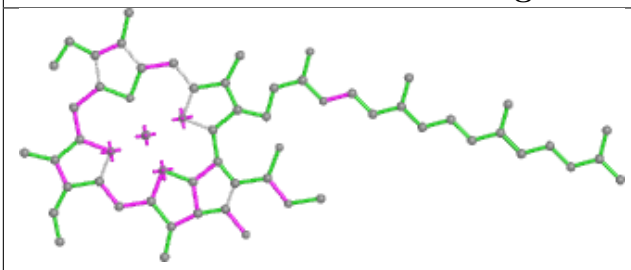
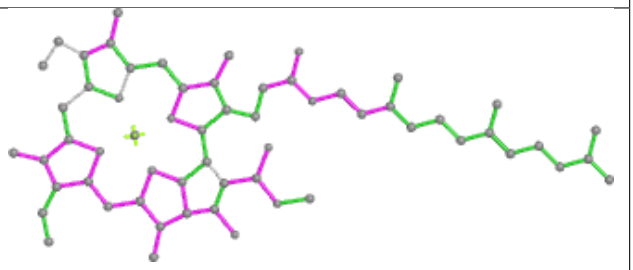
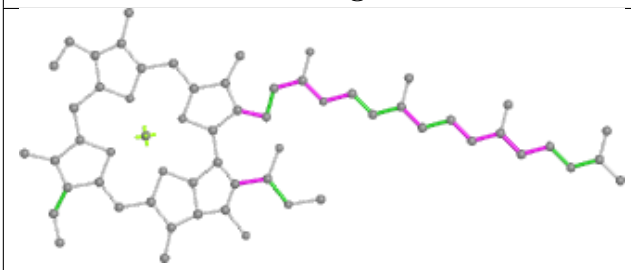
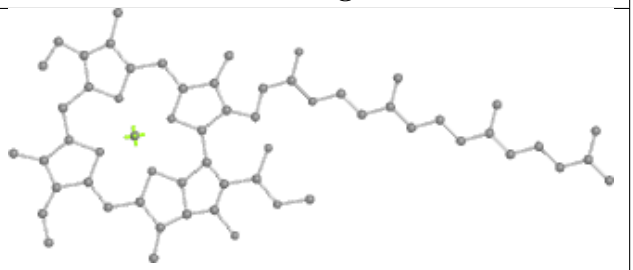
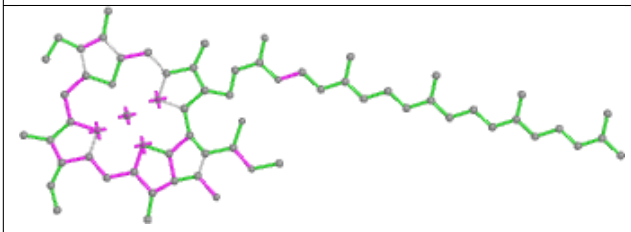
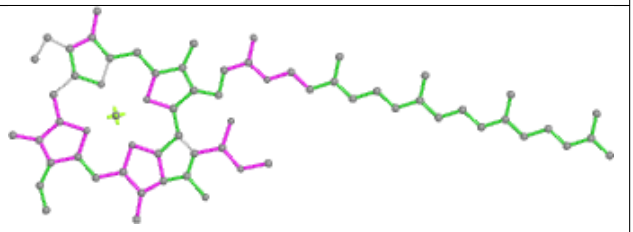
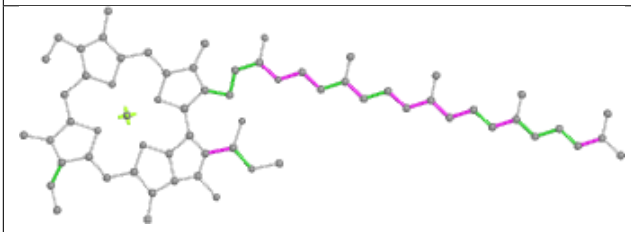
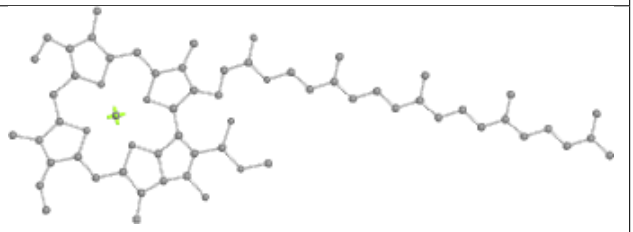
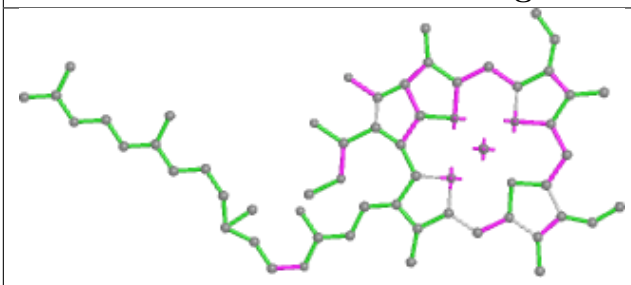


Rings

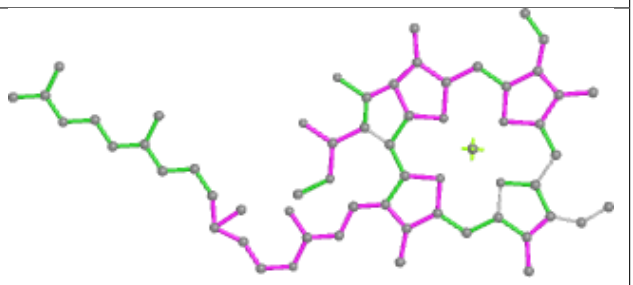
Ligand CLA A 1123	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA H 1240	
 Bond lengths	 Bond angles
 Torsions	 Rings

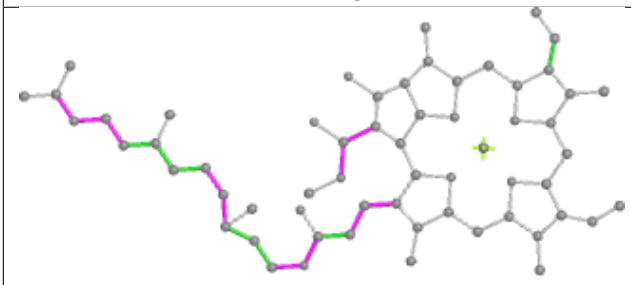
Ligand CLA A 1111



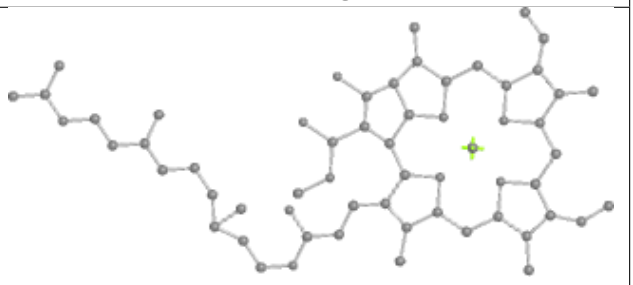
Bond lengths



Bond angles

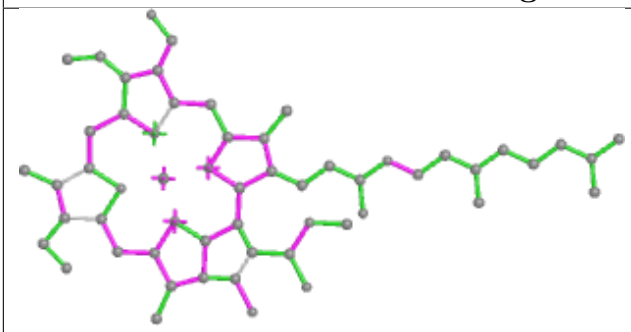


Torsions

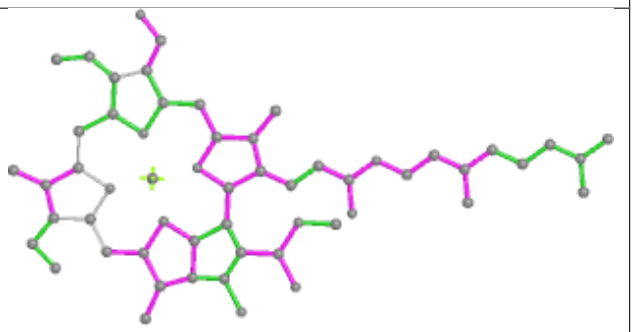


Rings

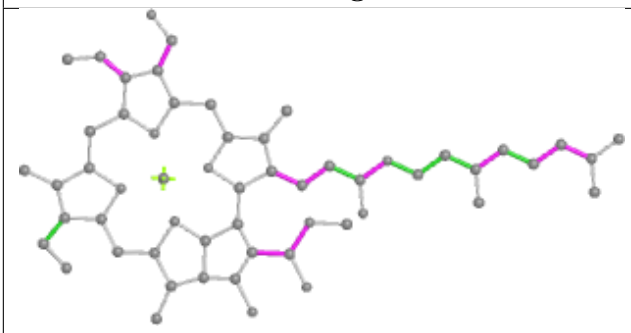
Ligand F6C B 1219



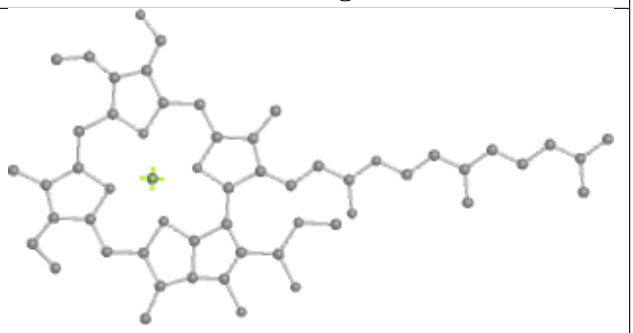
Bond lengths



Bond angles

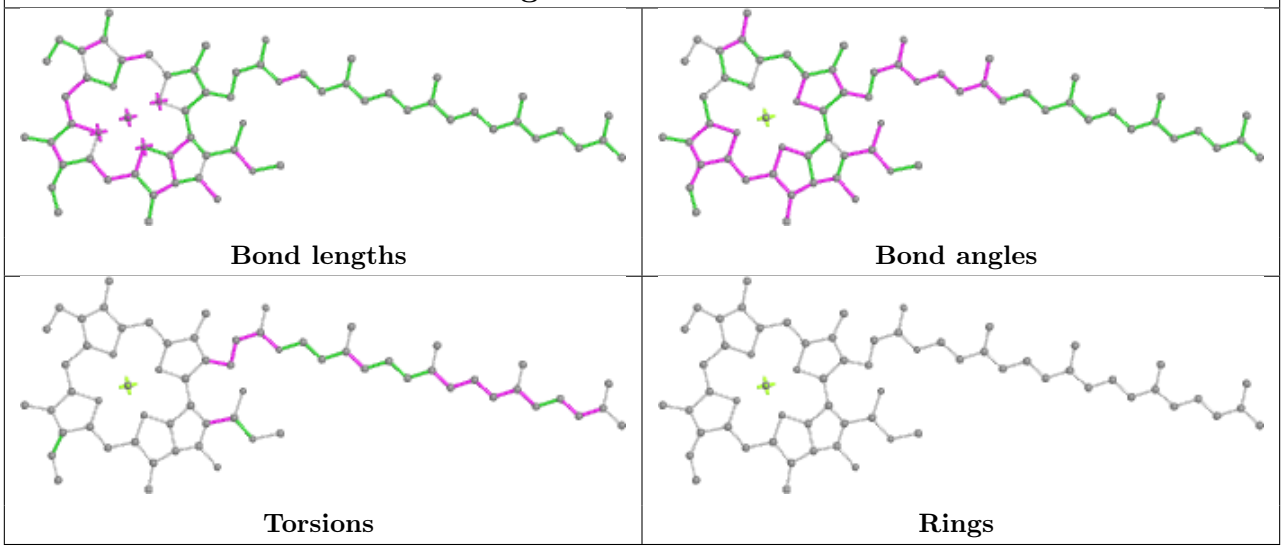


Torsions

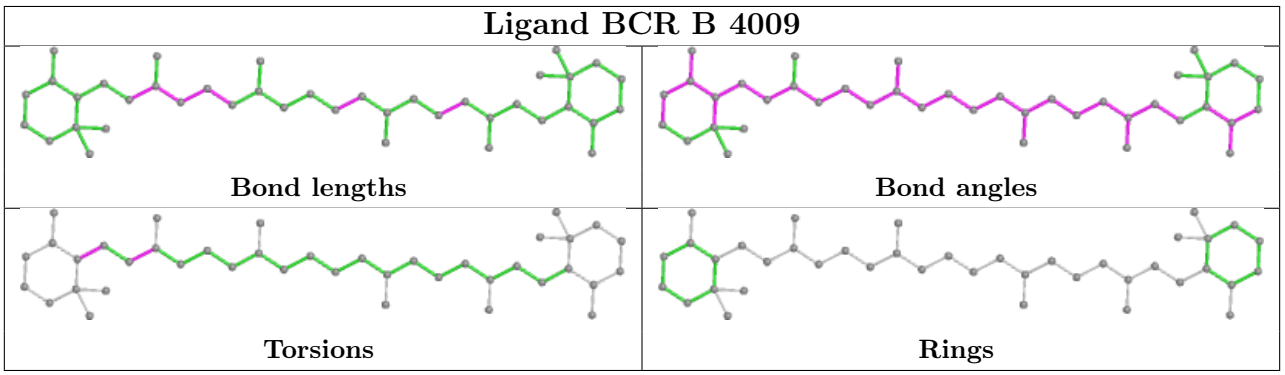


Rings

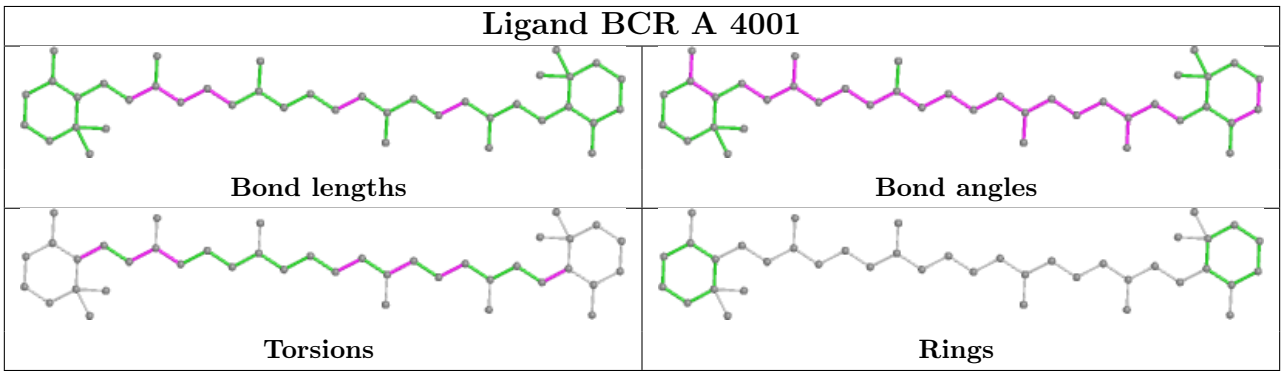
Ligand CLA a 1125



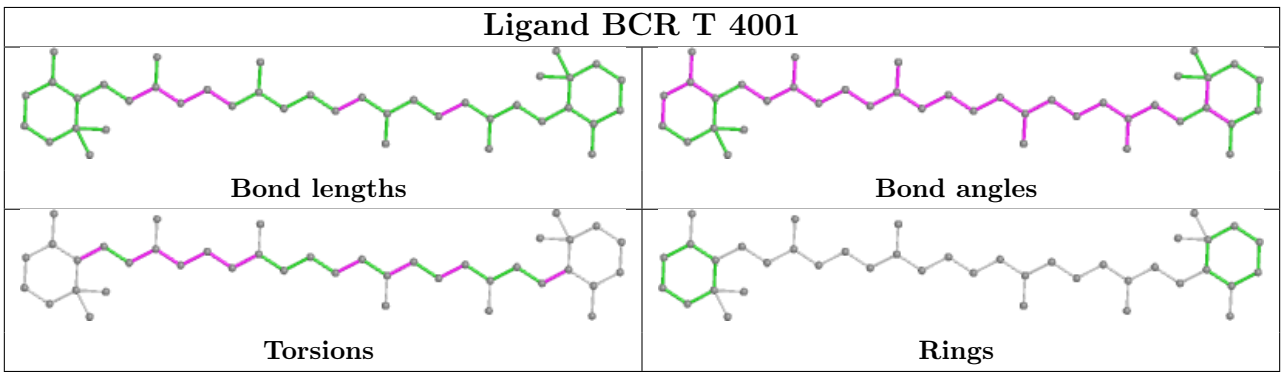
Ligand BCR B 4009



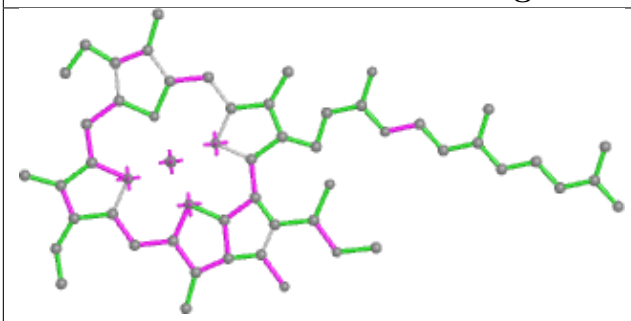
Ligand BCR A 4001



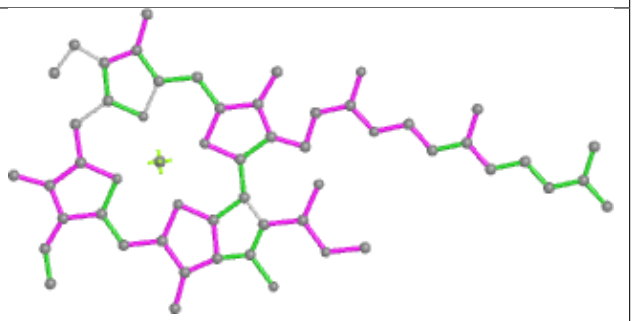
Ligand BCR T 4001



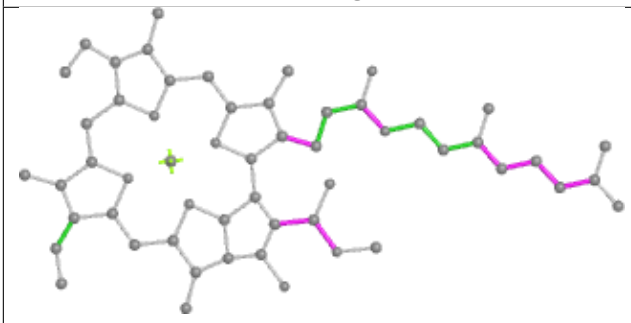
Ligand CLA G 1138



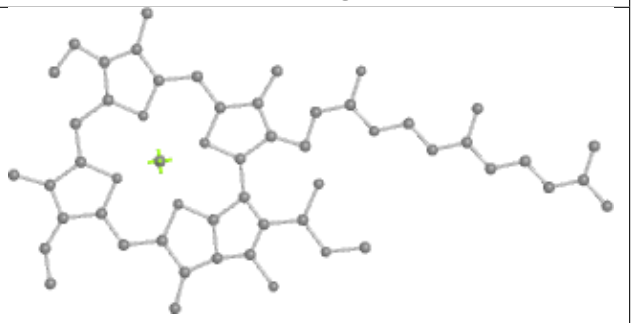
Bond lengths



Bond angles

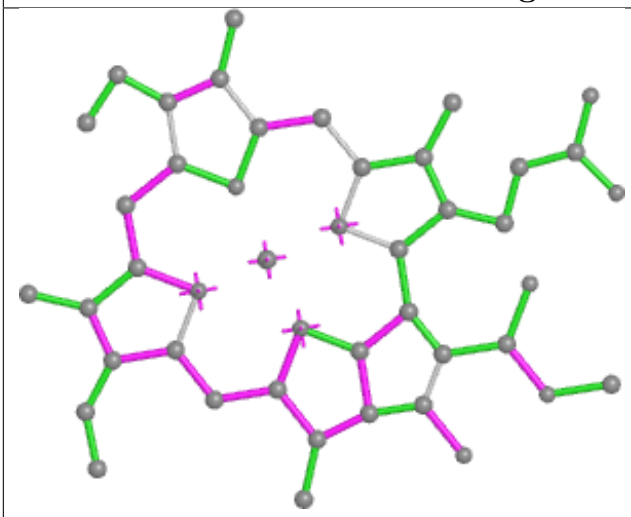


Torsions

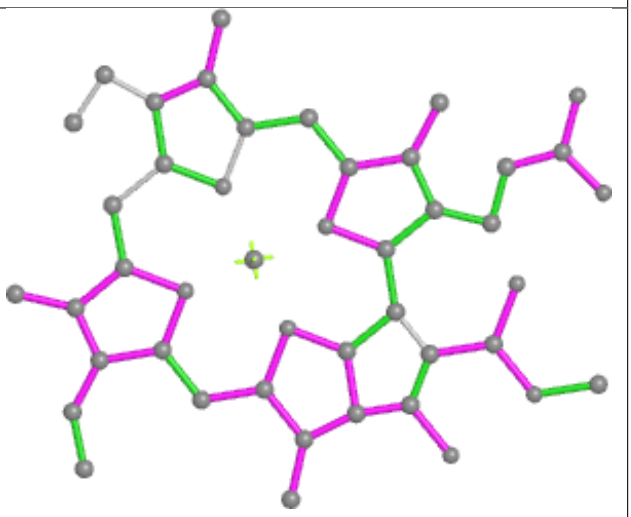


Rings

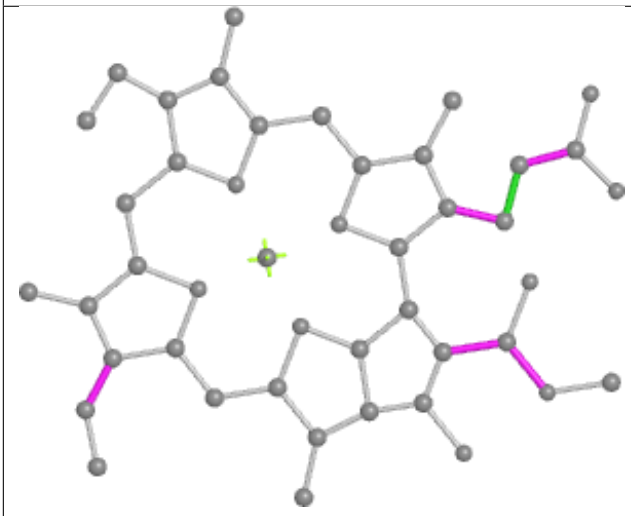
Ligand CLA k 1401



Bond lengths



Bond angles



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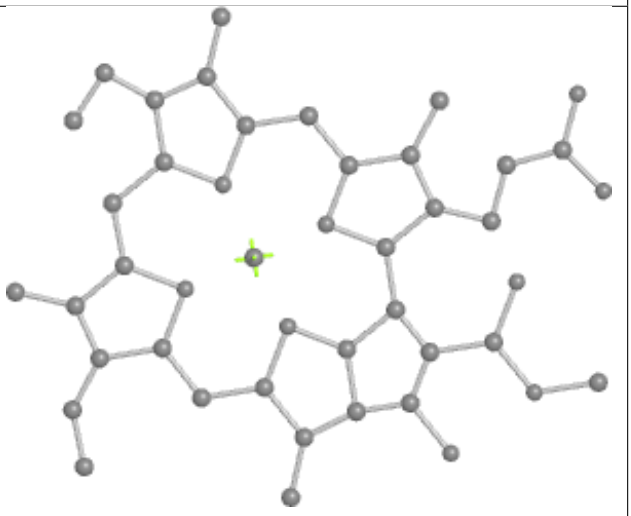
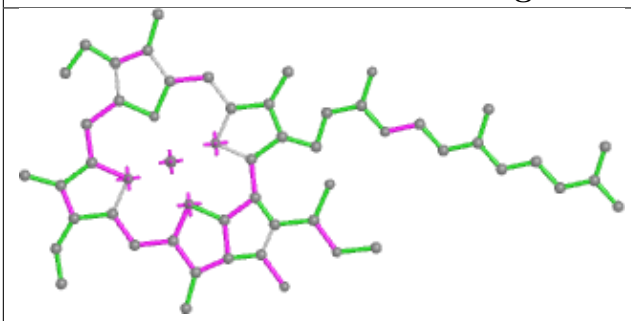


Rings

Ligand CLA A 1138



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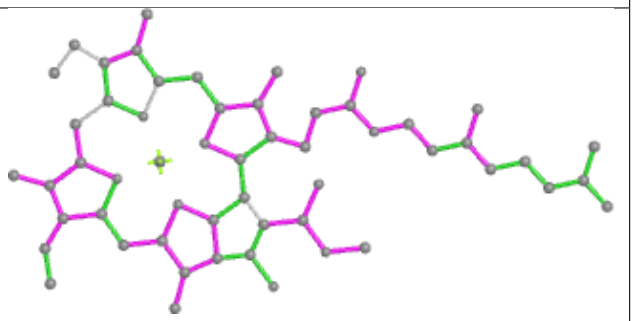
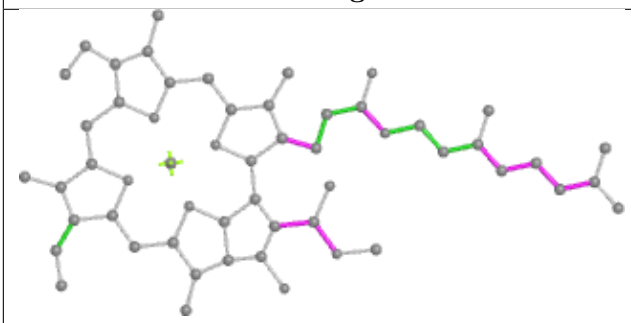


Bond angles



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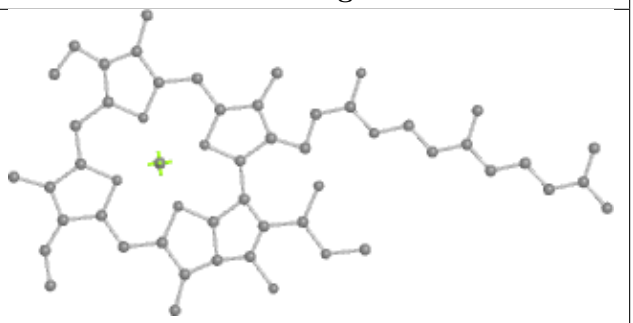
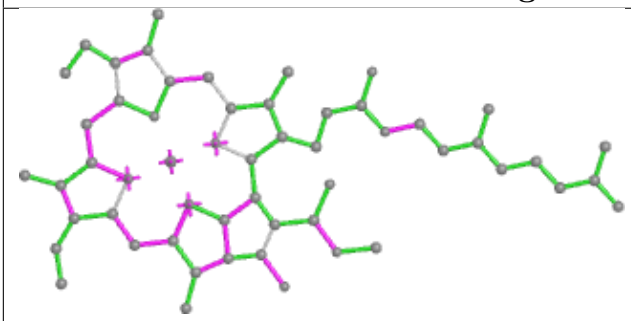


Rings

Ligand CLA b 1236



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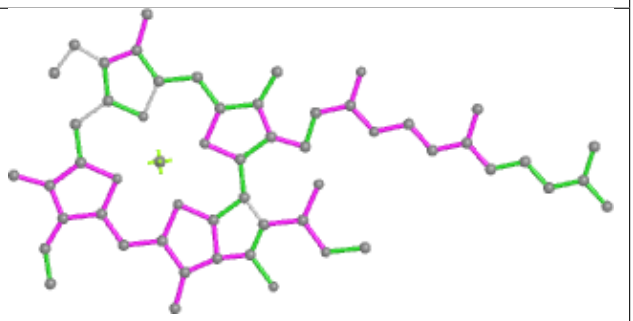
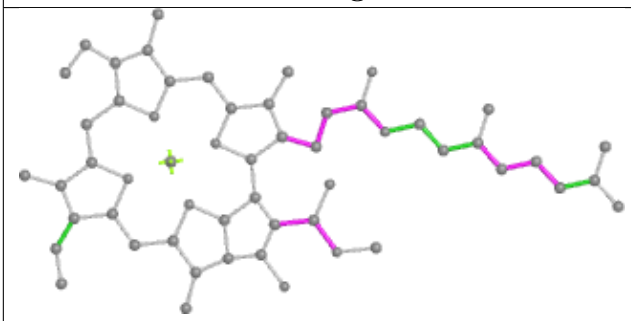


Bond angles



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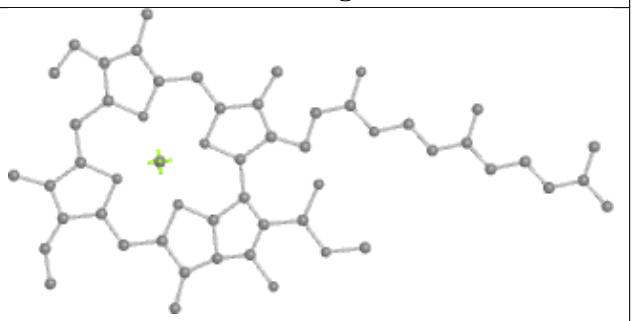
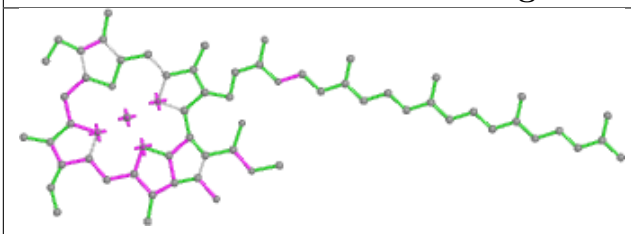
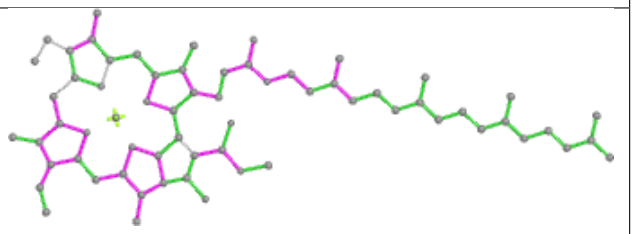


Rings

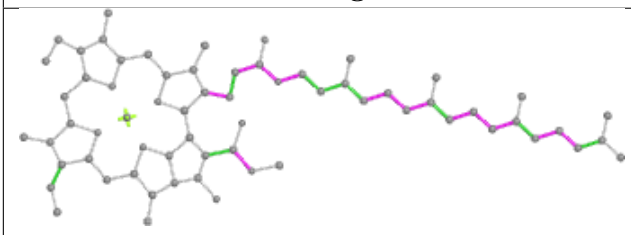
Ligand CLA b 1216



Bond lengths



Bond angles



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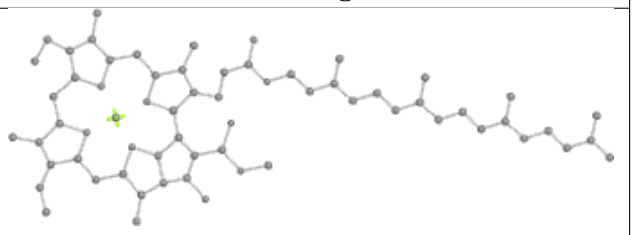
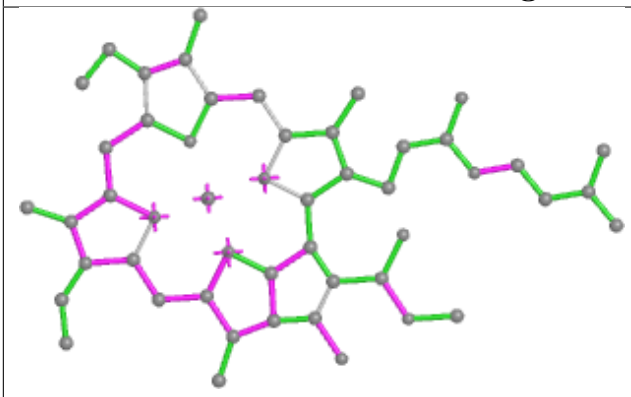
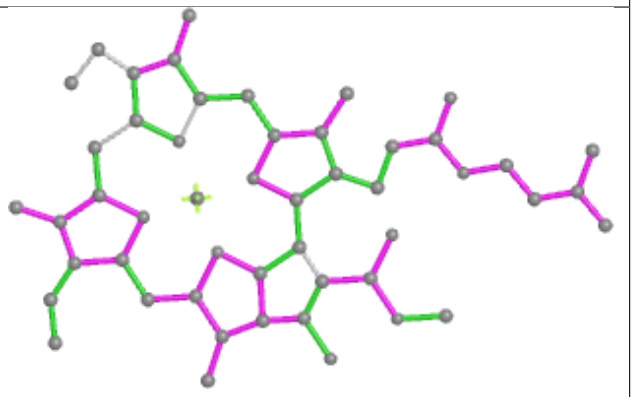


Rings

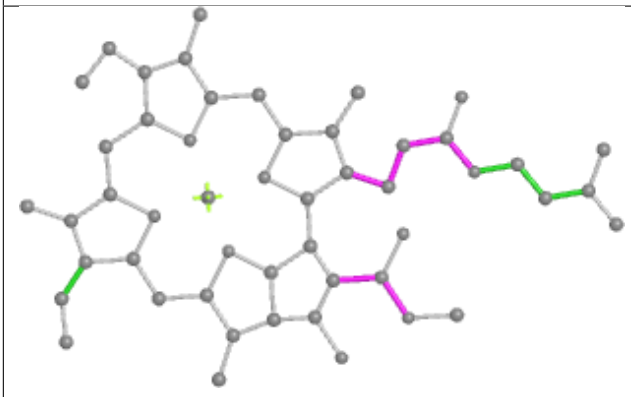
Ligand CLA a 1102



Bond lengths



Bond angles



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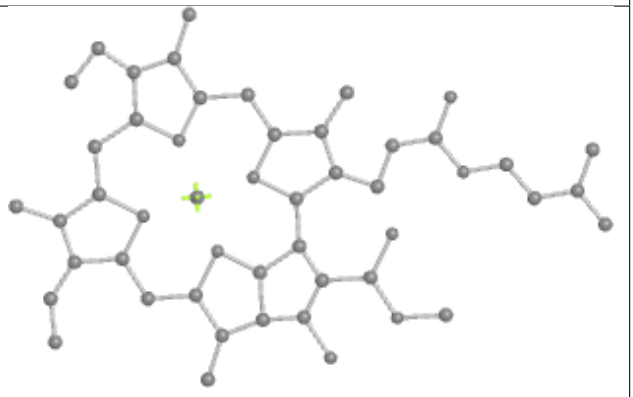
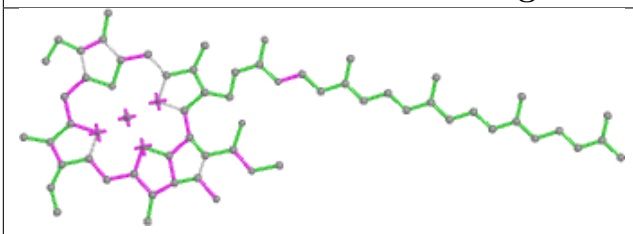


Rings

Ligand CLA b 1201



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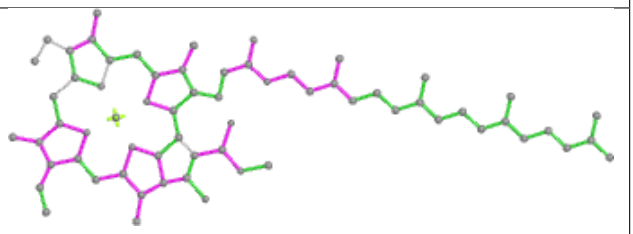
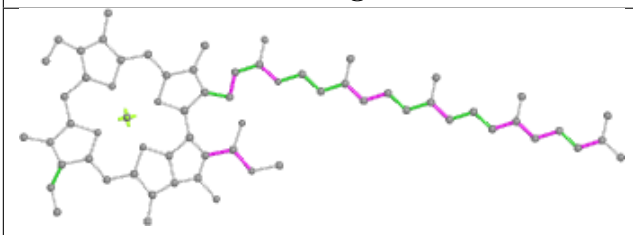


Bond angles



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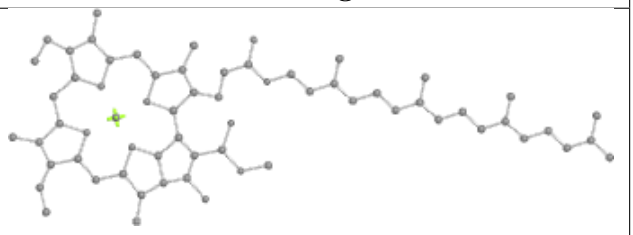
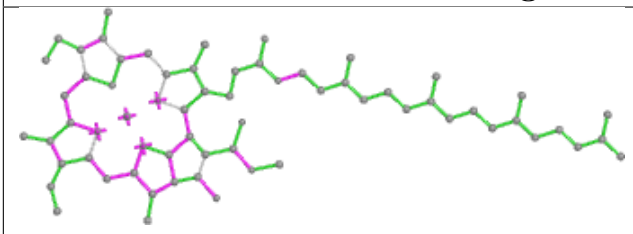
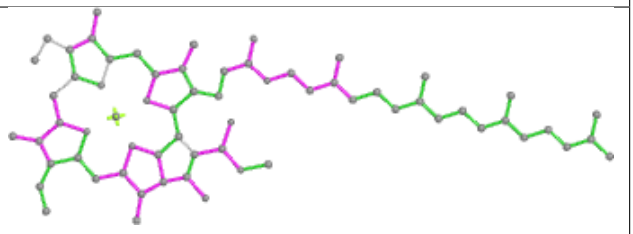


Rings

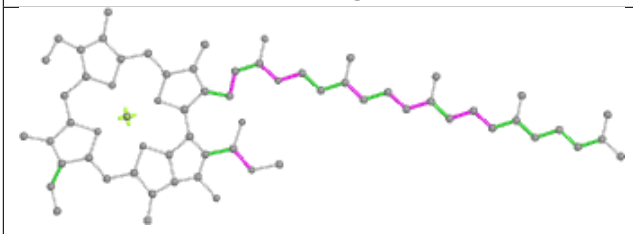
Ligand CLA a 1109



Bond lengths



Bond angles



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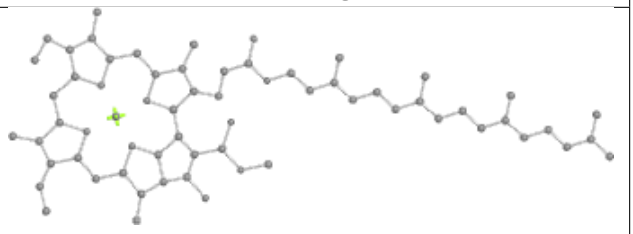
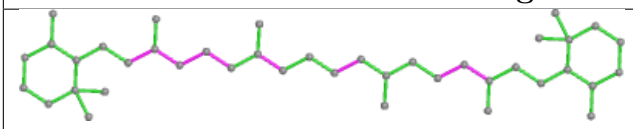


Rings

Ligand BCR b 4017



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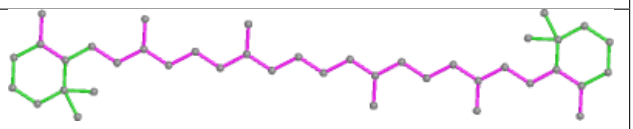
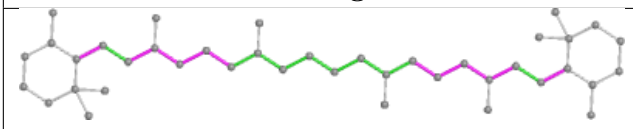


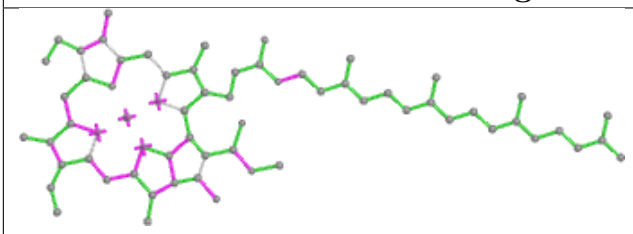
Bond angles



Torsions

Rings

Ligand CLA H 1226



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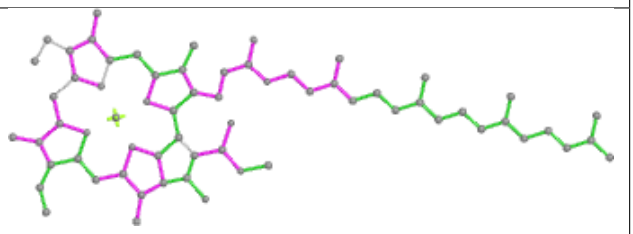
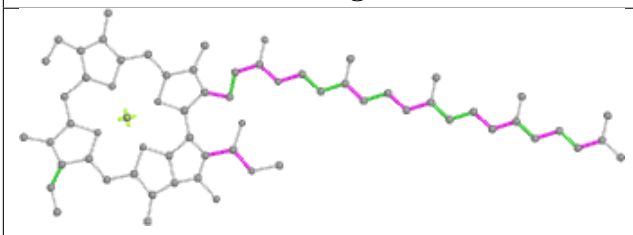


Bond angles



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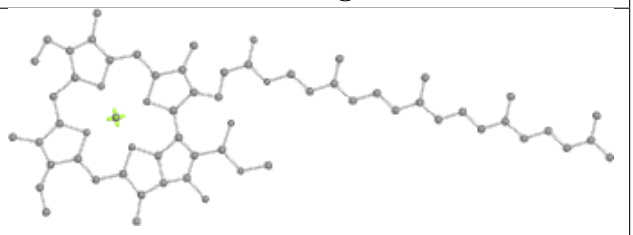
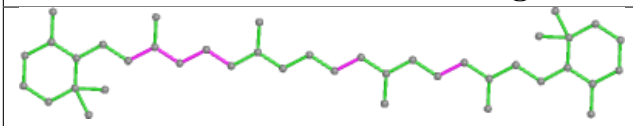
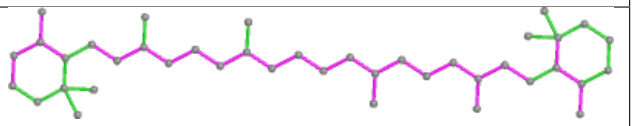


Rings

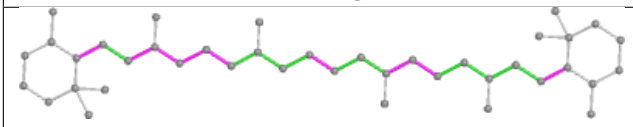
Ligand BCR m 4021



Bond lengths



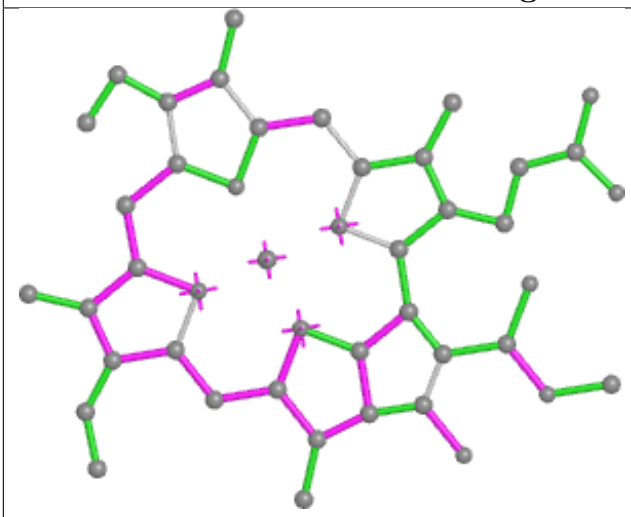
Bond angles



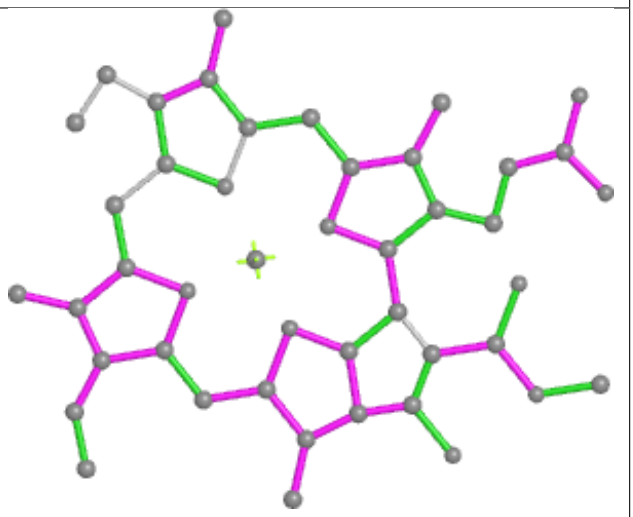
Torsions

Rings

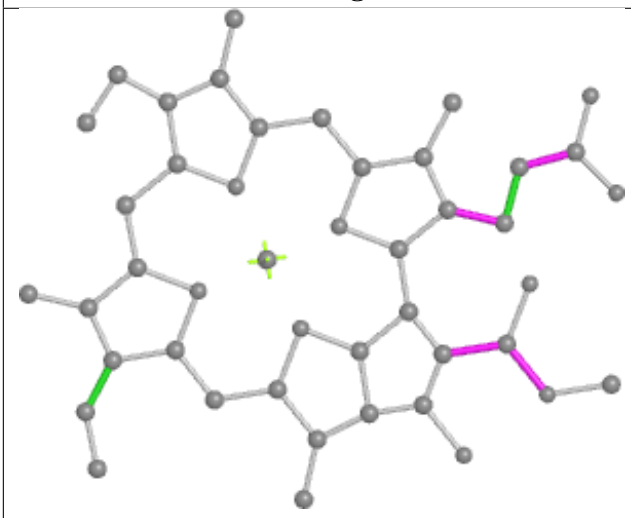
Ligand CLA a 1139



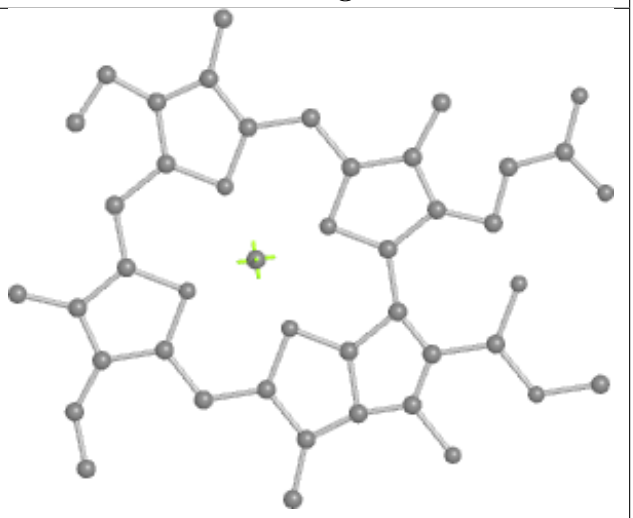
Bond lengths



Bond angles

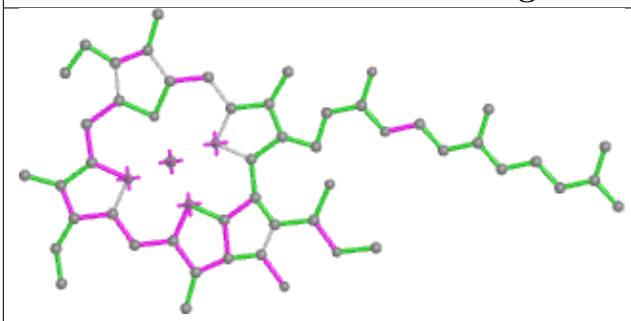


Torsions



Rings

Ligand CLA b 1228



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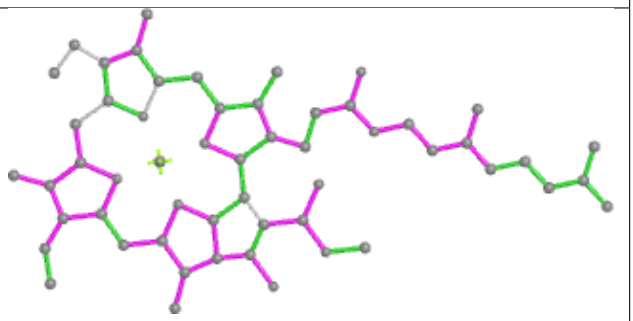
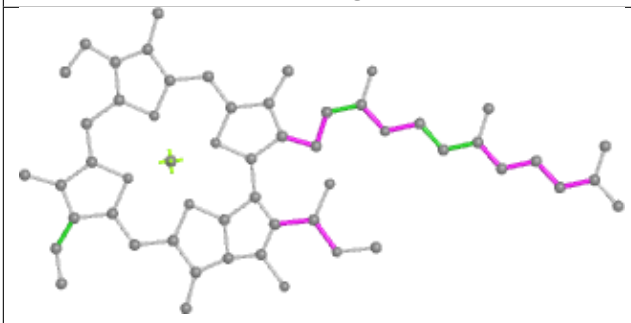


Bond angles



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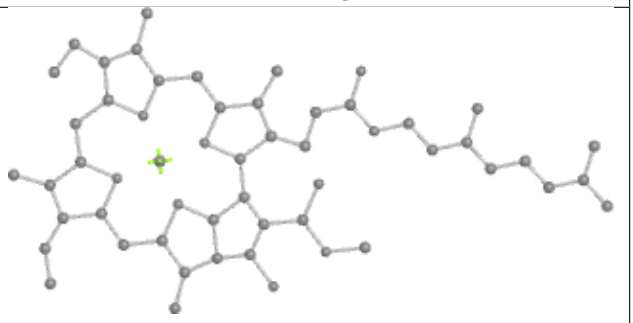
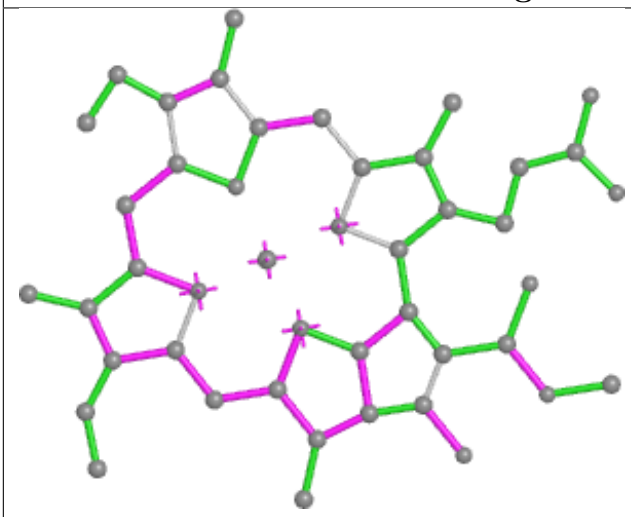


Rings

Ligand CLA A 1101



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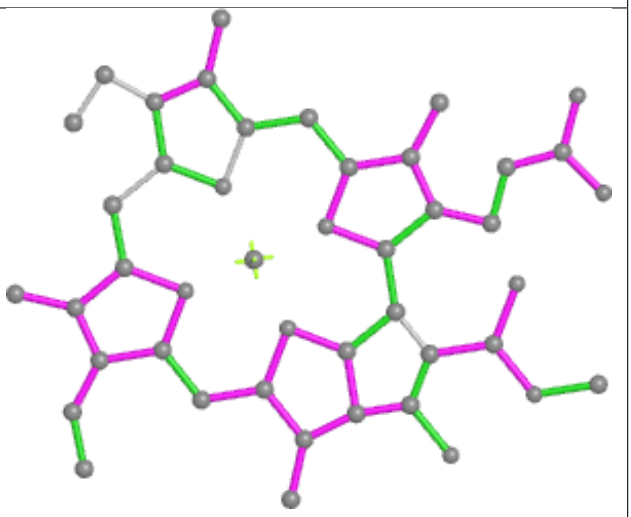
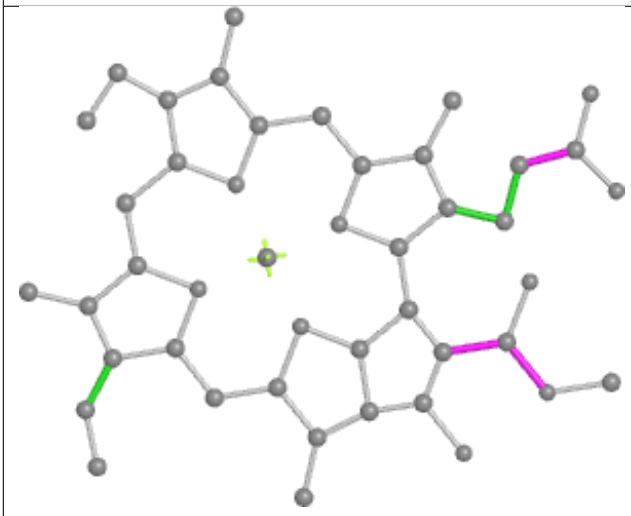
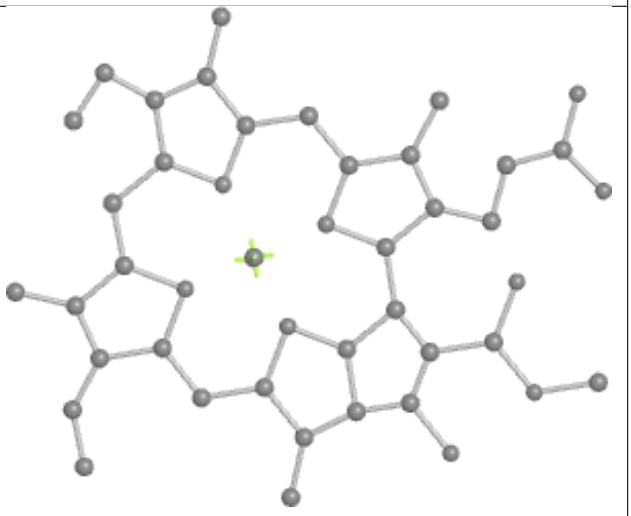


Bond angles

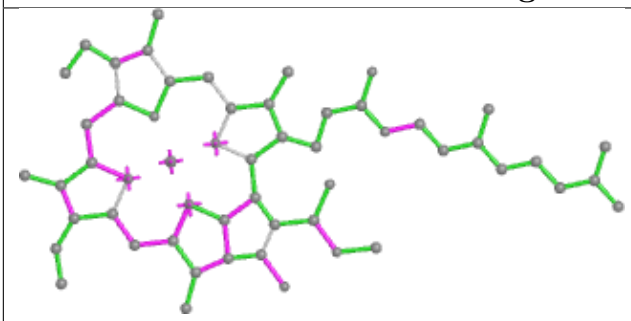


Torsions



Rings

Ligand CLA b 1022



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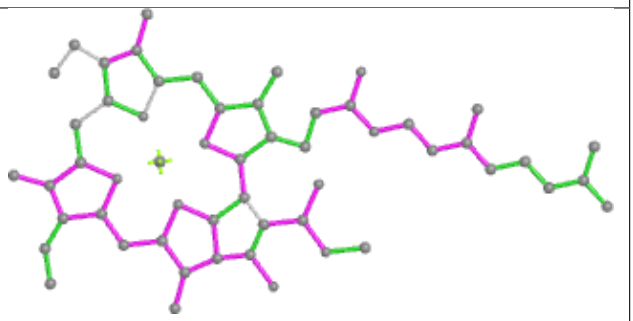
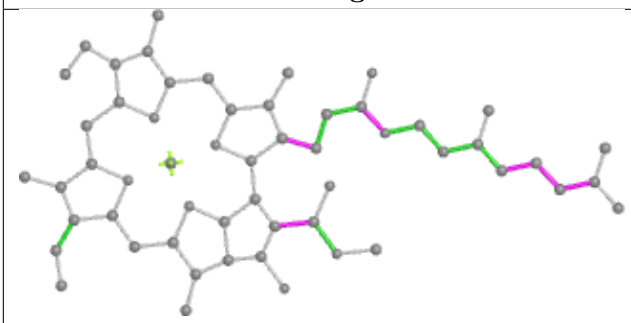
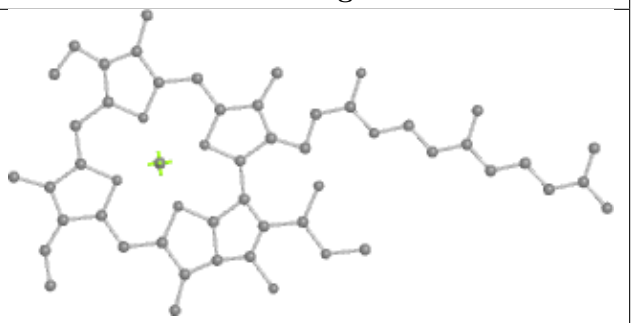


Bond angles

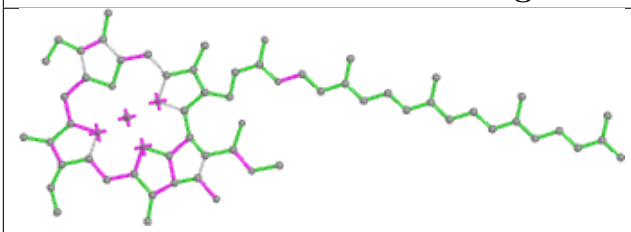


Torsions



Rings

Ligand CLA H 1210



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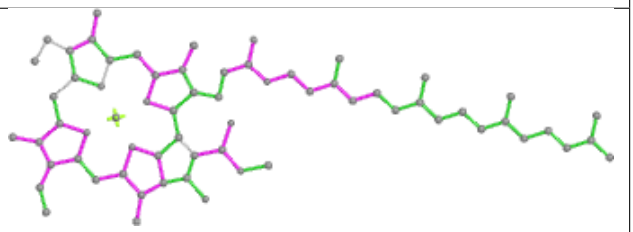
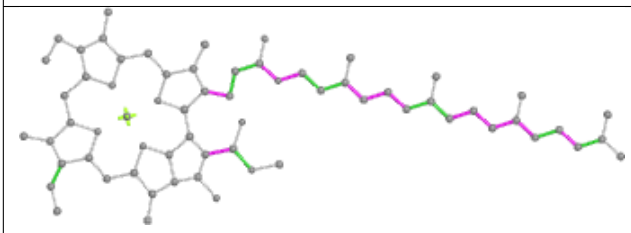


Bond angles



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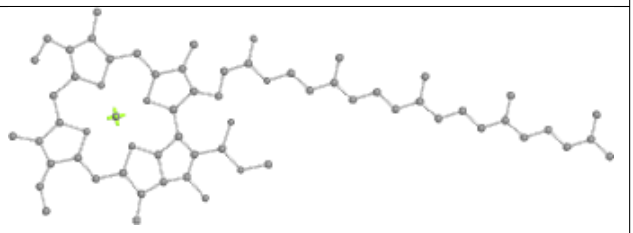
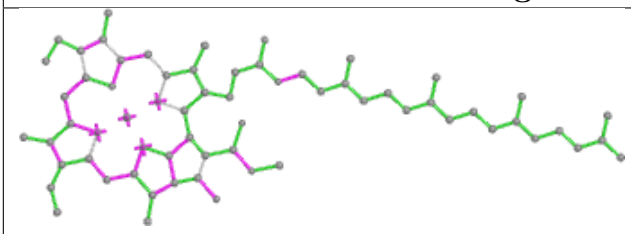


Rings

Ligand CLA G 1104



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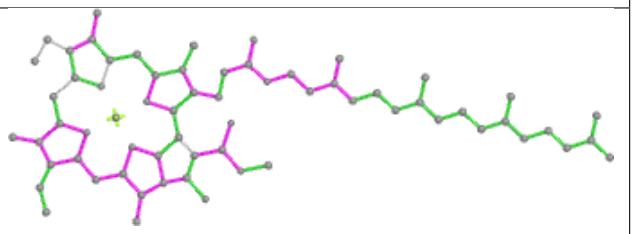
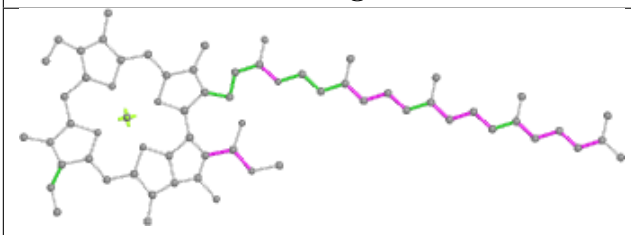


Bond angles



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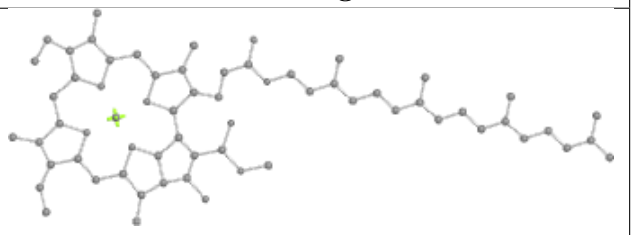
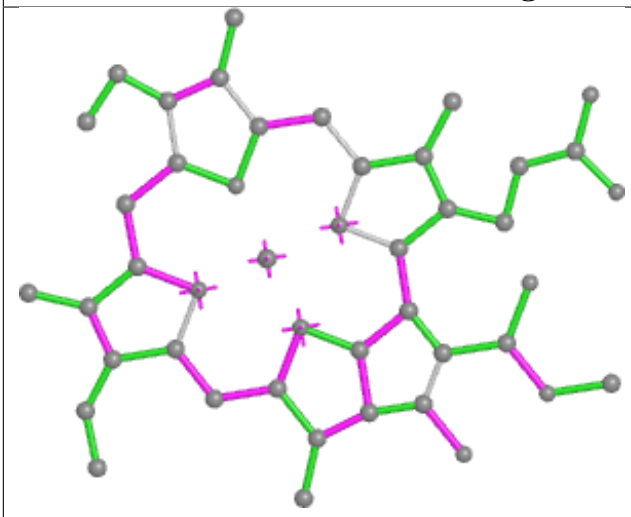


Rings

Ligand CLA a 1120



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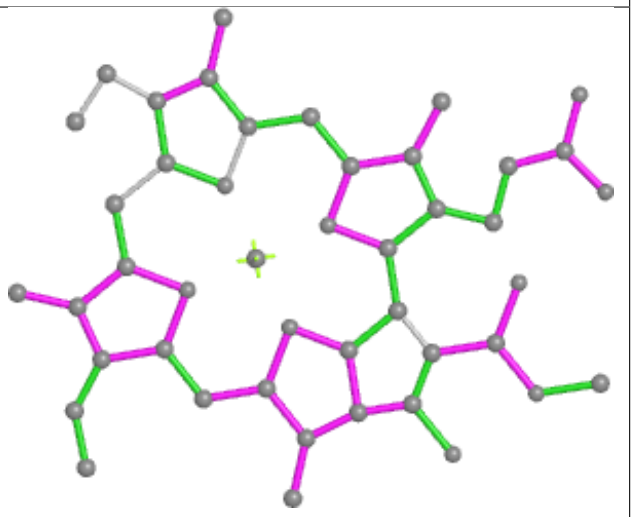
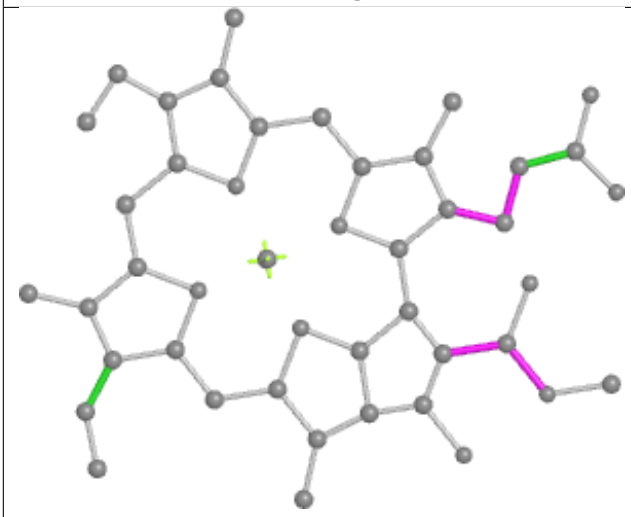


Bond angles



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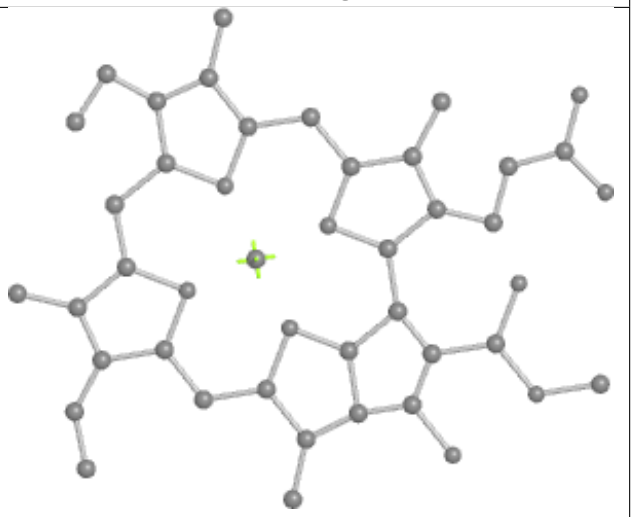
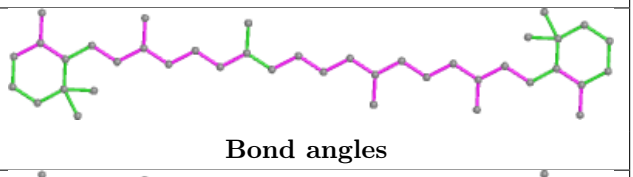


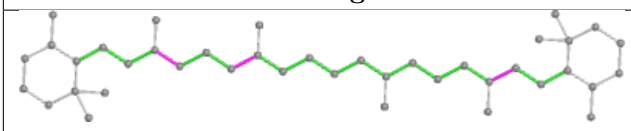
Rings

Ligand BCR b 4005

Bond lengths



Bond angles



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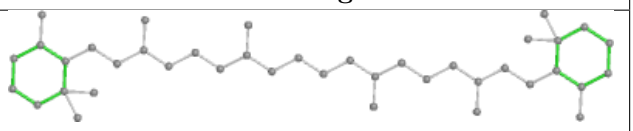
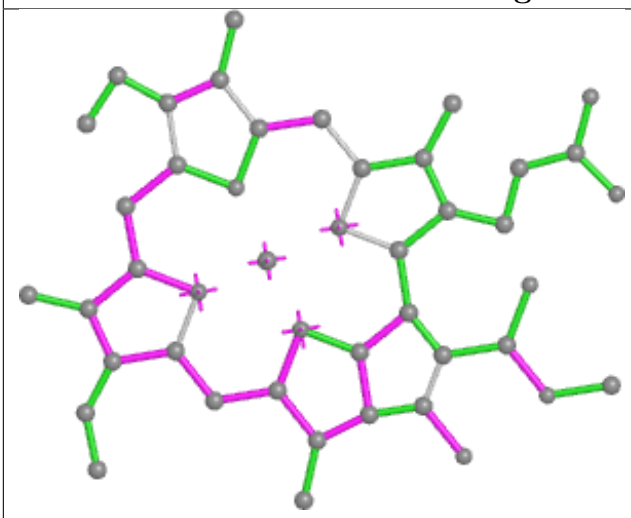


Rings

Ligand CLA G 1139



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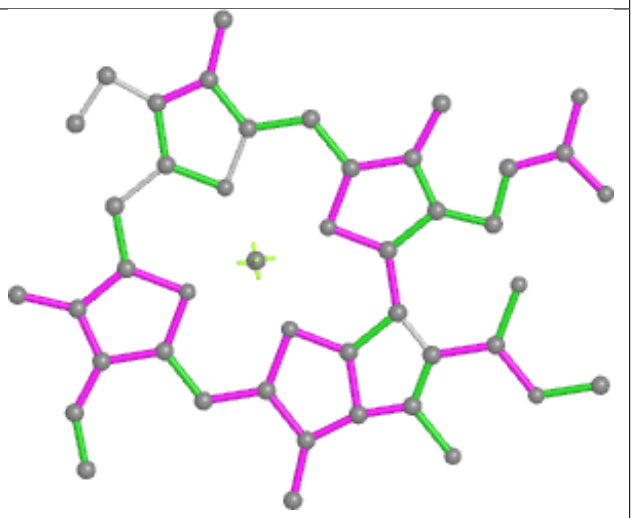
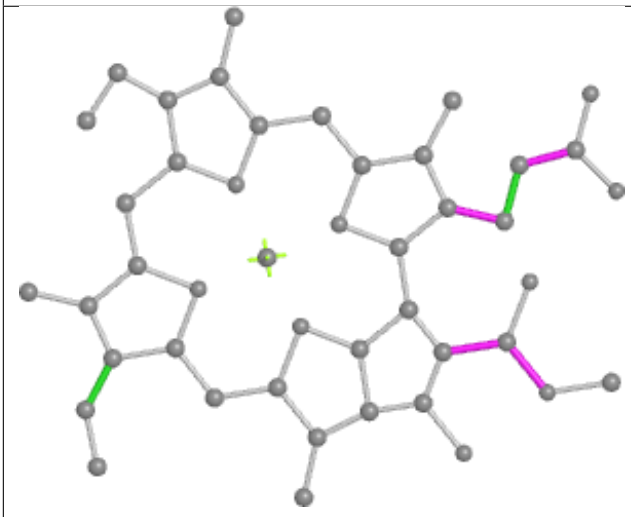


Bond angles



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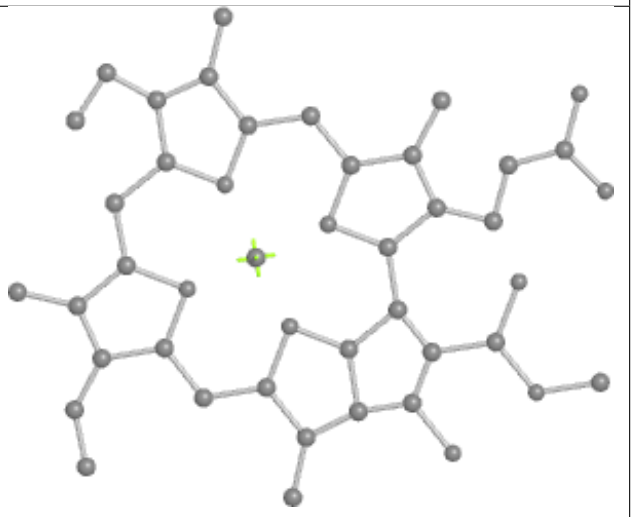
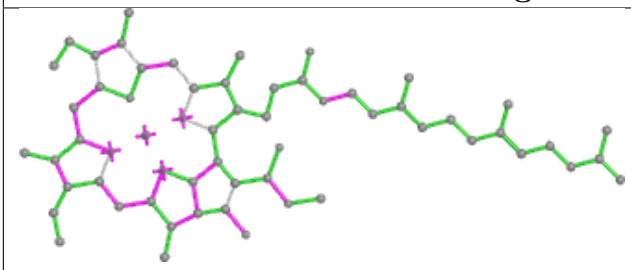
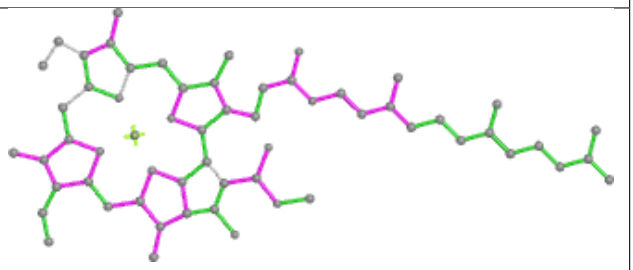
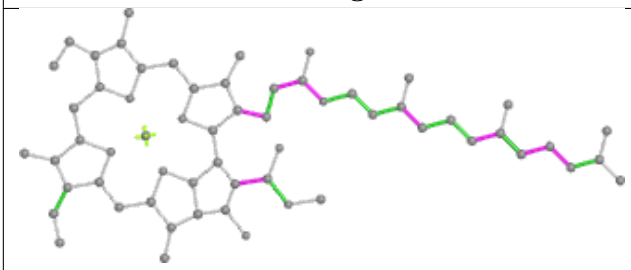
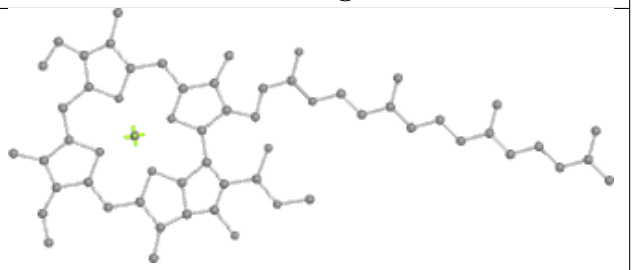
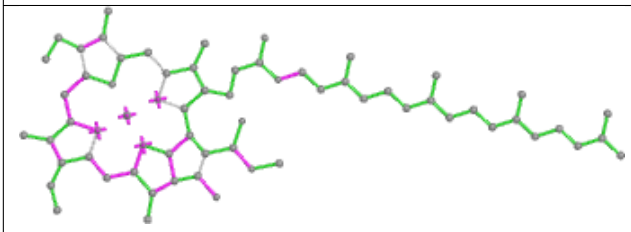
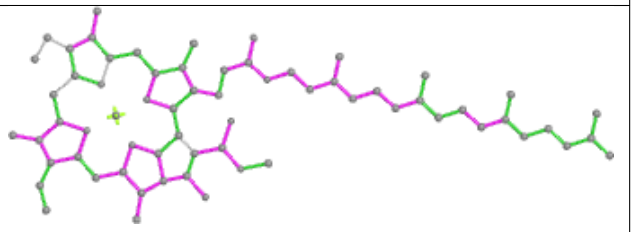
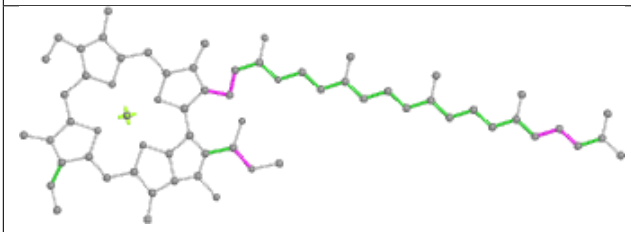
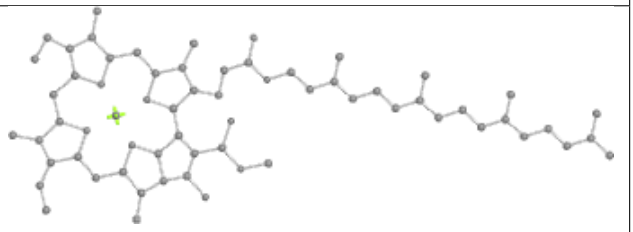
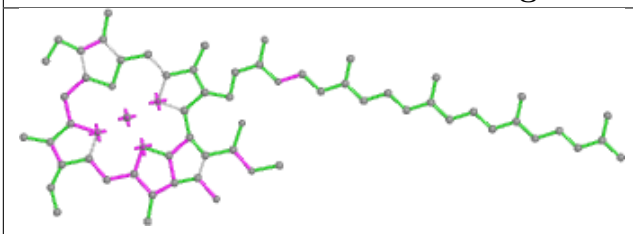


Rings

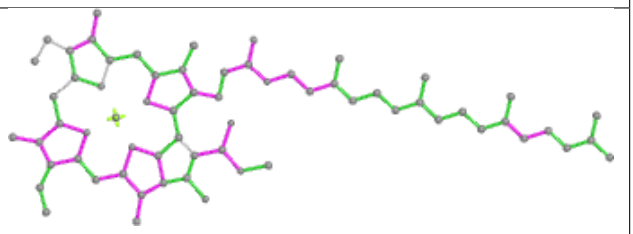
Ligand CLA U 1502	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA a 1012	
 Bond lengths	 Bond angles
 Torsions	 Rings

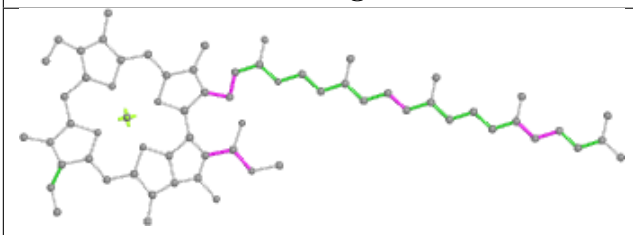
Ligand CLA a 1132



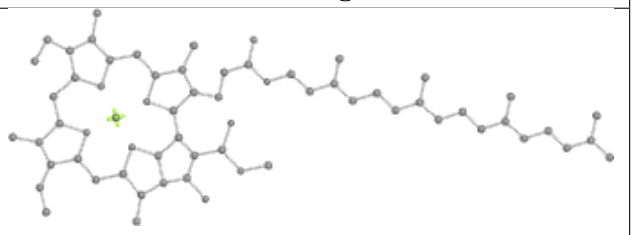
Bond lengths



Bond angles

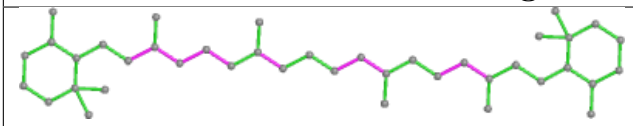


Torsions

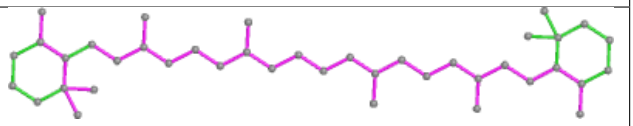


Rings

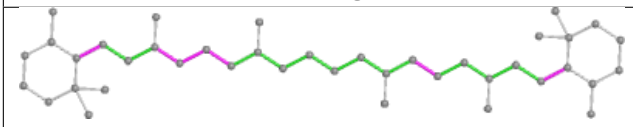
Ligand BCR I 4020



Bond lengths



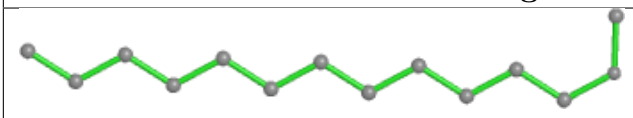
Bond angles



Torsions

Rings

Ligand LMT l 6001



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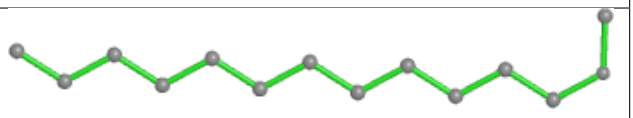
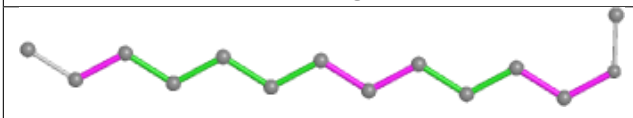


Bond angles



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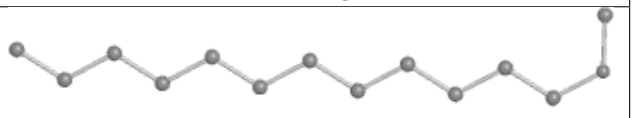
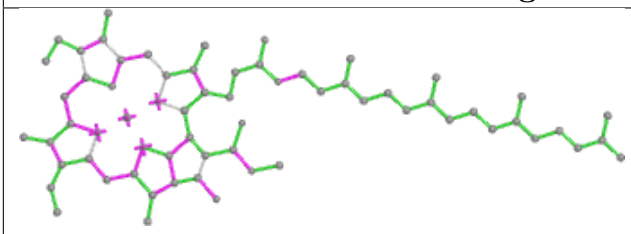
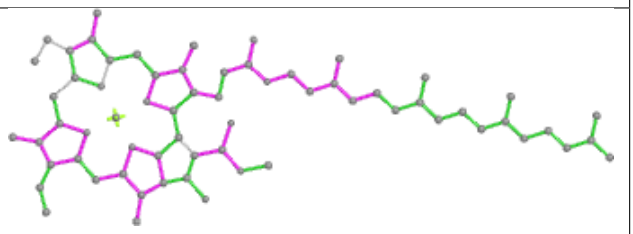


Rings

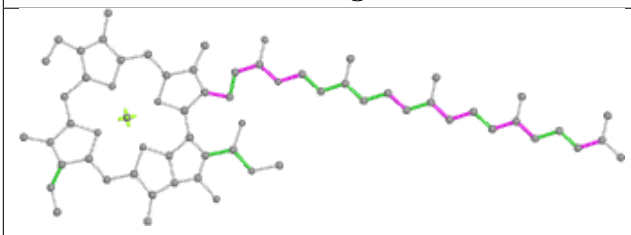
Ligand CL0 G 1011



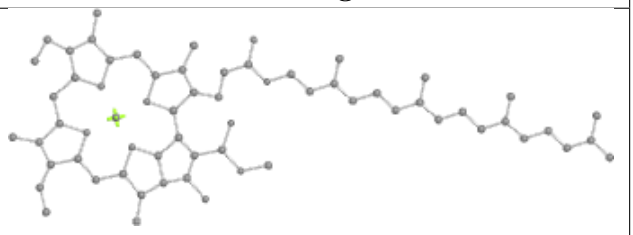
Bond lengths



Bond angles

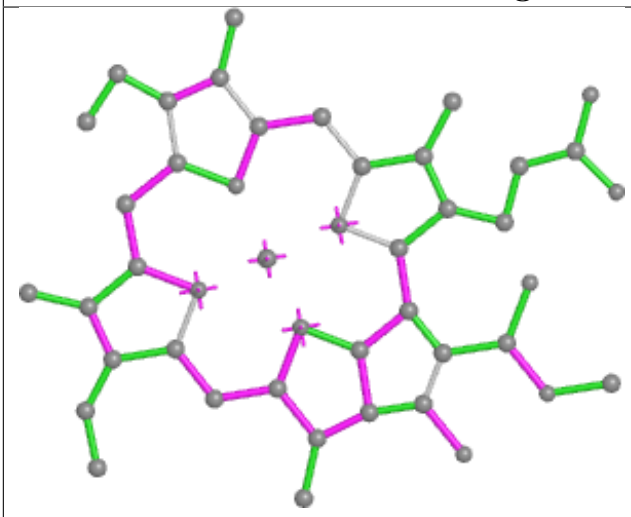


Torsions

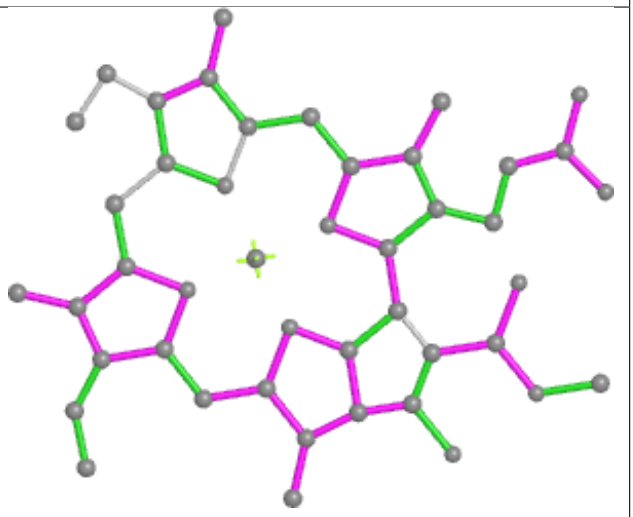


Rings

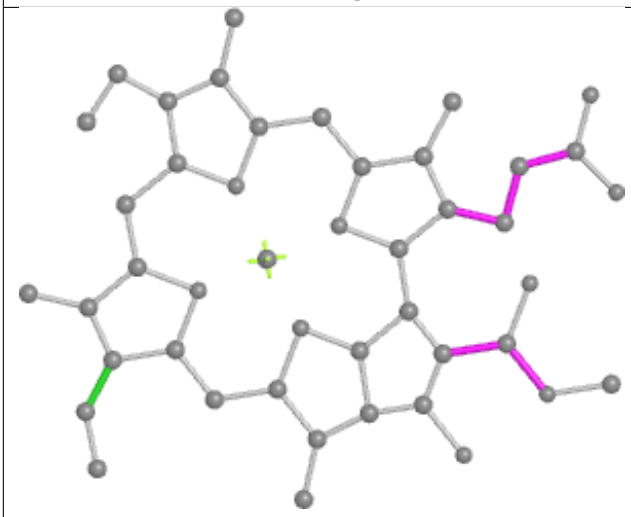
Ligand CLA G 1134



Bond lengths



Bond angles



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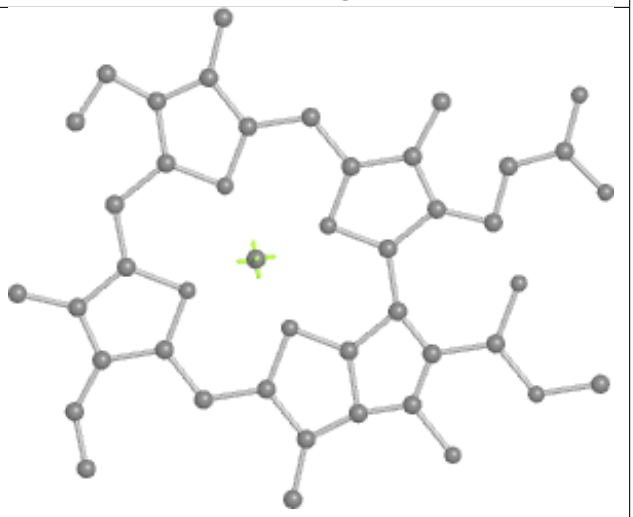
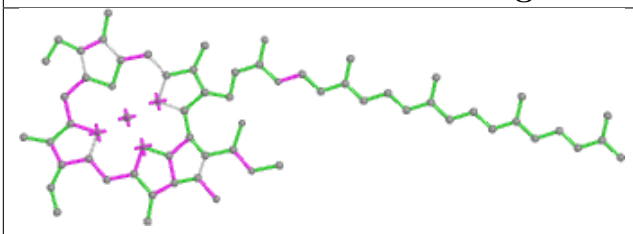
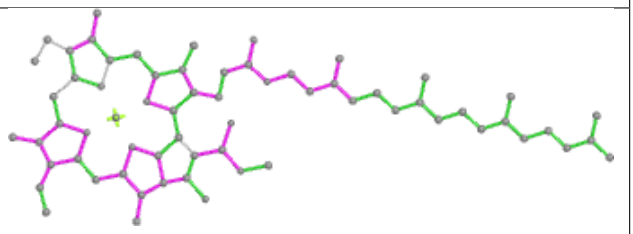


Rings

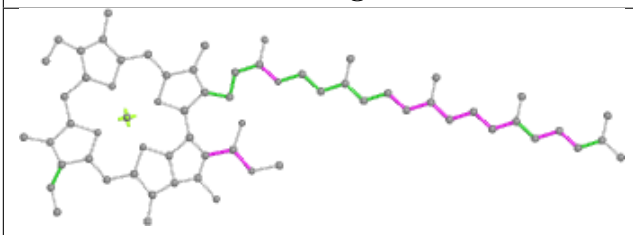
Ligand CLA B 1234



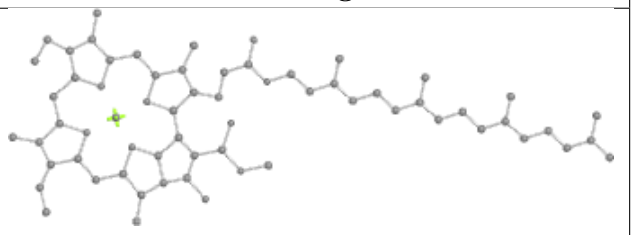
Bond lengths



Bond angles

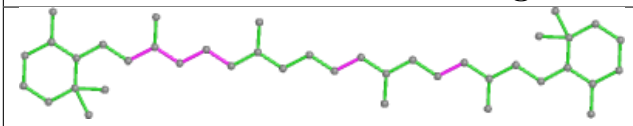


Torsions



Rings

Ligand BCR G 4004



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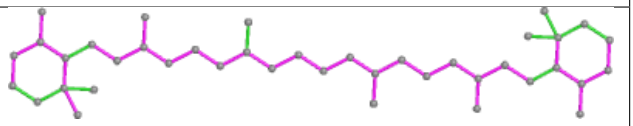
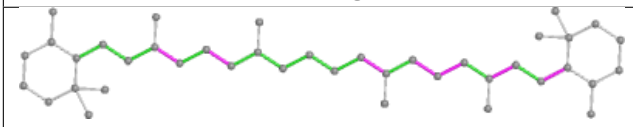


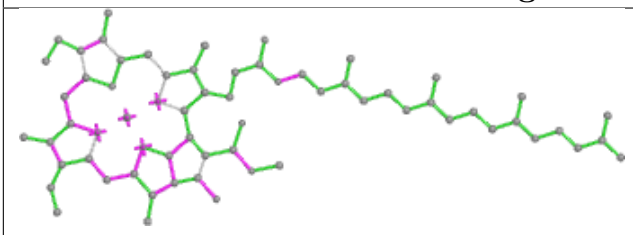
Bond angles



Torsions

Rings

Ligand CLA b 1224



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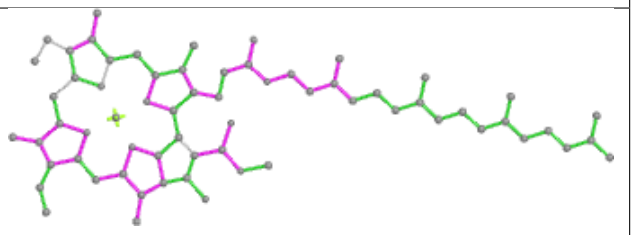
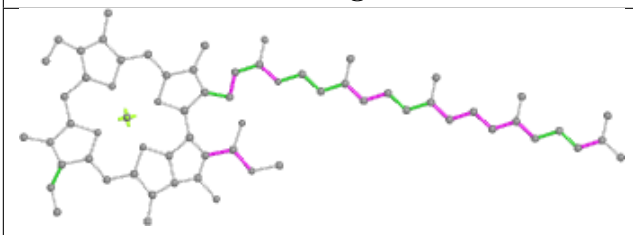
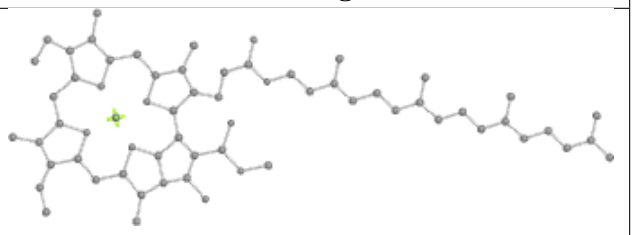


Bond angles

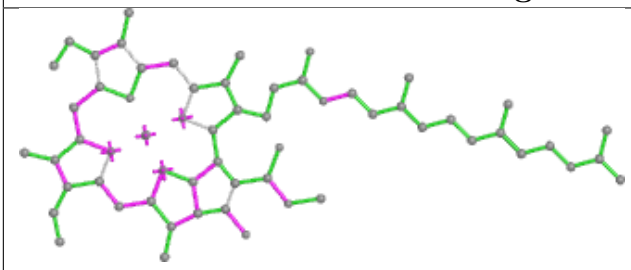


Torsions



Rings

Ligand CLA A 1106



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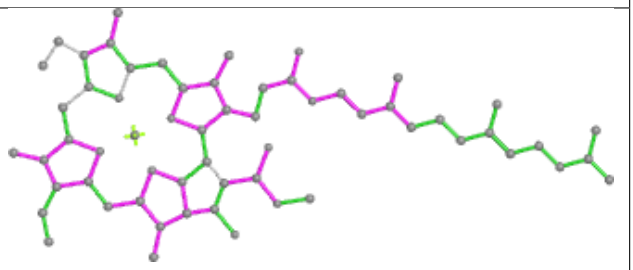
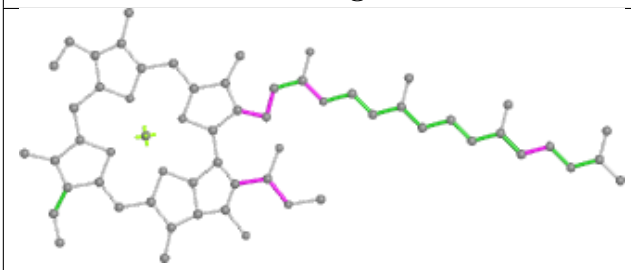
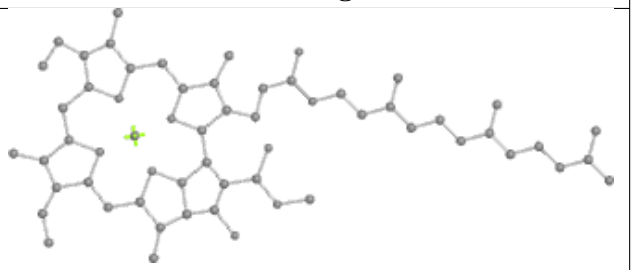


Bond angles

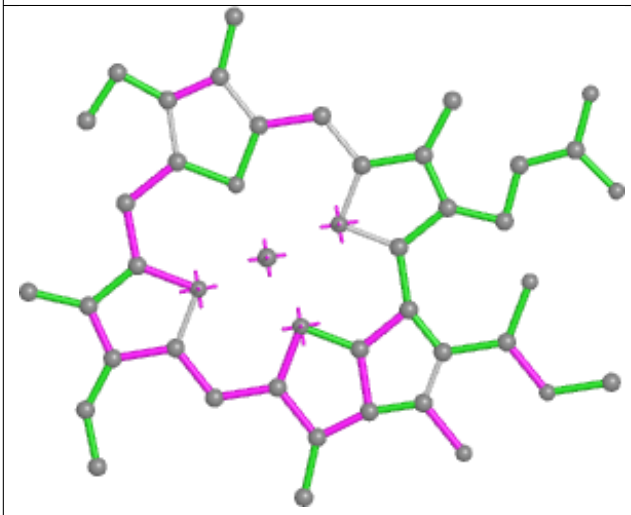


Torsions



Rings

Ligand CLA a 1108



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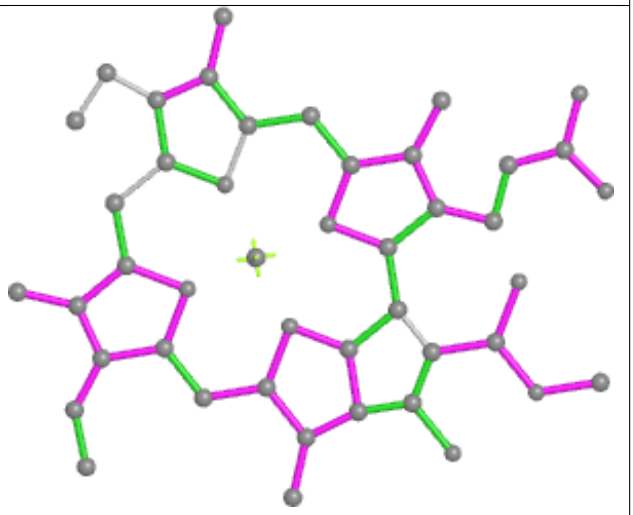
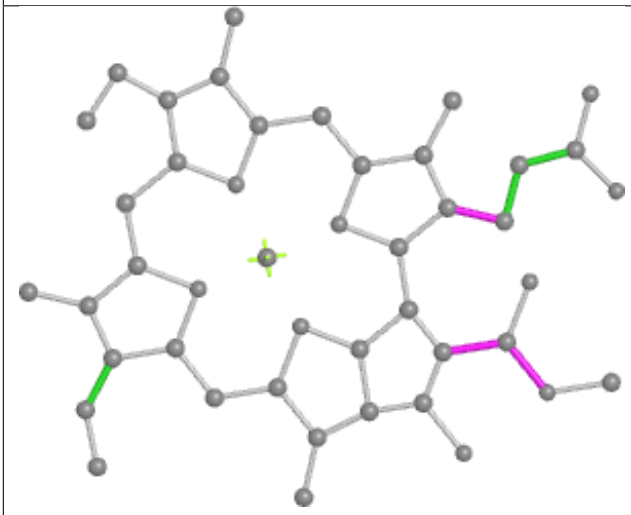
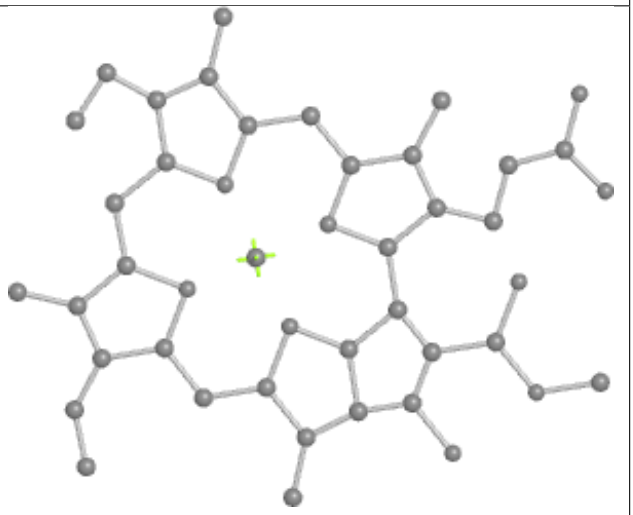


Bond angles

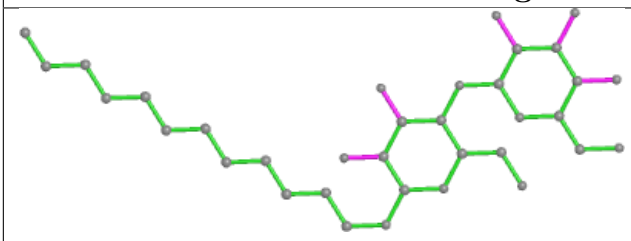


Torsions



Rings

Ligand LMT L 6002



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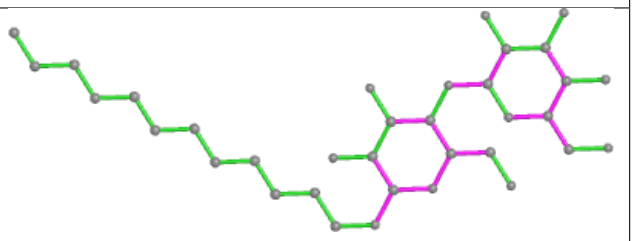
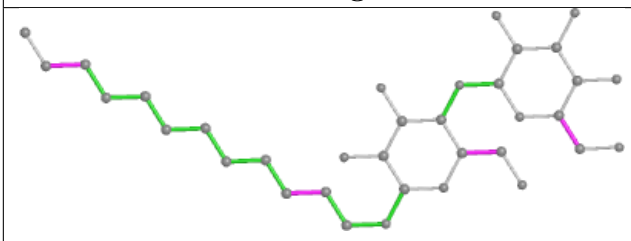


Bond angles



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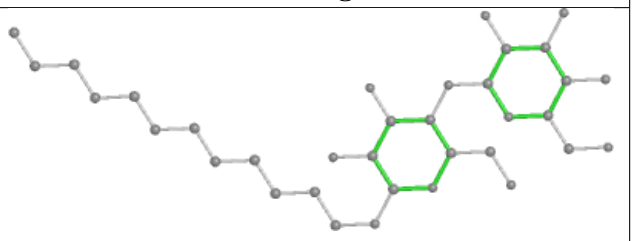
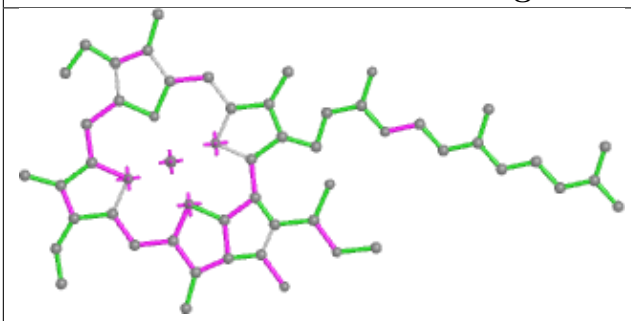
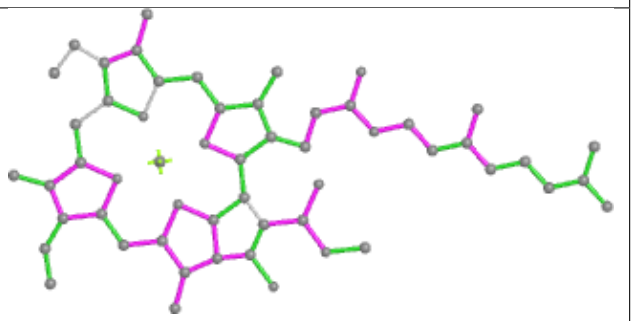


Rings

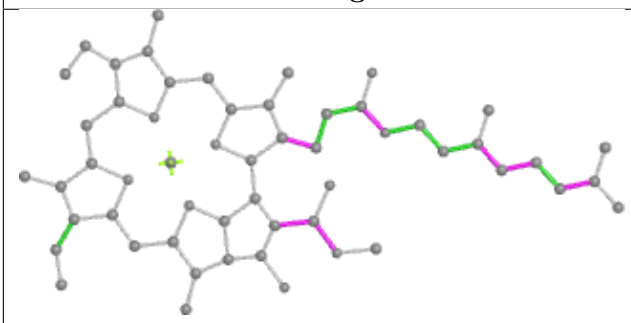
Ligand CLA G 1112



Bond lengths



Bond angles



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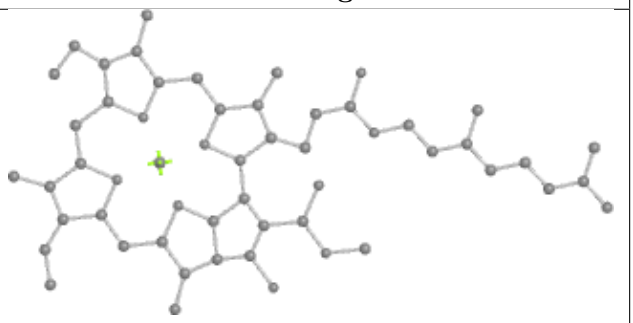
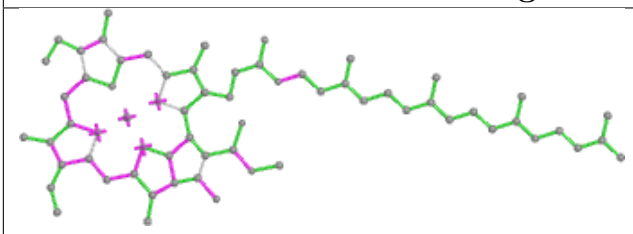


Rings

Ligand CLA b 1210



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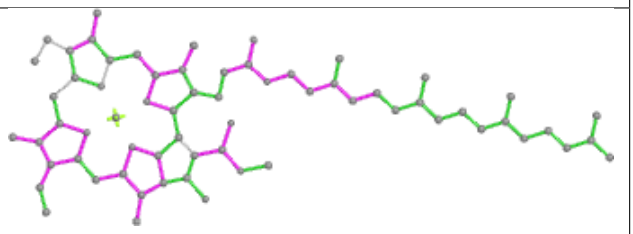
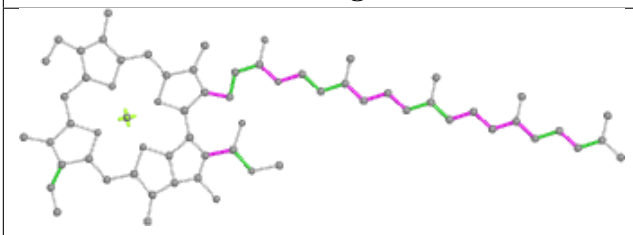


Bond angles



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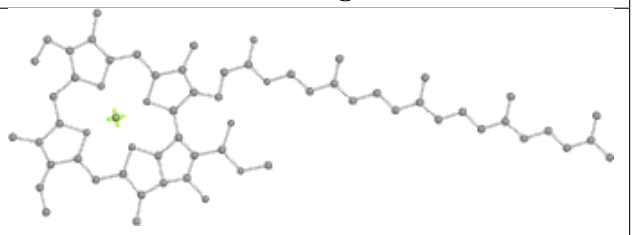
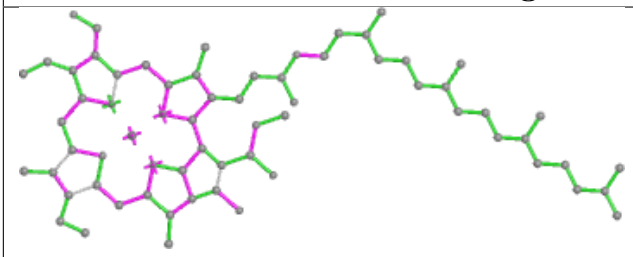
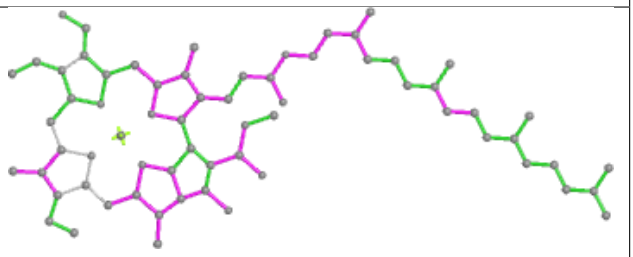


Rings

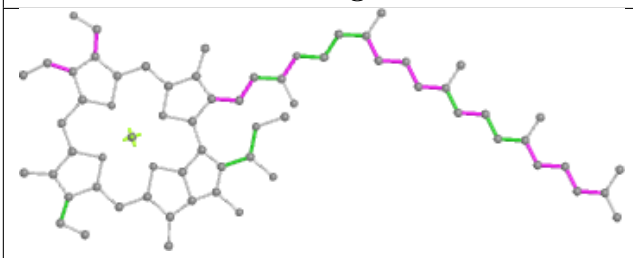
Ligand F6C B 1207



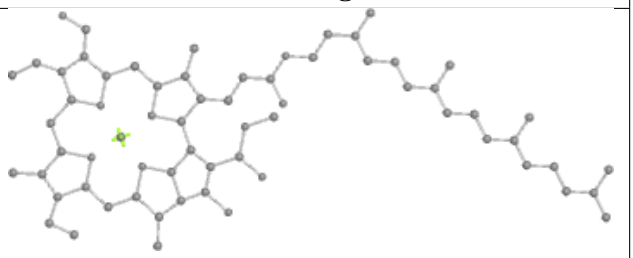
Bond lengths



Bond angles

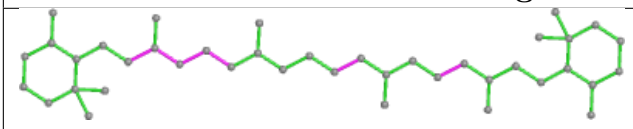


Torsions

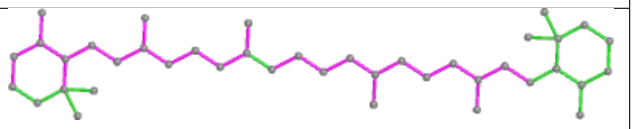


Rings

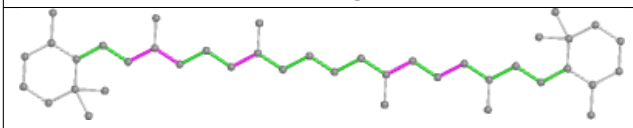
Ligand BCR L 4022



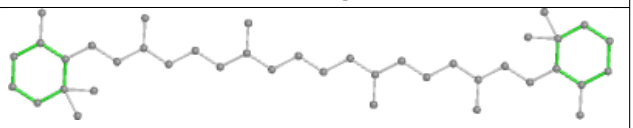
Bond lengths



Bond angles

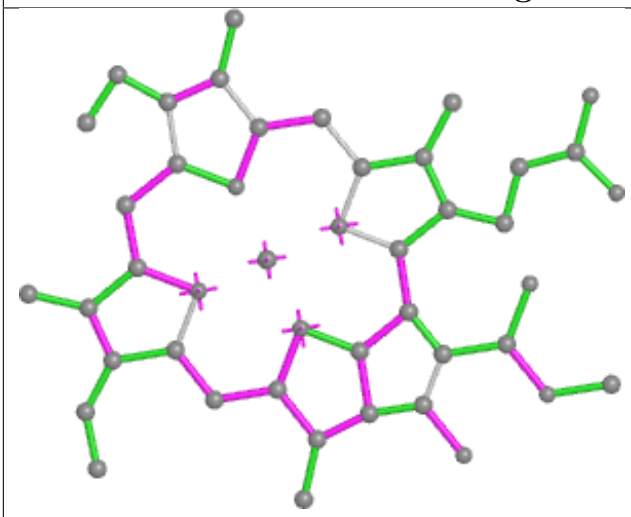


Torsions

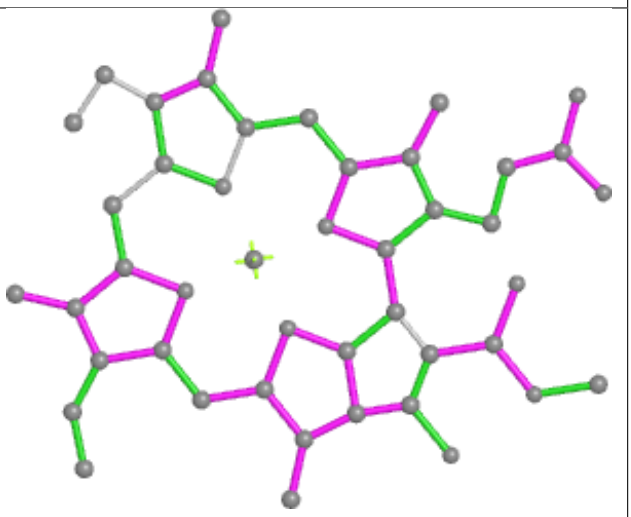


Rings

Ligand CLA A 1134



Bond lengths



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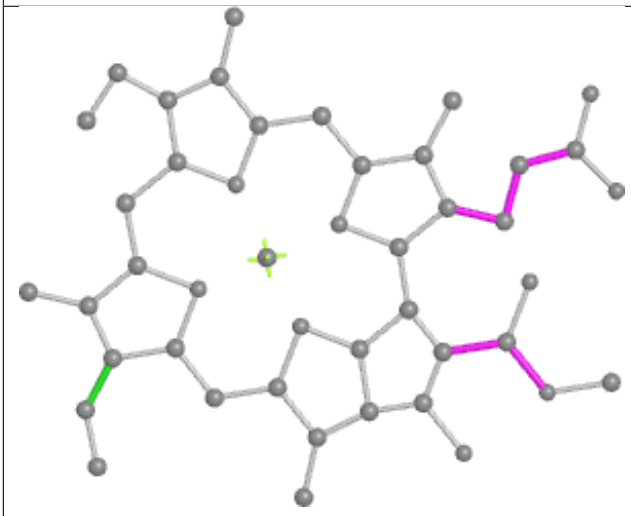

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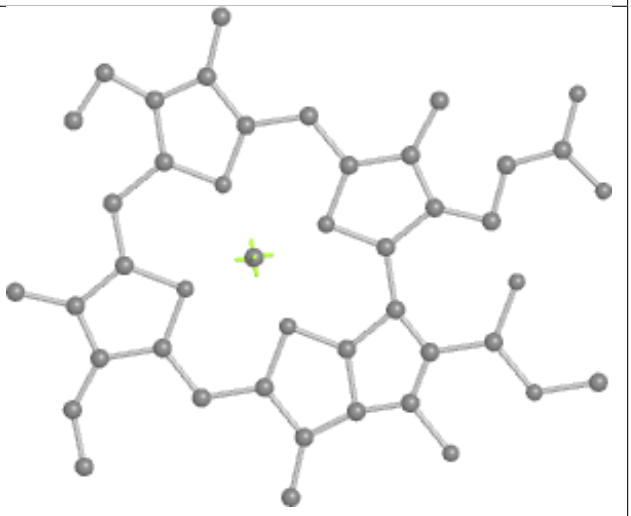
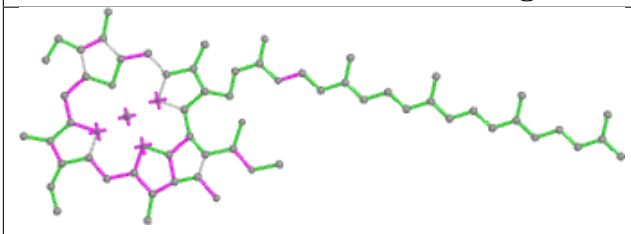
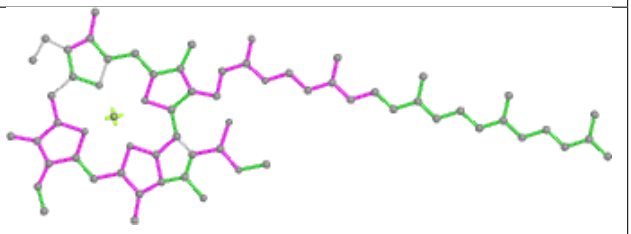


Rings

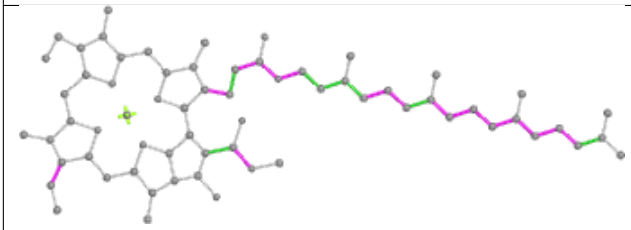
Ligand CLA b 1239



Bond lengths



Bond angles



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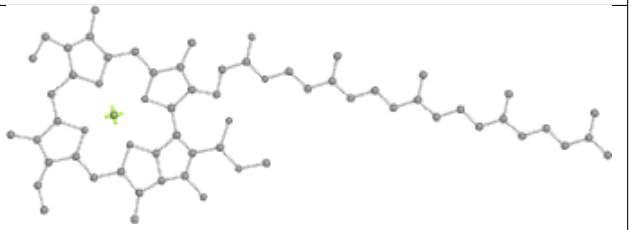
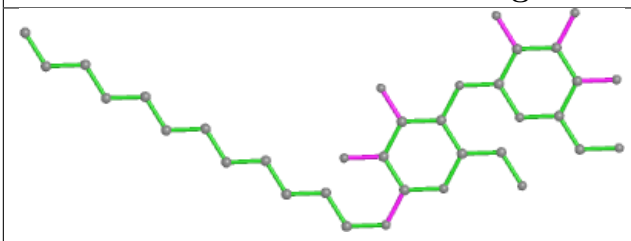
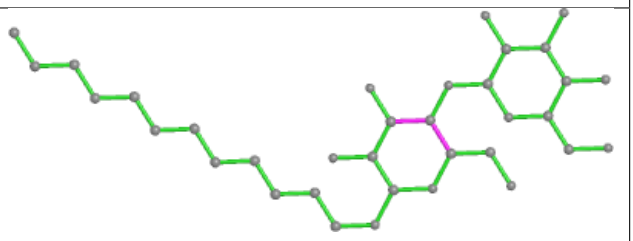


Rings

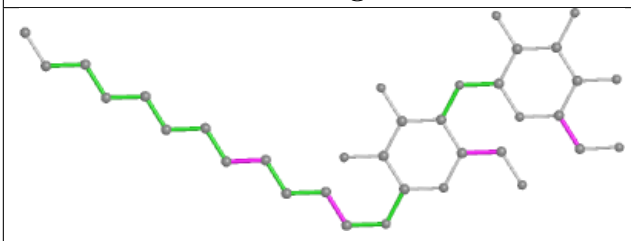
Ligand LMT V 6000



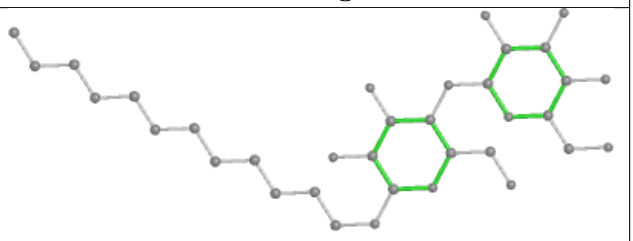
Bond lengths



Bond angles

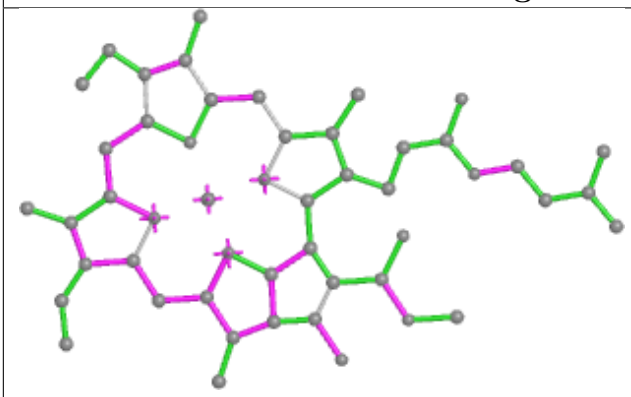


Torsions

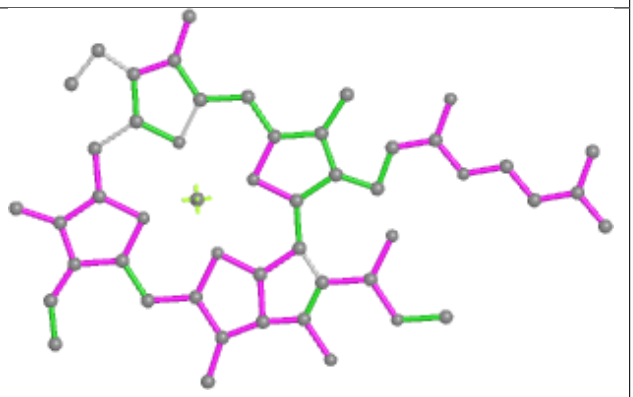


Rings

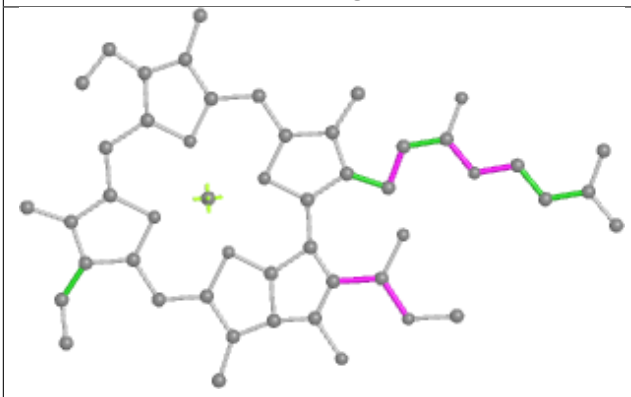
Ligand CLA G 1135



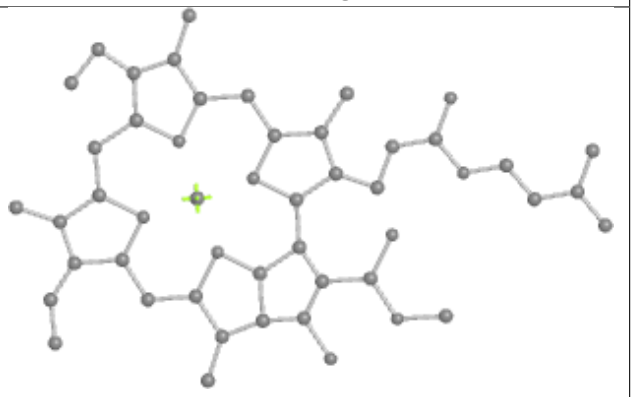
Bond lengths



Bond angles

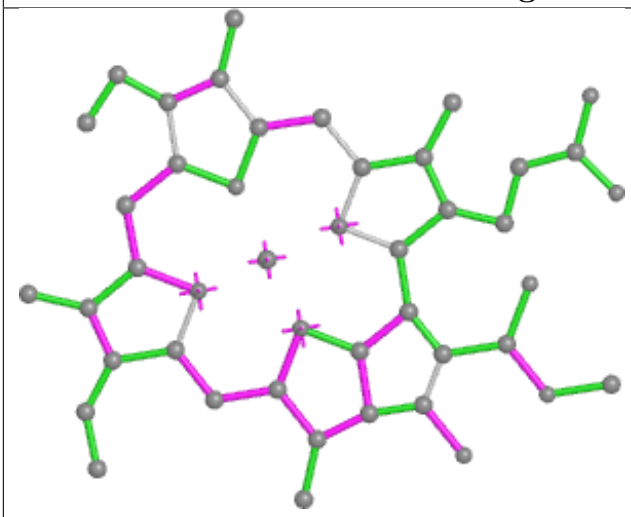


Torsions

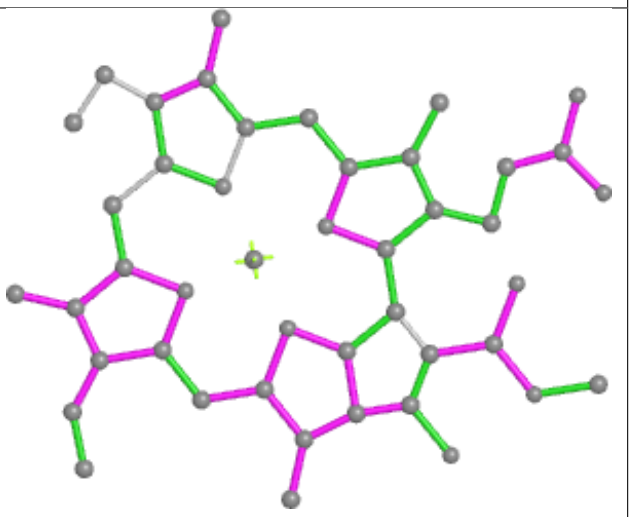


Rings

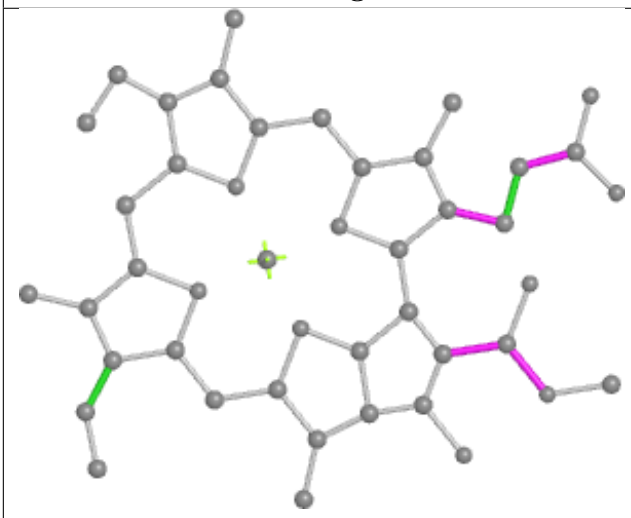
Ligand CLA b 1227



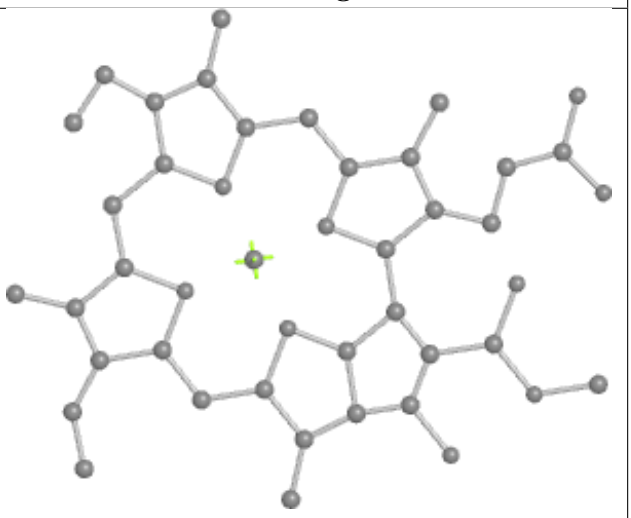
Bond lengths



Bond angles

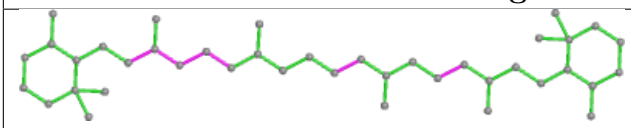


Torsions

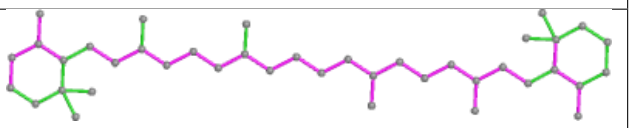


Rings

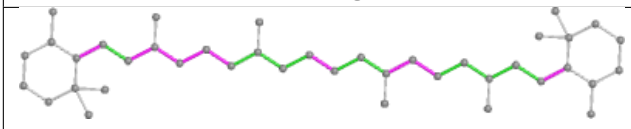
Ligand BCR M 4021



Bond lengths



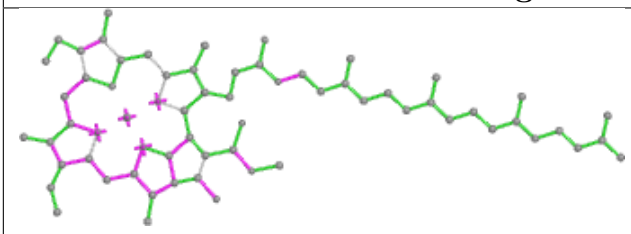
Bond angles



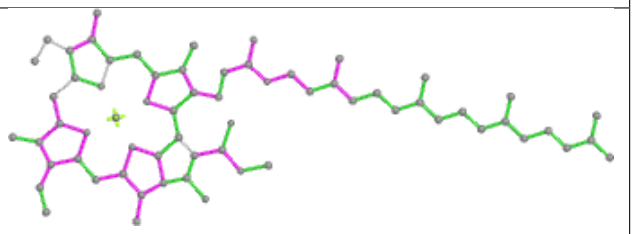
Torsions

Rings

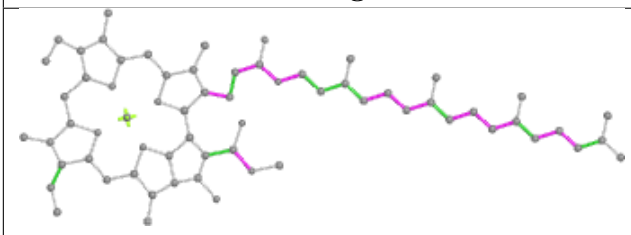
Ligand CLA B 1216



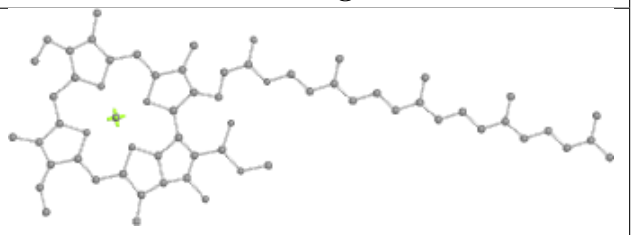
Bond lengths



Bond angles

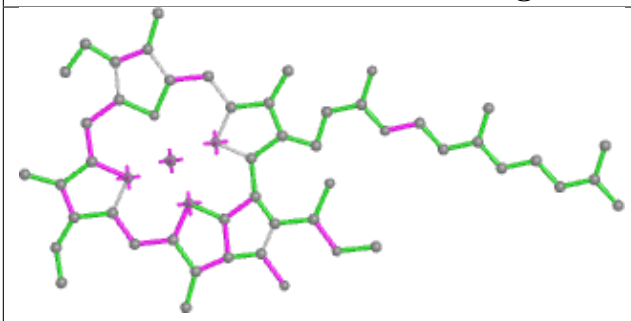


Torsions

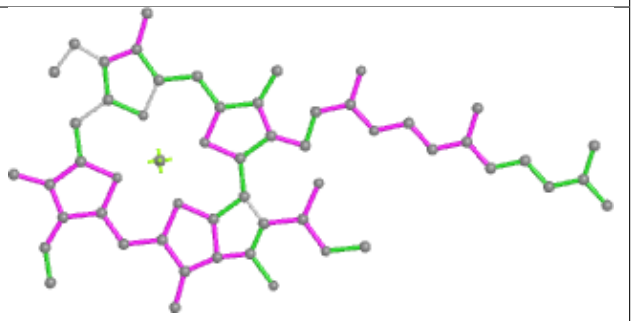


Rings

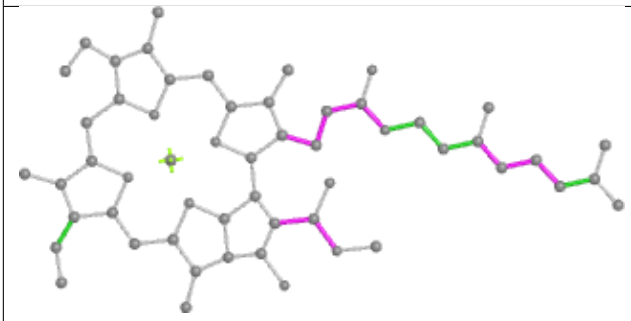
Ligand CLA B 1236



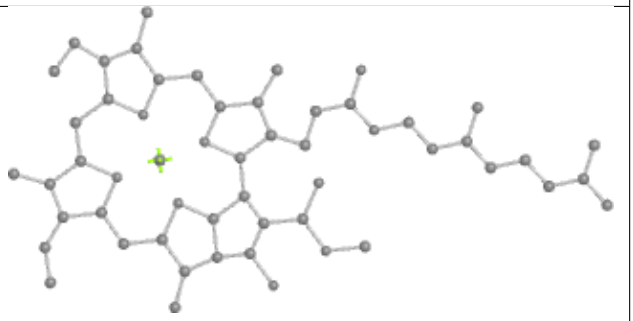
Bond lengths



Bond angles

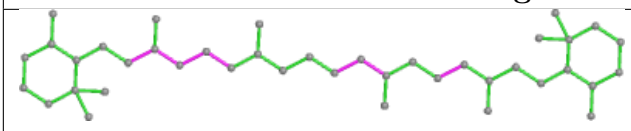


Torsions

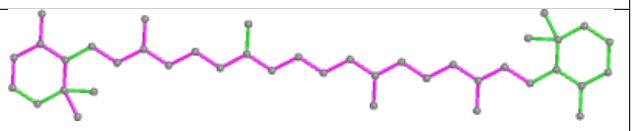


Rings

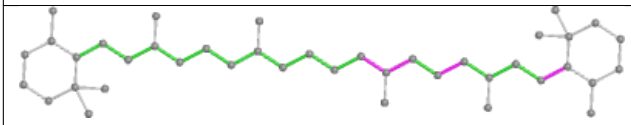
Ligand BCR B 4010



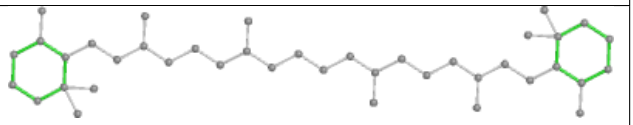
Bond lengths



Bond angles

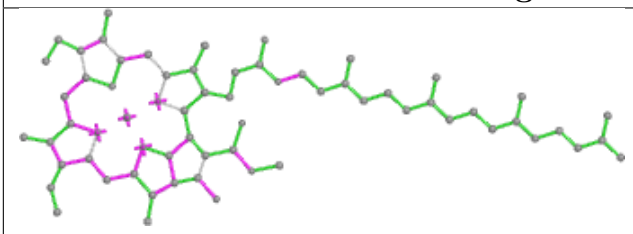


Torsions

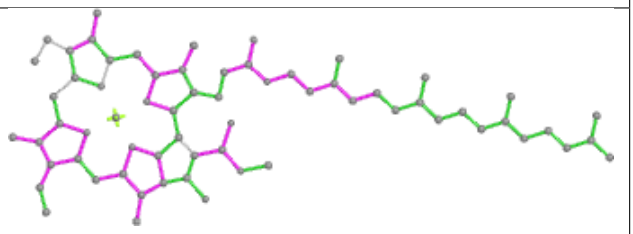


Rings

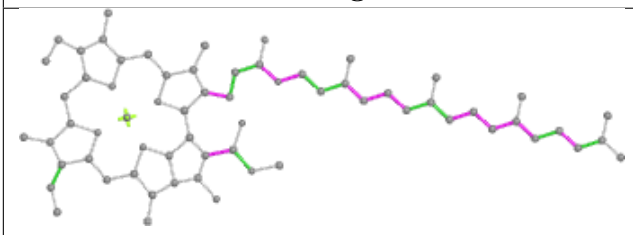
Ligand CLA B 1210



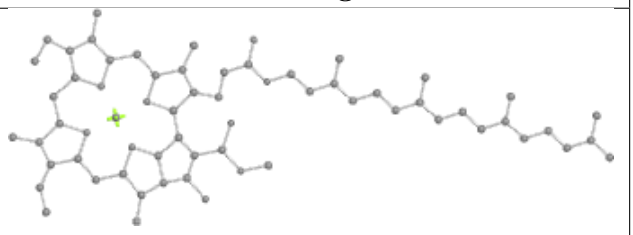
Bond lengths



Bond angles

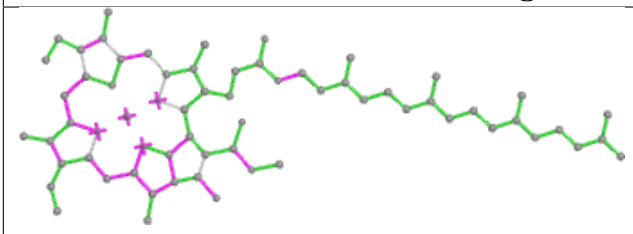


Torsions

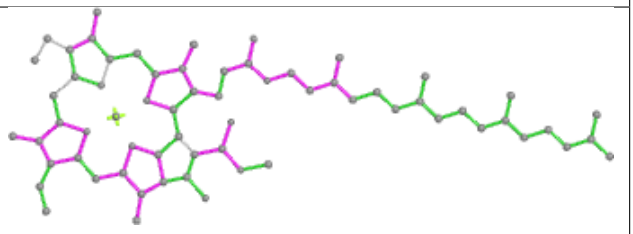


Rings

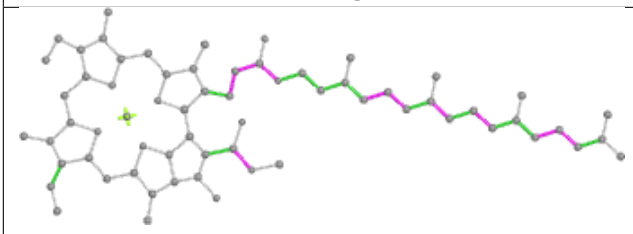
Ligand CLA b 1220



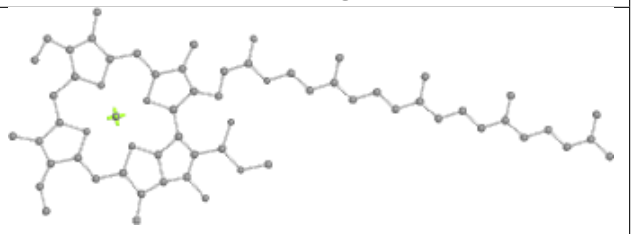
Bond lengths



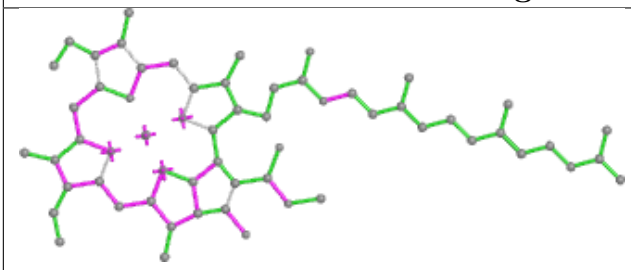
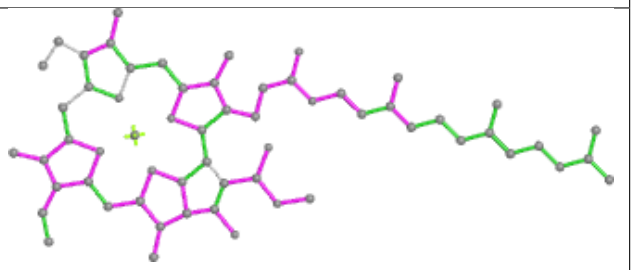
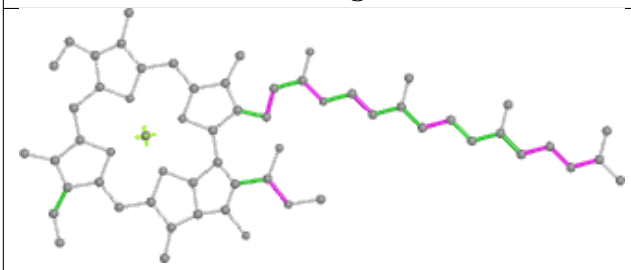
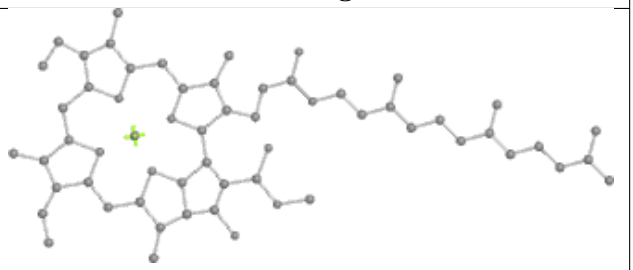
Bond angles

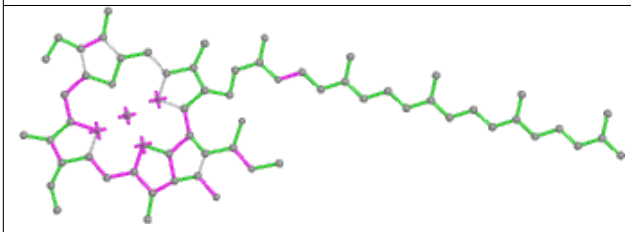
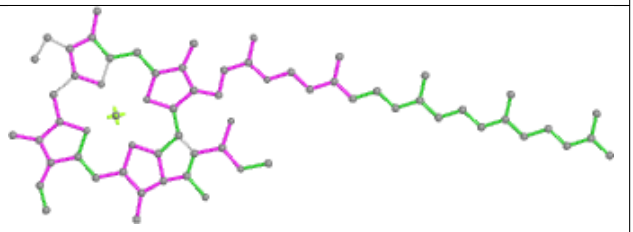
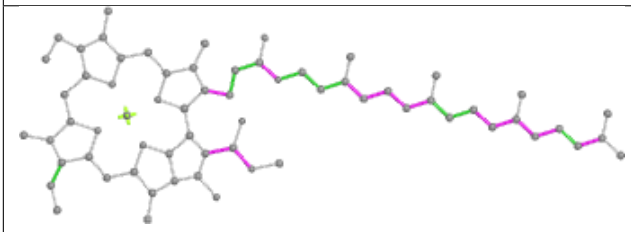
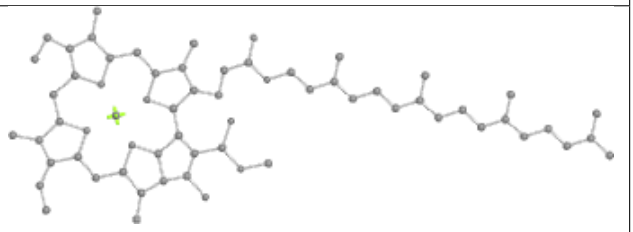


Torsions

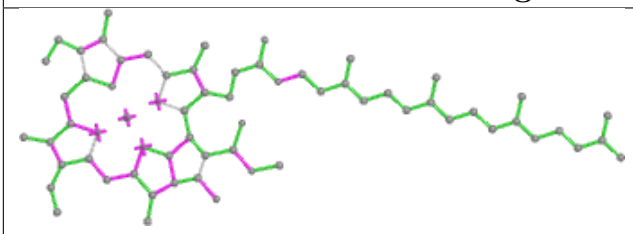


Rings

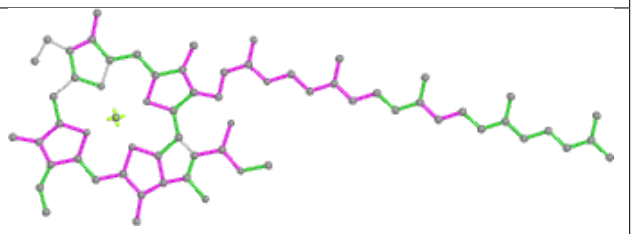
Ligand CLA H 1214	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA a 1117	
 Bond lengths	 Bond angles
 Torsions	 Rings

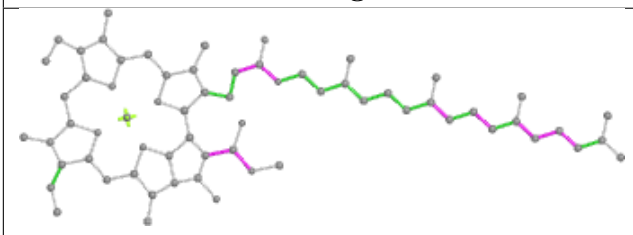
Ligand CLA H 1021



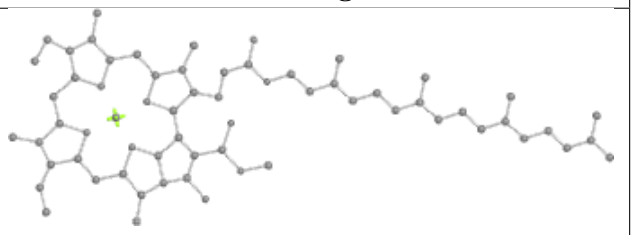
Bond lengths



Bond angles

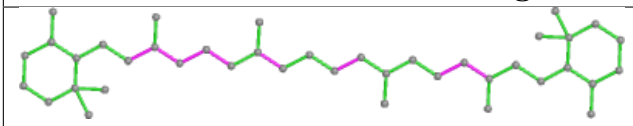


Torsions

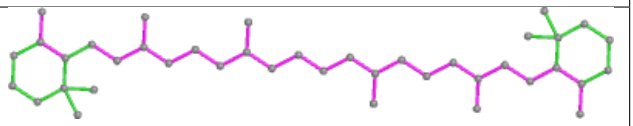


Rings

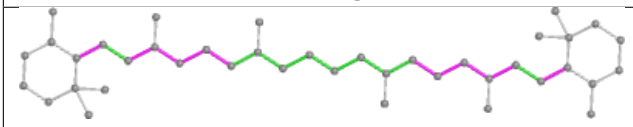
Ligand BCR B 4017



Bond lengths



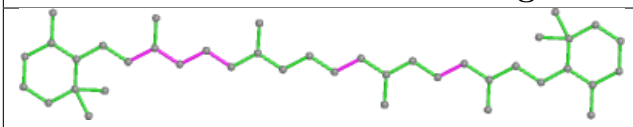
Bond angles



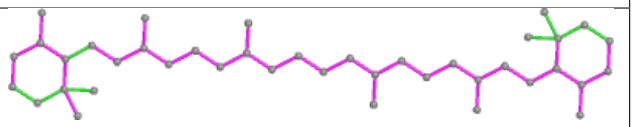
Torsions

Rings

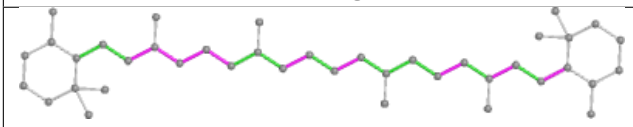
Ligand BCR a 4002



Bond lengths



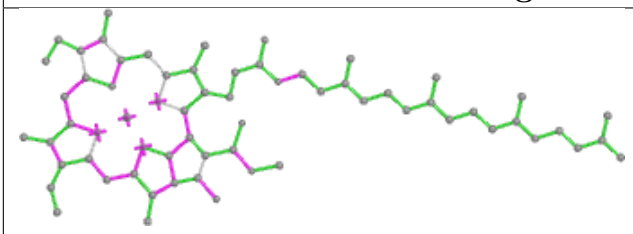
Bond angles



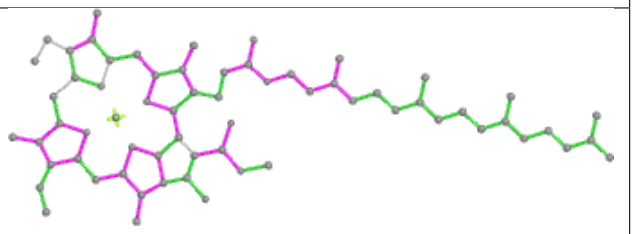
Torsions

Rings

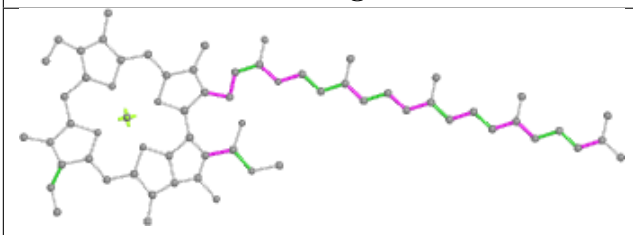
Ligand CLA B 1221



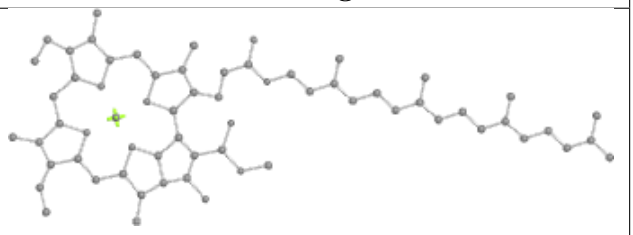
Bond lengths



Bond angles

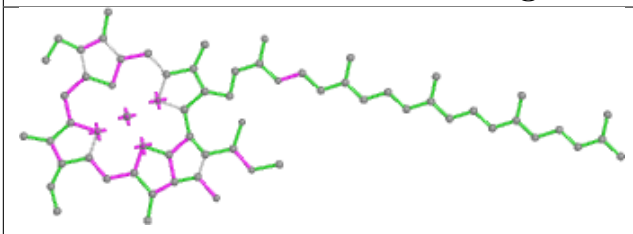


Torsions



Rings

Ligand CLA a 1127



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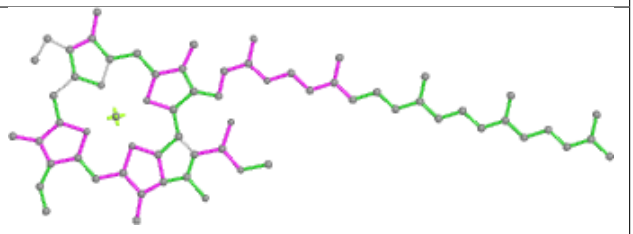
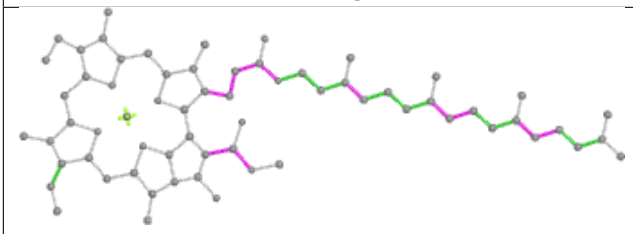
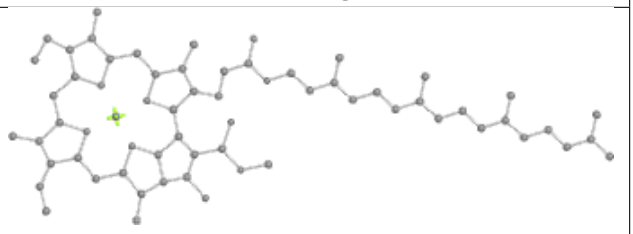


Bond angles

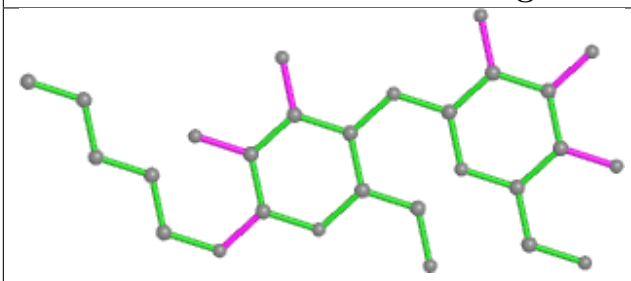


Torsions

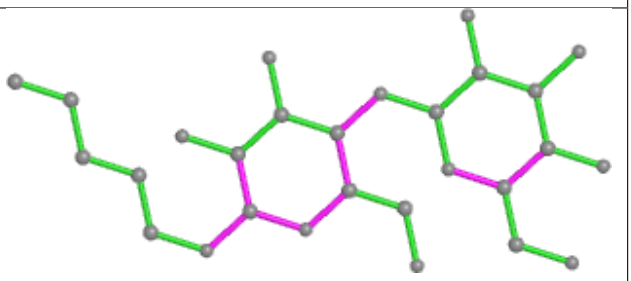


Rings

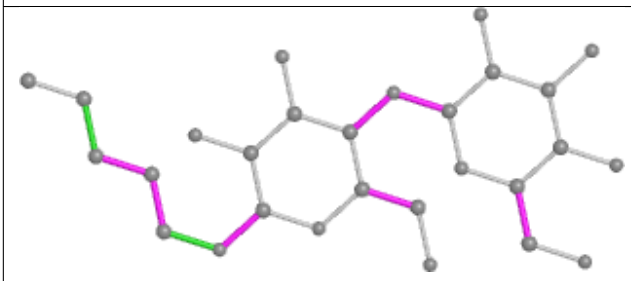
Ligand LMT a 6002



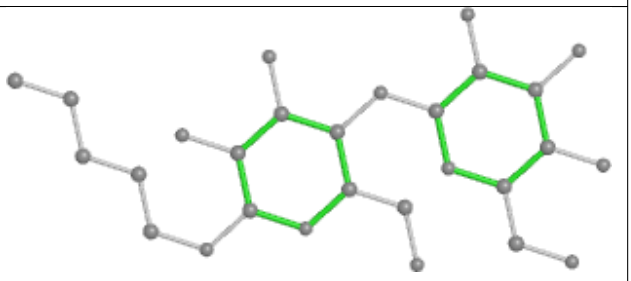
Bond lengths



Bond angles

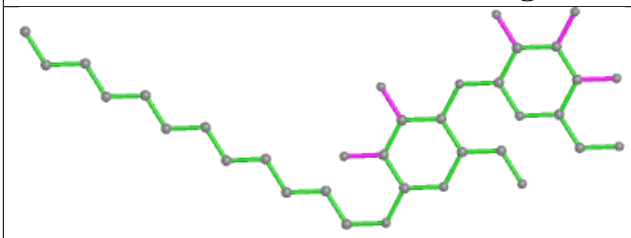


Torsions

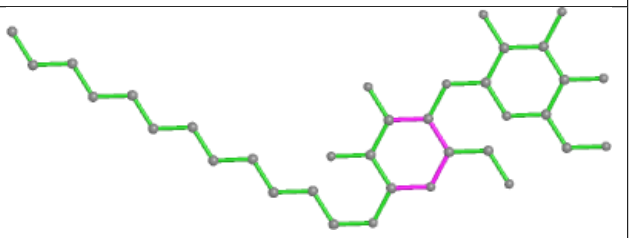


Rings

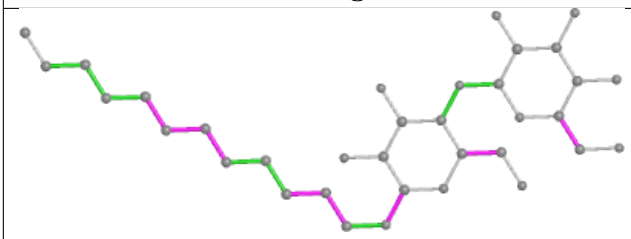
Ligand LMT I 6001



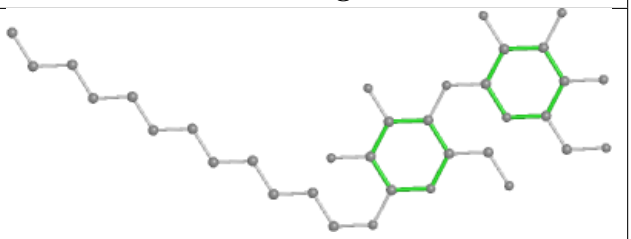
Bond lengths



Bond angles

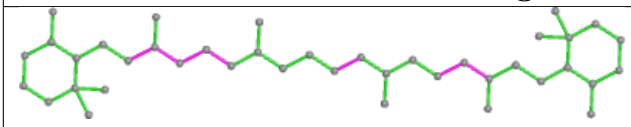


Torsions

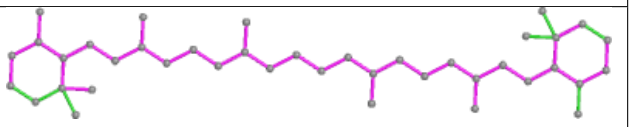


Rings

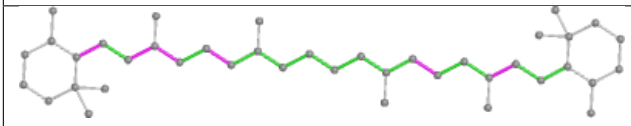
Ligand BCR L 4019



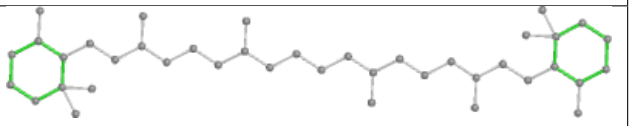
Bond lengths



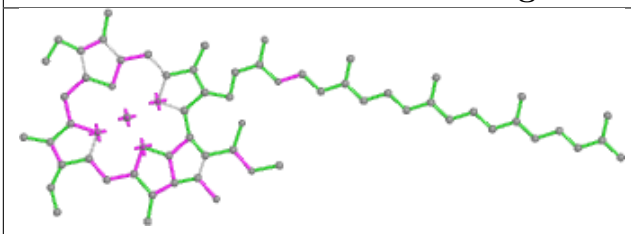
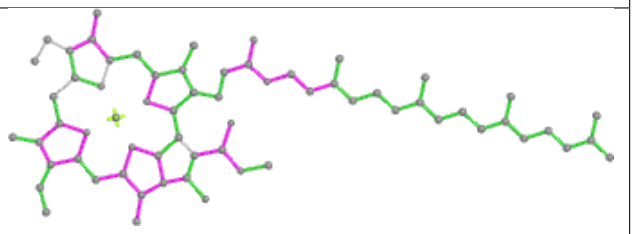
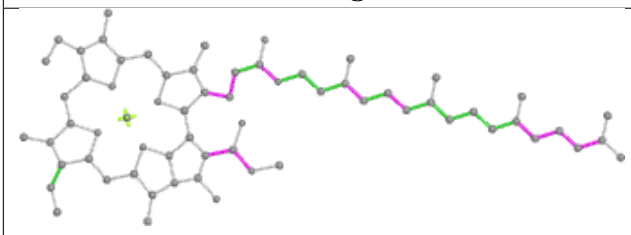
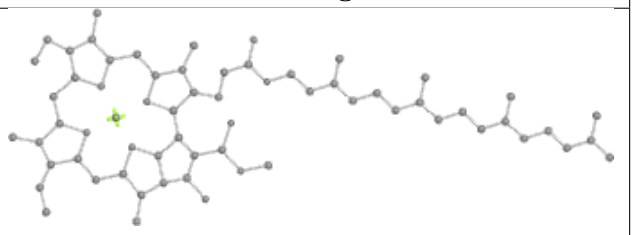
Bond angles

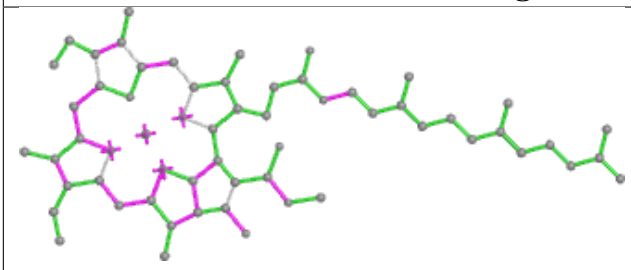
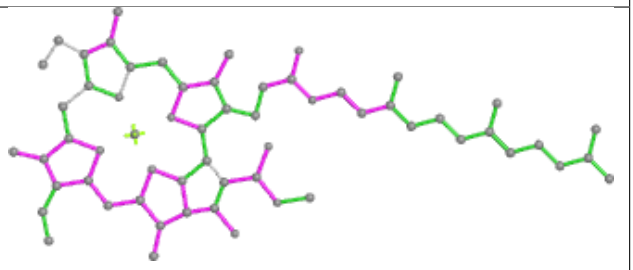
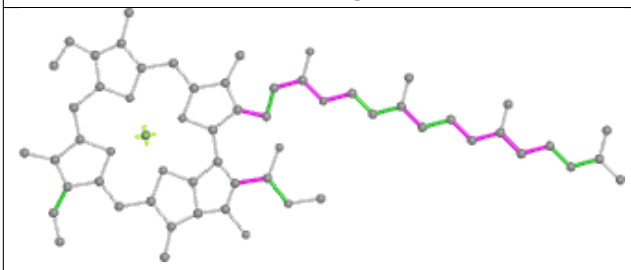
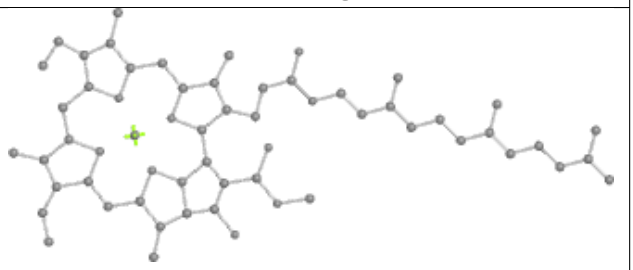


Torsions

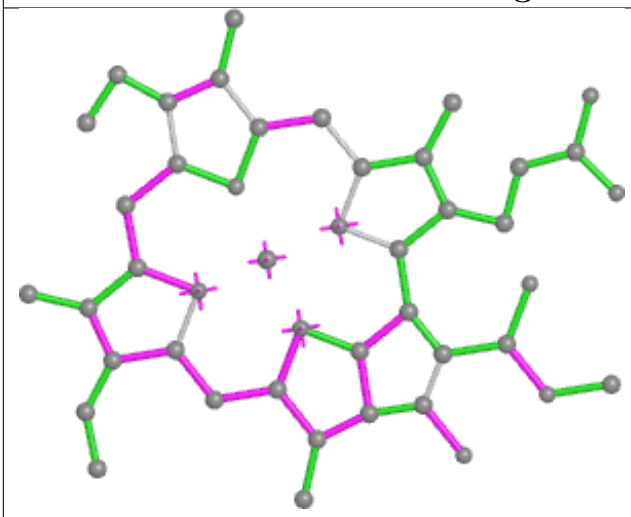


Rings

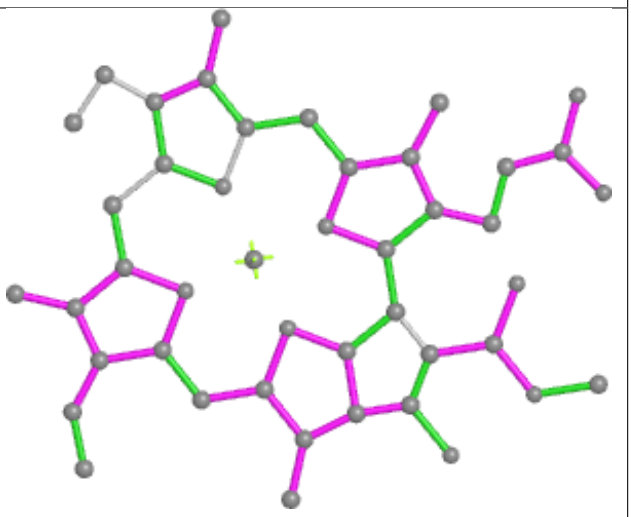
Ligand CLA b 1225	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA G 1123	
 Bond lengths	 Bond angles
 Torsions	 Rings

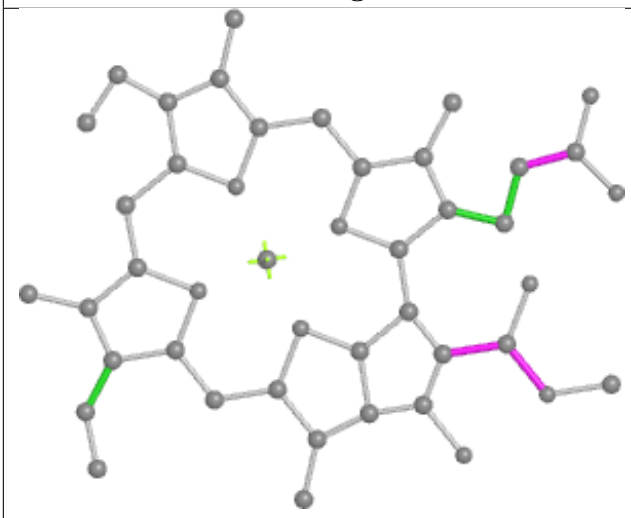
Ligand CLA G 1101



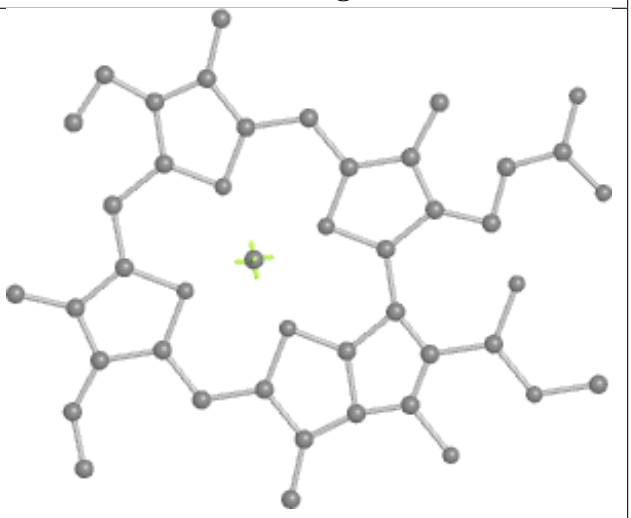
Bond lengths



Bond angles

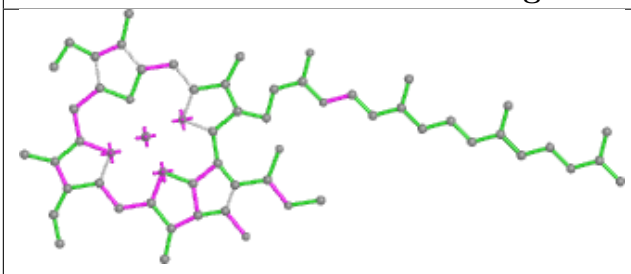


Torsions

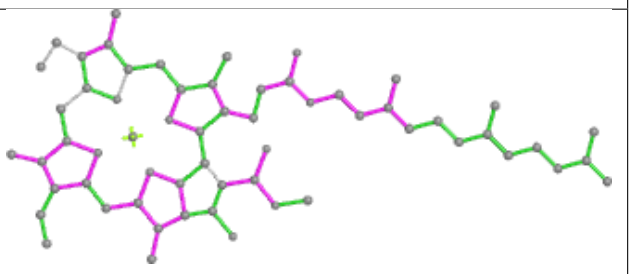


Rings

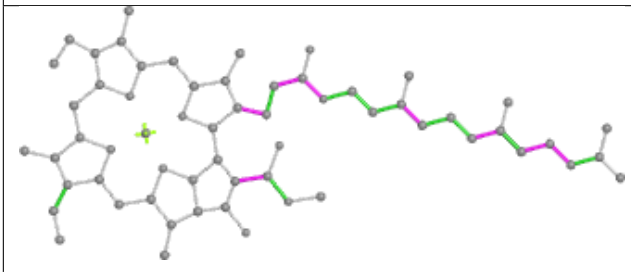
Ligand CLA l 1502



Bond lengths



Bond angles



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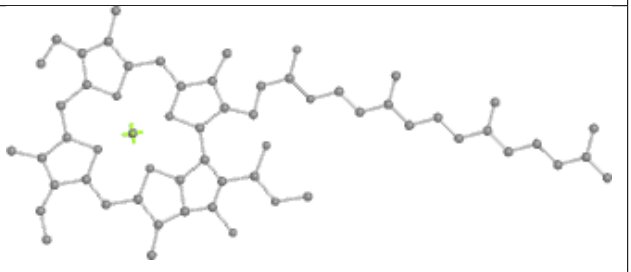
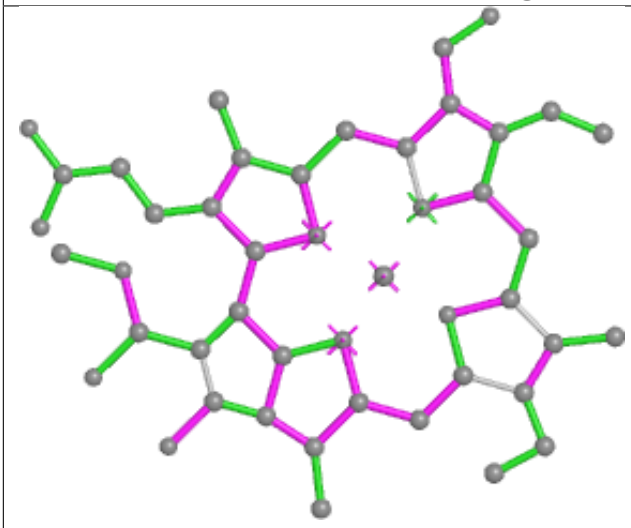


Rings

Ligand F6C G 1121



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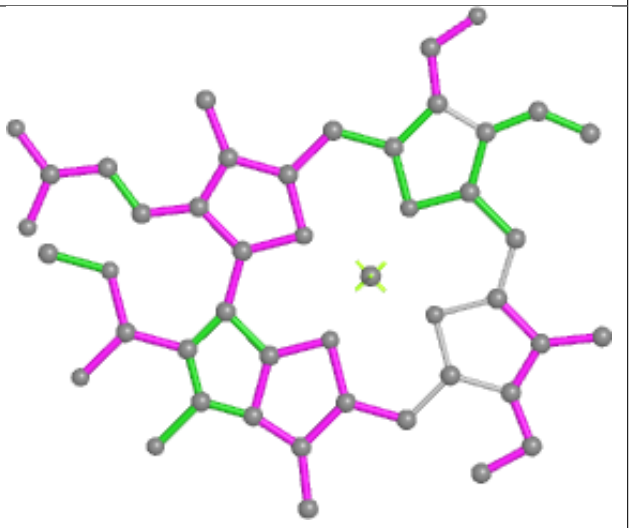
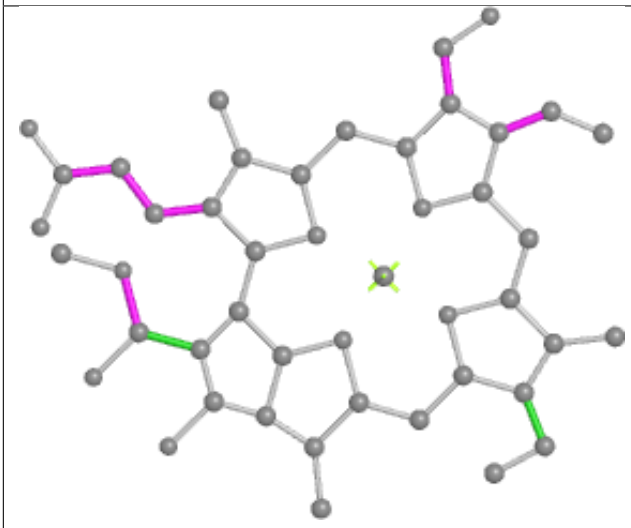


Bond angles



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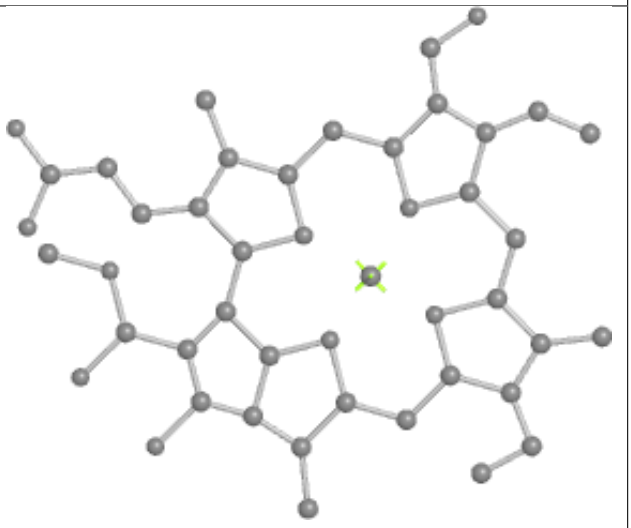
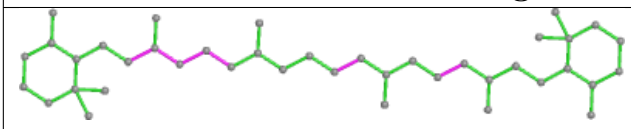


Rings

Ligand BCR G 4002



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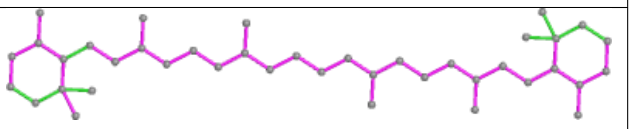
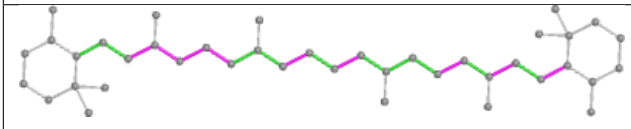


Bond angles



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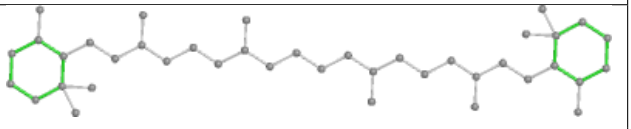
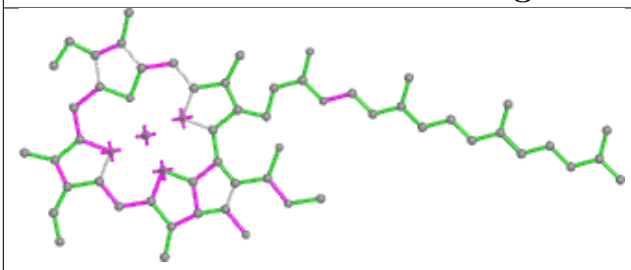


Rings

Ligand CLA G 1106



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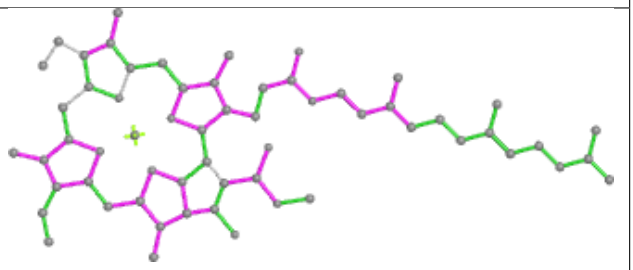
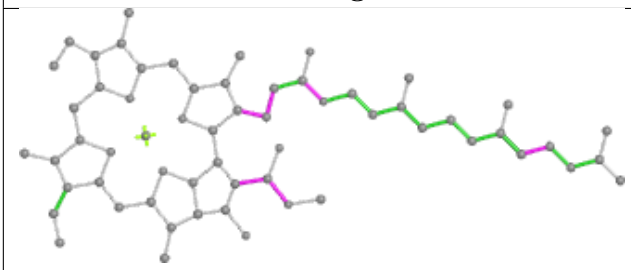


Bond angles



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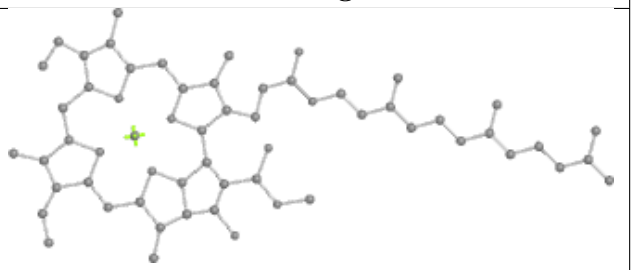
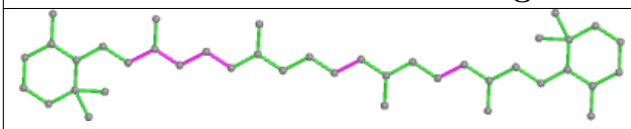


Rings

Ligand BCR B 4005



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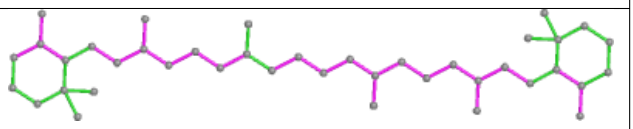
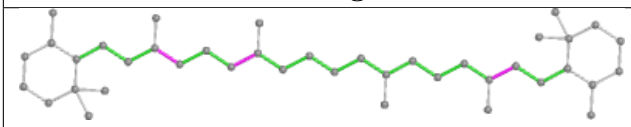


Bond angles



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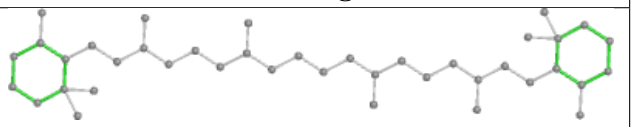
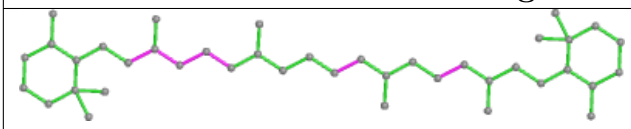


Rings

Ligand BCR a 4001



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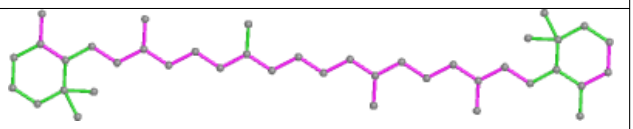
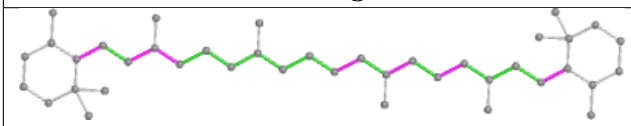


Bond angles



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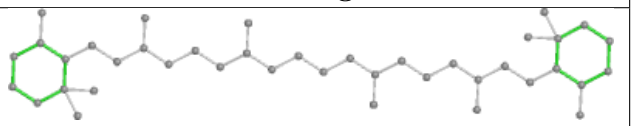
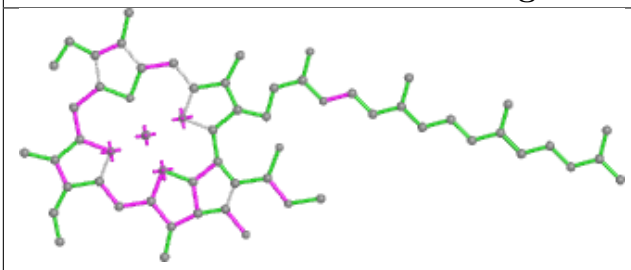


Rings

Ligand CLA b 1229



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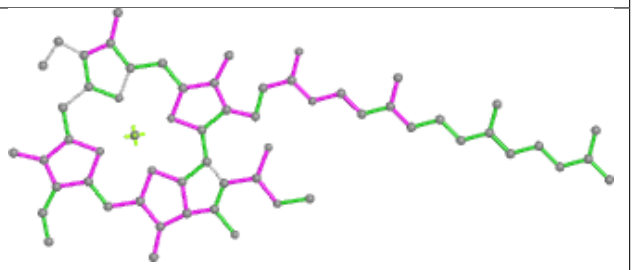
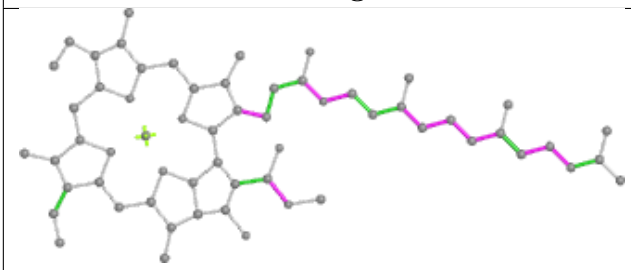


Bond angles



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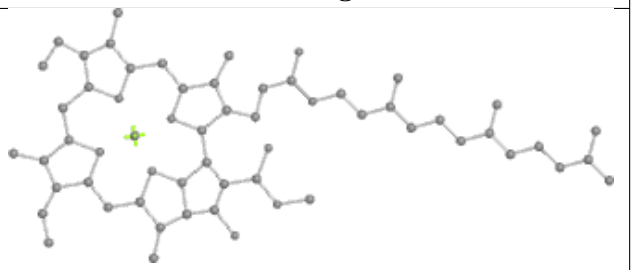
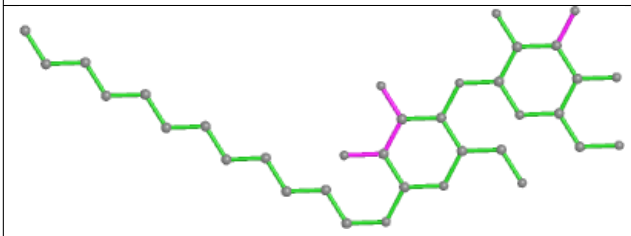


Rings

Ligand LMT B 6003



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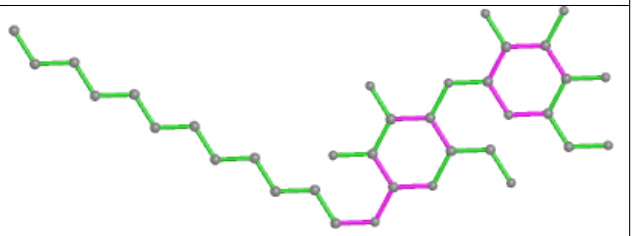
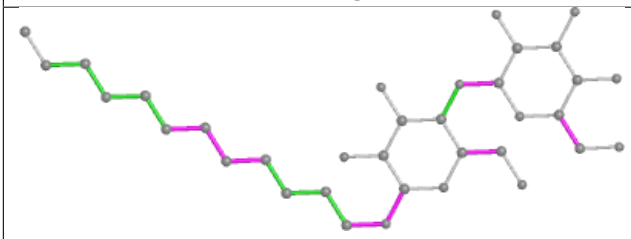


Bond angles



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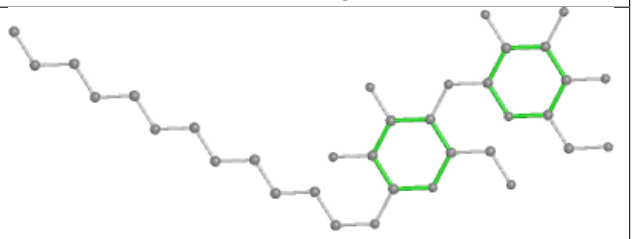
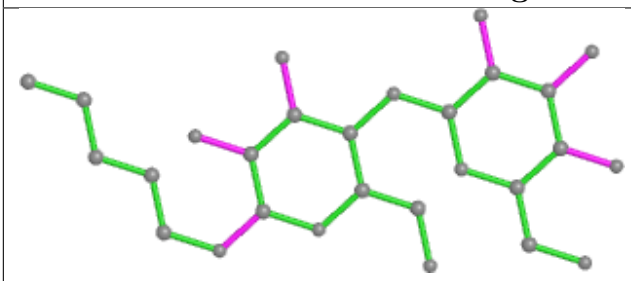


Rings

Ligand LMT G 6002



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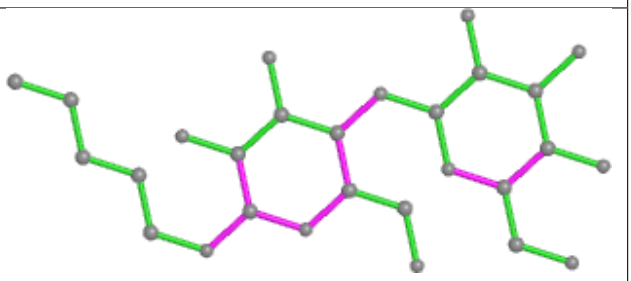
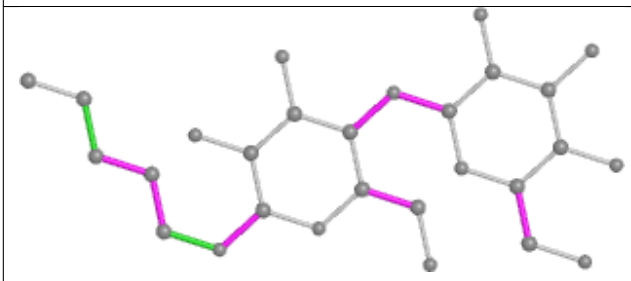


Bond angles



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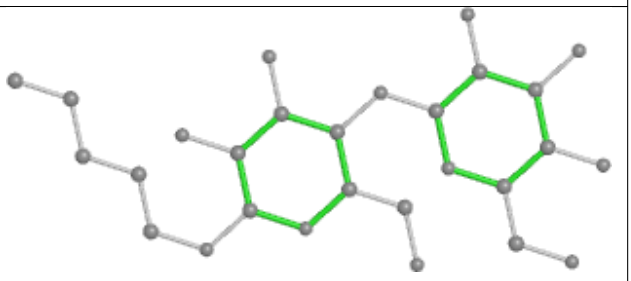
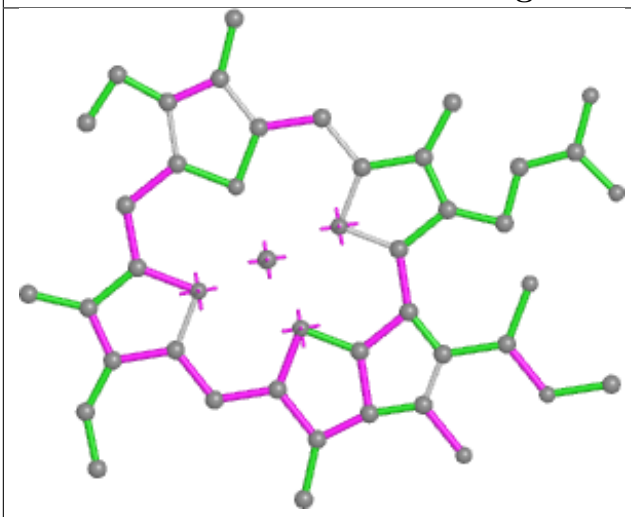


Rings

Ligand CLA T 1401



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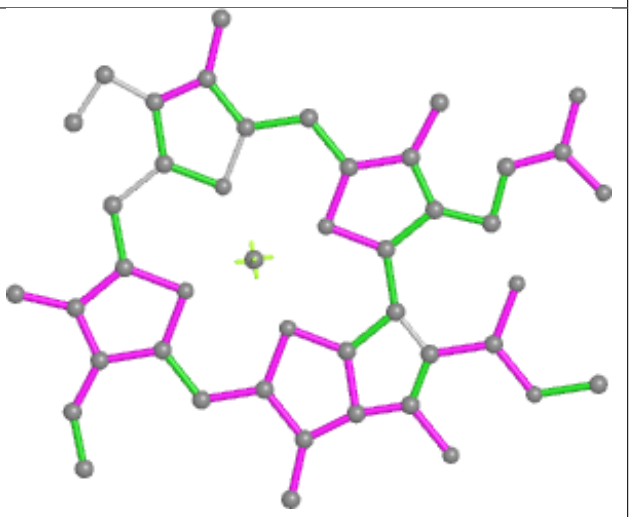
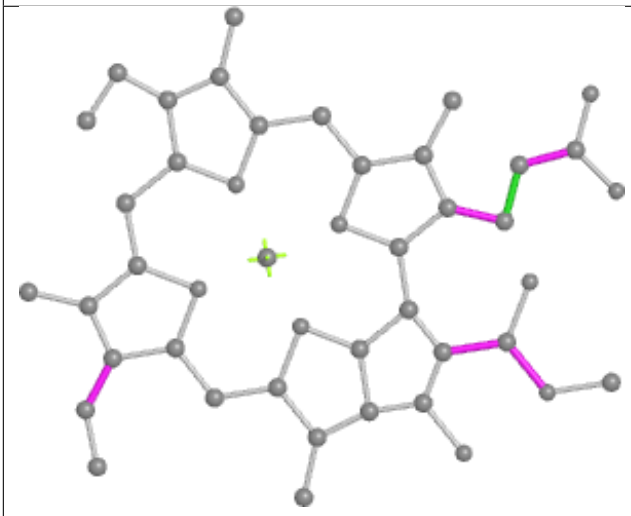


Bond angles



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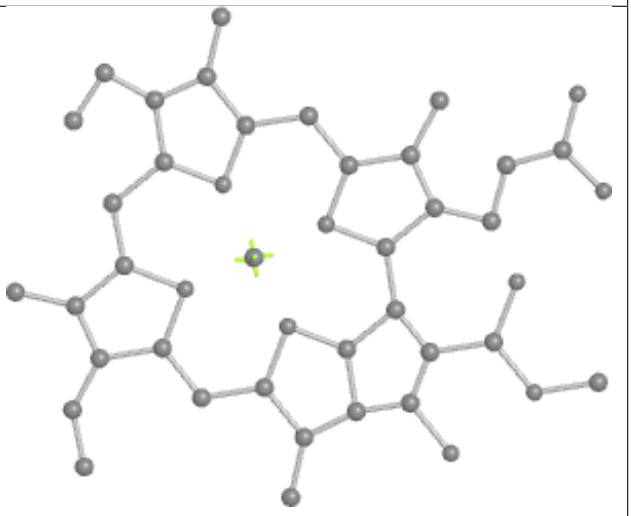
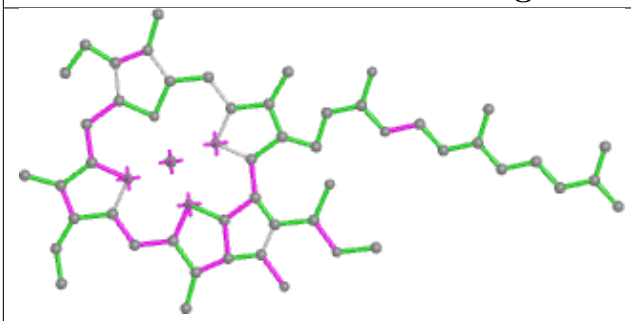


Rings

Ligand CLA A 1124



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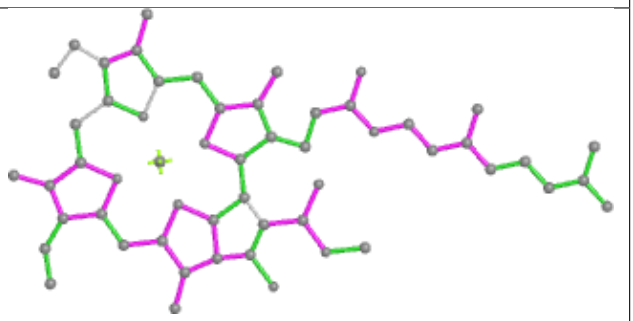
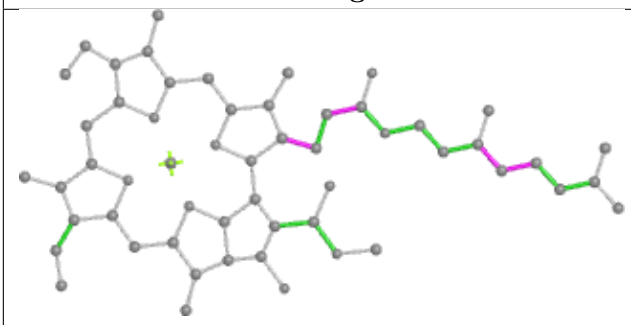


Bond angles



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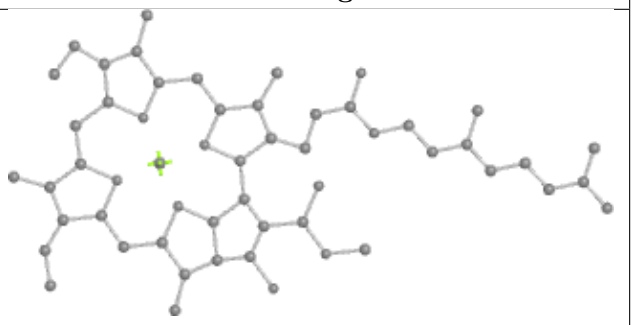
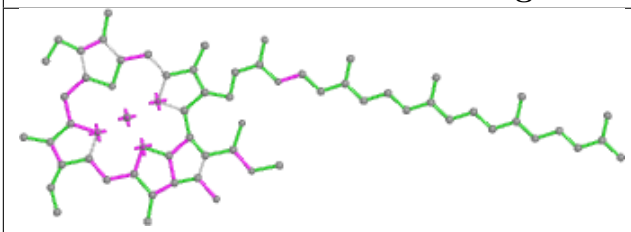


Rings

Ligand CLA B 1223



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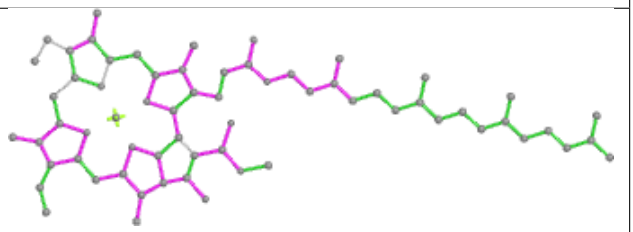
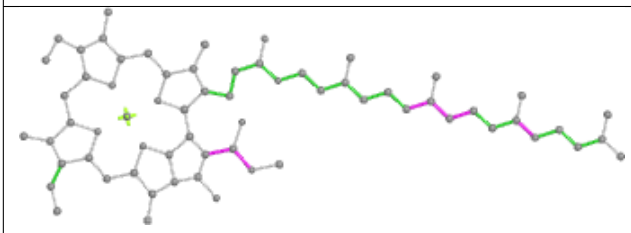


Bond angles



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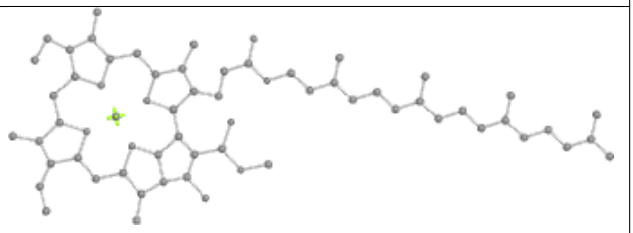
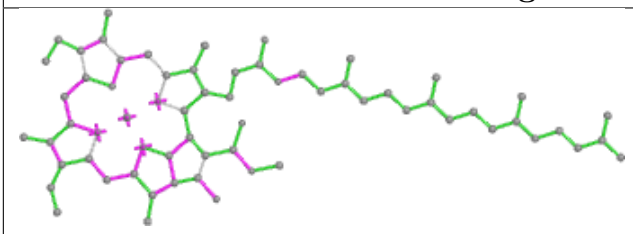
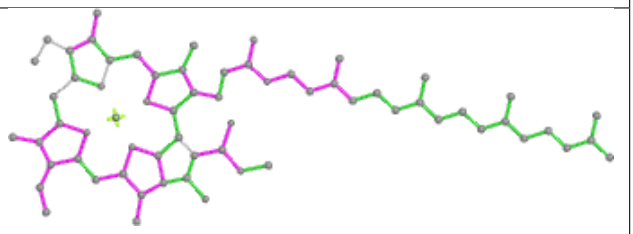


Rings

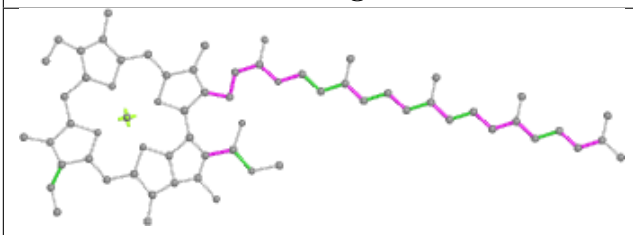
Ligand CLA b 1203



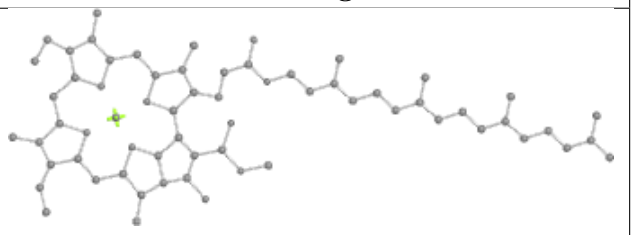
Bond lengths



Bond angles

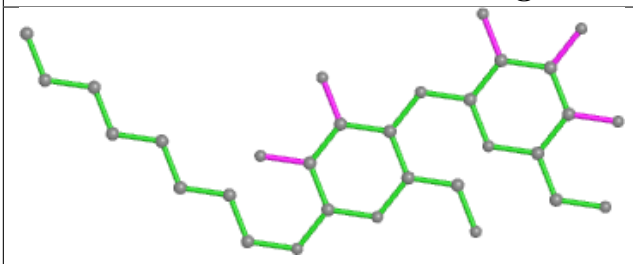


Torsions

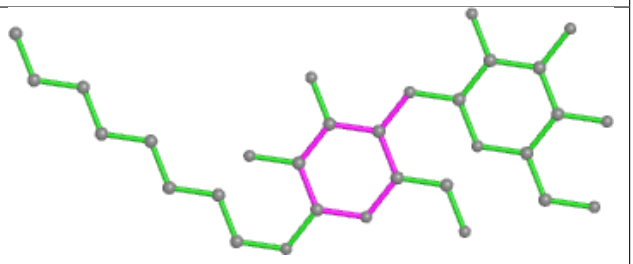


Rings

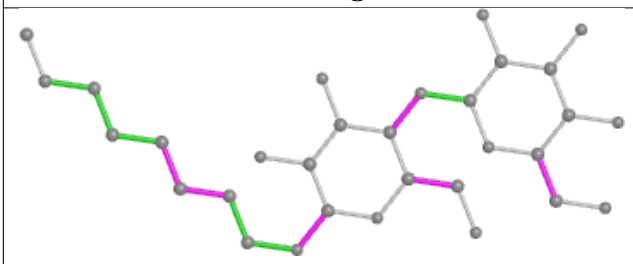
Ligand LMT b 6004



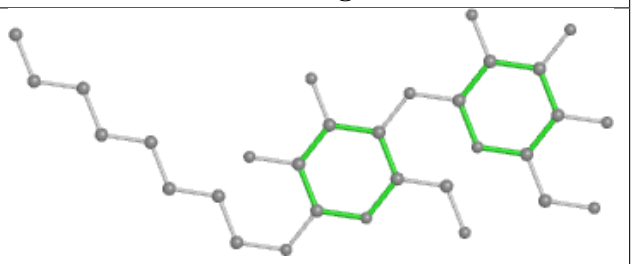
Bond lengths



Bond angles

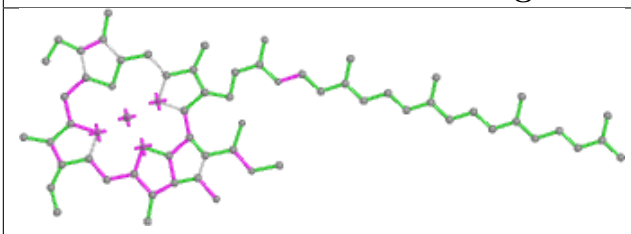


Torsions

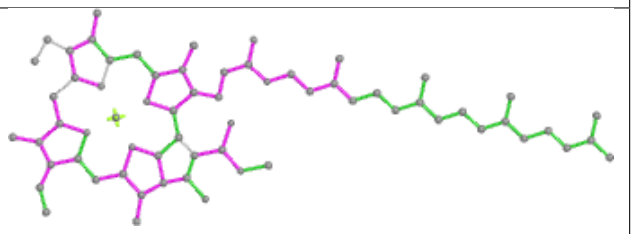


Rings

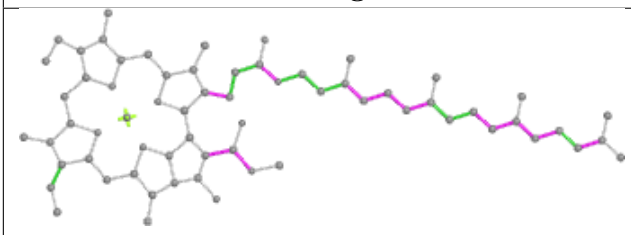
Ligand CLA A 1117



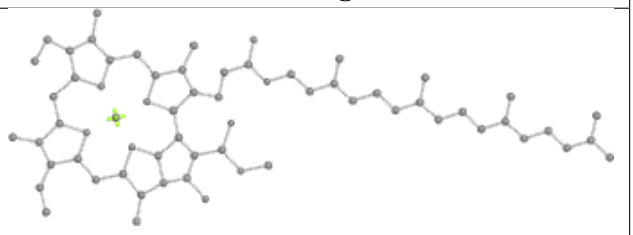
Bond lengths



Bond angles

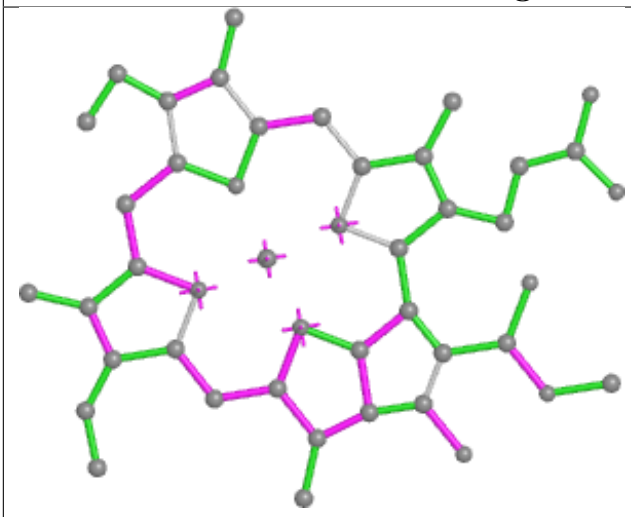


Torsions



Rings

Ligand CLA G 1110



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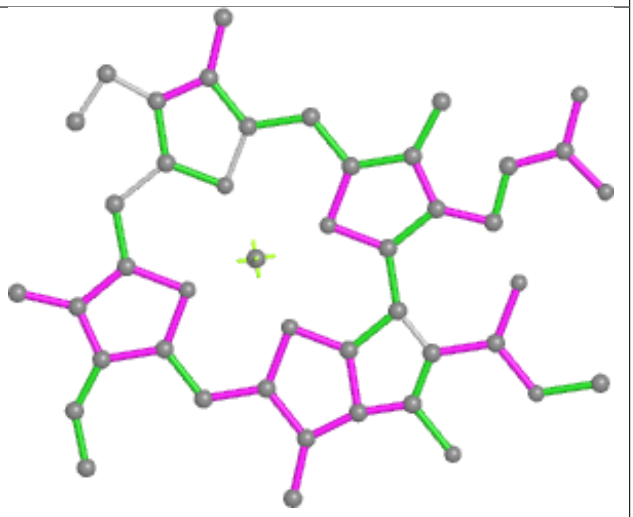
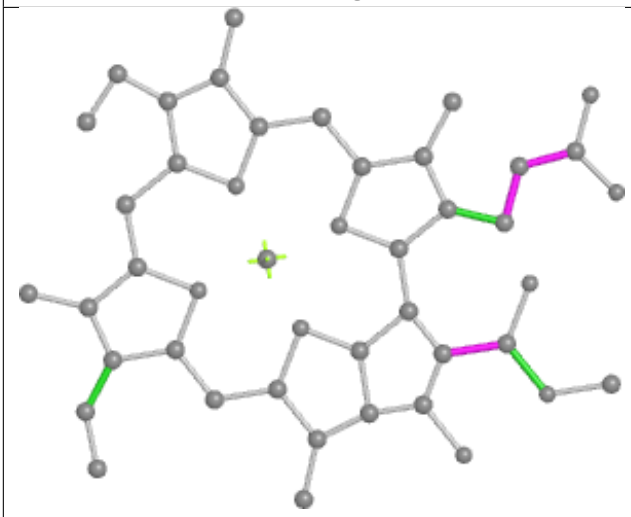
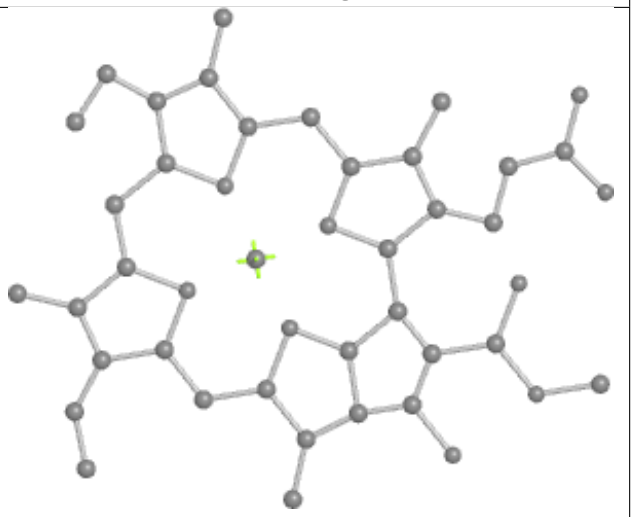


Bond angles

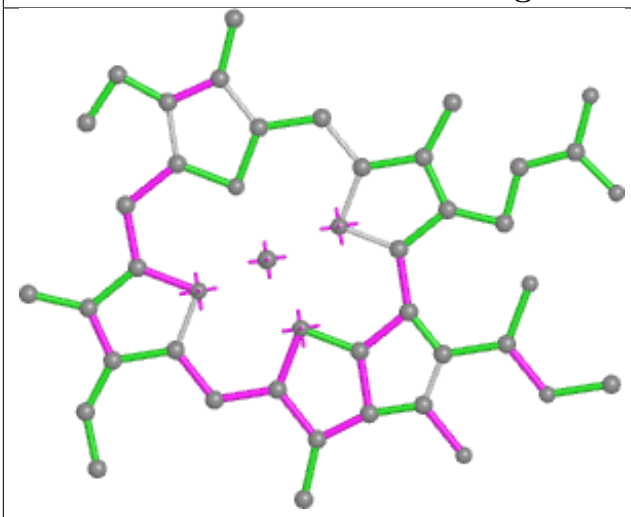


Torsions

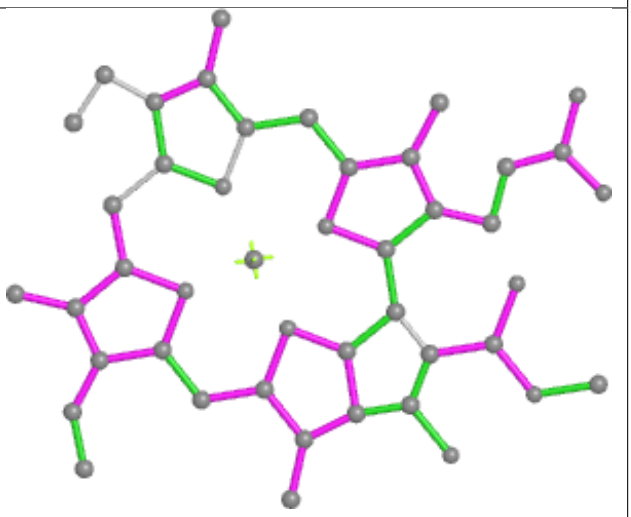


Rings

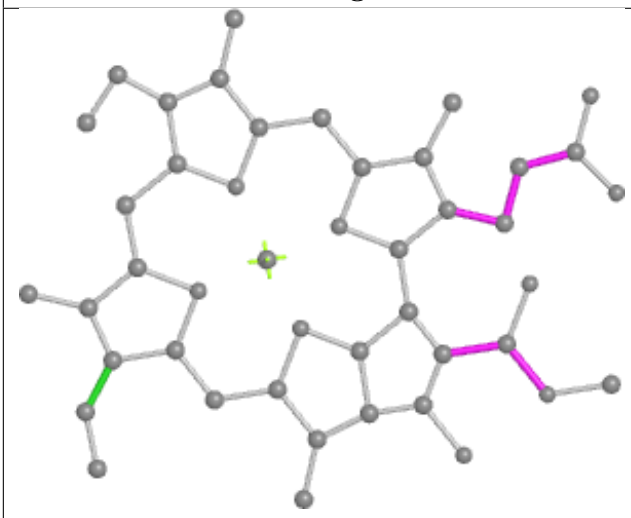
Ligand CLA H 1212



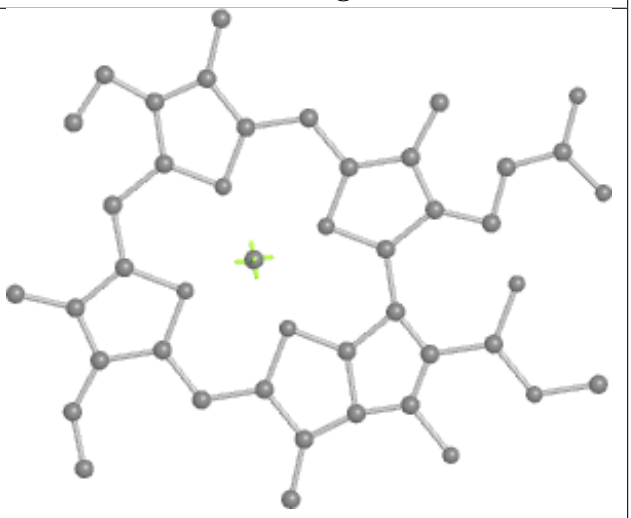
Bond lengths



Bond angles

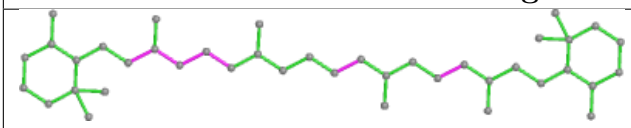


Torsions



Rings

Ligand BCR i 4018



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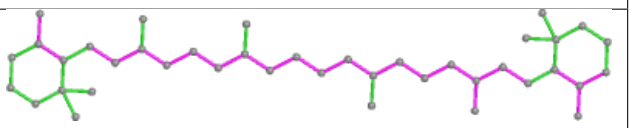
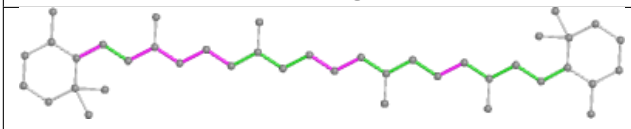


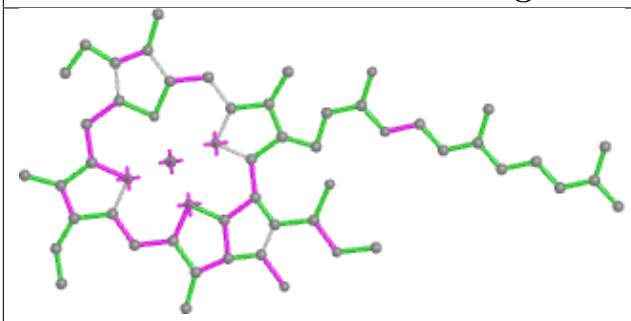
Bond angles



Torsions

Rings

Ligand CLA A 1122



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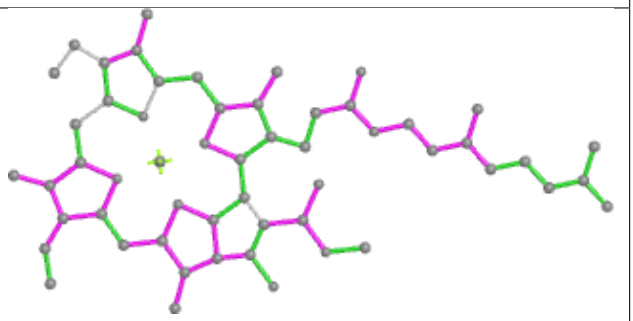
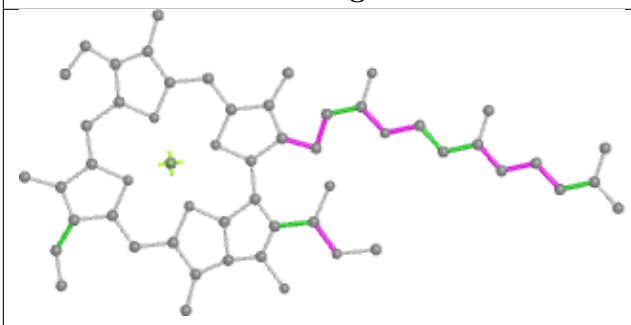
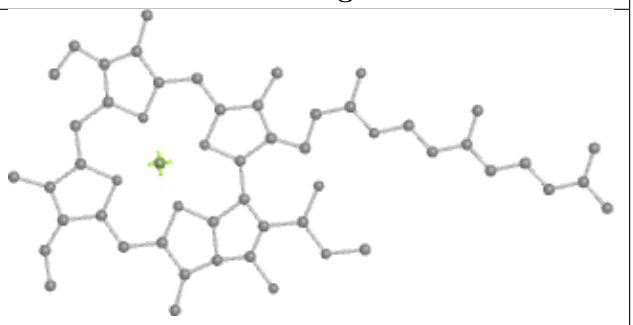


Bond angles

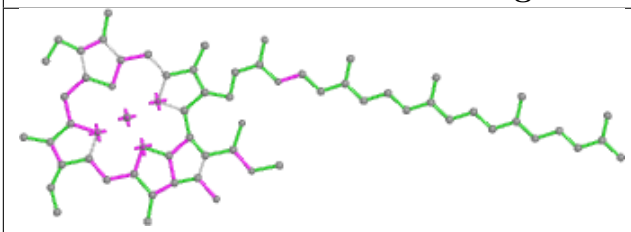


Torsions



Rings

Ligand CLA H 1203



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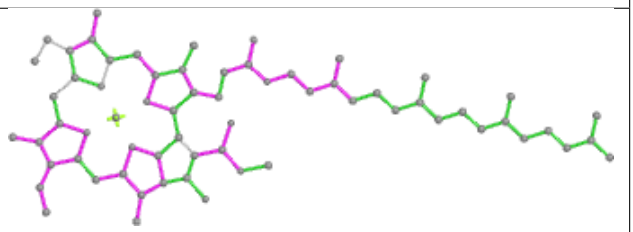
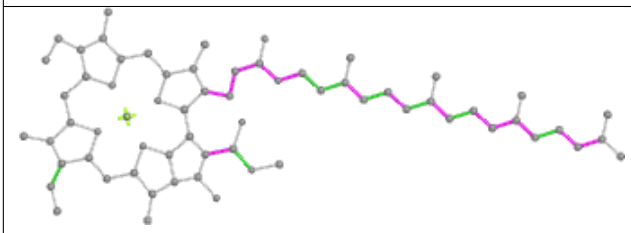


Bond angles



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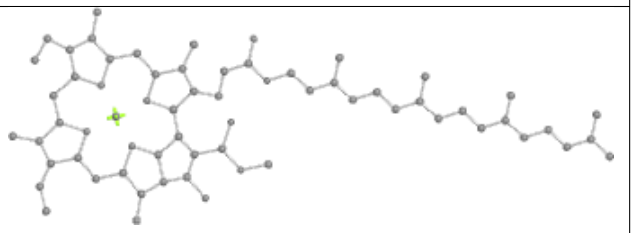
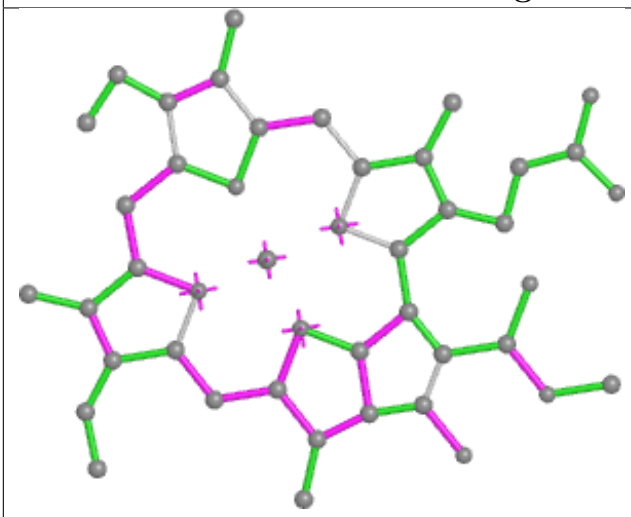
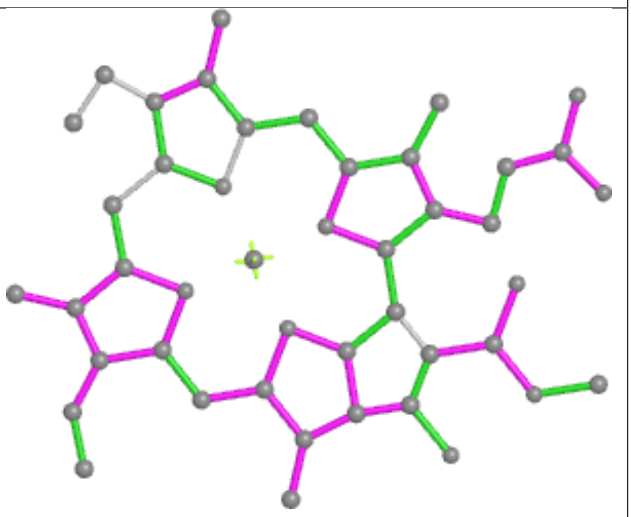


Rings

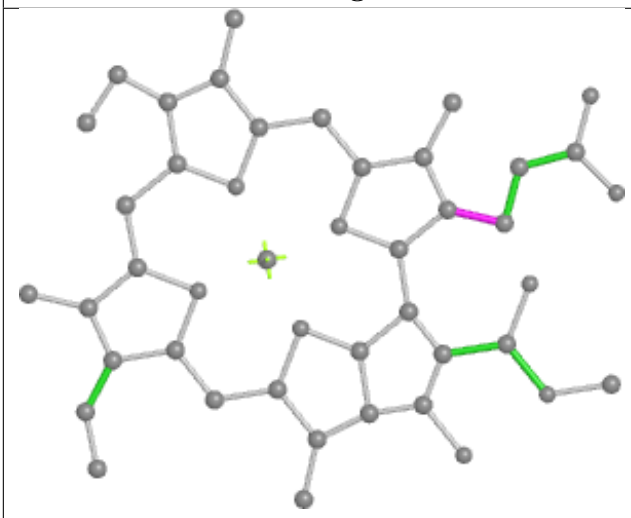
Ligand CLA H 1209



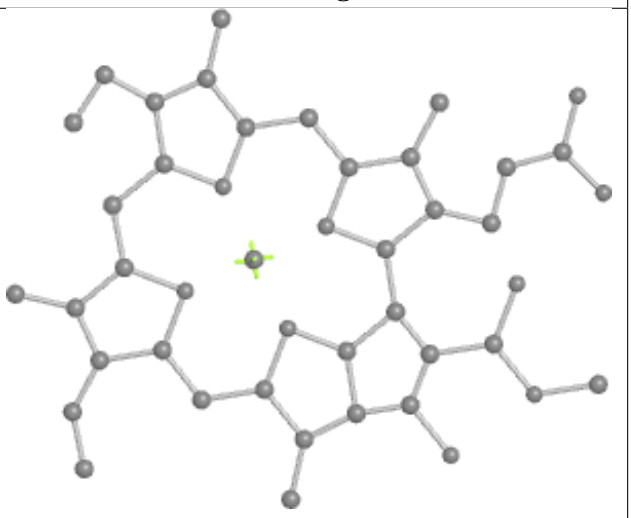
Bond lengths



Bond angles

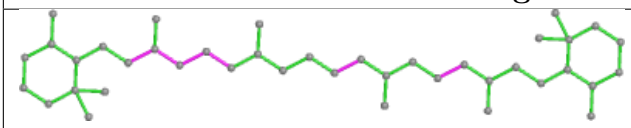


Torsions

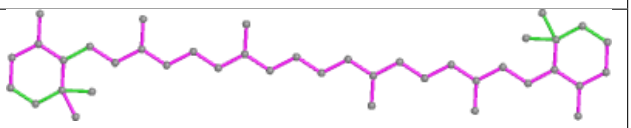


Rings

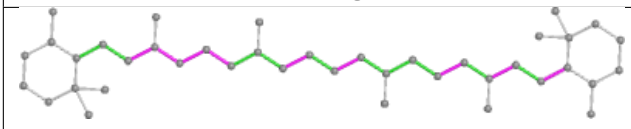
Ligand BCR A 4002



Bond lengths



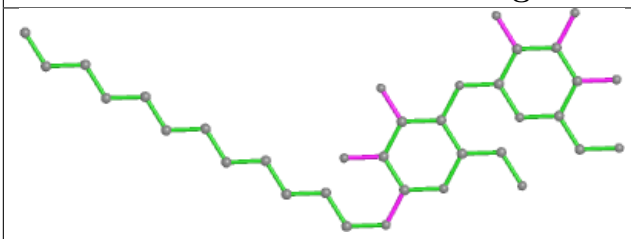
Bond angles



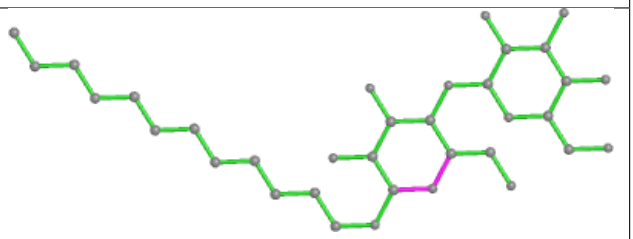
Torsions

Rings

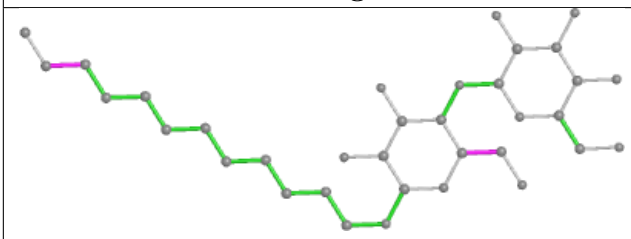
Ligand LMT B 6002



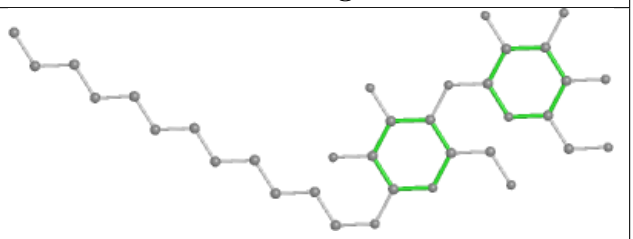
Bond lengths



Bond angles

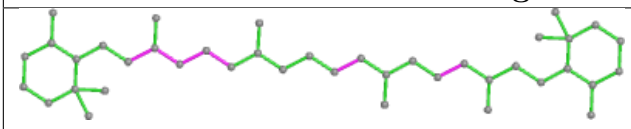


Torsions



Rings

Ligand BCR H 4014



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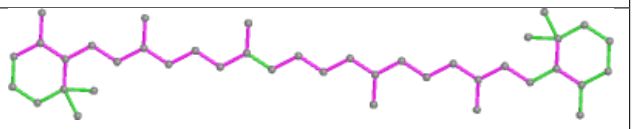
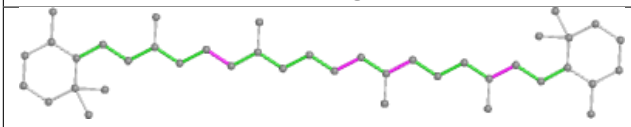


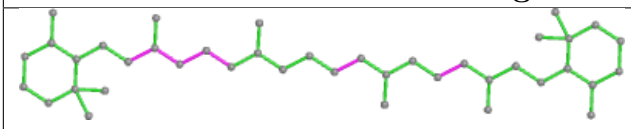
Bond angles



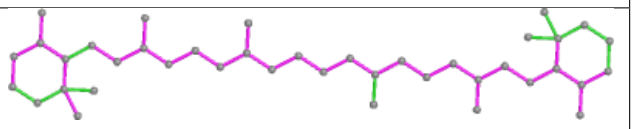
Torsions

Rings

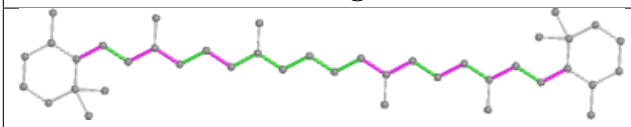
Ligand BCR A 4006



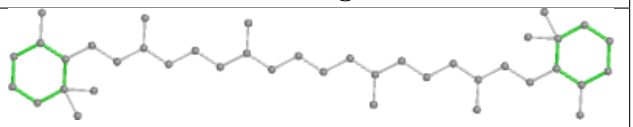
Bond lengths



Bond angles

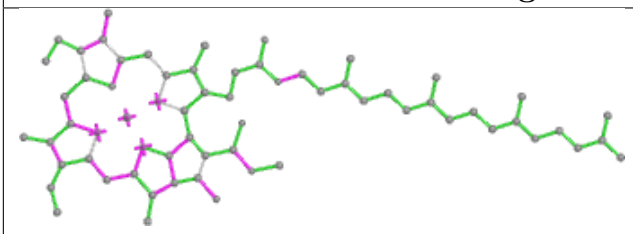


Torsions

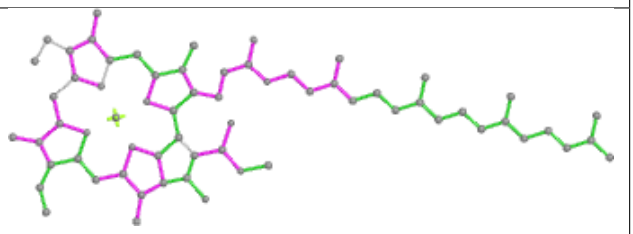


Rings

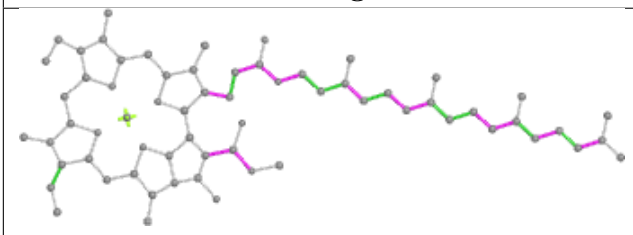
Ligand CLA b 1226



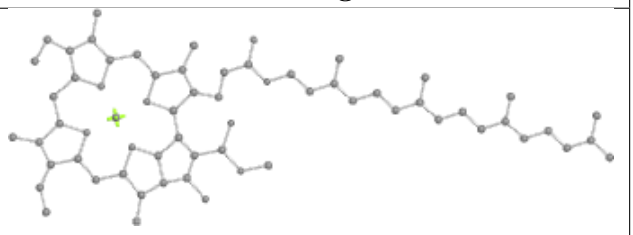
Bond lengths



Bond angles

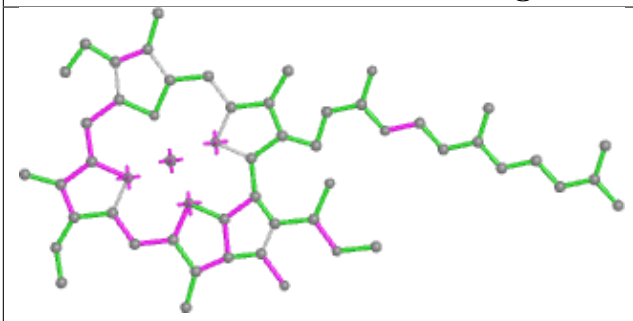


Torsions

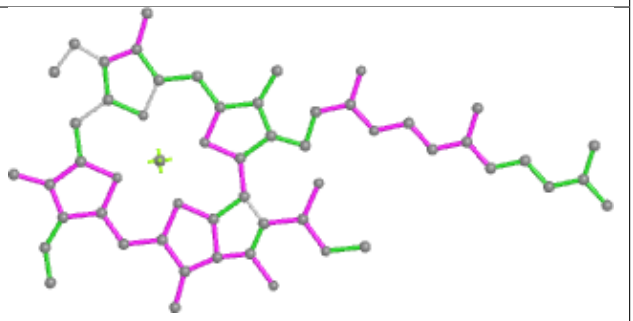


Rings

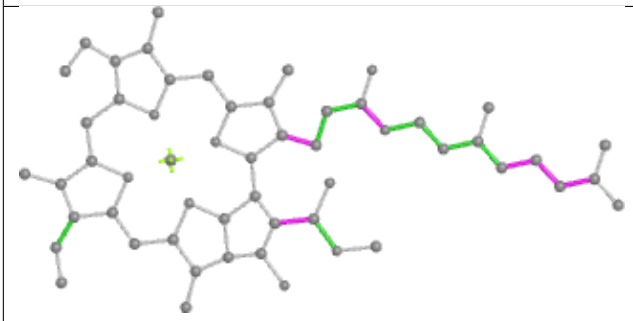
Ligand CLA H 1022



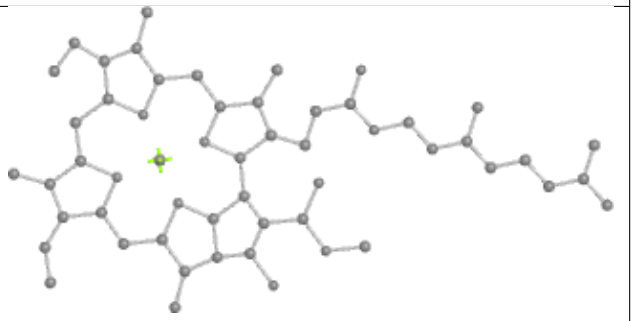
Bond lengths



Bond angles

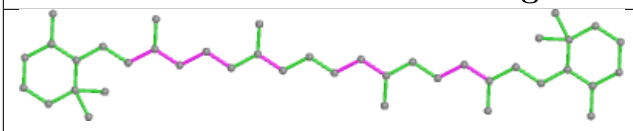


Torsions

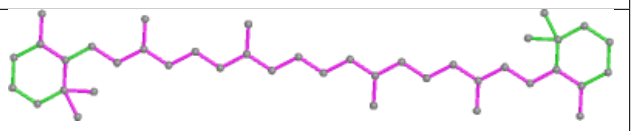


Rings

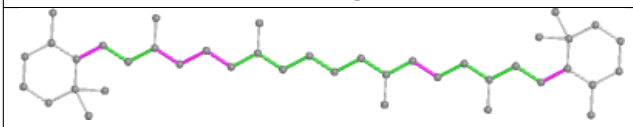
Ligand BCR i 4020



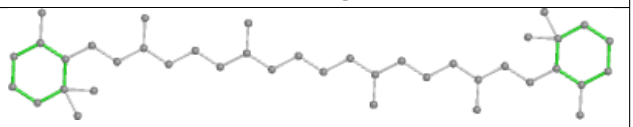
Bond lengths



Bond angles

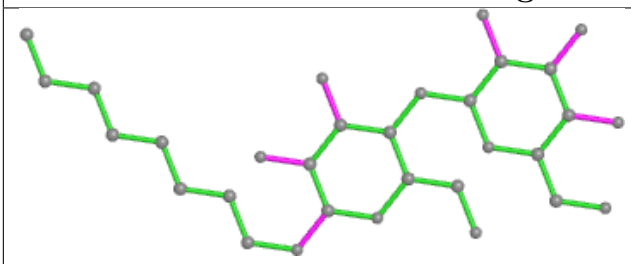


Torsions

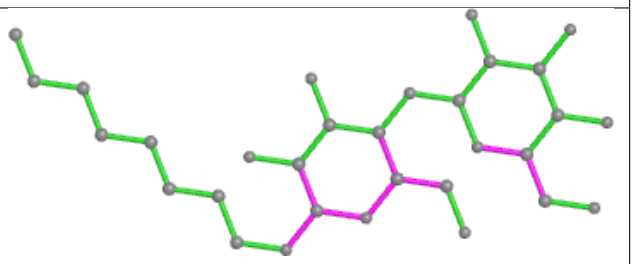


Rings

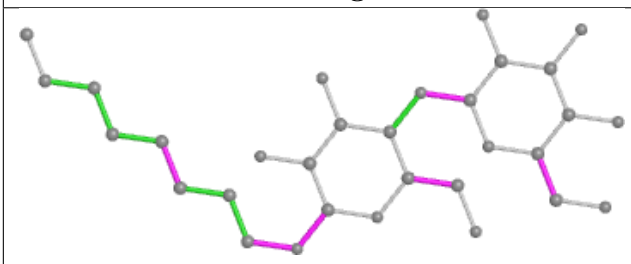
Ligand LMT a 6001



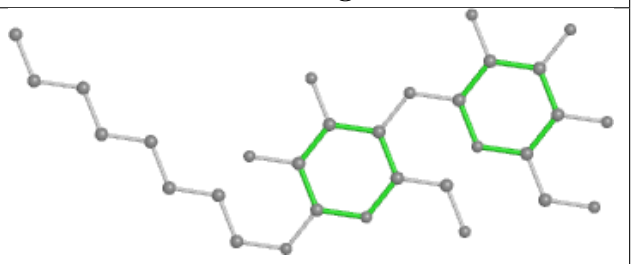
Bond lengths



Bond angles

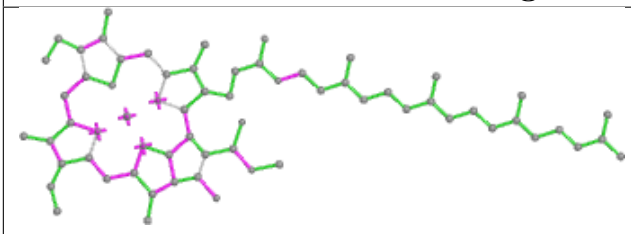


Torsions

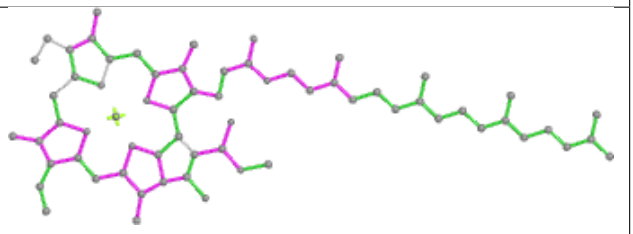


Rings

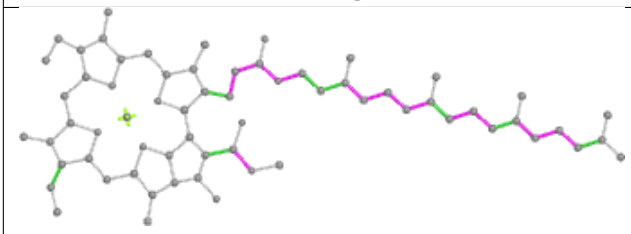
Ligand CLA a 1136



Bond lengths



Bond angles



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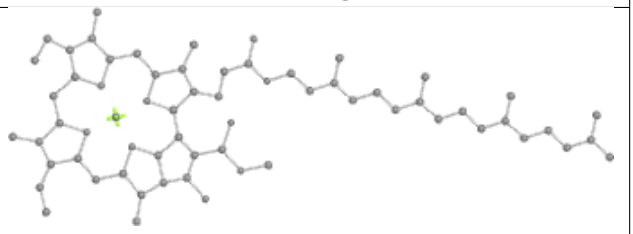
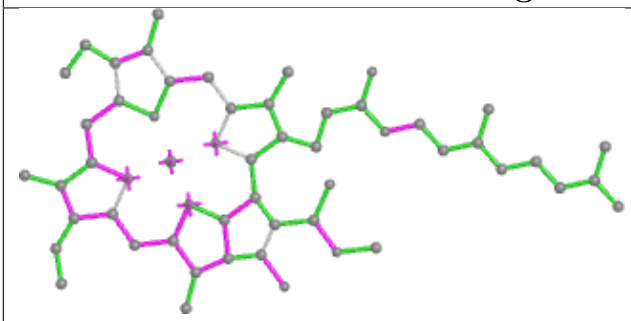


Rings

Ligand CLA B 1228



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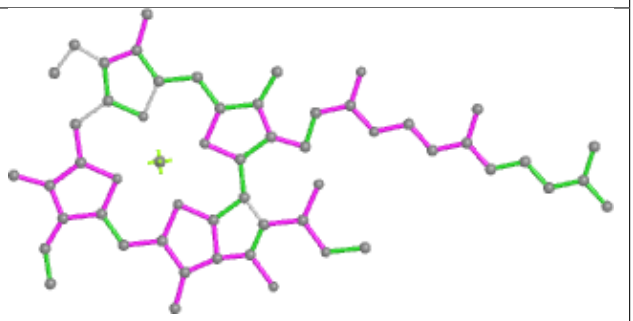
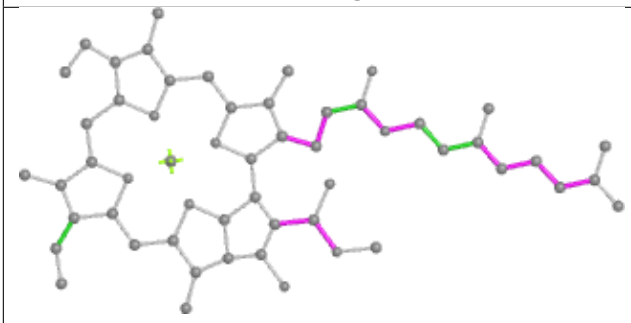
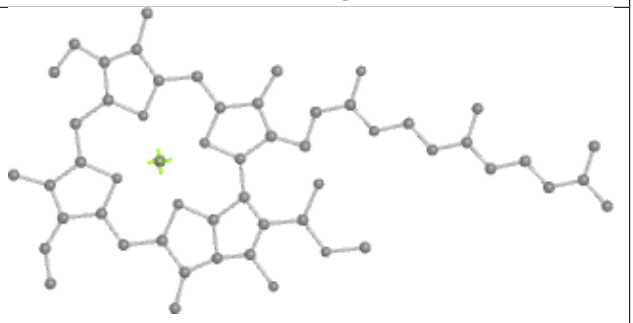


Bond angles

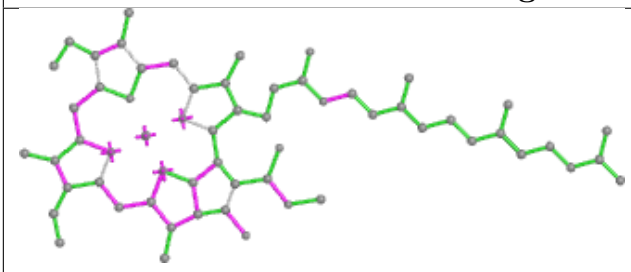


Torsions



Rings

Ligand CLA b 1208



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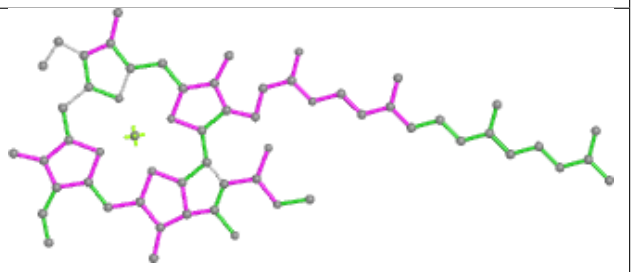

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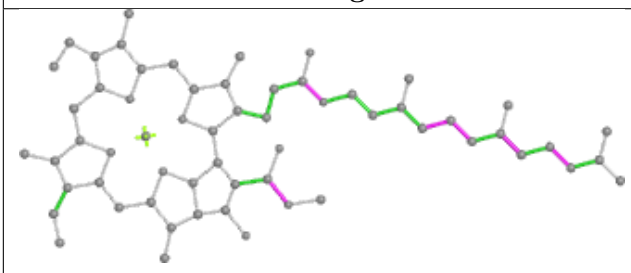
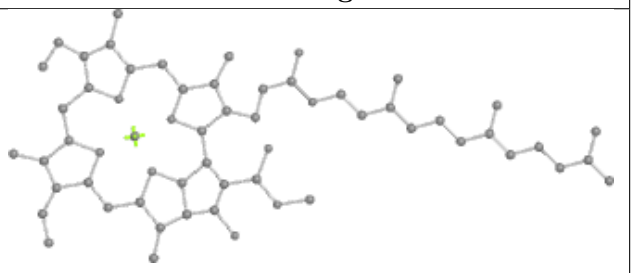
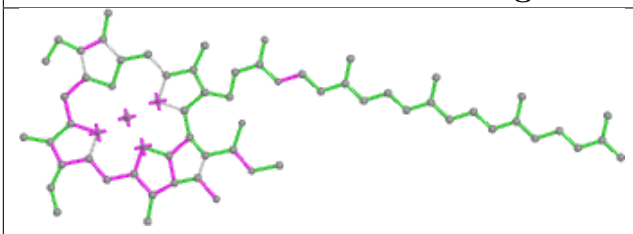


Torsions



Rings

Ligand CLA H 1216



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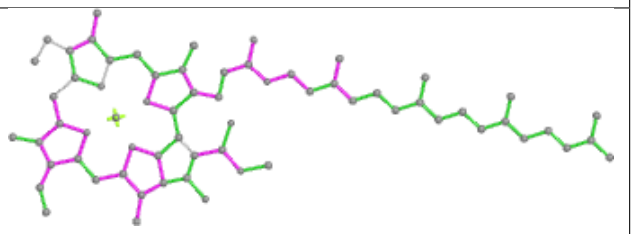
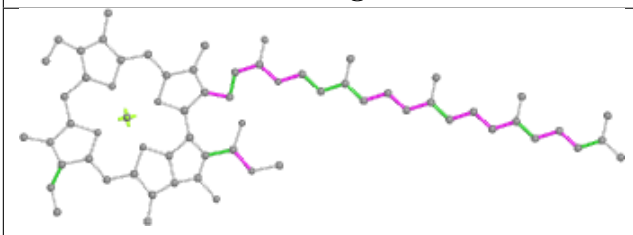
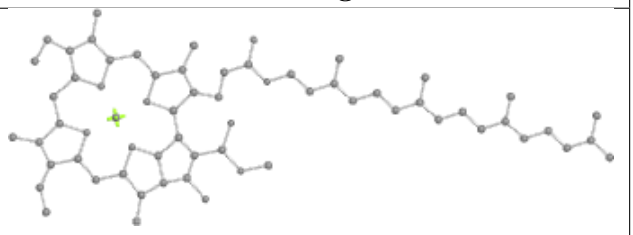


Bond angles

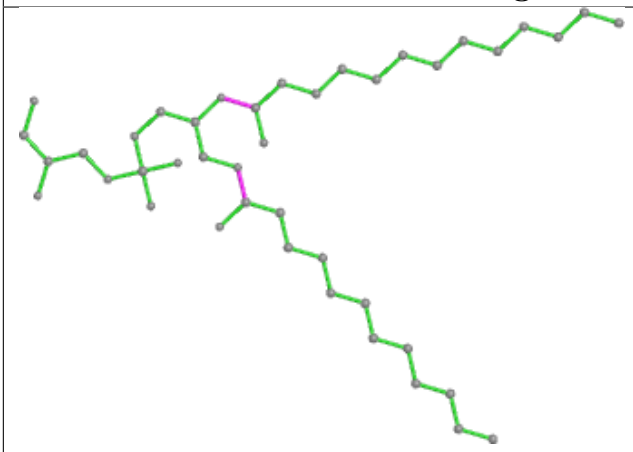


Torsions



Rings

Ligand LHG A 5001



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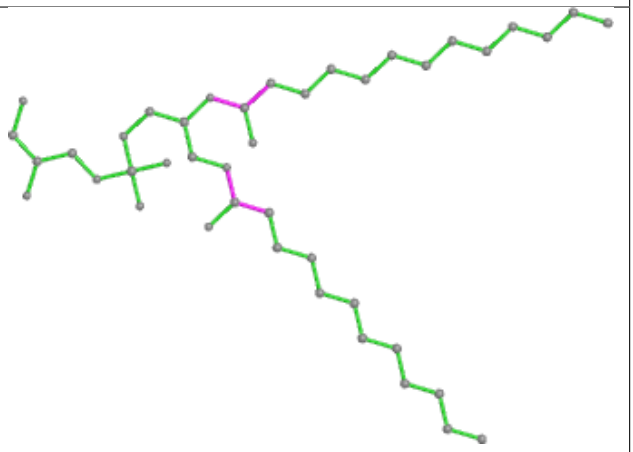
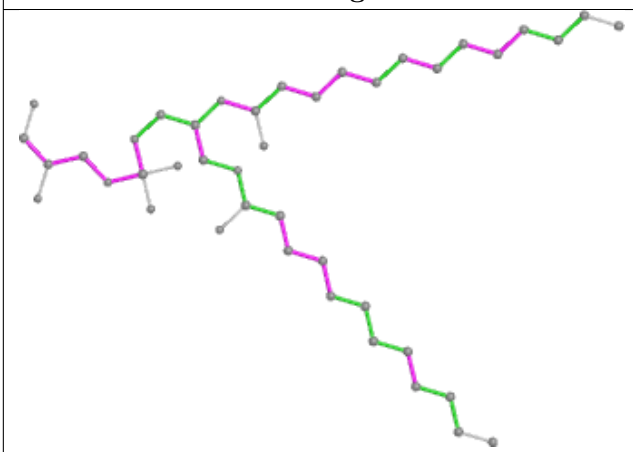


Bond angles



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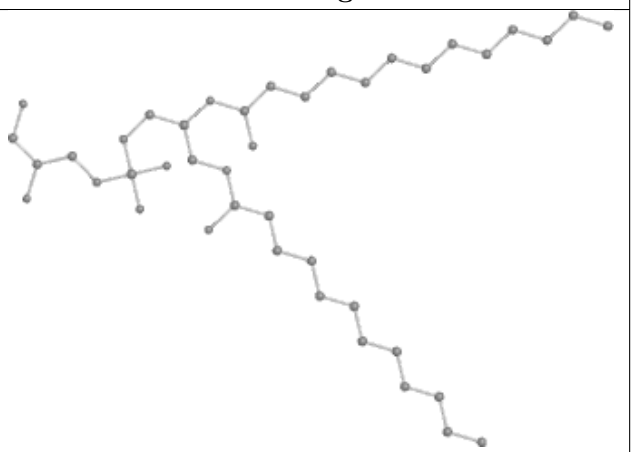
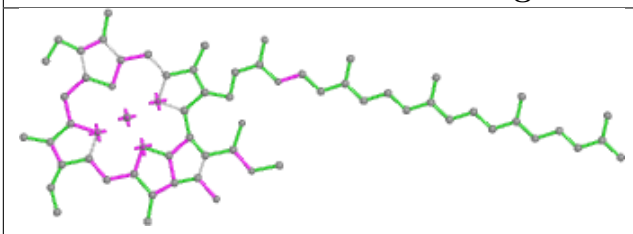


Rings

Ligand CLA G 1127



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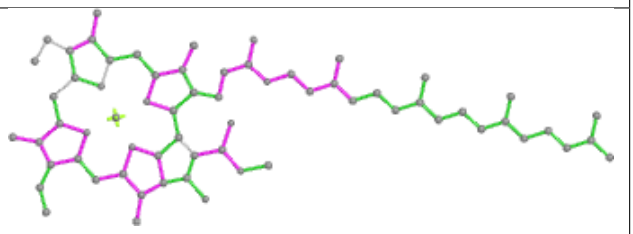
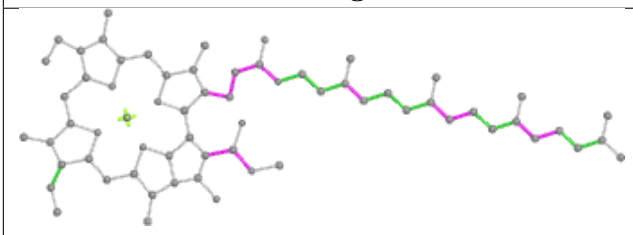
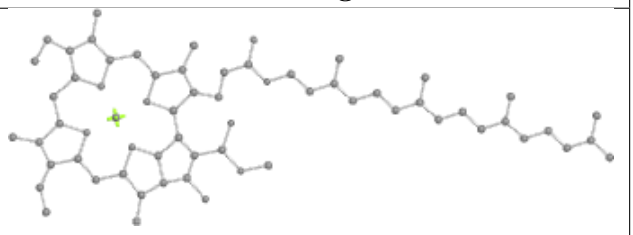


Bond angles

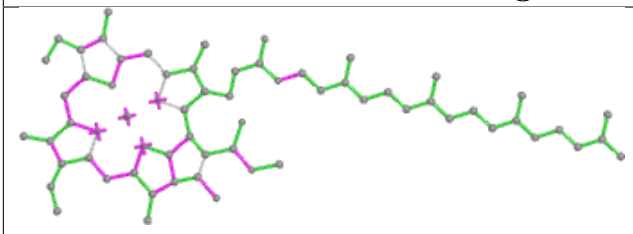


Torsions

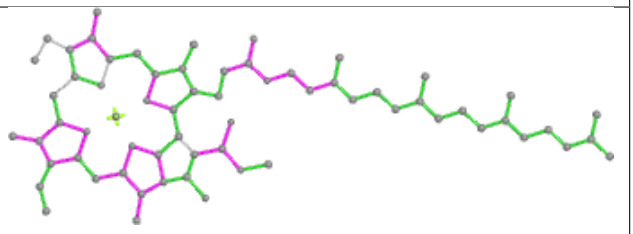


Rings

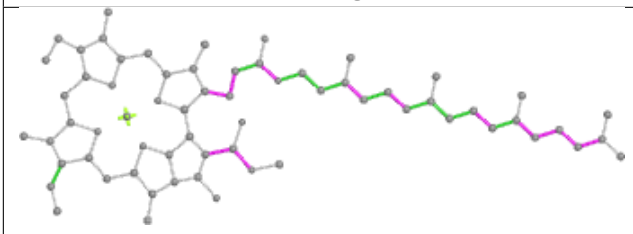
Ligand CLA H 1225



Bond lengths



Bond angles



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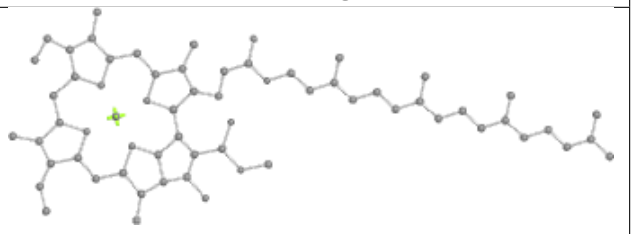
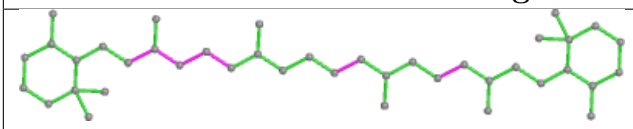


Rings

Ligand BCR K 4001



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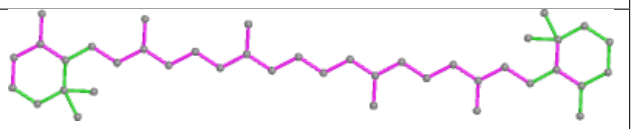
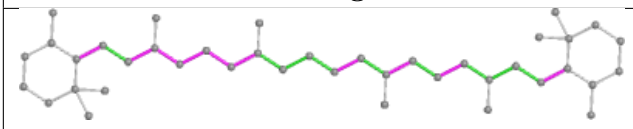


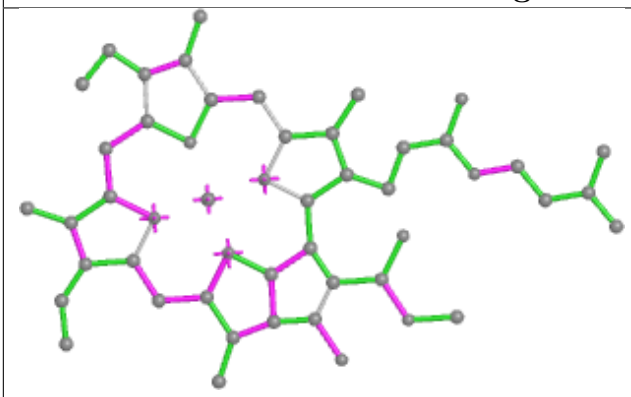
Bond angles



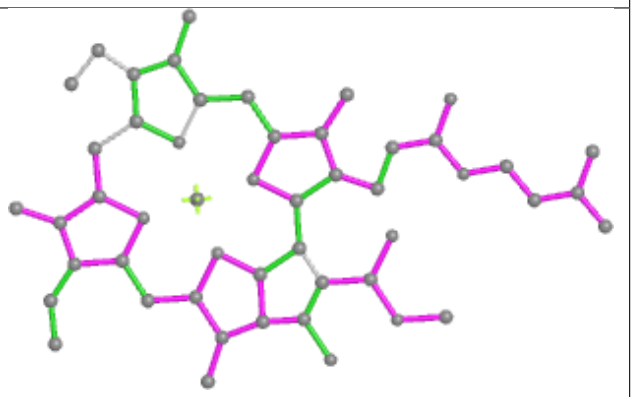
Torsions

Rings

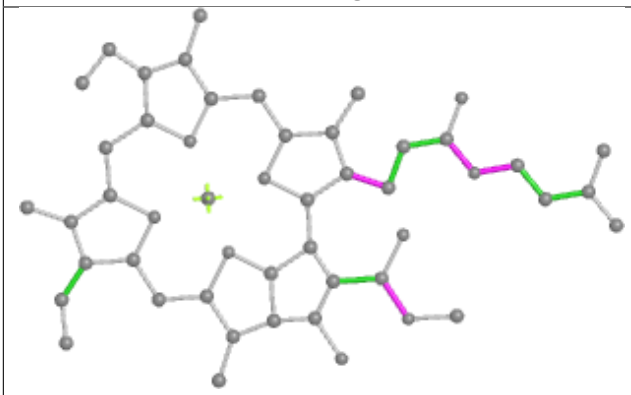
Ligand CLA m 1501



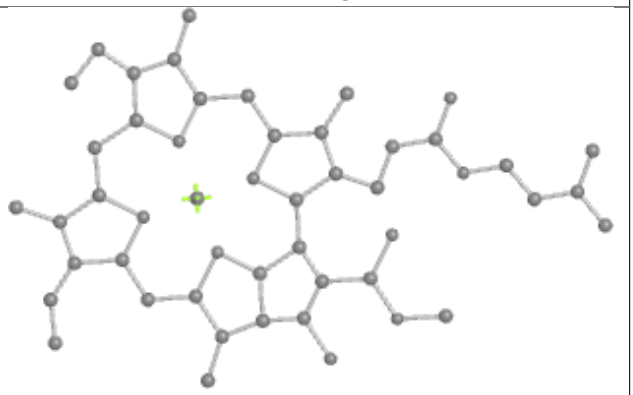
Bond lengths



Bond angles

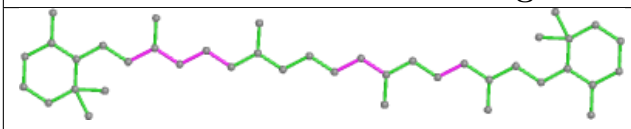


Torsions

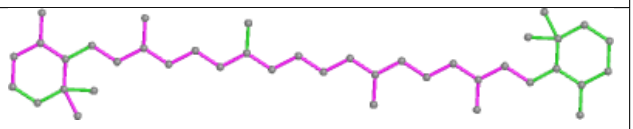


Rings

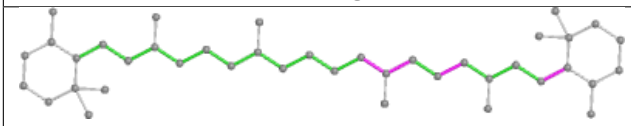
Ligand BCR b 4010



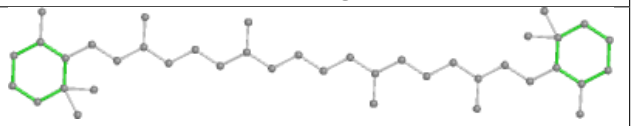
Bond lengths



Bond angles

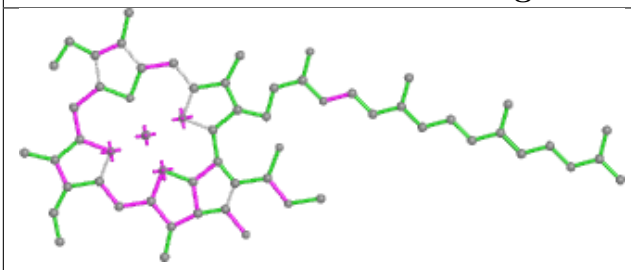


Torsions

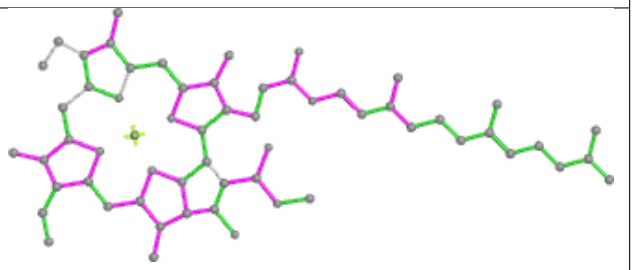


Rings

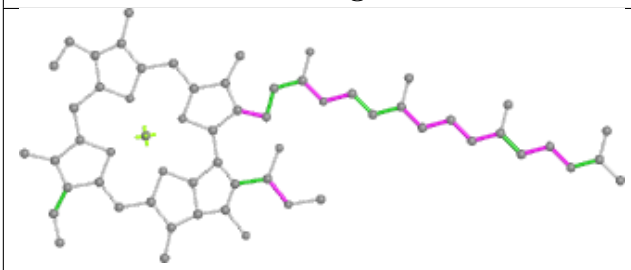
Ligand CLA H 1229



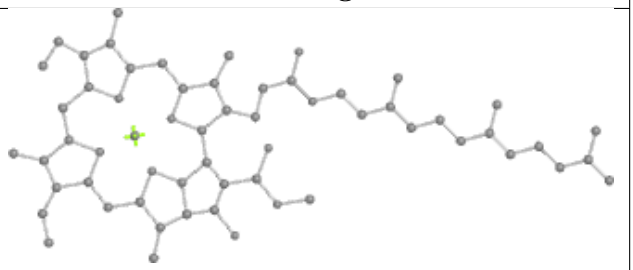
Bond lengths



Bond angles

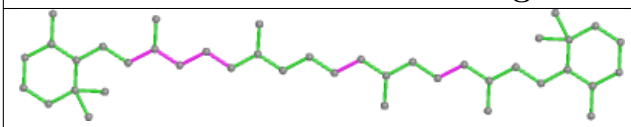


Torsions



Rings

Ligand BCR A 4004



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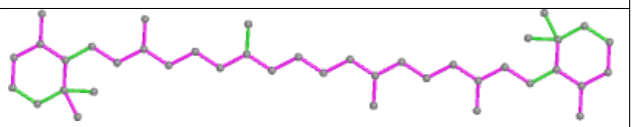
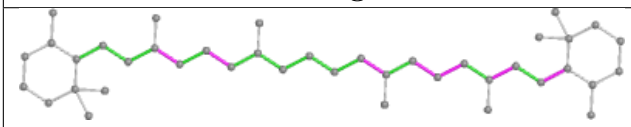
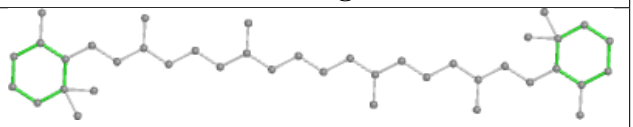


Bond angles

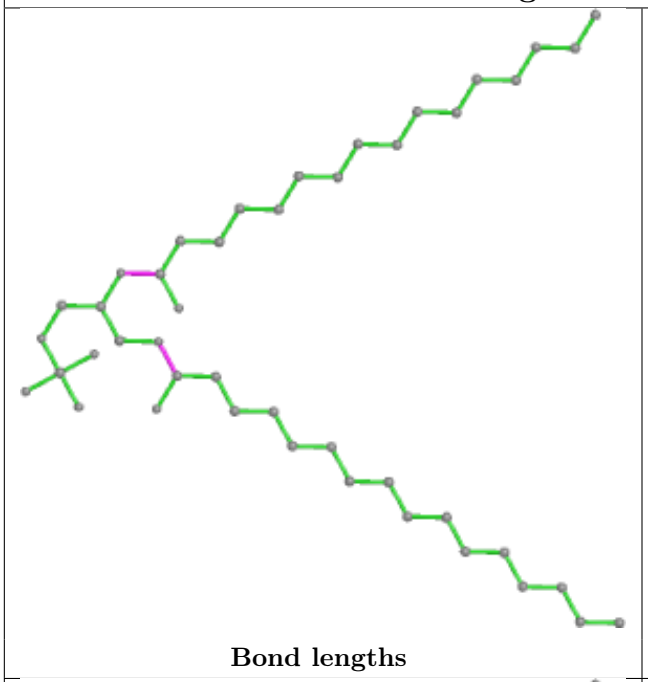


Torsions

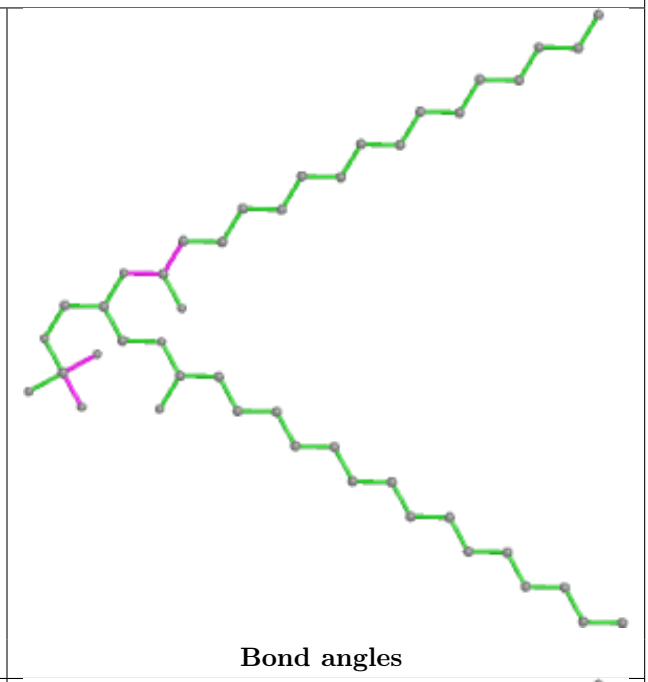


Rings

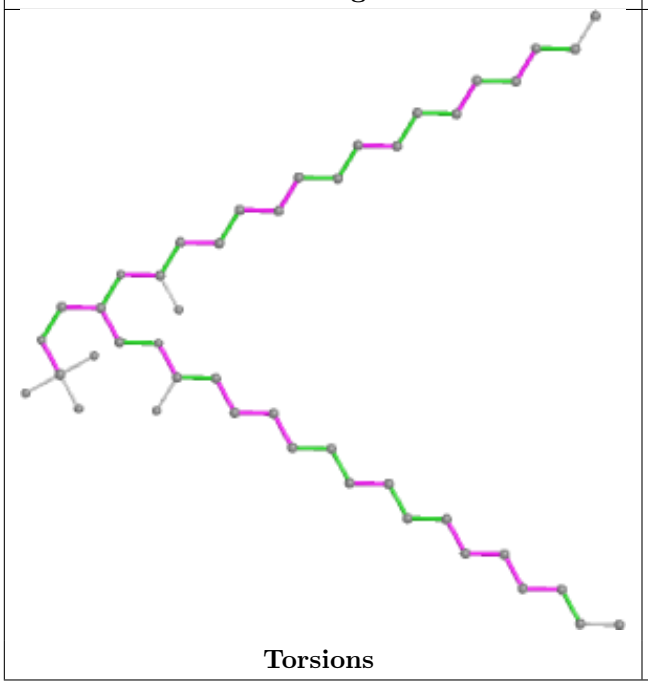
Ligand LHG a 5002



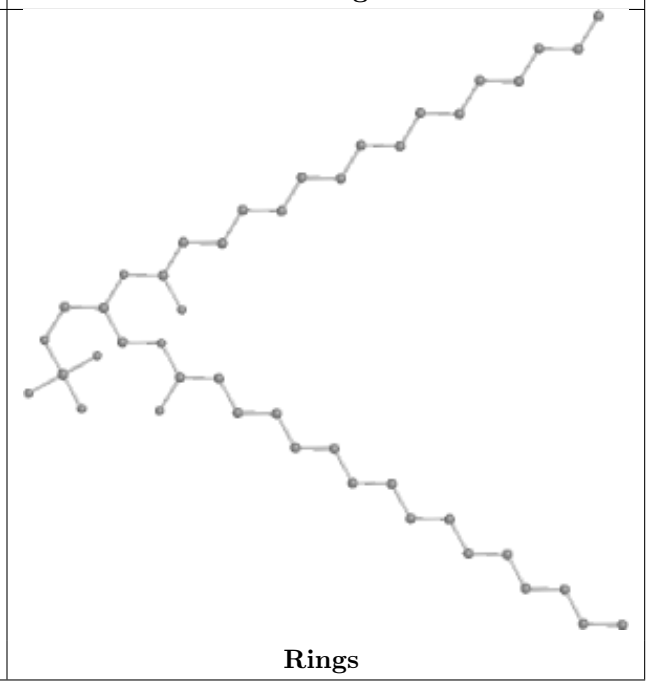
Bond lengths



Bond angles

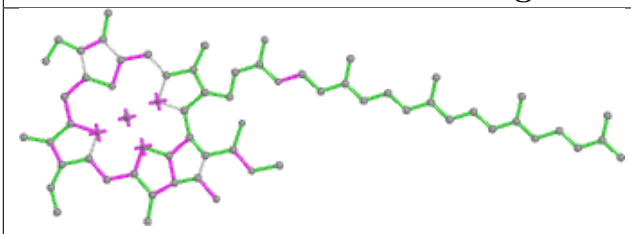


Torsions



Rings

Ligand CLA A 1104



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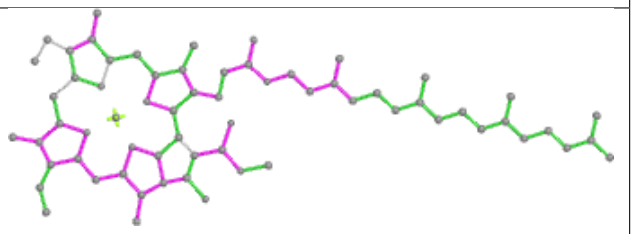
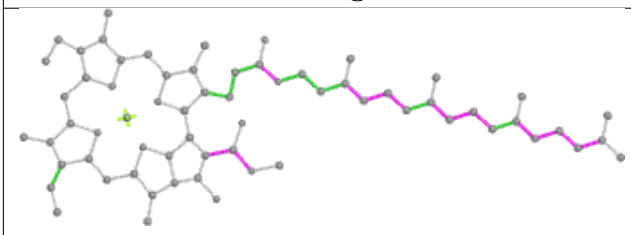
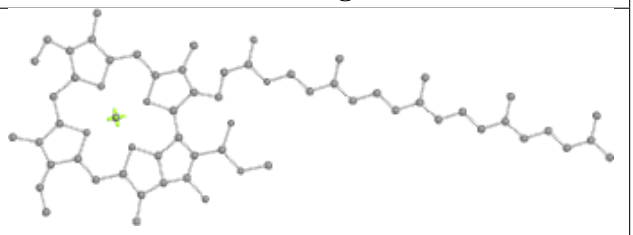


Bond angles

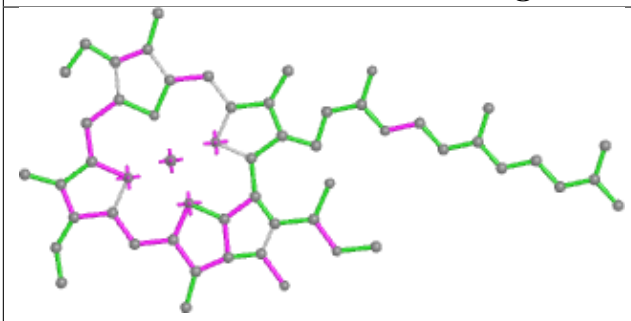


Torsions

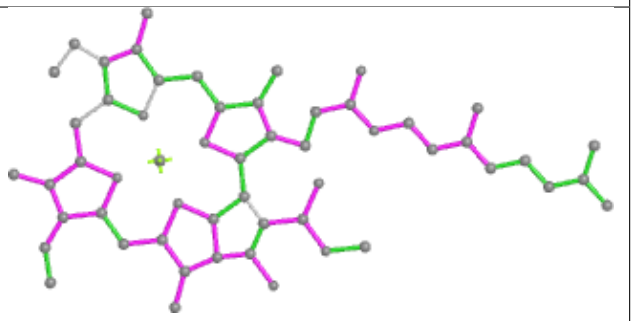


Rings

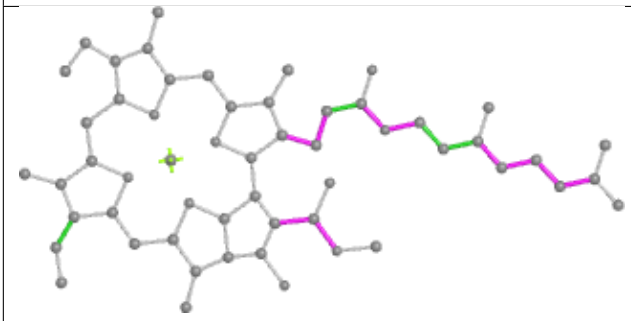
Ligand CLA H 1228



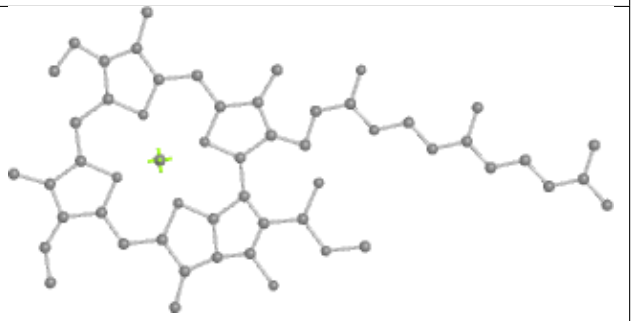
Bond lengths



Bond angles

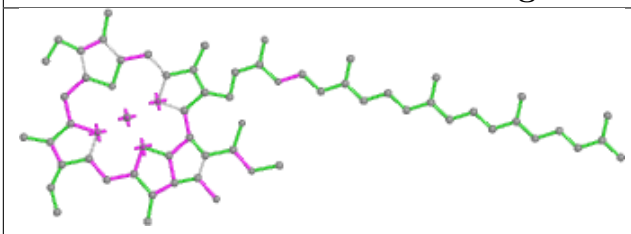


Torsions

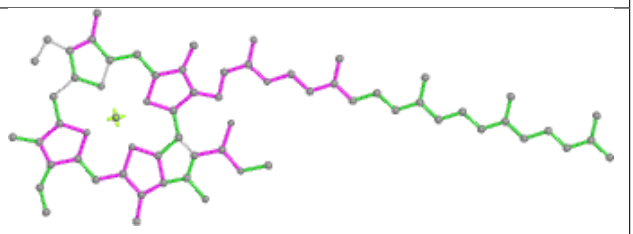


Rings

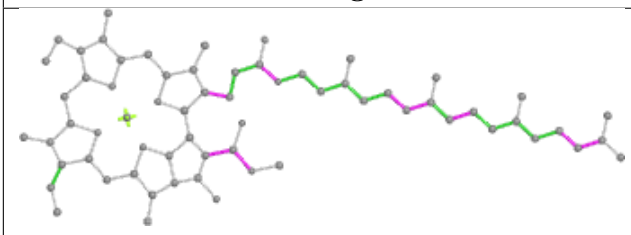
Ligand CLA b 1222



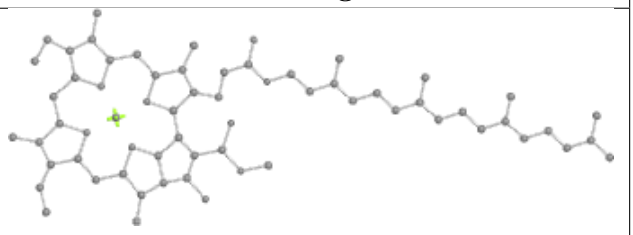
Bond lengths



Bond angles

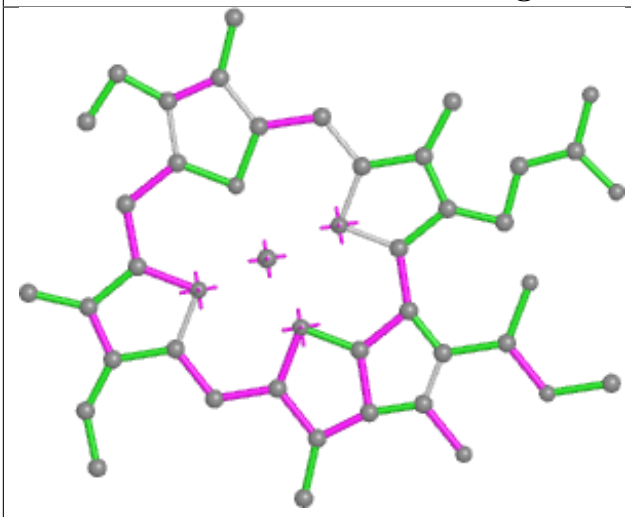


Torsions

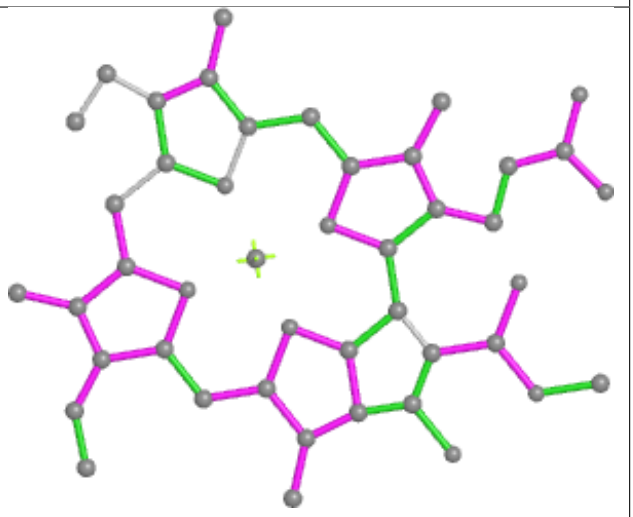


Rings

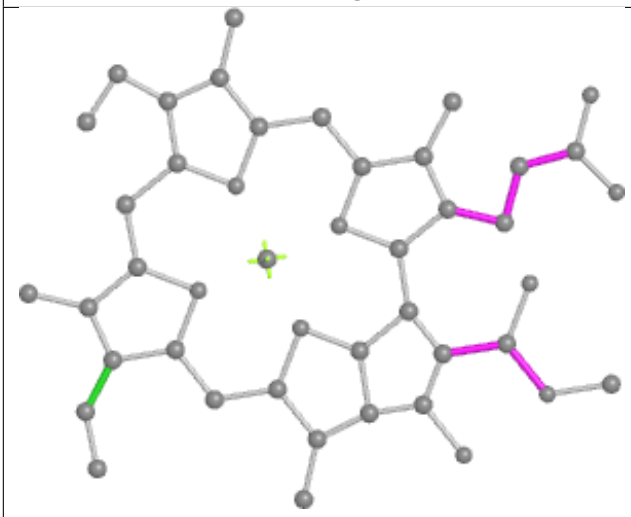
Ligand CLA B 1212



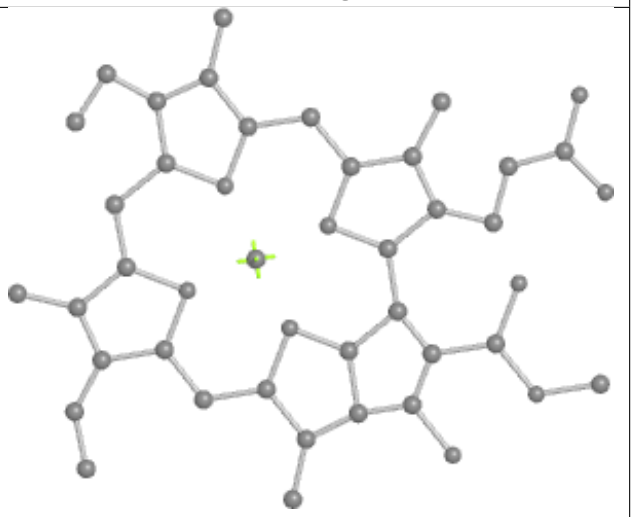
Bond lengths



Bond angles

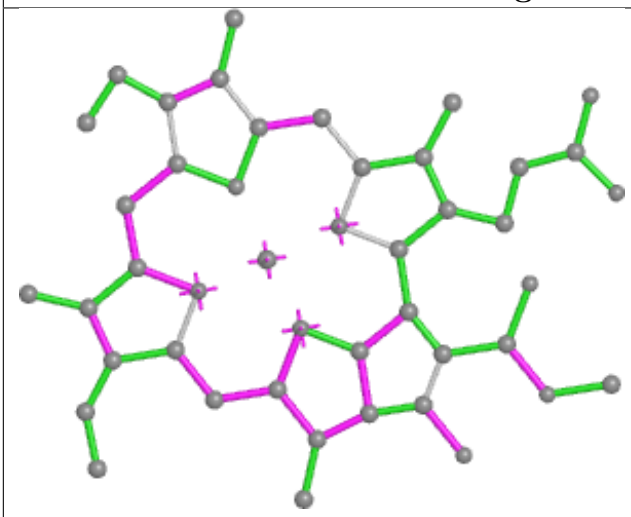


Torsions

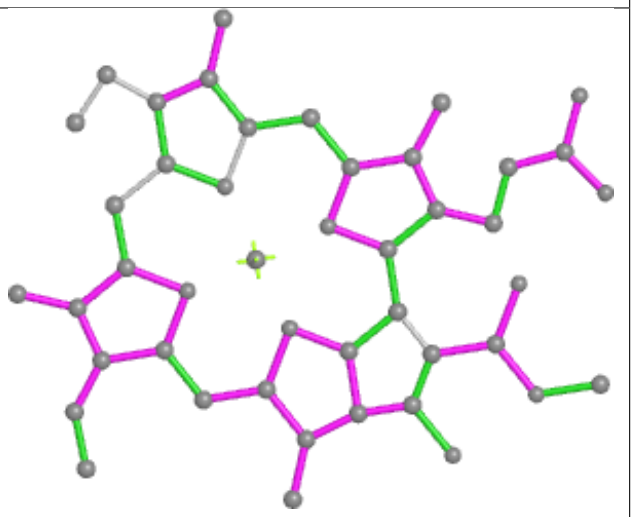


Rings

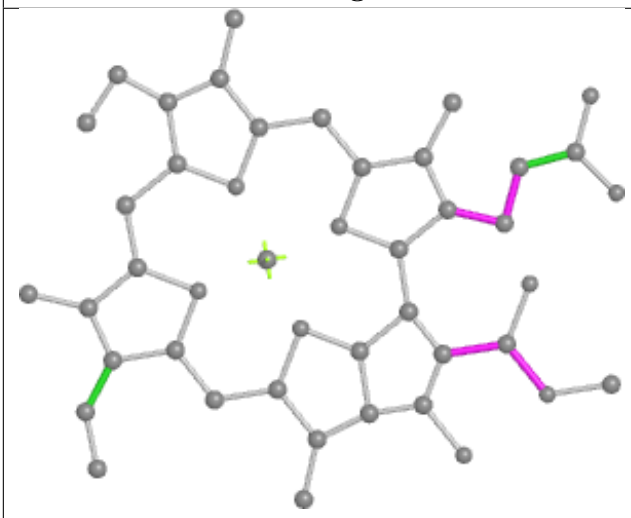
Ligand CLA A 1113



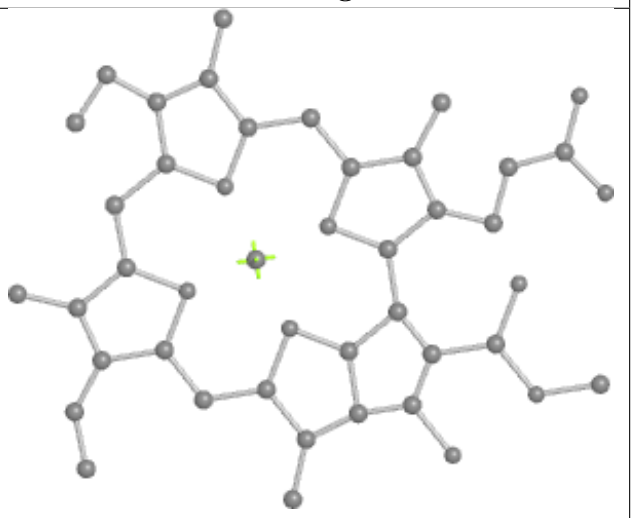
Bond lengths



Bond angles

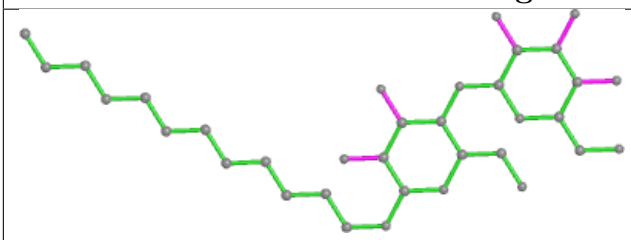


Torsions

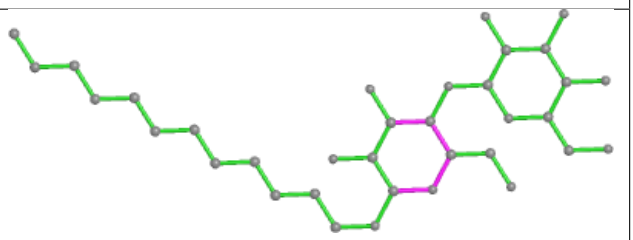


Rings

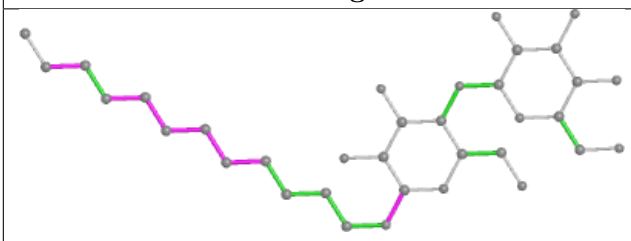
Ligand LMT b 6001



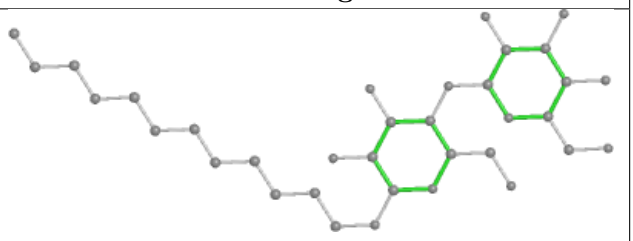
Bond lengths



Bond angles

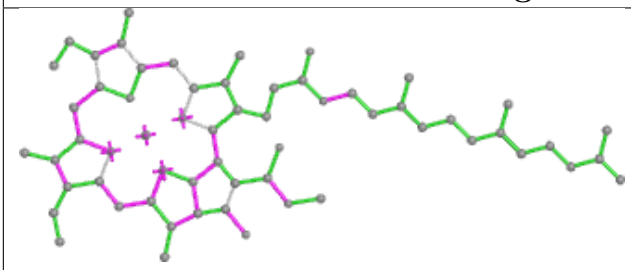


Torsions

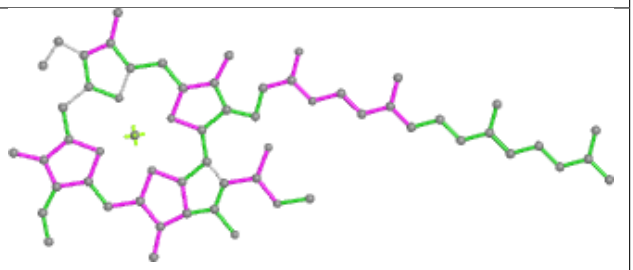


Rings

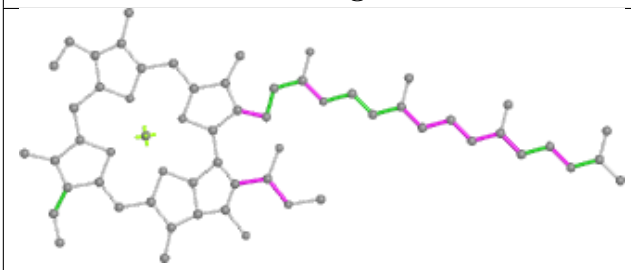
Ligand CLA H 1215



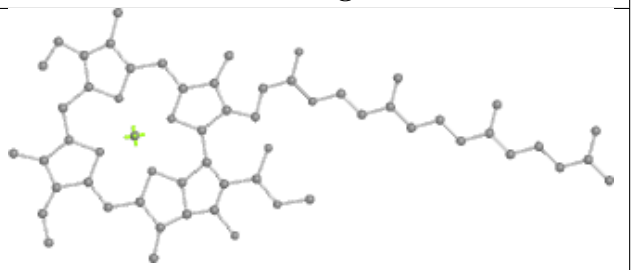
Bond lengths



Bond angles

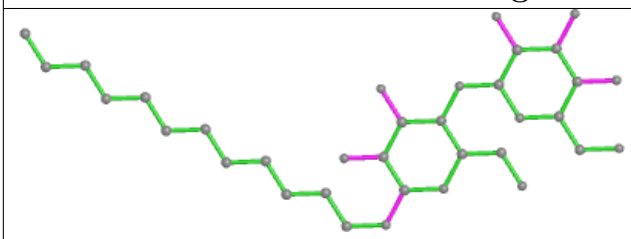


Torsions

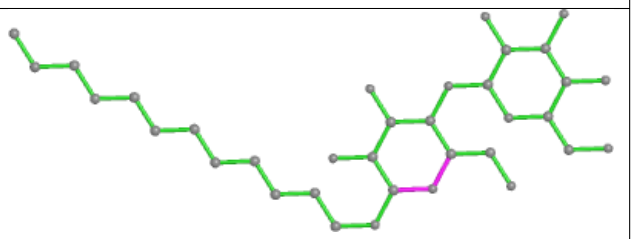


Rings

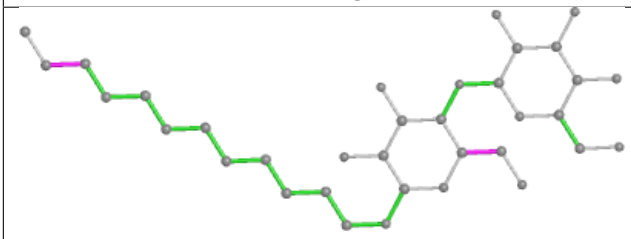
Ligand LMT H 6002



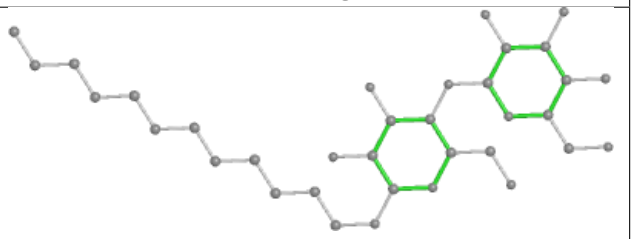
Bond lengths



Bond angles

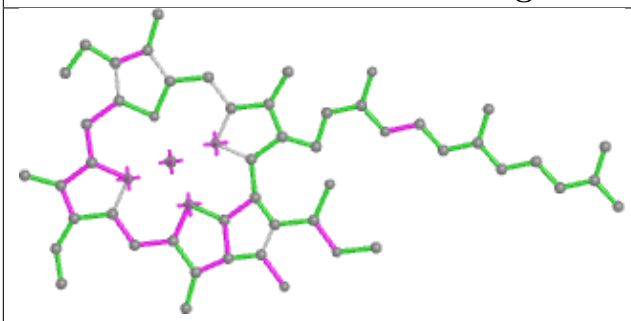


Torsions

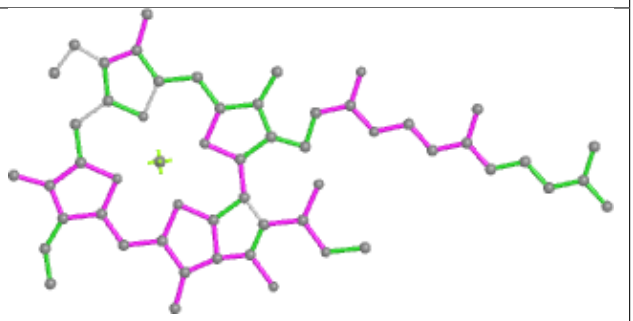


Rings

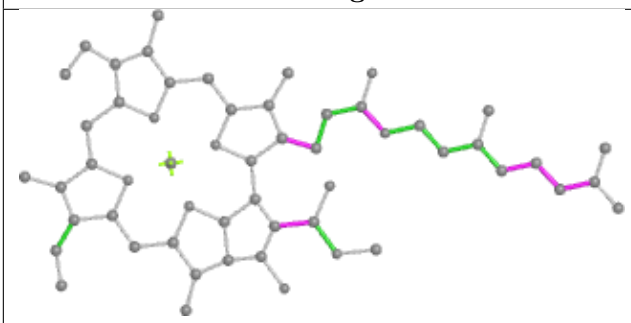
Ligand CLA B 1022



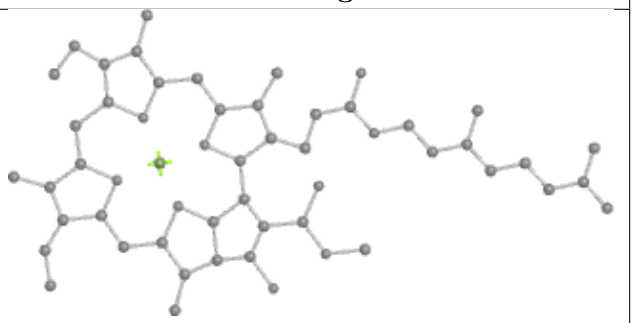
Bond lengths



Bond angles

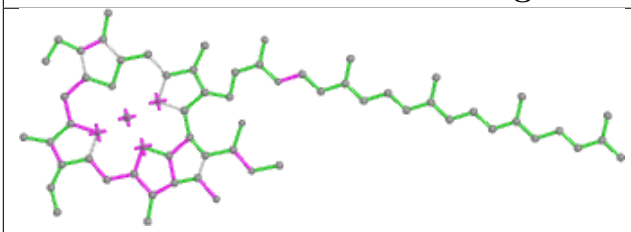


Torsions

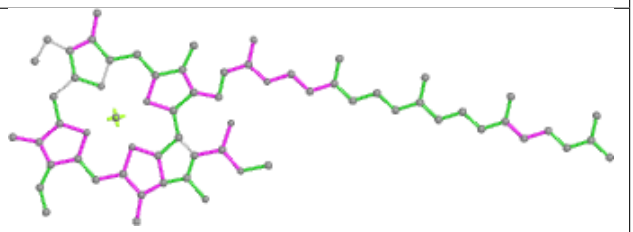


Rings

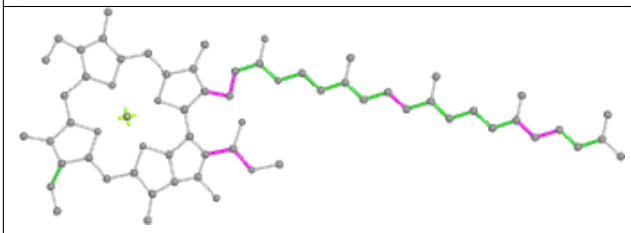
Ligand CLA G 1132



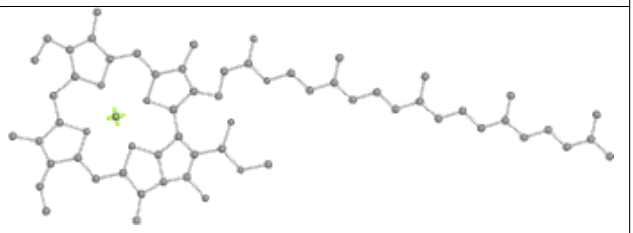
Bond lengths



Bond angles

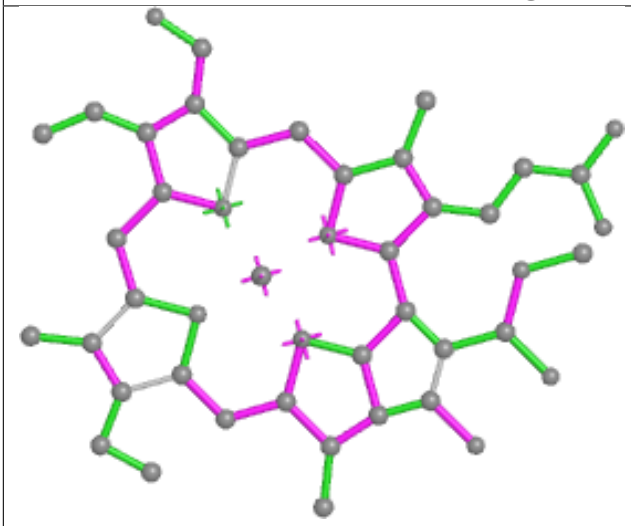


Torsions

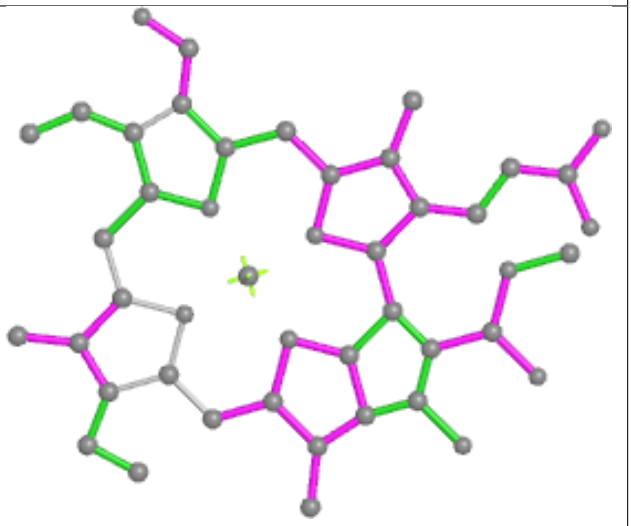


Rings

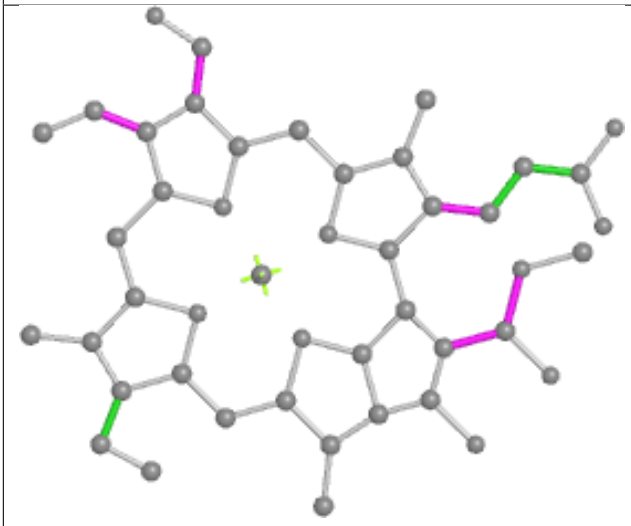
Ligand F6C b 1230



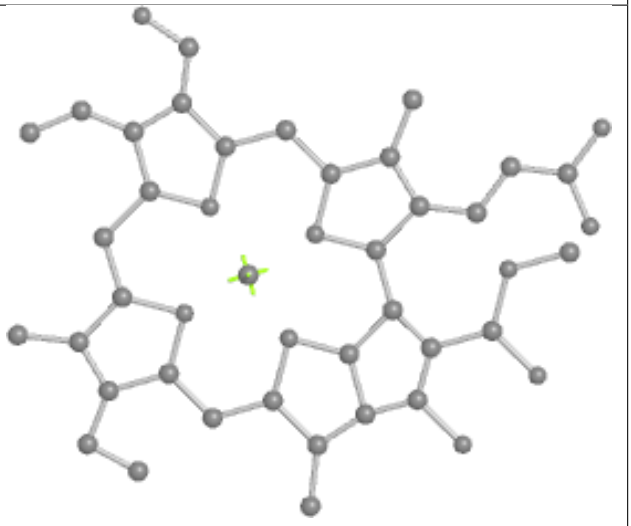
Bond lengths



Bond angles

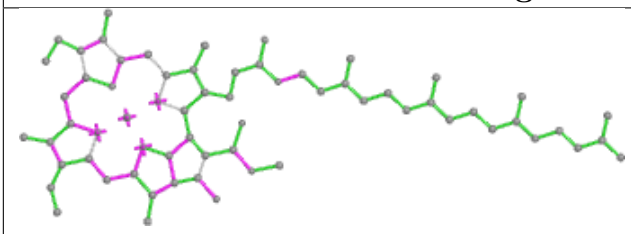


Torsions

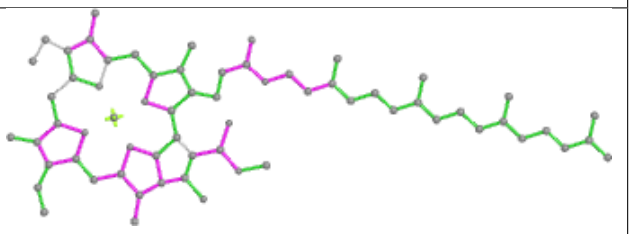


Rings

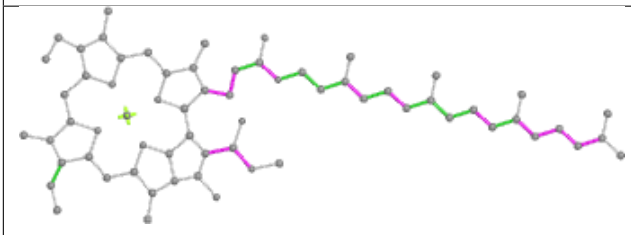
Ligand CLA B 1225



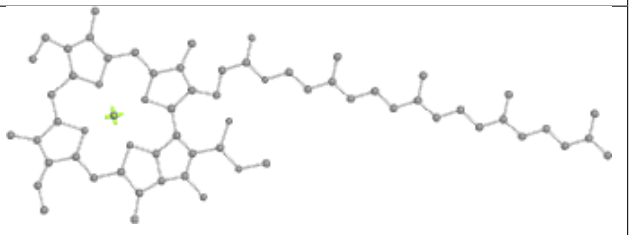
Bond lengths



Bond angles

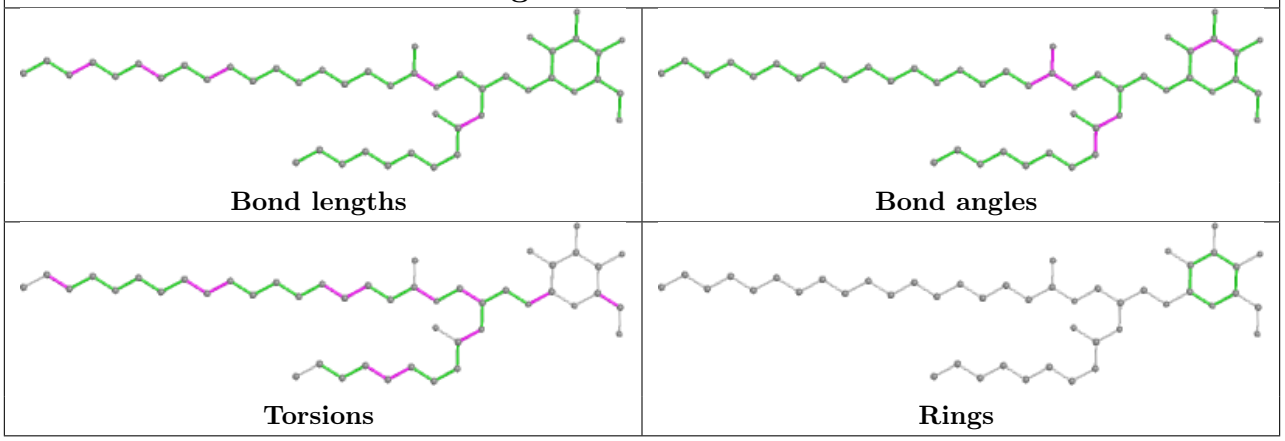


Torsions

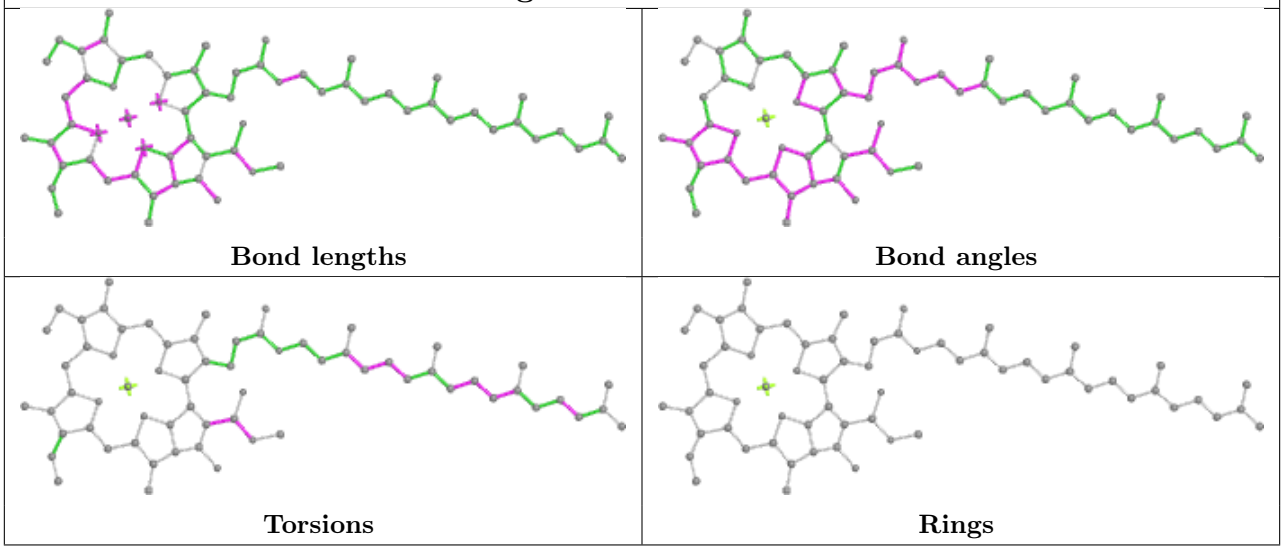


Rings

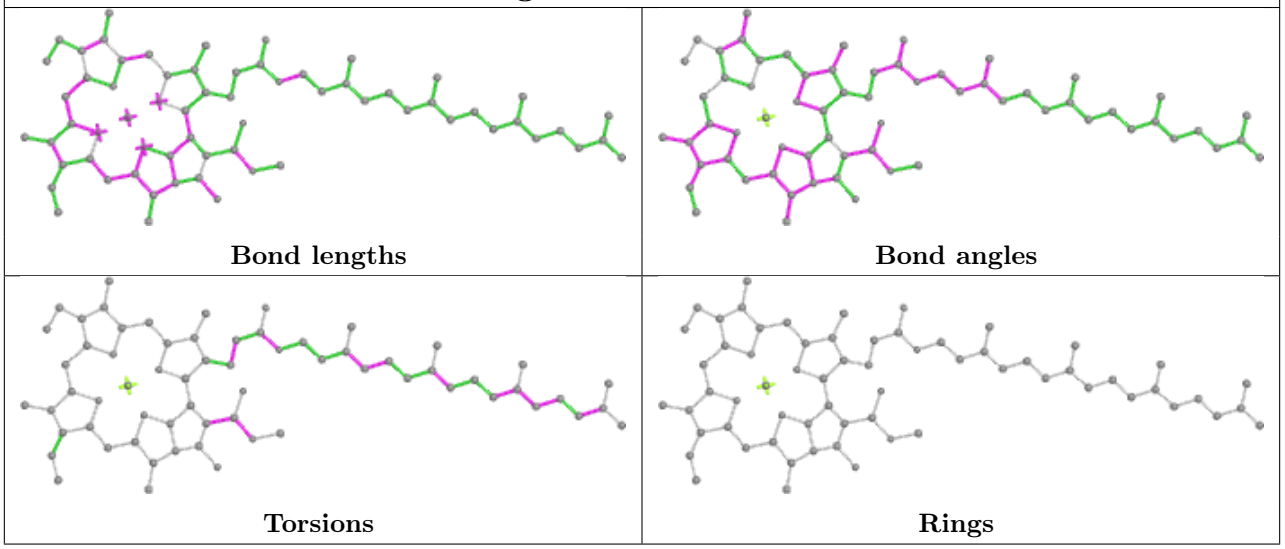
Ligand LMG A 5003



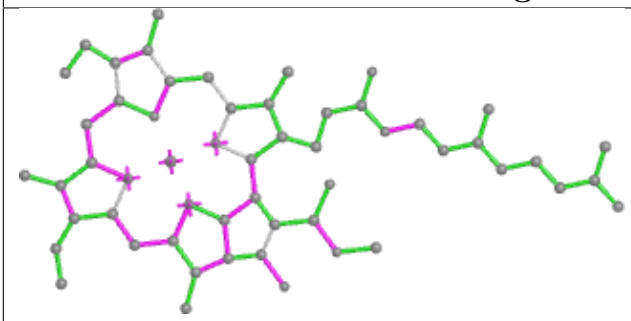
Ligand CLA B 1205



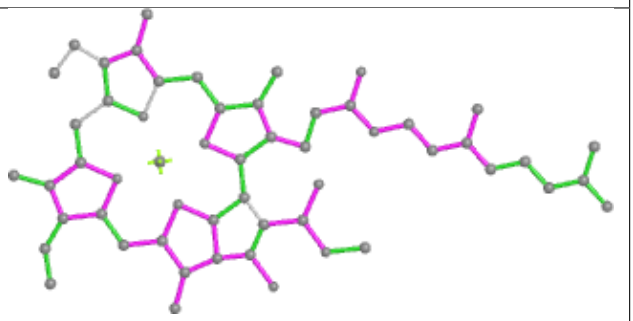
Ligand CLA B 1201



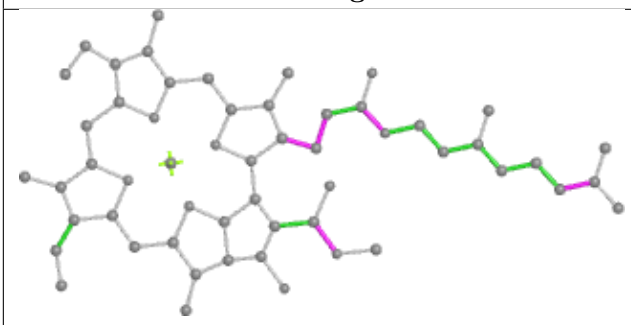
Ligand CLA G 1130



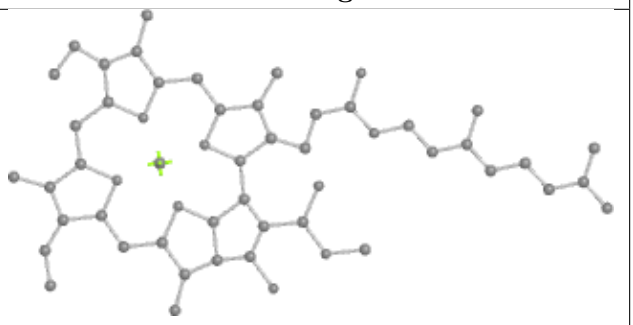
Bond lengths



Bond angles

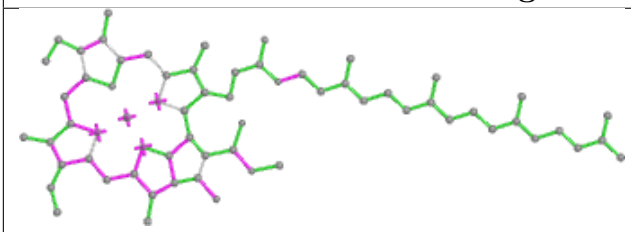


Torsions

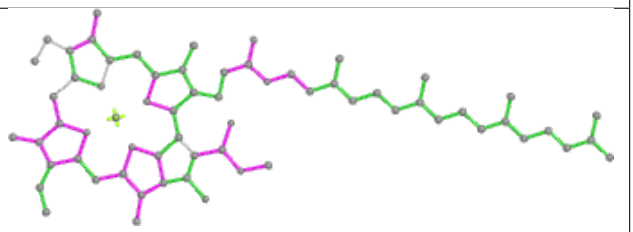


Rings

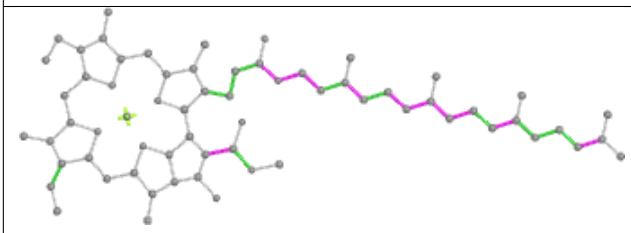
Ligand CLA b 1240



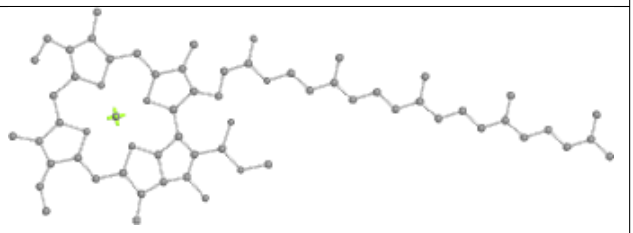
Bond lengths



Bond angles

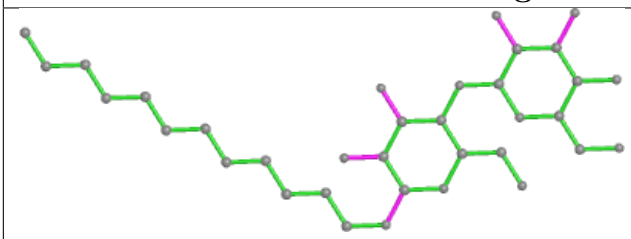


Torsions

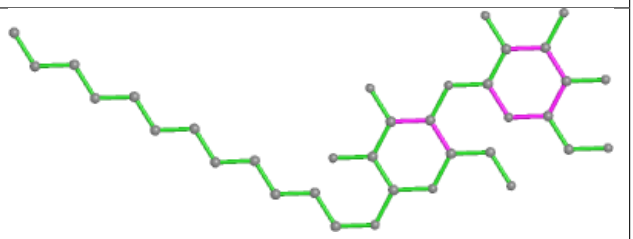


Rings

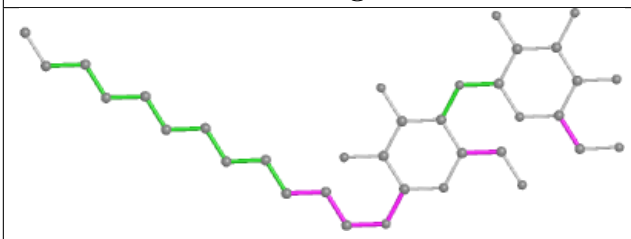
Ligand LMT L 6101



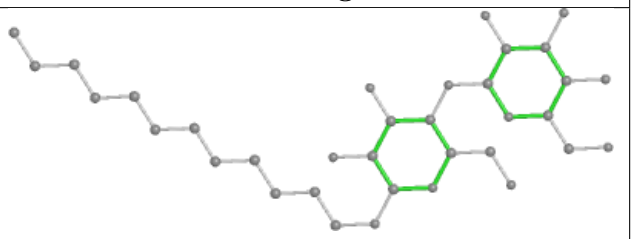
Bond lengths



Bond angles

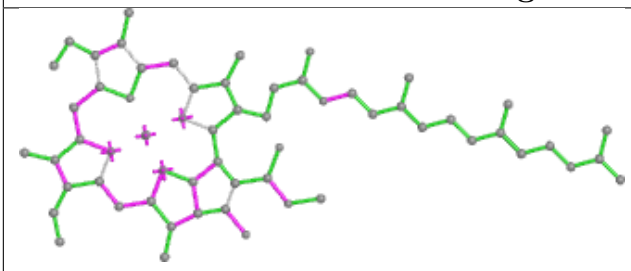


Torsions

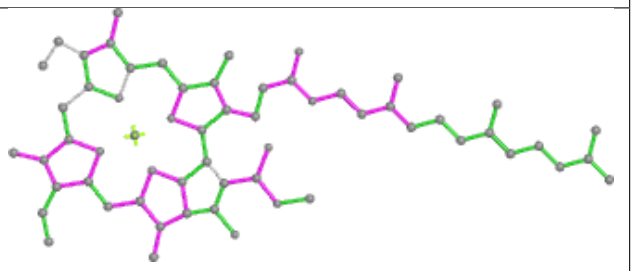


Rings

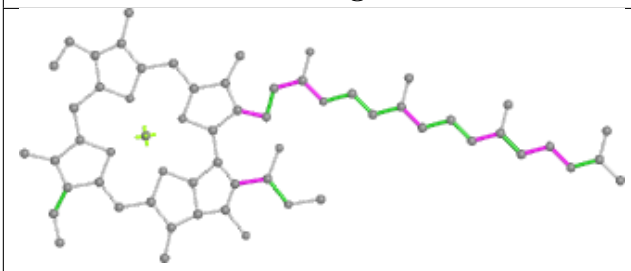
Ligand CLA L 1502



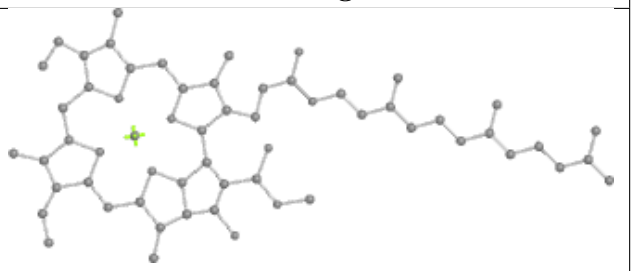
Bond lengths



Bond angles

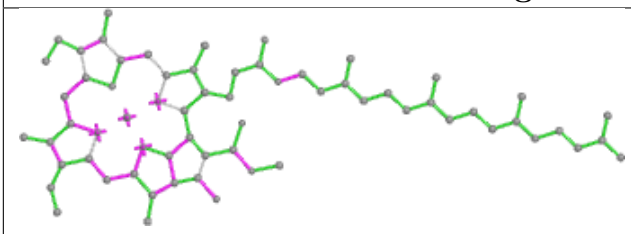


Torsions

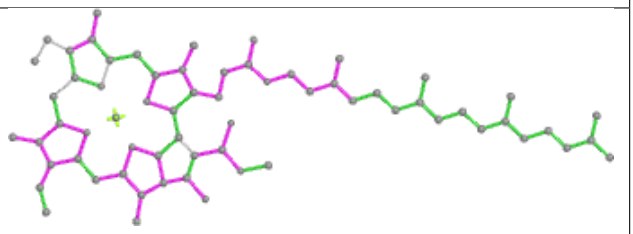


Rings

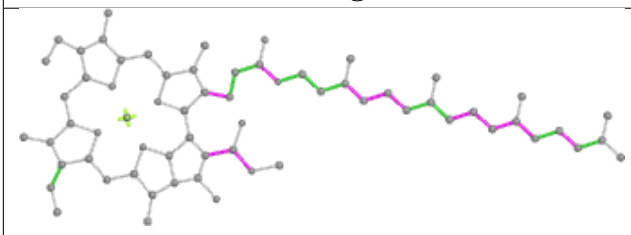
Ligand CLA A 1115



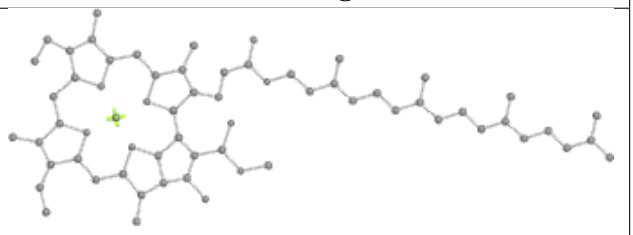
Bond lengths



Bond angles

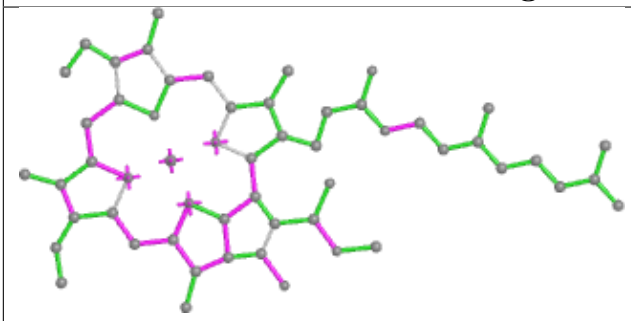


Torsions



Rings

Ligand CLA a 1112



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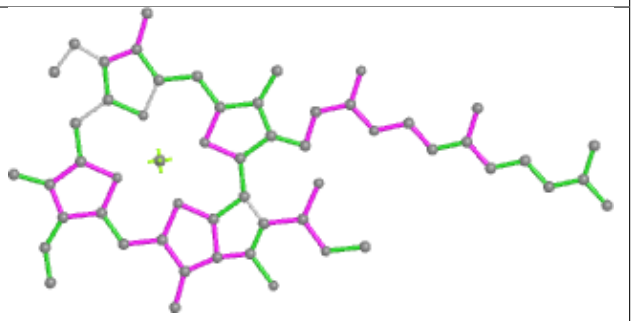

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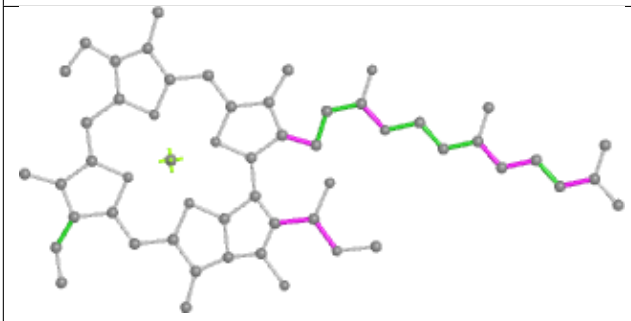
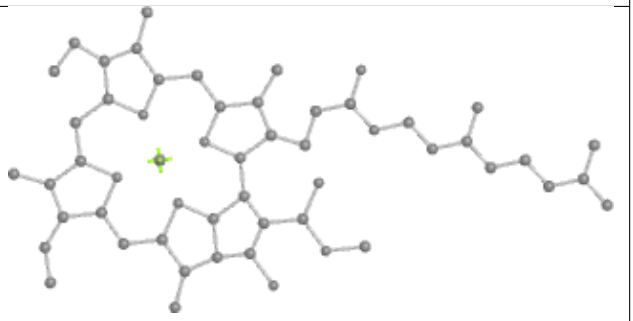
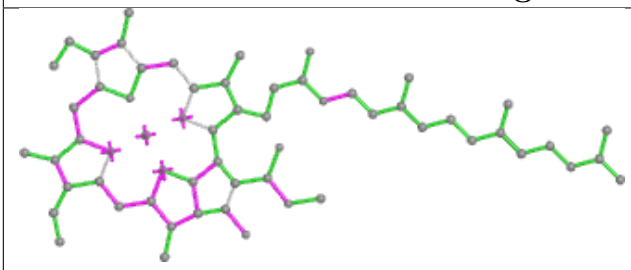


Torsions



Rings

Ligand CLA H 1208



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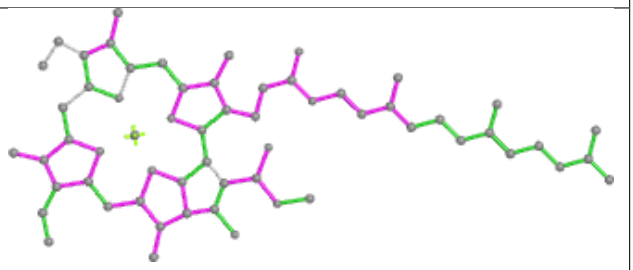
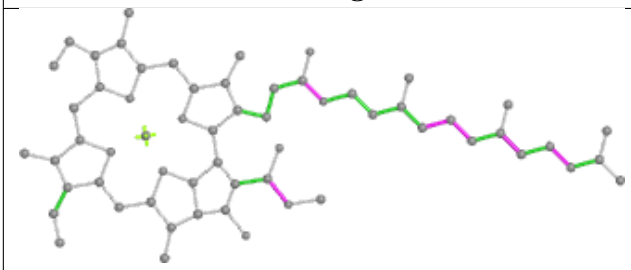
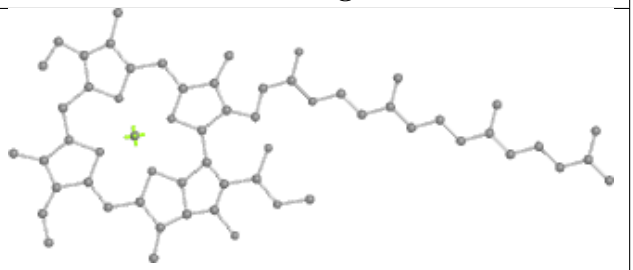


Bond angles

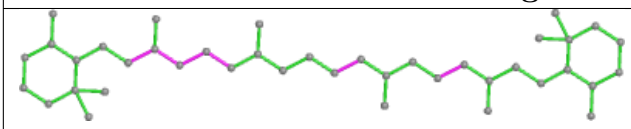


Torsions



Rings

Ligand BCR l 4022



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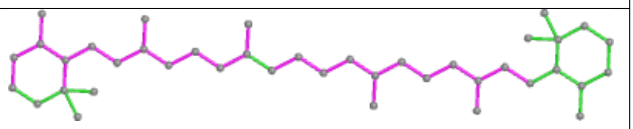
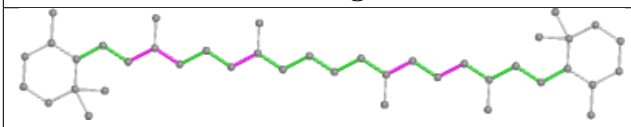
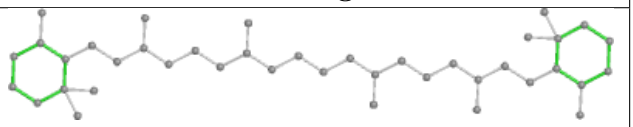


Bond angles

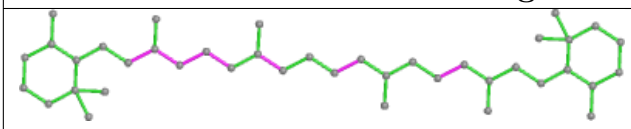


Torsions



Rings

Ligand BCR a 4005



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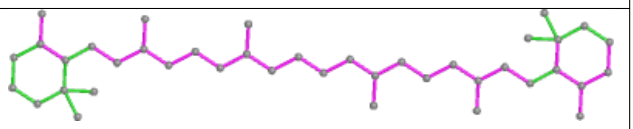
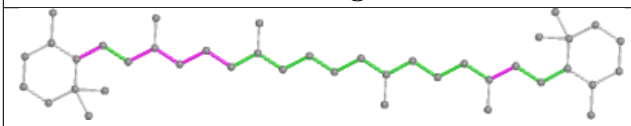


Bond angles



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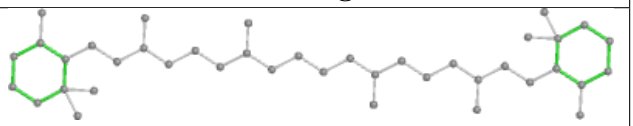
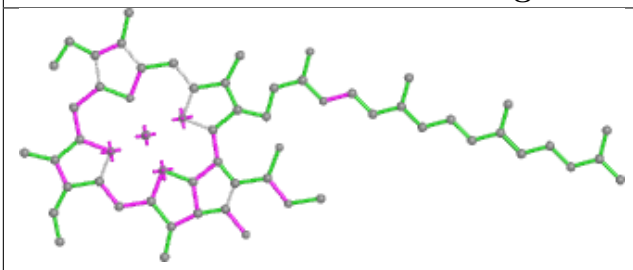


Rings

Ligand CLA G 1013



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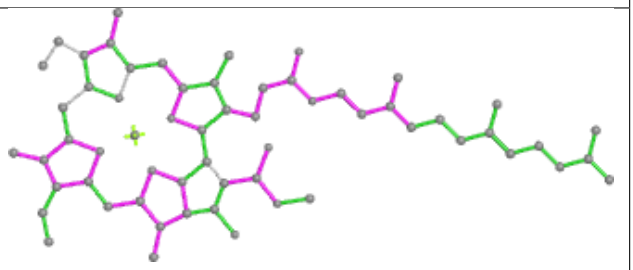
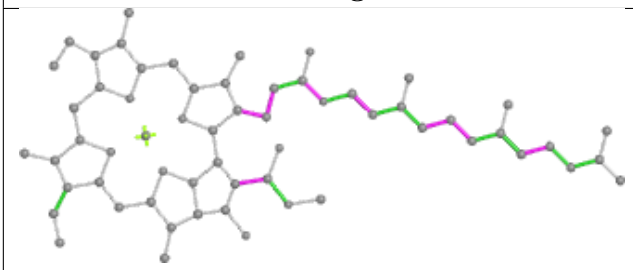


Bond angles



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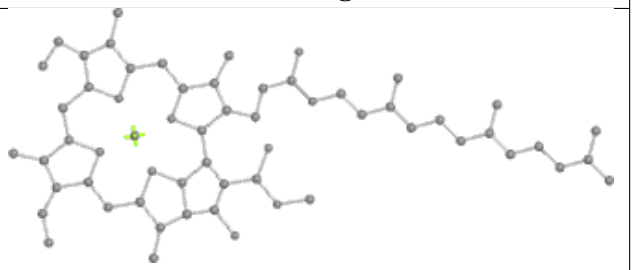
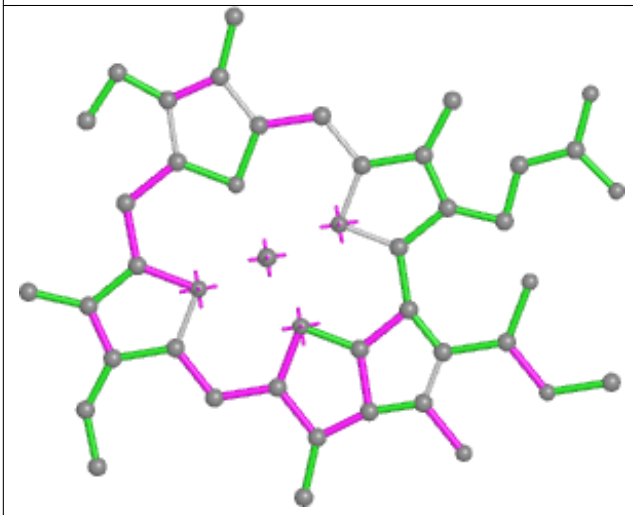


Rings

Ligand CLA A 1110



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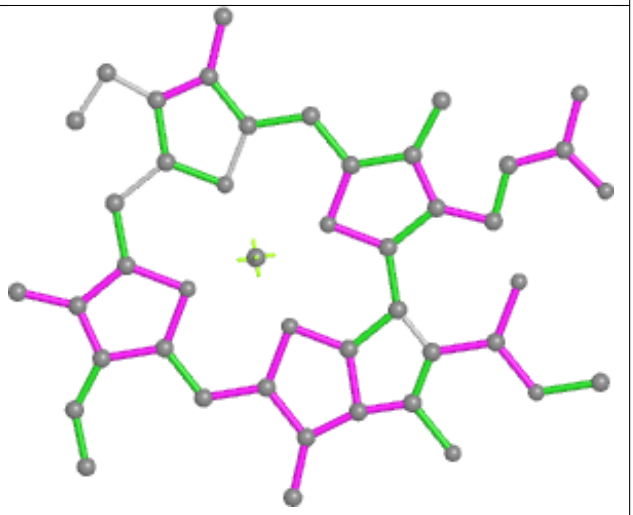
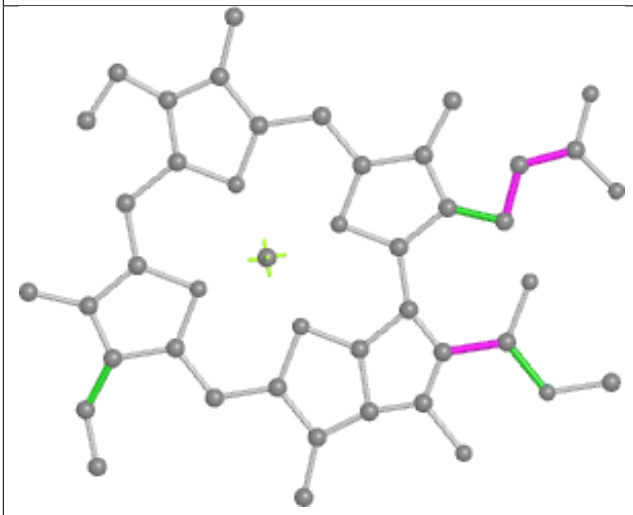


Bond angles



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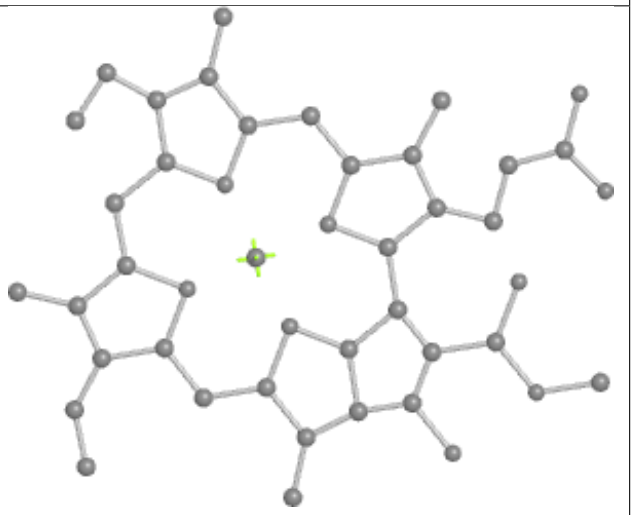
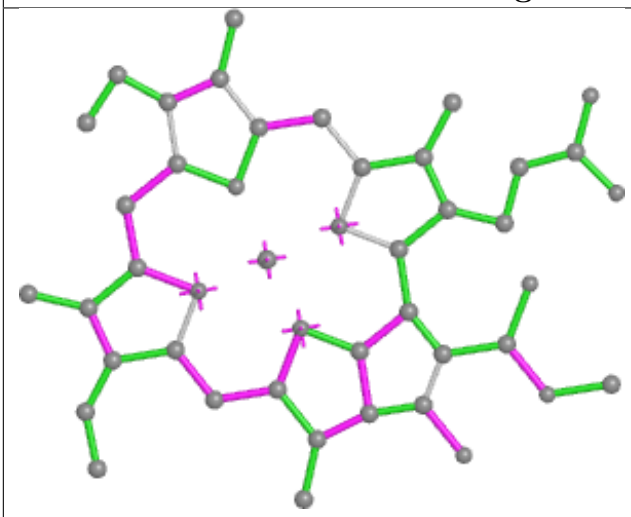
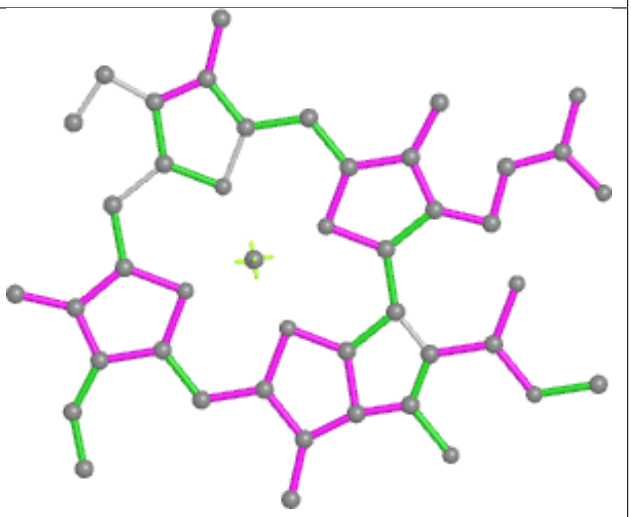


Rings

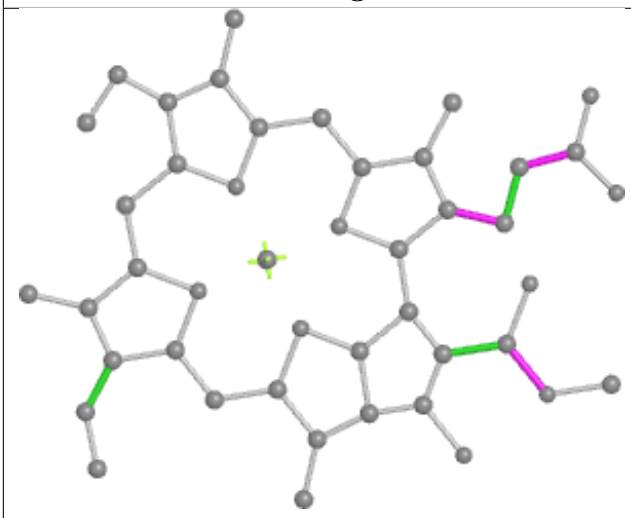
Ligand CLA A 1107



Bond lengths



Bond angles



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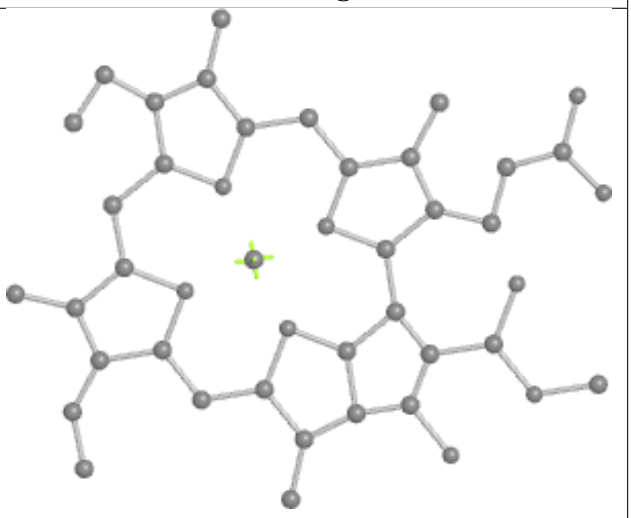
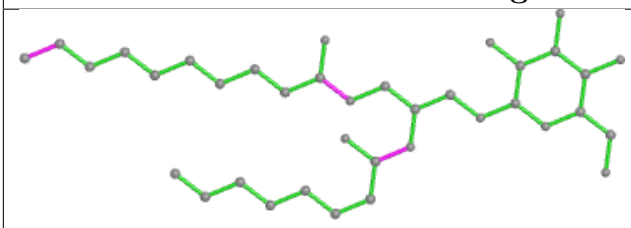
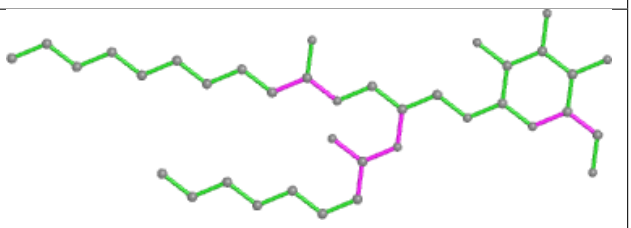


Rings

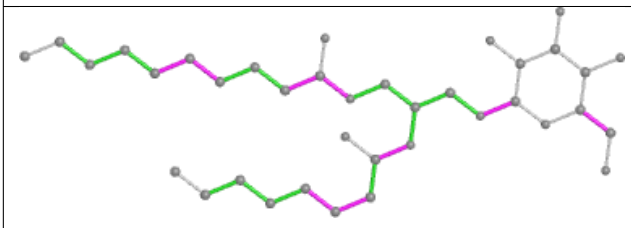
Ligand LMG R 5006



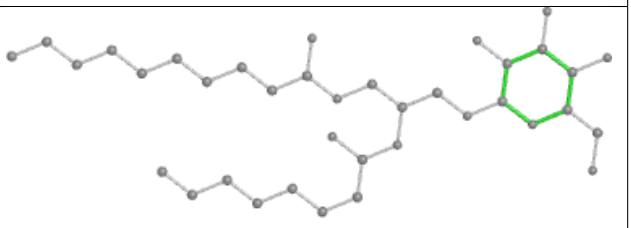
Bond lengths



Bond angles

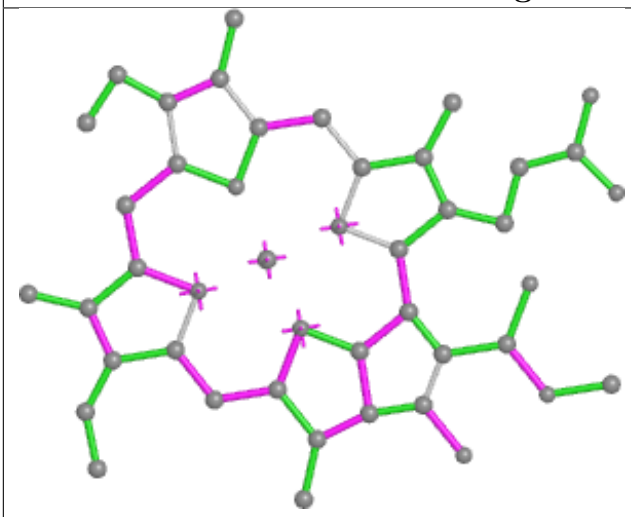


Torsions

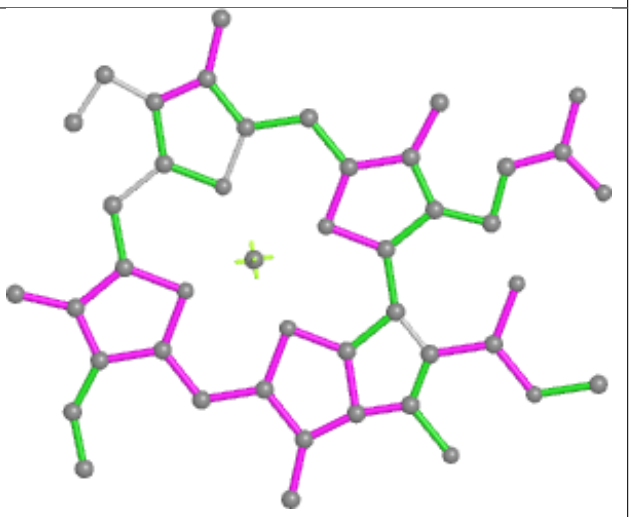


Rings

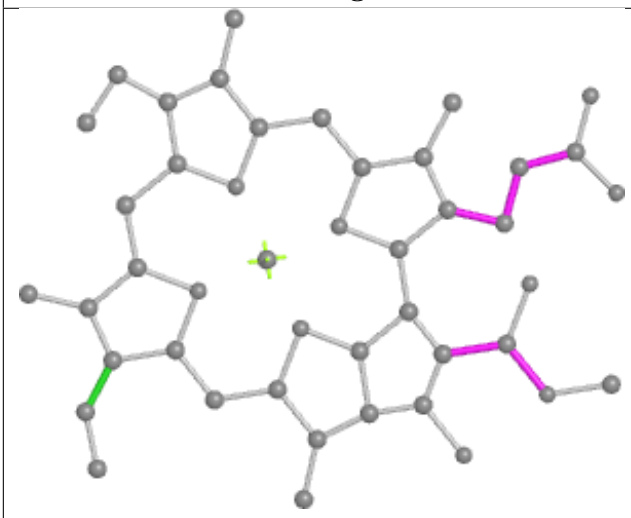
Ligand CLA H 1217



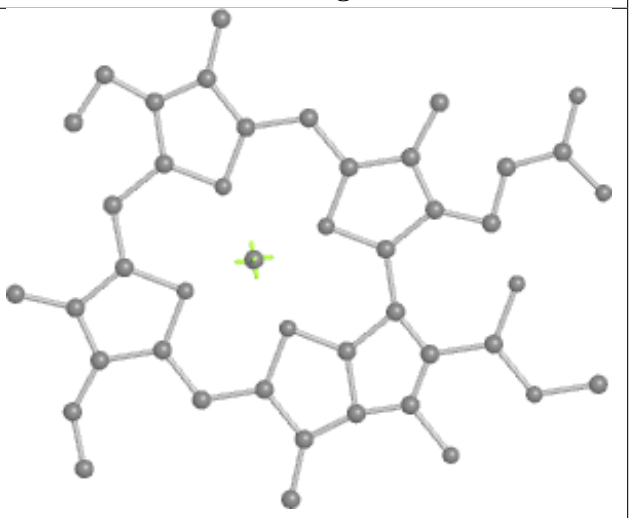
Bond lengths



Bond angles

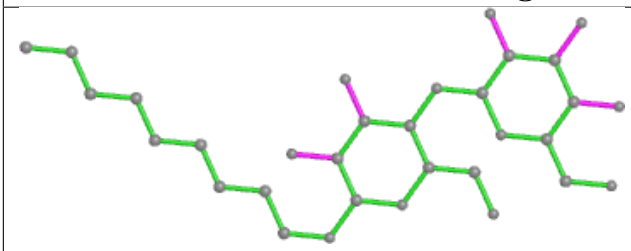


Torsions



Rings

Ligand LMT a 6003



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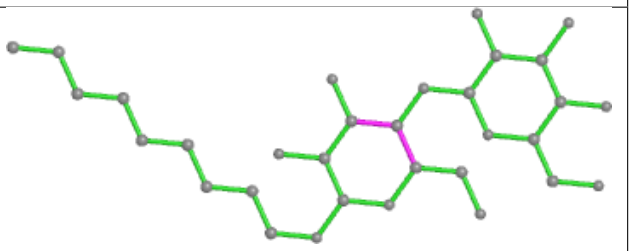
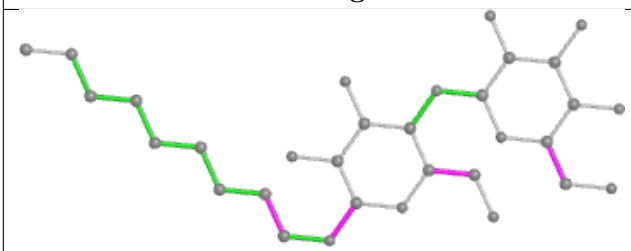
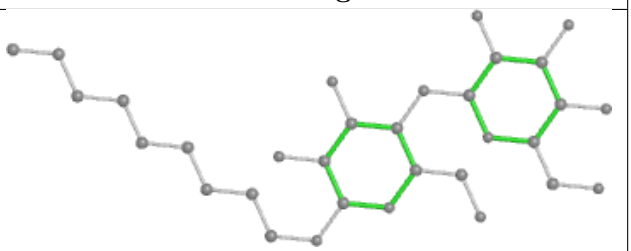


Bond angles

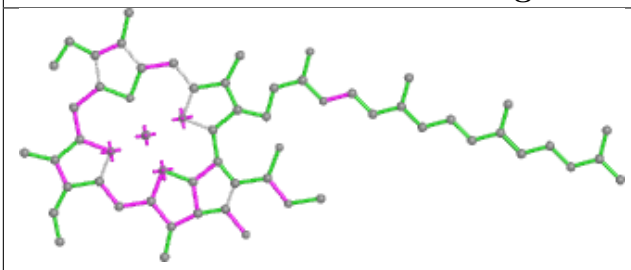


Torsions



Rings

Ligand CLA H 1235



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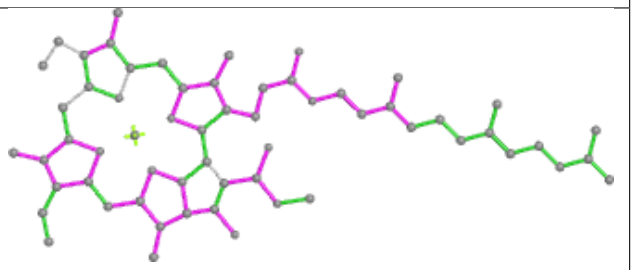
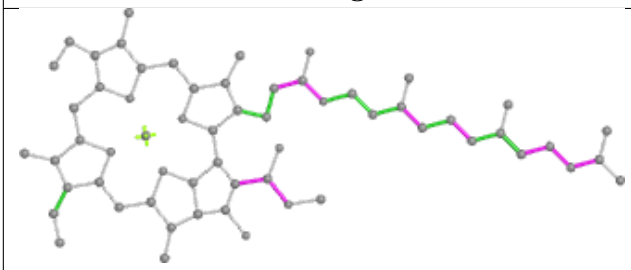


Bond angles



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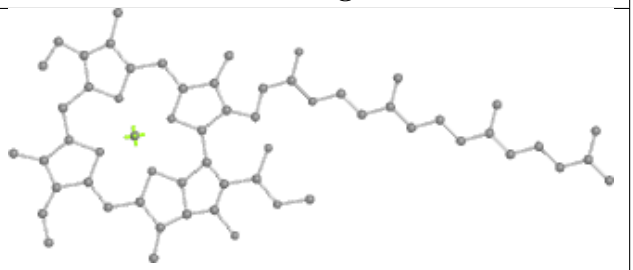
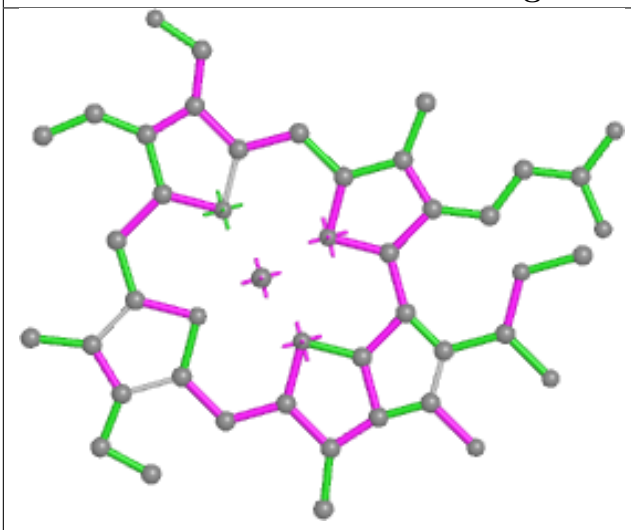
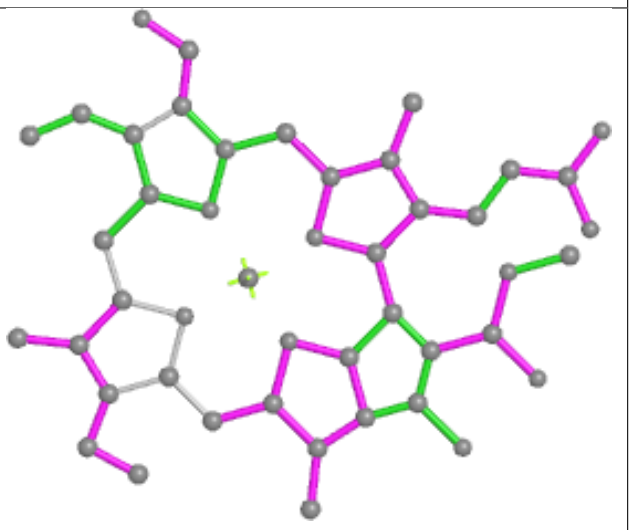


Rings

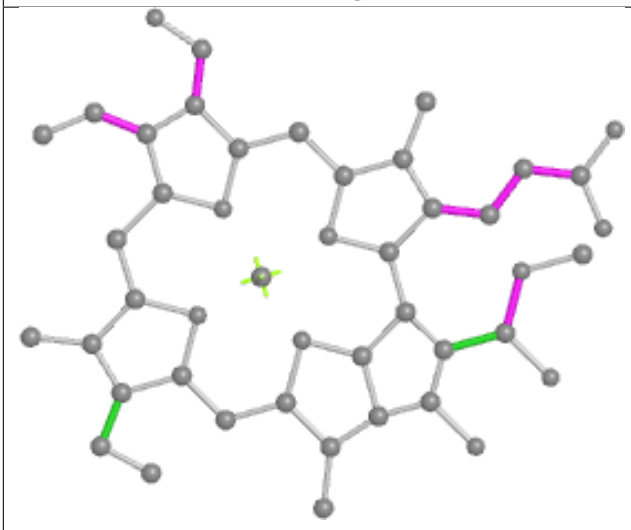
Ligand F6C a 1121



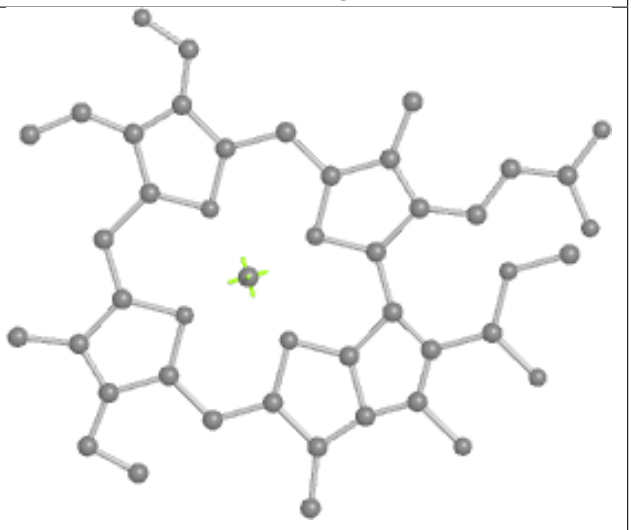
Bond lengths



Bond angles

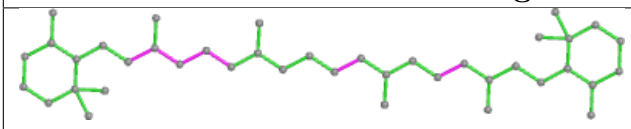


Torsions

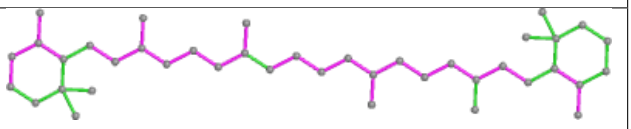


Rings

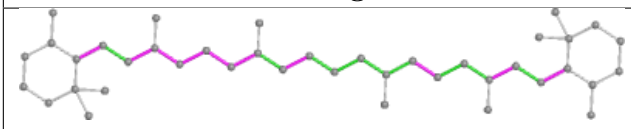
Ligand BCR B 4006



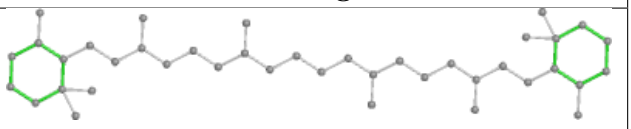
Bond lengths



Bond angles

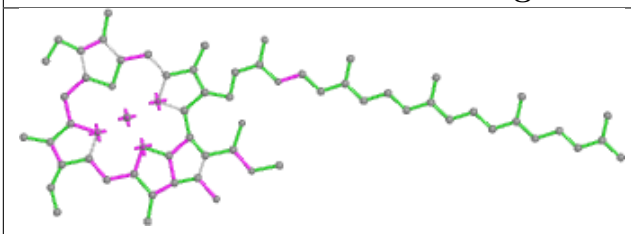


Torsions



Rings

Ligand CLA G 1115



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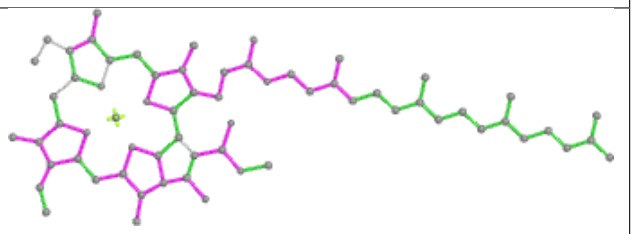
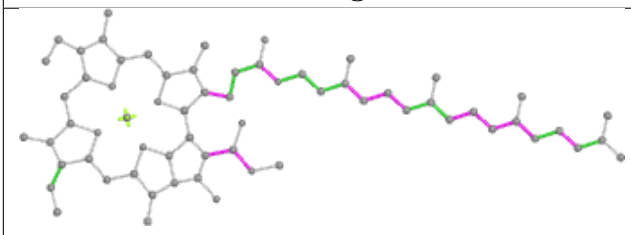


Bond angles



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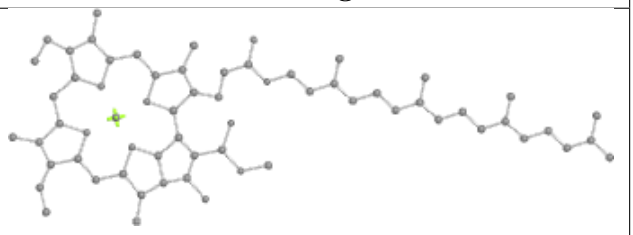
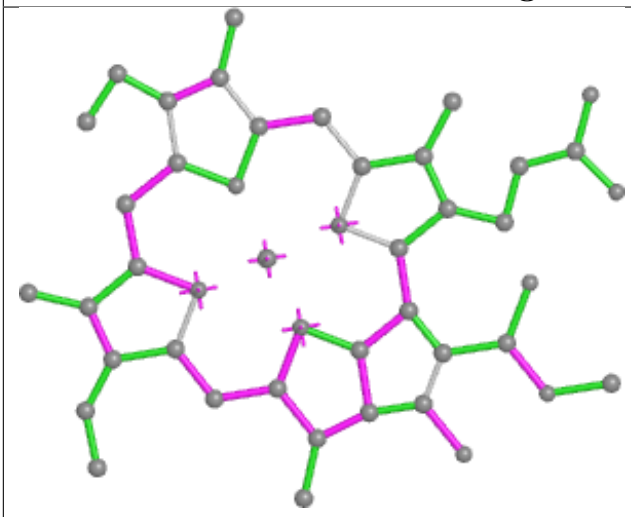
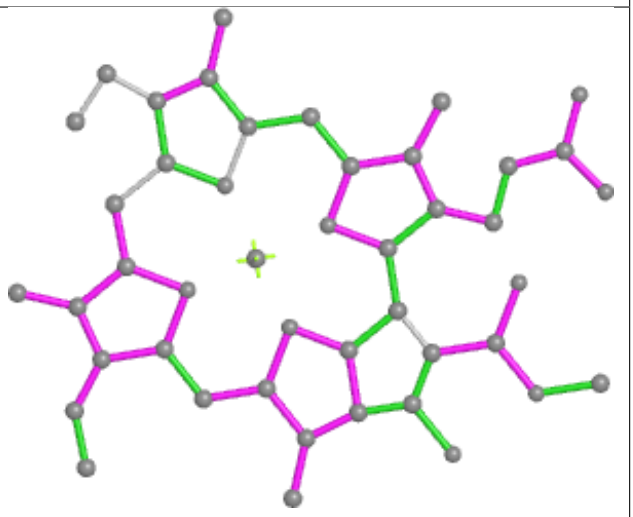


Rings

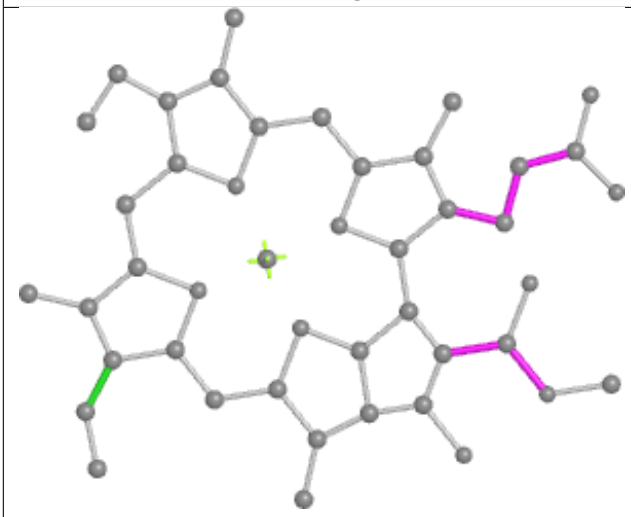
Ligand CLA b 1212



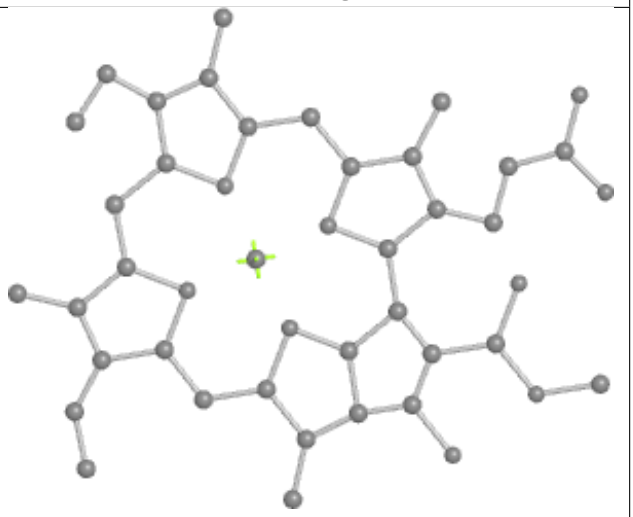
Bond lengths



Bond angles

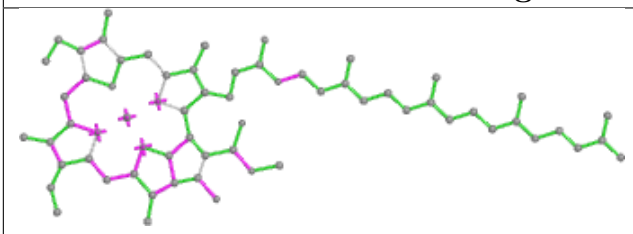


Torsions

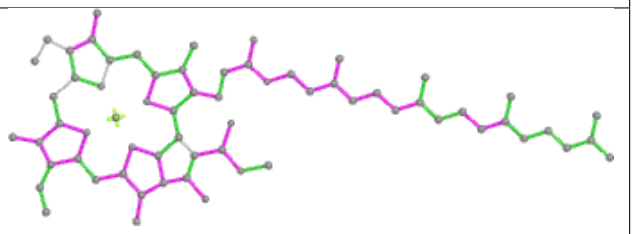


Rings

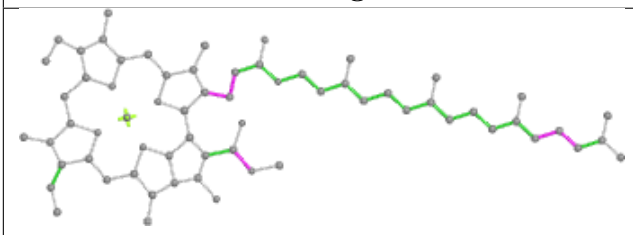
Ligand CLA A 1012



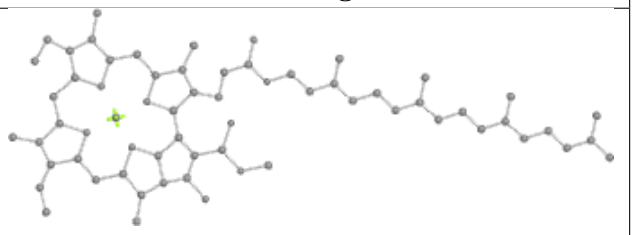
Bond lengths



Bond angles

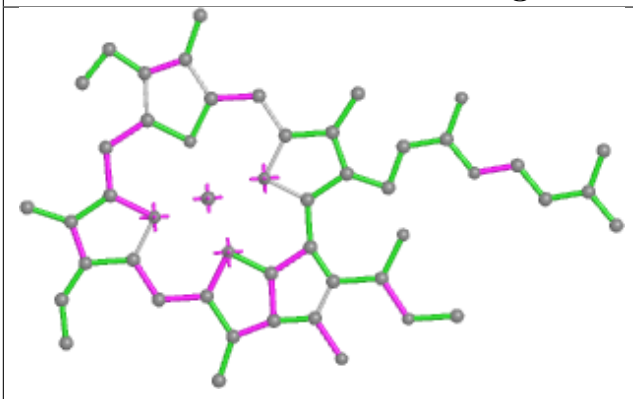


Torsions

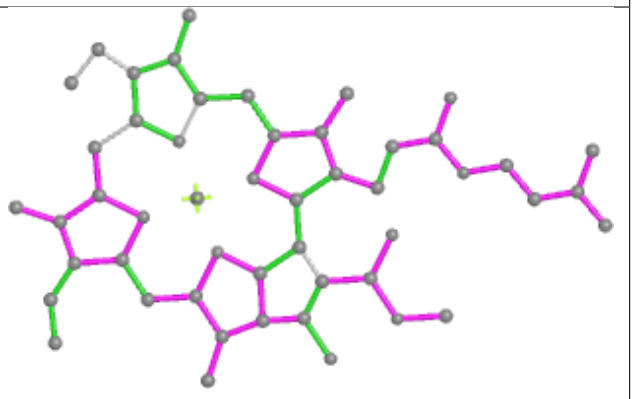


Rings

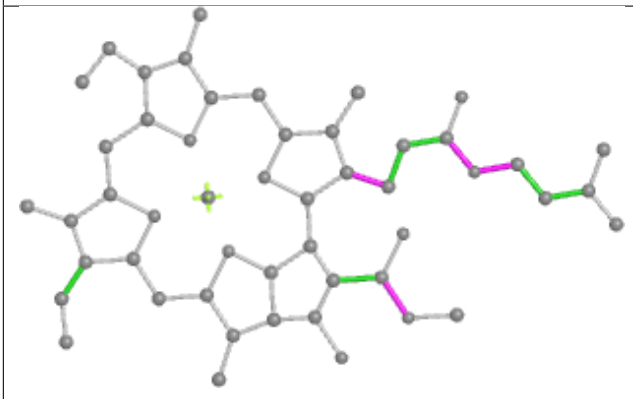
Ligand CLA M 1501



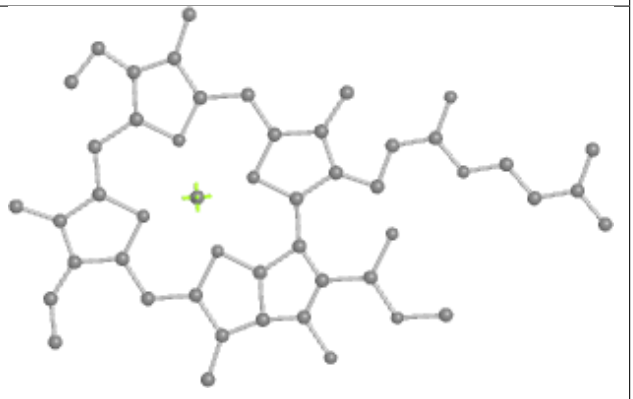
Bond lengths



Bond angles

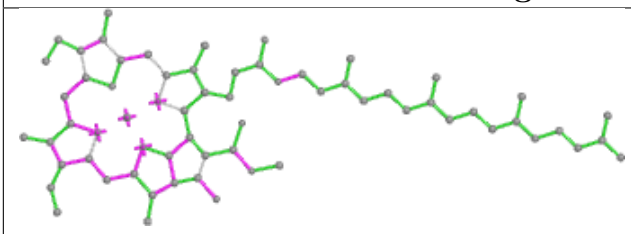


Torsions

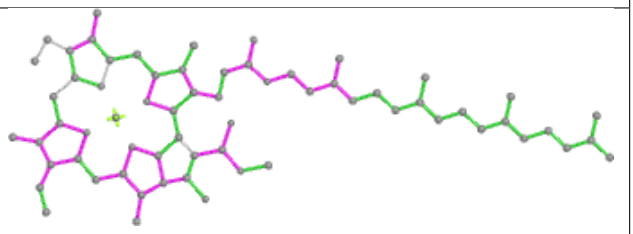


Rings

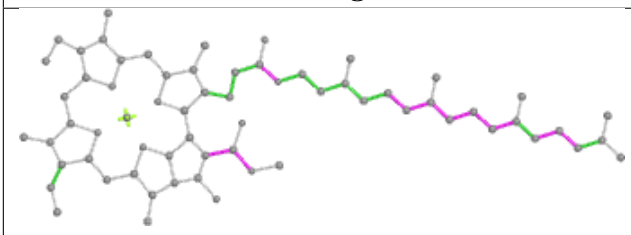
Ligand CLA H 1234



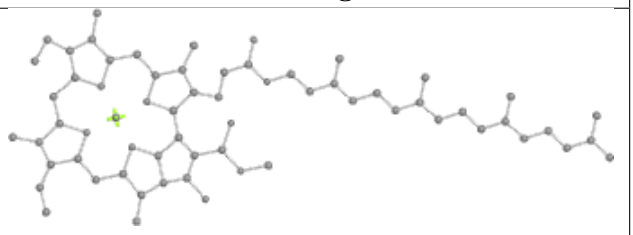
Bond lengths



Bond angles

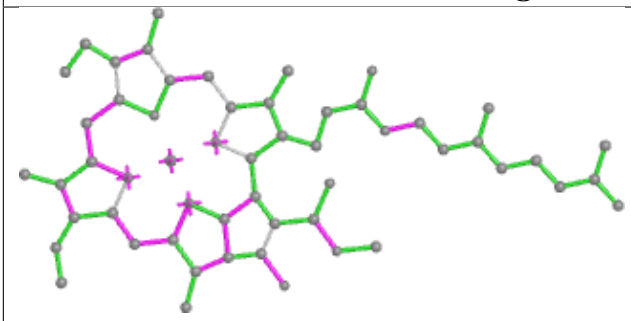


Torsions

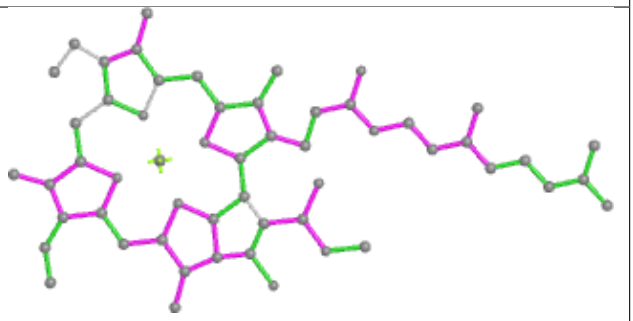


Rings

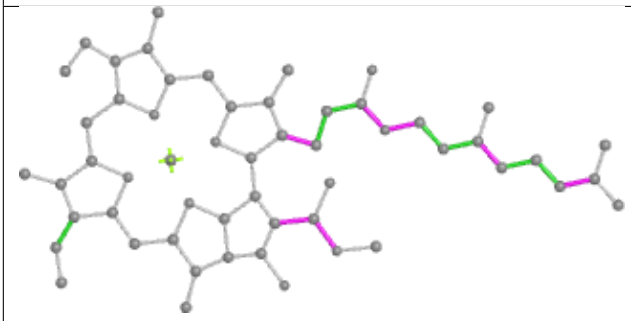
Ligand CLA A 1118



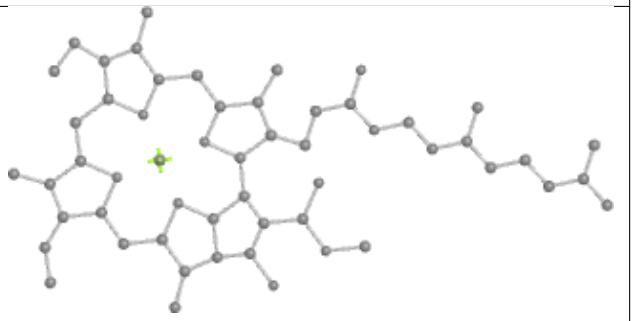
Bond lengths



Bond angles

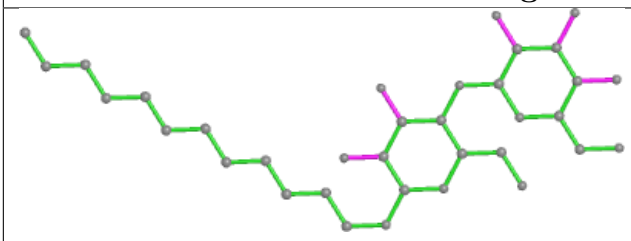


Torsions

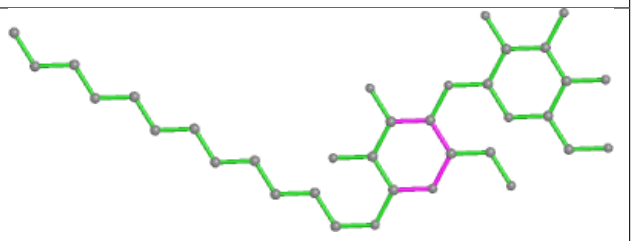


Rings

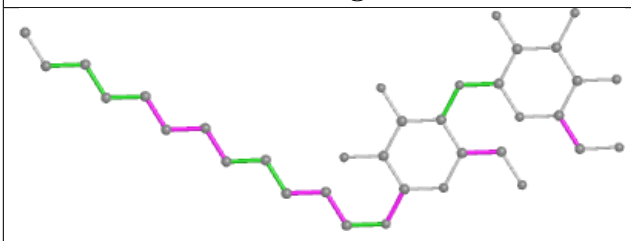
Ligand LMT i 6001



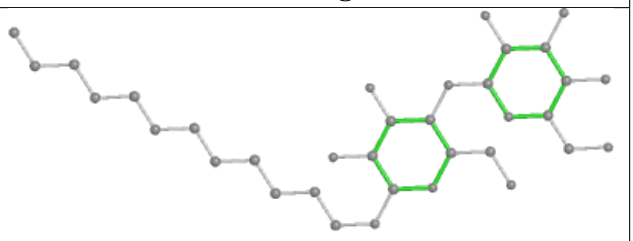
Bond lengths



Bond angles

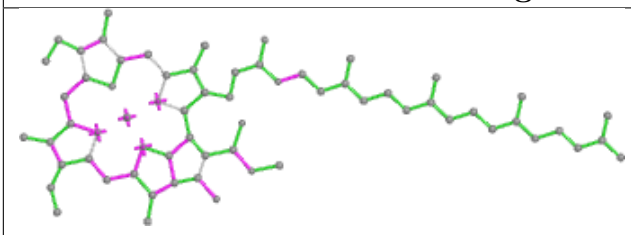


Torsions



Rings

Ligand CLA A 1119



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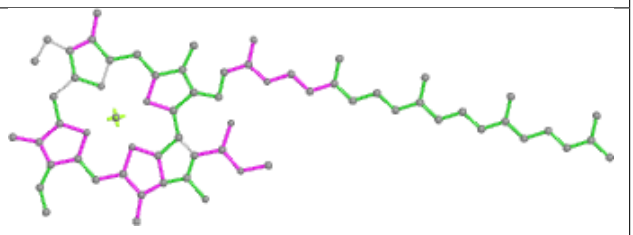
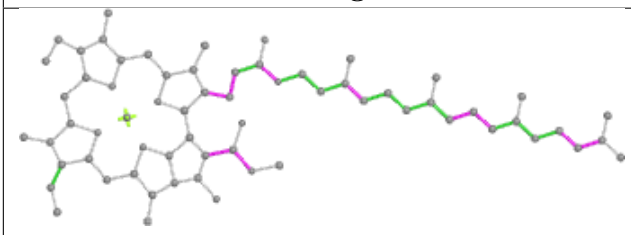
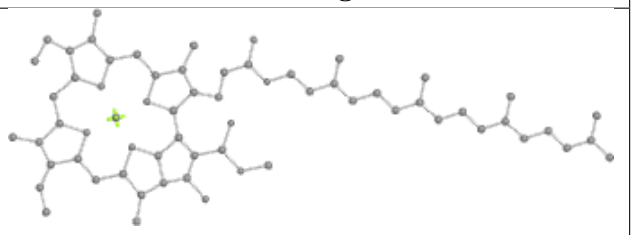


Bond angles

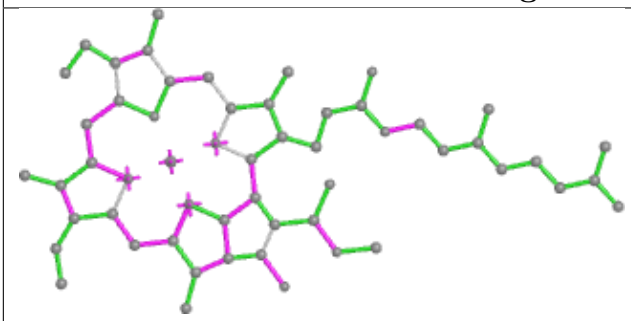


Torsions

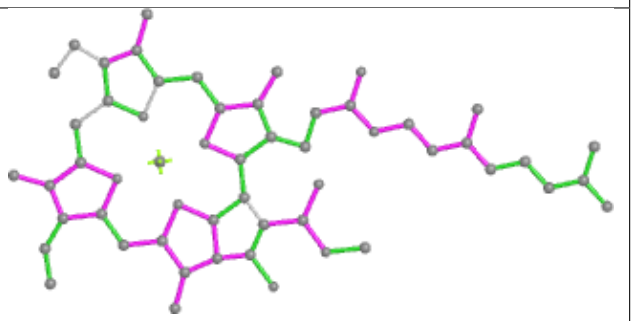


Rings

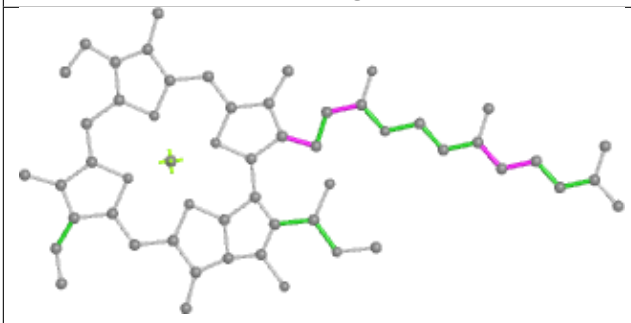
Ligand CLA a 1124



Bond lengths



Bond angles



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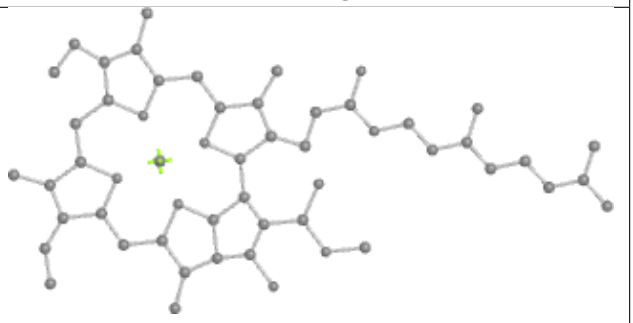
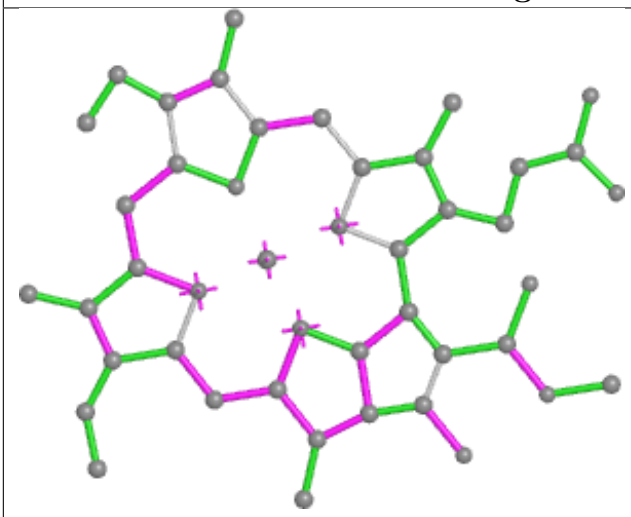
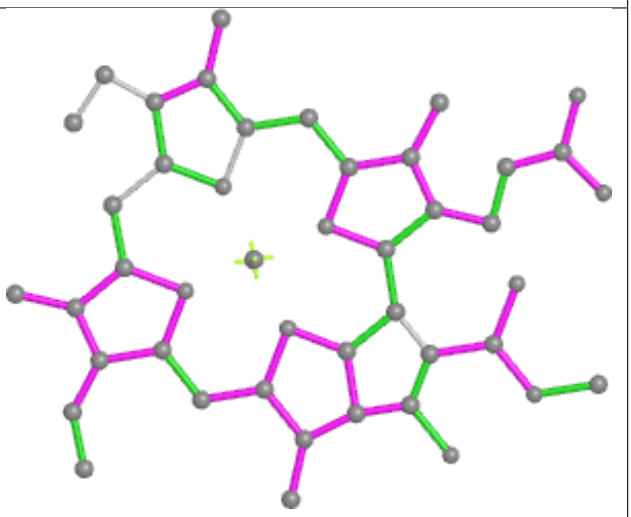


Rings

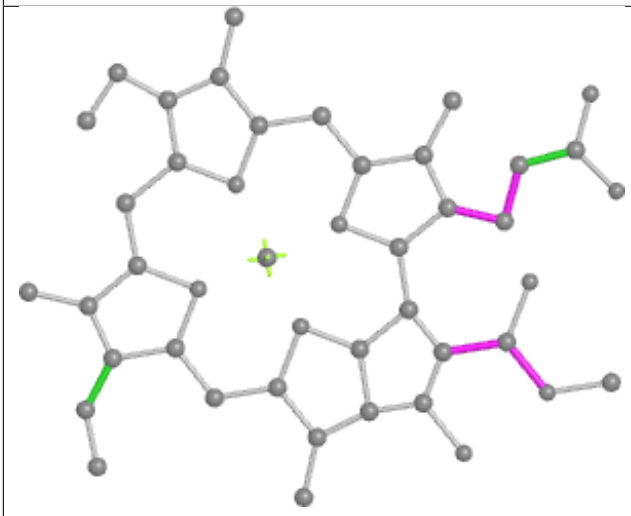
Ligand CLA G 1113



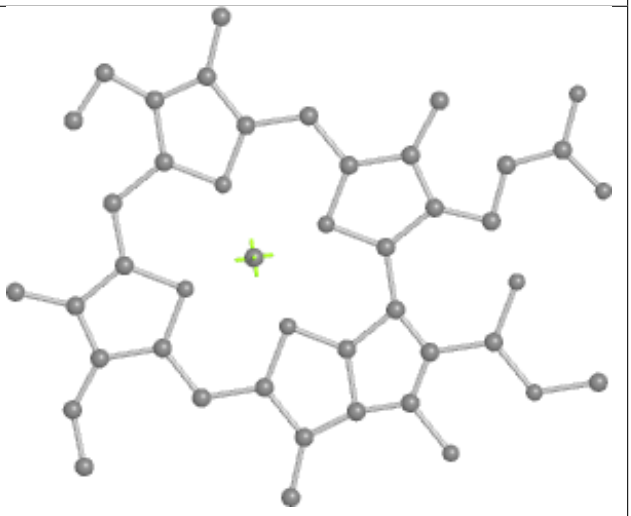
Bond lengths



Bond angles

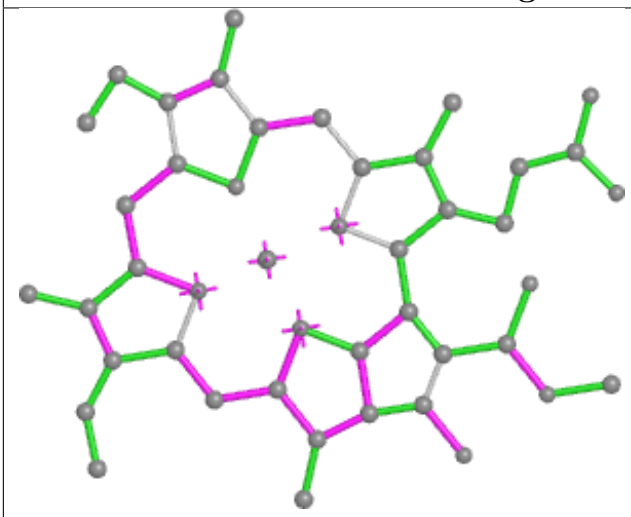


Torsions

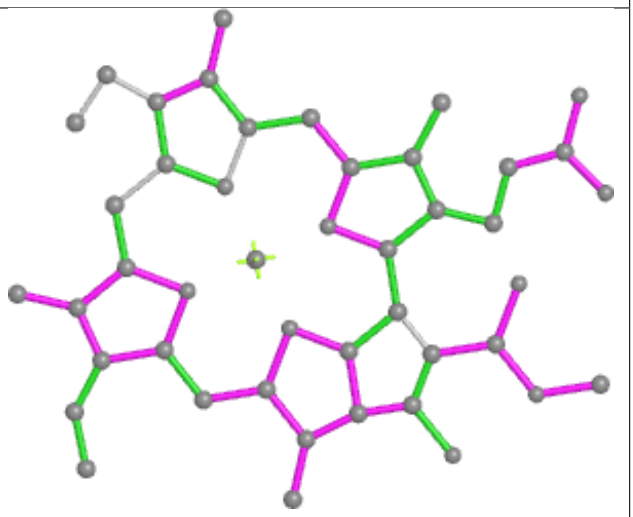


Rings

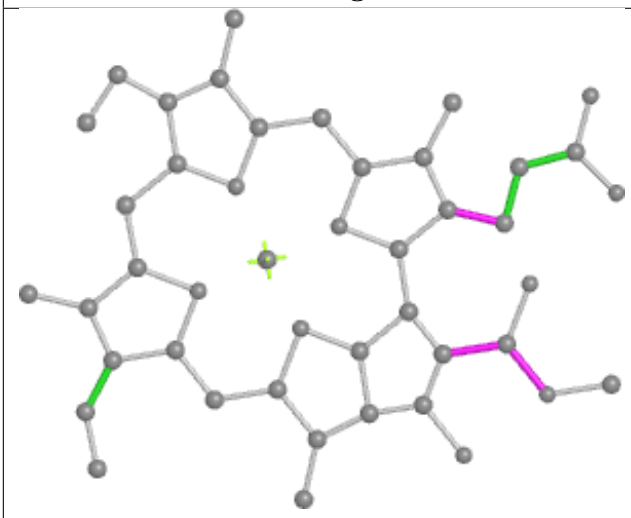
Ligand CLA b 1218



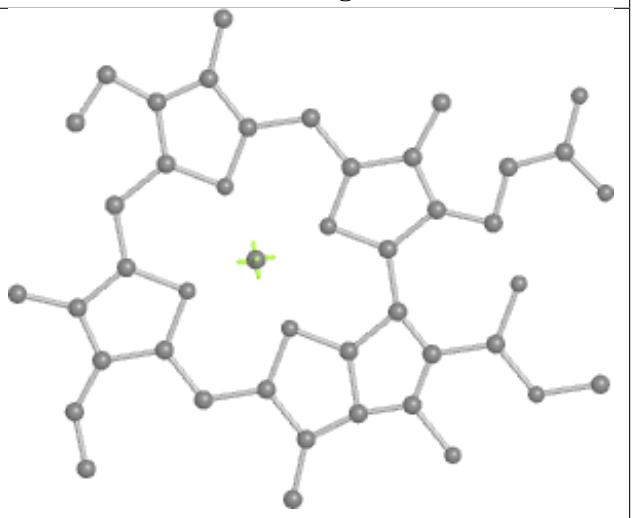
Bond lengths



Bond angles

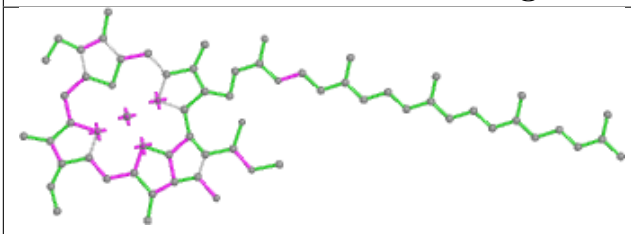


Torsions

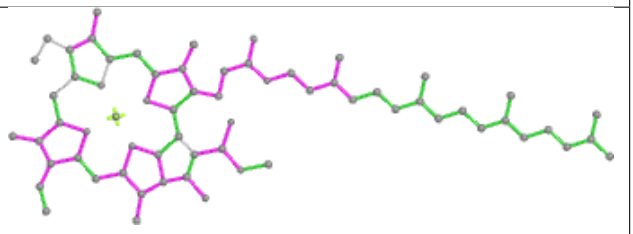


Rings

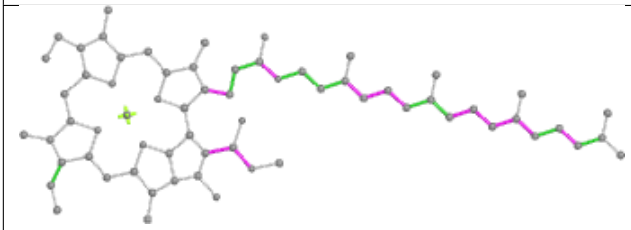
Ligand CLA a 1115



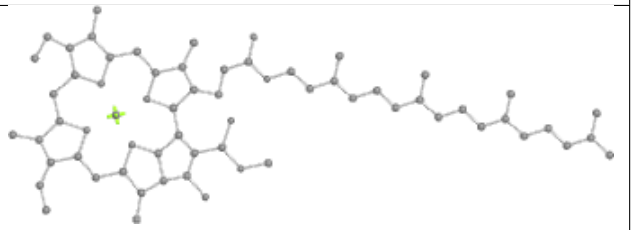
Bond lengths



Bond angles

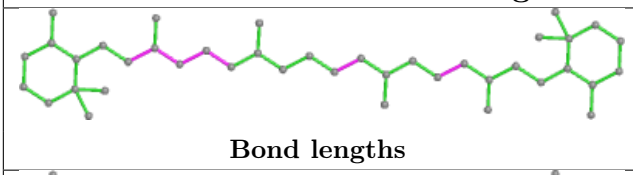


Torsions



Rings

Ligand BCR H 4009



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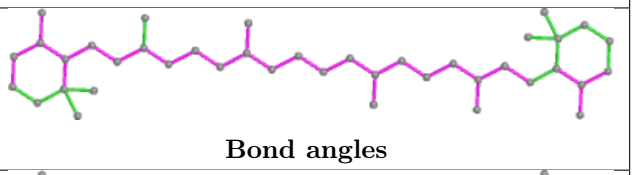
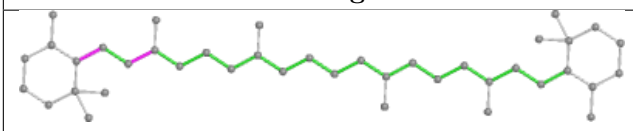
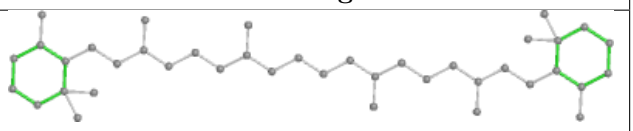


Bond angles

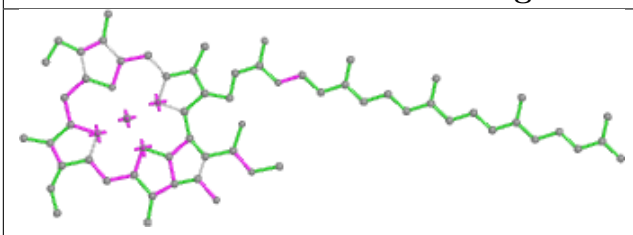


Torsions

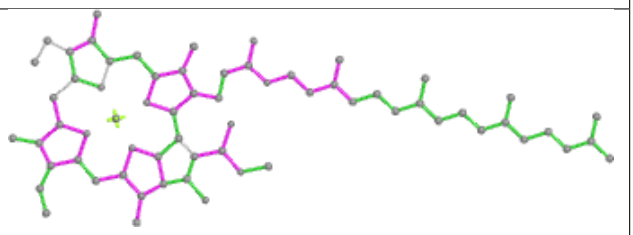


Rings

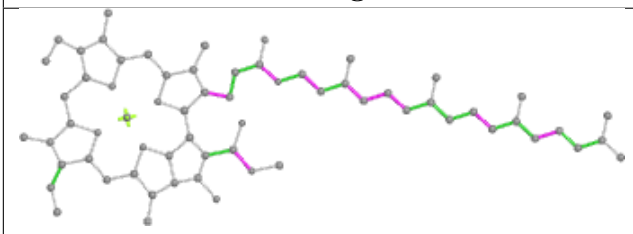
Ligand CLA U 1503



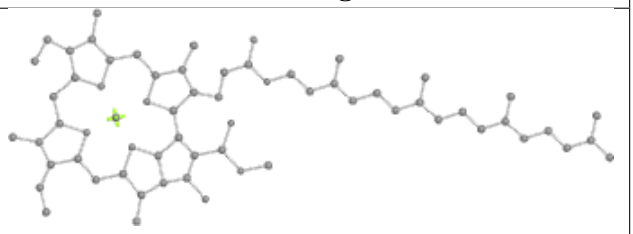
Bond lengths



Bond angles

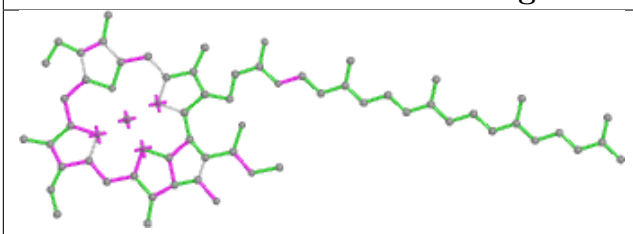


Torsions

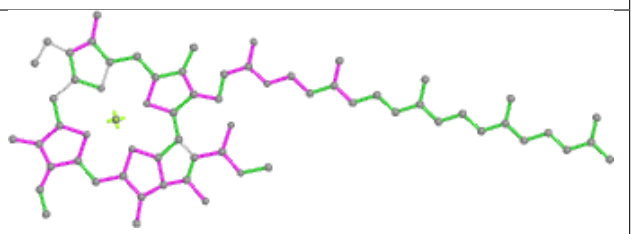


Rings

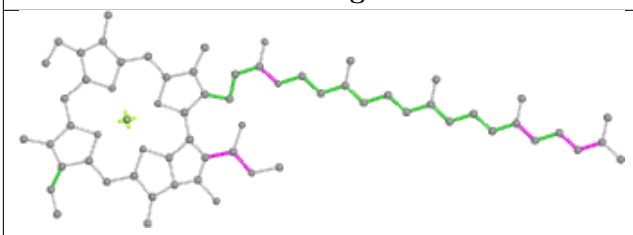
Ligand CLA b 1204



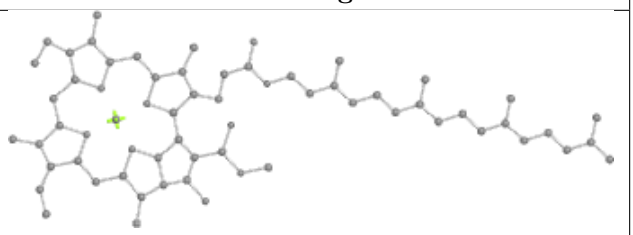
Bond lengths



Bond angles

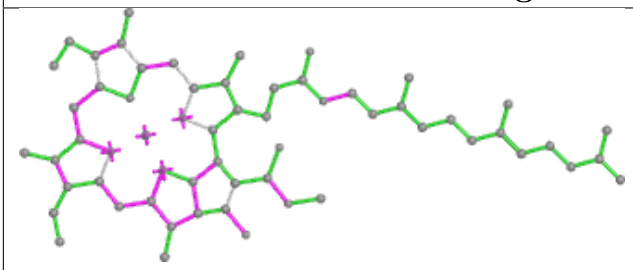


Torsions

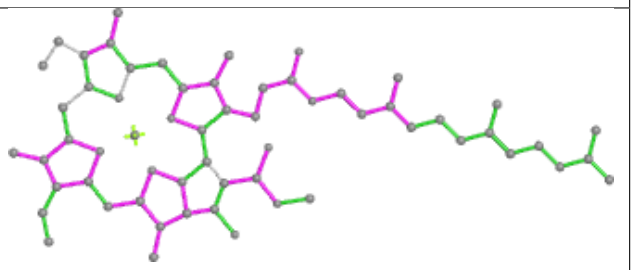


Rings

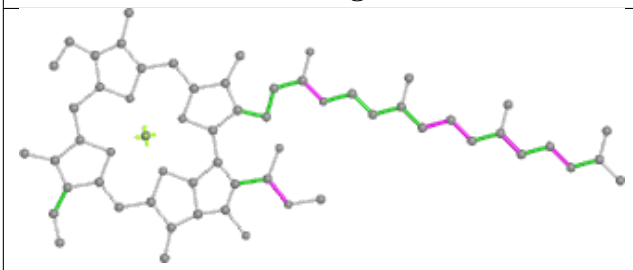
Ligand CLA B 1208



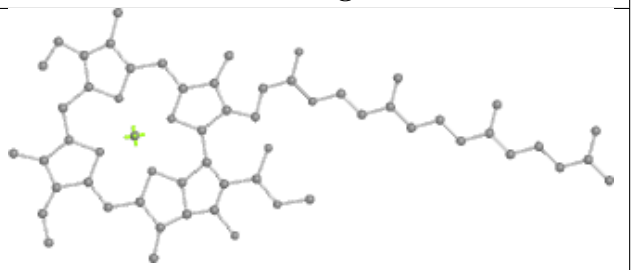
Bond lengths



Bond angles

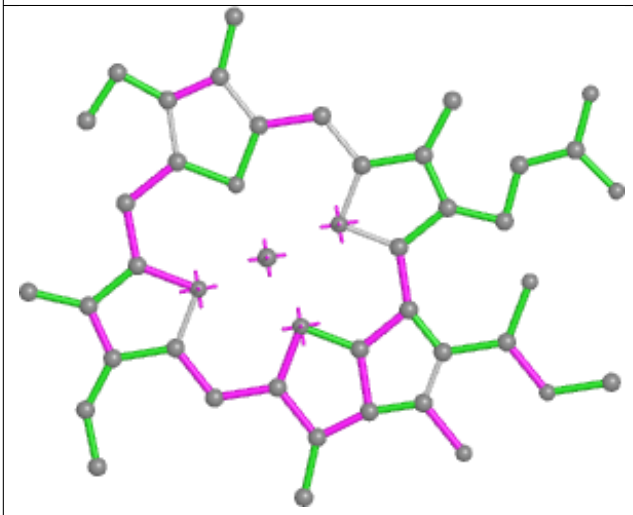


Torsions

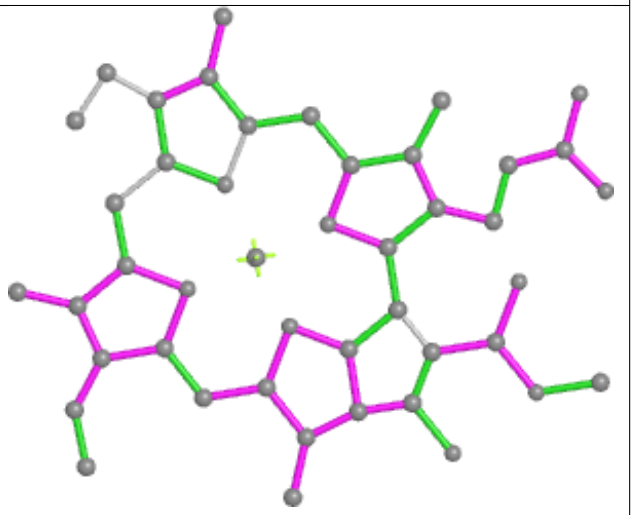


Rings

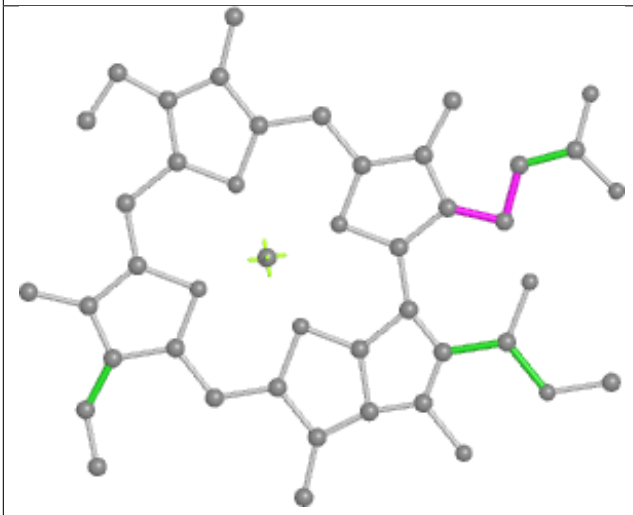
Ligand CLA b 1213



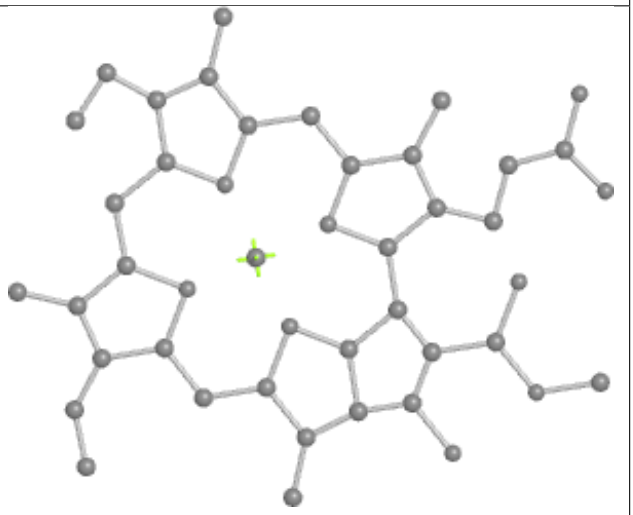
Bond lengths



Bond angles

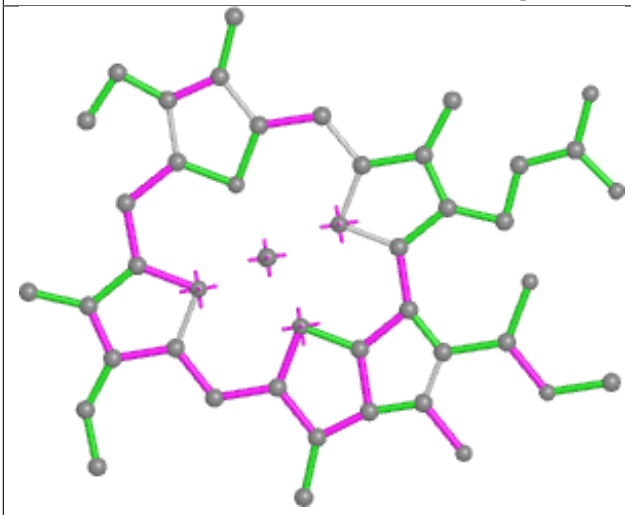


Torsions

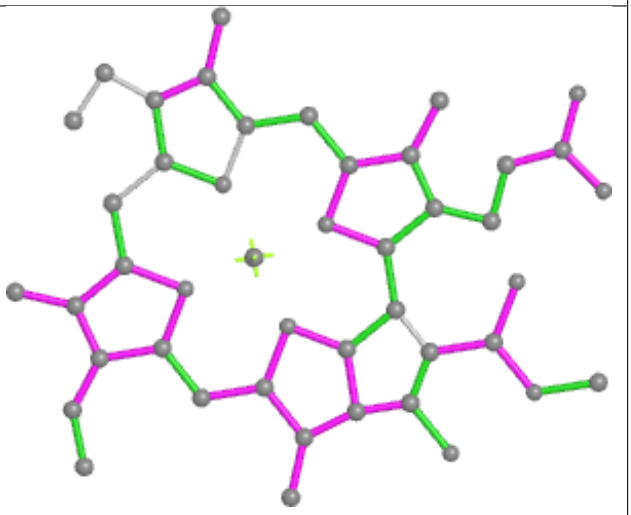


Rings

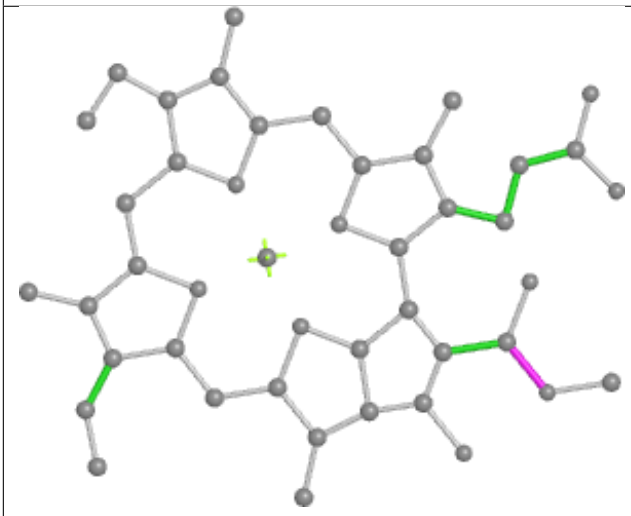
Ligand CLA H 1232



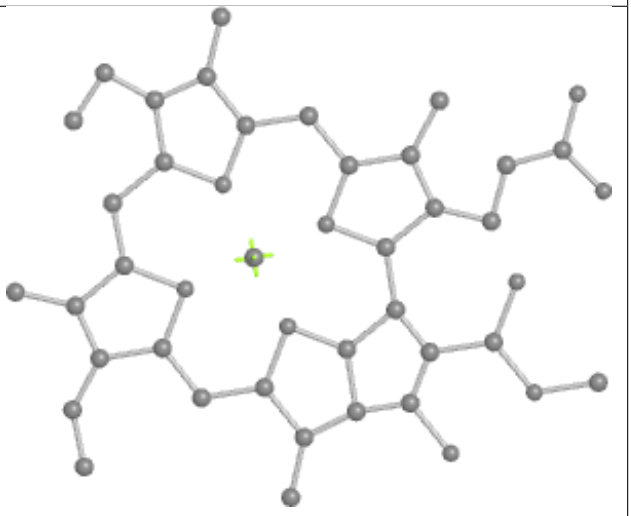
Bond lengths



Bond angles

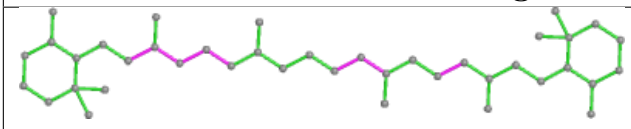


Torsions

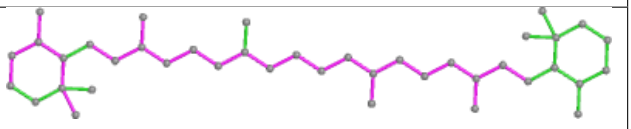


Rings

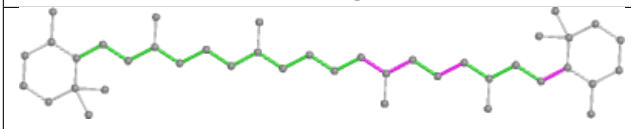
Ligand BCR H 4010



Bond lengths



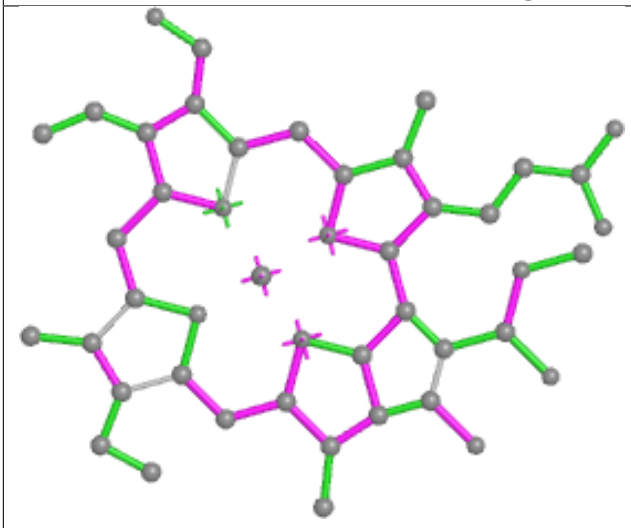
Bond angles



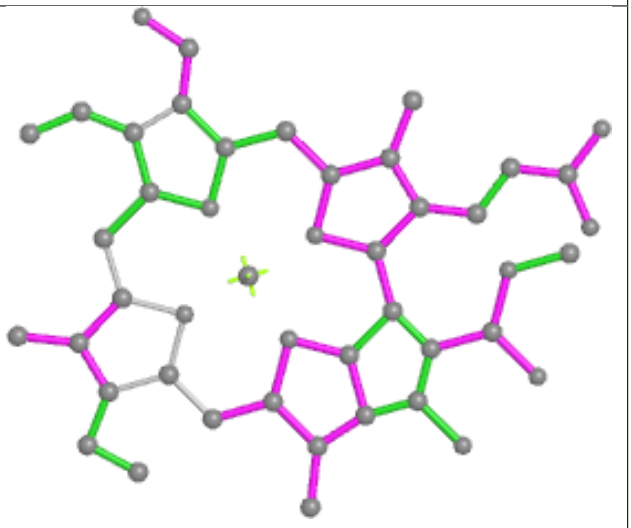
Torsions

Rings

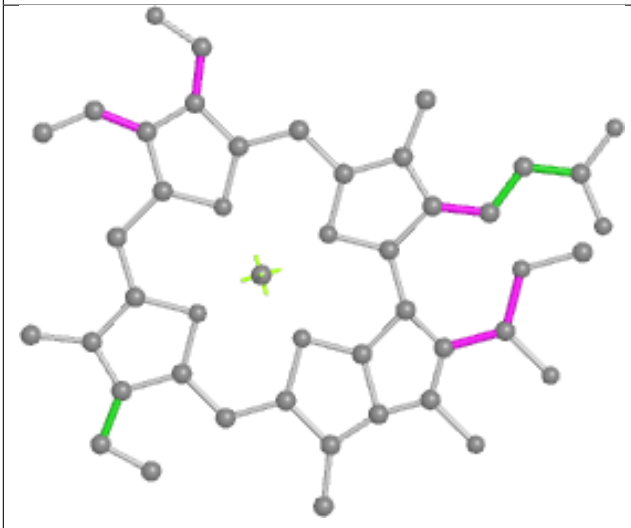
Ligand F6C B 1230



Bond lengths



Bond angles



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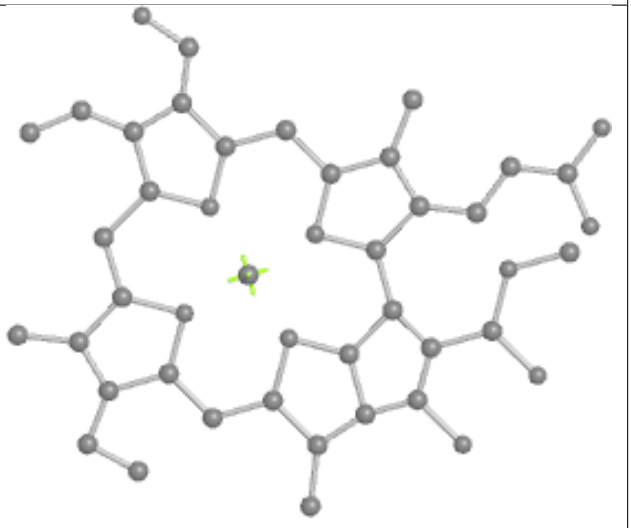
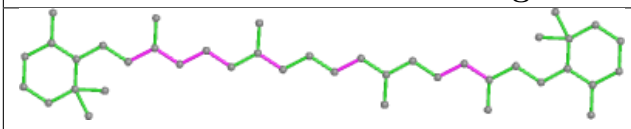
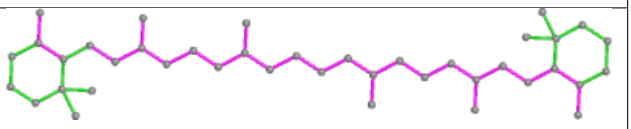


Rings

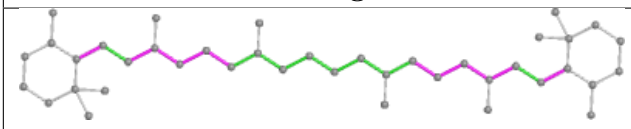
Ligand BCR H 4017



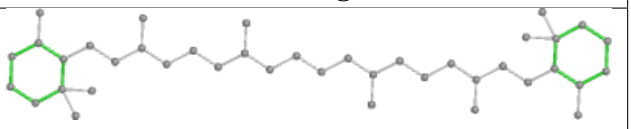
Bond lengths



Bond angles

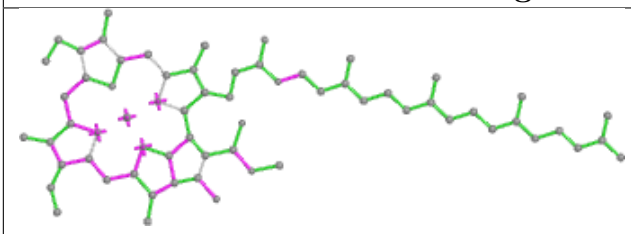


Torsions

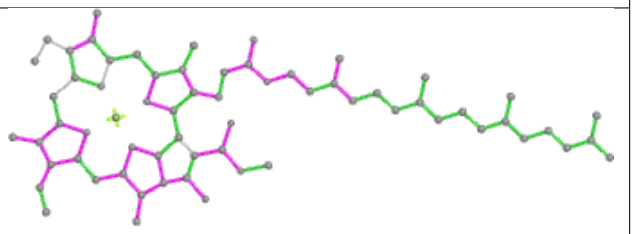


Rings

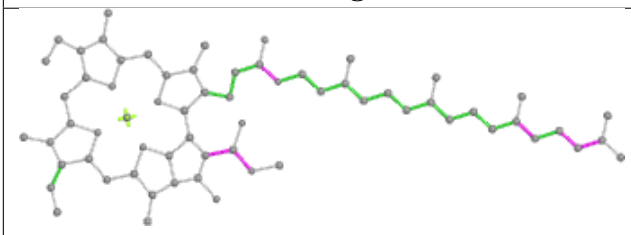
Ligand CLA H 1204



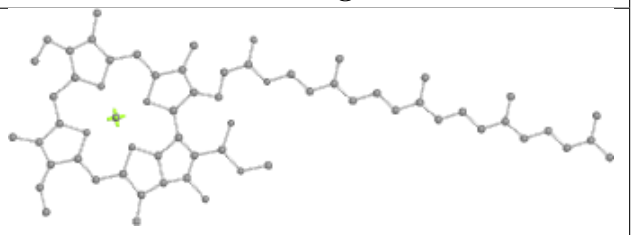
Bond lengths



Bond angles

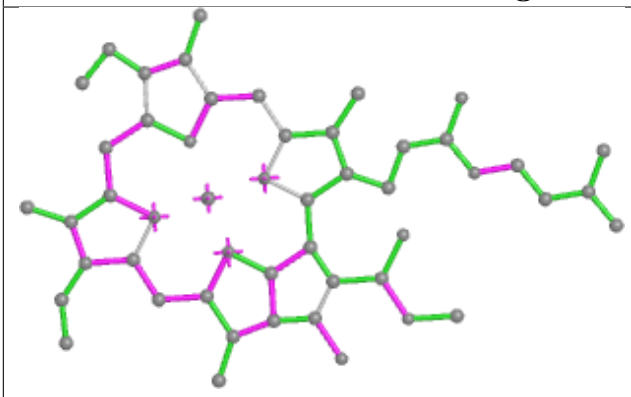


Torsions

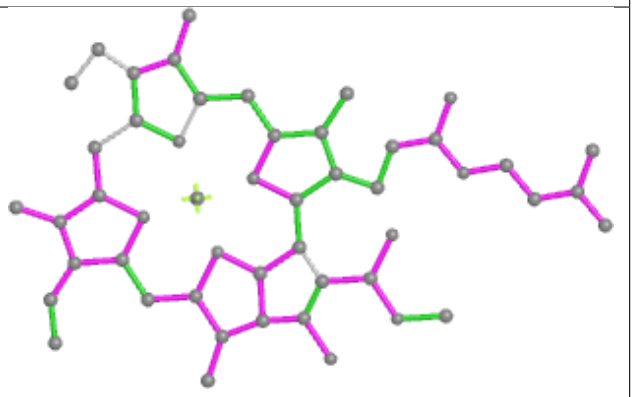


Rings

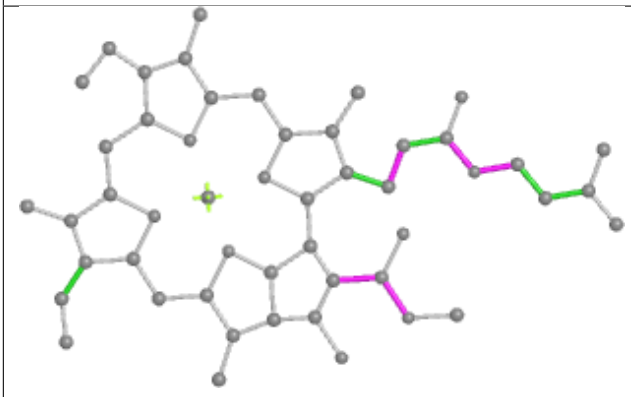
Ligand CLA A 1135



Bond lengths



Bond angles



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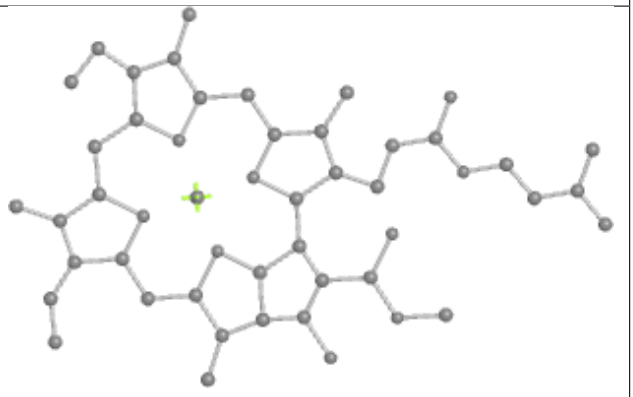
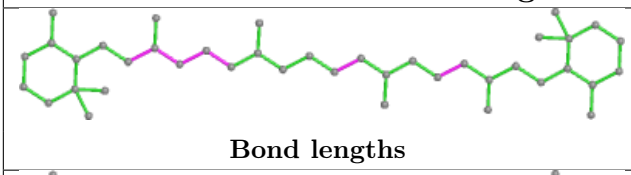


Rings

Ligand BCR a 4006



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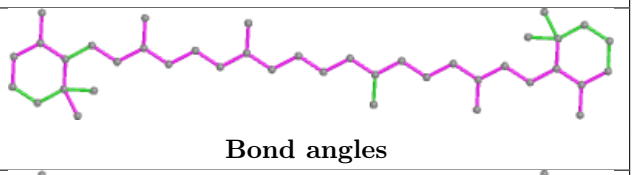
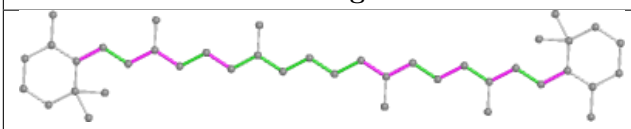
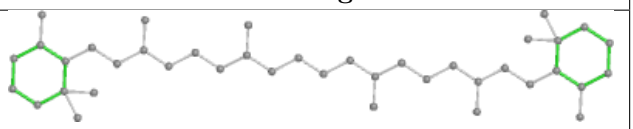


Bond angles

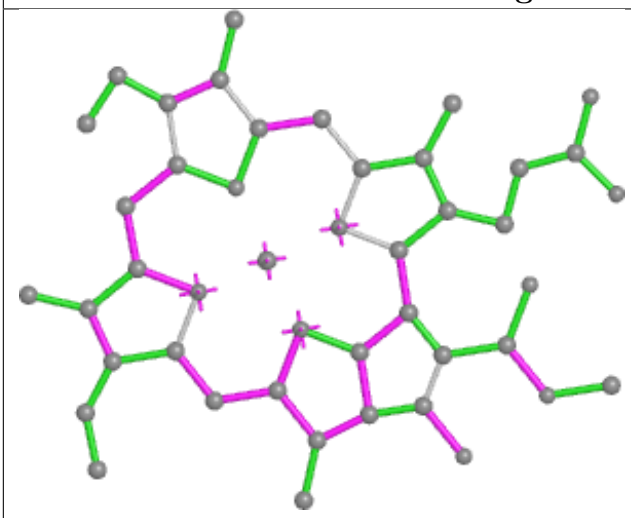


Torsions



Rings

Ligand CLA B 1213



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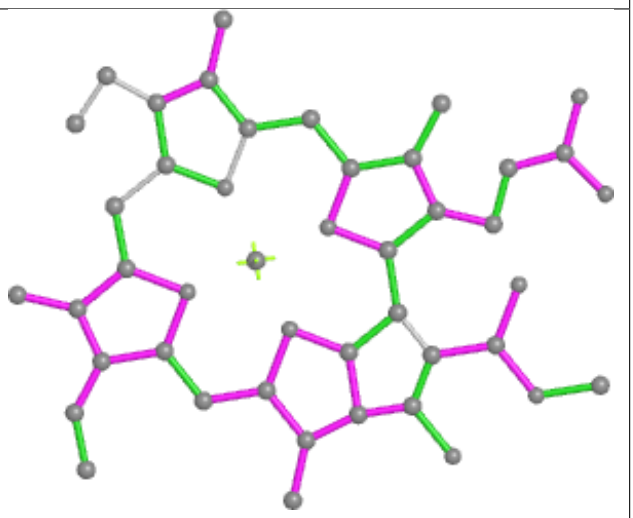
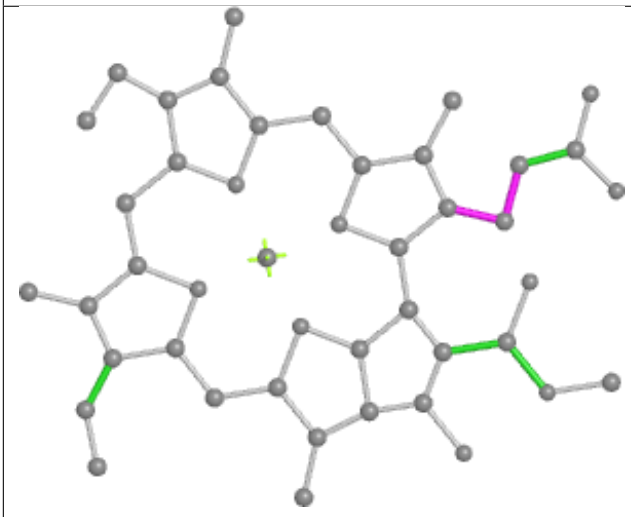
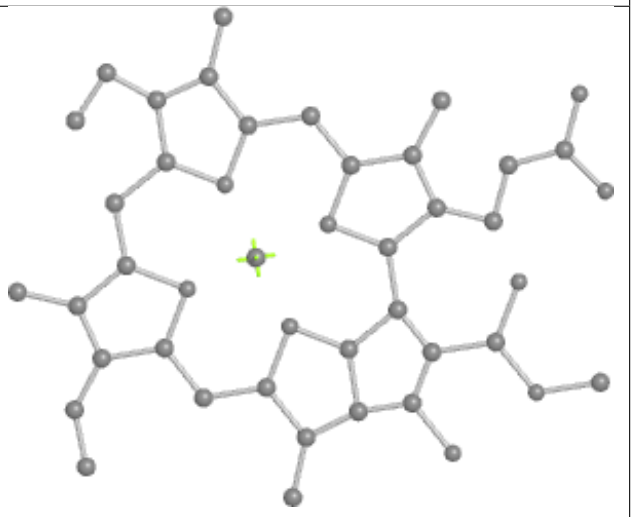


Bond angles

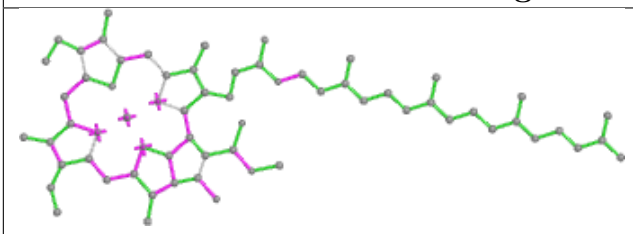


Torsions

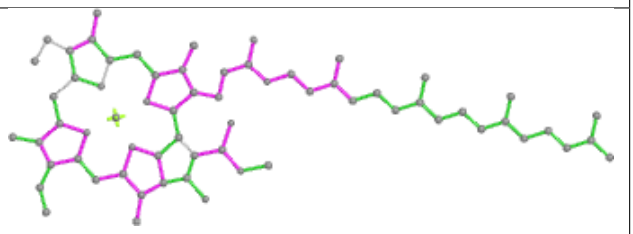


Rings

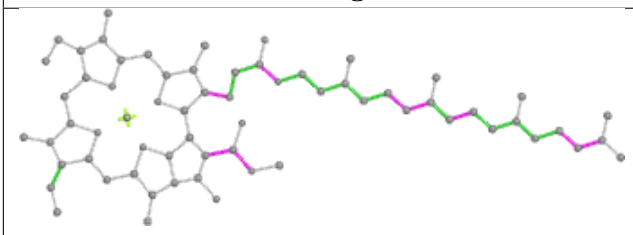
Ligand CLA H 1222



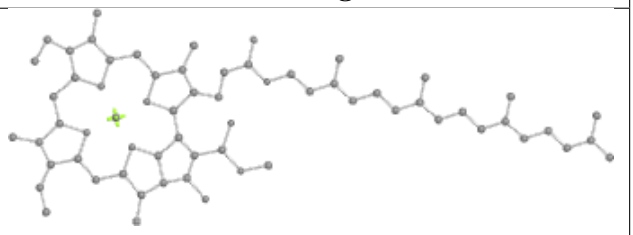
Bond lengths



Bond angles

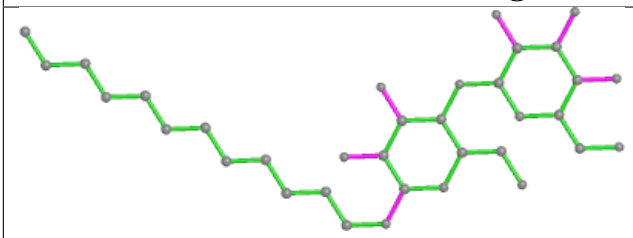


Torsions

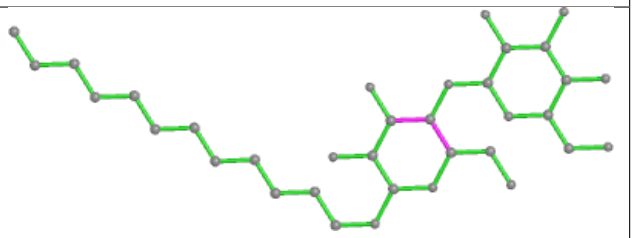


Rings

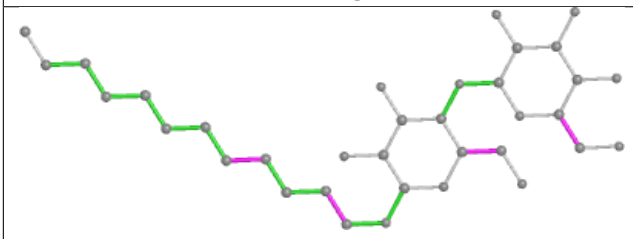
Ligand LMT M 6000



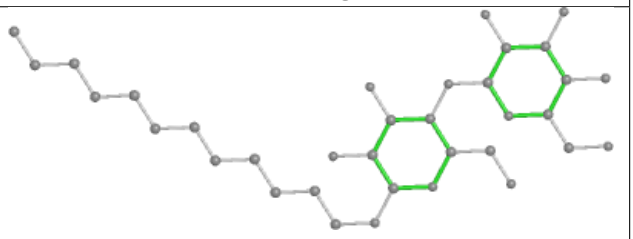
Bond lengths



Bond angles

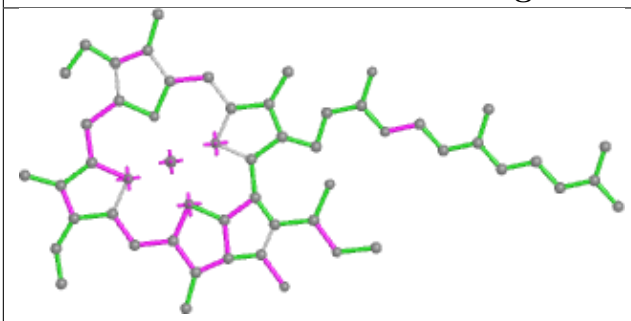


Torsions

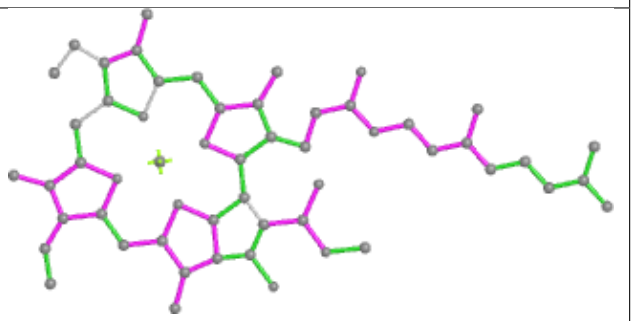


Rings

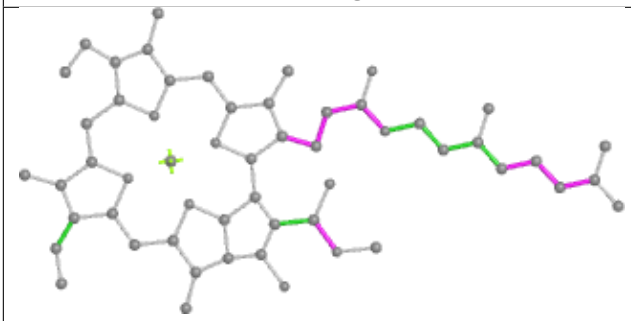
Ligand CLA A 1116



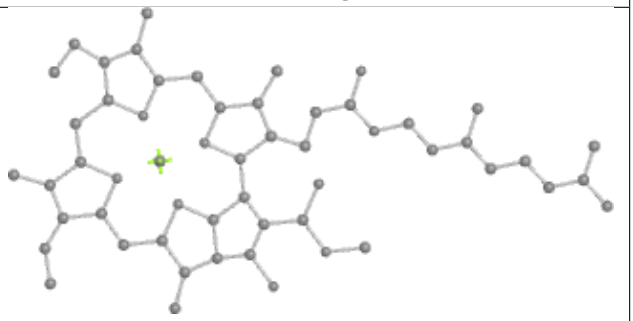
Bond lengths



Bond angles

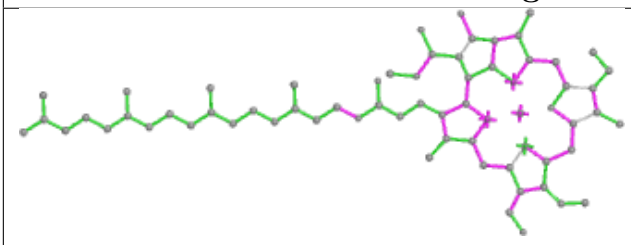


Torsions

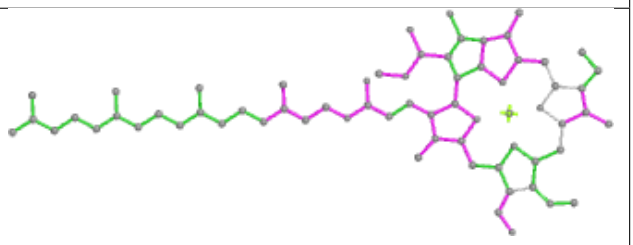


Rings

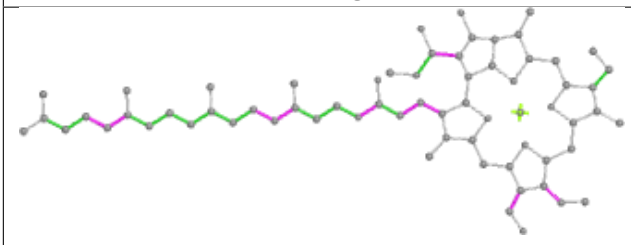
Ligand F6C b 1238



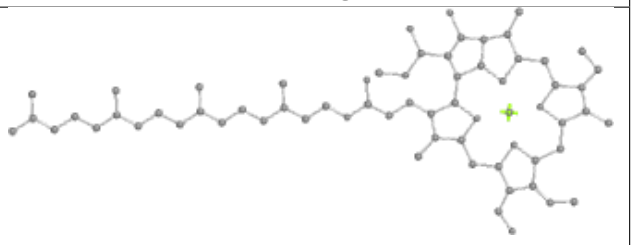
Bond lengths



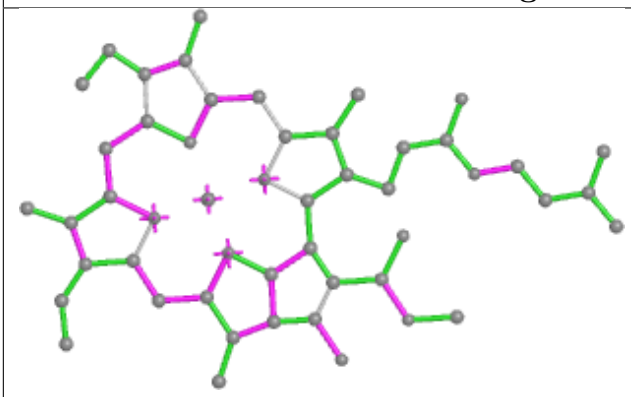
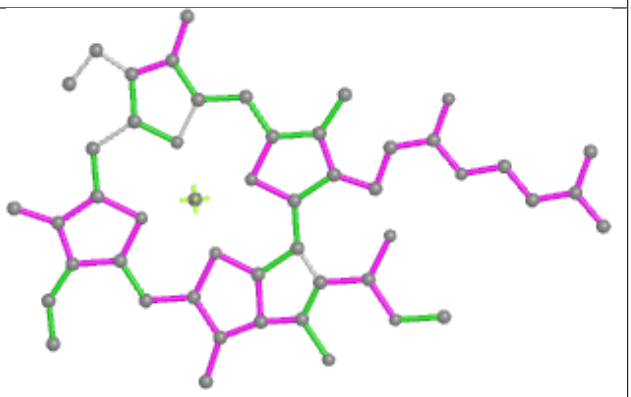
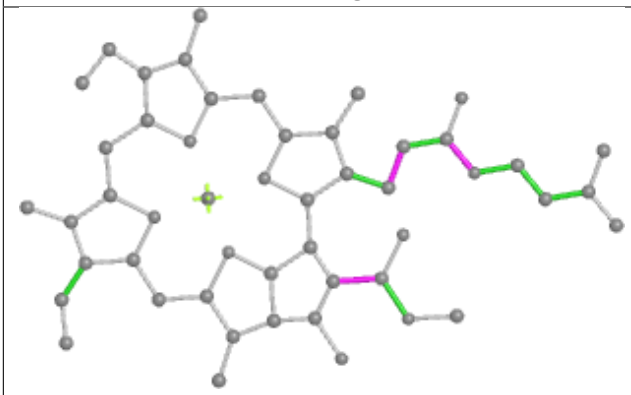
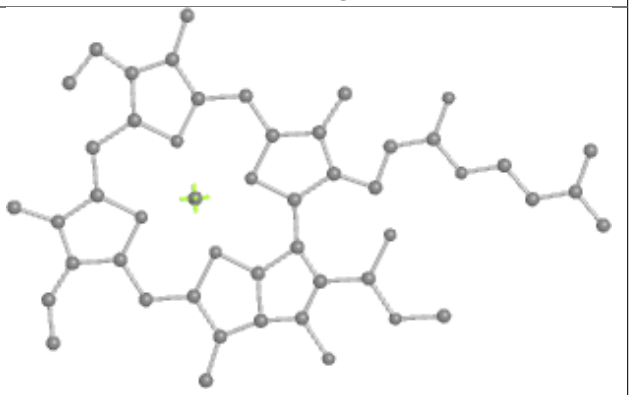
Bond angles

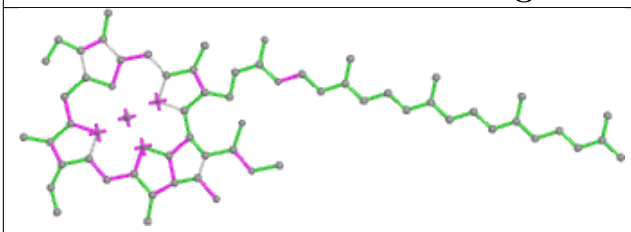
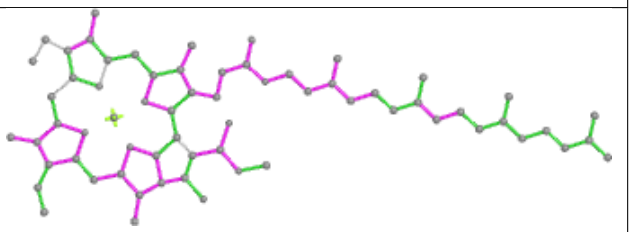
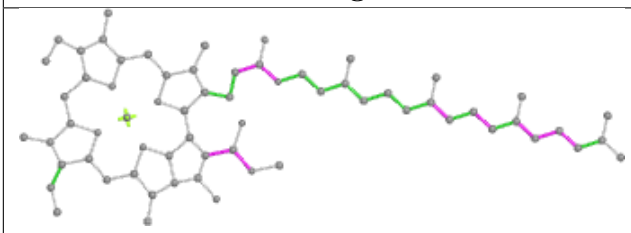
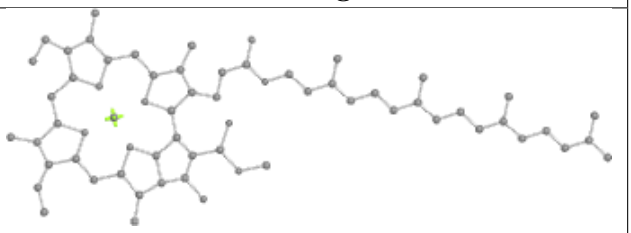


Torsions

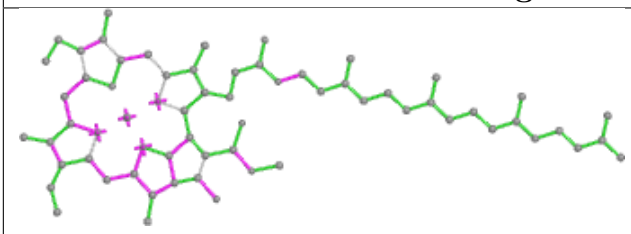


Rings

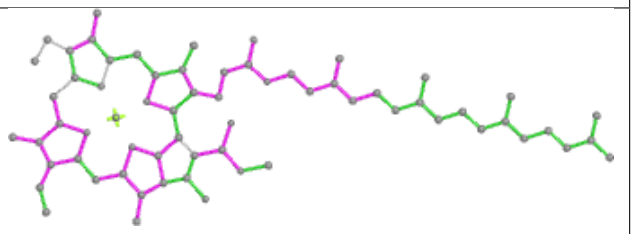
Ligand CLA a 1129	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA B 1021	
	
Bond lengths	Bond angles
	
Torsions	Rings

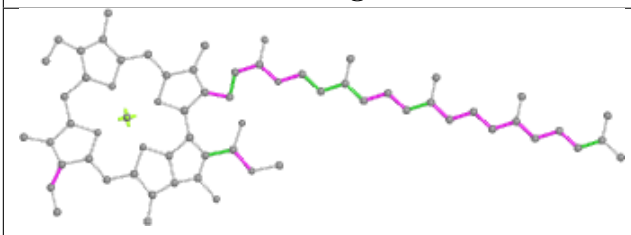
Ligand CLA B 1239



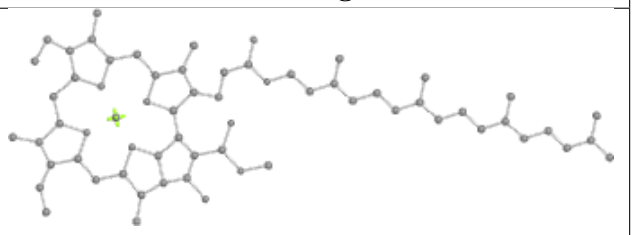
Bond lengths



Bond angles

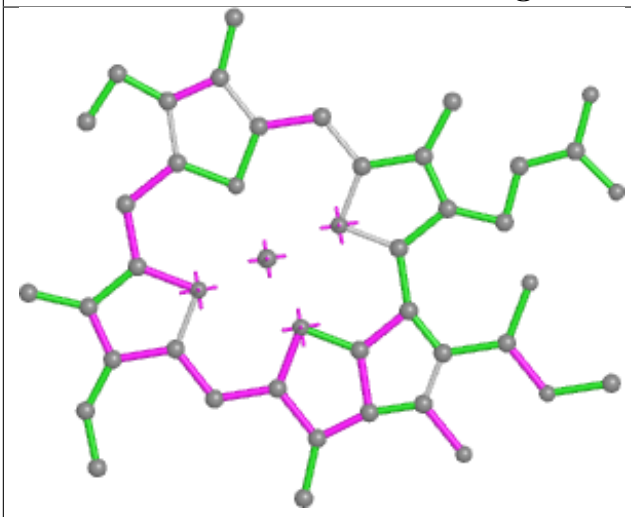


Torsions

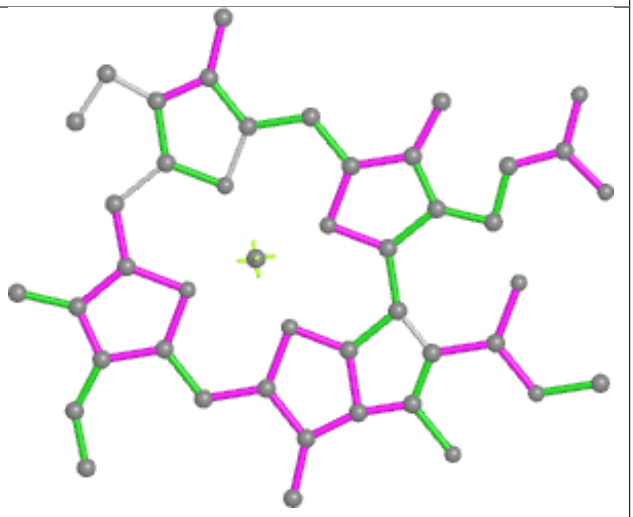


Rings

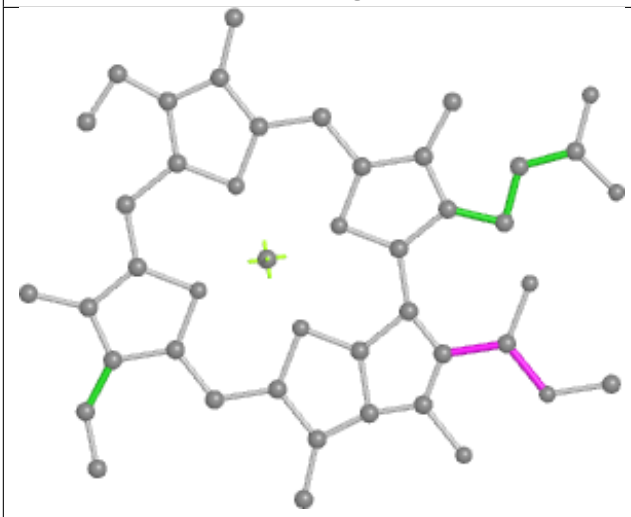
Ligand CLA A 1114



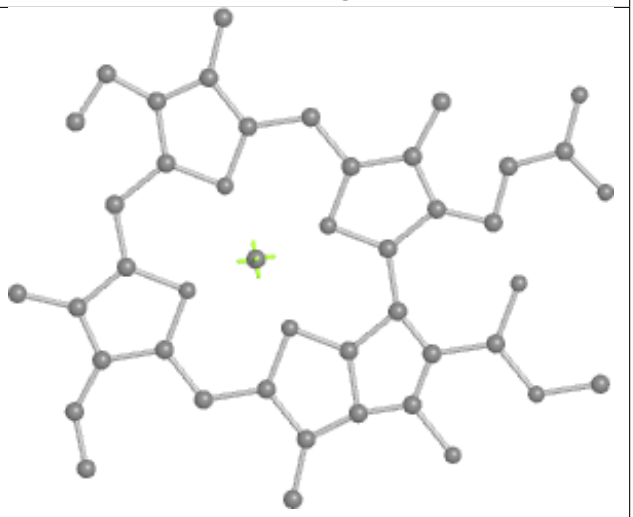
Bond lengths



Bond angles

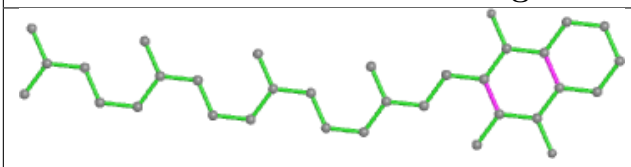


Torsions

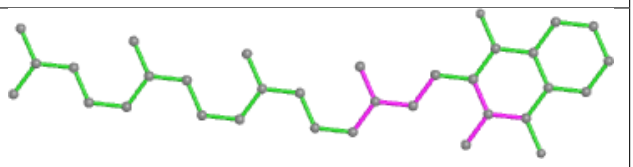


Rings

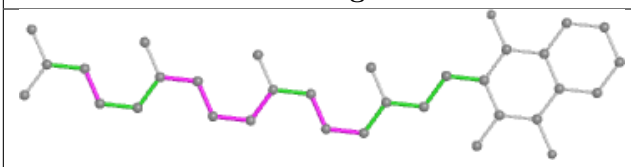
Ligand PQN G 2001



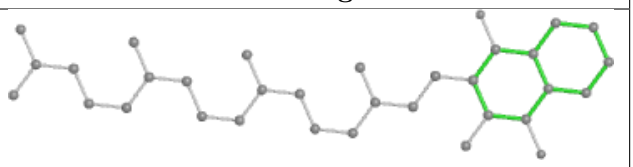
Bond lengths



Bond angles

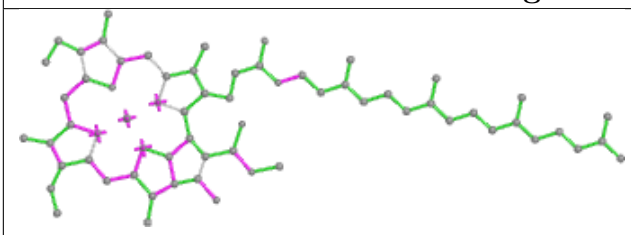


Torsions

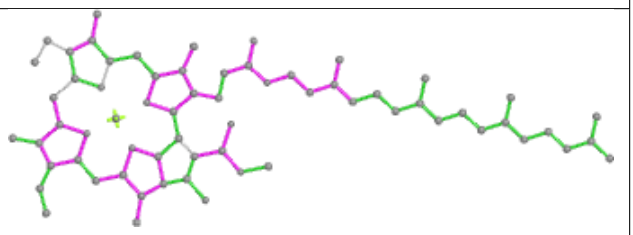


Rings

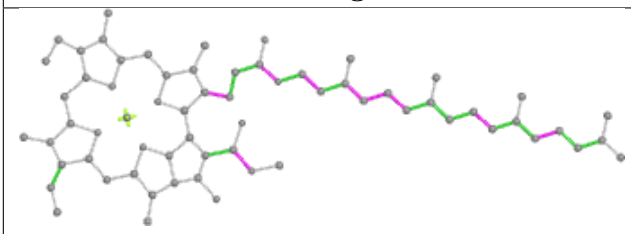
Ligand CLA l 1503



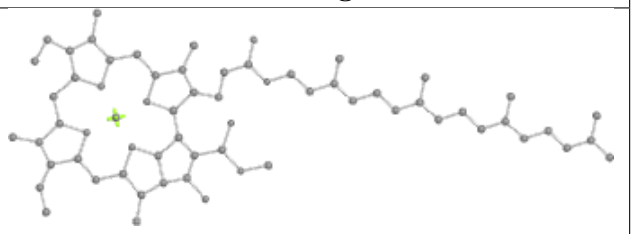
Bond lengths



Bond angles

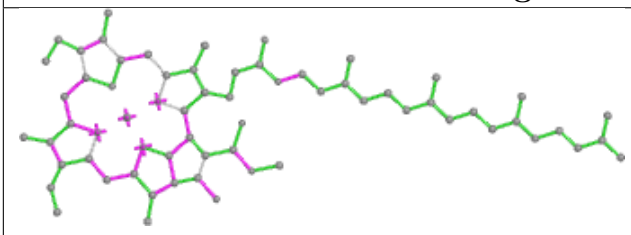


Torsions

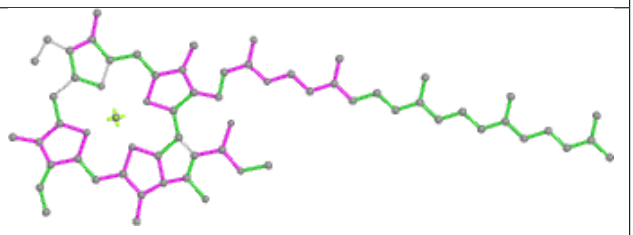


Rings

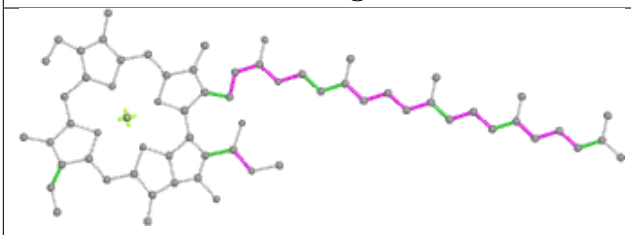
Ligand CLA G 1136



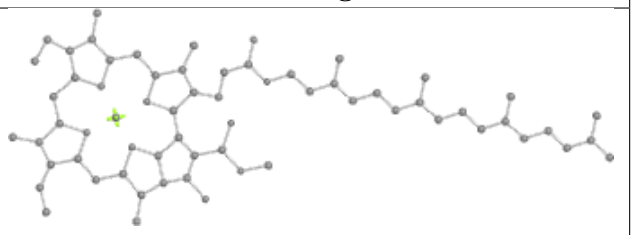
Bond lengths



Bond angles

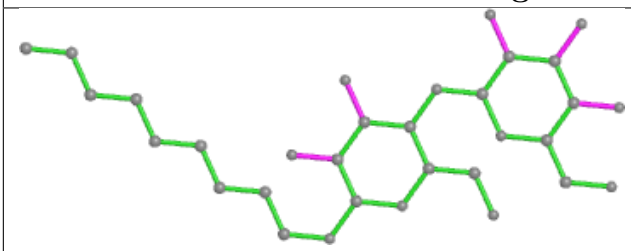


Torsions

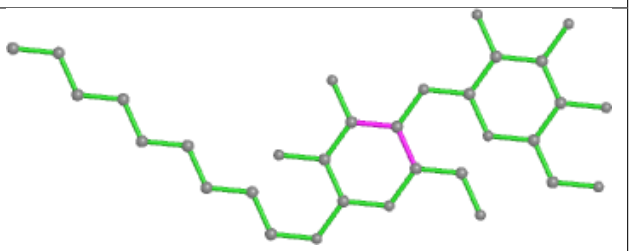


Rings

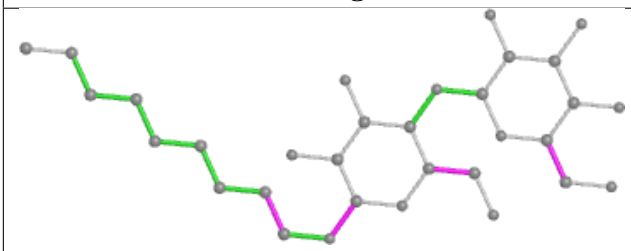
Ligand LMT A 6003



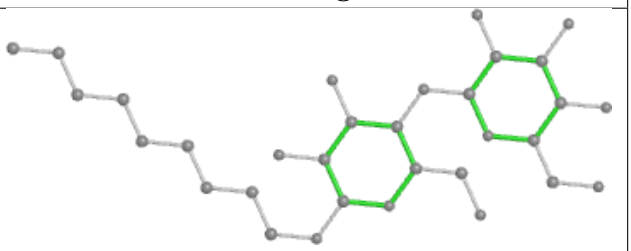
Bond lengths



Bond angles

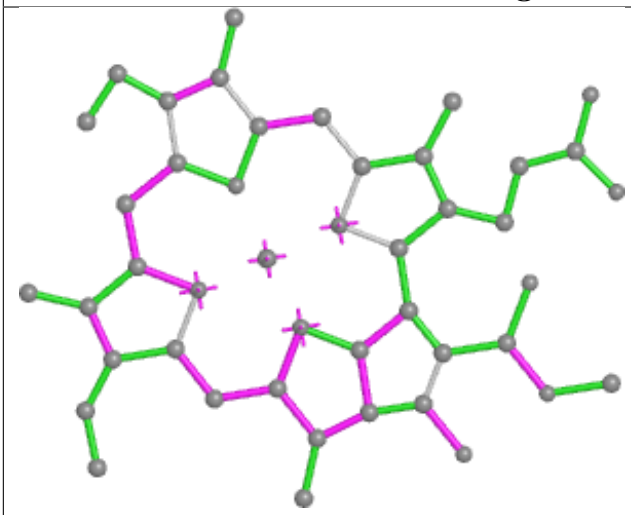


Torsions

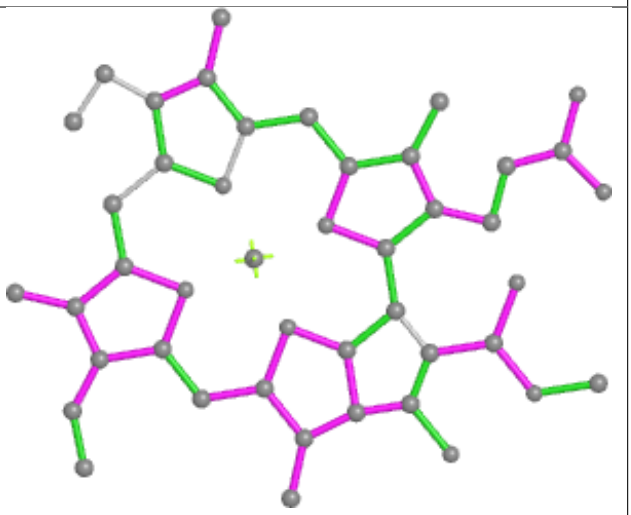


Rings

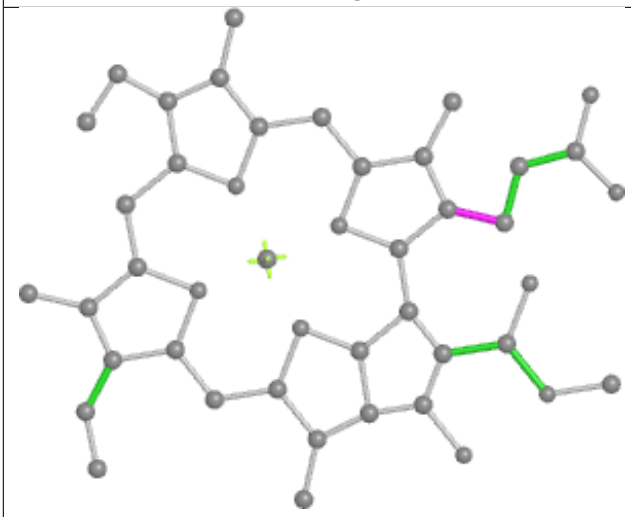
Ligand CLA B 1209



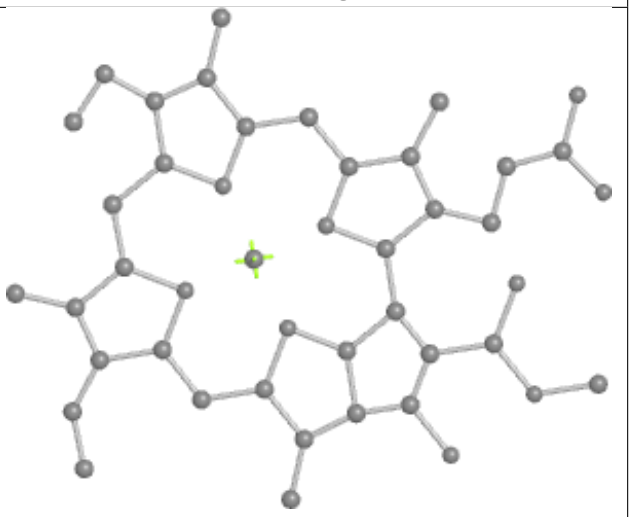
Bond lengths



Bond angles

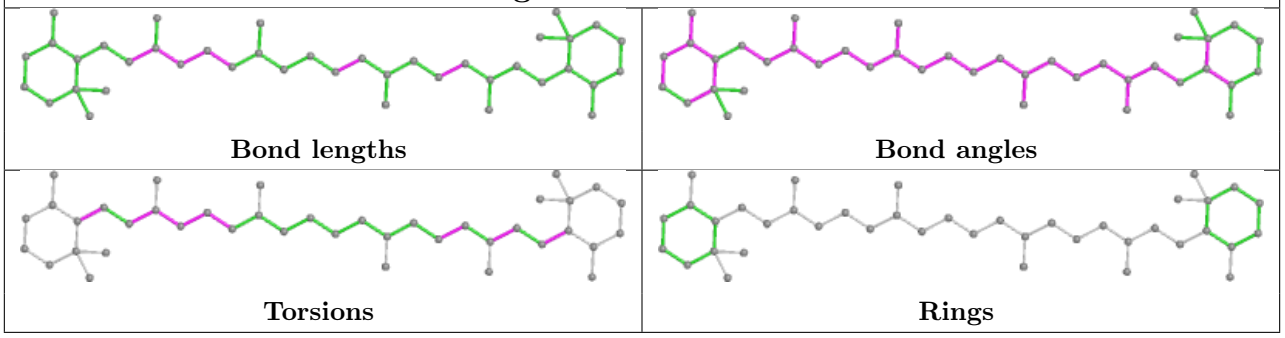


Torsions



Rings

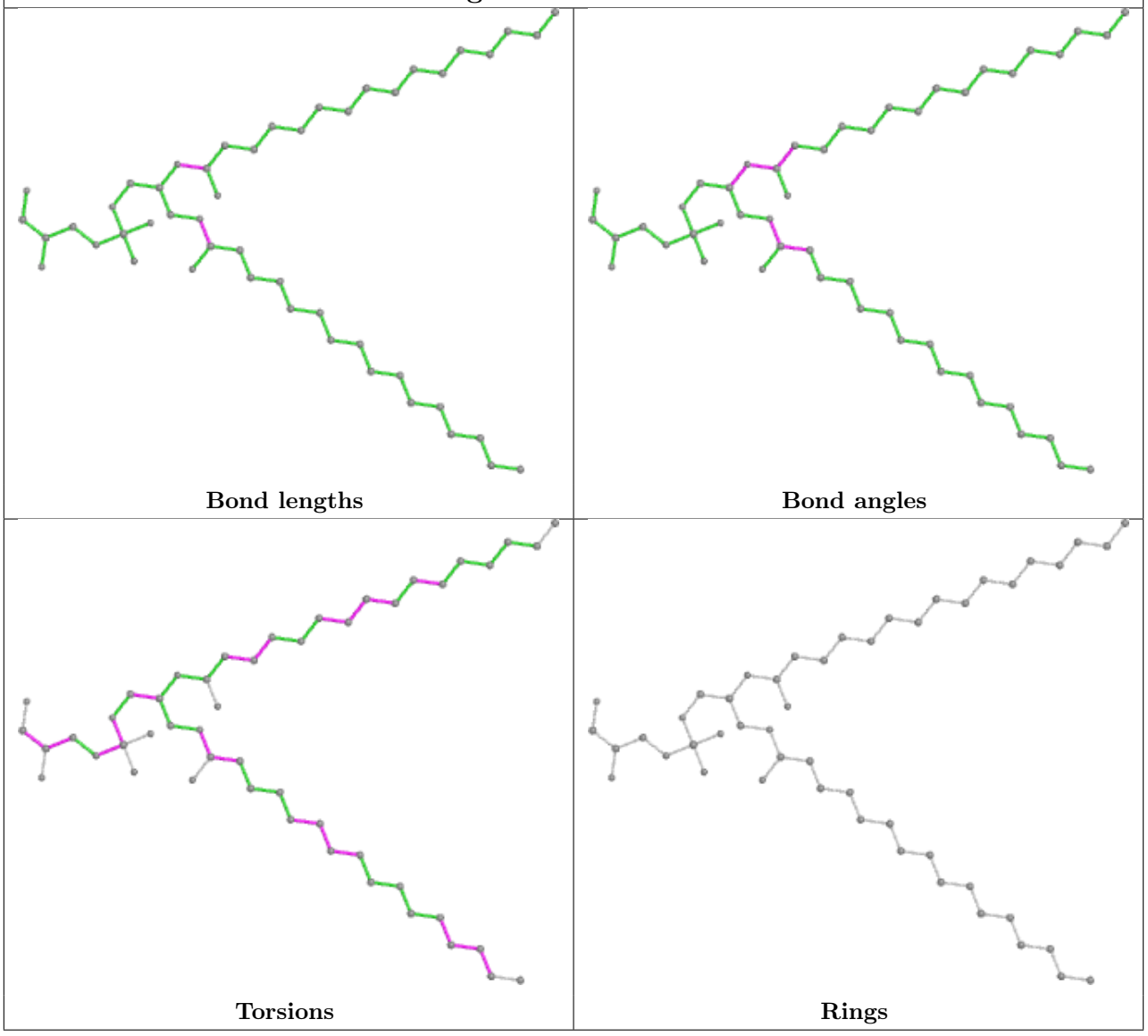
Ligand BCR H 4004



Bond lengths | Bond angles

Torsions | Rings

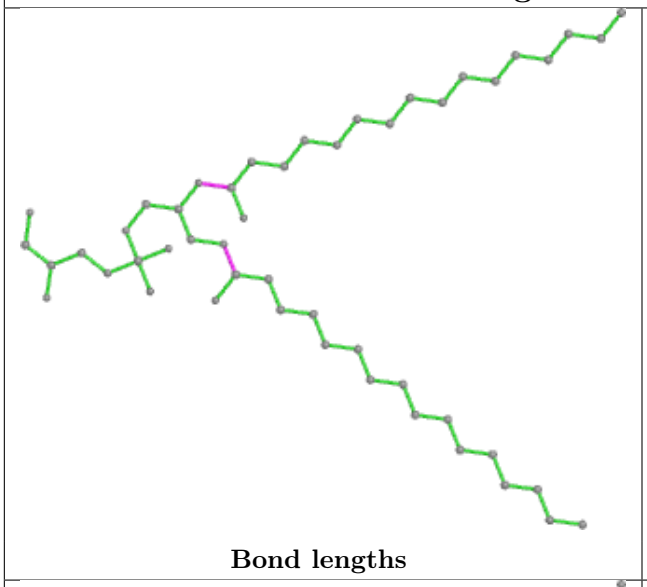
Ligand LHG l 5102



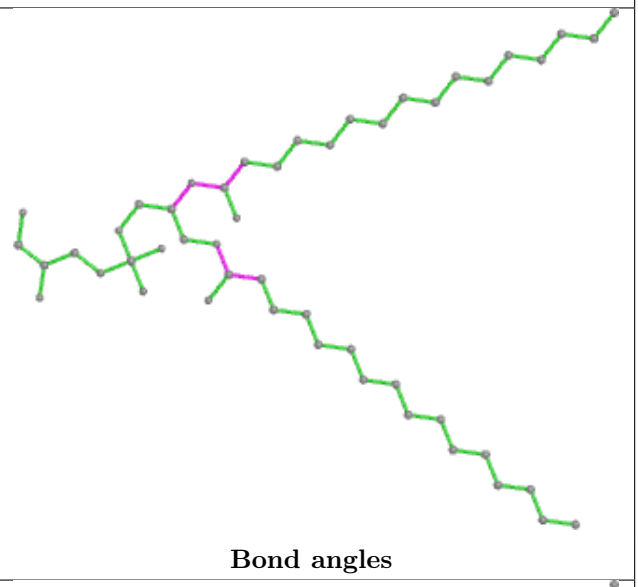
Bond lengths | Bond angles

Torsions | Rings

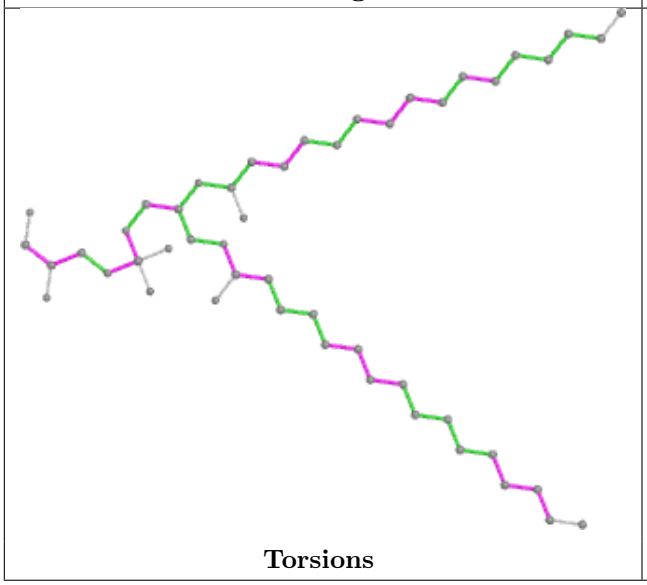
Ligand LHG U 5102



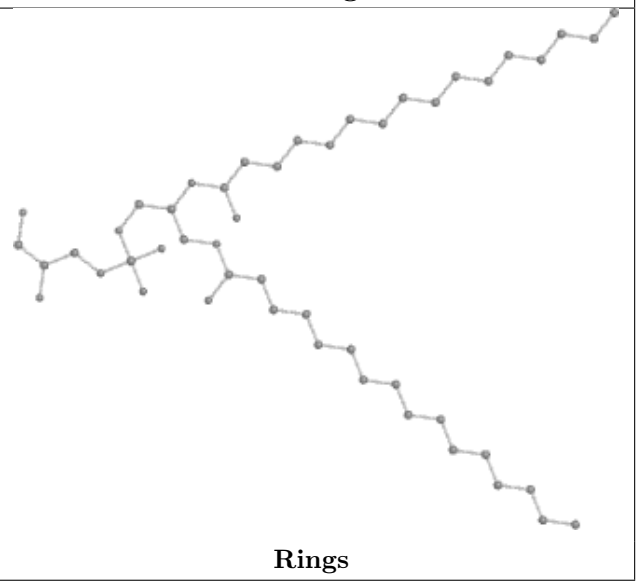
Bond lengths



Bond angles

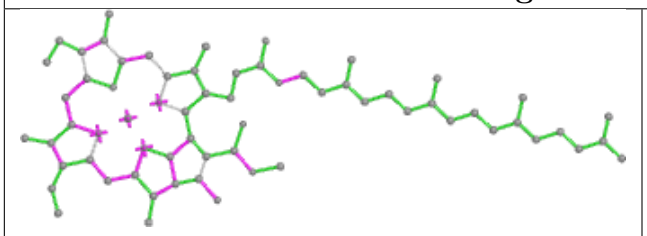


Torsions

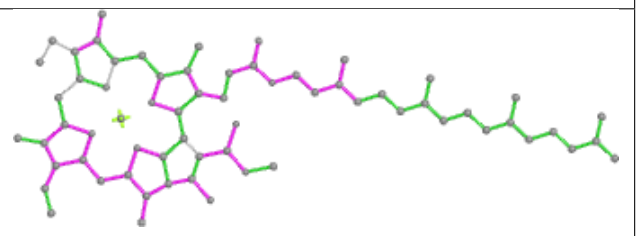


Rings

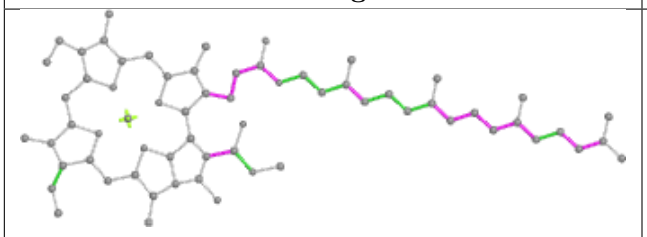
Ligand CLA A 1125



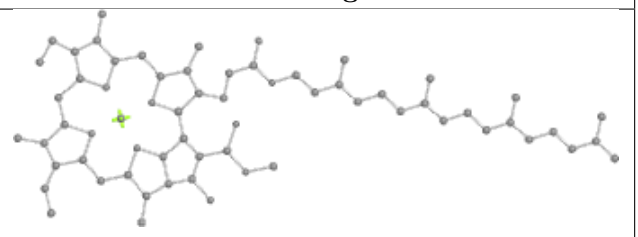
Bond lengths



Bond angles

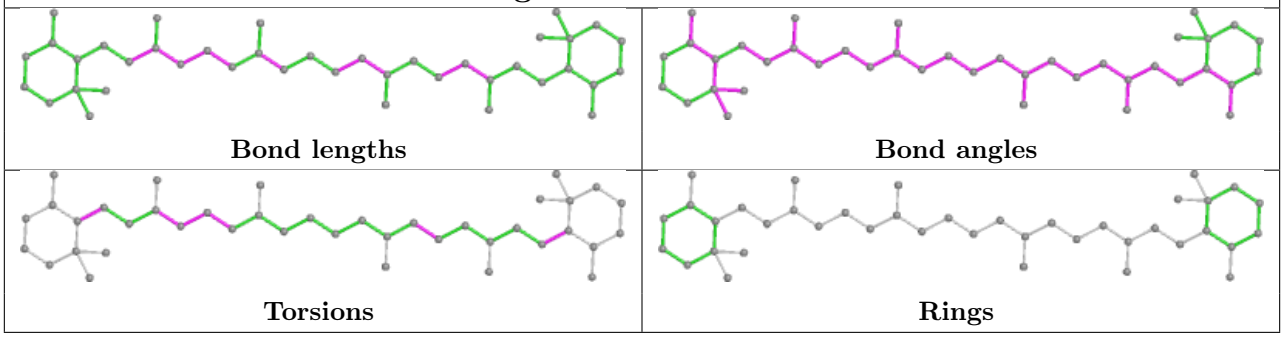


Torsions

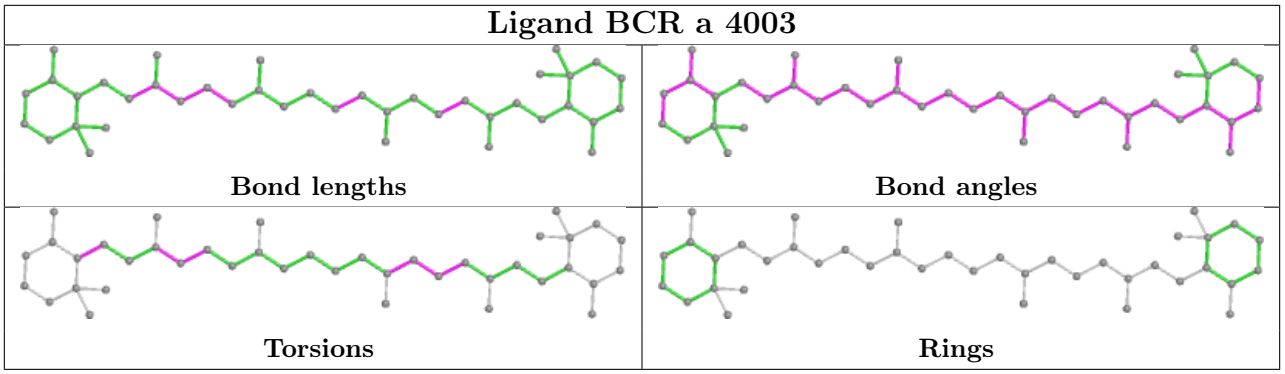


Rings

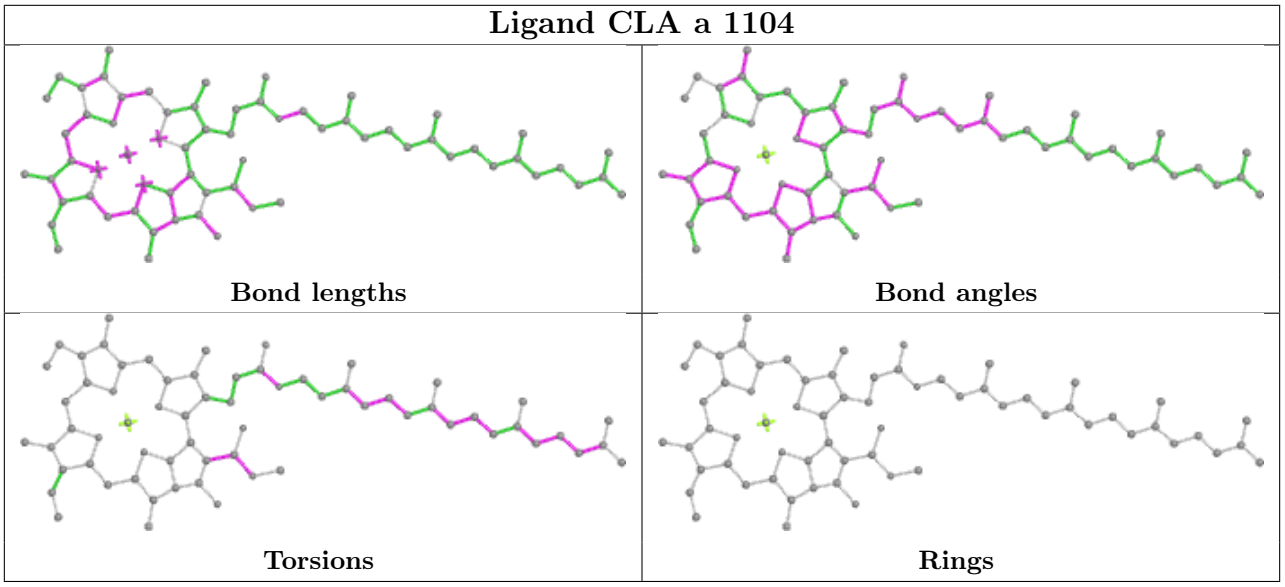
Ligand BCR R 4020



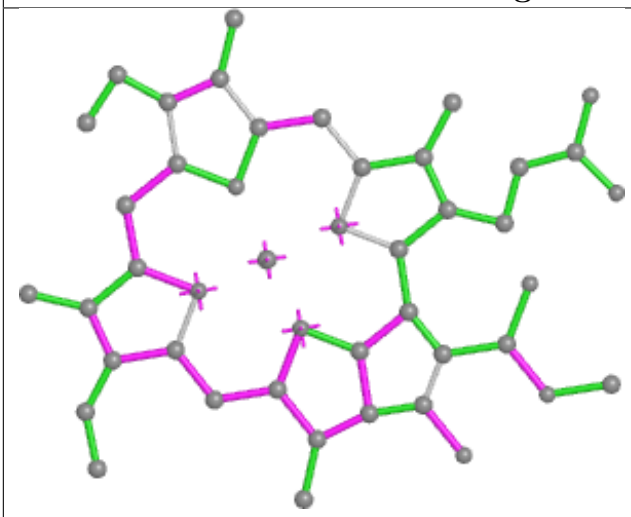
Ligand BCR a 4003



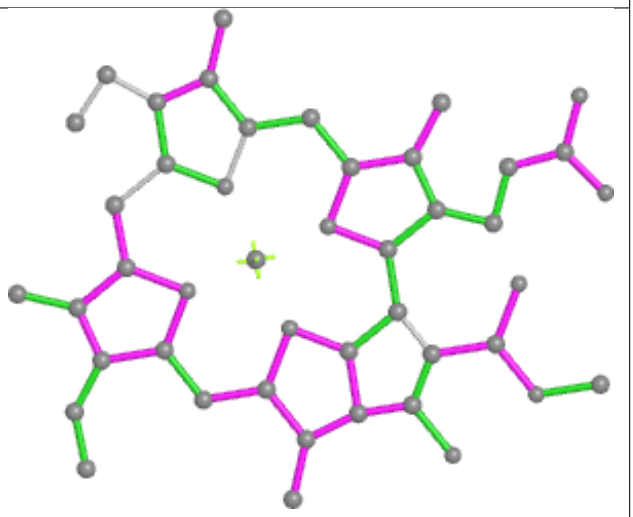
Ligand CLA a 1104



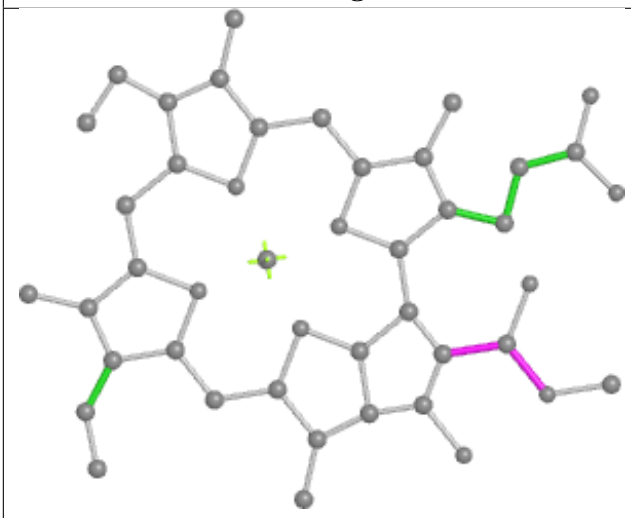
Ligand CLA G 1114



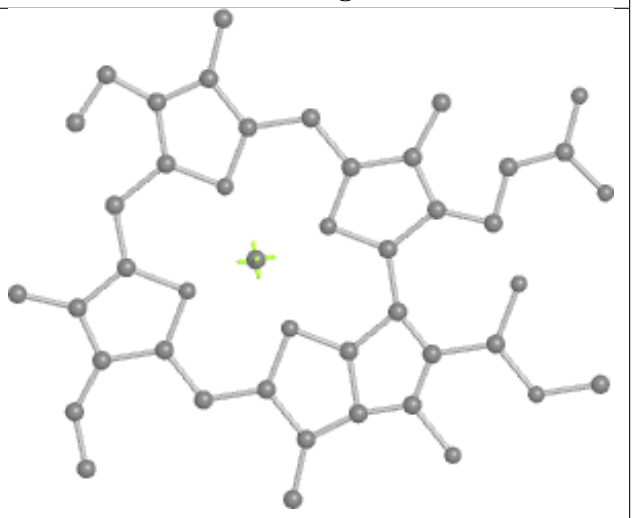
Bond lengths



Bond angles

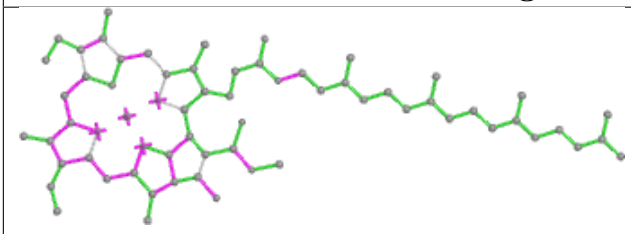


Torsions

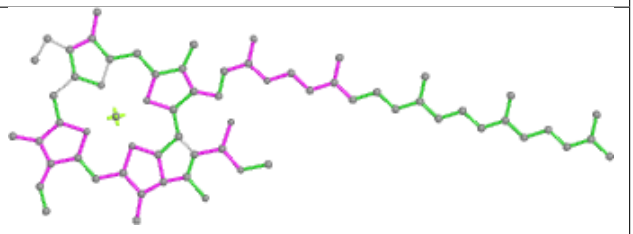


Rings

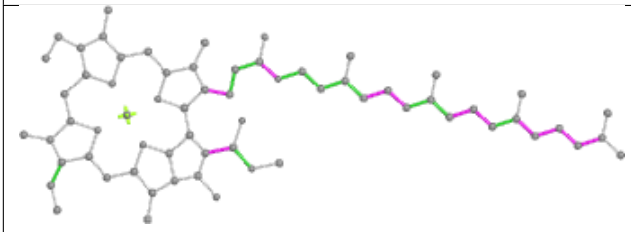
Ligand CLA b 1211



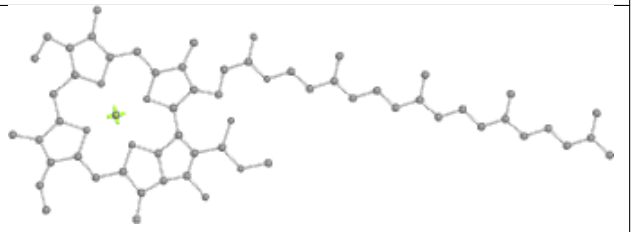
Bond lengths



Bond angles

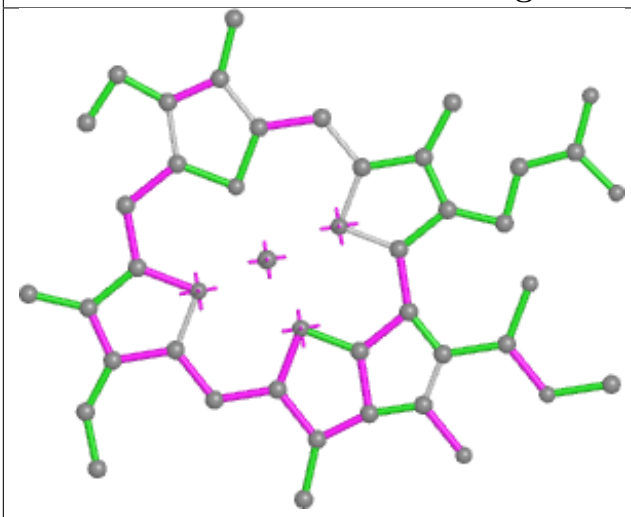


Torsions

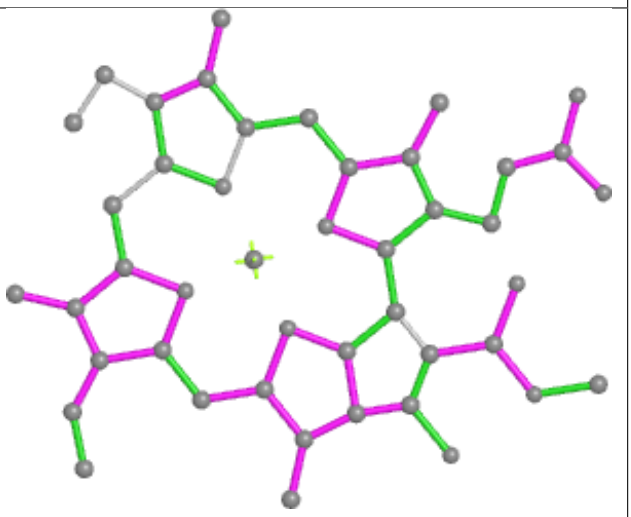


Rings

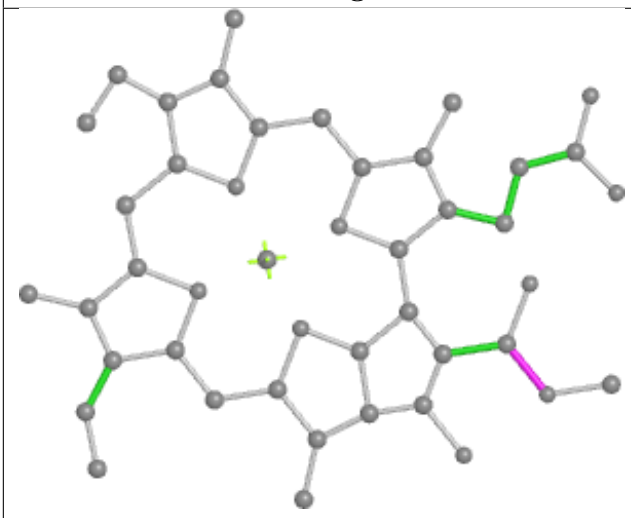
Ligand CLA B 1232



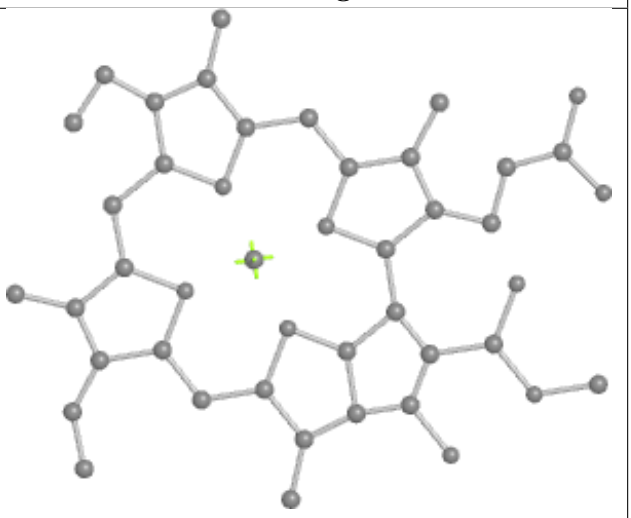
Bond lengths



Bond angles

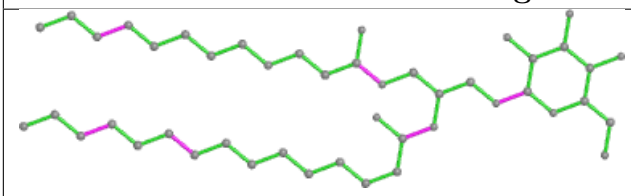


Torsions

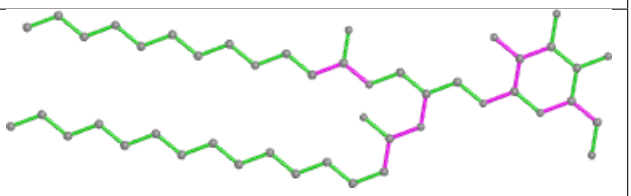


Rings

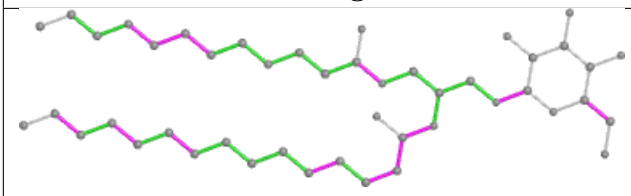
Ligand LMG b 5002



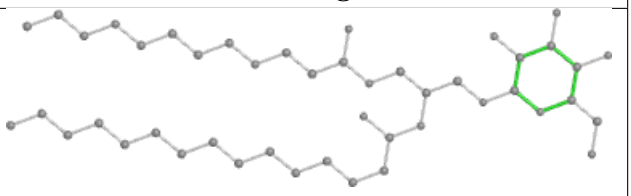
Bond lengths



Bond angles

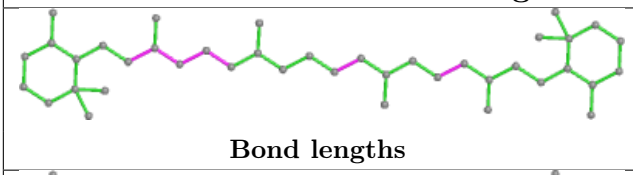


Torsions

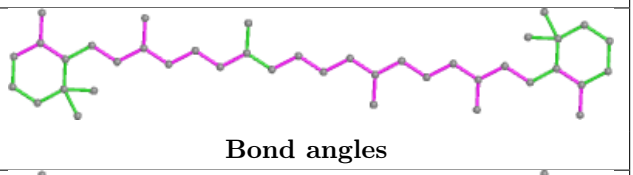


Rings

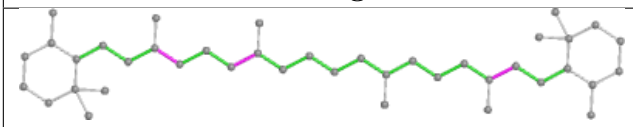
Ligand BCR H 4005



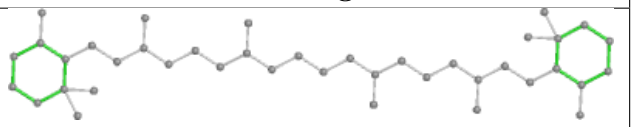
Bond lengths



Bond angles

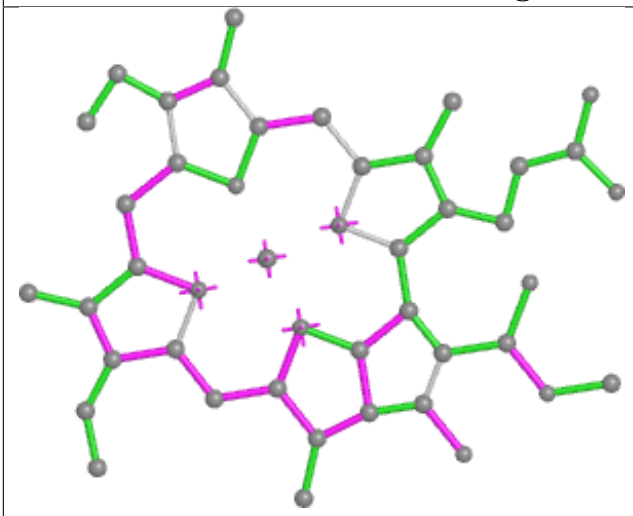


Torsions

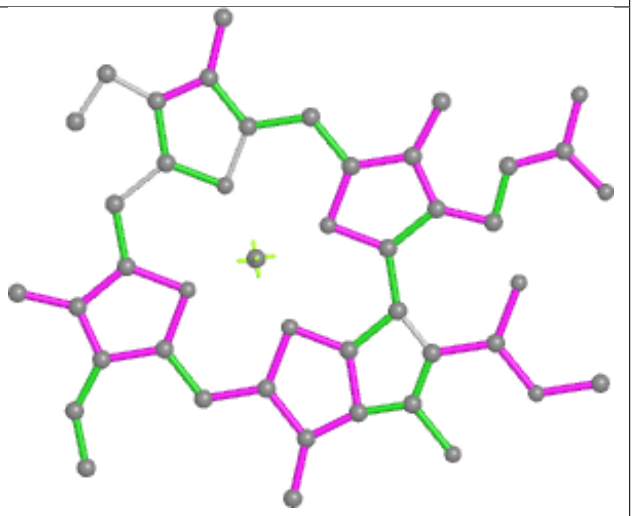


Rings

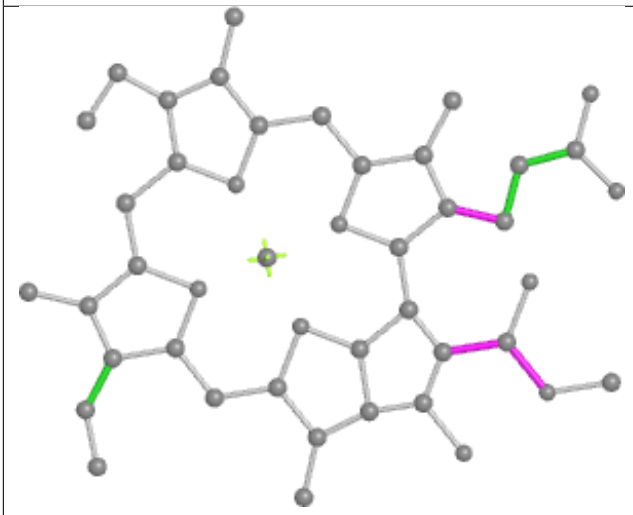
Ligand CLA G 1108



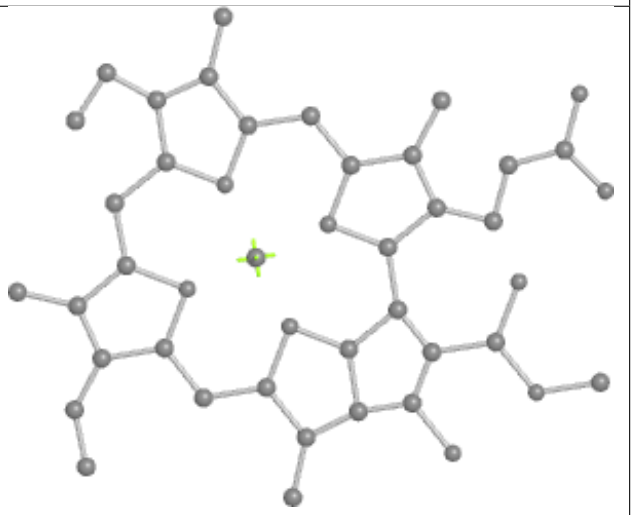
Bond lengths



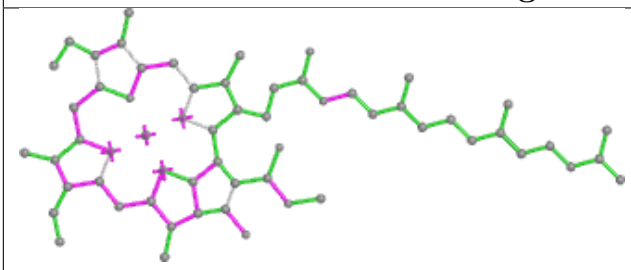
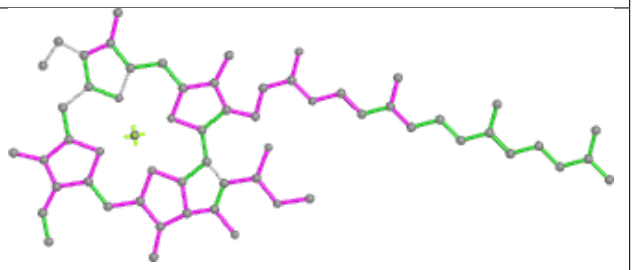
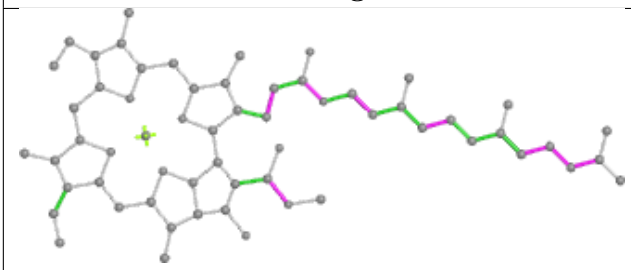
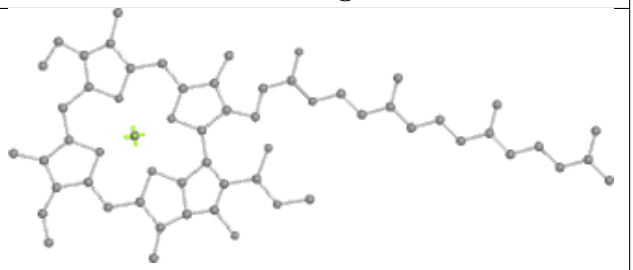
Bond angles

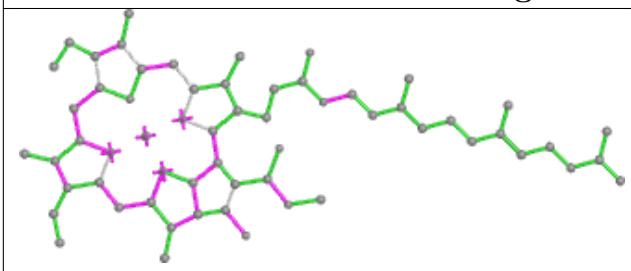
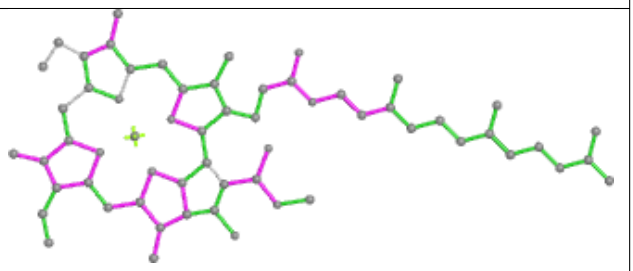
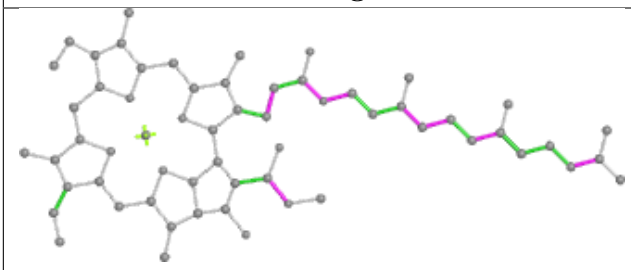
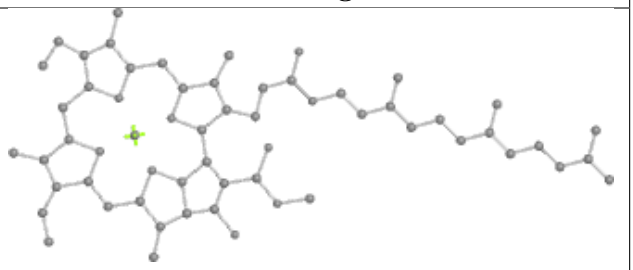


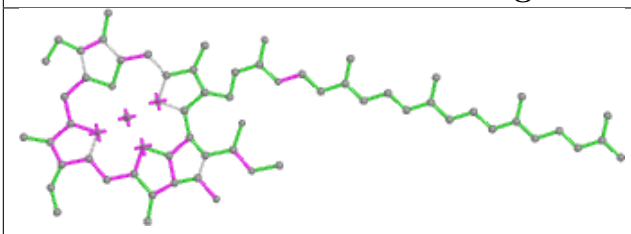
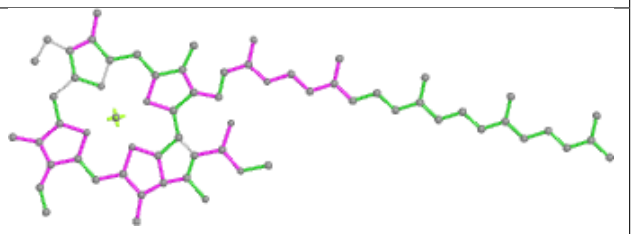
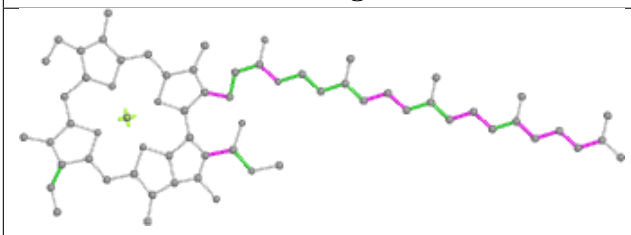
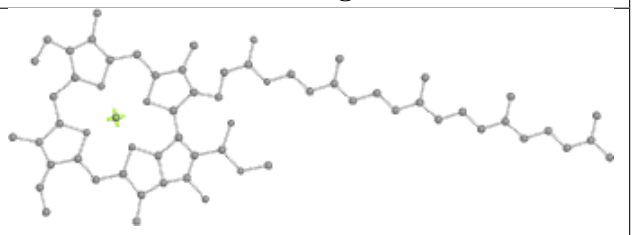
Torsions

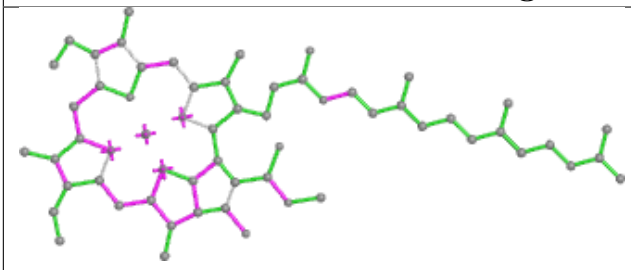
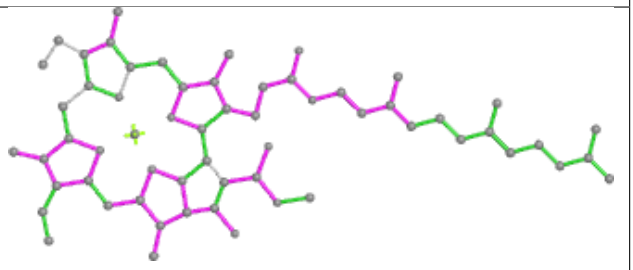
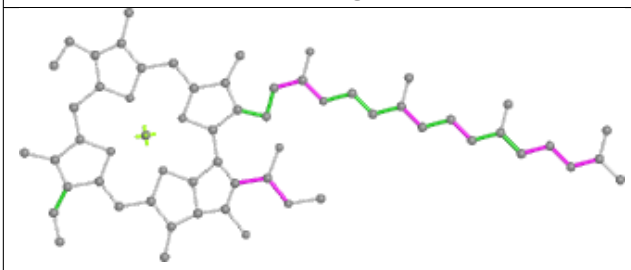
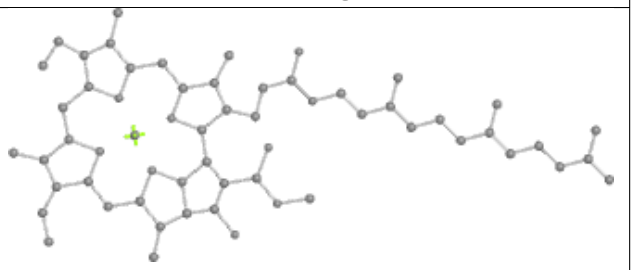


Rings

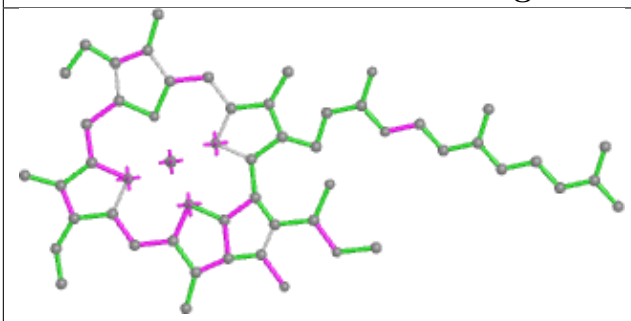
Ligand CLA b 1214	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA A 1131	
 Bond lengths	 Bond angles
 Torsions	 Rings

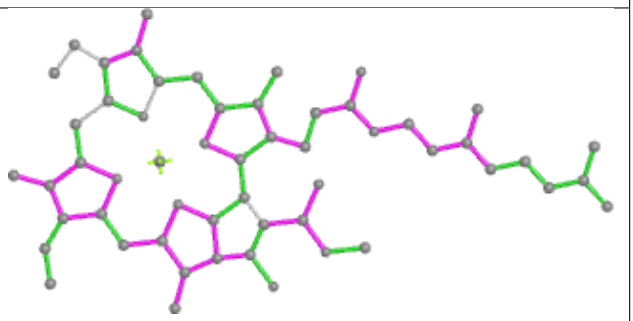
Ligand CLA H 1211	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA b 1235	
 Bond lengths	 Bond angles
 Torsions	 Rings

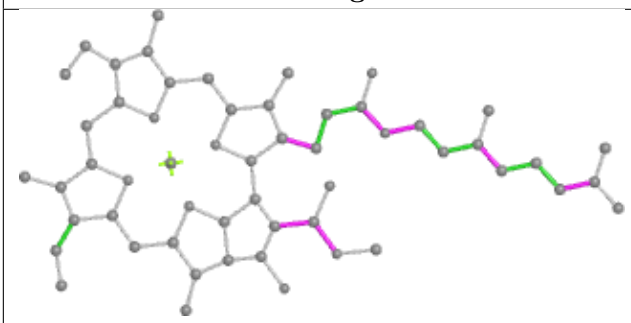
Ligand CLA G 1118



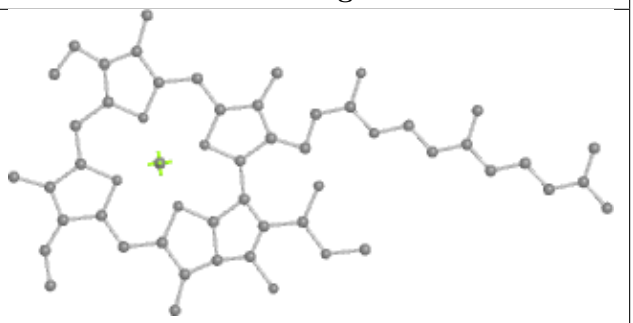
Bond lengths



Bond angles

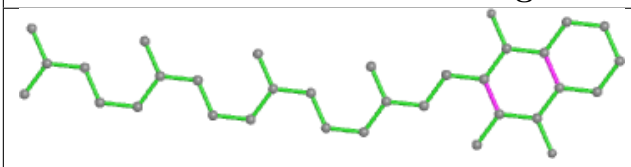


Torsions



Rings

Ligand PQN b 2002



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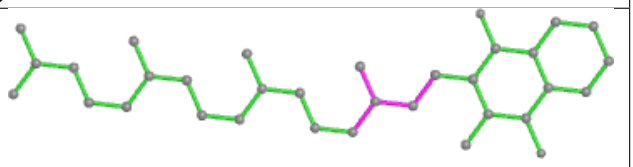
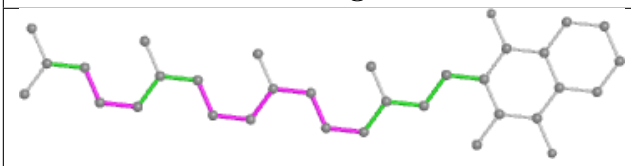


Bond angles



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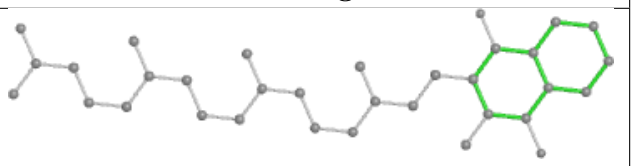
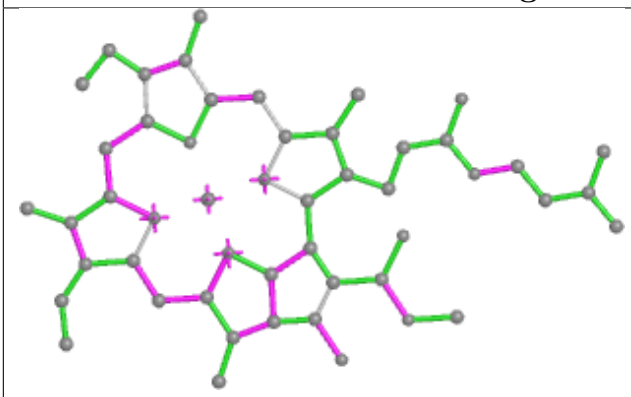
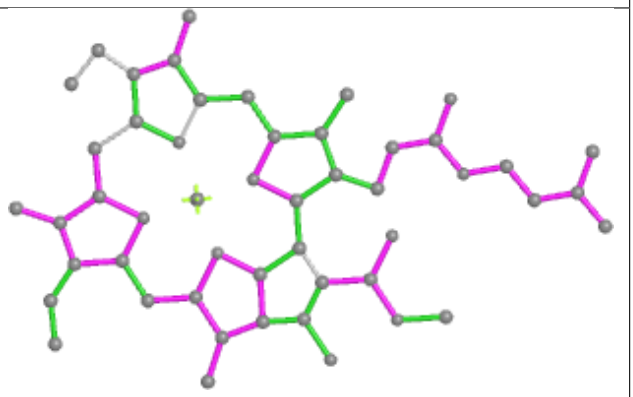


Rings

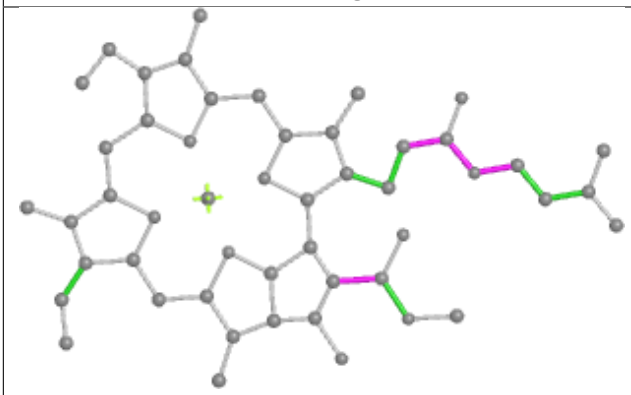
Ligand CLA a 1137



Bond lengths



Bond angles



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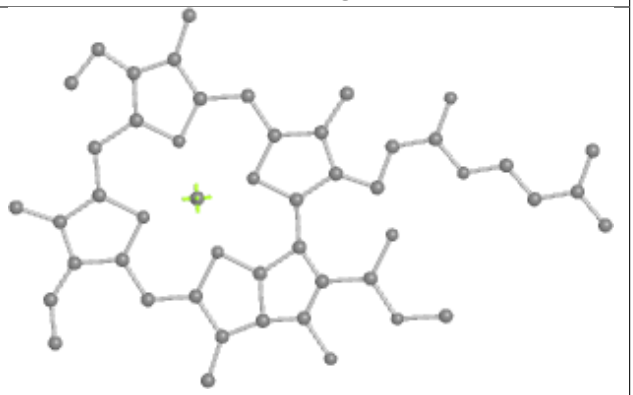
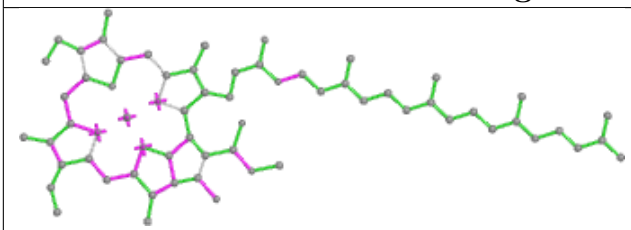
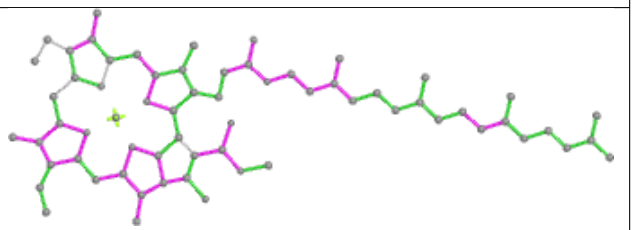


Rings

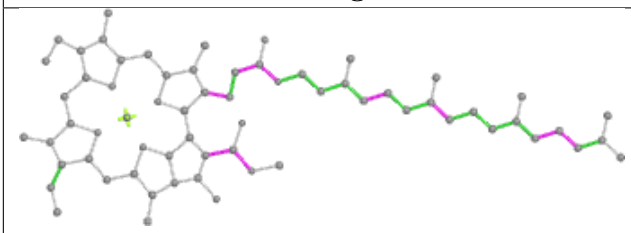
Ligand CLA H 1202



Bond lengths



Bond angles



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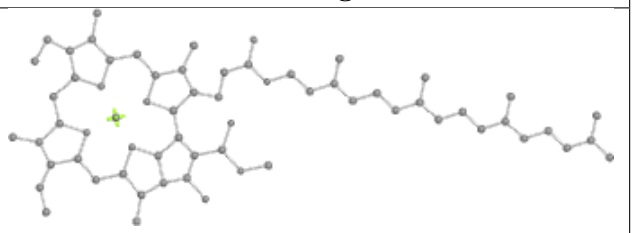
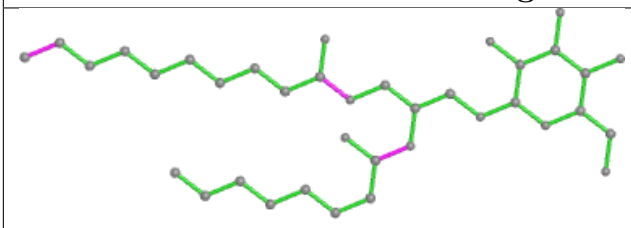
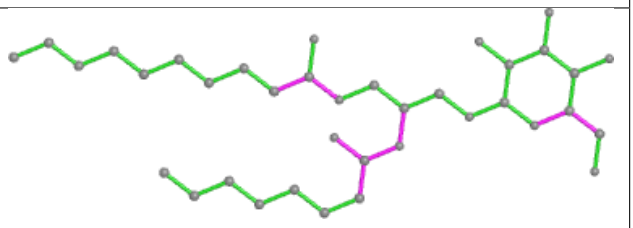


Rings

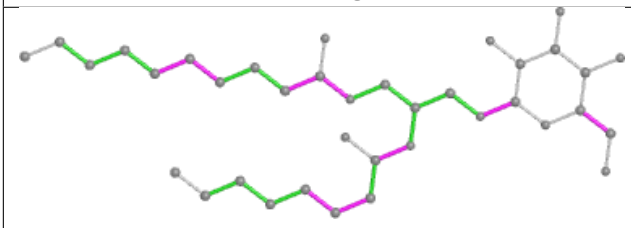
Ligand LMG I 5006



Bond lengths



Bond angles



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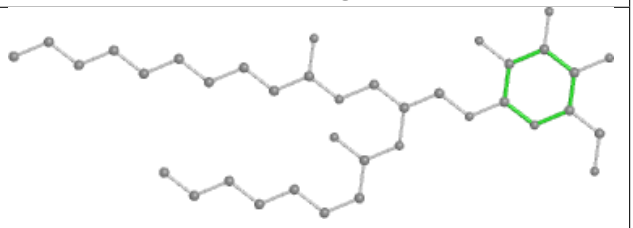
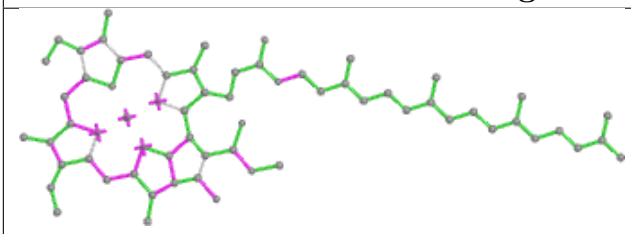
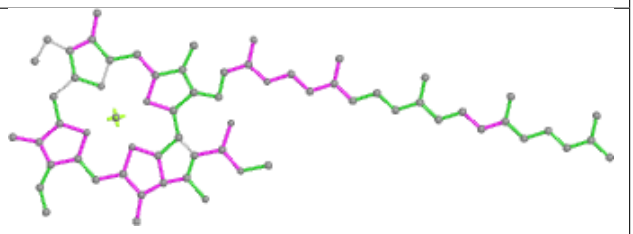


Rings

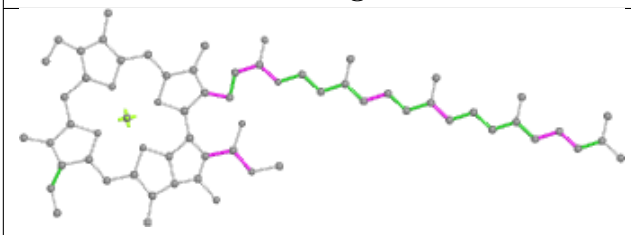
Ligand CLA b 1202



Bond lengths



Bond angles



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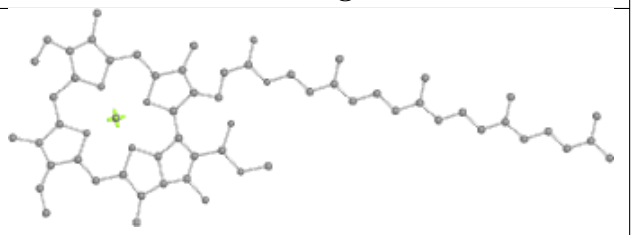
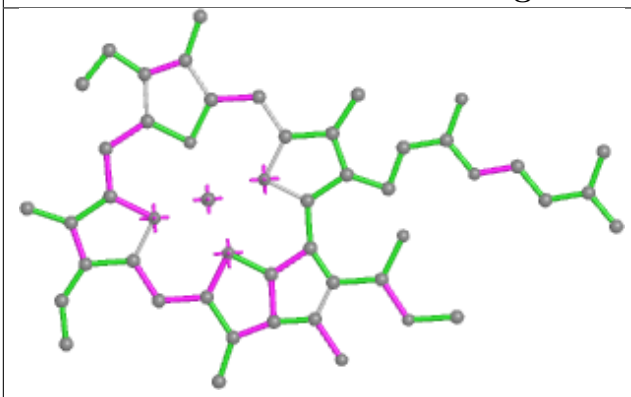


Rings

Ligand CLA G 1137



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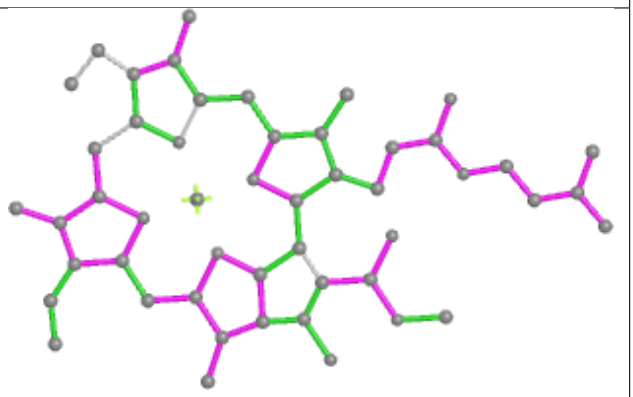
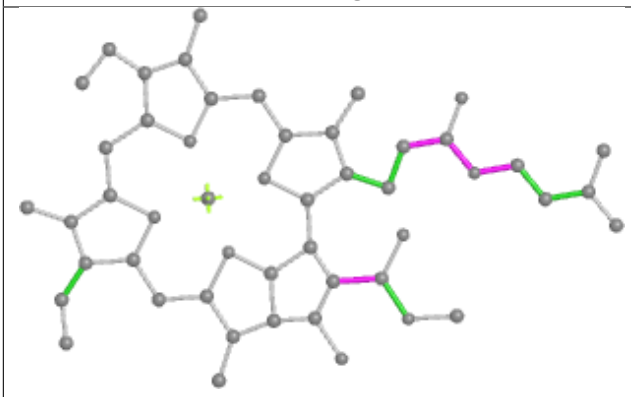


Bond angles



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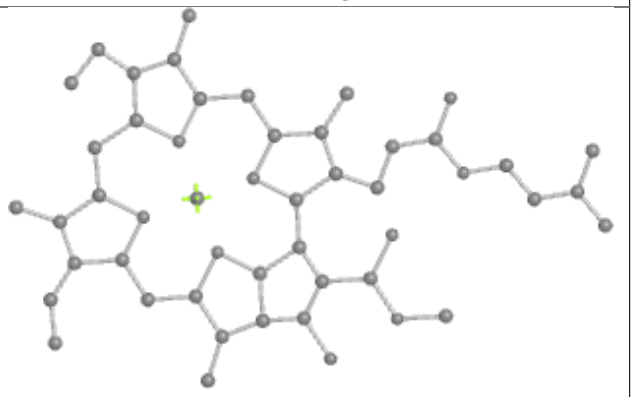
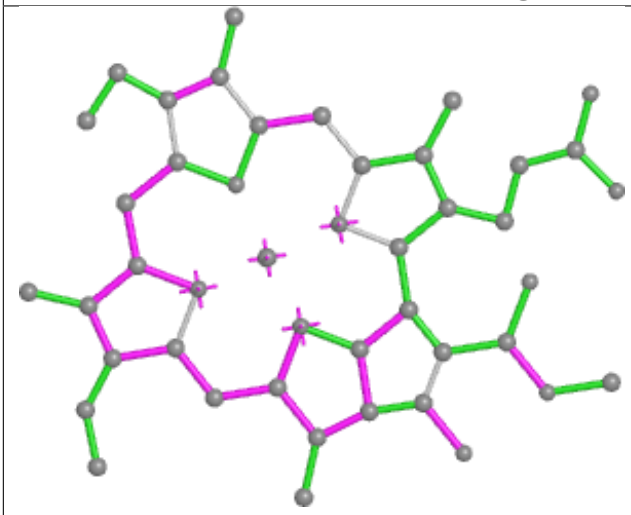


Rings

Ligand CLA A 1139



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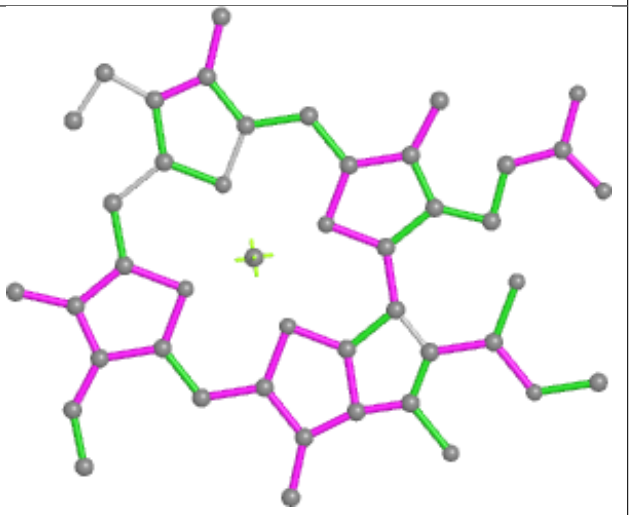
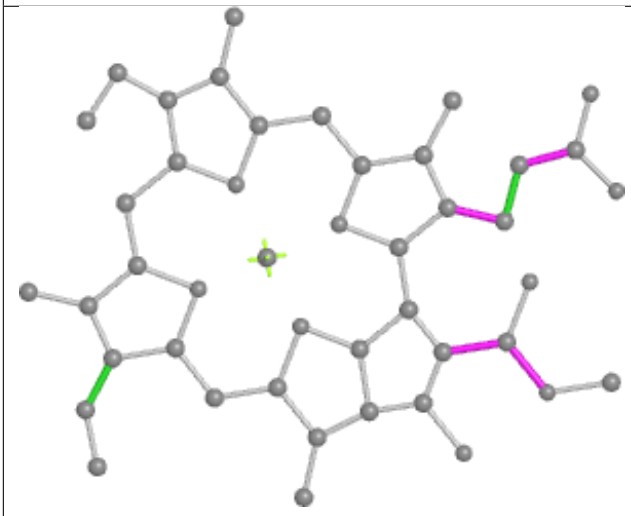


Bond angles



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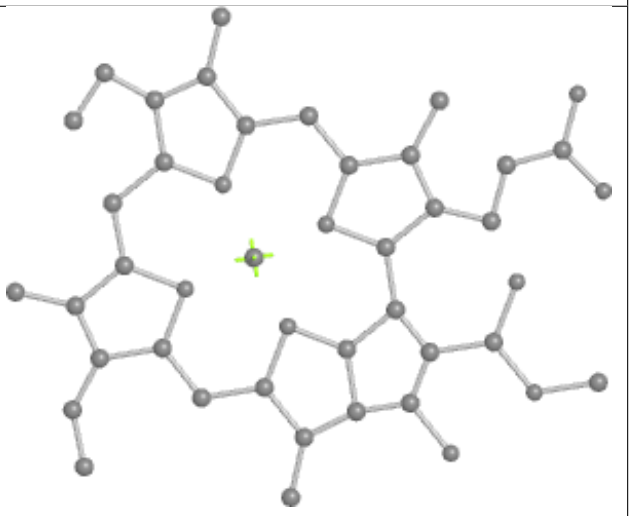
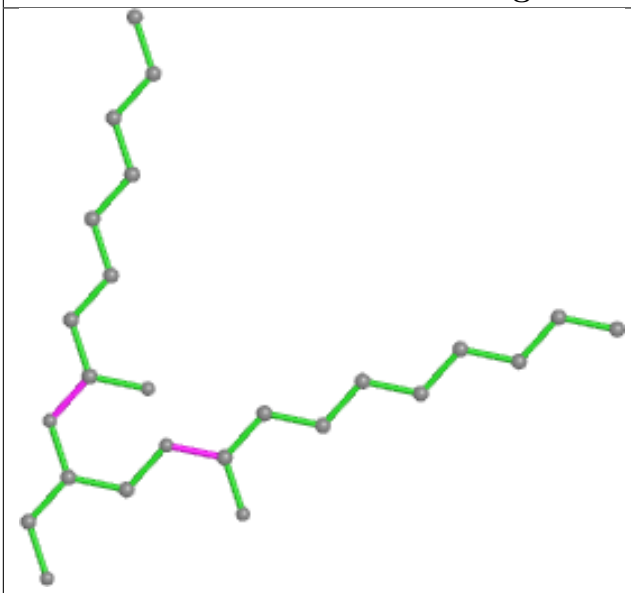


Rings

Ligand LHG U 5101



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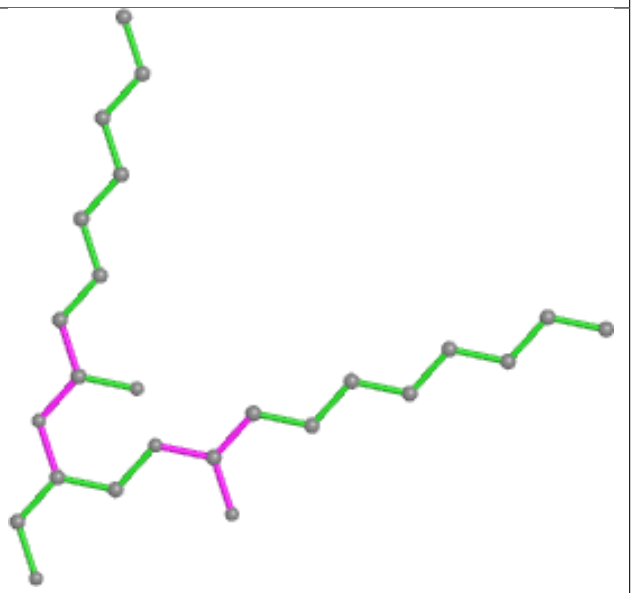
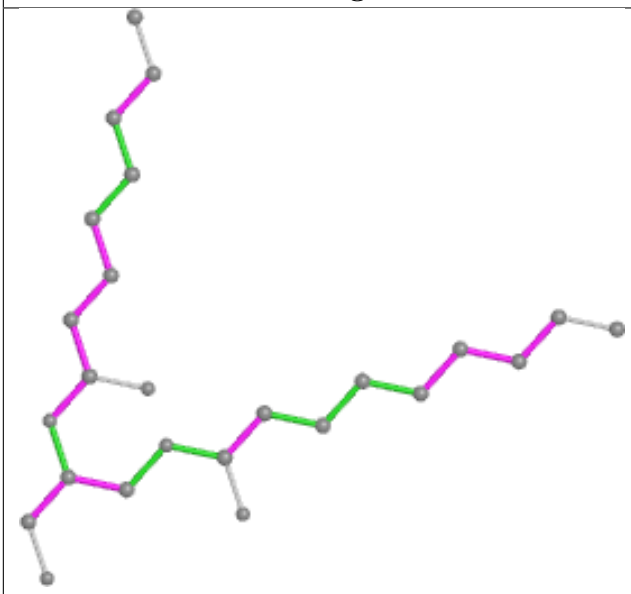


Bond angles



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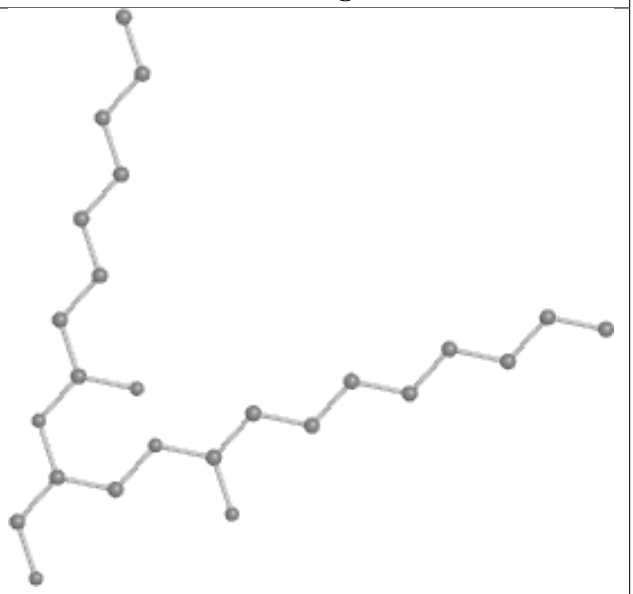
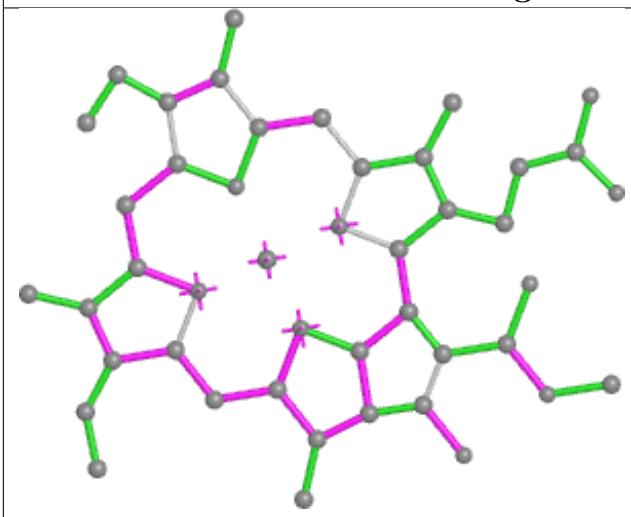


Rings

Ligand CLA G 1141



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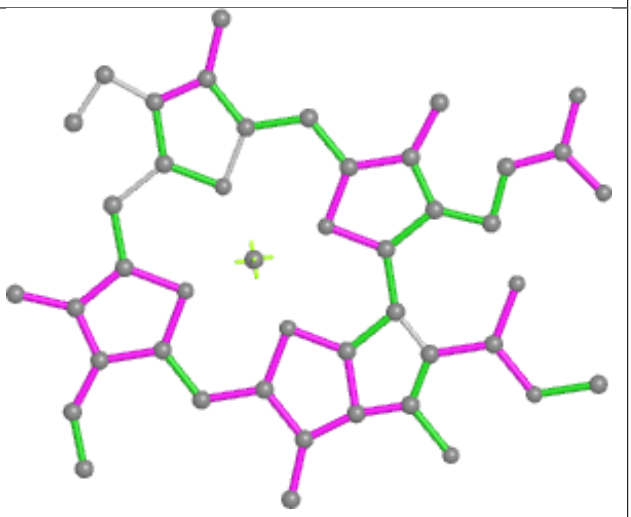
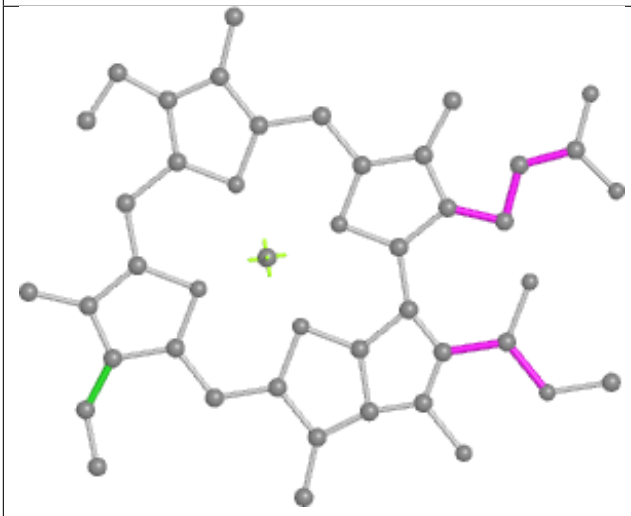


Bond angles



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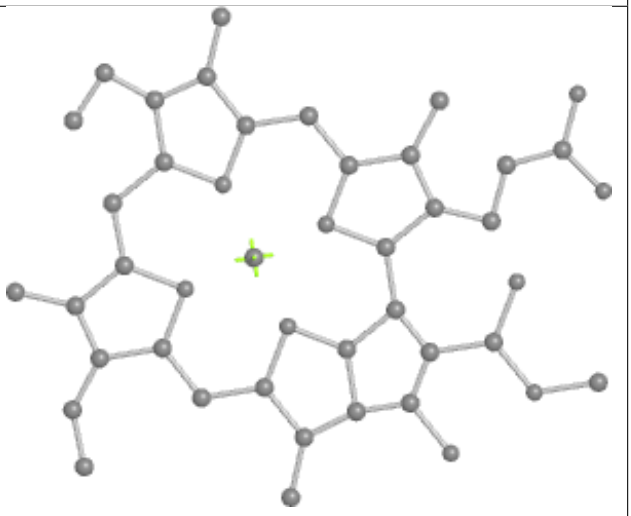
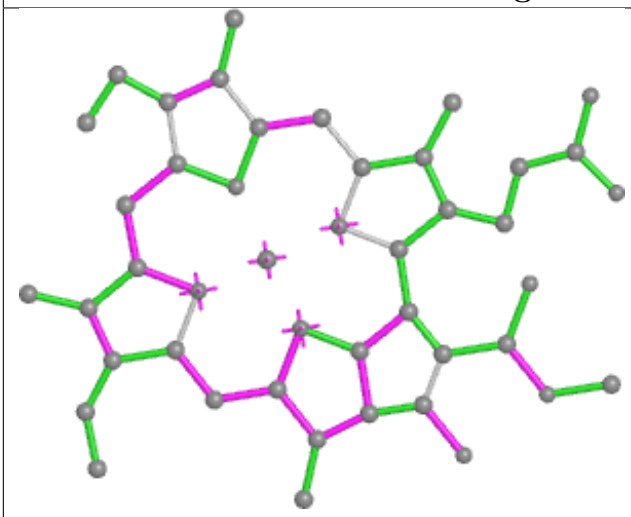


Rings

Ligand CLA G 1105



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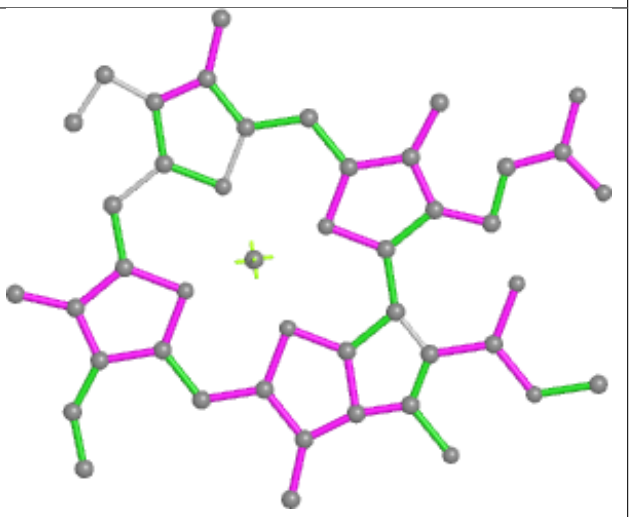
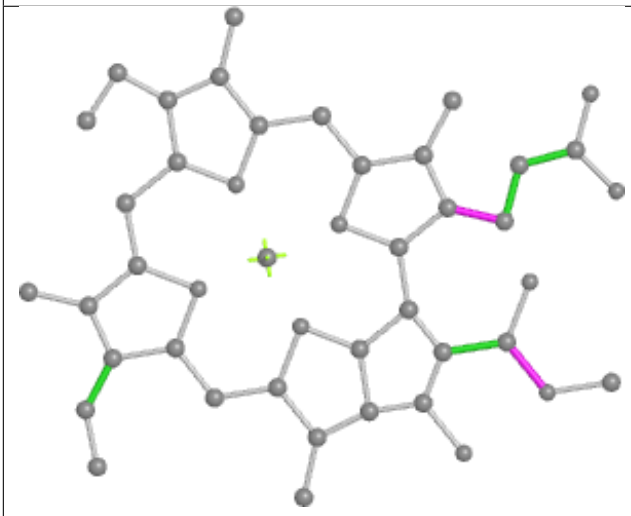


Bond angles



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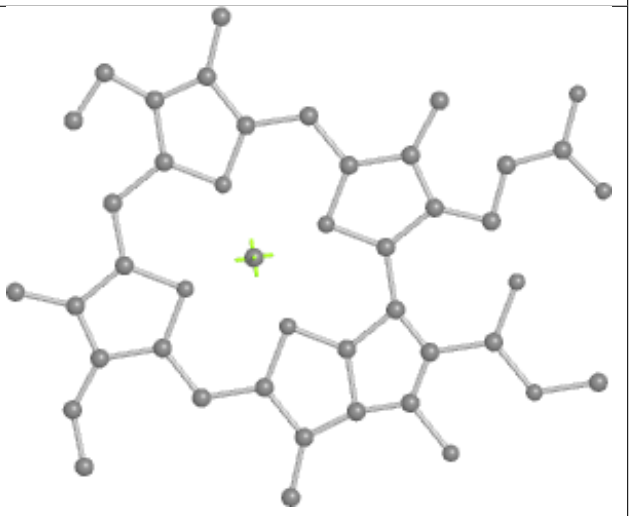
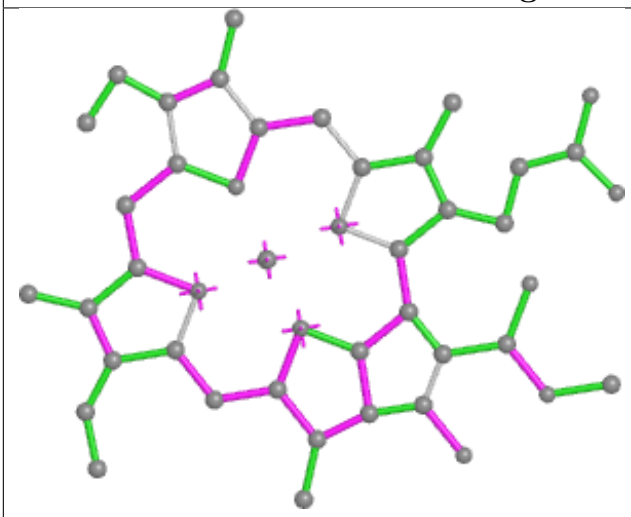
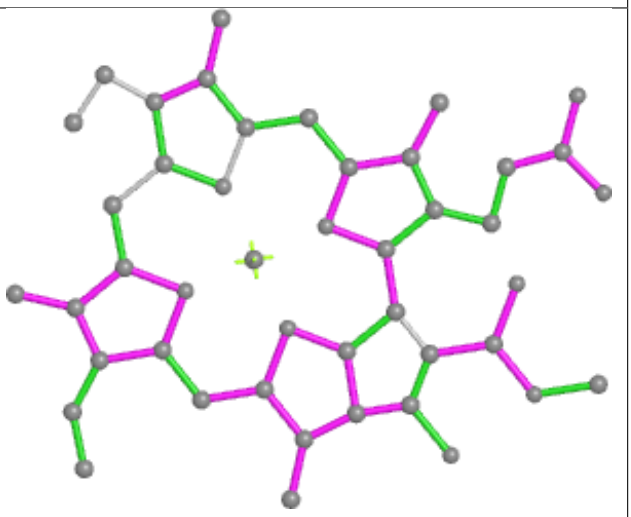


Rings

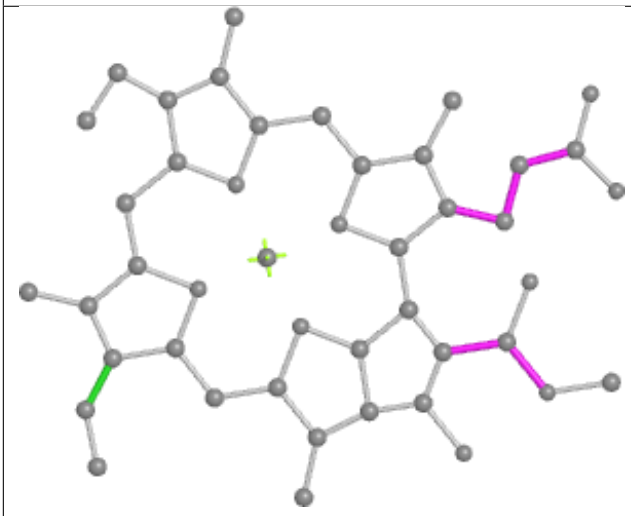
Ligand CLA a 1134



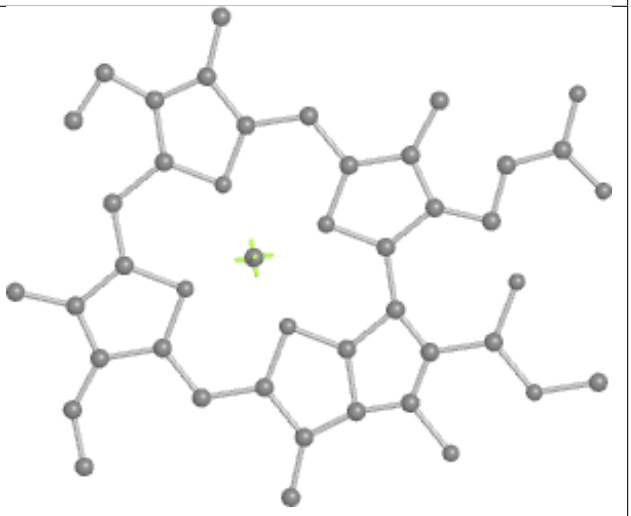
Bond lengths



Bond angles

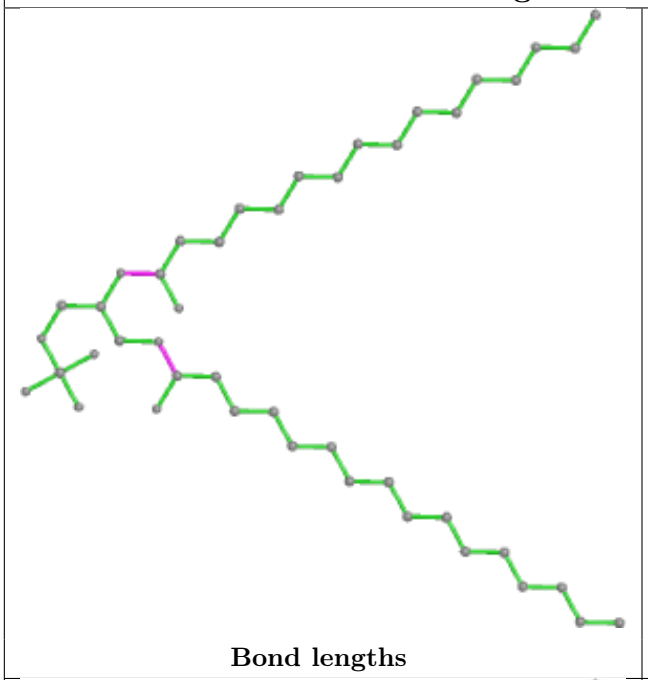


Torsions

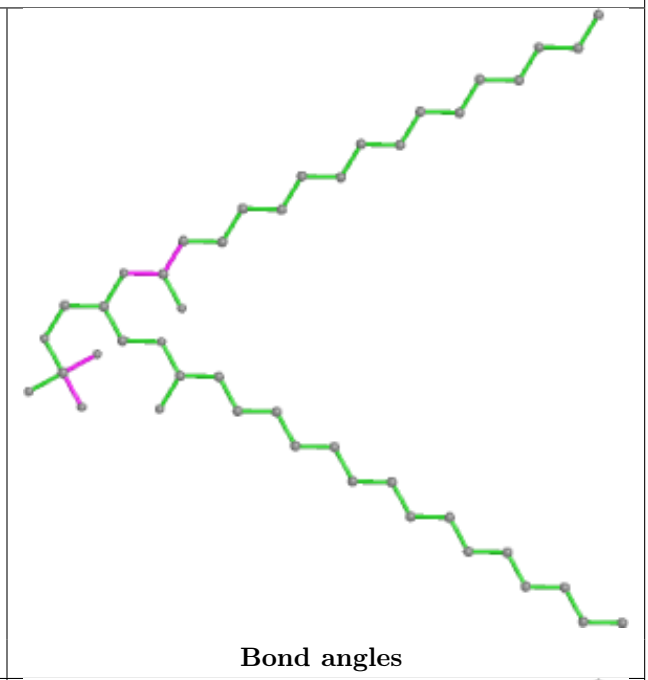


Rings

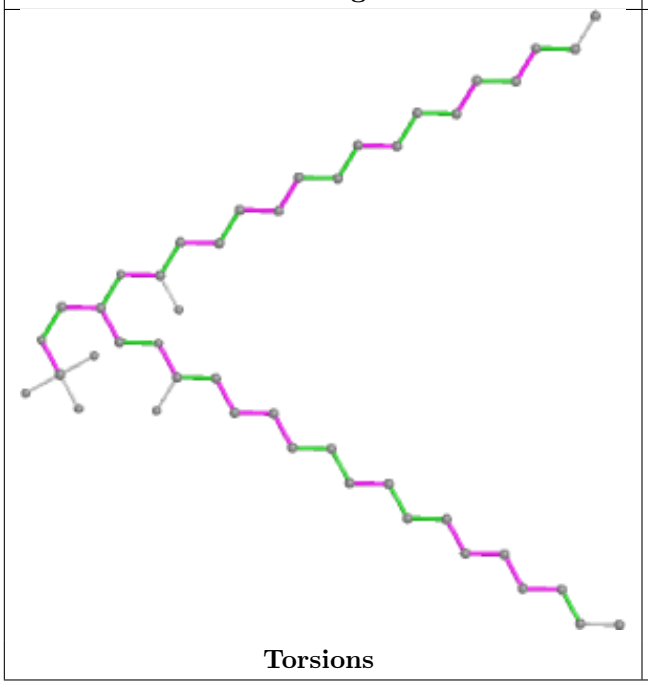
Ligand LHG G 5002



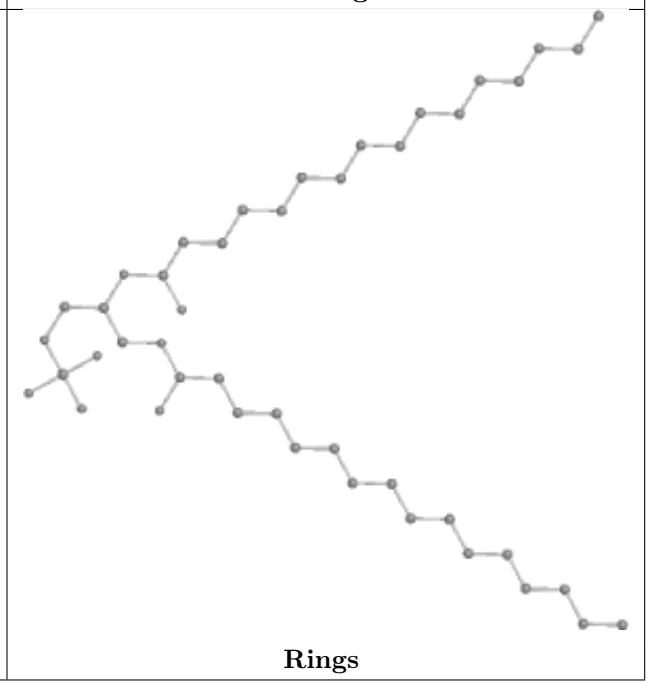
Bond lengths



Bond angles

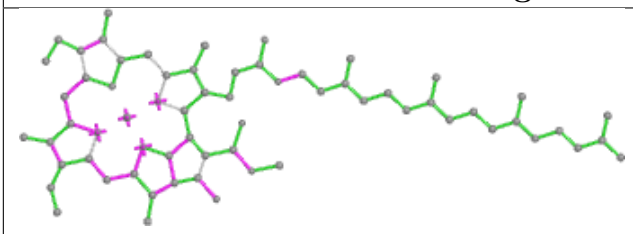


Torsions

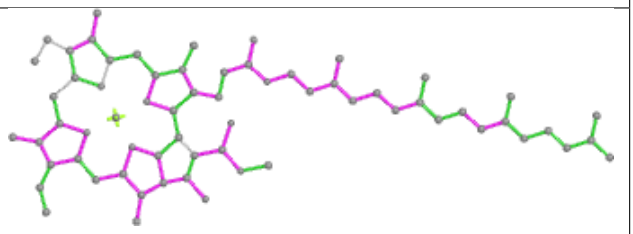


Rings

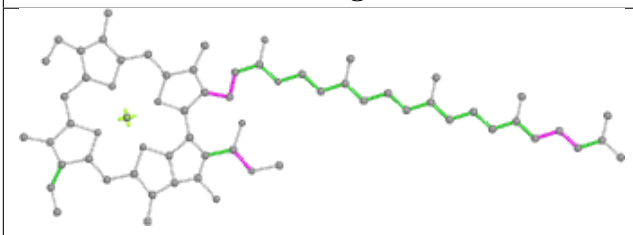
Ligand CLA G 1012



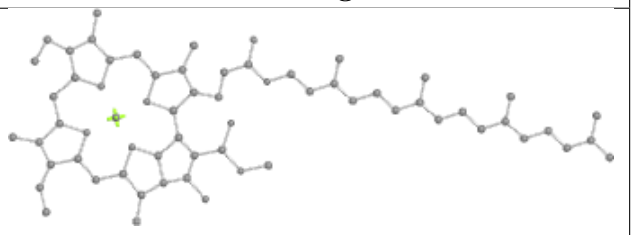
Bond lengths



Bond angles

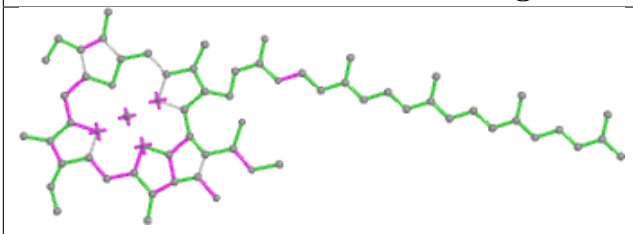


Torsions



Rings

Ligand CLA H 1205



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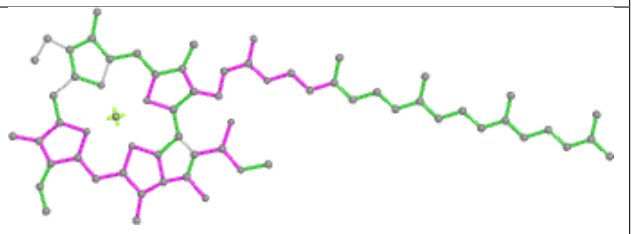
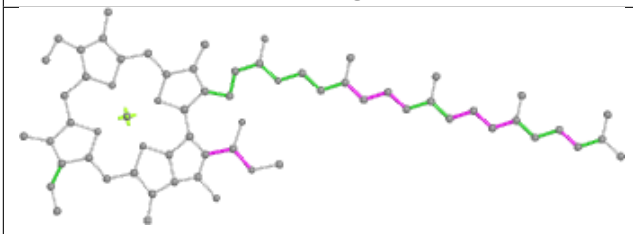
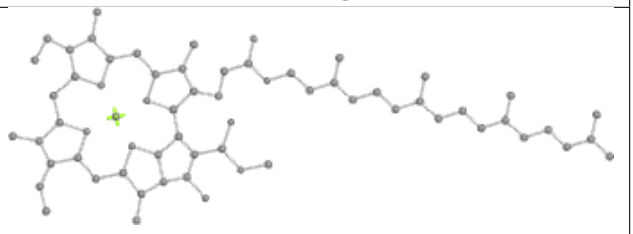


Bond angles

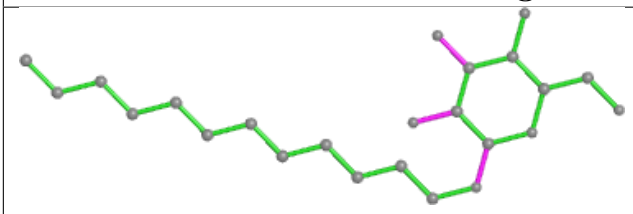


Torsions



Rings

Ligand LMT a 6004



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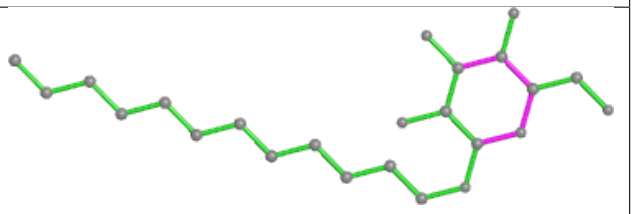
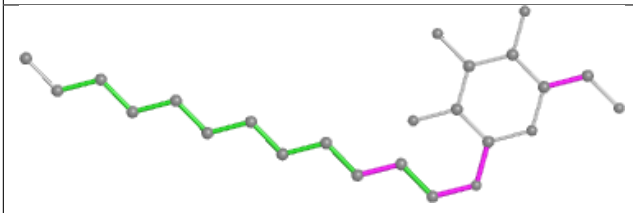
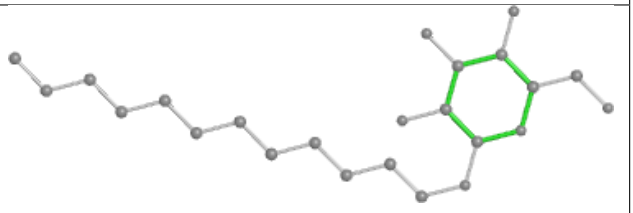


Bond angles

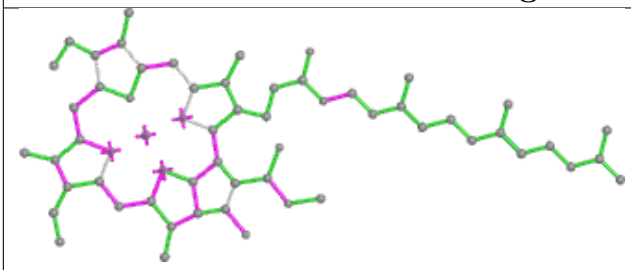


Torsions

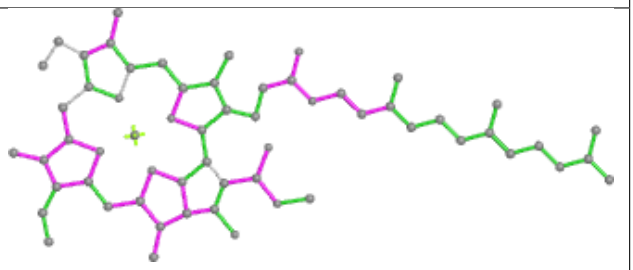


Rings

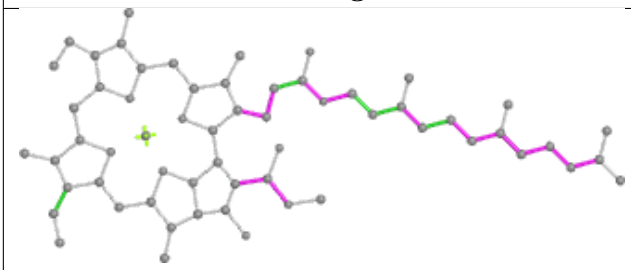
Ligand CLA a 1133



Bond lengths



Bond angles



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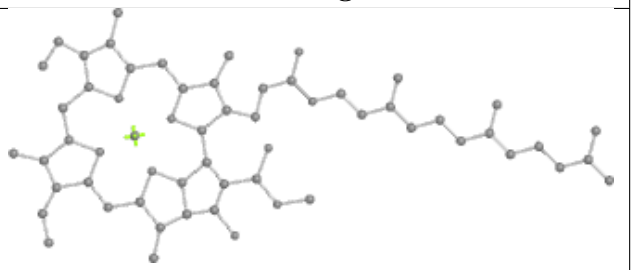
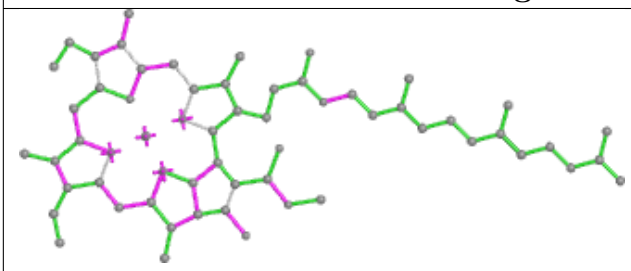


Rings

Ligand CLA G 1128



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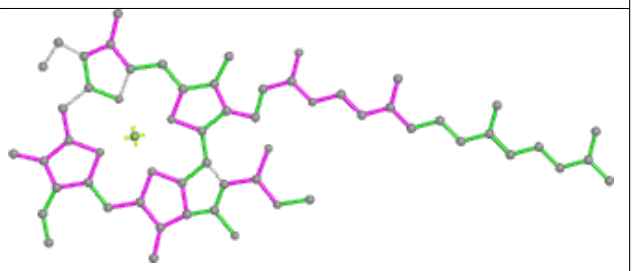
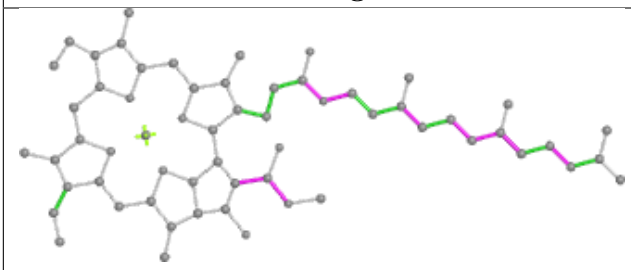
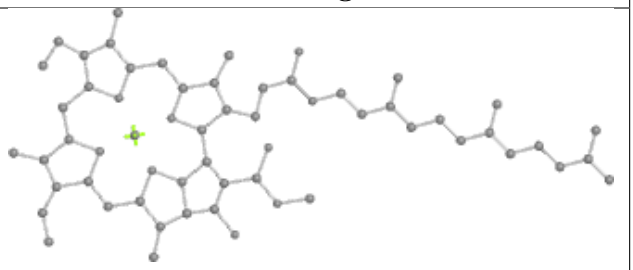


Bond angles

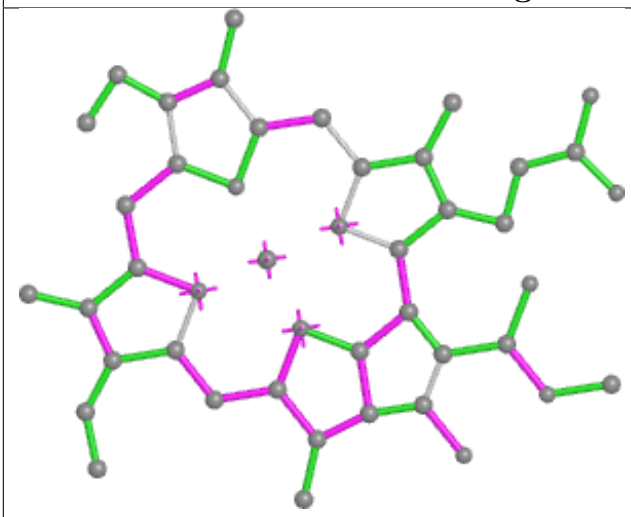


Torsions



Rings

Ligand CLA H 1213



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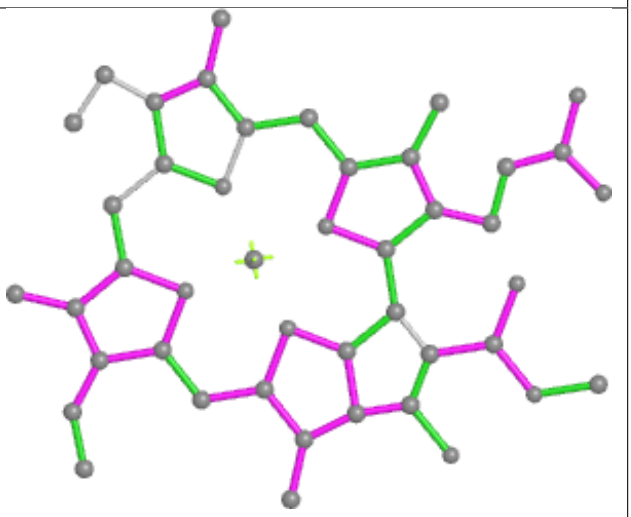
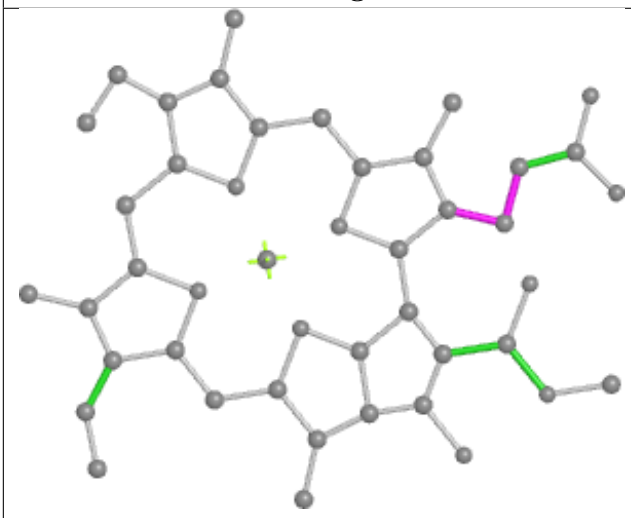


Bond angles



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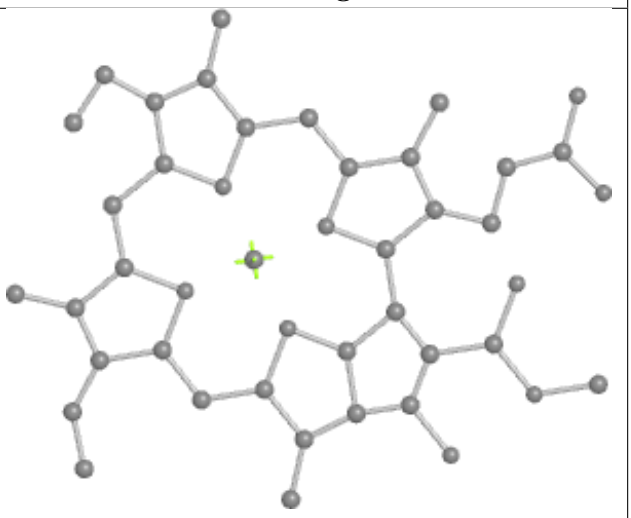
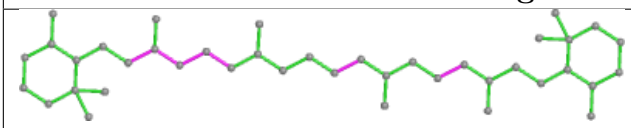


Rings

Ligand BCR k 4001



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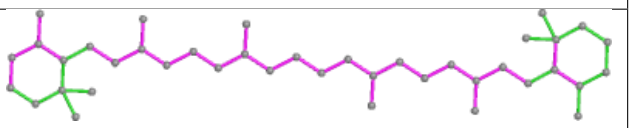
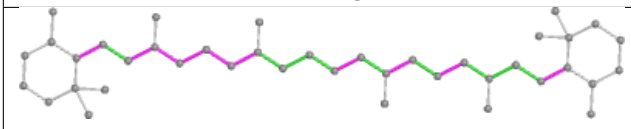


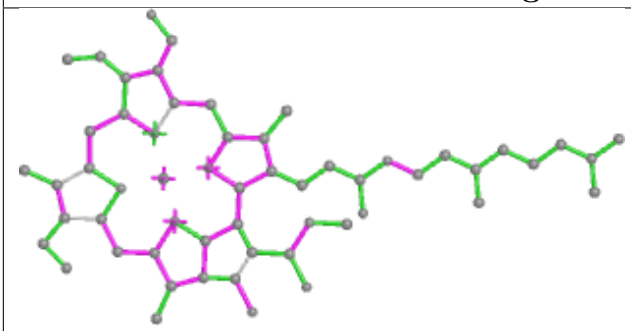
Bond angles



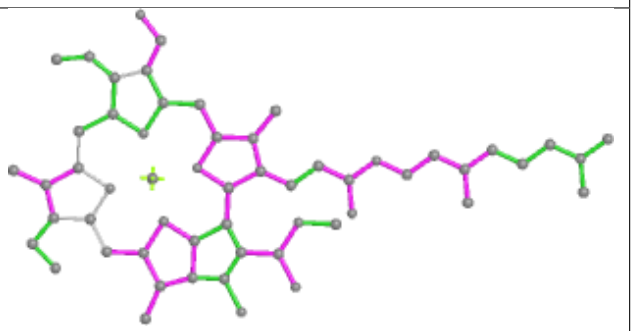
Torsions

Rings

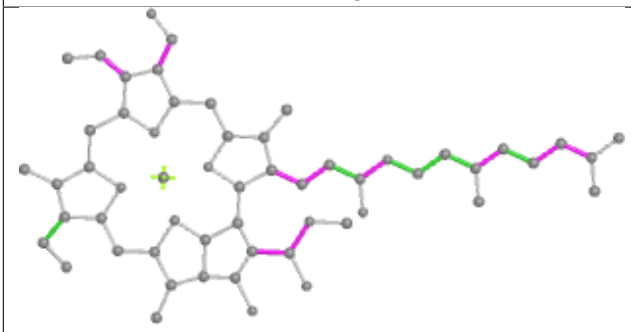
Ligand F6C b 1219



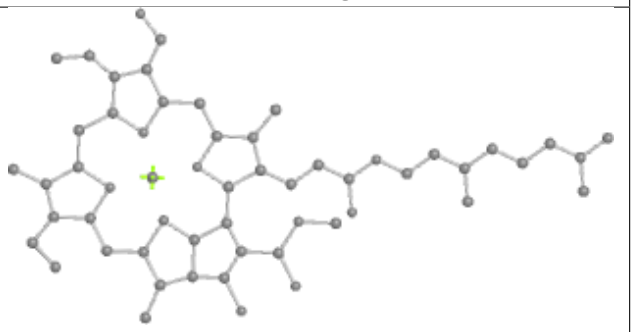
Bond lengths



Bond angles

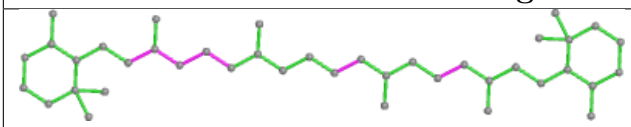


Torsions

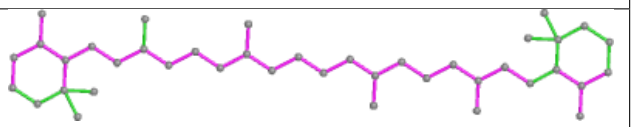


Rings

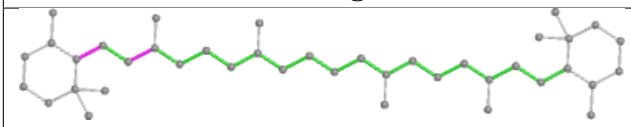
Ligand BCR b 4009



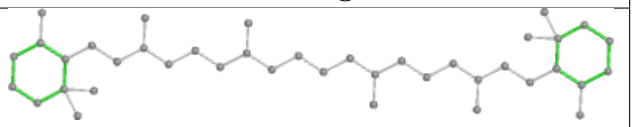
Bond lengths



Bond angles

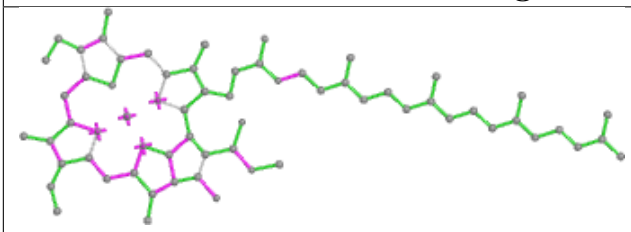


Torsions

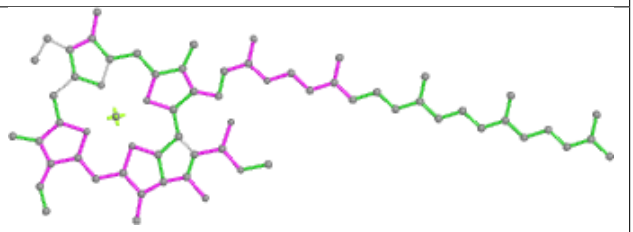


Rings

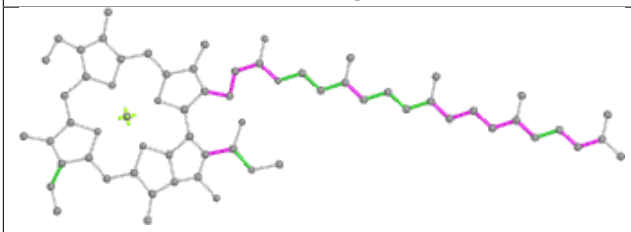
Ligand CLA G 1125



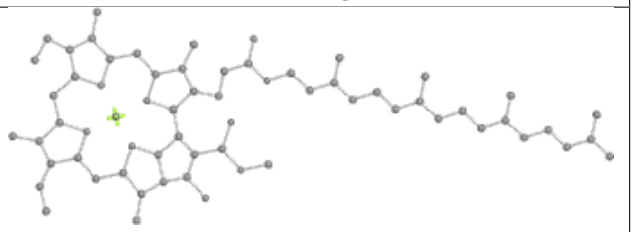
Bond lengths



Bond angles

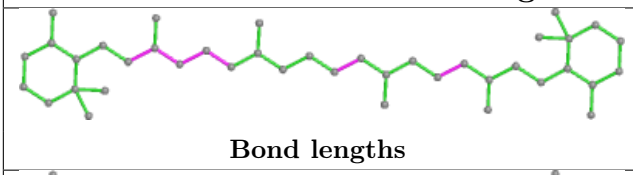


Torsions

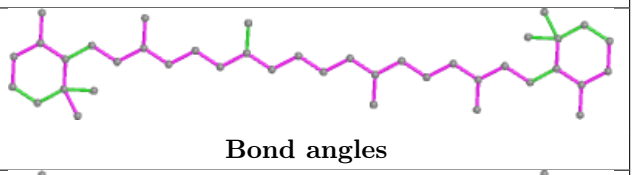


Rings

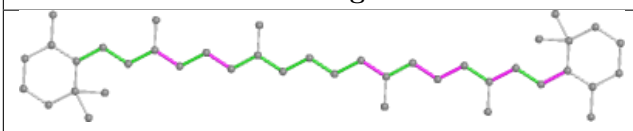
Ligand BCR a 4004



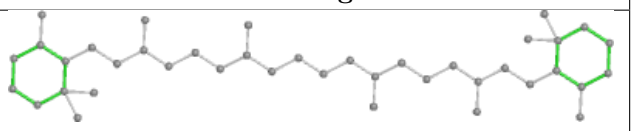
Bond lengths



Bond angles

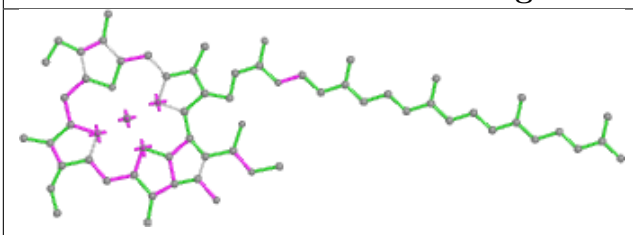


Torsions

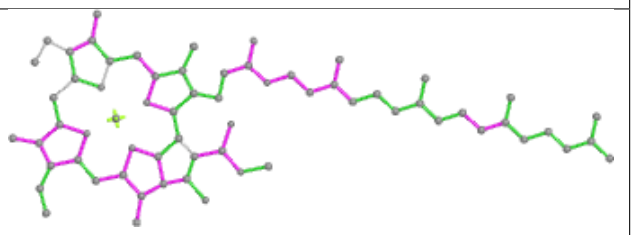


Rings

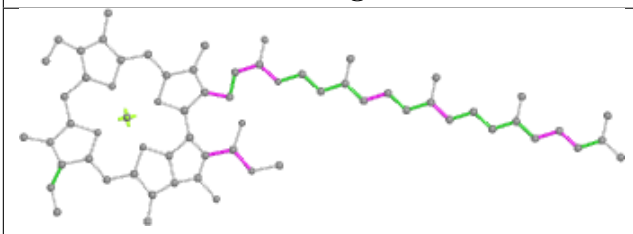
Ligand CLA B 1202



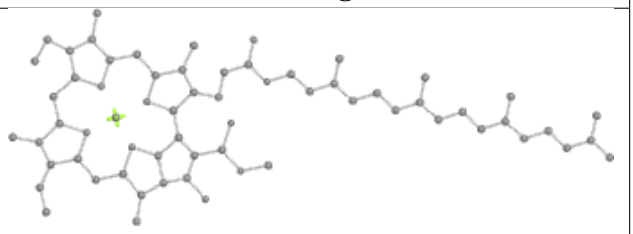
Bond lengths



Bond angles

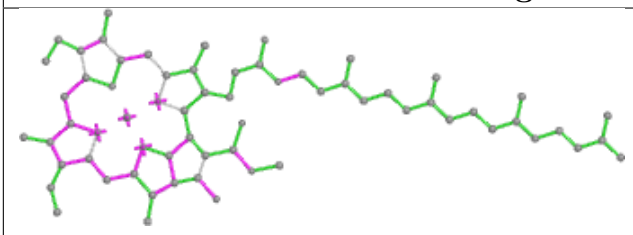


Torsions

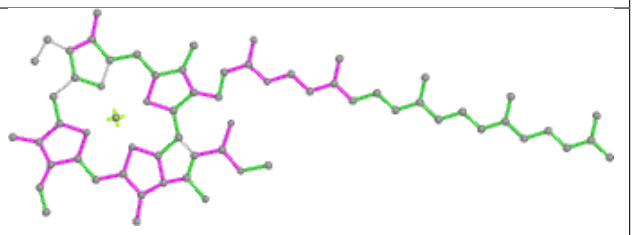


Rings

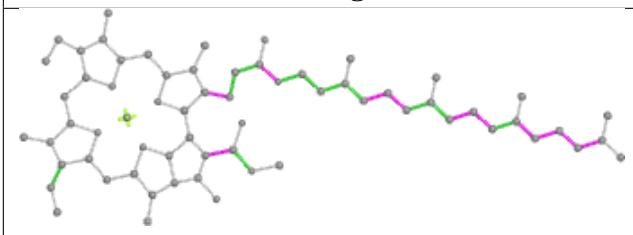
Ligand CLA B 1211



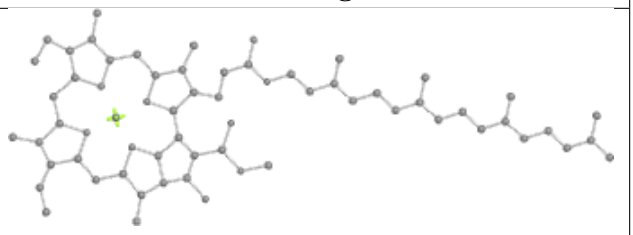
Bond lengths



Bond angles

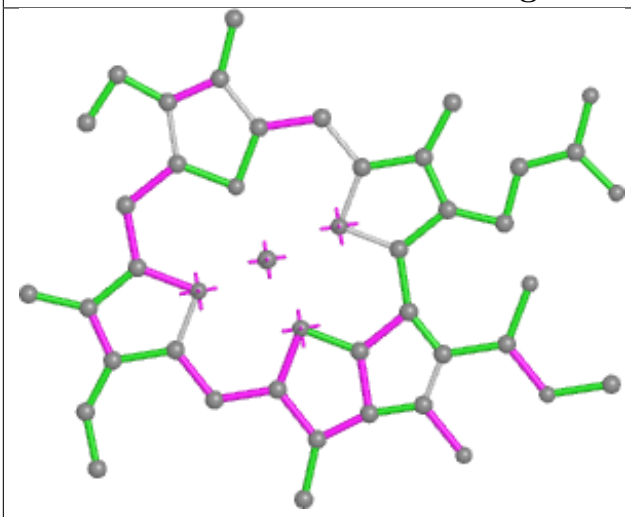


Torsions

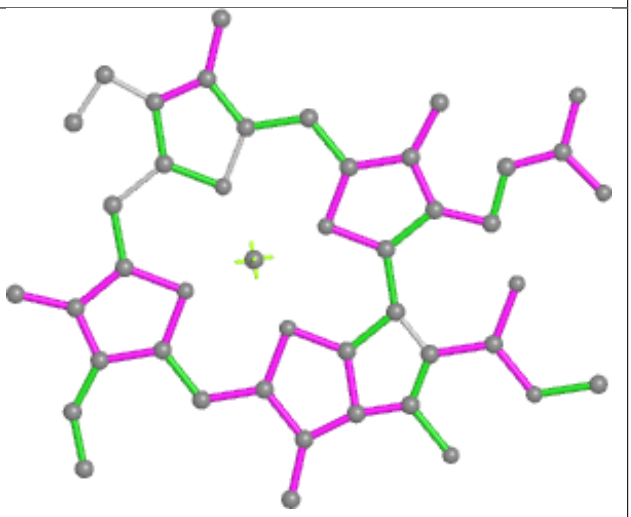


Rings

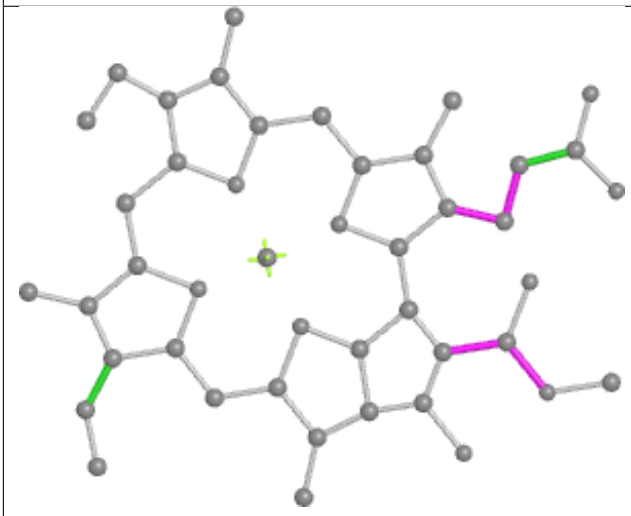
Ligand CLA a 1113



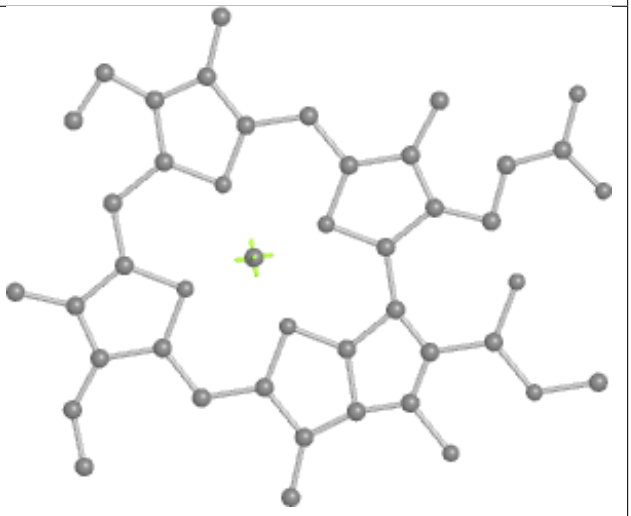
Bond lengths



Bond angles

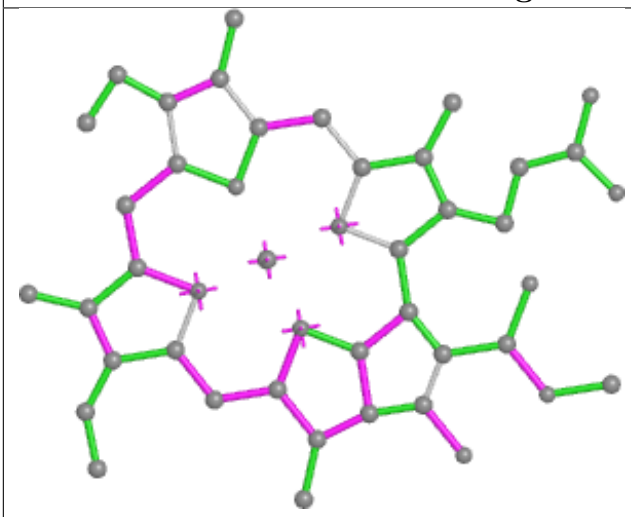


Torsions

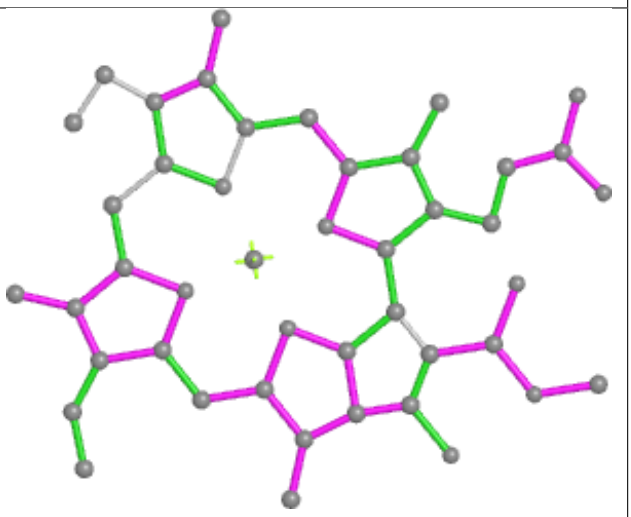


Rings

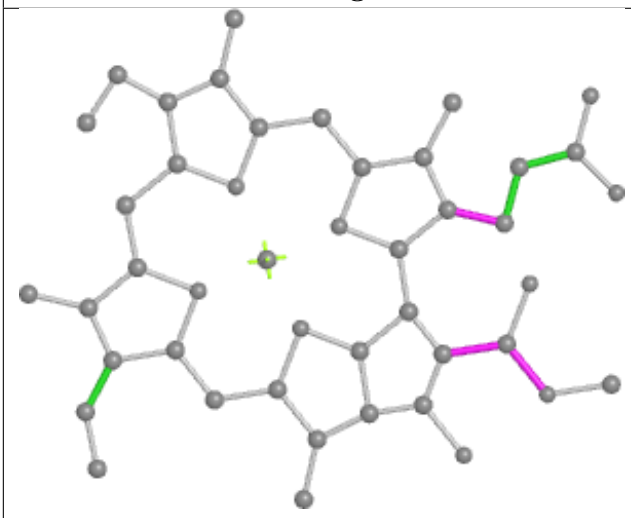
Ligand CLA B 1218



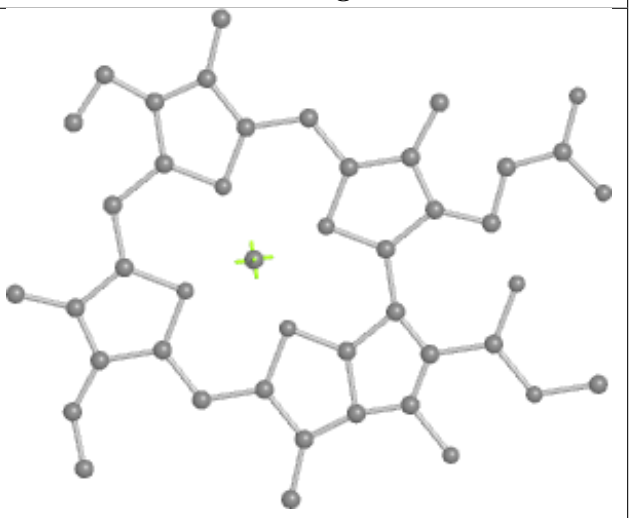
Bond lengths



Bond angles

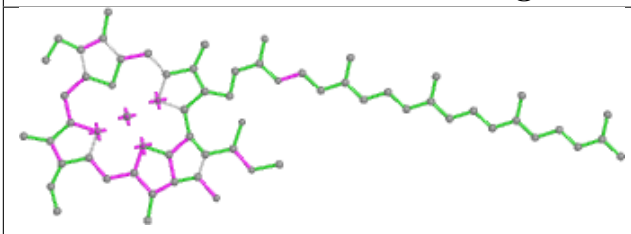


Torsions

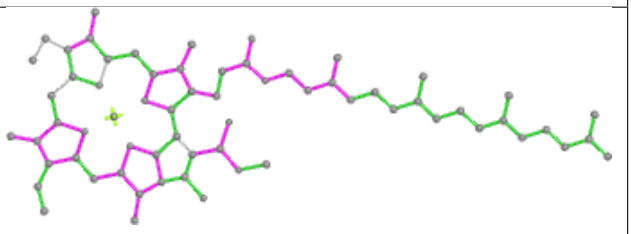


Rings

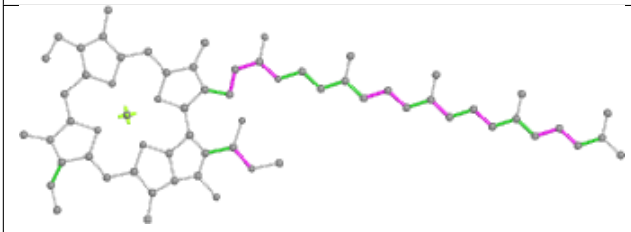
Ligand CLA B 1220



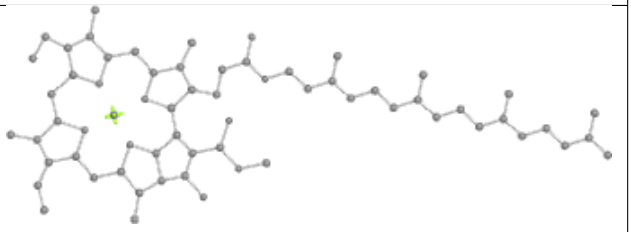
Bond lengths



Bond angles

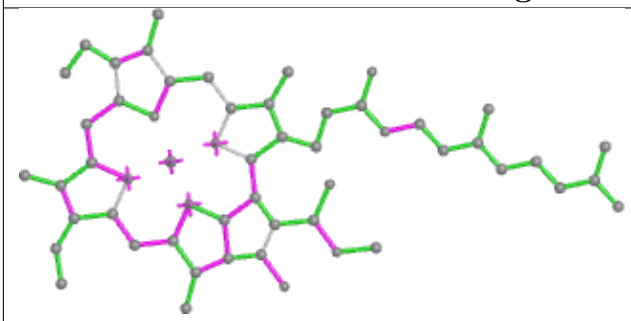


Torsions

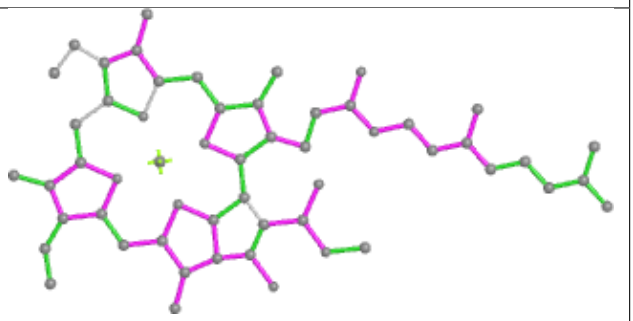


Rings

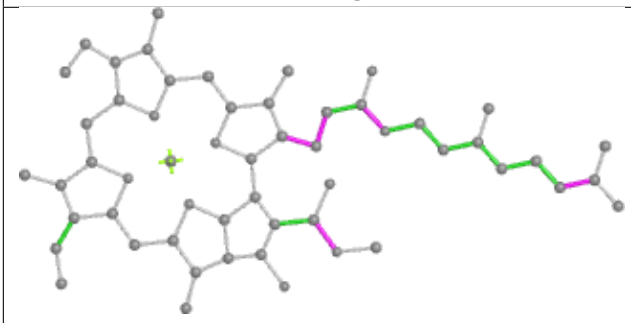
Ligand CLA A 1130



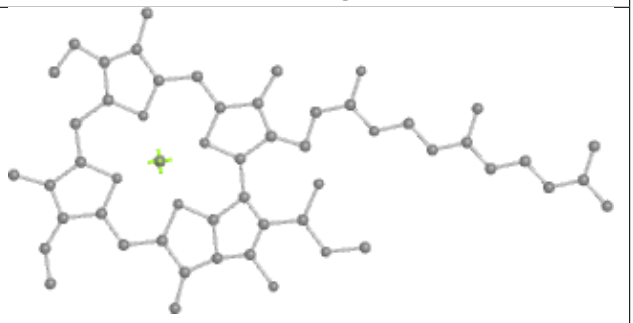
Bond lengths



Bond angles

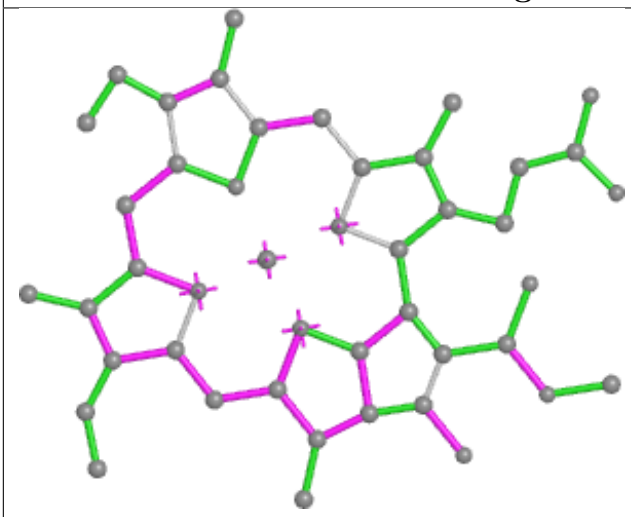


Torsions

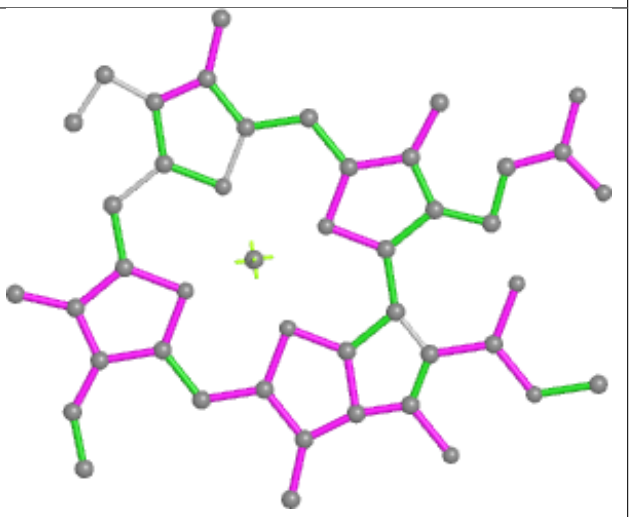


Rings

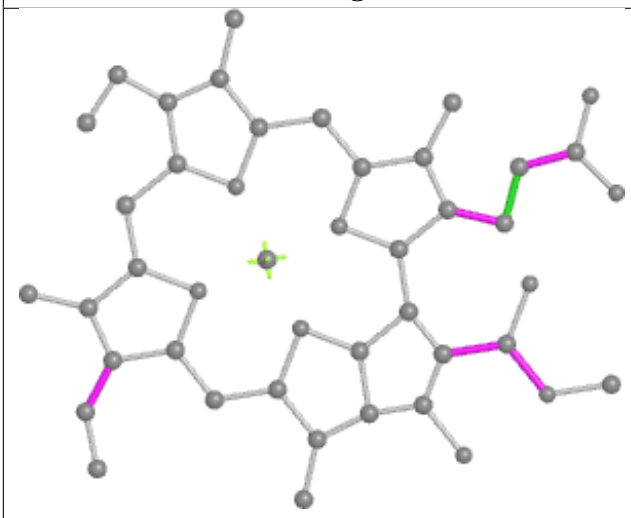
Ligand CLA K 1401



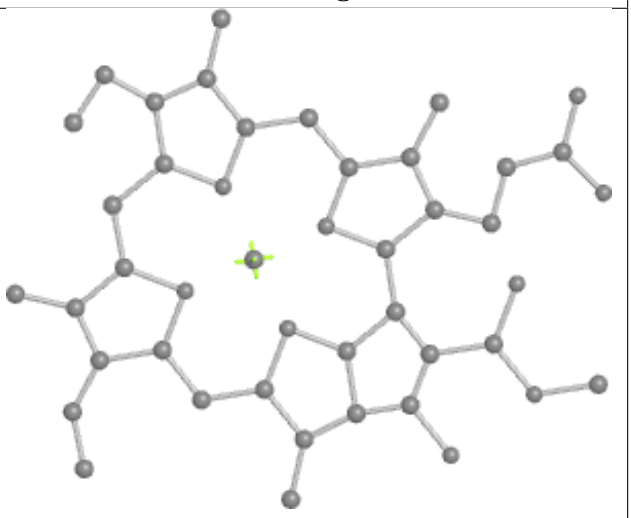
Bond lengths



Bond angles

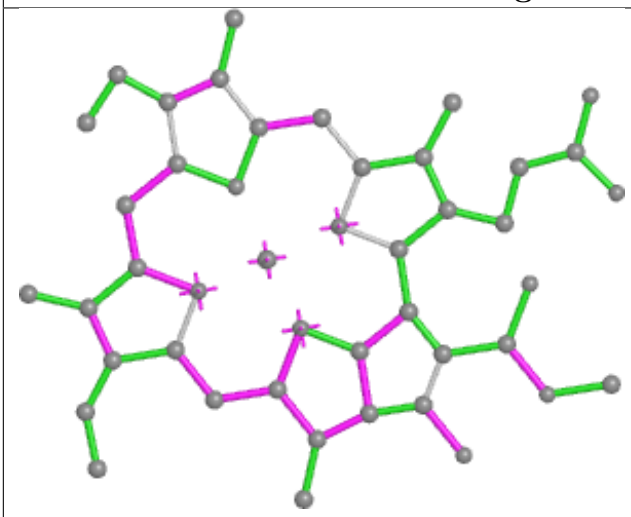


Torsions

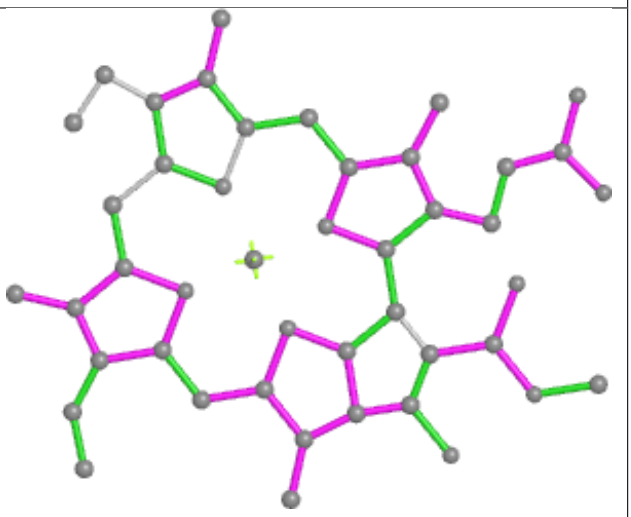


Rings

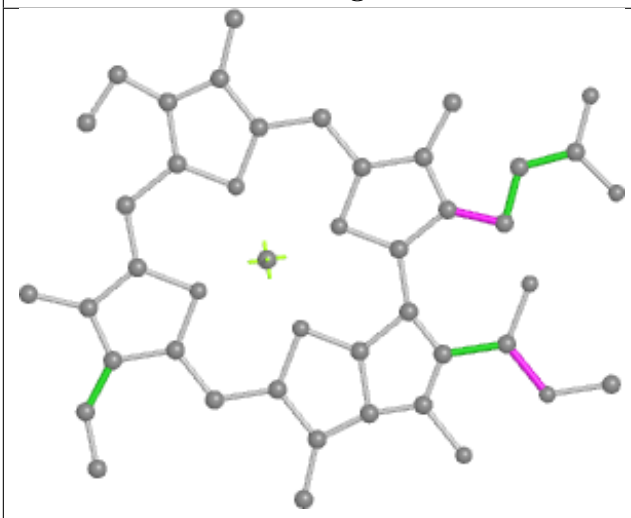
Ligand CLA A 1105



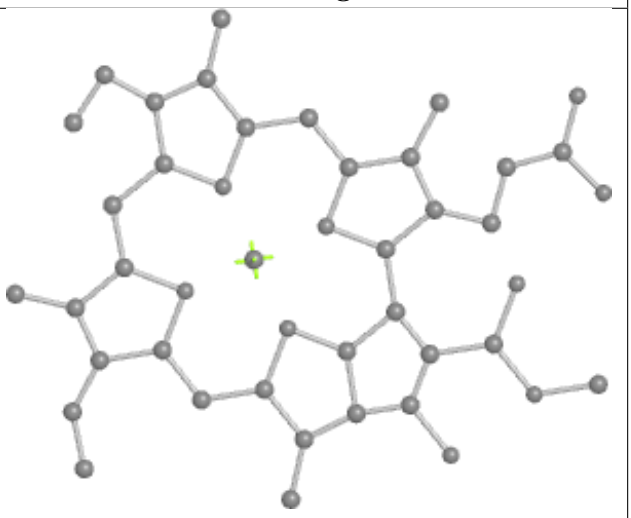
Bond lengths



Bond angles

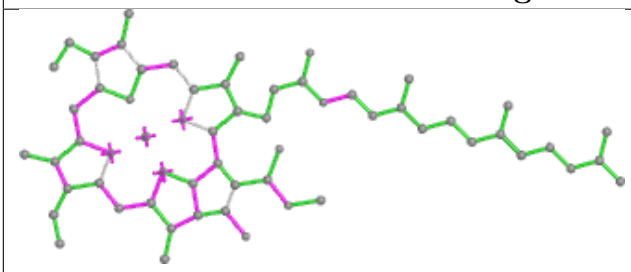


Torsions

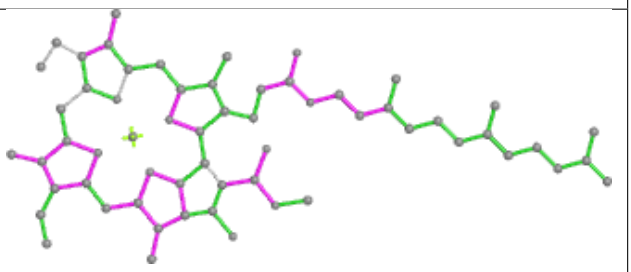


Rings

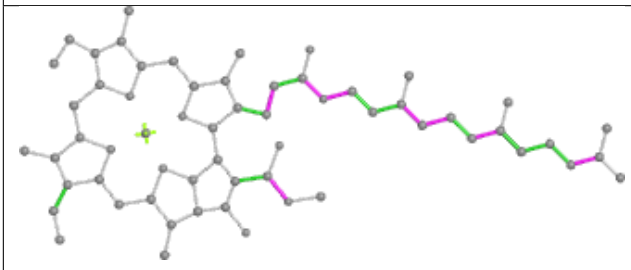
Ligand CLA G 1131



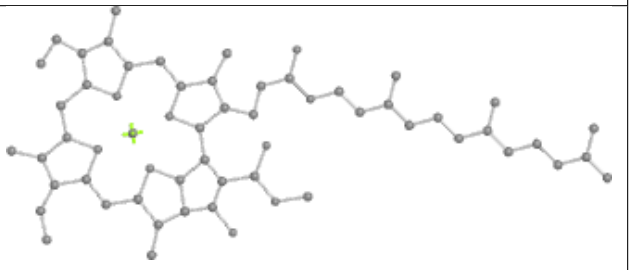
Bond lengths



Bond angles

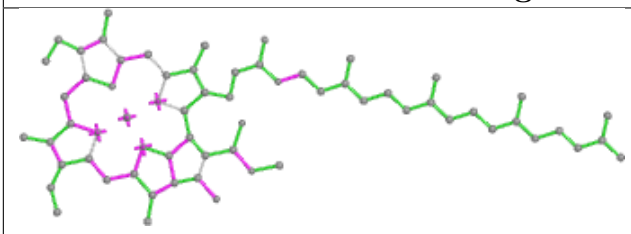


Torsions

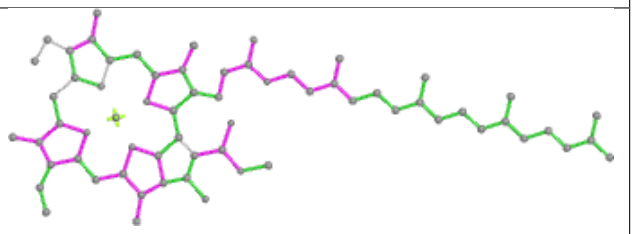


Rings

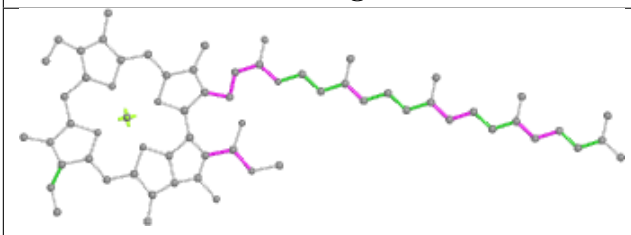
Ligand CLA A 1127



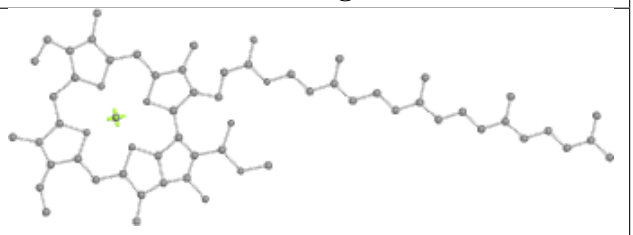
Bond lengths



Bond angles

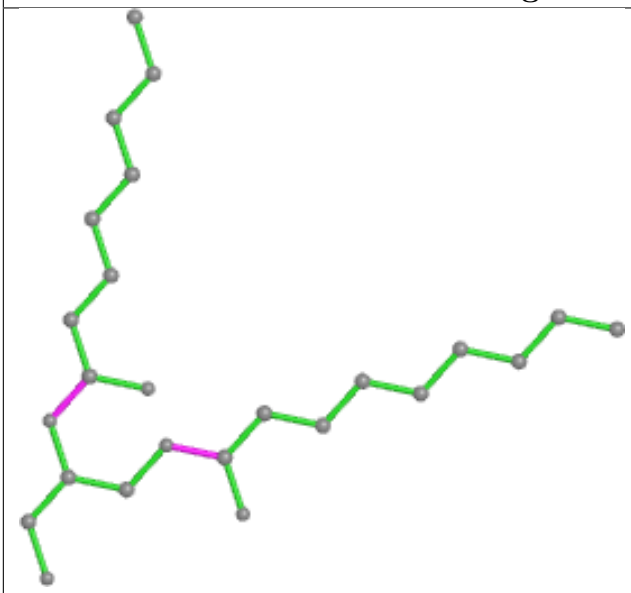


Torsions

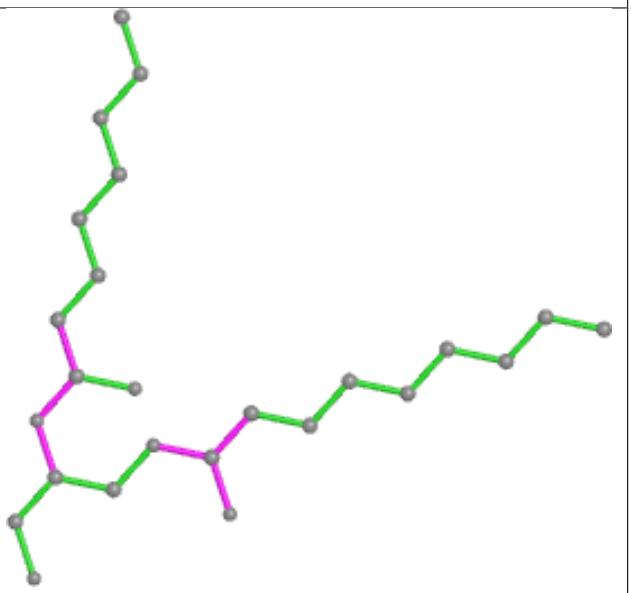


Rings

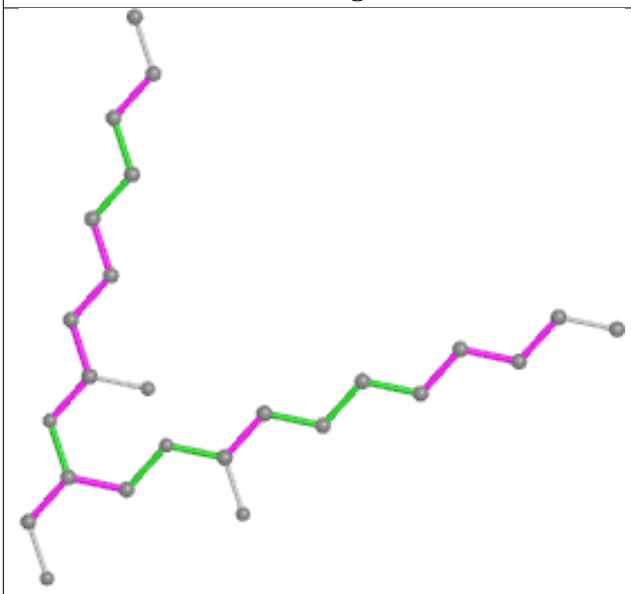
Ligand LHG l 5101



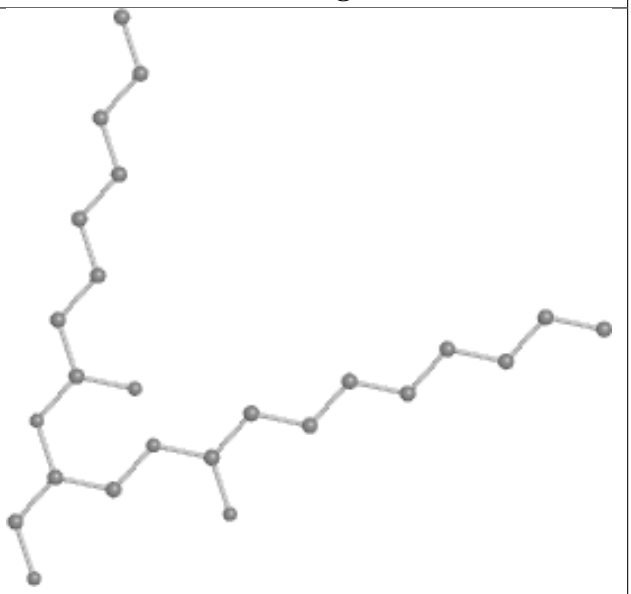
Bond lengths



Bond angles

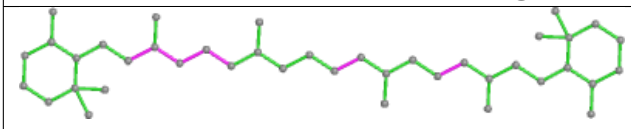


Torsions

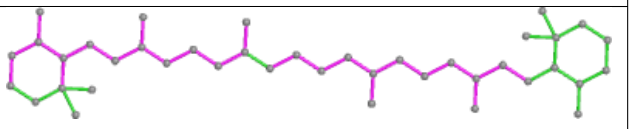


Rings

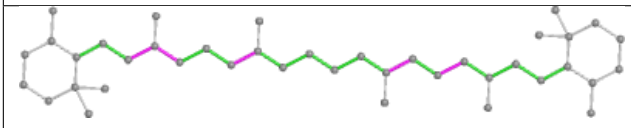
Ligand BCR U 4022



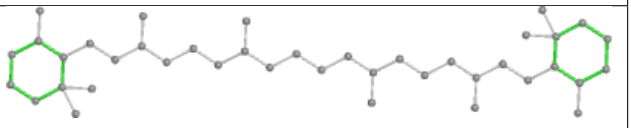
Bond lengths



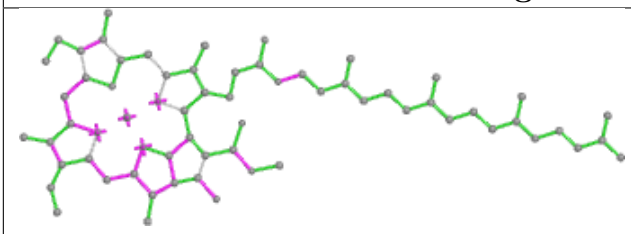
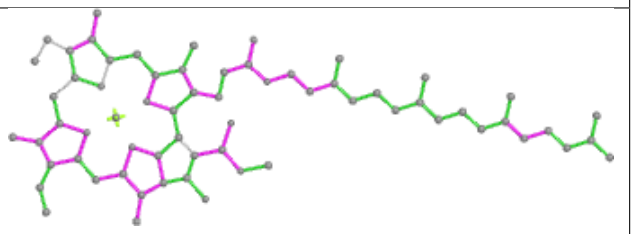
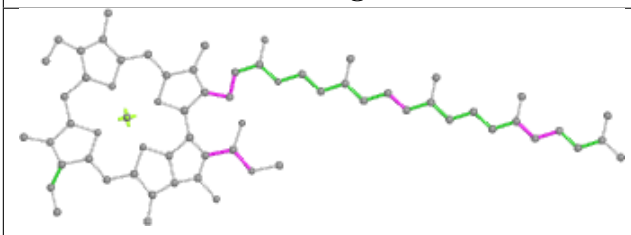
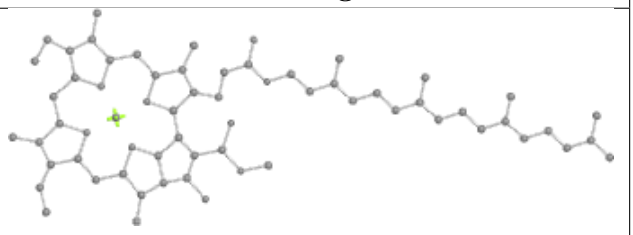
Bond angles

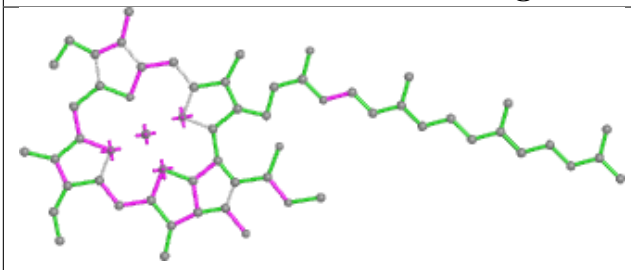
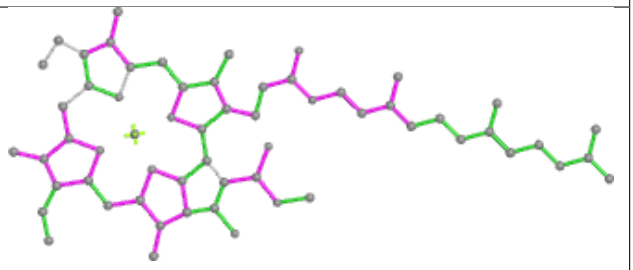
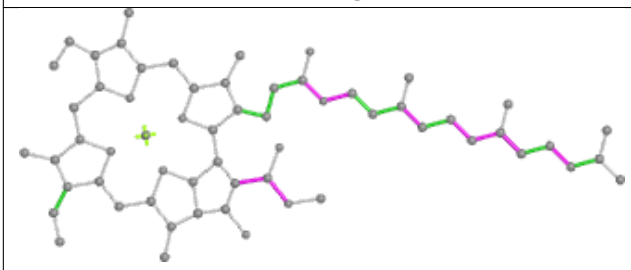
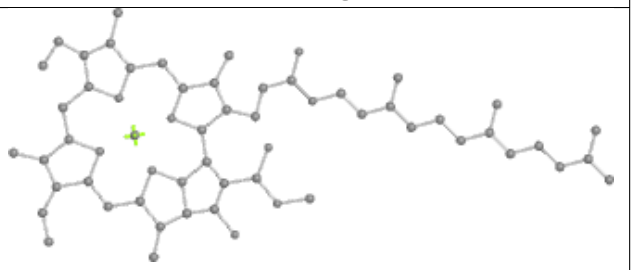


Torsions

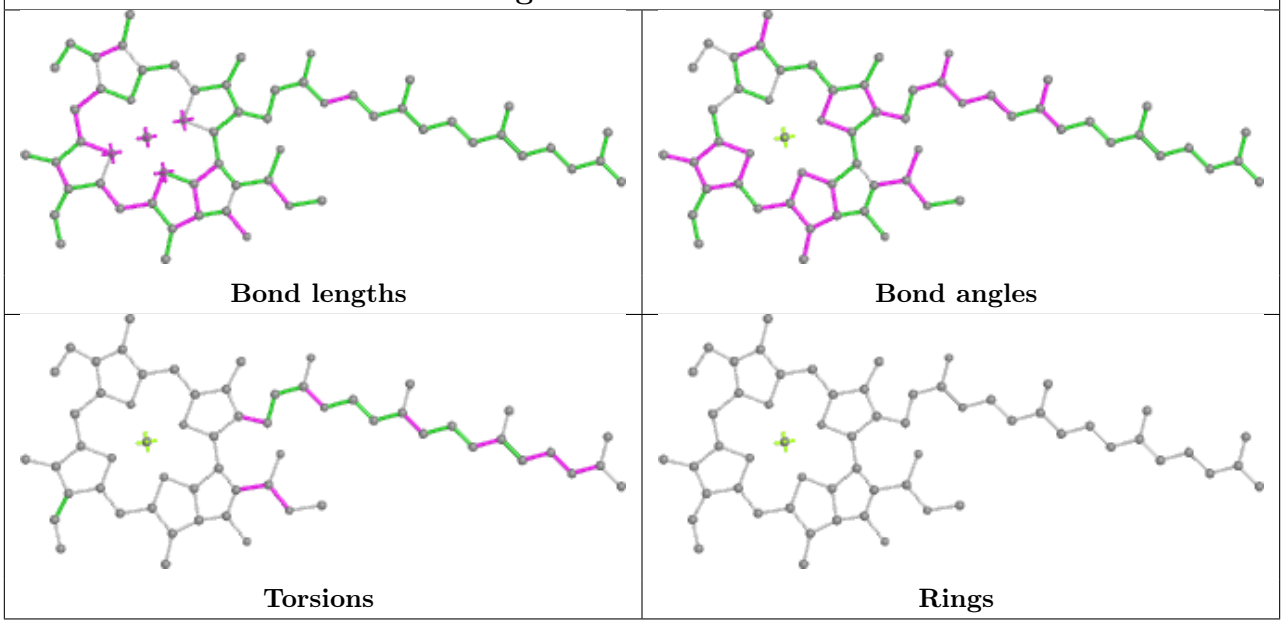


Rings

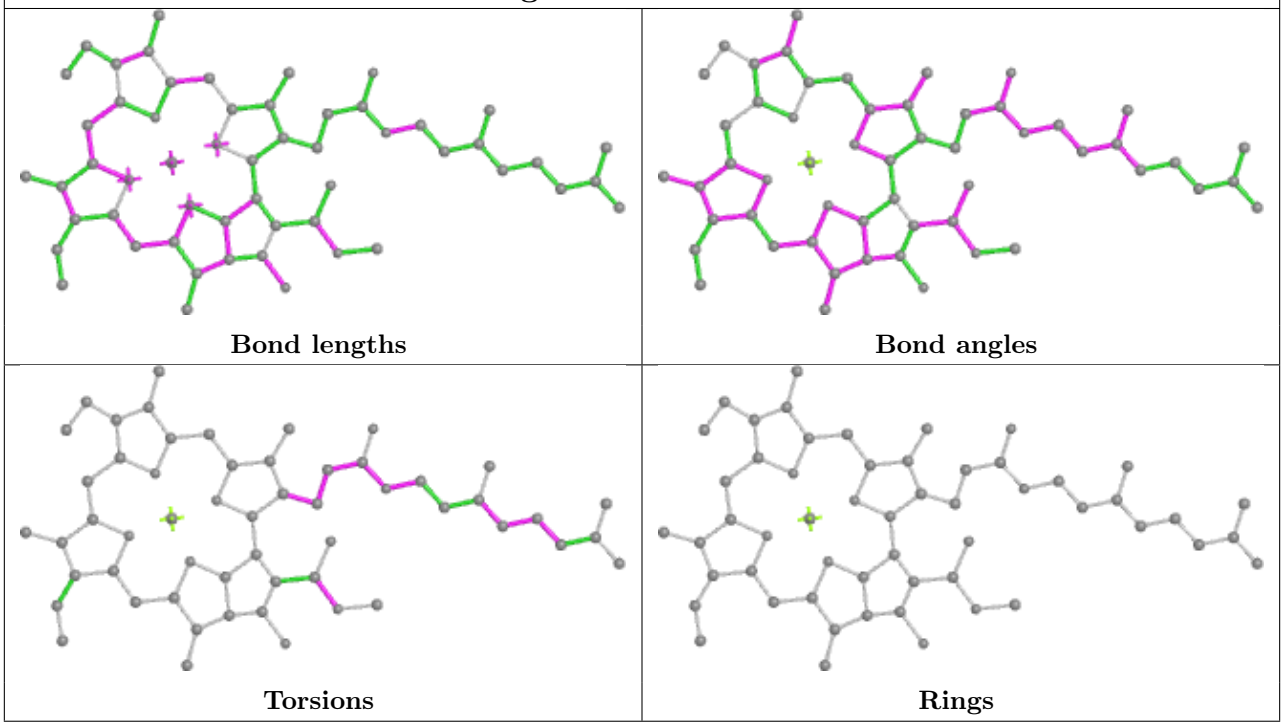
Ligand CLA A 1132	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA A 1128	
 Bond lengths	 Bond angles
 Torsions	 Rings

Ligand CLA A 1126



Ligand CLA a 1140



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.

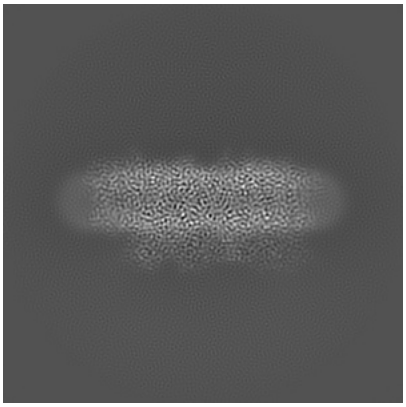
6 Map visualisation

This section contains visualisations of the EMDB entry EMD-24821. These allow visual inspection of the internal detail of the map and identification of artifacts.

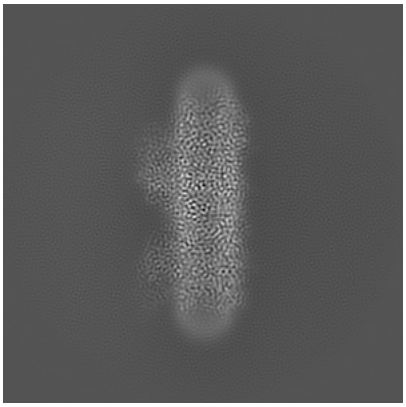
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections

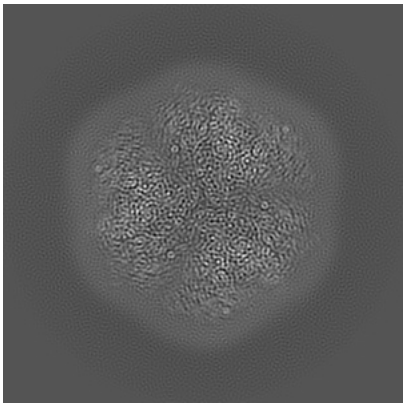
6.1.1 Primary map



X



Y

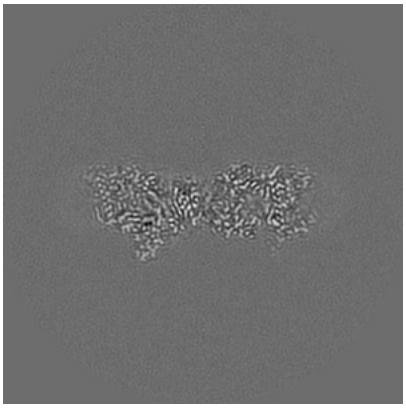


Z

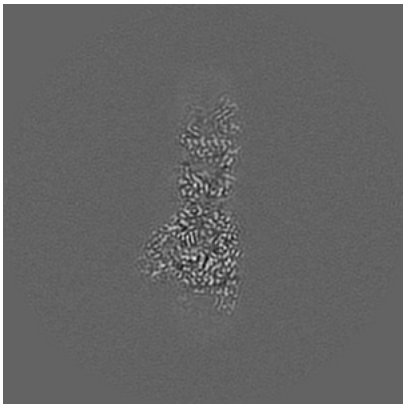
The images above show the map projected in three orthogonal directions.

6.2 Central slices

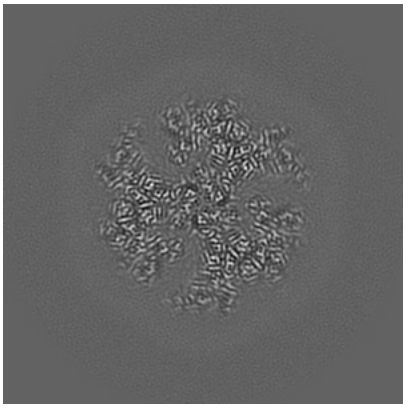
6.2.1 Primary map



X Index: 192



Y Index: 192

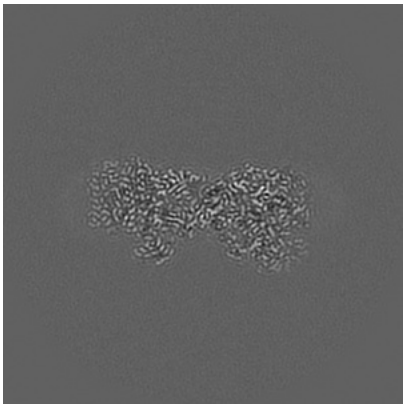


Z Index: 192

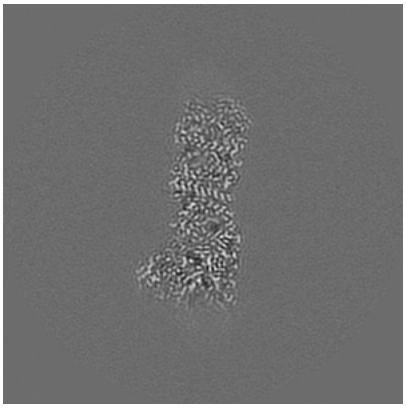
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices (i)

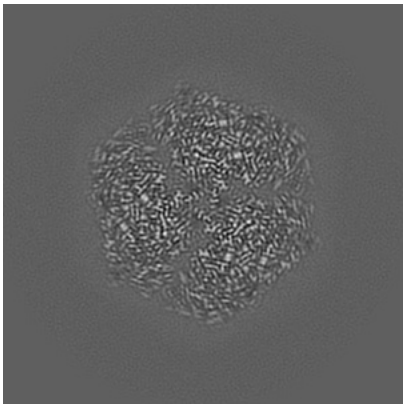
6.3.1 Primary map



X Index: 212



Y Index: 180

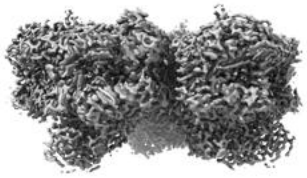


Z Index: 212

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

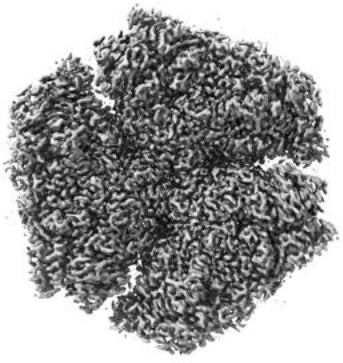
6.4 Orthogonal surface views (i)

6.4.1 Primary map



X

Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.0302. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

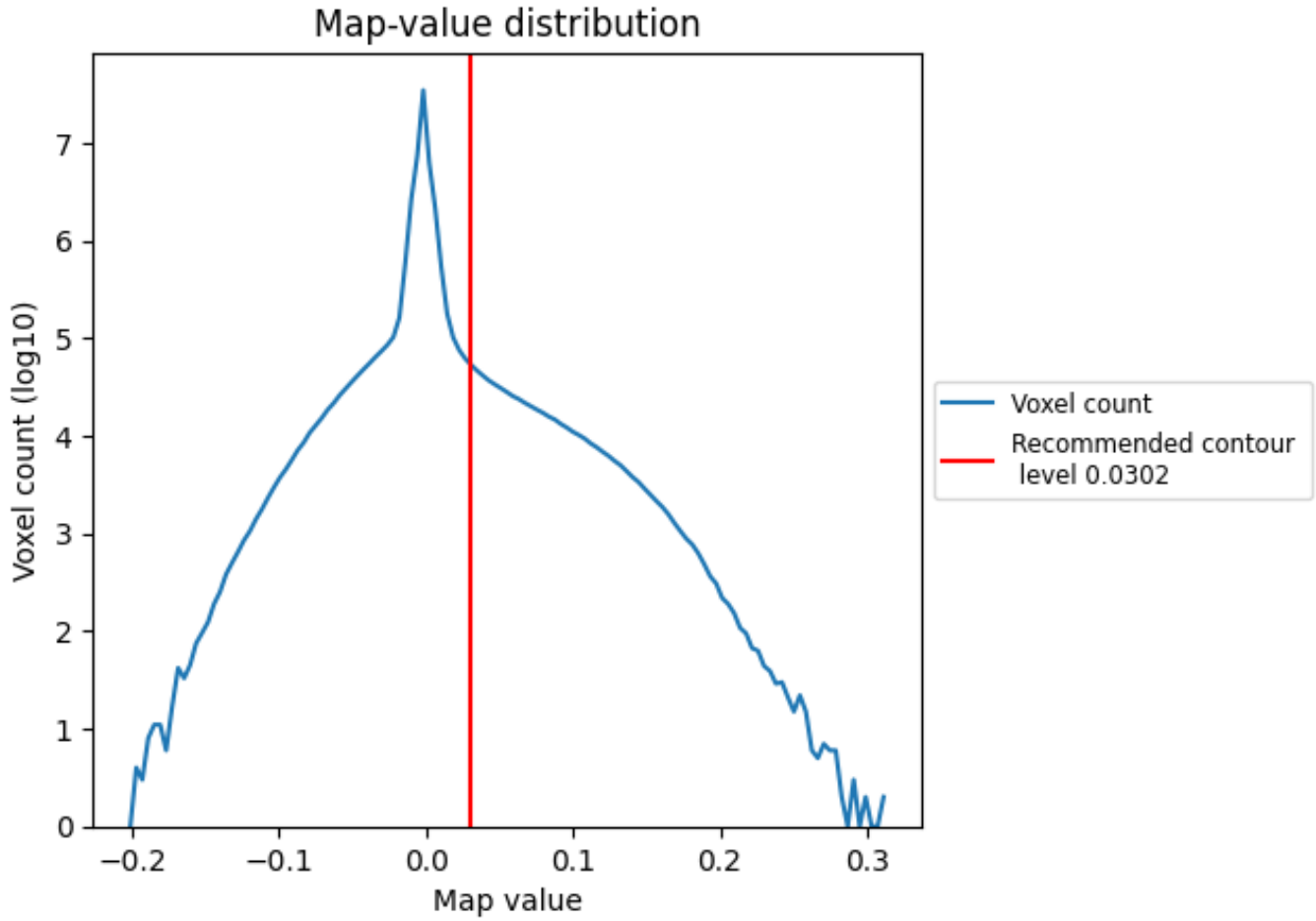
6.5 Mask visualisation (i)

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

7 Map analysis

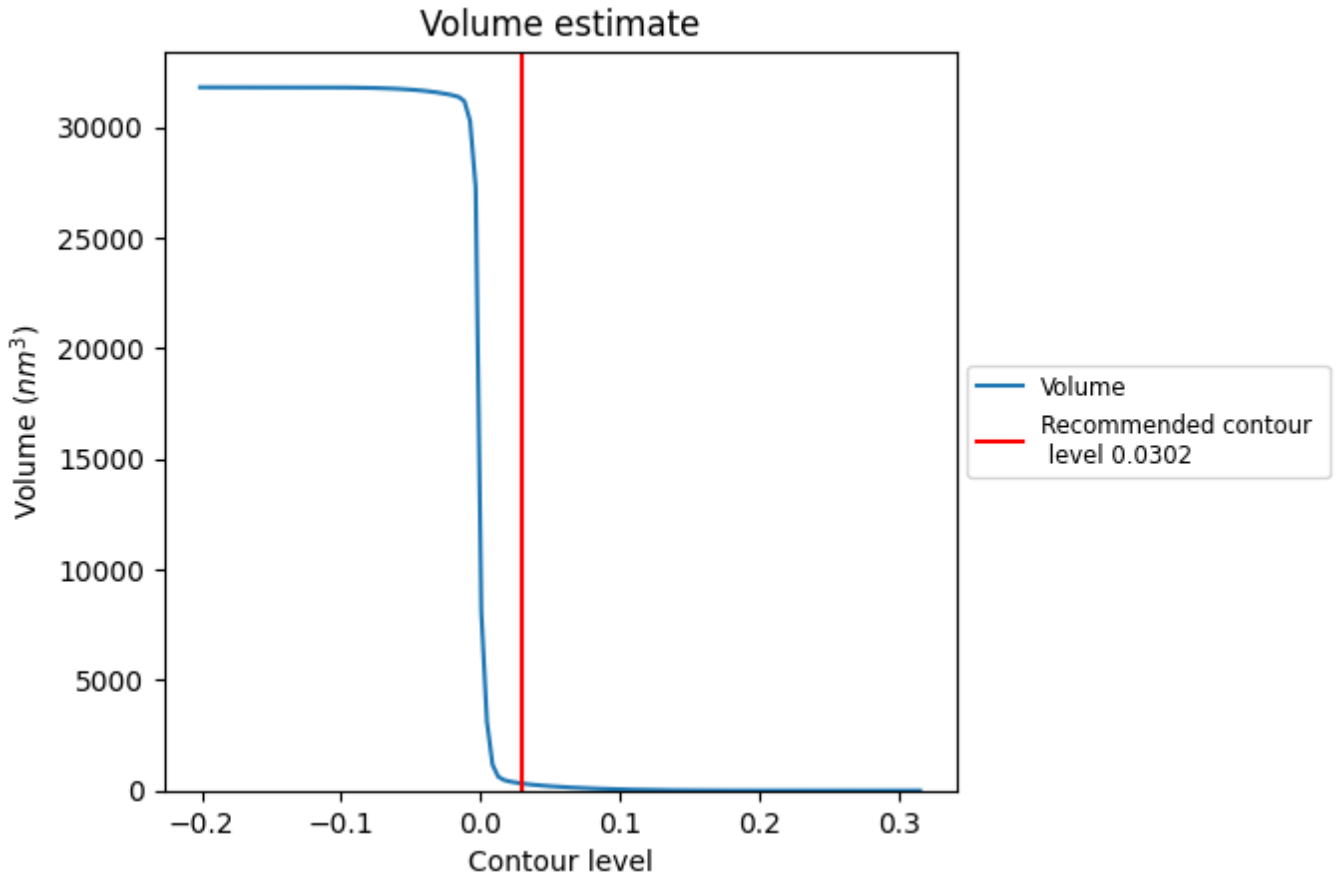
This section contains the results of statistical analysis of the map.

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.

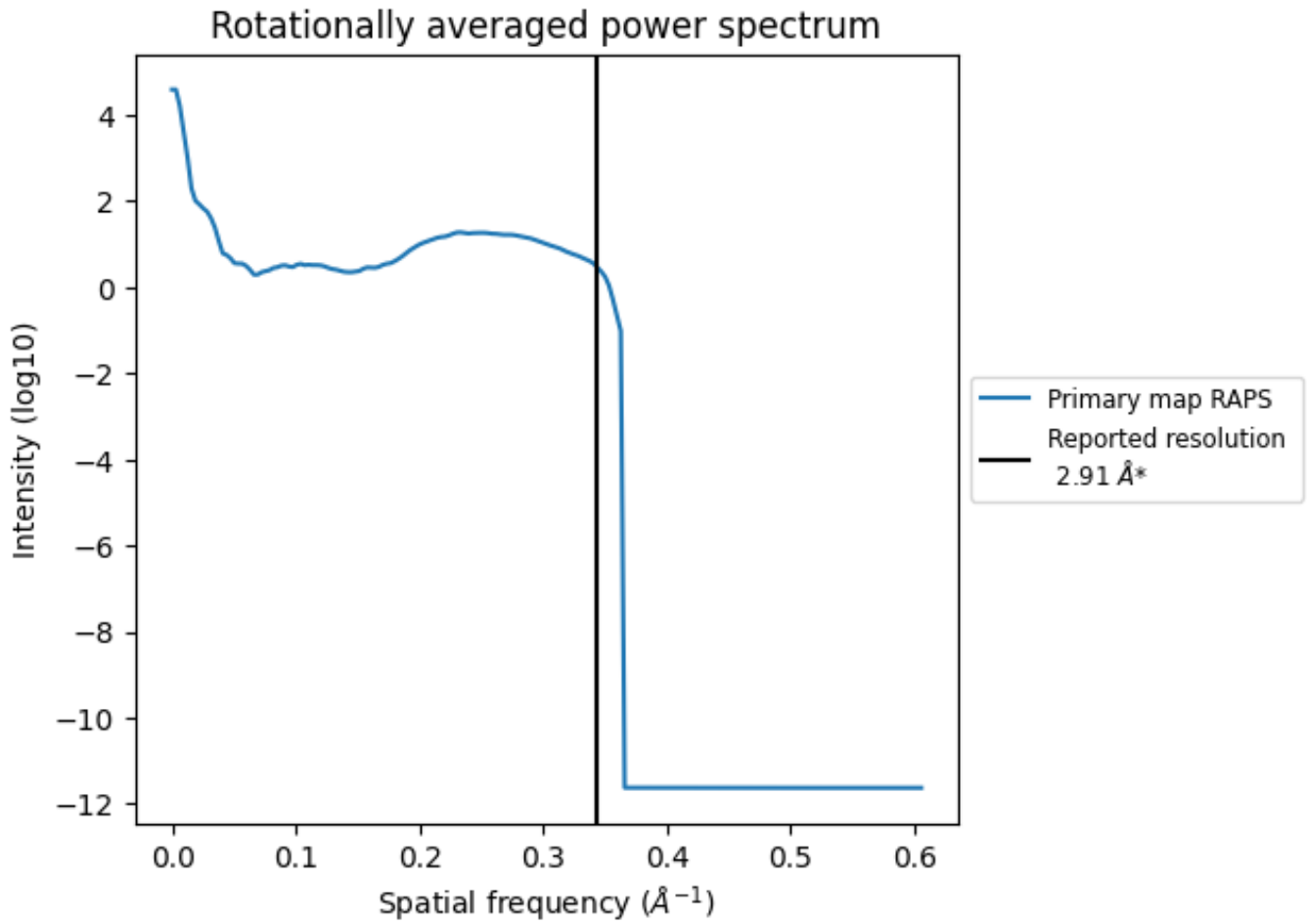
7.2 Volume estimate



The volume at the recommended contour level is 317 nm^3; this corresponds to an approximate mass of 286 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)

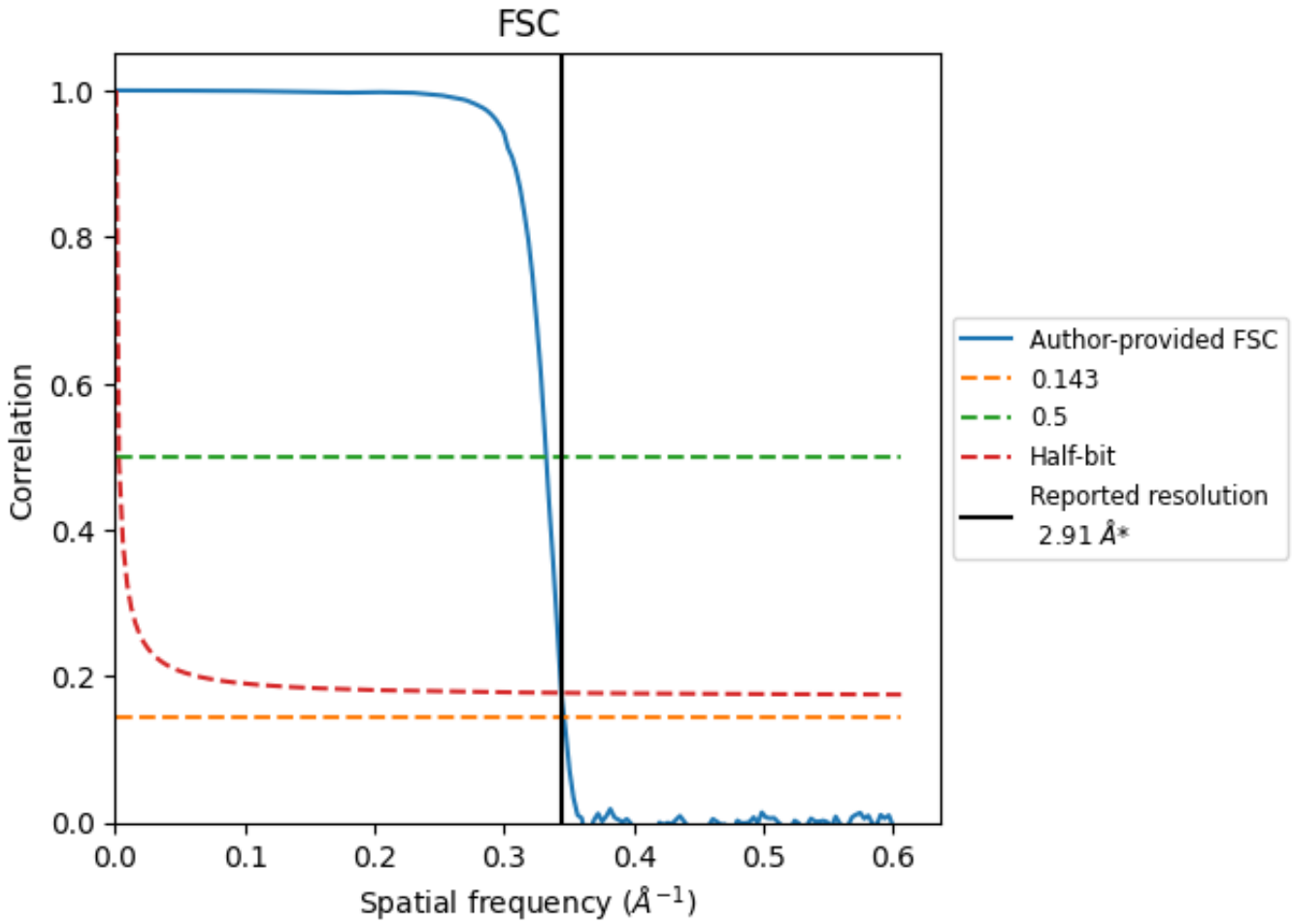


*Reported resolution corresponds to spatial frequency of 0.344 $Å^{-1}$

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 0.344 Å^{-1}

8.2 Resolution estimates (i)

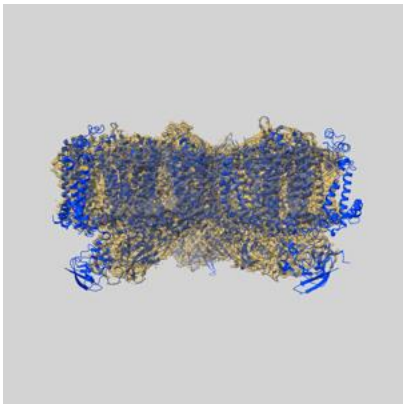
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	2.91	-	-
Author-provided FSC curve	2.89	3.01	2.91
Unmasked-calculated*	-	-	-

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps.

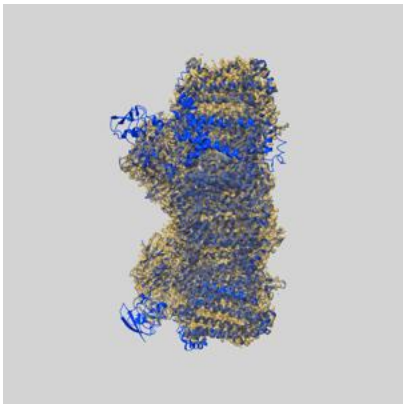
9 Map-model fit

This section contains information regarding the fit between EMDB map EMD-24821 and PDB model 7S3D. Per-residue inclusion information can be found in section 3 on page 40.

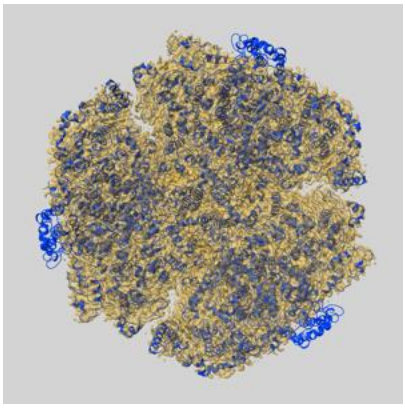
9.1 Map-model overlay



X



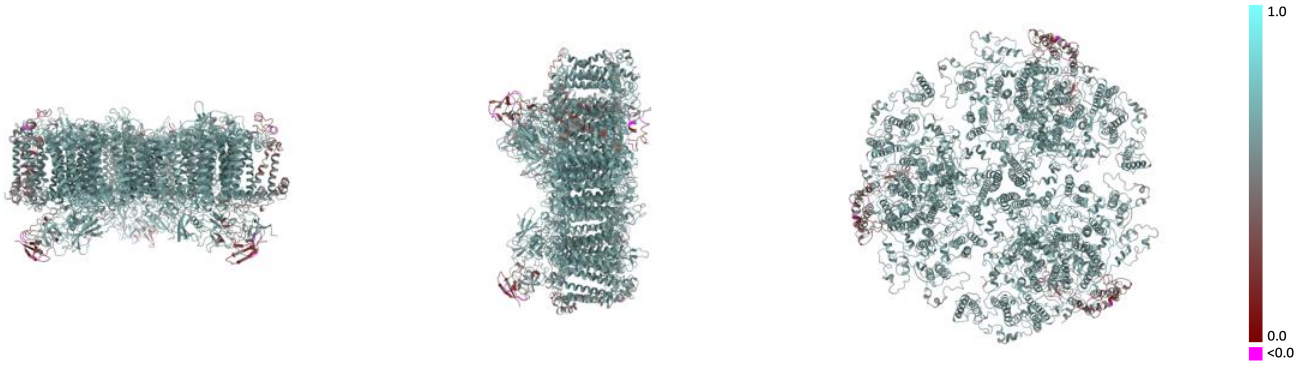
Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.0302 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

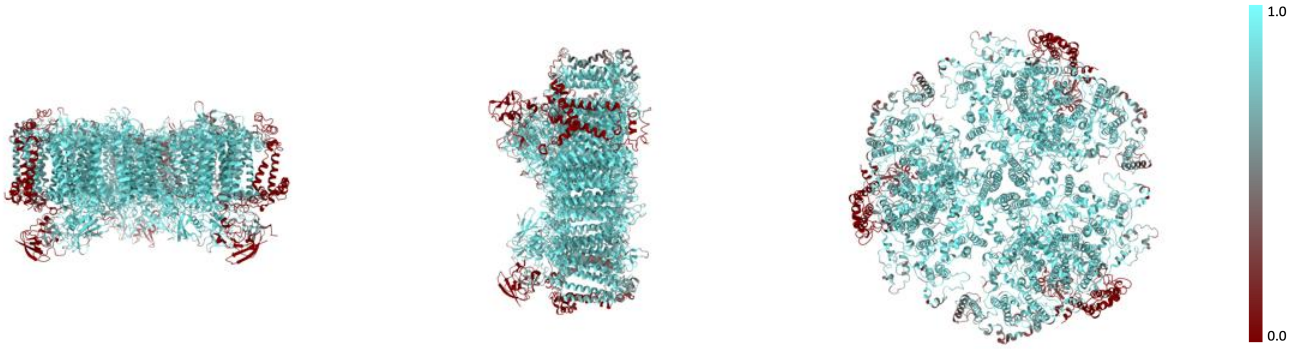
9.2 Q-score mapped to coordinate model (i)



X Y Z

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

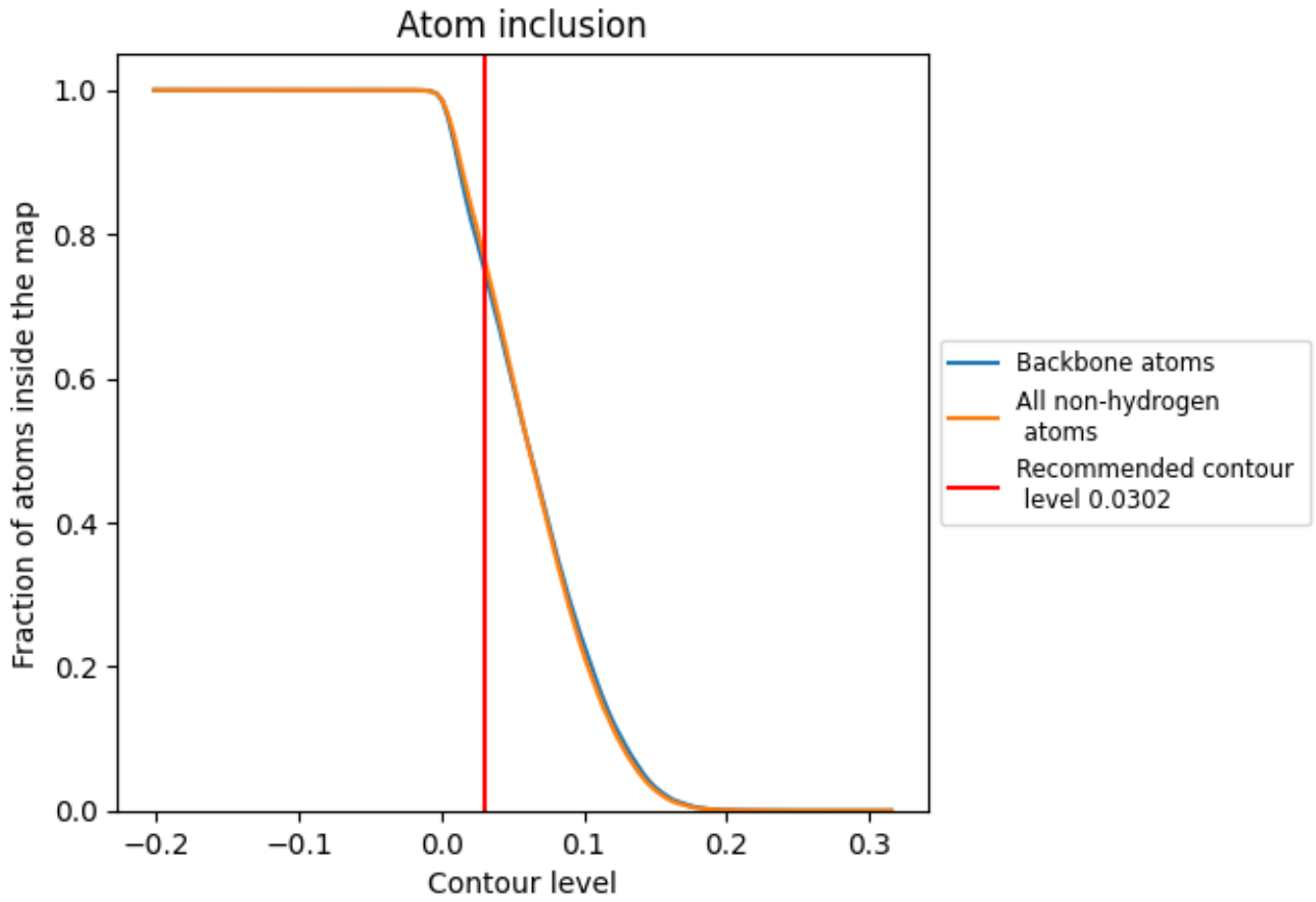
9.3 Atom inclusion mapped to coordinate model (i)



X Y Z

The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.0302).

9.4 Atom inclusion (i)



At the recommended contour level, 75% of all backbone atoms, 77% 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 (0.0302) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	0.7668	0.5990
A	0.8192	0.6180
B	0.8493	0.6180
C	0.9231	0.6330
D	0.7655	0.5910
E	0.5793	0.5940
F	0.0061	0.4060
G	0.8199	0.6180
H	0.8486	0.6180
I	0.8914	0.6310
J	0.0068	0.4470
K	0.4815	0.5480
L	0.9186	0.6310
M	0.8229	0.6080
N	0.9147	0.6340
O	0.7599	0.5920
P	0.5813	0.5900
Q	0.0049	0.4060
R	0.8975	0.6320
S	0.0068	0.4420
T	0.4765	0.5470
U	0.9192	0.6310
V	0.8200	0.6090
W	0.0000	0.3220
X	0.0015	0.3220
a	0.8207	0.6180
b	0.8490	0.6160
c	0.9214	0.6320
d	0.7636	0.5910
e	0.5711	0.5880
f	0.0049	0.4080
i	0.8955	0.6300
j	0.0068	0.4380
k	0.4832	0.5460
l	0.9174	0.6310

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Chain	Atom inclusion	Q-score
m	0.8286	0.6040
x	0.0015	0.3230