Full wwPDB X-ray Structure Validation Report ⓘ

Jun 7, 2020 – 03:15 am BST

PDB ID	:	6FOS
Title	:	Cyanidioschyzon merolae photosystem I
Authors	:	Nelson, N.; Hippler, M.; Antoshvili, M.; Caspy, I.
Deposited on	:	2018-02-08
Resolution	:	4.00 Å(reported)

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

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

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

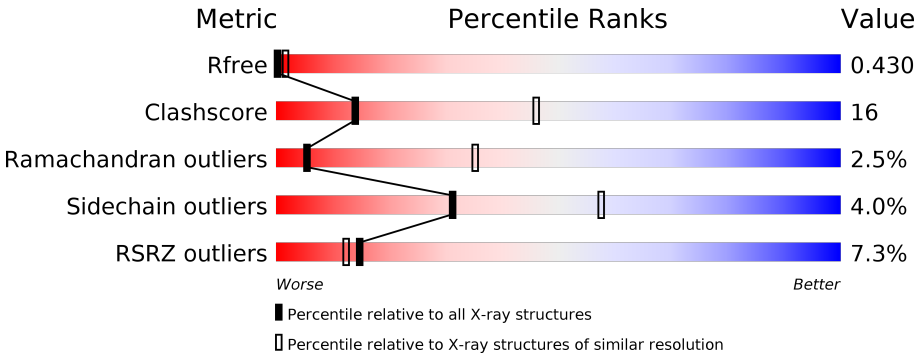
MolProbity	:	4.02b-467
Mogul	:	1.8.5 (274361), CSD as541be (2020)
Xtriage (Phenix)	:	1.13
EDS	:	2.11
buster-report	:	1.1.7 (2018)
Percentile statistics	:	20191225.v01 (using entries in the PDB archive December 25th 2019)
Refmac	:	5.8.0158
CCP4	:	7.0.044 (Gargrove)
Ideal geometry (proteins)	:	Engh & Huber (2001)
Ideal geometry (DNA, RNA)	:	Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP)	:	2.11

1 Overall quality at a glance (i)

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

The reported resolution of this entry is 4.00 Å.

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



Metric	Whole archive (#Entries)	Similar resolution (#Entries, resolution range(Å))
R_{free}	130704	1087 (4.30-3.70)
Clashscore	141614	1148 (4.30-3.70)
Ramachandran outliers	138981	1108 (4.30-3.70)
Sidechain outliers	138945	1099 (4.30-3.70)
RSRZ outliers	127900	1028 (4.34-3.66)

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

Mol	Chain	Length	Quality of chain
1	2	222	6% 45% 18% • 35%
1	3	222	6% 32% 28% 6% • 32%
2	4	214	6% 36% 15% • 46%
3	A	740	3% 64% 35% •
4	B	725	10% 66% 33% •
5	C	80	10% 59% 39% •

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Mol	Chain	Length	Quality of chain
6	D	124	15% 70% 27%
7	E	69	7% 49% 42% 9%
8	F	155	2% 66% 25% 8%
9	I	32	72% 25%
10	J	38	82% 16%
11	K	47	2% 68% 32%
12	L	140	19% 61% 34% 6%
13	M	29	97%
14	O	98	3% 78% 21%

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
15	CLA	2	601	X	-	-	-
15	CLA	2	602	X	-	-	-
15	CLA	2	603	X	-	-	-
15	CLA	2	604	X	-	-	-
15	CLA	2	605	X	-	-	-
15	CLA	2	606	X	-	-	-
15	CLA	2	607	X	-	-	-
15	CLA	2	608	X	-	-	-
15	CLA	2	610	X	-	-	-
15	CLA	2	611	X	-	-	-
15	CLA	2	612	X	-	-	-
15	CLA	2	613	X	-	-	-
15	CLA	2	614	X	-	-	-
15	CLA	2	615	X	-	-	-
15	CLA	2	616	X	-	-	X
15	CLA	3	601	X	-	-	-
15	CLA	3	602	X	-	-	-
15	CLA	3	603	X	-	-	X
15	CLA	3	604	X	-	-	-
15	CLA	3	606	X	-	-	-
15	CLA	3	607	X	-	-	-
15	CLA	3	608	X	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
15	CLA	3	610	X	-	-	-
15	CLA	3	611	X	-	-	-
15	CLA	3	612	X	-	-	-
15	CLA	3	614	X	-	-	-
15	CLA	4	601	X	-	-	-
15	CLA	4	602	X	-	-	X
15	CLA	4	603	X	-	-	-
15	CLA	4	604	X	-	-	-
15	CLA	4	605	X	-	-	-
15	CLA	4	606	X	-	-	-
15	CLA	4	608	X	-	-	-
15	CLA	4	609	X	-	-	-
15	CLA	4	610	X	-	-	-
15	CLA	4	611	X	-	-	X
15	CLA	4	612	X	-	-	-
15	CLA	4	615	X	-	-	-
15	CLA	4	616	X	-	-	-
15	CLA	A	1011	X	-	-	-
15	CLA	A	1012	X	-	-	-
15	CLA	A	1013	X	-	-	-
15	CLA	A	1101	X	-	-	-
15	CLA	A	1102	X	-	-	-
15	CLA	A	1103	X	-	-	-
15	CLA	A	1104	X	-	-	-
15	CLA	A	1105	X	-	-	-
15	CLA	A	1106	X	-	-	-
15	CLA	A	1107	X	-	-	-
15	CLA	A	1108	X	-	-	-
15	CLA	A	1109	X	-	-	-
15	CLA	A	1110	X	-	-	-
15	CLA	A	1111	X	-	-	-
15	CLA	A	1112	X	-	-	-
15	CLA	A	1113	X	-	-	-
15	CLA	A	1114	X	-	-	-
15	CLA	A	1115	X	-	-	-
15	CLA	A	1116	X	-	-	-
15	CLA	A	1117	X	-	-	-
15	CLA	A	1118	X	-	-	-
15	CLA	A	1119	X	-	-	-
15	CLA	A	1120	X	-	-	-
15	CLA	A	1121	X	-	-	-
15	CLA	A	1122	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
15	CLA	A	1123	X	-	-	-
15	CLA	A	1124	X	-	-	-
15	CLA	A	1125	X	-	-	-
15	CLA	A	1126	X	-	-	-
15	CLA	A	1127	X	-	-	-
15	CLA	A	1128	X	-	-	-
15	CLA	A	1129	X	-	-	-
15	CLA	A	1130	X	-	-	-
15	CLA	A	1131	X	-	-	-
15	CLA	A	1132	X	-	-	-
15	CLA	A	1133	X	-	-	-
15	CLA	A	1134	X	-	-	-
15	CLA	A	1135	X	-	-	-
15	CLA	A	1136	X	-	-	-
15	CLA	A	1137	X	-	-	-
15	CLA	A	1138	X	-	-	-
15	CLA	A	1139	X	-	-	-
15	CLA	A	1140	X	-	-	-
15	CLA	A	1141	X	-	-	-
15	CLA	B	1021	X	-	-	-
15	CLA	B	1022	X	-	-	-
15	CLA	B	1023	X	-	-	-
15	CLA	B	1201	X	-	-	-
15	CLA	B	1202	X	-	-	-
15	CLA	B	1203	X	-	-	-
15	CLA	B	1204	X	-	-	-
15	CLA	B	1205	X	-	-	-
15	CLA	B	1206	X	-	-	-
15	CLA	B	1207	X	-	-	X
15	CLA	B	1208	X	-	-	-
15	CLA	B	1209	X	-	-	-
15	CLA	B	1210	X	-	-	-
15	CLA	B	1211	X	-	-	-
15	CLA	B	1212	X	-	-	-
15	CLA	B	1214	X	-	-	X
15	CLA	B	1215	X	-	-	-
15	CLA	B	1216	X	-	-	X
15	CLA	B	1217	X	-	-	X
15	CLA	B	1218	X	-	-	X
15	CLA	B	1219	X	-	-	-
15	CLA	B	1220	X	-	-	-
15	CLA	B	1221	X	-	-	X

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
15	CLA	B	1222	X	-	-	-
15	CLA	B	1223	X	-	-	X
15	CLA	B	1224	X	-	-	-
15	CLA	B	1225	X	-	-	-
15	CLA	B	1226	X	-	-	-
15	CLA	B	1227	X	-	-	X
15	CLA	B	1228	X	-	-	-
15	CLA	B	1229	X	-	-	-
15	CLA	B	1230	X	-	-	-
15	CLA	B	1231	X	-	-	-
15	CLA	B	1232	X	-	-	-
15	CLA	B	1234	X	-	-	-
15	CLA	B	1235	X	-	-	-
15	CLA	B	1236	X	-	-	-
15	CLA	B	1237	X	-	-	-
15	CLA	B	1238	X	-	-	-
15	CLA	B	1239	X	-	-	-
15	CLA	F	1301	X	-	-	-
15	CLA	F	1302	X	-	-	-
15	CLA	J	1302	X	-	-	-
15	CLA	K	1401	X	-	-	-
15	CLA	K	1402	X	-	-	-
15	CLA	L	1501	X	-	-	-
15	CLA	L	1502	X	-	-	-
15	CLA	L	1503	X	-	-	-
15	CLA	O	1601	X	-	-	-
15	CLA	O	1602	X	-	-	X
15	CLA	O	1603	X	-	-	X
16	PQN	B	2002	-	-	-	X
17	SF4	C	3002	-	-	X	-
18	BCR	A	4007	-	-	-	X
18	BCR	A	4008	-	-	-	X
18	BCR	A	4011	-	-	-	X
18	BCR	B	4008	-	-	-	X
18	BCR	I	4018	-	-	-	X

2 Entry composition

There are 18 unique types of molecules in this entry. The entry contains 25611 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called Similar to chlorophyll a/b-binding protein, CP24.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
1	2	144	Total	C	N	O	S	0	0	0
			1116	726	193	192	5			
1	3	150	Total	C	N	O	S	0	0	0
			1181	769	200	206	6			

- Molecule 2 is a protein called Similar to light harvesting protein.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
2	4	116	Total	C	N	O	S	0	0	0
			935	618	157	153	7			

- Molecule 3 is a protein called Photosystem I P700 chlorophyll a apoprotein A1.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
3	A	740	Total	C	N	O	S	0	0	0
			5790	3787	994	982	27			

- Molecule 4 is a protein called Photosystem I P700 chlorophyll a apoprotein A2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
4	B	725	Total	C	N	O	S	0	0	1
			5766	3791	974	982	19			

- Molecule 5 is a protein called Photosystem I iron-sulfur center.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
5	C	80	Total	C	N	O	S	0	0	0
			597	367	104	114	12			

- Molecule 6 is a protein called Photosystem I p700 chlorophyll A apoprotein A2.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
6	D	124	Total	C	N	O	S	0	0	0
			976	618	171	182	5			

- Molecule 7 is a protein called Photosystem I iron-sulfur center subunit VII.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
7	E	69	Total	C	N	O	S	0	0	0
			555	360	88	106	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
8	F	153	Total	C	N	O	S	0	0	0
			1256	806	213	233	4			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
9	I	32	Total	C	N	O	S	0	0	0
			238	163	33	40	2			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
10	J	38	Total	C	N	O	S	0	0	0
			312	214	46	51	1			

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

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
11	K	47	Total	C	N	O	S	0	0	0
			331	211	58	58	4			

There is a discrepancy between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
K	14	MET	-	initiating methionine	UNP Q85G51

- Molecule 12 is a protein called Photosystem I reaction center subunit XI.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
12	L	140	Total	C	N	O	S	0	0	0
			1071	703	174	191	3			

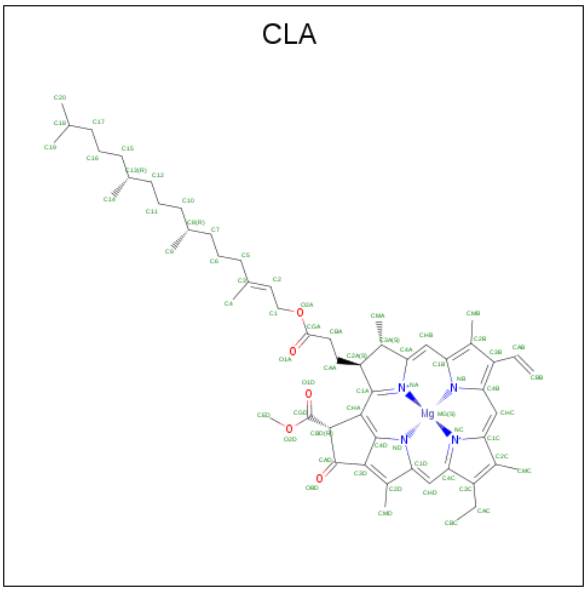
- Molecule 13 is a protein called Photosystem I reaction center subunit XII.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
13	M	29	Total	C	N	O	S	0	0	0
			214	142	34	36	2			

- Molecule 14 is a protein called PsaM.

Mol	Chain	Residues	Atoms					ZeroOcc	AltConf	Trace
14	O	98	Total	C	N	O	S	0	0	0
			755	509	116	129	1			

- Molecule 15 is CHLOROPHYLL A (three-letter code: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



Mol	Chain	Residues	Atoms				ZeroOcc	AltConf
15	2	1	Total	C	Mg	N	0	0
			25	20	1	4		
15	2	1	Total	C	Mg	N	0	0
			25	20	1	4		
15	2	1	Total	C	Mg	N	0	0
			25	20	1	4		
15	2	1	Total	C	Mg	N	0	0
			25	20	1	4		

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
15	2	1	Total C Mg N 25 20 1 4	0	0
15	2	1	Total C Mg N 25 20 1 4	0	0
15	2	1	Total C Mg N 25 20 1 4	0	0
15	2	1	Total C Mg N 25 20 1 4	0	0
15	2	1	Total C Mg N 25 20 1 4	0	0
15	2	1	Total C Mg N 25 20 1 4	0	0
15	2	1	Total C Mg N 25 20 1 4	0	0
15	2	1	Total C Mg N 25 20 1 4	0	0
15	2	1	Total C Mg N 25 20 1 4	0	0
15	2	1	Total C Mg N 25 20 1 4	0	0
15	2	1	Total C Mg N 25 20 1 4	0	0
15	3	1	Total C Mg N 25 20 1 4	0	0
15	3	1	Total C Mg N 25 20 1 4	0	0
15	3	1	Total C Mg N 25 20 1 4	0	0
15	3	1	Total C Mg N 25 20 1 4	0	0
15	3	1	Total C Mg N 25 20 1 4	0	0
15	3	1	Total C Mg N 25 20 1 4	0	0
15	3	1	Total C Mg N 25 20 1 4	0	0
15	3	1	Total C Mg N 25 20 1 4	0	0
15	3	1	Total C Mg N 25 20 1 4	0	0
15	3	1	Total C Mg N 25 20 1 4	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
15	3	1	Total C Mg N 25 20 1 4	0	0
15	4	1	Total C Mg N 25 20 1 4	0	0
15	4	1	Total C Mg N 25 20 1 4	0	0
15	4	1	Total C Mg N 25 20 1 4	0	0
15	4	1	Total C Mg N 25 20 1 4	0	0
15	4	1	Total C Mg N 25 20 1 4	0	0
15	4	1	Total C Mg N 25 20 1 4	0	0
15	4	1	Total C Mg N 25 20 1 4	0	0
15	4	1	Total C Mg N 25 20 1 4	0	0
15	4	1	Total C Mg N 25 20 1 4	0	0
15	4	1	Total C Mg N 25 20 1 4	0	0
15	4	1	Total C Mg N 25 20 1 4	0	0
15	4	1	Total C Mg N 25 20 1 4	0	0
15	4	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N O 50 40 1 4 5	0	0
15	A	1	Total C Mg N O 55 45 1 4 5	0	0
15	A	1	Total C Mg N O 55 45 1 4 5	0	0
15	A	1	Total C Mg N O 45 35 1 4 5	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N O 55 45 1 4 5	0	0
15	A	1	Total C Mg N O 55 45 1 4 5	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
15	A	1	Total C Mg N O 55 45 1 4 5	0	0
15	A	1	Total C Mg N O 55 45 1 4 5	0	0
15	A	1	Total C Mg N O 55 45 1 4 5	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N O 46 36 1 4 5	0	0
15	A	1	Total C Mg N O 55 45 1 4 5	0	0
15	A	1	Total C Mg N O 55 45 1 4 5	0	0
15	A	1	Total C Mg N O 55 45 1 4 5	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
15	A	1	Total C Mg N O 55 45 1 4 5	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N O 55 45 1 4 5	0	0
15	A	1	Total C Mg N O 45 35 1 4 5	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	A	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N O 45 35 1 4 5	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N O 50 40 1 4 5	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N O 55 45 1 4 5	0	0

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Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
15	B	1	Total C Mg N O 50 40 1 4 5	0	0
15	B	1	Total C Mg N O 55 45 1 4 5	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N O 50 40 1 4 5	0	0
15	B	1	Total C Mg N O 47 37 1 4 5	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N O 65 55 1 4 5	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N O 45 35 1 4 5	0	0
15	B	1	Total C Mg N O 55 45 1 4 5	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	B	1	Total C Mg N 25 20 1 4	0	0
15	F	1	Total C Mg N O 45 35 1 4 5	0	0
15	F	1	Total C Mg N 25 20 1 4	0	0
15	J	1	Total C Mg N O 50 40 1 4 5	0	0
15	K	1	Total C Mg N 25 20 1 4	0	0
15	K	1	Total C Mg N 25 20 1 4	0	0
15	L	1	Total C Mg N 25 20 1 4	0	0
15	L	1	Total C Mg N 25 20 1 4	0	0

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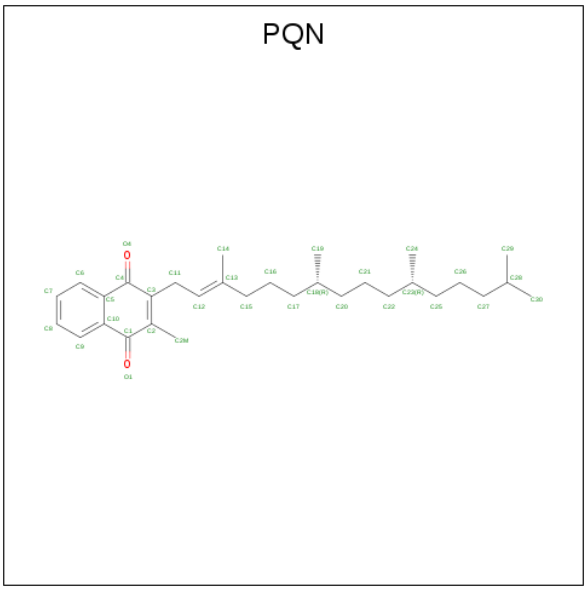
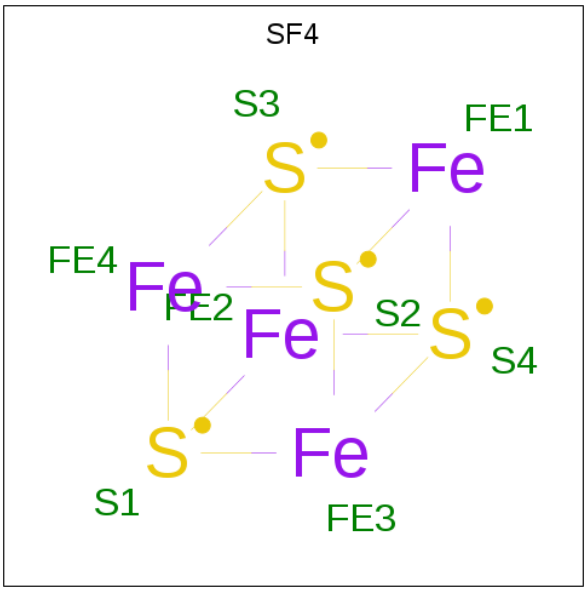
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
15	L	1	Total C Mg N 25 20 1 4	0	0
15	O	1	Total C Mg N 25 20 1 4	0	0
15	O	1	Total C Mg N 25 20 1 4	0	0
15	O	1	Total C Mg N 25 20 1 4	0	0

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



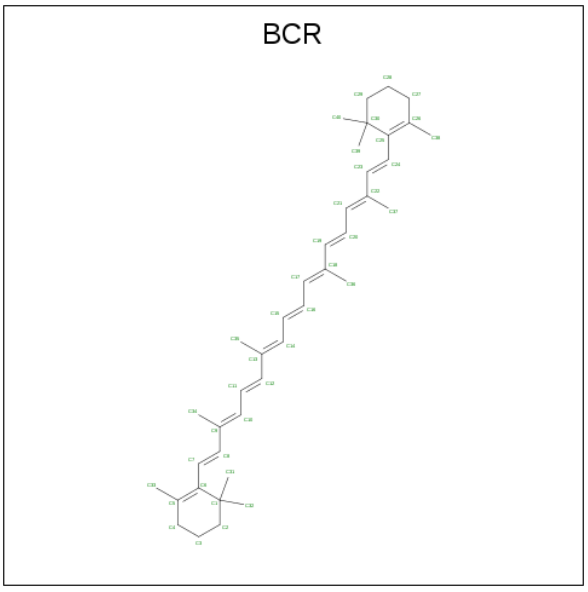
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
16	A	1	Total C O 33 31 2	0	0
16	B	1	Total C O 33 31 2	0	0

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



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
17	A	1	Total Fe S 8 4 4	0	0
17	C	1	Total Fe S 8 4 4	0	0
17	C	1	Total Fe S 8 4 4	0	0

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



Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
18	A	1	Total C 40 40	0	0

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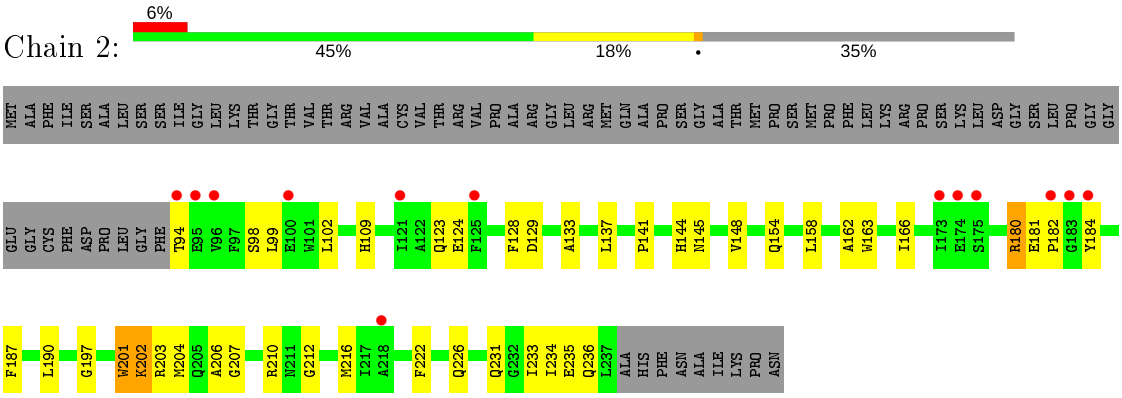
Mol	Chain	Residues	Atoms	ZeroOcc	AltConf
18	A	1	Total C 40 40	0	0
18	A	1	Total C 40 40	0	0
18	A	1	Total C 40 40	0	0
18	A	1	Total C 40 40	0	0
18	B	1	Total C 40 40	0	0
18	B	1	Total C 40 40	0	0
18	I	1	Total C 40 40	0	0

3 Residue-property plots (i)

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

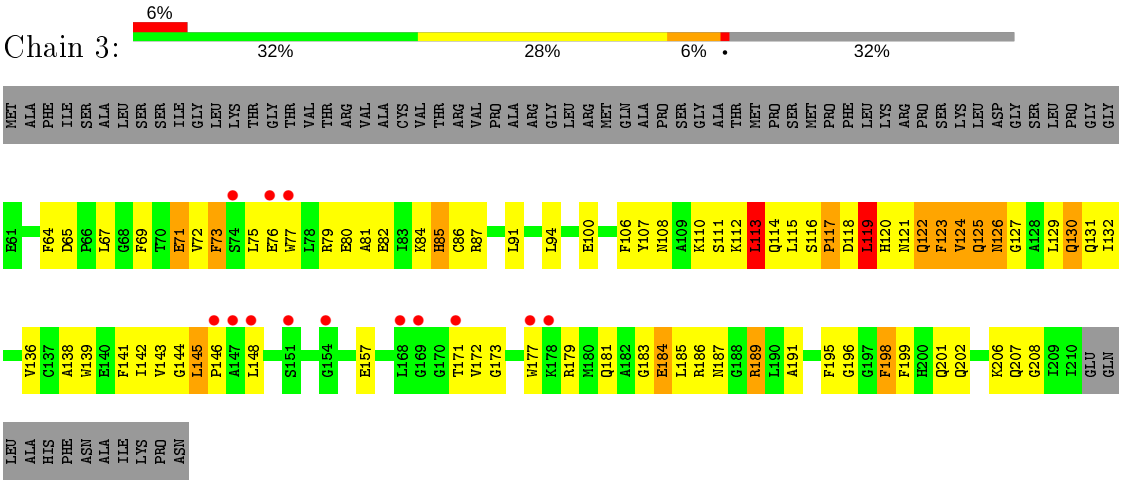
- Molecule 1: Similar to chlorophyll a/b-binding protein, CP24

Chain 2:



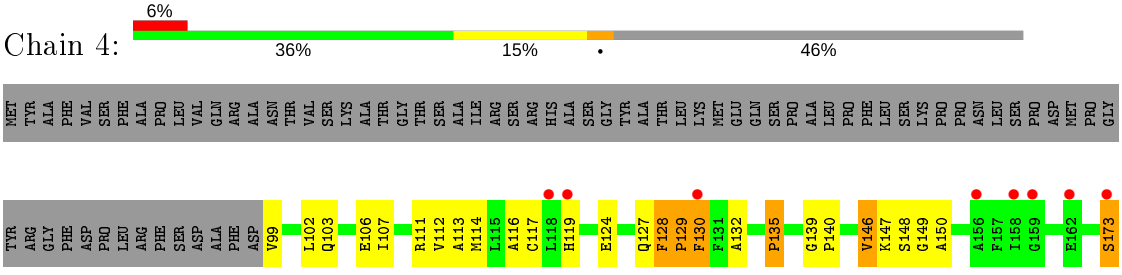
- Molecule 1: Similar to chlorophyll a/b-binding protein, CP24

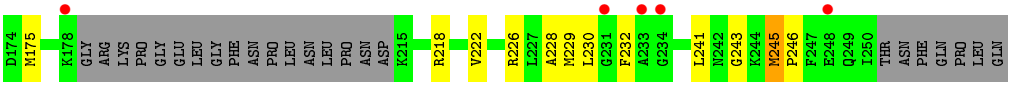
Chain 3:



- Molecule 2: Similar to light harvesting protein

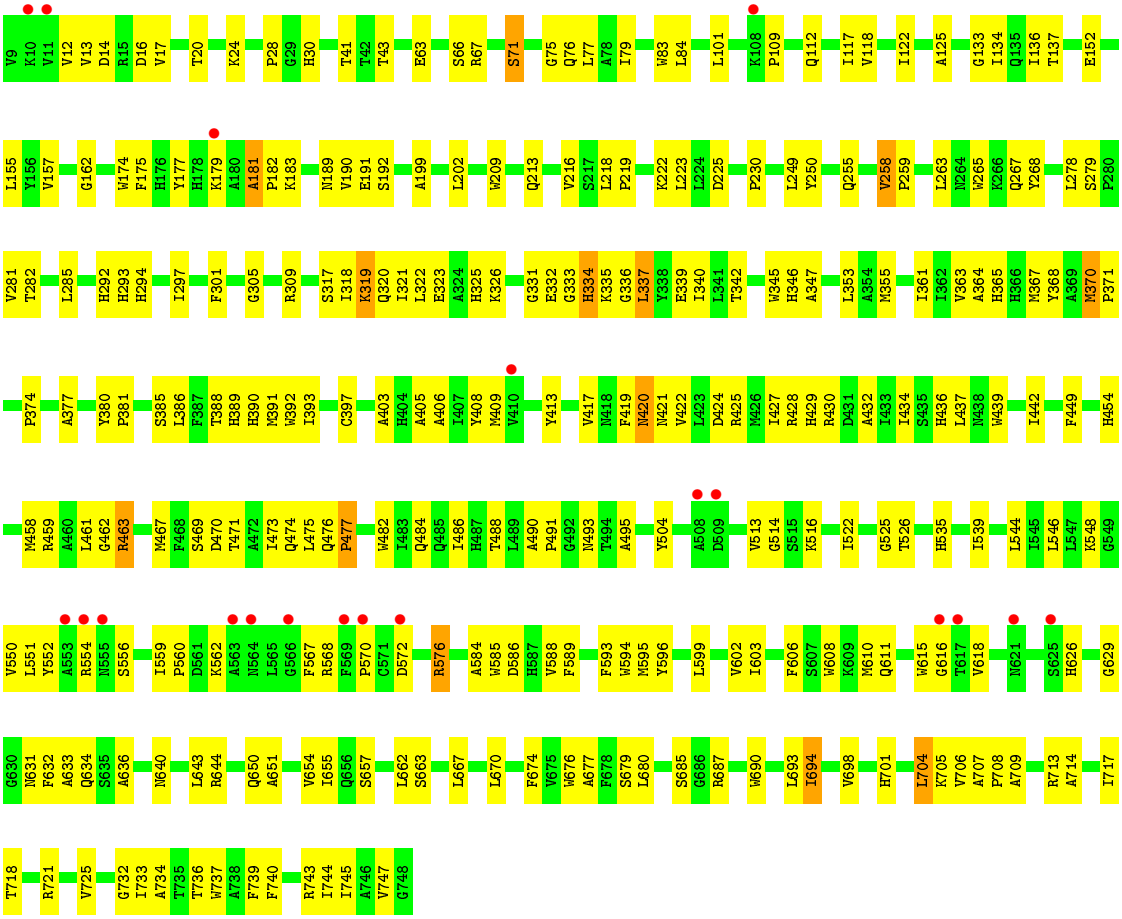
Chain 4:





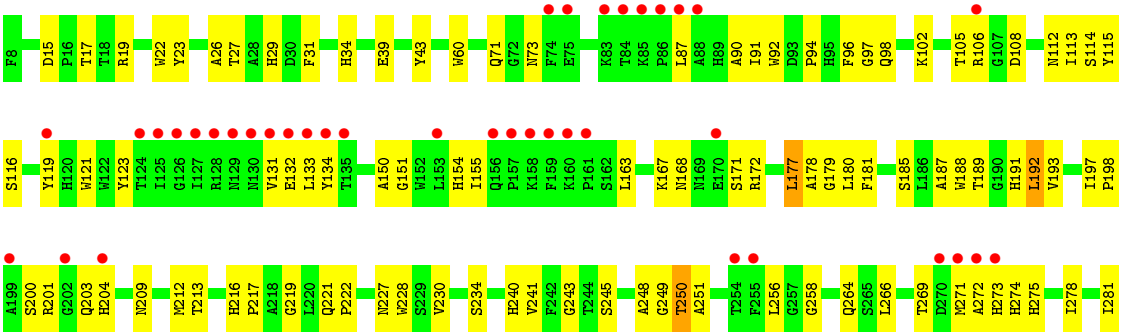
- Molecule 3: Photosystem I P700 chlorophyll a apoprotein A1

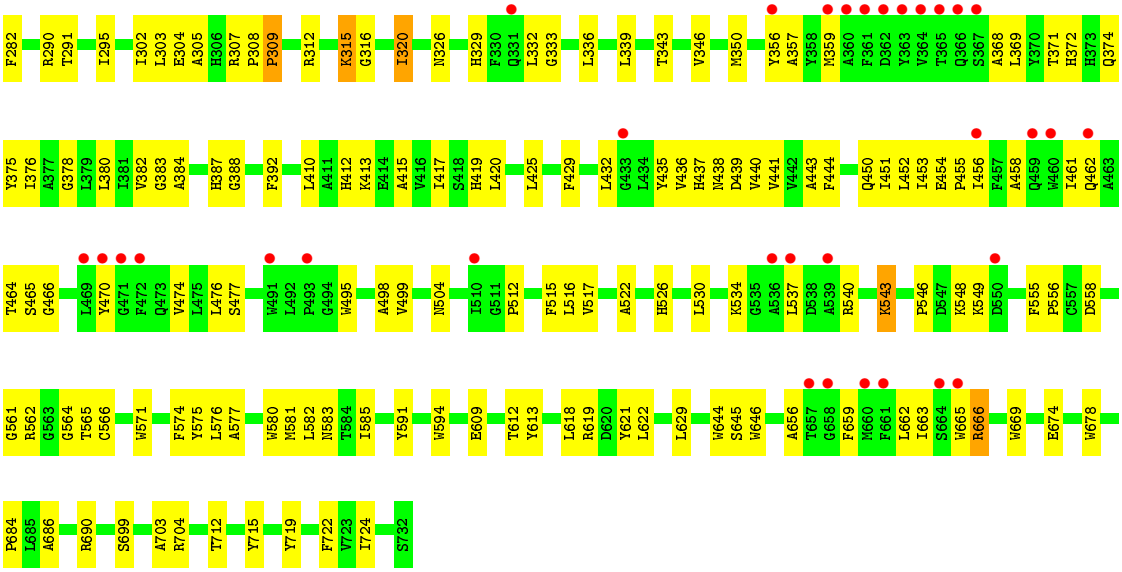
Chain A:



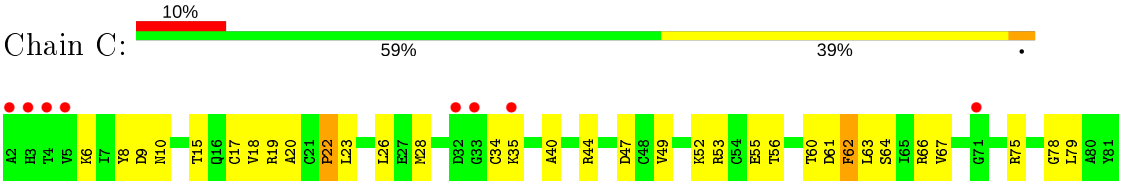
- Molecule 4: Photosystem I P700 chlorophyll a apoprotein A2

Chain B:

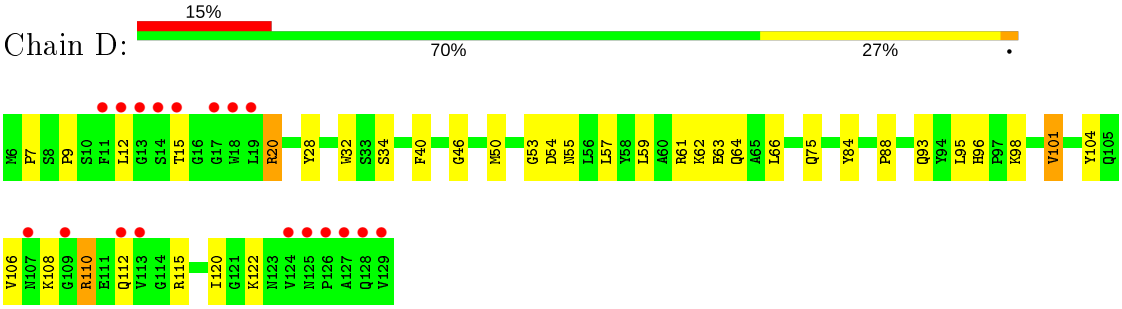




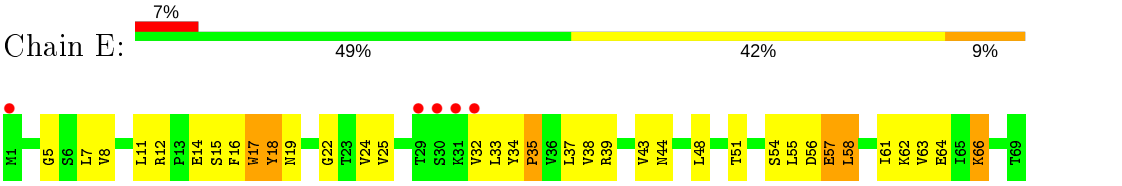
• Molecule 5: Photosystem I iron-sulfur center



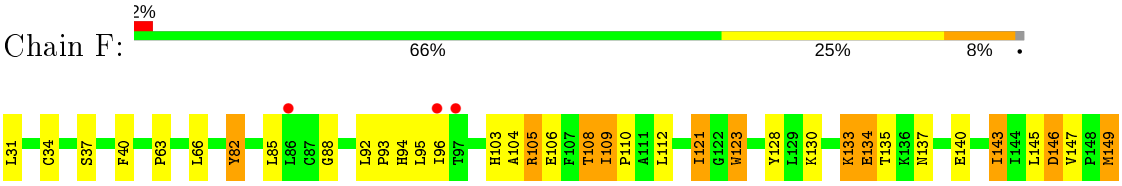
• Molecule 6: Photosystem I p700 chlorophyll A apoprotein A2

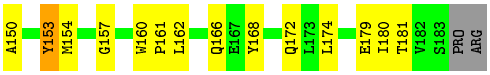


• Molecule 7: Photosystem I iron-sulfur center subunit VII



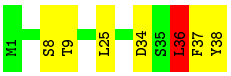
• Molecule 8: Photosystem I reaction center subunit II



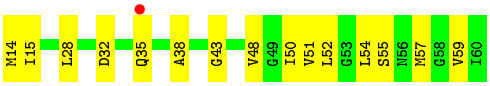


• Molecule 9: Photosystem I reaction center subunit VIII

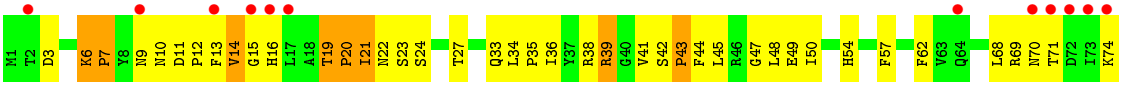
• Molecule 10: Photosystem I reaction center subunit IX

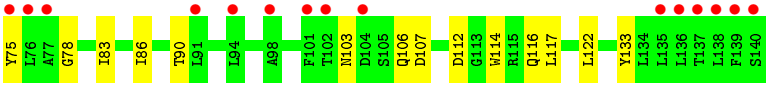


• Molecule 11: Photosystem I reaction center subunit X

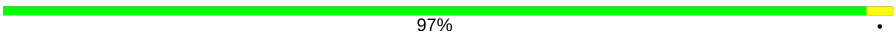


• Molecule 12: Photosystem I reaction center subunit XI

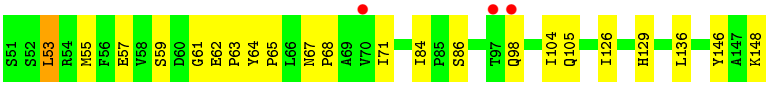




• Molecule 13: Photosystem I reaction center subunit XII



• Molecule 14: PsaM



4 Data and refinement statistics (i)

Property	Value	Source
Space group	C 2 2 21	Depositor
Cell constants a, b, c, α, β, γ	163.13Å 213.52Å 349.58Å 90.00° 90.00° 90.00°	Depositor
Resolution (Å)	48.53 – 4.00 48.53 – 3.38	Depositor EDS
% Data completeness (in resolution range)	80.9 (48.53-4.00) 53.6 (48.53-3.38)	Depositor EDS
R_{merge}	(Not available)	Depositor
R_{sym}	(Not available)	Depositor
$< I/\sigma(I) >$ [1]	1.60 (at 3.40Å)	Xtriage
Refinement program	PHENIX (dev_3042: ???)	Depositor
R, R_{free}	0.378 , 0.430 0.378 , 0.430	Depositor DCC
R_{free} test set	912 reflections (2.00%)	wwPDB-VP
Wilson B-factor (Å^2)	137.1	Xtriage
Anisotropy	0.070	Xtriage
Bulk solvent k_{sol}(e/Å^3), B_{sol}(Å^2)	0.16 , 110.7	EDS
L-test for twinning[2]	$< \|L\| > = 0.47$, $< L^2 > = 0.30$	Xtriage
Estimated twinning fraction	No twinning to report.	Xtriage
F_o,F_c correlation	0.76	EDS
Total number of atoms	25611	wwPDB-VP
Average B, all atoms (Å^2)	189.0	wwPDB-VP

Xtriage's analysis on translational NCS is as follows: *The largest off-origin peak in the Patterson function is 2.61% of the height of the origin peak. No significant pseudotranslation is detected.*

[1] Intensities estimated from amplitudes.

[2] Theoretical values of $< |L| >$, $< L^2 >$ for acentric reflections are 0.5, 0.333 respectively for untwinned datasets, and 0.375, 0.2 for perfectly twinned datasets.

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: SF4, CLA, BCR, PQN

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	2	0.25	0/1142	0.43	0/1544
1	3	0.28	0/1210	0.59	0/1633
2	4	0.25	0/961	0.40	0/1289
3	A	0.24	0/5977	0.40	0/8146
4	B	0.24	0/5973	0.40	0/8163
5	C	0.24	0/607	0.45	0/822
6	D	0.25	0/998	0.44	0/1349
7	E	0.24	0/564	0.47	0/763
8	F	0.27	0/1289	0.43	0/1750
9	I	0.28	0/243	0.49	0/331
10	J	0.25	0/321	0.53	1/437 (0.2%)
11	K	0.22	0/333	0.42	0/448
12	L	0.26	0/1097	0.48	0/1492
13	M	0.24	0/215	0.39	0/291
14	O	0.26	0/780	0.46	0/1068
All	All	0.25	0/21710	0.43	1/29526 (0.0%)

There are no bond length outliers.

All (1) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
10	J	36	LEU	CA-CB-CG	6.62	130.52	115.30

There are no chirality outliers.

There are no planarity outliers.

5.2 Too-close contacts (i)

In the following table, the Non-H and H(model) columns list the number of non-hydrogen atoms and hydrogen atoms in the chain respectively. The H(added) column lists the number of hydrogen atoms added and optimized by MolProbity. The Clashes column lists the number of clashes within the asymmetric unit, whereas Symm-Clashes lists symmetry related clashes.

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	2	1116	0	1088	39	0
1	3	1181	0	1169	74	0
2	4	935	0	926	25	0
3	A	5790	0	5719	234	0
4	B	5766	0	5589	183	0
5	C	597	0	584	35	0
6	D	976	0	967	30	0
7	E	555	0	576	25	0
8	F	1256	0	1227	55	0
9	I	238	0	265	8	0
10	J	312	0	327	11	0
11	K	331	0	349	9	0
12	L	1071	0	1090	39	0
13	M	214	0	236	0	0
14	O	755	0	760	12	0
15	2	375	0	45	2	0
15	3	275	0	33	5	0
15	4	325	0	39	3	0
15	A	1546	0	801	67	0
15	B	1267	0	522	53	0
15	F	70	0	35	1	0
15	J	50	0	38	1	0
15	K	50	0	6	0	0
15	L	75	0	9	2	0
15	O	75	0	9	0	0
16	A	33	0	46	3	0
16	B	33	0	46	1	0
17	A	8	0	0	0	0
17	C	16	0	0	4	0
18	A	200	0	260	24	0
18	B	80	0	105	7	0
18	I	40	0	53	4	0
All	All	25611	0	22919	764	0

The all-atom clashscore is defined as the number of clashes found per 1000 atoms (including hydrogen atoms). The all-atom clashscore for this structure is 16.

All (764) close contacts within the same asymmetric unit are listed below, sorted by their clash

magnitude.

Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:A:1012:CLA:H51	4:B:436:VAL:HG13	1.54	0.87
5:C:10:ASN:HB3	5:C:60:THR:HG21	1.63	0.79
15:B:1230:CLA:HBA1	18:B:4005:BCR:H281	1.65	0.79
3:A:157:VAL:HG21	15:A:1114:CLA:HAA2	1.66	0.78
15:B:1229:CLA:HMB2	18:B:4005:BCR:H21C	1.67	0.77
3:A:391:MET:HG3	3:A:599:LEU:HD12	1.65	0.77
8:F:34:CYS:HA	8:F:37:SER:HB3	1.67	0.76
3:A:346:HIS:HB3	3:A:408:TYR:HE1	1.51	0.76
14:O:84:ILE:HG22	14:O:86:SER:H	1.51	0.75
1:3:196:GLY:HA2	1:3:199:PHE:HB2	1.69	0.74
3:A:670:LEU:HD12	4:B:618:LEU:HD22	1.69	0.74
4:B:517:VAL:HG11	4:B:591:TYR:HB2	1.68	0.74
4:B:203:GLN:HE22	4:B:213:THR:HB	1.50	0.73
4:B:571:TRP:HH2	4:B:704:ARG:HB2	1.52	0.73
12:L:19:THR:HG23	12:L:24:SER:HA	1.71	0.73
4:B:200:SER:O	4:B:240:HIS:NE2	2.22	0.73
3:A:385:SER:HB3	15:A:1126:CLA:HMA1	1.69	0.72
3:A:459:ARG:NH2	3:A:634:GLN:O	2.16	0.72
4:B:437:HIS:CD2	4:B:451:ILE:HG22	2.24	0.72
1:3:179:ARG:HD3	1:3:186:ARG:HH12	1.55	0.72
4:B:180:LEU:HD13	15:B:1210:CLA:HHD	1.71	0.71
3:A:346:HIS:HB3	3:A:408:TYR:CE1	2.24	0.71
5:C:10:ASN:OD1	7:E:12:ARG:NH1	2.23	0.71
3:A:430:ARG:HB2	3:A:551:LEU:HD13	1.73	0.71
7:E:7:LEU:HB3	7:E:61:ILE:HG21	1.71	0.71
4:B:91:ILE:HD11	4:B:114:SER:HB3	1.72	0.70
1:2:187:PHE:HA	1:2:190:LEU:HB2	1.72	0.70
1:2:234:ILE:HG13	1:3:123:PHE:H	1.55	0.70
4:B:498:ALA:O	4:B:504:ASN:ND2	2.25	0.69
3:A:403:ALA:HA	3:A:588:VAL:HG21	1.74	0.69
3:A:285:LEU:HD21	3:A:370:MET:HB2	1.74	0.69
4:B:719:TYR:HB2	15:B:1021:CLA:HED3	1.74	0.69
2:4:99:VAL:HG22	8:F:149:MET:HG3	1.73	0.69
2:4:245:MET:H	2:4:246:PRO:HD3	1.57	0.69
1:3:79:ARG:HB2	1:3:145:LEU:HD13	1.74	0.69
3:A:392:TRP:HE1	3:A:603:ILE:HD13	1.56	0.68
5:C:6:LYS:HB3	6:D:115:ARG:HE	1.58	0.68
5:C:79:LEU:HA	6:D:61:ARG:HH11	1.58	0.68
3:A:476:GLN:HB3	3:A:477:PRO:HD2	1.75	0.67
8:F:105:ARG:HD2	10:J:36:LEU:HD12	1.76	0.67
4:B:356:TYR:HB2	4:B:359:MET:HG2	1.76	0.66

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:35:PRO:HA	12:L:38:ARG:HB2	1.76	0.66
3:A:477:PRO:HD2	3:A:525:GLY:HA2	1.77	0.66
12:L:19:THR:H	12:L:20:PRO:HD2	1.60	0.66
4:B:90:ALA:HA	4:B:113:ILE:HG12	1.78	0.66
12:L:19:THR:O	12:L:21:ILE:N	2.29	0.66
12:L:47:GLY:O	12:L:49:GLU:N	2.29	0.66
3:A:125:ALA:N	3:A:133:GLY:O	2.29	0.66
3:A:432:ALA:O	3:A:436:HIS:ND1	2.29	0.66
4:B:264:GLN:HB2	4:B:357:ALA:HB2	1.78	0.65
3:A:655:ILE:HG21	4:B:619:ARG:HB3	1.78	0.65
12:L:6:LYS:HE2	12:L:10:ASN:HB2	1.78	0.65
4:B:222:PRO:HB3	4:B:230:VAL:HB	1.79	0.64
3:A:323:GLU:HA	3:A:335:LYS:HG2	1.80	0.64
2:4:226:ARG:HH11	2:4:230:LEU:HD12	1.61	0.64
3:A:463:ARG:H	4:B:97:GLY:HA3	1.63	0.64
4:B:336:LEU:HD22	4:B:380:LEU:HD22	1.79	0.64
8:F:146:ASP:O	10:J:8:SER:OG	2.16	0.64
9:I:20:PHE:HE1	18:I:4018:BCR:H363	1.62	0.64
4:B:375:TYR:HB3	15:B:1224:CLA:HMC3	1.80	0.63
6:D:7:PRO:O	6:D:55:ASN:ND2	2.27	0.63
12:L:107:ASP:HB3	12:L:112:ASP:HB3	1.80	0.63
1:3:142:ILE:HA	1:3:145:LEU:HD12	1.79	0.63
1:3:183:GLY:HA2	1:3:186:ARG:HD2	1.80	0.63
1:3:122:GLN:HA	1:3:125:GLN:OE1	1.98	0.63
3:A:594:TRP:HE1	15:B:1023:CLA:C1D	2.12	0.63
3:A:677:ALA:O	15:A:1013:CLA:HAB	1.98	0.63
4:B:466:GLY:HA2	4:B:476:LEU:HB3	1.81	0.63
7:E:48:LEU:HD11	7:E:51:THR:HG22	1.79	0.63
1:3:145:LEU:H	1:3:146:PRO:HD2	1.64	0.62
3:A:409:MET:HB3	3:A:554:ARG:HB2	1.80	0.62
6:D:9:PRO:HD2	6:D:57:LEU:HD21	1.80	0.62
12:L:75:TYR:OH	12:L:133:TYR:O	2.17	0.62
3:A:76:GLN:HG2	15:A:1103:CLA:HMA1	1.82	0.62
1:2:99:LEU:HD23	1:2:102:LEU:HD12	1.81	0.62
1:3:115:LEU:HA	1:3:118:ASP:HB2	1.81	0.62
4:B:522:ALA:O	4:B:526:HIS:ND1	2.23	0.62
3:A:213:GLN:HA	3:A:216:VAL:HG12	1.81	0.61
3:A:526:THR:HG21	3:A:633:ALA:HA	1.82	0.61
12:L:103:ASN:HB3	12:L:106:GLN:HB3	1.82	0.61
1:3:171:THR:O	1:3:173:GLY:N	2.33	0.61
12:L:16:HIS:HB3	12:L:19:THR:HB	1.83	0.61

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:76:GLN:HB2	15:A:1103:CLA:HMB2	1.82	0.61
3:A:319:LYS:NZ	3:A:339:GLU:OE2	2.33	0.61
4:B:39:GLU:OE2	4:B:167:LYS:NZ	2.34	0.61
5:C:17:CYS:SG	5:C:18:VAL:N	2.74	0.61
2:4:245:MET:N	2:4:246:PRO:HD3	2.16	0.60
12:L:44:PHE:N	12:L:116:GLN:O	2.21	0.60
3:A:736:THR:H	15:A:1011:CLA:HED2	1.66	0.60
12:L:70:ASN:H	12:L:74:LYS:HE2	1.64	0.60
1:3:94:LEU:HD13	15:3:606:CLA:HHC	1.82	0.60
1:3:91:LEU:HA	1:3:94:LEU:HG	1.84	0.60
4:B:561:GLY:HA3	5:C:56:THR:HG22	1.84	0.60
3:A:66:SER:OG	3:A:345:TRP:NE1	2.31	0.60
3:A:219:PRO:HA	3:A:223:LEU:HD12	1.83	0.60
3:A:199:ALA:HB2	3:A:305:GLY:HA3	1.83	0.60
4:B:23:TYR:HA	4:B:26:ALA:HB3	1.82	0.60
4:B:415:ALA:O	4:B:419:HIS:ND1	2.33	0.60
3:A:41:THR:HG22	3:A:43:THR:H	1.65	0.60
4:B:278:ILE:HD13	4:B:281:ILE:HD12	1.84	0.60
12:L:90:THR:HG21	12:L:122:LEU:HD12	1.82	0.60
3:A:718:THR:HG22	3:A:721:ARG:HH21	1.67	0.59
8:F:130:LYS:HZ1	8:F:133:LYS:HD3	1.67	0.59
1:3:129:LEU:HA	1:3:132:ILE:HB	1.85	0.59
4:B:558:ASP:OD1	5:C:66:ARG:NH2	2.36	0.59
1:2:222:PHE:O	1:2:226:GLN:NE2	2.35	0.59
3:A:292:HIS:HD2	15:A:1116:CLA:HMB1	1.66	0.59
3:A:322:LEU:HD13	3:A:337:LEU:HB3	1.84	0.59
15:A:1131:CLA:HMA1	18:I:4018:BCR:H292	1.84	0.59
4:B:622:LEU:HA	15:B:1021:CLA:HMD2	1.85	0.59
4:B:256:LEU:H	4:B:266:LEU:HD23	1.68	0.59
5:C:47:ASP:OD1	5:C:75:ARG:NH1	2.35	0.59
12:L:22:ASN:OD1	12:L:23:SER:N	2.36	0.59
3:A:333:GLY:HA2	3:A:422:VAL:HG23	1.85	0.58
12:L:71:THR:OG1	12:L:74:LYS:NZ	2.25	0.58
4:B:571:TRP:CH2	4:B:704:ARG:HB2	2.35	0.58
3:A:708:PRO:HA	8:F:130:LYS:HZ2	1.68	0.58
3:A:674:PHE:CG	18:A:4011:BCR:H363	2.38	0.58
1:2:184:TYR:HA	1:2:187:PHE:HB2	1.85	0.58
3:A:572:ASP:OD2	3:A:576:ARG:NH2	2.37	0.58
4:B:43:TYR:OH	4:B:326:ASN:O	2.21	0.58
3:A:513:VAL:HG21	3:A:618:VAL:HG21	1.86	0.58
3:A:626:HIS:HB2	3:A:629:GLY:HA2	1.84	0.58

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:B:193:VAL:HG11	4:B:272:ALA:HB2	1.86	0.58
14:O:62:GLU:HG3	14:O:63:PRO:HD3	1.85	0.58
4:B:382:VAL:HG21	4:B:581:MET:HG3	1.83	0.58
4:B:574:PHE:HE1	15:B:1226:CLA:HAC2	1.68	0.58
4:B:376:ILE:HG21	15:B:1225:CLA:HAB	1.86	0.58
3:A:421:ASN:HA	3:A:424:ASP:HB2	1.86	0.58
4:B:217:PRO:HD3	4:B:250:THR:HG23	1.85	0.58
8:F:31:LEU:HD12	8:F:88:GLY:HA2	1.84	0.57
3:A:361:ILE:HG21	15:A:1124:CLA:C2A	2.34	0.57
8:F:121:ILE:HA	8:F:160:TRP:CD1	2.39	0.57
3:A:677:ALA:HA	3:A:680:LEU:HG	1.85	0.57
4:B:150:ALA:O	4:B:154:HIS:ND1	2.36	0.57
4:B:241:VAL:HG12	4:B:243:GLY:H	1.69	0.57
3:A:14:ASP:HB2	3:A:183:LYS:HD2	1.86	0.57
18:A:4002:BCR:H343	18:A:4002:BCR:HC31	1.85	0.57
15:B:1227:CLA:C3C	15:B:1228:CLA:C2A	2.82	0.57
3:A:657:SER:HB2	3:A:662:LEU:HB2	1.87	0.57
15:A:1013:CLA:HMA2	15:A:1013:CLA:H12	1.85	0.57
1:3:84:LYS:HG2	1:3:87:ARG:HE	1.69	0.57
4:B:663:ILE:HD12	15:B:1023:CLA:HMC1	1.87	0.57
3:A:474:GLN:O	3:A:476:GLN:N	2.37	0.56
4:B:339:LEU:O	4:B:343:THR:OG1	2.16	0.56
4:B:543:LYS:HA	4:B:543:LYS:HZ3	1.69	0.56
1:3:84:LYS:HD2	1:3:142:ILE:HD11	1.88	0.56
3:A:28:PRO:HD3	8:F:145:LEU:HD11	1.87	0.56
8:F:150:ALA:HA	8:F:153:TYR:HD1	1.69	0.56
1:2:197:GLY:HA3	1:2:201:TRP:HB2	1.87	0.56
1:3:119:LEU:HD12	1:3:125:GLN:HE21	1.71	0.56
8:F:130:LYS:NZ	8:F:133:LYS:HD3	2.20	0.56
4:B:613:TYR:HE2	4:B:619:ARG:HH12	1.54	0.56
3:A:439:TRP:HZ2	15:A:1131:CLA:HMD1	1.70	0.56
15:B:1229:CLA:HBB1	15:B:1229:CLA:HMB1	1.86	0.56
3:A:572:ASP:OD2	5:C:53:ARG:NH2	2.38	0.56
3:A:708:PRO:HA	8:F:130:LYS:NZ	2.20	0.56
4:B:419:HIS:CD2	15:B:1228:CLA:C4A	2.83	0.56
8:F:121:ILE:HA	8:F:160:TRP:NE1	2.20	0.56
4:B:198:PRO:HG3	4:B:204:HIS:HA	1.88	0.56
5:C:8:TYR:CE2	5:C:66:ARG:HB2	2.41	0.56
12:L:43:PRO:HA	12:L:116:GLN:HB3	1.86	0.56
1:3:112:LYS:HB3	1:3:117:PRO:HD3	1.88	0.55
7:E:8:VAL:HB	7:E:58:LEU:HD22	1.87	0.55

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:A:2001:PQN:H142	18:B:4005:BCR:H312	1.86	0.55
3:A:461:LEU:HD13	4:B:96:PHE:HD1	1.70	0.55
3:A:693:LEU:HA	4:B:534:LYS:HZ3	1.72	0.55
4:B:121:TRP:HE3	4:B:356:TYR:HH	1.54	0.55
2:4:111:ARG:NH1	2:4:114:MET:SD	2.79	0.55
4:B:674:GLU:OE2	6:D:61:ARG:NH1	2.38	0.55
3:A:676:TRP:O	3:A:679:SER:OG	2.18	0.55
1:3:186:ARG:HA	1:3:189:ARG:HE	1.70	0.55
4:B:436:VAL:HG12	15:B:1230:CLA:HAC1	1.88	0.55
5:C:26:LEU:HD12	5:C:40:ALA:HB1	1.89	0.55
7:E:12:ARG:NH2	7:E:14:GLU:OE2	2.40	0.55
8:F:105:ARG:HE	10:J:37:PHE:C	2.10	0.55
4:B:656:ALA:O	15:B:1023:CLA:HAB	2.07	0.55
7:E:24:VAL:HA	7:E:38:VAL:HG12	1.89	0.55
3:A:101:LEU:HD12	3:A:230:PRO:HB3	1.88	0.55
3:A:550:VAL:HG21	18:A:4008:BCR:H282	1.88	0.55
4:B:417:ILE:HD11	4:B:537:LEU:HD12	1.88	0.55
4:B:659:PHE:HB3	15:B:1023:CLA:HMC3	1.89	0.55
6:D:101:VAL:HG23	6:D:104:TYR:HB2	1.87	0.55
3:A:556:SER:OG	3:A:559:ILE:O	2.25	0.55
3:A:122:ILE:HG21	4:B:444:PHE:HA	1.88	0.55
6:D:34:SER:OG	6:D:53:GLY:O	2.25	0.55
1:2:233:ILE:HG22	1:2:234:ILE:HD13	1.88	0.55
5:C:78:GLY:O	6:D:61:ARG:NE	2.38	0.55
15:A:1104:CLA:H12	15:A:1104:CLA:H2A	1.89	0.54
5:C:22:PRO:HD3	5:C:53:ARG:HE	1.71	0.54
1:3:186:ARG:HA	1:3:189:ARG:NE	2.22	0.54
1:3:71:GLU:HB2	15:3:604:CLA:CHD	2.36	0.54
3:A:255:GLN:HE22	3:A:267:GLN:HB3	1.73	0.54
8:F:105:ARG:HG3	10:J:38:TYR:CD1	2.43	0.54
12:L:6:LYS:O	12:L:9:ASN:N	2.40	0.54
2:4:127:GLN:HA	2:4:132:ALA:HB1	1.89	0.54
1:2:94:THR:OG1	3:A:179:LYS:O	2.25	0.54
4:B:258:GLY:HA2	4:B:498:ALA:HB2	1.90	0.54
3:A:403:ALA:HB2	3:A:588:VAL:HG11	1.88	0.54
3:A:677:ALA:HB3	15:A:1013:CLA:HBB2	1.90	0.54
4:B:187:ALA:O	4:B:191:HIS:ND1	2.41	0.54
4:B:629:LEU:HD22	4:B:722:PHE:HD1	1.73	0.54
3:A:109:PRO:HB2	3:A:136:ILE:HG13	1.89	0.54
4:B:185:SER:HA	4:B:275:HIS:ND1	2.23	0.54
3:A:332:GLU:HB2	3:A:421:ASN:HB2	1.88	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:632:PHE:CD2	3:A:636:ALA:HB2	2.43	0.53
3:A:190:VAL:HG21	3:A:342:THR:HG22	1.90	0.53
4:B:167:LYS:HE2	4:B:326:ASN:HA	1.91	0.53
7:E:66:LYS:HD3	7:E:66:LYS:H	1.73	0.53
3:A:705:LYS:NZ	8:F:174:LEU:HB2	2.24	0.53
12:L:42:SER:HB2	12:L:43:PRO:HD2	1.90	0.53
14:O:57:GLU:HG3	14:O:59:SER:H	1.73	0.53
18:A:4011:BCR:H292	15:B:1229:CLA:HMB3	1.89	0.53
8:F:82:TYR:CE1	8:F:93:PRO:HB2	2.43	0.53
15:A:1105:CLA:HMB3	15:A:1106:CLA:HHB	1.89	0.53
3:A:392:TRP:HB3	15:A:1126:CLA:HMC3	1.90	0.53
3:A:687:ARG:H	4:B:566:CYS:HB2	1.73	0.53
1:3:202:GLN:HA	1:3:206:LYS:HE3	1.91	0.53
4:B:618:LEU:HD12	4:B:622:LEU:HD12	1.91	0.53
11:K:54:LEU:HD13	11:K:57:MET:H	1.73	0.53
3:A:606:PHE:O	3:A:610:MET:HG2	2.09	0.53
15:A:1013:CLA:HAA2	4:B:425:LEU:HD23	1.91	0.53
4:B:452:LEU:HG	8:F:92:LEU:HG	1.91	0.53
15:A:1012:CLA:HAB	4:B:580:TRP:CZ3	2.44	0.53
6:D:32:TRP:HD1	6:D:34:SER:HB3	1.73	0.53
3:A:346:HIS:CG	15:A:1103:CLA:HBC1	2.43	0.53
4:B:290:ARG:HH22	4:B:295:ILE:HG13	1.72	0.53
3:A:685:SER:HG	3:A:690:TRP:HE1	1.58	0.52
6:D:110:ARG:HG3	6:D:112:GLN:HE22	1.73	0.52
7:E:8:VAL:N	7:E:22:GLY:O	2.33	0.52
1:3:136:VAL:HA	1:3:139:TRP:CE3	2.44	0.52
5:C:9:ASP:HB2	7:E:33:LEU:HD11	1.91	0.52
1:3:67:LEU:H	1:3:67:LEU:HD23	1.74	0.52
3:A:117:ILE:HG22	3:A:118:VAL:HG13	1.90	0.52
3:A:340:ILE:HG21	18:A:4007:BCR:HC22	1.89	0.52
3:A:654:VAL:HG13	3:A:655:ILE:HG13	1.92	0.52
3:A:736:THR:HA	3:A:739:PHE:HB3	1.91	0.52
5:C:23:LEU:HD13	6:D:62:LYS:HD3	1.91	0.52
8:F:104:ALA:HB1	8:F:109:ILE:HG13	1.90	0.52
4:B:98:GLN:HG3	4:B:102:LYS:HE3	1.92	0.52
15:B:1232:CLA:H52	15:B:1232:CLA:H122	1.91	0.52
1:2:181:GLU:HA	1:2:184:TYR:CZ	2.45	0.52
3:A:24:LYS:HB3	3:A:30:HIS:CG	2.44	0.52
4:B:333:GLY:HA2	4:B:384:ALA:HA	1.92	0.52
4:B:582:LEU:HD21	4:B:712:THR:HA	1.92	0.52
3:A:347:ALA:HA	3:A:408:TYR:CZ	2.46	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:491:PRO:HA	3:A:495:ALA:HB3	1.92	0.51
12:L:68:LEU:HB3	12:L:74:LYS:HD2	1.93	0.51
1:2:235:GLU:HG2	1:3:125:GLN:HB3	1.91	0.51
3:A:546:LEU:O	3:A:550:VAL:HG23	2.11	0.51
8:F:157:GLY:HA3	8:F:160:TRP:CE2	2.45	0.51
12:L:36:ILE:HD12	12:L:50:ILE:HG12	1.92	0.51
3:A:282:THR:HB	3:A:374:PRO:HB3	1.91	0.51
3:A:63:GLU:O	3:A:67:ARG:NE	2.42	0.51
5:C:15:THR:HG22	5:C:28:MET:HG3	1.91	0.51
11:K:14:MET:HG3	11:K:15:ILE:H	1.76	0.51
12:L:39:ARG:HD3	12:L:39:ARG:H	1.75	0.51
1:3:75:LEU:HB3	1:3:77:TRP:CE3	2.45	0.51
3:A:737:TRP:NE1	15:A:1126:CLA:O1A	2.38	0.51
4:B:245:SER:HB2	4:B:248:ALA:HB3	1.91	0.51
12:L:11:ASP:O	12:L:13:PHE:N	2.44	0.51
3:A:709:ALA:H	8:F:143:ILE:HD11	1.75	0.51
4:B:201:ARG:HA	4:B:240:HIS:CE1	2.46	0.51
4:B:456:ILE:HD11	8:F:96:ILE:HA	1.93	0.51
4:B:543:LYS:HE2	8:F:180:ILE:HG22	1.91	0.51
4:B:454:GLU:HB2	8:F:94:HIS:HB3	1.92	0.51
1:3:132:ILE:O	1:3:136:VAL:HG23	2.11	0.51
3:A:258:VAL:H	3:A:259:PRO:HD2	1.76	0.51
3:A:736:THR:OG1	15:A:1011:CLA:OBD	2.28	0.51
3:A:162:GLY:HA2	18:A:4002:BCR:H322	1.92	0.51
4:B:132:GLU:OE1	4:B:132:GLU:N	2.44	0.51
6:D:54:ASP:N	6:D:54:ASP:OD1	2.43	0.51
8:F:85:LEU:HD12	8:F:106:GLU:OE2	2.11	0.51
7:E:32:VAL:HG22	7:E:35:PRO:HB3	1.93	0.51
4:B:92:TRP:CH2	9:I:12:PRO:HG3	2.46	0.51
11:K:51:VAL:O	11:K:55:SER:N	2.42	0.51
1:2:231:GLN:HG2	1:2:233:ILE:HG13	1.93	0.50
3:A:353:LEU:HB3	3:A:397:CYS:O	2.11	0.50
3:A:548:LYS:HG3	3:A:552:TYR:CD2	2.46	0.50
3:A:643:LEU:HB2	15:B:1021:CLA:HMC3	1.93	0.50
8:F:121:ILE:HA	8:F:160:TRP:HE1	1.75	0.50
3:A:321:ILE:O	3:A:325:HIS:ND1	2.42	0.50
15:B:1203:CLA:C3C	15:B:1226:CLA:HAB	2.41	0.50
3:A:14:ASP:N	3:A:181:ALA:O	2.36	0.50
15:B:1225:CLA:H2	15:B:1225:CLA:HAA1	1.93	0.50
4:B:546:PRO:HG2	5:C:62:PHE:CE2	2.47	0.50
9:I:1:MET:HG3	9:I:2:SER:H	1.76	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:L:19:THR:H	12:L:20:PRO:CD	2.23	0.50
3:A:662:LEU:HD21	3:A:745:ILE:HG21	1.93	0.50
8:F:147:VAL:HG12	8:F:149:MET:H	1.76	0.50
3:A:434:ILE:HD13	3:A:551:LEU:HD11	1.94	0.50
18:B:4005:BCR:H391	10:J:25:LEU:HD11	1.93	0.50
2:4:128:PHE:HB2	2:4:129:PRO:HD3	1.94	0.50
3:A:449:PHE:CE1	15:B:1022:CLA:HHD	2.46	0.50
15:B:1230:CLA:HBB1	15:B:1230:CLA:HMB1	1.93	0.50
7:E:34:TYR:CE1	7:E:54:SER:HB2	2.47	0.50
12:L:47:GLY:HA3	12:L:117:LEU:O	2.12	0.50
1:3:130:GLN:HE21	1:3:131:GLN:HG3	1.76	0.50
3:A:405:ALA:HA	3:A:408:TYR:CD2	2.47	0.50
3:A:476:GLN:HB3	3:A:525:GLY:HA2	1.92	0.50
3:A:663:SER:HB2	4:B:443:ALA:HB1	1.94	0.50
4:B:376:ILE:HG21	15:B:1225:CLA:HHC	1.93	0.50
4:B:388:GLY:HA3	18:B:4008:BCR:H271	1.94	0.50
7:E:5:GLY:H	7:E:24:VAL:HB	1.77	0.50
7:E:12:ARG:HG2	7:E:14:GLU:HG3	1.94	0.50
2:4:107:ILE:HD11	2:4:222:VAL:HA	1.94	0.49
5:C:34:CYS:SG	5:C:35:LYS:N	2.85	0.49
5:C:52:LYS:HE3	5:C:67:VAL:HB	1.93	0.49
8:F:82:TYR:CZ	8:F:93:PRO:HB2	2.47	0.49
1:3:179:ARG:HD3	1:3:186:ARG:NH1	2.26	0.49
4:B:438:ASN:HB3	4:B:613:TYR:HB3	1.94	0.49
4:B:684:PRO:O	4:B:686:ALA:N	2.43	0.49
1:3:123:PHE:CD2	1:3:124:VAL:HG22	2.47	0.49
3:A:611:GLN:HA	3:A:615:TRP:HB2	1.94	0.49
4:B:316:GLY:O	4:B:320:ILE:HG13	2.13	0.49
1:3:87:ARG:HH22	1:3:141:PHE:HD1	1.61	0.49
2:4:148:SER:O	2:4:150:ALA:N	2.45	0.49
3:A:189:ASN:HB3	3:A:192:SER:HB3	1.94	0.49
3:A:363:VAL:O	3:A:367:MET:HG2	2.13	0.49
4:B:105:THR:OG1	4:B:112:ASN:OD1	2.31	0.49
5:C:67:VAL:HG21	17:C:3002:SF4:S1	2.53	0.49
7:E:11:LEU:H	7:E:57:GLU:HA	1.78	0.49
8:F:105:ARG:HH21	10:J:38:TYR:H	1.61	0.49
4:B:227:ASN:OD1	4:B:228:TRP:N	2.46	0.49
4:B:329:HIS:HB3	4:B:387:HIS:O	2.12	0.49
4:B:437:HIS:HB2	15:B:1230:CLA:C1C	2.42	0.49
1:2:202:LYS:H	1:2:202:LYS:HD2	1.77	0.49
1:3:81:ALA:HB1	1:3:85:HIS:CE1	2.47	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:A:1126:CLA:H61	18:A:4011:BCR:H331	1.95	0.49
3:A:576:ARG:NH1	6:D:63:GLU:OE1	2.46	0.49
15:B:1201:CLA:HHC	15:B:1203:CLA:C2A	2.43	0.49
4:B:574:PHE:CE1	15:B:1226:CLA:HHD	2.48	0.49
4:B:715:TYR:CZ	15:B:1021:CLA:HED1	2.48	0.49
5:C:55:GLU:HB2	5:C:63:LEU:HD22	1.95	0.49
3:A:320:GLN:HA	3:A:323:GLU:HB2	1.94	0.48
11:K:28:LEU:HD22	11:K:43:GLY:HA2	1.93	0.48
3:A:222:LYS:HB3	3:A:249:LEU:HD12	1.95	0.48
4:B:87:LEU:HB3	4:B:113:ILE:HG21	1.95	0.48
3:A:278:LEU:H	3:A:504:TYR:HE2	1.59	0.48
15:B:1205:CLA:C3A	15:B:1224:CLA:HBA1	2.43	0.48
7:E:33:LEU:H	7:E:33:LEU:HD23	1.77	0.48
1:3:121:ASN:O	1:3:125:GLN:NE2	2.44	0.48
1:3:86:CYS:HB2	1:3:184:GLU:HG3	1.95	0.48
3:A:701:HIS:CD2	3:A:706:VAL:HG13	2.48	0.48
4:B:209:ASN:HB2	4:B:212:MET:HB3	1.95	0.48
4:B:266:LEU:O	4:B:269:THR:OG1	2.19	0.48
5:C:28:MET:HE1	5:C:40:ALA:HB2	1.95	0.48
14:O:68:PRO:HA	14:O:71:ILE:HB	1.95	0.48
1:2:234:ILE:HG12	1:3:123:PHE:CD1	2.49	0.48
15:A:1012:CLA:H52	18:A:4011:BCR:H362	1.95	0.48
1:2:180:ARG:HD3	1:2:181:GLU:HG3	1.95	0.48
1:2:234:ILE:HD12	1:3:121:ASN:HA	1.96	0.48
3:A:391:MET:HG3	3:A:599:LEU:CD1	2.40	0.48
3:A:586:ASP:HA	3:A:589:PHE:HB3	1.96	0.48
4:B:15:ASP:OD2	4:B:17:THR:OG1	2.31	0.48
1:3:112:LYS:O	1:3:114:GLN:N	2.47	0.48
15:A:1105:CLA:HHB	15:A:1106:CLA:HMB3	1.96	0.48
4:B:594:TRP:HE1	4:B:621:TYR:HB2	1.78	0.48
7:E:16:PHE:HB3	8:F:181:THR:HB	1.94	0.48
3:A:175:PHE:HD1	3:A:179:LYS:HD2	1.79	0.48
18:A:4011:BCR:H402	15:B:1229:CLA:HMB3	1.95	0.48
3:A:437:LEU:HB3	3:A:544:LEU:HD12	1.95	0.48
12:L:19:THR:N	12:L:20:PRO:HD2	2.28	0.48
3:A:651:ALA:HB2	15:A:1011:CLA:HBC1	1.95	0.48
4:B:73:ASN:ND2	4:B:108:ASP:OD2	2.47	0.48
7:E:54:SER:OG	7:E:55:LEU:N	2.46	0.48
8:F:157:GLY:HA3	8:F:160:TRP:CZ2	2.49	0.48
1:3:119:LEU:HB2	1:3:122:GLN:HG3	1.96	0.48
15:B:1224:CLA:H3A	15:B:1224:CLA:HBA2	1.37	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:175:PHE:CD1	3:A:179:LYS:HD2	2.50	0.47
1:2:210:ARG:HD3	15:2:607:CLA:C2A	2.44	0.47
1:2:234:ILE:HG12	1:3:123:PHE:CE1	2.48	0.47
15:B:1224:CLA:H61	15:B:1224:CLA:H41	1.45	0.47
1:2:123:GLN:HG3	1:2:124:GLU:HG3	1.97	0.47
3:A:309:ARG:NH1	3:A:317:SER:OG	2.47	0.47
4:B:368:ALA:HB1	15:B:1224:CLA:HMA1	1.96	0.47
4:B:558:ASP:HB3	4:B:565:THR:HG21	1.96	0.47
4:B:629:LEU:O	4:B:645:SER:HB3	2.14	0.47
3:A:71:SER:N	3:A:177:TYR:OH	2.48	0.47
4:B:315:LYS:HD2	4:B:315:LYS:N	2.29	0.47
3:A:364:ALA:HB2	3:A:390:HIS:HB2	1.96	0.47
11:K:35:GLN:HG3	11:K:38:ALA:HB3	1.96	0.47
1:2:234:ILE:O	1:2:236:GLN:NE2	2.47	0.47
1:3:157:GLU:CD	1:3:157:GLU:H	2.13	0.47
1:3:115:LEU:HD11	15:3:610:CLA:C3B	2.45	0.47
3:A:425:ARG:HB3	3:A:429:HIS:CE1	2.49	0.47
4:B:332:LEU:HD13	15:B:1202:CLA:C4A	2.45	0.47
12:L:36:ILE:HG21	15:L:1502:CLA:C2A	2.45	0.47
1:2:202:LYS:H	1:2:202:LYS:CD	2.27	0.47
4:B:410:LEU:HA	4:B:413:LYS:HG2	1.95	0.47
4:B:474:VAL:HG23	4:B:477:SER:HB2	1.96	0.47
1:2:158:LEU:HD22	15:2:612:CLA:HHC	1.97	0.47
2:4:113:ALA:O	2:4:116:ALA:N	2.46	0.47
15:A:1122:CLA:HHB	18:A:4007:BCR:H321	1.96	0.47
4:B:540:ARG:O	4:B:549:LYS:N	2.48	0.47
5:C:15:THR:N	17:C:3003:SF4:S3	2.88	0.47
8:F:121:ILE:HG12	8:F:160:TRP:CD1	2.50	0.47
1:3:73:PHE:HD2	1:3:76:GLU:HA	1.80	0.47
3:A:616:GLY:HA3	3:A:626:HIS:HA	1.96	0.47
4:B:31:PHE:HA	4:B:34:HIS:ND1	2.30	0.47
4:B:571:TRP:HZ3	4:B:704:ARG:HD2	1.80	0.47
3:A:421:ASN:OD1	3:A:428:ARG:NH2	2.48	0.47
1:2:162:ALA:O	1:2:166:ILE:HG13	2.14	0.46
1:2:181:GLU:HB2	1:2:182:PRO:HD3	1.97	0.46
1:2:236:GLN:HE21	1:3:124:VAL:HG21	1.80	0.46
15:A:1013:CLA:CHD	4:B:580:TRP:HE1	2.28	0.46
3:A:667:LEU:HD13	4:B:440:VAL:HG22	1.97	0.46
8:F:105:ARG:HH11	10:J:36:LEU:HD12	1.80	0.46
8:F:108:THR:OG1	8:F:109:ILE:N	2.48	0.46
3:A:191:GLU:HG3	3:A:318:ILE:HD12	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:326:LYS:HZ3	3:A:332:GLU:HA	1.80	0.46
3:A:408:TYR:HD2	18:A:4007:BCR:HC42	1.81	0.46
3:A:701:HIS:NE2	15:A:1139:CLA:HHB	2.30	0.46
3:A:734:ALA:HA	3:A:737:TRP:HB3	1.97	0.46
4:B:92:TRP:CZ3	4:B:94:PRO:HD3	2.50	0.46
2:4:106:GLU:HG2	2:4:229:MET:HE3	1.97	0.46
3:A:218:LEU:HD23	3:A:218:LEU:H	1.81	0.46
4:B:201:ARG:HA	4:B:240:HIS:HE1	1.80	0.46
7:E:25:VAL:HG22	7:E:39:ARG:HG3	1.97	0.46
2:4:106:GLU:HG2	2:4:229:MET:CE	2.45	0.46
15:A:1106:CLA:C3D	15:A:1126:CLA:HBA1	2.45	0.46
3:A:137:THR:HG22	3:A:381:PRO:HB2	1.97	0.46
4:B:307:ARG:O	4:B:309:PRO:HD3	2.15	0.46
8:F:63:PRO:HA	8:F:66:LEU:HD12	1.96	0.46
1:3:122:GLN:NE2	1:3:126:ASN:OD1	2.48	0.46
3:A:650:GLN:NE2	15:A:1011:CLA:HHD	2.31	0.46
3:A:333:GLY:O	3:A:335:LYS:N	2.44	0.46
3:A:568:ARG:HG2	3:A:585:TRP:CG	2.50	0.46
15:B:1226:CLA:H8	15:B:1226:CLA:H51	1.43	0.46
4:B:29:HIS:HB2	15:B:1226:CLA:HBA1	1.97	0.46
14:O:67:ASN:HB2	14:O:68:PRO:HD3	1.98	0.46
1:3:81:ALA:O	1:3:85:HIS:ND1	2.48	0.46
15:A:1106:CLA:H3A	15:A:1106:CLA:HBA2	1.44	0.46
3:A:218:LEU:HB3	3:A:250:TYR:HE2	1.81	0.46
12:L:3:ASP:OD2	12:L:7:PRO:HD3	2.16	0.46
14:O:61:GLY:HA2	14:O:64:TYR:CD2	2.50	0.46
3:A:439:TRP:CE2	15:A:1130:CLA:HAB	2.51	0.46
3:A:596:TYR:HE1	3:A:732:GLY:O	1.99	0.46
3:A:694:ILE:HD11	3:A:714:ALA:HB2	1.96	0.46
4:B:19:ARG:HA	4:B:22:TRP:HD1	1.80	0.46
4:B:383:GLY:O	4:B:387:HIS:ND1	2.41	0.46
4:B:690:ARG:HD2	6:D:20:ARG:HH11	1.80	0.46
3:A:704:LEU:HD21	8:F:168:TYR:CD1	2.51	0.46
15:A:1107:CLA:H8	15:A:1107:CLA:H52	1.67	0.46
16:A:2001:PQN:H292	16:A:2001:PQN:H262	1.76	0.46
15:A:1126:CLA:H62	18:A:4011:BCR:H343	1.97	0.46
4:B:346:VAL:O	4:B:350:MET:HG2	2.16	0.46
1:2:145:ASN:O	1:2:148:VAL:HG23	2.16	0.46
1:3:73:PHE:HB2	1:3:76:GLU:HA	1.98	0.46
3:A:595:MET:HG2	3:A:599:LEU:HD23	1.97	0.46
8:F:150:ALA:HA	8:F:153:TYR:CD1	2.51	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:392:TRP:CD1	15:A:1126:CLA:HAB	2.51	0.45
8:F:88:GLY:H	8:F:93:PRO:HA	1.81	0.45
9:I:2:SER:HB2	9:I:6:LEU:HB2	1.97	0.45
2:4:218:ARG:HD2	15:4:615:CLA:C3B	2.46	0.45
3:A:365:HIS:HA	3:A:368:TYR:CE1	2.51	0.45
6:D:28:TYR:HB2	6:D:59:LEU:HB2	1.97	0.45
6:D:98:LYS:HD2	6:D:106:VAL:HG21	1.97	0.45
1:3:119:LEU:HB2	1:3:122:GLN:CG	2.45	0.45
15:A:1126:CLA:O1D	15:A:1127:CLA:HHD	2.16	0.45
3:A:442:ILE:HA	15:B:1023:CLA:CGA	2.45	0.45
4:B:119:TYR:HE1	4:B:369:LEU:HB2	1.81	0.45
3:A:650:GLN:HE21	15:A:1011:CLA:HAC1	1.80	0.45
5:C:52:LYS:HE2	5:C:52:LYS:HA	1.98	0.45
7:E:16:PHE:O	7:E:18:TYR:N	2.49	0.45
8:F:34:CYS:HB3	8:F:40:PHE:CD2	2.51	0.45
15:A:1013:CLA:H93	18:A:4011:BCR:H373	1.98	0.45
3:A:428:ARG:HD2	6:D:12:LEU:O	2.16	0.45
3:A:83:TRP:HE3	3:A:84:LEU:HD12	1.81	0.45
6:D:96:HIS:HE2	6:D:101:VAL:HA	1.81	0.45
8:F:130:LYS:HA	8:F:130:LYS:HE2	1.99	0.45
15:A:1126:CLA:HBA2	15:A:1126:CLA:H3A	1.49	0.45
3:A:459:ARG:NH2	3:A:634:GLN:OE1	2.49	0.45
3:A:265:TRP:CD1	11:K:52:LEU:HD21	2.52	0.45
3:A:425:ARG:HG3	3:A:428:ARG:HH21	1.81	0.45
3:A:490:ALA:HB3	3:A:491:PRO:HD3	1.99	0.45
3:A:559:ILE:HG22	3:A:576:ARG:HH12	1.82	0.45
3:A:713:ARG:NH2	7:E:43:VAL:O	2.50	0.45
1:3:191:ALA:HB1	1:3:195:PHE:CE2	2.52	0.45
3:A:12:VAL:HG12	3:A:183:LYS:HD3	1.99	0.45
18:A:4007:BCR:H16C	18:A:4007:BCR:H19C	1.81	0.45
3:A:334:HIS:N	3:A:420:ASN:HD21	2.14	0.45
3:A:484:GLN:O	3:A:488:THR:HG23	2.16	0.45
4:B:181:PHE:HB2	4:B:282:PHE:CZ	2.52	0.45
4:B:453:ILE:HG12	4:B:515:PHE:CE2	2.52	0.45
15:A:1012:CLA:HAB	4:B:580:TRP:HZ3	1.82	0.45
8:F:162:LEU:O	8:F:166:GLN:HG3	2.16	0.45
1:2:133:ALA:O	1:2:137:LEU:N	2.50	0.45
15:B:1229:CLA:H2	8:F:123:TRP:NE1	2.32	0.45
3:A:608:TRP:HA	3:A:611:GLN:NE2	2.32	0.45
4:B:303:LEU:HD12	4:B:304:GLU:HB2	1.98	0.45
4:B:372:HIS:O	4:B:376:ILE:HG12	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:B:378:GLY:O	4:B:382:VAL:HG23	2.17	0.45
1:3:110:LYS:HG2	1:3:111:SER:H	1.81	0.44
1:3:201:GLN:N	1:3:201:GLN:OE1	2.38	0.44
3:A:293:HIS:O	3:A:297:ILE:HG12	2.17	0.44
3:A:389:HIS:CE1	3:A:393:ILE:HD11	2.52	0.44
3:A:427:ILE:HA	3:A:430:ARG:HB3	2.00	0.44
3:A:595:MET:HB3	3:A:595:MET:HE3	1.93	0.44
4:B:116:SER:HA	15:B:1207:CLA:C3A	2.47	0.44
15:B:1232:CLA:H11	15:B:1232:CLA:H51	1.77	0.44
4:B:151:GLY:O	4:B:155:ILE:HG12	2.16	0.44
5:C:23:LEU:HA	6:D:66:LEU:HG	1.99	0.44
1:2:234:ILE:HD12	1:3:121:ASN:CB	2.48	0.44
3:A:331:GLY:HA3	3:A:425:ARG:HH21	1.82	0.44
4:B:178:ALA:HA	4:B:282:PHE:CD2	2.51	0.44
6:D:93:GLN:NE2	6:D:95:LEU:O	2.35	0.44
1:3:119:LEU:HD12	1:3:125:GLN:NE2	2.32	0.44
15:A:1011:CLA:HMB3	15:A:1012:CLA:HMD1	1.99	0.44
15:A:1130:CLA:CGA	12:L:22:ASN:HA	2.47	0.44
3:A:454:HIS:O	3:A:458:MET:HG3	2.17	0.44
4:B:234:SER:OG	4:B:249:GLY:O	2.35	0.44
5:C:66:ARG:HA	5:C:66:ARG:HD2	1.82	0.44
2:4:146:VAL:HG12	2:4:147:LYS:H	1.82	0.44
18:A:4017:BCR:H14C	15:B:1239:CLA:C3C	2.48	0.44
3:A:406:ALA:HB1	3:A:584:ALA:HB1	2.00	0.44
3:A:593:PHE:CE1	3:A:725:VAL:HG23	2.52	0.44
3:A:651:ALA:HA	3:A:654:VAL:HG12	1.99	0.44
15:B:1021:CLA:H3A	15:B:1021:CLA:HBA2	1.67	0.44
15:B:1237:CLA:H61	15:B:1237:CLA:H41	1.66	0.44
4:B:305:ALA:O	4:B:308:PRO:HD2	2.18	0.44
5:C:26:LEU:HD23	17:C:3002:SF4:S3	2.57	0.44
5:C:53:ARG:HG2	17:C:3002:SF4:S4	2.58	0.44
15:J:1302:CLA:HBD	15:J:1302:CLA:HBA1	1.99	0.44
1:3:139:TRP:HA	1:3:143:VAL:HG23	2.00	0.44
1:3:94:LEU:HD22	15:3:606:CLA:HHC	2.00	0.44
3:A:371:PRO:HG2	3:A:377:ALA:HB2	1.99	0.44
4:B:106:ARG:NE	4:B:115:TYR:OH	2.49	0.44
12:L:24:SER:N	12:L:27:THR:HB	2.31	0.44
1:3:138:ALA:HB1	1:3:142:ILE:HD12	1.99	0.44
3:A:461:LEU:O	4:B:97:GLY:N	2.41	0.44
3:A:698:VAL:HA	3:A:701:HIS:HB2	1.99	0.44
1:3:198:PHE:N	1:3:198:PHE:CD2	2.86	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:4:228:ALA:O	2:4:232:PHE:HD2	2.01	0.44
15:A:1112:CLA:HHD	18:A:4002:BCR:H332	1.99	0.44
3:A:701:HIS:HB3	3:A:707:ALA:HA	1.99	0.44
4:B:420:LEU:HD13	4:B:530:LEU:HA	2.00	0.44
4:B:441:VAL:HG11	4:B:450:GLN:HA	2.00	0.44
8:F:134:GLU:HB2	8:F:135:THR:H	1.57	0.44
1:3:100:GLU:HB2	1:3:106:PHE:HD1	1.82	0.44
2:4:113:ALA:HB1	2:4:232:PHE:CD2	2.53	0.44
3:A:355:MET:HG3	15:A:1123:CLA:HHD	1.99	0.44
18:A:4011:BCR:H372	4:B:436:VAL:HG21	2.00	0.44
4:B:558:ASP:CG	4:B:562:ARG:HH22	2.22	0.44
4:B:678:TRP:HE1	6:D:15:THR:HA	1.83	0.44
4:B:71:GLN:HG2	4:B:90:ALA:HB2	2.00	0.44
6:D:32:TRP:O	6:D:54:ASP:HA	2.18	0.44
12:L:41:VAL:HG21	12:L:45:LEU:HD22	1.98	0.44
3:A:112:GLN:O	3:A:134:ILE:N	2.50	0.44
3:A:17:VAL:HG21	3:A:67:ARG:NH1	2.32	0.44
3:A:346:HIS:O	3:A:408:TYR:OH	2.17	0.44
4:B:197:ILE:HG22	4:B:198:PRO:HD3	2.00	0.44
18:B:4005:BCR:H351	18:B:4005:BCR:H15C	1.55	0.44
3:A:704:LEU:HD23	8:F:172:GLN:OE1	2.17	0.44
10:J:34:ASP:N	10:J:34:ASP:OD1	2.50	0.44
12:L:114:TRP:O	12:L:117:LEU:HG	2.18	0.44
3:A:218:LEU:HG	3:A:219:PRO:HD3	2.00	0.43
4:B:73:ASN:HD22	4:B:108:ASP:HB2	1.83	0.43
4:B:375:TYR:CE1	4:B:585:ILE:HG23	2.53	0.43
3:A:693:LEU:HA	4:B:534:LYS:NZ	2.32	0.43
7:E:15:SER:HB2	7:E:17:TRP:CD1	2.53	0.43
1:3:122:GLN:HG2	1:3:125:GLN:HE22	1.83	0.43
3:A:470:ASP:OD1	3:A:471:THR:N	2.50	0.43
4:B:458:ALA:O	4:B:462:GLN:NE2	2.51	0.43
12:L:62:PHE:HB2	12:L:78:GLY:HA2	2.00	0.43
15:A:1105:CLA:H3A	15:A:1105:CLA:HBA2	1.40	0.43
3:A:733:ILE:HG21	15:A:1126:CLA:HMC2	2.00	0.43
3:A:386:LEU:O	3:A:390:HIS:ND1	2.50	0.43
3:A:388:THR:HG21	3:A:740:PHE:CE2	2.52	0.43
3:A:413:TYR:OH	3:A:424:ASP:OD1	2.35	0.43
3:A:694:ILE:HG12	3:A:694:ILE:H	1.32	0.43
4:B:612:THR:HG21	8:F:92:LEU:HD21	2.00	0.43
1:3:144:GLY:HA2	1:3:148:LEU:HD12	1.99	0.43
1:3:198:PHE:N	1:3:198:PHE:HD2	2.16	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:B:163:LEU:HD11	4:B:167:LYS:HE3	1.99	0.43
4:B:181:PHE:O	4:B:185:SER:OG	2.18	0.43
5:C:22:PRO:HB2	6:D:63:GLU:HG3	2.01	0.43
3:A:422:VAL:HG13	15:A:1129:CLA:C3A	2.49	0.43
3:A:259:PRO:HG2	3:A:268:TYR:CE2	2.53	0.43
3:A:709:ALA:HB2	8:F:133:LYS:HD2	1.99	0.43
4:B:439:ASP:OD1	4:B:613:TYR:HB2	2.19	0.43
4:B:609:GLU:HA	8:F:92:LEU:HD22	2.00	0.43
3:A:263:LEU:HD21	11:K:48:VAL:HG22	2.00	0.43
1:3:145:LEU:H	1:3:146:PRO:CD	2.29	0.43
15:A:1105:CLA:HBB1	15:A:1105:CLA:H92	2.00	0.43
15:A:1106:CLA:H42	18:A:4011:BCR:H321	2.00	0.43
3:A:322:LEU:HB3	3:A:334:HIS:O	2.19	0.43
3:A:439:TRP:CZ2	15:A:1130:CLA:HAB	2.54	0.43
5:C:8:TYR:HB2	5:C:64:SER:HA	2.01	0.43
15:F:1301:CLA:HBB1	15:F:1301:CLA:HMB1	2.00	0.43
12:L:42:SER:CB	12:L:43:PRO:HD2	2.48	0.43
15:B:1212:CLA:C2B	18:I:4018:BCR:H21C	2.48	0.43
15:B:1230:CLA:C2	18:B:4005:BCR:H291	2.48	0.43
4:B:577:ALA:O	4:B:581:MET:HG2	2.18	0.43
3:A:265:TRP:HE3	15:A:1115:CLA:HMB2	1.84	0.43
3:A:535:HIS:O	3:A:539:ILE:HG12	2.19	0.43
3:A:482:TRP:CH2	3:A:486:ILE:HD11	2.54	0.43
3:A:701:HIS:HB3	3:A:707:ALA:CA	2.48	0.43
15:B:1232:CLA:H112	15:B:1232:CLA:H152	1.50	0.43
15:B:1236:CLA:HHC	15:B:1236:CLA:HBB1	2.00	0.43
4:B:123:TYR:CE2	4:B:357:ALA:HB3	2.54	0.43
4:B:438:ASN:HA	4:B:450:GLN:HG3	2.01	0.43
18:A:4017:BCR:HC21	4:B:646:TRP:CZ3	2.54	0.43
3:A:462:GLY:HA3	4:B:97:GLY:HA3	2.00	0.43
14:O:67:ASN:O	14:O:71:ILE:HG12	2.19	0.43
3:A:209:TRP:HD1	3:A:294:HIS:ND1	2.16	0.42
3:A:278:LEU:HD21	3:A:371:PRO:HD2	2.01	0.42
3:A:279:SER:OG	3:A:282:THR:OG1	2.32	0.42
3:A:602:VAL:HG13	15:A:1135:CLA:HHC	2.01	0.42
4:B:188:TRP:CH2	4:B:192:LEU:HD22	2.54	0.42
4:B:307:ARG:HB3	4:B:308:PRO:HD3	2.01	0.42
4:B:495:TRP:O	4:B:499:VAL:HG23	2.18	0.42
8:F:82:TYR:O	8:F:82:TYR:HD1	2.02	0.42
1:2:203:ARG:HD2	1:2:206:ALA:HB3	2.01	0.42
1:2:235:GLU:OE1	1:2:235:GLU:N	2.39	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:3:110:LYS:NZ	1:3:208:GLY:O	2.52	0.42
1:3:141:PHE:N	1:3:141:PHE:CD2	2.85	0.42
3:A:380:TYR:HB3	3:A:744:ILE:HD11	1.99	0.42
4:B:219:GLY:O	4:B:221:GLN:N	2.47	0.42
4:B:420:LEU:HB3	4:B:530:LEU:HB2	2.01	0.42
4:B:644:TRP:CH2	4:B:724:ILE:HG13	2.54	0.42
8:F:145:LEU:HD21	10:J:9:THR:HG22	2.01	0.42
14:O:53:LEU:HD12	14:O:55:MET:HB2	2.00	0.42
1:2:98:SER:OG	3:A:179:LYS:NZ	2.45	0.42
3:A:469:SER:O	3:A:473:ILE:HG12	2.20	0.42
3:A:734:ALA:HA	18:A:4011:BCR:HC42	2.01	0.42
6:D:32:TRP:CD1	6:D:34:SER:HB3	2.52	0.42
1:2:234:ILE:HG21	1:3:123:PHE:N	2.35	0.42
2:4:112:VAL:HG21	15:4:612:CLA:C3A	2.49	0.42
3:A:336:GLY:HA3	3:A:419:PHE:O	2.19	0.42
3:A:576:ARG:HD3	5:C:49:VAL:HB	2.00	0.42
4:B:465:SER:HA	4:B:495:TRP:HE1	1.84	0.42
8:F:108:THR:O	8:F:112:LEU:HB3	2.19	0.42
8:F:96:ILE:HB	8:F:103:HIS:CB	2.49	0.42
1:2:141:PRO:HA	1:2:144:HIS:ND1	2.35	0.42
1:3:139:TRP:O	1:3:143:VAL:HB	2.20	0.42
1:3:75:LEU:HA	1:3:75:LEU:HD23	1.85	0.42
15:A:1012:CLA:H52	15:A:1012:CLA:H12	1.80	0.42
15:B:1225:CLA:HBA2	15:B:1225:CLA:H3A	1.52	0.42
4:B:432:LEU:O	4:B:436:VAL:HG23	2.20	0.42
4:B:575:TYR:CE1	4:B:704:ARG:HB3	2.54	0.42
3:A:560:PRO:HG3	6:D:64:GLN:HA	2.00	0.42
8:F:103:HIS:HB3	8:F:106:GLU:CD	2.40	0.42
14:O:98:GLN:OE1	14:O:105:GLN:NE2	2.52	0.42
2:4:241:LEU:O	2:4:243:GLY:N	2.50	0.42
3:A:717:ILE:HD11	4:B:564:GLY:HA3	2.01	0.42
4:B:656:ALA:HB3	15:B:1023:CLA:HBB2	2.02	0.42
1:3:179:ARG:HB2	1:3:179:ARG:HE	1.69	0.42
3:A:225:ASP:HB3	3:A:281:VAL:HG11	2.01	0.42
3:A:439:TRP:CH2	15:A:1130:CLA:HAB	2.55	0.42
3:A:640:ASN:O	3:A:644:ARG:N	2.52	0.42
6:D:9:PRO:HD3	6:D:55:ASN:HB3	2.00	0.42
9:I:6:LEU:O	9:I:9:ILE:HG12	2.19	0.42
3:A:292:HIS:CD2	15:A:1116:CLA:HMB1	2.51	0.42
3:A:361:ILE:HG12	3:A:391:MET:HE3	2.02	0.42
4:B:189:THR:O	4:B:193:VAL:HG22	2.20	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
4:B:271:MET:HA	4:B:274:HIS:CD2	2.55	0.42
5:C:61:ASP:HA	7:E:44:ASN:ND2	2.35	0.42
15:A:1131:CLA:HHB	18:I:4018:BCR:H292	2.02	0.42
14:O:64:TYR:O	14:O:68:PRO:HD2	2.19	0.42
1:2:163:TRP:HA	1:2:166:ILE:HB	2.01	0.42
15:A:1126:CLA:H41	15:A:1126:CLA:H62	1.73	0.42
4:B:699:SER:O	4:B:703:ALA:N	2.44	0.42
5:C:15:THR:O	5:C:19:ARG:HG2	2.20	0.42
12:L:14:VAL:HG23	12:L:15:GLY:H	1.84	0.42
1:3:181:GLN:HG2	15:3:601:CLA:C3A	2.50	0.42
3:A:632:PHE:CG	3:A:636:ALA:HB2	2.55	0.42
4:B:371:THR:HB	15:B:1224:CLA:HMB1	2.00	0.42
5:C:20:ALA:O	5:C:53:ARG:HD2	2.19	0.42
7:E:17:TRP:O	7:E:19:ASN:N	2.53	0.42
12:L:33:GLN:HA	12:L:39:ARG:NH1	2.35	0.42
1:3:127:GLY:HA3	1:3:130:GLN:HB3	2.01	0.41
15:A:1013:CLA:H51	4:B:429:PHE:CE1	2.55	0.41
3:A:202:LEU:HB3	3:A:301:PHE:CD2	2.55	0.41
4:B:274:HIS:O	4:B:278:ILE:HG12	2.20	0.41
1:2:109:HIS:ND1	1:2:216:MET:SD	2.89	0.41
2:4:245:MET:N	2:4:246:PRO:CD	2.81	0.41
15:A:1117:CLA:C4A	15:A:1117:CLA:H12	2.50	0.41
9:I:32:LYS:HE3	9:I:32:LYS:HB3	1.88	0.41
1:3:118:ASP:O	1:3:122:GLN:HG3	2.20	0.41
1:2:235:GLU:O	1:3:125:GLN:HB3	2.21	0.41
3:A:567:PHE:CE2	3:A:585:TRP:HB2	2.56	0.41
3:A:610:MET:HB3	3:A:615:TRP:CE2	2.55	0.41
4:B:216:HIS:CE1	4:B:251:ALA:HA	2.55	0.41
4:B:332:LEU:HD23	4:B:387:HIS:CD2	2.55	0.41
7:E:62:LYS:C	7:E:64:GLU:H	2.22	0.41
14:O:64:TYR:HB2	14:O:65:PRO:HD3	2.03	0.41
1:2:203:ARG:HA	1:2:203:ARG:HD2	1.98	0.41
1:3:108:ASN:CG	1:3:113:LEU:HA	2.40	0.41
3:A:439:TRP:CD2	15:A:1130:CLA:HAB	2.55	0.41
3:A:13:VAL:HA	3:A:182:PRO:HA	2.03	0.41
4:B:302:ILE:HA	4:B:308:PRO:HG2	2.02	0.41
4:B:392:PHE:CZ	4:B:410:LEU:HD22	2.55	0.41
12:L:54:HIS:HA	12:L:57:PHE:CE1	2.55	0.41
2:4:117:CYS:HB3	2:4:232:PHE:CE1	2.55	0.41
15:A:1117:CLA:CHB	15:A:1117:CLA:H12	2.51	0.41
18:A:4017:BCR:H322	15:B:1206:CLA:C4B	2.50	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
2:4:124:GLU:HA	2:4:127:GLN:HG2	2.01	0.41
3:A:420:ASN:ND2	3:A:422:VAL:H	2.18	0.41
3:A:608:TRP:HZ3	3:A:743:ARG:CZ	2.33	0.41
3:A:576:ARG:HG3	5:C:78:GLY:HA3	2.03	0.41
6:D:108:LYS:O	6:D:110:ARG:NH1	2.54	0.41
11:K:32:ASP:OD1	11:K:32:ASP:N	2.54	0.41
15:A:1106:CLA:H43	15:A:1126:CLA:C2D	2.51	0.41
3:A:674:PHE:HB2	15:A:1012:CLA:O1A	2.21	0.41
4:B:168:ASN:HB2	4:B:171:SER:HB3	2.03	0.41
4:B:23:TYR:O	4:B:27:THR:N	2.46	0.41
4:B:548:LYS:HG3	4:B:555:PHE:HZ	1.85	0.41
3:A:409:MET:O	3:A:554:ARG:HD3	2.21	0.41
4:B:455:PRO:HB3	4:B:515:PHE:HB2	2.03	0.41
6:D:40:PHE:CD1	6:D:50:MET:HB2	2.55	0.41
3:A:152:GLU:HA	3:A:155:LEU:HD23	2.03	0.41
3:A:332:GLU:H	3:A:421:ASN:HD22	1.67	0.41
3:A:514:GLY:C	3:A:516:LYS:H	2.23	0.41
7:E:37:LEU:HD23	7:E:37:LEU:H	1.86	0.41
12:L:83:ILE:HD13	12:L:86:ILE:HD12	2.03	0.41
18:A:4017:BCR:H281	4:B:669:TRP:CZ3	2.56	0.41
3:A:75:GLY:O	3:A:79:ILE:HG12	2.21	0.41
14:O:126:ILE:HA	14:O:129:HIS:ND1	2.35	0.41
1:2:234:ILE:HD12	1:3:121:ASN:CA	2.50	0.41
1:3:141:PHE:HD2	1:3:141:PHE:N	2.18	0.41
3:A:439:TRP:CZ2	15:A:1131:CLA:HMD1	2.53	0.41
3:A:118:VAL:HB	15:B:1230:CLA:HMD1	2.02	0.41
3:A:392:TRP:NE1	3:A:603:ILE:HD13	2.28	0.41
18:A:4017:BCR:H333	15:B:1224:CLA:H62	2.03	0.41
4:B:374:GLN:HG3	4:B:585:ILE:HD11	2.01	0.41
6:D:120:ILE:HD11	6:D:122:LYS:NZ	2.35	0.41
8:F:105:ARG:HH21	10:J:38:TYR:N	2.19	0.41
3:A:733:ILE:HG22	18:A:4011:BCR:HC31	2.02	0.40
16:B:2002:PQN:H292	16:B:2002:PQN:H262	1.81	0.40
4:B:665:TRP:HB3	4:B:666:ARG:H	1.67	0.40
8:F:133:LYS:HB3	8:F:133:LYS:HE3	1.58	0.40
1:2:154:GLN:O	1:2:158:LEU:HG	2.21	0.40
2:4:119:HIS:NE2	15:4:606:CLA:HHC	2.36	0.40
15:A:1107:CLA:HBA1	15:A:1107:CLA:H12	1.85	0.40
3:A:259:PRO:HG2	3:A:268:TYR:CZ	2.56	0.40
3:A:318:ILE:H	3:A:318:ILE:HD12	1.85	0.40
3:A:467:MET:HG3	12:L:69:ARG:NH2	2.37	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:A:650:GLN:HB3	3:A:743:ARG:HH22	1.87	0.40
3:A:743:ARG:O	3:A:747:VAL:HG22	2.22	0.40
3:A:744:ILE:HA	3:A:744:ILE:HD12	1.88	0.40
4:B:461:ILE:O	4:B:464:THR:OG1	2.33	0.40
4:B:575:TYR:OH	4:B:662:LEU:HG	2.21	0.40
8:F:105:ARG:CD	10:J:36:LEU:HB2	2.51	0.40
4:B:92:TRP:CZ3	9:I:12:PRO:HG3	2.56	0.40
9:I:6:LEU:CB	9:I:7:PRO:HD3	2.50	0.40
2:4:135:PRO:HD2	2:4:140:PRO:HG3	2.02	0.40
2:4:173:SER:C	2:4:175:MET:H	2.25	0.40
3:A:20:THR:HG21	3:A:174:TRP:HZ2	1.86	0.40
3:A:334:HIS:H	3:A:420:ASN:HD21	1.70	0.40
4:B:188:TRP:CZ2	4:B:192:LEU:HD13	2.56	0.40
4:B:690:ARG:NH1	6:D:20:ARG:HG3	2.36	0.40
2:4:129:PRO:HB2	2:4:130:PHE:CD2	2.56	0.40
3:A:454:HIS:NE2	3:A:458:MET:SD	2.95	0.40
4:B:132:GLU:HG2	4:B:133:LEU:N	2.36	0.40
4:B:131:VAL:HG13	4:B:134:TYR:OH	2.21	0.40
11:K:50:ILE:O	11:K:54:LEU:N	2.49	0.40
12:L:33:GLN:HB3	15:L:1501:CLA:C2B	2.51	0.40
1:2:212:GLY:O	1:2:216:MET:HG2	2.21	0.40
1:3:77:TRP:HA	1:3:79:ARG:NE	2.36	0.40
3:A:677:ALA:C	15:A:1013:CLA:HAB	2.42	0.40
15:A:1117:CLA:HMB1	15:A:1117:CLA:HBB1	2.04	0.40
16:A:2001:PQN:H141	16:A:2001:PQN:H162	1.90	0.40
3:A:552:TYR:O	3:A:562:LYS:NZ	2.36	0.40

There are no symmetry-related clashes.

5.3 Torsion angles (i)

5.3.1 Protein backbone (i)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the backbone conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles
1	2	142/222 (64%)	122 (86%)	17 (12%)	3 (2%)	7 39
1	3	148/222 (67%)	124 (84%)	18 (12%)	6 (4%)	3 25
2	4	112/214 (52%)	96 (86%)	7 (6%)	9 (8%)	1 14
3	A	738/740 (100%)	645 (87%)	82 (11%)	11 (2%)	10 45
4	B	723/725 (100%)	630 (87%)	86 (12%)	7 (1%)	15 53
5	C	78/80 (98%)	69 (88%)	8 (10%)	1 (1%)	12 48
6	D	122/124 (98%)	107 (88%)	12 (10%)	3 (2%)	5 35
7	E	67/69 (97%)	52 (78%)	9 (13%)	6 (9%)	1 12
8	F	151/155 (97%)	132 (87%)	14 (9%)	5 (3%)	4 30
9	I	30/32 (94%)	27 (90%)	2 (7%)	1 (3%)	4 30
10	J	36/38 (95%)	34 (94%)	1 (3%)	1 (3%)	5 33
11	K	45/47 (96%)	36 (80%)	8 (18%)	1 (2%)	6 37
12	L	138/140 (99%)	110 (80%)	20 (14%)	8 (6%)	1 19
13	M	27/29 (93%)	25 (93%)	1 (4%)	1 (4%)	3 28
14	O	96/98 (98%)	84 (88%)	10 (10%)	2 (2%)	7 39
All	All	2653/2935 (90%)	2293 (86%)	295 (11%)	65 (2%)	5 35

All (65) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
1	3	113	LEU
1	3	145	LEU
1	3	172	VAL
3	A	477	PRO
7	E	56	ASP
7	E	63	VAL
8	F	161	PRO
9	I	6	LEU
10	J	36	LEU
12	L	7	PRO
12	L	12	PRO
12	L	21	ILE
12	L	43	PRO
1	3	72	VAL
2	4	135	PRO
2	4	146	VAL
2	4	149	GLY
3	A	522	ILE

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Mol	Chain	Res	Type
3	A	570	PRO
4	B	556	PRO
6	D	75	GLN
6	D	88	PRO
7	E	17	TRP
7	E	18	TYR
8	F	110	PRO
11	K	59	VAL
12	L	20	PRO
12	L	48	LEU
1	3	119	LEU
3	A	475	LEU
4	B	309	PRO
4	B	312	ARG
7	E	35	PRO
7	E	57	GLU
8	F	154	MET
13	M	27	GLN
14	O	146	TYR
1	2	129	ASP
1	2	201	TRP
1	2	207	GLY
1	3	117	PRO
3	A	16	ASP
3	A	319	LYS
8	F	108	THR
12	L	19	THR
2	4	128	PHE
2	4	129	PRO
2	4	245	MET
3	A	258	VAL
3	A	334	HIS
3	A	493	ASN
4	B	177	LEU
4	B	320	ILE
14	O	104	ILE
2	4	130	PHE
2	4	173	SER
5	C	22	PRO
3	A	181	ALA
4	B	512	PRO
12	L	6	LYS

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Mol	Chain	Res	Type
4	B	179	GLY
8	F	109	ILE
2	4	139	GLY
6	D	46	GLY
3	A	417	VAL

5.3.2 Protein sidechains (i)

In the following table, the Percentiles column shows the percent sidechain outliers of the chain as a percentile score with respect to all X-ray entries followed by that with respect to entries of similar resolution.

The Analysed column shows the number of residues for which the sidechain conformation was analysed, and the total number of residues.

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles
1	2	109/178 (61%)	105 (96%)	4 (4%)	34 60
1	3	121/178 (68%)	95 (78%)	26 (22%)	1 6
2	4	93/175 (53%)	91 (98%)	2 (2%)	52 71
3	A	597/597 (100%)	587 (98%)	10 (2%)	60 78
4	B	592/593 (100%)	576 (97%)	16 (3%)	44 66
5	C	66/66 (100%)	64 (97%)	2 (3%)	41 64
6	D	104/104 (100%)	100 (96%)	4 (4%)	33 59
7	E	66/66 (100%)	64 (97%)	2 (3%)	41 64
8	F	135/137 (98%)	120 (89%)	15 (11%)	6 26
9	I	27/27 (100%)	26 (96%)	1 (4%)	34 60
10	J	34/34 (100%)	34 (100%)	0	100 100
11	K	35/36 (97%)	35 (100%)	0	100 100
12	L	113/113 (100%)	110 (97%)	3 (3%)	44 66
13	M	22/23 (96%)	22 (100%)	0	100 100
14	O	77/77 (100%)	74 (96%)	3 (4%)	32 58
All	All	2191/2404 (91%)	2103 (96%)	88 (4%)	31 57

All (88) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	2	128	PHE

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Mol	Chain	Res	Type
1	2	180	ARG
1	2	202	LYS
1	2	204	MET
1	3	64	PHE
1	3	65	ASP
1	3	69	PHE
1	3	71	GLU
1	3	73	PHE
1	3	80	GLU
1	3	82	GLU
1	3	85	HIS
1	3	107	TYR
1	3	113	LEU
1	3	116	SER
1	3	119	LEU
1	3	120	HIS
1	3	122	GLN
1	3	123	PHE
1	3	124	VAL
1	3	125	GLN
1	3	126	ASN
1	3	130	GLN
1	3	177	TRP
1	3	184	GLU
1	3	185	LEU
1	3	187	ASN
1	3	189	ARG
1	3	198	PHE
1	3	207	GLN
2	4	102	LEU
2	4	103	GLN
3	A	71	SER
3	A	77	LEU
3	A	337	LEU
3	A	370	MET
3	A	420	ASN
3	A	463	ARG
3	A	576	ARG
3	A	631	ASN
3	A	694	ILE
3	A	704	LEU
4	B	60	TRP

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Mol	Chain	Res	Type
4	B	172	ARG
4	B	177	LEU
4	B	192	LEU
4	B	250	THR
4	B	273	HIS
4	B	291	THR
4	B	315	LYS
4	B	412	HIS
4	B	435	TYR
4	B	470	TYR
4	B	516	LEU
4	B	543	LYS
4	B	576	LEU
4	B	583	ASN
4	B	666	ARG
5	C	44	ARG
5	C	62	PHE
6	D	20	ARG
6	D	84	TYR
6	D	101	VAL
6	D	110	ARG
7	E	58	LEU
7	E	66	LYS
8	F	82	TYR
8	F	95	LEU
8	F	105	ARG
8	F	121	ILE
8	F	123	TRP
8	F	128	TYR
8	F	133	LYS
8	F	134	GLU
8	F	137	ASN
8	F	140	GLU
8	F	143	ILE
8	F	146	ASP
8	F	149	MET
8	F	153	TYR
8	F	179	GLU
9	I	10	LEU
12	L	14	VAL
12	L	34	LEU
12	L	39	ARG

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Mol	Chain	Res	Type
14	O	53	LEU
14	O	136	LEU
14	O	148	LYS

Some sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (10) such sidechains are listed below:

Mol	Chain	Res	Type
1	2	236	GLN
1	3	122	GLN
1	3	126	ASN
1	3	130	GLN
3	A	213	GLN
3	A	420	ASN
4	B	203	GLN
4	B	450	GLN
14	O	98	GLN
14	O	105	GLN

5.3.3 RNA

There are no RNA molecules in this entry.

5.4 Non-standard residues in protein, DNA, RNA chains

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

5.5 Carbohydrates

There are no carbohydrates in this entry.

5.6 Ligand geometry

147 ligands are modelled in this entry.

In the following table, the Counts columns list the number of bonds (or angles) for which Mogul statistics could be retrieved, the number of bonds (or angles) that are observed in the model and the number of bonds (or angles) that are defined in the Chemical Component Dictionary. The Link column lists molecule types, if any, to which the group is linked. The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the

expected value. A bond length (or angle) with $|Z| > 2$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\| > 2$	Counts	RMSZ	$\#\|Z\| > 2$
15	CLA	A	1102	-	22,32,73	3.08	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	3	601	-	22,32,73	3.05	9 (40%)	26,54,113	2.61	10 (38%)
15	CLA	4	602	-	22,32,73	3.10	9 (40%)	26,54,113	2.59	10 (38%)
15	CLA	K	1401	-	22,32,73	3.09	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	B	1203	-	22,32,73	3.09	9 (40%)	26,54,113	2.58	10 (38%)
15	CLA	B	1222	-	22,32,73	3.08	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	B	1201	-	22,32,73	3.10	9 (40%)	26,54,113	2.58	10 (38%)
15	CLA	A	1111	-	22,32,73	3.11	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	2	614	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1140	-	22,32,73	3.09	9 (40%)	26,54,113	2.55	10 (38%)
15	CLA	3	606	-	22,32,73	3.07	9 (40%)	26,54,113	2.55	10 (38%)
15	CLA	B	1235	-	22,32,73	3.08	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	B	1206	-	22,32,73	3.08	9 (40%)	26,54,113	2.55	10 (38%)
15	CLA	3	603	-	22,32,73	3.08	10 (45%)	26,54,113	2.62	10 (38%)
15	CLA	A	1121	-	22,32,73	3.07	9 (40%)	26,54,113	2.55	10 (38%)
15	CLA	A	1120	-	22,32,73	3.08	9 (40%)	26,54,113	2.55	10 (38%)
15	CLA	B	1232	-	59,73,73	1.31	8 (13%)	67,113,113	1.88	10 (14%)
15	CLA	L	1501	-	22,32,73	3.06	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1137	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	4	611	-	22,32,73	3.07	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	F	1301	-	36,53,73	1.64	7 (19%)	39,89,113	2.15	8 (20%)
15	CLA	B	1231	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	4	601	-	22,32,73	3.09	9 (40%)	26,54,113	2.58	10 (38%)
15	CLA	B	1023	-	44,58,73	1.50	7 (15%)	49,95,113	2.07	10 (20%)
15	CLA	3	614	-	22,32,73	3.08	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	2	610	-	22,32,73	3.08	9 (40%)	26,54,113	2.55	10 (38%)
15	CLA	J	1302	-	44,58,73	1.53	9 (20%)	49,95,113	2.25	13 (26%)
18	BCR	A	4011	-	41,41,41	1.85	4 (9%)	56,56,56	4.34	18 (32%)
15	CLA	A	1130	-	49,63,73	1.43	8 (16%)	55,101,113	2.03	11 (20%)
15	CLA	O	1603	-	22,32,73	3.10	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	B	1209	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1112	-	22,32,73	3.10	9 (40%)	26,54,113	2.58	10 (38%)
15	CLA	2	616	-	22,32,73	3.08	9 (40%)	26,54,113	2.56	10 (38%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	CLA	B	1219	-	22,32,73	3.09	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	B	1236	-	36,53,73	1.66	8 (22%)	39,89,113	2.16	8 (20%)
15	CLA	B	1237	-	49,63,73	1.42	7 (14%)	55,101,113	2.01	11 (20%)
15	CLA	A	1124	-	22,32,73	3.10	9 (40%)	26,54,113	2.57	10 (38%)
17	SF4	C	3003	-	0,12,12	0.00	-	-		
15	CLA	2	606	-	22,32,73	3.08	9 (40%)	26,54,113	2.55	10 (38%)
15	CLA	A	1116	-	49,63,73	1.45	8 (16%)	55,101,113	1.92	10 (18%)
15	CLA	B	1229	-	44,58,73	1.51	7 (15%)	49,95,113	2.17	13 (26%)
15	CLA	B	1202	-	22,32,73	3.08	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	F	1302	-	22,32,73	3.07	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	3	610	-	22,32,73	3.09	9 (40%)	26,54,113	2.58	10 (38%)
15	CLA	4	605	-	22,32,73	3.08	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	3	604	-	22,32,73	3.08	9 (40%)	26,54,113	2.61	10 (38%)
15	CLA	L	1502	-	22,32,73	3.10	9 (40%)	26,54,113	2.59	10 (38%)
15	CLA	B	1227	-	22,32,73	3.08	9 (40%)	26,54,113	2.58	9 (34%)
15	CLA	B	1216	-	22,32,73	3.10	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	B	1239	-	22,32,73	3.08	9 (40%)	26,54,113	2.58	10 (38%)
15	CLA	A	1105	-	49,63,73	1.43	8 (16%)	55,101,113	2.04	9 (16%)
15	CLA	A	1131	-	36,53,73	1.66	8 (22%)	39,89,113	2.07	6 (15%)
15	CLA	3	602	-	22,32,73	3.09	9 (40%)	26,54,113	2.58	10 (38%)
15	CLA	2	613	-	22,32,73	3.07	9 (40%)	26,54,113	2.55	10 (38%)
15	CLA	A	1136	-	22,32,73	3.07	9 (40%)	26,54,113	2.55	10 (38%)
15	CLA	A	1107	3	49,63,73	1.45	8 (16%)	55,101,113	1.99	11 (20%)
15	CLA	A	1114	-	40,54,73	1.57	8 (20%)	44,90,113	1.96	7 (15%)
15	CLA	B	1021	-	36,53,73	1.63	7 (19%)	39,89,113	2.02	8 (20%)
18	BCR	B	4005	-	41,41,41	1.86	4 (9%)	56,56,56	4.36	18 (32%)
15	CLA	2	612	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1101	-	36,53,73	1.66	8 (22%)	39,89,113	2.09	7 (17%)
15	CLA	4	608	-	22,32,73	3.07	9 (40%)	26,54,113	2.57	10 (38%)
17	SF4	A	3001	-	0,12,12	0.00	-	-		
15	CLA	A	1135	-	22,32,73	3.10	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	A	1117	-	49,63,73	1.42	7 (14%)	55,101,113	2.03	10 (18%)
15	CLA	B	1238	-	22,32,73	3.10	9 (40%)	26,54,113	2.56	10 (38%)
18	BCR	A	4017	-	41,41,41	1.85	4 (9%)	56,56,56	4.51	16 (28%)
15	CLA	B	1223	-	22,32,73	3.08	9 (40%)	26,54,113	2.56	10 (38%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	CLA	A	1011	-	44,58,73	1.49	7 (15%)	49,95,113	2.16	12 (24%)
15	CLA	A	1122	-	22,32,73	3.06	9 (40%)	26,54,113	2.58	10 (38%)
15	CLA	4	612	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	2	605	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1132	-	22,32,73	3.09	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	A	1133	-	22,32,73	3.07	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	B	1221	-	22,32,73	3.07	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	O	1601	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1141	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
18	BCR	A	4007	-	41,41,41	1.82	5 (12%)	56,56,56	4.60	18 (32%)
15	CLA	2	611	-	22,32,73	3.08	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1103	-	49,63,73	1.40	7 (14%)	55,101,113	1.99	12 (21%)
15	CLA	4	615	-	22,32,73	3.08	9 (40%)	26,54,113	2.54	10 (38%)
15	CLA	2	603	-	22,32,73	3.10	9 (40%)	26,54,113	2.54	10 (38%)
15	CLA	A	1129	-	22,32,73	3.08	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1126	-	49,63,73	1.43	8 (16%)	55,101,113	1.96	10 (18%)
15	CLA	B	1228	4	22,32,73	3.04	10 (45%)	26,54,113	2.74	10 (38%)
15	CLA	A	1104	-	49,63,73	1.43	9 (18%)	55,101,113	2.00	10 (18%)
15	CLA	4	604	-	22,32,73	3.09	9 (40%)	26,54,113	2.58	10 (38%)
18	BCR	A	4002	-	41,41,41	1.84	4 (9%)	56,56,56	4.46	17 (30%)
15	CLA	2	615	-	22,32,73	3.09	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	B	1204	-	22,32,73	3.10	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	B	1230	-	41,55,73	1.53	6 (14%)	45,91,113	2.32	13 (28%)
18	BCR	B	4008	-	41,41,41	1.86	4 (9%)	56,56,56	4.55	15 (26%)
15	CLA	B	1225	-	44,58,73	1.50	7 (15%)	49,95,113	2.03	9 (18%)
15	CLA	B	1224	-	49,63,73	1.42	8 (16%)	55,101,113	1.99	11 (20%)
15	CLA	A	1138	-	22,32,73	3.09	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	B	1215	-	22,32,73	3.08	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1012	-	49,63,73	1.43	9 (18%)	55,101,113	1.95	10 (18%)
15	CLA	4	603	-	22,32,73	3.10	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	3	612	-	22,32,73	3.06	9 (40%)	26,54,113	2.54	10 (38%)
15	CLA	3	607	-	22,32,73	3.10	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1013	-	49,63,73	1.43	7 (14%)	55,101,113	1.98	11 (20%)
15	CLA	K	1402	-	22,32,73	3.06	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	A	1106	-	49,63,73	1.42	7 (14%)	55,101,113	2.00	10 (18%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	CLA	O	1602	-	22,32,73	3.10	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	B	1212	-	22,32,73	3.07	9 (40%)	26,54,113	2.55	10 (38%)
17	SF4	C	3002	-	0,12,12	0.00	-	-		
15	CLA	A	1118	-	22,32,73	3.10	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	A	1139	-	22,32,73	3.07	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	4	616	-	22,32,73	3.07	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	2	601	-	22,32,73	3.09	9 (40%)	26,54,113	2.58	10 (38%)
15	CLA	2	608	-	22,32,73	3.09	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	B	1220	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1110	-	22,32,73	3.10	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	4	610	-	22,32,73	3.09	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	A	1108	-	22,32,73	3.10	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	2	607	1	22,32,73	3.10	9 (40%)	26,54,113	2.47	9 (34%)
16	PQN	A	2001	-	34,34,34	0.43	0	42,45,45	1.07	3 (7%)
15	CLA	3	608	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	2	602	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	B	1207	-	22,32,73	3.06	9 (40%)	26,54,113	2.58	10 (38%)
15	CLA	B	1208	-	22,32,73	3.08	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	3	611	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1109	-	22,32,73	3.11	9 (40%)	26,54,113	2.55	10 (38%)
15	CLA	A	1123	-	22,32,73	3.10	9 (40%)	26,54,113	2.55	10 (38%)
15	CLA	L	1503	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1134	-	22,32,73	3.10	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	4	609	-	22,32,73	3.08	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	A	1128	-	22,32,73	3.10	9 (40%)	26,54,113	2.55	10 (38%)
15	CLA	4	606	-	22,32,73	3.08	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	B	1214	-	22,32,73	3.08	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	2	604	-	22,32,73	3.11	9 (40%)	26,54,113	2.59	10 (38%)
15	CLA	A	1115	-	49,63,73	1.44	8 (16%)	55,101,113	2.00	11 (20%)
18	BCR	A	4008	-	41,41,41	1.84	4 (9%)	56,56,56	4.37	13 (23%)
15	CLA	B	1218	-	22,32,73	3.08	9 (40%)	26,54,113	2.56	10 (38%)
16	PQN	B	2002	-	34,34,34	0.39	0	42,45,45	1.16	3 (7%)
15	CLA	B	1217	-	22,32,73	3.08	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1113	-	22,32,73	3.10	9 (40%)	26,54,113	2.57	10 (38%)
18	BCR	I	4018	-	41,41,41	1.86	4 (9%)	56,56,56	4.33	17 (30%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\#\|Z\|>2$	Counts	RMSZ	$\#\|Z\|>2$
15	CLA	B	1022	-	22,32,73	3.07	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	B	1234	-	22,32,73	3.09	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1127	-	22,32,73	3.09	8 (36%)	26,54,113	2.56	10 (38%)
15	CLA	A	1119	-	22,32,73	3.08	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	B	1226	-	49,63,73	1.43	6 (12%)	55,101,113	2.06	10 (18%)
15	CLA	B	1210	-	22,32,73	3.08	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	B	1211	-	22,32,73	3.10	9 (40%)	26,54,113	2.57	10 (38%)
15	CLA	A	1125	-	22,32,73	3.06	9 (40%)	26,54,113	2.56	10 (38%)
15	CLA	B	1205	-	22,32,73	3.04	9 (40%)	26,54,113	2.62	10 (38%)

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
15	CLA	A	1102	-	3/3/7/25	-	-
15	CLA	3	601	-	3/3/7/25	-	-
15	CLA	4	602	-	3/3/7/25	-	-
15	CLA	K	1401	-	3/3/7/25	-	-
15	CLA	B	1203	-	3/3/7/25	-	-
15	CLA	B	1222	-	3/3/7/25	-	-
15	CLA	B	1201	-	3/3/7/25	-	-
15	CLA	A	1111	-	3/3/7/25	-	-
15	CLA	2	614	-	3/3/7/25	-	-
15	CLA	A	1140	-	3/3/7/25	-	-
15	CLA	3	606	-	3/3/7/25	-	-
15	CLA	B	1235	-	3/3/7/25	-	-
15	CLA	B	1206	-	3/3/7/25	-	-
15	CLA	3	603	-	3/3/7/25	-	-
15	CLA	A	1121	-	3/3/7/25	-	-
15	CLA	A	1120	-	3/3/7/25	-	-
15	CLA	B	1232	-	3/3/20/25	17/37/135/135	-
15	CLA	L	1501	-	3/3/7/25	-	-
15	CLA	A	1137	-	3/3/7/25	-	-
15	CLA	4	611	-	3/3/7/25	-	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	F	1301	-	3/3/16/25	4/11/111/135	-
15	CLA	B	1231	-	3/3/7/25	-	-
15	CLA	4	601	-	3/3/7/25	-	-
15	CLA	B	1023	-	3/3/17/25	9/19/117/135	-
15	CLA	3	614	-	3/3/7/25	-	-
15	CLA	2	610	-	3/3/7/25	-	-
15	CLA	J	1302	-	3/3/17/25	13/19/117/135	-
18	BCR	A	4011	-	-	11/29/63/63	0/2/2/2
15	CLA	A	1130	-	3/3/18/25	14/25/123/135	-
15	CLA	O	1603	-	3/3/7/25	-	-
15	CLA	B	1209	-	3/3/7/25	-	-
15	CLA	A	1112	-	3/3/7/25	-	-
15	CLA	2	616	-	3/3/7/25	-	-
15	CLA	B	1219	-	3/3/7/25	-	-
15	CLA	B	1236	-	3/3/16/25	6/11/111/135	-
15	CLA	B	1237	-	3/3/18/25	11/25/123/135	-
15	CLA	A	1124	-	3/3/7/25	-	-
17	SF4	C	3003	-	-	-	0/6/5/5
15	CLA	2	606	-	3/3/7/25	-	-
15	CLA	A	1116	-	3/3/18/25	16/25/123/135	-
15	CLA	B	1229	-	3/3/17/25	6/19/117/135	-
15	CLA	B	1202	-	3/3/7/25	-	-
15	CLA	F	1302	-	3/3/7/25	-	-
15	CLA	3	610	-	3/3/7/25	-	-
15	CLA	4	605	-	3/3/7/25	-	-
15	CLA	3	604	-	3/3/7/25	-	-
15	CLA	L	1502	-	3/3/7/25	-	-
15	CLA	B	1227	-	3/3/7/25	-	-
15	CLA	B	1216	-	3/3/7/25	-	-
15	CLA	B	1239	-	3/3/7/25	-	-
15	CLA	A	1105	-	3/3/18/25	9/25/123/135	-
15	CLA	A	1131	-	3/3/16/25	2/11/111/135	-
15	CLA	3	602	-	3/3/7/25	-	-
15	CLA	2	613	-	3/3/7/25	-	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	A	1136	-	3/3/7/25	-	-
15	CLA	A	1107	3	3/3/18/25	10/25/123/135	-
15	CLA	A	1114	-	3/3/16/25	6/15/113/135	-
15	CLA	B	1021	-	3/3/16/25	6/11/111/135	-
18	BCR	B	4005	-	-	15/29/63/63	0/2/2/2
15	CLA	2	612	-	3/3/7/25	-	-
15	CLA	A	1101	-	3/3/16/25	5/11/111/135	-
15	CLA	4	608	-	3/3/7/25	-	-
17	SF4	A	3001	-	-	-	0/6/5/5
15	CLA	A	1135	-	3/3/7/25	-	-
15	CLA	A	1117	-	3/3/18/25	12/25/123/135	-
15	CLA	B	1238	-	3/3/7/25	-	-
18	BCR	A	4017	-	-	12/29/63/63	0/2/2/2
15	CLA	B	1223	-	3/3/7/25	-	-
15	CLA	A	1011	-	3/3/17/25	6/19/117/135	-
15	CLA	A	1122	-	3/3/7/25	-	-
15	CLA	4	612	-	3/3/7/25	-	-
15	CLA	2	605	-	3/3/7/25	-	-
15	CLA	A	1132	-	3/3/7/25	-	-
15	CLA	A	1133	-	3/3/7/25	-	-
15	CLA	B	1221	-	3/3/7/25	-	-
15	CLA	O	1601	-	3/3/7/25	-	-
15	CLA	A	1141	-	3/3/7/25	-	-
18	BCR	A	4007	-	-	18/29/63/63	0/2/2/2
15	CLA	2	611	-	3/3/7/25	-	-
15	CLA	A	1103	-	3/3/18/25	10/25/123/135	-
15	CLA	4	615	-	3/3/7/25	-	-
15	CLA	2	603	-	3/3/7/25	-	-
15	CLA	A	1129	-	3/3/7/25	-	-
15	CLA	A	1126	-	3/3/18/25	13/25/123/135	-
15	CLA	B	1228	4	3/3/7/25	-	-
15	CLA	A	1104	-	3/3/18/25	12/25/123/135	-
15	CLA	4	604	-	3/3/7/25	-	-
18	BCR	A	4002	-	-	9/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	2	615	-	3/3/7/25	-	-
15	CLA	B	1204	-	3/3/7/25	-	-
15	CLA	B	1230	-	3/3/16/25	9/16/114/135	-
18	BCR	B	4008	-	-	14/29/63/63	0/2/2/2
15	CLA	B	1225	-	3/3/17/25	10/19/117/135	-
15	CLA	B	1224	-	3/3/18/25	15/25/123/135	-
15	CLA	A	1138	-	3/3/7/25	-	-
15	CLA	B	1215	-	3/3/7/25	-	-
15	CLA	A	1012	-	3/3/18/25	16/25/123/135	-
15	CLA	4	603	-	3/3/7/25	-	-
15	CLA	3	612	-	3/3/7/25	-	-
15	CLA	3	607	-	3/3/7/25	-	-
15	CLA	A	1013	-	3/3/18/25	15/25/123/135	-
15	CLA	K	1402	-	3/3/7/25	-	-
15	CLA	A	1106	-	3/3/18/25	12/25/123/135	-
15	CLA	O	1602	-	3/3/7/25	-	-
15	CLA	B	1212	-	3/3/7/25	-	-
17	SF4	C	3002	-	-	-	0/6/5/5
15	CLA	A	1118	-	3/3/7/25	-	-
15	CLA	A	1139	-	3/3/7/25	-	-
15	CLA	4	616	-	3/3/7/25	-	-
15	CLA	2	601	-	3/3/7/25	-	-
15	CLA	2	608	-	3/3/7/25	-	-
15	CLA	B	1220	-	3/3/7/25	-	-
15	CLA	A	1110	-	3/3/7/25	-	-
15	CLA	4	610	-	3/3/7/25	-	-
15	CLA	A	1108	-	3/3/7/25	-	-
15	CLA	2	607	1	3/3/7/25	-	-
16	PQN	A	2001	-	-	10/23/43/43	0/2/2/2
15	CLA	3	608	-	3/3/7/25	-	-
15	CLA	2	602	-	3/3/7/25	-	-
15	CLA	B	1207	-	3/3/7/25	-	-
15	CLA	B	1208	-	3/3/7/25	-	-
15	CLA	3	611	-	3/3/7/25	-	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
15	CLA	A	1109	-	3/3/7/25	-	-
15	CLA	A	1123	-	3/3/7/25	-	-
15	CLA	L	1503	-	3/3/7/25	-	-
15	CLA	A	1134	-	3/3/7/25	-	-
15	CLA	4	609	-	3/3/7/25	-	-
15	CLA	A	1128	-	3/3/7/25	-	-
15	CLA	4	606	-	3/3/7/25	-	-
15	CLA	B	1214	-	3/3/7/25	-	-
15	CLA	2	604	-	3/3/7/25	-	-
15	CLA	A	1115	-	3/3/18/25	15/25/123/135	-
18	BCR	A	4008	-	-	14/29/63/63	0/2/2/2
15	CLA	B	1218	-	3/3/7/25	-	-
16	PQN	B	2002	-	-	7/23/43/43	0/2/2/2
15	CLA	B	1217	-	3/3/7/25	-	-
15	CLA	A	1113	-	3/3/7/25	-	-
18	BCR	I	4018	-	-	17/29/63/63	0/2/2/2
15	CLA	B	1022	-	3/3/7/25	-	-
15	CLA	B	1234	-	3/3/7/25	-	-
15	CLA	A	1127	-	3/3/7/25	-	-
15	CLA	A	1119	-	3/3/7/25	-	-
15	CLA	B	1226	-	3/3/18/25	11/25/123/135	-
15	CLA	B	1210	-	3/3/7/25	-	-
15	CLA	B	1211	-	3/3/7/25	-	-
15	CLA	A	1125	-	3/3/7/25	-	-
15	CLA	B	1205	-	3/3/7/25	-	-

All (1200) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	A	1111	CLA	CHB-C4A	9.52	1.42	1.34
15	A	1110	CLA	CHB-C4A	9.50	1.42	1.34
15	2	607	CLA	CHB-C4A	9.50	1.42	1.34
15	A	1134	CLA	CHB-C4A	9.48	1.42	1.34
15	A	1112	CLA	CHB-C4A	9.47	1.42	1.34
15	2	604	CLA	CHB-C4A	9.47	1.42	1.34
15	A	1118	CLA	CHB-C4A	9.47	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	2	603	CLA	CHB-C4A	9.46	1.42	1.34
15	A	1113	CLA	CHB-C4A	9.46	1.42	1.34
15	O	1603	CLA	CHB-C4A	9.45	1.42	1.34
15	B	1209	CLA	CHB-C4A	9.45	1.42	1.34
15	A	1127	CLA	CHB-C4A	9.45	1.42	1.34
15	A	1123	CLA	CHB-C4A	9.45	1.42	1.34
15	A	1128	CLA	CHB-C4A	9.45	1.42	1.34
15	4	603	CLA	CHB-C4A	9.44	1.42	1.34
15	B	1204	CLA	CHB-C4A	9.44	1.42	1.34
15	A	1138	CLA	CHB-C4A	9.43	1.42	1.34
15	A	1109	CLA	CHB-C4A	9.43	1.42	1.34
15	A	1135	CLA	CHB-C4A	9.43	1.42	1.34
15	3	610	CLA	CHB-C4A	9.43	1.42	1.34
15	A	1108	CLA	CHB-C4A	9.42	1.42	1.34
15	O	1602	CLA	CHB-C4A	9.42	1.42	1.34
15	L	1502	CLA	CHB-C4A	9.42	1.42	1.34
15	2	605	CLA	CHB-C4A	9.42	1.42	1.34
15	4	610	CLA	CHB-C4A	9.42	1.42	1.34
15	B	1227	CLA	CHB-C4A	9.41	1.42	1.34
15	3	607	CLA	CHB-C4A	9.41	1.42	1.34
15	B	1211	CLA	CHB-C4A	9.41	1.42	1.34
15	2	602	CLA	CHB-C4A	9.41	1.42	1.34
15	2	614	CLA	CHB-C4A	9.40	1.42	1.34
15	B	1234	CLA	CHB-C4A	9.40	1.42	1.34
15	A	1141	CLA	CHB-C4A	9.40	1.42	1.34
15	3	608	CLA	CHB-C4A	9.40	1.42	1.34
15	A	1102	CLA	CHB-C4A	9.40	1.42	1.34
15	B	1239	CLA	CHB-C4A	9.40	1.42	1.34
15	A	1125	CLA	CHB-C4A	9.40	1.42	1.34
15	4	604	CLA	CHB-C4A	9.39	1.42	1.34
15	A	1137	CLA	CHB-C4A	9.39	1.42	1.34
15	L	1503	CLA	CHB-C4A	9.39	1.42	1.34
15	B	1219	CLA	CHB-C4A	9.39	1.42	1.34
15	2	601	CLA	CHB-C4A	9.39	1.42	1.34
15	4	601	CLA	CHB-C4A	9.38	1.42	1.34
15	B	1216	CLA	CHB-C4A	9.38	1.42	1.34
15	2	615	CLA	CHB-C4A	9.38	1.42	1.34
15	B	1201	CLA	CHB-C4A	9.38	1.42	1.34
15	A	1124	CLA	CHB-C4A	9.38	1.42	1.34
15	2	606	CLA	CHB-C4A	9.37	1.42	1.34
15	A	1129	CLA	CHB-C4A	9.37	1.42	1.34
15	2	608	CLA	CHB-C4A	9.37	1.42	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	B	1217	CLA	CHB-C4A	9.37	1.42	1.34
15	4	602	CLA	CHB-C4A	9.37	1.42	1.34
15	4	612	CLA	CHB-C4A	9.36	1.42	1.34
15	B	1238	CLA	CHB-C4A	9.36	1.42	1.34
15	B	1231	CLA	CHB-C4A	9.36	1.42	1.34
15	B	1208	CLA	CHB-C4A	9.36	1.42	1.34
15	A	1132	CLA	CHB-C4A	9.36	1.42	1.34
15	3	611	CLA	CHB-C4A	9.36	1.42	1.34
15	2	616	CLA	CHB-C4A	9.35	1.42	1.34
15	O	1601	CLA	CHB-C4A	9.35	1.42	1.34
15	B	1210	CLA	CHB-C4A	9.35	1.42	1.34
15	K	1401	CLA	CHB-C4A	9.35	1.42	1.34
15	B	1235	CLA	CHB-C4A	9.35	1.42	1.34
15	A	1120	CLA	CHB-C4A	9.35	1.42	1.34
15	4	605	CLA	CHB-C4A	9.34	1.42	1.34
15	A	1119	CLA	CHB-C4A	9.34	1.42	1.34
15	A	1140	CLA	CHB-C4A	9.34	1.42	1.34
15	B	1220	CLA	CHB-C4A	9.34	1.42	1.34
15	A	1133	CLA	CHB-C4A	9.34	1.42	1.34
15	B	1222	CLA	CHB-C4A	9.34	1.42	1.34
15	4	609	CLA	CHB-C4A	9.34	1.42	1.34
15	B	1214	CLA	CHB-C4A	9.34	1.42	1.34
15	B	1223	CLA	CHB-C4A	9.33	1.42	1.34
15	B	1206	CLA	CHB-C4A	9.33	1.42	1.34
15	4	616	CLA	CHB-C4A	9.33	1.42	1.34
15	B	1202	CLA	CHB-C4A	9.33	1.42	1.34
15	A	1139	CLA	CHB-C4A	9.32	1.42	1.34
15	3	604	CLA	CHB-C4A	9.32	1.42	1.34
15	2	612	CLA	CHB-C4A	9.32	1.42	1.34
15	B	1212	CLA	CHB-C4A	9.32	1.42	1.34
15	3	614	CLA	CHB-C4A	9.31	1.42	1.34
15	3	602	CLA	CHB-C4A	9.31	1.42	1.34
15	4	608	CLA	CHB-C4A	9.31	1.42	1.34
15	4	606	CLA	CHB-C4A	9.31	1.41	1.34
15	B	1218	CLA	CHB-C4A	9.30	1.41	1.34
15	2	613	CLA	CHB-C4A	9.30	1.41	1.34
15	A	1122	CLA	CHB-C4A	9.29	1.41	1.34
15	4	611	CLA	CHB-C4A	9.29	1.41	1.34
15	B	1022	CLA	CHB-C4A	9.29	1.41	1.34
15	2	611	CLA	CHB-C4A	9.29	1.41	1.34
15	2	610	CLA	CHB-C4A	9.29	1.41	1.34
15	4	615	CLA	CHB-C4A	9.29	1.41	1.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	A	1121	CLA	CHB-C4A	9.28	1.41	1.34
15	A	1136	CLA	CHB-C4A	9.28	1.41	1.34
15	B	1215	CLA	CHB-C4A	9.28	1.41	1.34
15	K	1402	CLA	CHB-C4A	9.27	1.41	1.34
15	B	1221	CLA	CHB-C4A	9.27	1.41	1.34
15	B	1203	CLA	CHB-C4A	9.27	1.41	1.34
15	F	1302	CLA	CHB-C4A	9.26	1.41	1.34
15	L	1501	CLA	CHB-C4A	9.25	1.41	1.34
15	3	612	CLA	CHB-C4A	9.22	1.41	1.34
15	3	606	CLA	CHB-C4A	9.20	1.41	1.34
15	3	603	CLA	CHB-C4A	9.20	1.41	1.34
15	B	1207	CLA	CHB-C4A	9.12	1.41	1.34
15	B	1205	CLA	CHB-C4A	9.09	1.41	1.34
15	3	601	CLA	CHB-C4A	9.08	1.41	1.34
15	B	1228	CLA	CHB-C4A	8.58	1.41	1.34
18	I	4018	BCR	C10-C9	7.43	1.45	1.35
18	B	4008	BCR	C10-C9	7.30	1.45	1.35
18	B	4005	BCR	C10-C9	7.25	1.45	1.35
18	A	4011	BCR	C10-C9	7.21	1.45	1.35
18	A	4002	BCR	C10-C9	7.13	1.45	1.35
18	A	4017	BCR	C10-C9	7.08	1.45	1.35
18	A	4008	BCR	C10-C9	6.99	1.45	1.35
18	A	4007	BCR	C10-C9	6.59	1.44	1.35
15	B	1232	CLA	MG-NA	6.46	2.21	2.06
15	A	1101	CLA	MG-NA	6.44	2.21	2.06
15	A	1107	CLA	MG-NA	6.43	2.21	2.06
15	J	1302	CLA	MG-NA	6.42	2.21	2.06
15	A	1126	CLA	MG-NA	6.41	2.21	2.06
15	F	1301	CLA	MG-NA	6.40	2.21	2.06
15	B	1237	CLA	MG-NA	6.40	2.21	2.06
15	A	1116	CLA	MG-NA	6.40	2.21	2.06
15	A	1013	CLA	MG-NA	6.39	2.21	2.06
15	B	1236	CLA	MG-NA	6.38	2.21	2.06
15	A	1115	CLA	MG-NA	6.38	2.21	2.06
15	A	1130	CLA	MG-NA	6.38	2.21	2.06
15	A	1105	CLA	MG-NA	6.37	2.21	2.06
15	A	1104	CLA	MG-NA	6.37	2.21	2.06
15	A	1131	CLA	MG-NA	6.36	2.21	2.06
15	A	1114	CLA	MG-NA	6.35	2.21	2.06
15	B	1023	CLA	MG-NA	6.34	2.21	2.06
15	A	1106	CLA	MG-NA	6.34	2.21	2.06
15	A	1012	CLA	MG-NA	6.33	2.21	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	B	1021	CLA	MG-NA	6.33	2.21	2.06
15	A	1117	CLA	MG-NA	6.33	2.21	2.06
15	A	1103	CLA	MG-NA	6.32	2.21	2.06
15	B	1224	CLA	MG-NA	6.28	2.21	2.06
15	B	1225	CLA	MG-NA	6.28	2.21	2.06
15	A	1011	CLA	MG-NA	6.26	2.21	2.06
15	B	1229	CLA	MG-NA	6.25	2.21	2.06
15	B	1226	CLA	MG-NA	6.24	2.21	2.06
15	B	1230	CLA	MG-NA	6.20	2.21	2.06
18	B	4008	BCR	C24-C23	5.83	1.50	1.33
18	B	4005	BCR	C24-C23	5.80	1.50	1.33
18	A	4002	BCR	C24-C23	5.76	1.50	1.33
18	A	4011	BCR	C24-C23	5.76	1.50	1.33
18	A	4007	BCR	C24-C23	5.71	1.50	1.33
18	A	4017	BCR	C24-C23	5.70	1.50	1.33
18	A	4008	BCR	C24-C23	5.63	1.50	1.33
18	I	4018	BCR	C24-C23	5.56	1.49	1.33
18	A	4007	BCR	C11-C12	-5.37	1.20	1.34
18	A	4017	BCR	C11-C12	-5.24	1.21	1.34
15	A	1109	CLA	C3B-C4B	5.23	1.49	1.39
15	A	1127	CLA	C3B-C4B	5.22	1.49	1.39
18	A	4008	BCR	C11-C12	-5.21	1.21	1.34
15	A	1108	CLA	C3B-C4B	5.21	1.49	1.39
15	A	1134	CLA	C3B-C4B	5.20	1.49	1.39
15	K	1401	CLA	C3B-C4B	5.20	1.49	1.39
15	A	1121	CLA	C3B-C4B	5.20	1.49	1.39
15	A	1111	CLA	C3B-C4B	5.20	1.49	1.39
15	B	1207	CLA	C3B-C4B	5.19	1.49	1.39
15	B	1231	CLA	C3B-C4B	5.19	1.49	1.39
15	A	1135	CLA	C3B-C4B	5.19	1.49	1.39
15	2	612	CLA	C3B-C4B	5.19	1.49	1.39
15	2	605	CLA	C3B-C4B	5.19	1.49	1.39
15	A	1129	CLA	C3B-C4B	5.19	1.49	1.39
15	3	614	CLA	C3B-C4B	5.19	1.49	1.39
15	A	1137	CLA	C3B-C4B	5.19	1.49	1.39
15	2	610	CLA	C3B-C4B	5.18	1.49	1.39
15	2	615	CLA	C3B-C4B	5.18	1.49	1.39
15	B	1221	CLA	C3B-C4B	5.18	1.49	1.39
15	B	1204	CLA	C3B-C4B	5.18	1.49	1.39
15	A	1132	CLA	C3B-C4B	5.18	1.49	1.39
15	3	611	CLA	C3B-C4B	5.18	1.49	1.39
15	B	1201	CLA	C3B-C4B	5.17	1.49	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	2	601	CLA	C3B-C4B	5.17	1.49	1.39
15	2	604	CLA	C3B-C4B	5.17	1.49	1.39
15	3	608	CLA	C3B-C4B	5.17	1.49	1.39
15	A	1118	CLA	C3B-C4B	5.17	1.49	1.39
15	2	607	CLA	C3B-C4B	5.17	1.49	1.39
15	A	1112	CLA	C3B-C4B	5.17	1.49	1.39
15	2	606	CLA	C3B-C4B	5.17	1.49	1.39
15	F	1302	CLA	C3B-C4B	5.17	1.49	1.39
15	B	1215	CLA	C3B-C4B	5.17	1.49	1.39
15	B	1216	CLA	C3B-C4B	5.17	1.49	1.39
15	4	615	CLA	C3B-C4B	5.17	1.49	1.39
15	2	608	CLA	C3B-C4B	5.17	1.49	1.39
15	2	603	CLA	C3B-C4B	5.16	1.49	1.39
15	4	602	CLA	C3B-C4B	5.16	1.49	1.39
15	A	1141	CLA	C3B-C4B	5.16	1.49	1.39
15	2	602	CLA	C3B-C4B	5.16	1.49	1.39
15	O	1602	CLA	C3B-C4B	5.16	1.49	1.39
15	B	1209	CLA	C3B-C4B	5.16	1.49	1.39
15	A	1113	CLA	C3B-C4B	5.16	1.49	1.39
15	3	601	CLA	C3B-C4B	5.16	1.49	1.39
15	A	1140	CLA	C3B-C4B	5.16	1.49	1.39
15	B	1207	CLA	C3A-C2A	-5.16	1.39	1.52
15	B	1202	CLA	C3B-C4B	5.16	1.49	1.39
15	B	1238	CLA	C3B-C4B	5.16	1.49	1.39
15	4	601	CLA	C3B-C4B	5.16	1.49	1.39
15	4	603	CLA	C3B-C4B	5.16	1.49	1.39
15	A	1128	CLA	C3B-C4B	5.16	1.49	1.39
15	B	1022	CLA	C3B-C4B	5.16	1.49	1.39
15	B	1203	CLA	C3B-C4B	5.16	1.49	1.39
15	3	610	CLA	C3B-C4B	5.16	1.49	1.39
15	A	1138	CLA	C3B-C4B	5.16	1.49	1.39
15	A	1124	CLA	C3B-C4B	5.15	1.49	1.39
15	4	604	CLA	C3B-C4B	5.15	1.49	1.39
15	A	1102	CLA	C3B-C4B	5.15	1.49	1.39
15	O	1601	CLA	C3B-C4B	5.15	1.49	1.39
15	4	612	CLA	C3B-C4B	5.15	1.49	1.39
15	B	1211	CLA	C3B-C4B	5.15	1.49	1.39
15	2	613	CLA	C3B-C4B	5.15	1.49	1.39
15	3	602	CLA	C3B-C4B	5.15	1.49	1.39
15	3	603	CLA	C3B-C4B	5.15	1.49	1.39
15	4	611	CLA	C3B-C4B	5.15	1.49	1.39
15	O	1603	CLA	C3B-C4B	5.15	1.49	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	A	1123	CLA	C3B-C4B	5.15	1.49	1.39
15	4	616	CLA	C3B-C4B	5.15	1.49	1.39
15	B	1217	CLA	C3B-C4B	5.15	1.49	1.39
15	A	1136	CLA	C3B-C4B	5.14	1.49	1.39
15	B	1220	CLA	C3B-C4B	5.14	1.49	1.39
15	3	604	CLA	C3A-C2A	-5.14	1.39	1.52
15	B	1228	CLA	C3B-C4B	5.14	1.49	1.39
15	B	1206	CLA	C3B-C4B	5.14	1.49	1.39
15	B	1219	CLA	C3B-C4B	5.14	1.49	1.39
15	4	606	CLA	C3B-C4B	5.14	1.49	1.39
15	L	1502	CLA	C3B-C4B	5.14	1.49	1.39
15	B	1214	CLA	C3B-C4B	5.14	1.48	1.39
15	B	1208	CLA	C3B-C4B	5.14	1.48	1.39
15	3	604	CLA	C3B-C4B	5.14	1.48	1.39
15	L	1503	CLA	C3B-C4B	5.14	1.48	1.39
15	B	1239	CLA	C3B-C4B	5.13	1.48	1.39
15	A	1110	CLA	C3B-C4B	5.13	1.48	1.39
15	4	610	CLA	C3B-C4B	5.13	1.48	1.39
15	3	607	CLA	C3B-C4B	5.13	1.48	1.39
15	2	611	CLA	C3B-C4B	5.13	1.48	1.39
15	2	614	CLA	C3B-C4B	5.13	1.48	1.39
15	B	1218	CLA	C3B-C4B	5.13	1.48	1.39
15	A	1120	CLA	C3B-C4B	5.13	1.48	1.39
15	A	1133	CLA	C3B-C4B	5.13	1.48	1.39
15	A	1139	CLA	C3B-C4B	5.13	1.48	1.39
15	4	605	CLA	C3B-C4B	5.13	1.48	1.39
15	B	1223	CLA	C3B-C4B	5.13	1.48	1.39
15	B	1222	CLA	C3B-C4B	5.13	1.48	1.39
15	B	1235	CLA	C3B-C4B	5.13	1.48	1.39
15	B	1210	CLA	C3B-C4B	5.12	1.48	1.39
15	B	1203	CLA	C3A-C2A	-5.12	1.39	1.52
15	K	1402	CLA	C3B-C4B	5.12	1.48	1.39
15	3	603	CLA	C3A-C2A	-5.12	1.39	1.52
15	B	1234	CLA	C3B-C4B	5.11	1.48	1.39
15	3	612	CLA	C3A-C2A	-5.11	1.39	1.52
15	A	1119	CLA	C3B-C4B	5.11	1.48	1.39
15	2	616	CLA	C3B-C4B	5.11	1.48	1.39
15	3	606	CLA	C3B-C4B	5.11	1.48	1.39
15	B	1022	CLA	C3A-C2A	-5.11	1.39	1.52
15	A	1125	CLA	C3A-C2A	-5.11	1.39	1.52
15	B	1228	CLA	C3A-C2A	-5.11	1.39	1.52
15	B	1205	CLA	C3B-C4B	5.11	1.48	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
18	B	4005	BCR	C11-C12	-5.11	1.21	1.34
15	4	602	CLA	C3A-C2A	-5.11	1.39	1.52
15	4	609	CLA	C3B-C4B	5.10	1.48	1.39
15	A	1132	CLA	C3A-C2A	-5.10	1.39	1.52
15	B	1223	CLA	C3A-C2A	-5.10	1.39	1.52
15	B	1211	CLA	C3A-C2A	-5.10	1.39	1.52
15	B	1214	CLA	C3A-C2A	-5.10	1.39	1.52
15	3	602	CLA	C3A-C2A	-5.10	1.39	1.52
15	4	608	CLA	C3B-C4B	5.10	1.48	1.39
15	4	603	CLA	C3A-C2A	-5.10	1.39	1.52
15	4	608	CLA	C3A-C2A	-5.10	1.39	1.52
15	2	611	CLA	C3A-C2A	-5.10	1.39	1.52
15	3	612	CLA	C3B-C4B	5.10	1.48	1.39
15	K	1401	CLA	C3A-C2A	-5.10	1.39	1.52
15	A	1124	CLA	C3A-C2A	-5.10	1.39	1.52
15	A	1112	CLA	C3A-C2A	-5.09	1.39	1.52
15	B	1234	CLA	C3A-C2A	-5.09	1.39	1.52
15	B	1239	CLA	C3A-C2A	-5.09	1.39	1.52
15	B	1210	CLA	C3A-C2A	-5.09	1.39	1.52
15	B	1212	CLA	C3A-C2A	-5.09	1.39	1.52
15	3	607	CLA	C3A-C2A	-5.09	1.39	1.52
15	2	614	CLA	C3A-C2A	-5.09	1.39	1.52
15	2	604	CLA	C3A-C2A	-5.09	1.39	1.52
15	2	616	CLA	C3A-C2A	-5.09	1.39	1.52
15	B	1222	CLA	C3A-C2A	-5.09	1.39	1.52
15	2	608	CLA	C3A-C2A	-5.09	1.39	1.52
15	3	611	CLA	C3A-C2A	-5.09	1.39	1.52
15	A	1113	CLA	C3A-C2A	-5.09	1.39	1.52
15	2	603	CLA	C3A-C2A	-5.09	1.39	1.52
15	L	1501	CLA	C3A-C2A	-5.09	1.39	1.52
15	4	612	CLA	C3A-C2A	-5.09	1.39	1.52
15	B	1217	CLA	C3A-C2A	-5.09	1.39	1.52
18	A	4002	BCR	C11-C12	-5.09	1.21	1.34
15	B	1208	CLA	C3A-C2A	-5.09	1.39	1.52
15	A	1134	CLA	C3A-C2A	-5.09	1.39	1.52
15	A	1119	CLA	C3A-C2A	-5.09	1.39	1.52
15	A	1102	CLA	C3A-C2A	-5.09	1.39	1.52
15	4	605	CLA	C3A-C2A	-5.09	1.39	1.52
15	B	1212	CLA	C3B-C4B	5.09	1.48	1.39
15	B	1238	CLA	C3A-C2A	-5.09	1.39	1.52
15	4	616	CLA	C3A-C2A	-5.08	1.39	1.52
15	A	1118	CLA	C3A-C2A	-5.08	1.39	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	A	1129	CLA	C3A-C2A	-5.08	1.39	1.52
15	A	1133	CLA	C3A-C2A	-5.08	1.39	1.52
15	B	1227	CLA	C3A-C2A	-5.08	1.39	1.52
15	2	607	CLA	C3A-C2A	-5.08	1.39	1.52
15	3	606	CLA	C3A-C2A	-5.08	1.39	1.52
15	4	604	CLA	C3A-C2A	-5.08	1.39	1.52
15	3	614	CLA	C3A-C2A	-5.08	1.39	1.52
15	A	1141	CLA	C3A-C2A	-5.08	1.39	1.52
15	A	1108	CLA	C3A-C2A	-5.08	1.39	1.52
18	A	4011	BCR	C11-C12	-5.08	1.21	1.34
15	2	602	CLA	C3A-C2A	-5.08	1.39	1.52
15	B	1202	CLA	C3A-C2A	-5.08	1.39	1.52
15	2	613	CLA	C3A-C2A	-5.08	1.39	1.52
15	4	611	CLA	C3A-C2A	-5.08	1.39	1.52
15	O	1603	CLA	C3A-C2A	-5.08	1.39	1.52
15	2	606	CLA	C3A-C2A	-5.08	1.39	1.52
15	O	1601	CLA	C3A-C2A	-5.08	1.39	1.52
15	3	610	CLA	C3A-C2A	-5.08	1.39	1.52
15	K	1402	CLA	C3A-C2A	-5.08	1.39	1.52
15	A	1139	CLA	C3A-C2A	-5.08	1.39	1.52
15	A	1122	CLA	C3B-C4B	5.08	1.48	1.39
15	2	610	CLA	C3A-C2A	-5.08	1.39	1.52
15	A	1109	CLA	C3A-C2A	-5.07	1.39	1.52
15	L	1501	CLA	C3B-C4B	5.07	1.48	1.39
15	B	1215	CLA	C3A-C2A	-5.07	1.39	1.52
15	2	601	CLA	C3A-C2A	-5.07	1.39	1.52
15	L	1502	CLA	C3A-C2A	-5.07	1.39	1.52
15	B	1221	CLA	C3A-C2A	-5.07	1.39	1.52
15	A	1135	CLA	C3A-C2A	-5.07	1.39	1.52
18	I	4018	BCR	C11-C12	-5.07	1.21	1.34
15	F	1302	CLA	C3A-C2A	-5.07	1.39	1.52
15	2	615	CLA	C3A-C2A	-5.07	1.39	1.52
15	B	1231	CLA	C3A-C2A	-5.07	1.39	1.52
15	4	615	CLA	C3A-C2A	-5.07	1.39	1.52
15	L	1503	CLA	C3A-C2A	-5.07	1.39	1.52
15	A	1122	CLA	C3A-C2A	-5.07	1.39	1.52
15	A	1138	CLA	C3A-C2A	-5.07	1.39	1.52
15	B	1204	CLA	C3A-C2A	-5.07	1.39	1.52
15	3	601	CLA	C3A-C2A	-5.07	1.39	1.52
15	A	1111	CLA	C3A-C2A	-5.07	1.39	1.52
15	B	1216	CLA	C3A-C2A	-5.07	1.39	1.52
15	4	601	CLA	C3A-C2A	-5.07	1.39	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	O	1602	CLA	C3A-C2A	-5.07	1.39	1.52
15	3	608	CLA	C3A-C2A	-5.07	1.39	1.52
15	A	1123	CLA	C3A-C2A	-5.07	1.39	1.52
15	B	1205	CLA	C3A-C2A	-5.07	1.39	1.52
15	B	1206	CLA	C3A-C2A	-5.06	1.39	1.52
15	A	1121	CLA	C3A-C2A	-5.06	1.39	1.52
15	4	610	CLA	C3A-C2A	-5.06	1.39	1.52
15	B	1218	CLA	C3A-C2A	-5.06	1.39	1.52
15	B	1220	CLA	C3A-C2A	-5.06	1.39	1.52
15	A	1128	CLA	C3A-C2A	-5.06	1.39	1.52
15	2	612	CLA	C3A-C2A	-5.06	1.39	1.52
15	2	605	CLA	C3A-C2A	-5.06	1.39	1.52
15	B	1209	CLA	C3A-C2A	-5.06	1.39	1.52
18	B	4008	BCR	C11-C12	-5.06	1.21	1.34
15	4	609	CLA	C3A-C2A	-5.06	1.39	1.52
15	A	1120	CLA	C3A-C2A	-5.06	1.39	1.52
15	A	1137	CLA	C3A-C2A	-5.06	1.39	1.52
15	4	606	CLA	C3A-C2A	-5.06	1.39	1.52
15	B	1219	CLA	C3A-C2A	-5.05	1.39	1.52
15	A	1136	CLA	C3A-C2A	-5.05	1.39	1.52
15	A	1110	CLA	C3A-C2A	-5.05	1.39	1.52
15	B	1235	CLA	C3A-C2A	-5.05	1.39	1.52
15	B	1201	CLA	C3A-C2A	-5.05	1.39	1.52
15	A	1140	CLA	C3A-C2A	-5.04	1.39	1.52
15	B	1227	CLA	C3B-C4B	5.03	1.48	1.39
15	A	1127	CLA	C3A-C2A	-5.03	1.39	1.52
15	A	1125	CLA	C3B-C4B	4.94	1.48	1.39
18	A	4008	BCR	C16-C17	-4.37	1.29	1.43
18	I	4018	BCR	C16-C17	-4.35	1.30	1.43
18	A	4011	BCR	C16-C17	-4.29	1.30	1.43
18	A	4017	BCR	C16-C17	-4.27	1.30	1.43
18	B	4005	BCR	C16-C17	-4.20	1.30	1.43
18	A	4007	BCR	C16-C17	-4.19	1.30	1.43
18	B	4008	BCR	C16-C17	-4.19	1.30	1.43
18	A	4002	BCR	C16-C17	-4.17	1.30	1.43
15	B	1228	CLA	C1B-NB	3.92	1.38	1.35
15	A	1127	CLA	C1B-NB	3.86	1.38	1.35
15	A	1140	CLA	C1B-NB	3.80	1.38	1.35
15	3	602	CLA	C1B-NB	3.79	1.38	1.35
15	A	1135	CLA	C2B-C1B	3.77	1.46	1.39
15	O	1603	CLA	C2B-C1B	3.76	1.46	1.39
15	4	612	CLA	C1B-NB	3.76	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	4	603	CLA	C1B-NB	3.76	1.38	1.35
15	A	1108	CLA	C2B-C1B	3.76	1.46	1.39
15	A	1111	CLA	C2B-C1B	3.75	1.46	1.39
15	3	607	CLA	C2B-C1B	3.75	1.46	1.39
15	3	607	CLA	C1B-NB	3.75	1.38	1.35
15	3	601	CLA	C2B-C1B	3.75	1.46	1.39
15	A	1123	CLA	C2B-C1B	3.75	1.46	1.39
15	A	1140	CLA	C2B-C1B	3.75	1.46	1.39
15	B	1215	CLA	C2B-C1B	3.75	1.46	1.39
15	B	1235	CLA	C2B-C1B	3.75	1.46	1.39
15	B	1219	CLA	C1B-NB	3.74	1.38	1.35
15	B	1234	CLA	C1B-NB	3.74	1.38	1.35
15	B	1204	CLA	C2B-C1B	3.74	1.46	1.39
15	A	1109	CLA	C2B-C1B	3.74	1.46	1.39
15	A	1136	CLA	C1B-NB	3.74	1.38	1.35
15	O	1602	CLA	C2B-C1B	3.74	1.46	1.39
15	A	1112	CLA	C2B-C1B	3.74	1.46	1.39
15	A	1137	CLA	C2B-C1B	3.74	1.46	1.39
15	B	1216	CLA	C2B-C1B	3.74	1.46	1.39
15	B	1238	CLA	C1B-NB	3.74	1.38	1.35
15	B	1221	CLA	C2B-C1B	3.74	1.46	1.39
15	A	1123	CLA	C1B-NB	3.74	1.38	1.35
15	B	1219	CLA	C2B-C1B	3.73	1.46	1.39
15	A	1113	CLA	C2B-C1B	3.73	1.46	1.39
15	A	1121	CLA	C2B-C1B	3.73	1.46	1.39
15	B	1238	CLA	C2B-C1B	3.73	1.46	1.39
15	2	603	CLA	C2B-C1B	3.73	1.46	1.39
15	A	1135	CLA	C1B-NB	3.73	1.38	1.35
15	2	613	CLA	C2B-C1B	3.73	1.46	1.39
15	A	1128	CLA	C2B-C1B	3.73	1.46	1.39
15	K	1401	CLA	C2B-C1B	3.73	1.46	1.39
15	4	603	CLA	C2B-C1B	3.73	1.46	1.39
15	3	603	CLA	C2B-C1B	3.73	1.46	1.39
15	B	1208	CLA	C2B-C1B	3.73	1.46	1.39
15	A	1120	CLA	C1B-NB	3.73	1.38	1.35
15	B	1227	CLA	C2B-C1B	3.73	1.46	1.39
15	2	611	CLA	C2B-C1B	3.73	1.46	1.39
15	4	616	CLA	C2B-C1B	3.72	1.46	1.39
15	L	1502	CLA	C1B-NB	3.72	1.38	1.35
15	A	1108	CLA	C1B-NB	3.72	1.38	1.35
15	4	606	CLA	C2B-C1B	3.72	1.46	1.39
15	4	610	CLA	C2B-C1B	3.72	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	B	1218	CLA	C1B-NB	3.72	1.38	1.35
15	A	1119	CLA	C2B-C1B	3.72	1.46	1.39
15	A	1138	CLA	C2B-C1B	3.72	1.46	1.39
15	B	1220	CLA	C1B-NB	3.72	1.38	1.35
15	A	1110	CLA	C1B-NB	3.72	1.38	1.35
15	A	1120	CLA	C2B-C1B	3.72	1.46	1.39
15	B	1223	CLA	C2B-C1B	3.72	1.46	1.39
15	B	1220	CLA	C2B-C1B	3.72	1.46	1.39
15	B	1234	CLA	C2B-C1B	3.72	1.46	1.39
15	B	1222	CLA	C2B-C1B	3.71	1.46	1.39
15	4	602	CLA	C2B-C1B	3.71	1.46	1.39
15	B	1201	CLA	C2B-C1B	3.71	1.46	1.39
15	3	610	CLA	C2B-C1B	3.71	1.46	1.39
15	B	1214	CLA	C2B-C1B	3.71	1.46	1.39
15	4	609	CLA	C1B-NB	3.71	1.38	1.35
15	B	1231	CLA	C2B-C1B	3.71	1.46	1.39
15	A	1110	CLA	C2B-C1B	3.71	1.46	1.39
15	B	1211	CLA	C2B-C1B	3.71	1.46	1.39
15	B	1216	CLA	C1B-NB	3.71	1.38	1.35
15	B	1206	CLA	C2B-C1B	3.71	1.46	1.39
15	3	614	CLA	C2B-C1B	3.71	1.46	1.39
15	L	1503	CLA	C2B-C1B	3.71	1.46	1.39
15	B	1203	CLA	C2B-C1B	3.71	1.46	1.39
15	2	616	CLA	C2B-C1B	3.71	1.46	1.39
15	A	1134	CLA	C2B-C1B	3.71	1.46	1.39
15	3	612	CLA	C2B-C1B	3.71	1.46	1.39
15	2	605	CLA	C2B-C1B	3.71	1.46	1.39
15	A	1133	CLA	C2B-C1B	3.71	1.46	1.39
15	A	1109	CLA	C1B-NB	3.71	1.38	1.35
15	A	1102	CLA	C2B-C1B	3.71	1.46	1.39
15	4	615	CLA	C2B-C1B	3.71	1.46	1.39
15	O	1601	CLA	C2B-C1B	3.71	1.46	1.39
15	4	611	CLA	C2B-C1B	3.71	1.46	1.39
15	4	605	CLA	C2B-C1B	3.70	1.46	1.39
15	A	1137	CLA	C1B-NB	3.70	1.38	1.35
15	B	1212	CLA	C1B-NB	3.70	1.38	1.35
15	A	1128	CLA	C1B-NB	3.70	1.38	1.35
15	2	608	CLA	C2B-C1B	3.70	1.46	1.39
15	3	604	CLA	C2B-C1B	3.70	1.46	1.39
15	2	604	CLA	C2B-C1B	3.70	1.46	1.39
15	4	601	CLA	C2B-C1B	3.70	1.46	1.39
15	3	608	CLA	C2B-C1B	3.70	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	4	608	CLA	C2B-C1B	3.70	1.46	1.39
15	A	1102	CLA	C1B-NB	3.70	1.38	1.35
15	B	1209	CLA	C2B-C1B	3.70	1.46	1.39
15	2	612	CLA	C2B-C1B	3.70	1.46	1.39
15	4	609	CLA	C2B-C1B	3.70	1.46	1.39
15	B	1223	CLA	C1B-NB	3.70	1.38	1.35
15	K	1401	CLA	C1B-NB	3.69	1.38	1.35
15	2	610	CLA	C2B-C1B	3.69	1.46	1.39
15	2	614	CLA	C1B-NB	3.69	1.38	1.35
15	B	1204	CLA	C1B-NB	3.69	1.38	1.35
15	A	1129	CLA	C2B-C1B	3.69	1.46	1.39
15	B	1218	CLA	C2B-C1B	3.69	1.46	1.39
15	4	612	CLA	C2B-C1B	3.69	1.46	1.39
15	A	1122	CLA	C2B-C1B	3.69	1.46	1.39
15	2	601	CLA	C1B-NB	3.69	1.38	1.35
15	B	1205	CLA	C2B-C1B	3.69	1.46	1.39
15	O	1602	CLA	C1B-NB	3.68	1.38	1.35
15	B	1022	CLA	C1B-NB	3.68	1.38	1.35
15	B	1202	CLA	C2B-C1B	3.68	1.46	1.39
15	A	1139	CLA	C2B-C1B	3.68	1.46	1.39
15	A	1141	CLA	C2B-C1B	3.68	1.46	1.39
15	A	1124	CLA	C1B-NB	3.68	1.38	1.35
15	2	602	CLA	C2B-C1B	3.68	1.46	1.39
15	B	1239	CLA	C2B-C1B	3.68	1.46	1.39
15	B	1210	CLA	C2B-C1B	3.68	1.46	1.39
15	2	607	CLA	C2B-C1B	3.68	1.46	1.39
15	A	1127	CLA	C2B-C1B	3.68	1.46	1.39
15	2	615	CLA	C2B-C1B	3.68	1.46	1.39
15	2	604	CLA	C1B-NB	3.68	1.38	1.35
15	2	614	CLA	C2B-C1B	3.68	1.46	1.39
15	4	604	CLA	C2B-C1B	3.68	1.46	1.39
15	A	1119	CLA	C1B-NB	3.68	1.38	1.35
15	O	1601	CLA	C1B-NB	3.68	1.38	1.35
15	A	1118	CLA	C2B-C1B	3.68	1.46	1.39
15	B	1022	CLA	C2B-C1B	3.68	1.46	1.39
15	2	612	CLA	C1B-NB	3.67	1.38	1.35
15	2	606	CLA	C2B-C1B	3.67	1.46	1.39
15	A	1132	CLA	C2B-C1B	3.67	1.46	1.39
15	F	1302	CLA	C2B-C1B	3.67	1.46	1.39
15	3	602	CLA	C2B-C1B	3.67	1.46	1.39
15	B	1202	CLA	C1B-NB	3.67	1.38	1.35
15	A	1124	CLA	C2B-C1B	3.67	1.46	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	4	605	CLA	C1B-NB	3.67	1.38	1.35
15	A	1125	CLA	C1B-NB	3.67	1.38	1.35
15	A	1136	CLA	C2B-C1B	3.67	1.46	1.39
15	B	1230	CLA	C1C-NC	-3.67	1.32	1.37
15	B	1207	CLA	C2B-C1B	3.67	1.46	1.39
15	3	611	CLA	C2B-C1B	3.66	1.46	1.39
15	L	1502	CLA	C2B-C1B	3.66	1.46	1.39
15	B	1203	CLA	C1B-NB	3.66	1.38	1.35
15	B	1217	CLA	C1B-NB	3.66	1.38	1.35
15	3	606	CLA	C2B-C1B	3.66	1.46	1.39
15	B	1217	CLA	C2B-C1B	3.66	1.46	1.39
15	4	602	CLA	C1B-NB	3.66	1.38	1.35
15	B	1231	CLA	C1B-NB	3.66	1.38	1.35
15	A	1129	CLA	C1B-NB	3.66	1.38	1.35
15	4	615	CLA	C1B-NB	3.66	1.38	1.35
15	K	1402	CLA	C2B-C1B	3.66	1.46	1.39
15	2	602	CLA	C1B-NB	3.66	1.38	1.35
15	A	1118	CLA	C1B-NB	3.66	1.38	1.35
15	A	1138	CLA	C1B-NB	3.65	1.38	1.35
15	B	1212	CLA	C2B-C1B	3.65	1.46	1.39
15	B	1222	CLA	C1B-NB	3.65	1.38	1.35
15	3	611	CLA	C1B-NB	3.65	1.38	1.35
15	2	611	CLA	C1B-NB	3.65	1.38	1.35
15	2	608	CLA	C1B-NB	3.65	1.38	1.35
15	2	601	CLA	C2B-C1B	3.65	1.46	1.39
15	F	1302	CLA	C1B-NB	3.65	1.38	1.35
15	A	1112	CLA	C1B-NB	3.64	1.38	1.35
15	3	614	CLA	C1B-NB	3.64	1.38	1.35
15	B	1209	CLA	C1B-NB	3.64	1.38	1.35
15	B	1211	CLA	C1B-NB	3.64	1.38	1.35
15	3	610	CLA	C1B-NB	3.64	1.38	1.35
15	A	1113	CLA	C1B-NB	3.64	1.38	1.35
15	4	611	CLA	C1B-NB	3.64	1.38	1.35
15	B	1215	CLA	C1B-NB	3.63	1.38	1.35
15	B	1228	CLA	MG-NA	-3.63	1.97	2.06
15	4	601	CLA	C1B-NB	3.63	1.38	1.35
15	A	1111	CLA	C1B-NB	3.63	1.38	1.35
15	O	1603	CLA	C1B-NB	3.63	1.38	1.35
15	B	1206	CLA	C1B-NB	3.63	1.38	1.35
15	B	1239	CLA	C1B-NB	3.63	1.38	1.35
15	B	1228	CLA	C2B-C1B	3.63	1.46	1.39
15	A	1121	CLA	C1B-NB	3.63	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	2	610	CLA	C1B-NB	3.63	1.38	1.35
15	2	603	CLA	C1B-NB	3.63	1.38	1.35
15	L	1503	CLA	C1B-NB	3.63	1.38	1.35
15	2	615	CLA	C1B-NB	3.62	1.38	1.35
15	B	1235	CLA	C1B-NB	3.62	1.38	1.35
15	L	1501	CLA	C2B-C1B	3.62	1.46	1.39
15	A	1132	CLA	C1B-NB	3.62	1.38	1.35
15	B	1210	CLA	C1B-NB	3.62	1.38	1.35
15	4	608	CLA	C1B-NB	3.62	1.38	1.35
15	3	604	CLA	C1B-NB	3.61	1.38	1.35
15	4	604	CLA	C1B-NB	3.61	1.38	1.35
15	3	608	CLA	C1B-NB	3.61	1.38	1.35
15	3	612	CLA	C1B-NB	3.61	1.38	1.35
15	A	1141	CLA	C1B-NB	3.61	1.38	1.35
15	B	1214	CLA	C1B-NB	3.60	1.38	1.35
15	2	616	CLA	C1B-NB	3.60	1.38	1.35
15	2	613	CLA	C1B-NB	3.60	1.38	1.35
15	2	606	CLA	C1B-NB	3.60	1.38	1.35
15	A	1133	CLA	C1B-NB	3.60	1.38	1.35
15	4	606	CLA	C1B-NB	3.59	1.38	1.35
15	4	610	CLA	C1B-NB	3.59	1.38	1.35
15	A	1125	CLA	C2B-C1B	3.59	1.46	1.39
15	2	605	CLA	C1B-NB	3.59	1.38	1.35
15	B	1221	CLA	C1B-NB	3.59	1.38	1.35
15	3	601	CLA	C1B-NB	3.59	1.38	1.35
15	3	606	CLA	C1B-NB	3.59	1.38	1.35
15	B	1207	CLA	C1B-NB	3.59	1.38	1.35
15	B	1208	CLA	C1B-NB	3.58	1.38	1.35
15	2	607	CLA	C1B-NB	3.58	1.38	1.35
15	A	1134	CLA	C1B-NB	3.57	1.38	1.35
15	L	1501	CLA	C1B-NB	3.57	1.38	1.35
15	4	616	CLA	C1B-NB	3.56	1.38	1.35
15	A	1122	CLA	C1B-NB	3.55	1.38	1.35
15	A	1139	CLA	C1B-NB	3.53	1.38	1.35
15	B	1201	CLA	C1B-NB	3.53	1.38	1.35
15	B	1205	CLA	C1B-NB	3.52	1.38	1.35
15	K	1402	CLA	C1B-NB	3.51	1.38	1.35
15	B	1226	CLA	C1C-NC	-3.45	1.32	1.37
15	B	1227	CLA	C1B-NB	3.41	1.38	1.35
15	B	1229	CLA	CBB-CAB	3.38	1.51	1.29
15	A	1103	CLA	CBB-CAB	3.38	1.51	1.29
15	A	1115	CLA	CBB-CAB	3.37	1.51	1.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	A	1104	CLA	CBB-CAB	3.37	1.51	1.29
15	A	1012	CLA	CBB-CAB	3.37	1.51	1.29
15	B	1236	CLA	CBB-CAB	3.36	1.51	1.29
15	3	603	CLA	C1B-NB	3.36	1.38	1.35
15	B	1237	CLA	CBB-CAB	3.36	1.51	1.29
15	A	1011	CLA	CBB-CAB	3.36	1.51	1.29
15	F	1301	CLA	CBB-CAB	3.36	1.51	1.29
15	B	1229	CLA	C1C-NC	-3.36	1.32	1.37
15	A	1130	CLA	CBB-CAB	3.36	1.51	1.29
15	A	1106	CLA	CBB-CAB	3.36	1.51	1.29
15	J	1302	CLA	CBB-CAB	3.36	1.51	1.29
15	B	1225	CLA	CBB-CAB	3.36	1.51	1.29
15	A	1117	CLA	CBB-CAB	3.36	1.51	1.29
15	B	1232	CLA	CBB-CAB	3.36	1.51	1.29
15	B	1227	CLA	MG-NA	-3.36	1.98	2.06
15	A	1116	CLA	CBB-CAB	3.36	1.51	1.29
15	B	1230	CLA	CBB-CAB	3.35	1.51	1.29
15	A	1126	CLA	CBB-CAB	3.35	1.51	1.29
15	B	1021	CLA	CBB-CAB	3.35	1.51	1.29
15	A	1131	CLA	CBB-CAB	3.35	1.51	1.29
15	B	1226	CLA	CBB-CAB	3.35	1.51	1.29
15	A	1101	CLA	CBB-CAB	3.35	1.51	1.29
15	A	1114	CLA	CBB-CAB	3.35	1.51	1.29
15	A	1107	CLA	CBB-CAB	3.34	1.51	1.29
15	A	1105	CLA	CBB-CAB	3.34	1.51	1.29
15	B	1023	CLA	CBB-CAB	3.34	1.51	1.29
15	B	1224	CLA	CBB-CAB	3.34	1.51	1.29
15	A	1013	CLA	CBB-CAB	3.34	1.51	1.29
15	B	1203	CLA	MG-NA	-3.33	1.98	2.06
15	3	603	CLA	MG-NA	-3.32	1.98	2.06
15	B	1207	CLA	MG-NA	-3.31	1.98	2.06
15	B	1205	CLA	MG-NA	-3.30	1.98	2.06
15	B	1022	CLA	MG-NA	-3.29	1.98	2.06
15	4	602	CLA	MG-NA	-3.29	1.98	2.06
15	B	1211	CLA	MG-NA	-3.29	1.98	2.06
15	B	1216	CLA	MG-NA	-3.28	1.98	2.06
15	2	614	CLA	MG-NA	-3.28	1.98	2.06
15	3	607	CLA	MG-NA	-3.28	1.98	2.06
15	B	1220	CLA	MG-NA	-3.28	1.98	2.06
15	3	610	CLA	MG-NA	-3.28	1.98	2.06
15	O	1602	CLA	MG-NA	-3.28	1.98	2.06
15	L	1502	CLA	MG-NA	-3.27	1.98	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	B	1214	CLA	MG-NA	-3.27	1.98	2.06
15	3	601	CLA	MG-NA	-3.27	1.98	2.06
15	2	616	CLA	MG-NA	-3.27	1.98	2.06
15	4	604	CLA	MG-NA	-3.27	1.98	2.06
15	B	1218	CLA	MG-NA	-3.27	1.98	2.06
15	B	1221	CLA	MG-NA	-3.27	1.98	2.06
15	2	612	CLA	MG-NA	-3.27	1.98	2.06
15	O	1601	CLA	MG-NA	-3.27	1.98	2.06
15	4	616	CLA	MG-NA	-3.27	1.98	2.06
15	3	611	CLA	MG-NA	-3.27	1.98	2.06
15	O	1603	CLA	MG-NA	-3.26	1.98	2.06
15	L	1503	CLA	MG-NA	-3.26	1.98	2.06
15	4	612	CLA	MG-NA	-3.26	1.98	2.06
15	4	606	CLA	MG-NA	-3.26	1.98	2.06
15	B	1212	CLA	MG-NA	-3.26	1.98	2.06
15	2	608	CLA	MG-NA	-3.26	1.98	2.06
15	A	1108	CLA	MG-NA	-3.26	1.98	2.06
15	B	1215	CLA	MG-NA	-3.26	1.98	2.06
15	A	1113	CLA	MG-NA	-3.26	1.98	2.06
15	B	1208	CLA	MG-NA	-3.26	1.98	2.06
15	B	1234	CLA	MG-NA	-3.26	1.98	2.06
15	4	610	CLA	MG-NA	-3.26	1.98	2.06
15	4	608	CLA	MG-NA	-3.25	1.98	2.06
15	4	609	CLA	MG-NA	-3.25	1.98	2.06
15	A	1138	CLA	MG-NA	-3.25	1.98	2.06
15	B	1201	CLA	MG-NA	-3.25	1.98	2.06
15	B	1238	CLA	MG-NA	-3.25	1.98	2.06
15	A	1120	CLA	MG-NA	-3.25	1.98	2.06
15	2	605	CLA	MG-NA	-3.25	1.98	2.06
15	4	601	CLA	MG-NA	-3.25	1.98	2.06
15	2	602	CLA	MG-NA	-3.25	1.98	2.06
15	A	1140	CLA	MG-NA	-3.25	1.98	2.06
15	B	1209	CLA	MG-NA	-3.25	1.98	2.06
15	3	608	CLA	MG-NA	-3.25	1.98	2.06
15	3	614	CLA	MG-NA	-3.25	1.98	2.06
15	B	1206	CLA	MG-NA	-3.25	1.98	2.06
15	3	606	CLA	MG-NA	-3.25	1.98	2.06
15	3	602	CLA	MG-NA	-3.25	1.98	2.06
15	A	1011	CLA	C1C-NC	-3.24	1.33	1.37
15	4	605	CLA	MG-NA	-3.24	1.98	2.06
15	2	603	CLA	MG-NA	-3.24	1.98	2.06
15	2	613	CLA	MG-NA	-3.24	1.98	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	L	1501	CLA	MG-NA	-3.24	1.98	2.06
15	A	1123	CLA	MG-NA	-3.24	1.98	2.06
15	B	1202	CLA	MG-NA	-3.24	1.98	2.06
15	4	615	CLA	MG-NA	-3.24	1.98	2.06
15	4	611	CLA	MG-NA	-3.24	1.98	2.06
15	A	1141	CLA	MG-NA	-3.24	1.98	2.06
15	2	611	CLA	MG-NA	-3.24	1.98	2.06
15	B	1204	CLA	MG-NA	-3.24	1.98	2.06
15	2	610	CLA	MG-NA	-3.24	1.98	2.06
15	A	1118	CLA	MG-NA	-3.24	1.98	2.06
15	K	1402	CLA	MG-NA	-3.24	1.98	2.06
15	A	1119	CLA	MG-NA	-3.24	1.98	2.06
15	B	1235	CLA	MG-NA	-3.24	1.98	2.06
15	A	1136	CLA	MG-NA	-3.24	1.98	2.06
15	F	1302	CLA	MG-NA	-3.23	1.98	2.06
15	B	1217	CLA	MG-NA	-3.23	1.98	2.06
15	2	604	CLA	MG-NA	-3.23	1.98	2.06
15	B	1222	CLA	MG-NA	-3.23	1.98	2.06
15	B	1219	CLA	MG-NA	-3.23	1.98	2.06
15	2	607	CLA	MG-NA	-3.23	1.98	2.06
15	A	1132	CLA	MG-NA	-3.23	1.98	2.06
15	2	615	CLA	MG-NA	-3.23	1.98	2.06
15	B	1231	CLA	MG-NA	-3.22	1.98	2.06
15	A	1134	CLA	MG-NA	-3.22	1.98	2.06
15	A	1129	CLA	MG-NA	-3.22	1.98	2.06
15	B	1223	CLA	MG-NA	-3.22	1.98	2.06
15	2	606	CLA	MG-NA	-3.22	1.98	2.06
15	B	1210	CLA	MG-NA	-3.22	1.98	2.06
15	A	1137	CLA	MG-NA	-3.22	1.98	2.06
15	4	603	CLA	MG-NA	-3.22	1.98	2.06
15	B	1239	CLA	MG-NA	-3.22	1.98	2.06
15	A	1125	CLA	MG-NA	-3.21	1.98	2.06
15	A	1139	CLA	MG-NA	-3.21	1.98	2.06
15	A	1124	CLA	MG-NA	-3.21	1.98	2.06
15	A	1122	CLA	MG-NA	-3.21	1.98	2.06
15	A	1133	CLA	MG-NA	-3.21	1.98	2.06
15	A	1110	CLA	MG-NA	-3.21	1.98	2.06
15	A	1109	CLA	MG-NA	-3.21	1.98	2.06
15	3	612	CLA	MG-NA	-3.21	1.98	2.06
15	2	601	CLA	MG-NA	-3.20	1.98	2.06
15	A	1112	CLA	MG-NA	-3.20	1.98	2.06
15	A	1128	CLA	MG-NA	-3.20	1.98	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	J	1302	CLA	C1C-NC	-3.20	1.33	1.37
15	B	1236	CLA	C1C-NC	-3.19	1.33	1.37
15	K	1401	CLA	MG-NA	-3.19	1.98	2.06
15	A	1111	CLA	MG-NA	-3.19	1.98	2.06
15	A	1121	CLA	MG-NA	-3.19	1.98	2.06
15	3	604	CLA	MG-NA	-3.18	1.98	2.06
15	A	1116	CLA	C1C-NC	-3.18	1.33	1.37
15	A	1101	CLA	C1C-NC	-3.18	1.33	1.37
15	A	1131	CLA	C1C-NC	-3.16	1.33	1.37
15	A	1107	CLA	C1C-NC	-3.16	1.33	1.37
15	A	1126	CLA	C1C-NC	-3.16	1.33	1.37
15	A	1127	CLA	MG-NA	-3.15	1.98	2.06
15	A	1115	CLA	C1C-NC	-3.15	1.33	1.37
15	A	1117	CLA	C1C-NC	-3.14	1.33	1.37
15	A	1114	CLA	C1C-NC	-3.14	1.33	1.37
15	A	1106	CLA	C1C-NC	-3.14	1.33	1.37
15	A	1105	CLA	C1C-NC	-3.14	1.33	1.37
15	A	1135	CLA	MG-NA	-3.14	1.98	2.06
15	A	1102	CLA	MG-NA	-3.14	1.98	2.06
15	B	1237	CLA	C1C-NC	-3.13	1.33	1.37
15	A	1130	CLA	C1C-NC	-3.13	1.33	1.37
15	B	1021	CLA	C1C-NC	-3.13	1.33	1.37
15	A	1013	CLA	C1C-NC	-3.12	1.33	1.37
15	B	1225	CLA	C1C-NC	-3.12	1.33	1.37
15	B	1023	CLA	C1C-NC	-3.10	1.33	1.37
15	B	1224	CLA	C1C-NC	-3.10	1.33	1.37
15	A	1104	CLA	C1C-NC	-3.09	1.33	1.37
15	A	1012	CLA	C1C-NC	-3.08	1.33	1.37
15	B	1232	CLA	C1C-NC	-3.07	1.33	1.37
15	A	1128	CLA	C3D-C2D	3.07	1.54	1.39
15	A	1127	CLA	C3D-C2D	3.07	1.54	1.39
15	B	1239	CLA	C3D-C2D	3.07	1.54	1.39
15	A	1124	CLA	C3D-C2D	3.07	1.54	1.39
15	A	1108	CLA	C3D-C2D	3.07	1.54	1.39
15	2	602	CLA	C3D-C2D	3.07	1.54	1.39
15	A	1134	CLA	C3D-C2D	3.07	1.54	1.39
15	B	1227	CLA	C3D-C2D	3.06	1.54	1.39
15	A	1129	CLA	C3D-C2D	3.06	1.54	1.39
15	B	1221	CLA	C3D-C2D	3.06	1.54	1.39
15	L	1503	CLA	C3D-C2D	3.06	1.54	1.39
15	B	1215	CLA	C3D-C2D	3.06	1.54	1.39
15	2	604	CLA	C3D-C2D	3.06	1.54	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	B	1218	CLA	C3D-C2D	3.06	1.54	1.39
15	B	1203	CLA	C3D-C2D	3.06	1.54	1.39
15	O	1601	CLA	C3D-C2D	3.06	1.54	1.39
15	3	602	CLA	C3D-C2D	3.06	1.54	1.39
15	3	606	CLA	C3D-C2D	3.06	1.54	1.39
15	B	1234	CLA	C3D-C2D	3.06	1.54	1.39
15	4	606	CLA	C3D-C2D	3.06	1.54	1.39
15	B	1206	CLA	C3D-C2D	3.06	1.54	1.39
15	A	1125	CLA	C3D-C2D	3.06	1.54	1.39
15	B	1220	CLA	C3D-C2D	3.06	1.54	1.39
15	B	1231	CLA	C3D-C2D	3.06	1.54	1.39
15	B	1222	CLA	C3D-C2D	3.06	1.54	1.39
15	2	616	CLA	C3D-C2D	3.06	1.54	1.39
15	4	603	CLA	C3D-C2D	3.06	1.54	1.39
15	A	1113	CLA	C3D-C2D	3.06	1.54	1.39
15	3	603	CLA	C3D-C2D	3.06	1.54	1.39
15	3	608	CLA	C3D-C2D	3.06	1.54	1.39
15	2	612	CLA	C3D-C2D	3.06	1.54	1.39
15	4	615	CLA	C3D-C2D	3.06	1.54	1.39
15	2	601	CLA	C3D-C2D	3.06	1.54	1.39
15	3	610	CLA	C3D-C2D	3.06	1.54	1.39
15	A	1139	CLA	C3D-C2D	3.06	1.54	1.39
15	A	1118	CLA	C3D-C2D	3.06	1.54	1.39
15	A	1102	CLA	C3D-C2D	3.05	1.54	1.39
15	4	605	CLA	C3D-C2D	3.05	1.54	1.39
15	L	1501	CLA	C3D-C2D	3.05	1.54	1.39
15	B	1207	CLA	C3D-C2D	3.05	1.54	1.39
15	A	1120	CLA	C3D-C2D	3.05	1.54	1.39
15	B	1209	CLA	C3D-C2D	3.05	1.54	1.39
15	B	1201	CLA	C3D-C2D	3.05	1.54	1.39
15	A	1133	CLA	C3D-C2D	3.05	1.54	1.39
15	B	1210	CLA	C3D-C2D	3.05	1.54	1.39
15	O	1603	CLA	C3D-C2D	3.05	1.54	1.39
15	A	1141	CLA	C3D-C2D	3.05	1.54	1.39
15	B	1235	CLA	C3D-C2D	3.05	1.54	1.39
15	A	1140	CLA	C3D-C2D	3.05	1.54	1.39
15	2	610	CLA	C3D-C2D	3.05	1.54	1.39
15	A	1112	CLA	C3D-C2D	3.05	1.54	1.39
15	4	604	CLA	C3D-C2D	3.05	1.54	1.39
15	4	608	CLA	C3D-C2D	3.05	1.54	1.39
15	2	608	CLA	C3D-C2D	3.05	1.54	1.39
15	4	601	CLA	C3D-C2D	3.05	1.54	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	2	605	CLA	C3D-C2D	3.05	1.54	1.39
15	4	602	CLA	C3D-C2D	3.05	1.54	1.39
15	A	1137	CLA	C3D-C2D	3.05	1.54	1.39
15	F	1302	CLA	C3D-C2D	3.05	1.54	1.39
15	3	611	CLA	C3D-C2D	3.05	1.54	1.39
15	A	1121	CLA	C3D-C2D	3.05	1.54	1.39
15	B	1211	CLA	C3D-C2D	3.05	1.54	1.39
15	A	1123	CLA	C3D-C2D	3.05	1.54	1.39
15	B	1238	CLA	C3D-C2D	3.05	1.54	1.39
15	B	1022	CLA	C3D-C2D	3.05	1.54	1.39
15	3	607	CLA	C3D-C2D	3.05	1.54	1.39
15	A	1136	CLA	C3D-C2D	3.05	1.54	1.39
15	B	1214	CLA	C3D-C2D	3.05	1.54	1.39
15	L	1502	CLA	C3D-C2D	3.05	1.54	1.39
15	4	611	CLA	C3D-C2D	3.05	1.54	1.39
15	A	1111	CLA	C3D-C2D	3.05	1.54	1.39
15	3	601	CLA	C3D-C2D	3.05	1.54	1.39
15	B	1223	CLA	C3D-C2D	3.05	1.54	1.39
15	3	604	CLA	C3D-C2D	3.05	1.54	1.39
15	A	1110	CLA	C3D-C2D	3.05	1.54	1.39
15	B	1216	CLA	C3D-C2D	3.04	1.54	1.39
15	B	1212	CLA	C3D-C2D	3.04	1.54	1.39
15	2	614	CLA	C3D-C2D	3.04	1.54	1.39
15	A	1122	CLA	C3D-C2D	3.04	1.54	1.39
15	3	612	CLA	C3D-C2D	3.04	1.54	1.39
15	B	1219	CLA	C3D-C2D	3.04	1.54	1.39
15	2	613	CLA	C3D-C2D	3.04	1.54	1.39
15	2	611	CLA	C3D-C2D	3.04	1.54	1.39
15	A	1109	CLA	C3D-C2D	3.04	1.54	1.39
15	K	1401	CLA	C3D-C2D	3.04	1.54	1.39
15	B	1202	CLA	C3D-C2D	3.04	1.54	1.39
15	3	614	CLA	C3D-C2D	3.04	1.54	1.39
15	A	1132	CLA	C3D-C2D	3.04	1.54	1.39
15	4	609	CLA	C3D-C2D	3.04	1.54	1.39
15	B	1217	CLA	C3D-C2D	3.04	1.54	1.39
15	4	612	CLA	C3D-C2D	3.04	1.54	1.39
15	A	1135	CLA	C3D-C2D	3.04	1.54	1.39
15	4	616	CLA	C3D-C2D	3.04	1.54	1.39
15	4	610	CLA	C3D-C2D	3.04	1.54	1.39
15	B	1208	CLA	C3D-C2D	3.04	1.54	1.39
15	O	1602	CLA	C3D-C2D	3.04	1.54	1.39
15	A	1138	CLA	C3D-C2D	3.04	1.54	1.39

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	2	615	CLA	C3D-C2D	3.04	1.54	1.39
15	2	606	CLA	C3D-C2D	3.03	1.54	1.39
15	B	1204	CLA	C3D-C2D	3.03	1.54	1.39
15	B	1228	CLA	C3D-C2D	3.03	1.54	1.39
15	A	1119	CLA	C3D-C2D	3.03	1.54	1.39
15	B	1205	CLA	C3D-C2D	3.03	1.54	1.39
15	F	1301	CLA	C1C-NC	-3.03	1.33	1.37
15	K	1402	CLA	C3D-C2D	3.02	1.54	1.39
15	2	603	CLA	C3D-C2D	3.01	1.54	1.39
15	A	1103	CLA	C1C-NC	-3.00	1.33	1.37
15	2	607	CLA	C3D-C2D	2.99	1.54	1.39
15	A	1115	CLA	CHC-C1C	2.78	1.42	1.35
15	A	1116	CLA	CHC-C1C	2.78	1.42	1.35
15	B	1225	CLA	CHC-C1C	2.77	1.42	1.35
15	B	1023	CLA	CHC-C1C	2.76	1.42	1.35
15	A	1126	CLA	CHC-C1C	2.72	1.42	1.35
15	A	1117	CLA	CHC-C1C	2.72	1.41	1.35
15	A	1106	CLA	CHC-C1C	2.72	1.41	1.35
15	A	1013	CLA	CHC-C1C	2.72	1.41	1.35
15	B	1224	CLA	CHC-C1C	2.71	1.41	1.35
15	A	1012	CLA	CHC-C1C	2.70	1.41	1.35
15	A	1011	CLA	CHC-C1C	2.69	1.41	1.35
15	B	1237	CLA	CHC-C1C	2.69	1.41	1.35
15	A	1130	CLA	CHC-C1C	2.68	1.41	1.35
15	A	1107	CLA	CHC-C1C	2.68	1.41	1.35
15	A	1114	CLA	CHC-C1C	2.67	1.41	1.35
15	A	1104	CLA	CHC-C1C	2.67	1.41	1.35
15	B	1226	CLA	C3B-C2B	-2.66	1.36	1.40
15	B	1232	CLA	CHC-C1C	2.65	1.41	1.35
15	B	1021	CLA	CHC-C1C	2.65	1.41	1.35
15	A	1105	CLA	CHC-C1C	2.64	1.41	1.35
15	A	1103	CLA	CHC-C1C	2.64	1.41	1.35
15	B	1201	CLA	C4B-NB	-2.63	1.32	1.35
15	3	603	CLA	C4B-NB	-2.63	1.32	1.35
15	J	1302	CLA	CHC-C1C	2.63	1.41	1.35
15	A	1131	CLA	CHC-C1C	2.62	1.41	1.35
15	B	1236	CLA	CHC-C1C	2.60	1.41	1.35
15	F	1301	CLA	CHC-C1C	2.60	1.41	1.35
15	3	606	CLA	C4B-NB	-2.59	1.32	1.35
15	A	1101	CLA	CHC-C1C	2.58	1.41	1.35
15	B	1229	CLA	CHC-C1C	2.55	1.41	1.35
15	B	1228	CLA	C4B-NB	-2.54	1.32	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	A	1132	CLA	C4B-NB	-2.53	1.33	1.35
15	2	612	CLA	C4B-NB	-2.49	1.33	1.35
15	A	1107	CLA	C3B-C2B	-2.48	1.36	1.40
15	A	1101	CLA	C3B-C2B	-2.47	1.36	1.40
15	A	1124	CLA	C4B-NB	-2.44	1.33	1.35
15	B	1211	CLA	C4B-NB	-2.44	1.33	1.35
15	2	603	CLA	C4B-NB	-2.44	1.33	1.35
15	4	606	CLA	C4B-NB	-2.43	1.33	1.35
15	A	1116	CLA	C3B-C2B	-2.43	1.37	1.40
15	B	1232	CLA	C3B-C2B	-2.43	1.37	1.40
15	B	1238	CLA	C4B-NB	-2.42	1.33	1.35
15	2	601	CLA	C4B-NB	-2.41	1.33	1.35
15	2	610	CLA	C4B-NB	-2.41	1.33	1.35
15	4	602	CLA	C4B-NB	-2.41	1.33	1.35
15	O	1602	CLA	C4B-NB	-2.40	1.33	1.35
15	3	612	CLA	C4B-NB	-2.40	1.33	1.35
15	L	1502	CLA	C4B-NB	-2.39	1.33	1.35
15	4	609	CLA	C4B-NB	-2.39	1.33	1.35
15	B	1226	CLA	CHC-C1C	2.39	1.41	1.35
15	4	615	CLA	C4B-NB	-2.39	1.33	1.35
15	B	1227	CLA	C4B-NB	-2.39	1.33	1.35
15	2	604	CLA	C4B-NB	-2.38	1.33	1.35
15	B	1236	CLA	C3B-C2B	-2.38	1.37	1.40
15	B	1202	CLA	C4B-NB	-2.38	1.33	1.35
15	A	1109	CLA	C4B-NB	-2.38	1.33	1.35
15	3	602	CLA	C4B-NB	-2.38	1.33	1.35
15	B	1231	CLA	C4B-NB	-2.38	1.33	1.35
15	B	1235	CLA	C4B-NB	-2.38	1.33	1.35
15	B	1216	CLA	C4B-NB	-2.37	1.33	1.35
15	B	1203	CLA	C4B-NB	-2.36	1.33	1.35
15	B	1205	CLA	C4B-NB	-2.36	1.33	1.35
15	B	1223	CLA	C4B-NB	-2.36	1.33	1.35
15	L	1503	CLA	C4B-NB	-2.35	1.33	1.35
15	4	612	CLA	C4B-NB	-2.35	1.33	1.35
15	F	1302	CLA	C4B-NB	-2.35	1.33	1.35
15	4	611	CLA	C4B-NB	-2.35	1.33	1.35
15	2	606	CLA	C4B-NB	-2.35	1.33	1.35
15	L	1501	CLA	C4B-NB	-2.34	1.33	1.35
15	B	1215	CLA	C4B-NB	-2.34	1.33	1.35
15	B	1222	CLA	C4B-NB	-2.34	1.33	1.35
15	4	601	CLA	C4B-NB	-2.34	1.33	1.35
15	A	1135	CLA	C4B-NB	-2.34	1.33	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	B	1207	CLA	C4B-NB	-2.34	1.33	1.35
15	A	1141	CLA	C4B-NB	-2.34	1.33	1.35
15	B	1219	CLA	C4B-NB	-2.34	1.33	1.35
15	A	1118	CLA	C4B-NB	-2.34	1.33	1.35
15	B	1214	CLA	C4B-NB	-2.34	1.33	1.35
15	B	1217	CLA	C4B-NB	-2.34	1.33	1.35
15	A	1122	CLA	C4B-NB	-2.33	1.33	1.35
15	3	607	CLA	C4B-NB	-2.33	1.33	1.35
15	A	1111	CLA	C4B-NB	-2.33	1.33	1.35
15	B	1220	CLA	C4B-NB	-2.33	1.33	1.35
15	2	615	CLA	C4B-NB	-2.33	1.33	1.35
15	4	603	CLA	C4B-NB	-2.33	1.33	1.35
15	A	1128	CLA	C4B-NB	-2.33	1.33	1.35
15	K	1401	CLA	C4B-NB	-2.33	1.33	1.35
15	3	611	CLA	C4B-NB	-2.33	1.33	1.35
15	3	601	CLA	C4B-NB	-2.33	1.33	1.35
15	2	611	CLA	C4B-NB	-2.32	1.33	1.35
15	A	1013	CLA	C3B-C2B	-2.32	1.37	1.40
15	A	1139	CLA	C4B-NB	-2.32	1.33	1.35
15	B	1208	CLA	C4B-NB	-2.31	1.33	1.35
15	A	1134	CLA	C4B-NB	-2.31	1.33	1.35
15	4	604	CLA	C4B-NB	-2.31	1.33	1.35
15	3	608	CLA	C4B-NB	-2.31	1.33	1.35
15	3	610	CLA	C4B-NB	-2.31	1.33	1.35
15	B	1212	CLA	C4B-NB	-2.31	1.33	1.35
15	A	1131	CLA	C3B-C2B	-2.31	1.37	1.40
15	3	614	CLA	C4B-NB	-2.31	1.33	1.35
15	O	1603	CLA	C4B-NB	-2.31	1.33	1.35
15	A	1112	CLA	C4B-NB	-2.31	1.33	1.35
15	2	613	CLA	C4B-NB	-2.31	1.33	1.35
15	2	614	CLA	C4B-NB	-2.30	1.33	1.35
15	B	1218	CLA	C4B-NB	-2.30	1.33	1.35
15	A	1119	CLA	C4B-NB	-2.30	1.33	1.35
15	A	1115	CLA	C1C-C2C	2.30	1.49	1.44
15	B	1224	CLA	C3B-C2B	-2.30	1.37	1.40
15	2	616	CLA	C4B-NB	-2.29	1.33	1.35
15	A	1129	CLA	C4B-NB	-2.29	1.33	1.35
15	B	1239	CLA	C4B-NB	-2.29	1.33	1.35
15	4	616	CLA	C4B-NB	-2.29	1.33	1.35
15	O	1601	CLA	C4B-NB	-2.29	1.33	1.35
15	A	1140	CLA	C4B-NB	-2.29	1.33	1.35
15	J	1302	CLA	C3B-C2B	-2.29	1.37	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	B	1230	CLA	CHC-C1C	2.29	1.40	1.35
15	A	1012	CLA	C3B-C2B	-2.29	1.37	1.40
15	B	1206	CLA	C4B-NB	-2.29	1.33	1.35
15	A	1113	CLA	C4B-NB	-2.28	1.33	1.35
15	A	1136	CLA	C4B-NB	-2.28	1.33	1.35
15	3	604	CLA	C4B-NB	-2.28	1.33	1.35
15	B	1234	CLA	C4B-NB	-2.28	1.33	1.35
15	B	1204	CLA	C4B-NB	-2.28	1.33	1.35
15	2	605	CLA	C4B-NB	-2.28	1.33	1.35
15	K	1402	CLA	C4B-NB	-2.28	1.33	1.35
15	2	602	CLA	C4B-NB	-2.28	1.33	1.35
15	A	1125	CLA	C4B-NB	-2.27	1.33	1.35
15	B	1209	CLA	C4B-NB	-2.27	1.33	1.35
15	4	605	CLA	C4B-NB	-2.27	1.33	1.35
15	4	608	CLA	C4B-NB	-2.27	1.33	1.35
15	2	608	CLA	C4B-NB	-2.27	1.33	1.35
15	A	1108	CLA	C4B-NB	-2.26	1.33	1.35
15	A	1107	CLA	C1B-NB	2.26	1.37	1.35
15	4	610	CLA	C4B-NB	-2.26	1.33	1.35
15	A	1104	CLA	C1C-C2C	2.26	1.48	1.44
15	A	1110	CLA	C4B-NB	-2.25	1.33	1.35
15	A	1105	CLA	C1B-NB	2.25	1.37	1.35
15	A	1138	CLA	C4B-NB	-2.25	1.33	1.35
15	A	1116	CLA	C1C-C2C	2.25	1.48	1.44
15	B	1225	CLA	C1C-C2C	2.25	1.48	1.44
15	2	607	CLA	C4B-NB	-2.25	1.33	1.35
15	B	1228	CLA	C2A-C1A	-2.25	1.39	1.52
15	A	1102	CLA	C4B-NB	-2.24	1.33	1.35
15	A	1104	CLA	C1B-NB	2.24	1.37	1.35
15	B	1221	CLA	C4B-NB	-2.24	1.33	1.35
15	B	1230	CLA	C1A-CHA	2.24	1.52	1.43
15	A	1137	CLA	C4B-NB	-2.24	1.33	1.35
15	A	1126	CLA	C1C-C2C	2.24	1.48	1.44
15	B	1232	CLA	C1B-NB	2.24	1.37	1.35
15	B	1225	CLA	C1B-NB	2.23	1.37	1.35
15	A	1012	CLA	C1C-C2C	2.23	1.48	1.44
15	A	1116	CLA	C1B-NB	2.23	1.37	1.35
15	A	1133	CLA	C4B-NB	-2.23	1.33	1.35
15	A	1120	CLA	C4B-NB	-2.23	1.33	1.35
15	B	1229	CLA	C1C-C2C	2.22	1.48	1.44
15	A	1114	CLA	C1B-NB	2.22	1.37	1.35
15	B	1210	CLA	C4B-NB	-2.22	1.33	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	B	1237	CLA	C1C-C2C	2.21	1.48	1.44
15	A	1121	CLA	C4B-NB	-2.21	1.33	1.35
15	A	1117	CLA	C1B-NB	2.21	1.37	1.35
15	A	1106	CLA	C1B-NB	2.21	1.37	1.35
15	B	1236	CLA	C1C-C2C	2.20	1.48	1.44
15	A	1115	CLA	C1B-NB	2.20	1.37	1.35
15	B	1022	CLA	C4B-NB	-2.20	1.33	1.35
15	A	1126	CLA	C1B-NB	2.19	1.37	1.35
15	A	1130	CLA	C3B-C2B	-2.19	1.37	1.40
15	B	1229	CLA	C1B-NB	2.19	1.37	1.35
15	A	1107	CLA	C1C-C2C	2.19	1.48	1.44
15	B	1023	CLA	C1C-C2C	2.19	1.48	1.44
15	A	1130	CLA	C1C-C2C	2.19	1.48	1.44
15	A	1105	CLA	C1C-C2C	2.19	1.48	1.44
15	J	1302	CLA	C1A-CHA	2.18	1.52	1.43
15	A	1114	CLA	C1C-C2C	2.18	1.48	1.44
15	A	1131	CLA	C1C-C2C	2.18	1.48	1.44
15	B	1224	CLA	C1C-C2C	2.18	1.48	1.44
15	A	1123	CLA	C4B-NB	-2.18	1.33	1.35
15	A	1105	CLA	C1A-CHA	2.17	1.52	1.43
15	A	1106	CLA	C1C-C2C	2.17	1.48	1.44
15	J	1302	CLA	C1B-NB	2.17	1.37	1.35
15	A	1131	CLA	C1B-NB	2.17	1.37	1.35
15	A	1114	CLA	C3B-C2B	-2.17	1.37	1.40
15	A	1117	CLA	C1C-C2C	2.16	1.48	1.44
15	A	1012	CLA	C1A-CHA	2.16	1.52	1.43
15	F	1301	CLA	C1A-CHA	2.16	1.52	1.43
15	A	1101	CLA	C1A-CHA	2.16	1.52	1.43
15	A	1115	CLA	C3B-C2B	-2.16	1.37	1.40
15	B	1021	CLA	C1C-C2C	2.16	1.48	1.44
15	J	1302	CLA	C1C-C2C	2.15	1.48	1.44
15	B	1236	CLA	C1A-CHA	2.15	1.52	1.43
15	A	1013	CLA	C1A-CHA	2.15	1.52	1.43
15	B	1232	CLA	C1C-C2C	2.15	1.48	1.44
15	A	1101	CLA	C1C-C2C	2.15	1.48	1.44
15	B	1023	CLA	C1A-CHA	2.15	1.52	1.43
15	A	1130	CLA	C1A-CHA	2.15	1.52	1.43
15	F	1301	CLA	C1C-C2C	2.15	1.48	1.44
15	B	1236	CLA	C1B-NB	2.14	1.37	1.35
15	A	1103	CLA	C1C-C2C	2.13	1.48	1.44
15	A	1127	CLA	C4B-NB	-2.13	1.33	1.35
15	B	1232	CLA	C1A-CHA	2.13	1.51	1.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	A	1115	CLA	C1A-CHA	2.12	1.51	1.43
15	A	1101	CLA	C1B-NB	2.12	1.37	1.35
15	B	1225	CLA	C3B-C2B	-2.12	1.37	1.40
15	A	1116	CLA	C1A-CHA	2.11	1.51	1.43
15	B	1237	CLA	C1A-CHA	2.10	1.51	1.43
15	B	1224	CLA	C1B-NB	2.10	1.37	1.35
15	A	1130	CLA	C1B-NB	2.10	1.37	1.35
15	B	1023	CLA	C3B-C2B	-2.09	1.37	1.40
15	B	1021	CLA	C3B-C2B	-2.09	1.37	1.40
15	A	1126	CLA	C1A-CHA	2.09	1.51	1.43
15	A	1117	CLA	C1A-CHA	2.09	1.51	1.43
15	A	1131	CLA	C1A-CHA	2.09	1.51	1.43
15	A	1126	CLA	C3B-C2B	-2.08	1.37	1.40
15	B	1230	CLA	C3B-C2B	-2.08	1.37	1.40
15	B	1203	CLA	C2A-C1A	-2.08	1.40	1.52
15	A	1011	CLA	C1C-C2C	2.08	1.48	1.44
15	A	1105	CLA	C3B-C2B	-2.08	1.37	1.40
15	B	1021	CLA	C1A-CHA	2.08	1.51	1.43
15	A	1104	CLA	C3B-C2B	-2.08	1.37	1.40
15	A	1107	CLA	C1A-CHA	2.07	1.51	1.43
15	A	1103	CLA	C1A-CHA	2.07	1.51	1.43
15	B	1226	CLA	C1A-CHA	2.07	1.51	1.43
15	A	1106	CLA	C1A-CHA	2.06	1.51	1.43
15	B	1211	CLA	C2A-C1A	-2.06	1.40	1.52
15	A	1013	CLA	C1C-C2C	2.06	1.48	1.44
15	A	1011	CLA	C3B-C2B	-2.06	1.37	1.40
15	3	603	CLA	C1B-CHB	-2.06	1.39	1.43
15	A	1104	CLA	C1A-CHA	2.06	1.51	1.43
15	B	1022	CLA	C2A-C1A	-2.06	1.40	1.52
15	A	1124	CLA	C2A-C1A	-2.05	1.40	1.52
15	B	1205	CLA	C2A-C1A	-2.05	1.40	1.52
15	3	612	CLA	C2A-C1A	-2.04	1.40	1.52
18	A	4007	BCR	C12-C13	-2.04	1.41	1.45
15	4	604	CLA	C2A-C1A	-2.04	1.40	1.52
15	L	1502	CLA	C2A-C1A	-2.04	1.40	1.52
15	B	1229	CLA	C3B-C2B	-2.04	1.37	1.40
15	3	603	CLA	C2A-C1A	-2.04	1.40	1.52
15	A	1011	CLA	C1A-CHA	2.04	1.51	1.43
15	A	1123	CLA	C2A-C1A	-2.04	1.40	1.52
15	A	1012	CLA	MG-NC	2.04	2.11	2.06
15	3	611	CLA	C2A-C1A	-2.04	1.40	1.52
15	O	1601	CLA	C2A-C1A	-2.04	1.40	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	4	606	CLA	C2A-C1A	-2.04	1.40	1.52
15	L	1503	CLA	C2A-C1A	-2.04	1.40	1.52
15	B	1206	CLA	C2A-C1A	-2.04	1.40	1.52
15	4	602	CLA	C2A-C1A	-2.03	1.40	1.52
15	A	1133	CLA	C2A-C1A	-2.03	1.40	1.52
15	B	1204	CLA	C2A-C1A	-2.03	1.40	1.52
15	4	609	CLA	C2A-C1A	-2.03	1.40	1.52
15	O	1602	CLA	C2A-C1A	-2.03	1.40	1.52
15	B	1220	CLA	C2A-C1A	-2.03	1.40	1.52
15	3	602	CLA	C2A-C1A	-2.03	1.40	1.52
15	B	1224	CLA	C1A-CHA	2.03	1.51	1.43
15	3	601	CLA	C2A-C1A	-2.03	1.40	1.52
15	B	1210	CLA	C2A-C1A	-2.03	1.40	1.52
15	A	1136	CLA	C2A-C1A	-2.03	1.40	1.52
15	K	1402	CLA	C2A-C1A	-2.03	1.40	1.52
15	2	606	CLA	C2A-C1A	-2.03	1.40	1.52
15	2	610	CLA	C2A-C1A	-2.03	1.40	1.52
15	B	1221	CLA	C2A-C1A	-2.03	1.40	1.52
15	4	601	CLA	C2A-C1A	-2.03	1.40	1.52
15	4	610	CLA	C2A-C1A	-2.03	1.40	1.52
15	B	1216	CLA	C2A-C1A	-2.03	1.40	1.52
15	2	612	CLA	C2A-C1A	-2.03	1.40	1.52
15	B	1231	CLA	C2A-C1A	-2.03	1.40	1.52
15	A	1121	CLA	C2A-C1A	-2.03	1.40	1.52
15	A	1137	CLA	C2A-C1A	-2.03	1.40	1.52
15	B	1209	CLA	C2A-C1A	-2.03	1.40	1.52
15	3	604	CLA	C2A-C1A	-2.03	1.40	1.52
15	B	1201	CLA	C2A-C1A	-2.03	1.40	1.52
15	A	1108	CLA	C2A-C1A	-2.03	1.40	1.52
15	A	1140	CLA	C2A-C1A	-2.03	1.40	1.52
15	B	1239	CLA	C2A-C1A	-2.03	1.40	1.52
15	3	608	CLA	C2A-C1A	-2.03	1.40	1.52
15	O	1603	CLA	C2A-C1A	-2.03	1.40	1.52
15	2	611	CLA	C2A-C1A	-2.03	1.40	1.52
15	A	1118	CLA	C2A-C1A	-2.03	1.40	1.52
15	A	1122	CLA	C2A-C1A	-2.03	1.40	1.52
15	A	1132	CLA	C2A-C1A	-2.03	1.40	1.52
15	A	1111	CLA	C2A-C1A	-2.02	1.40	1.52
15	2	614	CLA	C2A-C1A	-2.02	1.40	1.52
15	4	616	CLA	C2A-C1A	-2.02	1.40	1.52
15	B	1207	CLA	C2A-C1A	-2.02	1.40	1.52
15	3	606	CLA	C2A-C1A	-2.02	1.40	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	F	1302	CLA	C2A-C1A	-2.02	1.40	1.52
15	4	615	CLA	C2A-C1A	-2.02	1.40	1.52
15	A	1119	CLA	C2A-C1A	-2.02	1.40	1.52
15	B	1234	CLA	C2A-C1A	-2.02	1.40	1.52
15	B	1235	CLA	C2A-C1A	-2.02	1.40	1.52
15	2	602	CLA	C2A-C1A	-2.02	1.40	1.52
15	3	614	CLA	C2A-C1A	-2.02	1.40	1.52
15	A	1114	CLA	C1A-CHA	2.02	1.51	1.43
15	B	1212	CLA	C2A-C1A	-2.02	1.40	1.52
15	A	1128	CLA	C2A-C1A	-2.02	1.40	1.52
15	B	1227	CLA	C2A-C1A	-2.02	1.40	1.52
15	2	604	CLA	C2A-C1A	-2.02	1.40	1.52
15	3	607	CLA	C2A-C1A	-2.02	1.40	1.52
15	B	1238	CLA	C2A-C1A	-2.02	1.40	1.52
15	K	1401	CLA	C2A-C1A	-2.02	1.40	1.52
15	A	1129	CLA	C2A-C1A	-2.02	1.40	1.52
15	A	1138	CLA	C2A-C1A	-2.02	1.40	1.52
15	B	1214	CLA	C2A-C1A	-2.02	1.40	1.52
15	2	608	CLA	C2A-C1A	-2.02	1.40	1.52
15	4	612	CLA	C2A-C1A	-2.02	1.40	1.52
15	2	601	CLA	C2A-C1A	-2.02	1.40	1.52
15	B	1217	CLA	C2A-C1A	-2.02	1.40	1.52
15	A	1112	CLA	C2A-C1A	-2.02	1.40	1.52
15	4	608	CLA	C2A-C1A	-2.02	1.40	1.52
15	A	1125	CLA	C2A-C1A	-2.02	1.40	1.52
15	A	1113	CLA	C2A-C1A	-2.02	1.40	1.52
15	L	1501	CLA	C2A-C1A	-2.02	1.40	1.52
15	B	1223	CLA	C2A-C1A	-2.02	1.40	1.52
15	2	607	CLA	C2A-C1A	-2.02	1.40	1.52
15	4	605	CLA	C2A-C1A	-2.02	1.40	1.52
15	B	1237	CLA	MG-NC	2.02	2.11	2.06
15	2	605	CLA	C2A-C1A	-2.02	1.40	1.52
15	A	1102	CLA	C2A-C1A	-2.02	1.40	1.52
15	4	611	CLA	C2A-C1A	-2.02	1.40	1.52
15	2	603	CLA	C2A-C1A	-2.02	1.40	1.52
15	A	1120	CLA	C2A-C1A	-2.02	1.40	1.52
15	A	1103	CLA	C3B-C2B	-2.02	1.37	1.40
15	2	613	CLA	C2A-C1A	-2.02	1.40	1.52
15	B	1222	CLA	C2A-C1A	-2.01	1.40	1.52
15	B	1215	CLA	C2A-C1A	-2.01	1.40	1.52
15	B	1202	CLA	C2A-C1A	-2.01	1.40	1.52
15	2	616	CLA	C2A-C1A	-2.01	1.40	1.52

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	A	1141	CLA	C2A-C1A	-2.01	1.40	1.52
15	B	1208	CLA	C2A-C1A	-2.01	1.40	1.52
15	A	1134	CLA	C2A-C1A	-2.01	1.40	1.52
15	F	1301	CLA	MG-NC	2.01	2.11	2.06
15	A	1110	CLA	C2A-C1A	-2.01	1.40	1.52
15	B	1219	CLA	C2A-C1A	-2.01	1.40	1.52
15	A	1109	CLA	C2A-C1A	-2.01	1.40	1.52
15	A	1139	CLA	C2A-C1A	-2.01	1.40	1.52
15	2	615	CLA	C2A-C1A	-2.01	1.40	1.52
15	A	1135	CLA	C2A-C1A	-2.01	1.40	1.52
15	B	1218	CLA	C2A-C1A	-2.01	1.40	1.52
15	4	603	CLA	C2A-C1A	-2.01	1.40	1.52
15	J	1302	CLA	MG-NC	2.01	2.11	2.06
15	A	1012	CLA	C1B-NB	2.01	1.37	1.35
15	A	1104	CLA	MG-NC	2.01	2.11	2.06
15	B	1228	CLA	C1B-CHB	-2.00	1.39	1.43
15	3	610	CLA	C2A-C1A	-2.00	1.40	1.52

All (1477) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	A	4007	BCR	C10-C11-C12	18.19	179.99	123.22
18	A	4008	BCR	C10-C11-C12	17.90	179.09	123.22
18	A	4017	BCR	C10-C11-C12	17.72	178.52	123.22
18	B	4008	BCR	C10-C11-C12	17.61	178.17	123.22
18	B	4005	BCR	C10-C11-C12	17.51	177.87	123.22
18	A	4002	BCR	C10-C11-C12	17.48	177.75	123.22
18	I	4018	BCR	C10-C11-C12	17.01	176.30	123.22
18	A	4011	BCR	C10-C11-C12	16.89	175.93	123.22
18	A	4007	BCR	C16-C15-C14	16.56	157.39	123.47
18	A	4008	BCR	C16-C15-C14	16.20	156.65	123.47
18	B	4008	BCR	C16-C15-C14	15.79	155.83	123.47
18	A	4017	BCR	C16-C15-C14	15.75	155.74	123.47
18	A	4002	BCR	C16-C15-C14	14.92	154.04	123.47
18	B	4005	BCR	C16-C15-C14	14.52	153.22	123.47
18	I	4018	BCR	C11-C10-C9	13.88	147.12	127.31
18	B	4008	BCR	C11-C10-C9	13.15	146.07	127.31
18	A	4011	BCR	C11-C10-C9	13.12	146.04	127.31
18	I	4018	BCR	C16-C15-C14	12.71	149.51	123.47
18	A	4017	BCR	C21-C20-C19	12.68	162.79	123.22
18	B	4008	BCR	C21-C20-C19	12.37	161.82	123.22
18	A	4011	BCR	C16-C15-C14	12.32	148.71	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	A	4002	BCR	C21-C20-C19	12.20	161.29	123.22
18	A	4007	BCR	C21-C20-C19	12.11	161.01	123.22
18	B	4005	BCR	C21-C20-C19	12.07	160.89	123.22
18	A	4002	BCR	C11-C10-C9	11.76	144.09	127.31
18	A	4011	BCR	C11-C12-C13	11.42	158.49	126.42
18	I	4018	BCR	C21-C20-C19	11.23	158.28	123.22
18	A	4017	BCR	C11-C10-C9	11.20	143.30	127.31
18	A	4011	BCR	C21-C20-C19	10.92	157.30	123.22
18	A	4002	BCR	C11-C12-C13	10.81	156.79	126.42
18	B	4005	BCR	C11-C10-C9	10.71	142.59	127.31
18	A	4008	BCR	C21-C20-C19	10.66	156.49	123.22
18	B	4005	BCR	C11-C12-C13	10.15	154.92	126.42
18	I	4018	BCR	C11-C12-C13	9.67	153.57	126.42
18	A	4017	BCR	C11-C12-C13	9.54	153.21	126.42
18	A	4008	BCR	C20-C19-C18	9.45	152.98	126.42
15	B	1230	CLA	C4A-NA-C1A	9.43	110.94	106.71
18	B	4008	BCR	C11-C12-C13	9.29	152.51	126.42
15	A	1105	CLA	C4A-NA-C1A	9.20	110.84	106.71
18	A	4007	BCR	C11-C10-C9	9.19	140.43	127.31
18	A	4008	BCR	C11-C10-C9	9.18	140.41	127.31
18	A	4011	BCR	C20-C19-C18	9.09	151.96	126.42
15	F	1301	CLA	C4A-NA-C1A	9.09	110.79	106.71
15	J	1302	CLA	C4A-NA-C1A	9.04	110.77	106.71
15	A	1103	CLA	C4A-NA-C1A	9.01	110.75	106.71
15	A	1130	CLA	C4A-NA-C1A	8.95	110.73	106.71
15	A	1106	CLA	C4A-NA-C1A	8.91	110.71	106.71
15	B	1236	CLA	C4A-NA-C1A	8.90	110.71	106.71
15	B	1232	CLA	C4A-NA-C1A	8.84	110.68	106.71
15	A	1101	CLA	C4A-NA-C1A	8.81	110.67	106.71
18	A	4007	BCR	C11-C12-C13	8.80	151.14	126.42
15	A	1131	CLA	C4A-NA-C1A	8.80	110.66	106.71
15	B	1226	CLA	C4A-NA-C1A	8.79	110.66	106.71
18	A	4007	BCR	C20-C19-C18	8.79	151.11	126.42
15	A	1117	CLA	C4A-NA-C1A	8.78	110.65	106.71
15	B	1229	CLA	C4A-NA-C1A	8.77	110.65	106.71
15	A	1116	CLA	C4A-NA-C1A	8.75	110.64	106.71
15	A	1126	CLA	C4A-NA-C1A	8.74	110.64	106.71
15	B	1023	CLA	C4A-NA-C1A	8.74	110.63	106.71
15	A	1012	CLA	C4A-NA-C1A	8.73	110.63	106.71
18	I	4018	BCR	C20-C19-C18	8.72	150.92	126.42
15	A	1115	CLA	C4A-NA-C1A	8.72	110.62	106.71
18	A	4008	BCR	C11-C12-C13	8.71	150.89	126.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	1104	CLA	C4A-NA-C1A	8.70	110.62	106.71
15	B	1224	CLA	C4A-NA-C1A	8.50	110.53	106.71
15	B	1021	CLA	C4A-NA-C1A	8.49	110.52	106.71
15	B	1225	CLA	C4A-NA-C1A	8.48	110.52	106.71
15	B	1237	CLA	C4A-NA-C1A	8.43	110.50	106.71
15	A	1013	CLA	C4A-NA-C1A	8.33	110.45	106.71
18	A	4007	BCR	C15-C14-C13	-8.31	115.45	127.31
15	A	1011	CLA	C4A-NA-C1A	8.30	110.44	106.71
15	A	1114	CLA	C4A-NA-C1A	8.27	110.42	106.71
15	A	1107	CLA	C4A-NA-C1A	8.16	110.37	106.71
18	B	4005	BCR	C20-C19-C18	7.97	148.81	126.42
18	A	4002	BCR	C20-C19-C18	7.81	148.35	126.42
18	A	4017	BCR	C20-C19-C18	7.80	148.32	126.42
18	B	4008	BCR	C20-C19-C18	7.72	148.12	126.42
15	B	1228	CLA	C2A-C1A-CHA	-7.42	109.98	122.63
15	3	604	CLA	C2A-C1A-CHA	-6.84	110.97	122.63
15	B	1205	CLA	C2A-C1A-CHA	-6.79	111.06	122.63
15	L	1502	CLA	C2A-C1A-CHA	-6.77	111.08	122.63
15	A	1119	CLA	C2A-C1A-CHA	-6.77	111.09	122.63
15	3	612	CLA	C2A-C1A-CHA	-6.77	111.09	122.63
15	B	1222	CLA	C2A-C1A-CHA	-6.76	111.10	122.63
15	3	601	CLA	C2A-C1A-CHA	-6.76	111.11	122.63
15	O	1602	CLA	C2A-C1A-CHA	-6.75	111.11	122.63
15	B	1022	CLA	C2A-C1A-CHA	-6.75	111.12	122.63
15	4	612	CLA	C2A-C1A-CHA	-6.75	111.12	122.63
15	A	1140	CLA	C2A-C1A-CHA	-6.75	111.12	122.63
15	2	605	CLA	C2A-C1A-CHA	-6.75	111.12	122.63
15	A	1132	CLA	C2A-C1A-CHA	-6.75	111.12	122.63
15	4	610	CLA	C2A-C1A-CHA	-6.75	111.13	122.63
15	B	1202	CLA	C2A-C1A-CHA	-6.74	111.13	122.63
15	L	1503	CLA	C2A-C1A-CHA	-6.74	111.13	122.63
15	2	612	CLA	C2A-C1A-CHA	-6.74	111.13	122.63
15	K	1402	CLA	C2A-C1A-CHA	-6.74	111.13	122.63
15	3	610	CLA	C2A-C1A-CHA	-6.74	111.13	122.63
15	B	1208	CLA	C2A-C1A-CHA	-6.74	111.14	122.63
15	B	1219	CLA	C2A-C1A-CHA	-6.74	111.14	122.63
15	B	1217	CLA	C2A-C1A-CHA	-6.74	111.14	122.63
15	F	1302	CLA	C2A-C1A-CHA	-6.74	111.14	122.63
15	3	607	CLA	C2A-C1A-CHA	-6.74	111.14	122.63
15	A	1138	CLA	C2A-C1A-CHA	-6.74	111.15	122.63
15	A	1129	CLA	C2A-C1A-CHA	-6.73	111.15	122.63
15	B	1206	CLA	C2A-C1A-CHA	-6.73	111.15	122.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	4	608	CLA	C2A-C1A-CHA	-6.73	111.15	122.63
15	4	606	CLA	C2A-C1A-CHA	-6.73	111.15	122.63
15	B	1214	CLA	C2A-C1A-CHA	-6.73	111.15	122.63
15	B	1211	CLA	C2A-C1A-CHA	-6.73	111.15	122.63
15	B	1231	CLA	C2A-C1A-CHA	-6.73	111.15	122.63
15	2	601	CLA	C2A-C1A-CHA	-6.73	111.15	122.63
15	4	611	CLA	C2A-C1A-CHA	-6.73	111.15	122.63
15	A	1102	CLA	C2A-C1A-CHA	-6.73	111.16	122.63
15	4	601	CLA	C2A-C1A-CHA	-6.73	111.16	122.63
15	B	1234	CLA	C2A-C1A-CHA	-6.73	111.16	122.63
15	A	1125	CLA	C2A-C1A-CHA	-6.73	111.16	122.63
15	3	611	CLA	C2A-C1A-CHA	-6.73	111.16	122.63
15	A	1121	CLA	C2A-C1A-CHA	-6.73	111.16	122.63
15	B	1209	CLA	C2A-C1A-CHA	-6.73	111.16	122.63
15	B	1216	CLA	C2A-C1A-CHA	-6.73	111.16	122.63
15	A	1141	CLA	C2A-C1A-CHA	-6.72	111.16	122.63
15	B	1235	CLA	C2A-C1A-CHA	-6.72	111.17	122.63
15	2	604	CLA	C2A-C1A-CHA	-6.72	111.17	122.63
15	2	602	CLA	C2A-C1A-CHA	-6.72	111.17	122.63
15	B	1204	CLA	C2A-C1A-CHA	-6.72	111.17	122.63
15	B	1201	CLA	C2A-C1A-CHA	-6.72	111.17	122.63
15	2	615	CLA	C2A-C1A-CHA	-6.72	111.17	122.63
15	B	1239	CLA	C2A-C1A-CHA	-6.72	111.17	122.63
15	O	1603	CLA	C2A-C1A-CHA	-6.72	111.17	122.63
15	A	1120	CLA	C2A-C1A-CHA	-6.72	111.18	122.63
15	A	1133	CLA	C2A-C1A-CHA	-6.72	111.18	122.63
15	A	1108	CLA	C2A-C1A-CHA	-6.72	111.18	122.63
15	A	1134	CLA	C2A-C1A-CHA	-6.72	111.18	122.63
15	4	609	CLA	C2A-C1A-CHA	-6.72	111.18	122.63
15	4	602	CLA	C2A-C1A-CHA	-6.71	111.18	122.63
15	L	1501	CLA	C2A-C1A-CHA	-6.71	111.18	122.63
15	B	1218	CLA	C2A-C1A-CHA	-6.71	111.18	122.63
15	A	1112	CLA	C2A-C1A-CHA	-6.71	111.19	122.63
15	3	608	CLA	C2A-C1A-CHA	-6.71	111.19	122.63
15	A	1139	CLA	C2A-C1A-CHA	-6.71	111.19	122.63
15	B	1220	CLA	C2A-C1A-CHA	-6.71	111.19	122.63
15	2	614	CLA	C2A-C1A-CHA	-6.71	111.19	122.63
15	2	608	CLA	C2A-C1A-CHA	-6.71	111.19	122.63
15	A	1110	CLA	C2A-C1A-CHA	-6.71	111.19	122.63
15	4	604	CLA	C2A-C1A-CHA	-6.71	111.19	122.63
15	2	611	CLA	C2A-C1A-CHA	-6.71	111.19	122.63
15	2	606	CLA	C2A-C1A-CHA	-6.71	111.19	122.63

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	4	603	CLA	C2A-C1A-CHA	-6.71	111.19	122.63
15	4	605	CLA	C2A-C1A-CHA	-6.71	111.19	122.63
15	B	1215	CLA	C2A-C1A-CHA	-6.71	111.19	122.63
15	B	1210	CLA	C2A-C1A-CHA	-6.71	111.19	122.63
15	2	616	CLA	C2A-C1A-CHA	-6.71	111.20	122.63
15	B	1221	CLA	C2A-C1A-CHA	-6.71	111.20	122.63
15	3	606	CLA	C2A-C1A-CHA	-6.70	111.20	122.63
15	A	1109	CLA	C2A-C1A-CHA	-6.70	111.20	122.63
15	3	603	CLA	C2A-C1A-CHA	-6.70	111.20	122.63
15	B	1212	CLA	C2A-C1A-CHA	-6.70	111.20	122.63
15	A	1118	CLA	C2A-C1A-CHA	-6.70	111.20	122.63
15	A	1135	CLA	C2A-C1A-CHA	-6.70	111.21	122.63
15	B	1238	CLA	C2A-C1A-CHA	-6.70	111.21	122.63
15	A	1123	CLA	C2A-C1A-CHA	-6.70	111.21	122.63
15	A	1122	CLA	C2A-C1A-CHA	-6.69	111.22	122.63
15	2	610	CLA	C2A-C1A-CHA	-6.69	111.22	122.63
15	2	613	CLA	C2A-C1A-CHA	-6.69	111.22	122.63
15	A	1127	CLA	C2A-C1A-CHA	-6.69	111.22	122.63
15	B	1207	CLA	C2A-C1A-CHA	-6.69	111.22	122.63
15	3	614	CLA	C2A-C1A-CHA	-6.69	111.22	122.63
15	4	616	CLA	C2A-C1A-CHA	-6.69	111.22	122.63
15	O	1601	CLA	C2A-C1A-CHA	-6.69	111.22	122.63
15	A	1136	CLA	C2A-C1A-CHA	-6.69	111.22	122.63
15	B	1203	CLA	C2A-C1A-CHA	-6.69	111.23	122.63
15	A	1111	CLA	C2A-C1A-CHA	-6.69	111.23	122.63
15	K	1401	CLA	C2A-C1A-CHA	-6.68	111.23	122.63
15	4	615	CLA	C2A-C1A-CHA	-6.68	111.23	122.63
15	B	1223	CLA	C2A-C1A-CHA	-6.68	111.24	122.63
15	2	603	CLA	C2A-C1A-CHA	-6.68	111.24	122.63
15	3	602	CLA	C2A-C1A-CHA	-6.67	111.25	122.63
15	A	1137	CLA	C2A-C1A-CHA	-6.67	111.26	122.63
15	B	1227	CLA	C2A-C1A-CHA	-6.66	111.28	122.63
15	A	1128	CLA	C2A-C1A-CHA	-6.66	111.28	122.63
15	A	1113	CLA	C2A-C1A-CHA	-6.65	111.29	122.63
15	A	1124	CLA	C2A-C1A-CHA	-6.65	111.30	122.63
15	2	607	CLA	C2A-C1A-CHA	-6.61	111.36	122.63
18	A	4017	BCR	C15-C14-C13	-6.55	117.95	127.31
15	A	1011	CLA	O2D-CGD-CBD	6.30	122.47	111.27
18	B	4008	BCR	C15-C14-C13	-6.25	118.40	127.31
15	B	1230	CLA	O2D-CGD-CBD	6.24	122.35	111.27
15	J	1302	CLA	O2A-C1-C2	5.97	124.34	108.64
15	B	1236	CLA	O2D-CGD-CBD	5.67	121.35	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	B	1229	CLA	O2D-CGD-CBD	5.57	121.16	111.27
15	A	1130	CLA	O2A-C1-C2	5.43	122.90	108.64
15	A	1106	CLA	O2D-CGD-CBD	5.40	120.86	111.27
15	A	1116	CLA	O2D-CGD-CBD	5.38	120.82	111.27
15	A	1115	CLA	O2D-CGD-CBD	5.25	120.60	111.27
15	A	1013	CLA	O2A-C1-C2	5.22	122.36	108.64
15	A	1107	CLA	O2D-CGD-CBD	5.19	120.49	111.27
15	A	1105	CLA	O2A-C1-C2	5.17	122.22	108.64
15	A	1115	CLA	O2A-C1-C2	5.17	122.21	108.64
15	B	1237	CLA	O2A-C1-C2	5.16	122.20	108.64
15	B	1023	CLA	O2A-C1-C2	5.15	122.16	108.64
15	A	1117	CLA	O2D-CGD-CBD	5.14	120.39	111.27
15	A	1012	CLA	O2D-CGD-CBD	5.11	120.35	111.27
15	B	1225	CLA	O2D-CGD-CBD	5.11	120.34	111.27
15	J	1302	CLA	O2D-CGD-CBD	5.11	120.34	111.27
15	A	1107	CLA	O2A-C1-C2	5.11	122.05	108.64
15	A	1104	CLA	O2A-C1-C2	5.09	122.02	108.64
15	B	1232	CLA	O2D-CGD-CBD	5.08	120.30	111.27
15	B	1228	CLA	C2D-C3D-C4D	-5.02	101.98	106.30
15	A	1130	CLA	O2D-CGD-CBD	5.00	120.15	111.27
15	B	1237	CLA	O2D-CGD-CBD	5.00	120.15	111.27
15	A	1104	CLA	O2D-CGD-CBD	4.98	120.11	111.27
15	A	1103	CLA	O2D-CGD-CBD	4.96	120.07	111.27
15	A	1117	CLA	O2A-C1-C2	4.95	121.64	108.64
15	B	1226	CLA	O2D-CGD-CBD	4.93	120.03	111.27
15	B	1228	CLA	C1C-NC-C4C	4.93	108.92	106.71
15	A	1131	CLA	O2D-CGD-CBD	4.88	119.94	111.27
15	A	1101	CLA	O2D-CGD-CBD	4.88	119.93	111.27
15	B	1226	CLA	O2A-C1-C2	4.87	121.43	108.64
15	F	1301	CLA	O2D-CGD-CBD	4.86	119.90	111.27
15	A	1106	CLA	O2A-C1-C2	4.85	121.37	108.64
15	A	1013	CLA	O2D-CGD-CBD	4.83	119.86	111.27
15	B	1224	CLA	O2D-CGD-CBD	4.82	119.84	111.27
15	A	1114	CLA	O2D-CGD-CBD	4.82	119.83	111.27
15	B	1021	CLA	O2D-CGD-CBD	4.78	119.77	111.27
15	B	1224	CLA	O2A-C1-C2	4.74	121.11	108.64
15	A	1105	CLA	O2D-CGD-CBD	4.74	119.70	111.27
15	B	1225	CLA	O2A-C1-C2	4.73	121.06	108.64
15	A	1126	CLA	O2D-CGD-CBD	4.68	119.59	111.27
15	B	1232	CLA	O2A-C1-C2	4.65	120.85	108.64
15	B	1203	CLA	C1C-NC-C4C	4.62	108.78	106.71
15	A	1119	CLA	C2D-C3D-C4D	-4.60	102.34	106.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	B	1229	CLA	O2A-C1-C2	4.59	120.70	108.64
15	B	1227	CLA	C1C-NC-C4C	4.57	108.76	106.71
15	B	1207	CLA	C1C-NC-C4C	4.56	108.76	106.71
15	K	1402	CLA	C2D-C3D-C4D	-4.55	102.38	106.30
15	3	603	CLA	C1C-NC-C4C	4.54	108.75	106.71
15	A	1125	CLA	C2D-C3D-C4D	-4.51	102.42	106.30
15	3	604	CLA	C2D-C3D-C4D	-4.50	102.42	106.30
15	A	1126	CLA	O2A-C1-C2	4.50	120.46	108.64
15	A	1124	CLA	C2D-C3D-C4D	-4.49	102.43	106.30
15	O	1602	CLA	C2D-C3D-C4D	-4.49	102.43	106.30
15	A	1129	CLA	C2D-C3D-C4D	-4.49	102.43	106.30
15	B	1207	CLA	C2D-C3D-C4D	-4.48	102.44	106.30
15	3	610	CLA	C1C-NC-C4C	4.48	108.72	106.71
15	3	610	CLA	C2D-C3D-C4D	-4.47	102.45	106.30
15	B	1205	CLA	C1C-NC-C4C	4.47	108.71	106.71
15	L	1502	CLA	C1C-NC-C4C	4.46	108.71	106.71
15	3	601	CLA	C1C-NC-C4C	4.45	108.71	106.71
15	4	612	CLA	C1C-NC-C4C	4.45	108.71	106.71
18	B	4005	BCR	C15-C14-C13	-4.45	120.96	127.31
15	2	604	CLA	C2D-C3D-C4D	-4.44	102.48	106.30
15	B	1203	CLA	C2D-C3D-C4D	-4.43	102.48	106.30
15	3	604	CLA	C1C-NC-C4C	4.43	108.70	106.71
15	4	604	CLA	C1C-NC-C4C	4.43	108.70	106.71
15	2	604	CLA	C1C-NC-C4C	4.43	108.70	106.71
15	B	1227	CLA	C2D-C3D-C4D	-4.43	102.49	106.30
15	3	607	CLA	C2D-C3D-C4D	-4.43	102.49	106.30
15	4	602	CLA	C1C-NC-C4C	4.42	108.69	106.71
15	2	601	CLA	C2D-C3D-C4D	-4.42	102.50	106.30
15	3	614	CLA	C1C-NC-C4C	4.42	108.69	106.71
15	O	1603	CLA	C2D-C3D-C4D	-4.42	102.50	106.30
15	4	608	CLA	C2D-C3D-C4D	-4.42	102.50	106.30
15	B	1214	CLA	C2D-C3D-C4D	-4.42	102.50	106.30
15	2	608	CLA	C2D-C3D-C4D	-4.41	102.50	106.30
15	4	611	CLA	C2D-C3D-C4D	-4.41	102.50	106.30
15	4	601	CLA	C2D-C3D-C4D	-4.41	102.50	106.30
15	A	1120	CLA	C2D-C3D-C4D	-4.41	102.50	106.30
15	B	1211	CLA	C2D-C3D-C4D	-4.41	102.50	106.30
15	L	1502	CLA	C2D-C3D-C4D	-4.41	102.50	106.30
15	3	601	CLA	C2D-C3D-C4D	-4.40	102.51	106.30
15	B	1202	CLA	C2D-C3D-C4D	-4.40	102.51	106.30
15	B	1231	CLA	C2D-C3D-C4D	-4.40	102.51	106.30
15	B	1238	CLA	C2D-C3D-C4D	-4.40	102.51	106.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	B	1215	CLA	C2D-C3D-C4D	-4.40	102.51	106.30
15	A	1134	CLA	C2D-C3D-C4D	-4.40	102.51	106.30
15	2	605	CLA	C2D-C3D-C4D	-4.40	102.52	106.30
15	B	1022	CLA	C2D-C3D-C4D	-4.40	102.52	106.30
15	4	606	CLA	C2D-C3D-C4D	-4.39	102.52	106.30
15	B	1235	CLA	C2D-C3D-C4D	-4.39	102.52	106.30
15	2	602	CLA	C2D-C3D-C4D	-4.39	102.52	106.30
15	B	1239	CLA	C2D-C3D-C4D	-4.39	102.52	106.30
15	2	606	CLA	C2D-C3D-C4D	-4.38	102.53	106.30
15	B	1223	CLA	C2D-C3D-C4D	-4.38	102.53	106.30
15	2	615	CLA	C2D-C3D-C4D	-4.38	102.53	106.30
15	B	1210	CLA	C2D-C3D-C4D	-4.38	102.53	106.30
15	B	1208	CLA	C2D-C3D-C4D	-4.38	102.53	106.30
15	3	603	CLA	C2D-C3D-C4D	-4.38	102.53	106.30
15	B	1216	CLA	C2D-C3D-C4D	-4.38	102.53	106.30
15	2	611	CLA	C2D-C3D-C4D	-4.38	102.53	106.30
15	B	1220	CLA	C2D-C3D-C4D	-4.38	102.53	106.30
15	B	1202	CLA	C1C-NC-C4C	4.38	108.67	106.71
15	A	1133	CLA	C1C-NC-C4C	4.38	108.67	106.71
15	2	616	CLA	C2D-C3D-C4D	-4.38	102.53	106.30
15	A	1122	CLA	C2D-C3D-C4D	-4.38	102.53	106.30
15	L	1501	CLA	C1C-NC-C4C	4.37	108.67	106.71
15	4	604	CLA	C2D-C3D-C4D	-4.37	102.53	106.30
15	4	610	CLA	C2D-C3D-C4D	-4.37	102.53	106.30
15	O	1601	CLA	C2D-C3D-C4D	-4.37	102.54	106.30
15	3	607	CLA	C1C-NC-C4C	4.37	108.67	106.71
15	B	1201	CLA	C2D-C3D-C4D	-4.37	102.54	106.30
15	B	1022	CLA	C1C-NC-C4C	4.37	108.67	106.71
15	B	1218	CLA	C2D-C3D-C4D	-4.37	102.54	106.30
15	3	602	CLA	C2D-C3D-C4D	-4.37	102.54	106.30
15	4	605	CLA	C1C-NC-C4C	4.37	108.67	106.71
15	B	1222	CLA	C2D-C3D-C4D	-4.37	102.54	106.30
15	A	1137	CLA	C2D-C3D-C4D	-4.36	102.54	106.30
15	B	1212	CLA	C2D-C3D-C4D	-4.36	102.54	106.30
15	B	1231	CLA	C1C-NC-C4C	4.36	108.67	106.71
15	2	601	CLA	C1C-NC-C4C	4.36	108.67	106.71
15	L	1503	CLA	C2D-C3D-C4D	-4.36	102.54	106.30
15	A	1121	CLA	C2D-C3D-C4D	-4.36	102.54	106.30
15	3	611	CLA	C2D-C3D-C4D	-4.36	102.54	106.30
15	B	1217	CLA	C2D-C3D-C4D	-4.36	102.54	106.30
15	K	1401	CLA	C1C-NC-C4C	4.36	108.67	106.71
15	4	605	CLA	C2D-C3D-C4D	-4.36	102.55	106.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	B	1208	CLA	C1C-NC-C4C	4.36	108.67	106.71
15	3	614	CLA	C2D-C3D-C4D	-4.36	102.55	106.30
15	4	612	CLA	C2D-C3D-C4D	-4.36	102.55	106.30
15	A	1141	CLA	C2D-C3D-C4D	-4.36	102.55	106.30
15	A	1113	CLA	C2D-C3D-C4D	-4.36	102.55	106.30
15	B	1235	CLA	C1C-NC-C4C	4.36	108.66	106.71
15	A	1137	CLA	C1C-NC-C4C	4.36	108.66	106.71
15	2	610	CLA	C2D-C3D-C4D	-4.36	102.55	106.30
15	2	612	CLA	C2D-C3D-C4D	-4.35	102.55	106.30
15	A	1111	CLA	C1C-NC-C4C	4.35	108.66	106.71
15	A	1113	CLA	C1C-NC-C4C	4.35	108.66	106.71
15	B	1221	CLA	C2D-C3D-C4D	-4.35	102.55	106.30
15	A	1108	CLA	C2D-C3D-C4D	-4.35	102.56	106.30
15	A	1102	CLA	C2D-C3D-C4D	-4.35	102.56	106.30
15	4	603	CLA	C2D-C3D-C4D	-4.35	102.56	106.30
15	4	609	CLA	C2D-C3D-C4D	-4.35	102.56	106.30
15	A	1135	CLA	C2D-C3D-C4D	-4.34	102.56	106.30
15	4	616	CLA	C2D-C3D-C4D	-4.34	102.56	106.30
15	A	1109	CLA	C2D-C3D-C4D	-4.34	102.56	106.30
15	A	1135	CLA	C1C-NC-C4C	4.34	108.66	106.71
15	B	1219	CLA	C2D-C3D-C4D	-4.34	102.56	106.30
15	B	1220	CLA	C1C-NC-C4C	4.34	108.66	106.71
15	3	608	CLA	C1C-NC-C4C	4.34	108.66	106.71
15	F	1302	CLA	C2D-C3D-C4D	-4.34	102.56	106.30
15	A	1136	CLA	C2D-C3D-C4D	-4.34	102.56	106.30
15	K	1401	CLA	C2D-C3D-C4D	-4.34	102.56	106.30
15	3	611	CLA	C1C-NC-C4C	4.34	108.66	106.71
15	B	1234	CLA	C1C-NC-C4C	4.34	108.66	106.71
15	B	1209	CLA	C2D-C3D-C4D	-4.34	102.56	106.30
15	B	1222	CLA	C1C-NC-C4C	4.34	108.66	106.71
15	A	1118	CLA	C2D-C3D-C4D	-4.34	102.57	106.30
15	4	601	CLA	C1C-NC-C4C	4.34	108.66	106.71
15	A	1141	CLA	C1C-NC-C4C	4.34	108.66	106.71
15	B	1217	CLA	C1C-NC-C4C	4.34	108.66	106.71
15	B	1211	CLA	C1C-NC-C4C	4.34	108.66	106.71
15	2	612	CLA	C1C-NC-C4C	4.33	108.65	106.71
15	A	1125	CLA	C1C-NC-C4C	4.33	108.65	106.71
15	3	606	CLA	C2D-C3D-C4D	-4.33	102.57	106.30
15	B	1204	CLA	C2D-C3D-C4D	-4.33	102.57	106.30
15	B	1216	CLA	C1C-NC-C4C	4.33	108.65	106.71
15	2	605	CLA	C1C-NC-C4C	4.33	108.65	106.71
15	A	1139	CLA	C1C-NC-C4C	4.33	108.65	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	4	602	CLA	C2D-C3D-C4D	-4.33	102.57	106.30
15	L	1501	CLA	C2D-C3D-C4D	-4.33	102.57	106.30
15	B	1238	CLA	C1C-NC-C4C	4.33	108.65	106.71
15	2	607	CLA	C3D-C2D-C1D	-4.33	102.57	106.30
15	B	1209	CLA	C1C-NC-C4C	4.33	108.65	106.71
15	3	608	CLA	C2D-C3D-C4D	-4.33	102.58	106.30
15	A	1139	CLA	C2D-C3D-C4D	-4.32	102.58	106.30
15	B	1234	CLA	C2D-C3D-C4D	-4.32	102.58	106.30
15	4	615	CLA	C1C-NC-C4C	4.32	108.65	106.71
15	2	615	CLA	C1C-NC-C4C	4.32	108.65	106.71
15	B	1206	CLA	C2D-C3D-C4D	-4.32	102.58	106.30
15	A	1133	CLA	C2D-C3D-C4D	-4.32	102.58	106.30
15	2	608	CLA	C1C-NC-C4C	4.32	108.65	106.71
15	4	615	CLA	C2D-C3D-C4D	-4.32	102.58	106.30
15	A	1140	CLA	C1C-NC-C4C	4.32	108.65	106.71
15	2	613	CLA	C2D-C3D-C4D	-4.31	102.58	106.30
15	B	1215	CLA	C1C-NC-C4C	4.31	108.64	106.71
15	4	606	CLA	C1C-NC-C4C	4.31	108.64	106.71
15	2	602	CLA	C1C-NC-C4C	4.31	108.64	106.71
15	A	1129	CLA	C1C-NC-C4C	4.31	108.64	106.71
15	A	1124	CLA	C1C-NC-C4C	4.31	108.64	106.71
15	B	1239	CLA	C1C-NC-C4C	4.31	108.64	106.71
15	4	603	CLA	C1C-NC-C4C	4.31	108.64	106.71
15	4	609	CLA	C1C-NC-C4C	4.31	108.64	106.71
15	A	1138	CLA	C2D-C3D-C4D	-4.30	102.59	106.30
15	A	1121	CLA	C1C-NC-C4C	4.30	108.64	106.71
15	2	616	CLA	C1C-NC-C4C	4.30	108.64	106.71
18	A	4008	BCR	C33-C5-C6	-4.30	119.70	124.53
15	A	1112	CLA	C1C-NC-C4C	4.30	108.64	106.71
15	B	1201	CLA	C1C-NC-C4C	4.30	108.64	106.71
15	2	614	CLA	C2D-C3D-C4D	-4.29	102.60	106.30
15	A	1110	CLA	C2D-C3D-C4D	-4.29	102.60	106.30
15	2	606	CLA	C1C-NC-C4C	4.29	108.64	106.71
15	2	611	CLA	C1C-NC-C4C	4.29	108.64	106.71
15	B	1214	CLA	C1C-NC-C4C	4.29	108.64	106.71
15	A	1128	CLA	C2D-C3D-C4D	-4.29	102.61	106.30
15	A	1116	CLA	O2A-C1-C2	4.29	119.90	108.64
15	4	611	CLA	C1C-NC-C4C	4.29	108.63	106.71
15	A	1118	CLA	C1C-NC-C4C	4.29	108.63	106.71
15	B	1232	CLA	C1-C2-C3	-4.29	118.63	126.04
15	B	1223	CLA	C1C-NC-C4C	4.28	108.63	106.71
15	A	1123	CLA	C1C-NC-C4C	4.28	108.63	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	B	1210	CLA	C1C-NC-C4C	4.28	108.63	106.71
15	4	616	CLA	C1C-NC-C4C	4.28	108.63	106.71
15	2	614	CLA	C1C-NC-C4C	4.28	108.63	106.71
15	A	1109	CLA	C1C-NC-C4C	4.28	108.63	106.71
15	A	1112	CLA	C2D-C3D-C4D	-4.28	102.62	106.30
15	A	1111	CLA	C2D-C3D-C4D	-4.28	102.62	106.30
15	B	1227	CLA	C3B-C4B-NB	4.27	113.85	110.11
15	A	1136	CLA	C1C-NC-C4C	4.26	108.62	106.71
15	A	1134	CLA	C1C-NC-C4C	4.26	108.62	106.71
15	A	1127	CLA	C1C-NC-C4C	4.26	108.62	106.71
15	A	1140	CLA	C2D-C3D-C4D	-4.26	102.63	106.30
15	A	1123	CLA	C2D-C3D-C4D	-4.26	102.63	106.30
15	A	1120	CLA	C1C-NC-C4C	4.26	108.62	106.71
15	3	602	CLA	C1C-NC-C4C	4.26	108.62	106.71
15	O	1602	CLA	C1C-NC-C4C	4.25	108.62	106.71
15	4	608	CLA	C1C-NC-C4C	4.25	108.62	106.71
15	3	606	CLA	C1C-NC-C4C	4.25	108.62	106.71
15	A	1119	CLA	C1C-NC-C4C	4.25	108.62	106.71
15	A	1102	CLA	C1C-NC-C4C	4.25	108.61	106.71
15	O	1601	CLA	C1C-NC-C4C	4.25	108.61	106.71
15	L	1503	CLA	C1C-NC-C4C	4.24	108.61	106.71
15	B	1204	CLA	C1C-NC-C4C	4.24	108.61	106.71
15	A	1011	CLA	O2A-C1-C2	4.24	119.78	108.64
15	A	1122	CLA	C1C-NC-C4C	4.24	108.61	106.71
15	A	1138	CLA	C1C-NC-C4C	4.24	108.61	106.71
15	4	610	CLA	C1C-NC-C4C	4.24	108.61	106.71
15	A	1108	CLA	C1C-NC-C4C	4.24	108.61	106.71
15	B	1218	CLA	C1C-NC-C4C	4.24	108.61	106.71
15	2	613	CLA	C1C-NC-C4C	4.23	108.61	106.71
15	A	1110	CLA	C1C-NC-C4C	4.23	108.61	106.71
15	B	1221	CLA	C1C-NC-C4C	4.23	108.61	106.71
15	2	610	CLA	C1C-NC-C4C	4.23	108.61	106.71
15	F	1302	CLA	C1C-NC-C4C	4.22	108.61	106.71
15	A	1012	CLA	O2A-C1-C2	4.21	119.71	108.64
15	B	1205	CLA	C2D-C3D-C4D	-4.20	102.68	106.30
15	O	1603	CLA	C1C-NC-C4C	4.20	108.60	106.71
15	B	1219	CLA	C1C-NC-C4C	4.20	108.59	106.71
15	2	603	CLA	C3D-C2D-C1D	-4.20	102.68	106.30
15	A	1128	CLA	C1C-NC-C4C	4.19	108.59	106.71
15	K	1402	CLA	C1C-NC-C4C	4.18	108.58	106.71
15	A	1127	CLA	C2D-C3D-C4D	-4.17	102.71	106.30
15	B	1206	CLA	C1C-NC-C4C	4.16	108.58	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	1132	CLA	C2D-C3D-C4D	-4.16	102.72	106.30
15	B	1205	CLA	C4A-NA-C1A	-4.15	104.84	106.71
15	B	1212	CLA	C1C-NC-C4C	4.13	108.56	106.71
15	3	612	CLA	C3D-C2D-C1D	-4.13	102.75	106.30
15	3	612	CLA	C1C-NC-C4C	4.13	108.56	106.71
15	B	1224	CLA	C1-C2-C3	-4.12	118.92	126.04
15	3	603	CLA	C3B-C4B-NB	4.12	113.71	110.11
15	2	603	CLA	C1C-NC-C4C	4.08	108.54	106.71
15	2	607	CLA	C1C-NC-C4C	4.07	108.54	106.71
15	A	1103	CLA	O2A-C1-C2	4.06	119.31	108.64
15	A	1132	CLA	C1C-NC-C4C	4.06	108.53	106.71
15	3	612	CLA	C4A-NA-C1A	-4.04	104.89	106.71
15	3	604	CLA	C4A-NA-C1A	-4.03	104.89	106.71
15	B	1201	CLA	C3B-C4B-NB	4.02	113.63	110.11
15	A	1127	CLA	C3D-C2D-C1D	-4.00	102.86	106.30
15	A	1124	CLA	C3B-C4B-NB	3.99	113.60	110.11
15	B	1023	CLA	O2D-CGD-CBD	3.98	118.35	111.27
15	A	1132	CLA	C3D-C2D-C1D	-3.97	102.88	106.30
15	B	1203	CLA	C3B-C4B-NB	3.94	113.56	110.11
18	A	4008	BCR	C23-C24-C25	-3.93	116.16	127.20
15	B	1205	CLA	C3D-C2D-C1D	-3.93	102.92	106.30
15	A	1122	CLA	C3B-C4B-NB	3.93	113.55	110.11
15	3	602	CLA	C3B-C4B-NB	3.92	113.54	110.11
15	3	612	CLA	C2D-C3D-C4D	-3.91	102.94	106.30
15	B	1215	CLA	C3D-C2D-C1D	-3.91	102.94	106.30
15	3	601	CLA	C3B-C4B-NB	3.90	113.53	110.11
15	3	601	CLA	C4A-NA-C1A	-3.90	104.95	106.71
15	B	1023	CLA	C1-C2-C3	-3.90	120.45	126.75
15	3	606	CLA	C3B-C4B-NB	3.89	113.52	110.11
15	A	1112	CLA	C3D-C2D-C1D	-3.88	102.96	106.30
15	B	1228	CLA	C3B-C4B-NB	3.88	113.50	110.11
15	B	1209	CLA	C3D-C2D-C1D	-3.87	102.96	106.30
15	A	1123	CLA	C3D-C2D-C1D	-3.87	102.97	106.30
15	B	1221	CLA	C3D-C2D-C1D	-3.86	102.97	106.30
15	3	611	CLA	C3B-C4B-NB	3.86	113.49	110.11
15	2	604	CLA	C3B-C4B-NB	3.86	113.49	110.11
15	4	615	CLA	C3D-C2D-C1D	-3.86	102.98	106.30
15	4	612	CLA	C3B-C4B-NB	3.85	113.48	110.11
15	B	1220	CLA	C3B-C4B-NB	3.85	113.48	110.11
15	2	603	CLA	C2D-C3D-C4D	-3.85	102.98	106.30
15	4	601	CLA	C3B-C4B-NB	3.85	113.48	110.11
15	F	1302	CLA	C3B-C4B-NB	3.85	113.48	110.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	1128	CLA	C3D-C2D-C1D	-3.85	102.98	106.30
15	B	1223	CLA	C3B-C4B-NB	3.85	113.48	110.11
15	A	1111	CLA	C3D-C2D-C1D	-3.85	102.99	106.30
15	B	1206	CLA	C3D-C2D-C1D	-3.85	102.99	106.30
15	A	1112	CLA	C4A-NA-C1A	-3.85	104.98	106.71
15	4	603	CLA	C3B-C4B-NB	3.85	113.48	110.11
15	A	1011	CLA	C1-C2-C3	-3.84	120.53	126.75
15	3	606	CLA	C3D-C2D-C1D	-3.84	102.99	106.30
15	3	607	CLA	C3B-C4B-NB	3.84	113.47	110.11
15	2	614	CLA	C3D-C2D-C1D	-3.84	102.99	106.30
15	L	1502	CLA	C3B-C4B-NB	3.84	113.47	110.11
15	B	1218	CLA	C3B-C4B-NB	3.84	113.47	110.11
15	3	602	CLA	C3D-C2D-C1D	-3.84	102.99	106.30
15	K	1402	CLA	C4A-NA-C1A	-3.84	104.98	106.71
15	4	611	CLA	C3B-C4B-NB	3.84	113.47	110.11
15	L	1501	CLA	C3D-C2D-C1D	-3.84	103.00	106.30
15	4	602	CLA	C3D-C2D-C1D	-3.84	103.00	106.30
15	B	1234	CLA	C3D-C2D-C1D	-3.84	103.00	106.30
15	A	1132	CLA	C4A-NA-C1A	-3.83	104.98	106.71
15	A	1134	CLA	C3B-C4B-NB	3.83	113.47	110.11
15	L	1503	CLA	C3D-C2D-C1D	-3.83	103.00	106.30
15	O	1602	CLA	C4A-NA-C1A	-3.83	104.98	106.71
15	O	1601	CLA	C3B-C4B-NB	3.83	113.46	110.11
15	3	611	CLA	C3D-C2D-C1D	-3.83	103.00	106.30
15	2	614	CLA	C3B-C4B-NB	3.83	113.46	110.11
15	3	608	CLA	C3D-C2D-C1D	-3.83	103.00	106.30
15	A	1138	CLA	C3B-C4B-NB	3.83	113.46	110.11
15	4	616	CLA	C3B-C4B-NB	3.83	113.46	110.11
15	2	616	CLA	C3D-C2D-C1D	-3.83	103.00	106.30
15	2	611	CLA	C3D-C2D-C1D	-3.83	103.01	106.30
15	4	605	CLA	C3B-C4B-NB	3.83	113.46	110.11
15	B	1205	CLA	C3B-C4B-NB	3.83	113.46	110.11
15	B	1235	CLA	C3D-C2D-C1D	-3.82	103.01	106.30
15	2	603	CLA	C3B-C4B-NB	3.82	113.46	110.11
15	B	1217	CLA	C3D-C2D-C1D	-3.82	103.01	106.30
15	3	603	CLA	C3D-C2D-C1D	-3.82	103.01	106.30
15	3	608	CLA	C3B-C4B-NB	3.82	113.45	110.11
15	2	612	CLA	C3D-C2D-C1D	-3.82	103.01	106.30
15	4	602	CLA	C3B-C4B-NB	3.82	113.45	110.11
15	A	1111	CLA	C3B-C4B-NB	3.82	113.45	110.11
15	B	1239	CLA	C3B-C4B-NB	3.82	113.45	110.11
15	F	1302	CLA	C3D-C2D-C1D	-3.82	103.01	106.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	1108	CLA	C3D-C2D-C1D	-3.82	103.01	106.30
15	4	609	CLA	C3D-C2D-C1D	-3.82	103.01	106.30
15	B	1222	CLA	C3B-C4B-NB	3.82	113.45	110.11
15	A	1113	CLA	C3D-C2D-C1D	-3.81	103.02	106.30
15	4	603	CLA	C3D-C2D-C1D	-3.81	103.02	106.30
15	L	1503	CLA	C3B-C4B-NB	3.81	113.45	110.11
15	2	613	CLA	C3D-C2D-C1D	-3.81	103.02	106.30
15	O	1601	CLA	C3D-C2D-C1D	-3.81	103.02	106.30
15	B	1215	CLA	C3B-C4B-NB	3.81	113.45	110.11
15	B	1222	CLA	C3D-C2D-C1D	-3.81	103.02	106.30
15	2	605	CLA	C3D-C2D-C1D	-3.81	103.02	106.30
15	A	1118	CLA	C3D-C2D-C1D	-3.81	103.02	106.30
15	B	1219	CLA	C3B-C4B-NB	3.81	113.44	110.11
15	B	1207	CLA	C3B-C4B-NB	3.81	113.44	110.11
15	4	609	CLA	C3B-C4B-NB	3.81	113.44	110.11
15	A	1133	CLA	C3D-C2D-C1D	-3.81	103.02	106.30
15	A	1128	CLA	C3B-C4B-NB	3.81	113.44	110.11
15	B	1234	CLA	C3B-C4B-NB	3.81	113.44	110.11
15	L	1502	CLA	C3D-C2D-C1D	-3.81	103.02	106.30
15	B	1218	CLA	C3D-C2D-C1D	-3.81	103.02	106.30
15	B	1212	CLA	C3D-C2D-C1D	-3.80	103.02	106.30
15	B	1022	CLA	C3D-C2D-C1D	-3.80	103.02	106.30
15	K	1401	CLA	C3D-C2D-C1D	-3.80	103.03	106.30
15	A	1139	CLA	C3D-C2D-C1D	-3.80	103.03	106.30
15	A	1125	CLA	C4A-NA-C1A	-3.80	105.00	106.71
15	B	1216	CLA	C3B-C4B-NB	3.80	113.44	110.11
15	4	604	CLA	C3D-C2D-C1D	-3.80	103.03	106.30
15	B	1204	CLA	C3D-C2D-C1D	-3.80	103.03	106.30
15	A	1110	CLA	C3B-C4B-NB	3.80	113.44	110.11
15	B	1239	CLA	C3D-C2D-C1D	-3.80	103.03	106.30
15	2	602	CLA	C3D-C2D-C1D	-3.80	103.03	106.30
15	4	602	CLA	C4A-NA-C1A	-3.80	105.00	106.71
15	A	1110	CLA	C3D-C2D-C1D	-3.80	103.03	106.30
15	A	1141	CLA	C3B-C4B-NB	3.80	113.44	110.11
15	B	1219	CLA	C3D-C2D-C1D	-3.80	103.03	106.30
15	B	1210	CLA	C3B-C4B-NB	3.80	113.44	110.11
15	4	605	CLA	C3D-C2D-C1D	-3.80	103.03	106.30
15	A	1113	CLA	C3B-C4B-NB	3.80	113.43	110.11
15	3	614	CLA	C3D-C2D-C1D	-3.79	103.03	106.30
15	B	1204	CLA	C3B-C4B-NB	3.79	113.43	110.11
15	2	604	CLA	C3D-C2D-C1D	-3.79	103.03	106.30
15	A	1119	CLA	C4A-NA-C1A	-3.79	105.00	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	1140	CLA	C3D-C2D-C1D	-3.79	103.03	106.30
15	4	610	CLA	C3B-C4B-NB	3.79	113.43	110.11
15	2	610	CLA	C3D-C2D-C1D	-3.79	103.04	106.30
15	A	1109	CLA	C3D-C2D-C1D	-3.79	103.04	106.30
15	B	1217	CLA	C3B-C4B-NB	3.79	113.43	110.11
15	A	1141	CLA	C3D-C2D-C1D	-3.79	103.04	106.30
15	A	1137	CLA	C3B-C4B-NB	3.79	113.43	110.11
15	B	1214	CLA	C3D-C2D-C1D	-3.79	103.04	106.30
15	3	614	CLA	C3B-C4B-NB	3.79	113.42	110.11
15	2	612	CLA	C3B-C4B-NB	3.79	113.42	110.11
15	4	616	CLA	C3D-C2D-C1D	-3.79	103.04	106.30
15	A	1136	CLA	C3B-C4B-NB	3.79	113.42	110.11
15	4	608	CLA	C3B-C4B-NB	3.79	113.42	110.11
15	O	1602	CLA	C3B-C4B-NB	3.79	113.42	110.11
15	4	606	CLA	C3B-C4B-NB	3.79	113.42	110.11
15	B	1201	CLA	C3D-C2D-C1D	-3.79	103.04	106.30
15	B	1216	CLA	C3D-C2D-C1D	-3.79	103.04	106.30
15	A	1136	CLA	C3D-C2D-C1D	-3.79	103.04	106.30
15	O	1603	CLA	C3B-C4B-NB	3.78	113.42	110.11
15	A	1135	CLA	C3D-C2D-C1D	-3.78	103.04	106.30
15	2	602	CLA	C3B-C4B-NB	3.78	113.42	110.11
15	A	1112	CLA	C3B-C4B-NB	3.78	113.42	110.11
15	B	1220	CLA	C3D-C2D-C1D	-3.78	103.05	106.30
15	A	1107	CLA	C1-C2-C3	-3.78	119.50	126.04
15	A	1139	CLA	C3B-C4B-NB	3.78	113.42	110.11
15	4	606	CLA	C3D-C2D-C1D	-3.78	103.05	106.30
15	B	1210	CLA	C3D-C2D-C1D	-3.78	103.05	106.30
15	2	616	CLA	C3B-C4B-NB	3.78	113.42	110.11
15	2	605	CLA	C3B-C4B-NB	3.78	113.42	110.11
15	B	1212	CLA	C3B-C4B-NB	3.78	113.42	110.11
15	A	1113	CLA	C4A-NA-C1A	-3.78	105.01	106.71
15	B	1235	CLA	C3B-C4B-NB	3.77	113.41	110.11
15	2	611	CLA	C3B-C4B-NB	3.77	113.41	110.11
15	4	601	CLA	C3D-C2D-C1D	-3.77	103.05	106.30
15	4	608	CLA	C3D-C2D-C1D	-3.77	103.05	106.30
15	4	610	CLA	C3D-C2D-C1D	-3.77	103.05	106.30
15	B	1209	CLA	C3B-C4B-NB	3.77	113.41	110.11
15	A	1129	CLA	C3B-C4B-NB	3.77	113.41	110.11
15	B	1211	CLA	C3B-C4B-NB	3.77	113.41	110.11
15	B	1203	CLA	C3D-C2D-C1D	-3.77	103.05	106.30
15	B	1208	CLA	C3D-C2D-C1D	-3.77	103.05	106.30
15	B	1238	CLA	C3B-C4B-NB	3.77	113.41	110.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	3	604	CLA	C3D-C2D-C1D	-3.77	103.05	106.30
15	K	1401	CLA	C3B-C4B-NB	3.77	113.41	110.11
15	2	607	CLA	C3B-C4B-NB	3.77	113.41	110.11
15	B	1231	CLA	C3D-C2D-C1D	-3.77	103.06	106.30
15	O	1603	CLA	C3D-C2D-C1D	-3.76	103.06	106.30
15	A	1138	CLA	C3D-C2D-C1D	-3.76	103.06	106.30
15	2	608	CLA	C3B-C4B-NB	3.76	113.40	110.11
15	B	1208	CLA	C3B-C4B-NB	3.76	113.40	110.11
15	A	1140	CLA	C4A-NA-C1A	-3.76	105.01	106.71
15	4	608	CLA	C4A-NA-C1A	-3.76	105.01	106.71
15	A	1135	CLA	C4A-NA-C1A	-3.76	105.01	106.71
15	A	1137	CLA	C3D-C2D-C1D	-3.76	103.06	106.30
15	B	1223	CLA	C3D-C2D-C1D	-3.76	103.06	106.30
15	B	1230	CLA	C2C-C1C-NC	3.76	113.50	109.97
15	B	1231	CLA	C3B-C4B-NB	3.76	113.40	110.11
15	B	1214	CLA	C3B-C4B-NB	3.76	113.40	110.11
15	A	1102	CLA	C3D-C2D-C1D	-3.76	103.06	106.30
15	2	615	CLA	C3B-C4B-NB	3.76	113.40	110.11
15	B	1238	CLA	C3D-C2D-C1D	-3.76	103.06	106.30
15	A	1134	CLA	C3D-C2D-C1D	-3.76	103.06	106.30
15	B	1211	CLA	C3D-C2D-C1D	-3.76	103.06	106.30
15	4	612	CLA	C3D-C2D-C1D	-3.76	103.07	106.30
15	2	613	CLA	C3B-C4B-NB	3.76	113.40	110.11
15	2	615	CLA	C3D-C2D-C1D	-3.75	103.07	106.30
15	A	1133	CLA	C4A-NA-C1A	-3.75	105.02	106.71
15	2	601	CLA	C3B-C4B-NB	3.75	113.40	110.11
15	3	607	CLA	C3D-C2D-C1D	-3.75	103.07	106.30
15	A	1121	CLA	C3D-C2D-C1D	-3.75	103.07	106.30
15	B	1202	CLA	C3D-C2D-C1D	-3.75	103.07	106.30
15	2	610	CLA	C3B-C4B-NB	3.75	113.39	110.11
15	B	1221	CLA	C3B-C4B-NB	3.75	113.39	110.11
15	A	1139	CLA	C4A-NA-C1A	-3.75	105.02	106.71
15	A	1123	CLA	C3B-C4B-NB	3.75	113.39	110.11
15	A	1140	CLA	C3B-C4B-NB	3.75	113.39	110.11
15	A	1108	CLA	C3B-C4B-NB	3.75	113.39	110.11
15	3	601	CLA	C3D-C2D-C1D	-3.75	103.08	106.30
15	2	606	CLA	C3D-C2D-C1D	-3.75	103.08	106.30
15	B	1022	CLA	C3B-C4B-NB	3.75	113.39	110.11
15	A	1133	CLA	C3B-C4B-NB	3.74	113.39	110.11
15	A	1102	CLA	C3B-C4B-NB	3.74	113.39	110.11
15	A	1121	CLA	C3B-C4B-NB	3.74	113.39	110.11
15	A	1120	CLA	C3B-C4B-NB	3.74	113.39	110.11

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	1109	CLA	C3B-C4B-NB	3.74	113.39	110.11
15	A	1129	CLA	C3D-C2D-C1D	-3.74	103.08	106.30
15	A	1119	CLA	C3B-C4B-NB	3.74	113.39	110.11
15	O	1603	CLA	C4A-NA-C1A	-3.74	105.02	106.71
15	2	608	CLA	C3D-C2D-C1D	-3.74	103.08	106.30
15	3	610	CLA	C3B-C4B-NB	3.74	113.38	110.11
15	4	611	CLA	C3D-C2D-C1D	-3.74	103.08	106.30
15	2	601	CLA	C3D-C2D-C1D	-3.74	103.08	106.30
15	A	1132	CLA	C3B-C4B-NB	3.74	113.38	110.11
15	4	609	CLA	C4A-NA-C1A	-3.74	105.03	106.71
15	A	1120	CLA	C3D-C2D-C1D	-3.74	103.08	106.30
15	L	1501	CLA	C3B-C4B-NB	3.74	113.38	110.11
15	B	1202	CLA	C4A-NA-C1A	-3.73	105.03	106.71
15	K	1402	CLA	C3B-C4B-NB	3.73	113.38	110.11
15	3	610	CLA	C3D-C2D-C1D	-3.73	103.09	106.30
15	4	615	CLA	C3B-C4B-NB	3.73	113.38	110.11
15	B	1231	CLA	C4A-NA-C1A	-3.73	105.03	106.71
15	A	1118	CLA	C3B-C4B-NB	3.73	113.37	110.11
15	3	603	CLA	C4A-NA-C1A	-3.73	105.03	106.71
15	F	1302	CLA	C4A-NA-C1A	-3.72	105.03	106.71
15	2	603	CLA	C4A-NA-C1A	-3.72	105.03	106.71
15	A	1138	CLA	C4A-NA-C1A	-3.72	105.03	106.71
15	4	604	CLA	C3B-C4B-NB	3.72	113.37	110.11
15	B	1206	CLA	C4A-NA-C1A	-3.72	105.03	106.71
15	B	1206	CLA	C3B-C4B-NB	3.72	113.36	110.11
15	2	606	CLA	C3B-C4B-NB	3.72	113.36	110.11
15	B	1228	CLA	C3D-C2D-C1D	-3.72	103.10	106.30
15	L	1503	CLA	C4A-NA-C1A	-3.71	105.04	106.71
15	A	1125	CLA	C3B-C4B-NB	3.71	113.36	110.11
15	2	614	CLA	C4A-NA-C1A	-3.71	105.04	106.71
15	A	1118	CLA	C4A-NA-C1A	-3.71	105.04	106.71
15	B	1234	CLA	C4A-NA-C1A	-3.71	105.04	106.71
15	4	604	CLA	C4A-NA-C1A	-3.71	105.04	106.71
15	A	1127	CLA	C4A-NA-C1A	-3.71	105.04	106.71
15	B	1220	CLA	C4A-NA-C1A	-3.71	105.04	106.71
15	B	1227	CLA	C2B-C3B-C4B	-3.71	103.12	106.29
15	A	1124	CLA	C3D-C2D-C1D	-3.71	103.11	106.30
15	2	610	CLA	C4A-NA-C1A	-3.71	105.04	106.71
15	A	1122	CLA	C4A-NA-C1A	-3.71	105.04	106.71
15	B	1229	CLA	C1-C2-C3	-3.70	120.76	126.75
15	B	1210	CLA	C4A-NA-C1A	-3.70	105.04	106.71
15	A	1104	CLA	C1-C2-C3	-3.70	119.64	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	B	1227	CLA	C3D-C2D-C1D	-3.70	103.11	106.30
15	B	1219	CLA	C4A-NA-C1A	-3.70	105.04	106.71
15	A	1122	CLA	C3D-C2D-C1D	-3.70	103.12	106.30
15	B	1216	CLA	C4A-NA-C1A	-3.69	105.05	106.71
15	4	601	CLA	C4A-NA-C1A	-3.69	105.05	106.71
15	B	1208	CLA	C4A-NA-C1A	-3.69	105.05	106.71
15	B	1207	CLA	C3D-C2D-C1D	-3.69	103.12	106.30
15	A	1135	CLA	C3B-C4B-NB	3.68	113.33	110.11
15	2	612	CLA	C4A-NA-C1A	-3.68	105.05	106.71
15	A	1110	CLA	C4A-NA-C1A	-3.68	105.05	106.71
15	3	610	CLA	C4A-NA-C1A	-3.68	105.05	106.71
15	2	601	CLA	C4A-NA-C1A	-3.68	105.05	106.71
15	B	1221	CLA	C4A-NA-C1A	-3.68	105.05	106.71
15	A	1127	CLA	C3B-C4B-NB	3.68	113.33	110.11
18	A	4002	BCR	C33-C5-C6	-3.68	120.40	124.53
15	B	1239	CLA	C4A-NA-C1A	-3.67	105.06	106.71
15	L	1501	CLA	C4A-NA-C1A	-3.66	105.06	106.71
15	2	611	CLA	C4A-NA-C1A	-3.66	105.06	106.71
15	A	1123	CLA	C4A-NA-C1A	-3.66	105.06	106.71
15	B	1214	CLA	C4A-NA-C1A	-3.66	105.06	106.71
15	O	1601	CLA	C4A-NA-C1A	-3.65	105.06	106.71
15	4	616	CLA	C4A-NA-C1A	-3.65	105.06	106.71
15	A	1109	CLA	C4A-NA-C1A	-3.65	105.06	106.71
18	B	4008	BCR	C33-C5-C6	-3.65	120.43	124.53
15	B	1237	CLA	C1-C2-C3	-3.65	119.73	126.04
15	B	1222	CLA	C4A-NA-C1A	-3.65	105.07	106.71
15	2	602	CLA	C4A-NA-C1A	-3.65	105.07	106.71
15	A	1136	CLA	C4A-NA-C1A	-3.64	105.07	106.71
15	3	604	CLA	C3B-C4B-NB	3.64	113.30	110.11
15	B	1201	CLA	C4A-NA-C1A	-3.64	105.07	106.71
15	A	1102	CLA	C4A-NA-C1A	-3.64	105.07	106.71
15	B	1226	CLA	C2C-C1C-NC	3.64	113.38	109.97
15	A	1120	CLA	C4A-NA-C1A	-3.64	105.07	106.71
15	4	605	CLA	C4A-NA-C1A	-3.64	105.07	106.71
15	B	1204	CLA	C4A-NA-C1A	-3.64	105.07	106.71
15	B	1211	CLA	C4A-NA-C1A	-3.64	105.07	106.71
15	B	1228	CLA	C3D-C4D-ND	3.64	113.30	110.14
15	B	1217	CLA	C4A-NA-C1A	-3.63	105.07	106.71
15	2	616	CLA	C4A-NA-C1A	-3.63	105.07	106.71
15	4	606	CLA	C4A-NA-C1A	-3.63	105.07	106.71
15	2	608	CLA	C4A-NA-C1A	-3.63	105.08	106.71
15	O	1602	CLA	C3D-C2D-C1D	-3.63	103.18	106.30

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	B	1202	CLA	C3B-C4B-NB	3.63	113.28	110.11
15	3	602	CLA	C4A-NA-C1A	-3.61	105.08	106.71
15	A	1141	CLA	C4A-NA-C1A	-3.61	105.08	106.71
15	4	611	CLA	C4A-NA-C1A	-3.61	105.08	106.71
15	2	606	CLA	C4A-NA-C1A	-3.61	105.08	106.71
15	A	1134	CLA	C4A-NA-C1A	-3.61	105.08	106.71
15	3	612	CLA	C3B-C4B-NB	3.61	113.27	110.11
15	B	1209	CLA	C4A-NA-C1A	-3.61	105.08	106.71
15	3	608	CLA	C4A-NA-C1A	-3.61	105.08	106.71
15	4	603	CLA	C4A-NA-C1A	-3.60	105.09	106.71
15	B	1212	CLA	C4A-NA-C1A	-3.60	105.09	106.71
15	A	1128	CLA	C4A-NA-C1A	-3.59	105.09	106.71
15	3	614	CLA	C4A-NA-C1A	-3.59	105.09	106.71
15	K	1401	CLA	C4A-NA-C1A	-3.59	105.09	106.71
15	B	1235	CLA	C4A-NA-C1A	-3.59	105.09	106.71
15	2	604	CLA	C4A-NA-C1A	-3.59	105.09	106.71
15	A	1125	CLA	C3D-C2D-C1D	-3.59	103.21	106.30
15	B	1238	CLA	C4A-NA-C1A	-3.59	105.09	106.71
15	2	613	CLA	C4A-NA-C1A	-3.58	105.09	106.71
15	B	1223	CLA	C4A-NA-C1A	-3.58	105.10	106.71
15	A	1137	CLA	C4A-NA-C1A	-3.58	105.10	106.71
15	A	1105	CLA	C1-C2-C3	-3.57	119.87	126.04
15	A	1111	CLA	C4A-NA-C1A	-3.57	105.10	106.71
15	A	1129	CLA	C4A-NA-C1A	-3.57	105.10	106.71
15	B	1207	CLA	C4A-NA-C1A	-3.57	105.10	106.71
15	4	612	CLA	C4A-NA-C1A	-3.56	105.11	106.71
15	4	610	CLA	C4A-NA-C1A	-3.56	105.11	106.71
18	A	4011	BCR	C28-C27-C26	-3.56	107.72	114.08
15	2	615	CLA	C4A-NA-C1A	-3.55	105.11	106.71
18	A	4017	BCR	C33-C5-C6	-3.54	120.55	124.53
15	2	605	CLA	C4A-NA-C1A	-3.54	105.11	106.71
15	3	607	CLA	C4A-NA-C1A	-3.53	105.12	106.71
15	A	1119	CLA	C3D-C2D-C1D	-3.53	103.26	106.30
15	A	1108	CLA	C4A-NA-C1A	-3.52	105.12	106.71
15	L	1502	CLA	C4A-NA-C1A	-3.52	105.12	106.71
15	B	1022	CLA	C4A-NA-C1A	-3.52	105.12	106.71
15	B	1201	CLA	C2B-C3B-C4B	-3.51	103.28	106.29
15	B	1215	CLA	C4A-NA-C1A	-3.51	105.13	106.71
15	B	1218	CLA	C4A-NA-C1A	-3.49	105.14	106.71
15	A	1122	CLA	C2B-C3B-C4B	-3.49	103.30	106.29
15	2	607	CLA	C2D-C3D-C4D	-3.49	103.30	106.30
15	A	1121	CLA	C4A-NA-C1A	-3.49	105.14	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	4	615	CLA	C4A-NA-C1A	-3.48	105.14	106.71
15	3	603	CLA	C2B-C3B-C4B	-3.46	103.32	106.29
15	3	611	CLA	C4A-NA-C1A	-3.46	105.15	106.71
15	B	1226	CLA	C1-C2-C3	-3.45	120.08	126.04
15	A	1124	CLA	C2B-C3B-C4B	-3.45	103.34	106.29
15	A	1134	CLA	C2B-C3B-C4B	-3.44	103.34	106.29
15	B	1203	CLA	C4A-NA-C1A	-3.43	105.16	106.71
15	K	1402	CLA	C3D-C2D-C1D	-3.43	103.35	106.30
15	B	1227	CLA	C4A-NA-C1A	-3.42	105.17	106.71
15	B	1230	CLA	O2A-C1-C2	3.42	120.99	108.42
16	B	2002	PQN	C11-C12-C13	-3.41	121.12	126.79
15	3	601	CLA	C2B-C3B-C4B	-3.41	103.37	106.29
15	B	1239	CLA	C2B-C3B-C4B	-3.41	103.37	106.29
15	B	1205	CLA	C2B-C3B-C4B	-3.40	103.38	106.29
15	B	1225	CLA	C1-C2-C3	-3.40	121.26	126.75
15	2	604	CLA	C2B-C3B-C4B	-3.39	103.39	106.29
15	A	1111	CLA	C2B-C3B-C4B	-3.39	103.39	106.29
15	4	601	CLA	C2B-C3B-C4B	-3.39	103.39	106.29
15	F	1302	CLA	C2B-C3B-C4B	-3.38	103.39	106.29
15	3	611	CLA	C2B-C3B-C4B	-3.38	103.39	106.29
15	A	1117	CLA	C1-C2-C3	-3.38	120.20	126.04
15	4	602	CLA	C2B-C3B-C4B	-3.38	103.40	106.29
15	3	606	CLA	C4A-NA-C1A	-3.38	105.19	106.71
15	3	608	CLA	C2B-C3B-C4B	-3.38	103.40	106.29
15	A	1141	CLA	C2B-C3B-C4B	-3.37	103.41	106.29
15	B	1203	CLA	C2B-C3B-C4B	-3.36	103.41	106.29
15	3	602	CLA	C2B-C3B-C4B	-3.36	103.41	106.29
15	2	603	CLA	C2B-C3B-C4B	-3.36	103.41	106.29
15	L	1503	CLA	C2B-C3B-C4B	-3.36	103.41	106.29
15	4	612	CLA	C2B-C3B-C4B	-3.36	103.41	106.29
18	A	4007	BCR	C33-C5-C4	3.36	120.06	113.62
15	2	605	CLA	C2B-C3B-C4B	-3.36	103.42	106.29
15	J	1302	CLA	C2C-C1C-NC	3.36	113.12	109.97
15	4	616	CLA	C2B-C3B-C4B	-3.35	103.42	106.29
15	A	1124	CLA	C4A-NA-C1A	-3.35	105.20	106.71
15	2	602	CLA	C2B-C3B-C4B	-3.35	103.42	106.29
15	A	1137	CLA	C2B-C3B-C4B	-3.35	103.42	106.29
15	B	1218	CLA	C2B-C3B-C4B	-3.35	103.42	106.29
15	2	615	CLA	C2B-C3B-C4B	-3.34	103.43	106.29
15	4	611	CLA	C2B-C3B-C4B	-3.34	103.43	106.29
15	B	1210	CLA	C2B-C3B-C4B	-3.34	103.43	106.29
15	B	1215	CLA	C2B-C3B-C4B	-3.34	103.43	106.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	2	601	CLA	C2B-C3B-C4B	-3.34	103.43	106.29
15	4	603	CLA	C2B-C3B-C4B	-3.34	103.43	106.29
15	A	1112	CLA	C2B-C3B-C4B	-3.34	103.43	106.29
15	A	1138	CLA	C2B-C3B-C4B	-3.33	103.44	106.29
15	L	1502	CLA	C2B-C3B-C4B	-3.33	103.44	106.29
18	A	4002	BCR	C33-C5-C4	3.33	120.02	113.62
15	A	1129	CLA	C2B-C3B-C4B	-3.33	103.44	106.29
15	2	607	CLA	C2B-C3B-C4B	-3.33	103.44	106.29
15	B	1231	CLA	C2B-C3B-C4B	-3.33	103.44	106.29
15	L	1501	CLA	C2B-C3B-C4B	-3.33	103.44	106.29
15	2	614	CLA	C2B-C3B-C4B	-3.33	103.44	106.29
15	B	1220	CLA	C2B-C3B-C4B	-3.33	103.44	106.29
15	4	605	CLA	C2B-C3B-C4B	-3.33	103.44	106.29
15	O	1601	CLA	C2B-C3B-C4B	-3.32	103.44	106.29
15	B	1204	CLA	C2B-C3B-C4B	-3.32	103.44	106.29
15	A	1102	CLA	C2B-C3B-C4B	-3.32	103.44	106.29
15	4	610	CLA	C2B-C3B-C4B	-3.32	103.44	106.29
15	B	1223	CLA	C2B-C3B-C4B	-3.32	103.44	106.29
15	B	1209	CLA	C2B-C3B-C4B	-3.32	103.45	106.29
15	A	1113	CLA	C2B-C3B-C4B	-3.32	103.45	106.29
15	A	1133	CLA	C2B-C3B-C4B	-3.31	103.45	106.29
15	O	1602	CLA	C2B-C3B-C4B	-3.31	103.45	106.29
15	2	610	CLA	C2B-C3B-C4B	-3.31	103.45	106.29
15	A	1118	CLA	C2B-C3B-C4B	-3.31	103.45	106.29
15	B	1222	CLA	C2B-C3B-C4B	-3.31	103.45	106.29
15	3	606	CLA	C2B-C3B-C4B	-3.31	103.46	106.29
15	2	612	CLA	C2B-C3B-C4B	-3.31	103.46	106.29
15	A	1110	CLA	C2B-C3B-C4B	-3.30	103.46	106.29
15	3	614	CLA	C2B-C3B-C4B	-3.30	103.46	106.29
15	A	1132	CLA	C2B-C3B-C4B	-3.30	103.46	106.29
15	K	1402	CLA	C2B-C3B-C4B	-3.30	103.46	106.29
15	A	1139	CLA	C2B-C3B-C4B	-3.30	103.46	106.29
15	B	1214	CLA	C2B-C3B-C4B	-3.30	103.46	106.29
15	B	1217	CLA	C2B-C3B-C4B	-3.30	103.46	106.29
15	B	1221	CLA	C2B-C3B-C4B	-3.30	103.46	106.29
15	2	606	CLA	C2B-C3B-C4B	-3.30	103.47	106.29
15	B	1216	CLA	C2B-C3B-C4B	-3.30	103.47	106.29
15	B	1208	CLA	C2B-C3B-C4B	-3.30	103.47	106.29
18	I	4018	BCR	C23-C24-C25	-3.30	117.94	127.20
15	A	1121	CLA	C2B-C3B-C4B	-3.30	103.47	106.29
15	B	1207	CLA	C2B-C3B-C4B	-3.30	103.47	106.29
15	B	1212	CLA	C2B-C3B-C4B	-3.29	103.47	106.29

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	1136	CLA	C2B-C3B-C4B	-3.29	103.47	106.29
15	4	608	CLA	C2B-C3B-C4B	-3.29	103.47	106.29
15	2	613	CLA	C2B-C3B-C4B	-3.28	103.48	106.29
15	3	607	CLA	C2B-C3B-C4B	-3.28	103.48	106.29
15	4	604	CLA	C2B-C3B-C4B	-3.28	103.48	106.29
15	4	606	CLA	C2B-C3B-C4B	-3.28	103.48	106.29
15	A	1127	CLA	C2B-C3B-C4B	-3.28	103.48	106.29
15	B	1234	CLA	C2B-C3B-C4B	-3.28	103.48	106.29
15	O	1603	CLA	C2B-C3B-C4B	-3.27	103.49	106.29
15	B	1219	CLA	C2B-C3B-C4B	-3.27	103.49	106.29
15	A	1119	CLA	C2B-C3B-C4B	-3.27	103.49	106.29
15	2	608	CLA	C2B-C3B-C4B	-3.27	103.49	106.29
15	K	1401	CLA	C2B-C3B-C4B	-3.27	103.49	106.29
15	4	609	CLA	C2B-C3B-C4B	-3.27	103.49	106.29
15	B	1238	CLA	C2B-C3B-C4B	-3.27	103.49	106.29
15	2	611	CLA	C2B-C3B-C4B	-3.26	103.50	106.29
18	A	4007	BCR	C33-C5-C6	-3.26	120.86	124.53
15	F	1301	CLA	C2C-C1C-NC	3.26	113.03	109.97
15	B	1206	CLA	C2B-C3B-C4B	-3.26	103.50	106.29
15	2	616	CLA	C2B-C3B-C4B	-3.26	103.50	106.29
15	3	610	CLA	C2B-C3B-C4B	-3.25	103.51	106.29
15	A	1105	CLA	C2C-C1C-NC	3.25	113.02	109.97
15	B	1211	CLA	C2B-C3B-C4B	-3.25	103.51	106.29
15	B	1236	CLA	C2C-C1C-NC	3.25	113.02	109.97
15	B	1022	CLA	C2B-C3B-C4B	-3.25	103.51	106.29
15	A	1125	CLA	C2B-C3B-C4B	-3.25	103.51	106.29
15	A	1128	CLA	C2B-C3B-C4B	-3.24	103.51	106.29
15	A	1131	CLA	C2C-C1C-NC	3.24	113.00	109.97
15	A	1108	CLA	C2B-C3B-C4B	-3.24	103.52	106.29
15	A	1109	CLA	C2B-C3B-C4B	-3.23	103.52	106.29
15	A	1120	CLA	C2B-C3B-C4B	-3.23	103.52	106.29
15	3	604	CLA	C2B-C3B-C4B	-3.23	103.53	106.29
15	B	1235	CLA	C2B-C3B-C4B	-3.22	103.53	106.29
15	B	1229	CLA	C2C-C1C-NC	3.22	112.99	109.97
15	A	1135	CLA	C2B-C3B-C4B	-3.22	103.53	106.29
18	I	4018	BCR	C15-C14-C13	-3.22	122.72	127.31
15	B	1232	CLA	C2C-C1C-NC	3.20	112.97	109.97
15	A	1123	CLA	C2B-C3B-C4B	-3.19	103.56	106.29
15	A	1126	CLA	CMA-C3A-C4A	3.18	120.33	111.77
15	4	615	CLA	C2B-C3B-C4B	-3.18	103.56	106.29
15	3	612	CLA	C2B-C3B-C4B	-3.18	103.56	106.29
18	A	4007	BCR	C34-C9-C10	-3.18	118.47	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	A	4011	BCR	C33-C5-C4	3.17	119.70	113.62
15	A	1140	CLA	C2B-C3B-C4B	-3.17	103.58	106.29
15	A	1013	CLA	C2C-C1C-NC	3.16	112.94	109.97
15	A	1012	CLA	C2C-C1C-NC	3.16	112.93	109.97
18	A	4011	BCR	C33-C5-C6	-3.16	120.98	124.53
15	B	1202	CLA	C2B-C3B-C4B	-3.16	103.59	106.29
15	A	1011	CLA	O2D-CGD-O1D	-3.15	117.68	123.84
15	B	1228	CLA	C2B-C3B-C4B	-3.14	103.60	106.29
18	I	4018	BCR	C34-C9-C10	-3.13	118.54	122.92
15	B	1228	CLA	C3A-C4A-CHB	3.12	127.73	123.91
15	A	1115	CLA	C1-C2-C3	-3.12	120.65	126.04
15	A	1107	CLA	C2C-C1C-NC	3.11	112.88	109.97
16	A	2001	PQN	C14-C13-C15	3.10	120.49	115.27
15	A	1101	CLA	C2C-C1C-NC	3.10	112.88	109.97
15	B	1237	CLA	C2C-C1C-NC	3.09	112.87	109.97
15	B	1226	CLA	CMA-C3A-C4A	3.08	120.06	111.77
15	J	1302	CLA	CMA-C3A-C4A	3.08	120.06	111.77
15	A	1117	CLA	CMA-C3A-C4A	3.08	120.05	111.77
15	A	1130	CLA	C2C-C1C-NC	3.08	112.85	109.97
15	A	1106	CLA	C2C-C1C-NC	3.08	112.85	109.97
15	A	1103	CLA	C2C-C1C-NC	3.08	112.85	109.97
15	A	1130	CLA	CMA-C3A-C4A	3.07	120.03	111.77
15	2	607	CLA	C4A-NA-C1A	-3.07	105.33	106.71
15	A	1131	CLA	CMA-C3A-C4A	3.07	120.03	111.77
15	A	1101	CLA	CMA-C3A-C4A	3.06	120.00	111.77
15	B	1224	CLA	CMA-C3A-C4A	3.06	119.99	111.77
15	A	1114	CLA	CMA-C3A-C4A	3.05	119.98	111.77
15	A	1126	CLA	C2C-C1C-NC	3.04	112.82	109.97
15	A	1114	CLA	C2C-C1C-NC	3.02	112.80	109.97
15	B	1237	CLA	CMA-C3A-C4A	3.02	119.89	111.77
15	B	1230	CLA	O2D-CGD-O1D	-3.01	117.95	123.84
15	A	1126	CLA	C1-C2-C3	-3.00	120.86	126.04
15	A	1104	CLA	C2C-C1C-NC	2.99	112.78	109.97
15	A	1103	CLA	C1C-C2C-C3C	-2.98	103.83	106.96
15	B	1232	CLA	CMA-C3A-C4A	2.97	119.77	111.77
15	A	1115	CLA	C2C-C1C-NC	2.96	112.75	109.97
16	B	2002	PQN	C14-C13-C15	2.95	120.23	115.27
18	A	4008	BCR	C33-C5-C4	2.94	119.27	113.62
15	B	1230	CLA	CMA-C3A-C4A	2.94	119.67	111.77
15	A	1105	CLA	CMA-C3A-C4A	2.94	119.67	111.77
15	F	1301	CLA	CMA-C3A-C4A	2.93	119.65	111.77
15	B	1021	CLA	C2C-C1C-NC	2.92	112.71	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	1107	CLA	CMA-C3A-C4A	2.92	119.62	111.77
15	A	1130	CLA	C1-C2-C3	-2.92	121.00	126.04
18	A	4017	BCR	C33-C5-C4	2.91	119.20	113.62
15	A	1115	CLA	CMA-C3A-C4A	2.90	119.58	111.77
15	A	1117	CLA	C2C-C1C-NC	2.89	112.68	109.97
18	B	4005	BCR	C34-C9-C10	-2.89	118.87	122.92
15	3	603	CLA	C3A-C4A-CHB	2.88	127.44	123.91
15	A	1122	CLA	C3A-C4A-CHB	2.87	127.43	123.91
15	A	1116	CLA	CMA-C3A-C4A	2.86	119.46	111.77
15	B	1224	CLA	C2C-C1C-NC	2.86	112.65	109.97
15	K	1402	CLA	C3A-C4A-CHB	2.85	127.41	123.91
15	A	1123	CLA	C3A-C4A-CHB	2.85	127.40	123.91
15	A	1106	CLA	CMA-C3A-C4A	2.85	119.43	111.77
15	A	1116	CLA	C2C-C1C-NC	2.85	112.64	109.97
15	A	1103	CLA	C1-C2-C3	-2.84	121.14	126.04
15	B	1229	CLA	CMA-C3A-C4A	2.84	119.40	111.77
15	3	602	CLA	C3A-C4A-CHB	2.84	127.39	123.91
15	A	1011	CLA	C2C-C1C-NC	2.83	112.63	109.97
15	3	604	CLA	C3D-C4D-ND	2.83	112.60	110.14
15	B	1212	CLA	C3A-C4A-CHB	2.83	127.38	123.91
15	B	1205	CLA	C3A-C4A-CHB	2.83	127.38	123.91
15	3	607	CLA	C3A-C4A-CHB	2.83	127.38	123.91
15	A	1140	CLA	C3A-C4A-CHB	2.82	127.37	123.91
15	F	1301	CLA	O2D-CGD-O1D	-2.82	118.33	123.84
15	A	1112	CLA	C3A-C4A-CHB	2.82	127.36	123.91
15	A	1102	CLA	C3A-C4A-CHB	2.82	127.36	123.91
15	B	1239	CLA	C3A-C4A-CHB	2.82	127.36	123.91
15	A	1124	CLA	C3A-C4A-CHB	2.81	127.36	123.91
15	O	1601	CLA	C3A-C4A-CHB	2.81	127.36	123.91
15	A	1108	CLA	C3A-C4A-CHB	2.81	127.36	123.91
15	A	1128	CLA	C3A-C4A-CHB	2.81	127.36	123.91
15	B	1218	CLA	C3A-C4A-CHB	2.81	127.36	123.91
15	A	1119	CLA	C3A-C4A-CHB	2.81	127.35	123.91
18	A	4002	BCR	C36-C18-C17	-2.81	118.99	122.92
15	3	601	CLA	C3A-C4A-CHB	2.80	127.35	123.91
15	A	1134	CLA	C3A-C4A-CHB	2.80	127.34	123.91
15	2	611	CLA	C3A-C4A-CHB	2.80	127.34	123.91
15	B	1204	CLA	C3A-C4A-CHB	2.80	127.34	123.91
15	4	612	CLA	C3A-C4A-CHB	2.80	127.34	123.91
15	4	604	CLA	C3A-C4A-CHB	2.80	127.34	123.91
15	J	1302	CLA	C1-O2A-CGA	2.79	123.77	116.44
15	A	1139	CLA	C3A-C4A-CHB	2.79	127.33	123.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	B	1225	CLA	CMA-C3A-C4A	2.79	119.27	111.77
15	A	1110	CLA	C3A-C4A-CHB	2.79	127.33	123.91
15	4	610	CLA	C3A-C4A-CHB	2.79	127.33	123.91
15	B	1222	CLA	C3A-C4A-CHB	2.78	127.32	123.91
15	F	1302	CLA	C3A-C4A-CHB	2.78	127.32	123.91
15	A	1138	CLA	C3A-C4A-CHB	2.78	127.32	123.91
15	B	1231	CLA	C3A-C4A-CHB	2.78	127.32	123.91
15	B	1221	CLA	C3A-C4A-CHB	2.78	127.32	123.91
15	2	603	CLA	C3A-C4A-CHB	2.78	127.32	123.91
15	A	1141	CLA	C3A-C4A-CHB	2.78	127.32	123.91
15	A	1125	CLA	C3A-C4A-CHB	2.78	127.32	123.91
15	A	1119	CLA	C3D-C4D-ND	2.78	112.56	110.14
15	4	601	CLA	C3A-C4A-CHB	2.78	127.32	123.91
15	B	1229	CLA	C1C-C2C-C3C	-2.78	104.03	106.96
15	K	1401	CLA	C3A-C4A-CHB	2.78	127.31	123.91
15	B	1214	CLA	C3A-C4A-CHB	2.78	127.31	123.91
15	O	1603	CLA	C3A-C4A-CHB	2.78	127.31	123.91
15	L	1502	CLA	C3A-C4A-CHB	2.78	127.31	123.91
15	2	604	CLA	C3A-C4A-CHB	2.78	127.31	123.91
15	A	1109	CLA	C3A-C4A-CHB	2.77	127.31	123.91
15	4	611	CLA	C3A-C4A-CHB	2.77	127.31	123.91
15	4	608	CLA	C3A-C4A-CHB	2.77	127.31	123.91
15	B	1228	CLA	C3A-C2A-C1A	2.77	108.53	104.18
15	J	1302	CLA	C1C-C2C-C3C	-2.77	104.04	106.96
15	2	601	CLA	C3A-C4A-CHB	2.77	127.31	123.91
15	2	608	CLA	C3A-C4A-CHB	2.77	127.31	123.91
15	2	614	CLA	C3A-C4A-CHB	2.77	127.31	123.91
15	B	1223	CLA	C3A-C4A-CHB	2.77	127.30	123.91
15	B	1235	CLA	C3A-C4A-CHB	2.77	127.30	123.91
15	B	1227	CLA	C3A-C4A-CHB	2.77	127.30	123.91
15	A	1133	CLA	C3A-C4A-CHB	2.77	127.30	123.91
15	4	603	CLA	C3A-C4A-CHB	2.77	127.30	123.91
15	A	1137	CLA	C3A-C4A-CHB	2.77	127.30	123.91
15	2	602	CLA	C3A-C4A-CHB	2.77	127.30	123.91
18	A	4008	BCR	C27-C26-C25	-2.76	118.72	122.73
15	A	1132	CLA	C3A-C4A-CHB	2.76	127.30	123.91
15	3	608	CLA	C3A-C4A-CHB	2.76	127.30	123.91
15	A	1129	CLA	C3D-C4D-ND	2.76	112.54	110.14
15	B	1209	CLA	C3A-C4A-CHB	2.76	127.29	123.91
15	O	1602	CLA	C3A-C4A-CHB	2.76	127.29	123.91
15	J	1302	CLA	C1-C2-C3	-2.76	122.29	126.75
18	I	4018	BCR	C33-C5-C4	2.76	118.92	113.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	1121	CLA	C3A-C4A-CHB	2.76	127.29	123.91
15	L	1501	CLA	C3A-C4A-CHB	2.76	127.29	123.91
15	B	1236	CLA	CMA-C3A-C4A	2.76	119.18	111.77
15	2	616	CLA	C3A-C4A-CHB	2.76	127.29	123.91
15	A	1111	CLA	C3A-C4A-CHB	2.75	127.29	123.91
15	B	1234	CLA	C3A-C4A-CHB	2.75	127.29	123.91
15	2	605	CLA	C3A-C4A-CHB	2.75	127.28	123.91
15	A	1129	CLA	C3A-C4A-CHB	2.75	127.28	123.91
15	4	616	CLA	C3A-C4A-CHB	2.75	127.28	123.91
15	B	1210	CLA	C3A-C4A-CHB	2.75	127.28	123.91
15	L	1502	CLA	C3D-C4D-ND	2.75	112.53	110.14
15	A	1118	CLA	C3A-C4A-CHB	2.75	127.28	123.91
16	A	2001	PQN	C11-C12-C13	-2.74	122.23	126.79
15	B	1238	CLA	C3A-C4A-CHB	2.74	127.27	123.91
15	A	1013	CLA	C1-C2-C3	-2.74	121.30	126.04
15	3	610	CLA	C3A-C4A-CHB	2.74	127.27	123.91
15	J	1302	CLA	CAA-C2A-C3A	-2.74	105.28	112.78
15	2	606	CLA	C3A-C4A-CHB	2.74	127.27	123.91
15	2	615	CLA	C3A-C4A-CHB	2.74	127.27	123.91
15	A	1135	CLA	C3A-C4A-CHB	2.74	127.27	123.91
15	B	1208	CLA	C3A-C4A-CHB	2.74	127.27	123.91
15	L	1503	CLA	C3A-C4A-CHB	2.74	127.27	123.91
15	4	609	CLA	C3A-C4A-CHB	2.74	127.27	123.91
15	4	606	CLA	C3A-C4A-CHB	2.74	127.27	123.91
15	4	602	CLA	C3A-C4A-CHB	2.74	127.27	123.91
15	B	1022	CLA	C3D-C4D-ND	2.74	112.52	110.14
15	3	612	CLA	C3A-C4A-CHB	2.73	127.26	123.91
15	B	1219	CLA	C3A-C4A-CHB	2.73	127.26	123.91
15	A	1136	CLA	C3A-C4A-CHB	2.73	127.26	123.91
15	B	1215	CLA	C3A-C4A-CHB	2.73	127.26	123.91
15	B	1216	CLA	C3A-C4A-CHB	2.73	127.25	123.91
15	A	1127	CLA	C3A-C4A-CHB	2.73	127.25	123.91
15	B	1215	CLA	C3D-C4D-ND	2.73	112.51	110.14
15	2	613	CLA	C3A-C4A-CHB	2.72	127.25	123.91
15	3	606	CLA	C3A-C4A-CHB	2.72	127.25	123.91
15	2	604	CLA	C3D-C4D-ND	2.72	112.50	110.14
15	B	1220	CLA	C3A-C4A-CHB	2.72	127.25	123.91
15	B	1211	CLA	C3D-C4D-ND	2.72	112.50	110.14
15	A	1113	CLA	C3A-C4A-CHB	2.72	127.24	123.91
18	B	4005	BCR	C30-C25-C26	-2.72	118.79	122.61
15	B	1207	CLA	C3A-C4A-CHB	2.72	127.24	123.91
15	F	1301	CLA	C1C-C2C-C3C	-2.72	104.10	106.96

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	1104	CLA	CMA-C3A-C4A	2.71	119.07	111.77
15	3	614	CLA	C3A-C4A-CHB	2.71	127.24	123.91
15	2	612	CLA	C3A-C4A-CHB	2.71	127.23	123.91
15	B	1023	CLA	C2C-C1C-NC	2.71	112.51	109.97
15	3	607	CLA	C3D-C4D-ND	2.71	112.50	110.14
15	4	615	CLA	C3A-C4A-CHB	2.71	127.23	123.91
15	B	1217	CLA	C3A-C4A-CHB	2.71	127.23	123.91
15	B	1236	CLA	O2D-CGD-O1D	-2.71	118.54	123.84
15	A	1103	CLA	CMA-C3A-C4A	2.71	119.05	111.77
15	3	611	CLA	C3A-C4A-CHB	2.71	127.23	123.91
15	A	1120	CLA	C3A-C4A-CHB	2.70	127.22	123.91
15	B	1206	CLA	C3A-C4A-CHB	2.70	127.22	123.91
15	2	610	CLA	C3A-C4A-CHB	2.70	127.22	123.91
15	B	1202	CLA	C3A-C4A-CHB	2.70	127.22	123.91
15	B	1203	CLA	C3D-C4D-ND	2.70	112.48	110.14
15	A	1131	CLA	C1C-C2C-C3C	-2.70	104.12	106.96
15	4	605	CLA	C3A-C4A-CHB	2.69	127.21	123.91
15	A	1012	CLA	CMA-C3A-C4A	2.69	119.01	111.77
15	B	1236	CLA	C1C-C2C-C3C	-2.69	104.12	106.96
15	A	1012	CLA	C1C-C2C-C3C	-2.69	104.12	106.96
15	3	610	CLA	C3D-C4D-ND	2.69	112.48	110.14
15	A	1134	CLA	C3D-C4D-ND	2.69	112.48	110.14
15	2	611	CLA	C3D-C4D-ND	2.69	112.48	110.14
15	O	1603	CLA	C3D-C4D-ND	2.69	112.47	110.14
15	B	1211	CLA	C3A-C4A-CHB	2.69	127.20	123.91
15	A	1105	CLA	C1C-C2C-C3C	-2.69	104.13	106.96
15	3	611	CLA	C3D-C4D-ND	2.69	112.47	110.14
15	B	1235	CLA	C3D-C4D-ND	2.69	112.47	110.14
15	B	1216	CLA	C3D-C4D-ND	2.69	112.47	110.14
15	A	1116	CLA	O2A-CGA-CBA	2.69	120.34	111.91
15	A	1104	CLA	C1C-C2C-C3C	-2.69	104.13	106.96
15	2	605	CLA	C3D-C4D-ND	2.68	112.47	110.14
15	A	1126	CLA	C1C-C2C-C3C	-2.68	104.14	106.96
15	A	1108	CLA	C3D-C4D-ND	2.68	112.47	110.14
15	4	611	CLA	C3D-C4D-ND	2.68	112.47	110.14
15	2	606	CLA	C3D-C4D-ND	2.68	112.47	110.14
15	4	604	CLA	C3D-C4D-ND	2.68	112.47	110.14
15	B	1222	CLA	C3D-C4D-ND	2.68	112.47	110.14
15	B	1201	CLA	C3A-C4A-CHB	2.68	127.19	123.91
15	B	1226	CLA	C1C-C2C-C3C	-2.67	104.14	106.96
18	A	4002	BCR	C34-C9-C10	-2.67	119.18	122.92
18	A	4007	BCR	C23-C24-C25	-2.67	119.70	127.20

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	O	1602	CLA	C3D-C4D-ND	2.67	112.46	110.14
15	B	1212	CLA	C3D-C4D-ND	2.67	112.46	110.14
15	B	1214	CLA	C3D-C4D-ND	2.67	112.46	110.14
15	3	608	CLA	C3D-C4D-ND	2.67	112.46	110.14
15	2	602	CLA	C3D-C4D-ND	2.67	112.46	110.14
15	B	1207	CLA	C3D-C4D-ND	2.67	112.46	110.14
15	B	1022	CLA	C3A-C4A-CHB	2.67	127.18	123.91
15	3	603	CLA	C3D-C4D-ND	2.67	112.45	110.14
15	B	1202	CLA	C3D-C4D-ND	2.67	112.45	110.14
15	B	1225	CLA	C2C-C1C-NC	2.66	112.47	109.97
15	A	1125	CLA	C3D-C4D-ND	2.66	112.45	110.14
15	2	607	CLA	C3A-C4A-CHB	2.66	127.17	123.91
15	A	1013	CLA	O2A-CGA-CBA	2.66	120.26	111.91
15	A	1114	CLA	C1C-C2C-C3C	-2.66	104.16	106.96
15	A	1124	CLA	C3D-C4D-ND	2.66	112.45	110.14
15	B	1220	CLA	C3D-C4D-ND	2.66	112.45	110.14
15	A	1120	CLA	C3D-C4D-ND	2.66	112.45	110.14
15	L	1503	CLA	C3D-C4D-ND	2.66	112.45	110.14
15	B	1217	CLA	C3D-C4D-ND	2.66	112.45	110.14
15	3	604	CLA	C3A-C4A-CHB	2.66	127.17	123.91
15	3	601	CLA	C3D-C4D-ND	2.66	112.45	110.14
15	3	602	CLA	C3D-C4D-ND	2.66	112.45	110.14
15	3	614	CLA	C3D-C4D-ND	2.66	112.45	110.14
15	B	1204	CLA	C3D-C4D-ND	2.66	112.45	110.14
15	B	1210	CLA	C3D-C4D-ND	2.66	112.45	110.14
15	B	1239	CLA	C3D-C4D-ND	2.65	112.45	110.14
15	2	615	CLA	C3D-C4D-ND	2.65	112.44	110.14
15	4	603	CLA	C3D-C4D-ND	2.65	112.44	110.14
15	A	1107	CLA	C1C-C2C-C3C	-2.65	104.17	106.96
15	B	1221	CLA	C3D-C4D-ND	2.65	112.44	110.14
15	B	1203	CLA	C3A-C4A-CHB	2.65	127.16	123.91
15	A	1118	CLA	C3D-C4D-ND	2.65	112.44	110.14
18	A	4008	BCR	C34-C9-C10	-2.65	119.21	122.92
15	4	601	CLA	C3D-C4D-ND	2.65	112.44	110.14
15	4	608	CLA	C3D-C4D-ND	2.65	112.44	110.14
15	2	601	CLA	C3D-C4D-ND	2.65	112.44	110.14
15	2	616	CLA	C3D-C4D-ND	2.65	112.44	110.14
15	A	1113	CLA	C3D-C4D-ND	2.65	112.44	110.14
15	B	1227	CLA	C3D-C4D-ND	2.64	112.44	110.14
15	B	1218	CLA	C3D-C4D-ND	2.64	112.44	110.14
15	2	612	CLA	C3D-C4D-ND	2.64	112.43	110.14
15	A	1109	CLA	C3D-C4D-ND	2.64	112.43	110.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	B	1238	CLA	C3D-C4D-ND	2.64	112.43	110.14
15	O	1601	CLA	C3D-C4D-ND	2.64	112.43	110.14
18	A	4011	BCR	C35-C13-C12	2.64	122.23	118.08
15	A	1101	CLA	C1C-C2C-C3C	-2.64	104.19	106.96
15	A	1121	CLA	C3D-C4D-ND	2.64	112.43	110.14
15	A	1130	CLA	C1C-C2C-C3C	-2.64	104.19	106.96
15	K	1401	CLA	C3D-C4D-ND	2.63	112.43	110.14
15	2	610	CLA	C3D-C4D-ND	2.63	112.43	110.14
15	B	1206	CLA	C3D-C4D-ND	2.63	112.43	110.14
15	A	1106	CLA	C1C-C2C-C3C	-2.63	104.19	106.96
15	4	602	CLA	C3D-C4D-ND	2.63	112.43	110.14
15	B	1201	CLA	C3D-C4D-ND	2.63	112.43	110.14
15	3	606	CLA	C3D-C4D-ND	2.63	112.43	110.14
15	F	1302	CLA	C3D-C4D-ND	2.63	112.42	110.14
15	B	1219	CLA	C3D-C4D-ND	2.63	112.42	110.14
15	4	605	CLA	C3D-C4D-ND	2.62	112.42	110.14
15	B	1223	CLA	C3D-C4D-ND	2.62	112.42	110.14
15	4	610	CLA	C3D-C4D-ND	2.62	112.42	110.14
18	A	4007	BCR	C12-C13-C14	2.62	122.96	118.94
15	A	1141	CLA	C3D-C4D-ND	2.62	112.42	110.14
15	B	1232	CLA	O2A-CGA-CBA	2.62	120.12	111.91
15	2	614	CLA	C3D-C4D-ND	2.61	112.41	110.14
15	A	1137	CLA	C3D-C4D-ND	2.61	112.41	110.14
15	2	608	CLA	C3D-C4D-ND	2.61	112.41	110.14
15	4	609	CLA	C3D-C4D-ND	2.61	112.41	110.14
15	K	1402	CLA	C3D-C4D-ND	2.61	112.41	110.14
15	B	1231	CLA	C3D-C4D-ND	2.61	112.41	110.14
15	B	1209	CLA	C3D-C4D-ND	2.61	112.41	110.14
15	A	1105	CLA	O2D-CGD-O1D	-2.61	118.74	123.84
15	L	1501	CLA	C3D-C4D-ND	2.61	112.41	110.14
15	A	1011	CLA	CMA-C3A-C4A	2.61	118.78	111.77
18	A	4002	BCR	C37-C22-C21	-2.61	119.27	122.92
15	2	613	CLA	C3D-C4D-ND	2.61	112.40	110.14
15	4	615	CLA	C3D-C4D-ND	2.61	112.40	110.14
15	B	1208	CLA	C3D-C4D-ND	2.61	112.40	110.14
15	4	612	CLA	C3D-C4D-ND	2.60	112.40	110.14
15	A	1133	CLA	C3D-C4D-ND	2.60	112.40	110.14
15	A	1136	CLA	C3D-C4D-ND	2.60	112.40	110.14
15	4	606	CLA	C3D-C4D-ND	2.60	112.40	110.14
15	B	1205	CLA	C3D-C4D-ND	2.60	112.40	110.14
15	B	1234	CLA	C3D-C4D-ND	2.60	112.40	110.14
15	4	616	CLA	C3D-C4D-ND	2.59	112.39	110.14

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
18	B	4005	BCR	C33-C5-C4	2.59	118.59	113.62
15	A	1122	CLA	C3D-C4D-ND	2.59	112.39	110.14
15	A	1138	CLA	C3D-C4D-ND	2.58	112.38	110.14
15	A	1115	CLA	C1C-C2C-C3C	-2.58	104.25	106.96
15	A	1128	CLA	C3D-C4D-ND	2.58	112.38	110.14
15	A	1112	CLA	C3D-C4D-ND	2.57	112.38	110.14
15	A	1135	CLA	C3D-C4D-ND	2.57	112.38	110.14
15	B	1232	CLA	C1C-C2C-C3C	-2.57	104.25	106.96
15	A	1102	CLA	C3D-C4D-ND	2.57	112.37	110.14
15	B	1237	CLA	C1C-C2C-C3C	-2.56	104.26	106.96
15	A	1139	CLA	C3D-C4D-ND	2.56	112.36	110.14
15	B	1229	CLA	O2D-CGD-O1D	-2.56	118.84	123.84
18	I	4018	BCR	C4-C5-C6	-2.56	119.02	122.73
15	A	1013	CLA	C1C-C2C-C3C	-2.56	104.27	106.96
15	A	1106	CLA	C1-C2-C3	-2.56	121.62	126.04
18	B	4005	BCR	C38-C26-C27	2.56	118.53	113.62
18	A	4011	BCR	C8-C7-C6	-2.56	120.03	127.20
15	A	1111	CLA	C3D-C4D-ND	2.55	112.36	110.14
15	A	1110	CLA	C3D-C4D-ND	2.55	112.36	110.14
15	A	1106	CLA	O2D-CGD-O1D	-2.55	118.85	123.84
15	A	1123	CLA	C3D-C4D-ND	2.55	112.35	110.14
15	J	1302	CLA	O2D-CGD-O1D	-2.54	118.86	123.84
18	A	4007	BCR	C35-C13-C14	-2.54	119.37	122.92
18	B	4008	BCR	C37-C22-C21	-2.53	119.37	122.92
15	B	1023	CLA	O2A-CGA-CBA	2.53	119.86	111.91
18	A	4007	BCR	C38-C26-C27	2.52	118.47	113.62
15	B	1021	CLA	CMA-C3A-C4A	2.52	118.56	111.77
15	A	1132	CLA	C3D-C4D-ND	2.52	112.33	110.14
15	A	1127	CLA	C3D-C4D-ND	2.52	112.33	110.14
15	A	1105	CLA	O2A-CGA-CBA	2.52	119.82	111.91
18	B	4008	BCR	C34-C9-C10	-2.52	119.39	122.92
18	A	4007	BCR	C4-C5-C6	-2.52	119.07	122.73
18	A	4007	BCR	C27-C26-C25	-2.52	119.08	122.73
15	A	1117	CLA	O2D-CGD-O1D	-2.51	118.92	123.84
18	B	4005	BCR	C28-C27-C26	-2.51	109.59	114.08
18	A	4008	BCR	C15-C14-C13	-2.51	123.72	127.31
15	A	1013	CLA	O2D-CGD-O1D	-2.51	118.94	123.84
15	A	1012	CLA	O2A-CGA-CBA	2.50	119.76	111.91
15	A	1140	CLA	C3D-C4D-ND	2.50	112.31	110.14
15	A	1117	CLA	C1C-C2C-C3C	-2.49	104.34	106.96
18	B	4008	BCR	C33-C5-C4	2.49	118.39	113.62
18	A	4008	BCR	C38-C26-C27	2.48	118.37	113.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	1117	CLA	O2A-CGA-CBA	2.48	119.68	111.91
15	B	1237	CLA	O2D-CGD-O1D	-2.48	119.00	123.84
15	A	1011	CLA	C1C-C2C-C3C	-2.47	104.36	106.96
18	I	4018	BCR	C8-C9-C10	2.47	122.73	118.94
18	A	4002	BCR	C27-C26-C25	-2.47	119.15	122.73
15	A	1012	CLA	O2D-CGD-O1D	-2.47	119.02	123.84
18	A	4017	BCR	C37-C22-C21	-2.46	119.47	122.92
15	A	1115	CLA	O2D-CGD-O1D	-2.46	119.03	123.84
15	B	1225	CLA	C1C-C2C-C3C	-2.46	104.37	106.96
15	B	1232	CLA	O2D-CGD-O1D	-2.46	119.03	123.84
18	B	4008	BCR	C35-C13-C14	-2.45	119.49	122.92
18	B	4005	BCR	C37-C22-C21	-2.45	119.49	122.92
18	B	4005	BCR	C27-C26-C25	-2.44	119.19	122.73
18	A	4002	BCR	C38-C26-C27	2.44	118.30	113.62
15	B	1021	CLA	C1C-C2C-C3C	-2.43	104.40	106.96
18	A	4011	BCR	C27-C26-C25	-2.43	119.21	122.73
15	A	1116	CLA	O2D-CGD-O1D	-2.41	119.12	123.84
15	A	1011	CLA	CMB-C2B-C3B	2.41	129.19	124.68
15	A	1107	CLA	O2D-CGD-O1D	-2.41	119.13	123.84
15	B	1023	CLA	CMB-C2B-C3B	2.41	129.18	124.68
15	B	1224	CLA	C1C-C2C-C3C	-2.40	104.43	106.96
15	A	1126	CLA	O2A-CGA-CBA	2.40	119.45	111.91
15	A	1116	CLA	C1C-C2C-C3C	-2.40	104.44	106.96
15	A	1131	CLA	O2D-CGD-O1D	-2.39	119.16	123.84
15	B	1225	CLA	O2D-CGD-O1D	-2.38	119.18	123.84
15	B	1023	CLA	C1C-C2C-C3C	-2.38	104.45	106.96
18	B	4005	BCR	C4-C5-C6	-2.38	119.28	122.73
15	A	1104	CLA	O2D-CGD-O1D	-2.38	119.19	123.84
15	B	1230	CLA	CAC-C3C-C4C	2.37	127.88	124.81
18	A	4011	BCR	C4-C5-C6	-2.36	119.31	122.73
18	A	4011	BCR	C34-C9-C10	-2.35	119.63	122.92
15	B	1230	CLA	C1C-C2C-C3C	-2.35	104.48	106.96
15	A	1137	CLA	C2C-C3C-C4C	-2.35	104.40	107.21
15	3	606	CLA	C2C-C3C-C4C	-2.34	104.40	107.21
18	A	4002	BCR	C35-C13-C12	2.34	121.77	118.08
15	B	1230	CLA	O1D-CGD-CBD	-2.34	119.69	124.48
15	J	1302	CLA	O2A-CGA-CBA	2.34	119.25	111.91
15	A	1103	CLA	CBC-CAC-C3C	-2.34	105.99	112.43
16	B	2002	PQN	C2M-C2-C3	-2.34	120.59	124.40
15	3	612	CLA	C3D-C4D-ND	2.33	112.16	110.14
15	B	1021	CLA	O2D-CGD-O1D	-2.33	119.28	123.84
15	B	1226	CLA	O2D-CGD-O1D	-2.33	119.28	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	1132	CLA	C2C-C3C-C4C	-2.32	104.43	107.21
15	2	607	CLA	C2C-C3C-C4C	-2.32	104.44	107.21
15	A	1117	CLA	CMB-C2B-C3B	2.31	128.99	124.68
15	A	1111	CLA	C2C-C3C-C4C	-2.31	104.45	107.21
15	K	1402	CLA	C2C-C3C-C4C	-2.30	104.45	107.21
15	B	1201	CLA	C2C-C3C-C4C	-2.30	104.45	107.21
15	B	1202	CLA	C2C-C3C-C4C	-2.30	104.46	107.21
15	A	1124	CLA	C2C-C3C-C4C	-2.30	104.46	107.21
15	3	612	CLA	C2C-C3C-C4C	-2.30	104.46	107.21
15	A	1013	CLA	CMB-C2B-C3B	2.30	128.98	124.68
15	A	1130	CLA	C1-O2A-CGA	2.30	122.47	116.44
15	B	1237	CLA	CMB-C2B-C3B	2.30	128.97	124.68
18	I	4018	BCR	C38-C26-C27	2.29	118.02	113.62
15	2	603	CLA	C2C-C3C-C4C	-2.29	104.47	107.21
15	4	605	CLA	C2C-C3C-C4C	-2.28	104.48	107.21
15	A	1108	CLA	C2C-C3C-C4C	-2.28	104.48	107.21
15	B	1225	CLA	O2A-CGA-CBA	2.28	119.05	111.91
15	2	603	CLA	C3D-C4D-ND	2.28	112.12	110.14
15	3	604	CLA	C2C-C3C-C4C	-2.28	104.48	107.21
15	B	1232	CLA	CHA-C1A-NA	-2.27	121.19	126.40
15	B	1221	CLA	C2C-C3C-C4C	-2.27	104.49	107.21
15	B	1214	CLA	C2C-C3C-C4C	-2.27	104.49	107.21
18	B	4008	BCR	C27-C26-C25	-2.27	119.44	122.73
15	A	1013	CLA	CHA-C1A-NA	-2.27	121.20	126.40
18	A	4017	BCR	C38-C26-C25	-2.27	121.98	124.53
15	4	604	CLA	C2C-C3C-C4C	-2.27	104.50	107.21
15	4	615	CLA	C2C-C3C-C4C	-2.27	104.50	107.21
15	B	1230	CLA	CMB-C2B-C3B	2.26	128.91	124.68
15	L	1501	CLA	C2C-C3C-C4C	-2.26	104.50	107.21
15	A	1011	CLA	O1D-CGD-CBD	-2.26	119.85	124.48
15	A	1127	CLA	C2C-C3C-C4C	-2.26	104.50	107.21
15	B	1206	CLA	C2C-C3C-C4C	-2.26	104.50	107.21
15	2	610	CLA	C2C-C3C-C4C	-2.26	104.51	107.21
15	4	610	CLA	C2C-C3C-C4C	-2.26	104.51	107.21
15	A	1113	CLA	C2C-C3C-C4C	-2.26	104.51	107.21
15	3	603	CLA	C2C-C3C-C4C	-2.26	104.51	107.21
18	A	4011	BCR	C29-C30-C25	2.26	113.95	110.48
15	2	606	CLA	C2C-C3C-C4C	-2.26	104.51	107.21
15	A	1103	CLA	O2D-CGD-O1D	-2.25	119.43	123.84
15	A	1128	CLA	C2C-C3C-C4C	-2.25	104.51	107.21
15	B	1229	CLA	OBD-CAD-C3D	-2.25	124.24	127.98
15	A	1133	CLA	C2C-C3C-C4C	-2.25	104.52	107.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	A	1130	CLA	O2D-CGD-O1D	-2.25	119.44	123.84
15	A	1112	CLA	C2C-C3C-C4C	-2.25	104.52	107.21
15	2	601	CLA	C2C-C3C-C4C	-2.25	104.52	107.21
15	B	1216	CLA	C2C-C3C-C4C	-2.25	104.52	107.21
15	A	1141	CLA	C2C-C3C-C4C	-2.25	104.52	107.21
15	A	1115	CLA	O2A-CGA-CBA	2.24	118.95	111.91
15	4	608	CLA	C2C-C3C-C4C	-2.24	104.52	107.21
15	B	1238	CLA	C2C-C3C-C4C	-2.24	104.52	107.21
15	B	1219	CLA	C2C-C3C-C4C	-2.24	104.53	107.21
15	B	1229	CLA	O2A-CGA-CBA	2.24	118.94	111.91
15	B	1228	CLA	C2C-C3C-C4C	-2.24	104.53	107.21
15	B	1226	CLA	CAC-C3C-C4C	2.24	127.71	124.81
15	3	602	CLA	C2C-C3C-C4C	-2.24	104.53	107.21
15	2	608	CLA	C2C-C3C-C4C	-2.24	104.53	107.21
15	B	1211	CLA	C2C-C3C-C4C	-2.24	104.53	107.21
15	B	1223	CLA	C2C-C3C-C4C	-2.23	104.54	107.21
15	O	1601	CLA	C2C-C3C-C4C	-2.23	104.54	107.21
15	A	1109	CLA	C2C-C3C-C4C	-2.23	104.54	107.21
15	2	615	CLA	C2C-C3C-C4C	-2.23	104.54	107.21
15	2	616	CLA	C2C-C3C-C4C	-2.23	104.54	107.21
15	A	1135	CLA	C2C-C3C-C4C	-2.23	104.54	107.21
15	A	1011	CLA	O2A-CGA-CBA	2.23	118.91	111.91
15	B	1209	CLA	C2C-C3C-C4C	-2.23	104.54	107.21
15	B	1218	CLA	C2C-C3C-C4C	-2.23	104.54	107.21
15	B	1208	CLA	C2C-C3C-C4C	-2.23	104.54	107.21
15	A	1139	CLA	C2C-C3C-C4C	-2.23	104.54	107.21
15	F	1301	CLA	CMB-C2B-C3B	2.23	128.84	124.68
15	A	1136	CLA	C2C-C3C-C4C	-2.22	104.55	107.21
15	4	616	CLA	C2C-C3C-C4C	-2.22	104.55	107.21
15	A	1138	CLA	C2C-C3C-C4C	-2.22	104.55	107.21
15	4	601	CLA	C2C-C3C-C4C	-2.22	104.55	107.21
15	A	1110	CLA	C2C-C3C-C4C	-2.22	104.55	107.21
15	O	1603	CLA	C2C-C3C-C4C	-2.22	104.55	107.21
15	A	1114	CLA	O2D-CGD-O1D	-2.22	119.49	123.84
15	A	1101	CLA	O2D-CGD-O1D	-2.22	119.50	123.84
15	2	602	CLA	C2C-C3C-C4C	-2.22	104.55	107.21
15	B	1022	CLA	C2C-C3C-C4C	-2.22	104.55	107.21
15	4	602	CLA	C2C-C3C-C4C	-2.22	104.55	107.21
15	A	1121	CLA	C2C-C3C-C4C	-2.22	104.55	107.21
15	B	1215	CLA	C2C-C3C-C4C	-2.22	104.55	107.21
15	B	1205	CLA	C2C-C3C-C4C	-2.22	104.55	107.21
15	4	609	CLA	C2C-C3C-C4C	-2.22	104.56	107.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	2	604	CLA	C2C-C3C-C4C	-2.22	104.56	107.21
15	O	1602	CLA	C2C-C3C-C4C	-2.22	104.56	107.21
15	L	1503	CLA	C2C-C3C-C4C	-2.22	104.56	107.21
15	B	1210	CLA	C2C-C3C-C4C	-2.22	104.56	107.21
15	K	1401	CLA	C2C-C3C-C4C	-2.21	104.56	107.21
15	B	1231	CLA	C2C-C3C-C4C	-2.21	104.56	107.21
15	2	613	CLA	C2C-C3C-C4C	-2.21	104.56	107.21
18	A	4007	BCR	C8-C9-C10	2.21	122.34	118.94
15	B	1023	CLA	CHA-C1A-NA	-2.21	121.33	126.40
15	A	1103	CLA	O2A-CGA-CBA	2.21	118.85	111.91
15	B	1204	CLA	C2C-C3C-C4C	-2.21	104.56	107.21
15	B	1235	CLA	C2C-C3C-C4C	-2.21	104.56	107.21
15	B	1217	CLA	C2C-C3C-C4C	-2.21	104.57	107.21
15	B	1239	CLA	C2C-C3C-C4C	-2.21	104.57	107.21
15	A	1013	CLA	CMA-C3A-C4A	2.21	117.70	111.77
15	3	611	CLA	C2C-C3C-C4C	-2.21	104.57	107.21
15	2	611	CLA	C2C-C3C-C4C	-2.20	104.57	107.21
15	2	612	CLA	C2C-C3C-C4C	-2.20	104.57	107.21
15	B	1207	CLA	C2C-C3C-C4C	-2.20	104.57	107.21
15	J	1302	CLA	CHA-C1A-NA	-2.20	121.36	126.40
15	B	1220	CLA	C2C-C3C-C4C	-2.20	104.58	107.21
15	F	1302	CLA	C2C-C3C-C4C	-2.20	104.58	107.21
15	3	610	CLA	C2C-C3C-C4C	-2.20	104.58	107.21
15	B	1237	CLA	O2A-CGA-CBA	2.20	118.80	111.91
15	3	601	CLA	C2C-C3C-C4C	-2.20	104.58	107.21
18	I	4018	BCR	C33-C5-C6	-2.19	122.06	124.53
15	B	1230	CLA	O2A-CGA-CBA	2.19	118.79	111.91
15	B	1224	CLA	O2A-CGA-CBA	2.19	118.79	111.91
15	A	1122	CLA	C2C-C3C-C4C	-2.19	104.58	107.21
15	A	1129	CLA	C2C-C3C-C4C	-2.19	104.58	107.21
15	A	1134	CLA	C2C-C3C-C4C	-2.19	104.58	107.21
15	B	1229	CLA	O1D-CGD-CBD	-2.19	120.00	124.48
15	2	614	CLA	C2C-C3C-C4C	-2.19	104.59	107.21
15	A	1118	CLA	C2C-C3C-C4C	-2.19	104.59	107.21
15	4	606	CLA	C2C-C3C-C4C	-2.19	104.59	107.21
15	4	611	CLA	C2C-C3C-C4C	-2.19	104.59	107.21
15	4	603	CLA	C2C-C3C-C4C	-2.18	104.60	107.21
15	3	607	CLA	C2C-C3C-C4C	-2.18	104.60	107.21
15	3	608	CLA	C2C-C3C-C4C	-2.18	104.60	107.21
15	2	605	CLA	C2C-C3C-C4C	-2.17	104.61	107.21
15	B	1234	CLA	C2C-C3C-C4C	-2.17	104.61	107.21
15	B	1222	CLA	C2C-C3C-C4C	-2.17	104.61	107.21

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	B	1212	CLA	C2C-C3C-C4C	-2.17	104.61	107.21
18	A	4002	BCR	C4-C5-C6	-2.17	119.58	122.73
18	A	4002	BCR	C23-C24-C25	-2.17	121.12	127.20
15	L	1502	CLA	C2C-C3C-C4C	-2.16	104.62	107.21
15	A	1116	CLA	O1D-CGD-CBD	-2.16	120.06	124.48
15	A	1140	CLA	C2C-C3C-C4C	-2.16	104.63	107.21
15	3	614	CLA	C2C-C3C-C4C	-2.16	104.63	107.21
15	A	1102	CLA	C2C-C3C-C4C	-2.15	104.64	107.21
15	A	1123	CLA	C2C-C3C-C4C	-2.14	104.64	107.21
15	A	1107	CLA	O2A-CGA-CBA	2.14	118.63	111.91
15	A	1103	CLA	CMB-C2B-C3B	2.14	128.69	124.68
15	A	1120	CLA	C2C-C3C-C4C	-2.14	104.65	107.21
18	B	4005	BCR	C8-C9-C10	2.14	122.22	118.94
15	B	1236	CLA	O1D-CGD-CBD	-2.14	120.11	124.48
15	A	1012	CLA	CHA-C1A-NA	-2.13	121.52	126.40
18	B	4005	BCR	C33-C5-C6	-2.13	122.14	124.53
15	A	1126	CLA	O2D-CGD-O1D	-2.13	119.68	123.84
15	4	612	CLA	C2C-C3C-C4C	-2.13	104.67	107.21
15	A	1119	CLA	C2C-C3C-C4C	-2.13	104.67	107.21
18	A	4002	BCR	C19-C18-C17	2.12	122.20	118.94
18	A	4011	BCR	C32-C1-C6	-2.12	106.86	110.30
16	A	2001	PQN	C2M-C2-C3	-2.11	120.95	124.40
18	A	4011	BCR	C3-C4-C5	-2.11	110.31	114.08
15	A	1011	CLA	CHA-C1A-NA	-2.11	121.57	126.40
15	A	1012	CLA	C1-C2-C3	-2.11	122.40	126.04
15	B	1021	CLA	CHA-C1A-NA	-2.11	121.57	126.40
15	B	1224	CLA	O1D-CGD-CBD	-2.11	120.18	124.48
15	A	1107	CLA	CHA-C1A-NA	-2.10	121.58	126.40
18	A	4017	BCR	C34-C9-C10	-2.10	119.98	122.92
15	A	1101	CLA	CHA-C1A-NA	-2.10	121.59	126.40
15	A	1104	CLA	CHA-C1A-NA	-2.10	121.59	126.40
18	I	4018	BCR	C38-C26-C25	-2.10	122.17	124.53
15	A	1104	CLA	O2A-CGA-CBA	2.09	118.45	111.91
18	A	4007	BCR	C1-C6-C7	2.09	121.68	115.78
18	A	4017	BCR	C38-C26-C27	2.08	117.61	113.62
15	A	1116	CLA	CHA-C1A-NA	-2.08	121.64	126.40
15	B	1236	CLA	CHA-C1A-NA	-2.07	121.65	126.40
18	A	4017	BCR	C35-C13-C14	-2.07	120.02	122.92
15	B	1230	CLA	CMB-C2B-C1B	-2.07	125.28	128.46
18	A	4017	BCR	C29-C28-C27	2.07	116.00	111.38
15	F	1301	CLA	CHA-C1A-NA	-2.06	121.67	126.40
15	A	1130	CLA	O2A-CGA-CBA	2.06	118.38	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(^{o})	Ideal(^{o})
15	B	1203	CLA	C2C-C3C-C4C	-2.06	104.75	107.21
18	A	4011	BCR	C12-C13-C14	-2.06	115.78	118.94
15	B	1237	CLA	CHA-C1A-NA	-2.06	121.68	126.40
15	B	1021	CLA	CMB-C2B-C3B	2.05	128.52	124.68
15	A	1106	CLA	O1D-CGD-CBD	-2.05	120.28	124.48
15	A	1125	CLA	C2C-C3C-C4C	-2.05	104.75	107.21
15	B	1230	CLA	CMC-C2C-C3C	2.05	131.68	126.12
15	B	1226	CLA	O2A-CGA-CBA	2.04	118.31	111.91
15	A	1114	CLA	CHA-C1A-NA	-2.04	121.73	126.40
18	B	4008	BCR	C30-C25-C26	-2.04	119.75	122.61
15	B	1023	CLA	CMA-C3A-C4A	2.04	117.24	111.77
15	A	1126	CLA	CHA-C1A-NA	-2.03	121.74	126.40
15	B	1224	CLA	CMB-C2B-C3B	2.03	128.48	124.68
15	A	1106	CLA	CMB-C2B-C3B	2.03	128.47	124.68
18	A	4017	BCR	C8-C7-C6	-2.02	121.53	127.20
18	I	4018	BCR	C27-C26-C25	-2.01	119.81	122.73
15	A	1115	CLA	O1D-CGD-CBD	-2.01	120.37	124.48
15	J	1302	CLA	CBA-CAA-C2A	2.01	119.79	113.86
15	A	1130	CLA	CMB-C2B-C3B	2.01	128.44	124.68
15	A	1107	CLA	O1D-CGD-CBD	-2.01	120.38	124.48
15	B	1229	CLA	CHA-C1A-NA	-2.01	121.80	126.40
18	B	4008	BCR	C8-C7-C6	-2.01	121.56	127.20
15	A	1103	CLA	CHA-C1A-NA	-2.01	121.80	126.40
15	B	1229	CLA	CMC-C2C-C1C	2.01	128.09	125.04
15	A	1115	CLA	CHA-C1A-NA	-2.00	121.81	126.40
18	I	4018	BCR	C1-C6-C5	-2.00	119.80	122.61
15	B	1224	CLA	CHA-C1A-NA	-2.00	121.82	126.40
18	B	4005	BCR	C38-C26-C25	-2.00	122.28	124.53

All (402) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
15	A	1102	CLA	NC
15	A	1102	CLA	ND
15	A	1102	CLA	NA
15	3	601	CLA	NC
15	3	601	CLA	ND
15	3	601	CLA	NA
15	4	602	CLA	NC
15	4	602	CLA	ND
15	4	602	CLA	NA
15	K	1401	CLA	NC

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Mol	Chain	Res	Type	Atom
15	K	1401	CLA	ND
15	K	1401	CLA	NA
15	B	1203	CLA	NC
15	B	1203	CLA	ND
15	B	1203	CLA	NA
15	B	1222	CLA	NC
15	B	1222	CLA	ND
15	B	1222	CLA	NA
15	B	1201	CLA	NC
15	B	1201	CLA	ND
15	B	1201	CLA	NA
15	A	1111	CLA	NC
15	A	1111	CLA	ND
15	A	1111	CLA	NA
15	2	614	CLA	NC
15	2	614	CLA	ND
15	2	614	CLA	NA
15	A	1140	CLA	NC
15	A	1140	CLA	ND
15	A	1140	CLA	NA
15	3	606	CLA	NC
15	3	606	CLA	ND
15	3	606	CLA	NA
15	B	1235	CLA	NC
15	B	1235	CLA	ND
15	B	1235	CLA	NA
15	B	1206	CLA	NC
15	B	1206	CLA	ND
15	B	1206	CLA	NA
15	3	603	CLA	NC
15	3	603	CLA	ND
15	3	603	CLA	NA
15	A	1121	CLA	NC
15	A	1121	CLA	ND
15	A	1121	CLA	NA
15	A	1120	CLA	NC
15	A	1120	CLA	ND
15	A	1120	CLA	NA
15	B	1232	CLA	NC
15	B	1232	CLA	ND
15	B	1232	CLA	NA
15	L	1501	CLA	NC

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Mol	Chain	Res	Type	Atom
15	L	1501	CLA	ND
15	L	1501	CLA	NA
15	A	1137	CLA	NC
15	A	1137	CLA	ND
15	A	1137	CLA	NA
15	4	611	CLA	NC
15	4	611	CLA	ND
15	4	611	CLA	NA
15	F	1301	CLA	NC
15	F	1301	CLA	ND
15	F	1301	CLA	NA
15	B	1231	CLA	NC
15	B	1231	CLA	ND
15	B	1231	CLA	NA
15	4	601	CLA	NC
15	4	601	CLA	ND
15	4	601	CLA	NA
15	B	1023	CLA	NC
15	B	1023	CLA	ND
15	B	1023	CLA	NA
15	3	614	CLA	NC
15	3	614	CLA	ND
15	3	614	CLA	NA
15	2	610	CLA	NC
15	2	610	CLA	ND
15	2	610	CLA	NA
15	J	1302	CLA	NC
15	J	1302	CLA	ND
15	J	1302	CLA	NA
15	A	1130	CLA	NC
15	A	1130	CLA	ND
15	A	1130	CLA	NA
15	O	1603	CLA	NC
15	O	1603	CLA	ND
15	O	1603	CLA	NA
15	B	1209	CLA	NC
15	B	1209	CLA	ND
15	B	1209	CLA	NA
15	A	1112	CLA	NC
15	A	1112	CLA	ND
15	A	1112	CLA	NA
15	2	616	CLA	NC

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Mol	Chain	Res	Type	Atom
15	2	616	CLA	ND
15	2	616	CLA	NA
15	B	1219	CLA	NC
15	B	1219	CLA	ND
15	B	1219	CLA	NA
15	B	1236	CLA	NC
15	B	1236	CLA	ND
15	B	1236	CLA	NA
15	B	1237	CLA	NC
15	B	1237	CLA	ND
15	B	1237	CLA	NA
15	A	1124	CLA	NC
15	A	1124	CLA	ND
15	A	1124	CLA	NA
15	2	606	CLA	NC
15	2	606	CLA	ND
15	2	606	CLA	NA
15	A	1116	CLA	NC
15	A	1116	CLA	ND
15	A	1116	CLA	NA
15	B	1229	CLA	NC
15	B	1229	CLA	ND
15	B	1229	CLA	NA
15	B	1202	CLA	NC
15	B	1202	CLA	ND
15	B	1202	CLA	NA
15	F	1302	CLA	NC
15	F	1302	CLA	ND
15	F	1302	CLA	NA
15	3	610	CLA	NC
15	3	610	CLA	ND
15	3	610	CLA	NA
15	4	605	CLA	NC
15	4	605	CLA	ND
15	4	605	CLA	NA
15	3	604	CLA	NC
15	3	604	CLA	ND
15	3	604	CLA	NA
15	L	1502	CLA	NC
15	L	1502	CLA	ND
15	L	1502	CLA	NA
15	B	1227	CLA	NC

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Mol	Chain	Res	Type	Atom
15	B	1227	CLA	ND
15	B	1227	CLA	NA
15	B	1216	CLA	NC
15	B	1216	CLA	ND
15	B	1216	CLA	NA
15	B	1239	CLA	NC
15	B	1239	CLA	ND
15	B	1239	CLA	NA
15	A	1105	CLA	NC
15	A	1105	CLA	ND
15	A	1105	CLA	NA
15	A	1131	CLA	NC
15	A	1131	CLA	ND
15	A	1131	CLA	NA
15	3	602	CLA	NC
15	3	602	CLA	ND
15	3	602	CLA	NA
15	2	613	CLA	NC
15	2	613	CLA	ND
15	2	613	CLA	NA
15	A	1136	CLA	NC
15	A	1136	CLA	ND
15	A	1136	CLA	NA
15	A	1107	CLA	NC
15	A	1107	CLA	ND
15	A	1107	CLA	NA
15	A	1114	CLA	NC
15	A	1114	CLA	ND
15	A	1114	CLA	NA
15	B	1021	CLA	NC
15	B	1021	CLA	ND
15	B	1021	CLA	NA
15	2	612	CLA	NC
15	2	612	CLA	ND
15	2	612	CLA	NA
15	A	1101	CLA	NC
15	A	1101	CLA	ND
15	A	1101	CLA	NA
15	4	608	CLA	NC
15	4	608	CLA	ND
15	4	608	CLA	NA
15	A	1135	CLA	NC

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Mol	Chain	Res	Type	Atom
15	A	1135	CLA	ND
15	A	1135	CLA	NA
15	A	1117	CLA	NC
15	A	1117	CLA	ND
15	A	1117	CLA	NA
15	B	1238	CLA	NC
15	B	1238	CLA	ND
15	B	1238	CLA	NA
15	B	1223	CLA	NC
15	B	1223	CLA	ND
15	B	1223	CLA	NA
15	A	1011	CLA	NC
15	A	1011	CLA	ND
15	A	1011	CLA	NA
15	A	1122	CLA	NC
15	A	1122	CLA	ND
15	A	1122	CLA	NA
15	4	612	CLA	NC
15	4	612	CLA	ND
15	4	612	CLA	NA
15	2	605	CLA	NC
15	2	605	CLA	ND
15	2	605	CLA	NA
15	A	1132	CLA	NC
15	A	1132	CLA	ND
15	A	1132	CLA	NA
15	A	1133	CLA	NC
15	A	1133	CLA	ND
15	A	1133	CLA	NA
15	B	1221	CLA	NC
15	B	1221	CLA	ND
15	B	1221	CLA	NA
15	O	1601	CLA	NC
15	O	1601	CLA	ND
15	O	1601	CLA	NA
15	A	1141	CLA	NC
15	A	1141	CLA	ND
15	A	1141	CLA	NA
15	2	611	CLA	NC
15	2	611	CLA	ND
15	2	611	CLA	NA
15	A	1103	CLA	NC

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Mol	Chain	Res	Type	Atom
15	A	1103	CLA	ND
15	A	1103	CLA	NA
15	4	615	CLA	NC
15	4	615	CLA	ND
15	4	615	CLA	NA
15	2	603	CLA	NC
15	2	603	CLA	ND
15	2	603	CLA	NA
15	A	1129	CLA	NC
15	A	1129	CLA	ND
15	A	1129	CLA	NA
15	A	1126	CLA	NC
15	A	1126	CLA	ND
15	A	1126	CLA	NA
15	B	1228	CLA	NC
15	B	1228	CLA	ND
15	B	1228	CLA	NA
15	A	1104	CLA	NC
15	A	1104	CLA	ND
15	A	1104	CLA	NA
15	4	604	CLA	NC
15	4	604	CLA	ND
15	4	604	CLA	NA
15	2	615	CLA	NC
15	2	615	CLA	ND
15	2	615	CLA	NA
15	B	1204	CLA	NC
15	B	1204	CLA	ND
15	B	1204	CLA	NA
15	B	1230	CLA	NC
15	B	1230	CLA	ND
15	B	1230	CLA	NA
15	B	1225	CLA	NC
15	B	1225	CLA	ND
15	B	1225	CLA	NA
15	B	1224	CLA	NC
15	B	1224	CLA	ND
15	B	1224	CLA	NA
15	A	1138	CLA	NC
15	A	1138	CLA	ND
15	A	1138	CLA	NA
15	B	1215	CLA	NC

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Mol	Chain	Res	Type	Atom
15	B	1215	CLA	ND
15	B	1215	CLA	NA
15	A	1012	CLA	NC
15	A	1012	CLA	ND
15	A	1012	CLA	NA
15	4	603	CLA	NC
15	4	603	CLA	ND
15	4	603	CLA	NA
15	3	612	CLA	NC
15	3	612	CLA	ND
15	3	612	CLA	NA
15	3	607	CLA	NC
15	3	607	CLA	ND
15	3	607	CLA	NA
15	A	1013	CLA	NC
15	A	1013	CLA	ND
15	A	1013	CLA	NA
15	K	1402	CLA	NC
15	K	1402	CLA	ND
15	K	1402	CLA	NA
15	A	1106	CLA	NC
15	A	1106	CLA	ND
15	A	1106	CLA	NA
15	O	1602	CLA	NC
15	O	1602	CLA	ND
15	O	1602	CLA	NA
15	B	1212	CLA	NC
15	B	1212	CLA	ND
15	B	1212	CLA	NA
15	A	1118	CLA	NC
15	A	1118	CLA	ND
15	A	1118	CLA	NA
15	A	1139	CLA	NC
15	A	1139	CLA	ND
15	A	1139	CLA	NA
15	4	616	CLA	NC
15	4	616	CLA	ND
15	4	616	CLA	NA
15	2	601	CLA	NC
15	2	601	CLA	ND
15	2	601	CLA	NA
15	2	608	CLA	NC

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Mol	Chain	Res	Type	Atom
15	2	608	CLA	ND
15	2	608	CLA	NA
15	B	1220	CLA	NC
15	B	1220	CLA	ND
15	B	1220	CLA	NA
15	A	1110	CLA	NC
15	A	1110	CLA	ND
15	A	1110	CLA	NA
15	4	610	CLA	NC
15	4	610	CLA	ND
15	4	610	CLA	NA
15	A	1108	CLA	NC
15	A	1108	CLA	ND
15	A	1108	CLA	NA
15	2	607	CLA	NC
15	2	607	CLA	ND
15	2	607	CLA	NA
15	3	608	CLA	NC
15	3	608	CLA	ND
15	3	608	CLA	NA
15	2	602	CLA	NC
15	2	602	CLA	ND
15	2	602	CLA	NA
15	B	1207	CLA	NC
15	B	1207	CLA	ND
15	B	1207	CLA	NA
15	B	1208	CLA	NC
15	B	1208	CLA	ND
15	B	1208	CLA	NA
15	3	611	CLA	NC
15	3	611	CLA	ND
15	3	611	CLA	NA
15	A	1109	CLA	NC
15	A	1109	CLA	ND
15	A	1109	CLA	NA
15	A	1123	CLA	NC
15	A	1123	CLA	ND
15	A	1123	CLA	NA
15	L	1503	CLA	NC
15	L	1503	CLA	ND
15	L	1503	CLA	NA
15	A	1134	CLA	NC

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Mol	Chain	Res	Type	Atom
15	A	1134	CLA	ND
15	A	1134	CLA	NA
15	4	609	CLA	NC
15	4	609	CLA	ND
15	4	609	CLA	NA
15	A	1128	CLA	NC
15	A	1128	CLA	ND
15	A	1128	CLA	NA
15	4	606	CLA	NC
15	4	606	CLA	ND
15	4	606	CLA	NA
15	B	1214	CLA	NC
15	B	1214	CLA	ND
15	B	1214	CLA	NA
15	2	604	CLA	NC
15	2	604	CLA	ND
15	2	604	CLA	NA
15	A	1115	CLA	NC
15	A	1115	CLA	ND
15	A	1115	CLA	NA
15	B	1218	CLA	NC
15	B	1218	CLA	ND
15	B	1218	CLA	NA
15	B	1217	CLA	NC
15	B	1217	CLA	ND
15	B	1217	CLA	NA
15	A	1113	CLA	NC
15	A	1113	CLA	ND
15	A	1113	CLA	NA
15	B	1022	CLA	NC
15	B	1022	CLA	ND
15	B	1022	CLA	NA
15	B	1234	CLA	NC
15	B	1234	CLA	ND
15	B	1234	CLA	NA
15	A	1127	CLA	NC
15	A	1127	CLA	ND
15	A	1127	CLA	NA
15	A	1119	CLA	NC
15	A	1119	CLA	ND
15	A	1119	CLA	NA
15	B	1226	CLA	NC

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Mol	Chain	Res	Type	Atom
15	B	1226	CLA	ND
15	B	1226	CLA	NA
15	B	1210	CLA	NC
15	B	1210	CLA	ND
15	B	1210	CLA	NA
15	B	1211	CLA	NC
15	B	1211	CLA	ND
15	B	1211	CLA	NA
15	A	1125	CLA	NC
15	A	1125	CLA	ND
15	A	1125	CLA	NA
15	B	1205	CLA	NC
15	B	1205	CLA	ND
15	B	1205	CLA	NA

All (417) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
15	B	1232	CLA	C1A-C2A-CAA-CBA
15	B	1232	CLA	C3A-C2A-CAA-CBA
15	F	1301	CLA	CAD-CBD-CGD-O1D
15	B	1023	CLA	CBD-CGD-O2D-CED
15	J	1302	CLA	C1A-C2A-CAA-CBA
15	J	1302	CLA	C3A-C2A-CAA-CBA
15	J	1302	CLA	C2-C1-O2A-CGA
15	J	1302	CLA	CHA-CBD-CGD-O1D
15	J	1302	CLA	CHA-CBD-CGD-O2D
15	J	1302	CLA	CAD-CBD-CGD-O1D
15	J	1302	CLA	CBD-CGD-O2D-CED
18	A	4011	BCR	C11-C10-C9-C8
18	A	4011	BCR	C11-C10-C9-C34
18	A	4011	BCR	C11-C12-C13-C14
18	A	4011	BCR	C11-C12-C13-C35
18	A	4011	BCR	C36-C18-C19-C20
18	A	4011	BCR	C19-C20-C21-C22
18	A	4011	BCR	C21-C22-C23-C24
18	A	4011	BCR	C37-C22-C23-C24
15	A	1130	CLA	C1A-C2A-CAA-CBA
15	A	1130	CLA	C3A-C2A-CAA-CBA
15	A	1130	CLA	CHA-CBD-CGD-O1D
15	A	1130	CLA	CHA-CBD-CGD-O2D
15	B	1236	CLA	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
15	B	1236	CLA	C3A-C2A-CAA-CBA
15	B	1237	CLA	CBD-CGD-O2D-CED
15	A	1116	CLA	C3A-C2A-CAA-CBA
15	A	1116	CLA	C2-C1-O2A-CGA
15	A	1116	CLA	CBD-CGD-O2D-CED
15	B	1229	CLA	C2-C1-O2A-CGA
15	A	1105	CLA	C1A-C2A-CAA-CBA
15	A	1105	CLA	C3A-C2A-CAA-CBA
15	A	1105	CLA	CBD-CGD-O2D-CED
15	A	1107	CLA	CBD-CGD-O2D-CED
15	A	1114	CLA	CBD-CGD-O2D-CED
15	B	1021	CLA	C1A-C2A-CAA-CBA
15	B	1021	CLA	C3A-C2A-CAA-CBA
15	B	1021	CLA	CHA-CBD-CGD-O1D
15	B	1021	CLA	CHA-CBD-CGD-O2D
18	B	4005	BCR	C7-C8-C9-C10
18	B	4005	BCR	C7-C8-C9-C34
18	B	4005	BCR	C11-C10-C9-C8
18	B	4005	BCR	C11-C10-C9-C34
18	B	4005	BCR	C11-C12-C13-C14
18	B	4005	BCR	C11-C12-C13-C35
18	B	4005	BCR	C17-C18-C19-C20
18	B	4005	BCR	C36-C18-C19-C20
15	A	1101	CLA	C1A-C2A-CAA-CBA
15	A	1117	CLA	CBD-CGD-O2D-CED
18	A	4017	BCR	C11-C10-C9-C8
18	A	4017	BCR	C11-C10-C9-C34
18	A	4017	BCR	C21-C22-C23-C24
18	A	4017	BCR	C37-C22-C23-C24
15	A	1011	CLA	C1A-C2A-CAA-CBA
18	A	4007	BCR	C5-C6-C7-C8
18	A	4007	BCR	C7-C8-C9-C10
18	A	4007	BCR	C7-C8-C9-C34
18	A	4007	BCR	C11-C10-C9-C8
18	A	4007	BCR	C11-C10-C9-C34
18	A	4007	BCR	C23-C24-C25-C30
15	A	1103	CLA	C1A-C2A-CAA-CBA
15	A	1103	CLA	C3A-C2A-CAA-CBA
15	A	1103	CLA	C2-C1-O2A-CGA
15	A	1103	CLA	CBD-CGD-O2D-CED
15	A	1126	CLA	C1A-C2A-CAA-CBA
15	A	1126	CLA	C3A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
15	A	1126	CLA	C2-C1-O2A-CGA
15	A	1126	CLA	CHA-CBD-CGD-O1D
15	A	1126	CLA	CHA-CBD-CGD-O2D
18	A	4002	BCR	C11-C10-C9-C8
18	A	4002	BCR	C11-C10-C9-C34
15	B	1230	CLA	CHA-CBD-CGD-O1D
15	B	1230	CLA	CHA-CBD-CGD-O2D
18	B	4008	BCR	C11-C10-C9-C8
18	B	4008	BCR	C11-C10-C9-C34
18	B	4008	BCR	C10-C11-C12-C13
15	B	1225	CLA	C1A-C2A-CAA-CBA
15	B	1225	CLA	C3A-C2A-CAA-CBA
15	B	1225	CLA	CHA-CBD-CGD-O1D
15	B	1225	CLA	CHA-CBD-CGD-O2D
15	B	1224	CLA	C1A-C2A-CAA-CBA
15	B	1224	CLA	C3A-C2A-CAA-CBA
15	B	1224	CLA	CBD-CGD-O2D-CED
15	A	1012	CLA	C2A-CAA-CBA-CGA
15	A	1012	CLA	CHA-CBD-CGD-O1D
15	A	1012	CLA	CHA-CBD-CGD-O2D
15	A	1012	CLA	CAD-CBD-CGD-O1D
15	A	1012	CLA	CBD-CGD-O2D-CED
15	A	1013	CLA	CHA-CBD-CGD-O1D
15	A	1013	CLA	CHA-CBD-CGD-O2D
15	A	1106	CLA	C3A-C2A-CAA-CBA
15	A	1106	CLA	CHA-CBD-CGD-O1D
15	A	1106	CLA	CHA-CBD-CGD-O2D
15	A	1115	CLA	CHA-CBD-CGD-O1D
15	A	1115	CLA	CHA-CBD-CGD-O2D
15	A	1115	CLA	CBD-CGD-O2D-CED
15	A	1115	CLA	C2-C3-C5-C6
15	A	1115	CLA	C4-C3-C5-C6
18	A	4008	BCR	C1-C6-C7-C8
18	A	4008	BCR	C5-C6-C7-C8
18	A	4008	BCR	C11-C12-C13-C14
18	A	4008	BCR	C11-C12-C13-C35
18	A	4008	BCR	C13-C14-C15-C16
18	A	4008	BCR	C36-C18-C19-C20
18	I	4018	BCR	C7-C8-C9-C10
18	I	4018	BCR	C7-C8-C9-C34
18	I	4018	BCR	C10-C11-C12-C13
18	I	4018	BCR	C37-C22-C23-C24

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Mol	Chain	Res	Type	Atoms
15	B	1226	CLA	CBD-CGD-O2D-CED
15	B	1023	CLA	O1D-CGD-O2D-CED
15	B	1021	CLA	O1D-CGD-O2D-CED
15	B	1224	CLA	O1D-CGD-O2D-CED
15	A	1101	CLA	O1D-CGD-O2D-CED
15	F	1301	CLA	CBD-CGD-O2D-CED
15	A	1130	CLA	CBD-CGD-O2D-CED
15	B	1236	CLA	CBD-CGD-O2D-CED
15	B	1229	CLA	CBD-CGD-O2D-CED
15	A	1131	CLA	CBD-CGD-O2D-CED
15	B	1021	CLA	CBD-CGD-O2D-CED
15	A	1101	CLA	CBD-CGD-O2D-CED
15	A	1104	CLA	CBD-CGD-O2D-CED
15	B	1230	CLA	CBD-CGD-O2D-CED
15	A	1013	CLA	CBD-CGD-O2D-CED
15	A	1106	CLA	CBD-CGD-O2D-CED
15	A	1107	CLA	O1A-CGA-O2A-C1
15	A	1114	CLA	O1A-CGA-O2A-C1
15	A	1130	CLA	O1D-CGD-O2D-CED
15	B	1229	CLA	O1D-CGD-O2D-CED
15	A	1131	CLA	O1D-CGD-O2D-CED
15	A	1114	CLA	CBA-CGA-O2A-C1
15	B	1237	CLA	O1D-CGD-O2D-CED
15	A	1116	CLA	O1D-CGD-O2D-CED
15	A	1105	CLA	O1D-CGD-O2D-CED
15	A	1117	CLA	O1D-CGD-O2D-CED
15	A	1103	CLA	O1D-CGD-O2D-CED
15	A	1104	CLA	O1D-CGD-O2D-CED
15	A	1012	CLA	O1D-CGD-O2D-CED
15	A	1013	CLA	O1D-CGD-O2D-CED
15	A	1107	CLA	CBA-CGA-O2A-C1
15	A	1126	CLA	CBD-CGD-O2D-CED
15	A	1105	CLA	O1A-CGA-O2A-C1
15	B	1226	CLA	O1A-CGA-O2A-C1
15	J	1302	CLA	O1D-CGD-O2D-CED
15	A	1107	CLA	O1D-CGD-O2D-CED
15	A	1114	CLA	O1D-CGD-O2D-CED
15	A	1115	CLA	O1D-CGD-O2D-CED
15	B	1226	CLA	O1D-CGD-O2D-CED
15	A	1012	CLA	C3-C5-C6-C7
15	A	1105	CLA	CBA-CGA-O2A-C1
15	A	1126	CLA	CBA-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
15	B	1226	CLA	CBA-CGA-O2A-C1
15	B	1230	CLA	C2-C1-O2A-CGA
15	A	1013	CLA	C4-C3-C5-C6
15	B	1225	CLA	C2A-CAA-CBA-CGA
15	B	1236	CLA	O1D-CGD-O2D-CED
15	A	1117	CLA	C3-C5-C6-C7
15	A	1013	CLA	C3-C5-C6-C7
15	A	1116	CLA	CBA-CGA-O2A-C1
15	A	1117	CLA	CBA-CGA-O2A-C1
15	B	1225	CLA	CBA-CGA-O2A-C1
15	F	1301	CLA	O1D-CGD-O2D-CED
15	B	1229	CLA	O1A-CGA-O2A-C1
15	A	1126	CLA	O1A-CGA-O2A-C1
15	B	1230	CLA	O1A-CGA-O2A-C1
18	A	4017	BCR	C19-C20-C21-C22
18	A	4007	BCR	C9-C10-C11-C12
18	B	4008	BCR	C9-C10-C11-C12
18	I	4018	BCR	C13-C14-C15-C16
15	B	1232	CLA	CBD-CGD-O2D-CED
15	B	1230	CLA	O1D-CGD-O2D-CED
15	B	1237	CLA	C3-C5-C6-C7
15	A	1107	CLA	C3-C5-C6-C7
15	B	1229	CLA	CBA-CGA-O2A-C1
15	A	1103	CLA	CBA-CGA-O2A-C1
15	B	1230	CLA	CBA-CGA-O2A-C1
15	A	1013	CLA	CBA-CGA-O2A-C1
15	B	1226	CLA	C5-C6-C7-C8
15	A	1106	CLA	O1D-CGD-O2D-CED
15	B	1232	CLA	CBA-CGA-O2A-C1
15	A	1116	CLA	O1A-CGA-O2A-C1
15	A	1117	CLA	O1A-CGA-O2A-C1
15	B	1225	CLA	O1A-CGA-O2A-C1
15	B	1224	CLA	C4-C3-C5-C6
15	B	1224	CLA	C2-C3-C5-C6
15	B	1232	CLA	O1A-CGA-O2A-C1
15	A	1013	CLA	O1A-CGA-O2A-C1
15	A	1103	CLA	O1A-CGA-O2A-C1
15	A	1126	CLA	O1D-CGD-O2D-CED
15	A	1106	CLA	C3-C5-C6-C7
15	A	1011	CLA	CBA-CGA-O2A-C1
15	A	1104	CLA	CBA-CGA-O2A-C1
15	B	1224	CLA	CBA-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
18	I	4018	BCR	C9-C10-C11-C12
15	B	1232	CLA	C5-C6-C7-C8
15	B	1232	CLA	C8-C10-C11-C12
15	A	1104	CLA	O1A-CGA-O2A-C1
15	A	1013	CLA	C2A-CAA-CBA-CGA
18	A	4017	BCR	C7-C8-C9-C34
18	A	4007	BCR	C37-C22-C23-C24
18	A	4002	BCR	C11-C12-C13-C35
18	B	4008	BCR	C11-C12-C13-C35
18	B	4008	BCR	C36-C18-C19-C20
18	A	4008	BCR	C7-C8-C9-C34
18	I	4018	BCR	C36-C18-C19-C20
18	A	4002	BCR	C11-C12-C13-C14
18	B	4008	BCR	C17-C18-C19-C20
15	A	1011	CLA	O1A-CGA-O2A-C1
15	B	1224	CLA	O1A-CGA-O2A-C1
15	B	1224	CLA	C3-C5-C6-C7
15	B	1232	CLA	C15-C16-C17-C18
15	B	1224	CLA	C5-C6-C7-C8
15	A	1105	CLA	C5-C6-C7-C8
15	A	1126	CLA	C5-C6-C7-C8
15	A	1011	CLA	C2-C1-O2A-CGA
15	B	1225	CLA	C2-C1-O2A-CGA
15	A	1012	CLA	C2-C1-O2A-CGA
15	A	1013	CLA	C2-C1-O2A-CGA
18	A	4002	BCR	C13-C14-C15-C16
16	B	2002	PQN	C23-C25-C26-C27
18	A	4017	BCR	C10-C11-C12-C13
15	B	1232	CLA	C10-C11-C12-C13
16	A	2001	PQN	C14-C13-C15-C16
15	A	1116	CLA	C2A-CAA-CBA-CGA
15	A	1105	CLA	C2A-CAA-CBA-CGA
15	A	1115	CLA	C6-C7-C8-C9
15	A	1115	CLA	CBA-CGA-O2A-C1
15	A	1115	CLA	O1A-CGA-O2A-C1
18	A	4002	BCR	C7-C8-C9-C34
18	A	4008	BCR	C37-C22-C23-C24
18	A	4011	BCR	C17-C18-C19-C20
18	A	4002	BCR	C7-C8-C9-C10
18	A	4008	BCR	C7-C8-C9-C10
15	A	1103	CLA	C3-C5-C6-C7
15	B	1232	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
16	B	2002	PQN	C20-C21-C22-C23
15	A	1101	CLA	C3A-C2A-CAA-CBA
15	A	1011	CLA	C3A-C2A-CAA-CBA
15	A	1104	CLA	C3A-C2A-CAA-CBA
15	A	1013	CLA	C2-C3-C5-C6
16	B	2002	PQN	C25-C26-C27-C28
15	A	1107	CLA	C6-C7-C8-C9
15	B	1226	CLA	C3-C5-C6-C7
15	A	1130	CLA	C2-C1-O2A-CGA
15	B	1224	CLA	C2-C1-O2A-CGA
15	A	1106	CLA	C2-C1-O2A-CGA
18	A	4007	BCR	C1-C6-C7-C8
18	A	4007	BCR	C23-C24-C25-C26
18	B	4008	BCR	C1-C6-C7-C8
18	B	4008	BCR	C5-C6-C7-C8
18	A	4008	BCR	C23-C24-C25-C30
18	I	4018	BCR	C23-C24-C25-C26
18	I	4018	BCR	C23-C24-C25-C30
16	A	2001	PQN	C20-C21-C22-C23
15	A	1130	CLA	C3-C5-C6-C7
18	A	4008	BCR	C19-C20-C21-C22
18	I	4018	BCR	C19-C20-C21-C22
15	B	1023	CLA	C2A-CAA-CBA-CGA
15	B	1232	CLA	C13-C15-C16-C17
15	A	1012	CLA	CBA-CGA-O2A-C1
15	A	1104	CLA	C6-C7-C8-C10
15	A	1117	CLA	C6-C7-C8-C10
15	A	1115	CLA	C6-C7-C8-C10
16	A	2001	PQN	C12-C13-C15-C16
15	A	1116	CLA	C1A-C2A-CAA-CBA
15	A	1117	CLA	C1A-C2A-CAA-CBA
15	A	1104	CLA	C1A-C2A-CAA-CBA
15	B	1230	CLA	C1A-C2A-CAA-CBA
15	A	1106	CLA	C1A-C2A-CAA-CBA
15	A	1107	CLA	C6-C7-C8-C10
15	A	1104	CLA	C6-C7-C8-C9
16	A	2001	PQN	C18-C20-C21-C22
15	A	1126	CLA	C4-C3-C5-C6
15	A	1114	CLA	C2A-CAA-CBA-CGA
15	A	1106	CLA	C2A-CAA-CBA-CGA
15	B	1237	CLA	C4-C3-C5-C6
15	A	1116	CLA	C6-C7-C8-C9

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Mol	Chain	Res	Type	Atoms
15	A	1115	CLA	C2-C1-O2A-CGA
15	B	1226	CLA	C2-C1-O2A-CGA
15	A	1117	CLA	C6-C7-C8-C9
15	A	1106	CLA	C6-C7-C8-C10
15	A	1012	CLA	O1A-CGA-O2A-C1
15	B	1232	CLA	C6-C7-C8-C10
15	A	1013	CLA	CAA-CBA-CGA-O2A
15	B	1232	CLA	C6-C7-C8-C9
18	A	4008	BCR	C17-C18-C19-C20
18	I	4018	BCR	C21-C22-C23-C24
15	A	1104	CLA	C5-C6-C7-C8
15	A	1106	CLA	C5-C6-C7-C8
16	A	2001	PQN	C15-C16-C17-C18
15	B	1226	CLA	C6-C7-C8-C10
15	A	1104	CLA	C2A-CAA-CBA-CGA
15	A	1130	CLA	CBA-CGA-O2A-C1
16	B	2002	PQN	C21-C22-C23-C24
15	A	1116	CLA	C6-C7-C8-C10
18	B	4005	BCR	C1-C6-C7-C8
18	B	4005	BCR	C5-C6-C7-C8
18	B	4005	BCR	C23-C24-C25-C26
18	A	4017	BCR	C23-C24-C25-C26
18	A	4017	BCR	C23-C24-C25-C30
18	B	4008	BCR	C23-C24-C25-C26
18	B	4008	BCR	C23-C24-C25-C30
18	A	4008	BCR	C23-C24-C25-C26
18	I	4018	BCR	C1-C6-C7-C8
18	I	4018	BCR	C5-C6-C7-C8
15	B	1224	CLA	CAA-CBA-CGA-O2A
18	A	4017	BCR	C7-C8-C9-C10
18	A	4007	BCR	C21-C22-C23-C24
18	I	4018	BCR	C17-C18-C19-C20
15	A	1106	CLA	C6-C7-C8-C9
16	B	2002	PQN	C16-C17-C18-C20
18	A	4002	BCR	C15-C16-C17-C18
15	A	1114	CLA	CAD-CBD-CGD-O2D
15	B	1226	CLA	CAD-CBD-CGD-O2D
15	B	1226	CLA	C6-C7-C8-C9
15	B	1232	CLA	CHA-CBD-CGD-O1D
15	B	1232	CLA	CHA-CBD-CGD-O2D
15	B	1236	CLA	CHA-CBD-CGD-O1D
15	B	1236	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
15	A	1117	CLA	CHA-CBD-CGD-O1D
15	A	1117	CLA	CHA-CBD-CGD-O2D
15	A	1130	CLA	O1A-CGA-O2A-C1
15	A	1116	CLA	C5-C6-C7-C8
15	A	1107	CLA	C5-C6-C7-C8
15	A	1115	CLA	C2A-CAA-CBA-CGA
15	A	1126	CLA	CAA-CBA-CGA-O2A
18	B	4008	BCR	C11-C12-C13-C14
15	A	1107	CLA	C1A-C2A-CAA-CBA
15	A	1103	CLA	CAD-CBD-CGD-O1D
15	A	1101	CLA	C2A-CAA-CBA-CGA
15	A	1115	CLA	C3A-C2A-CAA-CBA
16	B	2002	PQN	C21-C22-C23-C25
16	B	2002	PQN	C16-C17-C18-C19
18	A	4007	BCR	C10-C11-C12-C13
18	A	4007	BCR	C18-C19-C20-C21
18	A	4007	BCR	C36-C18-C19-C20
15	B	1023	CLA	CBA-CGA-O2A-C1
15	B	1237	CLA	C2-C3-C5-C6
15	A	1126	CLA	C2-C3-C5-C6
15	B	1023	CLA	O1A-CGA-O2A-C1
15	B	1237	CLA	C2A-CAA-CBA-CGA
15	B	1224	CLA	C2A-CAA-CBA-CGA
15	A	1117	CLA	C5-C6-C7-C8
15	B	1230	CLA	CAA-CBA-CGA-O2A
18	B	4005	BCR	C23-C24-C25-C30
18	I	4018	BCR	C15-C16-C17-C18
15	A	1117	CLA	C2A-CAA-CBA-CGA
18	B	4005	BCR	C19-C20-C21-C22
15	A	1115	CLA	C3-C5-C6-C7
15	A	1013	CLA	C3A-C2A-CAA-CBA
15	A	1012	CLA	C6-C7-C8-C10
18	A	4007	BCR	C19-C20-C21-C22
15	B	1237	CLA	C5-C6-C7-C8
18	A	4011	BCR	C16-C17-C18-C36
18	B	4005	BCR	C16-C17-C18-C36
18	A	4017	BCR	C16-C17-C18-C36
18	A	4007	BCR	C16-C17-C18-C36
18	I	4018	BCR	C11-C10-C9-C34
15	A	1011	CLA	C2A-CAA-CBA-CGA
18	B	4008	BCR	C7-C8-C9-C34
15	B	1232	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
16	A	2001	PQN	C17-C18-C20-C21
16	A	2001	PQN	C21-C22-C23-C25
15	A	1130	CLA	C6-C7-C8-C10
18	A	4011	BCR	C16-C17-C18-C19
18	B	4005	BCR	C16-C17-C18-C19
18	A	4017	BCR	C16-C17-C18-C19
18	A	4007	BCR	C16-C17-C18-C19
15	J	1302	CLA	C2C-C3C-CAC-CBC
15	A	1013	CLA	CAA-CBA-CGA-O1A
15	B	1232	CLA	C2A-CAA-CBA-CGA
18	A	4002	BCR	C23-C24-C25-C30
15	A	1116	CLA	C4-C3-C5-C6
15	A	1105	CLA	C4-C3-C5-C6
15	A	1103	CLA	C4-C3-C5-C6
15	A	1012	CLA	C4-C3-C5-C6
16	A	2001	PQN	C19-C18-C20-C21
16	A	2001	PQN	C21-C22-C23-C24
15	J	1302	CLA	CAD-CBD-CGD-O2D
15	A	1012	CLA	CAD-CBD-CGD-O2D
15	B	1237	CLA	CAA-CBA-CGA-O2A
15	J	1302	CLA	CAA-CBA-CGA-O2A
18	B	4008	BCR	C7-C8-C9-C10
18	A	4008	BCR	C21-C22-C23-C24
15	A	1012	CLA	CAA-CBA-CGA-O2A
15	A	1130	CLA	C5-C6-C7-C8
15	J	1302	CLA	C4C-C3C-CAC-CBC
15	A	1012	CLA	C6-C7-C8-C9
15	B	1023	CLA	CHA-CBD-CGD-O1D
15	B	1023	CLA	CHA-CBD-CGD-O2D
15	B	1237	CLA	CHA-CBD-CGD-O1D
15	B	1237	CLA	CHA-CBD-CGD-O2D
15	A	1116	CLA	CHA-CBD-CGD-O1D
15	A	1116	CLA	CHA-CBD-CGD-O2D
15	A	1130	CLA	C4-C3-C5-C6
18	I	4018	BCR	C11-C10-C9-C8
15	A	1116	CLA	CAA-CBA-CGA-O2A
15	B	1023	CLA	CAA-CBA-CGA-O2A
15	B	1225	CLA	CAA-CBA-CGA-O2A
15	A	1130	CLA	C6-C7-C8-C9
15	B	1229	CLA	C2A-CAA-CBA-CGA
15	B	1226	CLA	C2A-CAA-CBA-CGA
15	J	1302	CLA	CAA-CBA-CGA-O1A

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Mol	Chain	Res	Type	Atoms
15	A	1012	CLA	CAA-CBA-CGA-O1A
18	A	4007	BCR	C17-C18-C19-C20
15	F	1301	CLA	C1A-C2A-CAA-CBA
15	A	1013	CLA	C1A-C2A-CAA-CBA
15	A	1115	CLA	C1A-C2A-CAA-CBA
16	A	2001	PQN	C26-C27-C28-C29
15	B	1224	CLA	CAA-CBA-CGA-O1A
15	B	1237	CLA	CAA-CBA-CGA-O1A
15	B	1225	CLA	CAA-CBA-CGA-O1A
15	A	1116	CLA	CAA-CBA-CGA-O1A
15	A	1104	CLA	CAA-CBA-CGA-O2A
15	B	1224	CLA	CAD-CBD-CGD-O1D
15	B	1023	CLA	CAA-CBA-CGA-O1A
15	A	1104	CLA	C3-C5-C6-C7
15	A	1107	CLA	CAA-CBA-CGA-O2A

There are no ring outliers.

70 monomers are involved in 158 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
15	3	601	CLA	1	0
15	B	1203	CLA	2	0
15	B	1201	CLA	1	0
15	3	606	CLA	2	0
15	B	1206	CLA	1	0
15	B	1232	CLA	3	0
15	L	1501	CLA	1	0
15	F	1301	CLA	1	0
15	B	1023	CLA	6	0
15	J	1302	CLA	1	0
18	A	4011	BCR	11	0
15	A	1130	CLA	5	0
15	A	1112	CLA	1	0
15	B	1236	CLA	1	0
15	B	1237	CLA	1	0
15	A	1124	CLA	1	0
17	C	3003	SF4	1	0
15	A	1116	CLA	2	0
15	B	1229	CLA	5	0
15	B	1202	CLA	1	0
15	3	610	CLA	1	0
15	3	604	CLA	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
15	L	1502	CLA	1	0
15	B	1227	CLA	1	0
15	B	1239	CLA	1	0
15	A	1105	CLA	4	0
15	A	1131	CLA	4	0
15	A	1107	CLA	2	0
15	A	1114	CLA	1	0
15	B	1021	CLA	5	0
18	B	4005	BCR	6	0
15	2	612	CLA	1	0
15	A	1135	CLA	1	0
15	A	1117	CLA	3	0
18	A	4017	BCR	5	0
15	A	1011	CLA	6	0
15	A	1122	CLA	1	0
15	4	612	CLA	1	0
18	A	4007	BCR	4	0
15	A	1103	CLA	3	0
15	4	615	CLA	1	0
15	A	1129	CLA	1	0
15	A	1126	CLA	12	0
15	B	1228	CLA	2	0
15	A	1104	CLA	1	0
18	A	4002	BCR	3	0
15	B	1230	CLA	6	0
18	B	4008	BCR	1	0
15	B	1225	CLA	4	0
15	B	1224	CLA	7	0
15	A	1012	CLA	7	0
15	A	1013	CLA	8	0
15	A	1106	CLA	6	0
15	B	1212	CLA	1	0
17	C	3002	SF4	3	0
15	A	1139	CLA	1	0
15	2	607	CLA	1	0
16	A	2001	PQN	3	0
15	B	1207	CLA	1	0
15	A	1123	CLA	1	0
15	4	606	CLA	1	0
15	A	1115	CLA	1	0
18	A	4008	BCR	1	0
16	B	2002	PQN	1	0

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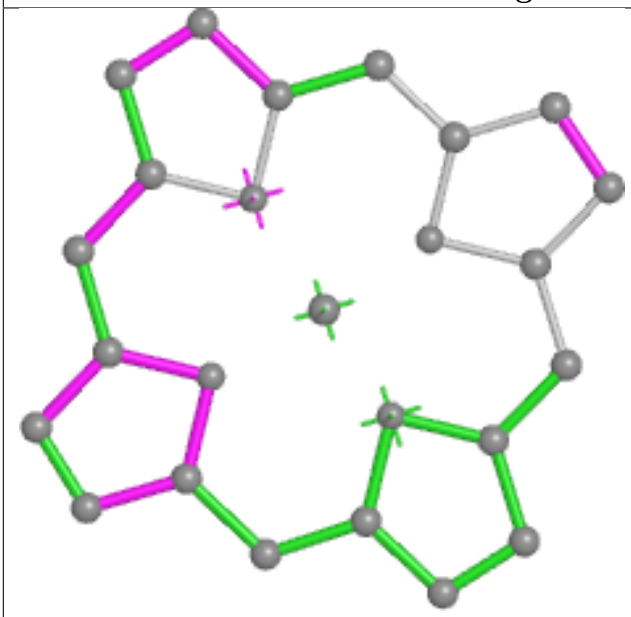
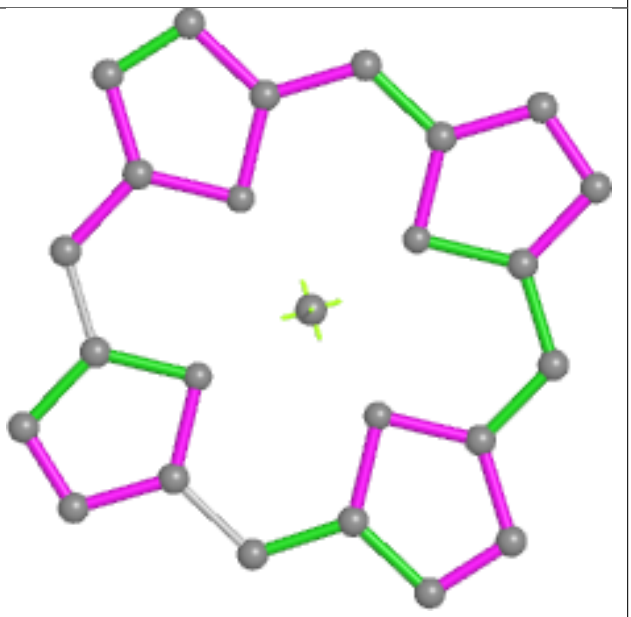
Mol	Chain	Res	Type	Clashes	Symm-Clashes
18	I	4018	BCR	4	0
15	B	1022	CLA	1	0
15	A	1127	CLA	1	0
15	B	1226	CLA	5	0
15	B	1210	CLA	1	0
15	B	1205	CLA	1	0

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.

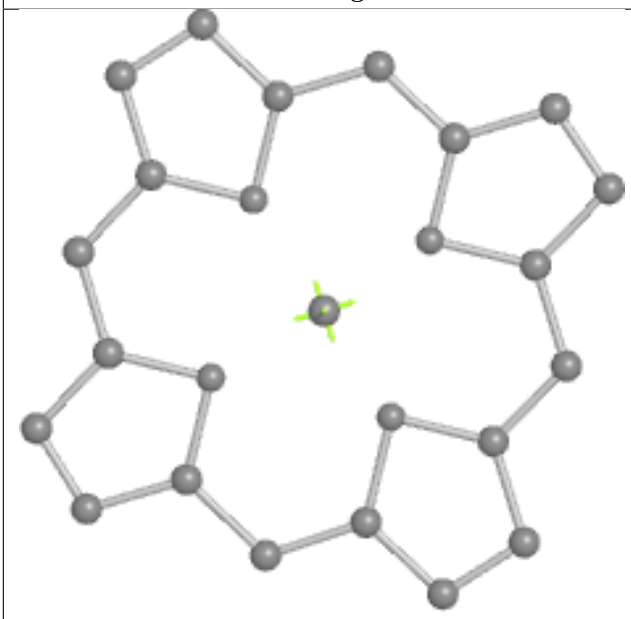
Ligand CLA A 1102



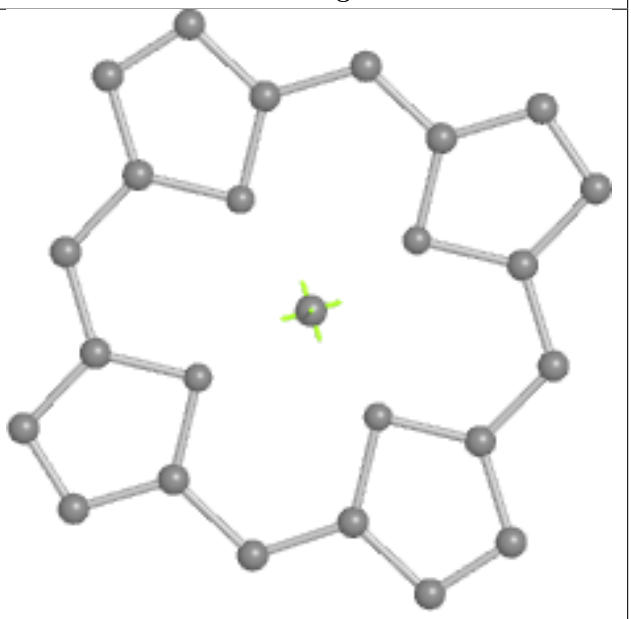
Bond lengths



Bond angles

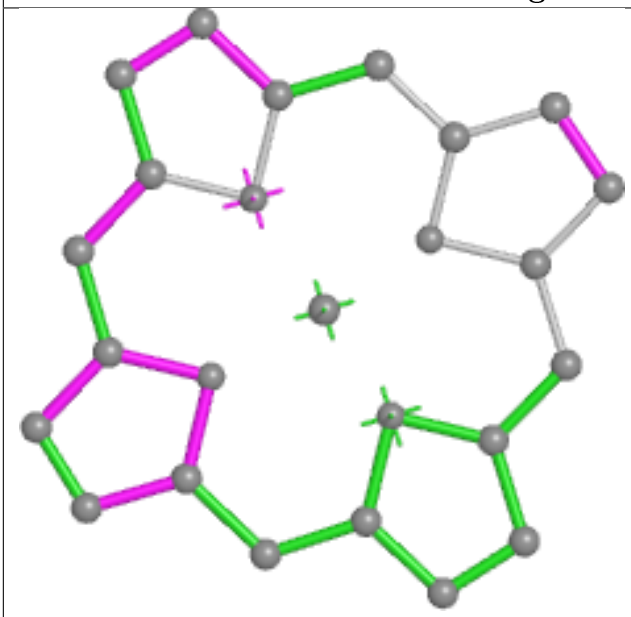


Torsions

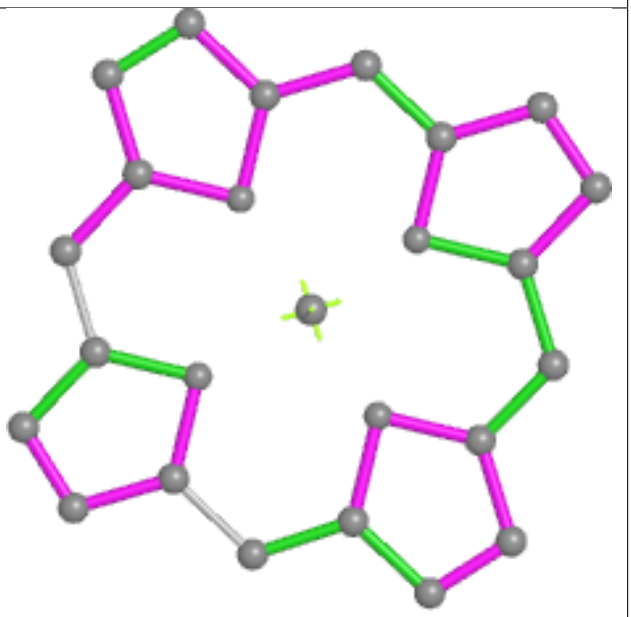


Rings

Ligand CLA 3 601



Bond lengths



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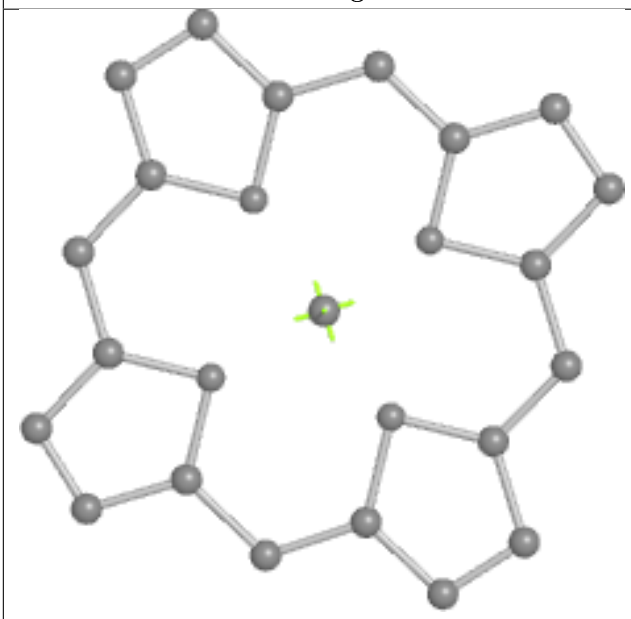
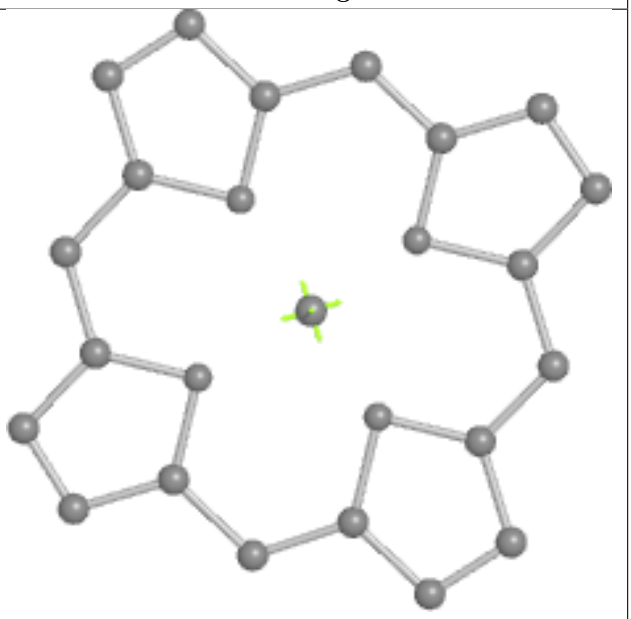
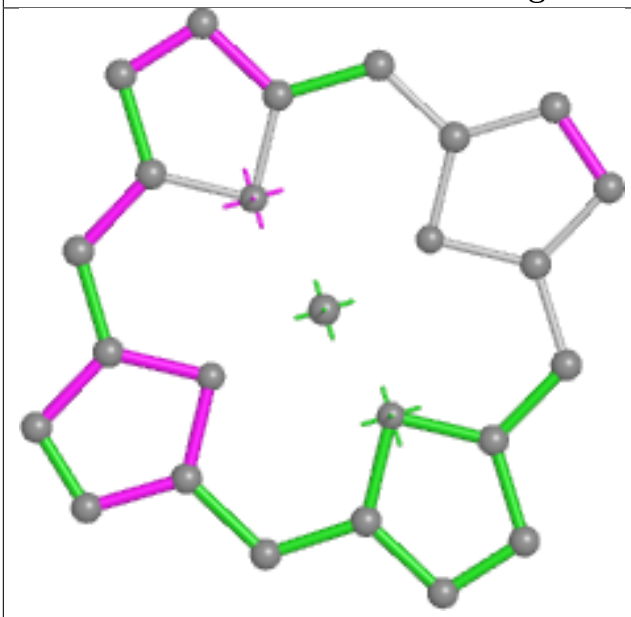


Torsions

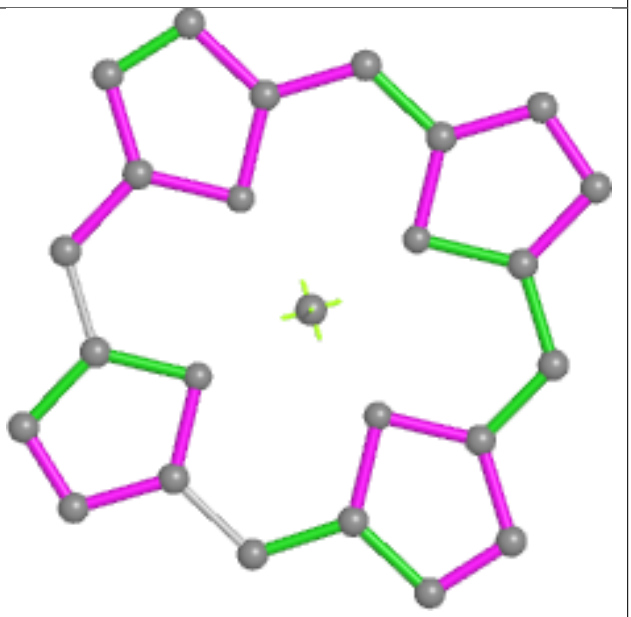


Rings

Ligand CLA 4 602



Bond lengths



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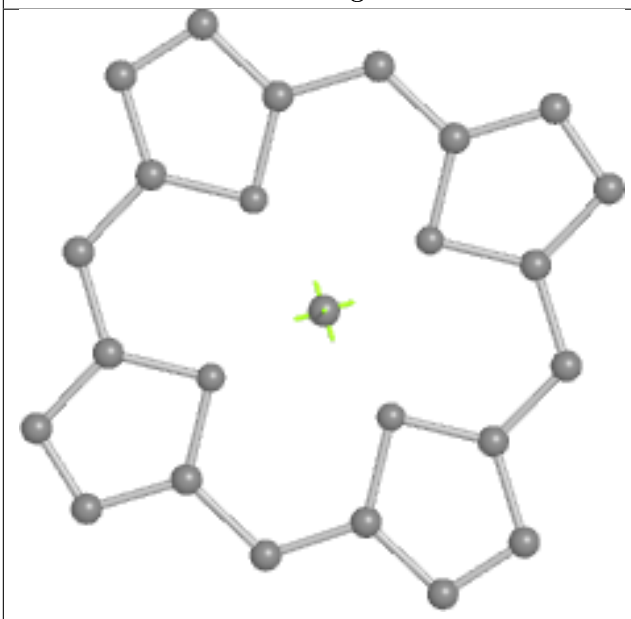
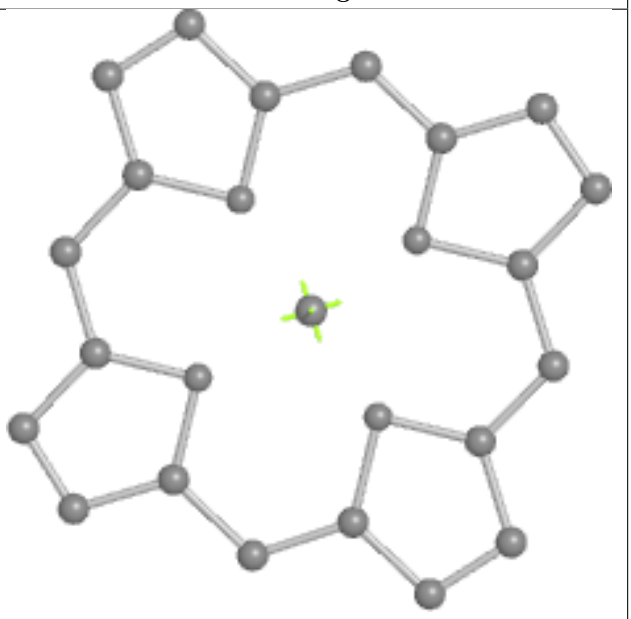
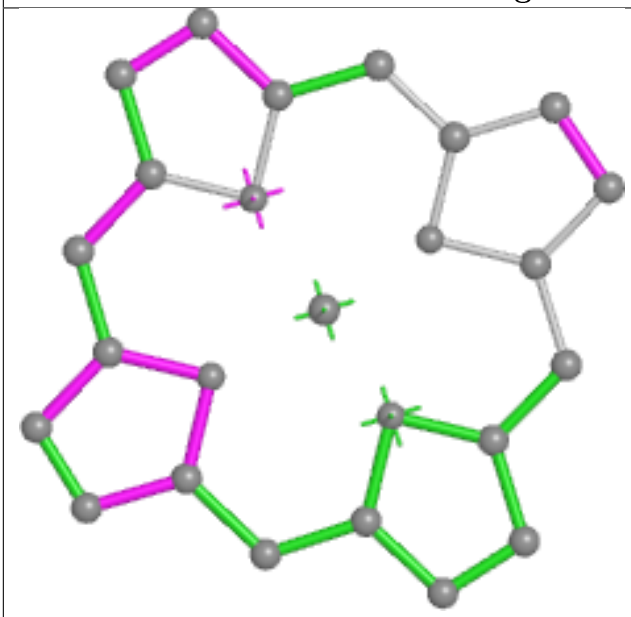


Torsions



Rings

Ligand CLA K 1401



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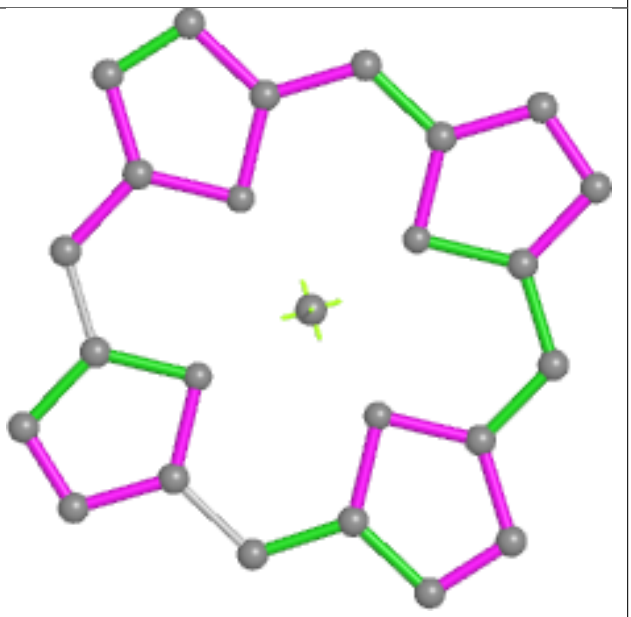
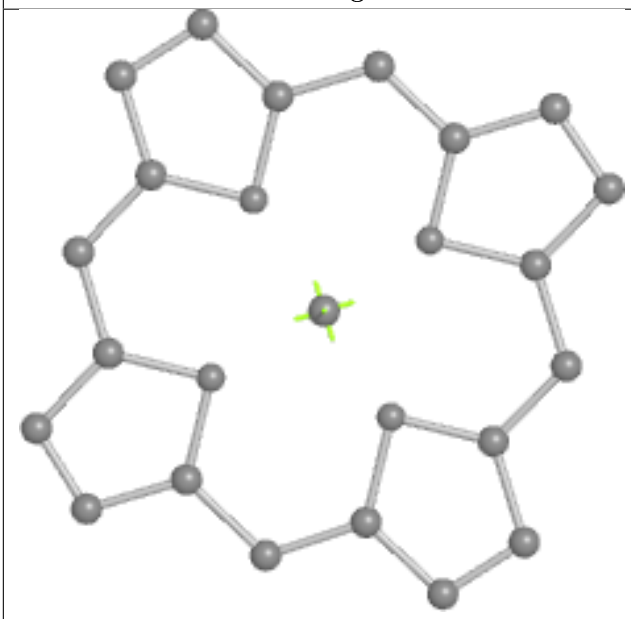


Bond angles



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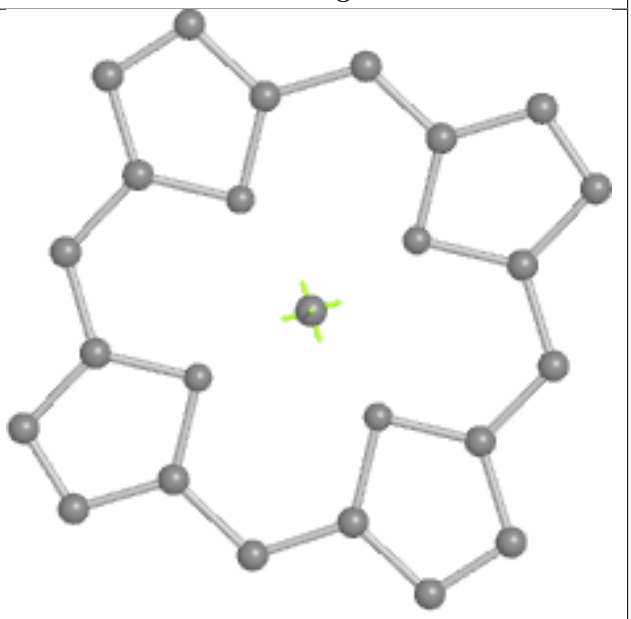
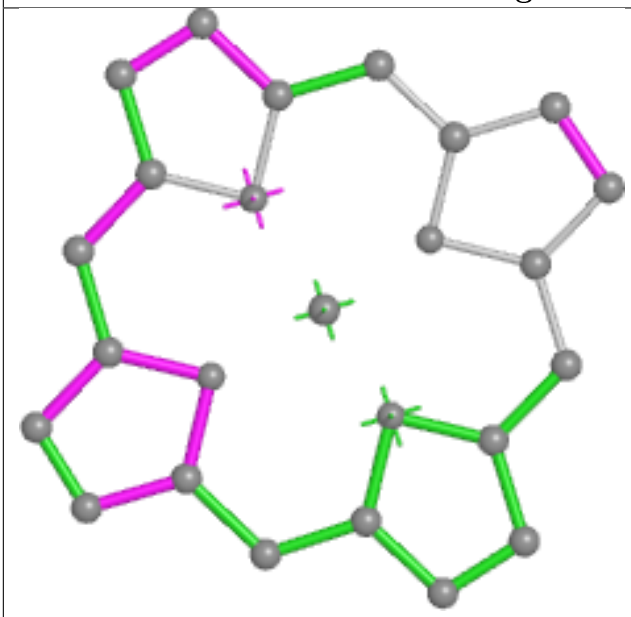
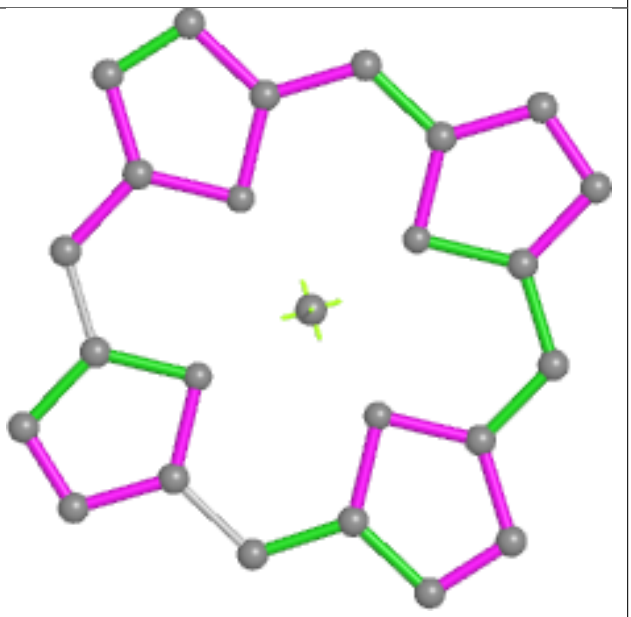


Rings

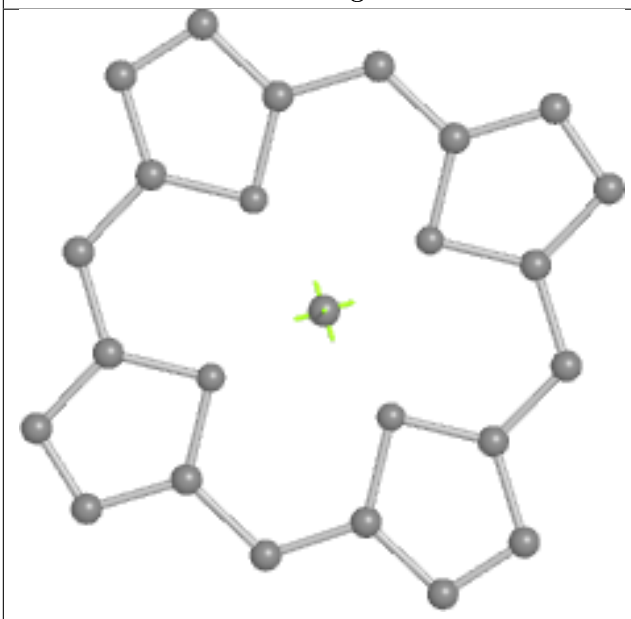
Ligand CLA B 1203



Bond lengths



Bond angles



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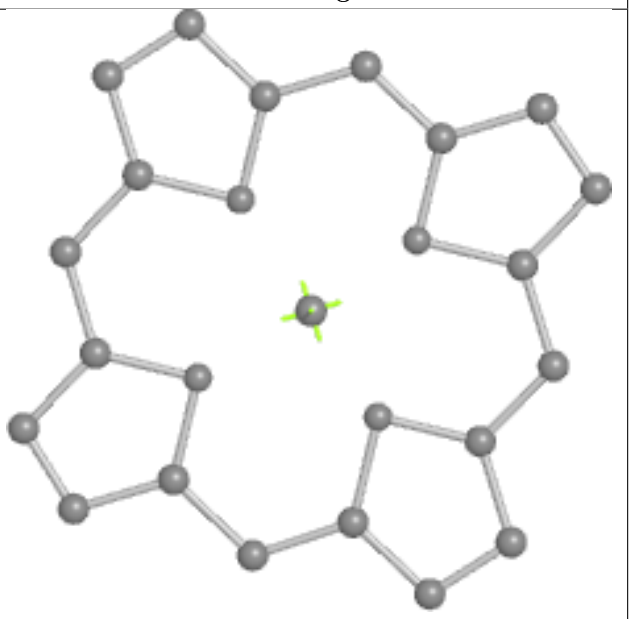
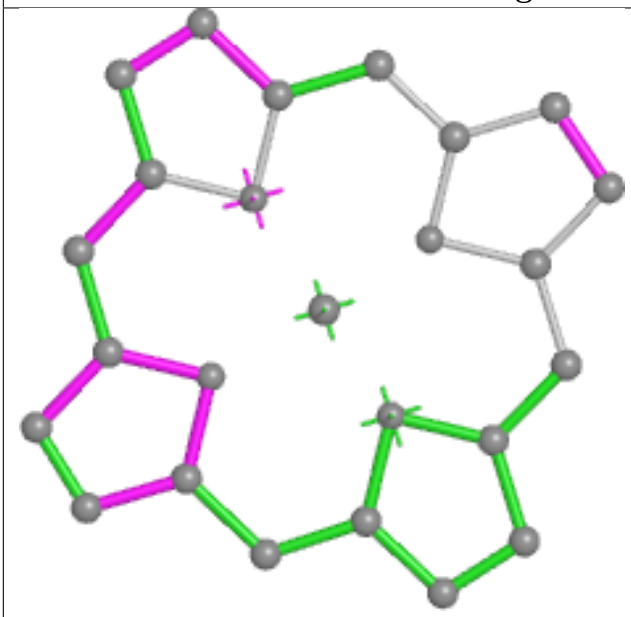


Rings

Ligand CLA B 1222



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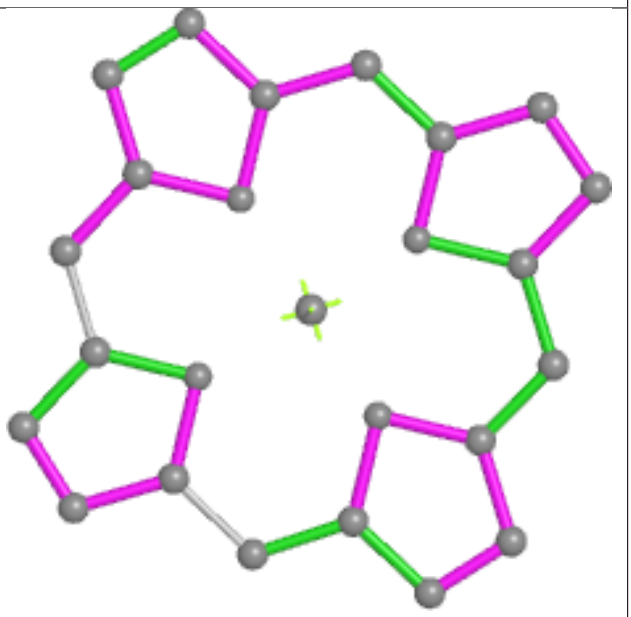

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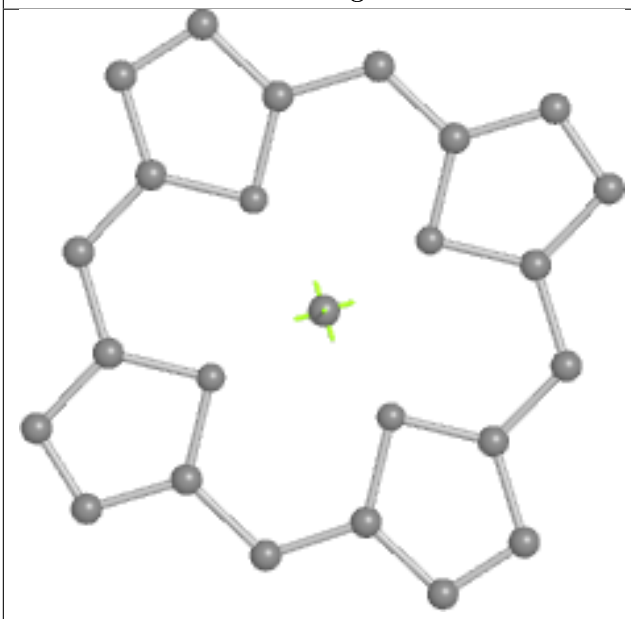

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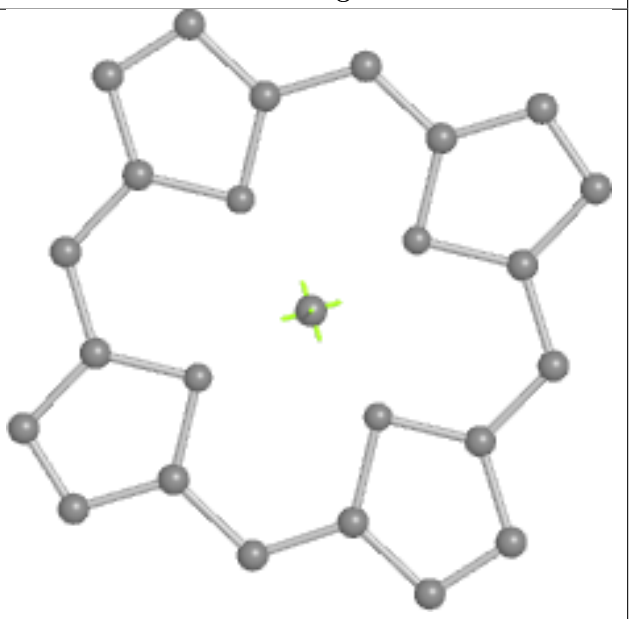
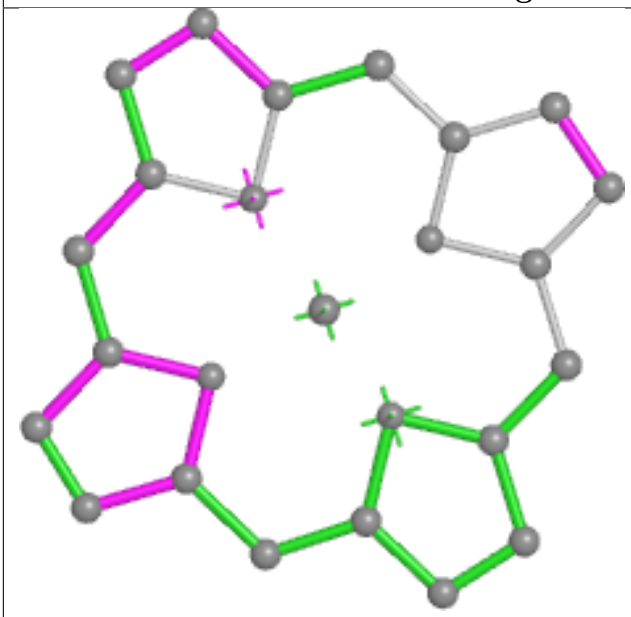


Rings

Ligand CLA B 1201



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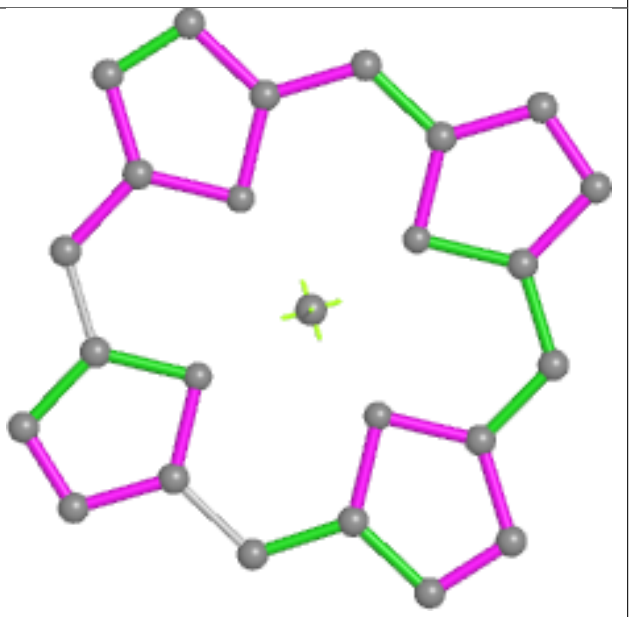

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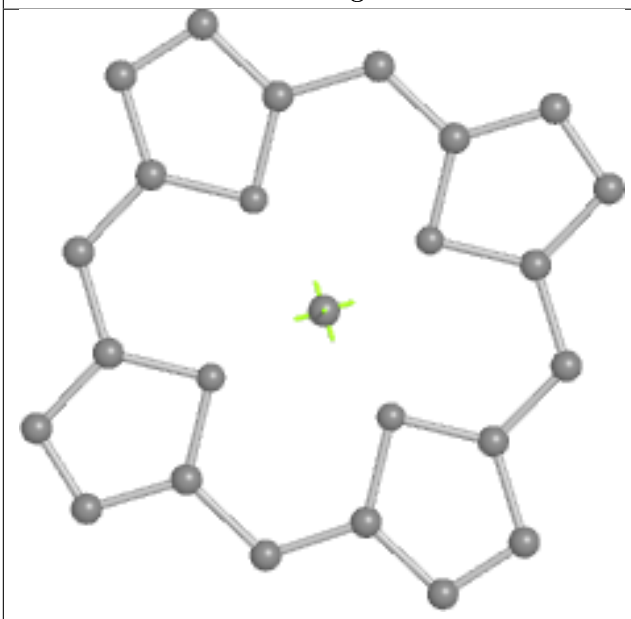

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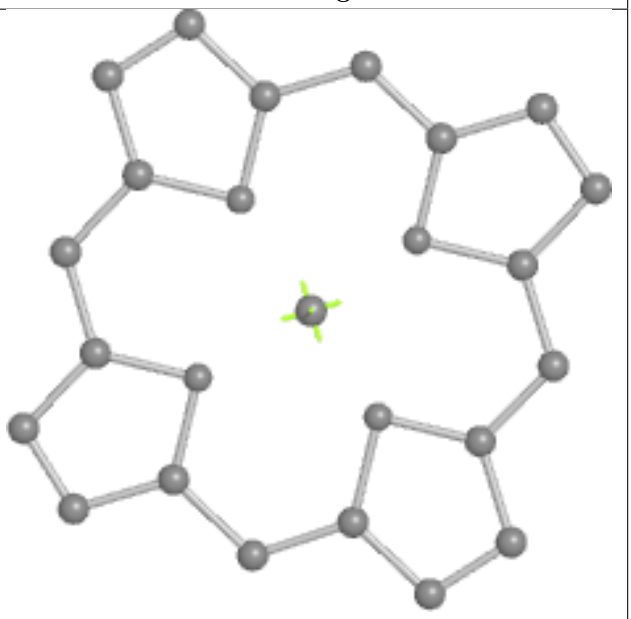
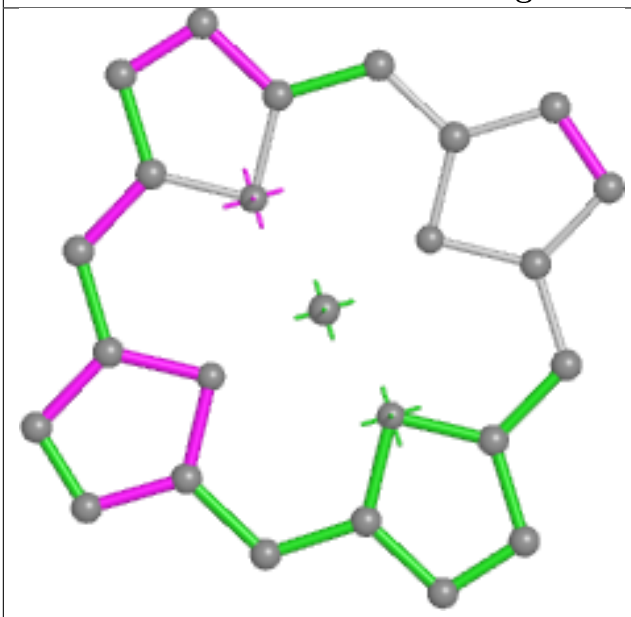


Rings

Ligand CLA A 1111



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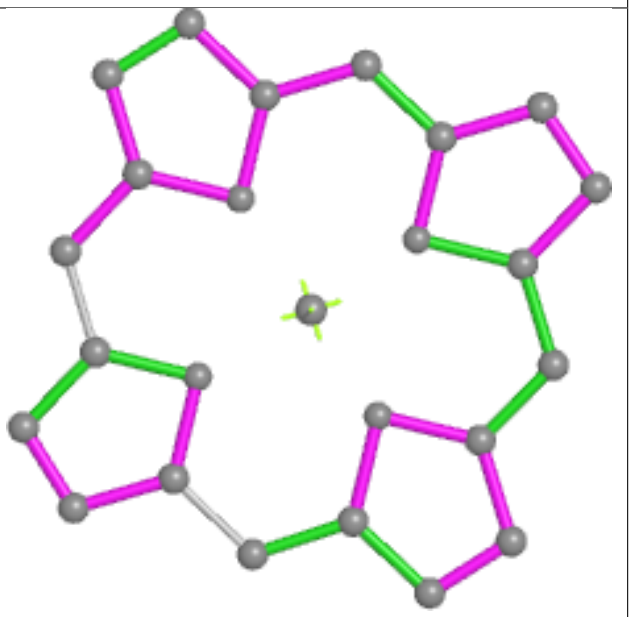

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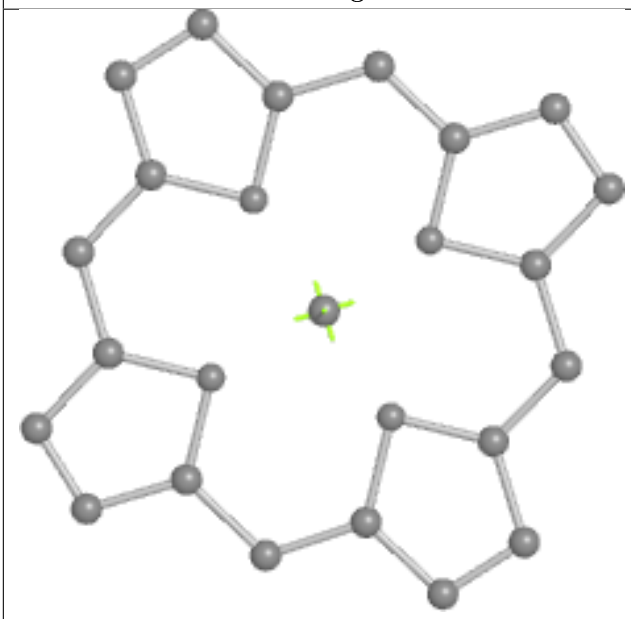

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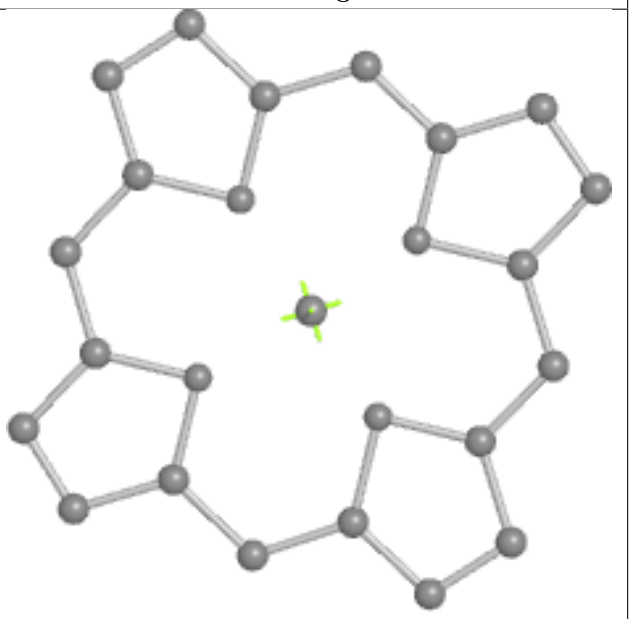
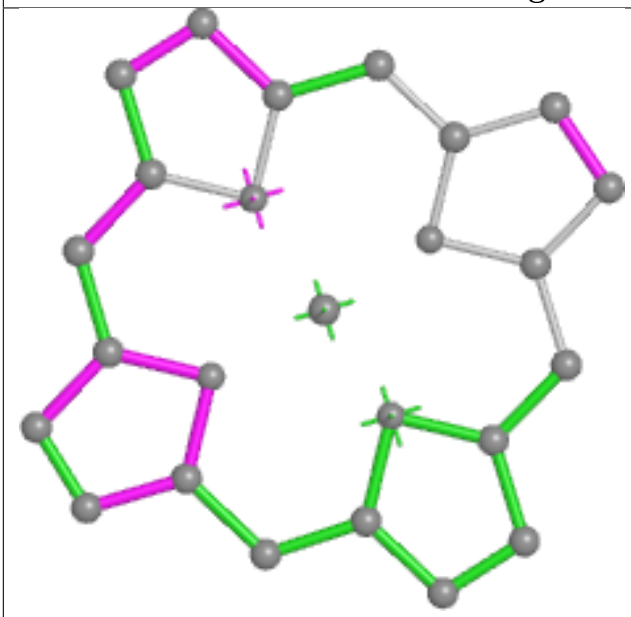


Rings

Ligand CLA 2 614



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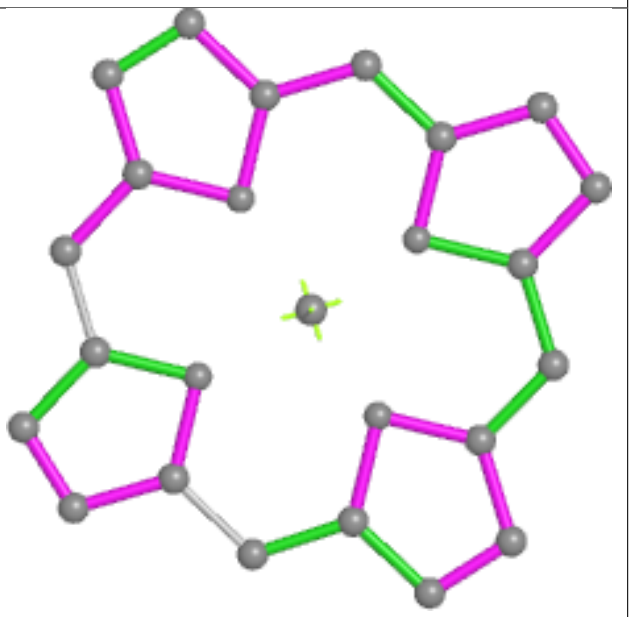

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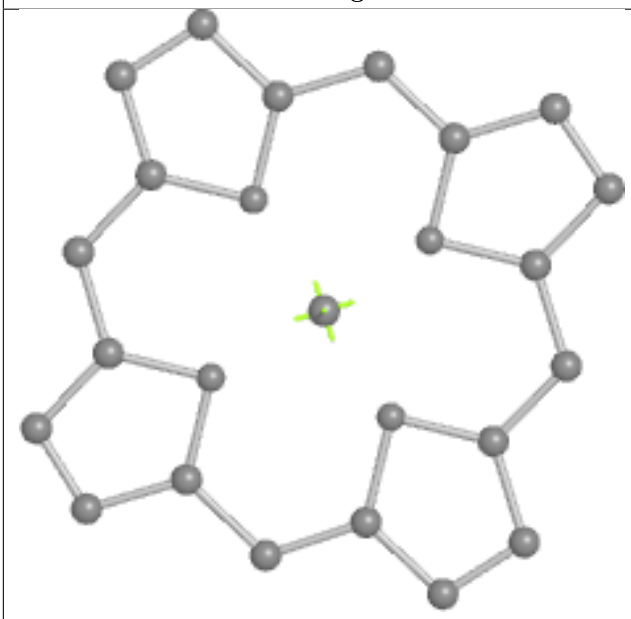

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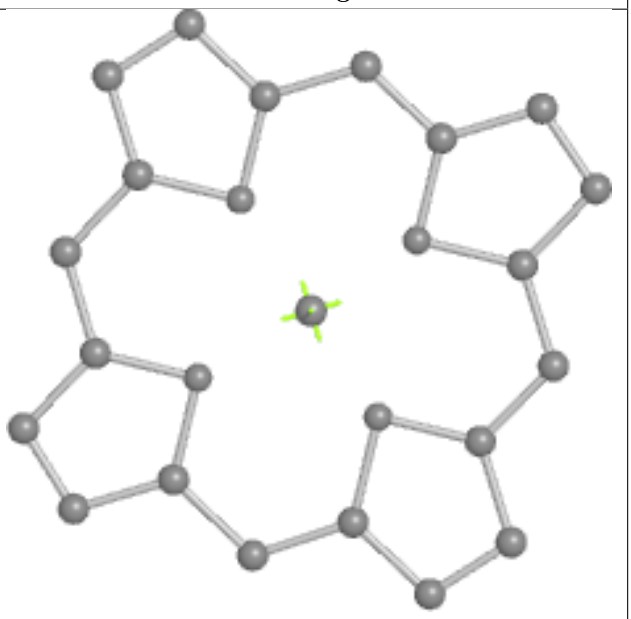
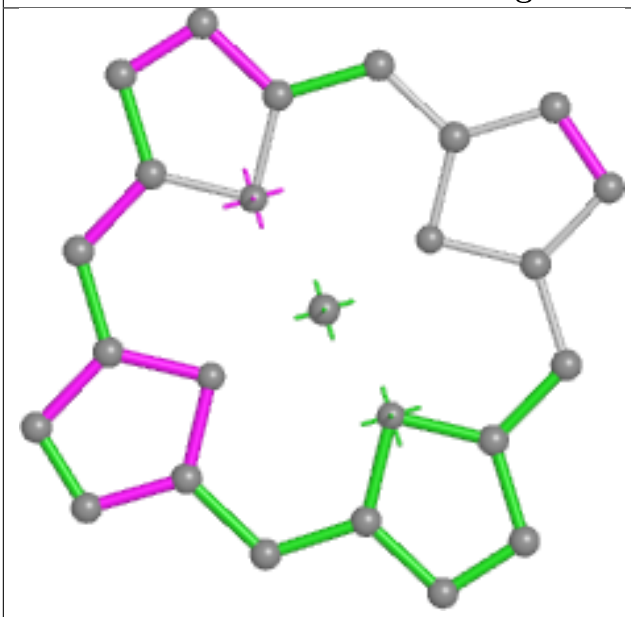


Rings

Ligand CLA A 1140



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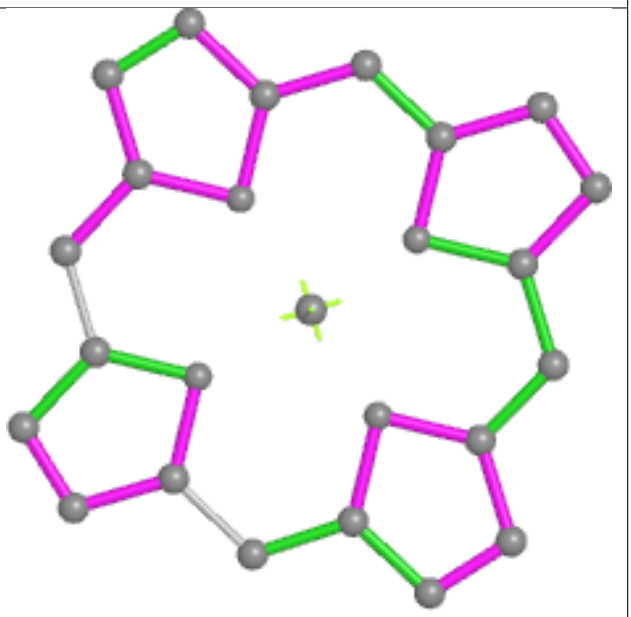

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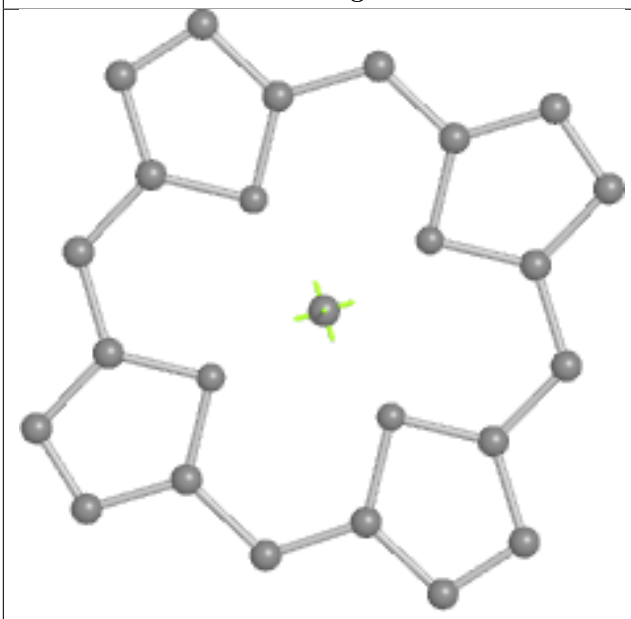

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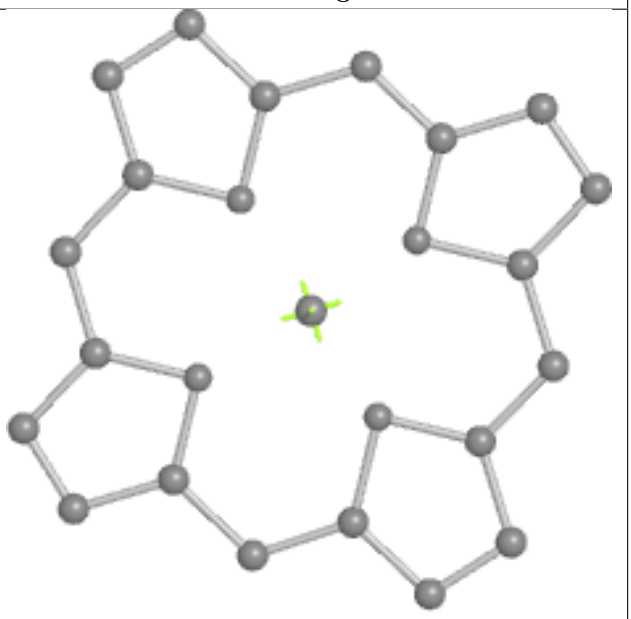
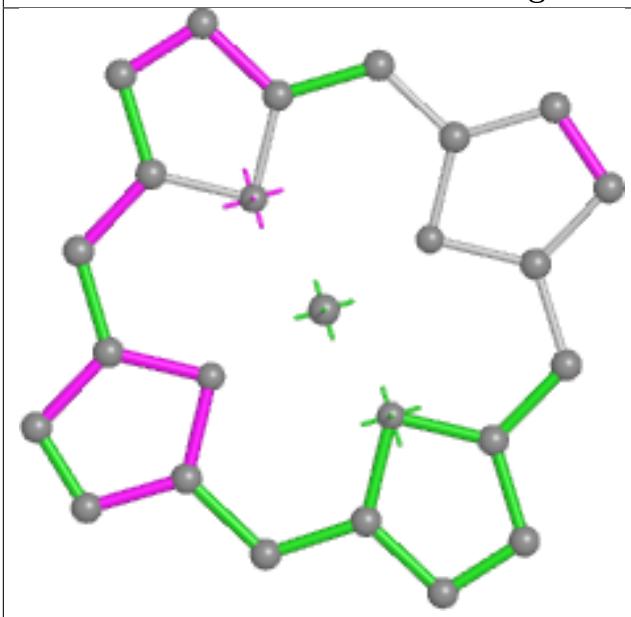


Rings

Ligand CLA 3 606



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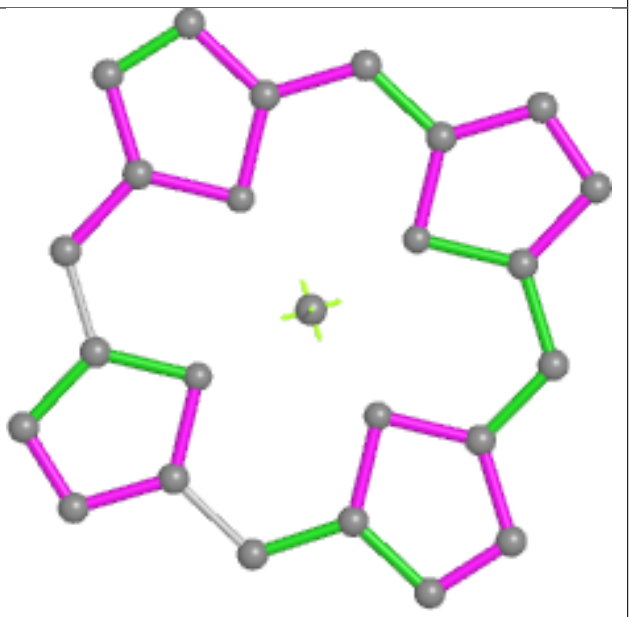

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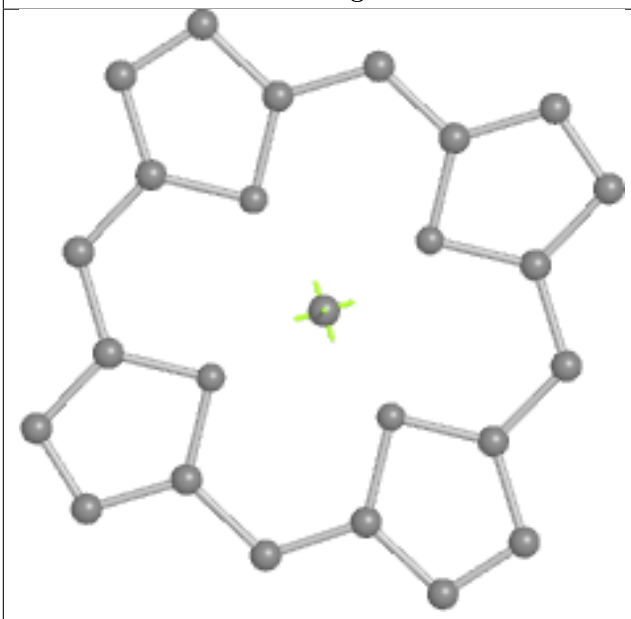

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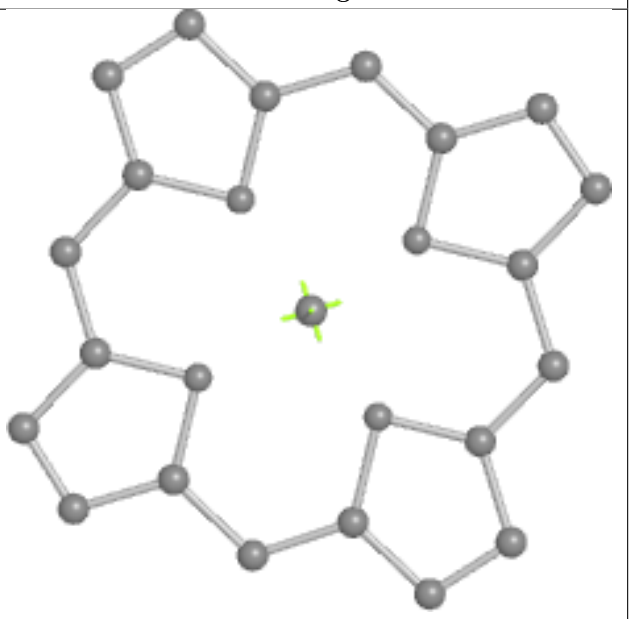
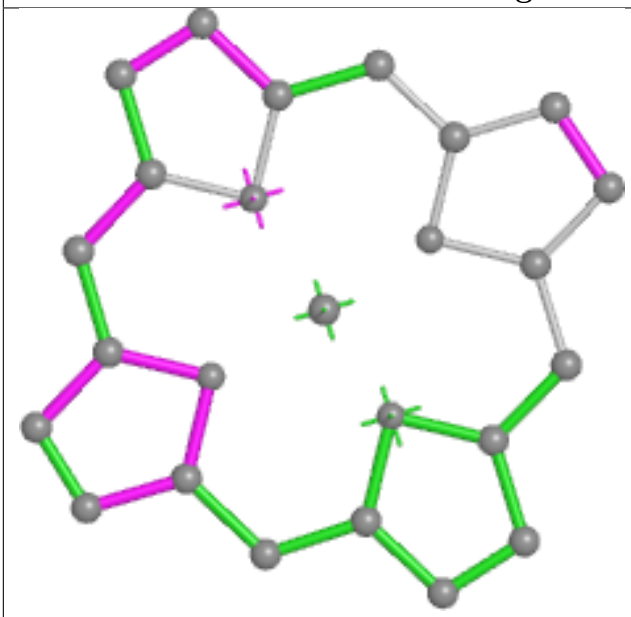


Rings

Ligand CLA B 1235



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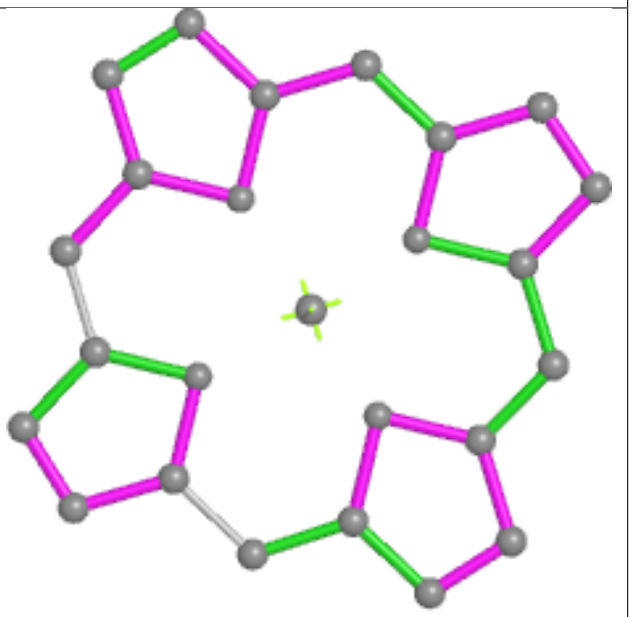
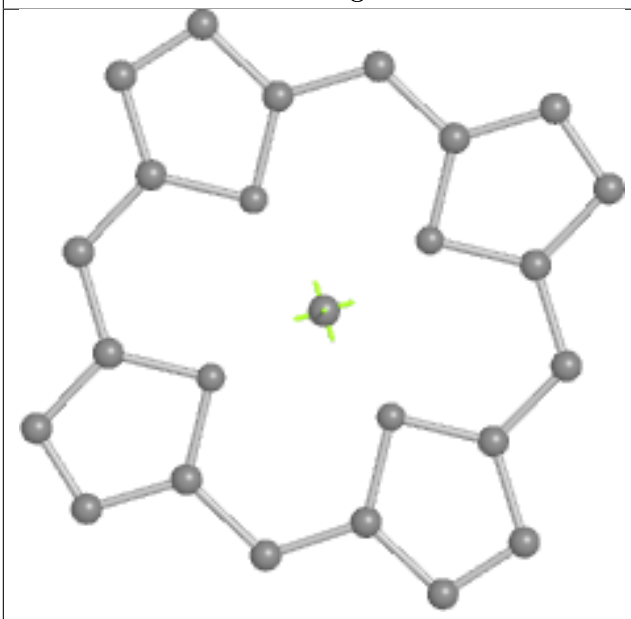


Bond angles



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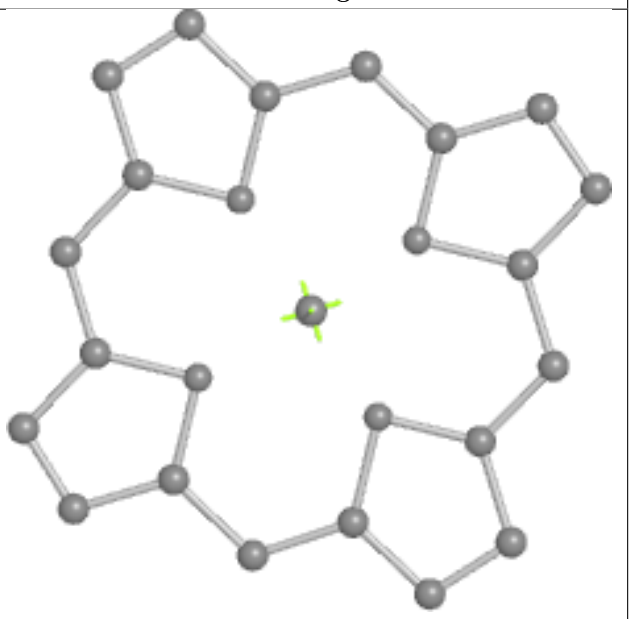
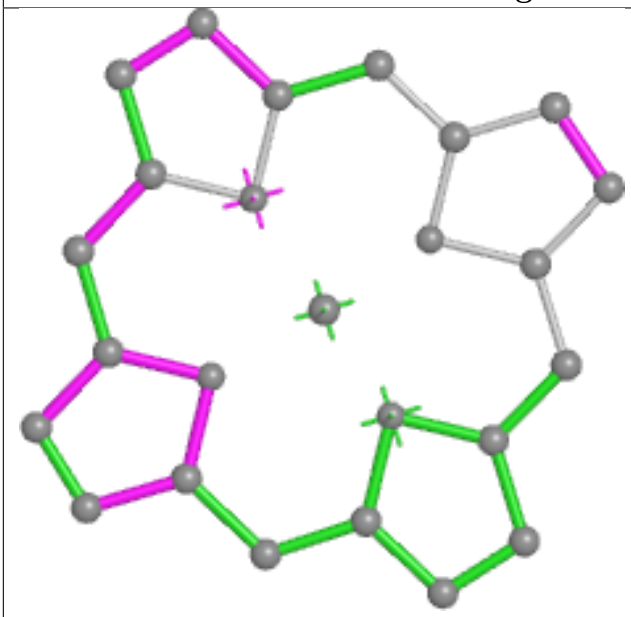
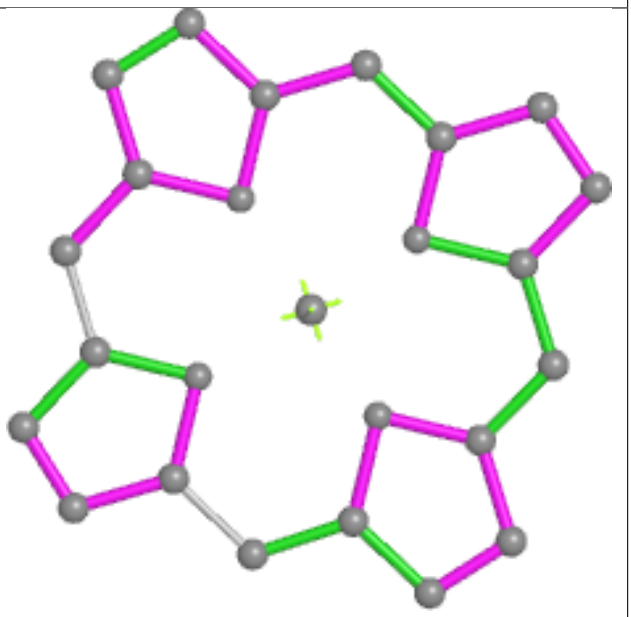


Rings

Ligand CLA B 1206



Bond lengths



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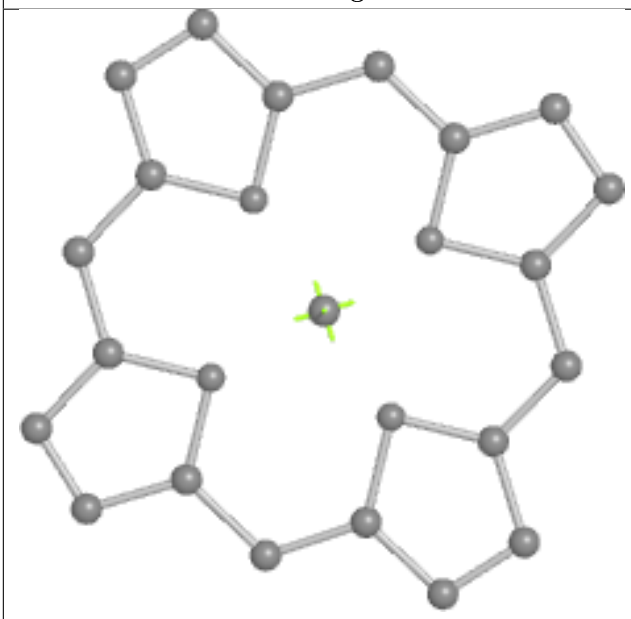

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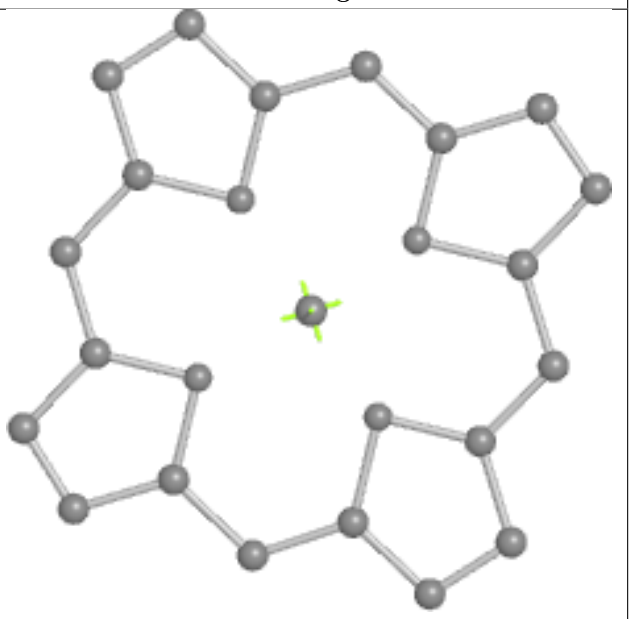
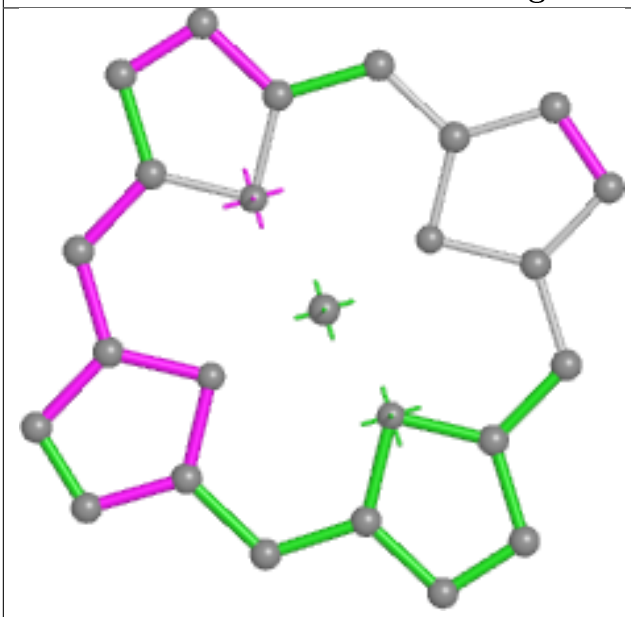
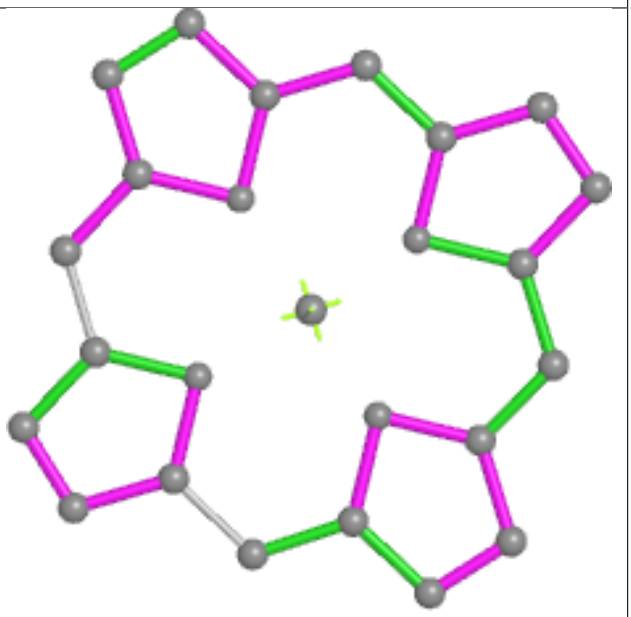


Rings

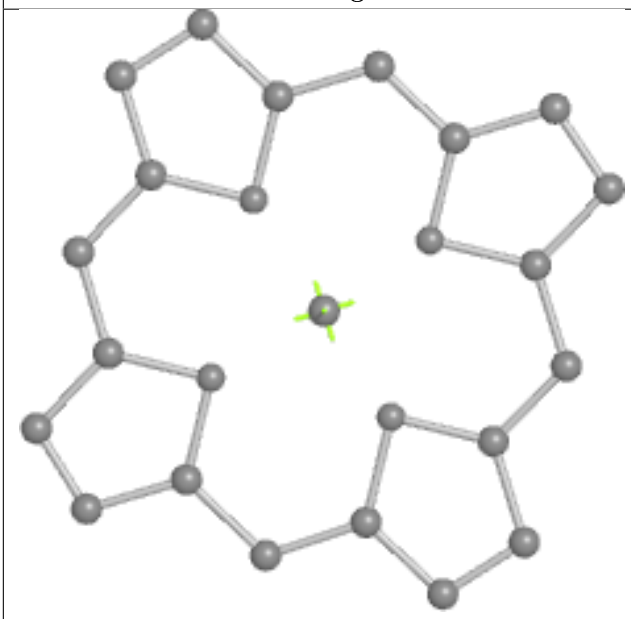
Ligand CLA 3 603



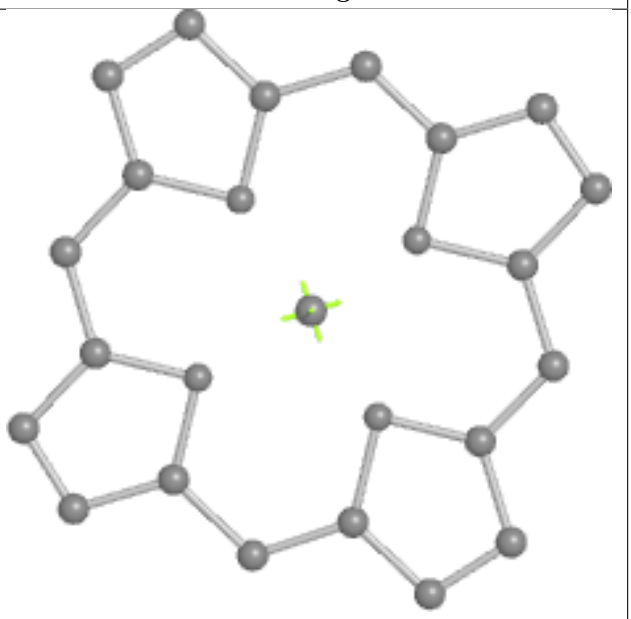
Bond lengths



Bond angles

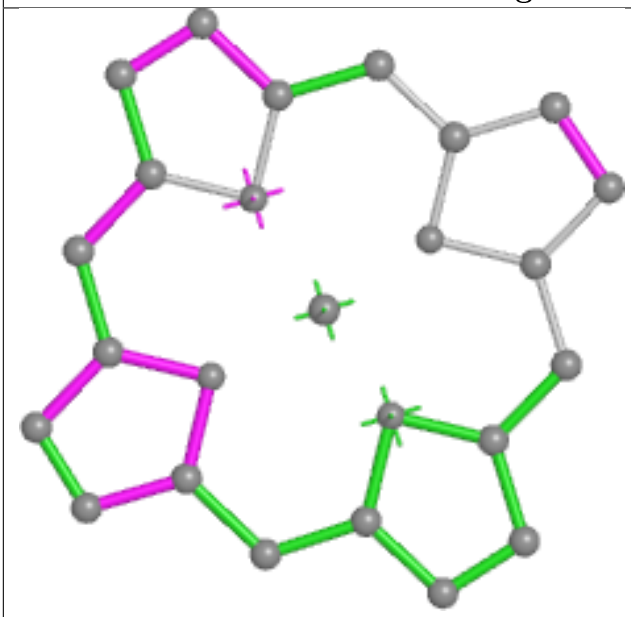


Torsions



Rings

Ligand CLA A 1121



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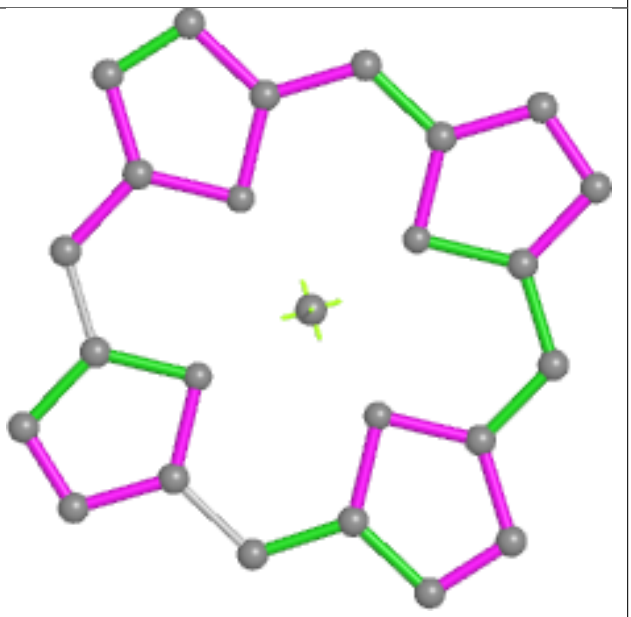

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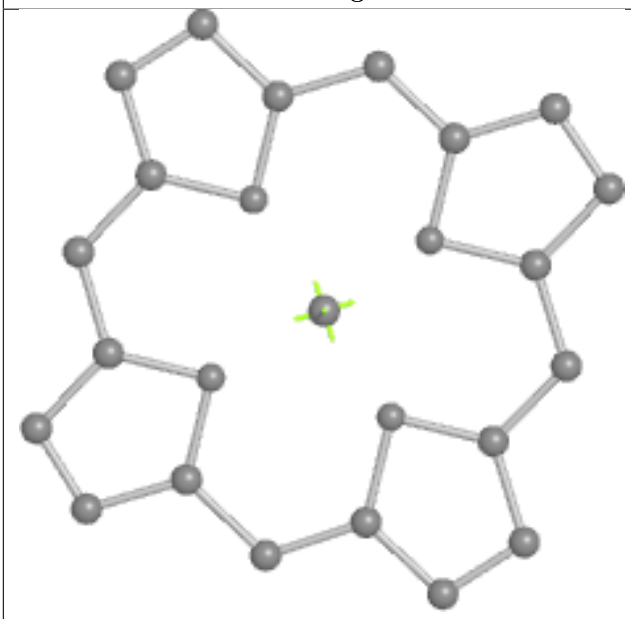

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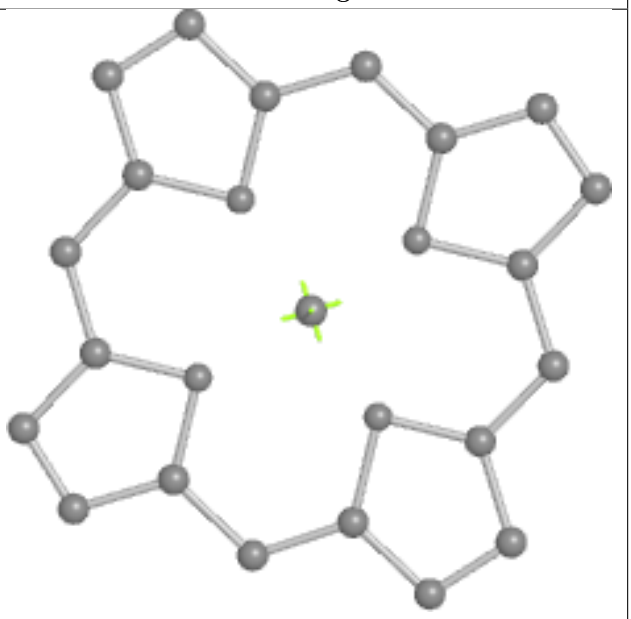
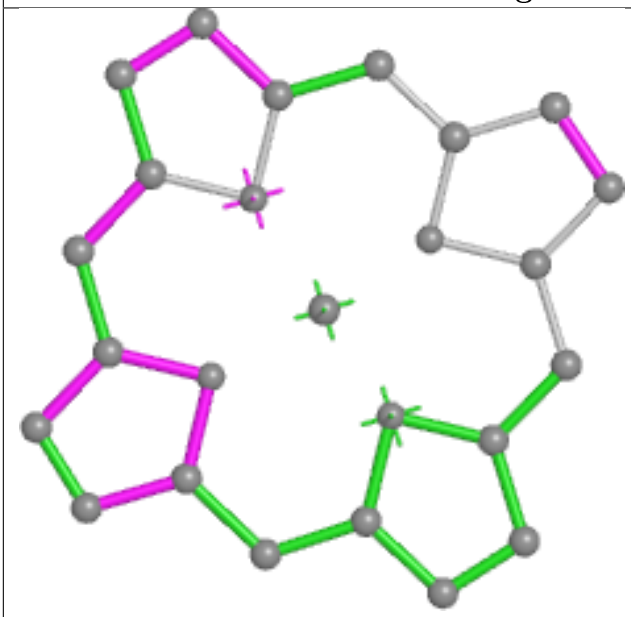


Rings

Ligand CLA A 1120



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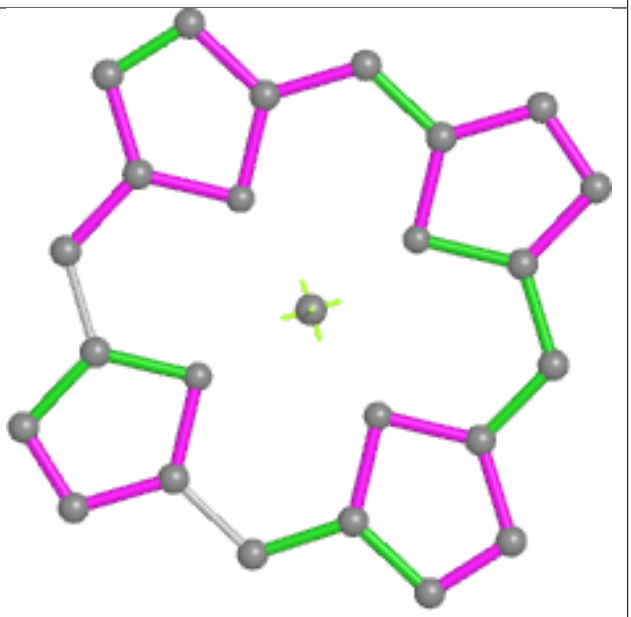
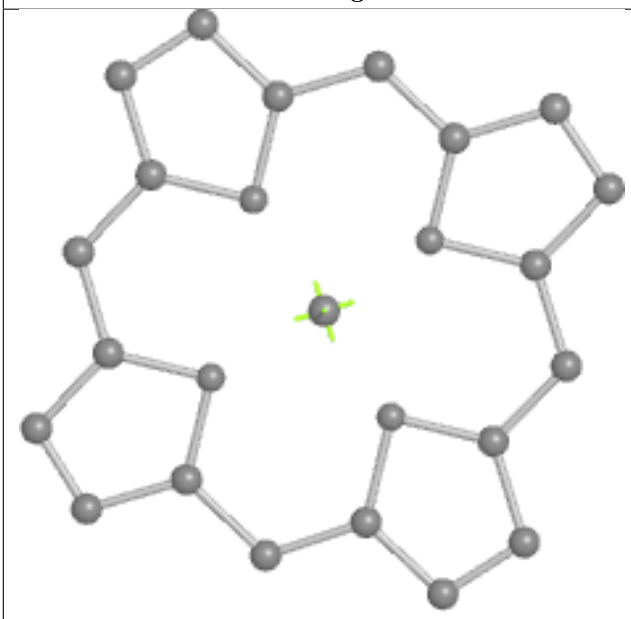
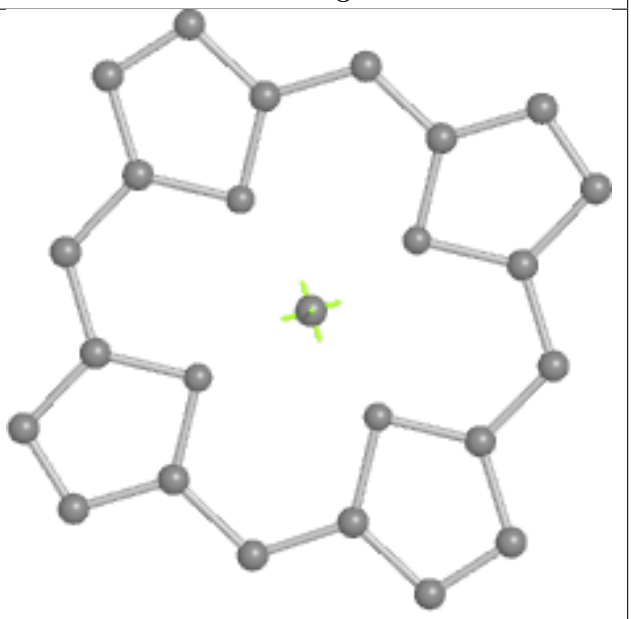


Bond angles

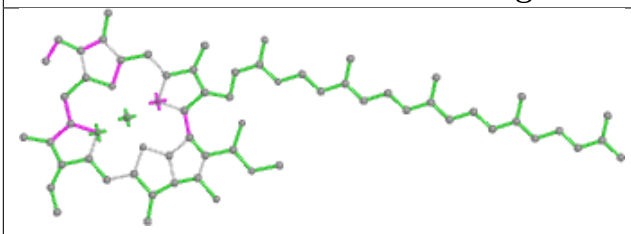


Torsions



Rings

Ligand CLA B 1232



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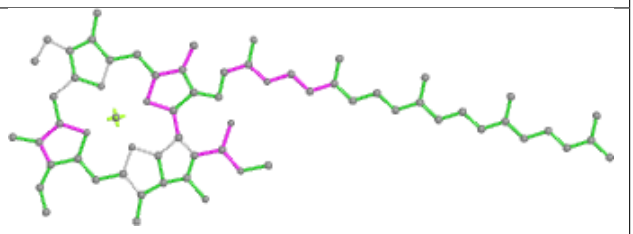
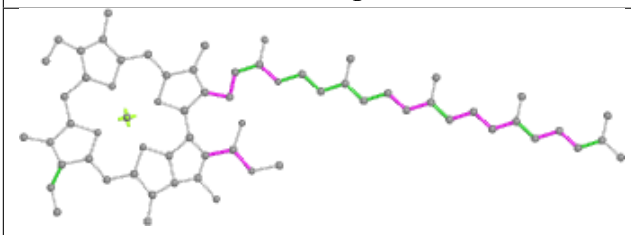
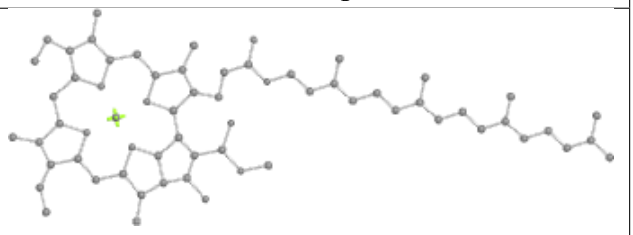


Bond angles

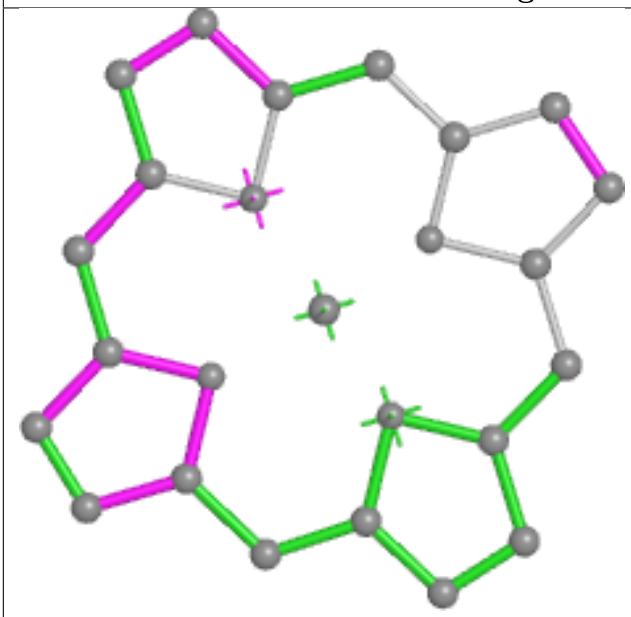


Torsions



Rings

Ligand CLA L 1501



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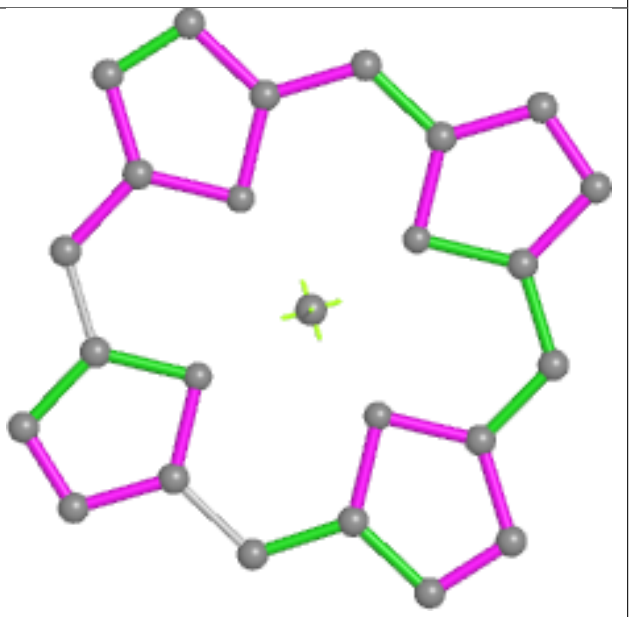
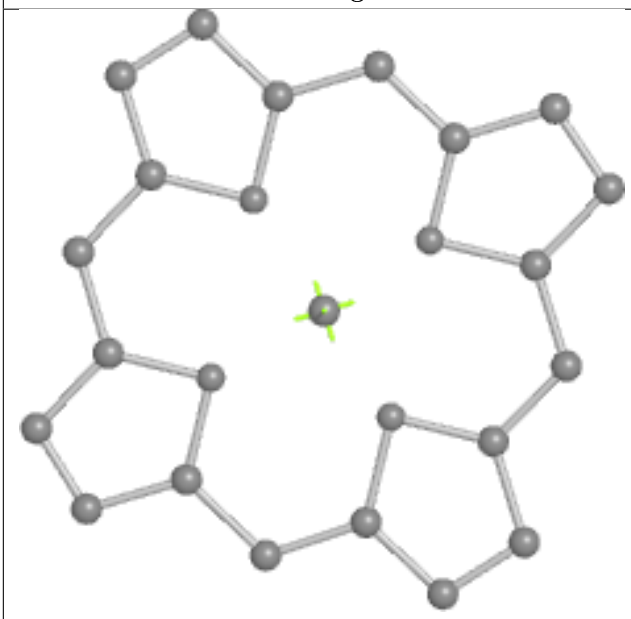


Bond angles



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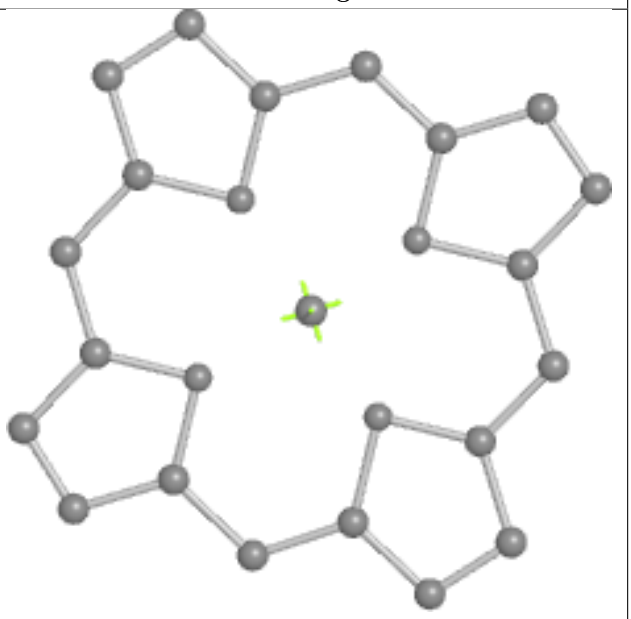
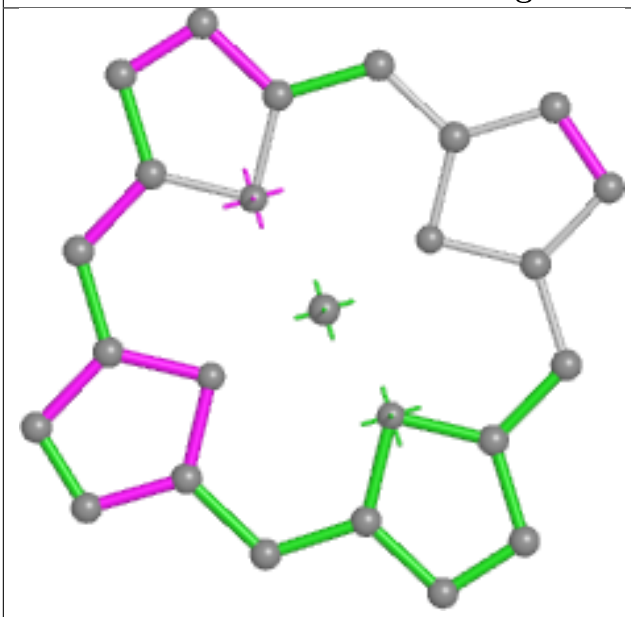


Rings

Ligand CLA A 1137



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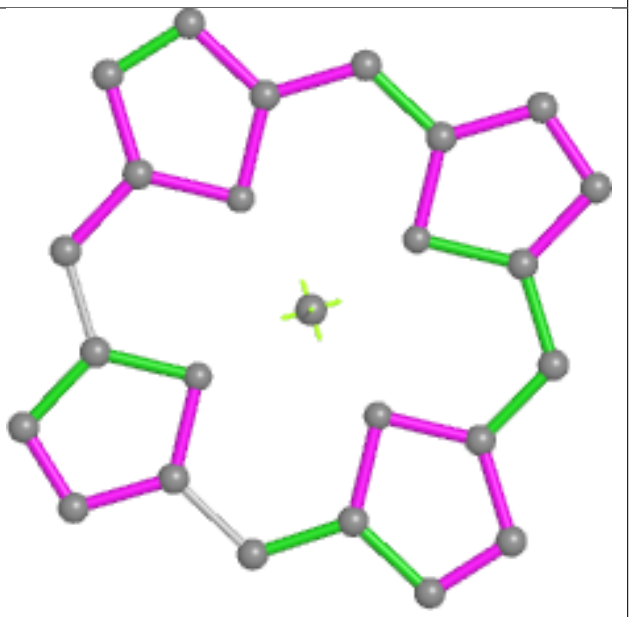
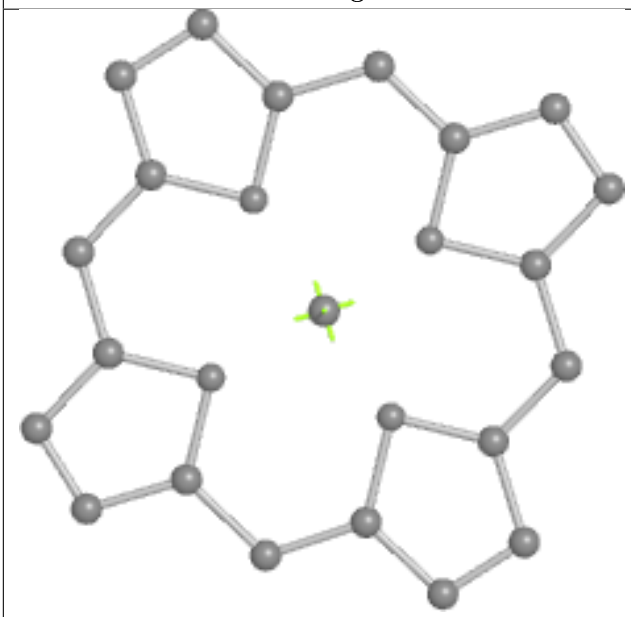


Bond angles



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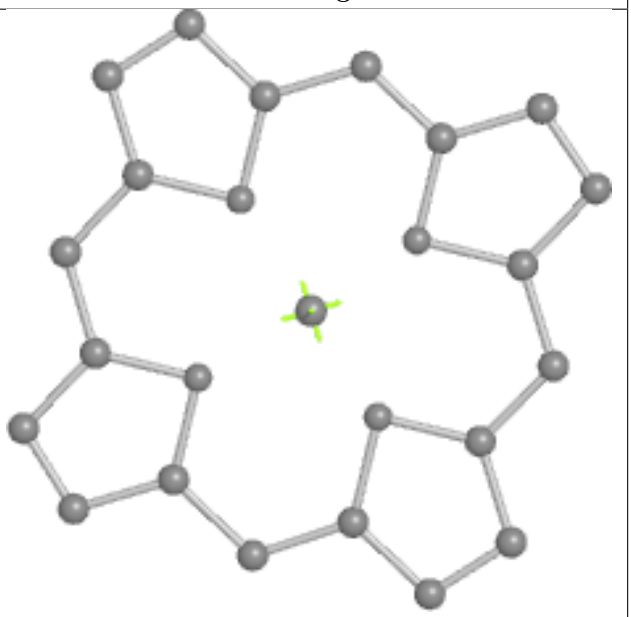
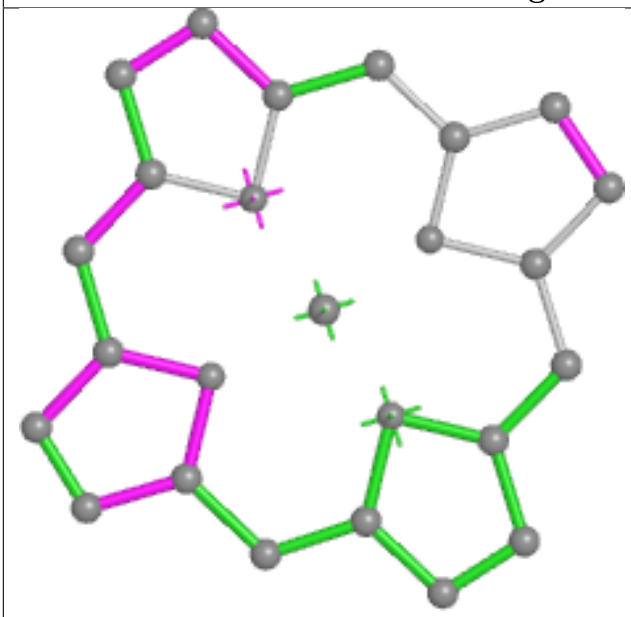


Rings

Ligand CLA 4 611



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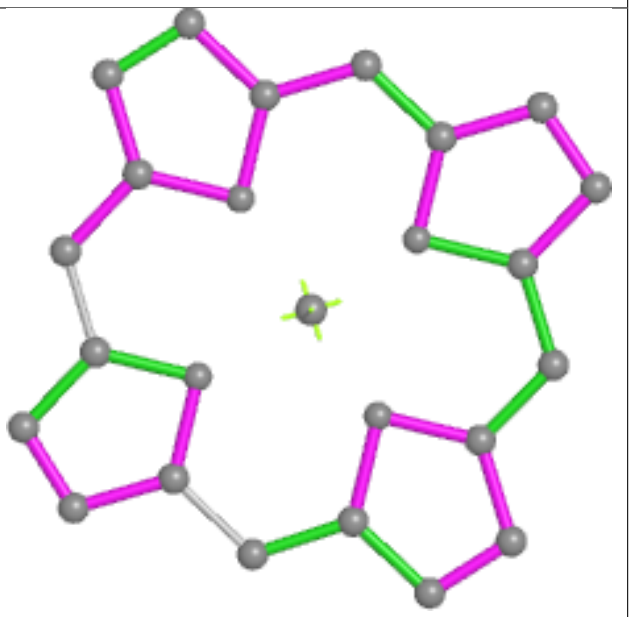
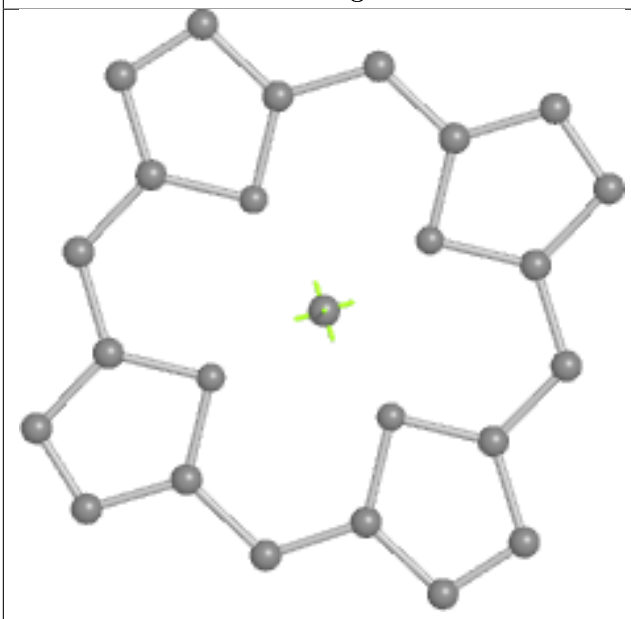


Bond angles



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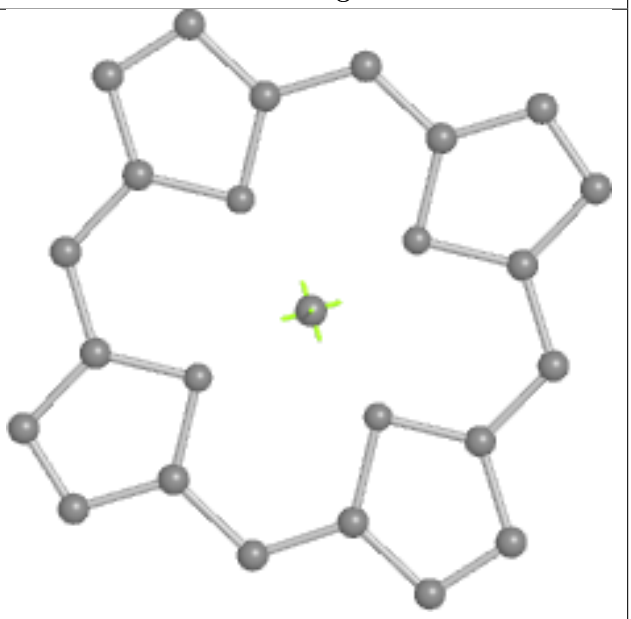
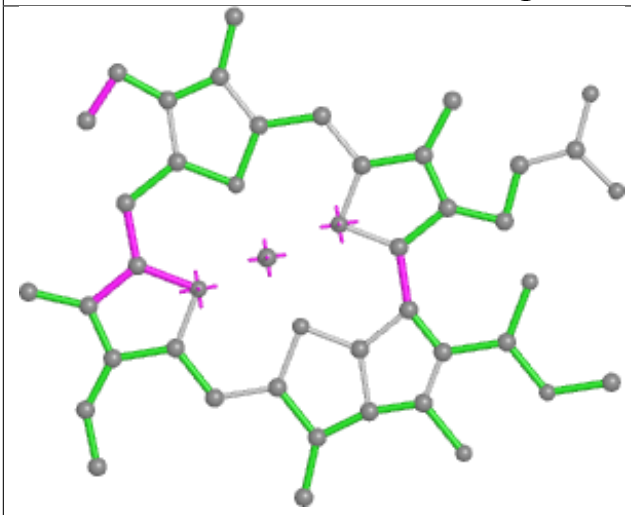


Rings

Ligand CLA F 1301



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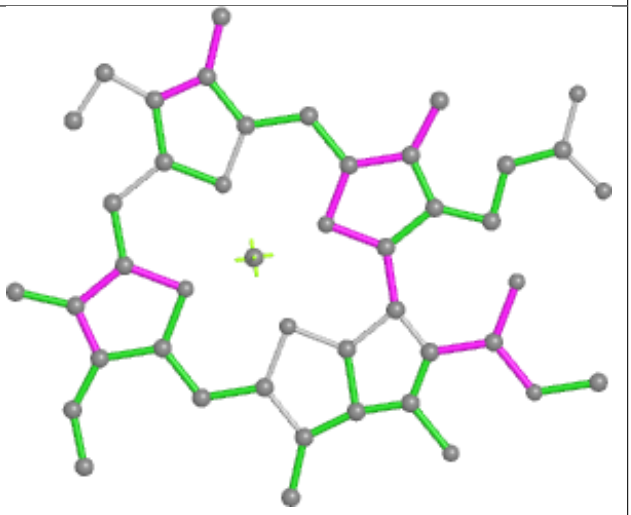
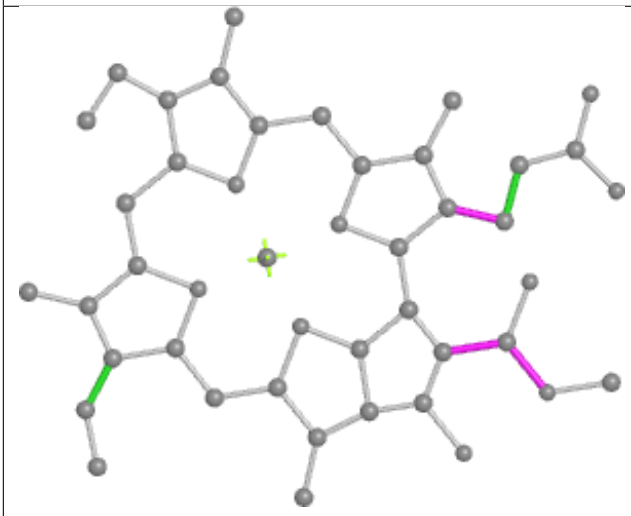


Bond angles



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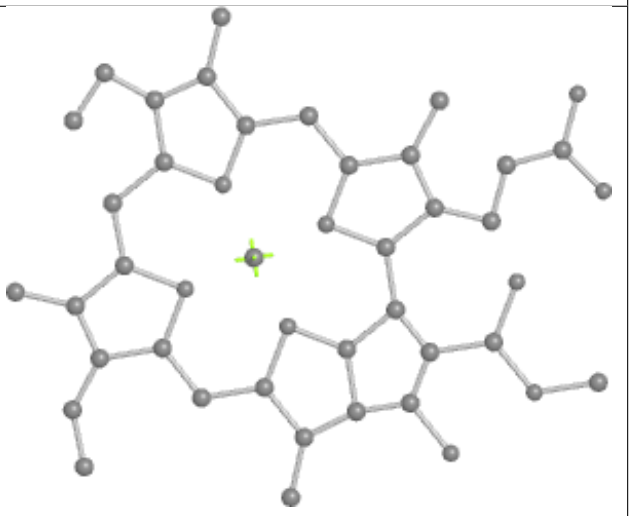
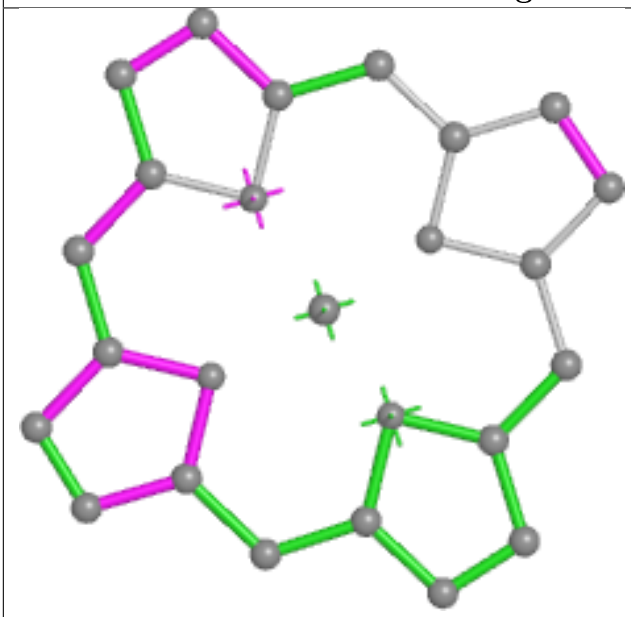


Rings

Ligand CLA B 1231



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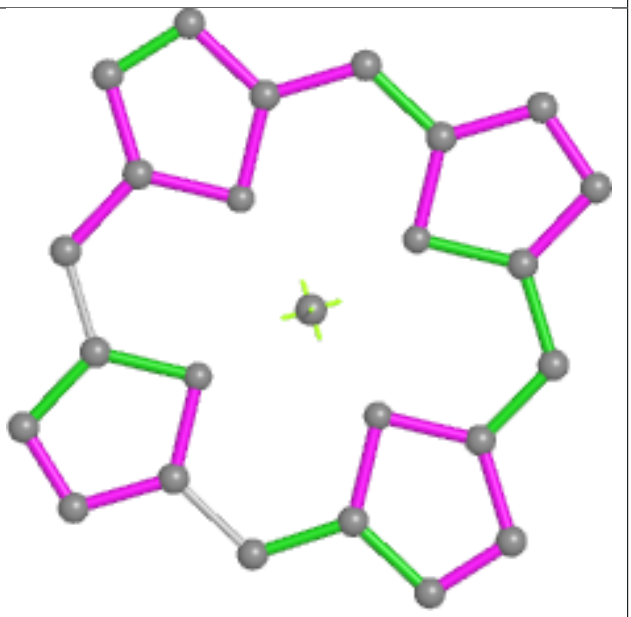
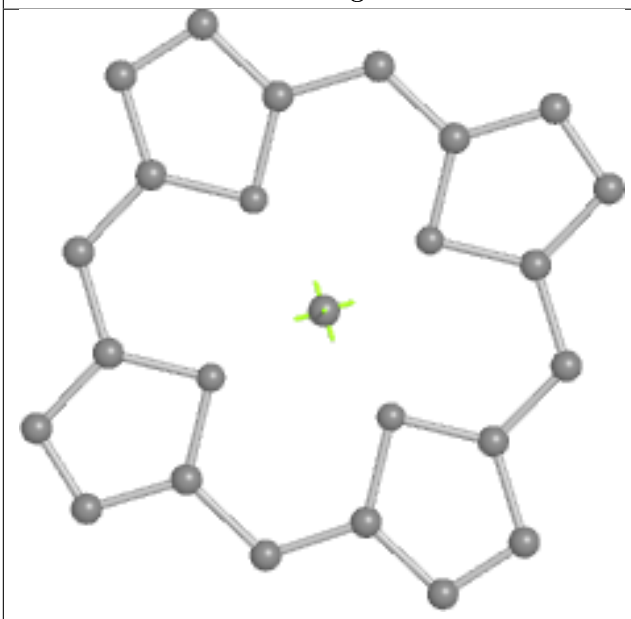


Bond angles



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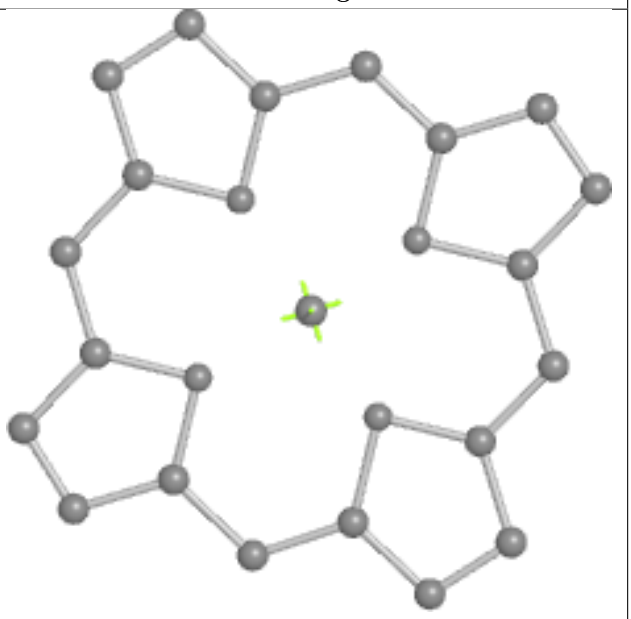
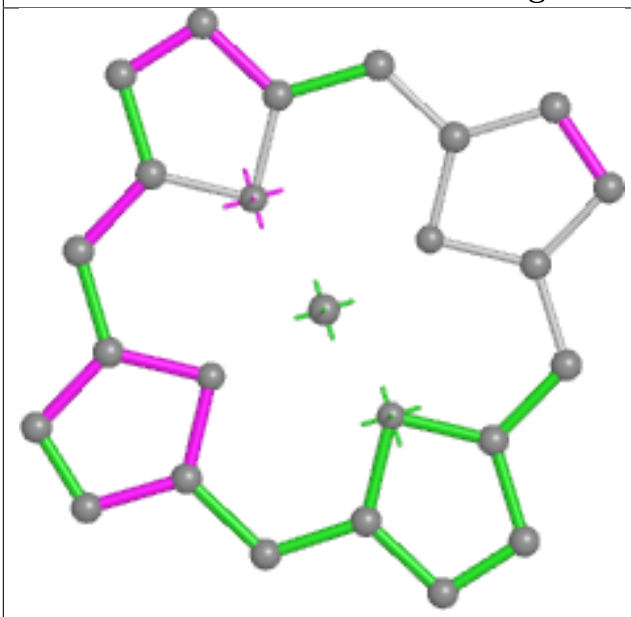


Rings

Ligand CLA 4 601



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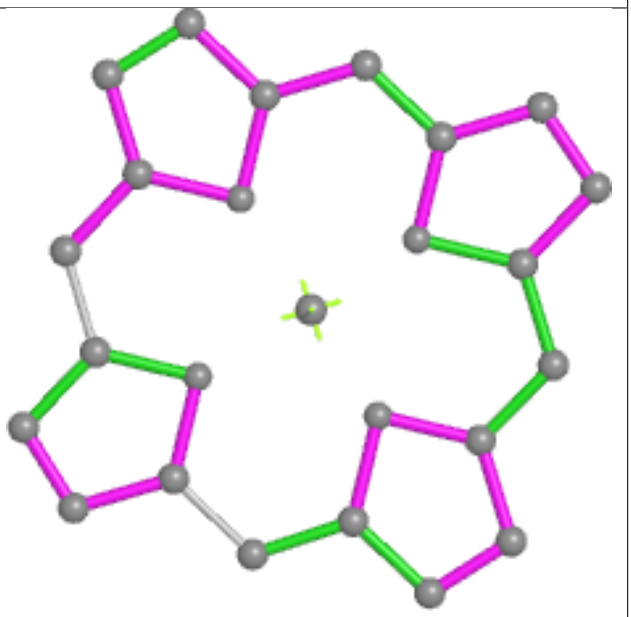
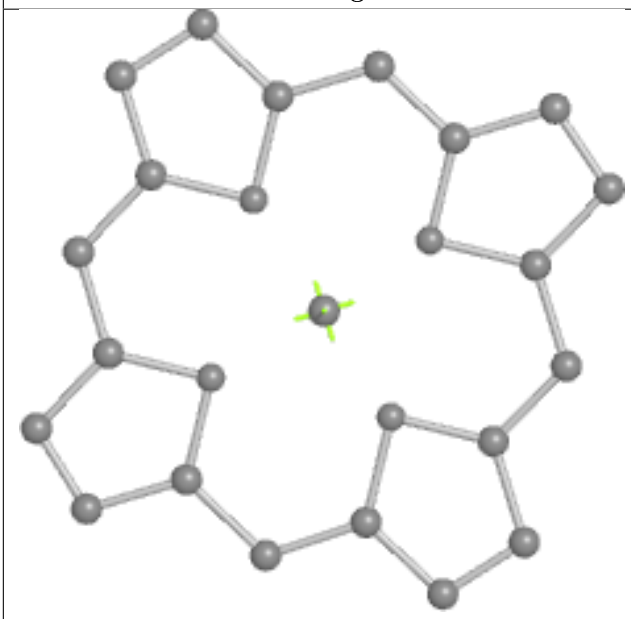
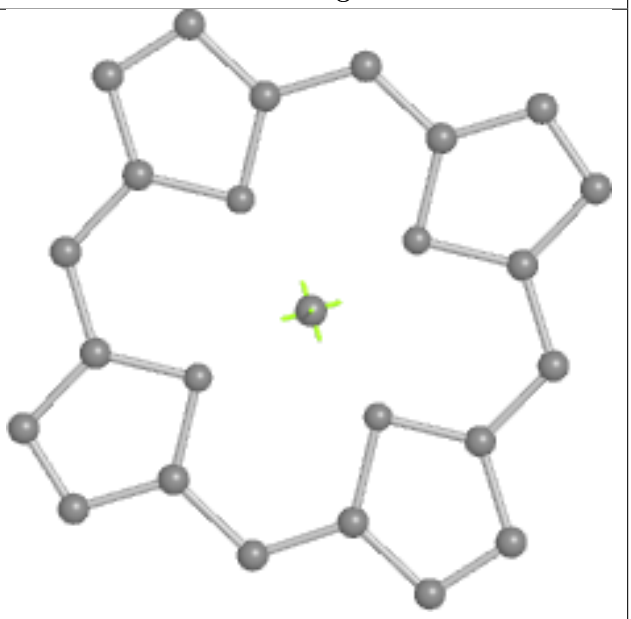


Bond angles

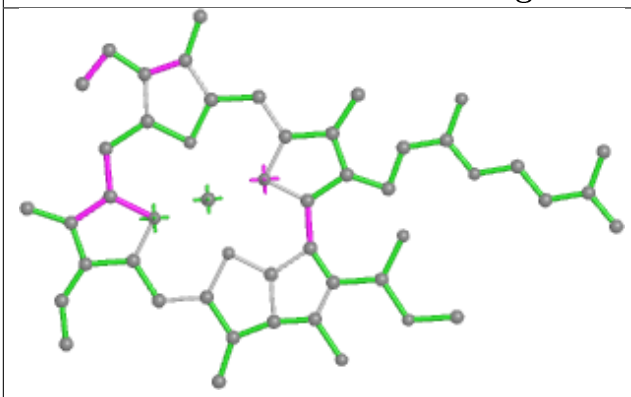


Torsions



Rings

Ligand CLA B 1023



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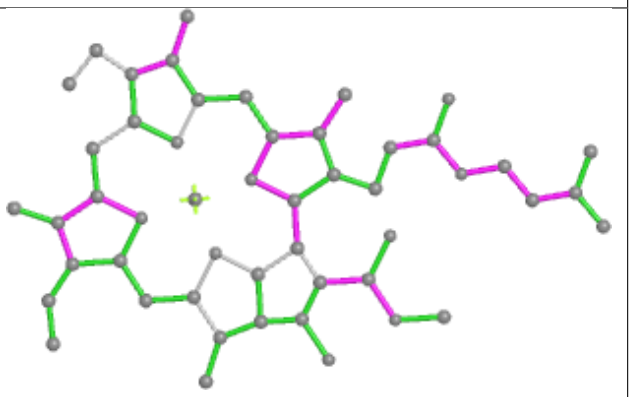
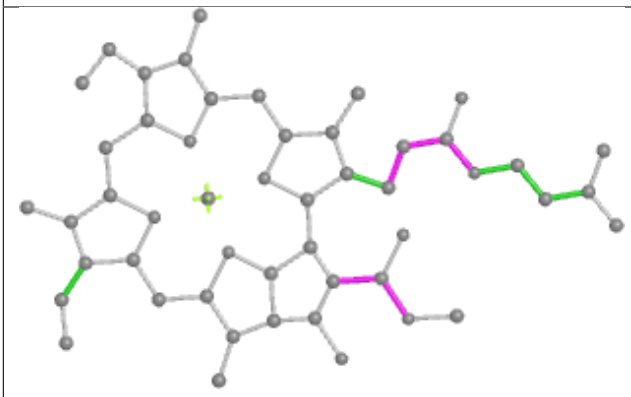


Bond angles



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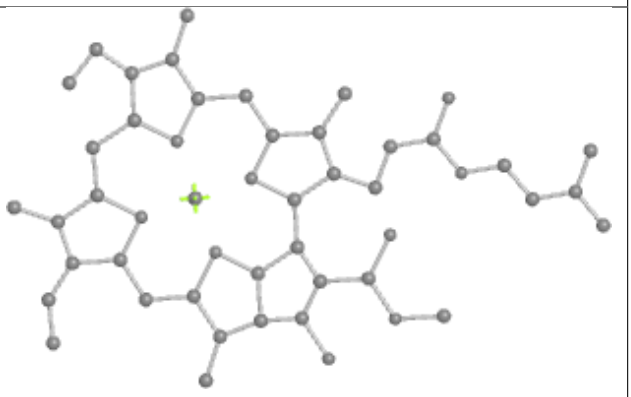
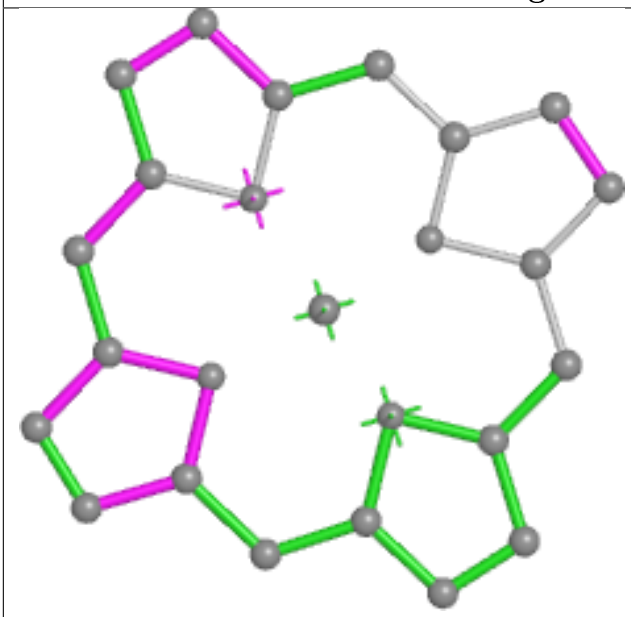


Rings

Ligand CLA 3 614



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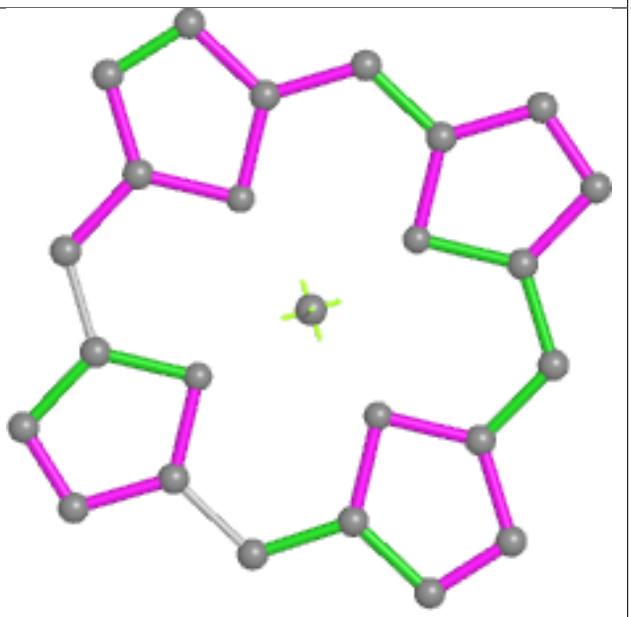
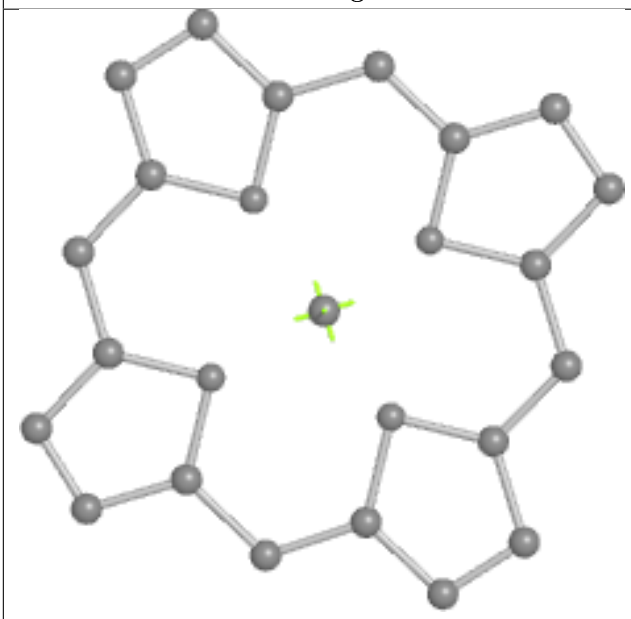
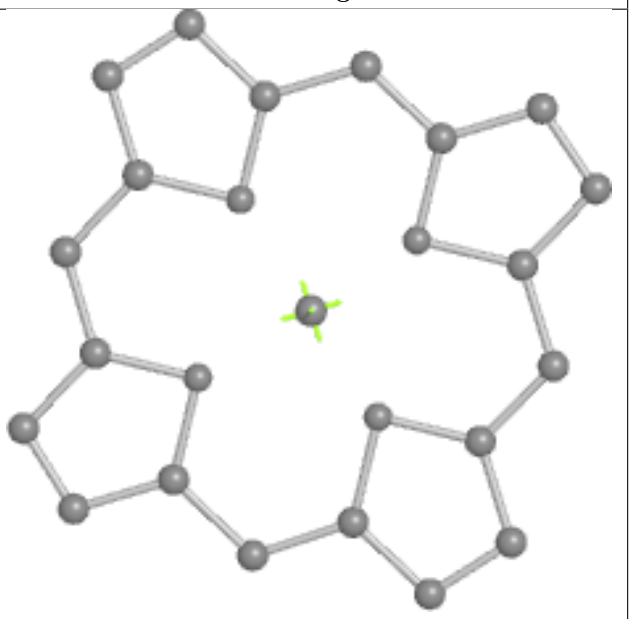


Bond angles

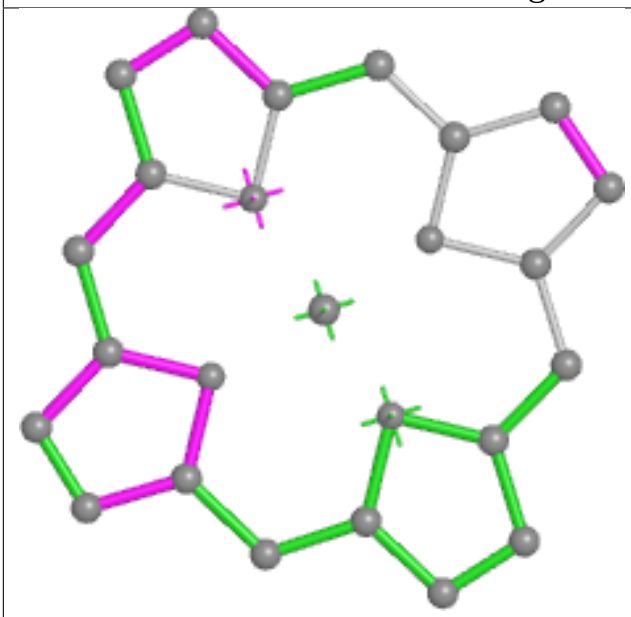


Torsions



Rings

Ligand CLA 2 610



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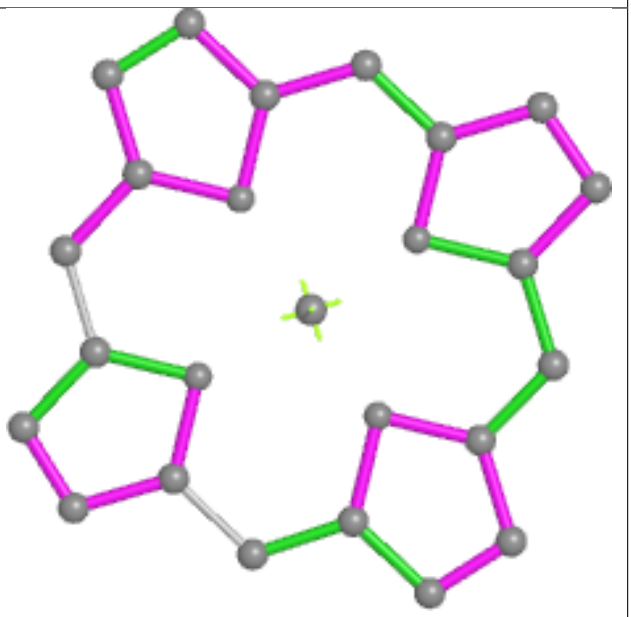
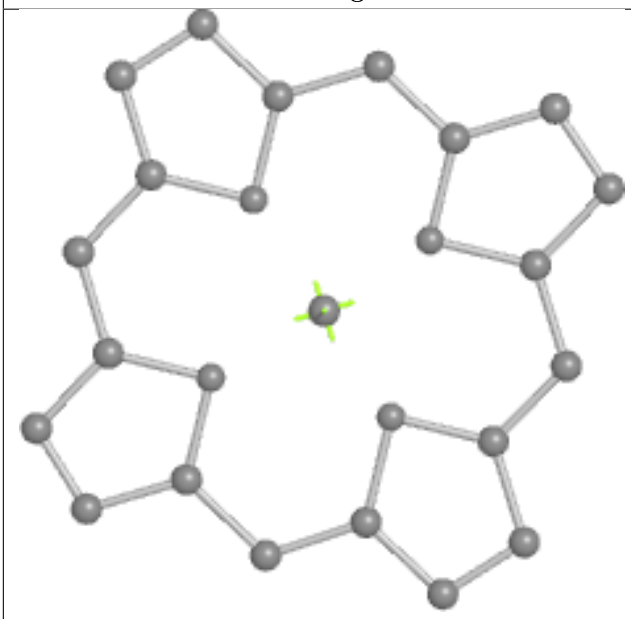
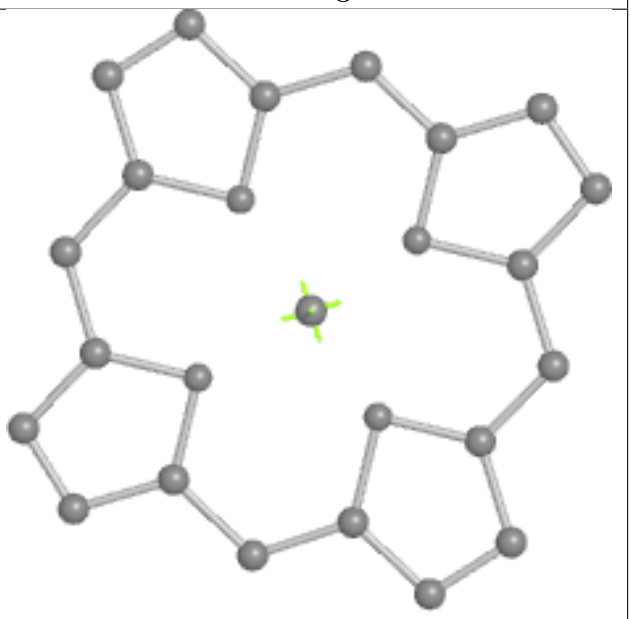


Bond angles

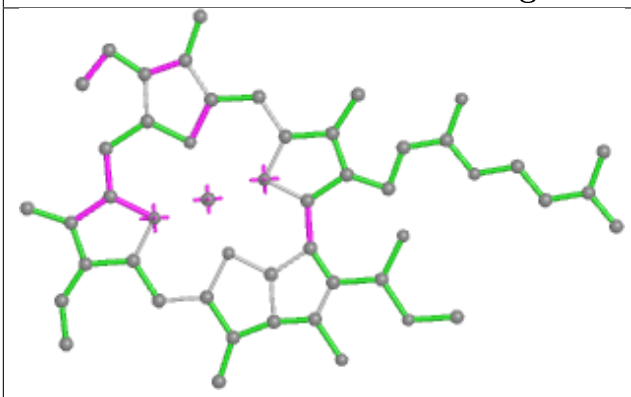


Torsions

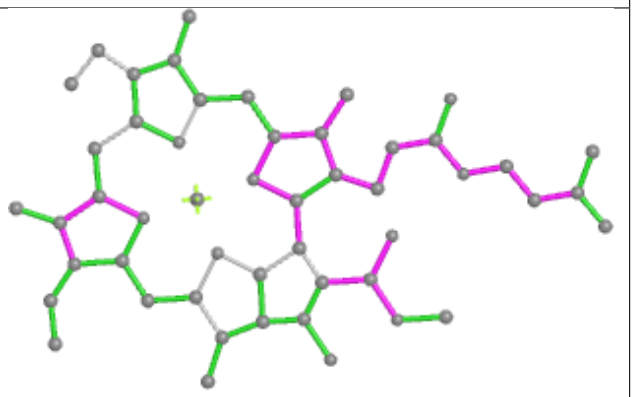


Rings

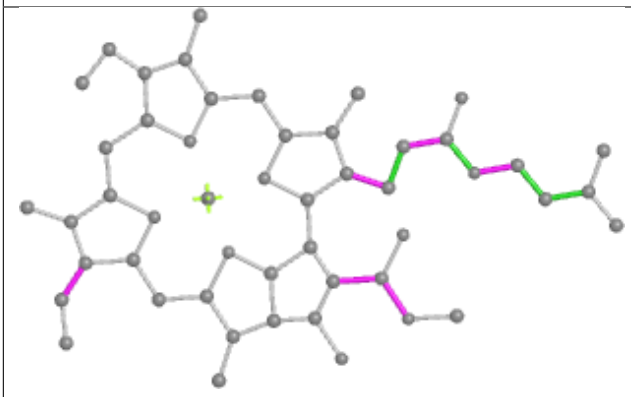
Ligand CLA J 1302



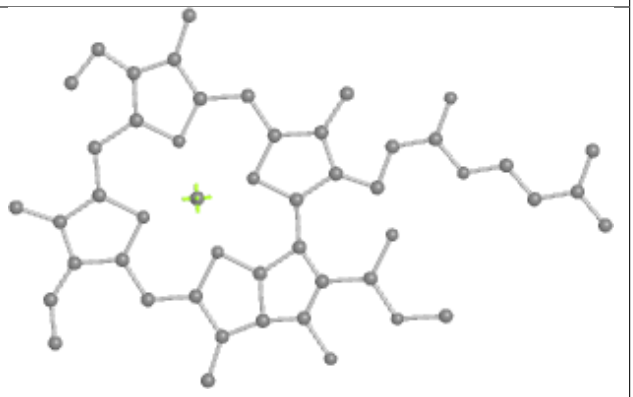
Bond lengths



Bond angles

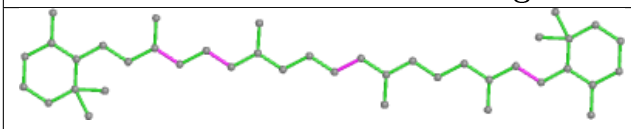


Torsions

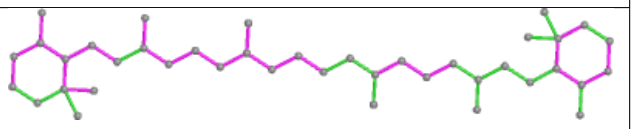


Rings

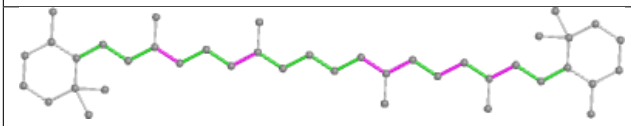
Ligand BCR A 4011



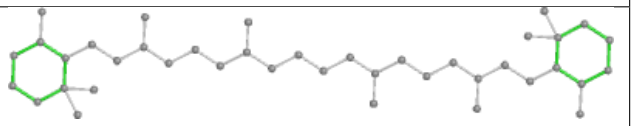
Bond lengths



Bond angles

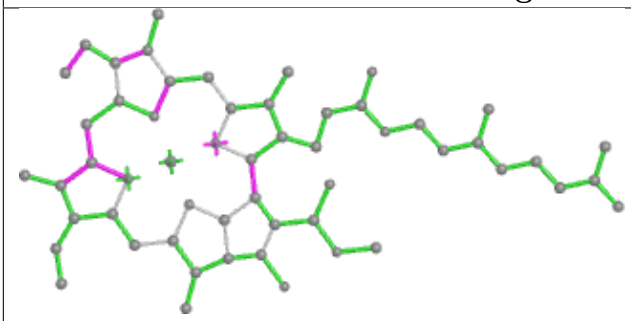


Torsions

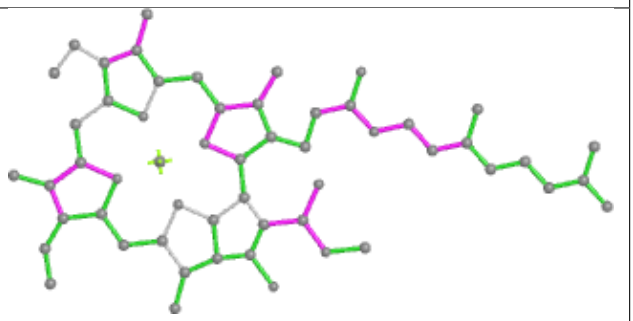


Rings

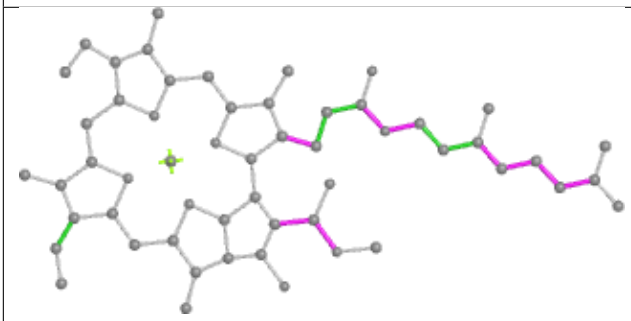
Ligand CLA A 1130



Bond lengths



Bond angles



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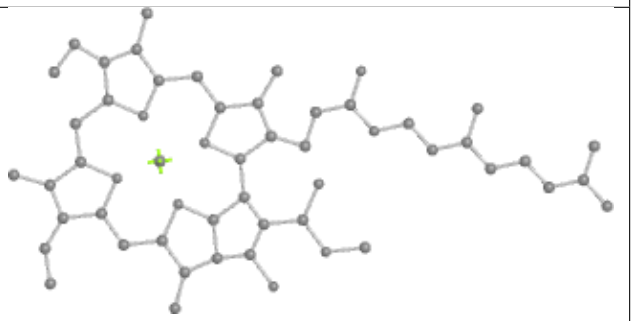
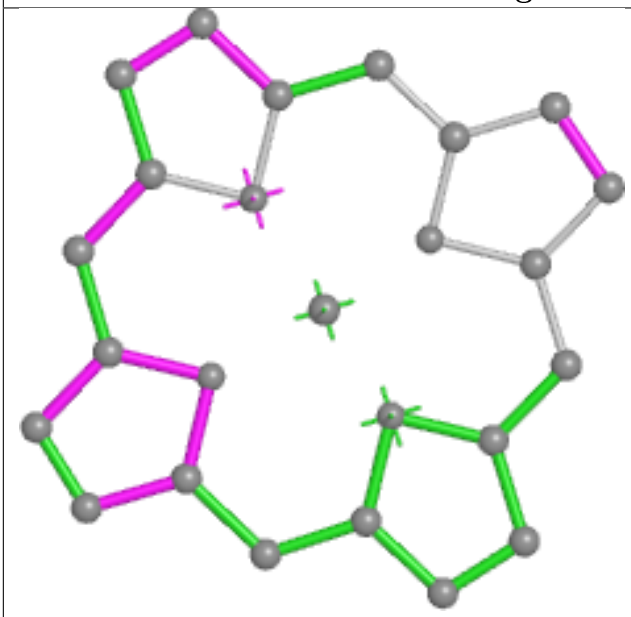
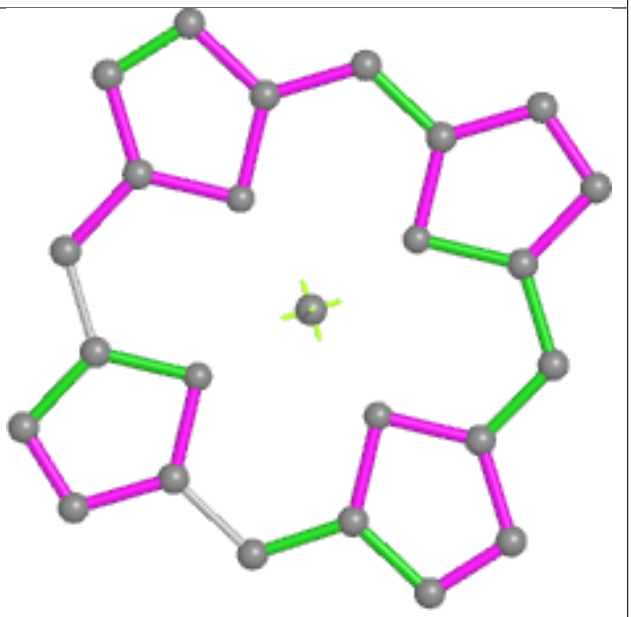


Rings

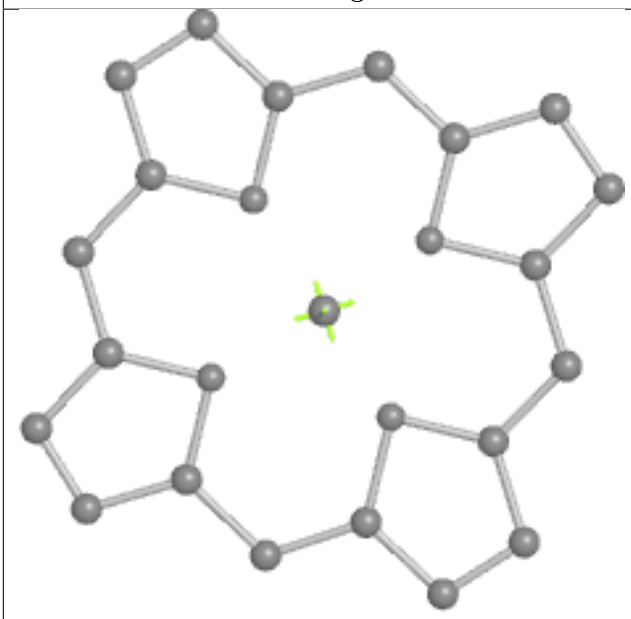
Ligand CLA O 1603



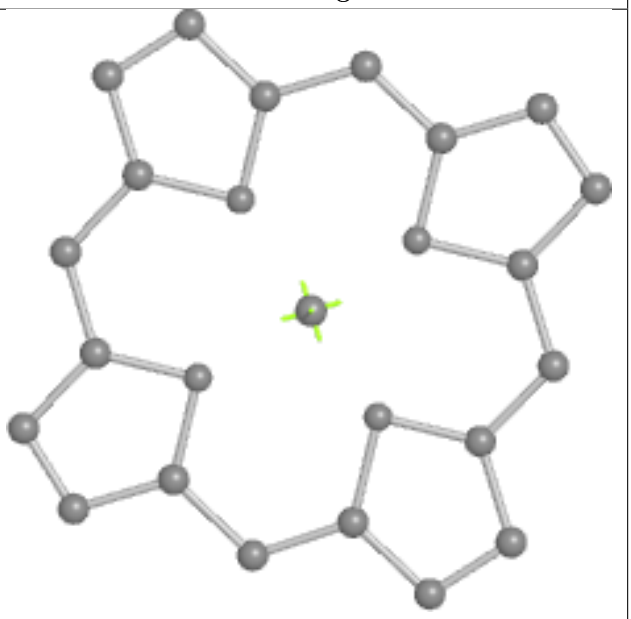
Bond lengths



Bond angles

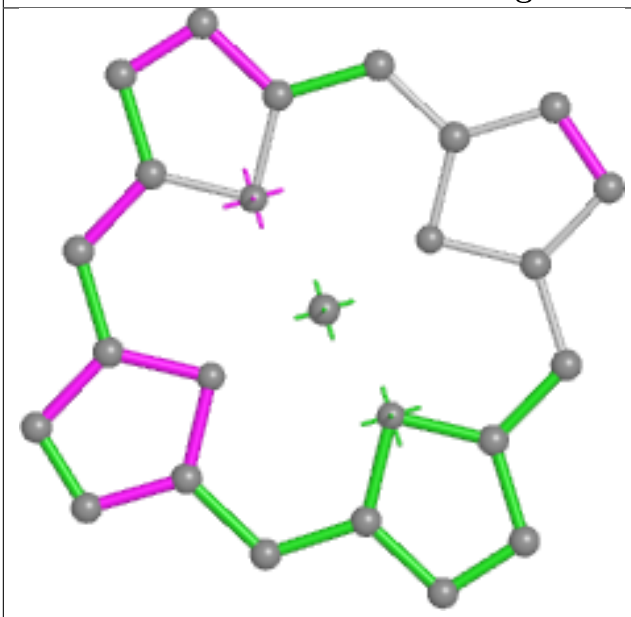


Torsions



Rings

Ligand CLA B 1209



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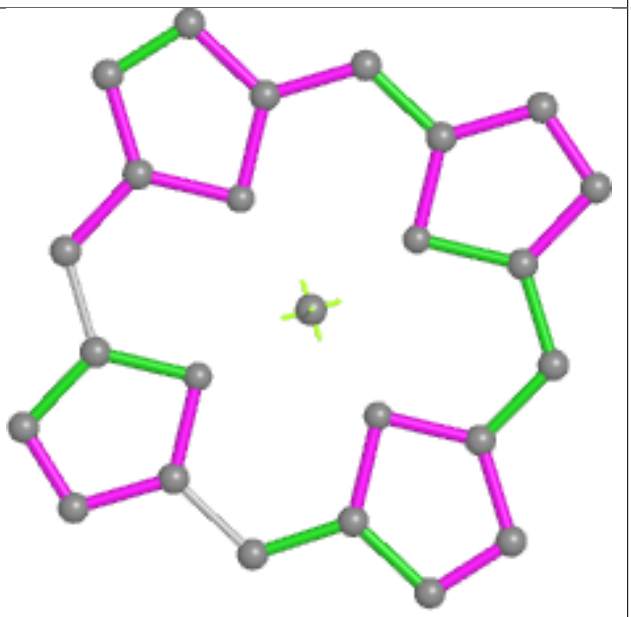
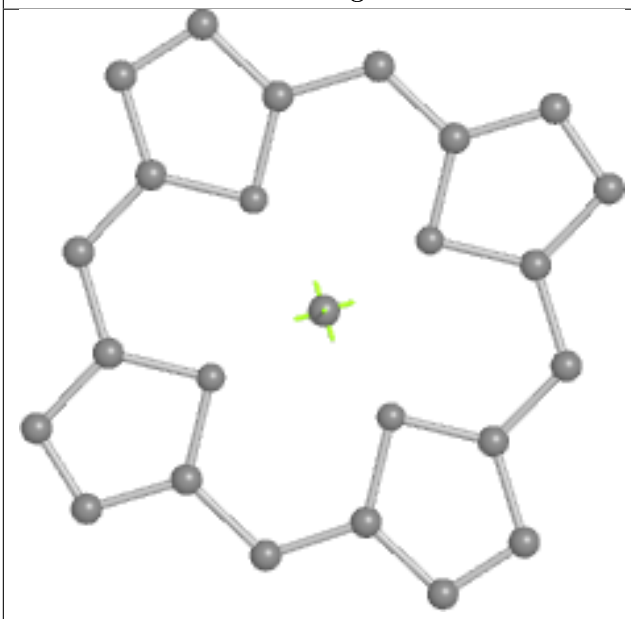
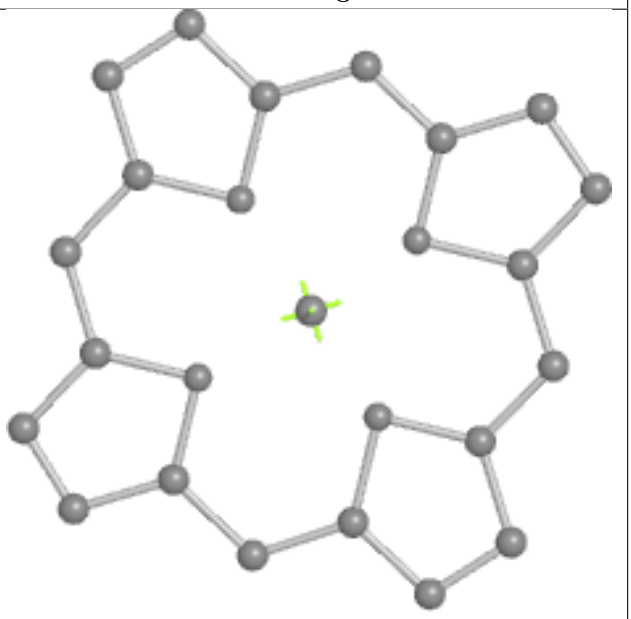


Bond angles

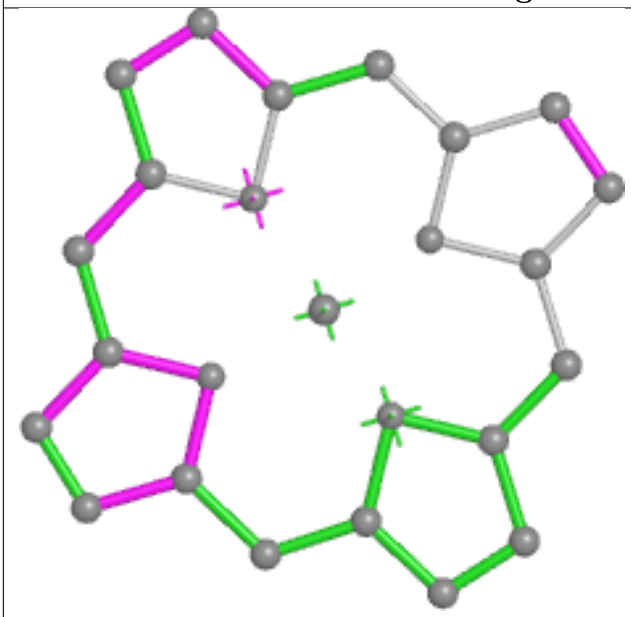


Torsions



Rings

Ligand CLA A 1112



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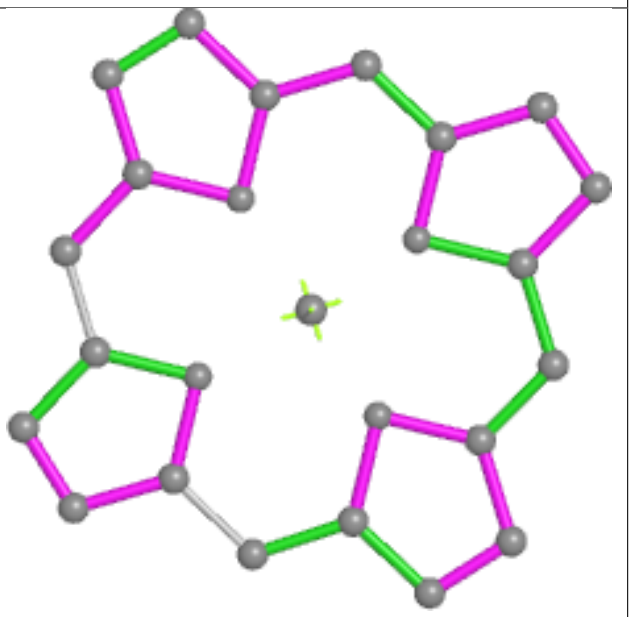
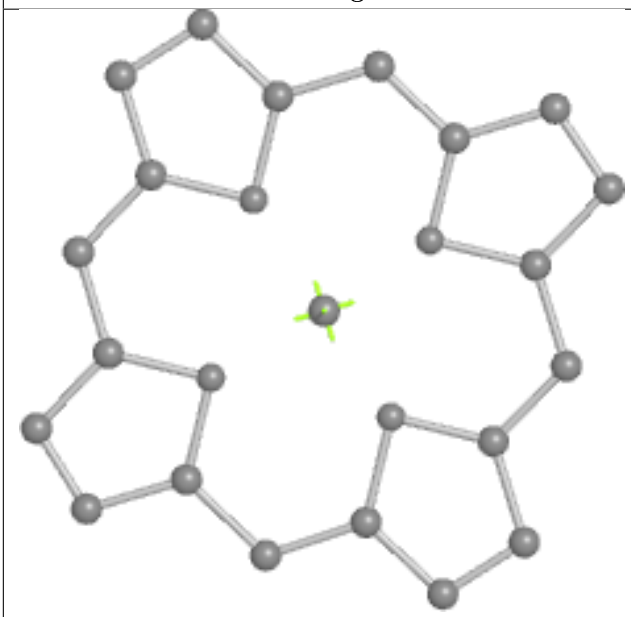


Bond angles



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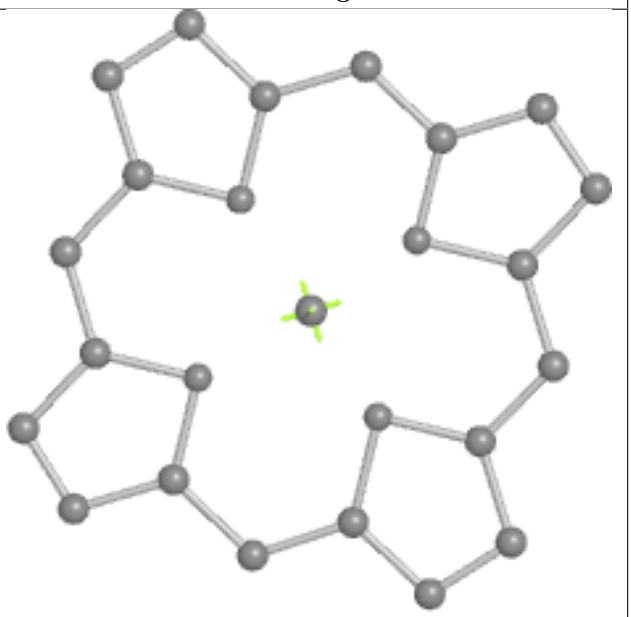
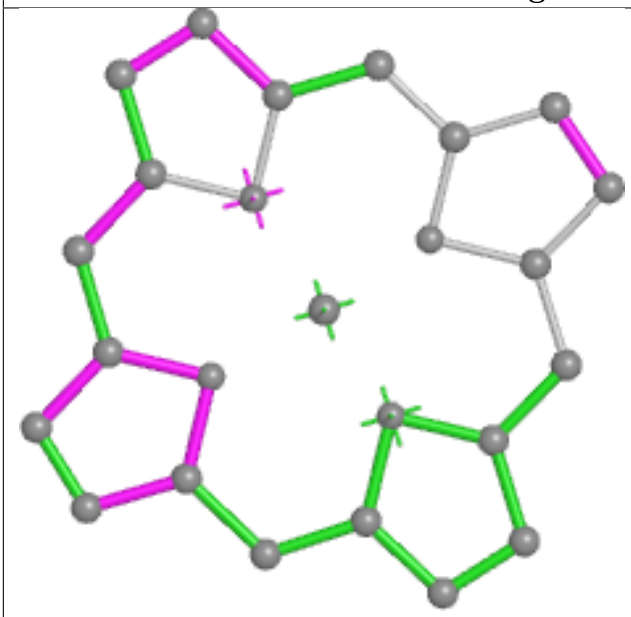


Rings

Ligand CLA 2 616



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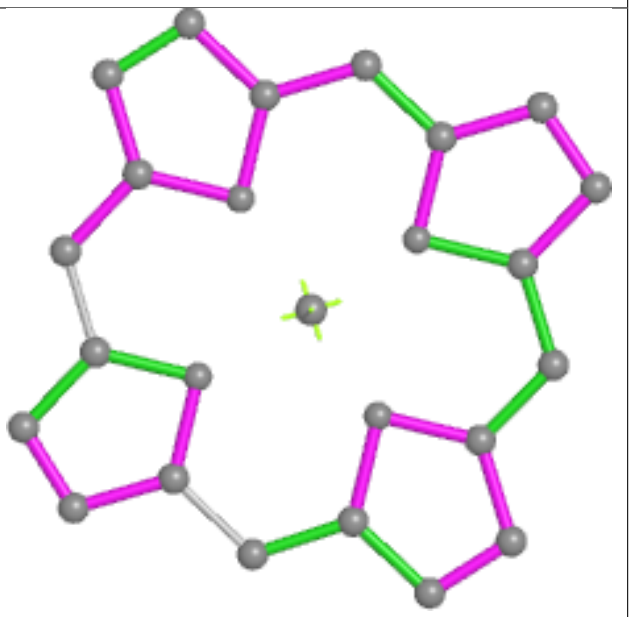
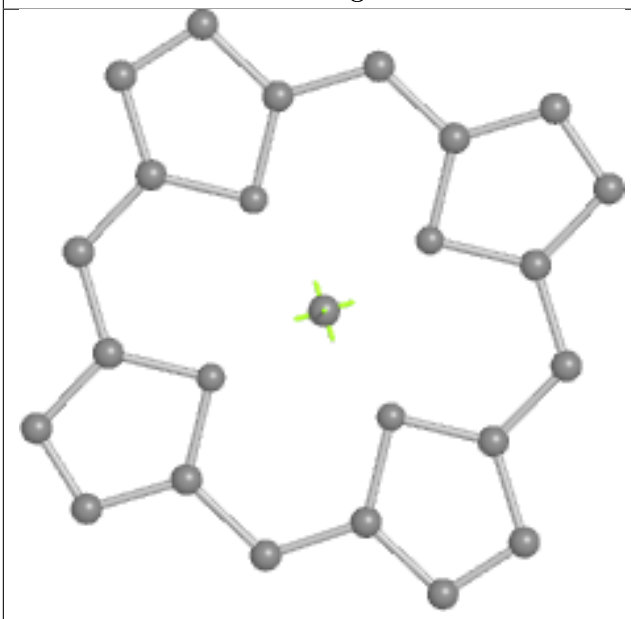


Bond angles



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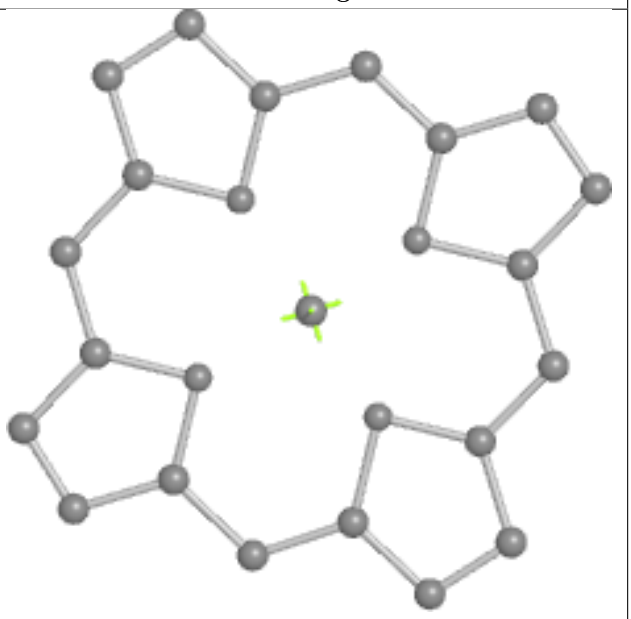
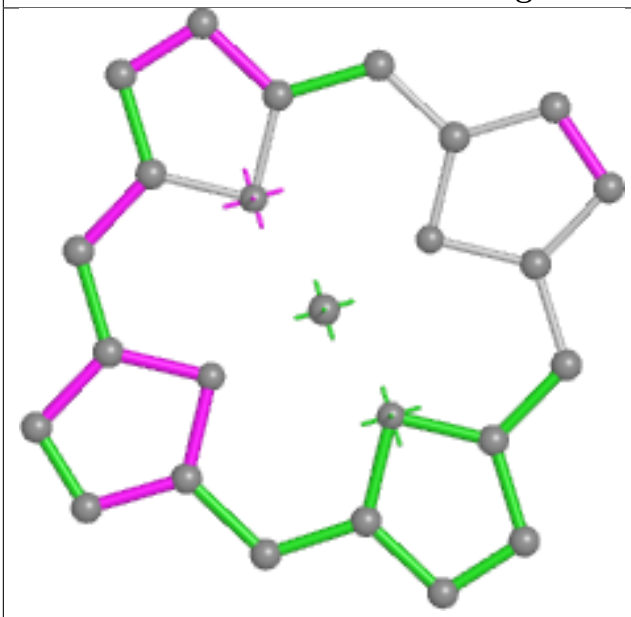
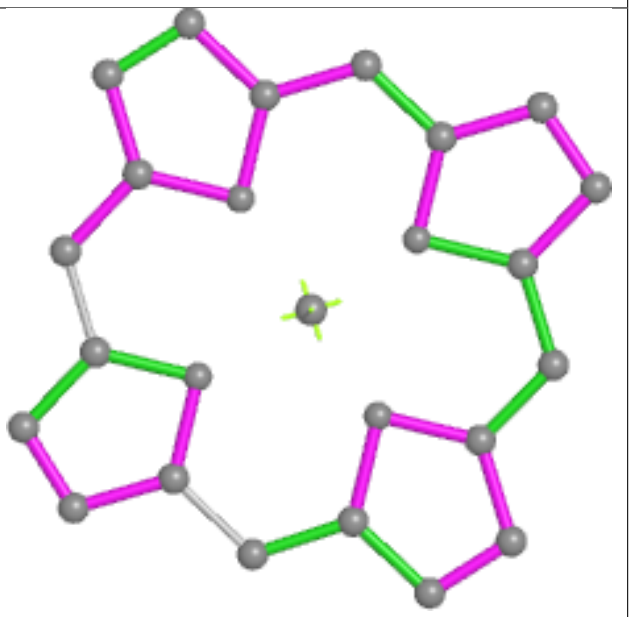


Rings

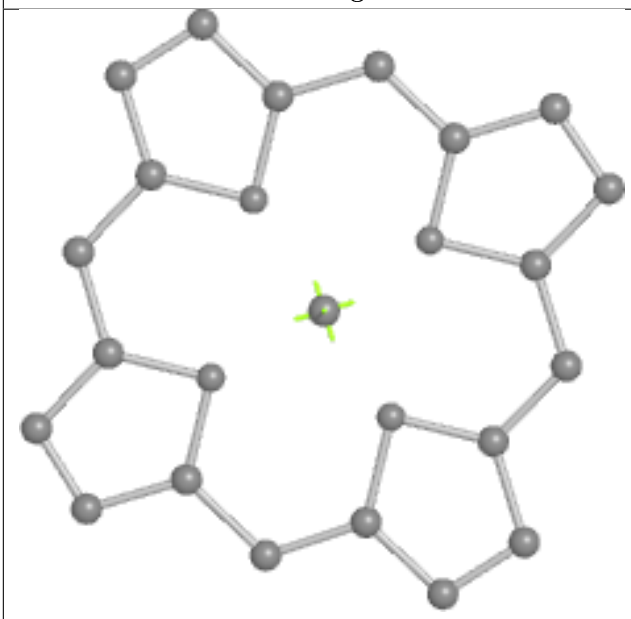
Ligand CLA B 1219



Bond lengths



Bond angles



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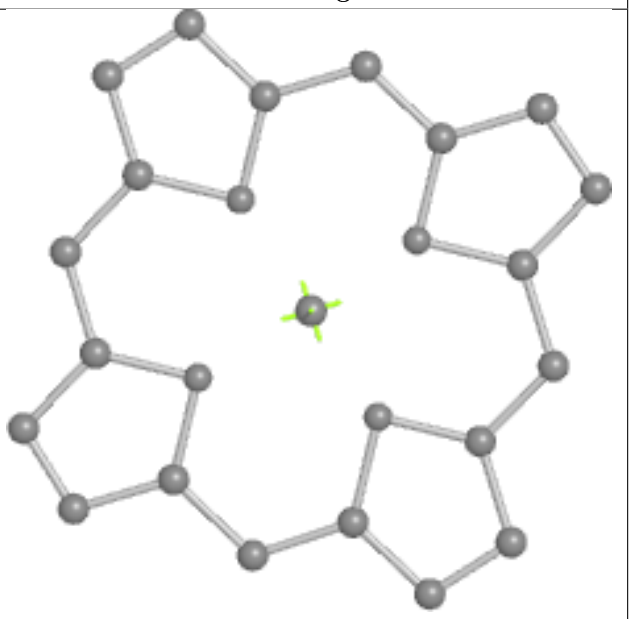
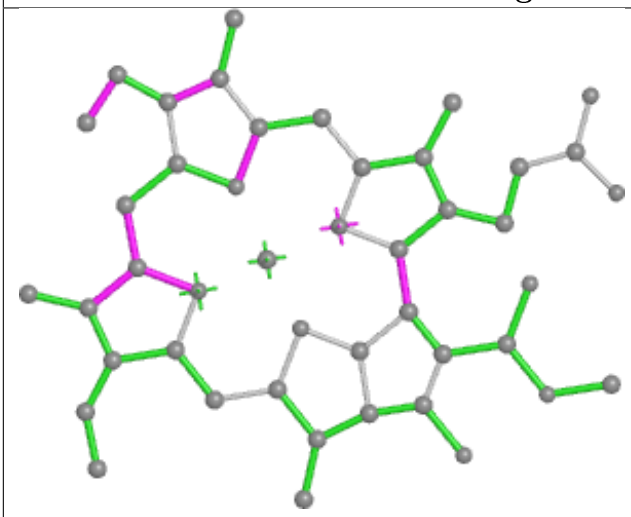
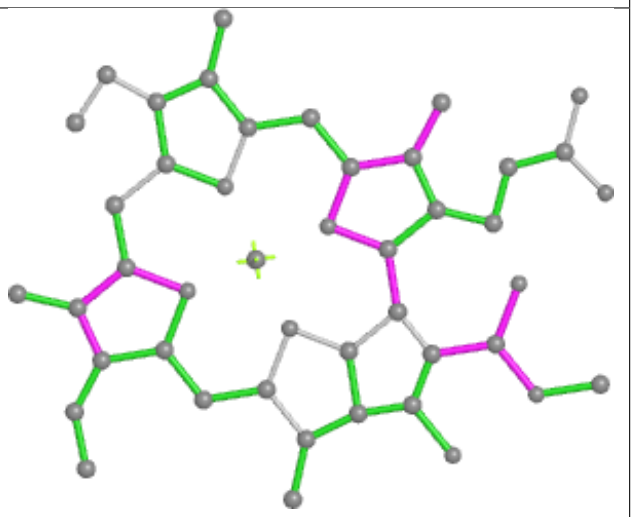


Rings

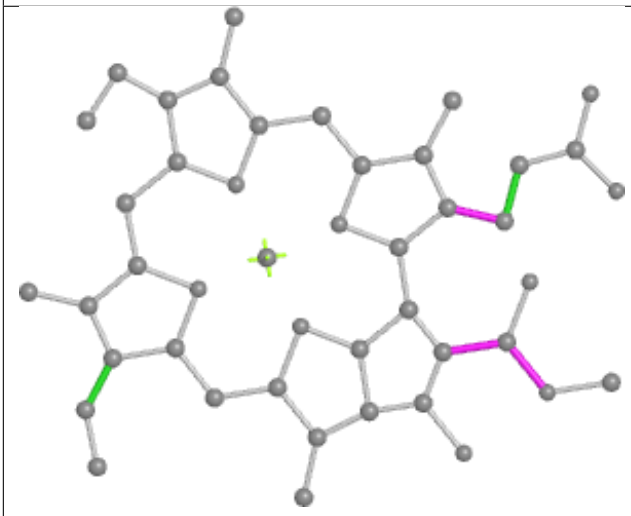
Ligand CLA B 1236



Bond lengths



Bond angles



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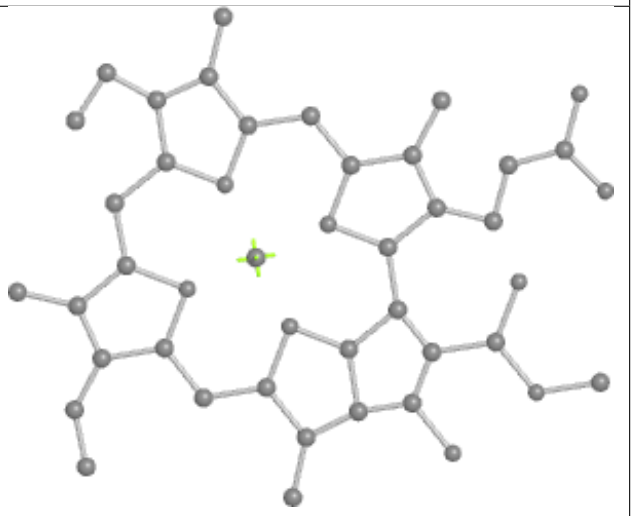
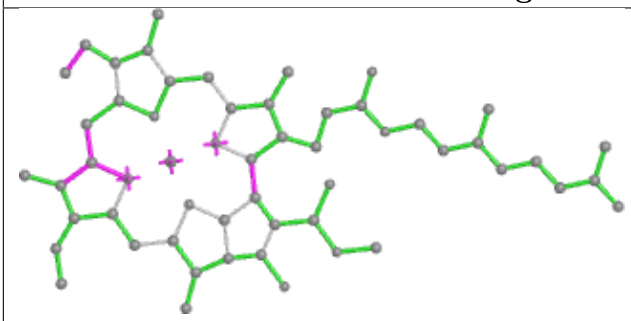


Rings

Ligand CLA B 1237



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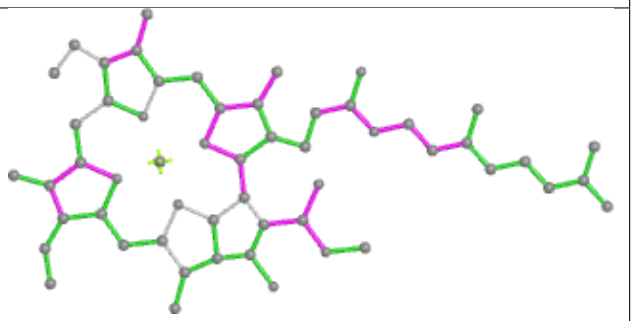
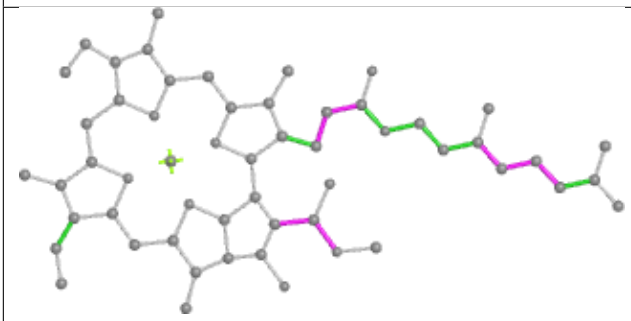


Bond angles



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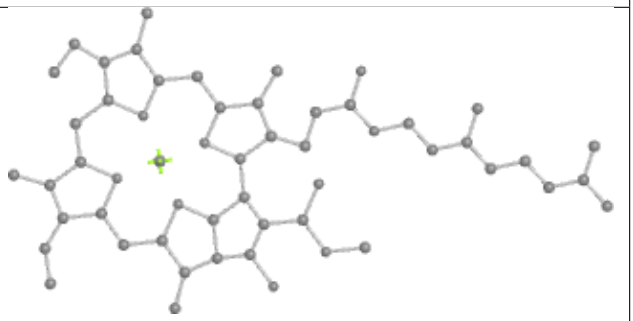
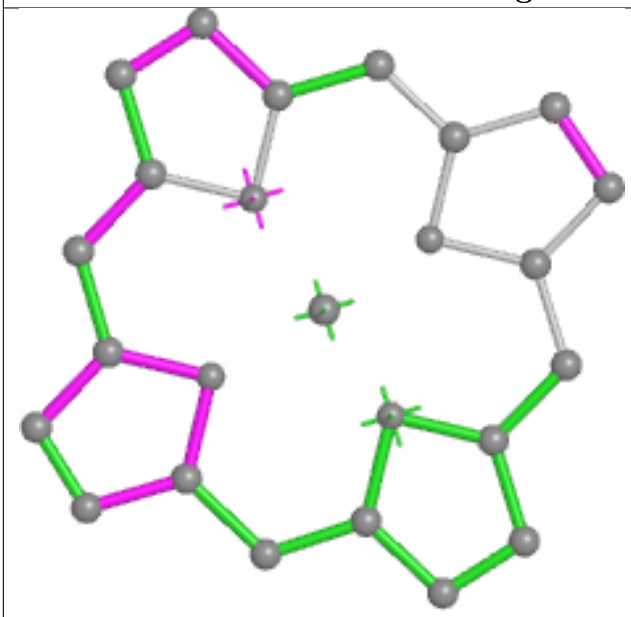
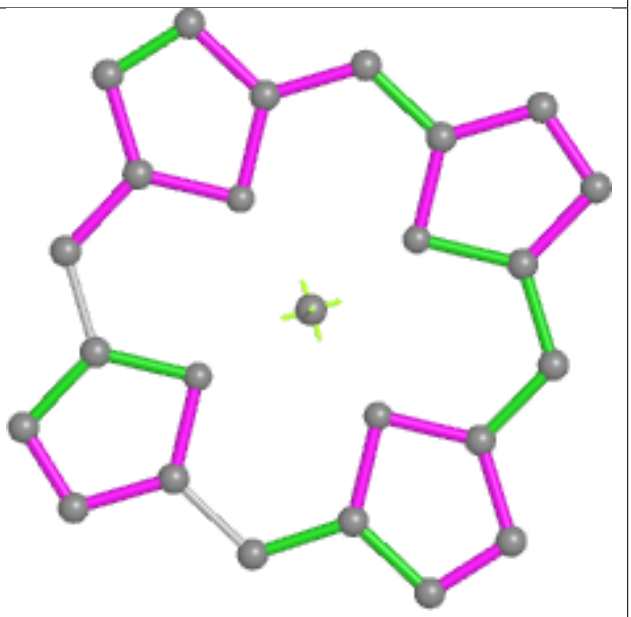


Rings

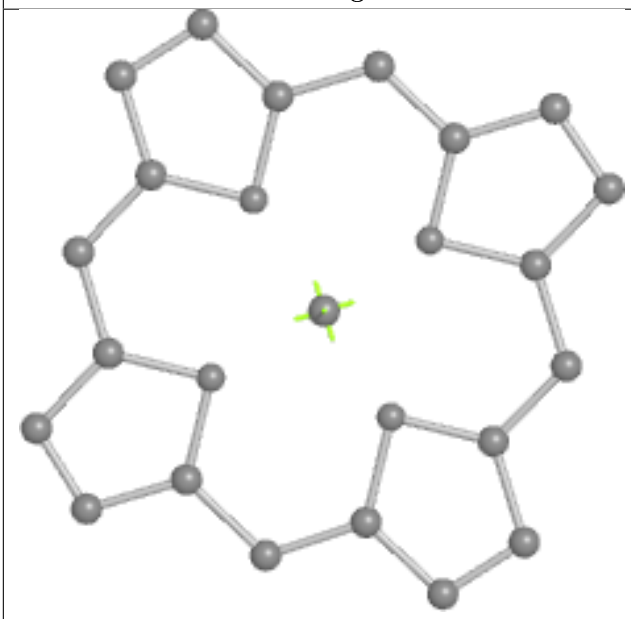
Ligand CLA A 1124



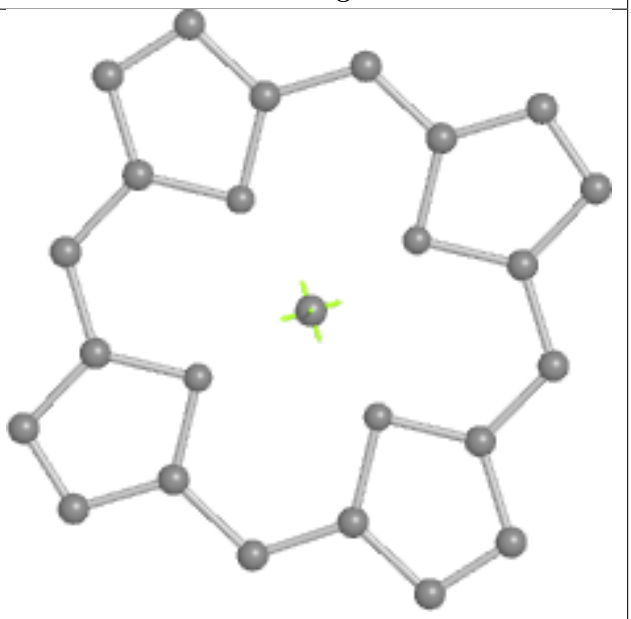
Bond lengths



Bond angles

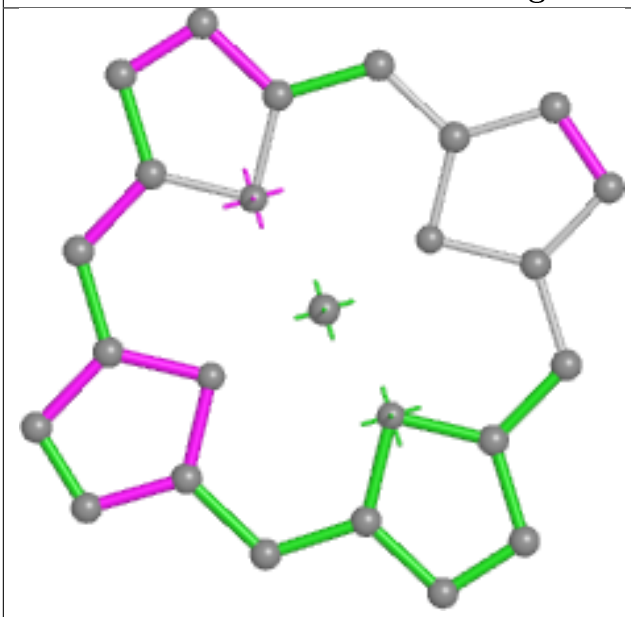


Torsions



Rings

Ligand CLA 2 606



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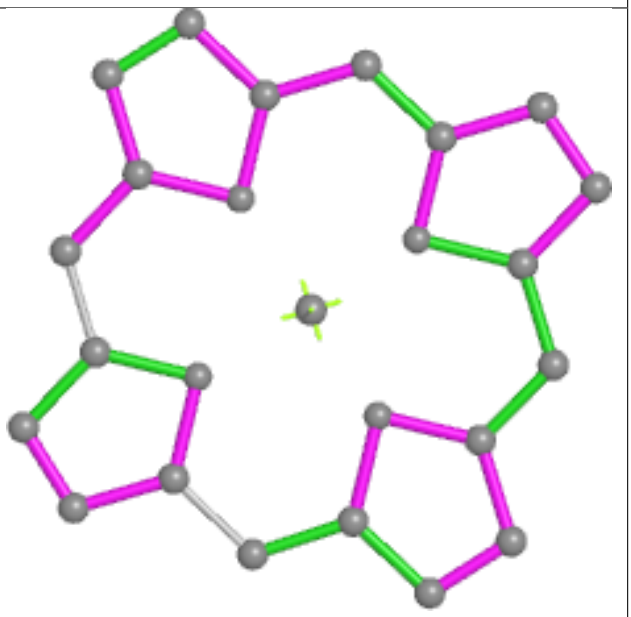
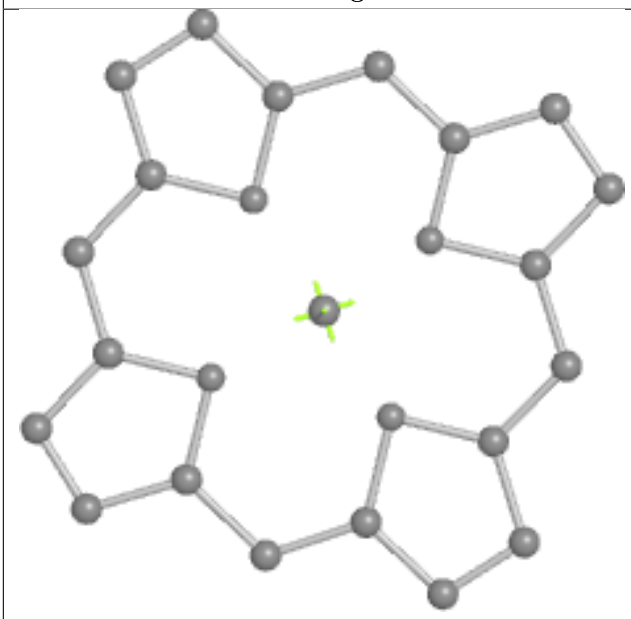
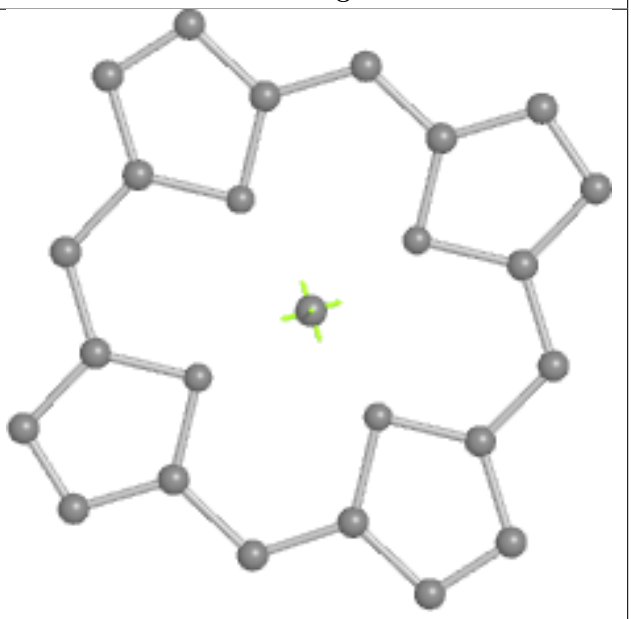


Bond angles

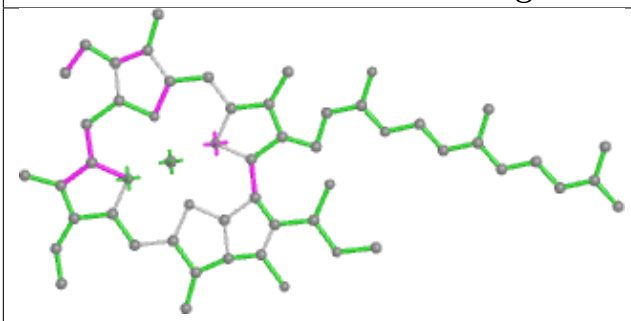


Torsions



Rings

Ligand CLA A 1116



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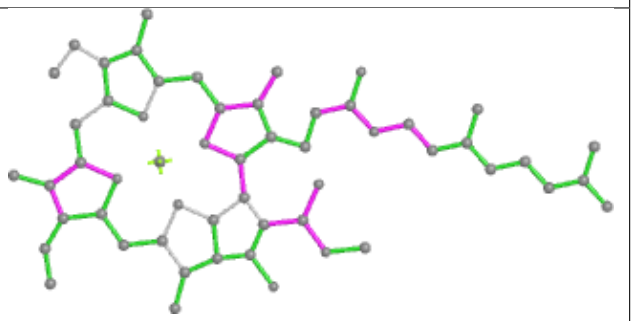
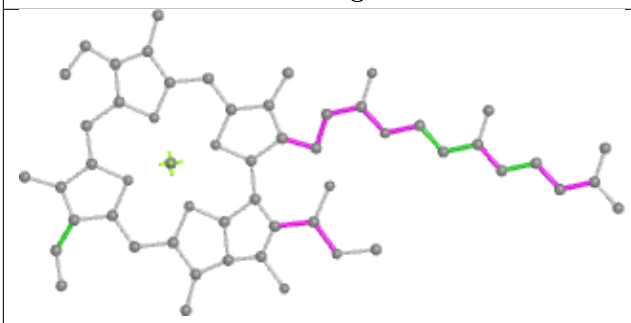
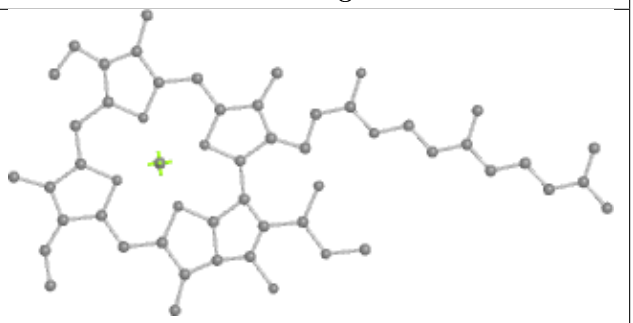


Bond angles

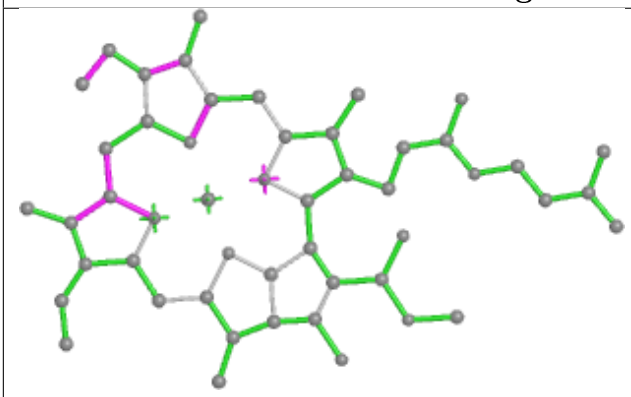


Torsions



Rings

Ligand CLA B 1229



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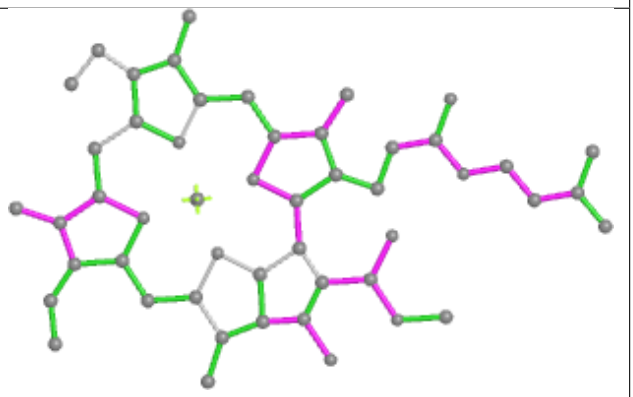
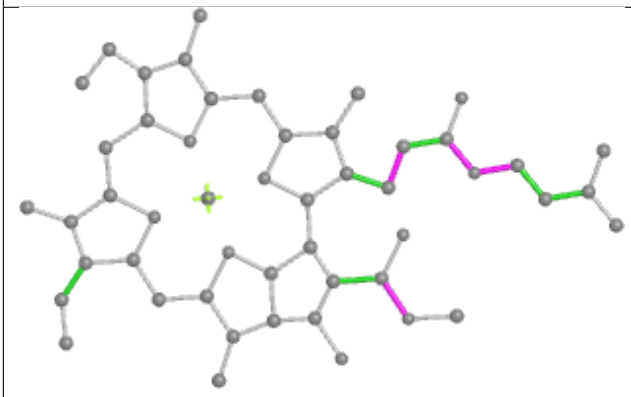
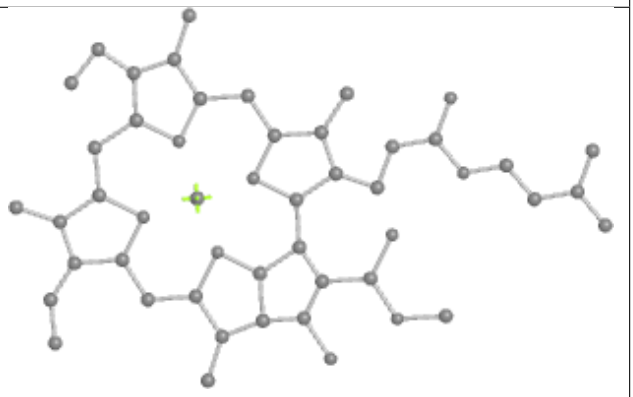


Bond angles

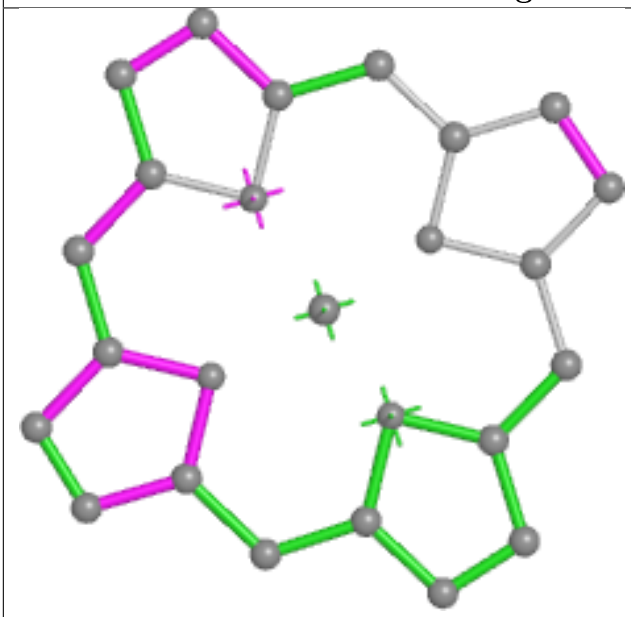


Torsions

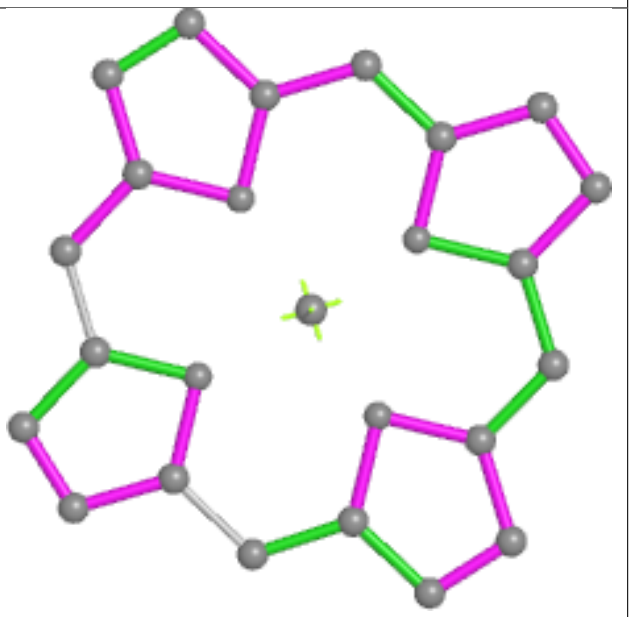


Rings

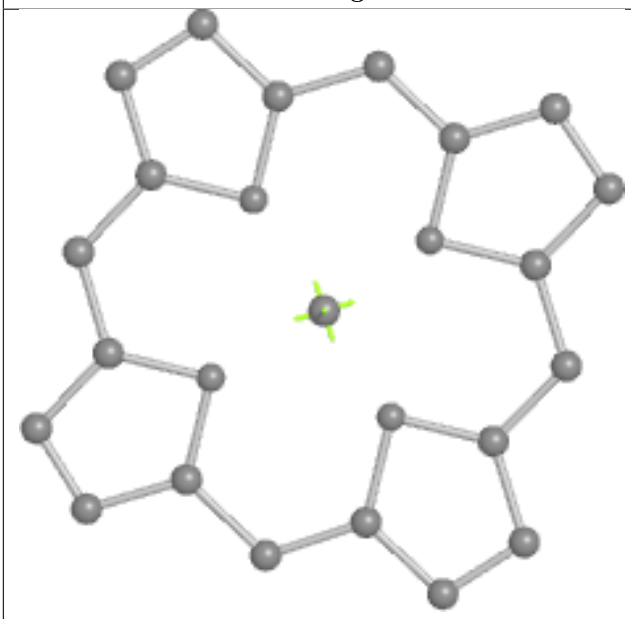
Ligand CLA B 1202



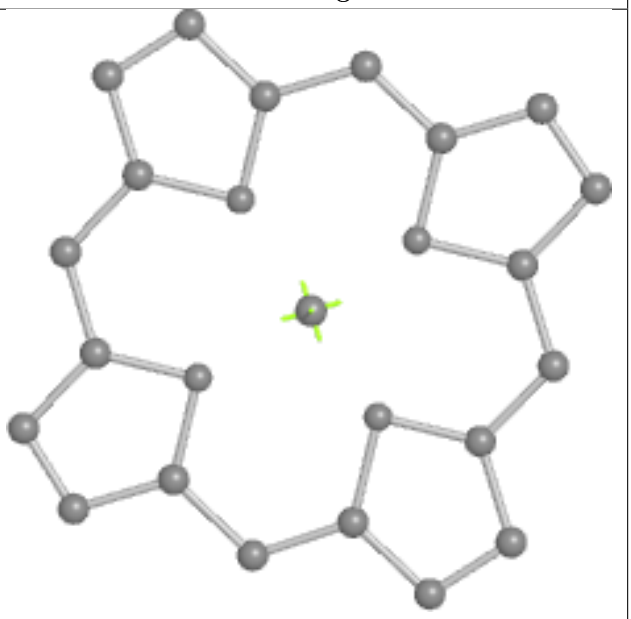
Bond lengths



Bond angles

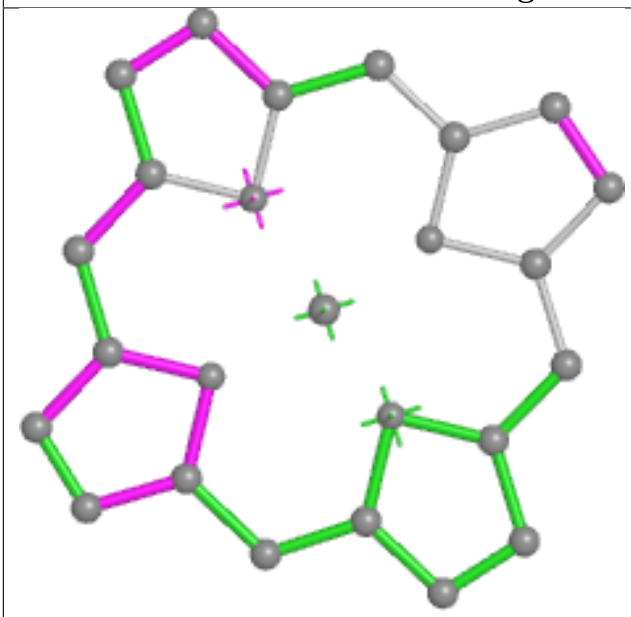


Torsions

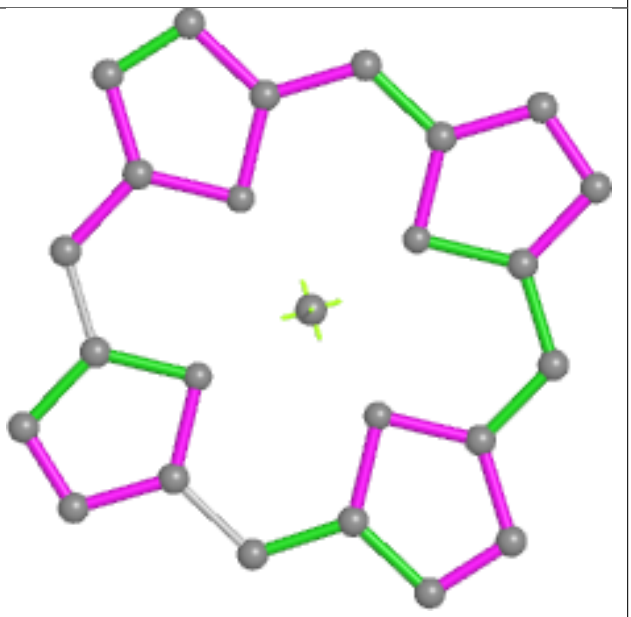


Rings

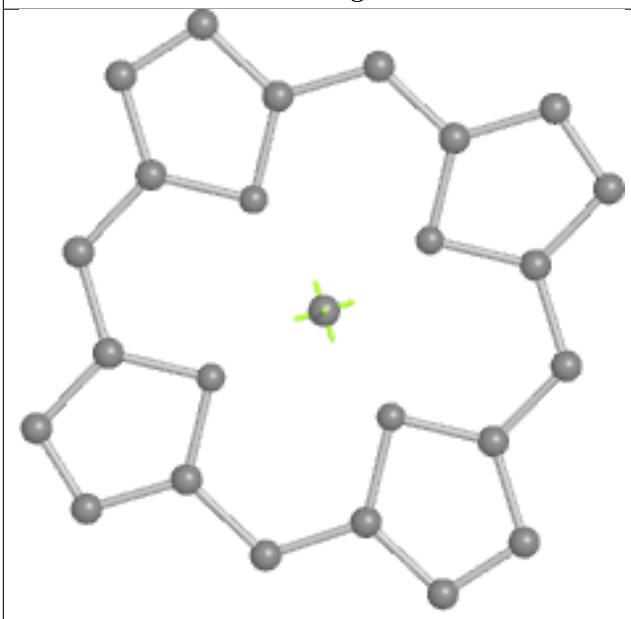
Ligand CLA F 1302



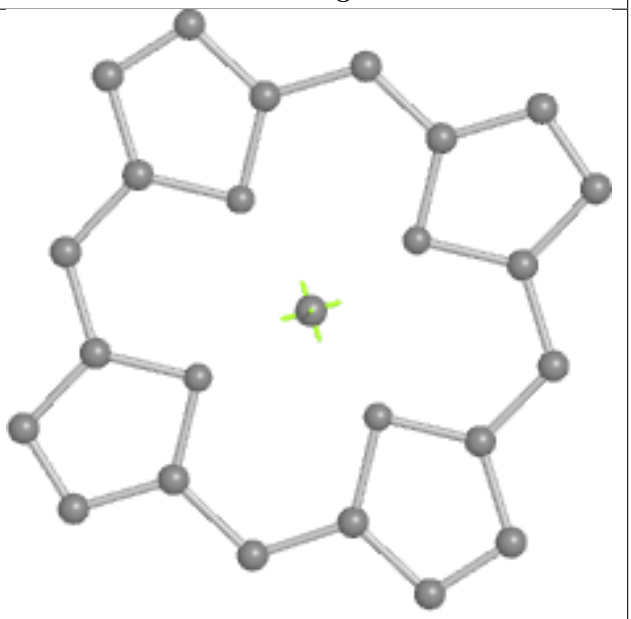
Bond lengths



Bond angles

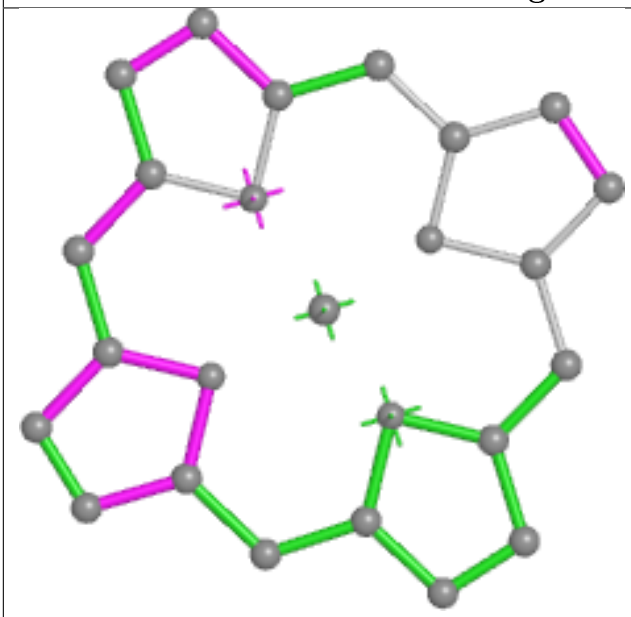


Torsions

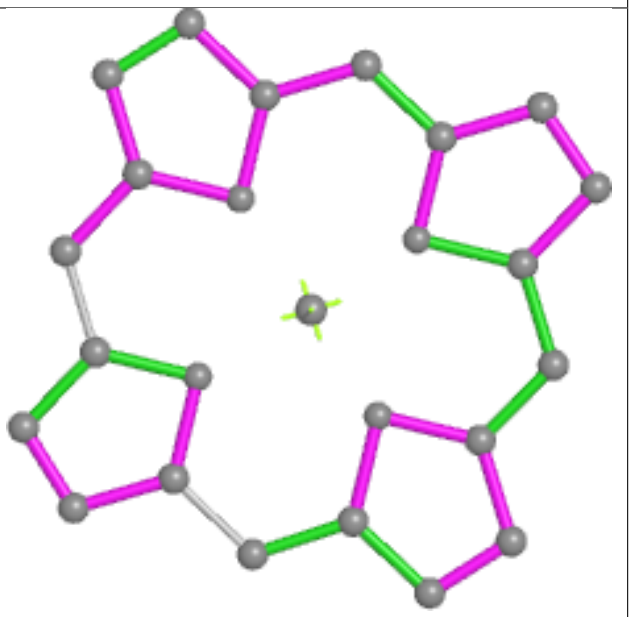


Rings

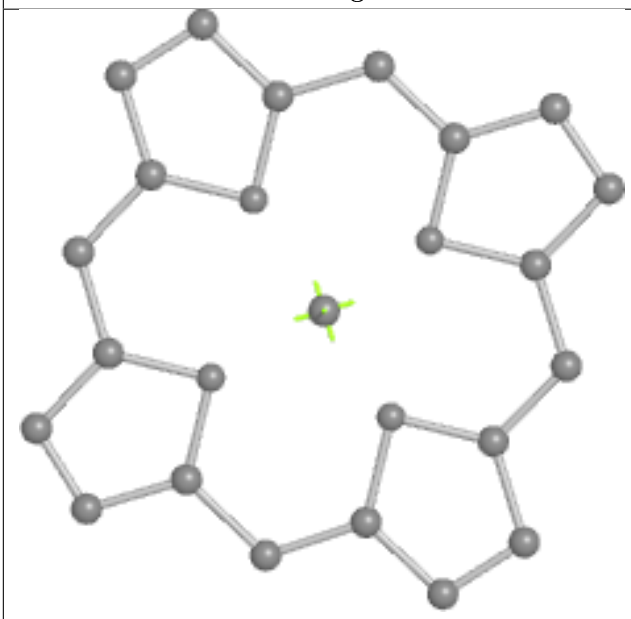
Ligand CLA 3 610



Bond lengths



Bond angles



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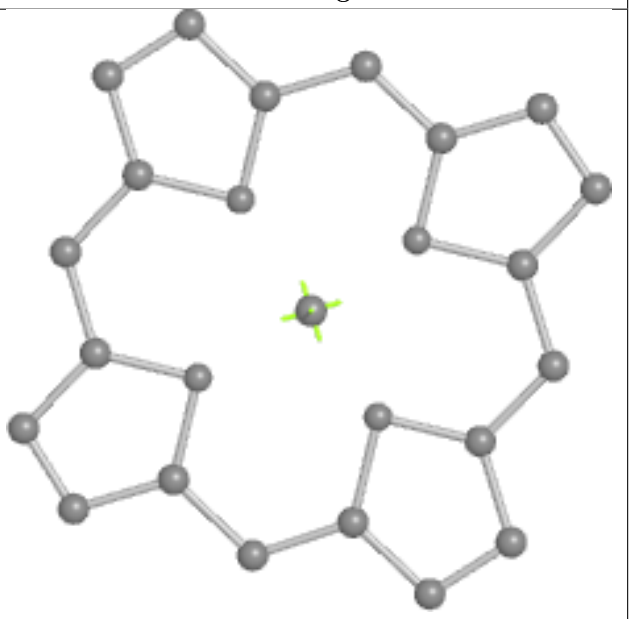
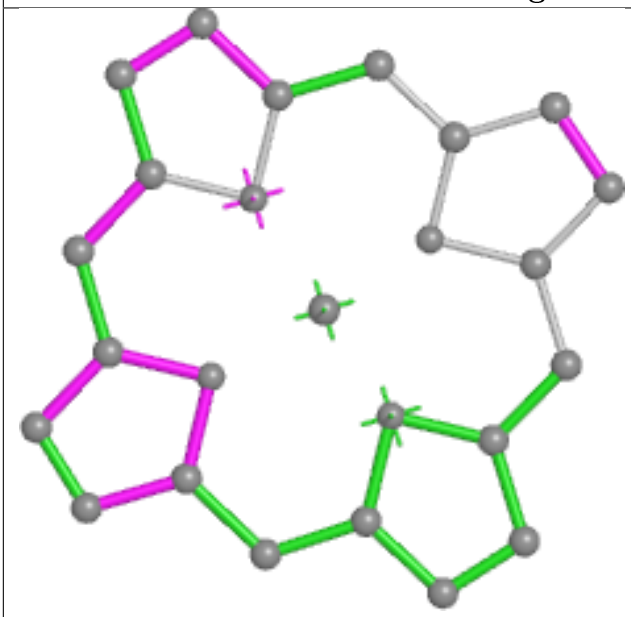


Rings

Ligand CLA 4 605



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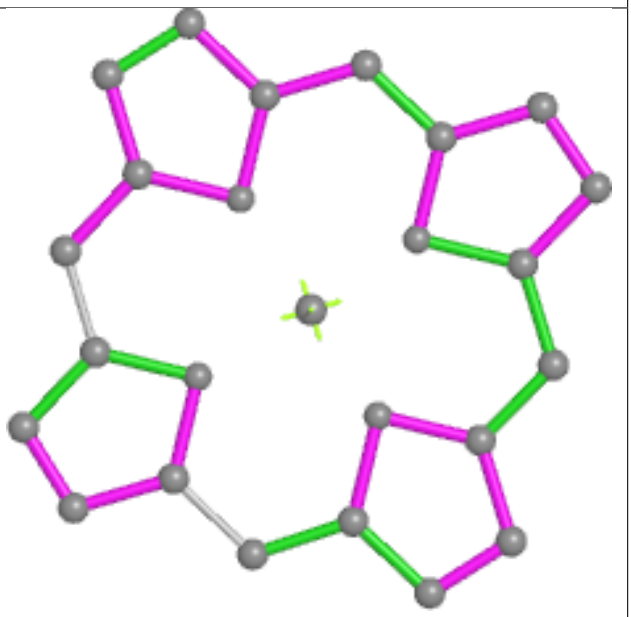

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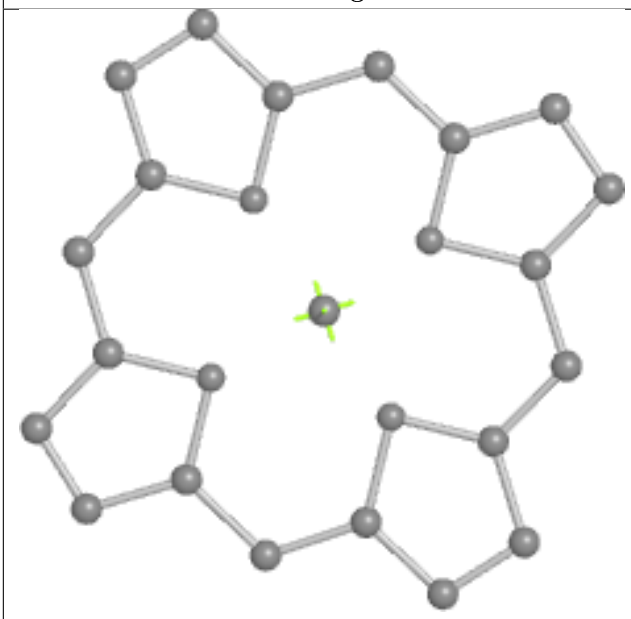
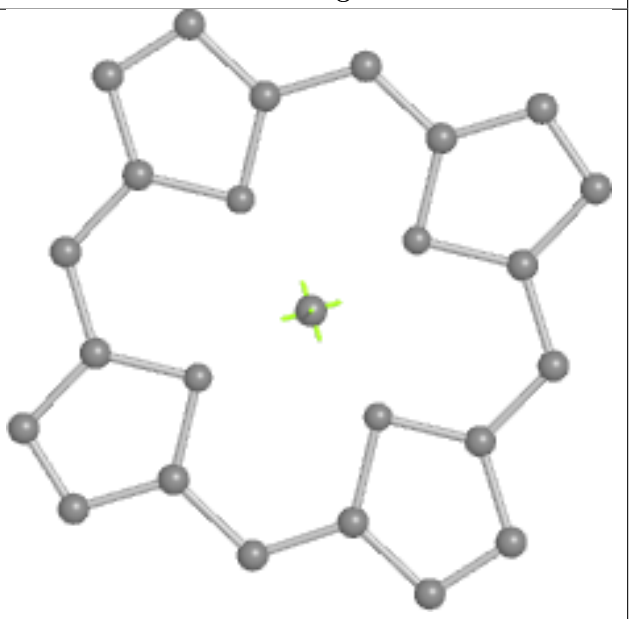
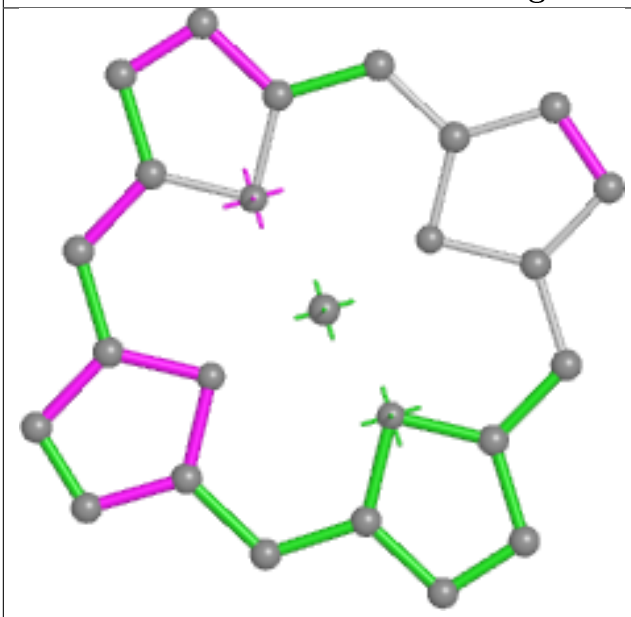


Torsions



Rings

Ligand CLA 3 604



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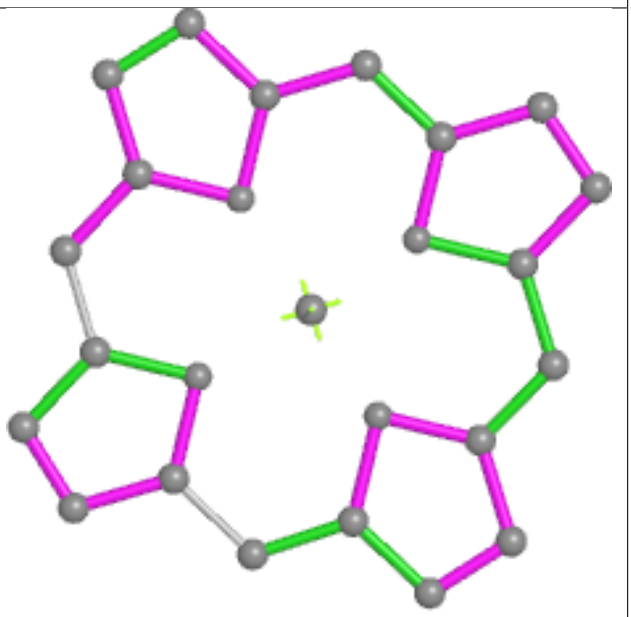
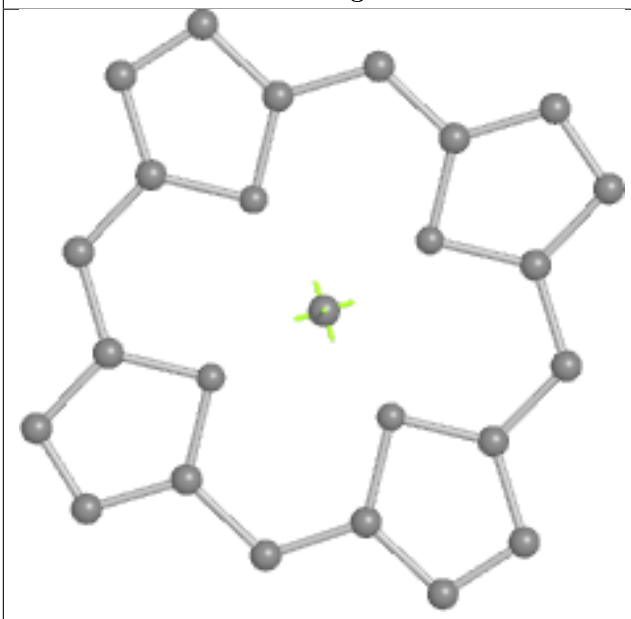
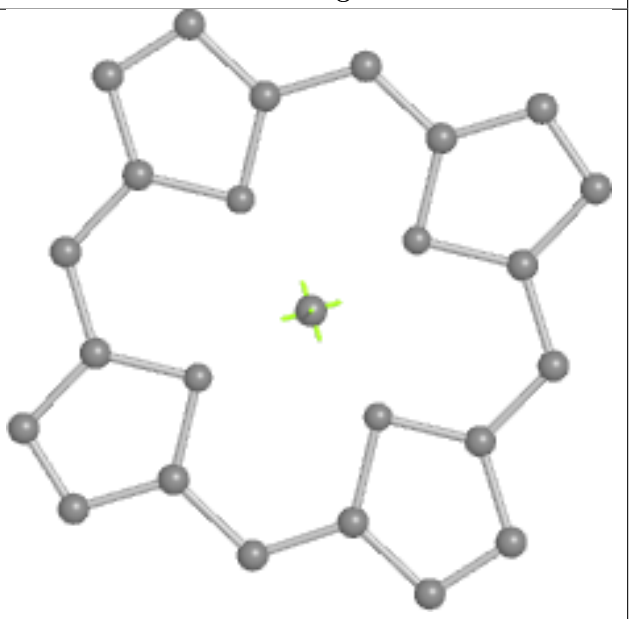


Bond angles

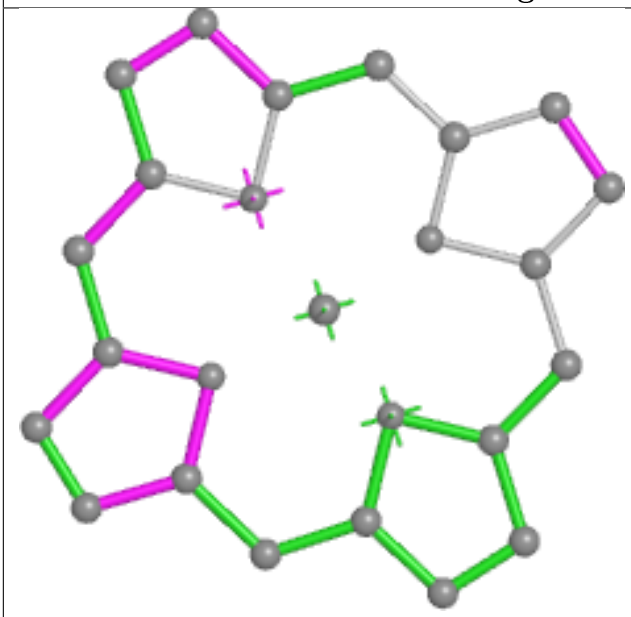


Torsions



Rings

Ligand CLA L 1502



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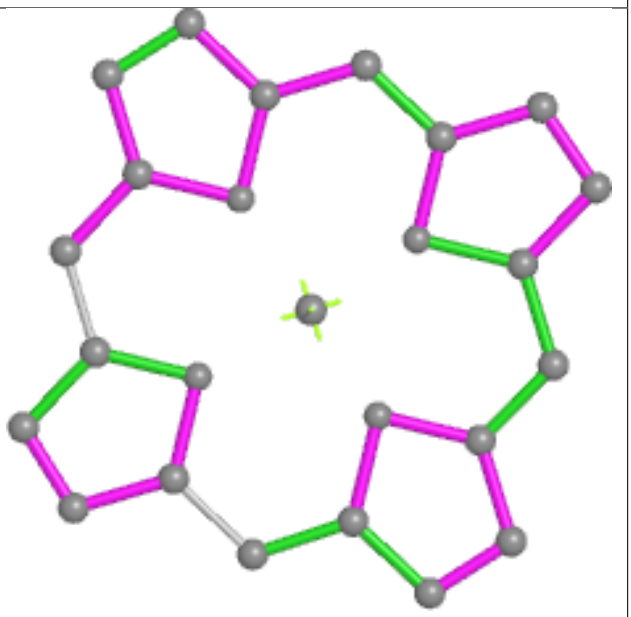
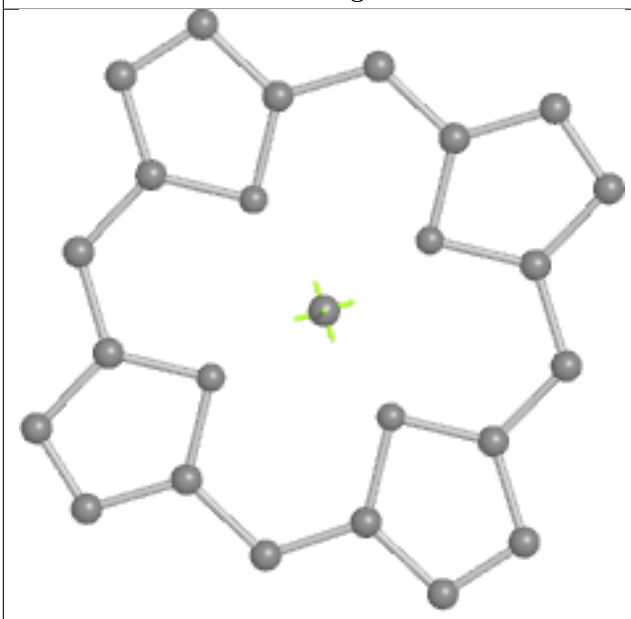


Bond angles



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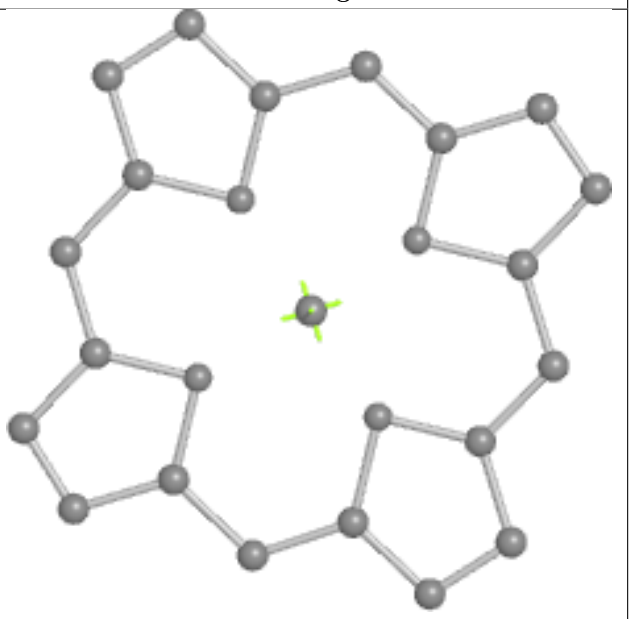
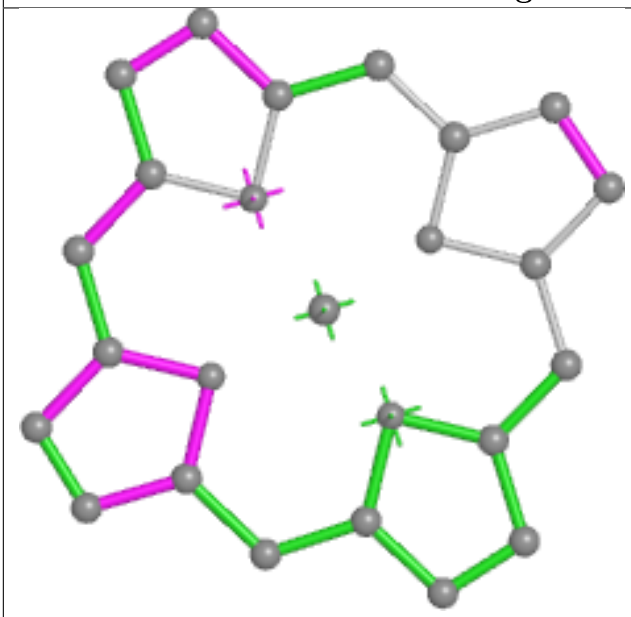


Rings

Ligand CLA B 1227



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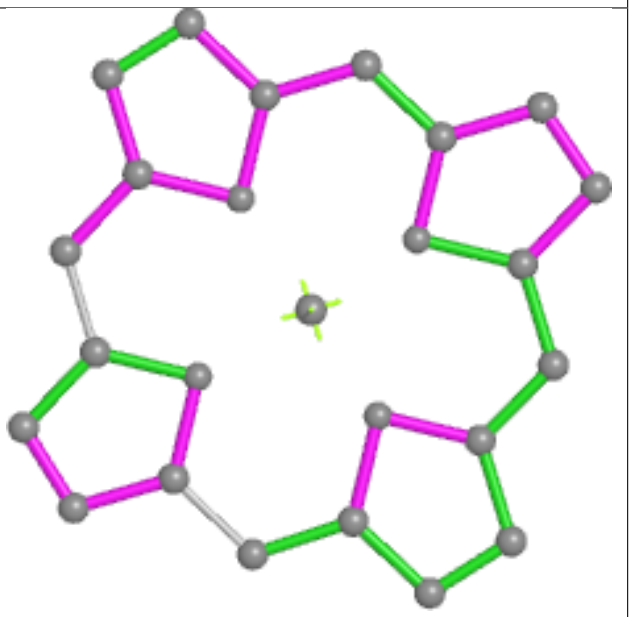
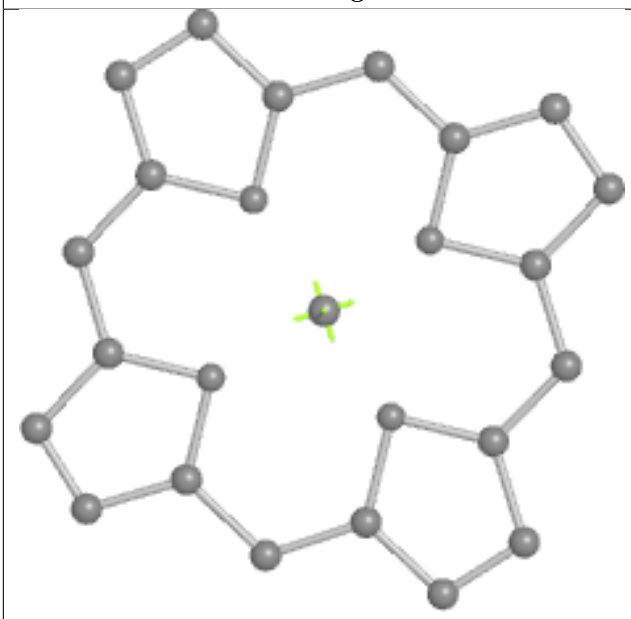


Bond angles



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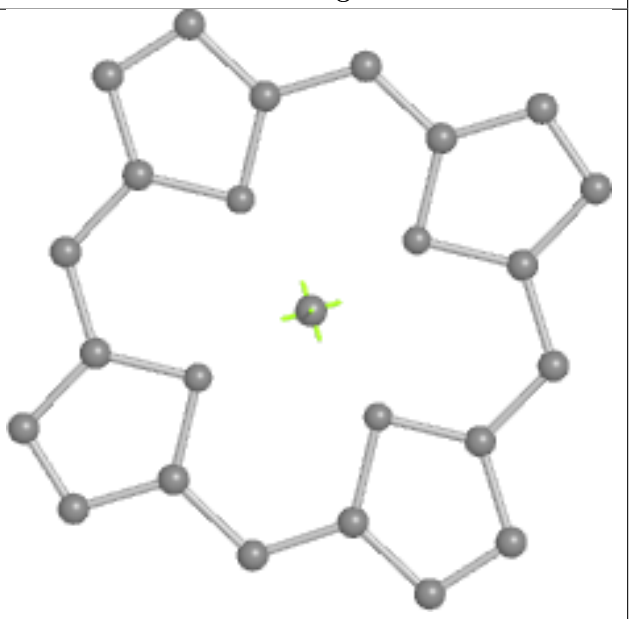
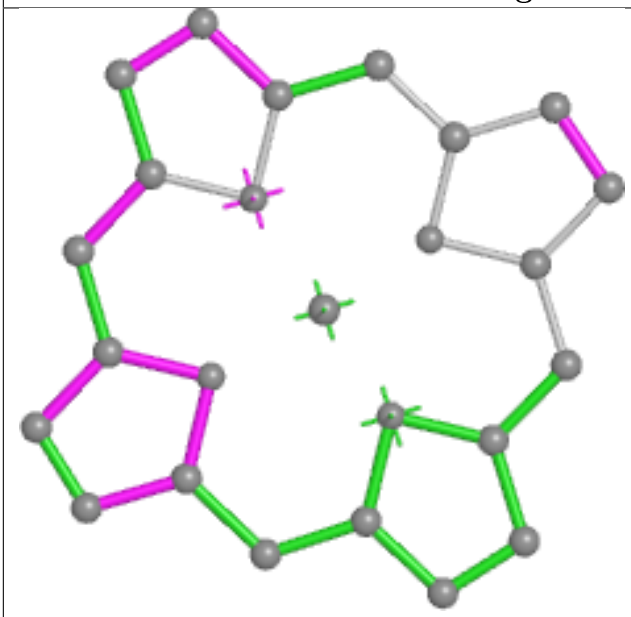


Rings

Ligand CLA B 1216



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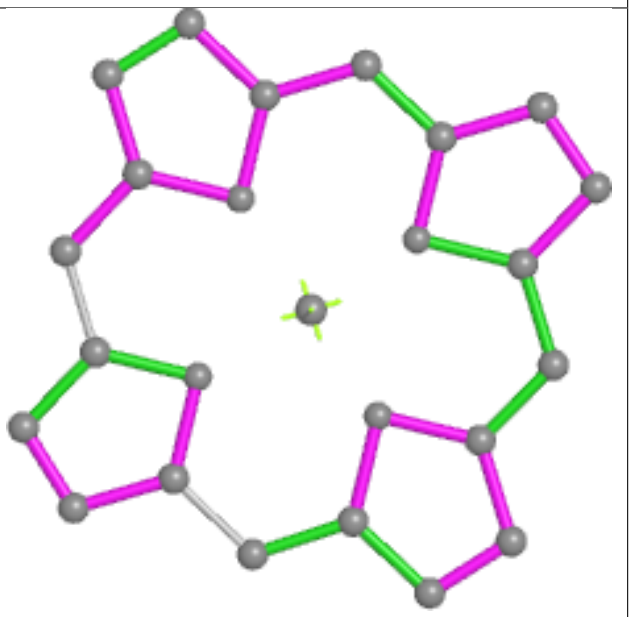
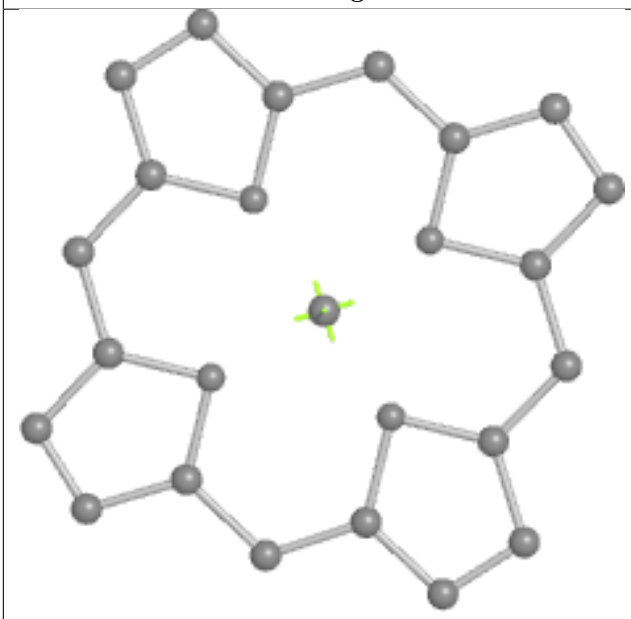


Bond angles



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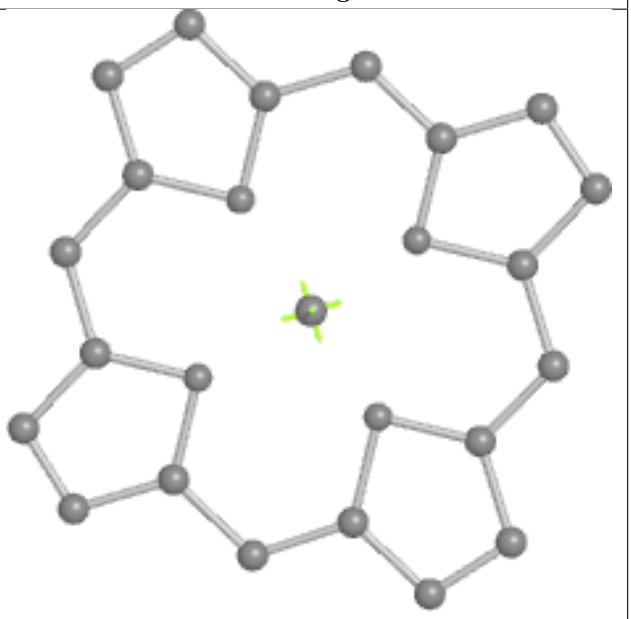
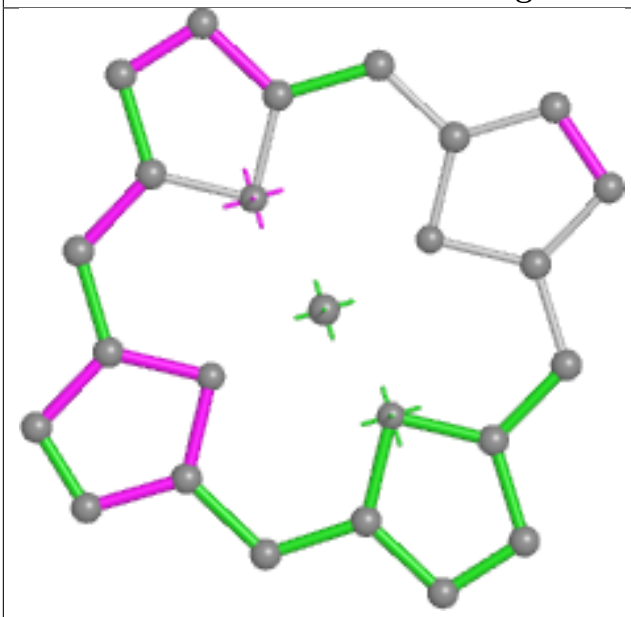


Rings

Ligand CLA B 1239



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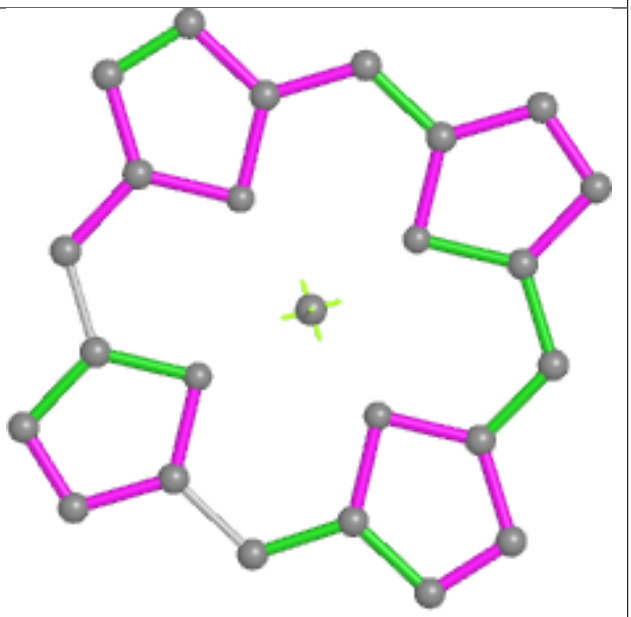
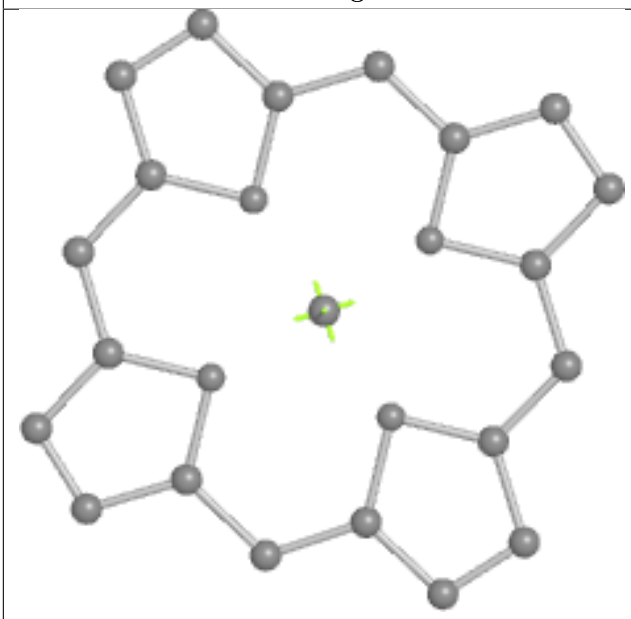


Bond angles



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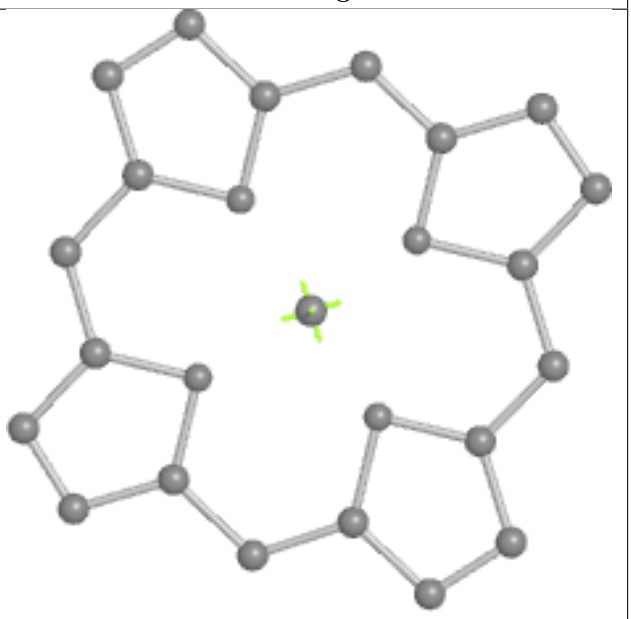
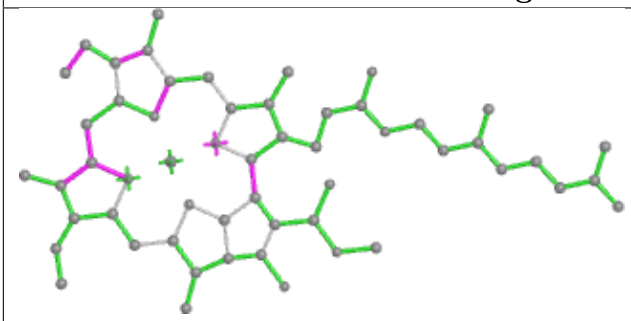


Rings

Ligand CLA A 1105



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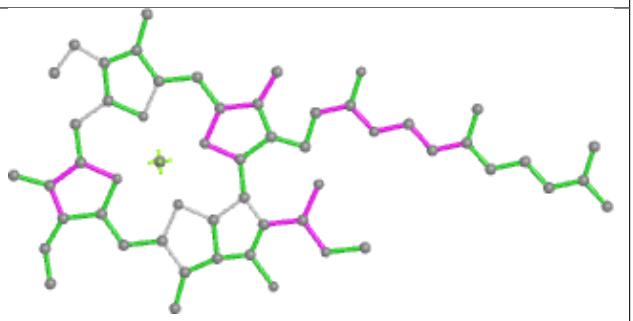
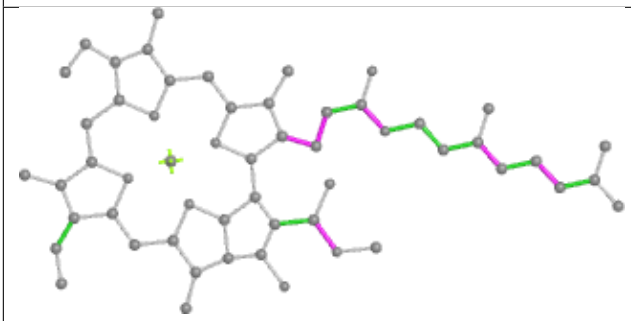


Bond angles



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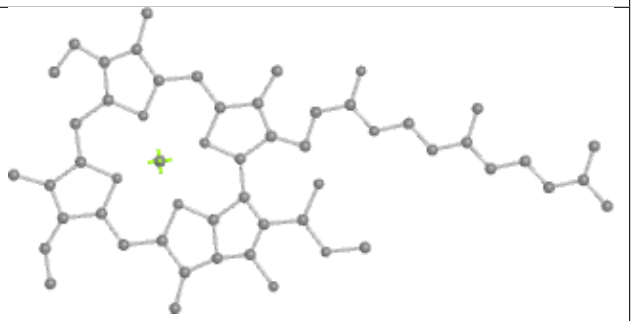
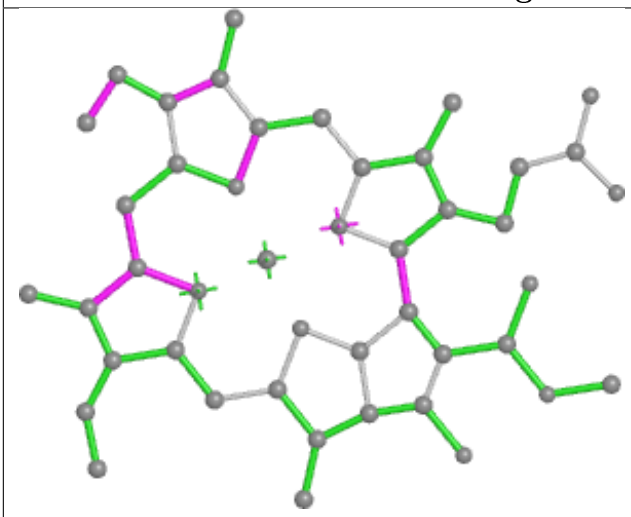


Rings

Ligand CLA A 1131



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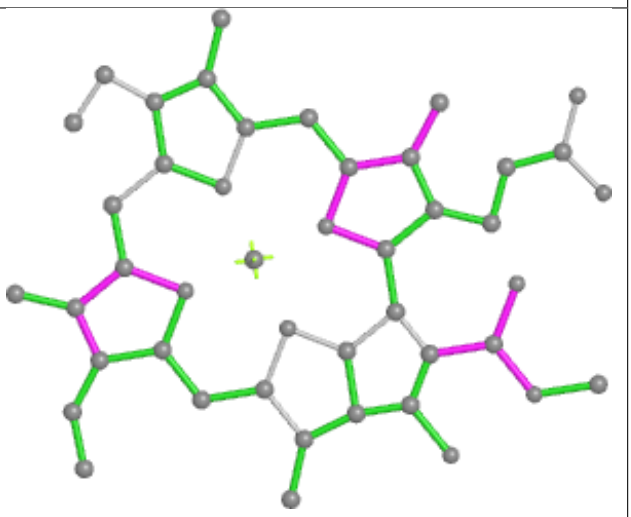
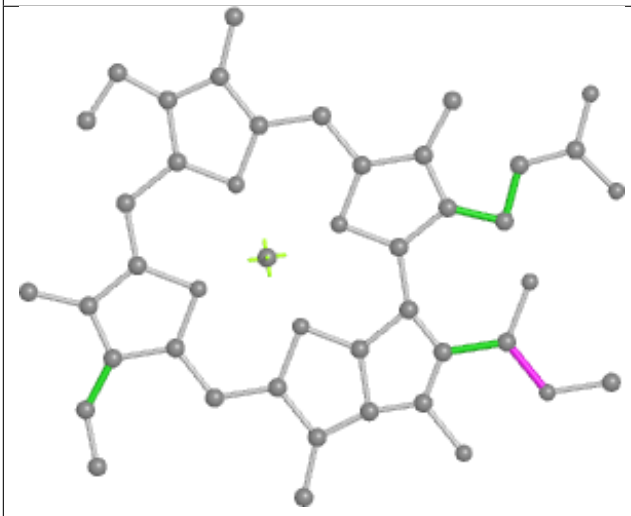


Bond angles



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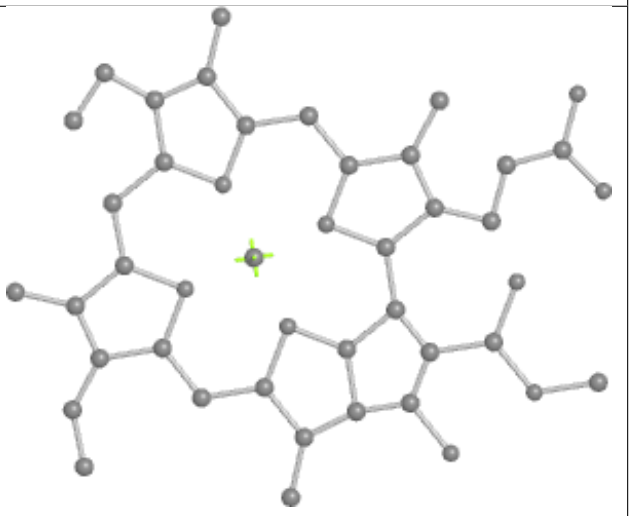
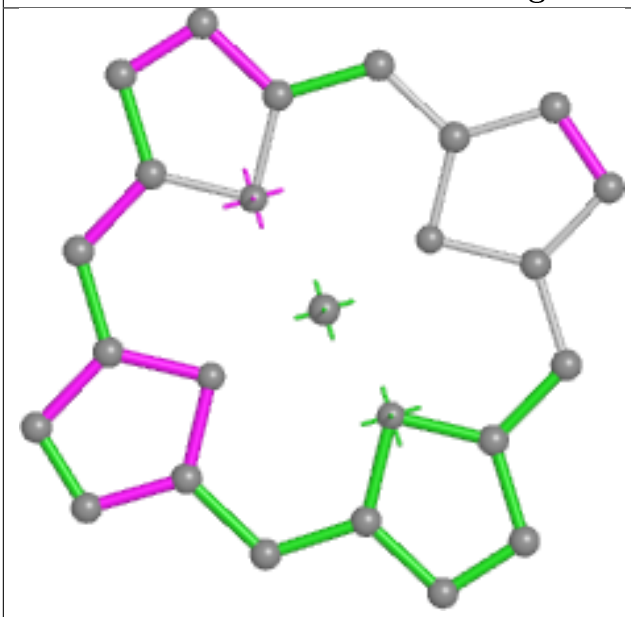


Rings

Ligand CLA 3 602



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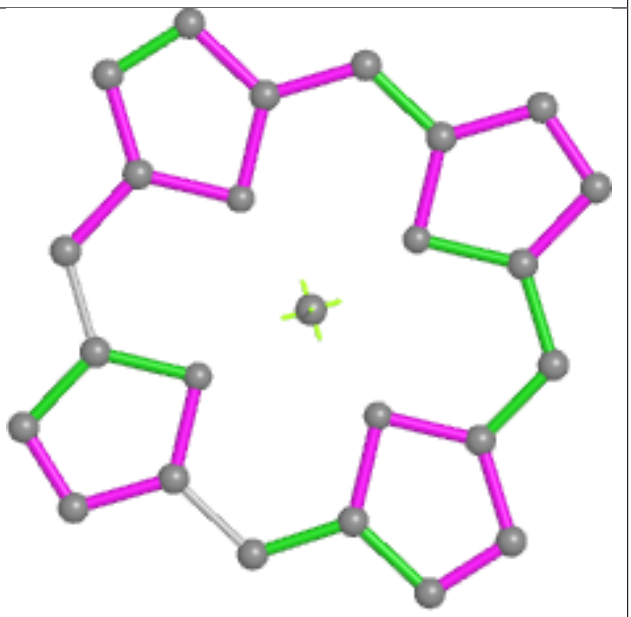
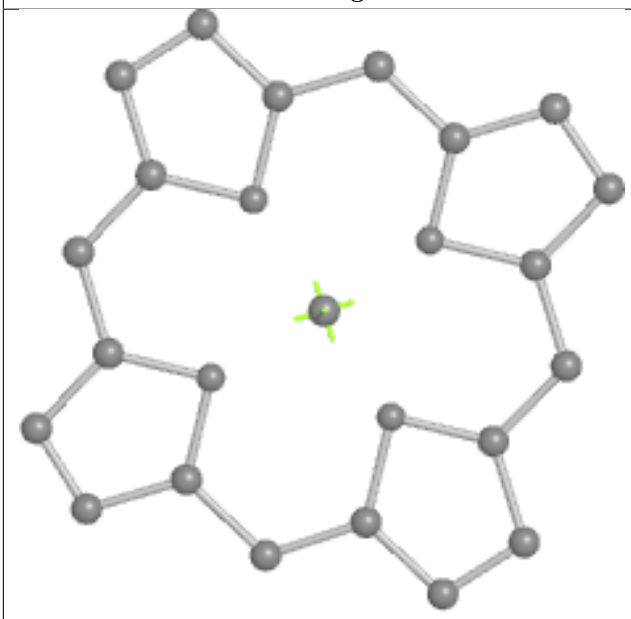


Bond angles



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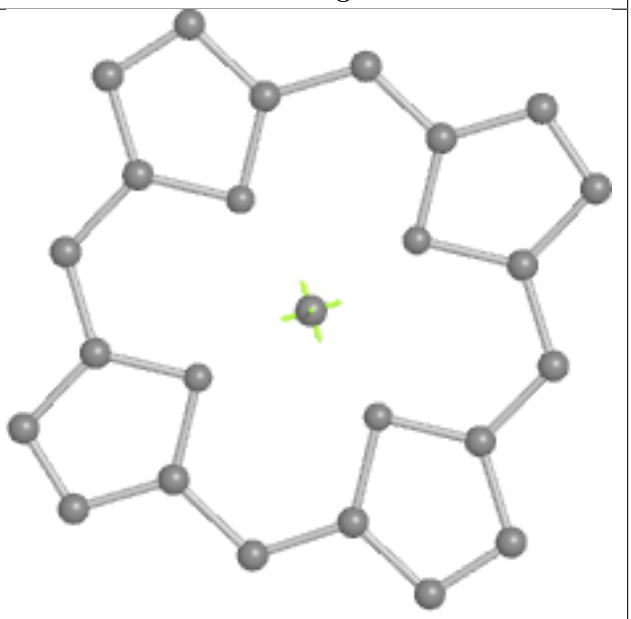
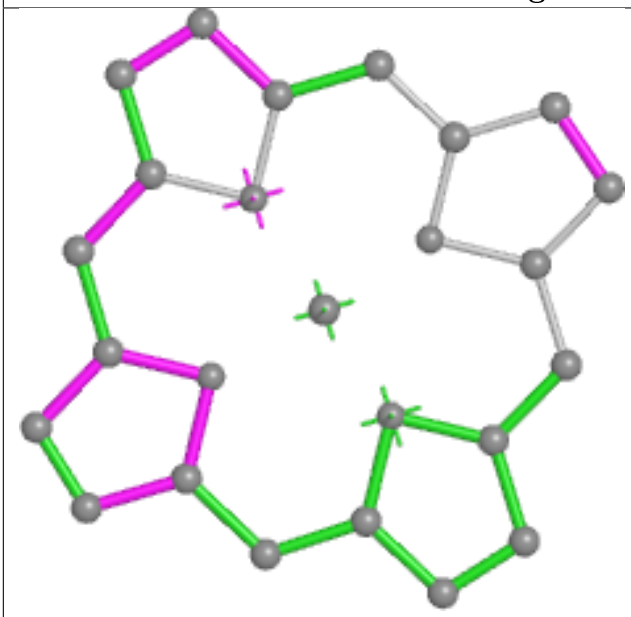


Rings

Ligand CLA 2 613



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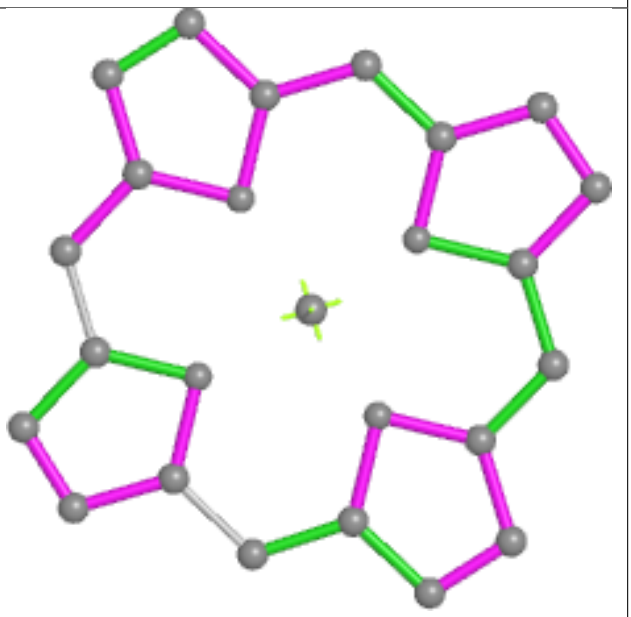
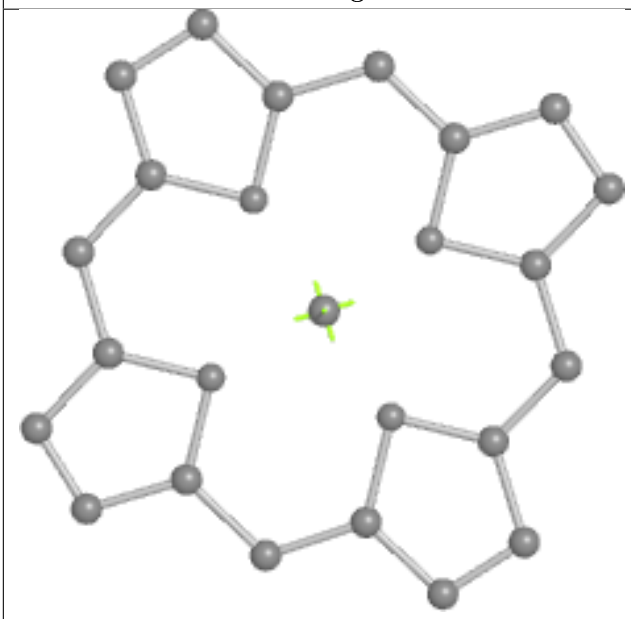


Bond angles



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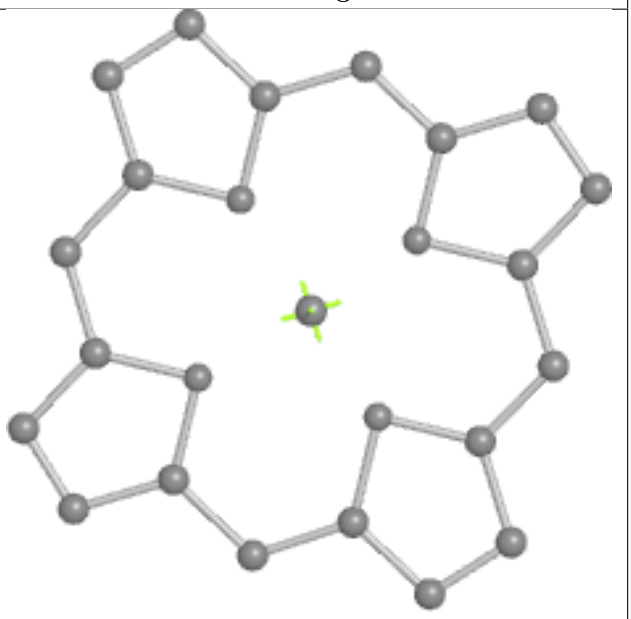
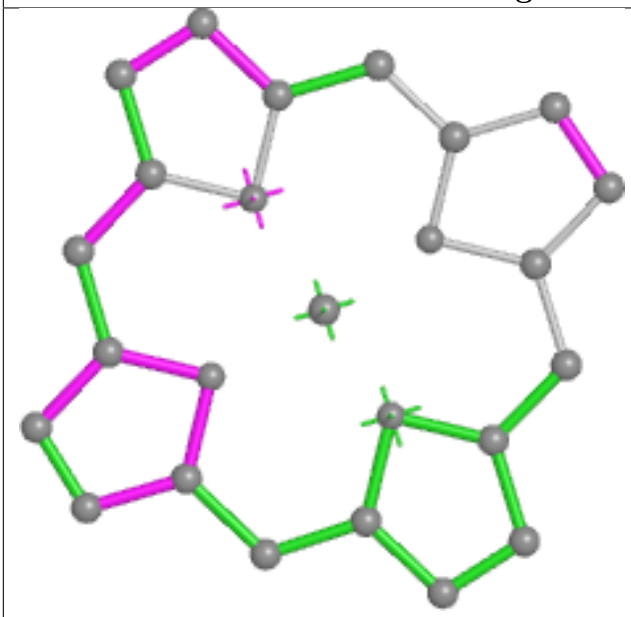


Rings

Ligand CLA A 1136



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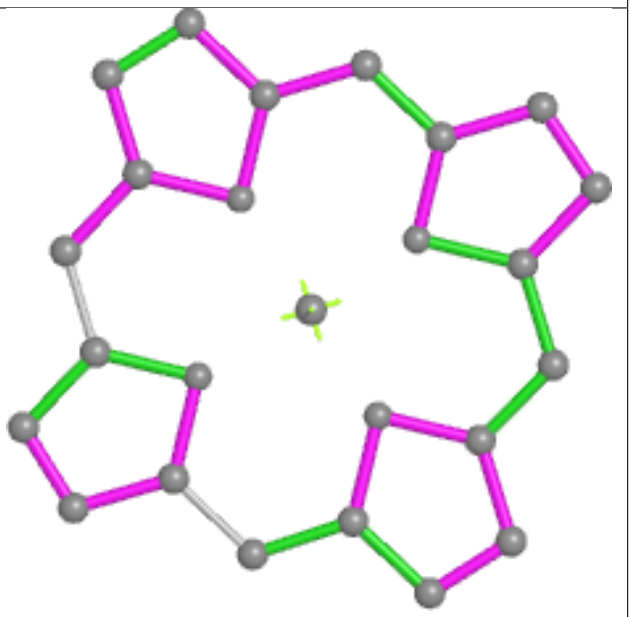
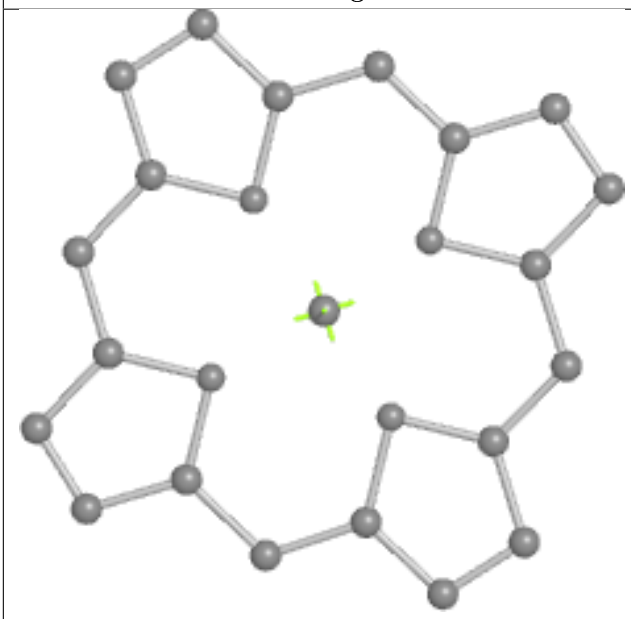


Bond angles



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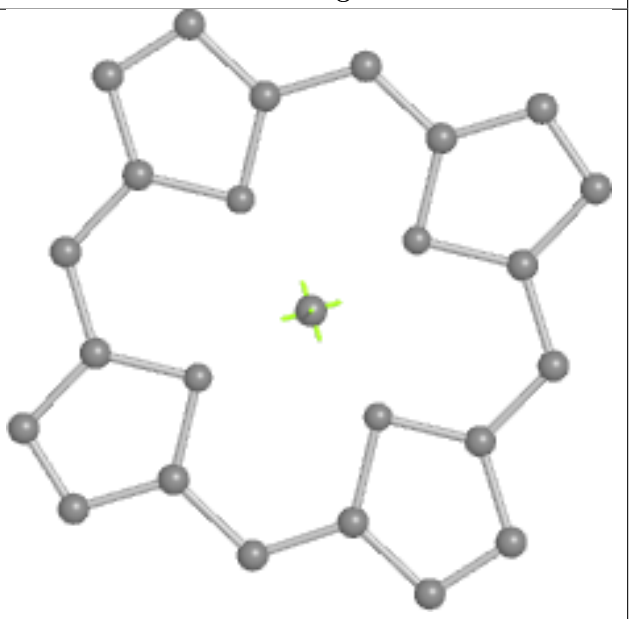
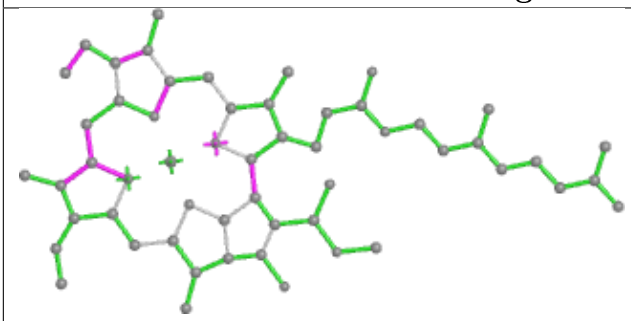


Rings

Ligand CLA A 1107



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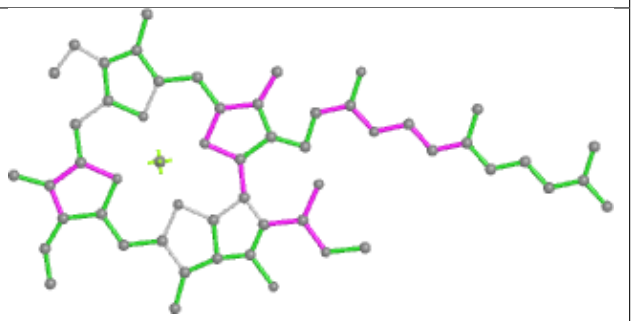
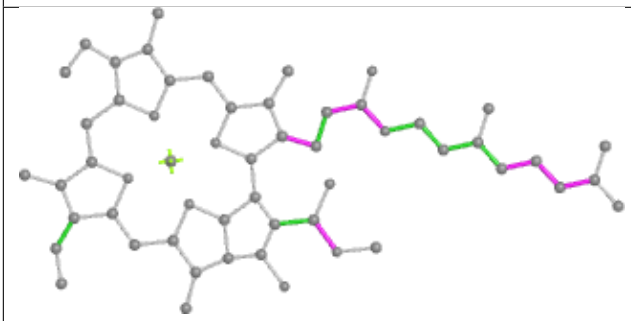


Bond angles



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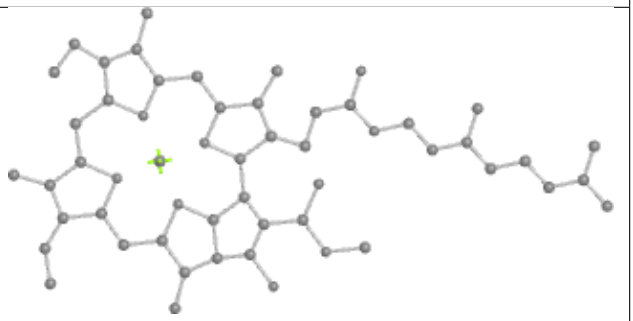
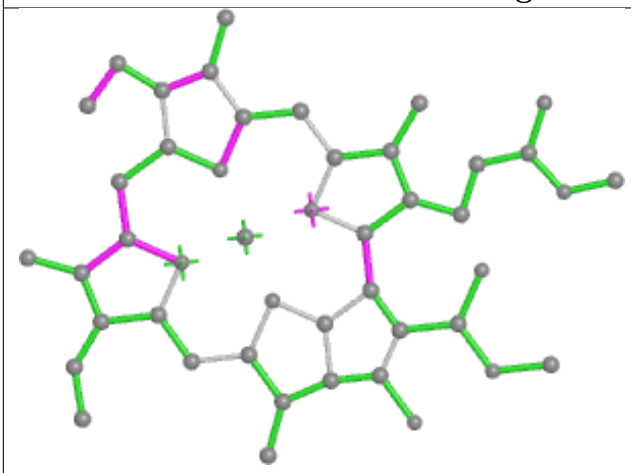
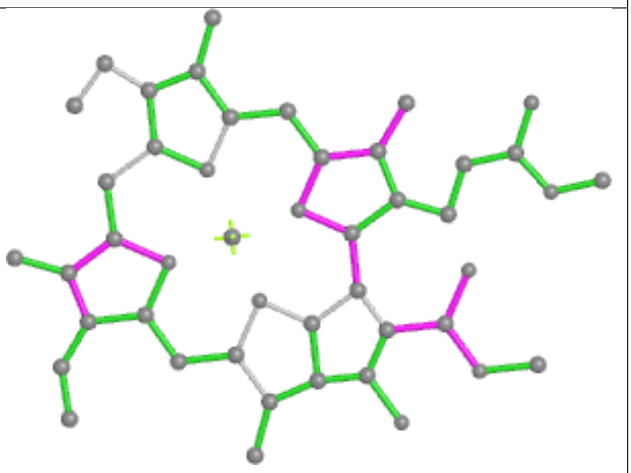


Rings

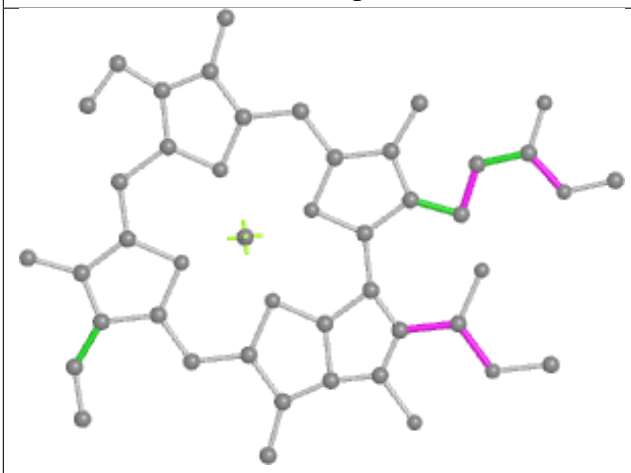
Ligand CLA A 1114



Bond lengths



Bond angles



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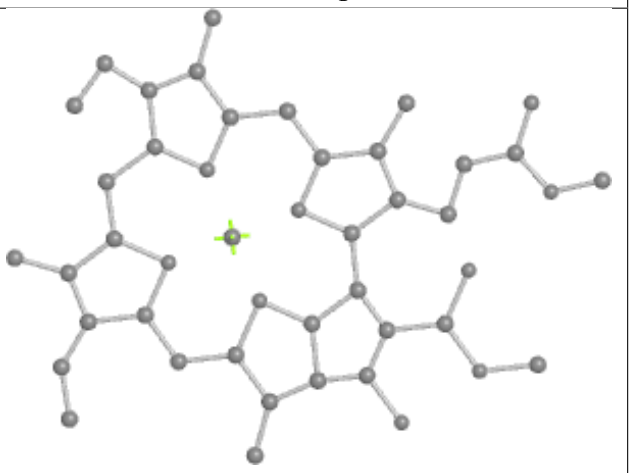
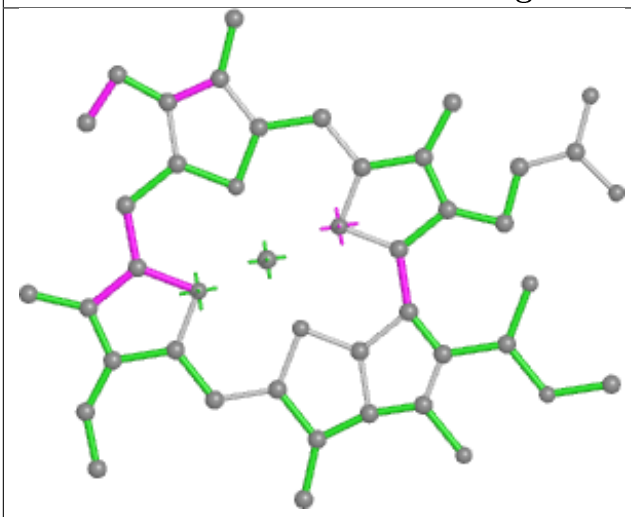
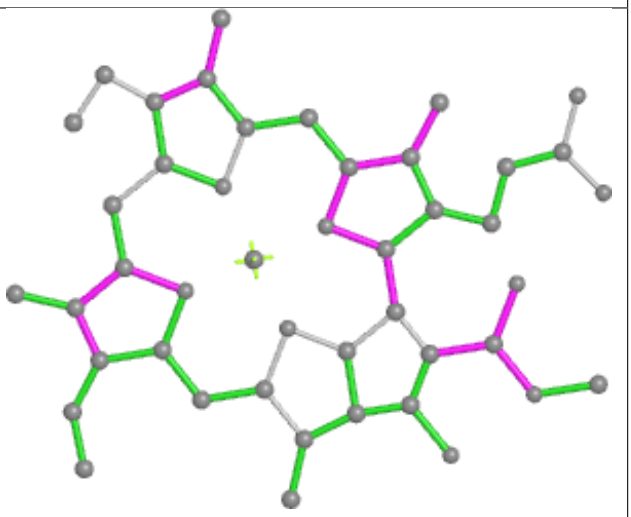


Rings

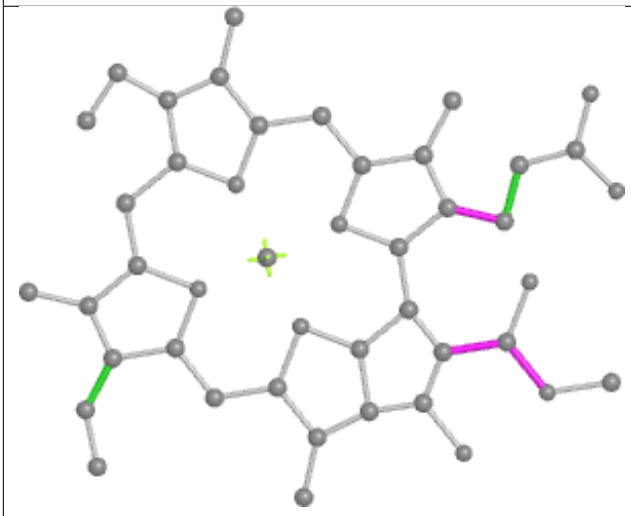
Ligand CLA B 1021



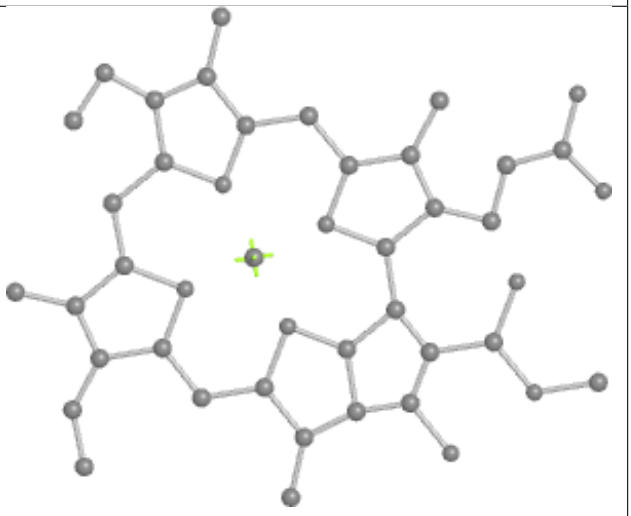
Bond lengths



Bond angles

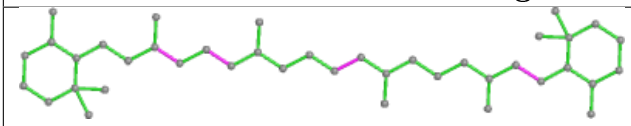


Torsions

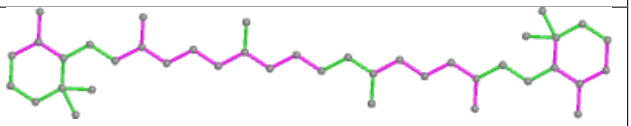


Rings

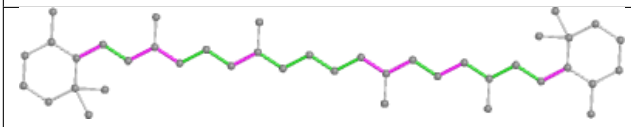
Ligand BCR B 4005



Bond lengths



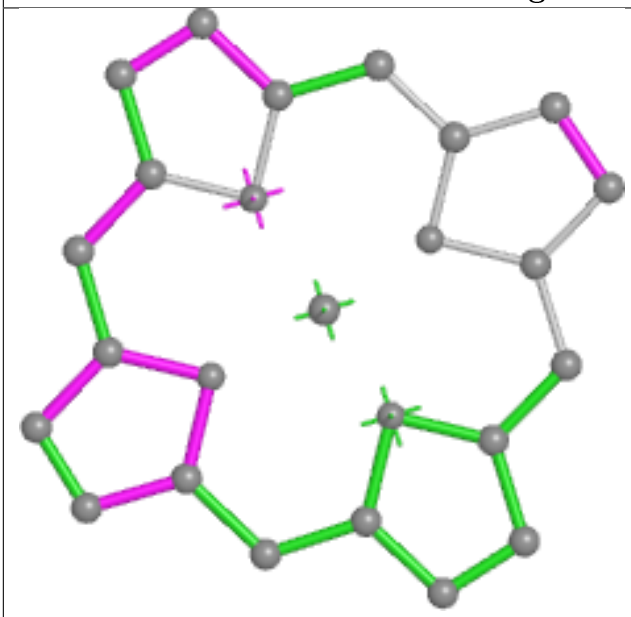
Bond angles



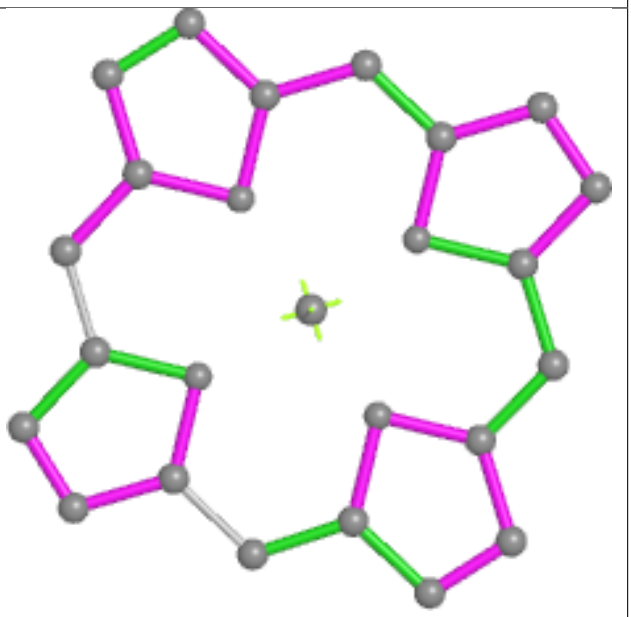
Torsions

Rings

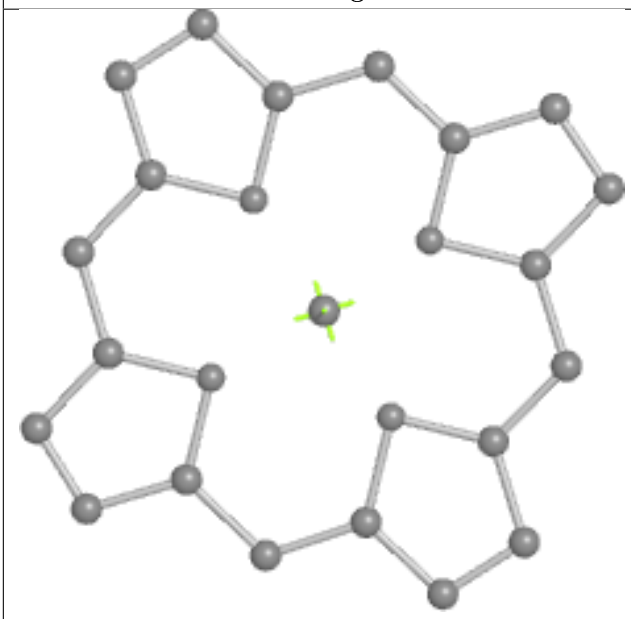
Ligand CLA 2 612



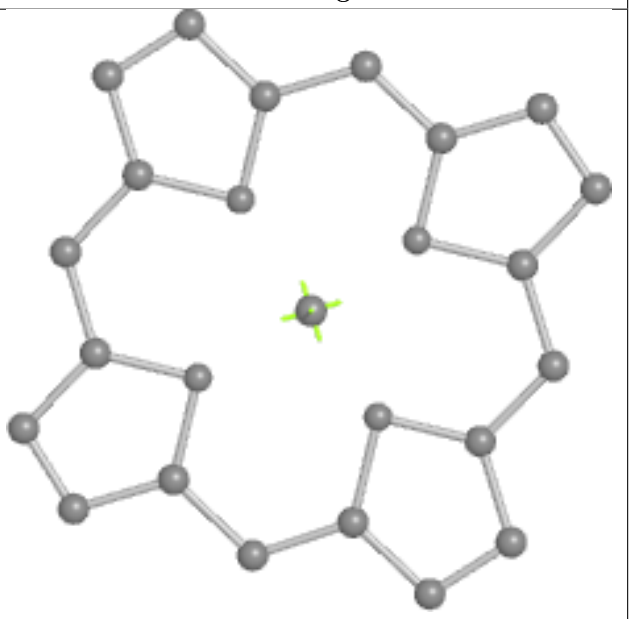
Bond lengths



Bond angles

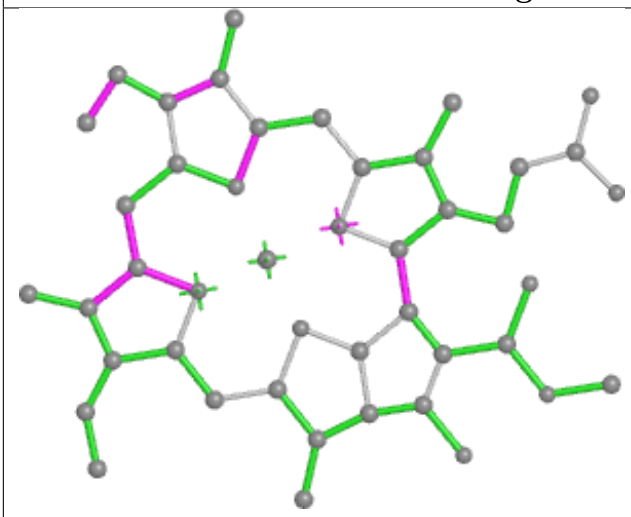


Torsions



Rings

Ligand CLA A 1101



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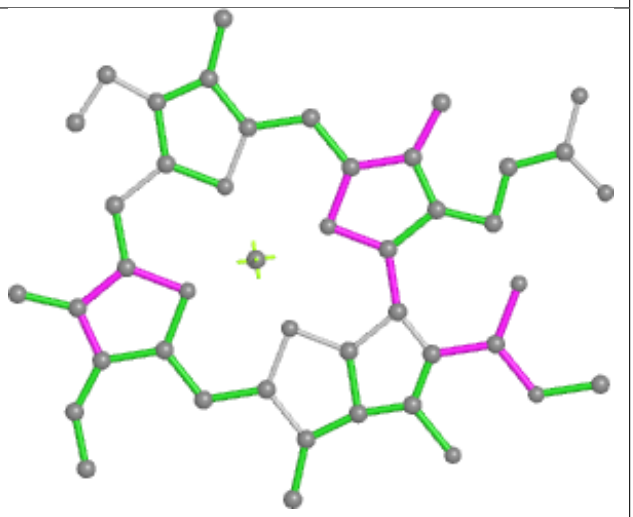
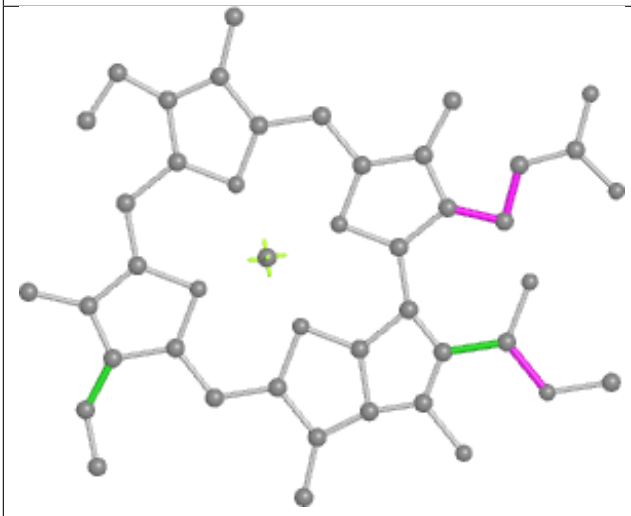
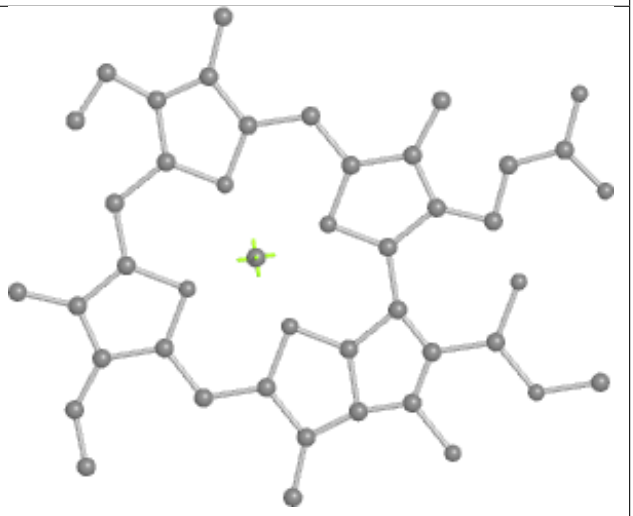


Bond angles

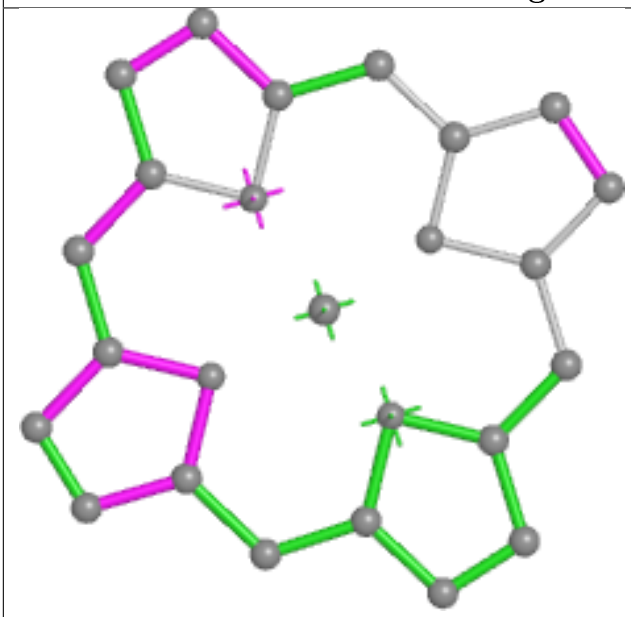


Torsions

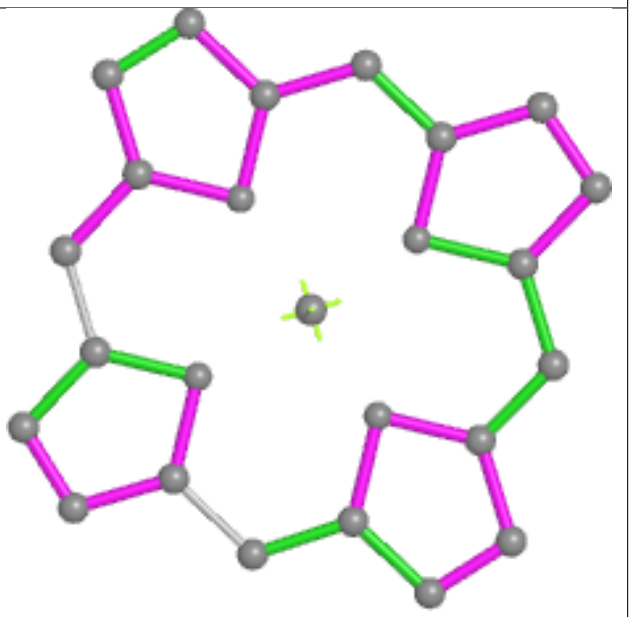


Rings

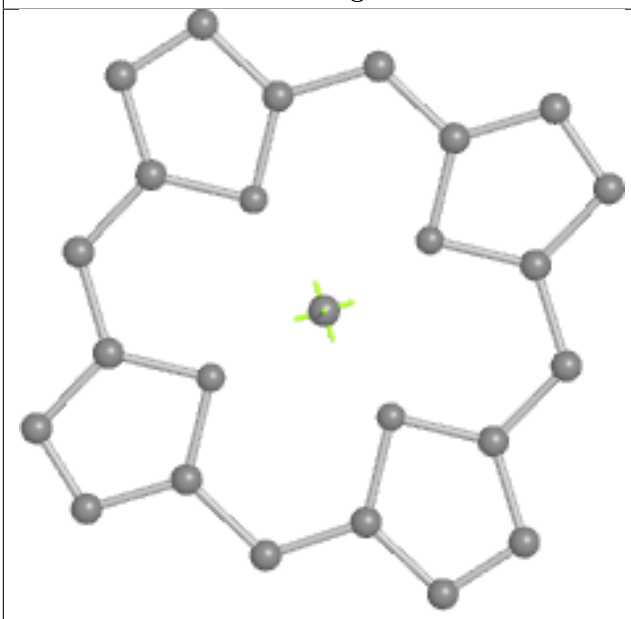
Ligand CLA 4 608



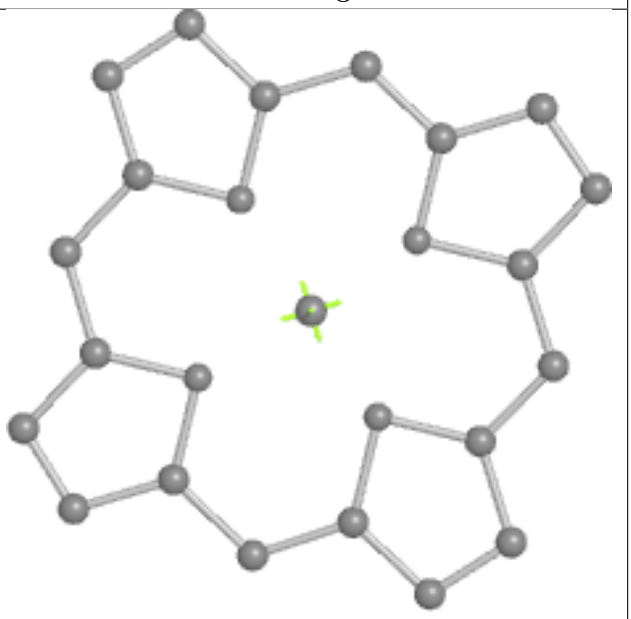
Bond lengths



Bond angles

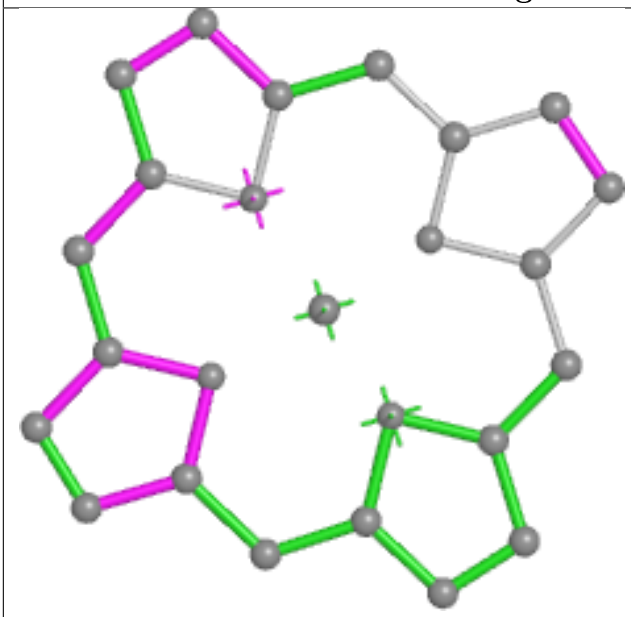


Torsions



Rings

Ligand CLA A 1135



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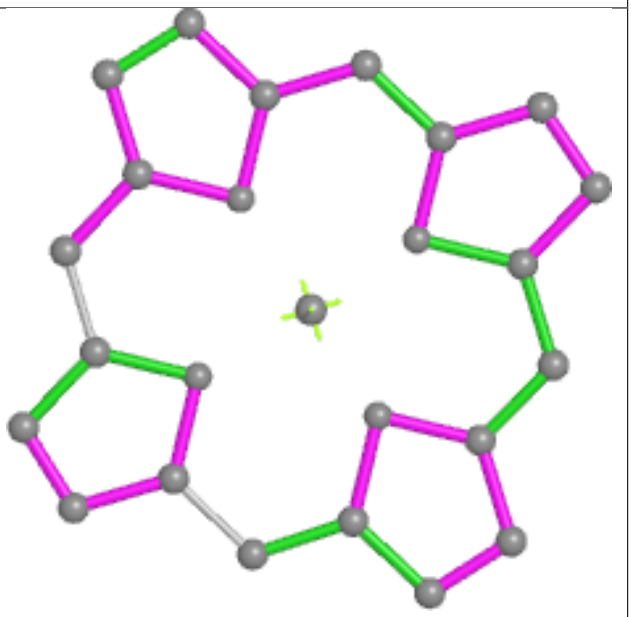
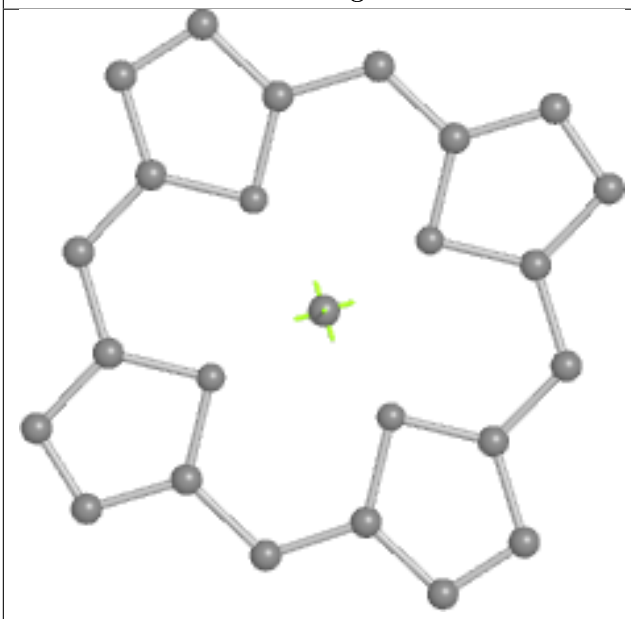


Bond angles



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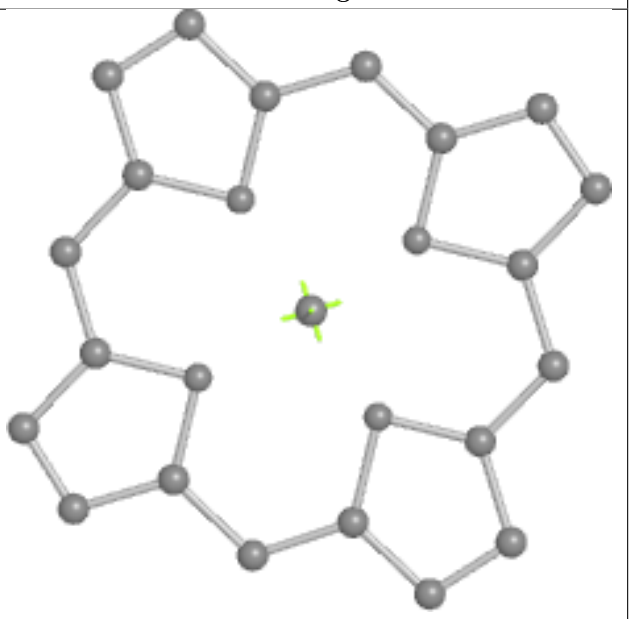
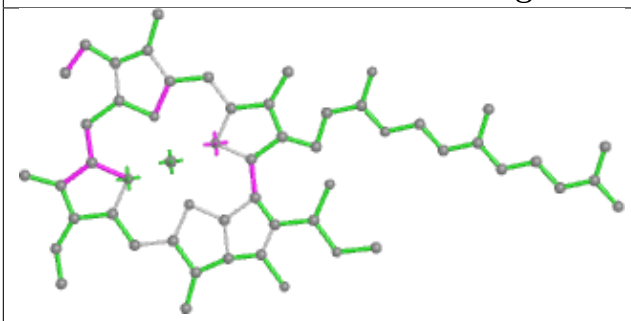


Rings

Ligand CLA A 1117



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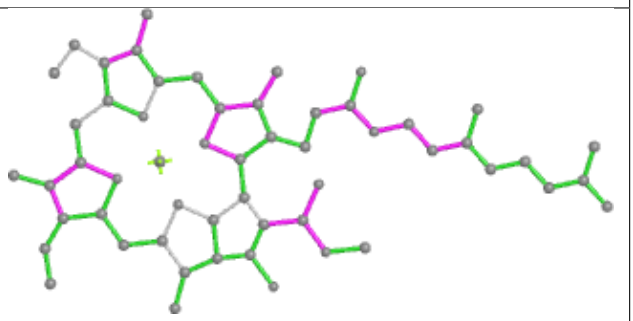
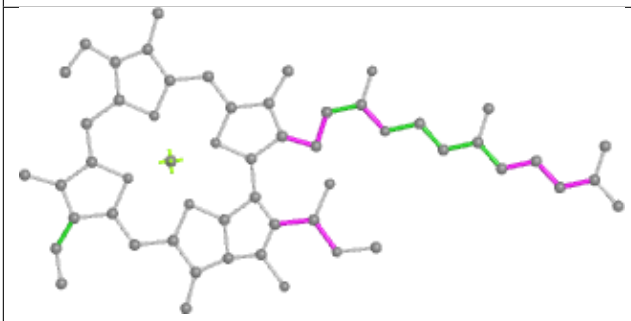


Bond angles



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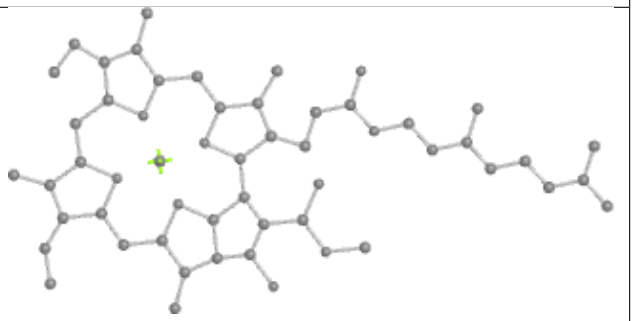
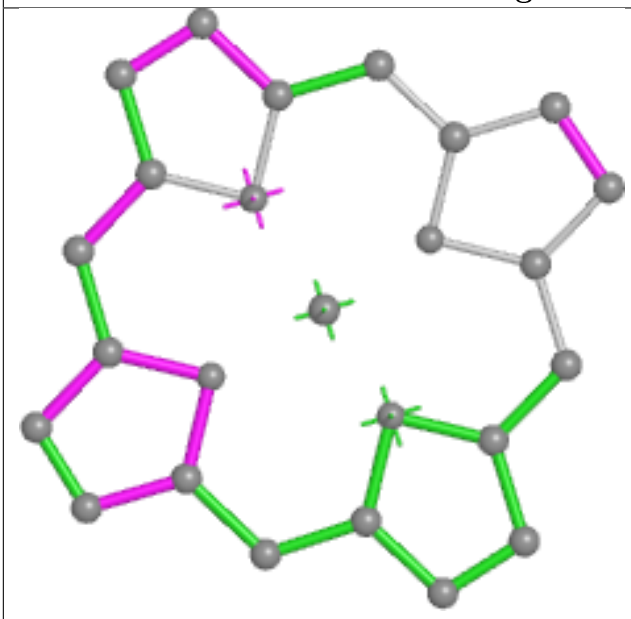


Rings

Ligand CLA B 1238



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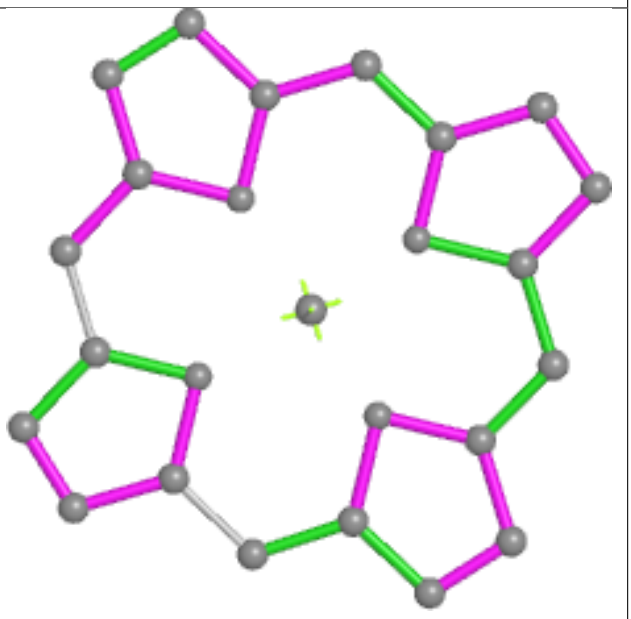
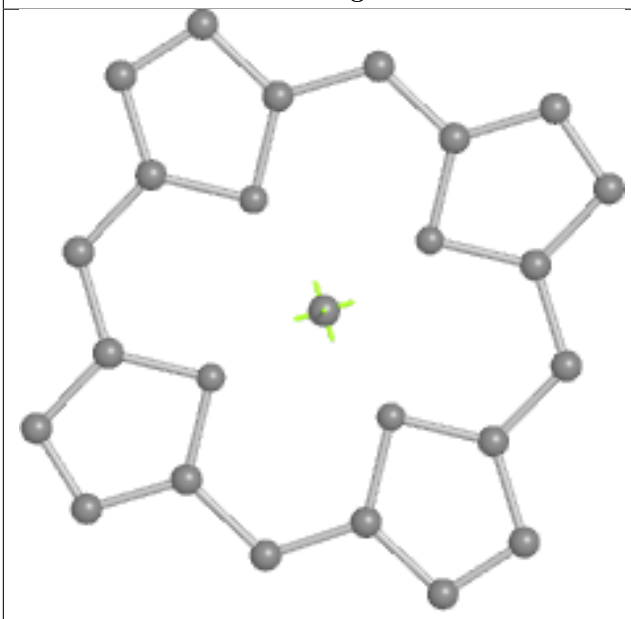
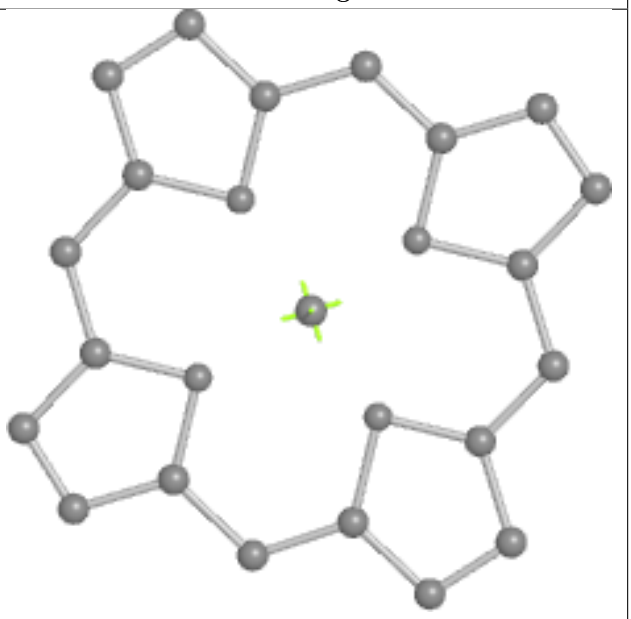


Bond angles

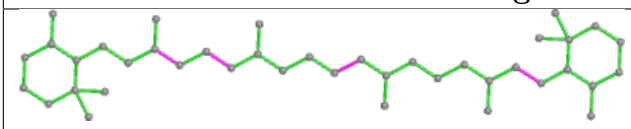


Torsions

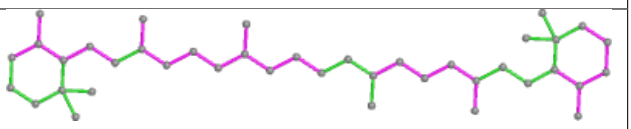


Rings

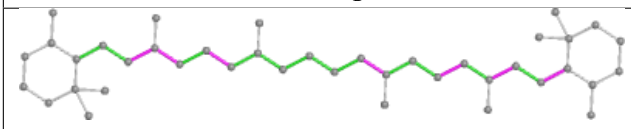
Ligand BCR A 4017



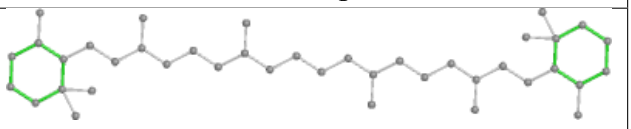
Bond lengths



Bond angles

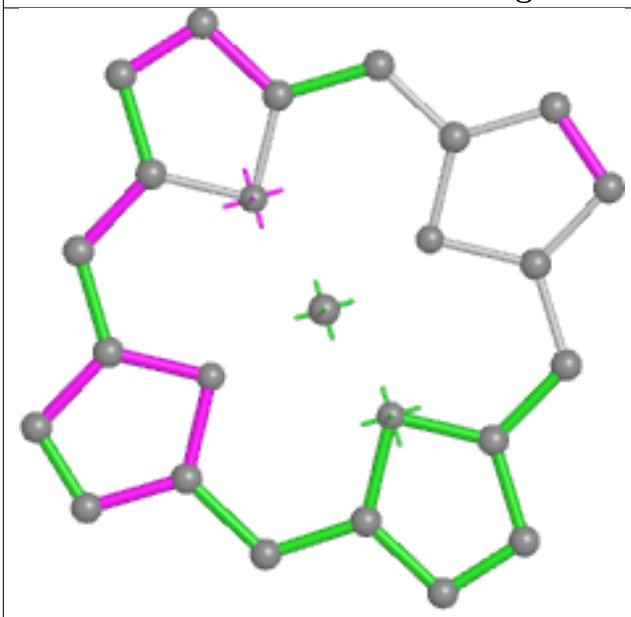


Torsions

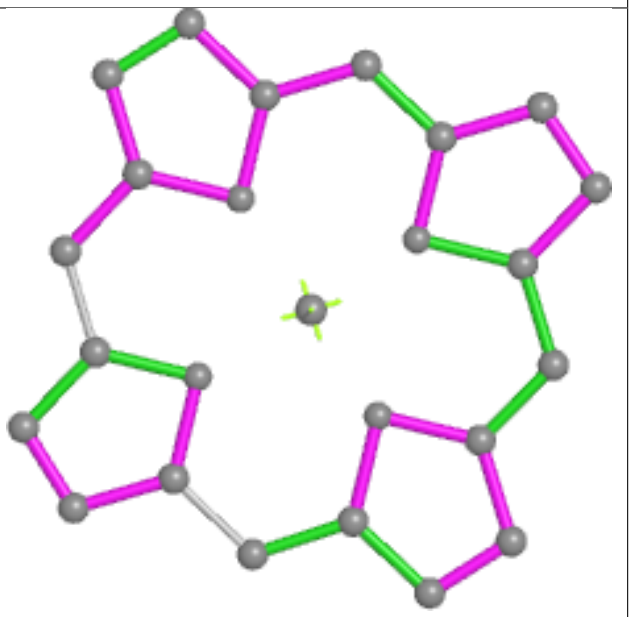


Rings

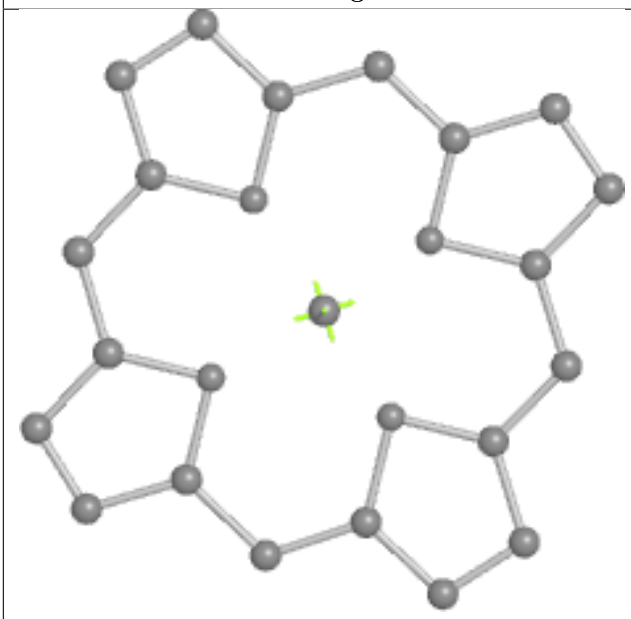
Ligand CLA B 1223



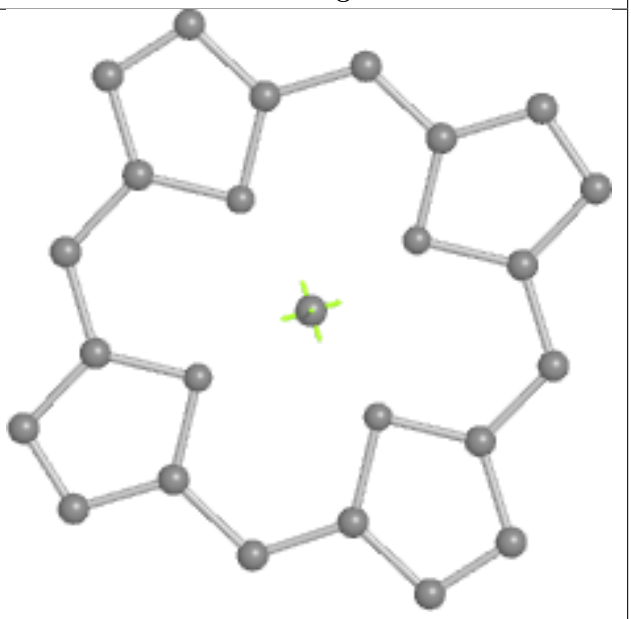
Bond lengths



Bond angles

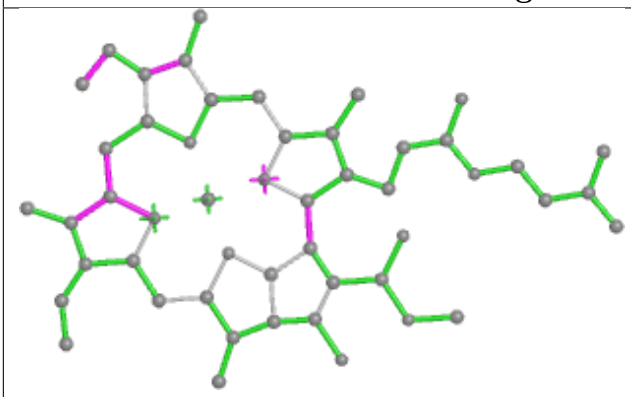


Torsions



Rings

Ligand CLA A 1011



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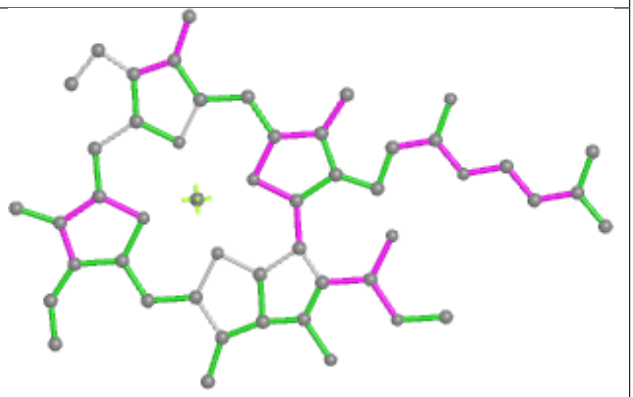
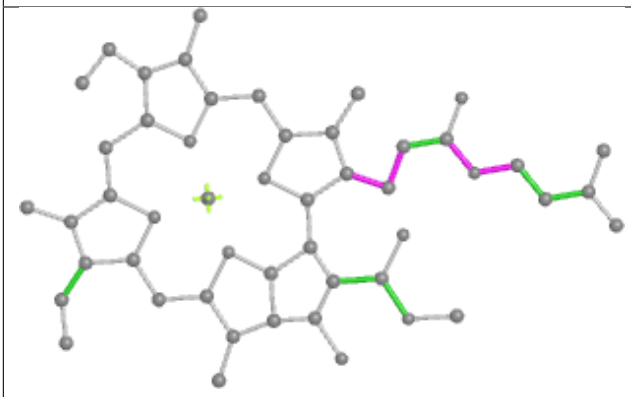
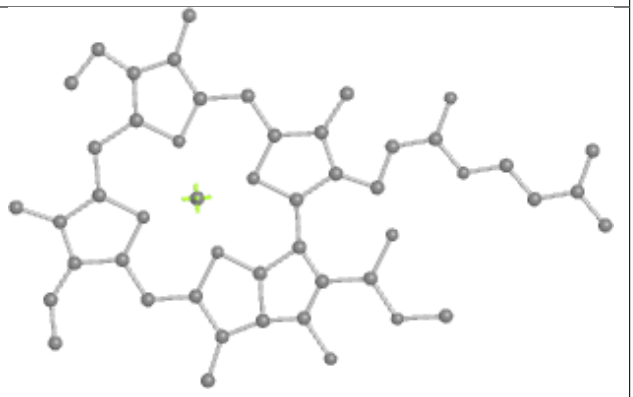


Bond angles

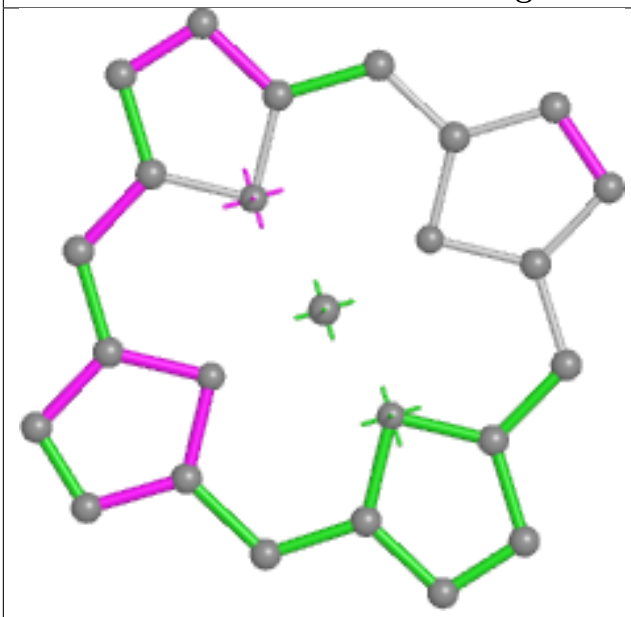


Torsions

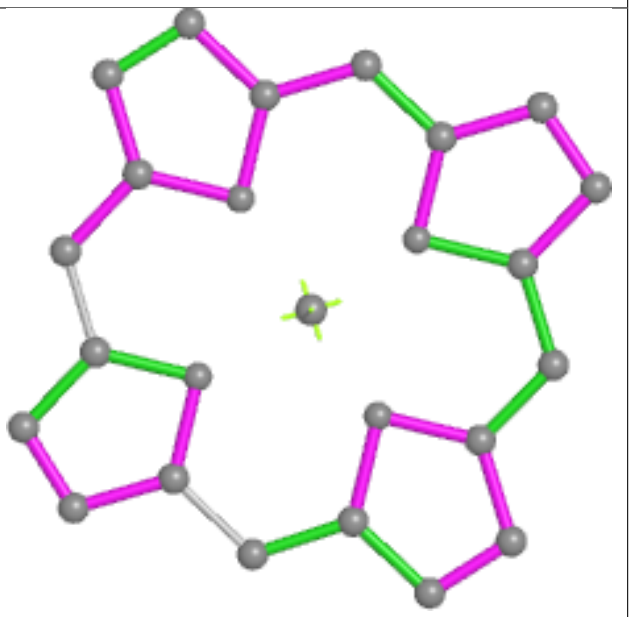


Rings

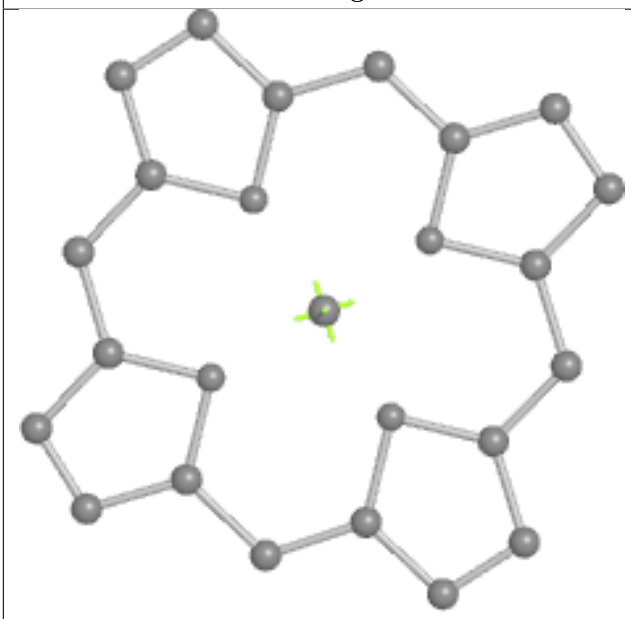
Ligand CLA A 1122



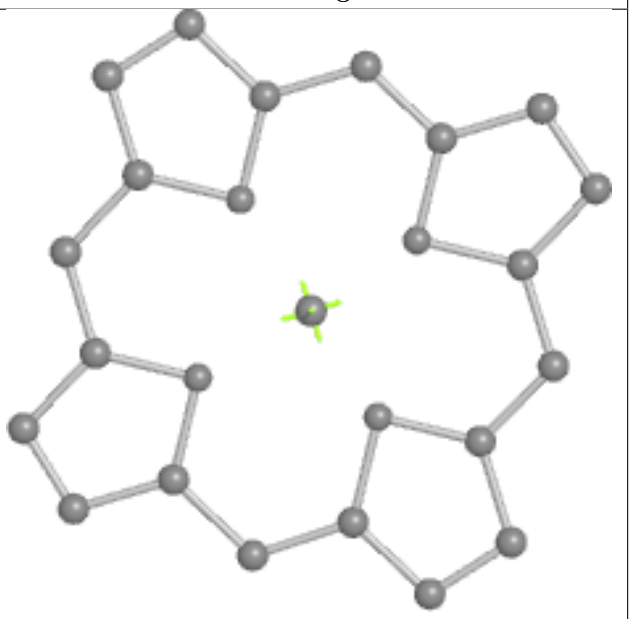
Bond lengths



Bond angles

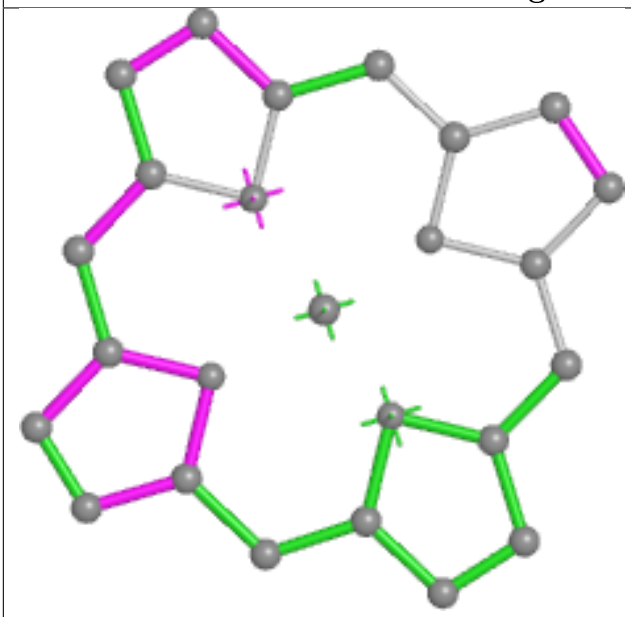


Torsions



Rings

Ligand CLA 4 612



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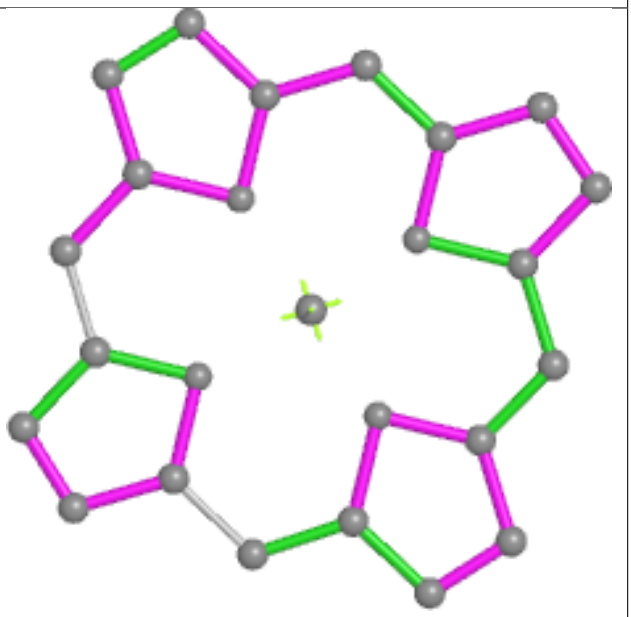
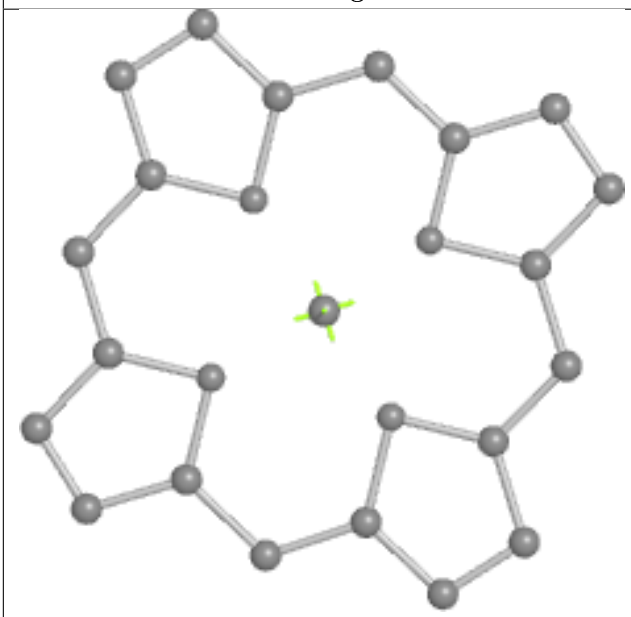
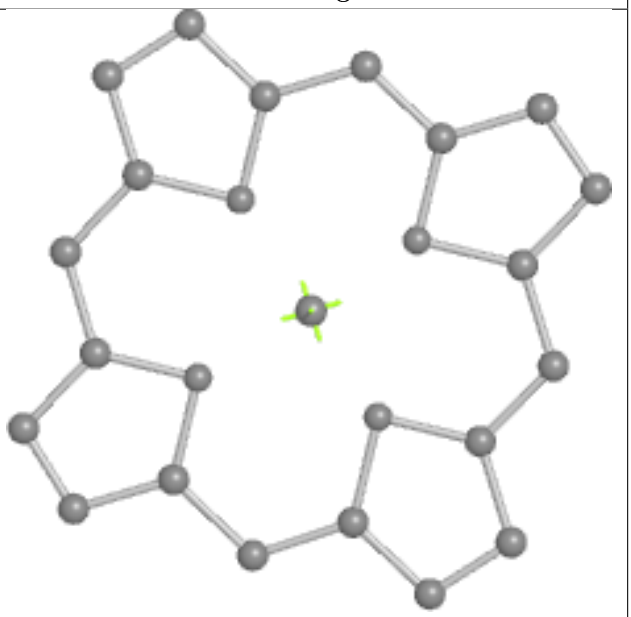


Bond angles

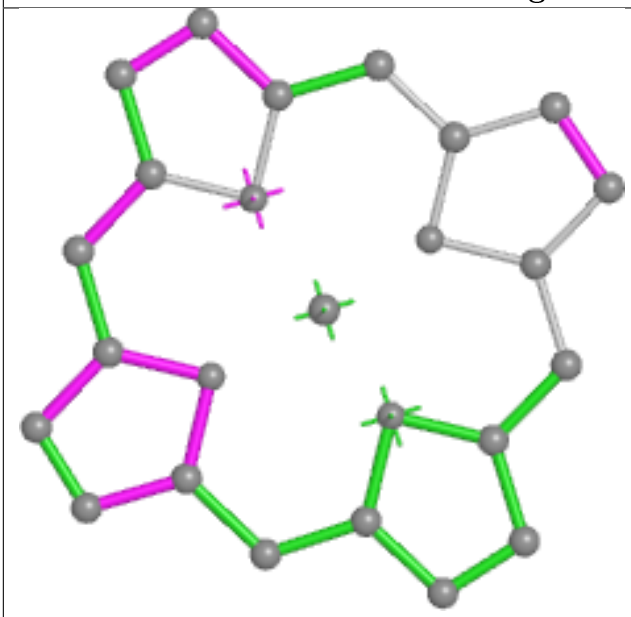


Torsions

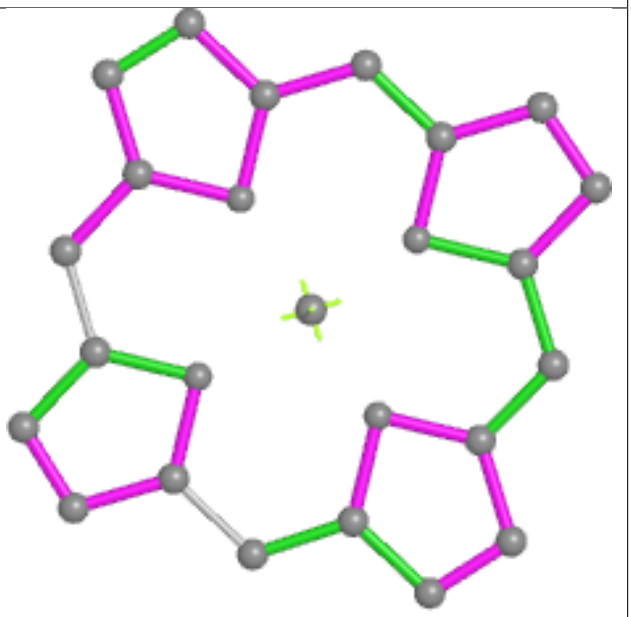


Rings

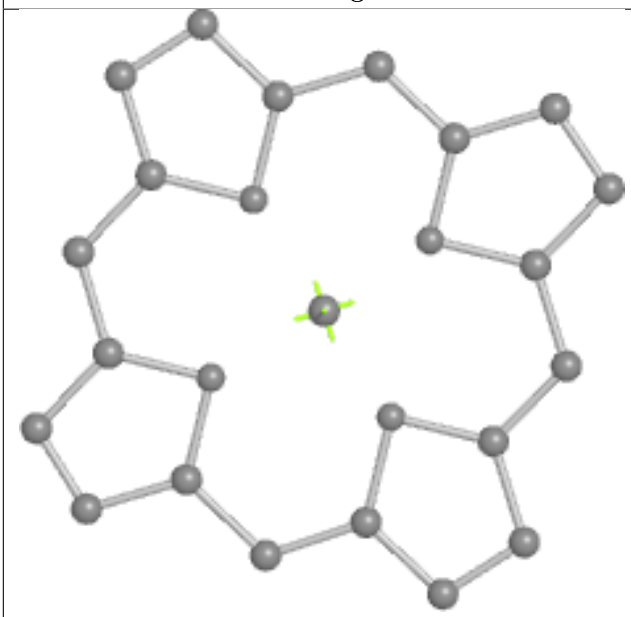
Ligand CLA 2 605



Bond lengths



Bond angles



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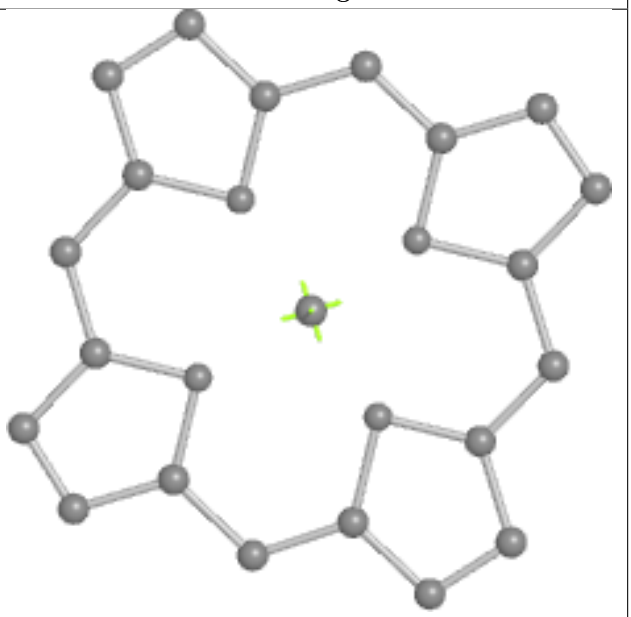
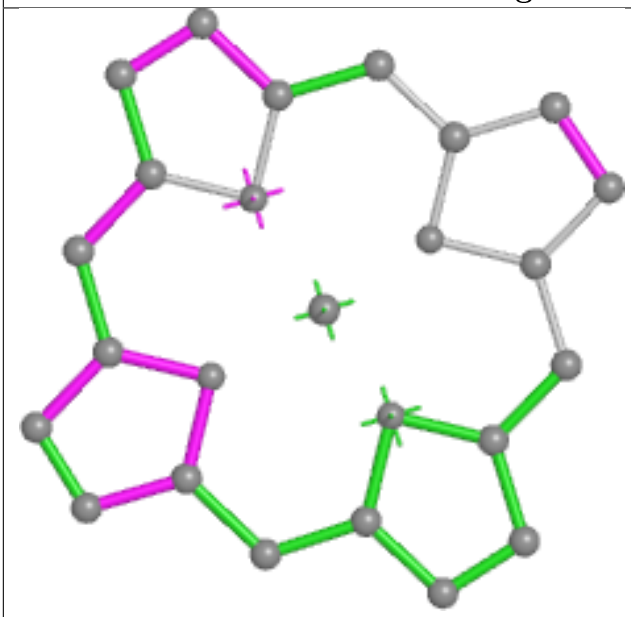
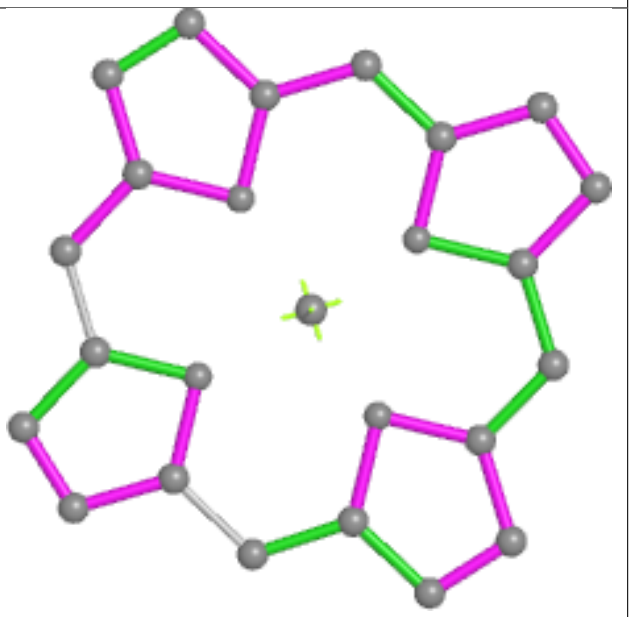


Rings

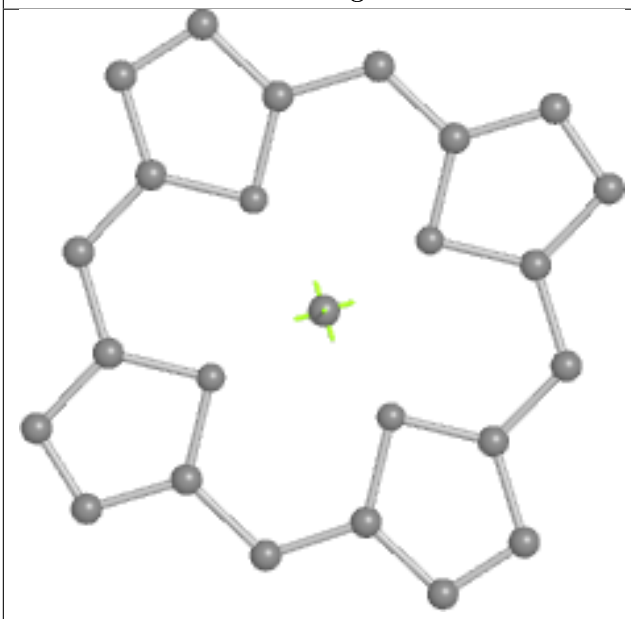
Ligand CLA A 1132



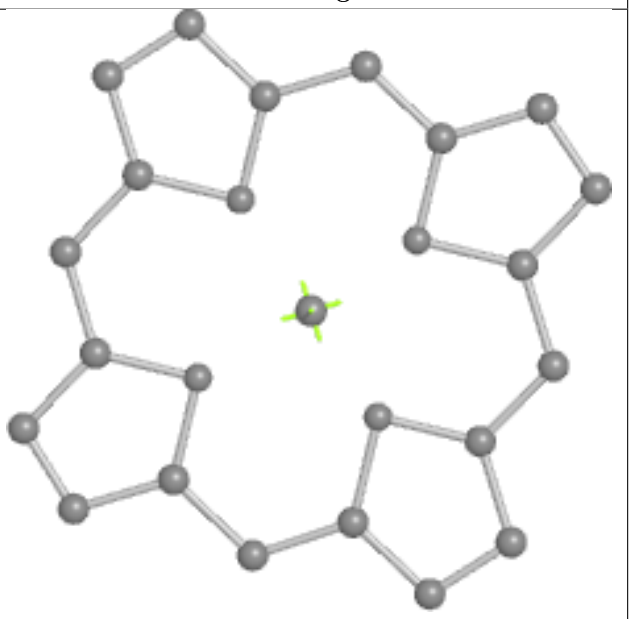
Bond lengths



Bond angles

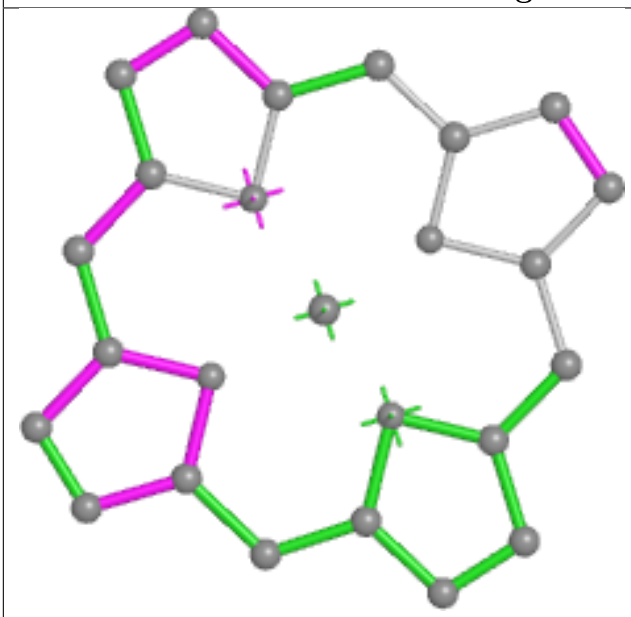


Torsions

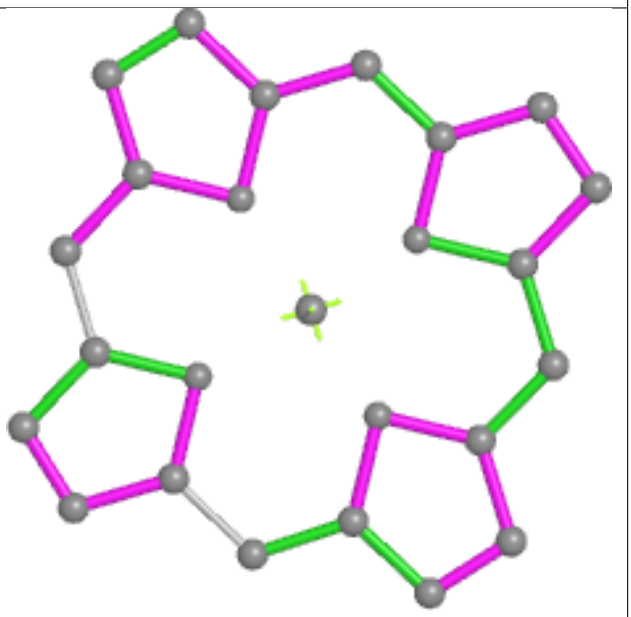


Rings

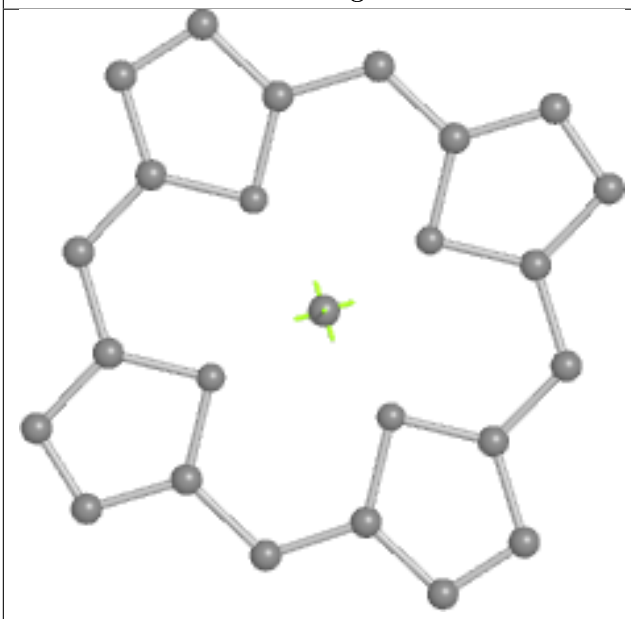
Ligand CLA A 1133



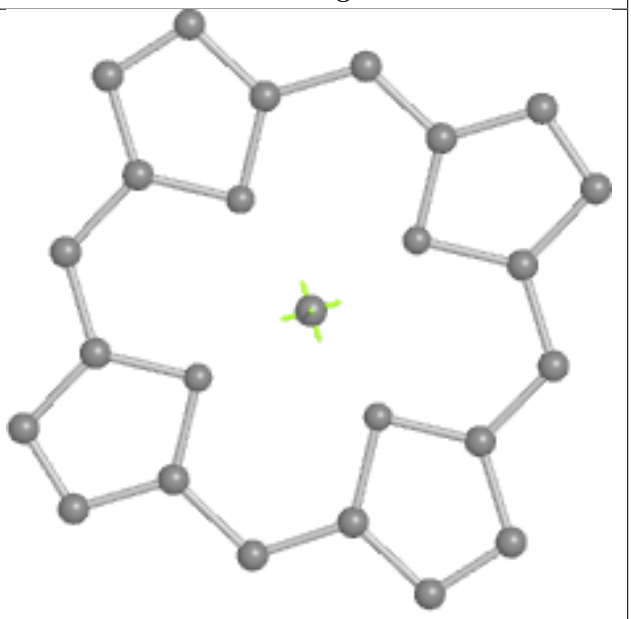
Bond lengths



Bond angles

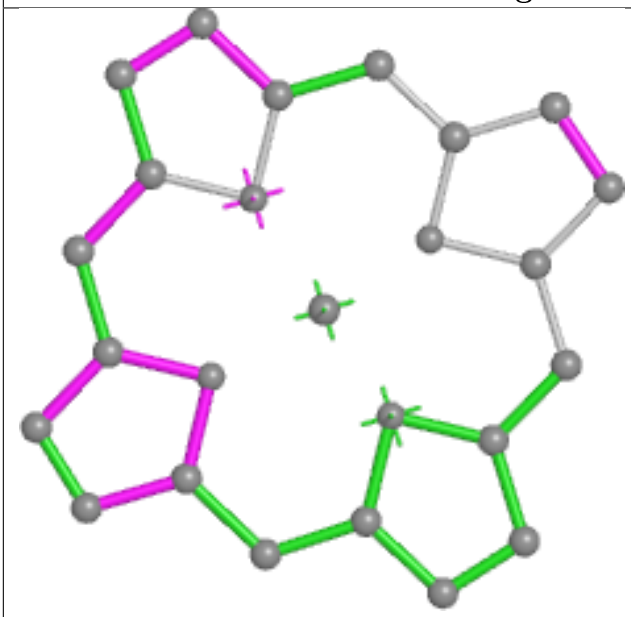


Torsions

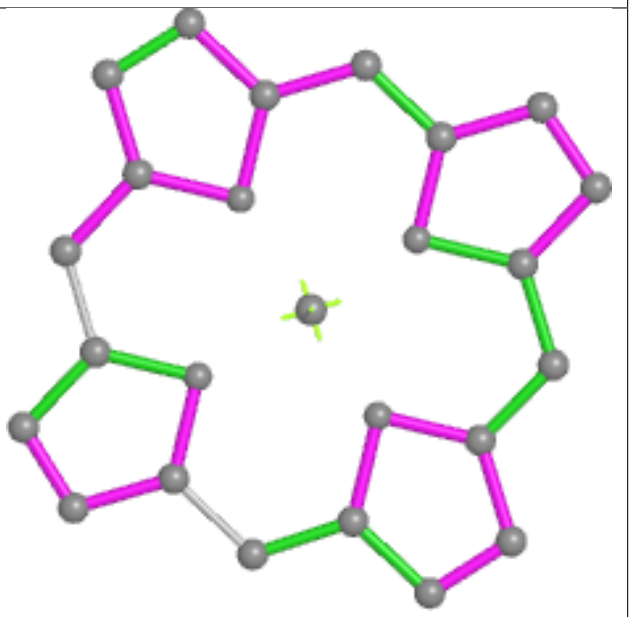


Rings

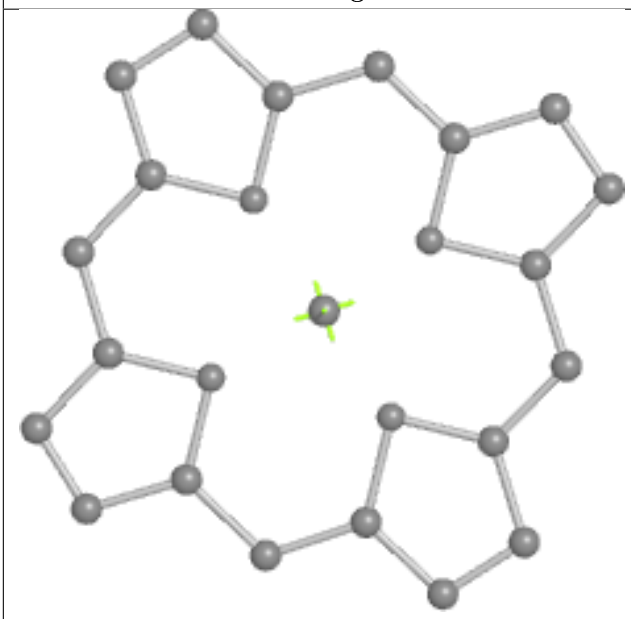
Ligand CLA B 1221



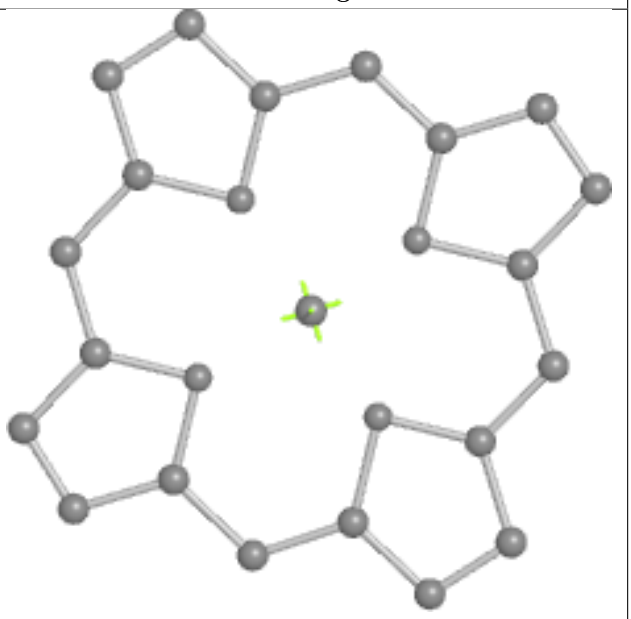
Bond lengths



Bond angles

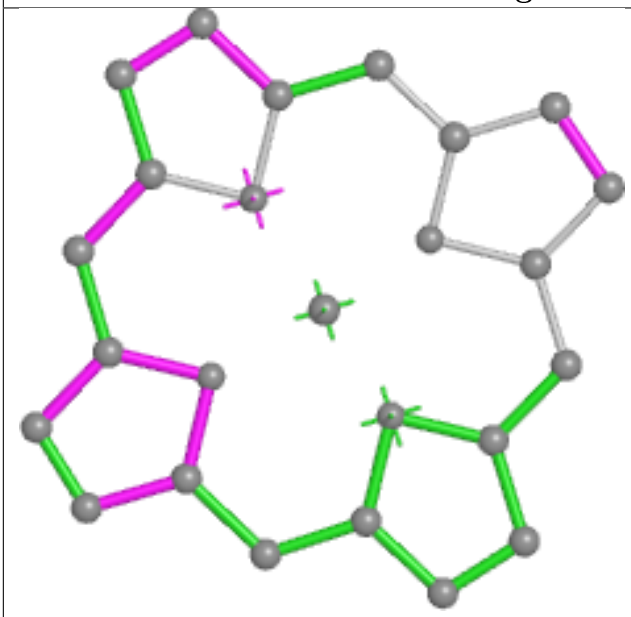


Torsions



Rings

Ligand CLA O 1601



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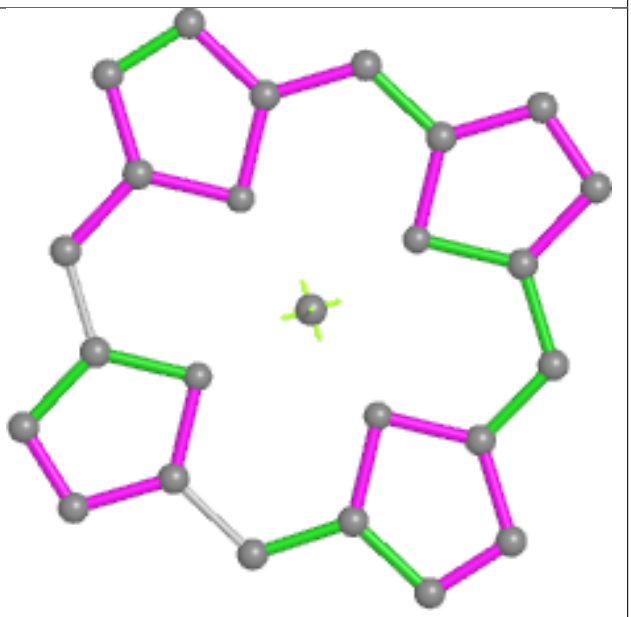
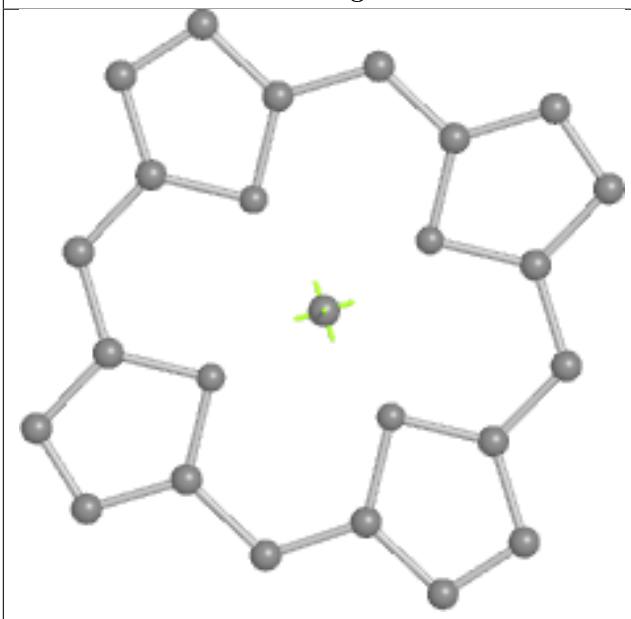
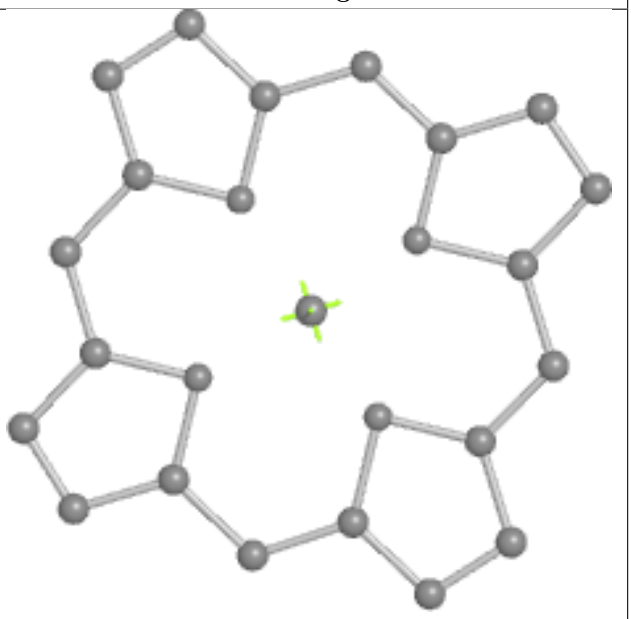


Bond angles

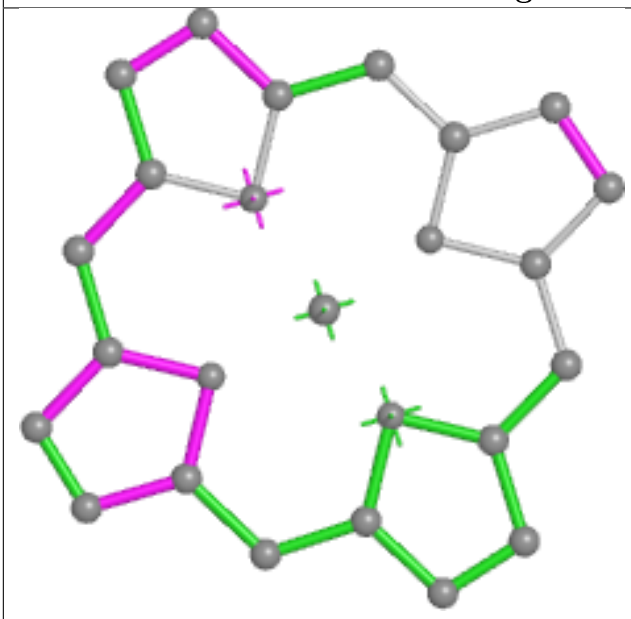


Torsions



Rings

Ligand CLA A 1141



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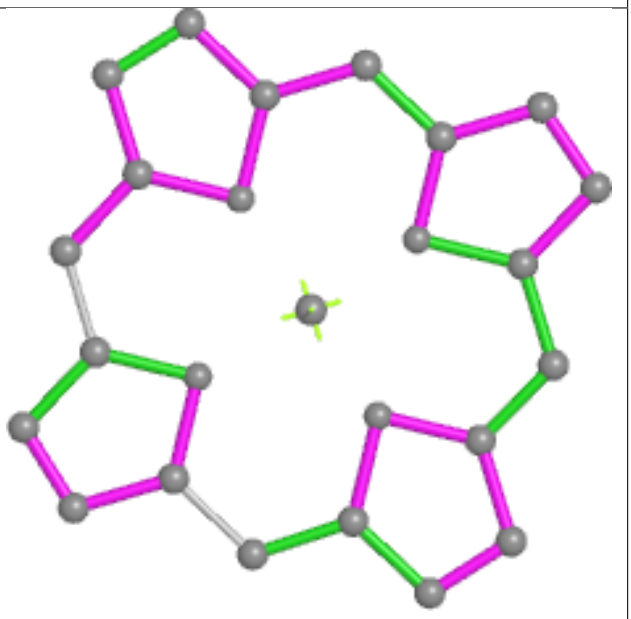
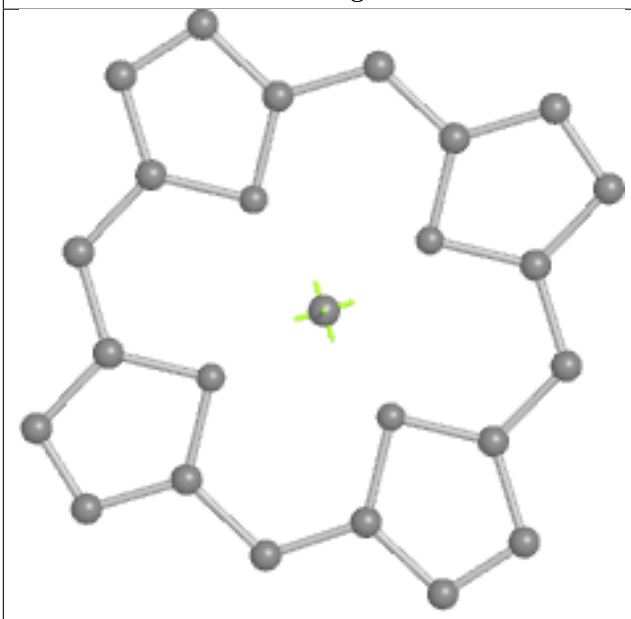
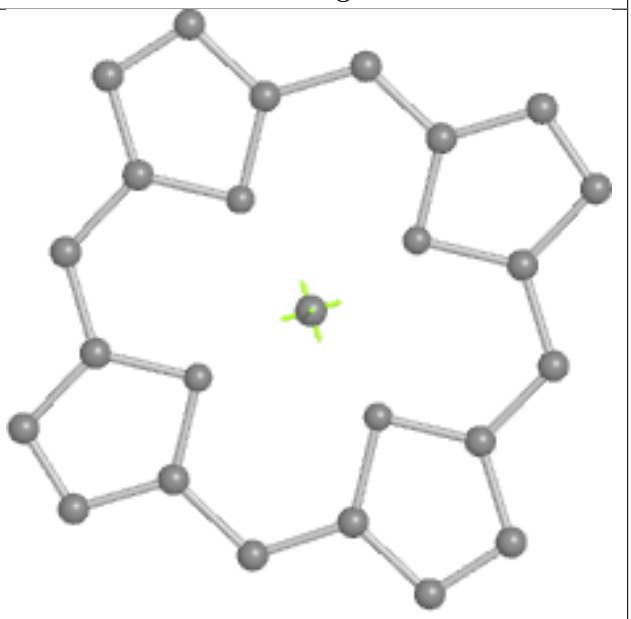


Bond angles

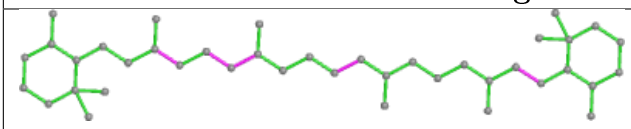


Torsions

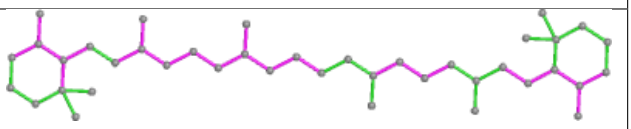


Rings

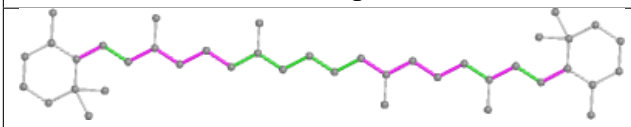
Ligand BCR A 4007



Bond lengths



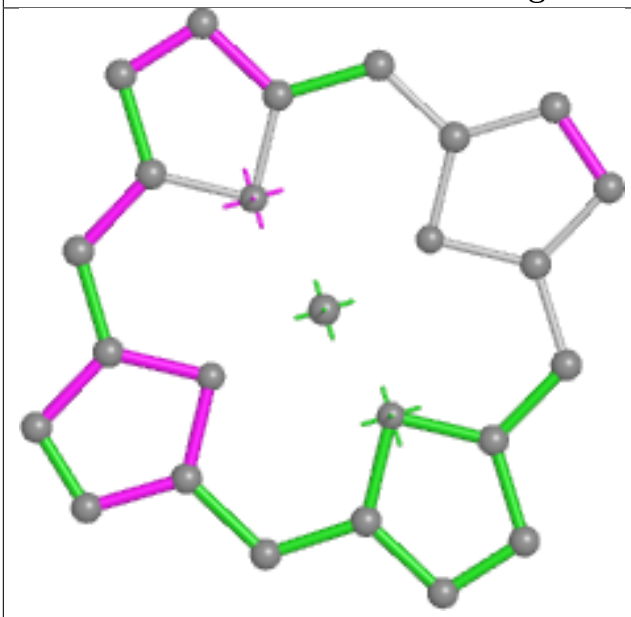
Bond angles



Torsions

Rings

Ligand CLA 2 611



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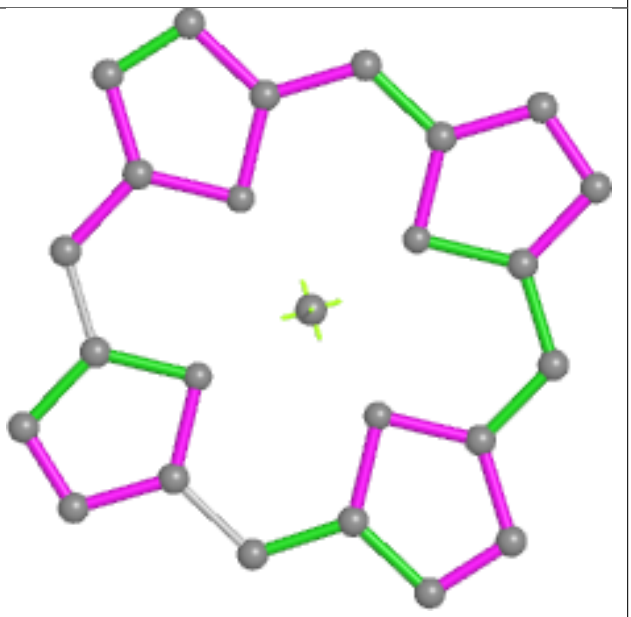
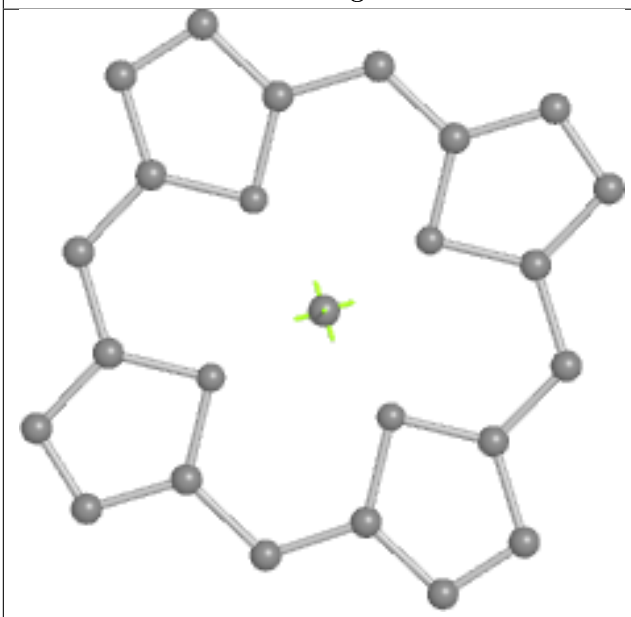


Bond angles



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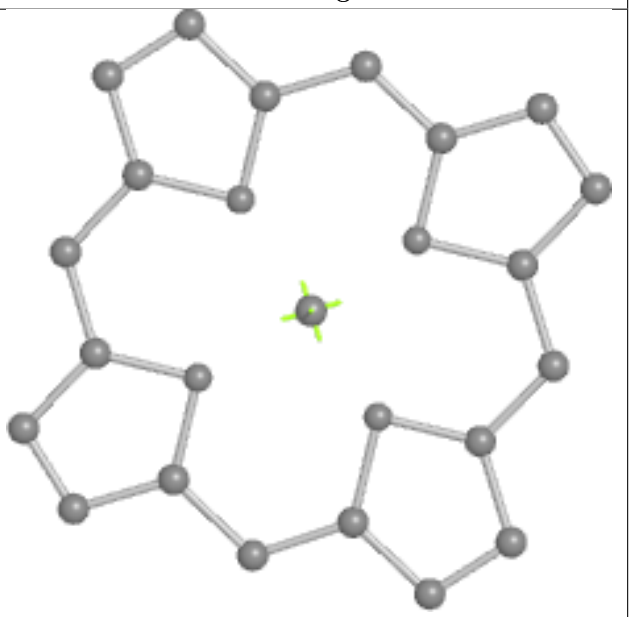
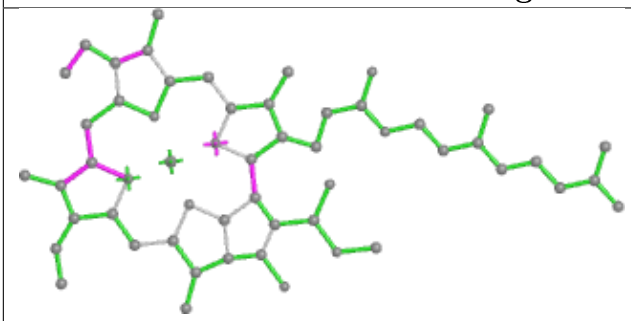
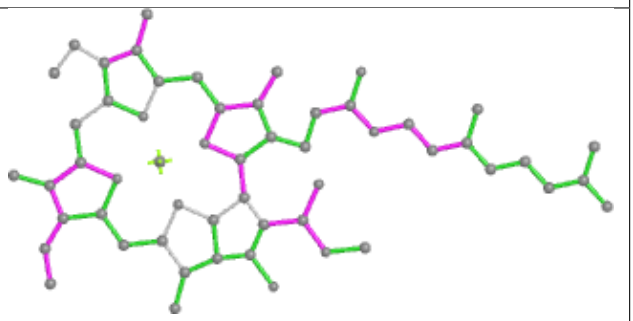


Rings

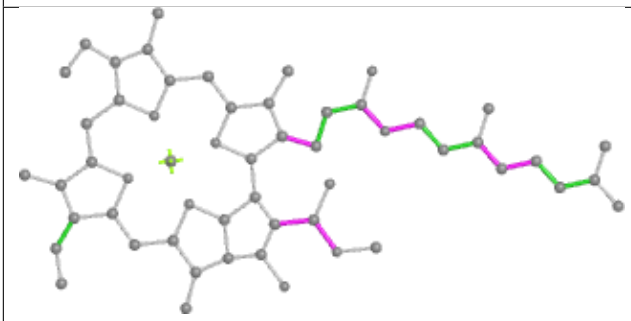
Ligand CLA A 1103



Bond lengths



Bond angles



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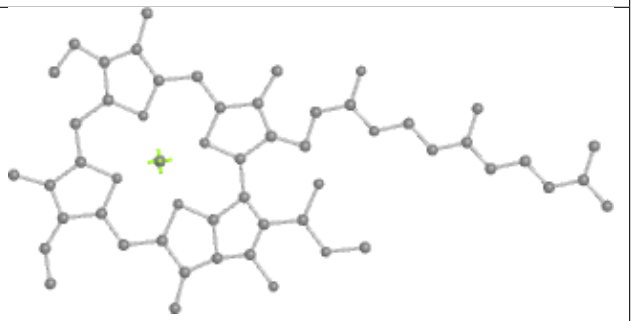
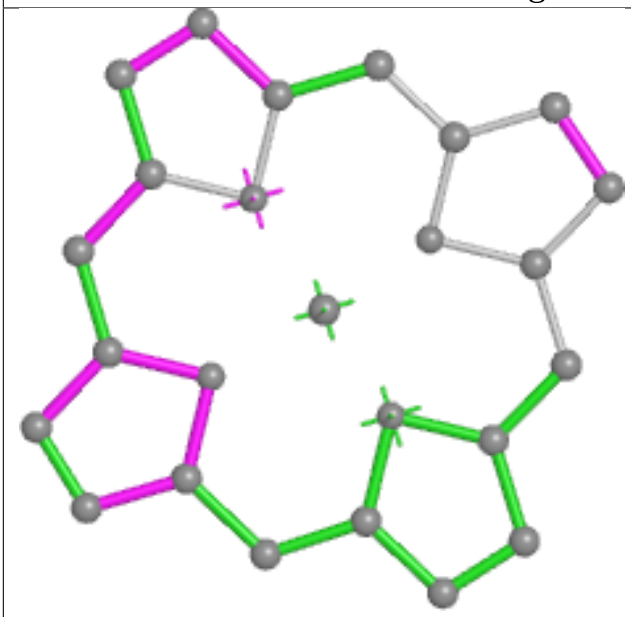


Rings

Ligand CLA 4 615



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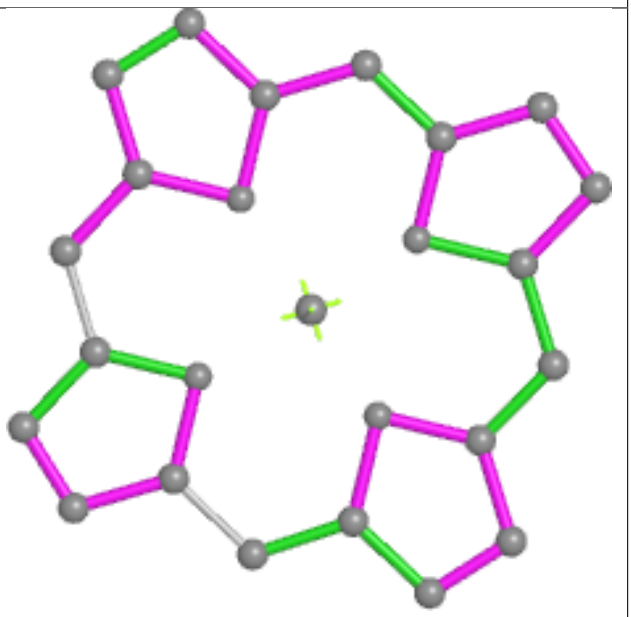
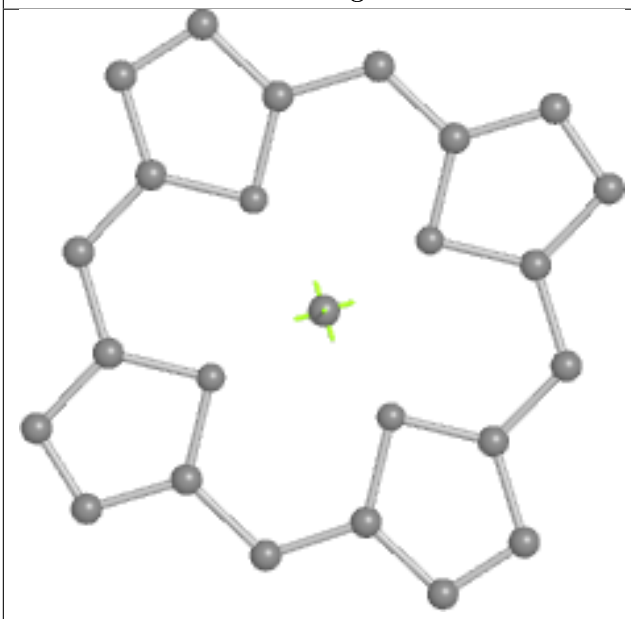


Bond angles



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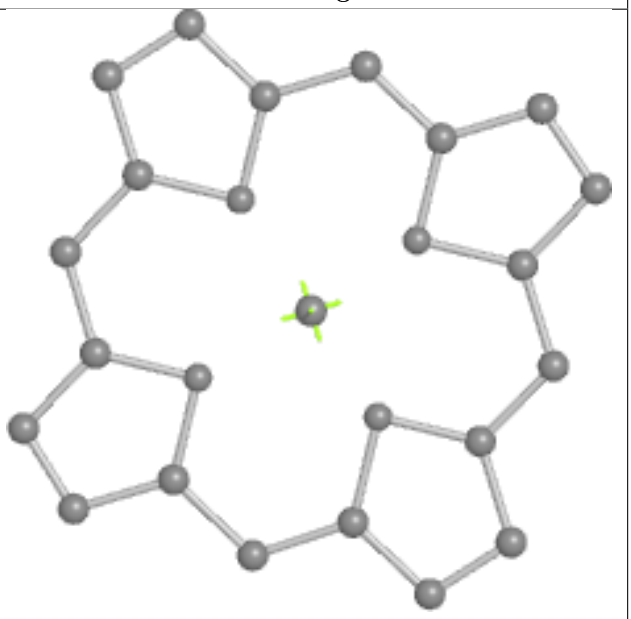
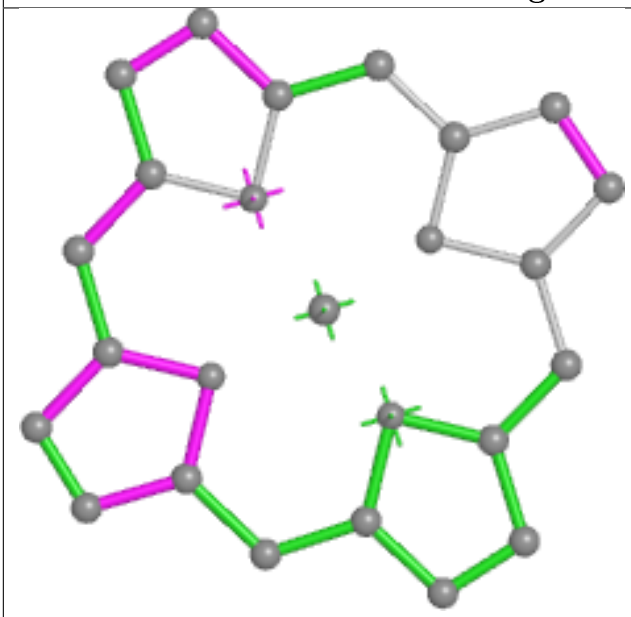
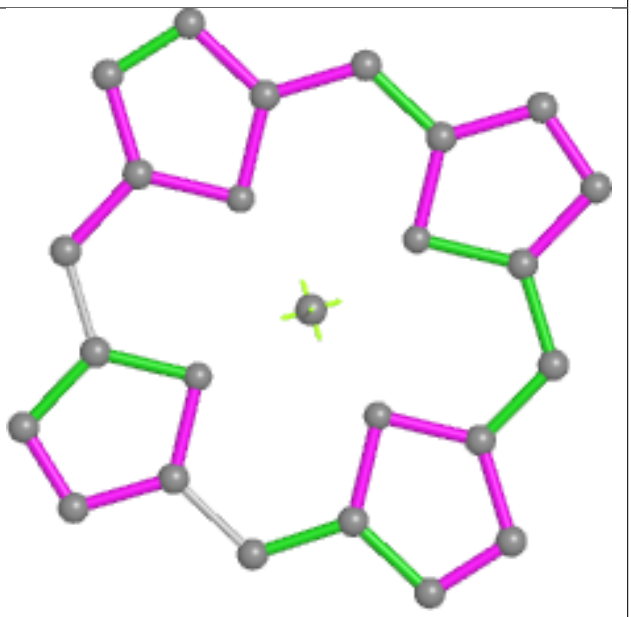


Rings

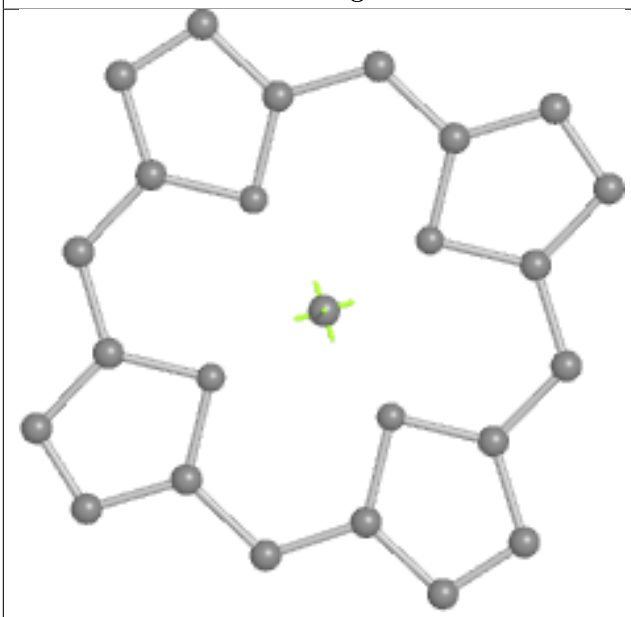
Ligand CLA 2 603



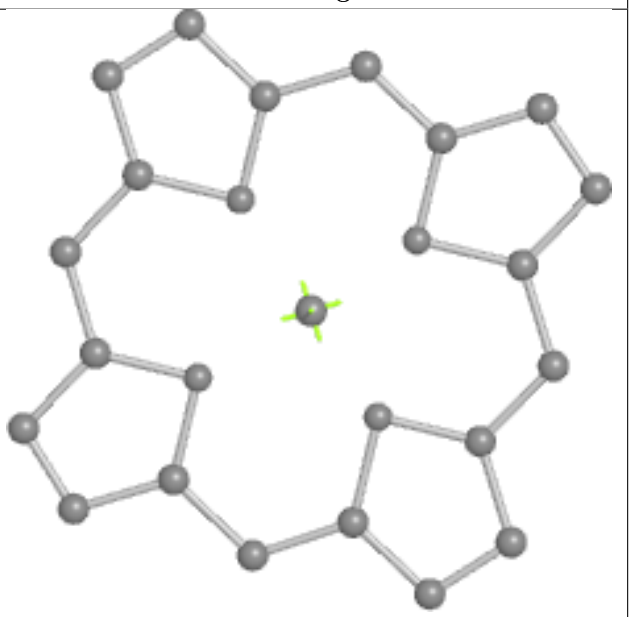
Bond lengths



Bond angles

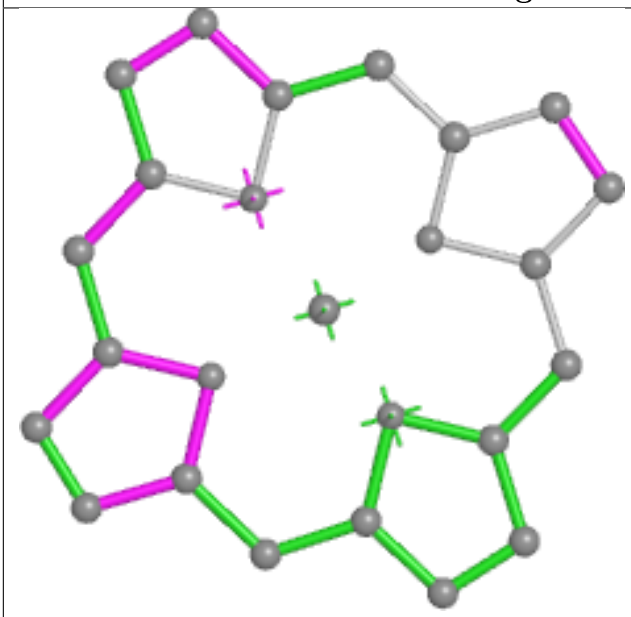


Torsions



Rings

Ligand CLA A 1129



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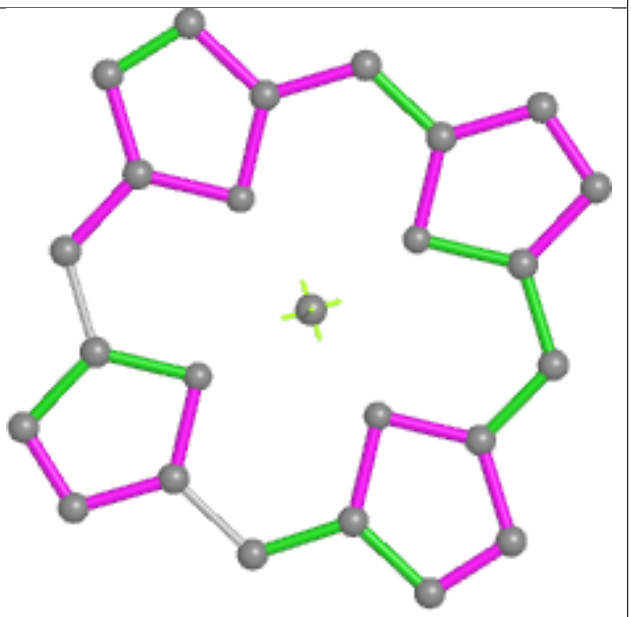
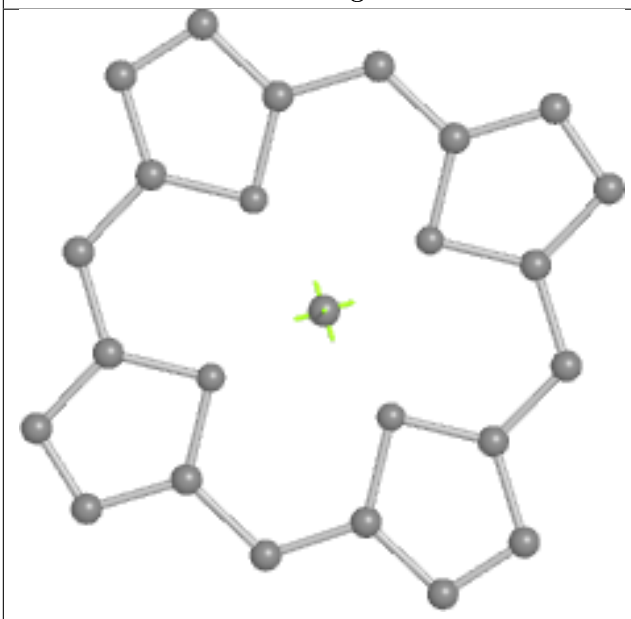
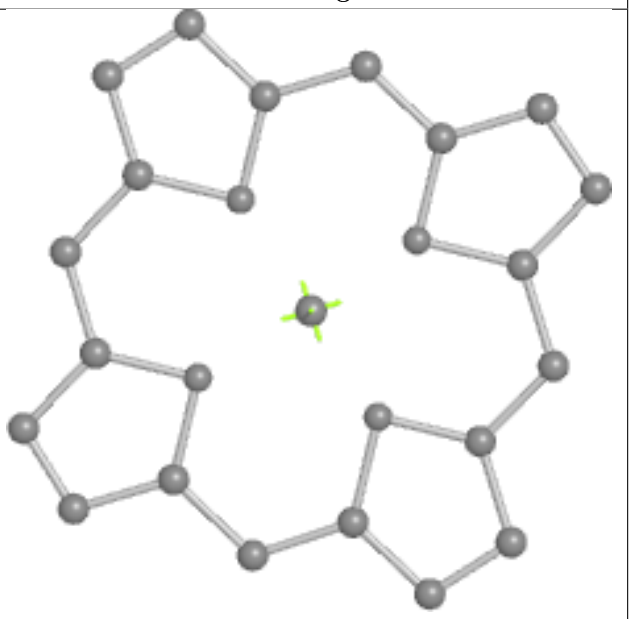


Bond angles

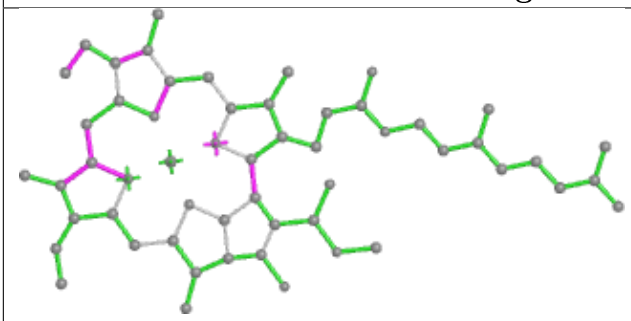


Torsions

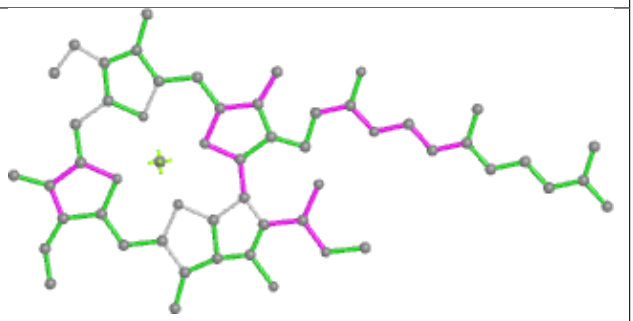


Rings

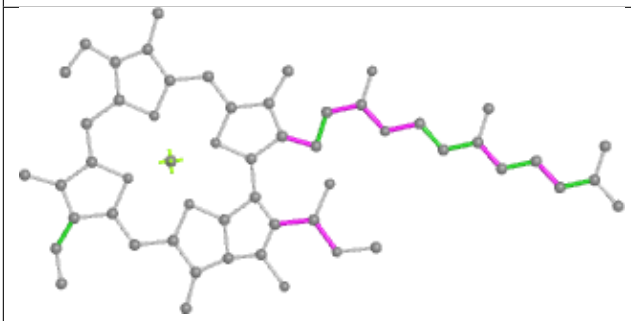
Ligand CLA A 1126



Bond lengths



Bond angles



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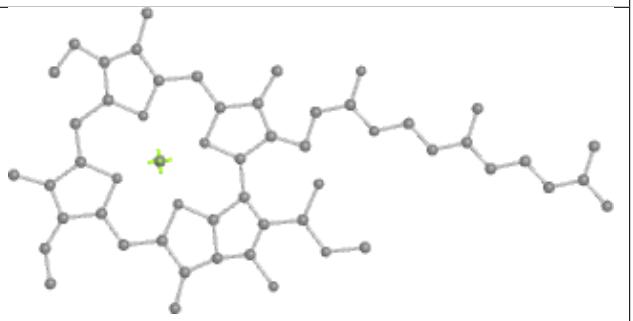
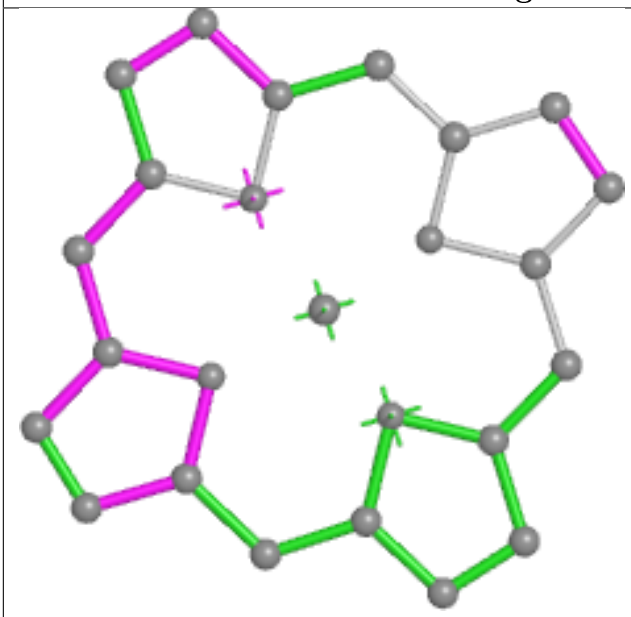
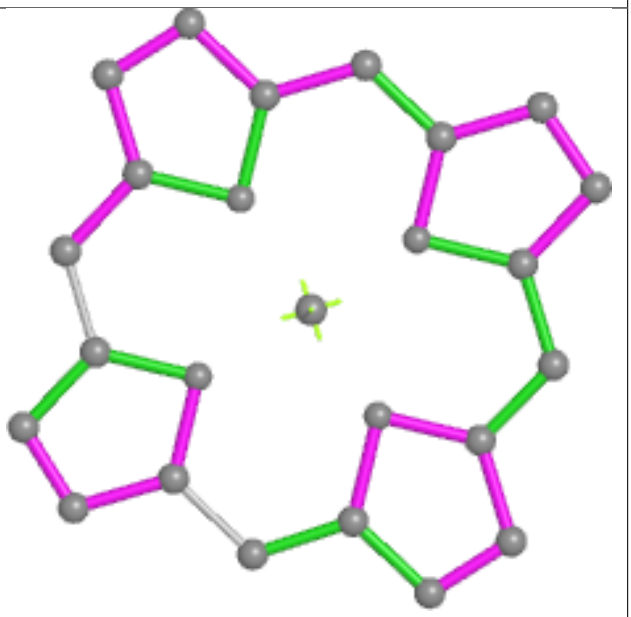


Rings

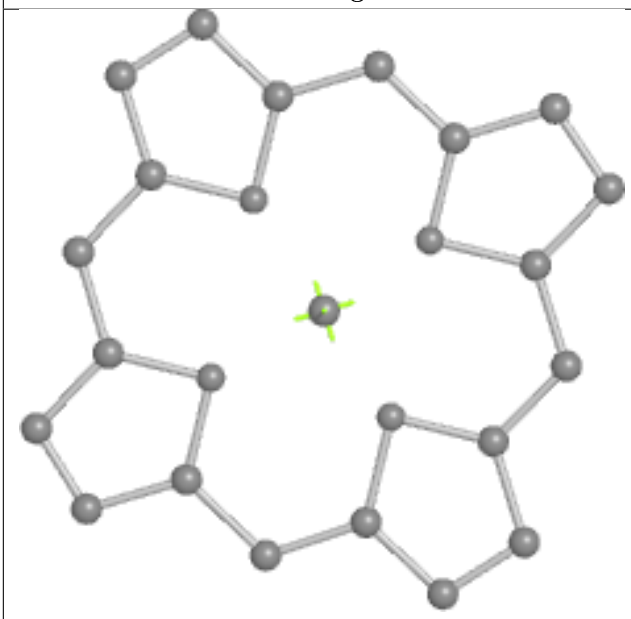
Ligand CLA B 1228



Bond lengths



Bond angles



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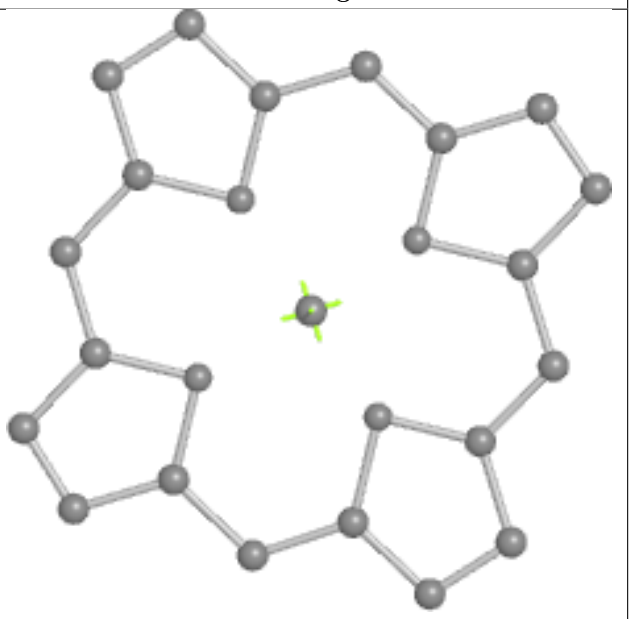
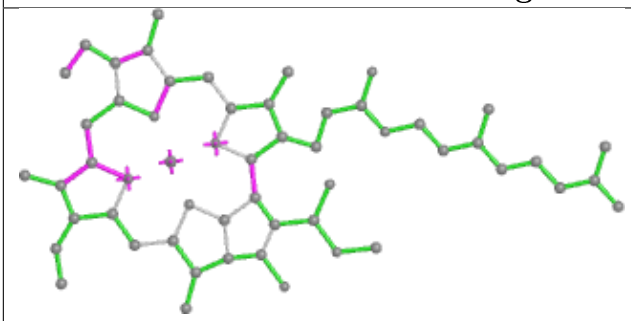
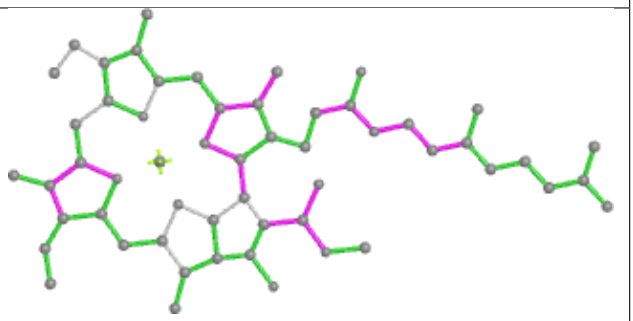


Rings

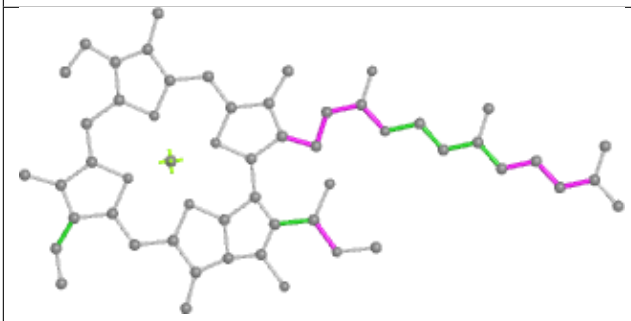
Ligand CLA A 1104



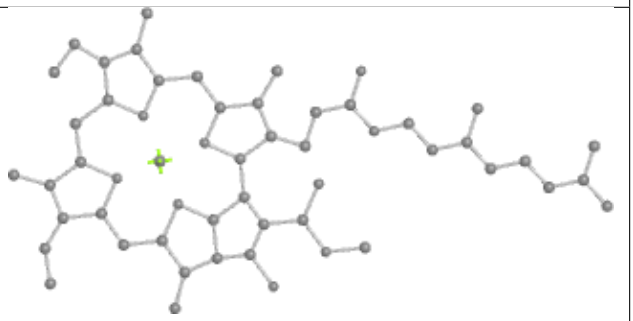
Bond lengths



Bond angles

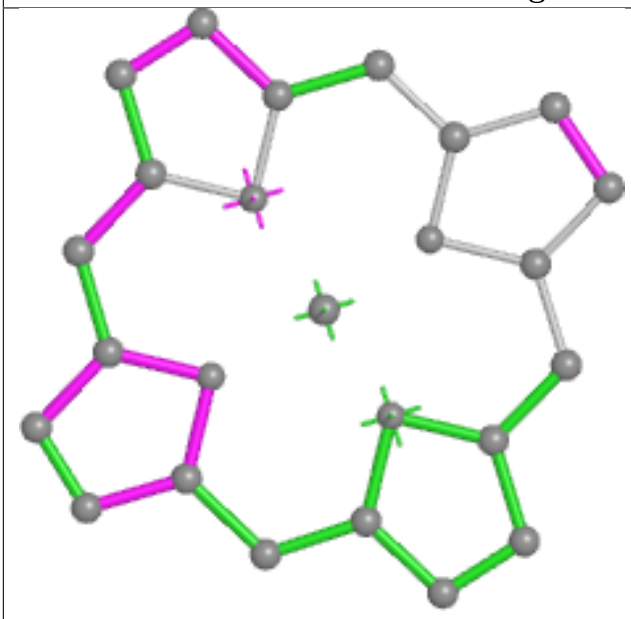


Torsions

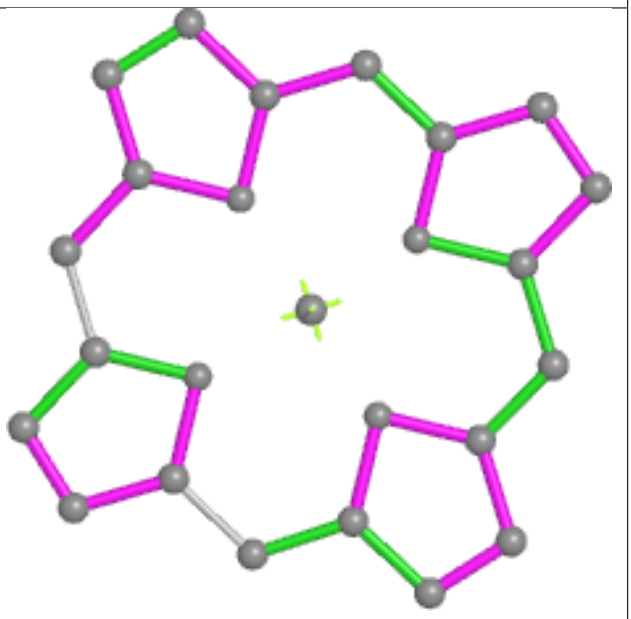


Rings

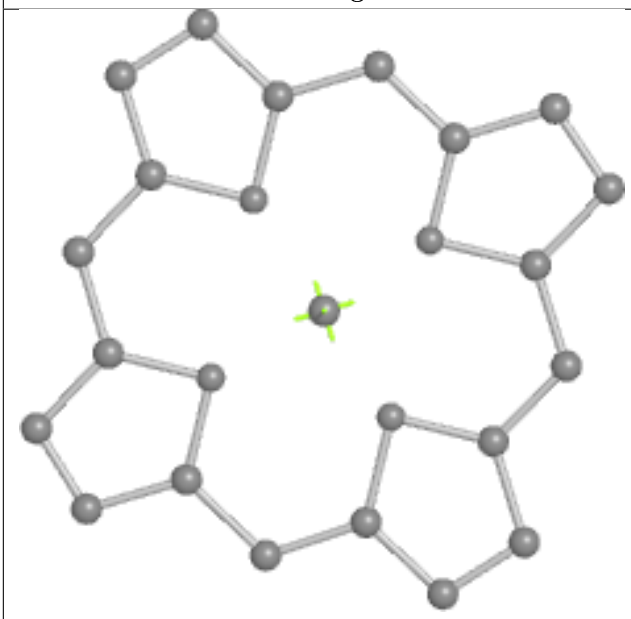
Ligand CLA 4 604



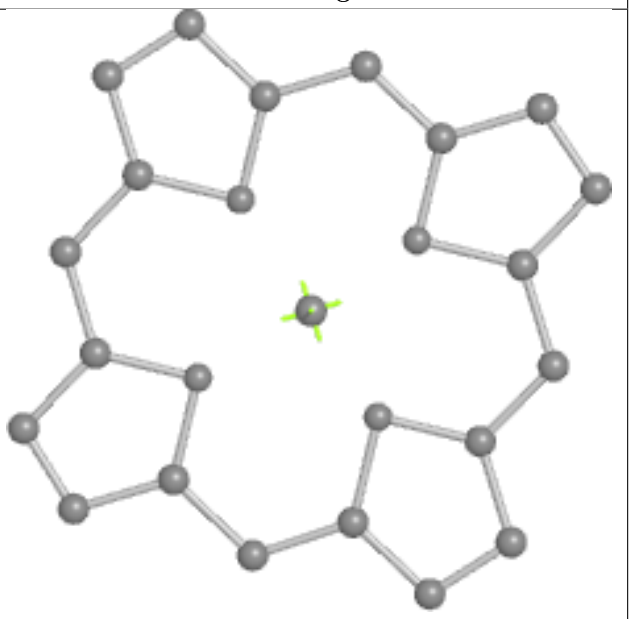
Bond lengths



Bond angles

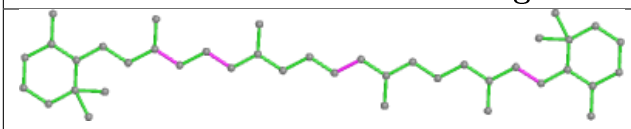


Torsions

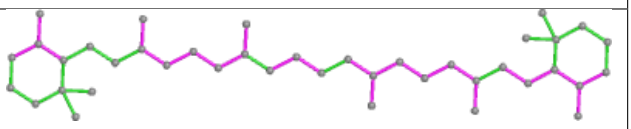


Rings

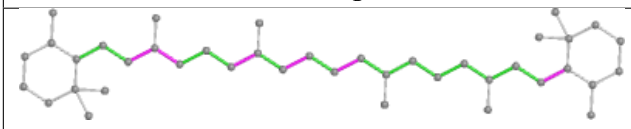
Ligand BCR A 4002



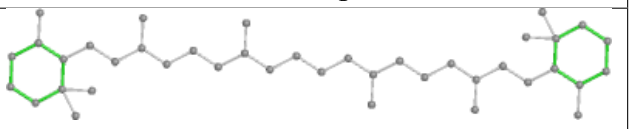
Bond lengths



Bond angles

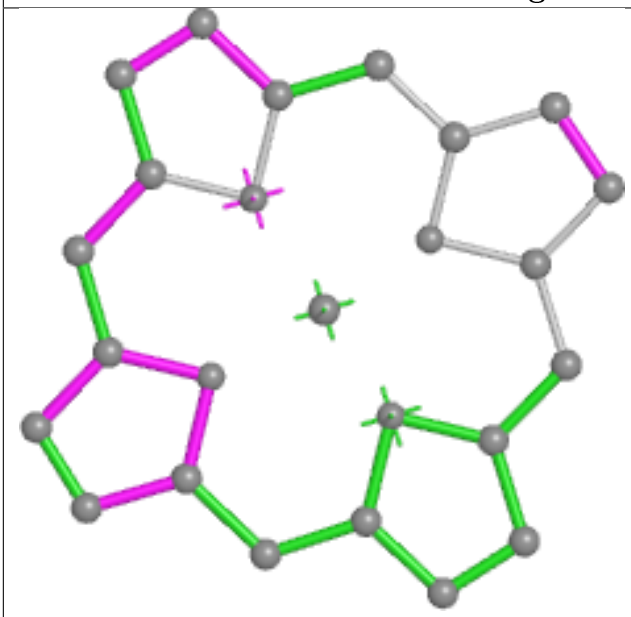


Torsions



Rings

Ligand CLA 2 615



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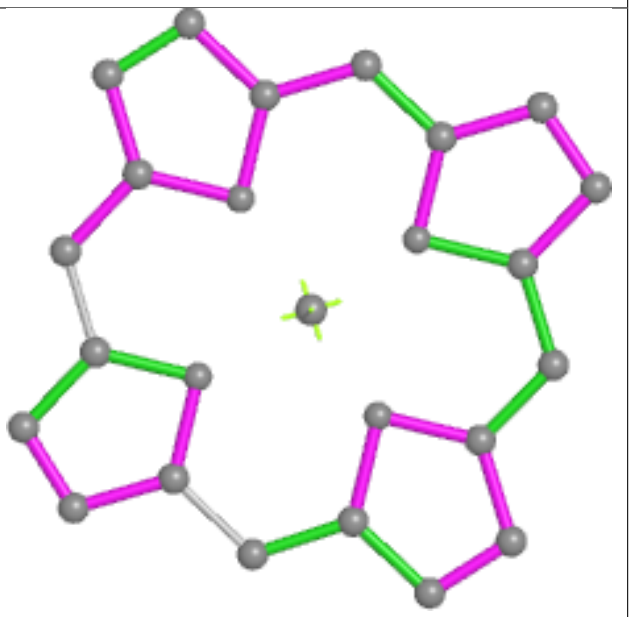
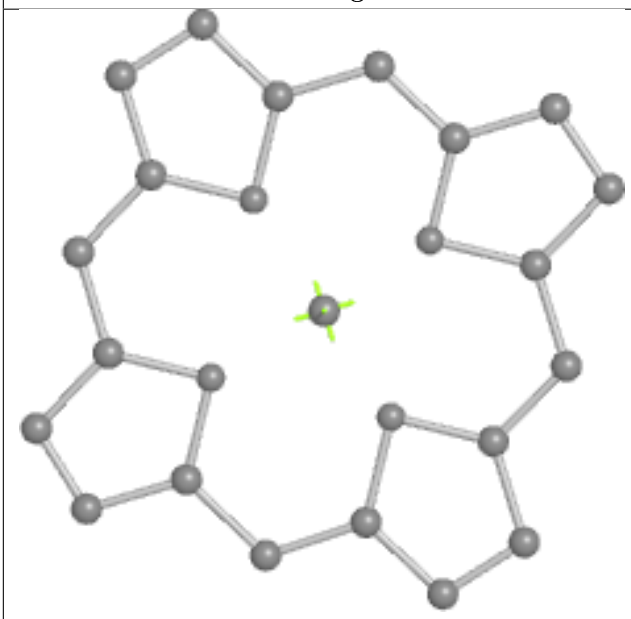


Bond angles



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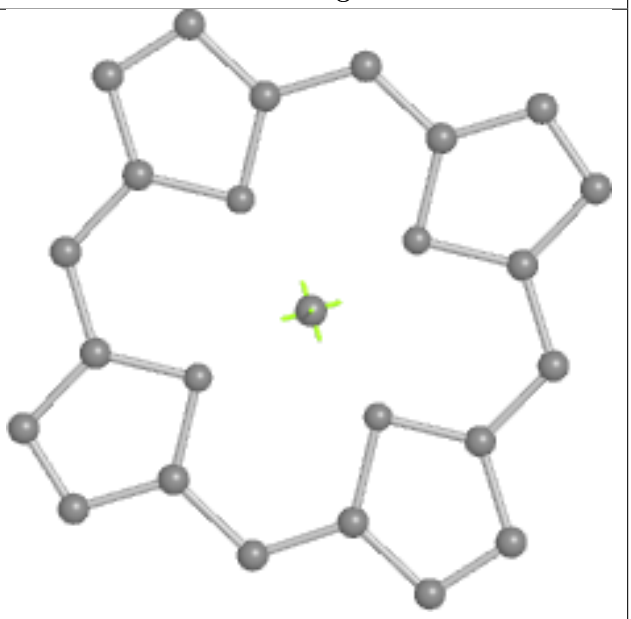
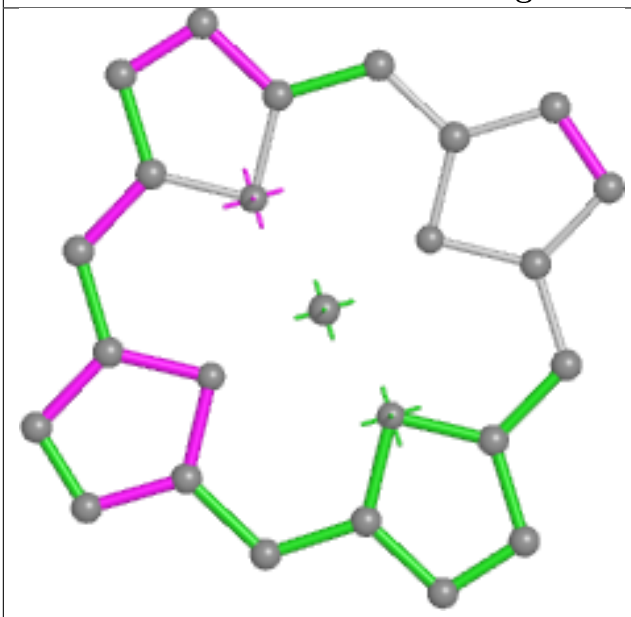


Rings

Ligand CLA B 1204



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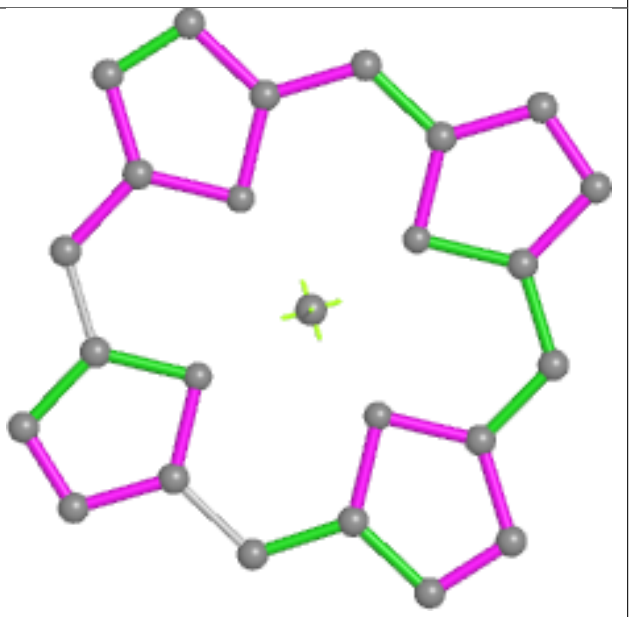
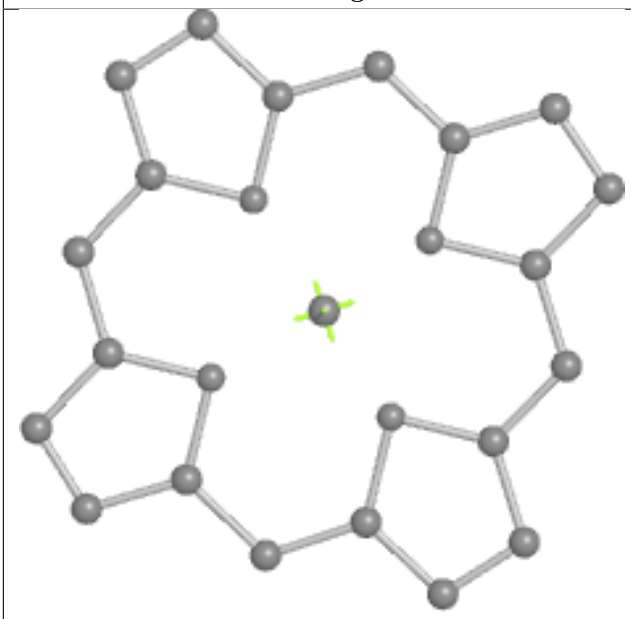
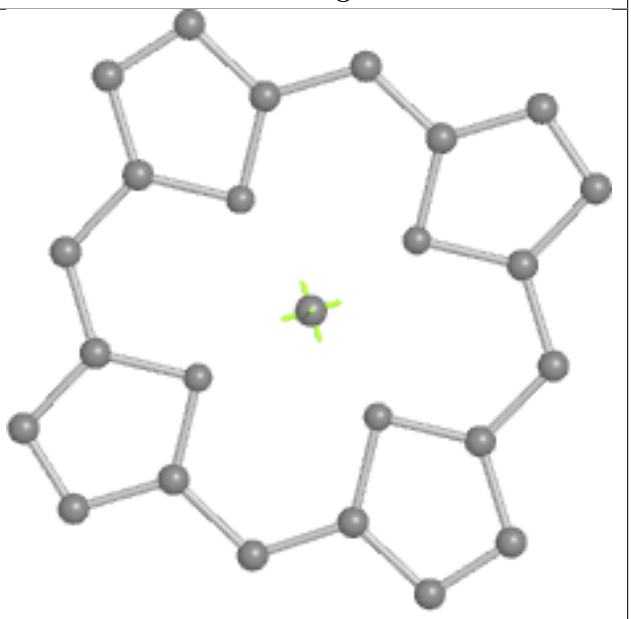


Bond angles

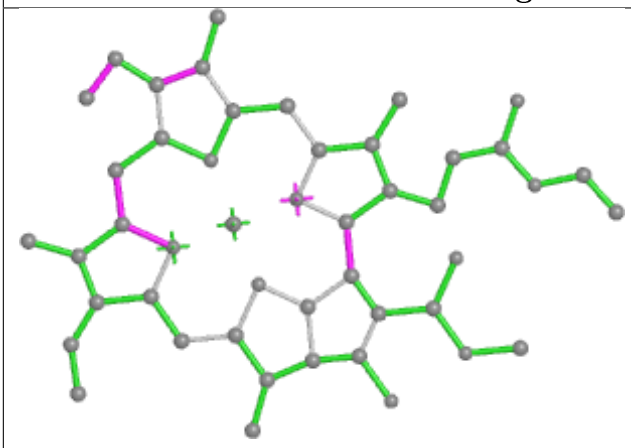


Torsions



Rings

Ligand CLA B 1230



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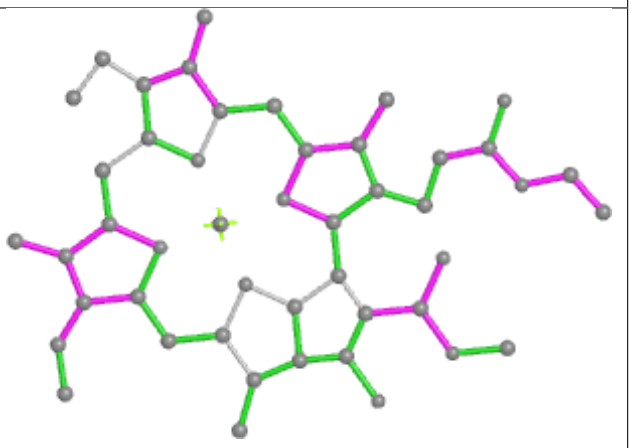
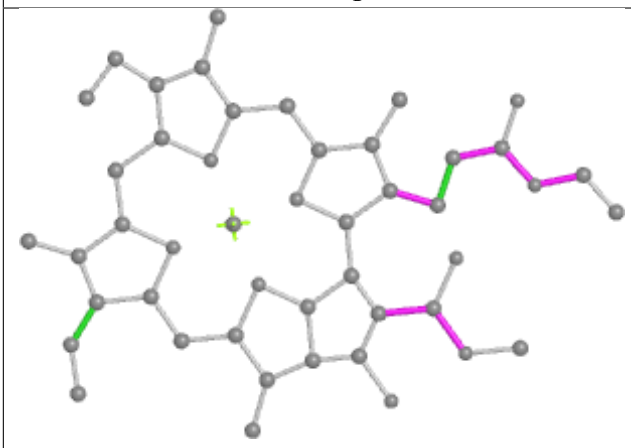
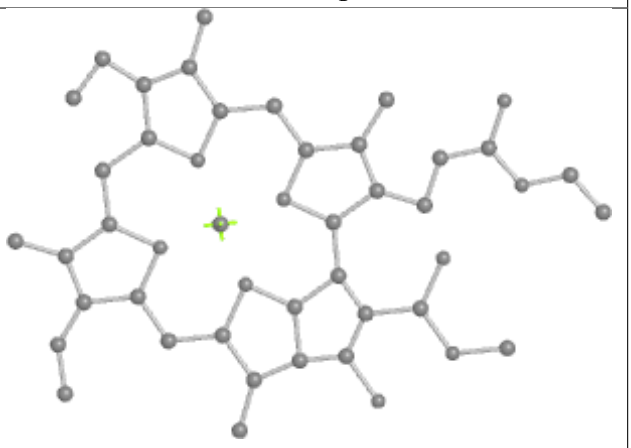


Bond angles

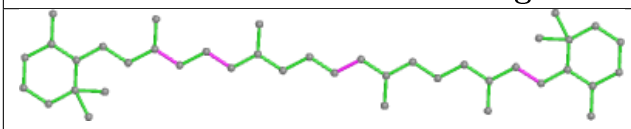


Torsions



Rings

Ligand BCR B 4008



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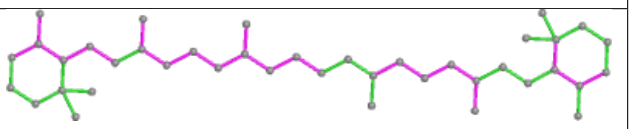
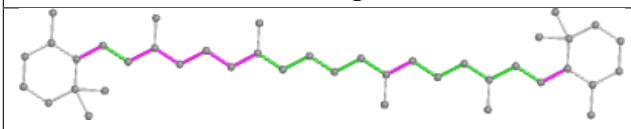


Bond angles



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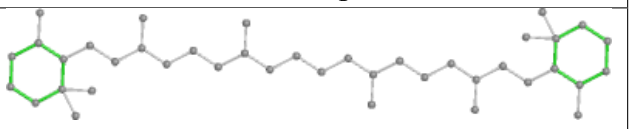
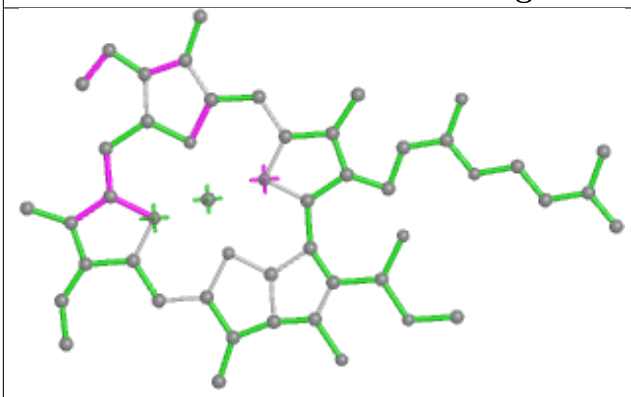


Rings

Ligand CLA B 1225



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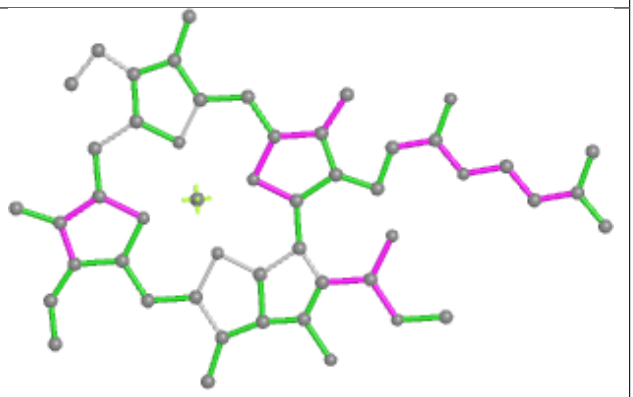
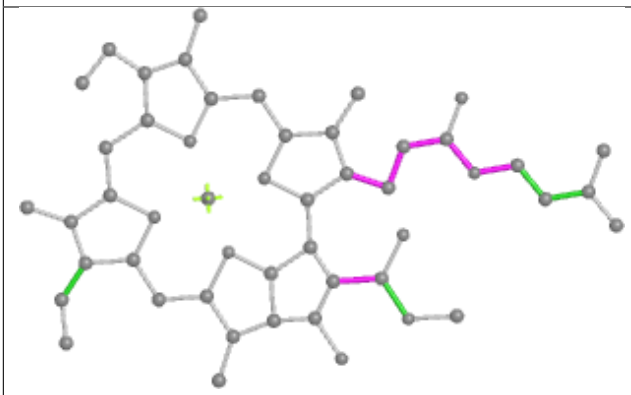


Bond angles



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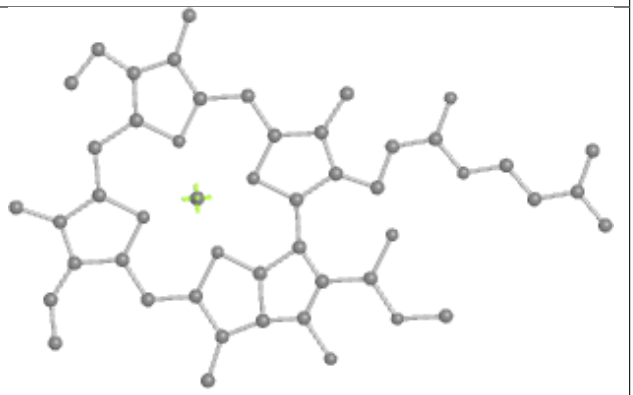
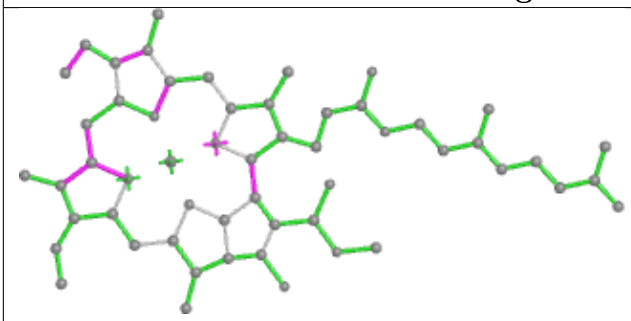


Rings

Ligand CLA B 1224



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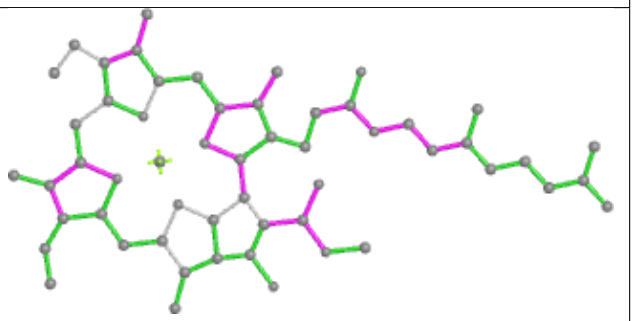
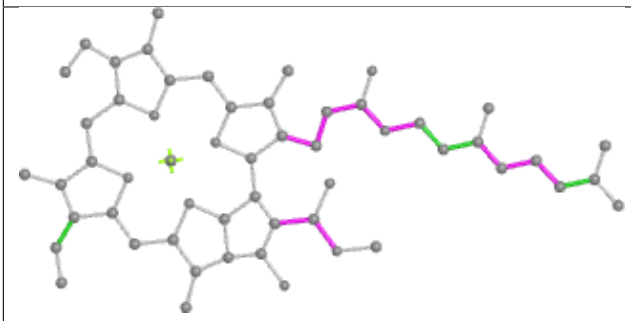


Bond angles



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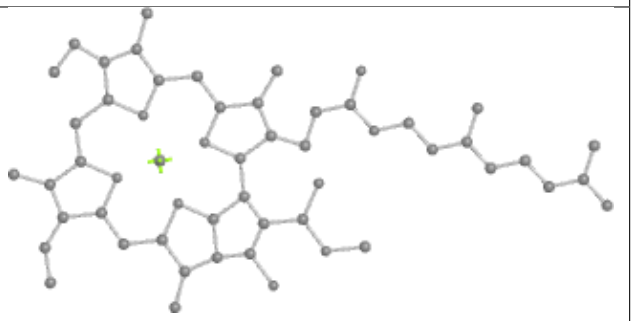
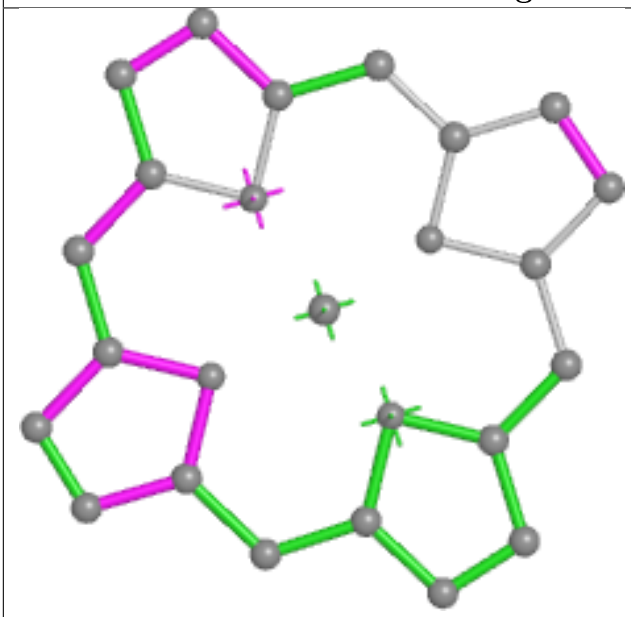


Rings

Ligand CLA A 1138



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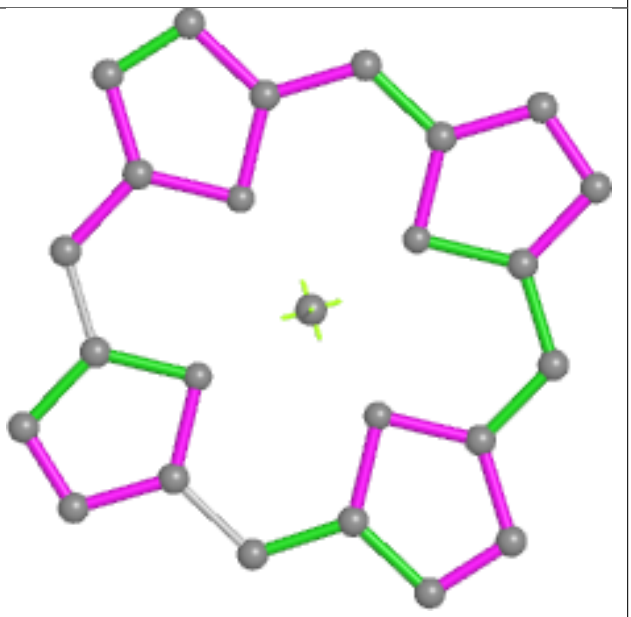
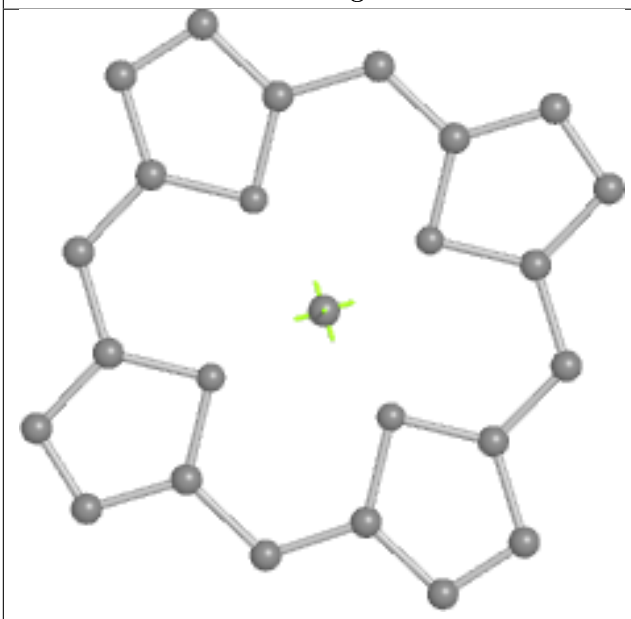


Bond angles



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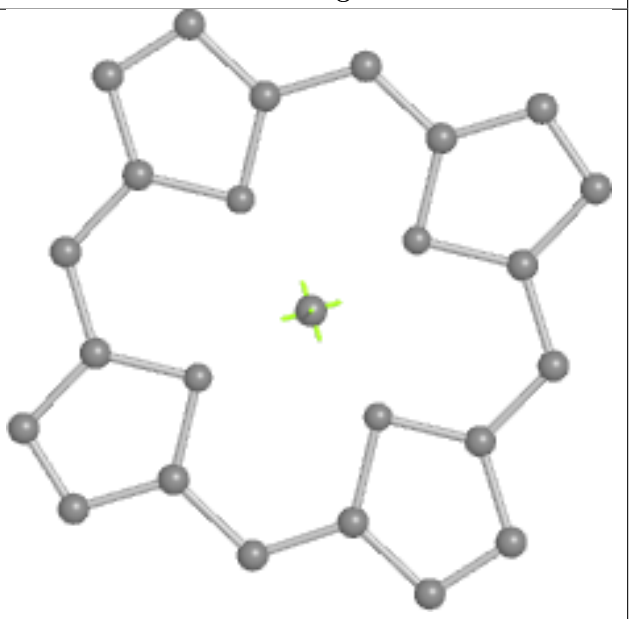
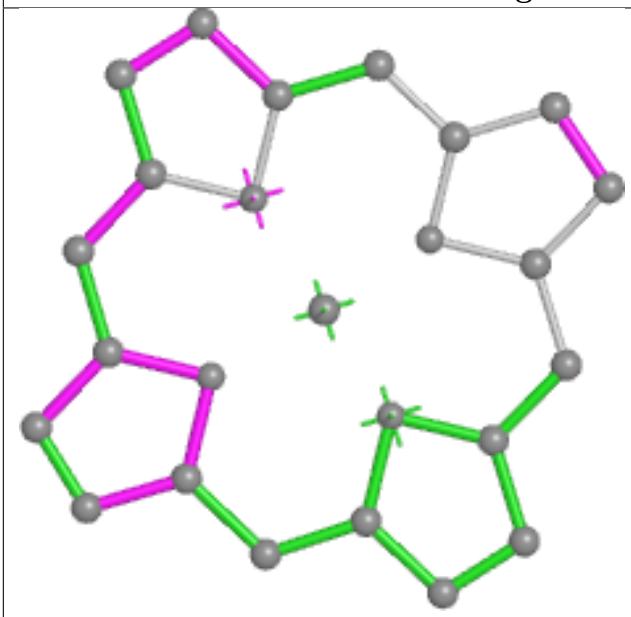


Rings

Ligand CLA B 1215



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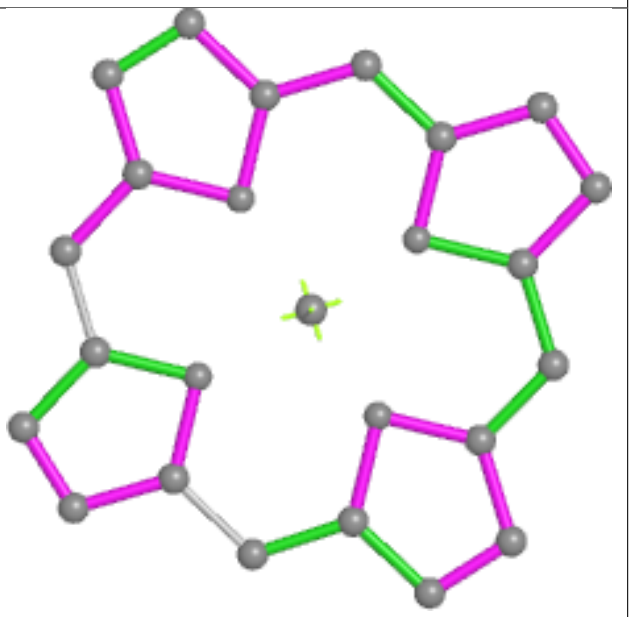
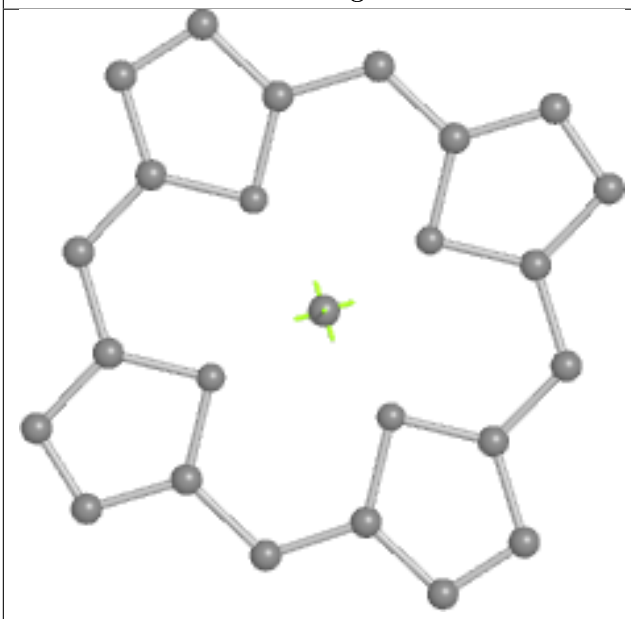
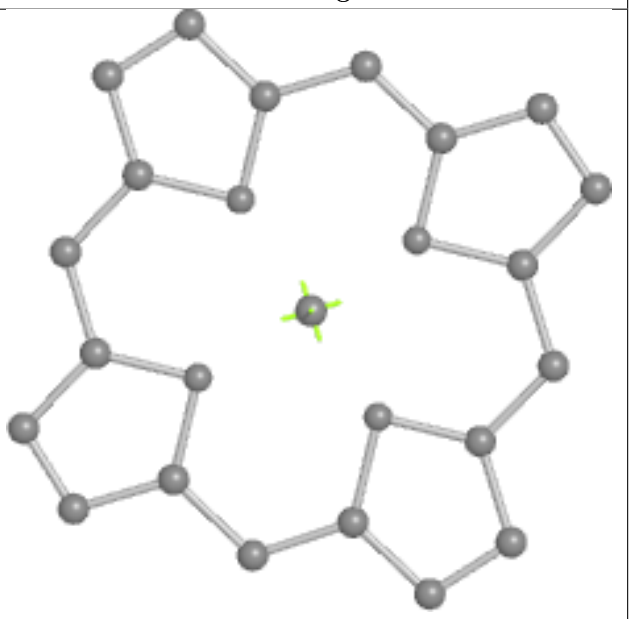


Bond angles

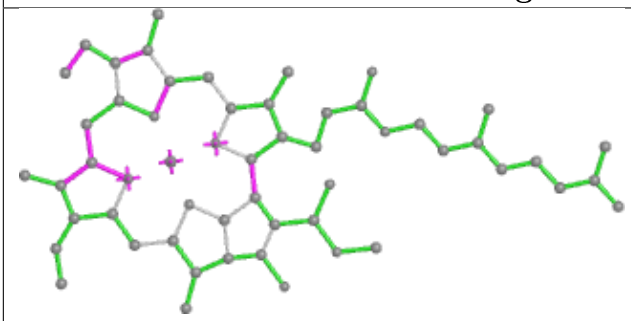


Torsions



Rings

Ligand CLA A 1012



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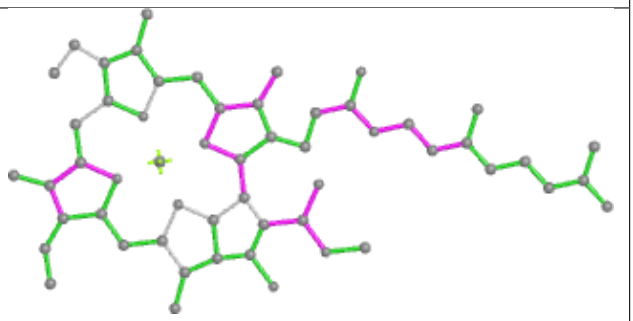
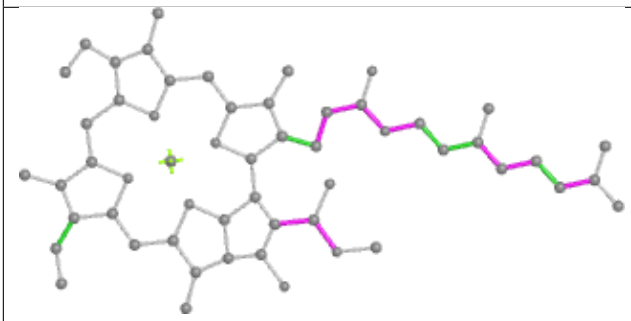


Bond angles



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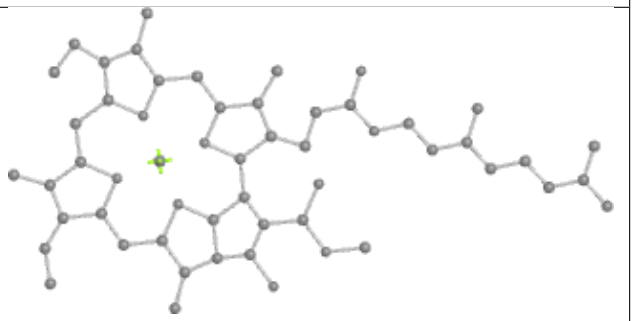
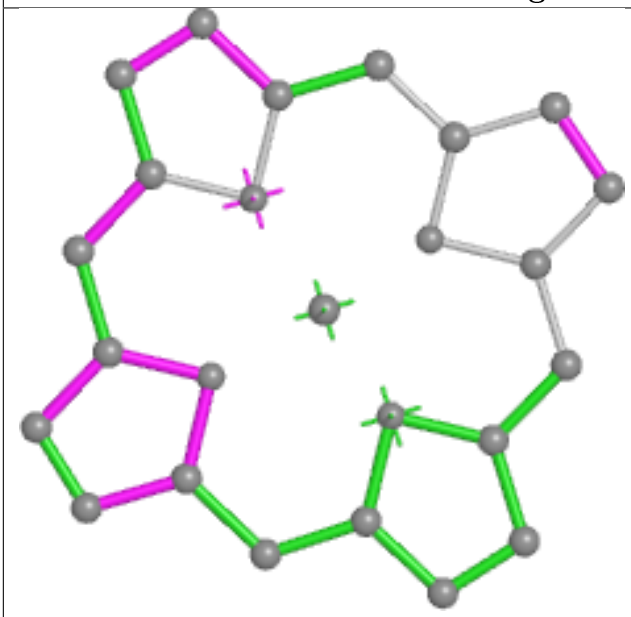


Rings

Ligand CLA 4 603



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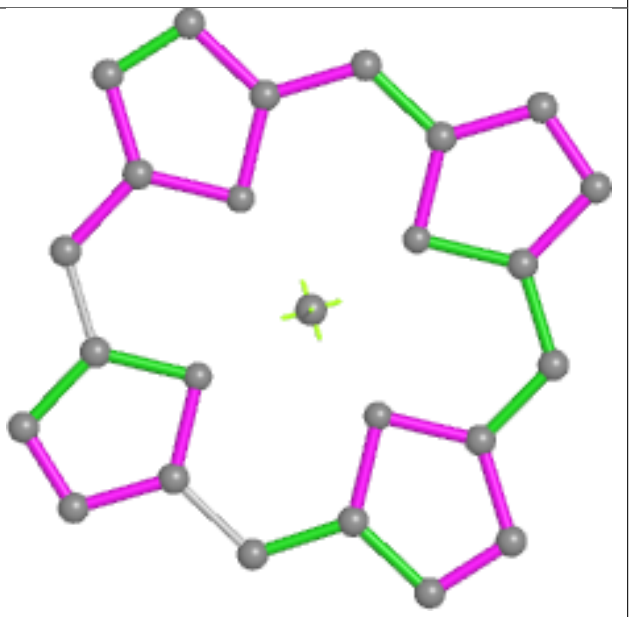
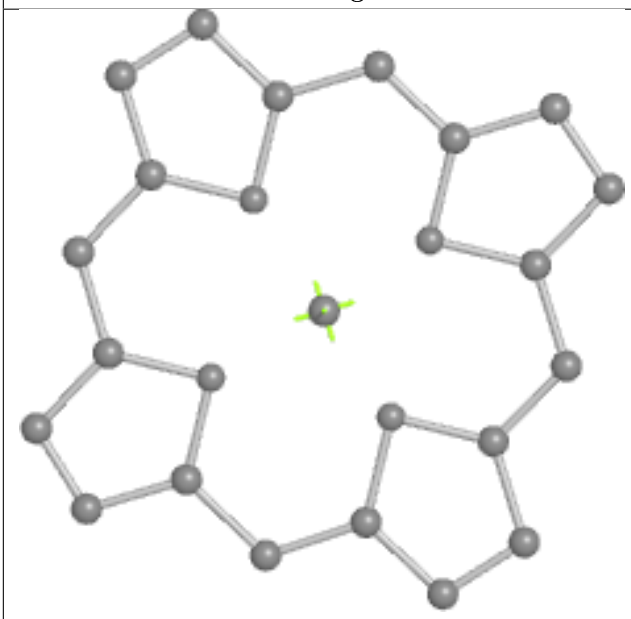


Bond angles



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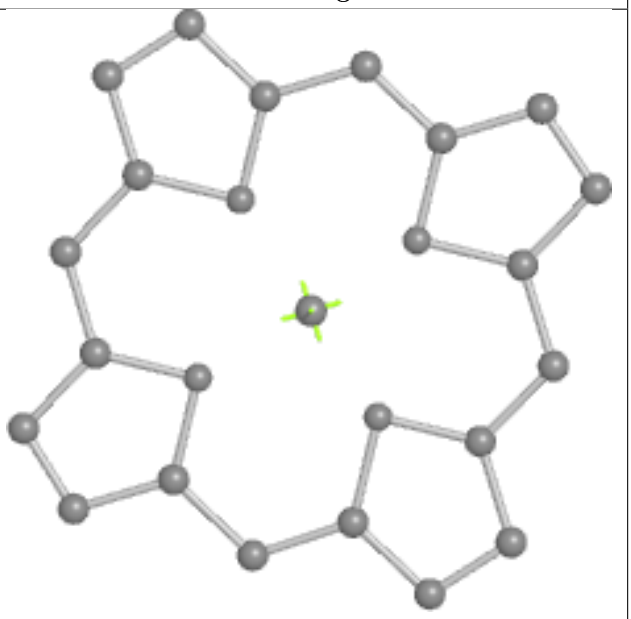
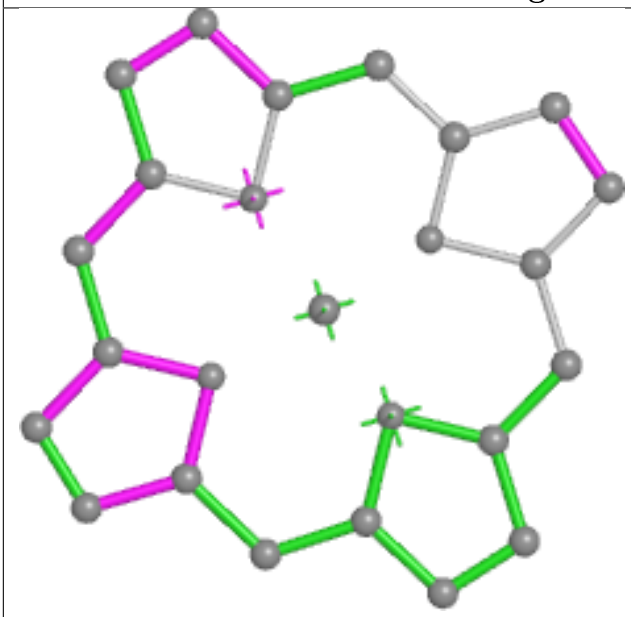


Rings

Ligand CLA 3 612



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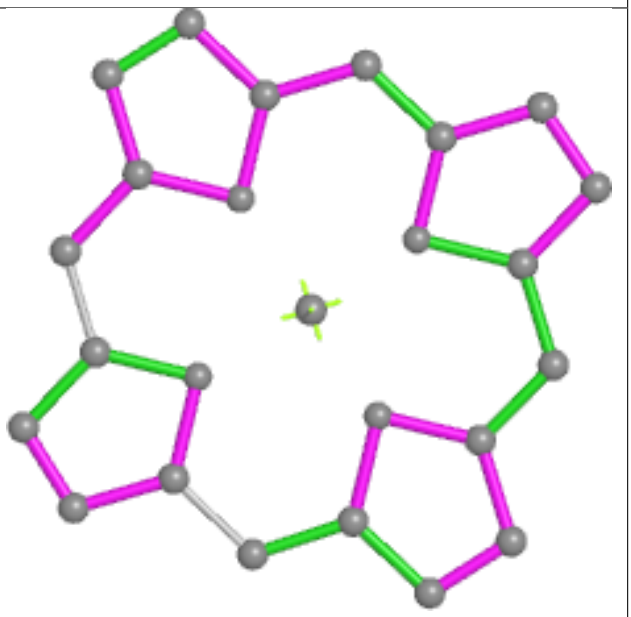
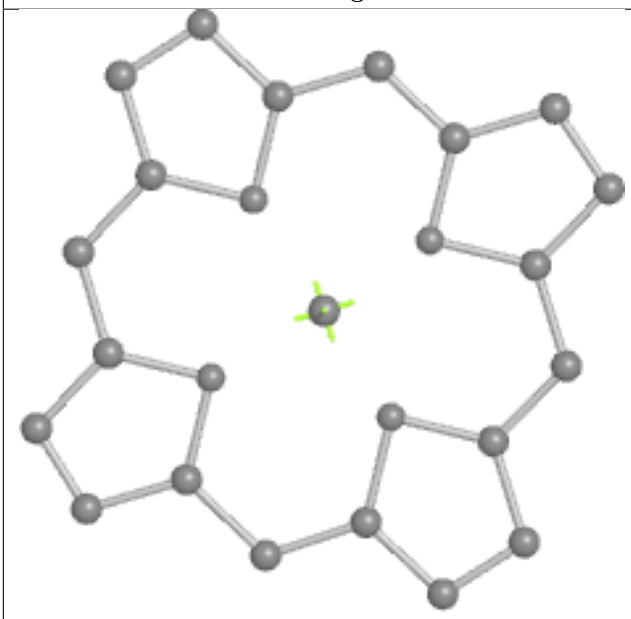
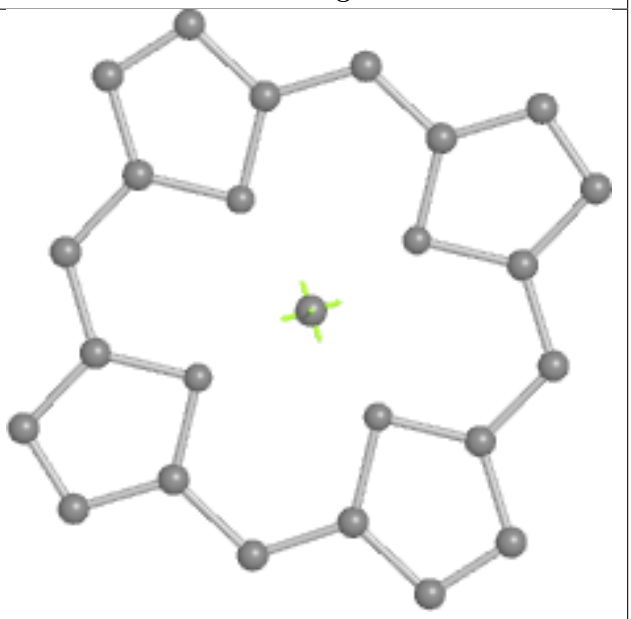


Bond angles

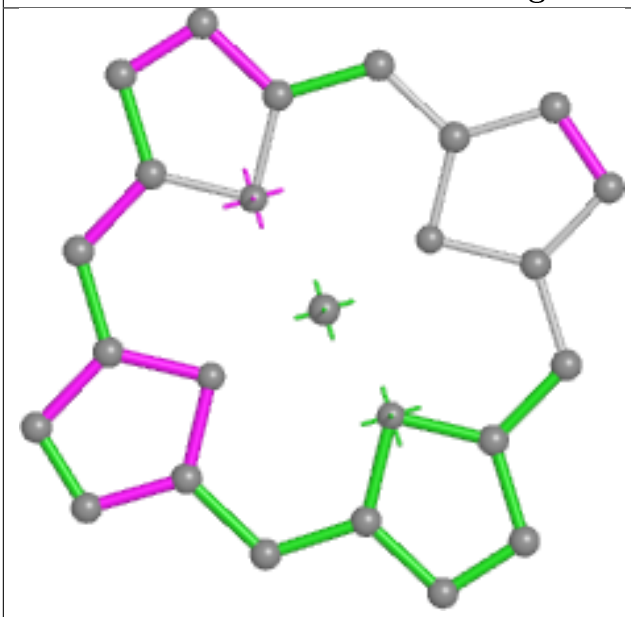


Torsions



Rings

Ligand CLA 3 607



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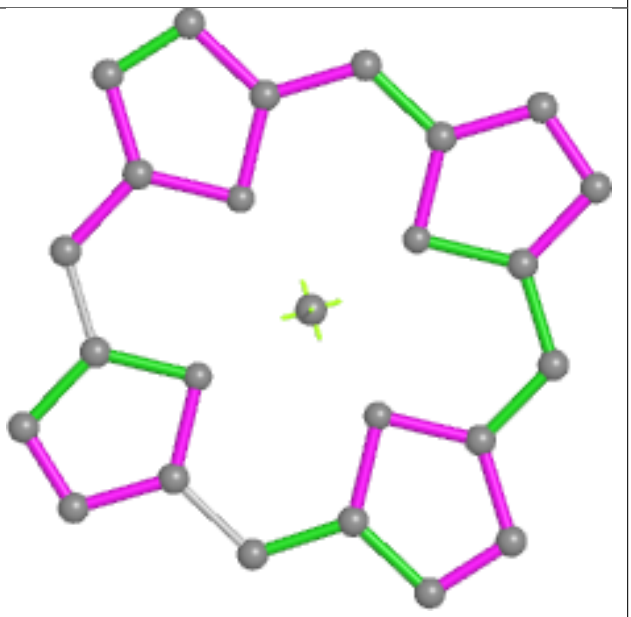
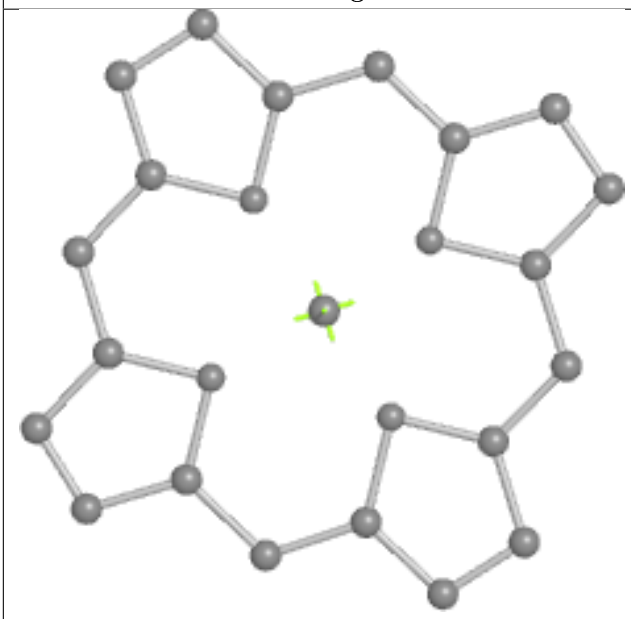
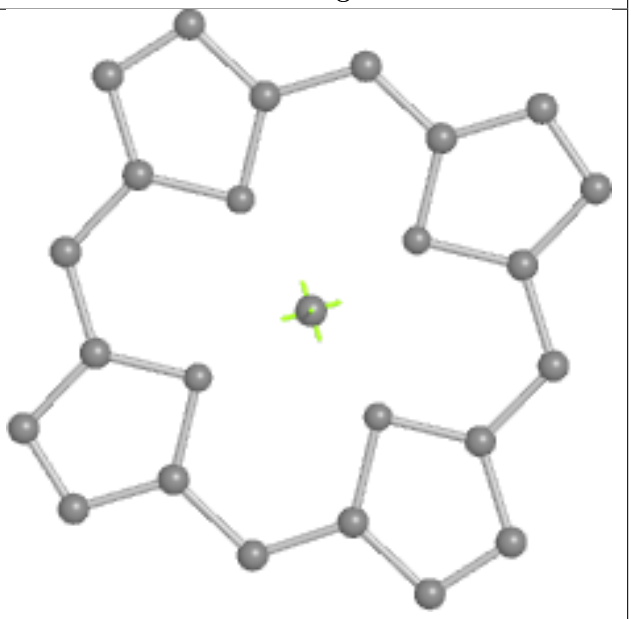


Bond angles

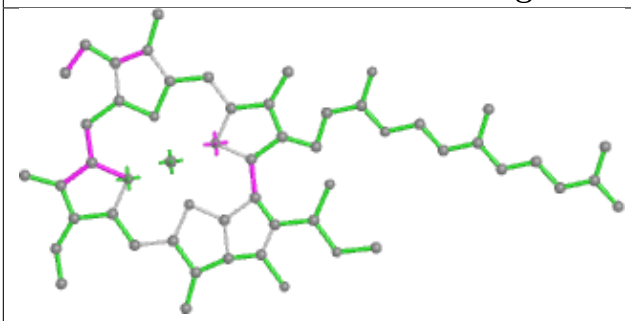


Torsions

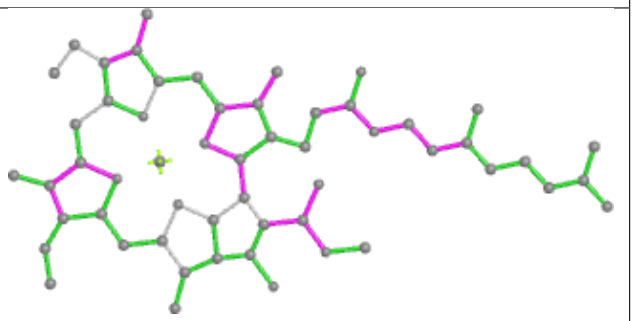


Rings

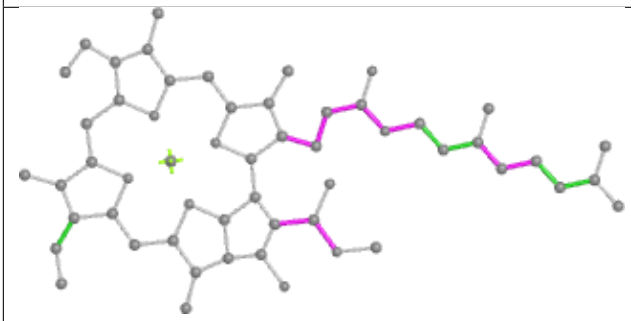
Ligand CLA A 1013



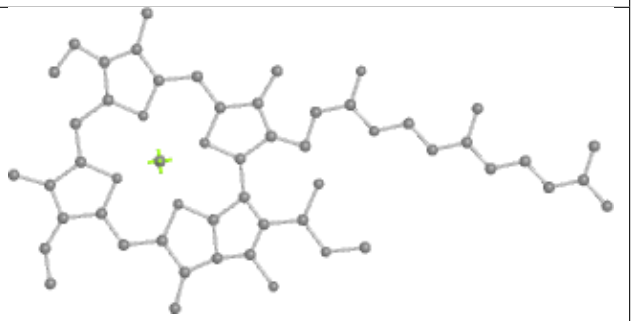
Bond lengths



Bond angles

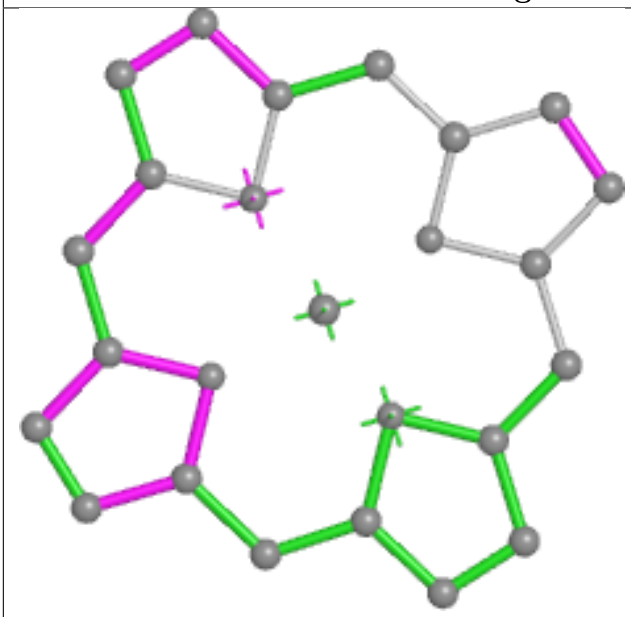


Torsions



Rings

Ligand CLA K 1402



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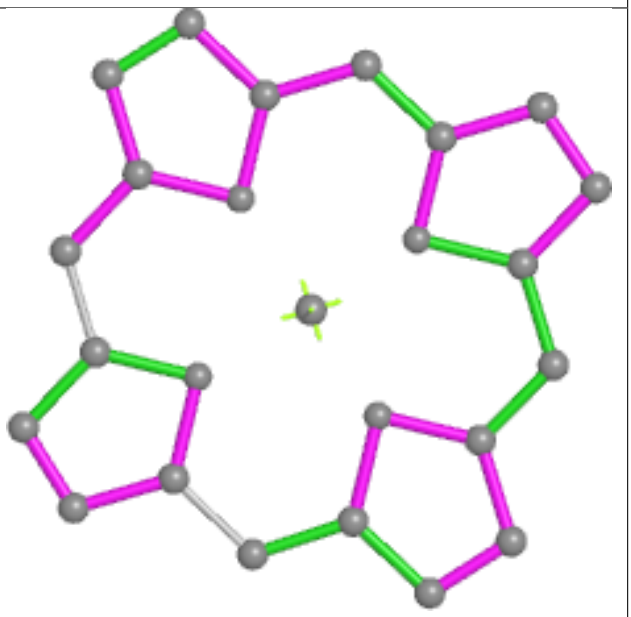
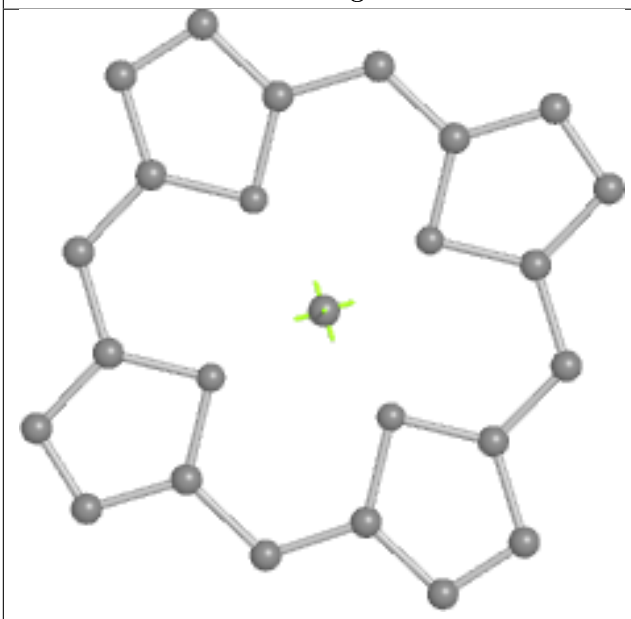
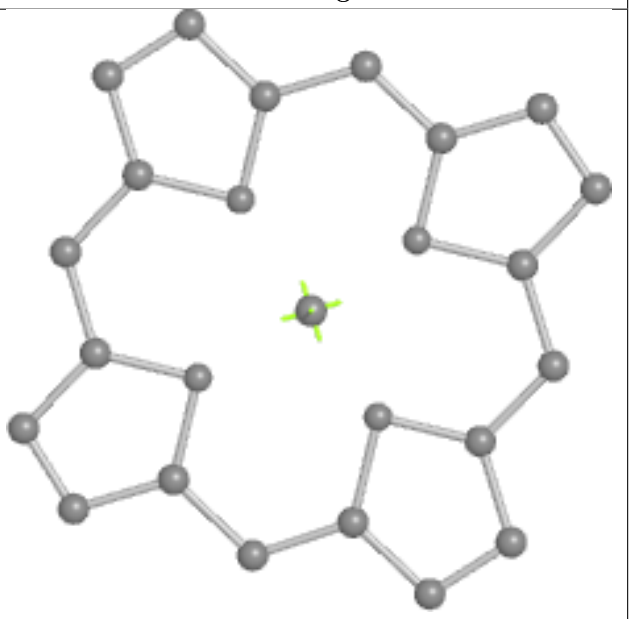


Bond angles

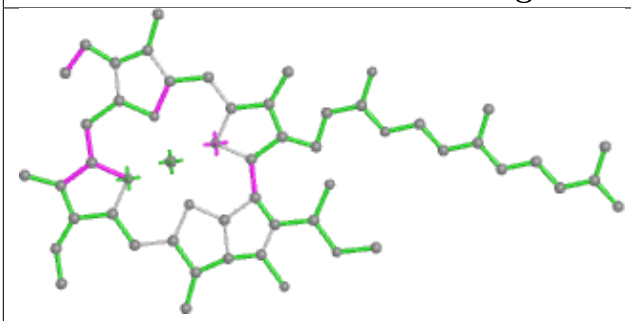


Torsions



Rings

Ligand CLA A 1106



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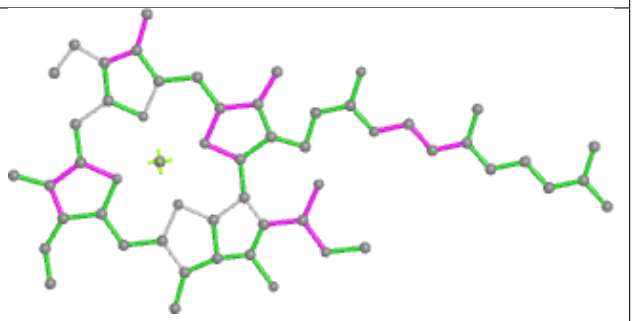
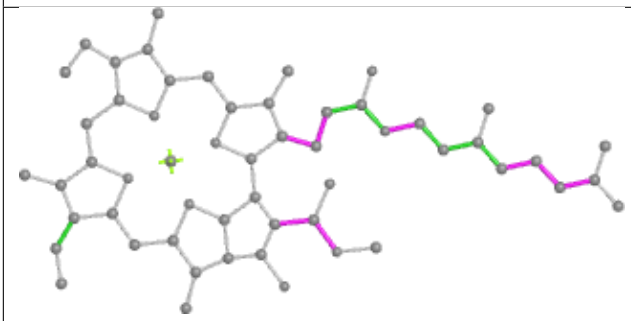


Bond angles



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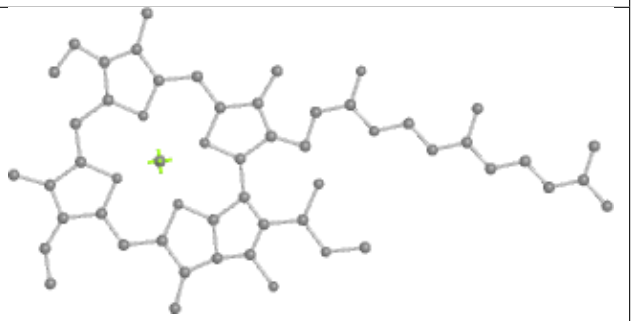
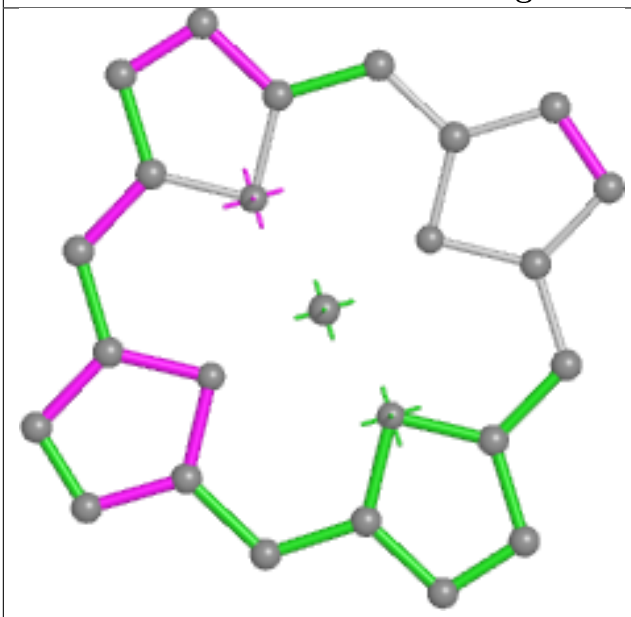


Rings

Ligand CLA O 1602



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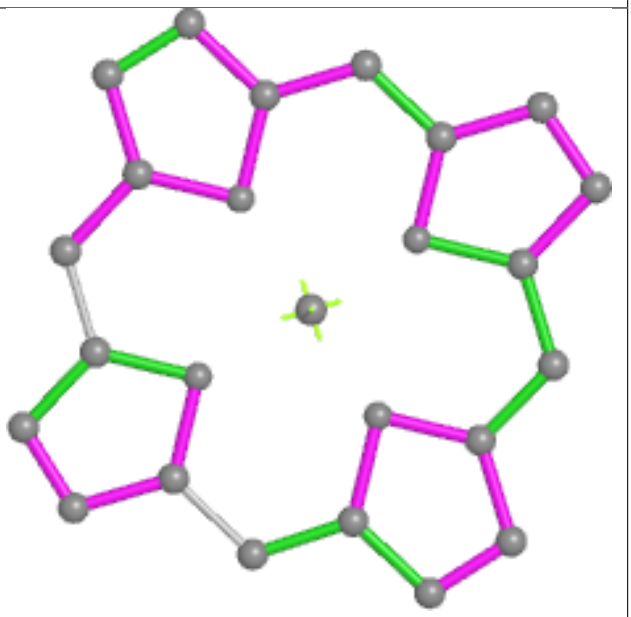
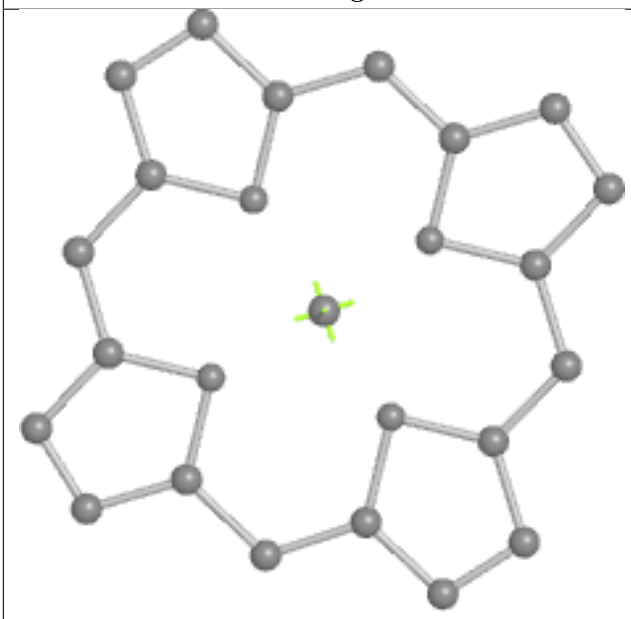


Bond angles



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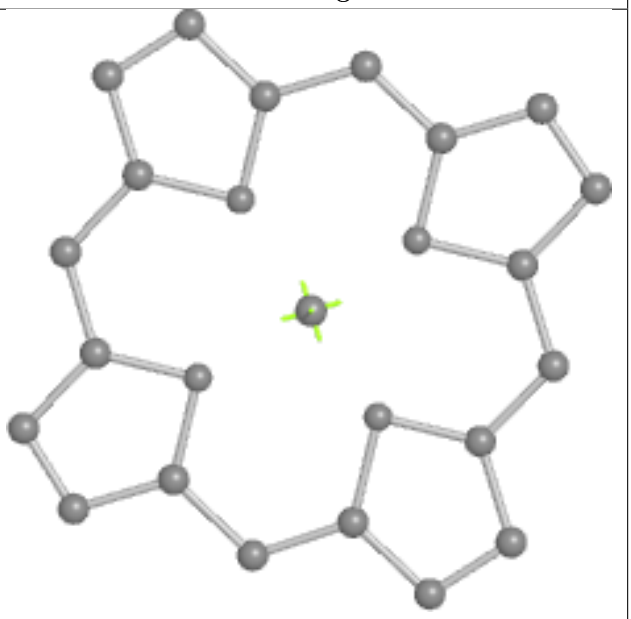
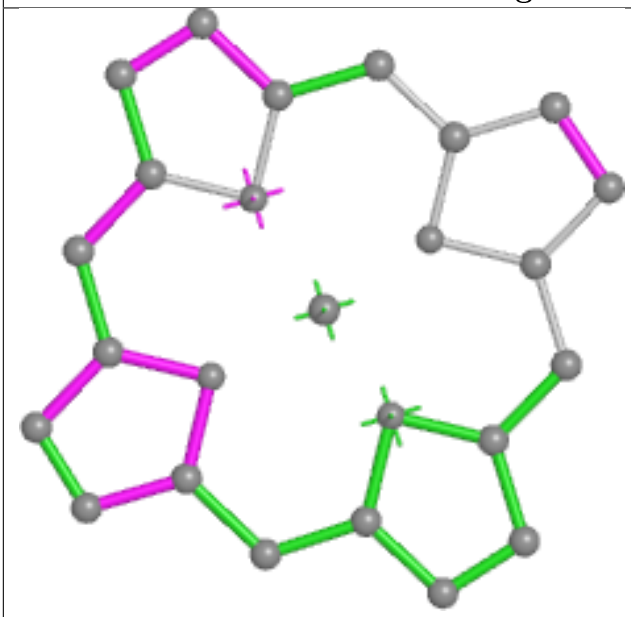


Rings

Ligand CLA B 1212



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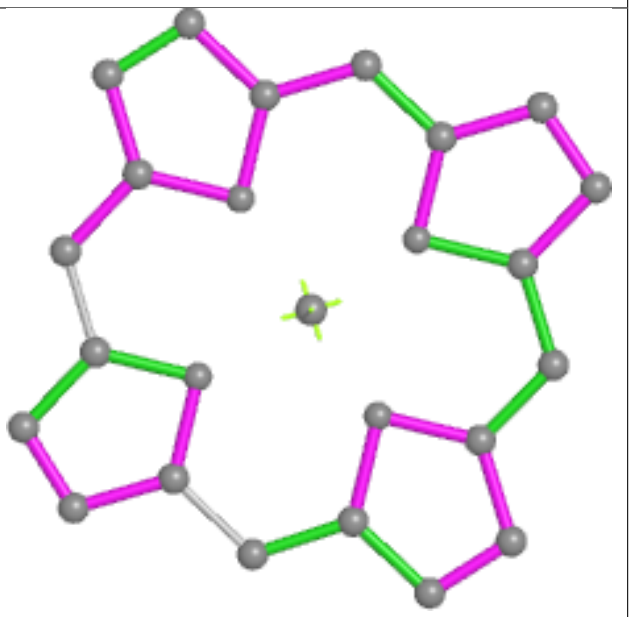

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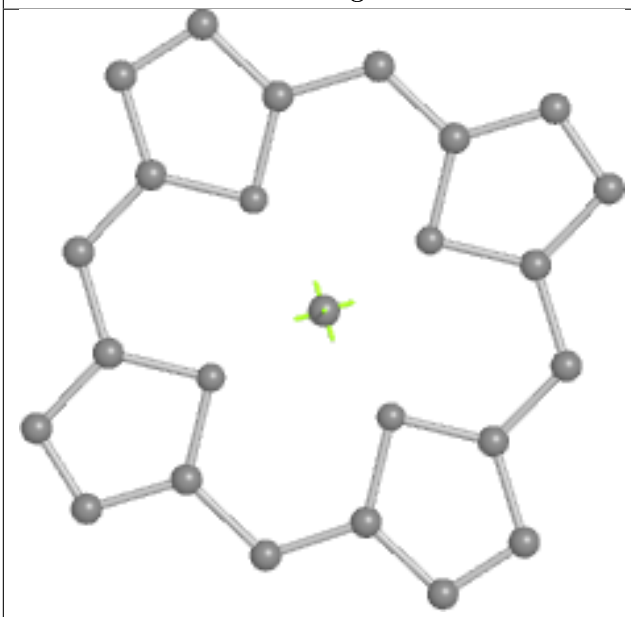

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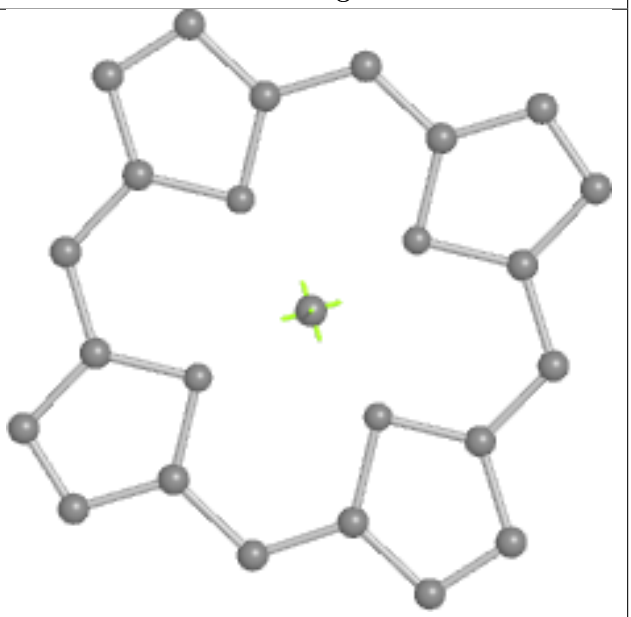
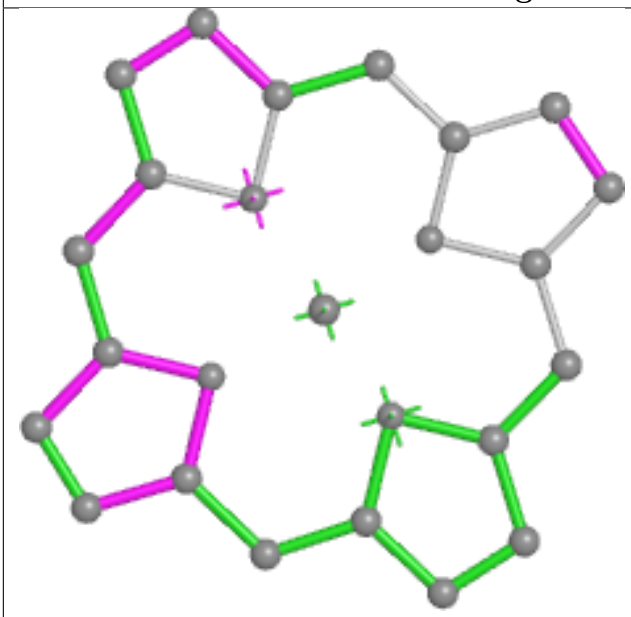


Rings

Ligand CLA A 1118



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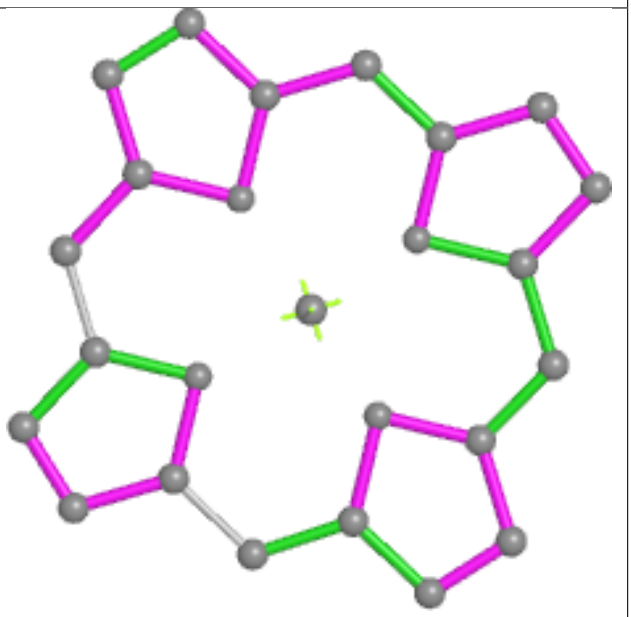
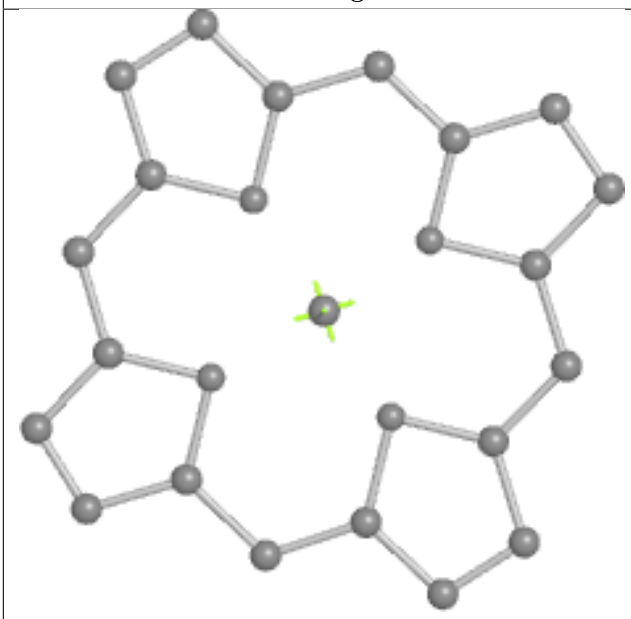


Bond angles



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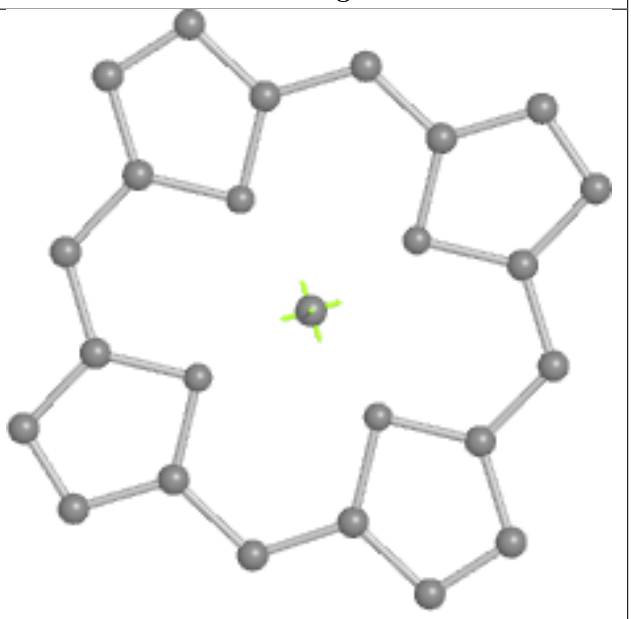
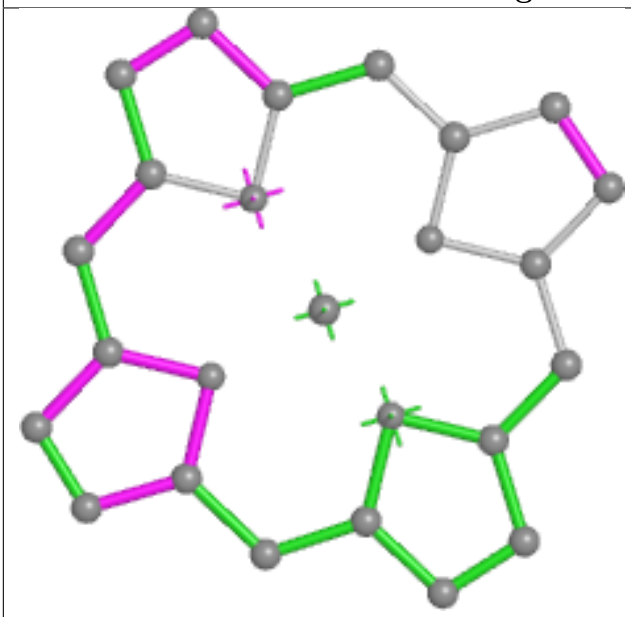


Rings

Ligand CLA A 1139



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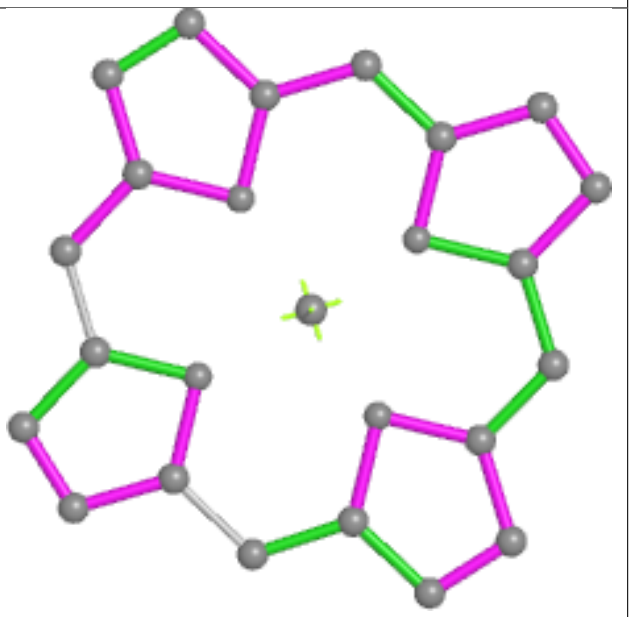
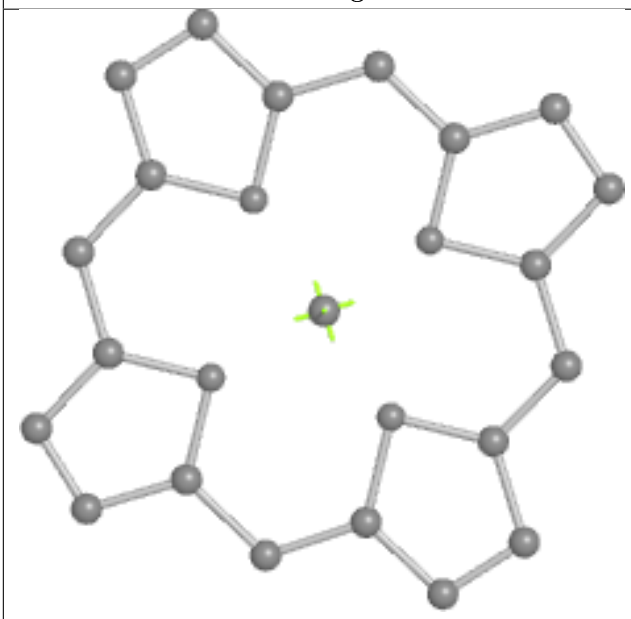


Bond angles



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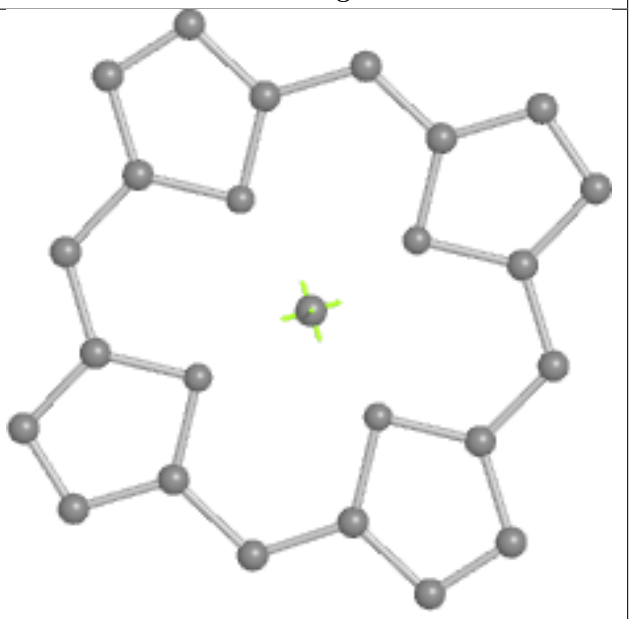
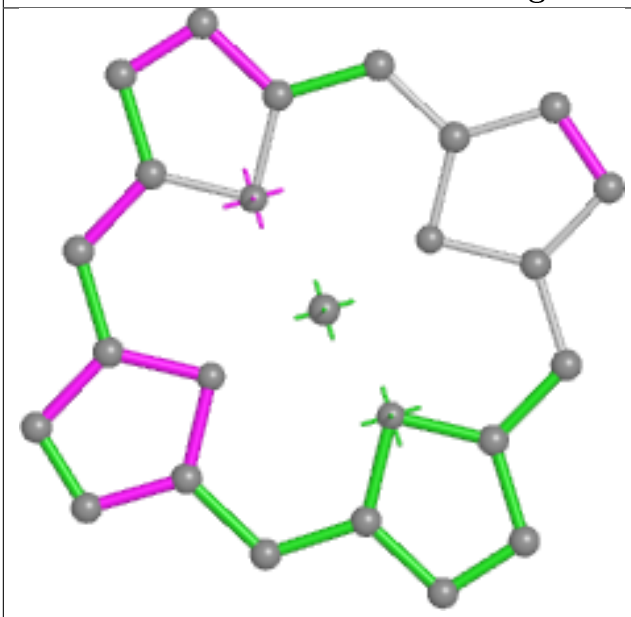


Rings

Ligand CLA 4 616



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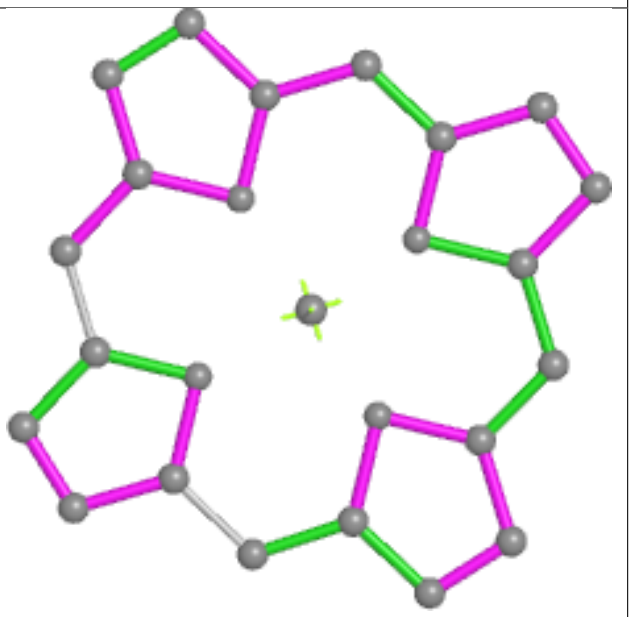
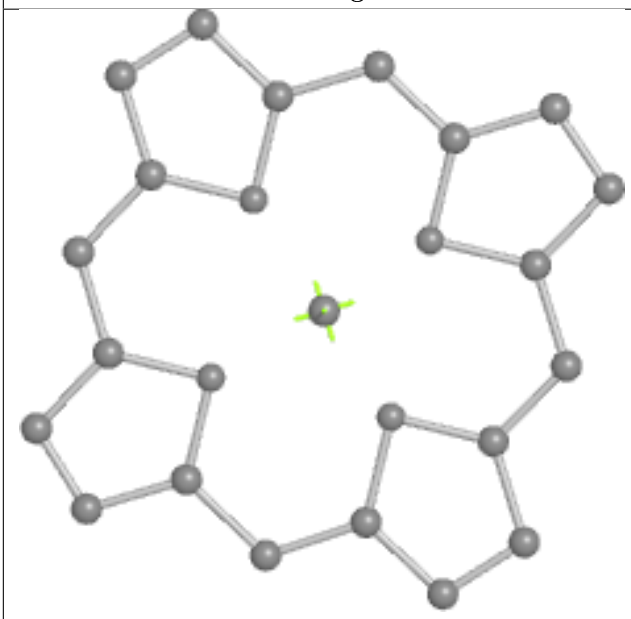


Bond angles



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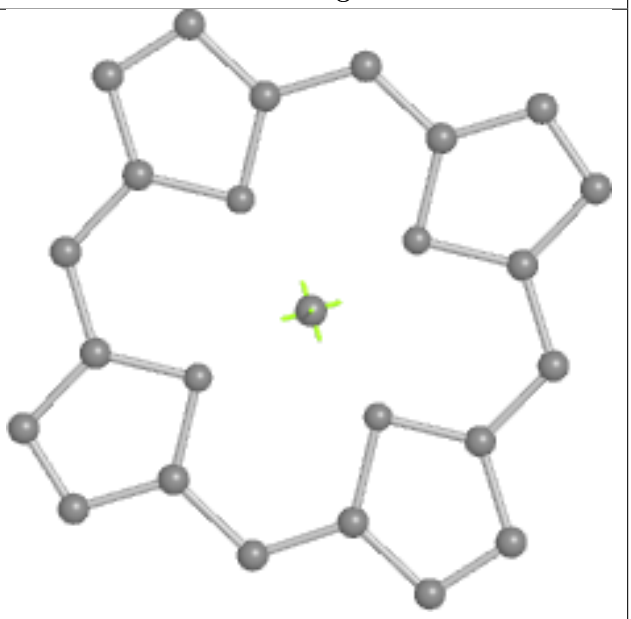
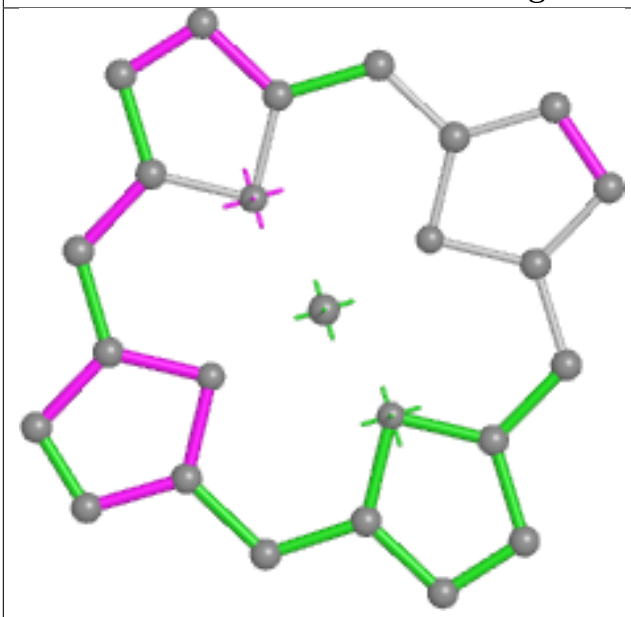


Rings

Ligand CLA 2 601



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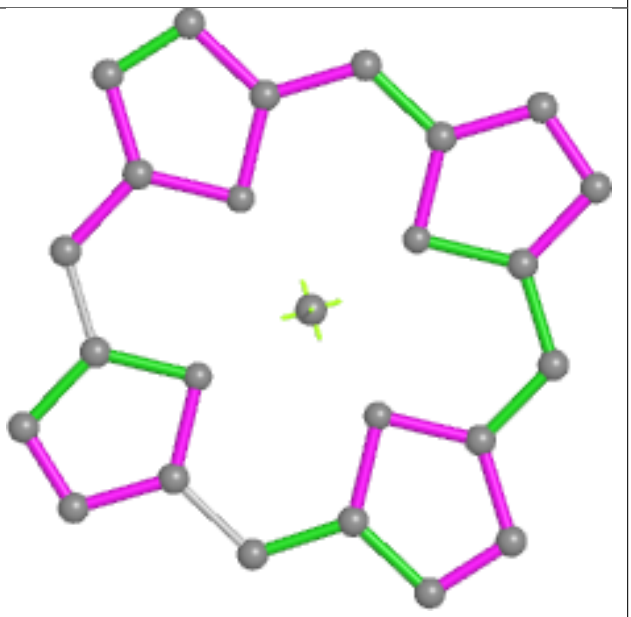
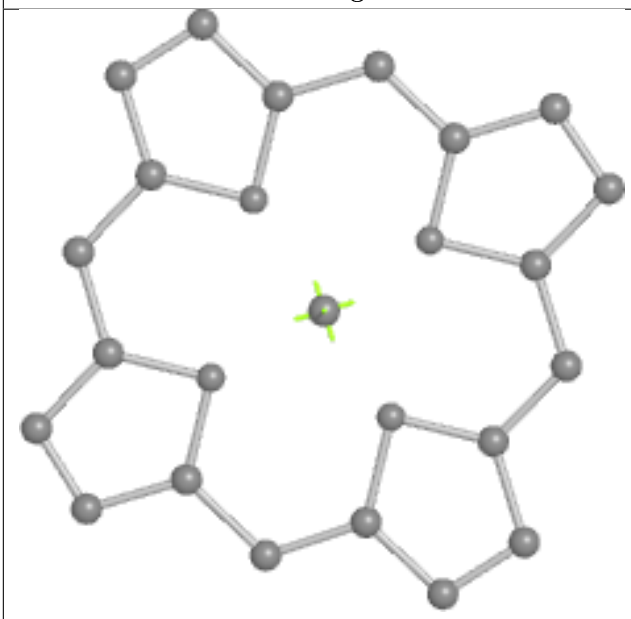


Bond angles



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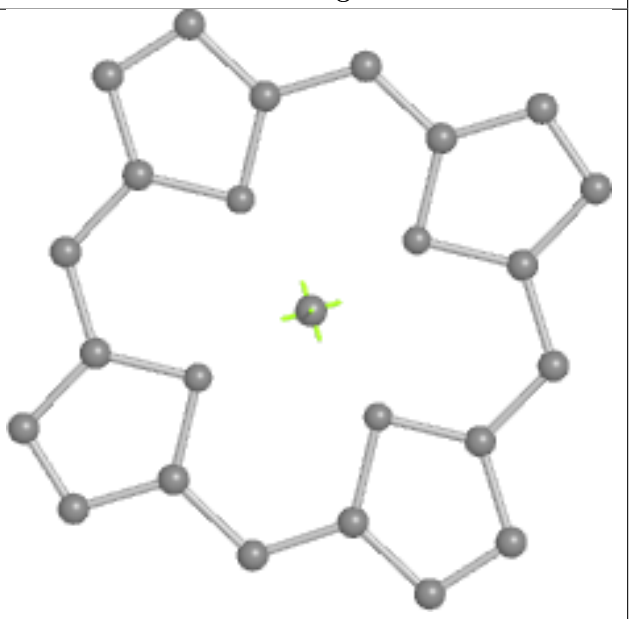
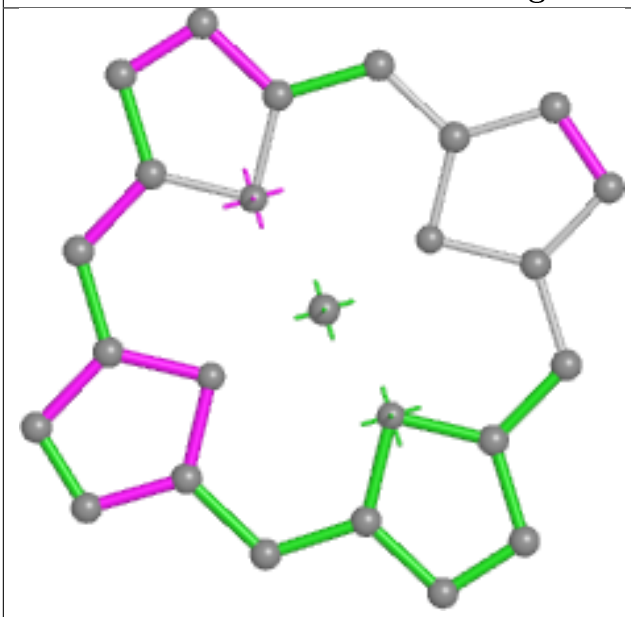


Rings

Ligand CLA 2 608



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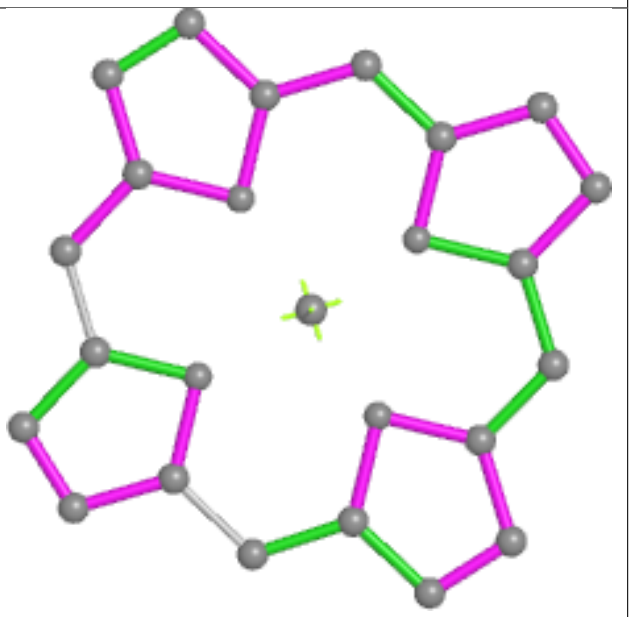
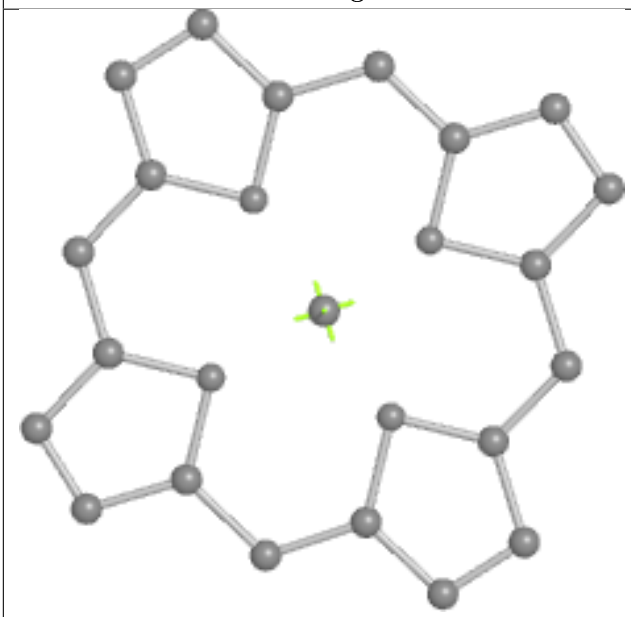


Bond angles



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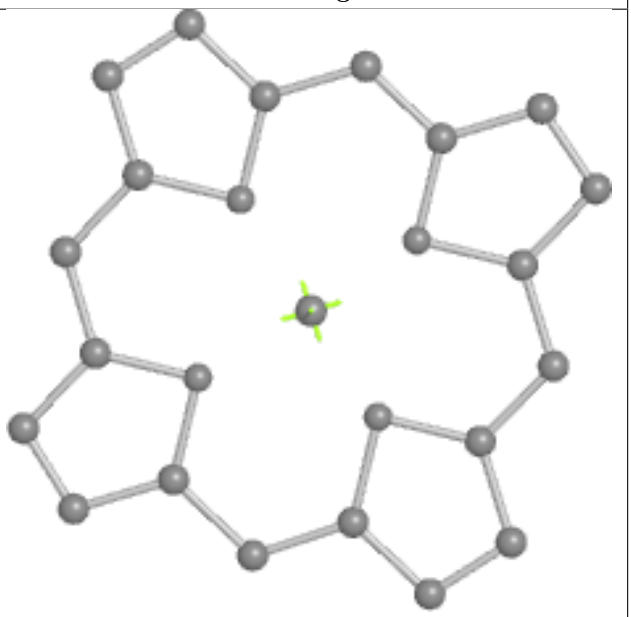
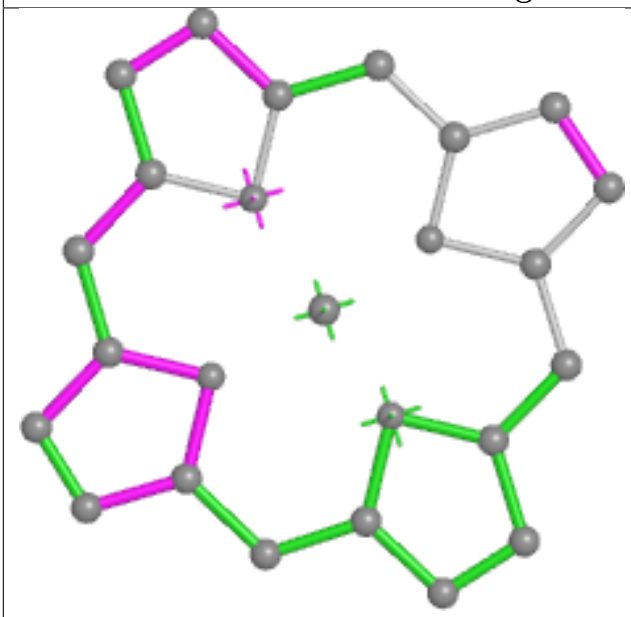


Rings

Ligand CLA B 1220



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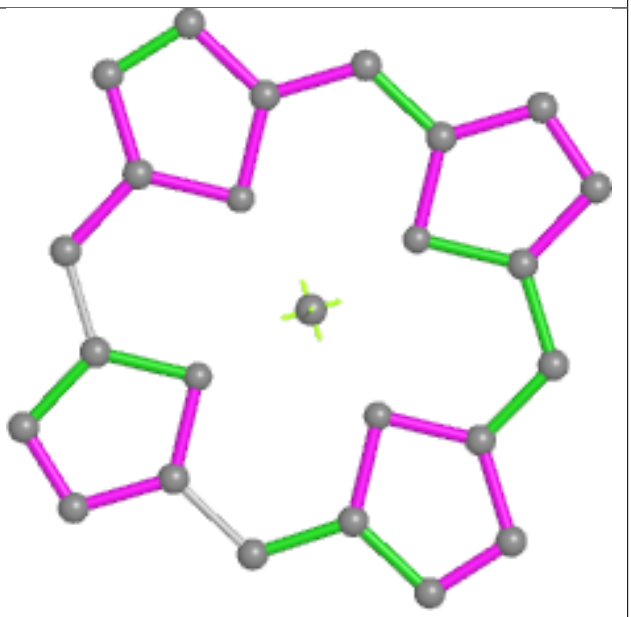
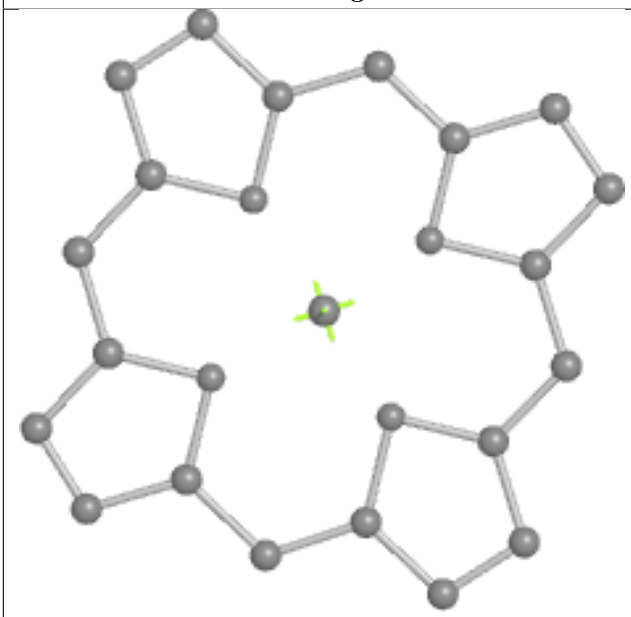


Bond angles



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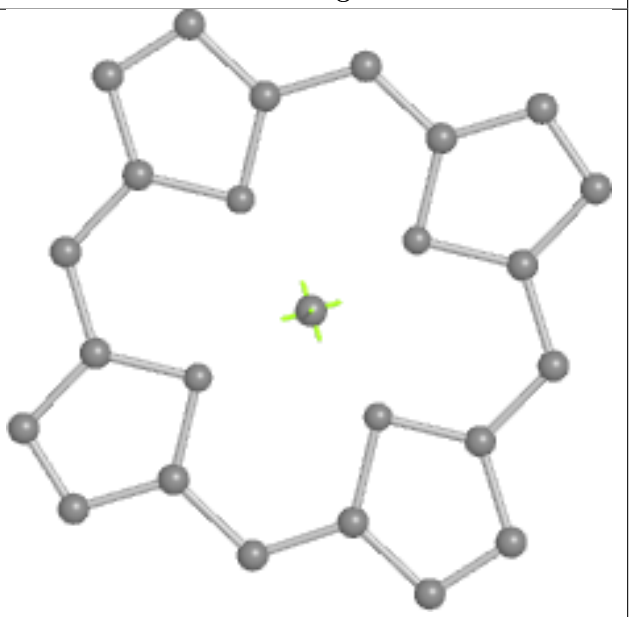
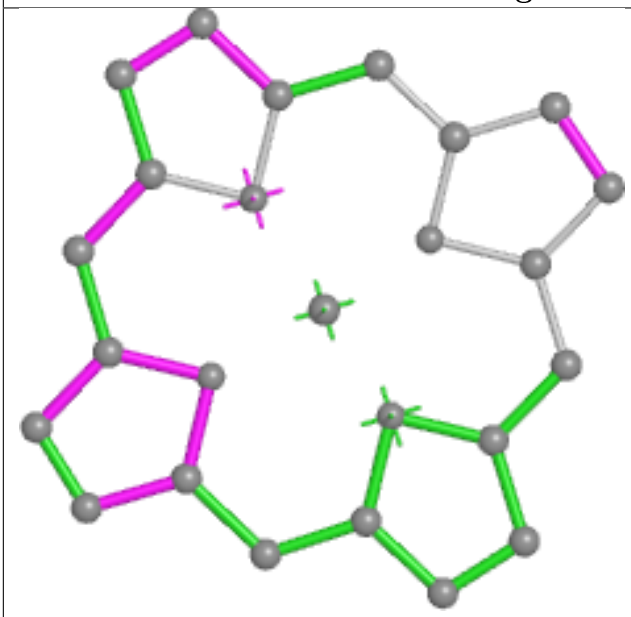


Rings

Ligand CLA A 1110



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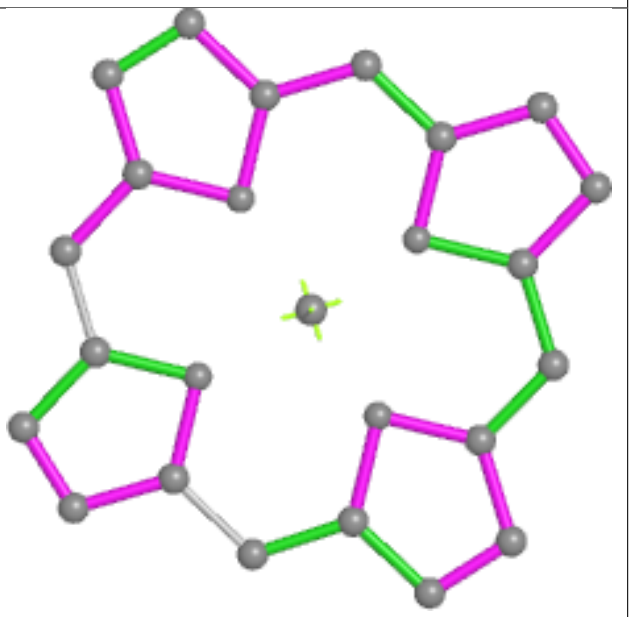
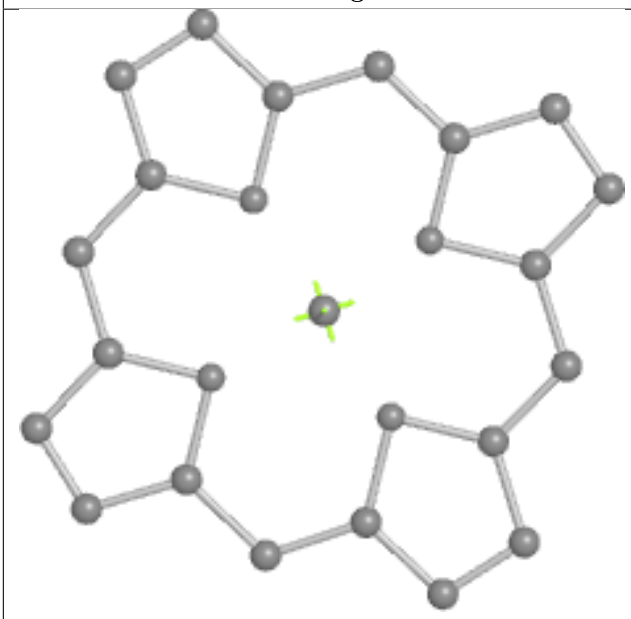


Bond angles



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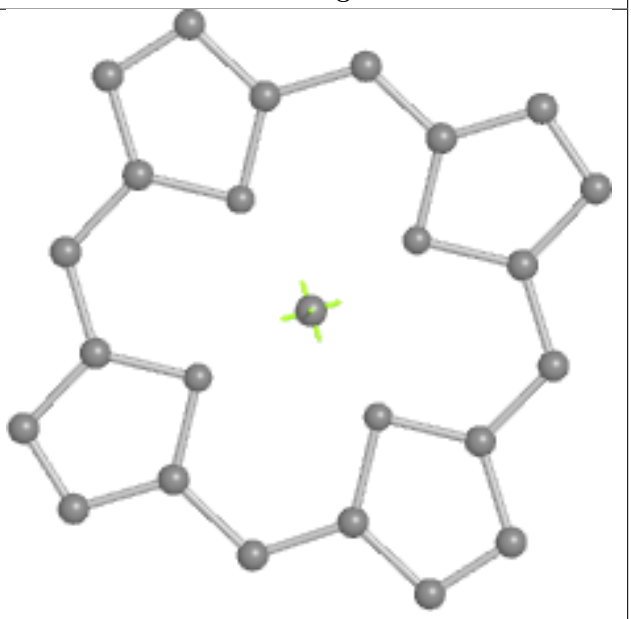
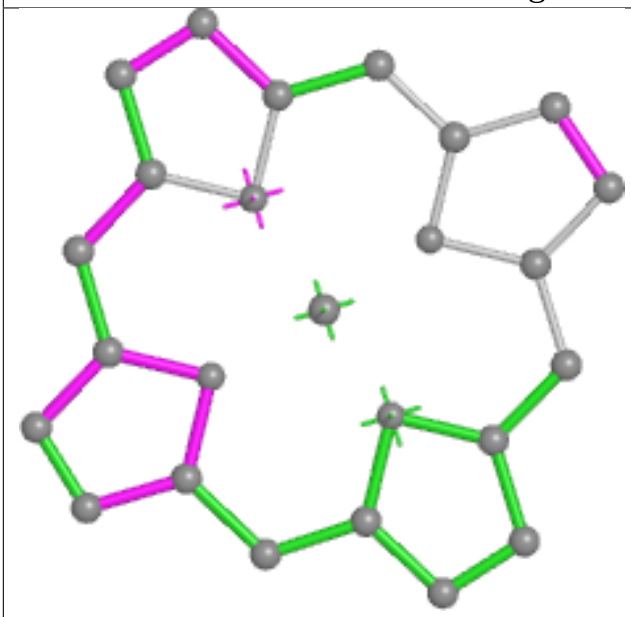


Rings

Ligand CLA 4 610



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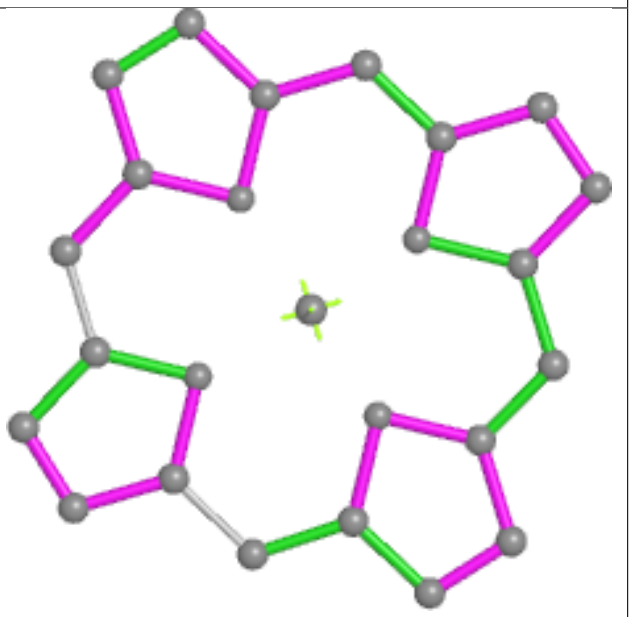
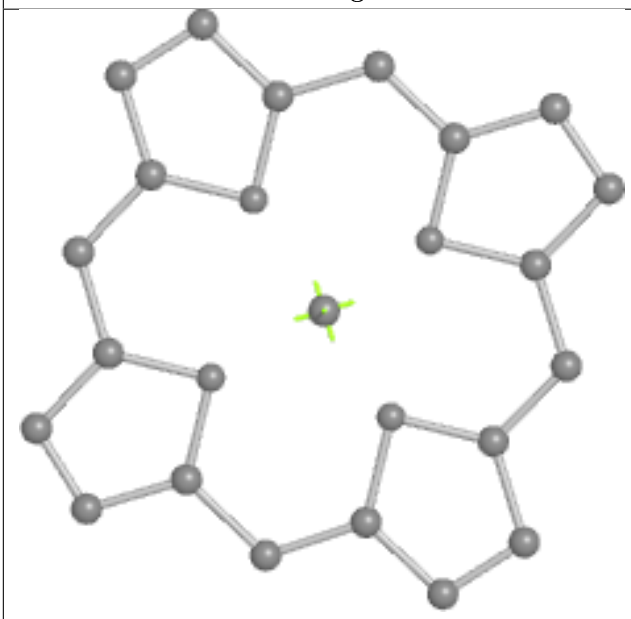


Bond angles



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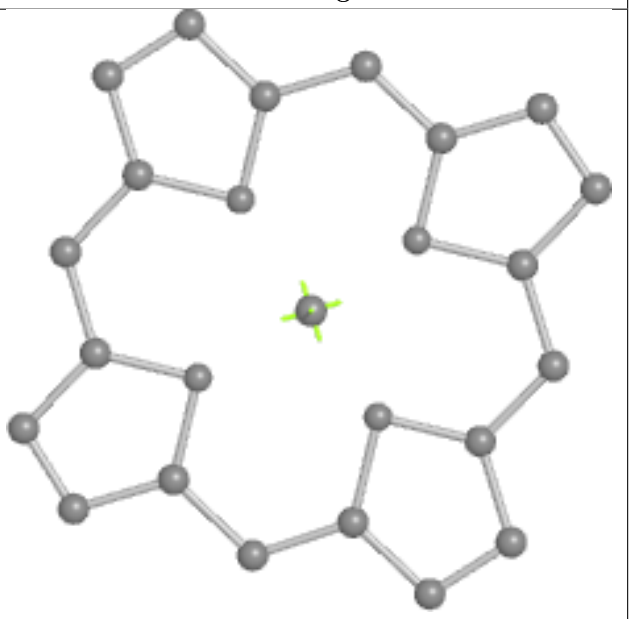
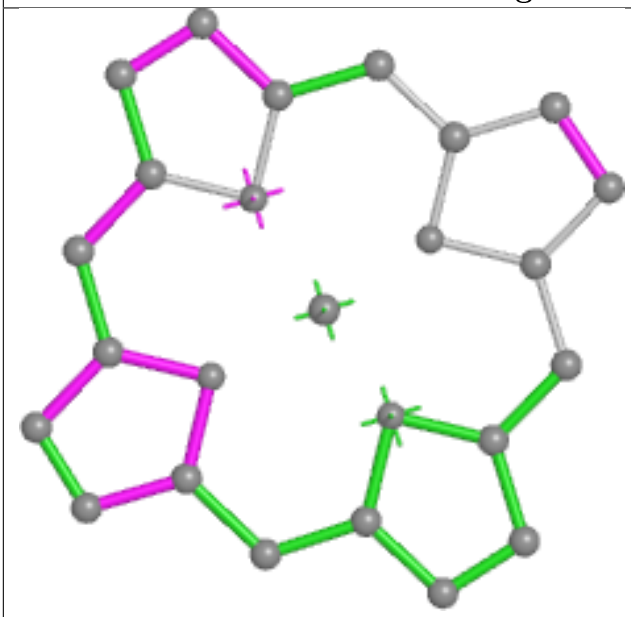


Rings

Ligand CLA A 1108



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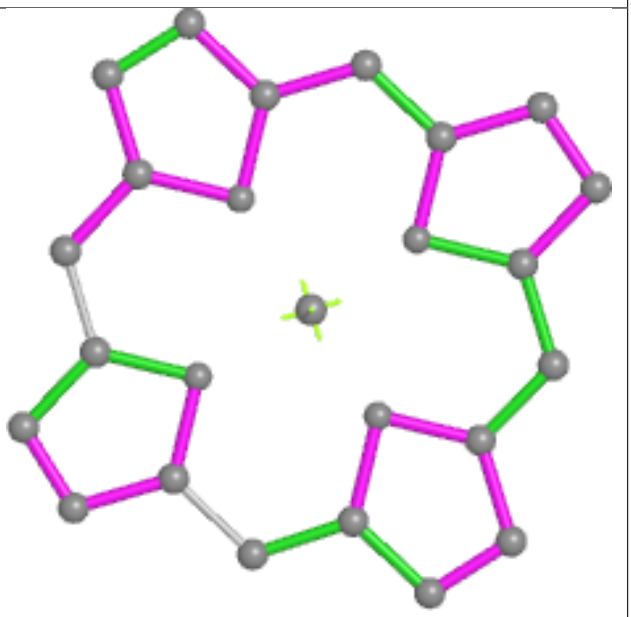
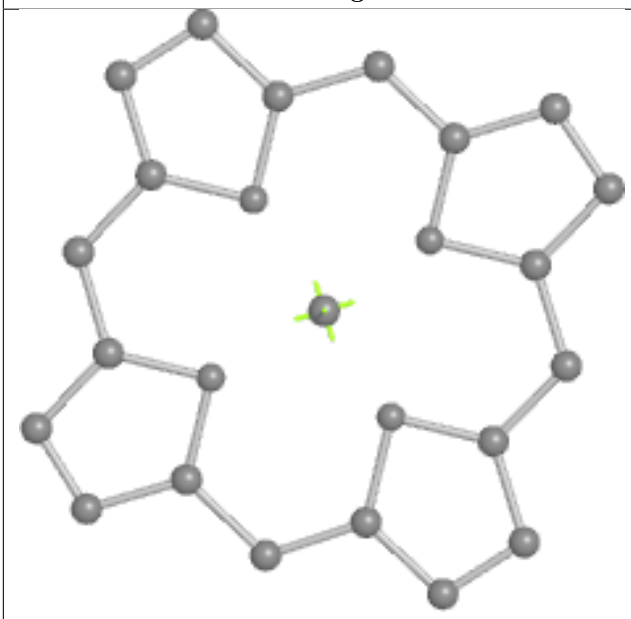


Bond angles



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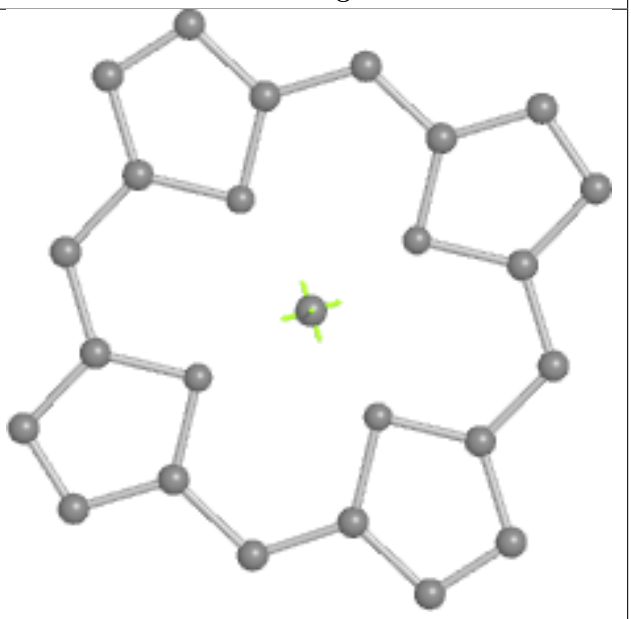
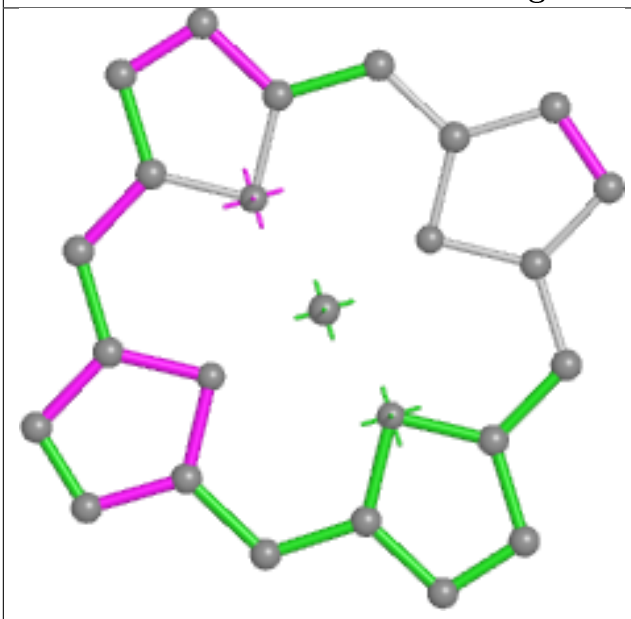


Rings

Ligand CLA 2 607



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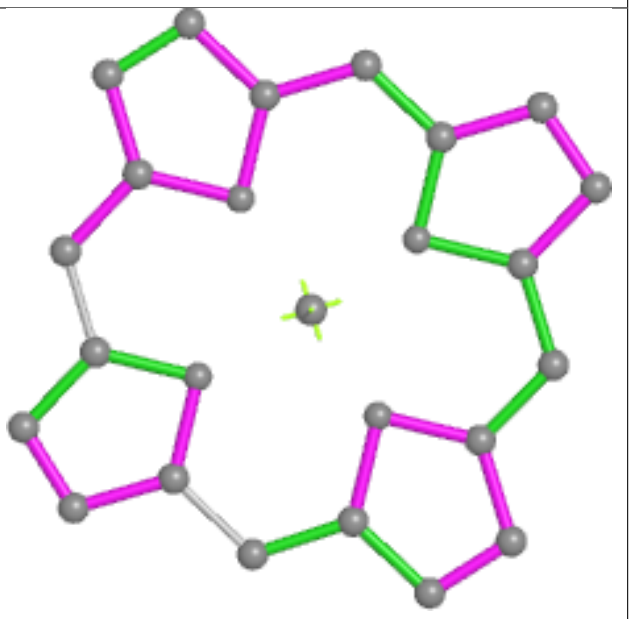
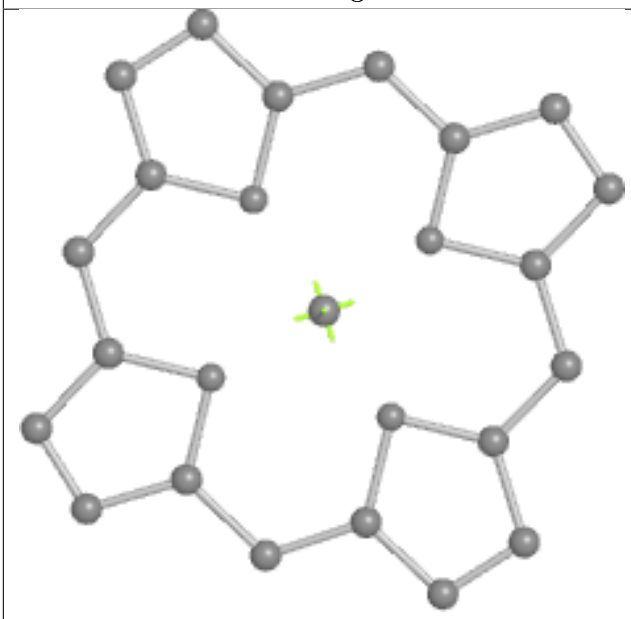
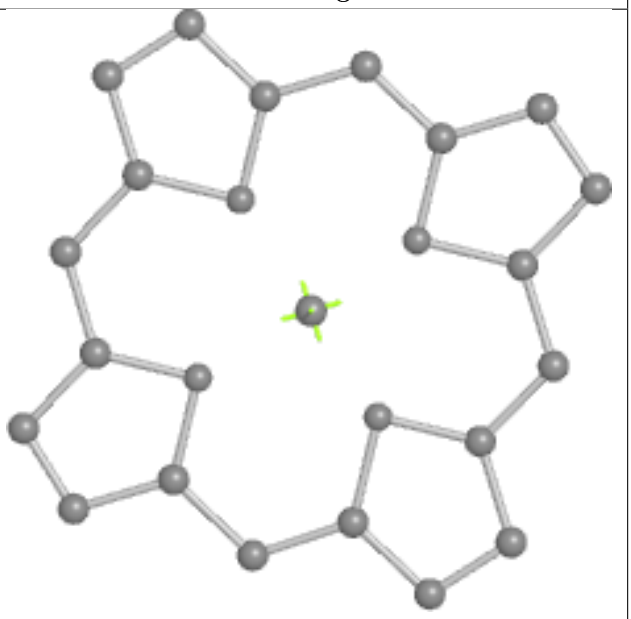


Bond angles

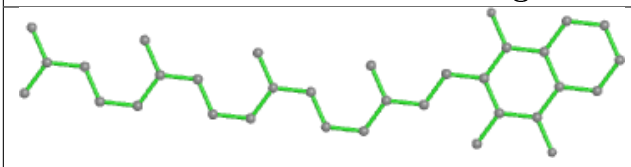


Torsions

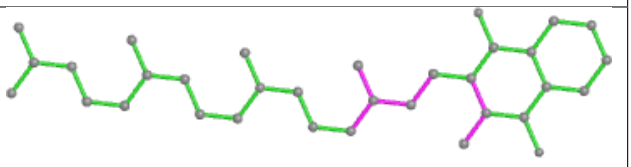


Rings

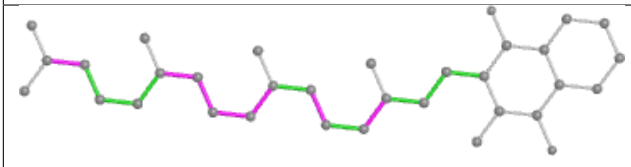
Ligand PQN A 2001



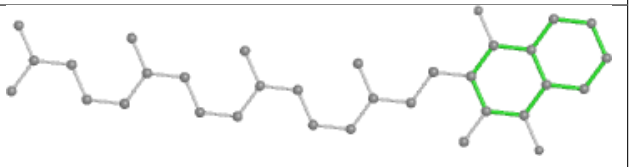
Bond lengths



Bond angles

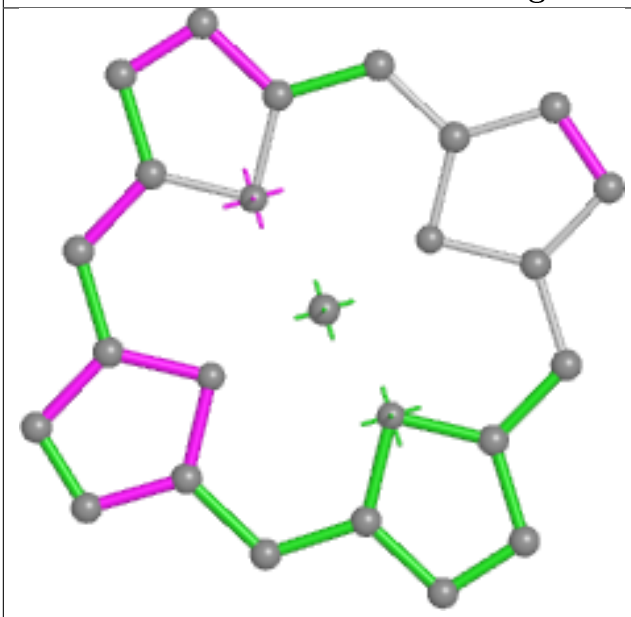


Torsions

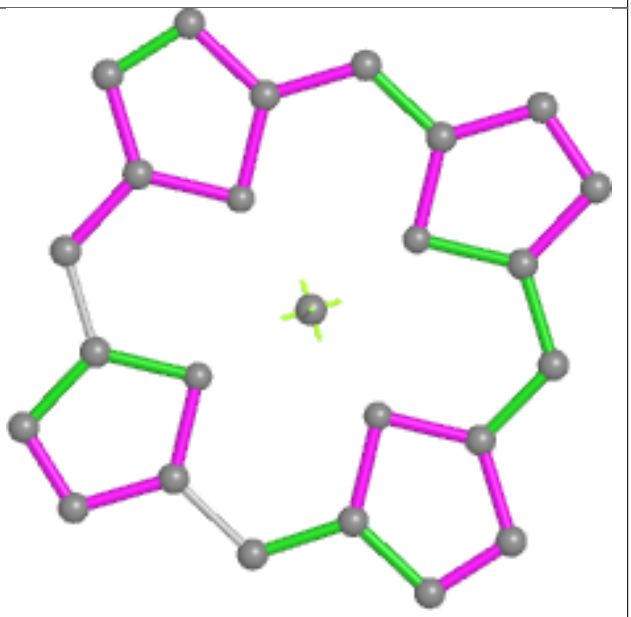


Rings

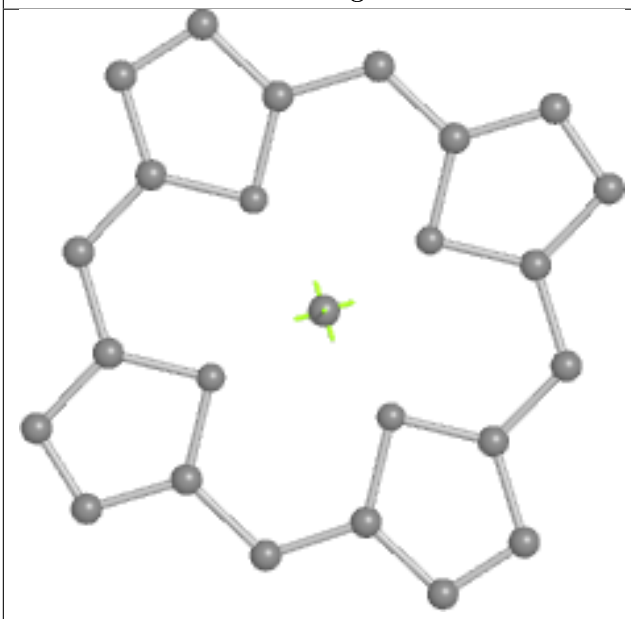
Ligand CLA 3 608



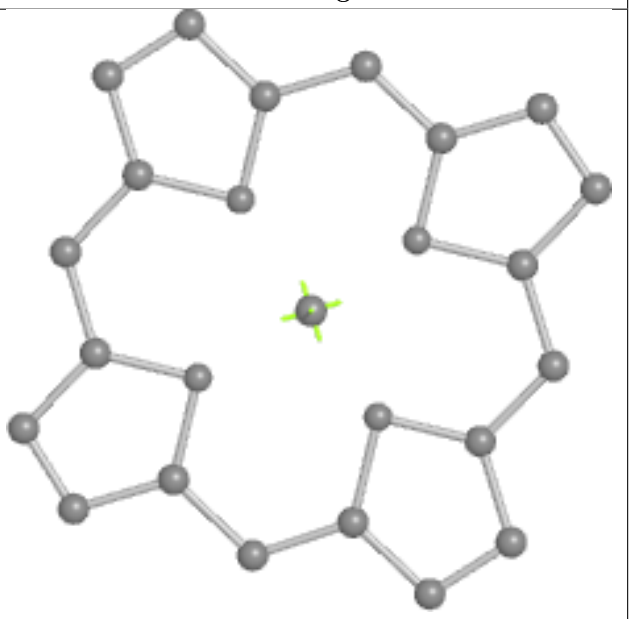
Bond lengths



Bond angles

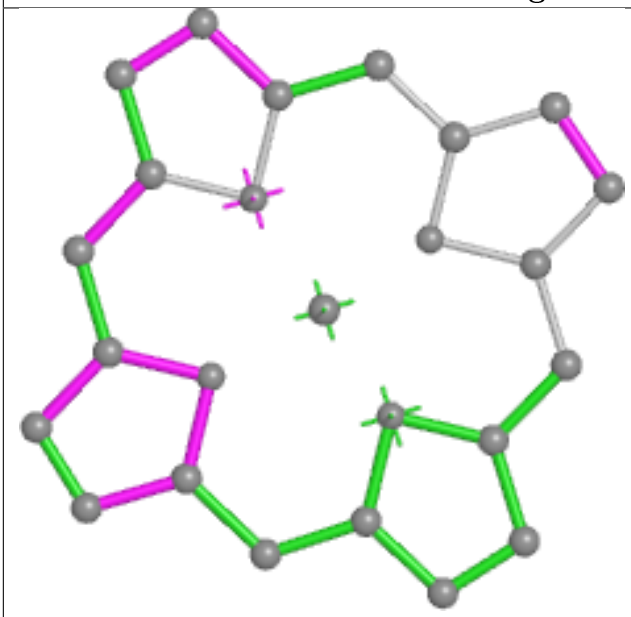


Torsions



Rings

Ligand CLA 2 602



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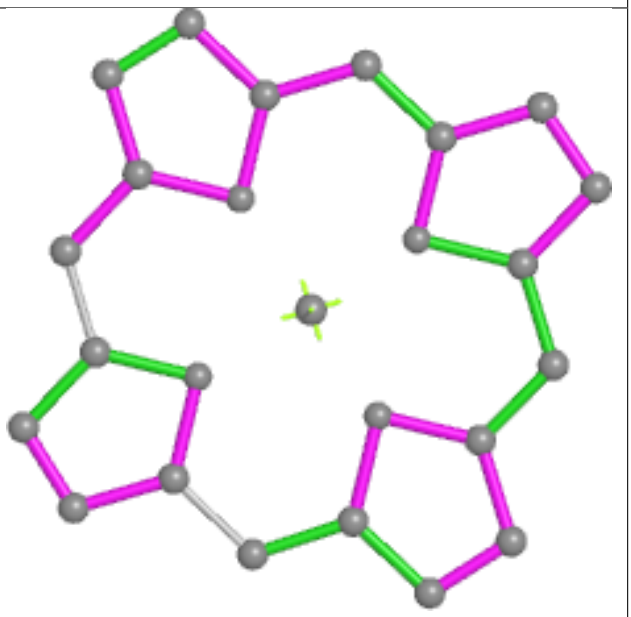

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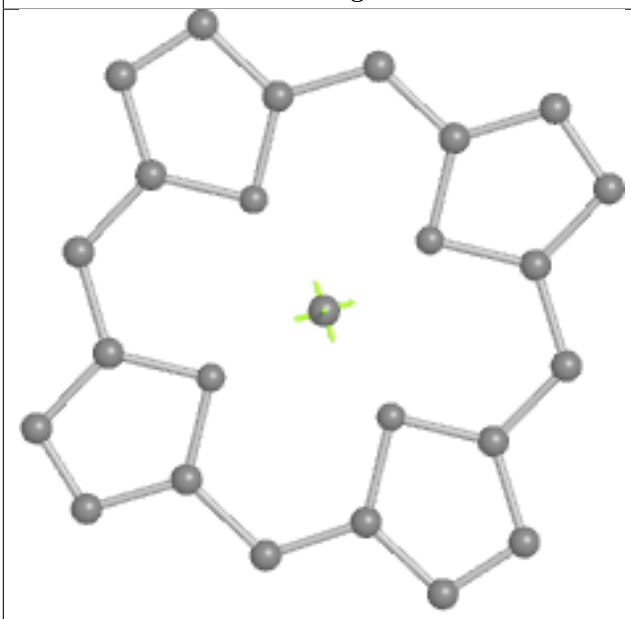

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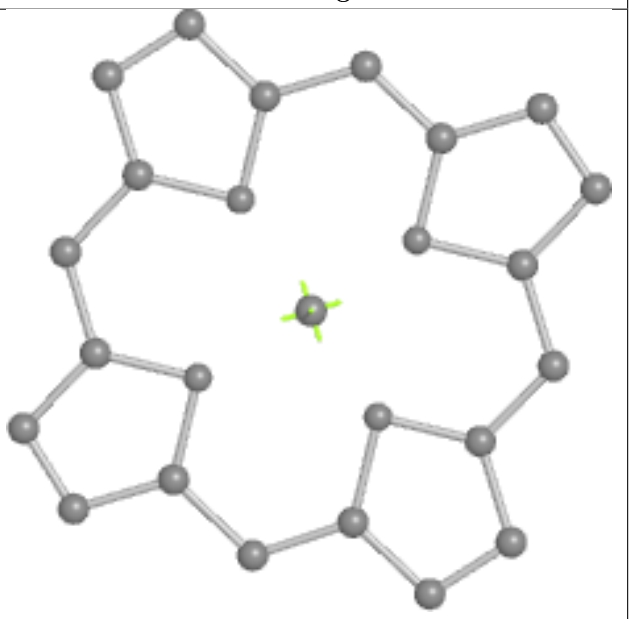
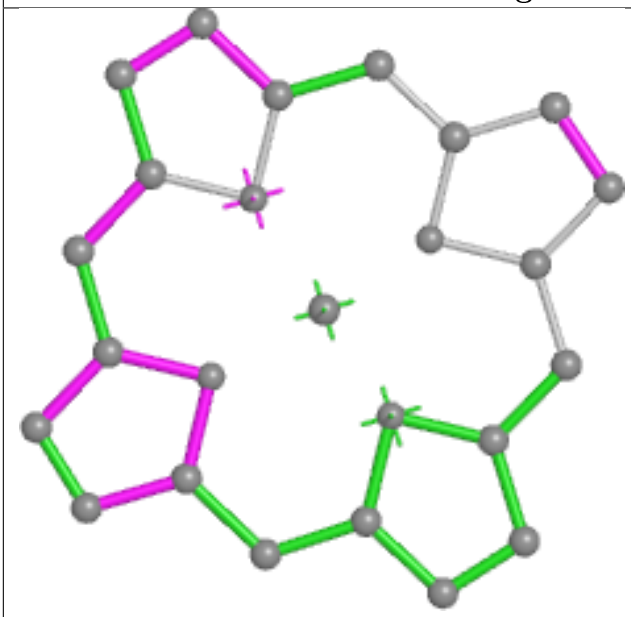


Rings

Ligand CLA B 1207



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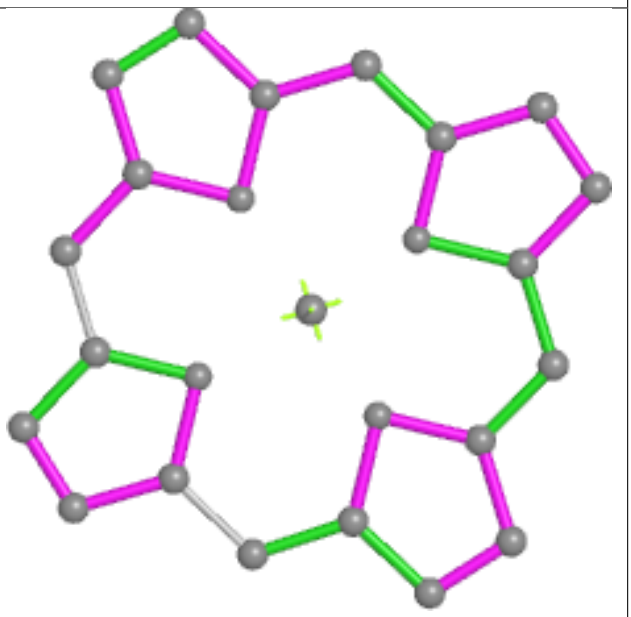
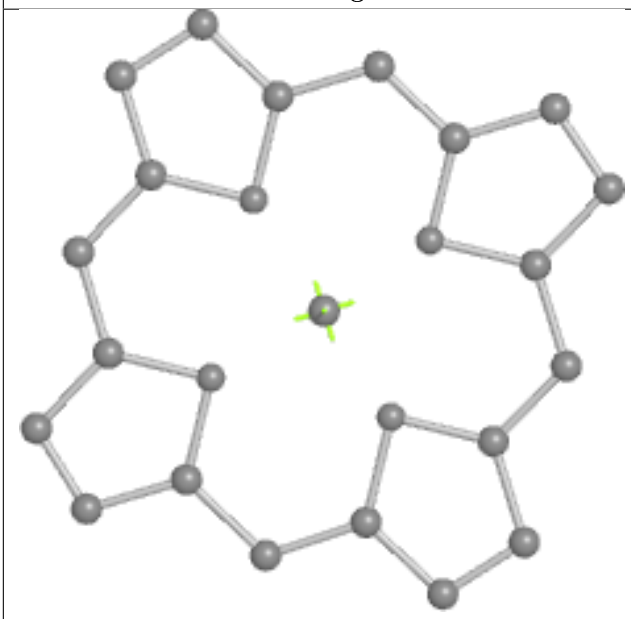
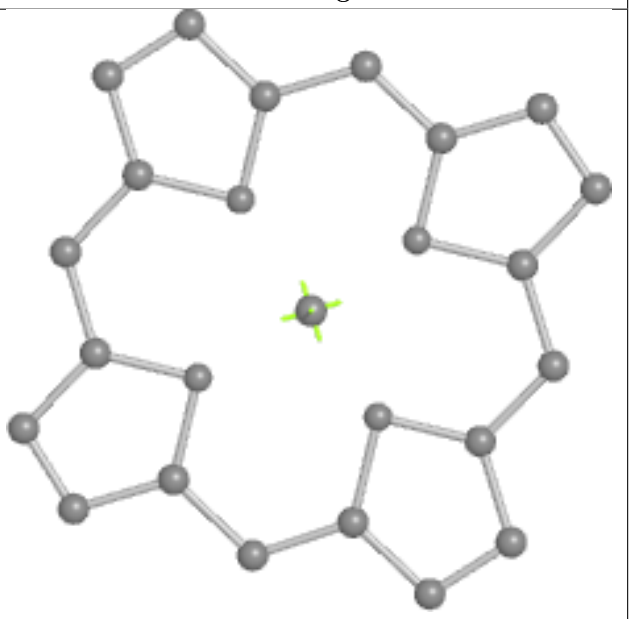


Bond angles

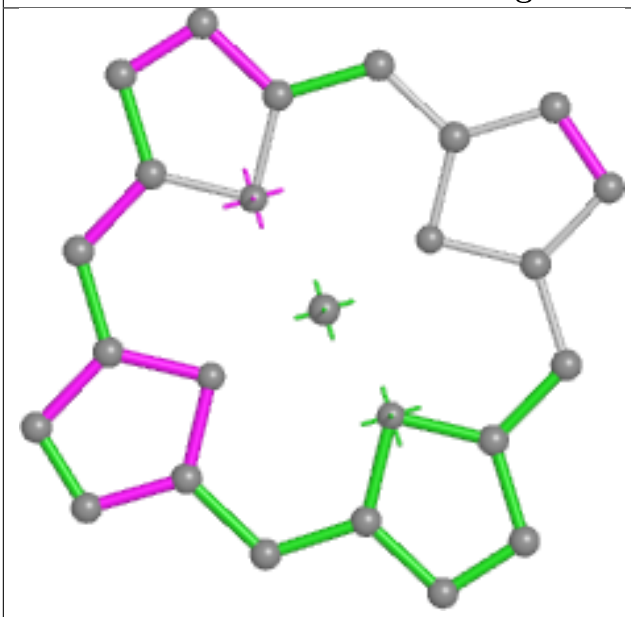


Torsions



Rings

Ligand CLA B 1208



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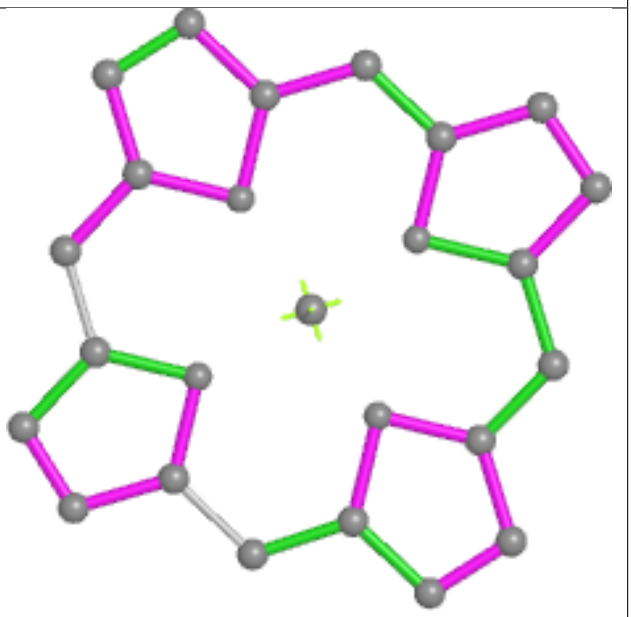
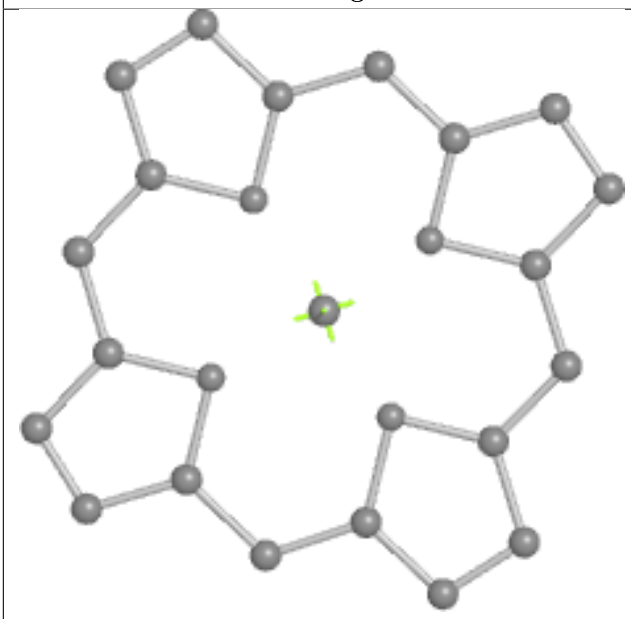
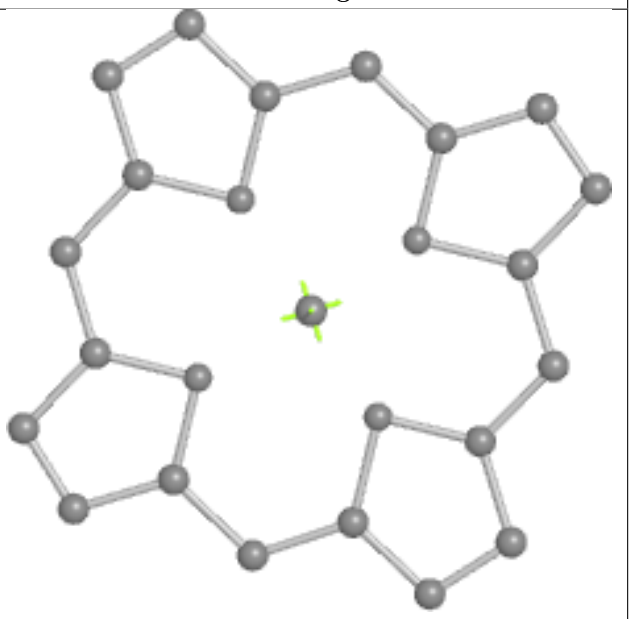


Bond angles

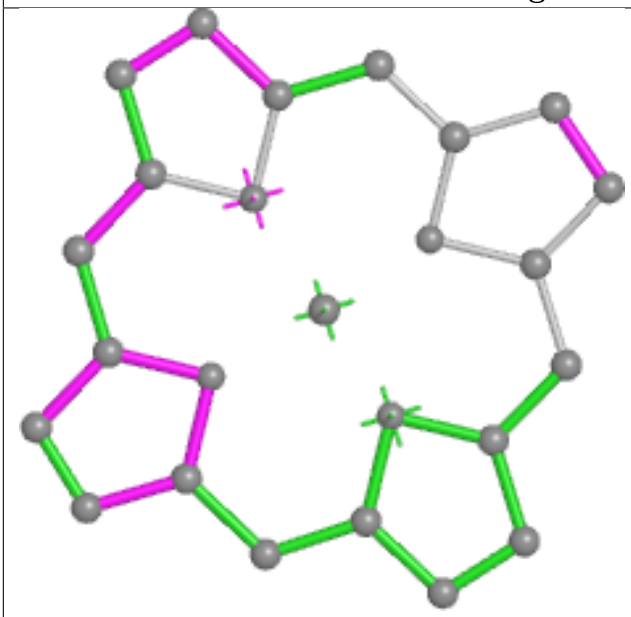


Torsions



Rings

Ligand CLA 3 611



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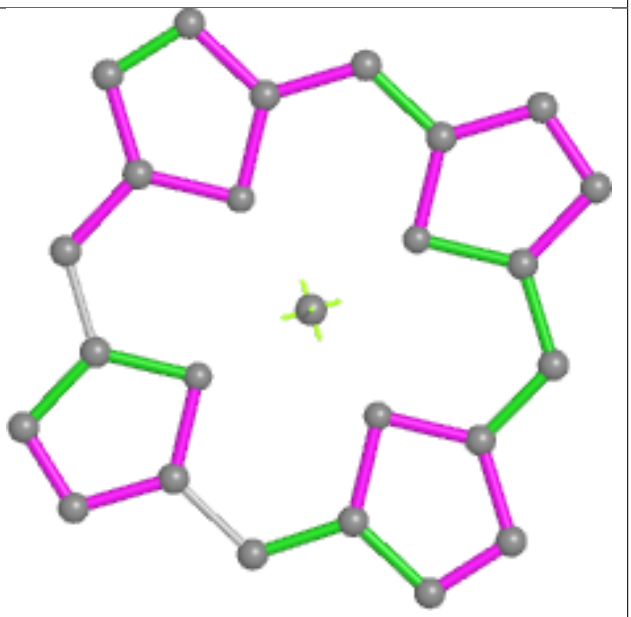
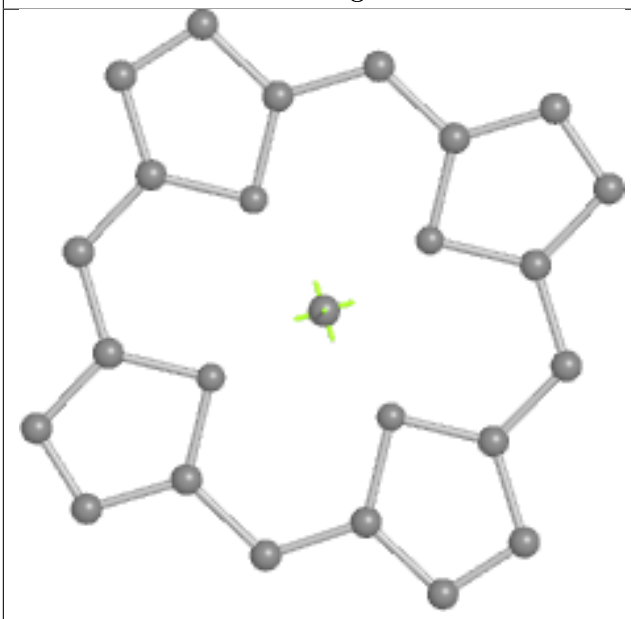


Bond angles



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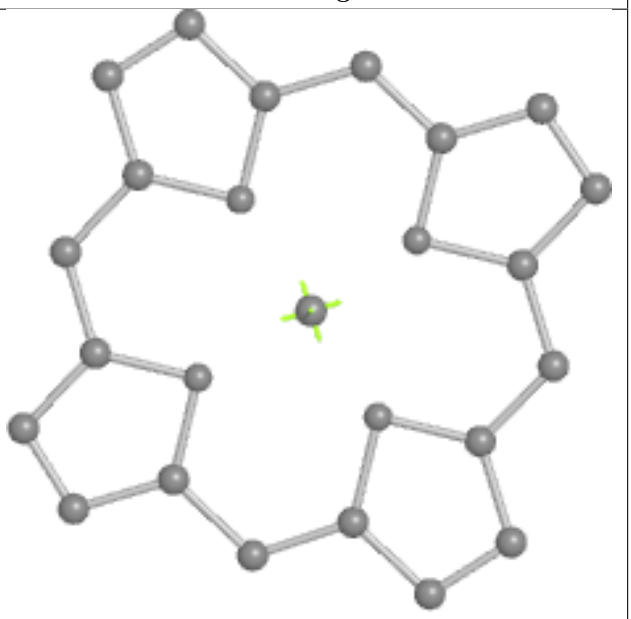
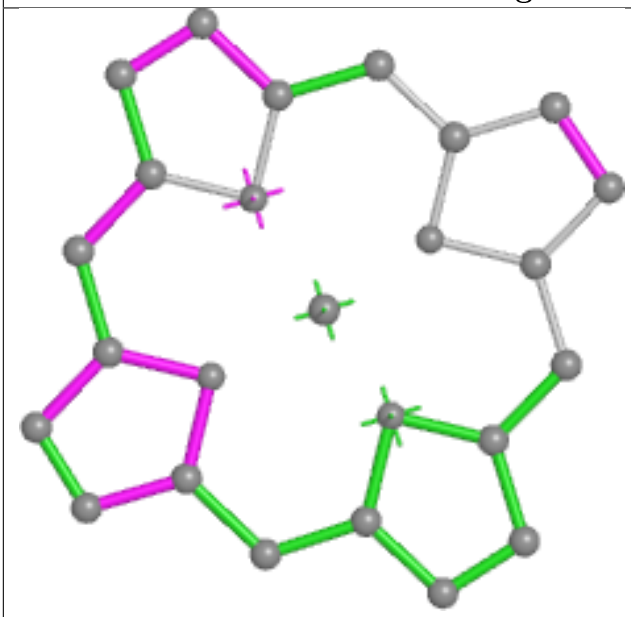


Rings

Ligand CLA A 1109



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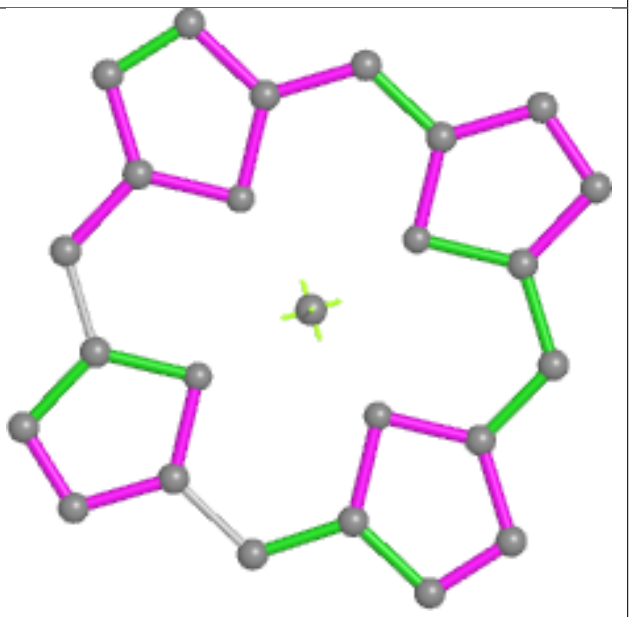
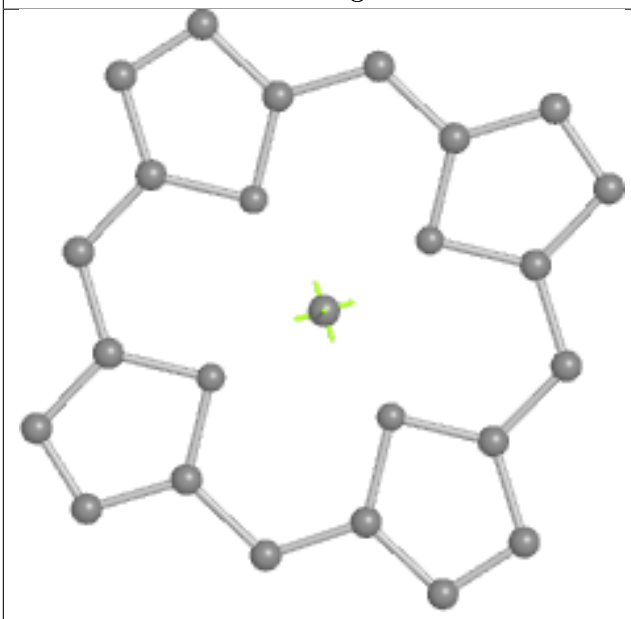


Bond angles



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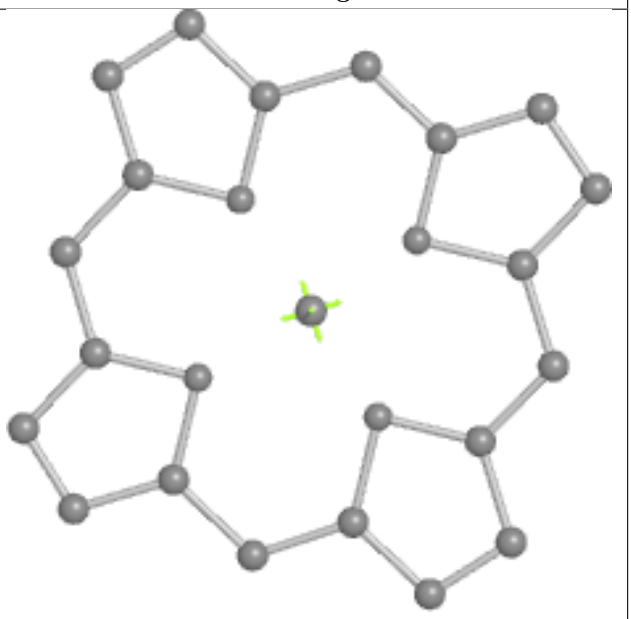
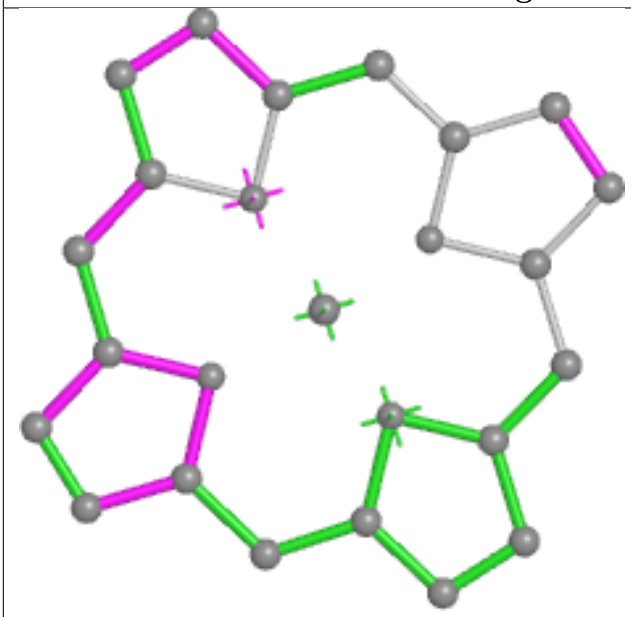


Rings

Ligand CLA A 1123



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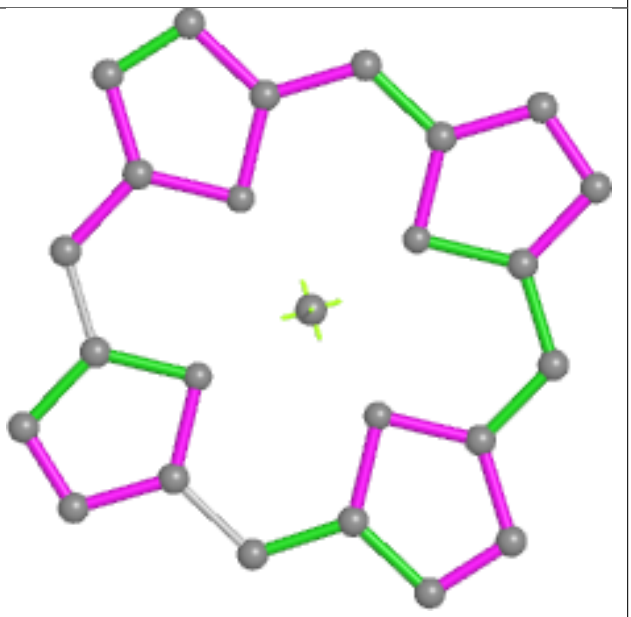
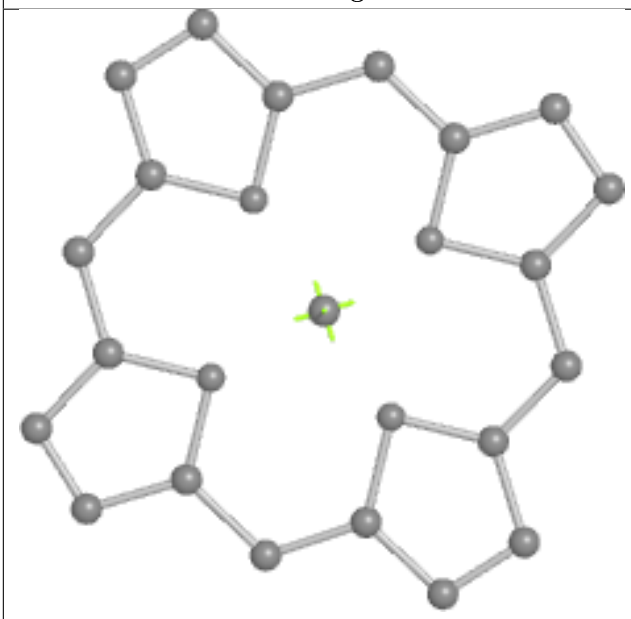


Bond angles



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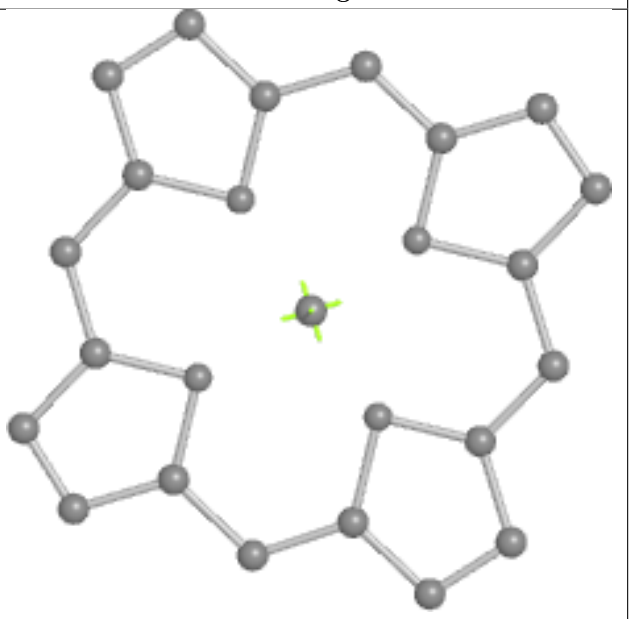
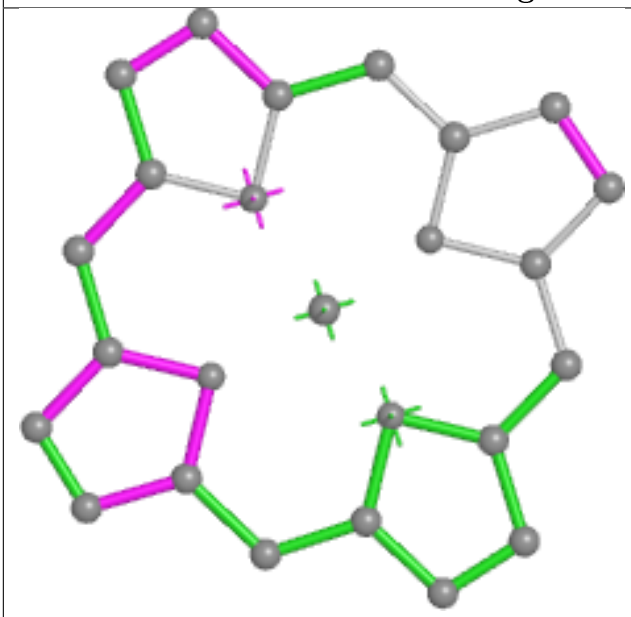


Rings

Ligand CLA L 1503



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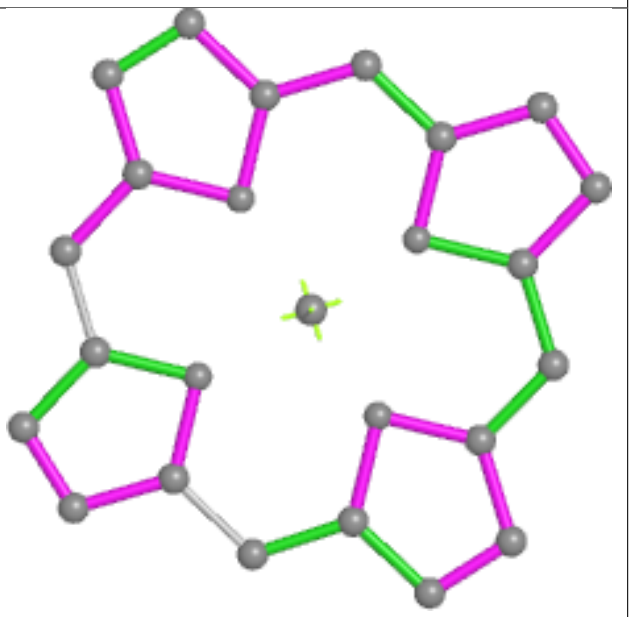
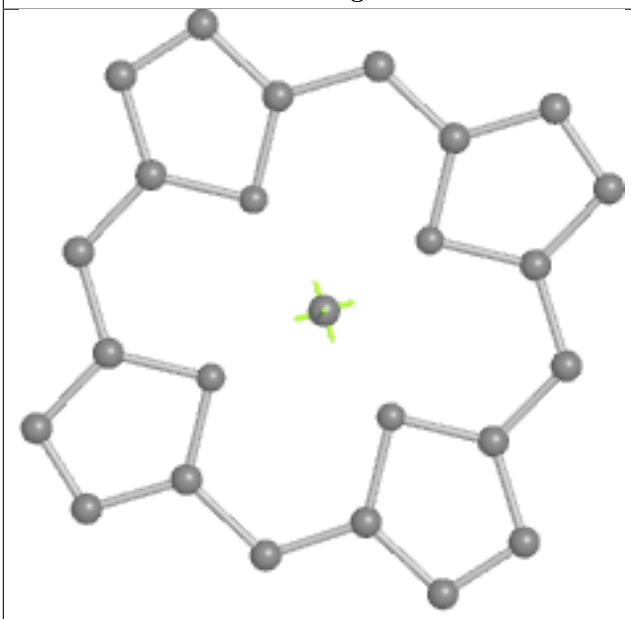


Bond angles



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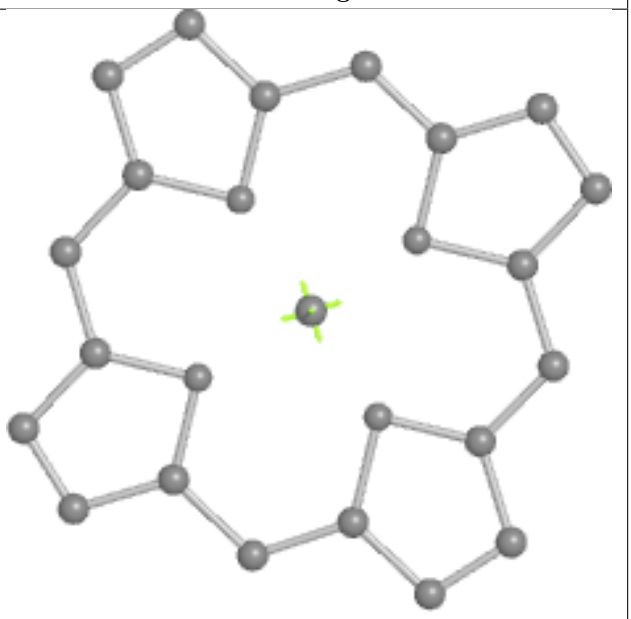
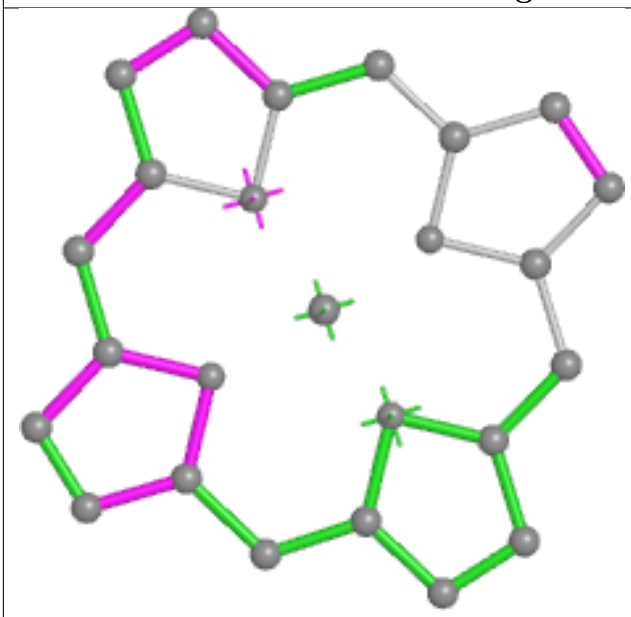


Rings

Ligand CLA A 1134



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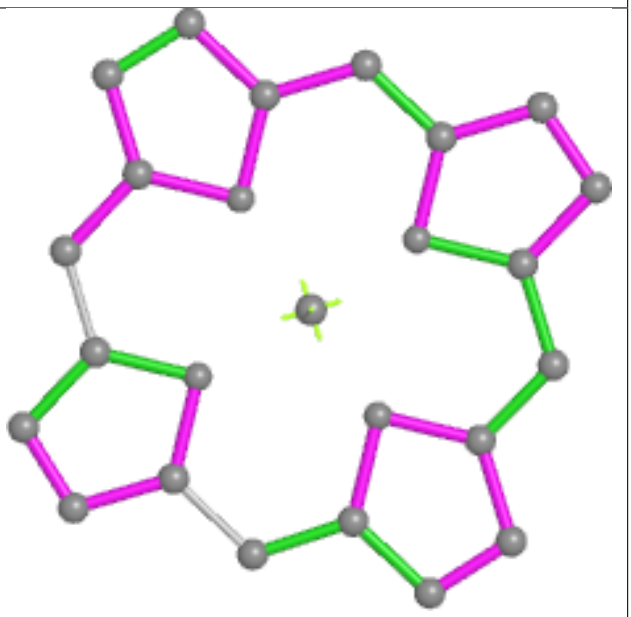
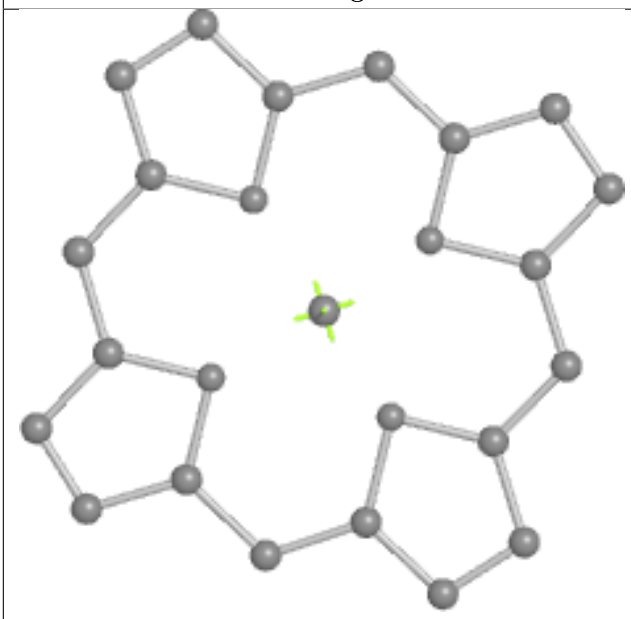


Bond angles



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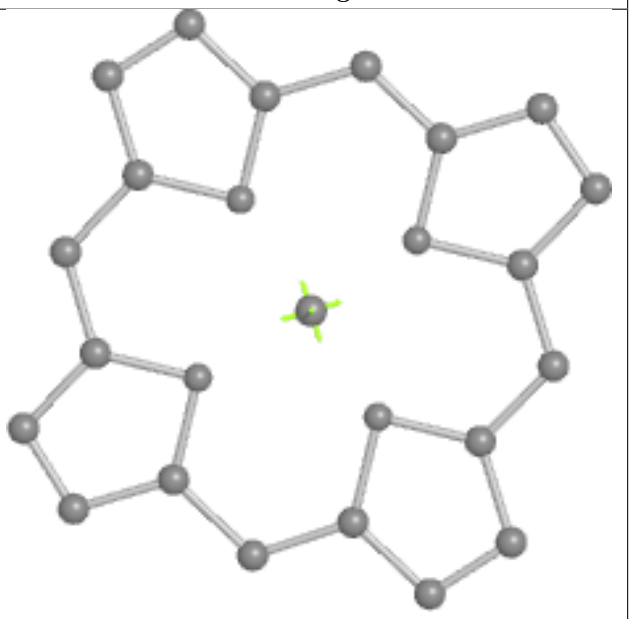
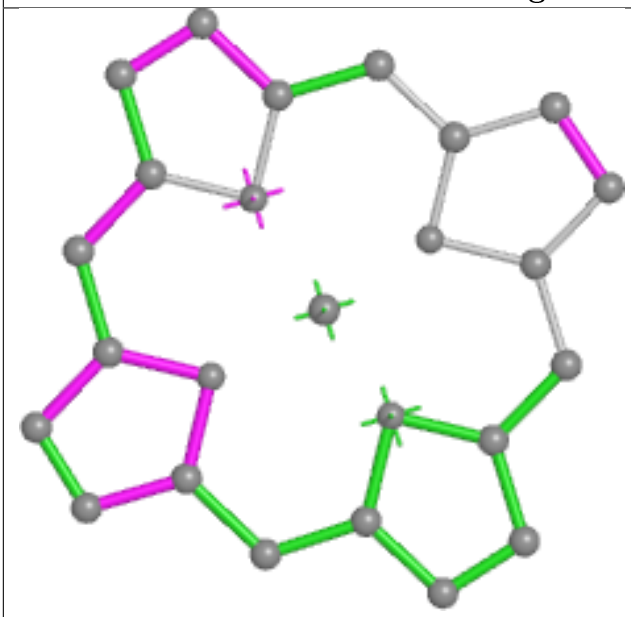


Rings

Ligand CLA 4 609



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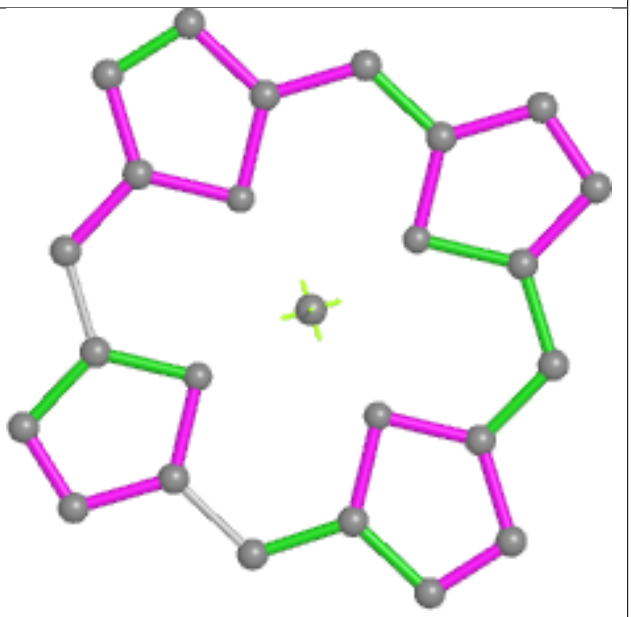
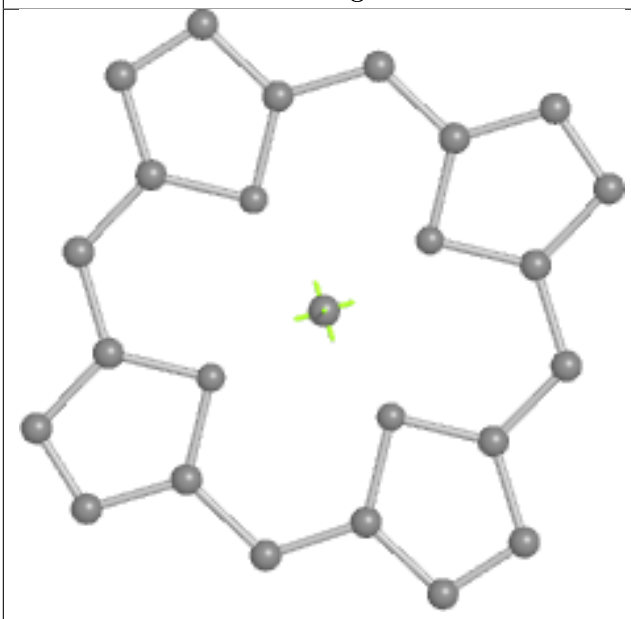


Bond angles



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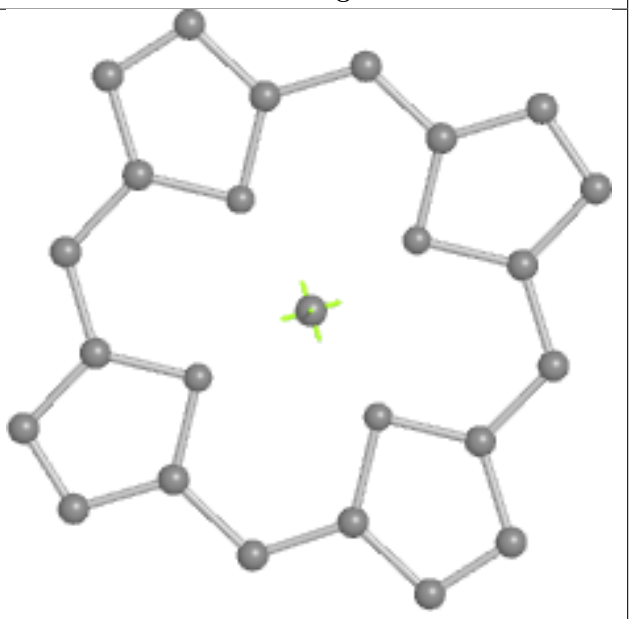
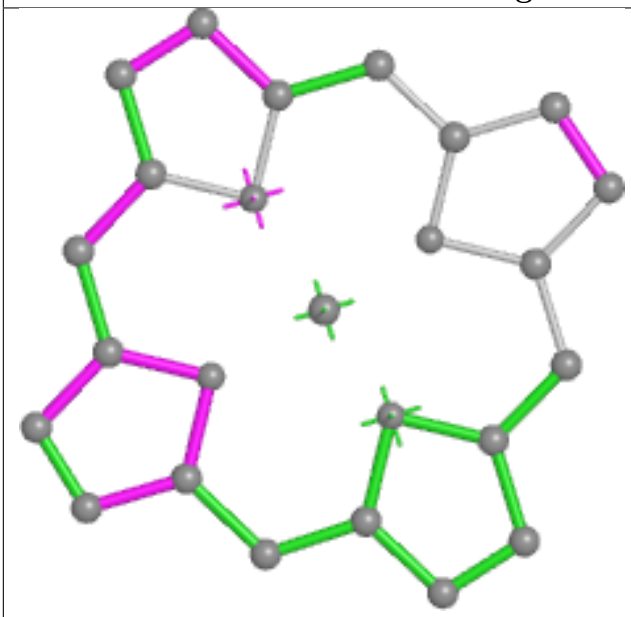


Rings

Ligand CLA A 1128



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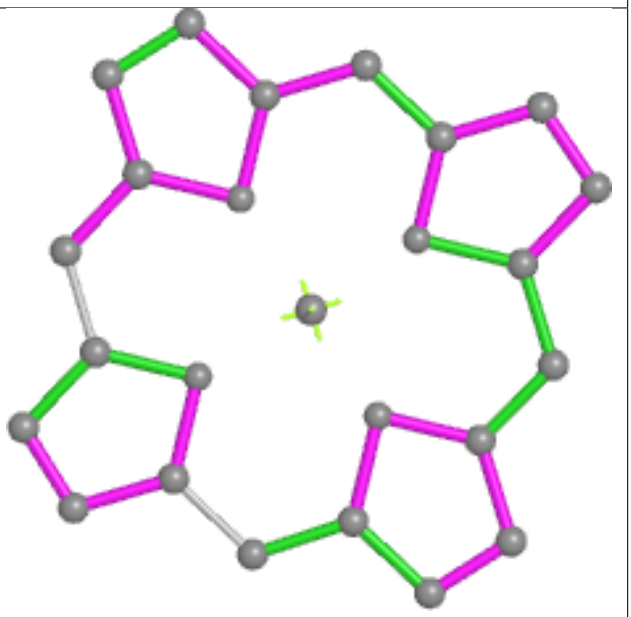
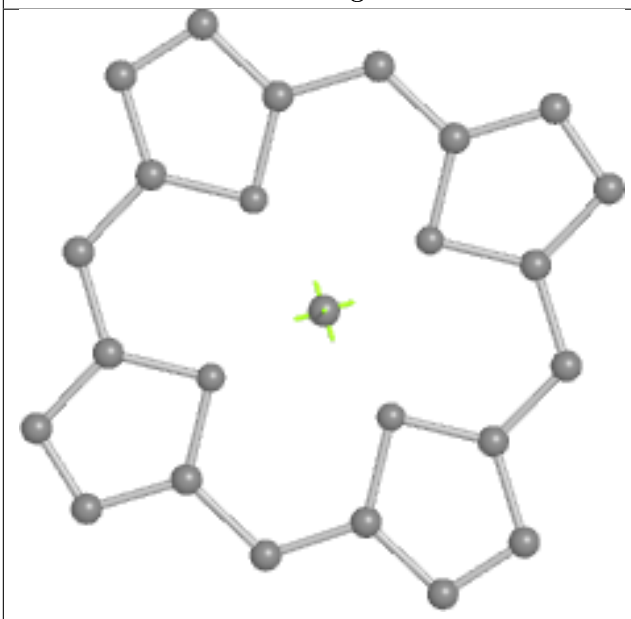


Bond angles



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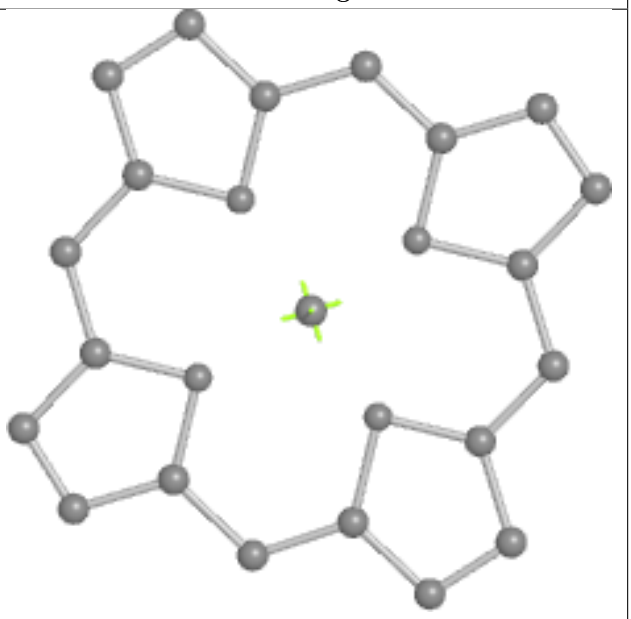
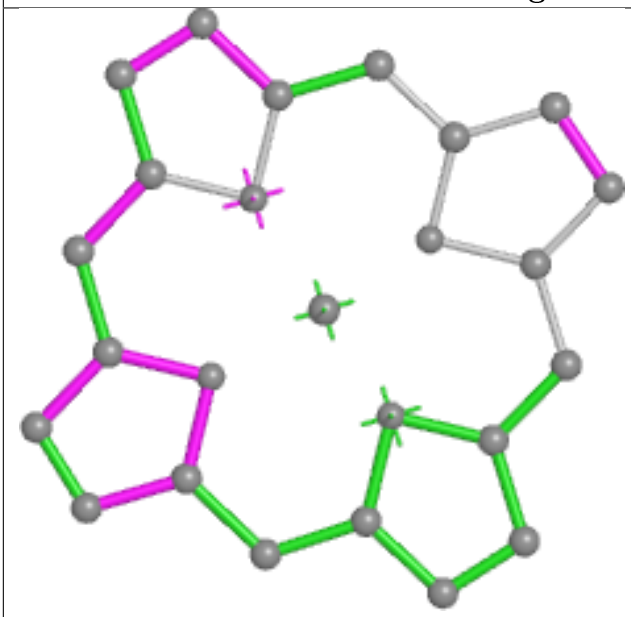


Rings

Ligand CLA 4 606



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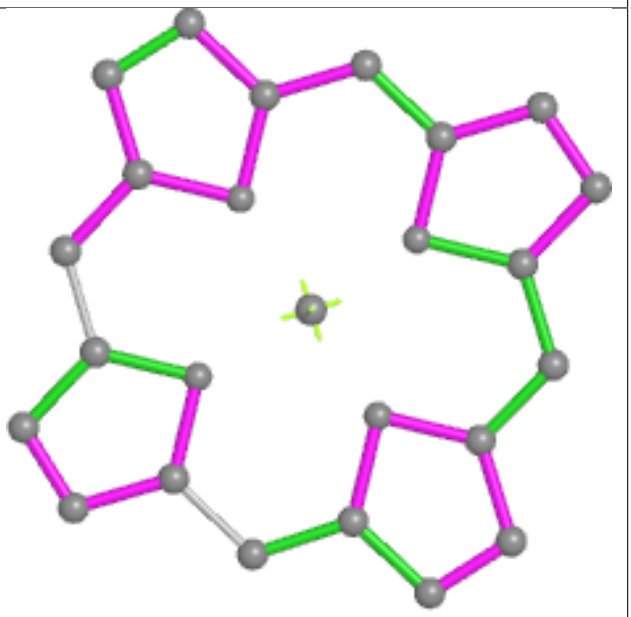
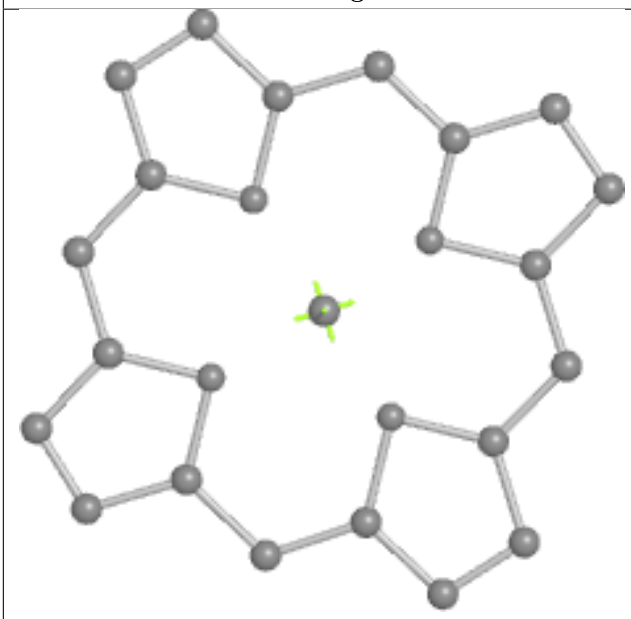
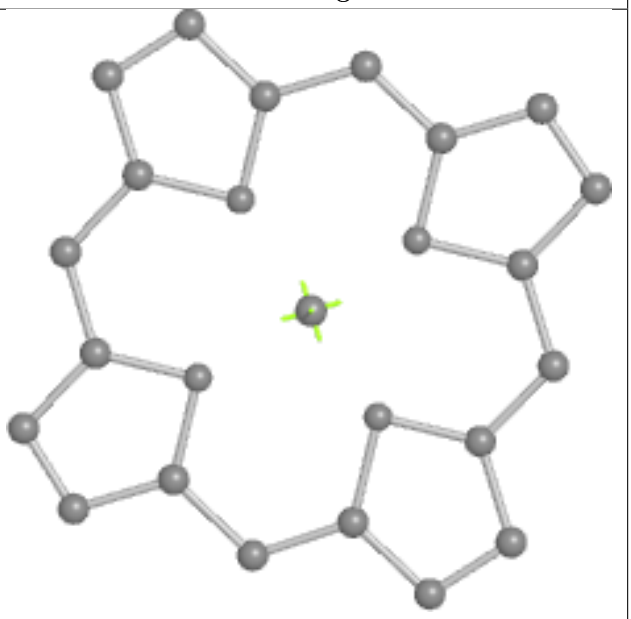


Bond angles

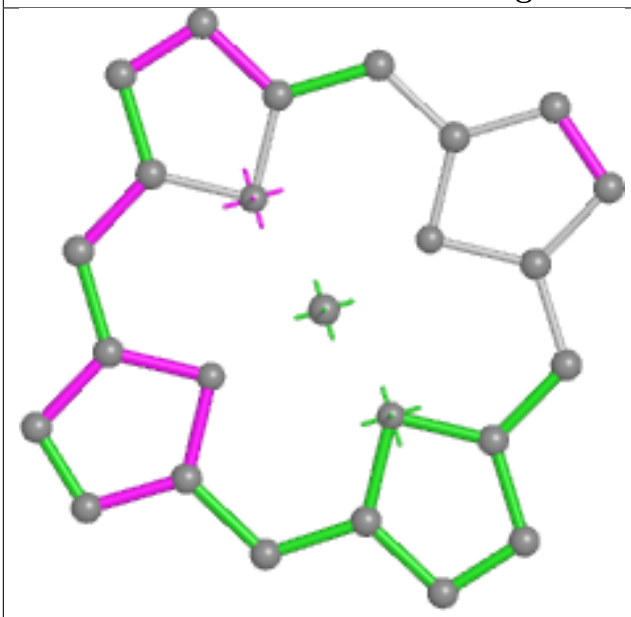


Torsions



Rings

Ligand CLA B 1214



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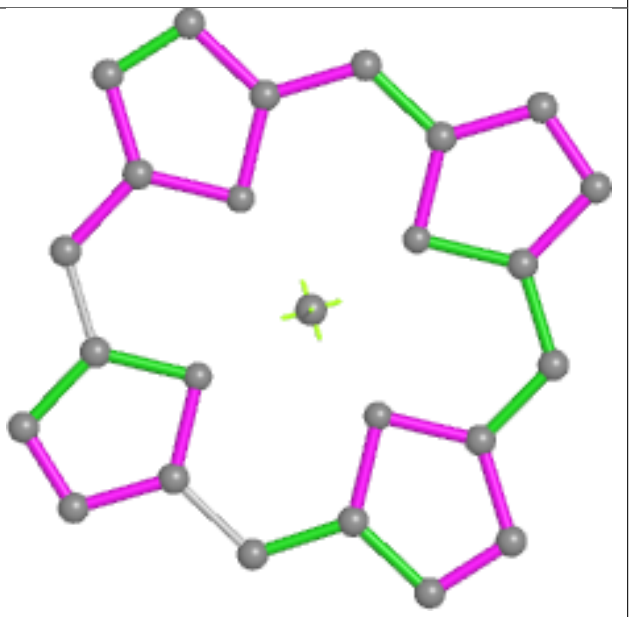
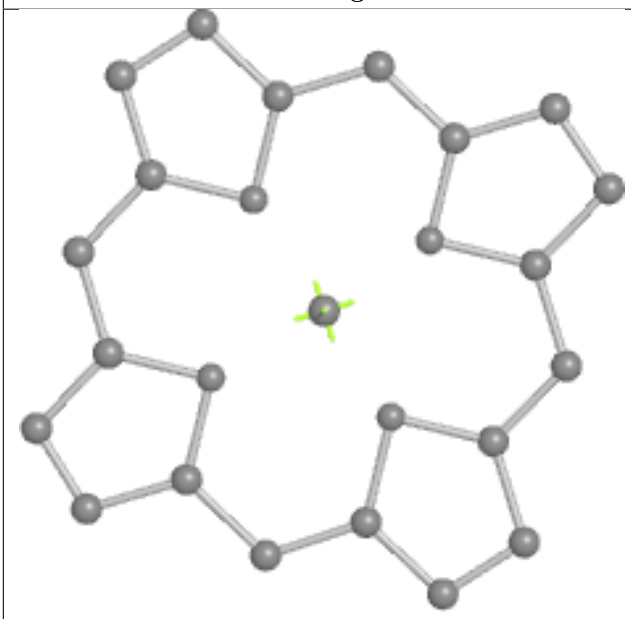
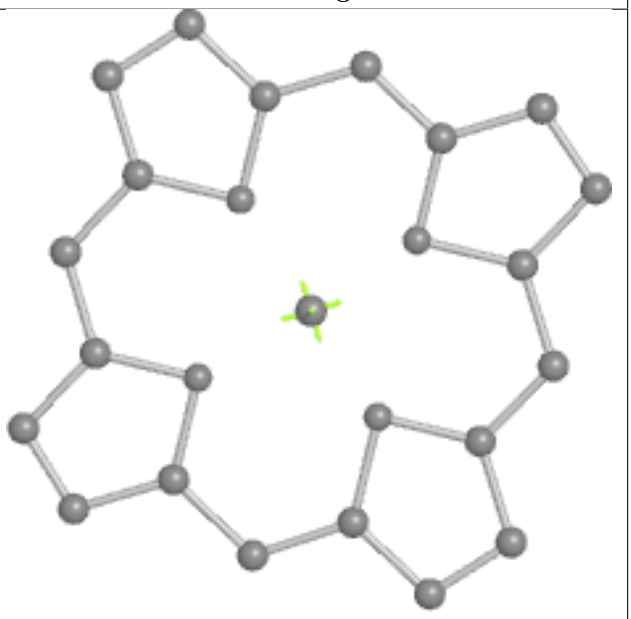


Bond angles

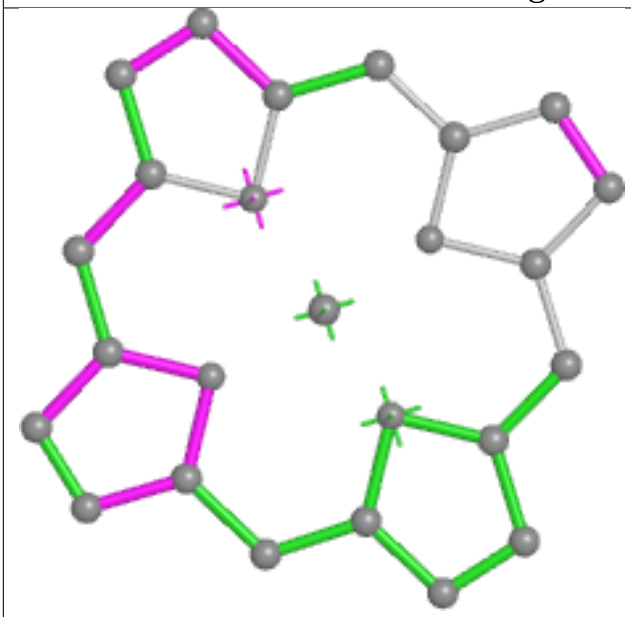


Torsions



Rings

Ligand CLA 2 604



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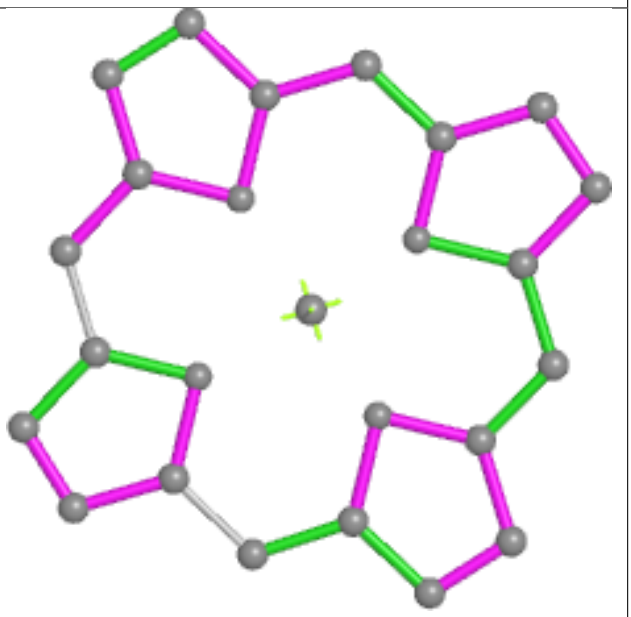
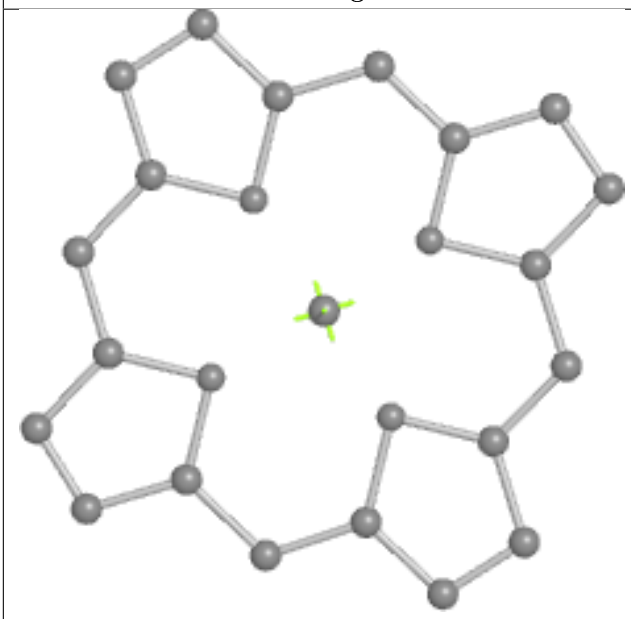


Bond angles



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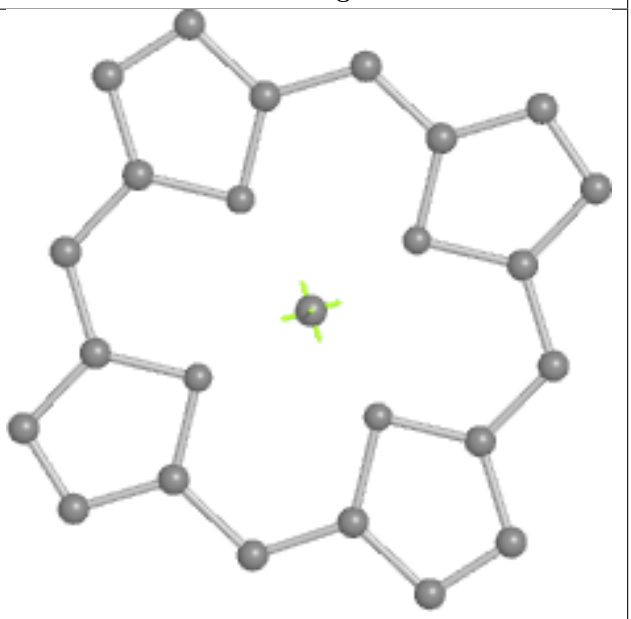
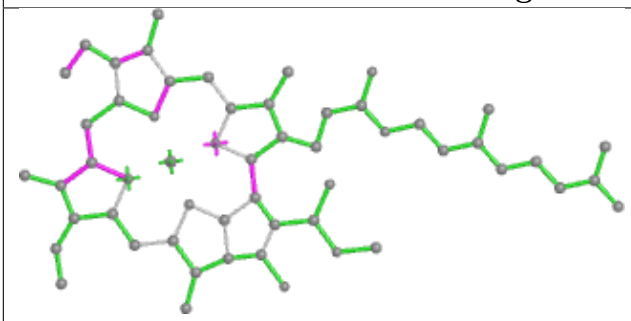
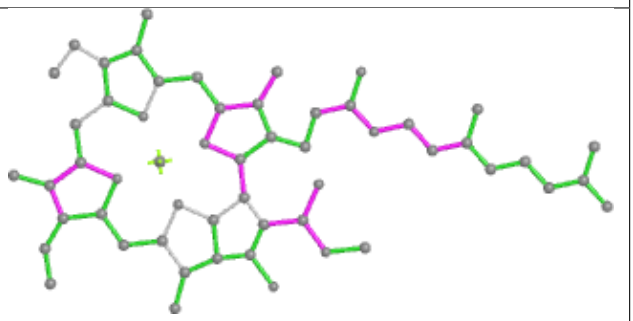


Rings

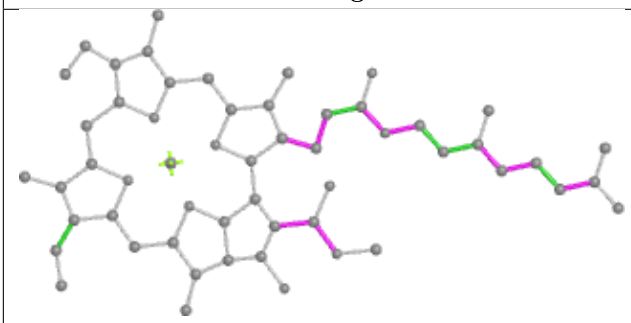
Ligand CLA A 1115



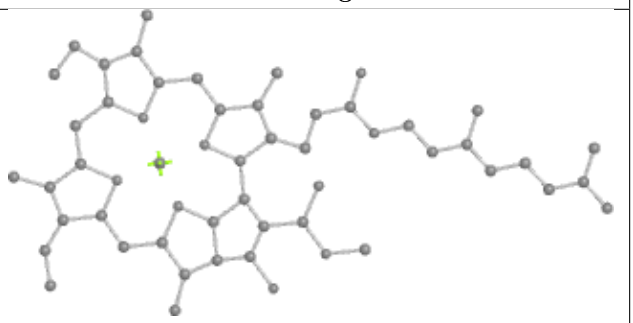
Bond lengths



Bond angles

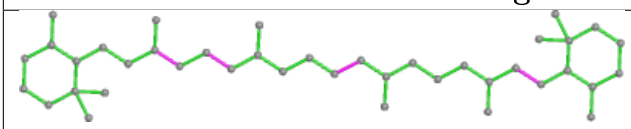


Torsions



Rings

Ligand BCR A 4008



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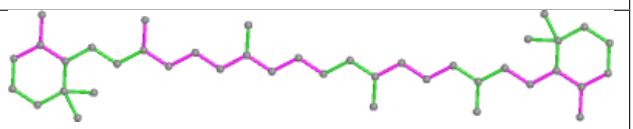
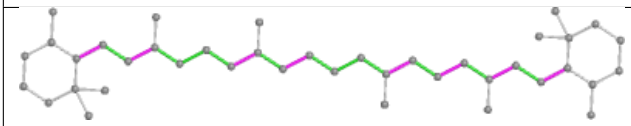


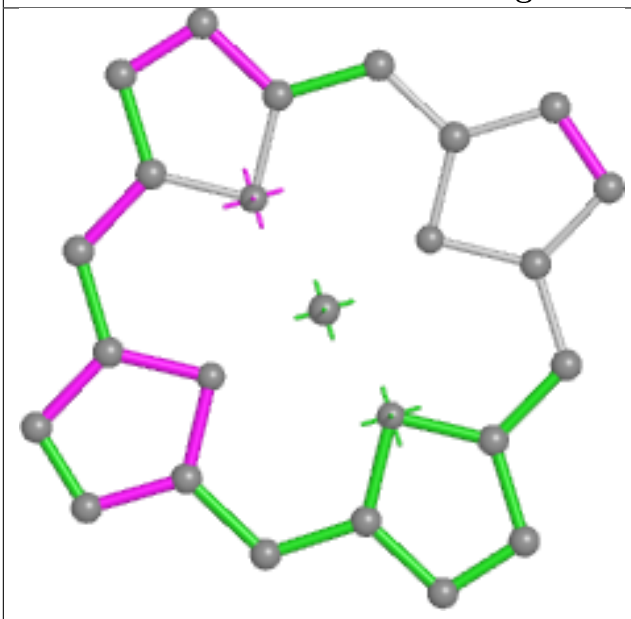
Bond angles



Torsions

Rings

Ligand CLA B 1218



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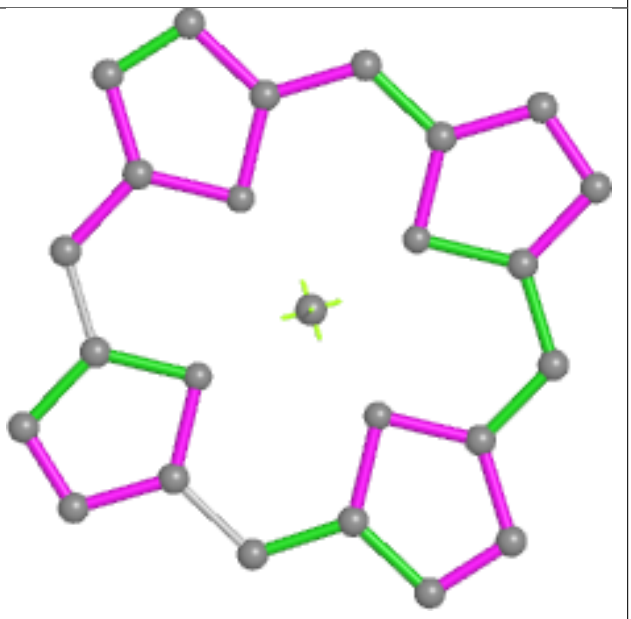
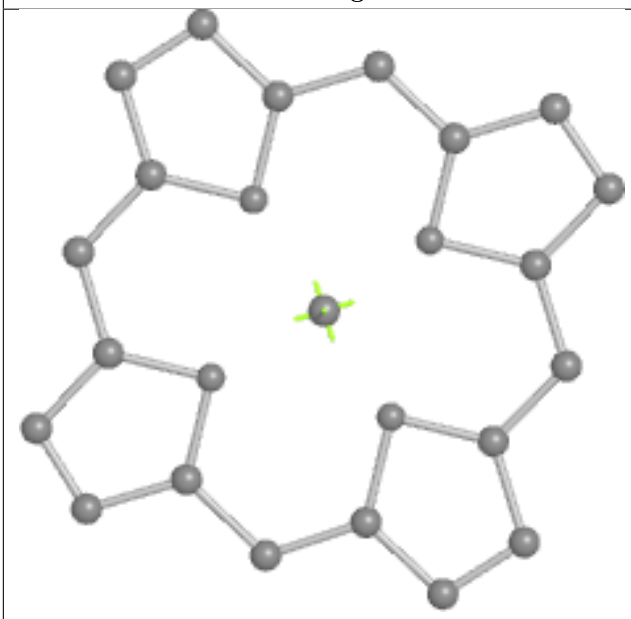


Bond angles



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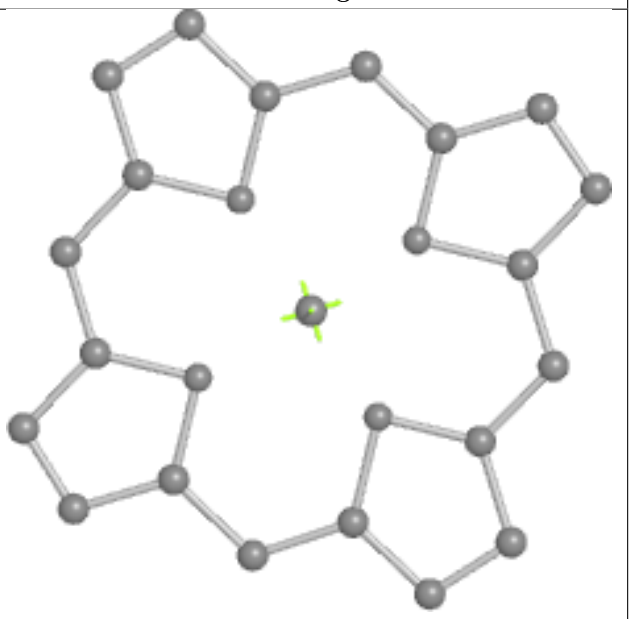
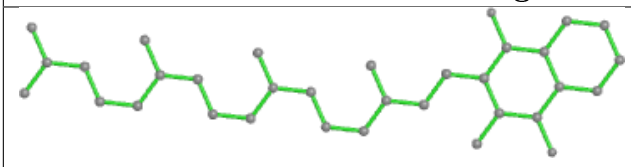
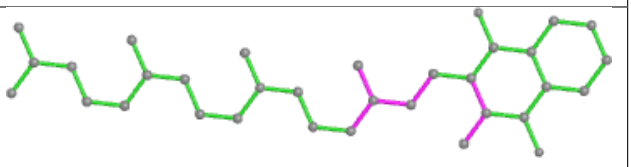


Rings

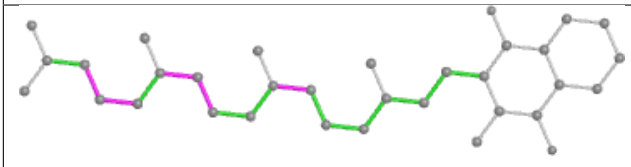
Ligand PQN B 2002



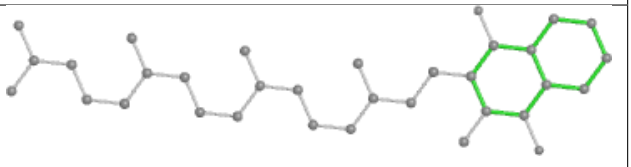
Bond lengths



Bond angles

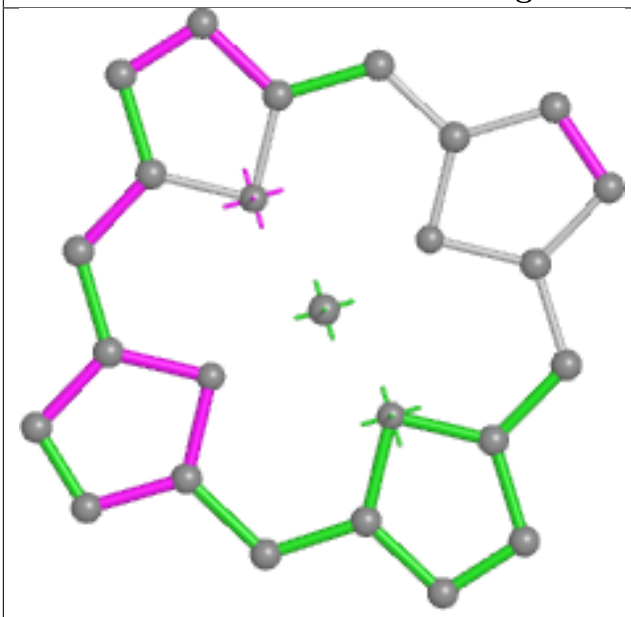


Torsions

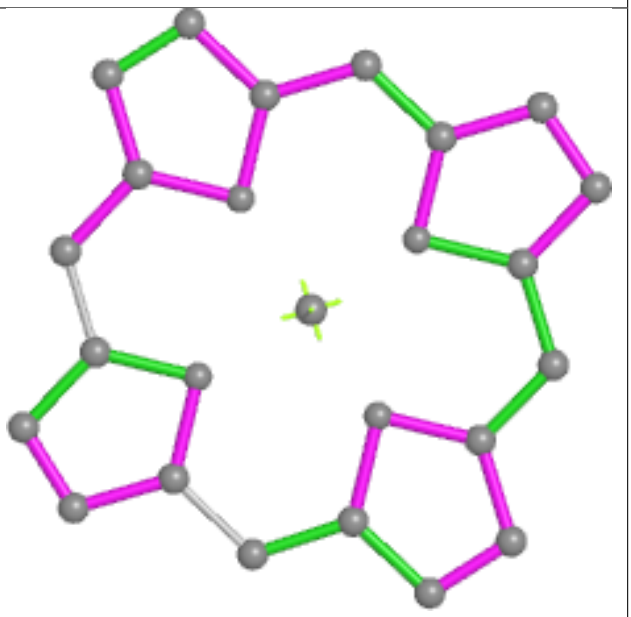


Rings

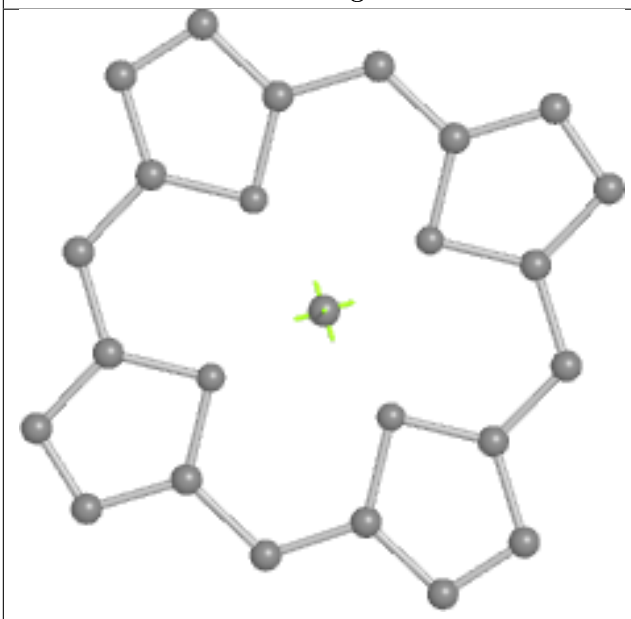
Ligand CLA B 1217



Bond lengths



Bond angles



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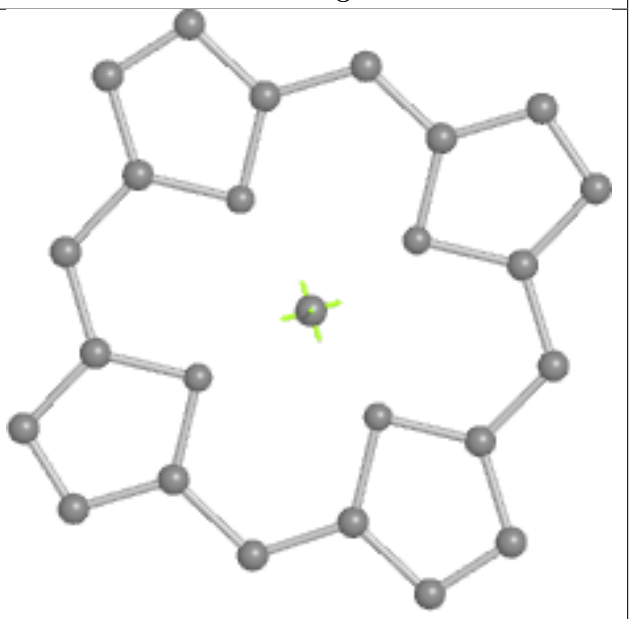
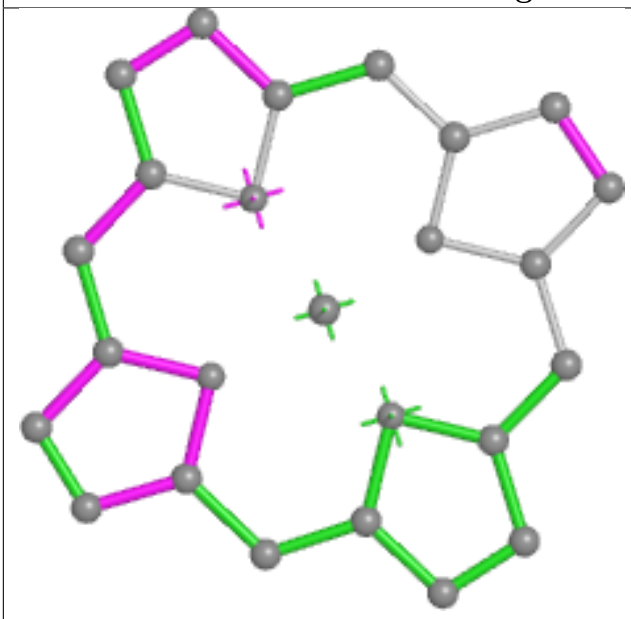


Rings

Ligand CLA A 1113



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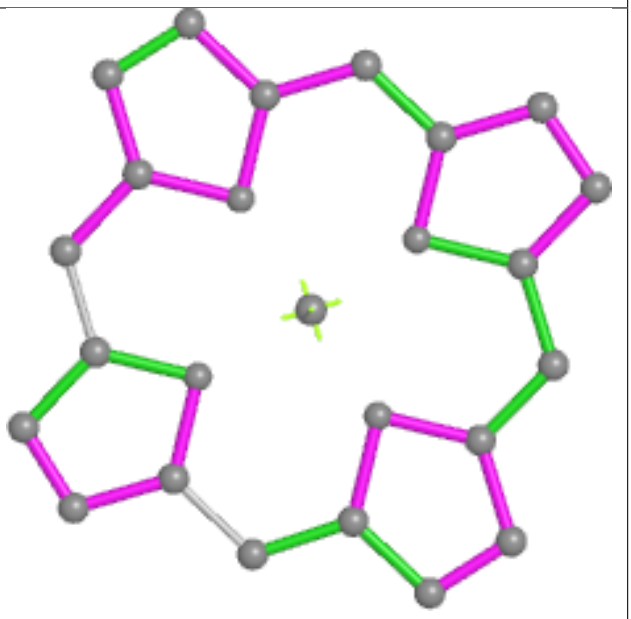
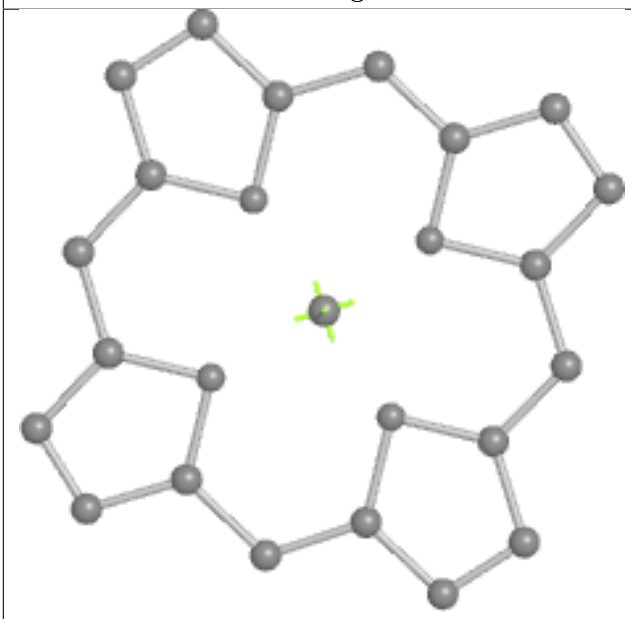


Bond angles



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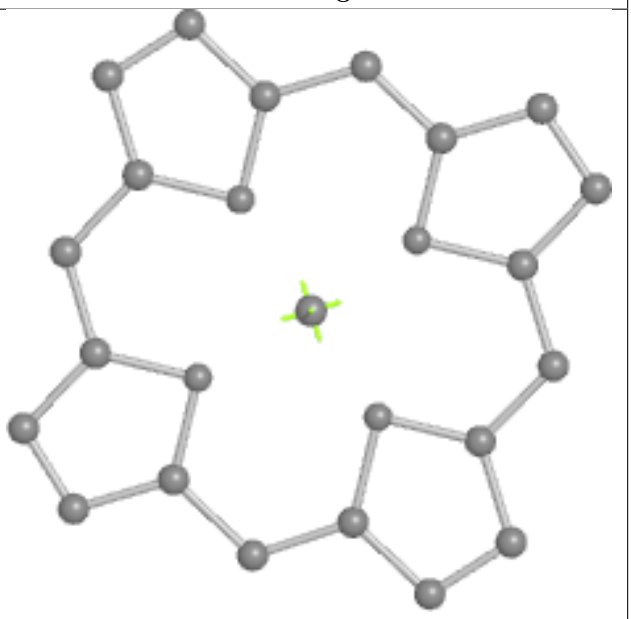
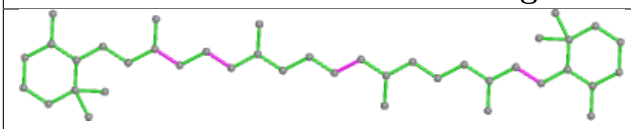


Rings

Ligand BCR I 4018



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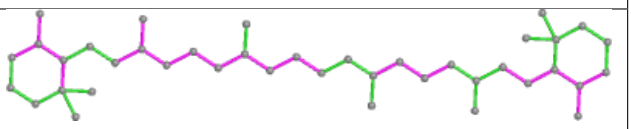
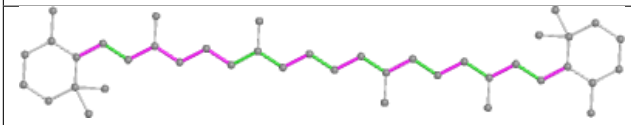


Bond angles



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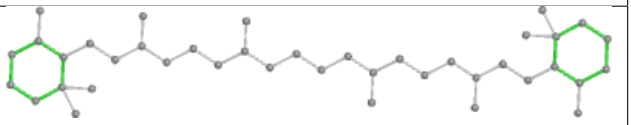
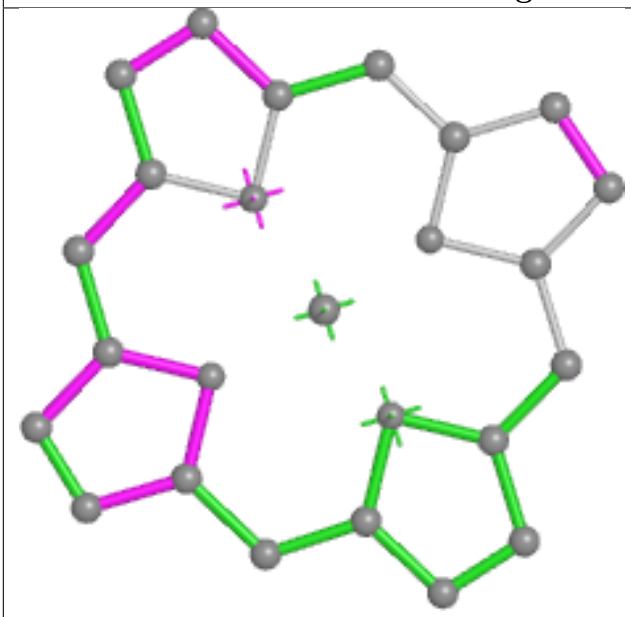


Rings

Ligand CLA B 1022



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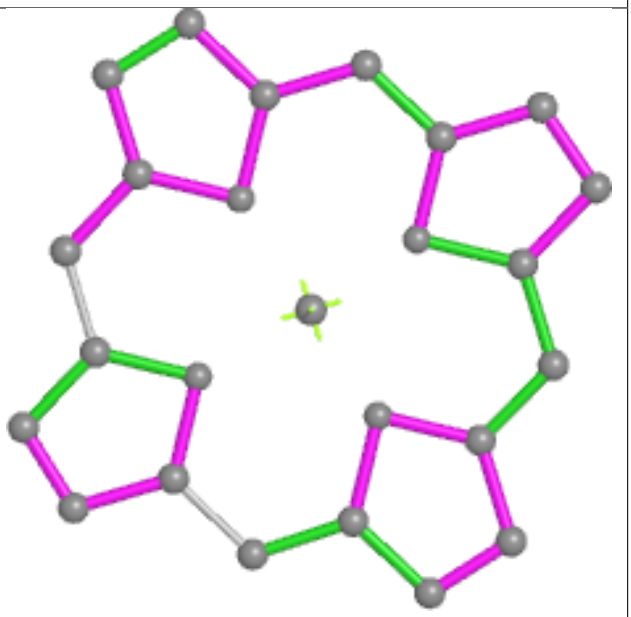
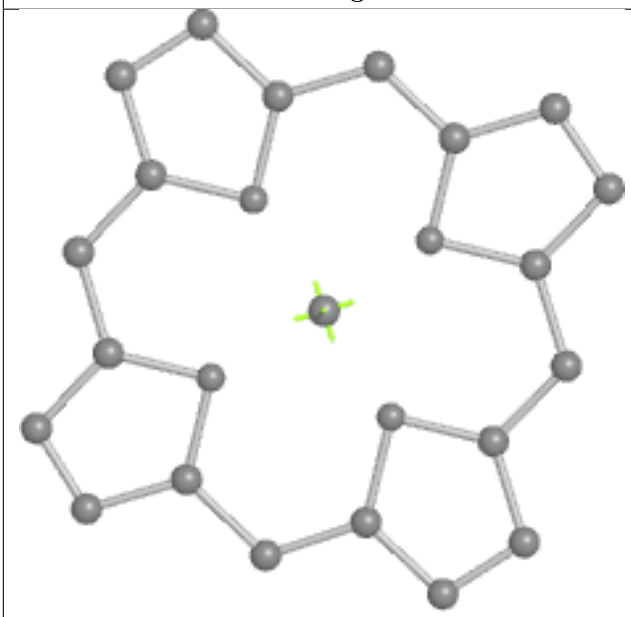
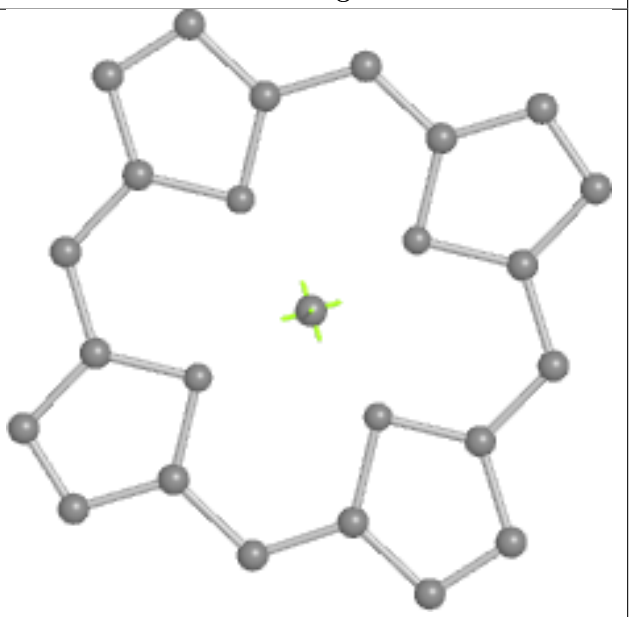


Bond angles

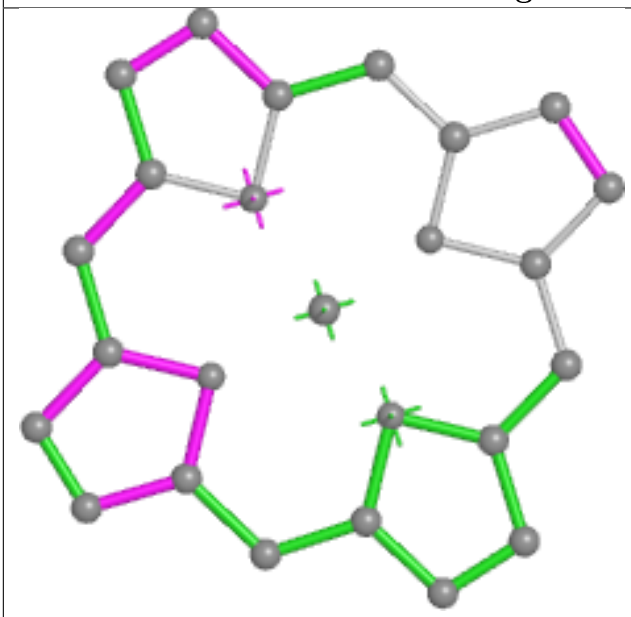


Torsions

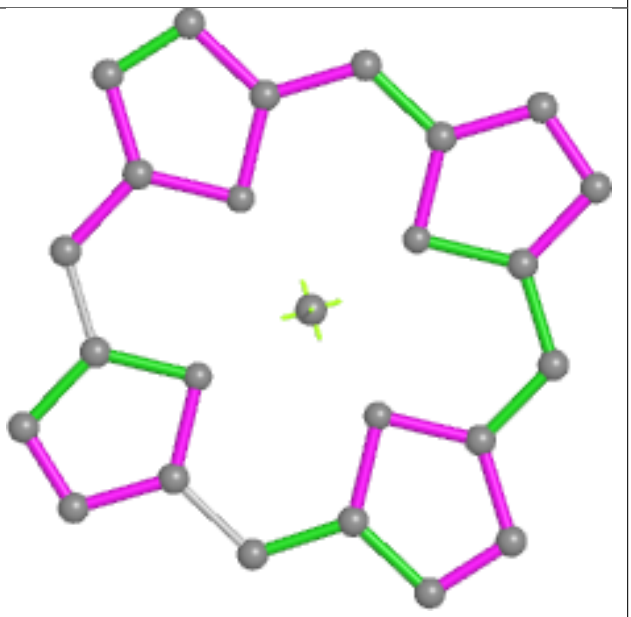


Rings

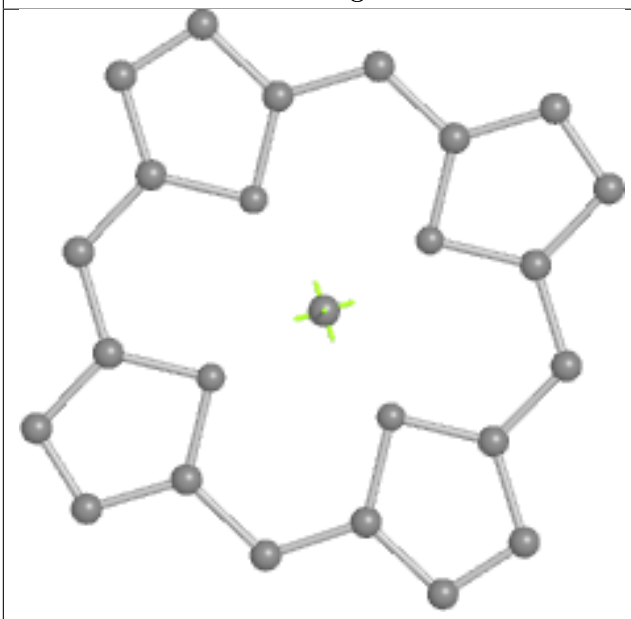
Ligand CLA B 1234



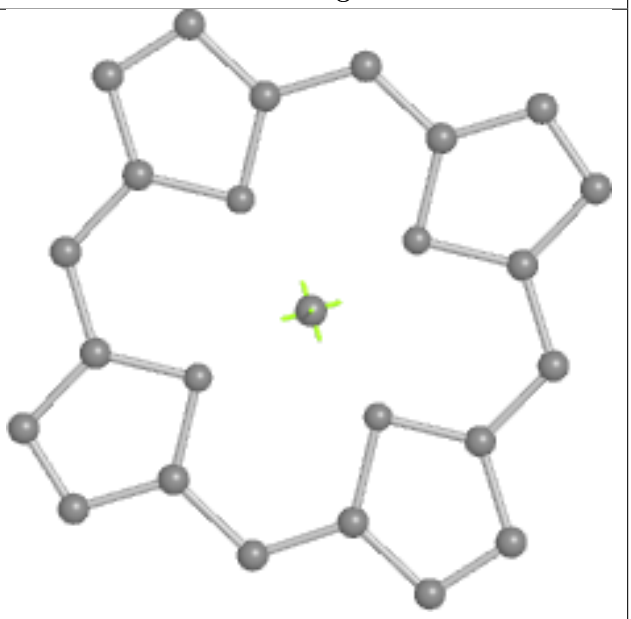
Bond lengths



Bond angles

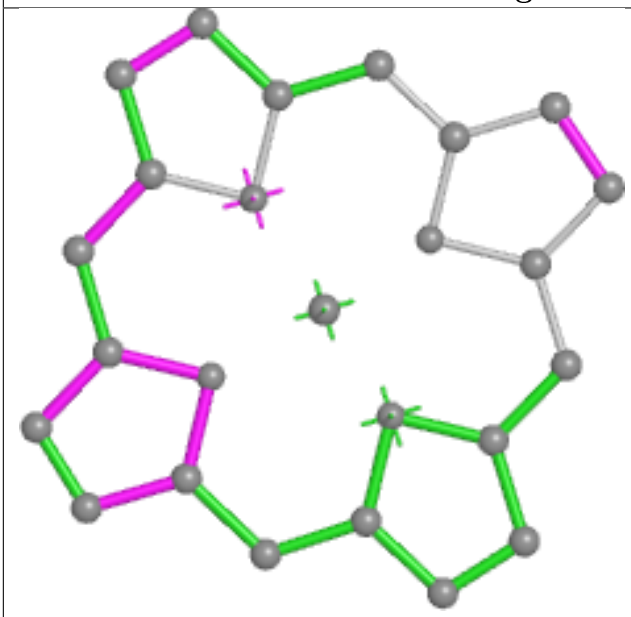


Torsions

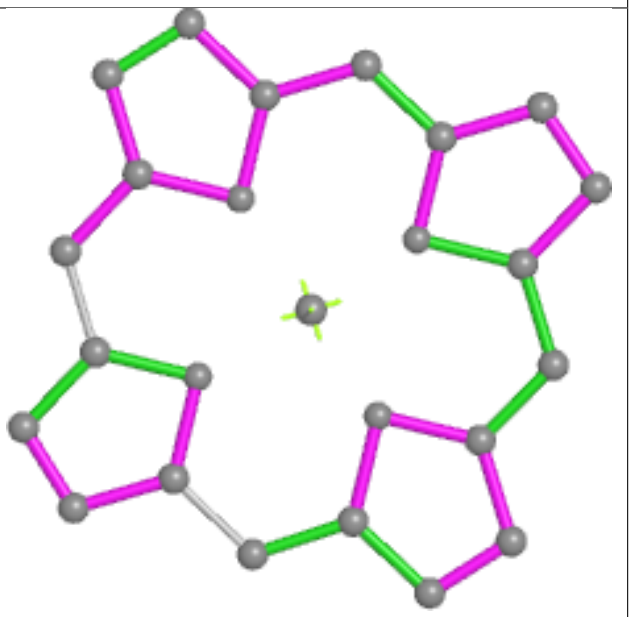


Rings

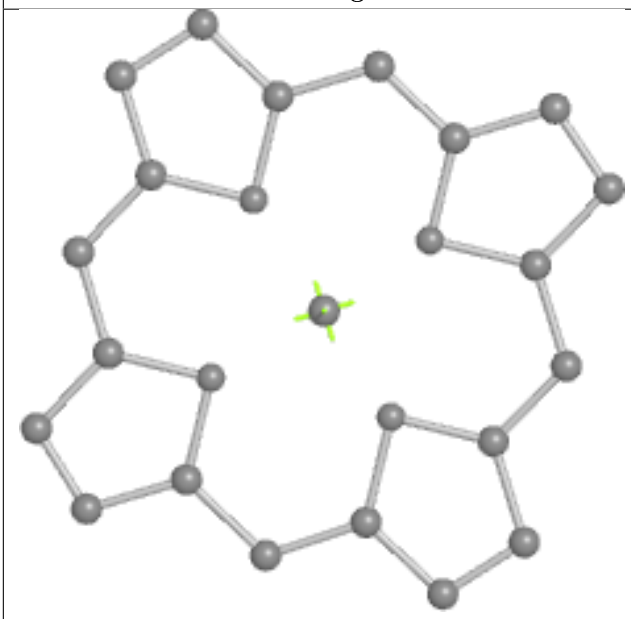
Ligand CLA A 1127



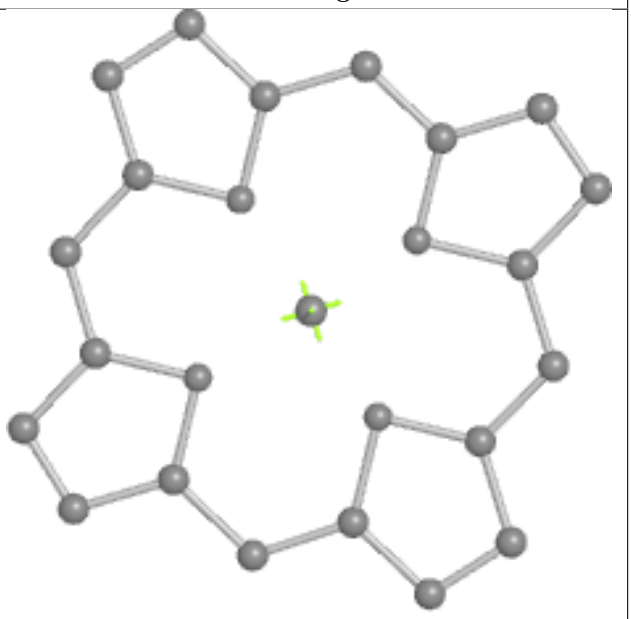
Bond lengths



Bond angles

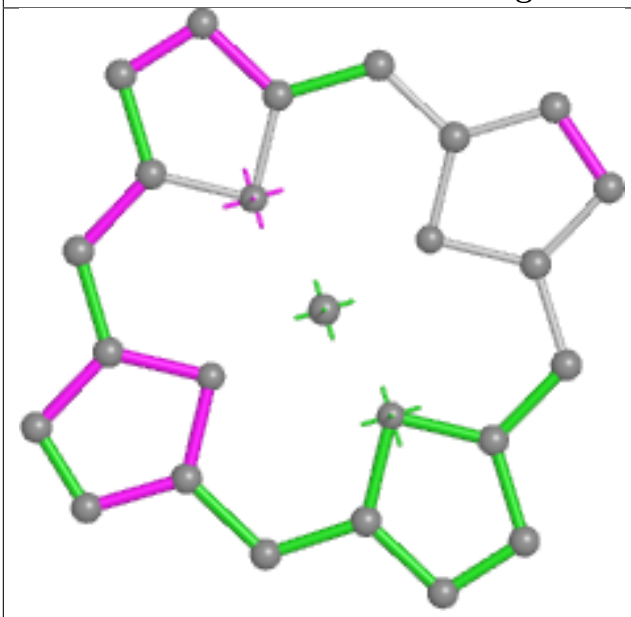


Torsions



Rings

Ligand CLA A 1119



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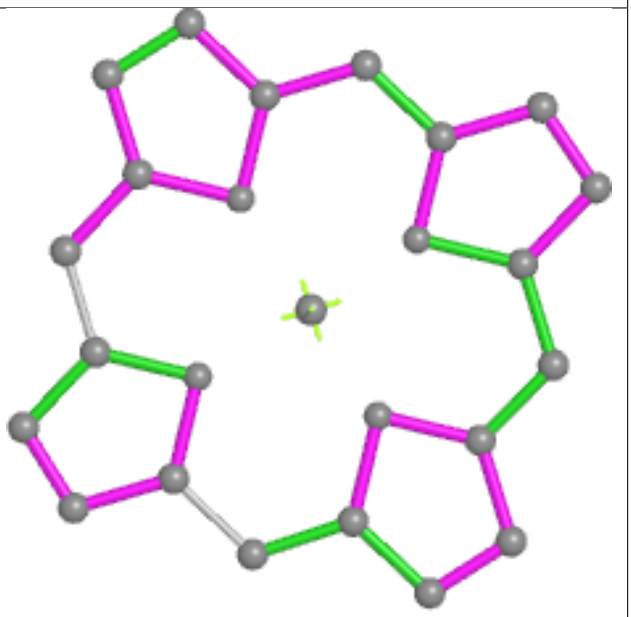
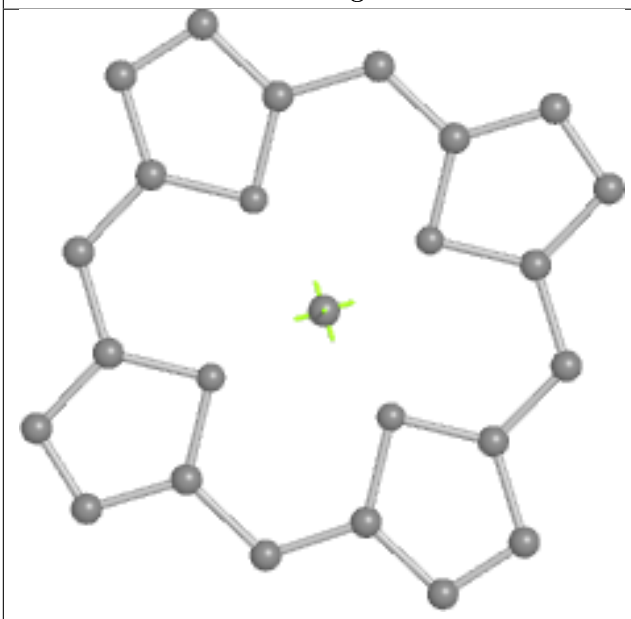


Bond angles



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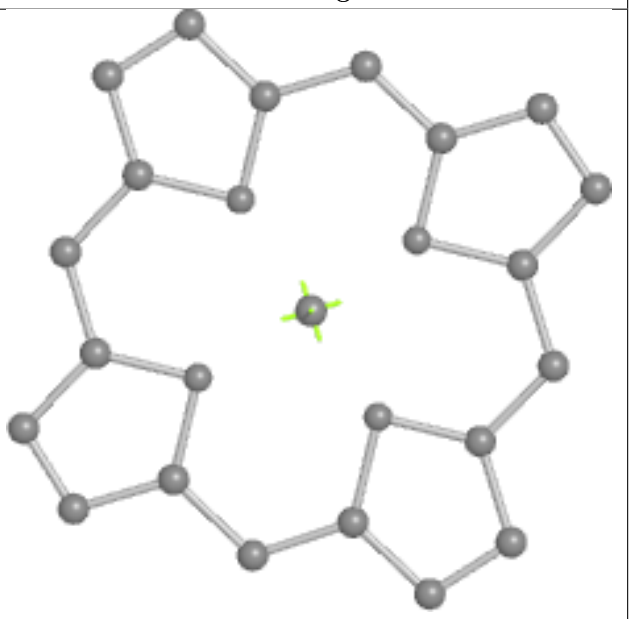
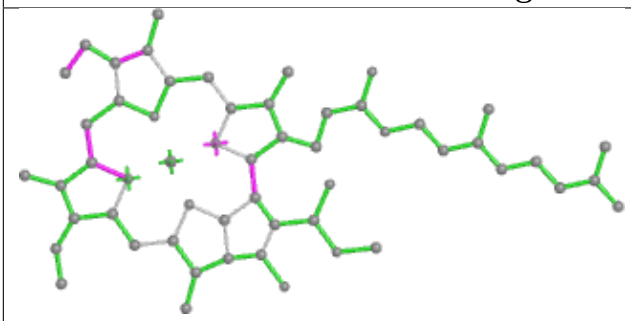


Rings

Ligand CLA B 1226



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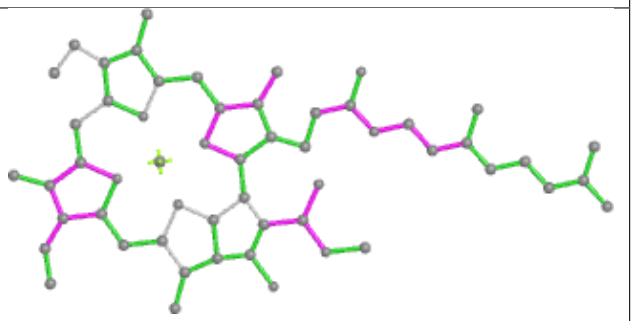
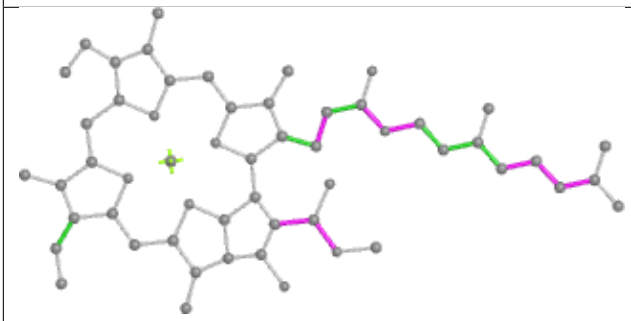
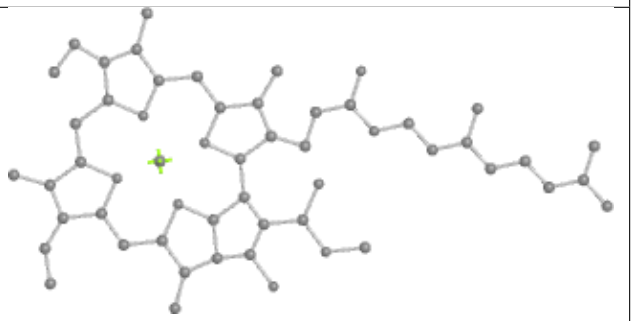


Bond angles

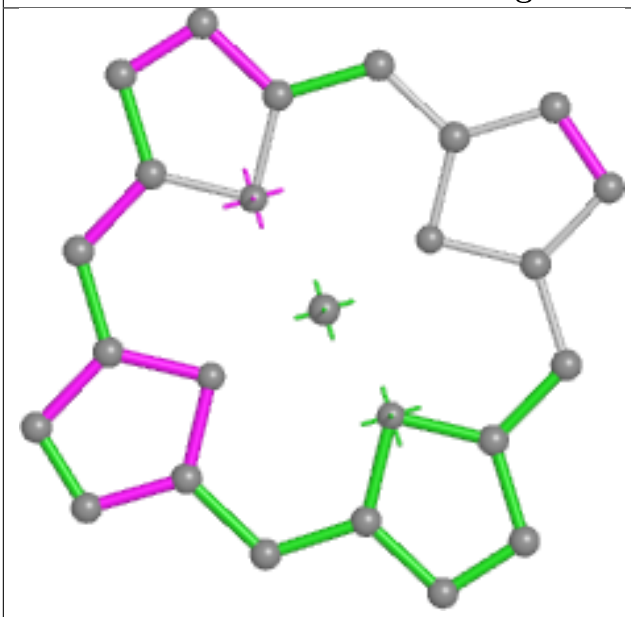


Torsions

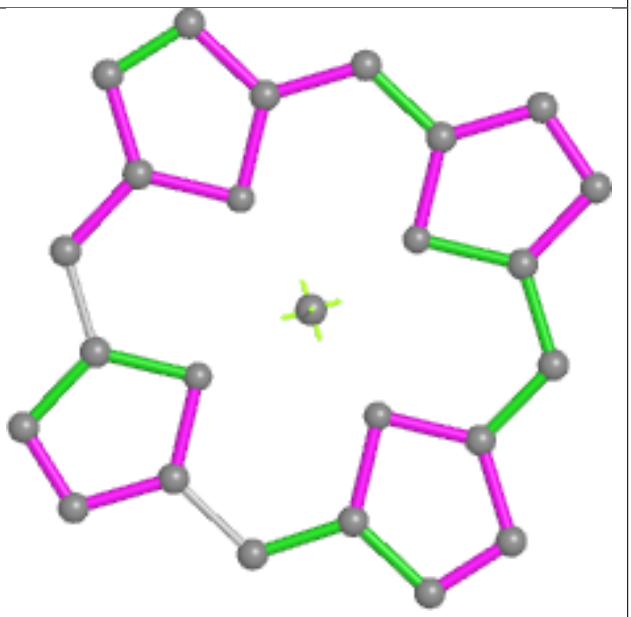


Rings

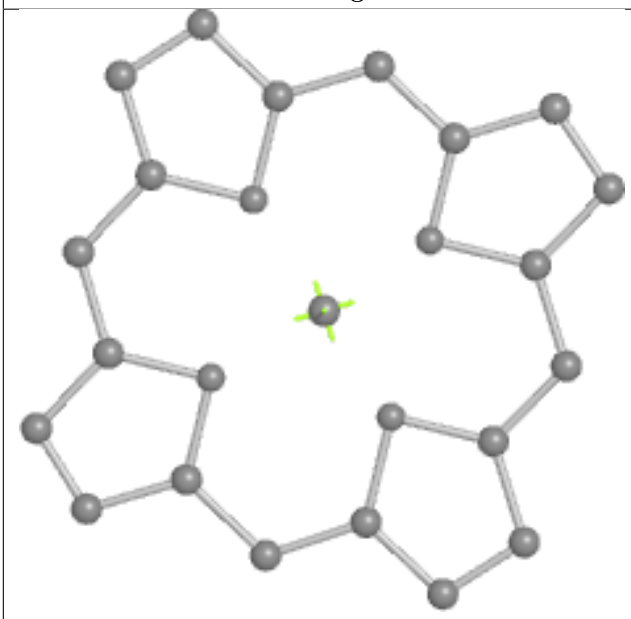
Ligand CLA B 1210



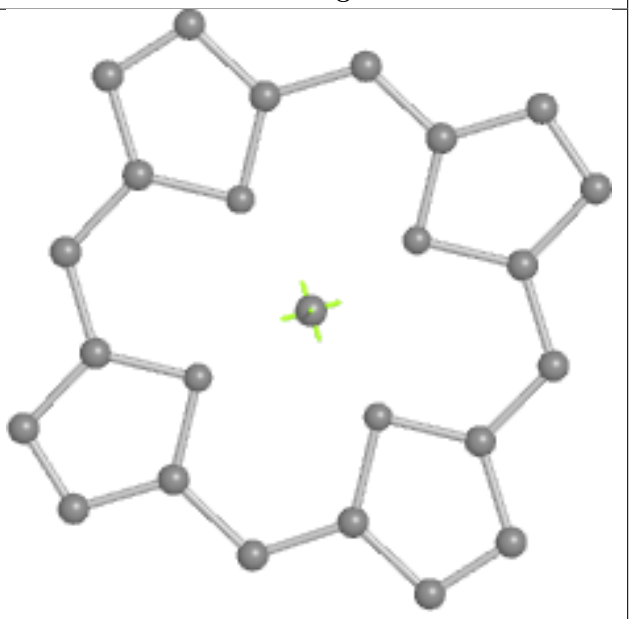
Bond lengths



Bond angles

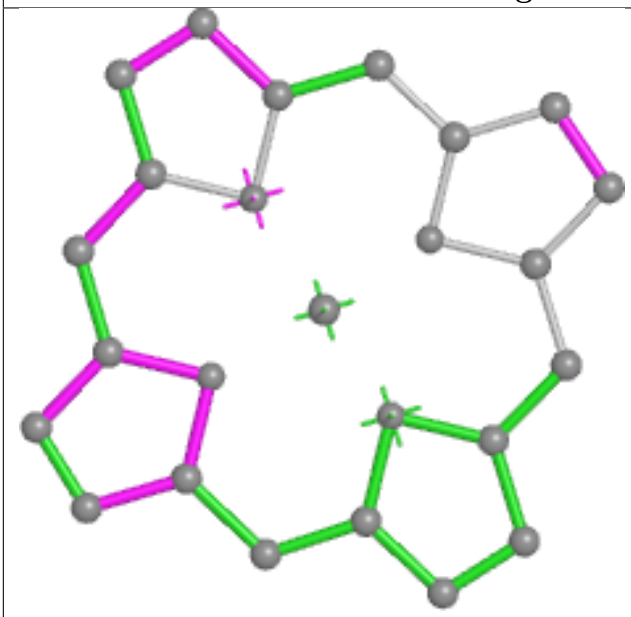


Torsions

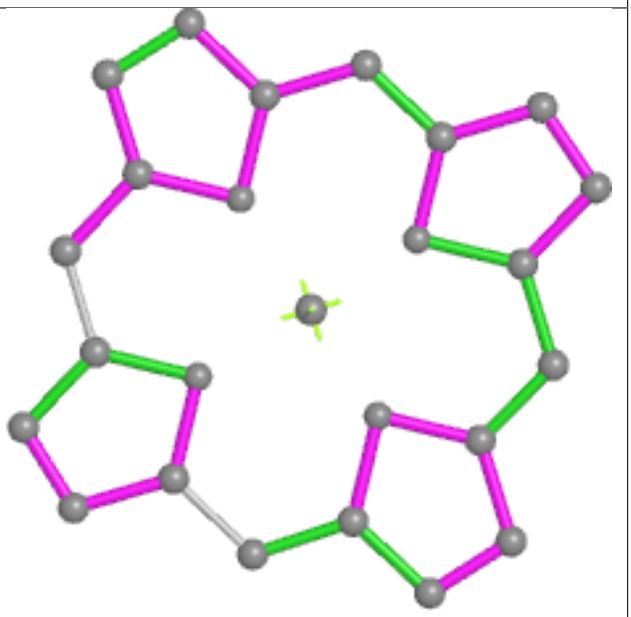


Rings

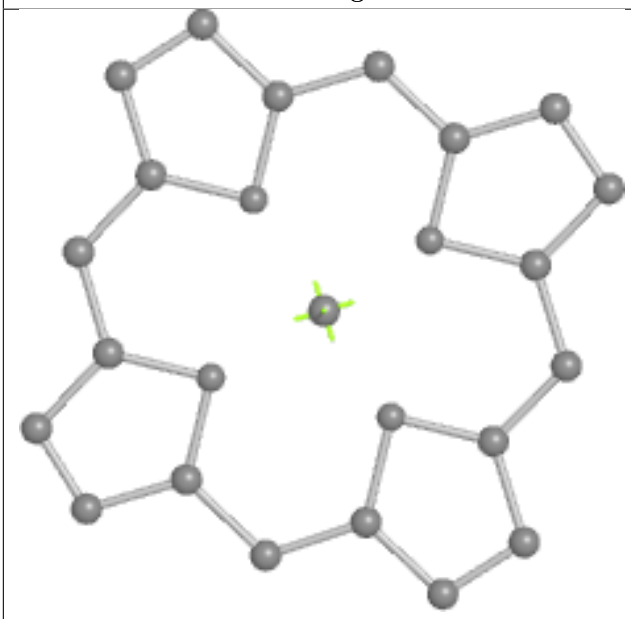
Ligand CLA B 1211



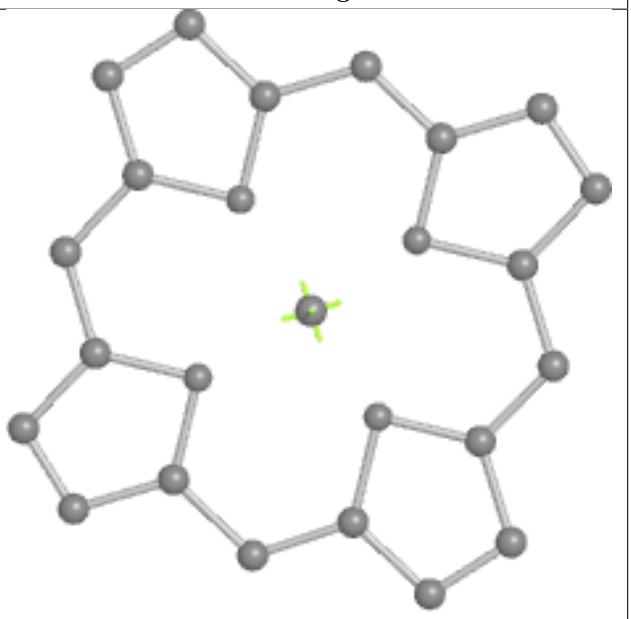
Bond lengths



Bond angles

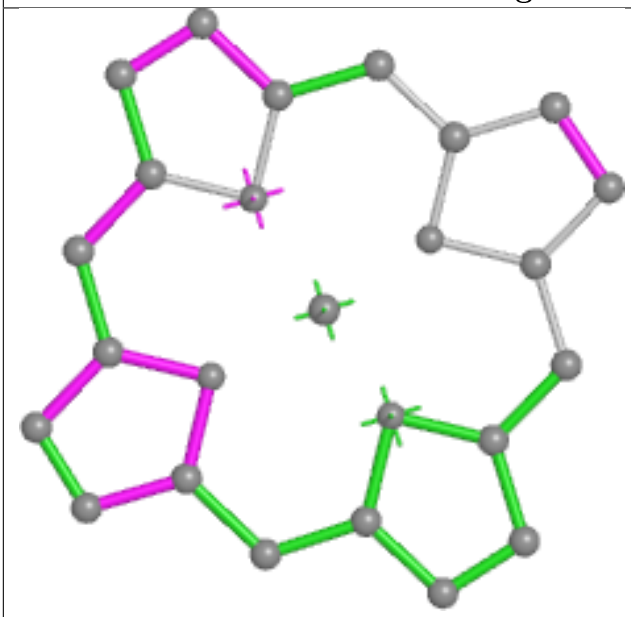


Torsions

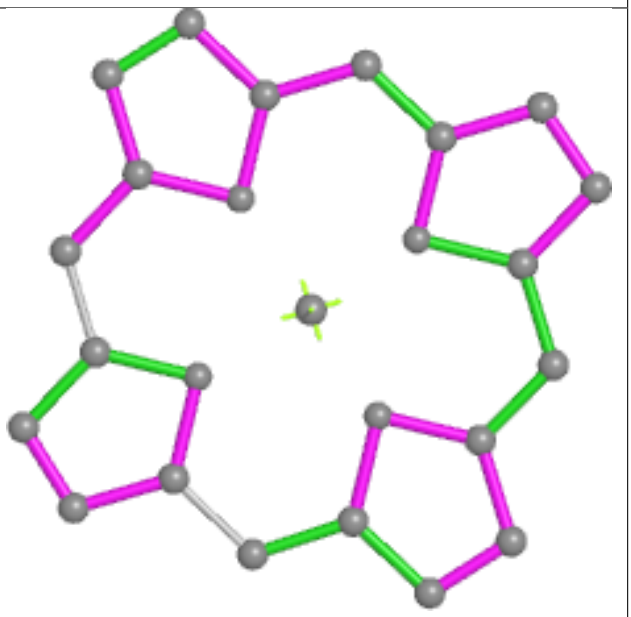


Rings

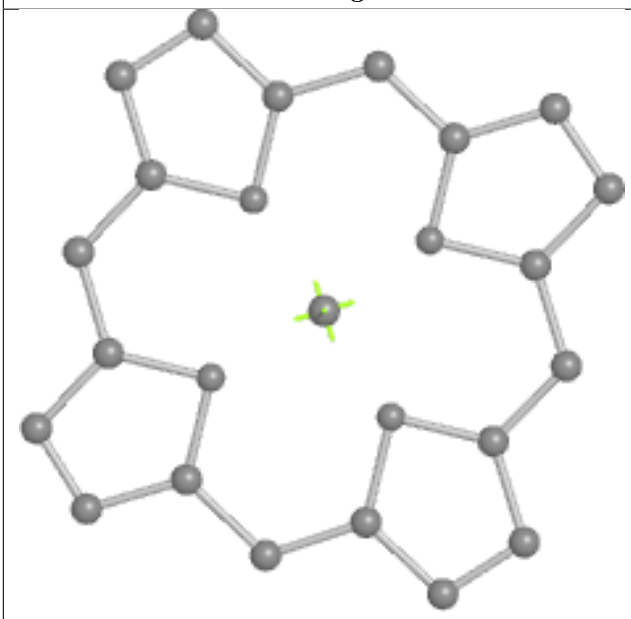
Ligand CLA A 1125



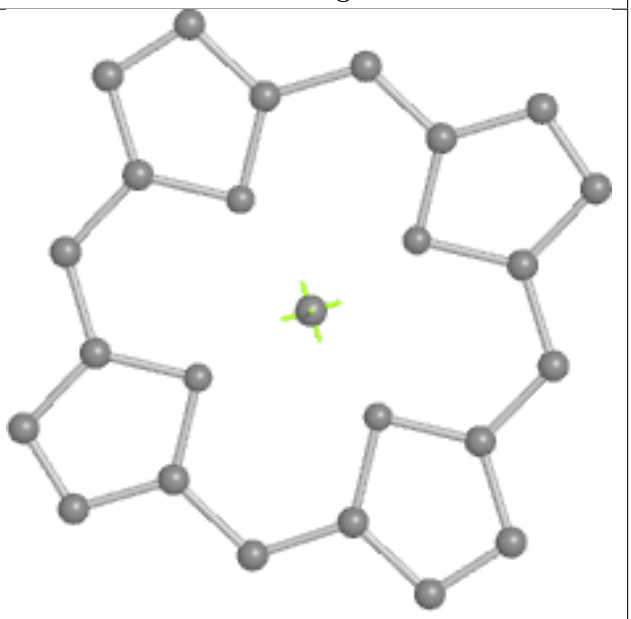
Bond lengths



Bond angles

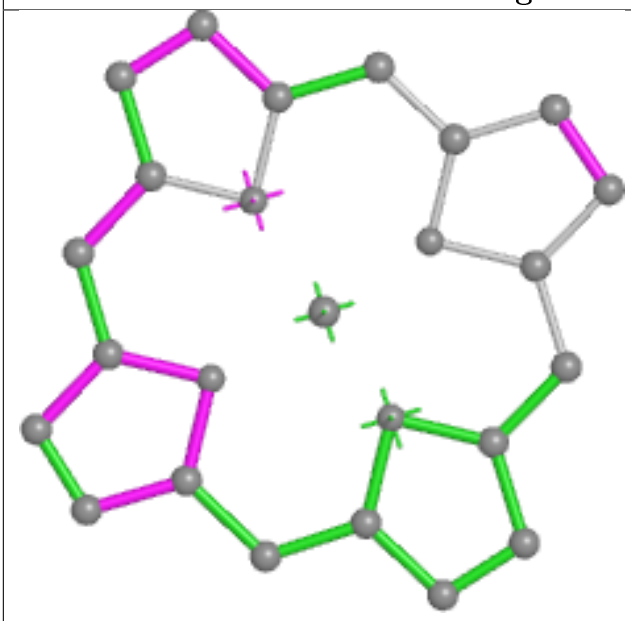


Torsions

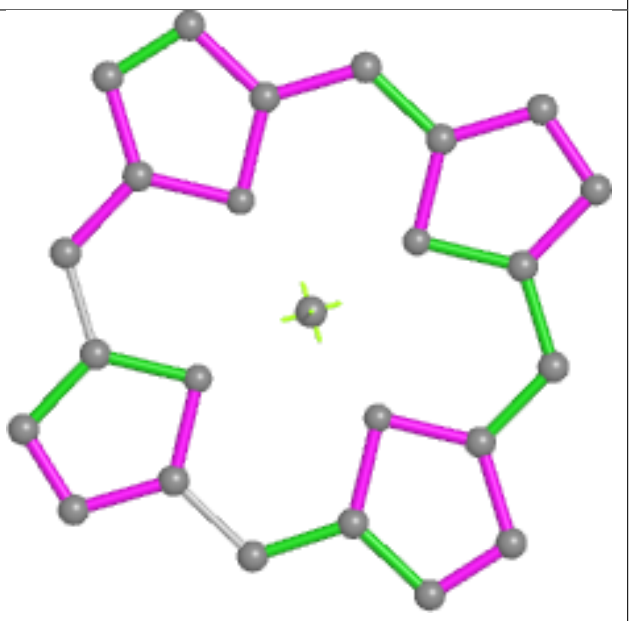


Rings

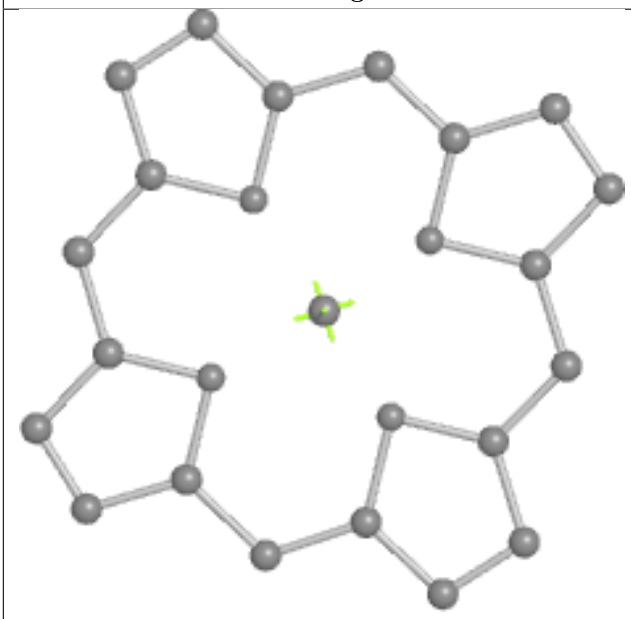
Ligand CLA B 1205



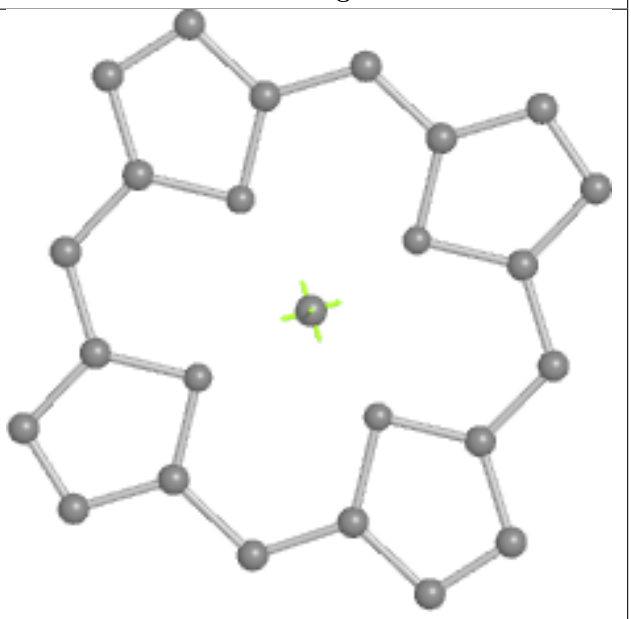
Bond lengths



Bond angles



Torsions



Rings

5.7 Other polymers

There are no such residues in this entry.

5.8 Polymer linkage issues

There are no chain breaks in this entry.

6 Fit of model and data

6.1 Protein, DNA and RNA chains

In the following table, the column labelled '#RSRZ> 2' contains the number (and percentage) of RSRZ outliers, followed by percent RSRZ outliers for the chain as percentile scores relative to all X-ray entries and entries of similar resolution. The OWAB column contains the minimum, median, 95^{th} percentile and maximum values of the occupancy-weighted average B-factor per residue. The column labelled 'Q< 0.9' lists the number of (and percentage) of residues with an average occupancy less than 0.9.

Mol	Chain	Analysed	<RSRZ>	#RSRZ>2	OWAB(Å^2)	Q<0.9
1	2	144/222 (64%)	0.11	13 (9%) 9 8	118, 215, 376, 389	0
1	3	150/222 (67%)	-0.07	13 (8%) 10 9	117, 198, 289, 310	0
2	4	116/214 (54%)	0.21	13 (11%) 5 5	169, 252, 362, 412	0
3	A	740/740 (100%)	-0.34	20 (2%) 54 44	40, 129, 195, 255	0
4	B	725/725 (100%)	0.23	72 (9%) 7 7	101, 201, 318, 438	0
5	C	80/80 (100%)	0.19	8 (10%) 7 7	113, 162, 221, 292	0
6	D	124/124 (100%)	0.22	18 (14%) 2 3	132, 186, 251, 415	0
7	E	69/69 (100%)	0.33	5 (7%) 15 12	138, 189, 265, 445	0
8	F	153/155 (98%)	-0.40	3 (1%) 65 56	117, 180, 248, 265	0
9	I	32/32 (100%)	-0.27	0 100 100	184, 254, 380, 425	0
10	J	38/38 (100%)	-0.73	0 100 100	88, 121, 212, 234	0
11	K	47/47 (100%)	-0.70	1 (2%) 63 54	132, 172, 260, 291	0
12	L	140/140 (100%)	0.62	27 (19%) 1 1	156, 233, 383, 404	0
13	M	29/29 (100%)	0.19	0 100 100	177, 247, 271, 276	0
14	O	98/98 (100%)	-0.32	3 (3%) 49 38	212, 278, 405, 427	0
All	All	2685/2935 (91%)	-0.02	196 (7%) 15 12	40, 183, 328, 445	0

All (196) RSRZ outliers are listed below:

Mol	Chain	Res	Type	RSRZ
7	E	30	SER	12.1
4	B	158	LYS	11.4
4	B	157	PRO	10.4
4	B	130	ASN	10.0
12	L	75	TYR	9.7
4	B	128	ARG	9.2
7	E	29	THR	9.1

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Mol	Chain	Res	Type	RSRZ
4	B	131	VAL	9.0
4	B	160	LYS	8.9
4	B	129	ASN	8.9
6	D	125	ASN	8.8
7	E	31	LYS	8.6
12	L	140	SER	8.5
4	B	83	LYS	8.4
12	L	74	LYS	8.1
1	3	168	LEU	7.9
1	2	94	THR	7.3
12	L	13	PHE	7.2
4	B	159	PHE	7.2
4	B	271	MET	6.9
1	2	125	PHE	6.8
7	E	32	VAL	6.7
4	B	471	GLY	6.6
2	4	233	ALA	6.6
4	B	75	GLU	6.6
1	2	95	GLU	6.3
1	2	174	GLU	6.3
6	D	107	ASN	6.2
4	B	88	ALA	6.2
3	A	509	ASP	6.2
12	L	71	THR	6.0
4	B	470	TYR	5.8
12	L	139	PHE	5.8
4	B	362	ASP	5.8
4	B	125	ILE	5.8
5	C	2	ALA	5.5
4	B	361	PHE	5.4
6	D	109	GLY	5.4
4	B	459	GLN	5.2
6	D	19	LEU	5.2
12	L	136	LEU	5.2
5	C	32	ASP	5.1
12	L	102	THR	5.1
12	L	70	ASN	5.0
1	3	148	LEU	4.9
12	L	101	PHE	4.9
1	3	147	ALA	4.9
6	D	126	PRO	4.8
4	B	126	GLY	4.8

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Mol	Chain	Res	Type	RSRZ
12	L	72	ASP	4.8
4	B	510	ILE	4.7
5	C	3	HIS	4.7
1	2	96	VAL	4.7
12	L	138	LEU	4.7
4	B	170	GLU	4.6
3	A	566	GLY	4.6
12	L	15	GLY	4.6
4	B	363	TYR	4.5
4	B	658	GLY	4.5
4	B	364	VAL	4.4
4	B	127	ILE	4.4
2	4	231	GLY	4.4
4	B	124	THR	4.4
12	L	76	LEU	4.3
8	F	97	THR	4.3
1	3	154	GLY	4.3
3	A	554	ARG	4.2
1	3	151	SER	4.1
4	B	462	GLN	4.1
1	2	183	GLY	3.9
3	A	625	SER	3.9
12	L	104	ASP	3.9
12	L	73	ILE	3.9
4	B	664	SER	3.8
6	D	124	VAL	3.8
3	A	617	THR	3.8
1	2	100	GLU	3.8
3	A	616	GLY	3.8
1	3	169	GLY	3.7
4	B	491	TRP	3.7
4	B	86	PRO	3.7
4	B	359	MET	3.7
1	3	177	TRP	3.7
4	B	493	PRO	3.7
4	B	472	PHE	3.7
4	B	119	TYR	3.7
4	B	469	LEU	3.7
4	B	367	SER	3.7
4	B	87	LEU	3.7
1	2	182	PRO	3.7
12	L	16	HIS	3.6

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Mol	Chain	Res	Type	RSRZ
5	C	71	GLY	3.6
2	4	234	GLY	3.5
1	3	74	SER	3.5
4	B	366	GLN	3.5
2	4	162	GLU	3.5
3	A	508	ALA	3.5
6	D	15	THR	3.5
1	2	218	ALA	3.4
4	B	273	HIS	3.4
4	B	456	ILE	3.4
4	B	657	THR	3.4
2	4	119	HIS	3.4
14	O	98	GLN	3.4
12	L	77	ALA	3.3
12	L	137	THR	3.3
3	A	564	ASN	3.3
1	3	146	PRO	3.3
4	B	660	MET	3.3
4	B	84	THR	3.3
4	B	202	GLY	3.2
2	4	178	LYS	3.2
12	L	98	ALA	3.2
1	2	173	ILE	3.2
1	2	175	SER	3.1
4	B	272	ALA	3.1
6	D	127	ALA	3.1
12	L	9	ASN	3.1
11	K	35	GLN	3.1
12	L	2	THR	3.1
4	B	661	PHE	3.1
4	B	134	TYR	3.0
4	B	153	LEU	3.0
4	B	331	GLN	3.0
12	L	17	LEU	3.0
4	B	85	LYS	3.0
6	D	129	VAL	3.0
5	C	33	GLY	2.9
2	4	158	ILE	2.9
2	4	159	GLY	2.9
3	A	553	ALA	2.9
3	A	555	ASN	2.9
12	L	94	LEU	2.9

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Mol	Chain	Res	Type	RSRZ
4	B	365	THR	2.9
6	D	12	LEU	2.9
6	D	128	GLN	2.9
12	L	135	LEU	2.8
6	D	112	GLN	2.8
4	B	161	PRO	2.8
6	D	11	PHE	2.8
6	D	18	TRP	2.7
1	3	77	TRP	2.7
4	B	433	GLY	2.7
4	B	133	LEU	2.7
1	2	121	ILE	2.7
4	B	74	PHE	2.7
7	E	1	MET	2.7
12	L	91	LEU	2.7
4	B	270	ASP	2.6
4	B	356	TYR	2.6
2	4	130	PHE	2.6
2	4	156	ALA	2.6
4	B	255	PHE	2.6
3	A	572	ASP	2.6
6	D	17	GLY	2.5
12	L	64	GLN	2.5
4	B	254	THR	2.5
5	C	5	VAL	2.5
6	D	113	VAL	2.5
4	B	360	ALA	2.5
14	O	70	VAL	2.5
4	B	199	ALA	2.5
8	F	96	ILE	2.5
4	B	156	GLN	2.4
3	A	11	VAL	2.3
3	A	108	LYS	2.3
4	B	537	LEU	2.2
6	D	13	GLY	2.2
2	4	173	SER	2.2
3	A	563	ALA	2.2
3	A	569	PHE	2.2
6	D	14	SER	2.2
3	A	621	ASN	2.2
8	F	86	LEU	2.2
4	B	665	TRP	2.2

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Mol	Chain	Res	Type	RSRZ
4	B	135	THR	2.1
1	3	178	LYS	2.1
4	B	536	ALA	2.1
5	C	4	THR	2.1
14	O	97	THR	2.1
3	A	570	PRO	2.1
1	3	76	GLU	2.1
4	B	132	GLU	2.1
1	3	171	THR	2.1
2	4	118	LEU	2.1
2	4	248	GLU	2.1
3	A	10	LYS	2.0
3	A	179	LYS	2.0
1	2	184	TYR	2.0
5	C	35	LYS	2.0
3	A	410	VAL	2.0
4	B	204	HIS	2.0
4	B	539	ALA	2.0
4	B	106	ARG	2.0
4	B	550	ASP	2.0
4	B	460	TRP	2.0

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

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

6.3 Carbohydrates (i)

There are no carbohydrates in this entry.

6.4 Ligands (i)

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

Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
15	CLA	3	608	25/65	0.24	0.45	298,335,354,361	0
15	CLA	3	603	25/65	0.33	0.54	246,261,286,294	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
15	CLA	B	1217	25/65	0.48	0.49	231,256,273,279	0
15	CLA	4	602	25/65	0.50	0.42	496,534,558,558	0
15	CLA	B	1227	25/65	0.50	0.76	211,262,292,303	0
15	CLA	4	601	25/65	0.55	0.24	182,213,243,269	0
15	CLA	B	1209	25/65	0.62	0.34	235,264,283,284	0
15	CLA	B	1218	25/65	0.62	0.98	300,335,347,356	0
18	BCR	B	4008	40/40	0.62	0.55	172,230,254,261	0
18	BCR	A	4007	40/40	0.66	0.55	60,129,164,195	0
15	CLA	B	1223	25/65	0.66	0.44	233,265,282,284	0
15	CLA	B	1212	25/65	0.66	0.36	184,204,223,230	0
15	CLA	4	615	25/65	0.67	0.25	236,276,298,305	0
18	BCR	A	4008	40/40	0.67	0.62	48,114,172,181	0
15	CLA	O	1602	25/65	0.68	0.44	303,330,344,350	0
15	CLA	4	608	25/65	0.69	0.27	343,352,370,376	0
15	CLA	4	611	25/65	0.69	0.73	216,237,248,253	0
15	CLA	B	1214	25/65	0.69	0.82	274,296,313,326	0
15	CLA	B	1208	25/65	0.70	0.30	203,267,283,288	0
15	CLA	4	609	25/65	0.70	0.37	252,286,299,301	0
16	PQN	B	2002	33/33	0.70	0.97	126,151,167,174	0
15	CLA	2	616	25/65	0.70	0.61	150,192,224,226	0
15	CLA	2	611	25/65	0.71	0.25	183,236,260,270	0
15	CLA	B	1221	25/65	0.72	0.70	178,214,233,234	0
15	CLA	B	1207	25/65	0.72	0.40	262,286,303,307	0
15	CLA	B	1216	25/65	0.72	1.01	337,368,376,377	0
15	CLA	3	611	25/65	0.72	0.17	118,182,201,208	0
15	CLA	4	604	25/65	0.72	0.33	156,208,225,230	0
18	BCR	I	4018	40/40	0.72	0.54	82,148,219,223	0
15	CLA	B	1231	25/65	0.73	0.27	247,265,279,286	0
15	CLA	2	615	25/65	0.74	0.16	232,276,300,304	0
15	CLA	O	1603	25/65	0.74	0.42	179,204,218,223	0
15	CLA	O	1601	25/65	0.74	0.26	333,342,346,354	0
15	CLA	B	1210	25/65	0.74	0.31	227,262,274,291	0
15	CLA	B	1236	45/65	0.75	0.36	123,190,211,222	0
15	CLA	2	613	25/65	0.75	0.30	182,222,233,242	0
15	CLA	2	601	25/65	0.75	0.25	164,206,231,233	0
15	CLA	L	1502	25/65	0.77	0.21	146,181,197,213	0
18	BCR	A	4011	40/40	0.78	0.50	51,112,139,162	0
15	CLA	2	603	25/65	0.78	0.21	157,184,202,206	0
15	CLA	A	1129	25/65	0.78	0.28	142,179,197,200	0
15	CLA	3	612	25/65	0.79	0.26	163,188,205,220	0
18	BCR	A	4017	40/40	0.80	0.68	86,164,194,202	0
15	CLA	4	610	25/65	0.80	0.17	157,182,206,213	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
15	CLA	3	607	25/65	0.80	0.27	213,230,253,258	0
15	CLA	K	1402	25/65	0.80	0.17	139,167,192,202	0
15	CLA	2	606	25/65	0.80	0.24	191,219,239,244	0
15	CLA	B	1232	65/65	0.80	0.34	128,185,220,230	0
15	CLA	4	616	25/65	0.80	0.29	189,214,233,237	0
18	BCR	B	4005	40/40	0.81	0.64	90,132,165,170	0
15	CLA	A	1137	25/65	0.81	0.34	71,135,157,165	0
15	CLA	3	602	25/65	0.81	0.16	135,182,210,216	0
15	CLA	B	1222	25/65	0.81	0.63	204,224,242,243	0
15	CLA	A	1011	50/65	0.81	0.43	98,141,159,202	0
15	CLA	B	1021	45/65	0.82	0.36	114,149,172,191	0
15	CLA	B	1219	25/65	0.82	0.14	159,177,201,218	0
15	CLA	2	610	25/65	0.82	0.21	164,216,237,243	0
15	CLA	B	1220	25/65	0.83	0.56	197,228,243,255	0
15	CLA	2	604	25/65	0.83	0.22	139,163,200,206	0
15	CLA	B	1023	50/65	0.83	0.45	88,147,172,183	0
15	CLA	3	614	25/65	0.83	0.33	104,155,182,201	0
15	CLA	F	1302	25/65	0.83	0.21	186,229,263,264	0
15	CLA	K	1401	25/65	0.83	0.19	151,187,207,218	0
15	CLA	B	1225	50/65	0.83	0.33	89,228,243,267	0
15	CLA	B	1234	25/65	0.83	0.36	228,248,256,260	0
15	CLA	A	1119	25/65	0.83	0.30	110,152,178,187	0
15	CLA	B	1226	55/65	0.83	0.34	72,163,196,199	0
15	CLA	3	601	25/65	0.83	0.23	144,196,210,234	0
15	CLA	4	606	25/65	0.84	0.15	161,216,236,250	0
15	CLA	A	1101	45/65	0.84	0.27	62,120,151,173	0
15	CLA	B	1224	55/65	0.84	0.38	174,218,261,270	0
15	CLA	2	607	25/65	0.84	0.17	159,202,220,235	0
15	CLA	A	1123	25/65	0.84	0.26	90,121,141,147	0
15	CLA	4	612	25/65	0.84	0.21	87,127,149,161	0
15	CLA	2	608	25/65	0.85	0.90	188,210,232,242	0
15	CLA	A	1116	55/65	0.85	0.29	42,90,116,124	0
15	CLA	A	1110	25/65	0.85	0.30	139,192,211,225	0
15	CLA	L	1501	25/65	0.85	0.14	151,182,196,207	0
15	CLA	A	1120	25/65	0.85	0.38	109,183,229,234	0
16	PQN	A	2001	33/33	0.85	0.39	36,100,136,159	0
15	CLA	A	1121	25/65	0.85	0.26	105,146,174,178	0
15	CLA	B	1204	25/65	0.85	0.26	259,286,298,310	0
15	CLA	B	1211	25/65	0.85	0.18	166,183,201,217	0
18	BCR	A	4002	40/40	0.86	0.66	29,93,126,132	0
15	CLA	A	1138	25/65	0.86	0.53	107,137,164,202	0
15	CLA	A	1012	55/65	0.86	0.29	67,145,178,191	0

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Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
15	CLA	2	614	25/65	0.86	0.28	181,245,252,253	0
15	CLA	3	606	25/65	0.86	0.49	172,210,242,250	0
15	CLA	A	1136	25/65	0.86	0.29	87,161,186,206	0
15	CLA	A	1103	55/65	0.86	0.29	48,92,121,124	0
15	CLA	3	604	25/65	0.87	0.32	189,234,254,266	0
15	CLA	A	1013	55/65	0.87	0.33	45,141,172,184	0
15	CLA	B	1022	25/65	0.87	0.32	106,141,159,178	0
15	CLA	B	1206	25/65	0.87	0.21	148,173,194,203	0
15	CLA	A	1112	25/65	0.87	0.22	97,124,135,141	0
15	CLA	A	1133	25/65	0.87	0.29	127,167,194,209	0
15	CLA	A	1109	25/65	0.87	0.17	55,102,136,154	0
15	CLA	B	1228	25/65	0.87	0.16	132,186,206,213	0
15	CLA	L	1503	25/65	0.88	0.31	237,249,262,268	0
15	CLA	B	1238	25/65	0.88	0.23	103,134,162,167	0
15	CLA	A	1131	45/65	0.88	0.23	57,87,101,121	0
15	CLA	B	1202	25/65	0.88	0.18	128,158,167,172	0
15	CLA	2	612	25/65	0.88	0.24	142,175,184,189	0
15	CLA	A	1130	55/65	0.88	0.37	121,209,233,235	0
15	CLA	B	1237	55/65	0.88	0.40	82,150,181,203	0
15	CLA	A	1139	25/65	0.88	0.24	91,143,148,161	0
15	CLA	B	1205	25/65	0.88	0.27	260,280,296,302	0
15	CLA	A	1118	25/65	0.89	0.30	155,183,211,214	0
15	CLA	A	1134	25/65	0.89	0.16	96,146,167,169	0
15	CLA	A	1135	25/65	0.89	0.22	101,119,157,168	0
15	CLA	A	1117	55/65	0.89	0.30	12,113,142,154	0
15	CLA	A	1105	55/65	0.89	0.25	39,125,150,190	0
15	CLA	A	1126	55/65	0.89	0.26	26,91,120,129	0
15	CLA	A	1132	25/65	0.89	0.28	69,121,152,153	0
15	CLA	A	1104	55/65	0.89	0.24	41,85,120,133	0
15	CLA	F	1301	45/65	0.89	0.26	96,146,168,177	0
15	CLA	B	1203	25/65	0.90	0.28	100,156,175,184	0
15	CLA	A	1106	55/65	0.90	0.29	61,117,147,168	0
15	CLA	B	1201	25/65	0.90	0.30	139,156,172,175	0
15	CLA	B	1235	25/65	0.90	0.25	105,137,154,160	0
15	CLA	B	1230	47/65	0.90	0.24	84,129,151,175	0
15	CLA	A	1108	25/65	0.90	0.17	45,123,143,151	0
15	CLA	A	1114	46/65	0.90	0.26	44,120,152,168	0
15	CLA	A	1141	25/65	0.90	0.22	145,178,193,196	0
15	CLA	2	602	25/65	0.91	0.10	132,169,184,193	0
15	CLA	J	1302	50/65	0.91	0.23	88,178,204,225	0
15	CLA	4	603	25/65	0.91	0.16	103,149,175,192	0
15	CLA	A	1127	25/65	0.91	0.18	0,57,91,97	0

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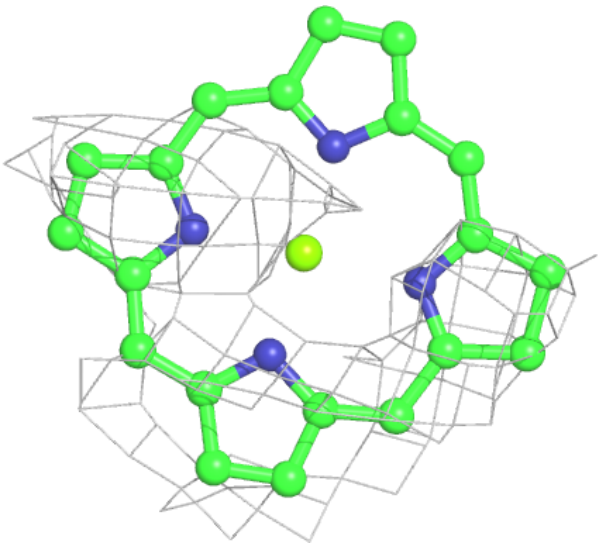
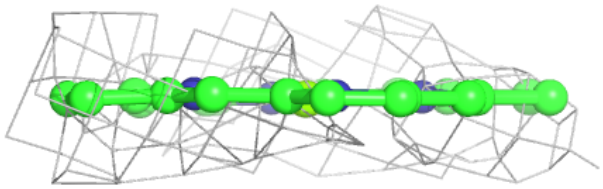
Mol	Type	Chain	Res	Atoms	RSCC	RSR	B-factors(Å^2)	Q<0.9
15	CLA	A	1111	25/65	0.91	0.18	62,104,123,138	0
15	CLA	4	605	25/65	0.91	0.17	105,126,145,154	0
15	CLA	B	1239	25/65	0.91	0.30	131,149,167,170	0
15	CLA	B	1229	50/65	0.91	0.45	105,140,167,180	0
15	CLA	B	1215	25/65	0.91	0.21	134,189,204,215	0
15	CLA	2	605	25/65	0.92	0.15	88,123,137,147	0
15	CLA	A	1115	55/65	0.92	0.21	77,115,144,156	0
15	CLA	A	1128	25/65	0.92	0.30	46,72,86,89	0
15	CLA	A	1122	25/65	0.92	0.17	52,112,129,135	0
15	CLA	A	1125	25/65	0.92	0.19	14,51,82,84	0
15	CLA	A	1140	25/65	0.92	0.25	68,92,127,132	0
15	CLA	A	1102	25/65	0.93	0.26	58,103,120,128	0
15	CLA	A	1124	25/65	0.93	0.26	50,82,106,122	0
15	CLA	3	610	25/65	0.94	0.23	144,167,182,195	0
15	CLA	A	1107	55/65	0.94	0.28	55,115,172,216	0
15	CLA	A	1113	25/65	0.95	0.27	86,119,141,149	0
17	SF4	C	3002	8/8	0.96	0.20	137,166,186,216	0
17	SF4	A	3001	8/8	0.97	0.24	145,192,216,219	0
17	SF4	C	3003	8/8	0.98	0.24	117,158,186,198	0

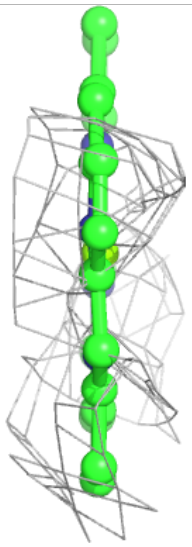
The following is a graphical depiction of the model fit to experimental electron density of all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the geometry validation Tables will also be included. Each fit is shown from different orientation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

Electron density around CLA 3 608:

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

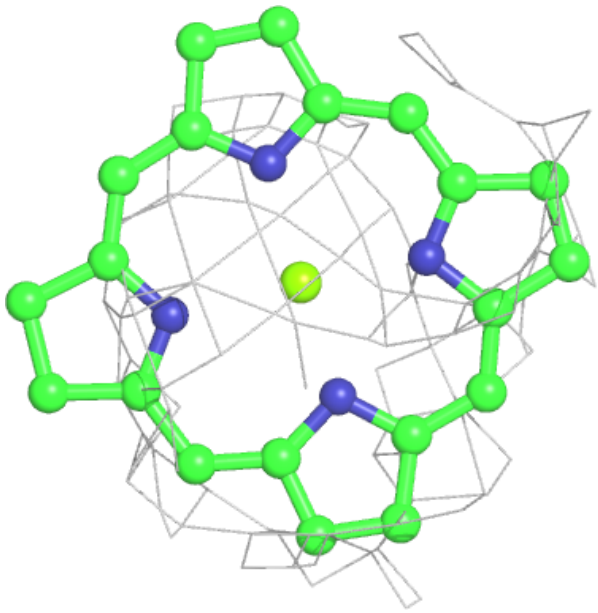


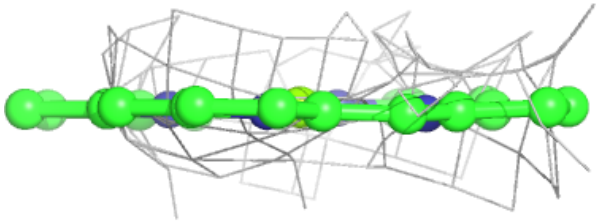


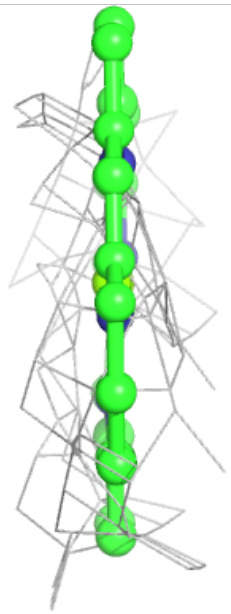


Electron density around CLA 3 603:

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

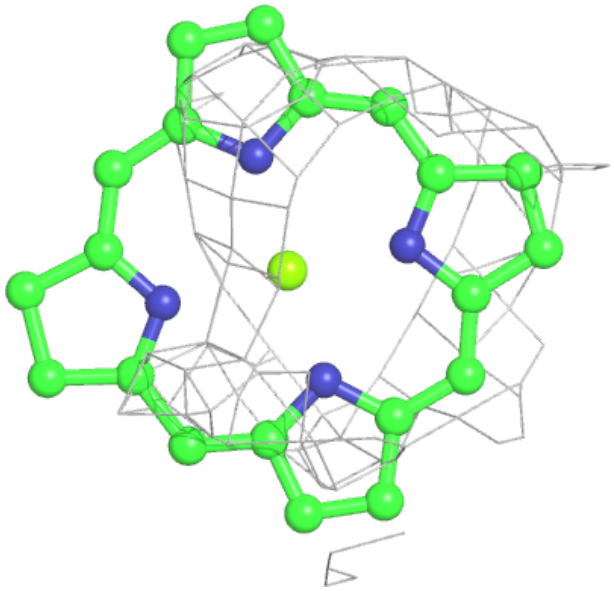


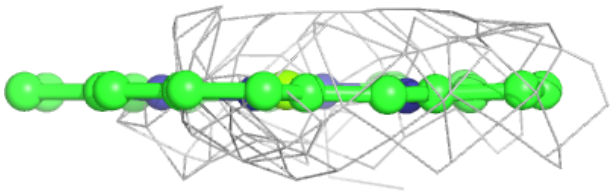


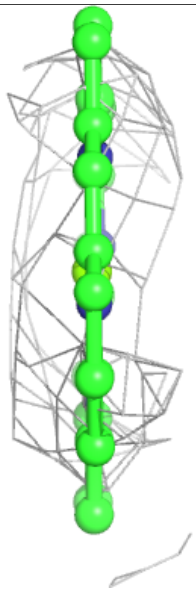


Electron density around CLA B 1217:

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

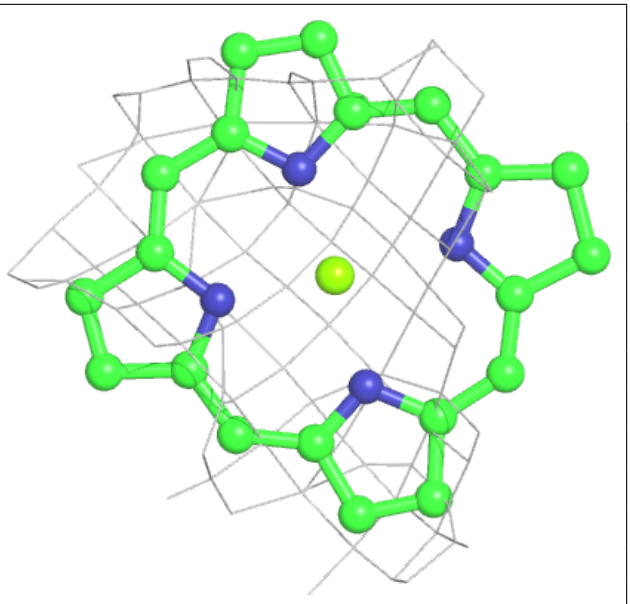


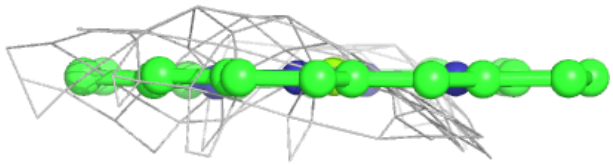


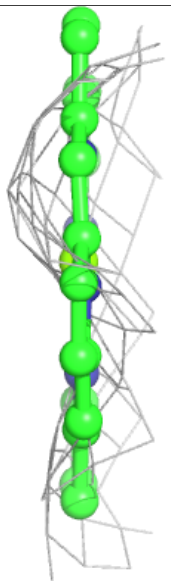


Electron density around CLA 4 602:

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

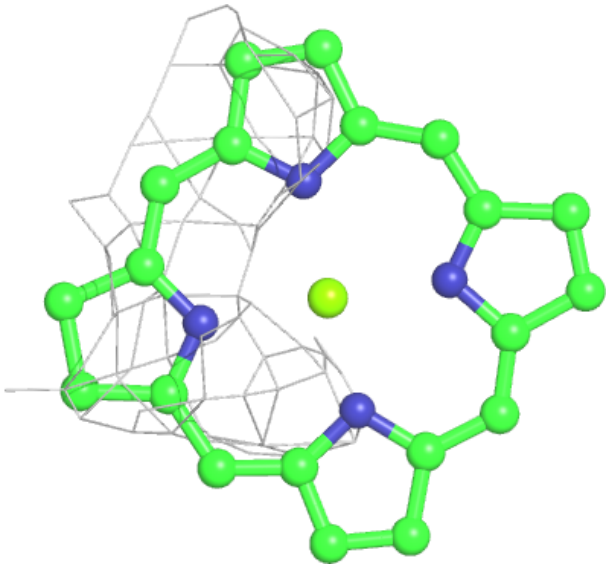


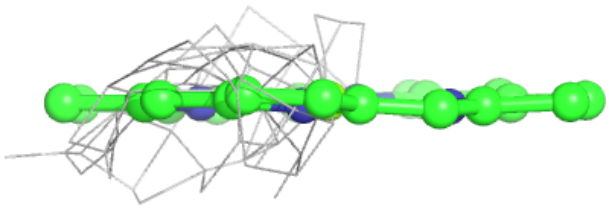


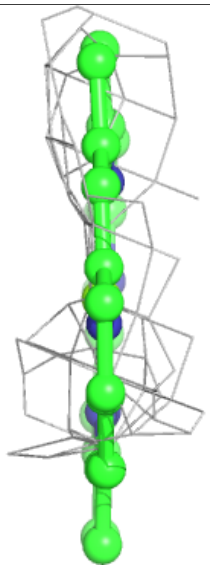


Electron density around CLA B 1227:

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

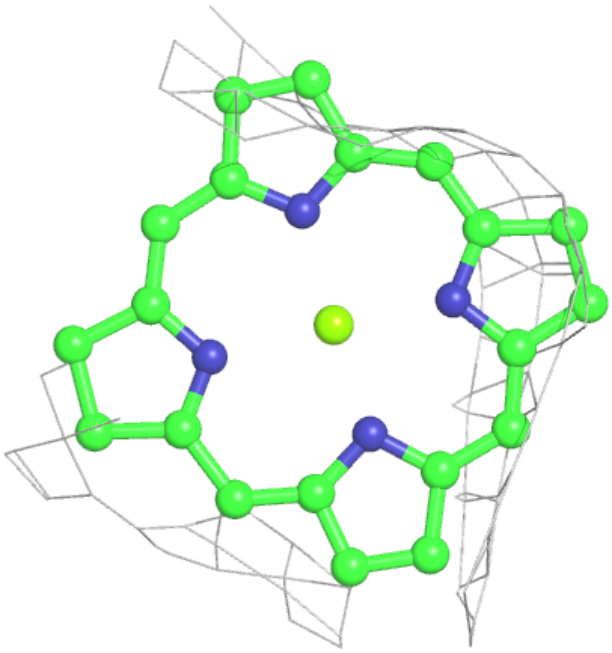


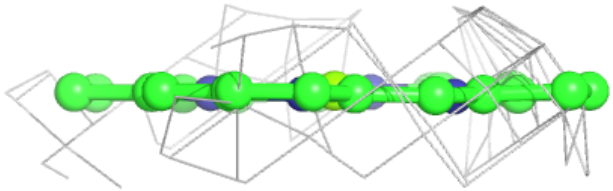


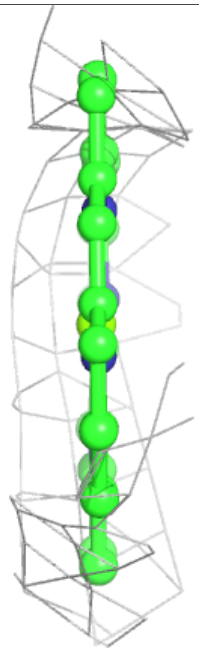


Electron density around CLA 4 601:

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

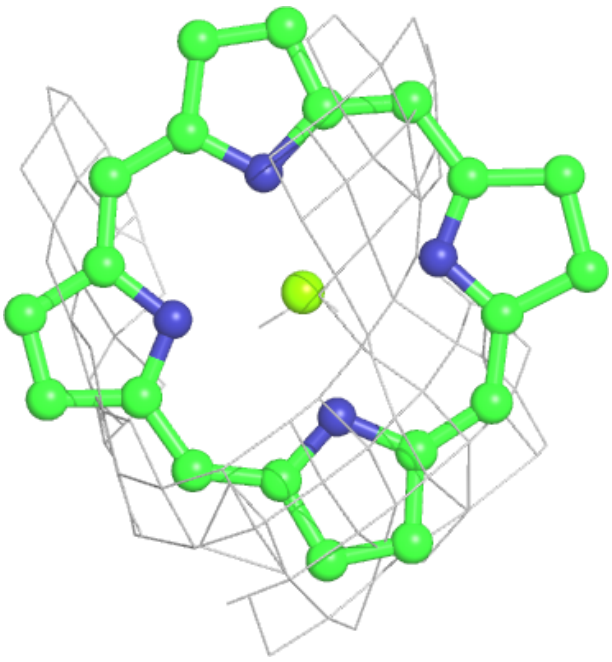


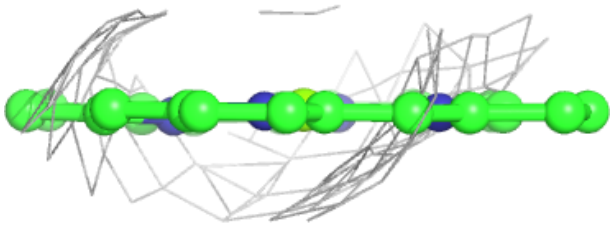


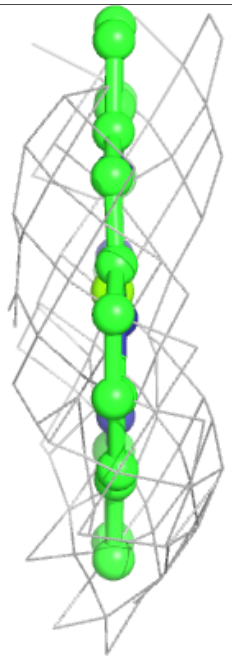


Electron density around CLA B 1209:

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

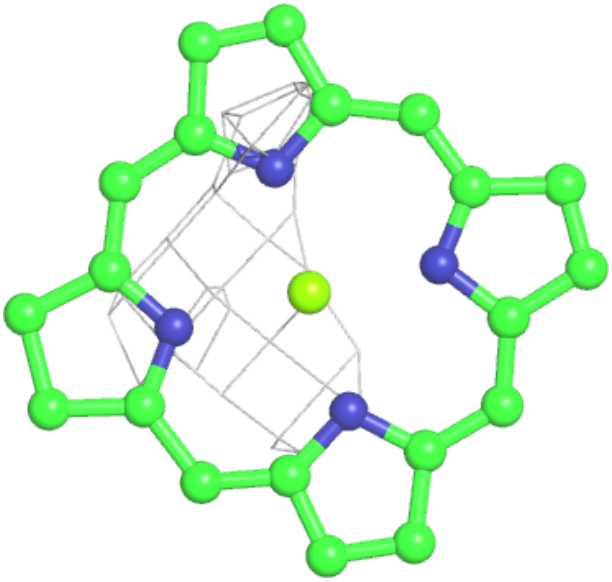


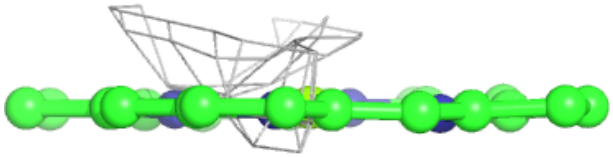


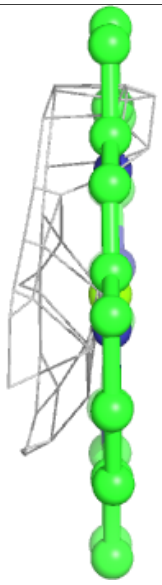


Electron density around CLA B 1218:

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

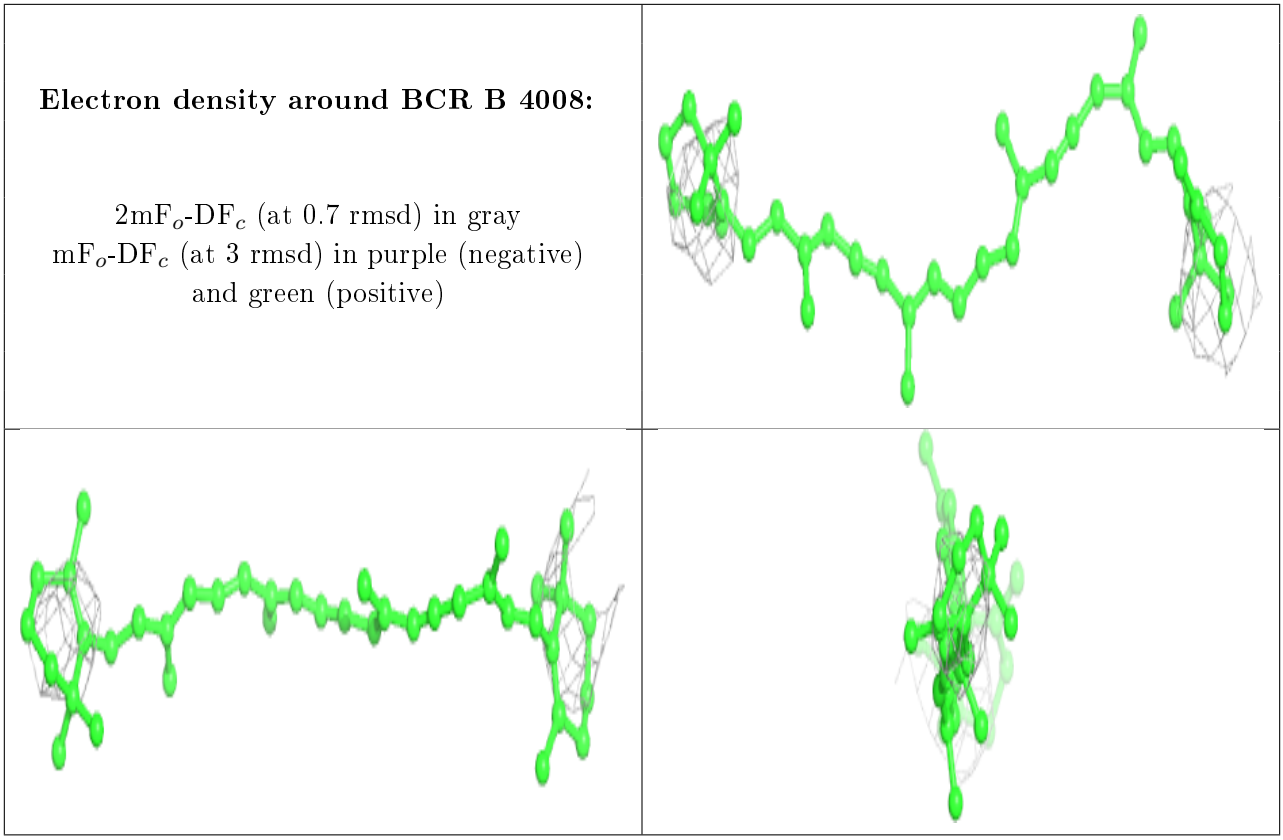






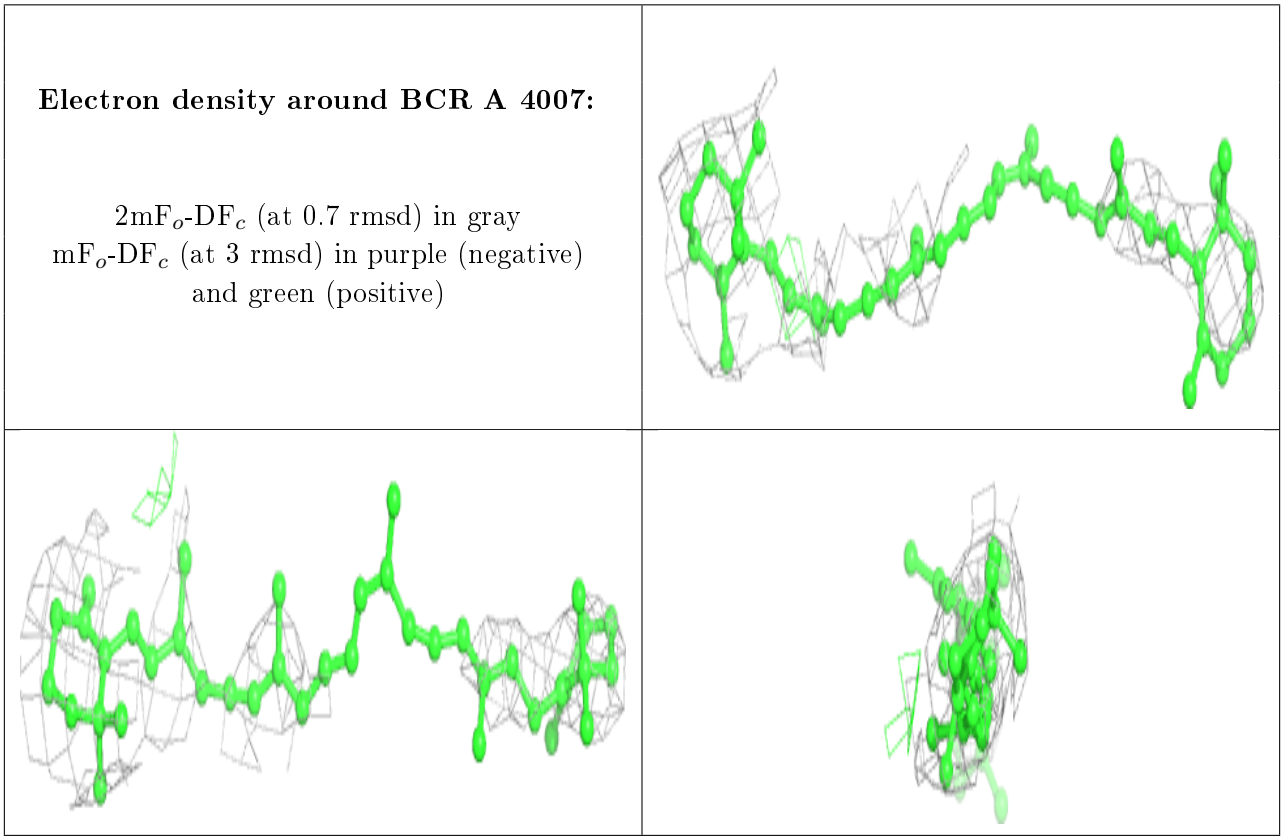
Electron density around BCR B 4008:

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



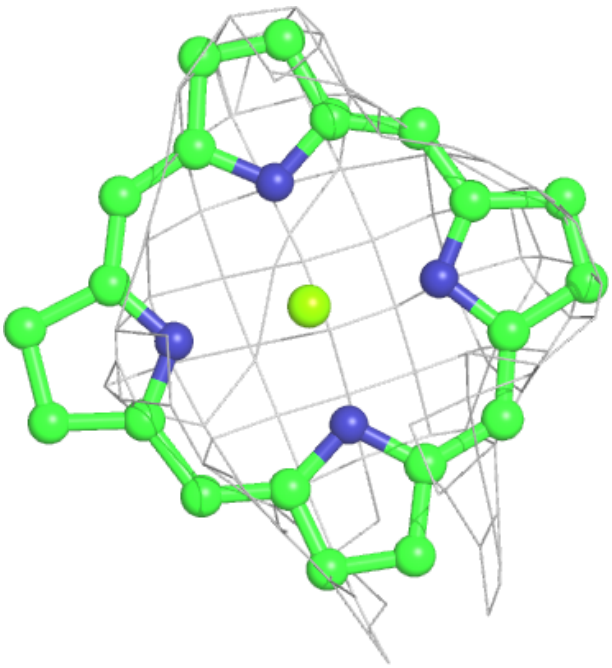
Electron density around BCR A 4007:

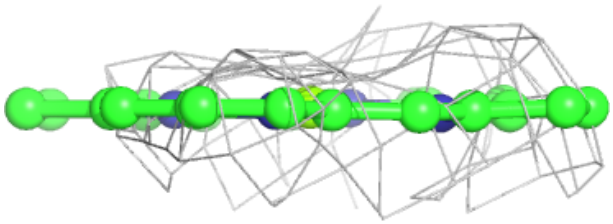
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

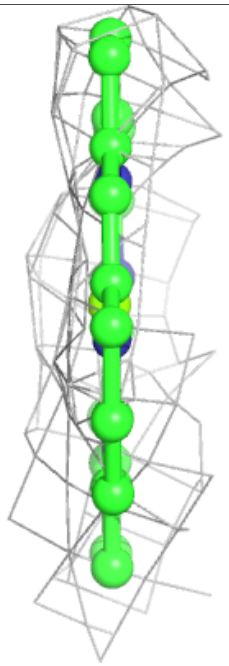


Electron density around CLA B 1223:

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

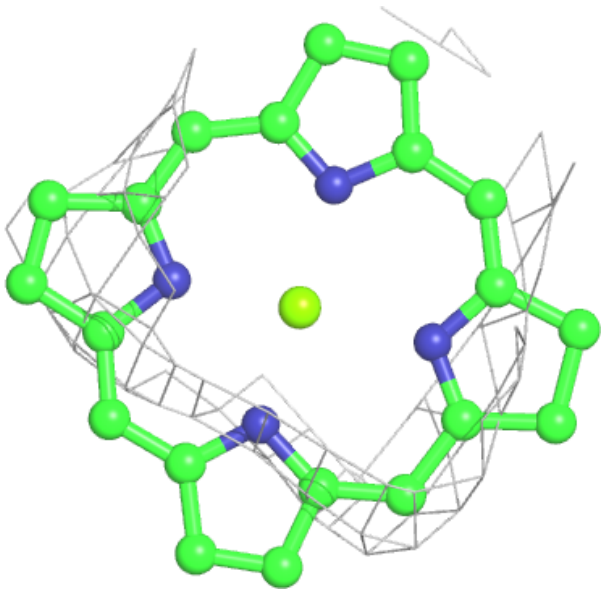


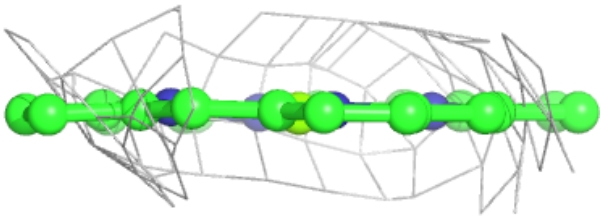


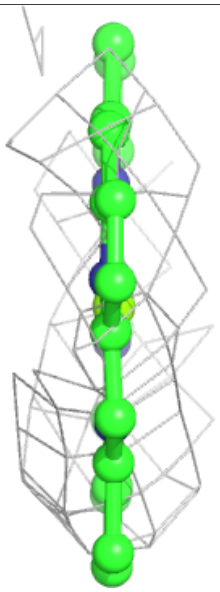


Electron density around CLA B 1212:

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

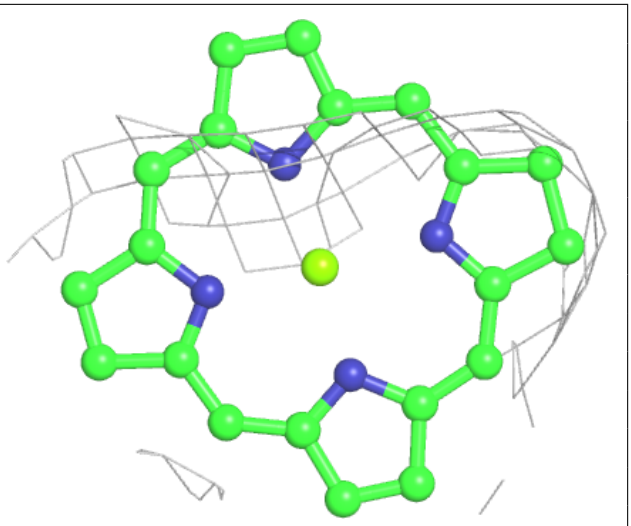


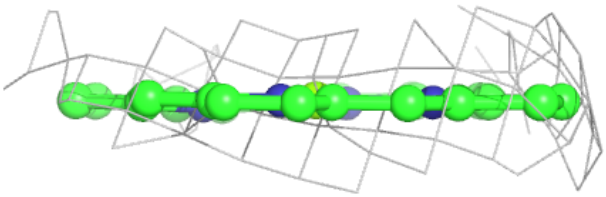


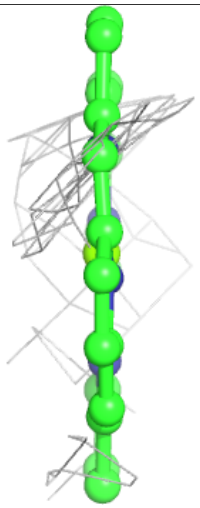


Electron density around CLA 4 615:

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

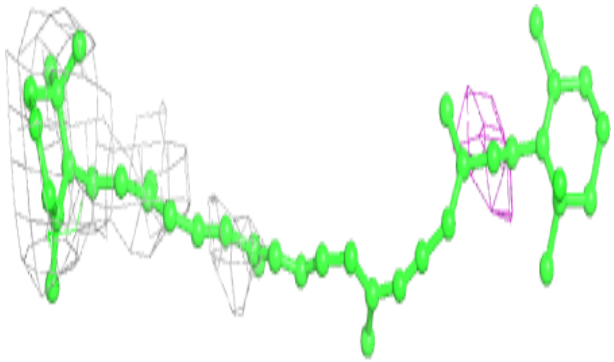


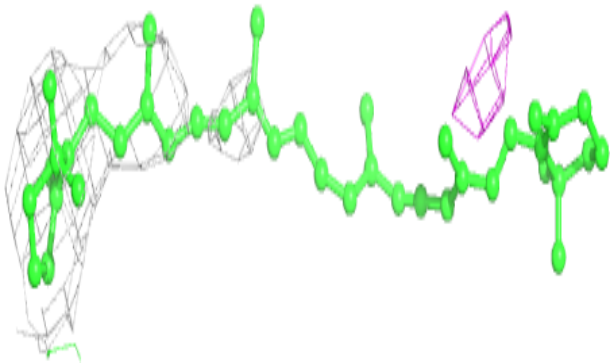


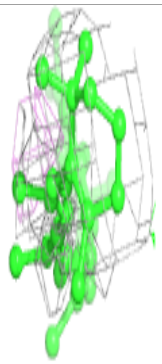


Electron density around BCR A 4008:

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

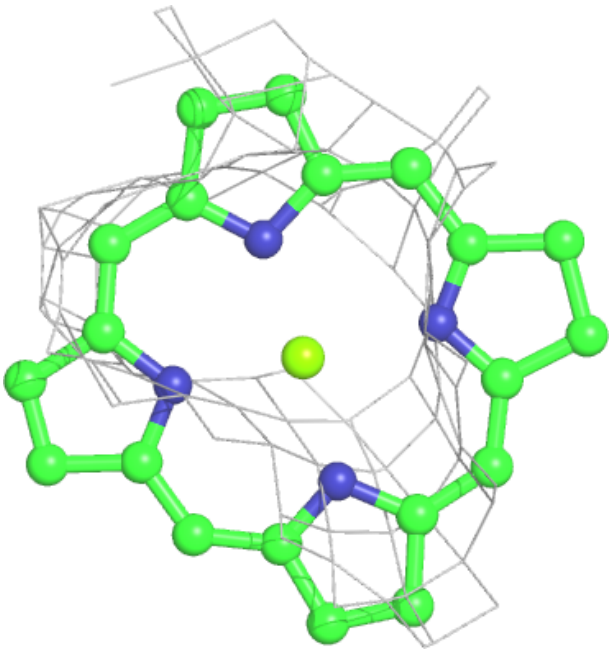


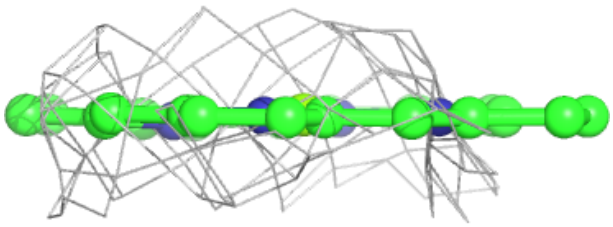


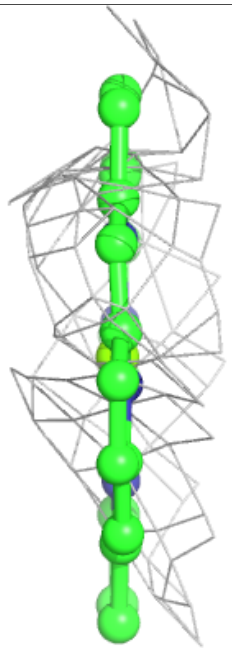


Electron density around CLA O 1602:

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

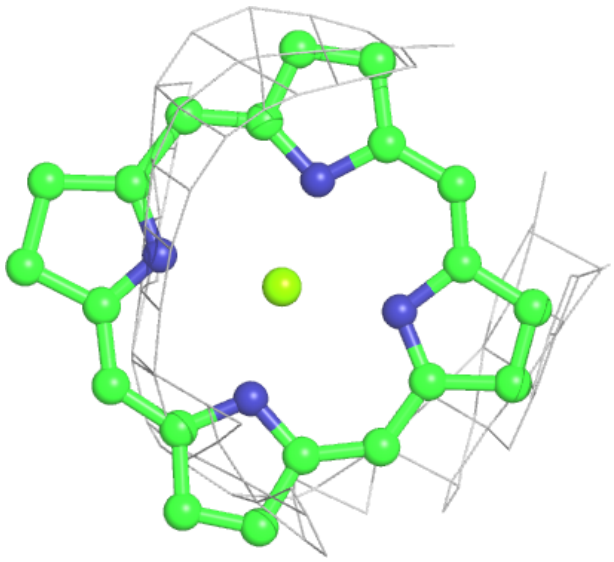


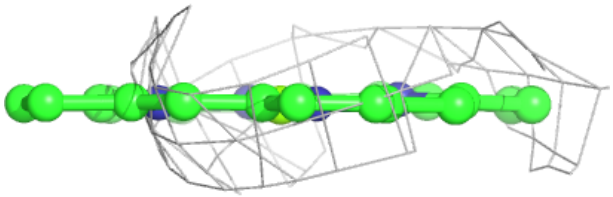


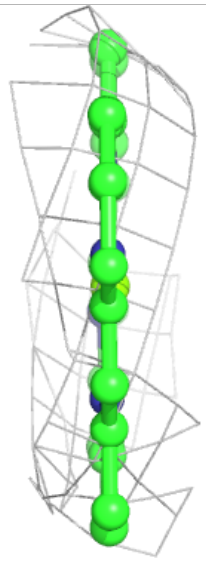


Electron density around CLA 4 608:

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

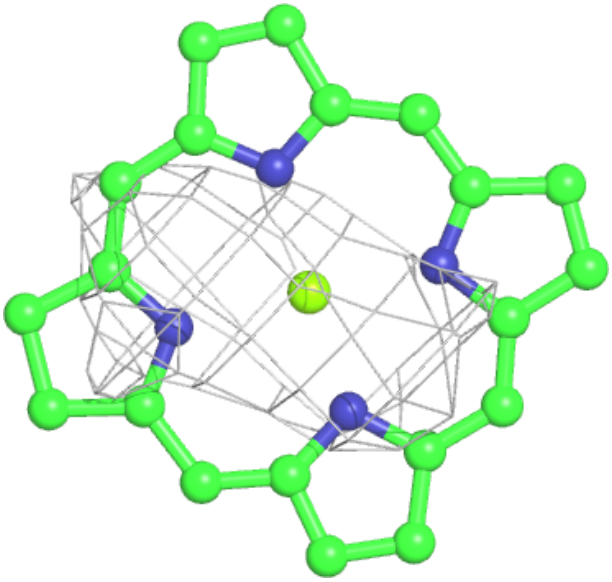


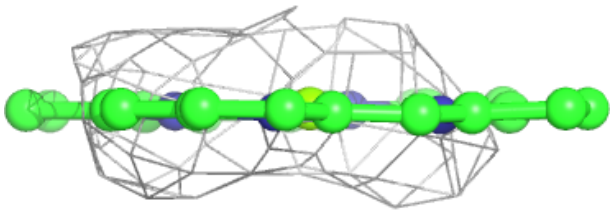


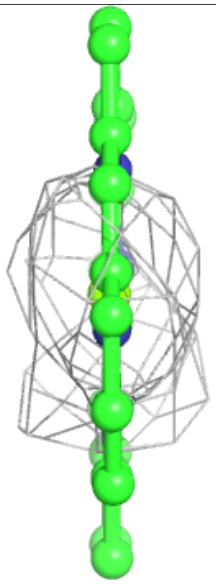


Electron density around CLA 4 611:

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

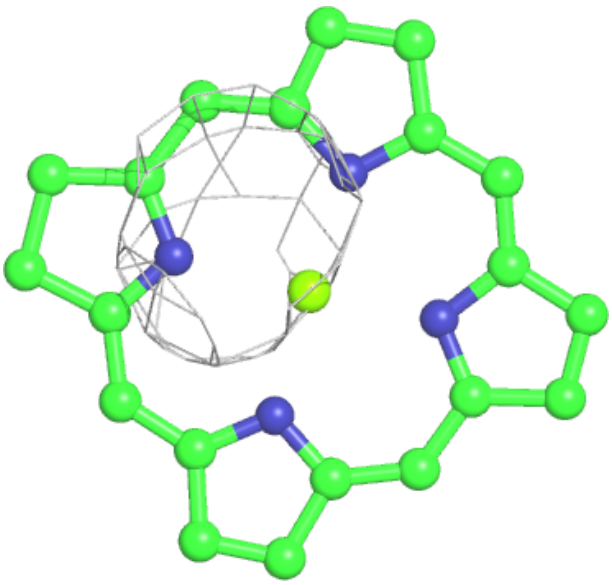


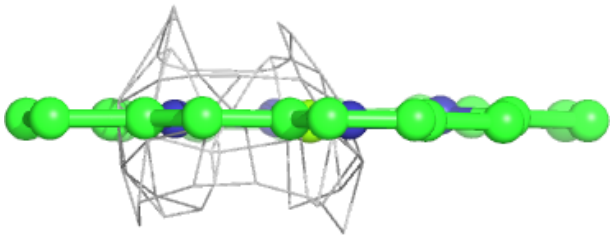


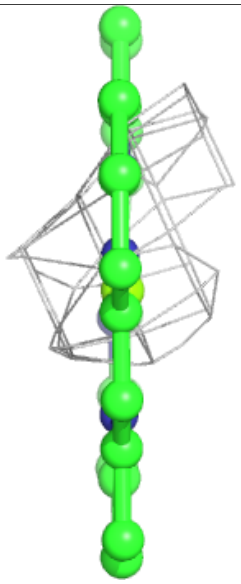


Electron density around CLA B 1214:

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

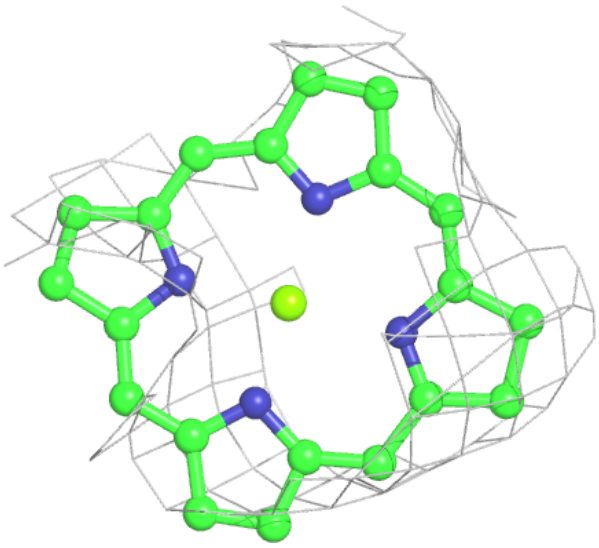


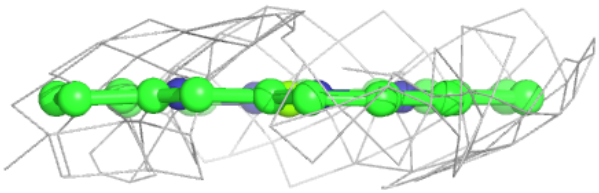


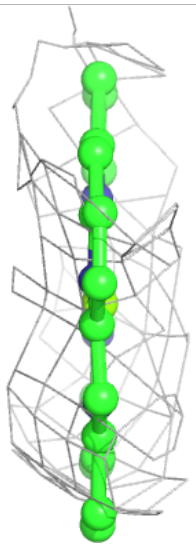


Electron density around CLA B 1208:

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

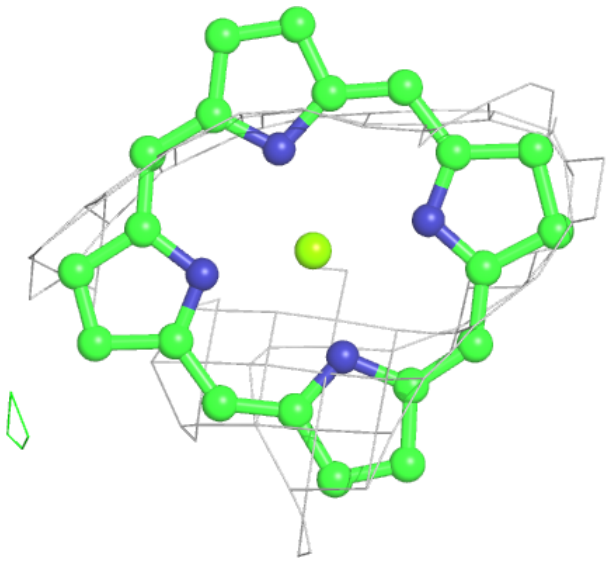


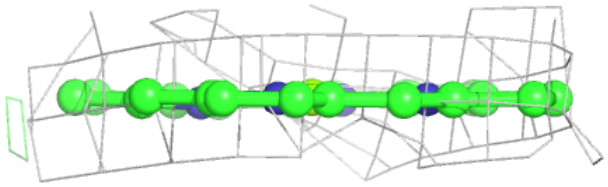


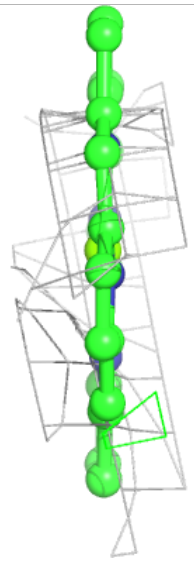


Electron density around CLA 4 609:

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

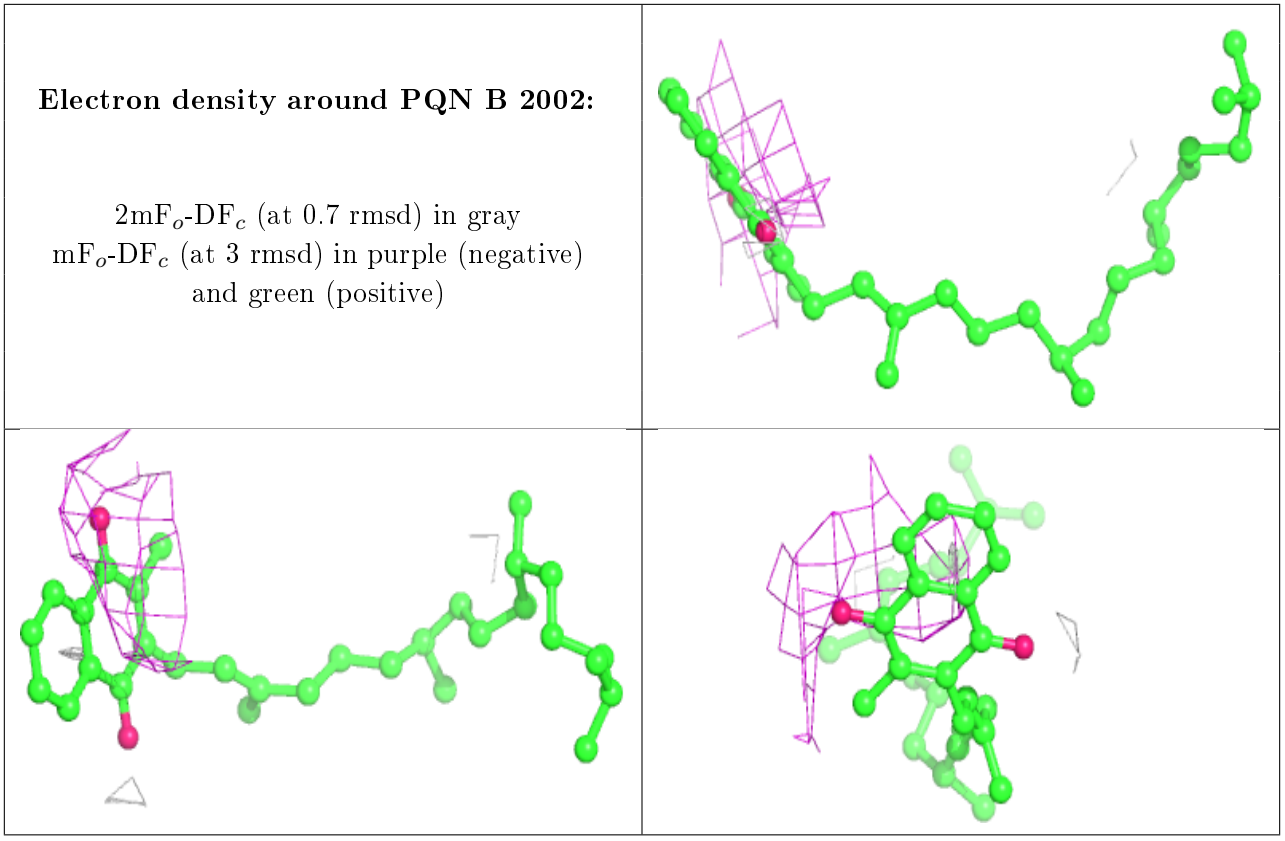






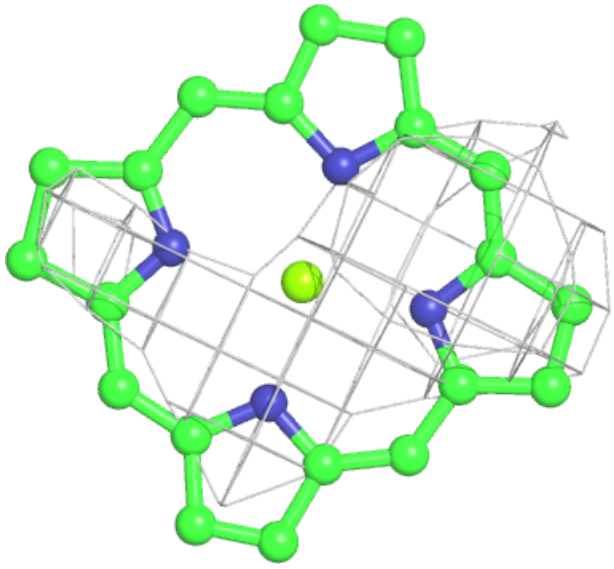
Electron density around PQN B 2002:

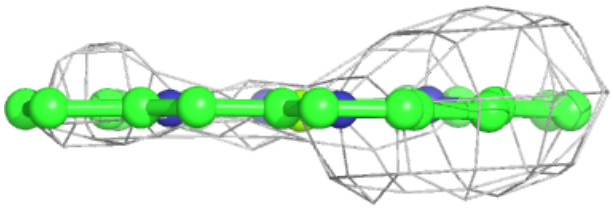
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

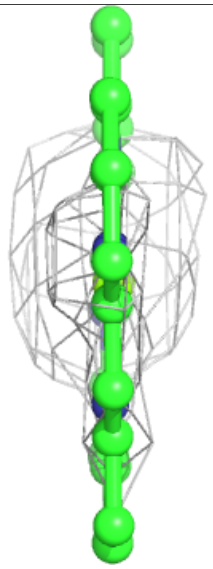


Electron density around CLA 2 616:

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

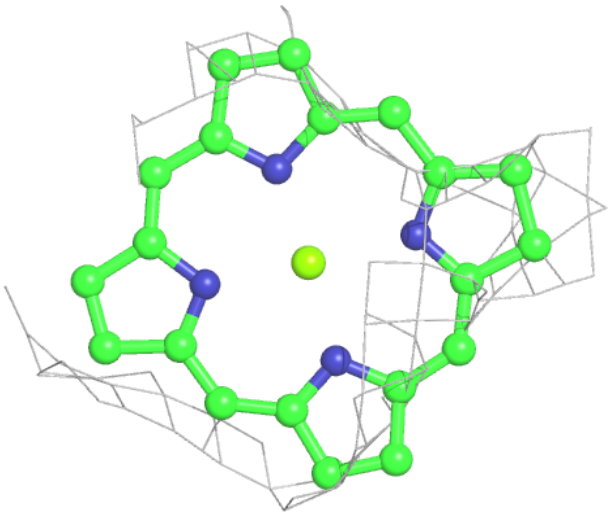


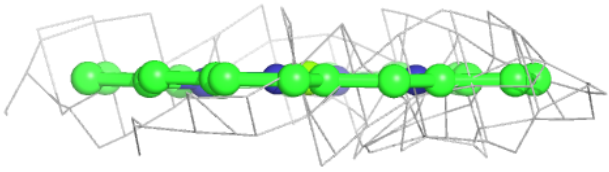


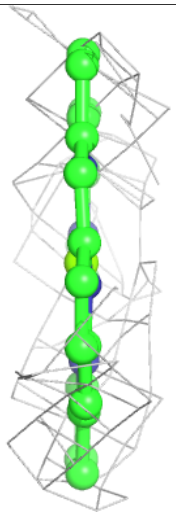


Electron density around CLA 2 611:

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

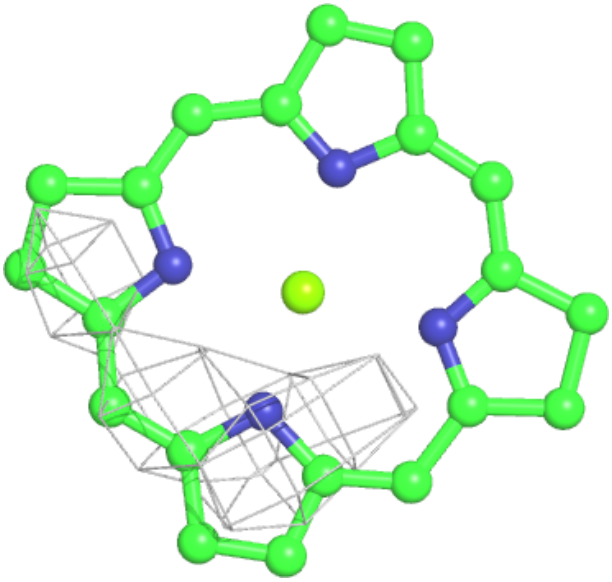


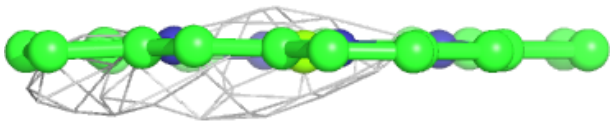


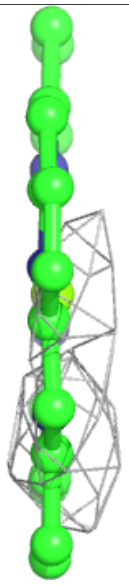


Electron density around CLA B 1221:

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

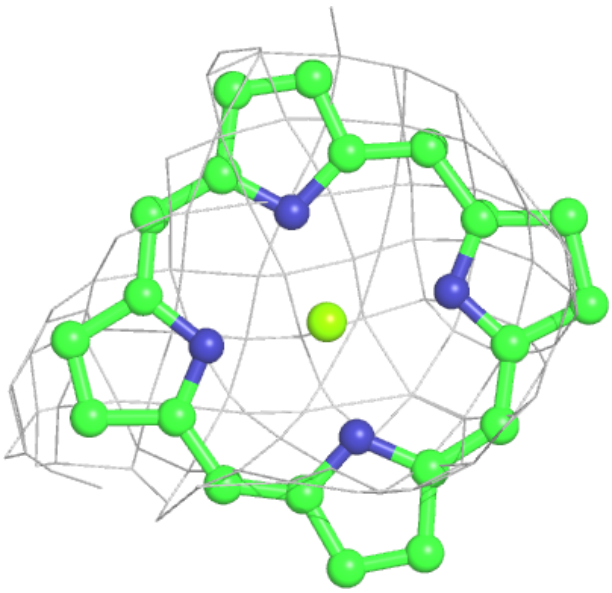


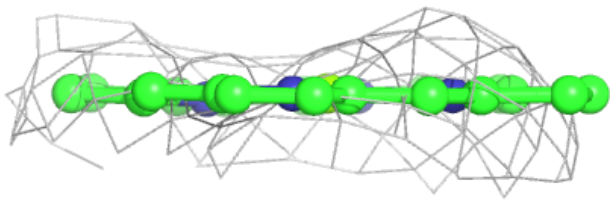


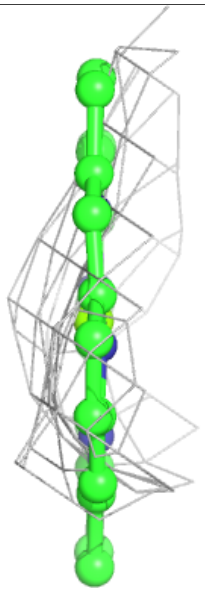


Electron density around CLA B 1207:

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

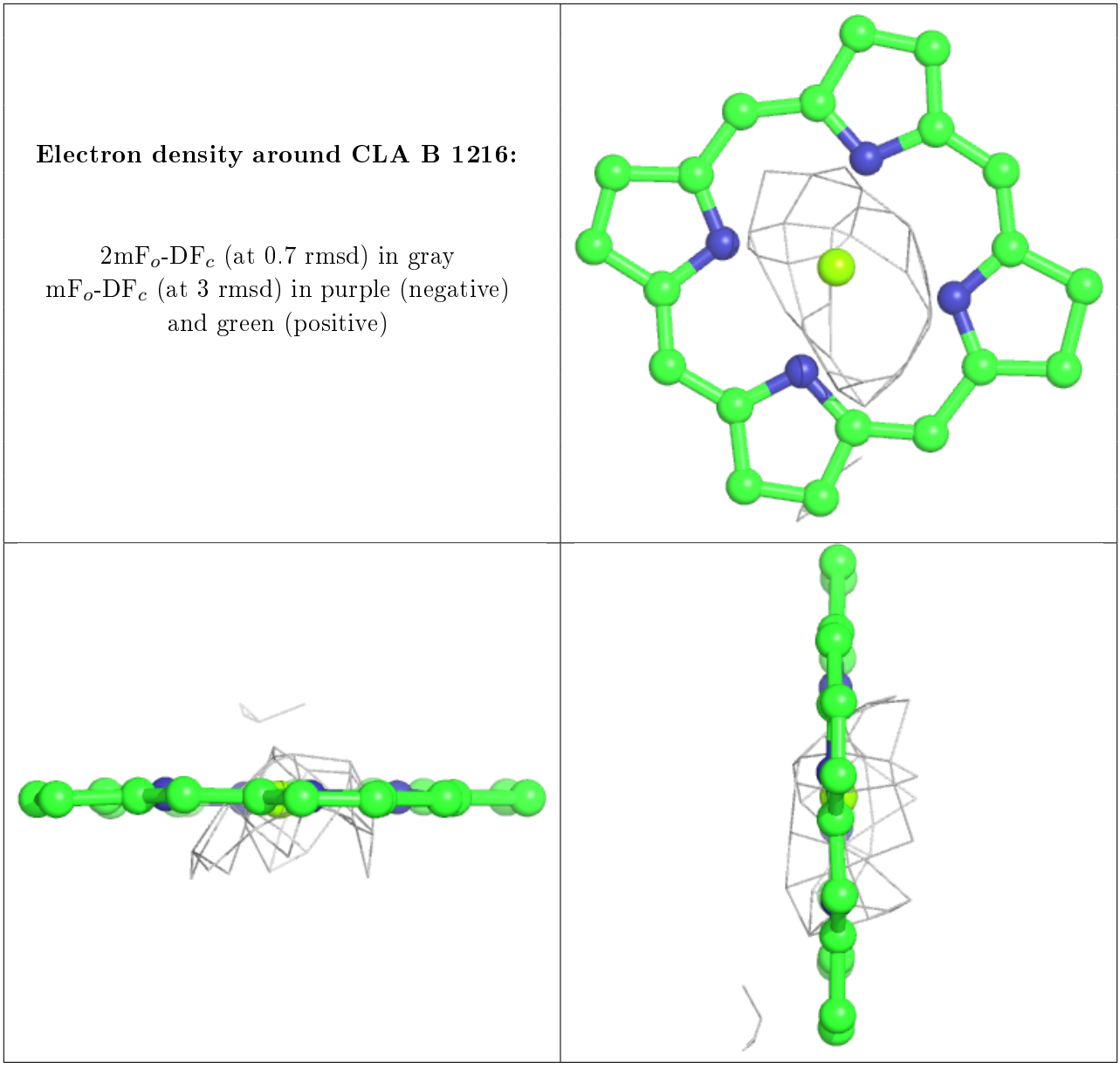






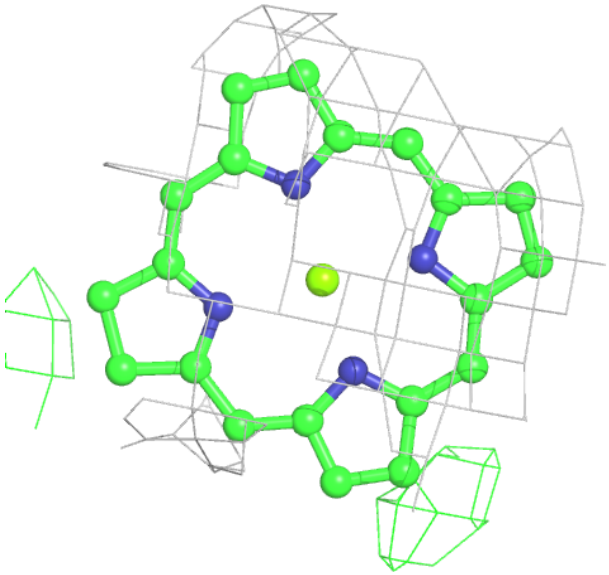
Electron density around CLA B 1216:

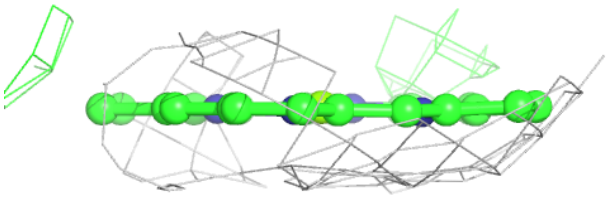
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

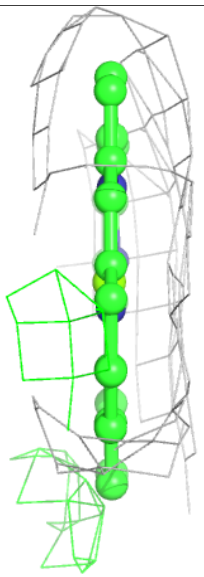


Electron density around CLA 3 611:

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

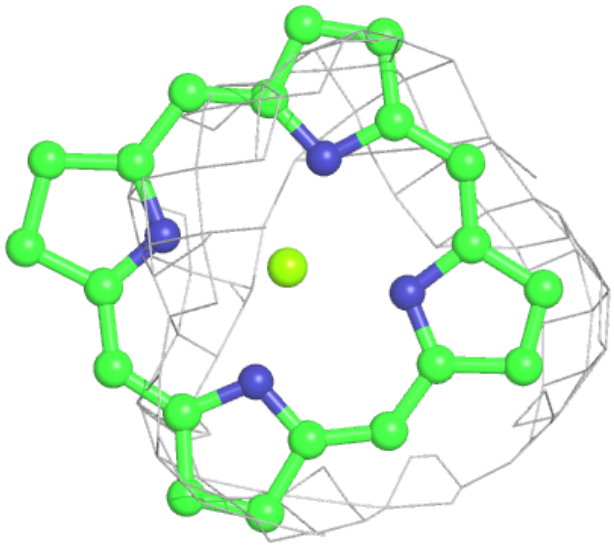


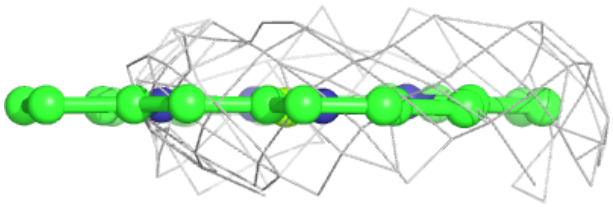


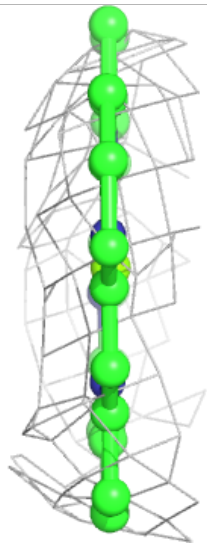


Electron density around CLA 4 604:

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

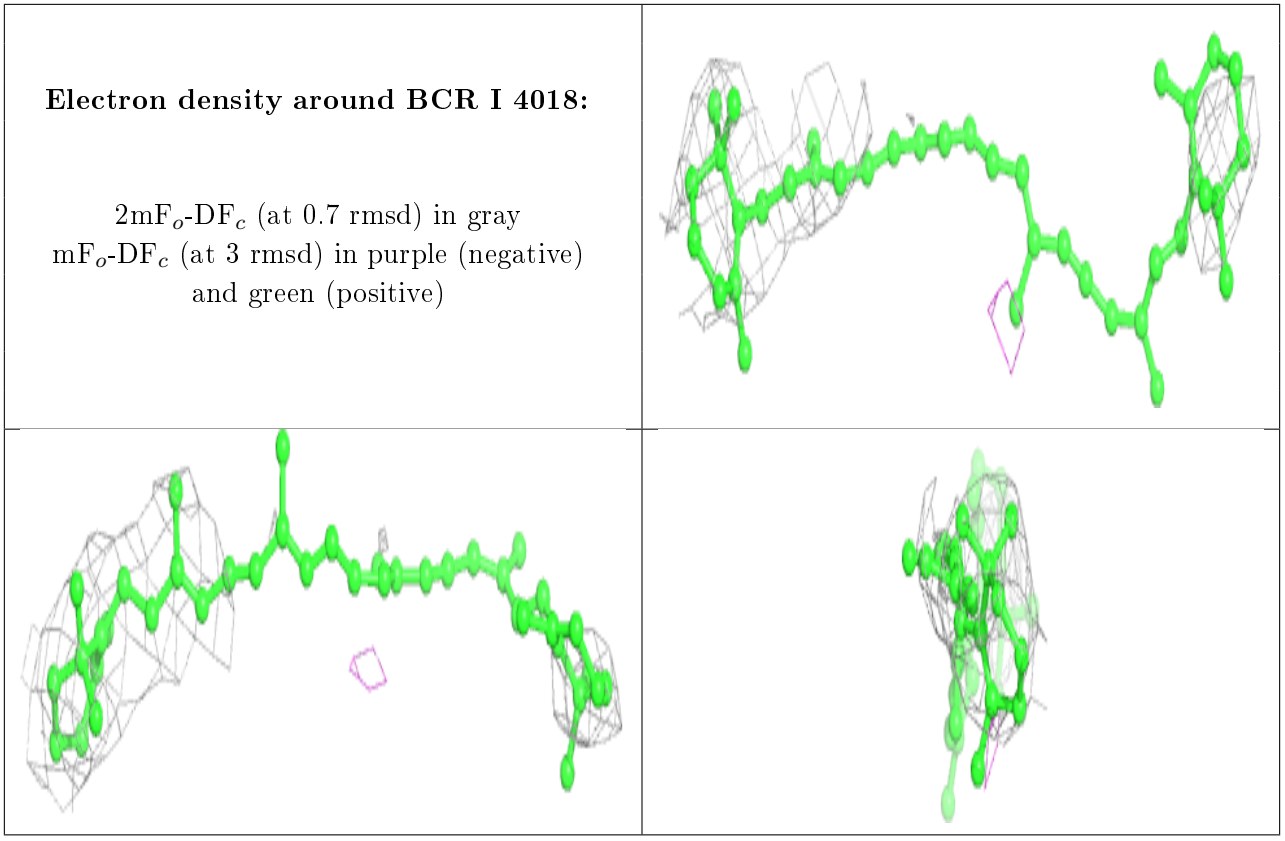






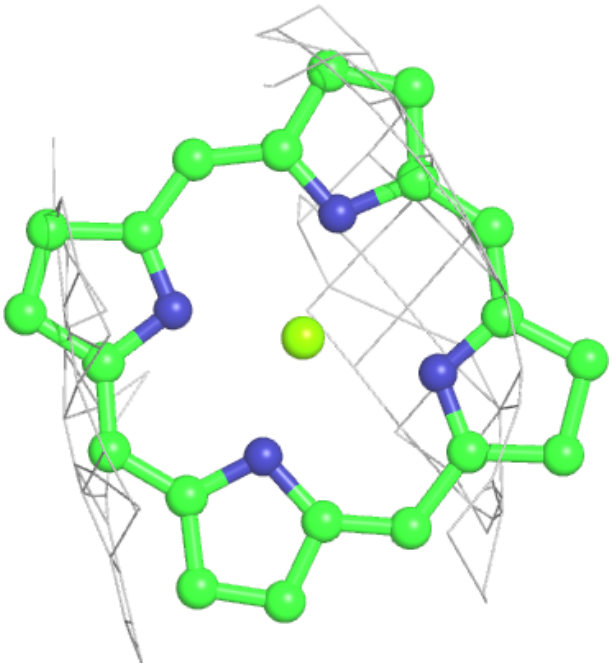
Electron density around BCR I 4018:

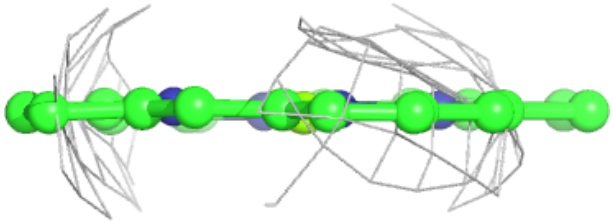
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

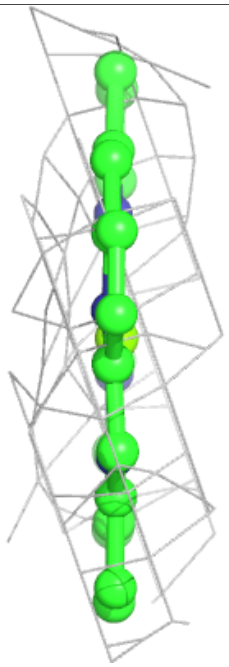


Electron density around CLA B 1231:

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

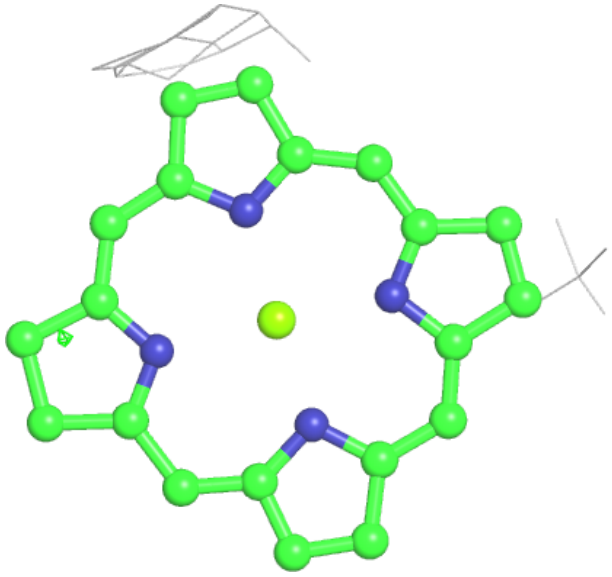


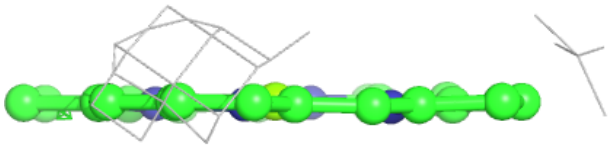


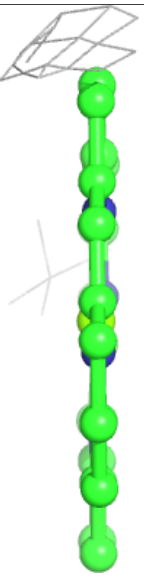


Electron density around CLA 2 615:

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

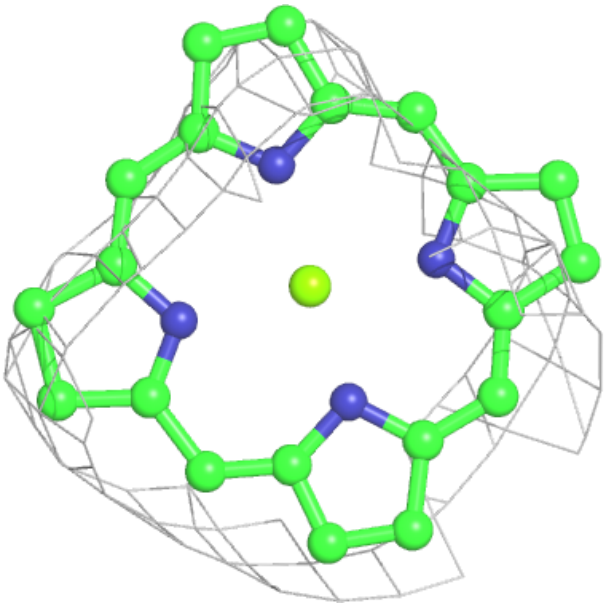


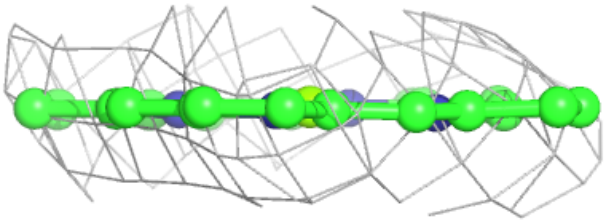


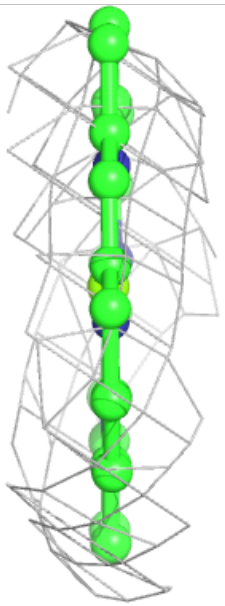


Electron density around CLA O 1603:

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

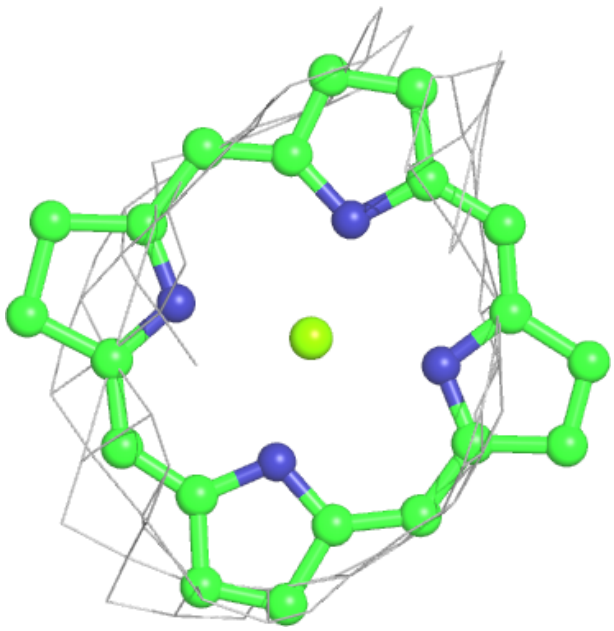


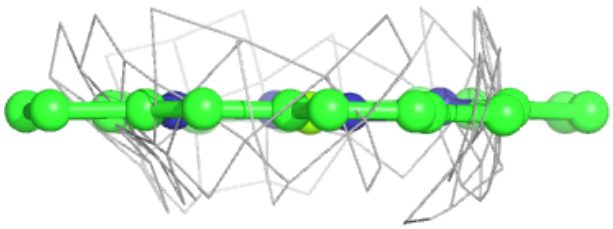


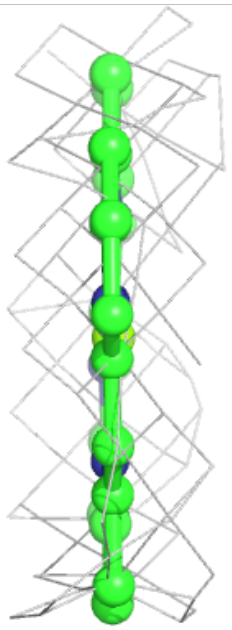


Electron density around CLA O 1601:

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

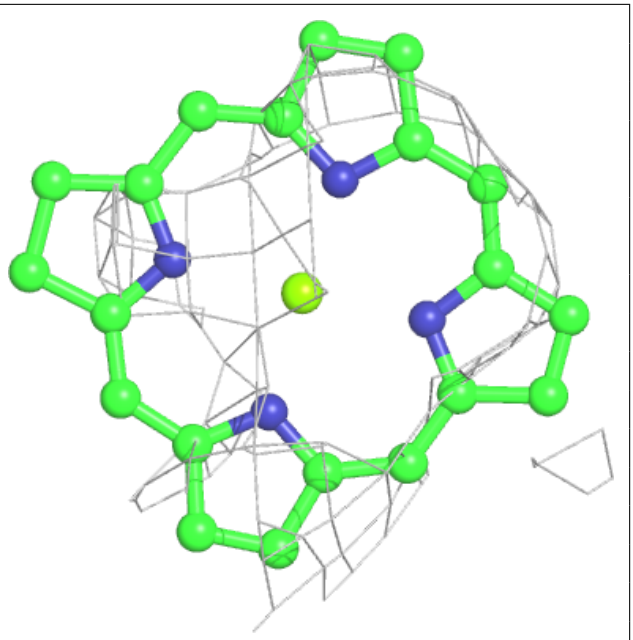


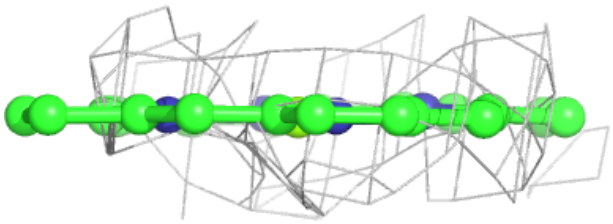


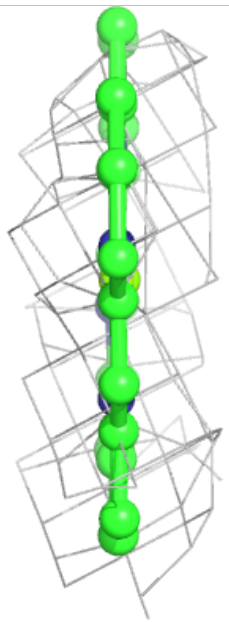


Electron density around CLA B 1210:

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

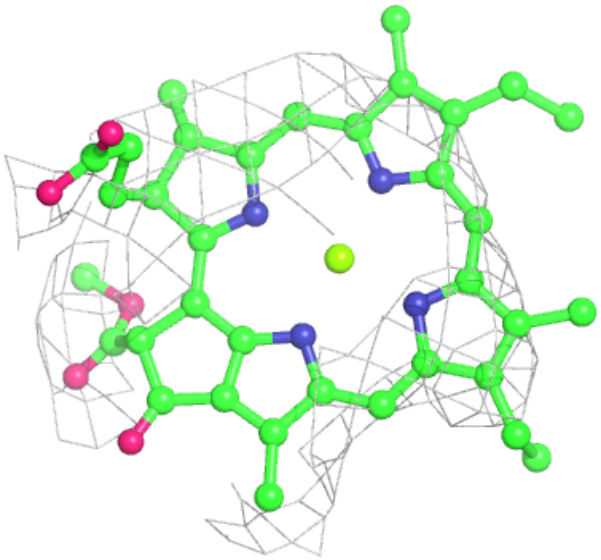


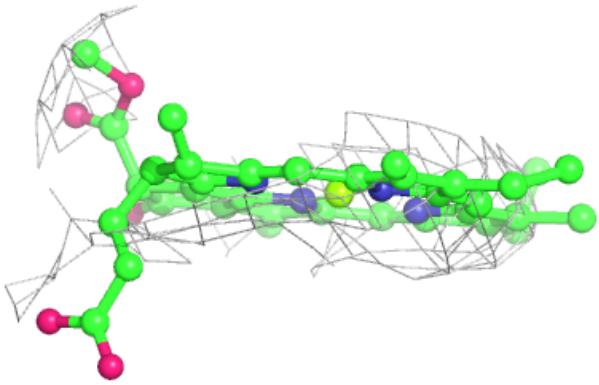


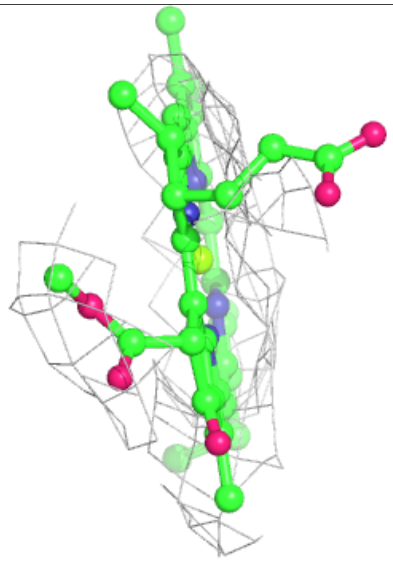


Electron density around CLA B 1236:

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

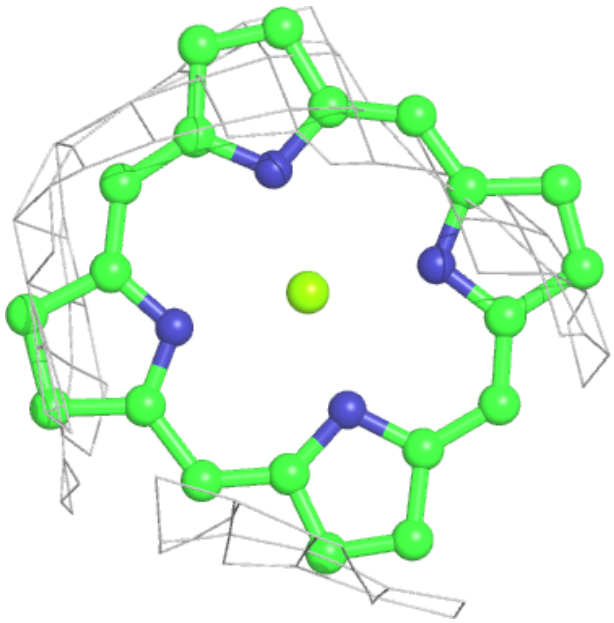


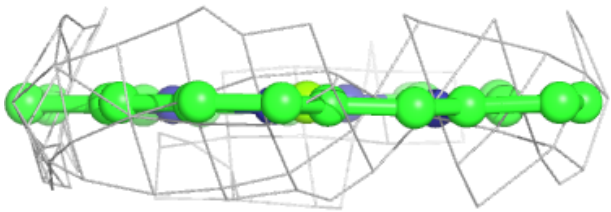


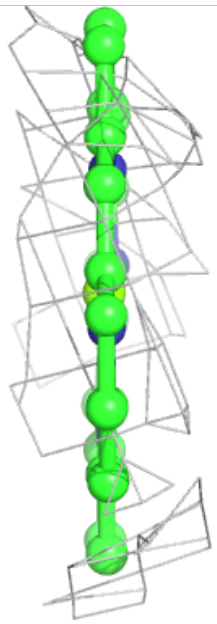


Electron density around CLA 2 613:

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

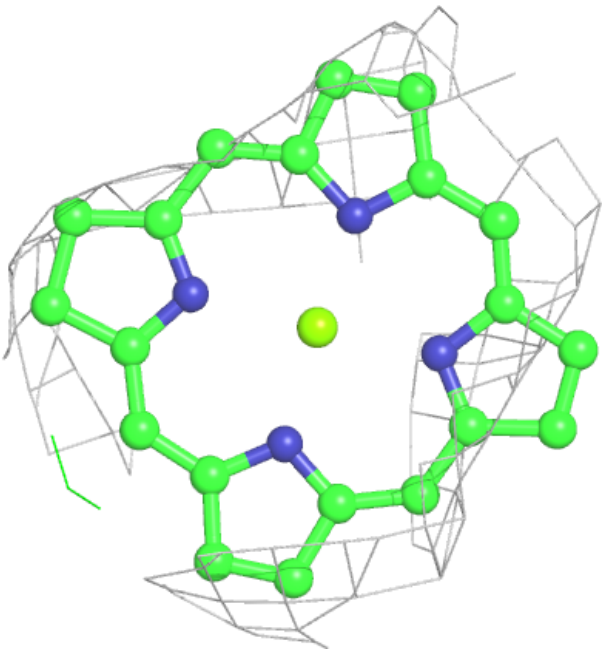


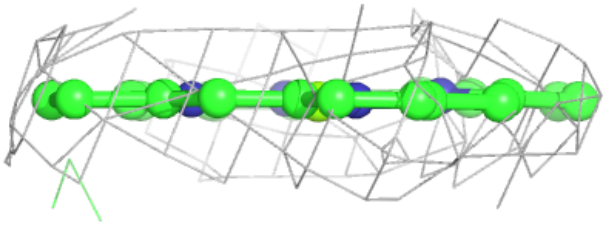


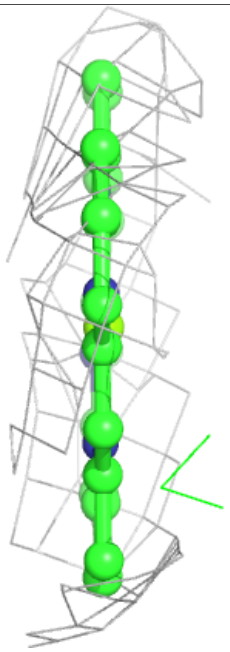


Electron density around CLA 2 601:

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

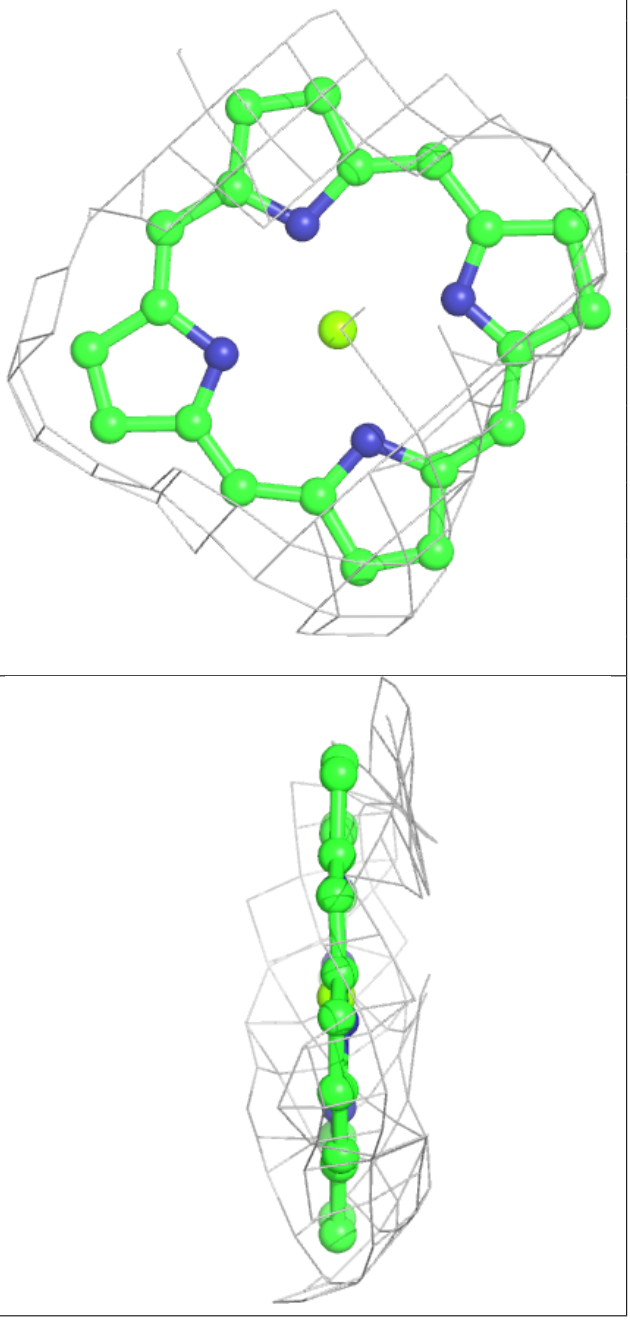


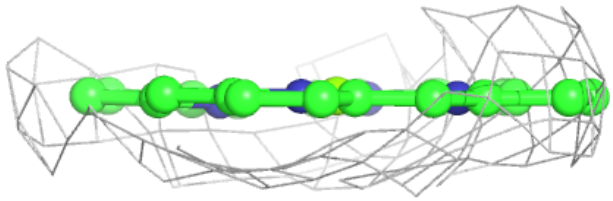




Electron density around CLA L 1502:

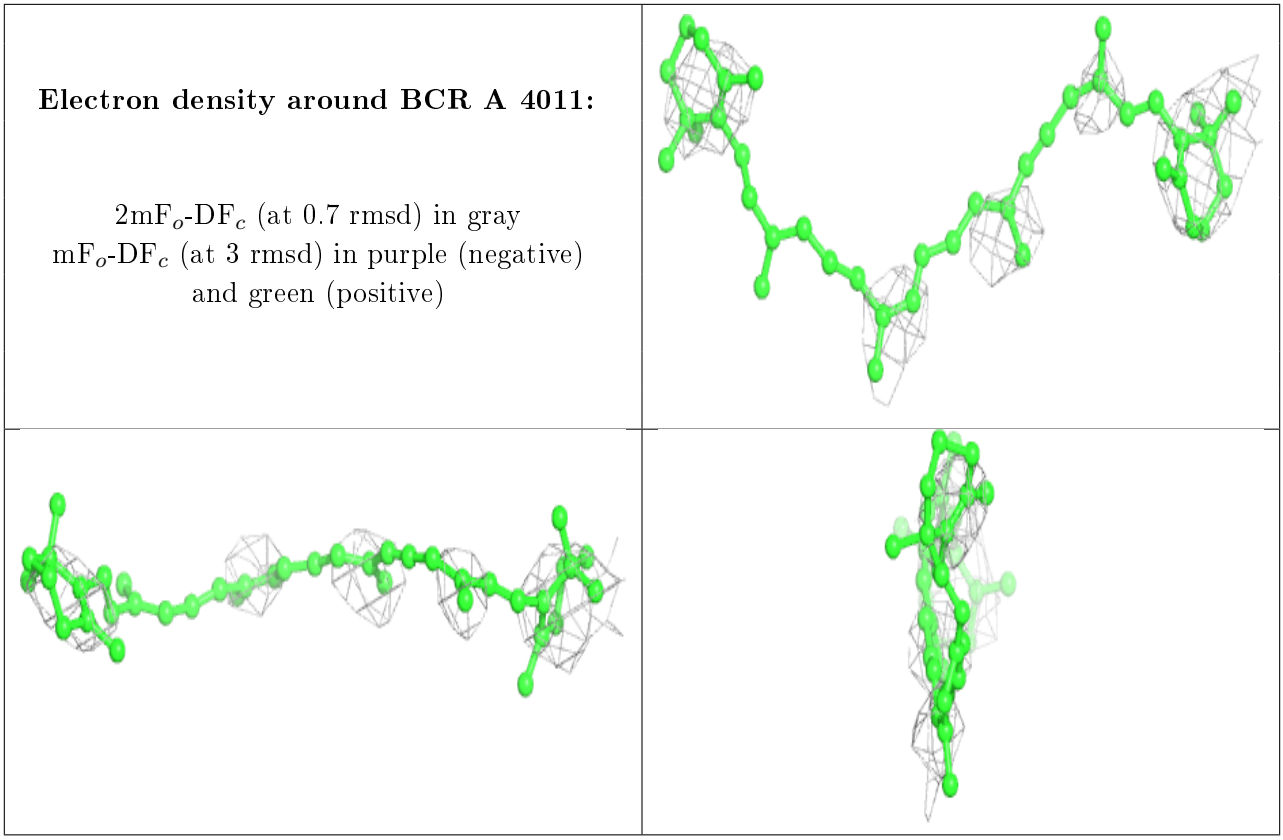
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





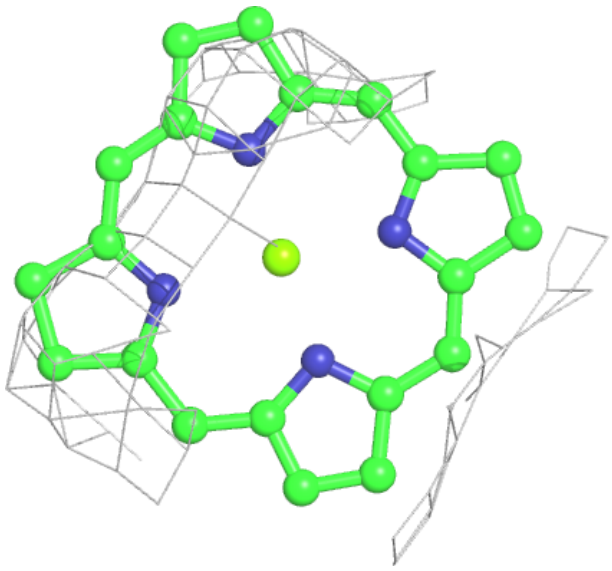
Electron density around BCR A 4011:

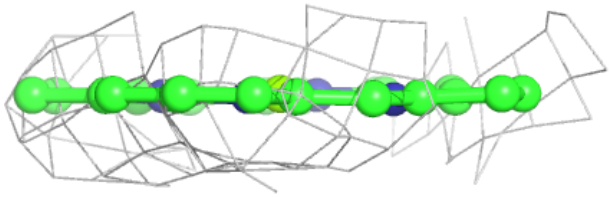
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

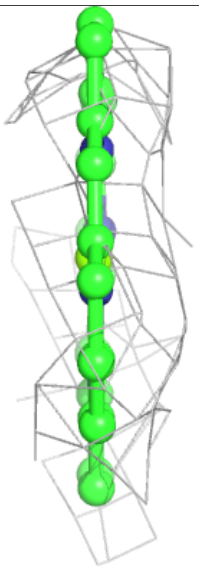


Electron density around CLA 2 603:

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

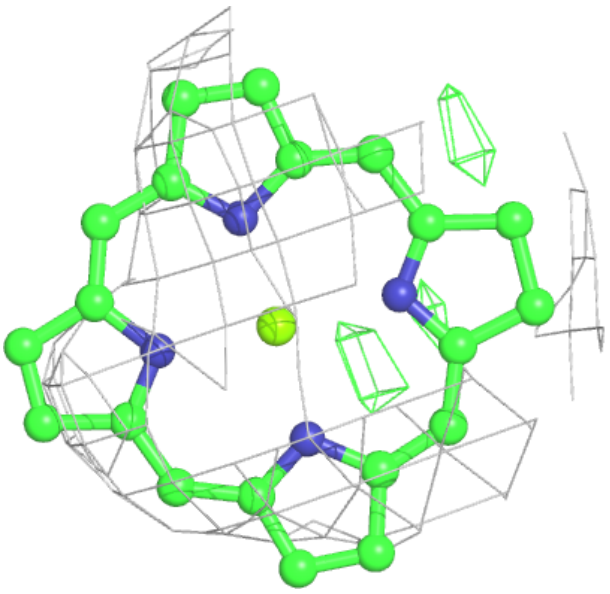


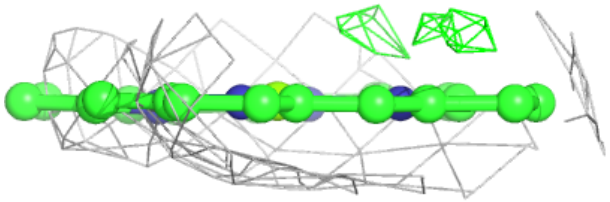


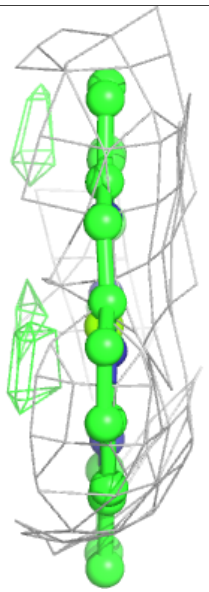


Electron density around CLA A 1129:

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

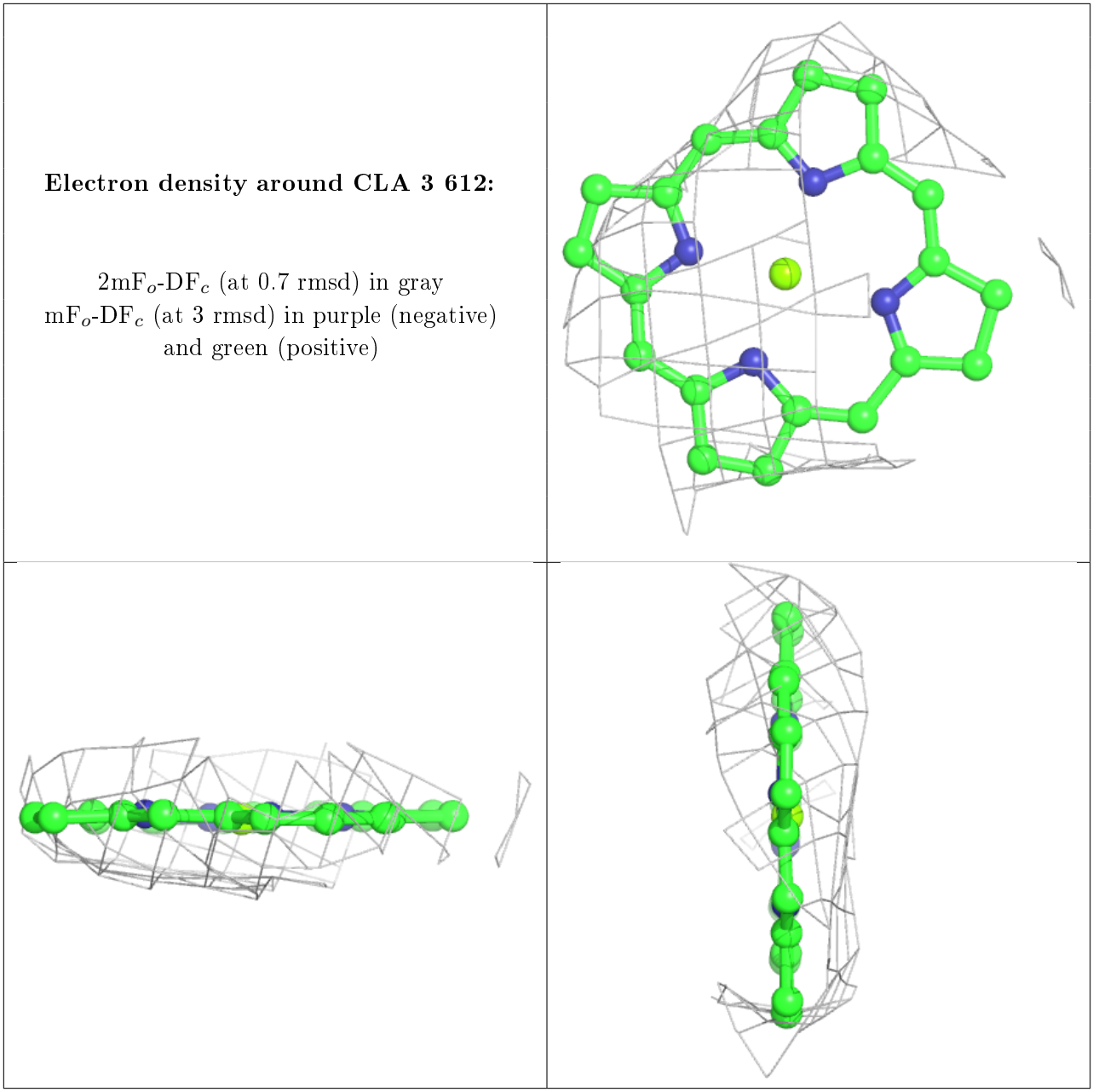






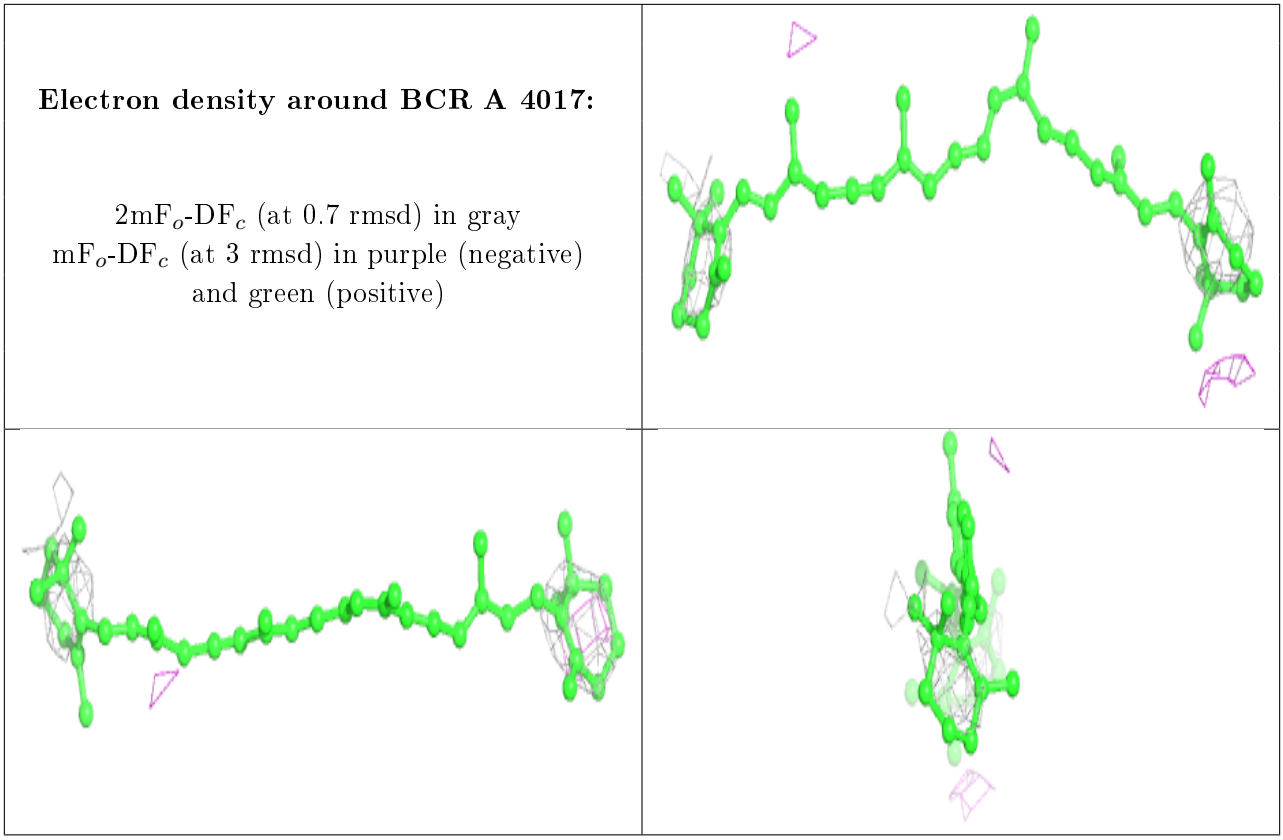
Electron density around CLA 3 612:

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



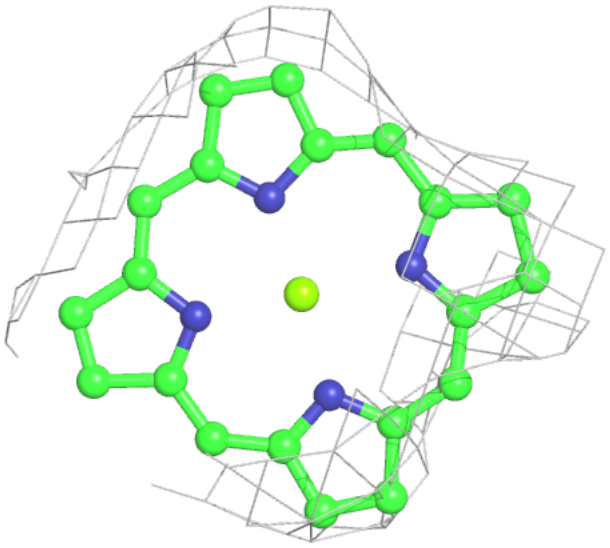
Electron density around BCR A 4017:

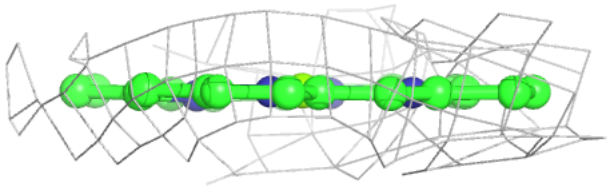
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

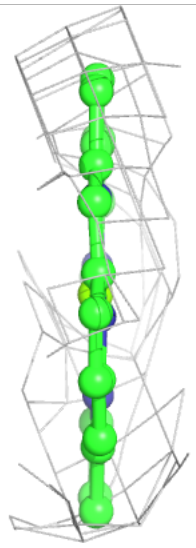


Electron density around CLA 4 610:

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

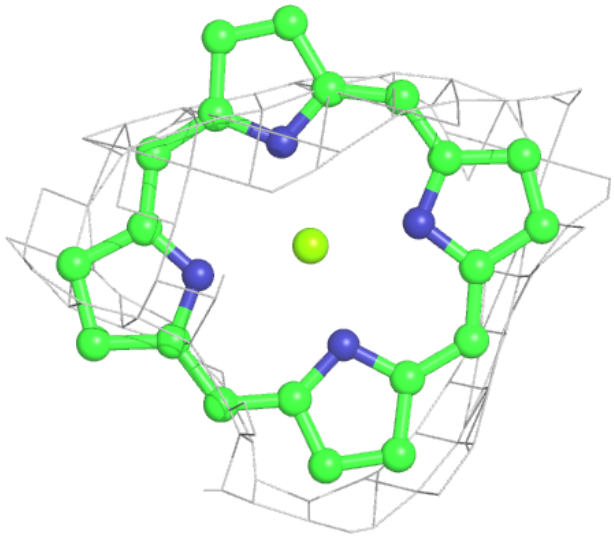


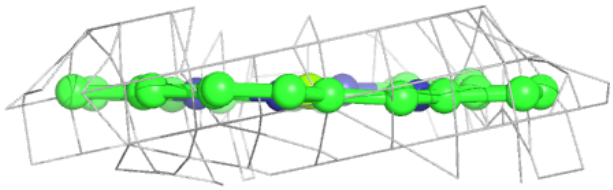


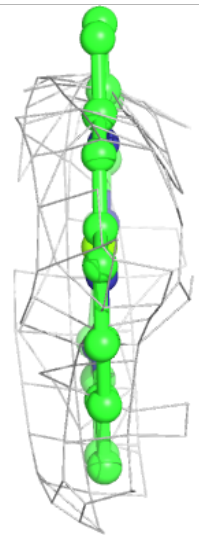


Electron density around CLA 3 607:

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

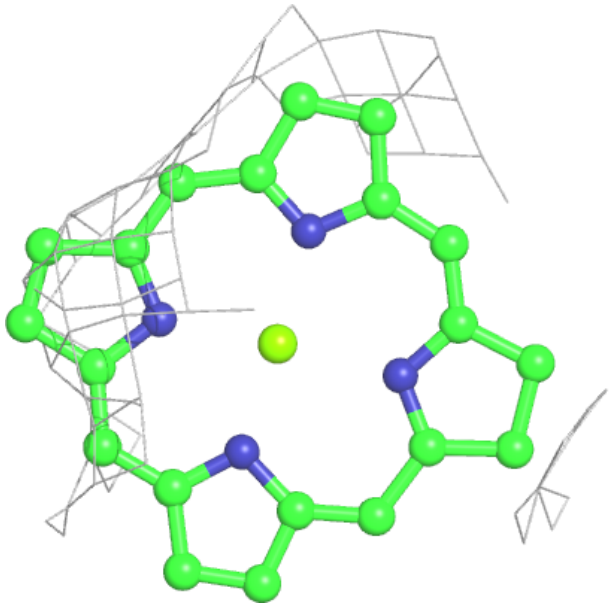


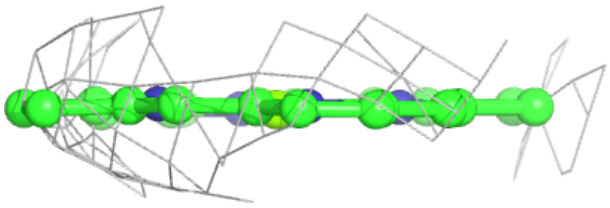


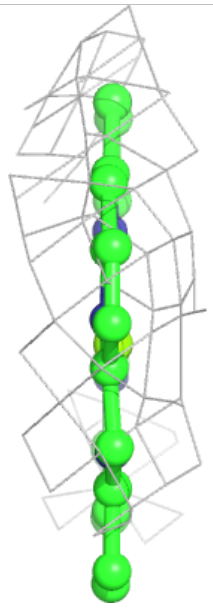


Electron density around CLA K 1402:

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

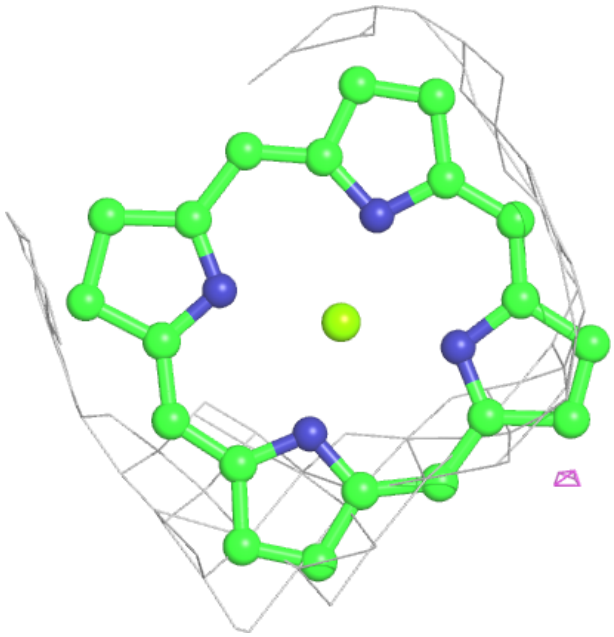


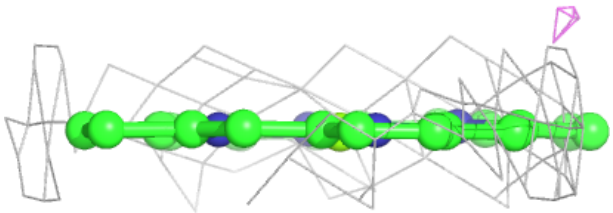


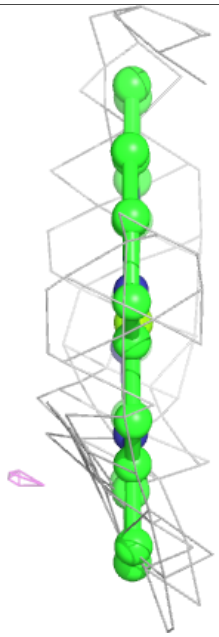


Electron density around CLA 2 606:

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

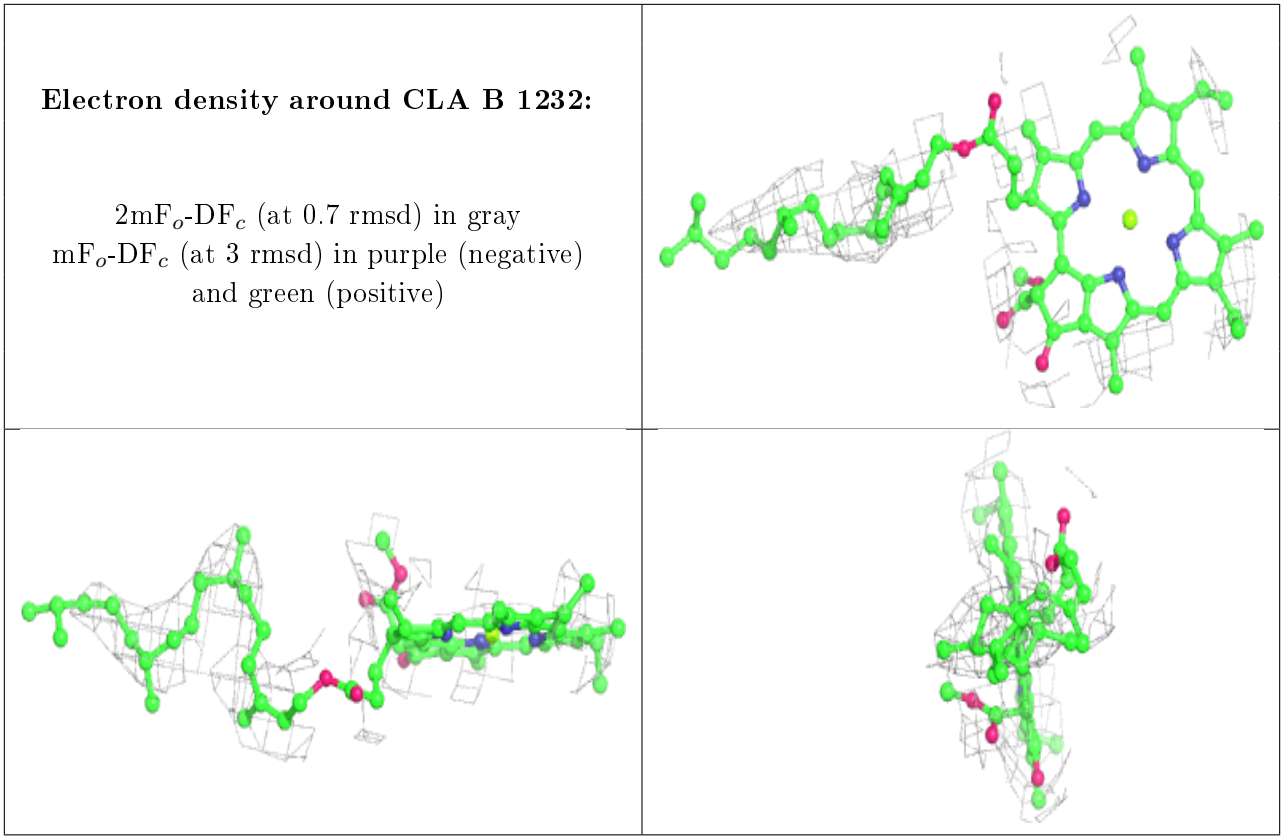






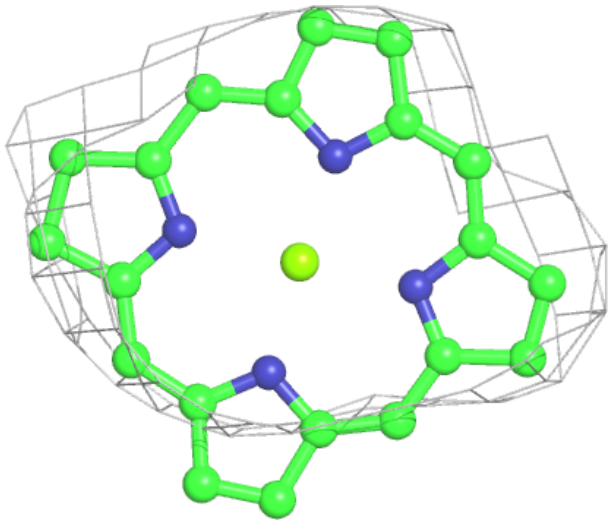
Electron density around CLA B 1232:

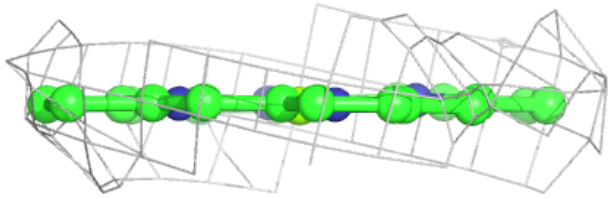
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

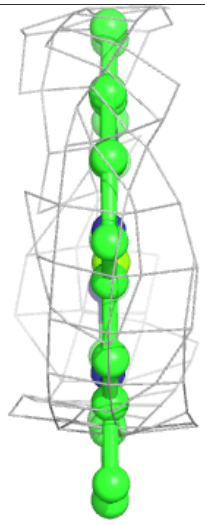


Electron density around CLA 4 616:

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

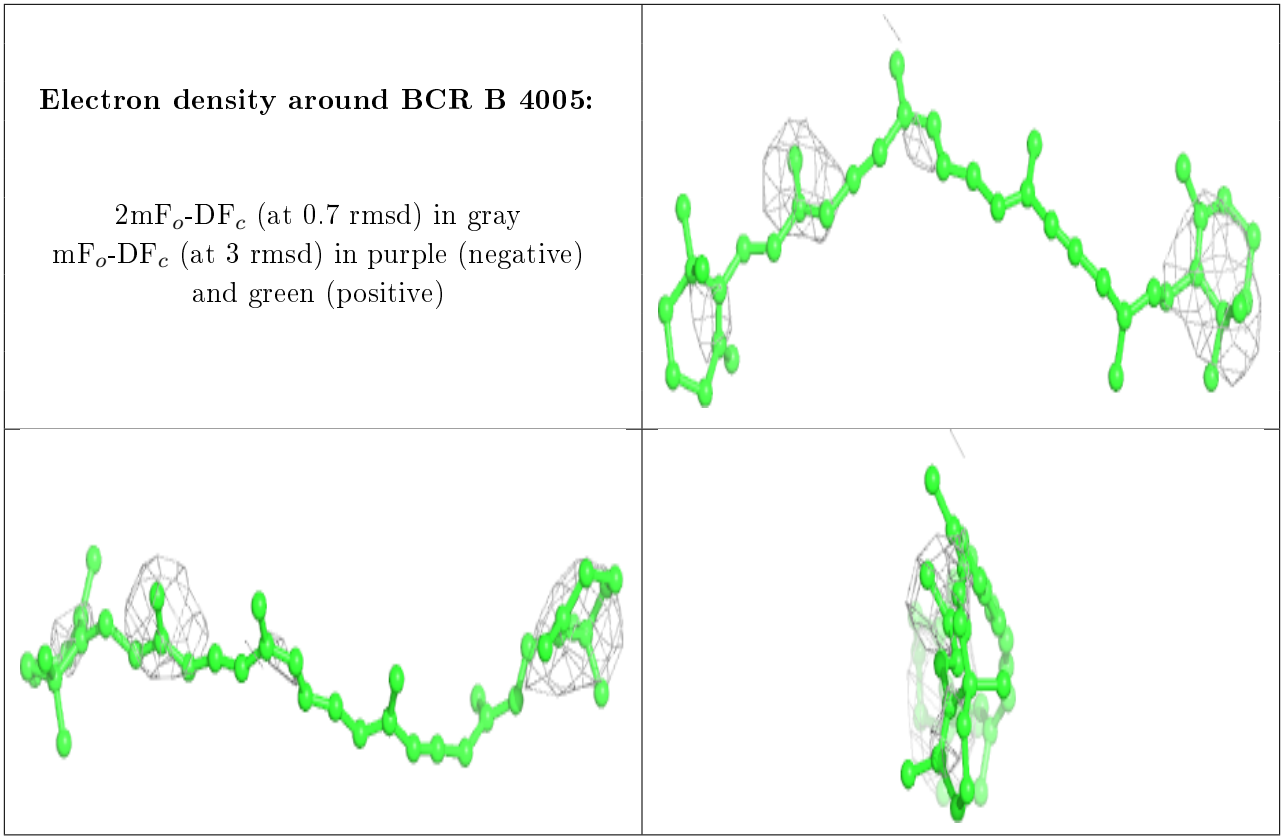






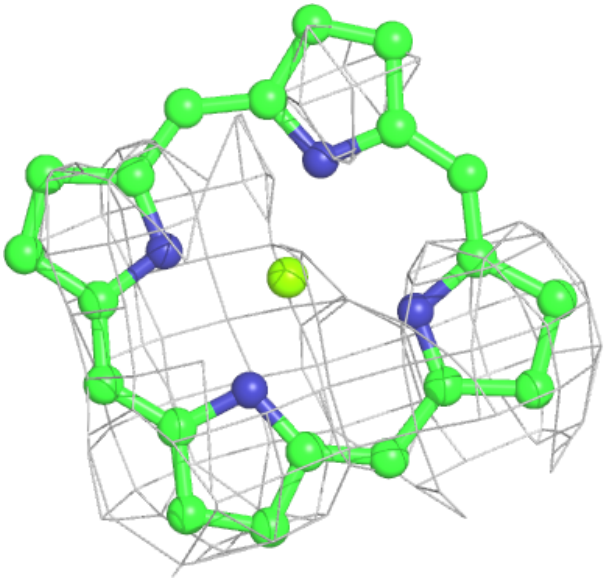
Electron density around BCR B 4005:

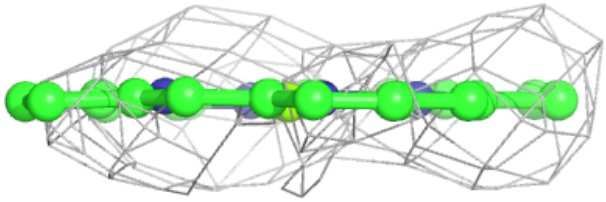
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

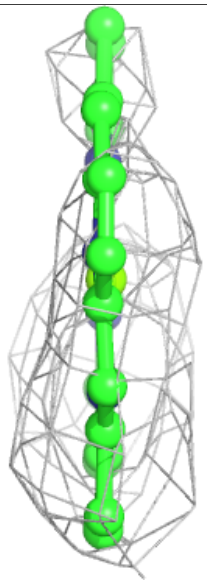


Electron density around CLA A 1137:

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

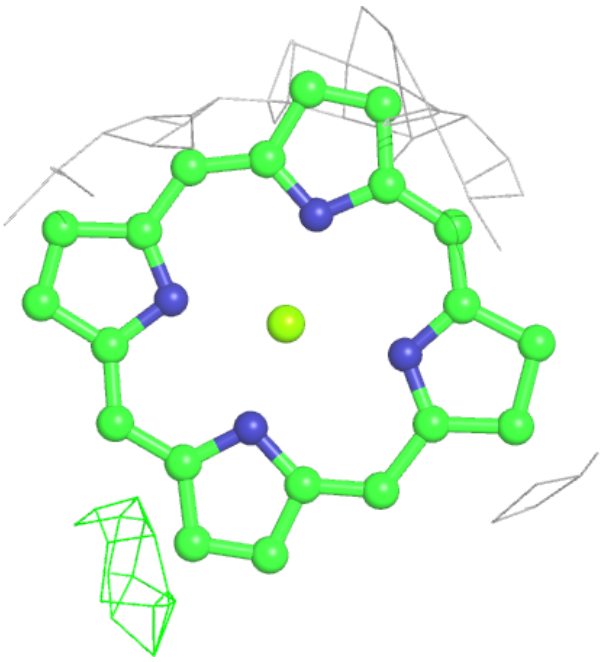


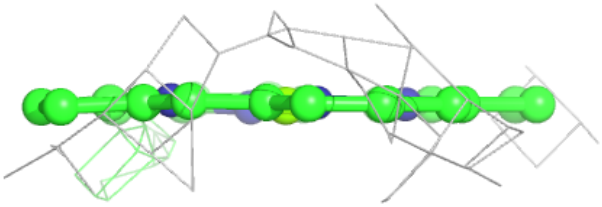


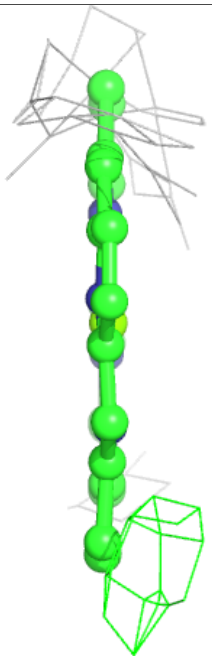


Electron density around CLA 3 602:

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

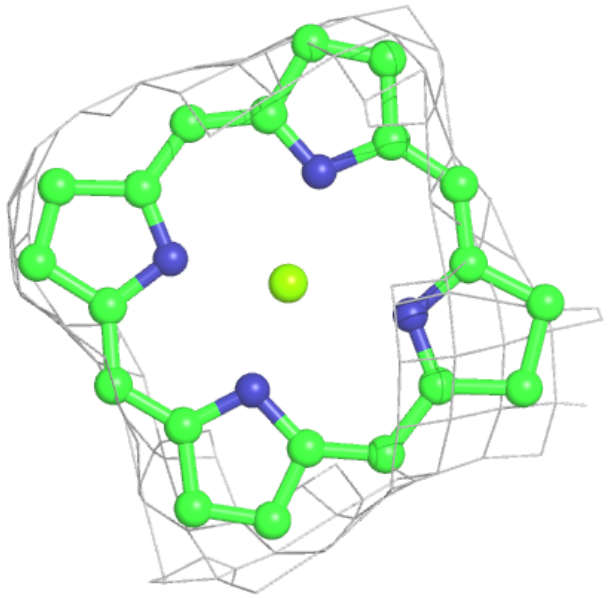


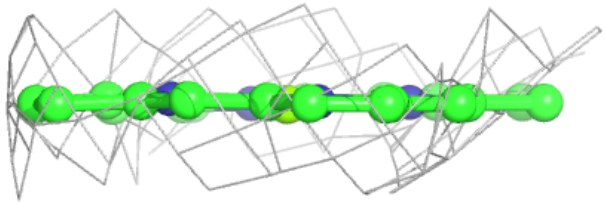


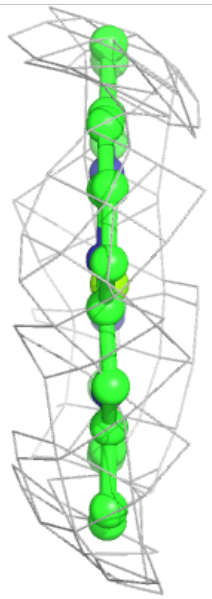


Electron density around CLA B 1222:

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

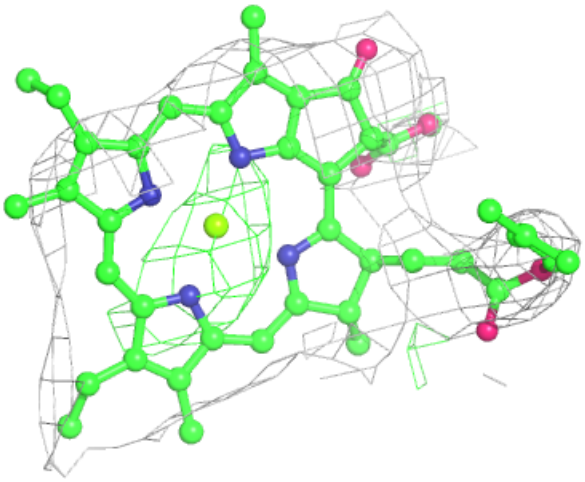


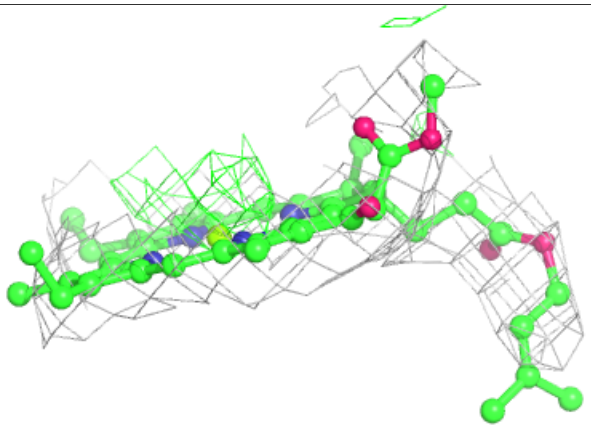


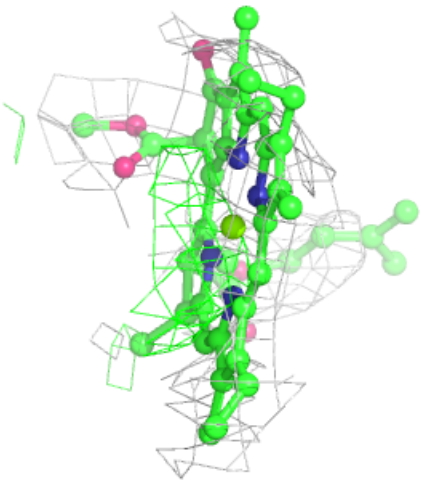


Electron density around CLA A 1011:

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

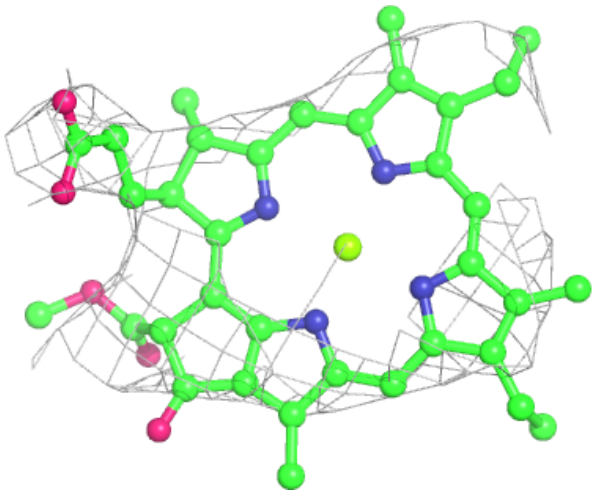


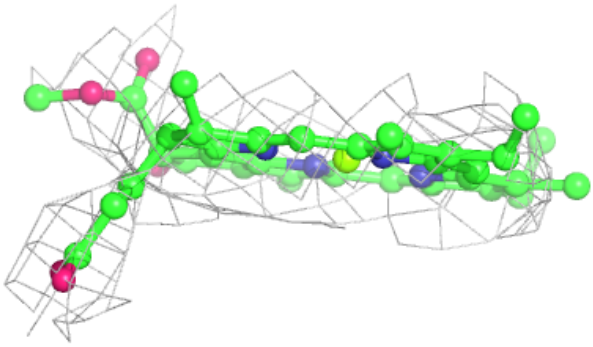


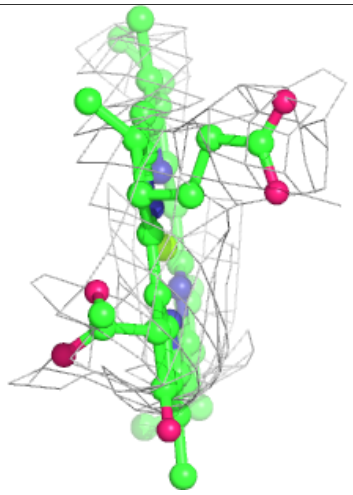


Electron density around CLA B 1021:

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

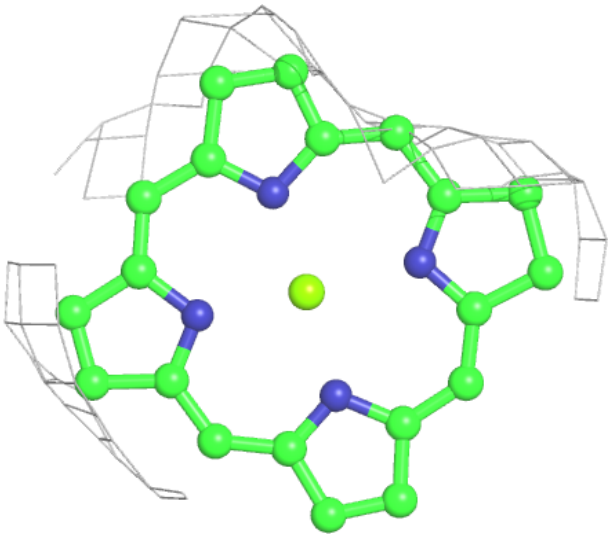


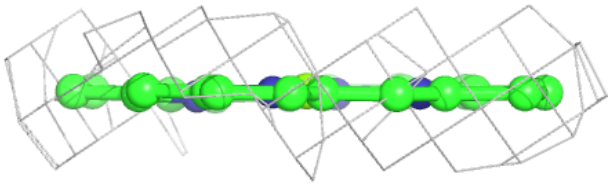


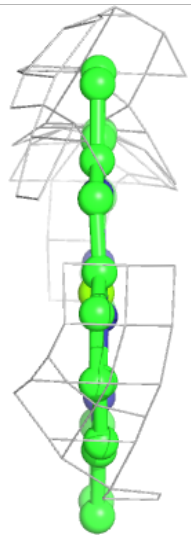


Electron density around CLA B 1219:

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

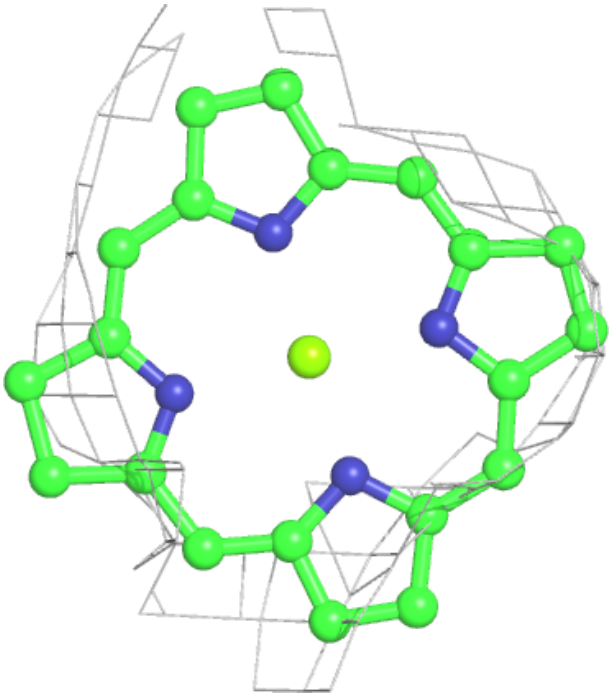


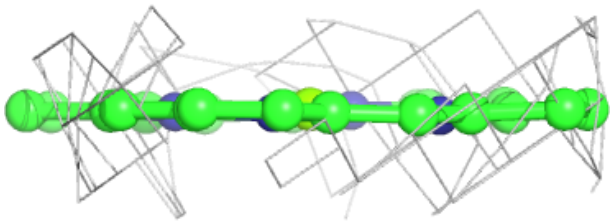


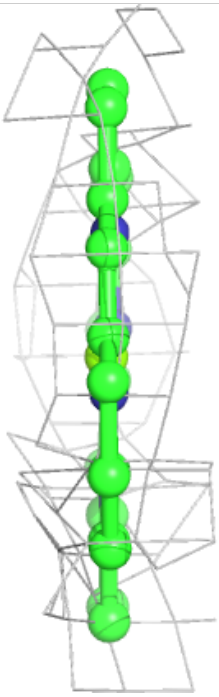


Electron density around CLA 2 610:

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

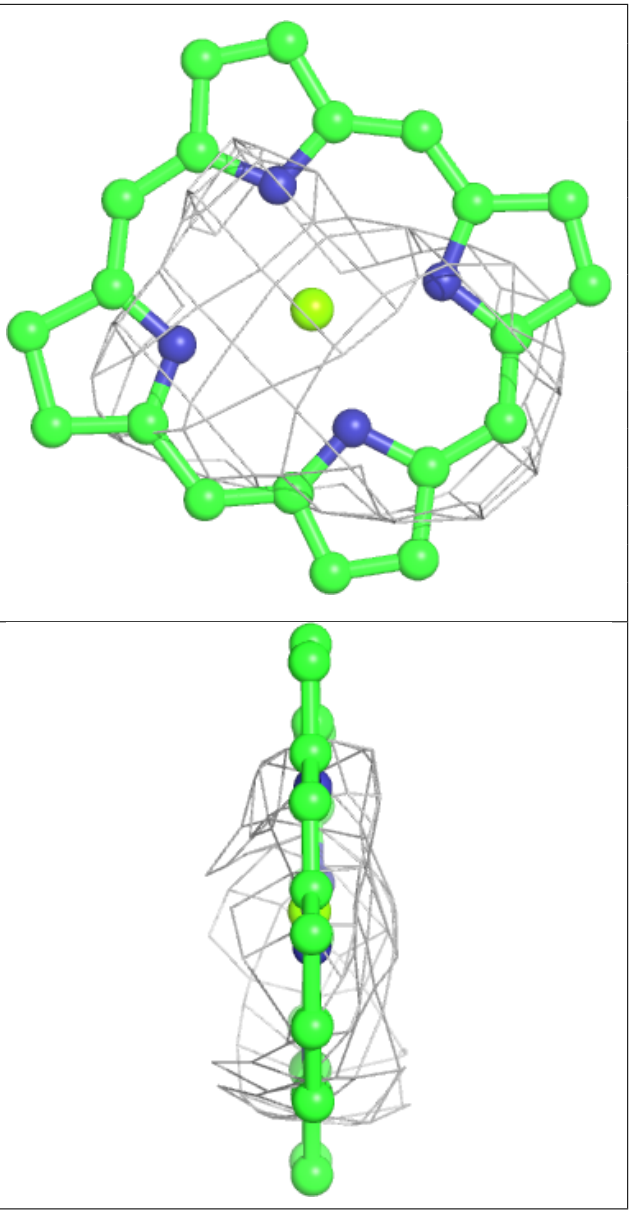






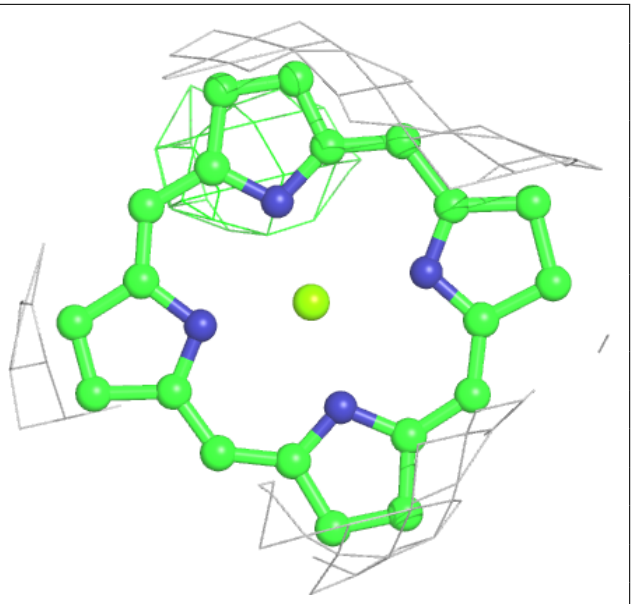
Electron density around CLA B 1220:

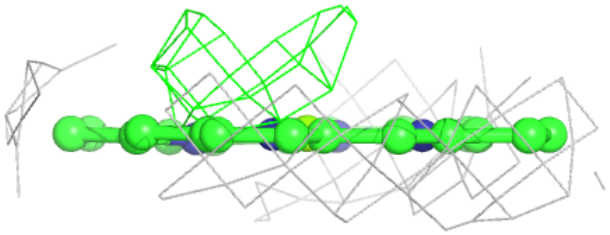
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

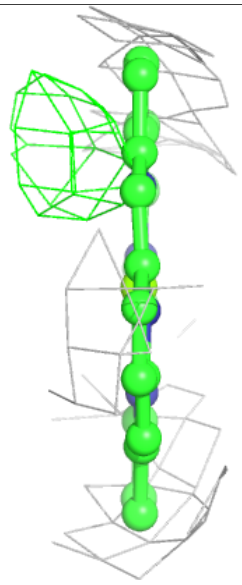


Electron density around CLA 2 604:

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

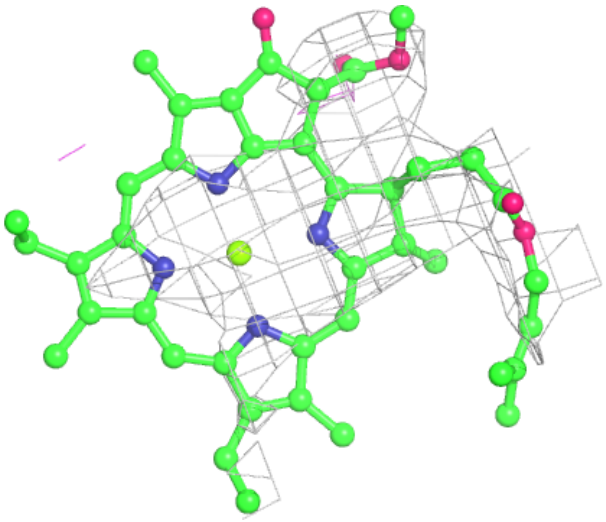


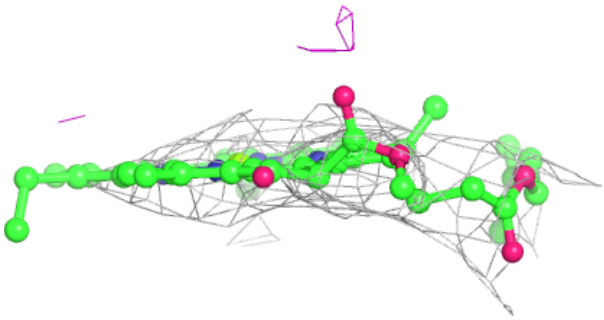


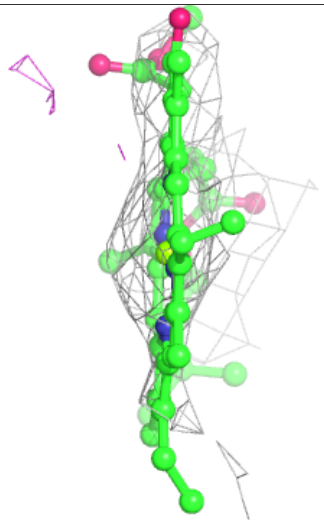


Electron density around CLA B 1023:

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

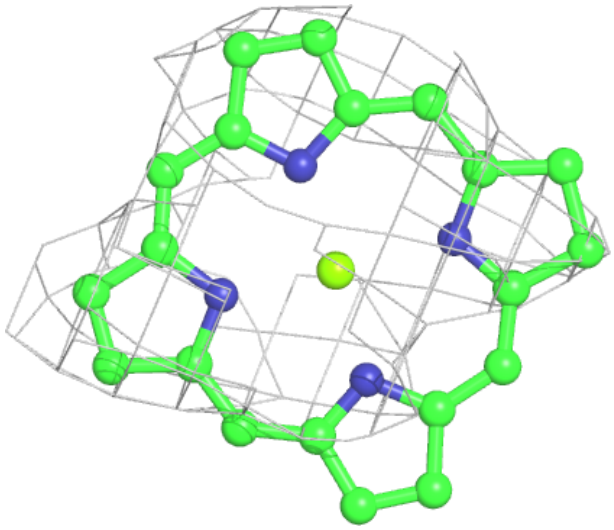


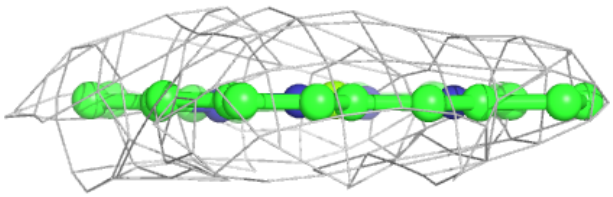


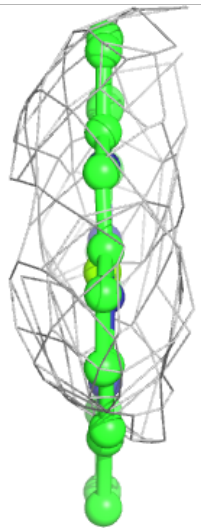


Electron density around CLA 3 614:

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

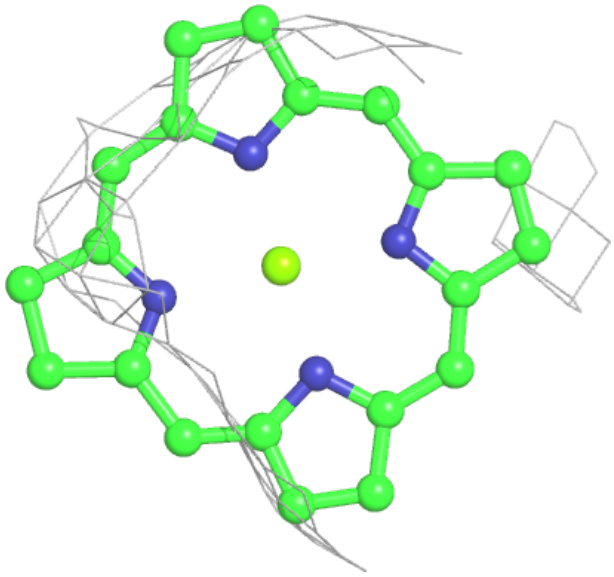


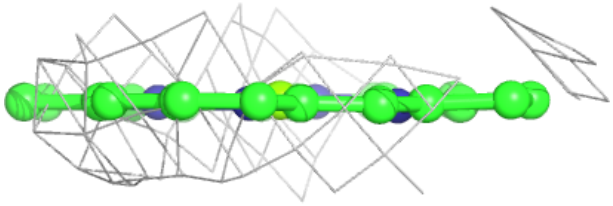


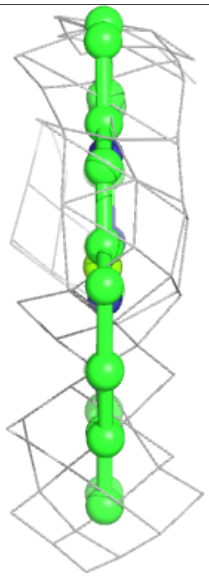


Electron density around CLA F 1302:

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

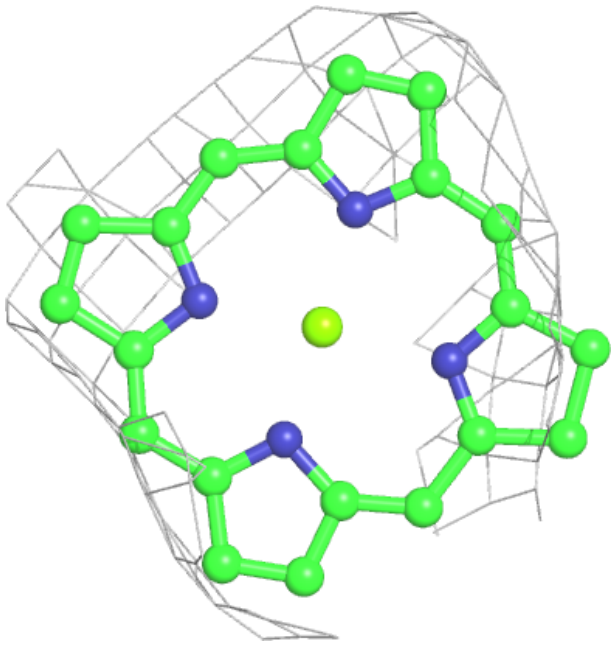


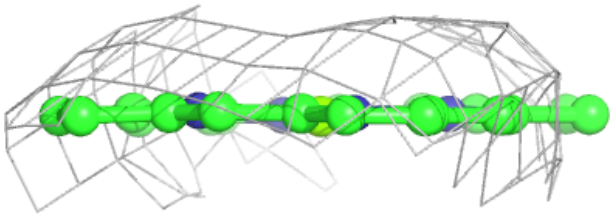


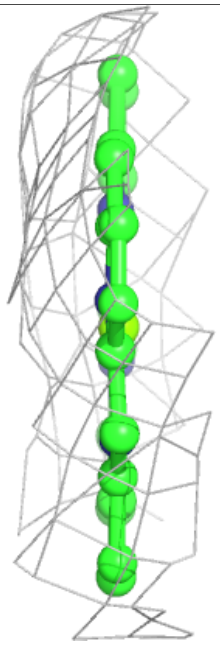


Electron density around CLA K 1401:

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

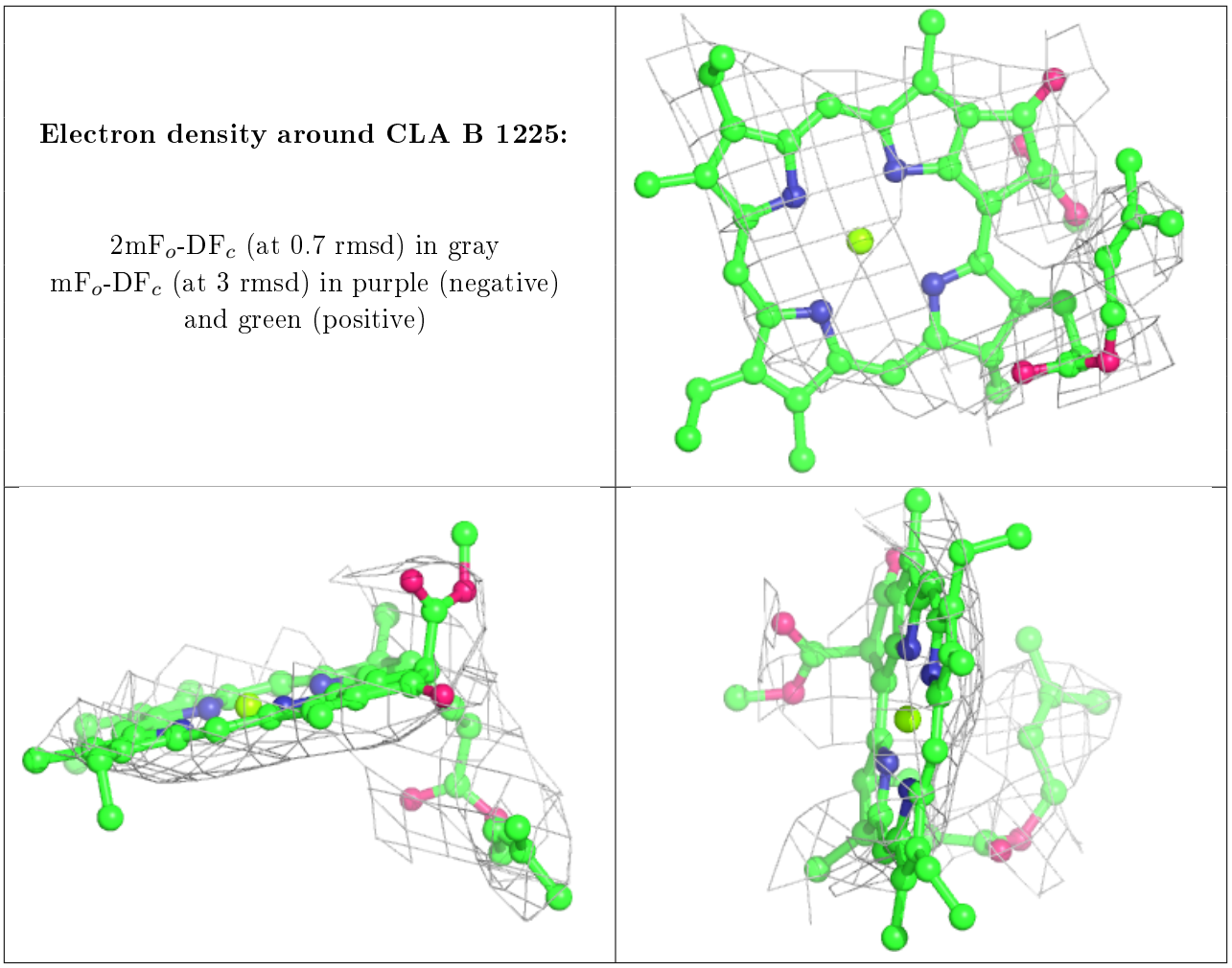






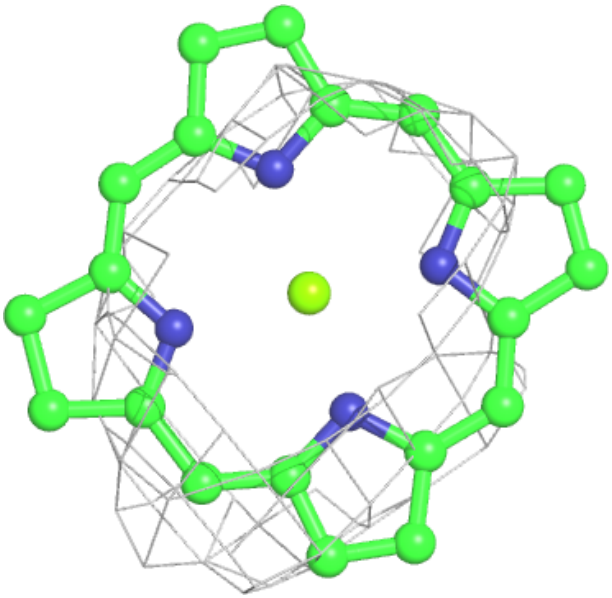
Electron density around CLA B 1225:

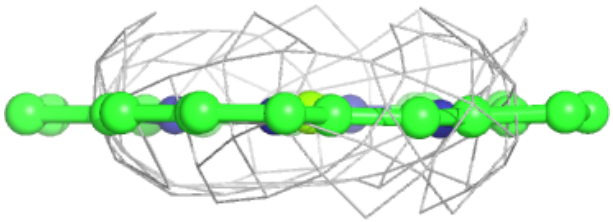
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

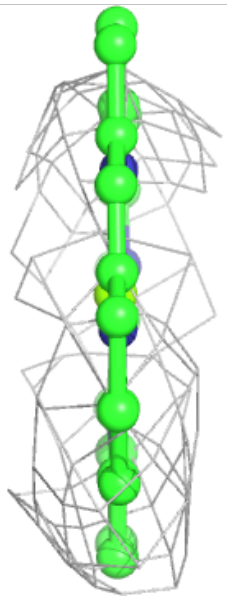


Electron density around CLA B 1234:

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

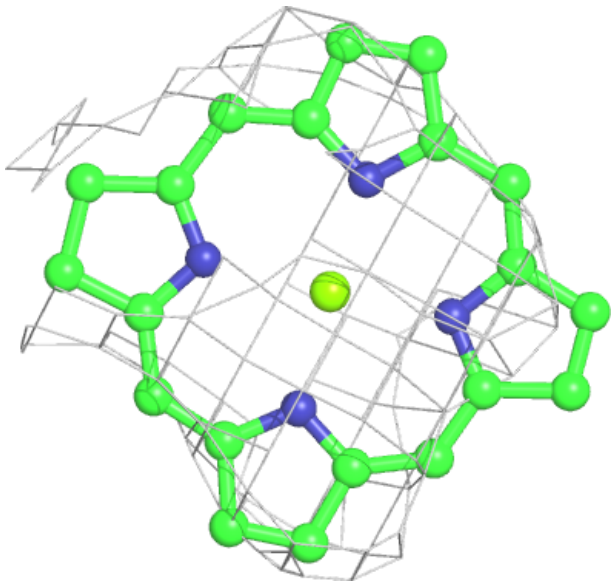


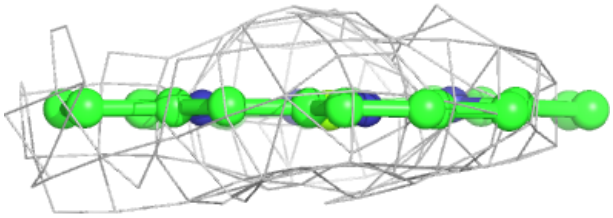


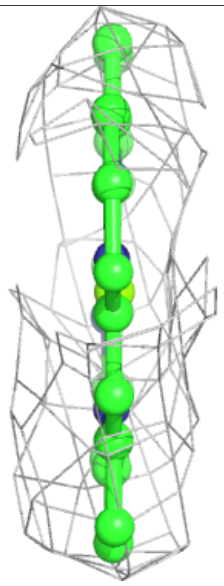


Electron density around CLA A 1119:

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

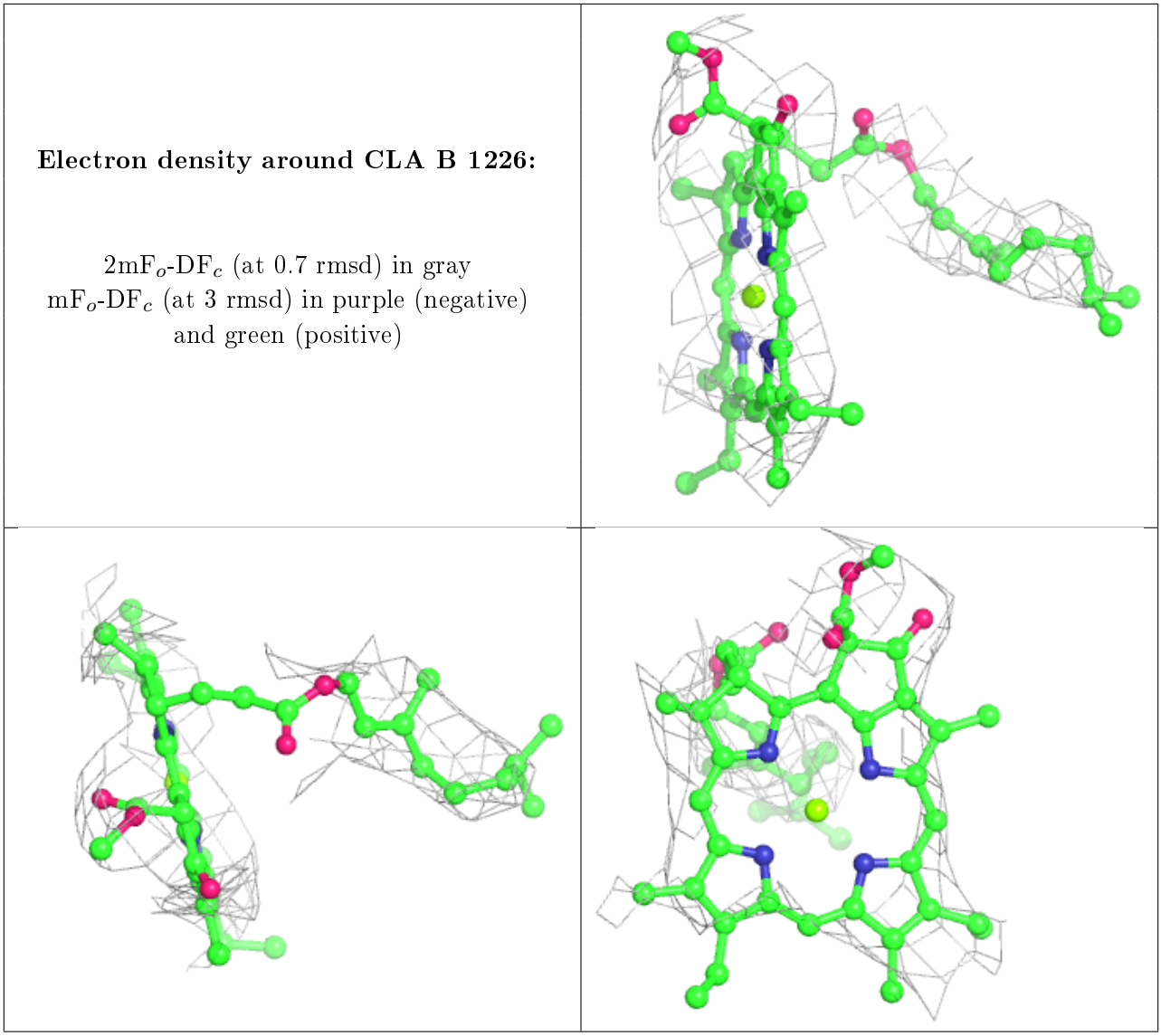






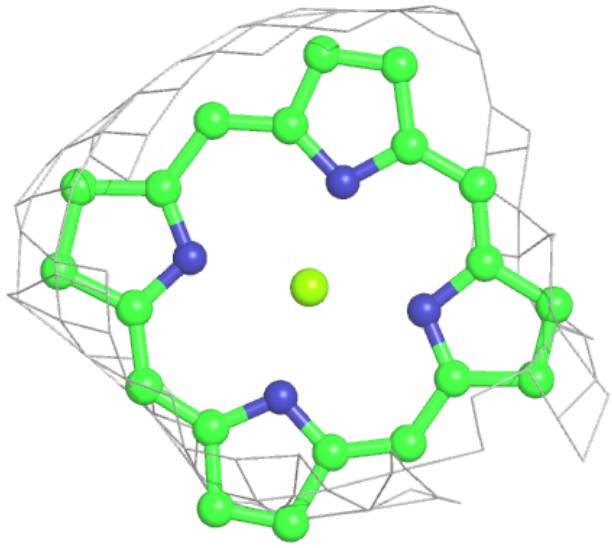
Electron density around CLA B 1226:

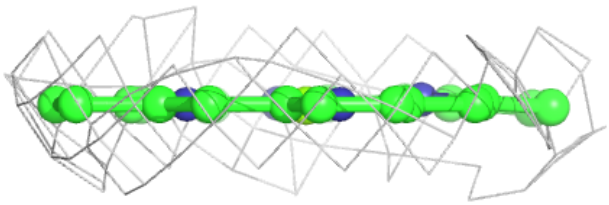
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

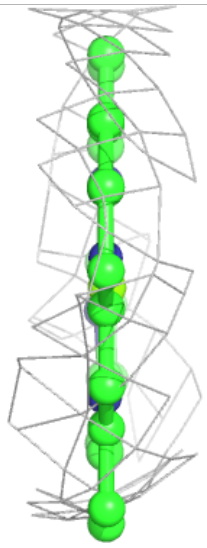


Electron density around CLA 3 601:

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

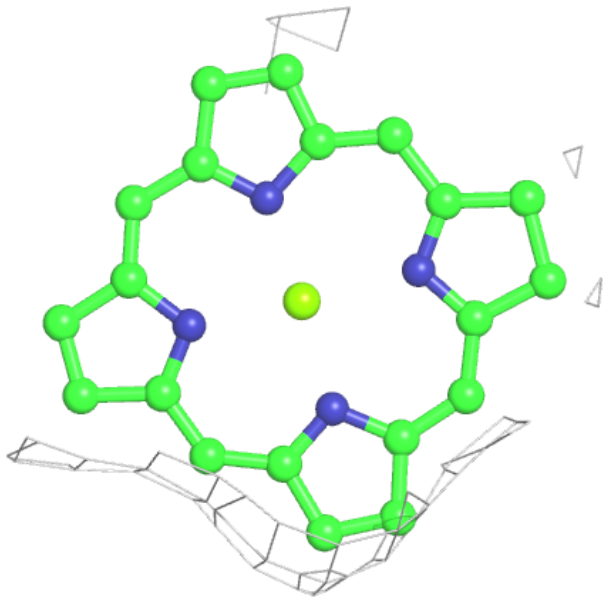


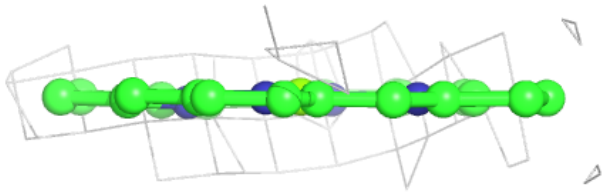


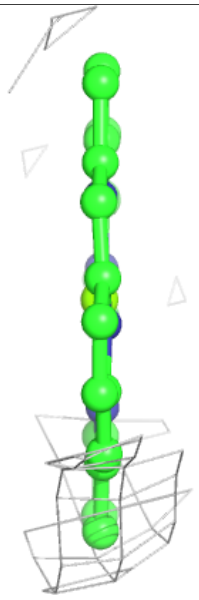


Electron density around CLA 4 606:

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

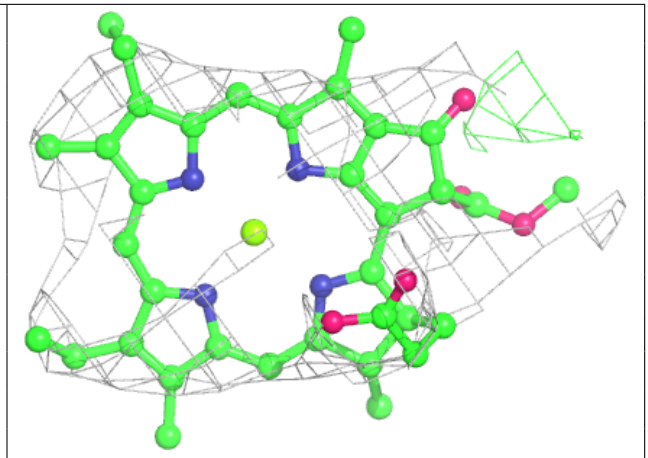


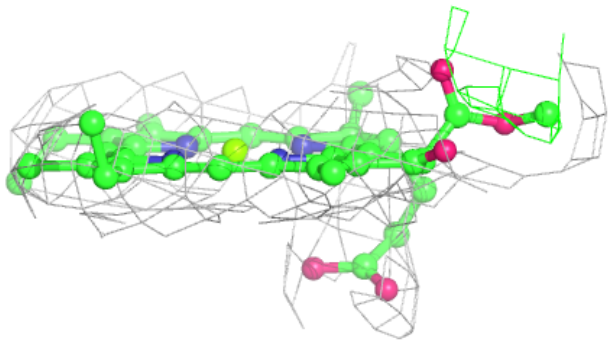


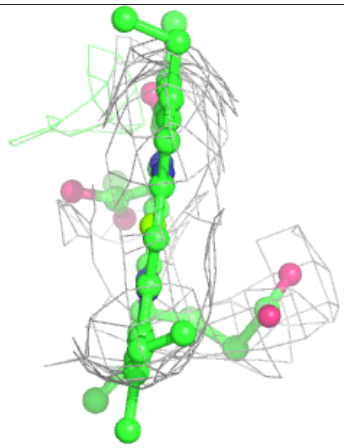


Electron density around CLA A 1101:

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

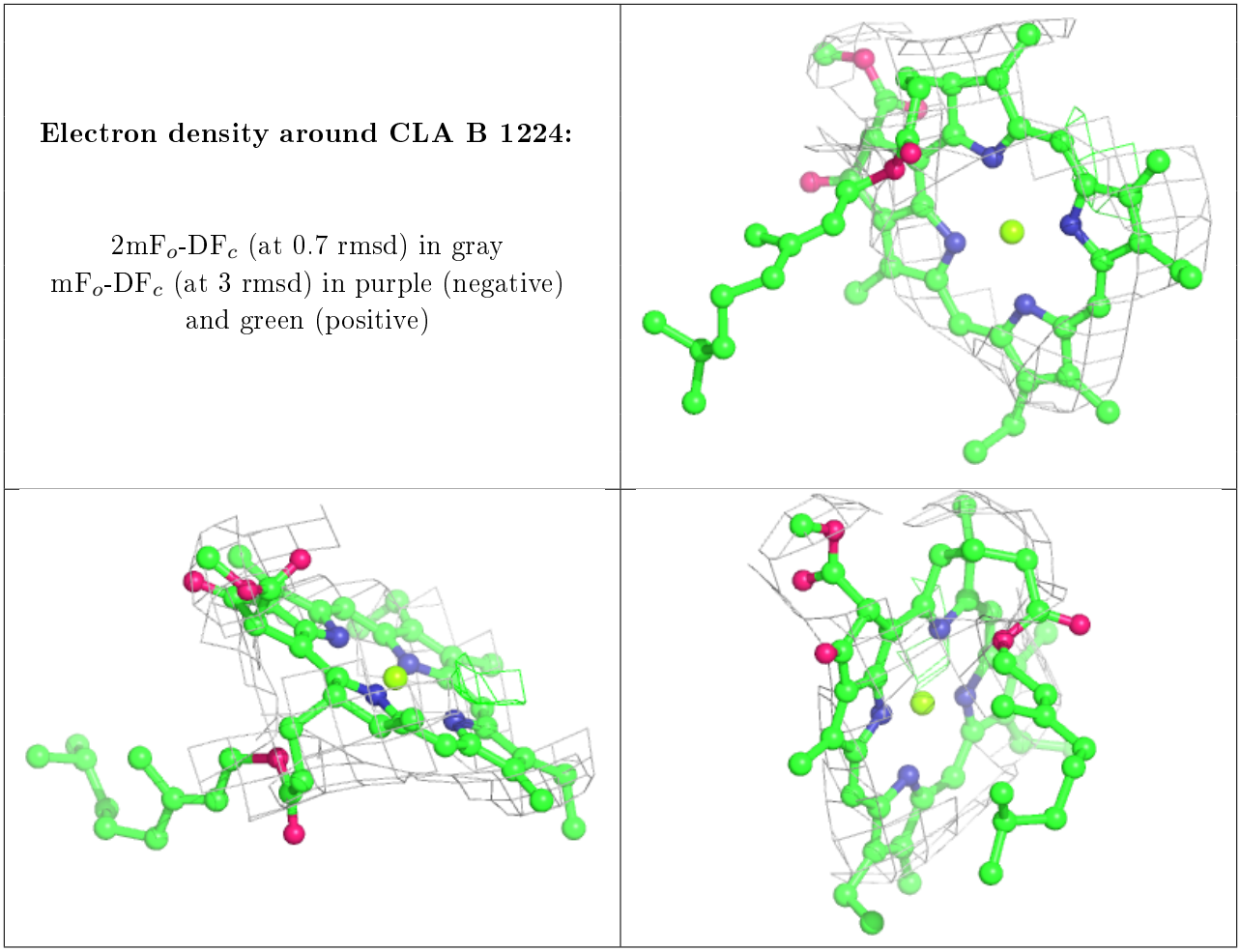






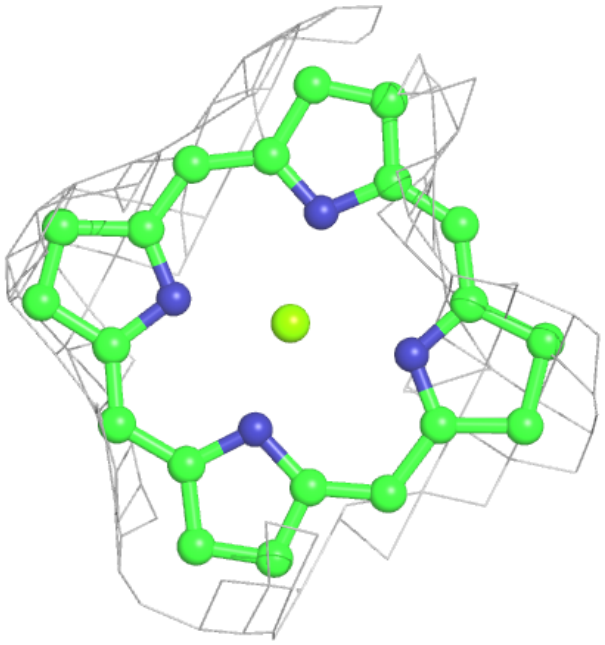
Electron density around CLA B 1224:

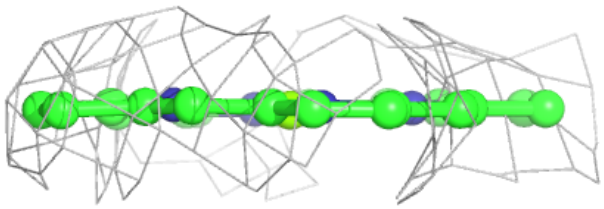
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

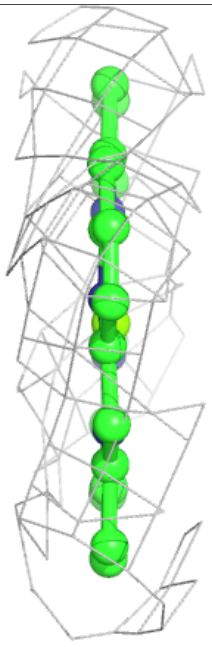


Electron density around CLA 2 607:

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

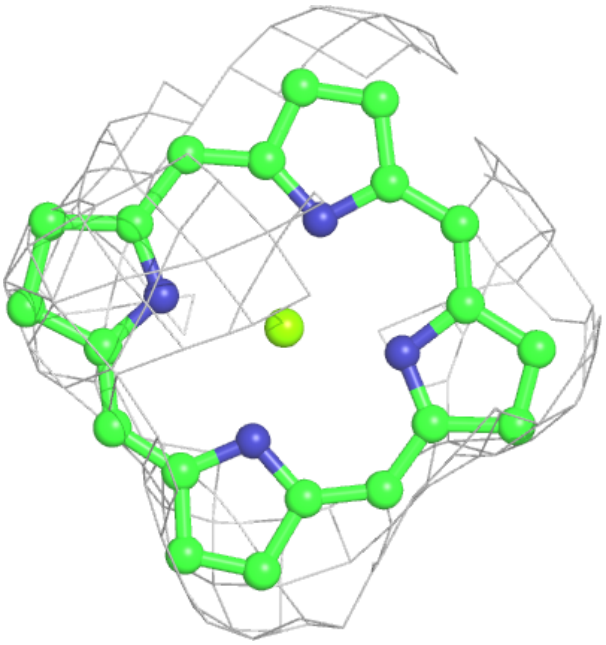


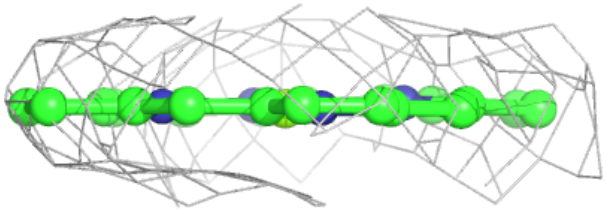


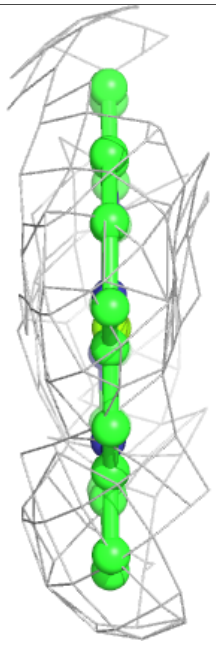


Electron density around CLA A 1123:

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

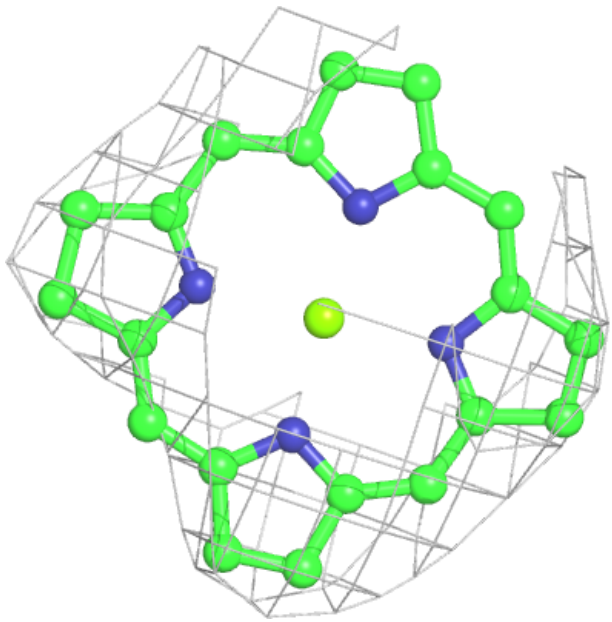


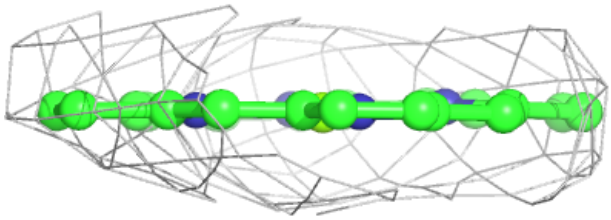


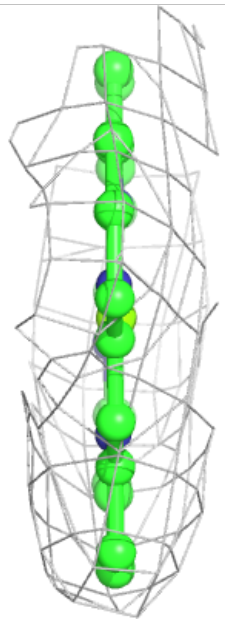


Electron density around CLA 4 612:

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

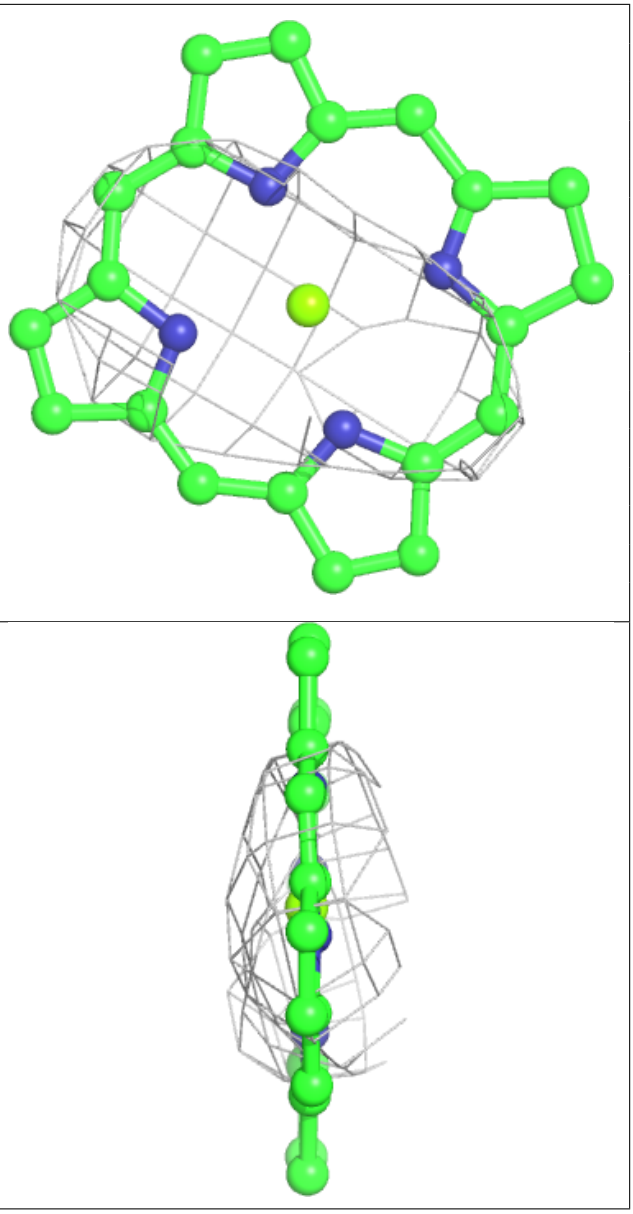


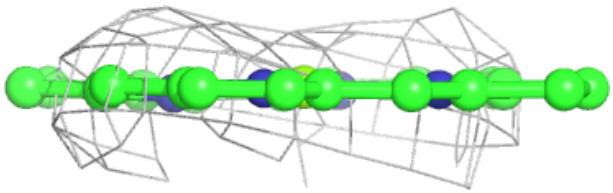




Electron density around CLA 2 608:

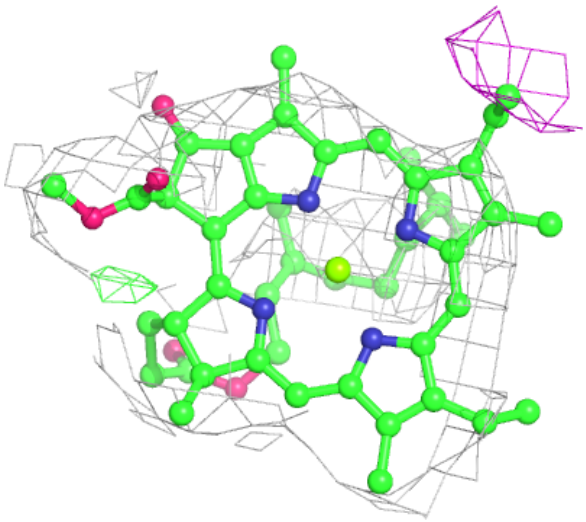
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

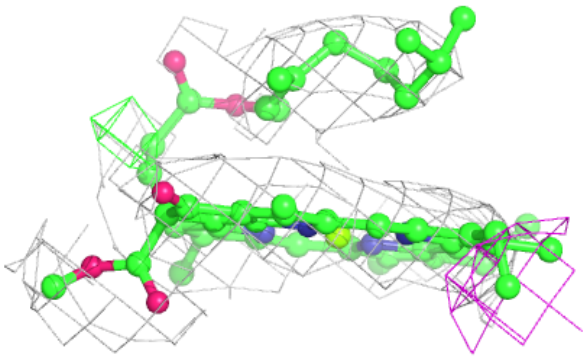


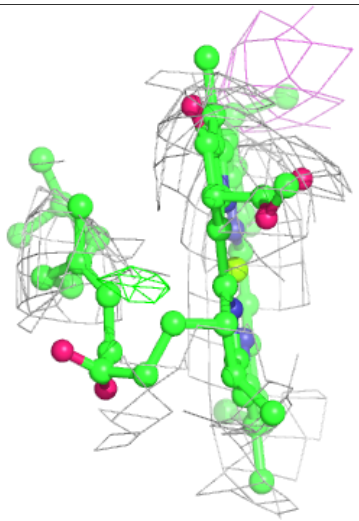


Electron density around CLA A 1116:

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

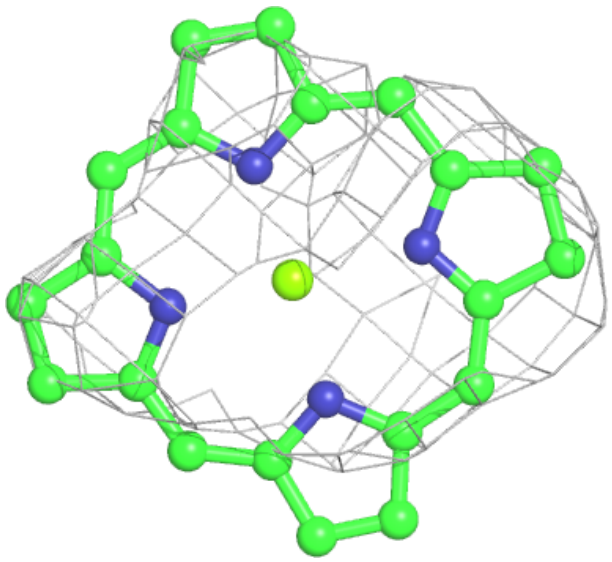


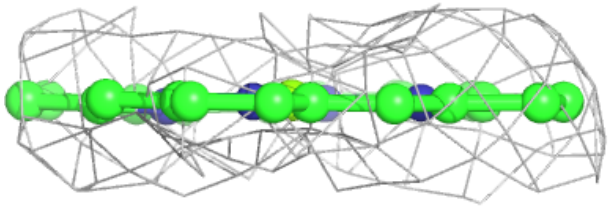


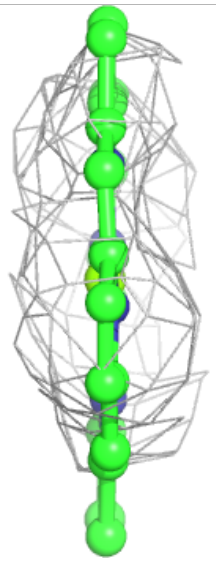


Electron density around CLA A 1110:

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

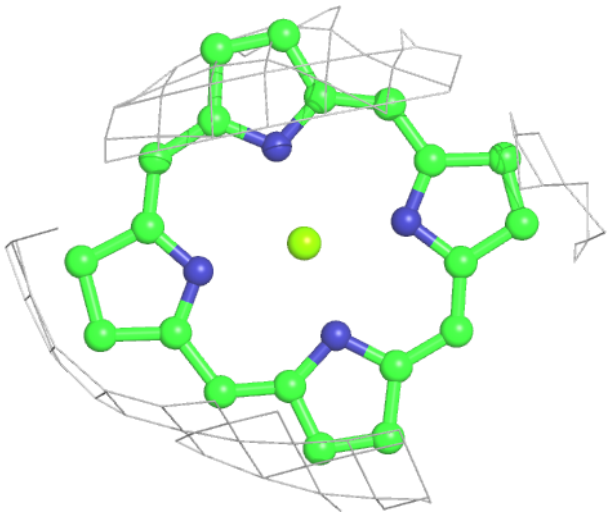


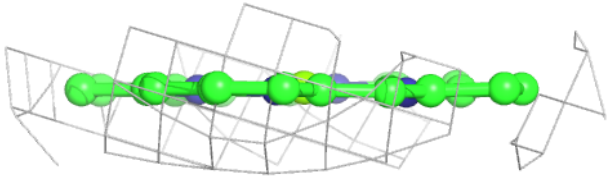


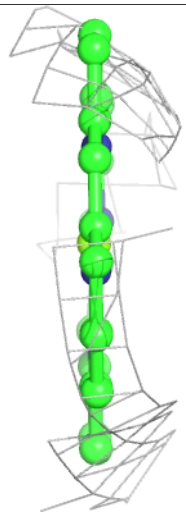


Electron density around CLA L 1501:

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

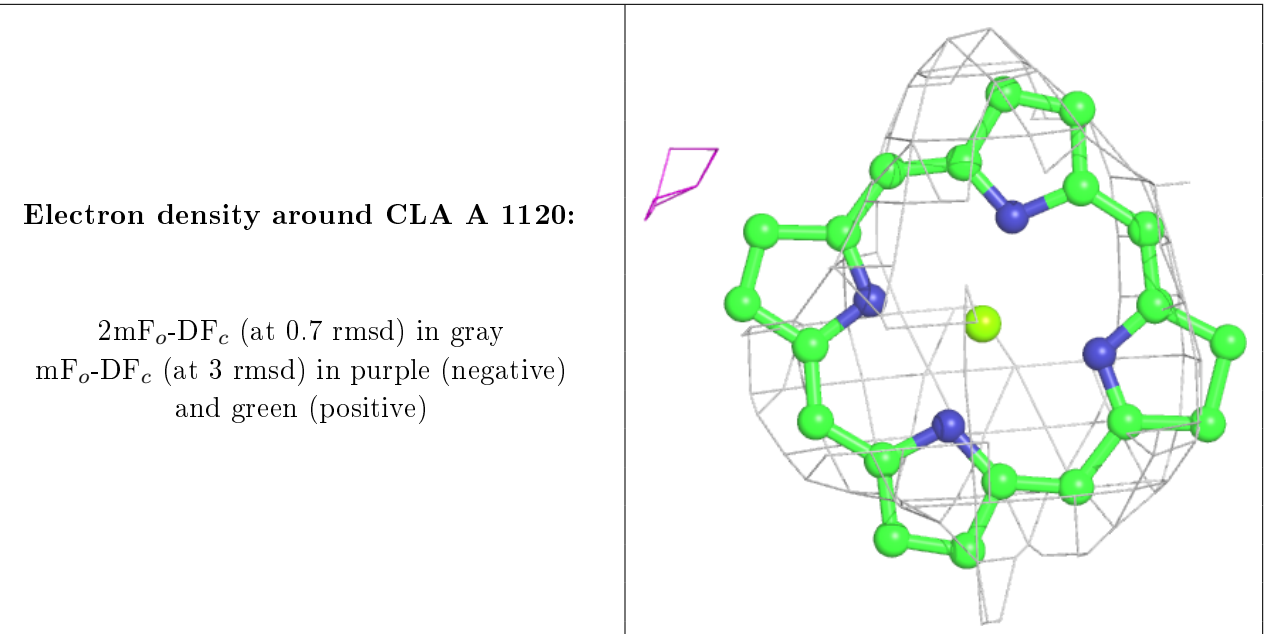


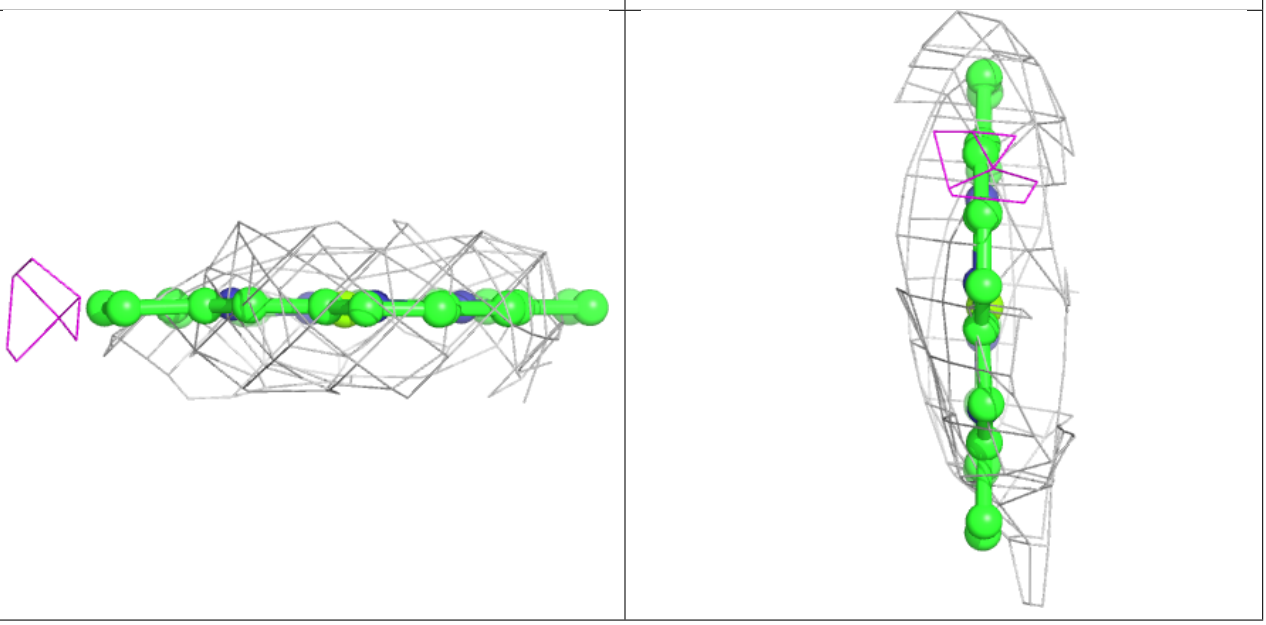




Electron density around CLA A 1120:

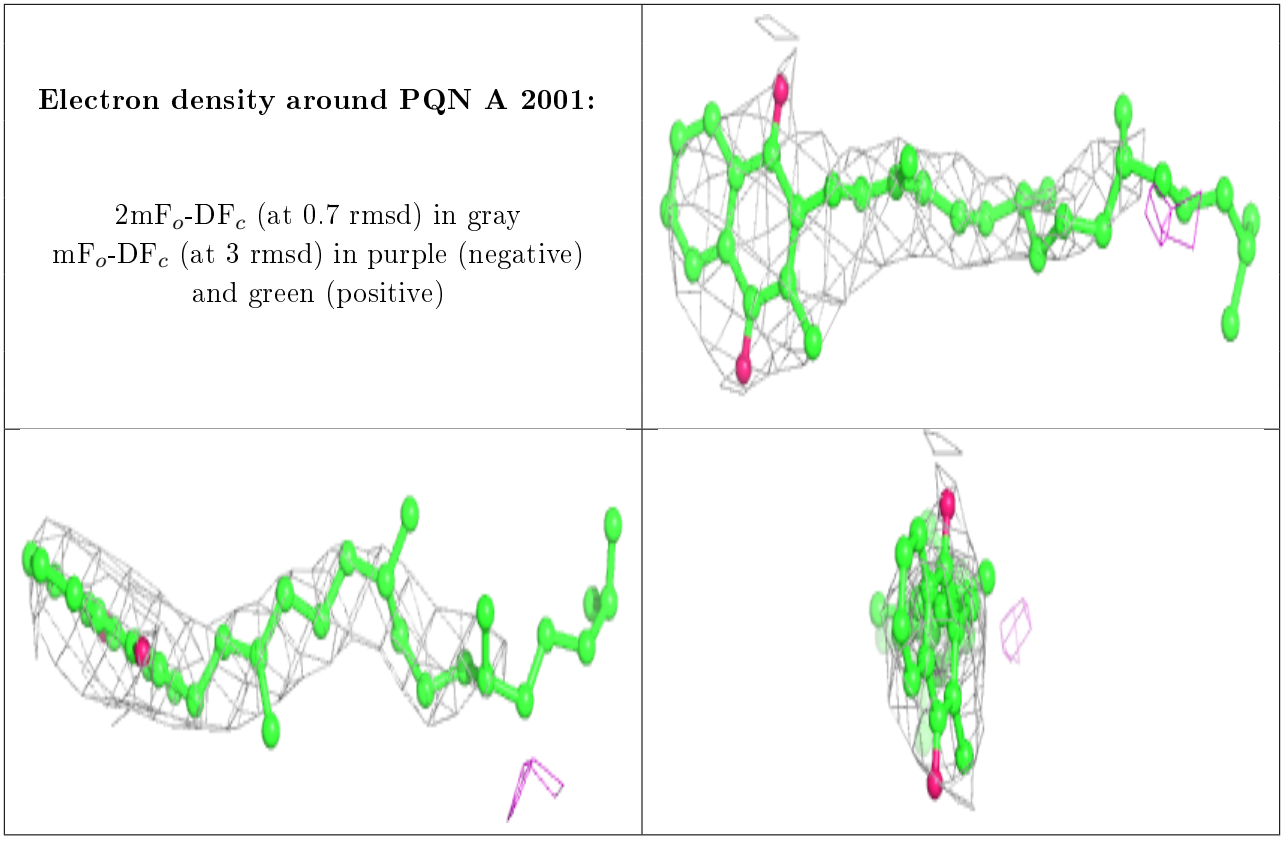
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)





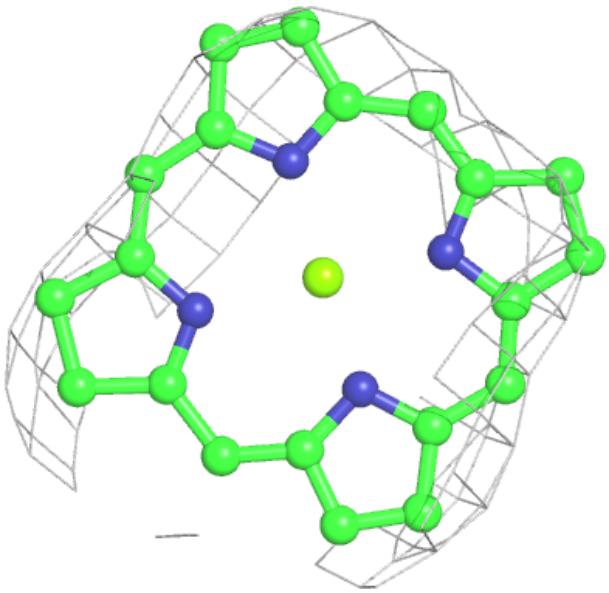
Electron density around PQN A 2001:

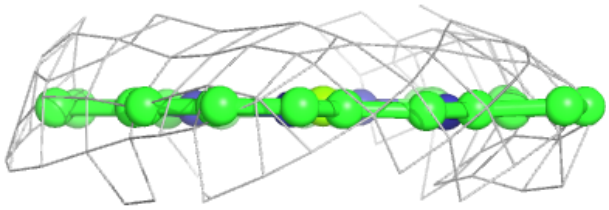
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

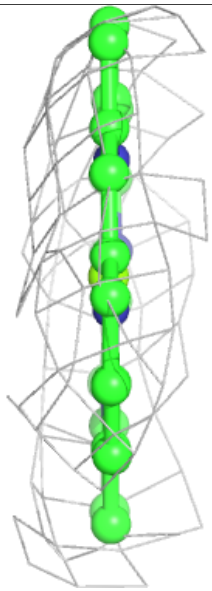


Electron density around CLA A 1121:

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

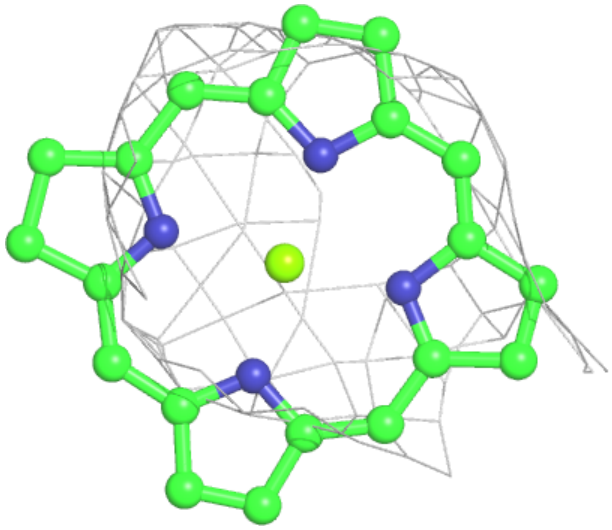


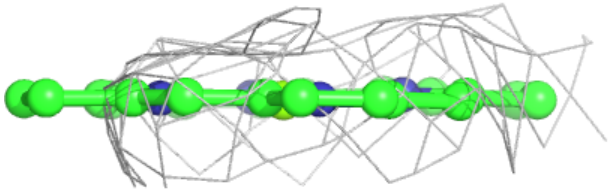


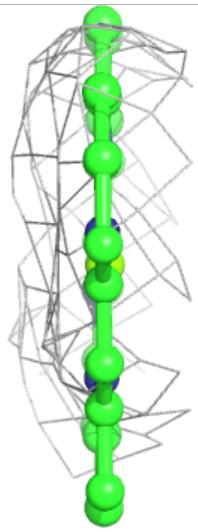


Electron density around CLA B 1204:

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

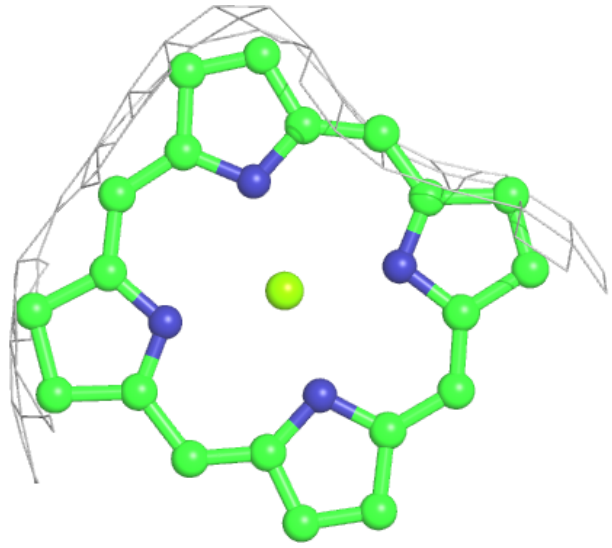


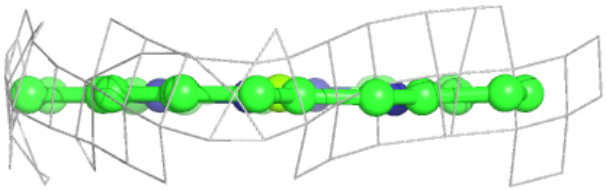


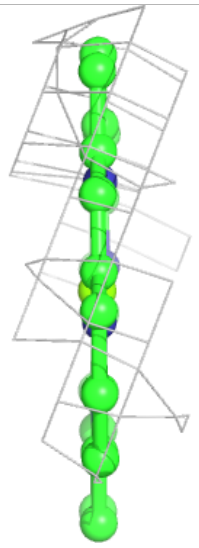


Electron density around CLA B 1211:

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

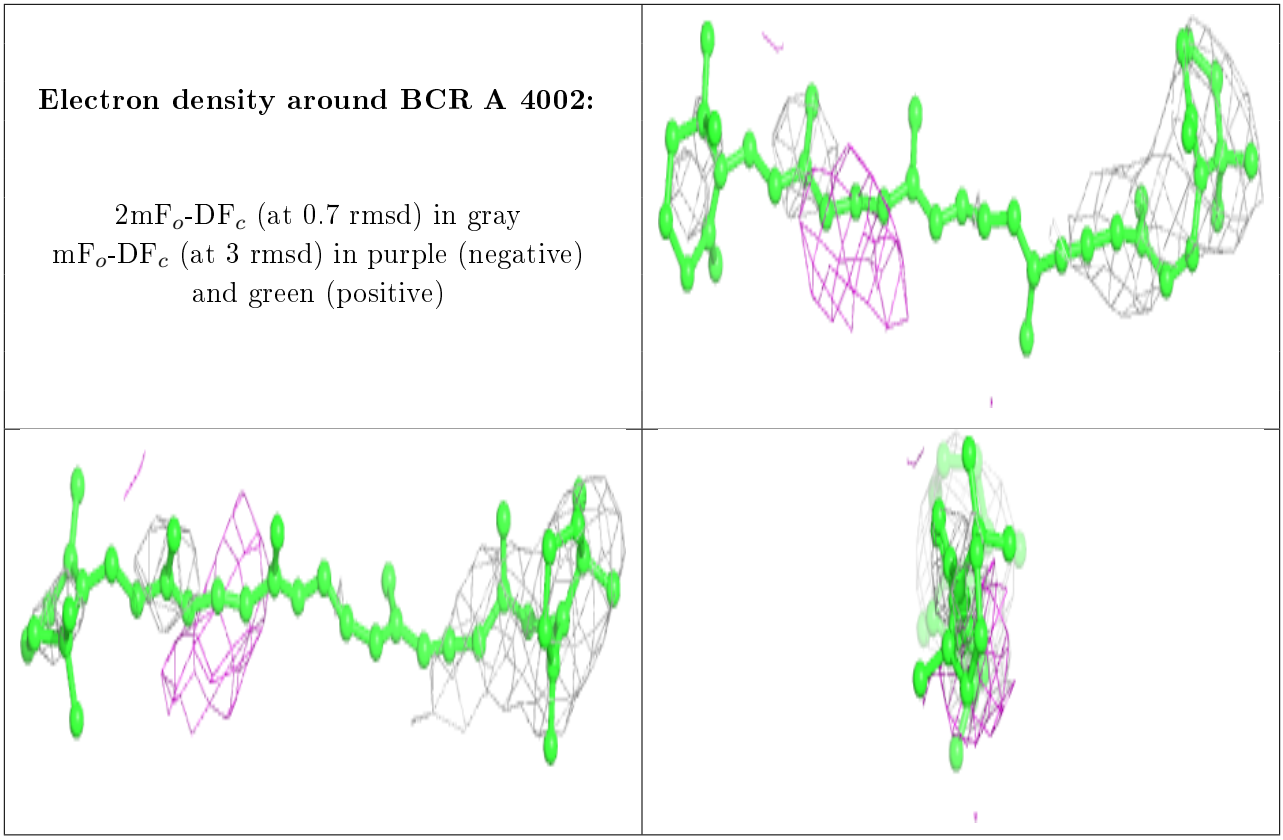






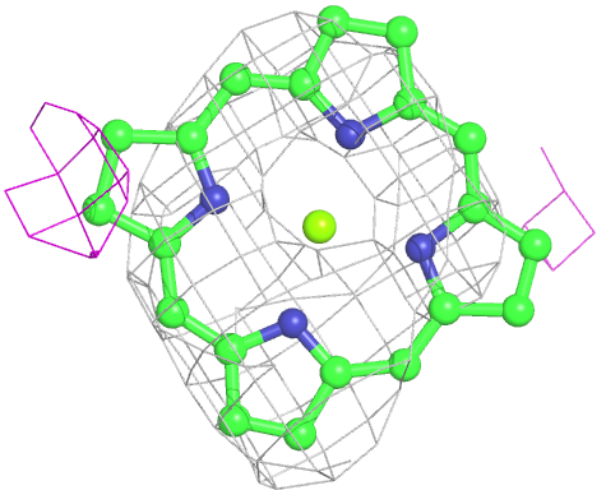
Electron density around BCR A 4002:

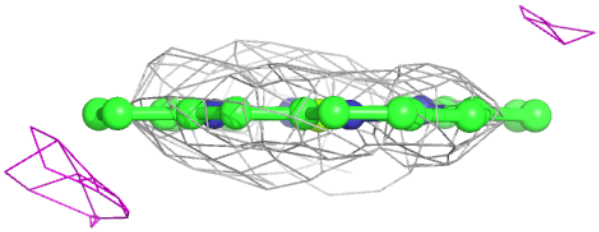
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

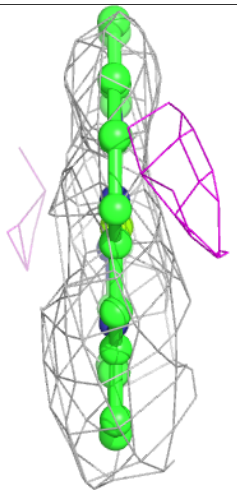


Electron density around CLA A 1138:

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

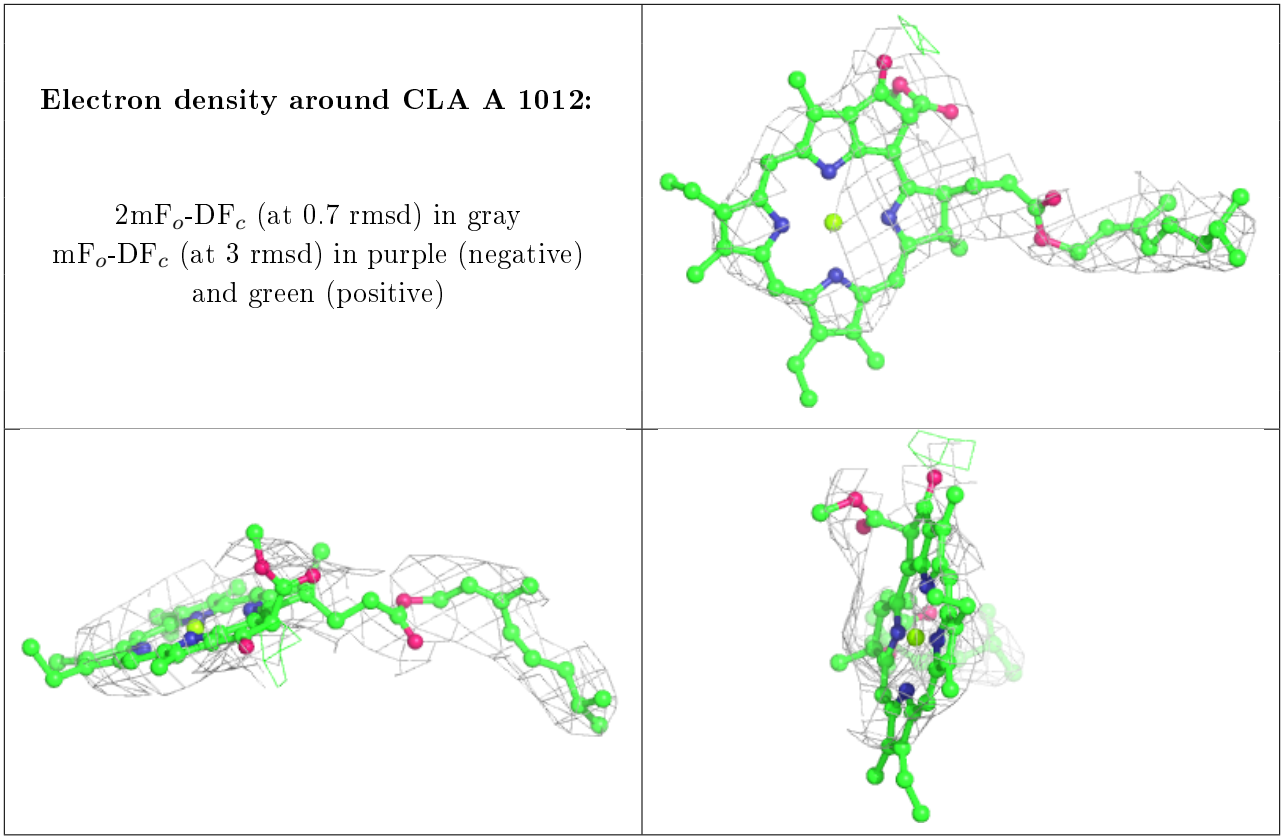






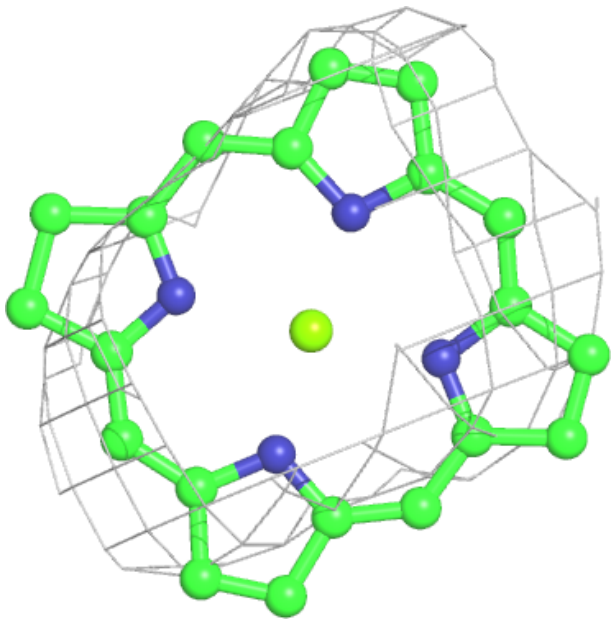
Electron density around CLA A 1012:

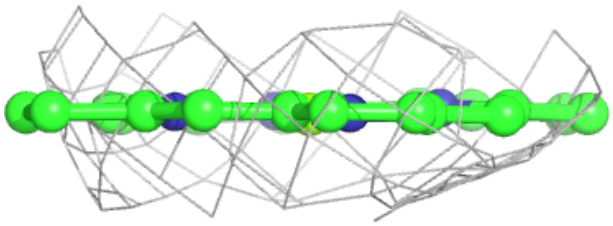
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

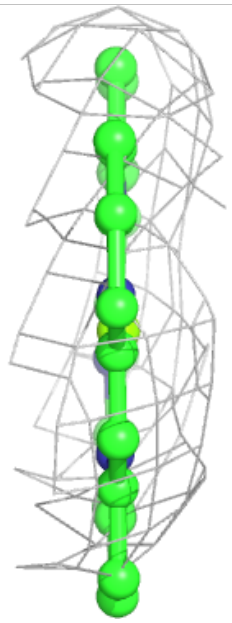


Electron density around CLA 2 614:

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

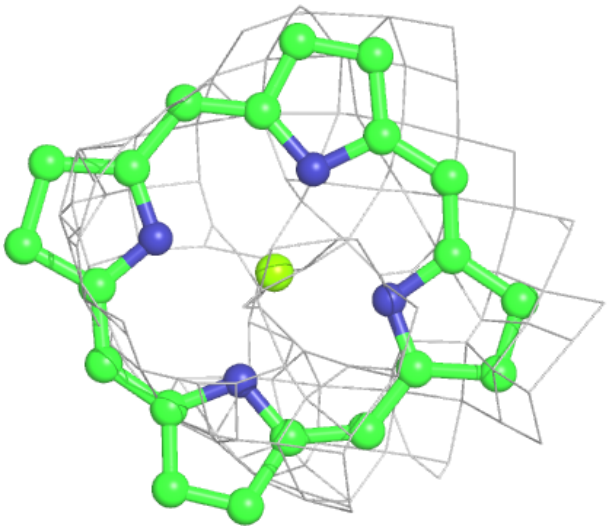


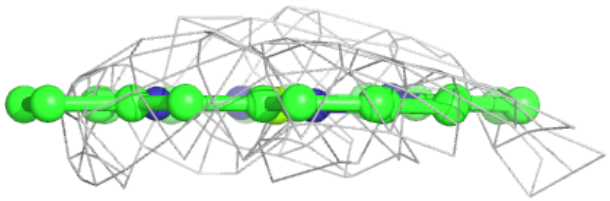


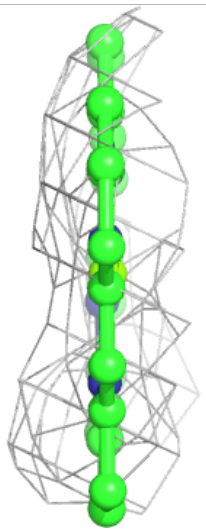


Electron density around CLA 3 606:

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

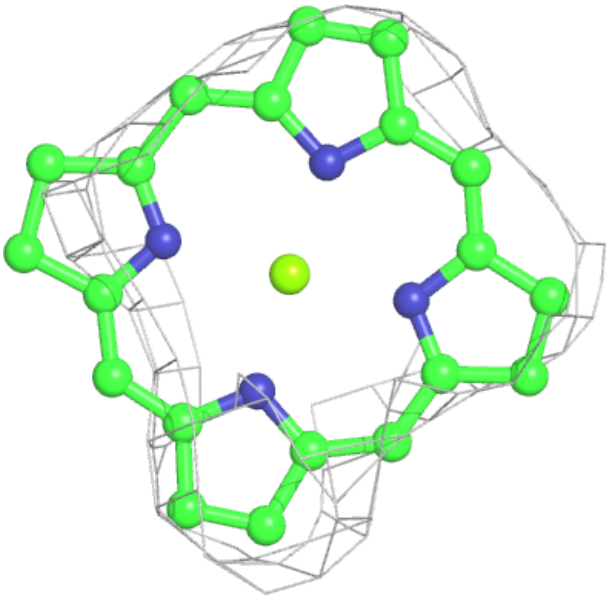


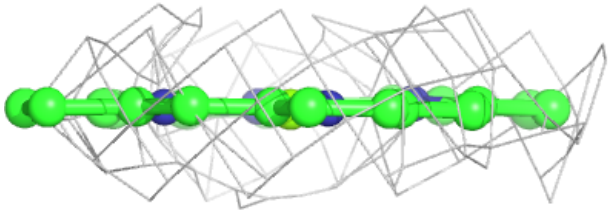


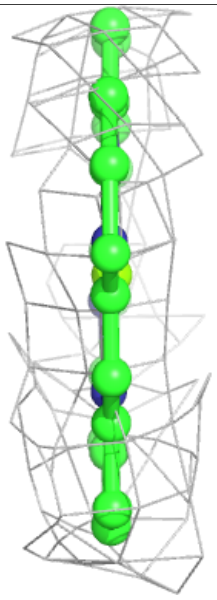


Electron density around CLA A 1136:

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

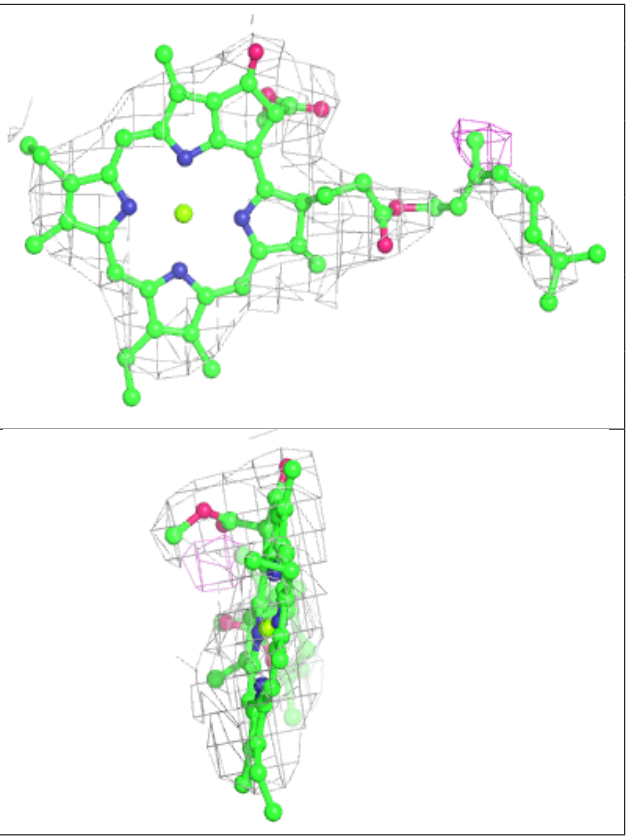


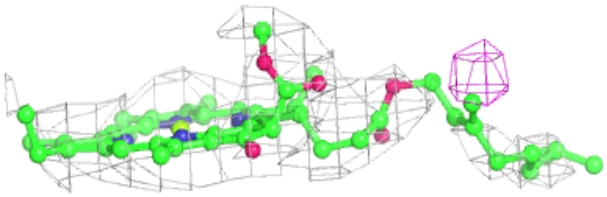




Electron density around CLA A 1103:

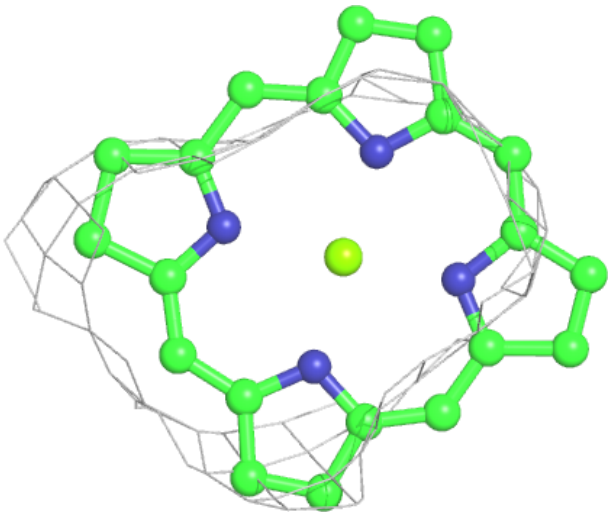
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

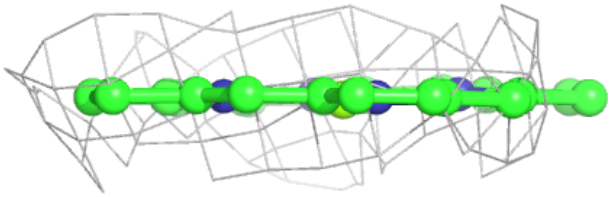


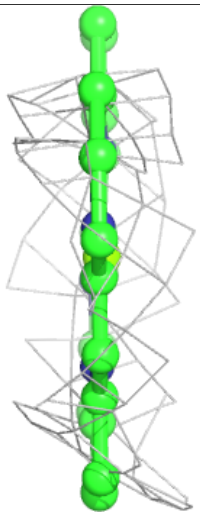


Electron density around CLA 3 604:

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

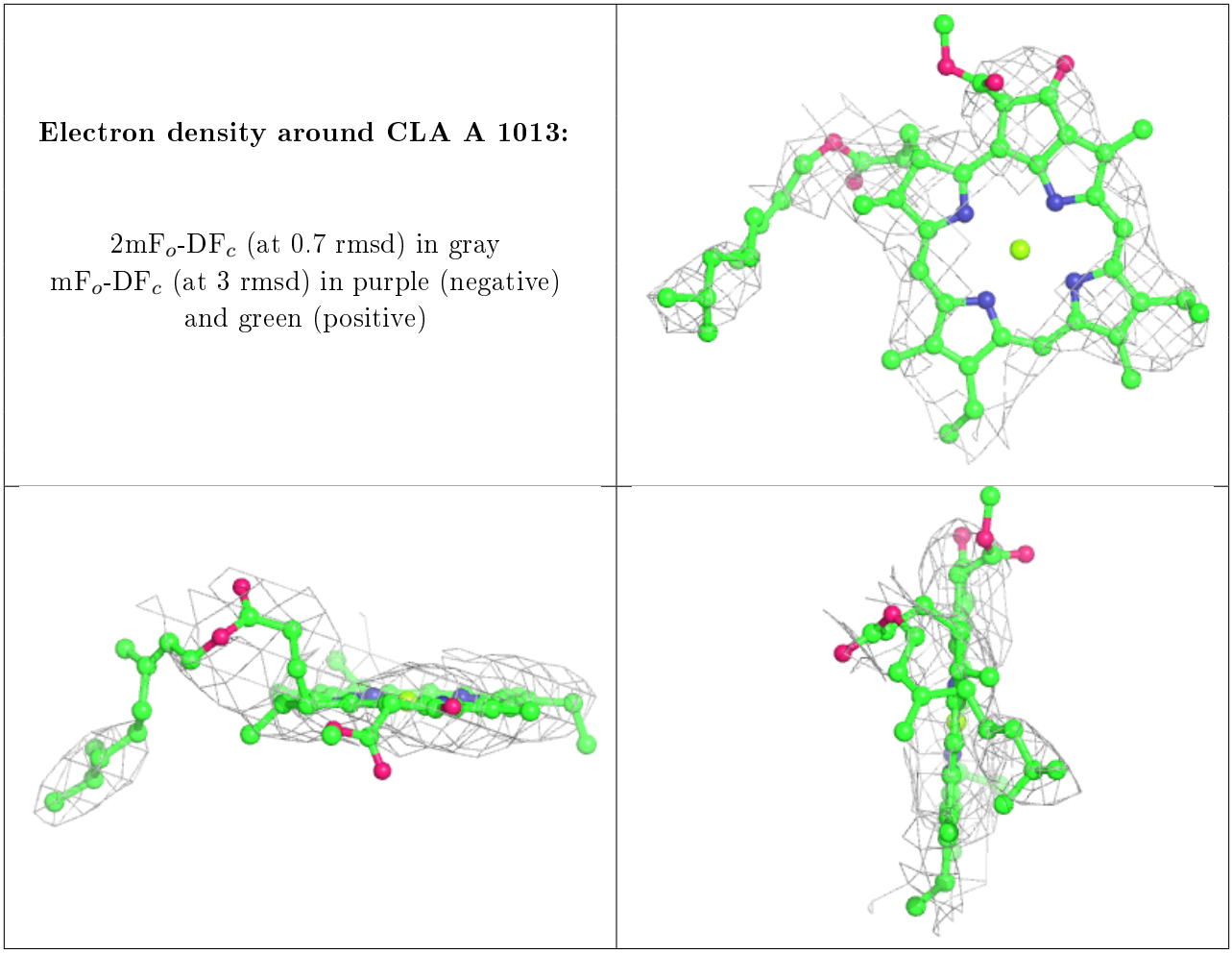






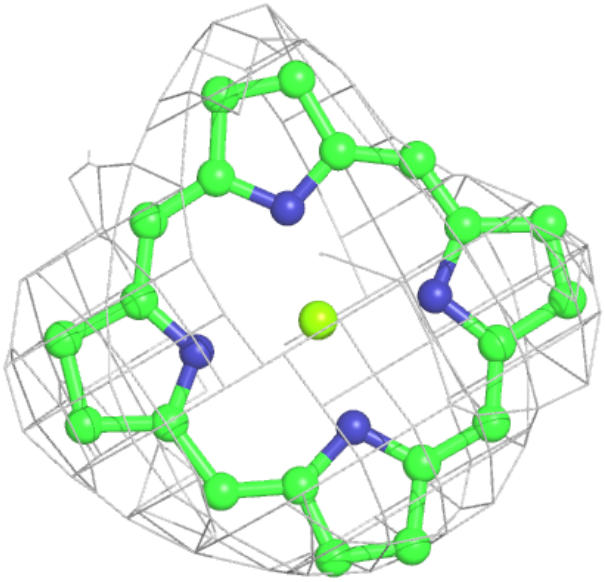
Electron density around CLA A 1013:

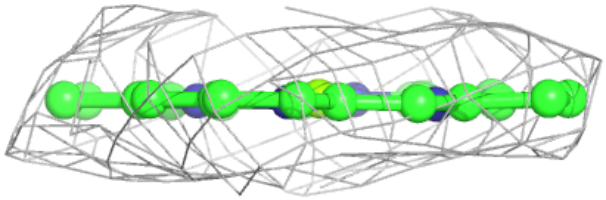
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

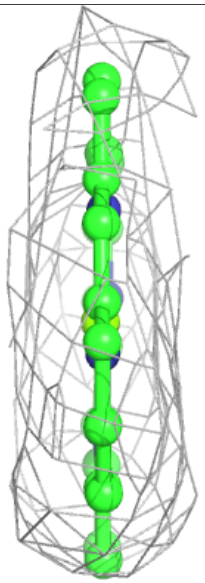


Electron density around CLA B 1022:

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

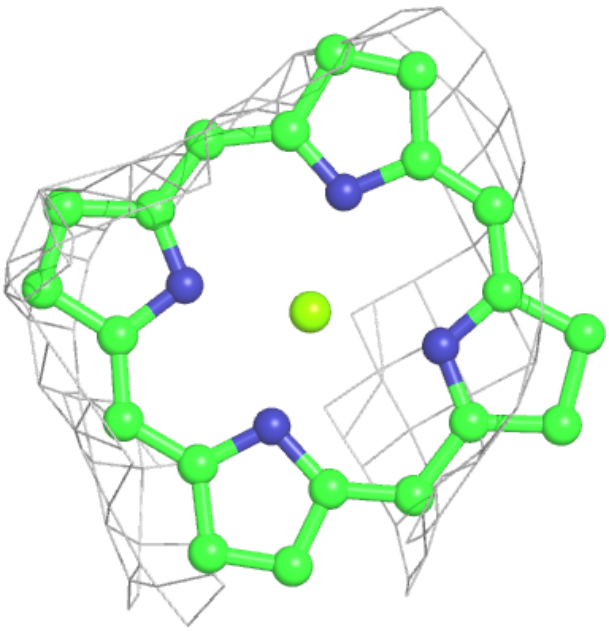


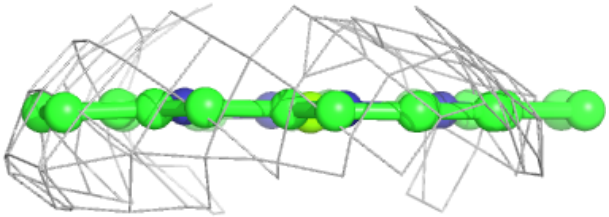


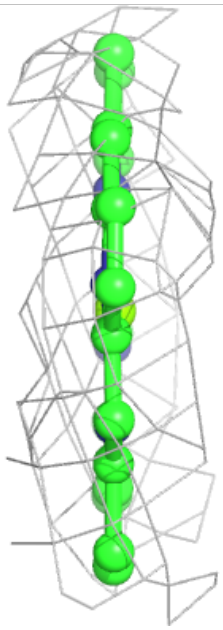


Electron density around CLA B 1206:

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

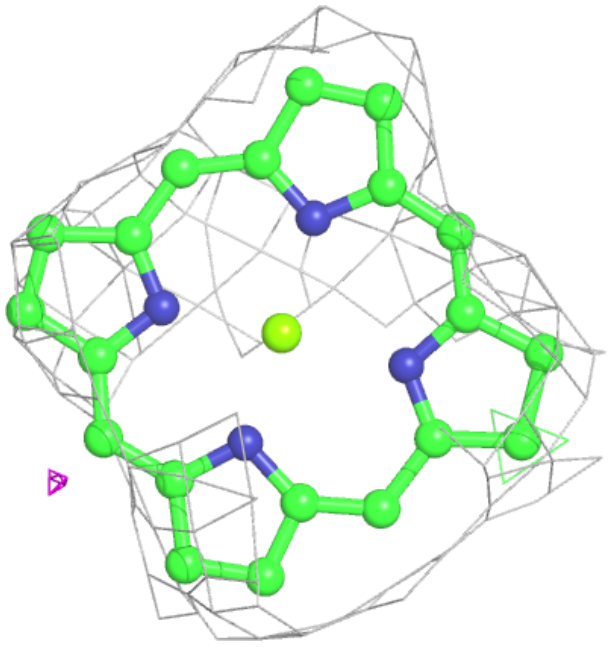


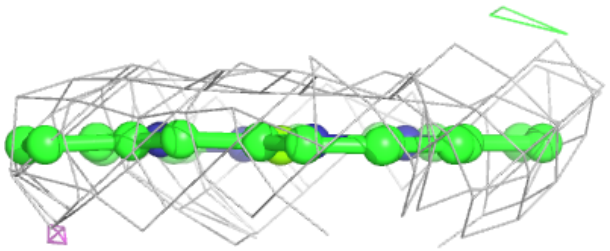


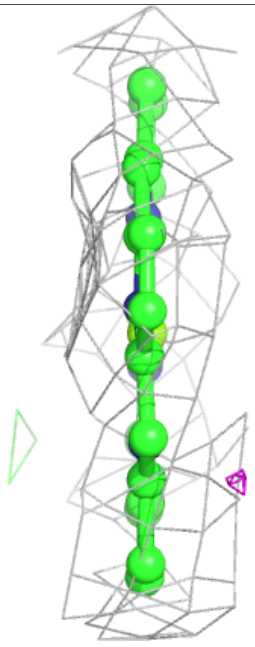


Electron density around CLA A 1112:

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

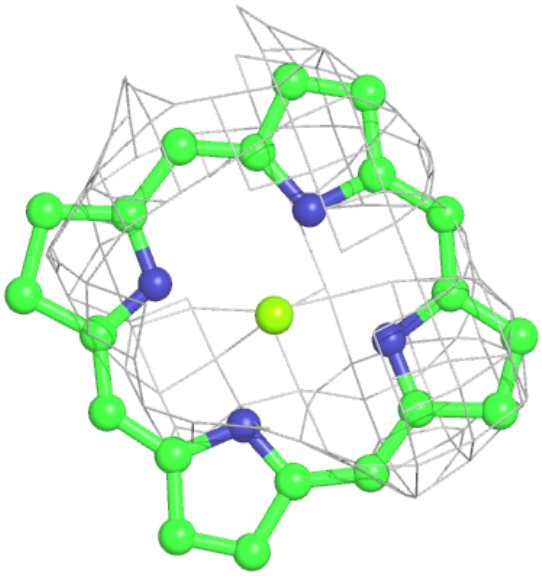


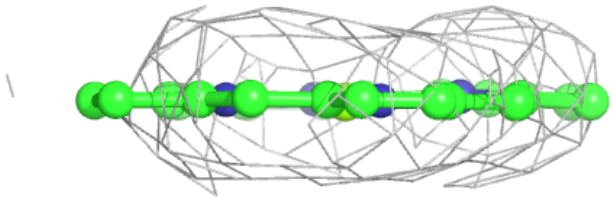


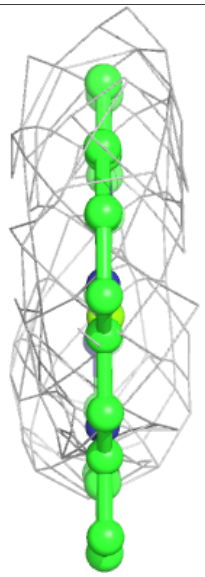


Electron density around CLA A 1133:

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

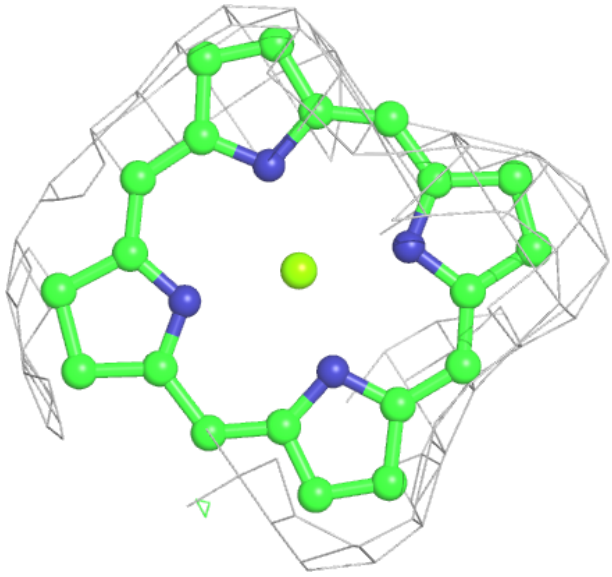


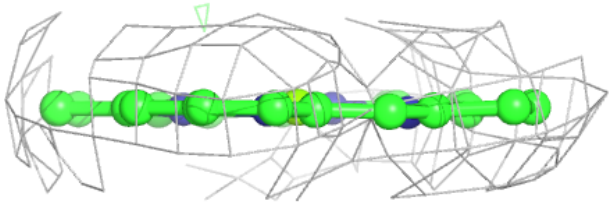


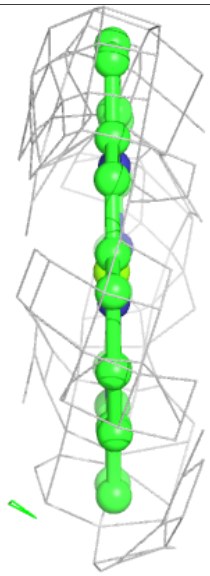


Electron density around CLA A 1109:

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

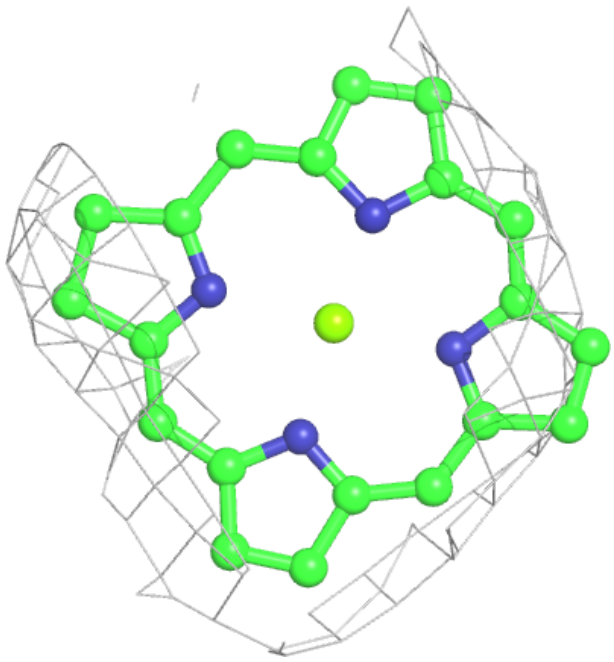


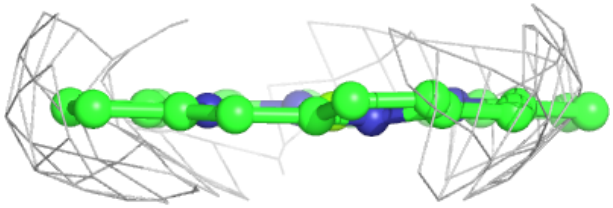


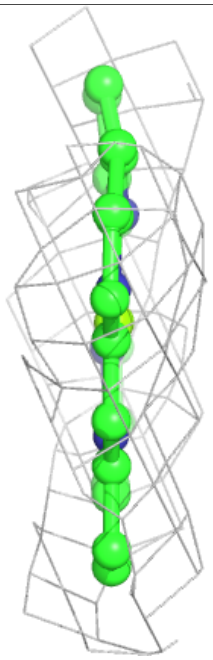


Electron density around CLA B 1228:

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

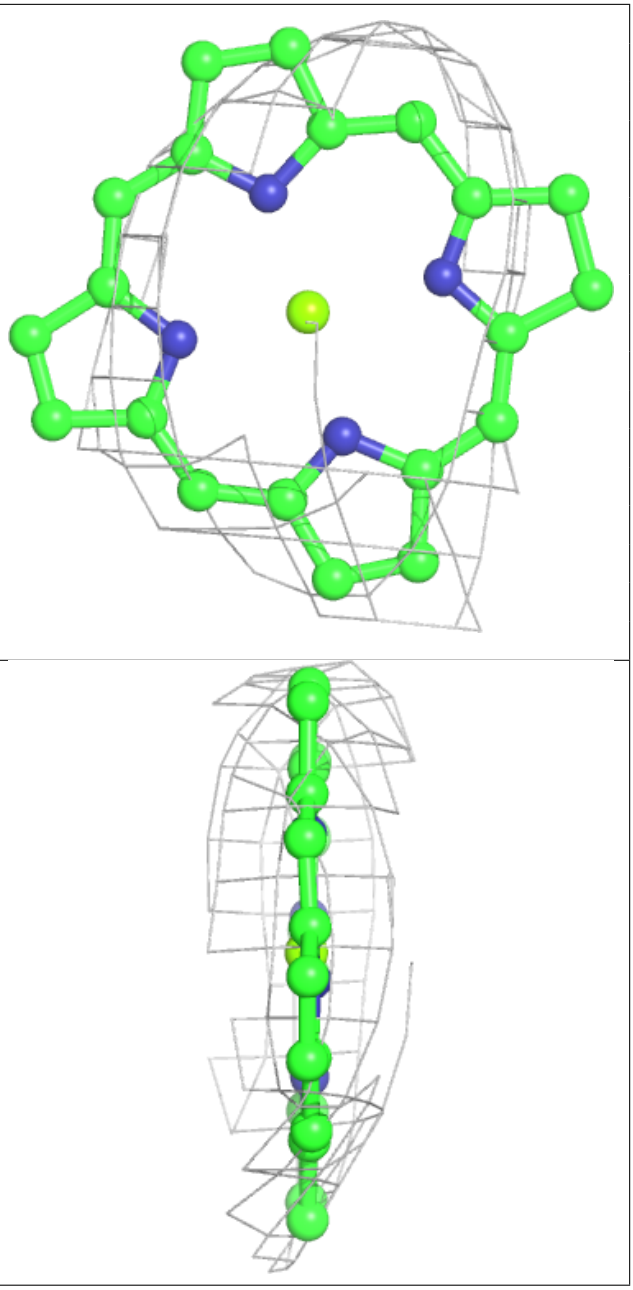


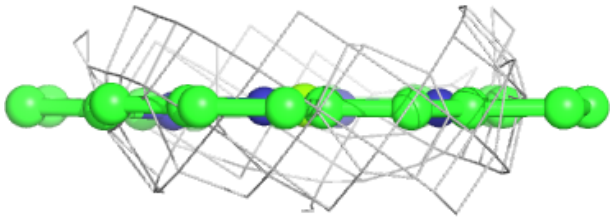




Electron density around CLA L 1503:

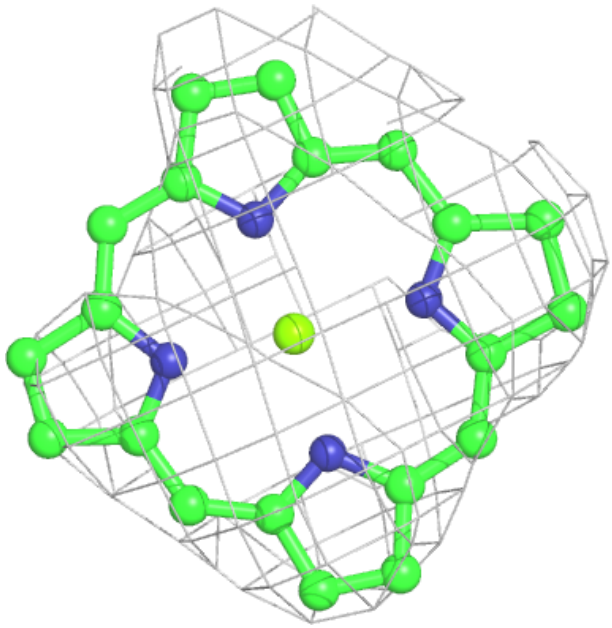
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

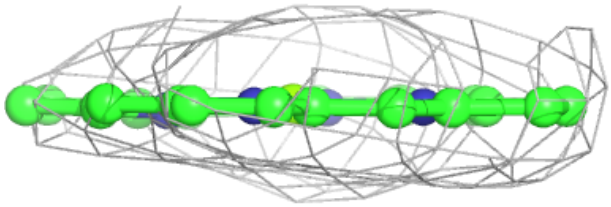


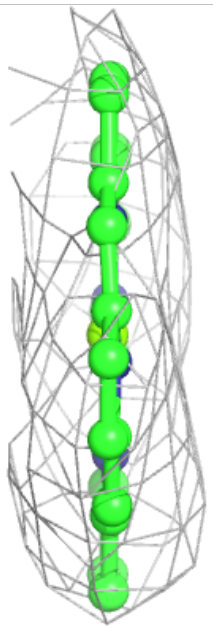


Electron density around CLA B 1238:

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

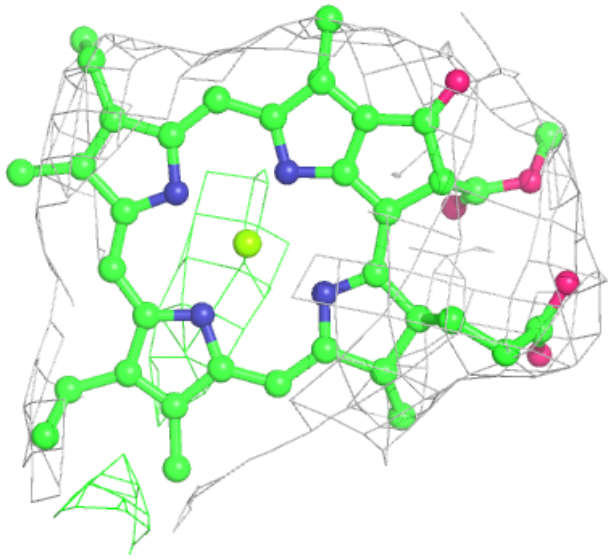


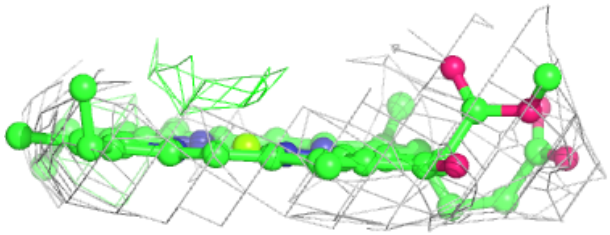


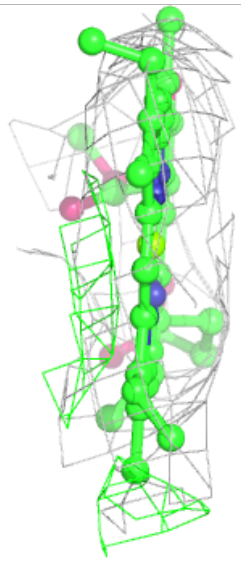


Electron density around CLA A 1131:

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

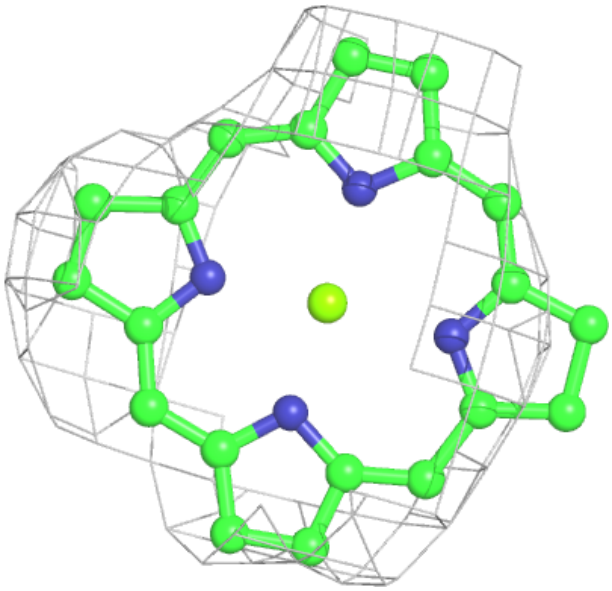


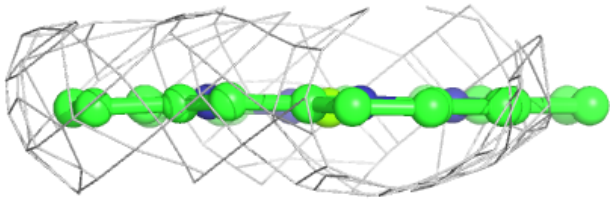


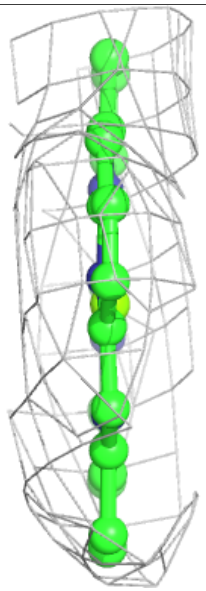


Electron density around CLA B 1202:

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

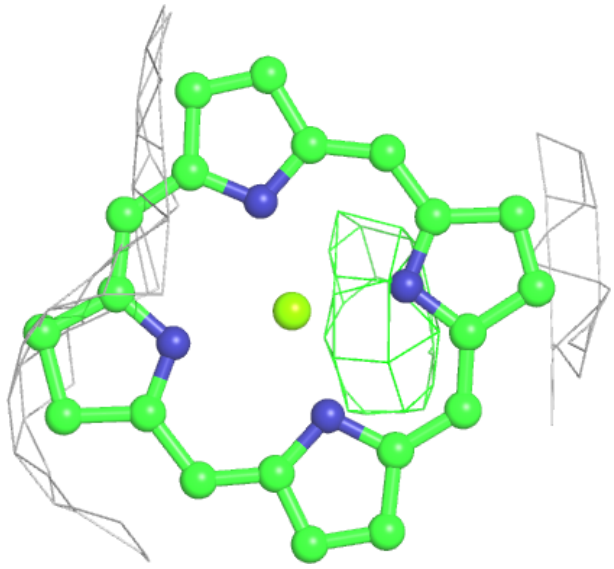


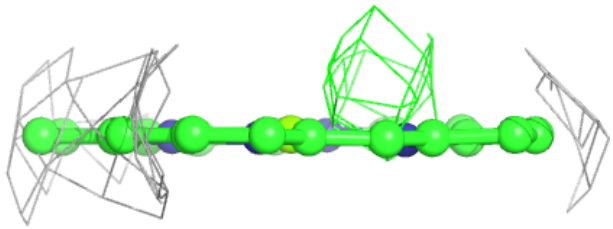


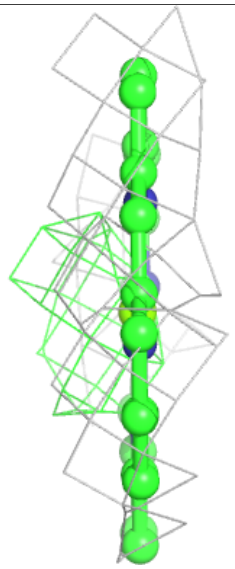


Electron density around CLA 2 612:

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

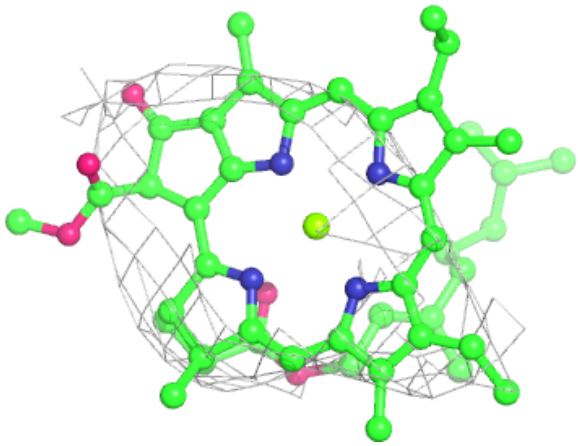


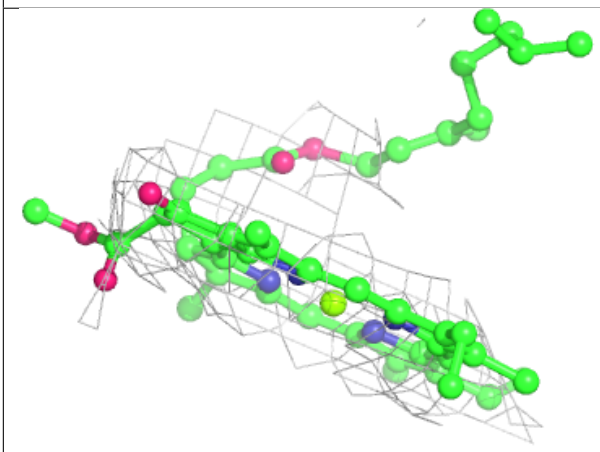


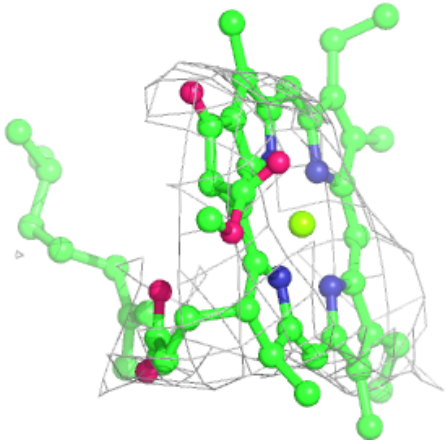


Electron density around CLA A 1130:

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

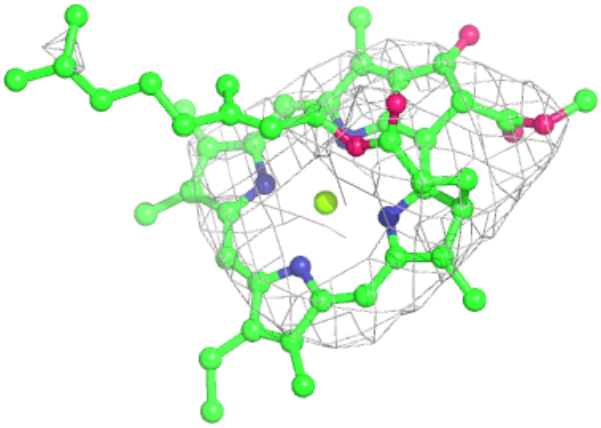


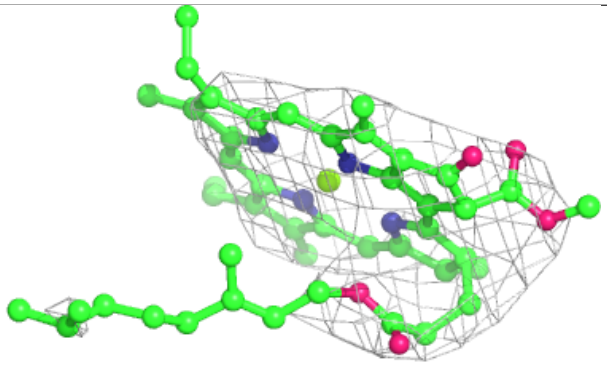


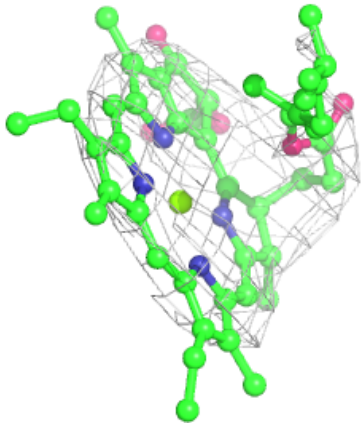


Electron density around CLA B 1237:

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

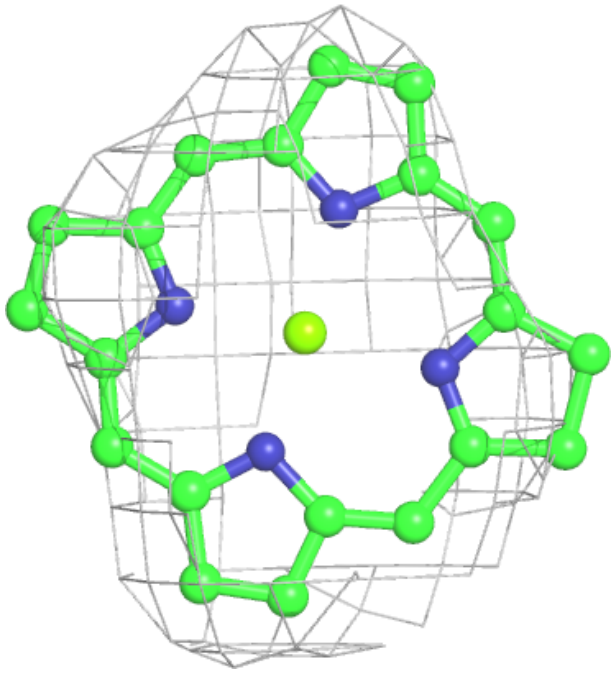


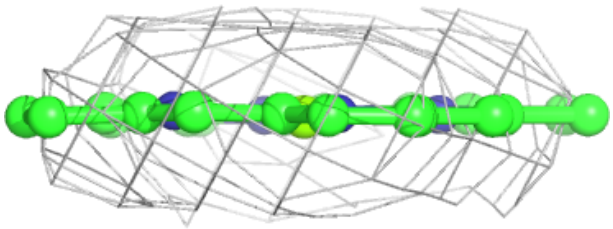


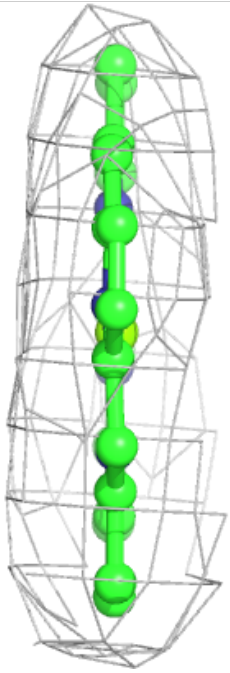


Electron density around CLA A 1139:

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

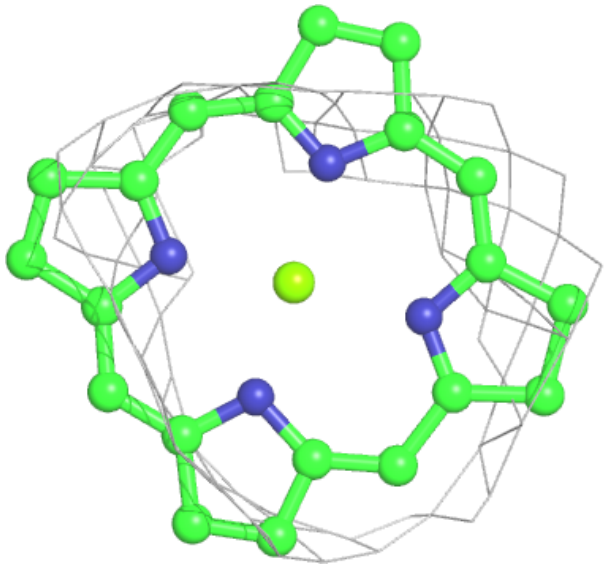


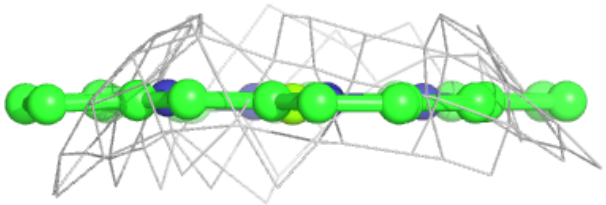


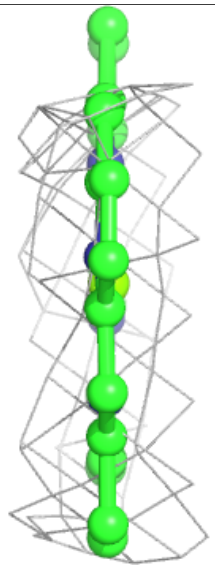


Electron density around CLA B 1205:

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

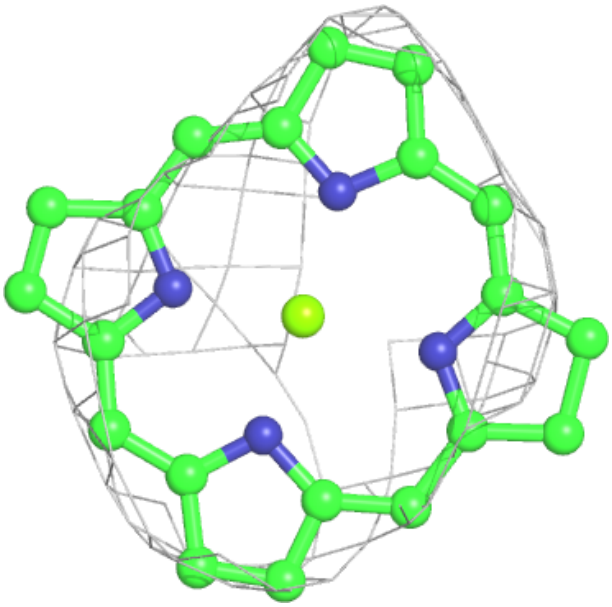


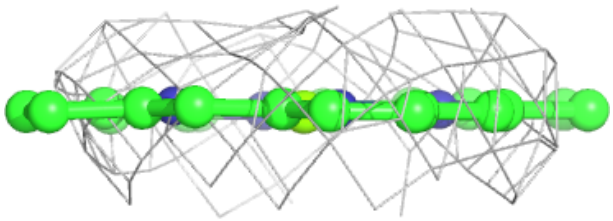


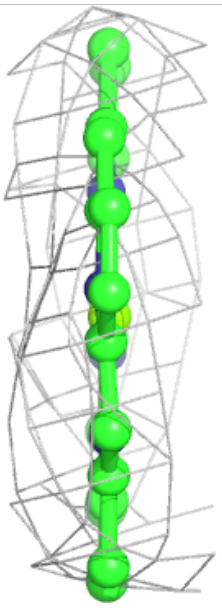


Electron density around CLA A 1118:

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

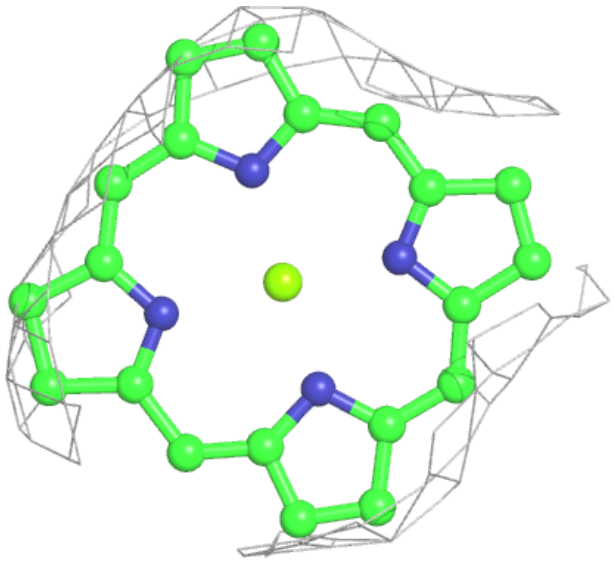


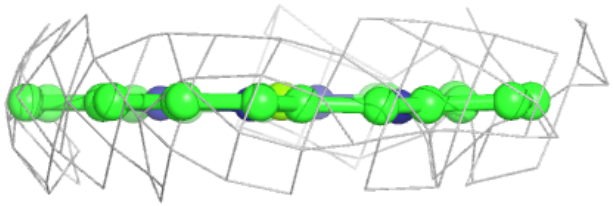


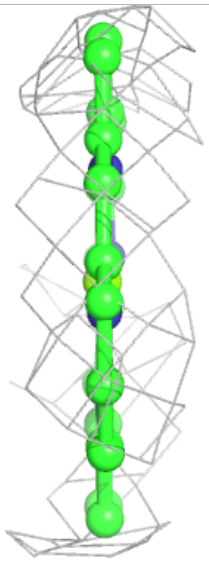


Electron density around CLA A 1134:

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

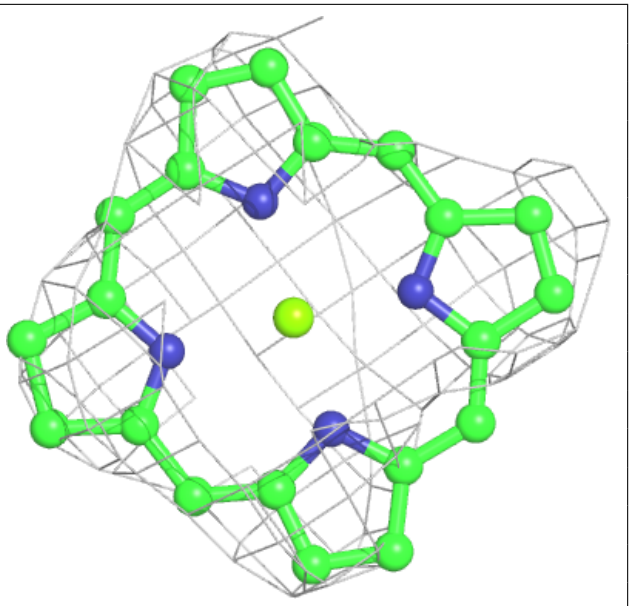


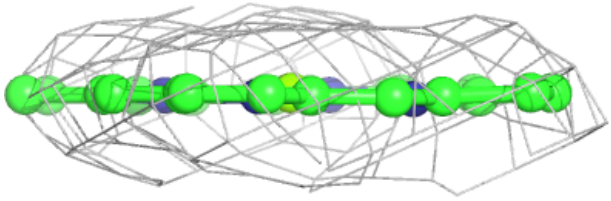


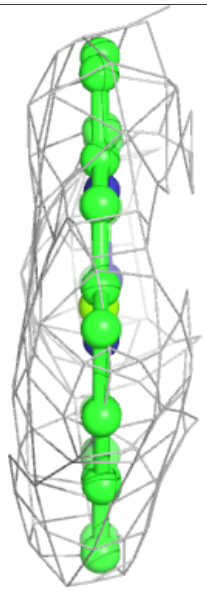


Electron density around CLA A 1135:

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

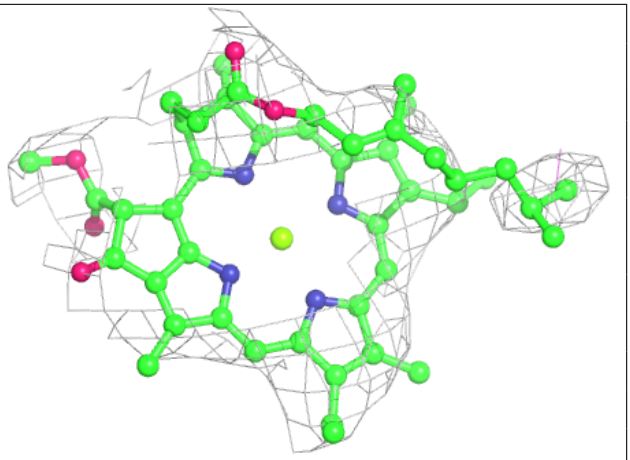


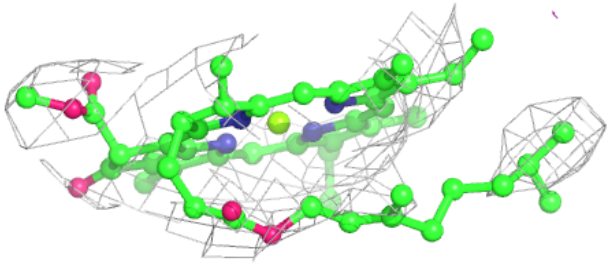


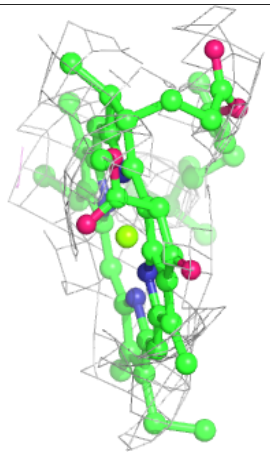


Electron density around CLA A 1117:

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

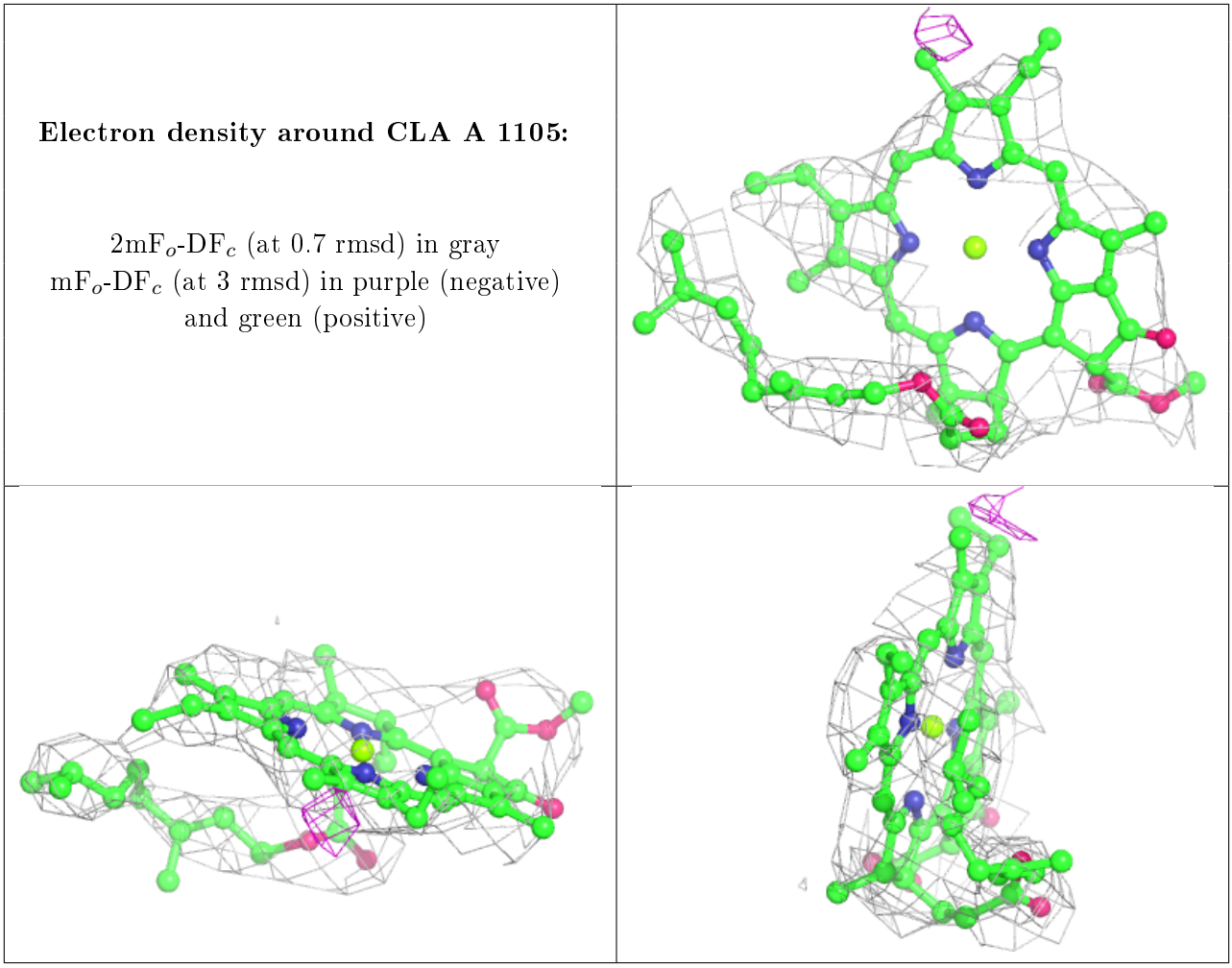






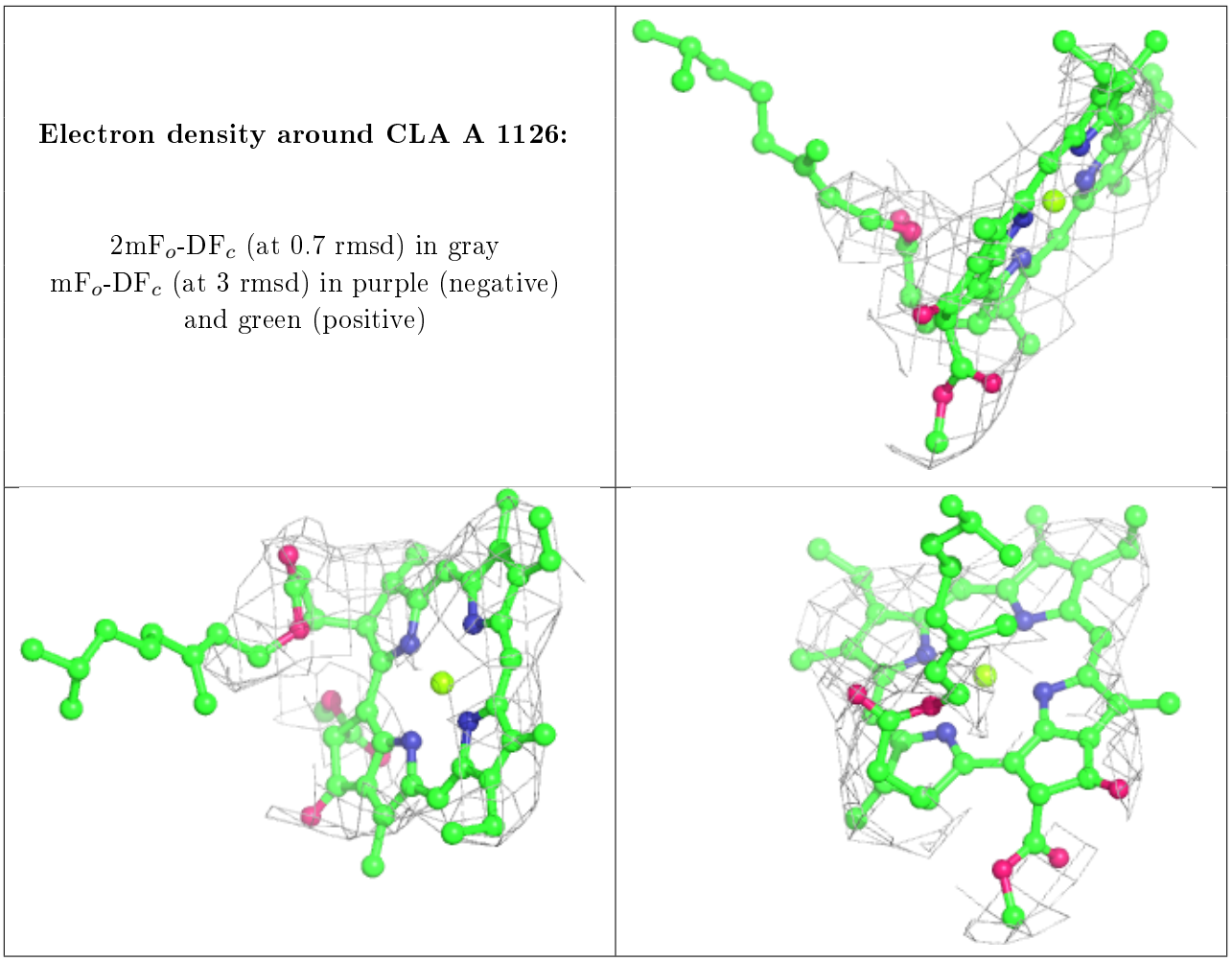
Electron density around CLA A 1105:

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



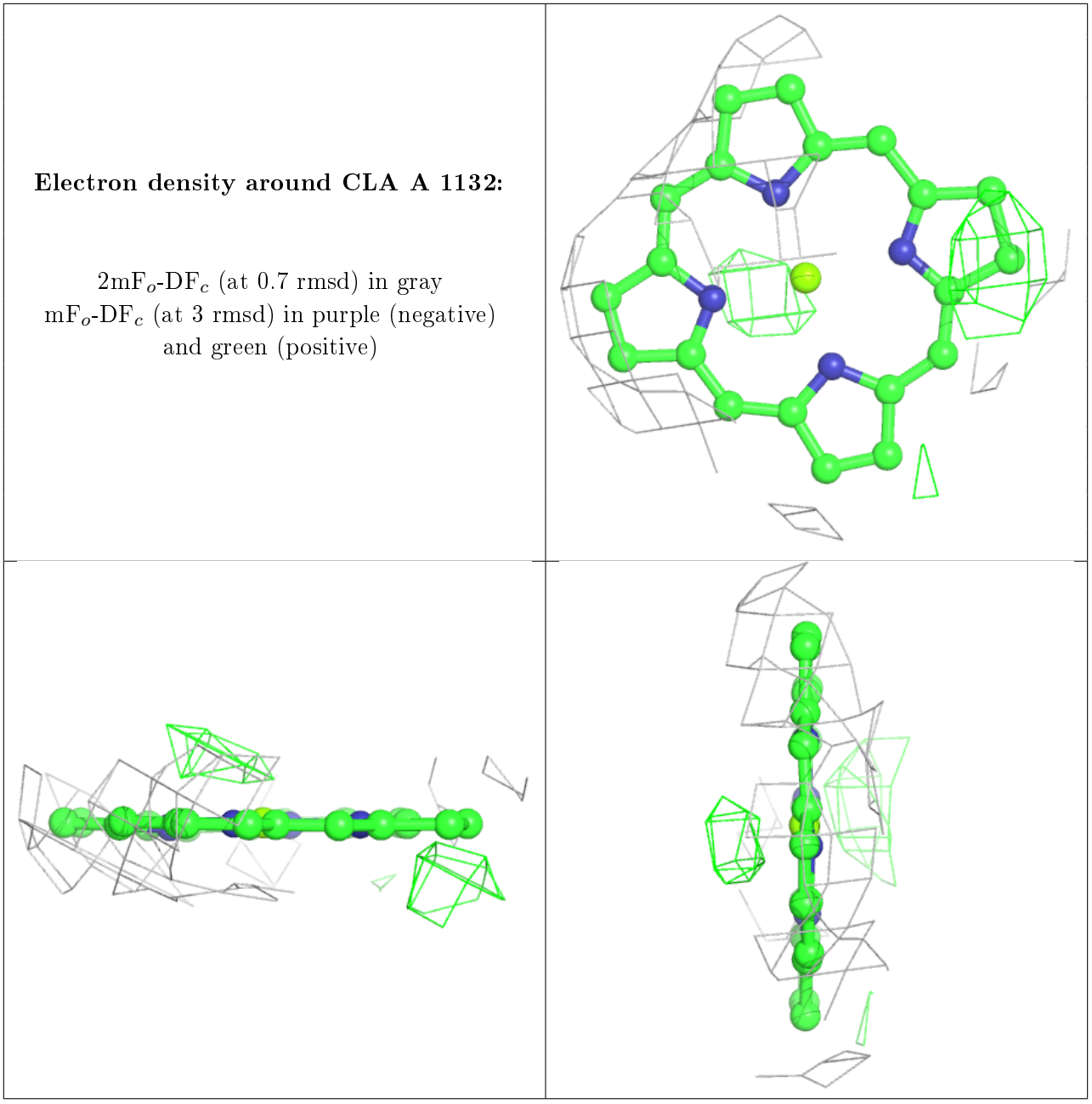
Electron density around CLA A 1126:

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



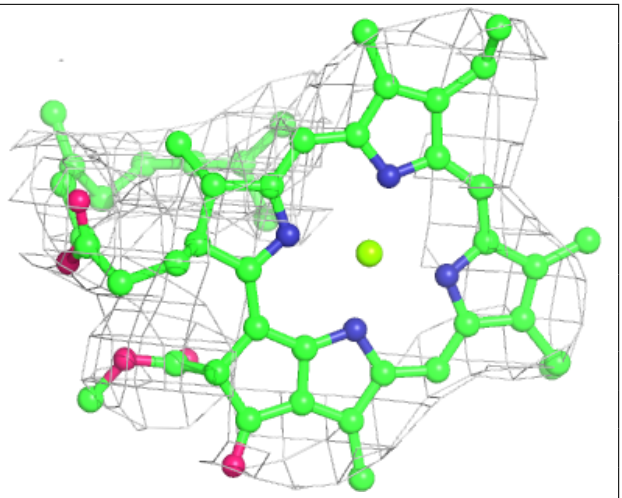
Electron density around CLA A 1132:

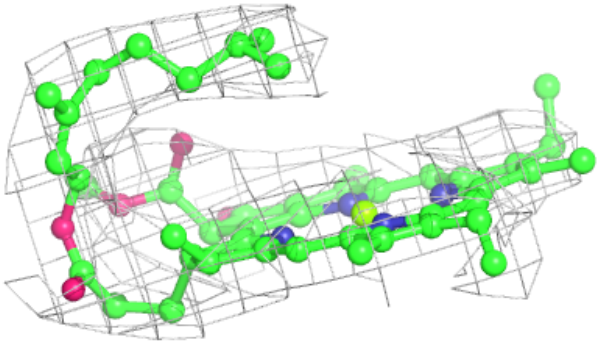
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

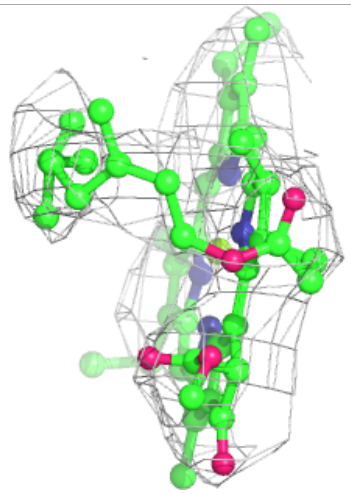


Electron density around CLA A 1104:

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

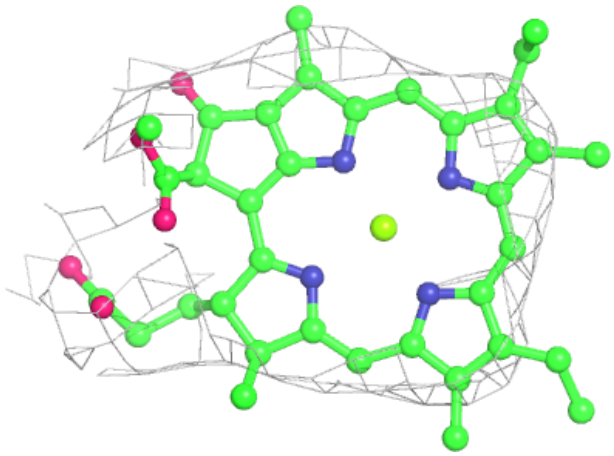


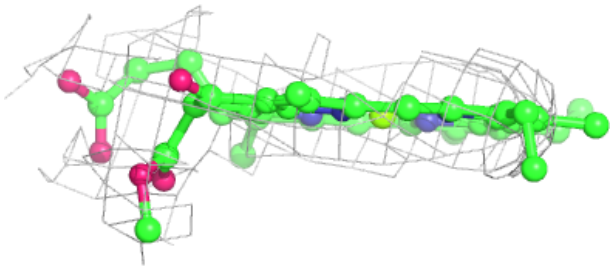


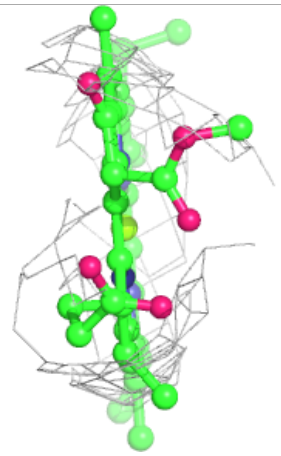


Electron density around CLA F 1301:

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

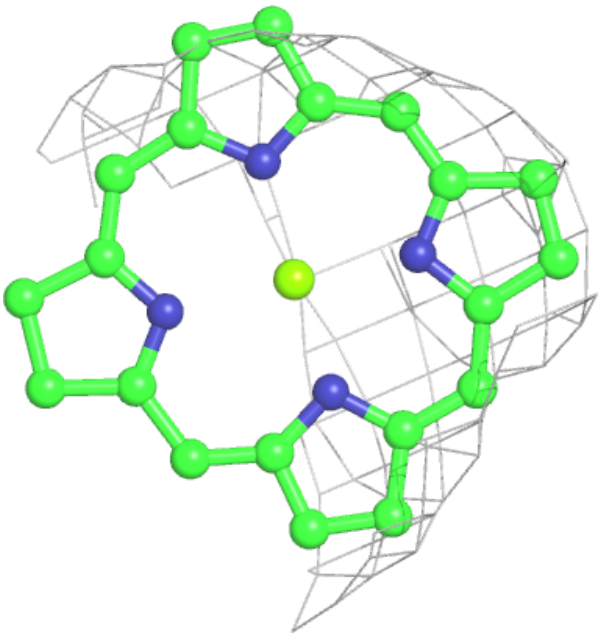


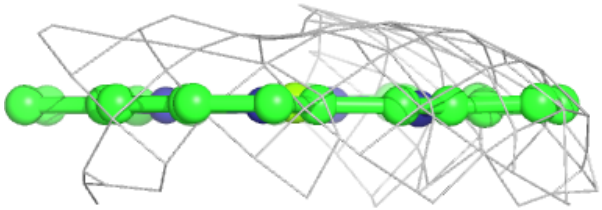


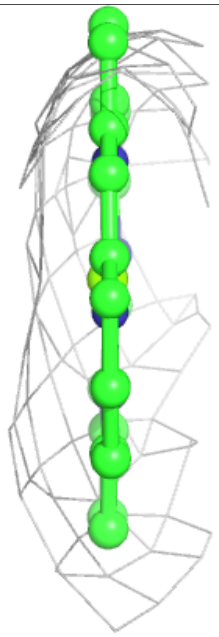


Electron density around CLA B 1203:

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

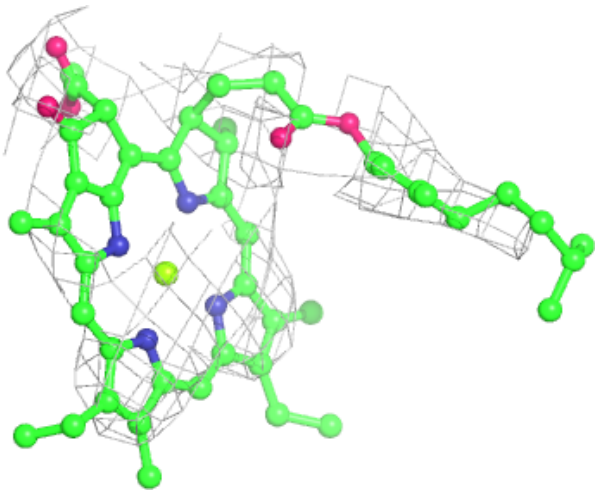


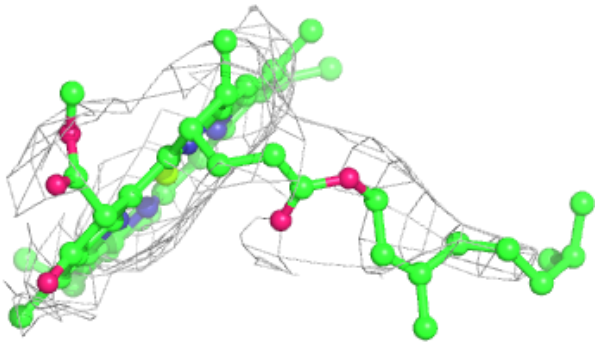


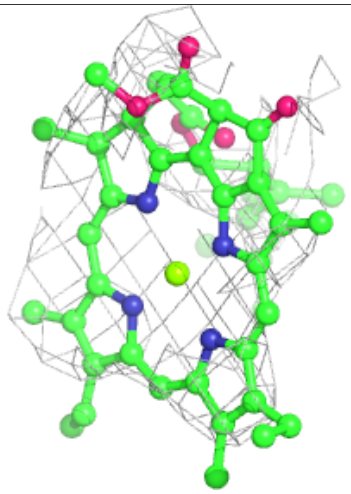


Electron density around CLA A 1106:

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

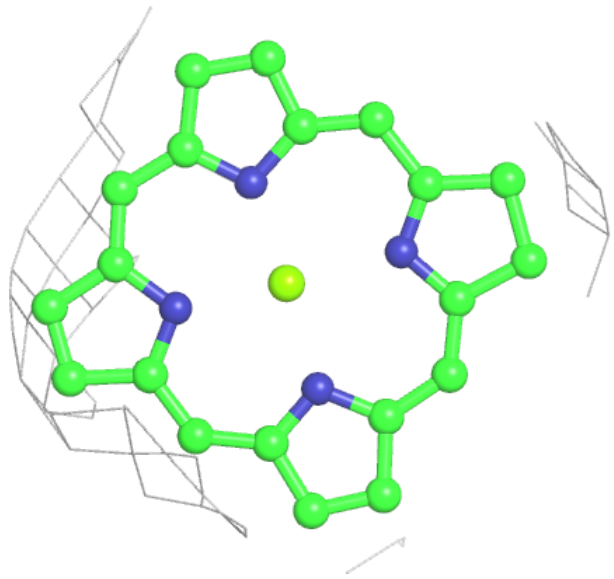


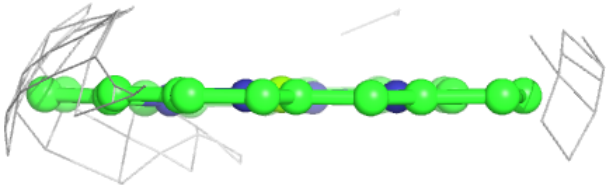


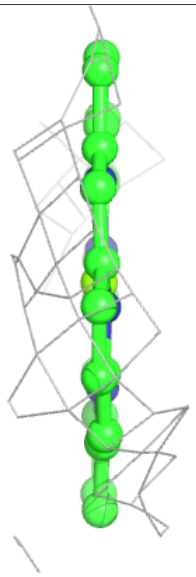


Electron density around CLA B 1201:

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

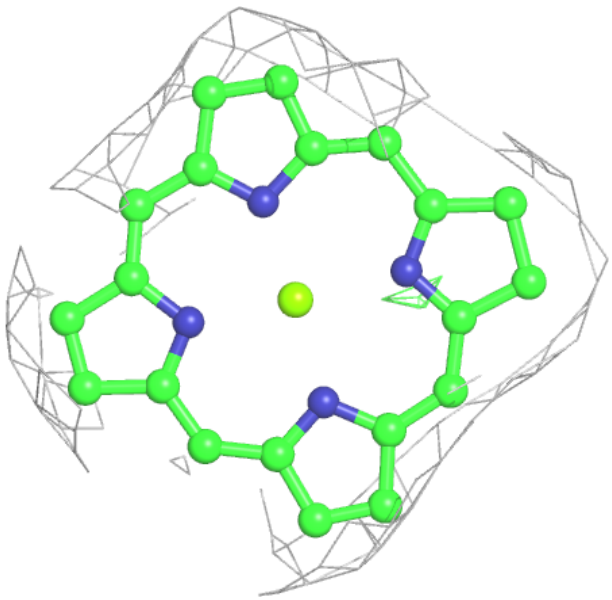


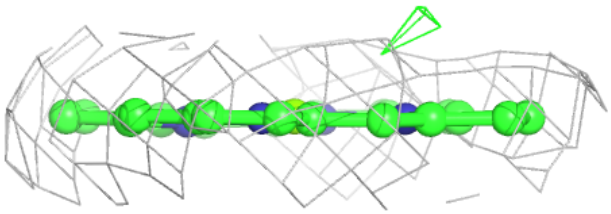


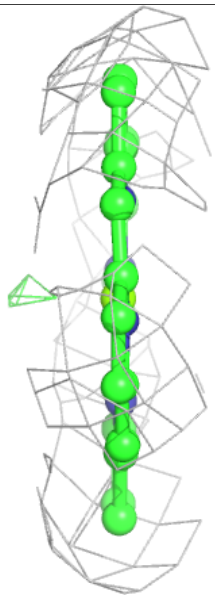


Electron density around CLA B 1235:

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

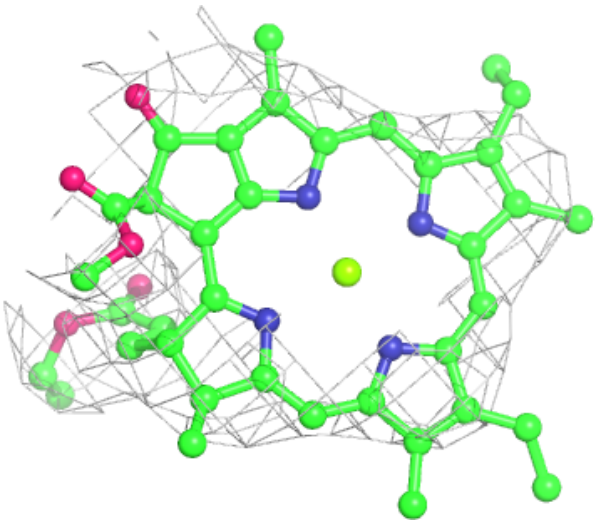


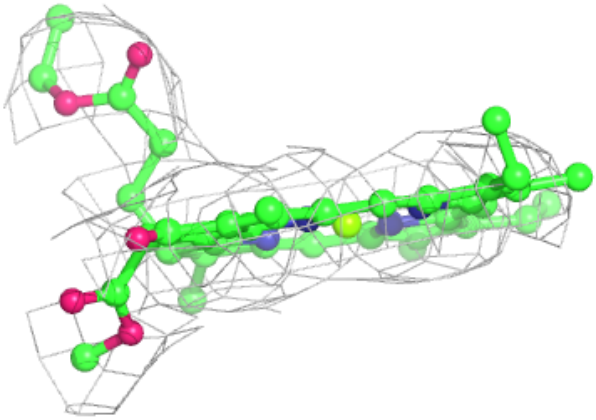


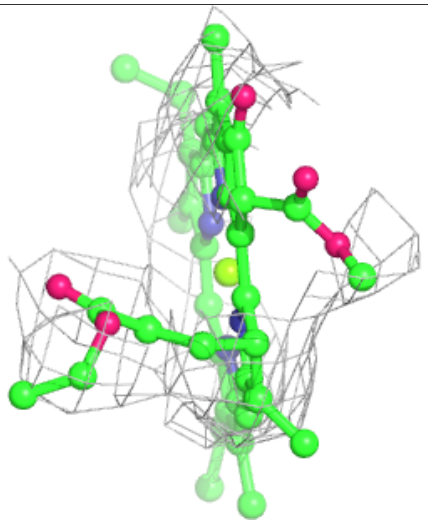


Electron density around CLA B 1230:

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

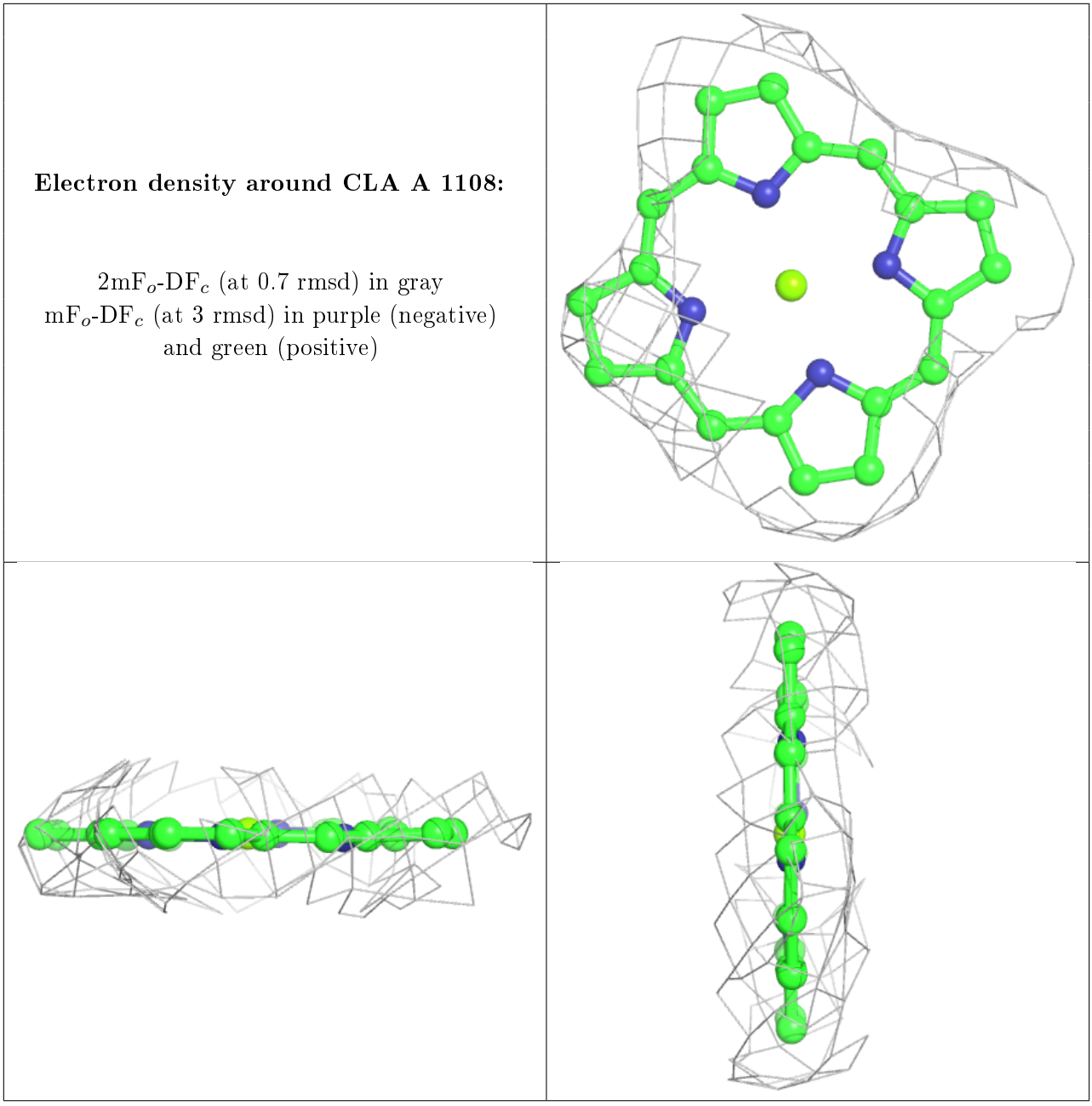






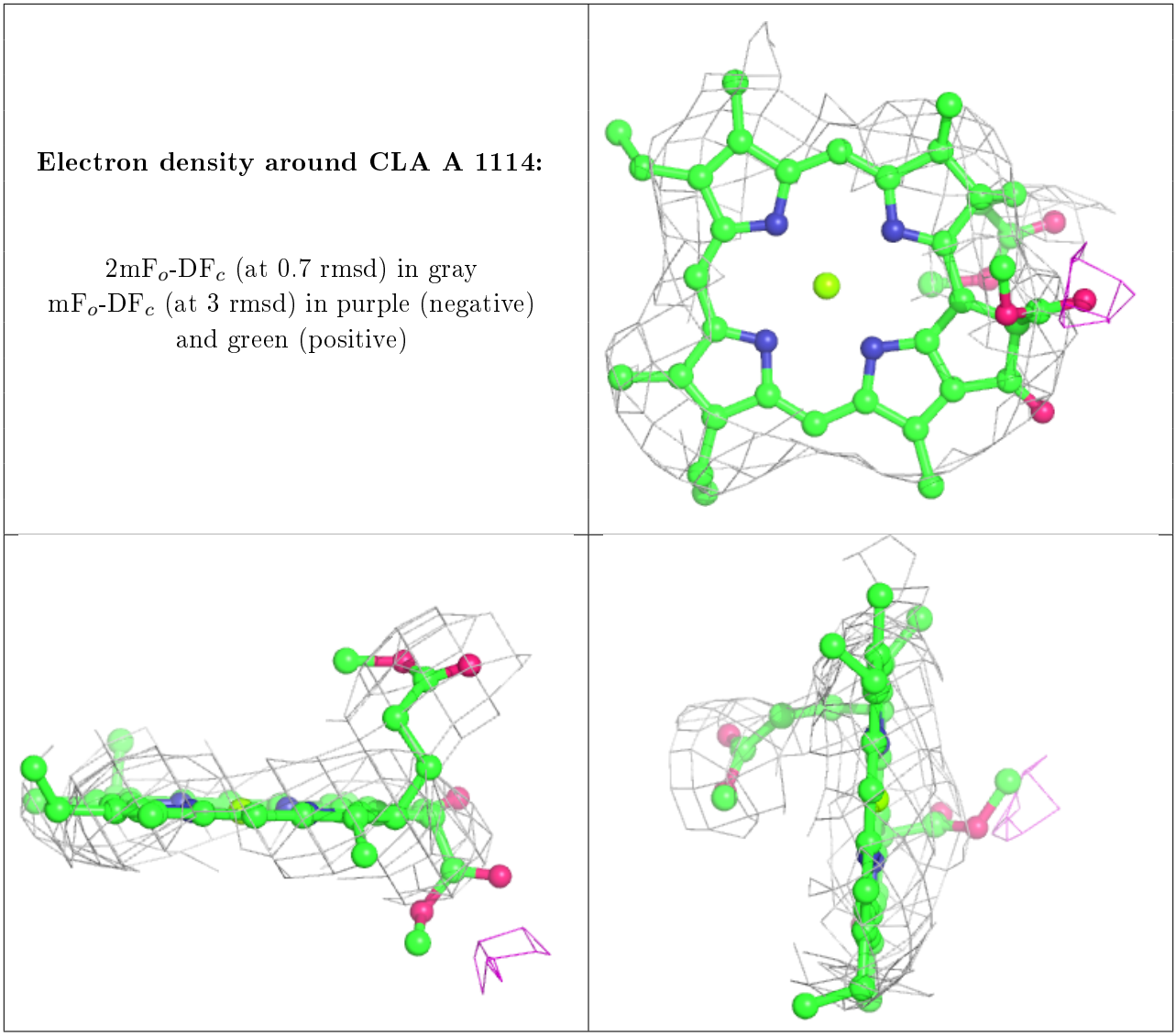
Electron density around CLA A 1108:

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



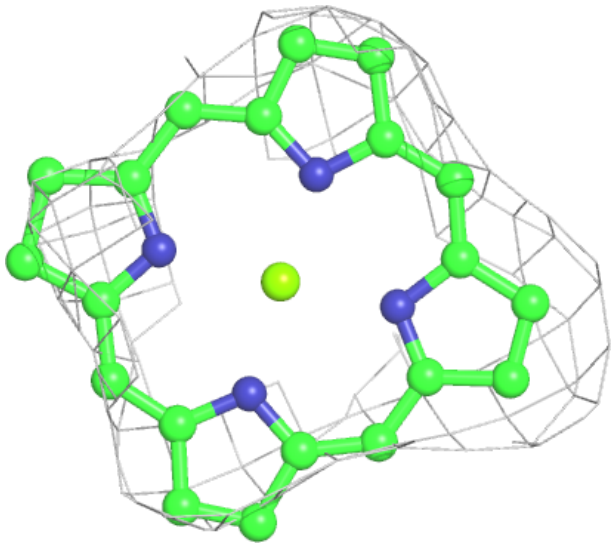
Electron density around CLA A 1114:

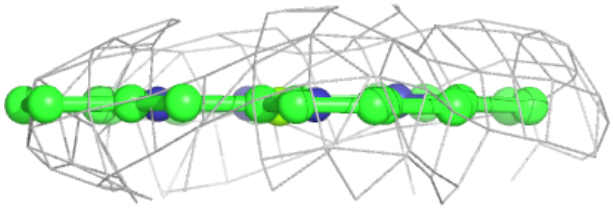
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

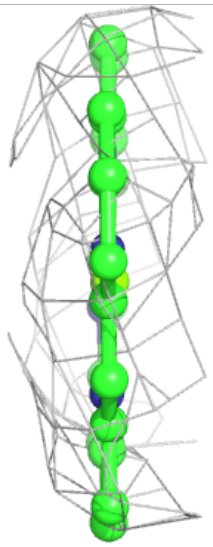


Electron density around CLA A 1141:

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

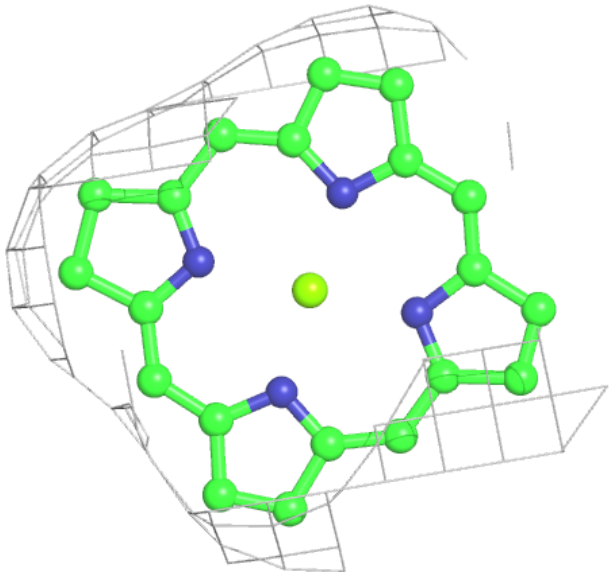


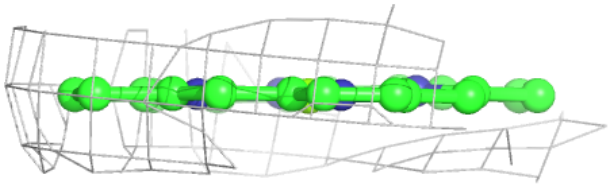


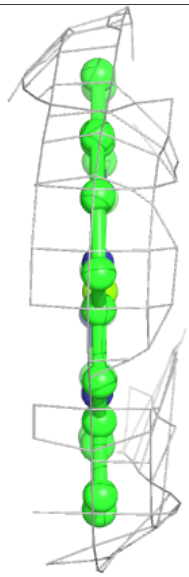


Electron density around CLA 2 602:

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

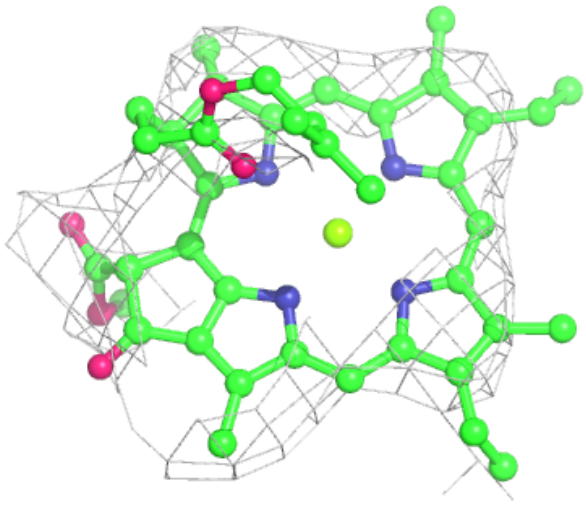


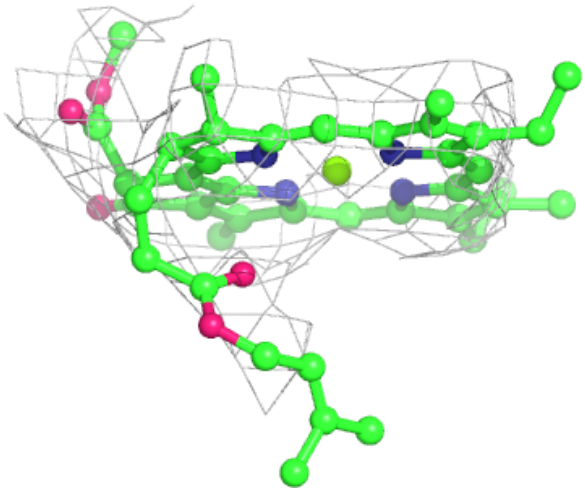


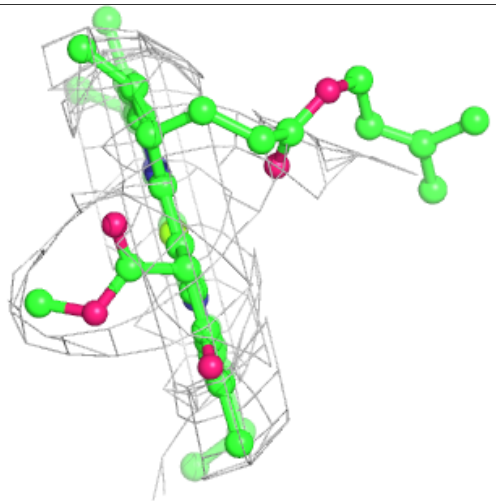


Electron density around CLA J 1302:

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

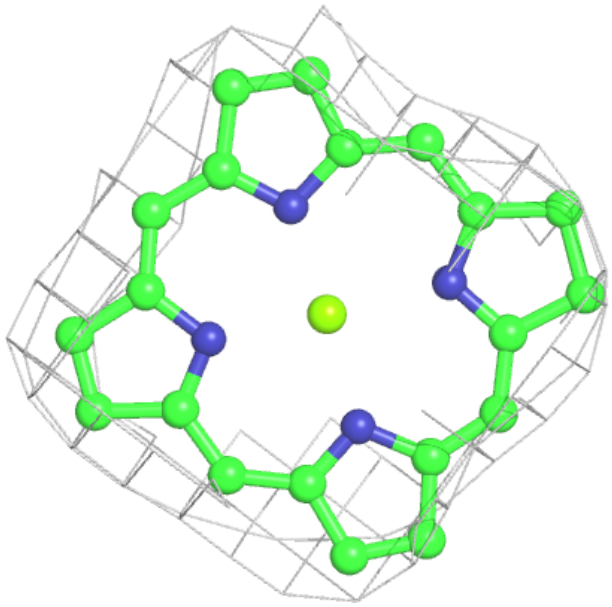


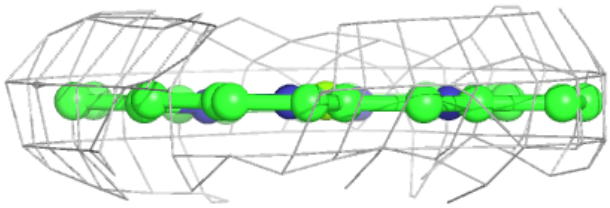


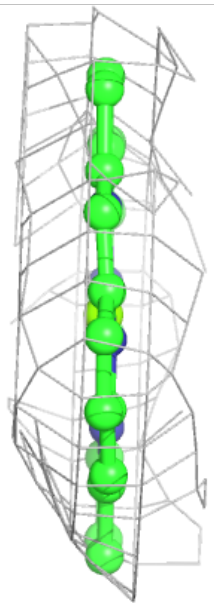


Electron density around CLA 4 603:

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

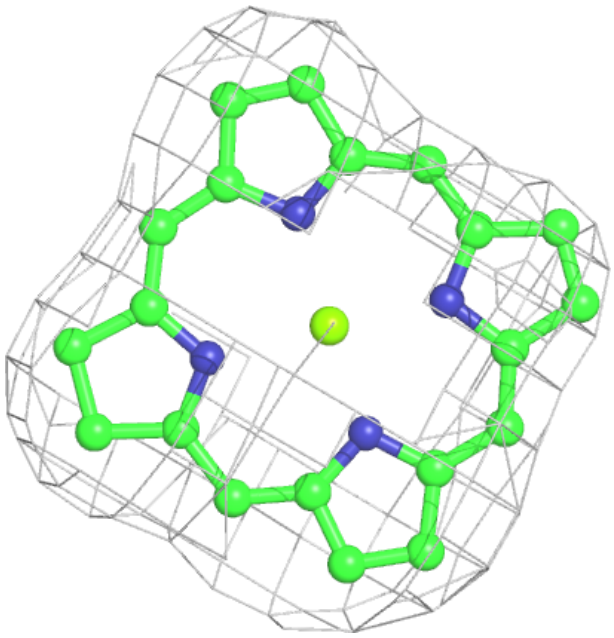


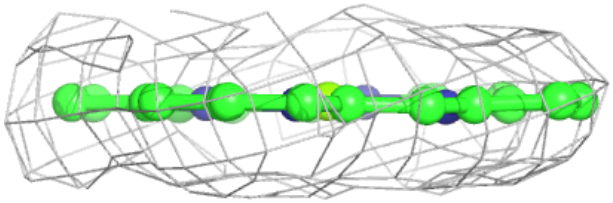


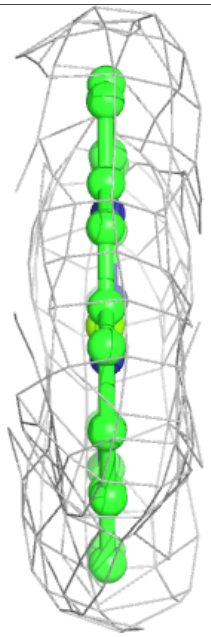


Electron density around CLA A 1127:

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

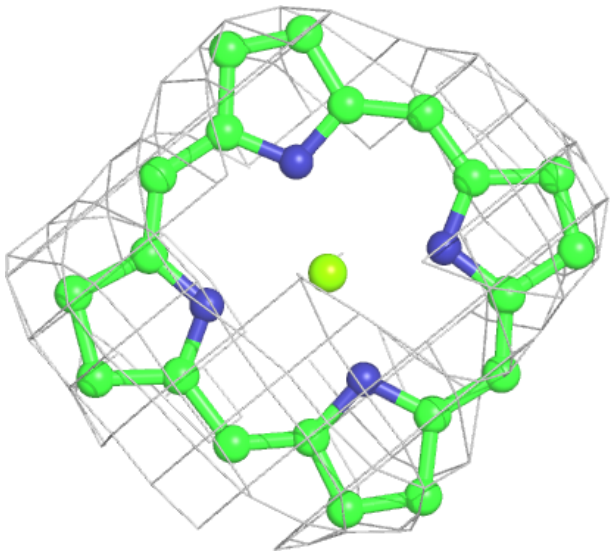


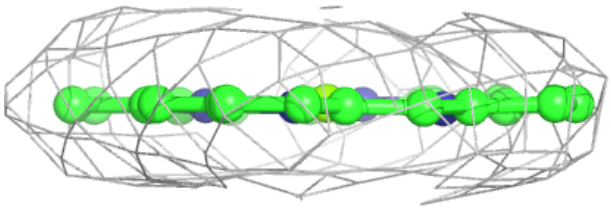


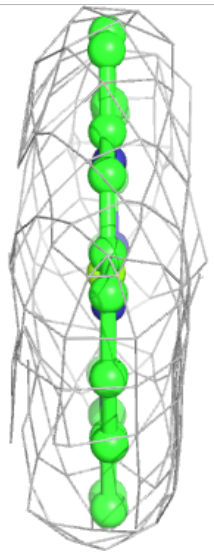


Electron density around CLA A 1111:

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

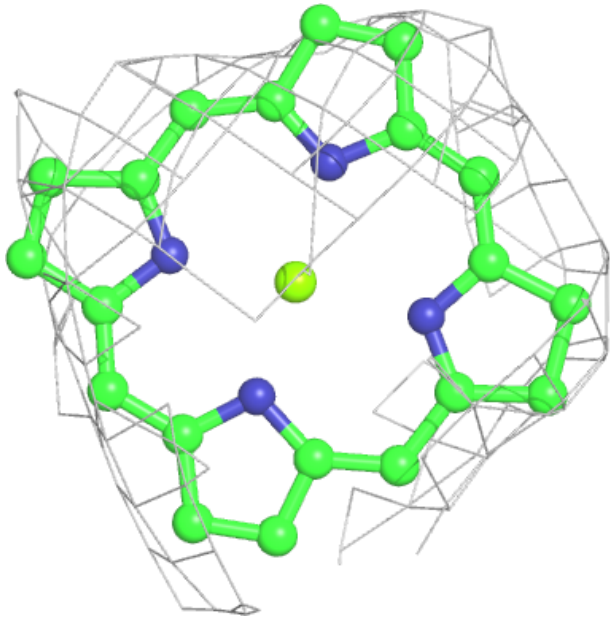


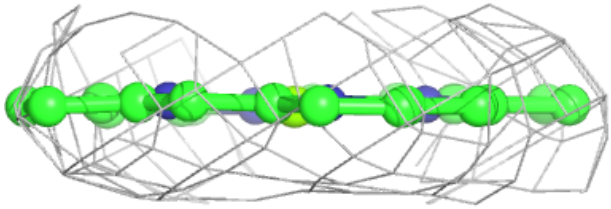


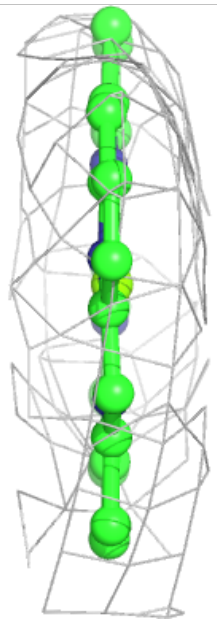


Electron density around CLA 4 605:

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

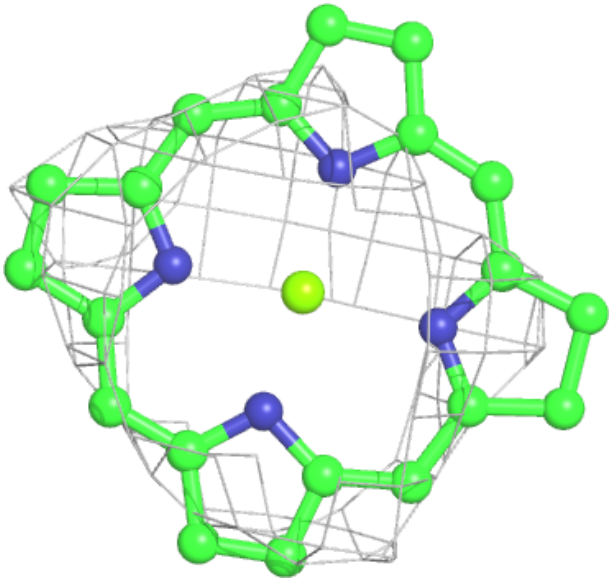


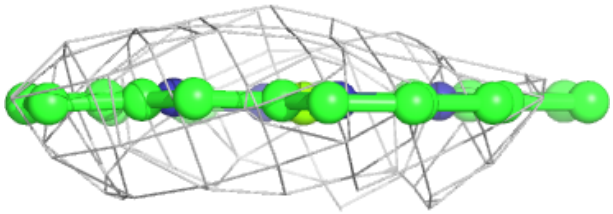


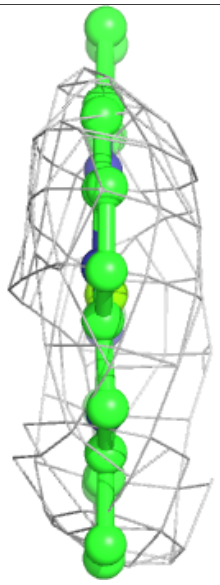


Electron density around CLA B 1239:

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

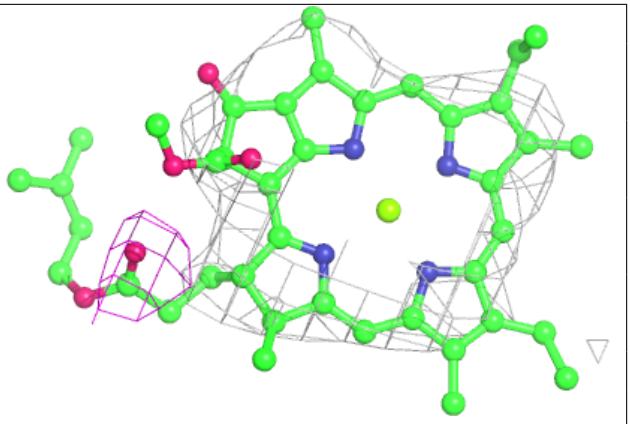


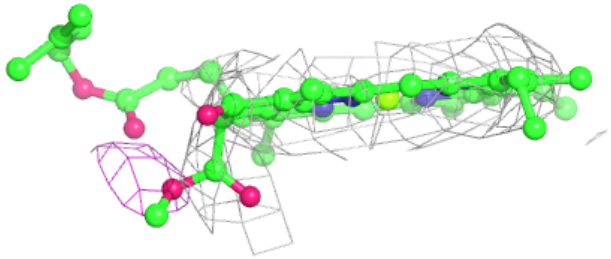


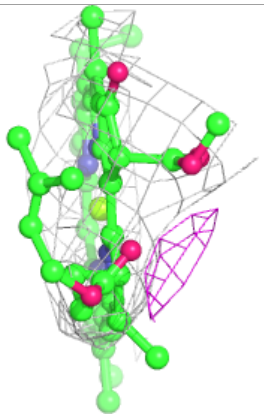


Electron density around CLA B 1229:

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

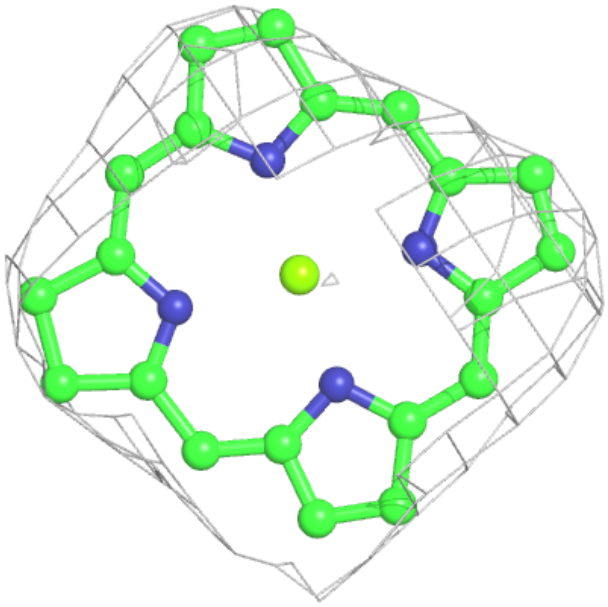


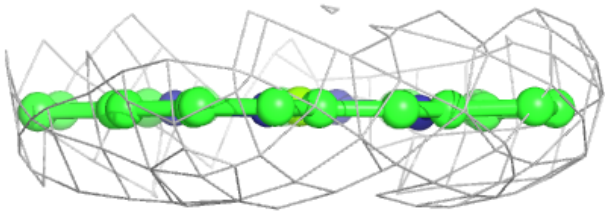


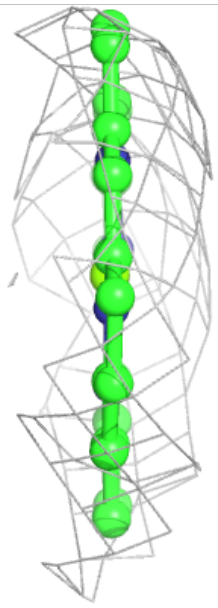


Electron density around CLA B 1215:

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

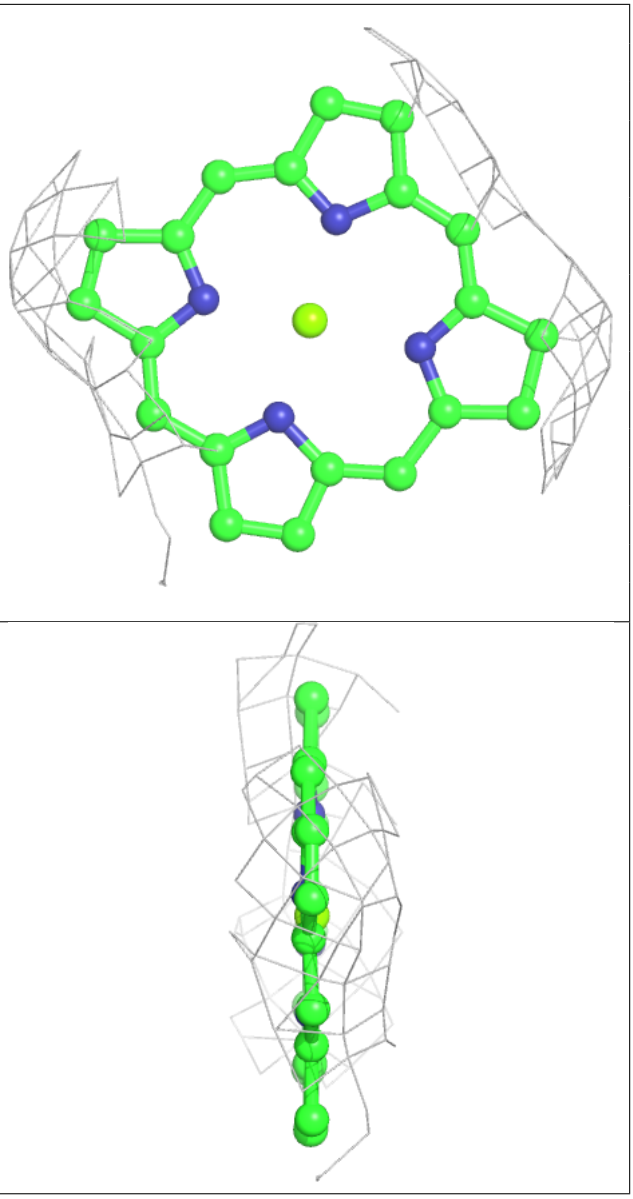


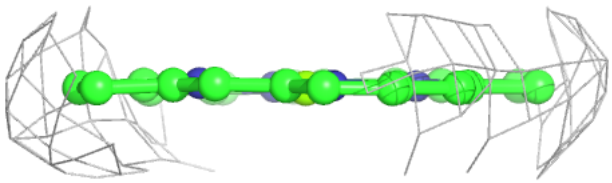




Electron density around CLA 2 605:

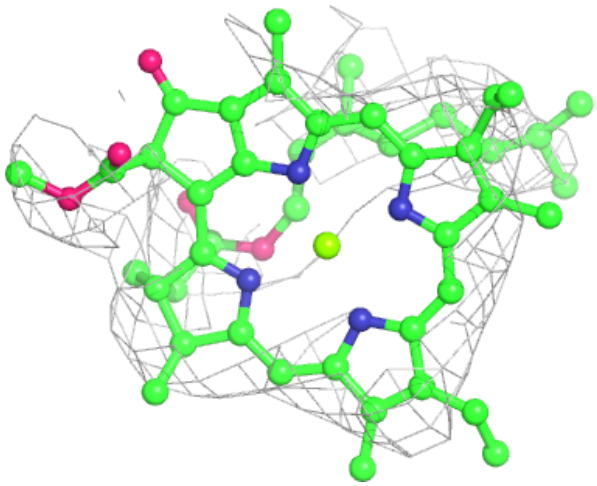
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

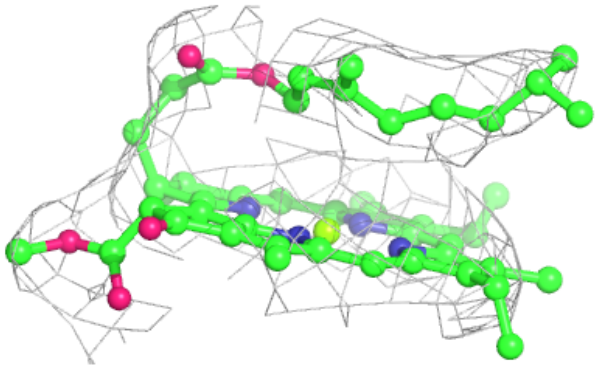


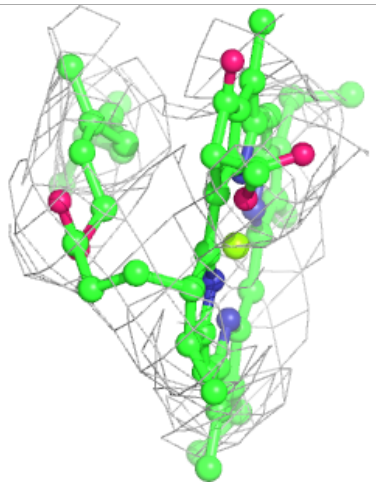


Electron density around CLA A 1115:

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

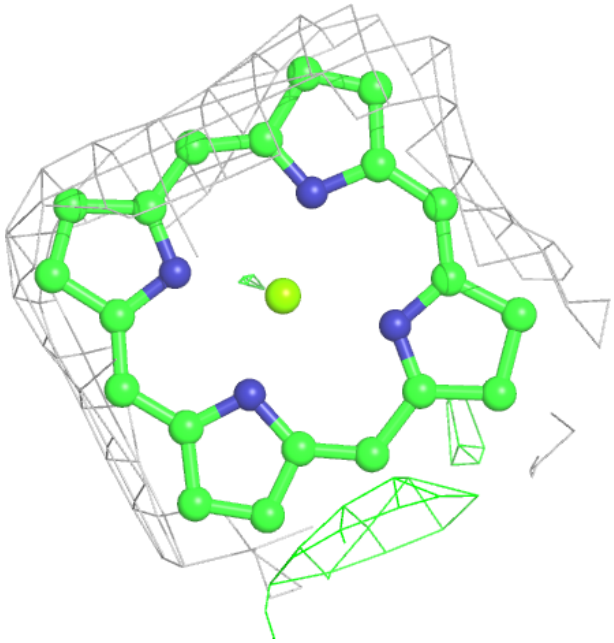


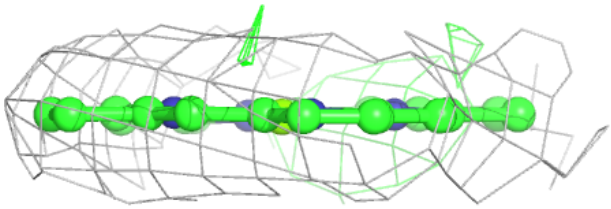


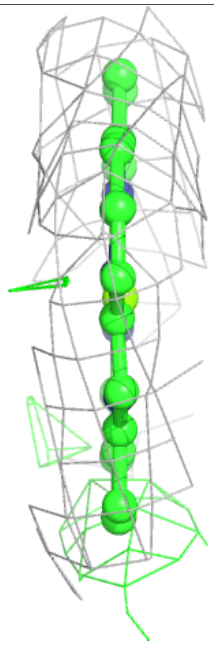


Electron density around CLA A 1128:

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

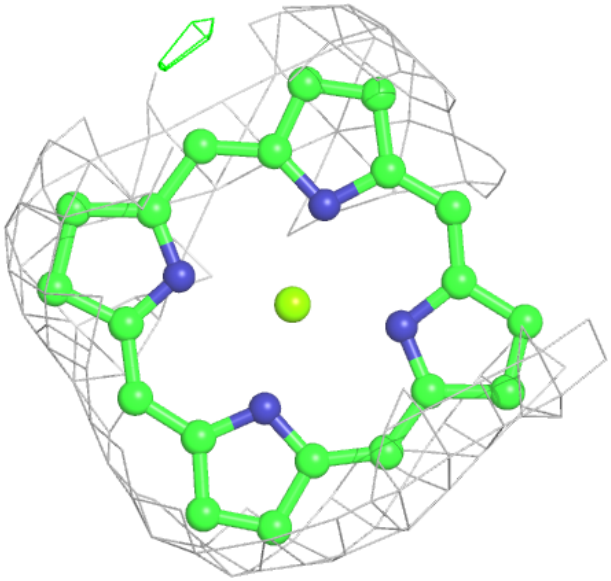


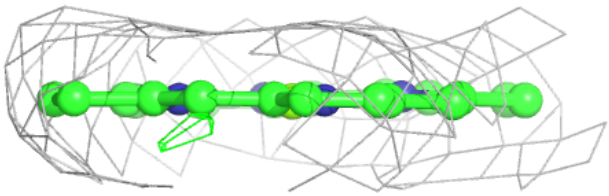


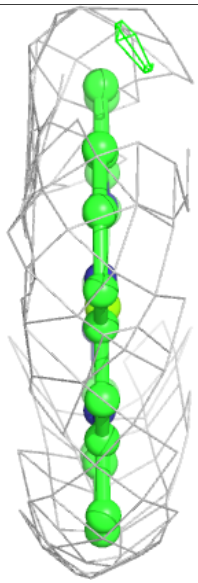


Electron density around CLA A 1122:

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

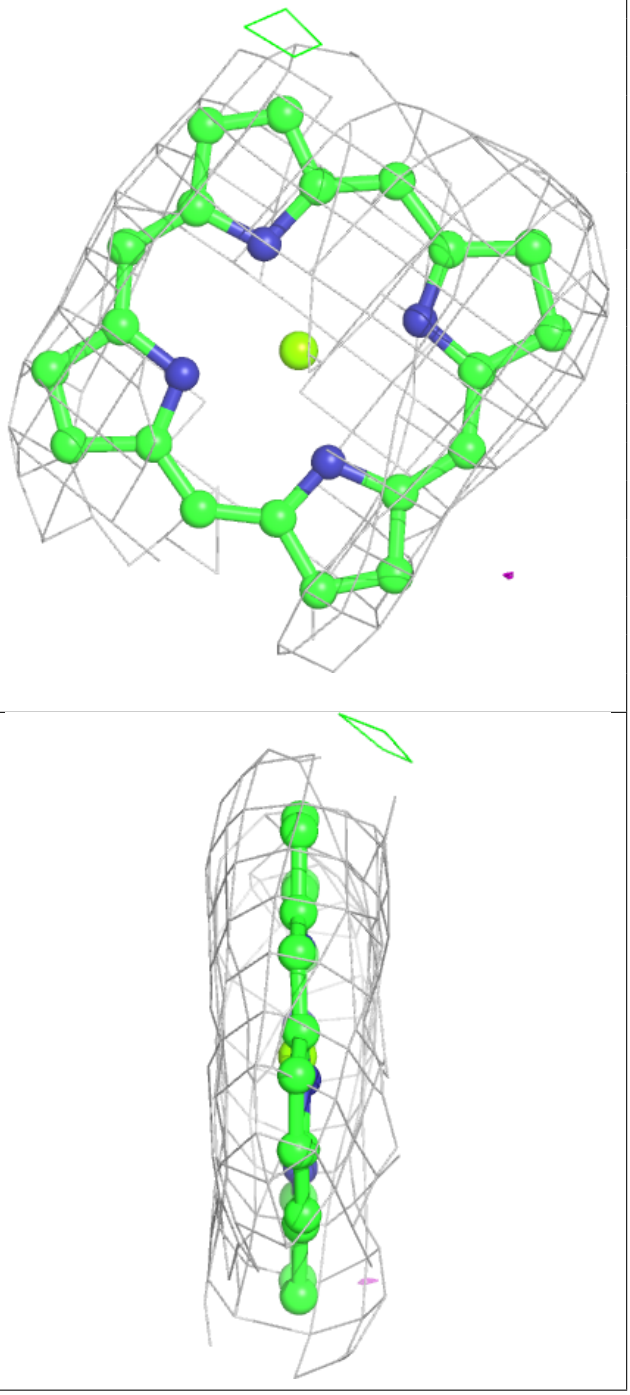






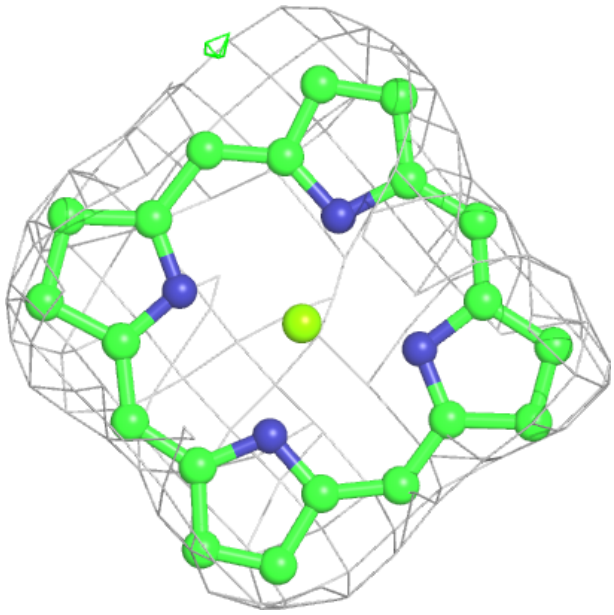
Electron density around CLA A 1125:

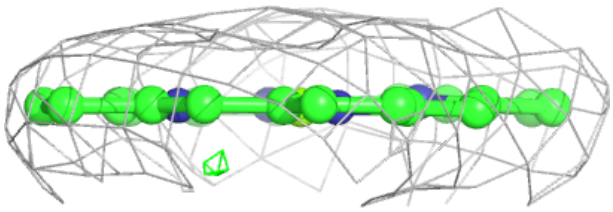
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

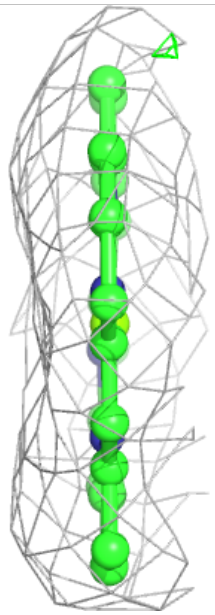


Electron density around CLA A 1140:

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

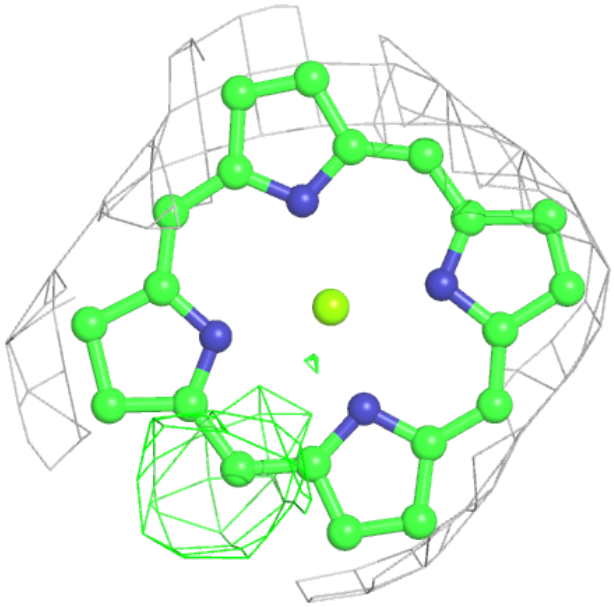


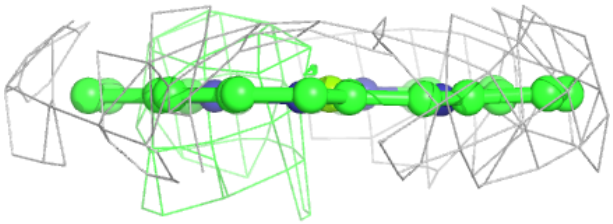


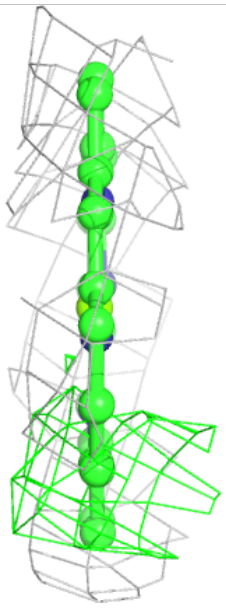


Electron density around CLA A 1102:

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

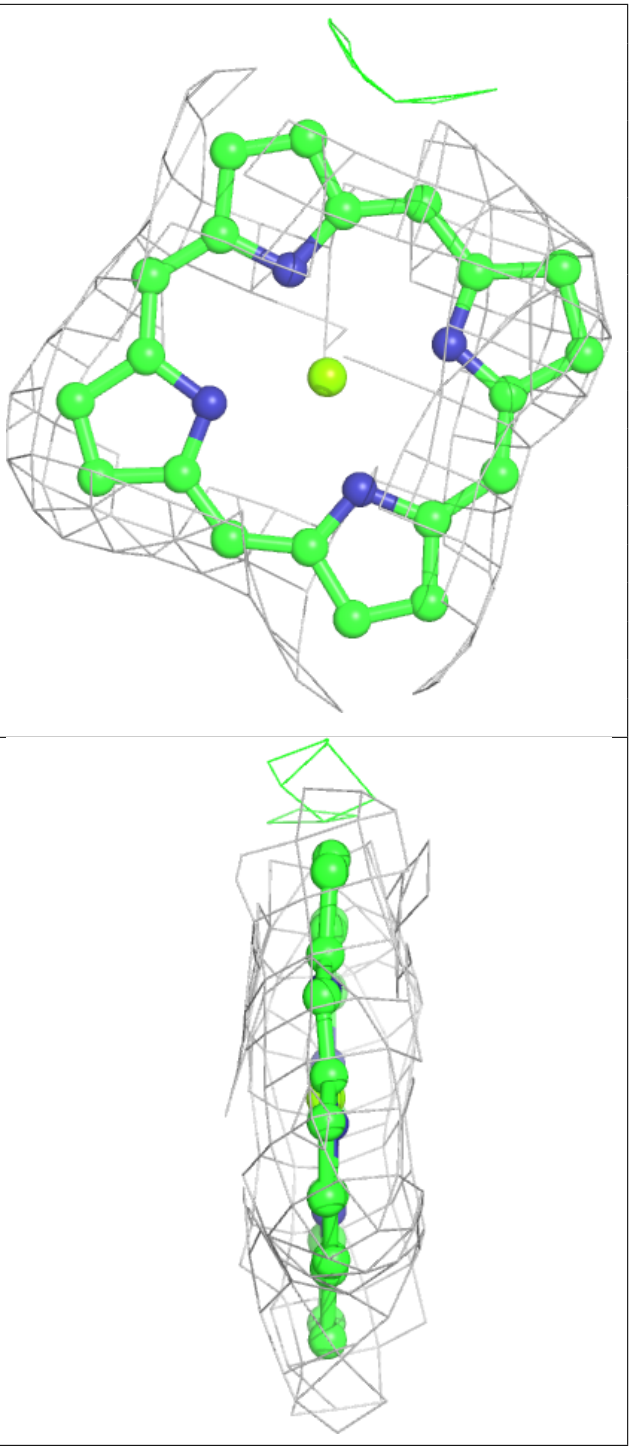






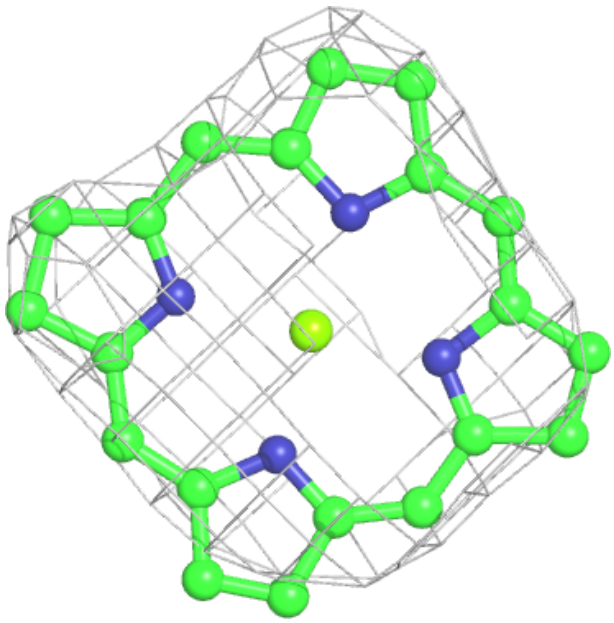
Electron density around CLA A 1124:

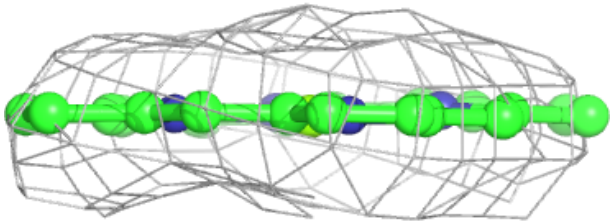
$2mF_o$-DF_c (at 0.7 rmsd) in gray
mF_o-DF_c (at 3 rmsd) in purple (negative) and green (positive)

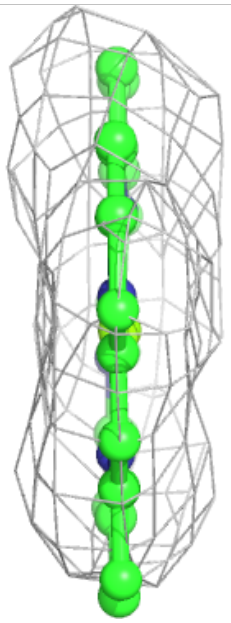


Electron density around CLA 3 610:

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

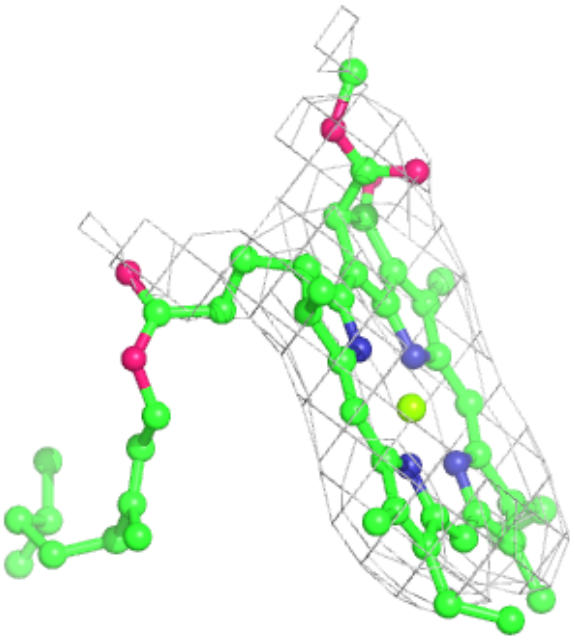


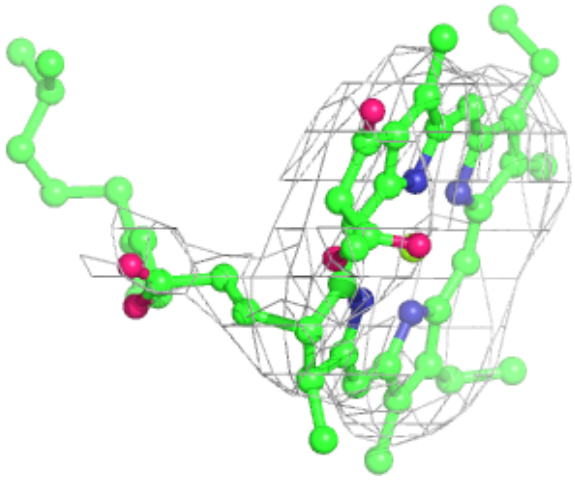


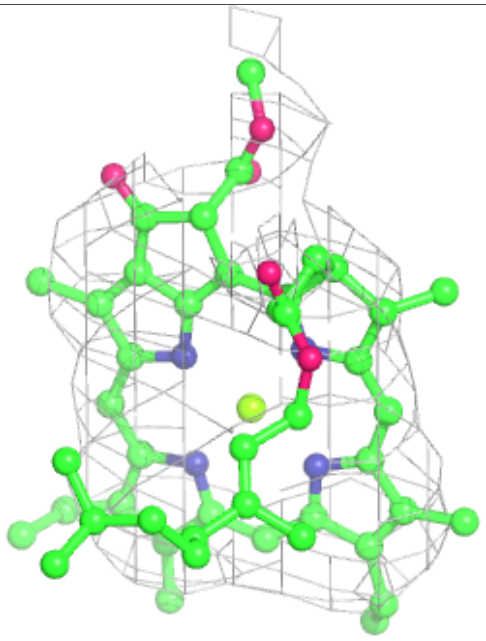


Electron density around CLA A 1107:

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

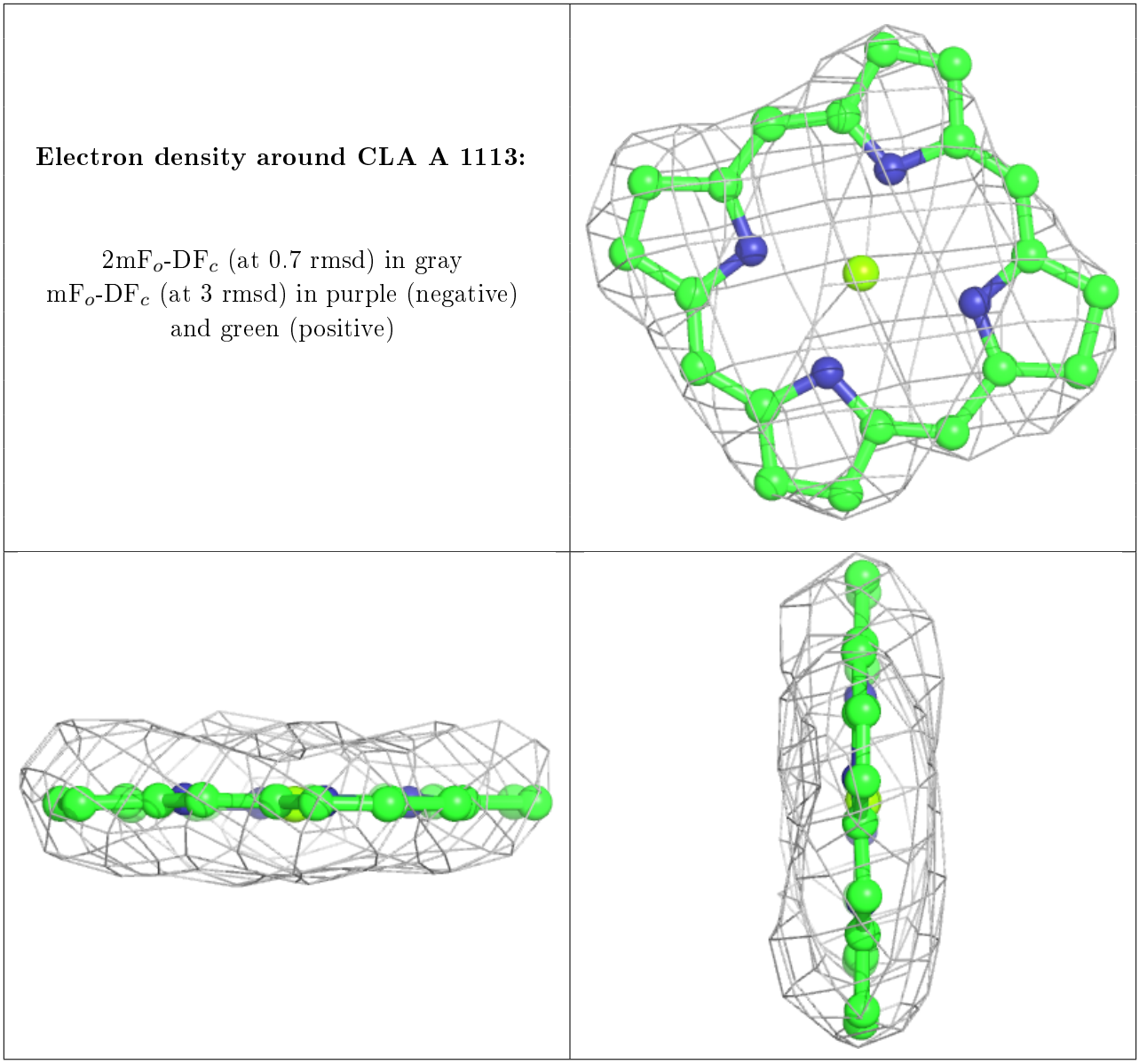






Electron density around CLA A 1113:

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



6.5 Other polymers

There are no such residues in this entry.