



## wwPDB EM Validation Summary Report ⓘ

Nov 15, 2022 – 05:35 AM JST

PDB ID : 6KIF  
EMDB ID : EMD-9994  
Title : Structure of cyanobacterial photosystem I-IsiA-flavodoxin supercomplex  
Authors : Cao, P.; Cao, D.F.; Si, L.; Su, X.D.; Chang, W.R.; Liu, Z.F.; Zhang, X.Z.; Li, M.  
Deposited on : 2019-07-18  
Resolution : 3.30 Å(reported)

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

We welcome your comments at [validation@mail.wwpdb.org](mailto:validation@mail.wwpdb.org)

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>

with specific help available everywhere you see the ⓘ symbol.

The types of validation reports are described at

<http://www.wwpdb.org/validation/2017/FAQs#types>.

---

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

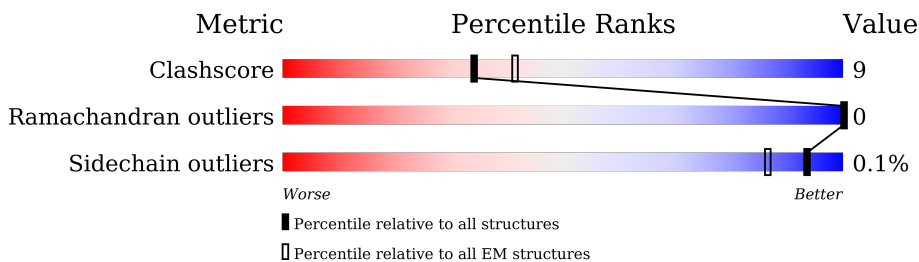
EMDB validation analysis : 0.0.1.dev43  
Mogul : 1.8.5 (274361), CSD as541be (2020)  
MolProbity : 4.02b-467  
buster-report : 1.1.7 (2018)  
Percentile statistics : 20191225.v01 (using entries in the PDB archive December 25th 2019)  
MapQ : 1.9.9  
Ideal geometry (proteins) : Engh & Huber (2001)  
Ideal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

# 1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:  
*ELECTRON MICROSCOPY*

The reported resolution of this entry is 3.30 Å.

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



Metric	Whole archive (#Entries)	EM structures (#Entries)
Clashscore	158937	4297
Ramachandran outliers	154571	4023
Sidechain outliers	154315	3826

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for  $\geq 3$ , 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  $\leq 5\%$ . The upper red bar (where present) indicates the fraction of residues that have poor fit to the EM map (all-atom inclusion  $< 40\%$ ). The numeric value is given above the bar.

Mol	Chain	Length	Quality of chain
1	A	763	82% 16% .
1	G	763	82% 16% .
1	e	763	98% .
2	B	734	82% 17%
2	H	734	83% 17%
2	f	734	100%
3	C	81	80% 19% .
3	N	81	79% 20% .

*Continued on next page...*

Continued from previous page...

Mol	Chain	Length	Quality of chain
3	g	81	99%
4	D	141	81% 19%
4	O	141	81% 19%
4	h	141	100%
5	E	75	11% 81% 13% 5%
5	Q	75	12% 84% 11% 5%
5	i	75	12% 95% 5%
6	F	159	75% 11% 14%
6	R	159	76% 9% 14%
6	j	159	86% 14%
7	I	38	8% 76% 24%
7	S	38	5% 84% 16%
7	k	38	8% 100%
8	J	41	5% 80% 20%
8	T	41	5% 80% 20%
8	l	41	5% 100%
9	K	84	19% 70% 23% 7%
9	U	84	23% 69% 24% 7%
9	m	84	15% 93% 7%
10	L	166	80% 19%
10	V	166	80% 19%
10	n	166	99%
11	M	29	79% 21%
11	W	29	86% 14%
11	o	29	100%

Continued on next page...

Continued from previous page...

Mol	Chain	Length	Quality of chain
12	P	172	58% 81% 17%
12	X	172	60% 83% 15%
12	p	172	58% 98%
13	1	342	64% 89% 10%
13	2	342	65% 85% 14%
13	3	342	76% 87% 12%
13	4	342	97% 81% 18%
13	5	342	98% 89% 10%
13	6	342	94% 81% 18%
13	Y	342	65% 88% 11%
13	Z	342	65% 85% 14%
13	a	342	78% 99%
13	b	342	97% 99%
13	c	342	98% 99%
13	d	342	93% 99%
13	q	342	64% 99%
13	r	342	65% 99%
13	s	342	75% 99%
13	t	342	96% 99%
13	u	342	98% 99%
13	v	342	93% 99%

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

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	1	501	X	-	-	-
14	CLA	1	502	X	-	-	-

Continued on next page...

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	1	503	X	-	-	-
14	CLA	1	504	X	-	-	-
14	CLA	1	505	X	-	-	-
14	CLA	1	506	X	-	-	-
14	CLA	1	507	X	-	-	-
14	CLA	1	508	X	-	-	-
14	CLA	1	509	X	-	-	-
14	CLA	1	510	X	-	-	-
14	CLA	1	511	X	-	-	-
14	CLA	1	512	X	-	-	-
14	CLA	1	513	X	-	-	-
14	CLA	1	516	X	-	-	-
14	CLA	1	517	X	-	-	-
14	CLA	1	518	X	-	-	-
14	CLA	1	519	X	-	-	-
14	CLA	2	501	X	-	-	-
14	CLA	2	502	X	-	-	-
14	CLA	2	503	X	-	-	-
14	CLA	2	504	X	-	-	-
14	CLA	2	505	X	-	-	-
14	CLA	2	506	X	-	-	-
14	CLA	2	507	X	-	-	-
14	CLA	2	508	X	-	-	-
14	CLA	2	509	X	-	-	-
14	CLA	2	510	X	-	-	-
14	CLA	2	511	X	-	-	-
14	CLA	2	512	X	-	-	-
14	CLA	2	513	X	-	-	-
14	CLA	2	518	X	-	-	-
14	CLA	2	519	X	-	-	-
14	CLA	3	501	X	-	-	-
14	CLA	3	502	X	-	-	-
14	CLA	3	503	X	-	-	-
14	CLA	3	504	X	-	-	-
14	CLA	3	505	X	-	-	-
14	CLA	3	506	X	-	-	-
14	CLA	3	507	X	-	-	-
14	CLA	3	508	X	-	-	-
14	CLA	3	509	X	-	-	-
14	CLA	3	510	X	-	-	-
14	CLA	3	511	X	-	-	-
14	CLA	3	512	X	-	-	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	3	513	X	-	-	-
14	CLA	3	516	X	-	-	-
14	CLA	3	517	X	-	-	-
14	CLA	3	518	X	-	-	-
14	CLA	3	519	X	-	-	-
14	CLA	4	501	X	-	-	-
14	CLA	4	502	X	-	-	-
14	CLA	4	503	X	-	-	-
14	CLA	4	504	X	-	-	-
14	CLA	4	505	X	-	-	-
14	CLA	4	506	X	-	-	-
14	CLA	4	507	X	-	-	-
14	CLA	4	508	X	-	-	-
14	CLA	4	509	X	-	-	-
14	CLA	4	510	X	-	-	-
14	CLA	4	511	X	-	-	-
14	CLA	4	512	X	-	-	-
14	CLA	4	513	X	-	-	-
14	CLA	4	516	X	-	-	-
14	CLA	4	517	X	-	-	-
14	CLA	4	518	X	-	-	-
14	CLA	4	519	X	-	-	-
14	CLA	5	501	X	-	-	-
14	CLA	5	502	X	-	-	-
14	CLA	5	503	X	-	-	-
14	CLA	5	504	X	-	-	-
14	CLA	5	505	X	-	-	-
14	CLA	5	506	X	-	-	-
14	CLA	5	507	X	-	-	-
14	CLA	5	508	X	-	-	-
14	CLA	5	509	X	-	-	-
14	CLA	5	510	X	-	-	-
14	CLA	5	511	X	-	-	-
14	CLA	5	512	X	-	-	-
14	CLA	5	513	X	-	-	-
14	CLA	5	516	X	-	-	-
14	CLA	5	517	X	-	-	-
14	CLA	5	518	X	-	-	-
14	CLA	5	519	X	-	-	-
14	CLA	6	501	X	-	-	-
14	CLA	6	502	X	-	-	-
14	CLA	6	503	X	-	-	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	6	504	X	-	-	-
14	CLA	6	505	X	-	-	-
14	CLA	6	506	X	-	-	-
14	CLA	6	507	X	-	-	-
14	CLA	6	508	X	-	-	-
14	CLA	6	509	X	-	-	-
14	CLA	6	510	X	-	-	-
14	CLA	6	511	X	-	-	-
14	CLA	6	512	X	-	-	-
14	CLA	6	513	X	-	-	-
14	CLA	6	516	X	-	-	-
14	CLA	6	517	X	-	-	-
14	CLA	6	518	X	-	-	-
14	CLA	6	519	X	-	-	-
14	CLA	A	1011	X	-	-	-
14	CLA	A	1013	X	-	-	-
14	CLA	A	1022	X	-	-	-
14	CLA	A	1101	X	-	-	-
14	CLA	A	1102	X	-	-	-
14	CLA	A	1103	X	-	-	-
14	CLA	A	1104	X	-	-	-
14	CLA	A	1105	X	-	-	-
14	CLA	A	1106	X	-	-	-
14	CLA	A	1107	X	-	-	-
14	CLA	A	1108	X	-	-	-
14	CLA	A	1109	X	-	-	-
14	CLA	A	1110	X	-	-	-
14	CLA	A	1111	X	-	-	-
14	CLA	A	1112	X	-	-	-
14	CLA	A	1113	X	-	-	-
14	CLA	A	1114	X	-	-	-
14	CLA	A	1115	X	-	-	-
14	CLA	A	1116	X	-	-	-
14	CLA	A	1117	X	-	-	-
14	CLA	A	1118	X	-	-	-
14	CLA	A	1119	X	-	-	-
14	CLA	A	1120	X	-	-	-
14	CLA	A	1121	X	-	-	-
14	CLA	A	1122	X	-	-	-
14	CLA	A	1123	X	-	-	-
14	CLA	A	1124	X	-	-	-
14	CLA	A	1125	X	-	-	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	A	1126	X	-	-	-
14	CLA	A	1127	X	-	-	-
14	CLA	A	1128	X	-	-	-
14	CLA	A	1129	X	-	-	-
14	CLA	A	1130	X	-	-	-
14	CLA	A	1131	X	-	-	-
14	CLA	A	1132	X	-	-	-
14	CLA	A	1133	X	-	-	-
14	CLA	A	1134	X	-	-	-
14	CLA	A	1135	X	-	-	-
14	CLA	A	1136	X	-	-	-
14	CLA	A	1137	X	-	-	-
14	CLA	A	1138	X	-	-	-
14	CLA	A	1139	X	-	-	-
14	CLA	A	1140	X	-	-	-
14	CLA	A	1237	X	-	-	-
14	CLA	A	1801	X	-	-	-
14	CLA	B	1012	X	-	-	-
14	CLA	B	1021	X	-	-	-
14	CLA	B	1023	X	-	-	-
14	CLA	B	1201	X	-	-	-
14	CLA	B	1202	X	-	-	-
14	CLA	B	1203	X	-	-	-
14	CLA	B	1204	X	-	-	-
14	CLA	B	1205	X	-	-	-
14	CLA	B	1206	X	-	-	-
14	CLA	B	1207	X	-	-	-
14	CLA	B	1208	X	-	-	-
14	CLA	B	1209	X	-	-	-
14	CLA	B	1210	X	-	-	-
14	CLA	B	1211	X	-	-	-
14	CLA	B	1212	X	-	-	-
14	CLA	B	1213	X	-	-	-
14	CLA	B	1214	X	-	-	-
14	CLA	B	1215	X	-	-	-
14	CLA	B	1216	X	-	-	-
14	CLA	B	1217	X	-	-	-
14	CLA	B	1218	X	-	-	-
14	CLA	B	1219	X	-	-	-
14	CLA	B	1220	X	-	-	-
14	CLA	B	1221	X	-	-	-
14	CLA	B	1222	X	-	-	-

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	B	1223	X	-	-	-
14	CLA	B	1224	X	-	-	-
14	CLA	B	1225	X	-	-	-
14	CLA	B	1226	X	-	-	-
14	CLA	B	1227	X	-	-	-
14	CLA	B	1228	X	-	-	-
14	CLA	B	1229	X	-	-	-
14	CLA	B	1230	X	-	-	-
14	CLA	B	1231	X	-	-	-
14	CLA	B	1232	X	-	-	-
14	CLA	B	1234	X	-	-	-
14	CLA	B	1235	X	-	-	-
14	CLA	B	1236	X	-	-	-
14	CLA	B	1238	X	-	-	-
14	CLA	B	1239	X	-	-	-
14	CLA	B	1240	X	-	-	-
14	CLA	F	1301	X	-	-	-
14	CLA	F	1302	X	-	-	-
14	CLA	G	1011	X	-	-	-
14	CLA	G	1013	X	-	-	-
14	CLA	G	1022	X	-	-	-
14	CLA	G	1101	X	-	-	-
14	CLA	G	1102	X	-	-	-
14	CLA	G	1103	X	-	-	-
14	CLA	G	1104	X	-	-	-
14	CLA	G	1105	X	-	-	-
14	CLA	G	1106	X	-	-	-
14	CLA	G	1107	X	-	-	-
14	CLA	G	1108	X	-	-	-
14	CLA	G	1109	X	-	-	-
14	CLA	G	1110	X	-	-	-
14	CLA	G	1111	X	-	-	-
14	CLA	G	1112	X	-	-	-
14	CLA	G	1113	X	-	-	-
14	CLA	G	1114	X	-	-	-
14	CLA	G	1115	X	-	-	-
14	CLA	G	1116	X	-	-	-
14	CLA	G	1117	X	-	-	-
14	CLA	G	1118	X	-	-	-
14	CLA	G	1119	X	-	-	-
14	CLA	G	1120	X	-	-	-
14	CLA	G	1121	X	-	-	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	G	1122	X	-	-	-
14	CLA	G	1123	X	-	-	-
14	CLA	G	1124	X	-	-	-
14	CLA	G	1125	X	-	-	-
14	CLA	G	1126	X	-	-	-
14	CLA	G	1127	X	-	-	-
14	CLA	G	1128	X	-	-	-
14	CLA	G	1129	X	-	-	-
14	CLA	G	1130	X	-	-	-
14	CLA	G	1131	X	-	-	-
14	CLA	G	1132	X	-	-	-
14	CLA	G	1133	X	-	-	-
14	CLA	G	1134	X	-	-	-
14	CLA	G	1135	X	-	-	-
14	CLA	G	1136	X	-	-	-
14	CLA	G	1137	X	-	-	-
14	CLA	G	1138	X	-	-	-
14	CLA	G	1139	X	-	-	-
14	CLA	G	1140	X	-	-	-
14	CLA	G	1237	X	-	-	-
14	CLA	G	1801	X	-	-	-
14	CLA	H	1012	X	-	-	-
14	CLA	H	1021	X	-	-	-
14	CLA	H	1023	X	-	-	-
14	CLA	H	1201	X	-	-	-
14	CLA	H	1202	X	-	-	-
14	CLA	H	1203	X	-	-	-
14	CLA	H	1204	X	-	-	-
14	CLA	H	1205	X	-	-	-
14	CLA	H	1206	X	-	-	-
14	CLA	H	1207	X	-	-	-
14	CLA	H	1208	X	-	-	-
14	CLA	H	1209	X	-	-	-
14	CLA	H	1210	X	-	-	-
14	CLA	H	1211	X	-	-	-
14	CLA	H	1212	X	-	-	-
14	CLA	H	1213	X	-	-	-
14	CLA	H	1214	X	-	-	-
14	CLA	H	1215	X	-	-	-
14	CLA	H	1216	X	-	-	-
14	CLA	H	1217	X	-	-	-
14	CLA	H	1218	X	-	-	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	H	1219	X	-	-	-
14	CLA	H	1220	X	-	-	-
14	CLA	H	1221	X	-	-	-
14	CLA	H	1222	X	-	-	-
14	CLA	H	1223	X	-	-	-
14	CLA	H	1224	X	-	-	-
14	CLA	H	1225	X	-	-	-
14	CLA	H	1226	X	-	-	-
14	CLA	H	1227	X	-	-	-
14	CLA	H	1228	X	-	-	-
14	CLA	H	1229	X	-	-	-
14	CLA	H	1230	X	-	-	-
14	CLA	H	1231	X	-	-	-
14	CLA	H	1232	X	-	-	-
14	CLA	H	1234	X	-	-	-
14	CLA	H	1235	X	-	-	-
14	CLA	H	1236	X	-	-	-
14	CLA	H	1238	X	-	-	-
14	CLA	H	1239	X	-	-	-
14	CLA	H	1240	X	-	-	-
14	CLA	J	1302	X	-	-	-
14	CLA	J	1303	X	-	-	-
14	CLA	K	1103	X	-	-	-
14	CLA	K	1105	X	-	-	-
14	CLA	K	1401	X	-	-	-
14	CLA	L	1501	X	-	-	-
14	CLA	L	1502	X	-	-	-
14	CLA	L	1503	X	-	-	-
14	CLA	R	1301	X	-	-	-
14	CLA	R	1302	X	-	-	-
14	CLA	T	1302	X	-	-	-
14	CLA	T	1303	X	-	-	-
14	CLA	U	1103	X	-	-	-
14	CLA	U	1105	X	-	-	-
14	CLA	U	1401	X	-	-	-
14	CLA	V	1501	X	-	-	-
14	CLA	V	1502	X	-	-	-
14	CLA	V	1503	X	-	-	-
14	CLA	Y	501	X	-	-	-
14	CLA	Y	502	X	-	-	-
14	CLA	Y	503	X	-	-	-
14	CLA	Y	504	X	-	-	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	Y	505	X	-	-	-
14	CLA	Y	506	X	-	-	-
14	CLA	Y	507	X	-	-	-
14	CLA	Y	508	X	-	-	-
14	CLA	Y	509	X	-	-	-
14	CLA	Y	510	X	-	-	-
14	CLA	Y	511	X	-	-	-
14	CLA	Y	512	X	-	-	-
14	CLA	Y	513	X	-	-	-
14	CLA	Y	516	X	-	-	-
14	CLA	Y	517	X	-	-	-
14	CLA	Y	518	X	-	-	-
14	CLA	Y	519	X	-	-	-
14	CLA	Z	501	X	-	-	-
14	CLA	Z	502	X	-	-	-
14	CLA	Z	503	X	-	-	-
14	CLA	Z	504	X	-	-	-
14	CLA	Z	505	X	-	-	-
14	CLA	Z	506	X	-	-	-
14	CLA	Z	507	X	-	-	-
14	CLA	Z	508	X	-	-	-
14	CLA	Z	509	X	-	-	-
14	CLA	Z	510	X	-	-	-
14	CLA	Z	511	X	-	-	-
14	CLA	Z	512	X	-	-	-
14	CLA	Z	513	X	-	-	-
14	CLA	Z	518	X	-	-	-
14	CLA	Z	519	X	-	-	-
14	CLA	a	501	X	-	-	-
14	CLA	a	502	X	-	-	-
14	CLA	a	503	X	-	-	-
14	CLA	a	504	X	-	-	-
14	CLA	a	505	X	-	-	-
14	CLA	a	506	X	-	-	-
14	CLA	a	507	X	-	-	-
14	CLA	a	508	X	-	-	-
14	CLA	a	509	X	-	-	-
14	CLA	a	510	X	-	-	-
14	CLA	a	511	X	-	-	-
14	CLA	a	512	X	-	-	-
14	CLA	a	513	X	-	-	-
14	CLA	a	516	X	-	-	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	a	517	X	-	-	-
14	CLA	a	518	X	-	-	-
14	CLA	a	519	X	-	-	-
14	CLA	b	501	X	-	-	-
14	CLA	b	502	X	-	-	-
14	CLA	b	503	X	-	-	-
14	CLA	b	504	X	-	-	-
14	CLA	b	505	X	-	-	-
14	CLA	b	506	X	-	-	-
14	CLA	b	507	X	-	-	-
14	CLA	b	508	X	-	-	-
14	CLA	b	509	X	-	-	-
14	CLA	b	510	X	-	-	-
14	CLA	b	511	X	-	-	-
14	CLA	b	512	X	-	-	-
14	CLA	b	513	X	-	-	-
14	CLA	b	516	X	-	-	-
14	CLA	b	517	X	-	-	-
14	CLA	b	518	X	-	-	-
14	CLA	b	519	X	-	-	-
14	CLA	c	501	X	-	-	-
14	CLA	c	502	X	-	-	-
14	CLA	c	503	X	-	-	-
14	CLA	c	504	X	-	-	-
14	CLA	c	505	X	-	-	-
14	CLA	c	506	X	-	-	-
14	CLA	c	507	X	-	-	-
14	CLA	c	508	X	-	-	-
14	CLA	c	509	X	-	-	-
14	CLA	c	510	X	-	-	-
14	CLA	c	511	X	-	-	-
14	CLA	c	512	X	-	-	-
14	CLA	c	513	X	-	-	-
14	CLA	c	516	X	-	-	-
14	CLA	c	517	X	-	-	-
14	CLA	c	518	X	-	-	-
14	CLA	c	519	X	-	-	-
14	CLA	d	501	X	-	-	-
14	CLA	d	502	X	-	-	-
14	CLA	d	503	X	-	-	-
14	CLA	d	504	X	-	-	-
14	CLA	d	505	X	-	-	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	d	506	X	-	-	-
14	CLA	d	507	X	-	-	-
14	CLA	d	508	X	-	-	-
14	CLA	d	509	X	-	-	-
14	CLA	d	510	X	-	-	-
14	CLA	d	511	X	-	-	-
14	CLA	d	512	X	-	-	-
14	CLA	d	513	X	-	-	-
14	CLA	d	516	X	-	-	-
14	CLA	d	517	X	-	-	-
14	CLA	d	518	X	-	-	-
14	CLA	d	519	X	-	-	-
14	CLA	e	1011	X	-	-	-
14	CLA	e	1013	X	-	-	-
14	CLA	e	1022	X	-	-	-
14	CLA	e	1101	X	-	-	-
14	CLA	e	1102	X	-	-	-
14	CLA	e	1103	X	-	-	-
14	CLA	e	1104	X	-	-	-
14	CLA	e	1105	X	-	-	-
14	CLA	e	1106	X	-	-	-
14	CLA	e	1107	X	-	-	-
14	CLA	e	1108	X	-	-	-
14	CLA	e	1109	X	-	-	-
14	CLA	e	1110	X	-	-	-
14	CLA	e	1111	X	-	-	-
14	CLA	e	1112	X	-	-	-
14	CLA	e	1113	X	-	-	-
14	CLA	e	1114	X	-	-	-
14	CLA	e	1115	X	-	-	-
14	CLA	e	1116	X	-	-	-
14	CLA	e	1117	X	-	-	-
14	CLA	e	1118	X	-	-	-
14	CLA	e	1119	X	-	-	-
14	CLA	e	1120	X	-	-	-
14	CLA	e	1121	X	-	-	-
14	CLA	e	1122	X	-	-	-
14	CLA	e	1123	X	-	-	-
14	CLA	e	1124	X	-	-	-
14	CLA	e	1125	X	-	-	-
14	CLA	e	1126	X	-	-	-
14	CLA	e	1127	X	-	-	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	e	1128	X	-	-	-
14	CLA	e	1129	X	-	-	-
14	CLA	e	1130	X	-	-	-
14	CLA	e	1131	X	-	-	-
14	CLA	e	1132	X	-	-	-
14	CLA	e	1133	X	-	-	-
14	CLA	e	1134	X	-	-	-
14	CLA	e	1135	X	-	-	-
14	CLA	e	1136	X	-	-	-
14	CLA	e	1137	X	-	-	-
14	CLA	e	1138	X	-	-	-
14	CLA	e	1139	X	-	-	-
14	CLA	e	1140	X	-	-	-
14	CLA	e	1237	X	-	-	-
14	CLA	e	1801	X	-	-	-
14	CLA	f	1012	X	-	-	-
14	CLA	f	1021	X	-	-	-
14	CLA	f	1023	X	-	-	-
14	CLA	f	1201	X	-	-	-
14	CLA	f	1202	X	-	-	-
14	CLA	f	1203	X	-	-	-
14	CLA	f	1204	X	-	-	-
14	CLA	f	1205	X	-	-	-
14	CLA	f	1206	X	-	-	-
14	CLA	f	1207	X	-	-	-
14	CLA	f	1208	X	-	-	-
14	CLA	f	1209	X	-	-	-
14	CLA	f	1210	X	-	-	-
14	CLA	f	1211	X	-	-	-
14	CLA	f	1212	X	-	-	-
14	CLA	f	1213	X	-	-	-
14	CLA	f	1214	X	-	-	-
14	CLA	f	1215	X	-	-	-
14	CLA	f	1216	X	-	-	-
14	CLA	f	1217	X	-	-	-
14	CLA	f	1218	X	-	-	-
14	CLA	f	1219	X	-	-	-
14	CLA	f	1220	X	-	-	-
14	CLA	f	1221	X	-	-	-
14	CLA	f	1222	X	-	-	-
14	CLA	f	1223	X	-	-	-
14	CLA	f	1224	X	-	-	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	f	1225	X	-	-	-
14	CLA	f	1226	X	-	-	-
14	CLA	f	1227	X	-	-	-
14	CLA	f	1228	X	-	-	-
14	CLA	f	1229	X	-	-	-
14	CLA	f	1230	X	-	-	-
14	CLA	f	1231	X	-	-	-
14	CLA	f	1232	X	-	-	-
14	CLA	f	1234	X	-	-	-
14	CLA	f	1235	X	-	-	-
14	CLA	f	1236	X	-	-	-
14	CLA	f	1238	X	-	-	-
14	CLA	f	1239	X	-	-	-
14	CLA	f	1240	X	-	-	-
14	CLA	j	1301	X	-	-	-
14	CLA	j	1302	X	-	-	-
14	CLA	l	1302	X	-	-	-
14	CLA	l	1303	X	-	-	-
14	CLA	m	1103	X	-	-	-
14	CLA	m	1105	X	-	-	-
14	CLA	m	1401	X	-	-	-
14	CLA	n	1501	X	-	-	-
14	CLA	n	1502	X	-	-	-
14	CLA	n	1503	X	-	-	-
14	CLA	q	501	X	-	-	-
14	CLA	q	502	X	-	-	-
14	CLA	q	503	X	-	-	-
14	CLA	q	504	X	-	-	-
14	CLA	q	505	X	-	-	-
14	CLA	q	506	X	-	-	-
14	CLA	q	507	X	-	-	-
14	CLA	q	508	X	-	-	-
14	CLA	q	509	X	-	-	-
14	CLA	q	510	X	-	-	-
14	CLA	q	511	X	-	-	-
14	CLA	q	512	X	-	-	-
14	CLA	q	513	X	-	-	-
14	CLA	q	516	X	-	-	-
14	CLA	q	517	X	-	-	-
14	CLA	q	518	X	-	-	-
14	CLA	q	519	X	-	-	-
14	CLA	r	501	X	-	-	-

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	r	502	X	-	-	-
14	CLA	r	503	X	-	-	-
14	CLA	r	504	X	-	-	-
14	CLA	r	505	X	-	-	-
14	CLA	r	506	X	-	-	-
14	CLA	r	507	X	-	-	-
14	CLA	r	508	X	-	-	-
14	CLA	r	509	X	-	-	-
14	CLA	r	510	X	-	-	-
14	CLA	r	511	X	-	-	-
14	CLA	r	512	X	-	-	-
14	CLA	r	513	X	-	-	-
14	CLA	r	518	X	-	-	-
14	CLA	r	519	X	-	-	-
14	CLA	s	501	X	-	-	-
14	CLA	s	502	X	-	-	-
14	CLA	s	503	X	-	-	-
14	CLA	s	504	X	-	-	-
14	CLA	s	505	X	-	-	-
14	CLA	s	506	X	-	-	-
14	CLA	s	507	X	-	-	-
14	CLA	s	508	X	-	-	-
14	CLA	s	509	X	-	-	-
14	CLA	s	510	X	-	-	-
14	CLA	s	511	X	-	-	-
14	CLA	s	512	X	-	-	-
14	CLA	s	513	X	-	-	-
14	CLA	s	516	X	-	-	-
14	CLA	s	517	X	-	-	-
14	CLA	s	518	X	-	-	-
14	CLA	s	519	X	-	-	-
14	CLA	t	501	X	-	-	-
14	CLA	t	502	X	-	-	-
14	CLA	t	503	X	-	-	-
14	CLA	t	504	X	-	-	-
14	CLA	t	505	X	-	-	-
14	CLA	t	506	X	-	-	-
14	CLA	t	507	X	-	-	-
14	CLA	t	508	X	-	-	-
14	CLA	t	509	X	-	-	-
14	CLA	t	510	X	-	-	-
14	CLA	t	511	X	-	-	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
14	CLA	t	512	X	-	-	-
14	CLA	t	513	X	-	-	-
14	CLA	t	516	X	-	-	-
14	CLA	t	517	X	-	-	-
14	CLA	t	518	X	-	-	-
14	CLA	t	519	X	-	-	-
14	CLA	u	501	X	-	-	-
14	CLA	u	502	X	-	-	-
14	CLA	u	503	X	-	-	-
14	CLA	u	504	X	-	-	-
14	CLA	u	505	X	-	-	-
14	CLA	u	506	X	-	-	-
14	CLA	u	507	X	-	-	-
14	CLA	u	508	X	-	-	-
14	CLA	u	509	X	-	-	-
14	CLA	u	510	X	-	-	-
14	CLA	u	511	X	-	-	-
14	CLA	u	512	X	-	-	-
14	CLA	u	513	X	-	-	-
14	CLA	u	516	X	-	-	-
14	CLA	u	517	X	-	-	-
14	CLA	u	518	X	-	-	-
14	CLA	u	519	X	-	-	-
14	CLA	v	501	X	-	-	-
14	CLA	v	502	X	-	-	-
14	CLA	v	503	X	-	-	-
14	CLA	v	504	X	-	-	-
14	CLA	v	505	X	-	-	-
14	CLA	v	506	X	-	-	-
14	CLA	v	507	X	-	-	-
14	CLA	v	508	X	-	-	-
14	CLA	v	509	X	-	-	-
14	CLA	v	510	X	-	-	-
14	CLA	v	511	X	-	-	-
14	CLA	v	512	X	-	-	-
14	CLA	v	513	X	-	-	-
14	CLA	v	516	X	-	-	-
14	CLA	v	517	X	-	-	-
14	CLA	v	518	X	-	-	-
14	CLA	v	519	X	-	-	-

## 2 Entry composition [i](#)

There are 23 unique types of molecules in this entry. The entry contains 144312 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

- Molecule 1 is a protein called Photosystem I P700 chlorophyll a apoprotein A1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A	751	Total	C	N	O	S	0	0
			5865	3847	1002	999	17		
1	G	751	Total	C	N	O	S	0	0
			5865	3847	1002	999	17		
1	e	751	Total	C	N	O	S	0	0
			5865	3847	1002	999	17		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	B	733	Total	C	N	O	S	0	0
			5789	3811	970	994	14		
2	H	733	Total	C	N	O	S	0	0
			5789	3811	970	994	14		
2	f	733	Total	C	N	O	S	0	0
			5789	3811	970	994	14		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	C	80	Total	C	N	O	S	0	0
			598	368	103	116	11		
3	N	80	Total	C	N	O	S	0	0
			598	368	103	116	11		
3	g	80	Total	C	N	O	S	0	0
			598	368	103	116	11		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	D	141	Total	C	N	O	S	0	0
			1098	702	187	208	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf	Trace
4	O	141	Total	C	N	O	S	0	0
			1098	702	187	208	1		
4	h	141	Total	C	N	O	S	0	0
			1098	702	187	208	1		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
5	E	71	Total	C	N	O	0	0	
			543	343	95	105			
5	Q	71	Total	C	N	O	0	0	
			543	343	95	105			
5	i	71	Total	C	N	O	0	0	
			543	343	95	105			

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

Mol	Chain	Residues	Atoms					AltConf	Trace
6	F	136	Total	C	N	O	S	0	0
			1036	670	174	190	2		
6	R	136	Total	C	N	O	S	0	0
			1036	670	174	190	2		
6	j	136	Total	C	N	O	S	0	0
			1036	670	174	190	2		

- Molecule 7 is a protein called Photosystem I PsaI protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	I	38	Total	C	N	O	S	0	0
			282	191	38	51	2		
7	S	38	Total	C	N	O	S	0	0
			282	191	38	51	2		
7	k	38	Total	C	N	O	S	0	0
			282	191	38	51	2		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
8	J	41	Total	C	N	O	S	0	0
			335	228	52	54	1		
8	T	41	Total	C	N	O	S	0	0
			335	228	52	54	1		

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf	Trace
8	l	41	Total	C	N	O	S	0	0
			335	228	52	54	1		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
9	K	78	Total	C	N	O	S	0	0
			549	364	91	93	1		
9	U	78	Total	C	N	O	S	0	0
			549	364	91	93	1		
9	m	78	Total	C	N	O	S	0	0
			549	364	91	93	1		

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

Mol	Chain	Residues	Atoms					AltConf	Trace
10	L	164	Total	C	N	O	S	0	0
			1210	782	201	225	2		
10	V	164	Total	C	N	O	S	0	0
			1210	782	201	225	2		
10	n	164	Total	C	N	O	S	0	0
			1210	782	201	225	2		

- Molecule 11 is a protein called Psam.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	M	29	Total	C	N	O	S	0	0
			228	151	36	40	1		
11	W	29	Total	C	N	O	S	0	0
			228	151	36	40	1		
11	o	29	Total	C	N	O	S	0	0
			228	151	36	40	1		

- Molecule 12 is a protein called Flavodoxin.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	P	169	Total	C	N	O	S	0	0
			1318	831	210	275	2		
12	X	169	Total	C	N	O	S	0	0
			1318	831	210	275	2		
12	p	169	Total	C	N	O	S	0	0
			1318	831	210	275	2		

There are 9 discrepancies between the modelled and reference sequences:

Chain	Residue	Modelled	Actual	Comment	Reference
P	-2	GLY	-	expression tag	UNP P10340
P	-1	SER	-	expression tag	UNP P10340
P	0	HIS	-	expression tag	UNP P10340
X	-2	GLY	-	expression tag	UNP P10340
X	-1	SER	-	expression tag	UNP P10340
X	0	HIS	-	expression tag	UNP P10340
p	-2	GLY	-	expression tag	UNP P10340
p	-1	SER	-	expression tag	UNP P10340
p	0	HIS	-	expression tag	UNP P10340

- Molecule 13 is a protein called Iron stress-induced chlorophyll-binding protein.

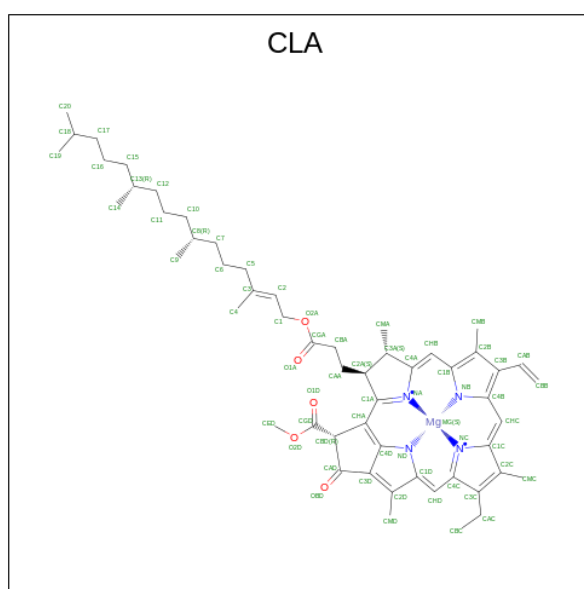
Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
13	1	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		
13	2	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		
13	3	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		
13	4	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		
13	5	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		
13	6	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		
13	Y	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		
13	Z	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		
13	a	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		
13	b	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		
13	c	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		
13	d	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		
13	q	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		
13	r	339	Total	C	N	O	S	0	0
			2605	1722	428	448	7		

*Continued on next page...*

Continued from previous page...

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
13	s	339	Total 2605	C 1722	N 428	O 448	S 7	0	0
13	t	339	Total 2605	C 1722	N 428	O 448	S 7	0	0
13	u	339	Total 2605	C 1722	N 428	O 448	S 7	0	0
13	v	339	Total 2605	C 1722	N 428	O 448	S 7	0	0

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



Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0

Continued on next page...





*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	A	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	B	1	Total 2515	C 2105	Mg 41	N 164	O 205	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	B	1	2515	2105	41	164	205	0
14	F	1	90	70	2	8	10	0
14	F	1	90	70	2	8	10	0
14	J	1	100	80	2	8	10	0
14	J	1	100	80	2	8	10	0
14	K	1	148	118	3	12	15	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	K	1	148	118	3	12	15	0
14	K	1	148	118	3	12	15	0
14	L	1	185	155	3	12	15	0
14	L	1	185	155	3	12	15	0
14	L	1	185	155	3	12	15	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0
14	1	1	765	595	17	68	85	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	1	1	765	595	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	2	1	850	680	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	3	1	785	615	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	4	1	765	595	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	5	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0
14	6	1	785	615	17	68	85	0

*Continued on next page...*







*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	G	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	G	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	G	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	G	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	G	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	H	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	R	1	Total 90	C 70	Mg 2	N 8	O 10	0
14	R	1	Total 90	C 70	Mg 2	N 8	O 10	0
14	T	1	Total 100	C 80	Mg 2	N 8	O 10	0
14	T	1	Total 100	C 80	Mg 2	N 8	O 10	0
14	U	1	Total 148	C 118	Mg 3	N 12	O 15	0
14	U	1	Total 148	C 118	Mg 3	N 12	O 15	0
14	U	1	Total 148	C 118	Mg 3	N 12	O 15	0
14	V	1	Total 185	C 155	Mg 3	N 12	O 15	0
14	V	1	Total 185	C 155	Mg 3	N 12	O 15	0
14	V	1	Total 185	C 155	Mg 3	N 12	O 15	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Y	1	Total 765	C 595	Mg 17	N 68	O 85	0
14	Z	1	Total 850	C 680	Mg 17	N 68	O 85	0
14	Z	1	Total 850	C 680	Mg 17	N 68	O 85	0
14	Z	1	Total 850	C 680	Mg 17	N 68	O 85	0
14	Z	1	Total 850	C 680	Mg 17	N 68	O 85	0
14	Z	1	Total 850	C 680	Mg 17	N 68	O 85	0
14	Z	1	Total 850	C 680	Mg 17	N 68	O 85	0
14	Z	1	Total 850	C 680	Mg 17	N 68	O 85	0
14	Z	1	Total 850	C 680	Mg 17	N 68	O 85	0
14	Z	1	Total 850	C 680	Mg 17	N 68	O 85	0
14	Z	1	Total 850	C 680	Mg 17	N 68	O 85	0
14	Z	1	Total 850	C 680	Mg 17	N 68	O 85	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	a	1	785	615	17	68	85	0
14	a	1	785	615	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	b	1	765	595	17	68	85	0
14	c	1	785	615	17	68	85	0
14	c	1	785	615	17	68	85	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
14	c	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	c	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	c	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	c	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	c	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	c	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	c	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	c	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	c	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	c	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	c	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	c	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	d	1	Total	C	Mg	N	O	0
			785	615	17	68	85	
14	e	1	Total	C	Mg	N	O	0
			2712	2262	45	180	225	
14	e	1	Total	C	Mg	N	O	0
			2712	2262	45	180	225	
14	e	1	Total	C	Mg	N	O	0
			2712	2262	45	180	225	
14	e	1	Total	C	Mg	N	O	0
			2712	2262	45	180	225	
14	e	1	Total	C	Mg	N	O	0
			2712	2262	45	180	225	
14	e	1	Total	C	Mg	N	O	0
			2712	2262	45	180	225	
14	e	1	Total	C	Mg	N	O	0
			2712	2262	45	180	225	
14	e	1	Total	C	Mg	N	O	0
			2712	2262	45	180	225	
14	e	1	Total	C	Mg	N	O	0
			2712	2262	45	180	225	

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	e	1	Total 2712	C 2262	Mg 45	N 180	O 225	0
14	f	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	f	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	f	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	f	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	f	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	f	1	Total 2515	C 2105	Mg 41	N 164	O 205	0
14	f	1	Total 2515	C 2105	Mg 41	N 164	O 205	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	f	1	2515	2105	41	164	205	0
14	f	1	2515	2105	41	164	205	0
14	f	1	2515	2105	41	164	205	0
14	f	1	2515	2105	41	164	205	0
14	f	1	2515	2105	41	164	205	0
14	f	1	2515	2105	41	164	205	0
14	f	1	2515	2105	41	164	205	0
14	f	1	2515	2105	41	164	205	0
14	f	1	2515	2105	41	164	205	0
14	f	1	2515	2105	41	164	205	0
14	f	1	2515	2105	41	164	205	0
14	f	1	2515	2105	41	164	205	0
14	f	1	2515	2105	41	164	205	0
14	f	1	2515	2105	41	164	205	0
14	j	1	90	70	2	8	10	0
14	j	1	90	70	2	8	10	0
14	l	1	100	80	2	8	10	0
14	l	1	100	80	2	8	10	0
14	m	1	148	118	3	12	15	0
14	m	1	148	118	3	12	15	0
14	m	1	148	118	3	12	15	0
14	n	1	185	155	3	12	15	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	n	1	185	155	3	12	15	0
14	n	1	185	155	3	12	15	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	q	1	765	595	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	r	1	850	680	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	s	1	785	615	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0

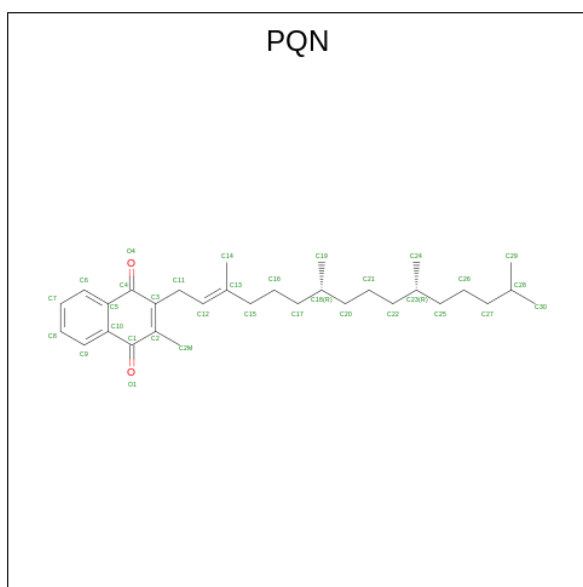
*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	t	1	765	595	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0
14	u	1	785	615	17	68	85	0

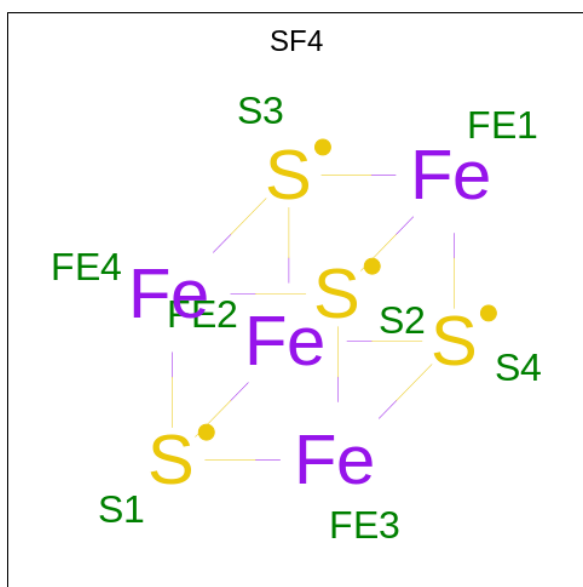
*Continued on next page...*





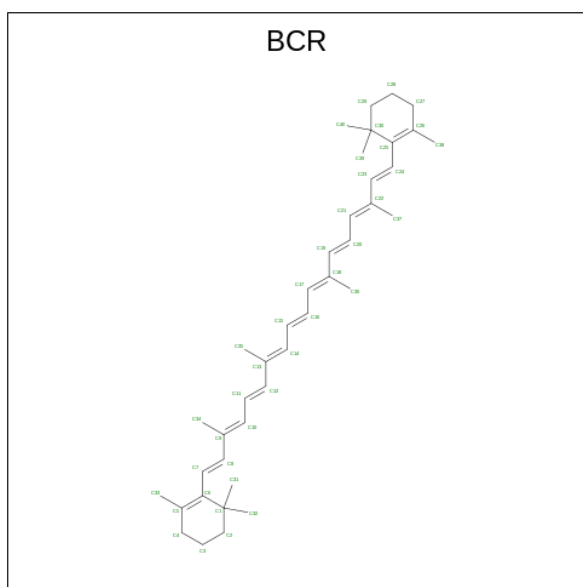
Mol	Chain	Residues	Atoms			AltConf
15	A	1	Total	C	O	0
			33	31	2	
15	B	1	Total	C	O	0
			33	31	2	
15	G	1	Total	C	O	0
			33	31	2	
15	H	1	Total	C	O	0
			33	31	2	
15	e	1	Total	C	O	0
			33	31	2	
15	f	1	Total	C	O	0
			33	31	2	

- Molecule 16 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe<sub>4</sub>S<sub>4</sub>).



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

- Molecule 17 is BETA-CAROTENE (three-letter code: BCR) (formula: C<sub>40</sub>H<sub>56</sub>).



Mol	Chain	Residues	Atoms	AltConf
17	A	1	Total C 240 240	0
17	A	1	Total C 240 240	0
17	A	1	Total C 240 240	0
17	A	1	Total C 240 240	0
17	A	1	Total C 240 240	0
17	A	1	Total C 240 240	0
17	B	1	Total C 280 280	0
17	B	1	Total C 280 280	0
17	B	1	Total C 280 280	0
17	B	1	Total C 280 280	0
17	B	1	Total C 280 280	0
17	B	1	Total C 280 280	0
17	B	1	Total C 280 280	0
17	F	1	Total C 40 40	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms		AltConf
17	I	1	Total 40	C 40	0
17	J	1	Total 120	C 120	0
17	J	1	Total 120	C 120	0
17	J	1	Total 120	C 120	0
17	K	1	Total 40	C 40	0
17	L	1	Total 160	C 160	0
17	L	1	Total 160	C 160	0
17	L	1	Total 160	C 160	0
17	L	1	Total 160	C 160	0
17	M	1	Total 40	C 40	0
17	1	1	Total 160	C 160	0
17	1	1	Total 160	C 160	0
17	1	1	Total 160	C 160	0
17	1	1	Total 160	C 160	0
17	2	1	Total 160	C 160	0
17	2	1	Total 160	C 160	0
17	2	1	Total 160	C 160	0
17	2	1	Total 160	C 160	0
17	3	1	Total 160	C 160	0
17	3	1	Total 160	C 160	0
17	3	1	Total 160	C 160	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms		AltConf
17	3	1	Total 160	C 160	0
17	4	1	Total 160	C 160	0
17	4	1	Total 160	C 160	0
17	4	1	Total 160	C 160	0
17	4	1	Total 160	C 160	0
17	5	1	Total 160	C 160	0
17	5	1	Total 160	C 160	0
17	5	1	Total 160	C 160	0
17	5	1	Total 160	C 160	0
17	6	1	Total 160	C 160	0
17	6	1	Total 160	C 160	0
17	6	1	Total 160	C 160	0
17	6	1	Total 160	C 160	0
17	G	1	Total 240	C 240	0
17	G	1	Total 240	C 240	0
17	G	1	Total 240	C 240	0
17	G	1	Total 240	C 240	0
17	G	1	Total 240	C 240	0
17	G	1	Total 240	C 240	0
17	H	1	Total 280	C 280	0
17	H	1	Total 280	C 280	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Residues	Atoms		AltConf
17	H	1	Total 280	C 280	0
17	H	1	Total 280	C 280	0
17	H	1	Total 280	C 280	0
17	H	1	Total 280	C 280	0
17	H	1	Total 280	C 280	0
17	R	1	Total 40	C 40	0
17	S	1	Total 40	C 40	0
17	T	1	Total 120	C 120	0
17	T	1	Total 120	C 120	0
17	T	1	Total 120	C 120	0
17	U	1	Total 40	C 40	0
17	V	1	Total 160	C 160	0
17	V	1	Total 160	C 160	0
17	V	1	Total 160	C 160	0
17	V	1	Total 160	C 160	0
17	W	1	Total 40	C 40	0
17	Y	1	Total 160	C 160	0
17	Y	1	Total 160	C 160	0
17	Y	1	Total 160	C 160	0
17	Y	1	Total 160	C 160	0
17	Z	1	Total 160	C 160	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms		AltConf
17	Z	1	Total 160	C 160	0
17	Z	1	Total 160	C 160	0
17	Z	1	Total 160	C 160	0
17	a	1	Total 160	C 160	0
17	a	1	Total 160	C 160	0
17	a	1	Total 160	C 160	0
17	a	1	Total 160	C 160	0
17	b	1	Total 160	C 160	0
17	b	1	Total 160	C 160	0
17	b	1	Total 160	C 160	0
17	b	1	Total 160	C 160	0
17	c	1	Total 160	C 160	0
17	c	1	Total 160	C 160	0
17	c	1	Total 160	C 160	0
17	c	1	Total 160	C 160	0
17	d	1	Total 160	C 160	0
17	d	1	Total 160	C 160	0
17	d	1	Total 160	C 160	0
17	d	1	Total 160	C 160	0
17	e	1	Total 240	C 240	0
17	e	1	Total 240	C 240	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Residues	Atoms		AltConf
17	e	1	Total 240	C 240	0
17	e	1	Total 240	C 240	0
17	e	1	Total 240	C 240	0
17	e	1	Total 240	C 240	0
17	f	1	Total 280	C 280	0
17	f	1	Total 280	C 280	0
17	f	1	Total 280	C 280	0
17	f	1	Total 280	C 280	0
17	f	1	Total 280	C 280	0
17	f	1	Total 280	C 280	0
17	f	1	Total 280	C 280	0
17	f	1	Total 280	C 280	0
17	j	1	Total 40	C 40	0
17	k	1	Total 40	C 40	0
17	l	1	Total 120	C 120	0
17	l	1	Total 120	C 120	0
17	l	1	Total 120	C 120	0
17	m	1	Total 40	C 40	0
17	n	1	Total 160	C 160	0
17	n	1	Total 160	C 160	0
17	n	1	Total 160	C 160	0
17	n	1	Total 160	C 160	0

*Continued on next page...*

*Continued from previous page...*

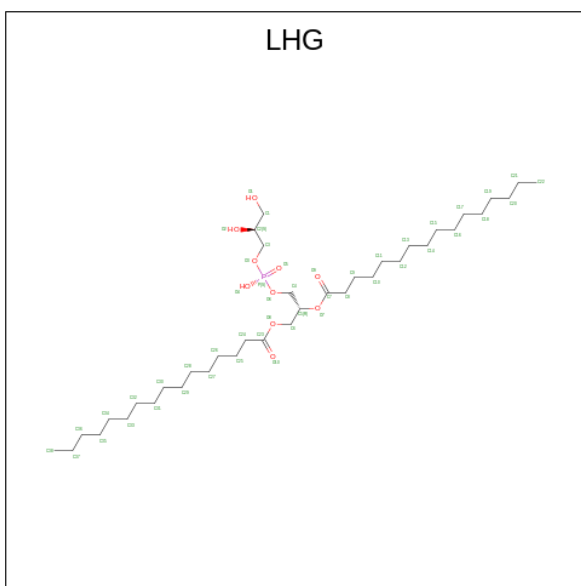
Mol	Chain	Residues	Atoms		AltConf
17	o	1	Total 40	C 40	0
17	q	1	Total 160	C 160	0
17	q	1	Total 160	C 160	0
17	q	1	Total 160	C 160	0
17	q	1	Total 160	C 160	0
17	r	1	Total 160	C 160	0
17	r	1	Total 160	C 160	0
17	r	1	Total 160	C 160	0
17	r	1	Total 160	C 160	0
17	s	1	Total 160	C 160	0
17	s	1	Total 160	C 160	0
17	s	1	Total 160	C 160	0
17	s	1	Total 160	C 160	0
17	t	1	Total 160	C 160	0
17	t	1	Total 160	C 160	0
17	t	1	Total 160	C 160	0
17	t	1	Total 160	C 160	0
17	u	1	Total 160	C 160	0
17	u	1	Total 160	C 160	0
17	u	1	Total 160	C 160	0
17	u	1	Total 160	C 160	0

*Continued on next page...*

Continued from previous page...

Mol	Chain	Residues	Atoms		AltConf
17	v	1	Total	C	0
			160	160	
17	v	1	Total	C	0
			160	160	
17	v	1	Total	C	0
			160	160	
17	v	1	Total	C	0
			160	160	

- Molecule 18 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (three-letter code: LHG) (formula: C<sub>38</sub>H<sub>75</sub>O<sub>10</sub>P).



Mol	Chain	Residues	Atoms				AltConf
18	A	1	Total	C	O	P	0
			374	275	90	9	
18	A	1	Total	C	O	P	0
			374	275	90	9	
18	A	1	Total	C	O	P	0
			374	275	90	9	
18	A	1	Total	C	O	P	0
			374	275	90	9	
18	A	1	Total	C	O	P	0
			374	275	90	9	
18	A	1	Total	C	O	P	0
			374	275	90	9	

Continued on next page...

*Continued from previous page...*

Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	P	
18	A	1	374	275	90	9	0
18	A	1	374	275	90	9	0
18	B	1	78	56	20	2	0
18	B	1	78	56	20	2	0
18	I	1	48	37	10	1	0
18	L	1	127	94	30	3	0
18	L	1	127	94	30	3	0
18	L	1	127	94	30	3	0
18	G	1	374	275	90	9	0
18	G	1	374	275	90	9	0
18	G	1	374	275	90	9	0
18	G	1	374	275	90	9	0
18	G	1	374	275	90	9	0
18	G	1	374	275	90	9	0
18	G	1	374	275	90	9	0
18	G	1	374	275	90	9	0
18	G	1	374	275	90	9	0
18	H	1	78	56	20	2	0
18	H	1	78	56	20	2	0
18	S	1	48	37	10	1	0
18	V	1	127	94	30	3	0

*Continued on next page...*

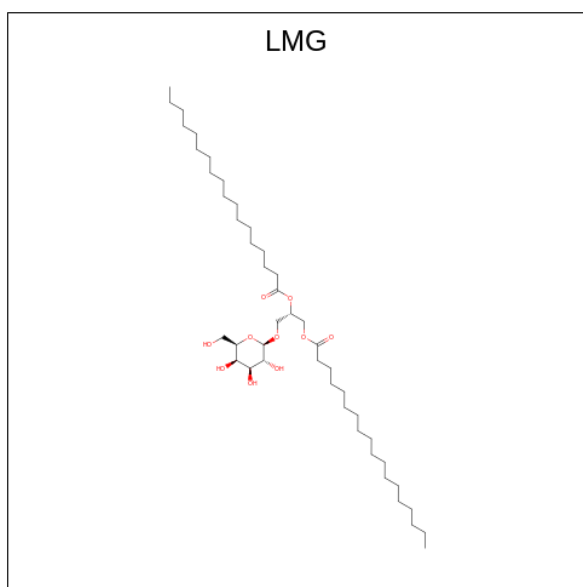
*Continued from previous page...*

Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	P	
18	V	1	127	94	30	3	0
18	V	1	127	94	30	3	0
18	e	1	374	275	90	9	0
18	e	1	374	275	90	9	0
18	e	1	374	275	90	9	0
18	e	1	374	275	90	9	0
18	e	1	374	275	90	9	0
18	e	1	374	275	90	9	0
18	e	1	374	275	90	9	0
18	e	1	374	275	90	9	0
18	e	1	374	275	90	9	0
18	f	1	78	56	20	2	0
18	f	1	78	56	20	2	0
18	k	1	48	37	10	1	0
18	n	1	127	94	30	3	0
18	n	1	127	94	30	3	0
18	n	1	127	94	30	3	0

- Molecule 19 is DODECYL-ALPHA-D-MALTOSIDE (three-letter code: LMU) (formula:  $C_{24}H_{46}O_{11}$ ).

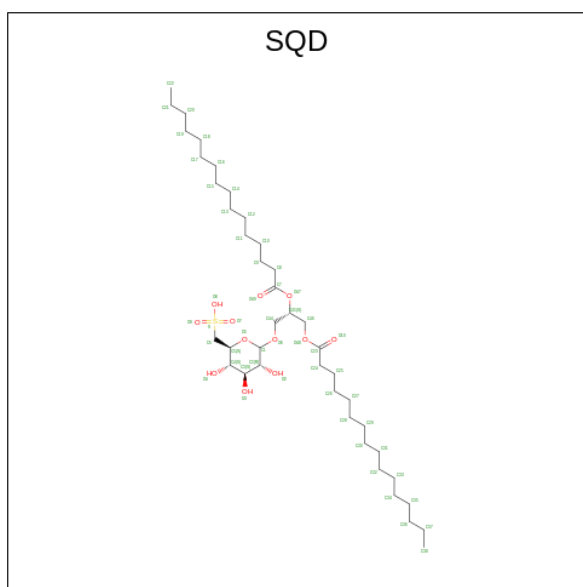






Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
20	B	1	53	43	10	0
20	J	1	32	22	10	0
20	H	1	53	43	10	0
20	T	1	32	22	10	0
20	f	1	53	43	10	0
20	l	1	32	22	10	0

- Molecule 21 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (three-letter code: SQD) (formula:  $C_{41}H_{78}O_{12}S$ ).



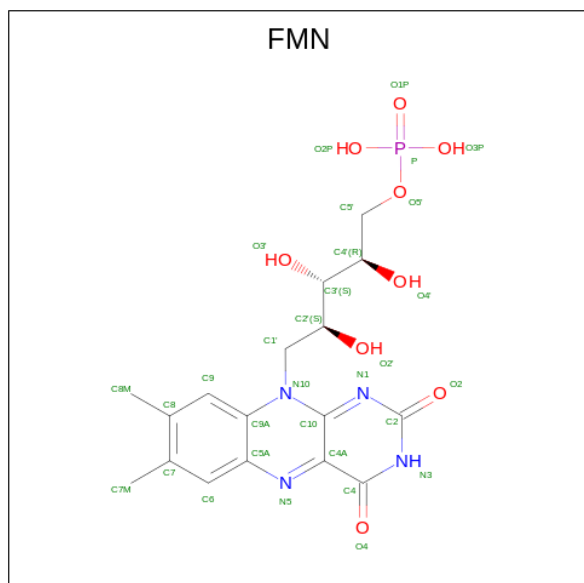
Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	S	
21	B	1	40	27	12	1	0
21	L	1	46	33	12	1	0
21	1	1	32	19	12	1	0
21	2	1	28	15	12	1	0
21	3	1	28	15	12	1	0
21	4	1	26	13	12	1	0
21	5	1	26	13	12	1	0
21	6	1	26	13	12	1	0
21	H	1	40	27	12	1	0
21	V	1	46	33	12	1	0
21	Y	1	32	19	12	1	0
21	Z	1	28	15	12	1	0
21	a	1	28	15	12	1	0
21	b	1	26	13	12	1	0

*Continued on next page...*

Continued from previous page...

Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	S	
21	c	1	Total 26	C 13	O 12	S 1	0
21	d	1	Total 26	C 13	O 12	S 1	0
21	f	1	Total 40	C 27	O 12	S 1	0
21	n	1	Total 46	C 33	O 12	S 1	0
21	q	1	Total 32	C 19	O 12	S 1	0
21	r	1	Total 28	C 15	O 12	S 1	0
21	s	1	Total 28	C 15	O 12	S 1	0
21	t	1	Total 26	C 13	O 12	S 1	0
21	u	1	Total 26	C 13	O 12	S 1	0
21	v	1	Total 26	C 13	O 12	S 1	0

- Molecule 22 is FLAVIN MONONUCLEOTIDE (three-letter code: FMN) (formula: C<sub>17</sub>H<sub>21</sub>N<sub>4</sub>O<sub>9</sub>P).



Mol	Chain	Residues	Atoms					AltConf
			Total	C	N	O	P	
22	P	1	Total 31	C 17	N 4	O 9	P 1	0

Continued on next page...

*Continued from previous page...*

Mol	Chain	Residues	Atoms					AltConf
22	X	1	Total	C	N	O	P	0
			31	17	4	9	1	
22	p	1	Total	C	N	O	P	0
			31	17	4	9	1	

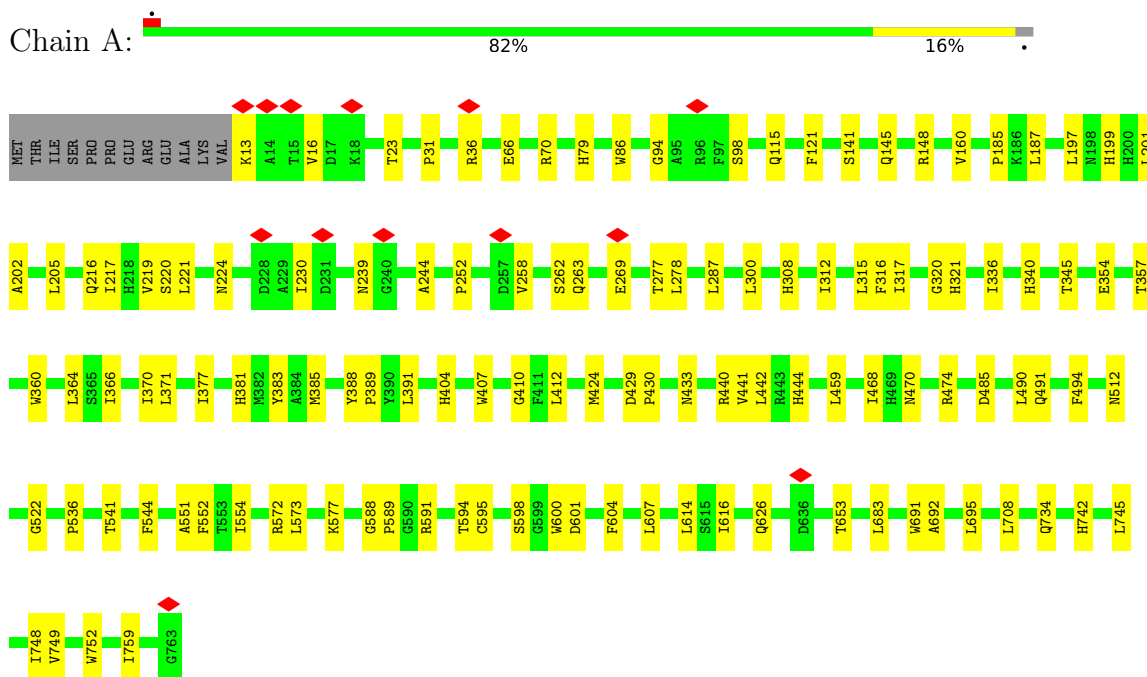
- Molecule 23 is water.

Mol	Chain	Residues	Atoms		AltConf
23	A	9	Total	O	0
			9	9	
23	B	7	Total	O	0
			7	7	
23	F	1	Total	O	0
			1	1	
23	L	1	Total	O	0
			1	1	
23	G	9	Total	O	0
			9	9	
23	H	7	Total	O	0
			7	7	
23	R	1	Total	O	0
			1	1	
23	V	1	Total	O	0
			1	1	
23	e	9	Total	O	0
			9	9	
23	f	7	Total	O	0
			7	7	
23	j	1	Total	O	0
			1	1	
23	n	1	Total	O	0
			1	1	

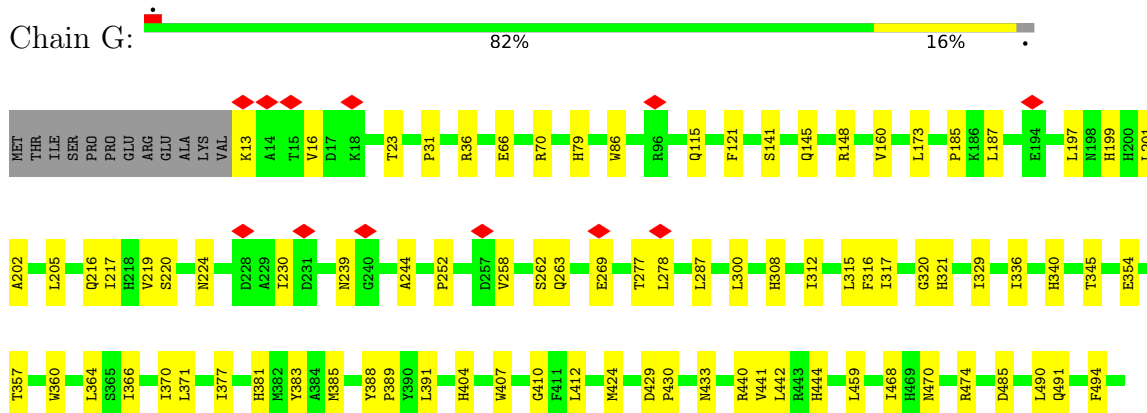
### 3 Residue-property plots

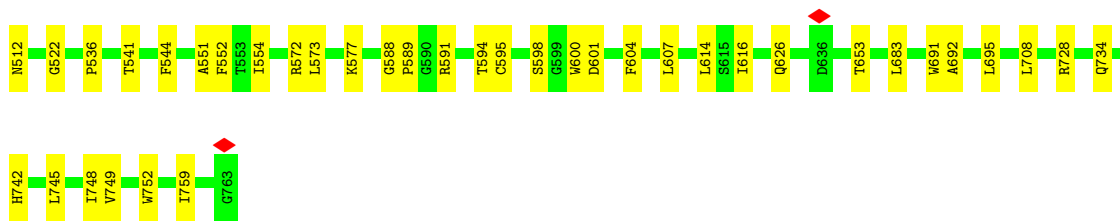
These plots are drawn for all protein, RNA, DNA and oligosaccharide chains in the entry. The first graphic for a chain summarises the proportions of the various outlier classes displayed in the second graphic. The second graphic shows the sequence view annotated by issues in geometry and atom inclusion in map density. Residues are color-coded according to the number of geometric quality criteria for which they contain at least one outlier: green = 0, yellow = 1, orange = 2 and red = 3 or more. A red diamond above a residue indicates a poor fit to the EM map for this residue (all-atom inclusion < 40%). Stretches of 2 or more consecutive residues without any outlier are shown as a green connector. Residues present in the sample, but not in the model, are shown in grey.

- Molecule 1: Photosystem I P700 chlorophyll a apoprotein A1

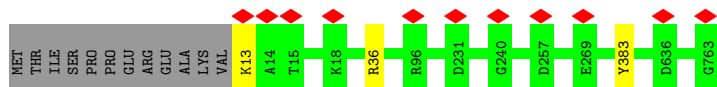


- Molecule 1: Photosystem I P700 chlorophyll a apoprotein A1

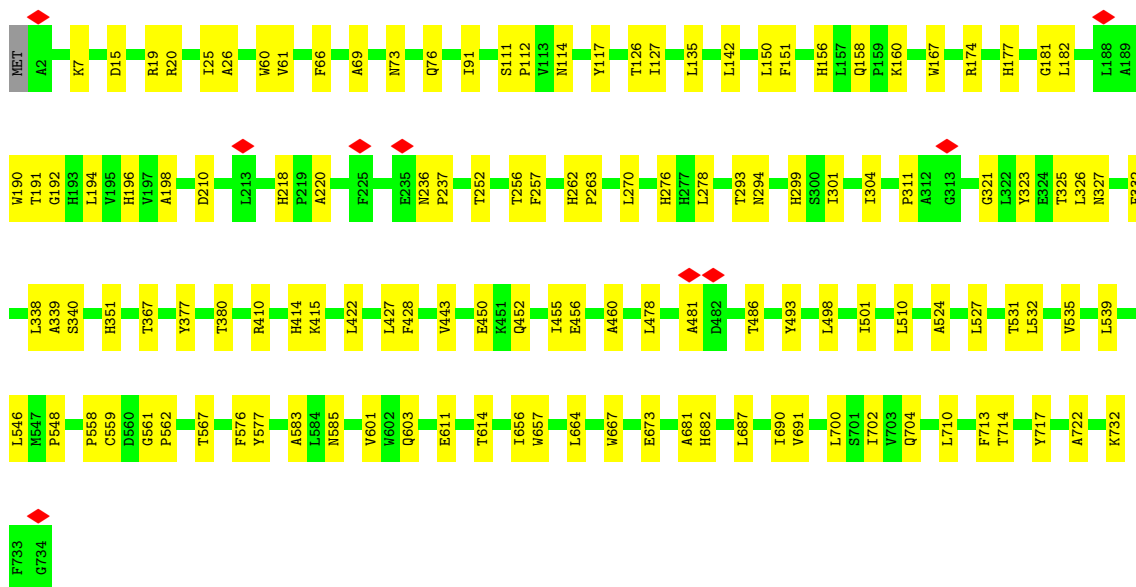
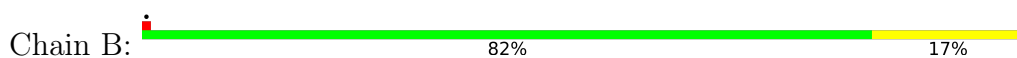




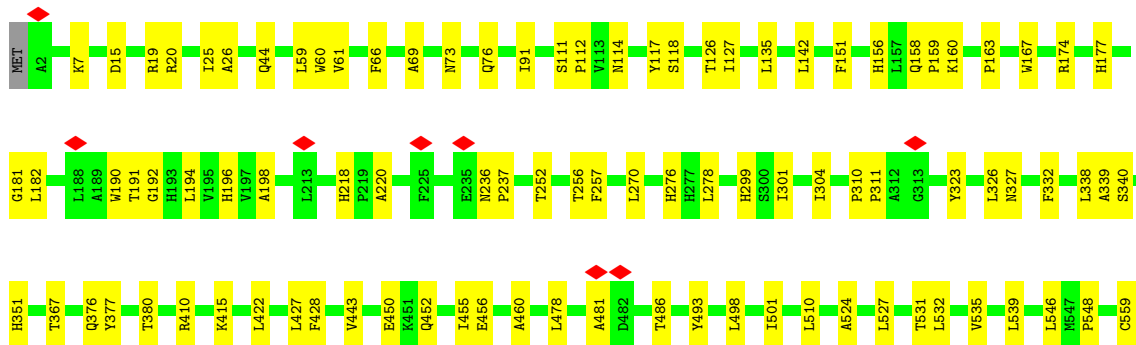
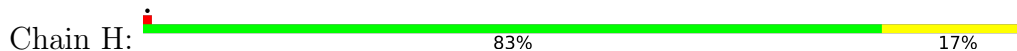
● Molecule 1: Photosystem I P700 chlorophyll a apoprotein A1



● Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2

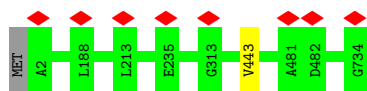


● Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2

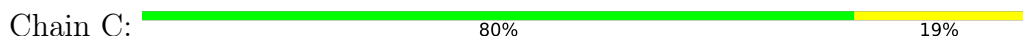




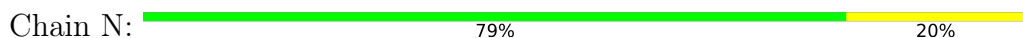
- Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2



- Molecule 3: Photosystem I iron-sulfur center



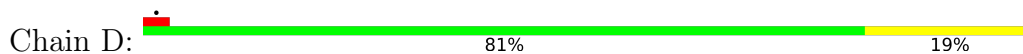
- Molecule 3: Photosystem I iron-sulfur center



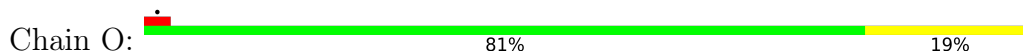
- Molecule 3: Photosystem I iron-sulfur center



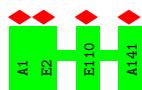
- Molecule 4: Photosystem I reaction center subunit II



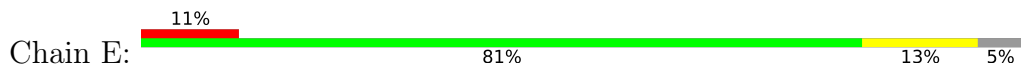
- Molecule 4: Photosystem I reaction center subunit II



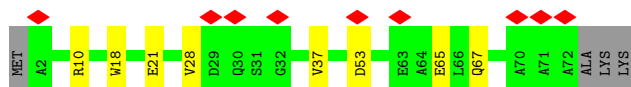
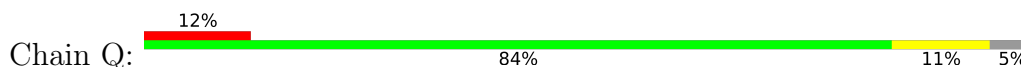
- Molecule 4: Photosystem I reaction center subunit II



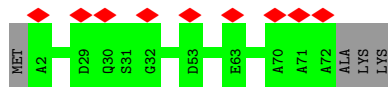
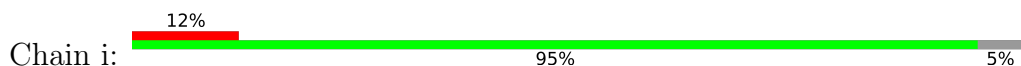
- Molecule 5: Photosystem I reaction center subunit IV



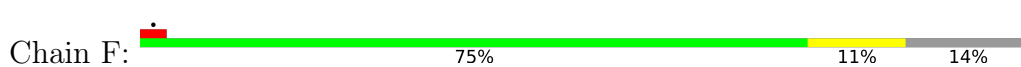
- Molecule 5: Photosystem I reaction center subunit IV



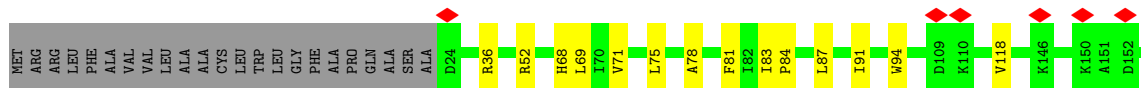
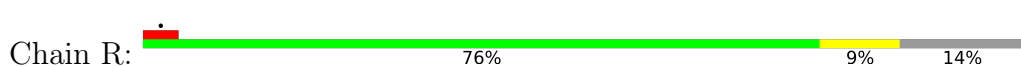
- Molecule 5: Photosystem I reaction center subunit IV



- Molecule 6: Photosystem I reaction center subunit III

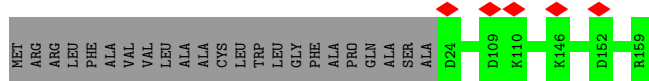
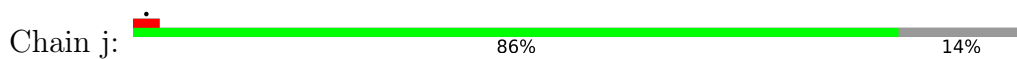


- Molecule 6: Photosystem I reaction center subunit III

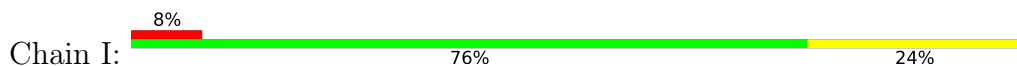


- Molecule 6: Photosystem I reaction center subunit III

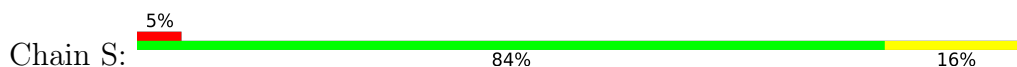




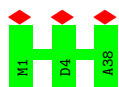
• Molecule 7: Photosystem I PsaI protein



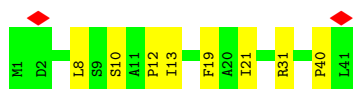
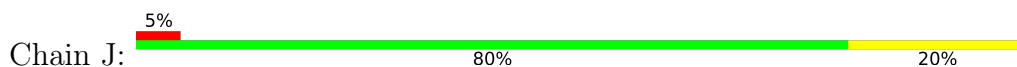
• Molecule 7: Photosystem I PsaI protein



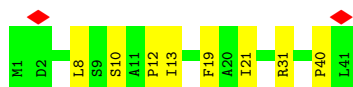
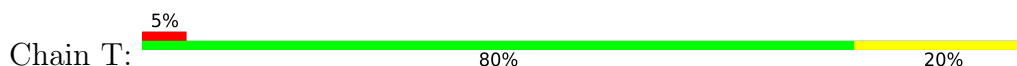
• Molecule 7: Photosystem I PsaI protein



• Molecule 8: Photosystem I reaction center subunit IX



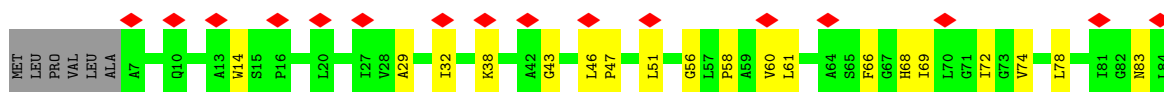
• Molecule 8: Photosystem I reaction center subunit IX



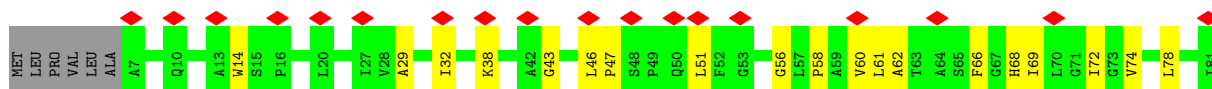
• Molecule 8: Photosystem I reaction center subunit IX



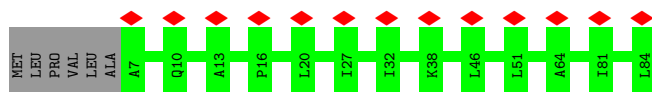
- Molecule 9: Photosystem I reaction center subunit PsaK



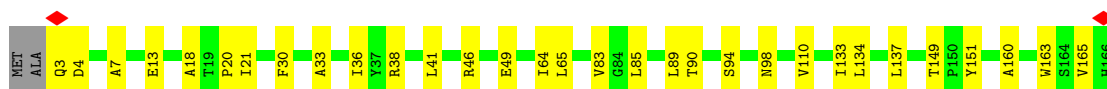
- Molecule 9: Photosystem I reaction center subunit PsaK



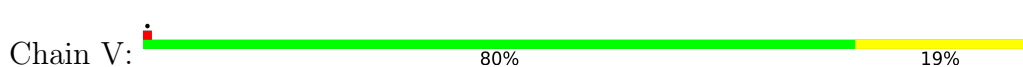
- Molecule 9: Photosystem I reaction center subunit PsaK



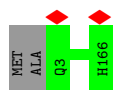
- Molecule 10: Photosystem I reaction center subunit XI



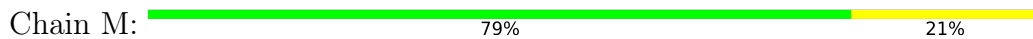
- Molecule 10: Photosystem I reaction center subunit XI



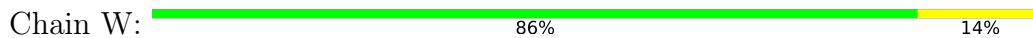
- Molecule 10: Photosystem I reaction center subunit XI



- Molecule 11: PsaM



• Molecule 11: PsaM

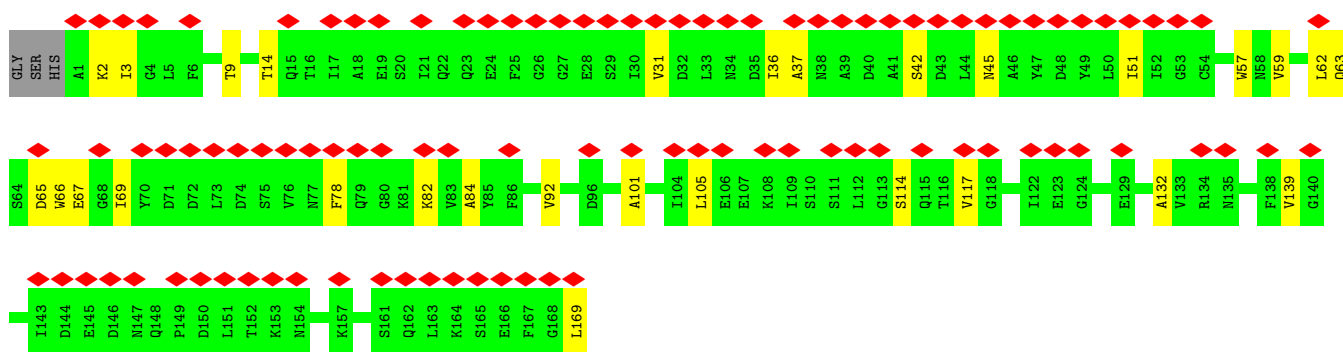
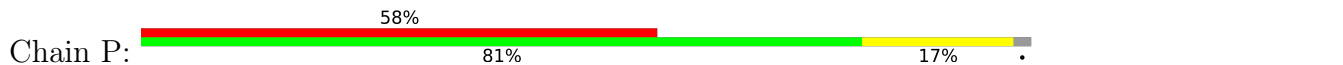


• Molecule 11: PsaM

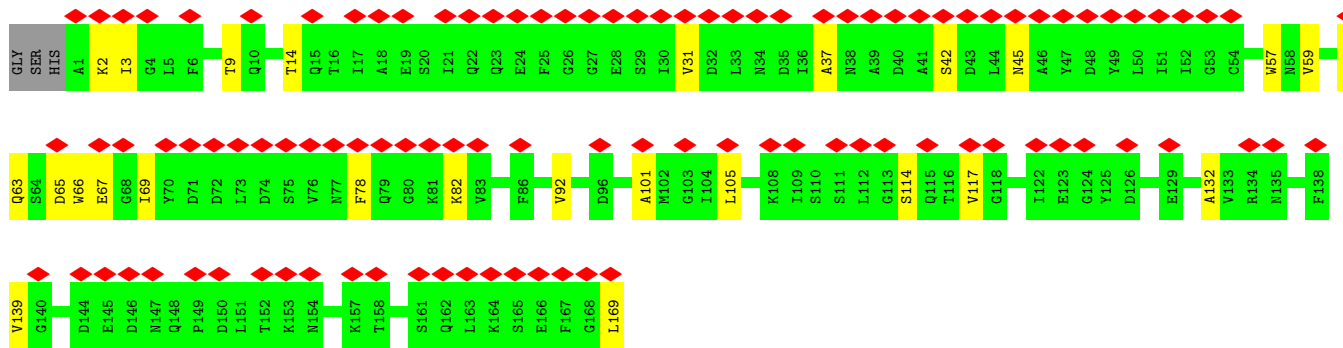
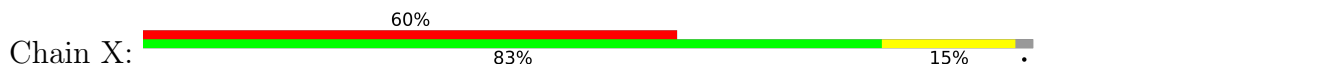


There are no outlier residues recorded for this chain.

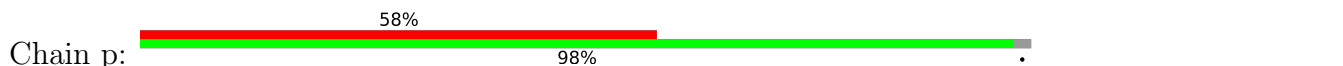
• Molecule 12: Flavodoxin

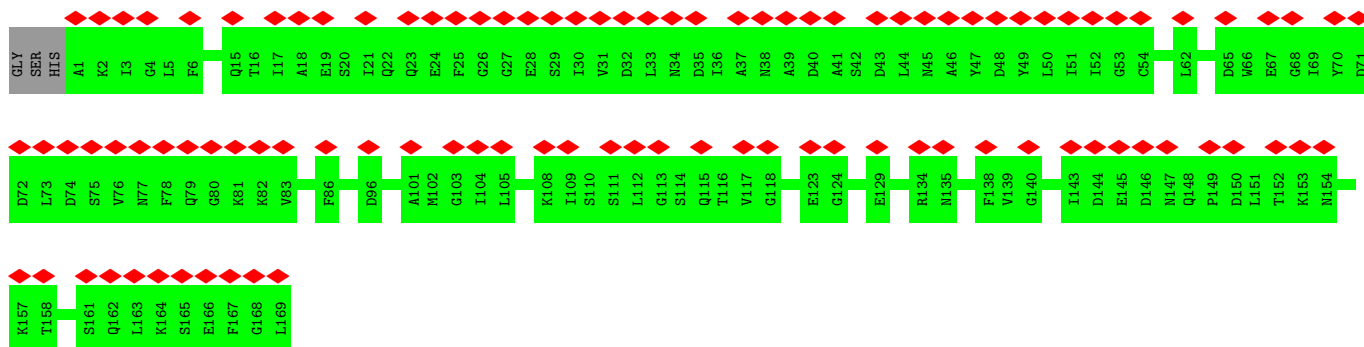


• Molecule 12: Flavodoxin

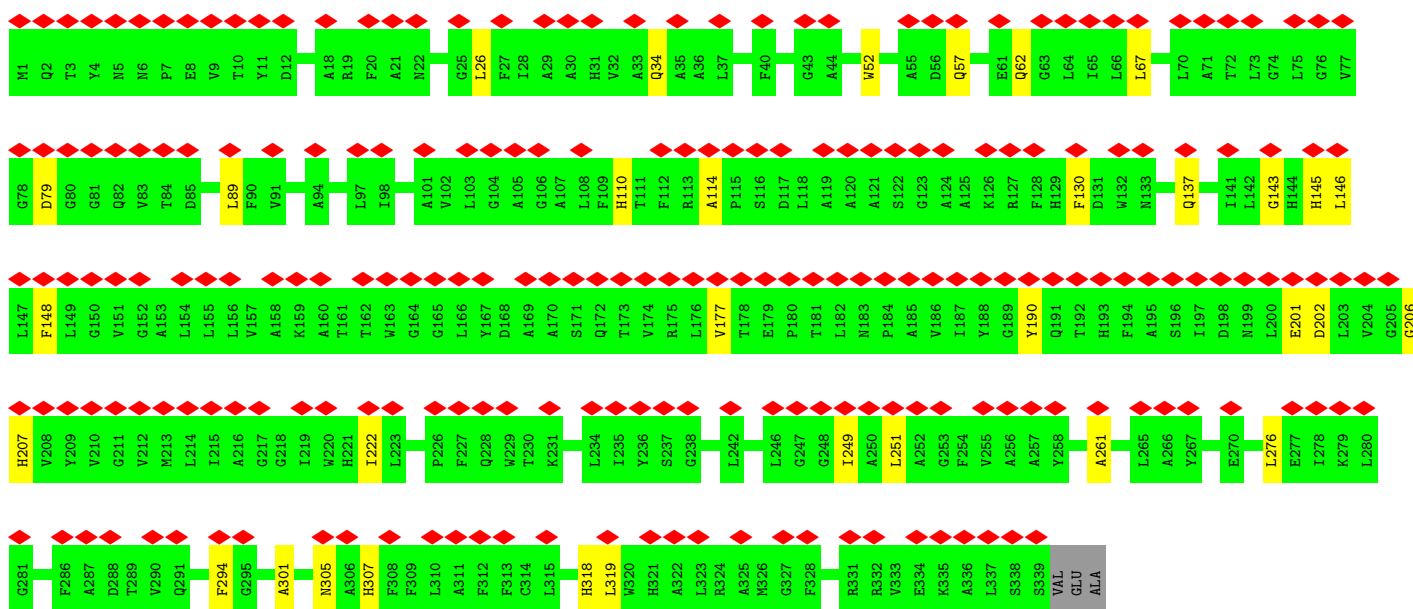
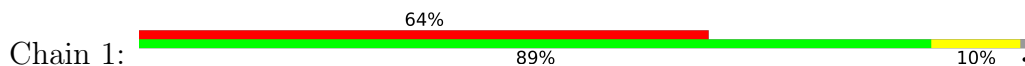


• Molecule 12: Flavodoxin

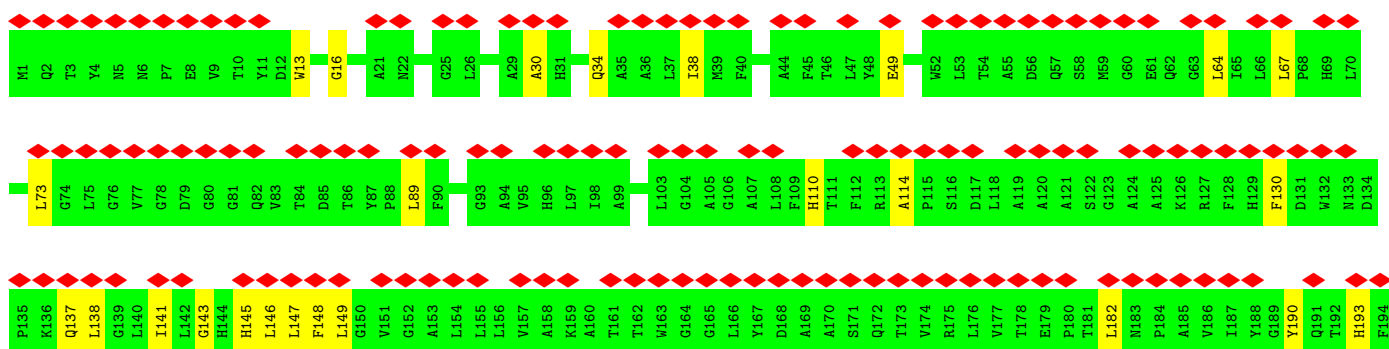
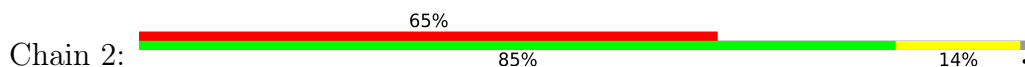


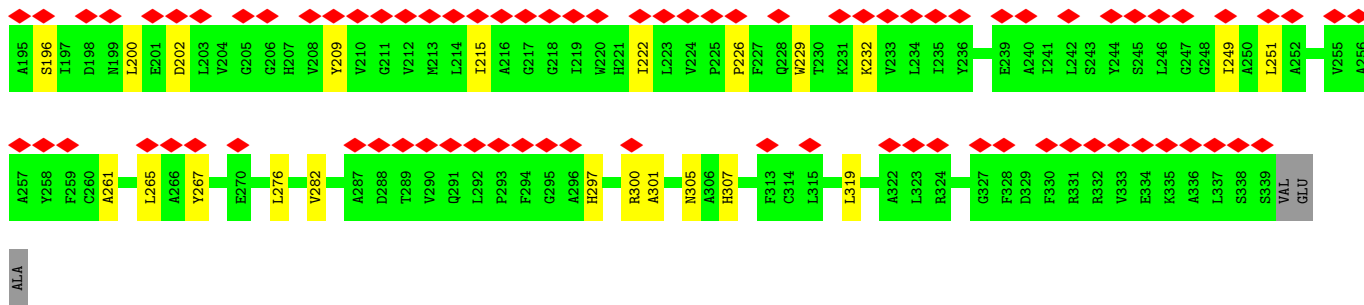


• Molecule 13: Iron stress-induced chlorophyll-binding protein

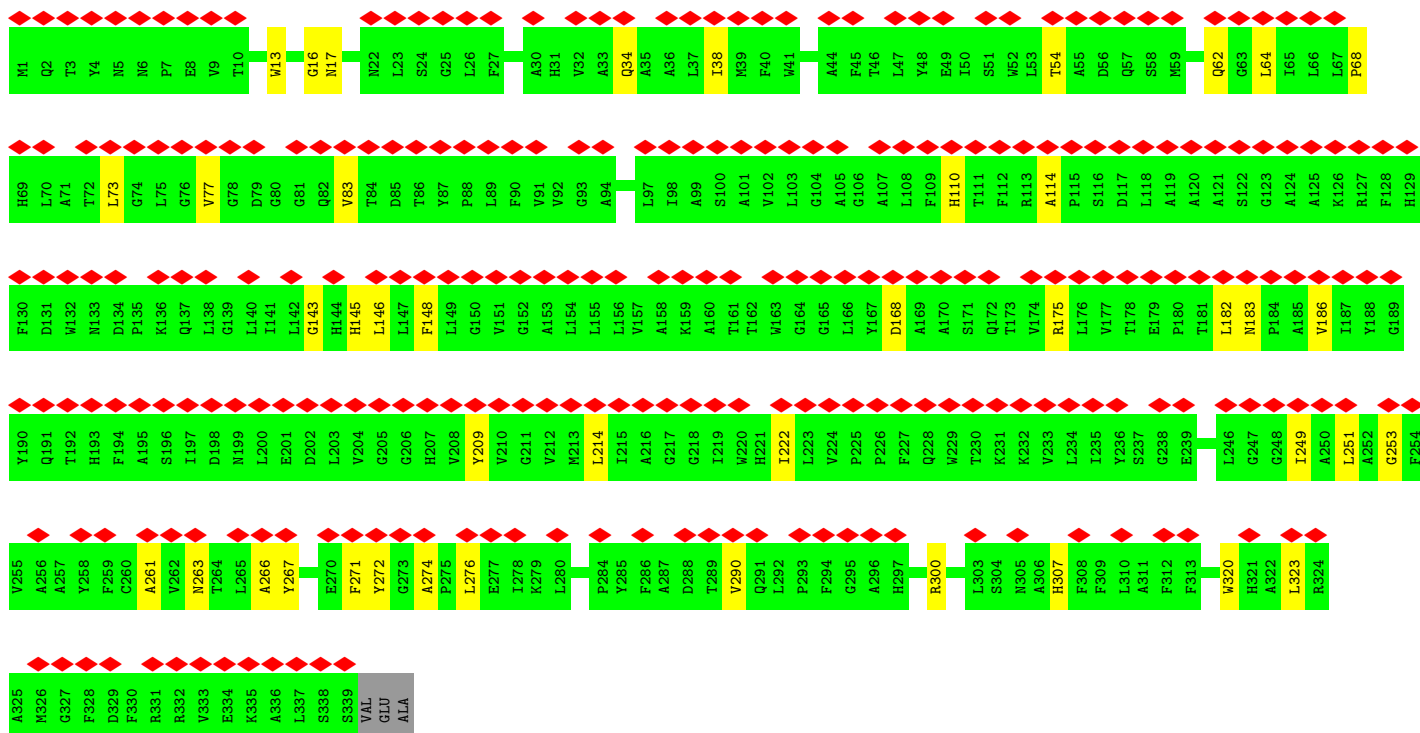
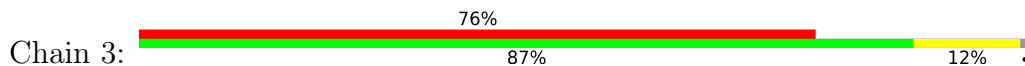


• Molecule 13: Iron stress-induced chlorophyll-binding protein

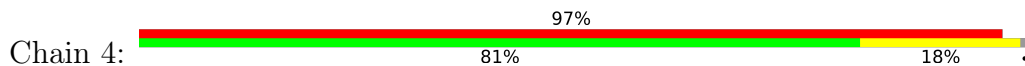


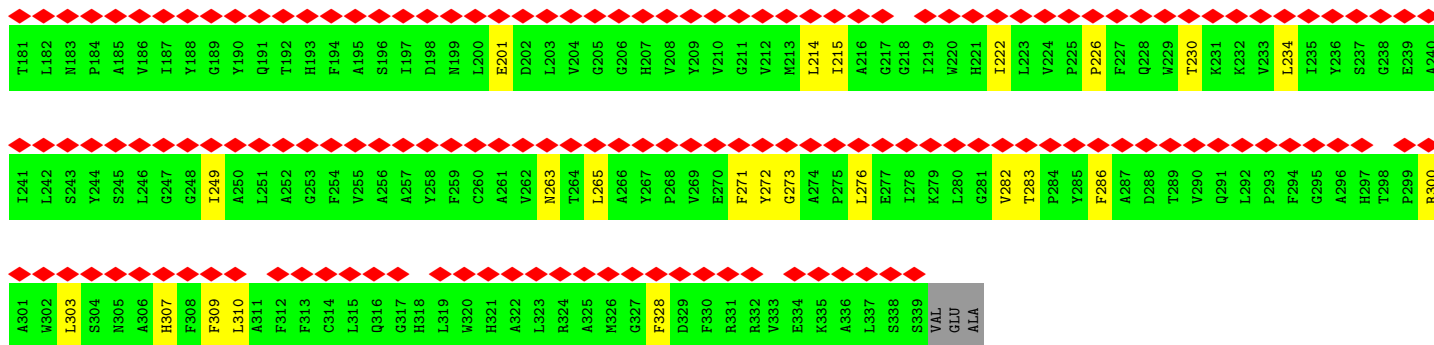


• Molecule 13: Iron stress-induced chlorophyll-binding protein

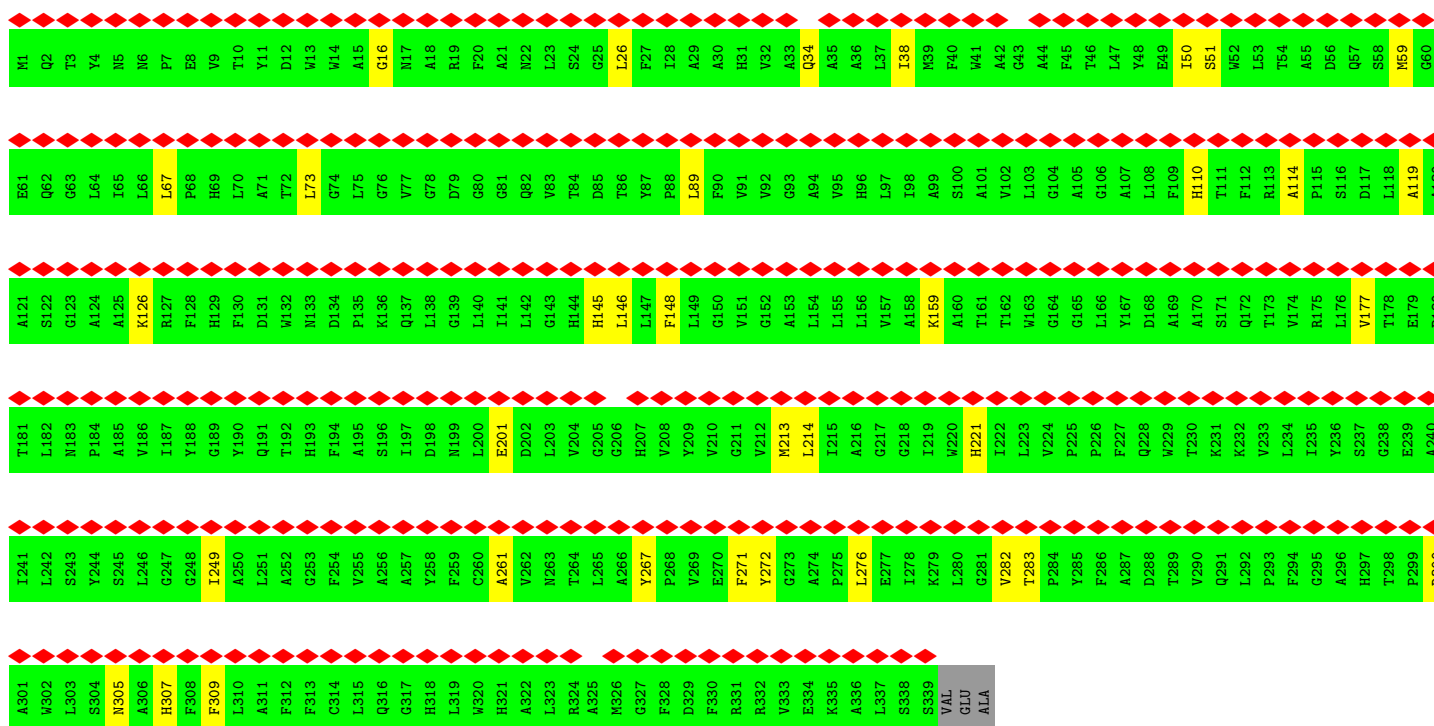
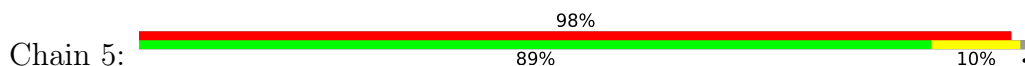


• Molecule 13: Iron stress-induced chlorophyll-binding protein

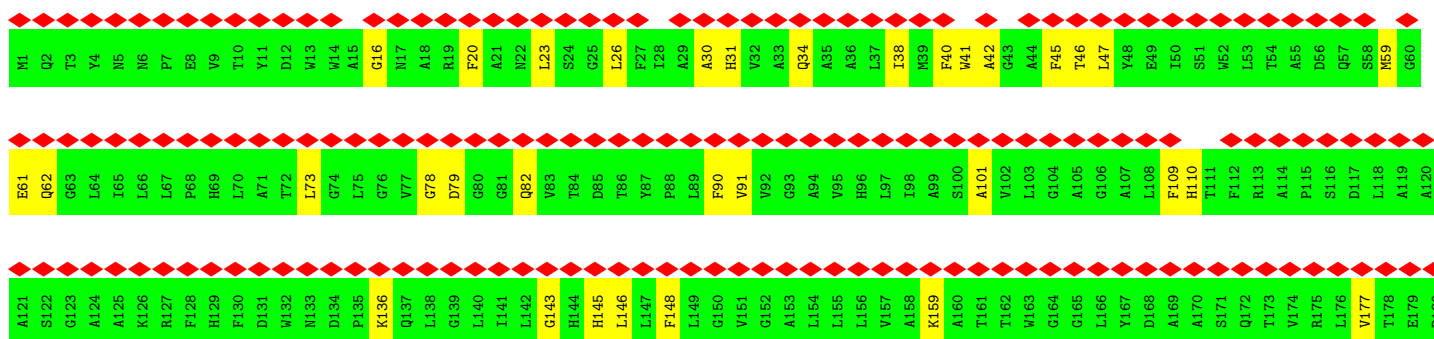
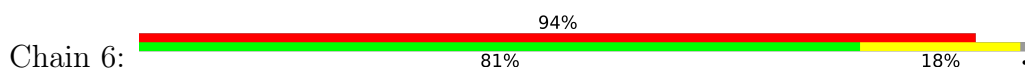


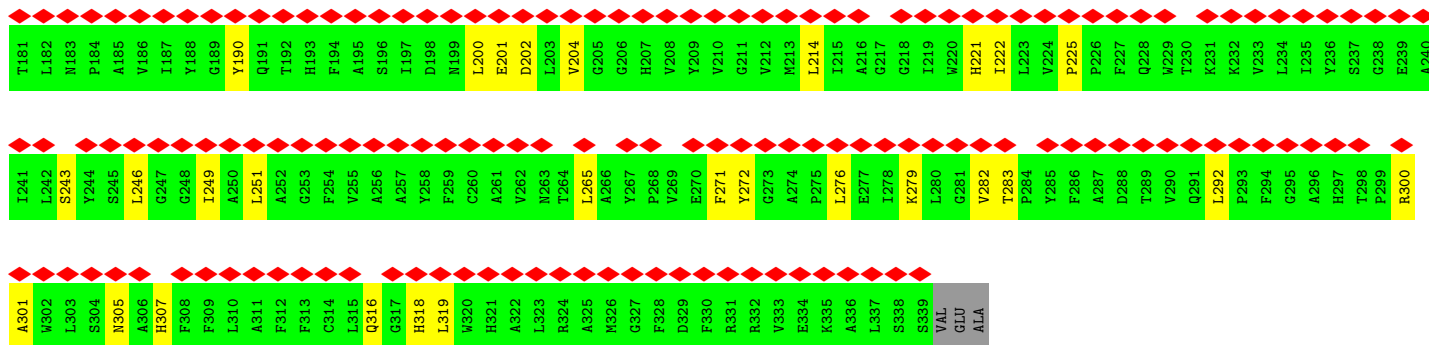


• Molecule 13: Iron stress-induced chlorophyll-binding protein

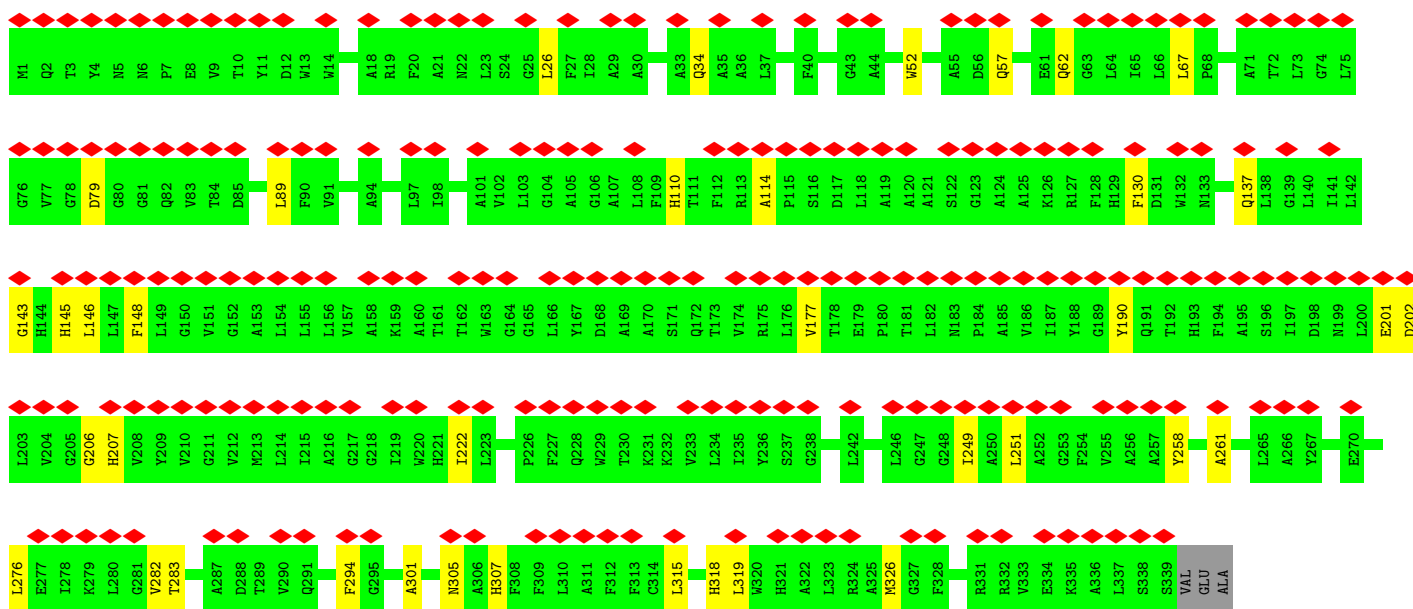
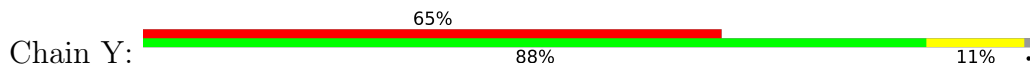


• Molecule 13: Iron stress-induced chlorophyll-binding protein

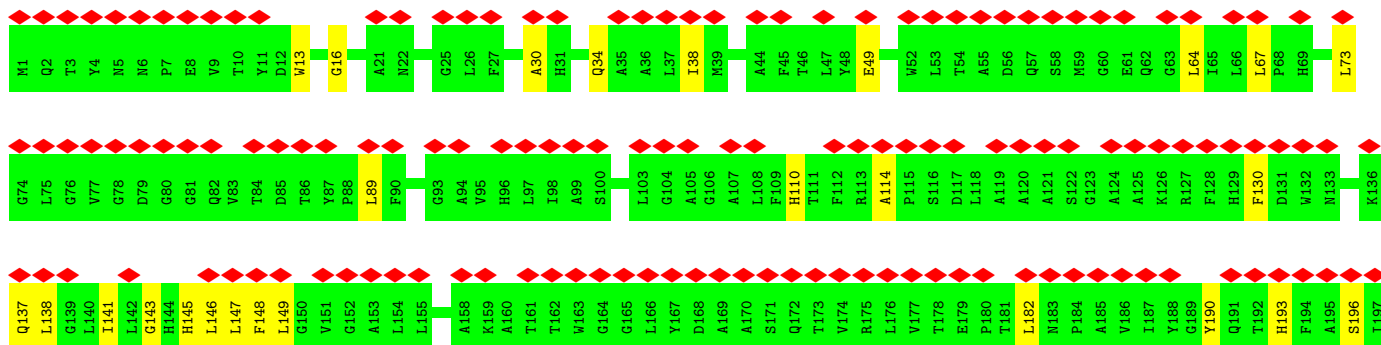
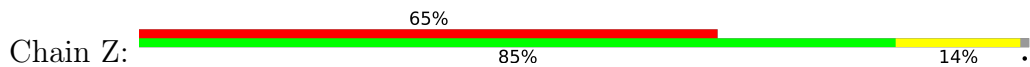


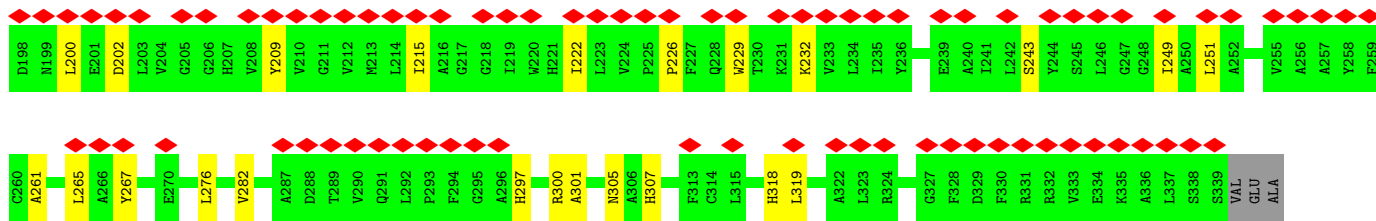


● Molecule 13: Iron stress-induced chlorophyll-binding protein

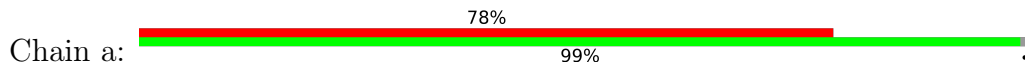


● Molecule 13: Iron stress-induced chlorophyll-binding protein

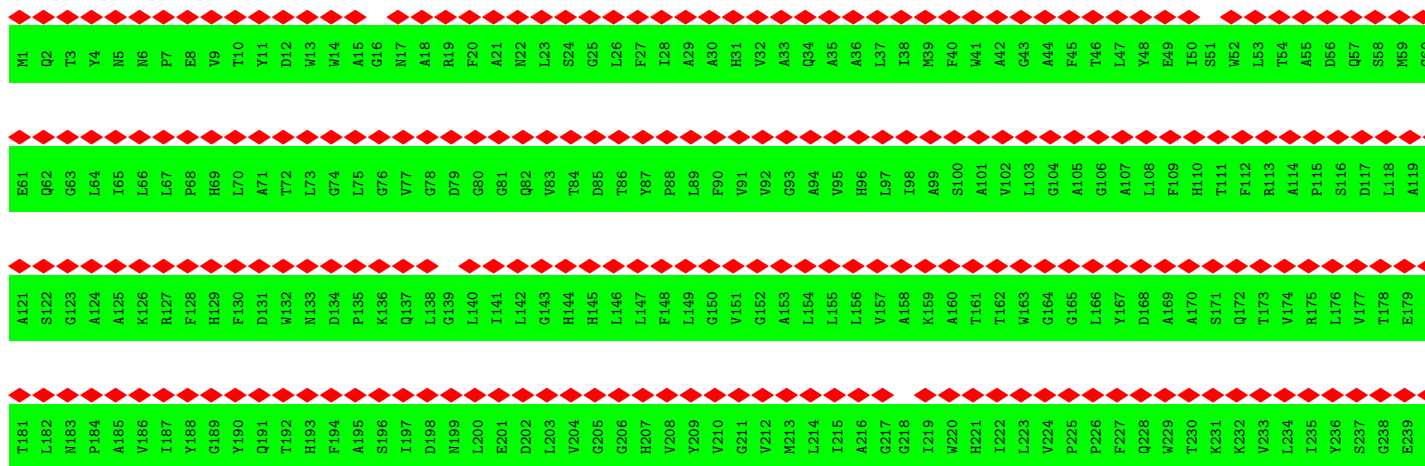




• Molecule 13: Iron stress-induced chlorophyll-binding protein



• Molecule 13: Iron stress-induced chlorophyll-binding protein



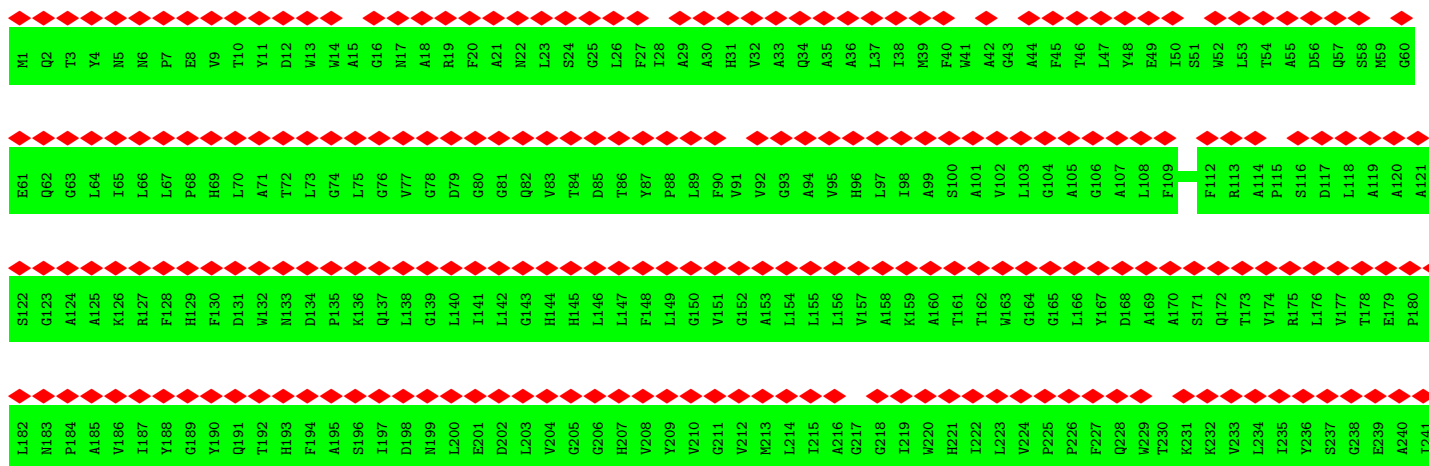


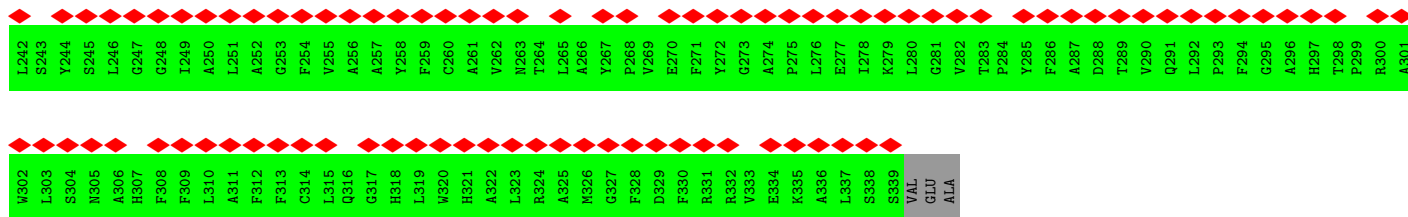


• Molecule 13: Iron stress-induced chlorophyll-binding protein



• Molecule 13: Iron stress-induced chlorophyll-binding protein

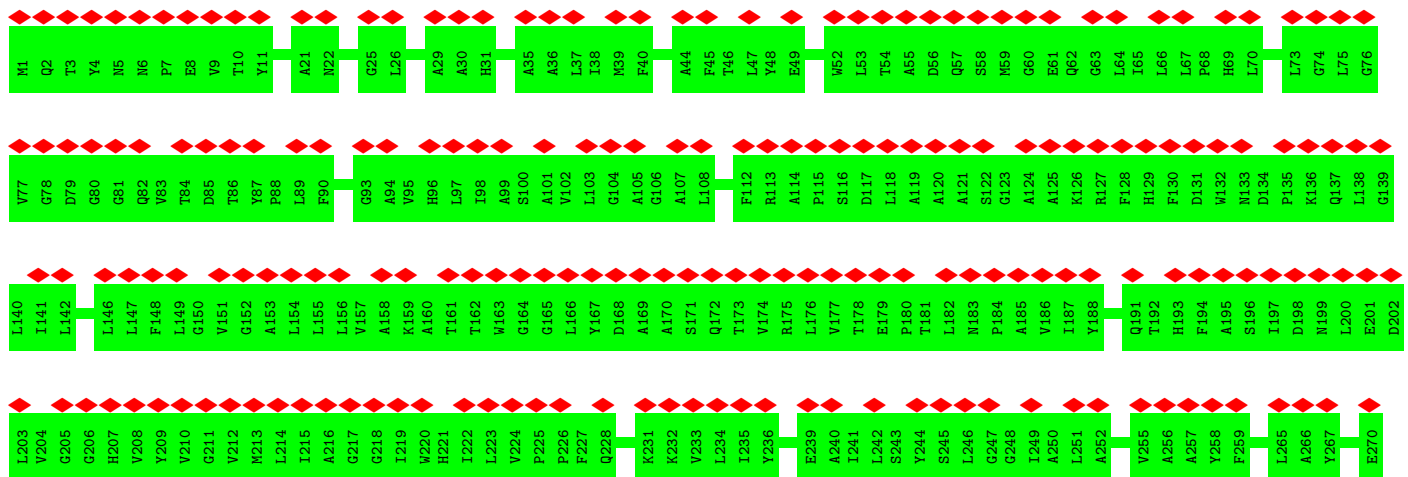


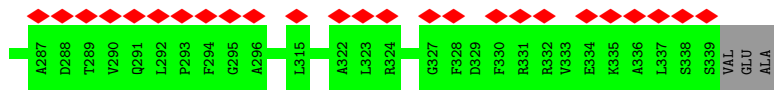


• Molecule 13: Iron stress-induced chlorophyll-binding protein



• Molecule 13: Iron stress-induced chlorophyll-binding protein





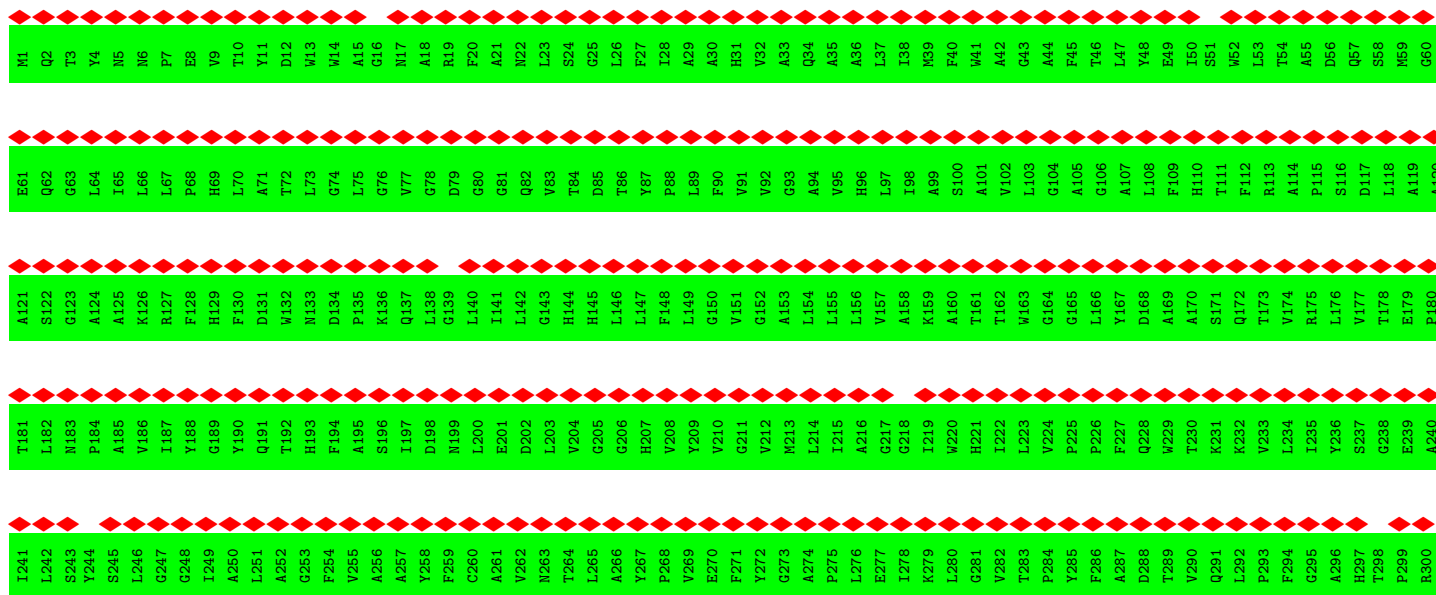
• Molecule 13: Iron stress-induced chlorophyll-binding protein

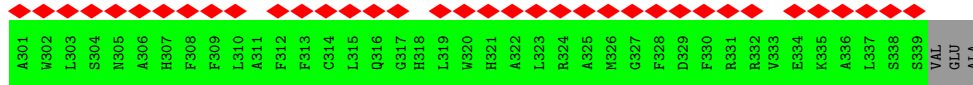
Chain s:



• Molecule 13: Iron stress-induced chlorophyll-binding protein

Chain t:

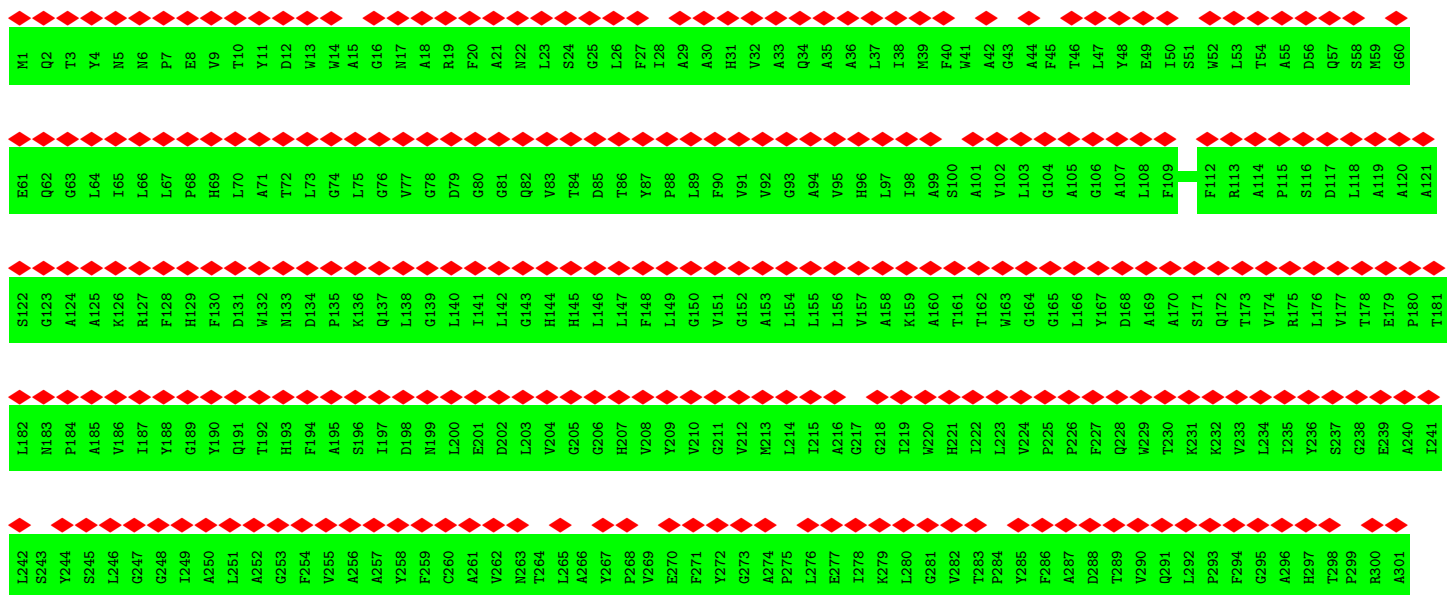




• Molecule 13: Iron stress-induced chlorophyll-binding protein



• Molecule 13: Iron stress-induced chlorophyll-binding protein



W302	L303	S304	N305	A306	H307	F308	F309	L310	A311	F312	F313	C314	L315	Q316	G317	H318	L319	W320	H321	A322	L323	R324	A325	M326	G327	F328	D329	F330	R331	R332	V333	E334	K335	A336	L337	S338	S339	V339	GLU	ALA
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-----	-----

## 4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C3	Depositor
Number of particles used	29295	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TALOS ARCTICA	Depositor
Voltage (kV)	200	Depositor
Electron dose ( $e^-/\text{\AA}^2$ )	50	Depositor
Minimum defocus (nm)	Not provided	
Maximum defocus (nm)	Not provided	
Magnification	Not provided	
Image detector	GATAN K2 SUMMIT (4k x 4k)	Depositor
Maximum map value	0.118	Depositor
Minimum map value	-0.042	Depositor
Average map value	0.000	Depositor
Map value standard deviation	0.003	Depositor
Recommended contour level	0.014	Depositor
Map size (Å)	480.0, 480.0, 480.0	wwPDB
Map dimensions	480, 480, 480	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	1.0, 1.0, 1.0	Depositor

## 5 Model quality [i](#)

### 5.1 Standard geometry [i](#)

Bond lengths and bond angles in the following residue types are not validated in this section: BCR, FMN, LHG, LMG, SQD, CLA, LMU, SF4, 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	A	0.54	0/6064	0.57	0/8274
1	G	0.54	0/6064	0.57	0/8274
1	e	0.54	0/6064	0.57	0/8274
2	B	0.46	0/5999	0.54	0/8199
2	H	0.46	0/5999	0.54	0/8199
2	f	0.46	0/5999	0.54	0/8199
3	C	0.44	0/608	0.56	0/823
3	N	0.44	0/608	0.56	0/823
3	g	0.44	0/608	0.56	0/823
4	D	0.48	0/1124	0.58	0/1516
4	O	0.48	0/1124	0.58	0/1516
4	h	0.48	0/1124	0.58	0/1516
5	E	0.44	0/553	0.53	0/750
5	Q	0.44	0/553	0.53	0/750
5	i	0.44	0/553	0.53	0/750
6	F	0.43	0/1062	0.54	0/1442
6	R	0.43	0/1062	0.54	0/1442
6	j	0.43	0/1062	0.54	0/1442
7	I	0.49	0/289	0.71	0/393
7	S	0.49	0/289	0.71	0/393
7	k	0.49	0/289	0.71	0/393
8	J	0.37	0/346	0.55	0/469
8	T	0.37	0/346	0.55	0/469
8	l	0.38	0/346	0.55	0/469
9	K	0.33	0/560	0.58	0/765
9	U	0.34	0/560	0.58	0/765
9	m	0.34	0/560	0.58	0/765
10	L	0.42	0/1242	0.55	0/1696
10	V	0.42	0/1242	0.55	0/1696
10	n	0.42	0/1242	0.55	0/1696
11	M	0.42	0/231	0.60	0/314
11	W	0.42	0/231	0.60	0/314

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z  >5	RMSZ	# Z  >5
11	o	0.42	0/231	0.60	0/314
12	P	0.31	0/1344	0.50	0/1822
12	X	0.31	0/1344	0.50	0/1822
12	p	0.31	0/1344	0.50	0/1822
13	1	0.30	0/2689	0.48	0/3678
13	2	0.30	0/2689	0.48	0/3678
13	3	0.28	0/2689	0.47	0/3678
13	4	0.28	0/2689	0.49	0/3678
13	5	0.29	0/2689	0.48	0/3678
13	6	0.28	0/2689	0.47	0/3678
13	Y	0.30	0/2689	0.48	0/3678
13	Z	0.30	0/2689	0.48	0/3678
13	a	0.28	0/2689	0.47	0/3678
13	b	0.28	0/2689	0.49	0/3678
13	c	0.29	0/2689	0.48	0/3678
13	d	0.28	0/2689	0.48	0/3678
13	q	0.30	0/2689	0.48	0/3678
13	r	0.30	0/2689	0.49	0/3678
13	s	0.28	0/2689	0.47	0/3678
13	t	0.28	0/2689	0.49	0/3678
13	u	0.29	0/2689	0.48	0/3678
13	v	0.29	0/2689	0.48	0/3678
All	All	0.40	0/106668	0.52	0/145593

There are no bond length outliers.

There are no bond angle outliers.

There are no chirality outliers.

There are no planarity outliers.

## 5.2 Too-close contacts

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	A	5865	0	5744	102	0
1	G	5865	0	5744	103	0
1	e	5865	0	5744	0	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
2	B	5789	0	5575	104	0
2	H	5789	0	5575	107	0
2	f	5789	0	5575	0	0
3	C	598	0	579	9	0
3	N	598	0	579	10	0
3	g	598	0	579	0	0
4	D	1098	0	1099	20	0
4	O	1098	0	1099	20	0
4	h	1098	0	1099	0	0
5	E	543	0	525	7	0
5	Q	543	0	525	6	0
5	i	543	0	525	0	0
6	F	1036	0	1031	17	0
6	R	1036	0	1031	13	0
6	j	1036	0	1031	0	0
7	I	282	0	291	8	0
7	S	282	0	291	5	0
7	k	282	0	291	0	0
8	J	335	0	344	8	0
8	T	335	0	344	8	0
8	l	335	0	344	0	0
9	K	549	0	597	15	0
9	U	549	0	597	16	0
9	m	549	0	597	0	0
10	L	1210	0	1206	34	0
10	V	1210	0	1206	31	0
10	n	1210	0	1206	0	0
11	M	228	0	246	6	0
11	W	228	0	246	4	0
11	o	228	0	246	0	0
12	P	1318	0	1233	19	0
12	X	1318	0	1233	17	0
12	p	1318	0	1233	0	0
13	1	2605	0	2564	36	0
13	2	2605	0	2564	42	0
13	3	2605	0	2564	37	0
13	4	2605	0	2564	44	0
13	5	2605	0	2564	31	0
13	6	2605	0	2564	46	0
13	Y	2605	0	2564	40	0
13	Z	2605	0	2564	44	0
13	a	2605	0	2564	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
13	b	2605	0	2564	0	0
13	c	2605	0	2564	0	0
13	d	2605	0	2564	0	0
13	q	2605	0	2564	0	0
13	r	2605	0	2564	0	0
13	s	2605	0	2564	0	0
13	t	2605	0	2564	0	0
13	u	2605	0	2564	0	0
13	v	2605	0	2564	0	0
14	1	765	0	561	26	0
14	2	850	0	720	31	0
14	3	785	0	593	22	0
14	4	765	0	561	21	0
14	5	785	0	600	20	0
14	6	785	0	600	25	0
14	A	2712	0	2766	133	0
14	B	2515	0	2595	130	0
14	F	90	0	66	4	0
14	G	2712	0	2766	138	0
14	H	2515	0	2595	125	0
14	J	100	0	82	4	0
14	K	148	0	118	3	0
14	L	185	0	190	9	0
14	R	90	0	66	4	0
14	T	100	0	82	4	0
14	U	148	0	118	3	0
14	V	185	0	190	13	0
14	Y	765	0	561	29	0
14	Z	850	0	720	32	0
14	a	785	0	593	0	0
14	b	765	0	561	0	0
14	c	785	0	600	0	0
14	d	785	0	600	0	0
14	e	2712	0	2766	0	0
14	f	2515	0	2595	0	0
14	j	90	0	66	0	0
14	l	100	0	82	0	0
14	m	148	0	118	0	0
14	n	185	0	190	0	0
14	q	765	0	561	0	0
14	r	850	0	720	0	0
14	s	785	0	593	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
14	t	765	0	561	0	0
14	u	785	0	600	0	0
14	v	785	0	600	0	0
15	A	33	0	46	4	0
15	B	33	0	46	4	0
15	G	33	0	46	3	0
15	H	33	0	46	5	0
15	e	33	0	46	0	0
15	f	33	0	46	0	0
16	A	8	0	0	0	0
16	C	16	0	0	0	0
16	G	8	0	0	0	0
16	N	16	0	0	0	0
16	e	8	0	0	0	0
16	g	16	0	0	0	0
17	1	160	0	224	16	0
17	2	160	0	224	16	0
17	3	160	0	224	5	0
17	4	160	0	224	7	0
17	5	160	0	224	7	0
17	6	160	0	224	12	0
17	A	240	0	336	22	0
17	B	280	0	392	31	0
17	F	40	0	56	6	0
17	G	240	0	336	20	0
17	H	280	0	392	29	0
17	I	40	0	56	4	0
17	J	120	0	168	15	0
17	K	40	0	56	3	0
17	L	160	0	224	18	0
17	M	40	0	56	2	0
17	R	40	0	56	6	0
17	S	40	0	56	3	0
17	T	120	0	168	14	0
17	U	40	0	56	3	0
17	V	160	0	224	22	0
17	W	40	0	56	3	0
17	Y	160	0	224	13	0
17	Z	160	0	224	16	0
17	a	160	0	224	0	0
17	b	160	0	224	0	0
17	c	160	0	224	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
17	d	160	0	224	0	0
17	e	240	0	336	0	0
17	f	280	0	392	0	0
17	j	40	0	56	0	0
17	k	40	0	56	0	0
17	l	120	0	168	0	0
17	m	40	0	56	0	0
17	n	160	0	224	0	0
17	o	40	0	56	0	0
17	q	160	0	224	0	0
17	r	160	0	224	0	0
17	s	160	0	224	0	0
17	t	160	0	224	0	0
17	u	160	0	224	0	0
17	v	160	0	224	0	0
18	A	374	0	493	32	0
18	B	78	0	96	6	0
18	G	374	0	493	32	0
18	H	78	0	96	6	0
18	I	48	0	69	2	0
18	L	127	0	170	7	0
18	S	48	0	69	0	0
18	V	127	0	170	14	0
18	e	374	0	493	0	0
18	f	78	0	96	0	0
18	k	48	0	69	0	0
18	n	127	0	170	0	0
19	A	58	0	76	3	0
19	B	35	0	46	1	0
19	G	58	0	76	3	0
19	H	35	0	46	1	0
19	J	22	0	28	0	0
19	T	22	0	28	0	0
19	e	58	0	76	0	0
19	f	35	0	46	0	0
19	l	22	0	28	0	0
20	B	53	0	76	5	0
20	H	53	0	76	6	0
20	J	32	0	34	0	0
20	T	32	0	34	1	0
20	f	53	0	76	0	0
20	l	32	0	34	0	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
21	1	32	0	28	1	0
21	2	28	0	20	0	0
21	3	28	0	20	2	0
21	4	26	0	16	0	0
21	5	26	0	16	0	0
21	6	26	0	16	0	0
21	B	40	0	42	8	0
21	H	40	0	42	9	0
21	L	46	0	58	4	0
21	V	46	0	58	6	0
21	Y	32	0	28	1	0
21	Z	28	0	20	0	0
21	a	28	0	20	0	0
21	b	26	0	16	0	0
21	c	26	0	16	0	0
21	d	26	0	16	0	0
21	f	40	0	42	0	0
21	n	46	0	58	0	0
21	q	32	0	28	0	0
21	r	28	0	20	0	0
21	s	28	0	20	0	0
21	t	26	0	16	0	0
21	u	26	0	16	0	0
21	v	26	0	16	0	0
22	P	31	0	19	1	0
22	X	31	0	19	1	0
22	p	31	0	19	0	0
23	A	9	0	0	1	0
23	B	7	0	0	0	0
23	F	1	0	0	0	0
23	G	9	0	0	1	0
23	H	7	0	0	0	0
23	L	1	0	0	0	0
23	R	1	0	0	0	0
23	V	1	0	0	0	0
23	e	9	0	0	0	0
23	f	7	0	0	0	0
23	j	1	0	0	0	0
23	n	1	0	0	0	0
All	All	144312	0	142227	1516	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 9.

The worst 5 of 1516 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)
10:L:3:GLN:HG2	10:L:4:ASP:H	0.93	1.06
10:V:3:GLN:HG2	10:V:4:ASP:H	0.93	1.05
10:L:3:GLN:HG2	10:L:4:ASP:N	1.75	1.00
10:V:3:GLN:HG2	10:V:4:ASP:N	1.75	0.98
10:L:94:SER:HB2	14:V:1501:CLA:HMD1	1.54	0.87

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

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

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
1	A	749/763 (98%)	724 (97%)	25 (3%)	0	100	100
1	G	749/763 (98%)	724 (97%)	25 (3%)	0	100	100
1	e	749/763 (98%)	724 (97%)	25 (3%)	0	100	100
2	B	731/734 (100%)	710 (97%)	21 (3%)	0	100	100
2	H	731/734 (100%)	710 (97%)	21 (3%)	0	100	100
2	f	731/734 (100%)	710 (97%)	21 (3%)	0	100	100
3	C	78/81 (96%)	77 (99%)	1 (1%)	0	100	100
3	N	78/81 (96%)	77 (99%)	1 (1%)	0	100	100
3	g	78/81 (96%)	77 (99%)	1 (1%)	0	100	100
4	D	139/141 (99%)	133 (96%)	6 (4%)	0	100	100
4	O	139/141 (99%)	133 (96%)	6 (4%)	0	100	100
4	h	139/141 (99%)	133 (96%)	6 (4%)	0	100	100
5	E	69/75 (92%)	68 (99%)	1 (1%)	0	100	100
5	Q	69/75 (92%)	68 (99%)	1 (1%)	0	100	100

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
5	i	69/75 (92%)	68 (99%)	1 (1%)	0	100	100
6	F	134/159 (84%)	129 (96%)	5 (4%)	0	100	100
6	R	134/159 (84%)	129 (96%)	5 (4%)	0	100	100
6	j	134/159 (84%)	129 (96%)	5 (4%)	0	100	100
7	I	36/38 (95%)	35 (97%)	1 (3%)	0	100	100
7	S	36/38 (95%)	35 (97%)	1 (3%)	0	100	100
7	k	36/38 (95%)	35 (97%)	1 (3%)	0	100	100
8	J	39/41 (95%)	39 (100%)	0	0	100	100
8	T	39/41 (95%)	39 (100%)	0	0	100	100
8	l	39/41 (95%)	39 (100%)	0	0	100	100
9	K	76/84 (90%)	75 (99%)	1 (1%)	0	100	100
9	U	76/84 (90%)	75 (99%)	1 (1%)	0	100	100
9	m	76/84 (90%)	75 (99%)	1 (1%)	0	100	100
10	L	162/166 (98%)	158 (98%)	4 (2%)	0	100	100
10	V	162/166 (98%)	158 (98%)	4 (2%)	0	100	100
10	n	162/166 (98%)	158 (98%)	4 (2%)	0	100	100
11	M	27/29 (93%)	27 (100%)	0	0	100	100
11	W	27/29 (93%)	27 (100%)	0	0	100	100
11	o	27/29 (93%)	27 (100%)	0	0	100	100
12	P	167/172 (97%)	159 (95%)	8 (5%)	0	100	100
12	X	167/172 (97%)	159 (95%)	8 (5%)	0	100	100
12	p	167/172 (97%)	159 (95%)	8 (5%)	0	100	100
13	1	337/342 (98%)	328 (97%)	9 (3%)	0	100	100
13	2	337/342 (98%)	330 (98%)	7 (2%)	0	100	100
13	3	337/342 (98%)	330 (98%)	7 (2%)	0	100	100
13	4	337/342 (98%)	326 (97%)	11 (3%)	0	100	100
13	5	337/342 (98%)	326 (97%)	11 (3%)	0	100	100
13	6	337/342 (98%)	328 (97%)	9 (3%)	0	100	100
13	Y	337/342 (98%)	328 (97%)	9 (3%)	0	100	100
13	Z	337/342 (98%)	330 (98%)	7 (2%)	0	100	100
13	a	337/342 (98%)	330 (98%)	7 (2%)	0	100	100

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
13	b	337/342 (98%)	326 (97%)	11 (3%)	0	100	100
13	c	337/342 (98%)	326 (97%)	11 (3%)	0	100	100
13	d	337/342 (98%)	328 (97%)	9 (3%)	0	100	100
13	q	337/342 (98%)	328 (97%)	9 (3%)	0	100	100
13	r	337/342 (98%)	330 (98%)	7 (2%)	0	100	100
13	s	337/342 (98%)	330 (98%)	7 (2%)	0	100	100
13	t	337/342 (98%)	326 (97%)	11 (3%)	0	100	100
13	u	337/342 (98%)	326 (97%)	11 (3%)	0	100	100
13	v	337/342 (98%)	328 (97%)	9 (3%)	0	100	100
All	All	13287/13605 (98%)	12906 (97%)	381 (3%)	0	100	100

There are no Ramachandran outliers to report.

### 5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	600/611 (98%)	597 (100%)	3 (0%)	88	93
1	G	600/611 (98%)	597 (100%)	3 (0%)	88	93
1	e	600/611 (98%)	597 (100%)	3 (0%)	88	93
2	B	583/584 (100%)	582 (100%)	1 (0%)	93	97
2	H	583/584 (100%)	582 (100%)	1 (0%)	93	97
2	f	583/584 (100%)	582 (100%)	1 (0%)	93	97
3	C	67/68 (98%)	67 (100%)	0	100	100
3	N	67/68 (98%)	67 (100%)	0	100	100
3	g	67/68 (98%)	67 (100%)	0	100	100
4	D	114/114 (100%)	114 (100%)	0	100	100
4	O	114/114 (100%)	114 (100%)	0	100	100
4	h	114/114 (100%)	114 (100%)	0	100	100

Continued on next page...



*Continued from previous page...*

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
5	E	56/59 (95%)	56 (100%)	0	100	100
5	Q	56/59 (95%)	56 (100%)	0	100	100
5	i	56/59 (95%)	56 (100%)	0	100	100
6	F	105/121 (87%)	105 (100%)	0	100	100
6	R	105/121 (87%)	105 (100%)	0	100	100
6	j	105/121 (87%)	105 (100%)	0	100	100
7	I	30/30 (100%)	30 (100%)	0	100	100
7	S	30/30 (100%)	30 (100%)	0	100	100
7	k	30/30 (100%)	30 (100%)	0	100	100
8	J	35/35 (100%)	35 (100%)	0	100	100
8	T	35/35 (100%)	35 (100%)	0	100	100
8	l	35/35 (100%)	35 (100%)	0	100	100
9	K	56/61 (92%)	56 (100%)	0	100	100
9	U	56/61 (92%)	56 (100%)	0	100	100
9	m	56/61 (92%)	56 (100%)	0	100	100
10	L	127/128 (99%)	127 (100%)	0	100	100
10	V	127/128 (99%)	127 (100%)	0	100	100
10	n	127/128 (99%)	127 (100%)	0	100	100
11	M	24/24 (100%)	24 (100%)	0	100	100
11	W	24/24 (100%)	24 (100%)	0	100	100
11	o	24/24 (100%)	24 (100%)	0	100	100
12	P	140/142 (99%)	140 (100%)	0	100	100
12	X	140/142 (99%)	140 (100%)	0	100	100
12	p	140/142 (99%)	140 (100%)	0	100	100
13	1	257/259 (99%)	257 (100%)	0	100	100
13	2	257/259 (99%)	257 (100%)	0	100	100
13	3	257/259 (99%)	257 (100%)	0	100	100
13	4	257/259 (99%)	257 (100%)	0	100	100
13	5	257/259 (99%)	257 (100%)	0	100	100
13	6	257/259 (99%)	257 (100%)	0	100	100
13	Y	257/259 (99%)	257 (100%)	0	100	100

*Continued on next page...*

Continued from previous page...

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
13	Z	257/259 (99%)	257 (100%)	0	100	100
13	a	257/259 (99%)	257 (100%)	0	100	100
13	b	257/259 (99%)	257 (100%)	0	100	100
13	c	257/259 (99%)	257 (100%)	0	100	100
13	d	257/259 (99%)	257 (100%)	0	100	100
13	q	257/259 (99%)	257 (100%)	0	100	100
13	r	257/259 (99%)	257 (100%)	0	100	100
13	s	257/259 (99%)	257 (100%)	0	100	100
13	t	257/259 (99%)	257 (100%)	0	100	100
13	u	257/259 (99%)	257 (100%)	0	100	100
13	v	257/259 (99%)	257 (100%)	0	100	100
All	All	10437/10593 (98%)	10425 (100%)	12 (0%)	93	97

5 of 12 residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
2	H	443	VAL
1	e	13	LYS
2	f	443	VAL
1	e	36	ARG
2	B	443	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. 5 of 62 such sidechains are listed below:

Mol	Chain	Res	Type
2	H	34	HIS
4	h	71	GLN
5	Q	67	GLN
2	f	603	GLN
13	t	62	GLN

### 5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

## 5.5 Carbohydrates [i](#)

There are no monosaccharides in this entry.

## 5.6 Ligand geometry [i](#)

843 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
14	CLA	1	512	13	45,53,73	1.74	8 (17%)	52,89,113	1.49	5 (9%)
21	SQD	r	822	-	27,28,54	1.22	4 (14%)	36,39,65	1.86	10 (27%)
14	CLA	d	509	13	45,53,73	1.75	7 (15%)	52,89,113	1.69	7 (13%)
14	CLA	G	1117	1	65,73,73	1.47	10 (15%)	76,113,113	1.57	10 (13%)
14	CLA	t	512	13	45,53,73	1.74	6 (13%)	52,89,113	1.60	6 (11%)
17	BCR	4	521	-	41,41,41	0.67	0	56,56,56	1.79	11 (19%)
14	CLA	2	503	13	65,73,73	1.45	6 (9%)	76,113,113	1.47	8 (10%)
14	CLA	e	1102	1	55,63,73	1.56	9 (16%)	64,101,113	1.62	7 (10%)
17	BCR	H	4014	-	41,41,41	0.83	0	56,56,56	1.89	23 (41%)
14	CLA	u	518	13	45,53,73	1.76	6 (13%)	52,89,113	1.57	8 (15%)
14	CLA	B	1211	2	55,63,73	1.52	8 (14%)	64,101,113	1.68	8 (12%)
18	LHG	H	1842	14	36,36,48	0.81	1 (2%)	39,42,54	1.26	3 (7%)
14	CLA	G	1022	23	65,73,73	1.53	11 (16%)	76,113,113	1.55	11 (14%)
16	SF4	A	3001	2,1	0,12,12	-	-	-	-	-
14	CLA	e	1113	1	45,53,73	1.67	7 (15%)	52,89,113	1.81	7 (13%)
14	CLA	3	512	13	45,53,73	1.77	8 (17%)	52,89,113	1.52	5 (9%)
14	CLA	f	1229	2	65,73,73	1.41	8 (12%)	76,113,113	1.60	8 (10%)
17	BCR	d	522	-	41,41,41	0.71	0	56,56,56	1.89	19 (33%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
18	LHG	A	5004	-	34,34,48	0.67	0	37,40,54	1.28	4 (10%)
14	CLA	3	502	13	45,53,73	1.76	7 (15%)	52,89,113	1.72	9 (17%)
14	CLA	H	1218	2	60,68,73	1.51	8 (13%)	70,107,113	1.44	7 (10%)
14	CLA	a	501	13	45,53,73	1.75	7 (15%)	52,89,113	1.67	9 (17%)
14	CLA	A	1128	1	65,73,73	1.58	11 (16%)	76,113,113	1.69	9 (11%)
14	CLA	A	1111	1	65,73,73	1.43	9 (13%)	76,113,113	1.53	8 (10%)
14	CLA	6	502	13	45,53,73	1.77	7 (15%)	52,89,113	1.66	8 (15%)
14	CLA	e	1117	1	65,73,73	1.47	10 (15%)	76,113,113	1.57	10 (13%)
17	BCR	a	522	-	41,41,41	0.70	0	56,56,56	2.03	17 (30%)
14	CLA	f	1204	2	65,73,73	1.40	8 (12%)	76,113,113	1.47	9 (11%)
14	CLA	e	1124	23	60,68,73	1.53	9 (15%)	70,107,113	1.59	10 (14%)
14	CLA	B	1214	2	65,73,73	1.49	9 (13%)	76,113,113	1.51	7 (9%)
18	LHG	A	5003	14	39,39,48	0.86	1 (2%)	42,45,54	1.38	6 (14%)
14	CLA	s	512	13	45,53,73	1.78	8 (17%)	52,89,113	1.52	5 (9%)
14	CLA	4	503	13	45,53,73	1.79	7 (15%)	52,89,113	1.71	8 (15%)
14	CLA	G	1114	23	45,53,73	1.80	8 (17%)	52,89,113	1.69	9 (17%)
14	CLA	H	1235	2	65,73,73	1.47	10 (15%)	76,113,113	1.51	8 (10%)
14	CLA	Z	519	13	45,53,73	1.76	9 (20%)	52,89,113	1.60	8 (15%)
18	LHG	V	5218	-	36,36,48	0.76	2 (5%)	39,42,54	1.20	4 (10%)
21	SQD	c	822	-	25,26,54	1.29	4 (16%)	34,37,65	1.95	11 (32%)
17	BCR	2	524	-	41,41,41	0.73	0	56,56,56	1.76	12 (21%)
14	CLA	c	513	13	45,53,73	1.79	8 (17%)	52,89,113	1.56	6 (11%)
14	CLA	q	508	13	45,53,73	1.77	9 (20%)	52,89,113	1.93	8 (15%)
14	CLA	r	502	13	45,53,73	1.76	7 (15%)	52,89,113	1.70	9 (17%)
14	CLA	c	507	-	45,53,73	1.74	6 (13%)	52,89,113	1.71	9 (17%)
14	CLA	5	519	13	45,53,73	1.78	6 (13%)	52,89,113	1.61	7 (13%)
14	CLA	e	1134	1	56,64,73	1.56	8 (14%)	65,102,113	1.64	11 (16%)
14	CLA	F	1302	6	45,53,73	1.76	9 (20%)	52,89,113	1.58	8 (15%)
14	CLA	B	1204	2	65,73,73	1.40	8 (12%)	76,113,113	1.47	9 (11%)
14	CLA	A	1115	1	60,68,73	1.51	9 (15%)	70,107,113	1.59	7 (10%)
17	BCR	J	4013	-	41,41,41	0.77	0	56,56,56	1.93	16 (28%)
14	CLA	B	1239	2	65,73,73	1.48	8 (12%)	76,113,113	1.72	15 (19%)
14	CLA	3	510	13	45,53,73	1.75	8 (17%)	52,89,113	1.64	7 (13%)
14	CLA	e	1138	1	65,73,73	1.45	9 (13%)	76,113,113	1.54	7 (9%)
14	CLA	H	1201	2	60,68,73	1.49	7 (11%)	70,107,113	1.65	9 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	H	1224	2	60,68,73	1.50	7 (11%)	70,107,113	1.54	9 (12%)
14	CLA	H	1212	2	51,59,73	1.59	7 (13%)	59,96,113	1.68	6 (10%)
17	BCR	d	524	-	41,41,41	0.79	0	56,56,56	1.84	15 (26%)
14	CLA	f	1201	2	60,68,73	1.49	7 (11%)	70,107,113	1.65	9 (12%)
14	CLA	u	503	13	45,53,73	1.78	7 (15%)	52,89,113	1.68	10 (19%)
18	LHG	e	5005	-	42,42,48	0.65	1 (2%)	45,48,54	1.21	4 (8%)
14	CLA	B	1240	18	65,73,73	1.47	6 (9%)	76,113,113	1.46	8 (10%)
14	CLA	B	1213	2	61,69,73	1.47	7 (11%)	71,108,113	1.60	9 (12%)
14	CLA	B	1205	2	65,73,73	1.46	10 (15%)	76,113,113	1.59	11 (14%)
14	CLA	f	1209	2	53,61,73	1.63	8 (15%)	61,98,113	1.68	8 (13%)
14	CLA	f	1021	2	65,73,73	1.47	9 (13%)	76,113,113	1.45	9 (11%)
14	CLA	t	517	-	45,53,73	1.75	6 (13%)	52,89,113	1.66	8 (15%)
14	CLA	G	1013	-	65,73,73	1.43	8 (12%)	76,113,113	1.88	13 (17%)
14	CLA	a	506	13	45,53,73	1.77	7 (15%)	52,89,113	1.70	6 (11%)
14	CLA	f	1236	2	50,58,73	1.70	9 (18%)	58,95,113	1.55	10 (17%)
16	SF4	G	3001	2,1	0,12,12	-	-	-	-	-
14	CLA	G	1120	1	50,58,73	1.57	8 (16%)	58,95,113	1.73	10 (17%)
21	SQD	4	822	-	25,26,54	1.32	4 (16%)	34,37,65	1.97	9 (26%)
14	CLA	u	504	-	45,53,73	1.77	8 (17%)	52,89,113	1.67	7 (13%)
17	BCR	e	4008	-	41,41,41	0.95	2 (4%)	56,56,56	2.17	16 (28%)
14	CLA	d	501	13	45,53,73	1.75	7 (15%)	52,89,113	1.71	7 (13%)
14	CLA	v	508	13	45,53,73	1.76	7 (15%)	52,89,113	1.78	11 (21%)
14	CLA	Z	516	13	45,53,73	1.77	7 (15%)	52,89,113	1.66	8 (15%)
14	CLA	H	1230	2	60,68,73	1.54	10 (16%)	70,107,113	1.46	7 (10%)
14	CLA	G	1128	1	65,73,73	1.58	11 (16%)	76,113,113	1.69	9 (11%)
14	CLA	d	511	13	45,53,73	1.77	5 (11%)	52,89,113	1.70	7 (13%)
14	CLA	5	517	-	45,53,73	1.79	8 (17%)	52,89,113	1.56	6 (11%)
14	CLA	Y	510	13	45,53,73	1.77	8 (17%)	52,89,113	1.60	6 (11%)
21	SQD	q	822	-	31,32,54	1.20	5 (16%)	40,43,65	2.05	13 (32%)
14	CLA	a	507	-	45,53,73	1.74	6 (13%)	52,89,113	1.68	9 (17%)
18	LHG	n	5221	-	48,48,48	0.62	0	51,54,54	1.28	7 (13%)
14	CLA	B	1202	2	65,73,73	1.41	7 (10%)	76,113,113	1.58	8 (10%)
14	CLA	2	510	13	45,53,73	1.72	7 (15%)	52,89,113	1.62	6 (11%)
19	LMU	l	5105	-	22,22,36	1.21	1 (4%)	27,27,47	1.43	5 (18%)
14	CLA	5	518	13	45,53,73	1.76	6 (13%)	52,89,113	1.56	8 (15%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	Z	503	13	65,73,73	1.45	6 (9%)	76,113,113	1.47	8 (10%)
14	CLA	u	508	13	45,53,73	1.79	9 (20%)	52,89,113	1.85	7 (13%)
14	CLA	s	516	13	45,53,73	1.75	5 (11%)	52,89,113	1.87	11 (21%)
14	CLA	f	1238	23	65,73,73	1.41	7 (10%)	76,113,113	1.63	10 (13%)
14	CLA	l	510	13	45,53,73	1.76	8 (17%)	52,89,113	1.60	6 (11%)
18	LHG	G	5008	-	34,34,48	0.71	1 (2%)	37,40,54	1.25	3 (8%)
14	CLA	G	1134	1	56,64,73	1.55	8 (14%)	65,102,113	1.64	11 (16%)
14	CLA	b	505	13	45,53,73	1.76	8 (17%)	52,89,113	1.54	6 (11%)
14	CLA	5	503	13	45,53,73	1.78	7 (15%)	52,89,113	1.67	10 (19%)
14	CLA	Y	503	13	45,53,73	1.77	8 (17%)	52,89,113	1.66	7 (13%)
14	CLA	f	1205	2	65,73,73	1.46	10 (15%)	76,113,113	1.59	11 (14%)
19	LMU	G	1849	-	23,23,36	1.18	1 (4%)	28,28,47	1.39	4 (14%)
14	CLA	a	512	13	45,53,73	1.76	8 (17%)	52,89,113	1.53	5 (9%)
14	CLA	L	1501	10	60,68,73	1.56	10 (16%)	70,107,113	1.50	9 (12%)
14	CLA	A	1104	1	65,73,73	1.44	9 (13%)	76,113,113	1.59	13 (17%)
14	CLA	l	503	13	45,53,73	1.76	8 (17%)	52,89,113	1.66	7 (13%)
14	CLA	q	510	13	45,53,73	1.77	7 (15%)	52,89,113	1.59	6 (11%)
17	BCR	H	4006	-	41,41,41	0.78	0	56,56,56	2.09	18 (32%)
14	CLA	e	1103	1	65,73,73	1.45	9 (13%)	76,113,113	1.73	10 (13%)
14	CLA	L	1502	10	65,73,73	1.45	9 (13%)	76,113,113	1.53	8 (10%)
14	CLA	H	1204	2	65,73,73	1.40	8 (12%)	76,113,113	1.47	9 (11%)
14	CLA	A	1122	1	60,68,73	1.50	10 (16%)	70,107,113	1.54	9 (12%)
16	SF4	N	3003	3	0,12,12	-	-	-	-	-
14	CLA	A	1135	1	55,63,73	1.49	10 (18%)	64,101,113	1.76	11 (17%)
14	CLA	f	1230	2	60,68,73	1.54	10 (16%)	70,107,113	1.46	7 (10%)
14	CLA	r	508	13	45,53,73	1.78	9 (20%)	52,89,113	1.76	10 (19%)
17	BCR	Z	524	-	41,41,41	0.74	0	56,56,56	1.75	12 (21%)
16	SF4	g	3003	3	0,12,12	-	-	-	-	-
14	CLA	2	511	13	45,53,73	1.75	7 (15%)	52,89,113	1.70	7 (13%)
17	BCR	n	4022	-	41,41,41	0.79	0	56,56,56	1.82	10 (17%)
14	CLA	c	518	13	45,53,73	1.75	6 (13%)	52,89,113	1.56	8 (15%)
14	CLA	e	1120	1	50,58,73	1.58	8 (16%)	58,95,113	1.73	10 (17%)
14	CLA	t	519	13	45,53,73	1.75	7 (15%)	52,89,113	1.64	7 (13%)
17	BCR	4	522	-	41,41,41	0.73	0	56,56,56	1.91	19 (33%)
14	CLA	m	1103	9	48,56,73	1.66	8 (16%)	55,92,113	1.61	8 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	j	1301	23	45,53,73	1.73	9 (20%)	52,89,113	1.60	6 (11%)
18	LHG	G	5004	-	34,34,48	0.67	0	37,40,54	1.28	4 (10%)
17	BCR	R	4016	-	41,41,41	0.81	0	56,56,56	1.91	12 (21%)
14	CLA	A	1137	1	60,68,73	1.53	9 (15%)	70,107,113	1.56	10 (14%)
14	CLA	3	503	13	45,53,73	1.77	6 (13%)	52,89,113	1.64	8 (15%)
14	CLA	r	501	13	60,68,73	1.50	8 (13%)	70,107,113	1.57	8 (11%)
17	BCR	l	4015	-	41,41,41	0.80	0	56,56,56	1.73	12 (21%)
18	LHG	e	5007	-	46,46,48	0.61	0	49,52,54	1.20	4 (8%)
14	CLA	f	1215	2	65,73,73	1.46	10 (15%)	76,113,113	1.72	10 (13%)
14	CLA	A	1118	1	60,68,73	1.48	10 (16%)	70,107,113	1.55	8 (11%)
14	CLA	3	509	13	45,53,73	1.75	7 (15%)	52,89,113	1.77	7 (13%)
17	BCR	A	4002	-	41,41,41	0.88	1 (2%)	56,56,56	1.94	16 (28%)
17	BCR	q	521	-	41,41,41	0.67	0	56,56,56	1.83	11 (19%)
14	CLA	B	1021	2	65,73,73	1.47	9 (13%)	76,113,113	1.45	9 (11%)
14	CLA	H	1012	23	65,73,73	1.44	9 (13%)	76,113,113	1.58	9 (11%)
14	CLA	u	516	13	45,53,73	1.77	6 (13%)	52,89,113	1.58	6 (11%)
14	CLA	6	508	13	45,53,73	1.78	7 (15%)	52,89,113	1.78	11 (21%)
14	CLA	t	502	13	45,53,73	1.79	8 (17%)	52,89,113	1.67	7 (13%)
14	CLA	U	1401	-	55,63,73	1.58	7 (12%)	64,101,113	1.62	10 (15%)
14	CLA	6	506	13	45,53,73	1.76	7 (15%)	52,89,113	1.67	6 (11%)
14	CLA	A	1133	1	65,73,73	1.41	10 (15%)	76,113,113	1.48	6 (7%)
14	CLA	v	502	13	45,53,73	1.77	7 (15%)	52,89,113	1.66	8 (15%)
17	BCR	J	4015	-	41,41,41	0.80	0	56,56,56	1.73	12 (21%)
14	CLA	B	1216	23	60,68,73	1.60	10 (16%)	70,107,113	1.56	11 (15%)
14	CLA	s	509	13	45,53,73	1.74	7 (15%)	52,89,113	1.77	7 (13%)
14	CLA	e	1135	1	55,63,73	1.50	10 (18%)	64,101,113	1.76	11 (17%)
14	CLA	Z	502	13	45,53,73	1.76	9 (20%)	52,89,113	1.71	9 (17%)
14	CLA	q	517	-	45,53,73	1.74	6 (13%)	52,89,113	1.60	7 (13%)
14	CLA	r	513	13	45,53,73	1.78	9 (20%)	52,89,113	1.55	6 (11%)
17	BCR	l	522	-	41,41,41	0.74	0	56,56,56	1.91	20 (35%)
14	CLA	Z	511	13	45,53,73	1.75	7 (15%)	52,89,113	1.70	7 (13%)
17	BCR	H	4017	-	41,41,41	0.97	4 (9%)	56,56,56	1.82	12 (21%)
14	CLA	r	504	-	45,53,73	1.77	7 (15%)	52,89,113	1.63	8 (15%)
17	BCR	n	4019	-	41,41,41	0.76	0	56,56,56	1.95	15 (26%)
14	CLA	A	1132	1	65,73,73	1.42	10 (15%)	76,113,113	1.55	11 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	v	509	13	45,53,73	1.75	7 (15%)	52,89,113	1.68	7 (13%)
14	CLA	B	1223	2	65,73,73	1.42	8 (12%)	76,113,113	1.63	7 (9%)
14	CLA	Y	512	13	45,53,73	1.74	8 (17%)	52,89,113	1.49	5 (9%)
17	BCR	t	521	-	41,41,41	0.67	0	56,56,56	1.79	10 (17%)
17	BCR	W	4021	-	41,41,41	0.77	0	56,56,56	1.91	15 (26%)
14	CLA	G	1140	1	65,73,73	1.46	9 (13%)	76,113,113	1.56	10 (13%)
14	CLA	e	1116	1	60,68,73	1.52	8 (13%)	70,107,113	1.50	7 (10%)
14	CLA	q	519	13	45,53,73	1.79	9 (20%)	52,89,113	1.56	7 (13%)
14	CLA	Z	504	-	45,53,73	1.77	7 (15%)	52,89,113	1.64	8 (15%)
14	CLA	H	1220	2	55,63,73	1.58	10 (18%)	64,101,113	1.64	10 (15%)
14	CLA	e	1129	1	53,61,73	1.62	10 (18%)	61,98,113	1.59	9 (14%)
17	BCR	L	4020	-	41,41,41	0.98	2 (4%)	56,56,56	1.67	15 (26%)
14	CLA	5	513	13	45,53,73	1.79	8 (17%)	52,89,113	1.55	6 (11%)
14	CLA	T	1303	8	45,53,73	1.77	7 (15%)	52,89,113	1.73	9 (17%)
14	CLA	c	503	13	45,53,73	1.77	7 (15%)	52,89,113	1.68	10 (19%)
14	CLA	s	502	13	45,53,73	1.77	8 (17%)	52,89,113	1.72	9 (17%)
14	CLA	5	504	-	45,53,73	1.76	7 (15%)	52,89,113	1.68	7 (13%)
14	CLA	5	508	13	45,53,73	1.79	9 (20%)	52,89,113	1.84	7 (13%)
14	CLA	G	1122	1	60,68,73	1.51	11 (18%)	70,107,113	1.54	9 (12%)
14	CLA	f	1231	23	65,73,73	1.38	7 (10%)	76,113,113	1.52	9 (11%)
16	SF4	g	3002	3	0,12,12	-	-	-	-	-
14	CLA	t	518	13	45,53,73	1.76	6 (13%)	52,89,113	1.61	6 (11%)
14	CLA	H	1202	2	65,73,73	1.41	7 (10%)	76,113,113	1.58	8 (10%)
14	CLA	2	509	13	65,73,73	1.46	7 (10%)	76,113,113	1.52	7 (9%)
17	BCR	G	4007	-	41,41,41	0.87	0	56,56,56	2.11	20 (35%)
21	SQD	H	1852	-	39,40,54	1.18	6 (15%)	48,51,65	1.84	12 (25%)
14	CLA	b	504	-	45,53,73	1.77	5 (11%)	52,89,113	1.64	7 (13%)
14	CLA	t	501	13	45,53,73	1.79	6 (13%)	52,89,113	1.63	7 (13%)
17	BCR	V	4020	-	41,41,41	0.99	2 (4%)	56,56,56	1.67	15 (26%)
14	CLA	B	1201	2	60,68,73	1.49	7 (11%)	70,107,113	1.66	9 (12%)
17	BCR	s	521	-	41,41,41	0.66	0	56,56,56	1.83	11 (19%)
17	BCR	M	4021	-	41,41,41	0.76	0	56,56,56	1.91	15 (26%)
17	BCR	G	4002	-	41,41,41	0.88	1 (2%)	56,56,56	1.94	16 (28%)
14	CLA	v	510	13	45,53,73	1.77	7 (15%)	52,89,113	1.63	6 (11%)
21	SQD	3	822	-	27,28,54	1.29	5 (18%)	36,39,65	1.80	11 (30%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	Z	510	13	45,53,73	1.72	7 (15%)	52,89,113	1.62	6 (11%)
14	CLA	6	505	13	65,73,73	1.45	7 (10%)	76,113,113	1.45	8 (10%)
17	BCR	q	523	-	41,41,41	0.75	0	56,56,56	1.68	13 (23%)
14	CLA	3	516	13	45,53,73	1.75	5 (11%)	52,89,113	1.87	11 (21%)
14	CLA	r	519	13	45,53,73	1.77	9 (20%)	52,89,113	1.59	8 (15%)
17	BCR	H	4010	-	41,41,41	0.91	1 (2%)	56,56,56	2.31	21 (37%)
14	CLA	e	1130	1	56,64,73	1.52	8 (14%)	65,102,113	1.73	9 (13%)
14	CLA	G	1133	1	65,73,73	1.42	10 (15%)	76,113,113	1.49	6 (7%)
14	CLA	B	1236	2	50,58,73	1.70	9 (18%)	58,95,113	1.54	10 (17%)
14	CLA	2	502	13	45,53,73	1.76	8 (17%)	52,89,113	1.70	9 (17%)
14	CLA	e	1127	1	65,73,73	1.42	9 (13%)	76,113,113	1.55	11 (14%)
14	CLA	l	501	13	45,53,73	1.75	6 (13%)	52,89,113	1.67	6 (11%)
14	CLA	s	506	13	45,53,73	1.79	7 (15%)	52,89,113	1.69	6 (11%)
16	SF4	N	3002	3	0,12,12	-	-	-	-	-
21	SQD	n	5216	-	45,46,54	1.02	5 (11%)	54,57,65	1.68	11 (20%)
14	CLA	A	1124	23	60,68,73	1.52	9 (15%)	70,107,113	1.58	9 (12%)
14	CLA	a	510	13	45,53,73	1.75	8 (17%)	52,89,113	1.65	7 (13%)
14	CLA	u	519	13	45,53,73	1.78	6 (13%)	52,89,113	1.60	7 (13%)
14	CLA	B	1234	2	65,73,73	1.44	8 (12%)	76,113,113	1.65	10 (13%)
14	CLA	R	1301	23	45,53,73	1.72	9 (20%)	52,89,113	1.59	6 (11%)
14	CLA	b	517	-	45,53,73	1.76	7 (15%)	52,89,113	1.67	8 (15%)
14	CLA	t	511	13	45,53,73	1.79	6 (13%)	52,89,113	1.67	9 (17%)
17	BCR	G	4001	-	41,41,41	0.79	0	56,56,56	1.68	11 (19%)
14	CLA	B	1227	2	60,68,73	1.54	10 (16%)	70,107,113	1.51	8 (11%)
17	BCR	e	4002	-	41,41,41	0.87	1 (2%)	56,56,56	1.94	16 (28%)
17	BCR	t	523	-	41,41,41	0.73	0	56,56,56	1.77	14 (25%)
21	SQD	d	822	-	25,26,54	1.31	4 (16%)	34,37,65	2.00	10 (29%)
21	SQD	s	822	-	27,28,54	1.29	5 (18%)	36,39,65	1.80	10 (27%)
14	CLA	e	1022	23	65,73,73	1.54	11 (16%)	76,113,113	1.55	11 (14%)
14	CLA	d	513	13	45,53,73	1.77	7 (15%)	52,89,113	1.58	6 (11%)
17	BCR	2	521	-	41,41,41	0.70	0	56,56,56	1.90	13 (23%)
14	CLA	4	511	13	45,53,73	1.78	7 (15%)	52,89,113	1.67	9 (17%)
14	CLA	e	1123	23	65,73,73	1.42	8 (12%)	76,113,113	1.53	8 (10%)
14	CLA	r	512	13	45,53,73	1.75	8 (17%)	52,89,113	1.51	5 (9%)
14	CLA	Y	516	13	45,53,73	1.71	9 (20%)	52,89,113	1.64	9 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	d	507	-	45,53,73	1.75	7 (15%)	52,89,113	1.69	9 (17%)
14	CLA	A	1107	1	65,73,73	1.52	10 (15%)	76,113,113	1.49	10 (13%)
14	CLA	G	1104	1	65,73,73	1.43	9 (13%)	76,113,113	1.60	13 (17%)
14	CLA	2	505	13	65,73,73	1.42	7 (10%)	76,113,113	1.47	8 (10%)
14	CLA	G	1138	1	65,73,73	1.45	9 (13%)	76,113,113	1.55	7 (9%)
14	CLA	5	506	13	45,53,73	1.73	7 (15%)	52,89,113	1.62	7 (13%)
14	CLA	e	1122	1	60,68,73	1.51	11 (18%)	70,107,113	1.54	9 (12%)
14	CLA	u	502	13	45,53,73	1.79	7 (15%)	52,89,113	1.68	7 (13%)
14	CLA	f	1222	23	50,58,73	1.61	9 (18%)	58,95,113	1.73	9 (15%)
14	CLA	A	1237	23	65,73,73	1.46	12 (18%)	76,113,113	1.57	9 (11%)
14	CLA	A	1106	1	65,73,73	1.41	8 (12%)	76,113,113	1.53	9 (11%)
14	CLA	G	1129	1	53,61,73	1.63	10 (18%)	61,98,113	1.60	9 (14%)
14	CLA	4	513	13	45,53,73	1.78	7 (15%)	52,89,113	1.64	6 (11%)
14	CLA	4	507	-	45,53,73	1.72	6 (13%)	52,89,113	1.72	8 (15%)
14	CLA	4	504	-	45,53,73	1.78	6 (13%)	52,89,113	1.65	7 (13%)
14	CLA	b	506	13	45,53,73	1.78	7 (15%)	52,89,113	1.66	6 (11%)
14	CLA	n	1503	23	60,68,73	1.48	8 (13%)	70,107,113	1.57	7 (10%)
14	CLA	f	1213	2	61,69,73	1.47	7 (11%)	71,108,113	1.60	8 (11%)
14	CLA	c	516	13	45,53,73	1.77	6 (13%)	52,89,113	1.58	6 (11%)
14	CLA	q	518	13	45,53,73	1.75	6 (13%)	52,89,113	1.62	7 (13%)
14	CLA	U	1105	9	45,53,73	1.78	8 (17%)	52,89,113	1.85	11 (21%)
16	SF4	C	3002	3	0,12,12	-	-	-	-	-
14	CLA	6	504	-	45,53,73	1.74	7 (15%)	52,89,113	1.69	7 (13%)
18	LHG	A	5008	-	34,34,48	0.70	1 (2%)	37,40,54	1.25	4 (10%)
14	CLA	n	1502	10	65,73,73	1.45	9 (13%)	76,113,113	1.54	8 (10%)
14	CLA	b	513	13	45,53,73	1.78	6 (13%)	52,89,113	1.63	6 (11%)
14	CLA	f	1220	2	55,63,73	1.58	10 (18%)	64,101,113	1.63	10 (15%)
14	CLA	r	517	-	45,53,73	1.76	7 (15%)	52,89,113	1.65	7 (13%)
14	CLA	2	516	13	45,53,73	1.77	7 (15%)	52,89,113	1.66	8 (15%)
17	BCR	e	4007	-	41,41,41	0.87	0	56,56,56	2.10	19 (33%)
14	CLA	G	1137	1	60,68,73	1.52	9 (15%)	70,107,113	1.57	10 (14%)
14	CLA	q	513	13	45,53,73	1.77	7 (15%)	52,89,113	1.63	7 (13%)
14	CLA	A	1101	1	65,73,73	1.50	9 (13%)	76,113,113	1.61	13 (17%)
14	CLA	J	1303	8	45,53,73	1.77	7 (15%)	52,89,113	1.73	9 (17%)
14	CLA	f	1208	2	65,73,73	1.45	7 (10%)	76,113,113	1.39	7 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	Y	517	-	45,53,73	1.75	7 (15%)	52,89,113	1.61	7 (13%)
14	CLA	l	516	13	45,53,73	1.71	9 (20%)	52,89,113	1.63	8 (15%)
14	CLA	q	504	-	45,53,73	1.79	8 (17%)	52,89,113	1.79	11 (21%)
17	BCR	G	4008	-	41,41,41	0.95	2 (4%)	56,56,56	2.17	16 (28%)
17	BCR	b	524	-	41,41,41	0.69	0	56,56,56	1.85	14 (25%)
14	CLA	v	501	13	45,53,73	1.75	7 (15%)	52,89,113	1.71	7 (13%)
14	CLA	c	504	-	45,53,73	1.76	7 (15%)	52,89,113	1.68	7 (13%)
14	CLA	A	1136	1	65,73,73	1.47	10 (15%)	76,113,113	1.54	10 (13%)
21	SQD	b	822	-	25,26,54	1.32	4 (16%)	34,37,65	1.97	9 (26%)
17	BCR	e	4003	-	41,41,41	0.87	1 (2%)	56,56,56	1.78	14 (25%)
14	CLA	d	518	13	45,53,73	1.74	6 (13%)	52,89,113	1.63	6 (11%)
14	CLA	c	508	13	45,53,73	1.79	9 (20%)	52,89,113	1.84	7 (13%)
14	CLA	B	1230	2	60,68,73	1.53	10 (16%)	70,107,113	1.47	7 (10%)
17	BCR	S	4018	-	41,41,41	0.93	2 (4%)	56,56,56	1.93	16 (28%)
14	CLA	T	1302	8	55,63,73	1.55	9 (16%)	64,101,113	1.56	9 (14%)
18	LHG	G	5001	-	48,48,48	0.80	1 (2%)	51,54,54	1.30	7 (13%)
18	LHG	A	5009	-	41,41,48	0.67	0	44,47,54	1.22	5 (11%)
14	CLA	t	509	13	45,53,73	1.77	7 (15%)	52,89,113	1.75	9 (17%)
14	CLA	H	1219	2	63,71,73	1.52	9 (14%)	73,110,113	1.43	10 (13%)
18	LHG	G	5003	14	39,39,48	0.86	1 (2%)	42,45,54	1.38	6 (14%)
14	CLA	u	501	13	45,53,73	1.76	7 (15%)	52,89,113	1.71	8 (15%)
14	CLA	6	510	13	45,53,73	1.77	7 (15%)	52,89,113	1.63	6 (11%)
14	CLA	r	518	13	55,63,73	1.55	7 (12%)	64,101,113	1.53	8 (12%)
14	CLA	e	1126	1	65,73,73	1.39	8 (12%)	76,113,113	1.57	8 (10%)
17	BCR	5	521	-	41,41,41	0.71	0	56,56,56	1.97	18 (32%)
14	CLA	f	1227	2	60,68,73	1.54	10 (16%)	70,107,113	1.51	8 (11%)
14	CLA	e	1133	1	65,73,73	1.41	10 (15%)	76,113,113	1.48	6 (7%)
17	BCR	H	4004	-	41,41,41	0.73	0	56,56,56	1.85	14 (25%)
14	CLA	A	1129	1	53,61,73	1.62	10 (18%)	61,98,113	1.60	9 (14%)
14	CLA	B	1215	2	65,73,73	1.46	10 (15%)	76,113,113	1.71	10 (13%)
14	CLA	A	1108	1	54,62,73	1.58	9 (16%)	62,99,113	1.58	8 (12%)
14	CLA	Z	509	13	65,73,73	1.46	7 (10%)	76,113,113	1.52	7 (9%)
17	BCR	T	4012	-	41,41,41	0.72	0	56,56,56	1.76	13 (23%)
14	CLA	Y	513	13	45,53,73	1.77	7 (15%)	52,89,113	1.63	7 (13%)
17	BCR	L	4022	-	41,41,41	0.79	0	56,56,56	1.82	10 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
19	LMU	B	1843	-	36,36,36	1.16	2 (5%)	47,47,47	1.06	3 (6%)
14	CLA	A	1103	1	65,73,73	1.46	9 (13%)	76,113,113	1.73	11 (14%)
14	CLA	c	511	13	45,53,73	1.75	5 (11%)	52,89,113	1.71	8 (15%)
17	BCR	r	523	-	41,41,41	0.72	0	56,56,56	1.75	17 (30%)
14	CLA	u	509	13	65,73,73	1.43	7 (10%)	76,113,113	1.50	7 (9%)
14	CLA	u	505	13	45,53,73	1.73	7 (15%)	52,89,113	1.60	6 (11%)
17	BCR	G	4011	-	41,41,41	0.81	0	56,56,56	1.78	12 (21%)
17	BCR	3	521	-	41,41,41	0.67	0	56,56,56	1.83	11 (19%)
17	BCR	r	522	-	41,41,41	0.74	0	56,56,56	1.85	17 (30%)
14	CLA	H	1228	2	55,63,73	1.52	7 (12%)	64,101,113	1.71	8 (12%)
14	CLA	q	506	13	45,53,73	1.76	6 (13%)	52,89,113	1.64	6 (11%)
17	BCR	6	521	-	41,41,41	0.67	0	56,56,56	1.79	12 (21%)
14	CLA	A	1120	1	50,58,73	1.58	8 (16%)	58,95,113	1.73	10 (17%)
14	CLA	2	518	13	55,63,73	1.55	6 (10%)	64,101,113	1.53	7 (10%)
14	CLA	5	510	13	45,53,73	1.73	7 (15%)	52,89,113	1.62	7 (13%)
14	CLA	d	519	13	45,53,73	1.77	9 (20%)	52,89,113	1.57	7 (13%)
17	BCR	B	4017	-	41,41,41	0.97	3 (7%)	56,56,56	1.82	12 (21%)
14	CLA	G	1101	1	65,73,73	1.50	9 (13%)	76,113,113	1.62	13 (17%)
17	BCR	T	4013	-	41,41,41	0.78	0	56,56,56	1.93	16 (28%)
14	CLA	H	1208	2	65,73,73	1.44	8 (12%)	76,113,113	1.39	7 (9%)
14	CLA	2	501	13	60,68,73	1.51	7 (11%)	70,107,113	1.57	8 (11%)
21	SQD	6	822	-	25,26,54	1.31	4 (16%)	34,37,65	2.00	10 (29%)
14	CLA	b	510	13	45,53,73	1.72	6 (13%)	52,89,113	1.65	6 (11%)
17	BCR	6	523	-	41,41,41	0.72	0	56,56,56	1.72	14 (25%)
17	BCR	r	521	-	41,41,41	0.70	0	56,56,56	1.90	13 (23%)
14	CLA	6	517	-	45,53,73	1.73	7 (15%)	52,89,113	1.61	7 (13%)
17	BCR	f	4006	-	41,41,41	0.77	0	56,56,56	2.09	18 (32%)
18	LHG	n	5220	-	40,40,48	0.70	1 (2%)	43,46,54	1.30	5 (11%)
14	CLA	G	1108	1	54,62,73	1.57	8 (14%)	62,99,113	1.57	8 (12%)
17	BCR	q	524	-	41,41,41	0.74	0	56,56,56	1.85	17 (30%)
15	PQN	f	2002	-	34,34,34	2.84	11 (32%)	42,45,45	2.30	6 (14%)
17	BCR	d	521	-	41,41,41	0.67	0	56,56,56	1.79	12 (21%)
14	CLA	H	1023	-	65,73,73	1.41	8 (12%)	76,113,113	1.90	11 (14%)
14	CLA	t	506	13	45,53,73	1.77	7 (15%)	52,89,113	1.65	6 (11%)
14	CLA	G	1119	23	65,73,73	1.49	11 (16%)	76,113,113	1.67	13 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
17	BCR	t	524	-	41,41,41	0.70	0	56,56,56	1.85	14 (25%)
14	CLA	f	1012	23	65,73,73	1.45	9 (13%)	76,113,113	1.58	9 (11%)
14	CLA	Y	502	13	45,53,73	1.75	8 (17%)	52,89,113	1.65	8 (15%)
17	BCR	V	4019	-	41,41,41	0.76	0	56,56,56	1.95	15 (26%)
18	LHG	A	5007	-	46,46,48	0.60	0	49,52,54	1.20	4 (8%)
14	CLA	H	1203	2	65,73,73	1.44	9 (13%)	76,113,113	1.53	9 (11%)
14	CLA	3	519	13	45,53,73	1.76	8 (17%)	52,89,113	1.61	7 (13%)
14	CLA	G	1124	23	60,68,73	1.52	9 (15%)	70,107,113	1.59	9 (12%)
17	BCR	V	4022	-	41,41,41	0.78	0	56,56,56	1.81	10 (17%)
14	CLA	B	1226	2	55,63,73	1.71	10 (18%)	64,101,113	1.98	15 (23%)
14	CLA	f	1203	2	65,73,73	1.44	9 (13%)	76,113,113	1.53	9 (11%)
14	CLA	4	518	13	45,53,73	1.76	6 (13%)	52,89,113	1.61	6 (11%)
14	CLA	m	1401	-	55,63,73	1.59	7 (12%)	64,101,113	1.63	10 (15%)
14	CLA	B	1208	2	65,73,73	1.44	7 (10%)	76,113,113	1.38	7 (9%)
17	BCR	B	4009	-	41,41,41	0.77	0	56,56,56	1.90	18 (32%)
14	CLA	Z	505	13	65,73,73	1.42	6 (9%)	76,113,113	1.47	8 (10%)
14	CLA	1	502	13	45,53,73	1.75	8 (17%)	52,89,113	1.66	8 (15%)
14	CLA	G	1112	1	50,58,73	1.62	10 (20%)	58,95,113	1.67	8 (13%)
14	CLA	v	516	13	45,53,73	1.77	6 (13%)	52,89,113	1.60	8 (15%)
14	CLA	H	1209	2	53,61,73	1.62	8 (15%)	61,98,113	1.67	8 (13%)
17	BCR	A	4011	-	41,41,41	0.82	0	56,56,56	1.79	12 (21%)
18	LHG	A	5002	-	42,42,48	0.76	1 (2%)	45,48,54	1.22	4 (8%)
14	CLA	b	519	13	45,53,73	1.77	7 (15%)	52,89,113	1.64	7 (13%)
14	CLA	u	512	13	45,53,73	1.74	7 (15%)	52,89,113	1.57	6 (11%)
17	BCR	b	521	-	41,41,41	0.68	0	56,56,56	1.78	11 (19%)
14	CLA	t	508	13	45,53,73	1.81	10 (22%)	52,89,113	1.79	9 (17%)
17	BCR	5	523	-	41,41,41	0.78	1 (2%)	56,56,56	1.78	15 (26%)
14	CLA	G	1237	23	65,73,73	1.47	12 (18%)	76,113,113	1.57	9 (11%)
14	CLA	G	1106	1	65,73,73	1.41	8 (12%)	76,113,113	1.53	9 (11%)
14	CLA	c	512	13	45,53,73	1.74	7 (15%)	52,89,113	1.56	6 (11%)
21	SQD	V	5216	-	45,46,54	1.01	5 (11%)	54,57,65	1.69	11 (20%)
14	CLA	d	508	13	45,53,73	1.77	7 (15%)	52,89,113	1.78	11 (21%)
14	CLA	2	512	13	45,53,73	1.76	8 (17%)	52,89,113	1.50	5 (9%)
14	CLA	a	516	13	45,53,73	1.74	5 (11%)	52,89,113	1.87	11 (21%)
14	CLA	6	518	13	45,53,73	1.74	6 (13%)	52,89,113	1.63	6 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	q	511	13	45,53,73	1.76	7 (15%)	52,89,113	1.67	8 (15%)
17	BCR	b	523	-	41,41,41	0.73	0	56,56,56	1.77	14 (25%)
14	CLA	f	1224	2	60,68,73	1.49	7 (11%)	70,107,113	1.54	9 (12%)
14	CLA	l	505	13	45,53,73	1.73	7 (15%)	52,89,113	1.65	6 (11%)
14	CLA	Z	501	13	60,68,73	1.50	8 (13%)	70,107,113	1.57	7 (10%)
17	BCR	A	4008	-	41,41,41	0.95	2 (4%)	56,56,56	2.17	16 (28%)
14	CLA	t	507	-	45,53,73	1.73	6 (13%)	52,89,113	1.73	8 (15%)
20	LMG	l	5104	-	32,32,55	0.96	2 (6%)	40,40,63	1.26	4 (10%)
14	CLA	e	1110	1	53,61,73	1.60	8 (15%)	61,98,113	1.57	8 (13%)
14	CLA	e	1112	1	50,58,73	1.62	10 (20%)	58,95,113	1.67	8 (13%)
18	LHG	G	5007	-	46,46,48	0.60	0	49,52,54	1.20	4 (8%)
14	CLA	A	1011	1	65,73,73	1.46	10 (15%)	76,113,113	1.73	14 (18%)
17	BCR	4	523	-	41,41,41	0.74	0	56,56,56	1.77	14 (25%)
14	CLA	d	503	13	45,53,73	1.76	7 (15%)	52,89,113	1.68	6 (11%)
14	CLA	B	1231	23	65,73,73	1.38	7 (10%)	76,113,113	1.52	9 (11%)
14	CLA	4	517	-	45,53,73	1.76	7 (15%)	52,89,113	1.67	8 (15%)
14	CLA	f	1226	2	55,63,73	1.70	10 (18%)	64,101,113	1.98	15 (23%)
17	BCR	3	523	-	41,41,41	0.69	0	56,56,56	1.82	15 (26%)
14	CLA	a	503	13	45,53,73	1.76	6 (13%)	52,89,113	1.64	8 (15%)
14	CLA	B	1222	23	50,58,73	1.61	9 (18%)	58,95,113	1.72	9 (15%)
14	CLA	2	519	13	45,53,73	1.77	9 (20%)	52,89,113	1.60	8 (15%)
14	CLA	A	1130	1	56,64,73	1.52	8 (14%)	65,102,113	1.73	9 (13%)
14	CLA	A	1138	1	65,73,73	1.44	9 (13%)	76,113,113	1.55	7 (9%)
14	CLA	A	1125	1	65,73,73	1.42	10 (15%)	76,113,113	1.58	9 (11%)
18	LHG	n	5218	-	36,36,48	0.76	2 (5%)	39,42,54	1.20	4 (10%)
14	CLA	H	1232	23	55,63,73	1.54	8 (14%)	64,101,113	1.70	7 (10%)
19	LMU	H	1843	-	36,36,36	1.17	2 (5%)	47,47,47	1.06	3 (6%)
14	CLA	6	519	13	45,53,73	1.78	9 (20%)	52,89,113	1.58	7 (13%)
14	CLA	q	507	-	45,53,73	1.74	7 (15%)	52,89,113	1.70	9 (17%)
14	CLA	H	1223	2	65,73,73	1.42	8 (12%)	76,113,113	1.63	7 (9%)
14	CLA	r	511	13	45,53,73	1.75	7 (15%)	52,89,113	1.71	8 (15%)
18	LHG	G	5009	-	41,41,48	0.67	0	44,47,54	1.22	4 (9%)
14	CLA	c	502	13	45,53,73	1.78	7 (15%)	52,89,113	1.69	7 (13%)
14	CLA	B	1220	2	55,63,73	1.58	10 (18%)	64,101,113	1.64	10 (15%)
17	BCR	e	4001	-	41,41,41	0.79	0	56,56,56	1.69	11 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	r	506	13	45,53,73	1.75	7 (15%)	52,89,113	1.63	7 (13%)
17	BCR	F	4016	-	41,41,41	0.82	0	56,56,56	1.91	11 (19%)
14	CLA	e	1119	23	65,73,73	1.50	11 (16%)	76,113,113	1.67	13 (17%)
14	CLA	f	1023	-	65,73,73	1.41	8 (12%)	76,113,113	1.89	11 (14%)
14	CLA	Z	518	13	55,63,73	1.55	7 (12%)	64,101,113	1.53	7 (10%)
21	SQD	t	822	-	25,26,54	1.32	4 (16%)	34,37,65	1.97	9 (26%)
14	CLA	d	506	13	45,53,73	1.76	7 (15%)	52,89,113	1.67	6 (11%)
14	CLA	H	1215	2	65,73,73	1.46	10 (15%)	76,113,113	1.71	10 (13%)
14	CLA	e	1237	23	65,73,73	1.46	12 (18%)	76,113,113	1.57	9 (11%)
14	CLA	u	506	13	45,53,73	1.73	7 (15%)	52,89,113	1.63	7 (13%)
14	CLA	G	1103	1	65,73,73	1.46	9 (13%)	76,113,113	1.73	11 (14%)
14	CLA	Y	505	13	45,53,73	1.74	7 (15%)	52,89,113	1.66	6 (11%)
14	CLA	b	503	13	45,53,73	1.78	7 (15%)	52,89,113	1.70	8 (15%)
17	BCR	u	524	-	41,41,41	0.71	0	56,56,56	1.74	11 (19%)
19	LMU	e	1848	-	36,36,36	1.15	2 (5%)	47,47,47	1.02	2 (4%)
17	BCR	r	524	-	41,41,41	0.74	0	56,56,56	1.76	13 (23%)
14	CLA	b	509	13	45,53,73	1.77	7 (15%)	52,89,113	1.75	8 (15%)
14	CLA	B	1203	2	65,73,73	1.44	9 (13%)	76,113,113	1.53	9 (11%)
21	SQD	2	822	-	27,28,54	1.22	4 (14%)	36,39,65	1.86	10 (27%)
14	CLA	r	507	-	45,53,73	1.72	8 (17%)	52,89,113	1.71	10 (19%)
17	BCR	t	522	-	41,41,41	0.74	0	56,56,56	1.91	19 (33%)
17	BCR	2	523	-	41,41,41	0.72	0	56,56,56	1.75	17 (30%)
14	CLA	4	519	13	45,53,73	1.76	7 (15%)	52,89,113	1.64	7 (13%)
14	CLA	c	505	13	45,53,73	1.74	7 (15%)	52,89,113	1.62	6 (11%)
14	CLA	A	1121	1	55,63,73	1.57	10 (18%)	64,101,113	1.66	12 (18%)
14	CLA	Y	501	13	45,53,73	1.75	7 (15%)	52,89,113	1.67	6 (11%)
14	CLA	c	501	13	45,53,73	1.75	7 (15%)	52,89,113	1.70	8 (15%)
14	CLA	c	510	13	45,53,73	1.74	7 (15%)	52,89,113	1.62	7 (13%)
17	BCR	f	4009	-	41,41,41	0.78	0	56,56,56	1.89	18 (32%)
18	LHG	e	5008	-	34,34,48	0.71	1 (2%)	37,40,54	1.25	4 (10%)
17	BCR	c	523	-	41,41,41	0.78	1 (2%)	56,56,56	1.78	15 (26%)
17	BCR	6	524	-	41,41,41	0.78	0	56,56,56	1.85	15 (26%)
17	BCR	A	4003	-	41,41,41	0.88	1 (2%)	56,56,56	1.78	14 (25%)
17	BCR	v	521	-	41,41,41	0.68	0	56,56,56	1.79	12 (21%)
14	CLA	a	502	13	45,53,73	1.77	8 (17%)	52,89,113	1.72	9 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
20	LMG	T	5104	-	32,32,55	0.96	2 (6%)	40,40,63	1.26	4 (10%)
14	CLA	B	1218	2	60,68,73	1.51	8 (13%)	70,107,113	1.43	7 (10%)
18	LHG	G	5002	-	42,42,48	0.76	1 (2%)	45,48,54	1.23	4 (8%)
14	CLA	v	512	13	45,53,73	1.76	7 (15%)	52,89,113	1.58	6 (11%)
14	CLA	6	501	13	45,53,73	1.75	7 (15%)	52,89,113	1.71	7 (13%)
15	PQN	A	2001	-	34,34,34	2.81	11 (32%)	42,45,45	2.19	6 (14%)
14	CLA	Z	512	13	45,53,73	1.76	8 (17%)	52,89,113	1.49	5 (9%)
14	CLA	G	1135	1	55,63,73	1.49	10 (18%)	64,101,113	1.76	11 (17%)
14	CLA	j	1302	6	45,53,73	1.76	9 (20%)	52,89,113	1.57	8 (15%)
17	BCR	j	4016	-	41,41,41	0.82	0	56,56,56	1.91	11 (19%)
14	CLA	H	1231	23	65,73,73	1.39	7 (10%)	76,113,113	1.52	9 (11%)
14	CLA	d	504	-	45,53,73	1.74	7 (15%)	52,89,113	1.69	7 (13%)
17	BCR	v	523	-	41,41,41	0.72	0	56,56,56	1.72	15 (26%)
14	CLA	B	1229	2	65,73,73	1.42	7 (10%)	76,113,113	1.59	8 (10%)
14	CLA	H	1222	23	50,58,73	1.61	9 (18%)	58,95,113	1.73	9 (15%)
17	BCR	Z	523	-	41,41,41	0.72	0	56,56,56	1.76	17 (30%)
14	CLA	e	1105	1	55,63,73	1.50	9 (16%)	64,101,113	1.67	8 (12%)
16	SF4	C	3003	3	0,12,12	-	-	-	-	-
17	BCR	a	521	-	41,41,41	0.67	0	56,56,56	1.83	11 (19%)
14	CLA	e	1106	1	65,73,73	1.41	8 (12%)	76,113,113	1.53	9 (11%)
14	CLA	1	509	13	45,53,73	1.76	7 (15%)	52,89,113	1.65	9 (17%)
14	CLA	5	516	13	45,53,73	1.77	6 (13%)	52,89,113	1.58	6 (11%)
14	CLA	5	501	13	45,53,73	1.75	7 (15%)	52,89,113	1.71	8 (15%)
14	CLA	f	1207	2	65,73,73	1.44	8 (12%)	76,113,113	1.38	6 (7%)
14	CLA	4	516	13	45,53,73	1.76	6 (13%)	52,89,113	1.62	7 (13%)
15	PQN	B	2002	-	34,34,34	2.84	11 (32%)	42,45,45	2.31	6 (14%)
14	CLA	4	508	13	45,53,73	1.80	9 (20%)	52,89,113	1.80	9 (17%)
14	CLA	1	506	13	45,53,73	1.75	7 (15%)	52,89,113	1.64	6 (11%)
14	CLA	B	1012	23	65,73,73	1.44	9 (13%)	76,113,113	1.58	9 (11%)
14	CLA	a	517	-	45,53,73	1.79	8 (17%)	52,89,113	1.58	6 (11%)
14	CLA	G	1123	23	65,73,73	1.42	8 (12%)	76,113,113	1.52	8 (10%)
14	CLA	m	1105	9	45,53,73	1.79	8 (17%)	52,89,113	1.84	11 (21%)
14	CLA	6	511	13	45,53,73	1.78	5 (11%)	52,89,113	1.69	7 (13%)
14	CLA	3	504	-	45,53,73	1.75	7 (15%)	52,89,113	1.73	9 (17%)
14	CLA	b	516	13	45,53,73	1.76	6 (13%)	52,89,113	1.62	7 (13%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	s	519	13	45,53,73	1.76	8 (17%)	52,89,113	1.61	7 (13%)
17	BCR	2	522	-	41,41,41	0.74	0	56,56,56	1.85	17 (30%)
14	CLA	c	509	13	65,73,73	1.44	7 (10%)	76,113,113	1.49	7 (9%)
14	CLA	q	505	13	45,53,73	1.74	7 (15%)	52,89,113	1.64	6 (11%)
21	SQD	u	822	-	25,26,54	1.29	4 (16%)	34,37,65	1.95	11 (32%)
17	BCR	n	4219	-	41,41,41	1.09	5 (12%)	56,56,56	2.26	23 (41%)
14	CLA	A	1127	1	65,73,73	1.42	9 (13%)	76,113,113	1.55	11 (14%)
18	LHG	H	1855	-	40,40,48	0.69	1 (2%)	43,46,54	1.24	5 (11%)
14	CLA	G	1011	1	65,73,73	1.46	10 (15%)	76,113,113	1.73	14 (18%)
14	CLA	f	1218	2	60,68,73	1.51	8 (13%)	70,107,113	1.43	7 (10%)
14	CLA	e	1137	1	60,68,73	1.52	9 (15%)	70,107,113	1.56	10 (14%)
17	BCR	B	4014	-	41,41,41	0.83	1 (2%)	56,56,56	1.89	23 (41%)
14	CLA	B	1219	2	63,71,73	1.52	8 (12%)	73,110,113	1.44	10 (13%)
14	CLA	l	1303	8	45,53,73	1.77	8 (17%)	52,89,113	1.74	9 (17%)
14	CLA	v	518	13	45,53,73	1.74	6 (13%)	52,89,113	1.62	6 (11%)
17	BCR	G	4003	-	41,41,41	0.87	1 (2%)	56,56,56	1.78	14 (25%)
18	LHG	B	1842	14	36,36,48	0.81	1 (2%)	39,42,54	1.26	3 (7%)
14	CLA	5	512	13	45,53,73	1.74	7 (15%)	52,89,113	1.56	6 (11%)
18	LHG	e	5009	-	41,41,48	0.67	0	44,47,54	1.22	4 (9%)
14	CLA	3	507	-	45,53,73	1.74	6 (13%)	52,89,113	1.68	9 (17%)
14	CLA	G	1130	1	56,64,73	1.52	8 (14%)	65,102,113	1.74	9 (13%)
14	CLA	6	513	13	45,53,73	1.78	7 (15%)	52,89,113	1.59	6 (11%)
14	CLA	B	1209	2	53,61,73	1.62	8 (15%)	61,98,113	1.68	8 (13%)
17	BCR	u	522	-	41,41,41	0.75	0	56,56,56	1.94	21 (37%)
14	CLA	J	1302	8	55,63,73	1.56	9 (16%)	64,101,113	1.56	9 (14%)
14	CLA	B	1217	2	60,68,73	1.53	6 (10%)	70,107,113	1.42	7 (10%)
14	CLA	3	517	-	45,53,73	1.79	8 (17%)	52,89,113	1.58	6 (11%)
14	CLA	6	507	-	45,53,73	1.76	7 (15%)	52,89,113	1.69	9 (17%)
14	CLA	B	1224	2	60,68,73	1.50	7 (11%)	70,107,113	1.54	9 (12%)
14	CLA	A	1119	23	65,73,73	1.50	11 (16%)	76,113,113	1.67	13 (17%)
18	LHG	A	5005	-	42,42,48	0.65	1 (2%)	45,48,54	1.21	4 (8%)
14	CLA	H	1216	23	60,68,73	1.60	10 (16%)	70,107,113	1.57	11 (15%)
15	PQN	G	2001	-	34,34,34	2.82	11 (32%)	42,45,45	2.20	6 (14%)
17	BCR	Y	524	-	41,41,41	0.74	0	56,56,56	1.85	17 (30%)
14	CLA	G	1126	1	65,73,73	1.39	8 (12%)	76,113,113	1.57	8 (10%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	b	508	13	45,53,73	1.81	10 (22%)	52,89,113	1.80	9 (17%)
21	SQD	Y	822	-	31,32,54	1.20	5 (16%)	40,43,65	2.05	13 (32%)
14	CLA	H	1021	2	65,73,73	1.46	9 (13%)	76,113,113	1.45	9 (11%)
14	CLA	B	1232	23	55,63,73	1.54	8 (14%)	64,101,113	1.70	7 (10%)
14	CLA	K	1103	9	48,56,73	1.66	8 (16%)	55,92,113	1.62	8 (14%)
20	LMG	H	5002	-	53,53,55	0.86	3 (5%)	61,61,63	1.51	12 (19%)
21	SQD	a	822	-	27,28,54	1.30	5 (18%)	36,39,65	1.79	10 (27%)
14	CLA	4	512	13	45,53,73	1.74	6 (13%)	52,89,113	1.59	6 (11%)
14	CLA	A	1113	1	45,53,73	1.67	7 (15%)	52,89,113	1.81	7 (13%)
14	CLA	s	507	-	45,53,73	1.75	6 (13%)	52,89,113	1.68	9 (17%)
17	BCR	u	521	-	41,41,41	0.71	0	56,56,56	1.97	18 (32%)
17	BCR	l	524	-	41,41,41	0.74	0	56,56,56	1.85	17 (30%)
14	CLA	4	506	13	45,53,73	1.77	6 (13%)	52,89,113	1.66	6 (11%)
18	LHG	L	5218	-	36,36,48	0.76	2 (5%)	39,42,54	1.20	4 (10%)
14	CLA	v	505	13	65,73,73	1.45	7 (10%)	76,113,113	1.45	8 (10%)
17	BCR	d	523	-	41,41,41	0.72	0	56,56,56	1.72	14 (25%)
14	CLA	A	1112	1	50,58,73	1.62	10 (20%)	58,95,113	1.68	8 (13%)
14	CLA	3	506	13	45,53,73	1.79	7 (15%)	52,89,113	1.70	6 (11%)
18	LHG	A	5001	-	48,48,48	0.80	1 (2%)	51,54,54	1.30	7 (13%)
14	CLA	d	517	-	45,53,73	1.72	6 (13%)	52,89,113	1.61	7 (13%)
14	CLA	G	1113	1	45,53,73	1.67	7 (15%)	52,89,113	1.80	7 (13%)
14	CLA	H	1238	23	65,73,73	1.40	7 (10%)	76,113,113	1.64	11 (14%)
17	BCR	u	523	-	41,41,41	0.78	0	56,56,56	1.79	15 (26%)
17	BCR	H	4005	-	41,41,41	0.76	0	56,56,56	1.73	12 (21%)
17	BCR	f	4014	-	41,41,41	0.83	1 (2%)	56,56,56	1.90	23 (41%)
17	BCR	T	4015	-	41,41,41	0.80	0	56,56,56	1.73	12 (21%)
14	CLA	G	1111	1	65,73,73	1.43	10 (15%)	76,113,113	1.53	7 (9%)
14	CLA	n	1501	10	60,68,73	1.56	10 (16%)	70,107,113	1.50	9 (12%)
14	CLA	s	518	13	55,63,73	1.59	7 (12%)	64,101,113	1.47	7 (10%)
14	CLA	R	1302	6	45,53,73	1.77	9 (20%)	52,89,113	1.59	8 (15%)
18	LHG	S	5001	-	47,47,48	0.62	0	50,53,54	1.24	5 (10%)
14	CLA	A	1110	1	53,61,73	1.59	8 (15%)	61,98,113	1.57	8 (13%)
17	BCR	c	524	-	41,41,41	0.72	0	56,56,56	1.74	12 (21%)
14	CLA	e	1109	1	65,73,73	1.40	9 (13%)	76,113,113	1.60	8 (10%)
14	CLA	q	509	13	45,53,73	1.76	7 (15%)	52,89,113	1.66	9 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
17	BCR	3	524	-	41,41,41	0.78	0	56,56,56	1.93	18 (32%)
14	CLA	f	1217	2	60,68,73	1.52	6 (10%)	70,107,113	1.41	7 (10%)
14	CLA	B	1023	-	65,73,73	1.41	8 (12%)	76,113,113	1.89	11 (14%)
14	CLA	c	517	-	45,53,73	1.79	8 (17%)	52,89,113	1.56	6 (11%)
14	CLA	r	510	13	45,53,73	1.71	7 (15%)	52,89,113	1.62	7 (13%)
14	CLA	f	1212	2	51,59,73	1.60	7 (13%)	59,96,113	1.67	6 (10%)
18	LHG	e	5004	-	34,34,48	0.67	0	37,40,54	1.28	4 (10%)
14	CLA	5	502	13	45,53,73	1.78	7 (15%)	52,89,113	1.70	7 (13%)
14	CLA	t	503	13	45,53,73	1.80	7 (15%)	52,89,113	1.71	8 (15%)
14	CLA	Y	518	13	45,53,73	1.76	6 (13%)	52,89,113	1.64	7 (13%)
14	CLA	1	507	-	45,53,73	1.74	7 (15%)	52,89,113	1.70	9 (17%)
17	BCR	L	4019	-	41,41,41	0.76	0	56,56,56	1.95	15 (26%)
14	CLA	K	1105	9	45,53,73	1.79	8 (17%)	52,89,113	1.85	11 (21%)
14	CLA	e	1011	1	65,73,73	1.45	10 (15%)	76,113,113	1.73	14 (18%)
14	CLA	G	1107	1	65,73,73	1.52	10 (15%)	76,113,113	1.50	10 (13%)
14	CLA	G	1102	1	55,63,73	1.57	9 (16%)	64,101,113	1.61	7 (10%)
14	CLA	H	1236	2	50,58,73	1.70	9 (18%)	58,95,113	1.54	10 (17%)
14	CLA	b	502	13	45,53,73	1.80	8 (17%)	52,89,113	1.67	8 (15%)
17	BCR	b	522	-	41,41,41	0.73	0	56,56,56	1.91	19 (33%)
22	FMN	p	170	-	33,33,33	1.12	2 (6%)	48,50,50	1.24	6 (12%)
17	BCR	o	4021	-	41,41,41	0.77	0	56,56,56	1.91	15 (26%)
14	CLA	1	504	-	45,53,73	1.79	8 (17%)	52,89,113	1.78	9 (17%)
14	CLA	K	1401	-	55,63,73	1.58	7 (12%)	64,101,113	1.63	10 (15%)
14	CLA	5	505	13	45,53,73	1.73	7 (15%)	52,89,113	1.61	6 (11%)
14	CLA	t	504	-	45,53,73	1.79	6 (13%)	52,89,113	1.64	7 (13%)
14	CLA	2	506	13	45,53,73	1.77	8 (17%)	52,89,113	1.62	7 (13%)
19	LMU	G	1848	-	36,36,36	1.15	2 (5%)	47,47,47	1.02	2 (4%)
17	BCR	Z	522	-	41,41,41	0.75	0	56,56,56	1.86	17 (30%)
14	CLA	Y	509	13	45,53,73	1.76	7 (15%)	52,89,113	1.66	9 (17%)
17	BCR	s	522	-	41,41,41	0.70	0	56,56,56	2.04	18 (32%)
14	CLA	a	509	13	45,53,73	1.74	7 (15%)	52,89,113	1.78	7 (13%)
14	CLA	s	503	13	45,53,73	1.77	6 (13%)	52,89,113	1.64	8 (15%)
14	CLA	b	512	13	45,53,73	1.74	6 (13%)	52,89,113	1.60	6 (11%)
14	CLA	e	1111	1	65,73,73	1.42	9 (13%)	76,113,113	1.53	8 (10%)
18	LHG	V	5220	-	40,40,48	0.70	1 (2%)	43,46,54	1.30	5 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	f	1214	2	65,73,73	1.49	9 (13%)	76,113,113	1.51	7 (9%)
14	CLA	U	1103	9	48,56,73	1.67	8 (16%)	55,92,113	1.62	8 (14%)
14	CLA	G	1121	1	55,63,73	1.57	10 (18%)	64,101,113	1.66	12 (18%)
14	CLA	G	1136	1	65,73,73	1.46	9 (13%)	76,113,113	1.54	10 (13%)
18	LHG	L	5220	-	40,40,48	0.70	1 (2%)	43,46,54	1.30	5 (11%)
20	LMG	f	5002	-	53,53,55	0.85	2 (3%)	61,61,63	1.51	12 (19%)
14	CLA	r	503	13	65,73,73	1.45	6 (9%)	76,113,113	1.47	8 (10%)
14	CLA	G	1139	23	65,73,73	1.47	10 (15%)	76,113,113	1.36	6 (7%)
14	CLA	G	1110	1	53,61,73	1.60	8 (15%)	61,98,113	1.58	8 (13%)
14	CLA	6	509	13	45,53,73	1.75	7 (15%)	52,89,113	1.68	7 (13%)
14	CLA	3	505	13	55,63,73	1.56	8 (14%)	64,101,113	1.49	7 (10%)
14	CLA	Y	519	13	45,53,73	1.80	8 (17%)	52,89,113	1.55	7 (13%)
14	CLA	4	510	13	45,53,73	1.73	6 (13%)	52,89,113	1.66	6 (11%)
14	CLA	d	502	13	45,53,73	1.77	7 (15%)	52,89,113	1.67	8 (15%)
17	BCR	Y	522	-	41,41,41	0.74	0	56,56,56	1.91	20 (35%)
14	CLA	1	508	13	45,53,73	1.77	10 (22%)	52,89,113	1.92	7 (13%)
14	CLA	A	1131	1	65,73,73	1.47	10 (15%)	76,113,113	1.42	9 (11%)
14	CLA	G	1109	1	65,73,73	1.40	9 (13%)	76,113,113	1.60	8 (10%)
14	CLA	H	1217	2	60,68,73	1.53	6 (10%)	70,107,113	1.42	7 (10%)
14	CLA	a	519	13	45,53,73	1.76	8 (17%)	52,89,113	1.61	7 (13%)
14	CLA	G	1127	1	65,73,73	1.42	9 (13%)	76,113,113	1.54	11 (14%)
14	CLA	f	1228	2	55,63,73	1.52	7 (12%)	64,101,113	1.70	8 (12%)
14	CLA	s	504	-	45,53,73	1.76	6 (13%)	52,89,113	1.74	9 (17%)
14	CLA	q	501	13	45,53,73	1.75	7 (15%)	52,89,113	1.66	6 (11%)
14	CLA	f	1225	2	65,73,73	1.45	10 (15%)	76,113,113	1.49	9 (11%)
14	CLA	1	519	13	45,53,73	1.79	8 (17%)	52,89,113	1.56	6 (11%)
14	CLA	2	507	-	45,53,73	1.72	8 (17%)	52,89,113	1.71	10 (19%)
17	BCR	k	4018	-	41,41,41	0.93	2 (4%)	56,56,56	1.93	16 (28%)
14	CLA	4	502	13	45,53,73	1.79	8 (17%)	52,89,113	1.67	7 (13%)
17	BCR	n	4020	-	41,41,41	0.98	2 (4%)	56,56,56	1.67	14 (25%)
14	CLA	H	1205	2	65,73,73	1.46	10 (15%)	76,113,113	1.58	11 (14%)
14	CLA	e	1131	1	65,73,73	1.47	10 (15%)	76,113,113	1.42	9 (11%)
17	BCR	f	4010	-	41,41,41	0.91	1 (2%)	56,56,56	2.30	21 (37%)
14	CLA	B	1207	2	65,73,73	1.45	9 (13%)	76,113,113	1.38	6 (7%)
17	BCR	Y	521	-	41,41,41	0.67	0	56,56,56	1.83	11 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
17	BCR	s	524	-	41,41,41	0.77	0	56,56,56	1.93	18 (32%)
15	PQN	e	2001	-	34,34,34	2.81	11 (32%)	42,45,45	2.19	6 (14%)
18	LHG	e	5006	-	39,39,48	0.67	1 (2%)	42,45,54	1.22	5 (11%)
14	CLA	e	1114	23	45,53,73	1.80	8 (17%)	52,89,113	1.68	9 (17%)
14	CLA	t	516	13	45,53,73	1.76	6 (13%)	52,89,113	1.62	7 (13%)
17	BCR	3	522	-	41,41,41	0.69	0	56,56,56	2.04	18 (32%)
17	BCR	6	522	-	41,41,41	0.72	0	56,56,56	1.89	19 (33%)
14	CLA	d	505	13	65,73,73	1.45	7 (10%)	76,113,113	1.46	8 (10%)
17	BCR	m	4104	-	41,41,41	0.79	0	56,56,56	1.88	16 (28%)
14	CLA	Z	506	13	45,53,73	1.77	8 (17%)	52,89,113	1.61	7 (13%)
14	CLA	5	511	13	45,53,73	1.76	5 (11%)	52,89,113	1.71	7 (13%)
17	BCR	B	4006	-	41,41,41	0.78	0	56,56,56	2.09	18 (32%)
14	CLA	a	505	13	55,63,73	1.56	8 (14%)	64,101,113	1.49	7 (10%)
14	CLA	d	510	13	45,53,73	1.76	7 (15%)	52,89,113	1.62	6 (11%)
14	CLA	s	508	13	45,53,73	1.79	9 (20%)	52,89,113	1.75	7 (13%)
17	BCR	1	521	-	41,41,41	0.67	0	56,56,56	1.83	11 (19%)
14	CLA	e	1136	1	65,73,73	1.46	9 (13%)	76,113,113	1.54	10 (13%)
14	CLA	f	1234	2	65,73,73	1.44	9 (13%)	76,113,113	1.65	10 (13%)
17	BCR	e	4011	-	41,41,41	0.83	0	56,56,56	1.78	12 (21%)
14	CLA	A	1105	1	55,63,73	1.50	9 (16%)	64,101,113	1.67	8 (12%)
19	LMU	T	5105	-	22,22,36	1.21	1 (4%)	27,27,47	1.43	5 (18%)
21	SQD	B	1852	-	39,40,54	1.18	6 (15%)	48,51,65	1.84	12 (25%)
14	CLA	v	506	13	45,53,73	1.76	7 (15%)	52,89,113	1.67	6 (11%)
18	LHG	B	1855	-	40,40,48	0.69	1 (2%)	43,46,54	1.24	5 (11%)
17	BCR	V	4219	-	41,41,41	1.08	5 (12%)	56,56,56	2.26	23 (41%)
18	LHG	f	1842	14	36,36,48	0.81	1 (2%)	39,42,54	1.25	3 (7%)
17	BCR	a	524	-	41,41,41	0.78	0	56,56,56	1.93	18 (32%)
14	CLA	F	1301	23	45,53,73	1.73	9 (20%)	52,89,113	1.60	6 (11%)
17	BCR	L	4219	-	41,41,41	1.09	5 (12%)	56,56,56	2.26	23 (41%)
14	CLA	Z	513	13	45,53,73	1.78	9 (20%)	52,89,113	1.55	6 (11%)
21	SQD	L	5216	-	45,46,54	1.01	5 (11%)	54,57,65	1.69	11 (20%)
14	CLA	H	1226	2	55,63,73	1.71	10 (18%)	64,101,113	1.99	16 (25%)
14	CLA	v	517	-	45,53,73	1.74	8 (17%)	52,89,113	1.61	7 (13%)
14	CLA	H	1206	2	65,73,73	1.49	11 (16%)	76,113,113	1.61	10 (13%)
14	CLA	H	1211	2	55,63,73	1.53	8 (14%)	64,101,113	1.69	8 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	Y	508	13	45,53,73	1.77	9 (20%)	52,89,113	1.92	8 (15%)
14	CLA	Z	507	-	45,53,73	1.72	7 (15%)	52,89,113	1.71	10 (19%)
14	CLA	e	1801	18	45,53,73	1.65	7 (15%)	52,89,113	1.73	7 (13%)
14	CLA	s	510	13	45,53,73	1.75	8 (17%)	52,89,113	1.64	7 (13%)
14	CLA	f	1206	2	65,73,73	1.49	11 (16%)	76,113,113	1.61	10 (13%)
18	LHG	G	5005	-	42,42,48	0.65	1 (2%)	45,48,54	1.21	4 (8%)
17	BCR	c	521	-	41,41,41	0.71	0	56,56,56	1.97	18 (32%)
19	LMU	J	5105	-	22,22,36	1.21	1 (4%)	27,27,47	1.43	5 (18%)
14	CLA	a	508	13	45,53,73	1.78	9 (20%)	52,89,113	1.75	7 (13%)
14	CLA	f	1219	2	63,71,73	1.51	9 (14%)	73,110,113	1.44	10 (13%)
14	CLA	q	512	13	45,53,73	1.74	8 (17%)	52,89,113	1.48	5 (9%)
14	CLA	s	511	13	45,53,73	1.75	6 (13%)	52,89,113	1.71	9 (17%)
21	SQD	l	822	-	31,32,54	1.20	5 (16%)	40,43,65	2.05	13 (32%)
14	CLA	e	1139	23	65,73,73	1.47	10 (15%)	76,113,113	1.36	7 (9%)
14	CLA	2	508	13	45,53,73	1.77	9 (20%)	52,89,113	1.76	10 (19%)
14	CLA	A	1801	18	45,53,73	1.65	7 (15%)	52,89,113	1.73	7 (13%)
14	CLA	s	513	13	45,53,73	1.79	8 (17%)	52,89,113	1.59	6 (11%)
14	CLA	e	1108	1	54,62,73	1.57	7 (12%)	62,99,113	1.58	8 (12%)
18	LHG	A	5006	-	39,39,48	0.67	1 (2%)	42,45,54	1.22	5 (11%)
14	CLA	e	1132	1	65,73,73	1.42	10 (15%)	76,113,113	1.55	11 (14%)
14	CLA	b	501	13	45,53,73	1.79	6 (13%)	52,89,113	1.63	7 (13%)
14	CLA	v	513	13	45,53,73	1.78	7 (15%)	52,89,113	1.59	6 (11%)
14	CLA	l	517	-	45,53,73	1.75	7 (15%)	52,89,113	1.59	7 (13%)
22	FMN	P	170	-	33,33,33	1.13	2 (6%)	48,50,50	1.24	6 (12%)
14	CLA	Y	511	13	45,53,73	1.76	7 (15%)	52,89,113	1.68	7 (13%)
14	CLA	v	504	-	45,53,73	1.75	7 (15%)	52,89,113	1.69	7 (13%)
14	CLA	f	1235	2	65,73,73	1.48	10 (15%)	76,113,113	1.52	8 (10%)
20	LMG	B	5002	-	53,53,55	0.85	3 (5%)	61,61,63	1.51	12 (19%)
14	CLA	a	511	13	45,53,73	1.75	6 (13%)	52,89,113	1.71	9 (17%)
14	CLA	e	1013	-	65,73,73	1.43	8 (12%)	76,113,113	1.88	13 (17%)
14	CLA	c	519	13	45,53,73	1.77	6 (13%)	52,89,113	1.62	7 (13%)
14	CLA	q	516	13	45,53,73	1.72	9 (20%)	52,89,113	1.64	9 (17%)
18	LHG	f	1855	-	40,40,48	0.69	1 (2%)	43,46,54	1.24	5 (11%)
14	CLA	5	509	13	65,73,73	1.44	7 (10%)	76,113,113	1.49	7 (9%)
14	CLA	t	513	13	45,53,73	1.77	6 (13%)	52,89,113	1.63	6 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
17	BCR	c	522	-	41,41,41	0.76	0	56,56,56	1.94	20 (35%)
14	CLA	H	1239	2	65,73,73	1.48	8 (12%)	76,113,113	1.73	14 (18%)
17	BCR	B	4005	-	41,41,41	0.76	0	56,56,56	1.72	12 (21%)
14	CLA	H	1207	2	65,73,73	1.45	9 (13%)	76,113,113	1.39	6 (7%)
14	CLA	3	501	13	45,53,73	1.76	7 (15%)	52,89,113	1.66	9 (17%)
18	LHG	I	5001	-	47,47,48	0.62	0	50,53,54	1.24	5 (10%)
17	BCR	v	524	-	41,41,41	0.78	0	56,56,56	1.84	15 (26%)
14	CLA	a	513	13	45,53,73	1.79	8 (17%)	52,89,113	1.60	6 (11%)
14	CLA	r	505	13	65,73,73	1.42	7 (10%)	76,113,113	1.46	8 (10%)
14	CLA	f	1232	23	55,63,73	1.54	8 (14%)	64,101,113	1.70	7 (10%)
14	CLA	a	504	-	45,53,73	1.75	7 (15%)	52,89,113	1.72	9 (17%)
17	BCR	A	4001	-	41,41,41	0.79	0	56,56,56	1.69	11 (19%)
17	BCR	Y	523	-	41,41,41	0.74	0	56,56,56	1.69	14 (25%)
18	LHG	L	5221	-	48,48,48	0.62	0	51,54,54	1.28	7 (13%)
17	BCR	q	522	-	41,41,41	0.74	0	56,56,56	1.91	20 (35%)
14	CLA	H	1210	2	65,73,73	1.44	9 (13%)	76,113,113	1.48	9 (11%)
14	CLA	f	1202	2	65,73,73	1.42	7 (10%)	76,113,113	1.58	8 (10%)
14	CLA	V	1501	10	60,68,73	1.57	10 (16%)	70,107,113	1.51	9 (12%)
21	SQD	f	1852	-	39,40,54	1.18	6 (15%)	48,51,65	1.84	12 (25%)
14	CLA	A	1126	1	65,73,73	1.39	8 (12%)	76,113,113	1.57	8 (10%)
14	CLA	l	1302	8	55,63,73	1.55	9 (16%)	64,101,113	1.56	9 (14%)
14	CLA	2	504	-	45,53,73	1.77	7 (15%)	52,89,113	1.63	8 (15%)
17	BCR	B	4010	-	41,41,41	0.91	1 (2%)	56,56,56	2.30	21 (37%)
14	CLA	B	1221	23	62,70,73	1.50	8 (12%)	72,109,113	1.69	11 (15%)
14	CLA	A	1140	1	65,73,73	1.45	9 (13%)	76,113,113	1.57	10 (13%)
14	CLA	G	1801	18	45,53,73	1.65	7 (15%)	52,89,113	1.74	6 (11%)
14	CLA	e	1128	1	65,73,73	1.58	11 (16%)	76,113,113	1.69	9 (11%)
14	CLA	t	510	13	45,53,73	1.73	6 (13%)	52,89,113	1.67	6 (11%)
14	CLA	e	1121	1	55,63,73	1.57	10 (18%)	64,101,113	1.65	12 (18%)
17	BCR	J	4012	-	41,41,41	0.72	0	56,56,56	1.75	12 (21%)
14	CLA	u	511	13	45,53,73	1.76	5 (11%)	52,89,113	1.72	8 (15%)
17	BCR	K	4104	-	41,41,41	0.78	0	56,56,56	1.88	16 (28%)
14	CLA	A	1123	23	65,73,73	1.42	8 (12%)	76,113,113	1.53	8 (10%)
14	CLA	f	1223	2	65,73,73	1.42	8 (12%)	76,113,113	1.64	7 (9%)
17	BCR	H	4009	-	41,41,41	0.78	0	56,56,56	1.90	20 (35%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	v	519	13	45,53,73	1.79	9 (20%)	52,89,113	1.58	7 (13%)
18	LHG	k	5001	-	47,47,48	0.62	0	50,53,54	1.24	5 (10%)
20	LMG	J	5104	-	32,32,55	0.96	2 (6%)	40,40,63	1.26	4 (10%)
14	CLA	4	501	13	45,53,73	1.78	5 (11%)	52,89,113	1.63	7 (13%)
14	CLA	G	1125	1	65,73,73	1.42	10 (15%)	76,113,113	1.58	9 (11%)
14	CLA	v	503	13	45,53,73	1.75	6 (13%)	52,89,113	1.69	6 (11%)
14	CLA	u	507	-	45,53,73	1.74	6 (13%)	52,89,113	1.71	9 (17%)
14	CLA	v	507	-	45,53,73	1.76	7 (15%)	52,89,113	1.69	9 (17%)
18	LHG	G	5006	-	39,39,48	0.67	1 (2%)	42,45,54	1.22	5 (11%)
14	CLA	G	1131	1	65,73,73	1.47	10 (15%)	76,113,113	1.42	9 (11%)
17	BCR	U	4104	-	41,41,41	0.78	0	56,56,56	1.88	16 (28%)
14	CLA	2	517	-	45,53,73	1.76	7 (15%)	52,89,113	1.65	7 (13%)
14	CLA	B	1206	2	65,73,73	1.49	11 (16%)	76,113,113	1.61	10 (13%)
14	CLA	d	512	13	45,53,73	1.76	7 (15%)	52,89,113	1.58	6 (11%)
17	BCR	5	524	-	41,41,41	0.71	0	56,56,56	1.74	12 (21%)
14	CLA	H	1214	2	65,73,73	1.49	9 (13%)	76,113,113	1.52	8 (10%)
18	LHG	V	5221	-	48,48,48	0.62	0	51,54,54	1.28	7 (13%)
19	LMU	f	1843	-	36,36,36	1.16	2 (5%)	47,47,47	1.06	3 (6%)
14	CLA	e	1140	1	65,73,73	1.45	9 (13%)	76,113,113	1.56	10 (13%)
14	CLA	3	508	13	45,53,73	1.79	9 (20%)	52,89,113	1.75	7 (13%)
14	CLA	4	509	13	45,53,73	1.77	7 (15%)	52,89,113	1.76	9 (17%)
14	CLA	H	1221	23	62,70,73	1.50	8 (12%)	72,109,113	1.70	11 (15%)
14	CLA	A	1116	1	60,68,73	1.51	8 (13%)	70,107,113	1.50	7 (10%)
14	CLA	r	509	13	65,73,73	1.45	7 (10%)	76,113,113	1.51	7 (9%)
16	SF4	e	3001	2,1	0,12,12	-	-	-	-	-
14	CLA	4	505	13	45,53,73	1.75	9 (20%)	52,89,113	1.54	6 (11%)
14	CLA	f	1221	23	62,70,73	1.50	8 (12%)	72,109,113	1.69	11 (15%)
14	CLA	e	1115	1	60,68,73	1.50	9 (15%)	70,107,113	1.58	7 (10%)
14	CLA	V	1503	23	60,68,73	1.47	8 (13%)	70,107,113	1.56	7 (10%)
14	CLA	H	1213	2	61,69,73	1.46	7 (11%)	71,108,113	1.60	9 (12%)
17	BCR	Z	521	-	41,41,41	0.70	0	56,56,56	1.90	13 (23%)
22	FMN	X	170	-	33,33,33	1.12	2 (6%)	48,50,50	1.24	6 (12%)
14	CLA	Y	504	-	45,53,73	1.79	9 (20%)	52,89,113	1.79	10 (19%)
14	CLA	A	1102	1	55,63,73	1.56	9 (16%)	64,101,113	1.62	7 (10%)
14	CLA	V	1502	10	65,73,73	1.45	9 (13%)	76,113,113	1.53	8 (10%)



Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	A	1022	23	65,73,73	1.54	11 (16%)	76,113,113	1.55	11 (14%)
14	CLA	e	1107	1	65,73,73	1.53	10 (15%)	76,113,113	1.49	10 (13%)
14	CLA	B	1238	23	65,73,73	1.40	7 (10%)	76,113,113	1.63	10 (13%)
14	CLA	B	1228	2	55,63,73	1.52	7 (12%)	64,101,113	1.70	8 (12%)
14	CLA	G	1105	1	55,63,73	1.49	8 (14%)	64,101,113	1.67	8 (12%)
14	CLA	B	1225	2	65,73,73	1.44	10 (15%)	76,113,113	1.49	8 (10%)
14	CLA	Z	508	13	45,53,73	1.77	9 (20%)	52,89,113	1.77	10 (19%)
17	BCR	4	524	-	41,41,41	0.70	0	56,56,56	1.85	14 (25%)
19	LMU	A	1848	-	36,36,36	1.15	2 (5%)	47,47,47	1.02	2 (4%)
14	CLA	2	513	13	45,53,73	1.78	9 (20%)	52,89,113	1.55	6 (11%)
14	CLA	f	1239	2	65,73,73	1.48	8 (12%)	76,113,113	1.73	14 (18%)
17	BCR	l	4012	-	41,41,41	0.73	0	56,56,56	1.75	12 (21%)
14	CLA	u	513	13	45,53,73	1.79	8 (17%)	52,89,113	1.55	6 (11%)
14	CLA	q	502	13	45,53,73	1.76	8 (17%)	52,89,113	1.66	8 (15%)
21	SQD	5	822	-	25,26,54	1.29	4 (16%)	34,37,65	1.95	11 (32%)
14	CLA	G	1132	1	65,73,73	1.42	10 (15%)	76,113,113	1.55	11 (14%)
14	CLA	G	1118	1	60,68,73	1.47	9 (15%)	70,107,113	1.56	8 (11%)
14	CLA	5	507	-	45,53,73	1.73	6 (13%)	52,89,113	1.71	9 (17%)
17	BCR	f	4005	-	41,41,41	0.77	0	56,56,56	1.72	12 (21%)
14	CLA	f	1240	18	65,73,73	1.47	6 (9%)	76,113,113	1.45	8 (10%)
17	BCR	B	4004	-	41,41,41	0.73	0	56,56,56	1.85	14 (25%)
17	BCR	l	523	-	41,41,41	0.75	0	56,56,56	1.69	13 (23%)
14	CLA	H	1227	2	60,68,73	1.54	10 (16%)	70,107,113	1.50	8 (11%)
17	BCR	v	522	-	41,41,41	0.71	0	56,56,56	1.89	19 (33%)
14	CLA	b	507	-	45,53,73	1.72	6 (13%)	52,89,113	1.72	8 (15%)
14	CLA	B	1210	2	65,73,73	1.43	9 (13%)	76,113,113	1.48	9 (11%)
14	CLA	L	1503	23	60,68,73	1.48	8 (13%)	70,107,113	1.56	7 (10%)
14	CLA	u	510	13	45,53,73	1.73	7 (15%)	52,89,113	1.63	7 (13%)
14	CLA	a	518	13	55,63,73	1.58	8 (14%)	64,101,113	1.48	7 (10%)
14	CLA	s	505	13	55,63,73	1.56	7 (12%)	64,101,113	1.50	7 (10%)
14	CLA	d	516	13	45,53,73	1.77	6 (13%)	52,89,113	1.60	7 (13%)
18	LHG	e	5002	-	42,42,48	0.76	1 (2%)	45,48,54	1.23	4 (8%)
14	CLA	u	517	-	45,53,73	1.80	8 (17%)	52,89,113	1.57	6 (11%)
14	CLA	6	516	13	45,53,73	1.77	6 (13%)	52,89,113	1.60	8 (15%)
19	LMU	e	1849	-	23,23,36	1.17	1 (4%)	28,28,47	1.39	4 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
14	CLA	G	1116	1	60,68,73	1.51	8 (13%)	70,107,113	1.51	7 (10%)
14	CLA	e	1104	1	65,73,73	1.44	9 (13%)	76,113,113	1.60	13 (17%)
14	CLA	A	1117	1	65,73,73	1.47	10 (15%)	76,113,113	1.58	10 (13%)
17	BCR	s	523	-	41,41,41	0.69	0	56,56,56	1.82	15 (26%)
21	SQD	v	822	-	25,26,54	1.31	4 (16%)	34,37,65	2.00	10 (29%)
14	CLA	l	518	13	45,53,73	1.76	6 (13%)	52,89,113	1.63	7 (13%)
17	BCR	l	4013	-	41,41,41	0.77	0	56,56,56	1.93	16 (28%)
21	SQD	Z	822	-	27,28,54	1.22	4 (14%)	36,39,65	1.86	10 (27%)
14	CLA	t	505	13	45,53,73	1.75	9 (20%)	52,89,113	1.54	6 (11%)
14	CLA	A	1013	-	65,73,73	1.43	8 (12%)	76,113,113	1.88	13 (17%)
14	CLA	H	1229	2	65,73,73	1.42	7 (10%)	76,113,113	1.59	9 (11%)
14	CLA	r	516	13	45,53,73	1.77	7 (15%)	52,89,113	1.65	8 (15%)
14	CLA	b	518	13	45,53,73	1.76	6 (13%)	52,89,113	1.61	6 (11%)
15	PQN	H	2002	-	34,34,34	2.84	11 (32%)	42,45,45	2.30	6 (14%)
14	CLA	s	501	13	45,53,73	1.76	7 (15%)	52,89,113	1.67	9 (17%)
17	BCR	f	4017	-	41,41,41	0.97	3 (7%)	56,56,56	1.82	12 (21%)
14	CLA	c	506	13	45,53,73	1.73	7 (15%)	52,89,113	1.62	7 (13%)
14	CLA	6	503	13	45,53,73	1.76	6 (13%)	52,89,113	1.69	6 (11%)
14	CLA	v	511	13	45,53,73	1.78	5 (11%)	52,89,113	1.70	7 (13%)
14	CLA	6	512	13	45,53,73	1.77	6 (13%)	52,89,113	1.59	6 (11%)
17	BCR	f	4004	-	41,41,41	0.74	0	56,56,56	1.85	14 (25%)
14	CLA	l	511	13	45,53,73	1.76	7 (15%)	52,89,113	1.68	7 (13%)
14	CLA	Y	507	-	45,53,73	1.74	7 (15%)	52,89,113	1.70	9 (17%)
17	BCR	I	4018	-	41,41,41	0.93	2 (4%)	56,56,56	1.93	17 (30%)
14	CLA	Z	517	-	45,53,73	1.75	7 (15%)	52,89,113	1.65	7 (13%)
14	CLA	B	1235	2	65,73,73	1.47	10 (15%)	76,113,113	1.51	8 (10%)
17	BCR	a	523	-	41,41,41	0.69	0	56,56,56	1.82	15 (26%)
14	CLA	f	1210	2	65,73,73	1.43	8 (12%)	76,113,113	1.48	9 (11%)
14	CLA	q	503	13	45,53,73	1.76	8 (17%)	52,89,113	1.66	7 (13%)
14	CLA	e	1101	1	65,73,73	1.50	9 (13%)	76,113,113	1.61	13 (17%)
14	CLA	3	518	13	55,63,73	1.58	8 (14%)	64,101,113	1.49	7 (10%)
17	BCR	A	4007	-	41,41,41	0.87	0	56,56,56	2.10	20 (35%)
14	CLA	b	511	13	45,53,73	1.79	7 (15%)	52,89,113	1.68	9 (17%)
14	CLA	f	1216	23	60,68,73	1.60	10 (16%)	70,107,113	1.55	11 (15%)
14	CLA	l	513	13	45,53,73	1.77	7 (15%)	52,89,113	1.62	7 (13%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z  > 2	Counts	RMSZ	# Z  > 2
17	BCR	5	522	-	41,41,41	0.76	0	56,56,56	1.94	20 (35%)
14	CLA	s	517	-	45,53,73	1.79	8 (17%)	52,89,113	1.59	6 (11%)
14	CLA	e	1125	1	65,73,73	1.42	10 (15%)	76,113,113	1.59	9 (11%)
14	CLA	A	1114	23	45,53,73	1.80	8 (17%)	52,89,113	1.69	9 (17%)
14	CLA	H	1240	18	65,73,73	1.47	6 (9%)	76,113,113	1.46	8 (10%)
14	CLA	H	1225	2	65,73,73	1.45	10 (15%)	76,113,113	1.49	9 (11%)
14	CLA	3	513	13	45,53,73	1.78	8 (17%)	52,89,113	1.60	6 (11%)
14	CLA	A	1139	23	65,73,73	1.47	10 (15%)	76,113,113	1.36	7 (9%)
14	CLA	A	1109	1	65,73,73	1.41	9 (13%)	76,113,113	1.60	8 (10%)
18	LHG	e	5001	-	48,48,48	0.80	1 (2%)	51,54,54	1.30	7 (13%)
14	CLA	e	1118	1	60,68,73	1.47	10 (16%)	70,107,113	1.56	8 (11%)
14	CLA	3	511	13	45,53,73	1.75	6 (13%)	52,89,113	1.71	9 (17%)
18	LHG	e	5003	14	39,39,48	0.86	1 (2%)	42,45,54	1.38	6 (14%)
14	CLA	A	1134	1	56,64,73	1.56	8 (14%)	65,102,113	1.64	11 (16%)
14	CLA	B	1212	2	51,59,73	1.60	7 (13%)	59,96,113	1.67	6 (10%)
14	CLA	Y	506	13	45,53,73	1.76	7 (15%)	52,89,113	1.64	6 (11%)
14	CLA	G	1115	1	60,68,73	1.50	9 (15%)	70,107,113	1.59	7 (10%)
14	CLA	H	1234	2	65,73,73	1.44	9 (13%)	76,113,113	1.65	10 (13%)
19	LMU	A	1849	-	23,23,36	1.17	1 (4%)	28,28,47	1.39	4 (14%)
14	CLA	f	1211	2	55,63,73	1.53	8 (14%)	64,101,113	1.69	8 (12%)

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

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	1	512	13	1/1/11/20	5/13/91/115	-
21	SQD	r	822	-	-	7/22/42/69	0/1/1/1
14	CLA	d	509	13	1/1/11/20	4/13/91/115	-
14	CLA	G	1117	1	1/1/15/20	12/37/115/115	-
14	CLA	t	512	13	1/1/11/20	3/13/91/115	-
17	BCR	4	521	-	-	10/29/63/63	0/2/2/2
14	CLA	2	503	13	1/1/15/20	9/37/115/115	-
14	CLA	e	1102	1	1/1/13/20	7/25/103/115	-
17	BCR	H	4014	-	-	7/29/63/63	0/2/2/2

Continued on next page...

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	u	518	13	1/1/11/20	3/13/91/115	-
14	CLA	B	1211	2	1/1/13/20	8/25/103/115	-
18	LHG	H	1842	14	-	19/41/41/53	-
14	CLA	G	1022	23	1/1/15/20	9/37/115/115	-
16	SF4	A	3001	2,1	-	-	0/6/5/5
14	CLA	e	1113	1	1/1/11/20	6/13/91/115	-
14	CLA	3	512	13	1/1/11/20	2/13/91/115	-
14	CLA	f	1229	2	1/1/15/20	12/37/115/115	-
17	BCR	d	522	-	-	5/29/63/63	0/2/2/2
18	LHG	A	5004	-	-	18/39/39/53	-
14	CLA	3	502	13	1/1/11/20	1/13/91/115	-
14	CLA	H	1218	2	1/1/14/20	7/31/109/115	-
14	CLA	a	501	13	1/1/11/20	4/13/91/115	-
14	CLA	A	1128	1	1/1/15/20	10/37/115/115	-
14	CLA	A	1111	1	1/1/15/20	18/37/115/115	-
14	CLA	6	502	13	1/1/11/20	1/13/91/115	-
14	CLA	e	1117	1	1/1/15/20	12/37/115/115	-
17	BCR	a	522	-	-	5/29/63/63	0/2/2/2
14	CLA	f	1204	2	1/1/15/20	12/37/115/115	-
14	CLA	e	1124	23	1/1/14/20	11/31/109/115	-
14	CLA	B	1214	2	1/1/15/20	12/37/115/115	-
18	LHG	A	5003	14	-	17/44/44/53	-
14	CLA	s	512	13	1/1/11/20	2/13/91/115	-
14	CLA	4	503	13	1/1/11/20	2/13/91/115	-
14	CLA	G	1114	23	1/1/11/20	3/13/91/115	-
14	CLA	H	1235	2	1/1/15/20	7/37/115/115	-
14	CLA	Z	519	13	1/1/11/20	5/13/91/115	-
18	LHG	V	5218	-	-	19/41/41/53	-
21	SQD	c	822	-	-	3/19/39/69	0/1/1/1
17	BCR	2	524	-	-	3/29/63/63	0/2/2/2
14	CLA	c	513	13	1/1/11/20	5/13/91/115	-
14	CLA	q	508	13	1/1/11/20	5/13/91/115	-
14	CLA	r	502	13	1/1/11/20	1/13/91/115	-
14	CLA	c	507	-	1/1/11/20	7/13/91/115	-
14	CLA	5	519	13	1/1/11/20	6/13/91/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	e	1134	1	1/1/13/20	9/27/105/115	-
14	CLA	F	1302	6	1/1/11/20	7/13/91/115	-
14	CLA	B	1204	2	1/1/15/20	12/37/115/115	-
14	CLA	A	1115	1	1/1/14/20	11/31/109/115	-
17	BCR	J	4013	-	-	4/29/63/63	0/2/2/2
14	CLA	B	1239	2	1/1/15/20	14/37/115/115	-
14	CLA	3	510	13	1/1/11/20	6/13/91/115	-
14	CLA	e	1138	1	1/1/15/20	12/37/115/115	-
14	CLA	H	1201	2	1/1/14/20	8/31/109/115	-
14	CLA	H	1224	2	1/1/14/20	7/31/109/115	-
14	CLA	H	1212	2	1/1/12/20	8/21/99/115	-
17	BCR	d	524	-	-	5/29/63/63	0/2/2/2
14	CLA	f	1201	2	1/1/14/20	8/31/109/115	-
14	CLA	u	503	13	1/1/11/20	7/13/91/115	-
18	LHG	e	5005	-	-	28/47/47/53	-
14	CLA	B	1240	18	1/1/15/20	13/37/115/115	-
14	CLA	B	1213	2	1/1/14/20	11/33/111/115	-
14	CLA	B	1205	2	1/1/15/20	8/37/115/115	-
14	CLA	f	1209	2	1/1/12/20	9/23/101/115	-
14	CLA	f	1021	2	1/1/15/20	9/37/115/115	-
14	CLA	t	517	-	1/1/11/20	5/13/91/115	-
14	CLA	G	1013	-	1/1/15/20	14/37/115/115	-
14	CLA	a	506	13	1/1/11/20	8/13/91/115	-
14	CLA	f	1236	2	1/1/12/20	3/19/97/115	-
16	SF4	G	3001	2,1	-	-	0/6/5/5
14	CLA	G	1120	1	1/1/12/20	11/19/97/115	-
21	SQD	4	822	-	-	10/19/39/69	0/1/1/1
14	CLA	u	504	-	1/1/11/20	3/13/91/115	-
17	BCR	e	4008	-	-	7/29/63/63	0/2/2/2
14	CLA	d	501	13	1/1/11/20	7/13/91/115	-
14	CLA	v	508	13	1/1/11/20	4/13/91/115	-
14	CLA	Z	516	13	-	6/13/91/115	-
14	CLA	H	1230	2	1/1/14/20	10/31/109/115	-
14	CLA	G	1128	1	1/1/15/20	10/37/115/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	d	511	13	1/1/11/20	6/13/91/115	-
14	CLA	5	517	-	1/1/11/20	10/13/91/115	-
14	CLA	Y	510	13	1/1/11/20	4/13/91/115	-
21	SQD	q	822	-	-	10/27/47/69	0/1/1/1
14	CLA	a	507	-	1/1/11/20	5/13/91/115	-
18	LHG	n	5221	-	-	31/53/53/53	-
14	CLA	B	1202	2	1/1/15/20	12/37/115/115	-
14	CLA	2	510	13	1/1/11/20	7/13/91/115	-
19	LMU	l	5105	-	-	9/13/33/61	0/1/1/2
14	CLA	5	518	13	1/1/11/20	3/13/91/115	-
14	CLA	Z	503	13	1/1/15/20	9/37/115/115	-
14	CLA	u	508	13	1/1/11/20	4/13/91/115	-
14	CLA	s	516	13	1/1/11/20	7/13/91/115	-
14	CLA	f	1238	23	1/1/15/20	4/37/115/115	-
14	CLA	1	510	13	1/1/11/20	4/13/91/115	-
18	LHG	G	5008	-	-	18/39/39/53	-
14	CLA	G	1134	1	1/1/13/20	9/27/105/115	-
14	CLA	b	505	13	1/1/11/20	3/13/91/115	-
14	CLA	5	503	13	1/1/11/20	7/13/91/115	-
14	CLA	Y	503	13	1/1/11/20	7/13/91/115	-
14	CLA	f	1205	2	1/1/15/20	8/37/115/115	-
19	LMU	G	1849	-	-	6/14/34/61	0/1/1/2
14	CLA	a	512	13	1/1/11/20	2/13/91/115	-
14	CLA	L	1501	10	1/1/14/20	9/31/109/115	-
14	CLA	A	1104	1	1/1/15/20	10/37/115/115	-
14	CLA	1	503	13	1/1/11/20	7/13/91/115	-
14	CLA	q	510	13	1/1/11/20	4/13/91/115	-
17	BCR	H	4006	-	-	4/29/63/63	0/2/2/2
14	CLA	e	1103	1	1/1/15/20	21/37/115/115	-
14	CLA	L	1502	10	1/1/15/20	8/37/115/115	-
14	CLA	H	1204	2	1/1/15/20	12/37/115/115	-
14	CLA	A	1122	1	1/1/14/20	12/31/109/115	-
16	SF4	N	3003	3	-	-	0/6/5/5
14	CLA	A	1135	1	1/1/13/20	10/25/103/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	f	1230	2	1/1/14/20	10/31/109/115	-
14	CLA	r	508	13	1/1/11/20	2/13/91/115	-
17	BCR	Z	524	-	-	3/29/63/63	0/2/2/2
16	SF4	g	3003	3	-	-	0/6/5/5
14	CLA	2	511	13	1/1/11/20	4/13/91/115	-
17	BCR	n	4022	-	-	3/29/63/63	0/2/2/2
14	CLA	c	518	13	1/1/11/20	3/13/91/115	-
14	CLA	e	1120	1	1/1/12/20	11/19/97/115	-
14	CLA	t	519	13	1/1/11/20	8/13/91/115	-
17	BCR	4	522	-	-	4/29/63/63	0/2/2/2
14	CLA	m	1103	9	1/1/11/20	8/17/95/115	-
14	CLA	j	1301	23	1/1/11/20	2/13/91/115	-
18	LHG	G	5004	-	-	18/39/39/53	-
17	BCR	R	4016	-	-	2/29/63/63	0/2/2/2
14	CLA	A	1137	1	1/1/14/20	18/31/109/115	-
14	CLA	3	503	13	1/1/11/20	7/13/91/115	-
14	CLA	r	501	13	1/1/14/20	11/31/109/115	-
17	BCR	l	4015	-	-	5/29/63/63	0/2/2/2
18	LHG	e	5007	-	-	23/51/51/53	-
14	CLA	f	1215	2	1/1/15/20	19/37/115/115	-
14	CLA	A	1118	1	1/1/14/20	8/31/109/115	-
14	CLA	3	509	13	1/1/11/20	2/13/91/115	-
17	BCR	A	4002	-	-	0/29/63/63	0/2/2/2
17	BCR	q	521	-	-	7/29/63/63	0/2/2/2
14	CLA	B	1021	2	1/1/15/20	9/37/115/115	-
14	CLA	H	1012	23	1/1/15/20	15/37/115/115	-
14	CLA	u	516	13	1/1/11/20	5/13/91/115	-
14	CLA	6	508	13	1/1/11/20	4/13/91/115	-
14	CLA	t	502	13	1/1/11/20	3/13/91/115	-
14	CLA	U	1401	-	1/1/13/20	8/25/103/115	-
14	CLA	6	506	13	1/1/11/20	6/13/91/115	-
14	CLA	A	1133	1	1/1/15/20	15/37/115/115	-
14	CLA	v	502	13	1/1/11/20	1/13/91/115	-
17	BCR	J	4015	-	-	5/29/63/63	0/2/2/2
14	CLA	B	1216	23	1/1/14/20	11/31/109/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	s	509	13	1/1/11/20	2/13/91/115	-
14	CLA	e	1135	1	1/1/13/20	10/25/103/115	-
14	CLA	Z	502	13	1/1/11/20	1/13/91/115	-
14	CLA	q	517	-	1/1/11/20	7/13/91/115	-
14	CLA	r	513	13	1/1/11/20	2/13/91/115	-
17	BCR	l	522	-	-	6/29/63/63	0/2/2/2
14	CLA	Z	511	13	1/1/11/20	4/13/91/115	-
17	BCR	H	4017	-	-	2/29/63/63	0/2/2/2
14	CLA	r	504	-	1/1/11/20	7/13/91/115	-
17	BCR	n	4019	-	-	6/29/63/63	0/2/2/2
14	CLA	A	1132	1	1/1/15/20	16/37/115/115	-
14	CLA	v	509	13	1/1/11/20	4/13/91/115	-
14	CLA	B	1223	2	1/1/15/20	9/37/115/115	-
14	CLA	Y	512	13	1/1/11/20	5/13/91/115	-
17	BCR	t	521	-	-	10/29/63/63	0/2/2/2
17	BCR	W	4021	-	-	6/29/63/63	0/2/2/2
14	CLA	G	1140	1	1/1/15/20	12/37/115/115	-
14	CLA	e	1116	1	1/1/14/20	9/31/109/115	-
14	CLA	q	519	13	1/1/11/20	6/13/91/115	-
14	CLA	Z	504	-	1/1/11/20	7/13/91/115	-
14	CLA	H	1220	2	1/1/13/20	9/25/103/115	-
14	CLA	e	1129	1	1/1/12/20	8/23/101/115	-
17	BCR	L	4020	-	-	4/29/63/63	0/2/2/2
14	CLA	5	513	13	1/1/11/20	5/13/91/115	-
14	CLA	T	1303	8	1/1/11/20	4/13/91/115	-
14	CLA	c	503	13	1/1/11/20	7/13/91/115	-
14	CLA	s	502	13	1/1/11/20	1/13/91/115	-
14	CLA	5	504	-	1/1/11/20	3/13/91/115	-
14	CLA	5	508	13	1/1/11/20	4/13/91/115	-
14	CLA	G	1122	1	1/1/14/20	12/31/109/115	-
14	CLA	f	1231	23	1/1/15/20	8/37/115/115	-
16	SF4	g	3002	3	-	-	0/6/5/5
14	CLA	t	518	13	1/1/11/20	4/13/91/115	-
14	CLA	H	1202	2	1/1/15/20	12/37/115/115	-
14	CLA	2	509	13	1/1/15/20	3/37/115/115	-

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
17	BCR	G	4007	-	-	0/29/63/63	0/2/2/2
21	SQD	H	1852	-	-	18/35/55/69	0/1/1/1
14	CLA	b	504	-	1/1/11/20	4/13/91/115	-
14	CLA	t	501	13	1/1/11/20	6/13/91/115	-
17	BCR	V	4020	-	-	4/29/63/63	0/2/2/2
14	CLA	B	1201	2	1/1/14/20	8/31/109/115	-
17	BCR	s	521	-	-	7/29/63/63	0/2/2/2
17	BCR	M	4021	-	-	6/29/63/63	0/2/2/2
17	BCR	G	4002	-	-	0/29/63/63	0/2/2/2
14	CLA	v	510	13	1/1/11/20	8/13/91/115	-
21	SQD	3	822	-	-	9/23/43/69	0/1/1/1
14	CLA	Z	510	13	1/1/11/20	7/13/91/115	-
14	CLA	6	505	13	1/1/15/20	15/37/115/115	-
17	BCR	q	523	-	-	6/29/63/63	0/2/2/2
14	CLA	3	516	13	1/1/11/20	7/13/91/115	-
14	CLA	r	519	13	1/1/11/20	5/13/91/115	-
17	BCR	H	4010	-	-	7/29/63/63	0/2/2/2
14	CLA	e	1130	1	1/1/13/20	7/27/105/115	-
14	CLA	G	1133	1	1/1/15/20	15/37/115/115	-
14	CLA	B	1236	2	1/1/12/20	3/19/97/115	-
14	CLA	2	502	13	1/1/11/20	1/13/91/115	-
14	CLA	e	1127	1	1/1/15/20	12/37/115/115	-
14	CLA	l	501	13	1/1/11/20	9/13/91/115	-
14	CLA	s	506	13	1/1/11/20	8/13/91/115	-
21	SQD	n	5216	-	-	17/41/61/69	0/1/1/1
16	SF4	N	3002	3	-	-	0/6/5/5
14	CLA	A	1124	23	1/1/14/20	11/31/109/115	-
14	CLA	a	510	13	1/1/11/20	6/13/91/115	-
14	CLA	u	519	13	1/1/11/20	6/13/91/115	-
14	CLA	B	1234	2	1/1/15/20	15/37/115/115	-
14	CLA	R	1301	23	1/1/11/20	2/13/91/115	-
14	CLA	b	517	-	1/1/11/20	5/13/91/115	-
14	CLA	t	511	13	1/1/11/20	3/13/91/115	-
17	BCR	G	4001	-	-	8/29/63/63	0/2/2/2
14	CLA	B	1227	2	1/1/14/20	11/31/109/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
17	BCR	e	4002	-	-	0/29/63/63	0/2/2/2
17	BCR	t	523	-	-	5/29/63/63	0/2/2/2
21	SQD	d	822	-	-	7/19/39/69	0/1/1/1
21	SQD	s	822	-	-	9/23/43/69	0/1/1/1
14	CLA	e	1022	23	1/1/15/20	9/37/115/115	-
14	CLA	d	513	13	1/1/11/20	3/13/91/115	-
17	BCR	2	521	-	-	4/29/63/63	0/2/2/2
14	CLA	4	511	13	1/1/11/20	3/13/91/115	-
14	CLA	e	1123	23	1/1/15/20	11/37/115/115	-
14	CLA	r	512	13	1/1/11/20	4/13/91/115	-
14	CLA	Y	516	13	1/1/11/20	12/13/91/115	-
14	CLA	d	507	-	1/1/11/20	5/13/91/115	-
14	CLA	A	1107	1	1/1/15/20	14/37/115/115	-
14	CLA	G	1104	1	1/1/15/20	10/37/115/115	-
14	CLA	2	505	13	1/1/15/20	14/37/115/115	-
14	CLA	G	1138	1	1/1/15/20	12/37/115/115	-
14	CLA	5	506	13	1/1/11/20	6/13/91/115	-
14	CLA	e	1122	1	1/1/14/20	12/31/109/115	-
14	CLA	u	502	13	1/1/11/20	5/13/91/115	-
14	CLA	f	1222	23	1/1/12/20	2/19/97/115	-
14	CLA	A	1237	23	1/1/15/20	22/37/115/115	-
14	CLA	A	1106	1	1/1/15/20	21/37/115/115	-
14	CLA	G	1129	1	1/1/12/20	8/23/101/115	-
14	CLA	4	513	13	1/1/11/20	5/13/91/115	-
14	CLA	4	507	-	1/1/11/20	6/13/91/115	-
14	CLA	4	504	-	1/1/11/20	4/13/91/115	-
14	CLA	b	506	13	1/1/11/20	4/13/91/115	-
14	CLA	n	1503	23	1/1/14/20	10/31/109/115	-
14	CLA	f	1213	2	1/1/14/20	11/33/111/115	-
14	CLA	c	516	13	1/1/11/20	5/13/91/115	-
14	CLA	q	518	13	1/1/11/20	6/13/91/115	-
14	CLA	U	1105	9	1/1/11/20	8/13/91/115	-
16	SF4	C	3002	3	-	-	0/6/5/5
14	CLA	6	504	-	1/1/11/20	4/13/91/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	LHG	A	5008	-	-	18/39/39/53	-
14	CLA	n	1502	10	1/1/15/20	8/37/115/115	-
14	CLA	b	513	13	1/1/11/20	5/13/91/115	-
14	CLA	f	1220	2	1/1/13/20	9/25/103/115	-
14	CLA	r	517	-	-	7/13/91/115	-
14	CLA	2	516	13	-	6/13/91/115	-
17	BCR	e	4007	-	-	0/29/63/63	0/2/2/2
14	CLA	G	1137	1	1/1/14/20	18/31/109/115	-
14	CLA	q	513	13	1/1/11/20	4/13/91/115	-
14	CLA	A	1101	1	1/1/15/20	18/37/115/115	-
14	CLA	J	1303	8	1/1/11/20	4/13/91/115	-
14	CLA	f	1208	2	1/1/15/20	15/37/115/115	-
14	CLA	Y	517	-	1/1/11/20	7/13/91/115	-
14	CLA	l	516	13	1/1/11/20	12/13/91/115	-
14	CLA	q	504	-	1/1/11/20	5/13/91/115	-
17	BCR	G	4008	-	-	7/29/63/63	0/2/2/2
17	BCR	b	524	-	-	4/29/63/63	0/2/2/2
14	CLA	v	501	13	1/1/11/20	7/13/91/115	-
14	CLA	c	504	-	1/1/11/20	3/13/91/115	-
14	CLA	A	1136	1	1/1/15/20	10/37/115/115	-
21	SQD	b	822	-	-	10/19/39/69	0/1/1/1
17	BCR	e	4003	-	-	0/29/63/63	0/2/2/2
14	CLA	d	518	13	1/1/11/20	7/13/91/115	-
14	CLA	c	508	13	1/1/11/20	4/13/91/115	-
14	CLA	B	1230	2	1/1/14/20	10/31/109/115	-
17	BCR	S	4018	-	-	0/29/63/63	0/2/2/2
14	CLA	T	1302	8	1/1/13/20	12/25/103/115	-
18	LHG	G	5001	-	-	23/53/53/53	-
18	LHG	A	5009	-	-	28/46/46/53	-
14	CLA	t	509	13	1/1/11/20	6/13/91/115	-
14	CLA	H	1219	2	1/1/14/20	18/35/113/115	-
18	LHG	G	5003	14	-	17/44/44/53	-
14	CLA	u	501	13	1/1/11/20	6/13/91/115	-
14	CLA	6	510	13	1/1/11/20	8/13/91/115	-
14	CLA	r	518	13	1/1/13/20	14/25/103/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	e	1126	1	1/1/15/20	18/37/115/115	-
17	BCR	5	521	-	-	7/29/63/63	0/2/2/2
14	CLA	f	1227	2	1/1/14/20	11/31/109/115	-
14	CLA	e	1133	1	1/1/15/20	15/37/115/115	-
17	BCR	H	4004	-	-	8/29/63/63	0/2/2/2
14	CLA	A	1129	1	1/1/12/20	8/23/101/115	-
14	CLA	B	1215	2	1/1/15/20	19/37/115/115	-
14	CLA	A	1108	1	1/1/12/20	14/24/102/115	-
14	CLA	Z	509	13	1/1/15/20	3/37/115/115	-
17	BCR	T	4012	-	-	9/29/63/63	0/2/2/2
14	CLA	Y	513	13	1/1/11/20	4/13/91/115	-
17	BCR	L	4022	-	-	3/29/63/63	0/2/2/2
19	LMU	B	1843	-	-	12/21/61/61	0/2/2/2
14	CLA	A	1103	1	1/1/15/20	21/37/115/115	-
14	CLA	c	511	13	1/1/11/20	3/13/91/115	-
17	BCR	r	523	-	-	6/29/63/63	0/2/2/2
14	CLA	u	509	13	1/1/15/20	13/37/115/115	-
14	CLA	u	505	13	1/1/11/20	3/13/91/115	-
17	BCR	G	4011	-	-	13/29/63/63	0/2/2/2
17	BCR	3	521	-	-	7/29/63/63	0/2/2/2
17	BCR	r	522	-	-	6/29/63/63	0/2/2/2
14	CLA	H	1228	2	1/1/13/20	6/25/103/115	-
14	CLA	q	506	13	1/1/11/20	5/13/91/115	-
17	BCR	6	521	-	-	5/29/63/63	0/2/2/2
14	CLA	A	1120	1	1/1/12/20	11/19/97/115	-
14	CLA	2	518	13	1/1/13/20	14/25/103/115	-
14	CLA	5	510	13	1/1/11/20	7/13/91/115	-
14	CLA	d	519	13	1/1/11/20	6/13/91/115	-
17	BCR	B	4017	-	-	2/29/63/63	0/2/2/2
14	CLA	G	1101	1	1/1/15/20	18/37/115/115	-
17	BCR	T	4013	-	-	4/29/63/63	0/2/2/2
14	CLA	H	1208	2	1/1/15/20	15/37/115/115	-
14	CLA	2	501	13	1/1/14/20	11/31/109/115	-
21	SQD	6	822	-	-	7/19/39/69	0/1/1/1

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	b	510	13	1/1/11/20	5/13/91/115	-
17	BCR	6	523	-	-	4/29/63/63	0/2/2/2
17	BCR	r	521	-	-	4/29/63/63	0/2/2/2
14	CLA	6	517	-	1/1/11/20	10/13/91/115	-
17	BCR	f	4006	-	-	4/29/63/63	0/2/2/2
18	LHG	n	5220	-	-	28/45/45/53	-
14	CLA	G	1108	1	1/1/12/20	14/24/102/115	-
17	BCR	q	524	-	-	2/29/63/63	0/2/2/2
15	PQN	f	2002	-	-	6/23/43/43	0/2/2/2
17	BCR	d	521	-	-	5/29/63/63	0/2/2/2
14	CLA	H	1023	-	1/1/15/20	10/37/115/115	-
14	CLA	t	506	13	1/1/11/20	4/13/91/115	-
14	CLA	G	1119	23	1/1/15/20	13/37/115/115	-
17	BCR	t	524	-	-	4/29/63/63	0/2/2/2
14	CLA	f	1012	23	1/1/15/20	15/37/115/115	-
14	CLA	Y	502	13	1/1/11/20	2/13/91/115	-
17	BCR	V	4019	-	-	6/29/63/63	0/2/2/2
18	LHG	A	5007	-	-	23/51/51/53	-
14	CLA	H	1203	2	1/1/15/20	14/37/115/115	-
14	CLA	3	519	13	1/1/11/20	5/13/91/115	-
14	CLA	G	1124	23	1/1/14/20	11/31/109/115	-
17	BCR	V	4022	-	-	3/29/63/63	0/2/2/2
14	CLA	B	1226	2	1/1/13/20	7/25/103/115	-
14	CLA	f	1203	2	1/1/15/20	14/37/115/115	-
14	CLA	4	518	13	1/1/11/20	4/13/91/115	-
14	CLA	m	1401	-	1/1/13/20	8/25/103/115	-
14	CLA	B	1208	2	1/1/15/20	15/37/115/115	-
17	BCR	B	4009	-	-	1/29/63/63	0/2/2/2
14	CLA	Z	505	13	1/1/15/20	14/37/115/115	-
14	CLA	1	502	13	1/1/11/20	2/13/91/115	-
14	CLA	G	1112	1	1/1/12/20	2/19/97/115	-
14	CLA	v	516	13	1/1/11/20	9/13/91/115	-
14	CLA	H	1209	2	1/1/12/20	9/23/101/115	-
17	BCR	A	4011	-	-	13/29/63/63	0/2/2/2

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	LHG	A	5002	-	-	22/47/47/53	-
14	CLA	b	519	13	1/1/11/20	8/13/91/115	-
14	CLA	u	512	13	1/1/11/20	5/13/91/115	-
17	BCR	b	521	-	-	10/29/63/63	0/2/2/2
14	CLA	t	508	13	1/1/11/20	4/13/91/115	-
17	BCR	5	523	-	-	4/29/63/63	0/2/2/2
14	CLA	G	1237	23	1/1/15/20	23/37/115/115	-
14	CLA	G	1106	1	1/1/15/20	21/37/115/115	-
14	CLA	c	512	13	1/1/11/20	5/13/91/115	-
21	SQD	V	5216	-	-	17/41/61/69	0/1/1/1
14	CLA	d	508	13	1/1/11/20	4/13/91/115	-
14	CLA	2	512	13	1/1/11/20	4/13/91/115	-
14	CLA	a	516	13	1/1/11/20	7/13/91/115	-
14	CLA	6	518	13	1/1/11/20	7/13/91/115	-
14	CLA	q	511	13	1/1/11/20	2/13/91/115	-
17	BCR	b	523	-	-	5/29/63/63	0/2/2/2
14	CLA	f	1224	2	1/1/14/20	7/31/109/115	-
14	CLA	1	505	13	1/1/11/20	6/13/91/115	-
14	CLA	Z	501	13	1/1/14/20	11/31/109/115	-
17	BCR	A	4008	-	-	7/29/63/63	0/2/2/2
14	CLA	t	507	-	1/1/11/20	6/13/91/115	-
20	LMG	l	5104	-	-	13/27/47/70	0/1/1/1
14	CLA	e	1110	1	1/1/12/20	10/23/101/115	-
14	CLA	e	1112	1	1/1/12/20	2/19/97/115	-
18	LHG	G	5007	-	-	23/51/51/53	-
14	CLA	A	1011	1	1/1/15/20	10/37/115/115	-
17	BCR	4	523	-	-	5/29/63/63	0/2/2/2
14	CLA	d	503	13	1/1/11/20	6/13/91/115	-
14	CLA	B	1231	23	1/1/15/20	8/37/115/115	-
14	CLA	4	517	-	1/1/11/20	5/13/91/115	-
14	CLA	f	1226	2	1/1/13/20	7/25/103/115	-
17	BCR	3	523	-	-	4/29/63/63	0/2/2/2
14	CLA	a	503	13	1/1/11/20	7/13/91/115	-
14	CLA	B	1222	23	1/1/12/20	2/19/97/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	2	519	13	1/1/11/20	5/13/91/115	-
14	CLA	A	1130	1	1/1/13/20	7/27/105/115	-
14	CLA	A	1138	1	1/1/15/20	12/37/115/115	-
14	CLA	A	1125	1	1/1/15/20	12/37/115/115	-
18	LHG	n	5218	-	-	19/41/41/53	-
14	CLA	H	1232	23	1/1/13/20	6/25/103/115	-
19	LMU	H	1843	-	-	12/21/61/61	0/2/2/2
14	CLA	6	519	13	1/1/11/20	6/13/91/115	-
14	CLA	q	507	-	1/1/11/20	6/13/91/115	-
14	CLA	H	1223	2	1/1/15/20	9/37/115/115	-
14	CLA	r	511	13	1/1/11/20	4/13/91/115	-
18	LHG	G	5009	-	-	28/46/46/53	-
14	CLA	c	502	13	1/1/11/20	5/13/91/115	-
14	CLA	B	1220	2	1/1/13/20	9/25/103/115	-
17	BCR	e	4001	-	-	8/29/63/63	0/2/2/2
14	CLA	r	506	13	1/1/11/20	5/13/91/115	-
17	BCR	F	4016	-	-	2/29/63/63	0/2/2/2
14	CLA	e	1119	23	1/1/15/20	14/37/115/115	-
14	CLA	f	1023	-	1/1/15/20	10/37/115/115	-
14	CLA	Z	518	13	1/1/13/20	14/25/103/115	-
21	SQD	t	822	-	-	10/19/39/69	0/1/1/1
14	CLA	d	506	13	1/1/11/20	6/13/91/115	-
14	CLA	H	1215	2	1/1/15/20	19/37/115/115	-
14	CLA	e	1237	23	1/1/15/20	23/37/115/115	-
14	CLA	u	506	13	1/1/11/20	6/13/91/115	-
14	CLA	G	1103	1	1/1/15/20	21/37/115/115	-
14	CLA	Y	505	13	1/1/11/20	6/13/91/115	-
14	CLA	b	503	13	1/1/11/20	2/13/91/115	-
17	BCR	u	524	-	-	2/29/63/63	0/2/2/2
19	LMU	e	1848	-	-	7/21/61/61	0/2/2/2
17	BCR	r	524	-	-	3/29/63/63	0/2/2/2
14	CLA	b	509	13	1/1/11/20	6/13/91/115	-
14	CLA	B	1203	2	1/1/15/20	14/37/115/115	-
21	SQD	2	822	-	-	7/22/42/69	0/1/1/1

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	r	507	-	1/1/11/20	8/13/91/115	-
17	BCR	t	522	-	-	4/29/63/63	0/2/2/2
17	BCR	2	523	-	-	6/29/63/63	0/2/2/2
14	CLA	4	519	13	1/1/11/20	8/13/91/115	-
14	CLA	c	505	13	1/1/11/20	3/13/91/115	-
14	CLA	A	1121	1	1/1/13/20	8/25/103/115	-
14	CLA	Y	501	13	1/1/11/20	9/13/91/115	-
14	CLA	c	501	13	1/1/11/20	6/13/91/115	-
14	CLA	c	510	13	1/1/11/20	7/13/91/115	-
17	BCR	f	4009	-	-	1/29/63/63	0/2/2/2
18	LHG	e	5008	-	-	18/39/39/53	-
17	BCR	c	523	-	-	4/29/63/63	0/2/2/2
17	BCR	6	524	-	-	5/29/63/63	0/2/2/2
17	BCR	A	4003	-	-	0/29/63/63	0/2/2/2
17	BCR	v	521	-	-	5/29/63/63	0/2/2/2
14	CLA	a	502	13	1/1/11/20	1/13/91/115	-
20	LMG	T	5104	-	-	13/27/47/70	0/1/1/1
14	CLA	B	1218	2	1/1/14/20	7/31/109/115	-
18	LHG	G	5002	-	-	22/47/47/53	-
14	CLA	v	512	13	1/1/11/20	7/13/91/115	-
14	CLA	6	501	13	1/1/11/20	7/13/91/115	-
15	PQN	A	2001	-	-	14/23/43/43	0/2/2/2
14	CLA	Z	512	13	1/1/11/20	4/13/91/115	-
14	CLA	G	1135	1	1/1/13/20	10/25/103/115	-
14	CLA	j	1302	6	1/1/11/20	7/13/91/115	-
17	BCR	j	4016	-	-	2/29/63/63	0/2/2/2
14	CLA	H	1231	23	1/1/15/20	8/37/115/115	-
14	CLA	d	504	-	1/1/11/20	4/13/91/115	-
17	BCR	v	523	-	-	4/29/63/63	0/2/2/2
14	CLA	B	1229	2	1/1/15/20	13/37/115/115	-
14	CLA	H	1222	23	1/1/12/20	2/19/97/115	-
17	BCR	Z	523	-	-	6/29/63/63	0/2/2/2
14	CLA	e	1105	1	1/1/13/20	7/25/103/115	-
16	SF4	C	3003	3	-	-	0/6/5/5
17	BCR	a	521	-	-	7/29/63/63	0/2/2/2

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	e	1106	1	1/1/15/20	21/37/115/115	-
14	CLA	1	509	13	1/1/11/20	3/13/91/115	-
14	CLA	5	516	13	1/1/11/20	5/13/91/115	-
14	CLA	5	501	13	1/1/11/20	6/13/91/115	-
14	CLA	f	1207	2	1/1/15/20	16/37/115/115	-
14	CLA	4	516	13	1/1/11/20	7/13/91/115	-
15	PQN	B	2002	-	-	6/23/43/43	0/2/2/2
14	CLA	4	508	13	1/1/11/20	4/13/91/115	-
14	CLA	1	506	13	1/1/11/20	5/13/91/115	-
14	CLA	B	1012	23	1/1/15/20	15/37/115/115	-
14	CLA	a	517	-	1/1/11/20	7/13/91/115	-
14	CLA	G	1123	23	1/1/15/20	11/37/115/115	-
14	CLA	m	1105	9	1/1/11/20	8/13/91/115	-
14	CLA	6	511	13	1/1/11/20	5/13/91/115	-
14	CLA	3	504	-	1/1/11/20	5/13/91/115	-
14	CLA	b	516	13	1/1/11/20	7/13/91/115	-
14	CLA	s	519	13	1/1/11/20	5/13/91/115	-
17	BCR	2	522	-	-	6/29/63/63	0/2/2/2
14	CLA	c	509	13	1/1/15/20	13/37/115/115	-
14	CLA	q	505	13	1/1/11/20	6/13/91/115	-
21	SQD	u	822	-	-	3/19/39/69	0/1/1/1
17	BCR	n	4219	-	-	2/29/63/63	0/2/2/2
14	CLA	A	1127	1	1/1/15/20	12/37/115/115	-
18	LHG	H	1855	-	-	24/45/45/53	-
14	CLA	G	1011	1	1/1/15/20	10/37/115/115	-
14	CLA	f	1218	2	1/1/14/20	7/31/109/115	-
14	CLA	e	1137	1	1/1/14/20	18/31/109/115	-
17	BCR	B	4014	-	-	7/29/63/63	0/2/2/2
14	CLA	B	1219	2	1/1/14/20	18/35/113/115	-
14	CLA	l	1303	8	1/1/11/20	4/13/91/115	-
14	CLA	v	518	13	1/1/11/20	7/13/91/115	-
17	BCR	G	4003	-	-	0/29/63/63	0/2/2/2
18	LHG	B	1842	14	-	19/41/41/53	-
14	CLA	5	512	13	1/1/11/20	5/13/91/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
18	LHG	e	5009	-	-	28/46/46/53	-
14	CLA	3	507	-	1/1/11/20	5/13/91/115	-
14	CLA	G	1130	1	1/1/13/20	7/27/105/115	-
14	CLA	6	513	13	1/1/11/20	3/13/91/115	-
14	CLA	B	1209	2	1/1/12/20	9/23/101/115	-
17	BCR	u	522	-	-	5/29/63/63	0/2/2/2
14	CLA	J	1302	8	1/1/13/20	12/25/103/115	-
14	CLA	B	1217	2	1/1/14/20	12/31/109/115	-
14	CLA	3	517	-	1/1/11/20	7/13/91/115	-
14	CLA	6	507	-	1/1/11/20	5/13/91/115	-
14	CLA	B	1224	2	1/1/14/20	7/31/109/115	-
14	CLA	A	1119	23	1/1/15/20	14/37/115/115	-
18	LHG	A	5005	-	-	28/47/47/53	-
14	CLA	H	1216	23	1/1/14/20	11/31/109/115	-
15	PQN	G	2001	-	-	14/23/43/43	0/2/2/2
17	BCR	Y	524	-	-	2/29/63/63	0/2/2/2
14	CLA	G	1126	1	1/1/15/20	18/37/115/115	-
14	CLA	b	508	13	1/1/11/20	4/13/91/115	-
21	SQD	Y	822	-	-	10/27/47/69	0/1/1/1
14	CLA	H	1021	2	1/1/15/20	9/37/115/115	-
14	CLA	B	1232	23	1/1/13/20	6/25/103/115	-
14	CLA	K	1103	9	1/1/11/20	8/17/95/115	-
20	LMG	H	5002	-	-	24/48/68/70	0/1/1/1
21	SQD	a	822	-	-	9/23/43/69	0/1/1/1
14	CLA	4	512	13	1/1/11/20	3/13/91/115	-
14	CLA	A	1113	1	1/1/11/20	6/13/91/115	-
14	CLA	s	507	-	1/1/11/20	5/13/91/115	-
17	BCR	u	521	-	-	7/29/63/63	0/2/2/2
17	BCR	1	524	-	-	2/29/63/63	0/2/2/2
14	CLA	4	506	13	1/1/11/20	4/13/91/115	-
18	LHG	L	5218	-	-	19/41/41/53	-
14	CLA	v	505	13	1/1/15/20	15/37/115/115	-
17	BCR	d	523	-	-	4/29/63/63	0/2/2/2
14	CLA	A	1112	1	1/1/12/20	2/19/97/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	3	506	13	1/1/11/20	8/13/91/115	-
18	LHG	A	5001	-	-	23/53/53/53	-
14	CLA	d	517	-	1/1/11/20	10/13/91/115	-
14	CLA	G	1113	1	1/1/11/20	6/13/91/115	-
14	CLA	H	1238	23	1/1/15/20	4/37/115/115	-
17	BCR	u	523	-	-	4/29/63/63	0/2/2/2
17	BCR	H	4005	-	-	6/29/63/63	0/2/2/2
17	BCR	f	4014	-	-	7/29/63/63	0/2/2/2
17	BCR	T	4015	-	-	5/29/63/63	0/2/2/2
14	CLA	G	1111	1	1/1/15/20	18/37/115/115	-
14	CLA	n	1501	10	1/1/14/20	9/31/109/115	-
14	CLA	s	518	13	1/1/13/20	9/25/103/115	-
14	CLA	R	1302	6	1/1/11/20	7/13/91/115	-
18	LHG	S	5001	-	-	25/52/52/53	-
14	CLA	A	1110	1	1/1/12/20	10/23/101/115	-
17	BCR	c	524	-	-	2/29/63/63	0/2/2/2
14	CLA	e	1109	1	1/1/15/20	14/37/115/115	-
14	CLA	q	509	13	1/1/11/20	3/13/91/115	-
17	BCR	3	524	-	-	5/29/63/63	0/2/2/2
14	CLA	f	1217	2	1/1/14/20	12/31/109/115	-
14	CLA	B	1023	-	1/1/15/20	10/37/115/115	-
14	CLA	c	517	-	1/1/11/20	10/13/91/115	-
14	CLA	r	510	13	1/1/11/20	7/13/91/115	-
14	CLA	f	1212	2	1/1/12/20	8/21/99/115	-
18	LHG	e	5004	-	-	18/39/39/53	-
14	CLA	5	502	13	1/1/11/20	5/13/91/115	-
14	CLA	t	503	13	1/1/11/20	2/13/91/115	-
14	CLA	Y	518	13	1/1/11/20	6/13/91/115	-
14	CLA	1	507	-	1/1/11/20	6/13/91/115	-
17	BCR	L	4019	-	-	6/29/63/63	0/2/2/2
14	CLA	K	1105	9	1/1/11/20	8/13/91/115	-
14	CLA	e	1011	1	1/1/15/20	10/37/115/115	-
14	CLA	G	1107	1	1/1/15/20	14/37/115/115	-
14	CLA	G	1102	1	1/1/13/20	7/25/103/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	H	1236	2	1/1/12/20	3/19/97/115	-
14	CLA	b	502	13	1/1/11/20	3/13/91/115	-
17	BCR	b	522	-	-	4/29/63/63	0/2/2/2
22	FMN	p	170	-	-	0/18/18/18	0/3/3/3
17	BCR	o	4021	-	-	6/29/63/63	0/2/2/2
14	CLA	1	504	-	1/1/11/20	5/13/91/115	-
14	CLA	K	1401	-	1/1/13/20	8/25/103/115	-
14	CLA	5	505	13	1/1/11/20	3/13/91/115	-
14	CLA	t	504	-	1/1/11/20	4/13/91/115	-
14	CLA	2	506	13	1/1/11/20	5/13/91/115	-
19	LMU	G	1848	-	-	7/21/61/61	0/2/2/2
17	BCR	Z	522	-	-	6/29/63/63	0/2/2/2
14	CLA	Y	509	13	1/1/11/20	3/13/91/115	-
17	BCR	s	522	-	-	5/29/63/63	0/2/2/2
14	CLA	a	509	13	1/1/11/20	2/13/91/115	-
14	CLA	s	503	13	1/1/11/20	7/13/91/115	-
14	CLA	b	512	13	1/1/11/20	3/13/91/115	-
14	CLA	e	1111	1	1/1/15/20	18/37/115/115	-
18	LHG	V	5220	-	-	28/45/45/53	-
14	CLA	f	1214	2	1/1/15/20	12/37/115/115	-
14	CLA	U	1103	9	1/1/11/20	8/17/95/115	-
14	CLA	G	1121	1	1/1/13/20	8/25/103/115	-
14	CLA	G	1136	1	1/1/15/20	10/37/115/115	-
18	LHG	L	5220	-	-	28/45/45/53	-
20	LMG	f	5002	-	-	24/48/68/70	0/1/1/1
14	CLA	r	503	13	1/1/15/20	9/37/115/115	-
14	CLA	G	1139	23	1/1/15/20	18/37/115/115	-
14	CLA	G	1110	1	1/1/12/20	10/23/101/115	-
14	CLA	6	509	13	1/1/11/20	4/13/91/115	-
14	CLA	3	505	13	1/1/13/20	11/25/103/115	-
14	CLA	Y	519	13	1/1/11/20	6/13/91/115	-
14	CLA	4	510	13	1/1/11/20	5/13/91/115	-
14	CLA	d	502	13	1/1/11/20	1/13/91/115	-
17	BCR	Y	522	-	-	6/29/63/63	0/2/2/2

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	1	508	13	1/1/11/20	5/13/91/115	-
14	CLA	A	1131	1	1/1/15/20	6/37/115/115	-
14	CLA	G	1109	1	1/1/15/20	14/37/115/115	-
14	CLA	H	1217	2	1/1/14/20	12/31/109/115	-
14	CLA	a	519	13	1/1/11/20	5/13/91/115	-
14	CLA	G	1127	1	1/1/15/20	12/37/115/115	-
14	CLA	f	1228	2	1/1/13/20	6/25/103/115	-
14	CLA	s	504	-	1/1/11/20	5/13/91/115	-
14	CLA	q	501	13	1/1/11/20	9/13/91/115	-
14	CLA	f	1225	2	1/1/15/20	7/37/115/115	-
14	CLA	1	519	13	1/1/11/20	6/13/91/115	-
14	CLA	2	507	-	1/1/11/20	8/13/91/115	-
17	BCR	k	4018	-	-	0/29/63/63	0/2/2/2
14	CLA	4	502	13	1/1/11/20	3/13/91/115	-
17	BCR	n	4020	-	-	4/29/63/63	0/2/2/2
14	CLA	H	1205	2	1/1/15/20	8/37/115/115	-
14	CLA	e	1131	1	1/1/15/20	6/37/115/115	-
17	BCR	f	4010	-	-	7/29/63/63	0/2/2/2
14	CLA	B	1207	2	1/1/15/20	16/37/115/115	-
17	BCR	Y	521	-	-	7/29/63/63	0/2/2/2
17	BCR	s	524	-	-	5/29/63/63	0/2/2/2
15	PQN	e	2001	-	-	14/23/43/43	0/2/2/2
18	LHG	e	5006	-	-	26/44/44/53	-
14	CLA	e	1114	23	1/1/11/20	3/13/91/115	-
14	CLA	t	516	13	1/1/11/20	7/13/91/115	-
17	BCR	3	522	-	-	5/29/63/63	0/2/2/2
17	BCR	6	522	-	-	5/29/63/63	0/2/2/2
14	CLA	d	505	13	1/1/15/20	15/37/115/115	-
17	BCR	m	4104	-	-	2/29/63/63	0/2/2/2
14	CLA	Z	506	13	1/1/11/20	5/13/91/115	-
14	CLA	5	511	13	1/1/11/20	3/13/91/115	-
17	BCR	B	4006	-	-	4/29/63/63	0/2/2/2
14	CLA	a	505	13	1/1/13/20	11/25/103/115	-
14	CLA	d	510	13	1/1/11/20	8/13/91/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	s	508	13	1/1/11/20	2/13/91/115	-
17	BCR	1	521	-	-	7/29/63/63	0/2/2/2
14	CLA	e	1136	1	1/1/15/20	10/37/115/115	-
14	CLA	f	1234	2	1/1/15/20	15/37/115/115	-
17	BCR	e	4011	-	-	13/29/63/63	0/2/2/2
14	CLA	A	1105	1	1/1/13/20	7/25/103/115	-
19	LMU	T	5105	-	-	9/13/33/61	0/1/1/2
21	SQD	B	1852	-	-	18/35/55/69	0/1/1/1
14	CLA	v	506	13	1/1/11/20	6/13/91/115	-
18	LHG	B	1855	-	-	24/45/45/53	-
17	BCR	V	4219	-	-	2/29/63/63	0/2/2/2
18	LHG	f	1842	14	-	19/41/41/53	-
17	BCR	a	524	-	-	5/29/63/63	0/2/2/2
14	CLA	F	1301	23	1/1/11/20	2/13/91/115	-
17	BCR	L	4219	-	-	2/29/63/63	0/2/2/2
14	CLA	Z	513	13	1/1/11/20	2/13/91/115	-
21	SQD	L	5216	-	-	17/41/61/69	0/1/1/1
14	CLA	H	1226	2	1/1/13/20	7/25/103/115	-
14	CLA	v	517	-	1/1/11/20	10/13/91/115	-
14	CLA	H	1206	2	1/1/15/20	15/37/115/115	-
14	CLA	H	1211	2	1/1/13/20	8/25/103/115	-
14	CLA	Y	508	13	1/1/11/20	5/13/91/115	-
14	CLA	Z	507	-	1/1/11/20	8/13/91/115	-
14	CLA	e	1801	18	1/1/11/20	7/13/91/115	-
14	CLA	s	510	13	1/1/11/20	6/13/91/115	-
14	CLA	f	1206	2	1/1/15/20	15/37/115/115	-
18	LHG	G	5005	-	-	28/47/47/53	-
17	BCR	c	521	-	-	7/29/63/63	0/2/2/2
19	LMU	J	5105	-	-	9/13/33/61	0/1/1/2
14	CLA	a	508	13	1/1/11/20	2/13/91/115	-
14	CLA	f	1219	2	1/1/14/20	18/35/113/115	-
14	CLA	q	512	13	1/1/11/20	5/13/91/115	-
14	CLA	s	511	13	1/1/11/20	2/13/91/115	-
21	SQD	1	822	-	-	10/27/47/69	0/1/1/1

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	e	1139	23	1/1/15/20	18/37/115/115	-
14	CLA	2	508	13	1/1/11/20	2/13/91/115	-
14	CLA	A	1801	18	1/1/11/20	7/13/91/115	-
14	CLA	s	513	13	1/1/11/20	3/13/91/115	-
14	CLA	e	1108	1	1/1/12/20	14/24/102/115	-
18	LHG	A	5006	-	-	26/44/44/53	-
14	CLA	e	1132	1	1/1/15/20	16/37/115/115	-
14	CLA	b	501	13	1/1/11/20	6/13/91/115	-
14	CLA	v	513	13	1/1/11/20	3/13/91/115	-
14	CLA	l	517	-	1/1/11/20	7/13/91/115	-
22	FMN	P	170	-	-	0/18/18/18	0/3/3/3
14	CLA	Y	511	13	1/1/11/20	2/13/91/115	-
14	CLA	v	504	-	1/1/11/20	4/13/91/115	-
14	CLA	f	1235	2	1/1/15/20	7/37/115/115	-
20	LMG	B	5002	-	-	24/48/68/70	0/1/1/1
14	CLA	a	511	13	1/1/11/20	2/13/91/115	-
14	CLA	e	1013	-	1/1/15/20	13/37/115/115	-
14	CLA	c	519	13	1/1/11/20	6/13/91/115	-
14	CLA	q	516	13	1/1/11/20	12/13/91/115	-
18	LHG	f	1855	-	-	24/45/45/53	-
14	CLA	5	509	13	1/1/15/20	13/37/115/115	-
14	CLA	t	513	13	1/1/11/20	5/13/91/115	-
17	BCR	c	522	-	-	5/29/63/63	0/2/2/2
14	CLA	H	1239	2	1/1/15/20	14/37/115/115	-
17	BCR	B	4005	-	-	6/29/63/63	0/2/2/2
14	CLA	H	1207	2	1/1/15/20	16/37/115/115	-
14	CLA	3	501	13	1/1/11/20	4/13/91/115	-
18	LHG	I	5001	-	-	25/52/52/53	-
17	BCR	v	524	-	-	5/29/63/63	0/2/2/2
14	CLA	a	513	13	1/1/11/20	3/13/91/115	-
14	CLA	r	505	13	1/1/15/20	14/37/115/115	-
14	CLA	f	1232	23	1/1/13/20	6/25/103/115	-
14	CLA	a	504	-	1/1/11/20	5/13/91/115	-
17	BCR	A	4001	-	-	8/29/63/63	0/2/2/2

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
17	BCR	Y	523	-	-	6/29/63/63	0/2/2/2
18	LHG	L	5221	-	-	31/53/53/53	-
17	BCR	q	522	-	-	6/29/63/63	0/2/2/2
14	CLA	H	1210	2	1/1/15/20	20/37/115/115	-
14	CLA	f	1202	2	1/1/15/20	12/37/115/115	-
14	CLA	V	1501	10	1/1/14/20	9/31/109/115	-
21	SQD	f	1852	-	-	18/35/55/69	0/1/1/1
14	CLA	A	1126	1	1/1/15/20	18/37/115/115	-
14	CLA	l	1302	8	1/1/13/20	12/25/103/115	-
14	CLA	2	504	-	1/1/11/20	7/13/91/115	-
17	BCR	B	4010	-	-	7/29/63/63	0/2/2/2
14	CLA	B	1221	23	1/1/14/20	14/34/112/115	-
14	CLA	A	1140	1	1/1/15/20	12/37/115/115	-
14	CLA	G	1801	18	1/1/11/20	7/13/91/115	-
14	CLA	e	1128	1	1/1/15/20	10/37/115/115	-
14	CLA	t	510	13	1/1/11/20	5/13/91/115	-
14	CLA	e	1121	1	1/1/13/20	8/25/103/115	-
17	BCR	J	4012	-	-	9/29/63/63	0/2/2/2
14	CLA	u	511	13	1/1/11/20	3/13/91/115	-
17	BCR	K	4104	-	-	2/29/63/63	0/2/2/2
14	CLA	A	1123	23	1/1/15/20	11/37/115/115	-
14	CLA	f	1223	2	1/1/15/20	10/37/115/115	-
17	BCR	H	4009	-	-	1/29/63/63	0/2/2/2
14	CLA	v	519	13	1/1/11/20	6/13/91/115	-
18	LHG	k	5001	-	-	25/52/52/53	-
20	LMG	J	5104	-	-	13/27/47/70	0/1/1/1
14	CLA	4	501	13	1/1/11/20	6/13/91/115	-
14	CLA	G	1125	1	1/1/15/20	12/37/115/115	-
14	CLA	v	503	13	1/1/11/20	6/13/91/115	-
14	CLA	u	507	-	1/1/11/20	7/13/91/115	-
14	CLA	v	507	-	1/1/11/20	5/13/91/115	-
18	LHG	G	5006	-	-	26/44/44/53	-
14	CLA	G	1131	1	1/1/15/20	6/37/115/115	-
17	BCR	U	4104	-	-	2/29/63/63	0/2/2/2

*Continued on next page...*



*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	2	517	-	-	7/13/91/115	-
14	CLA	B	1206	2	1/1/15/20	15/37/115/115	-
14	CLA	d	512	13	1/1/11/20	7/13/91/115	-
17	BCR	5	524	-	-	2/29/63/63	0/2/2/2
14	CLA	H	1214	2	1/1/15/20	12/37/115/115	-
18	LHG	V	5221	-	-	31/53/53/53	-
19	LMU	f	1843	-	-	12/21/61/61	0/2/2/2
14	CLA	e	1140	1	1/1/15/20	12/37/115/115	-
14	CLA	3	508	13	1/1/11/20	2/13/91/115	-
14	CLA	4	509	13	1/1/11/20	6/13/91/115	-
14	CLA	H	1221	23	1/1/14/20	14/34/112/115	-
14	CLA	A	1116	1	1/1/14/20	9/31/109/115	-
14	CLA	r	509	13	1/1/15/20	4/37/115/115	-
16	SF4	e	3001	2,1	-	-	0/6/5/5
14	CLA	4	505	13	1/1/11/20	3/13/91/115	-
14	CLA	f	1221	23	1/1/14/20	14/34/112/115	-
14	CLA	e	1115	1	1/1/14/20	10/31/109/115	-
14	CLA	V	1503	23	1/1/14/20	10/31/109/115	-
14	CLA	H	1213	2	1/1/14/20	11/33/111/115	-
17	BCR	Z	521	-	-	4/29/63/63	0/2/2/2
22	FMN	X	170	-	-	0/18/18/18	0/3/3/3
14	CLA	Y	504	-	1/1/11/20	5/13/91/115	-
14	CLA	A	1102	1	1/1/13/20	7/25/103/115	-
14	CLA	V	1502	10	1/1/15/20	8/37/115/115	-
14	CLA	A	1022	23	1/1/15/20	9/37/115/115	-
14	CLA	e	1107	1	1/1/15/20	14/37/115/115	-
14	CLA	B	1238	23	1/1/15/20	4/37/115/115	-
14	CLA	B	1228	2	1/1/13/20	6/25/103/115	-
14	CLA	G	1105	1	1/1/13/20	8/25/103/115	-
14	CLA	B	1225	2	1/1/15/20	7/37/115/115	-
14	CLA	Z	508	13	1/1/11/20	2/13/91/115	-
17	BCR	4	524	-	-	4/29/63/63	0/2/2/2
19	LMU	A	1848	-	-	7/21/61/61	0/2/2/2
14	CLA	2	513	13	1/1/11/20	2/13/91/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	f	1239	2	1/1/15/20	14/37/115/115	-
17	BCR	l	4012	-	-	9/29/63/63	0/2/2/2
14	CLA	u	513	13	1/1/11/20	5/13/91/115	-
14	CLA	q	502	13	1/1/11/20	2/13/91/115	-
21	SQD	5	822	-	-	3/19/39/69	0/1/1/1
14	CLA	G	1132	1	1/1/15/20	16/37/115/115	-
14	CLA	G	1118	1	1/1/14/20	8/31/109/115	-
14	CLA	5	507	-	1/1/11/20	7/13/91/115	-
17	BCR	f	4005	-	-	6/29/63/63	0/2/2/2
14	CLA	f	1240	18	1/1/15/20	13/37/115/115	-
17	BCR	B	4004	-	-	8/29/63/63	0/2/2/2
17	BCR	l	523	-	-	6/29/63/63	0/2/2/2
14	CLA	H	1227	2	1/1/14/20	11/31/109/115	-
17	BCR	v	522	-	-	5/29/63/63	0/2/2/2
14	CLA	b	507	-	1/1/11/20	6/13/91/115	-
14	CLA	B	1210	2	1/1/15/20	20/37/115/115	-
14	CLA	L	1503	23	1/1/14/20	10/31/109/115	-
14	CLA	u	510	13	1/1/11/20	7/13/91/115	-
14	CLA	a	518	13	1/1/13/20	9/25/103/115	-
14	CLA	s	505	13	1/1/13/20	11/25/103/115	-
14	CLA	d	516	13	1/1/11/20	9/13/91/115	-
18	LHG	e	5002	-	-	22/47/47/53	-
14	CLA	u	517	-	1/1/11/20	10/13/91/115	-
14	CLA	6	516	13	1/1/11/20	9/13/91/115	-
19	LMU	e	1849	-	-	6/14/34/61	0/1/1/2
14	CLA	G	1116	1	1/1/14/20	9/31/109/115	-
14	CLA	e	1104	1	1/1/15/20	10/37/115/115	-
14	CLA	A	1117	1	1/1/15/20	12/37/115/115	-
17	BCR	s	523	-	-	4/29/63/63	0/2/2/2
21	SQD	v	822	-	-	7/19/39/69	0/1/1/1
14	CLA	l	518	13	1/1/11/20	6/13/91/115	-
17	BCR	l	4013	-	-	4/29/63/63	0/2/2/2
21	SQD	Z	822	-	-	7/22/42/69	0/1/1/1
14	CLA	t	505	13	1/1/11/20	3/13/91/115	-

*Continued on next page...*

*Continued from previous page...*

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	A	1013	-	1/1/15/20	13/37/115/115	-
14	CLA	H	1229	2	1/1/15/20	12/37/115/115	-
14	CLA	r	516	13	-	6/13/91/115	-
14	CLA	b	518	13	1/1/11/20	4/13/91/115	-
15	PQN	H	2002	-	-	6/23/43/43	0/2/2/2
14	CLA	s	501	13	1/1/11/20	4/13/91/115	-
17	BCR	f	4017	-	-	2/29/63/63	0/2/2/2
14	CLA	c	506	13	1/1/11/20	6/13/91/115	-
14	CLA	6	503	13	1/1/11/20	6/13/91/115	-
14	CLA	v	511	13	1/1/11/20	5/13/91/115	-
14	CLA	6	512	13	1/1/11/20	7/13/91/115	-
17	BCR	f	4004	-	-	8/29/63/63	0/2/2/2
14	CLA	l	511	13	1/1/11/20	2/13/91/115	-
14	CLA	Y	507	-	1/1/11/20	6/13/91/115	-
17	BCR	I	4018	-	-	0/29/63/63	0/2/2/2
14	CLA	Z	517	-	-	7/13/91/115	-
14	CLA	B	1235	2	1/1/15/20	7/37/115/115	-
17	BCR	a	523	-	-	4/29/63/63	0/2/2/2
14	CLA	f	1210	2	1/1/15/20	20/37/115/115	-
14	CLA	q	503	13	1/1/11/20	7/13/91/115	-
14	CLA	e	1101	1	1/1/15/20	18/37/115/115	-
14	CLA	3	518	13	1/1/13/20	9/25/103/115	-
17	BCR	A	4007	-	-	0/29/63/63	0/2/2/2
14	CLA	b	511	13	1/1/11/20	3/13/91/115	-
14	CLA	f	1216	23	1/1/14/20	11/31/109/115	-
14	CLA	l	513	13	1/1/11/20	4/13/91/115	-
17	BCR	5	522	-	-	5/29/63/63	0/2/2/2
14	CLA	s	517	-	1/1/11/20	7/13/91/115	-
14	CLA	e	1125	1	1/1/15/20	12/37/115/115	-
14	CLA	A	1114	23	1/1/11/20	3/13/91/115	-
14	CLA	H	1240	18	1/1/15/20	13/37/115/115	-
14	CLA	H	1225	2	1/1/15/20	7/37/115/115	-
14	CLA	3	513	13	1/1/11/20	3/13/91/115	-
14	CLA	A	1139	23	1/1/15/20	18/37/115/115	-

*Continued on next page...*

Continued from previous page...

Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
14	CLA	A	1109	1	1/1/15/20	14/37/115/115	-
18	LHG	e	5001	-	-	23/53/53/53	-
14	CLA	e	1118	1	1/1/14/20	8/31/109/115	-
14	CLA	3	511	13	1/1/11/20	2/13/91/115	-
18	LHG	e	5003	14	-	17/44/44/53	-
14	CLA	A	1134	1	1/1/13/20	9/27/105/115	-
14	CLA	B	1212	2	1/1/12/20	8/21/99/115	-
14	CLA	Y	506	13	1/1/11/20	5/13/91/115	-
14	CLA	G	1115	1	1/1/14/20	11/31/109/115	-
14	CLA	H	1234	2	1/1/15/20	15/37/115/115	-
19	LMU	A	1849	-	-	6/14/34/61	0/1/1/2
14	CLA	f	1211	2	1/1/13/20	8/25/103/115	-

The worst 5 of 5009 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
15	G	2001	PQN	C12-C13	8.46	1.53	1.33
15	A	2001	PQN	C12-C13	8.44	1.53	1.33
15	e	2001	PQN	C12-C13	8.44	1.53	1.33
15	B	2002	PQN	C12-C13	8.38	1.53	1.33
15	H	2002	PQN	C12-C13	8.38	1.53	1.33

The worst 5 of 7680 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
14	H	1023	CLA	C4A-NA-C1A	9.67	111.06	106.71
14	B	1023	CLA	C4A-NA-C1A	9.59	111.02	106.71
14	f	1023	CLA	C4A-NA-C1A	9.53	110.99	106.71
15	G	2001	PQN	C11-C12-C13	-9.51	110.96	126.79
15	A	2001	PQN	C11-C12-C13	-9.50	110.98	126.79

5 of 588 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
14	A	1011	CLA	ND
14	A	1013	CLA	ND
14	A	1102	CLA	ND
14	A	1103	CLA	ND
14	A	1104	CLA	ND

5 of 7071 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
14	A	1011	CLA	CHA-CBD-CGD-O1D
14	A	1102	CLA	C3A-C2A-CAA-CBA
14	A	1103	CLA	C1A-C2A-CAA-CBA
14	A	1103	CLA	CHA-CBD-CGD-O1D
14	A	1103	CLA	CHA-CBD-CGD-O2D

There are no ring outliers.

402 monomers are involved in 1033 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	1	512	CLA	4	0
14	G	1117	CLA	5	0
17	4	521	BCR	2	0
14	2	503	CLA	3	0
17	H	4014	BCR	5	0
14	B	1211	CLA	1	0
18	H	1842	LHG	3	0
14	G	1022	CLA	2	0
14	3	512	CLA	5	0
18	A	5004	LHG	3	0
14	3	502	CLA	5	0
14	H	1218	CLA	3	0
14	A	1128	CLA	7	0
14	A	1111	CLA	2	0
14	6	502	CLA	2	0
14	B	1214	CLA	3	0
18	A	5003	LHG	2	0
14	4	503	CLA	1	0
14	G	1114	CLA	1	0
14	H	1235	CLA	4	0
14	Z	519	CLA	1	0
18	V	5218	LHG	2	0
17	2	524	BCR	5	0
14	F	1302	CLA	3	0
14	B	1204	CLA	5	0
14	A	1115	CLA	2	0
17	J	4013	BCR	6	0
14	B	1239	CLA	5	0
14	3	510	CLA	3	0
14	H	1201	CLA	3	0
14	H	1224	CLA	4	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	H	1212	CLA	1	0
14	B	1240	CLA	4	0
14	B	1205	CLA	3	0
14	G	1013	CLA	8	0
14	G	1120	CLA	2	0
14	H	1230	CLA	3	0
14	G	1128	CLA	7	0
14	Y	510	CLA	1	0
14	B	1202	CLA	2	0
14	2	510	CLA	2	0
14	Z	503	CLA	3	0
14	1	510	CLA	1	0
18	G	5008	LHG	8	0
14	G	1134	CLA	2	0
19	G	1849	LMU	1	0
14	L	1501	CLA	5	0
14	A	1104	CLA	6	0
17	H	4006	BCR	4	0
14	L	1502	CLA	4	0
14	H	1204	CLA	4	0
14	A	1122	CLA	2	0
14	A	1135	CLA	2	0
17	Z	524	BCR	5	0
14	2	511	CLA	2	0
17	4	522	BCR	1	0
18	G	5004	LHG	2	0
17	R	4016	BCR	6	0
14	A	1137	CLA	5	0
14	3	503	CLA	1	0
14	A	1118	CLA	2	0
14	3	509	CLA	1	0
17	A	4002	BCR	5	0
14	B	1021	CLA	3	0
14	H	1012	CLA	4	0
14	U	1401	CLA	1	0
14	6	506	CLA	2	0
14	A	1133	CLA	2	0
17	J	4015	BCR	6	0
14	B	1216	CLA	5	0
14	Z	502	CLA	3	0
17	1	522	BCR	2	0
14	Z	511	CLA	2	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
17	H	4017	BCR	3	0
14	A	1132	CLA	1	0
14	B	1223	CLA	4	0
14	Y	512	CLA	4	0
17	W	4021	BCR	3	0
14	G	1140	CLA	3	0
14	H	1220	CLA	3	0
17	L	4020	BCR	2	0
14	5	513	CLA	2	0
14	T	1303	CLA	3	0
14	G	1122	CLA	3	0
14	H	1202	CLA	3	0
14	2	509	CLA	3	0
17	G	4007	BCR	3	0
21	H	1852	SQD	9	0
17	V	4020	BCR	2	0
14	B	1201	CLA	3	0
17	M	4021	BCR	2	0
17	G	4002	BCR	2	0
21	3	822	SQD	2	0
14	Z	510	CLA	2	0
14	6	505	CLA	5	0
17	H	4010	BCR	7	0
14	G	1133	CLA	2	0
14	B	1236	CLA	4	0
14	2	502	CLA	3	0
14	A	1124	CLA	3	0
14	B	1234	CLA	6	0
14	R	1301	CLA	1	0
17	G	4001	BCR	3	0
14	B	1227	CLA	4	0
17	2	521	BCR	7	0
14	4	511	CLA	3	0
14	Y	516	CLA	6	0
14	A	1107	CLA	2	0
14	G	1104	CLA	6	0
14	2	505	CLA	5	0
14	5	506	CLA	4	0
14	A	1237	CLA	8	0
14	A	1106	CLA	6	0
14	G	1129	CLA	6	0
14	4	513	CLA	2	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	4	507	CLA	1	0
14	U	1105	CLA	2	0
18	A	5008	LHG	7	0
14	G	1137	CLA	5	0
14	A	1101	CLA	5	0
14	J	1303	CLA	3	0
14	1	516	CLA	6	0
17	G	4008	BCR	4	0
14	A	1136	CLA	3	0
14	B	1230	CLA	2	0
17	S	4018	BCR	3	0
14	T	1302	CLA	1	0
18	G	5001	LHG	5	0
18	A	5009	LHG	3	0
14	H	1219	CLA	3	0
18	G	5003	LHG	2	0
14	6	510	CLA	2	0
17	5	521	BCR	3	0
17	H	4004	BCR	5	0
14	A	1129	CLA	6	0
14	B	1215	CLA	3	0
14	A	1108	CLA	2	0
14	Z	509	CLA	3	0
17	T	4012	BCR	4	0
14	Y	513	CLA	2	0
17	L	4022	BCR	6	0
19	B	1843	LMU	1	0
14	A	1103	CLA	5	0
17	G	4011	BCR	5	0
17	3	521	BCR	1	0
14	H	1228	CLA	1	0
14	A	1120	CLA	2	0
14	2	518	CLA	2	0
14	5	510	CLA	2	0
17	B	4017	BCR	4	0
14	G	1101	CLA	5	0
17	T	4013	BCR	6	0
14	H	1208	CLA	5	0
14	2	501	CLA	2	0
17	6	523	BCR	4	0
14	6	517	CLA	2	0
14	G	1108	CLA	2	0

*Continued on next page...*



*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	H	1023	CLA	4	0
14	G	1119	CLA	9	0
14	Y	502	CLA	2	0
17	V	4019	BCR	4	0
18	A	5007	LHG	2	0
14	H	1203	CLA	2	0
14	G	1124	CLA	3	0
17	V	4022	BCR	8	0
14	B	1226	CLA	5	0
14	B	1208	CLA	6	0
17	B	4009	BCR	3	0
14	Z	505	CLA	5	0
14	1	502	CLA	2	0
14	G	1112	CLA	1	0
14	H	1209	CLA	2	0
17	A	4011	BCR	4	0
18	A	5002	LHG	1	0
17	5	523	BCR	2	0
14	G	1237	CLA	8	0
14	G	1106	CLA	6	0
21	V	5216	SQD	6	0
14	2	512	CLA	5	0
14	6	518	CLA	1	0
14	1	505	CLA	5	0
14	Z	501	CLA	2	0
17	A	4008	BCR	6	0
18	G	5007	LHG	2	0
14	A	1011	CLA	4	0
17	4	523	BCR	2	0
14	B	1231	CLA	3	0
14	4	517	CLA	1	0
17	3	523	BCR	2	0
14	B	1222	CLA	1	0
14	2	519	CLA	1	0
14	A	1130	CLA	4	0
14	A	1125	CLA	3	0
19	H	1843	LMU	1	0
14	6	519	CLA	1	0
14	H	1223	CLA	4	0
18	G	5009	LHG	3	0
14	B	1220	CLA	3	0
17	F	4016	BCR	6	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	Z	518	CLA	2	0
14	H	1215	CLA	4	0
14	G	1103	CLA	5	0
14	Y	505	CLA	7	0
14	B	1203	CLA	2	0
17	2	523	BCR	2	0
14	A	1121	CLA	4	0
17	6	524	BCR	4	0
17	A	4003	BCR	1	0
20	T	5104	LMG	1	0
14	B	1218	CLA	3	0
18	G	5002	LHG	1	0
15	A	2001	PQN	4	0
14	Z	512	CLA	6	0
14	G	1135	CLA	2	0
14	H	1231	CLA	3	0
14	B	1229	CLA	8	0
14	H	1222	CLA	2	0
17	Z	523	BCR	2	0
14	1	509	CLA	2	0
14	4	516	CLA	2	0
15	B	2002	PQN	4	0
14	4	508	CLA	1	0
14	B	1012	CLA	5	0
14	G	1123	CLA	3	0
14	6	511	CLA	3	0
14	3	504	CLA	1	0
17	2	522	BCR	2	0
14	A	1127	CLA	1	0
18	H	1855	LHG	3	0
14	G	1011	CLA	5	0
17	B	4014	BCR	7	0
14	B	1219	CLA	3	0
17	G	4003	BCR	3	0
18	B	1842	LHG	3	0
14	5	512	CLA	4	0
14	G	1130	CLA	5	0
14	6	513	CLA	3	0
14	B	1209	CLA	2	0
14	J	1302	CLA	1	0
14	B	1217	CLA	2	0
14	3	517	CLA	1	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	B	1224	CLA	4	0
14	A	1119	CLA	7	0
18	A	5005	LHG	7	0
14	H	1216	CLA	6	0
15	G	2001	PQN	3	0
17	Y	524	BCR	6	0
14	G	1126	CLA	10	0
21	Y	822	SQD	1	0
14	H	1021	CLA	4	0
20	H	5002	LMG	6	0
14	4	512	CLA	2	0
14	A	1113	CLA	1	0
17	1	524	BCR	6	0
18	L	5218	LHG	2	0
14	A	1112	CLA	1	0
18	A	5001	LHG	5	0
14	G	1113	CLA	1	0
14	H	1238	CLA	1	0
17	H	4005	BCR	3	0
17	T	4015	BCR	5	0
14	G	1111	CLA	2	0
14	R	1302	CLA	3	0
14	A	1110	CLA	2	0
17	3	524	BCR	1	0
14	B	1023	CLA	2	0
14	5	502	CLA	2	0
14	Y	518	CLA	1	0
14	1	507	CLA	1	0
17	L	4019	BCR	4	0
14	K	1105	CLA	2	0
14	G	1107	CLA	2	0
14	G	1102	CLA	1	0
14	H	1236	CLA	5	0
14	1	504	CLA	1	0
14	K	1401	CLA	1	0
14	5	505	CLA	1	0
14	2	506	CLA	2	0
19	G	1848	LMU	2	0
17	Z	522	BCR	2	0
14	Y	509	CLA	2	0
18	V	5220	LHG	4	0
14	G	1121	CLA	4	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	G	1136	CLA	4	0
18	L	5220	LHG	4	0
14	G	1139	CLA	1	0
14	G	1110	CLA	1	0
14	6	509	CLA	1	0
14	3	505	CLA	2	0
14	Y	519	CLA	1	0
14	4	510	CLA	3	0
14	A	1131	CLA	3	0
14	G	1109	CLA	2	0
14	H	1217	CLA	1	0
14	G	1127	CLA	1	0
14	4	502	CLA	4	0
14	H	1205	CLA	3	0
14	B	1207	CLA	10	0
17	Y	521	BCR	6	0
17	3	522	BCR	1	0
17	6	522	BCR	4	0
14	Z	506	CLA	2	0
14	5	511	CLA	2	0
17	B	4006	BCR	4	0
17	1	521	BCR	6	0
14	A	1105	CLA	2	0
21	B	1852	SQD	8	0
18	B	1855	LHG	3	0
17	V	4219	BCR	8	0
14	F	1301	CLA	1	0
17	L	4219	BCR	6	0
14	Z	513	CLA	2	0
21	L	5216	SQD	4	0
14	H	1226	CLA	5	0
14	H	1206	CLA	5	0
18	G	5005	LHG	6	0
21	1	822	SQD	1	0
14	A	1801	CLA	3	0
18	A	5006	LHG	4	0
22	P	170	FMN	1	0
14	Y	511	CLA	1	0
20	B	5002	LMG	5	0
14	5	509	CLA	2	0
14	H	1239	CLA	5	0
17	B	4005	BCR	4	0

*Continued on next page...*

*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	H	1207	CLA	3	0
18	I	5001	LHG	2	0
17	A	4001	BCR	4	0
17	Y	523	BCR	1	0
18	L	5221	LHG	1	0
14	H	1210	CLA	9	0
14	V	1501	CLA	8	0
14	A	1126	CLA	9	0
17	B	4010	BCR	6	0
14	B	1221	CLA	9	0
14	A	1140	CLA	3	0
14	G	1801	CLA	3	0
17	J	4012	BCR	4	0
17	K	4104	BCR	3	0
14	A	1123	CLA	1	0
17	H	4009	BCR	2	0
14	G	1125	CLA	3	0
18	G	5006	LHG	4	0
14	G	1131	CLA	3	0
17	U	4104	BCR	3	0
14	2	517	CLA	1	0
14	B	1206	CLA	4	0
14	H	1214	CLA	3	0
18	V	5221	LHG	8	0
14	4	509	CLA	4	0
14	H	1221	CLA	9	0
14	A	1116	CLA	5	0
14	V	1503	CLA	2	0
17	Z	521	BCR	7	0
22	X	170	FMN	1	0
14	Y	504	CLA	1	0
14	A	1102	CLA	2	0
14	V	1502	CLA	4	0
14	A	1022	CLA	2	0
14	B	1238	CLA	1	0
14	B	1228	CLA	2	0
14	G	1105	CLA	2	0
14	B	1225	CLA	4	0
17	4	524	BCR	2	0
19	A	1848	LMU	2	0
14	2	513	CLA	2	0
14	G	1132	CLA	1	0

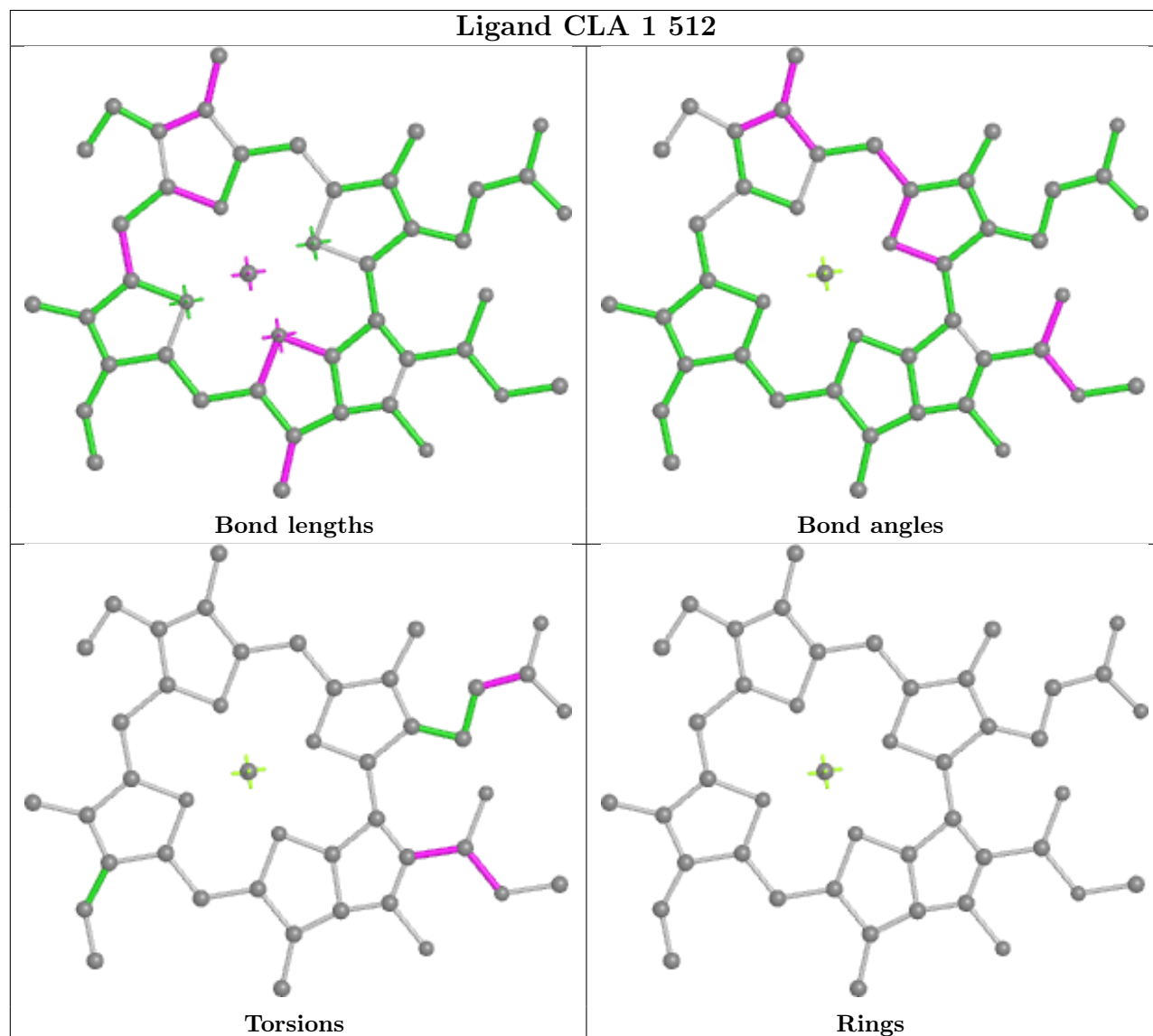
*Continued on next page...*

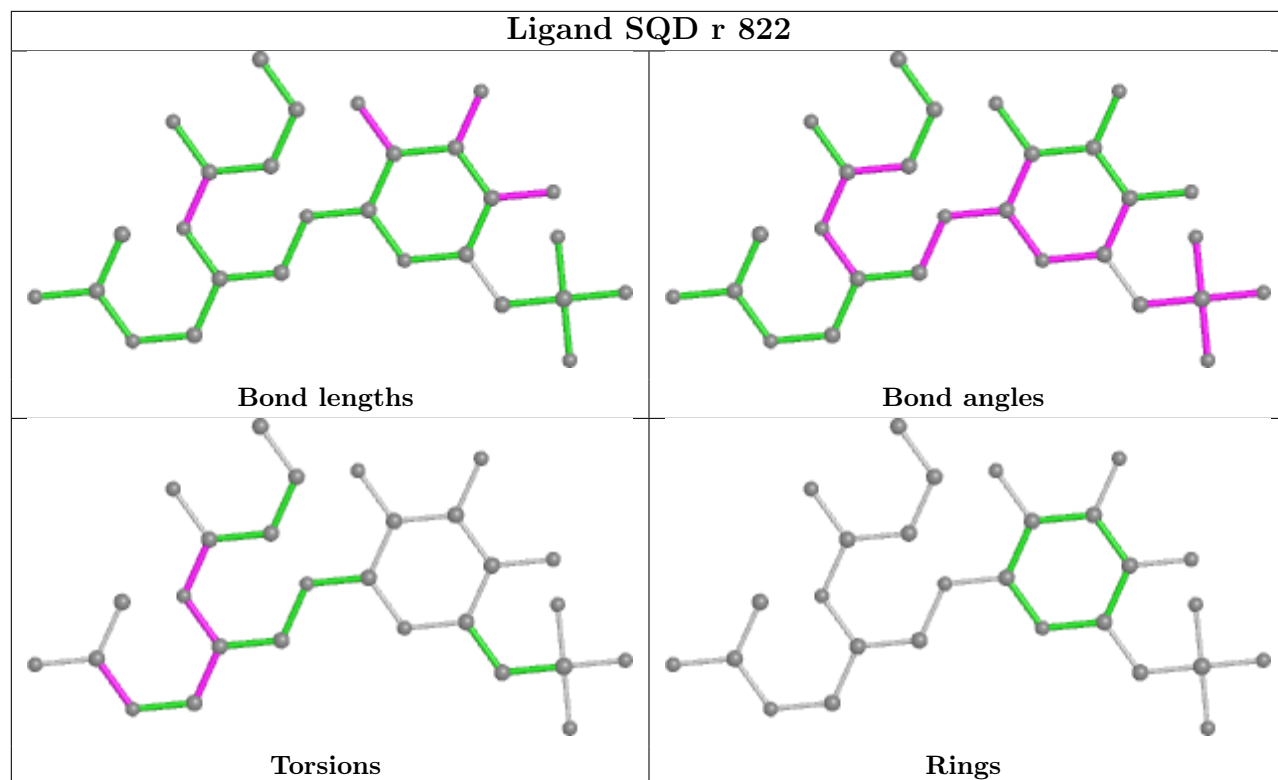
*Continued from previous page...*

Mol	Chain	Res	Type	Clashes	Symm-Clashes
14	G	1118	CLA	2	0
14	5	507	CLA	1	0
17	B	4004	BCR	3	0
17	1	523	BCR	2	0
14	H	1227	CLA	4	0
14	B	1210	CLA	9	0
14	L	1503	CLA	1	0
14	G	1116	CLA	7	0
14	A	1117	CLA	5	0
14	1	518	CLA	1	0
14	A	1013	CLA	9	0
14	H	1229	CLA	6	0
15	H	2002	PQN	5	0
14	6	512	CLA	4	0
14	1	511	CLA	1	0
14	Y	507	CLA	1	0
17	I	4018	BCR	4	0
14	Z	517	CLA	1	0
14	B	1235	CLA	4	0
14	3	518	CLA	1	0
17	A	4007	BCR	2	0
14	1	513	CLA	2	0
17	5	522	BCR	2	0
14	A	1114	CLA	1	0
14	H	1240	CLA	3	0
14	H	1225	CLA	4	0
14	3	513	CLA	2	0
14	A	1139	CLA	3	0
14	A	1109	CLA	2	0
14	3	511	CLA	1	0
14	A	1134	CLA	3	0
14	B	1212	CLA	1	0
14	G	1115	CLA	3	0
14	H	1234	CLA	7	0
19	A	1849	LMU	1	0

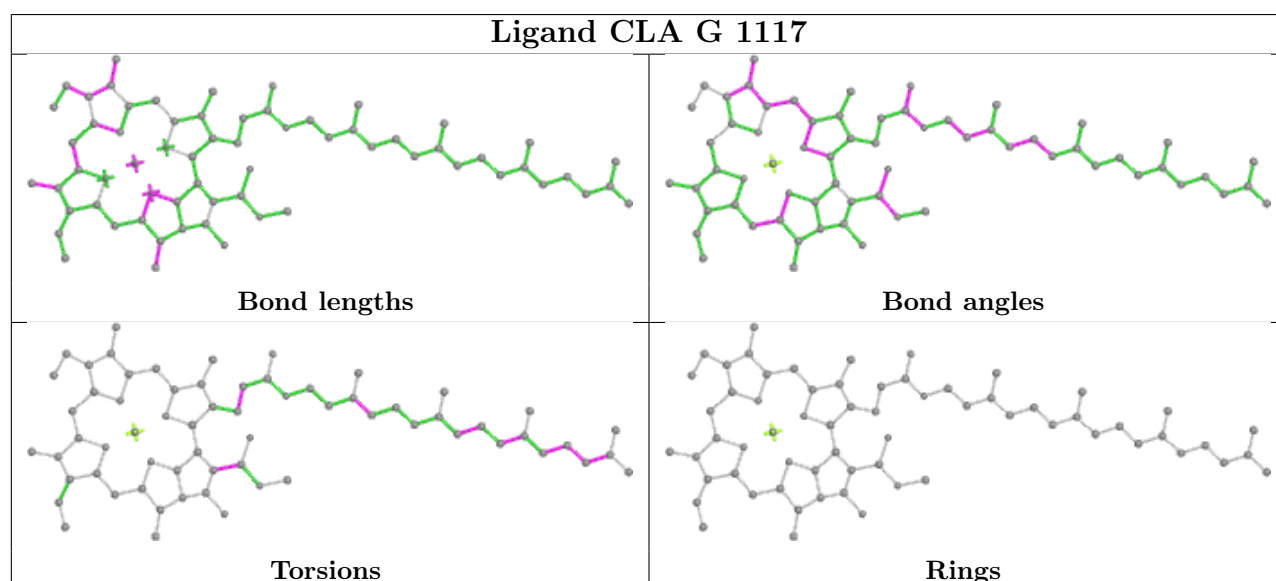
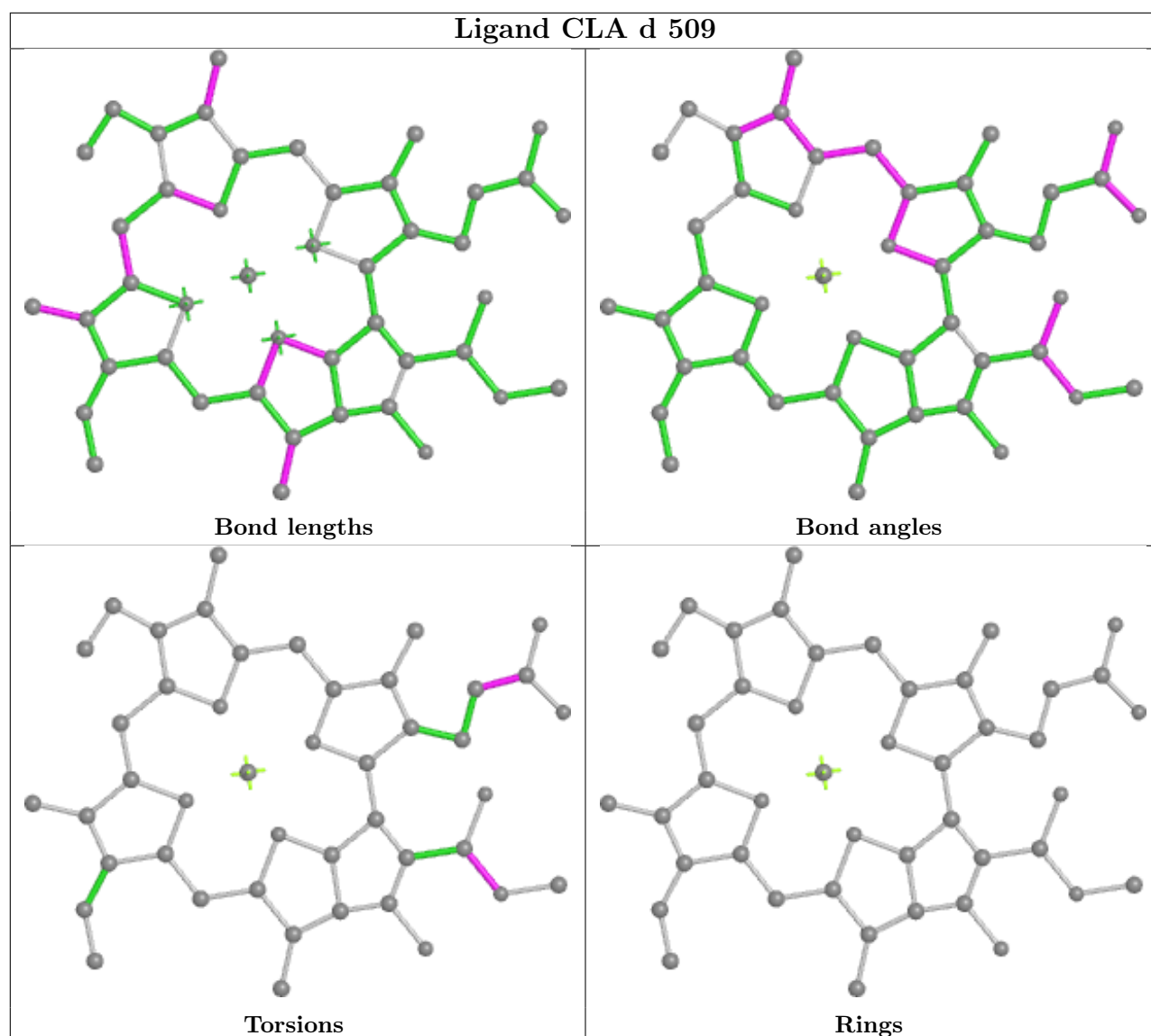
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

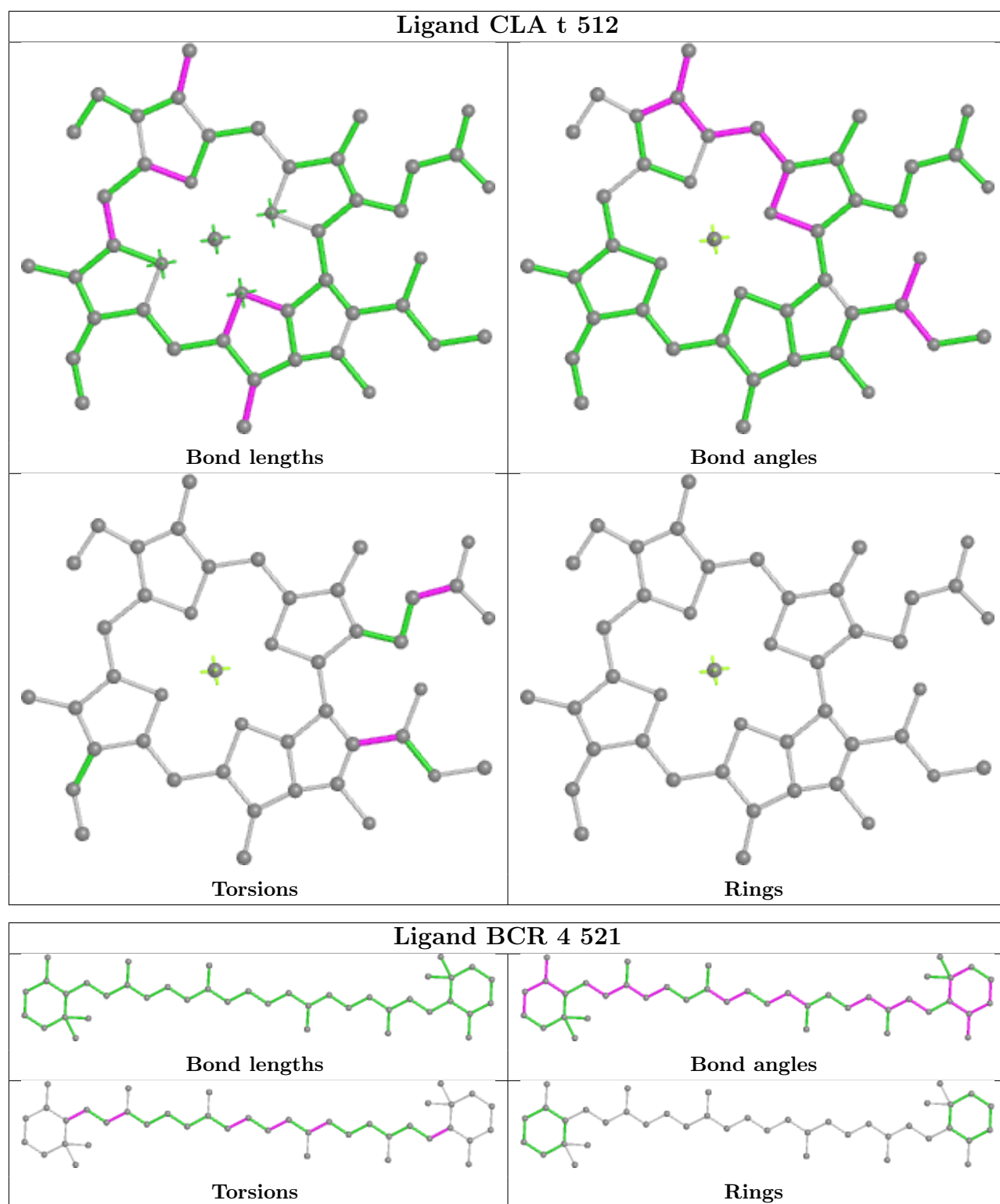
in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.

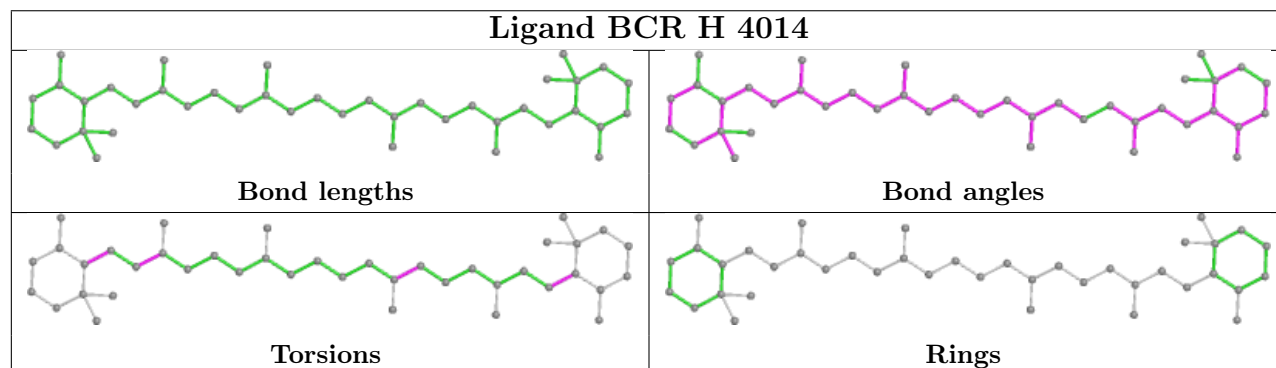
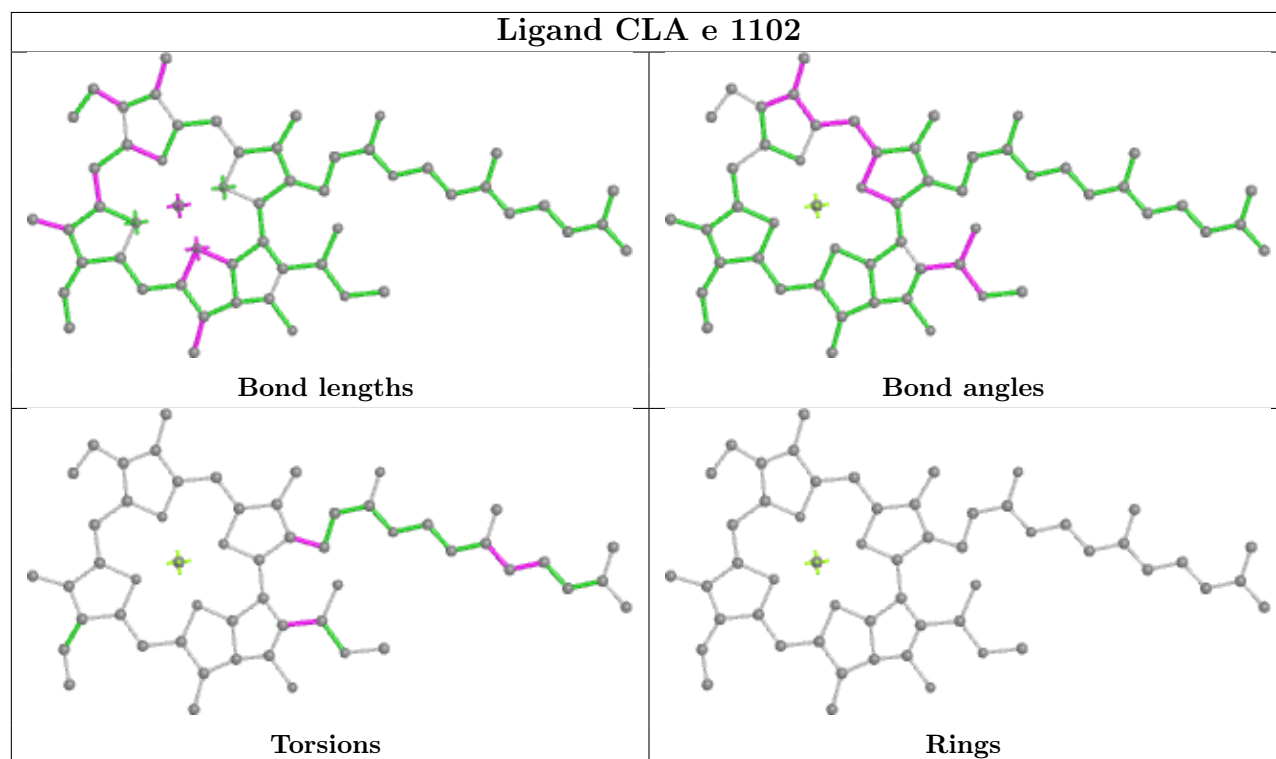
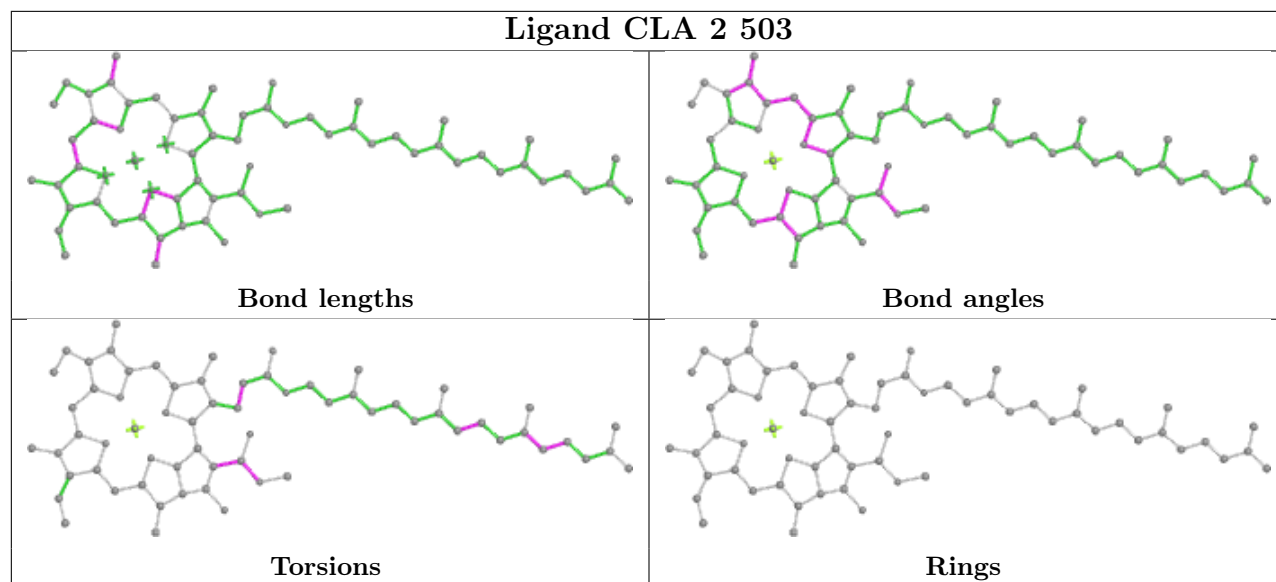


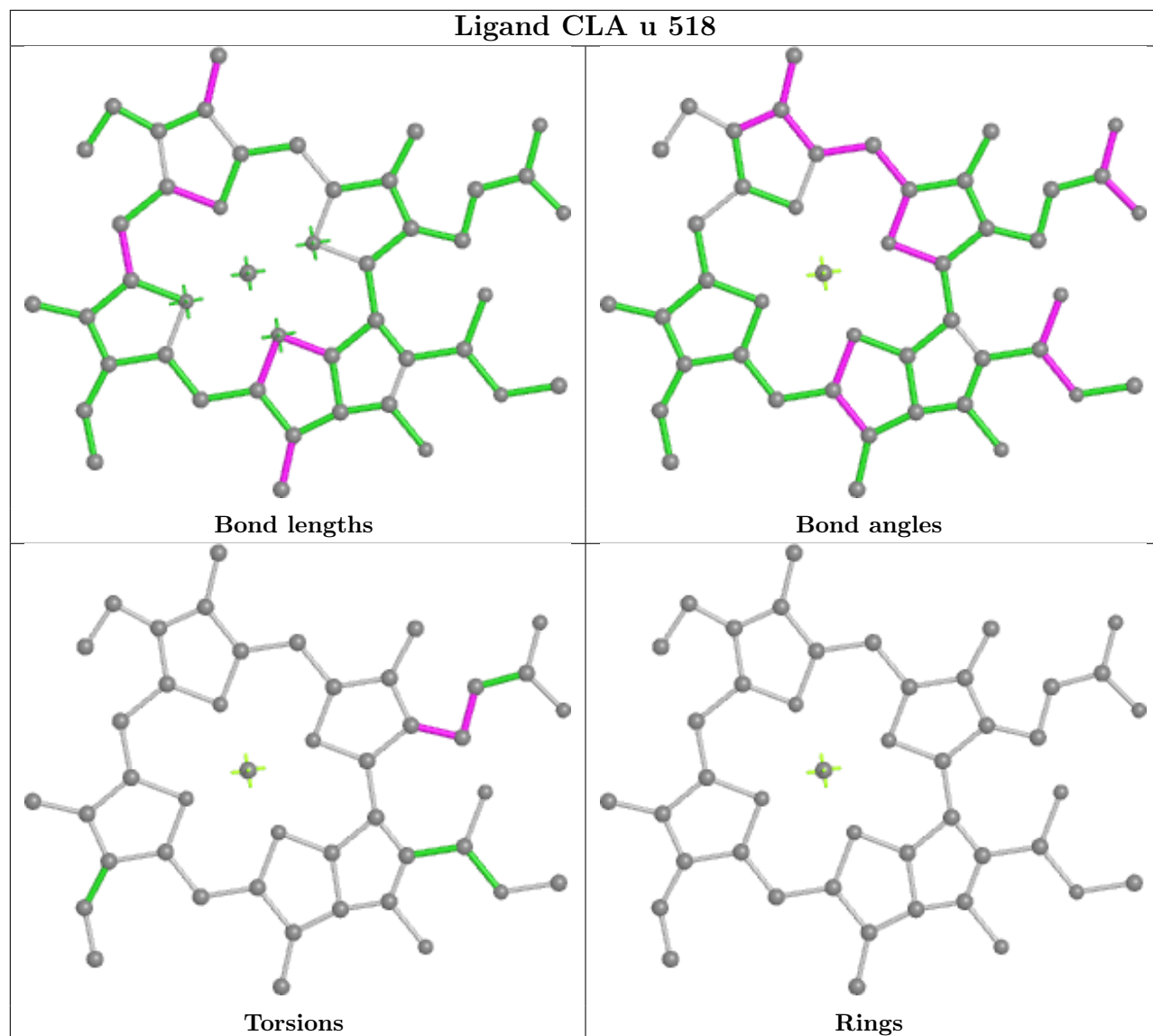


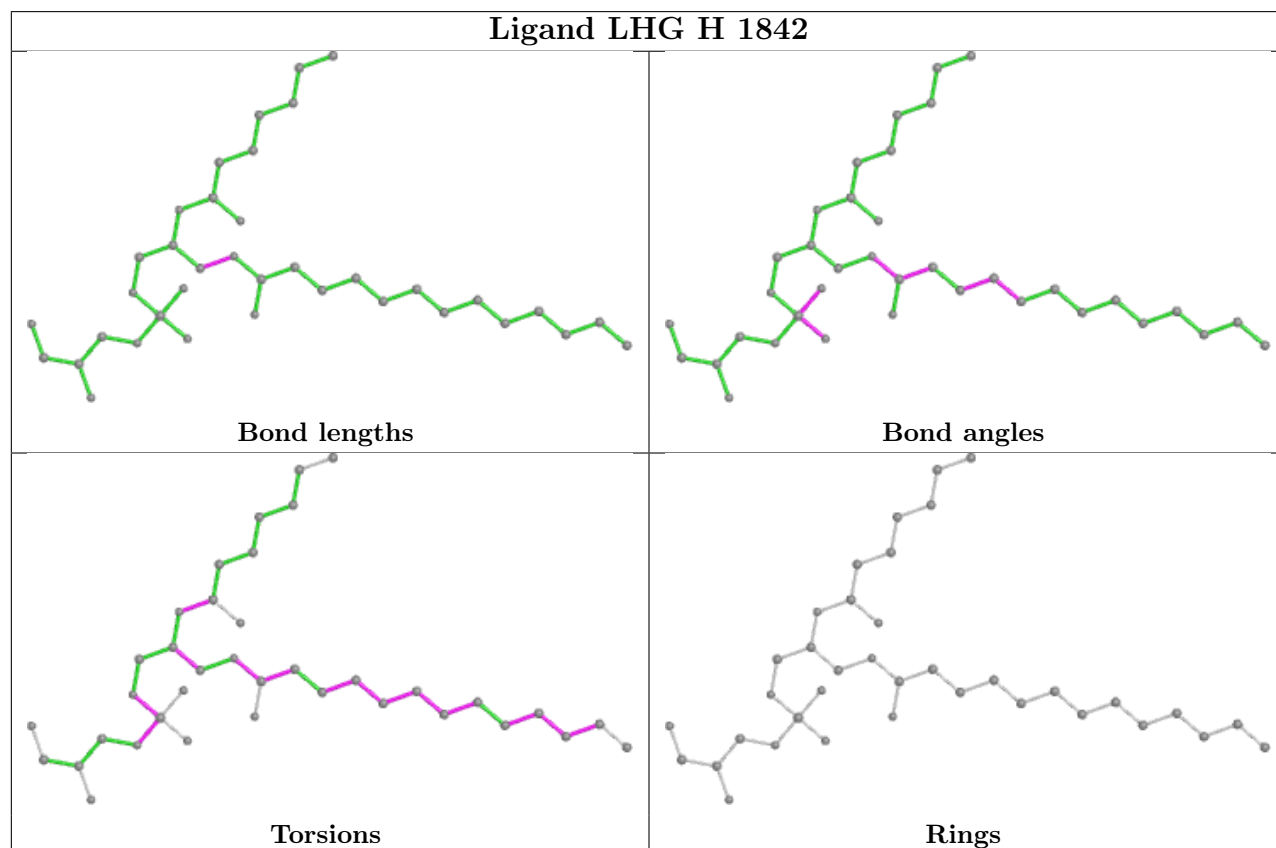
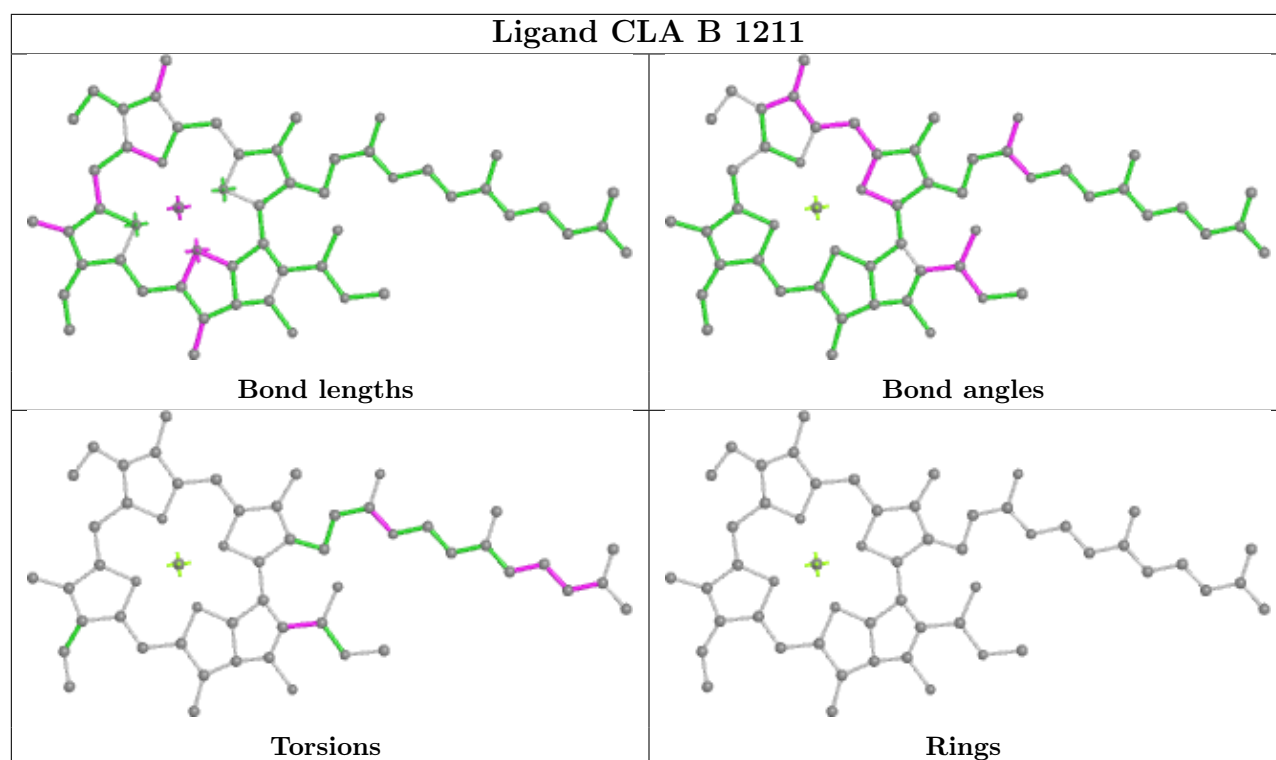


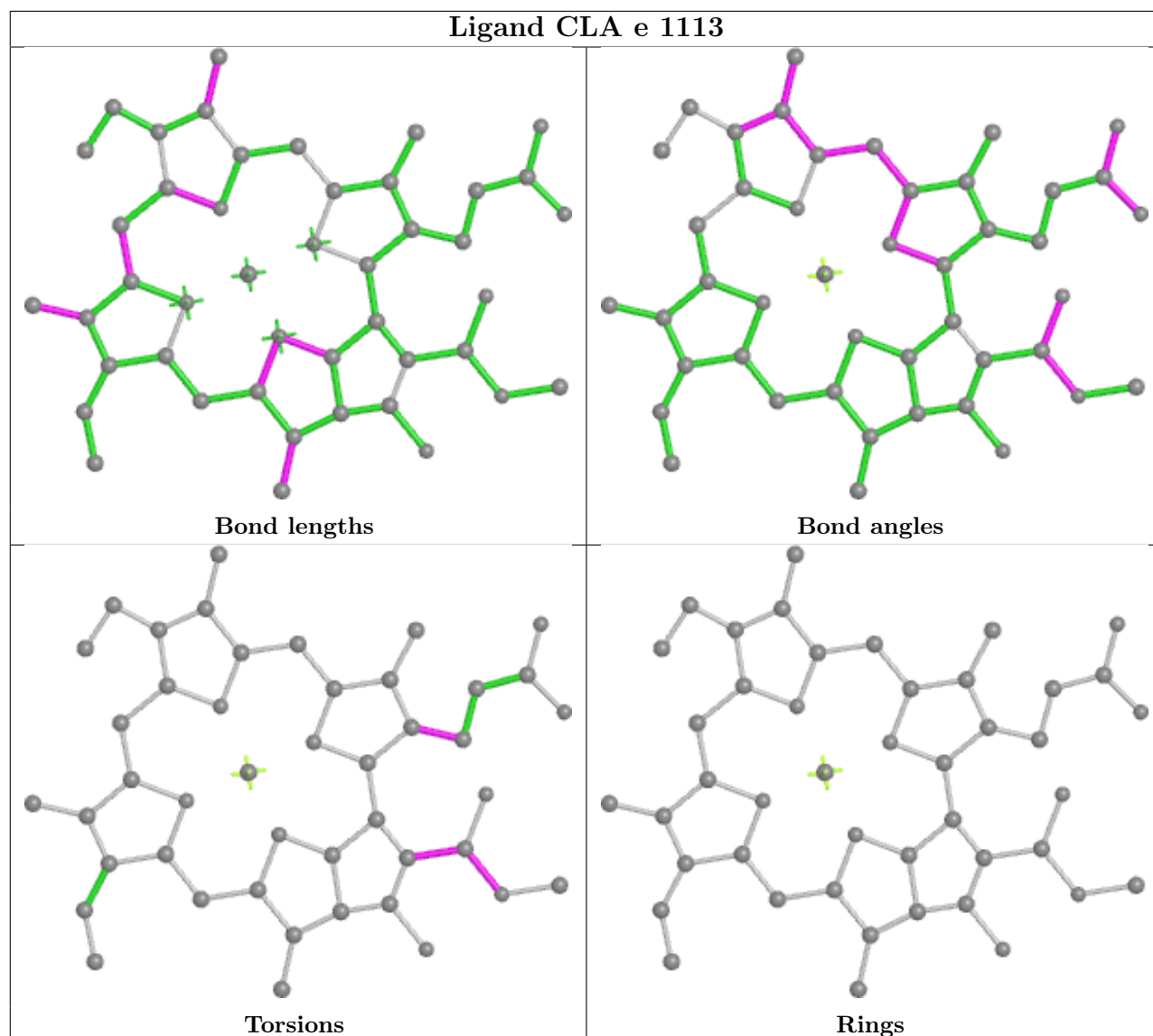
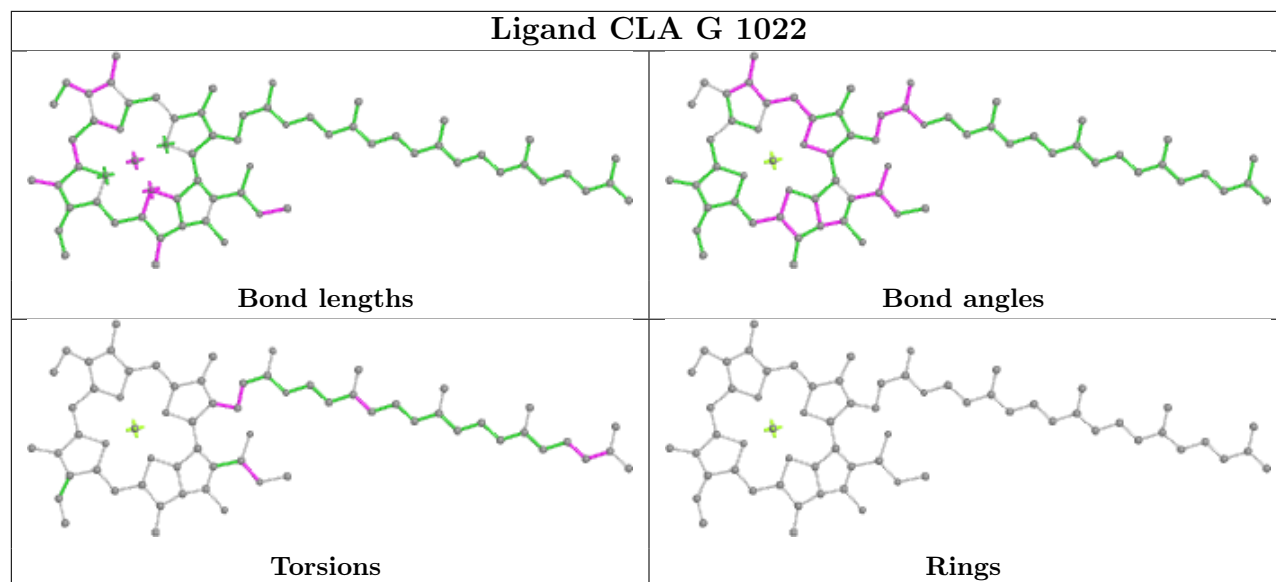




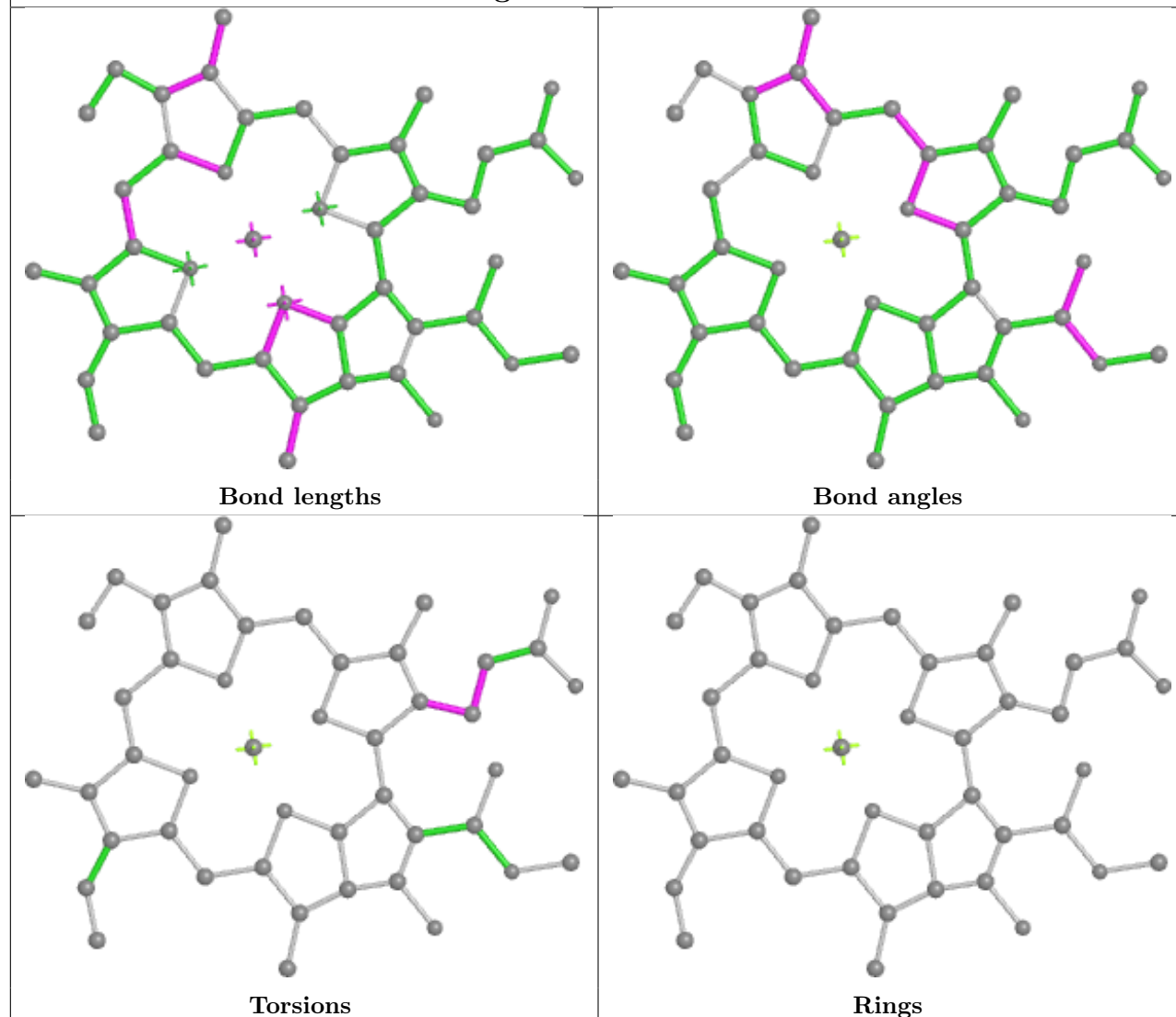




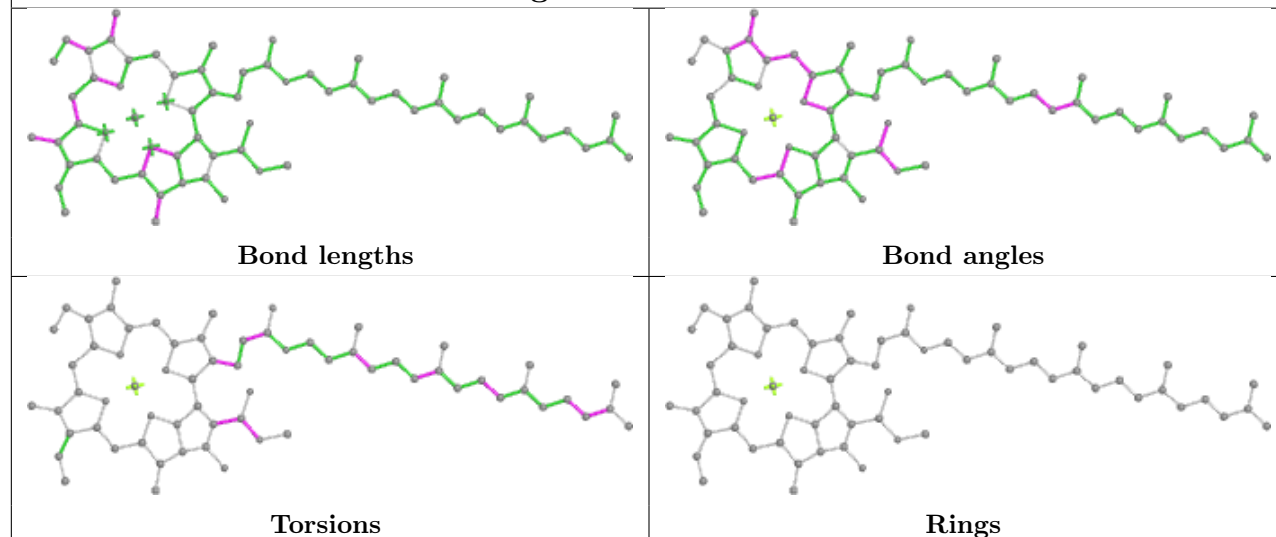


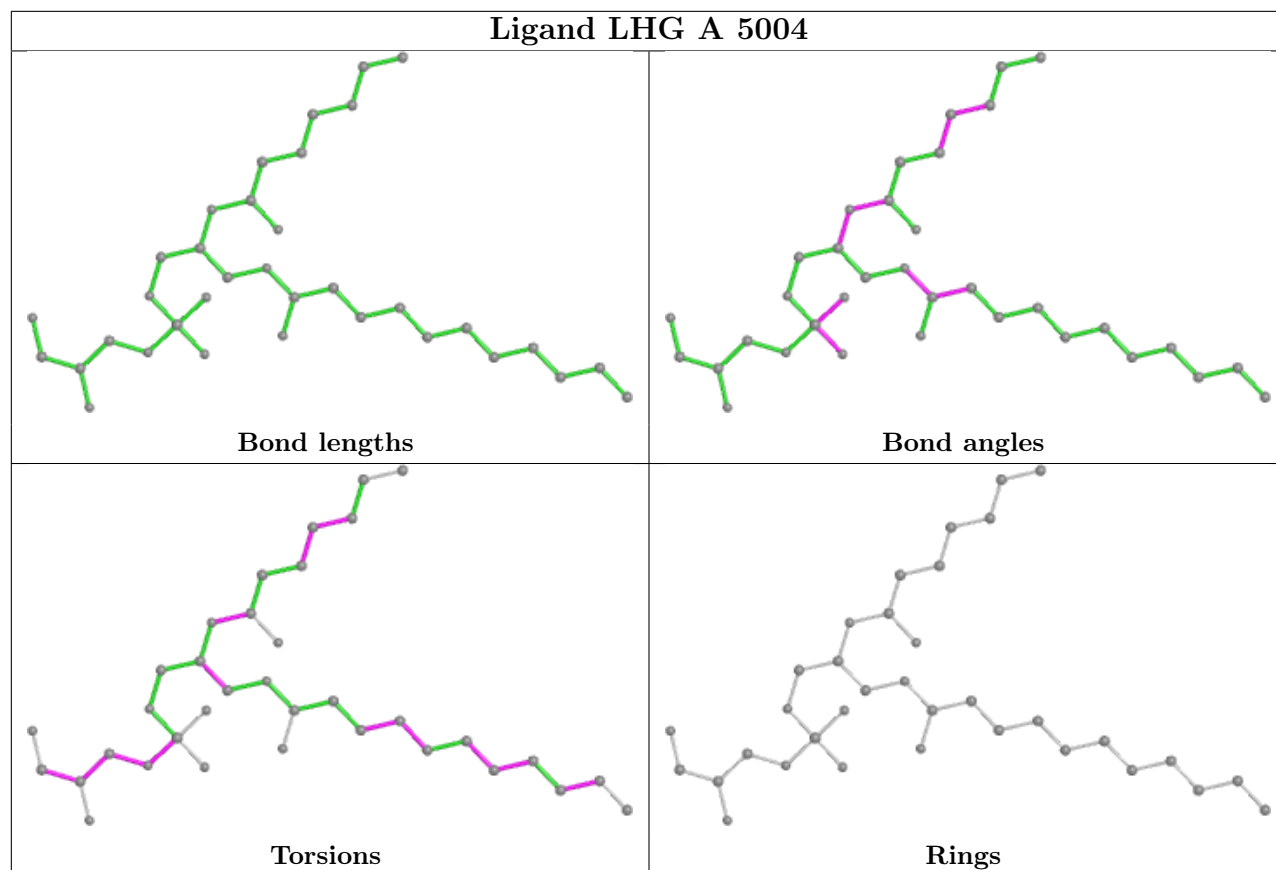
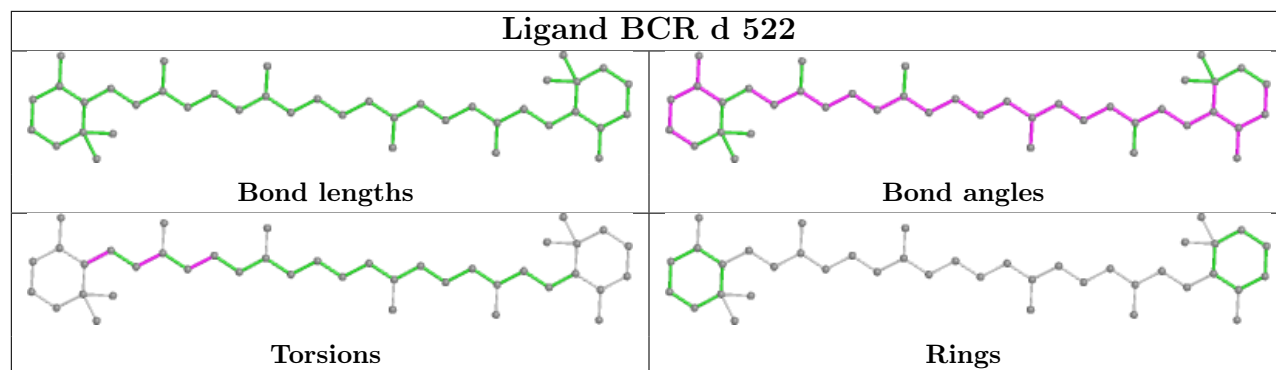


## Ligand CLA 3 512

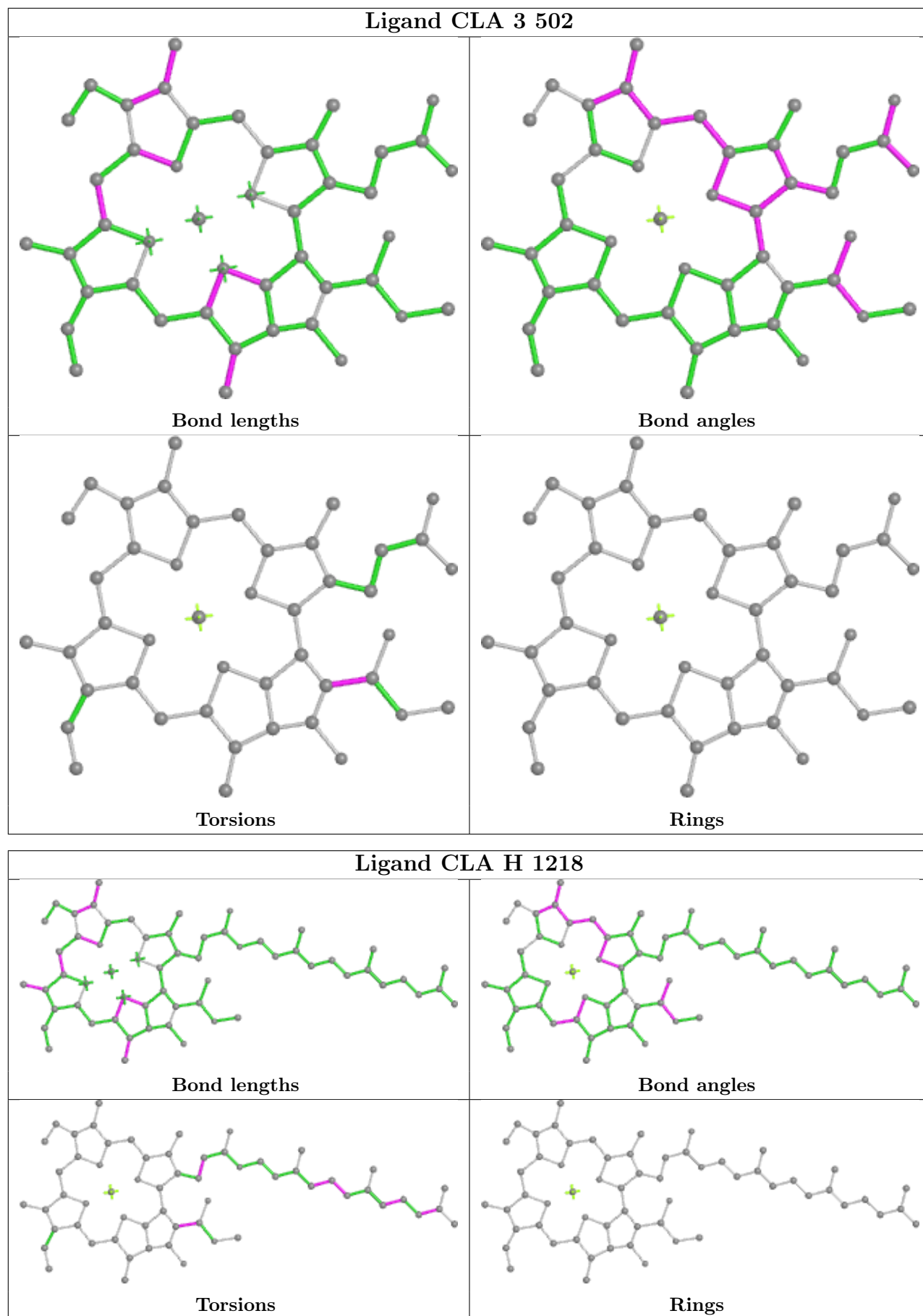


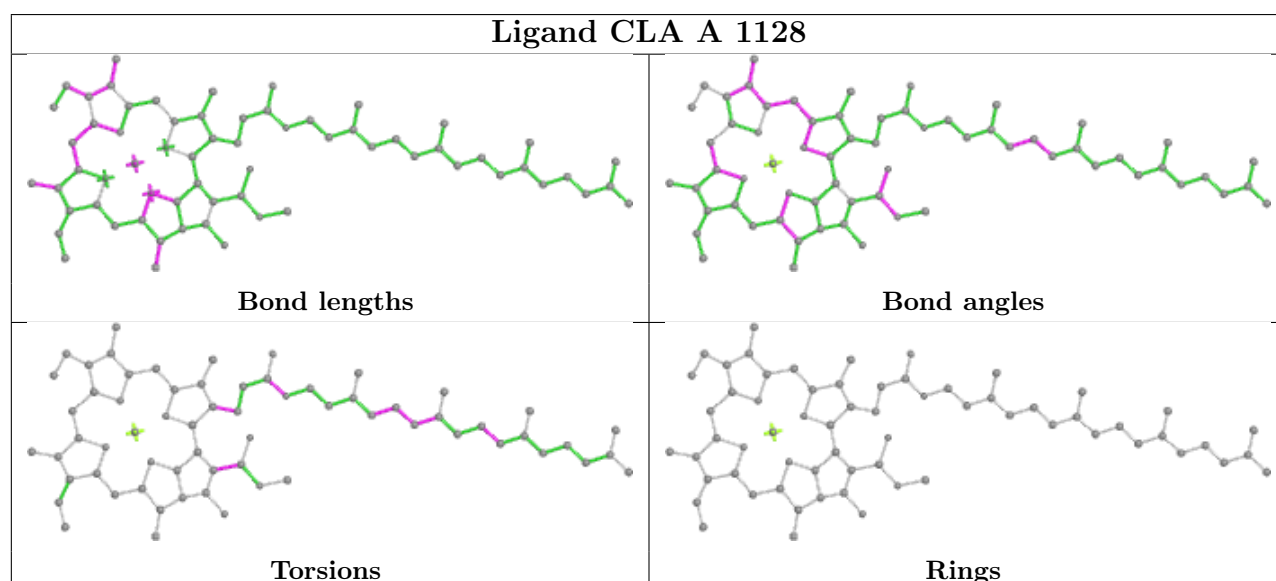
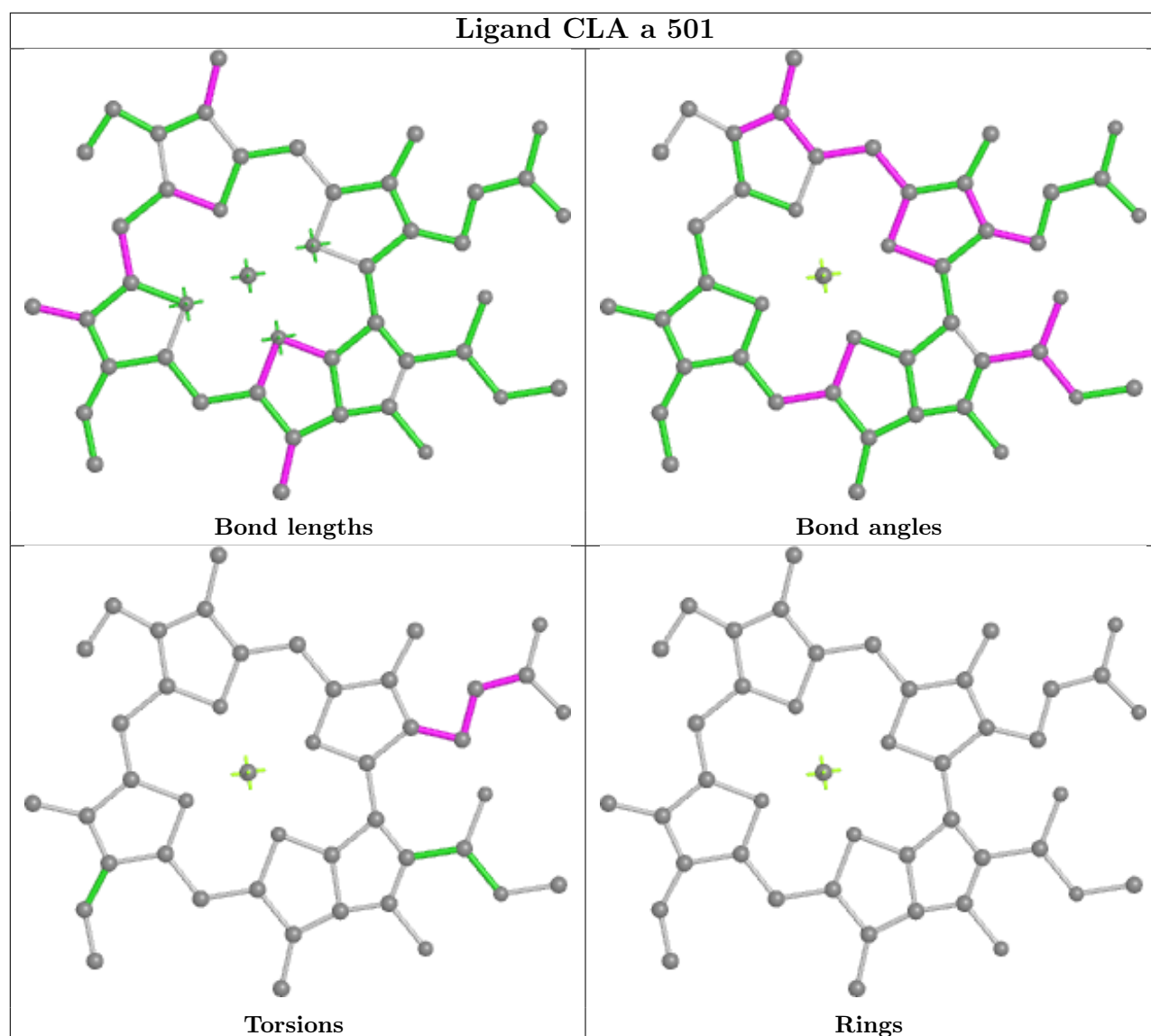
## Ligand CLA f 1229

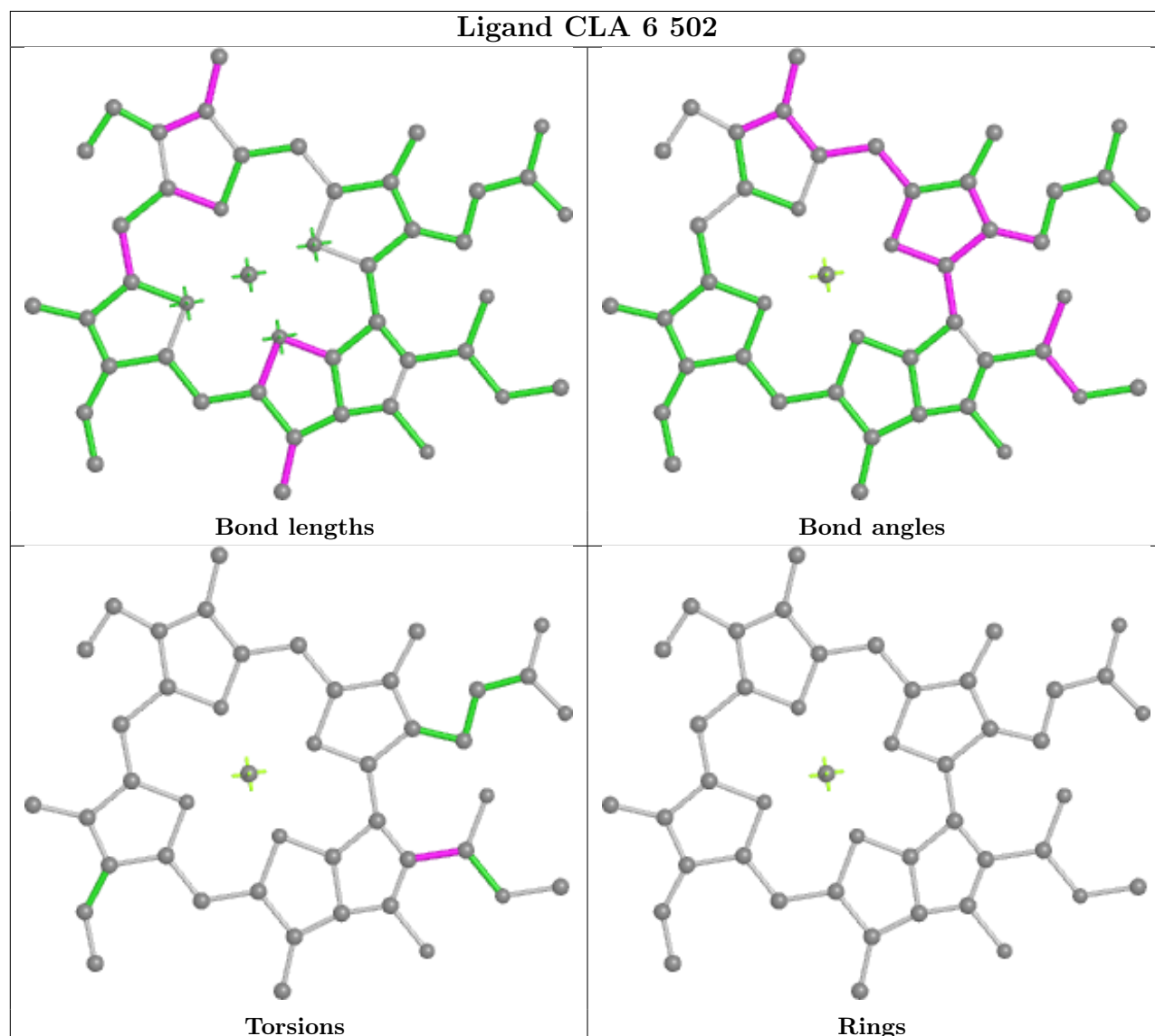
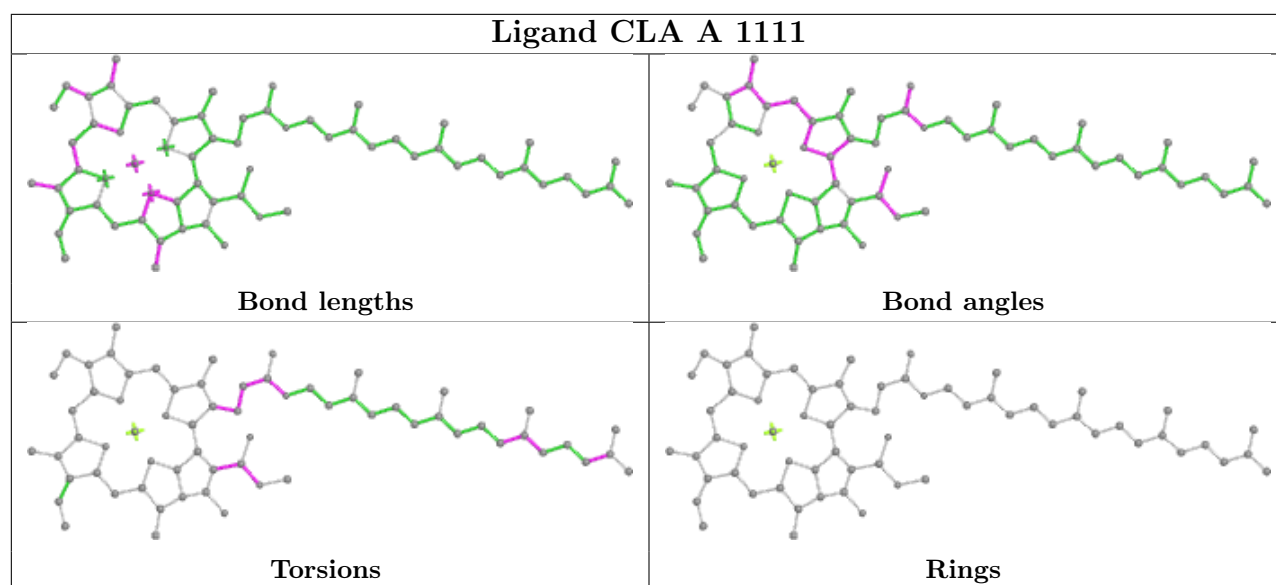


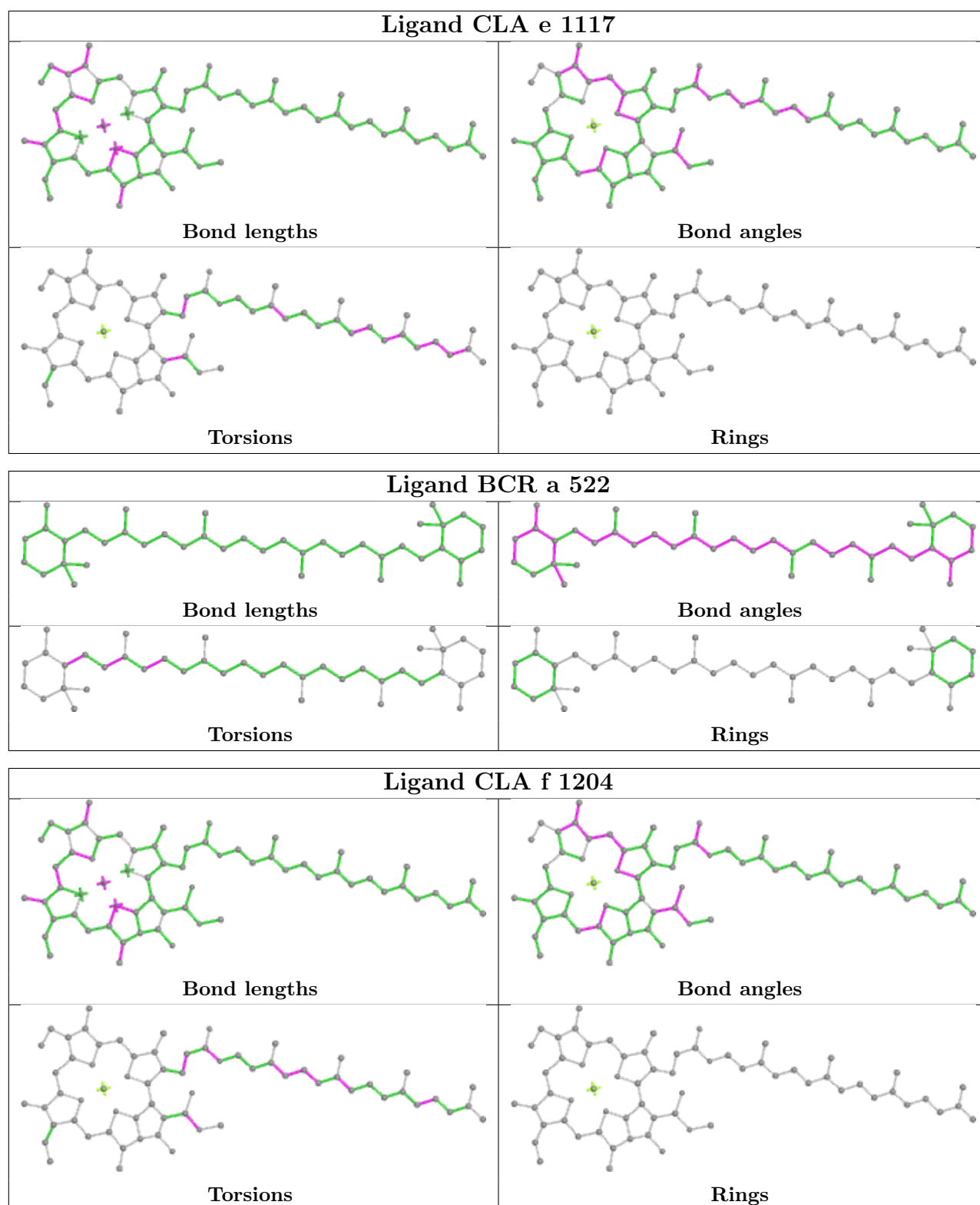


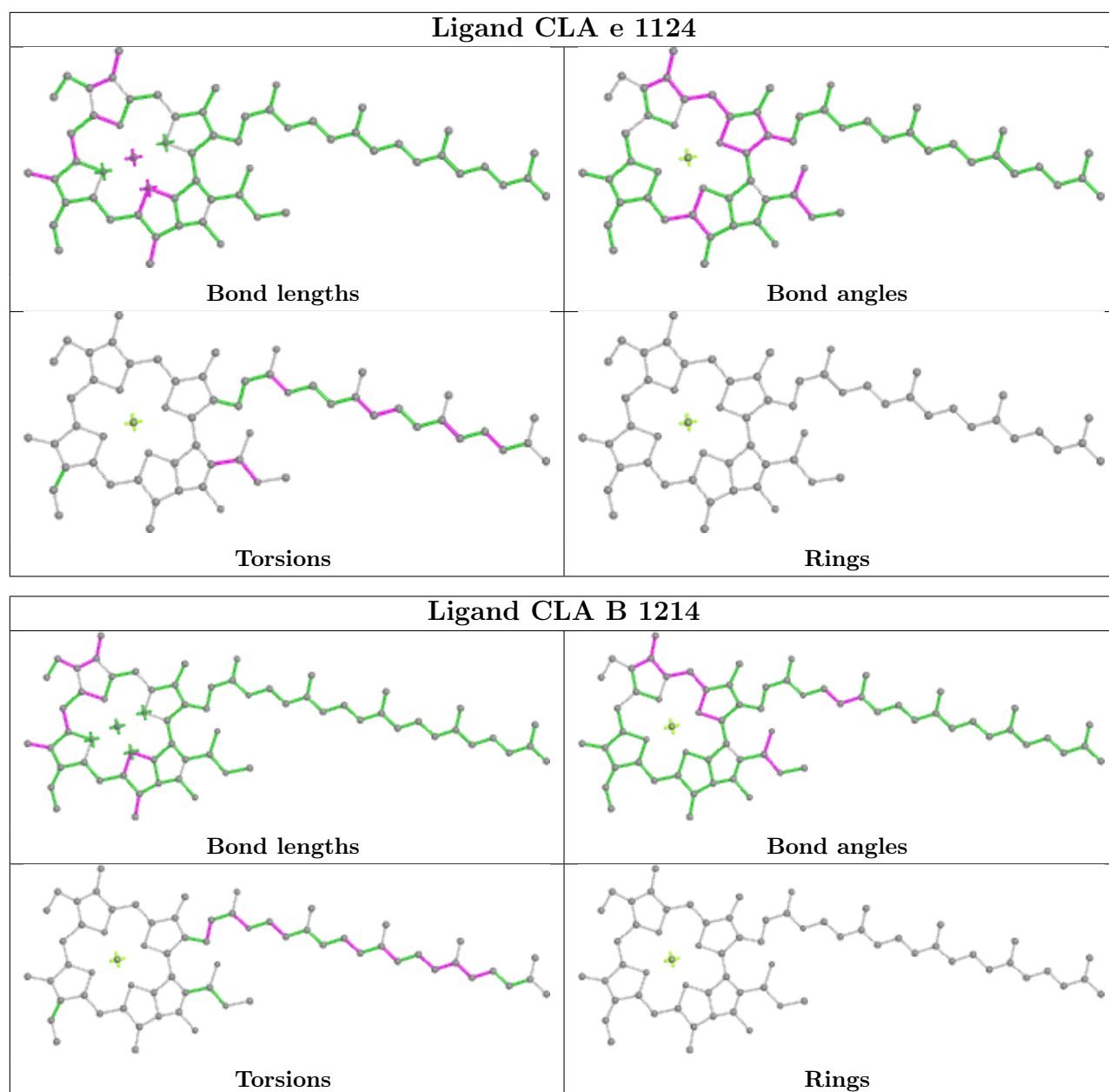


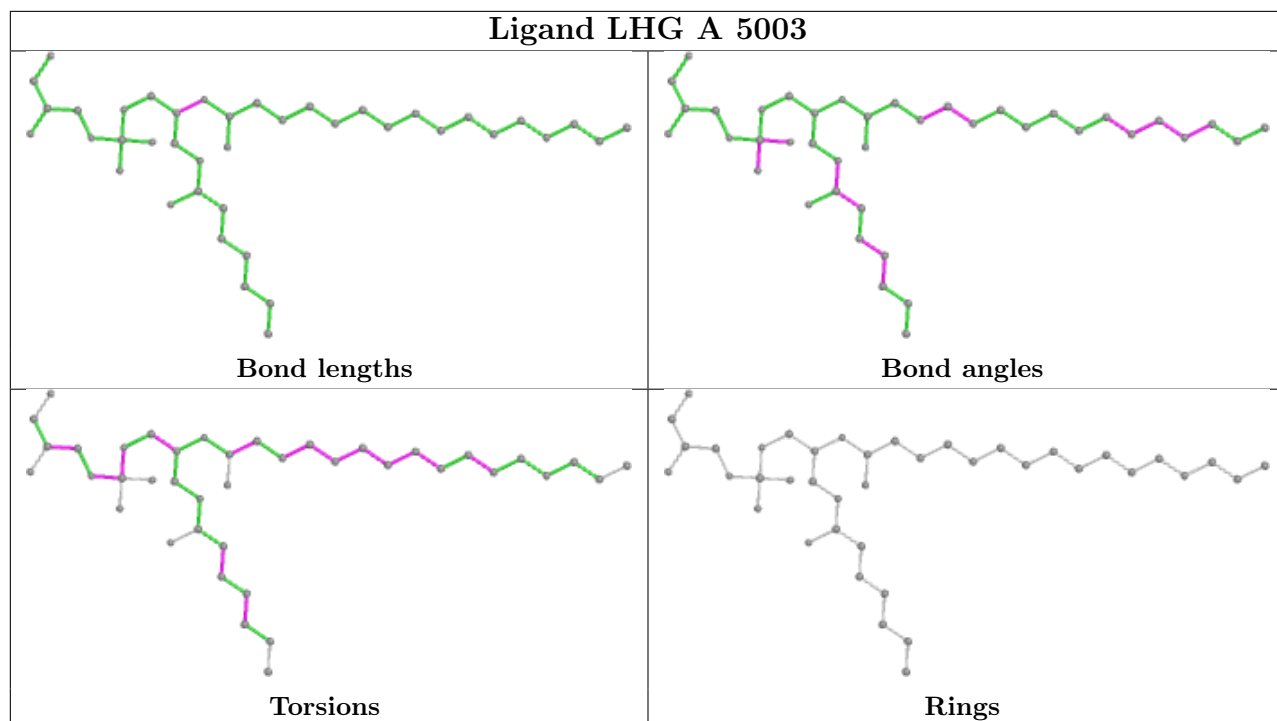


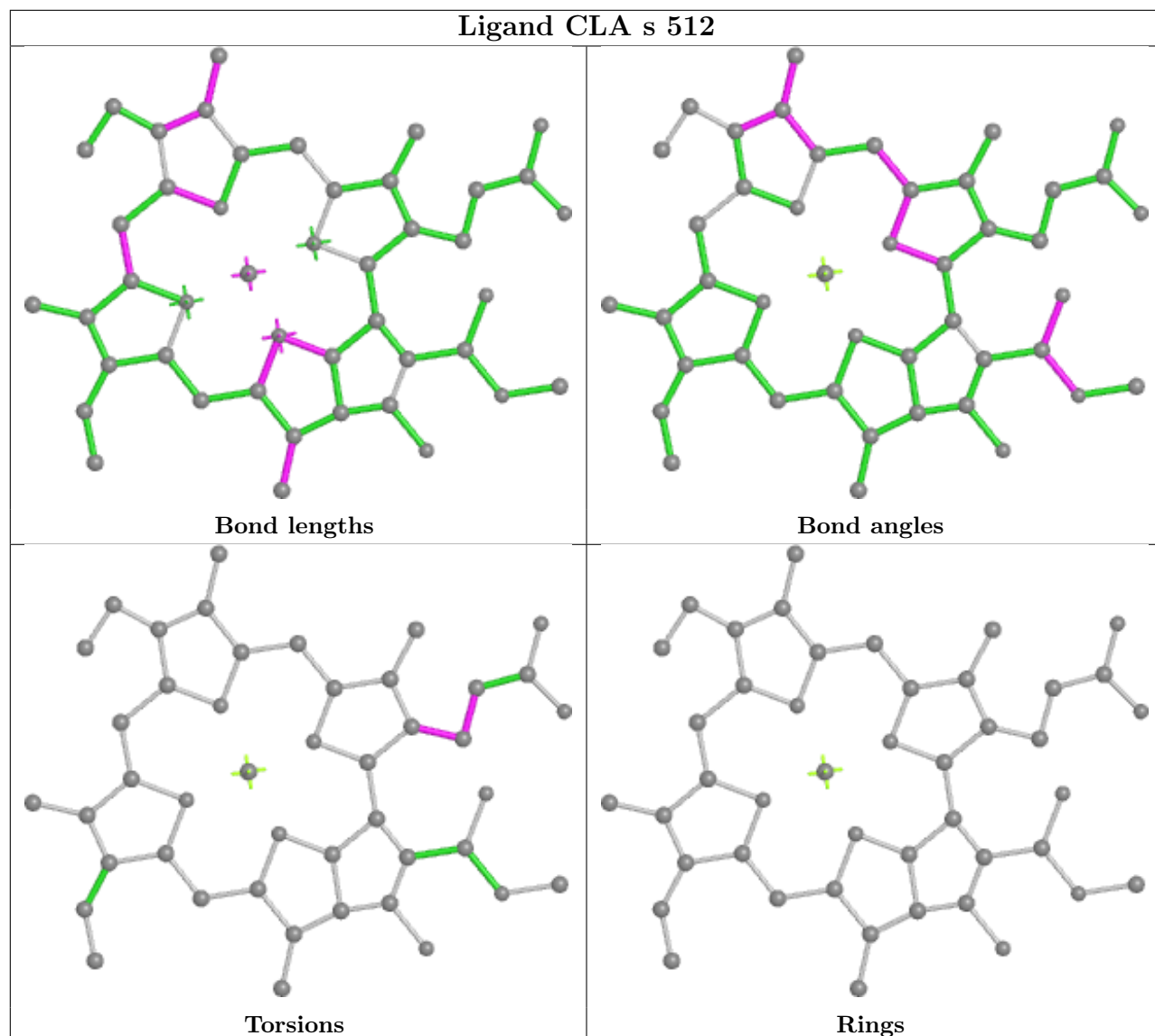


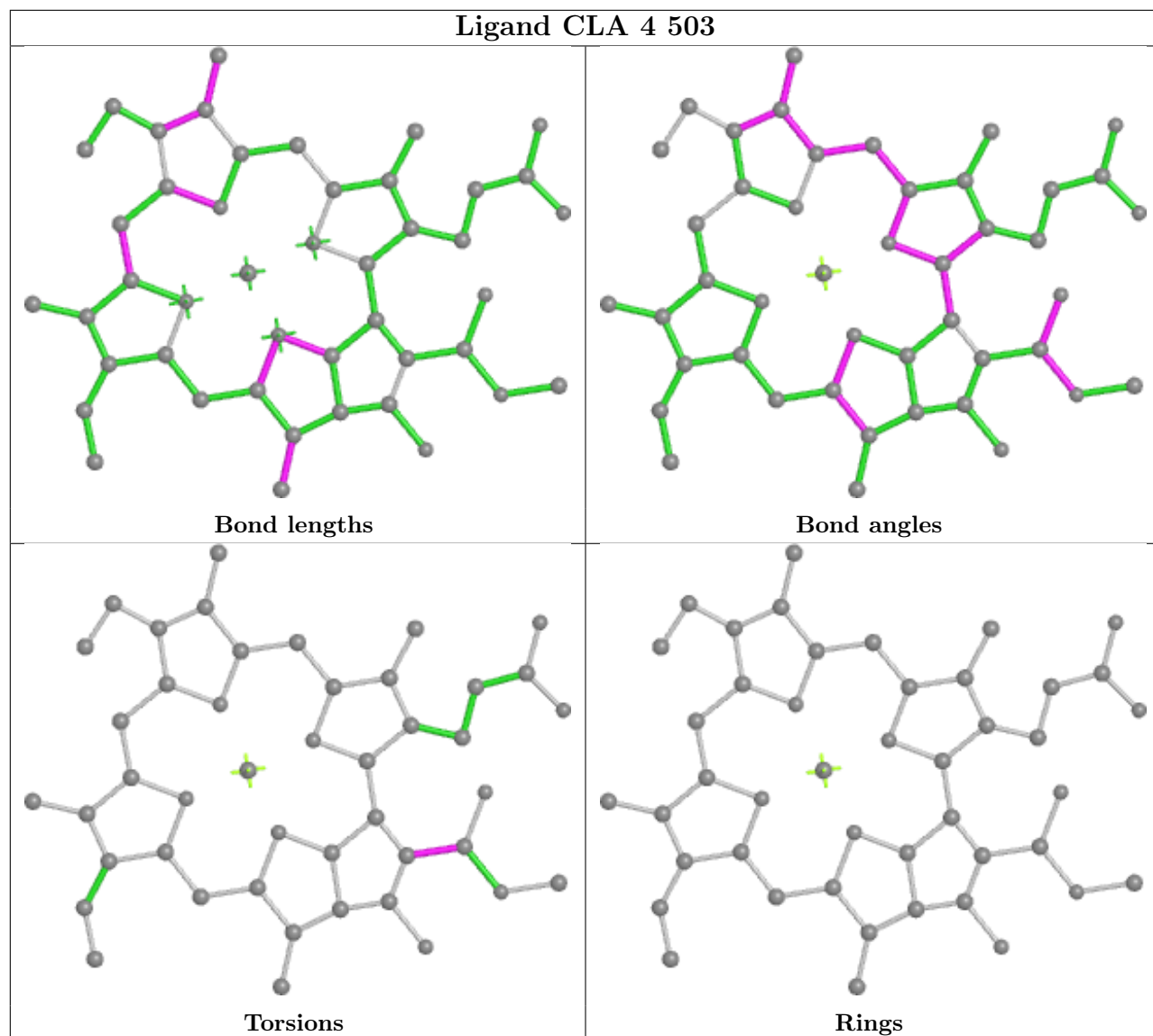




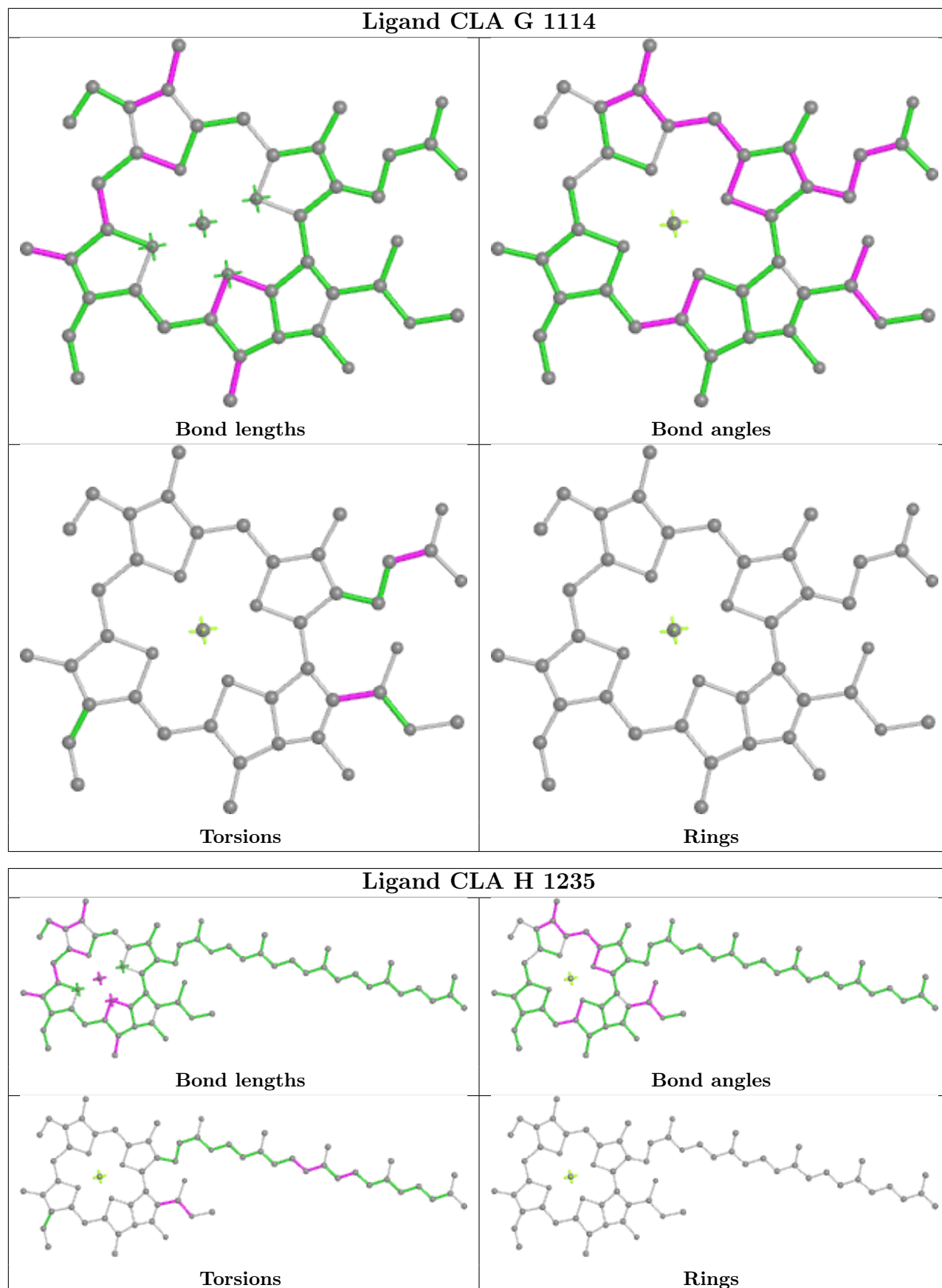


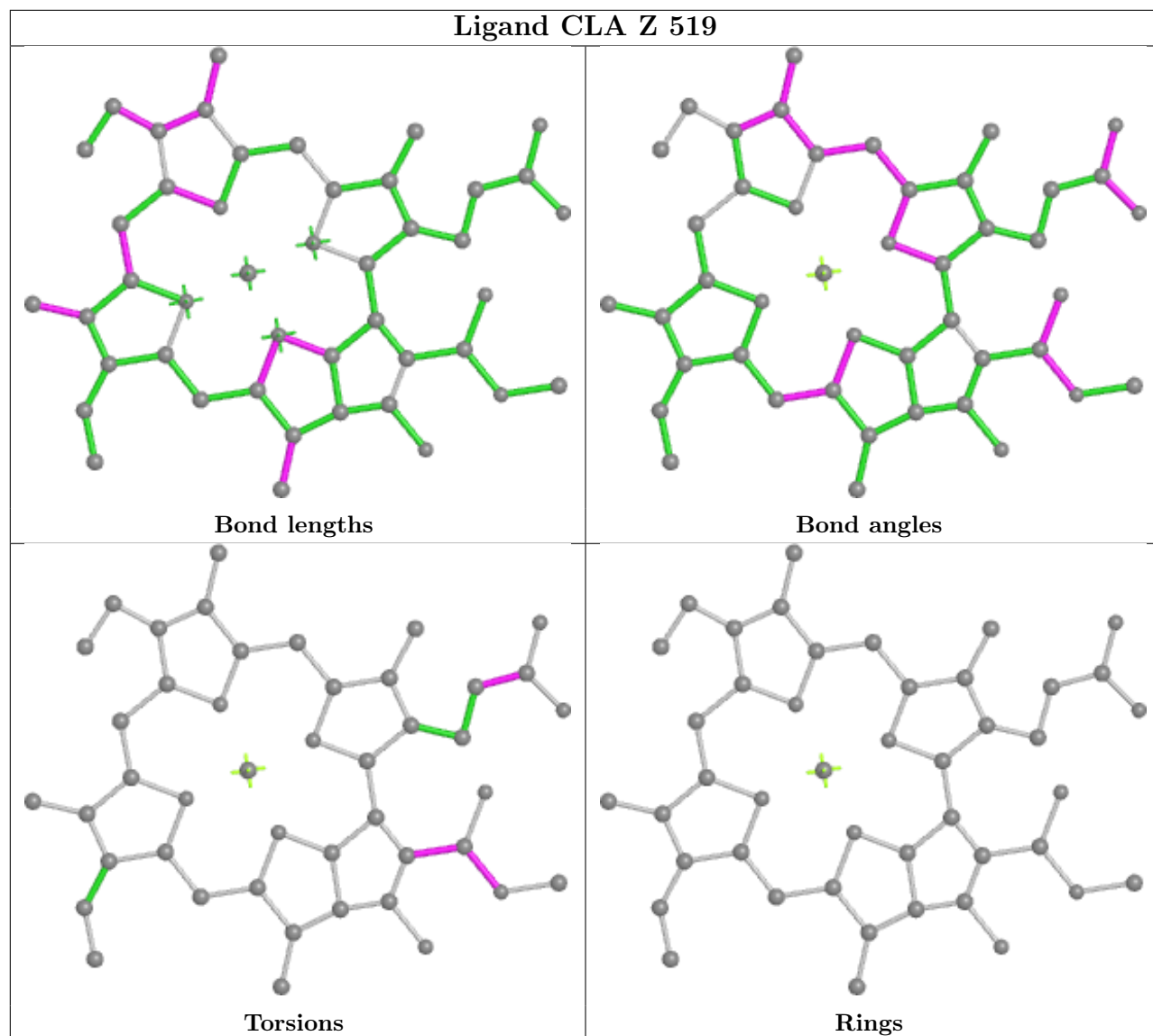


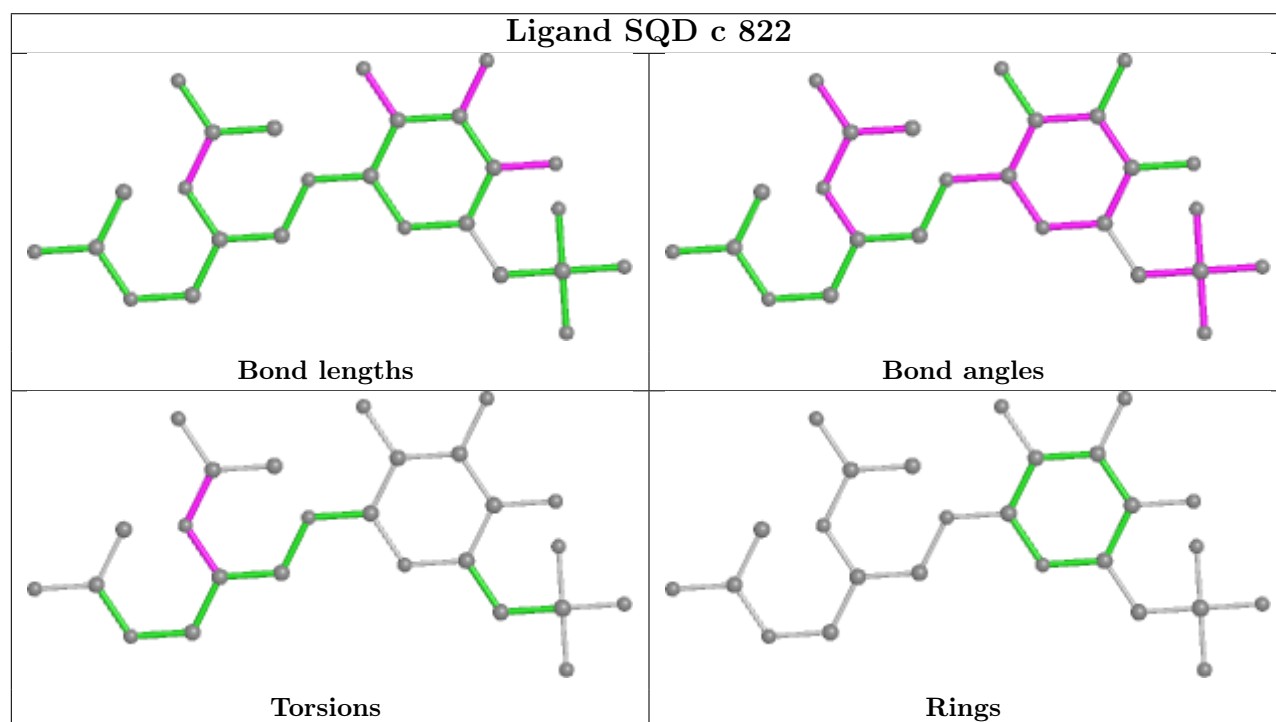
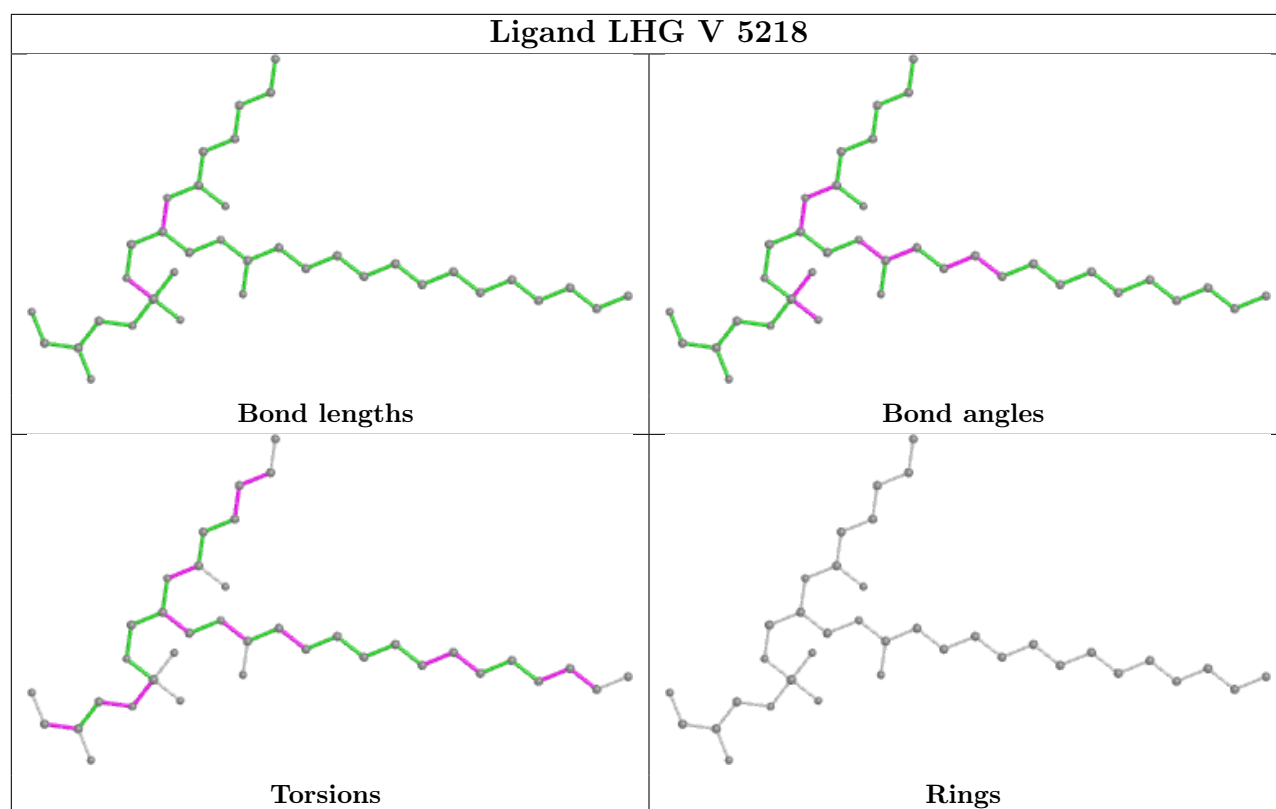


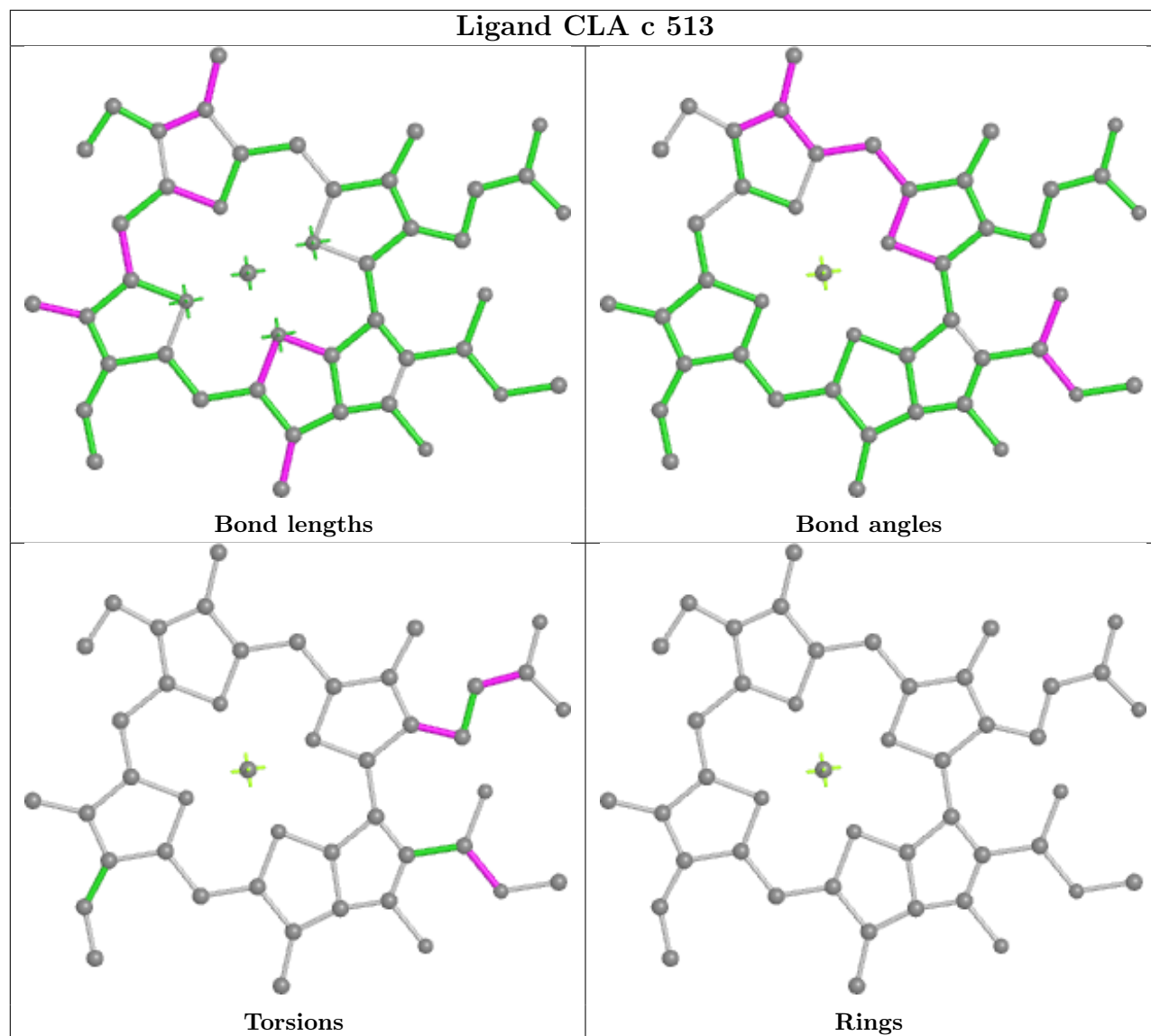
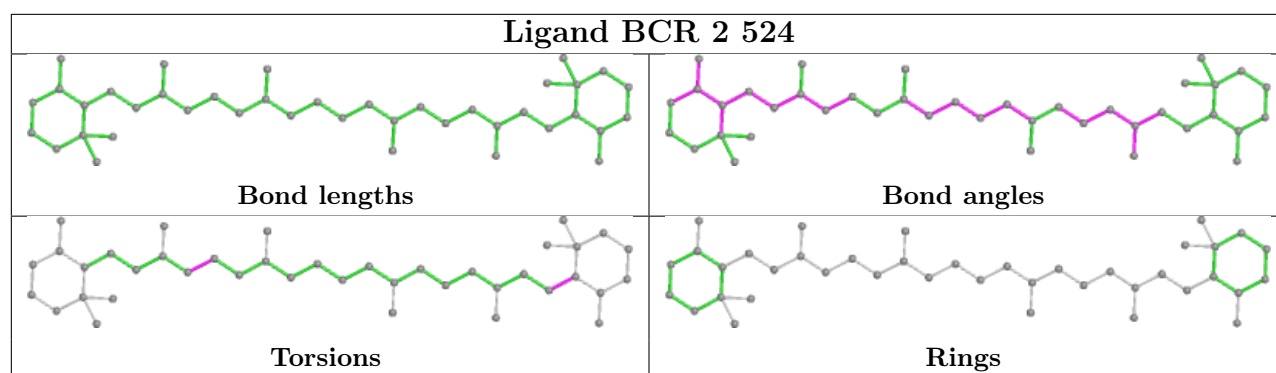


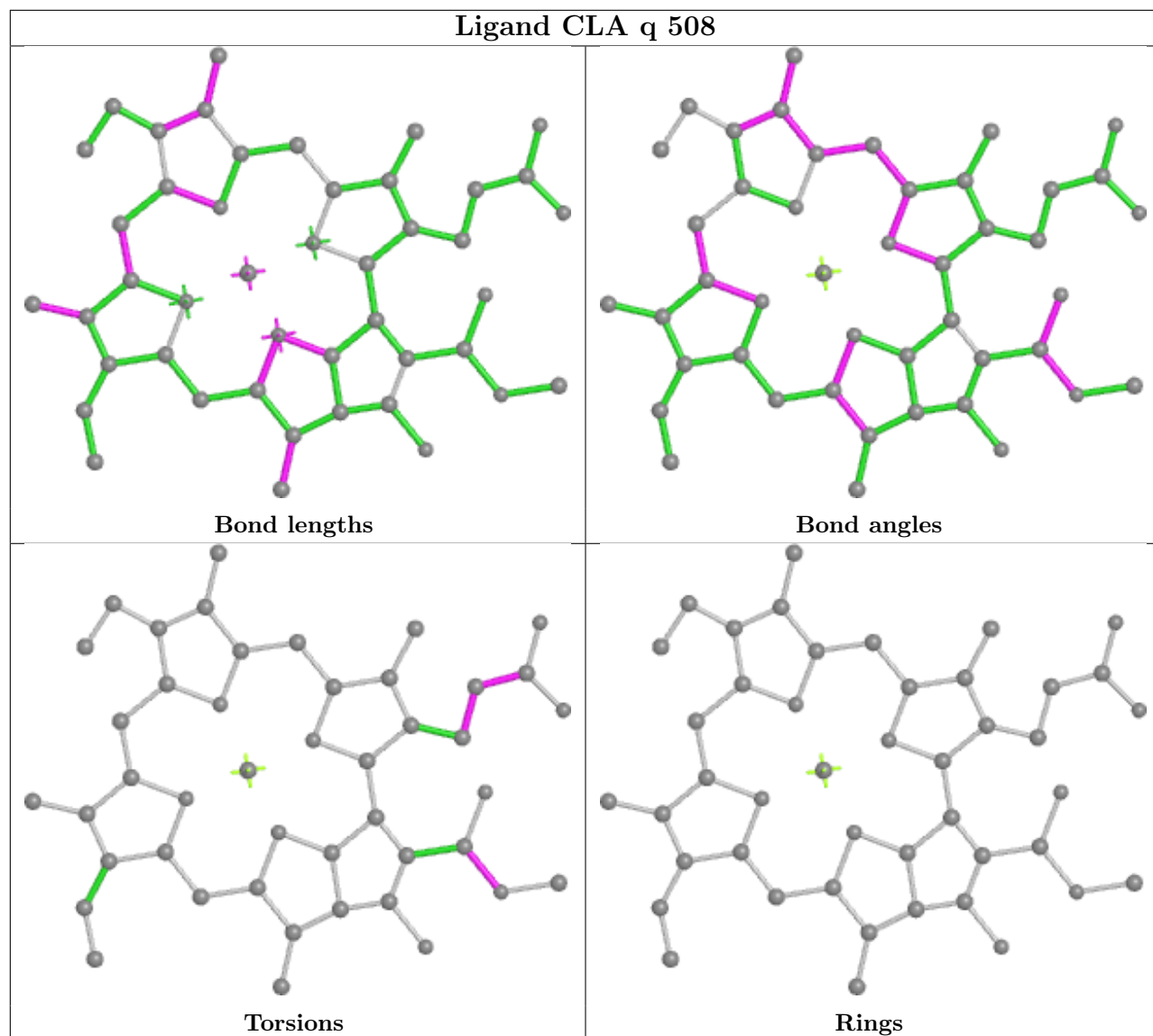


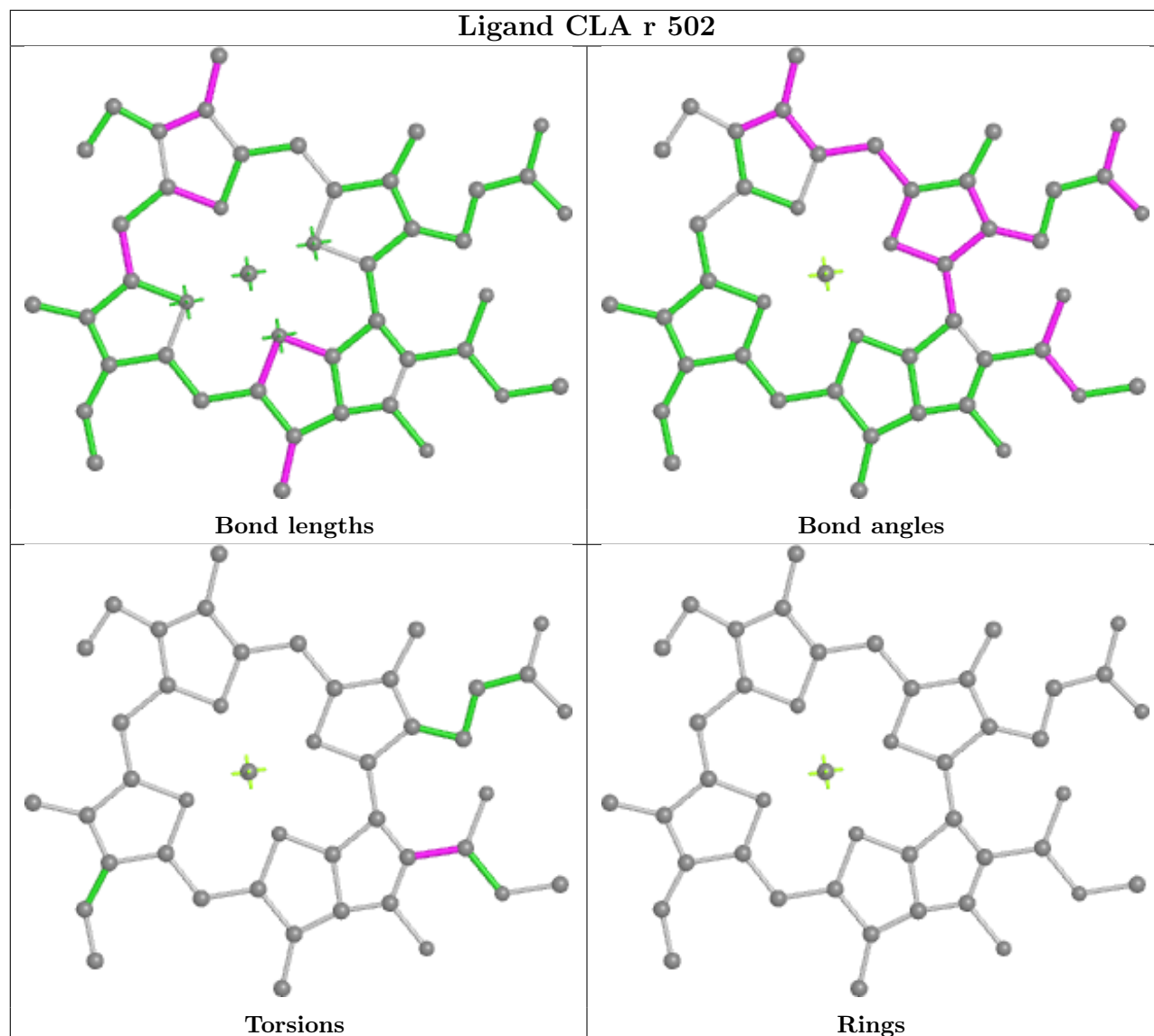


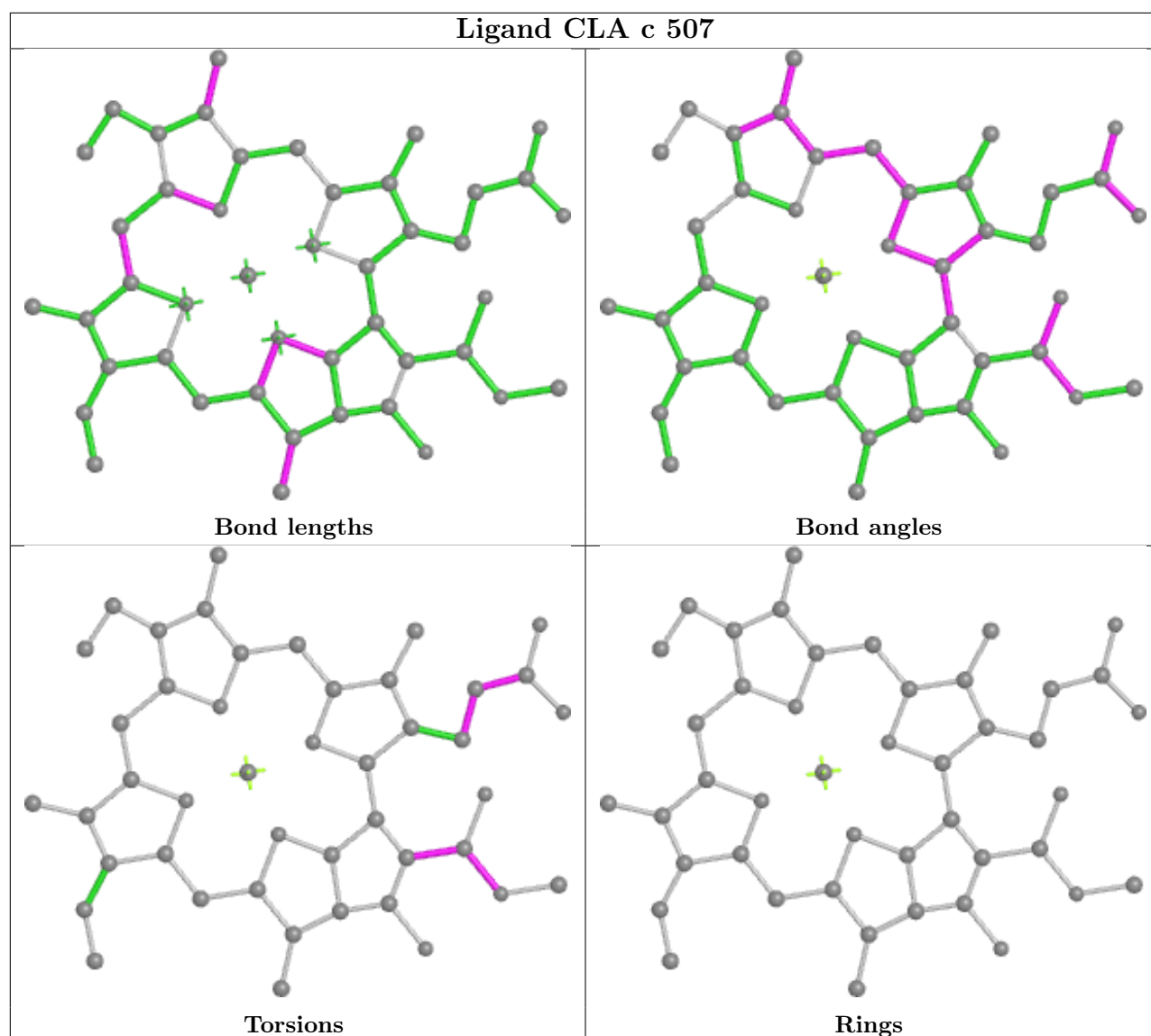


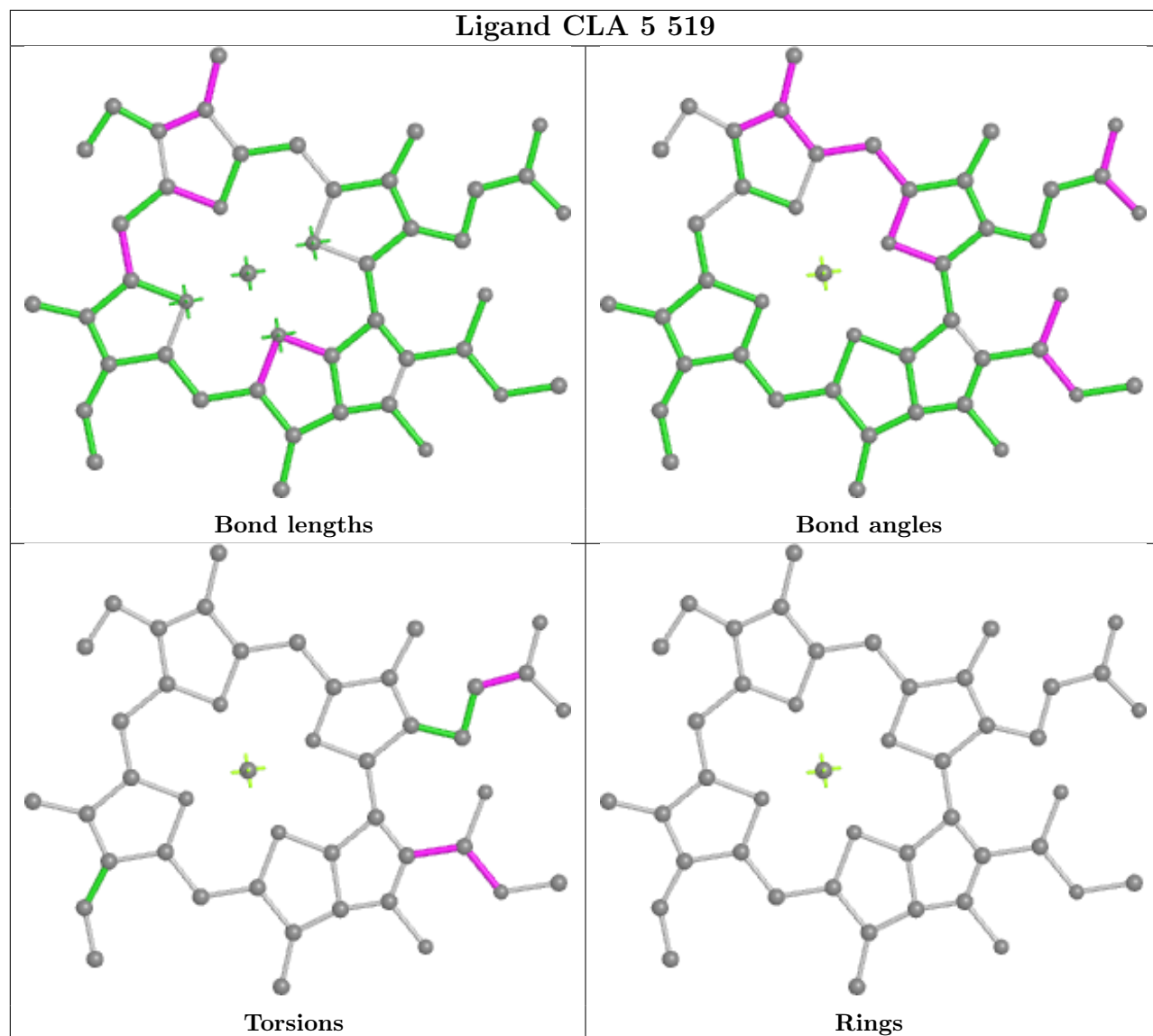




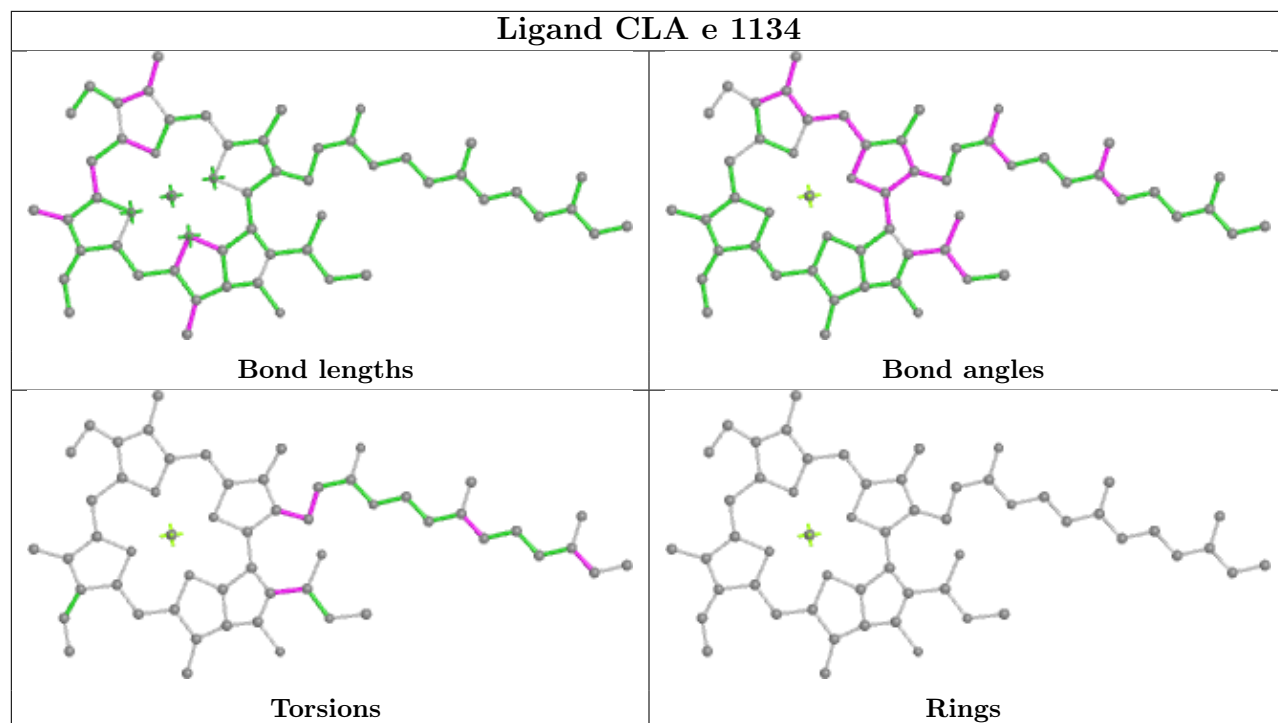


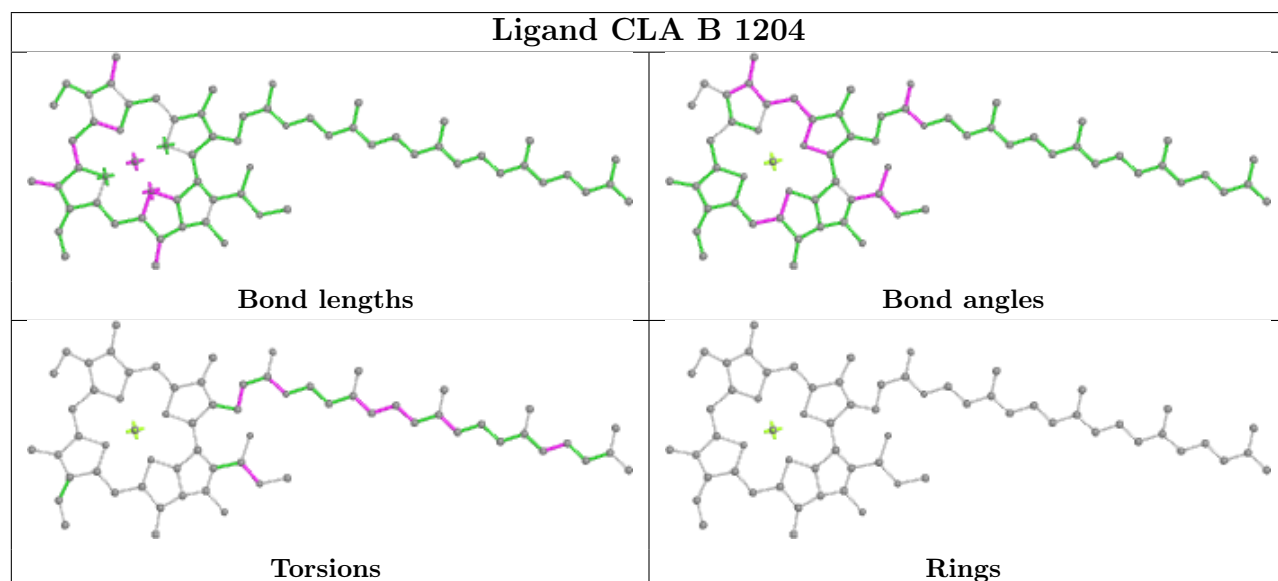
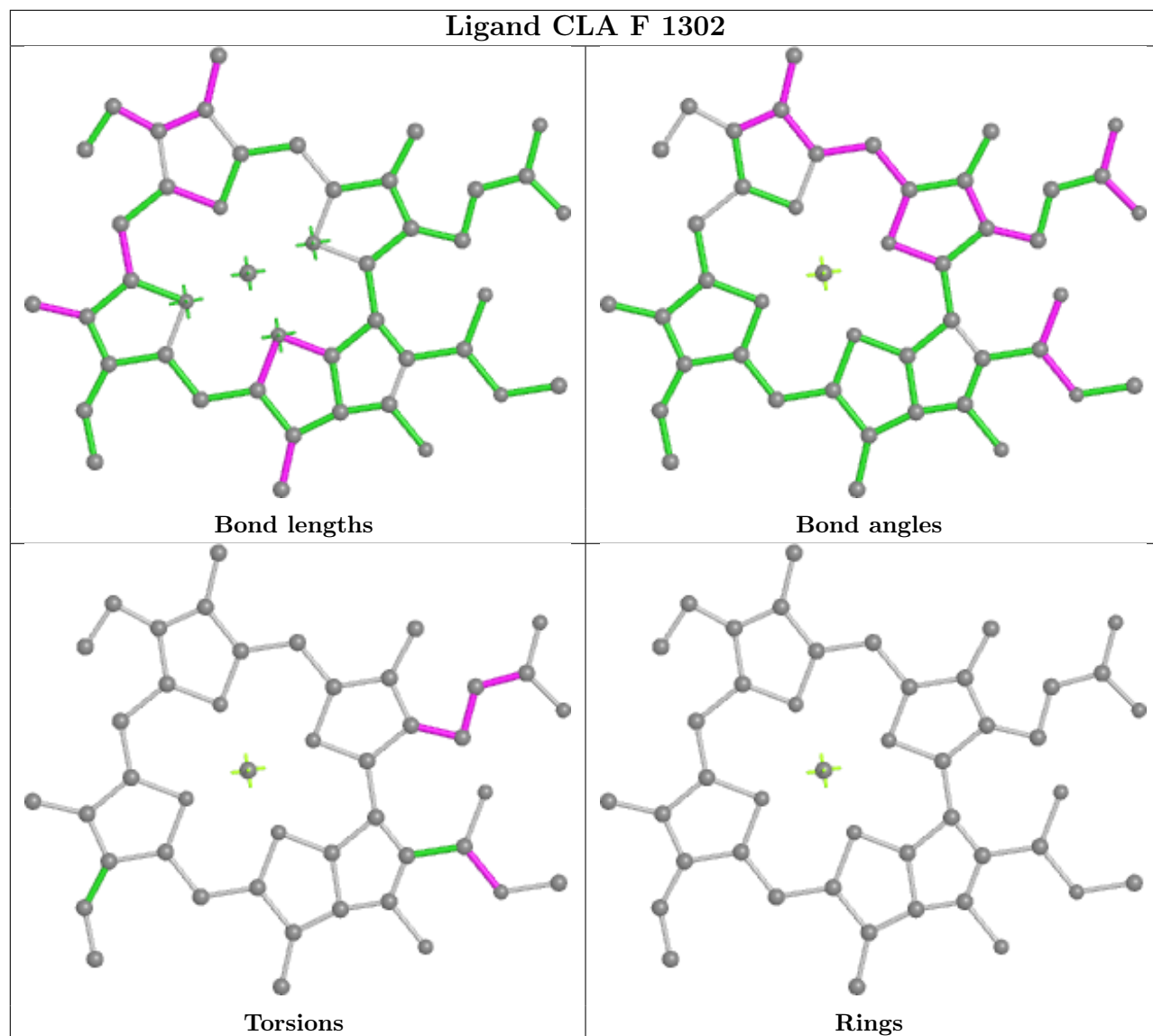


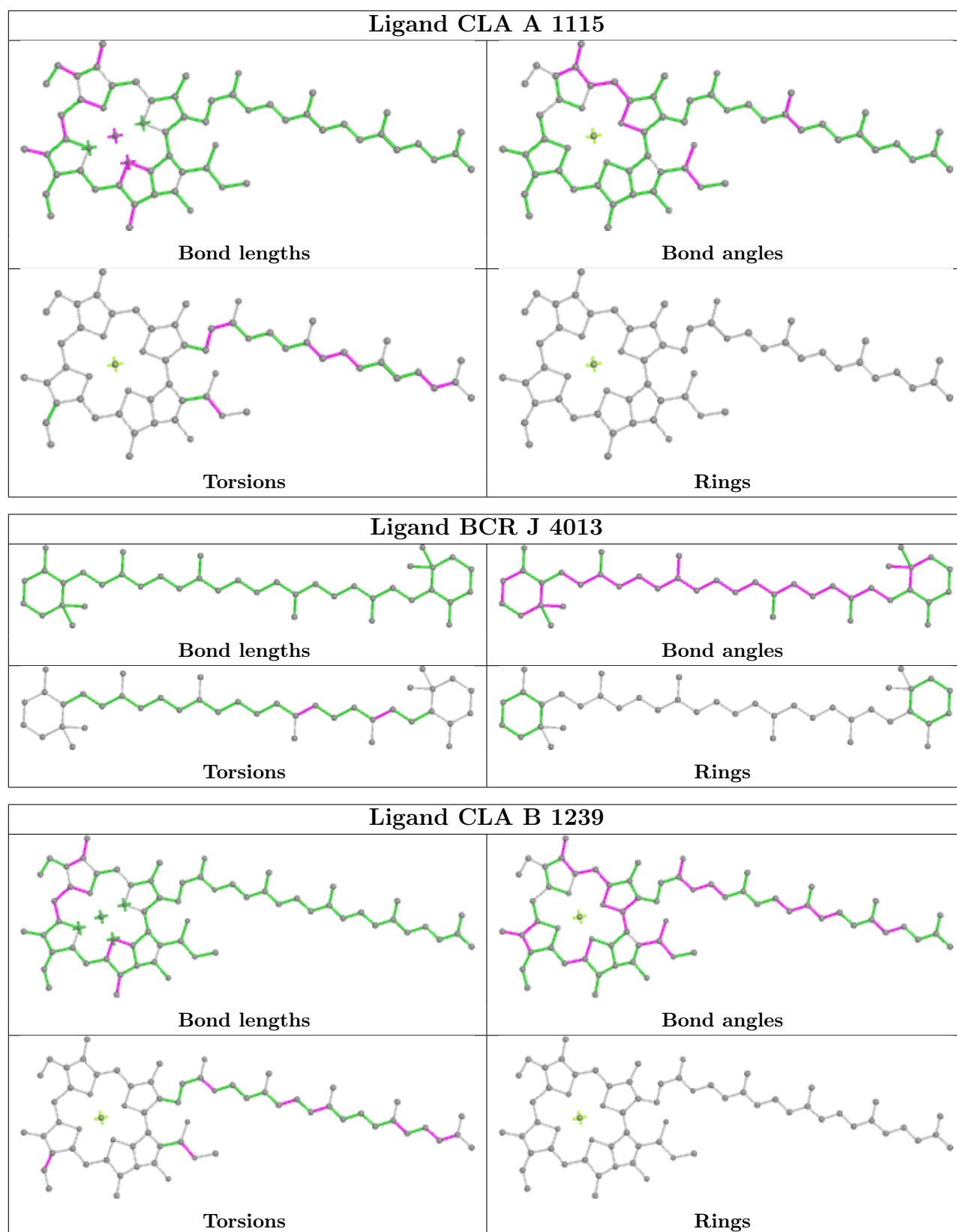


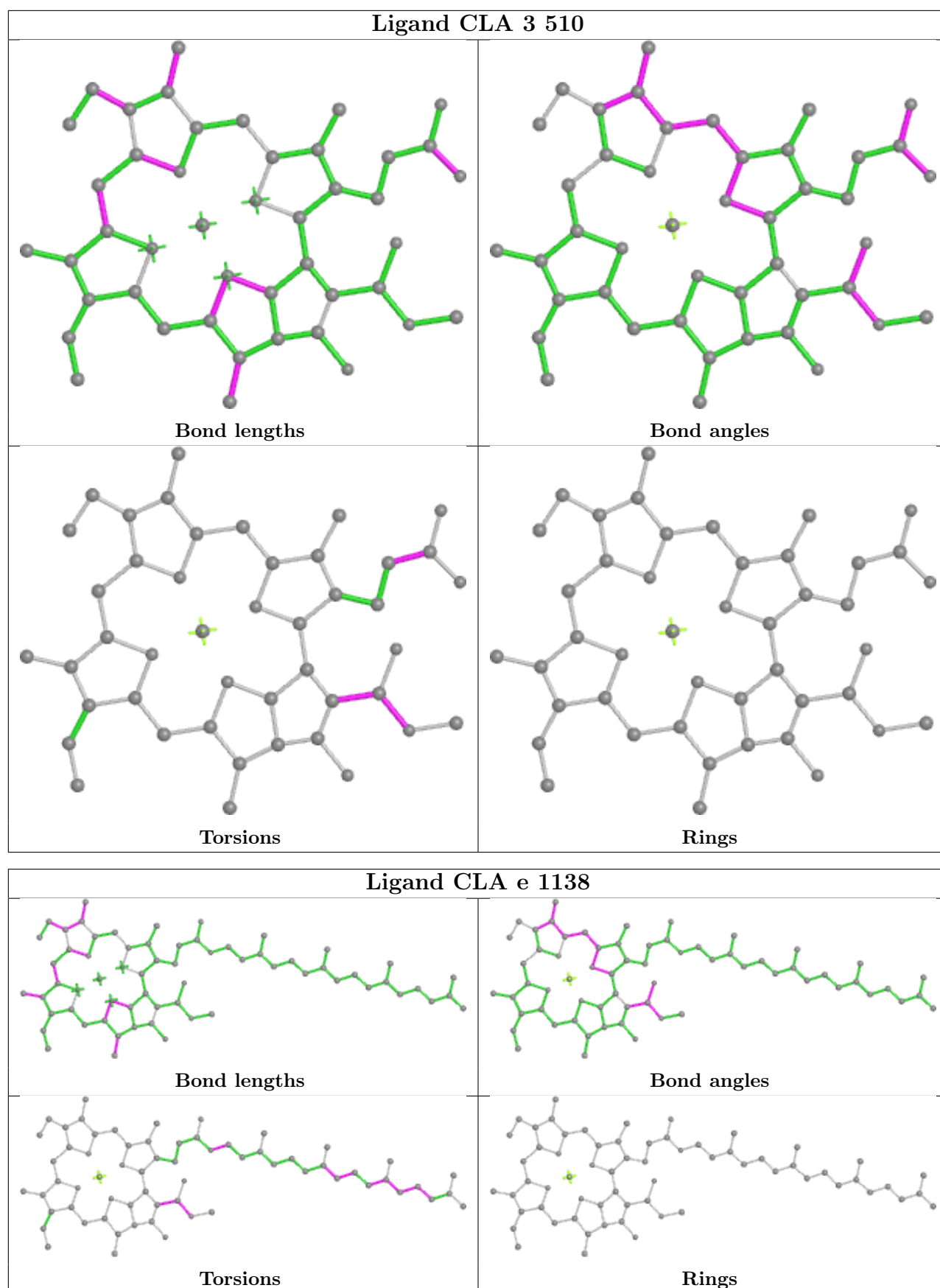


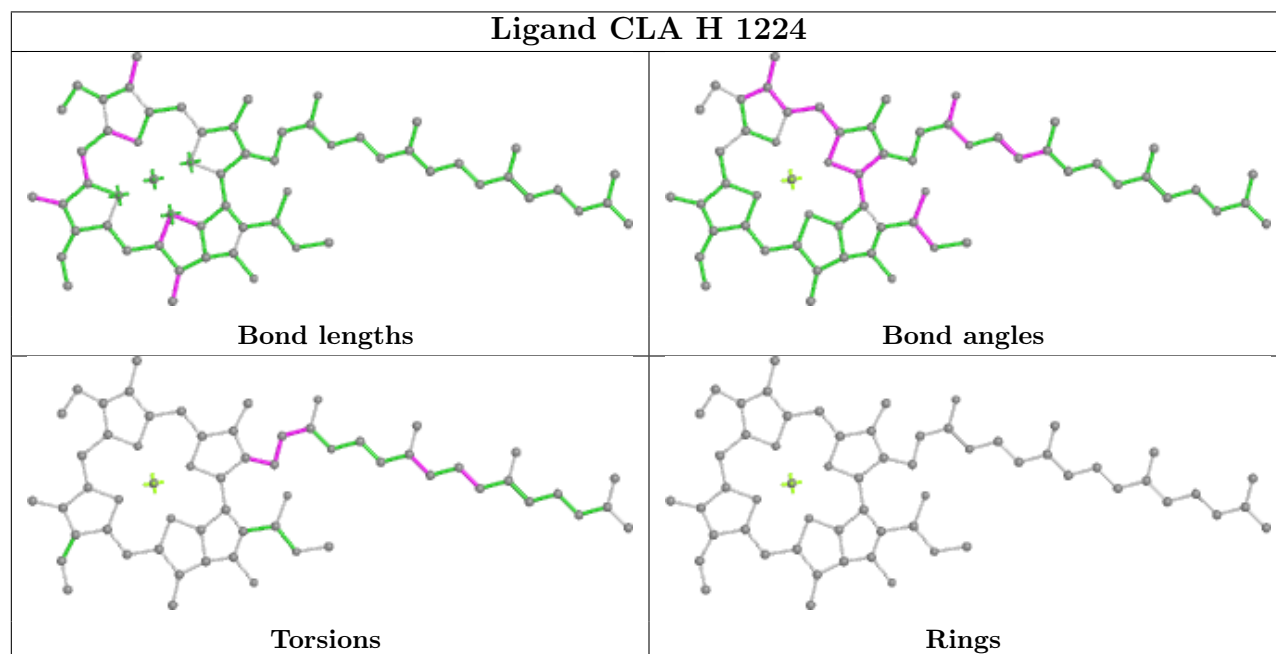
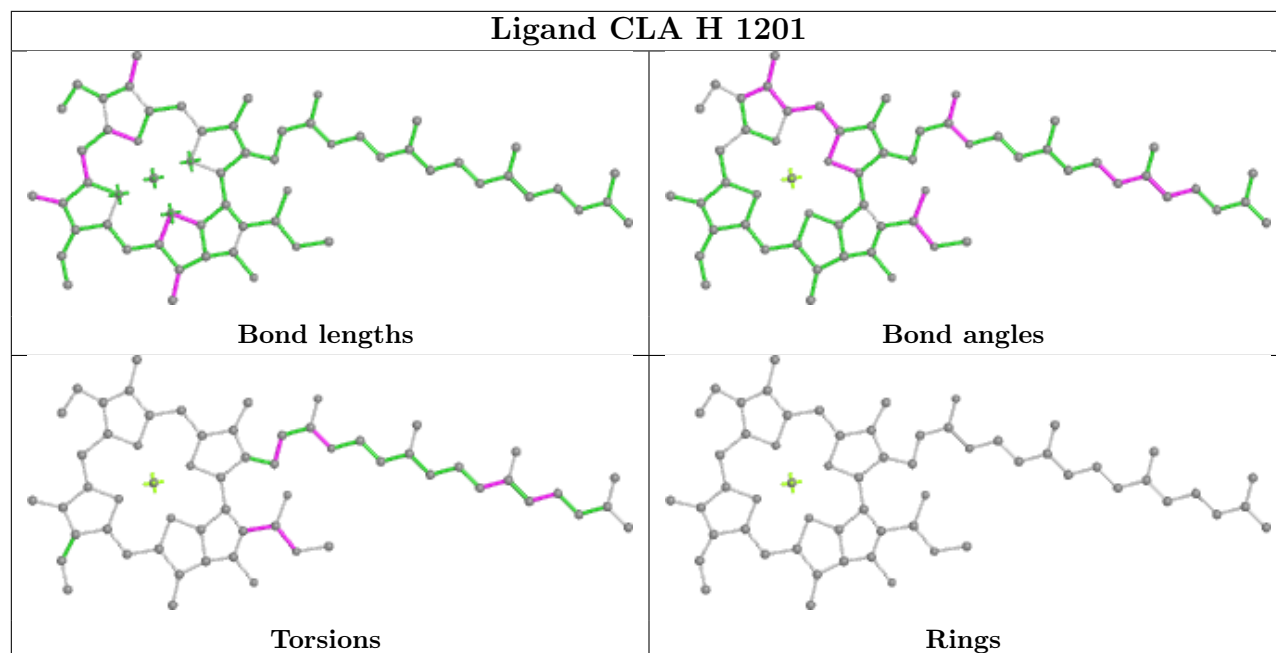


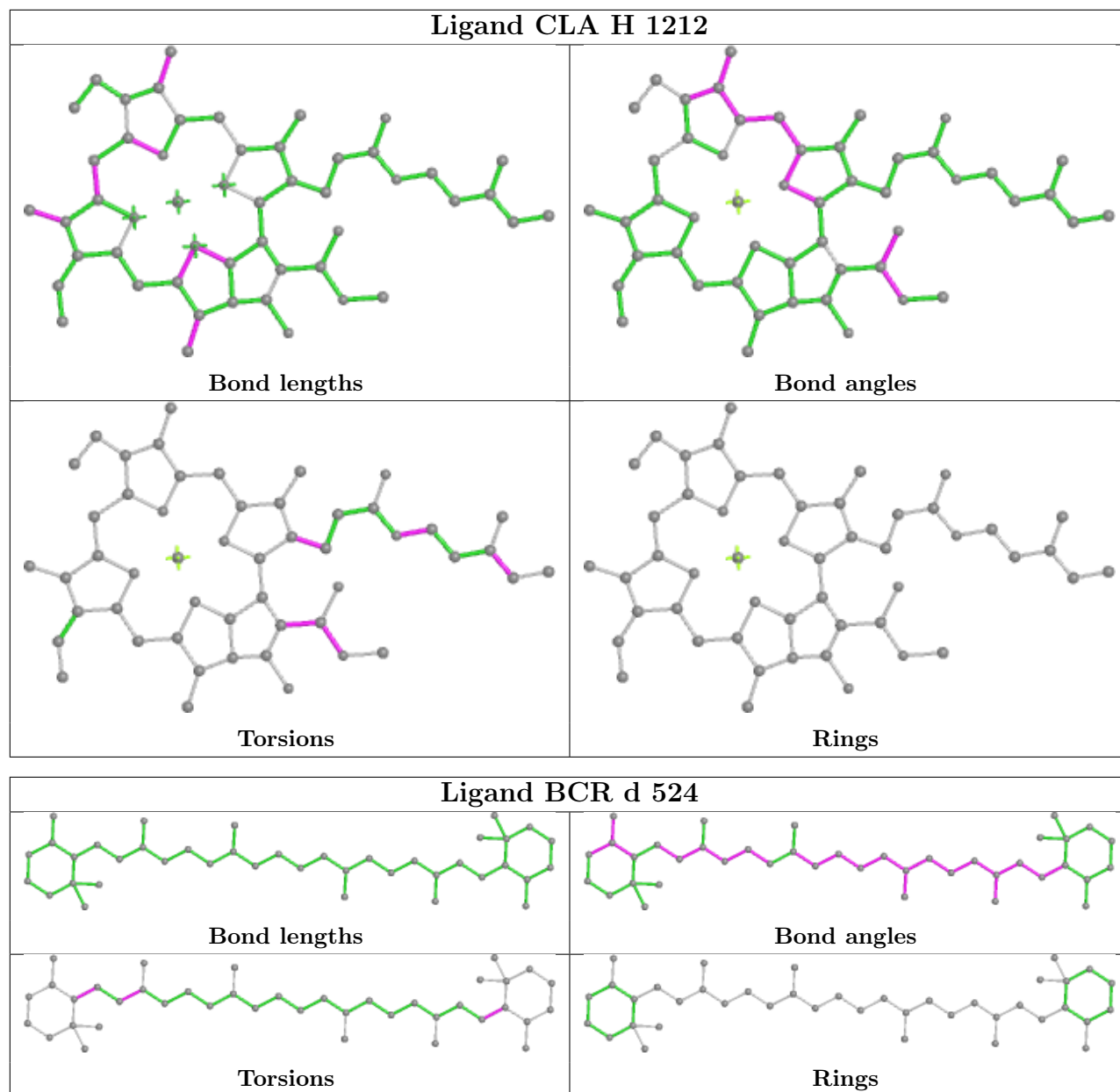


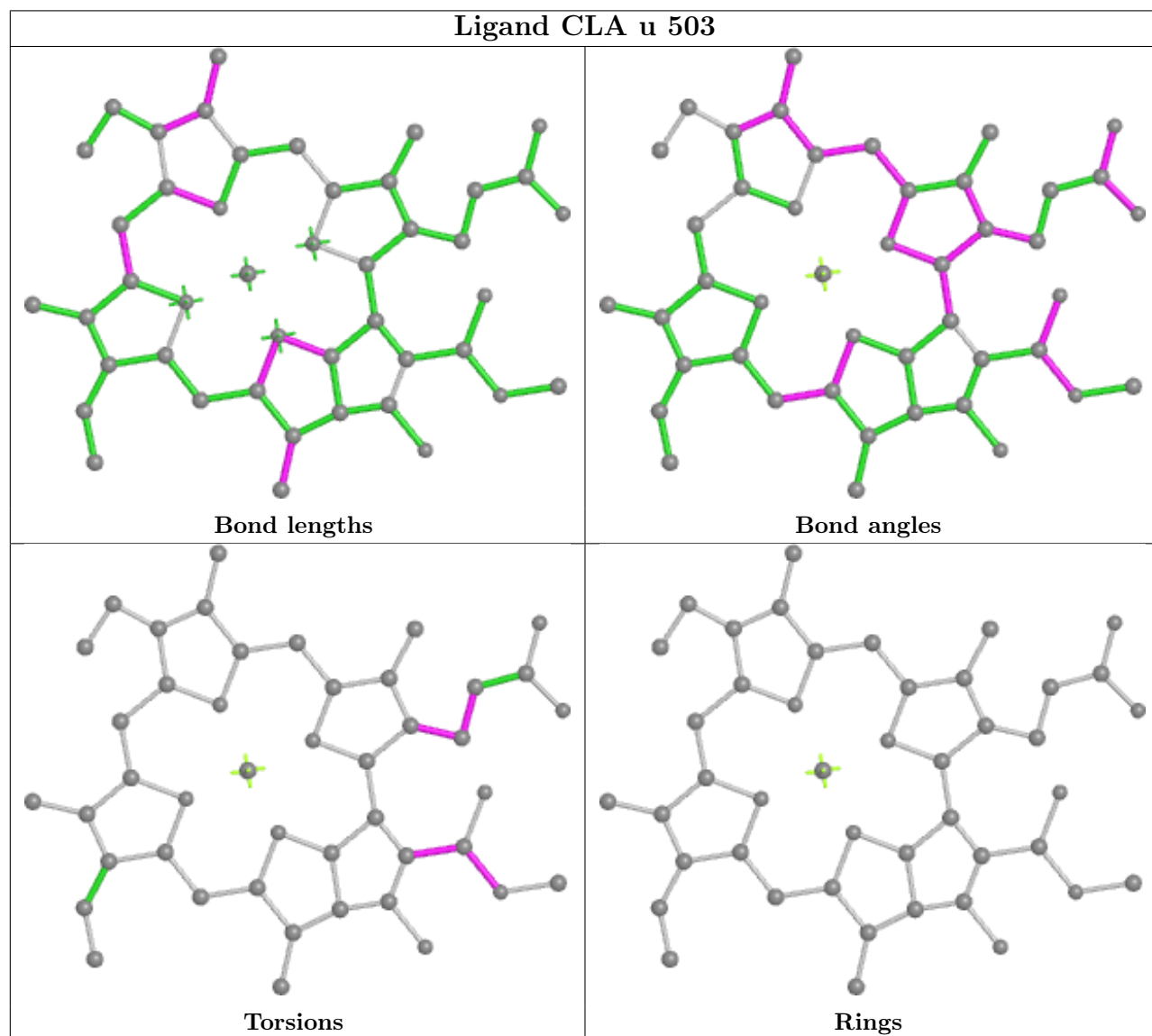
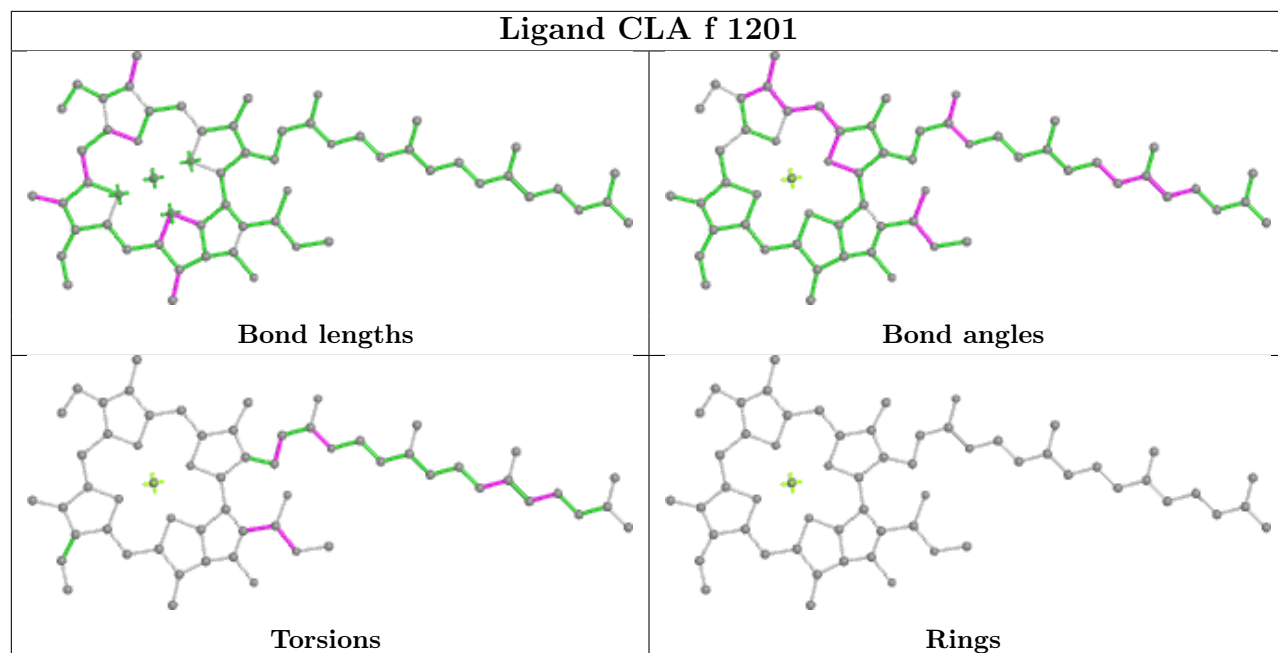


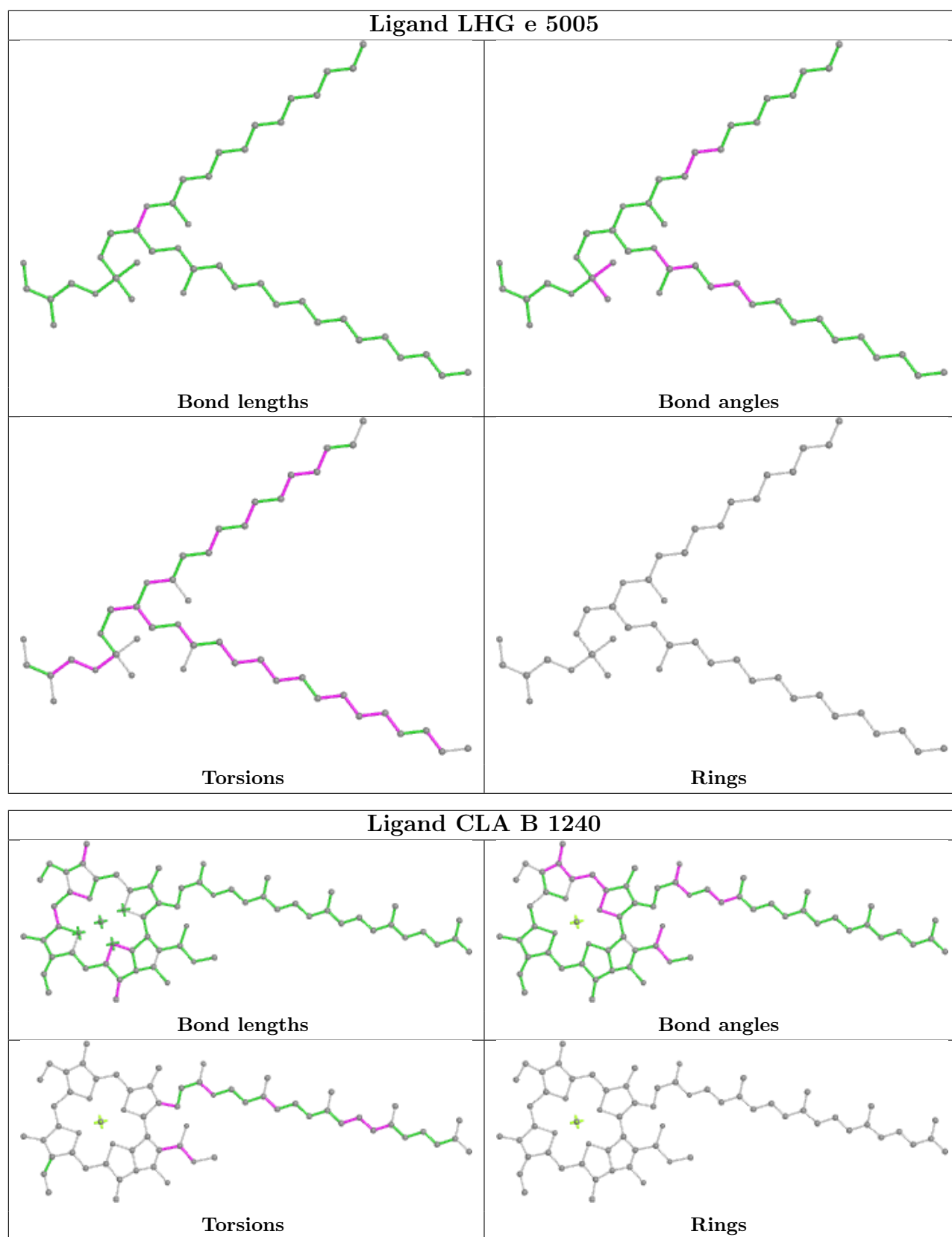




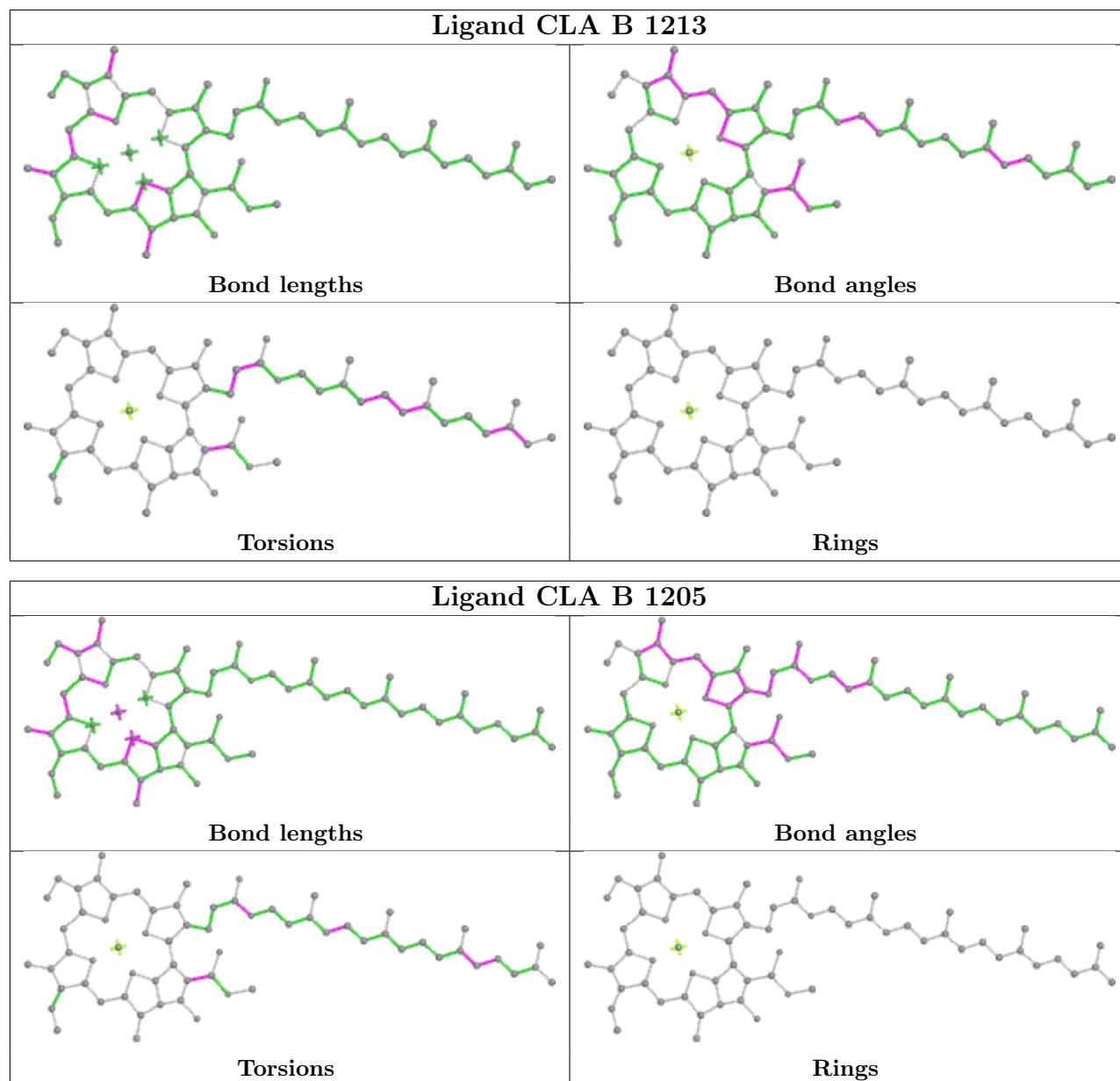


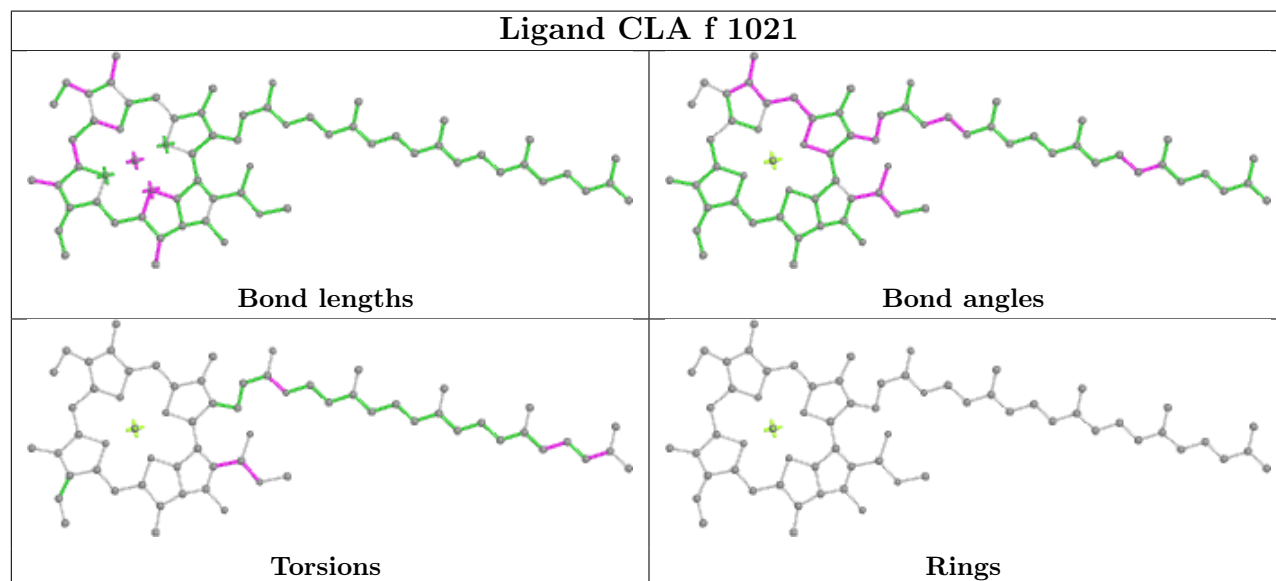
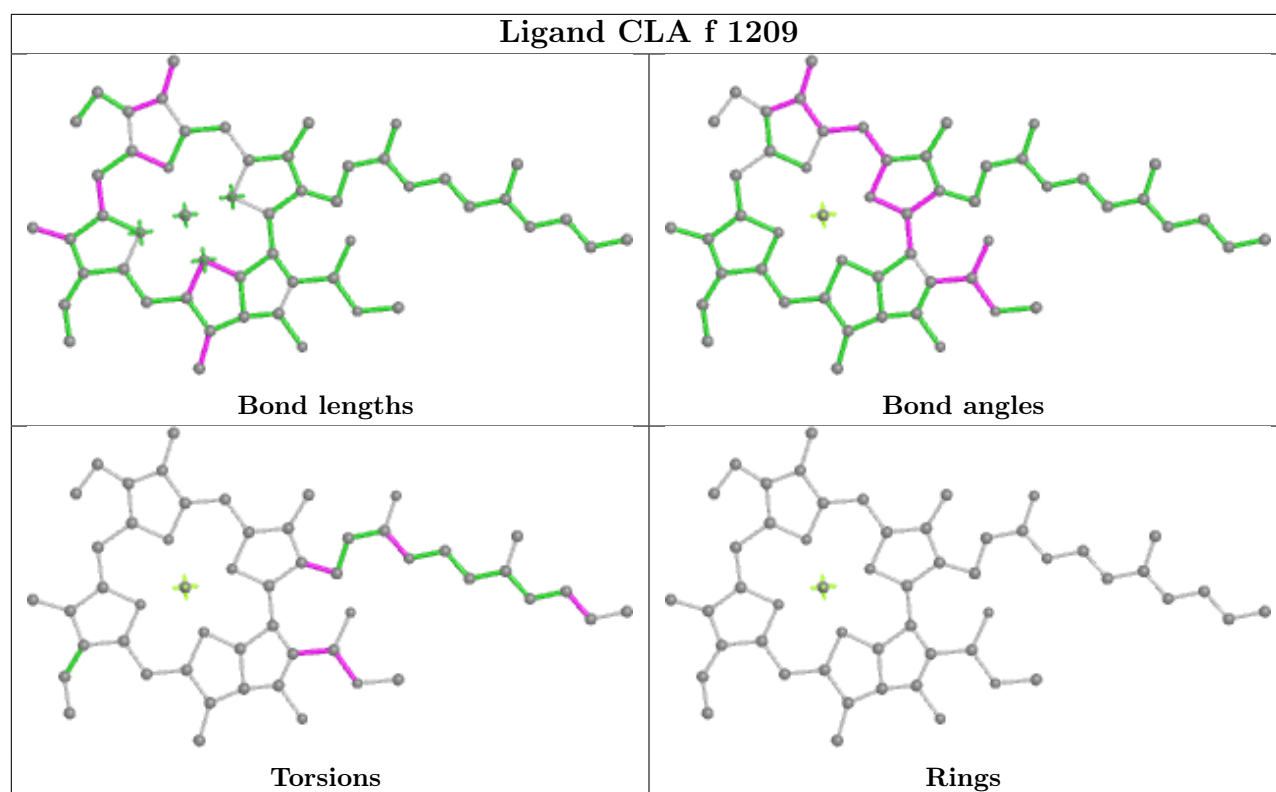


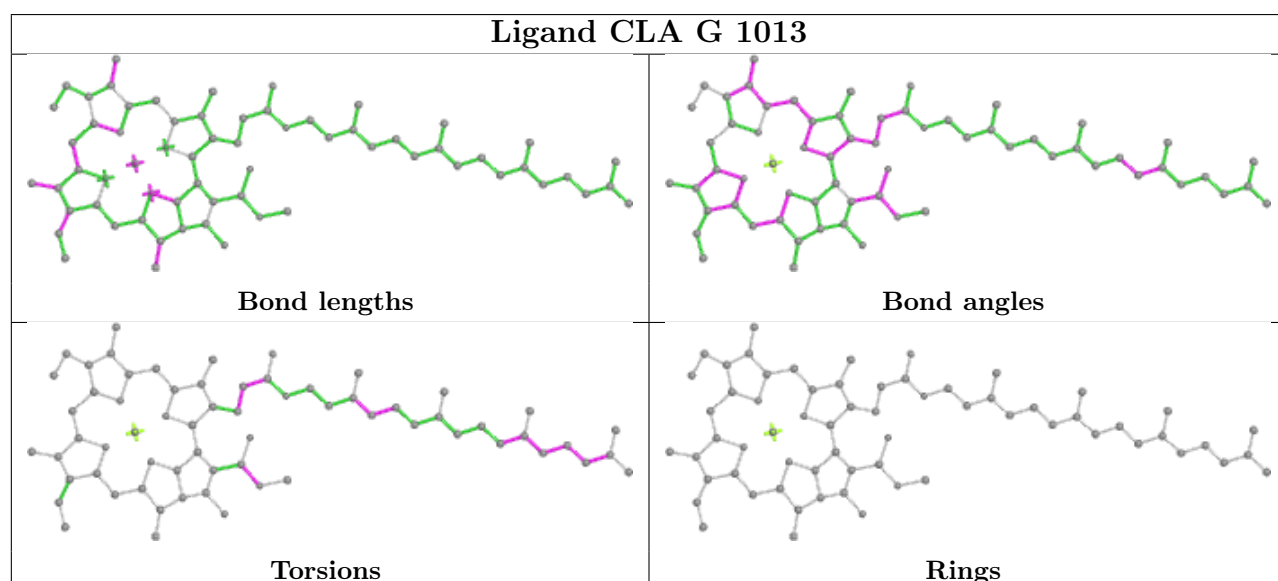
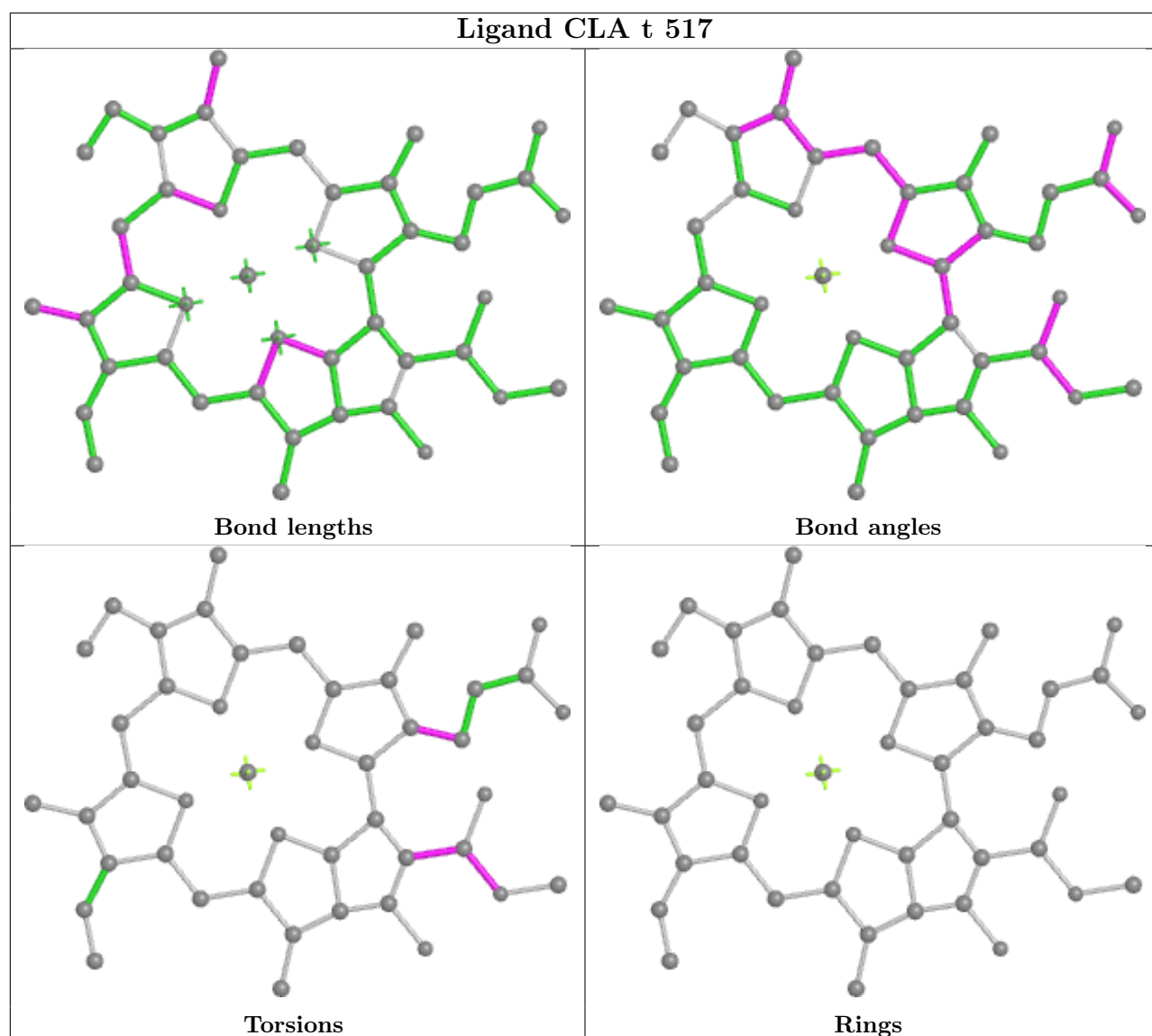


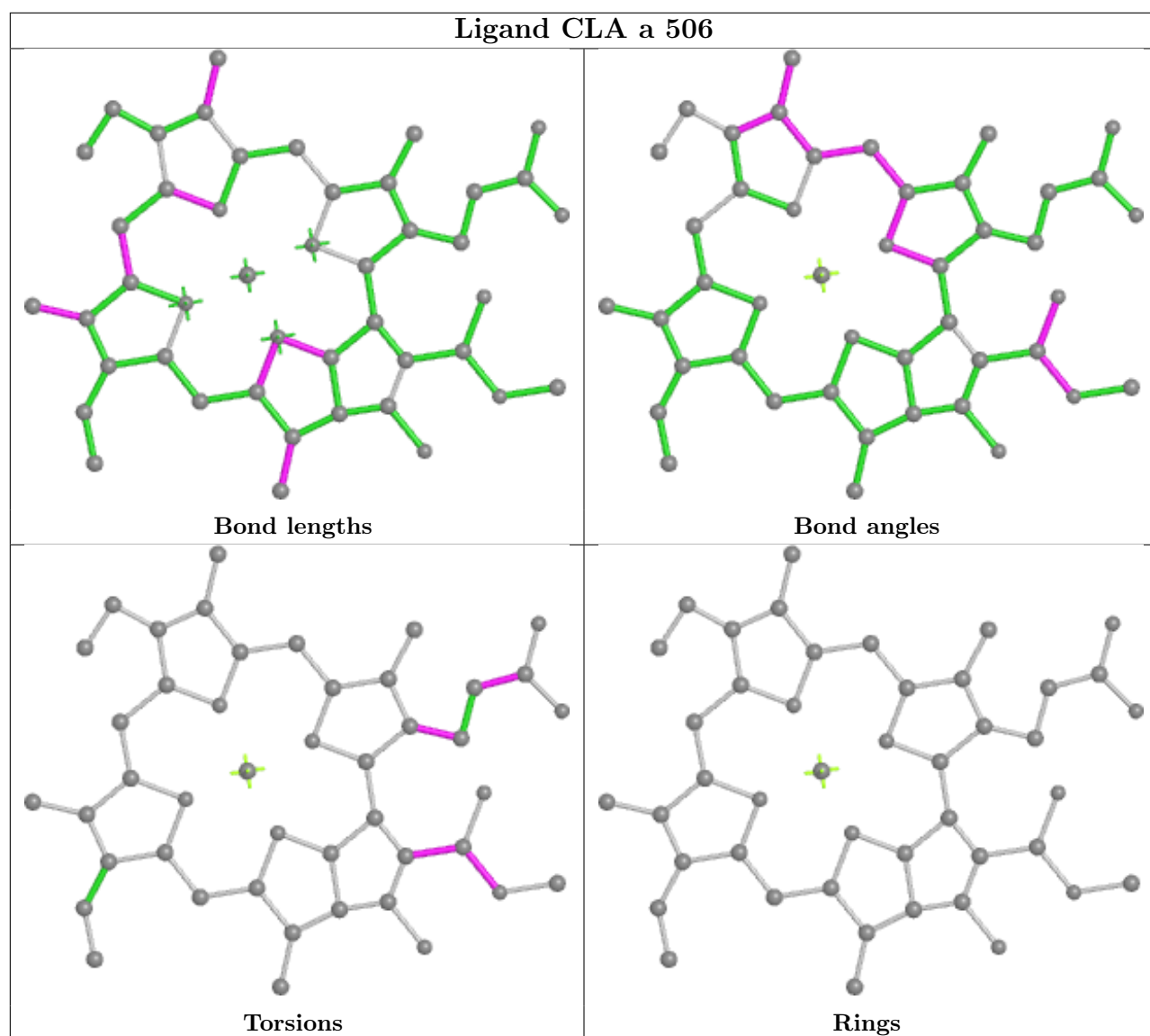


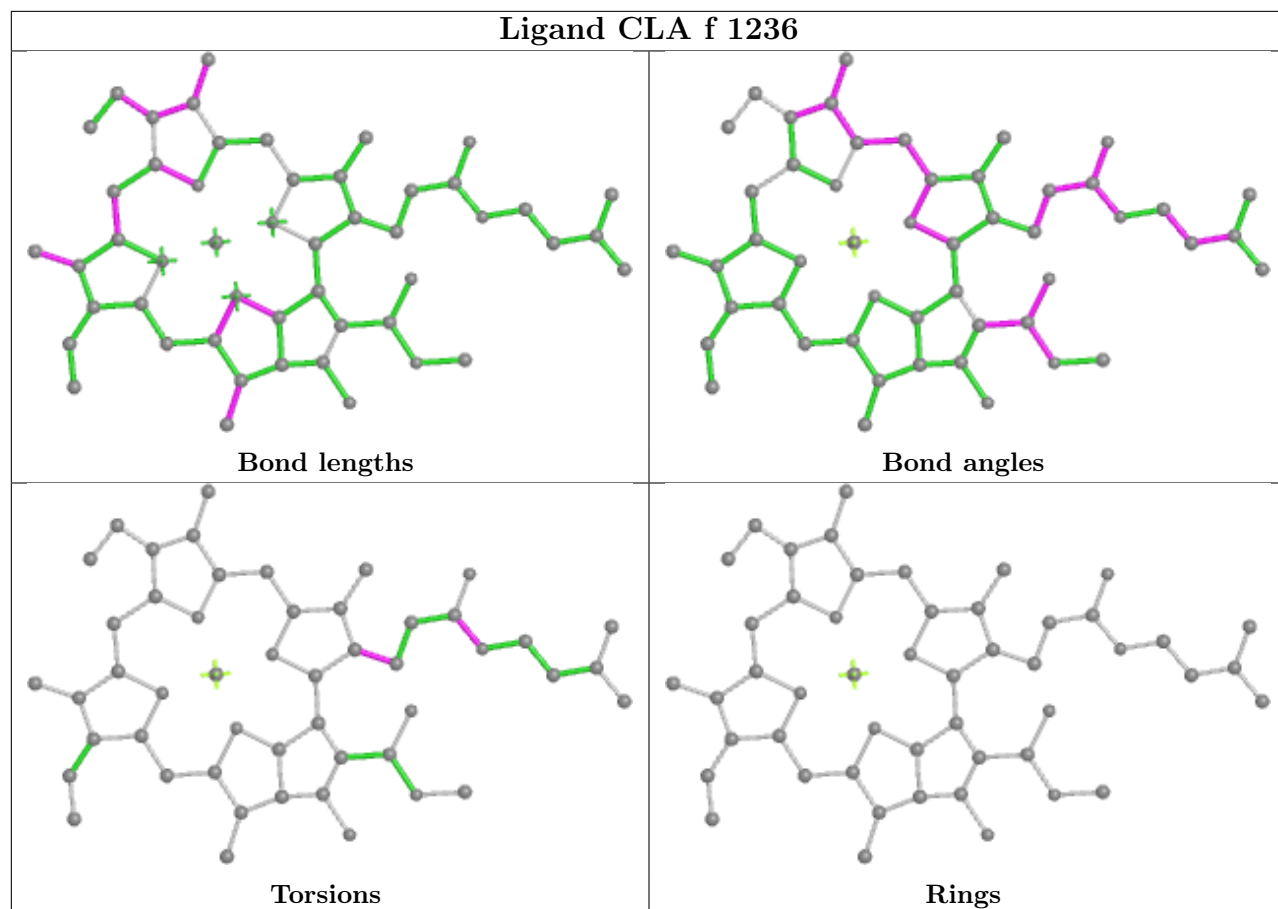


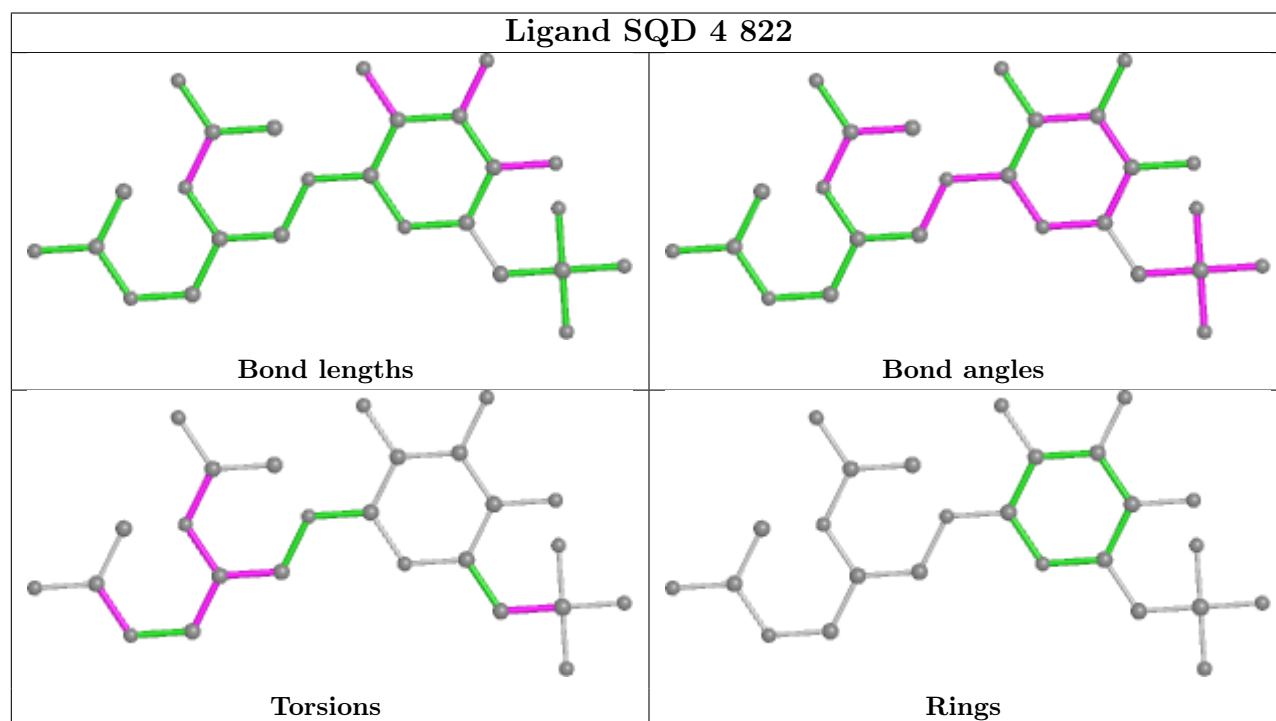
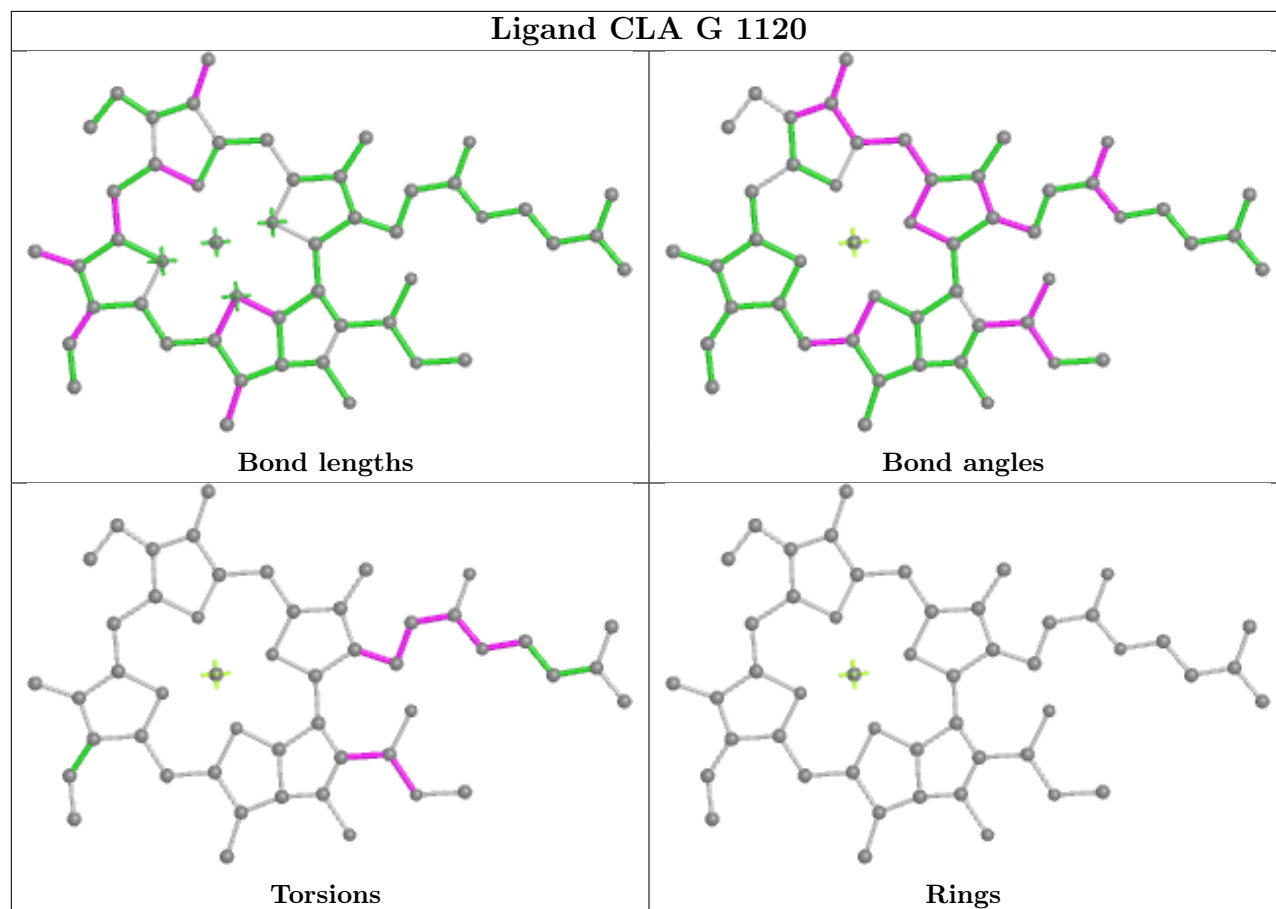


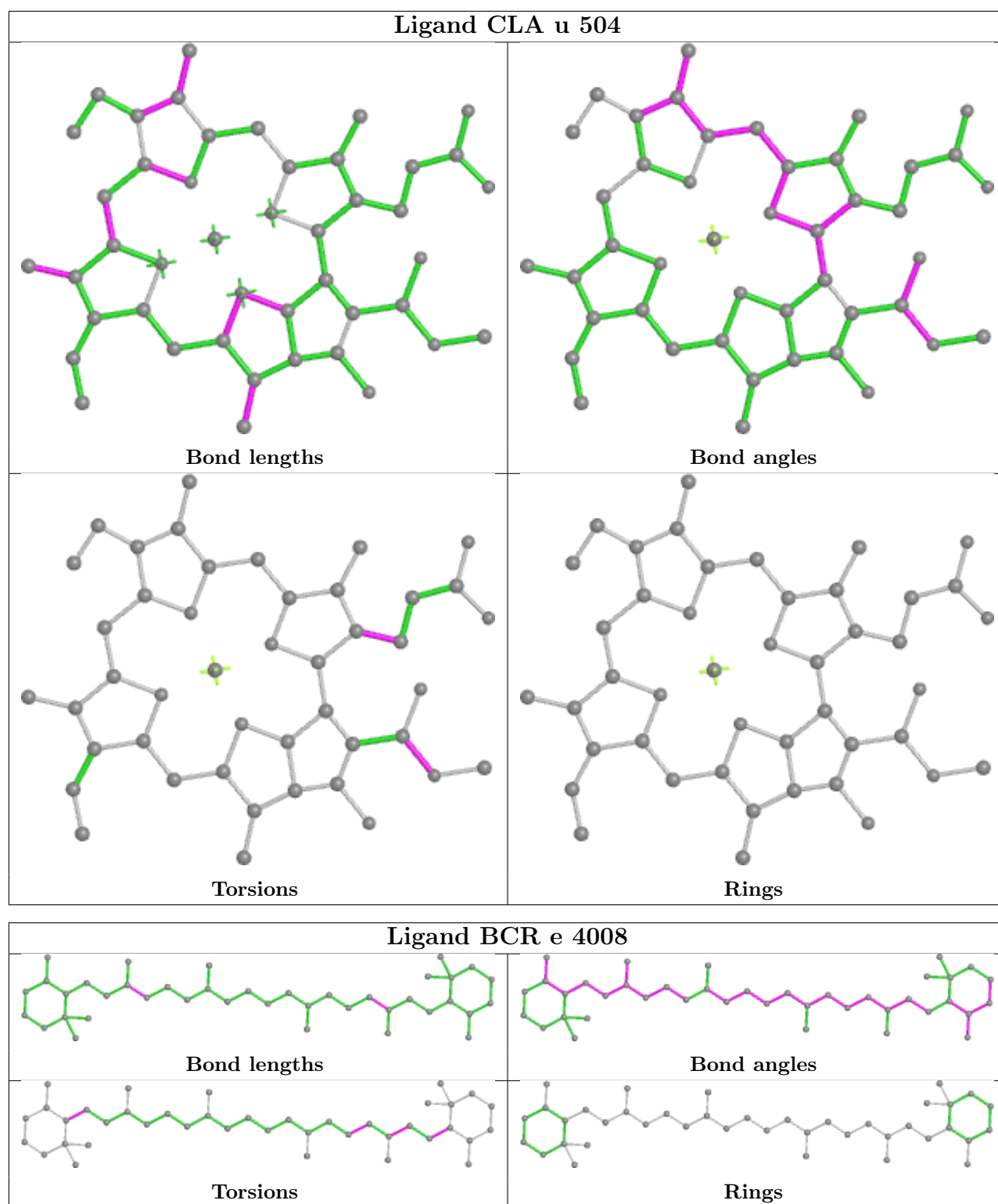


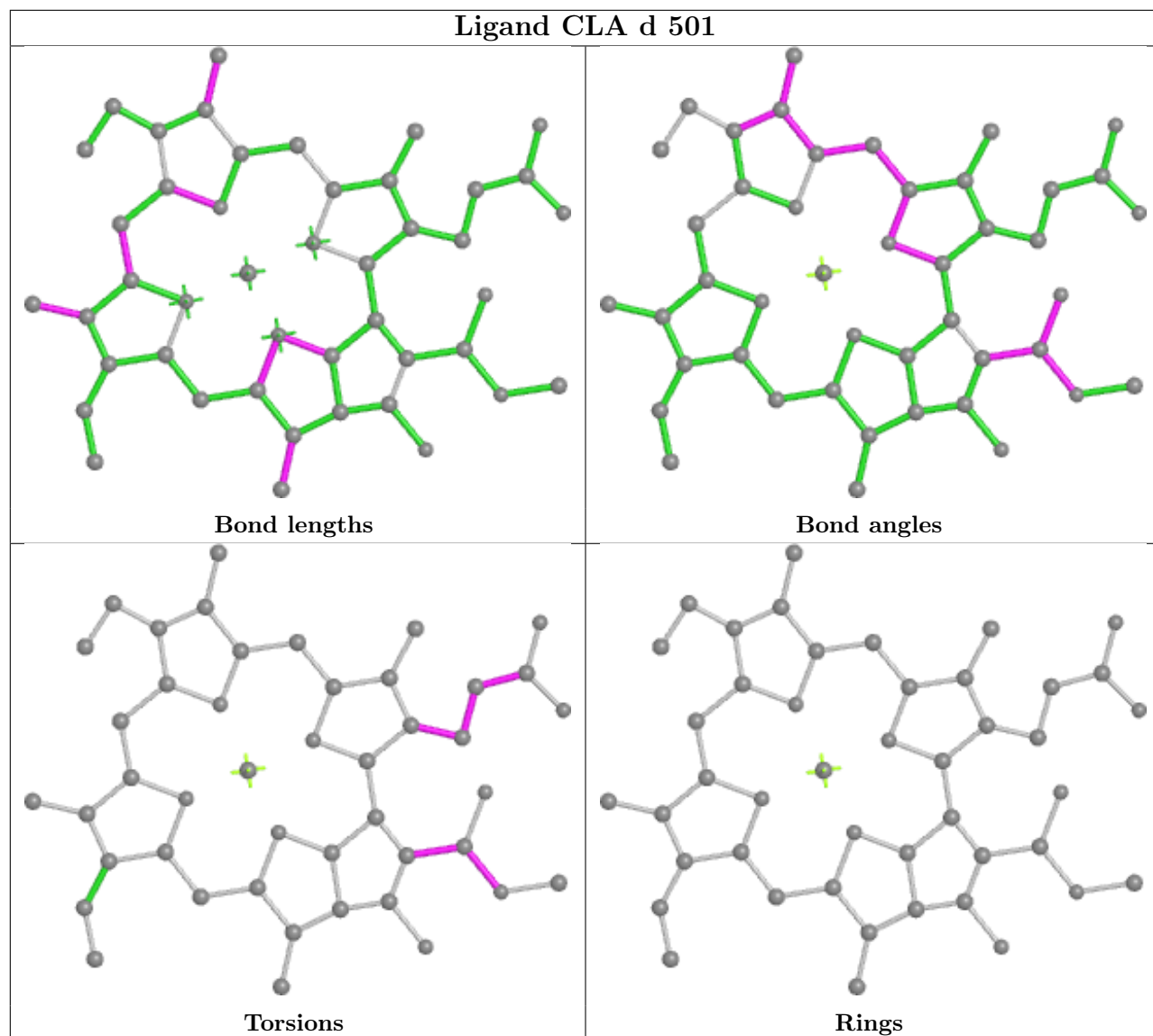




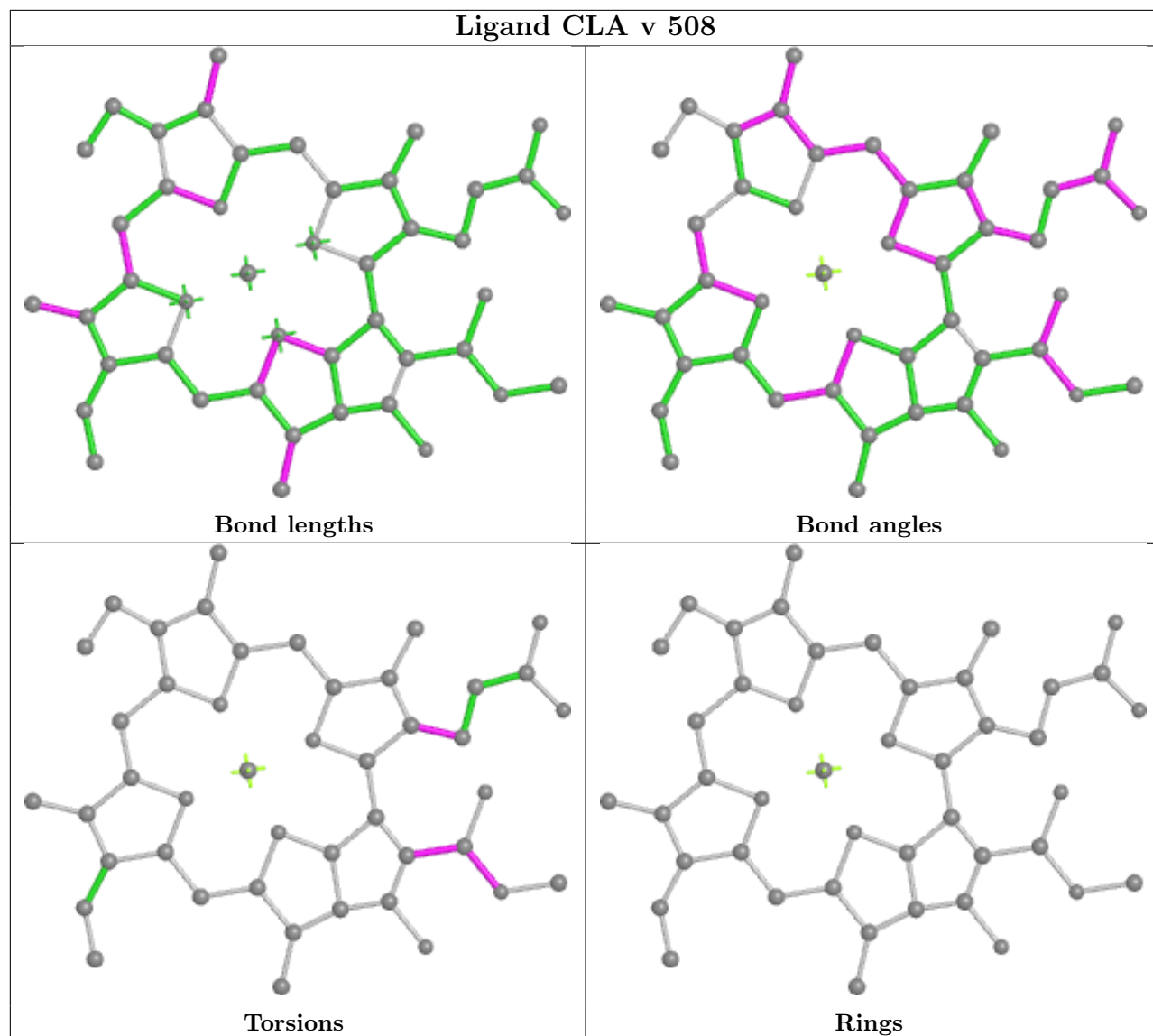


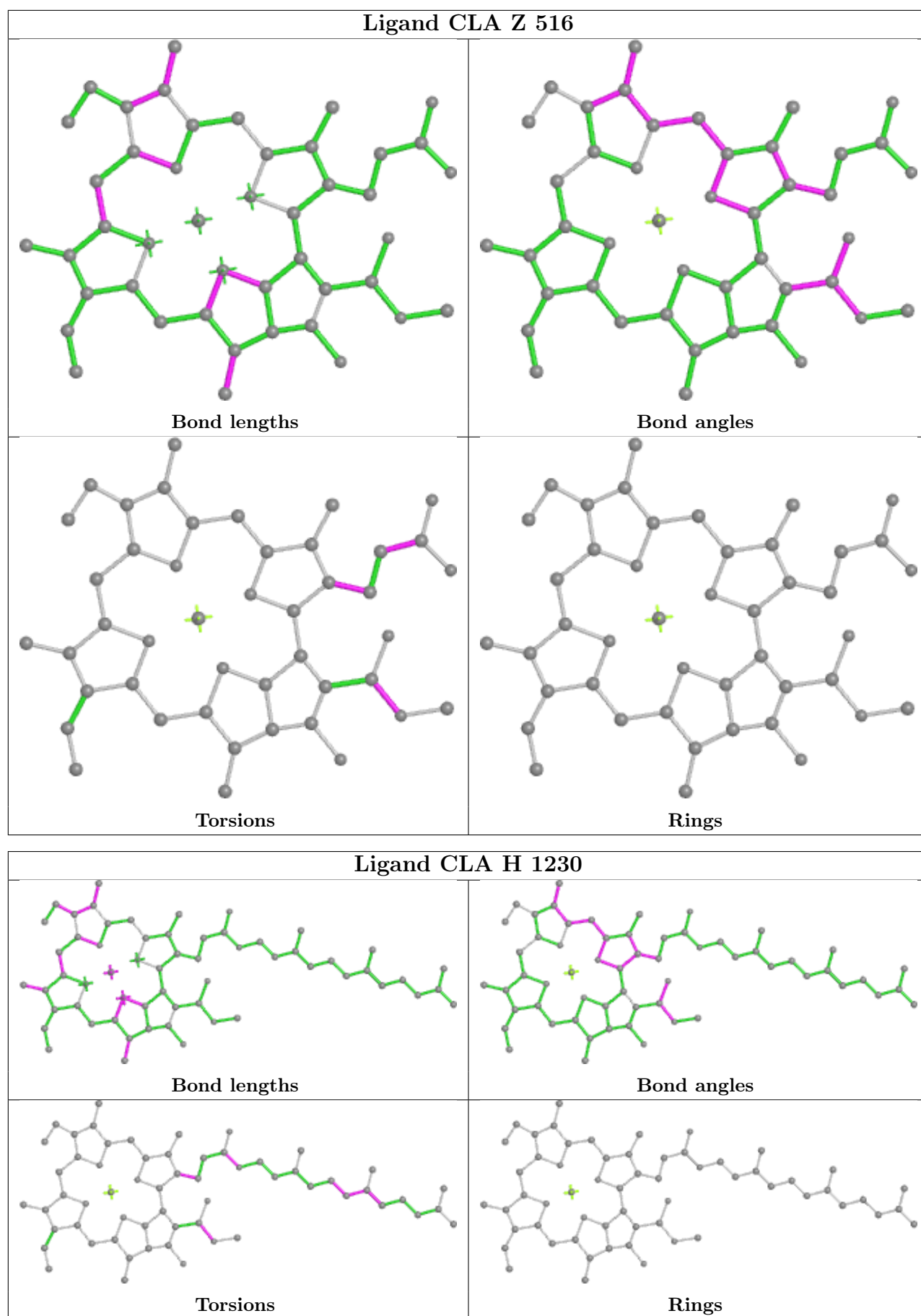


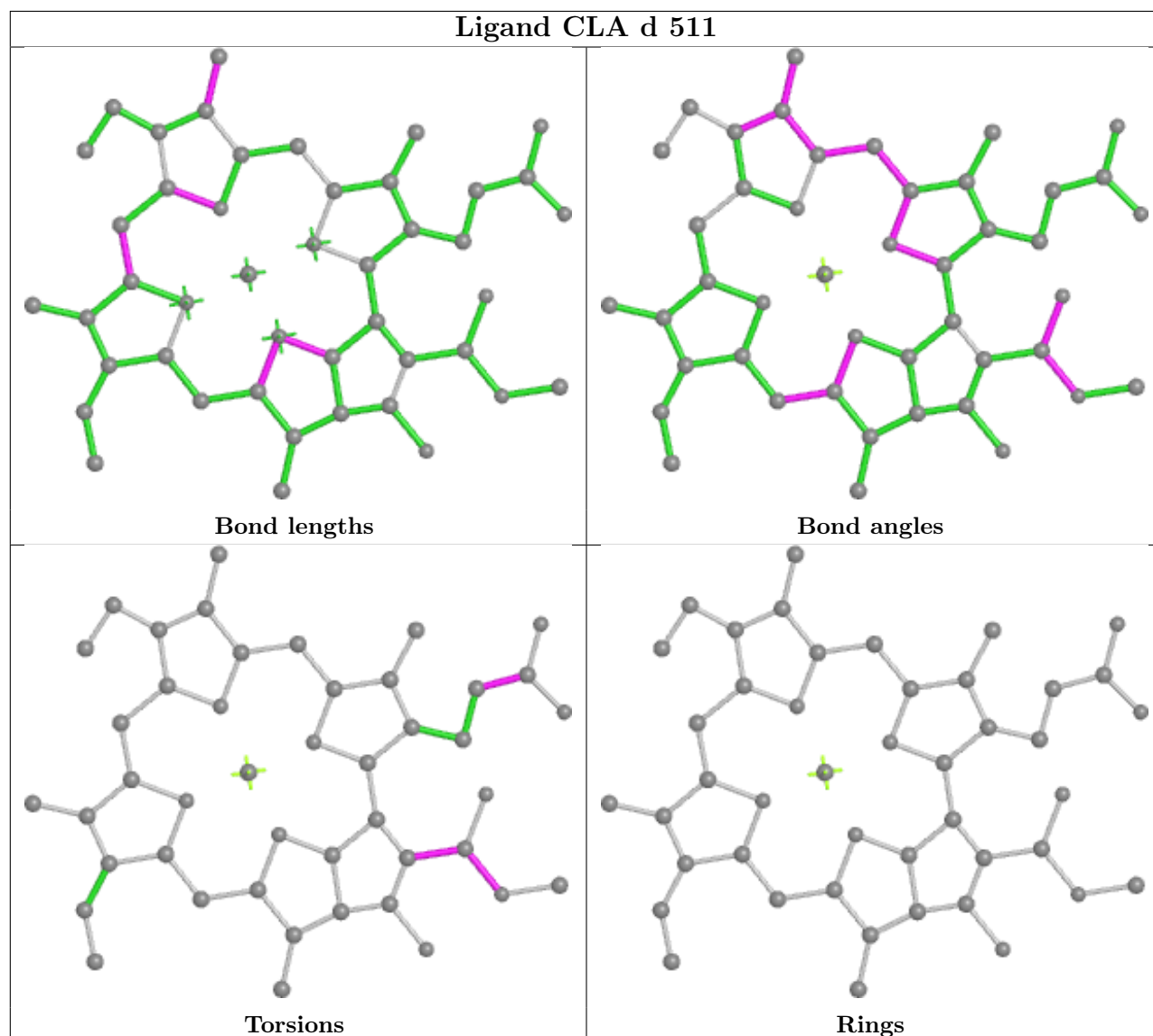
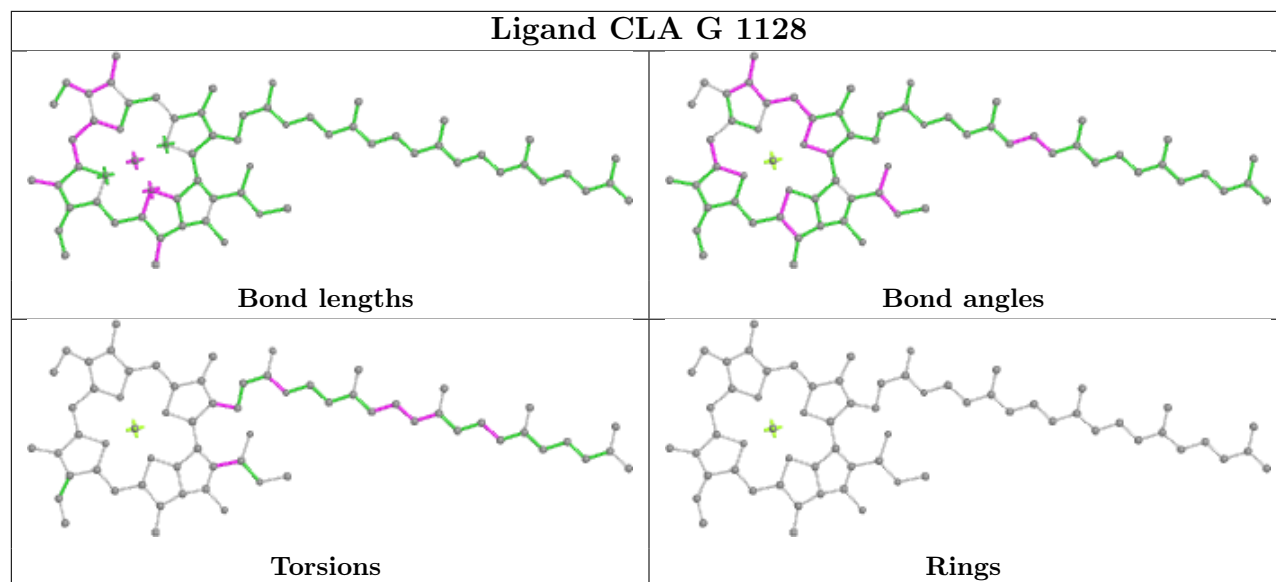


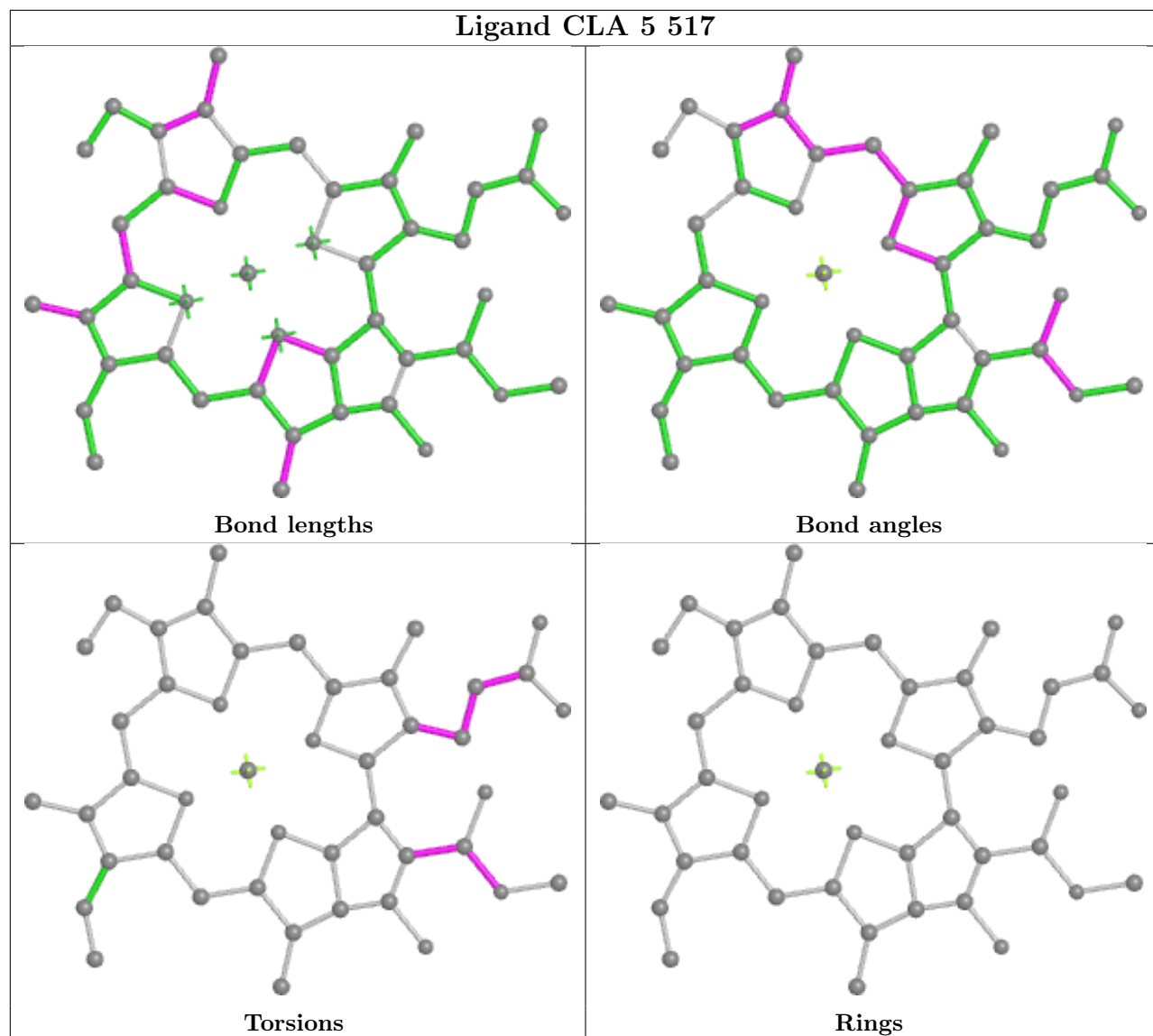


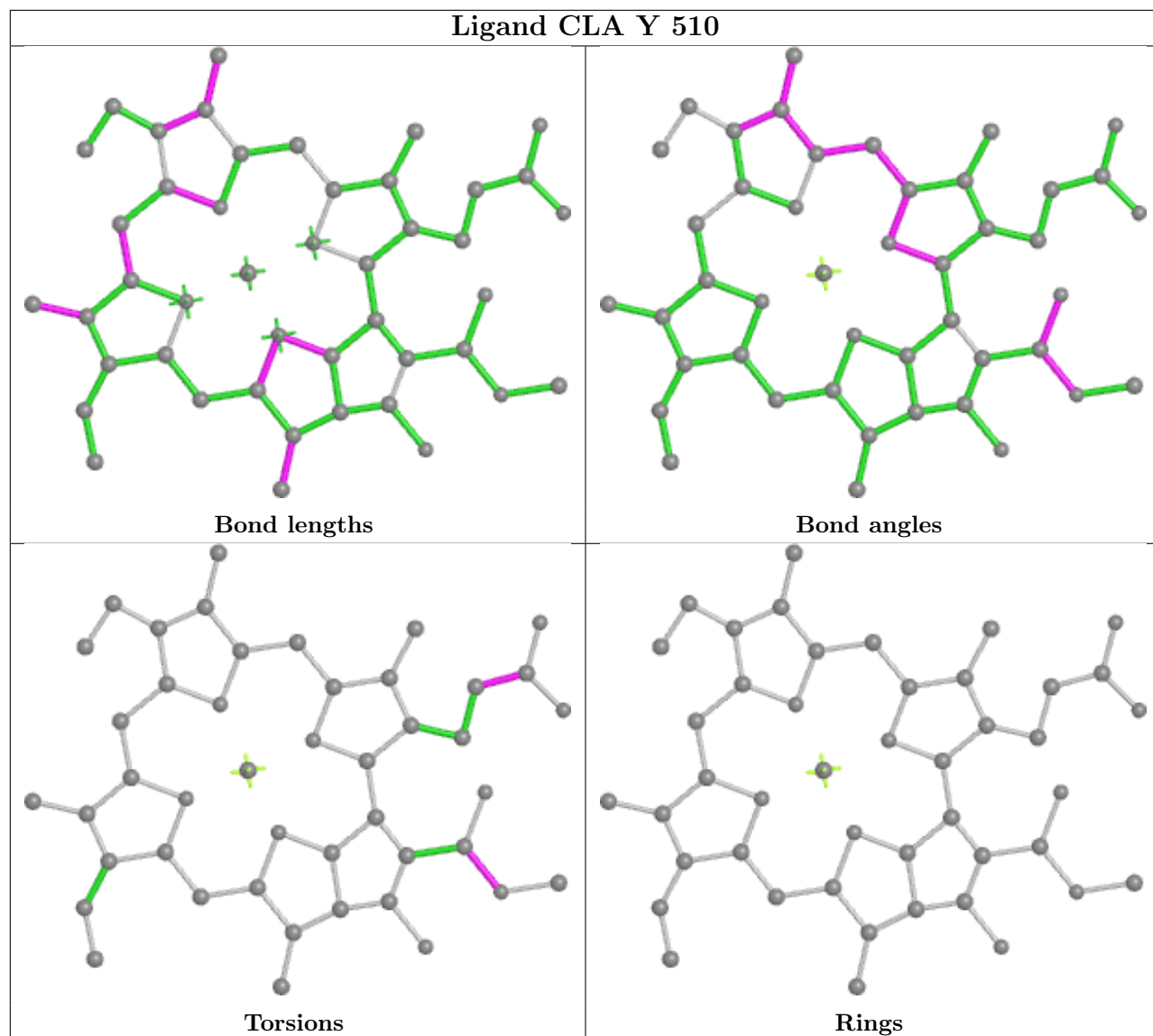


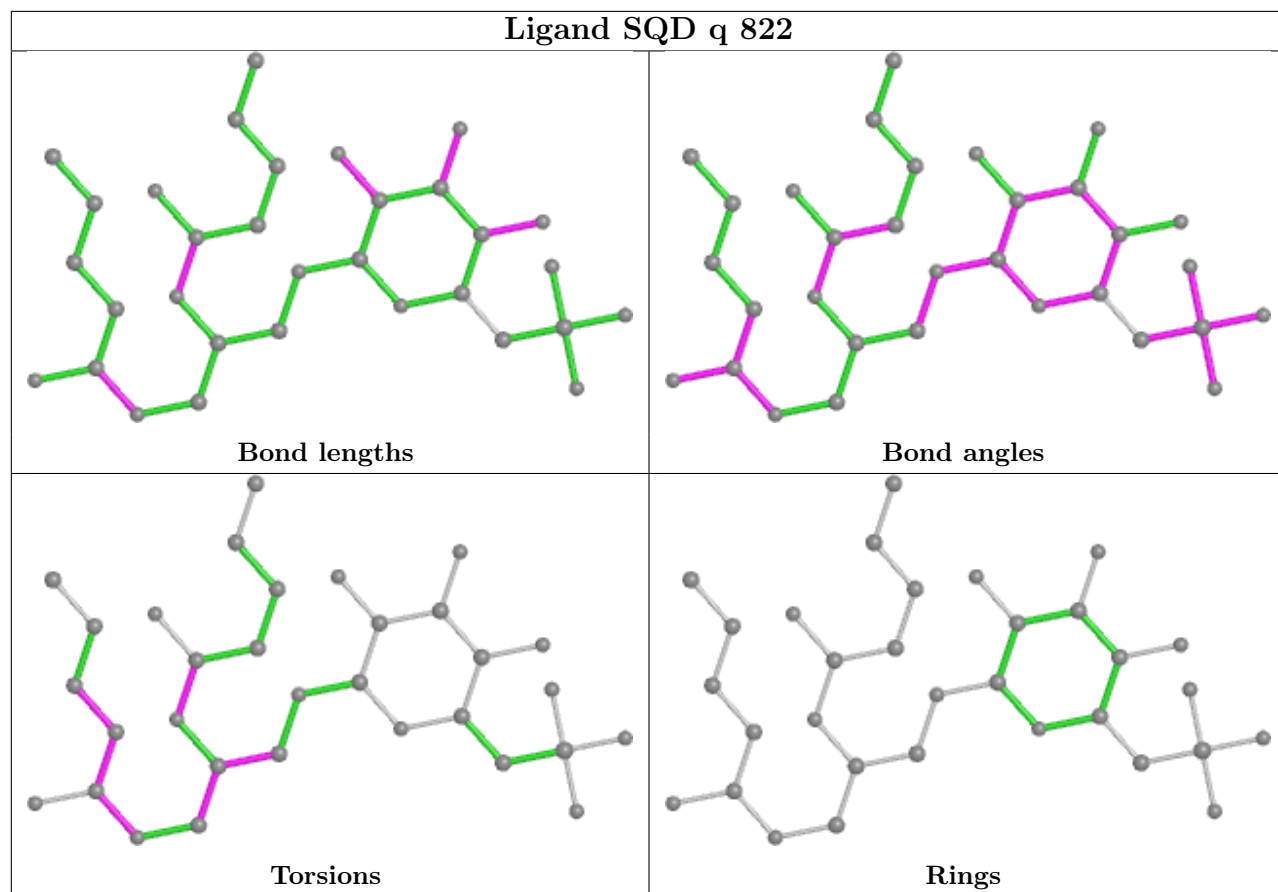


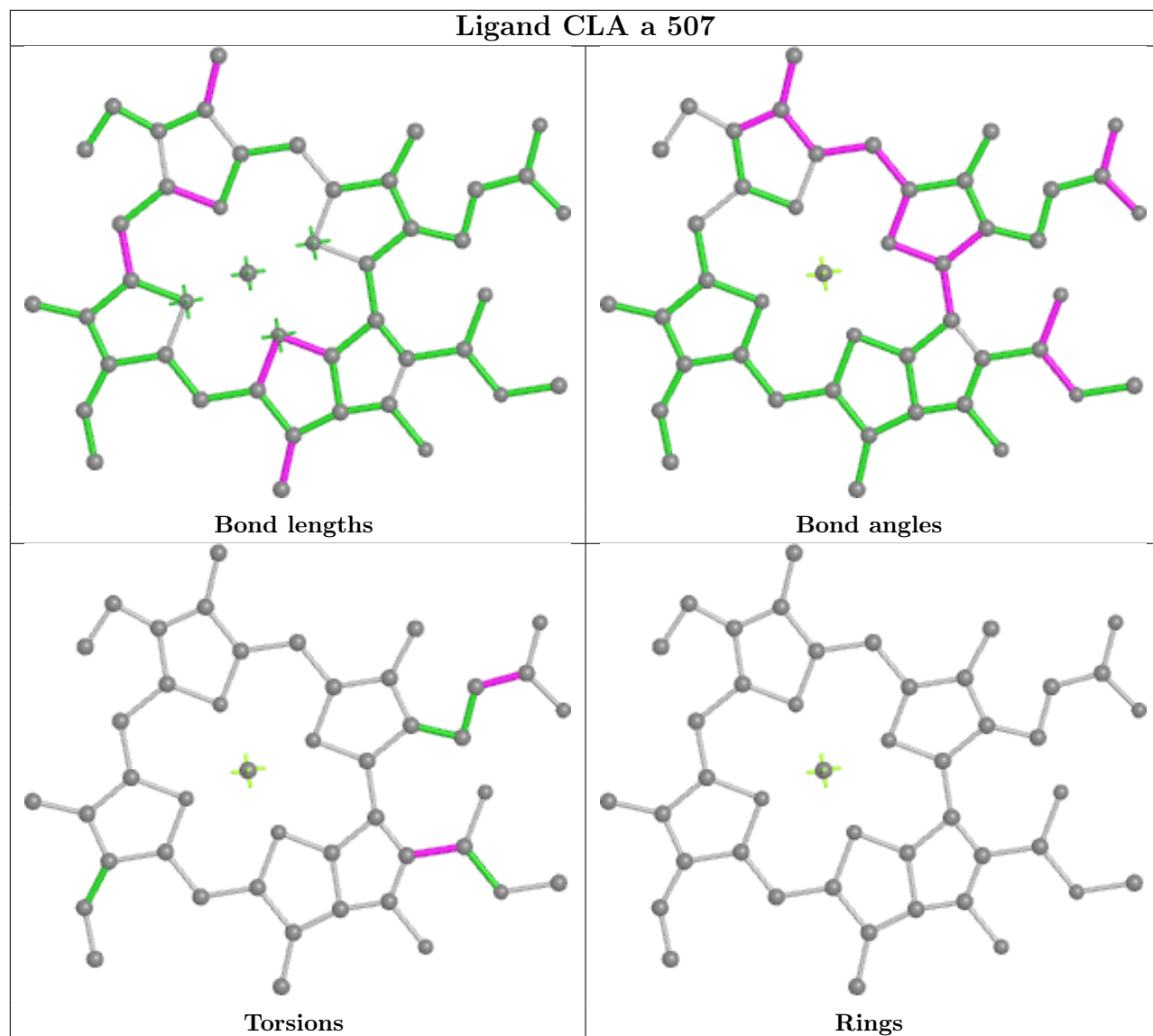


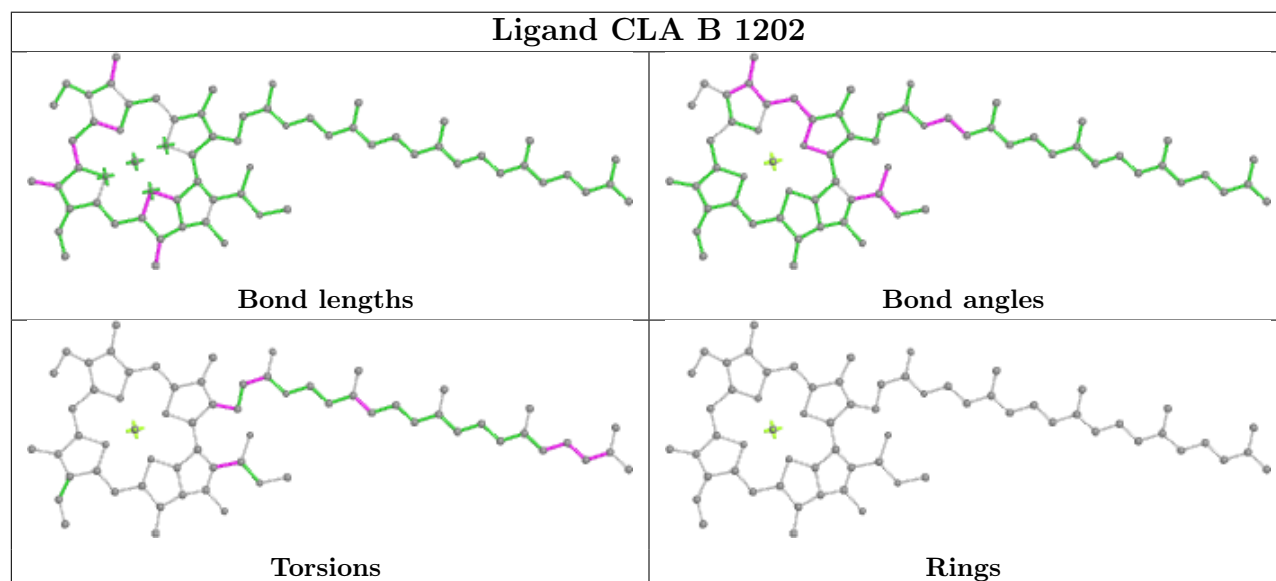
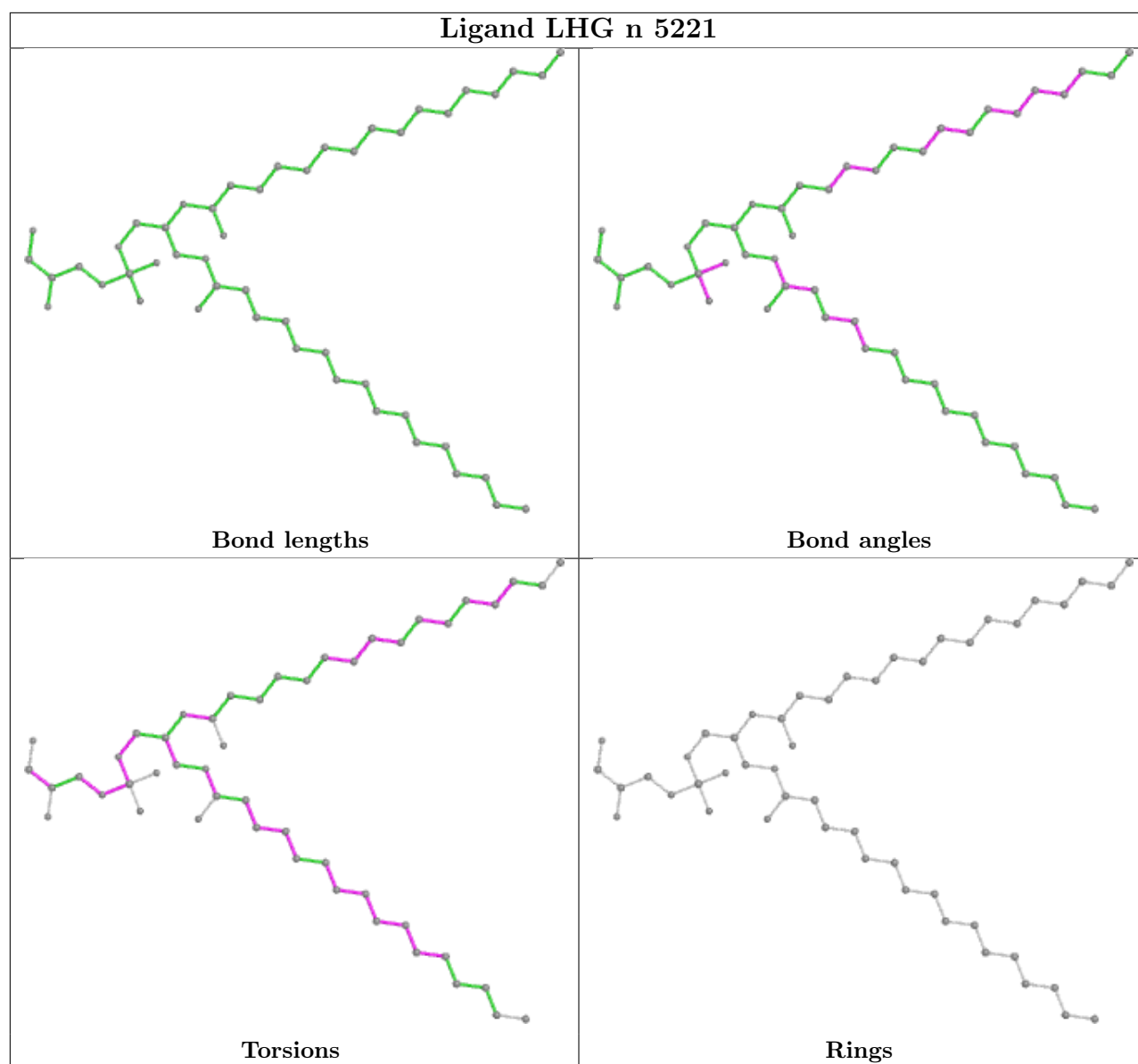




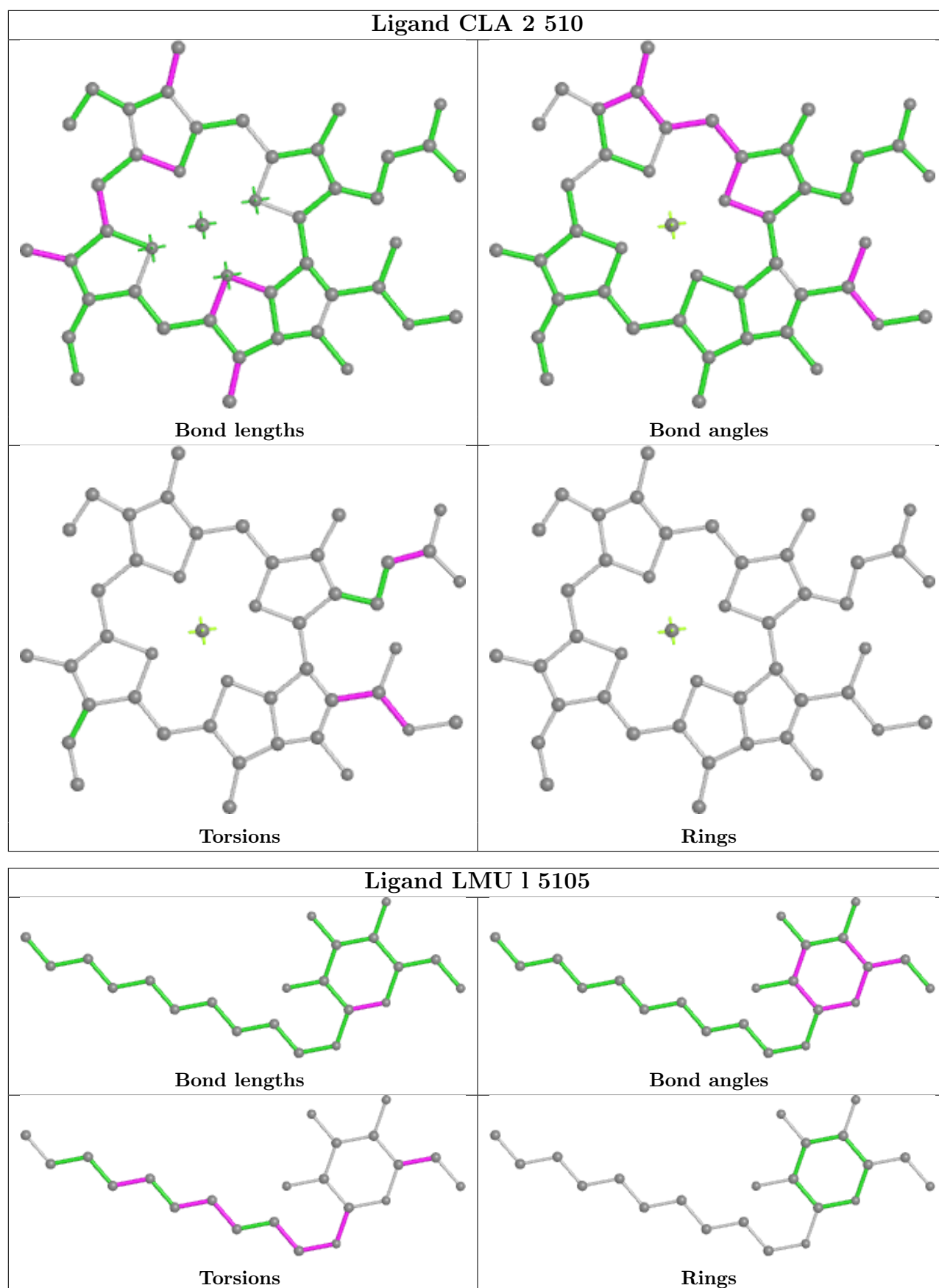


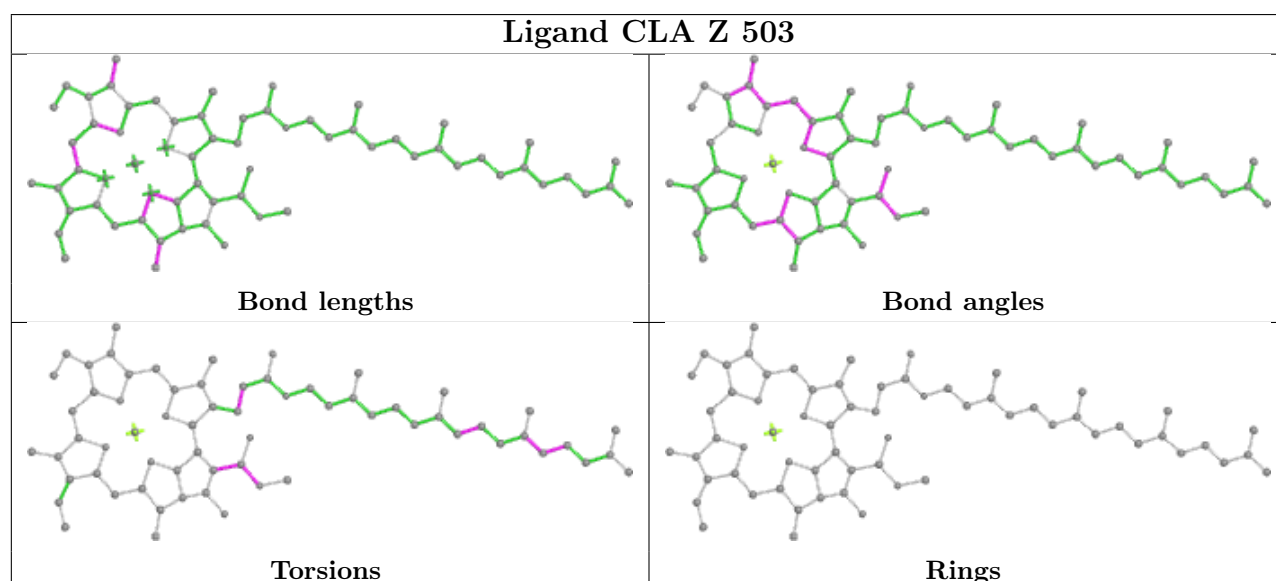
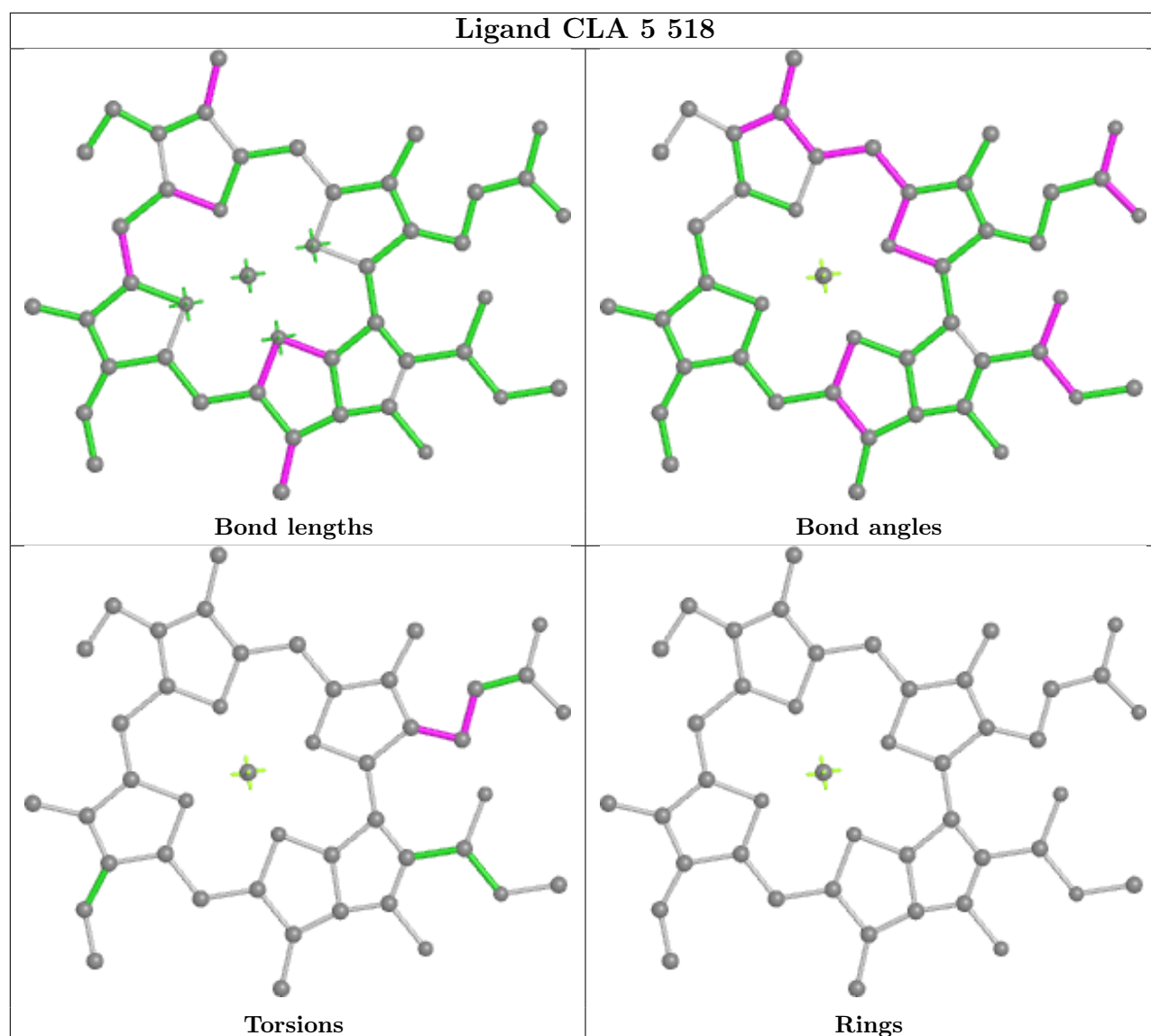


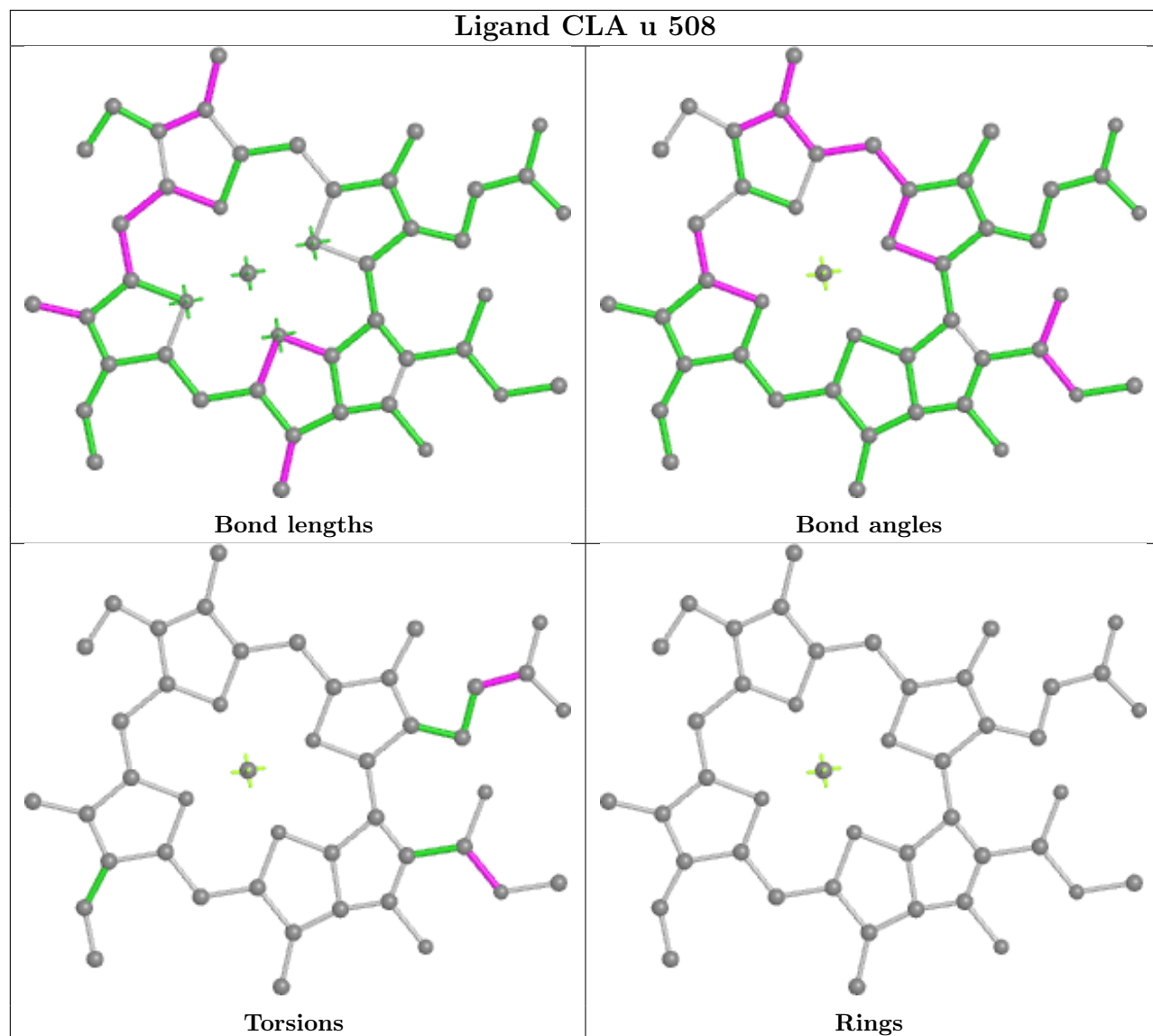


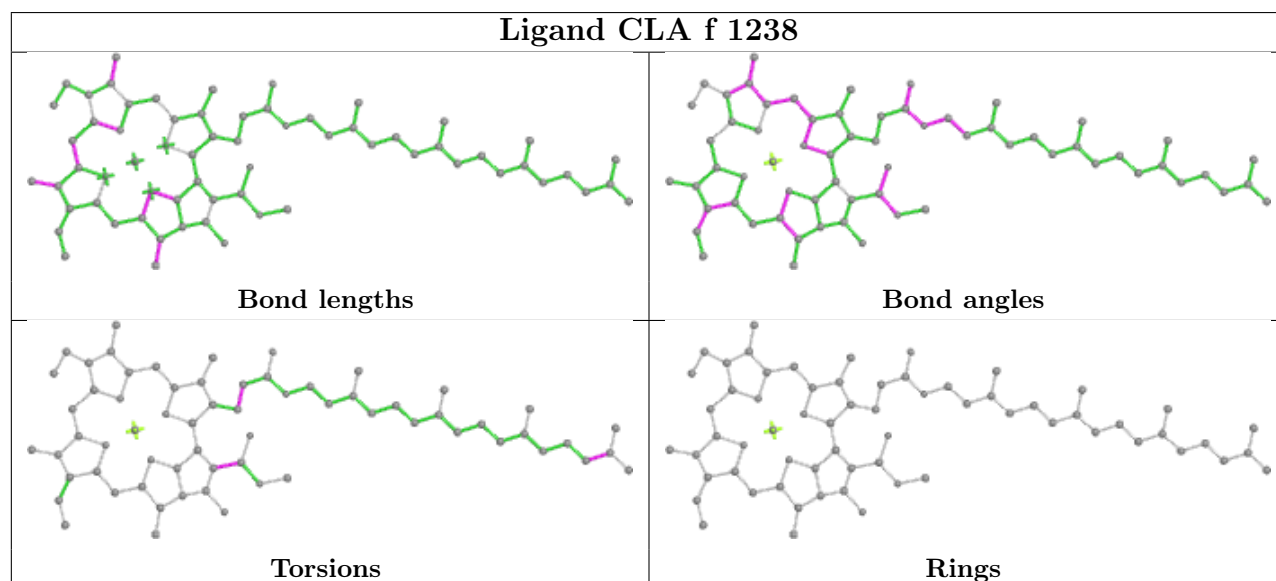
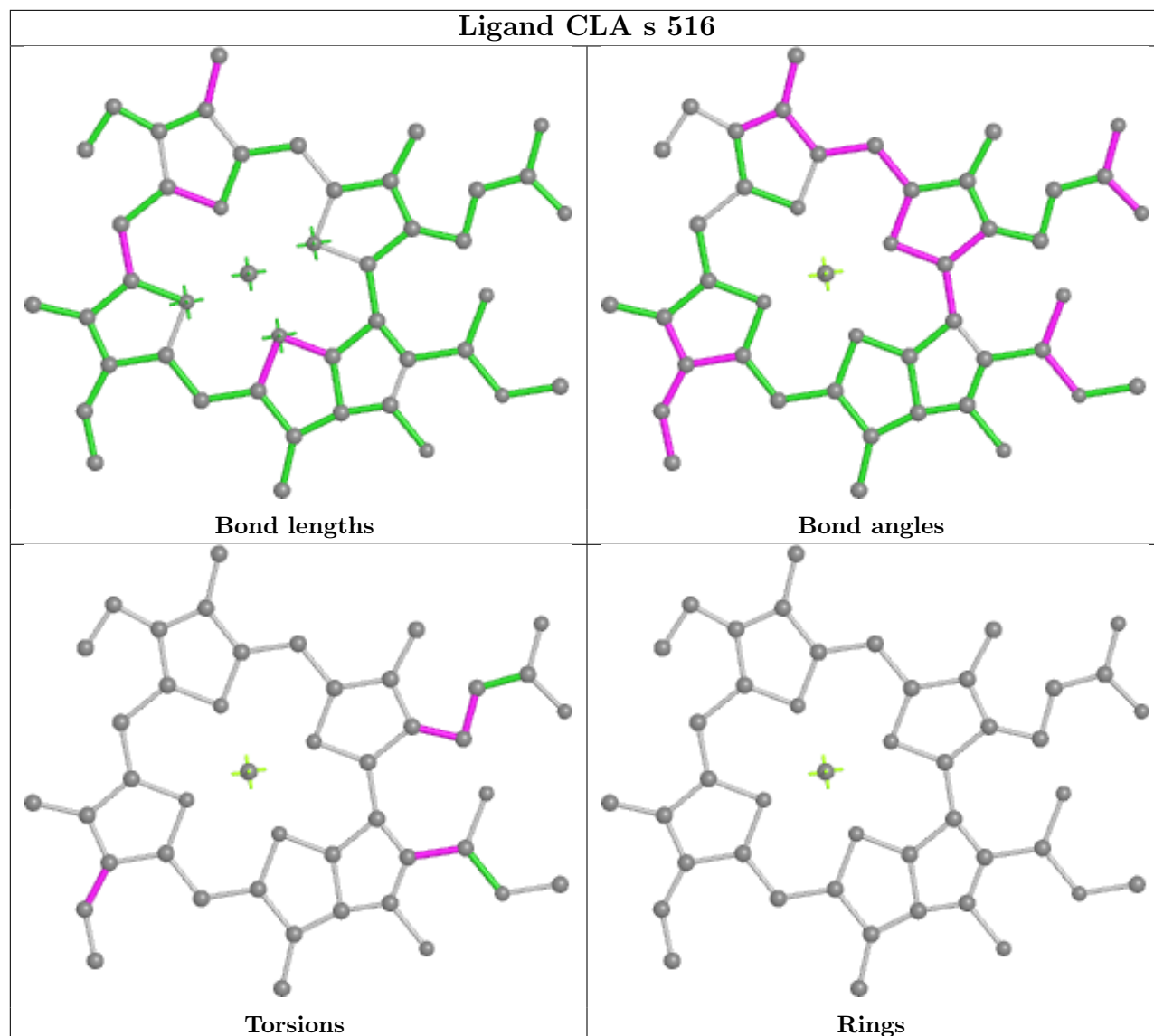


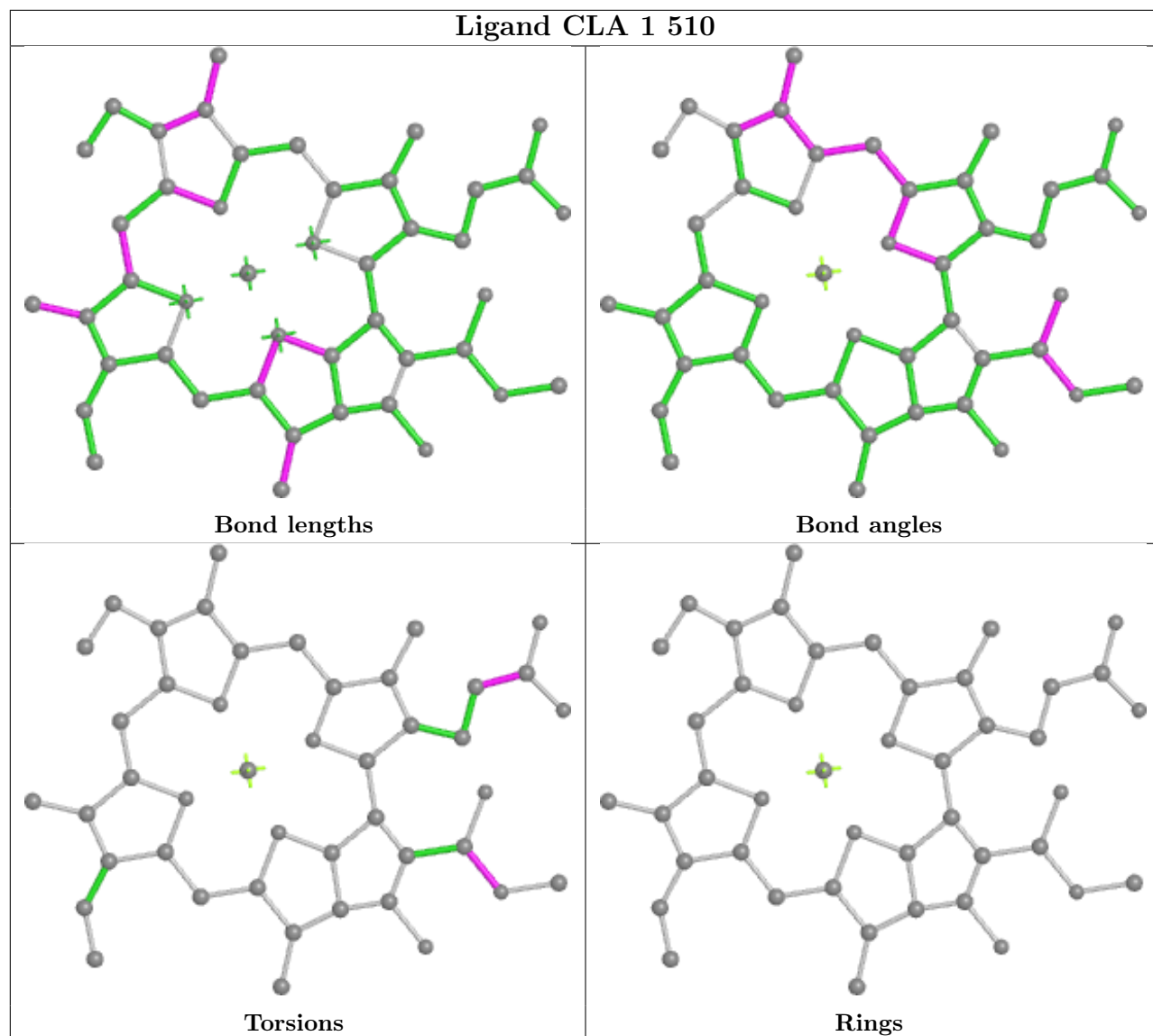


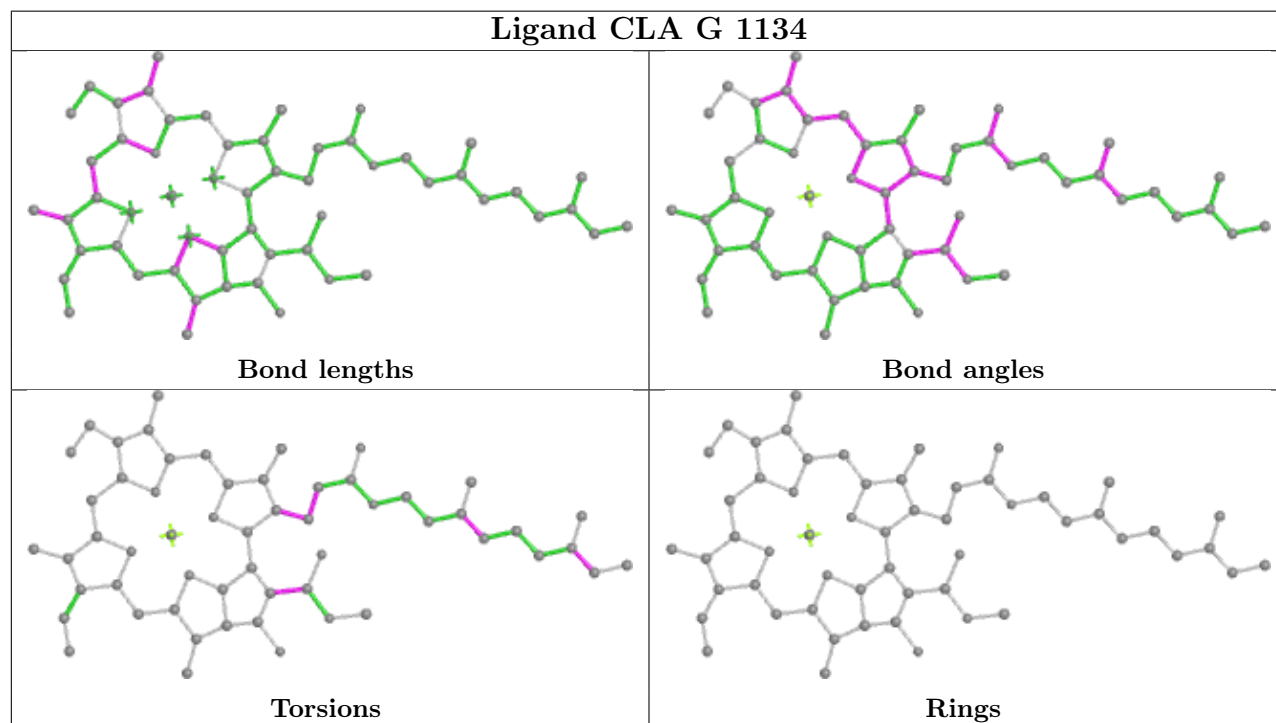
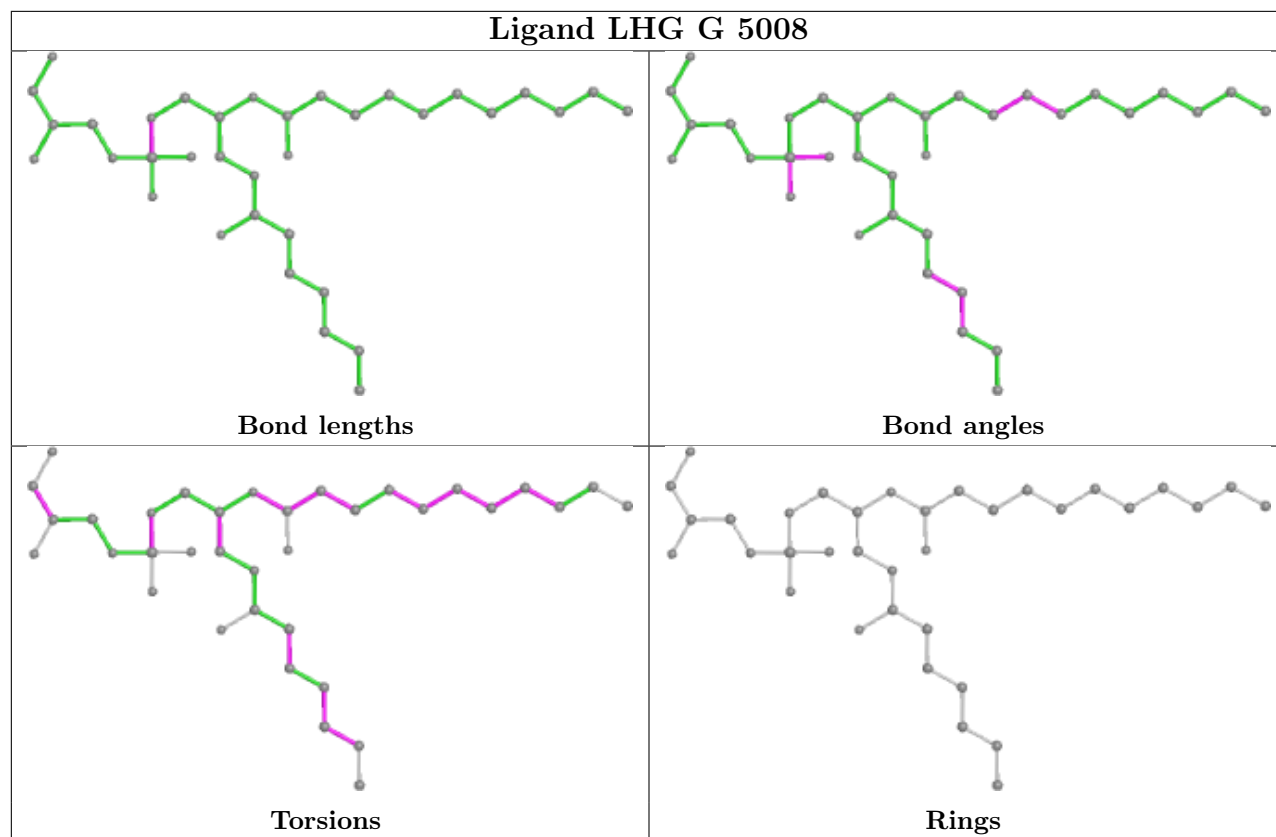


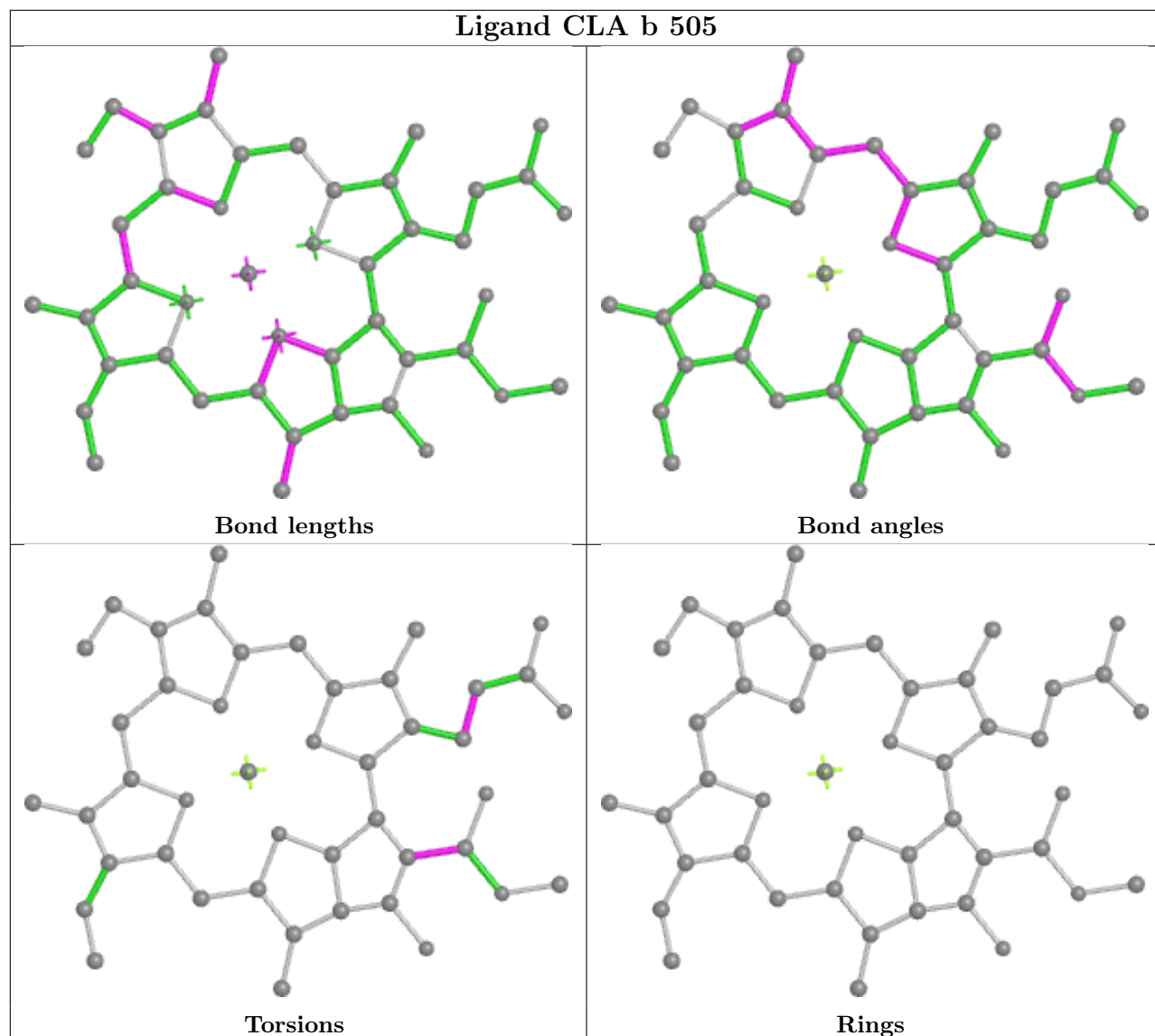


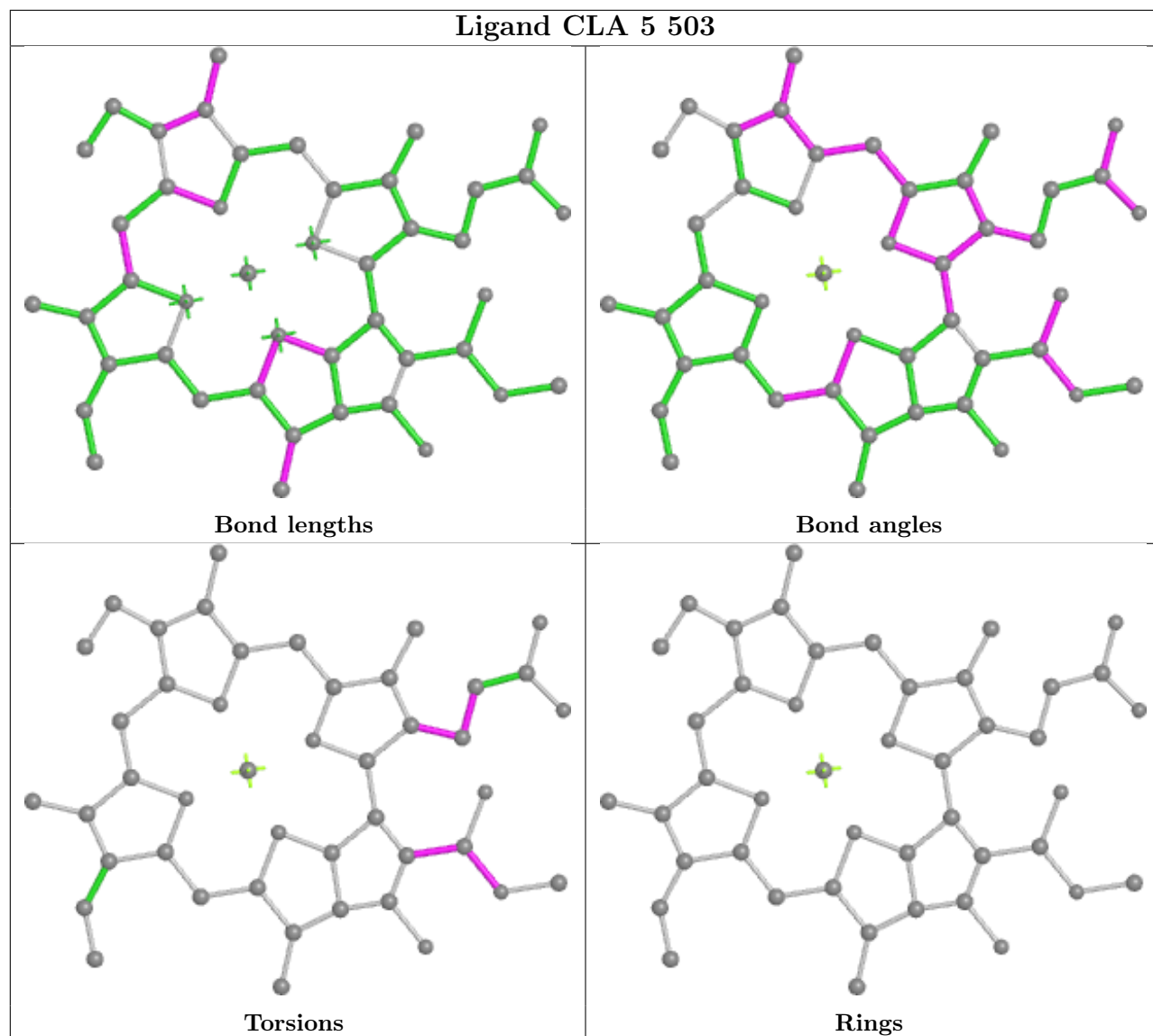




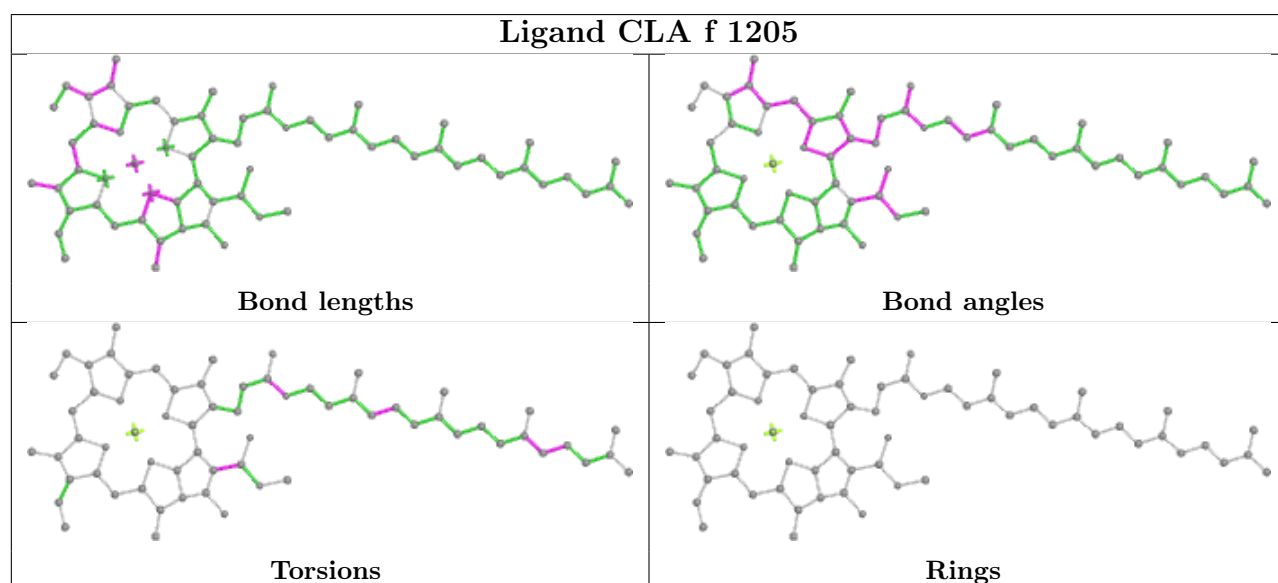
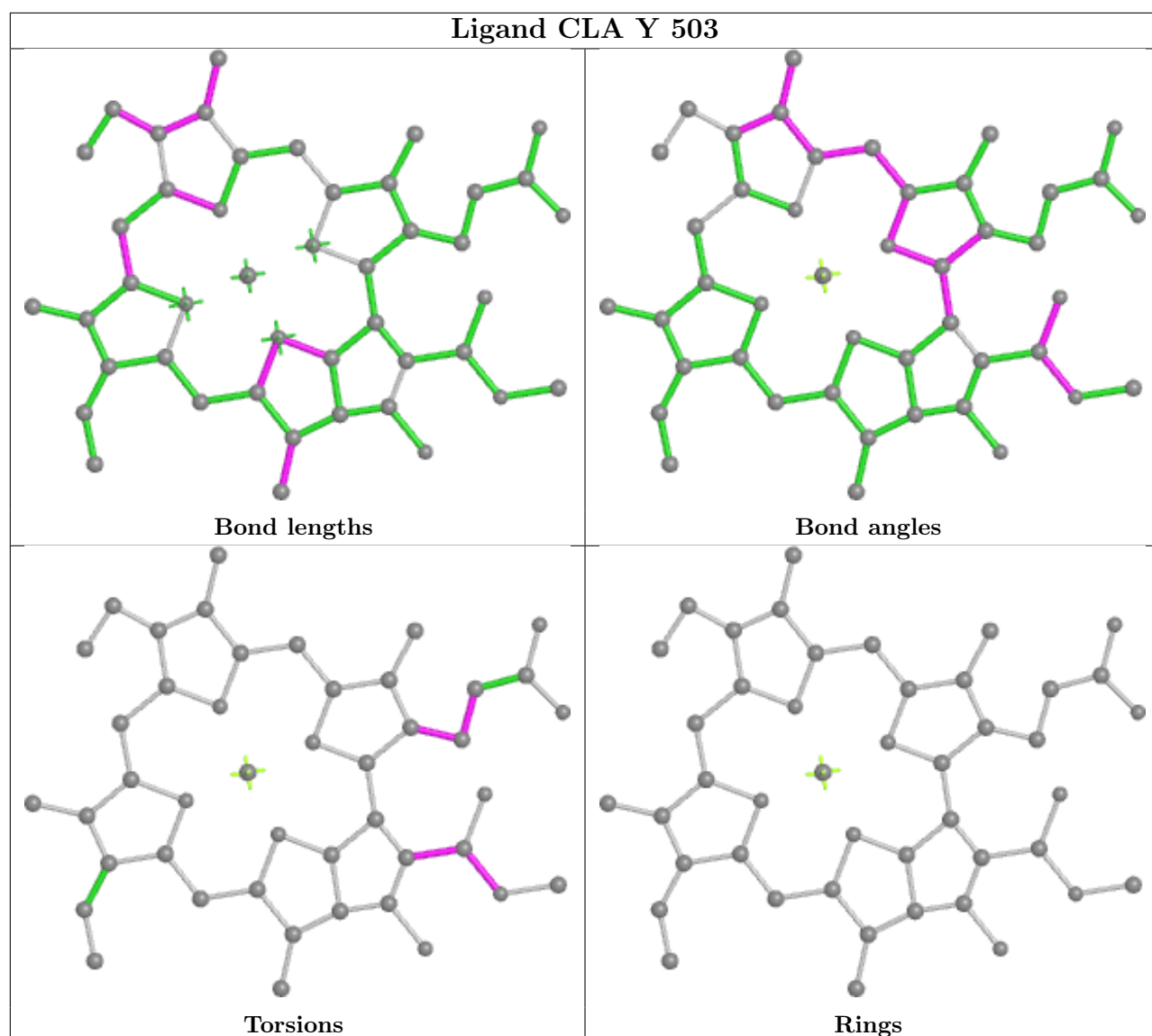


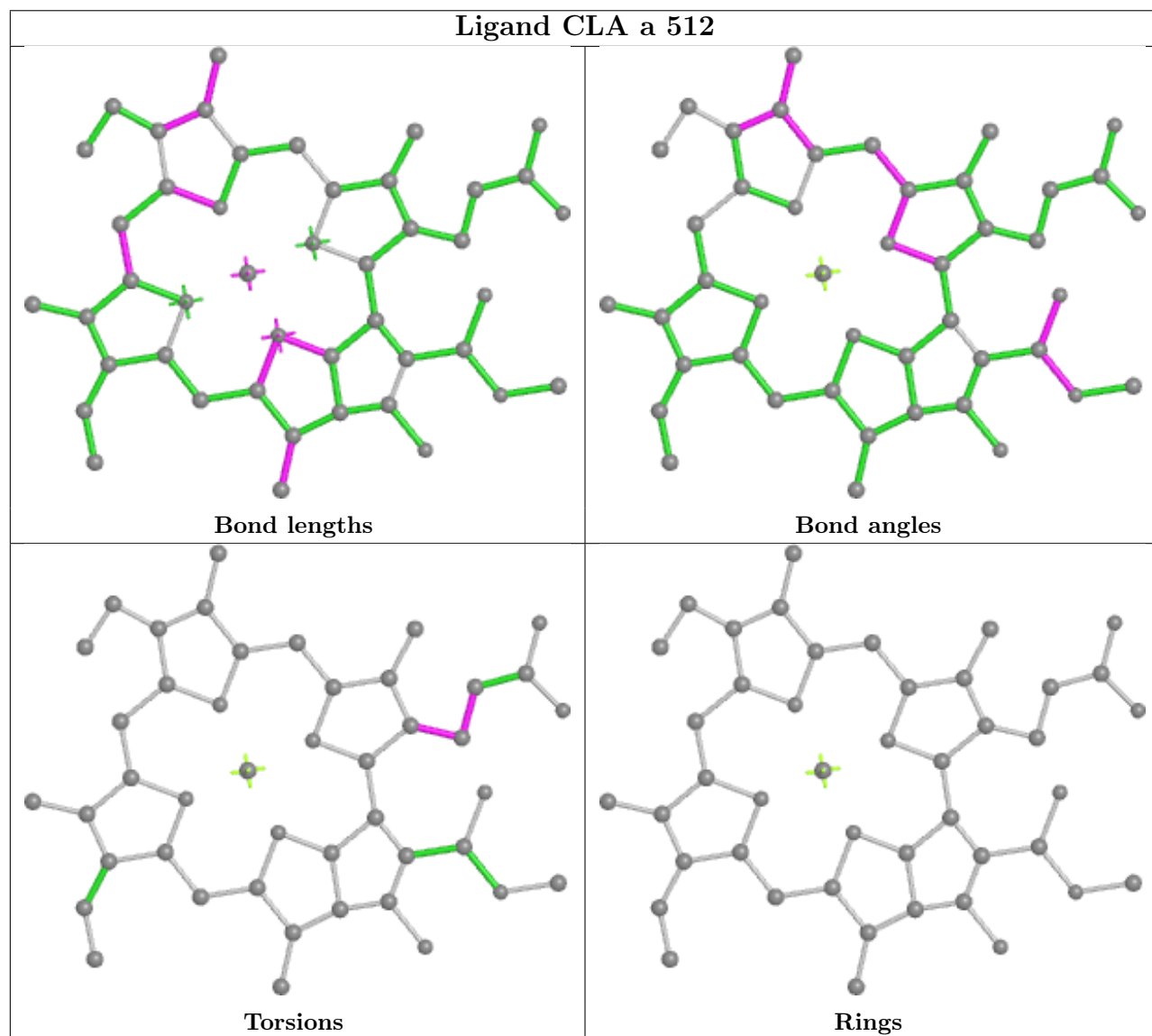
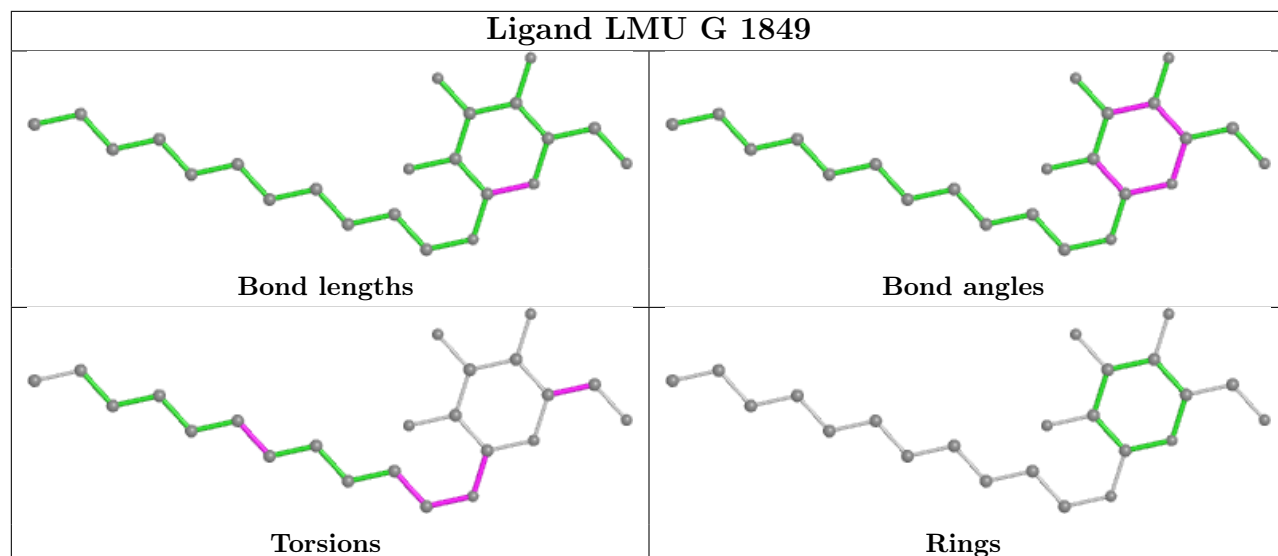


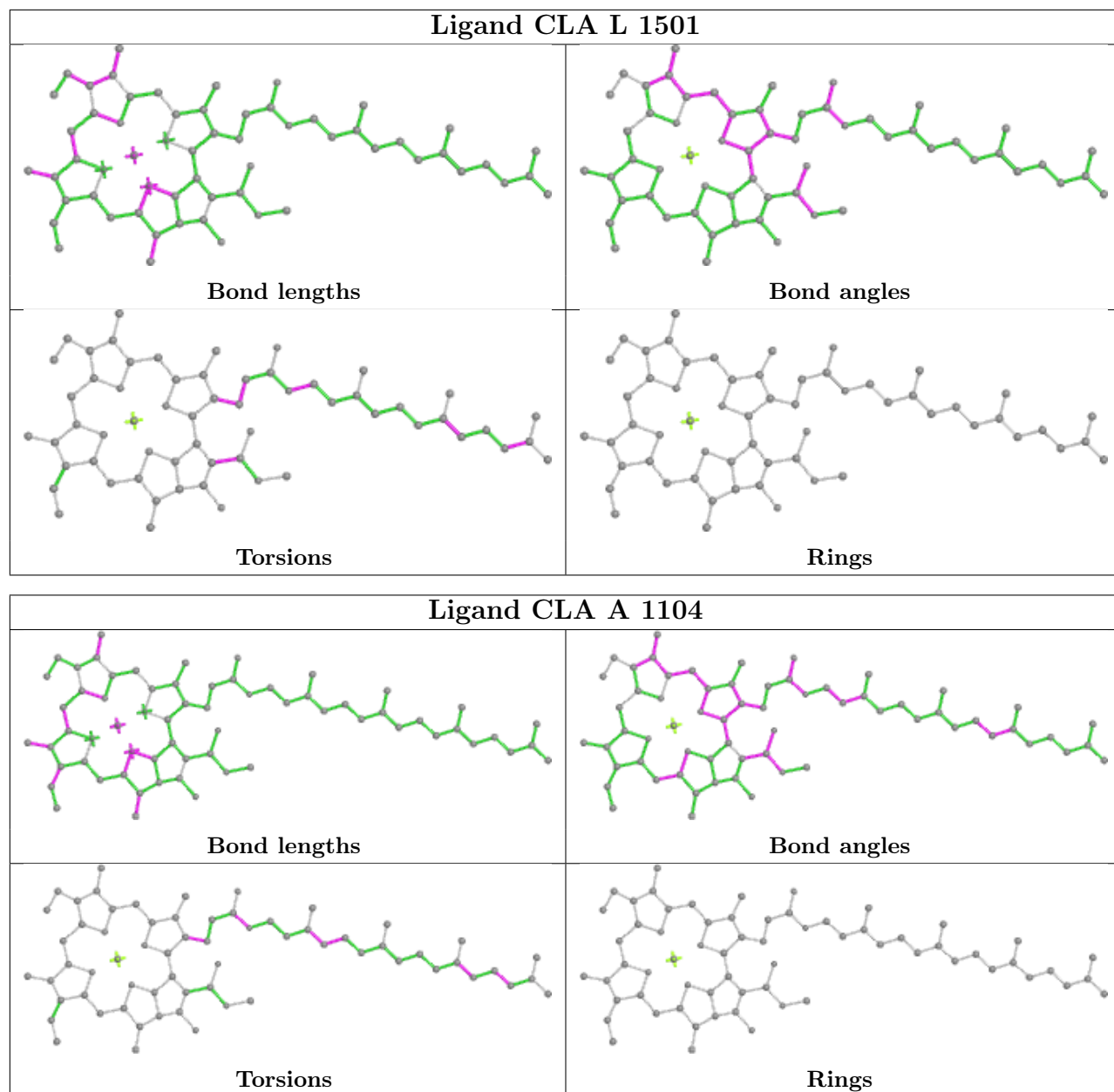


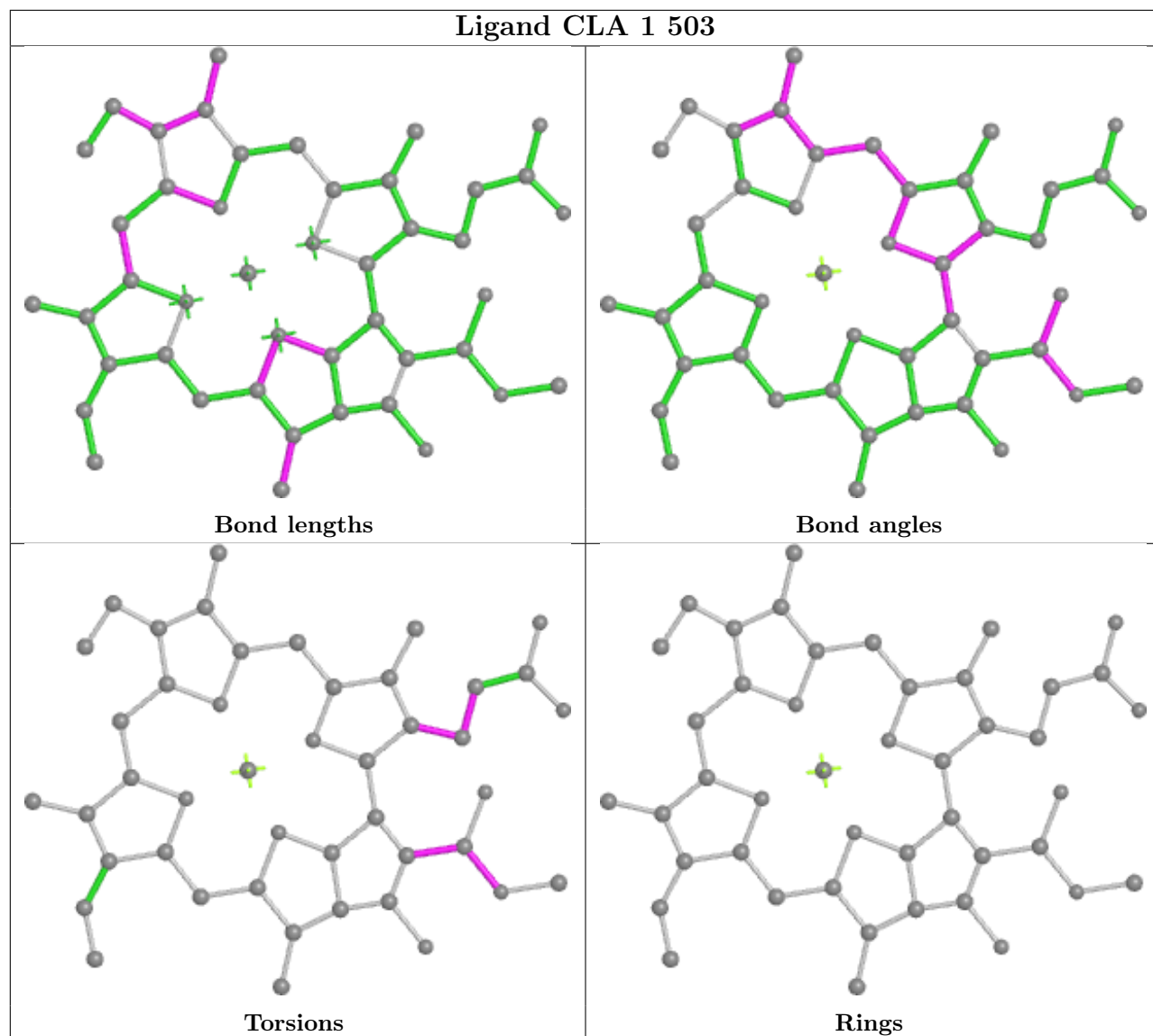


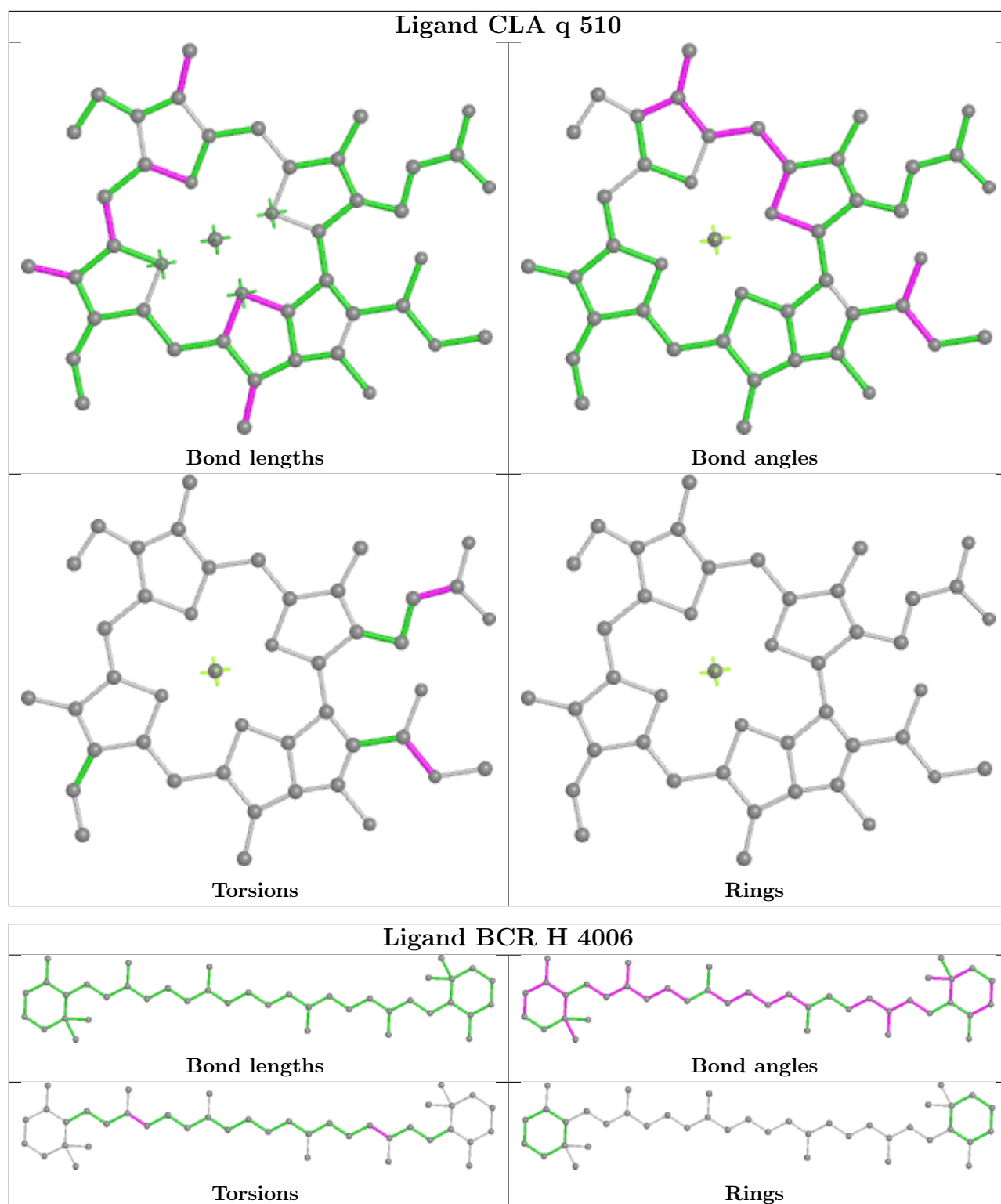


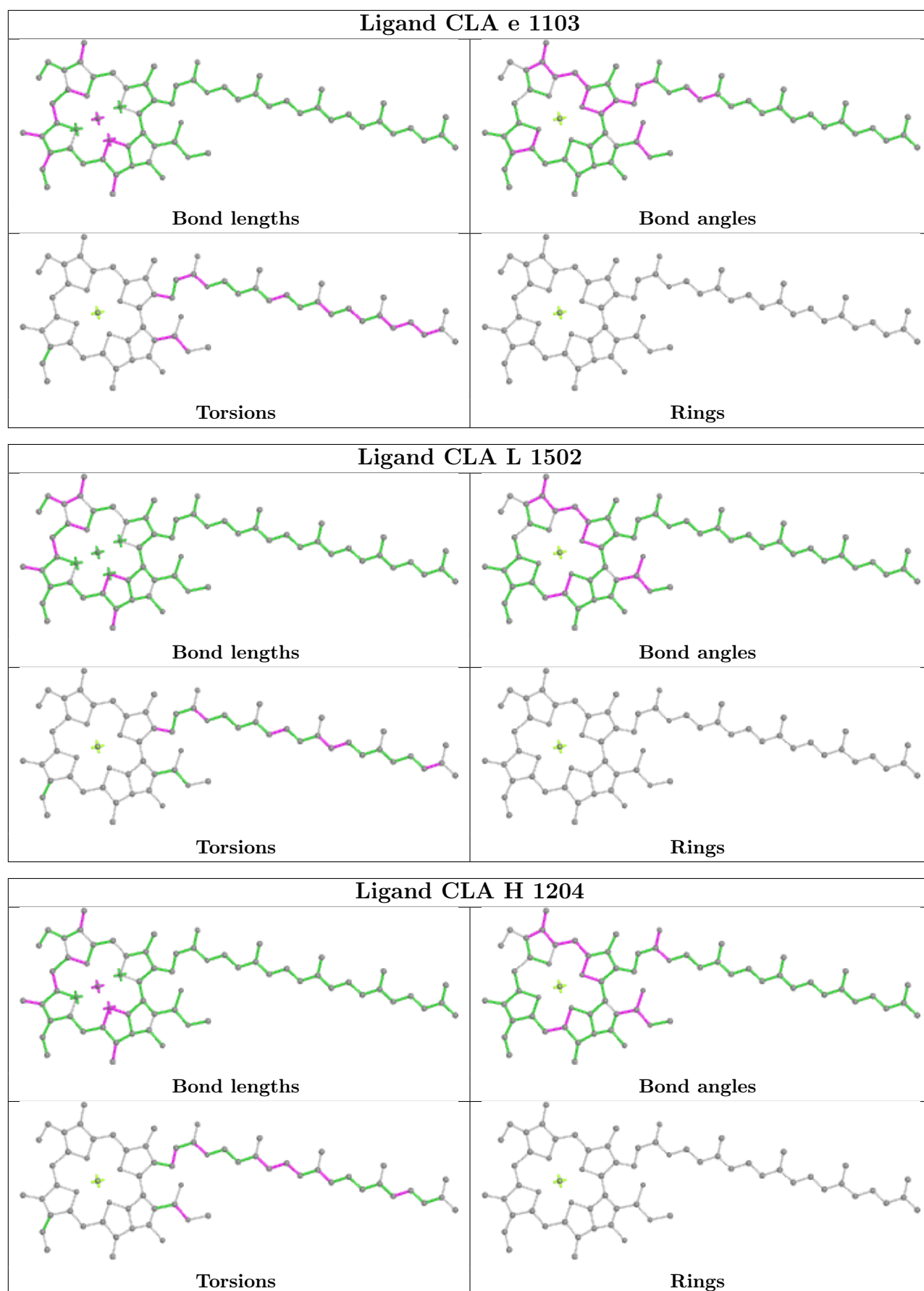


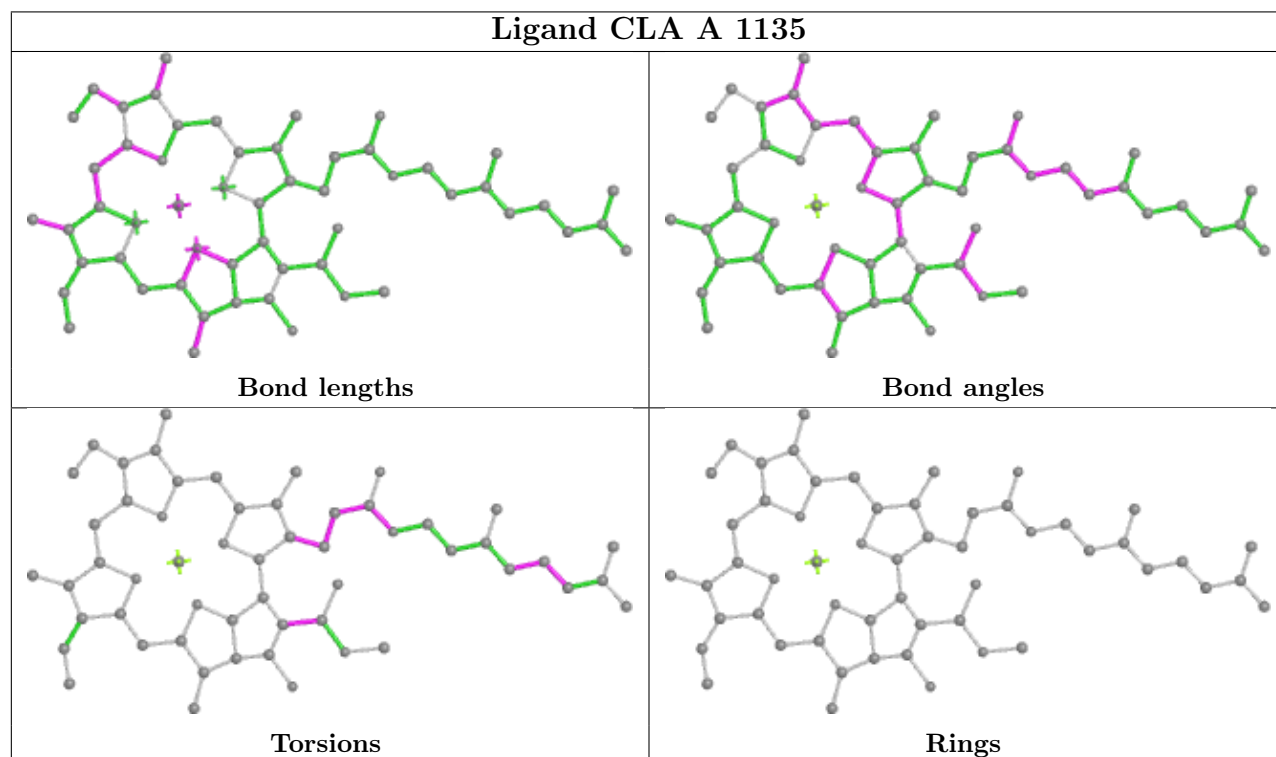
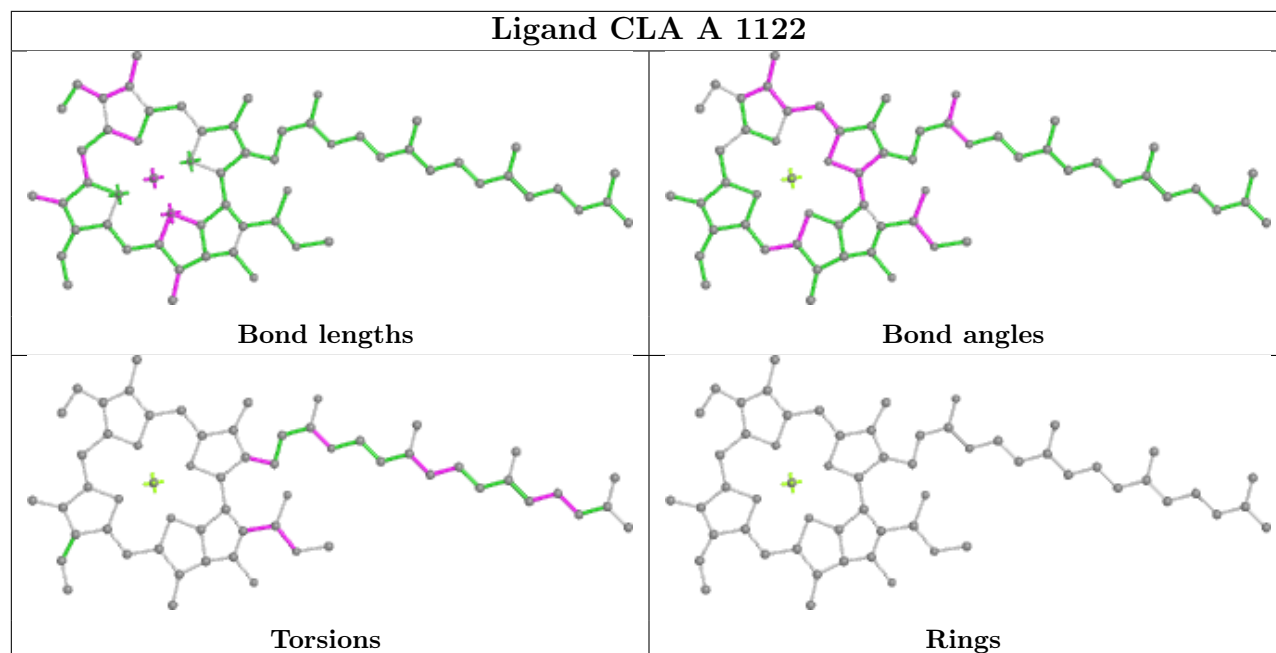


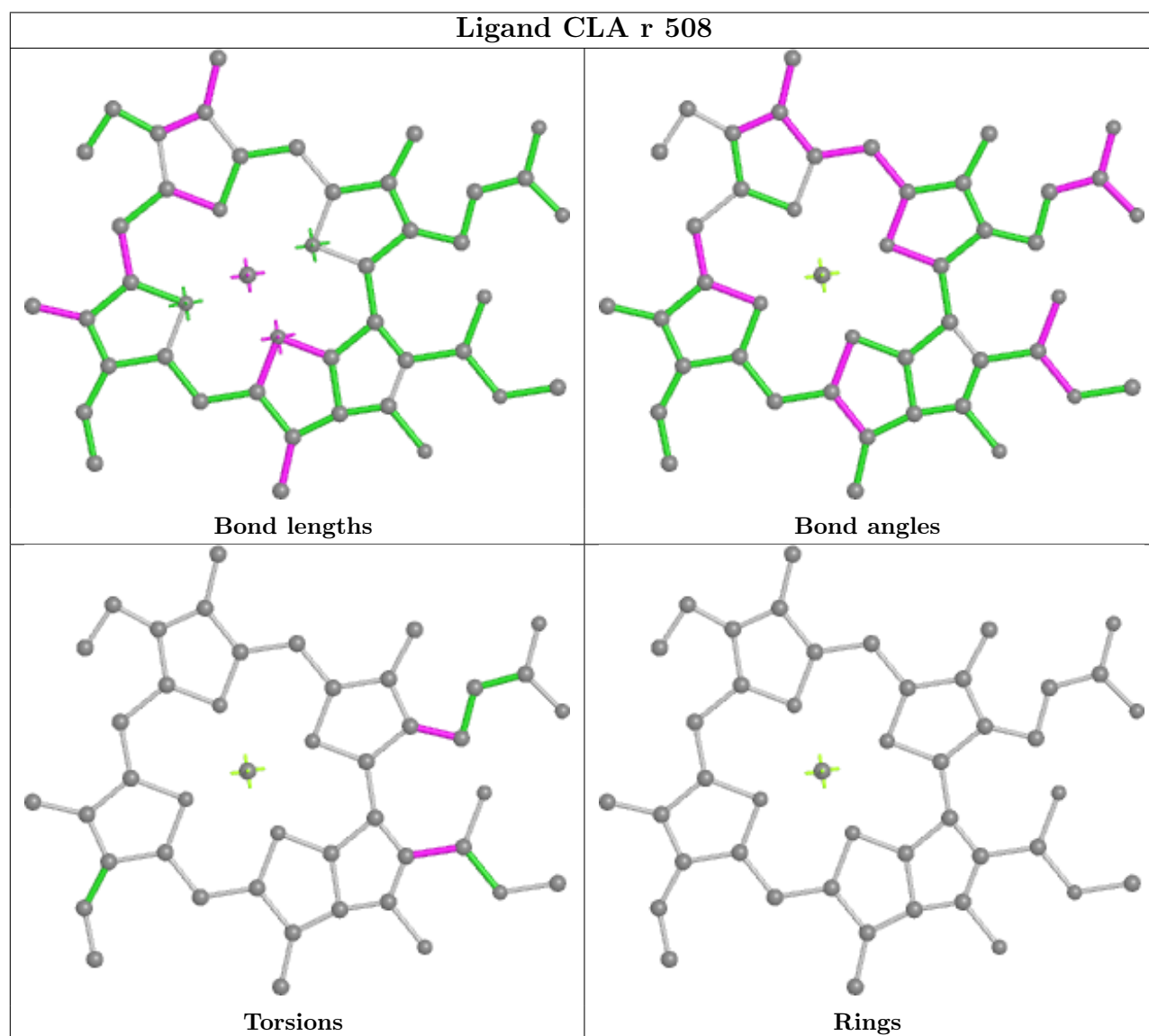
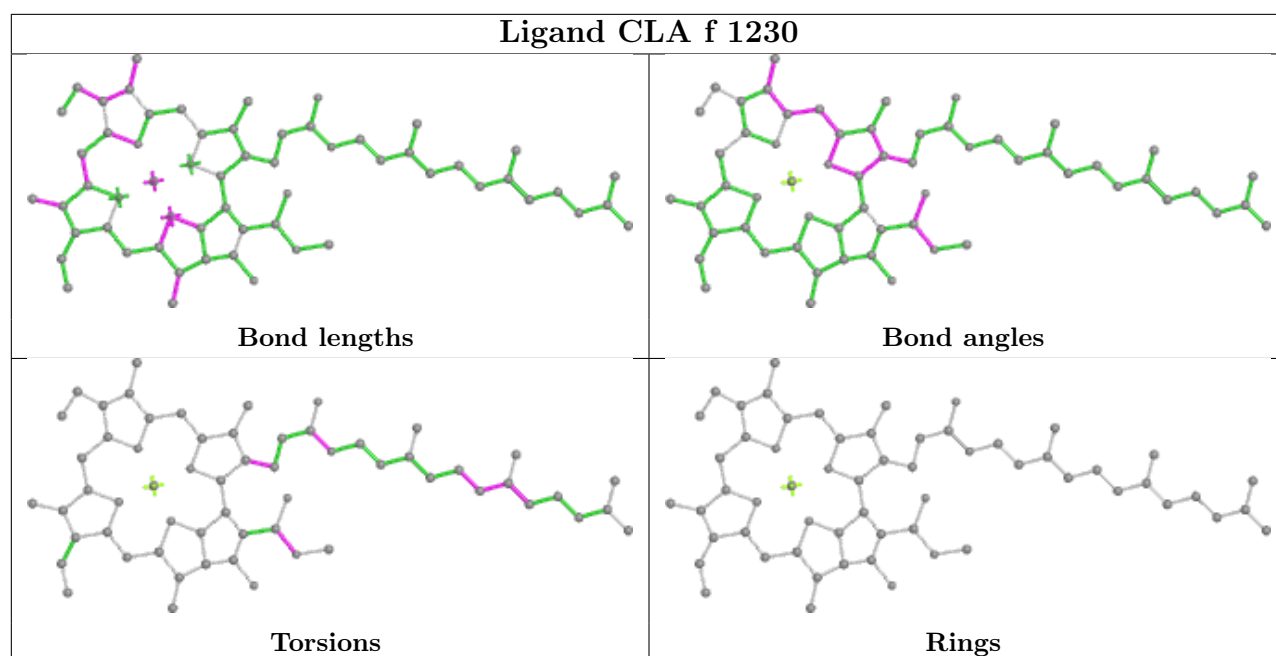




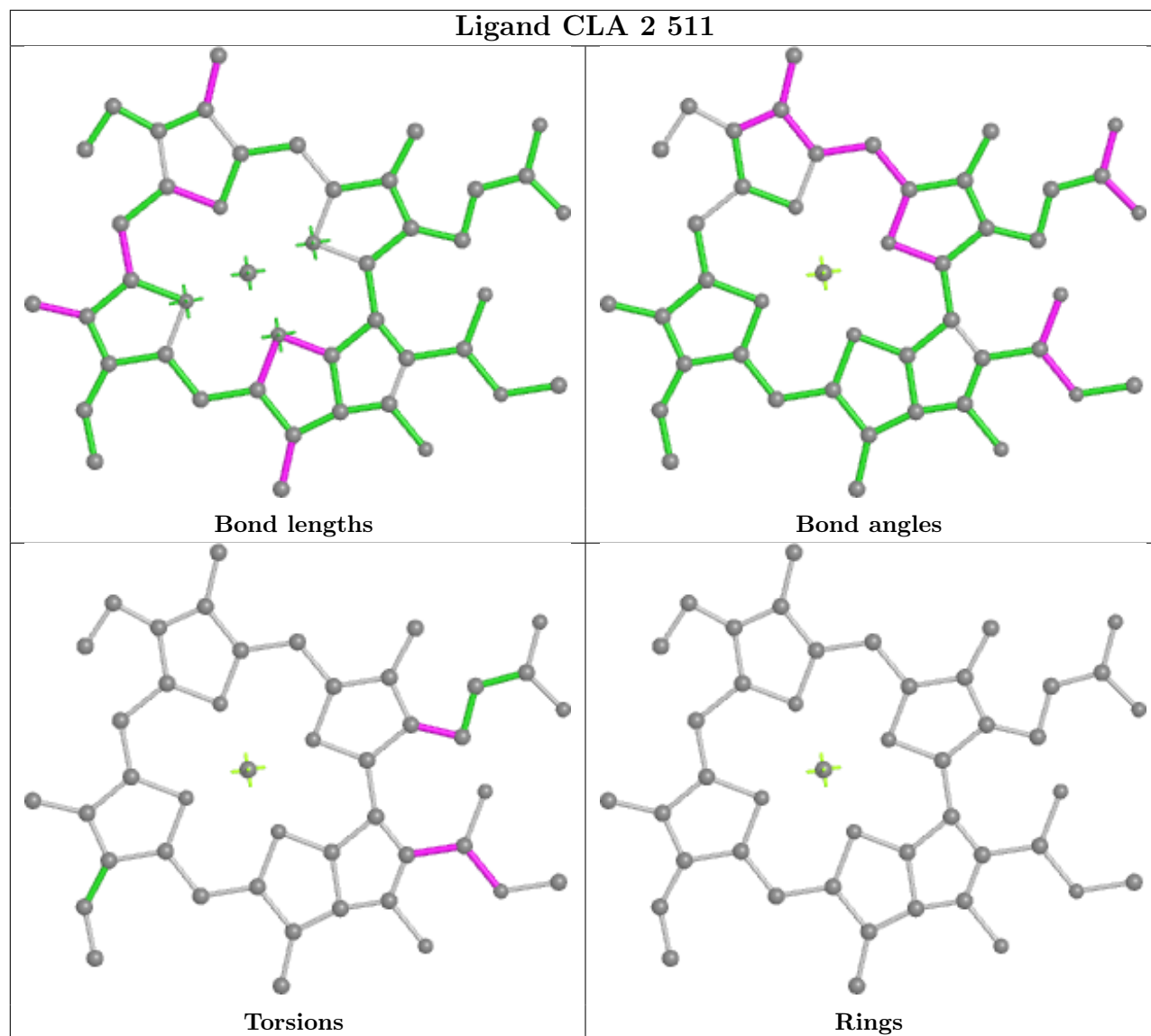
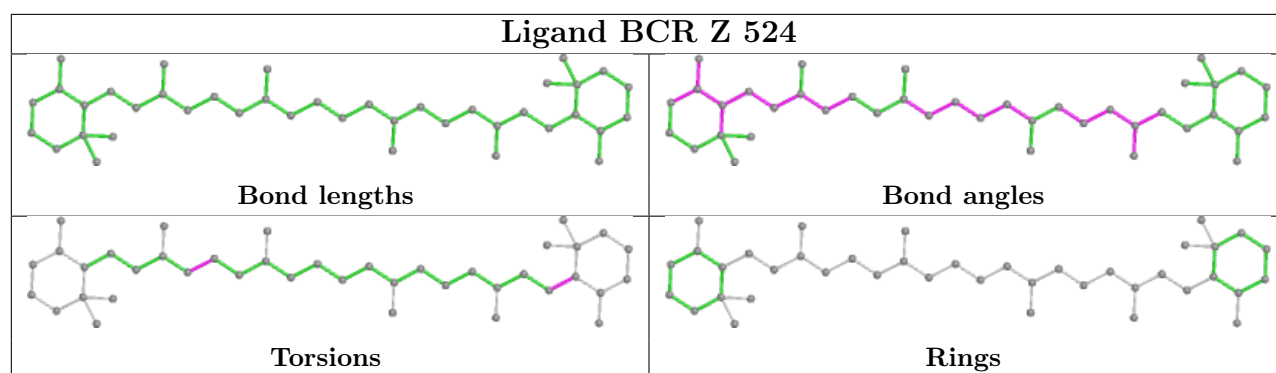


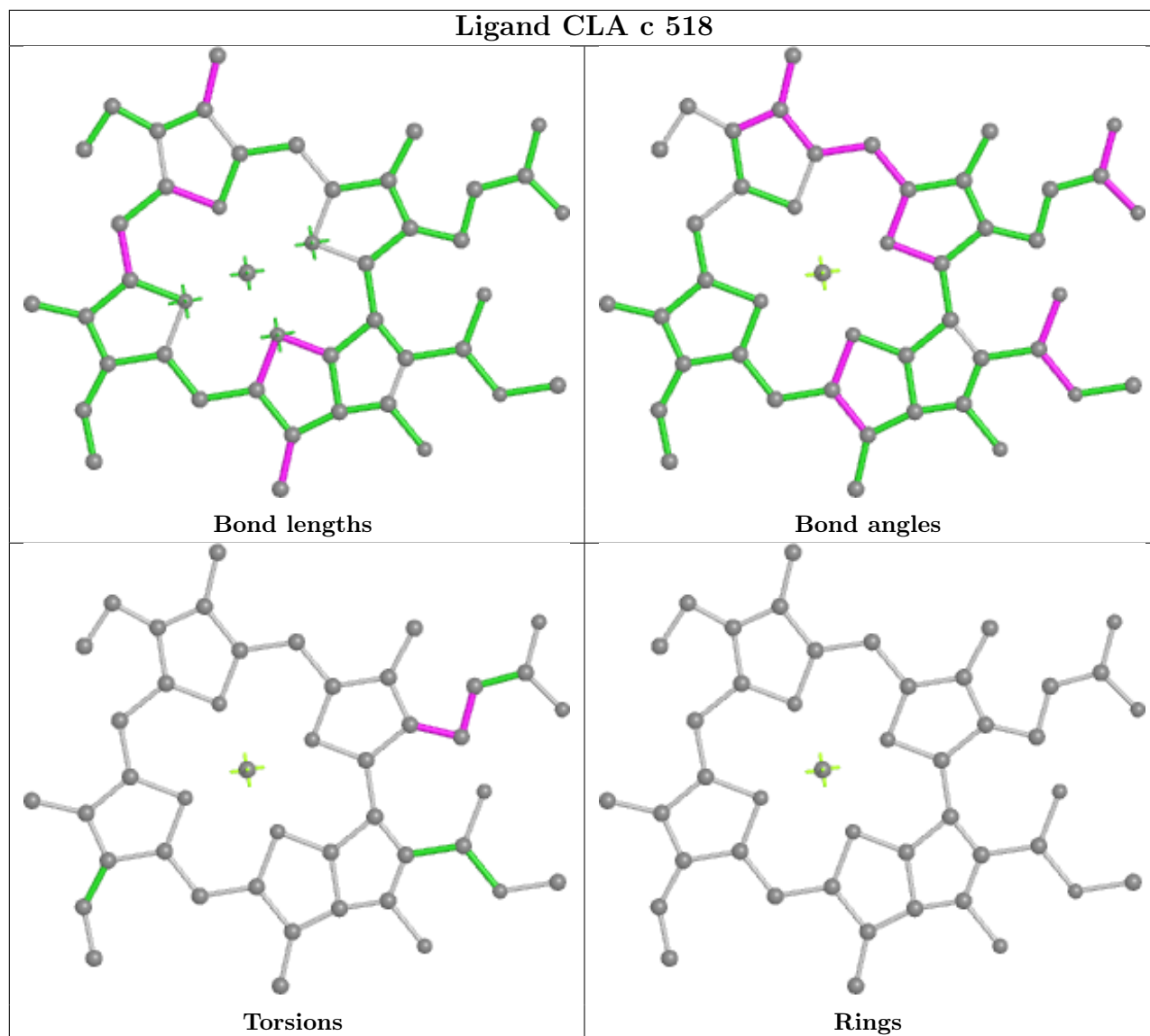
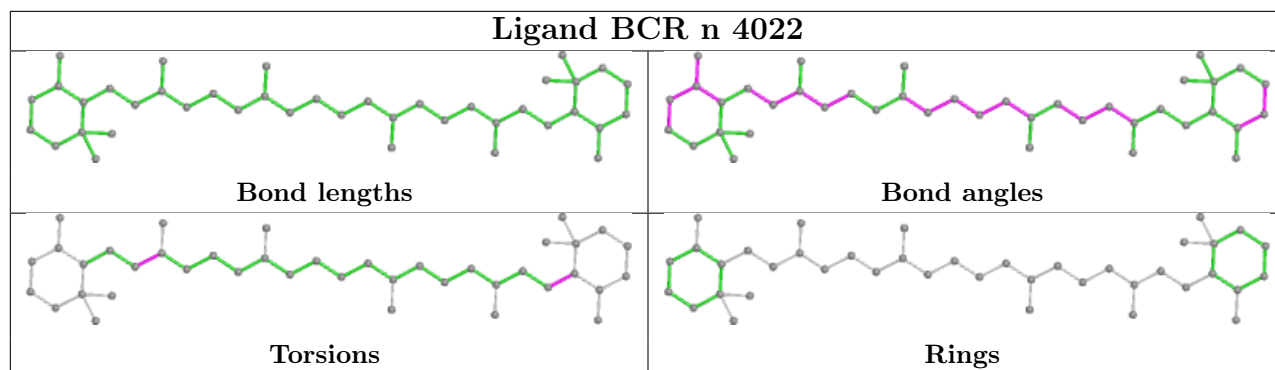


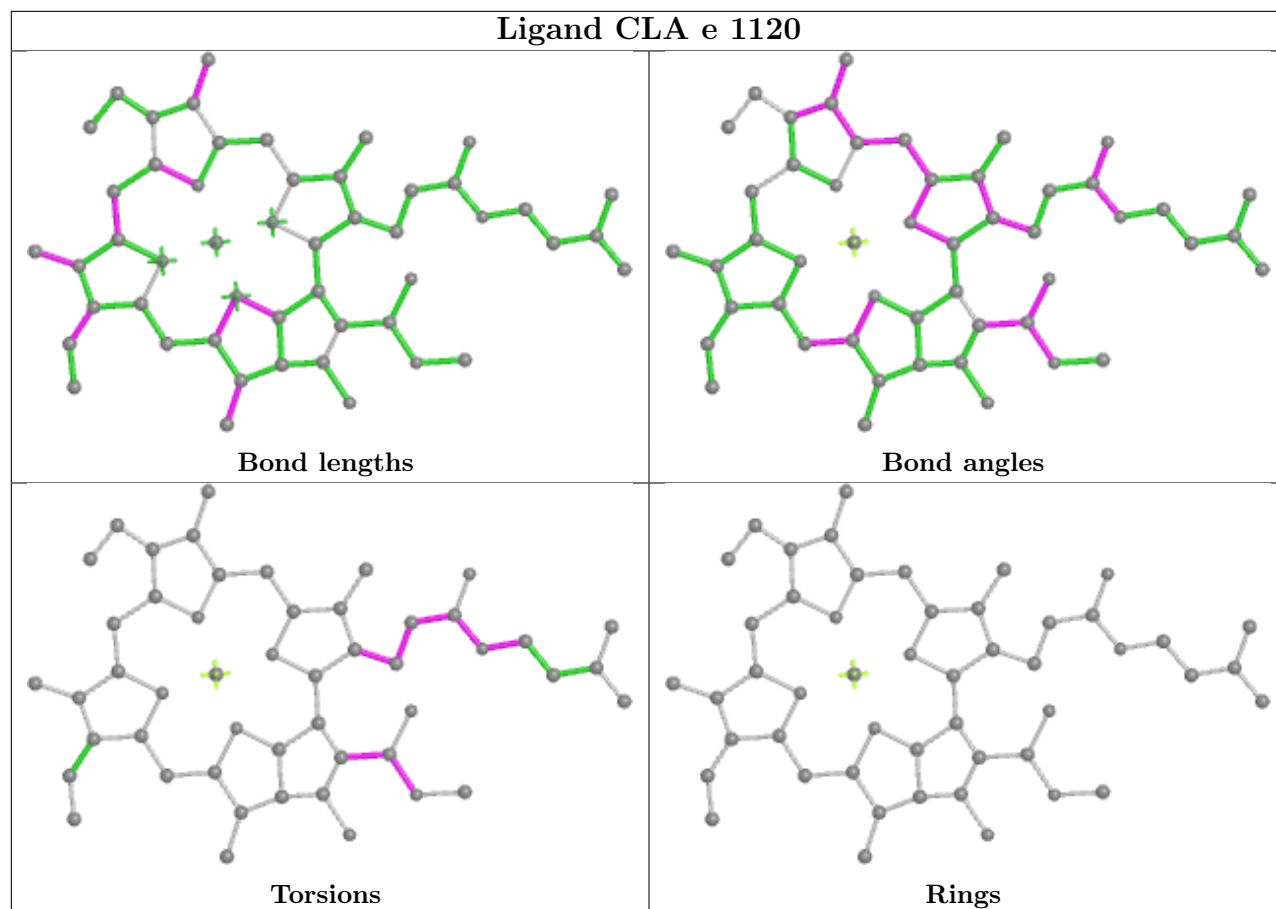


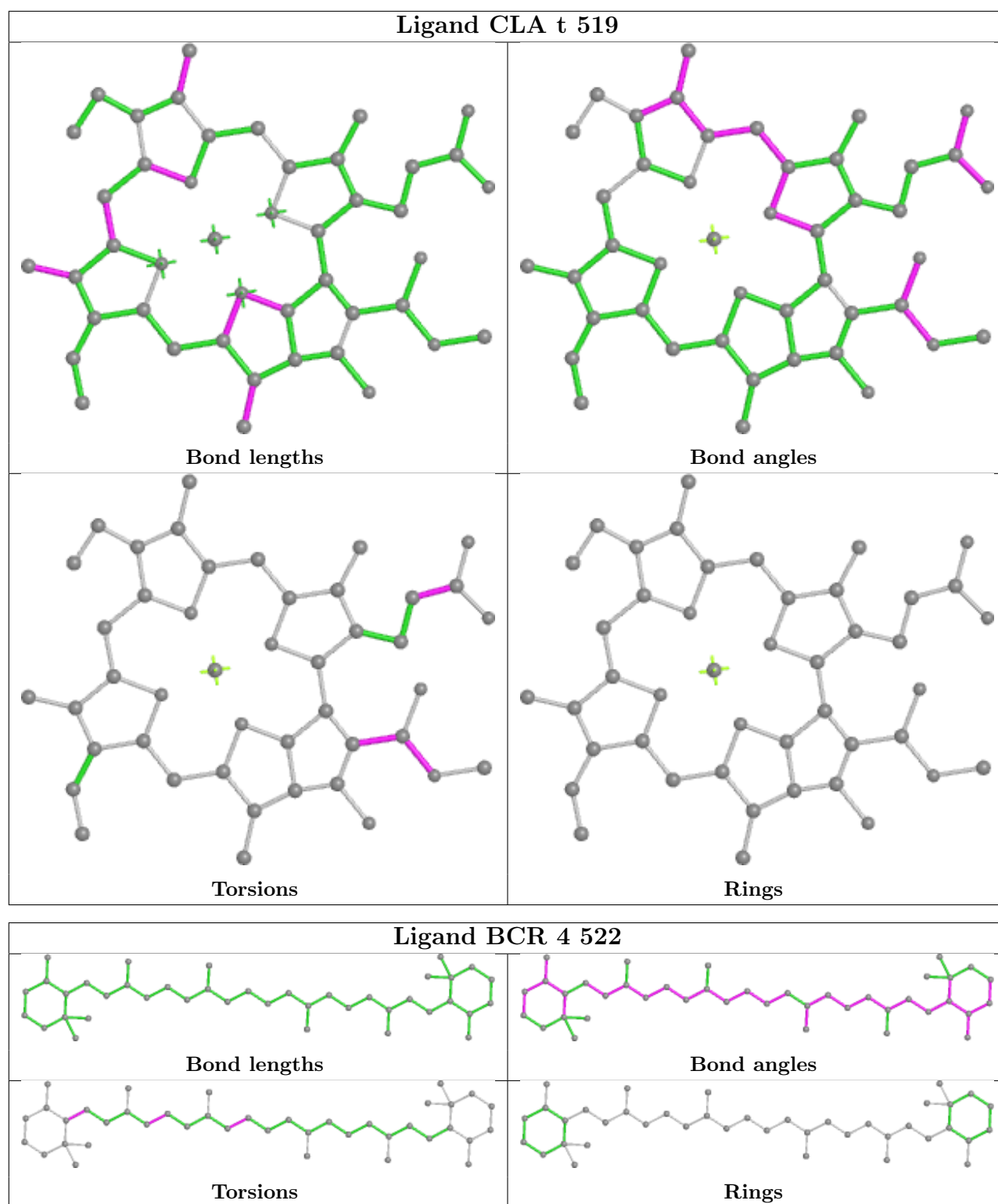


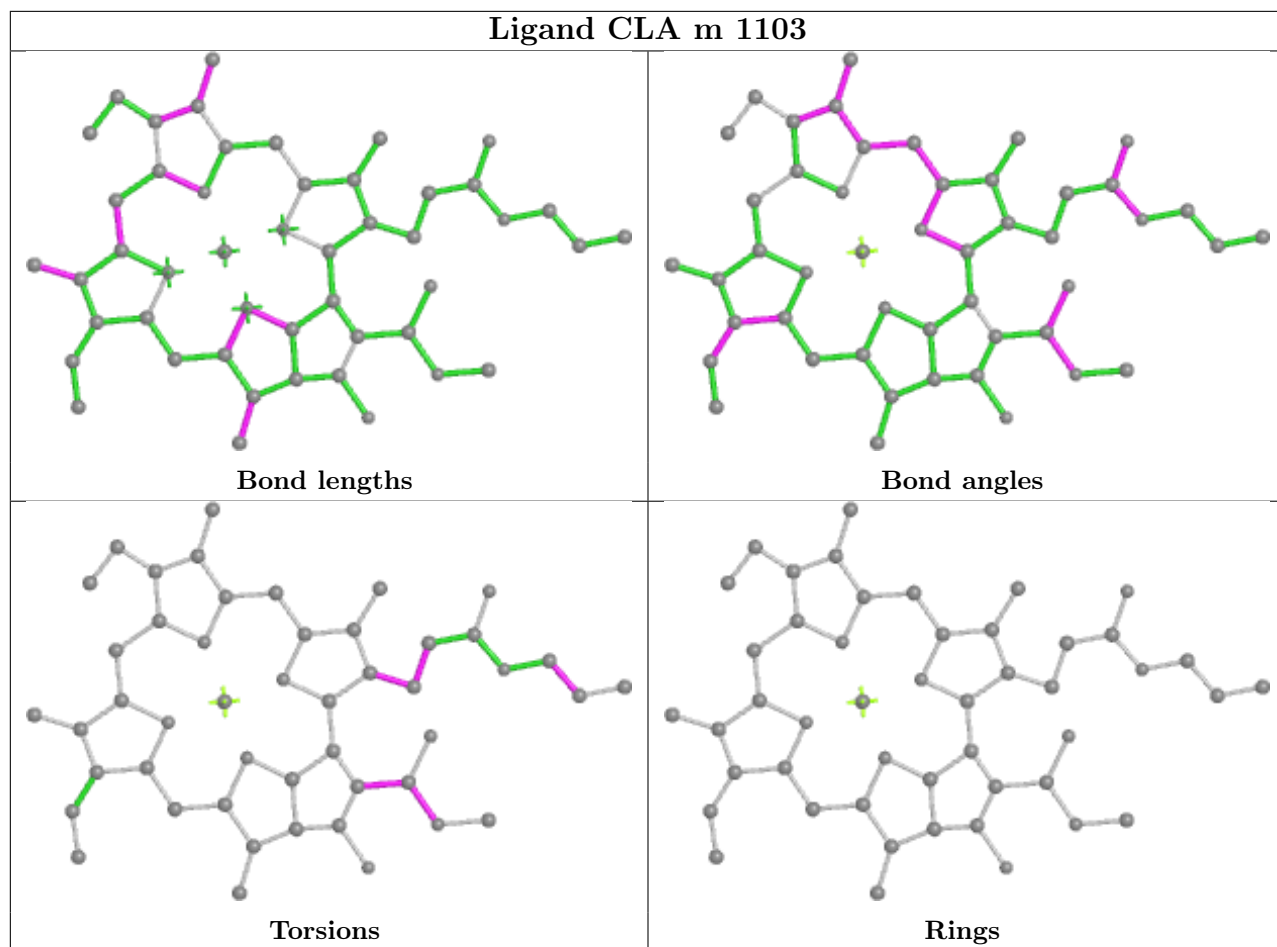


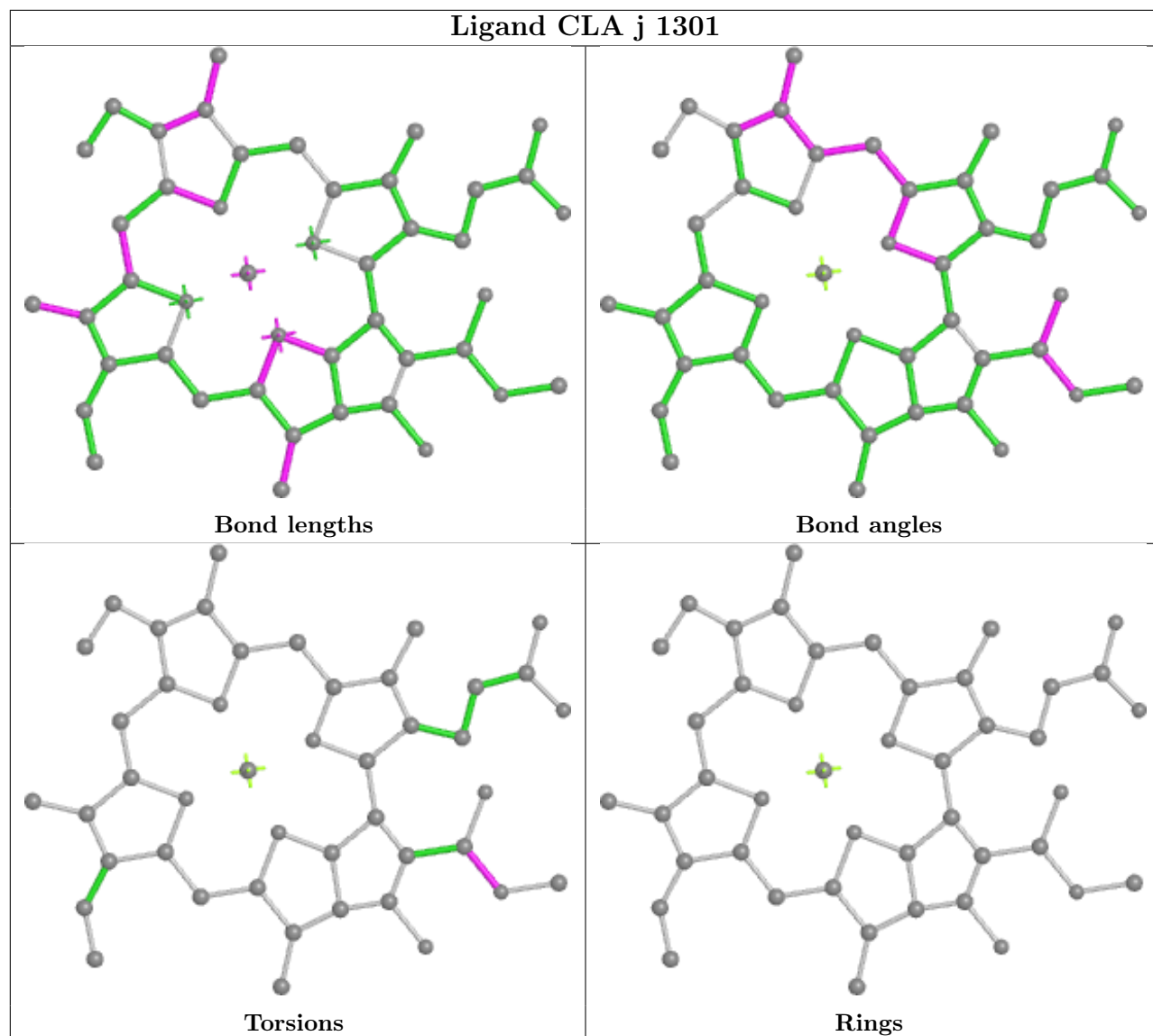


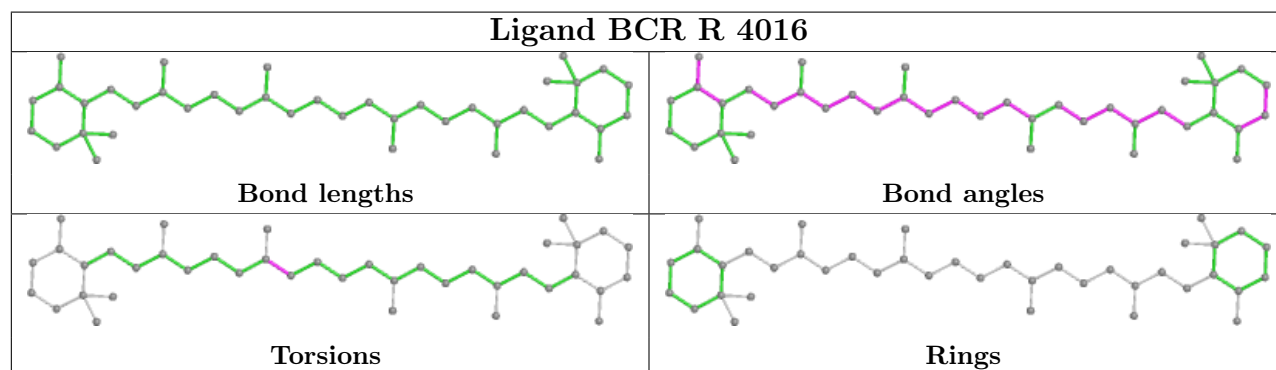
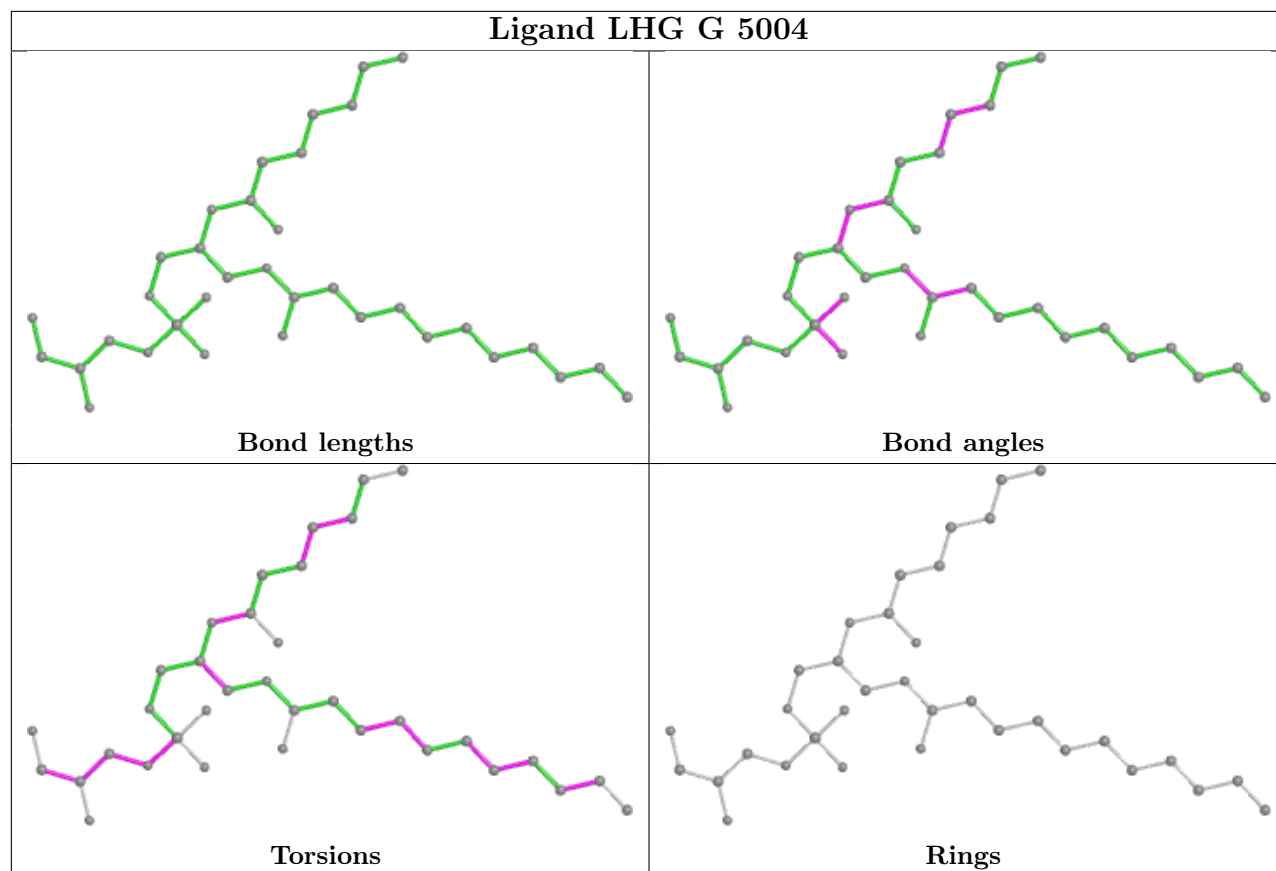


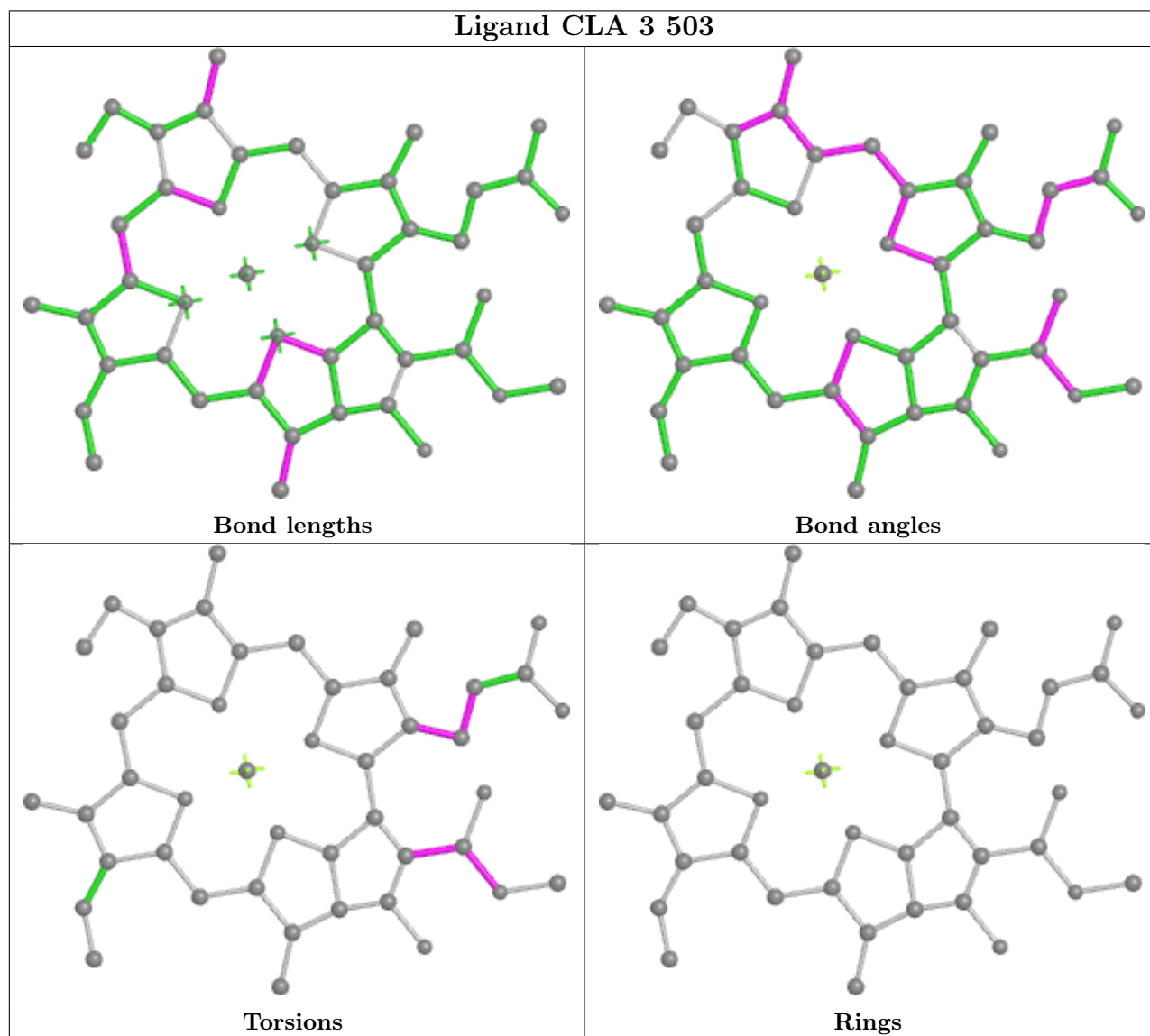
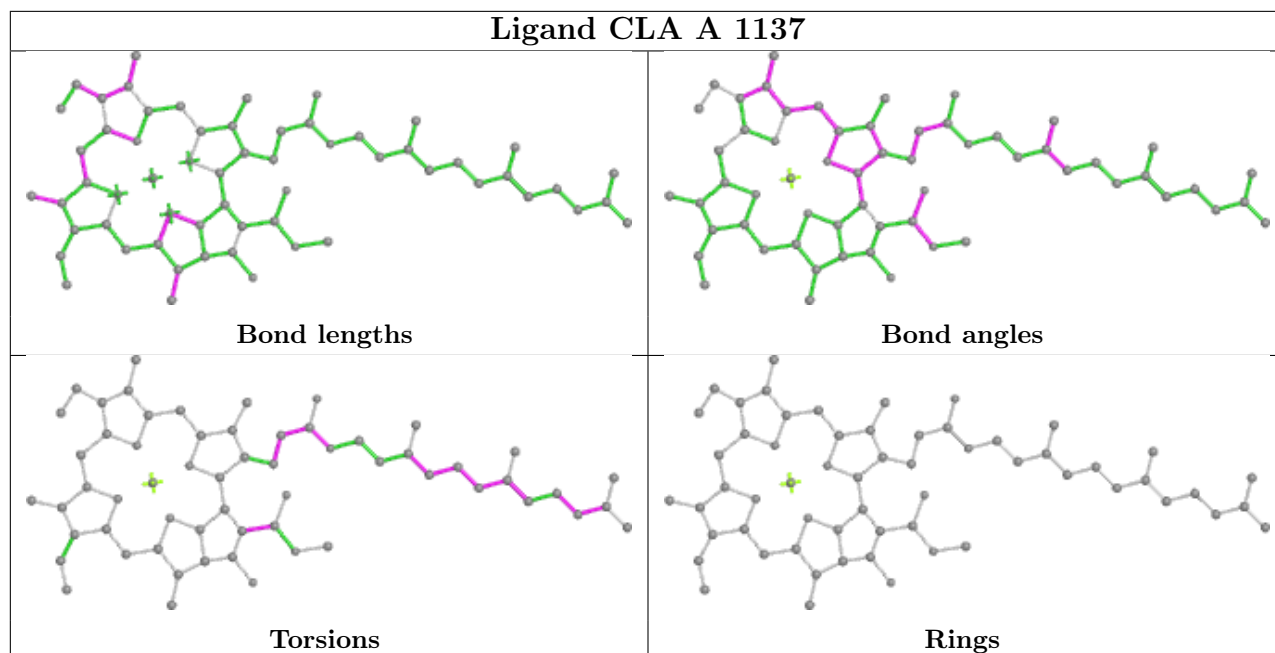




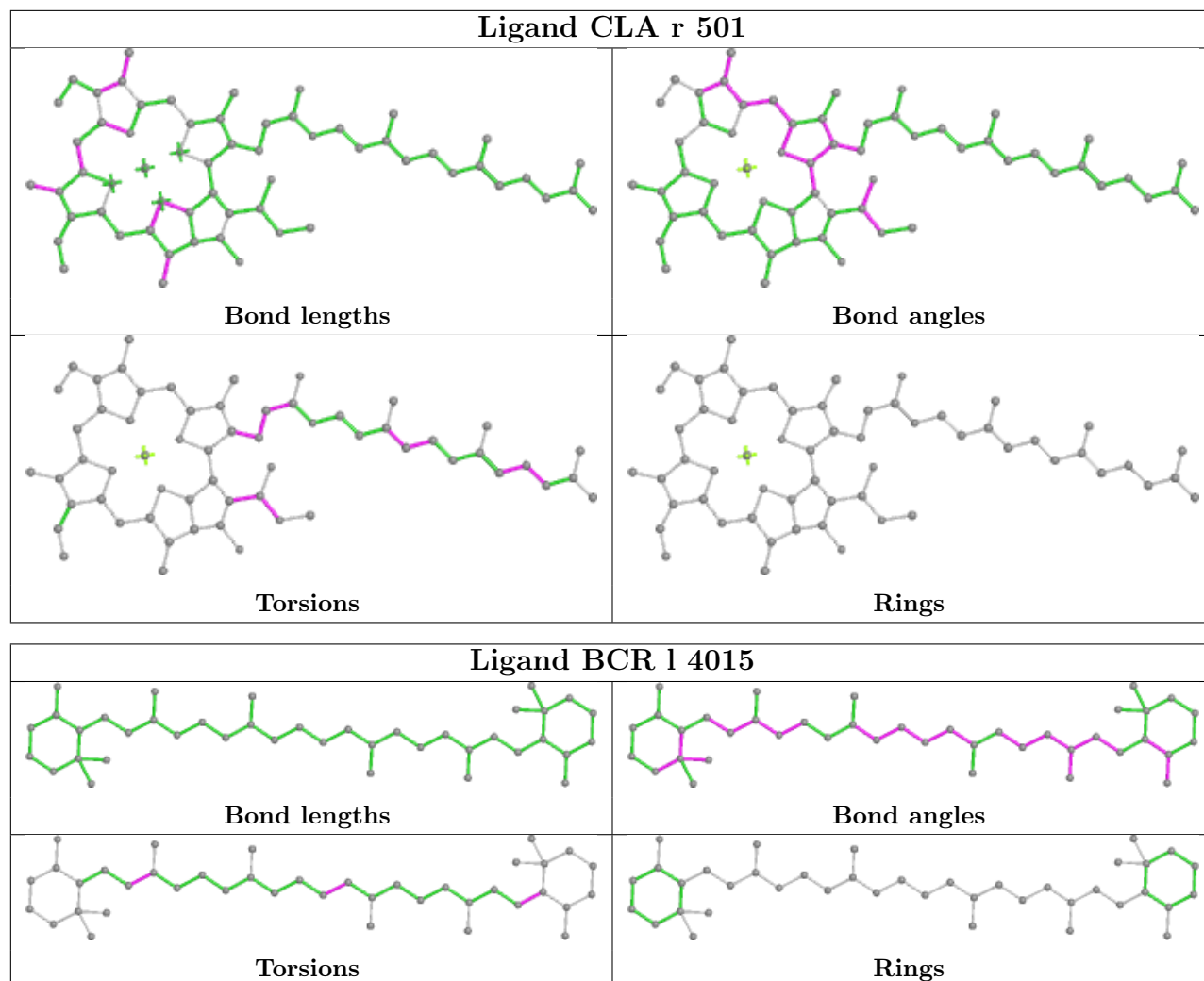


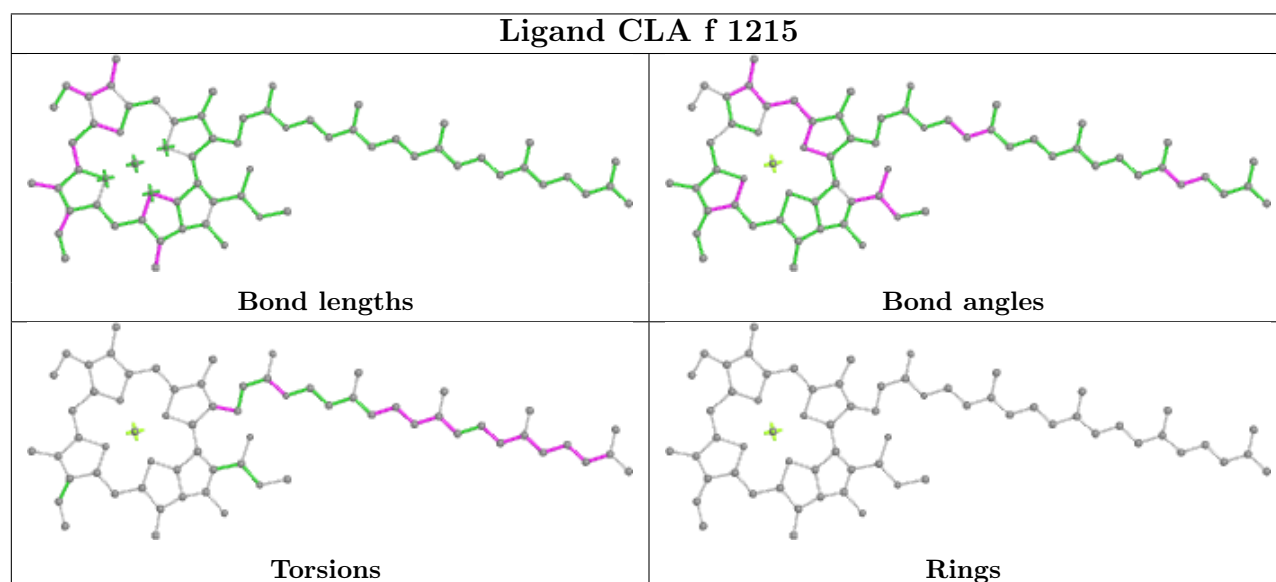
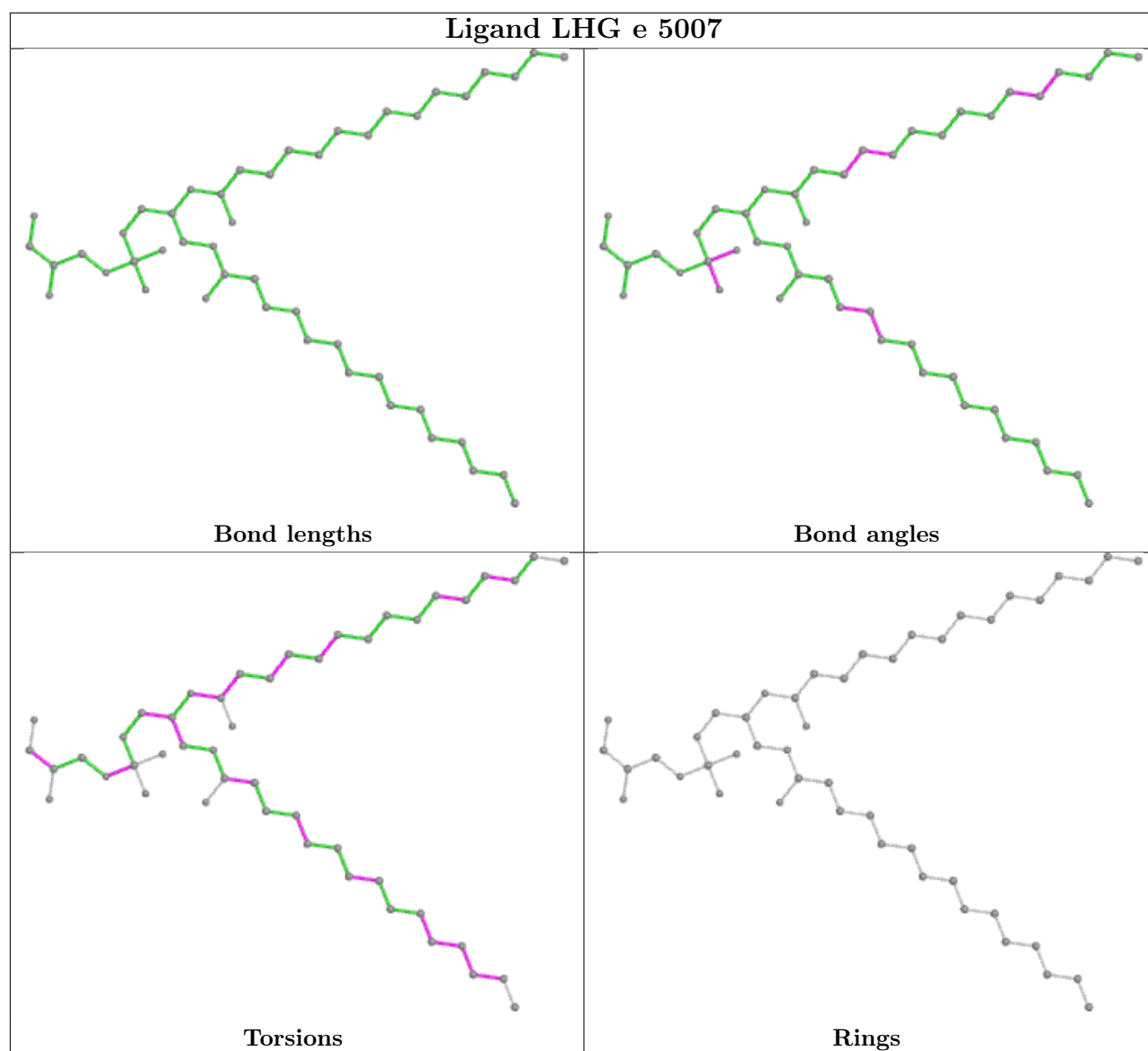


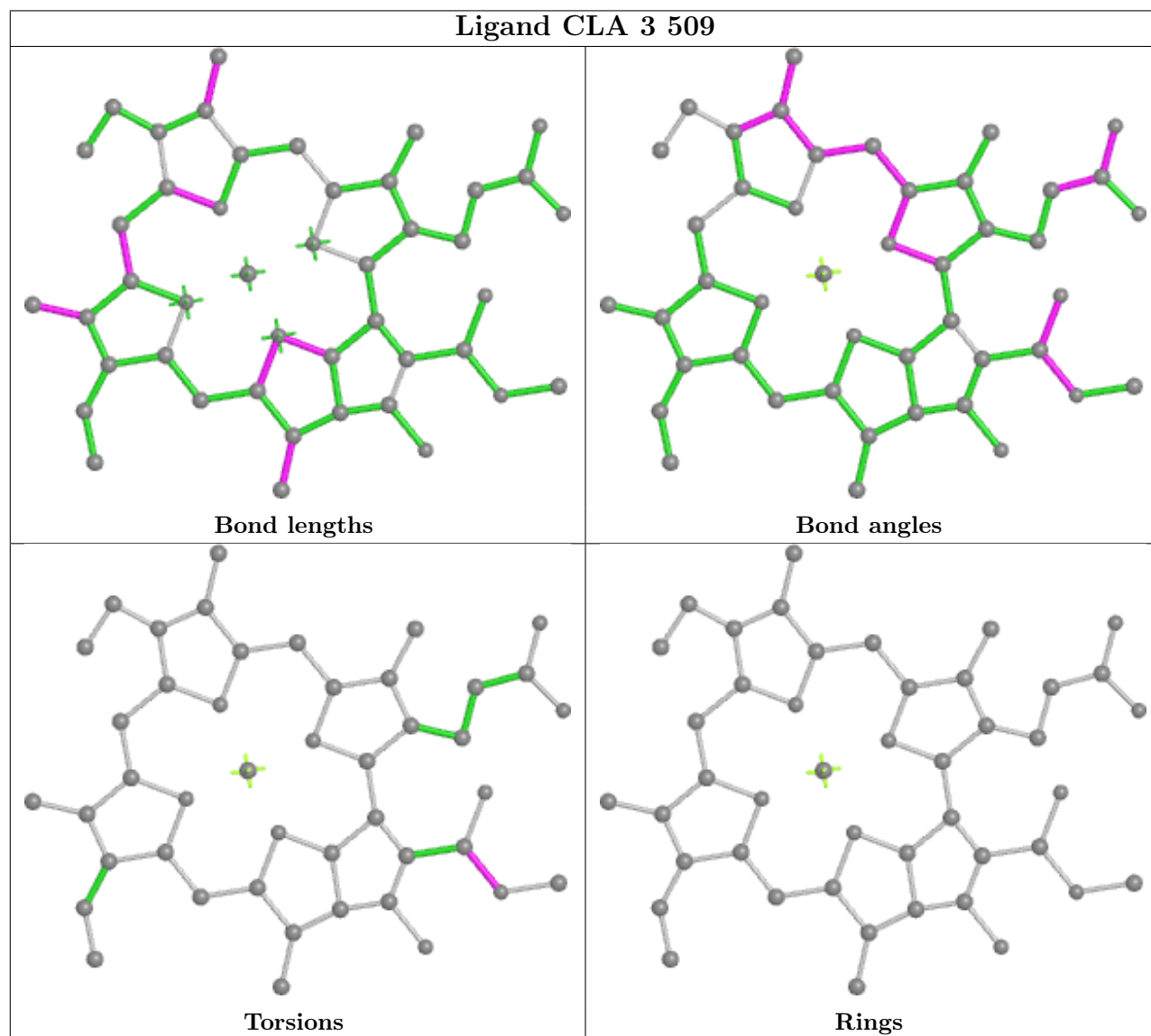
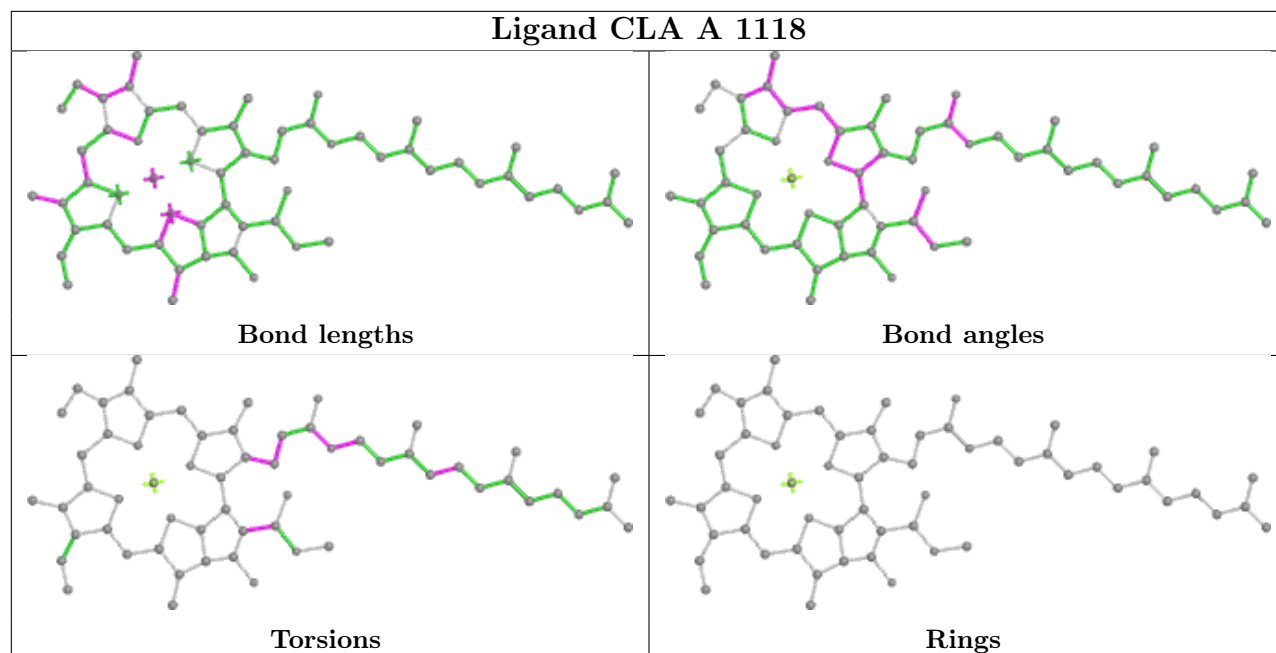


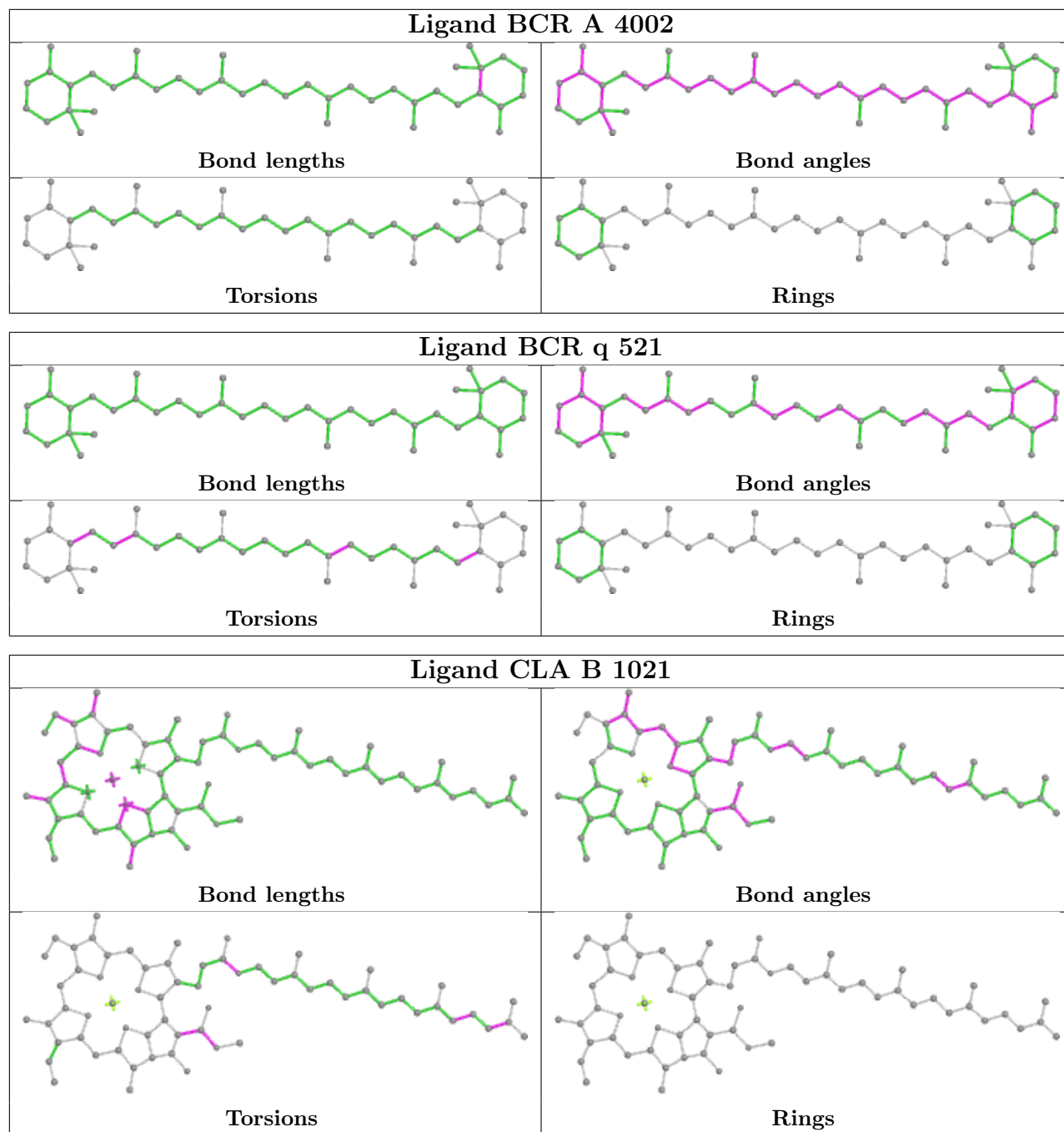


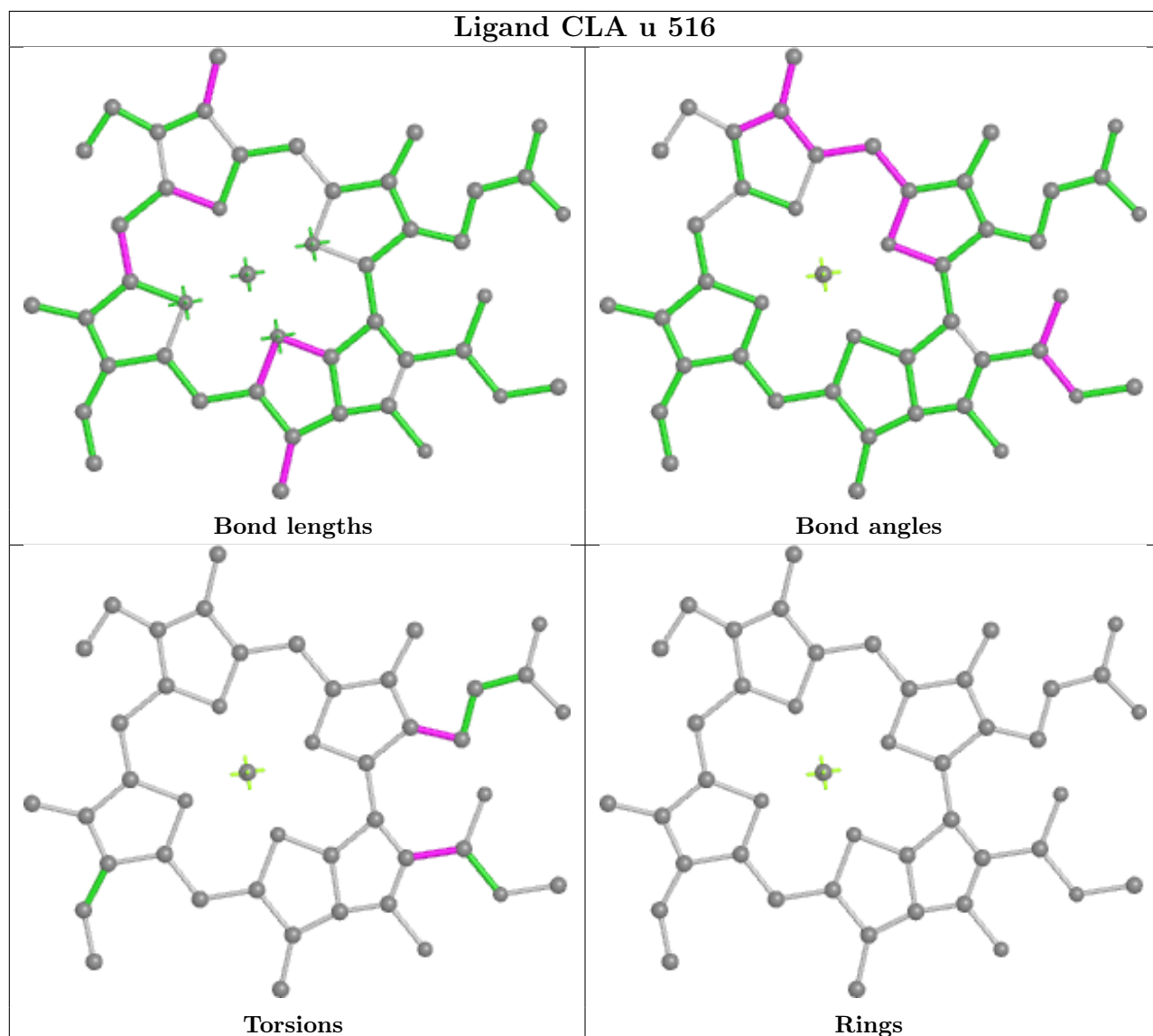
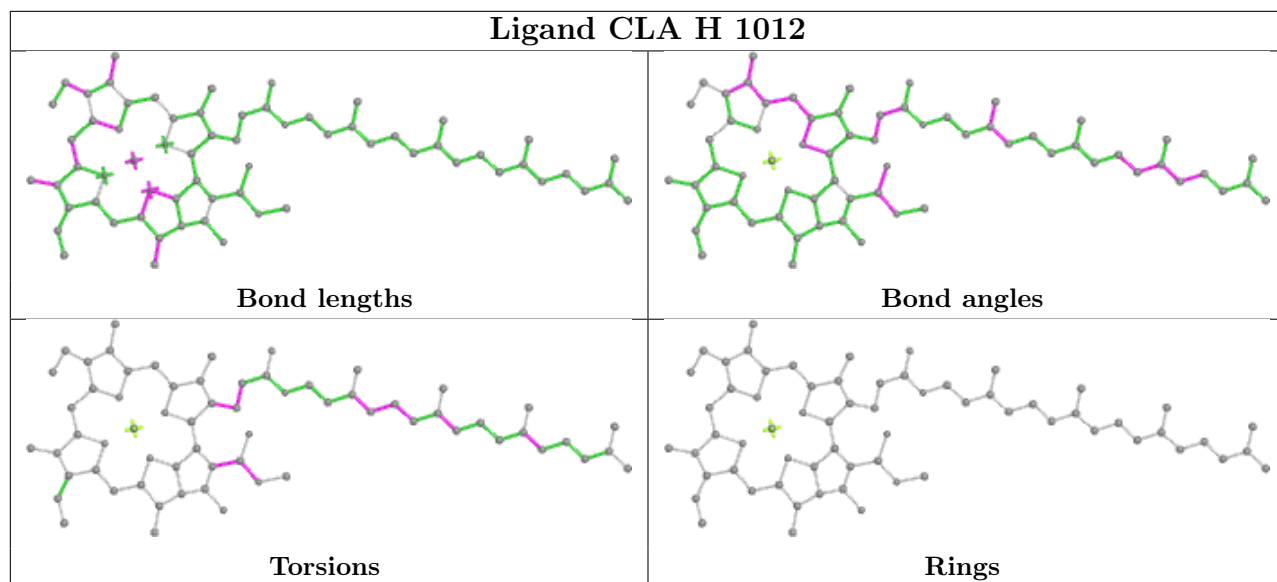


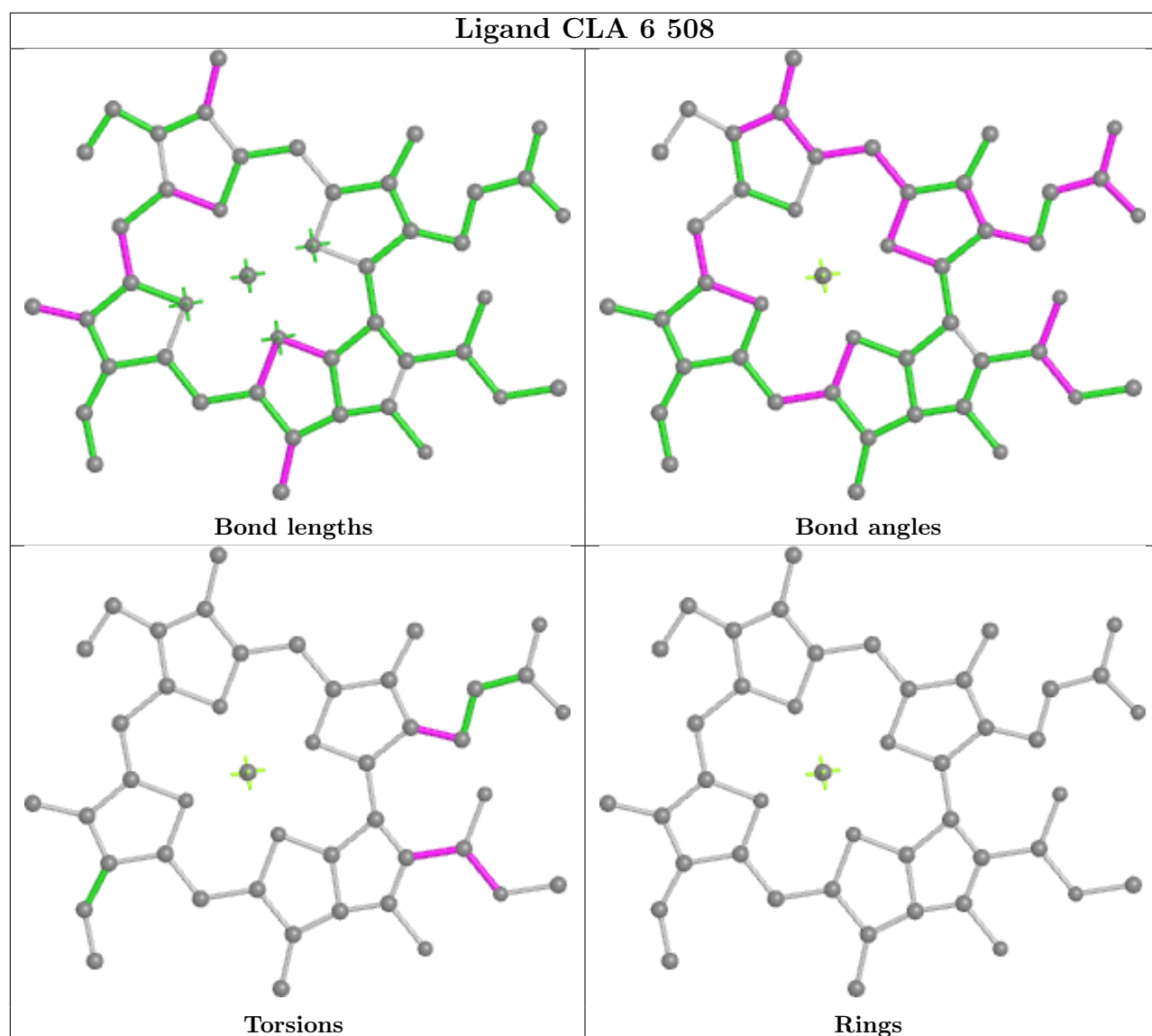


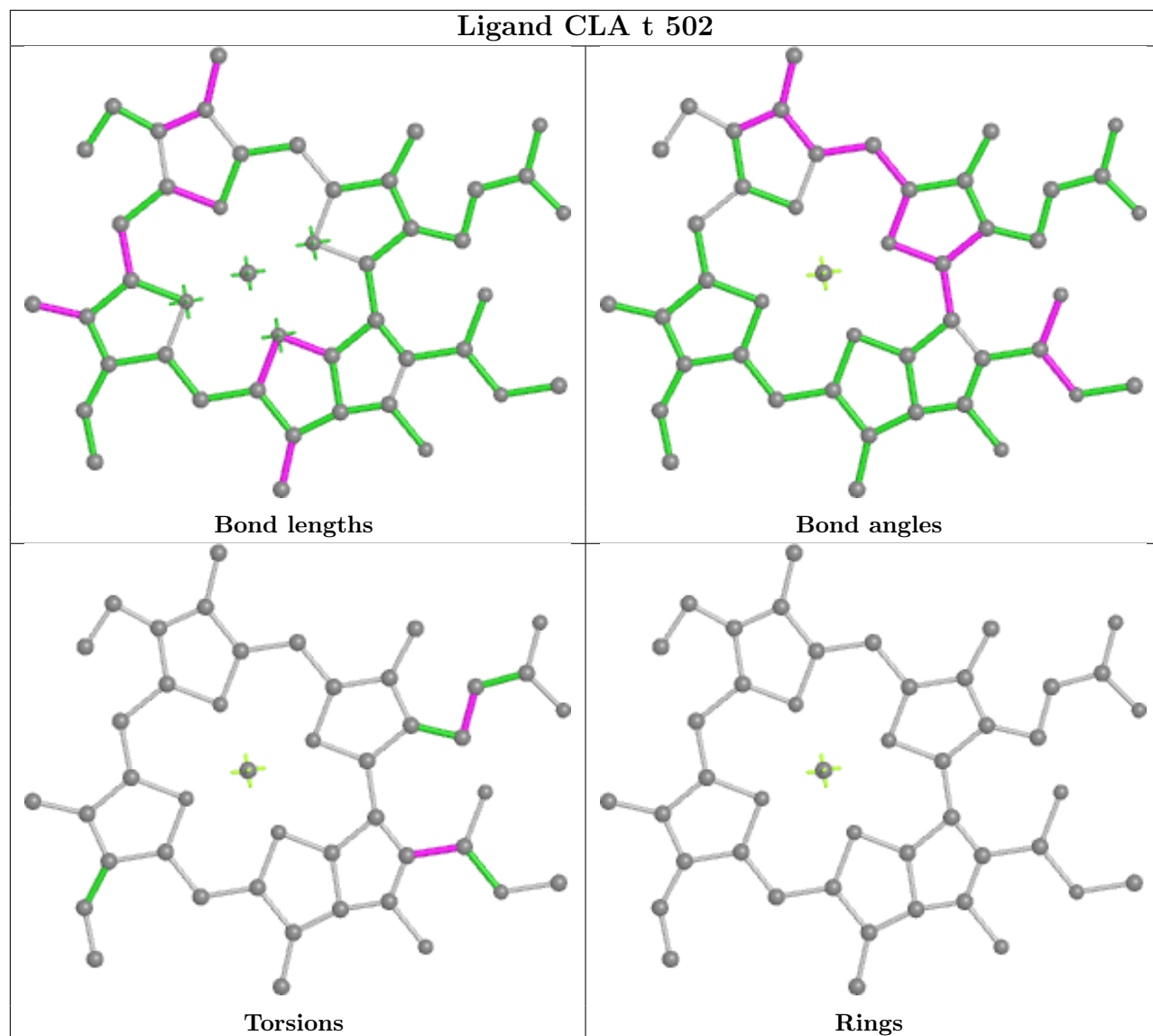


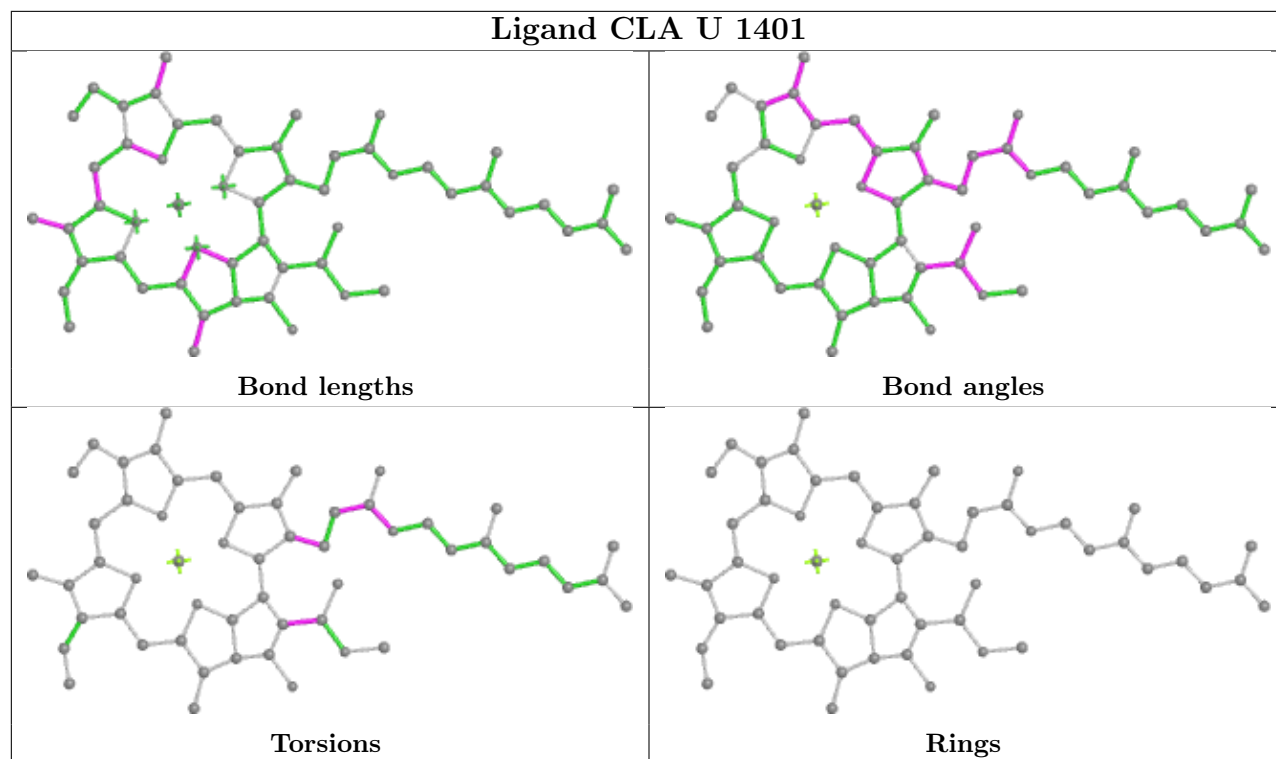




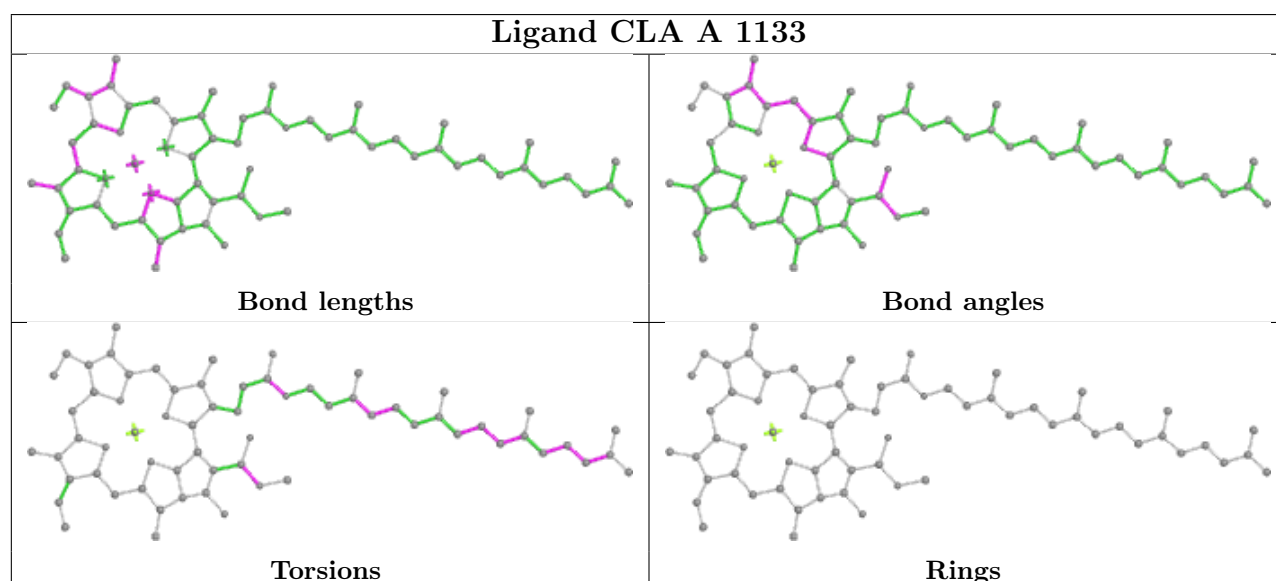
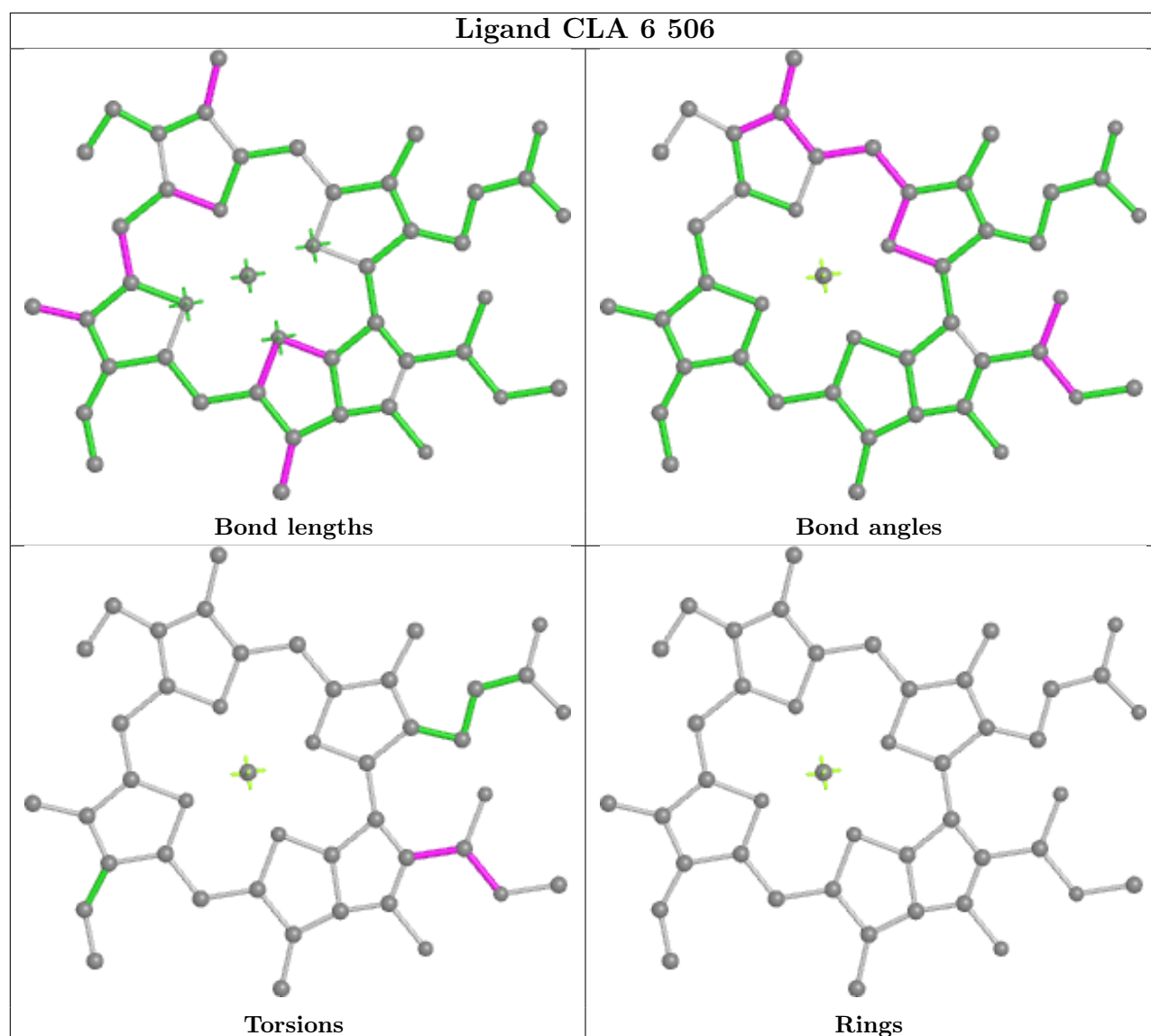


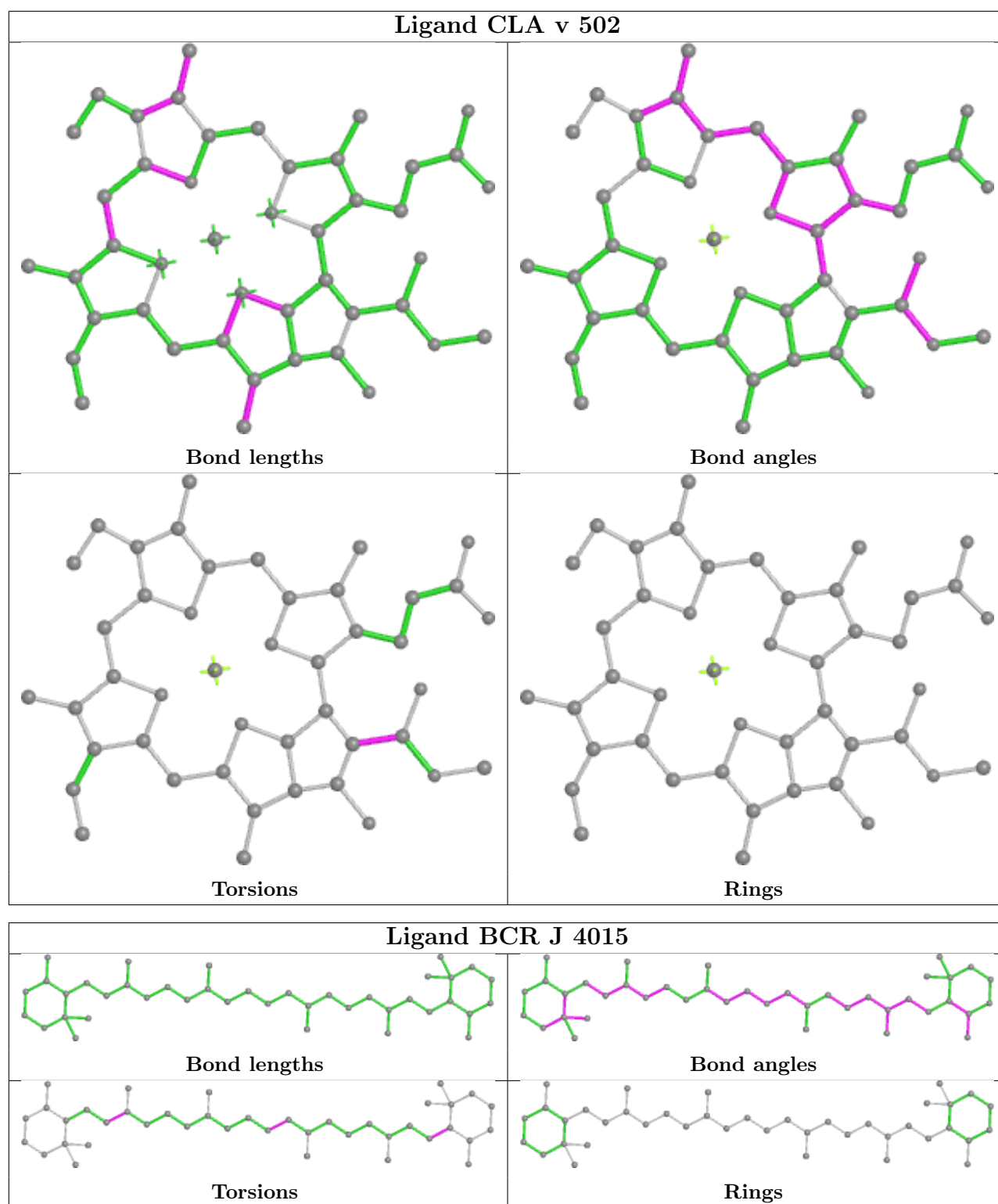


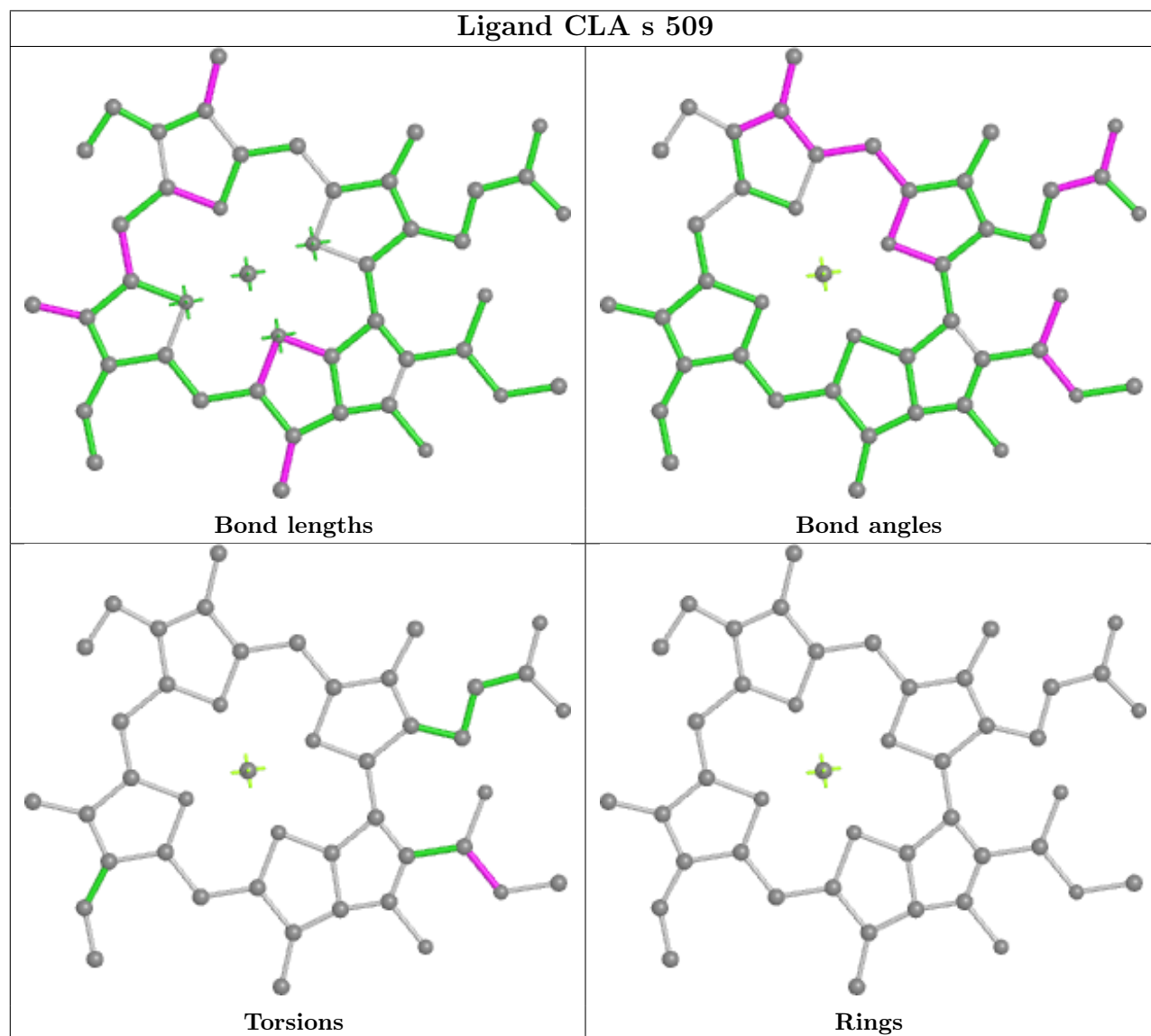
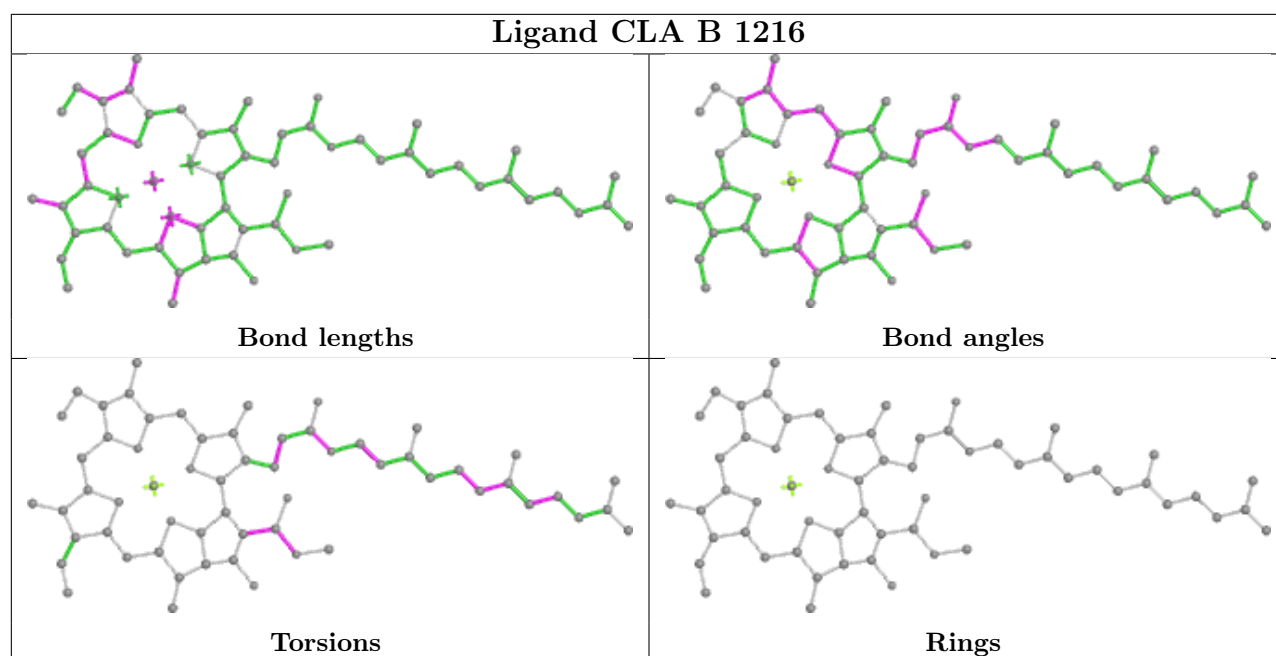


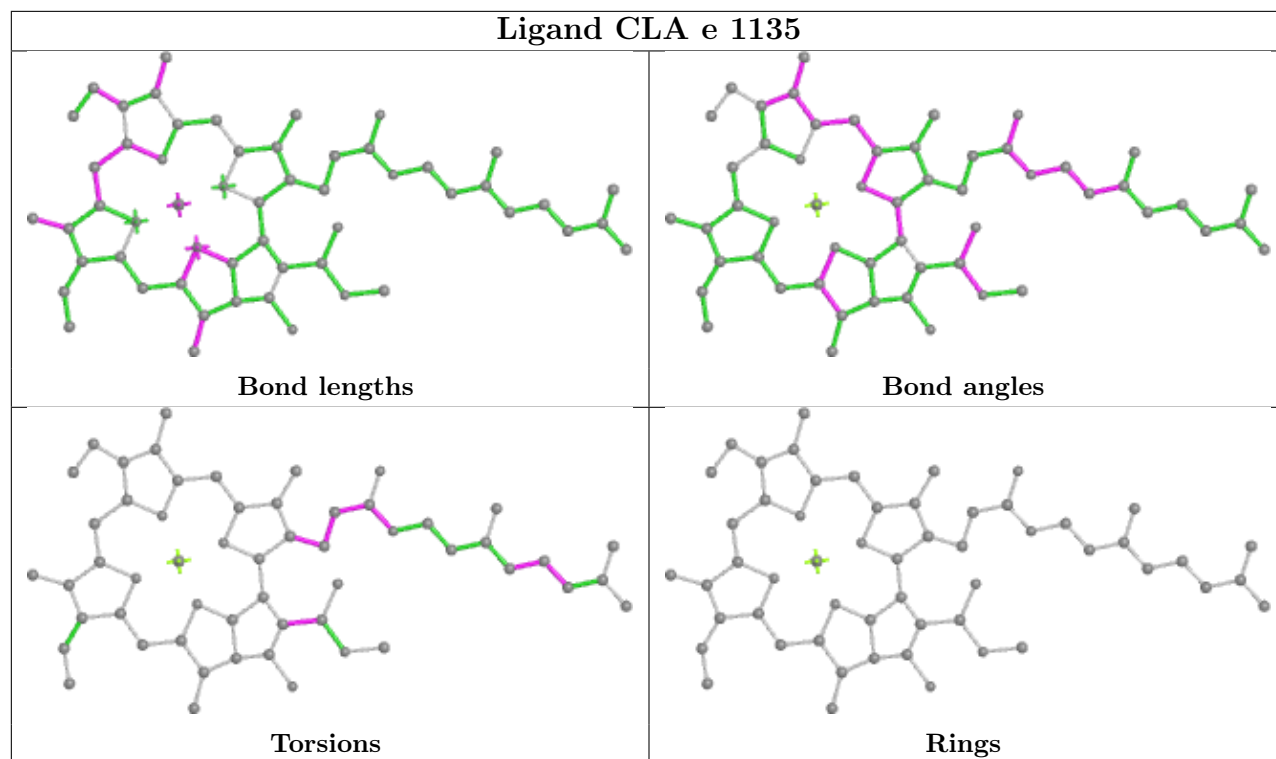


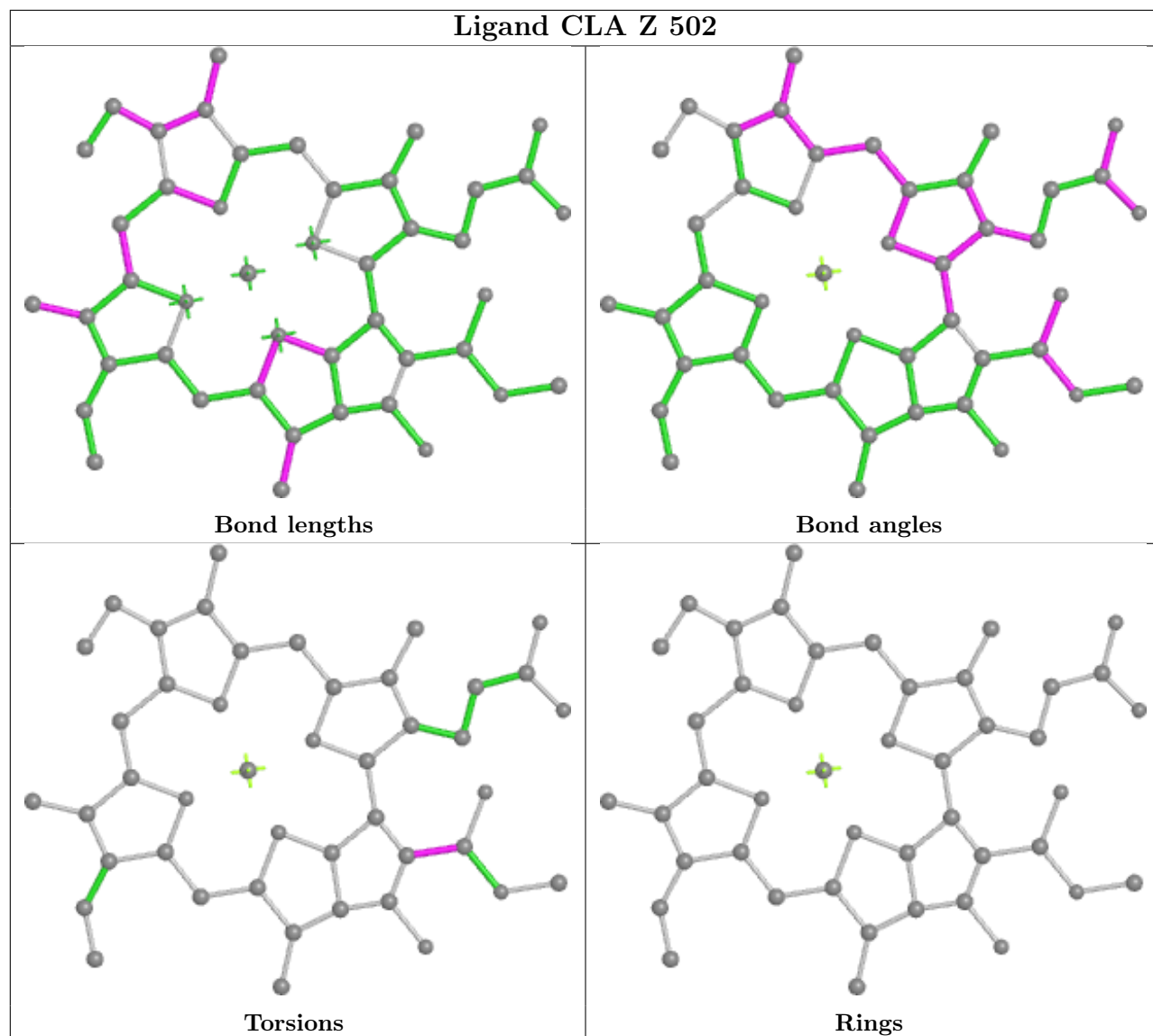


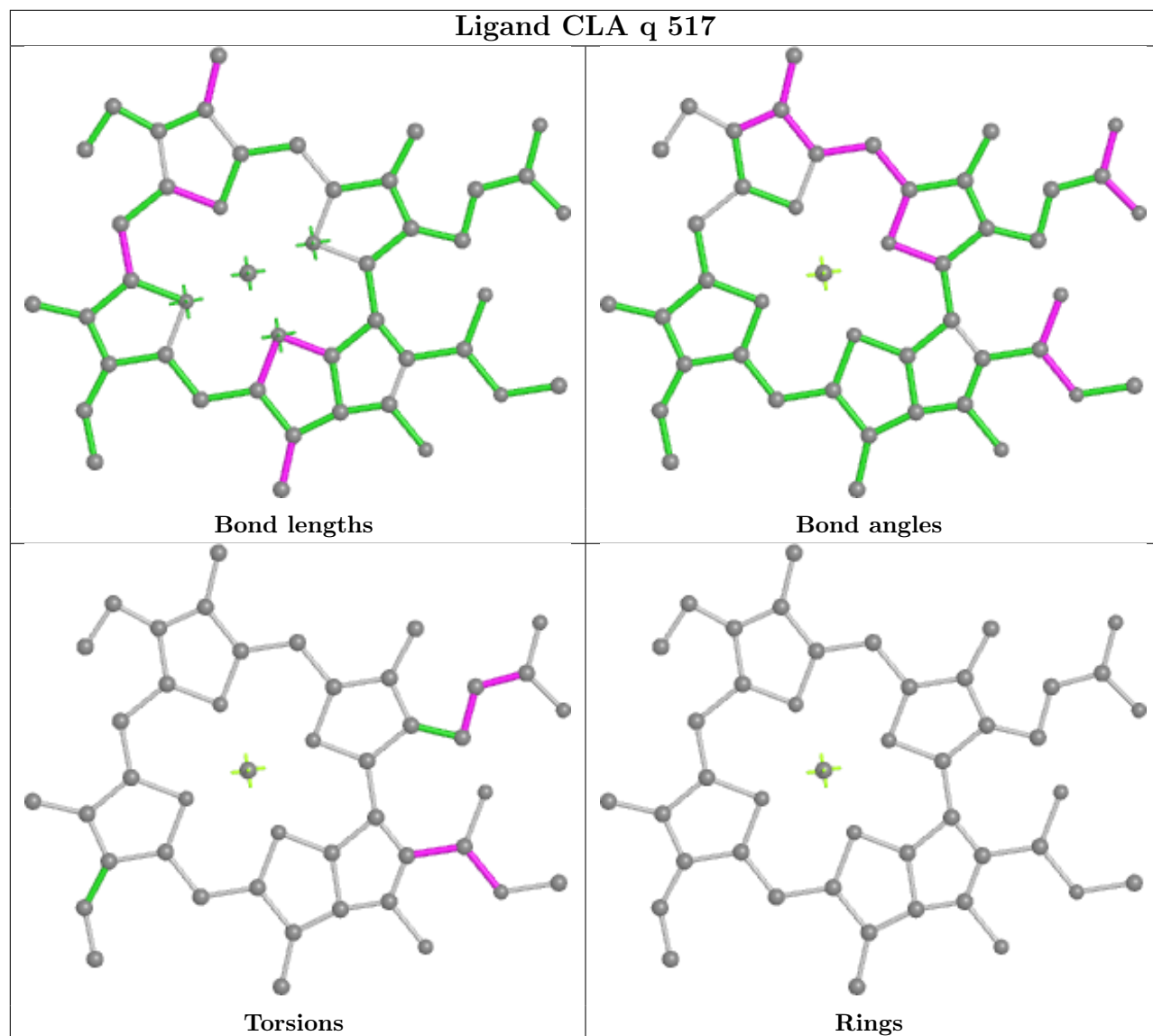


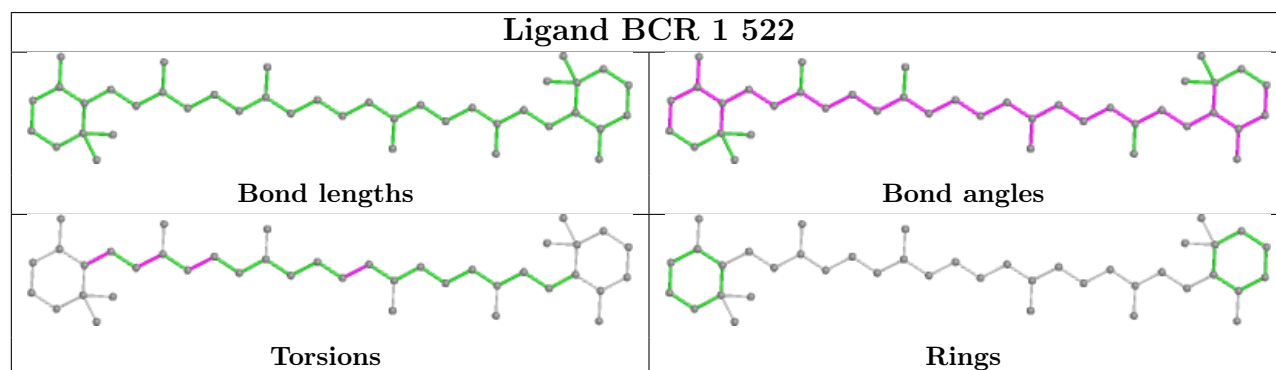
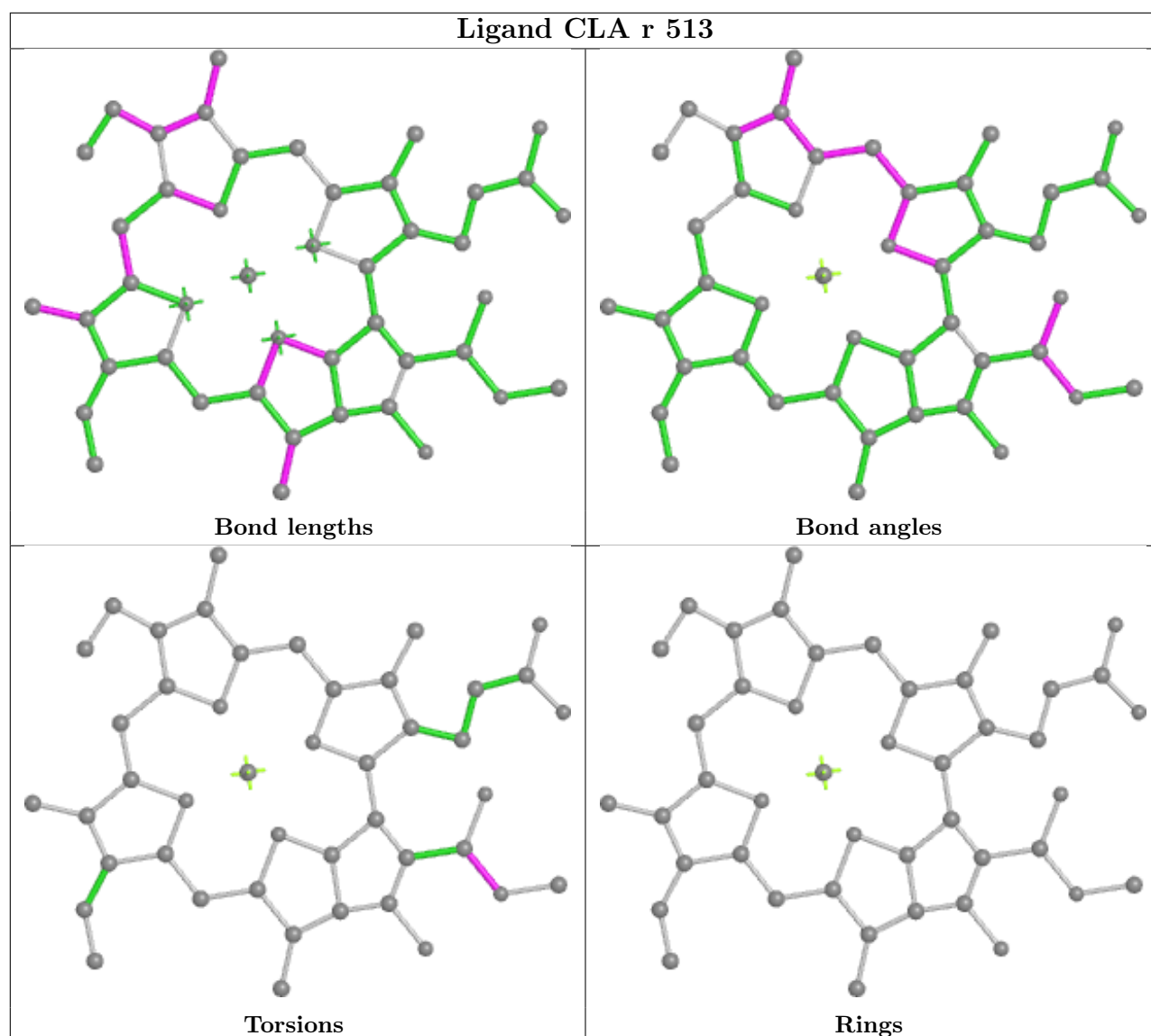


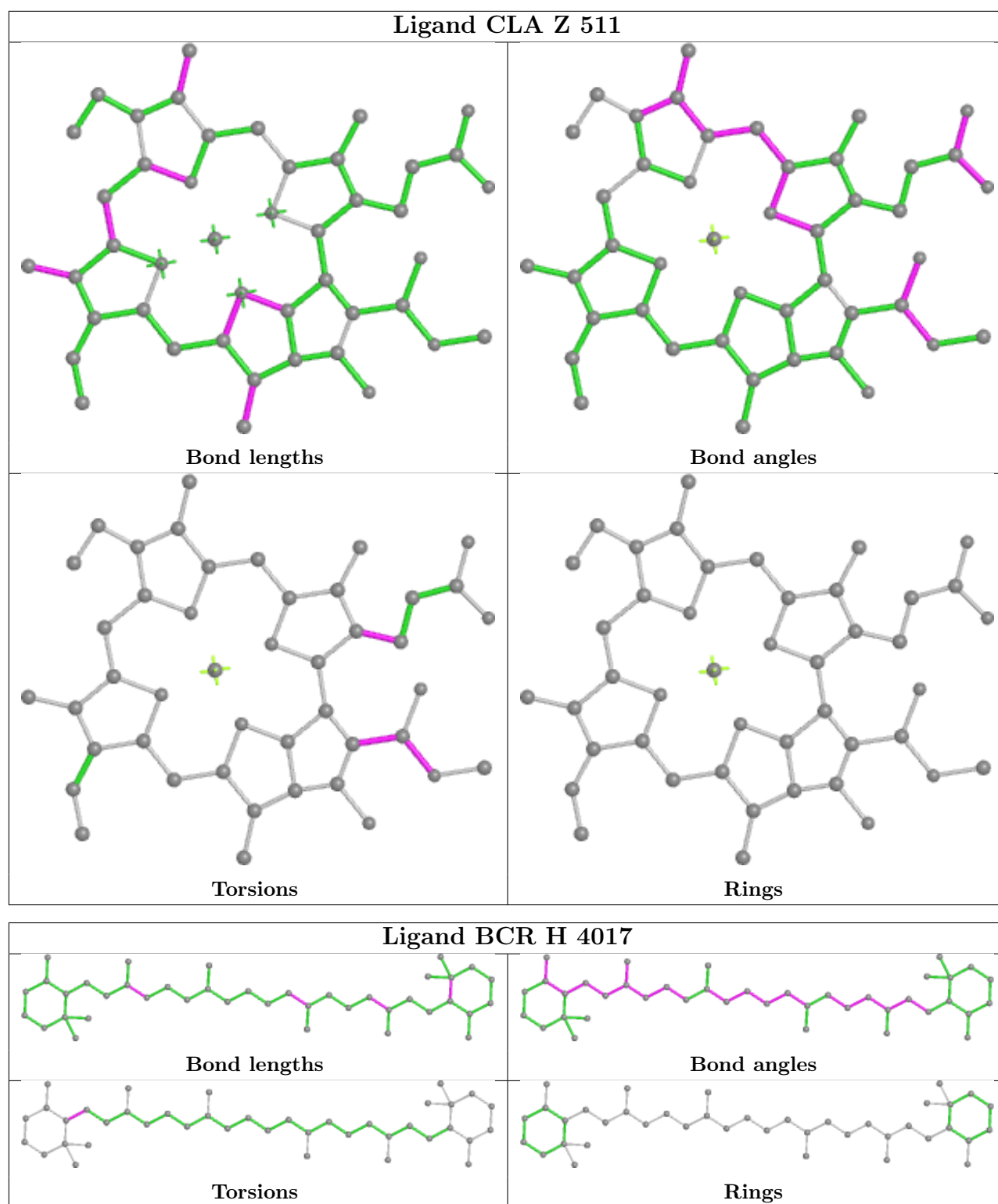




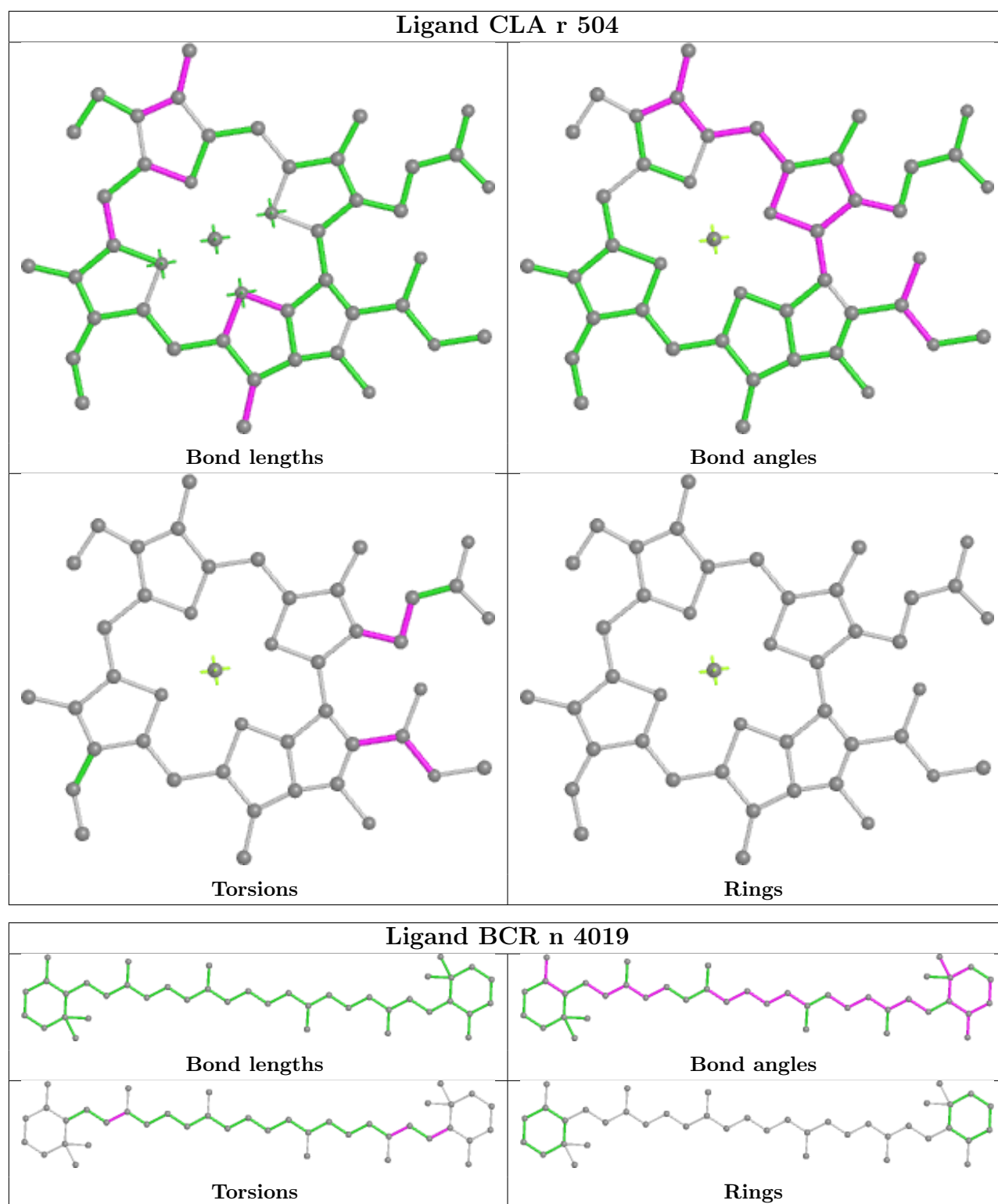


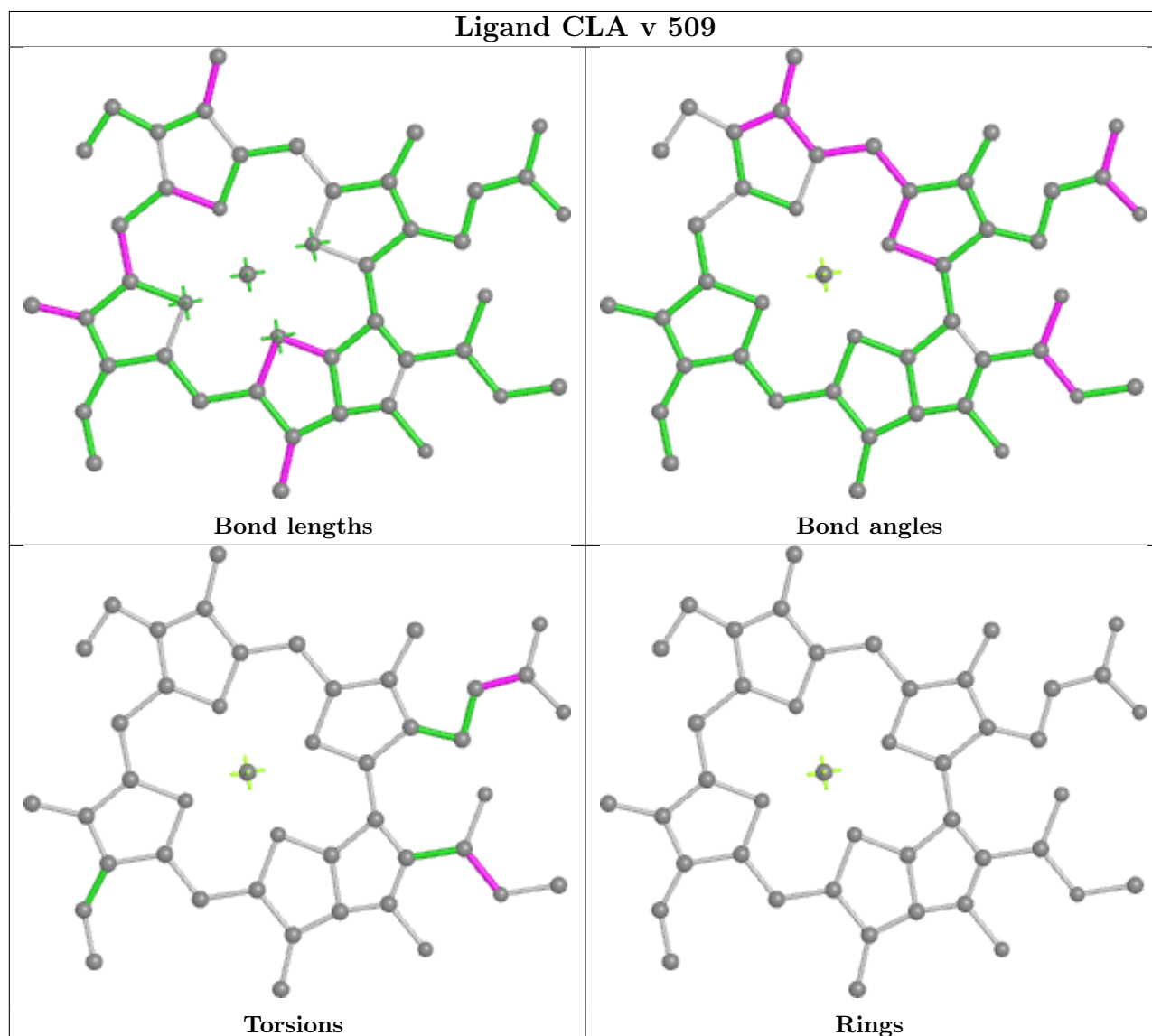
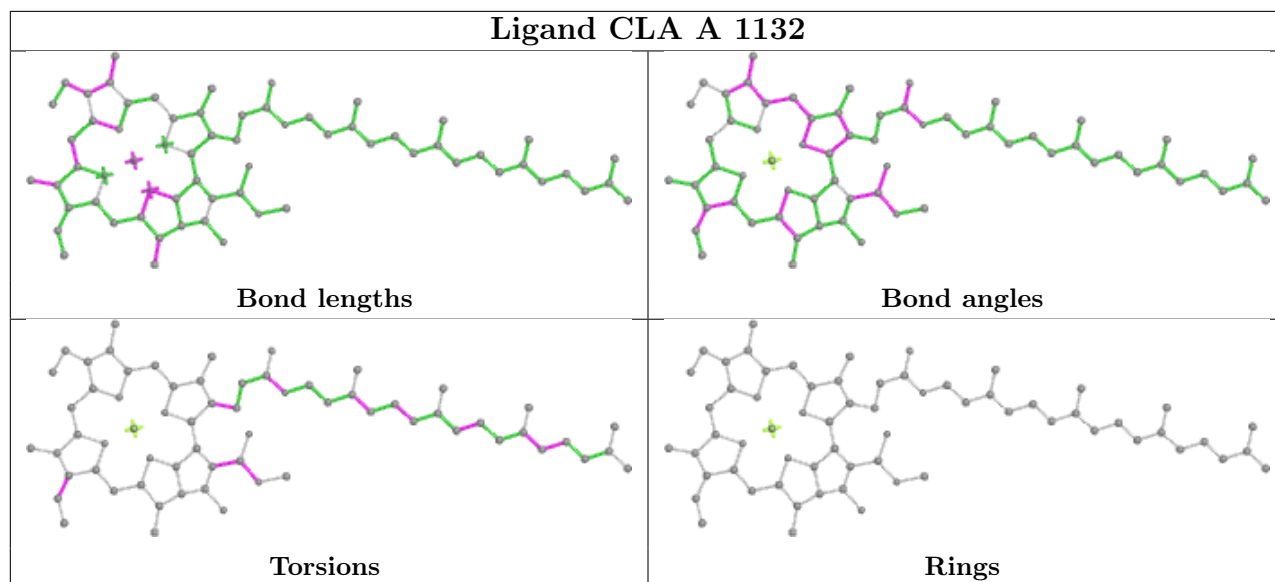


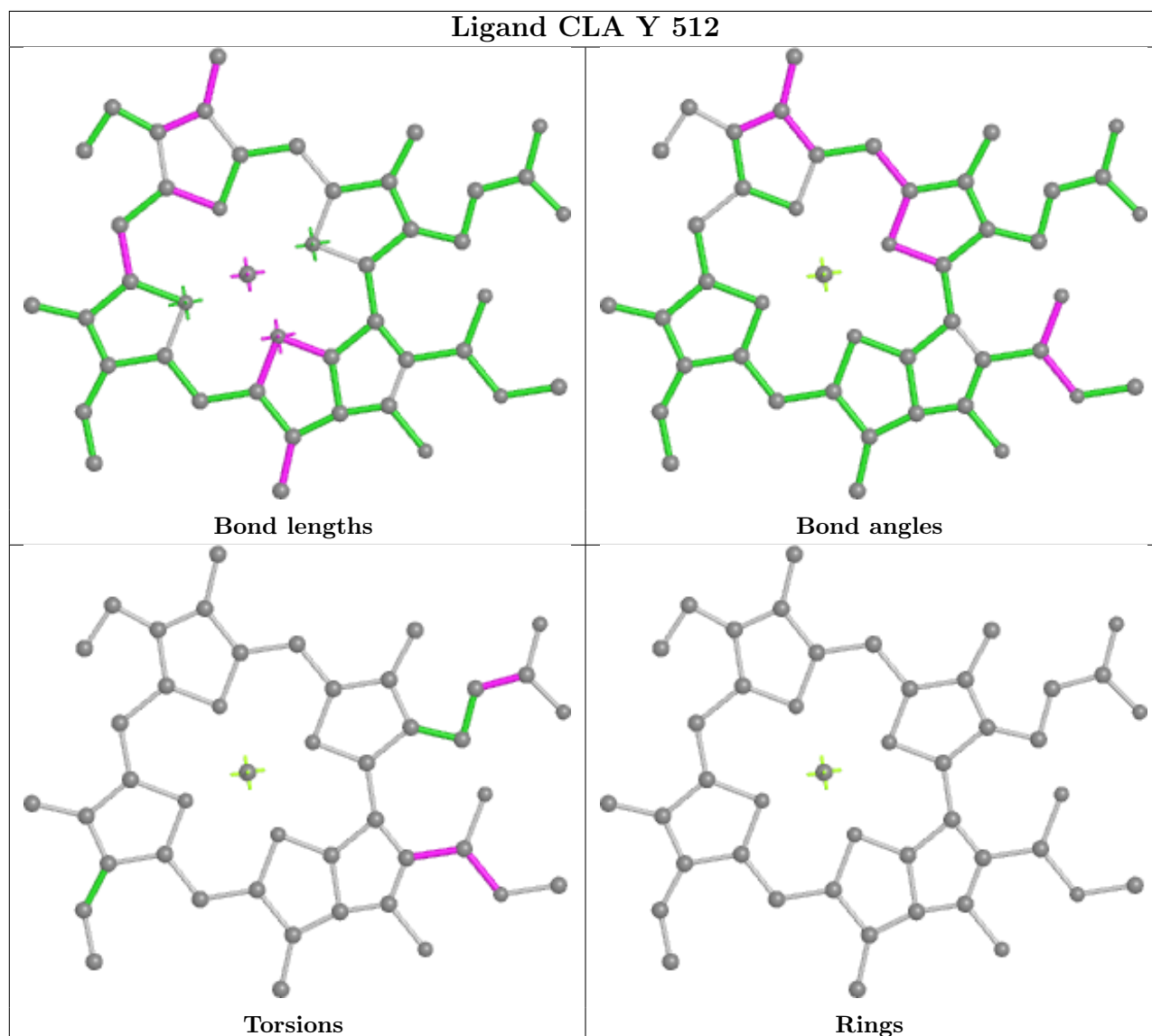
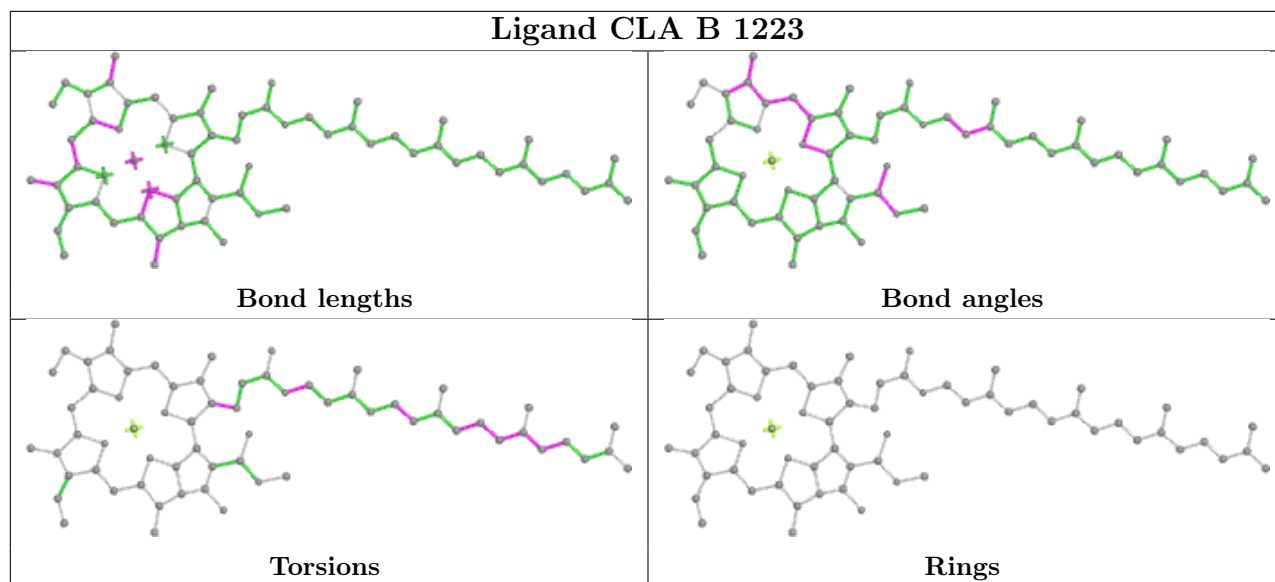


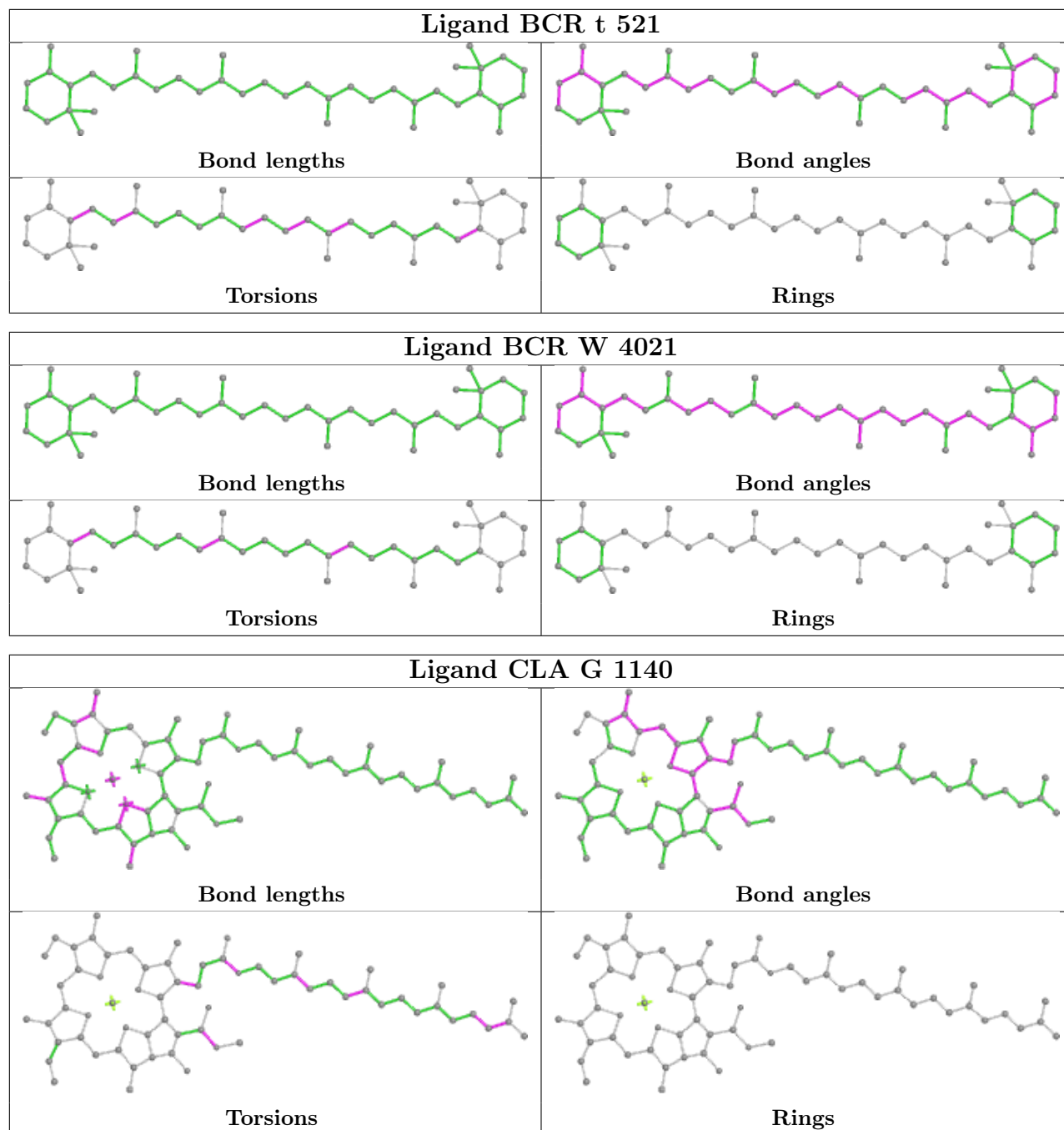


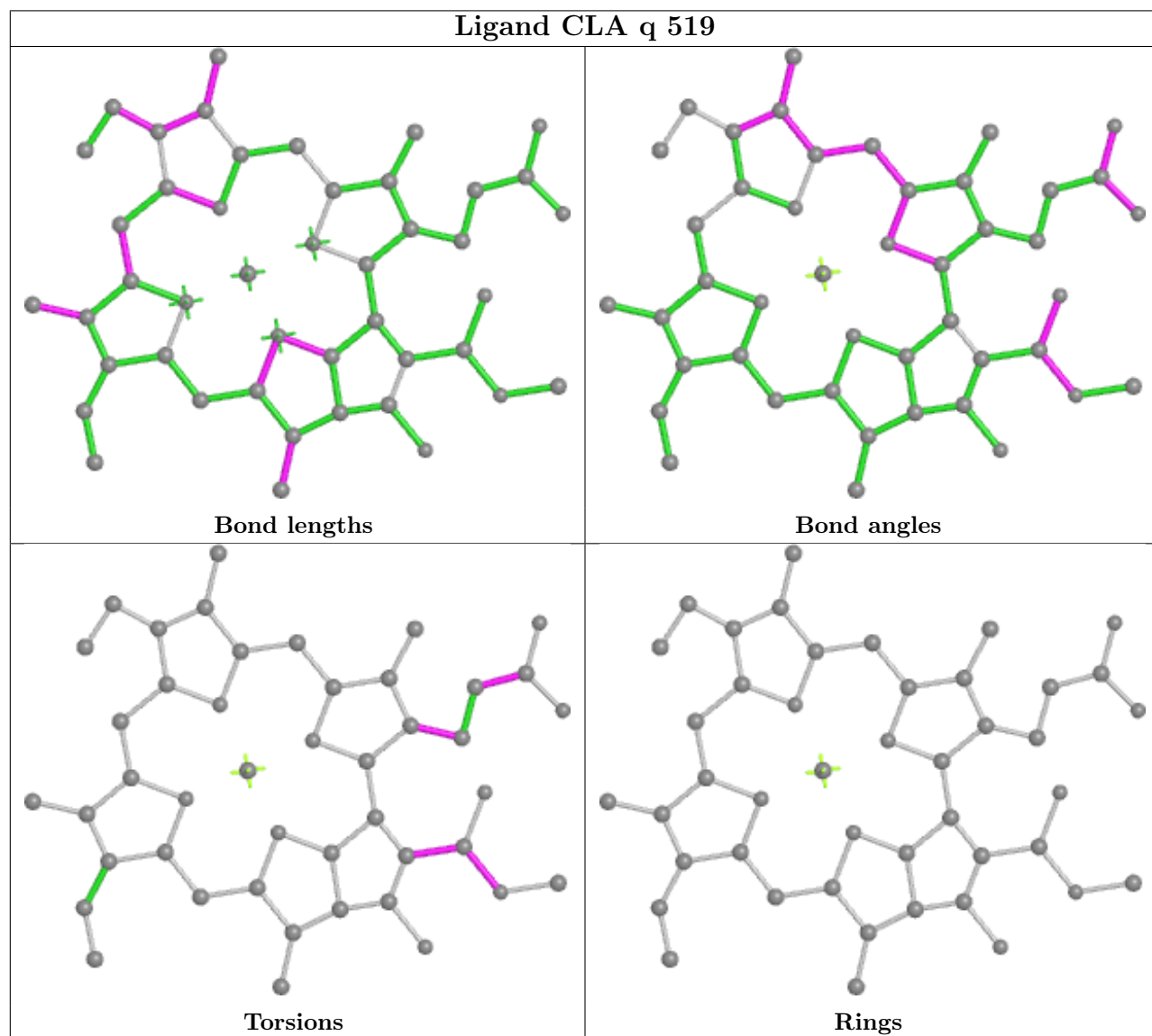
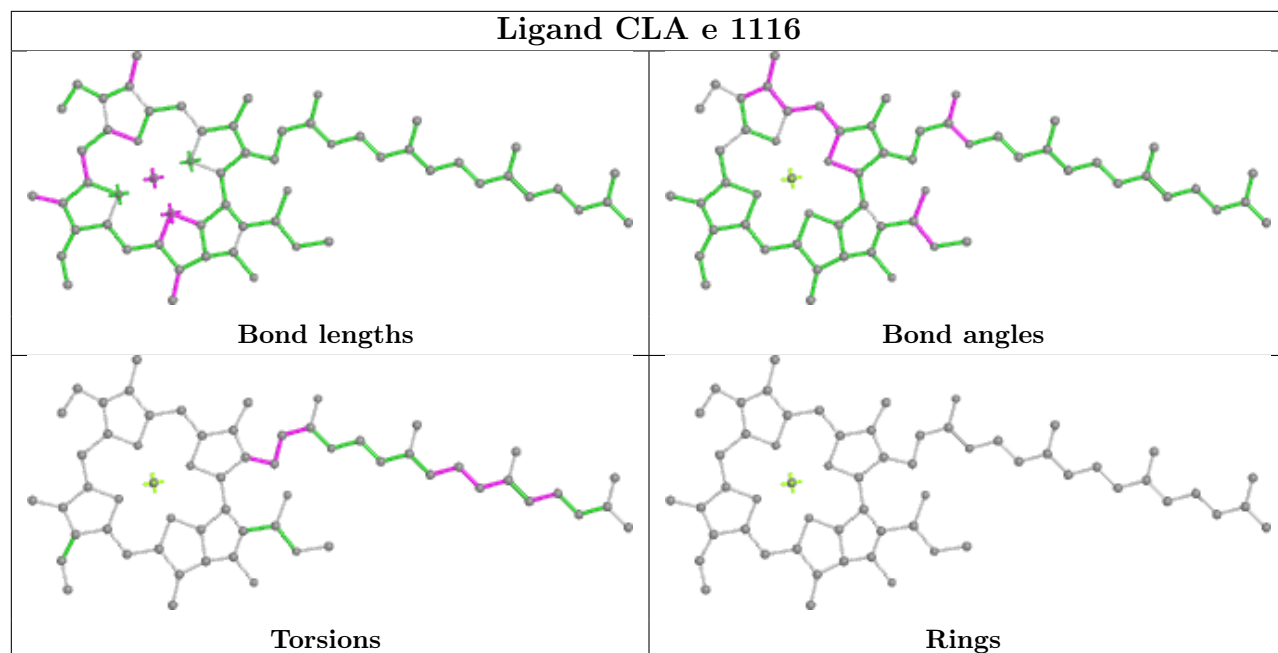


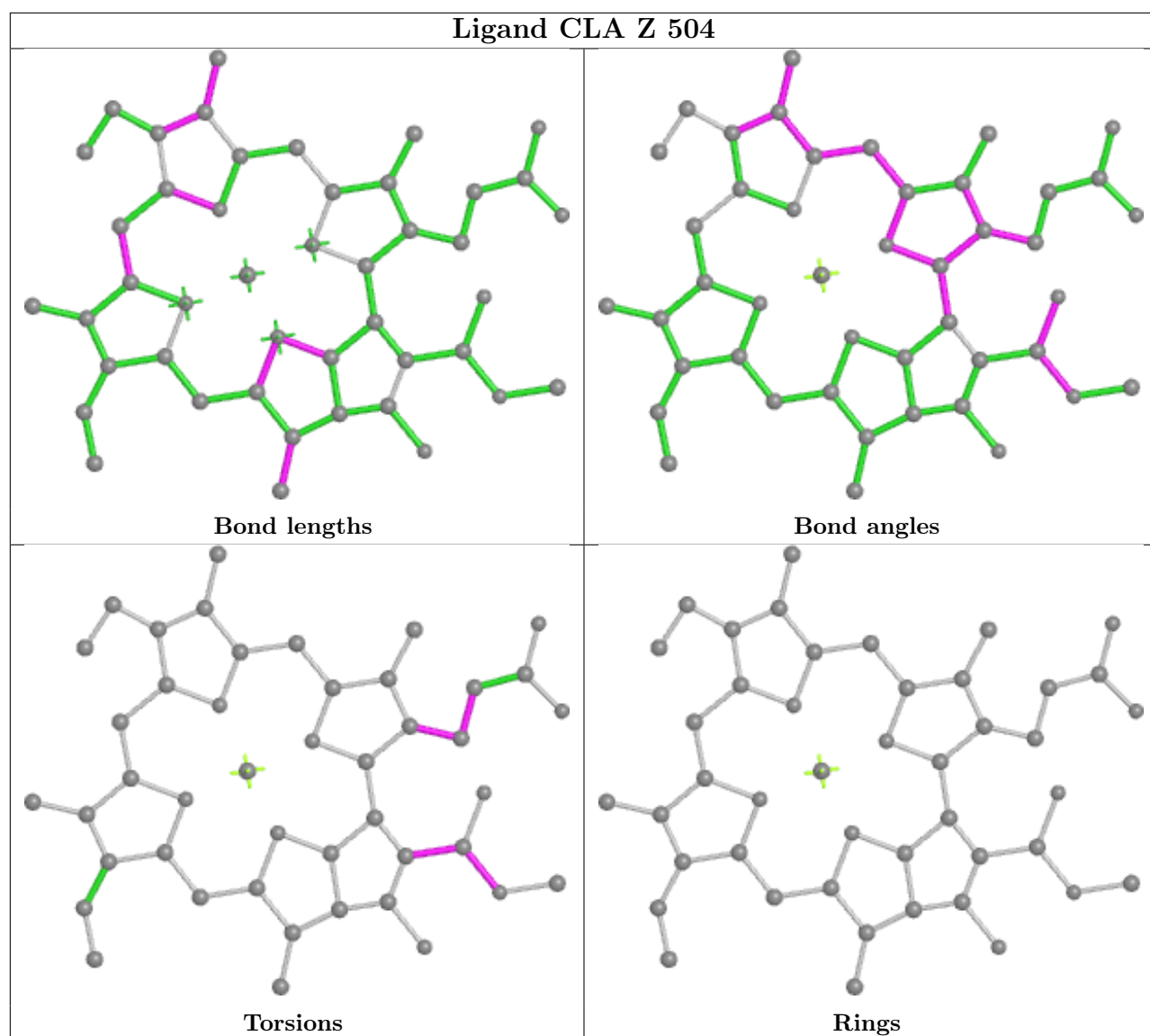


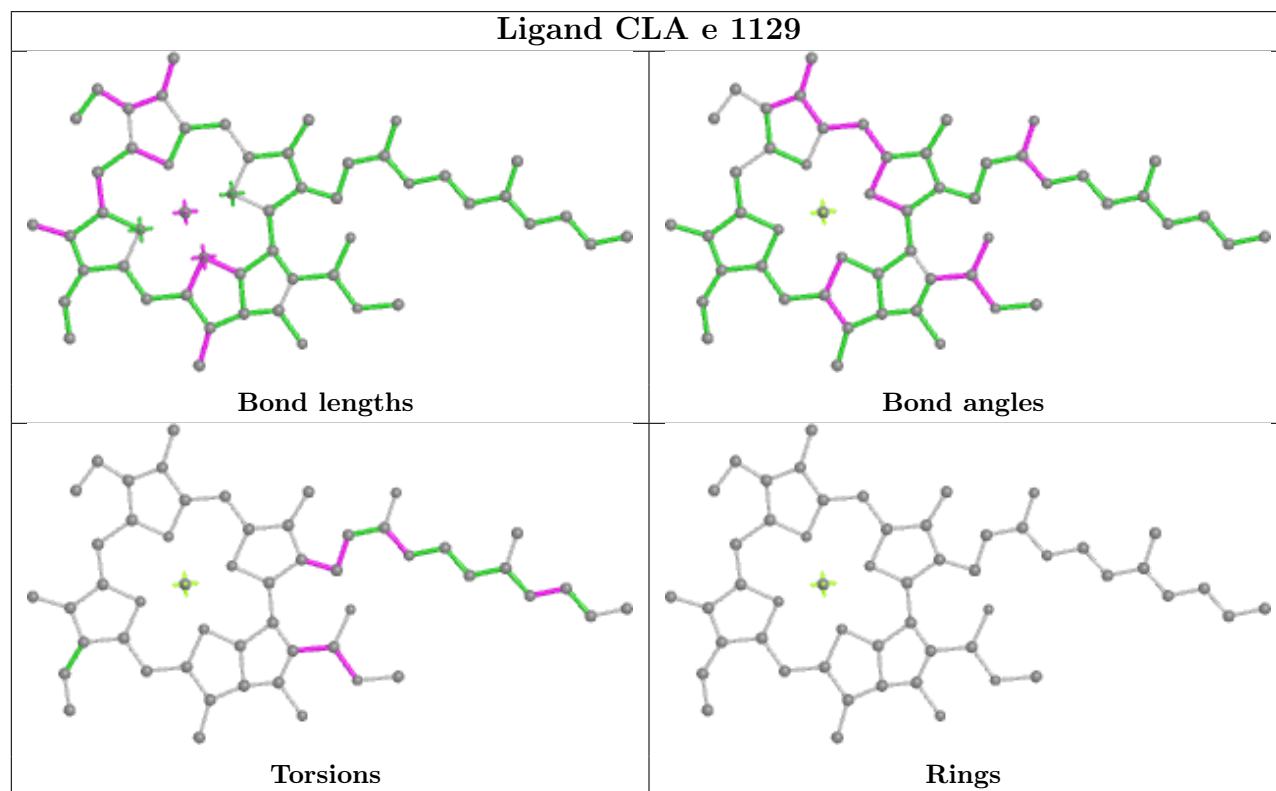
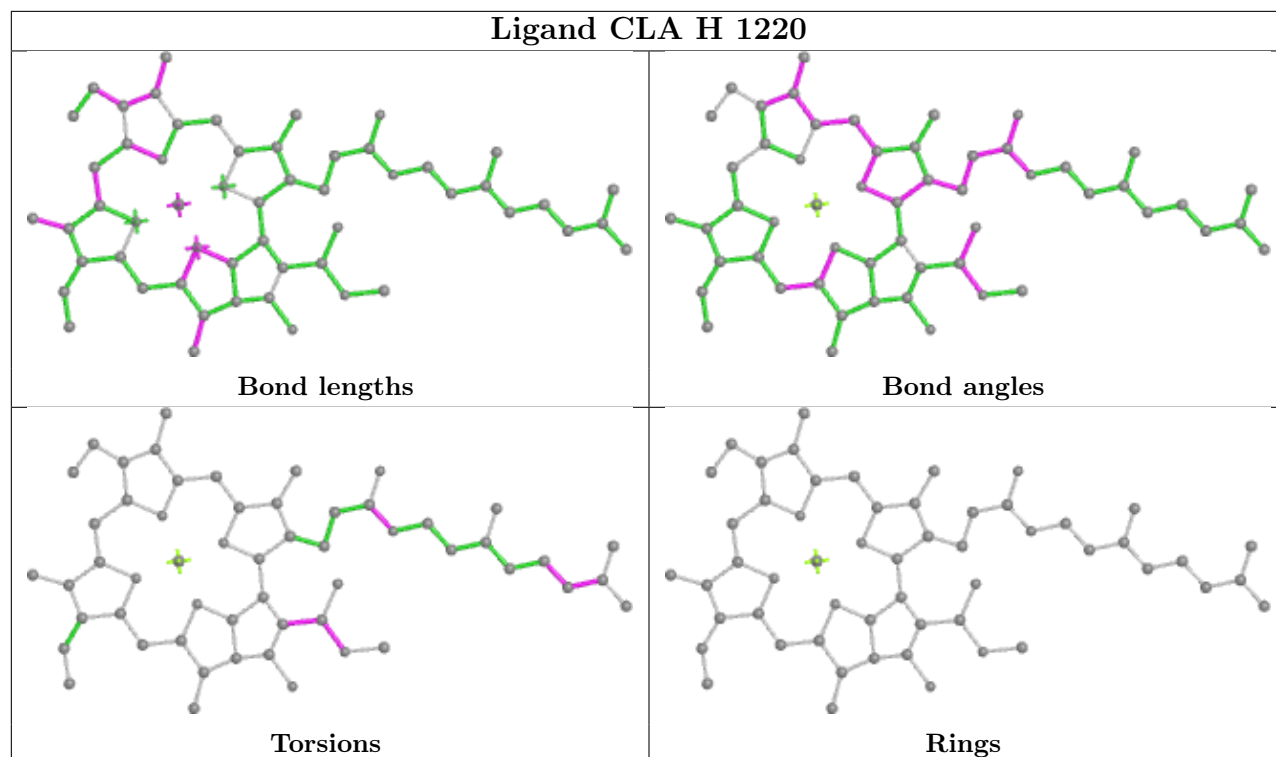


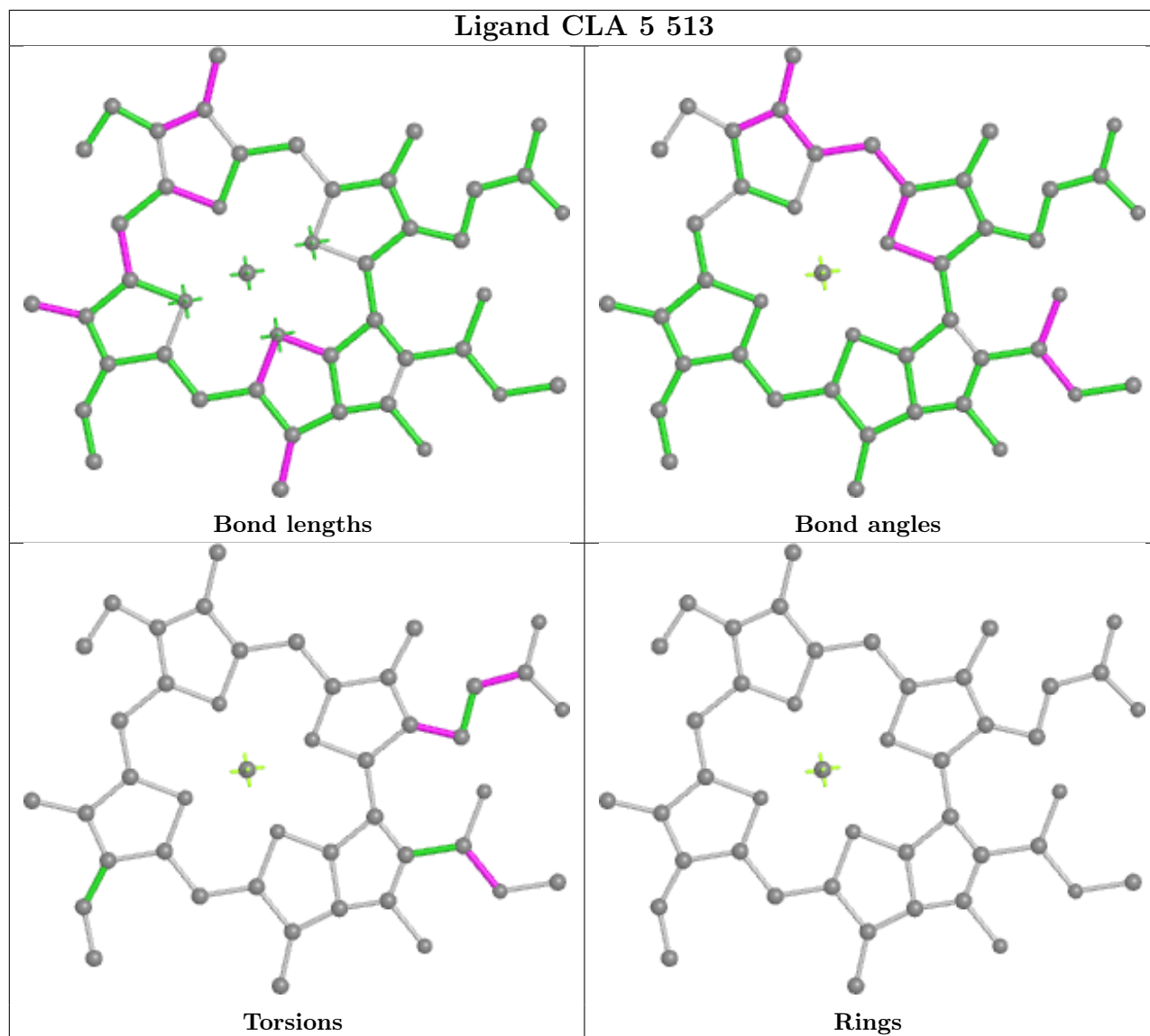
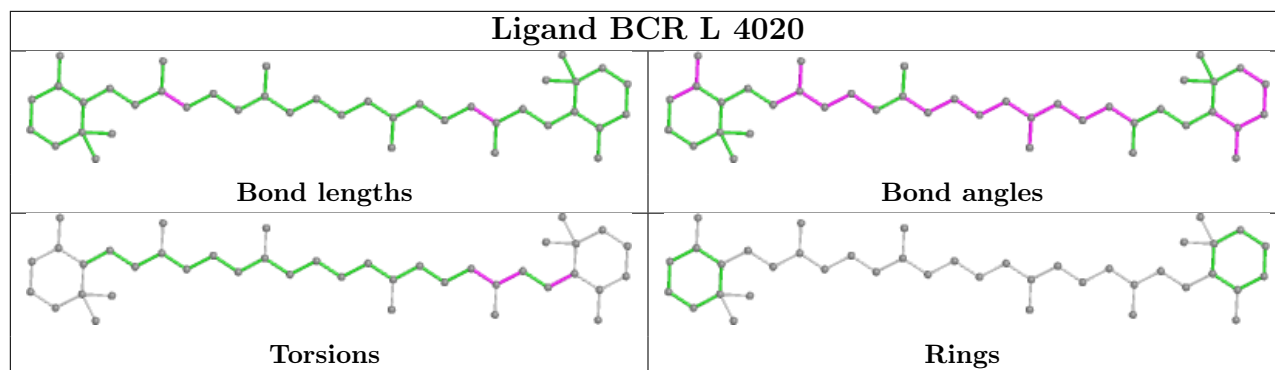




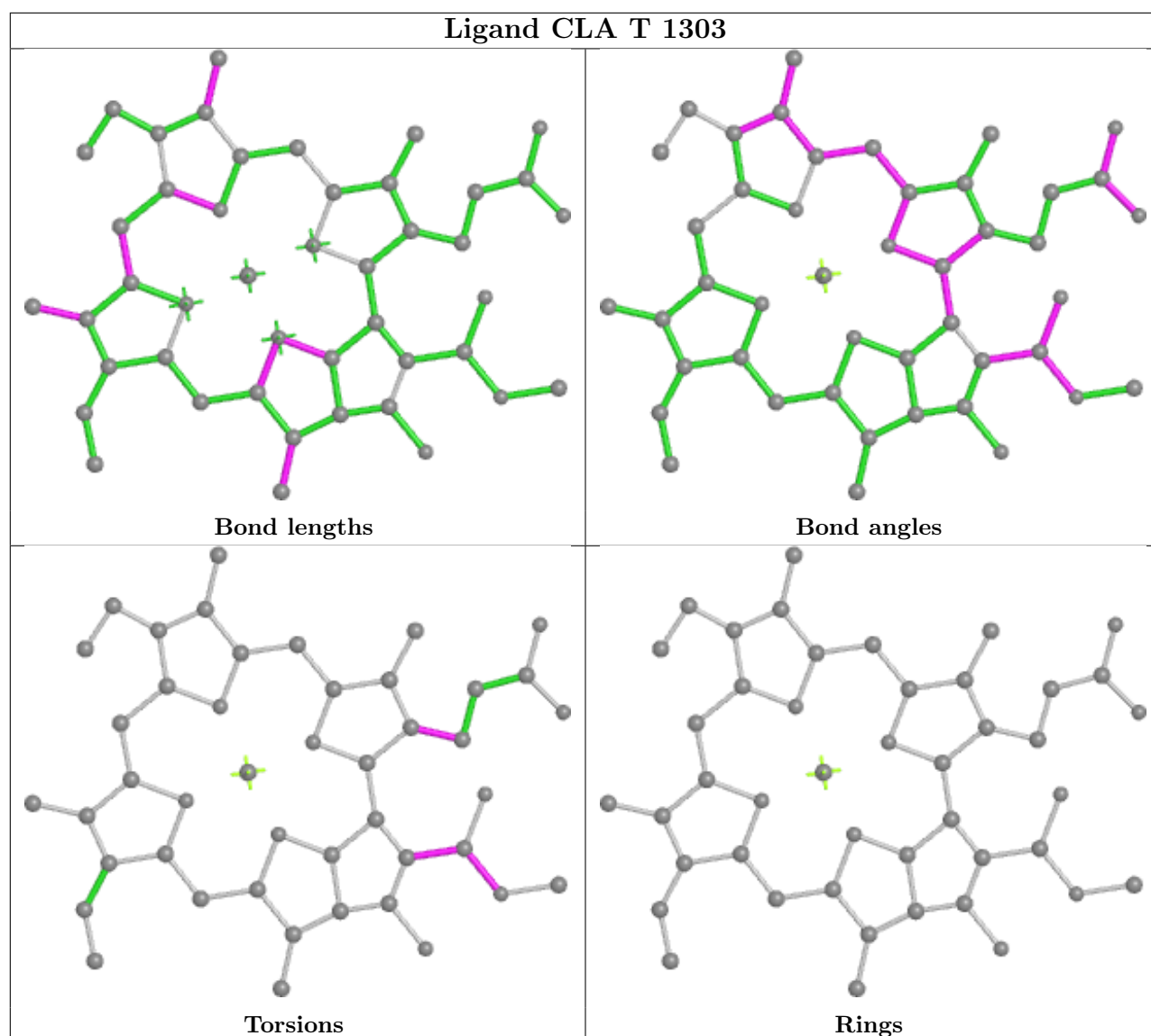


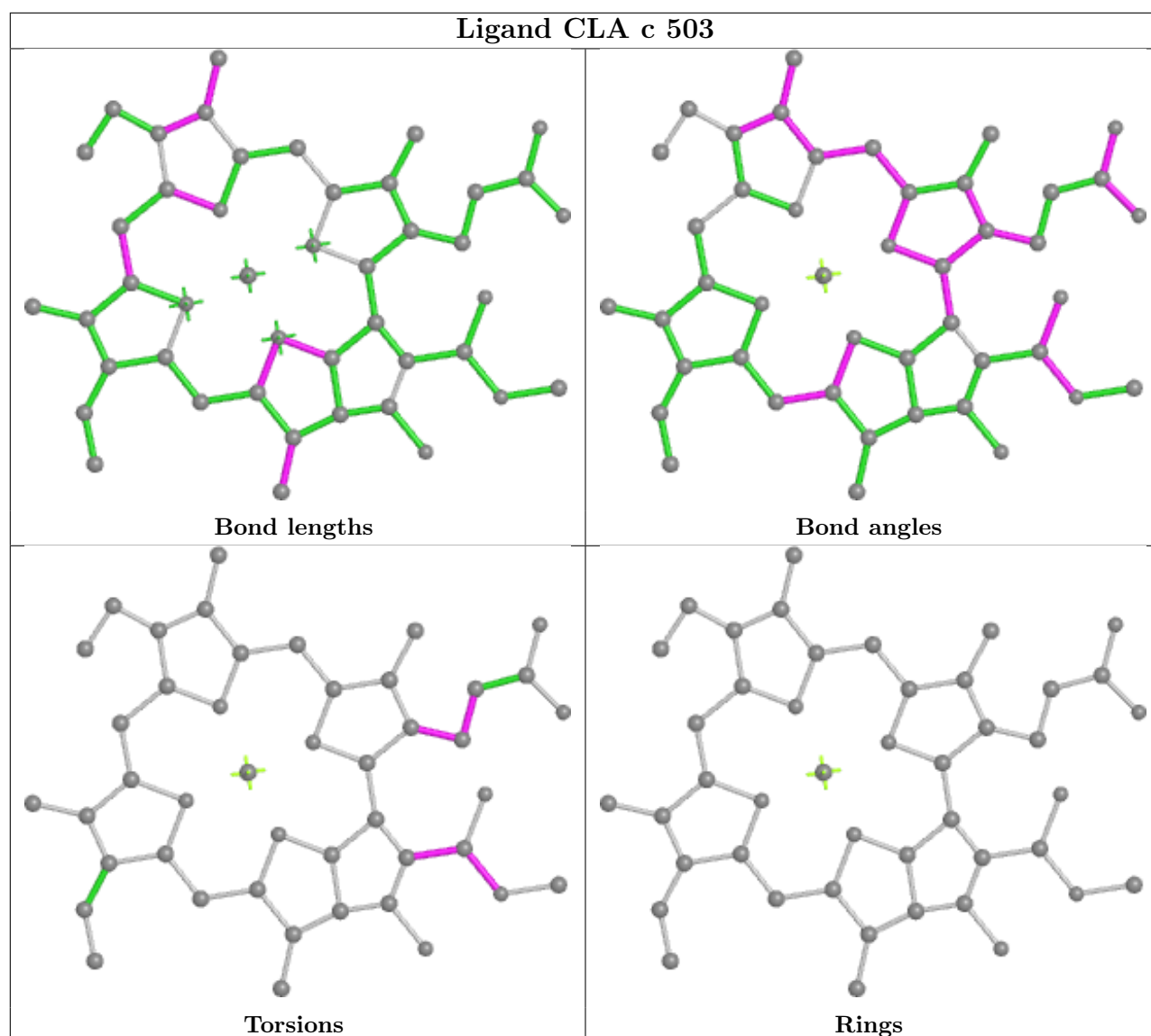


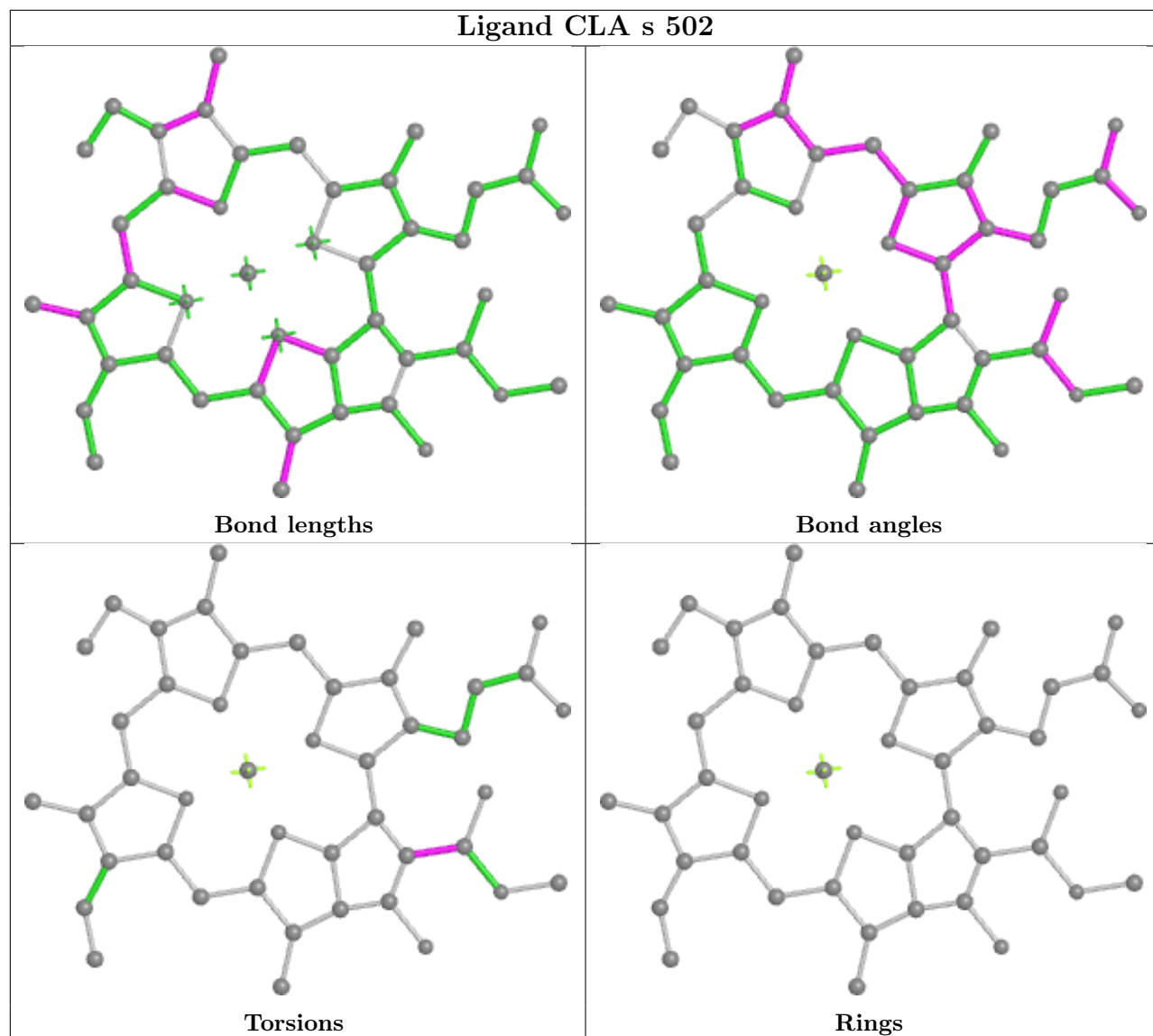


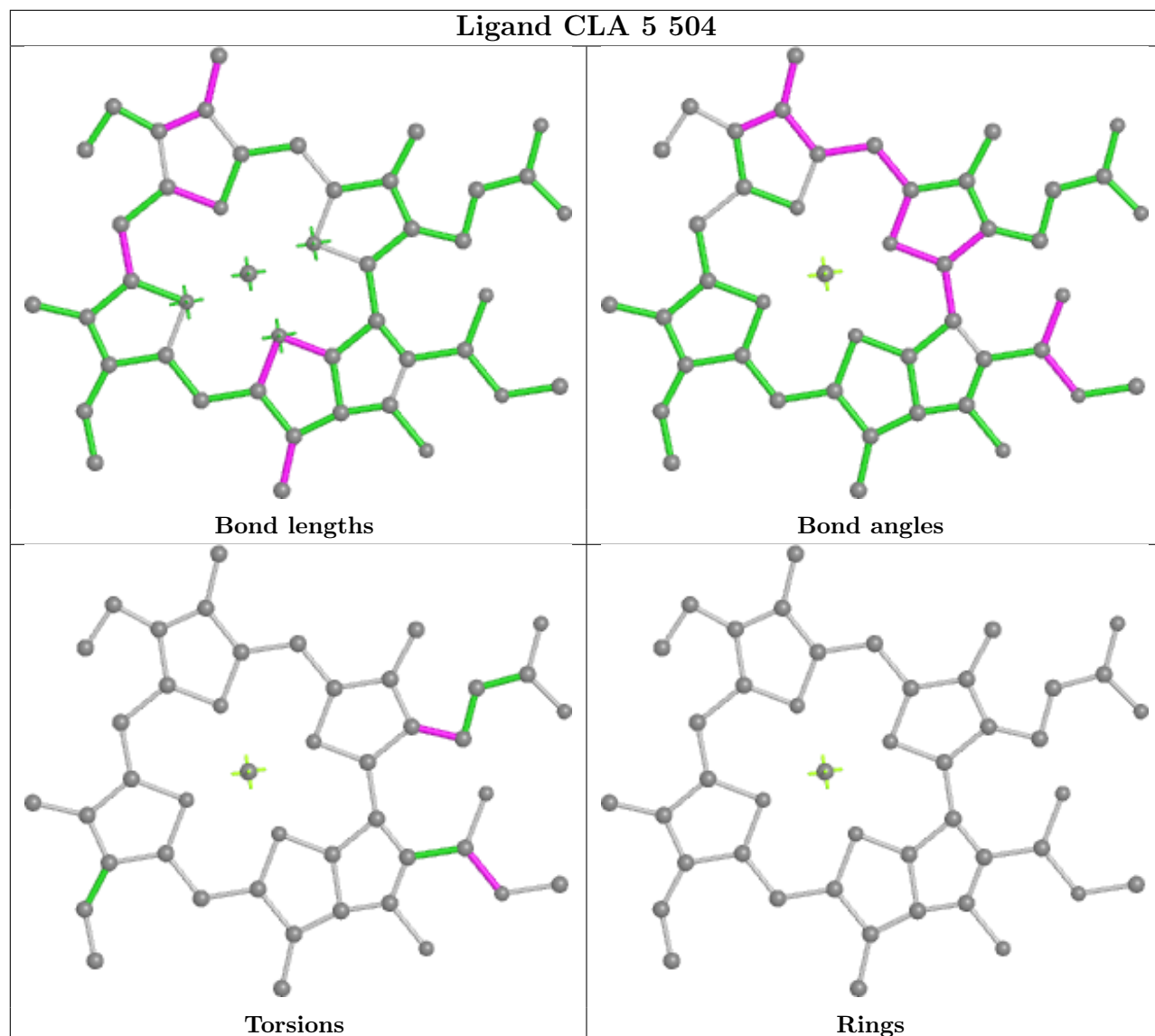


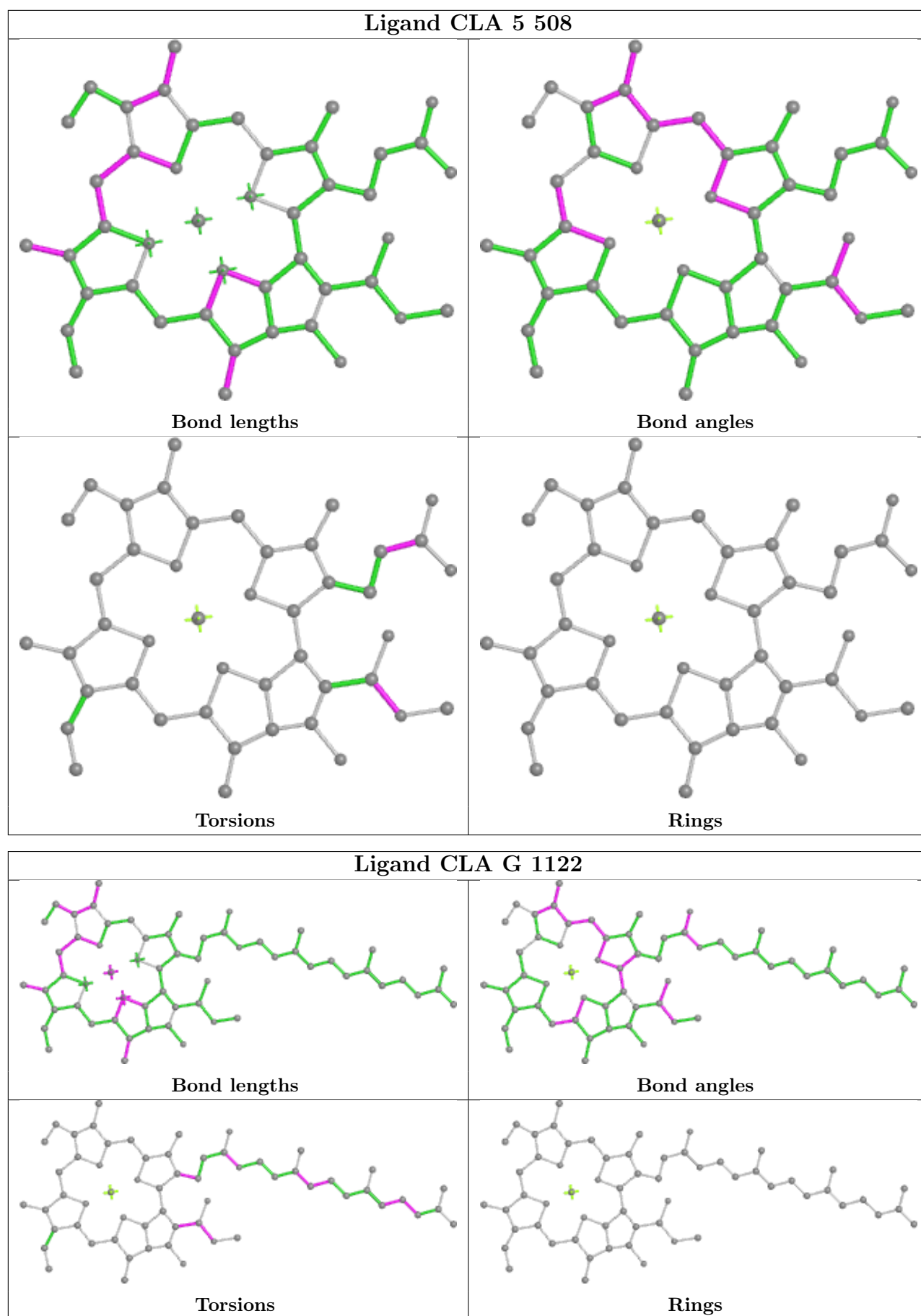


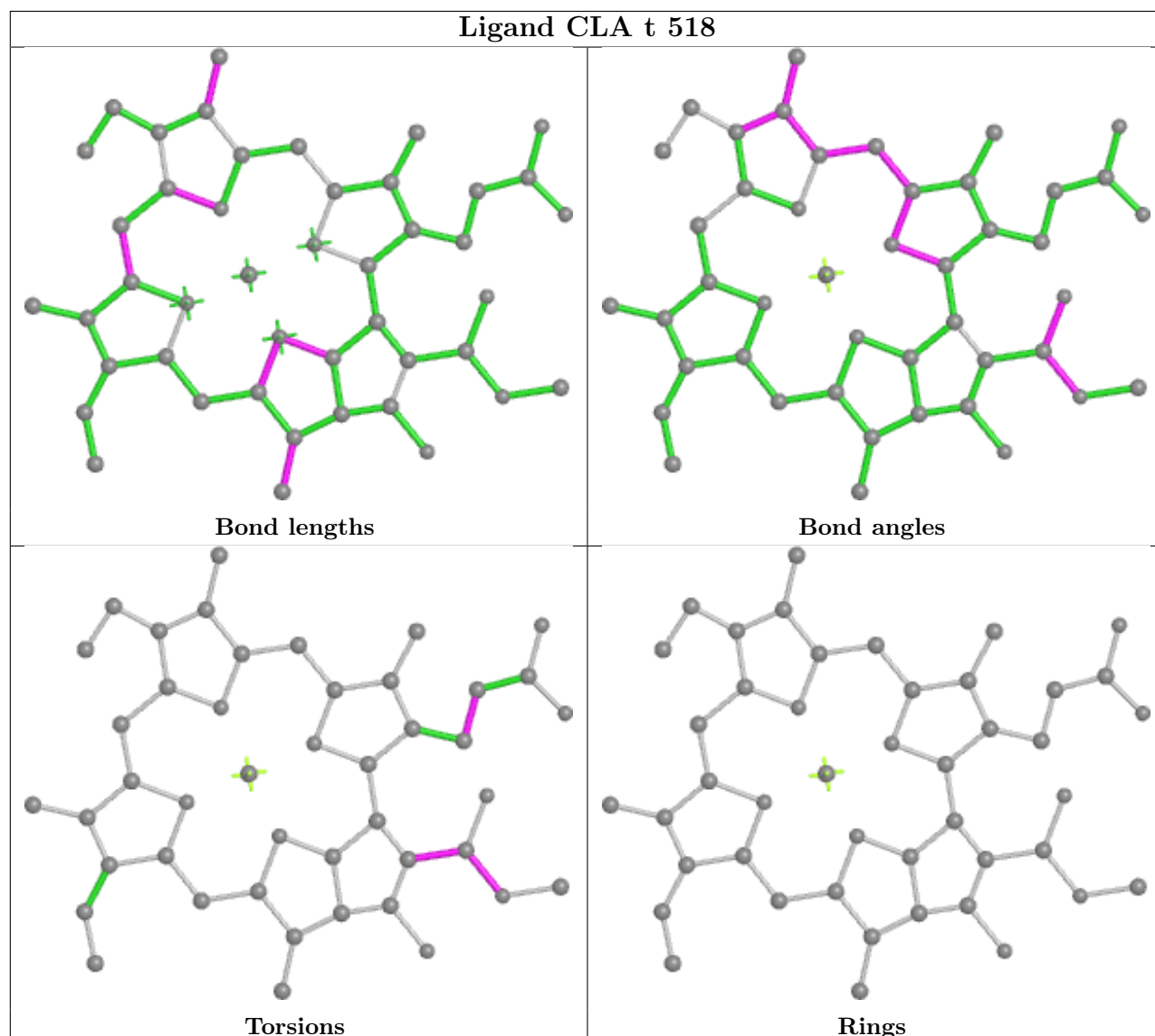
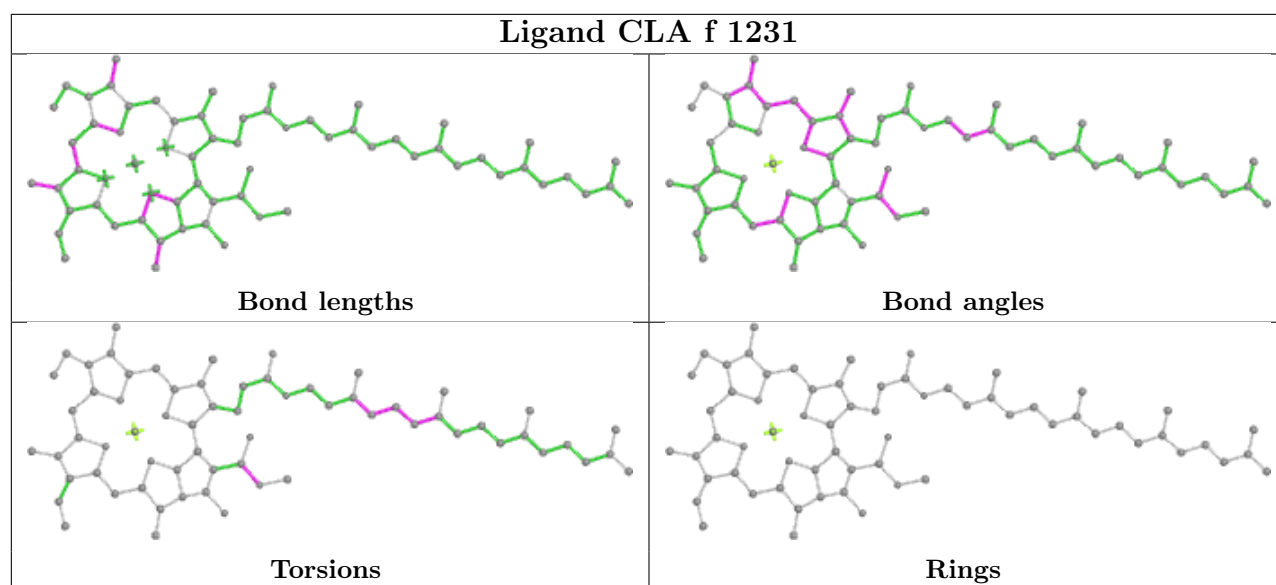


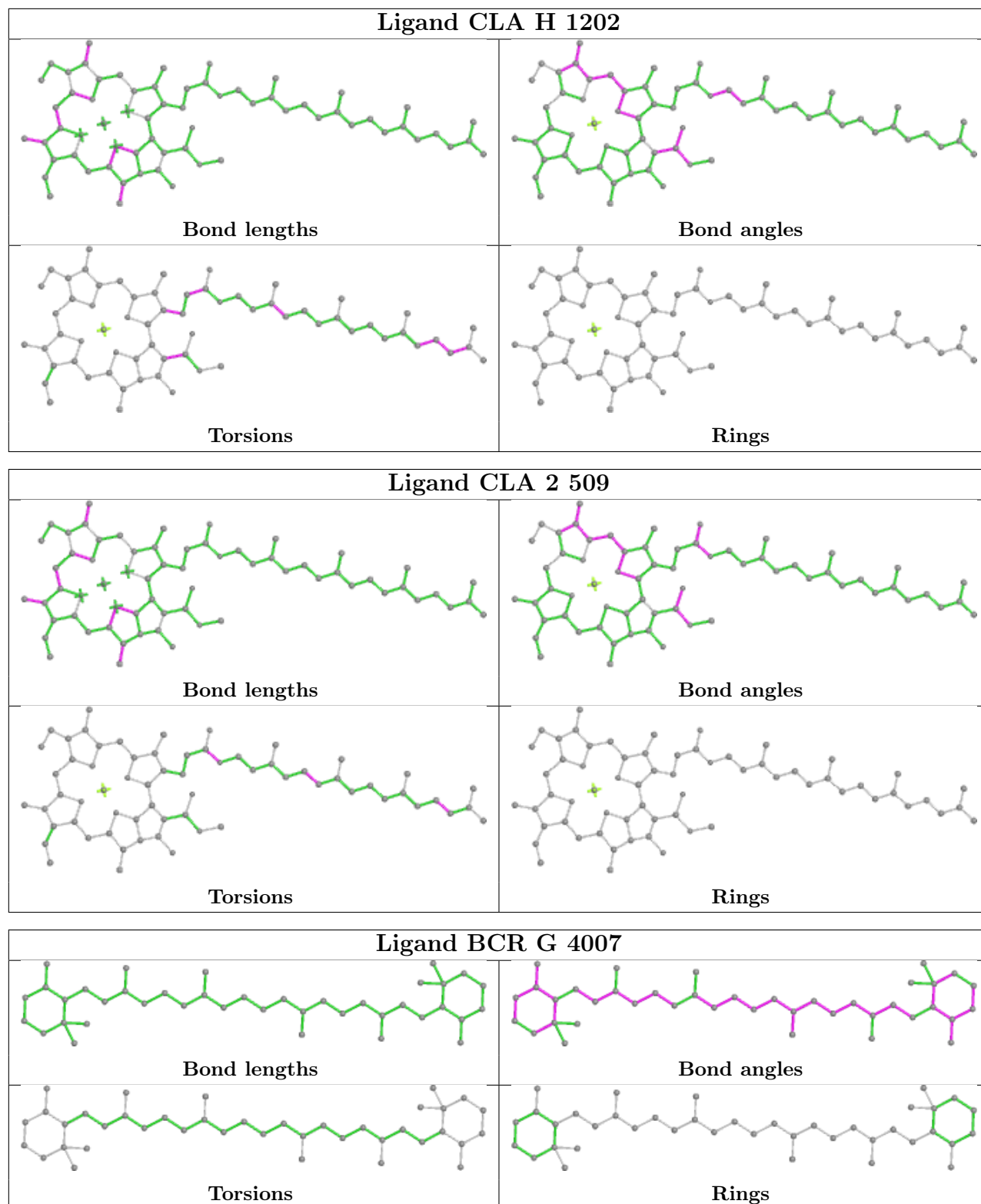


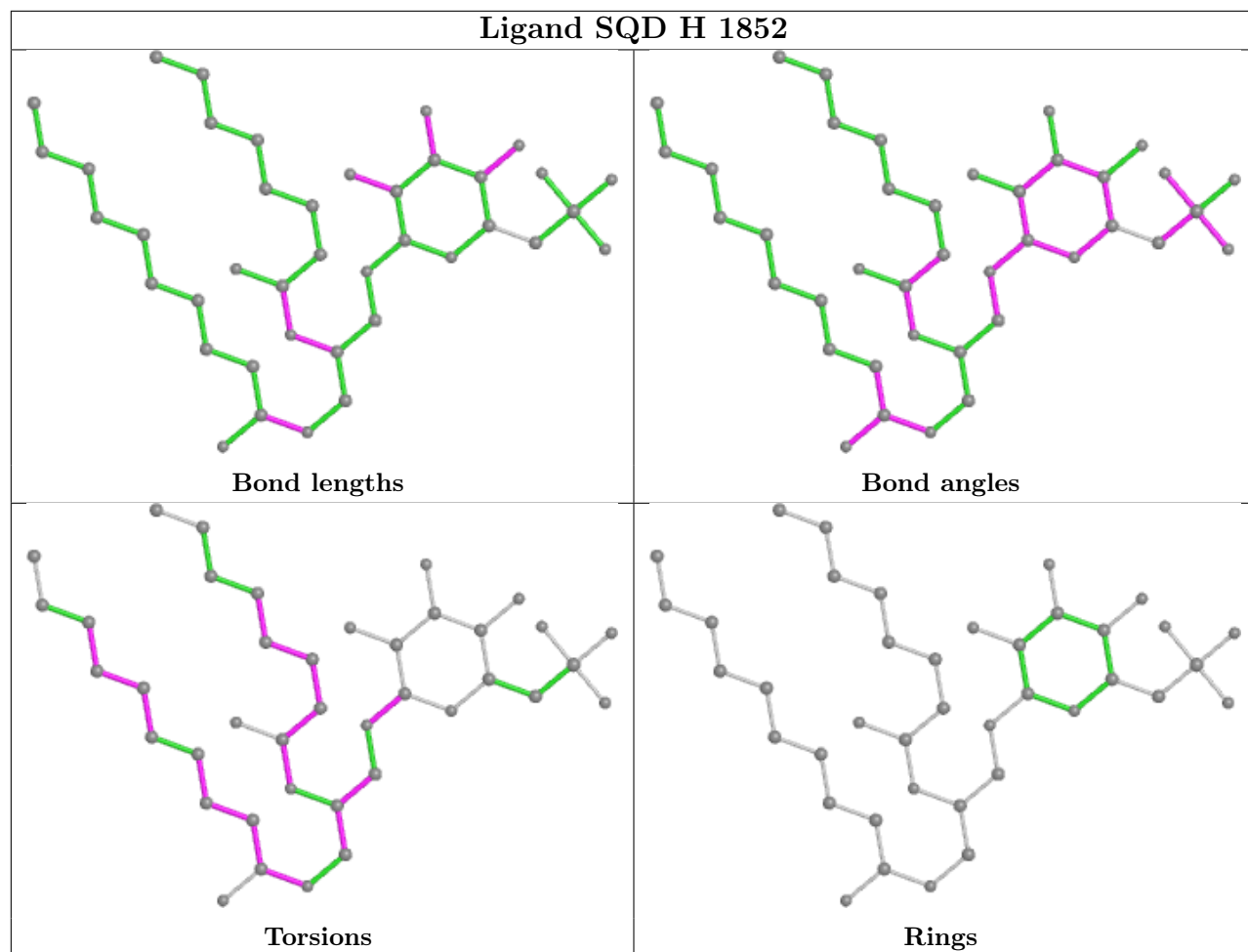




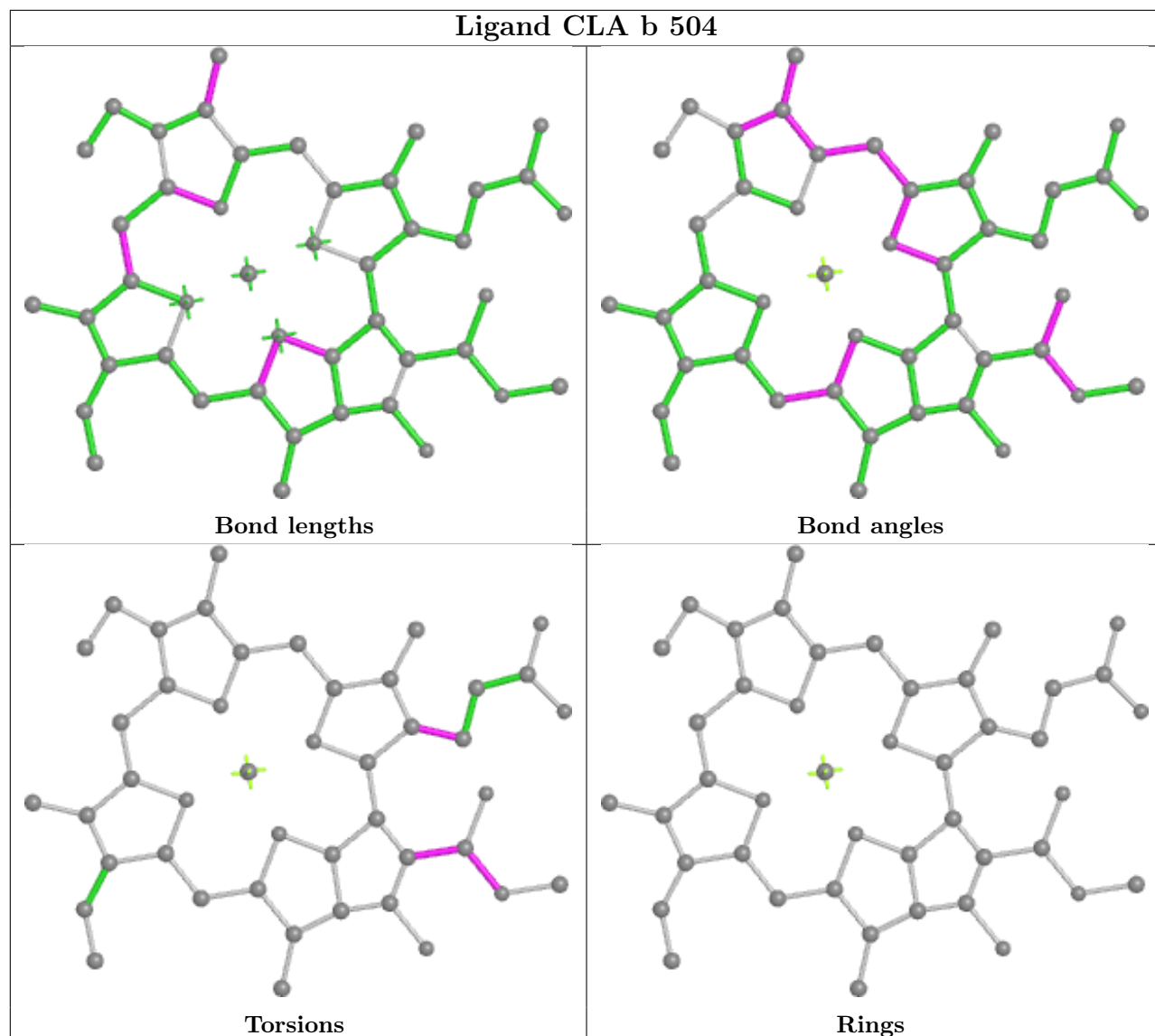


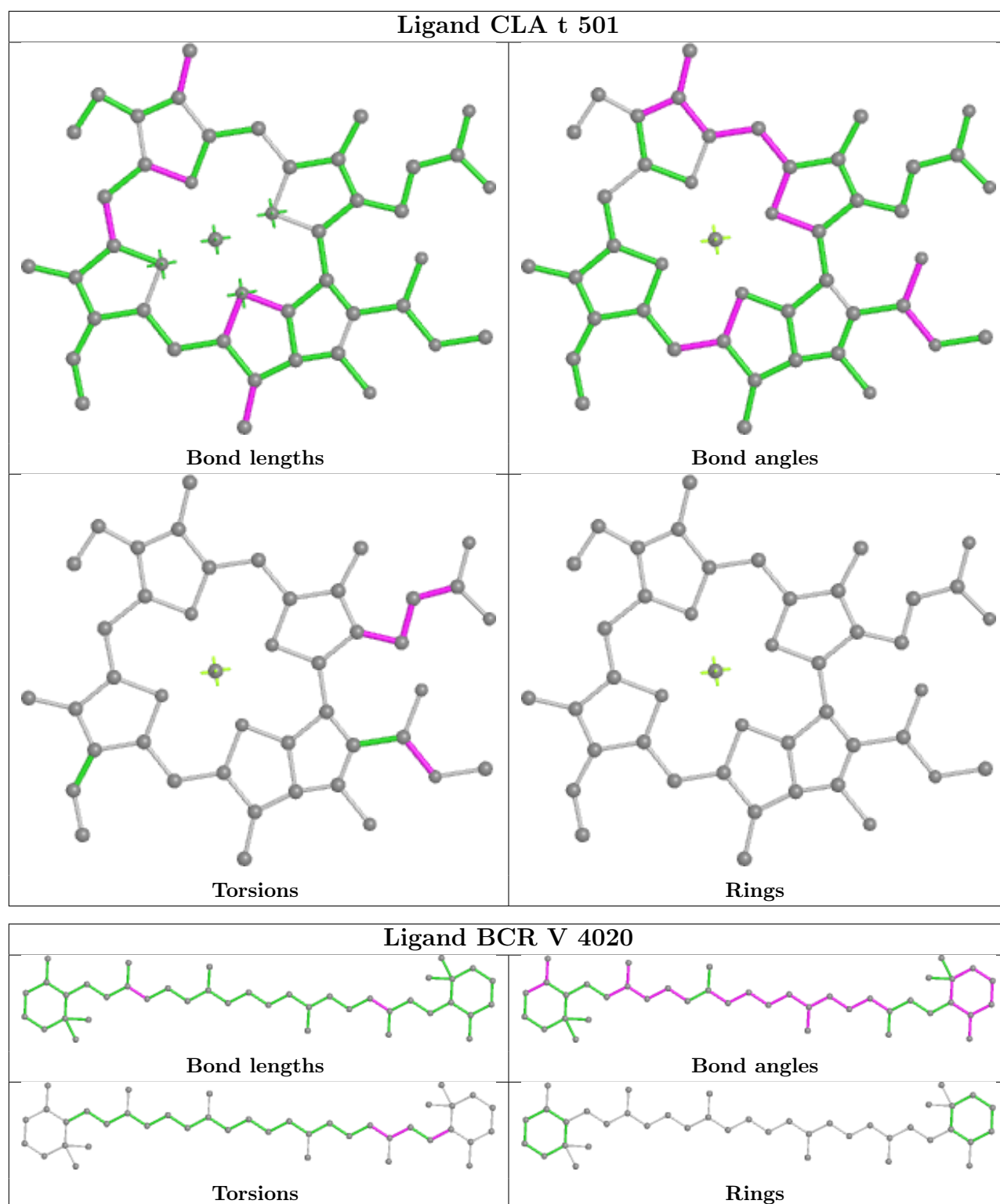


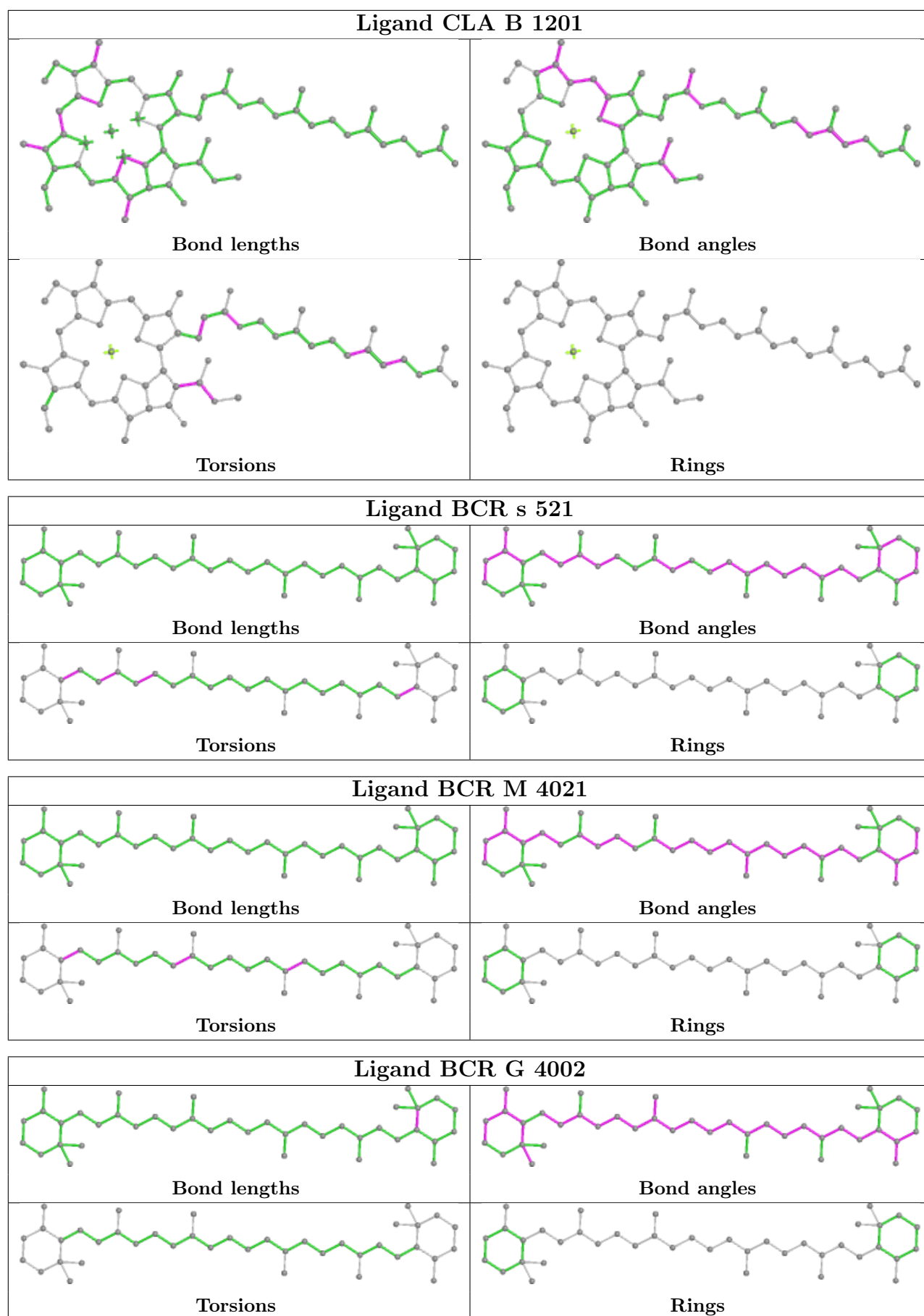


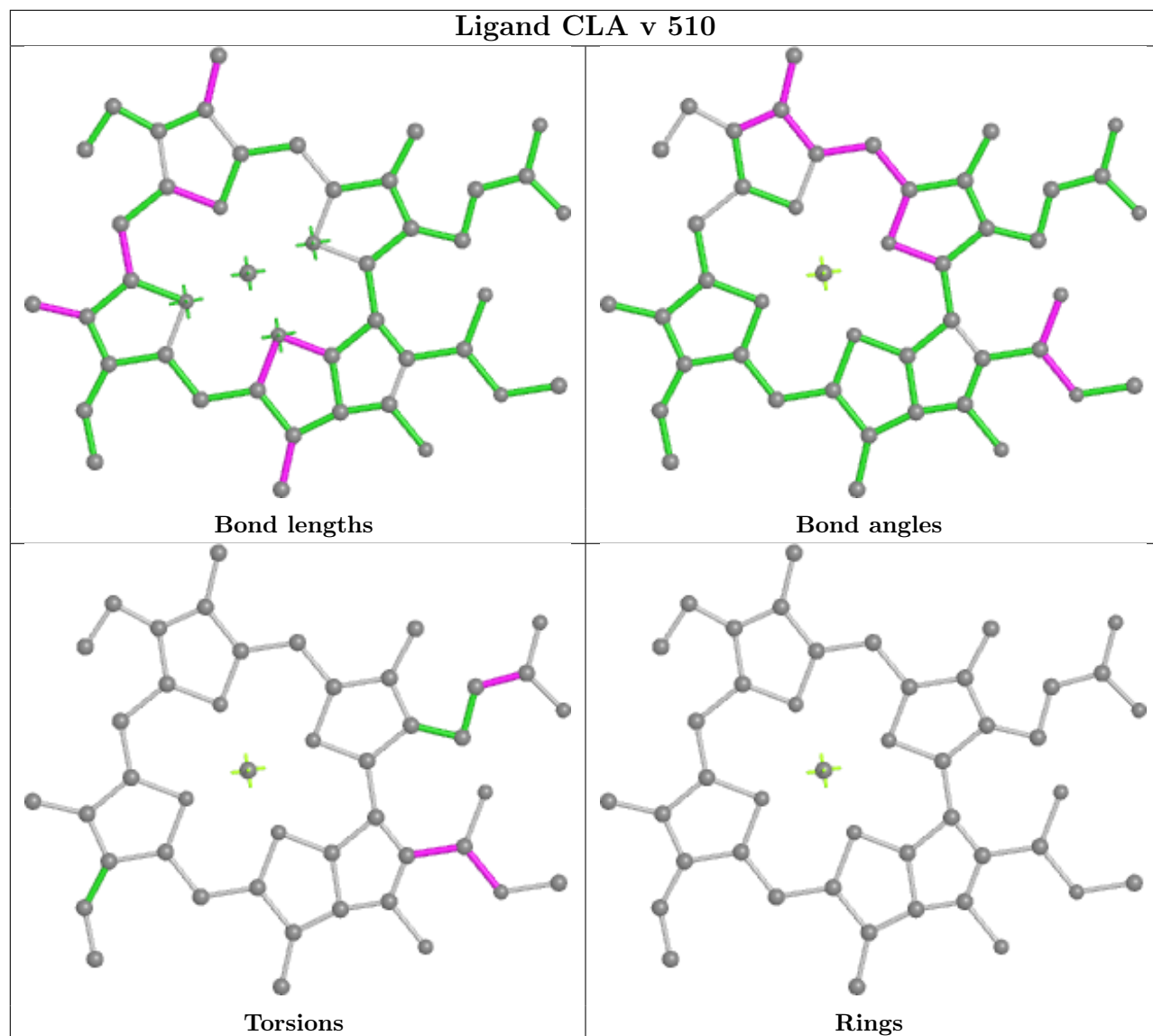


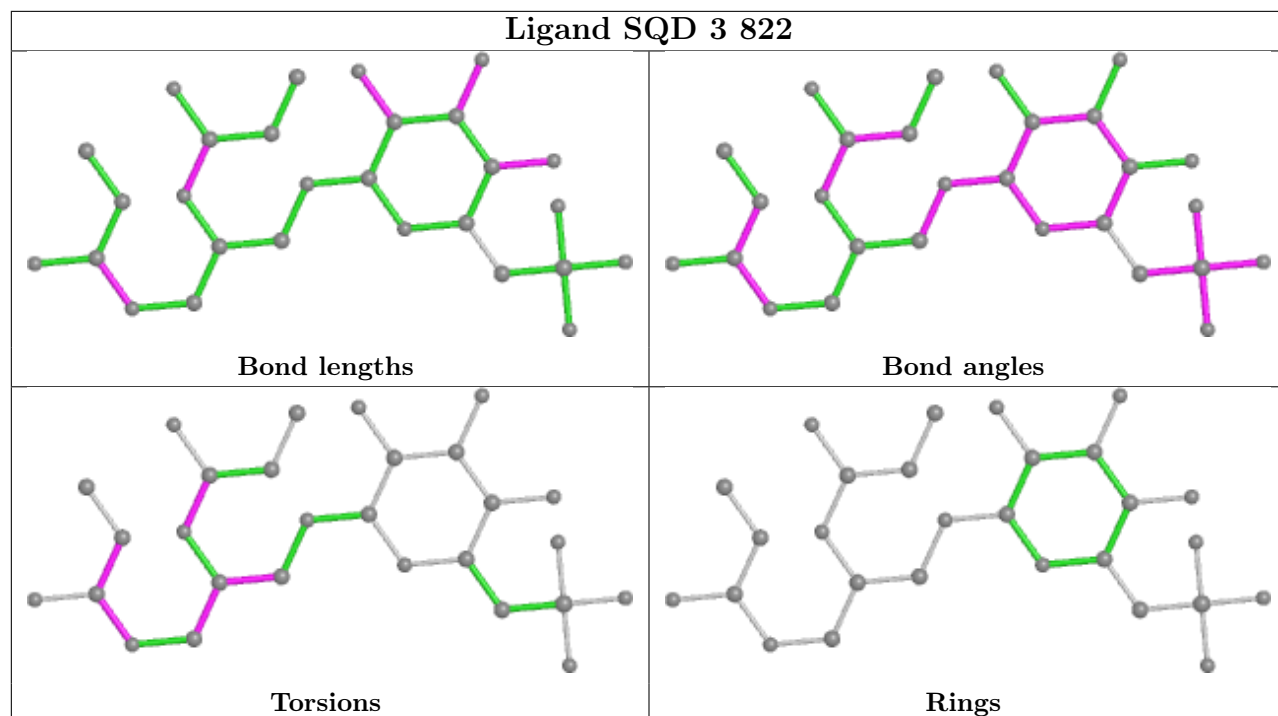


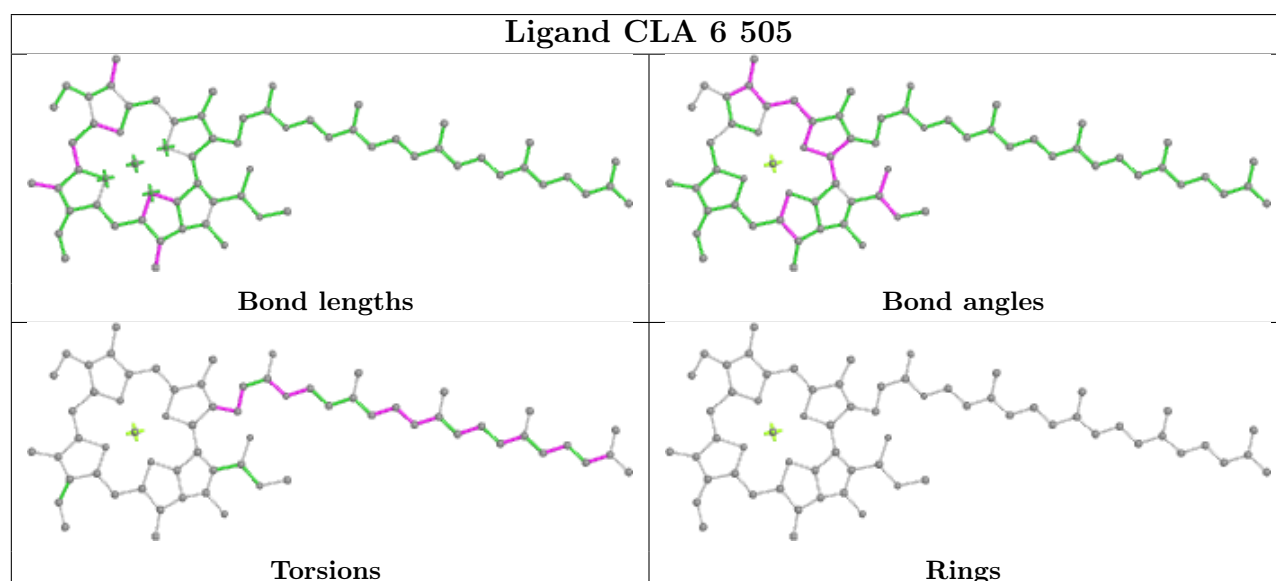
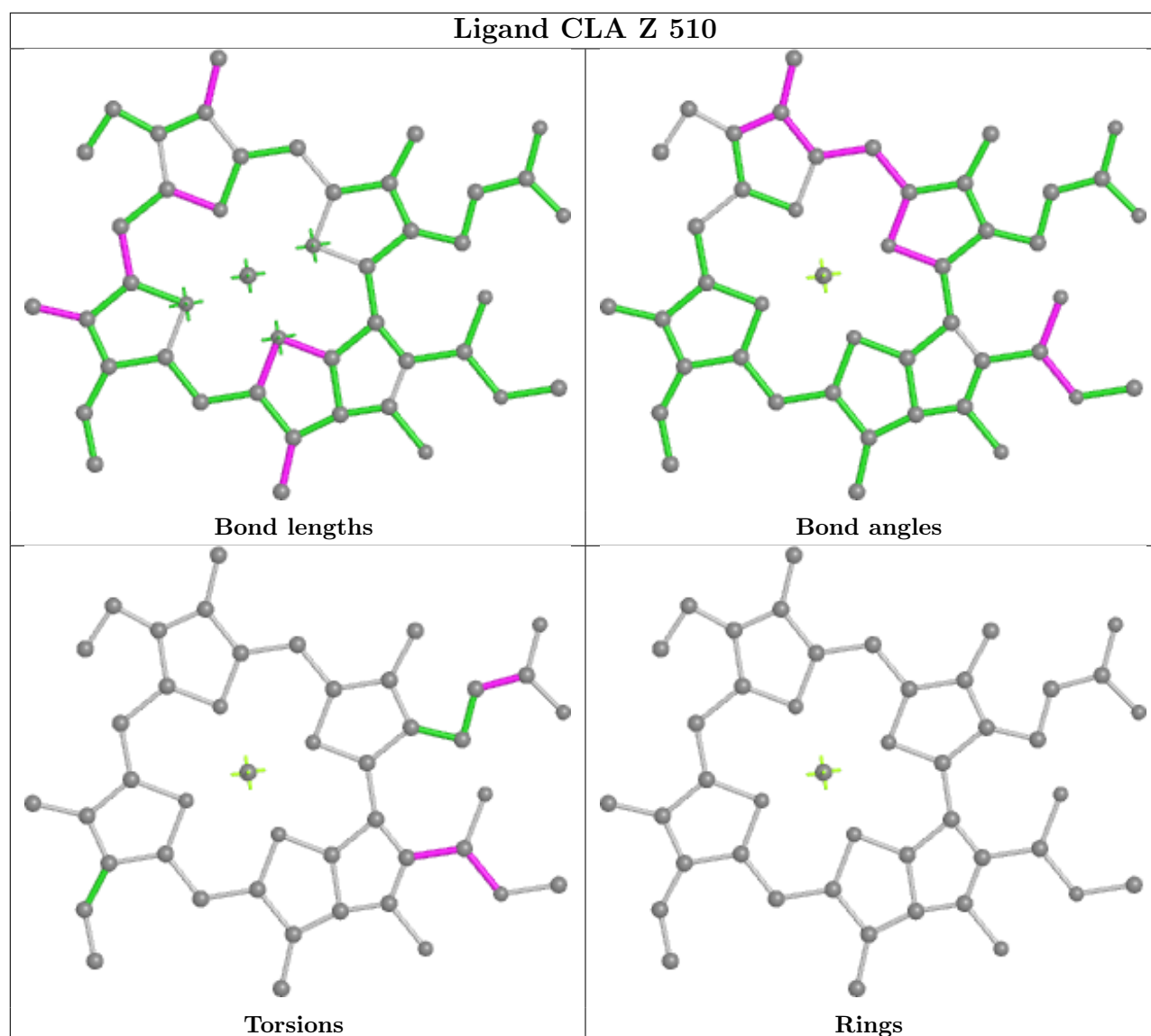


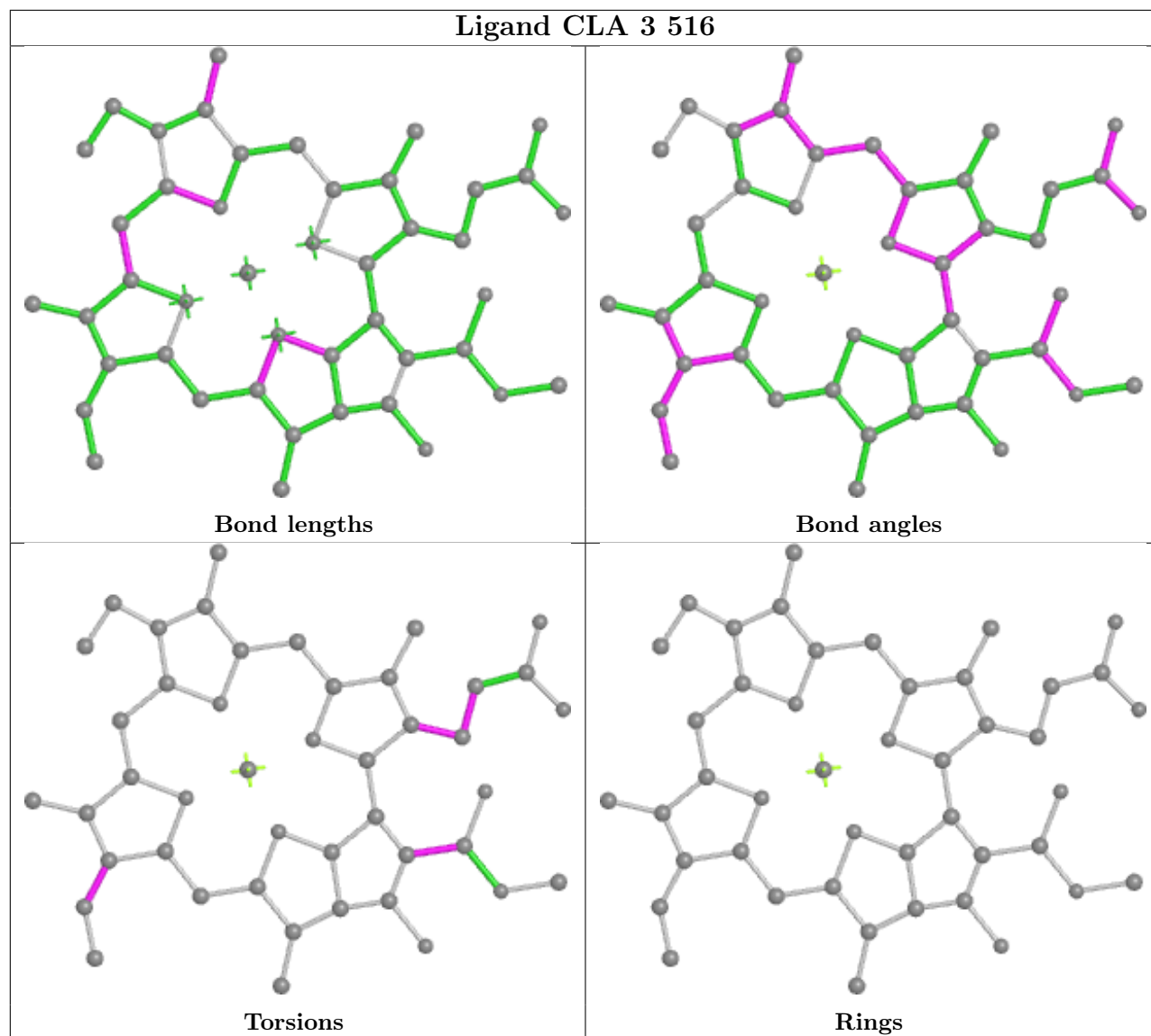
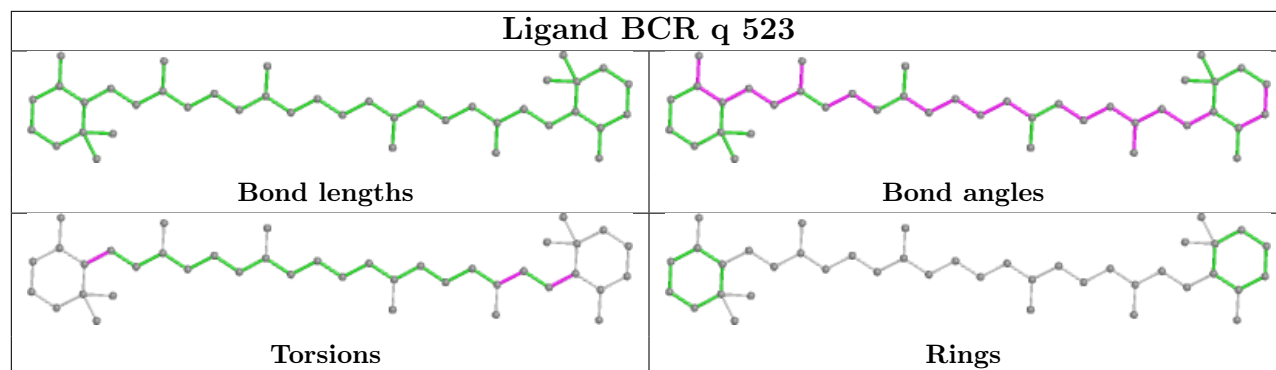


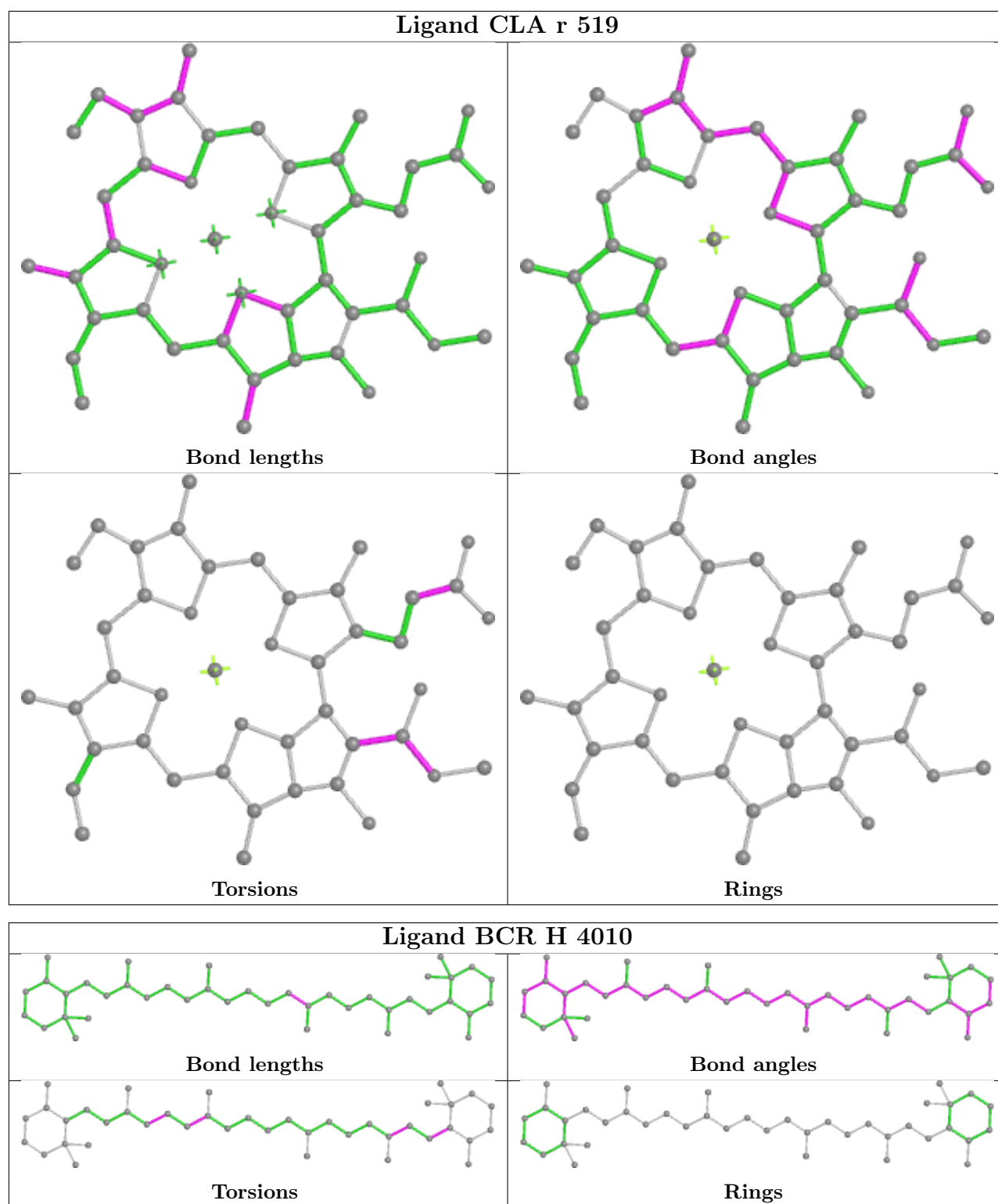




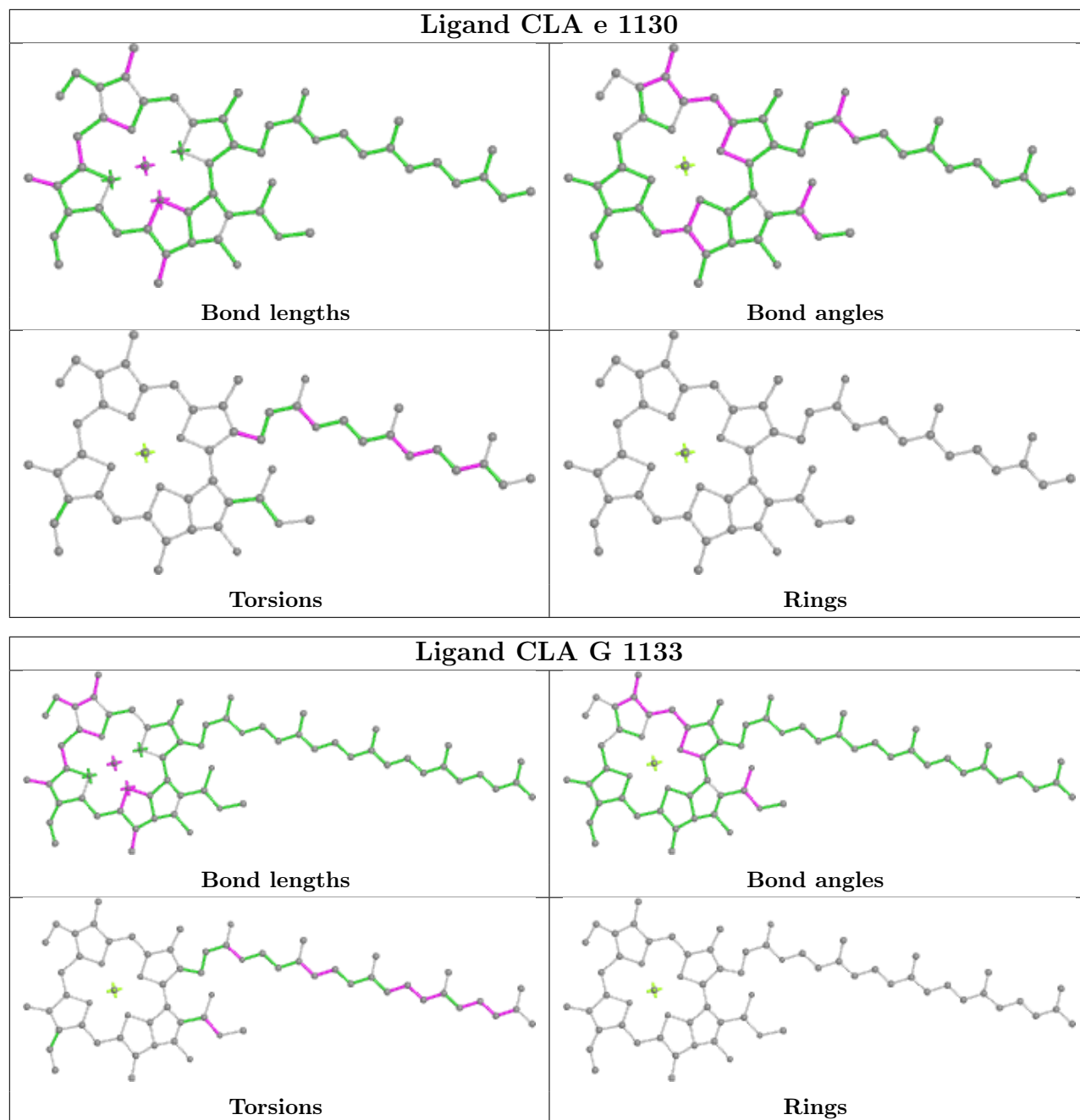


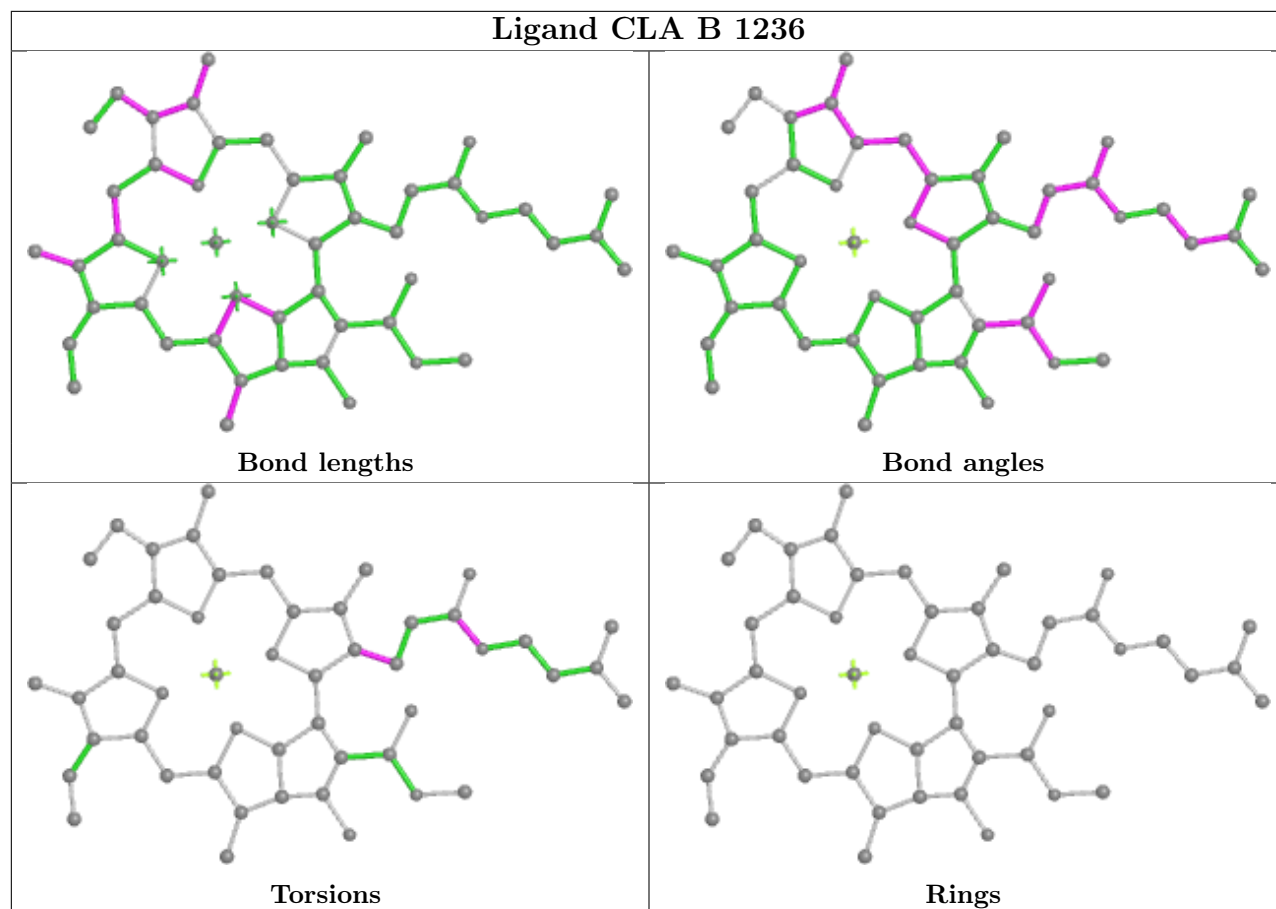


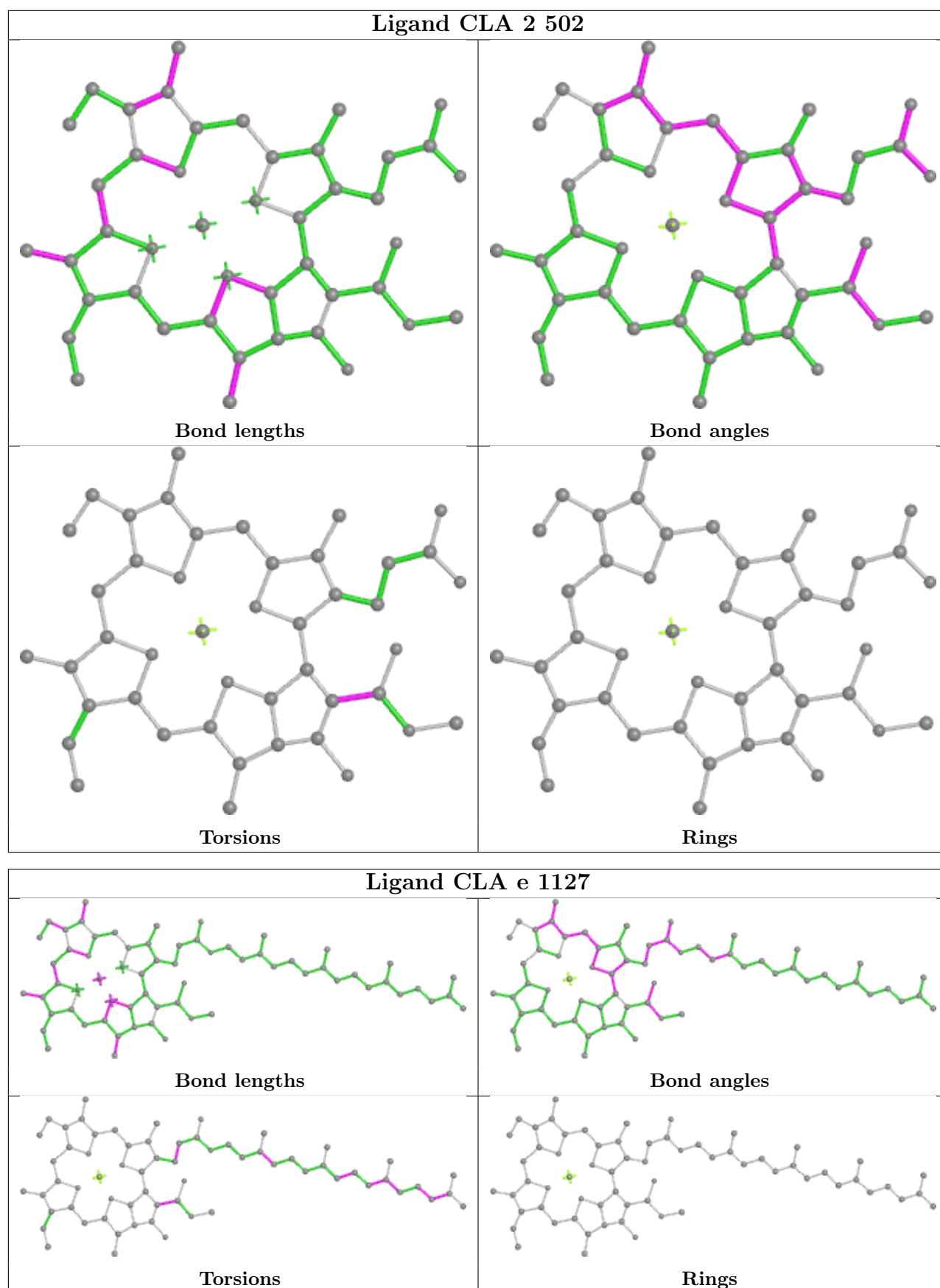


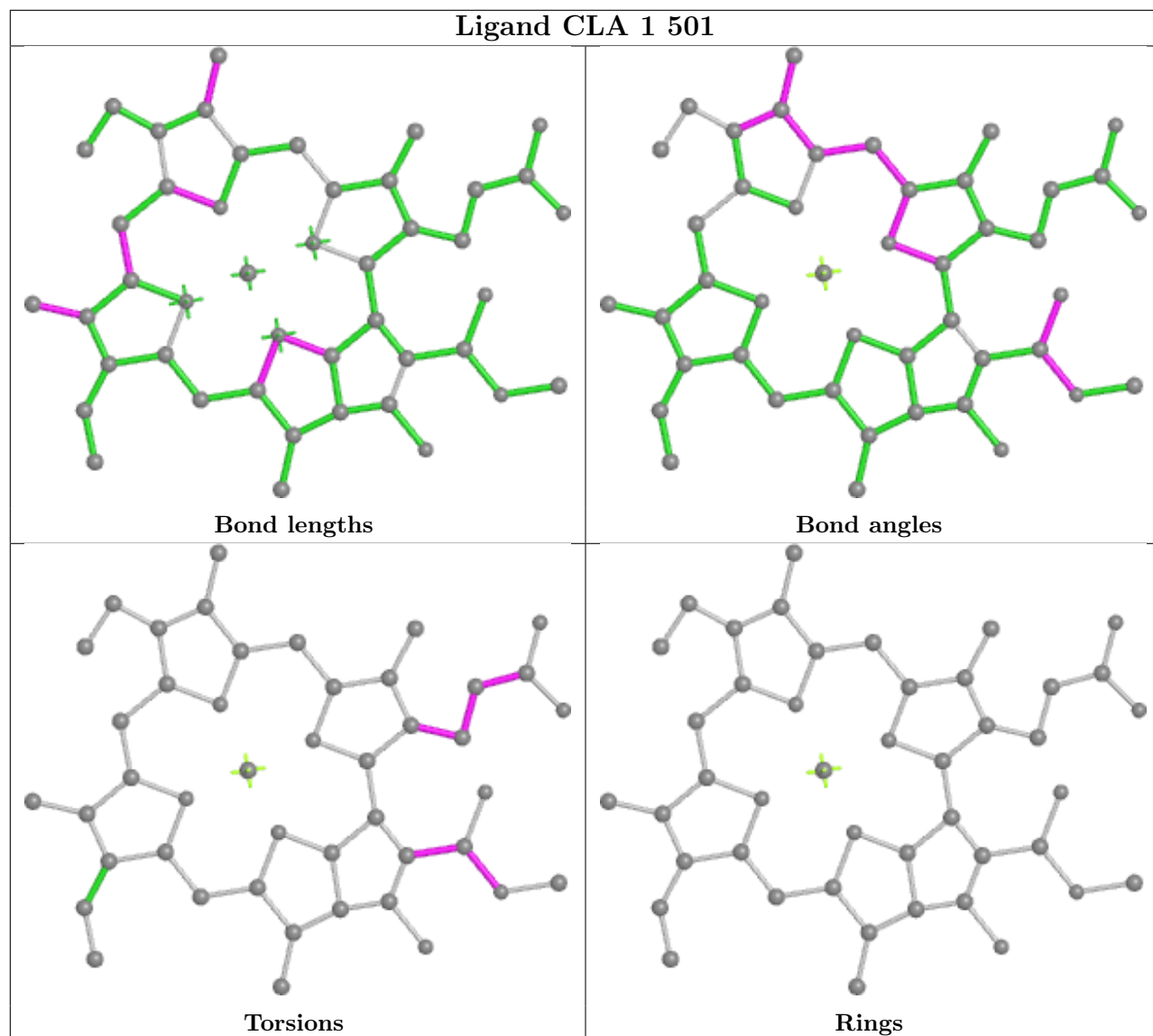


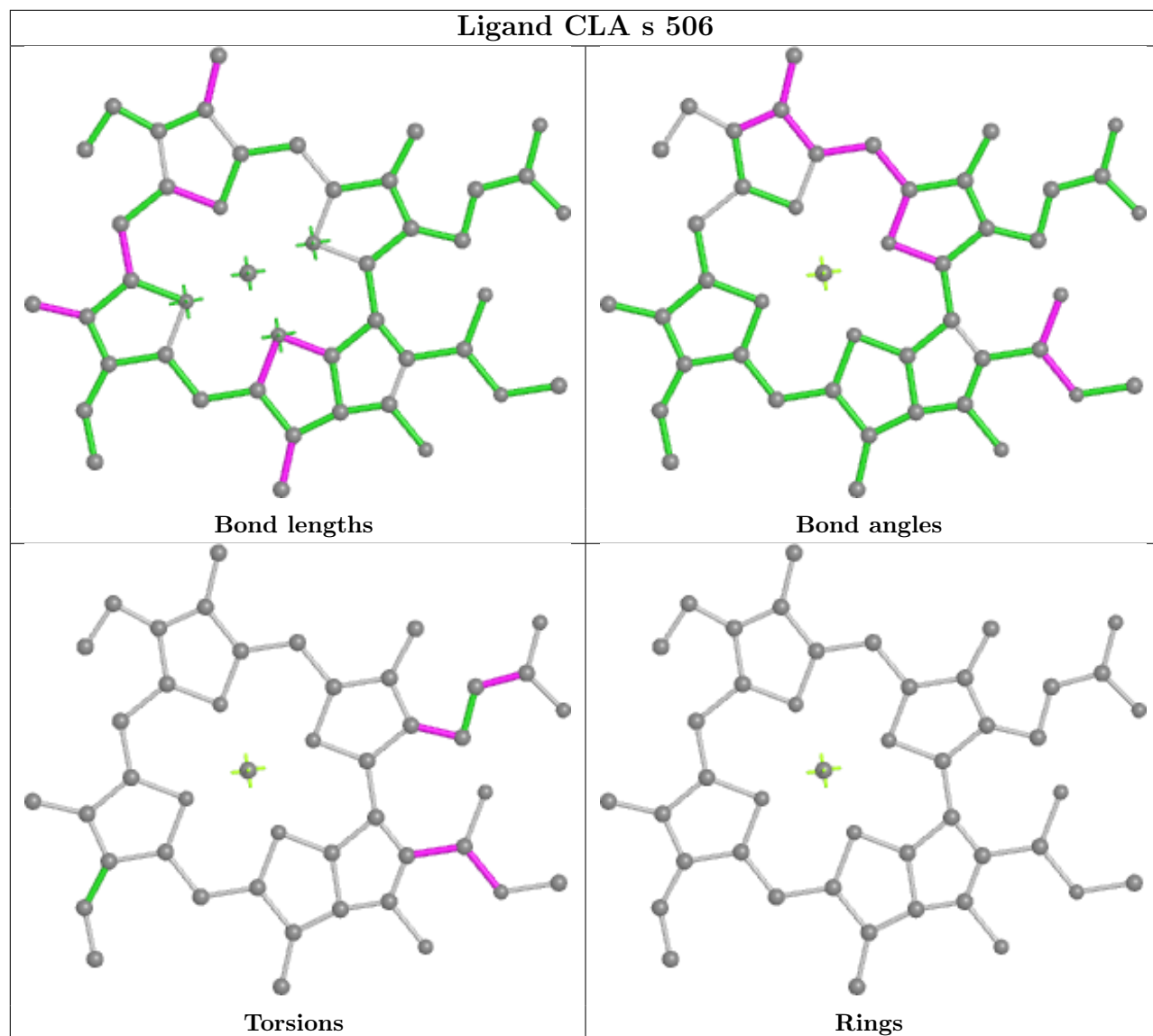


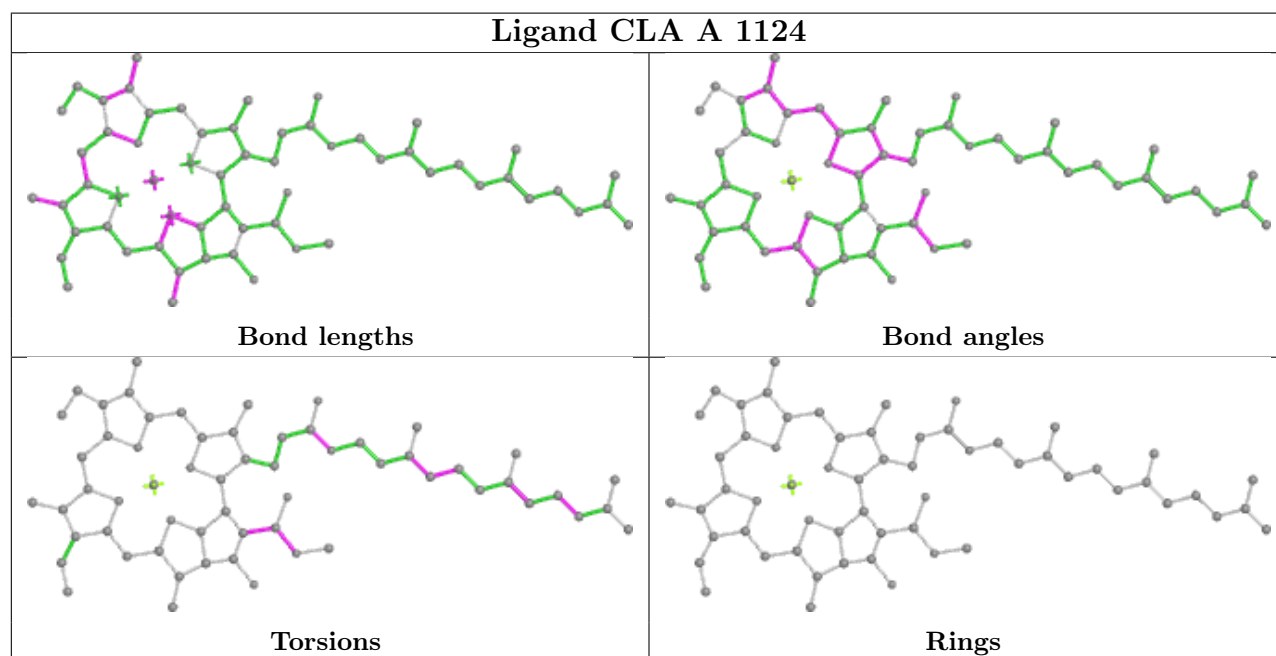
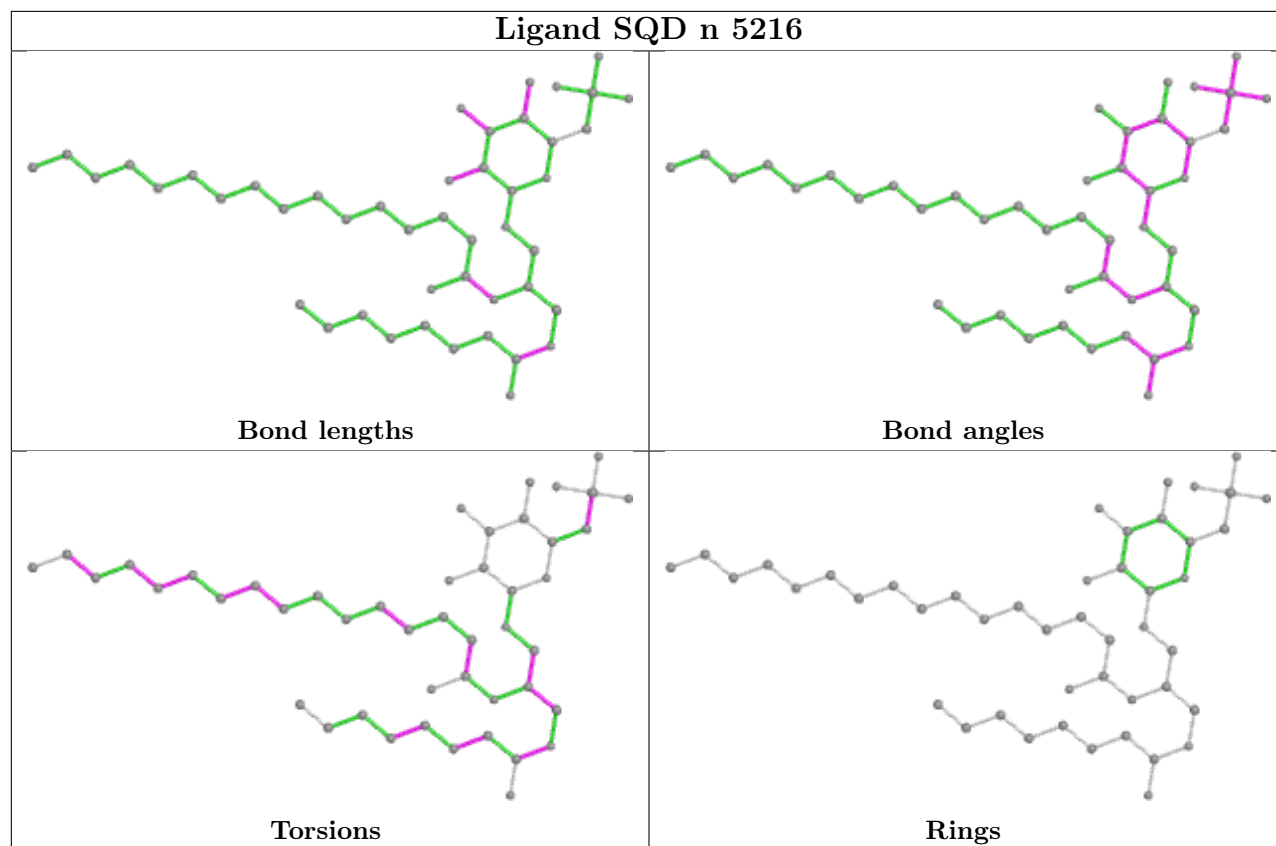


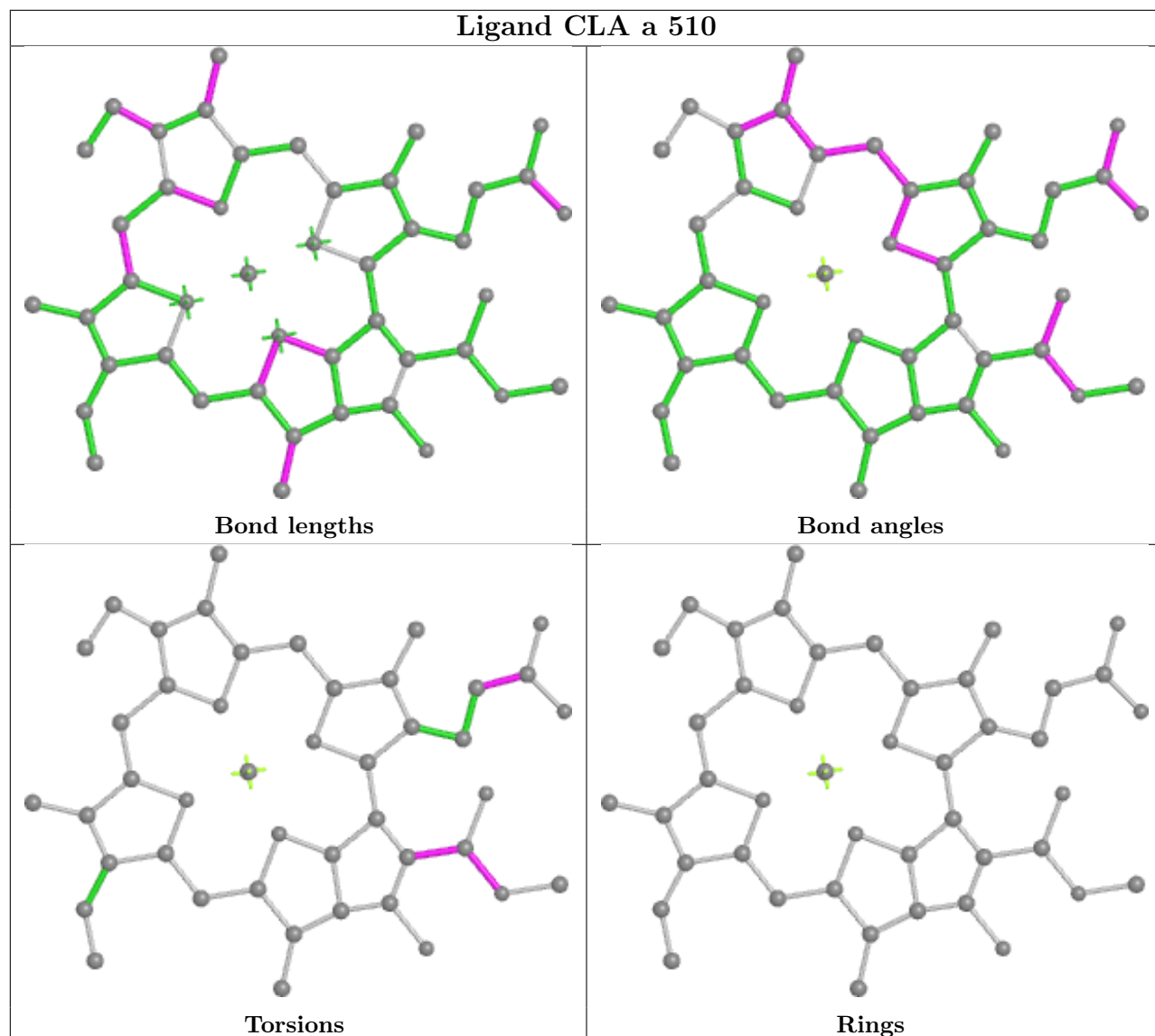


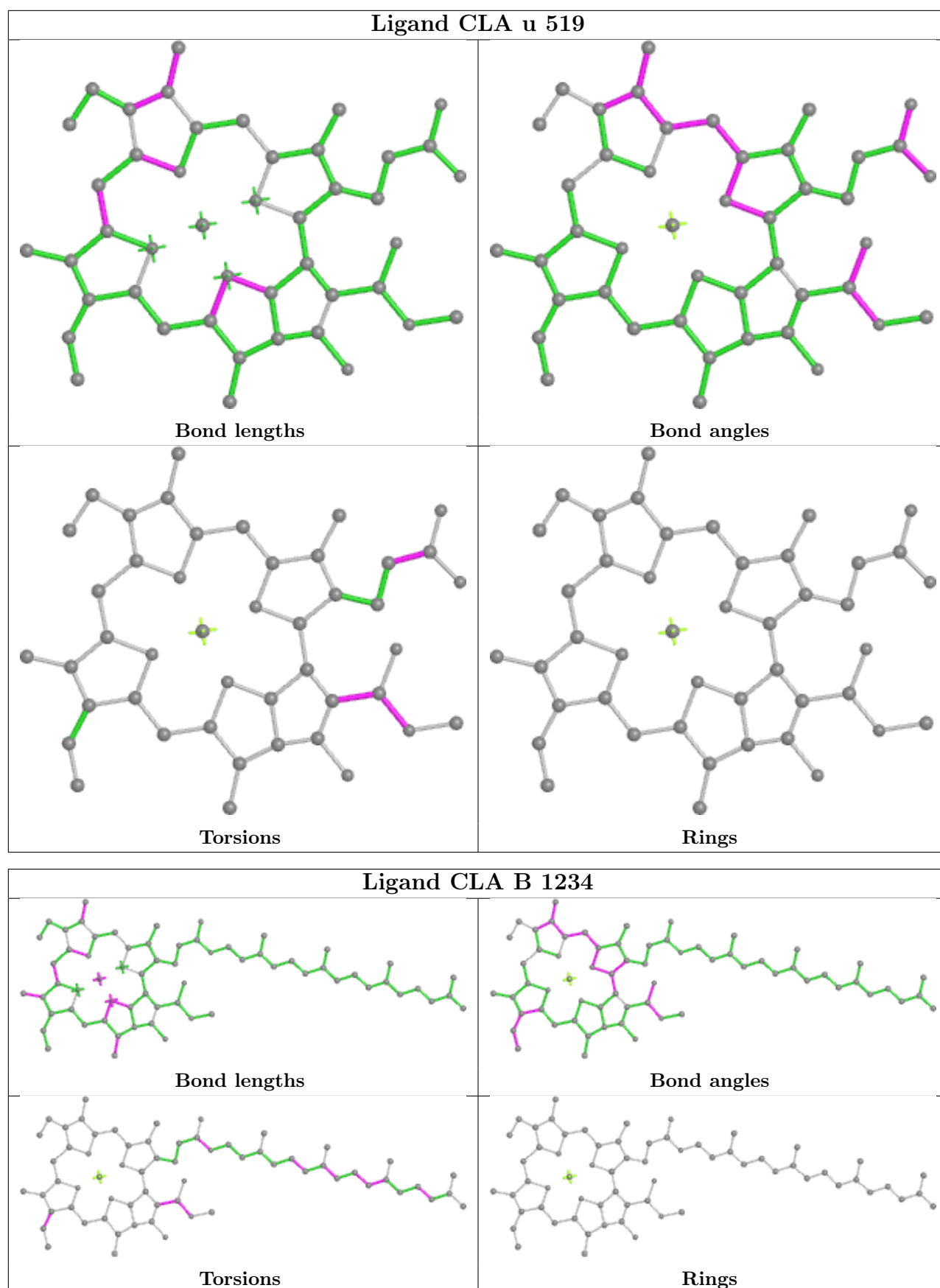




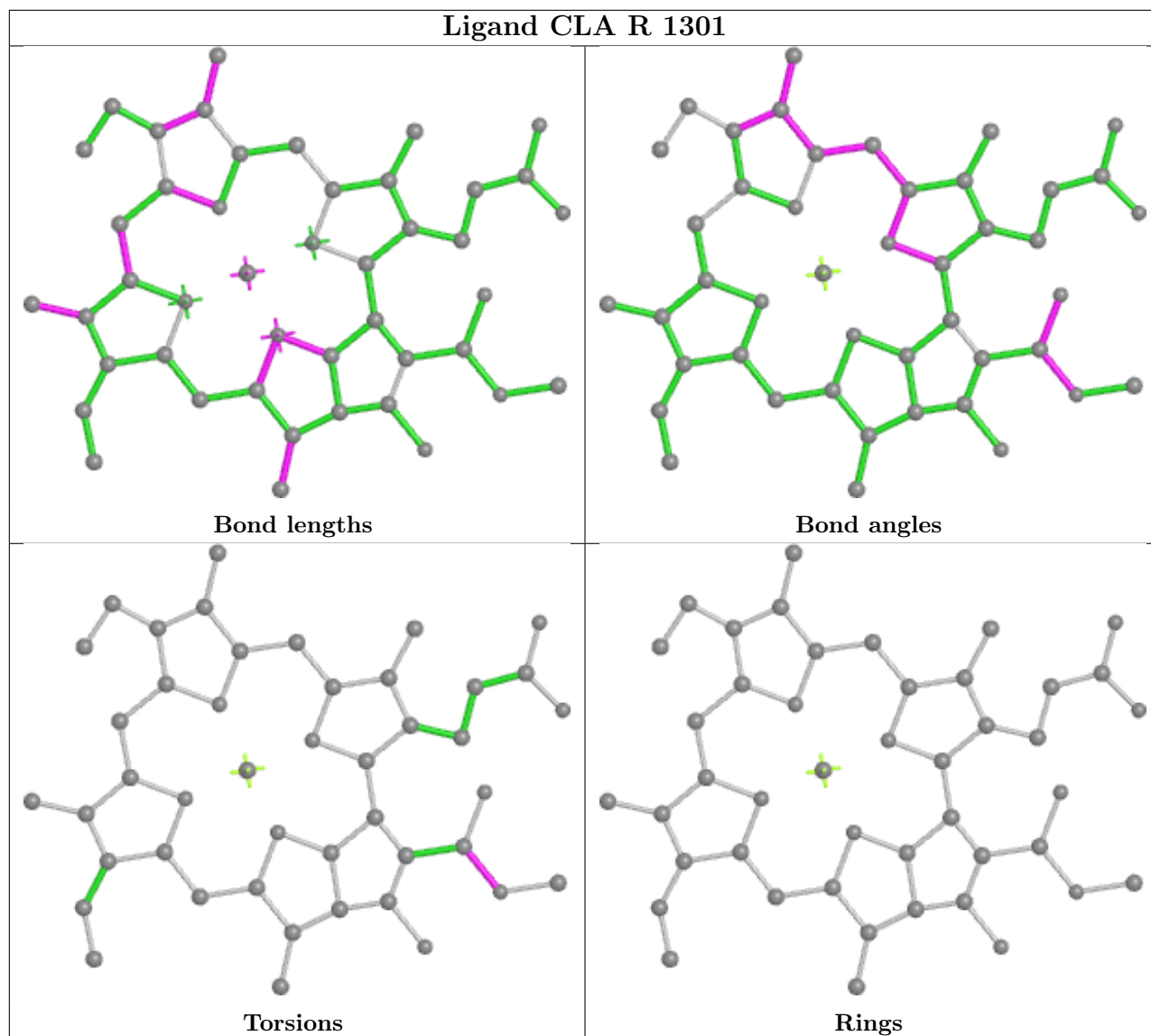


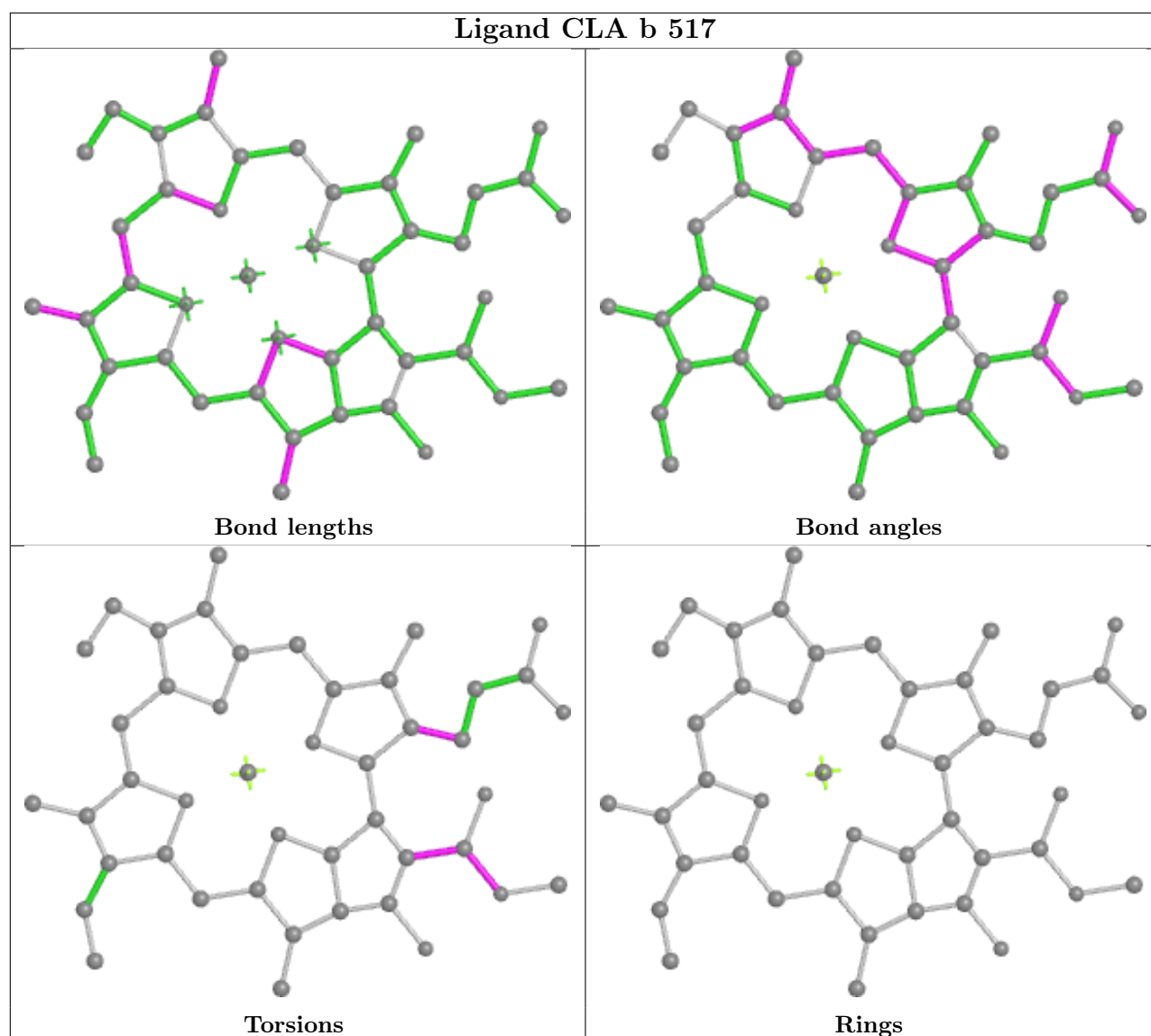


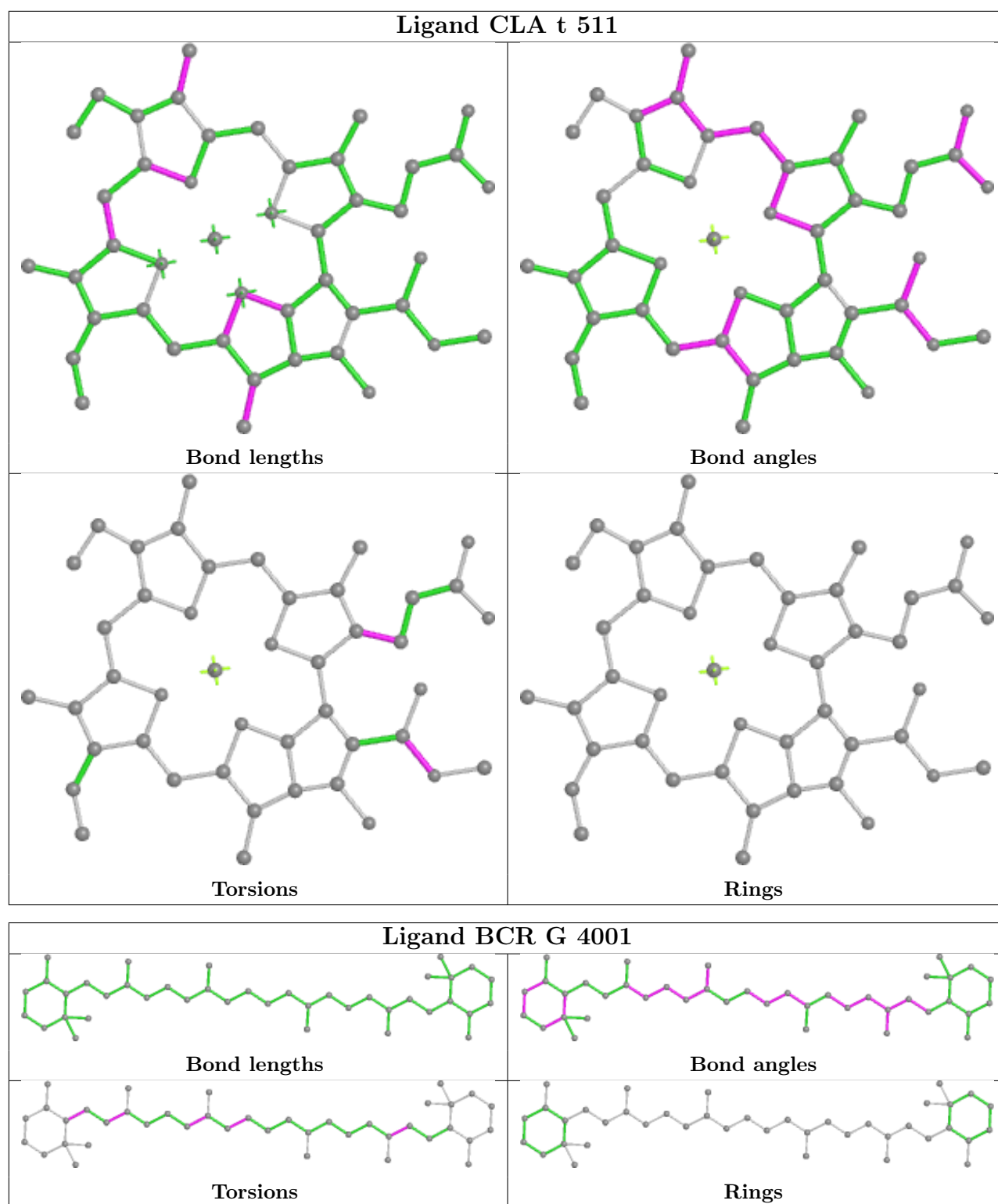


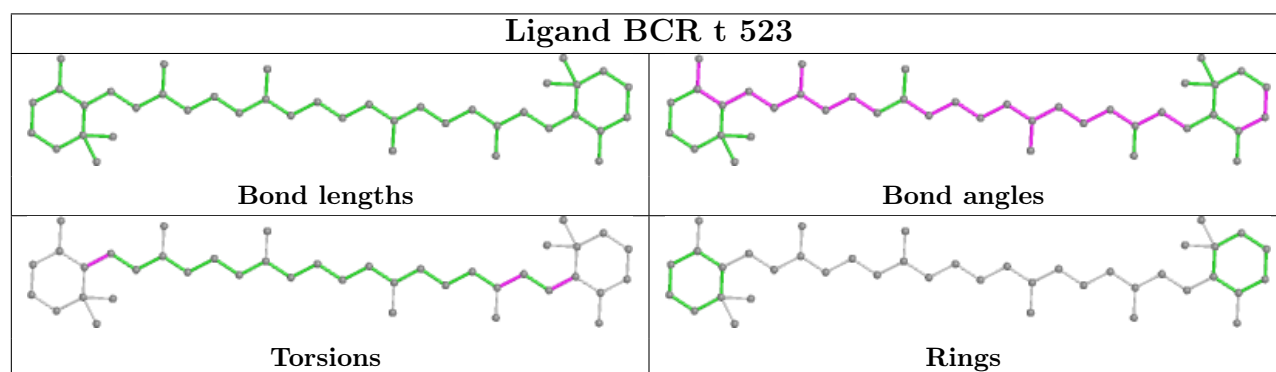
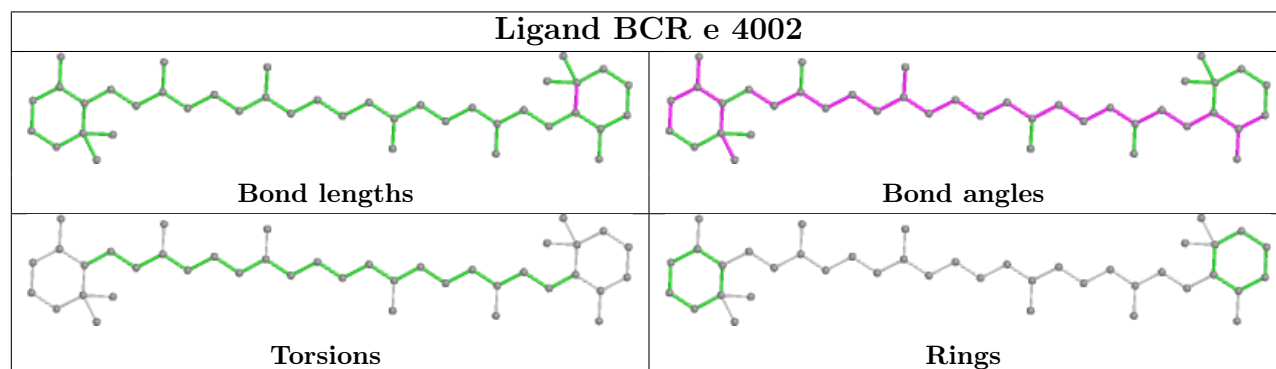
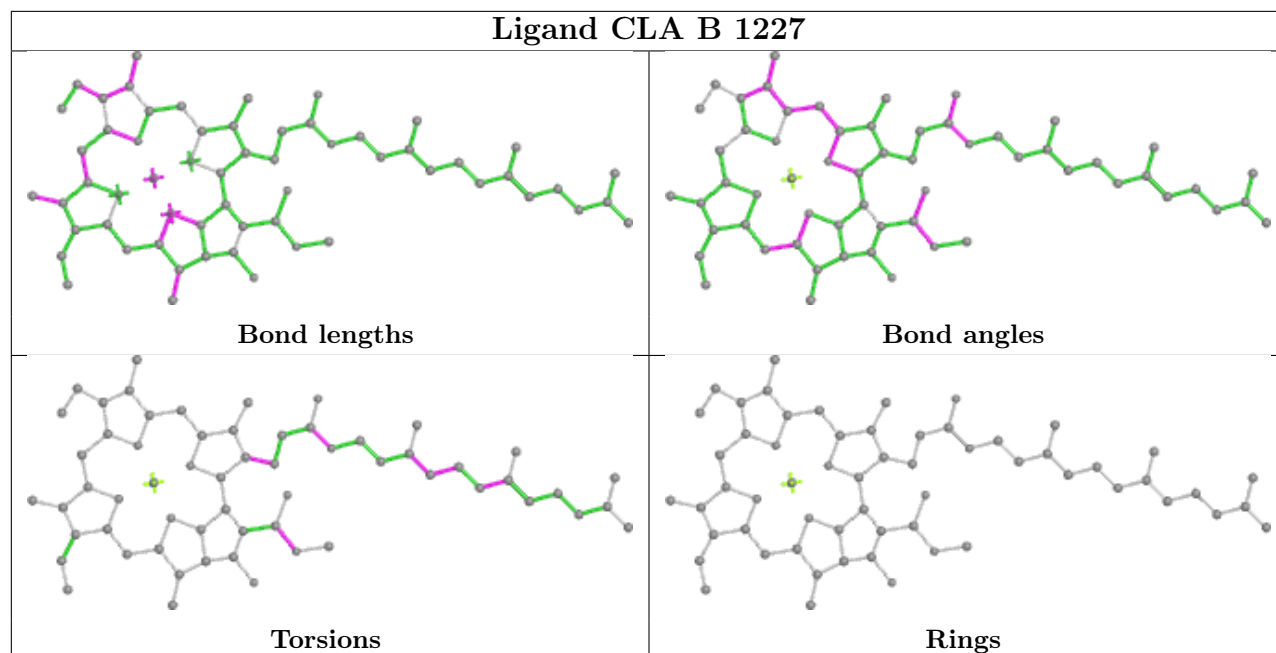


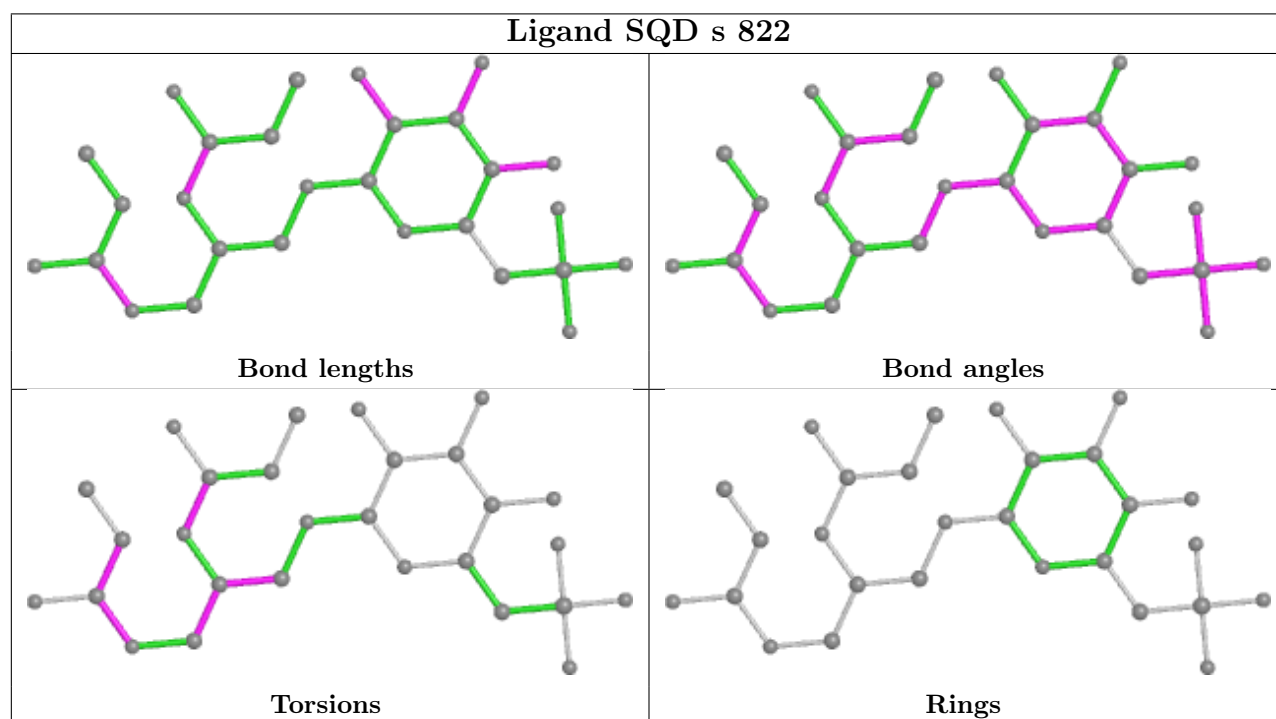
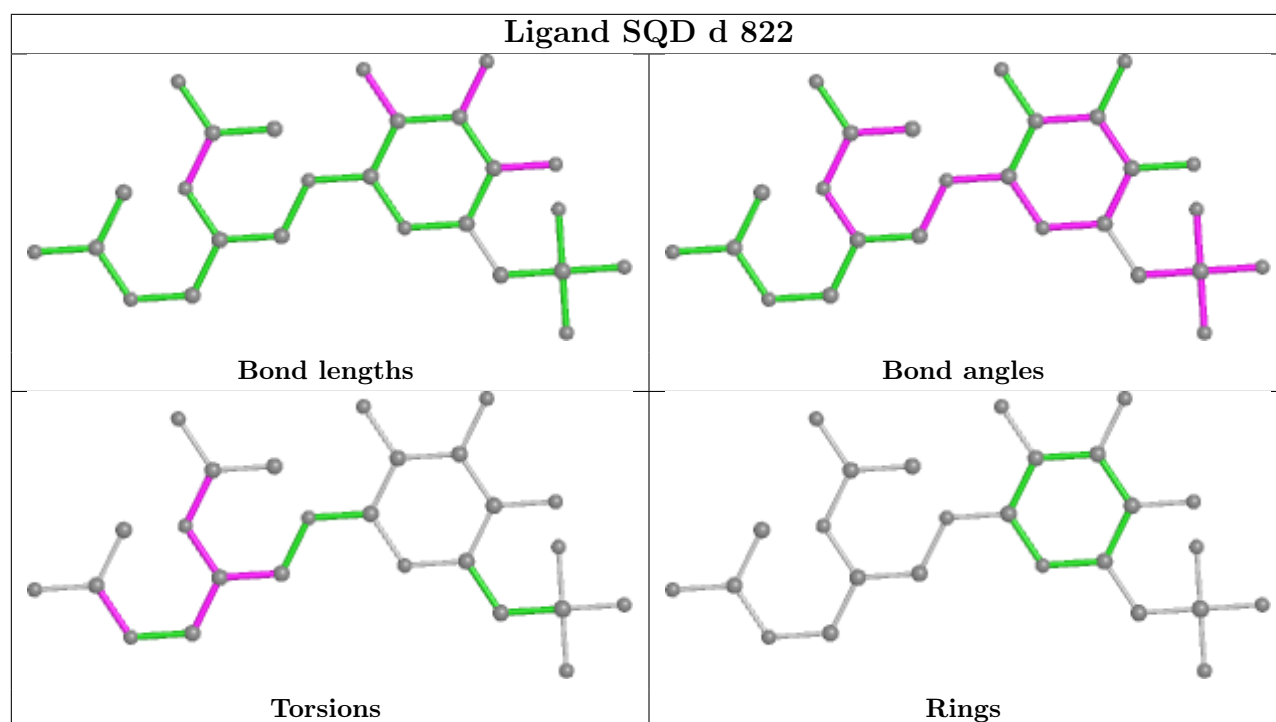


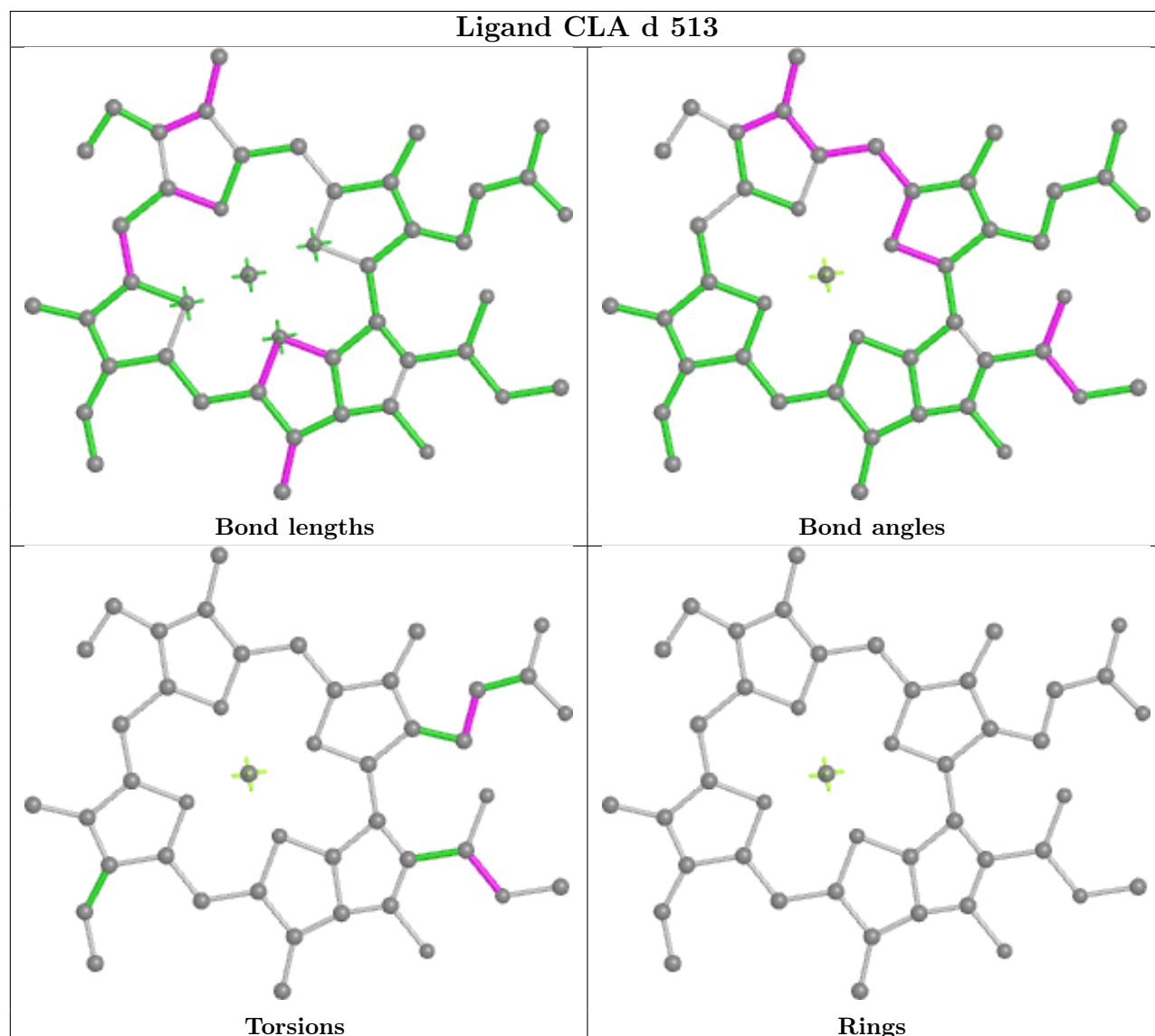
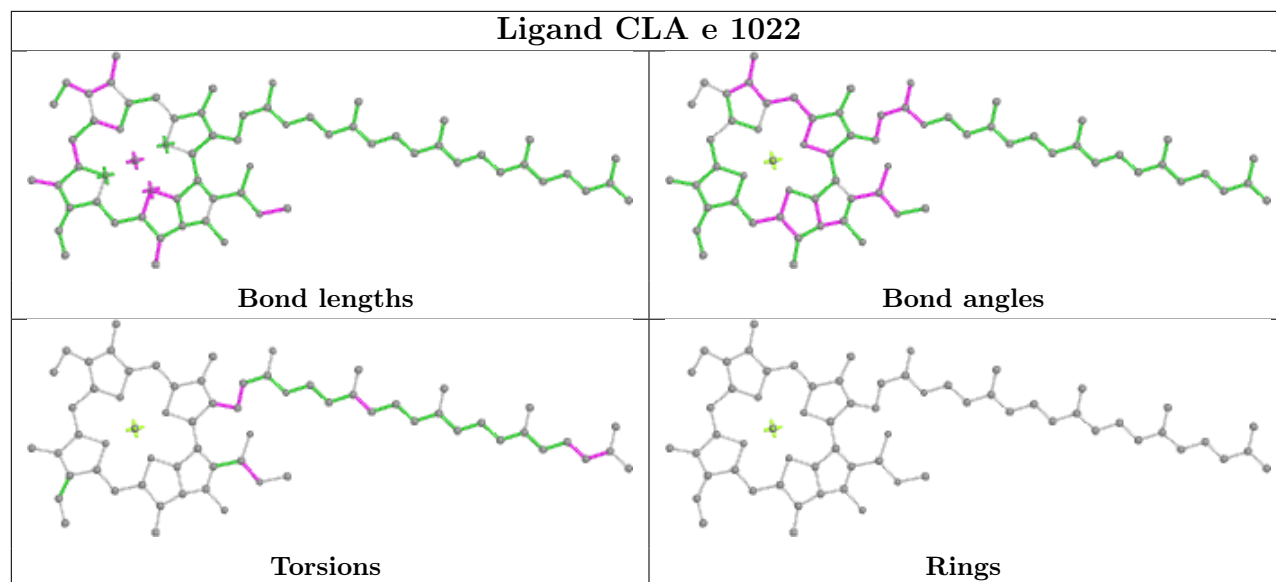


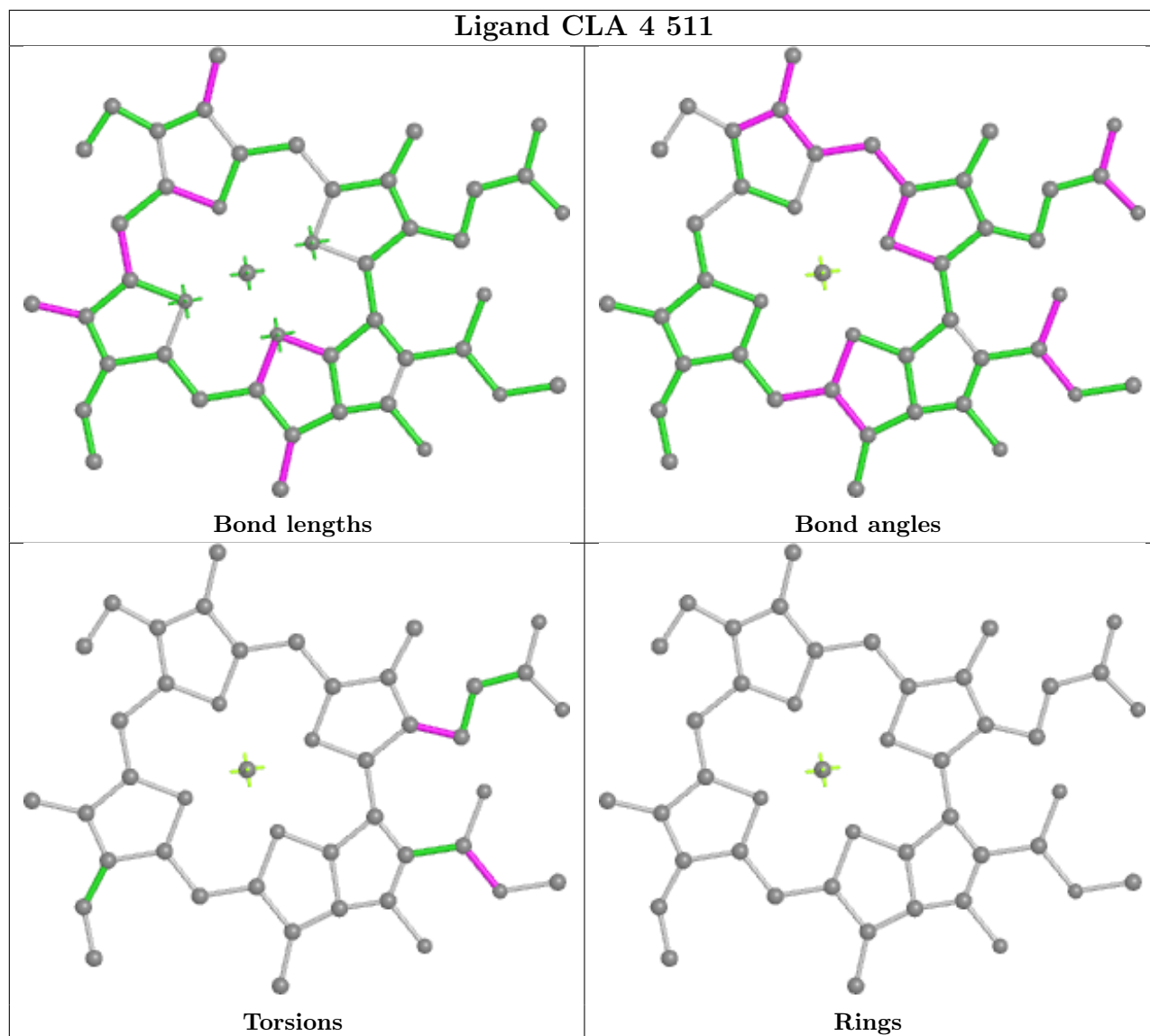
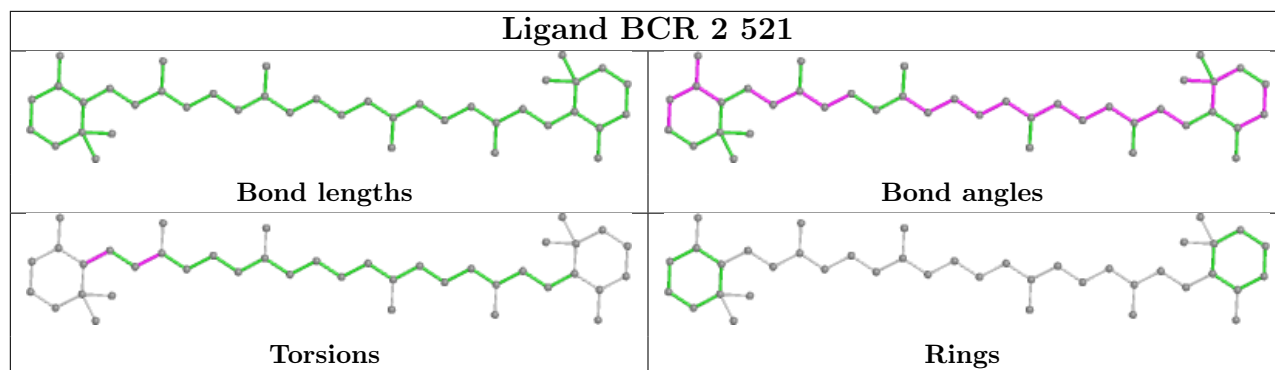


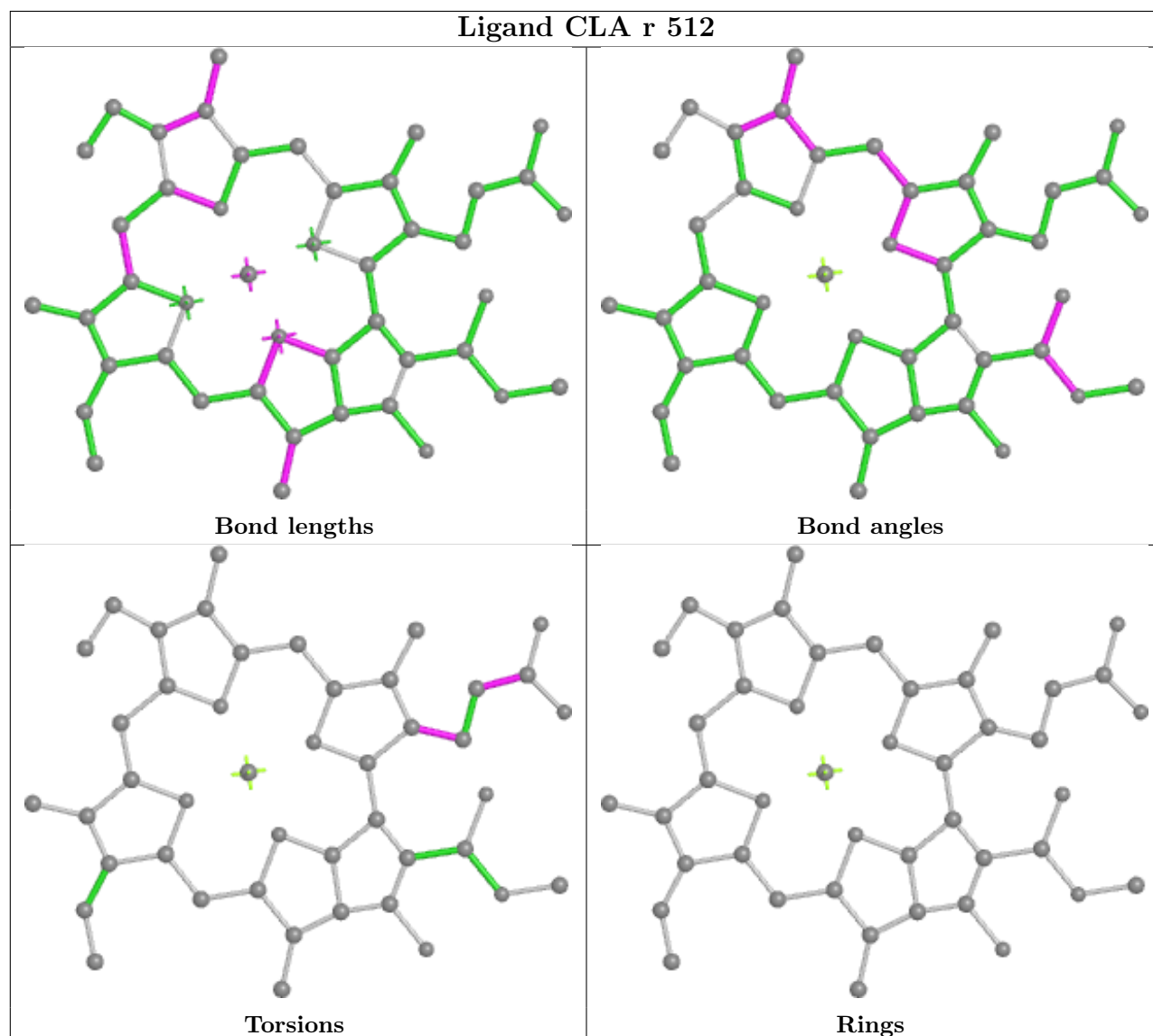
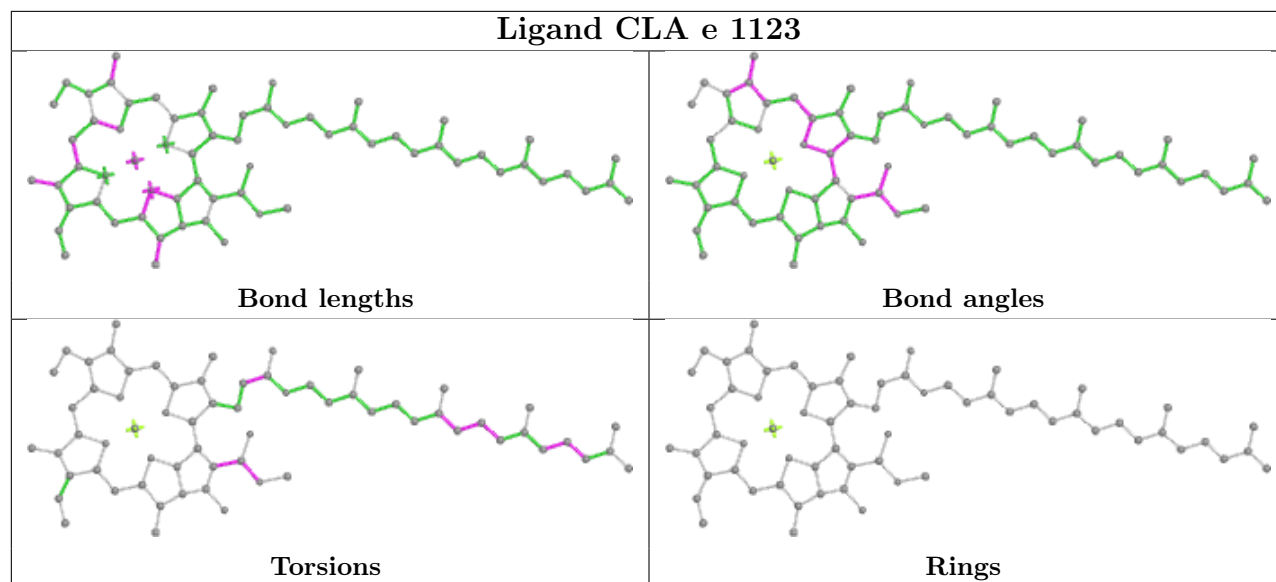




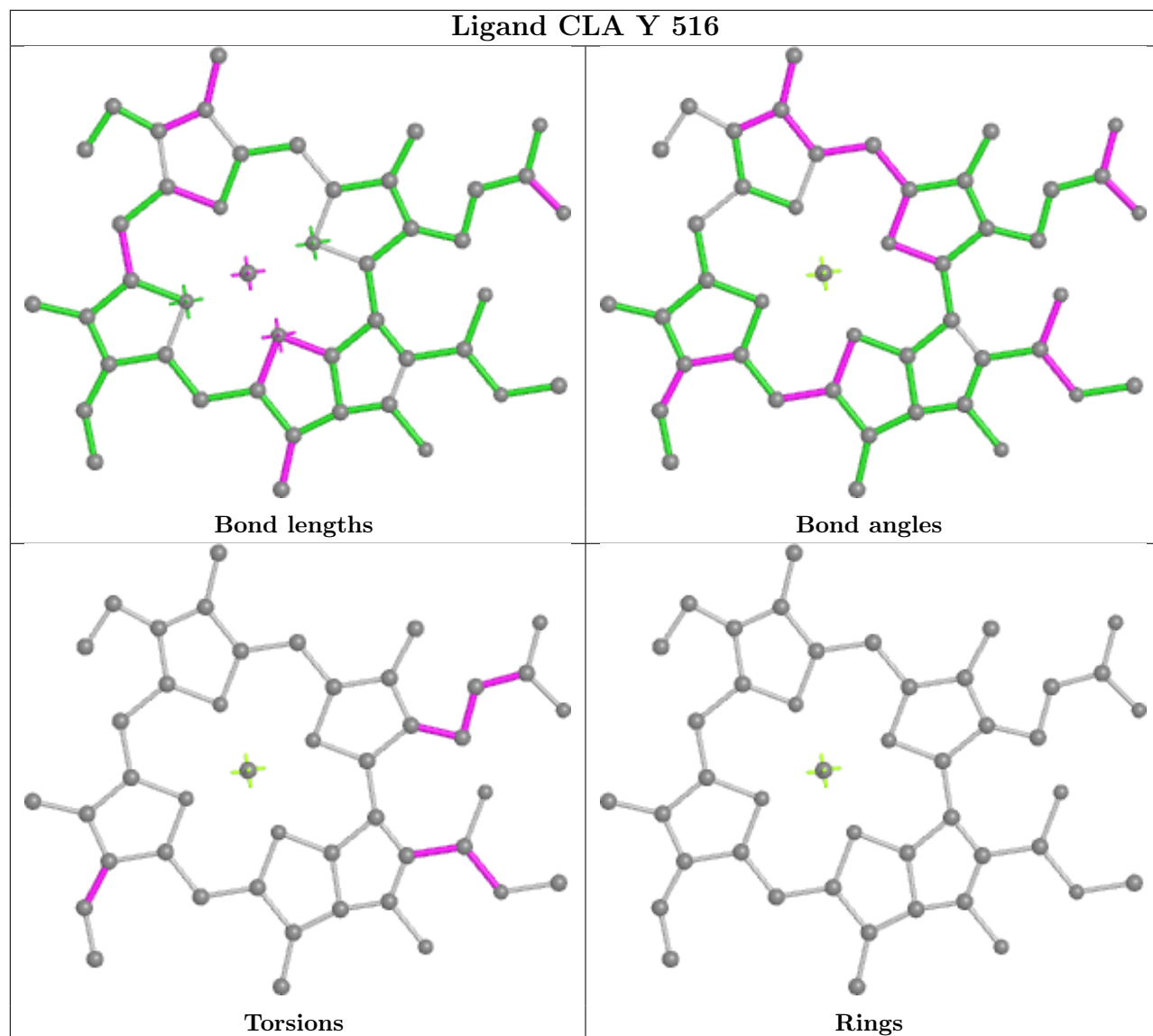


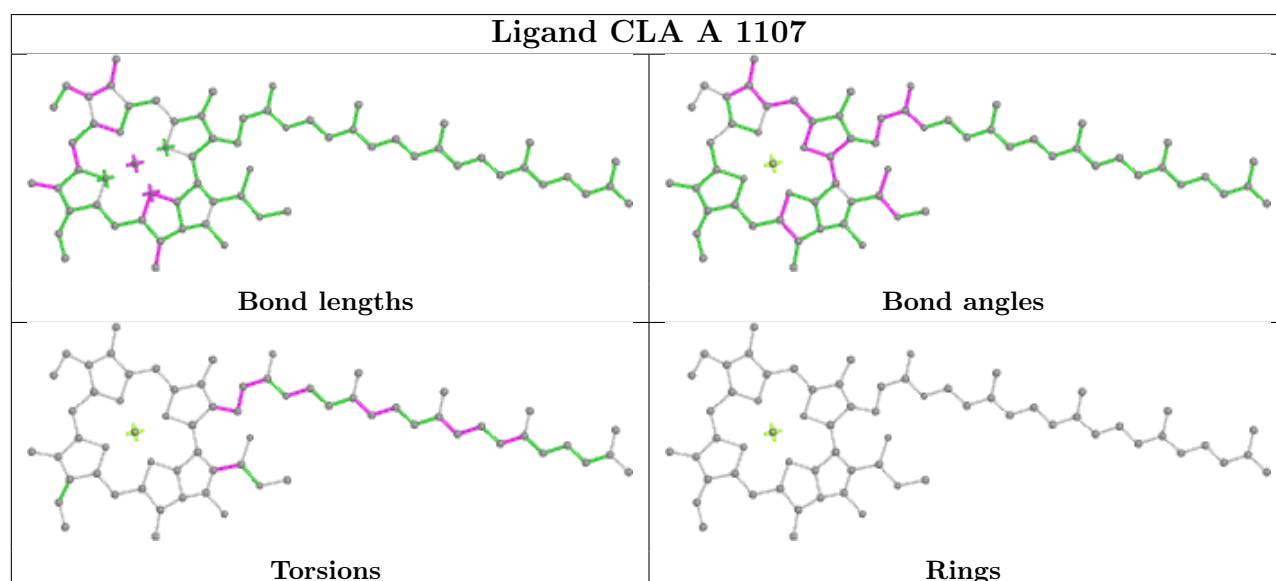
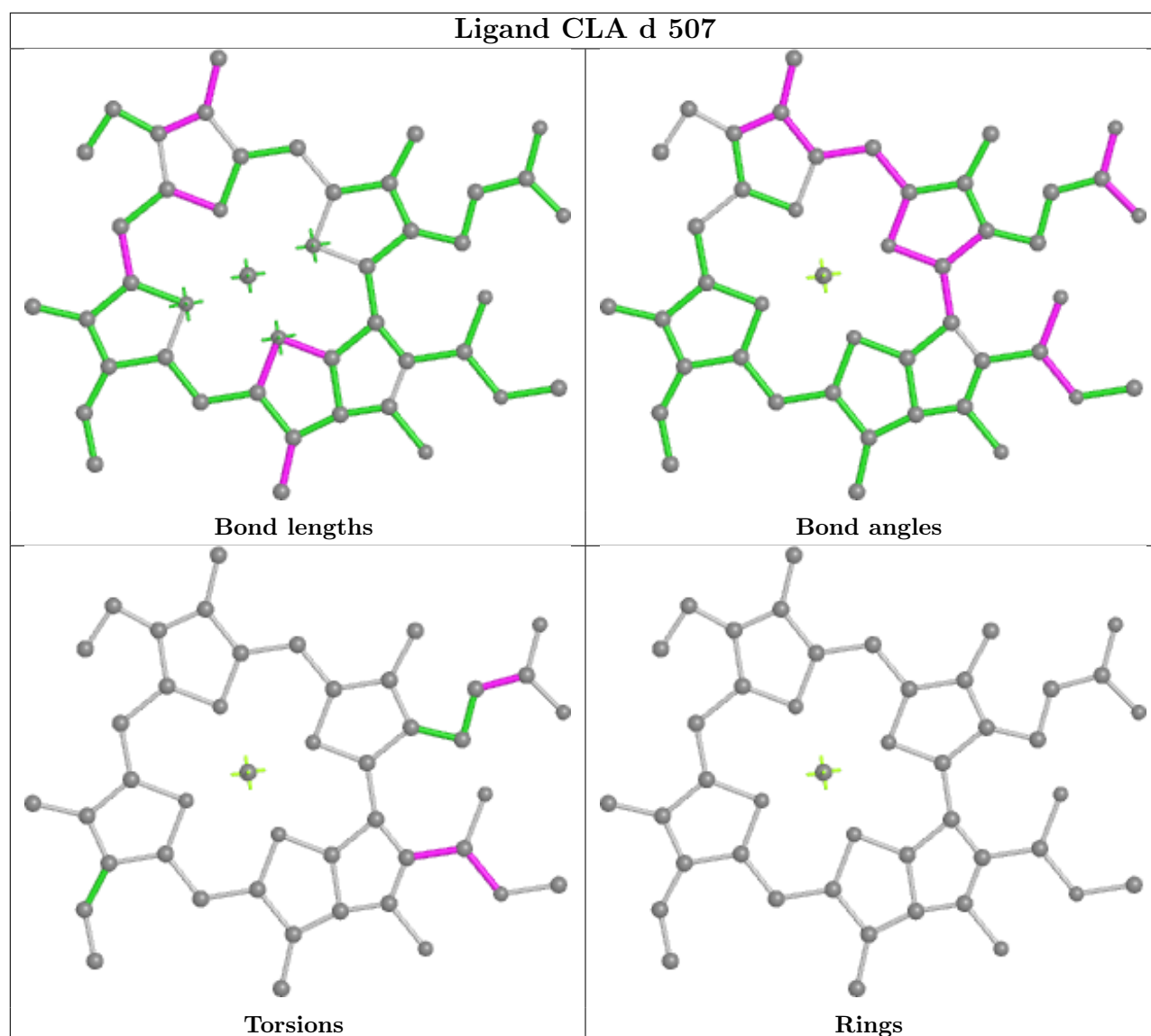


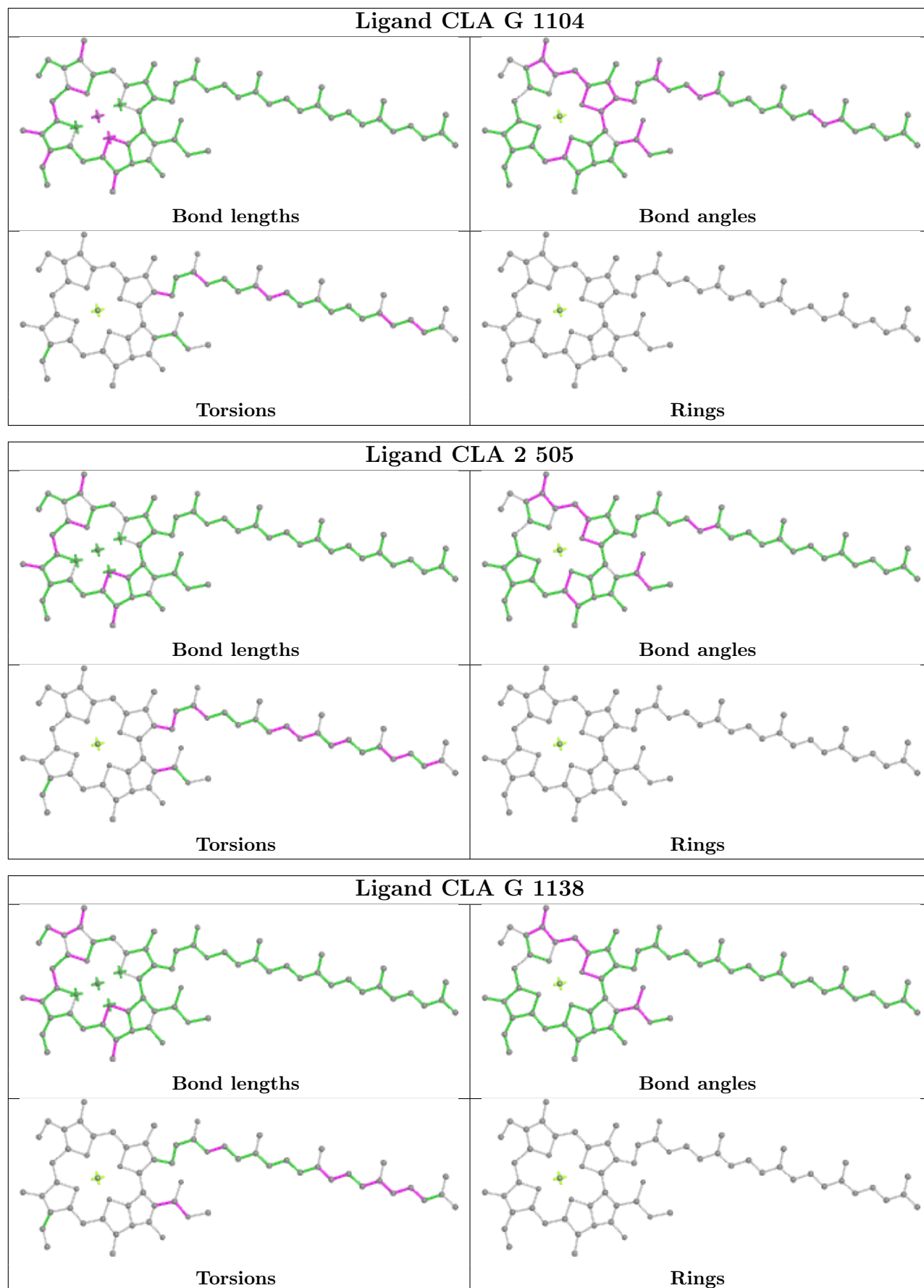


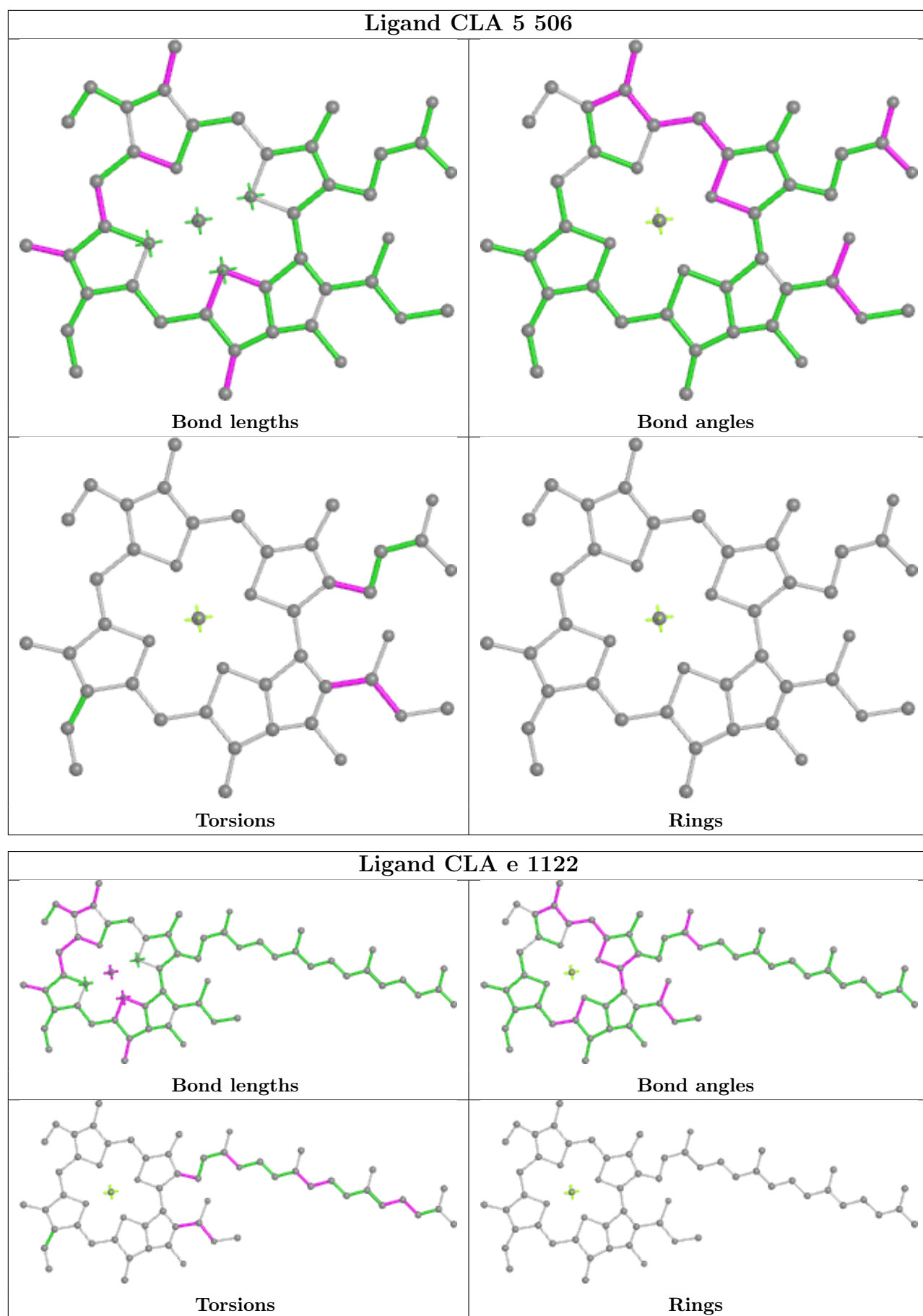


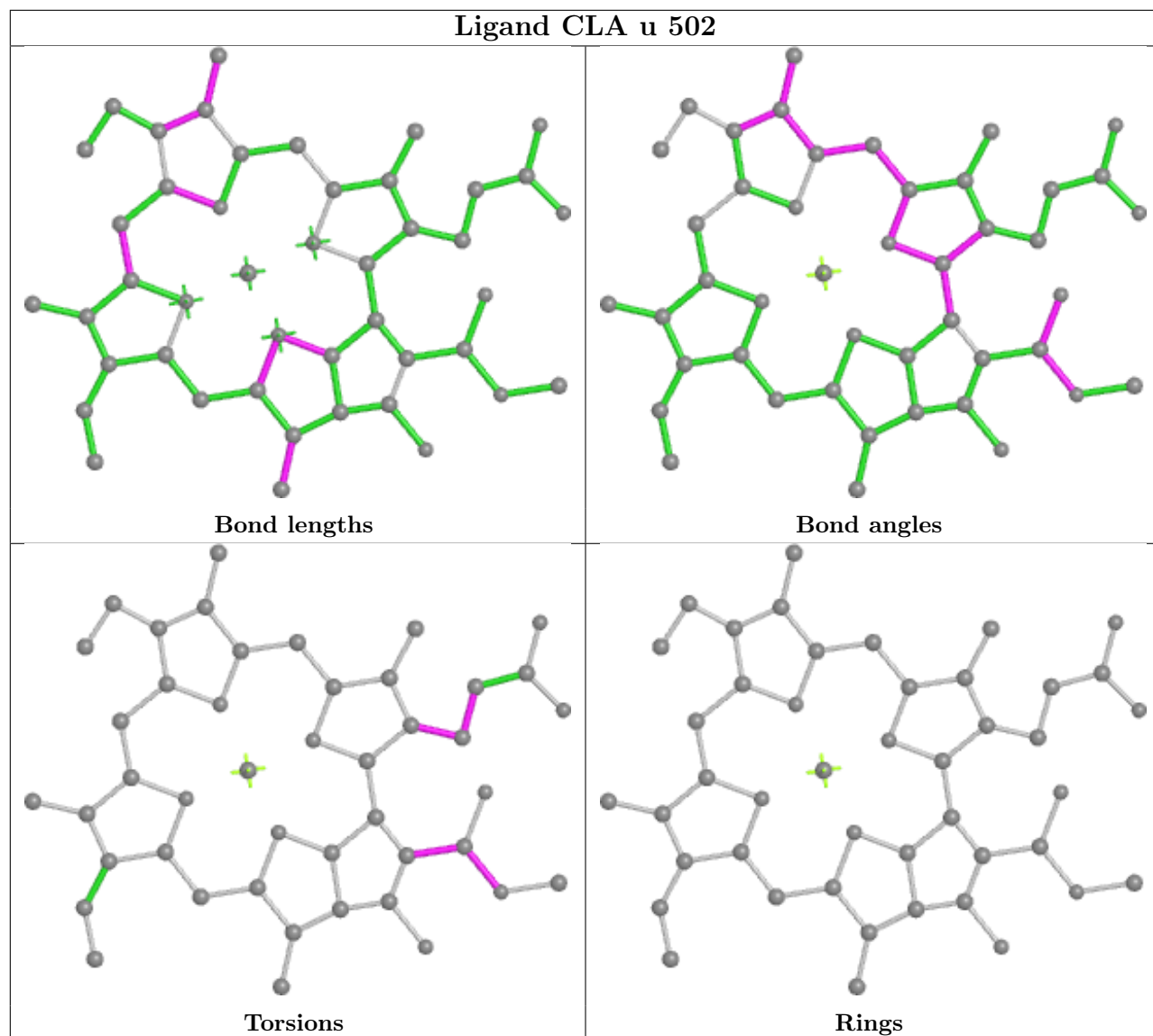


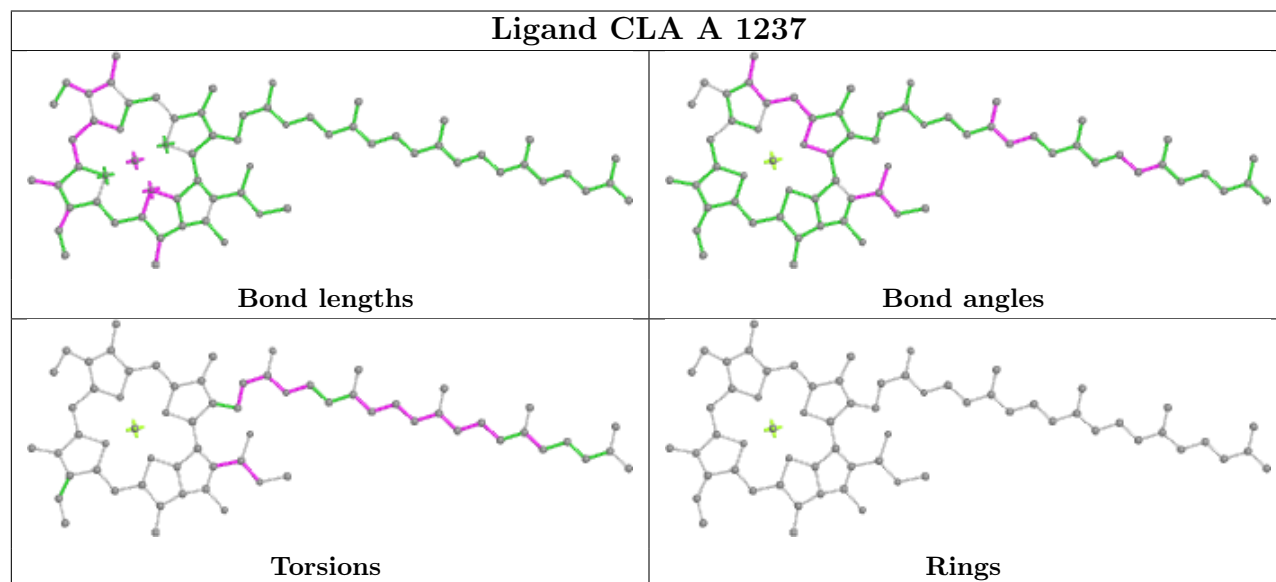
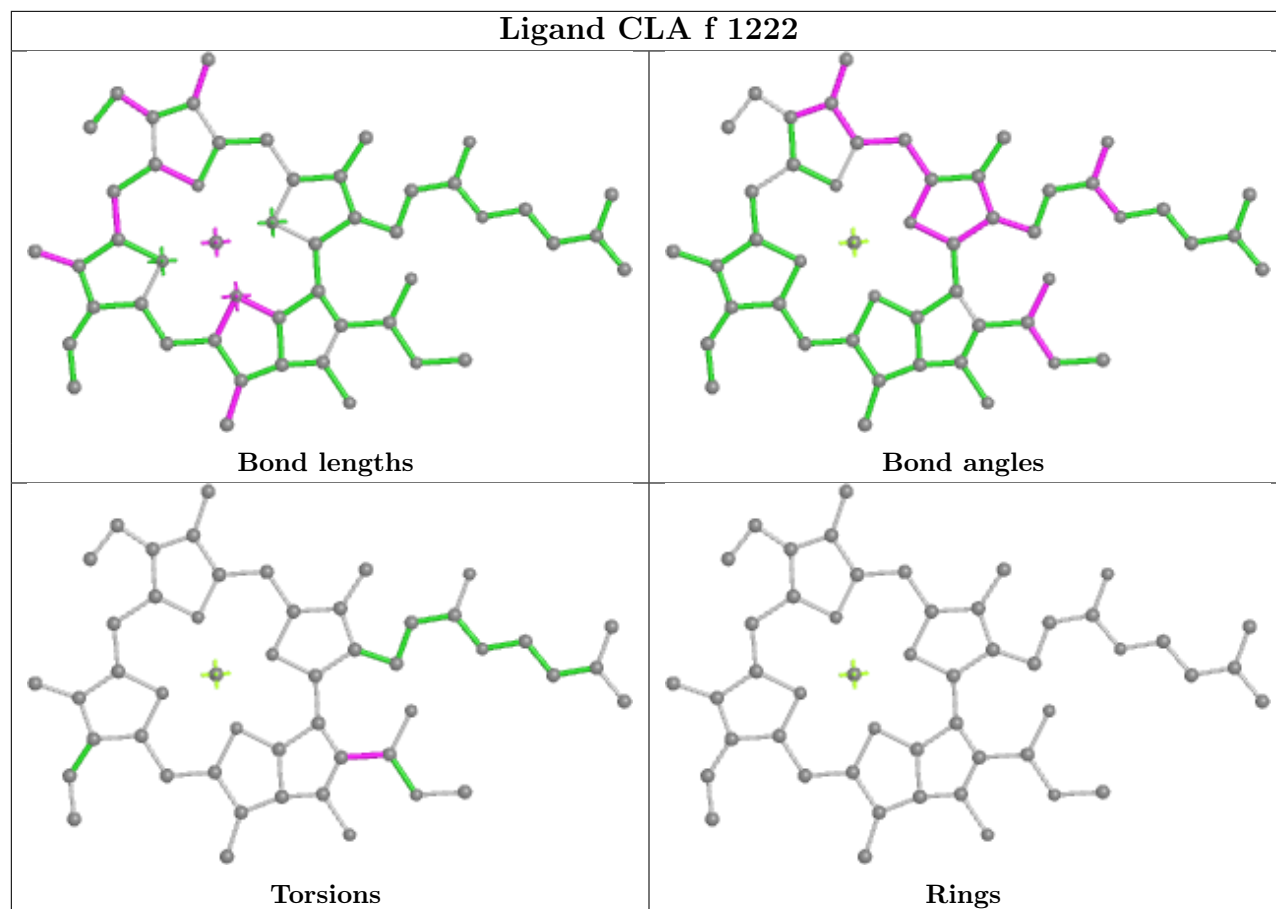


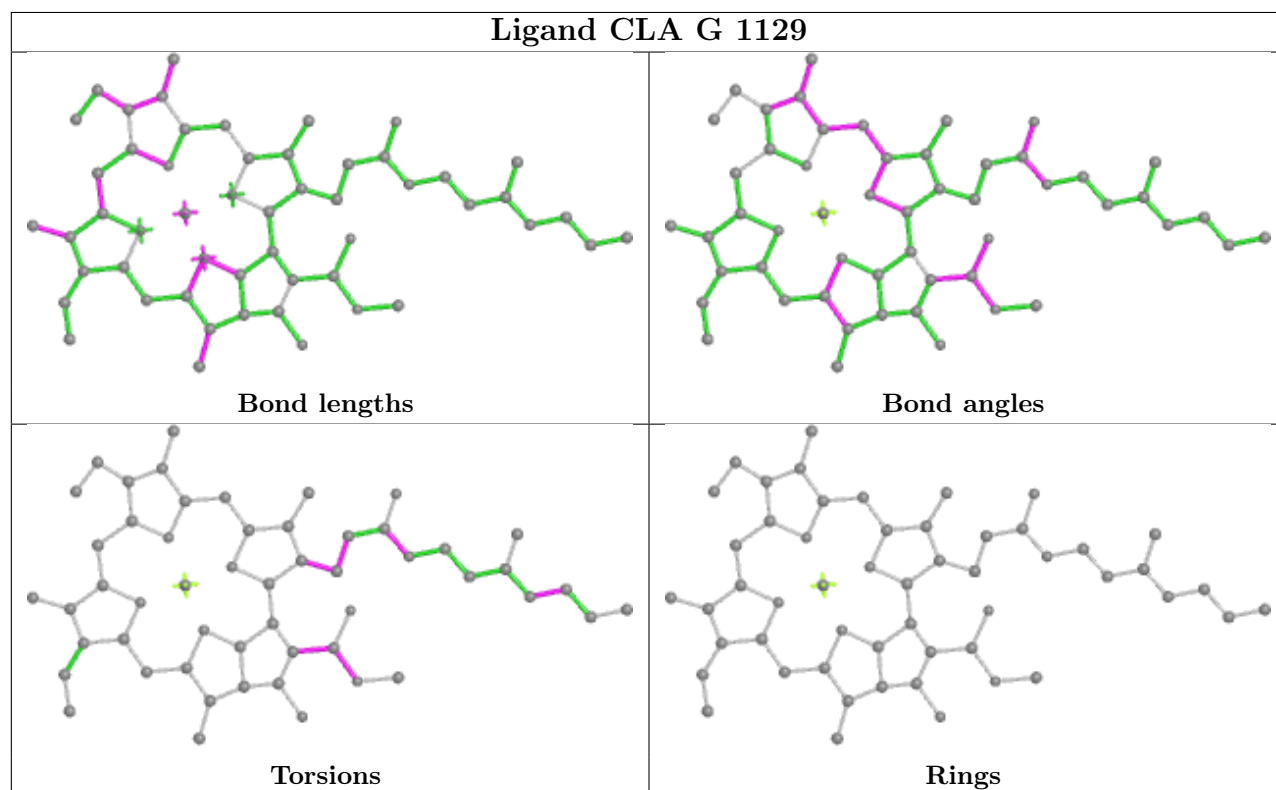
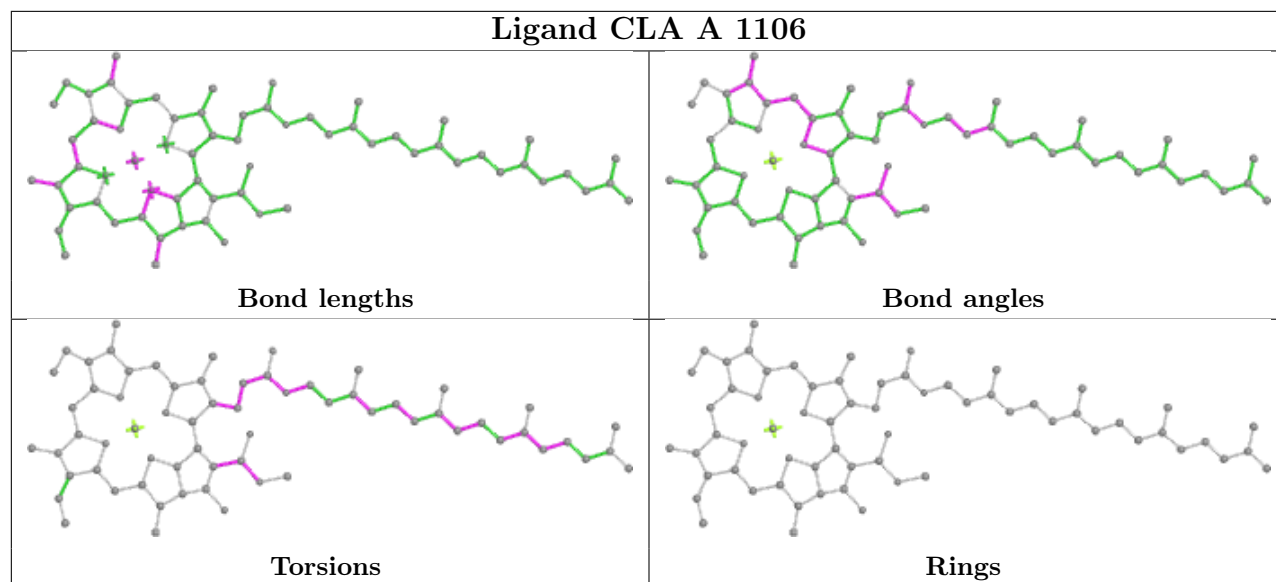


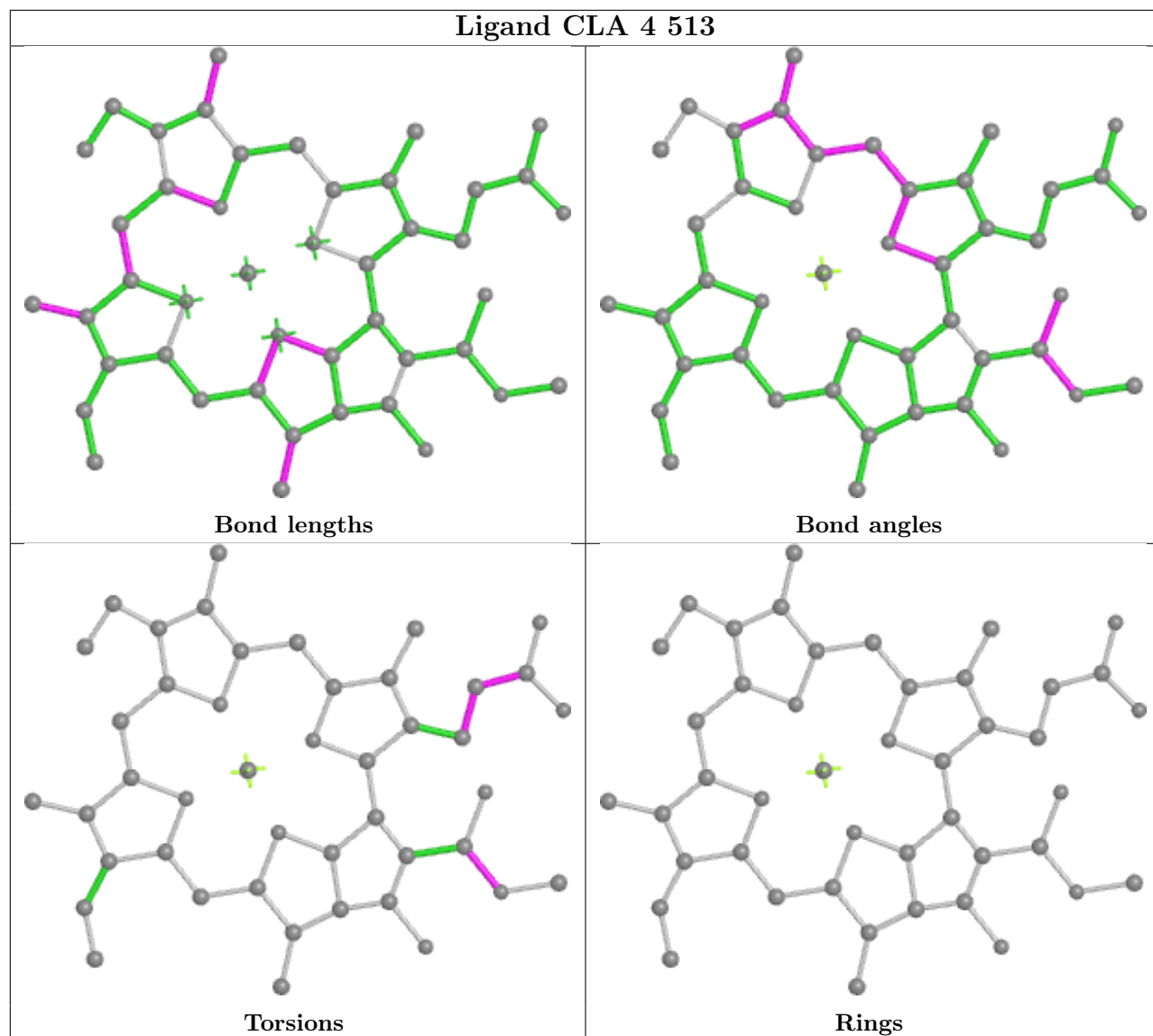




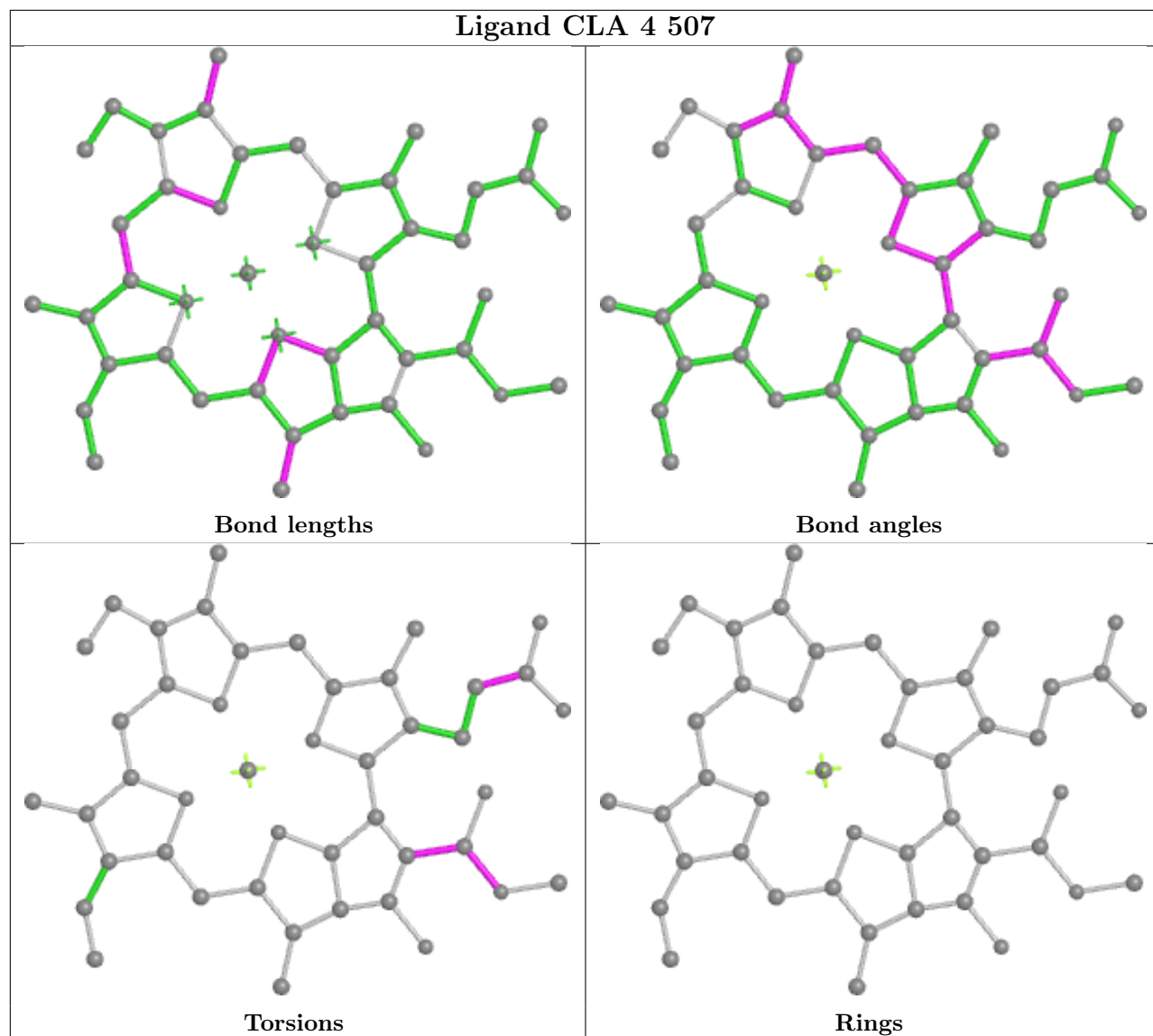


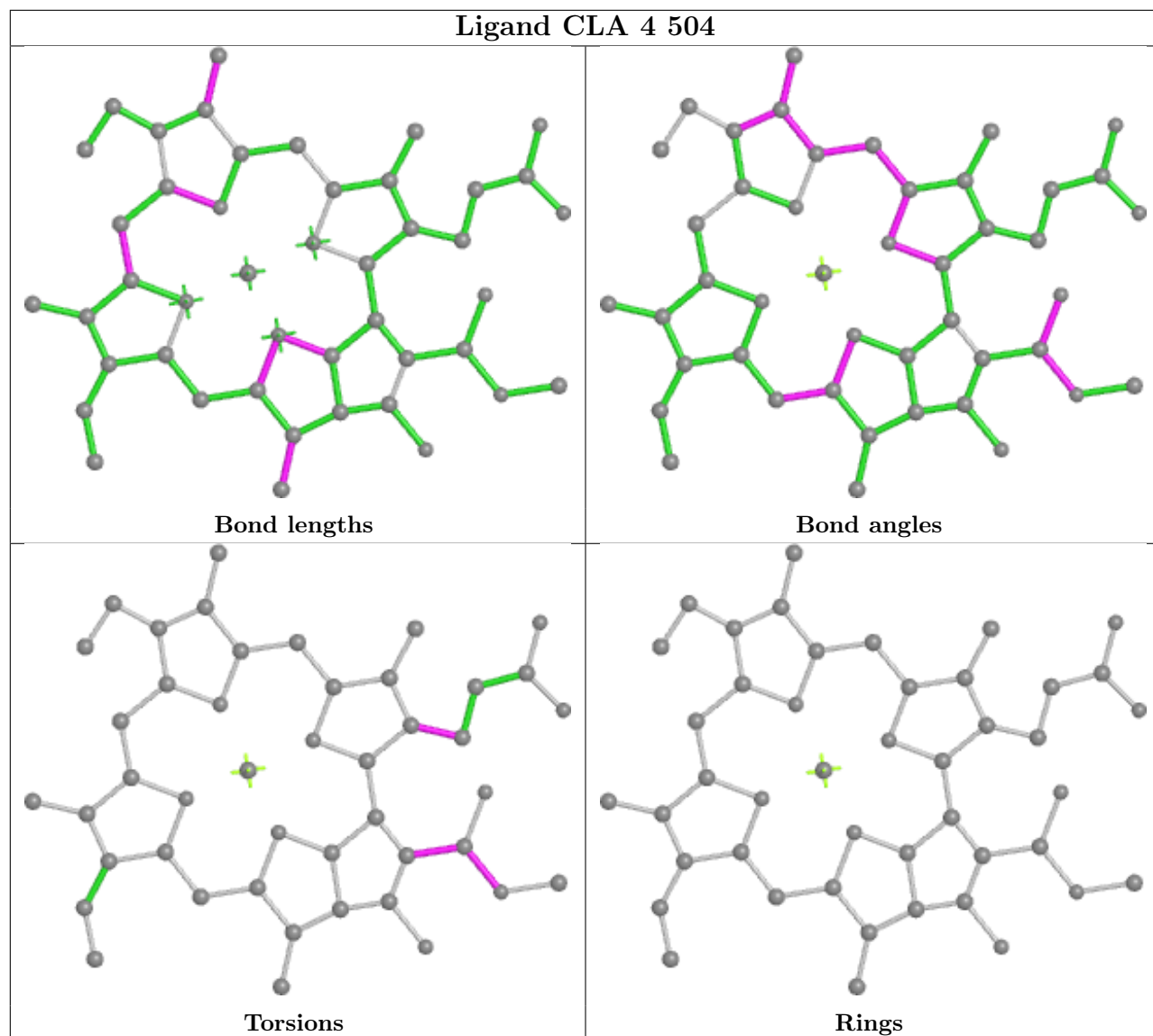


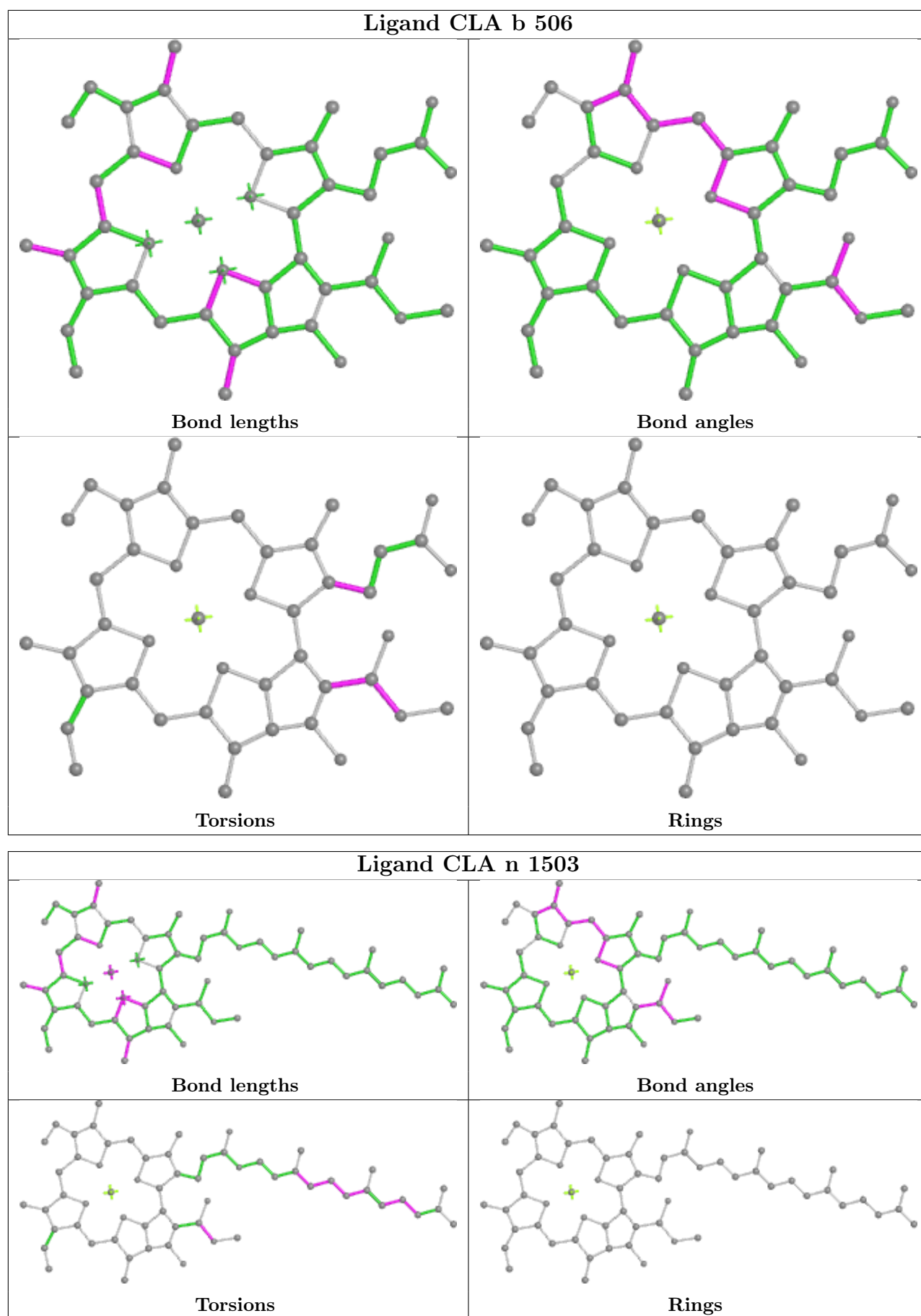


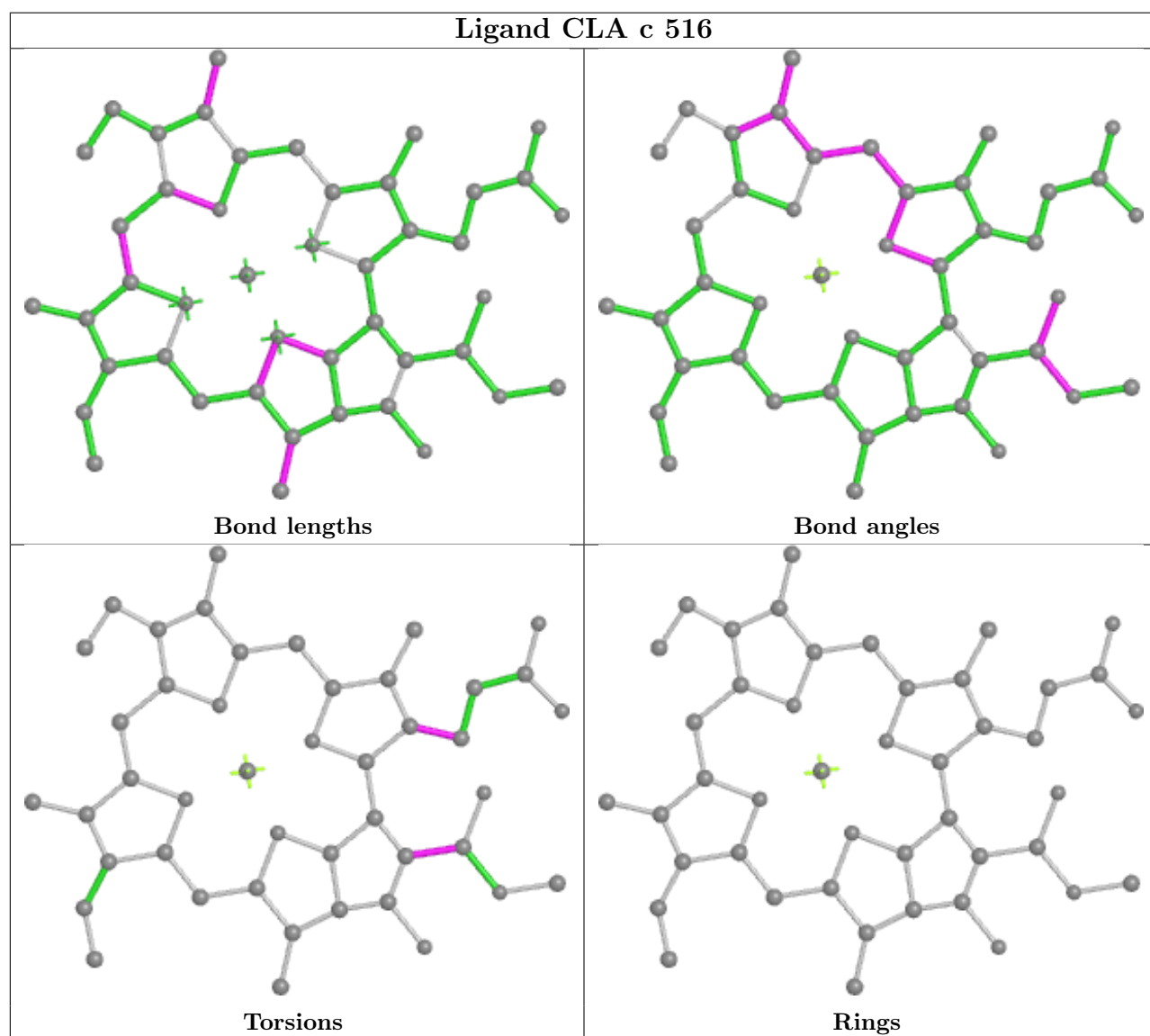
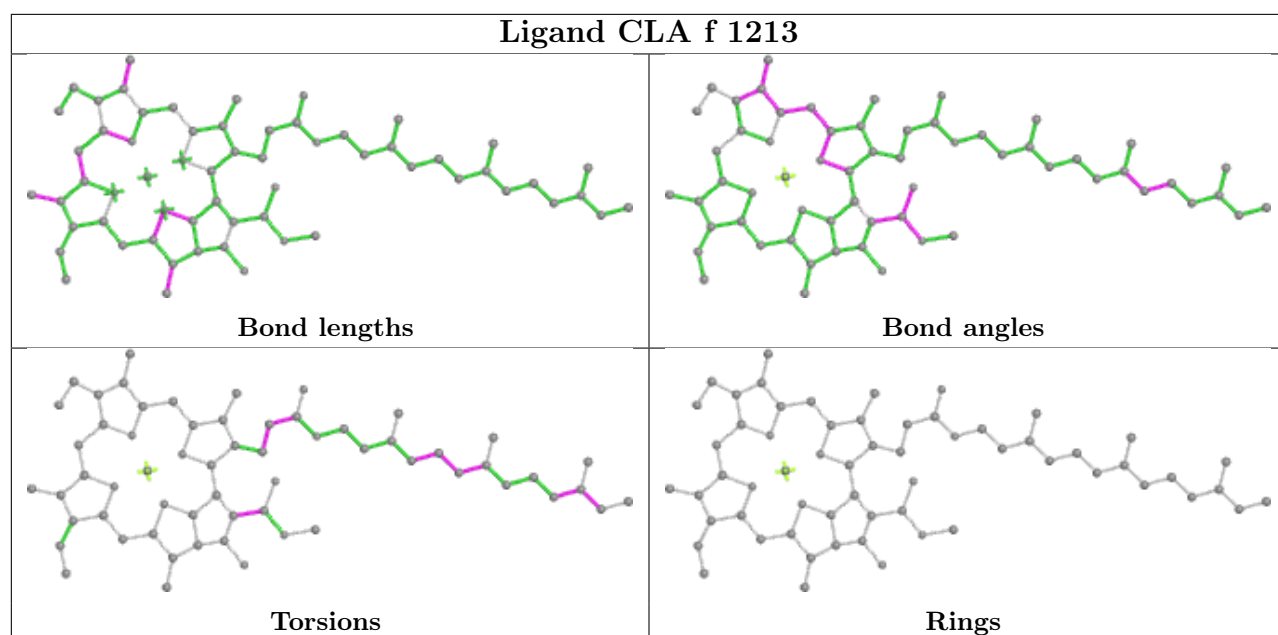


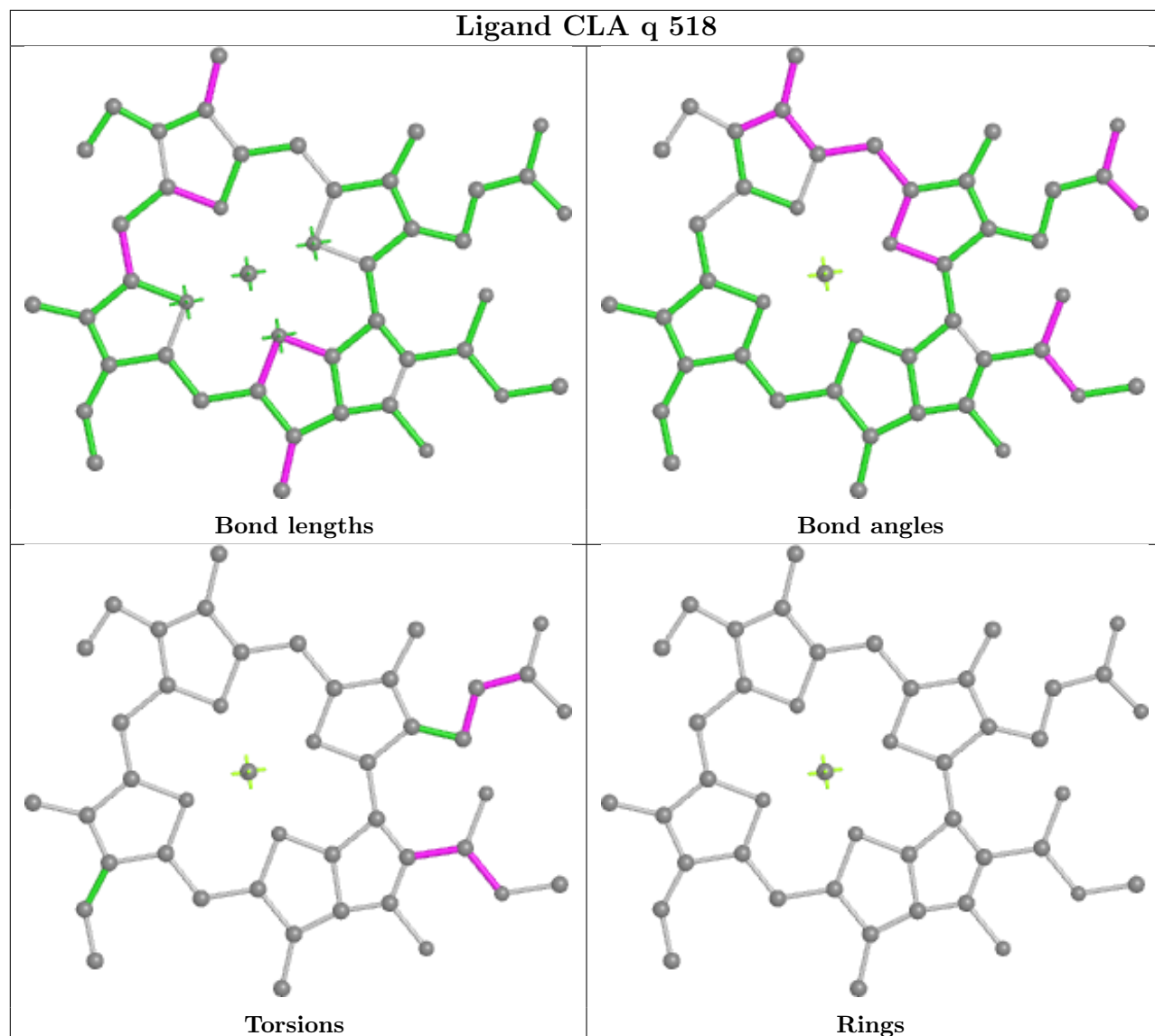


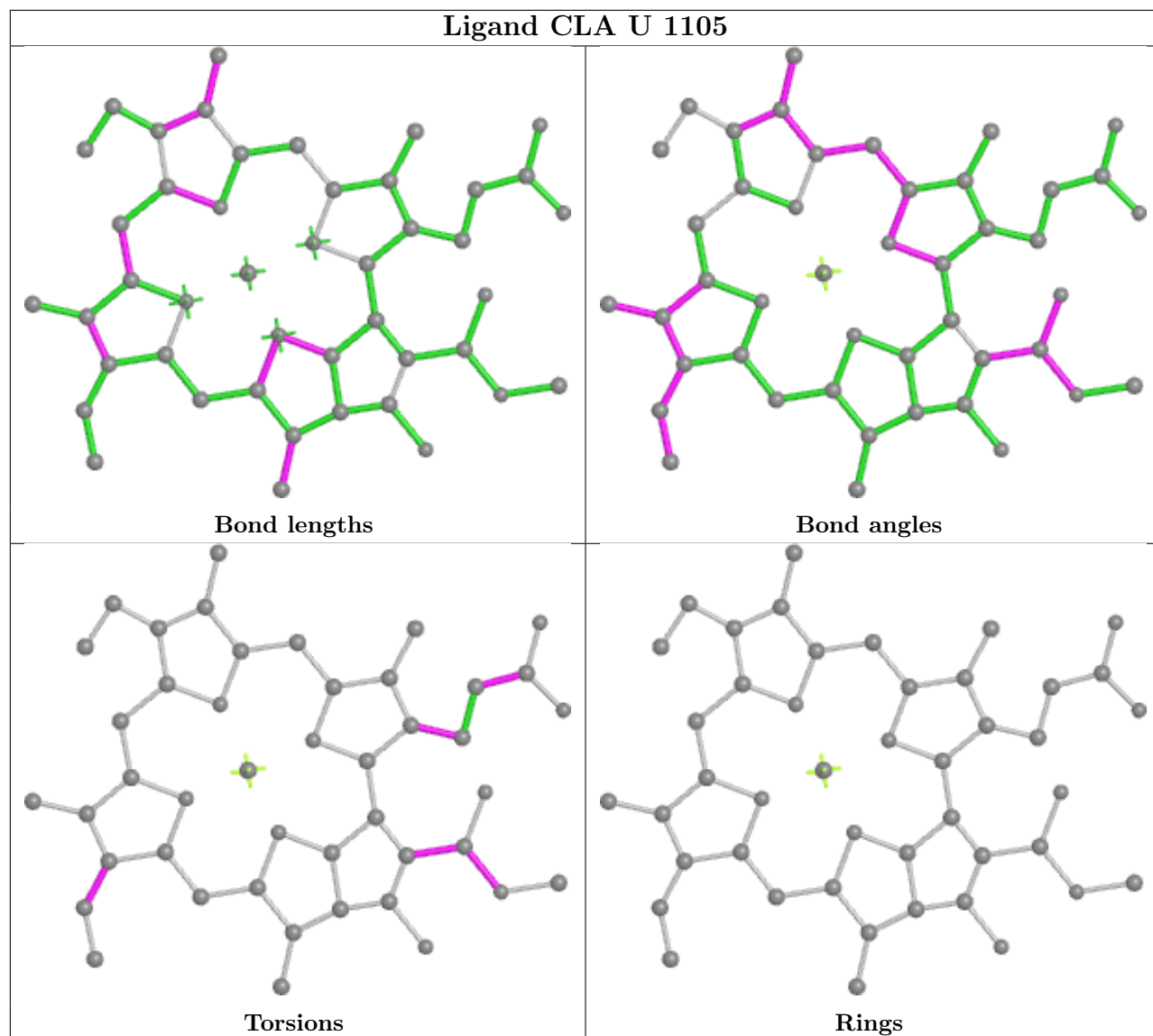


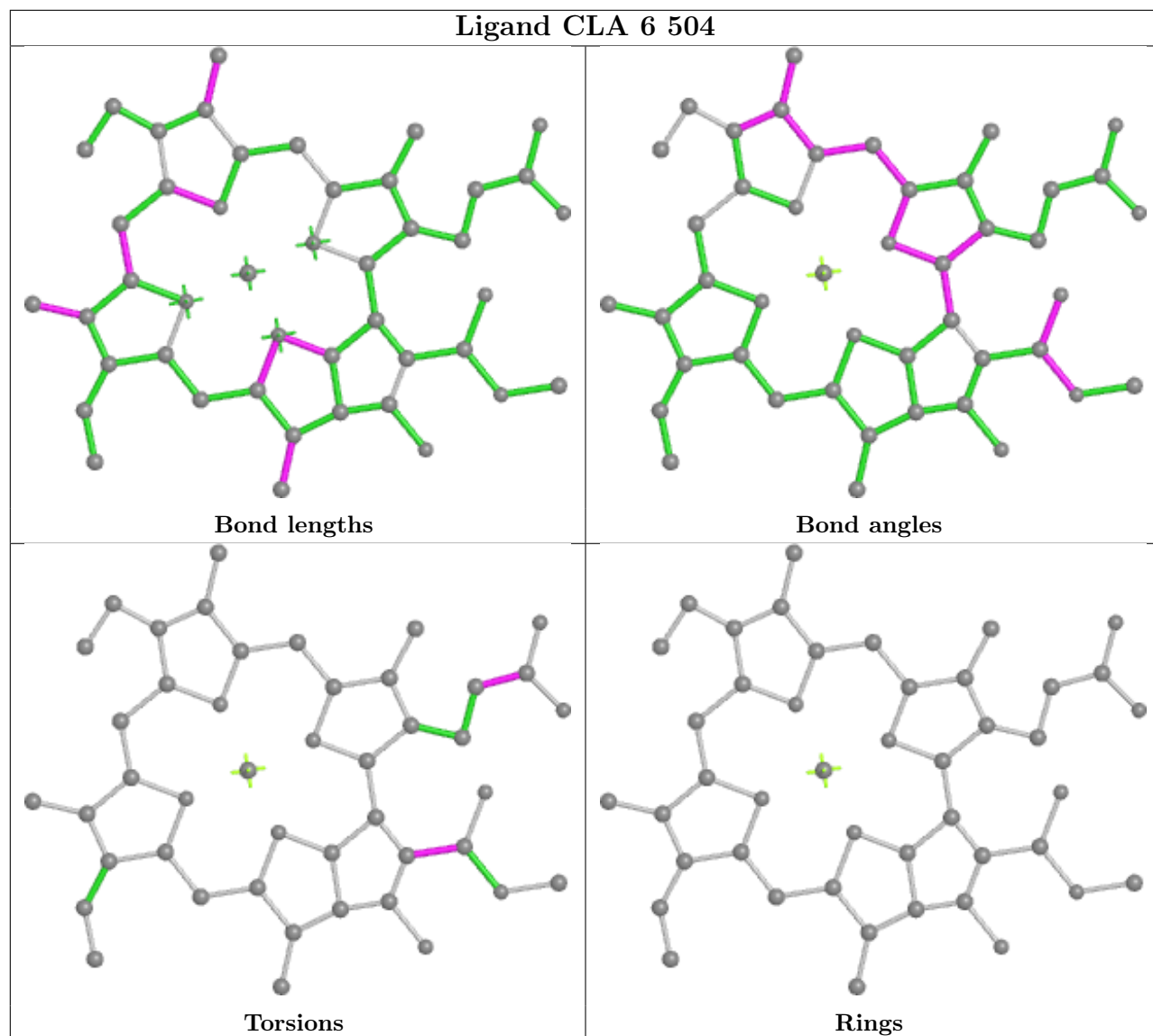


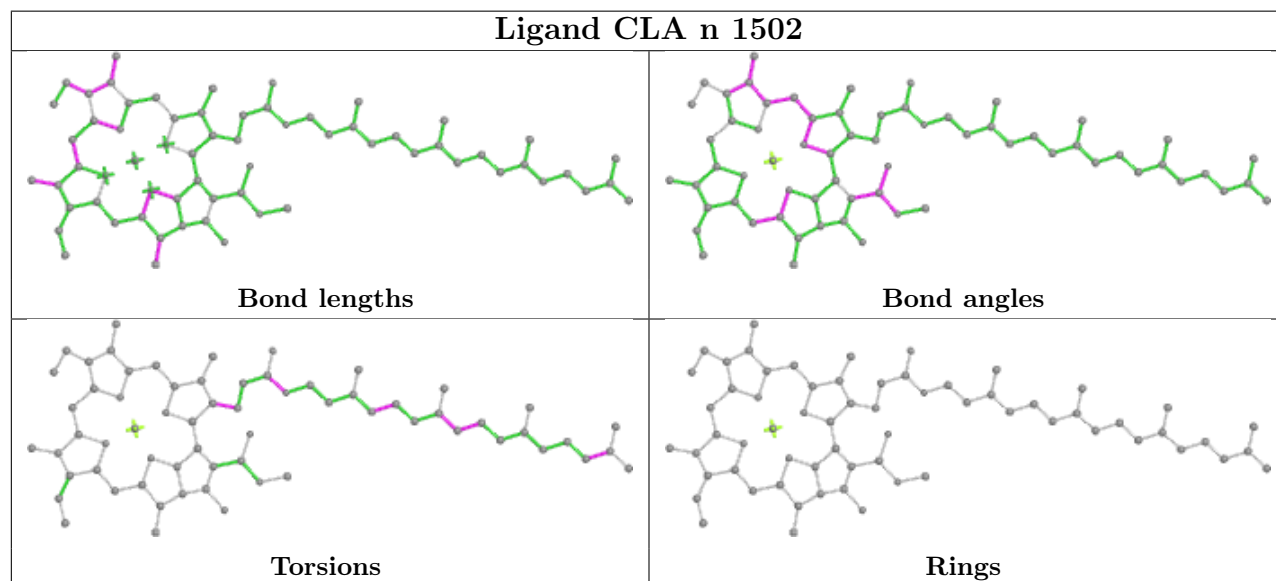
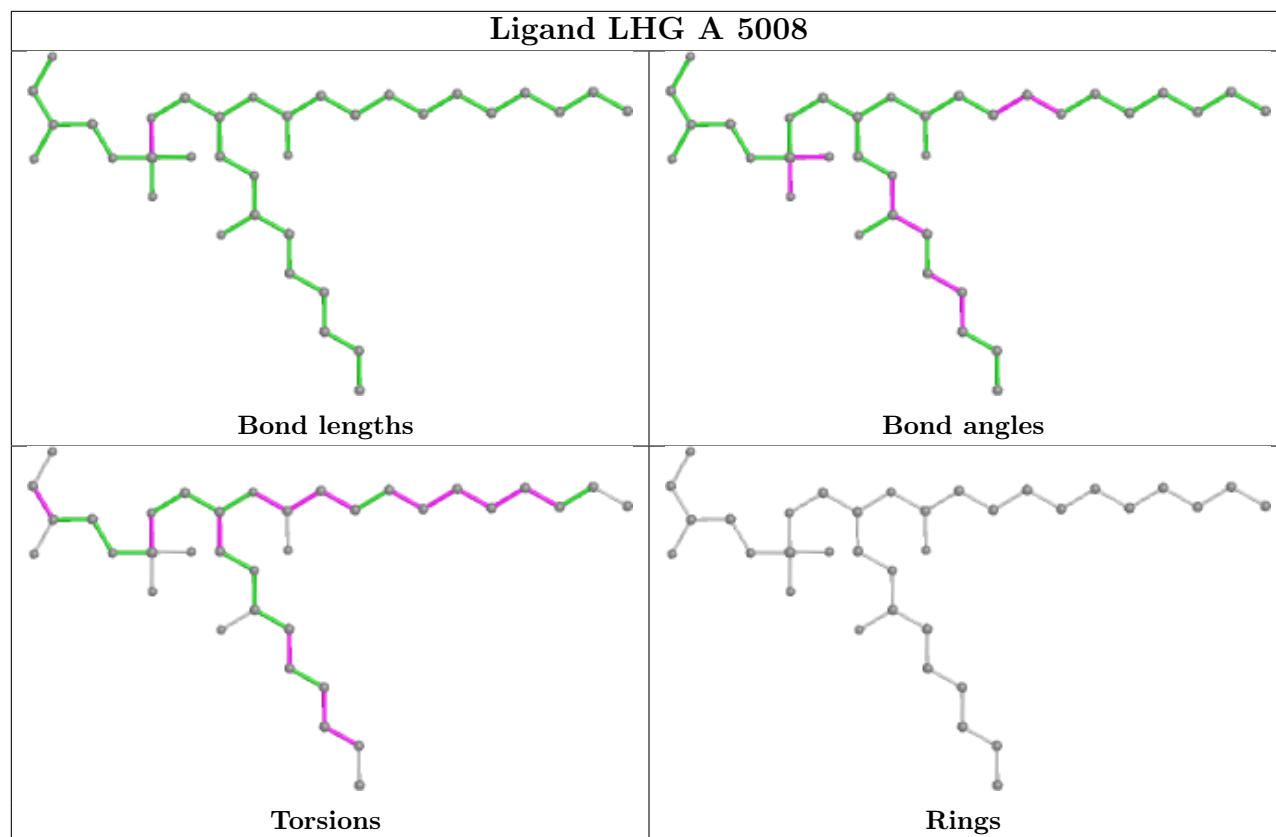




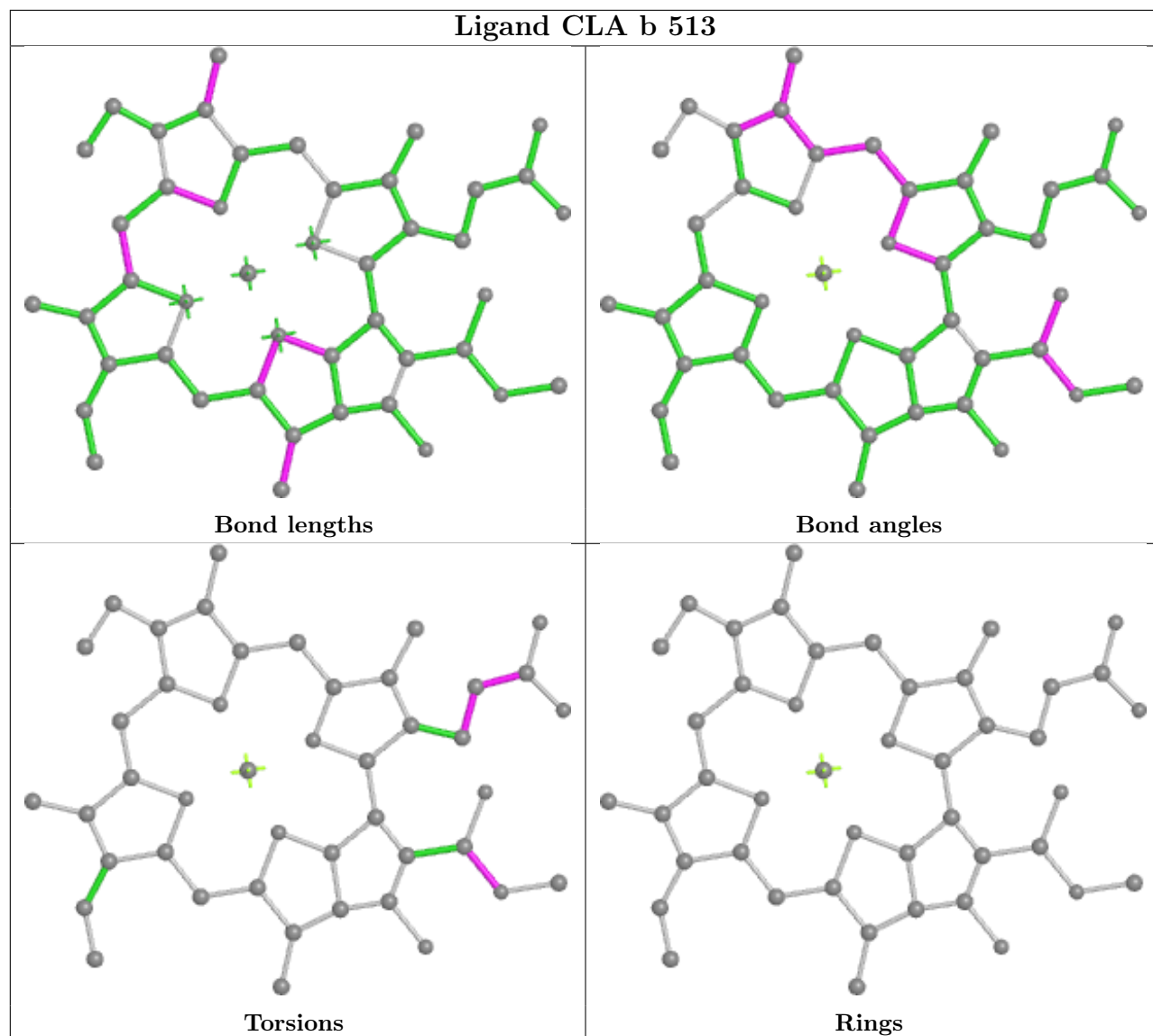


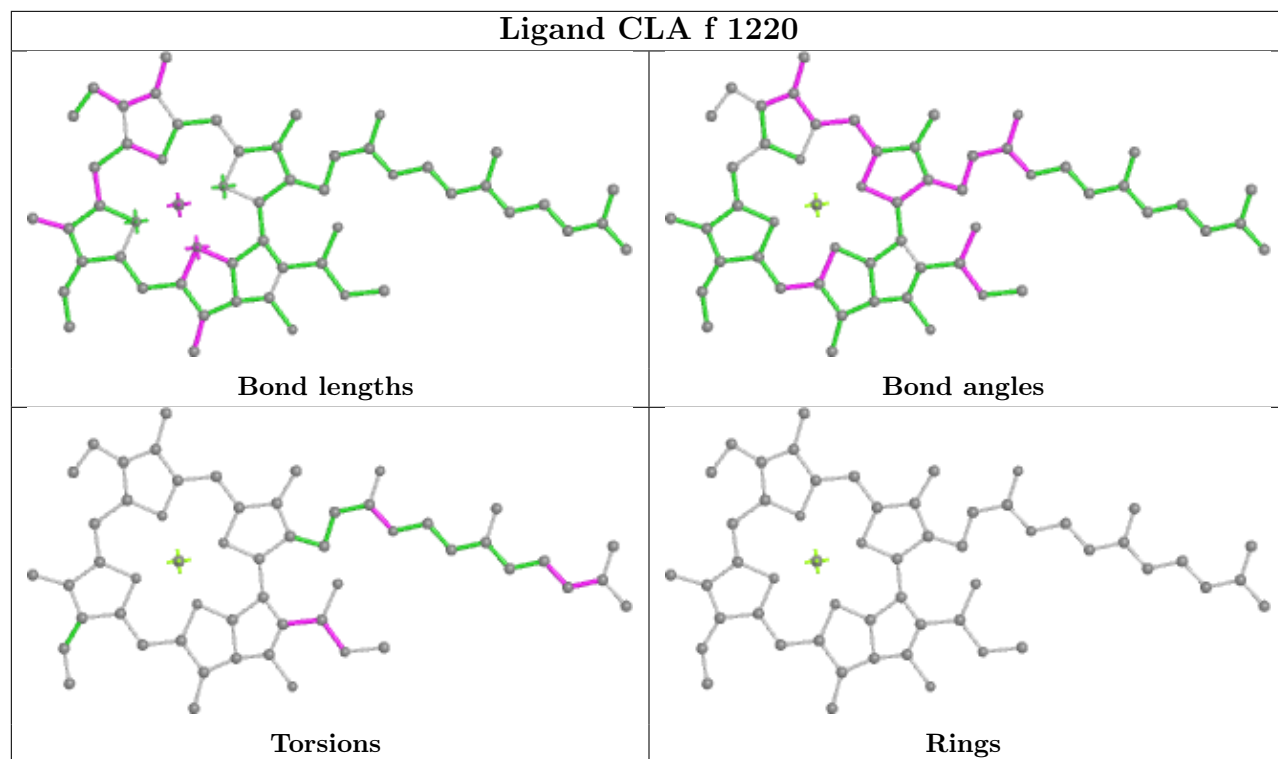


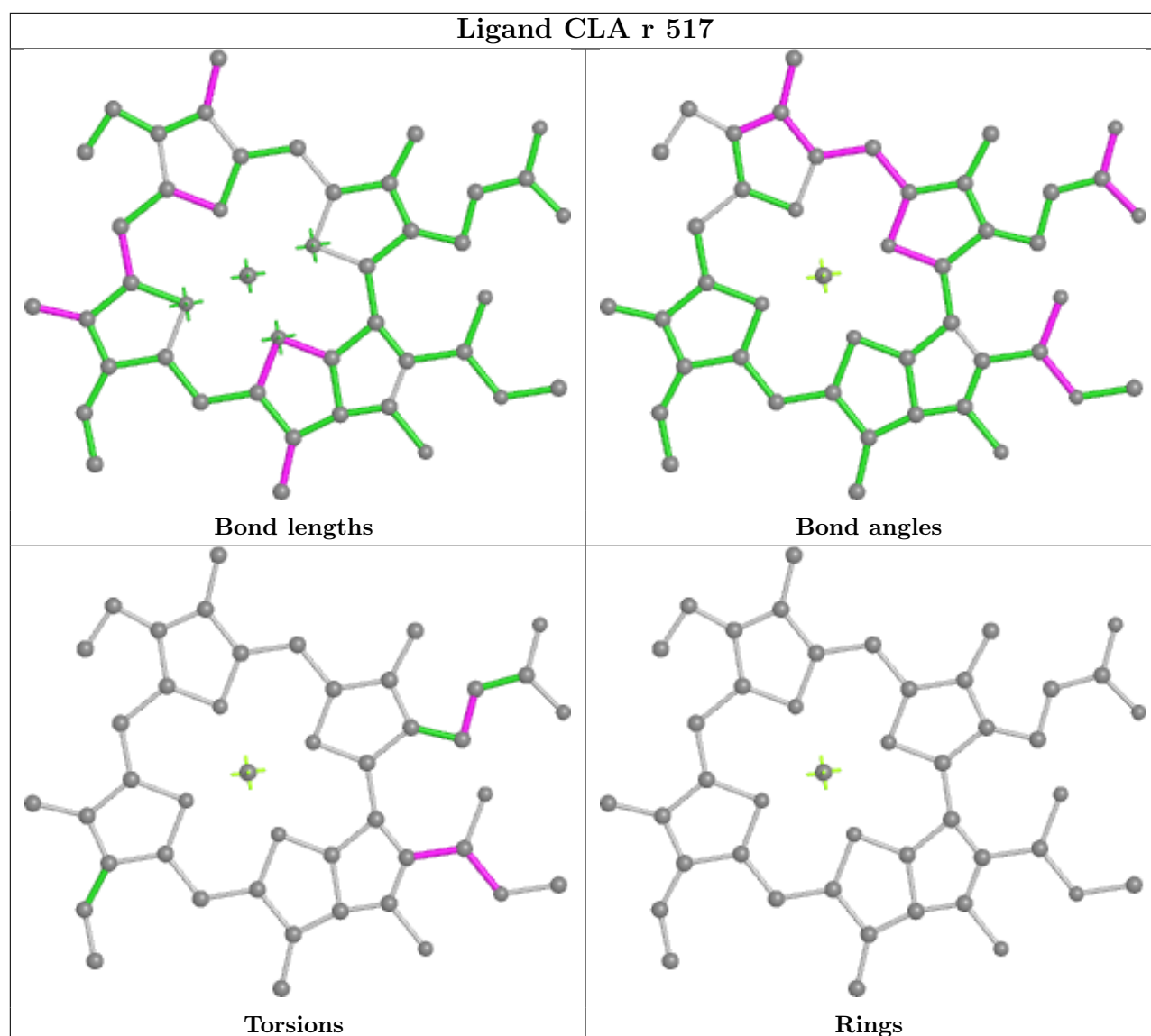


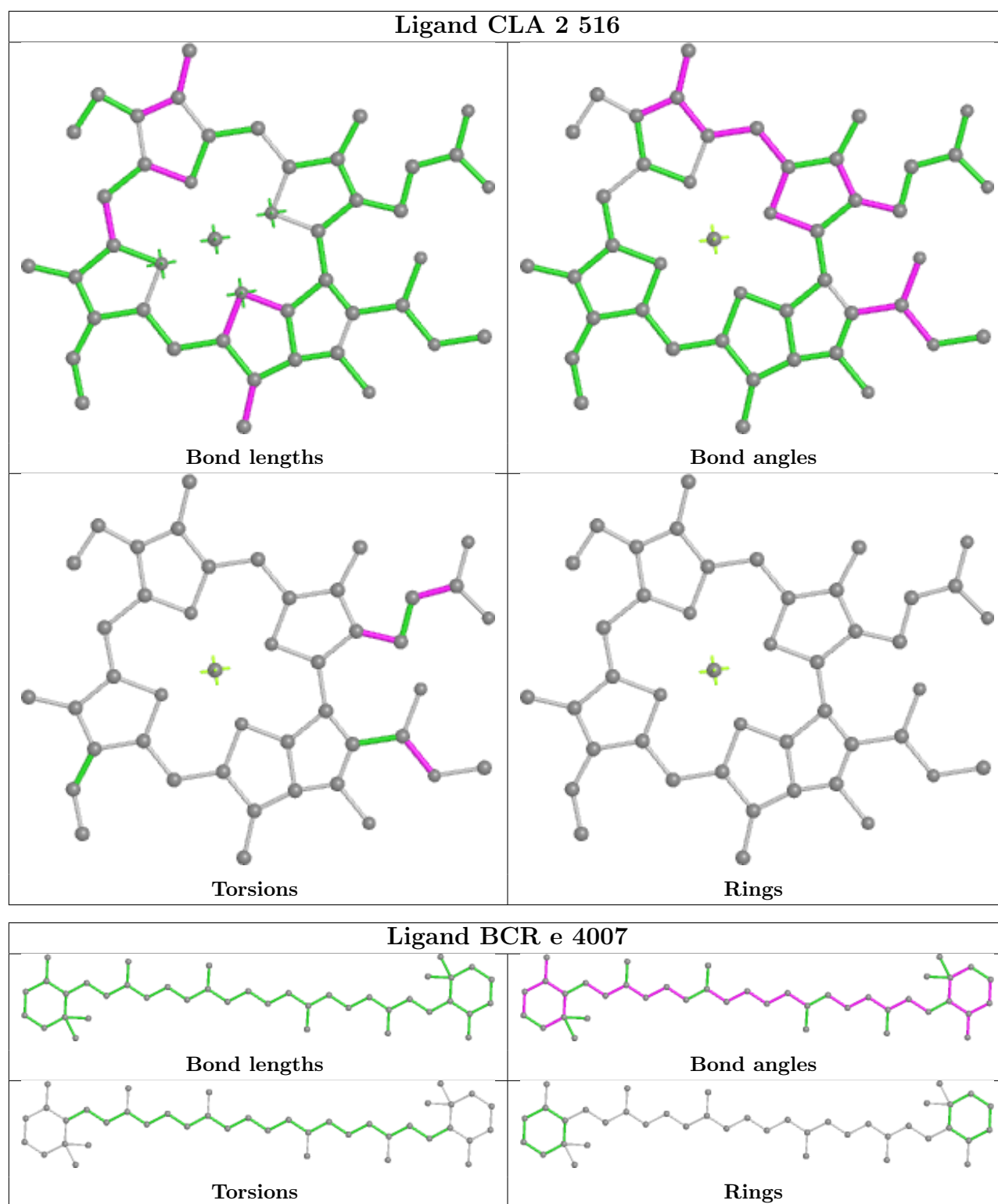


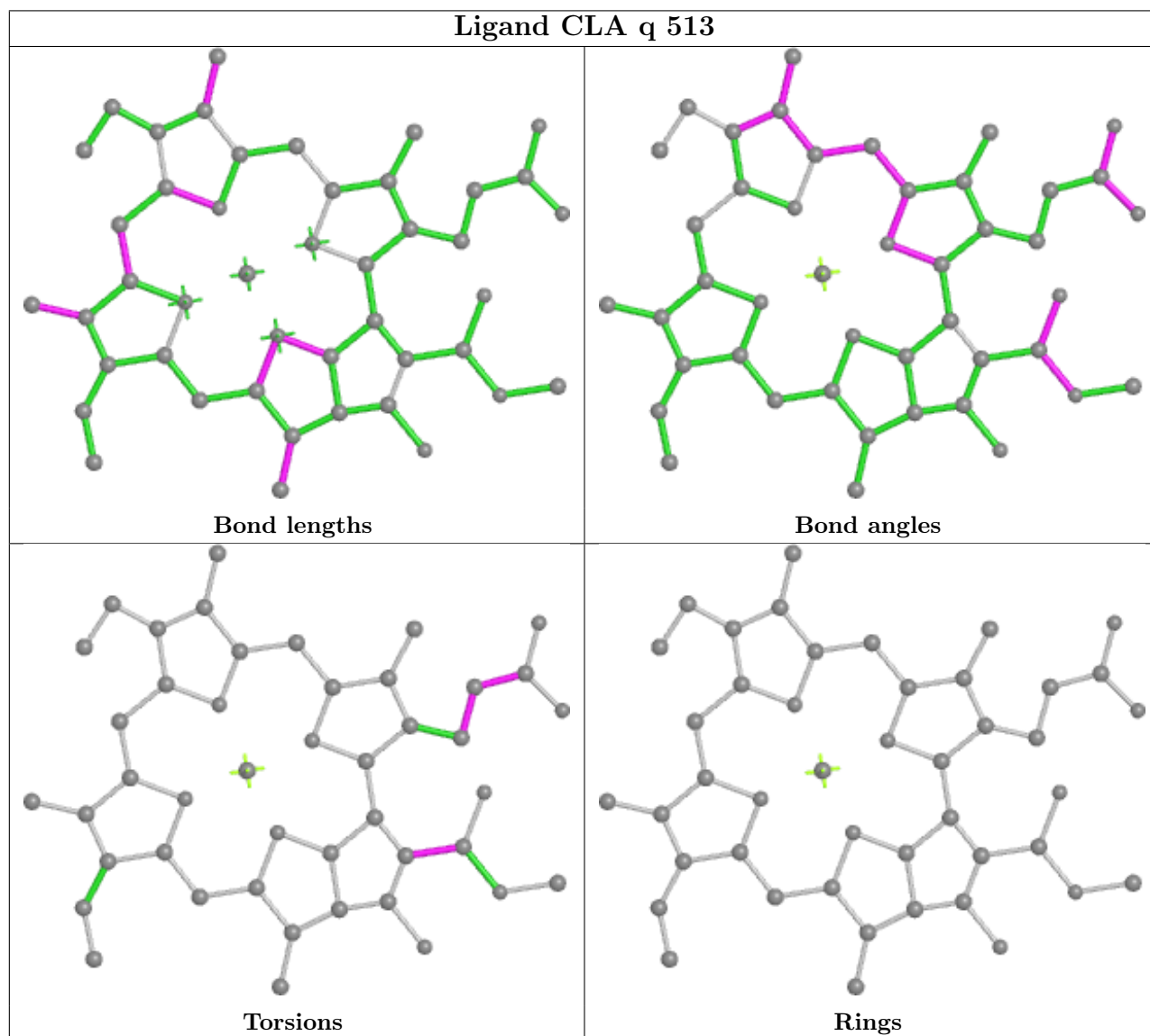
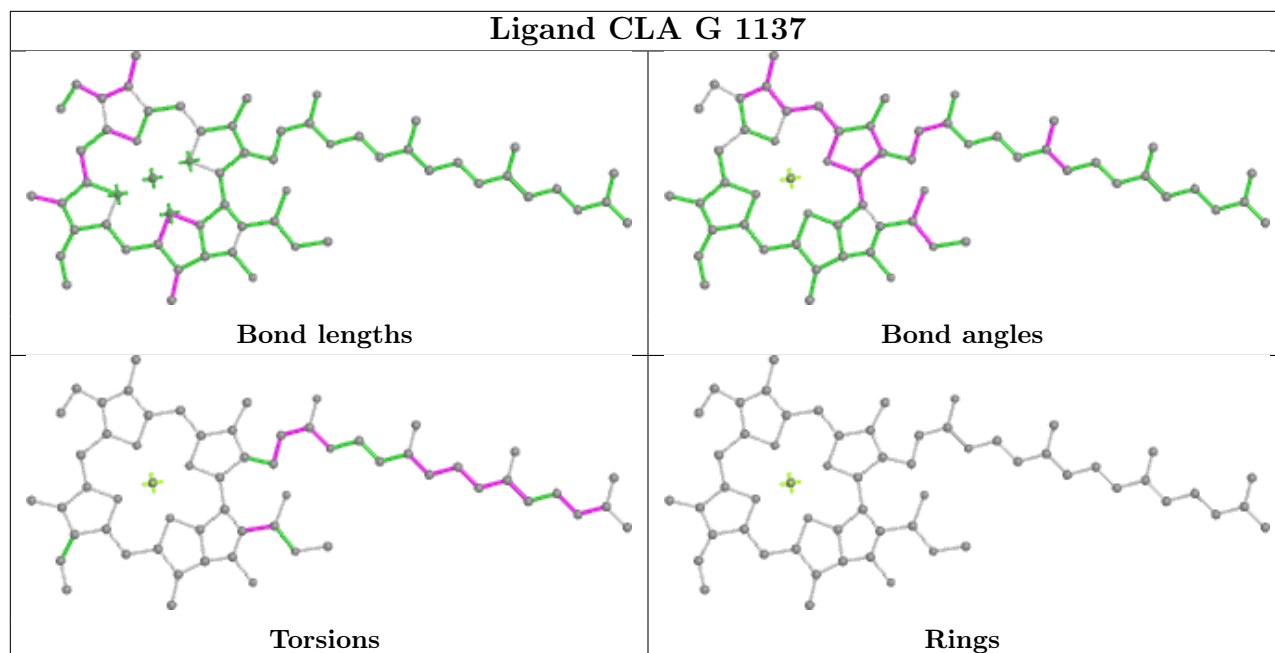


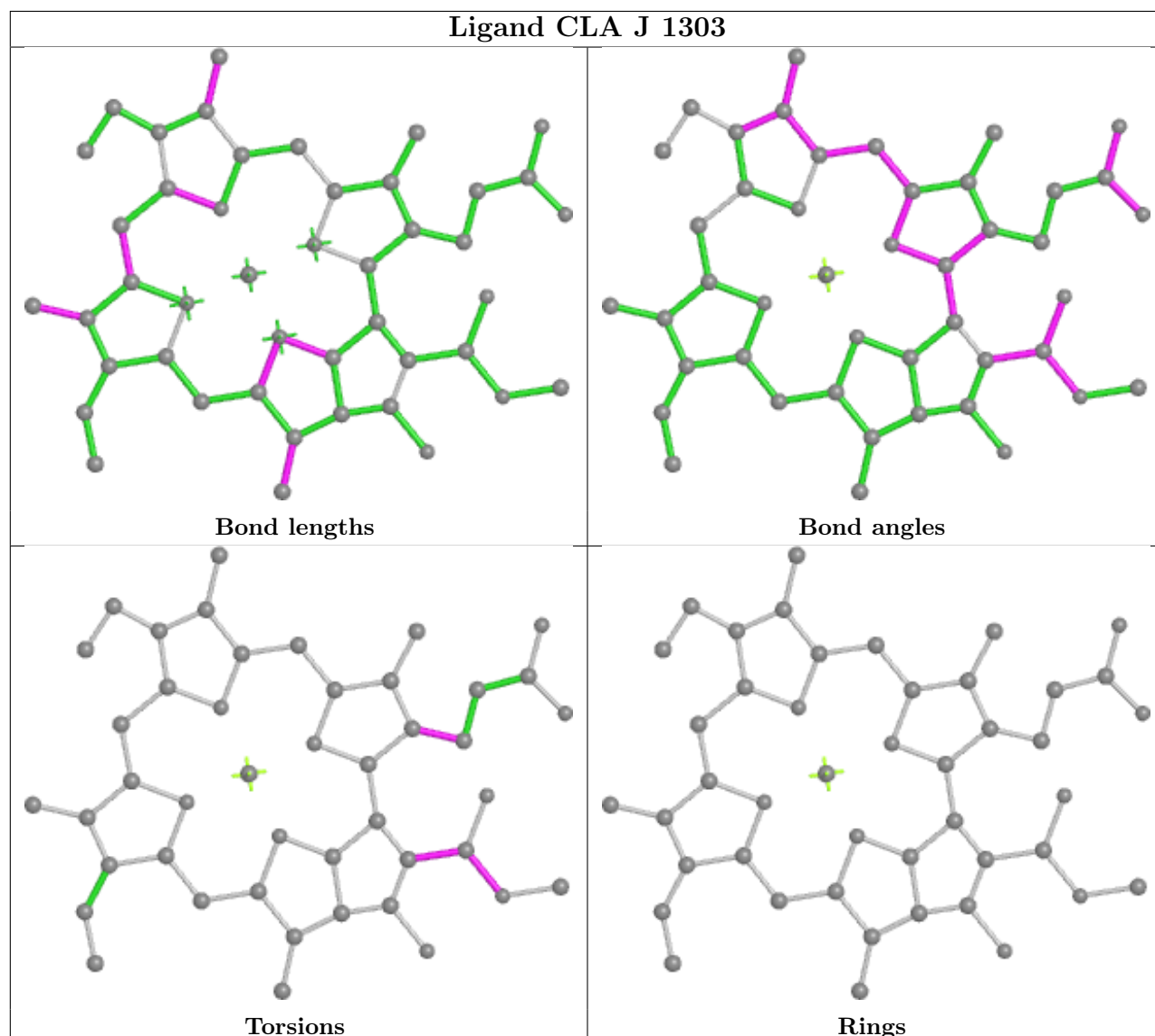
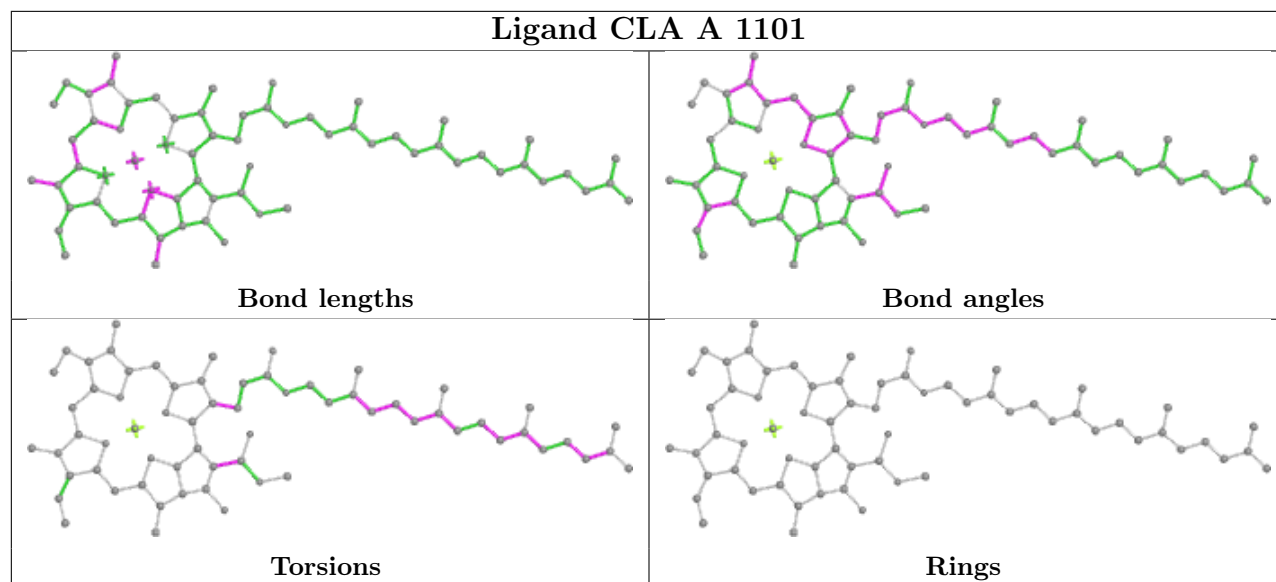


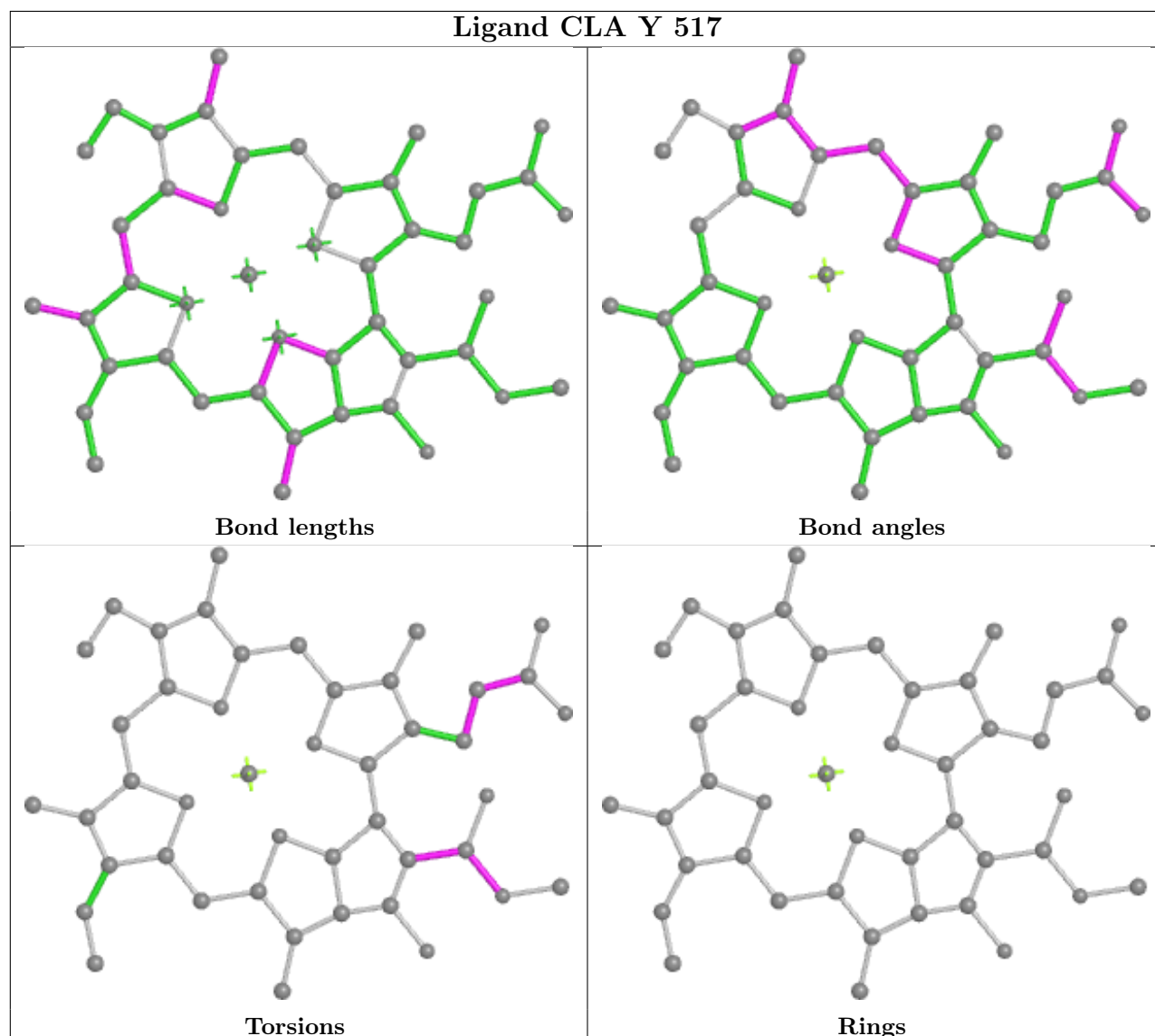
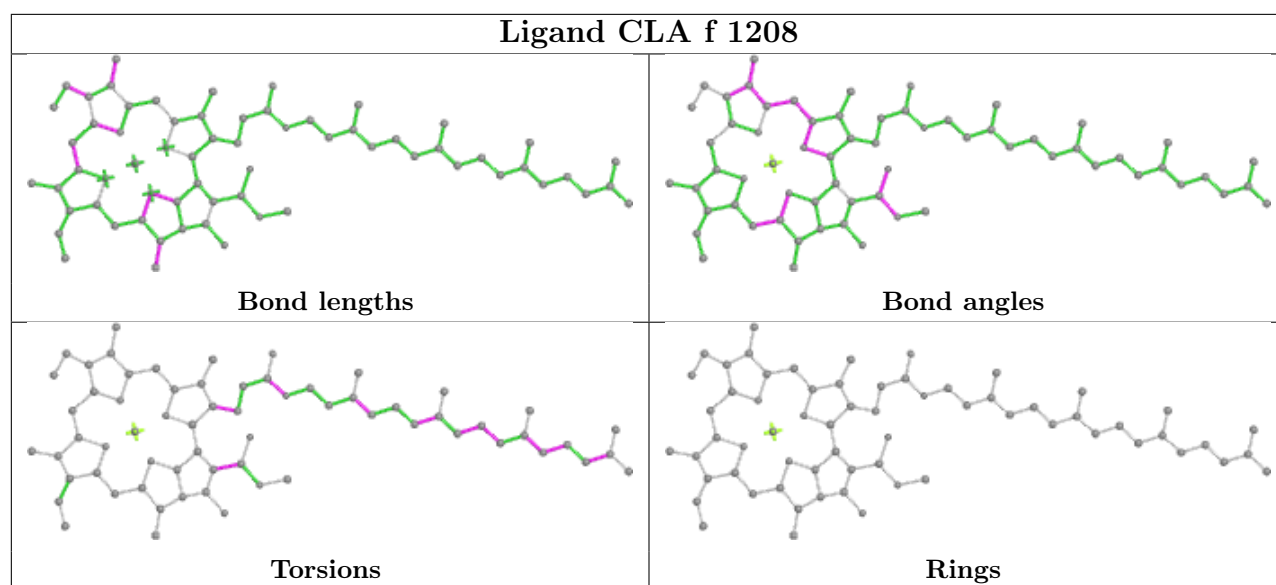


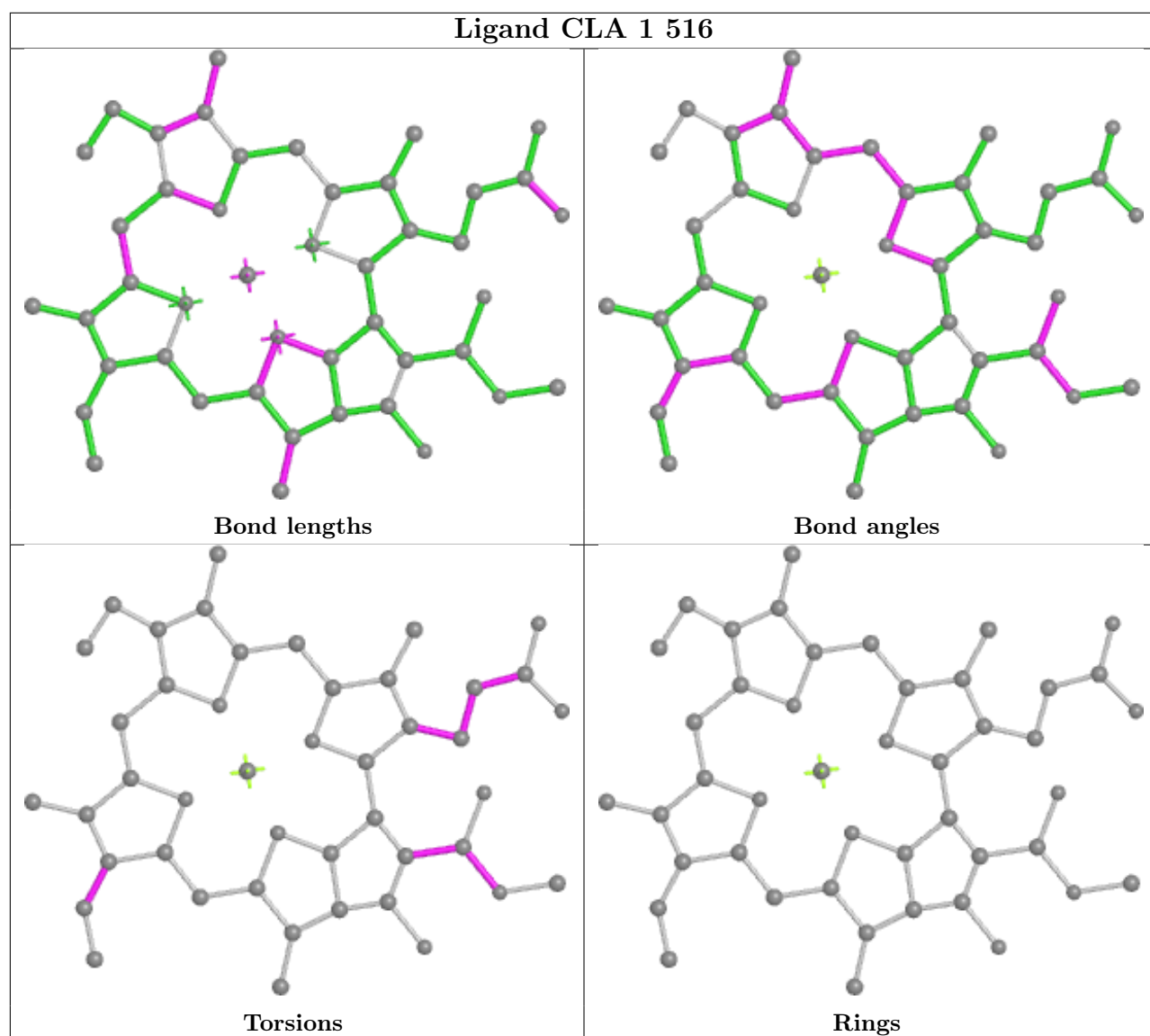




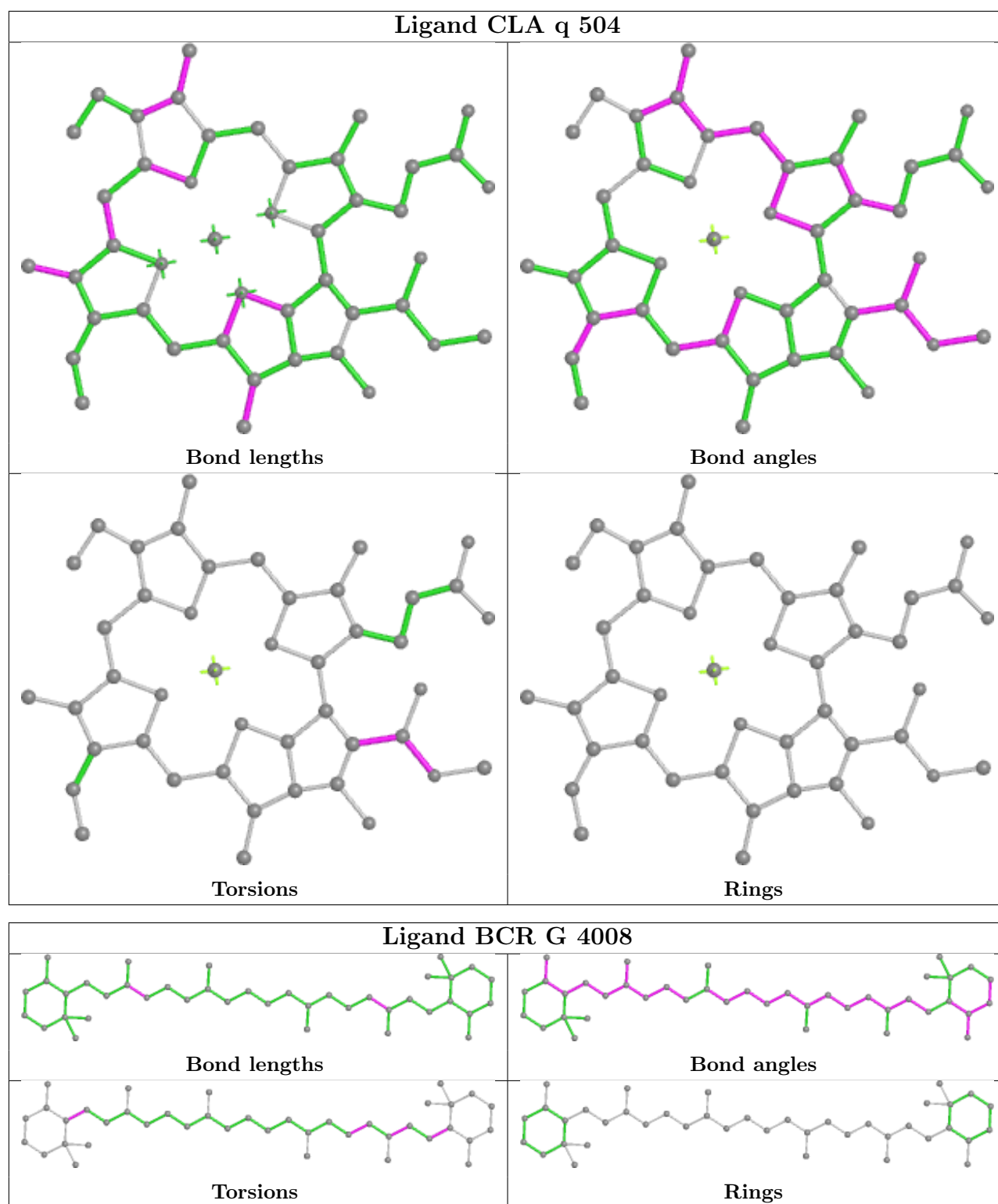


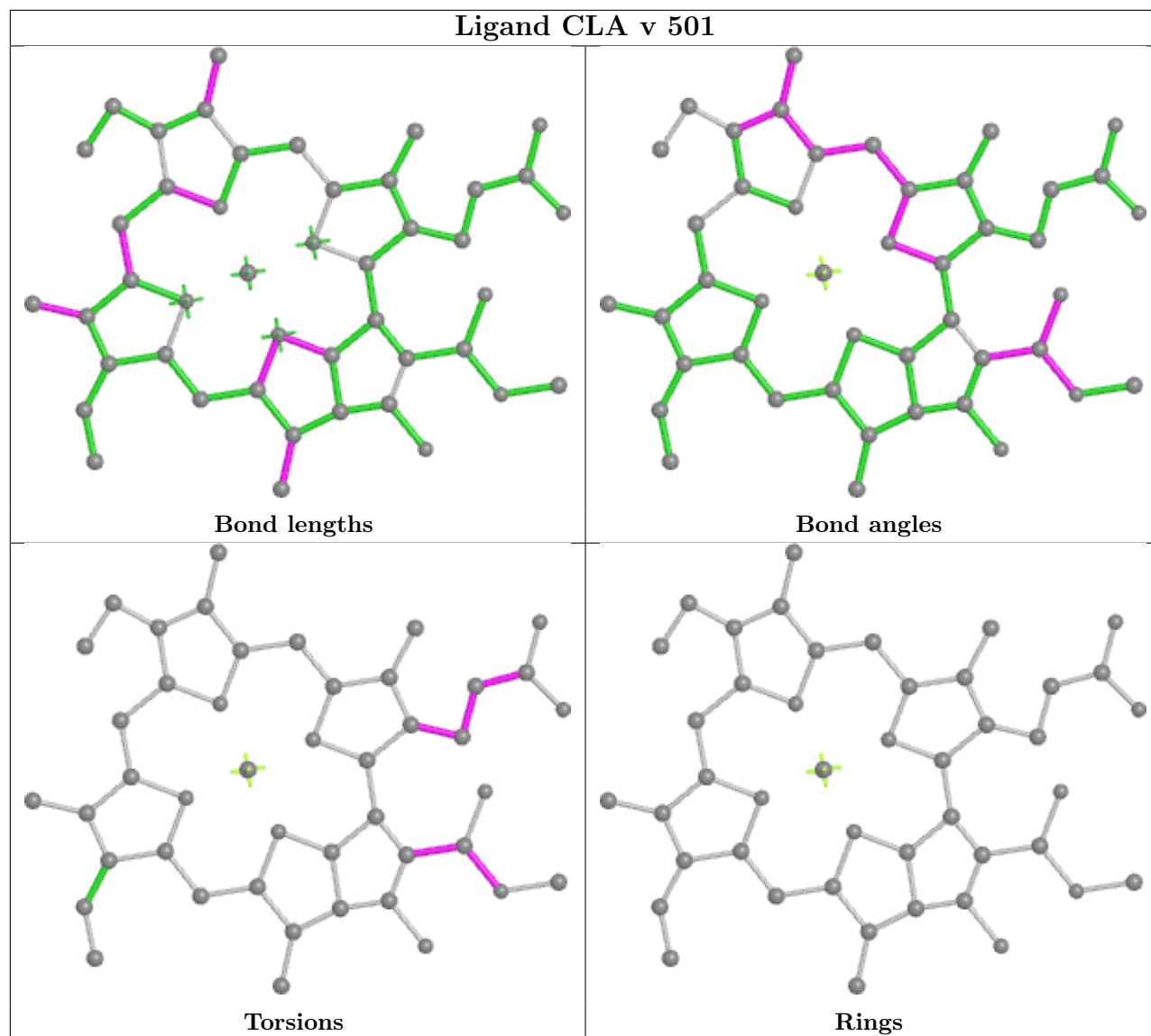
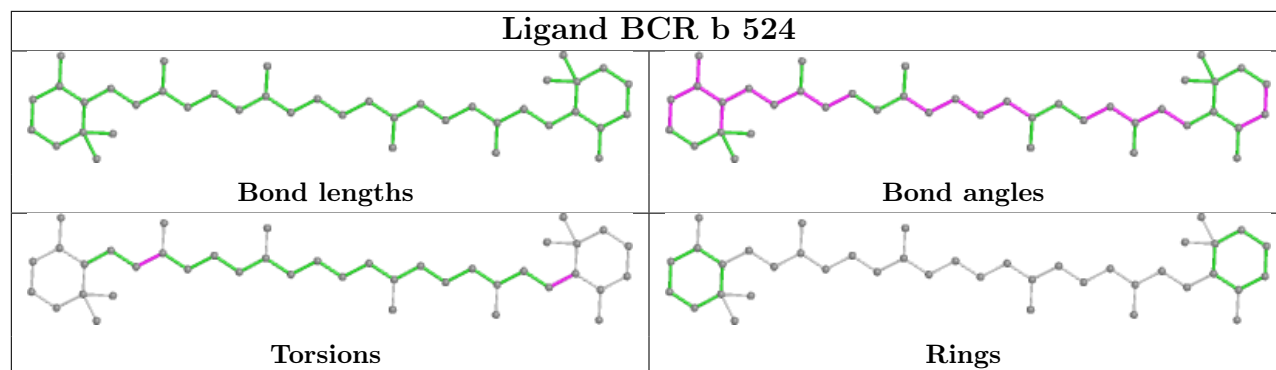


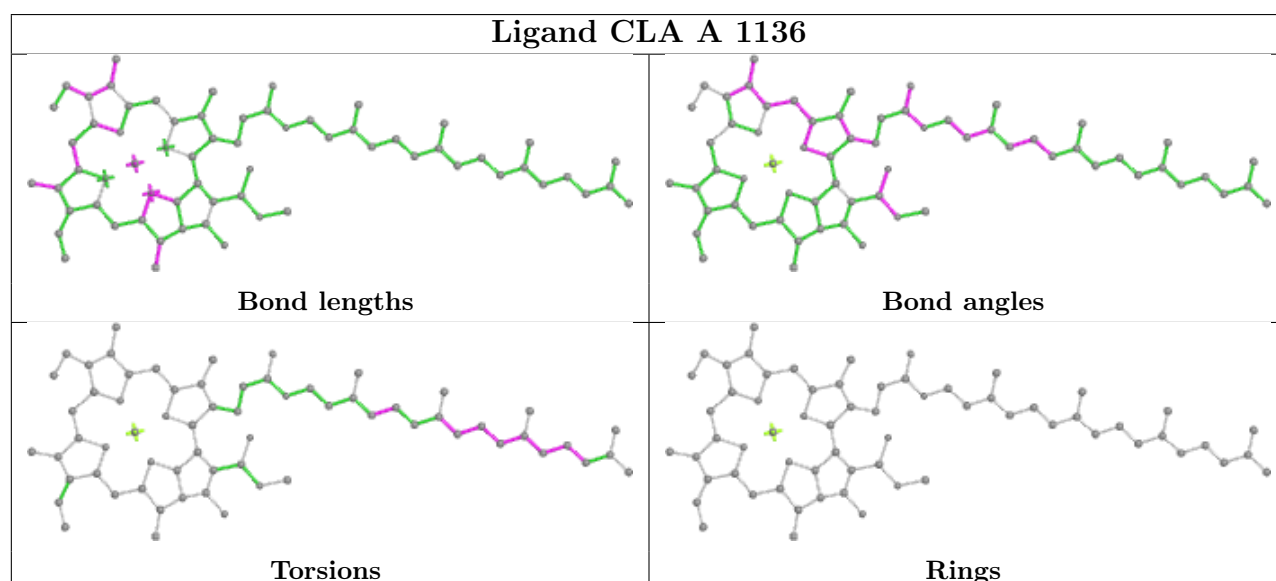
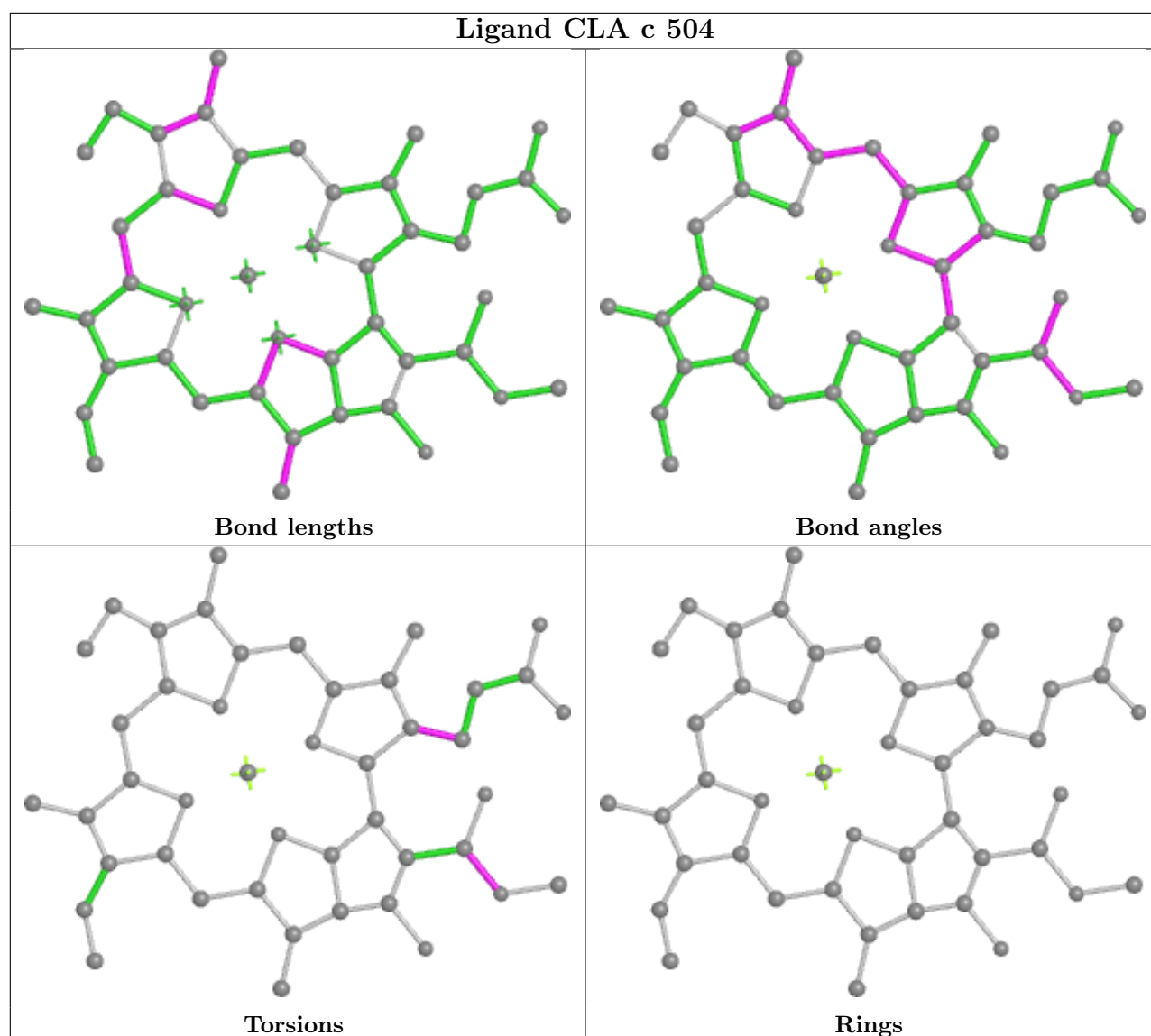


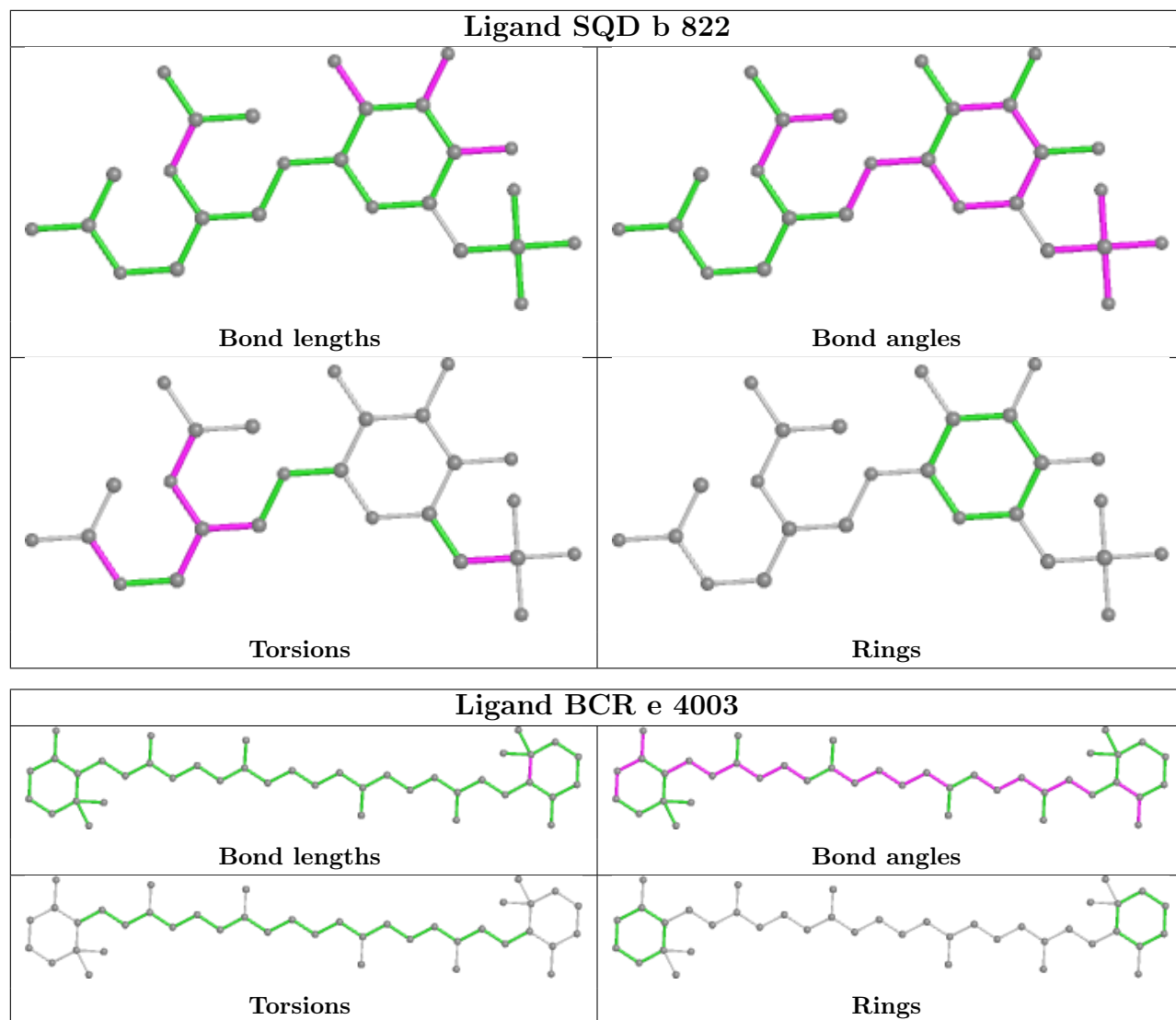


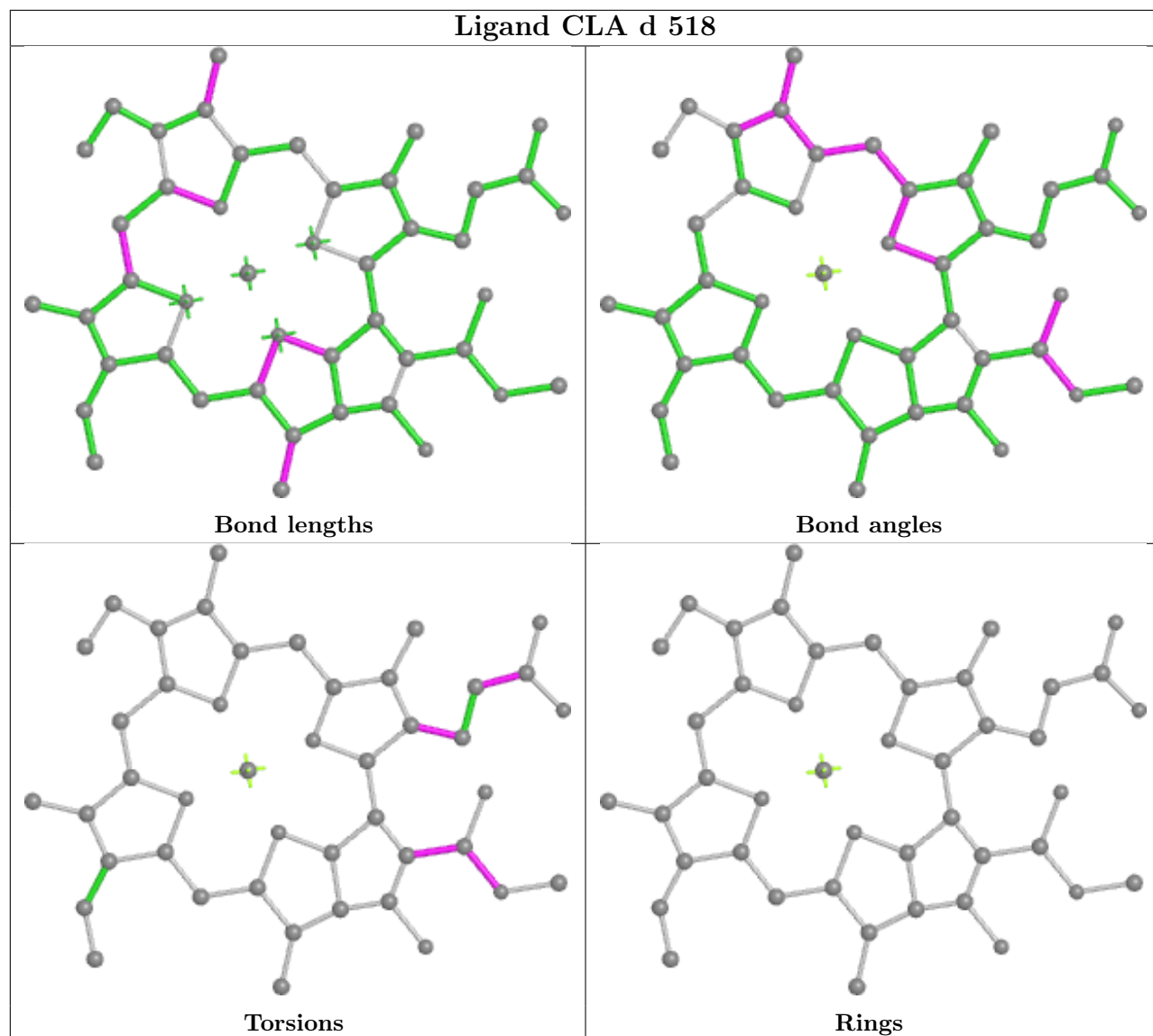


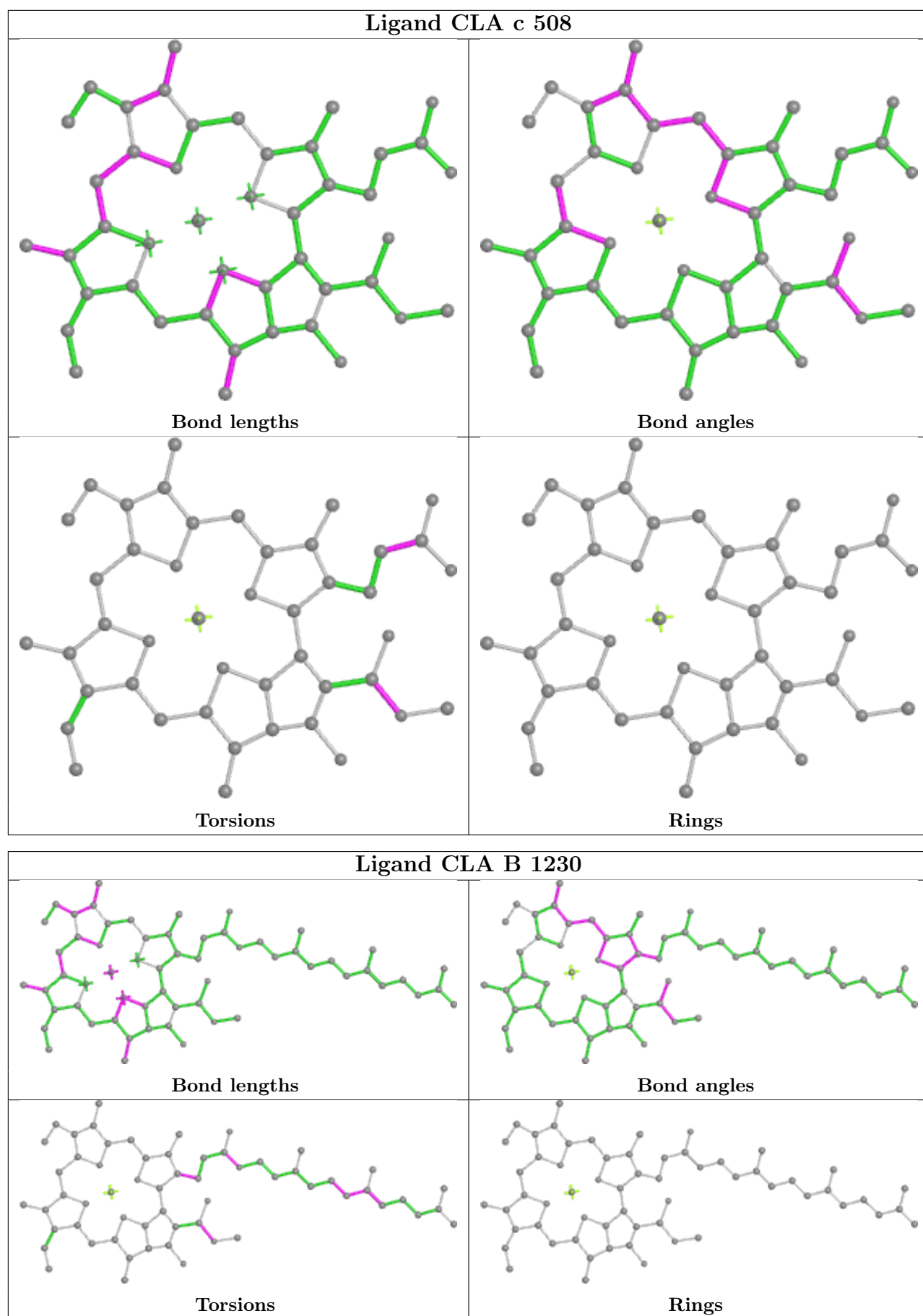


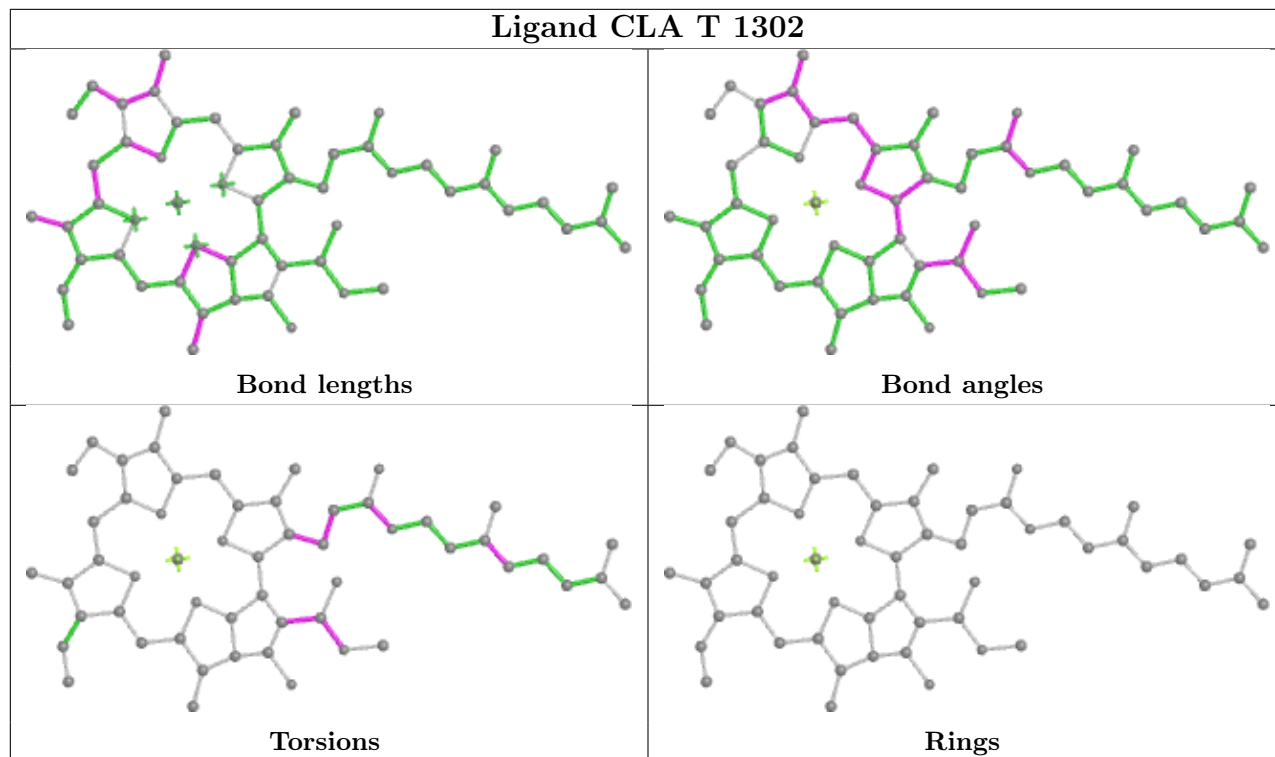
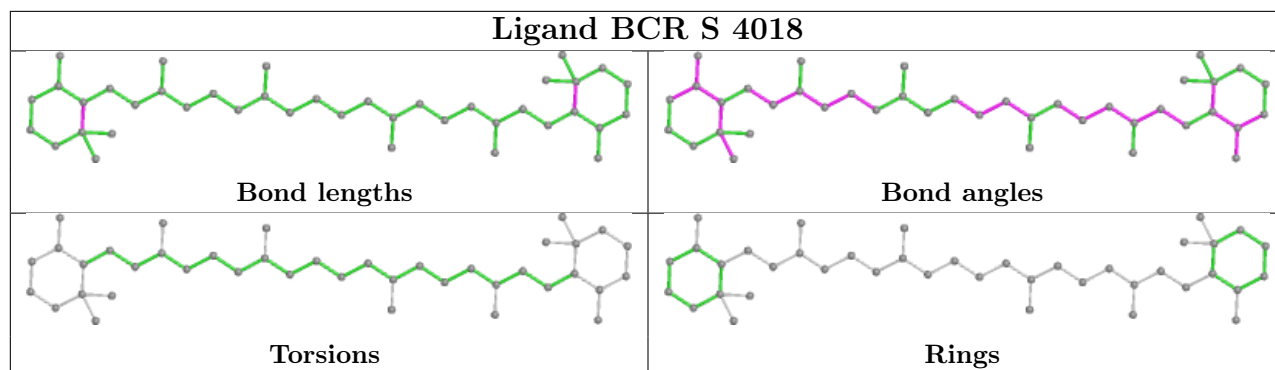


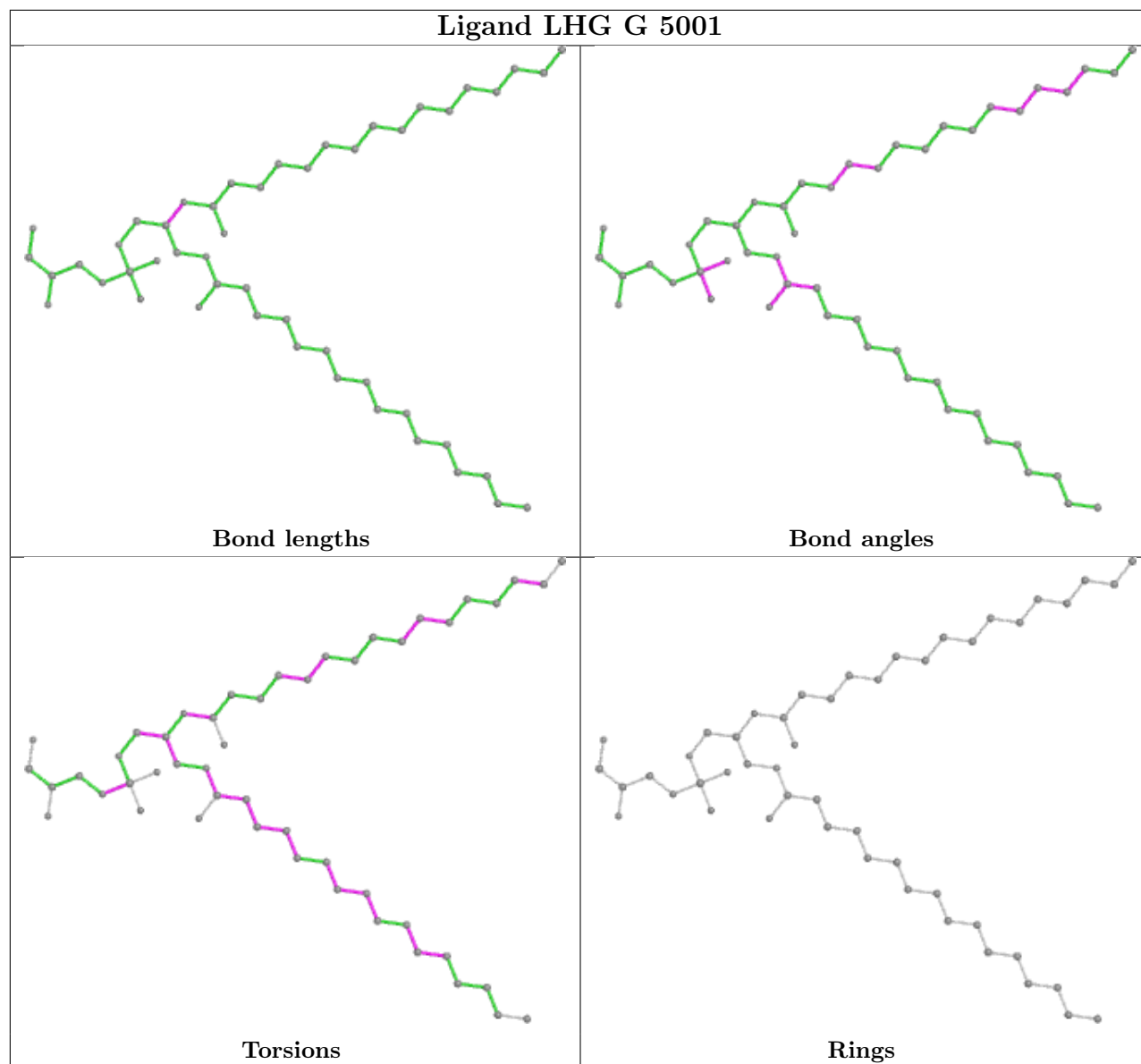




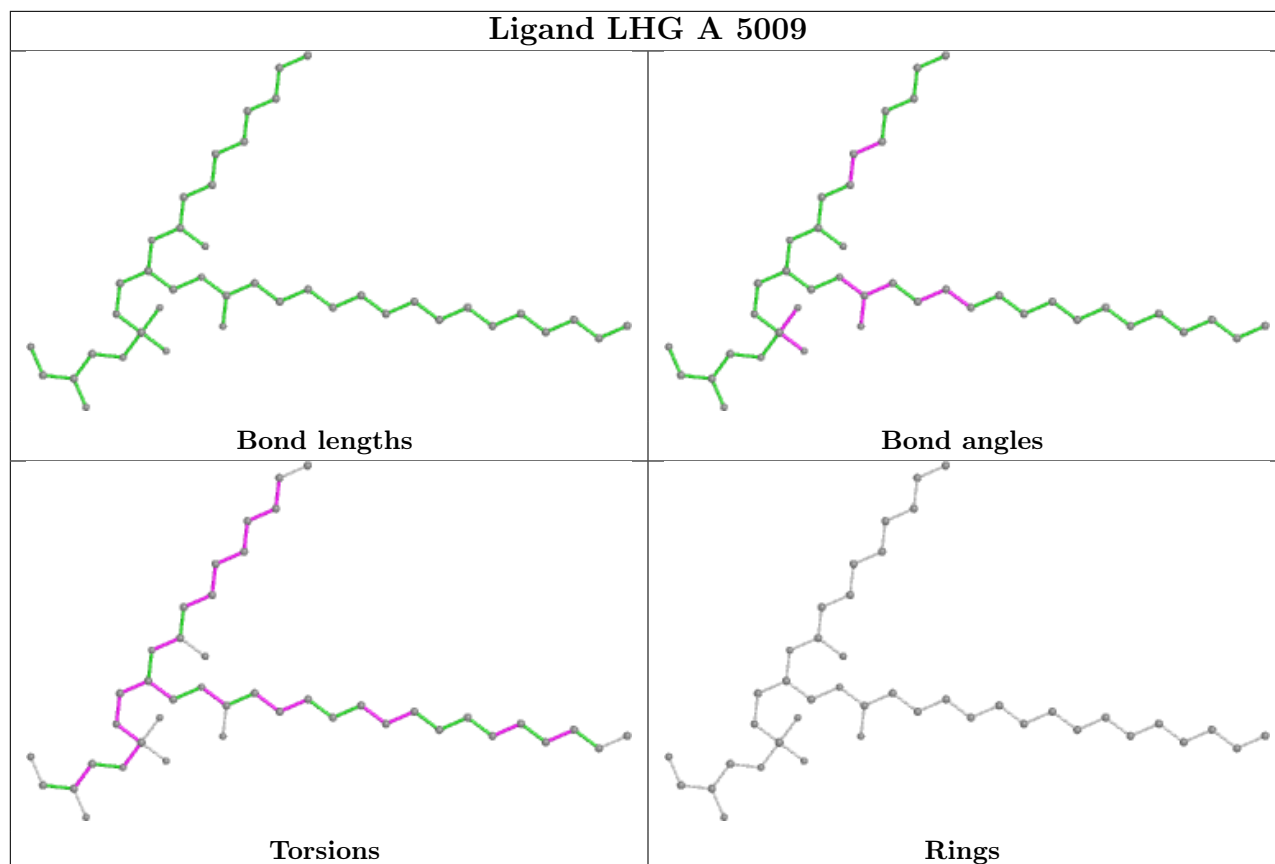


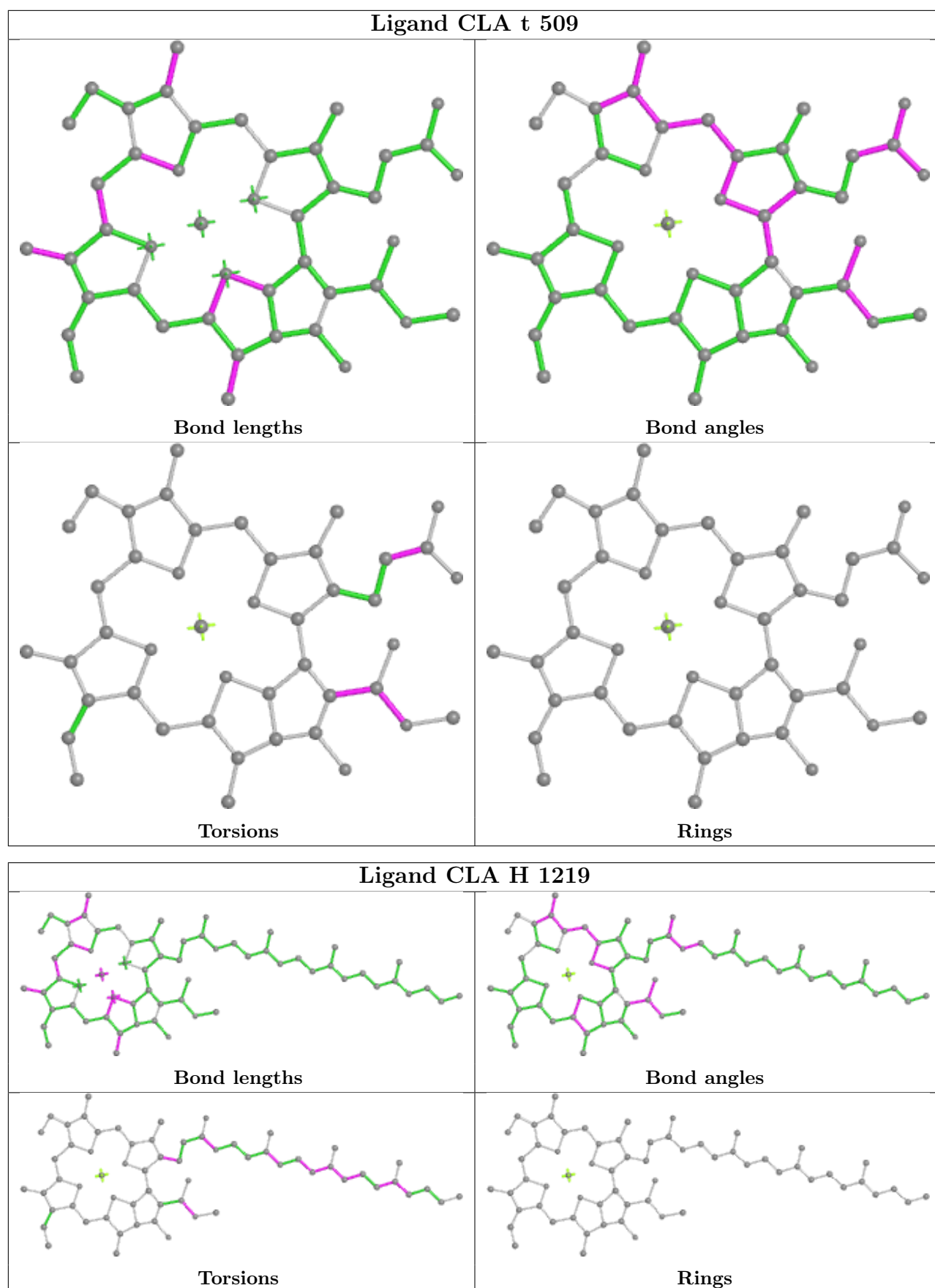


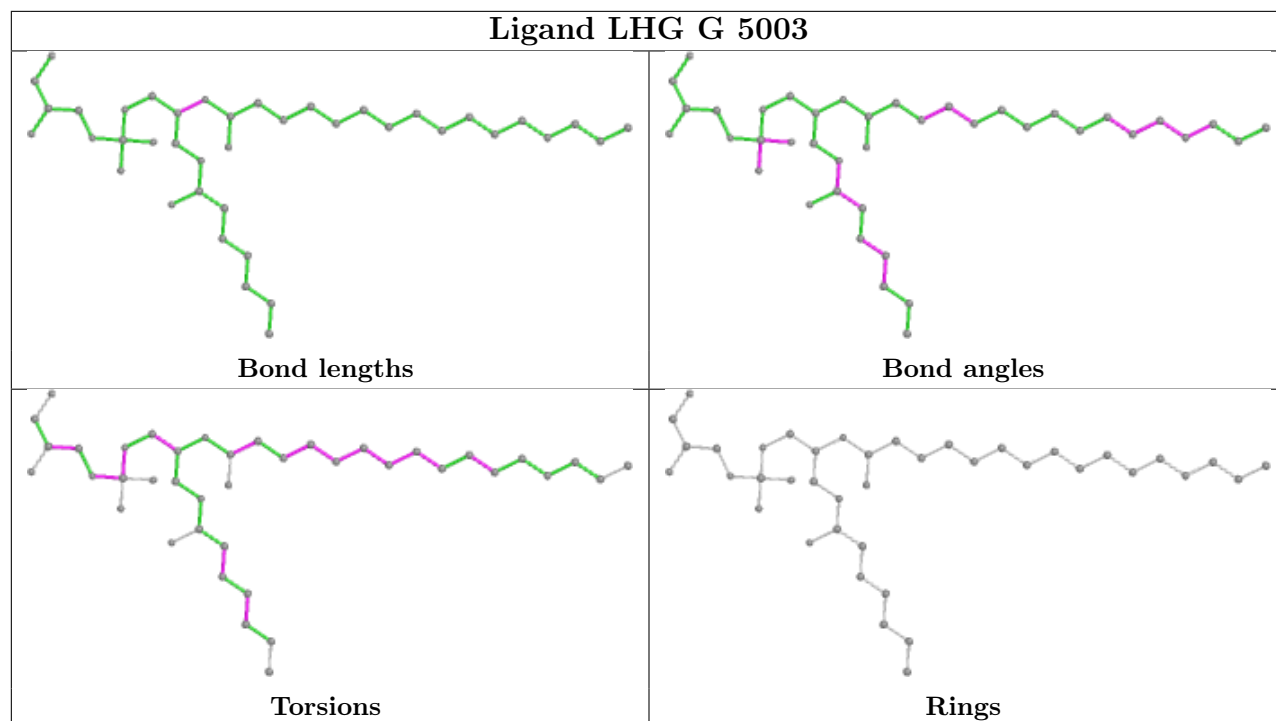


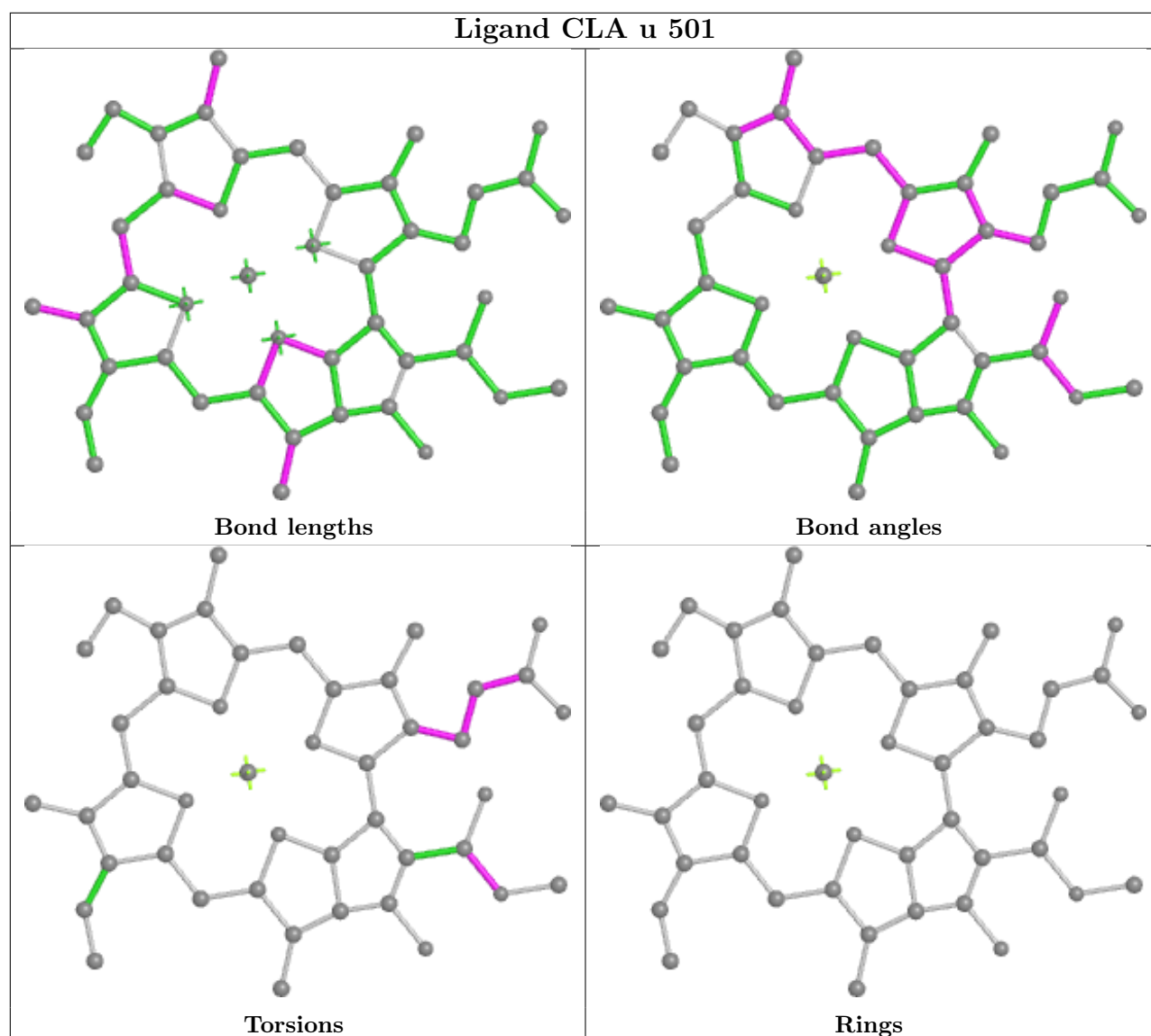


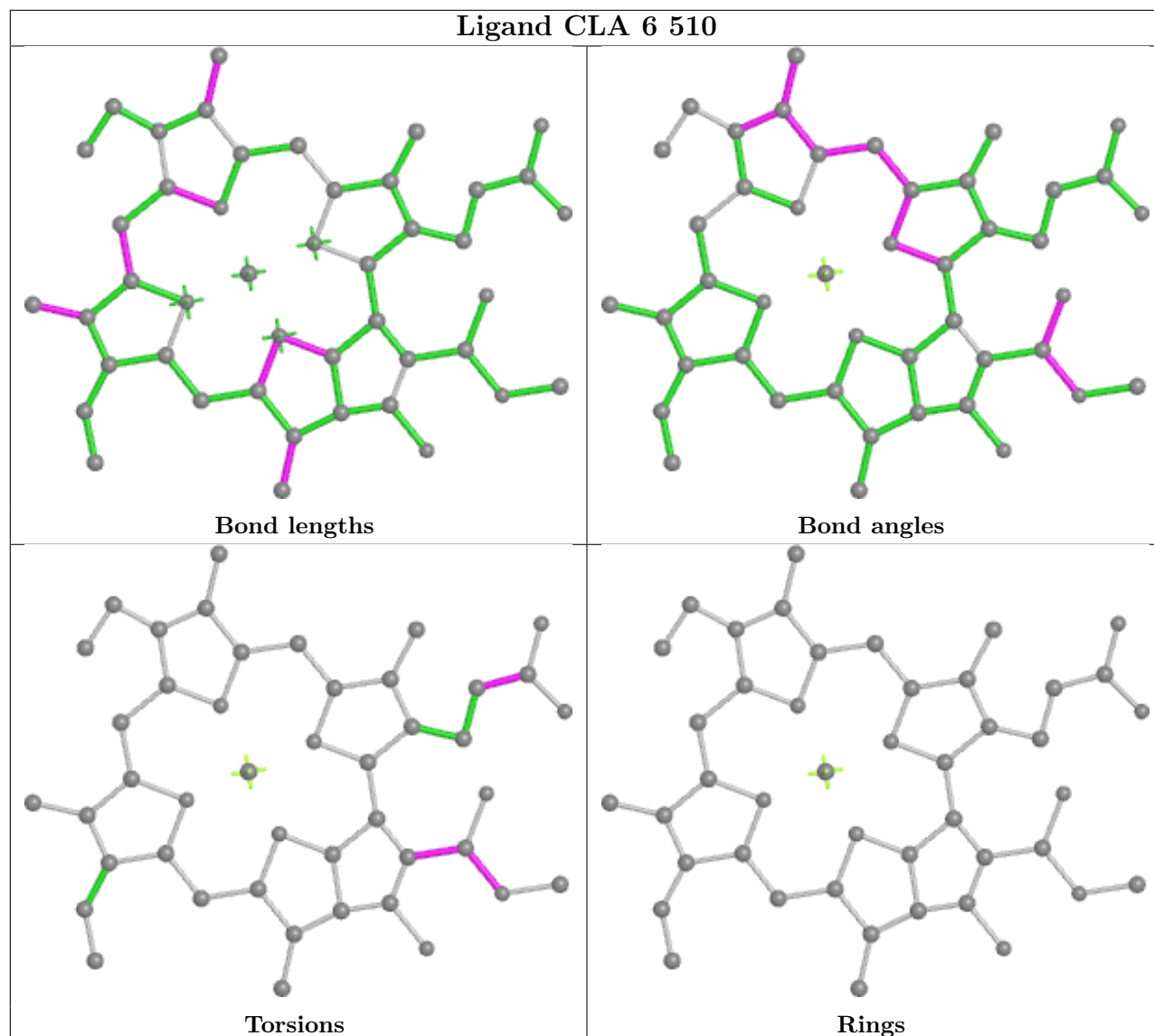


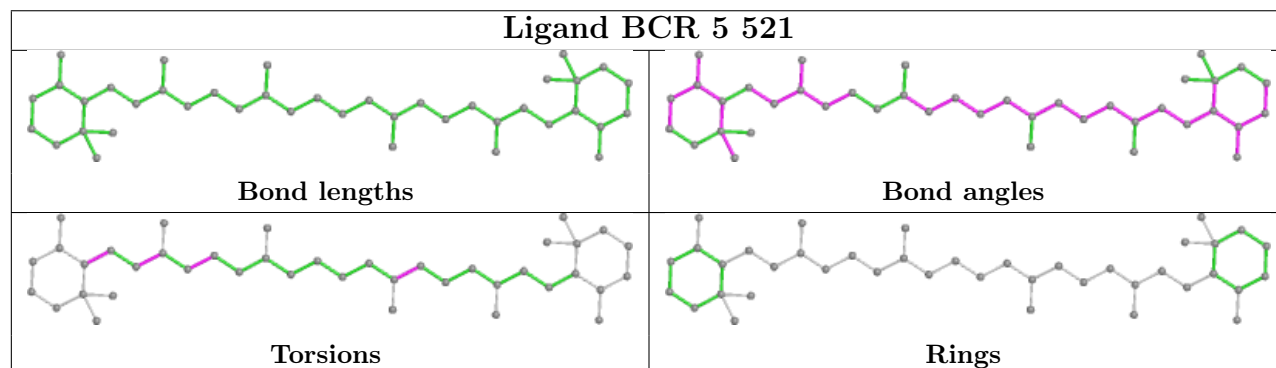
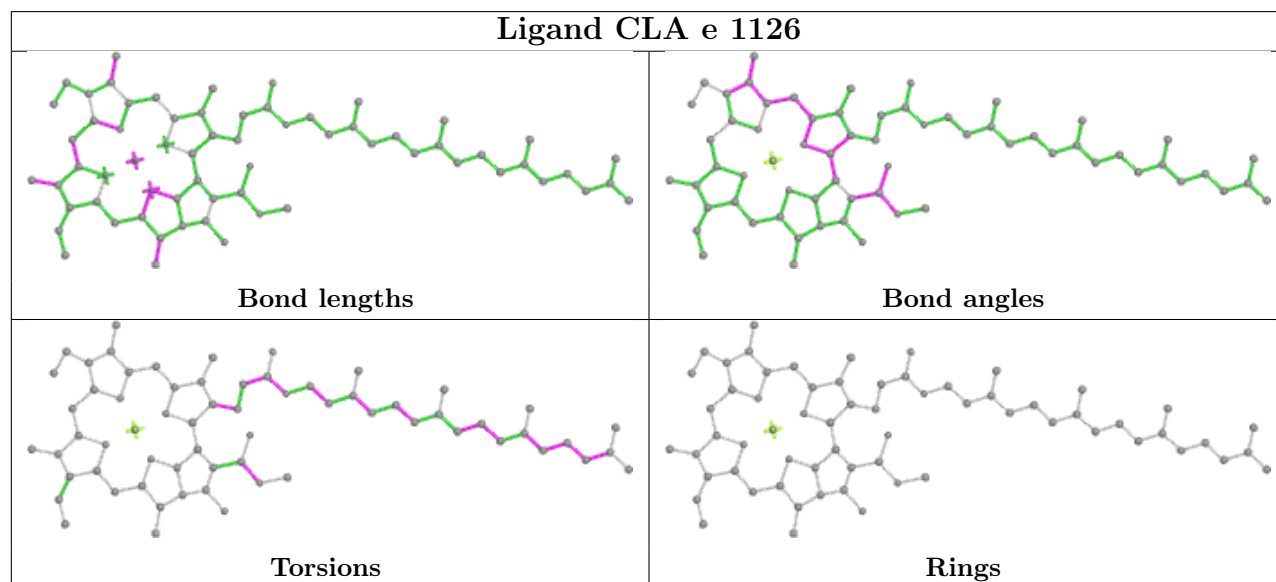
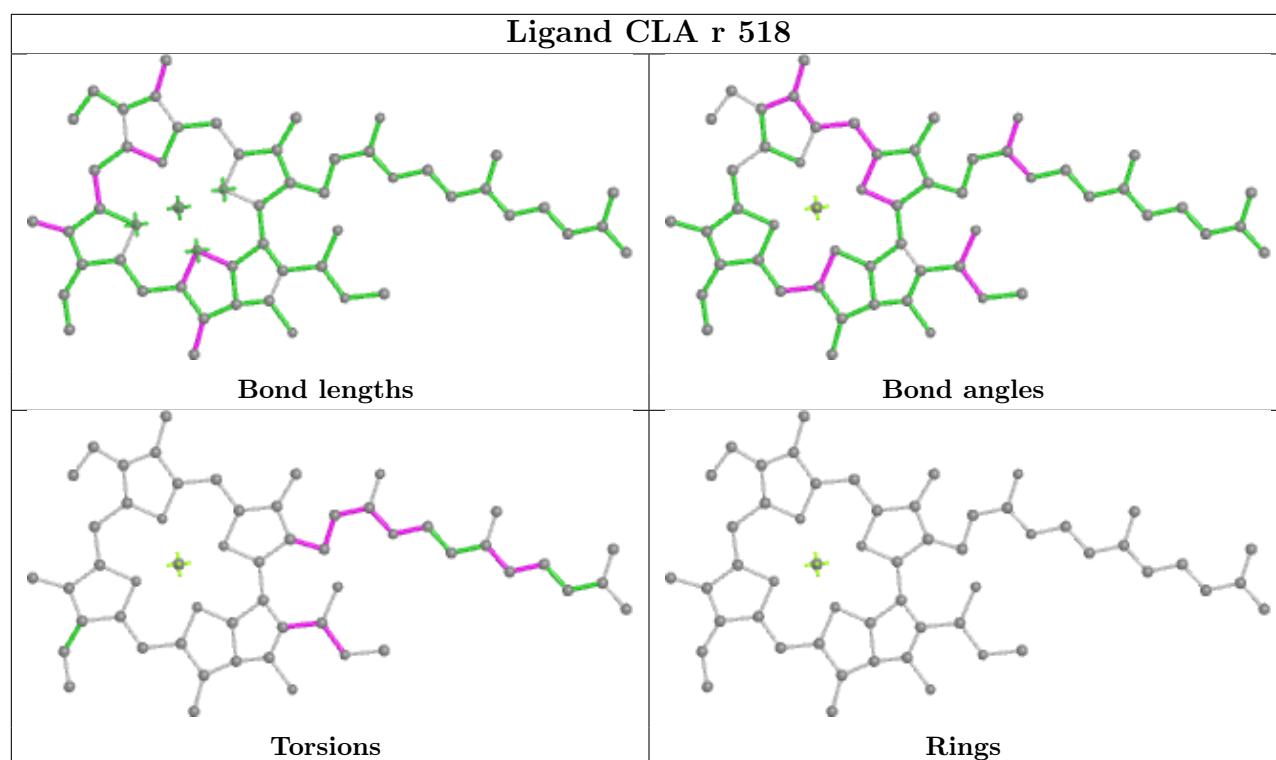


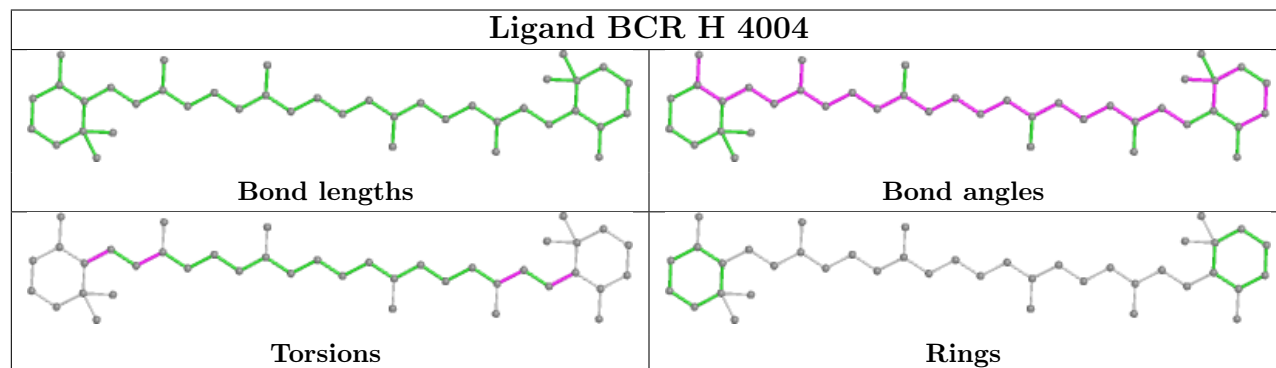
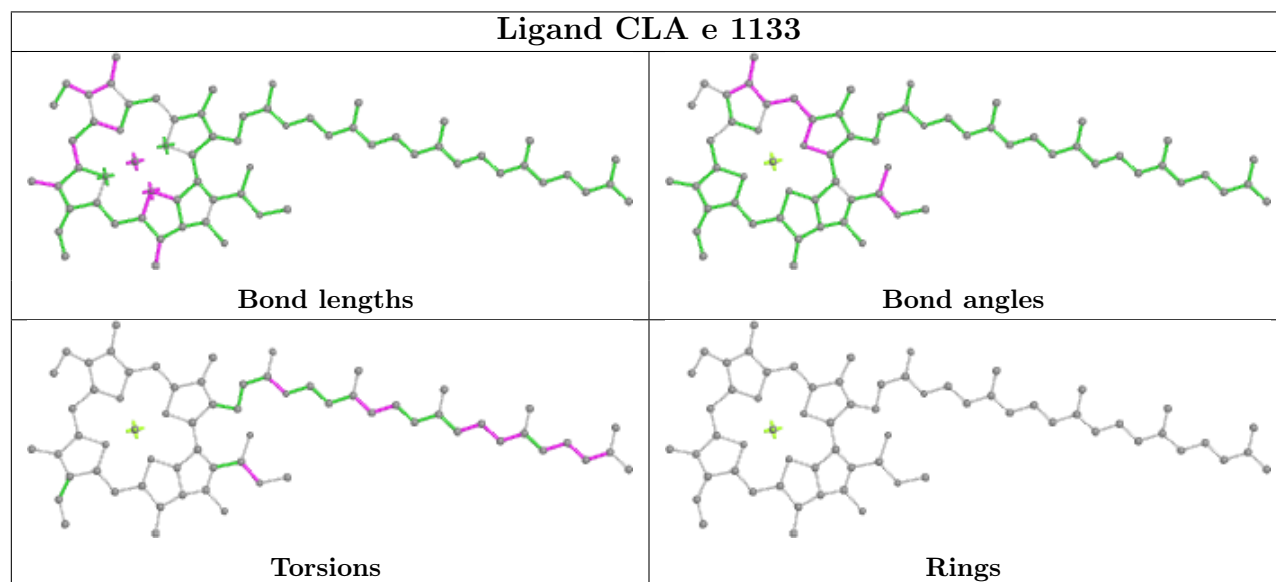
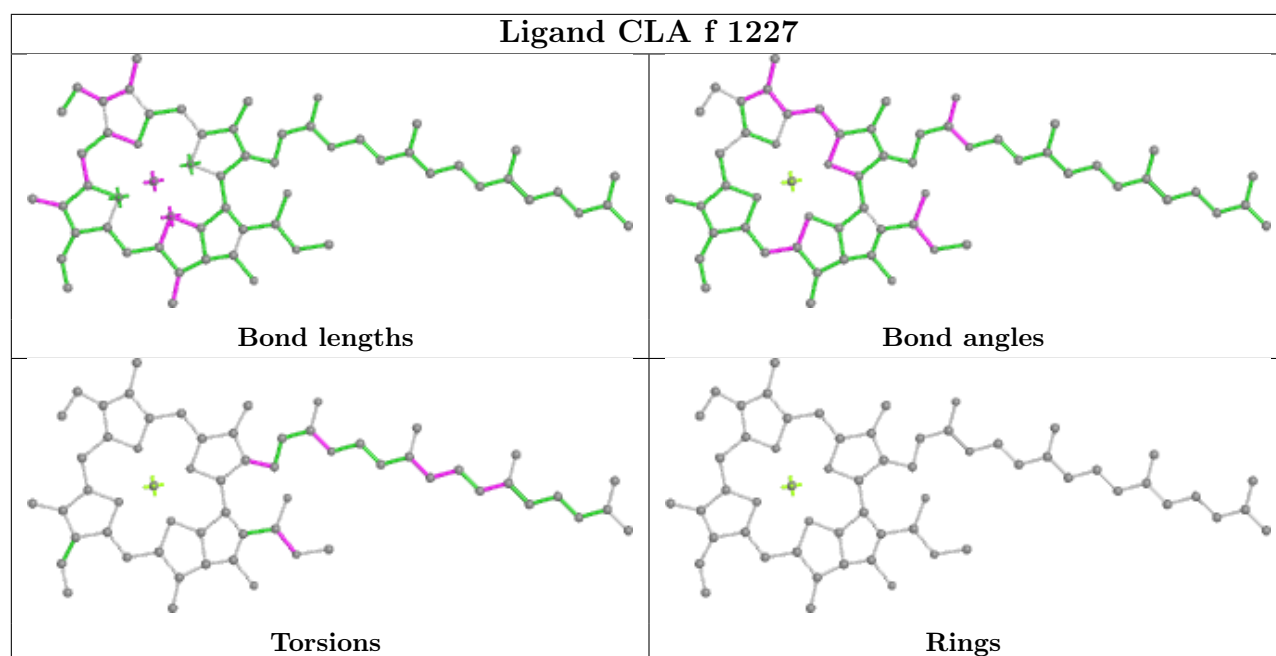


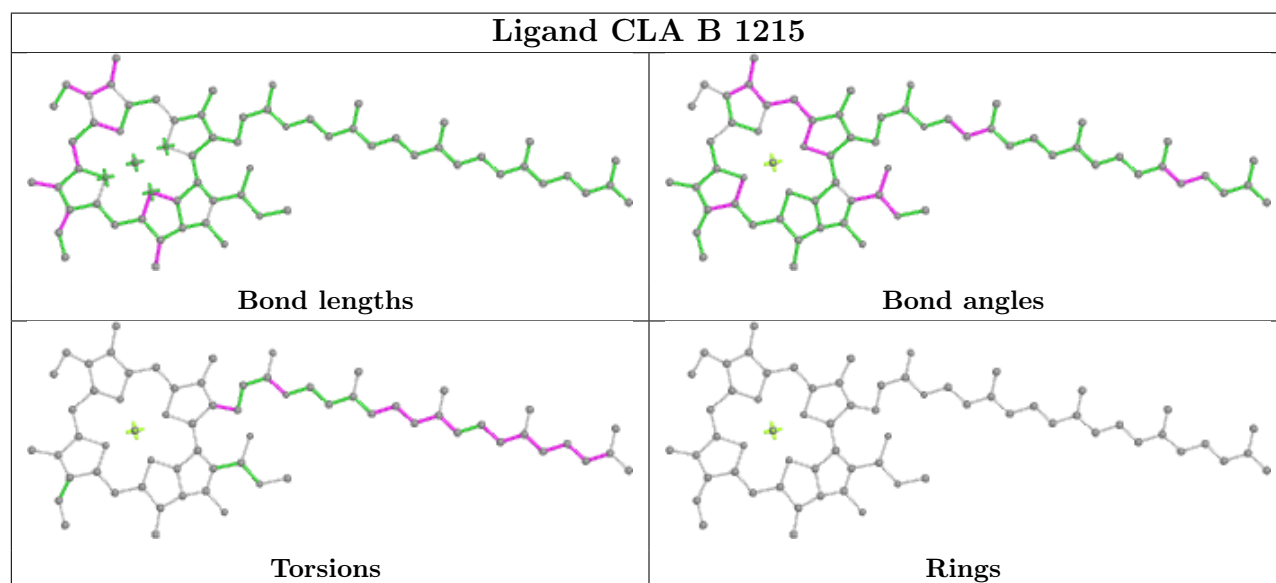
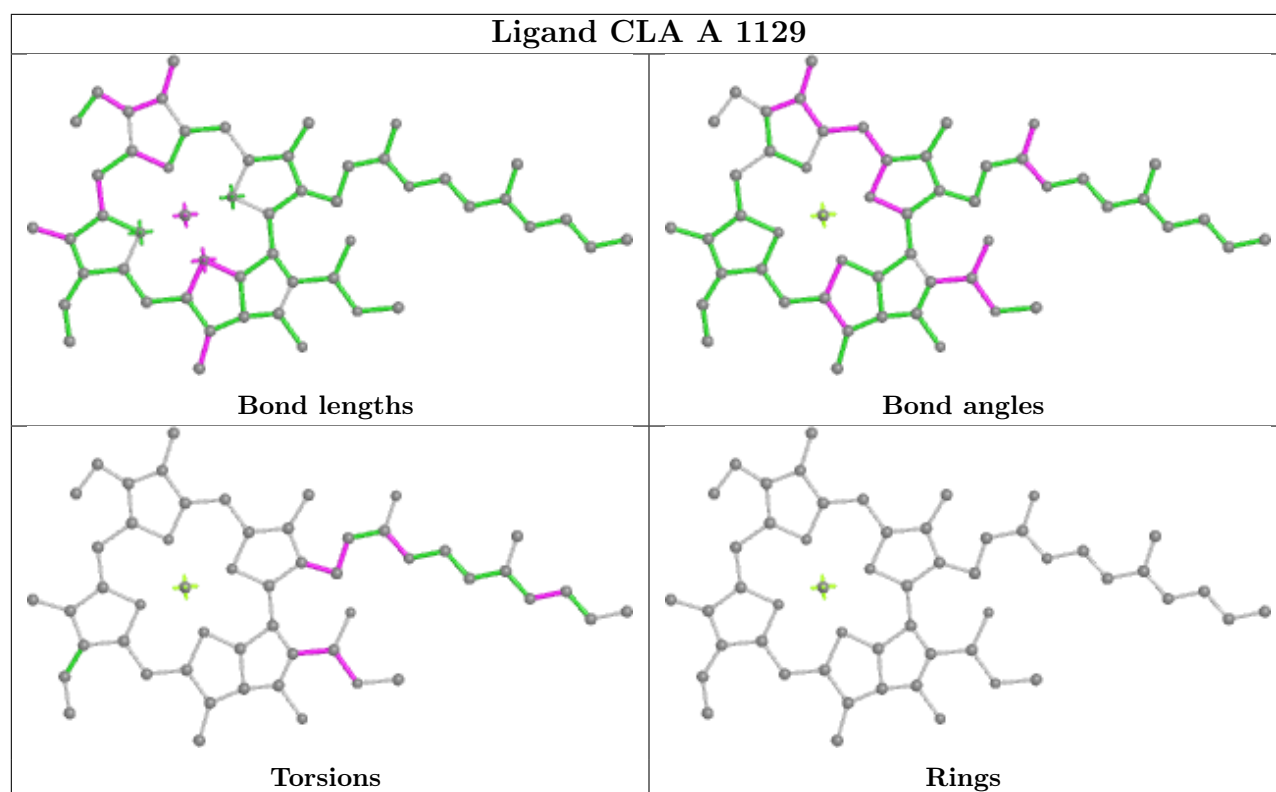




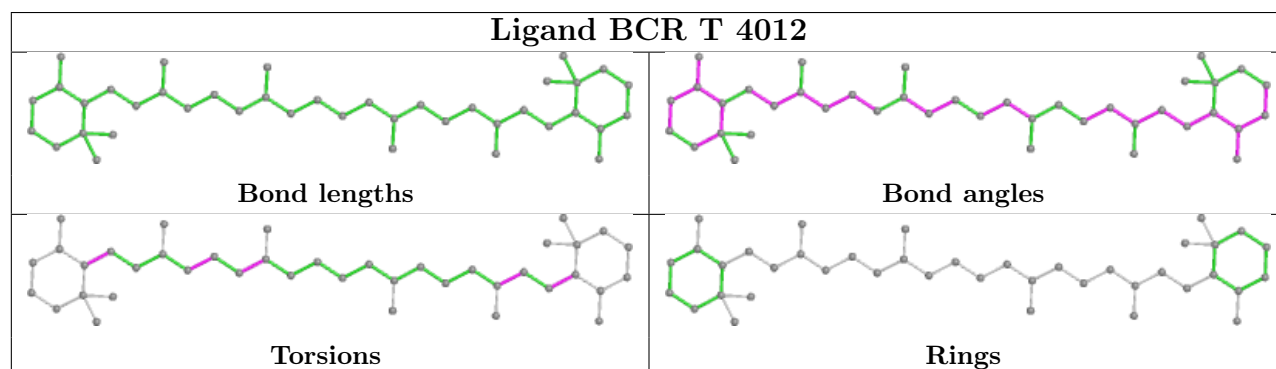
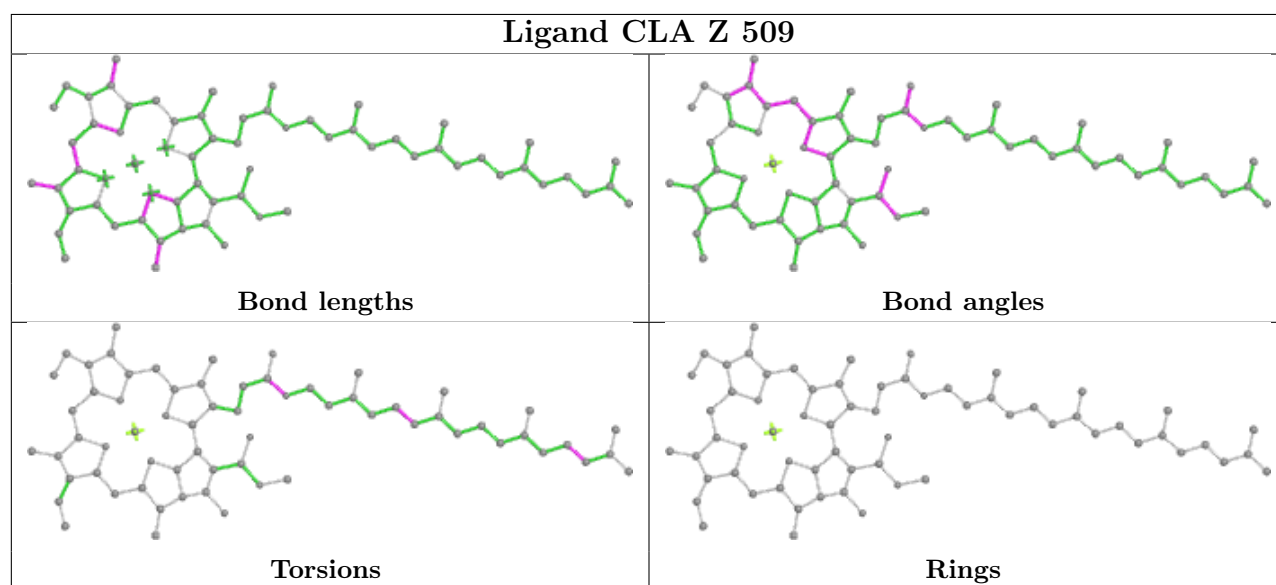
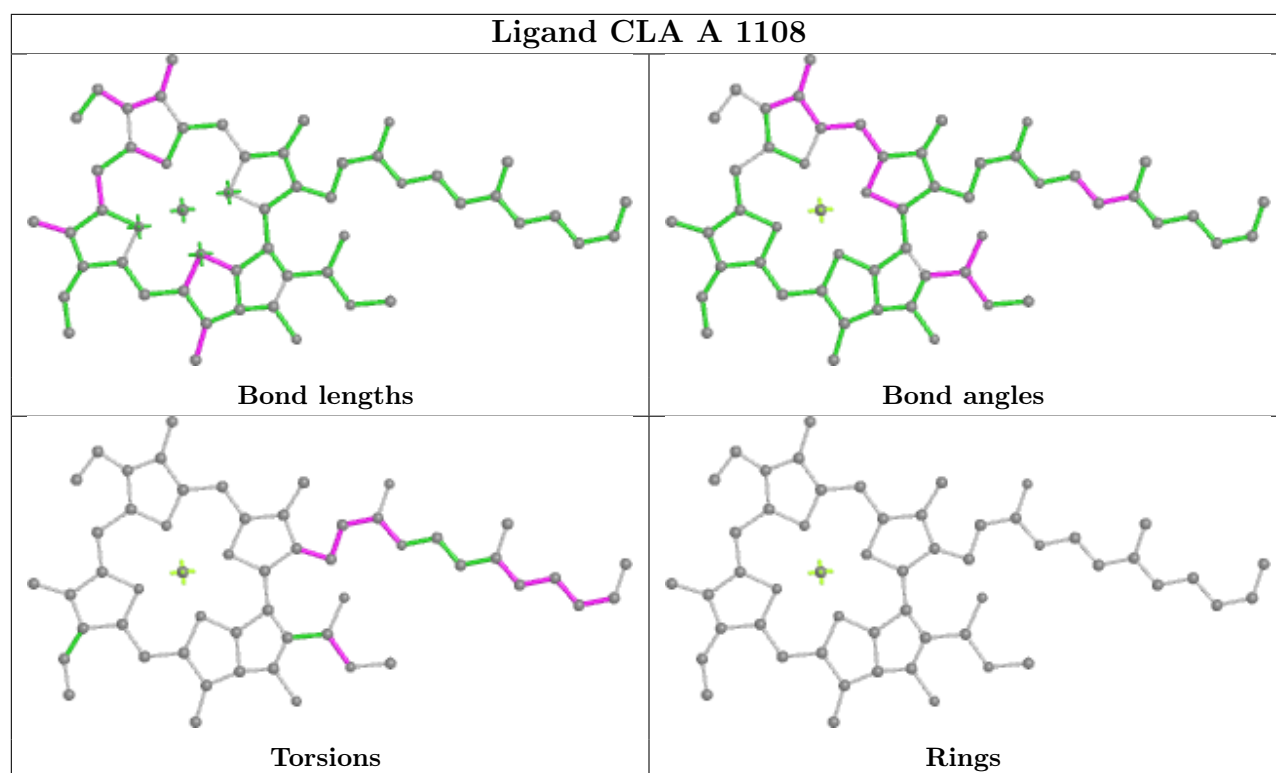


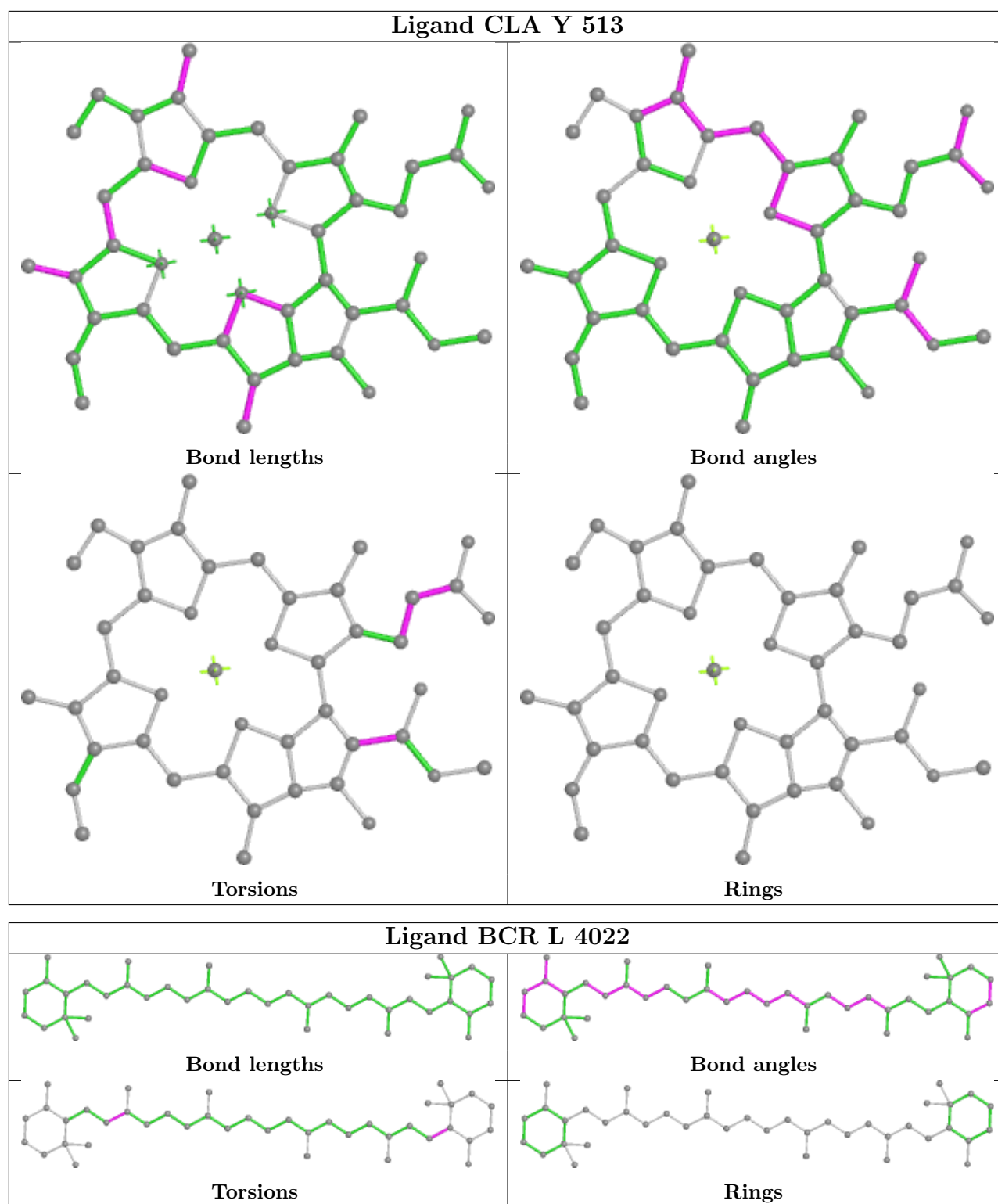


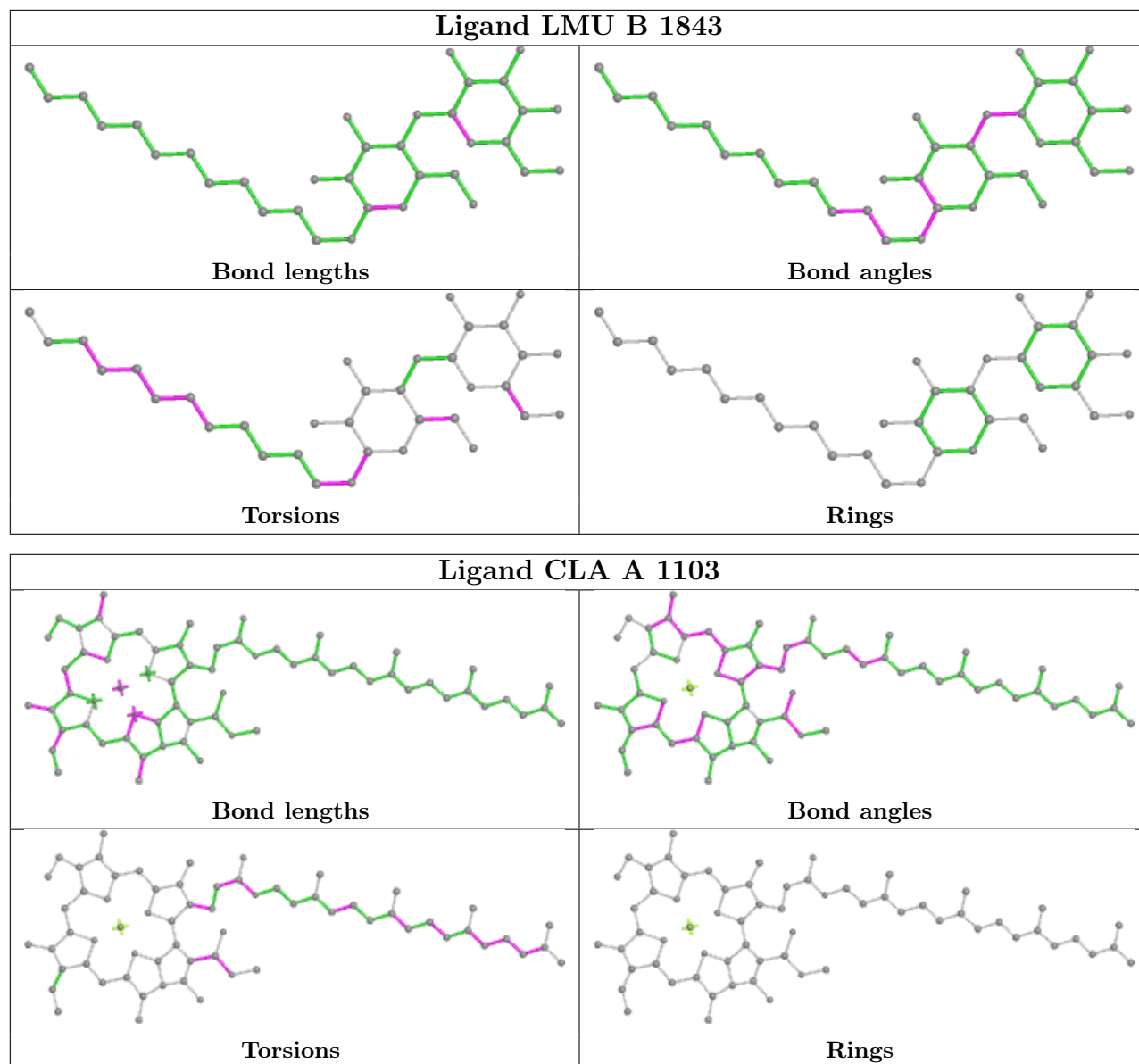


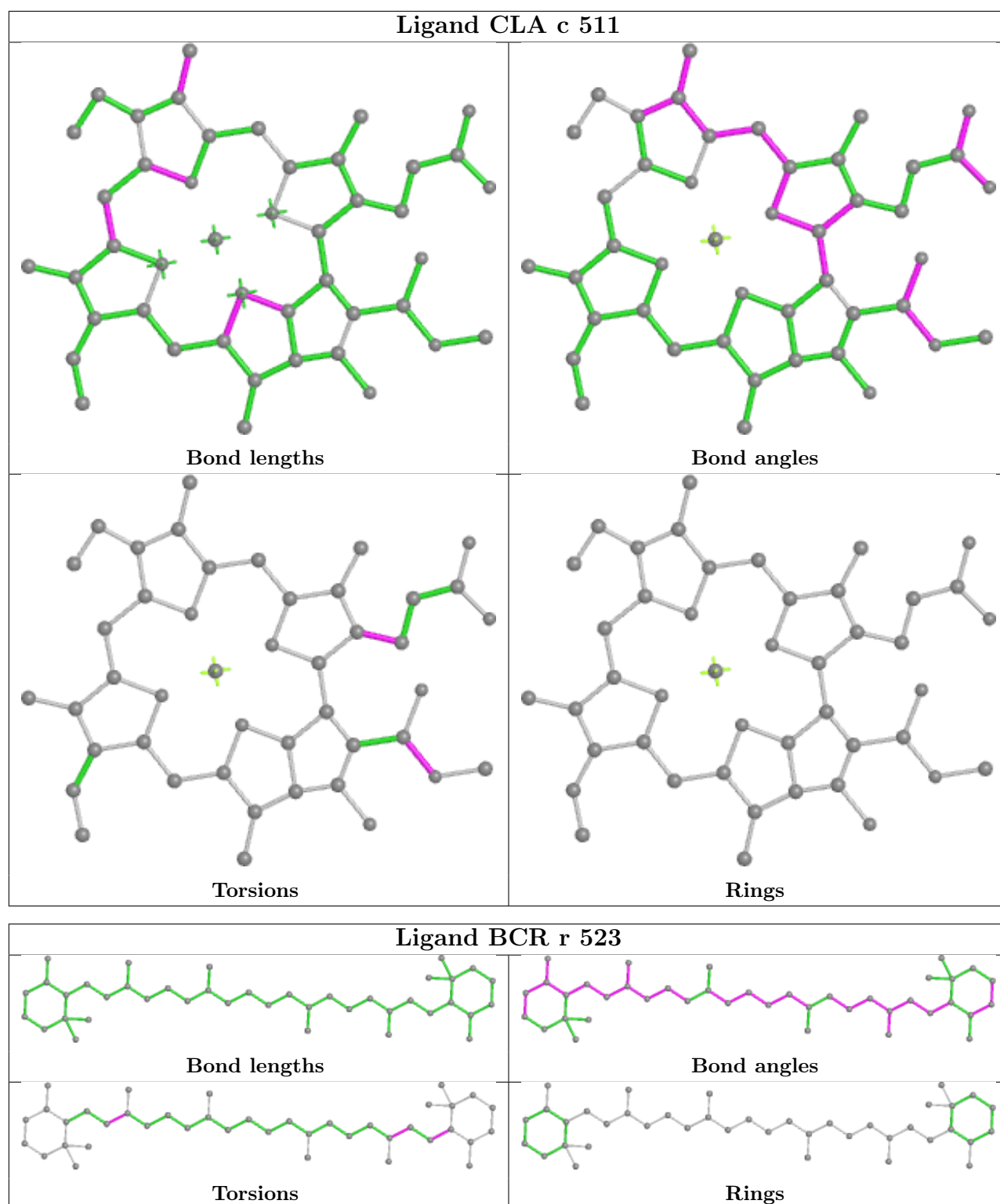


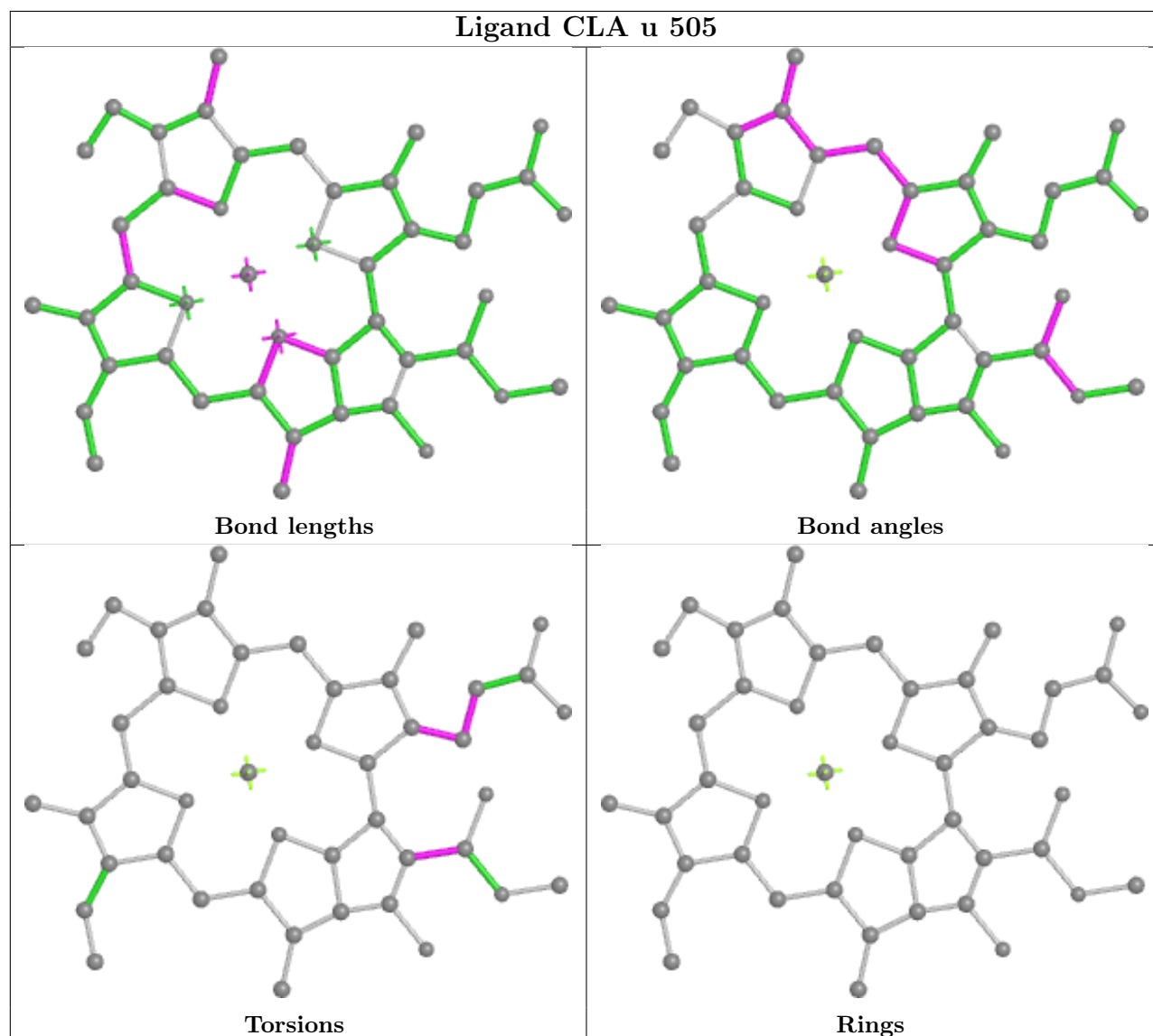
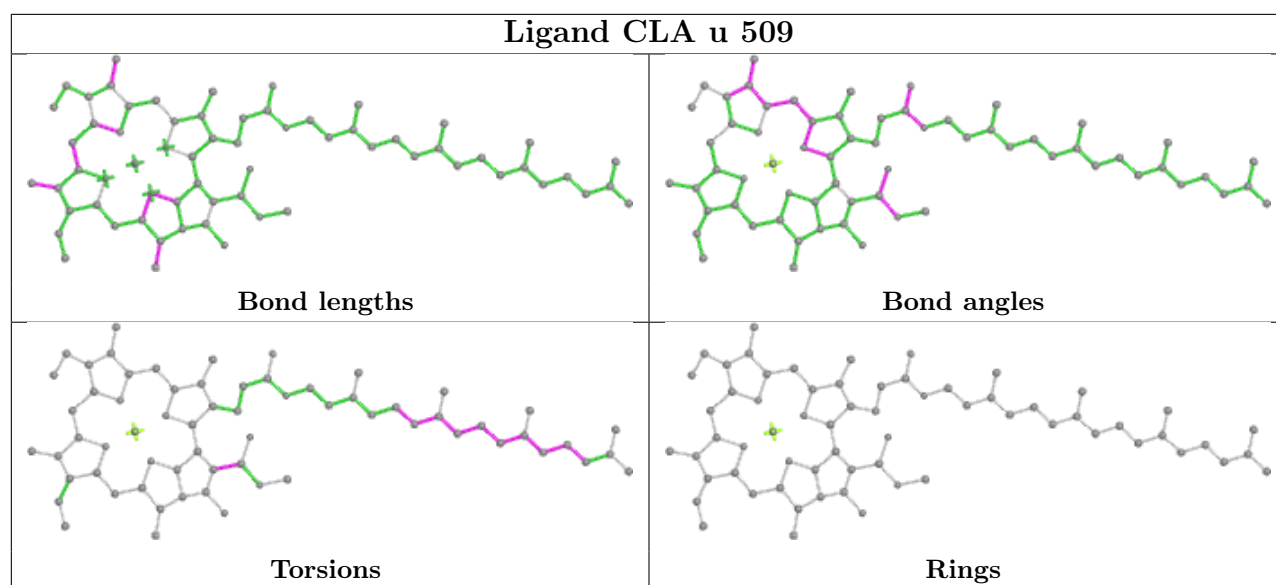


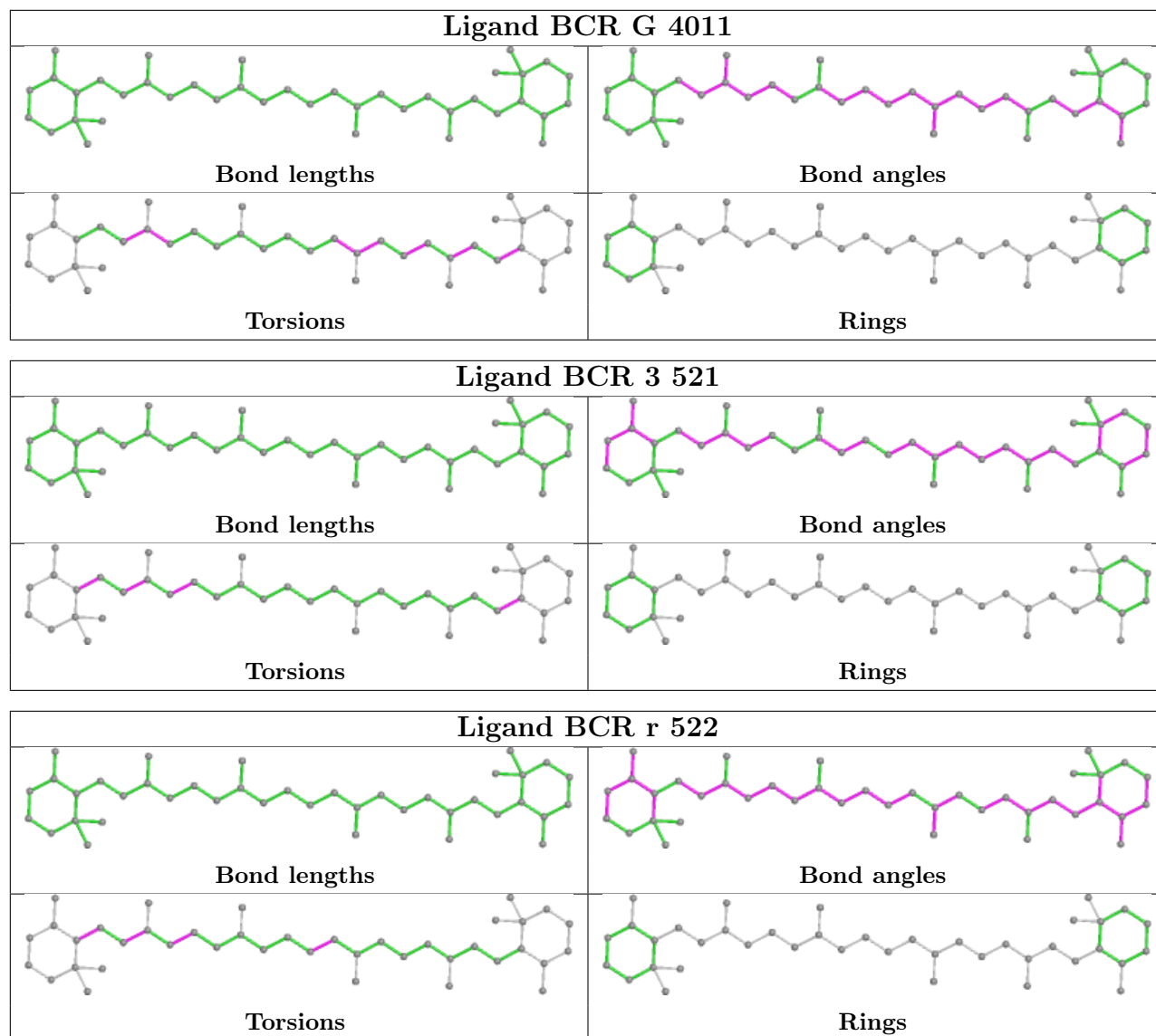


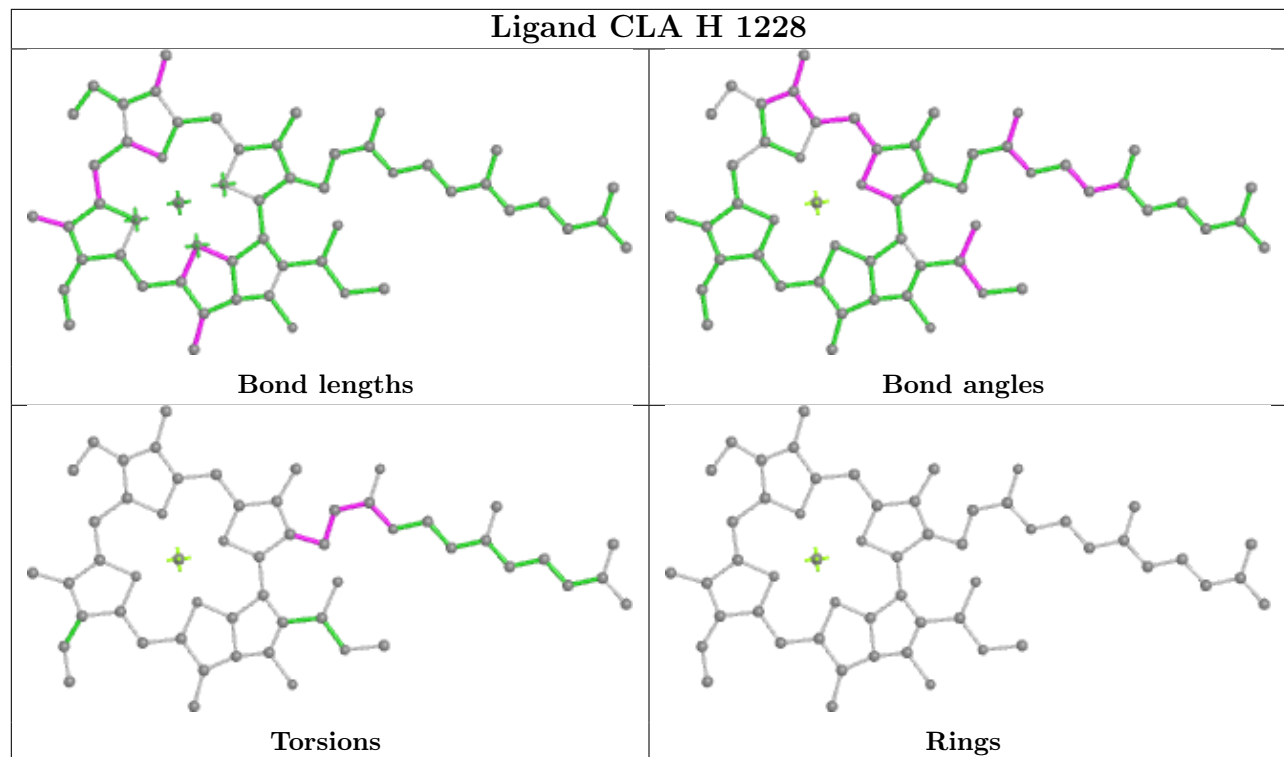


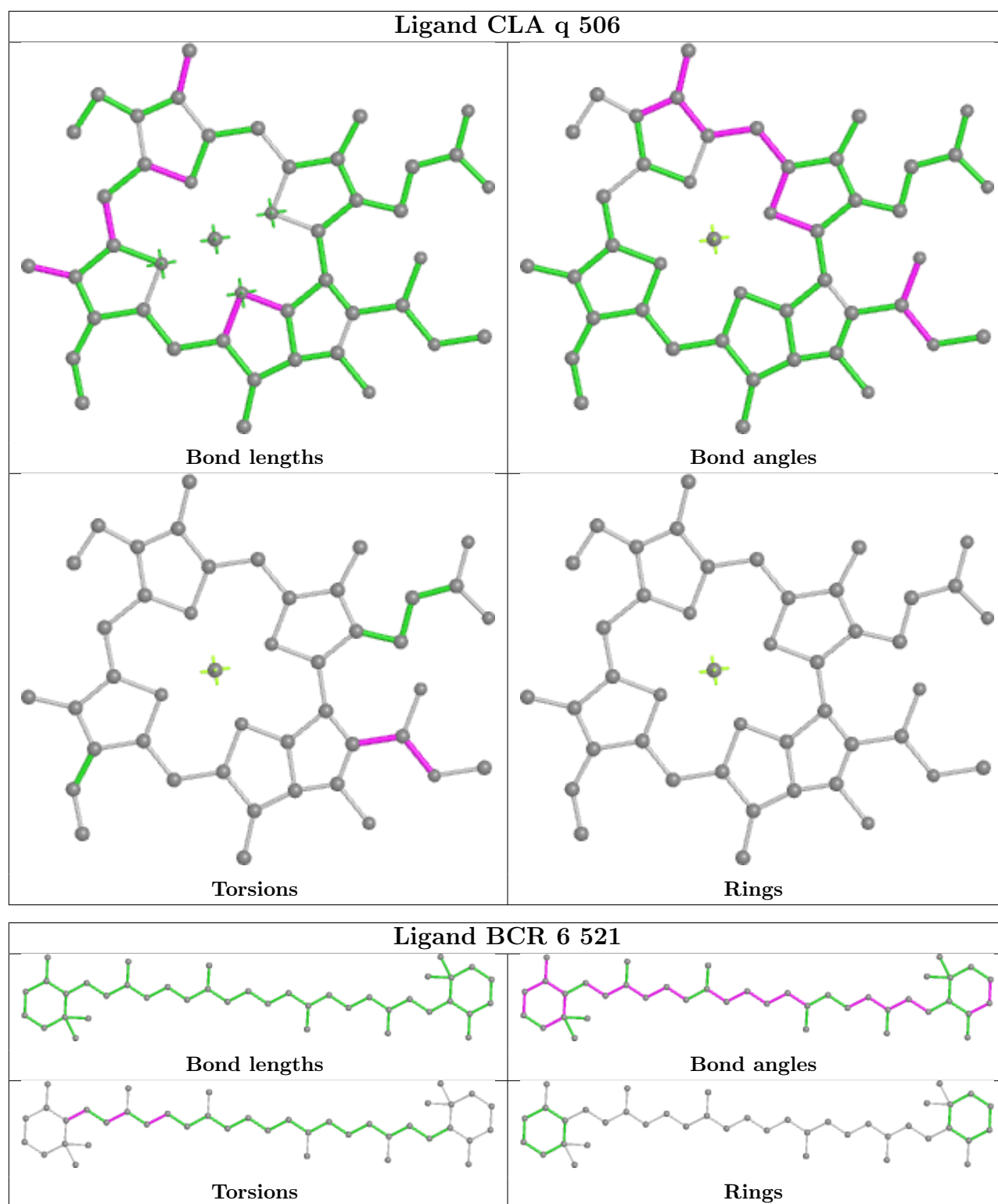




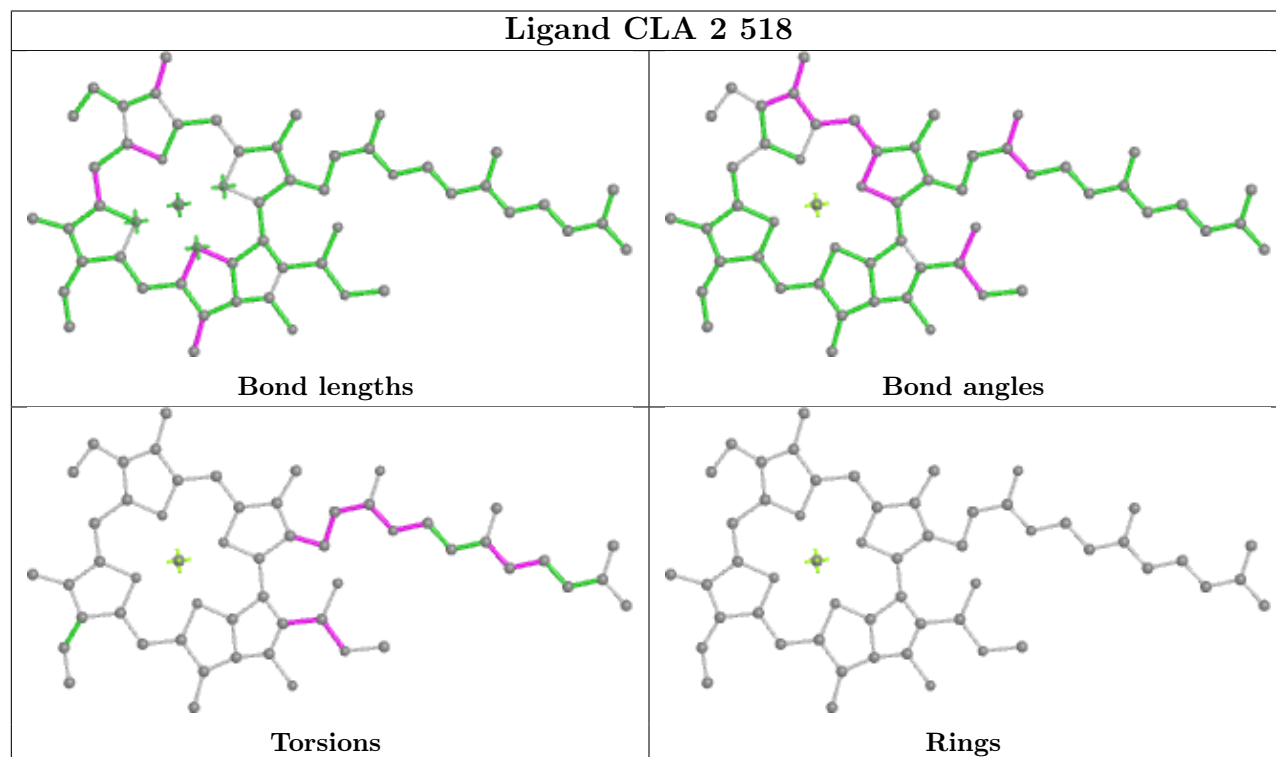
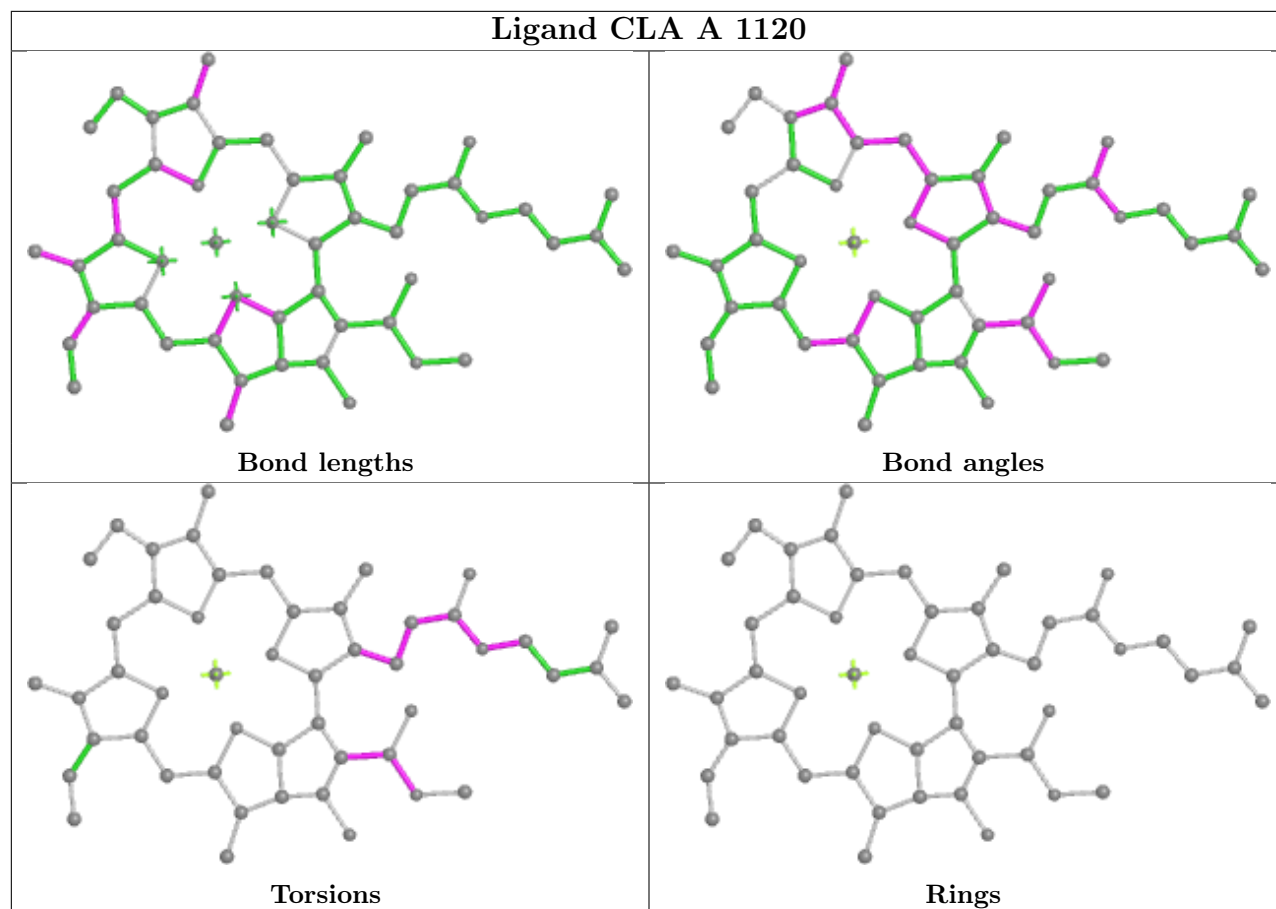


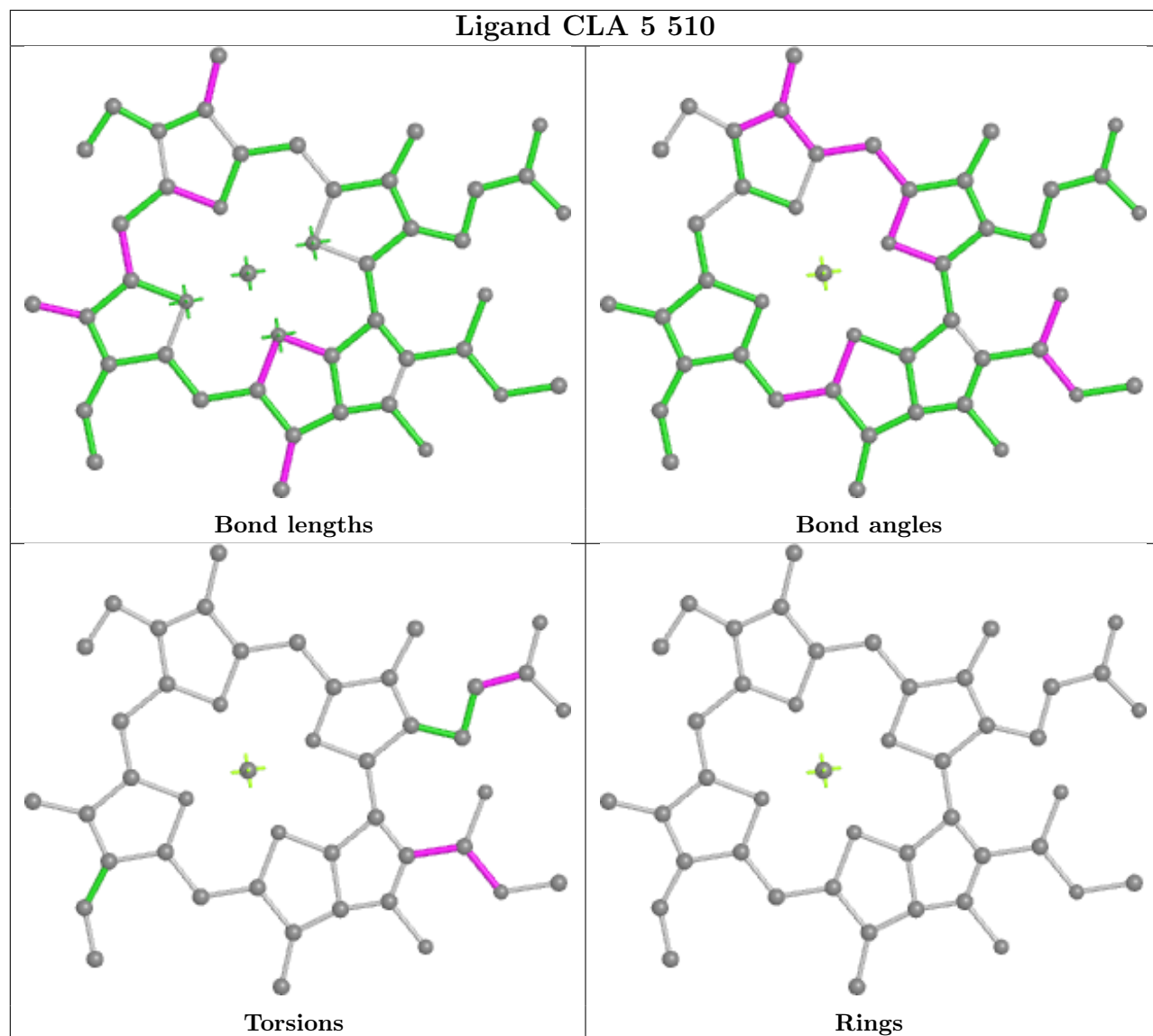


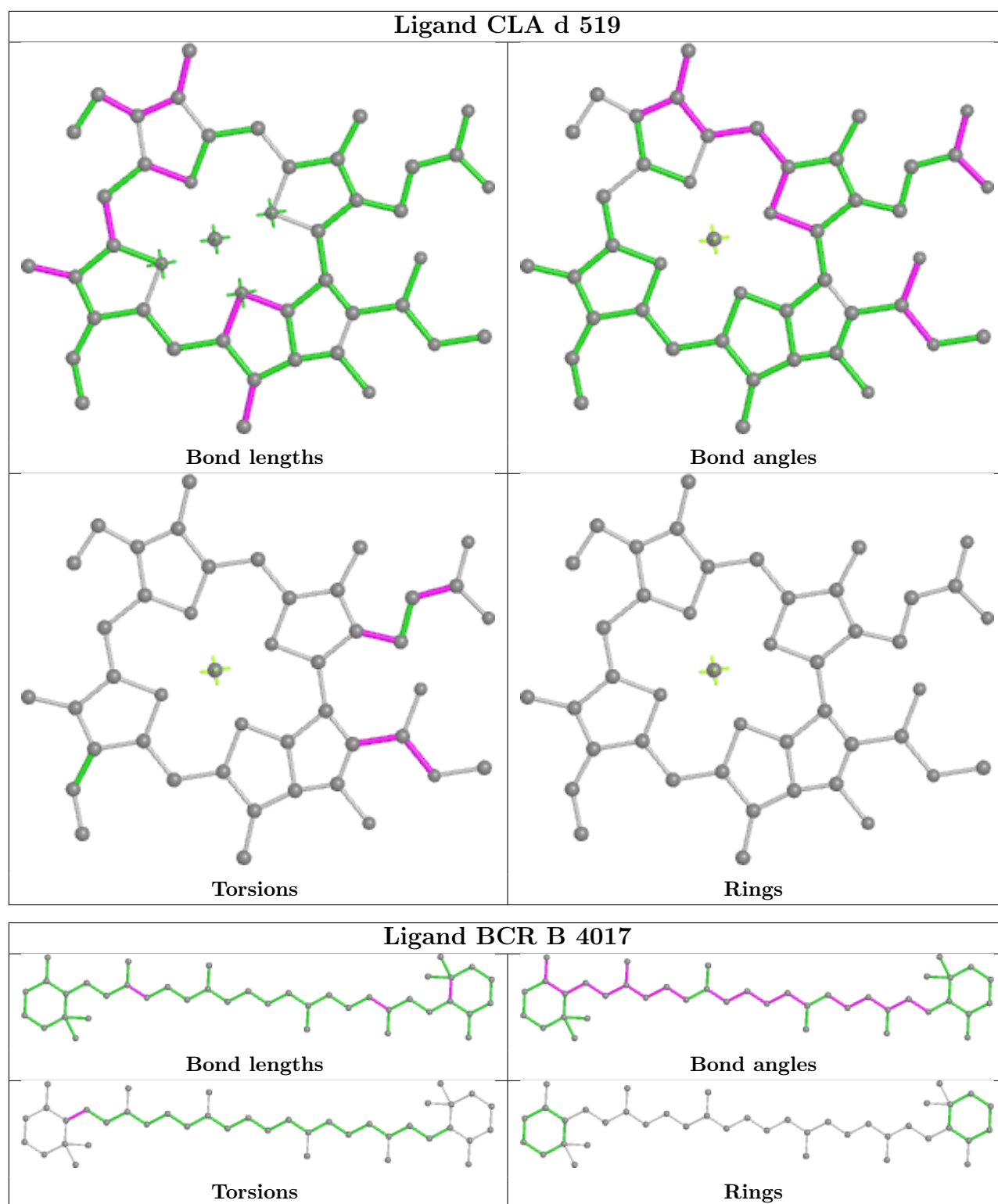


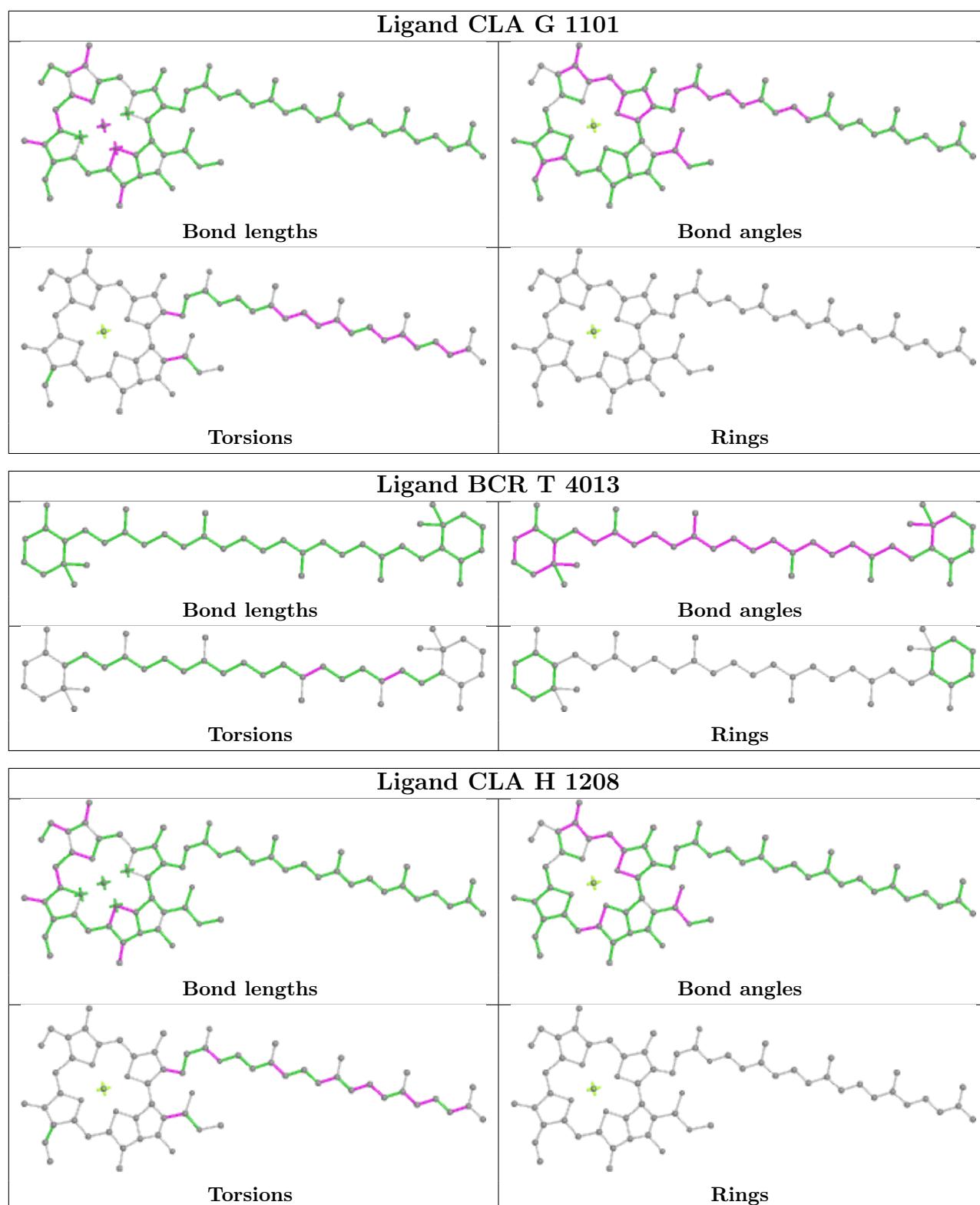


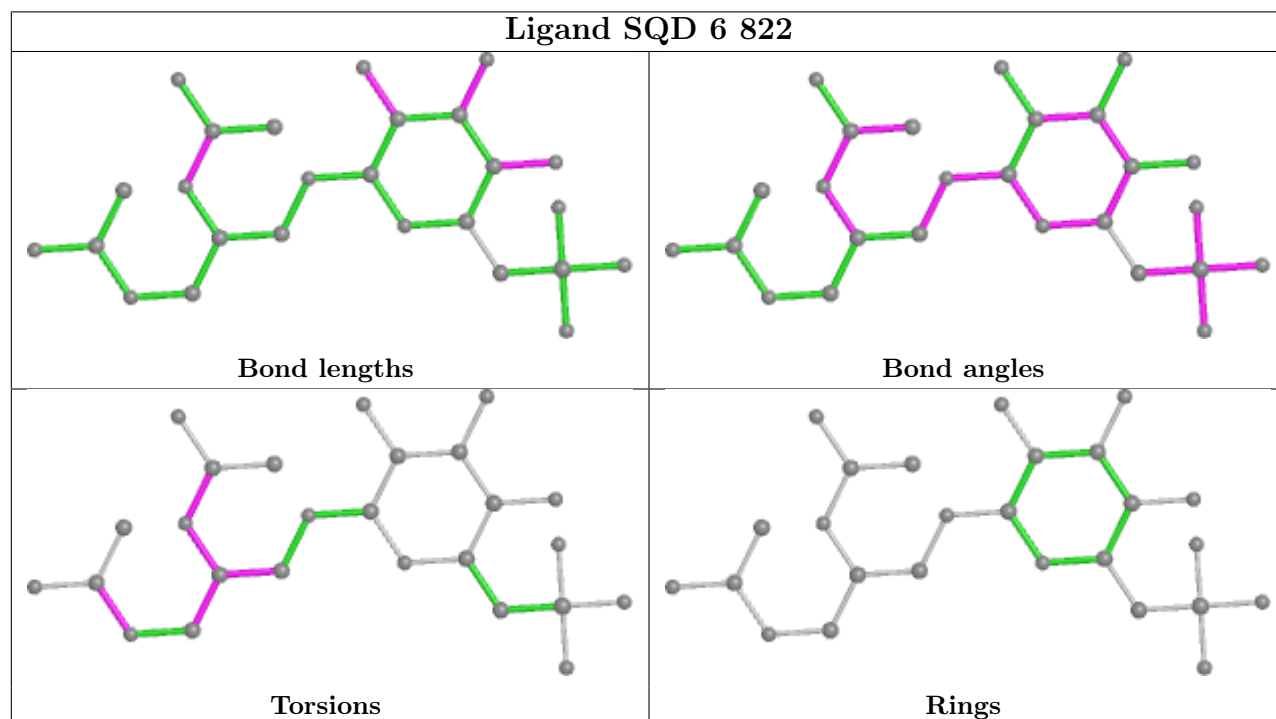
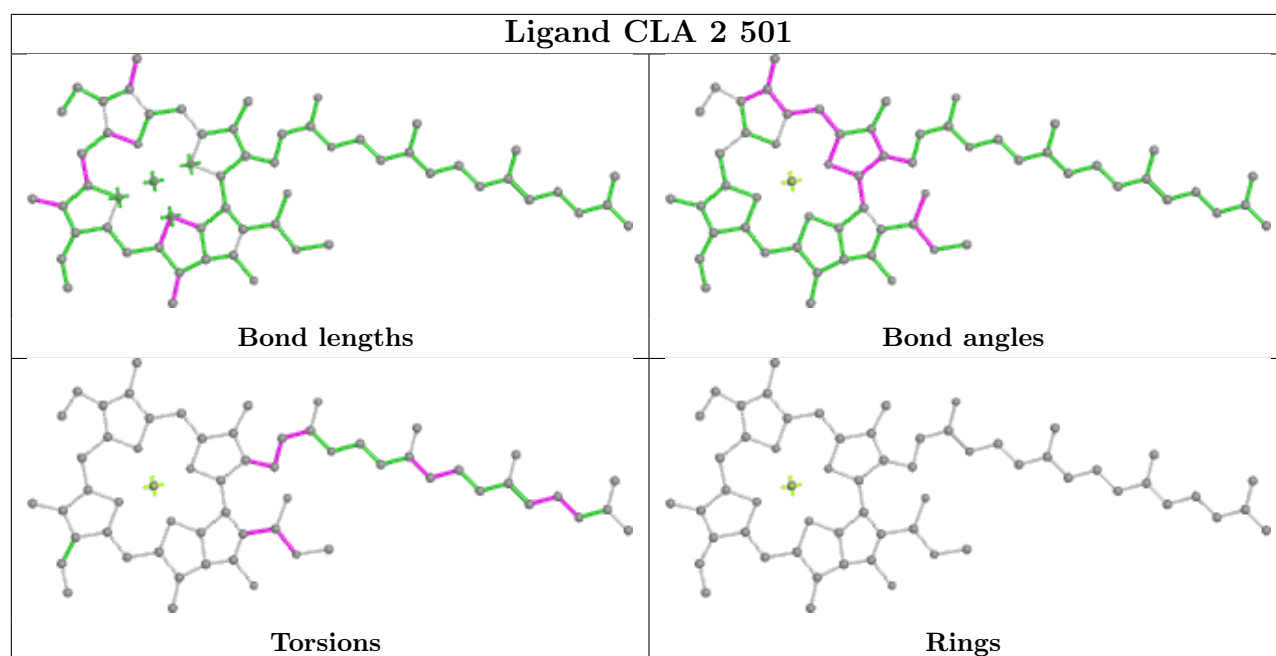


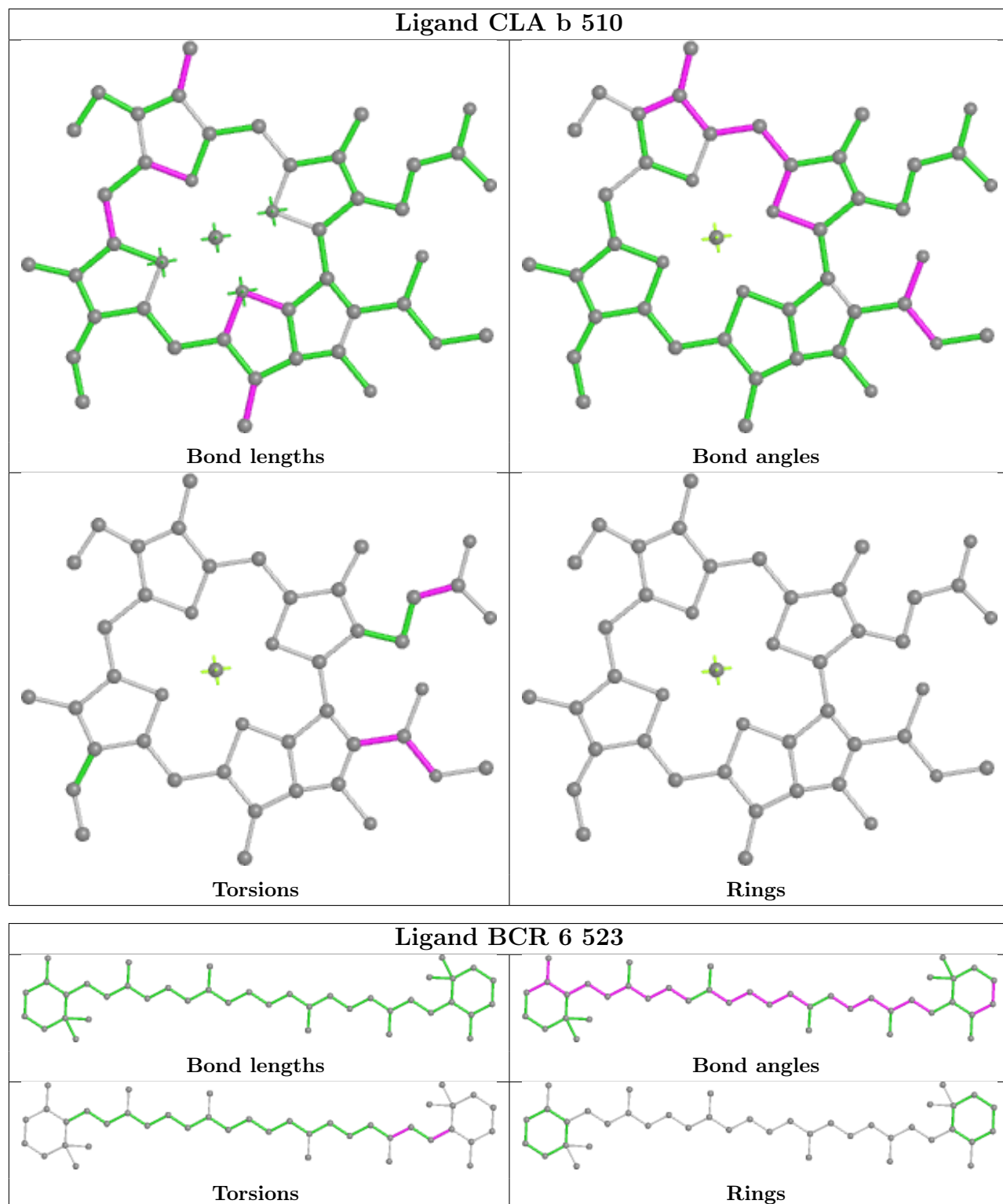


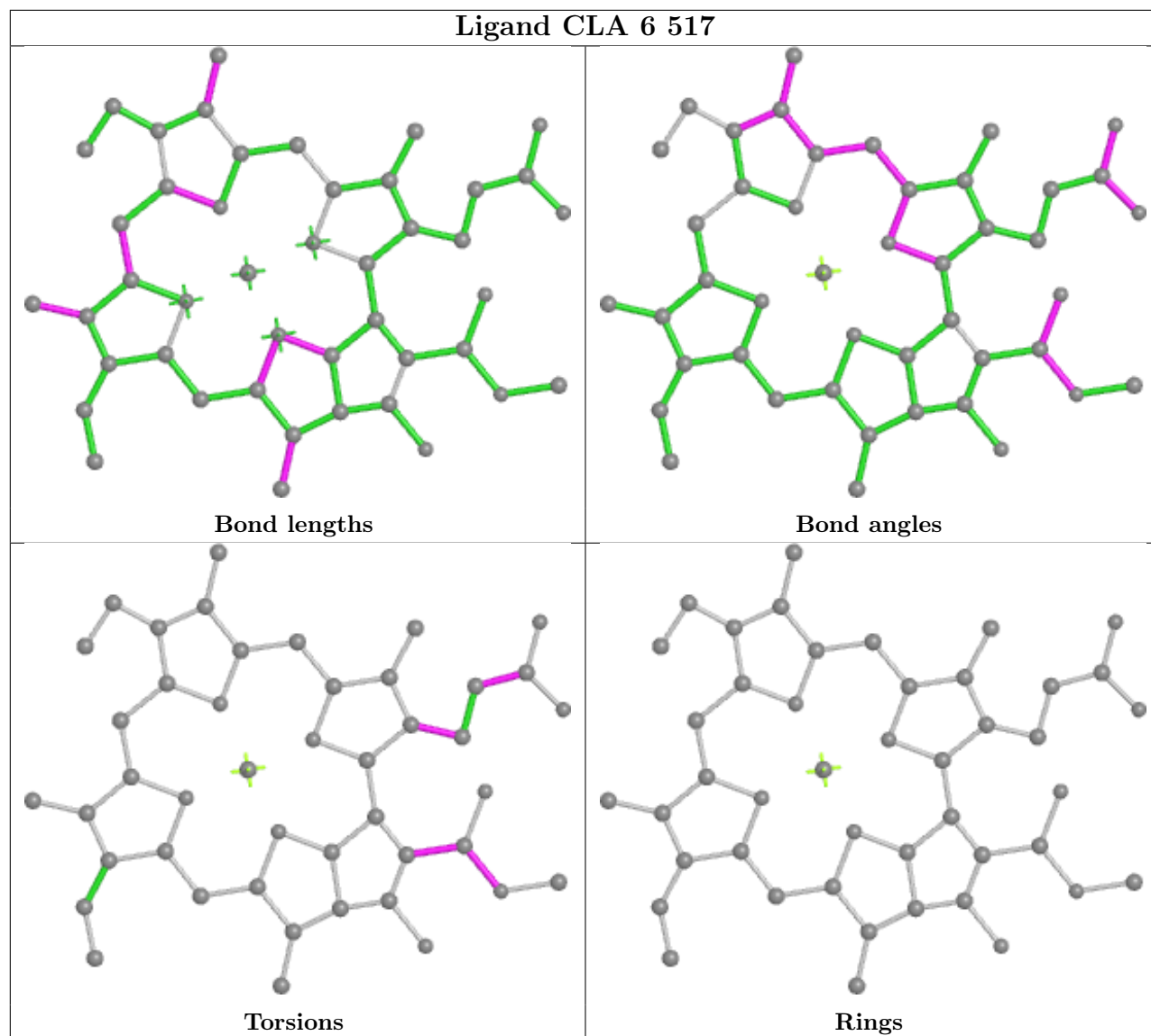
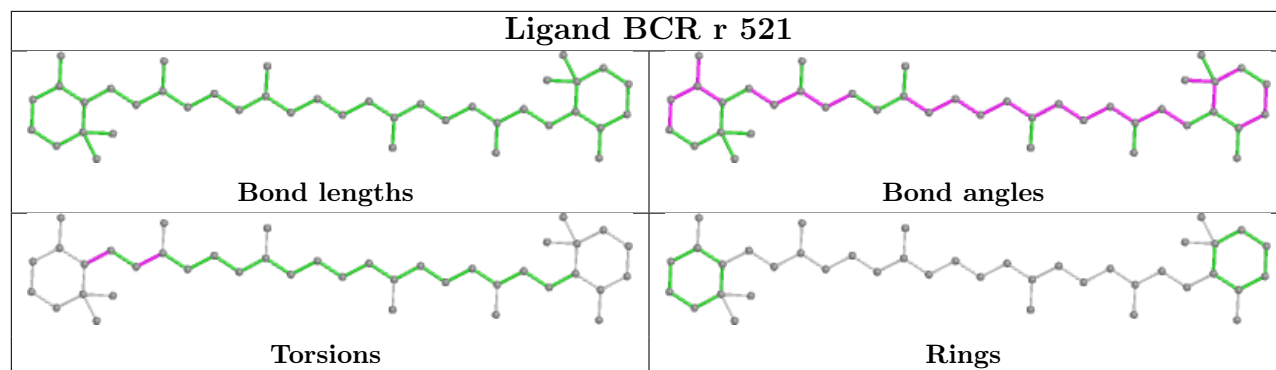


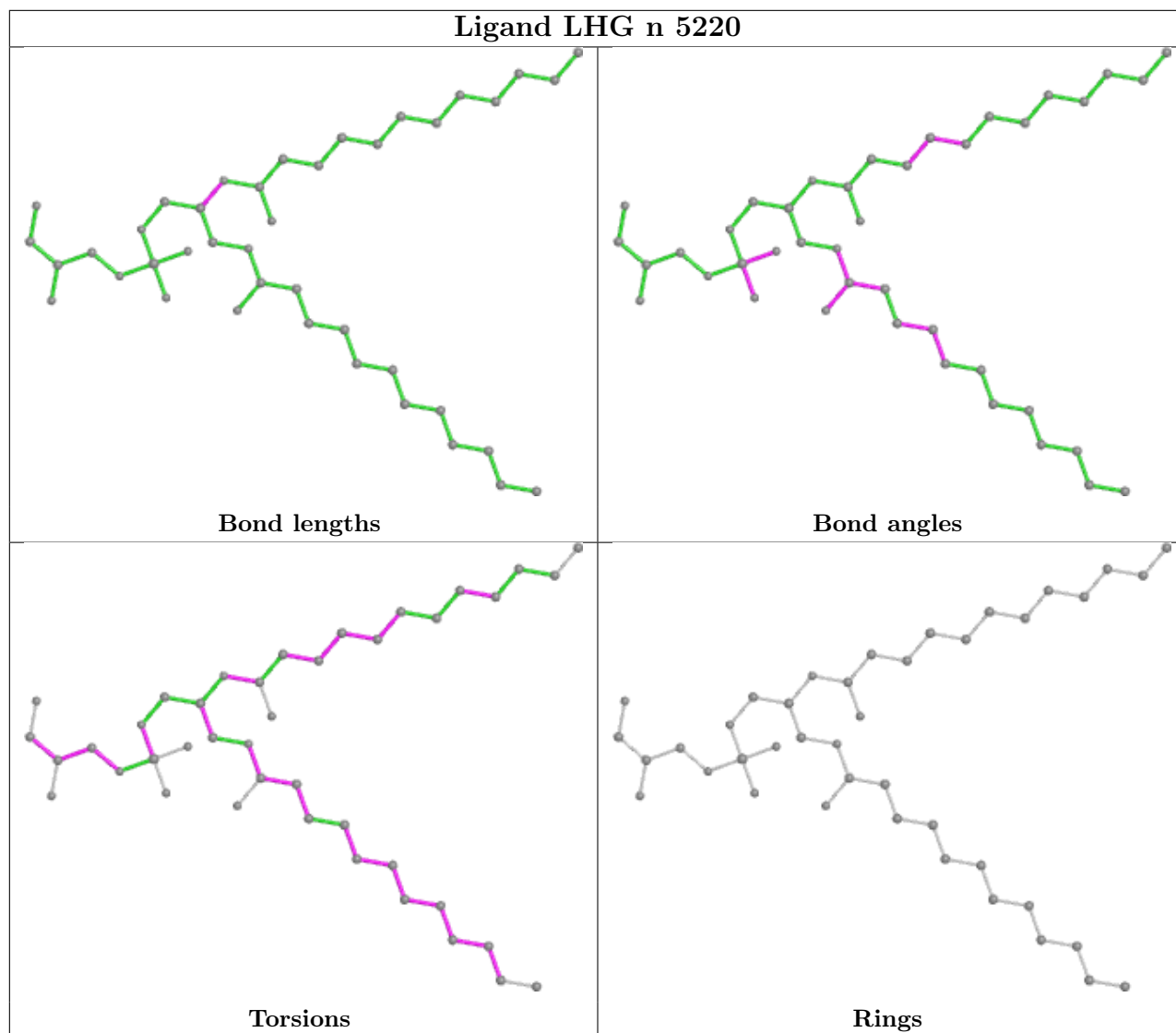
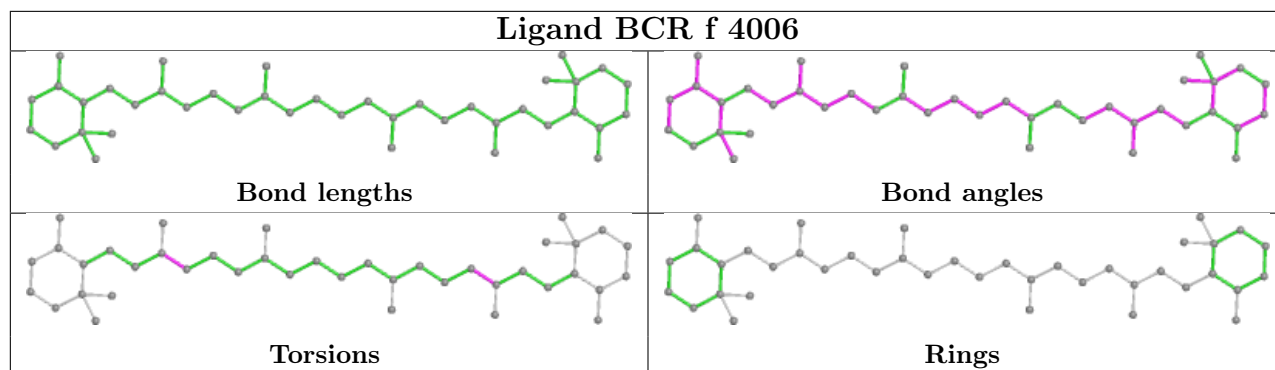




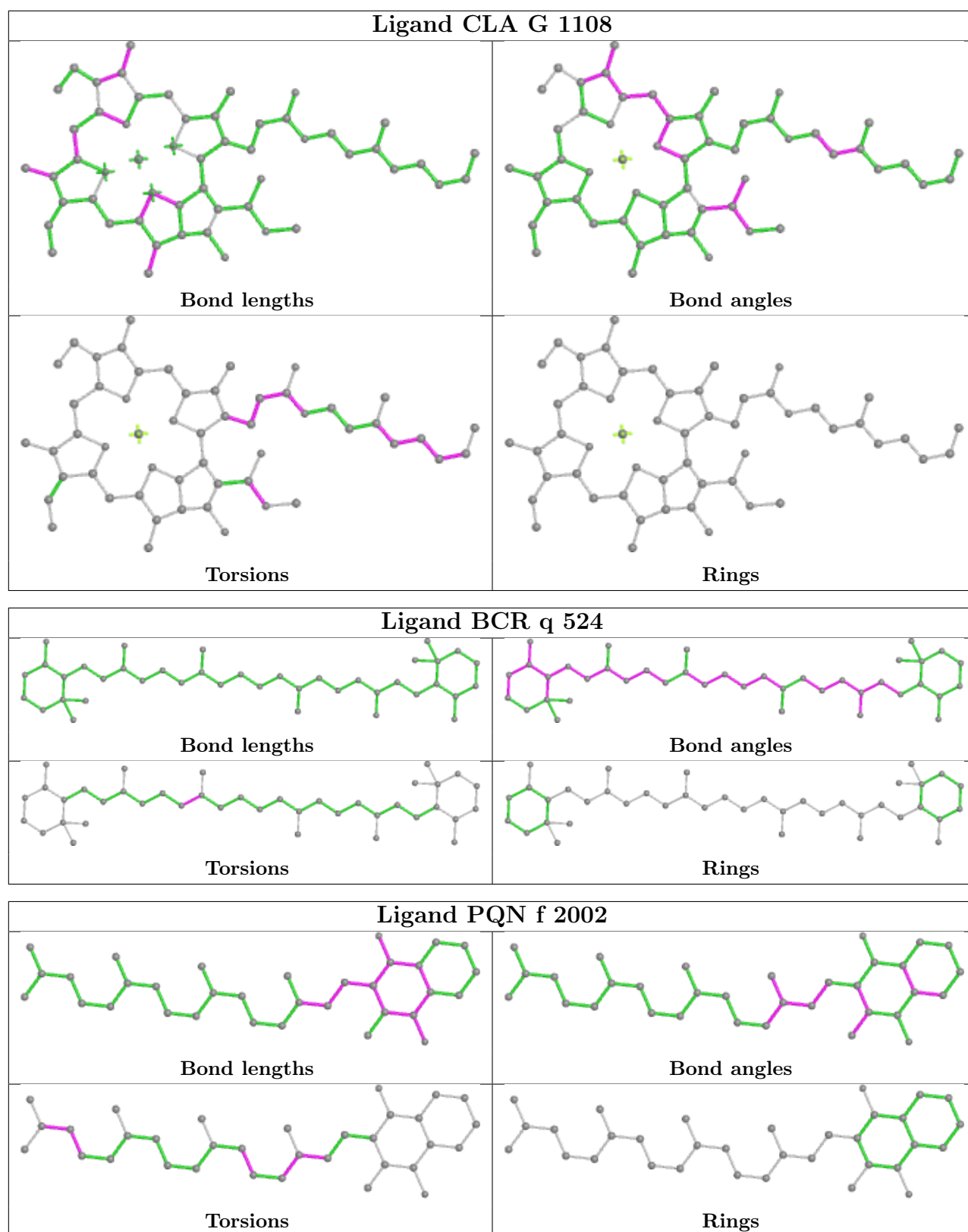


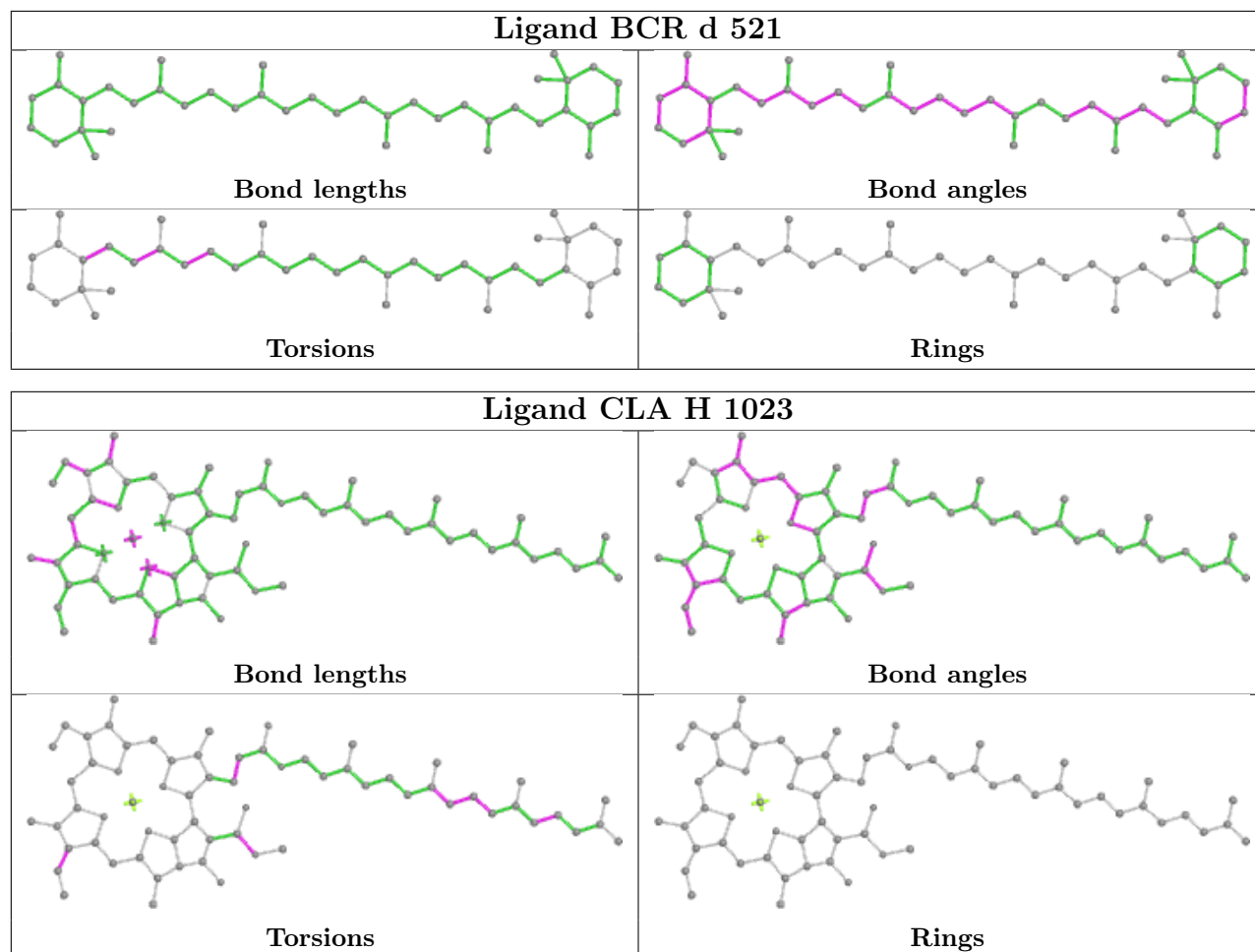


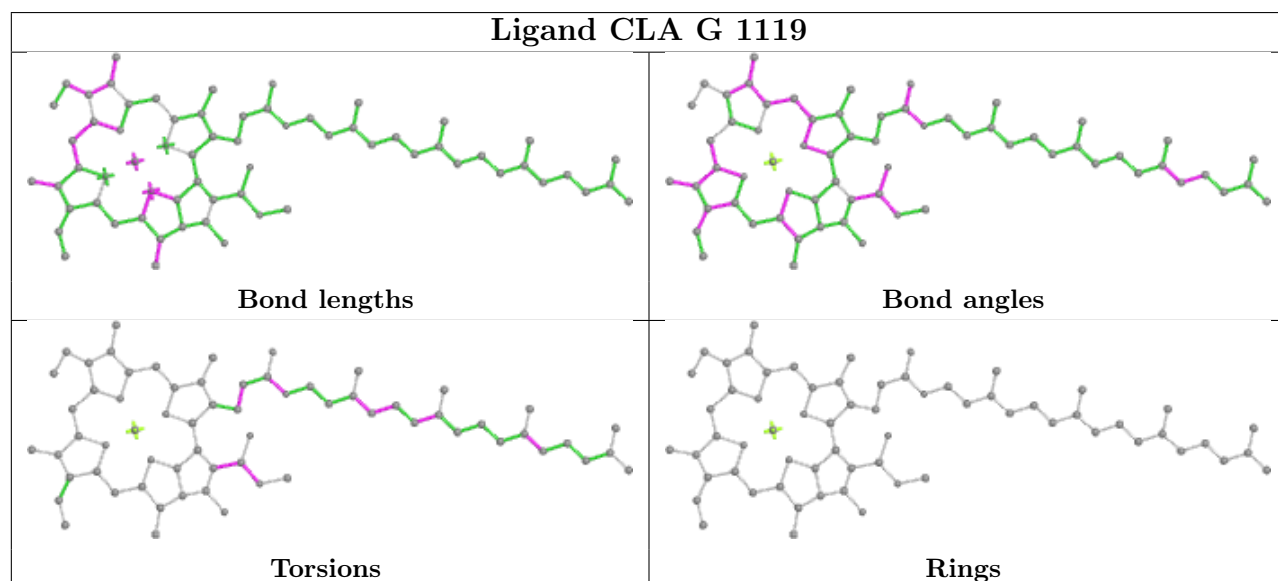
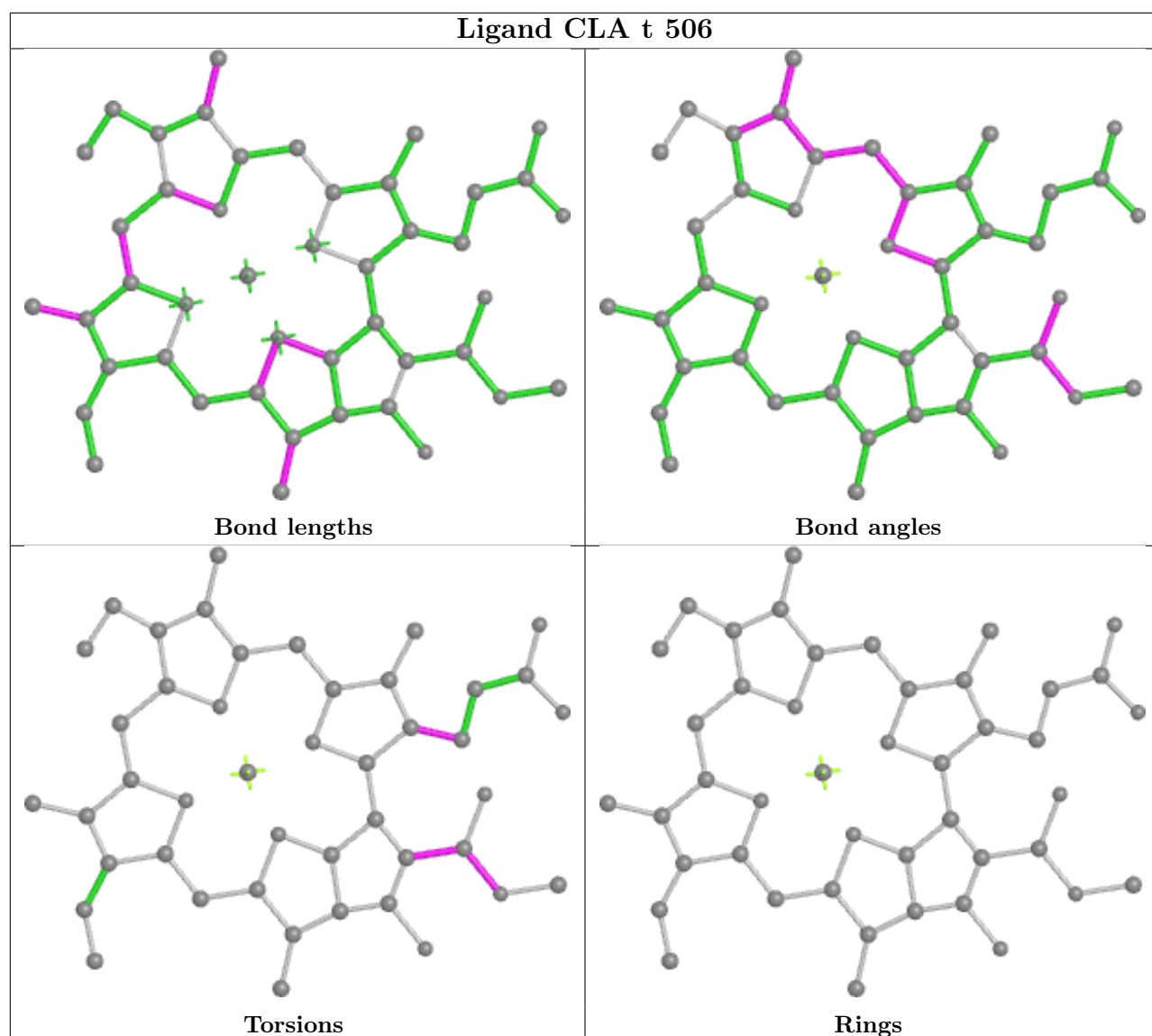


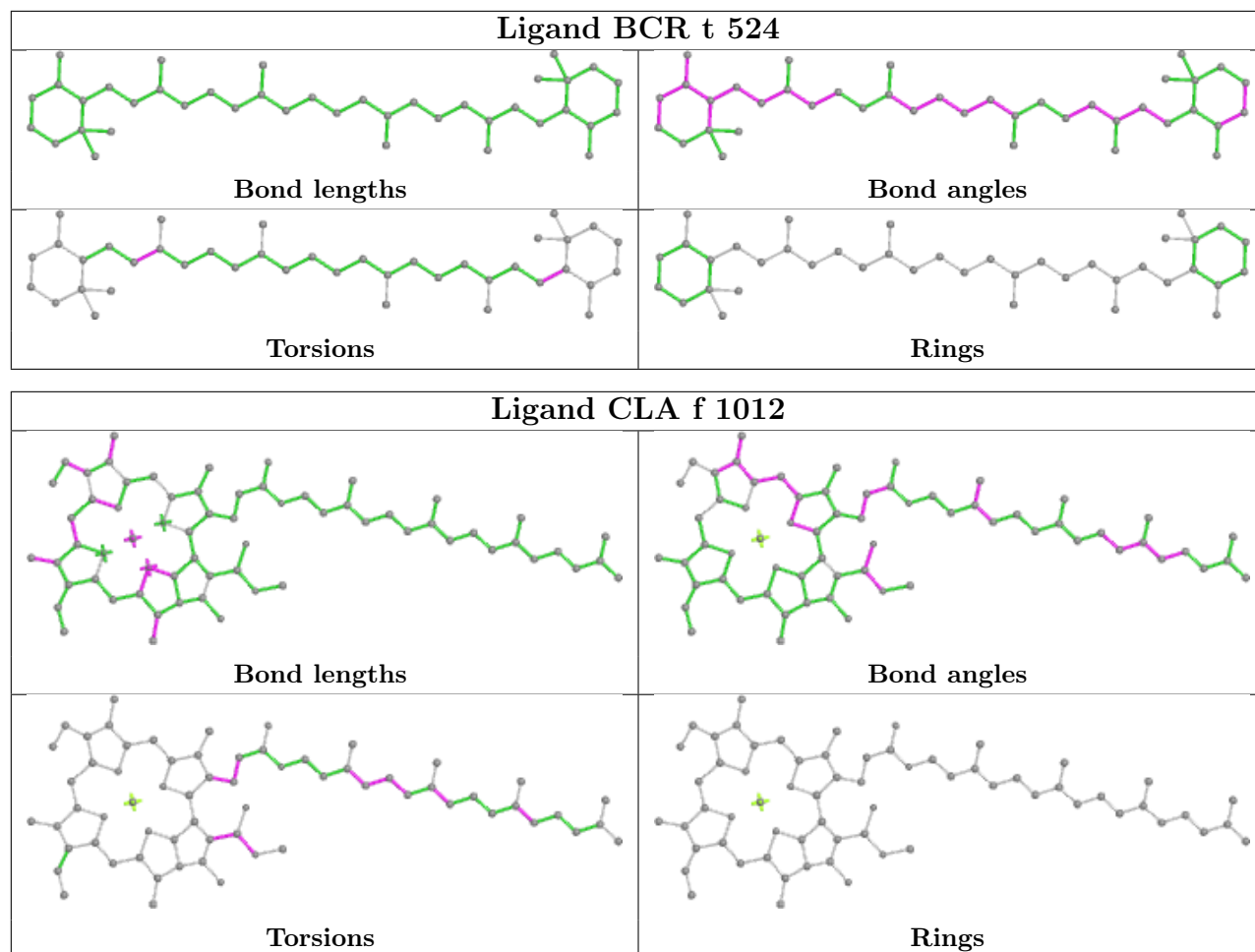


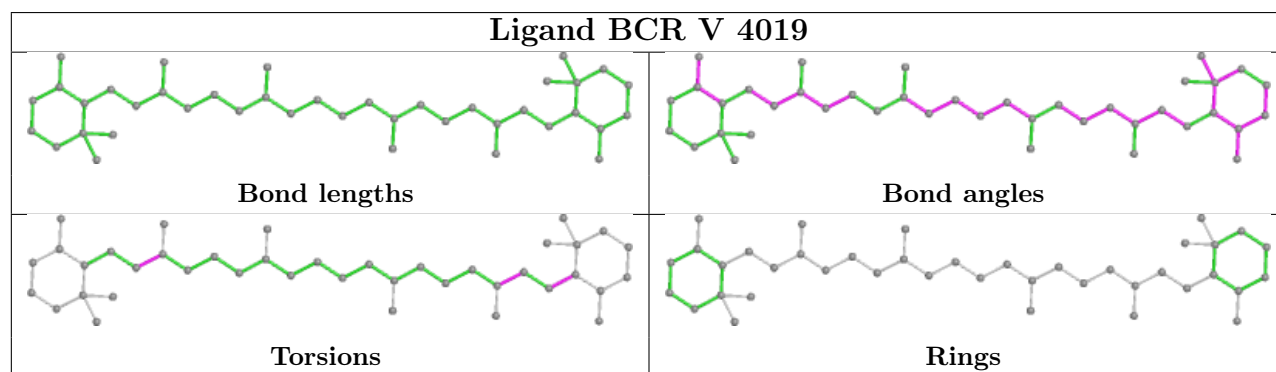
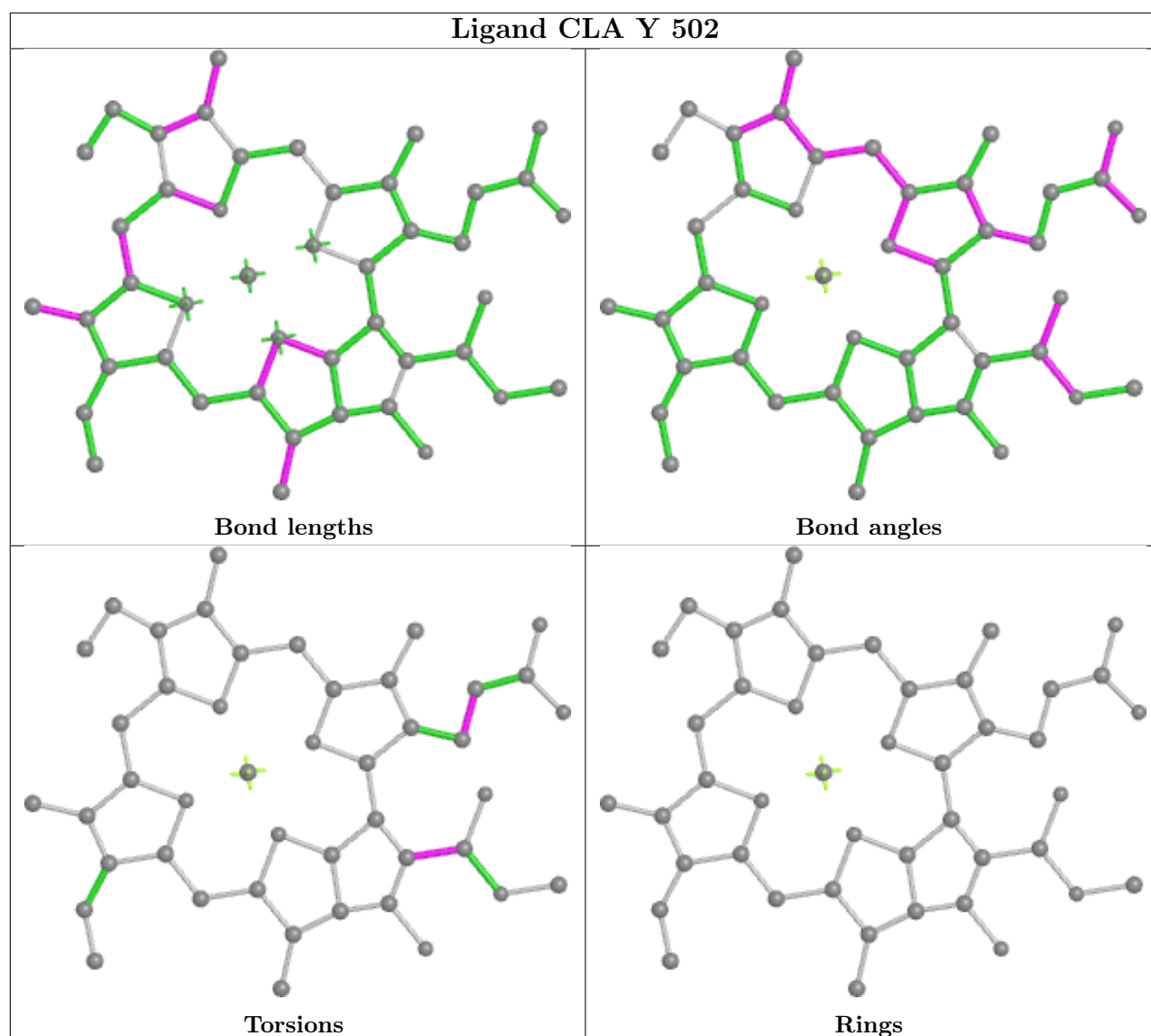


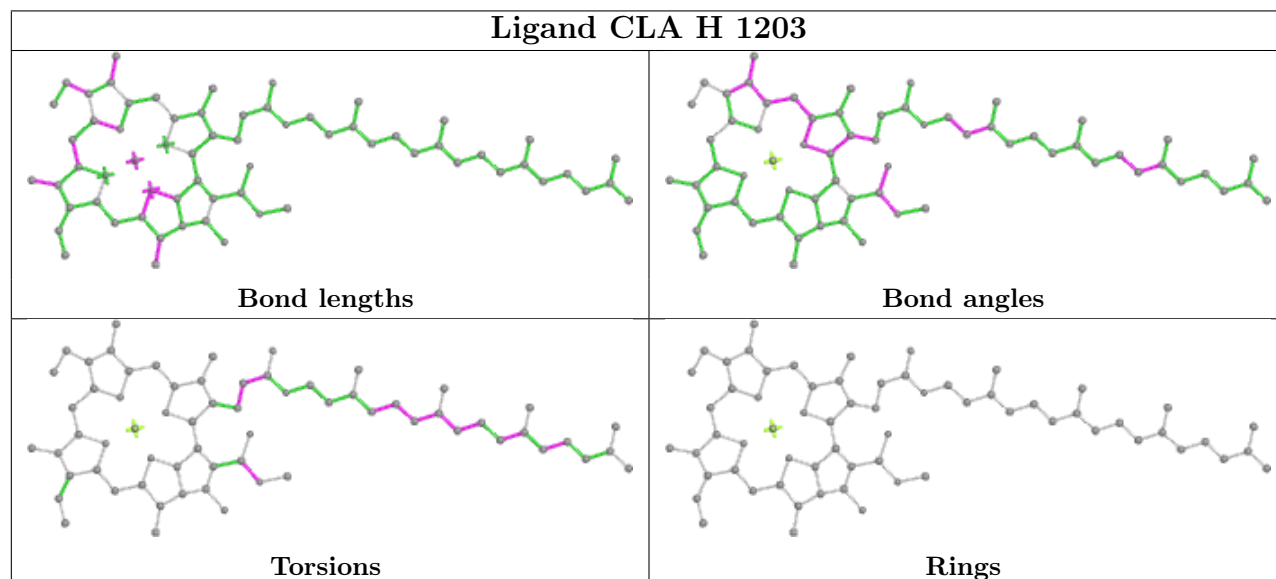
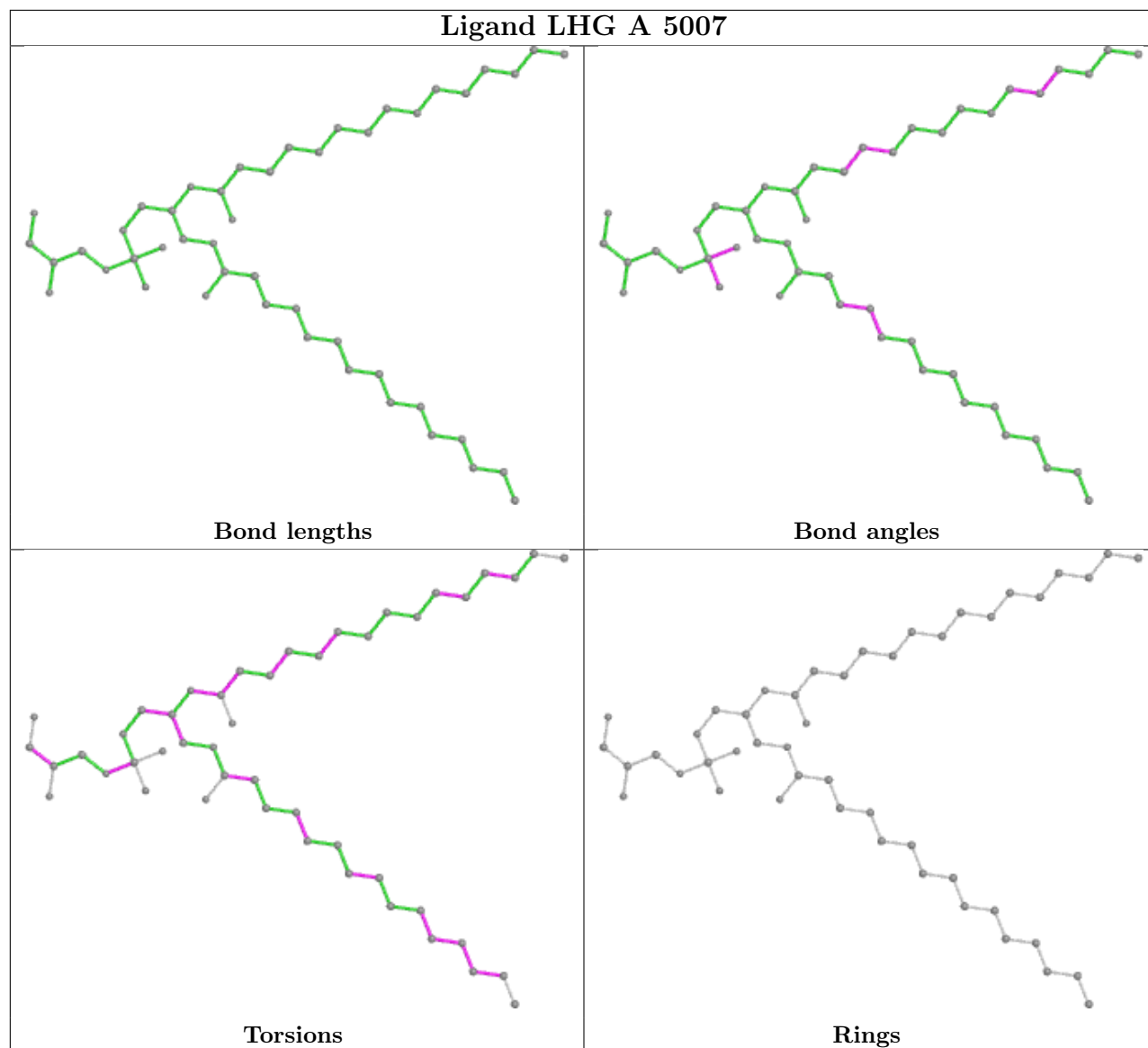


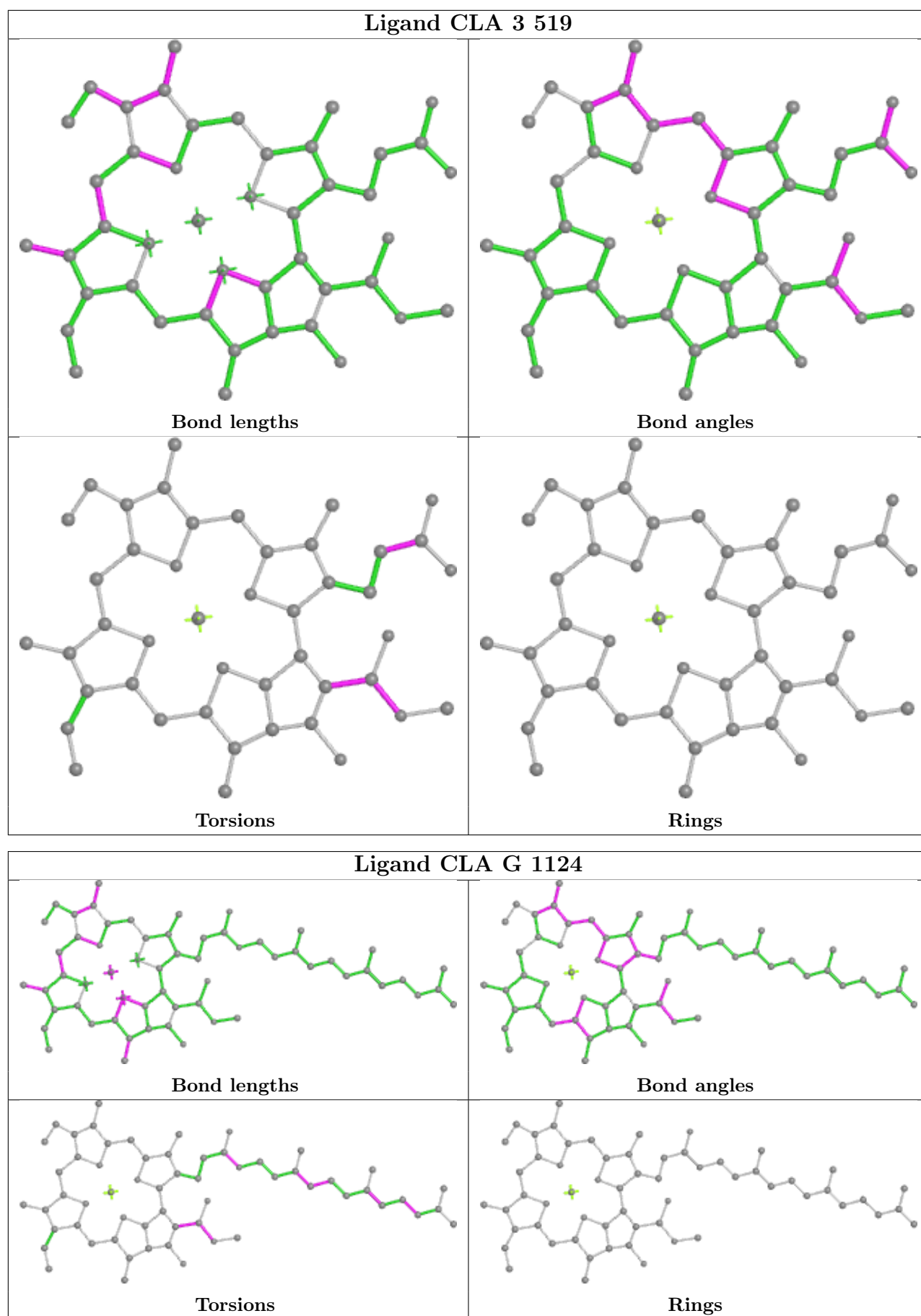


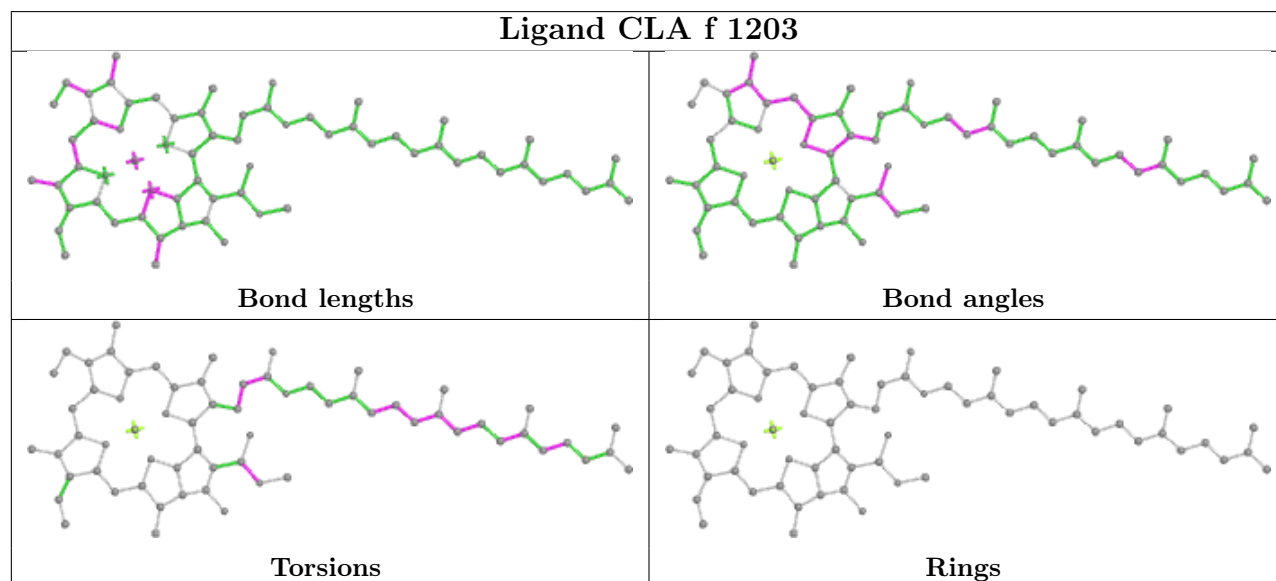
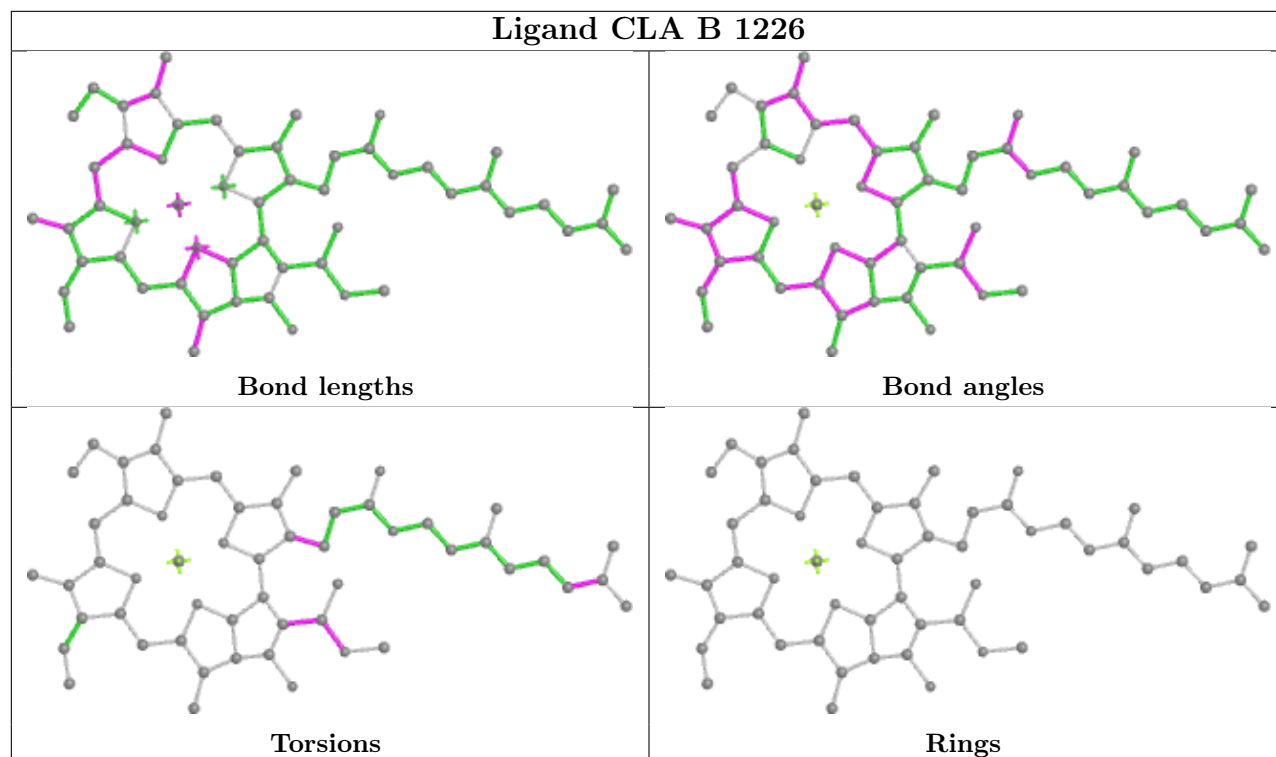
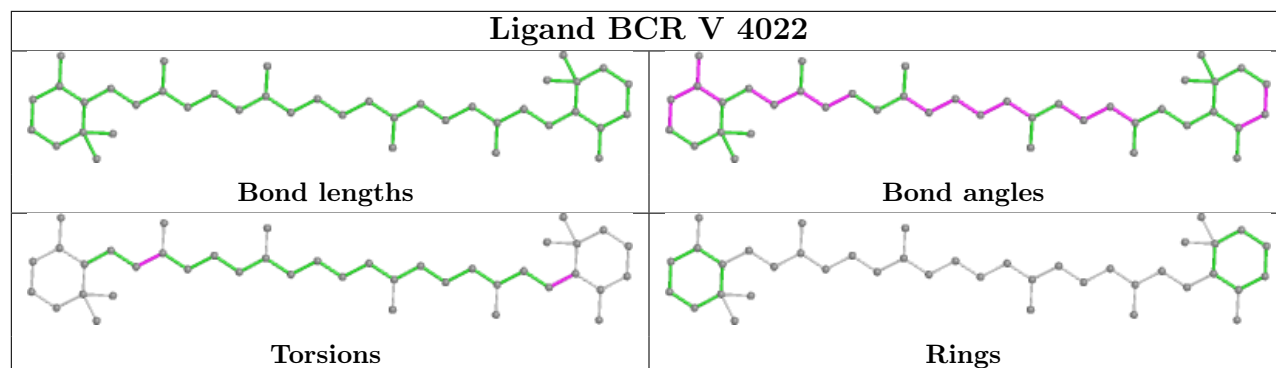




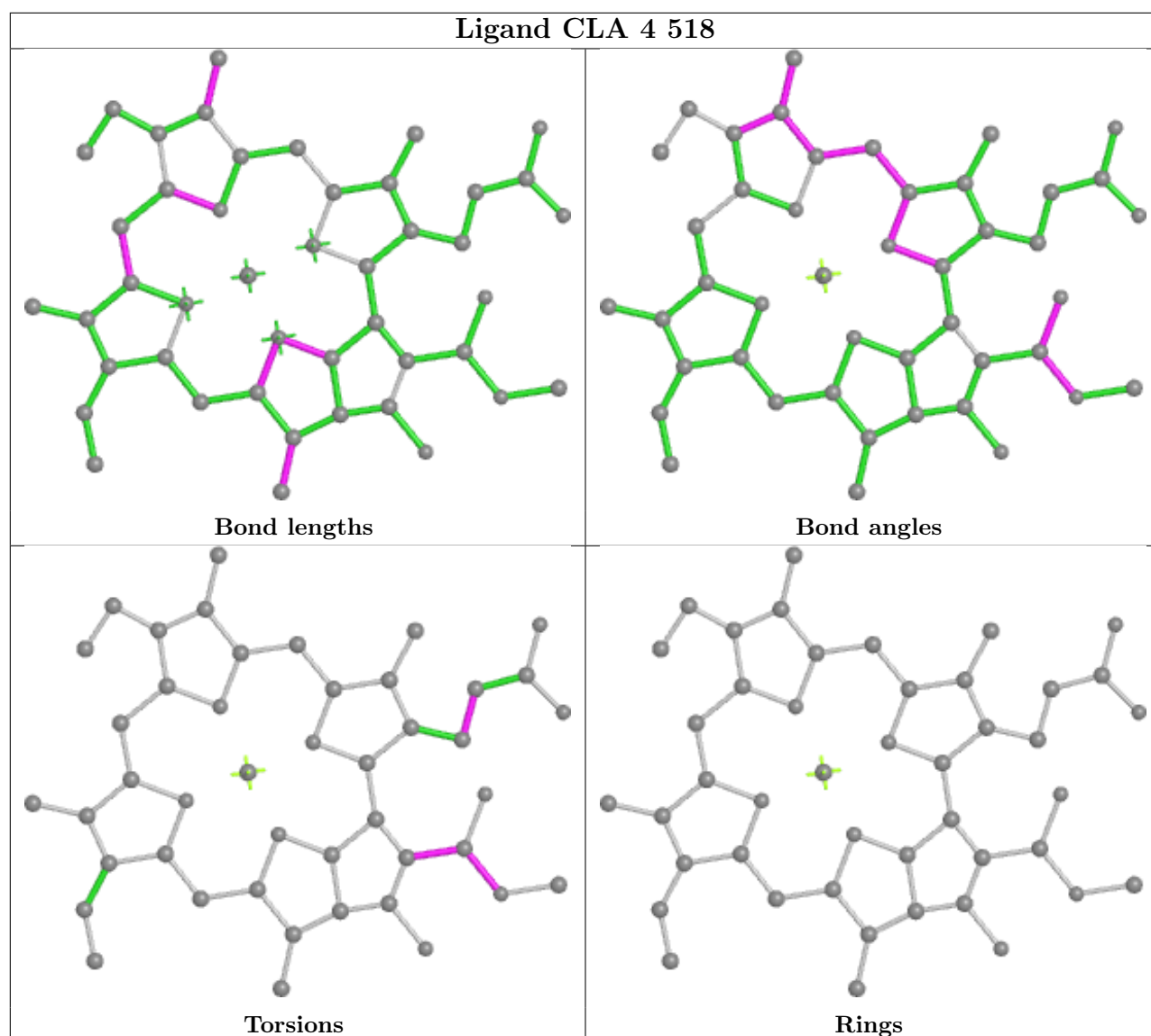


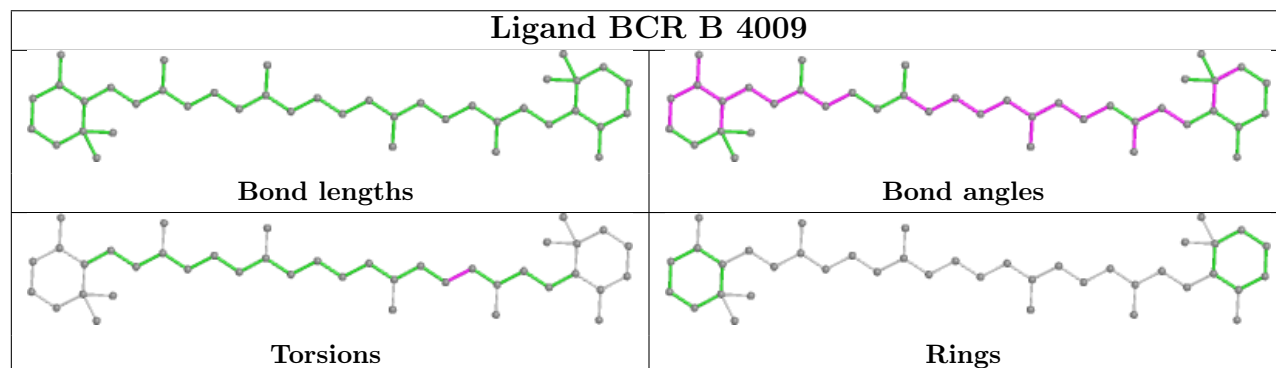
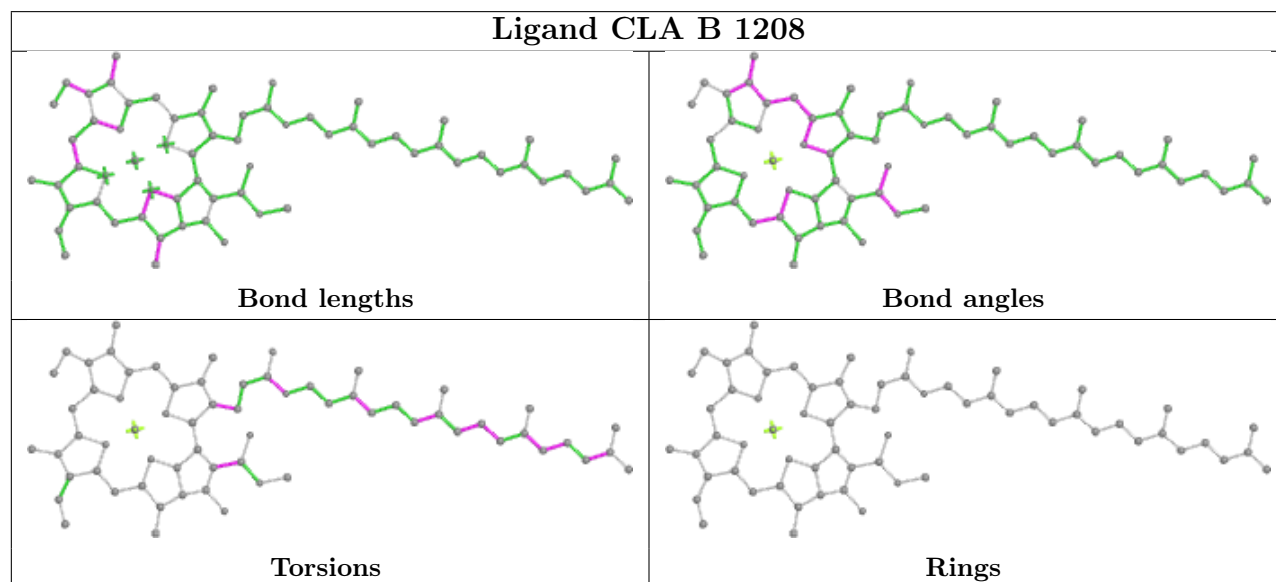
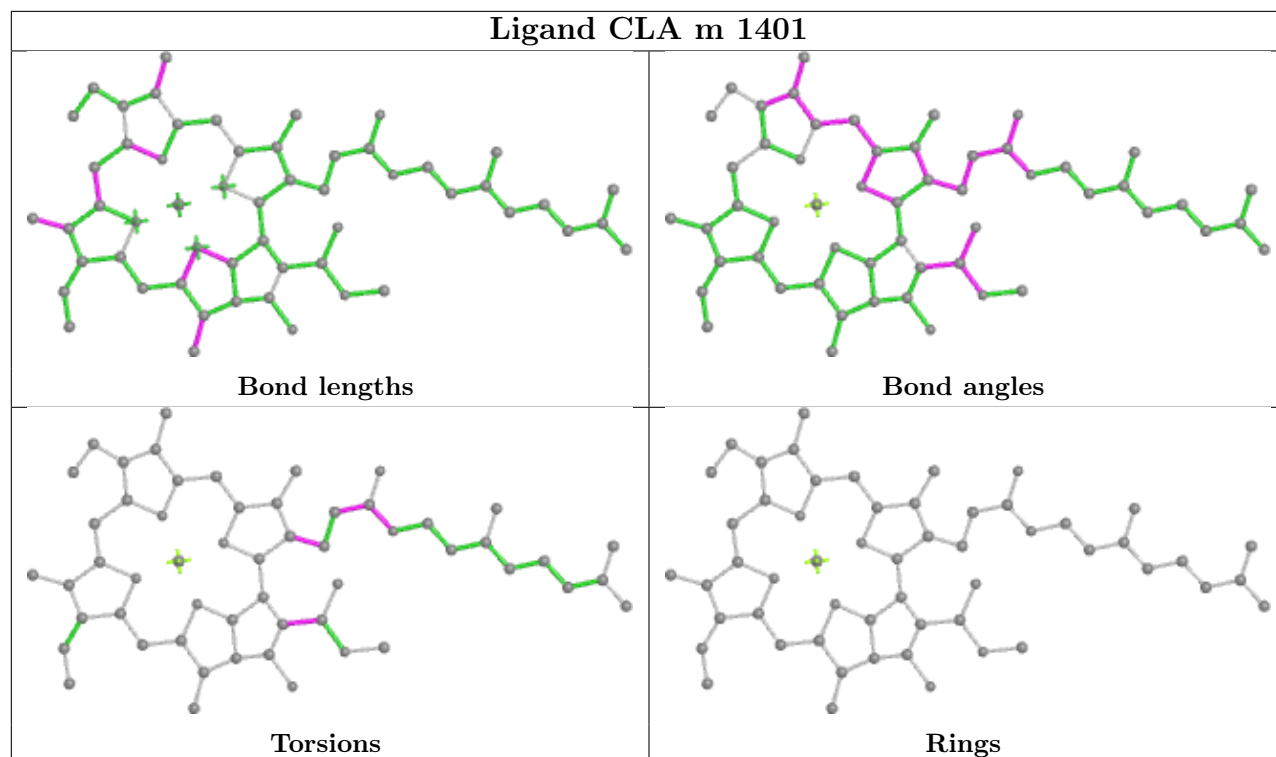


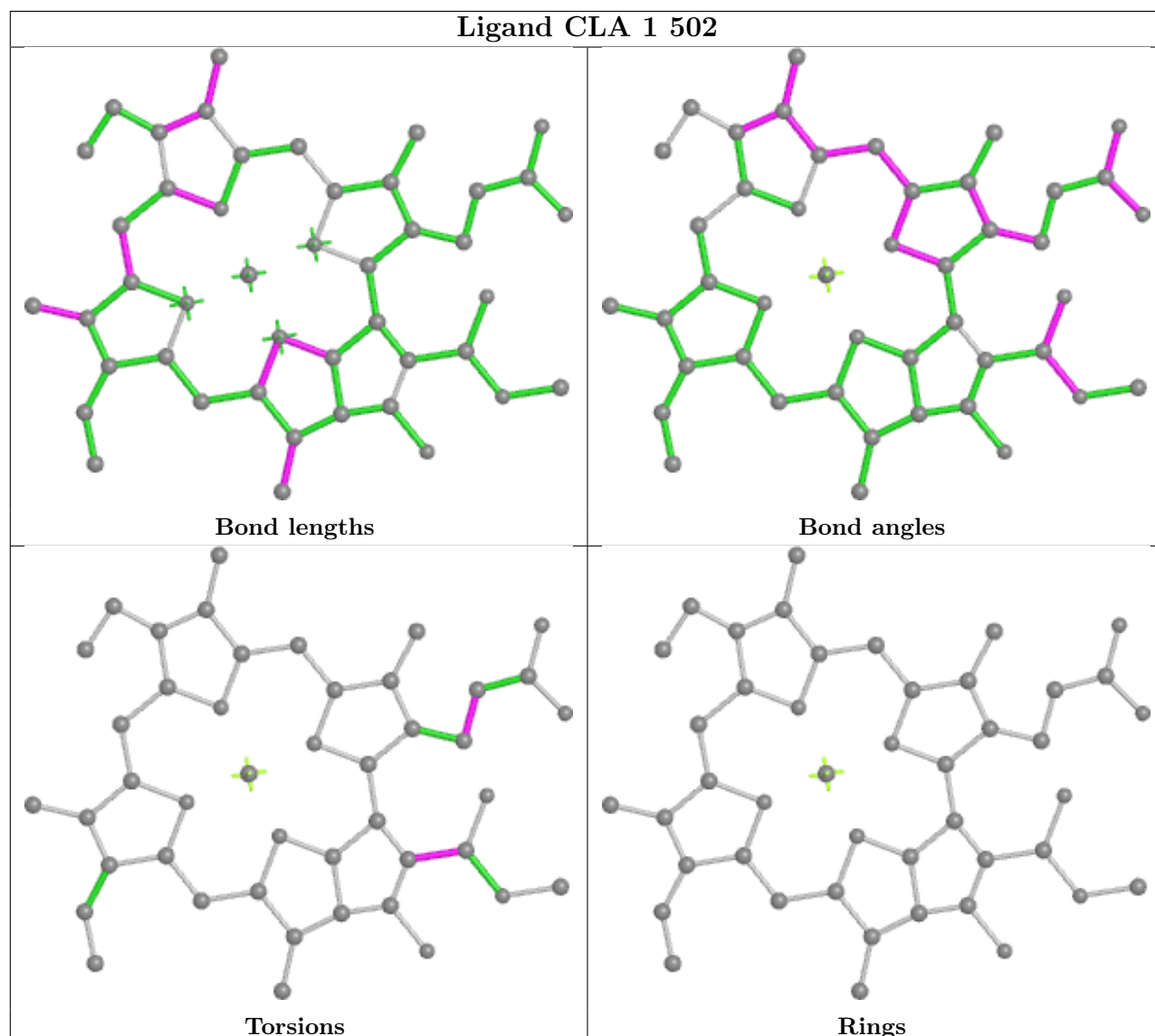
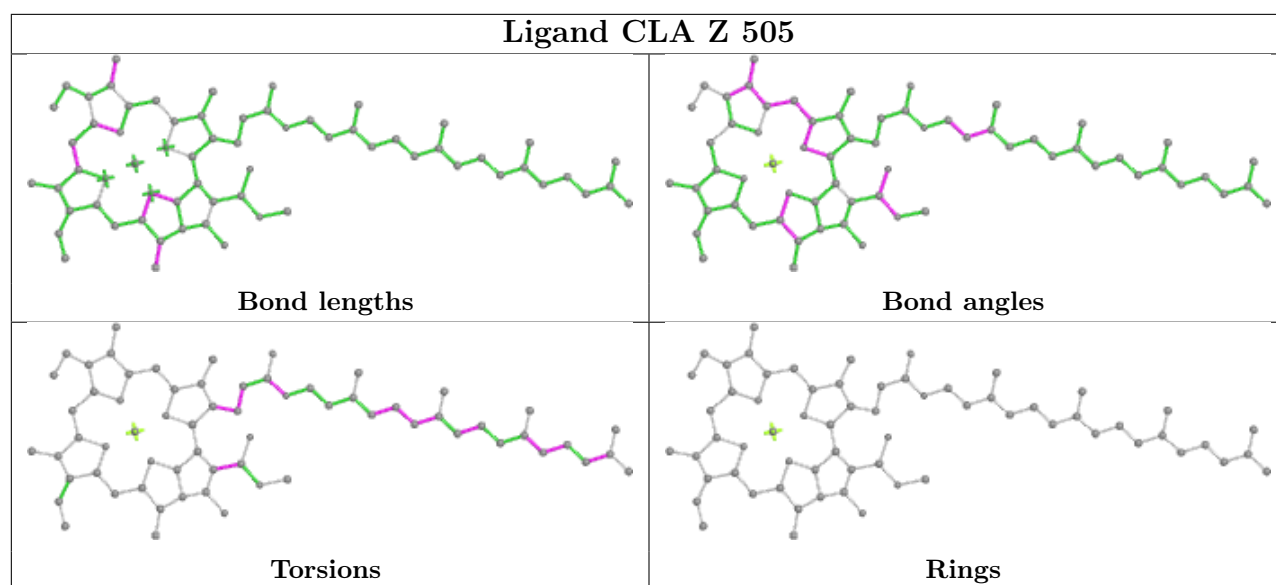


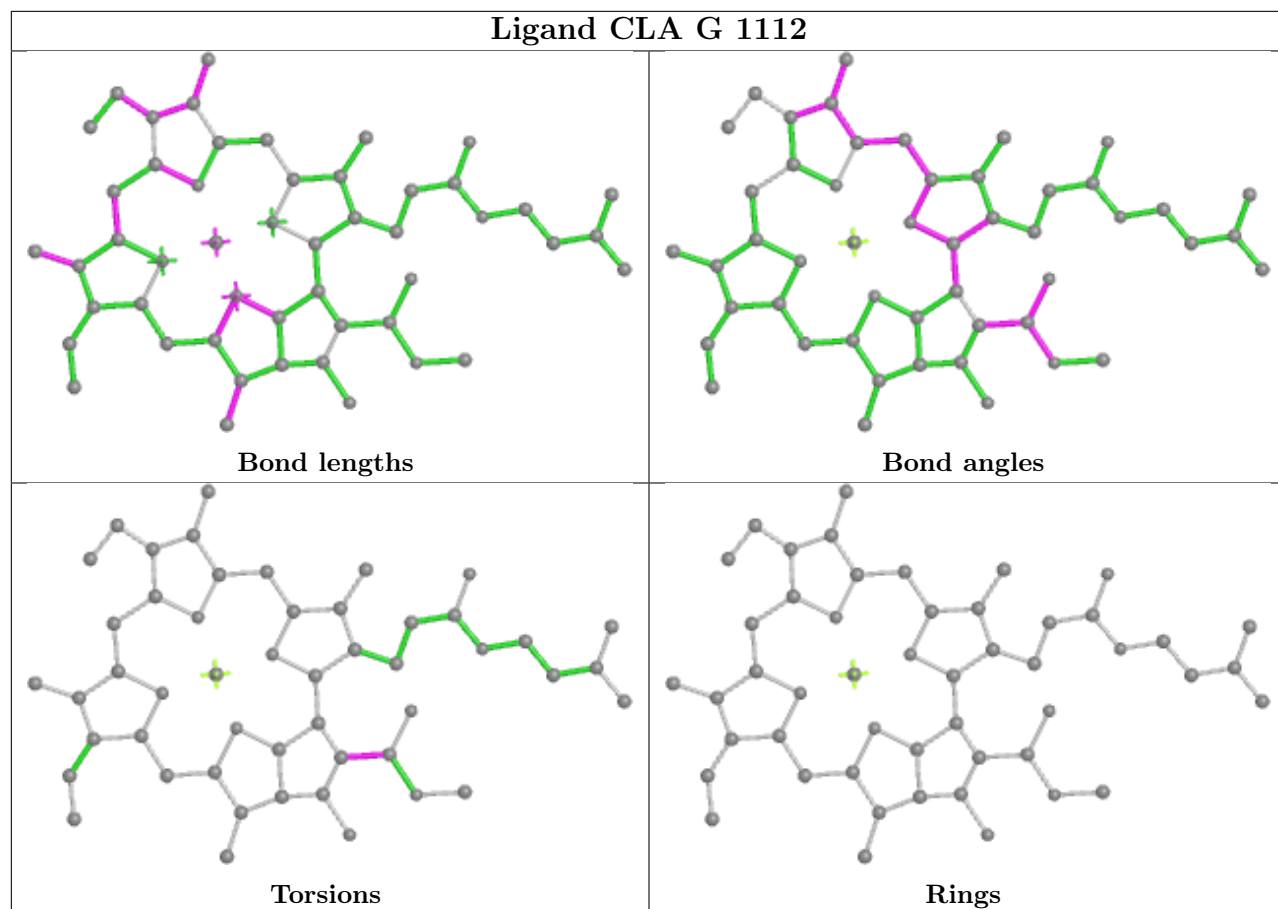


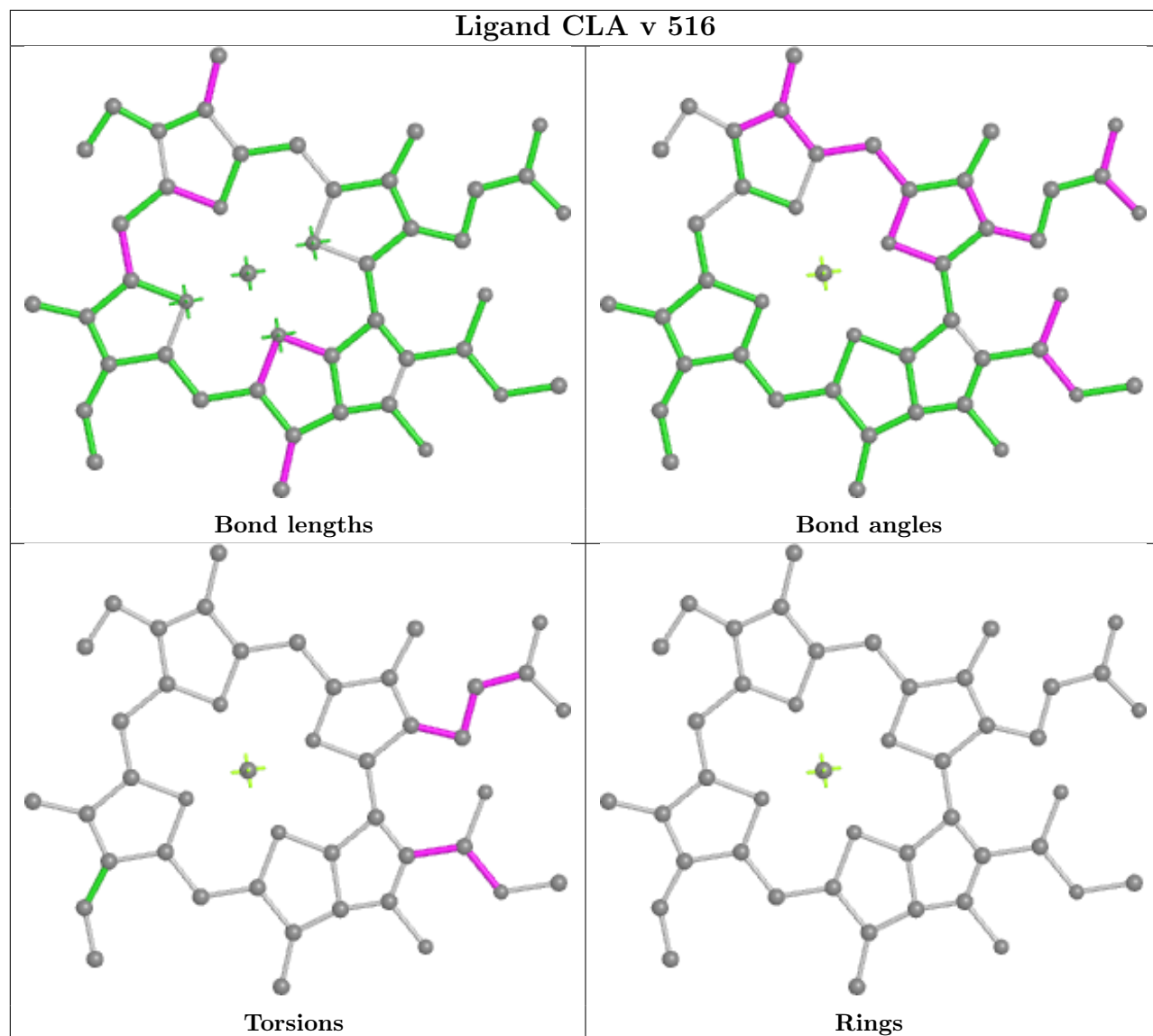


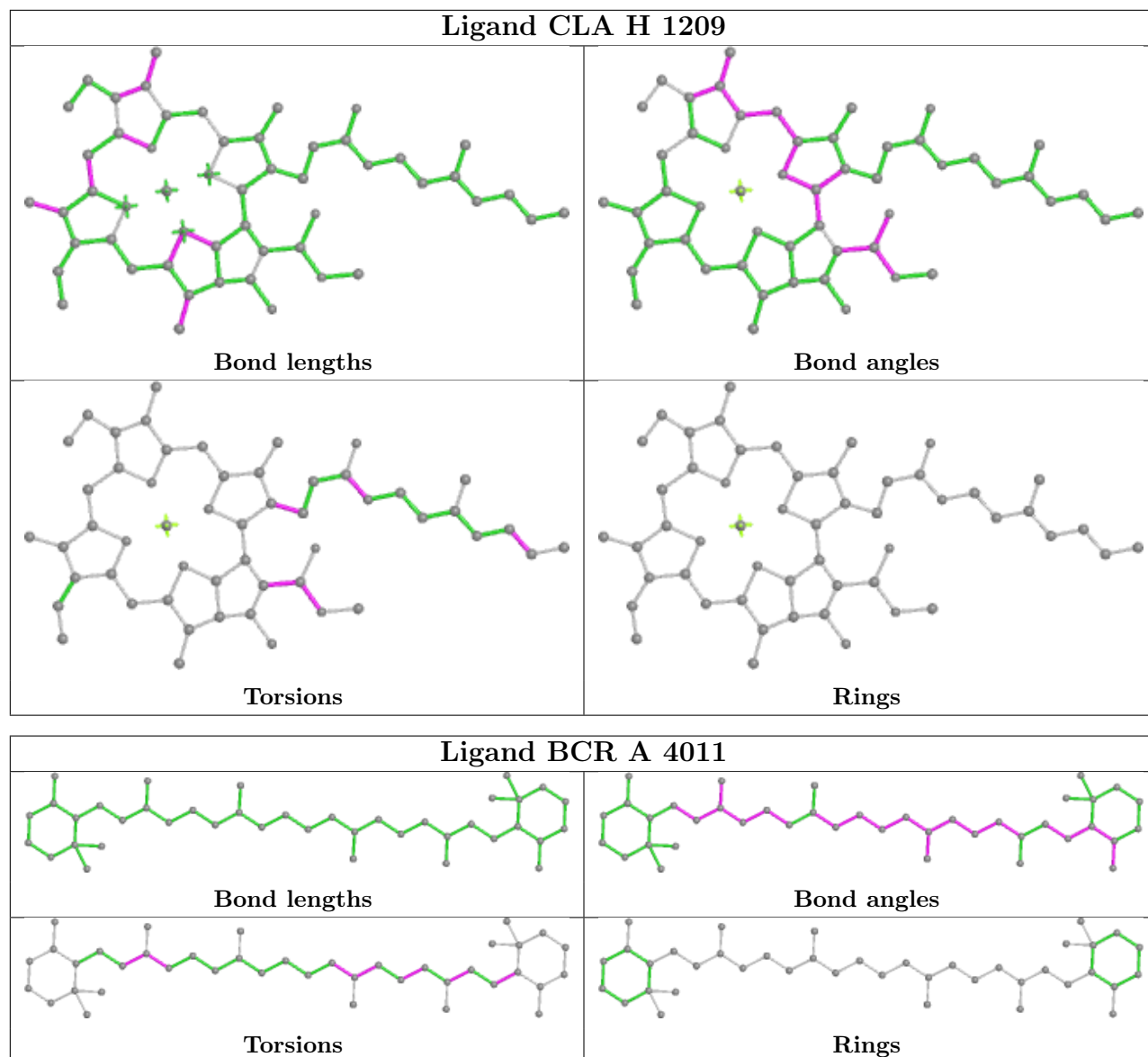


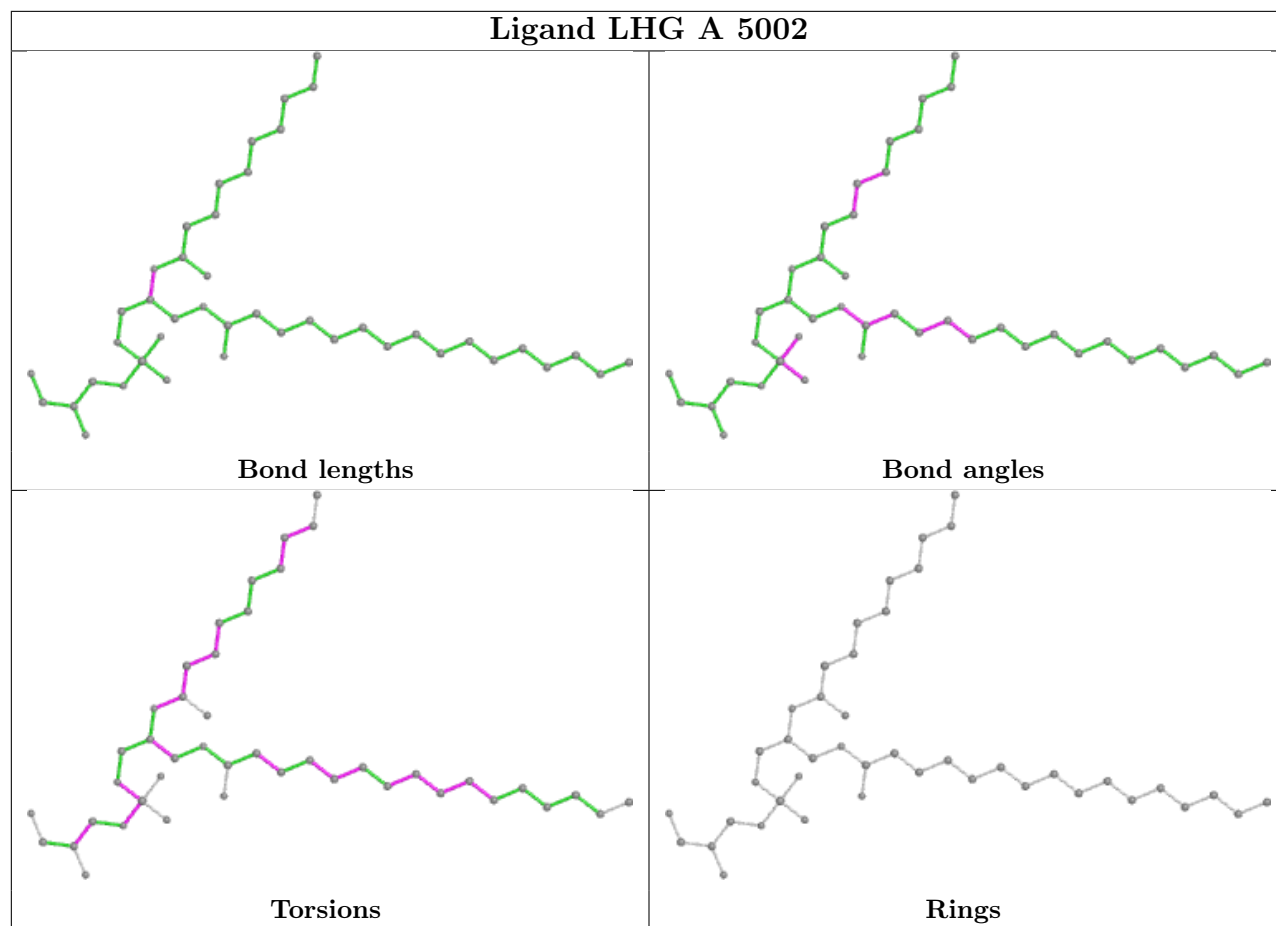


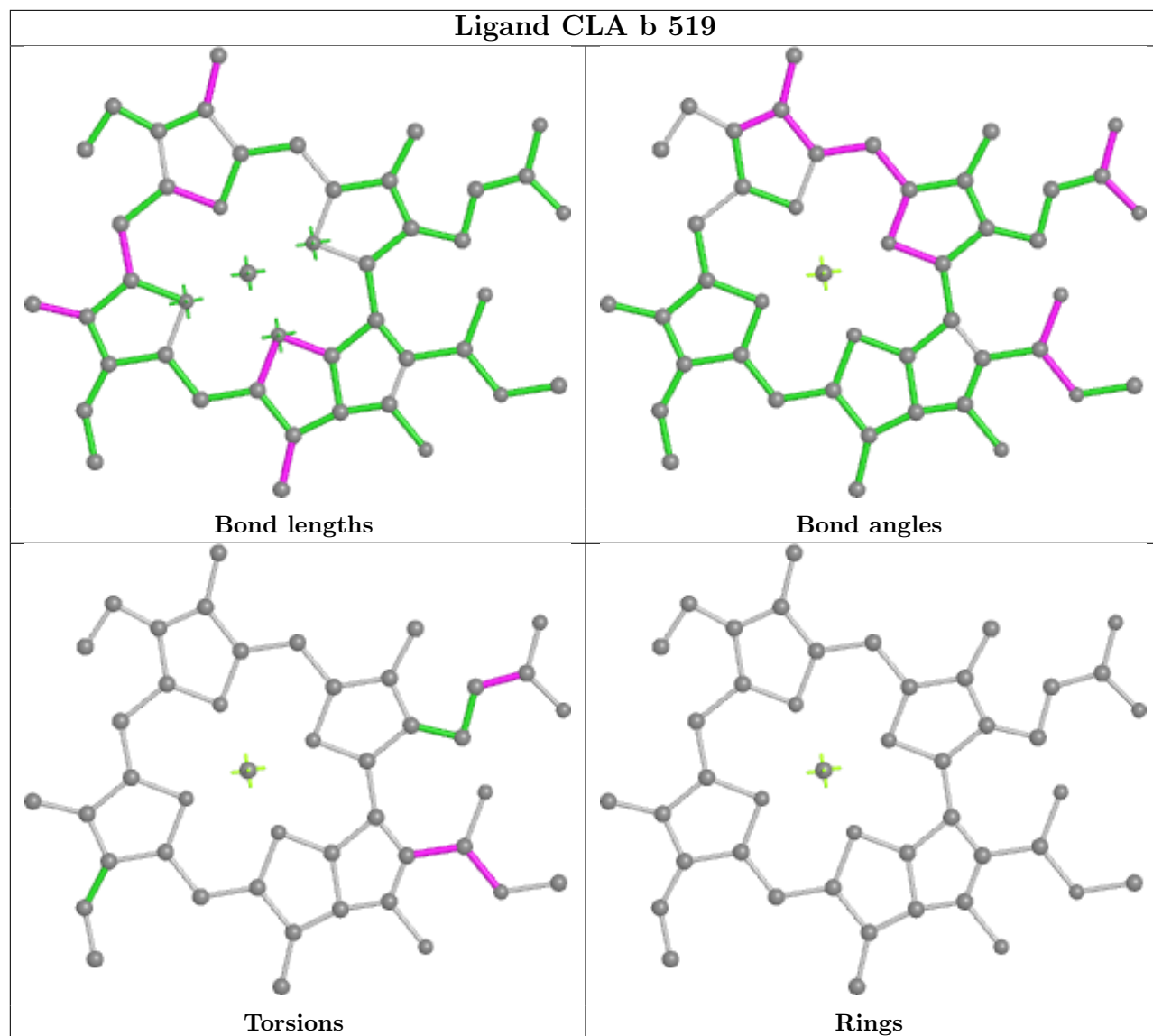




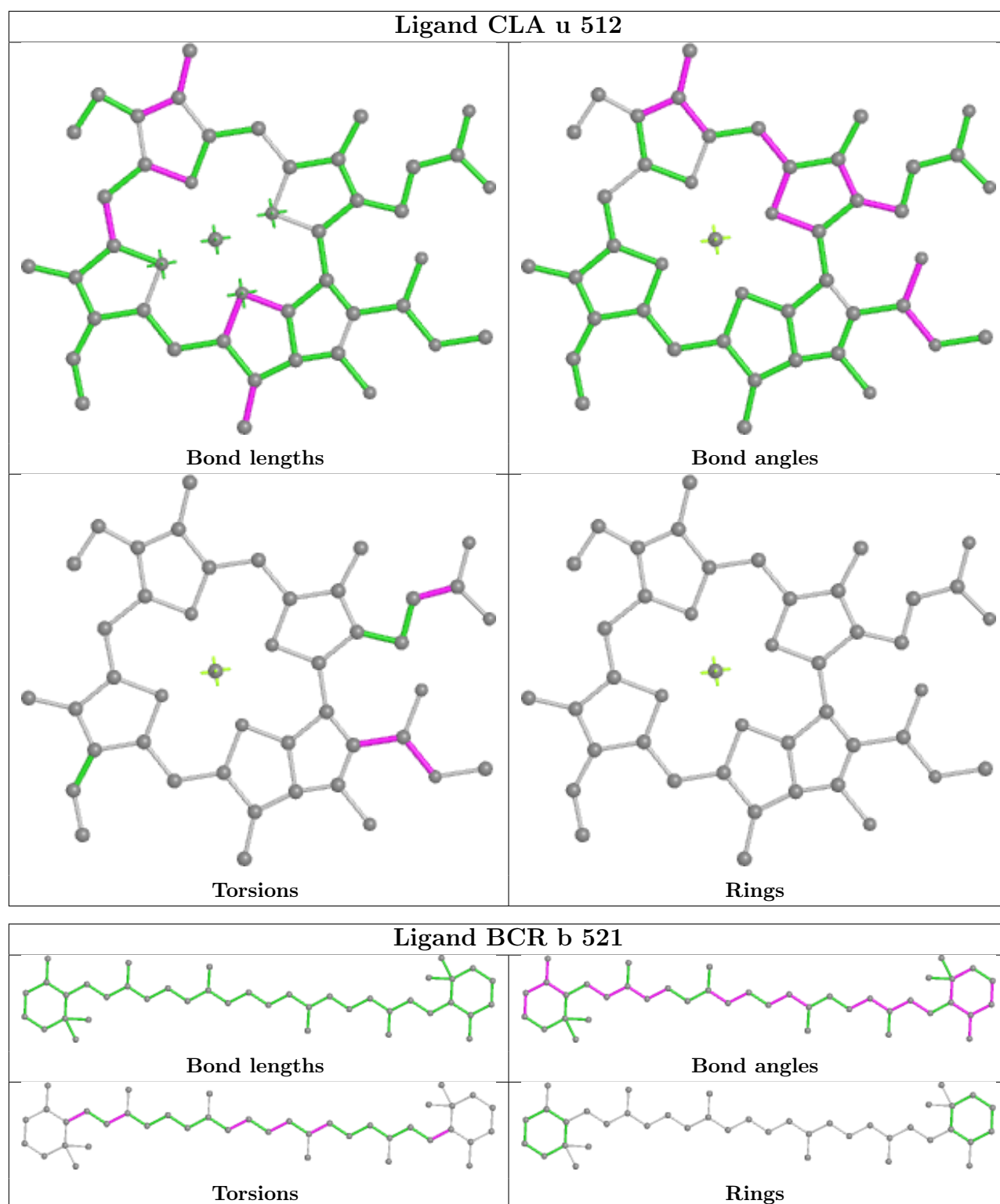


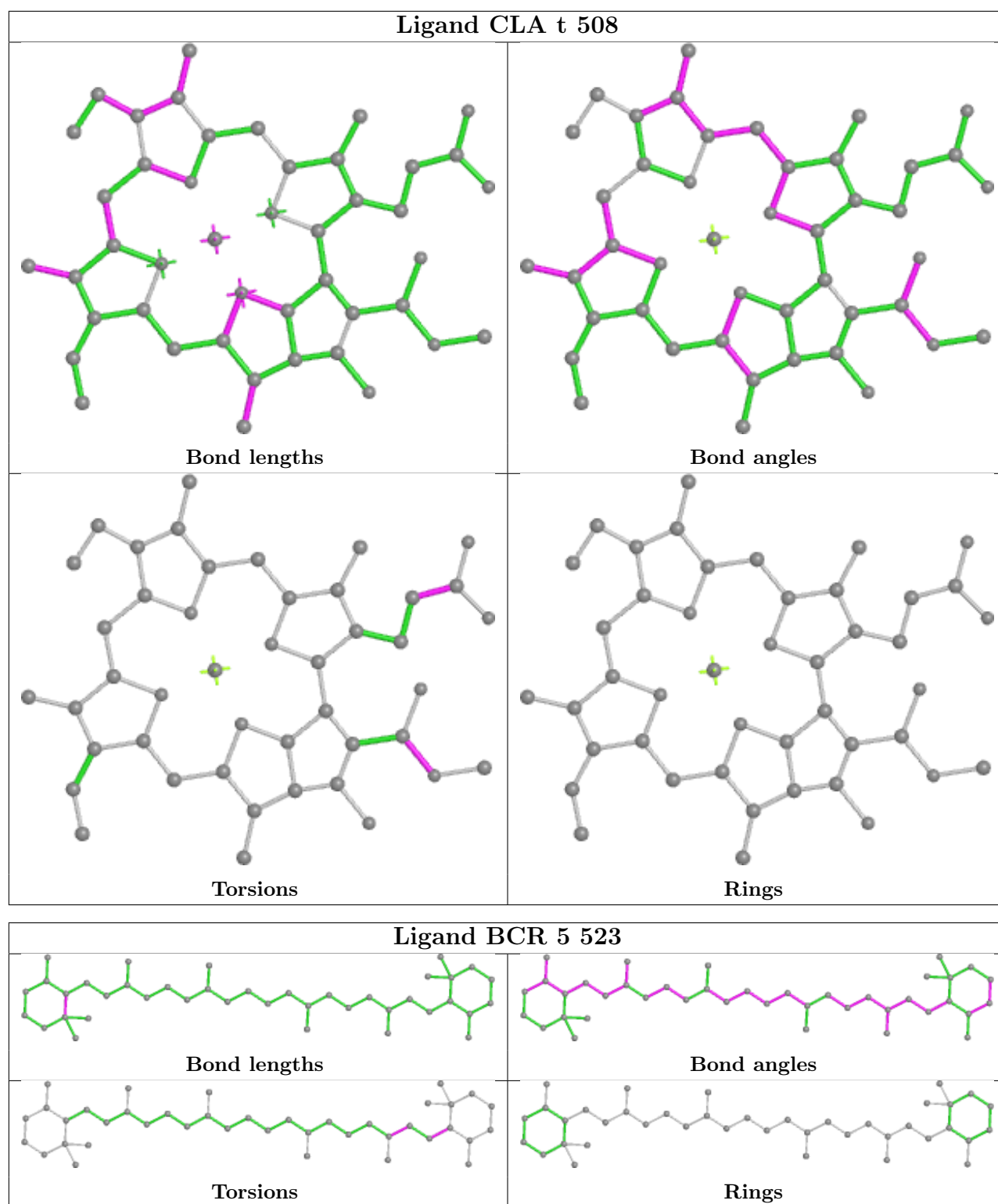


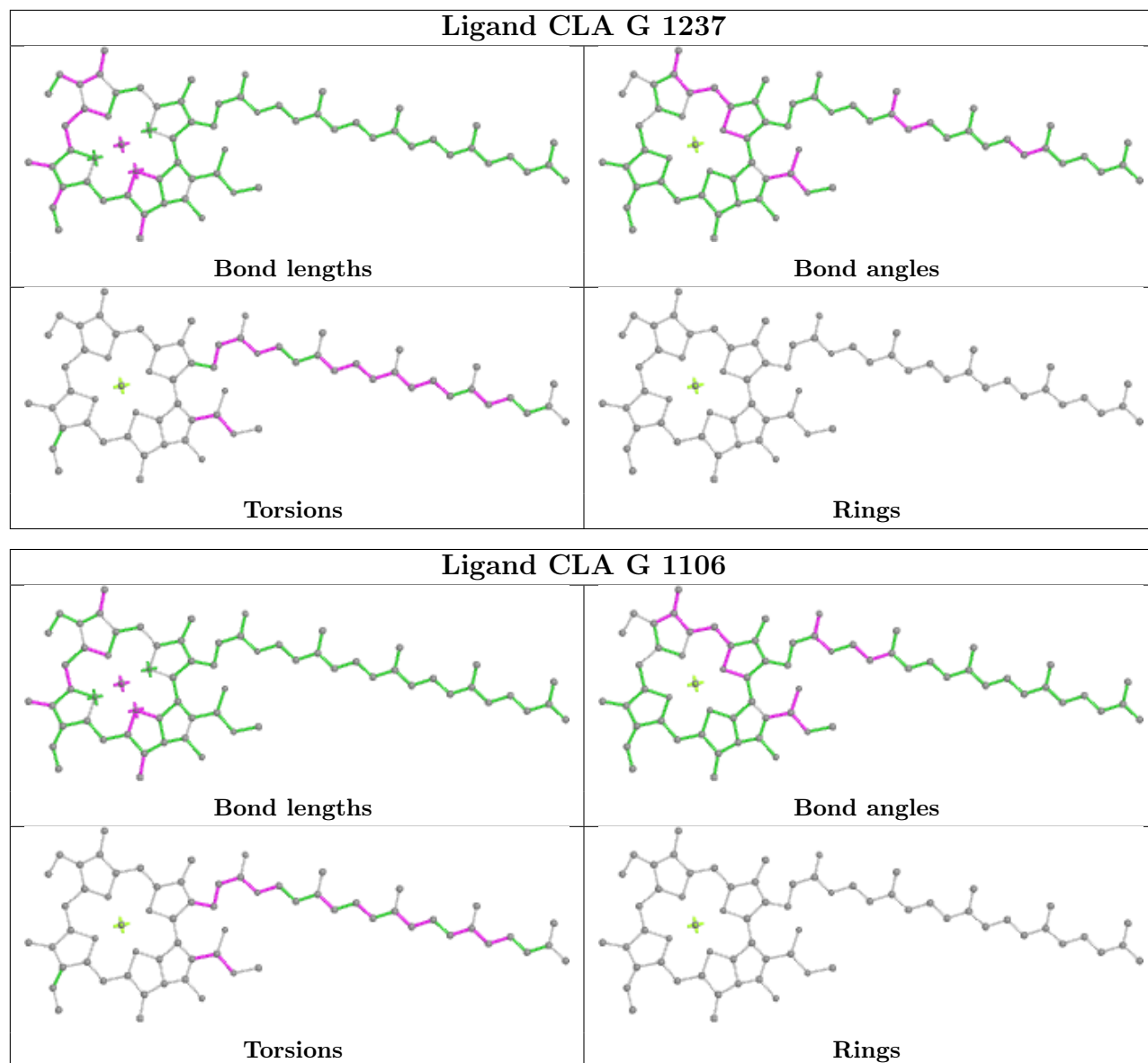


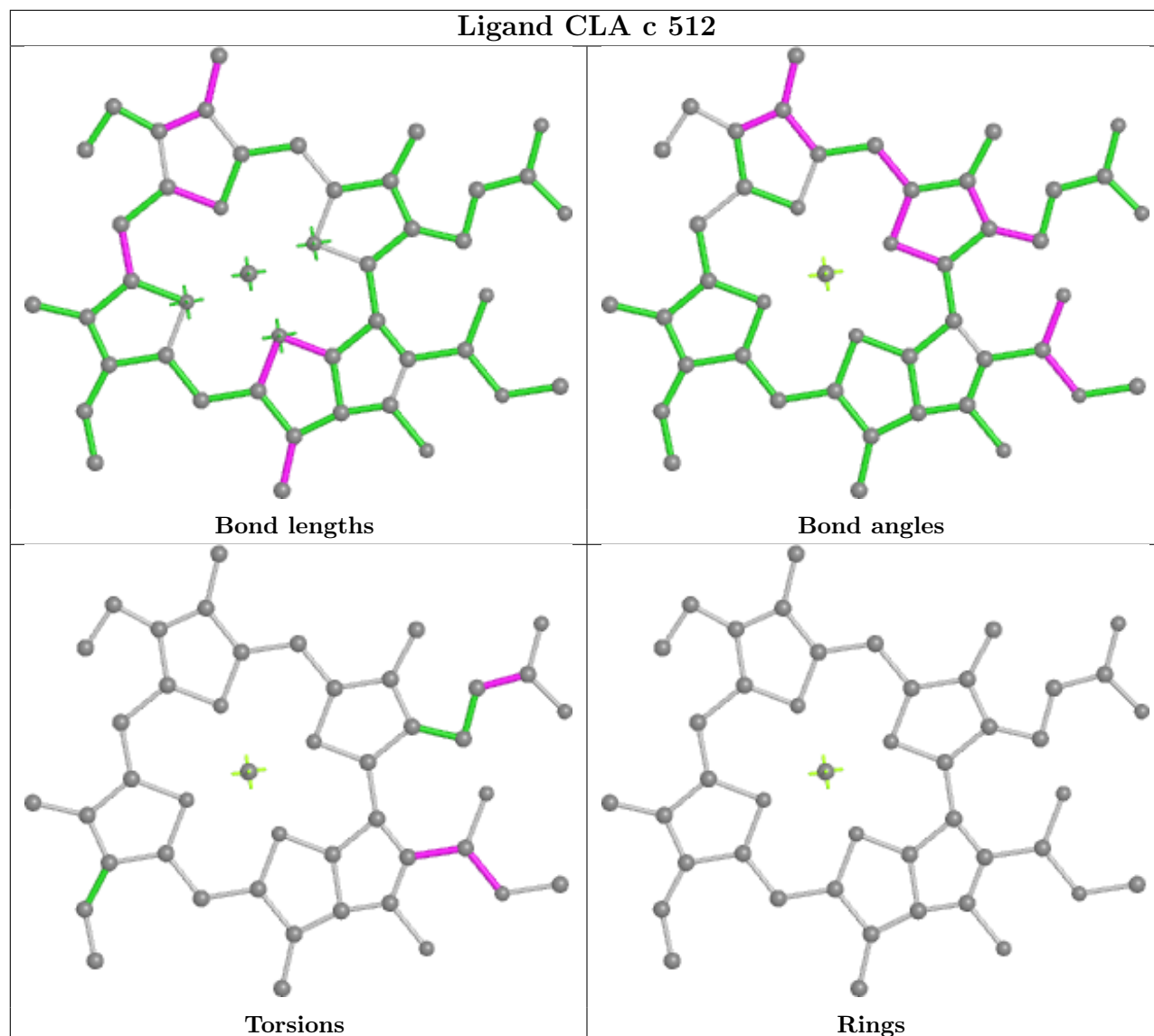


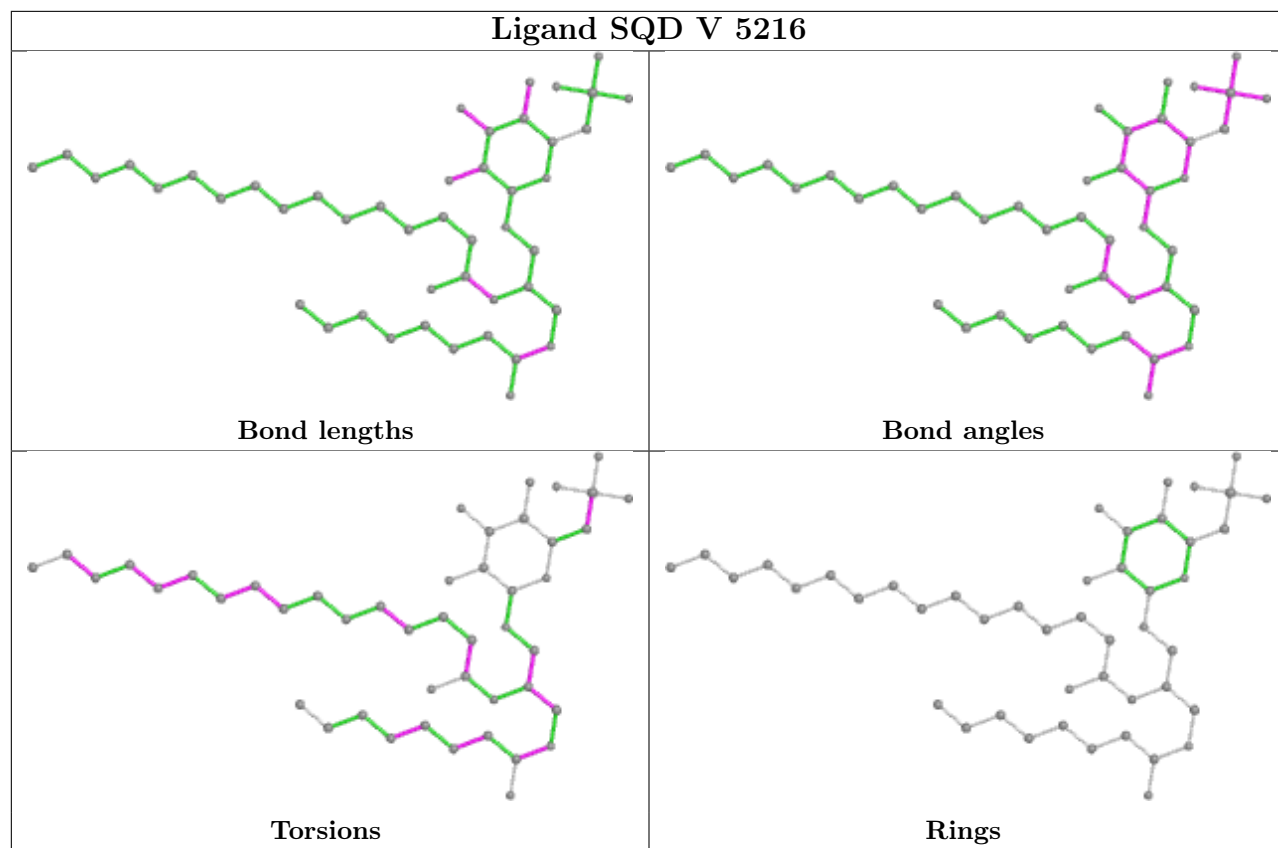


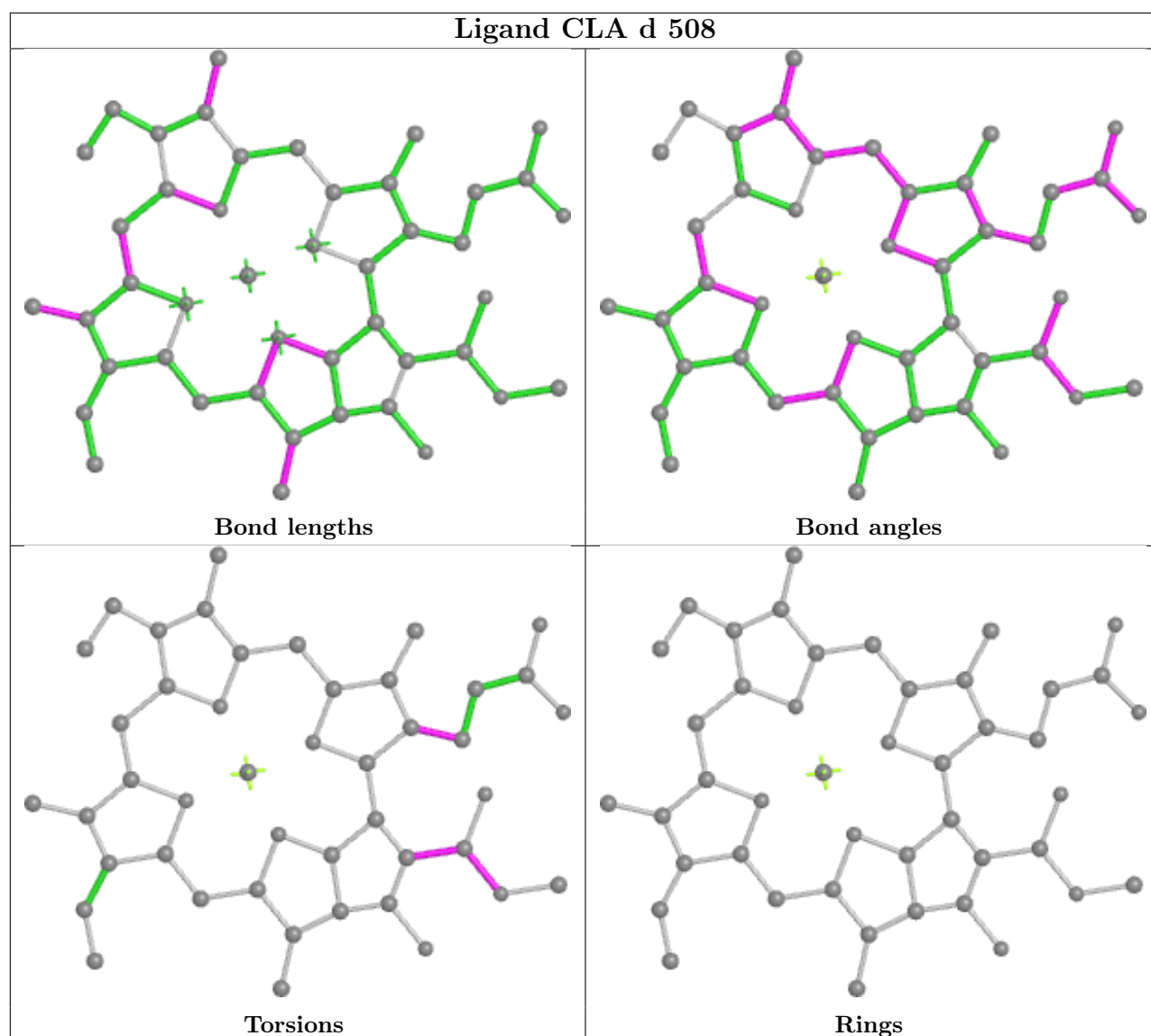


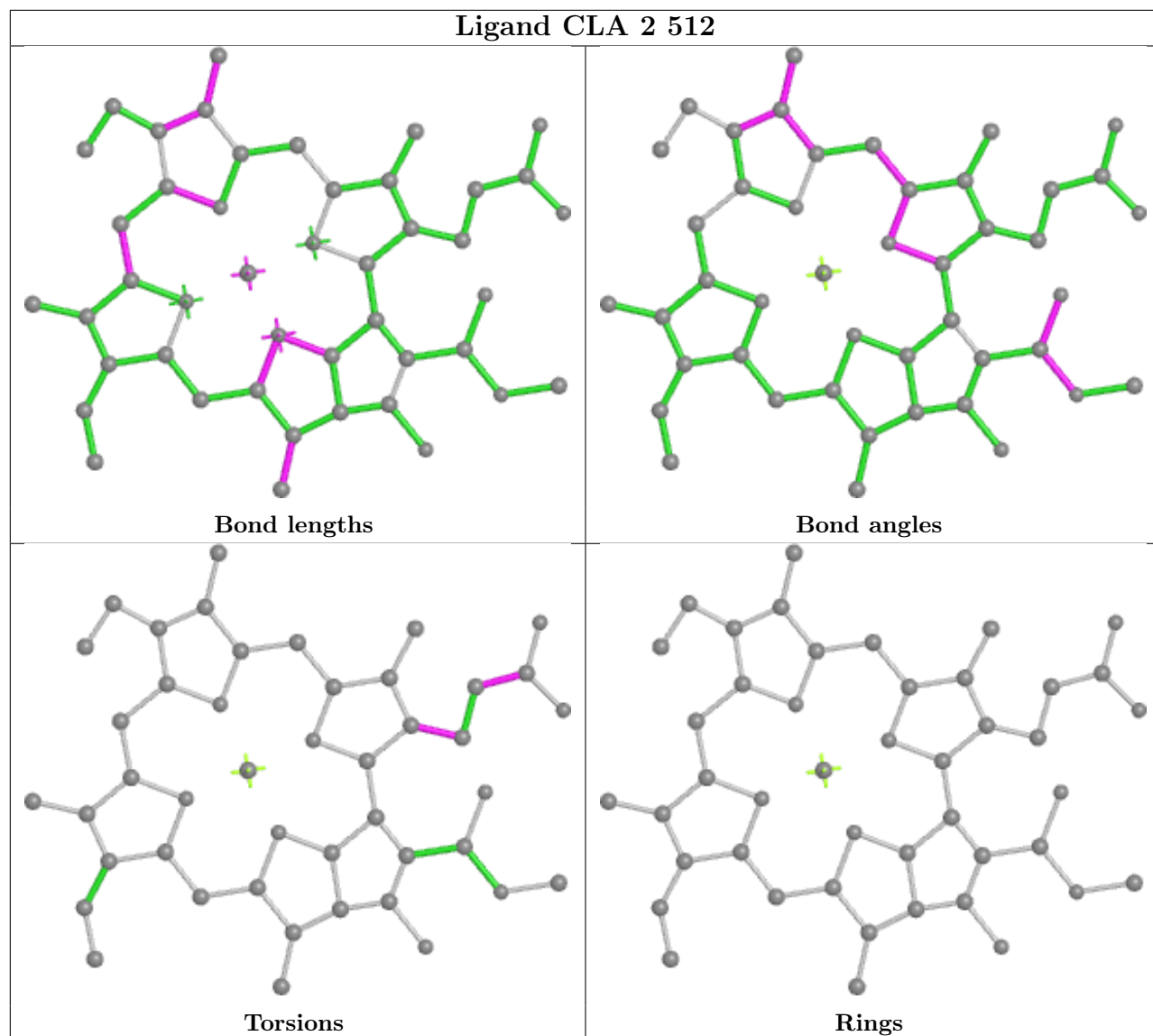


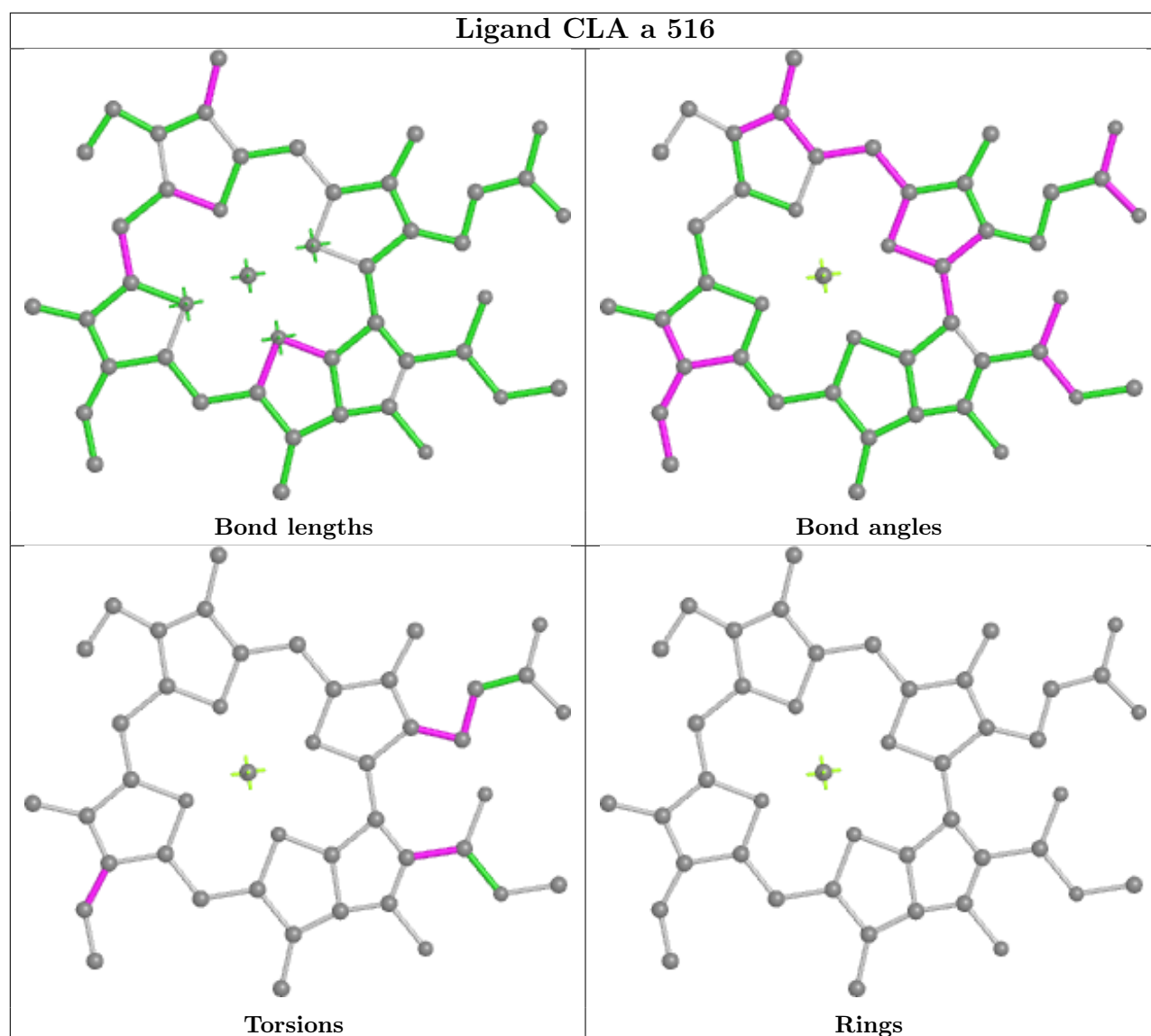




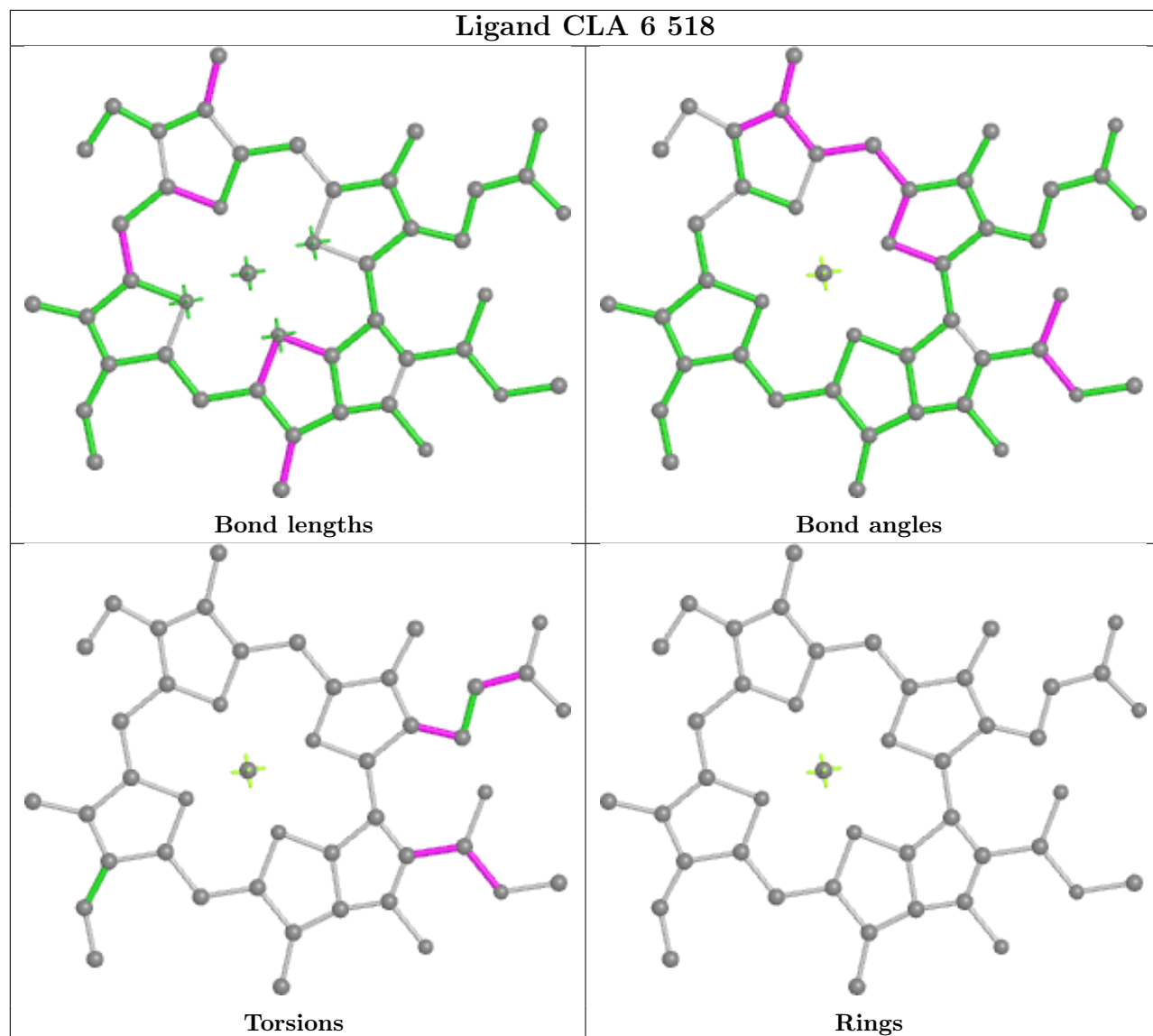


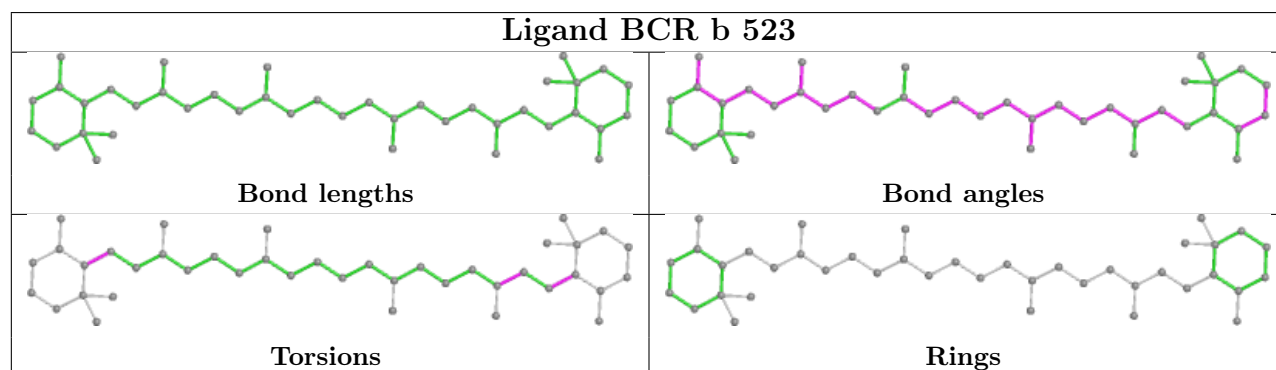
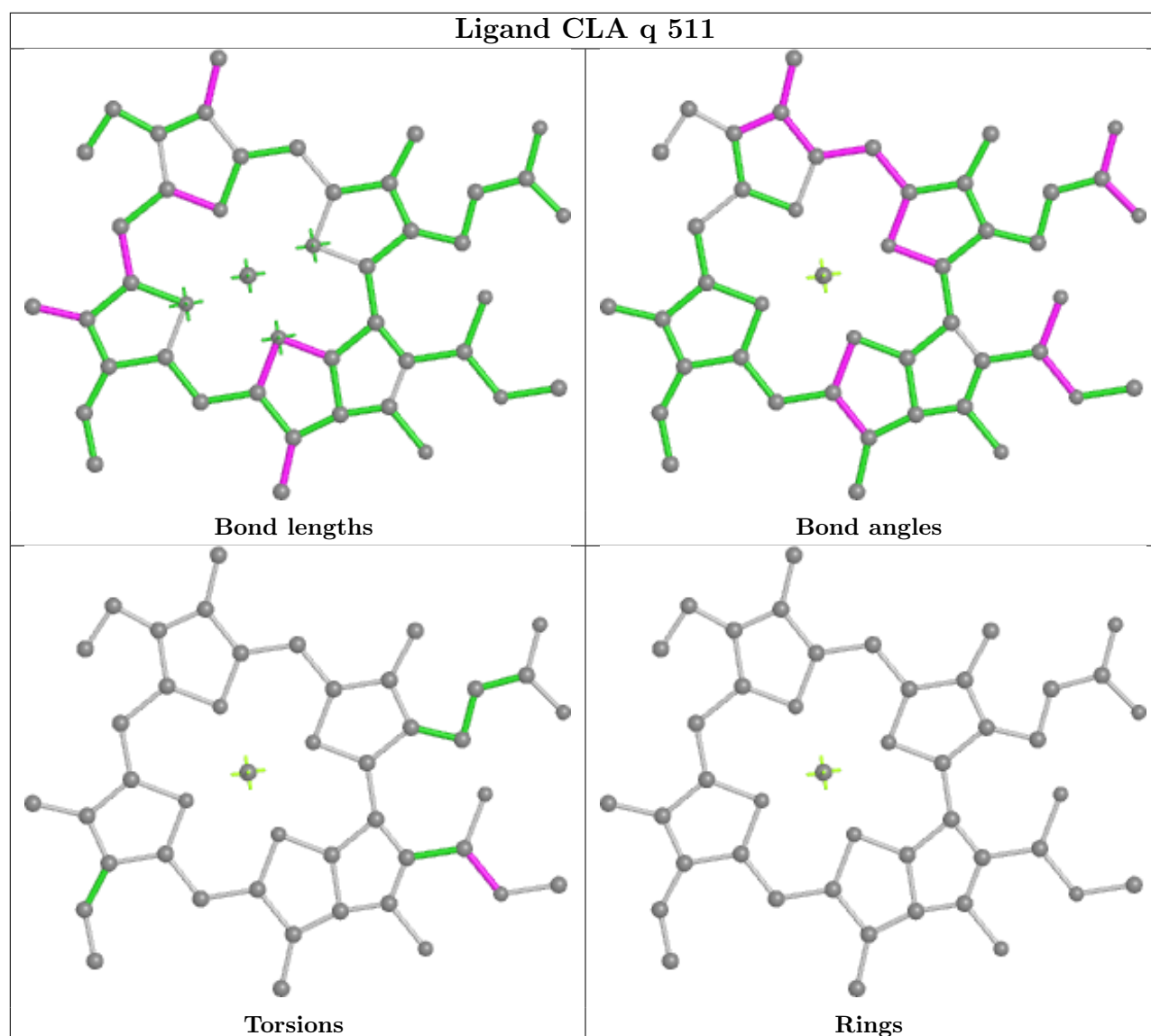


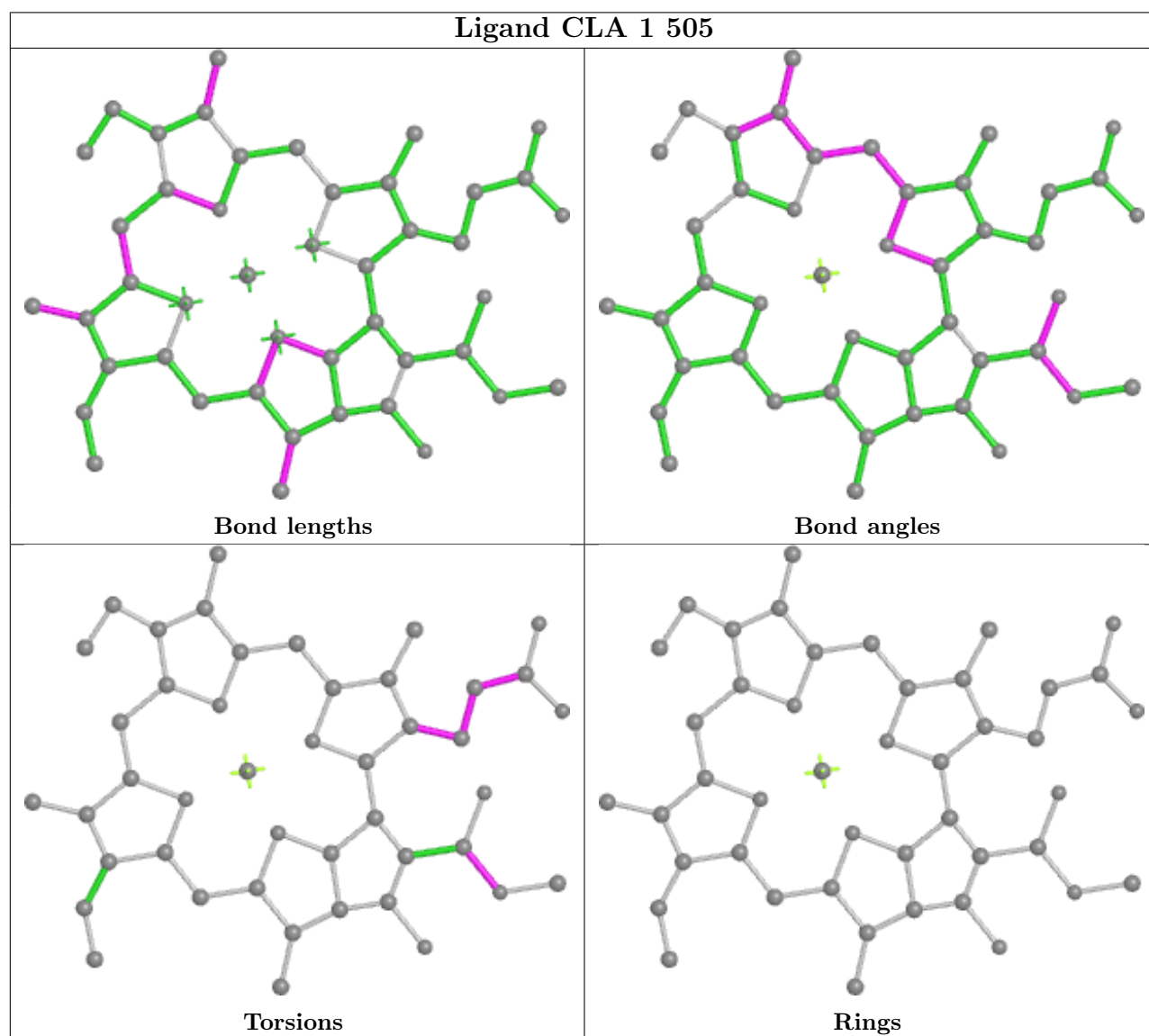
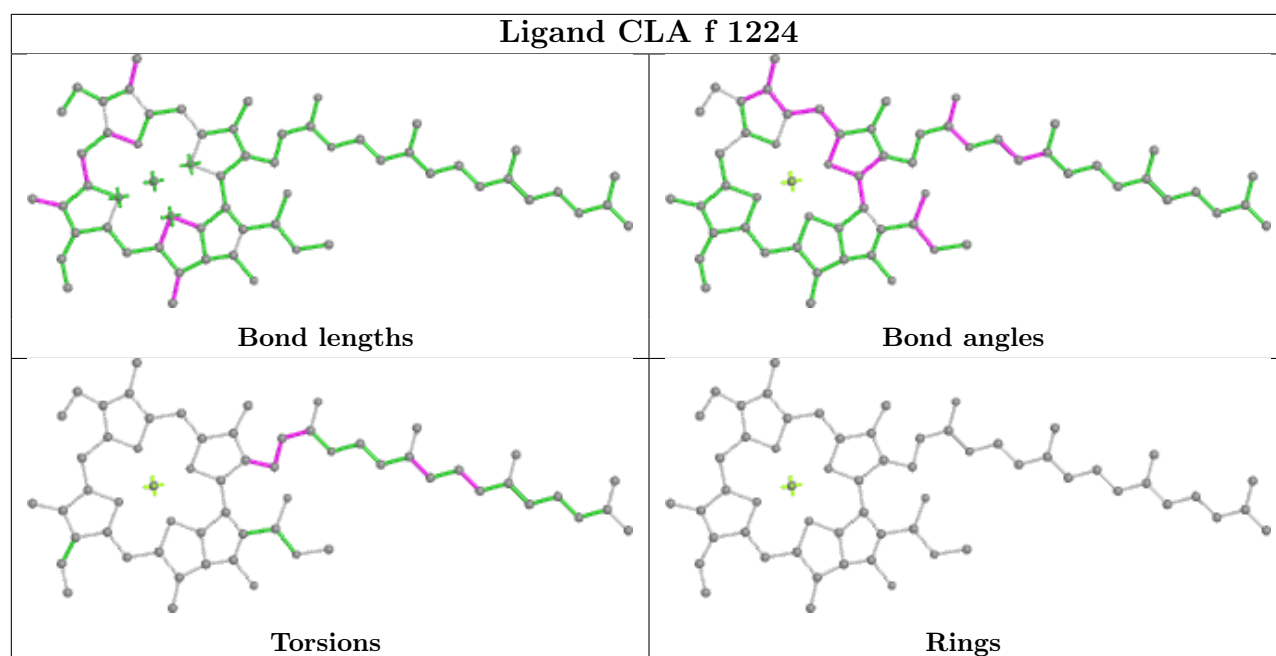


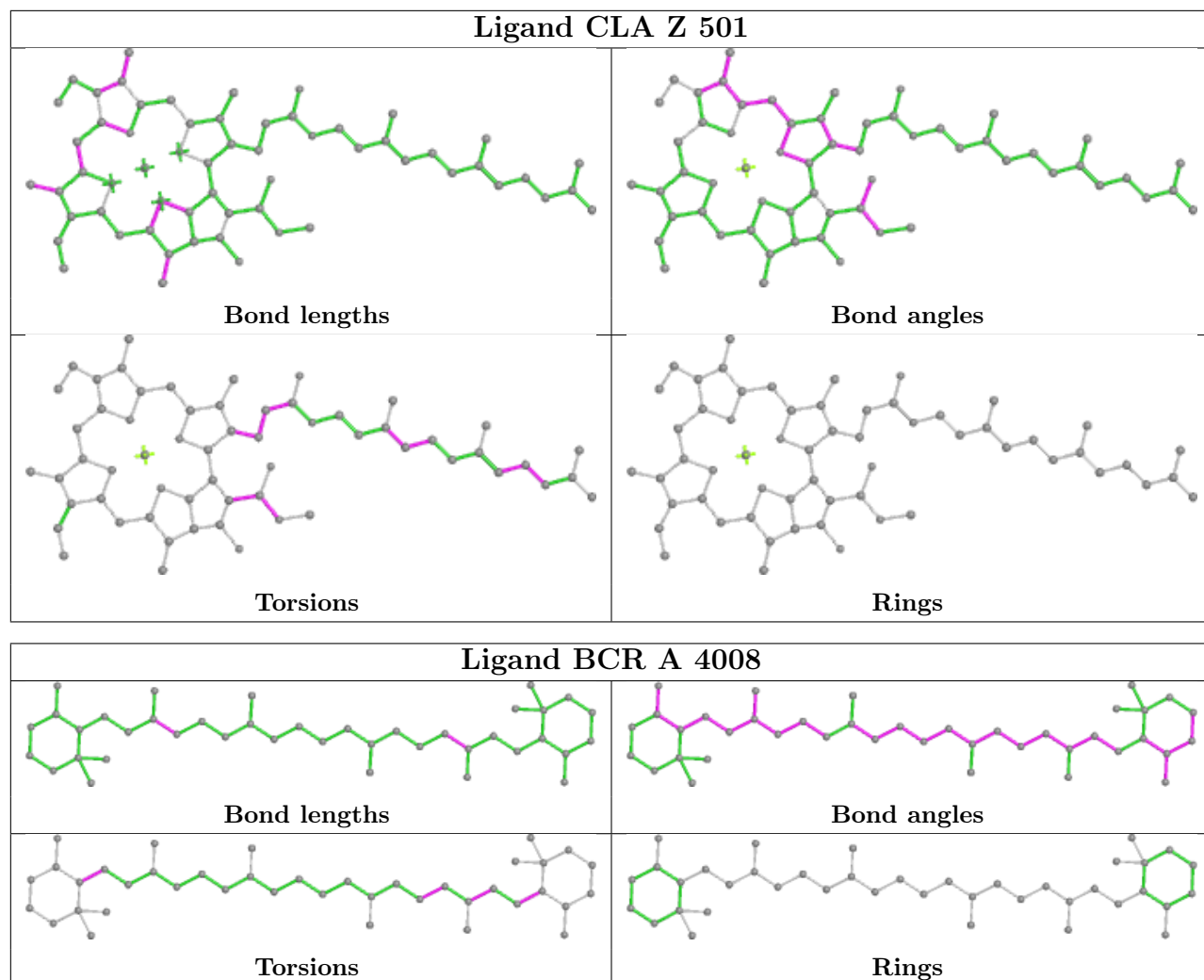


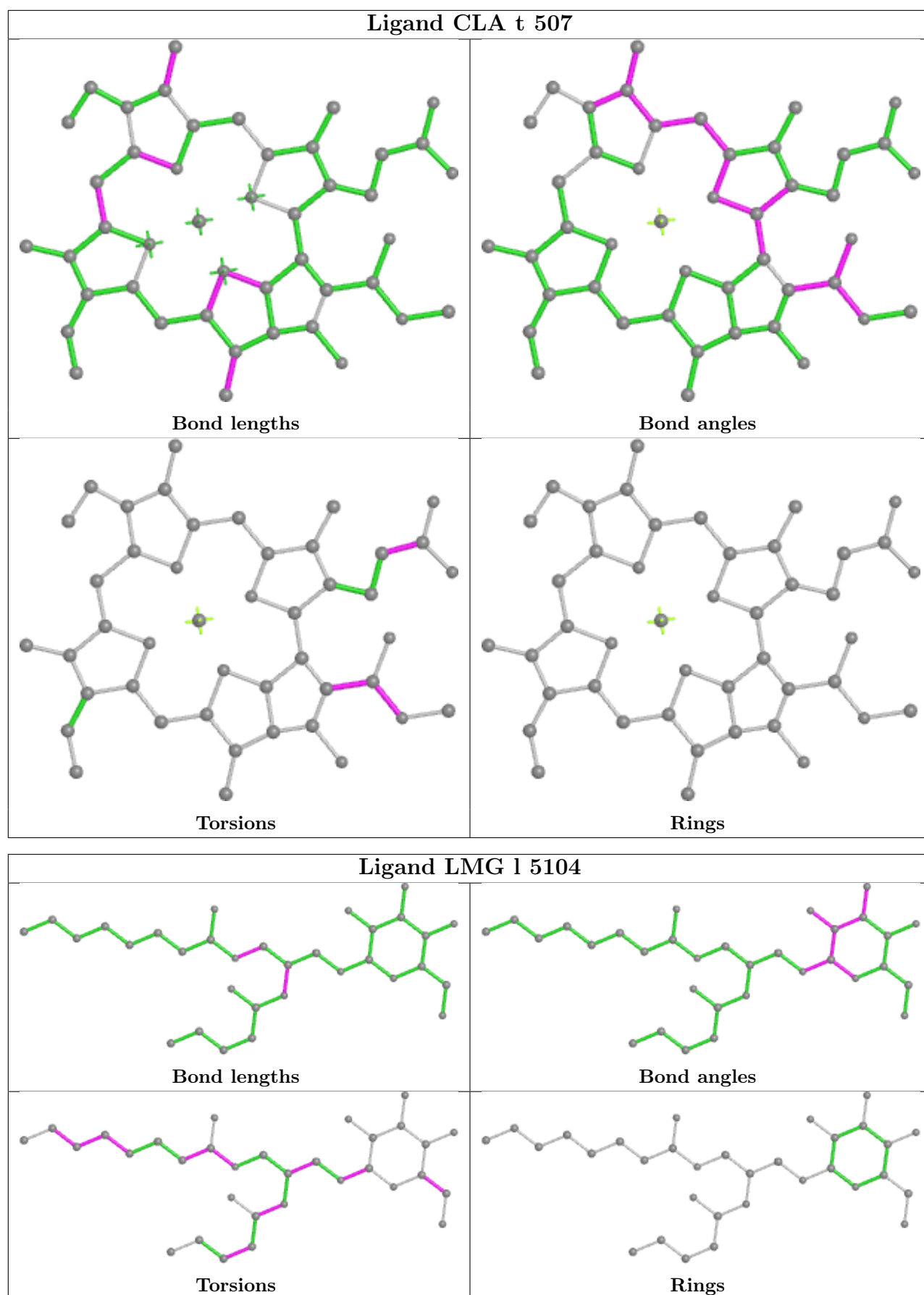


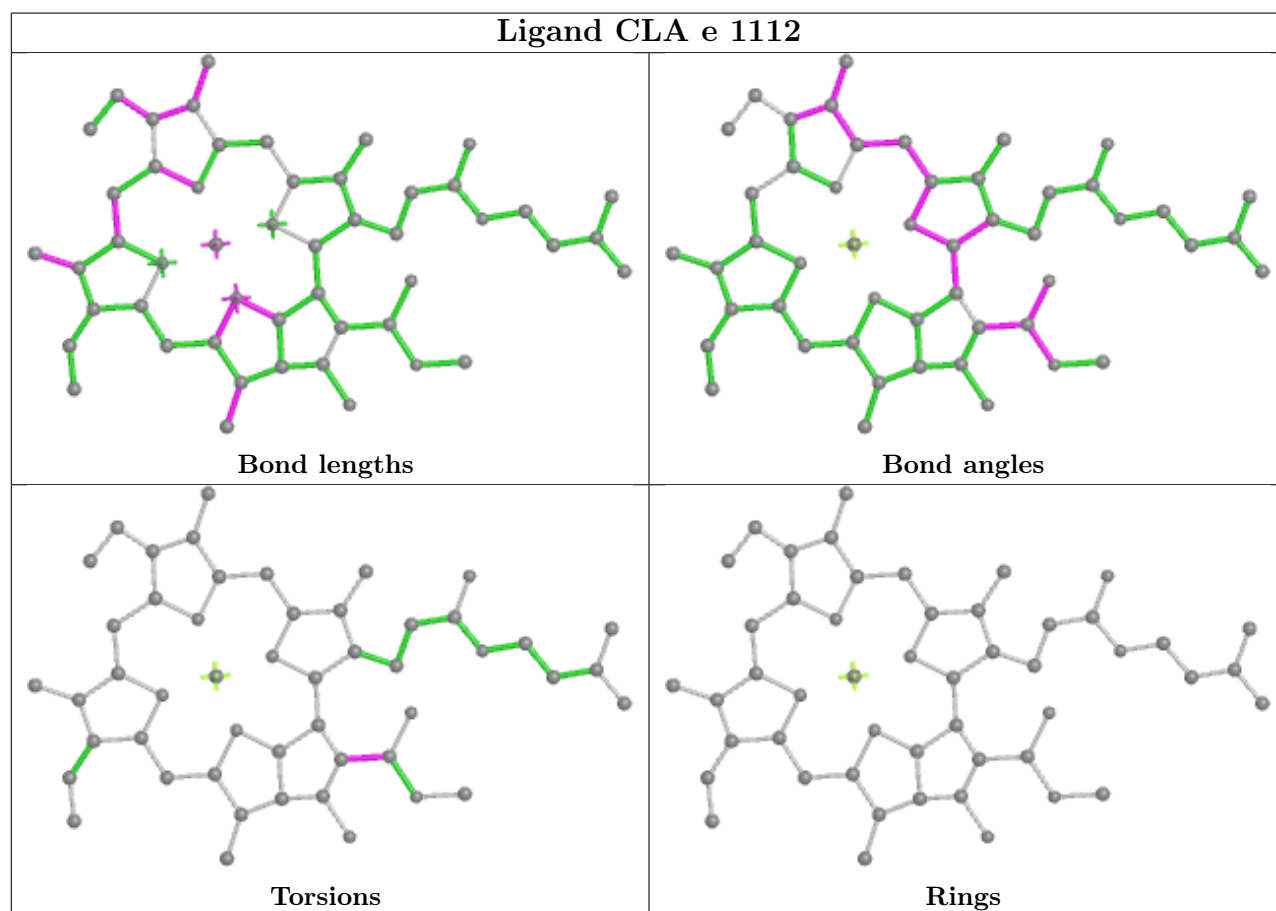
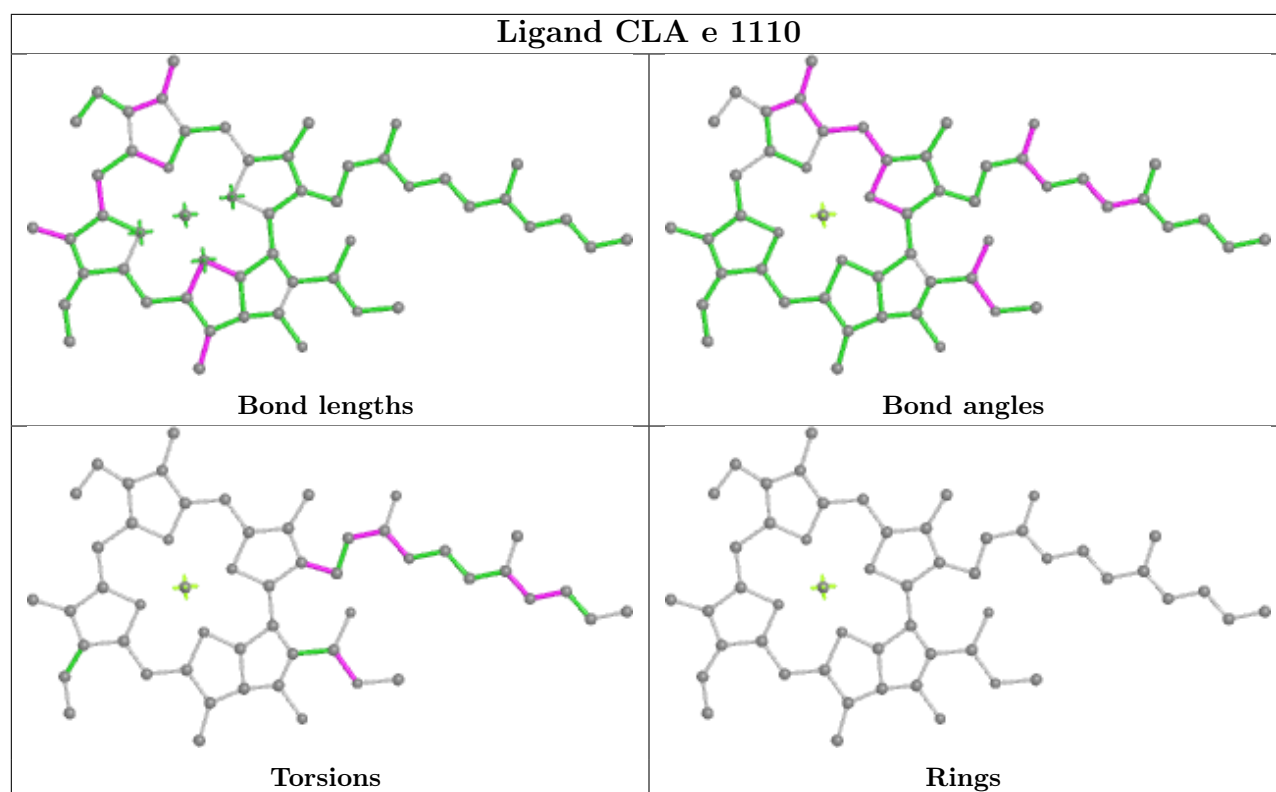


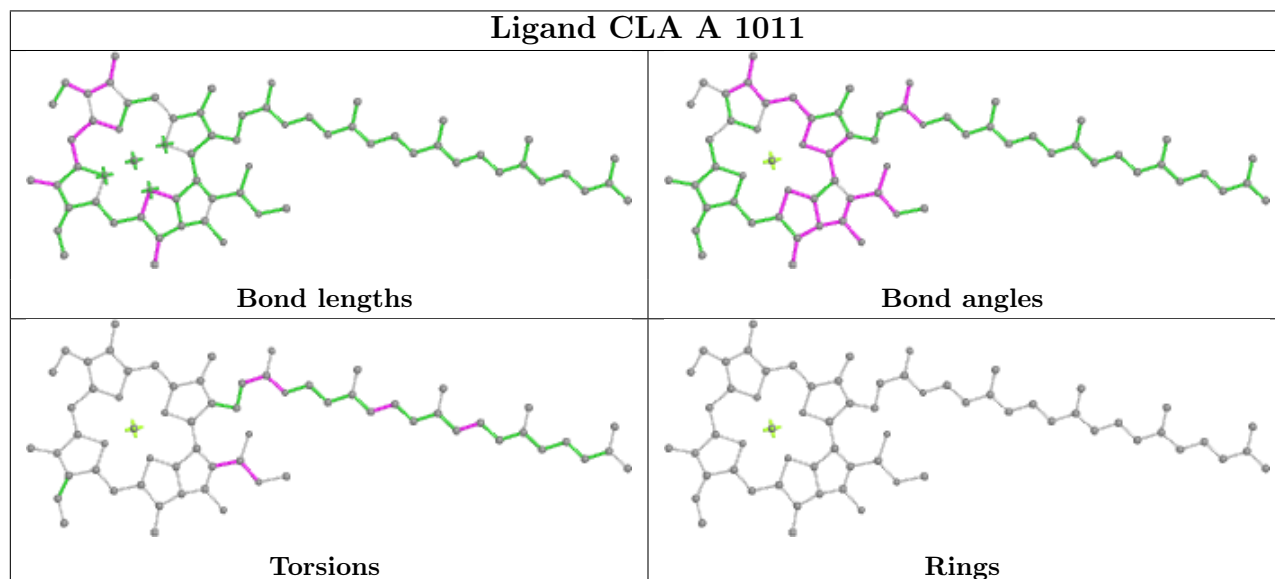
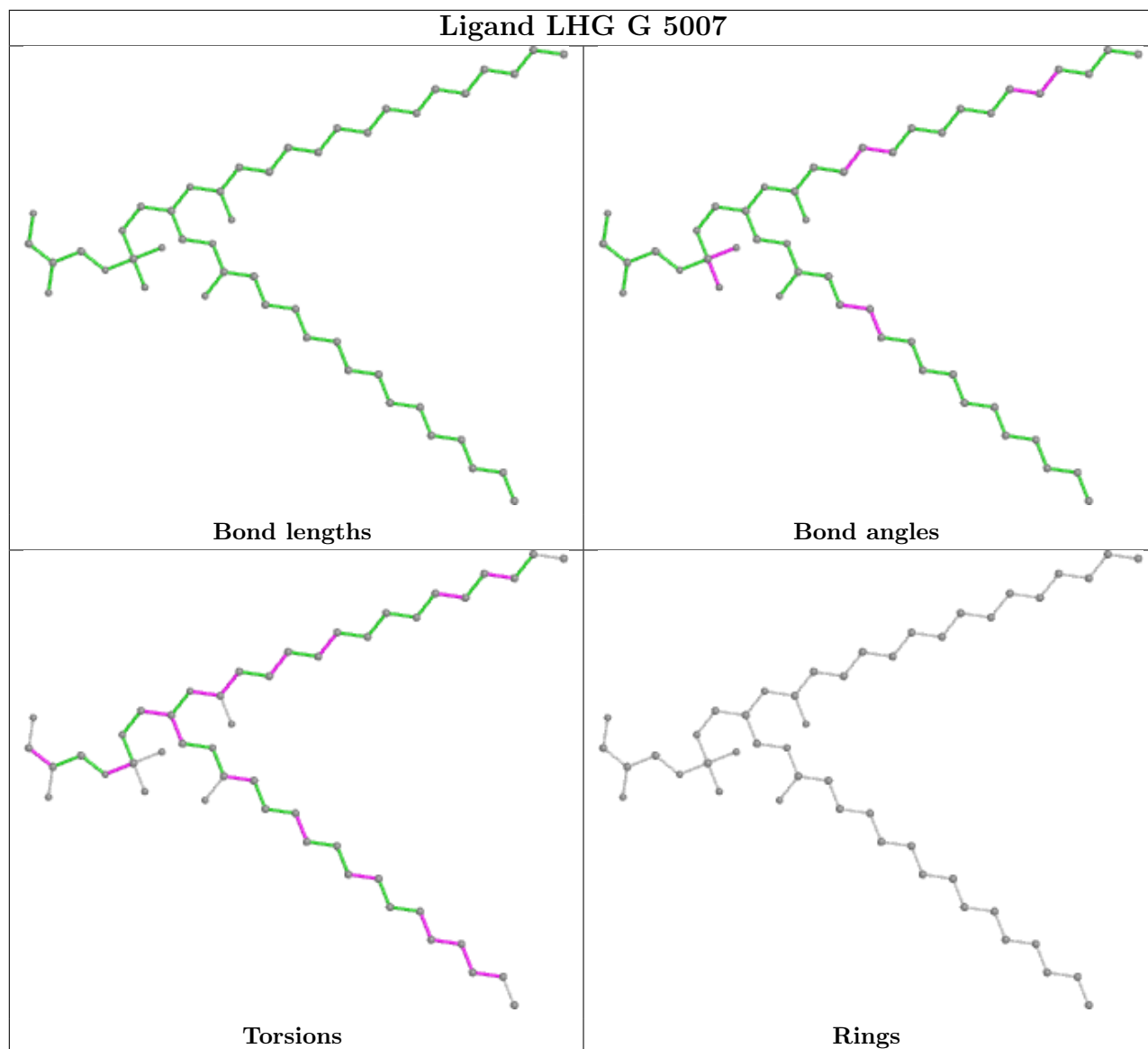


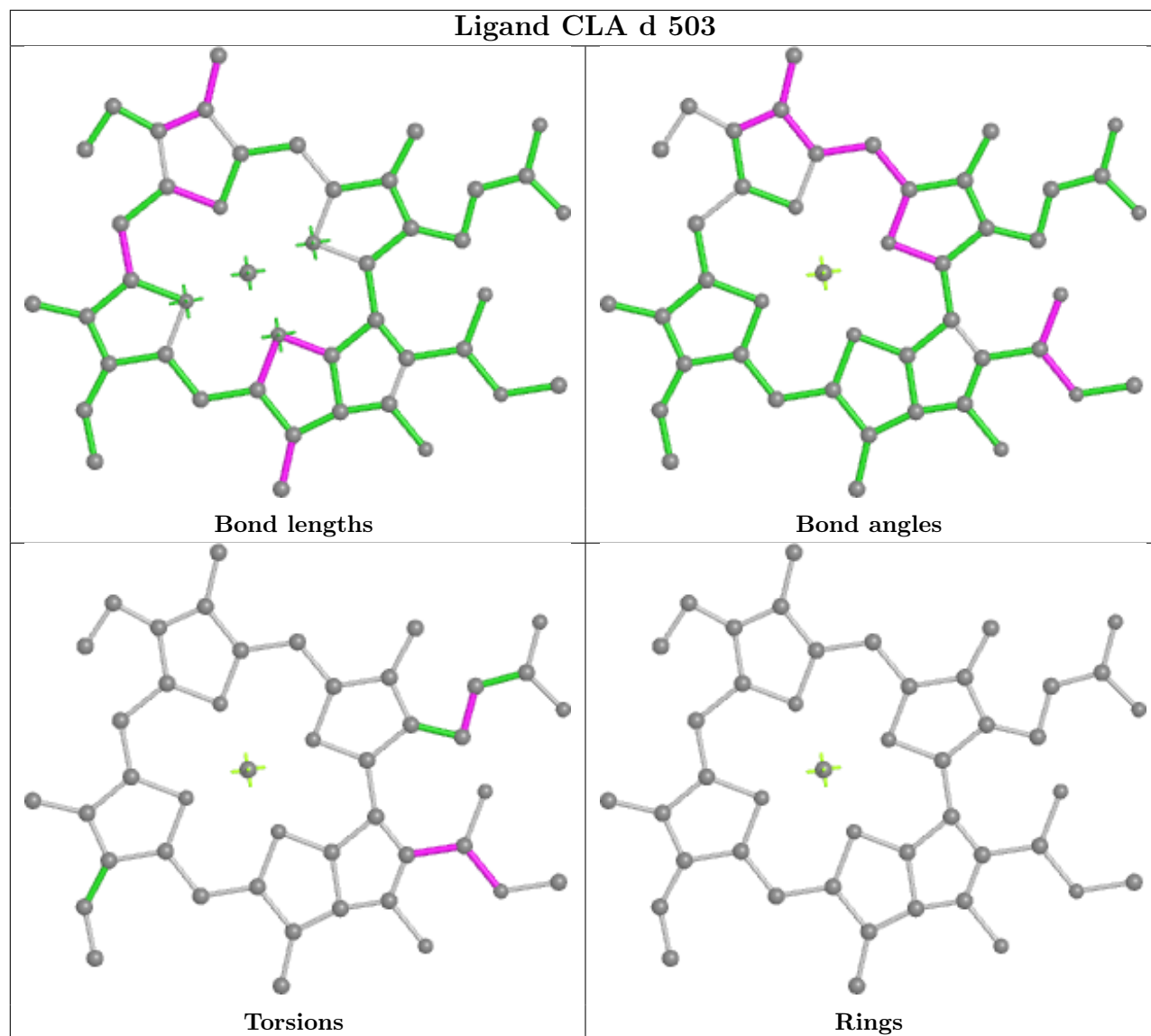
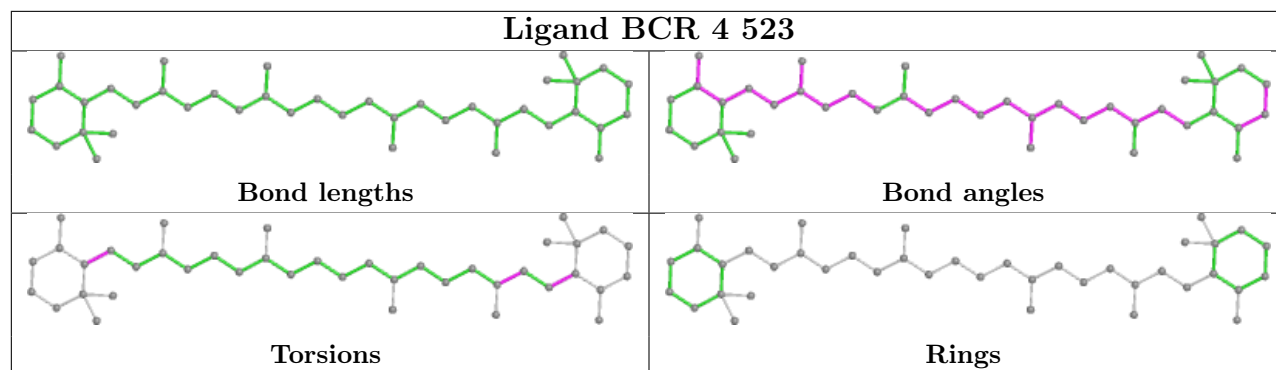




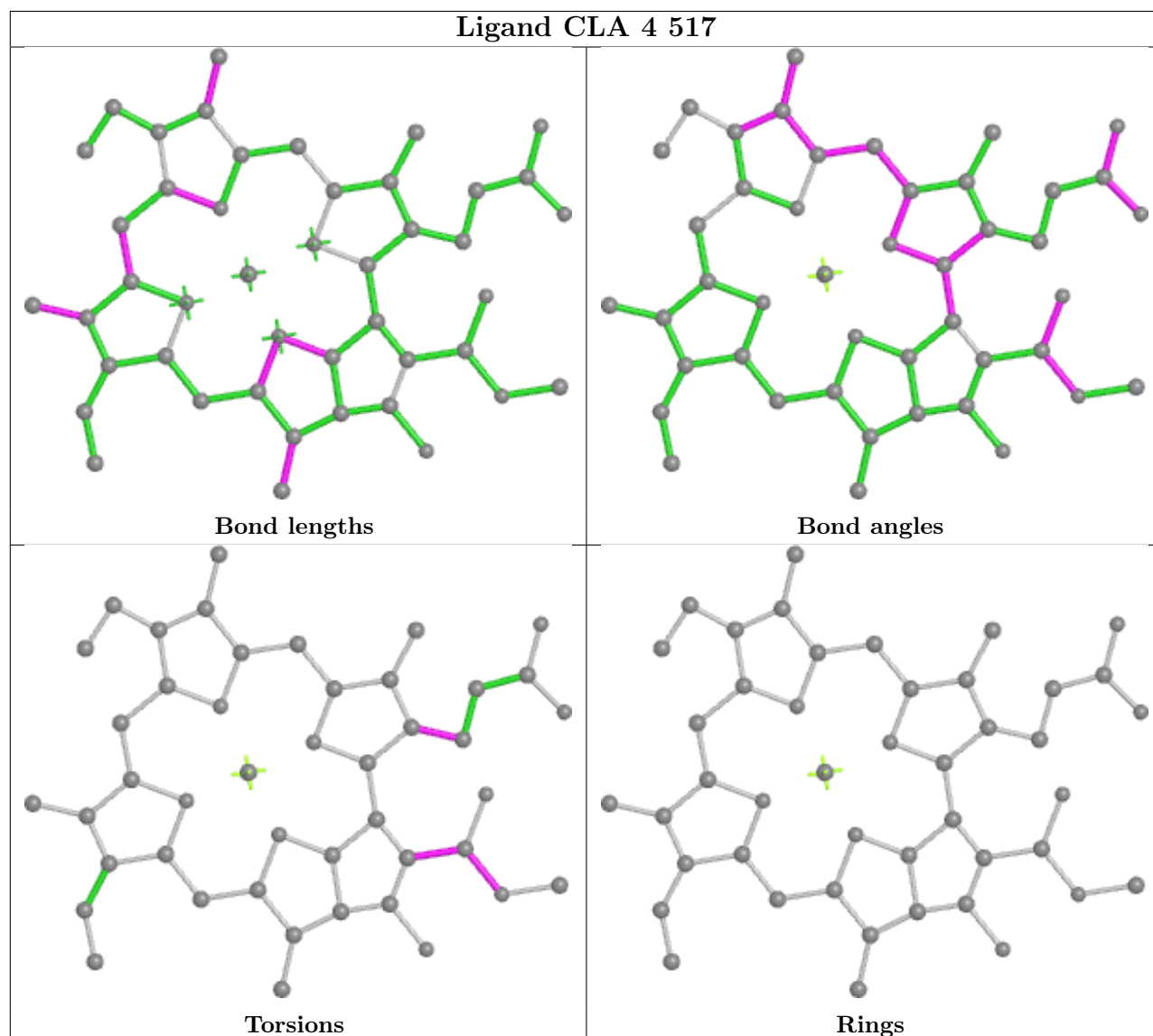
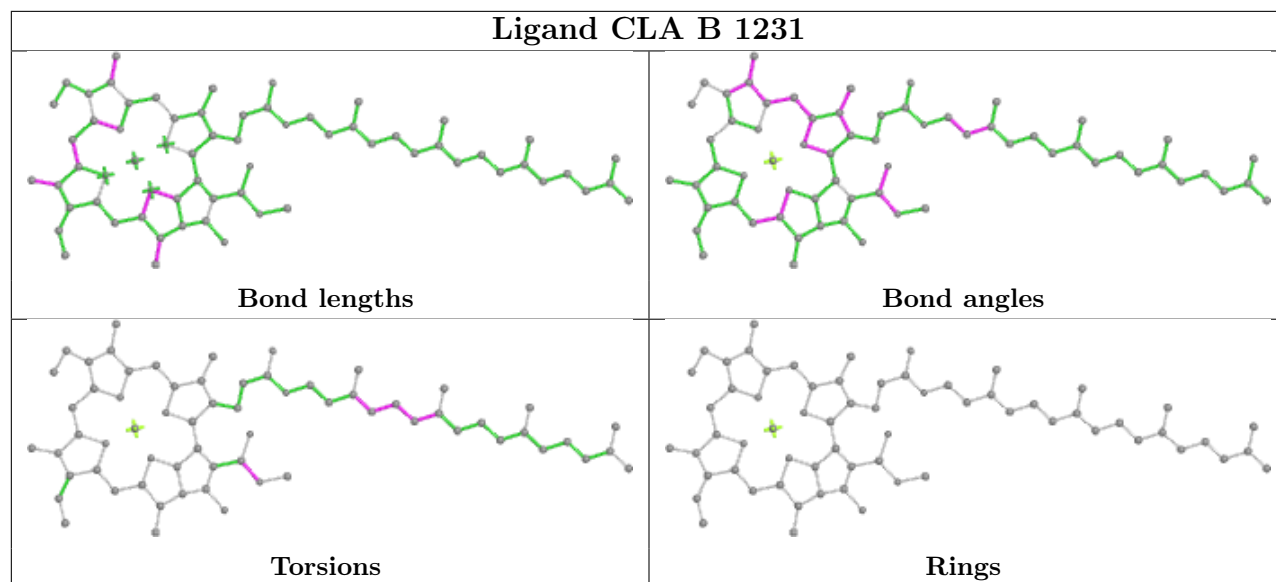


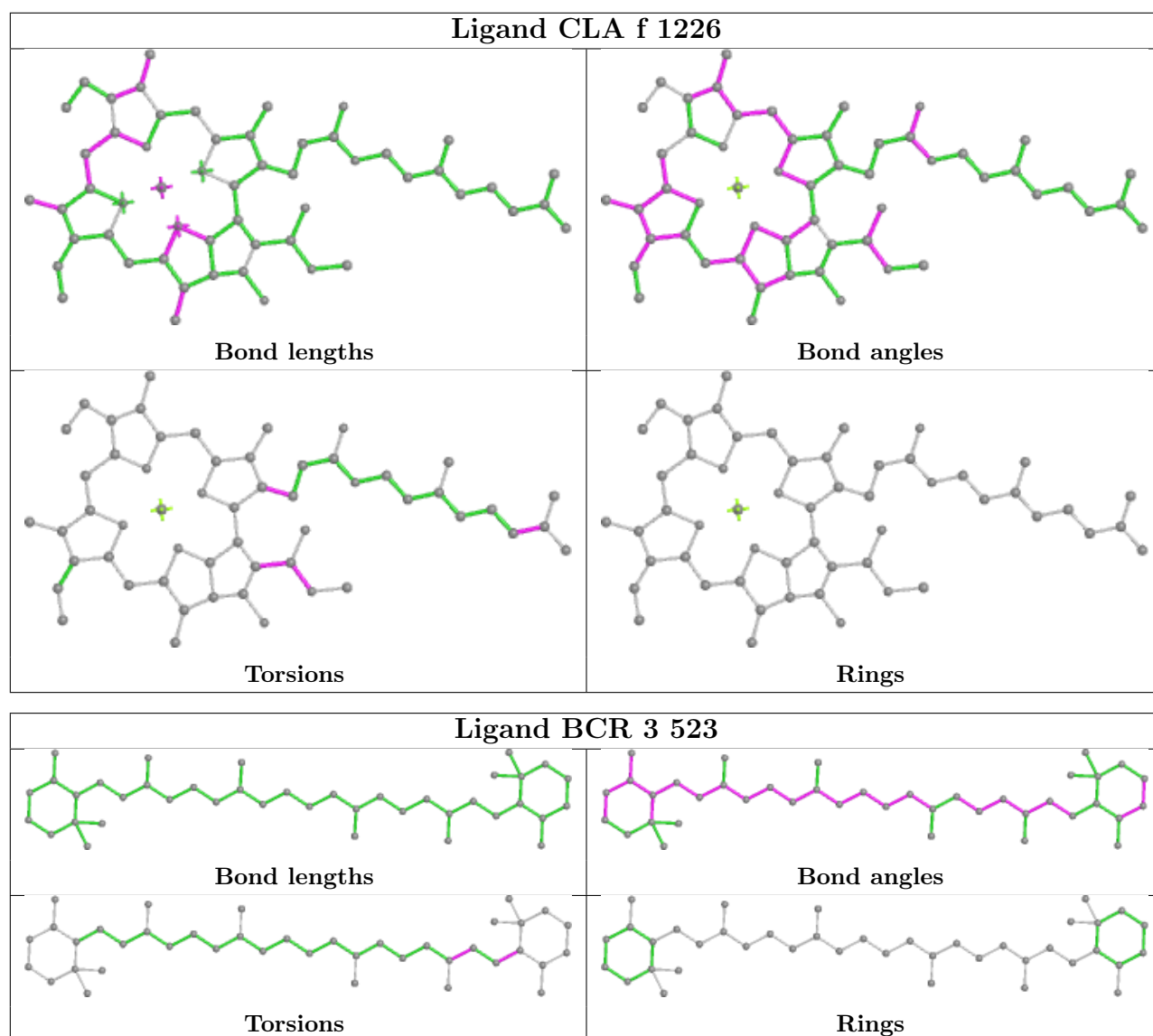


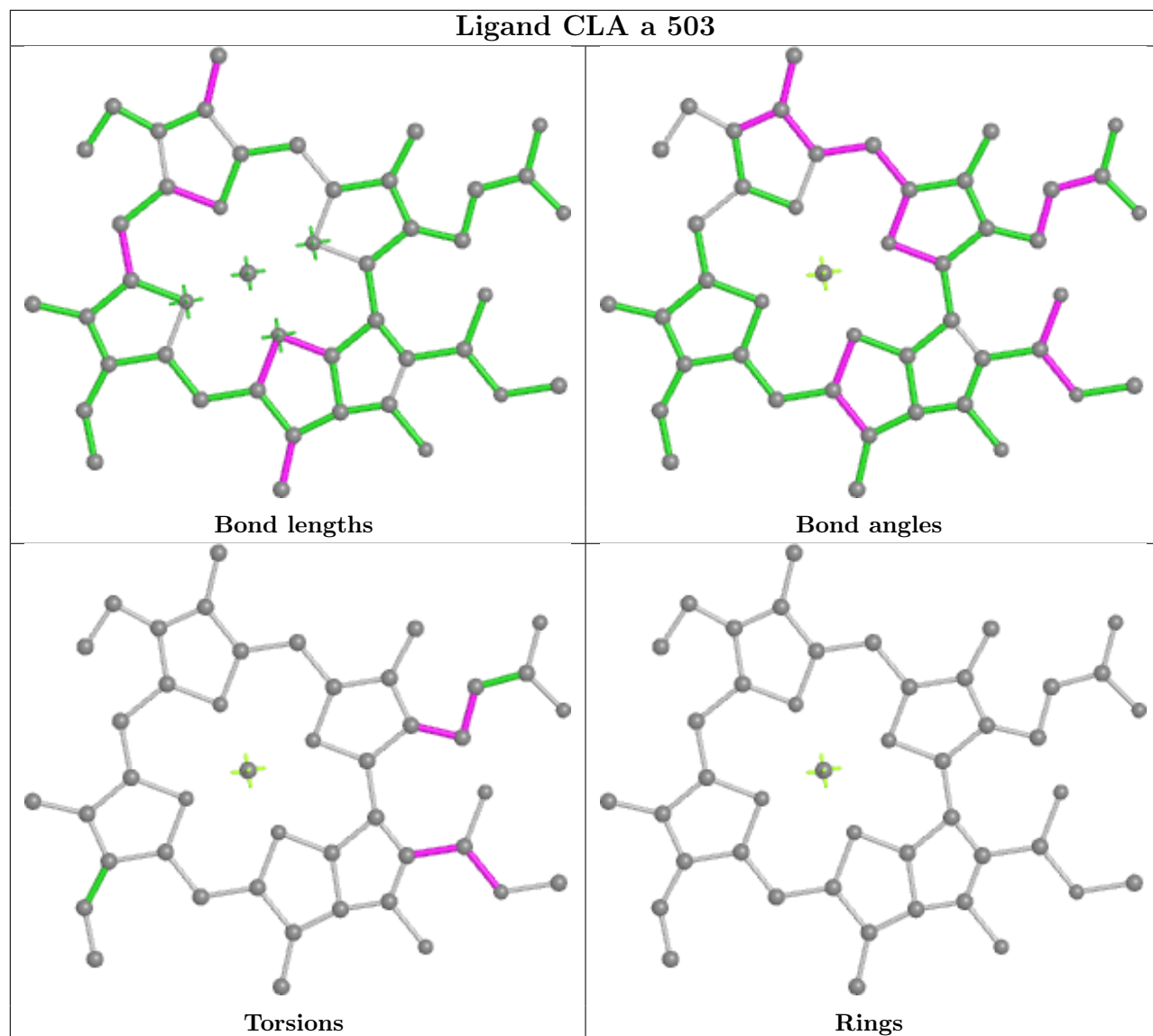


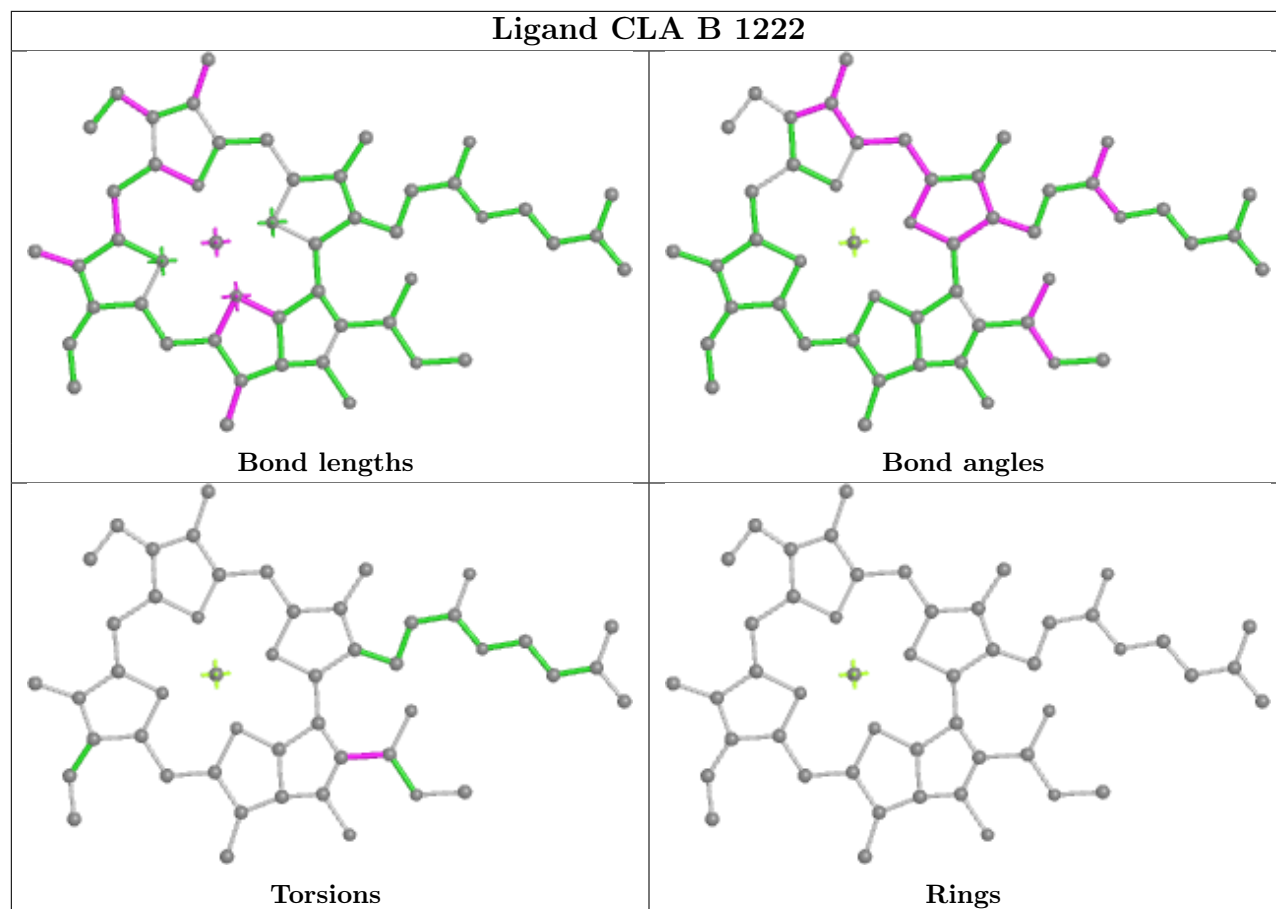


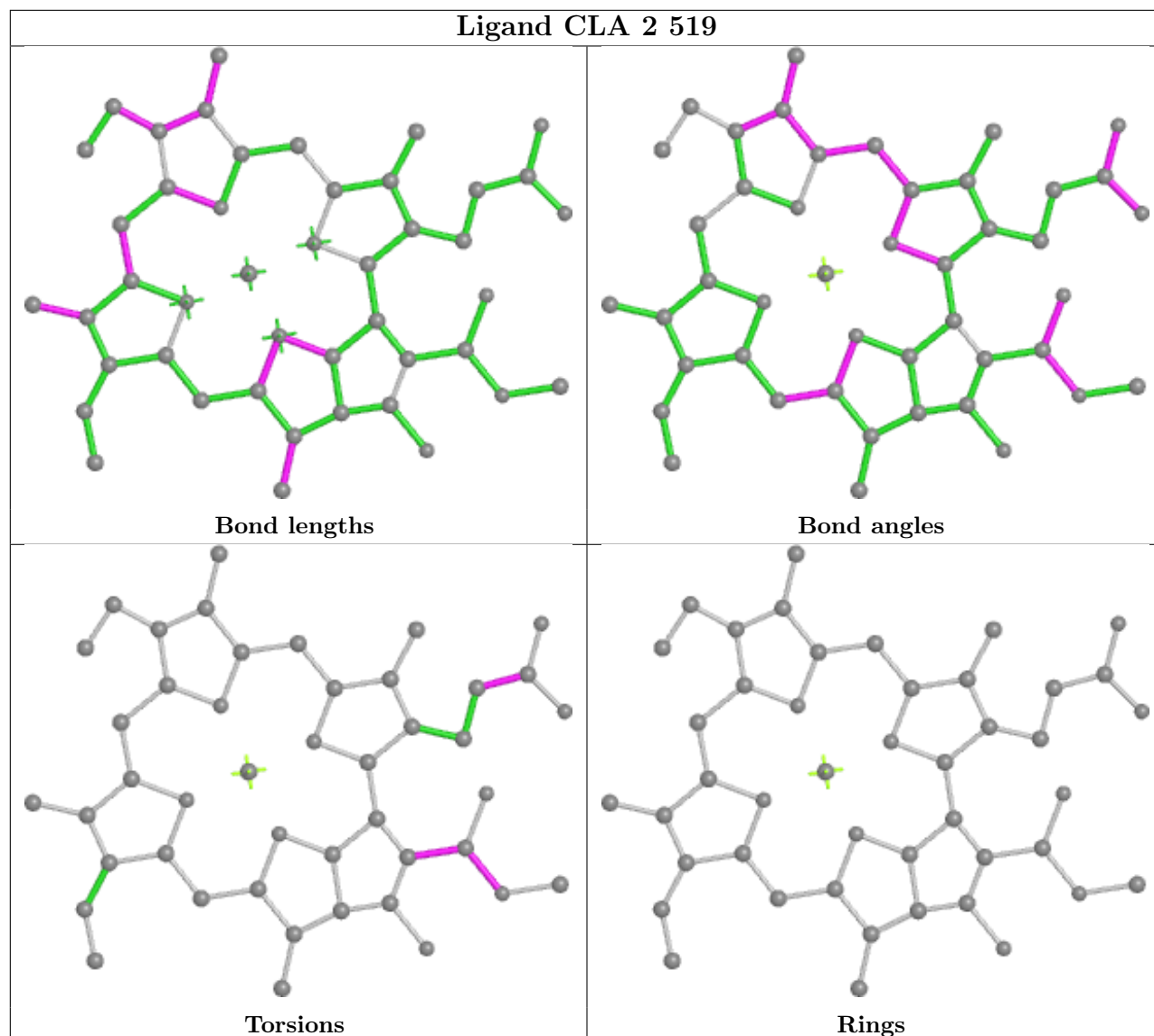


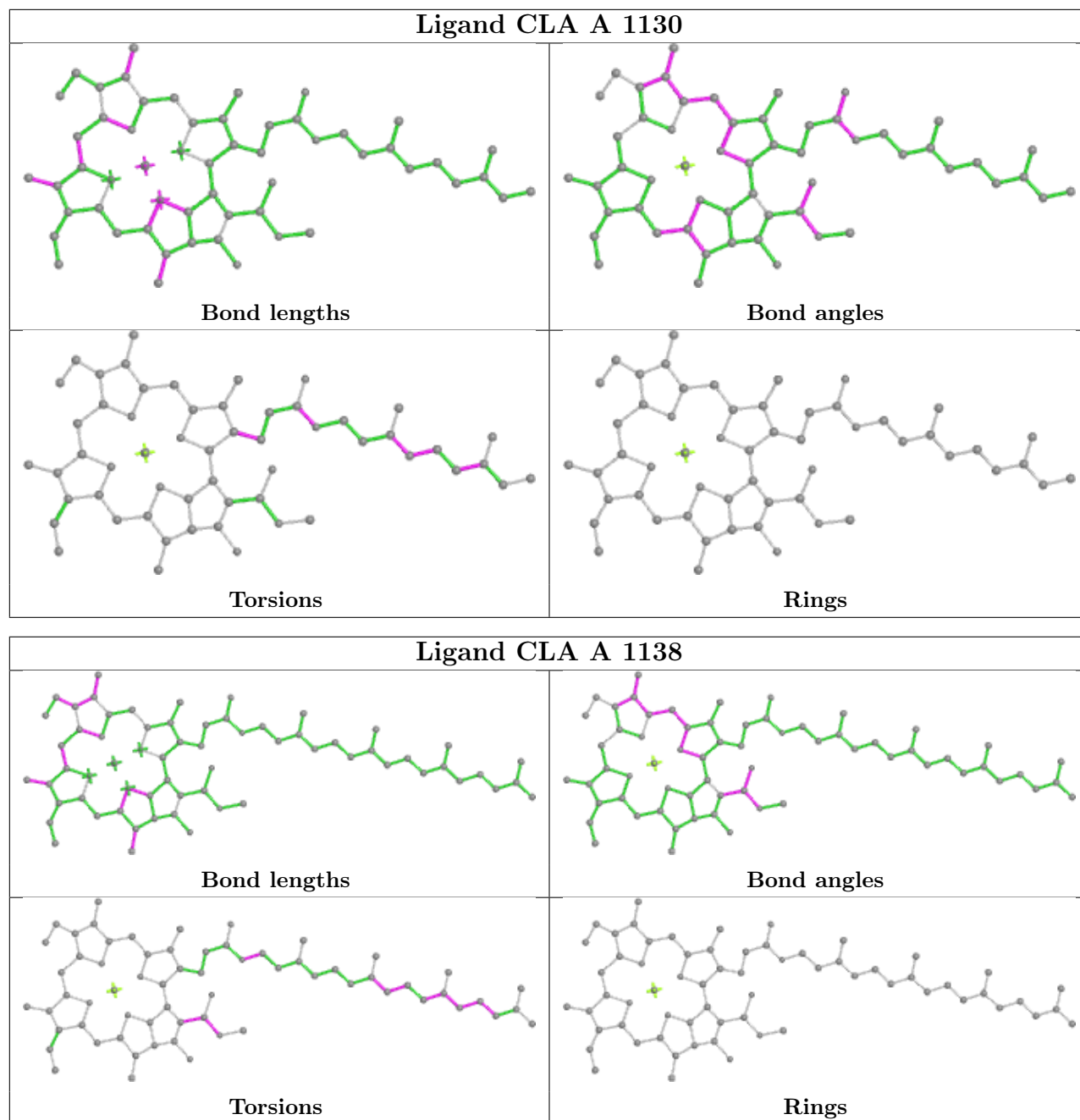


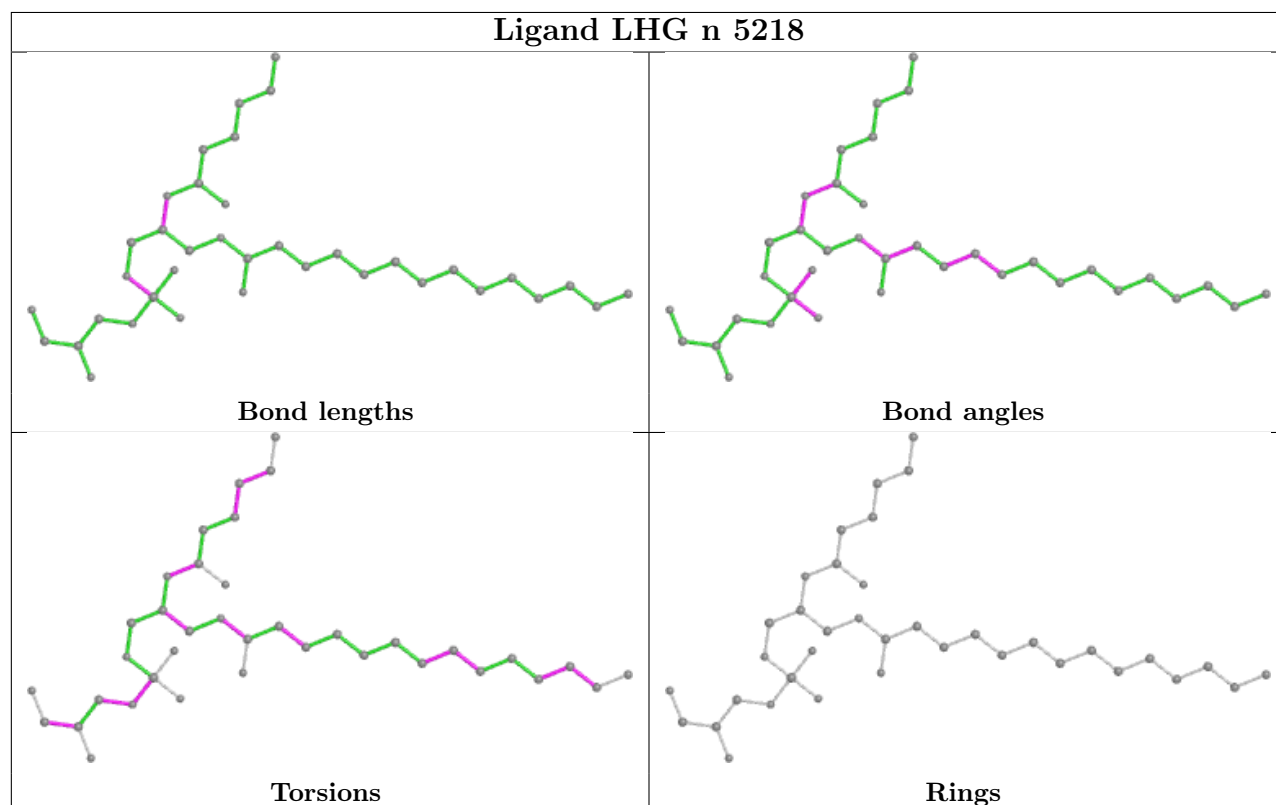
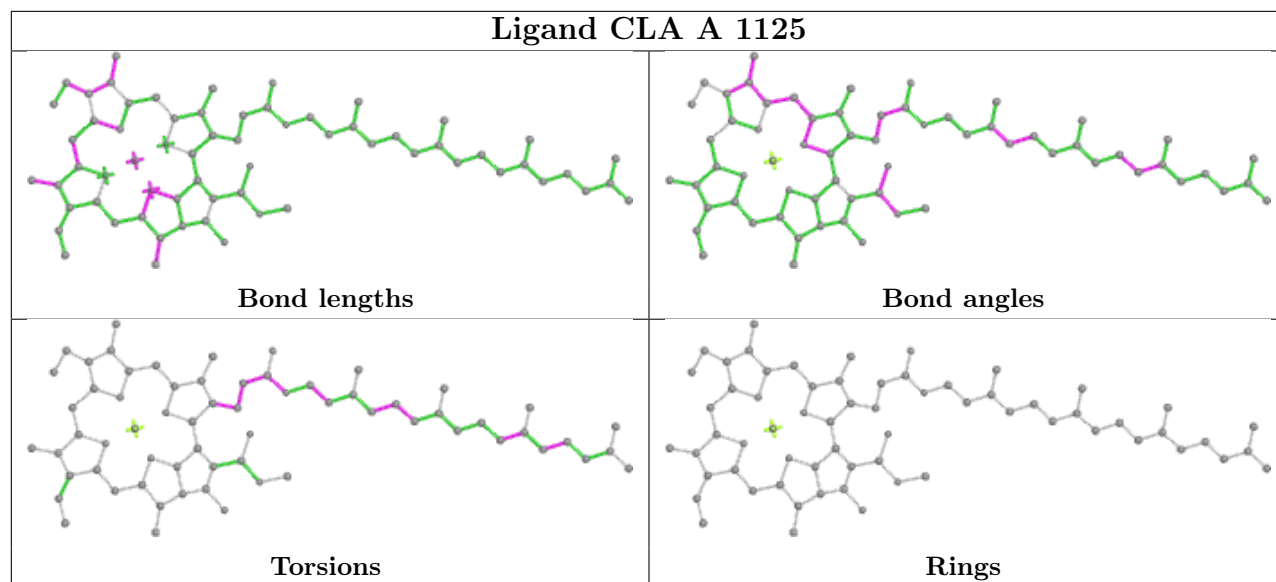


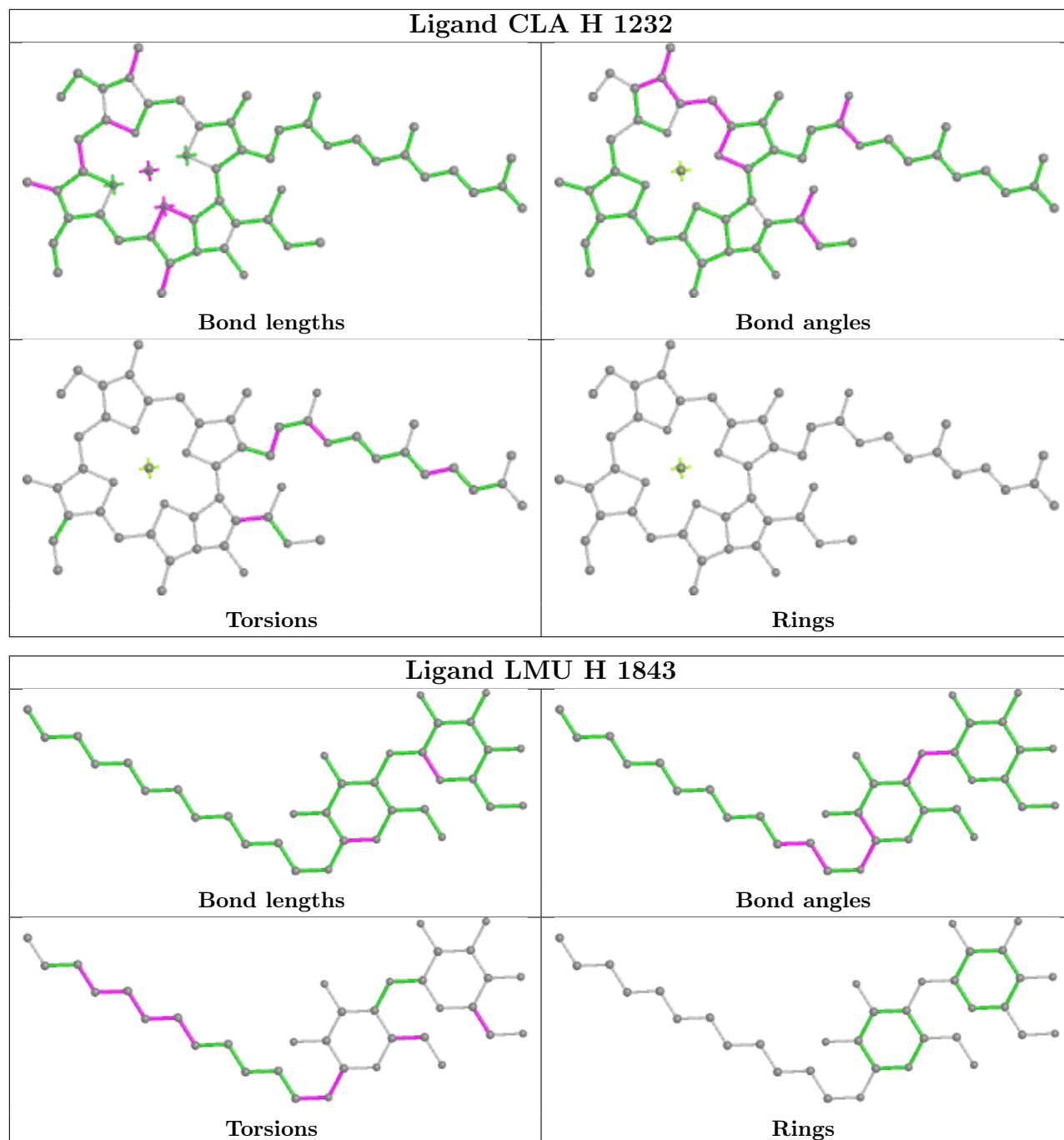




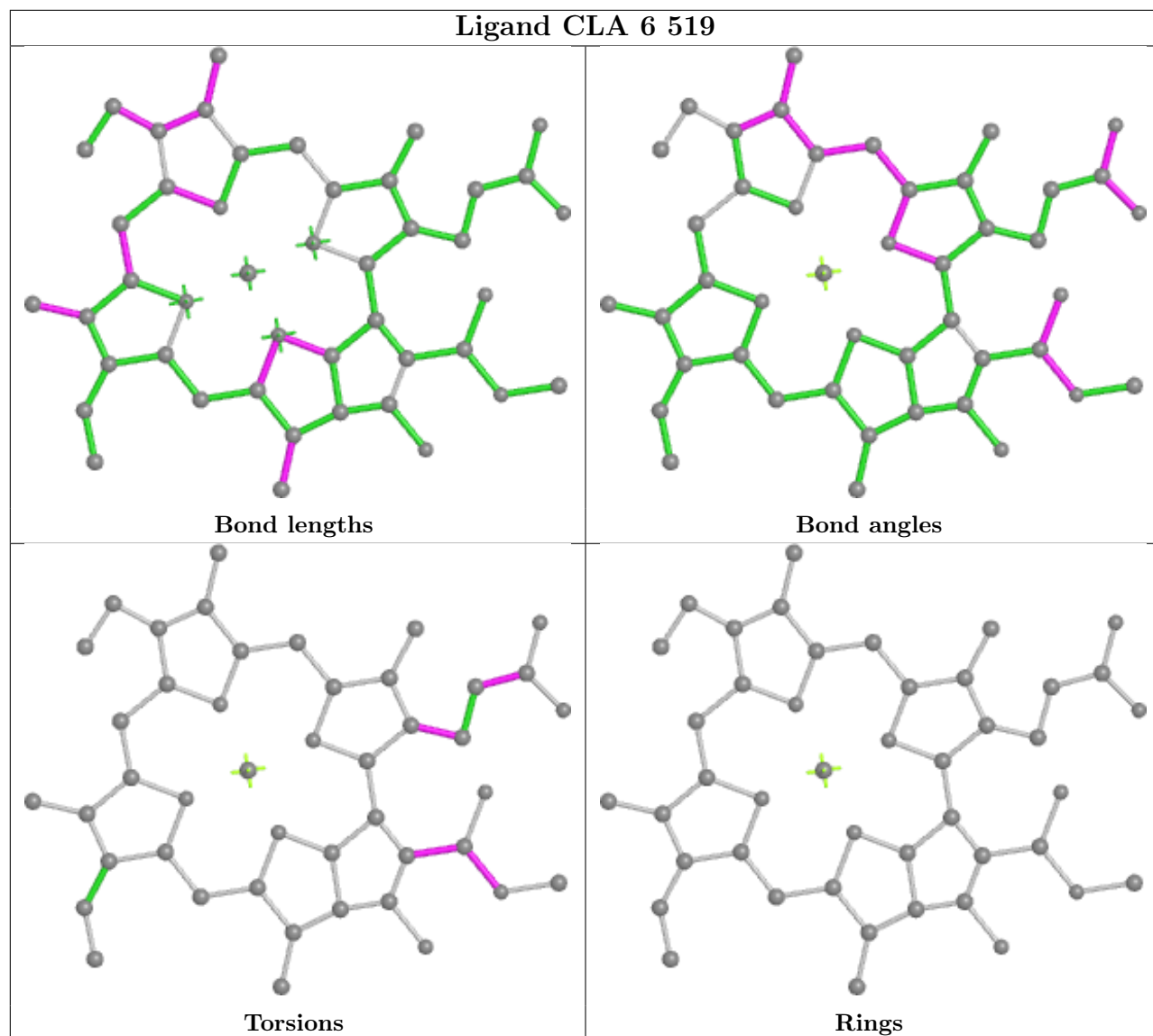


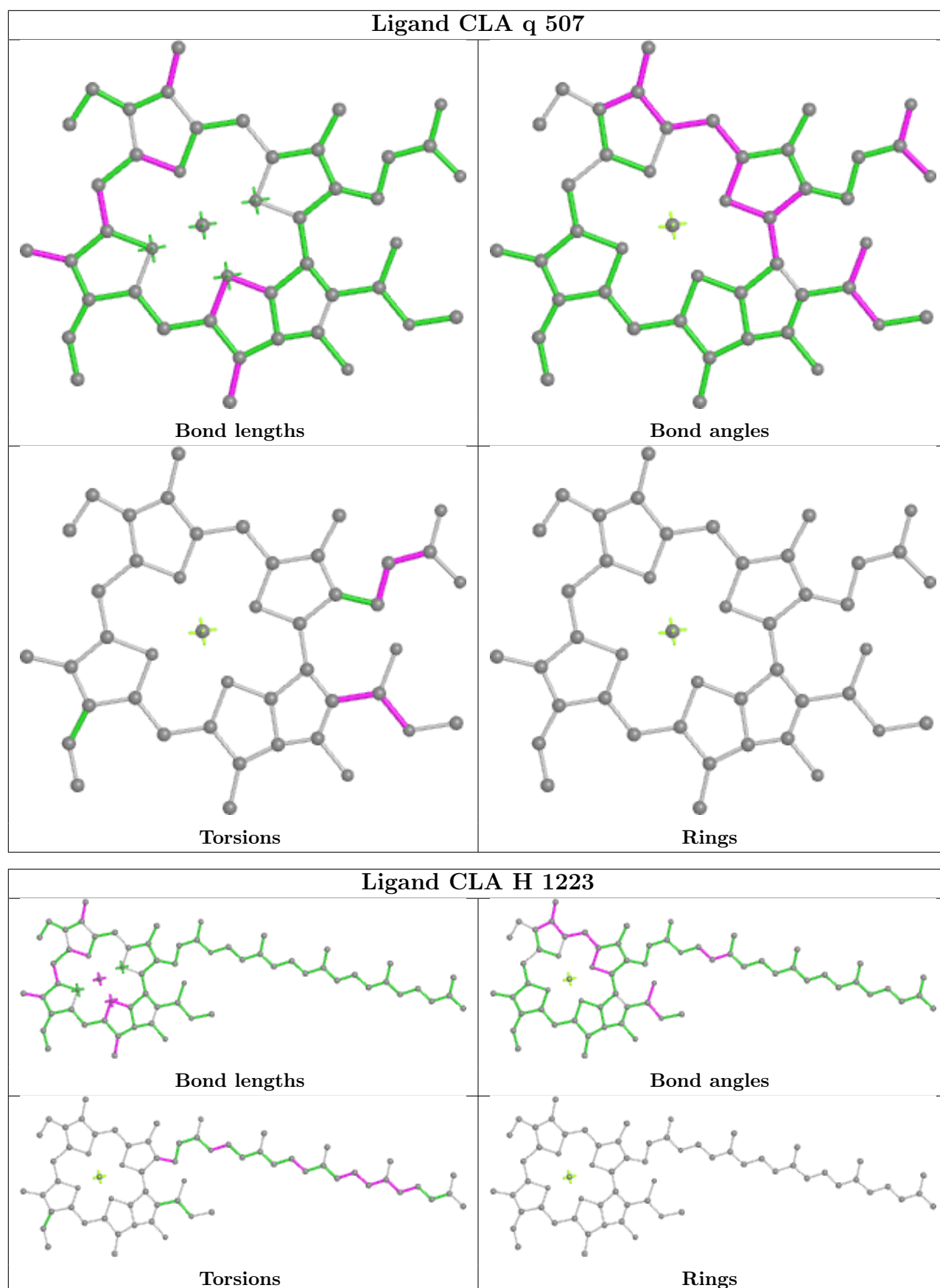


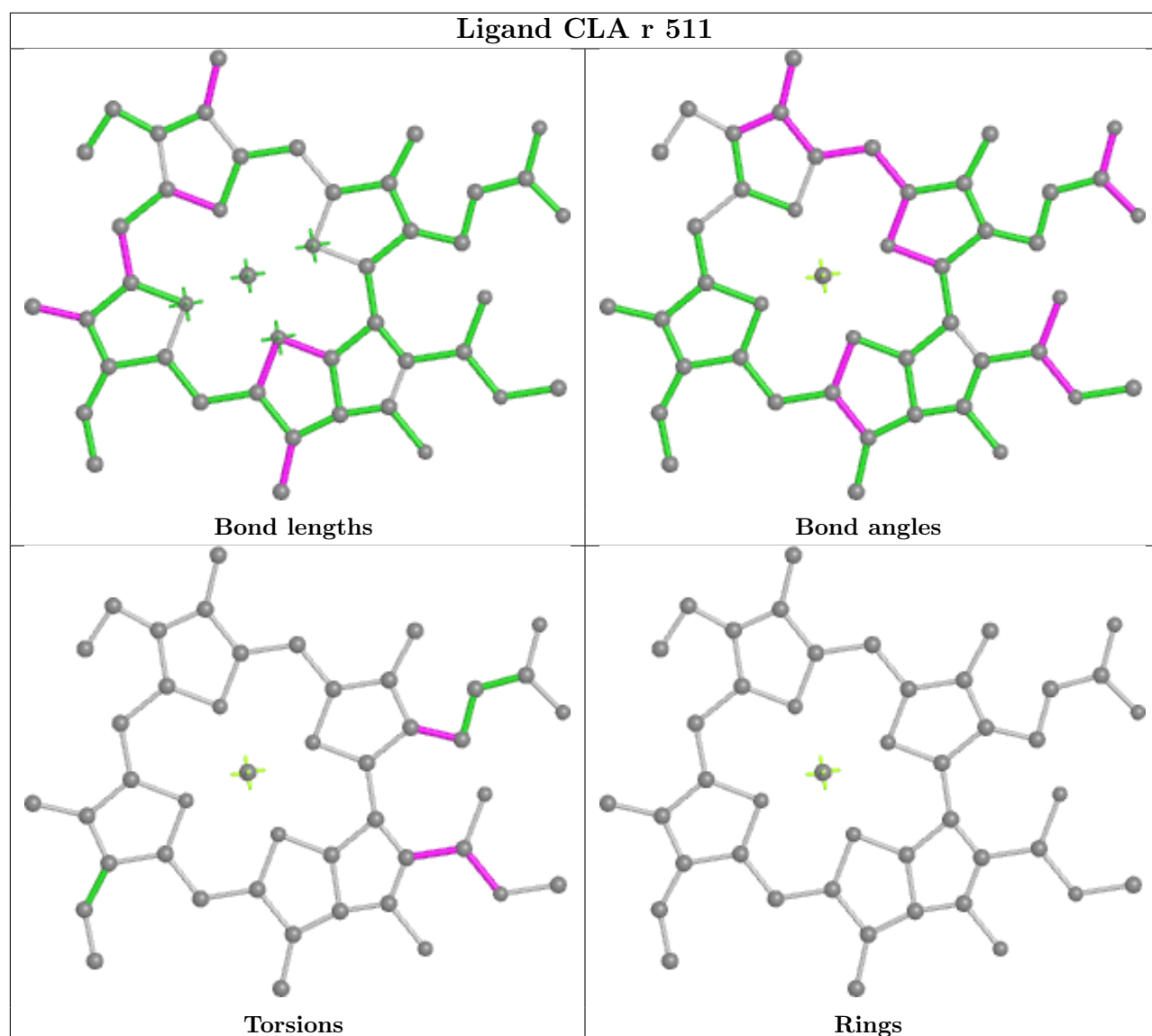


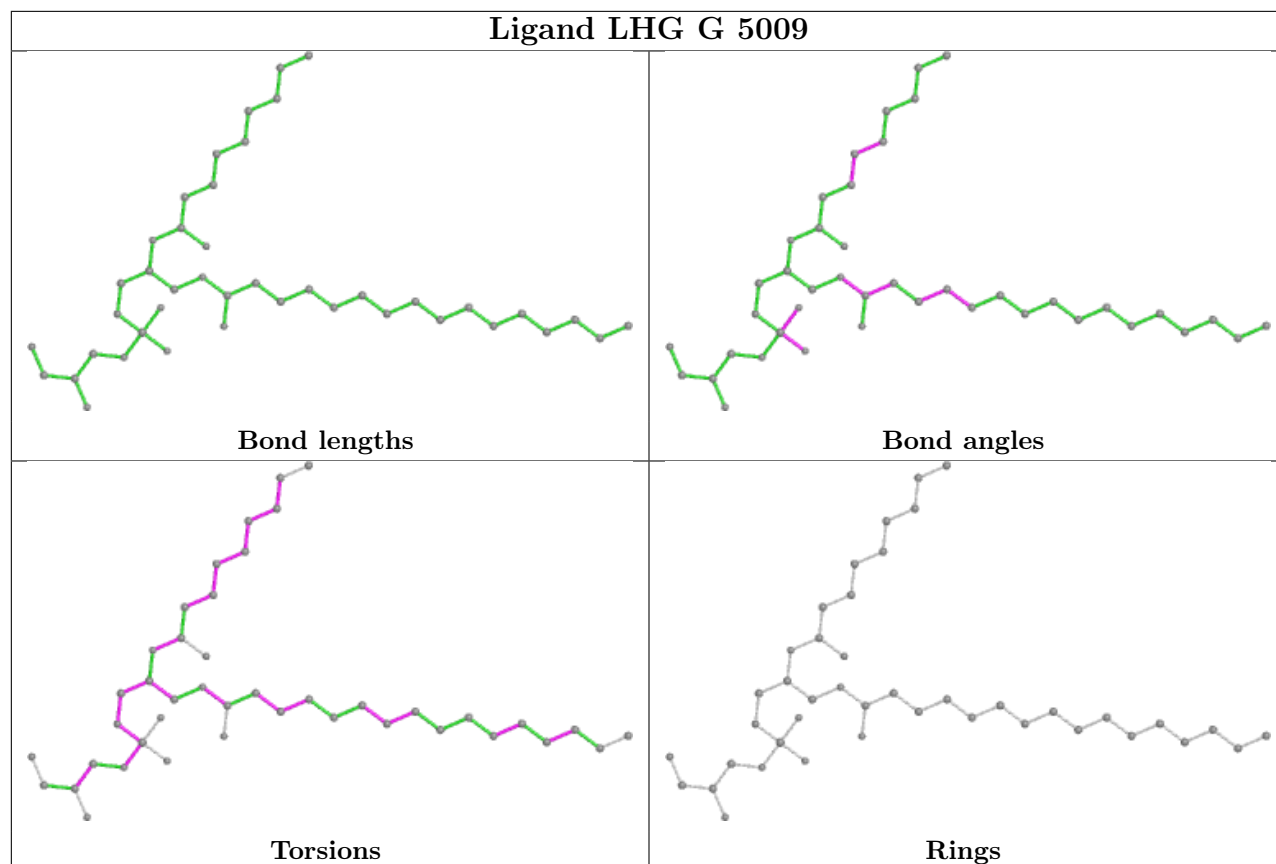


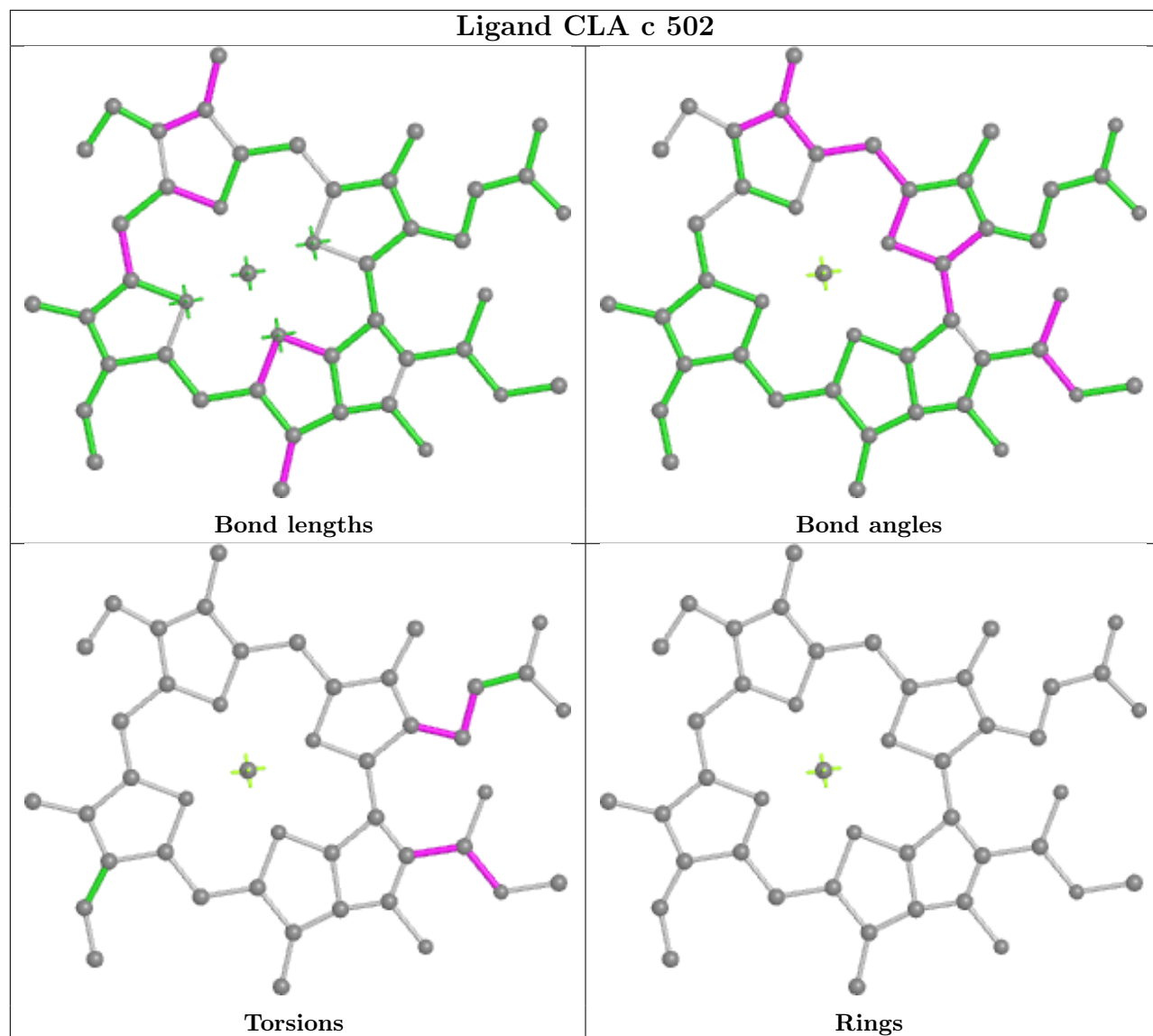


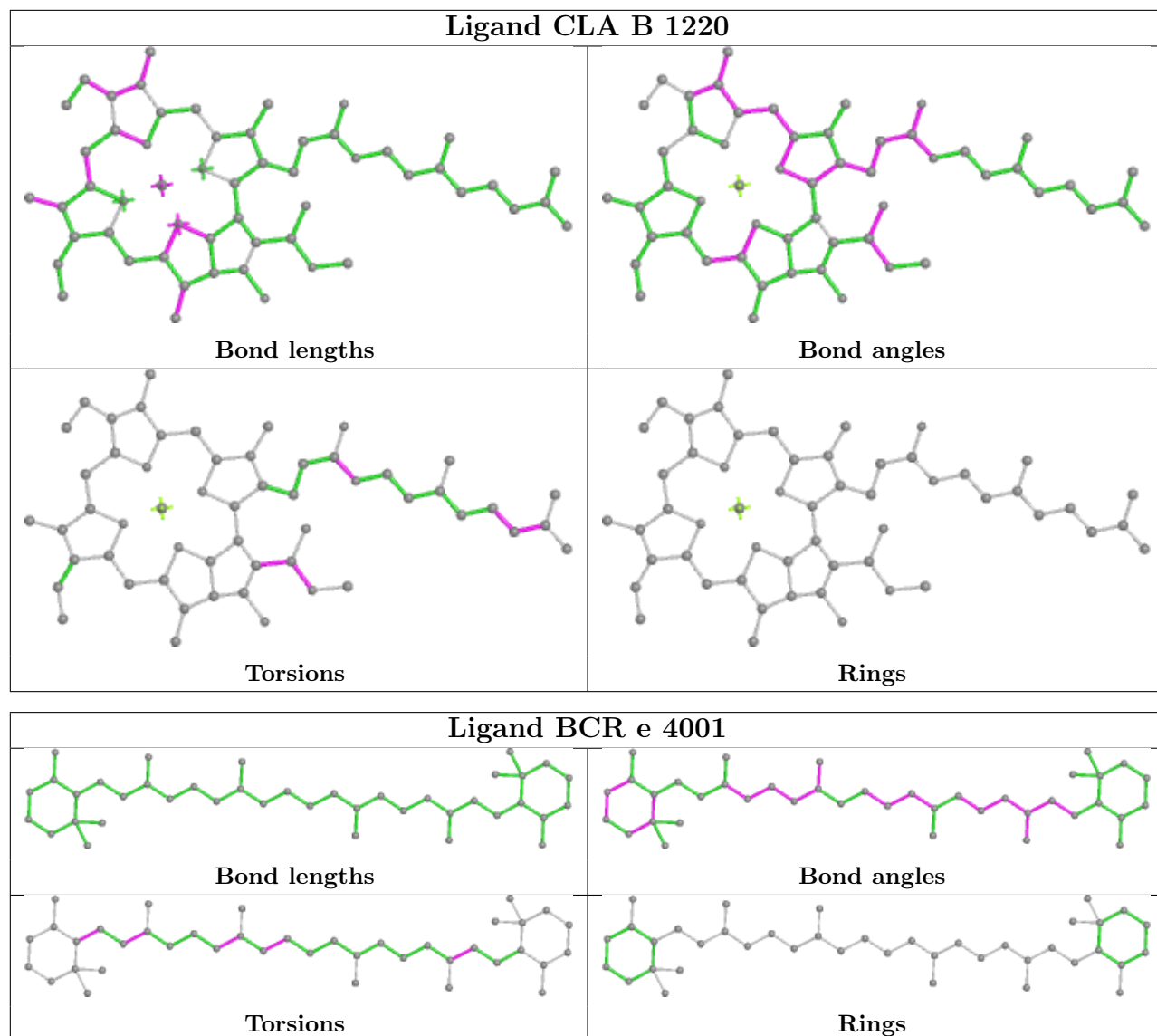


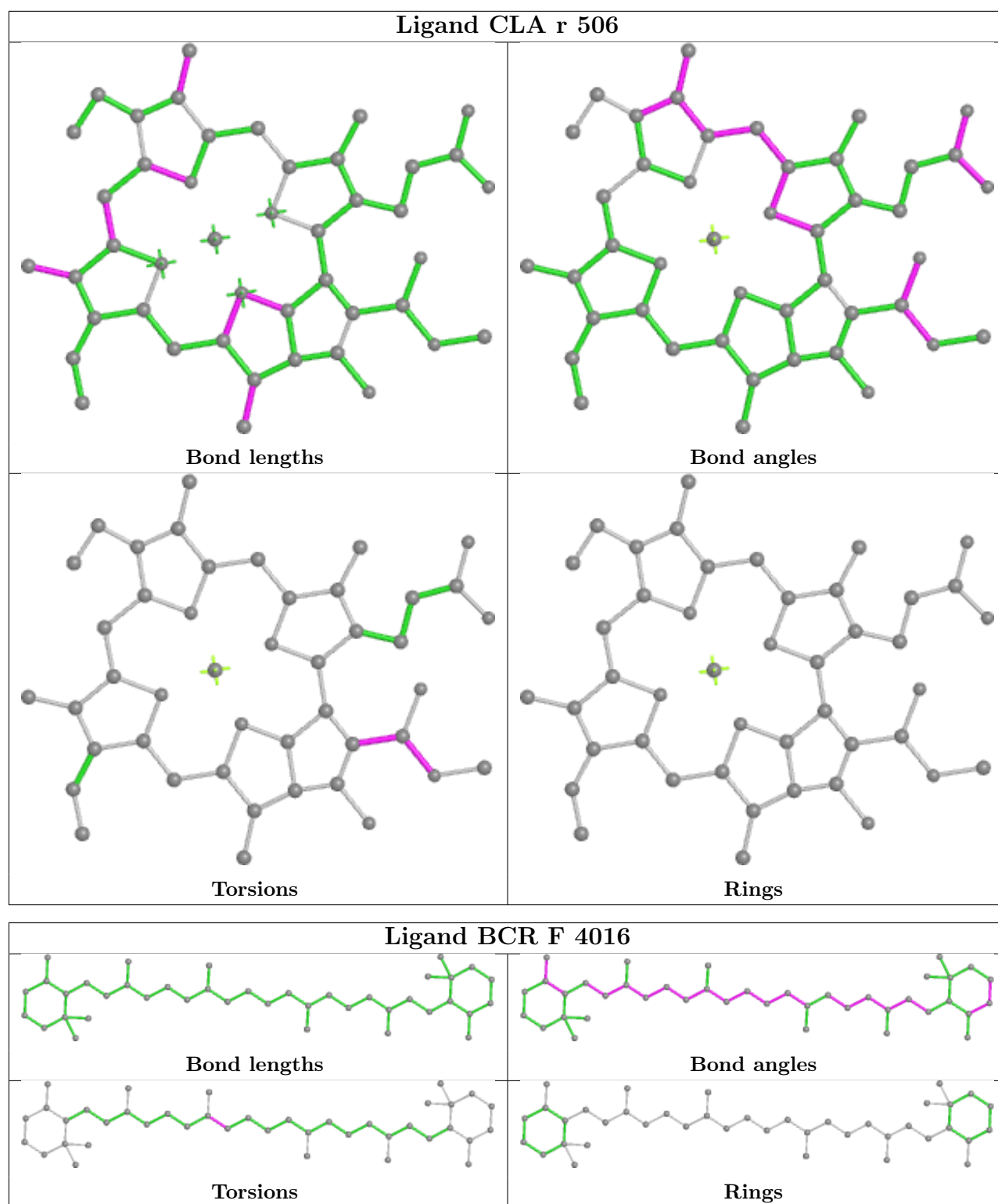


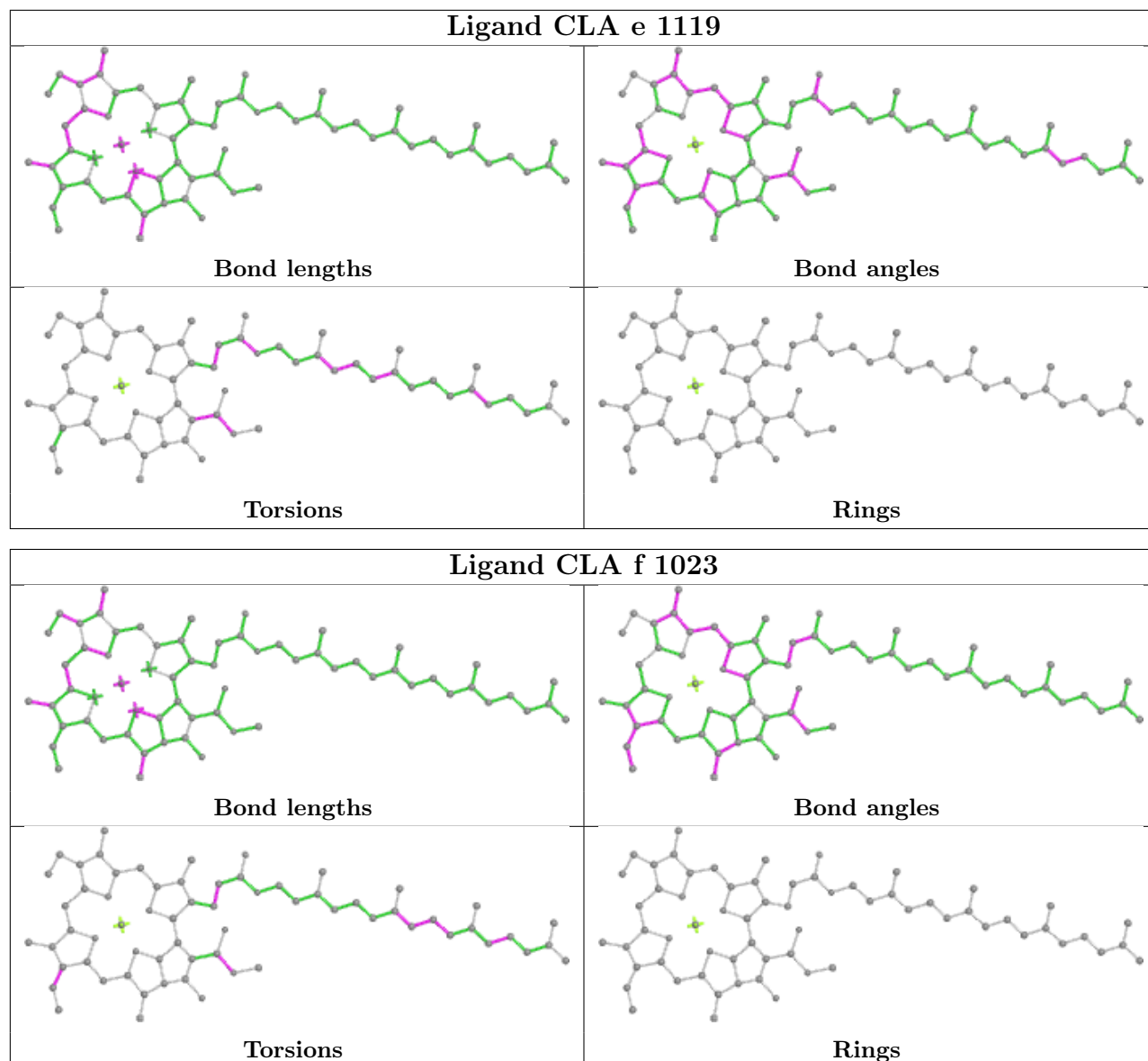




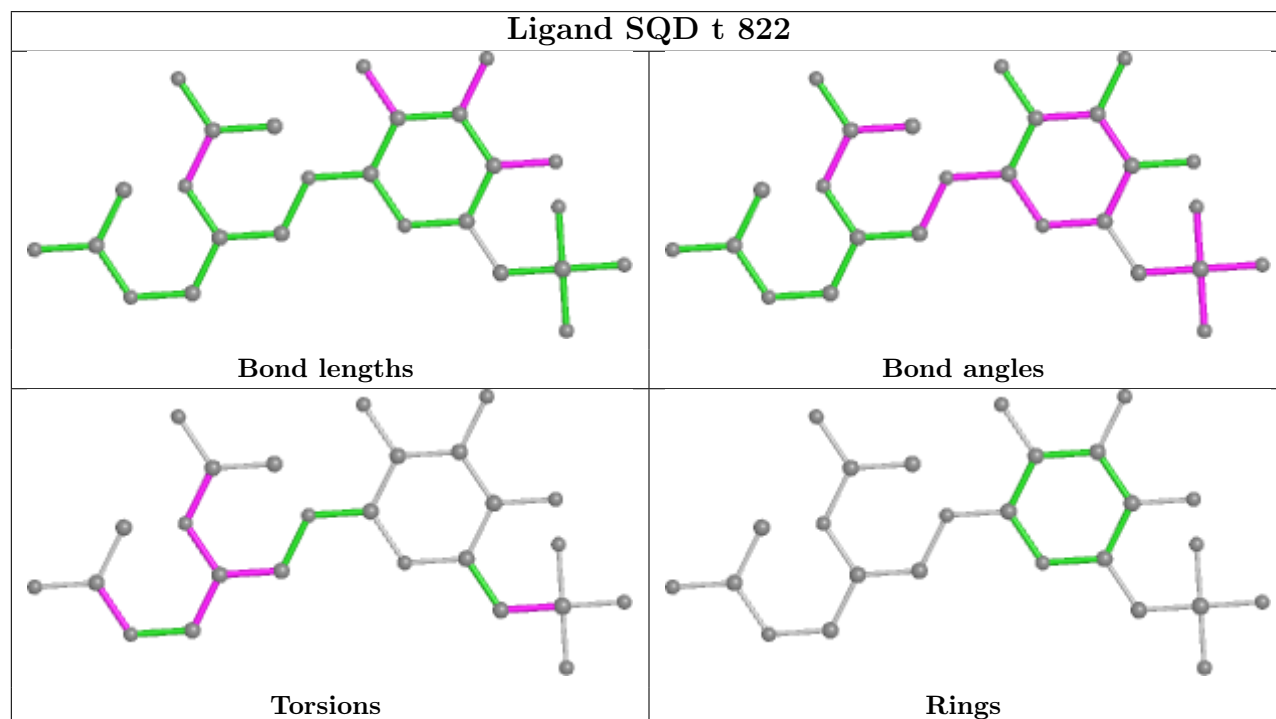
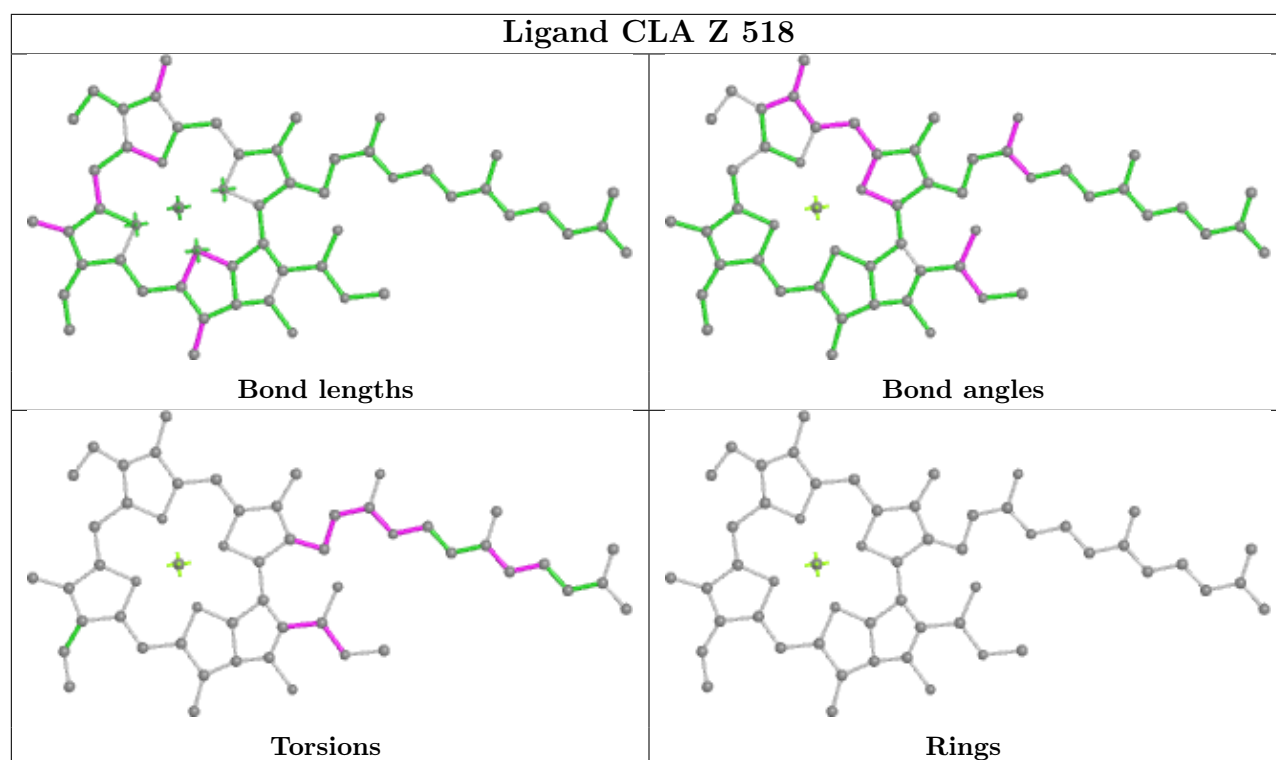


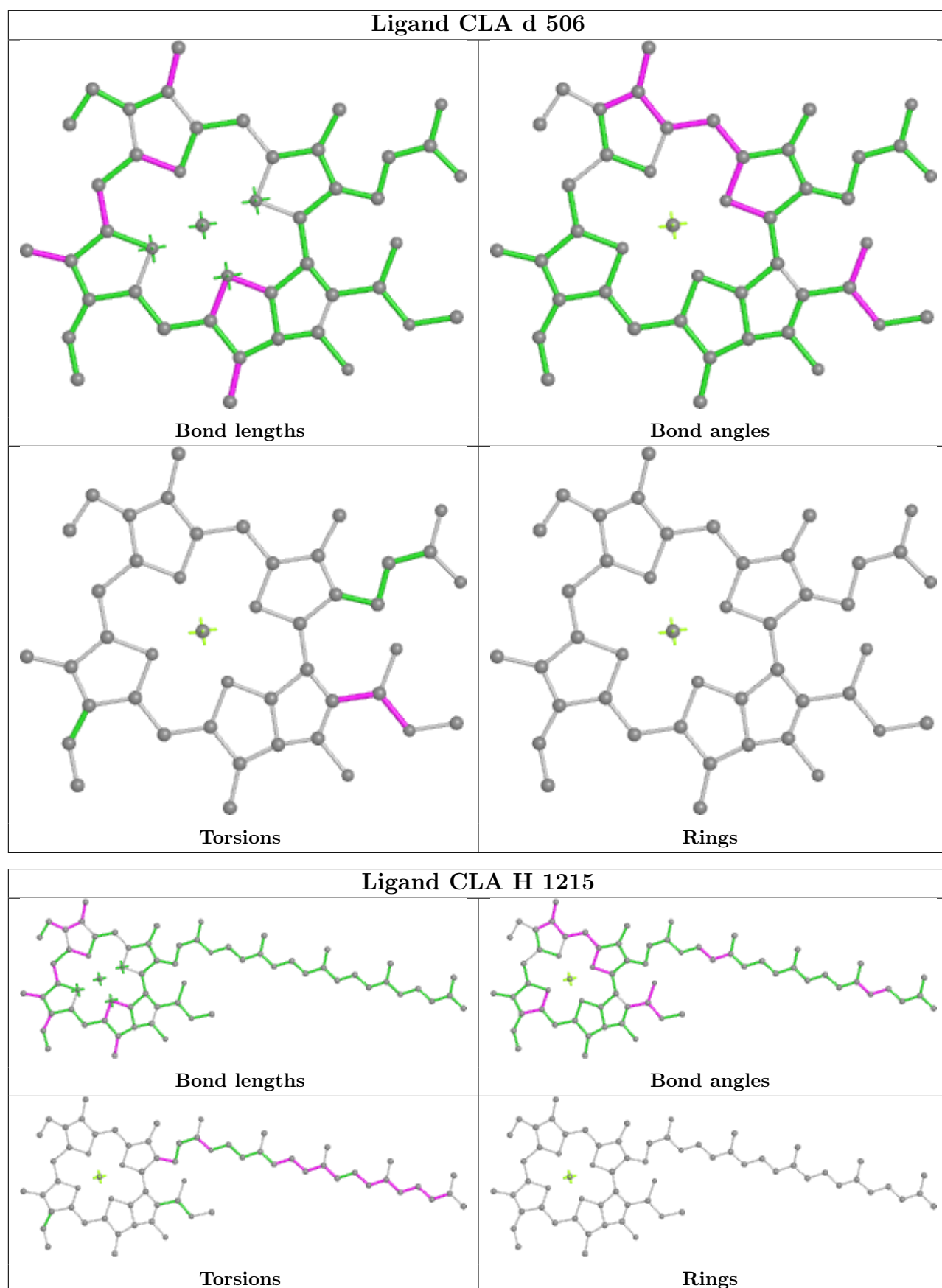


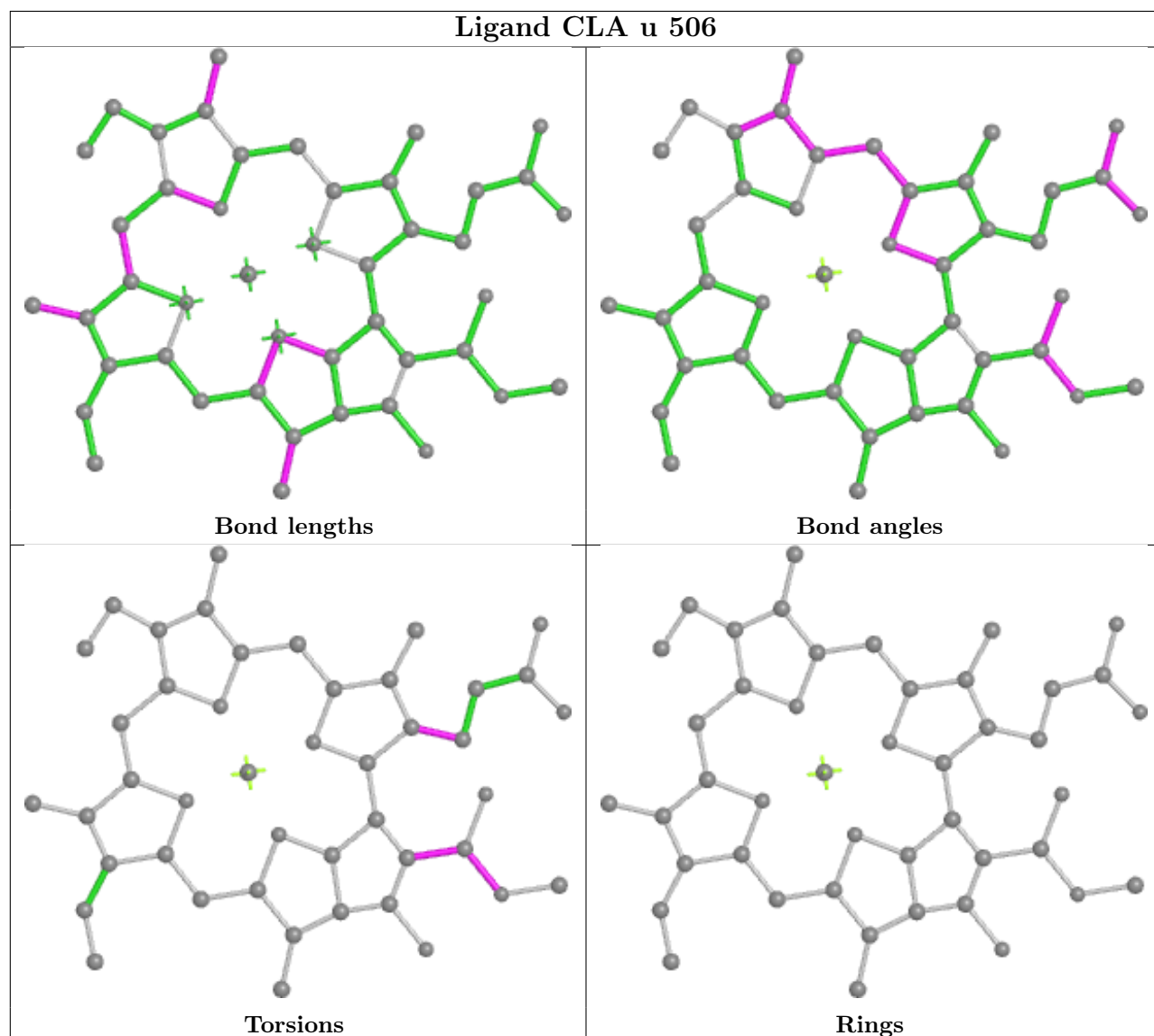
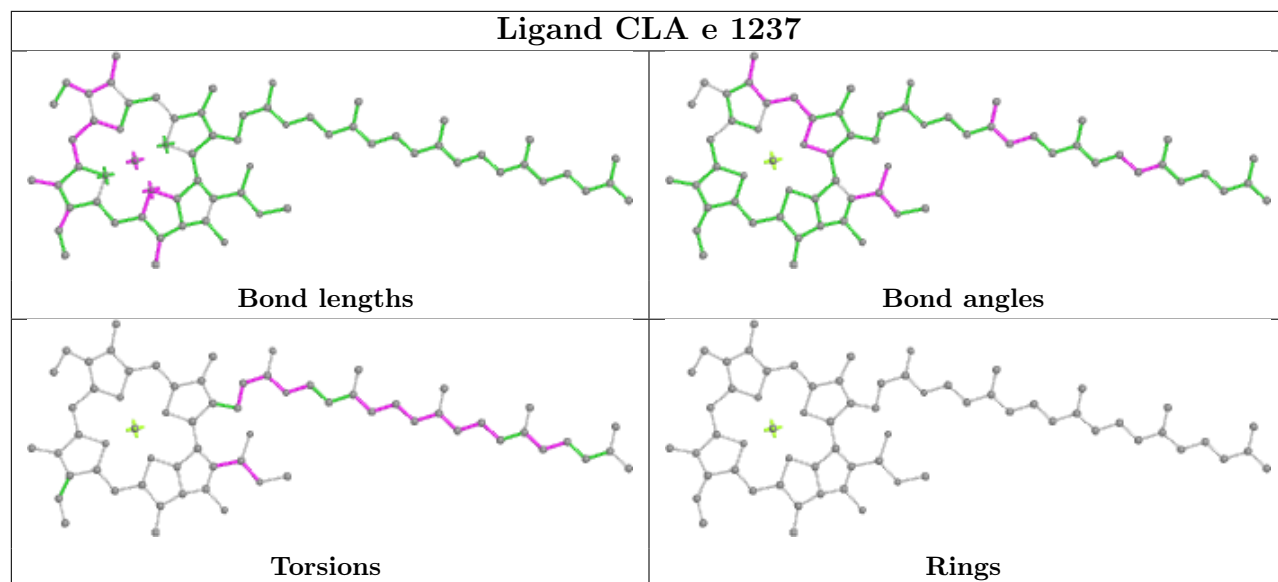


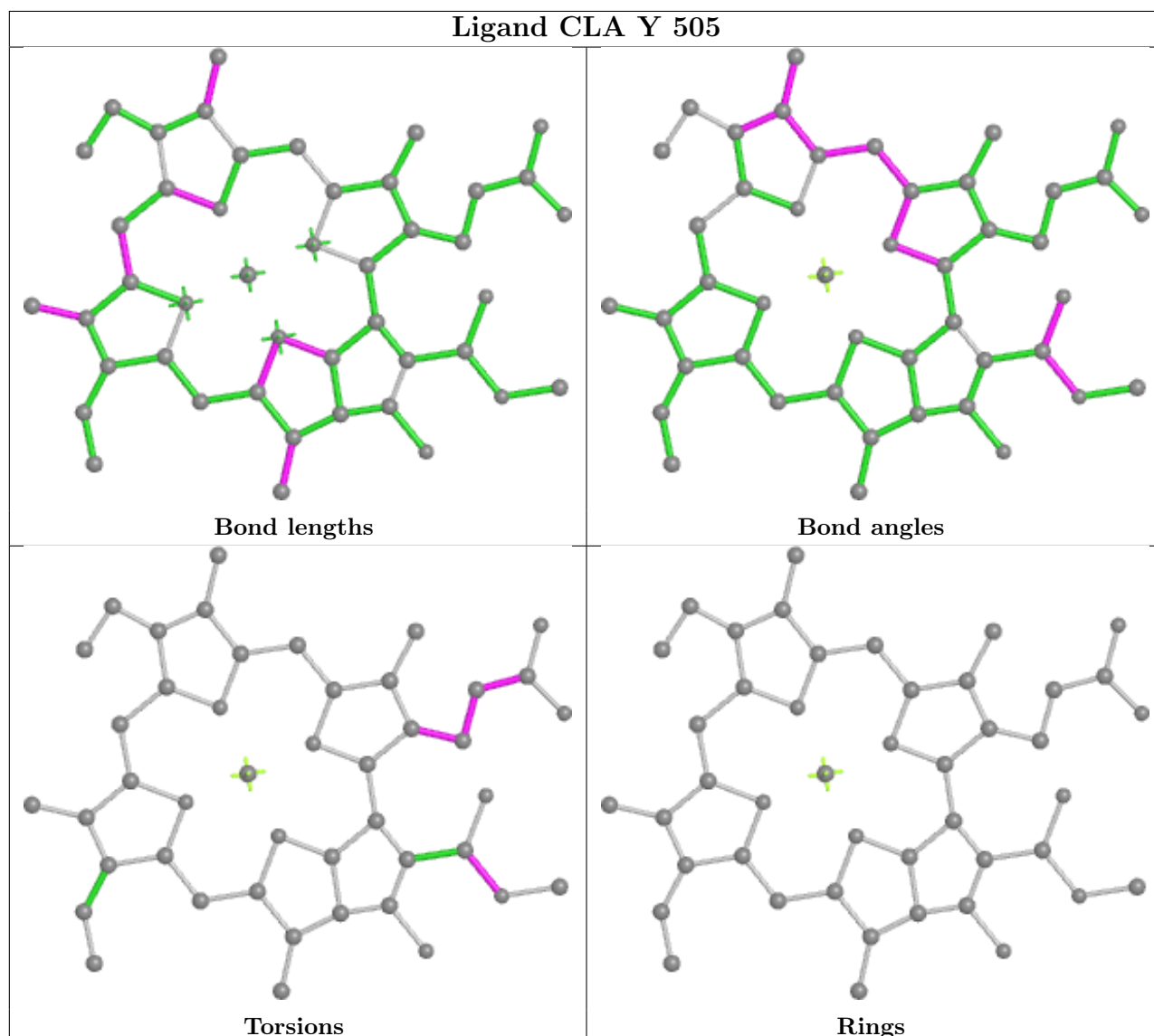
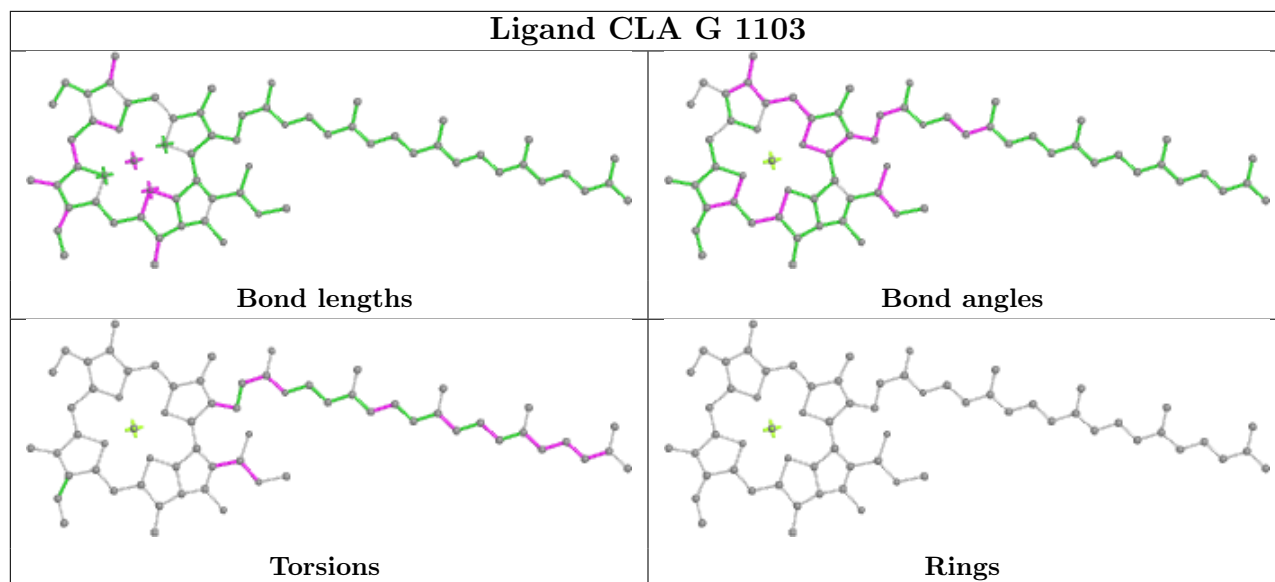


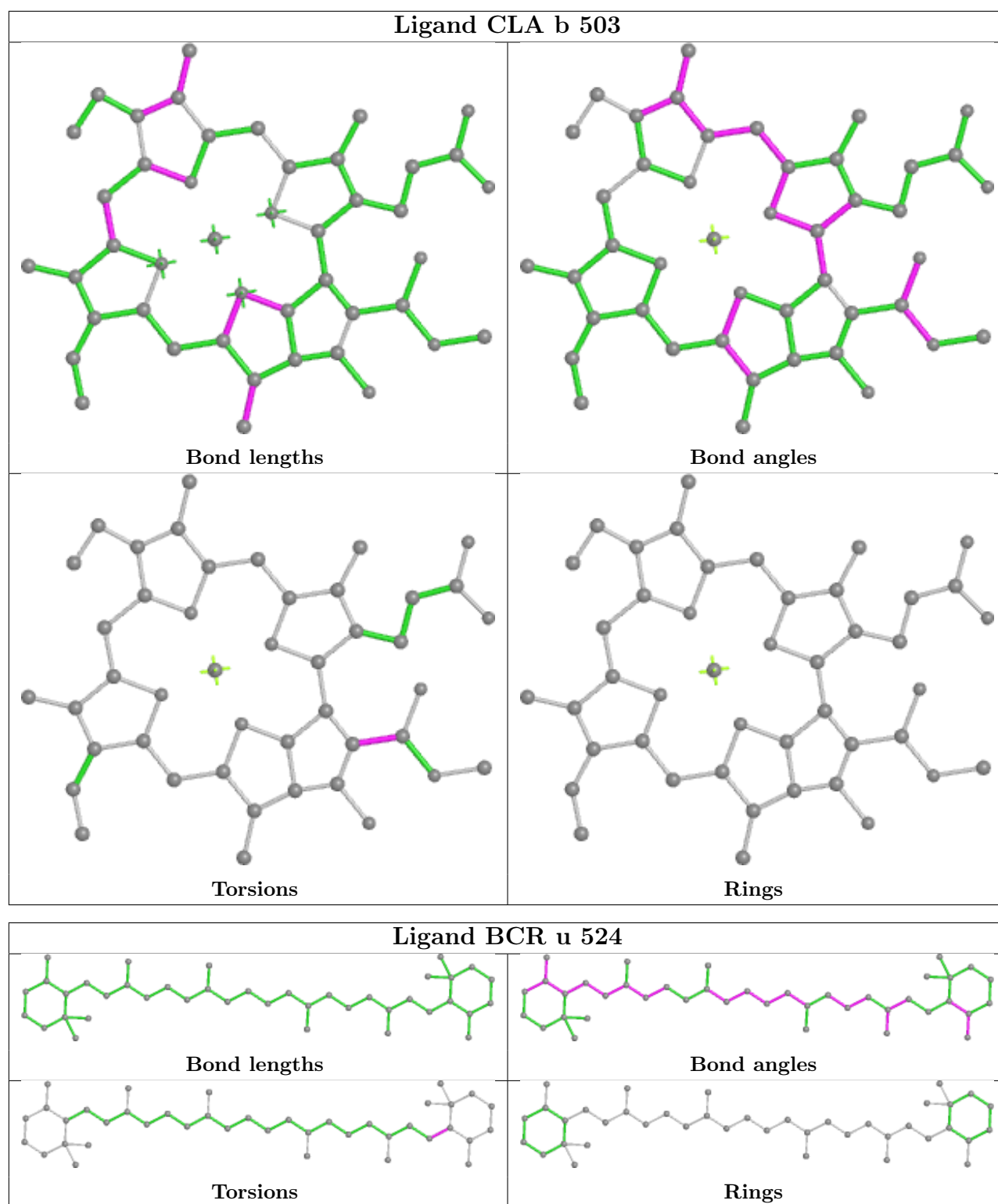


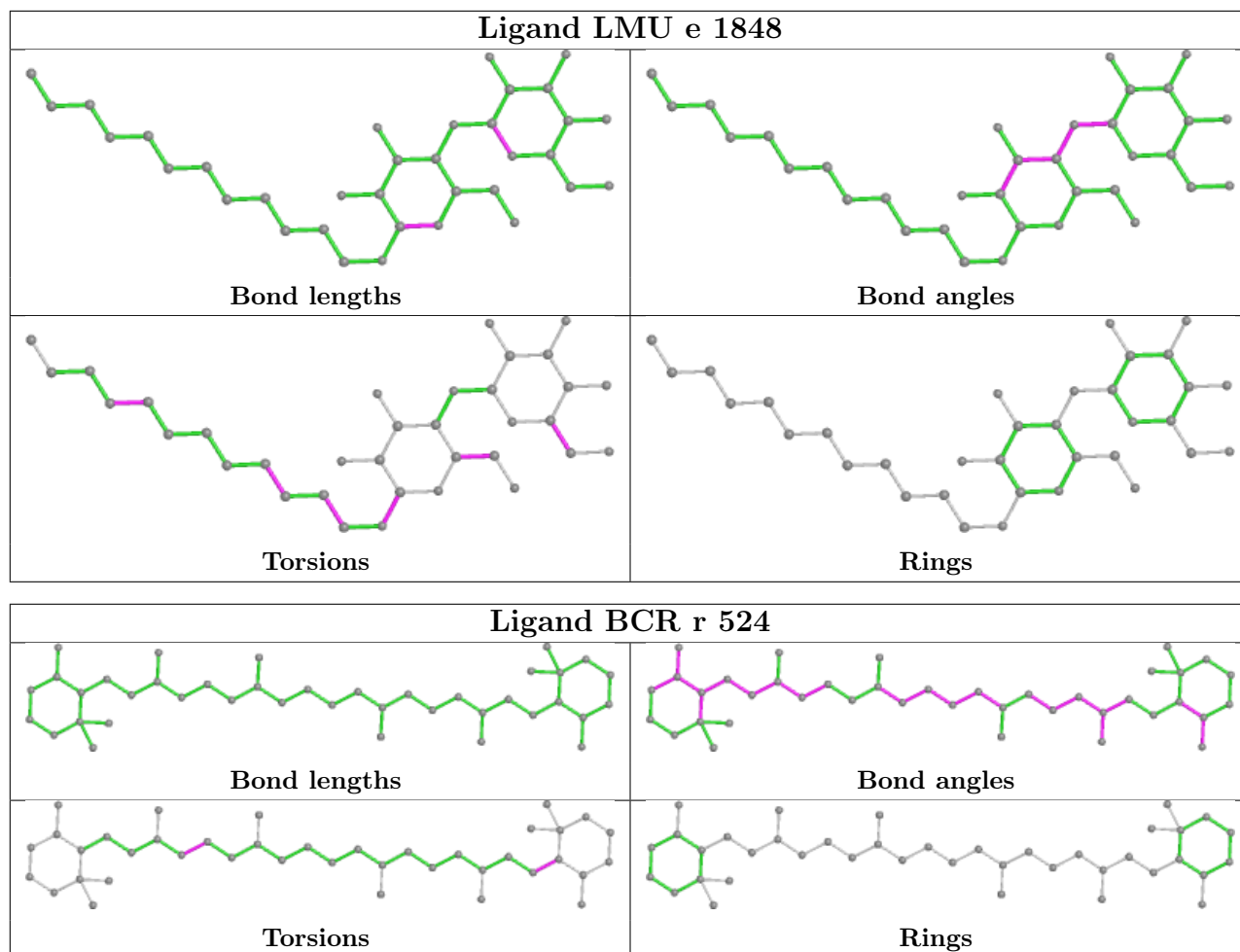


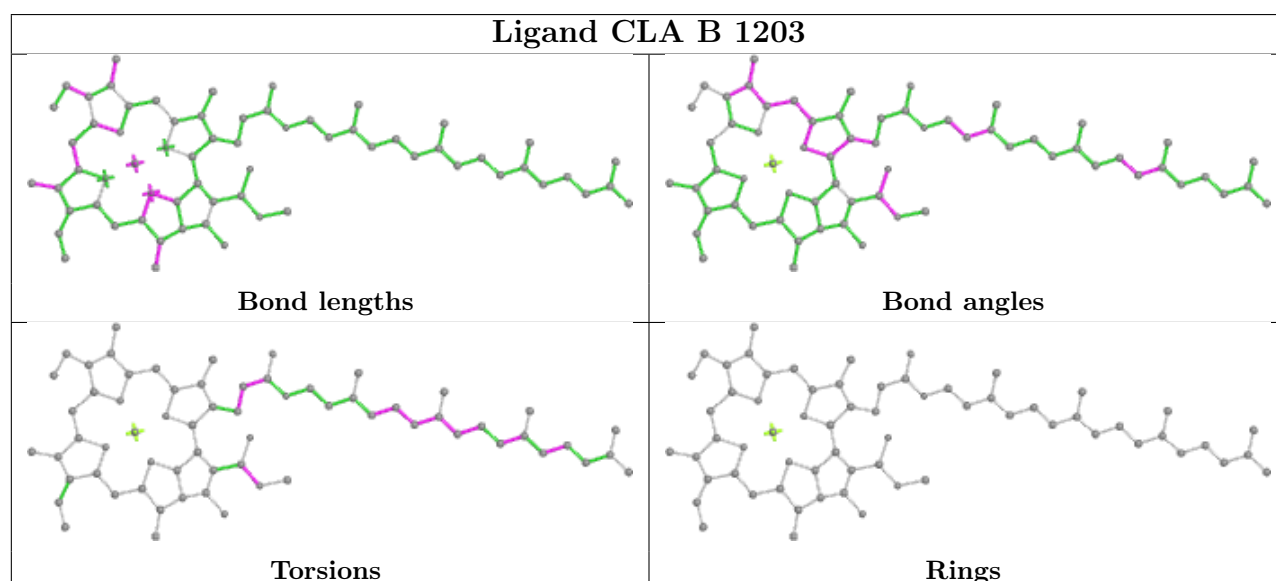
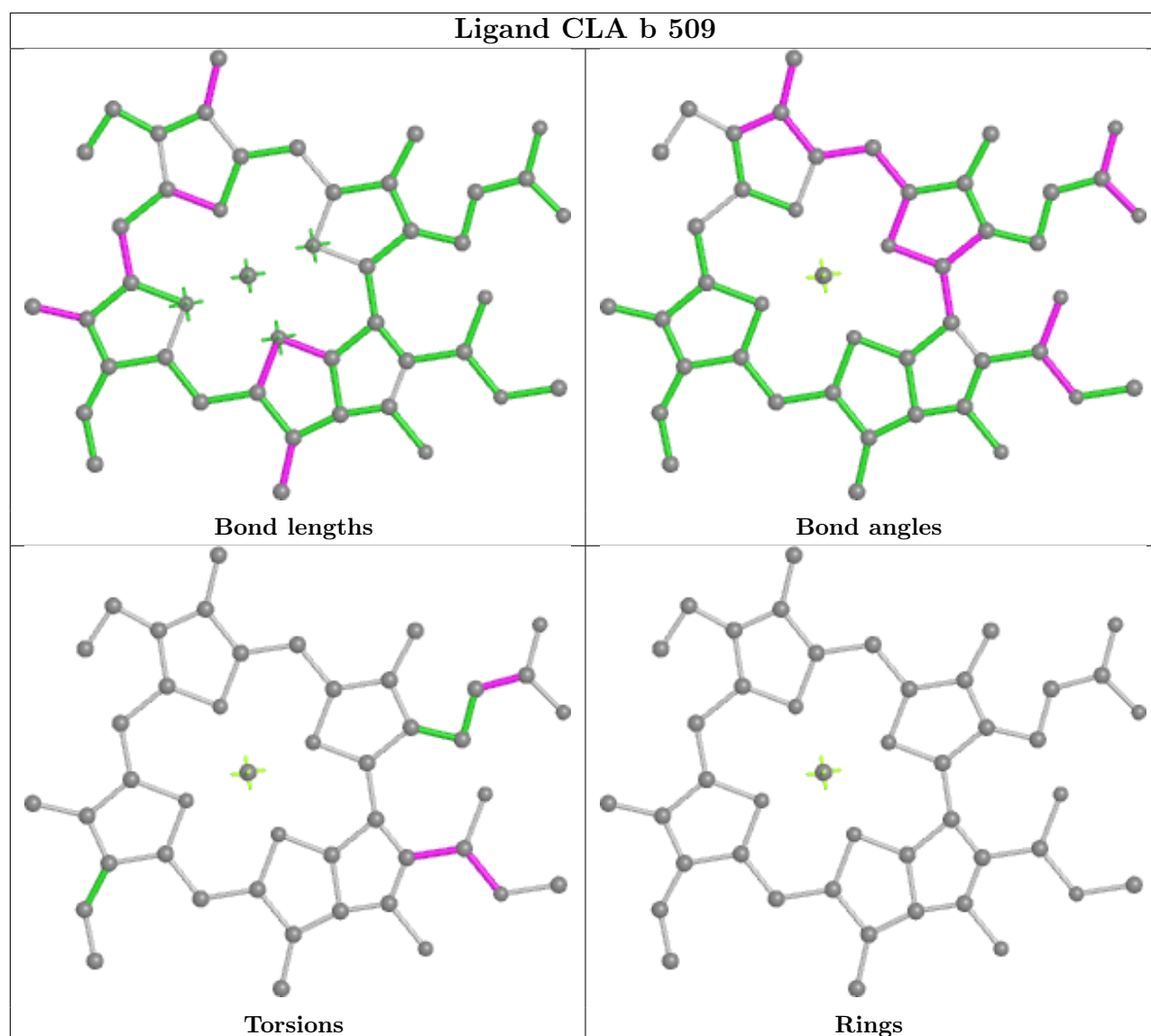


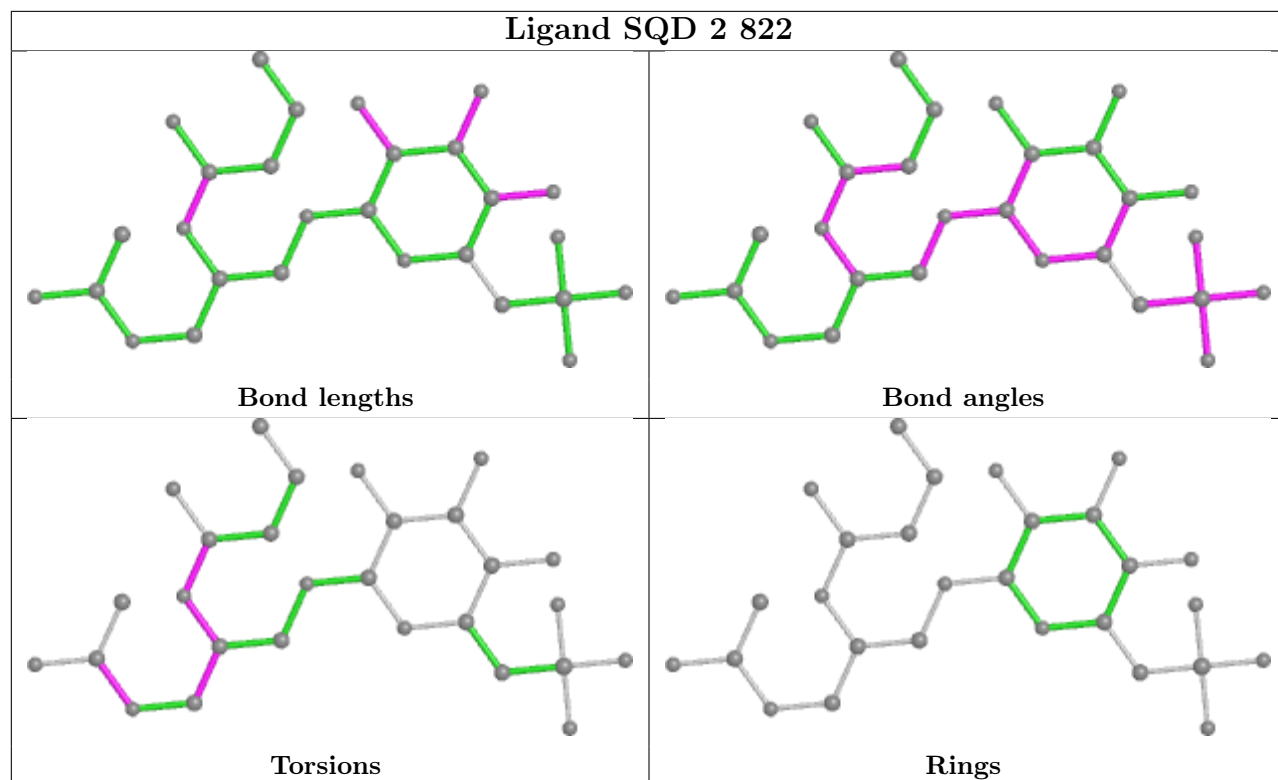




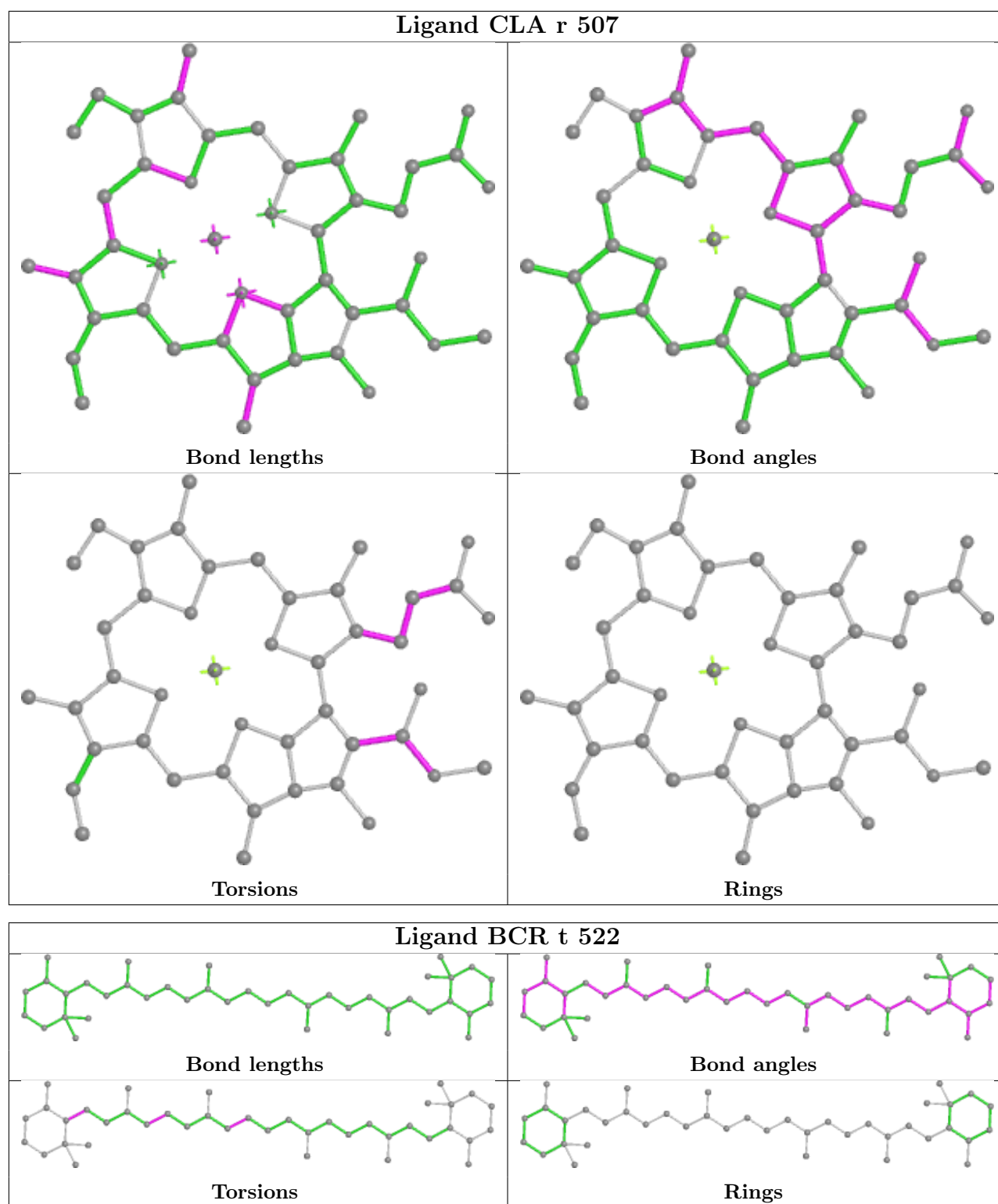


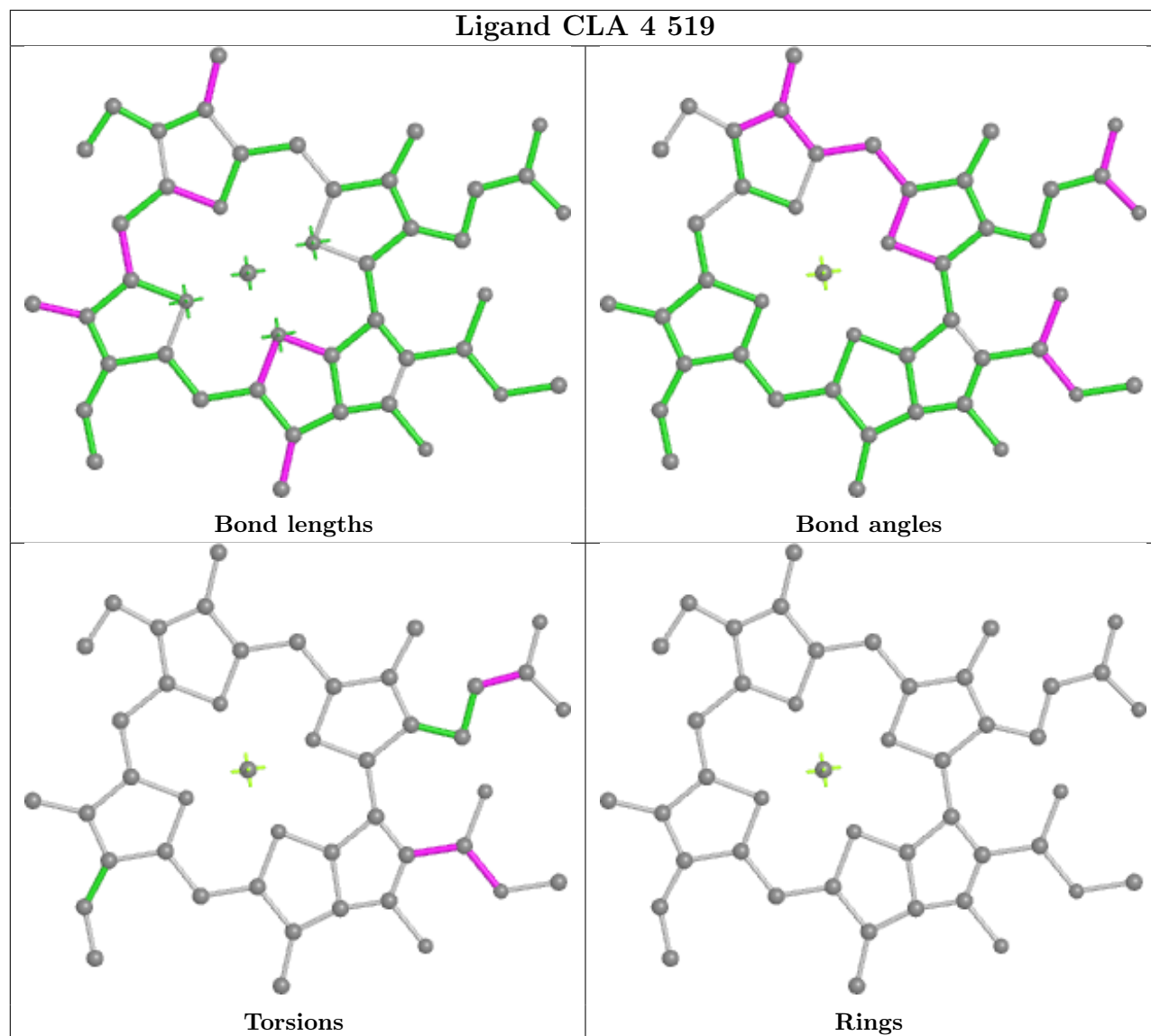
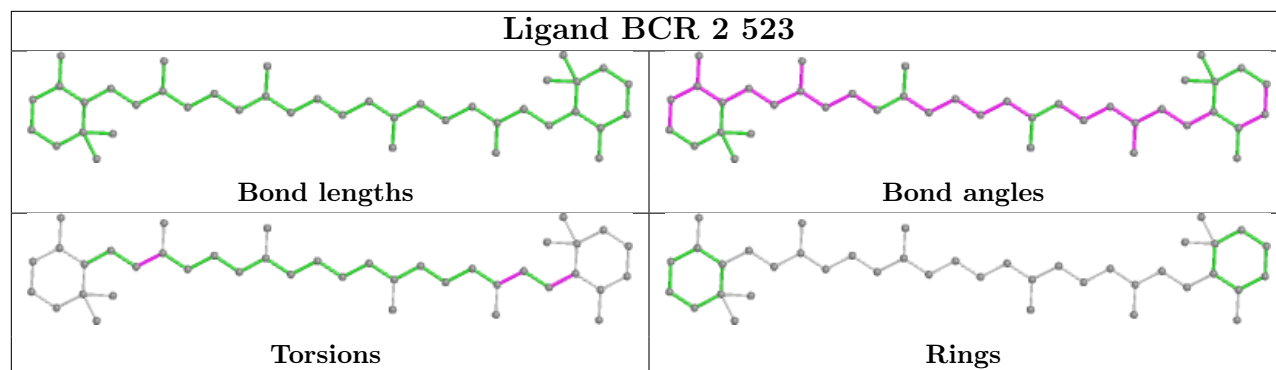


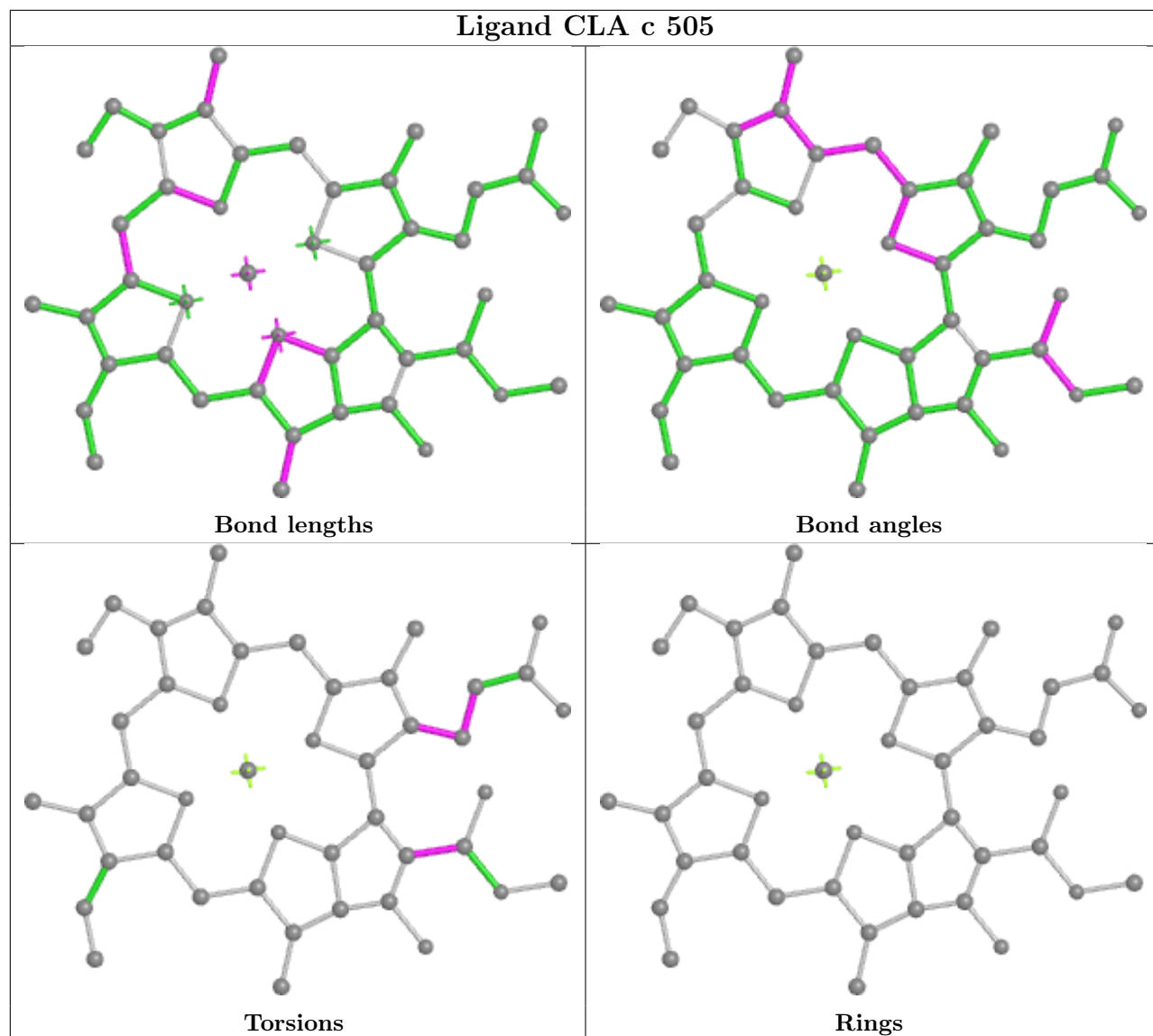


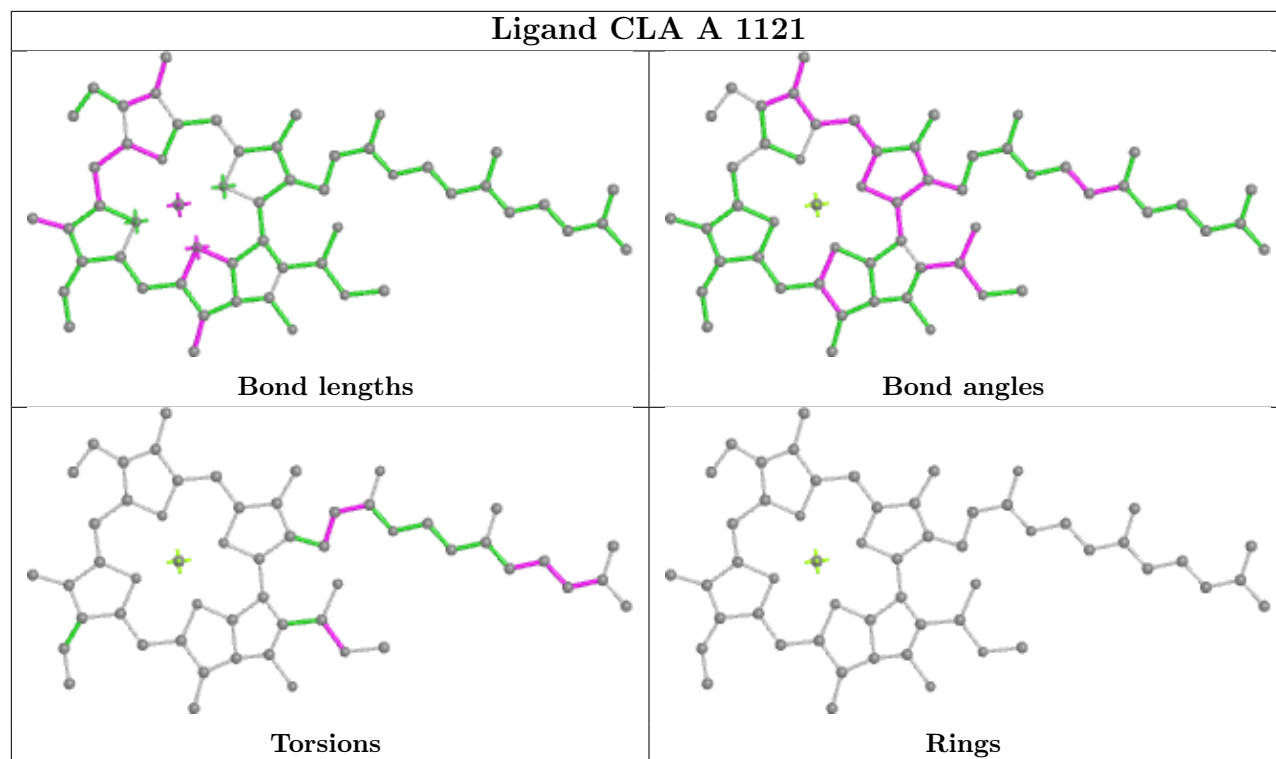


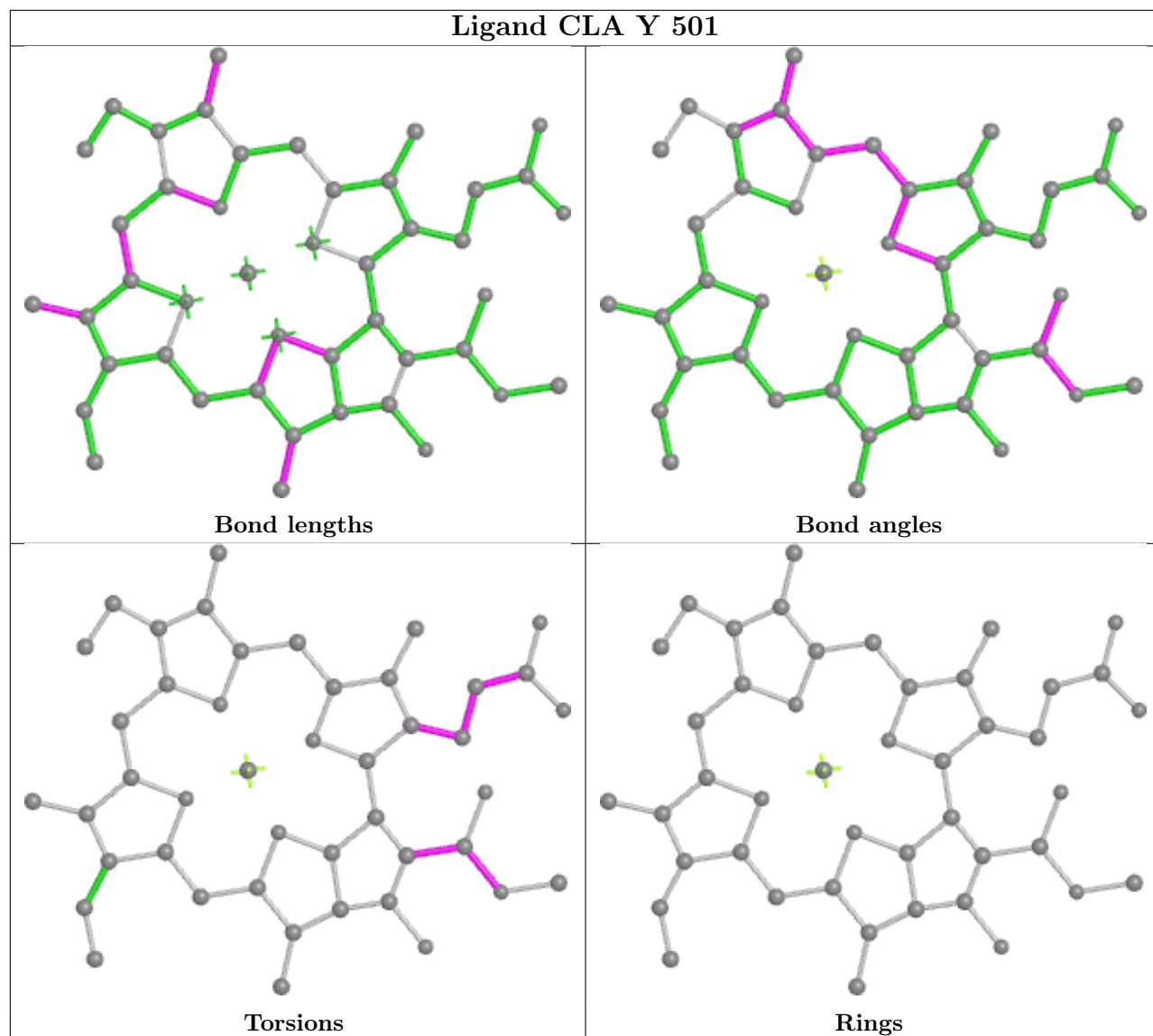


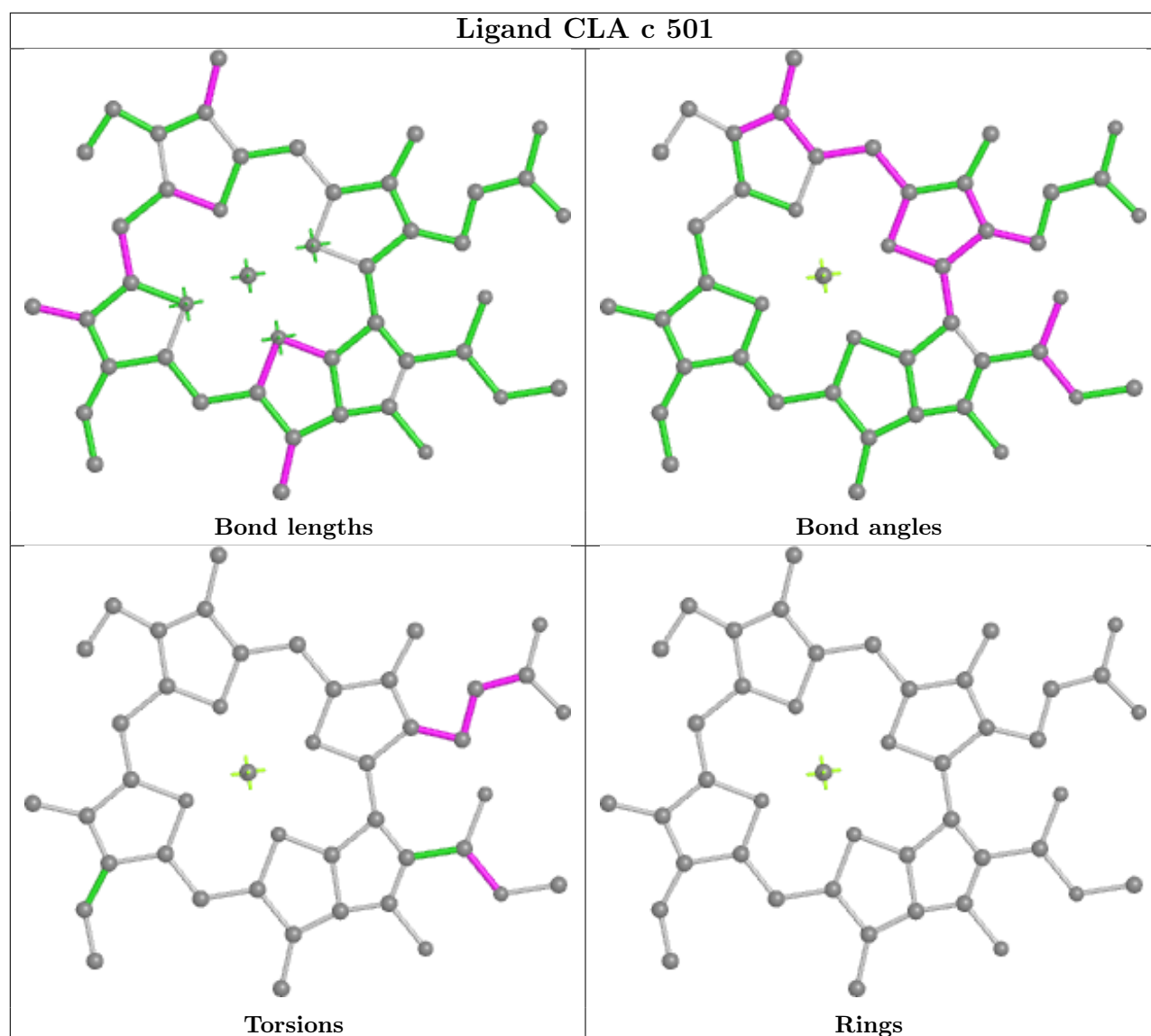


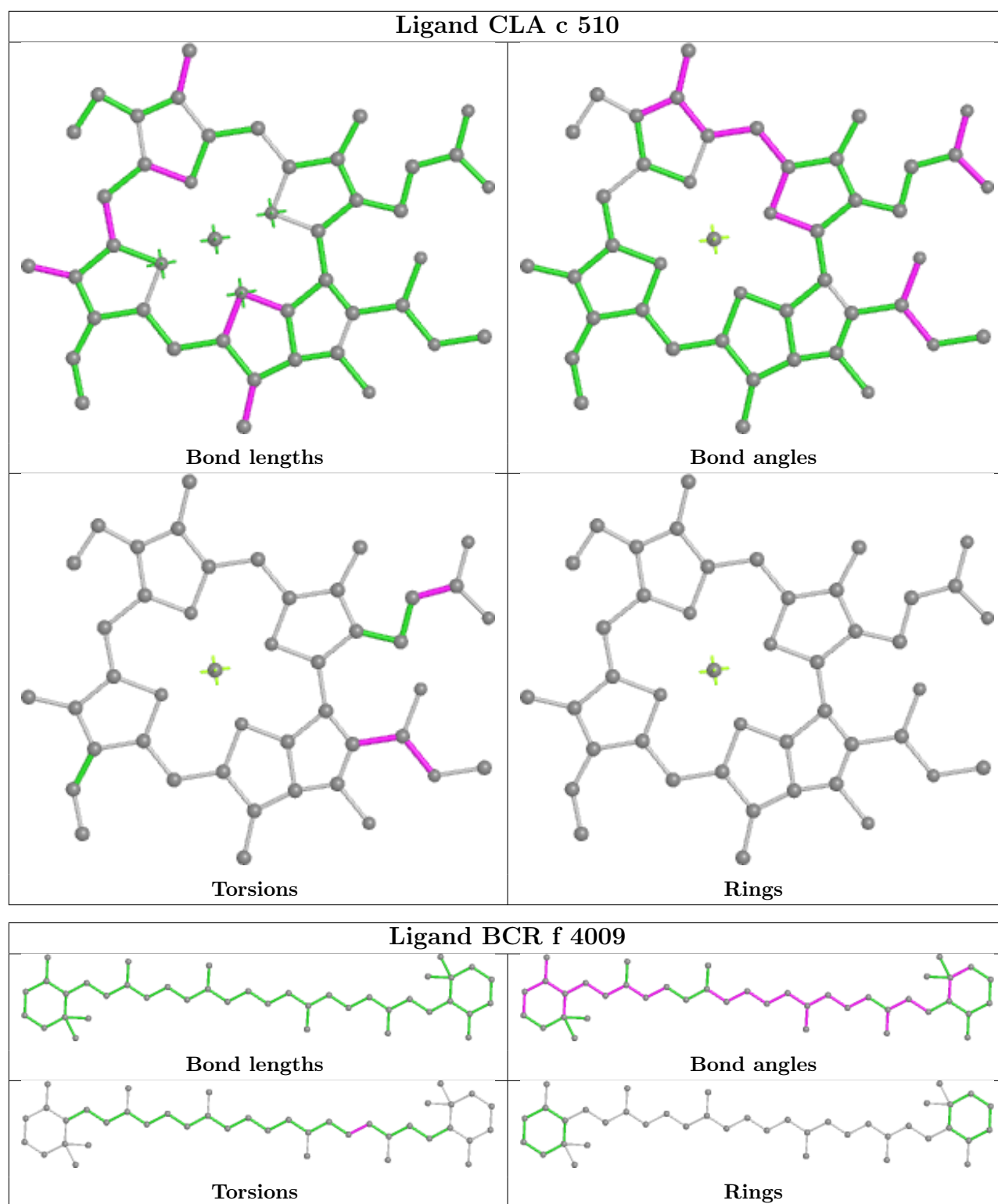


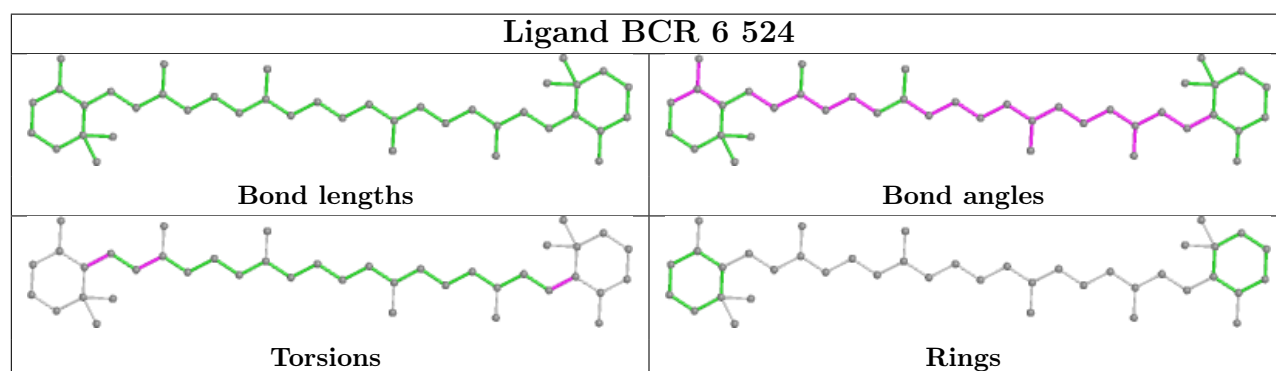
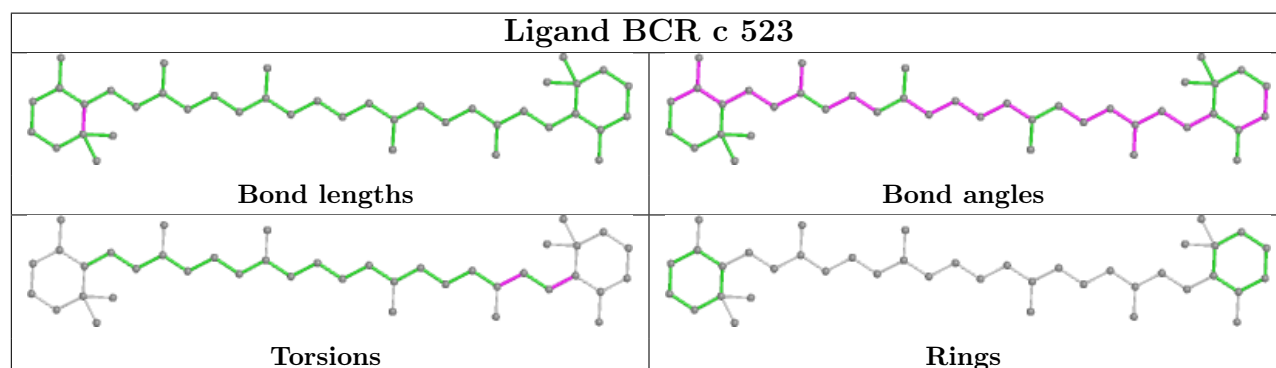
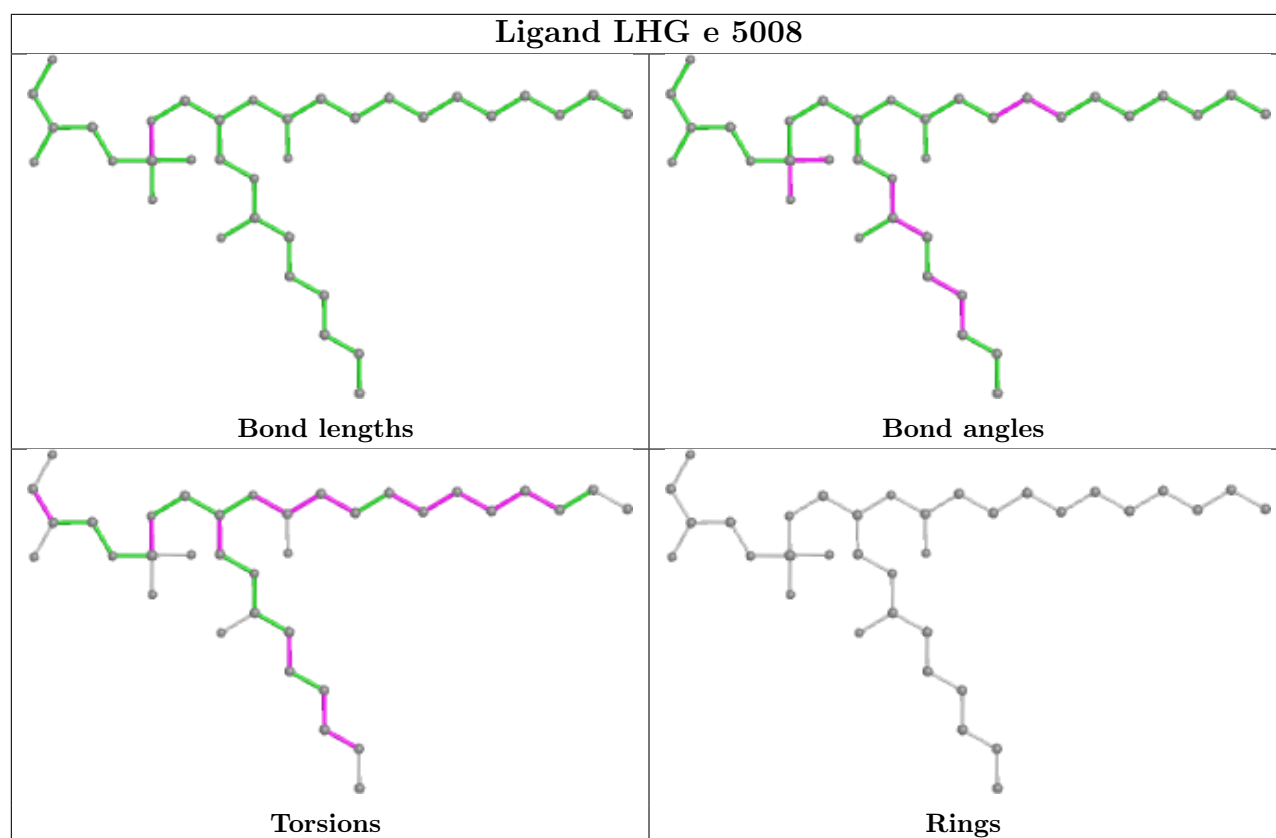




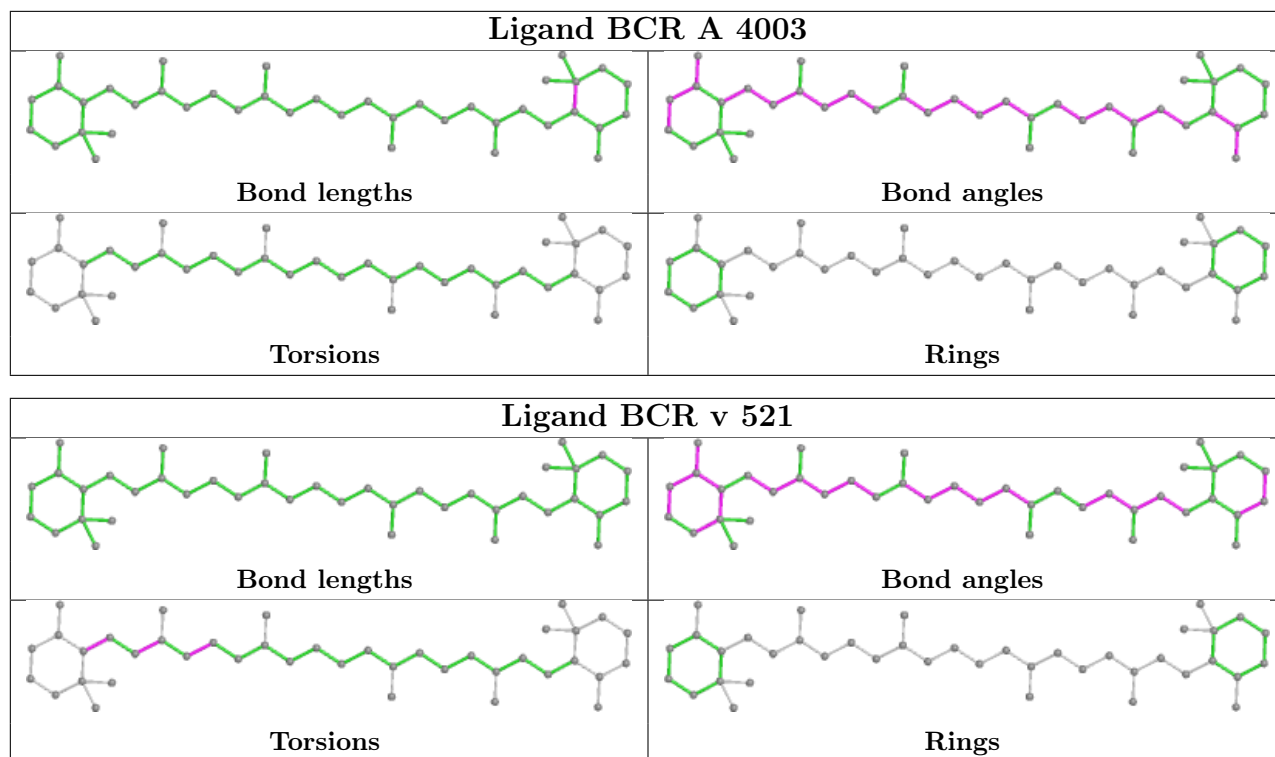


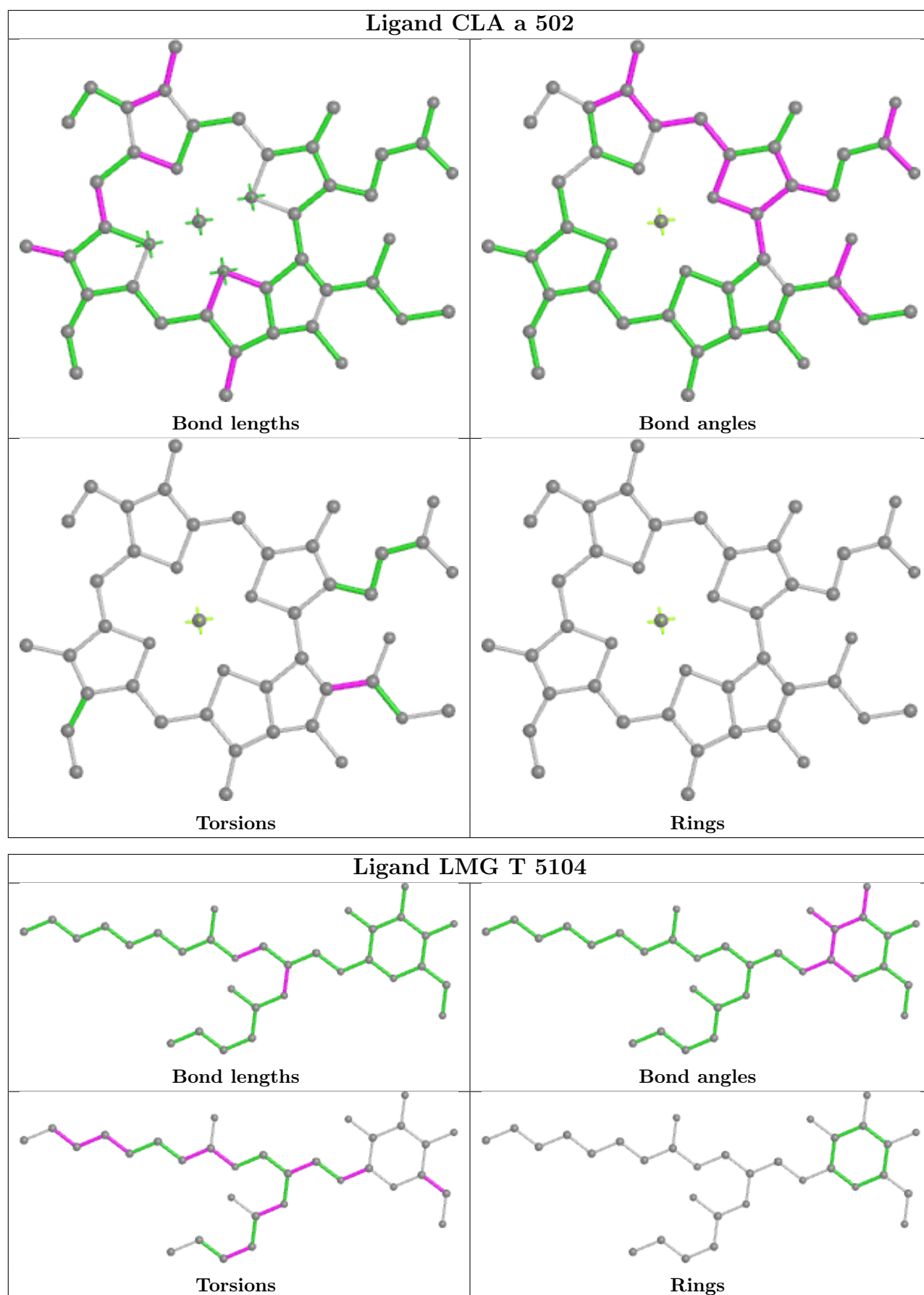


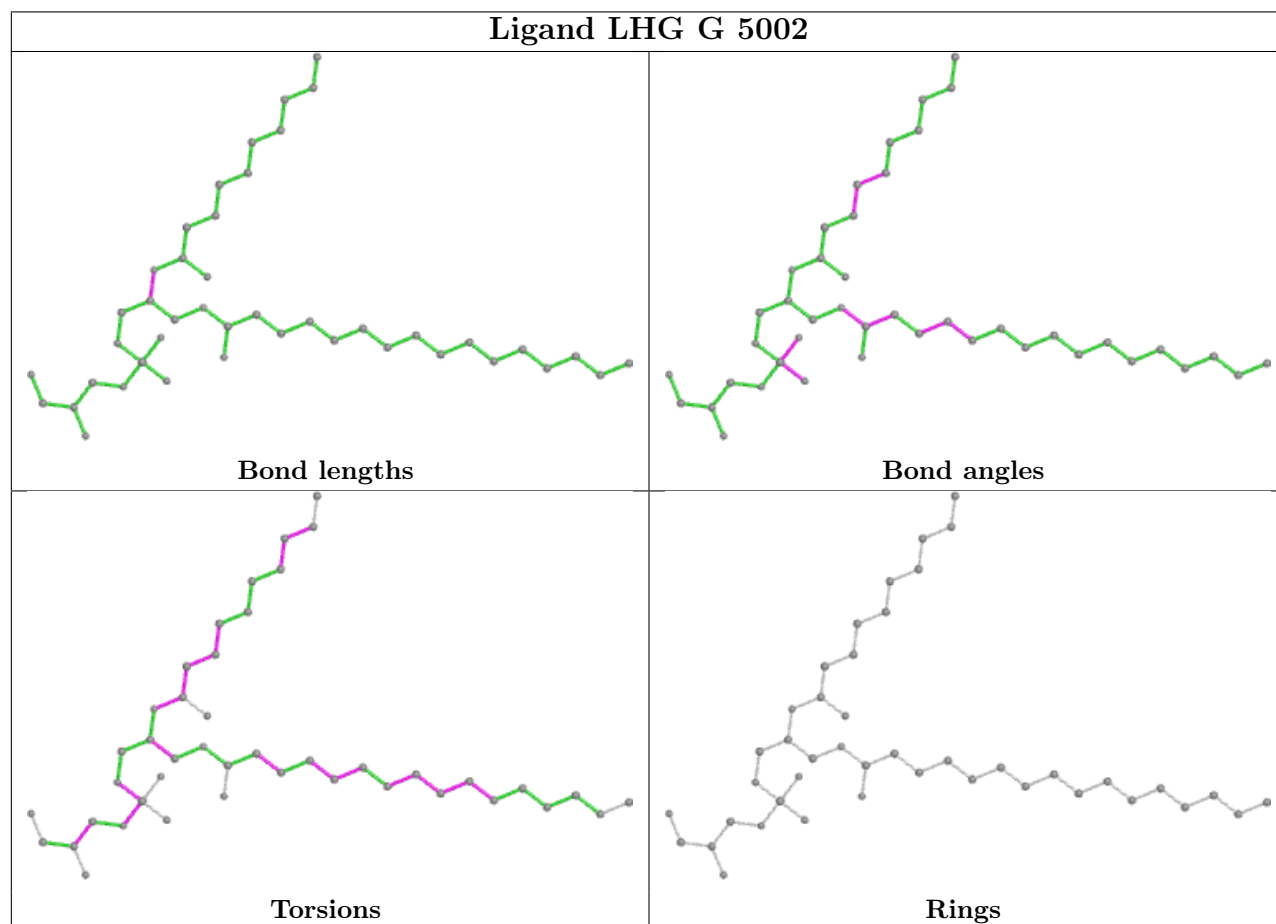
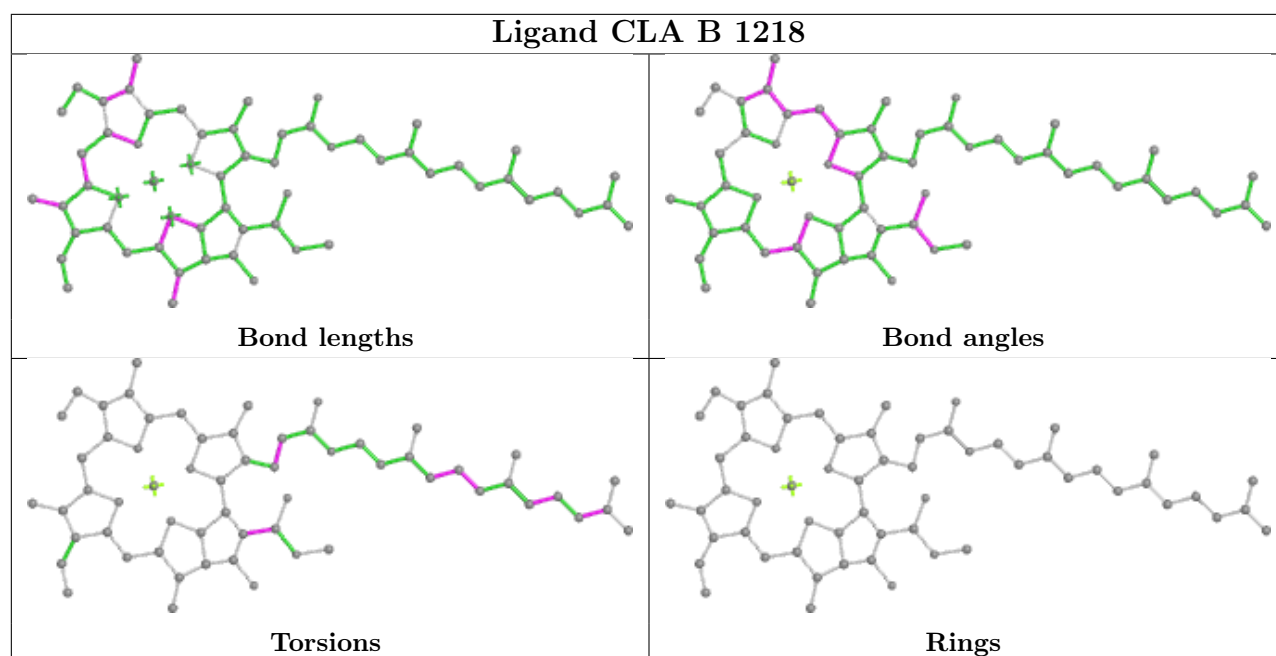


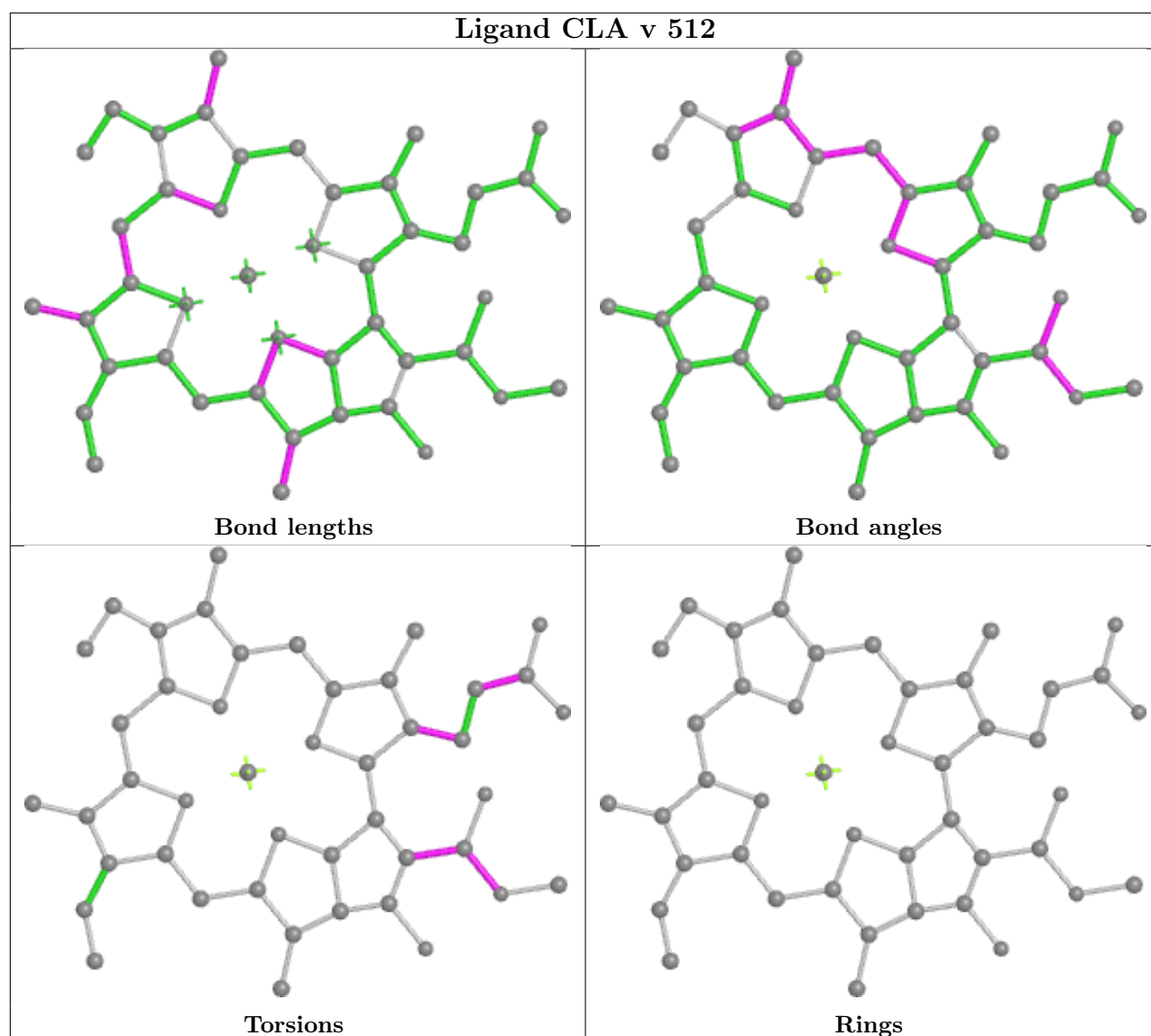


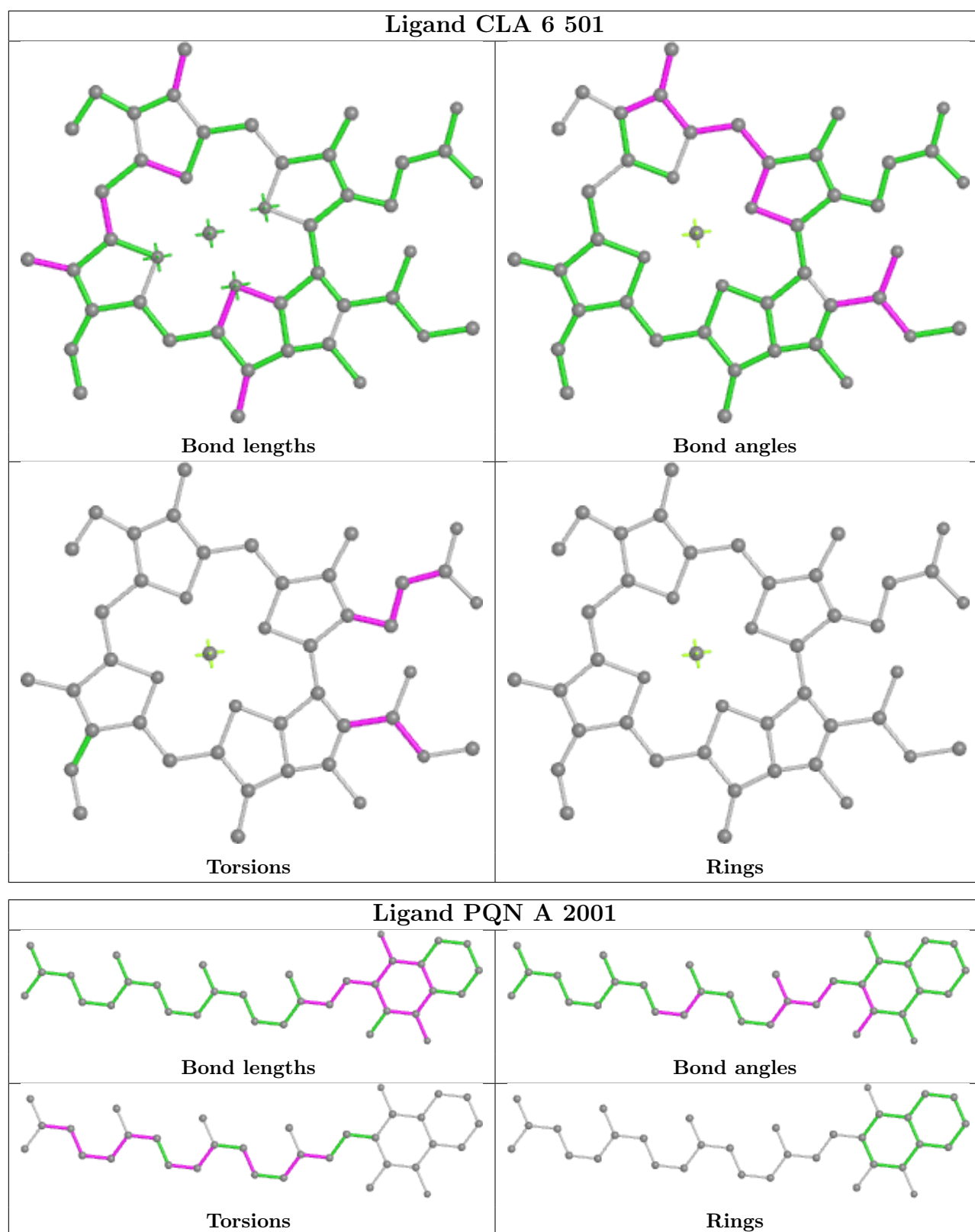


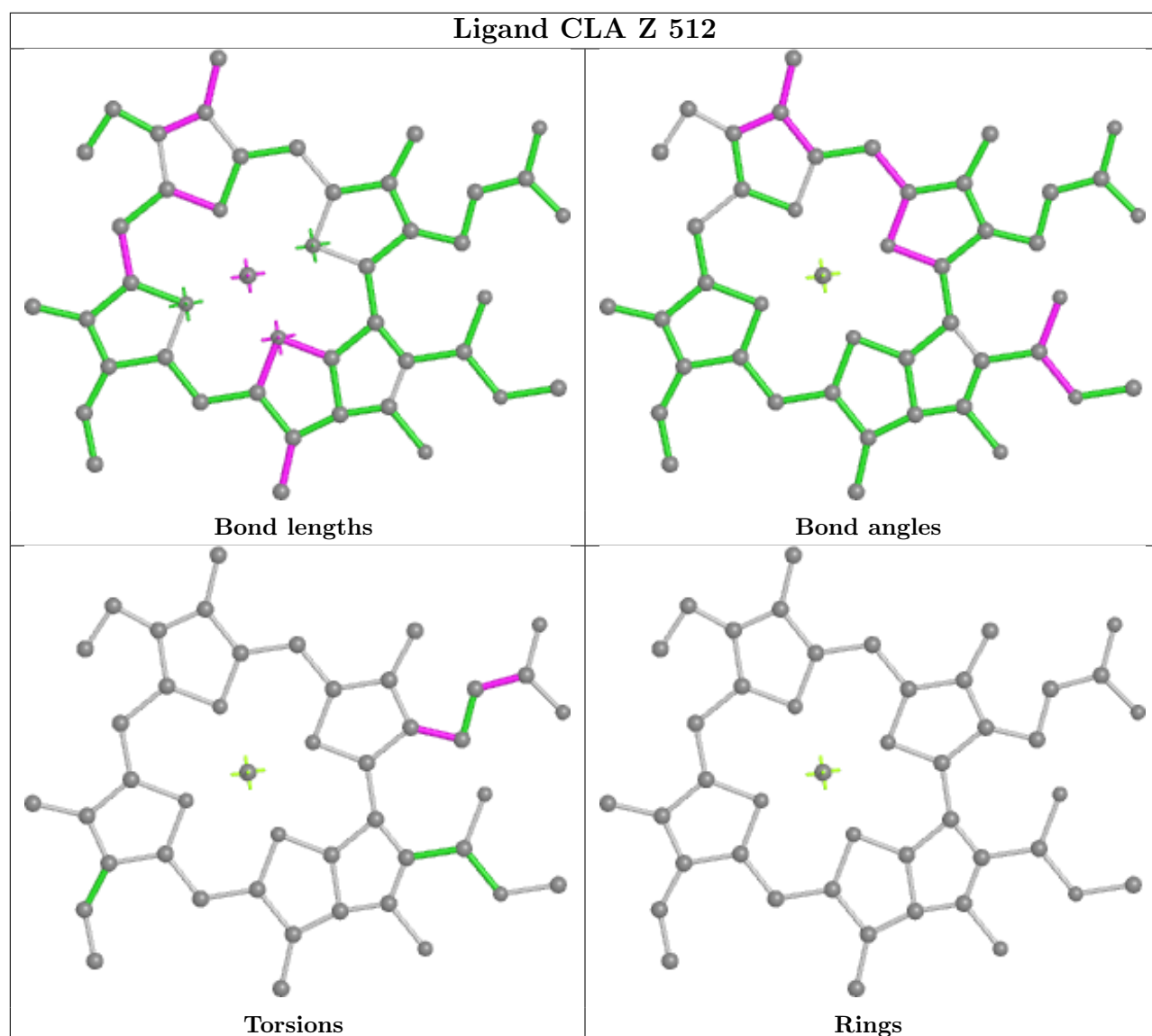


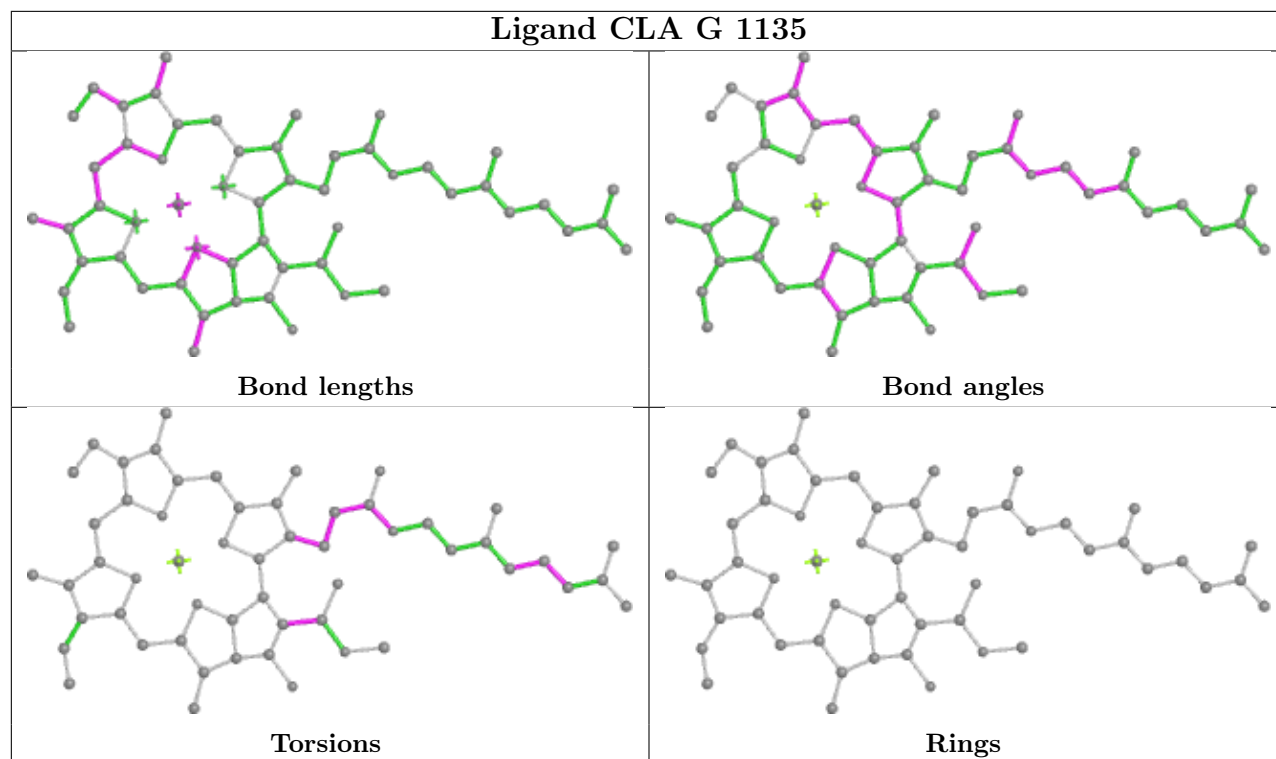


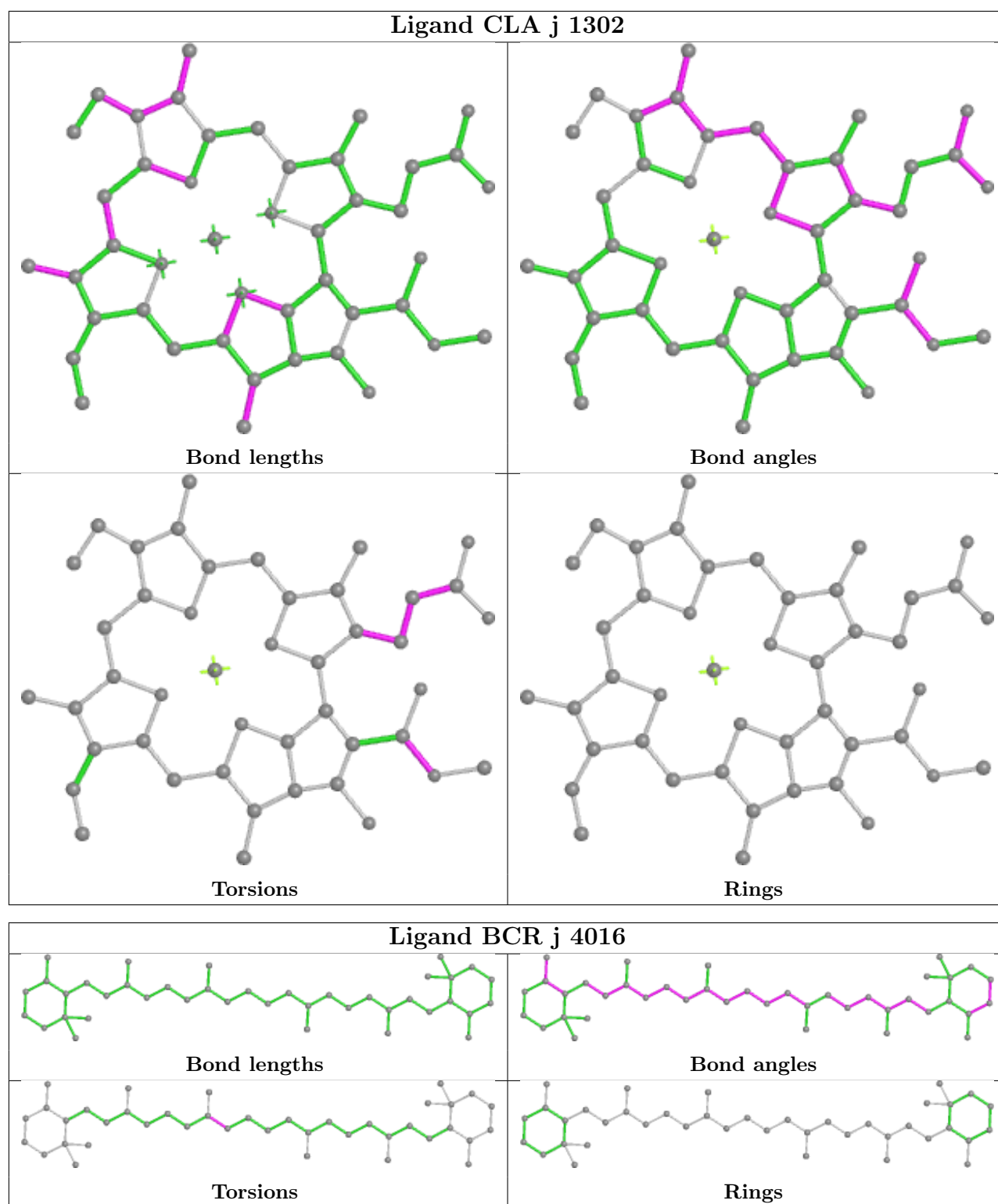




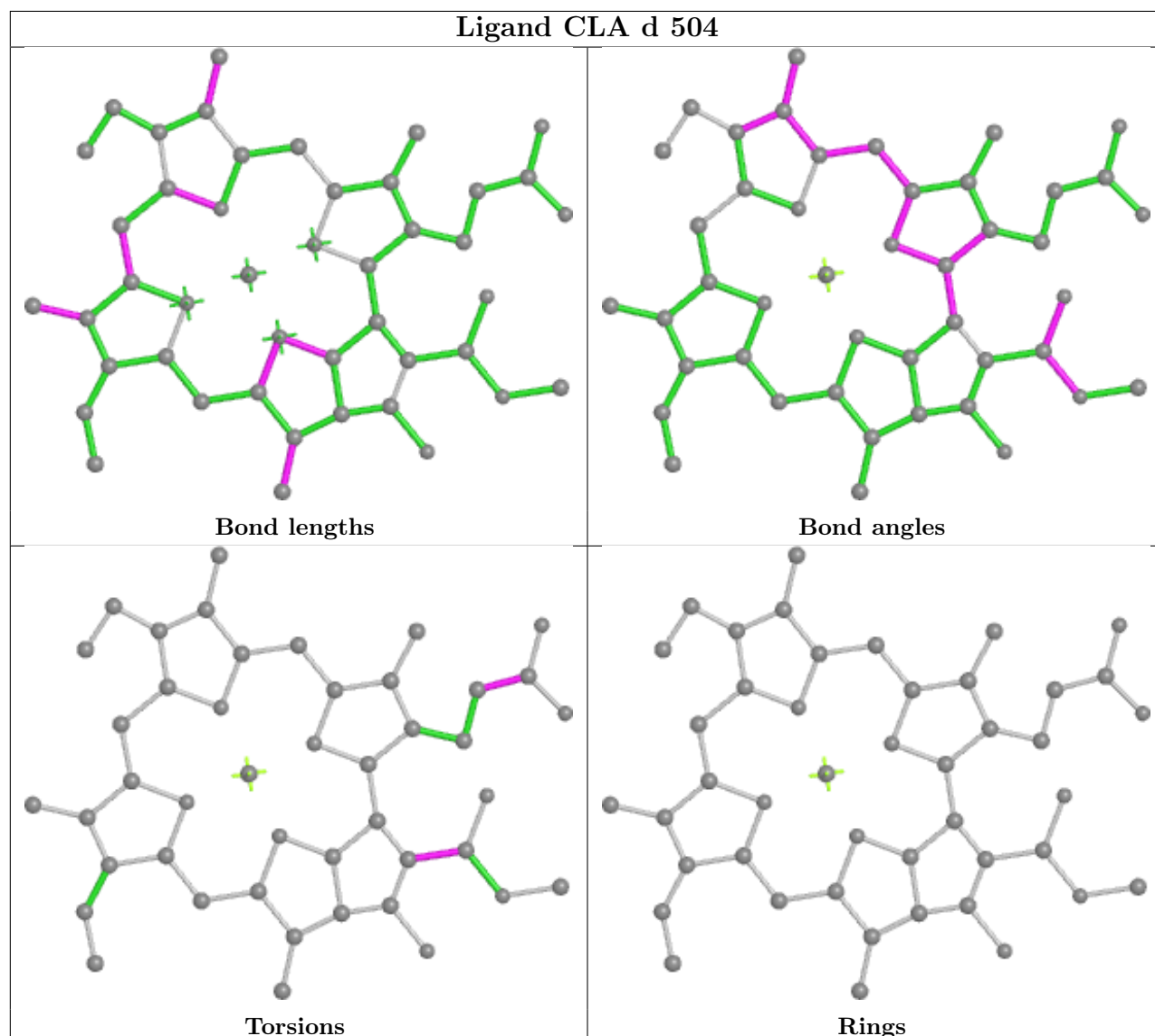
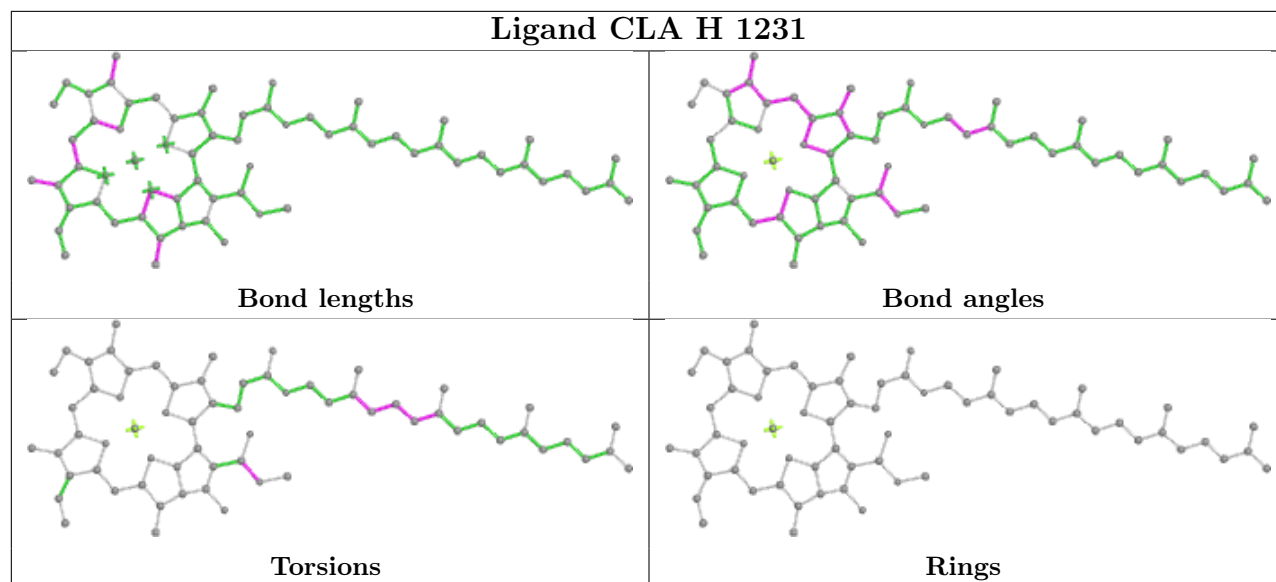


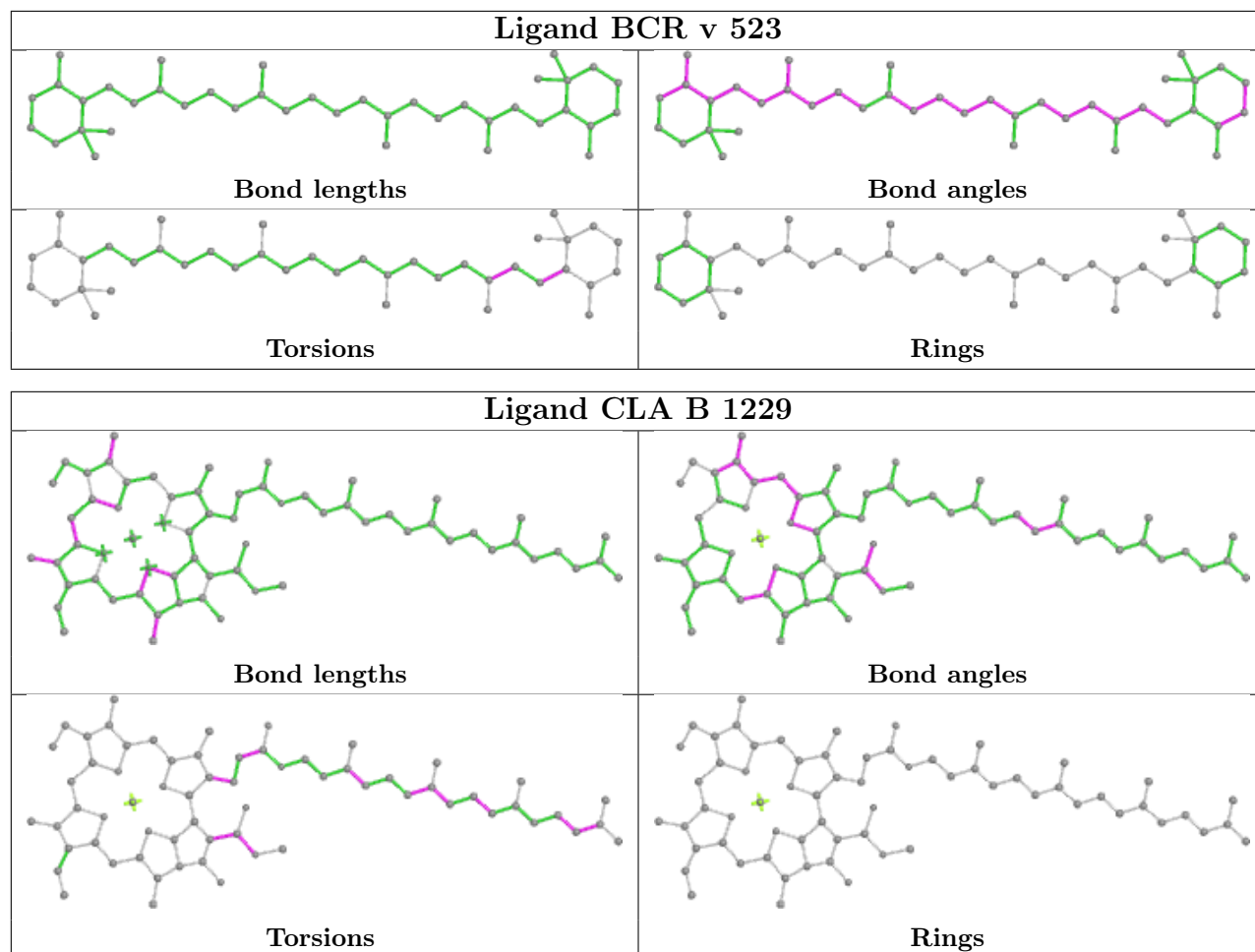


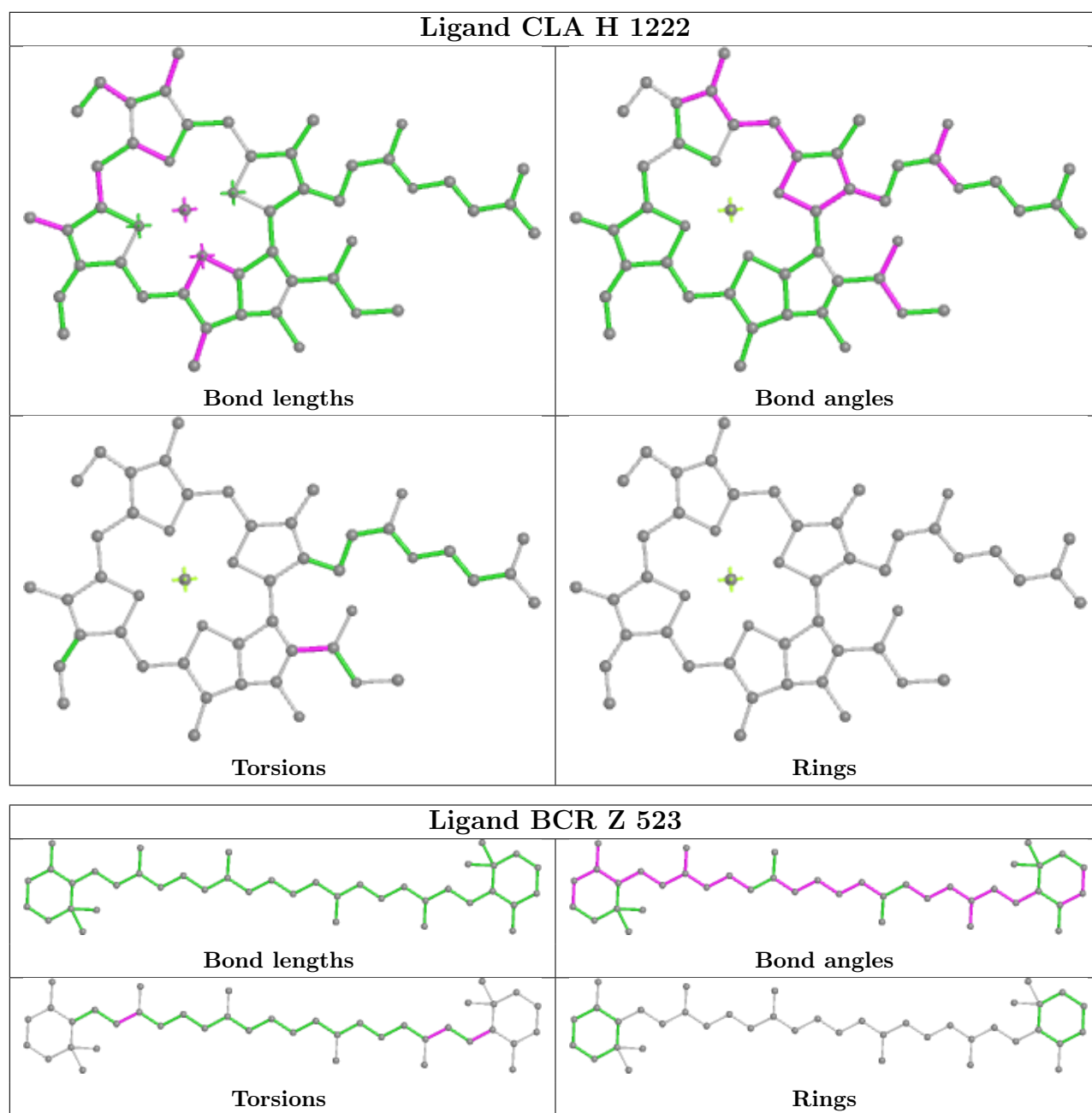


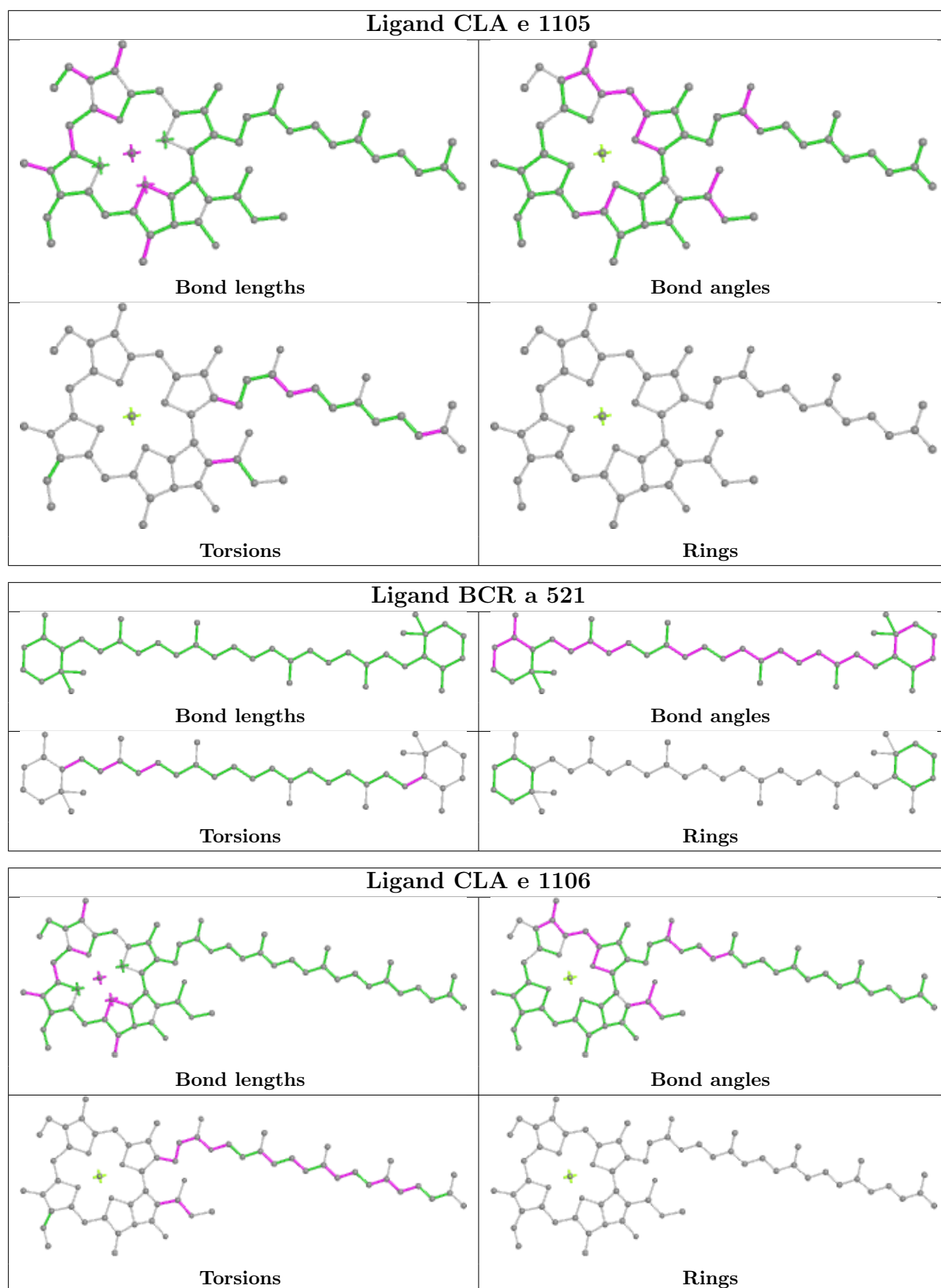


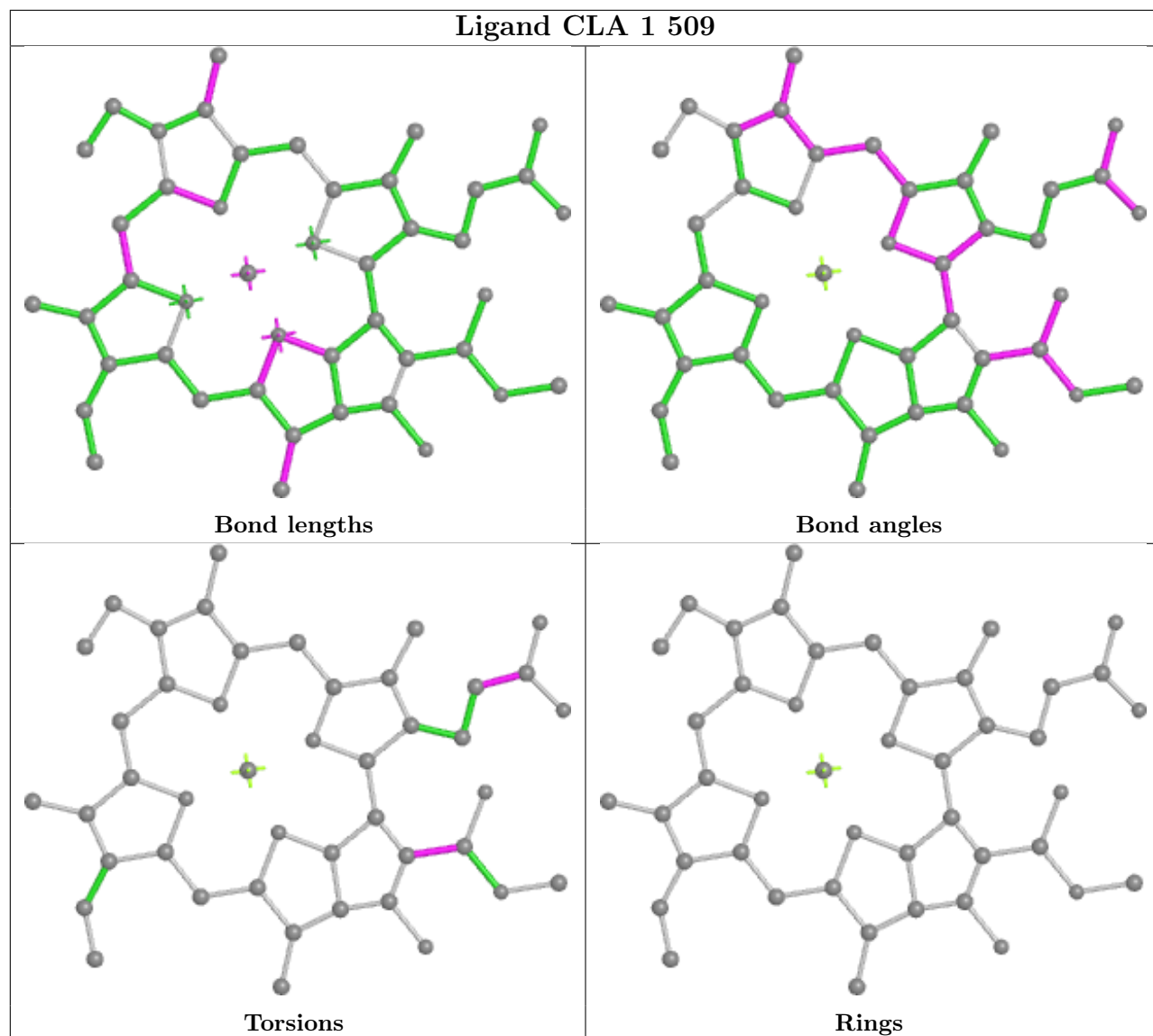


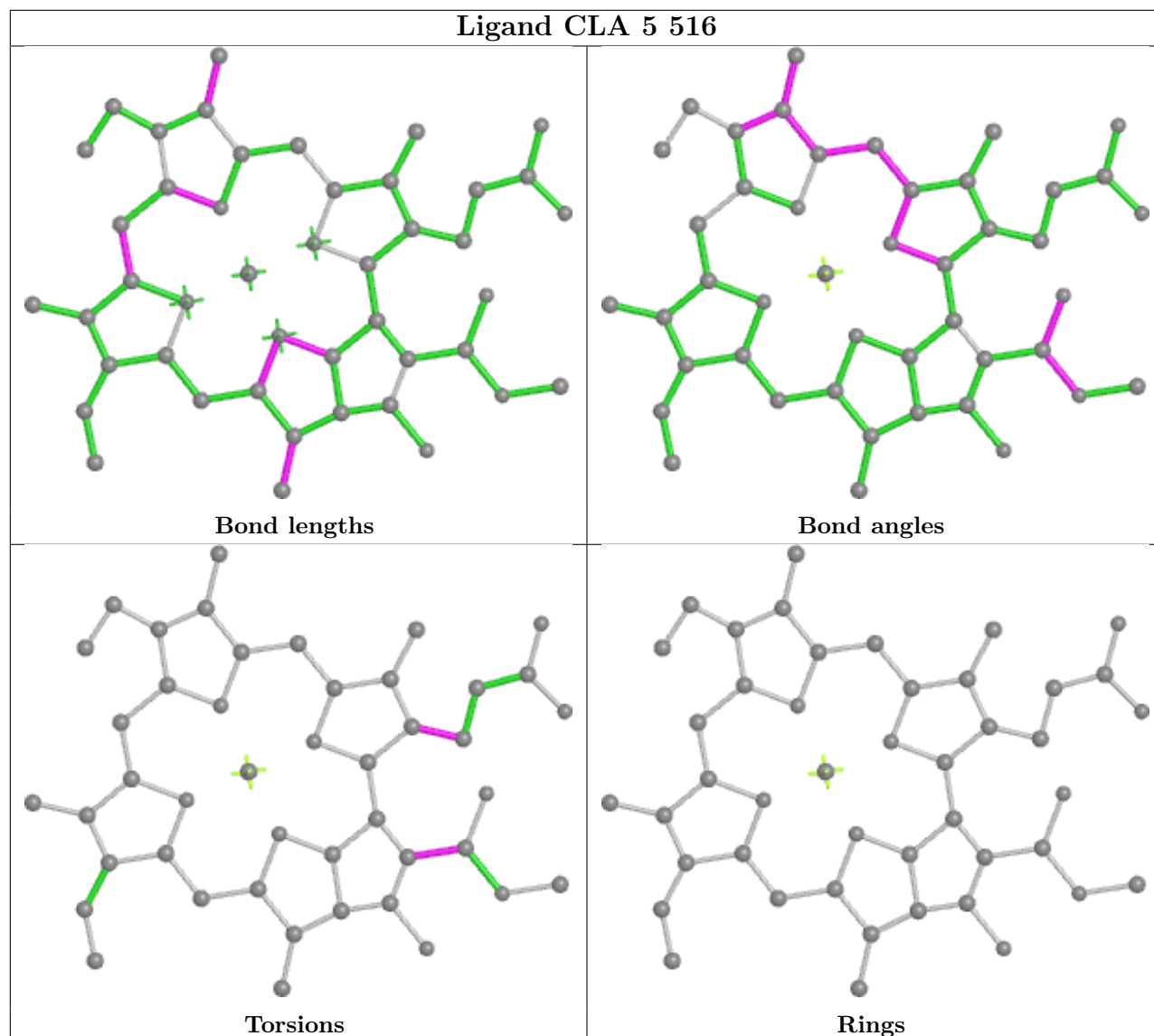


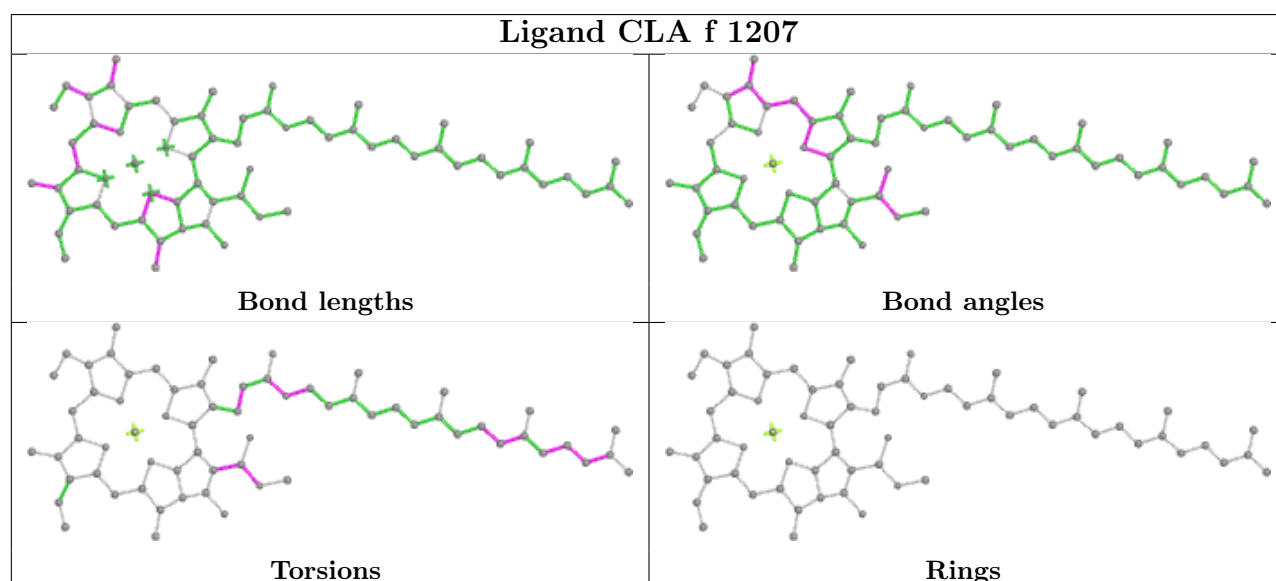
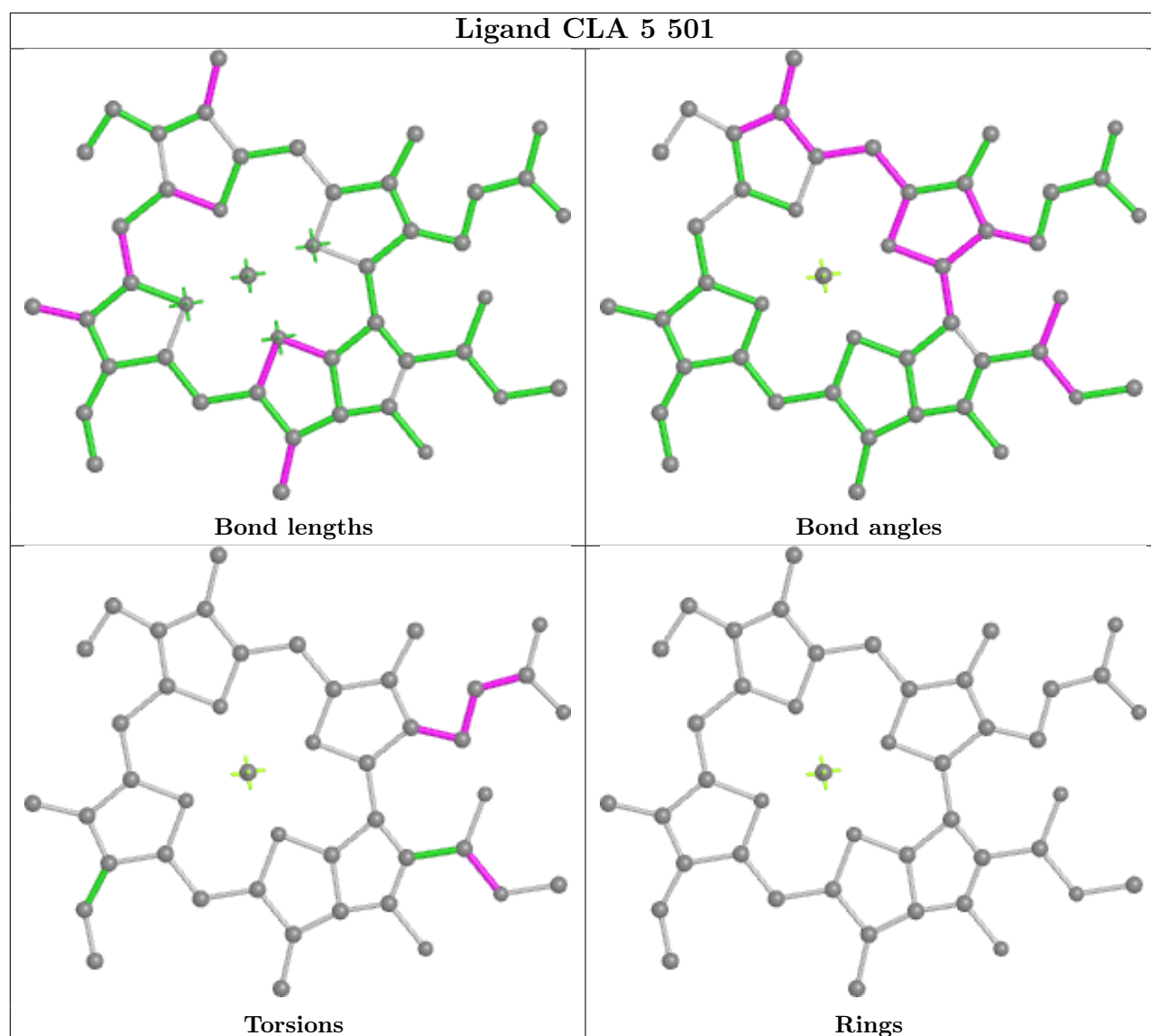


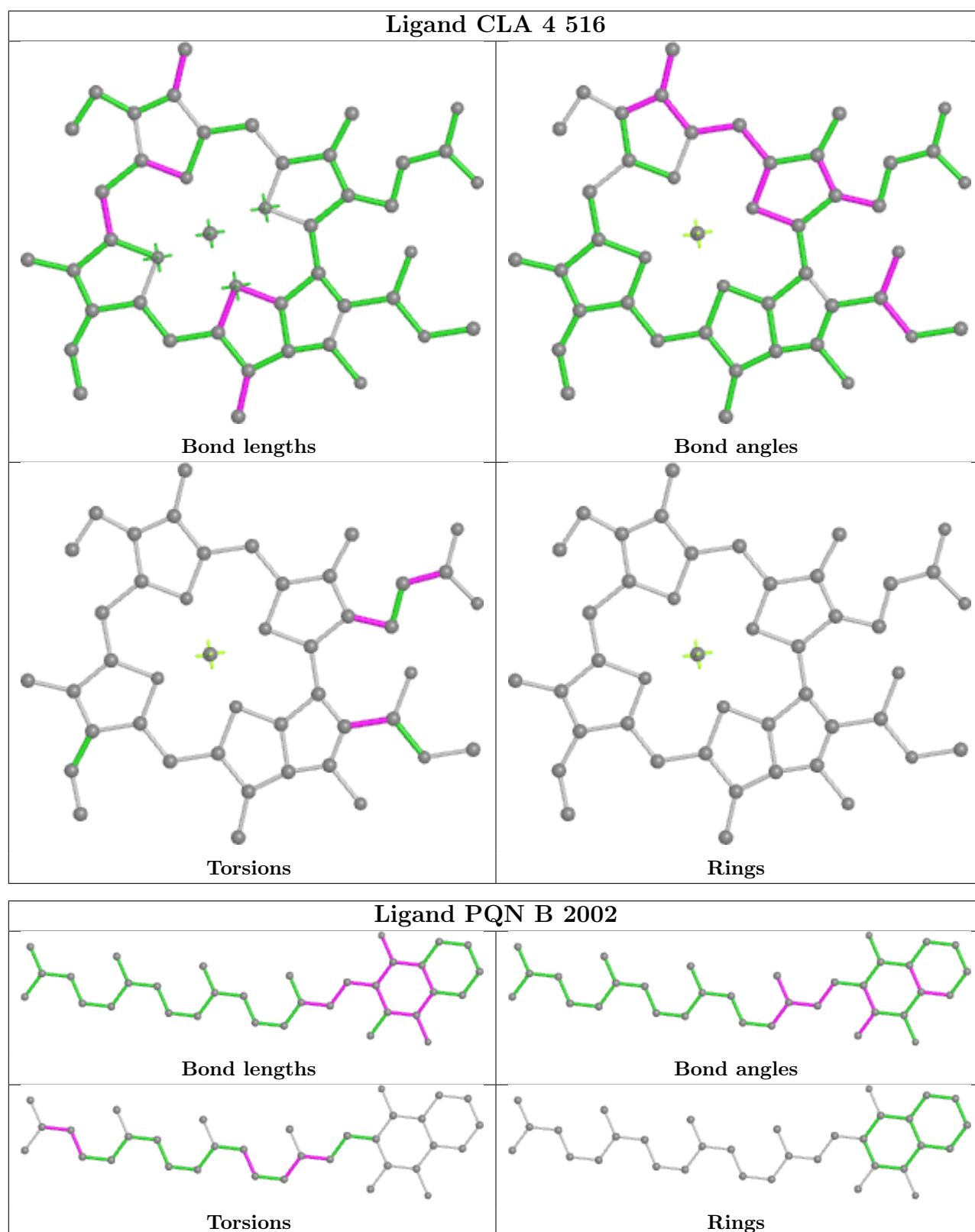




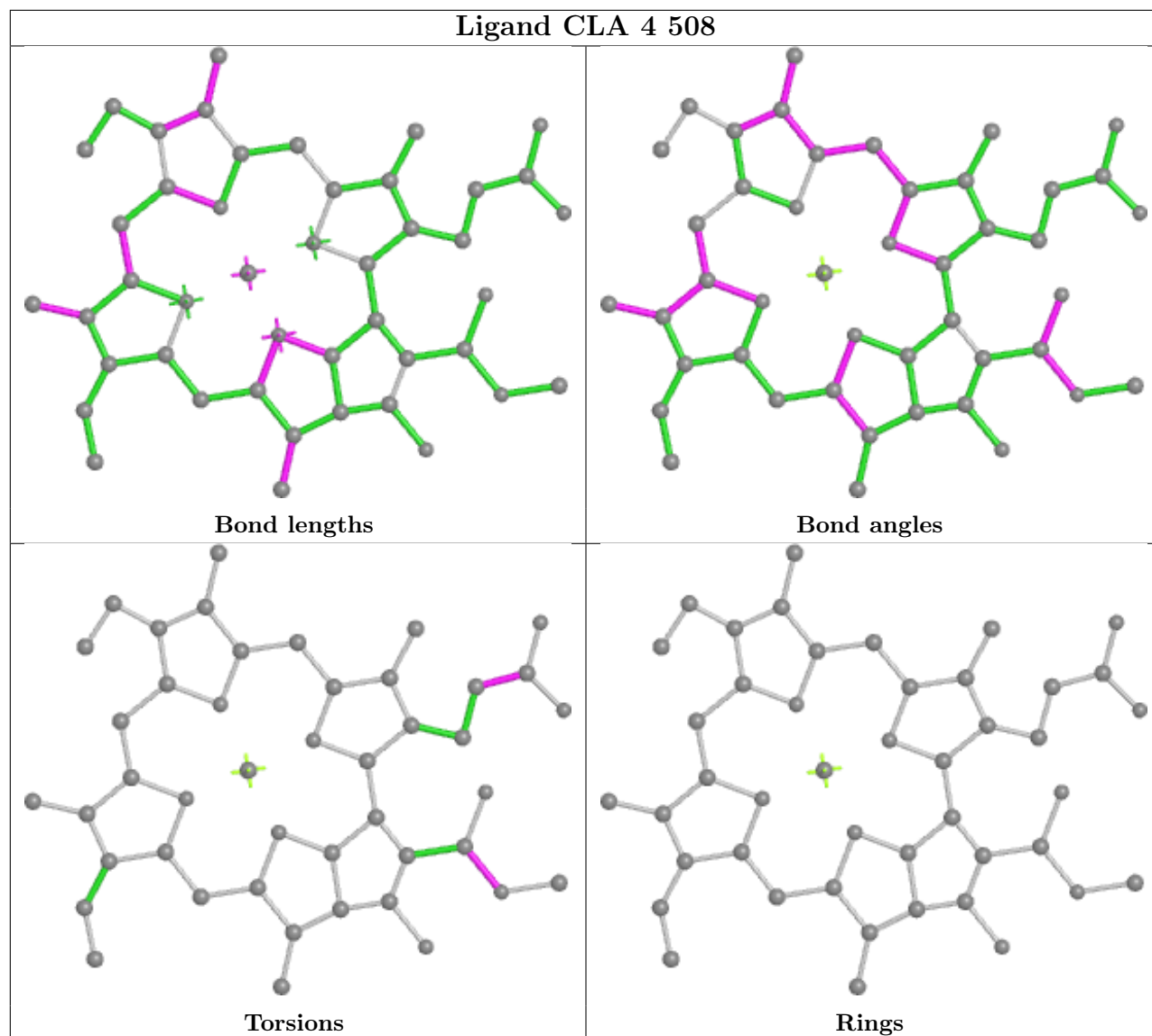


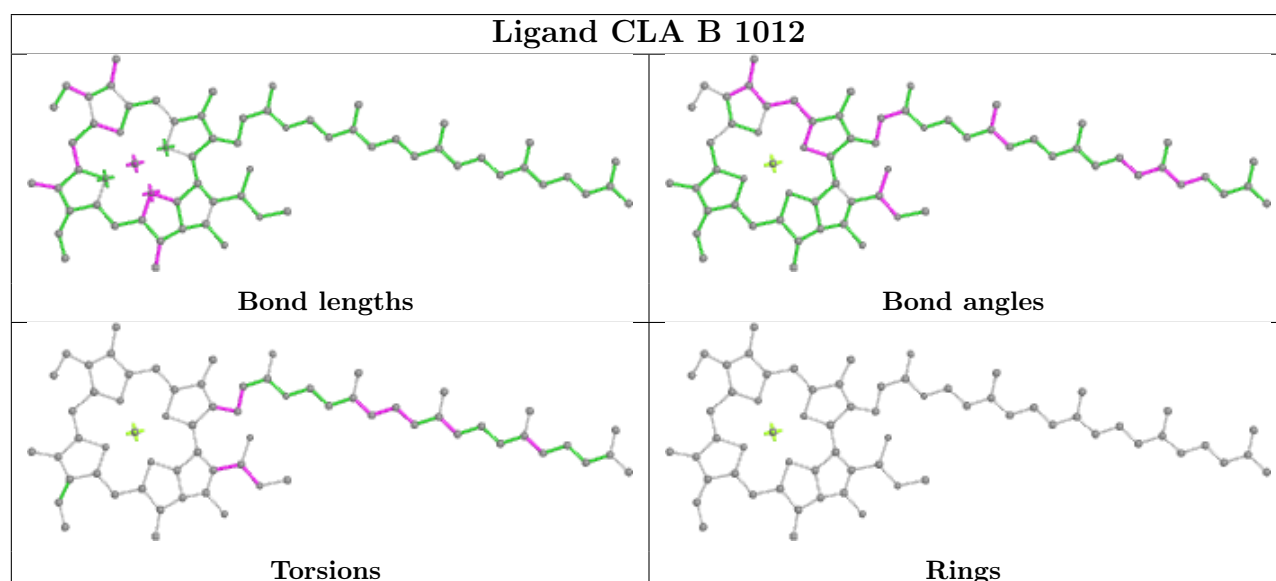
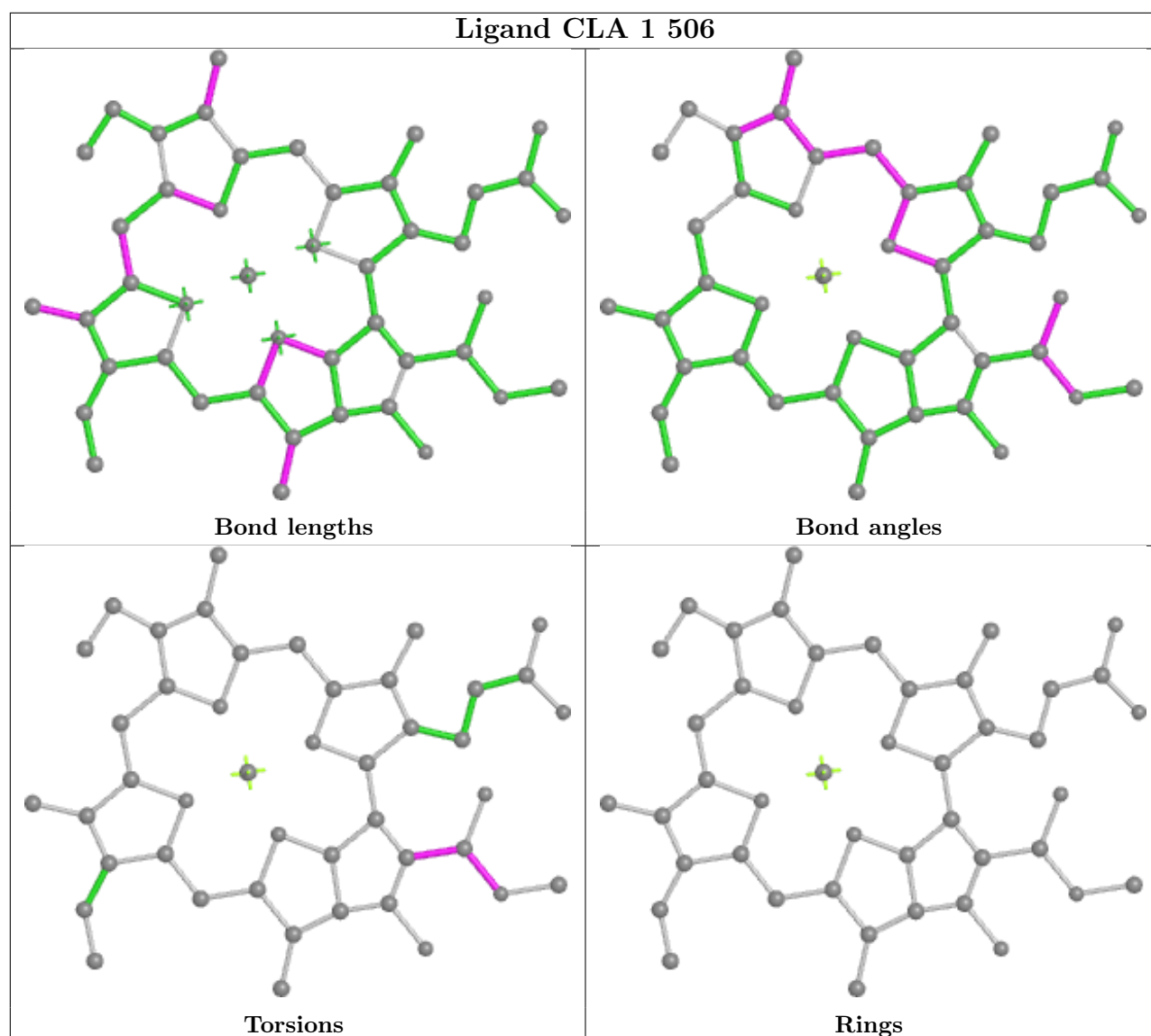


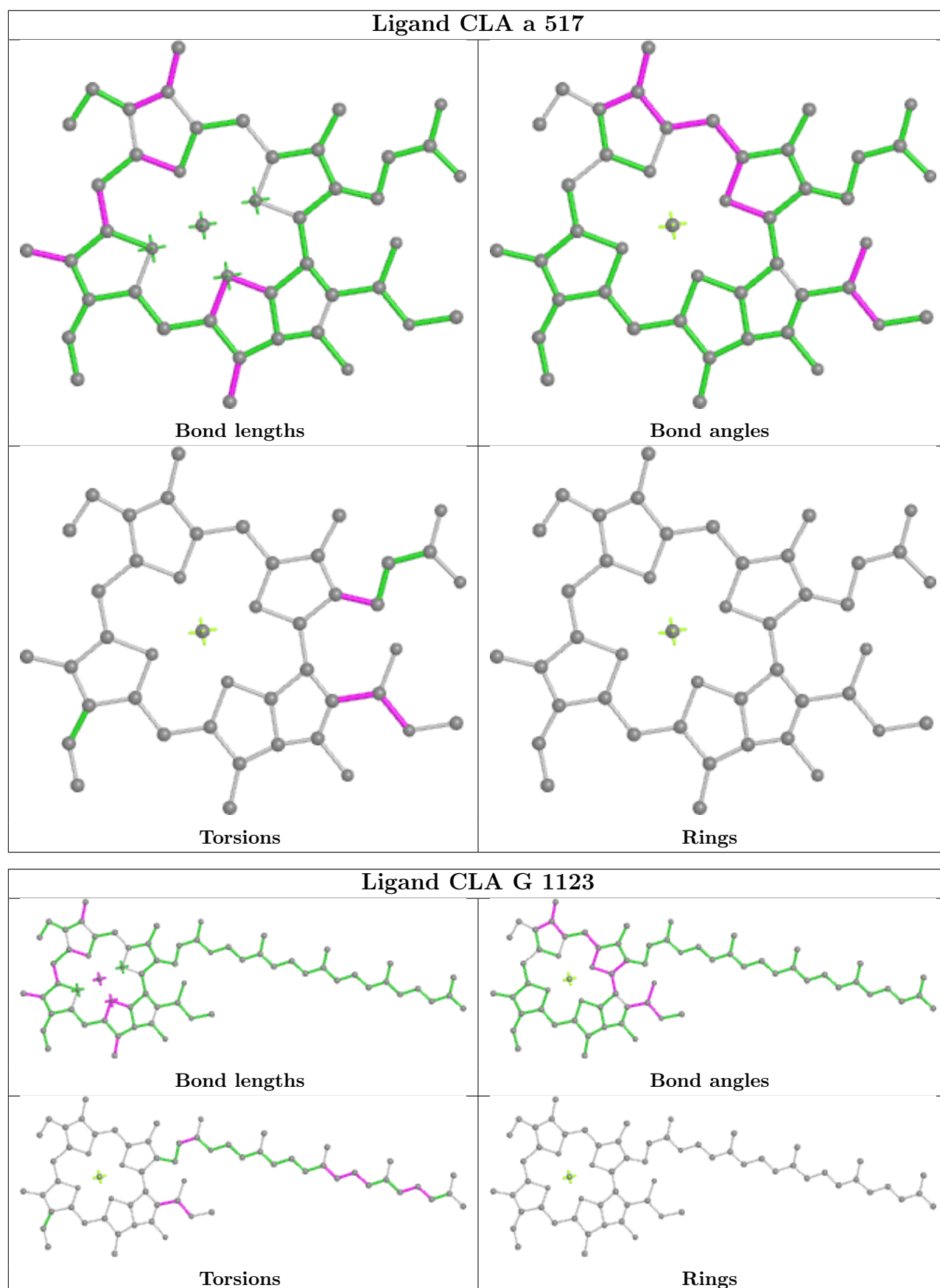


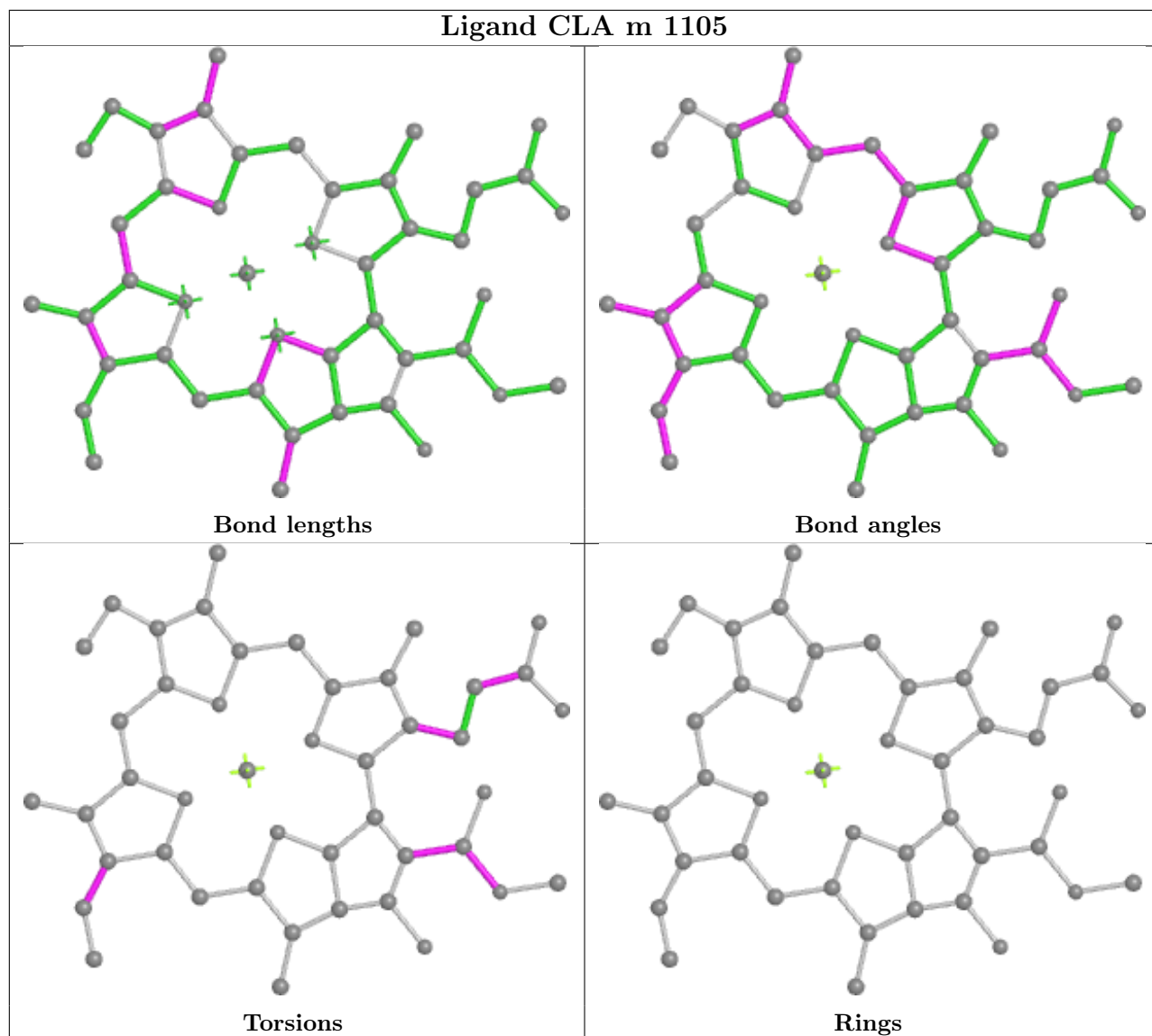


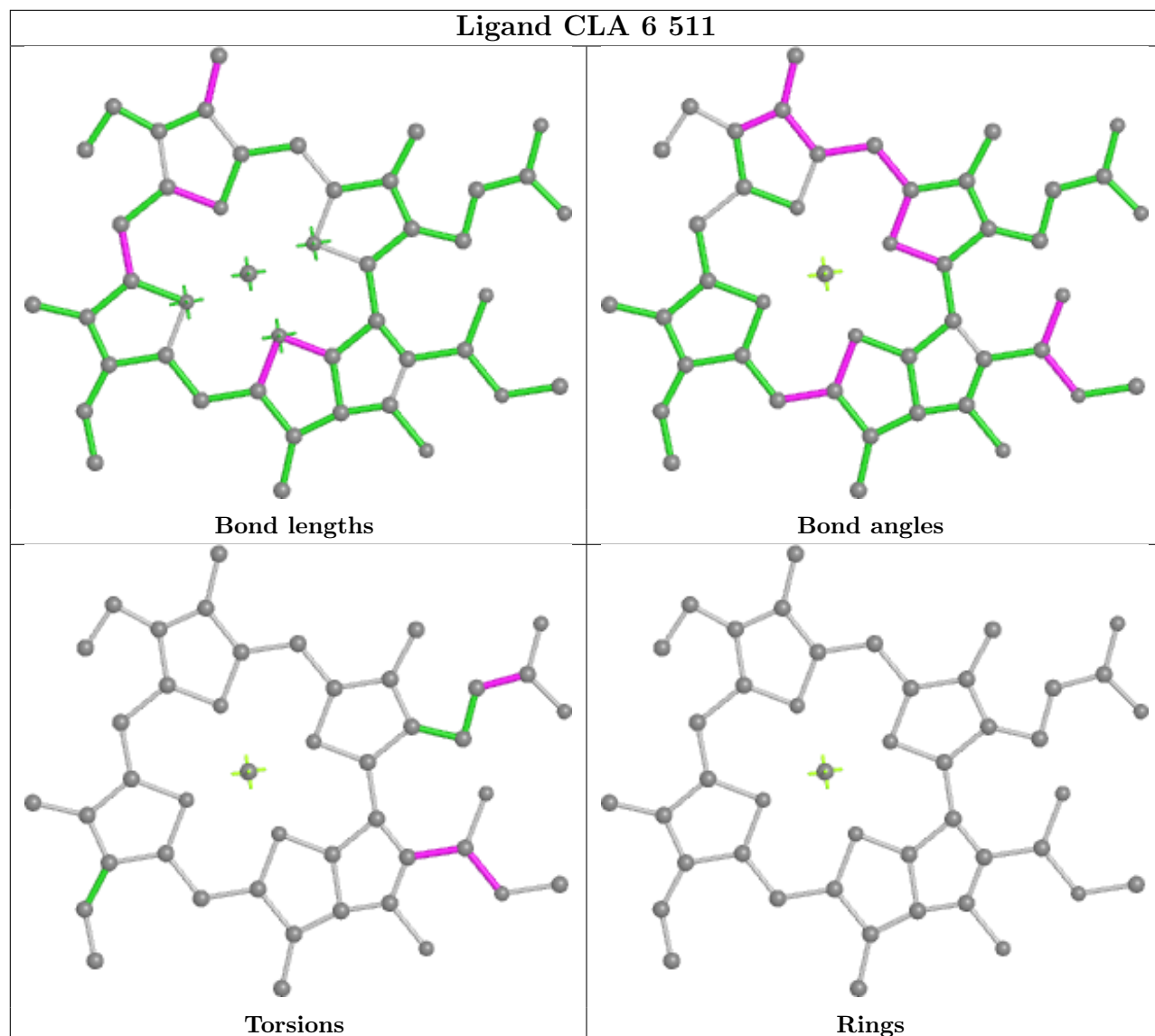


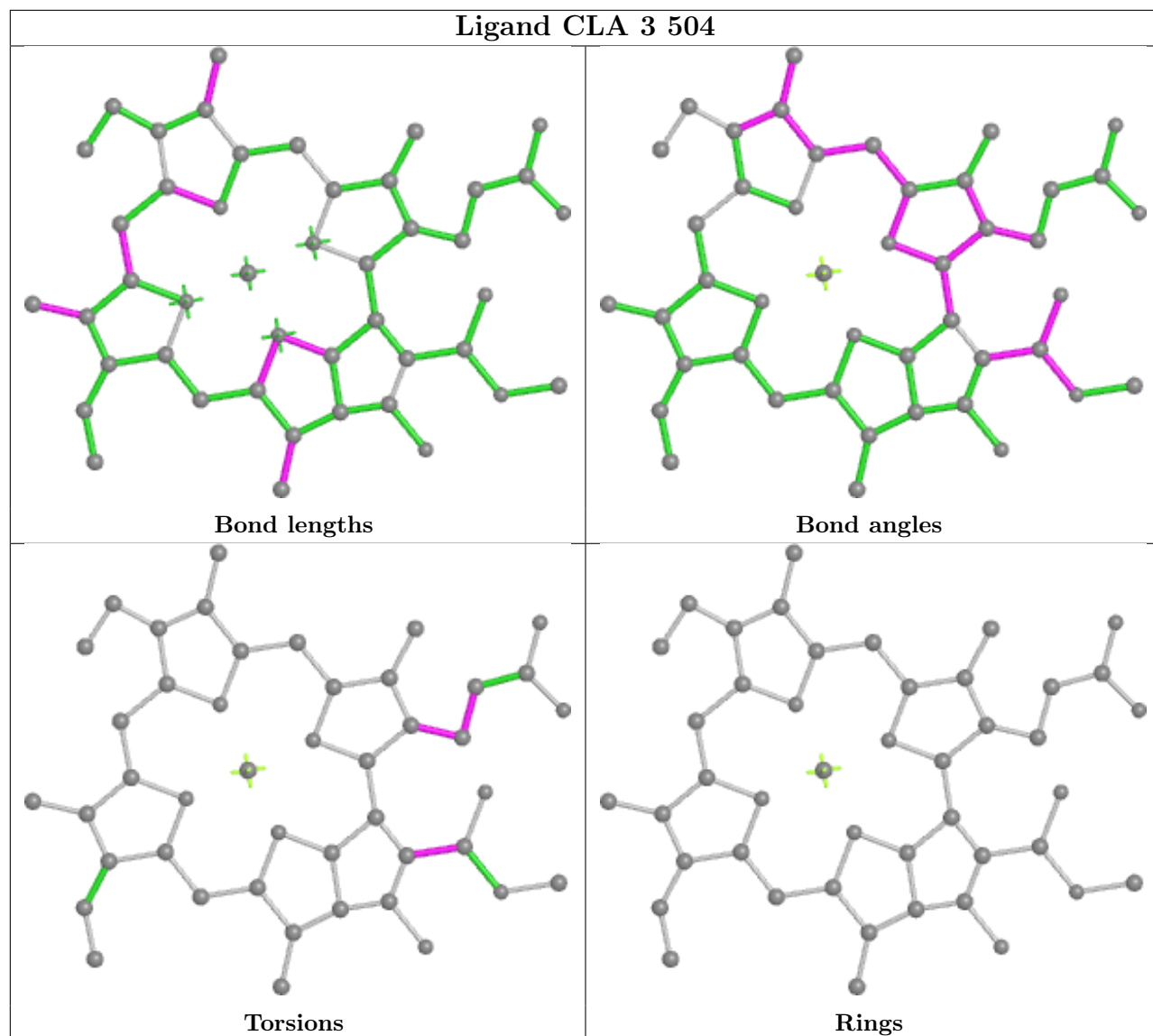


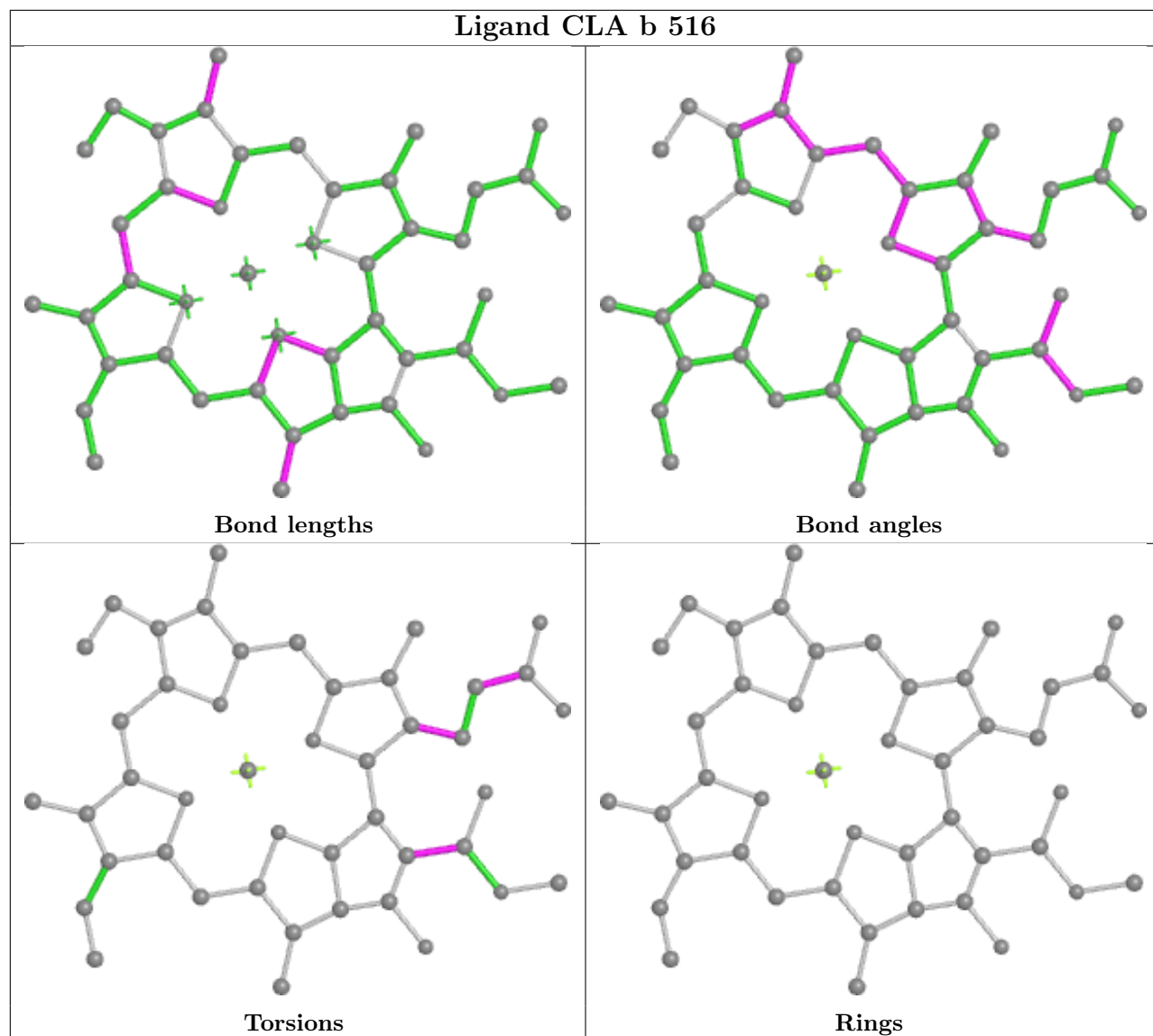


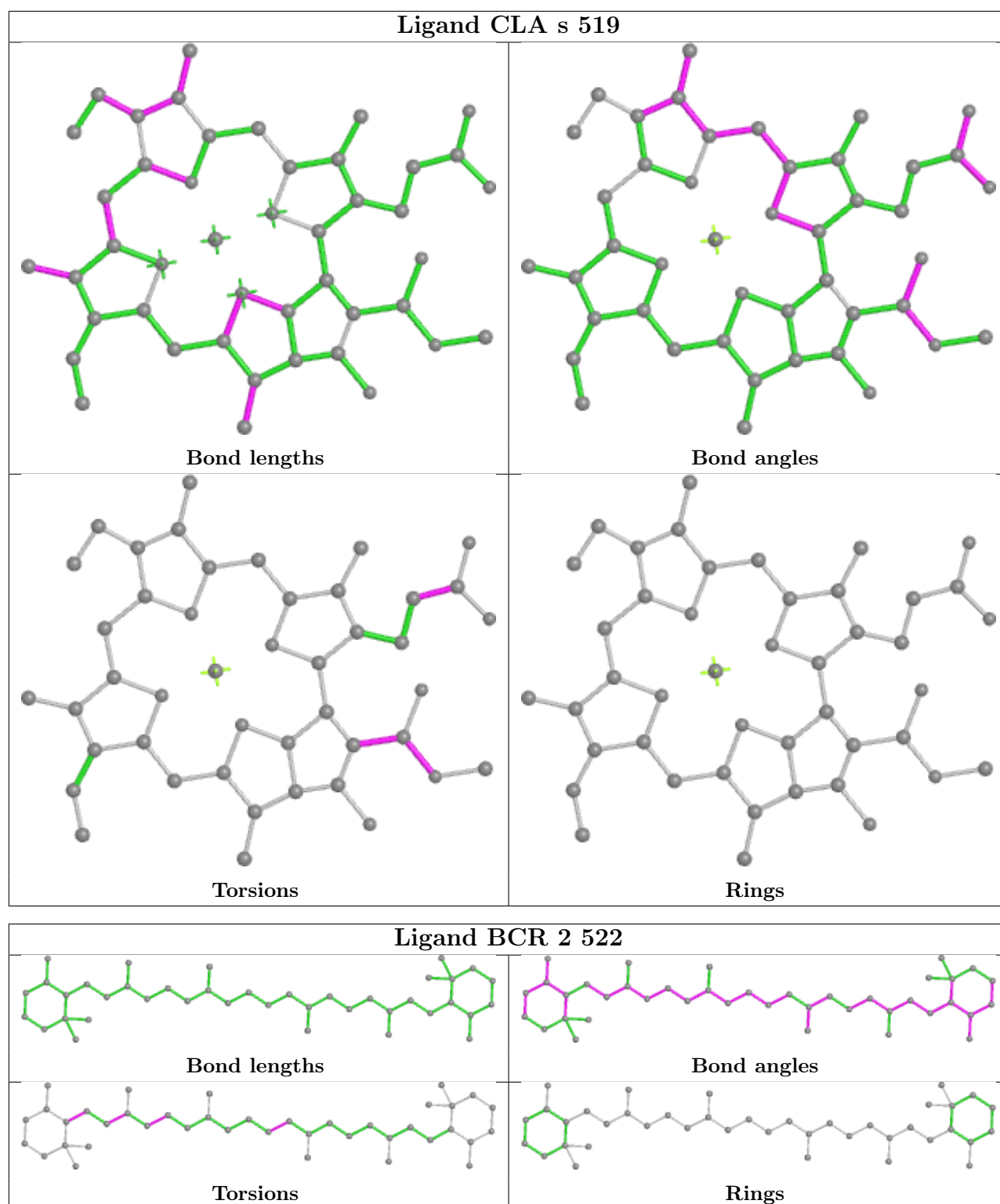




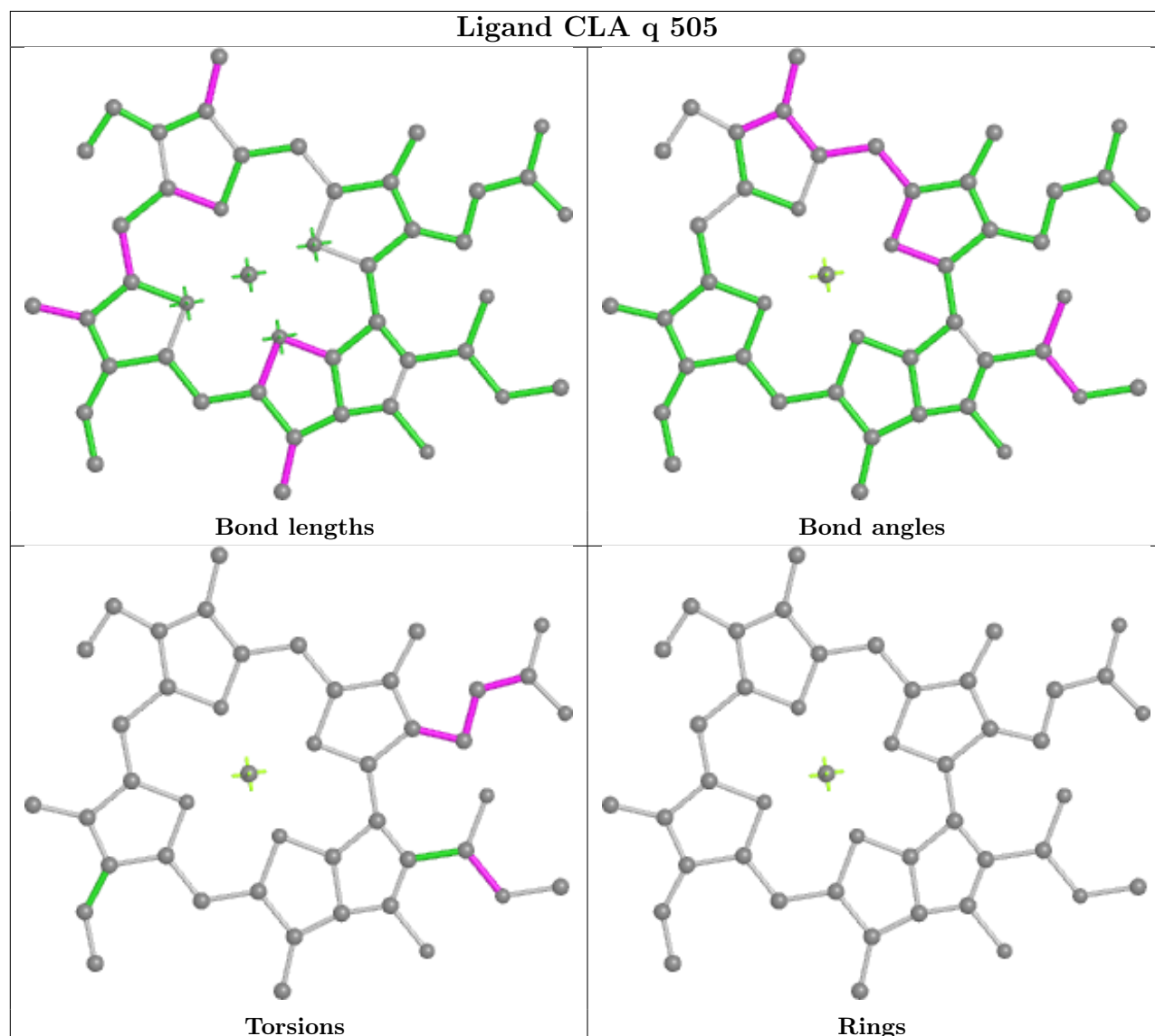
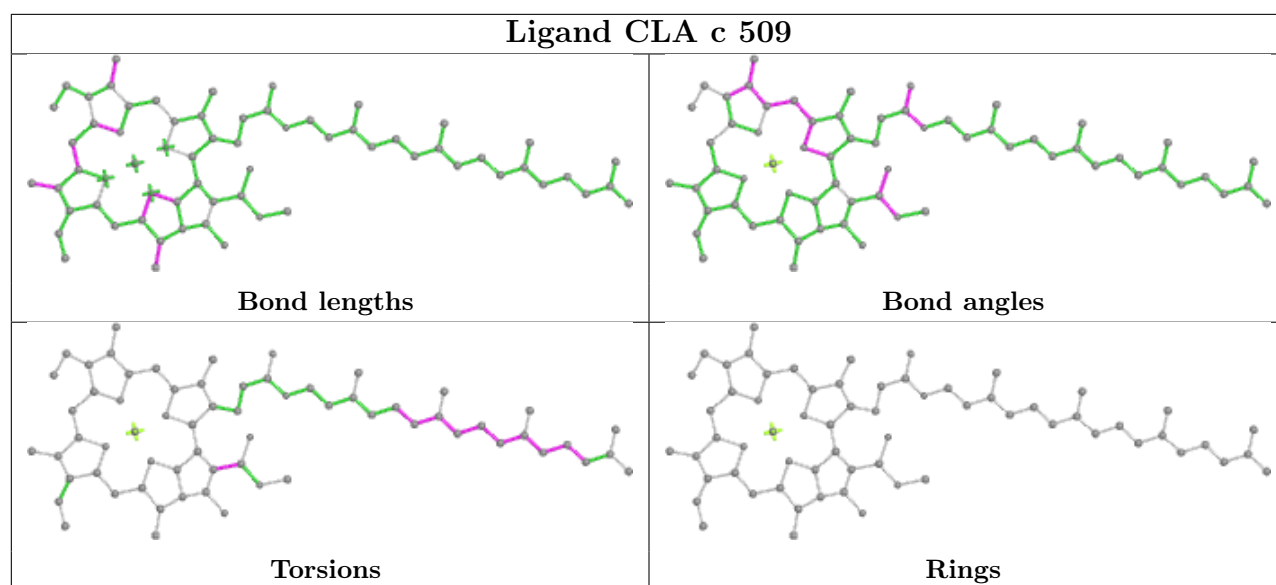


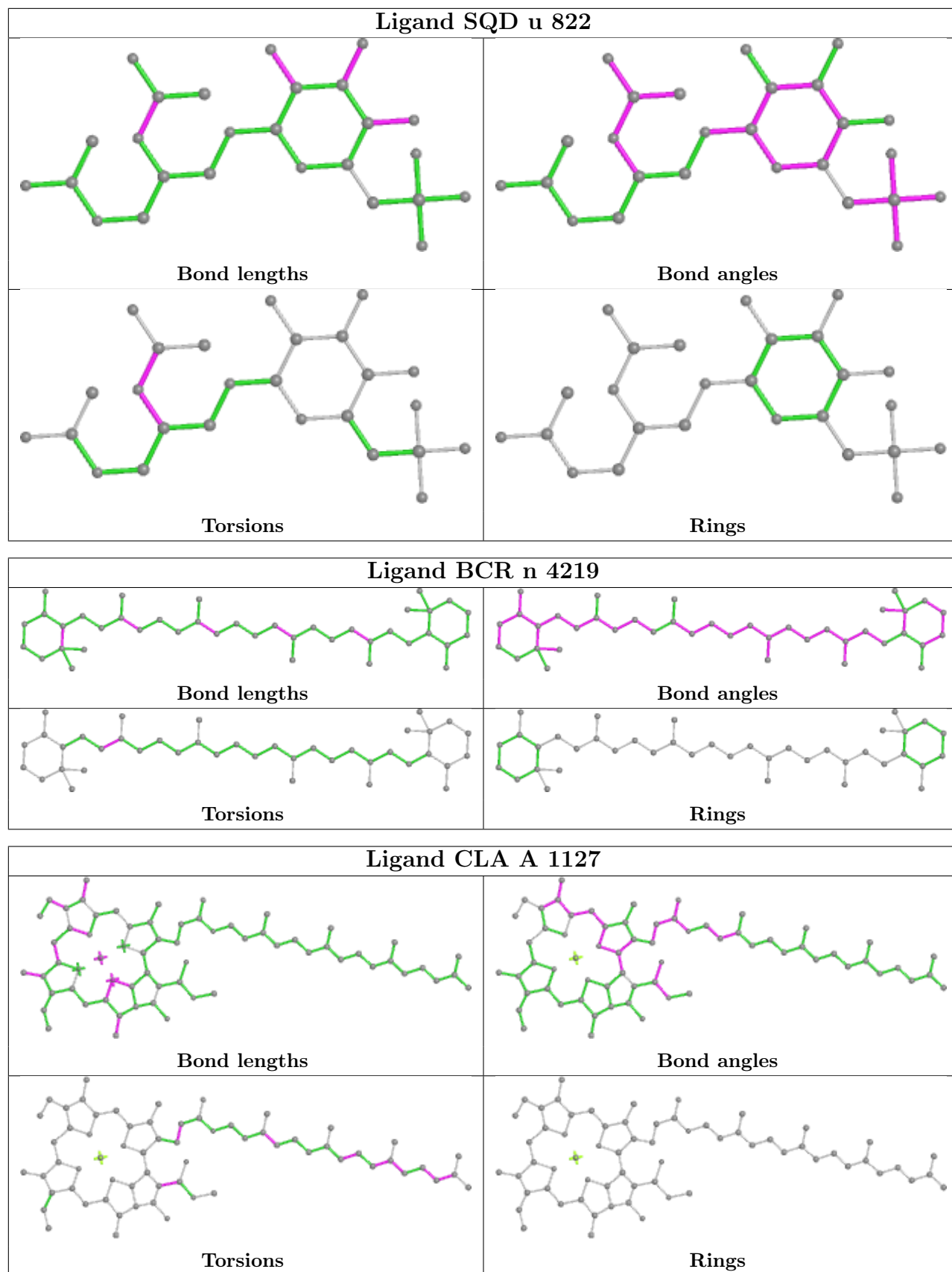


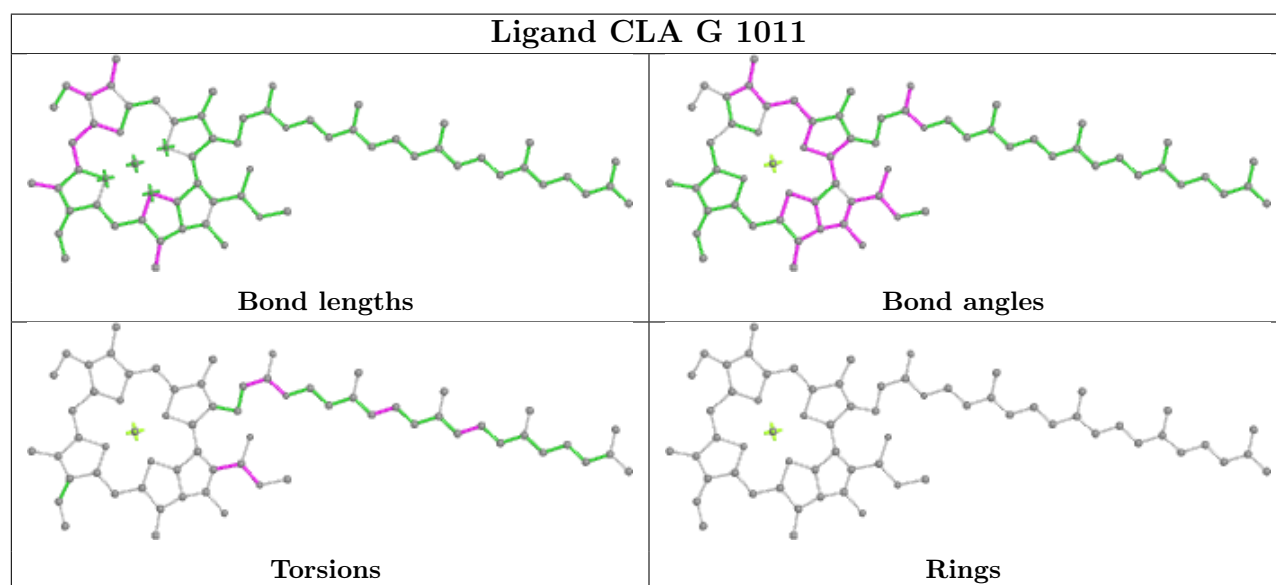
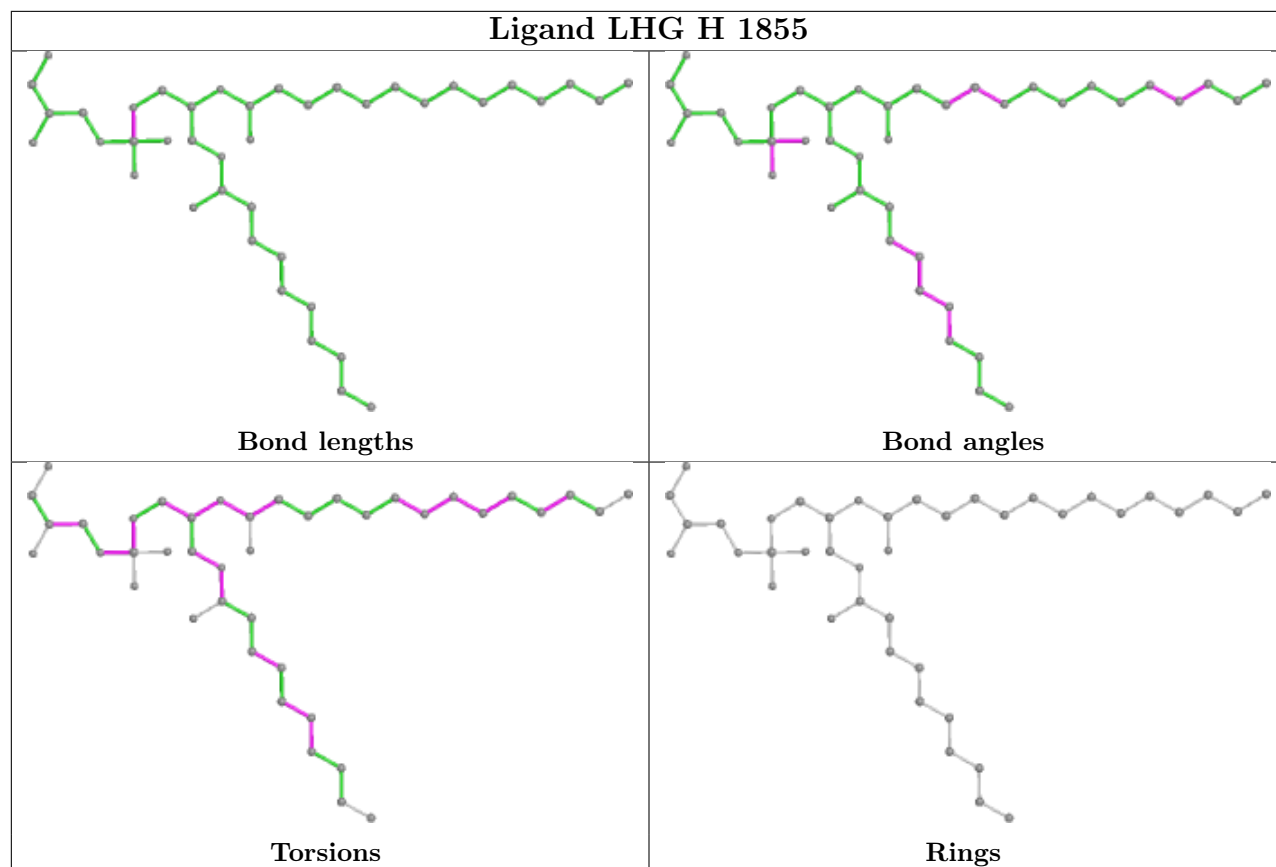


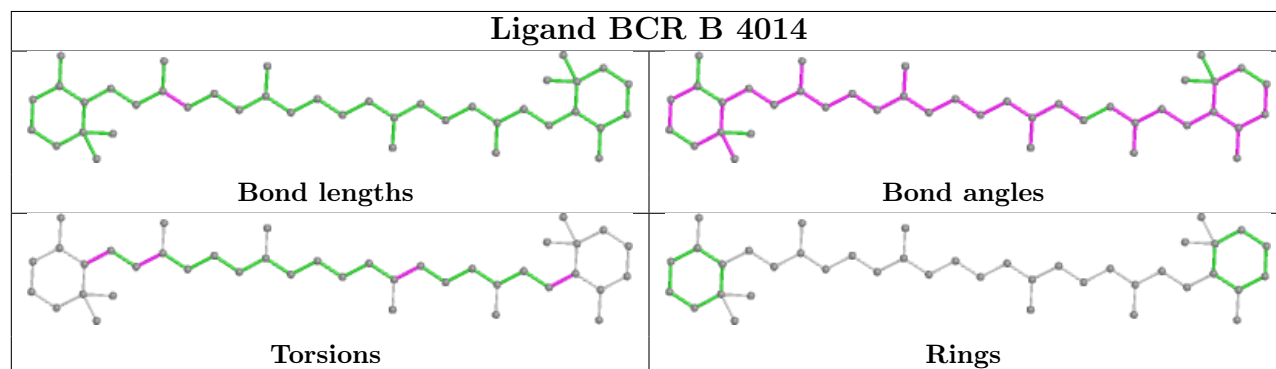
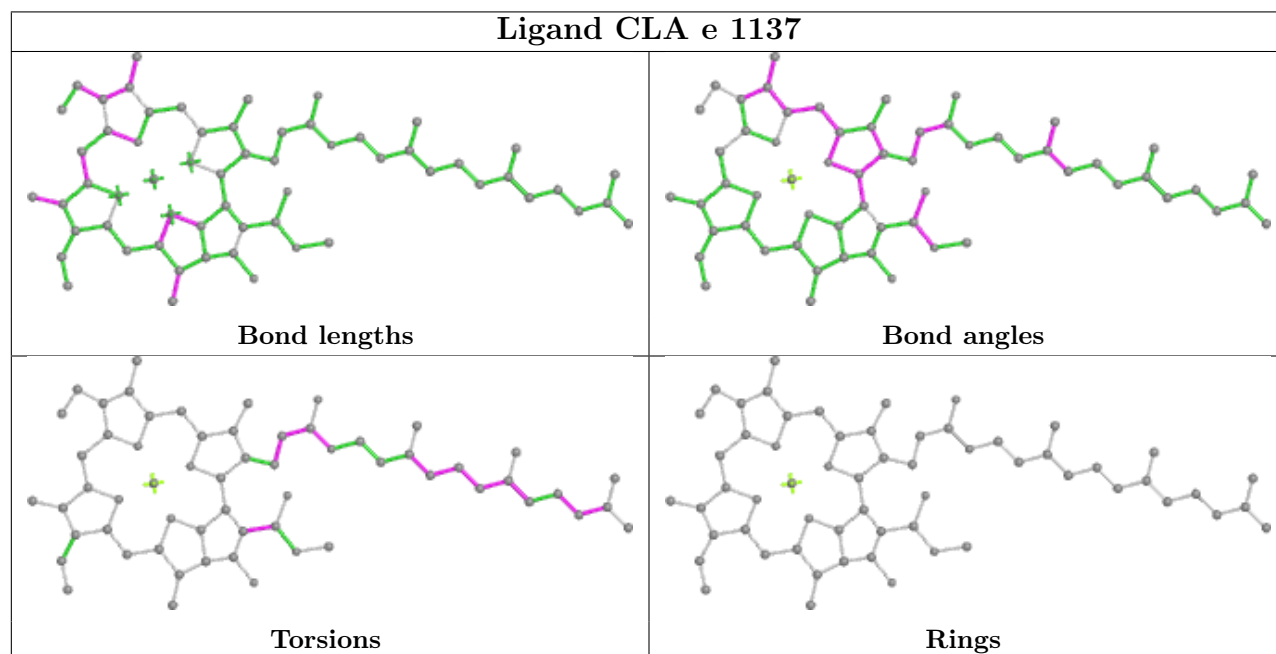
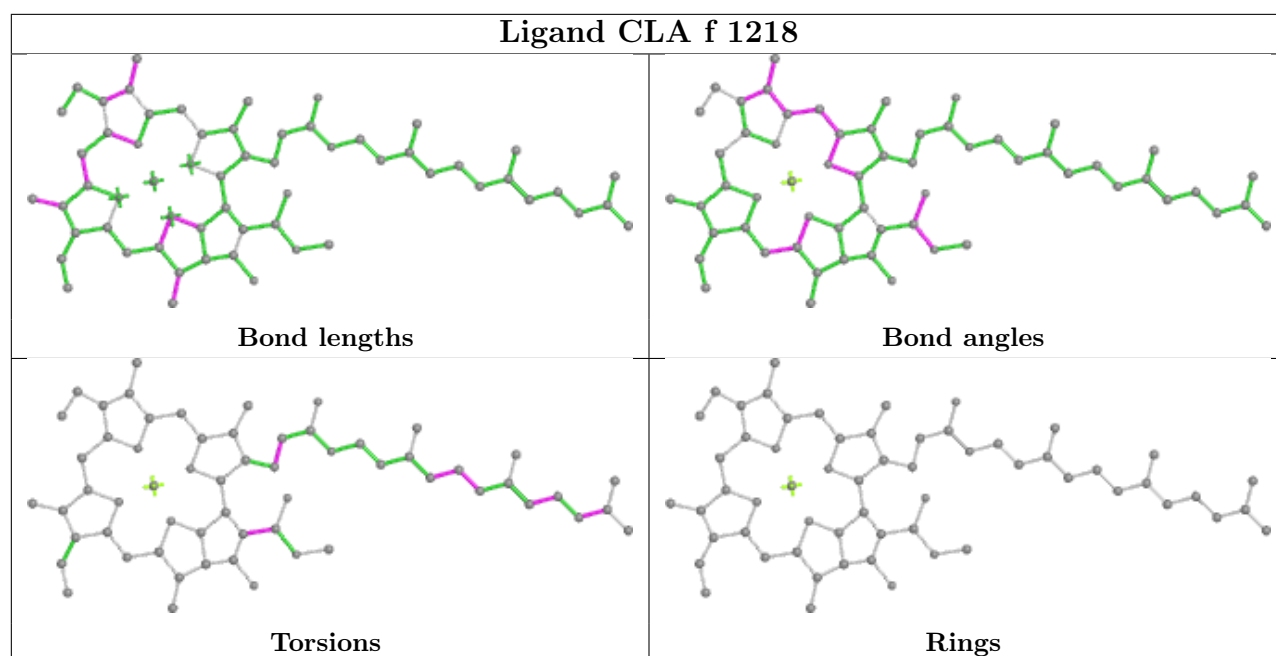


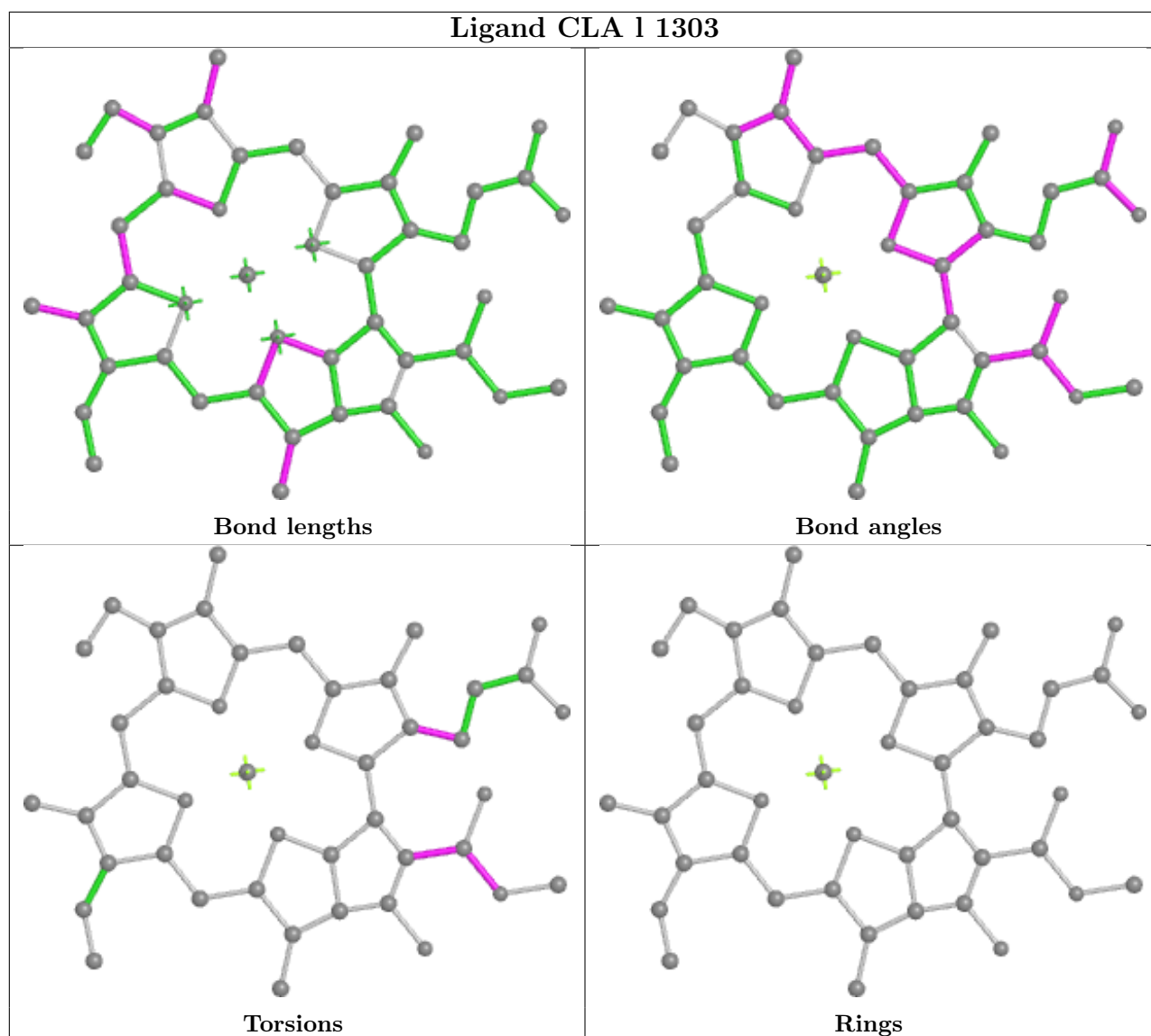
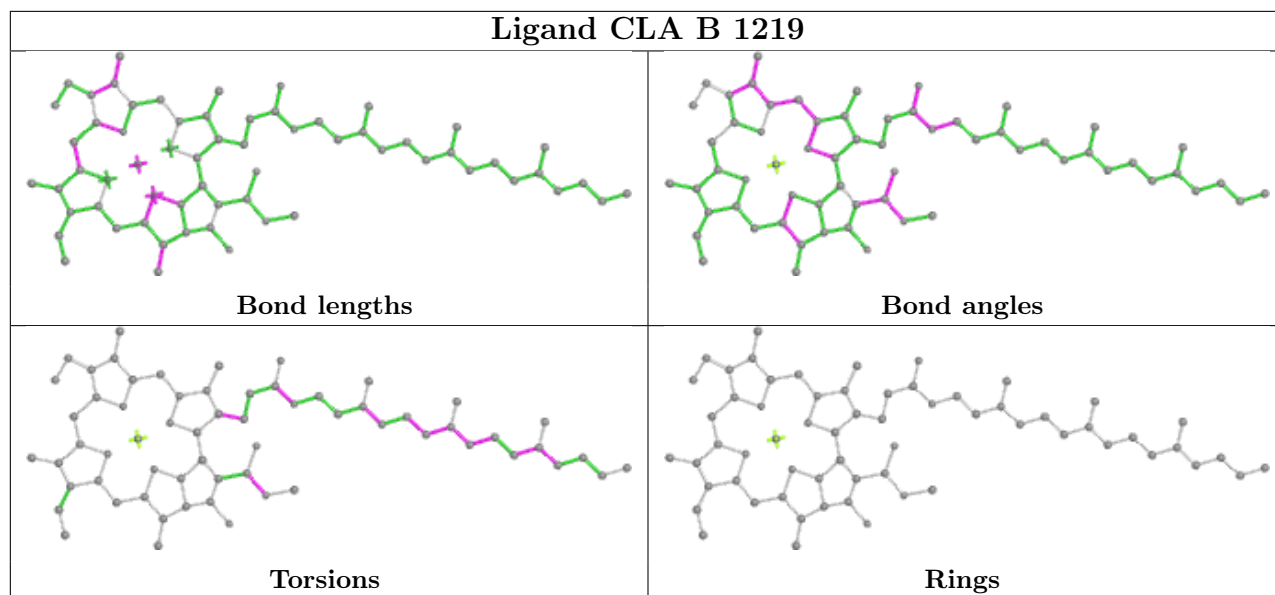


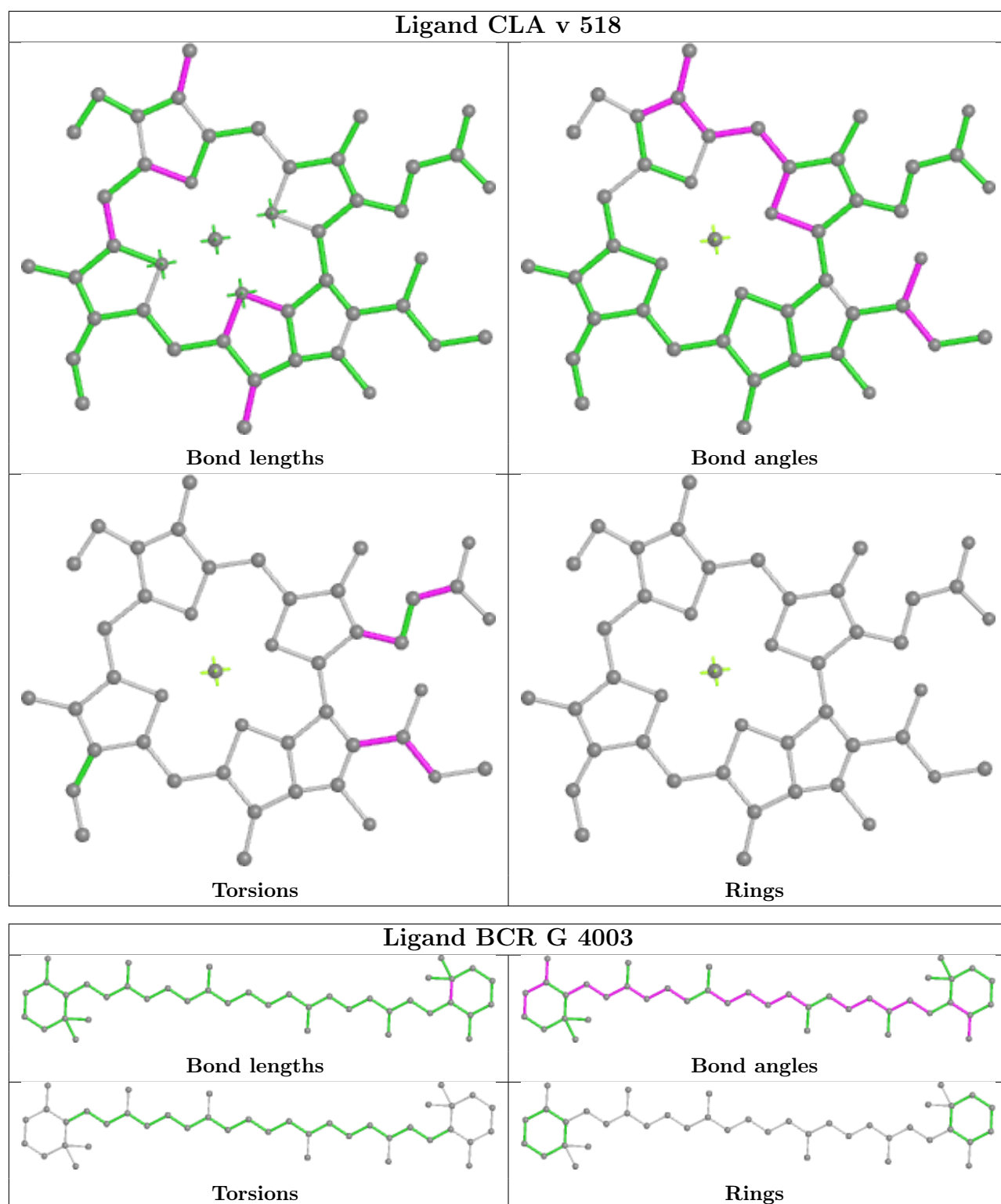


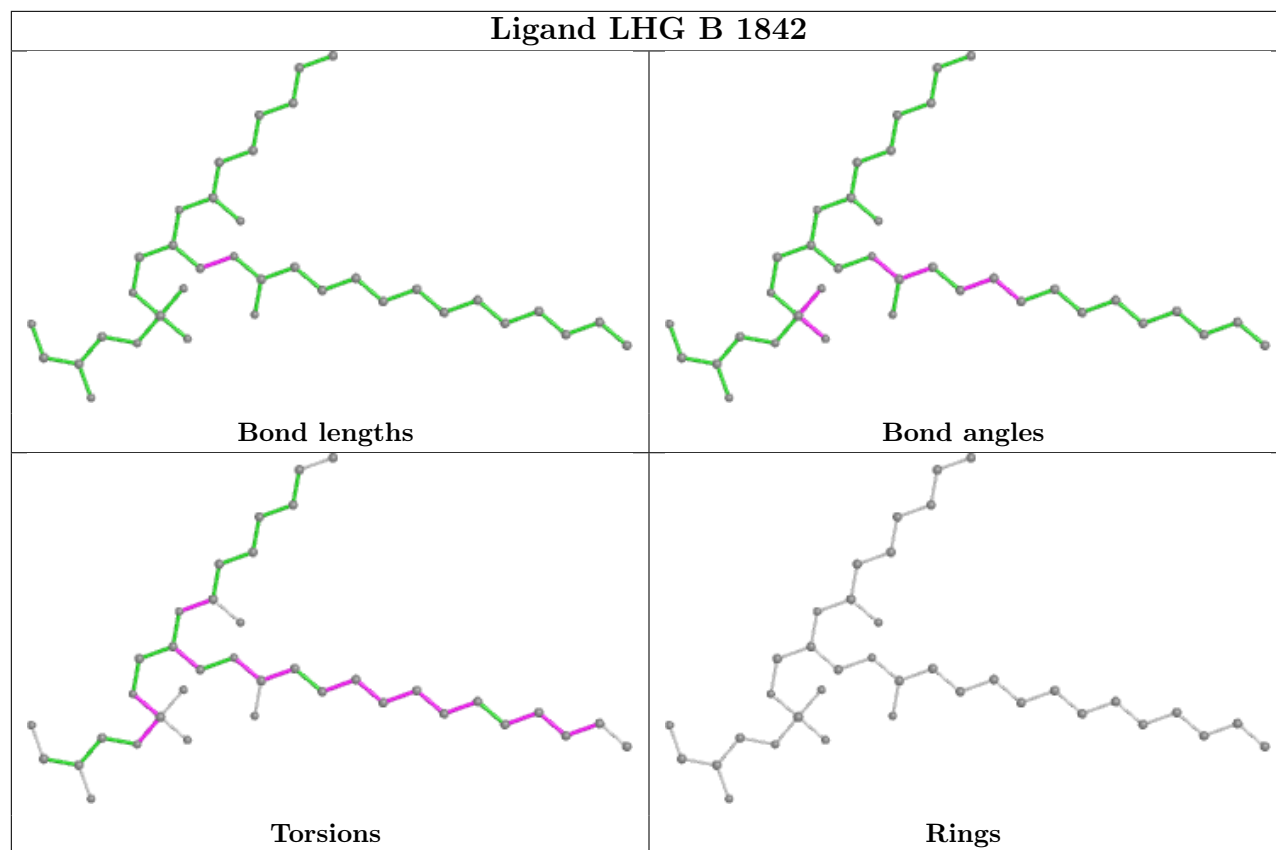


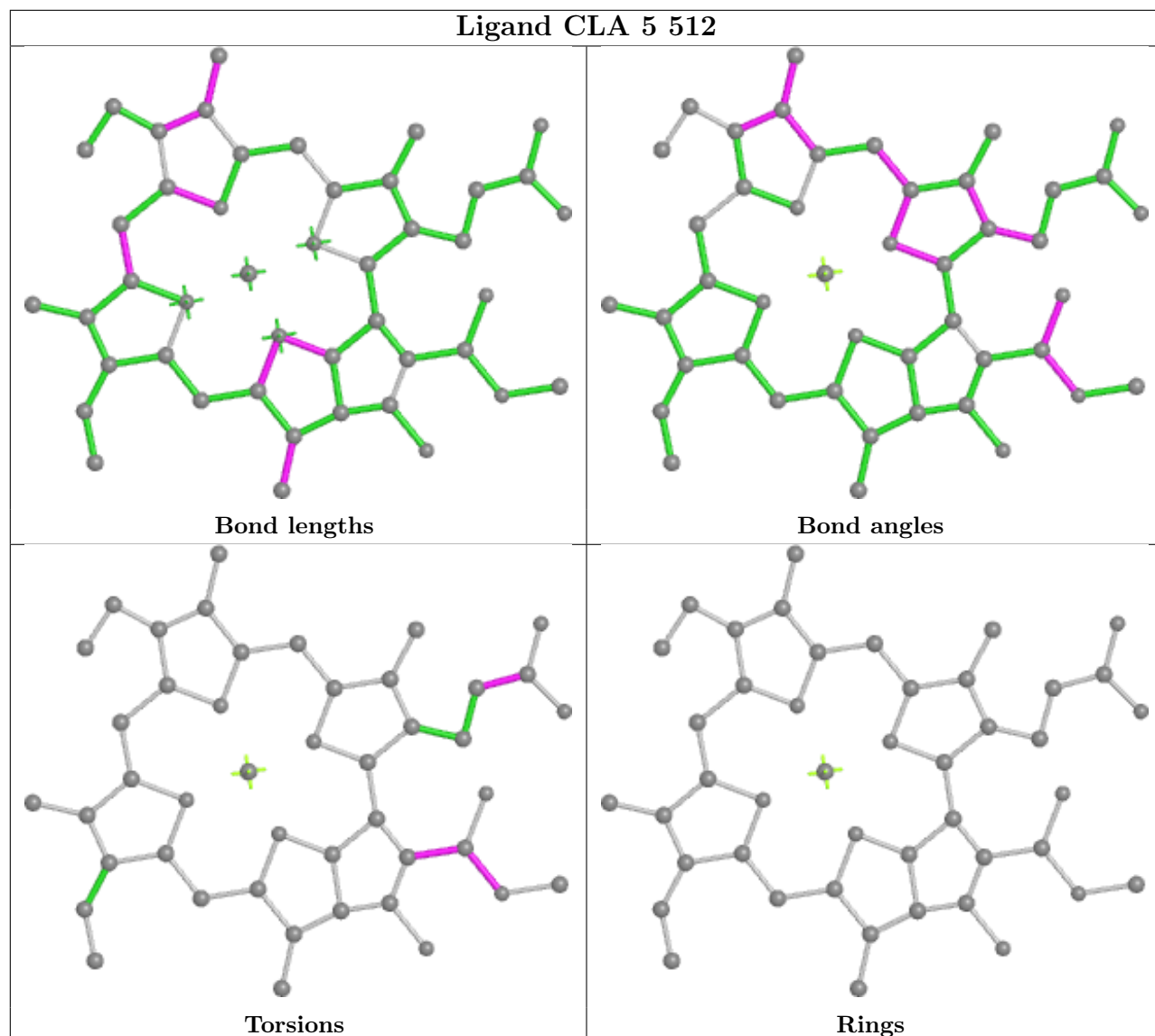




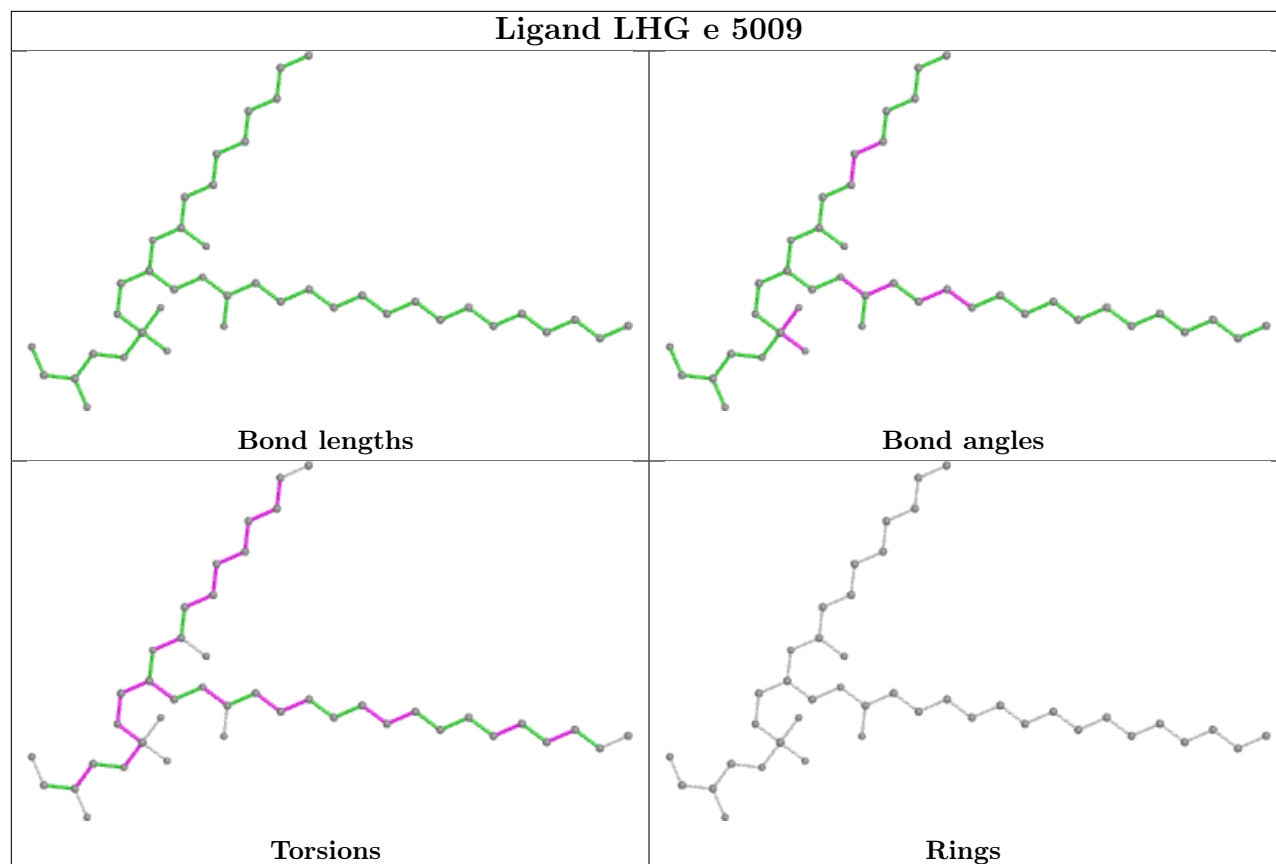


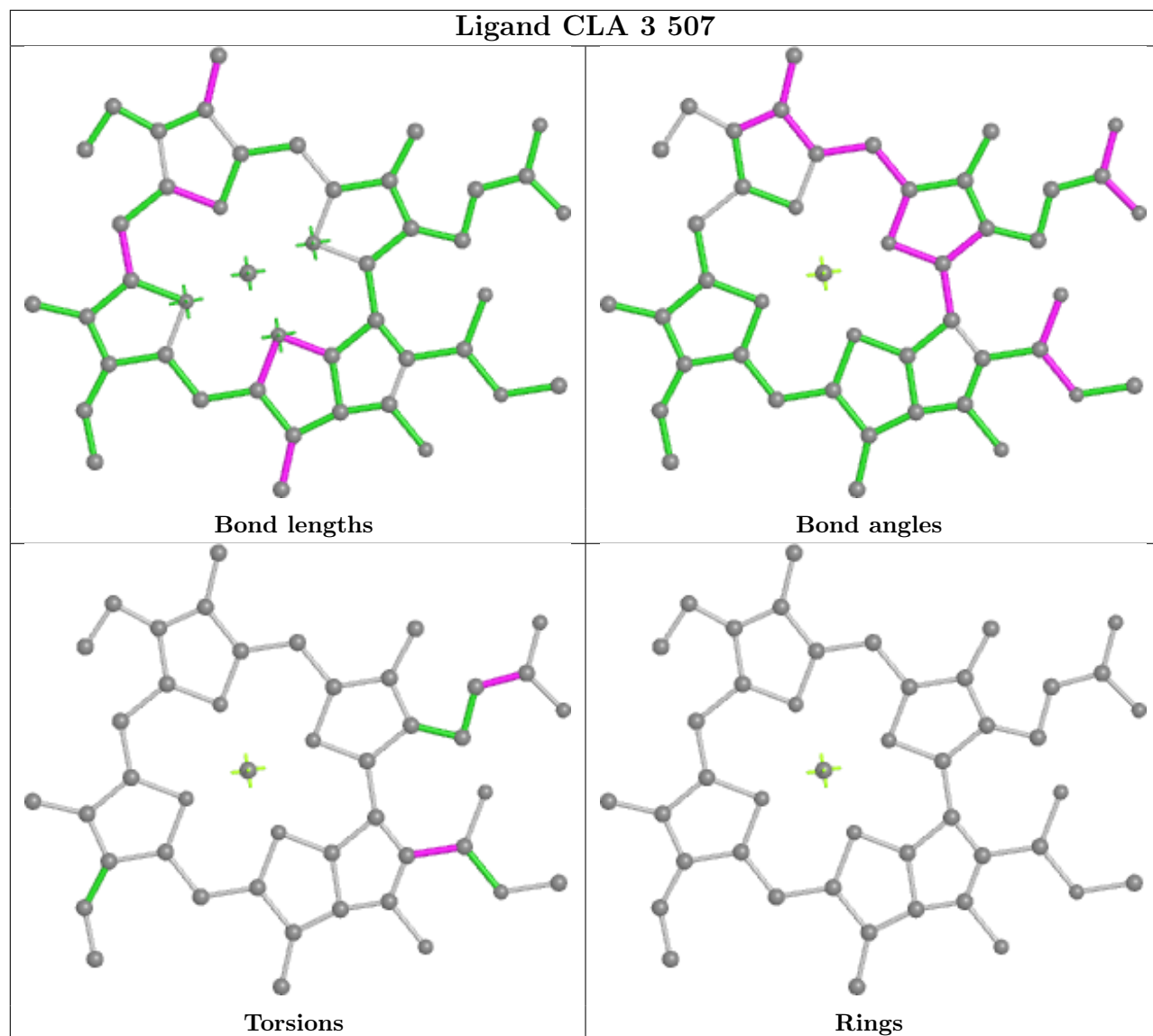


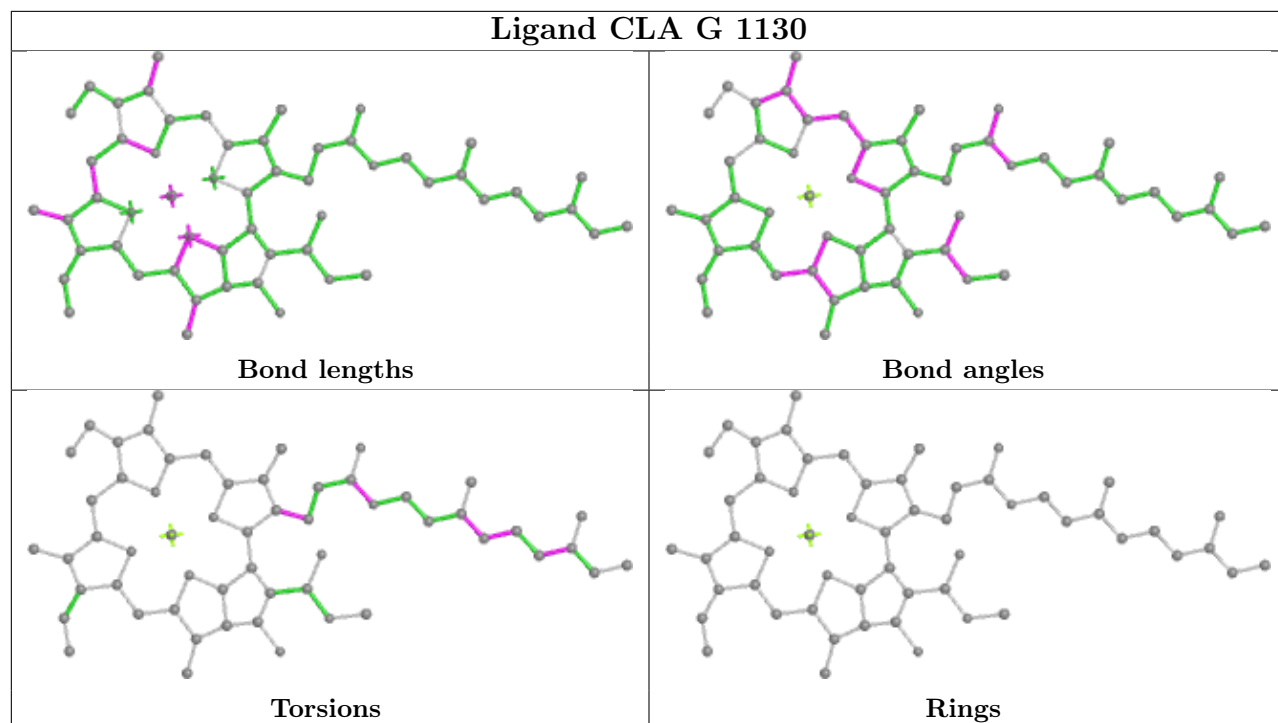


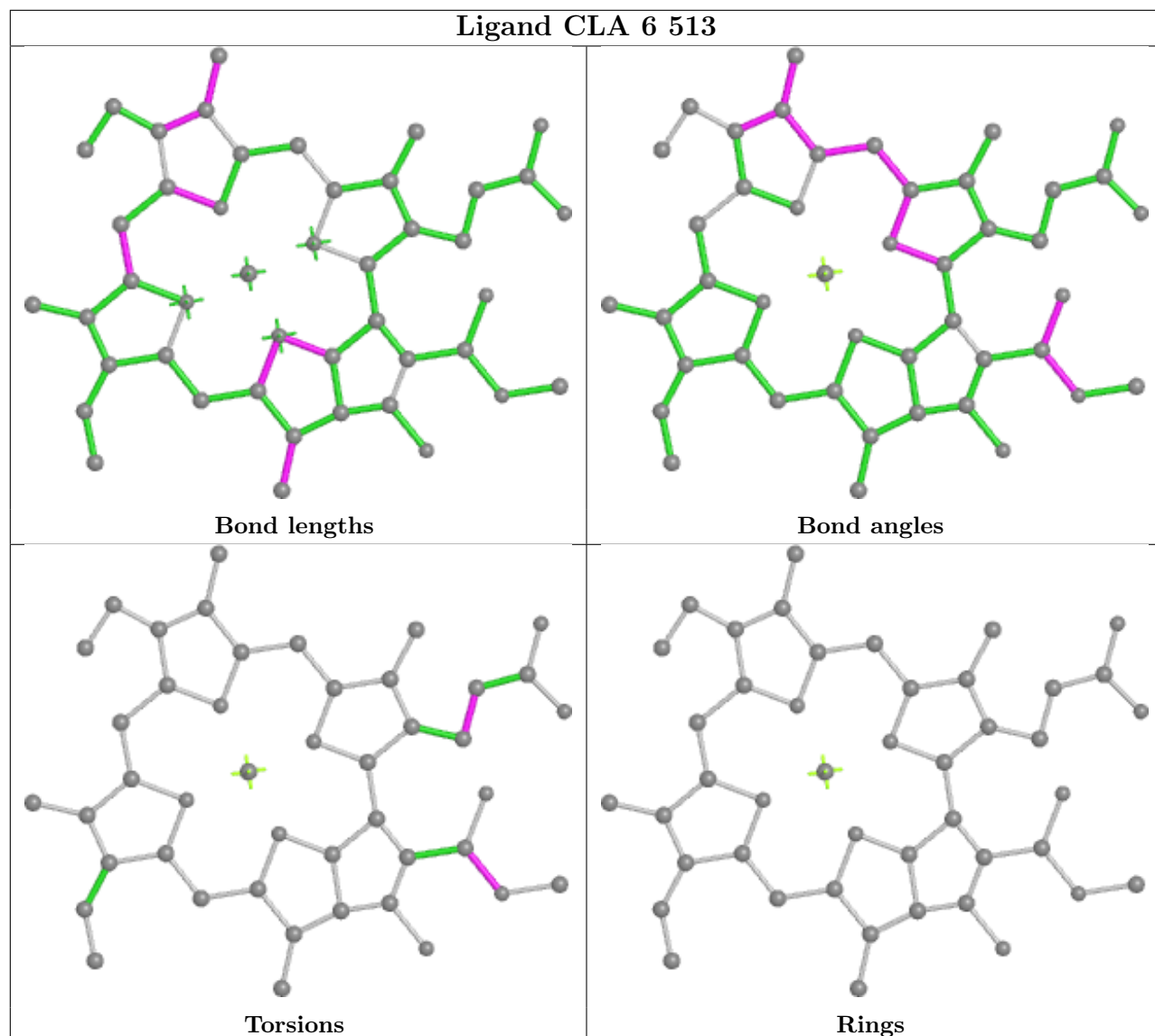


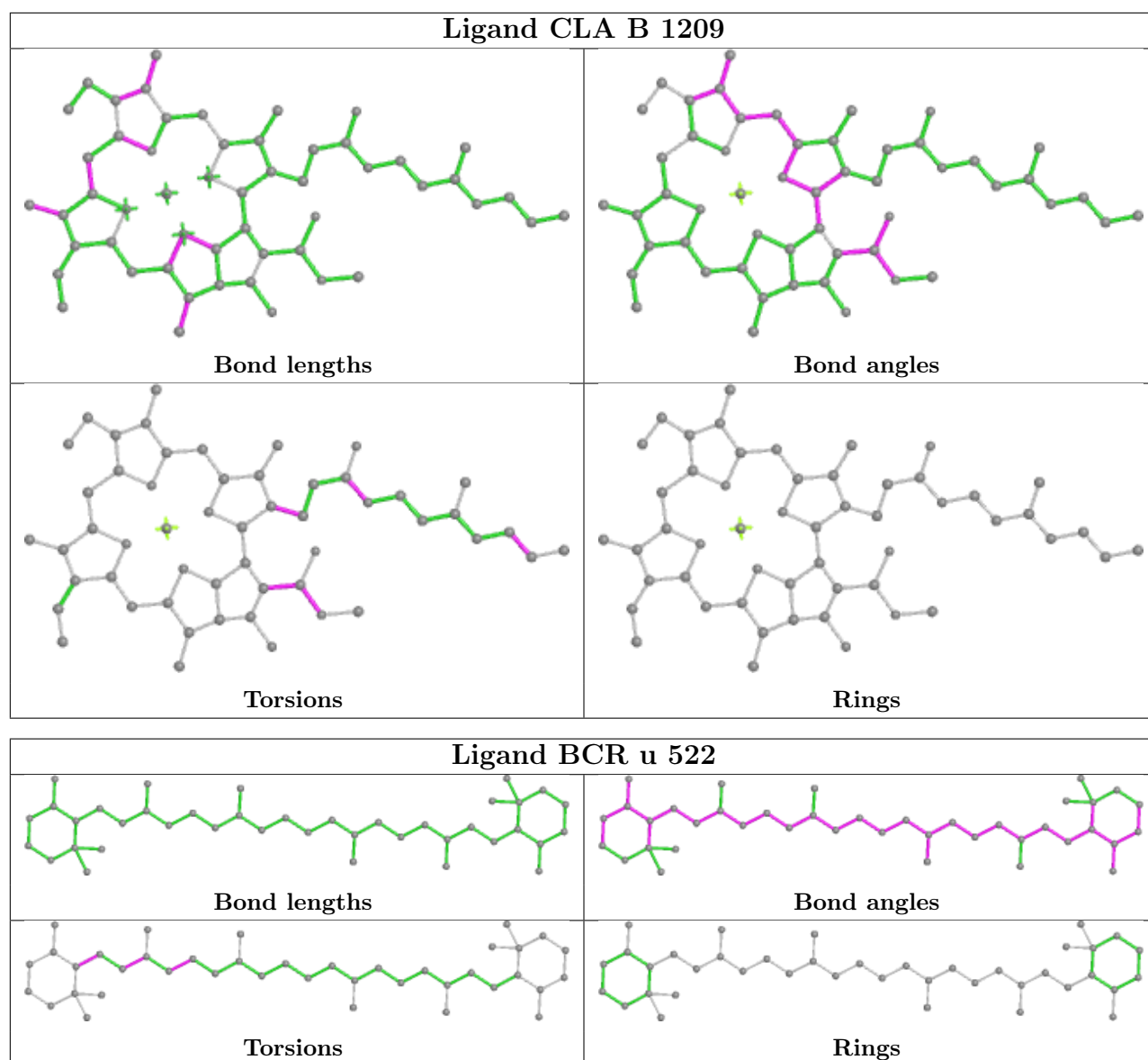


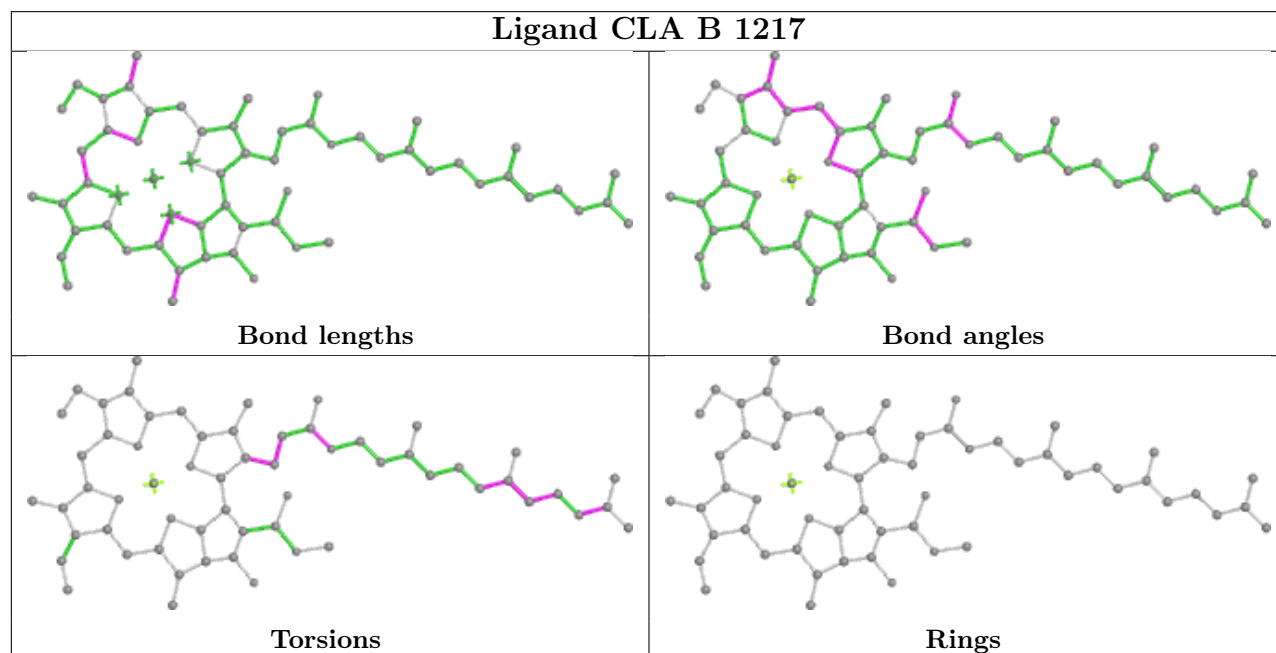
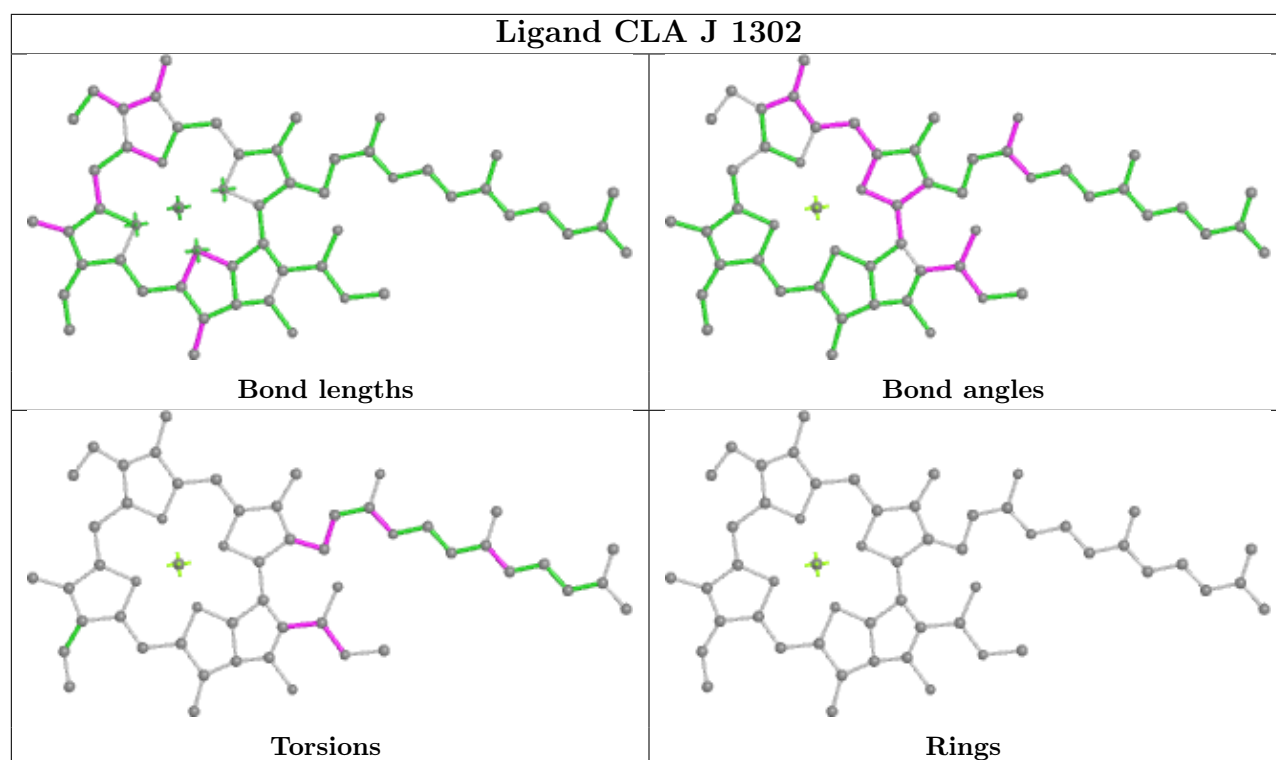


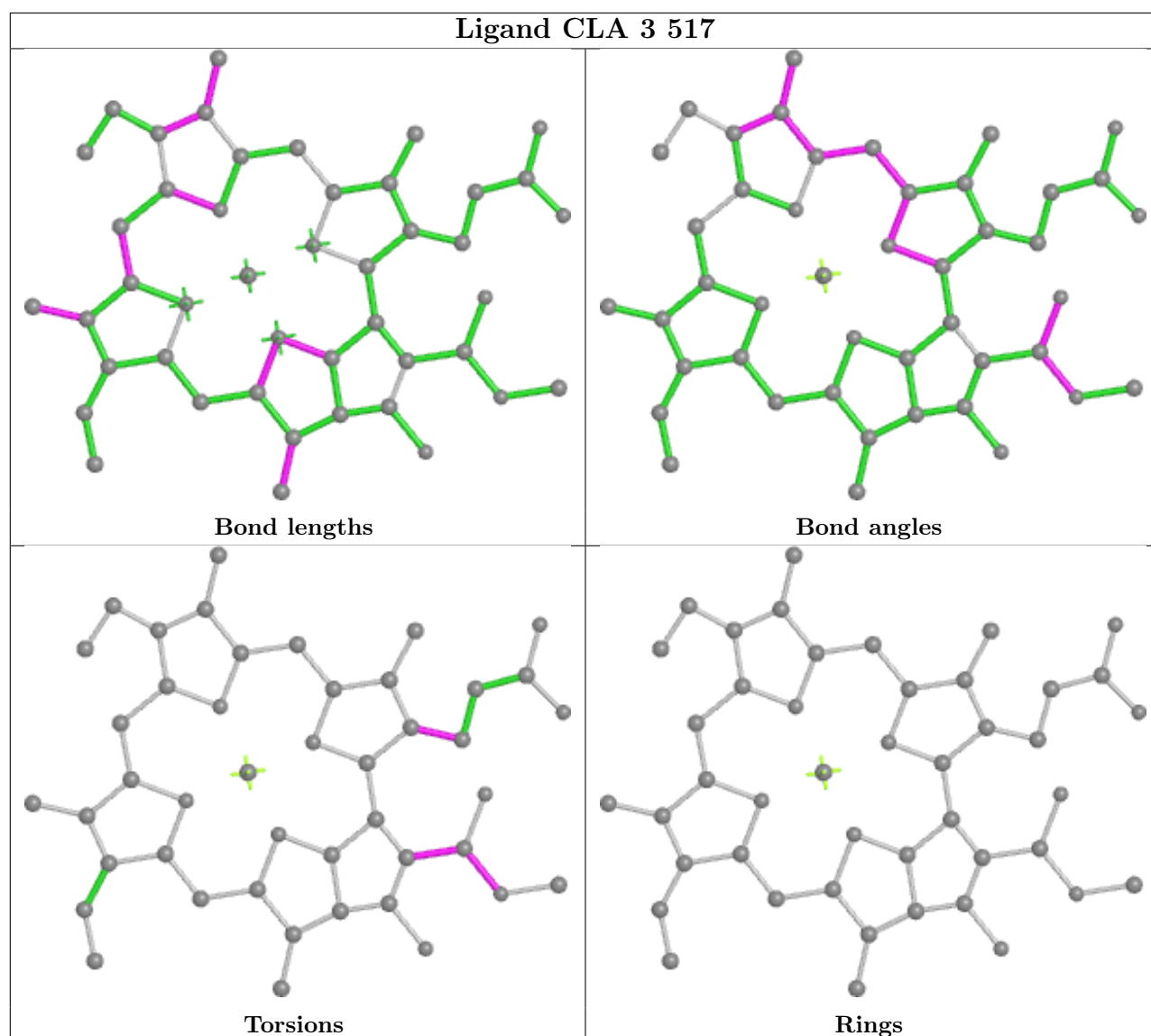


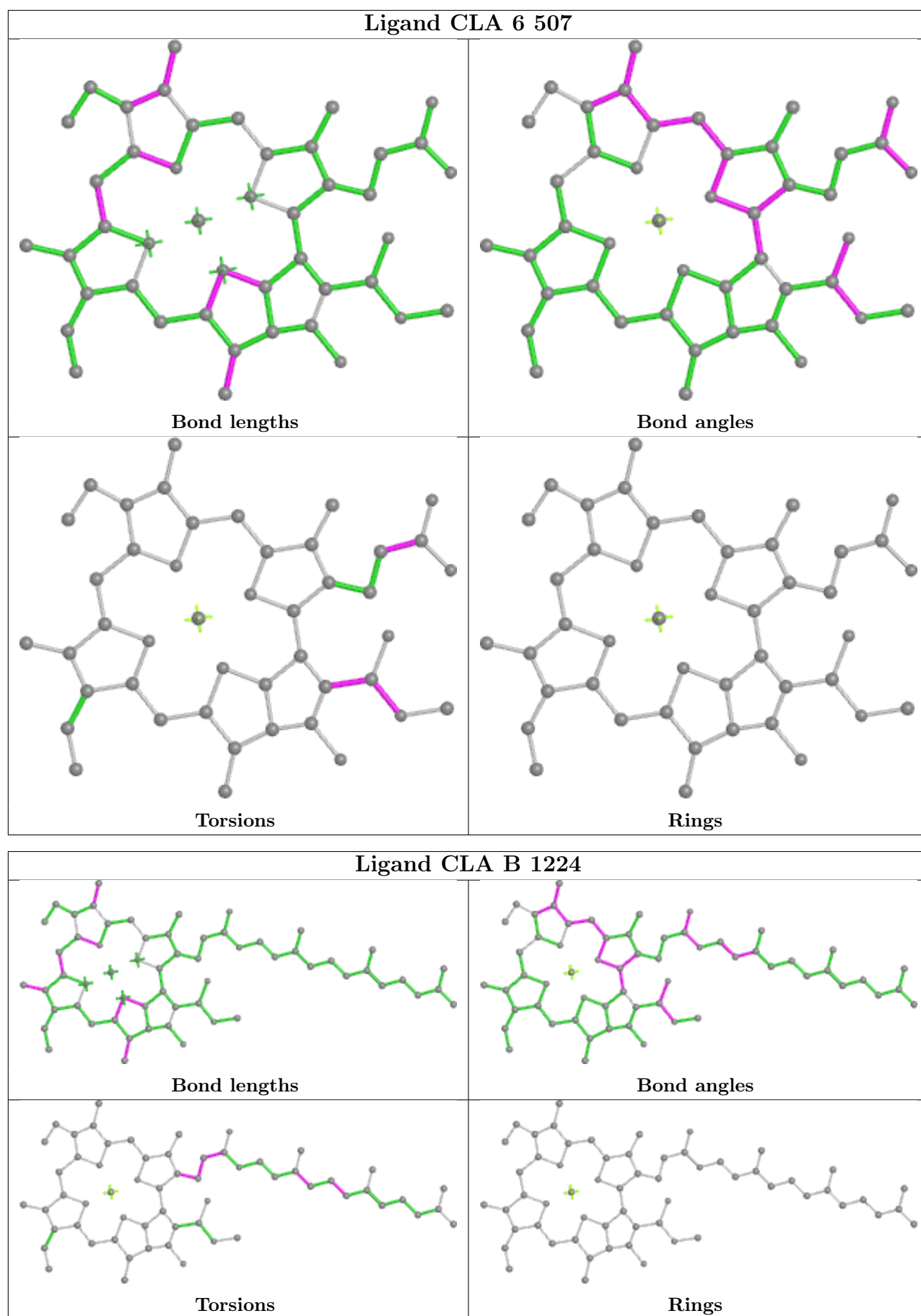




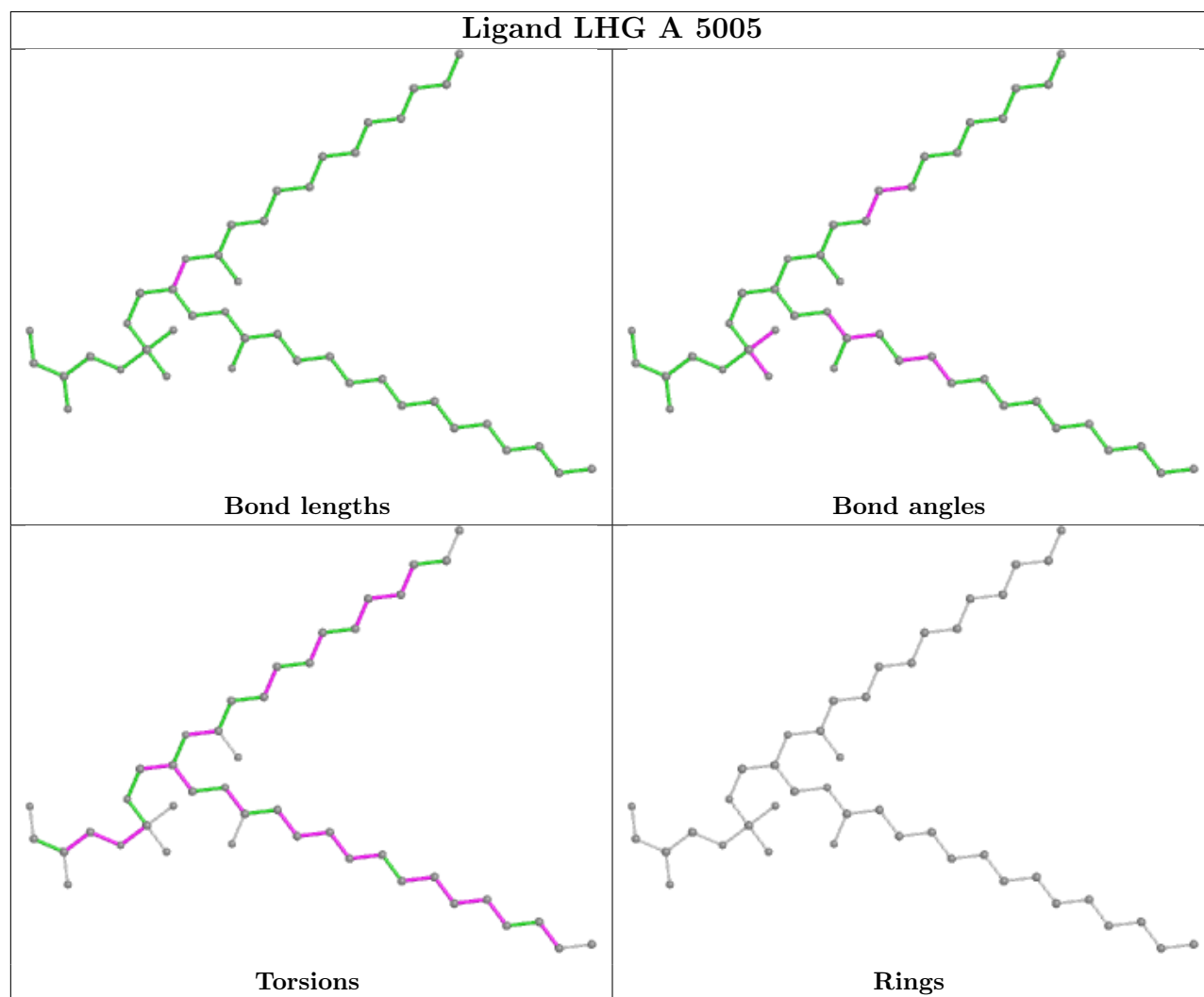
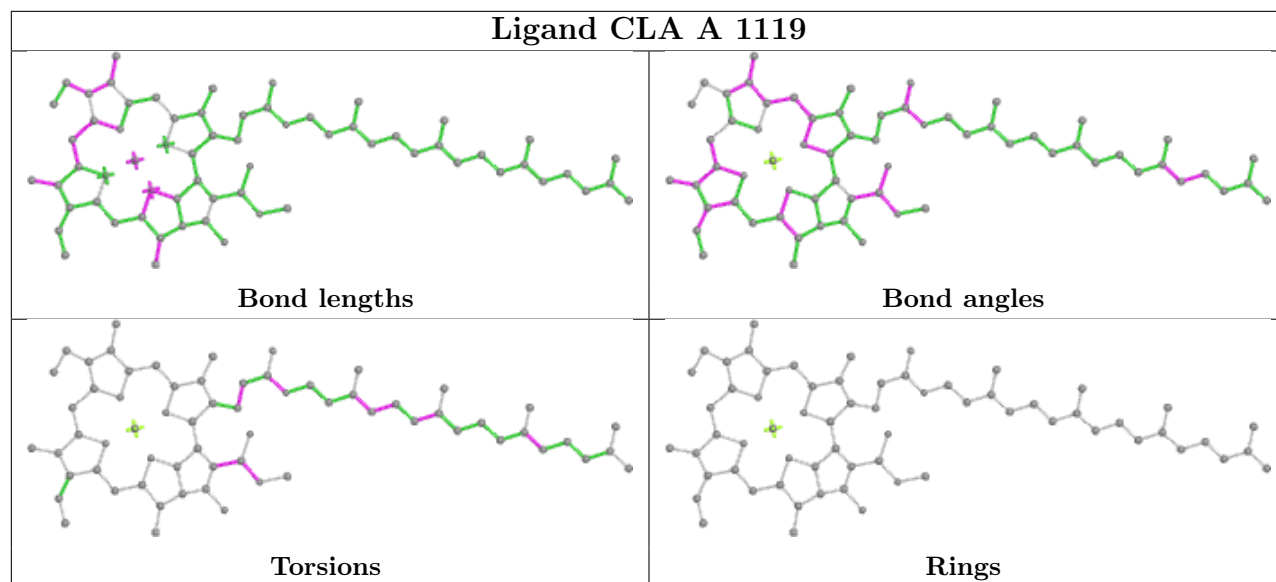


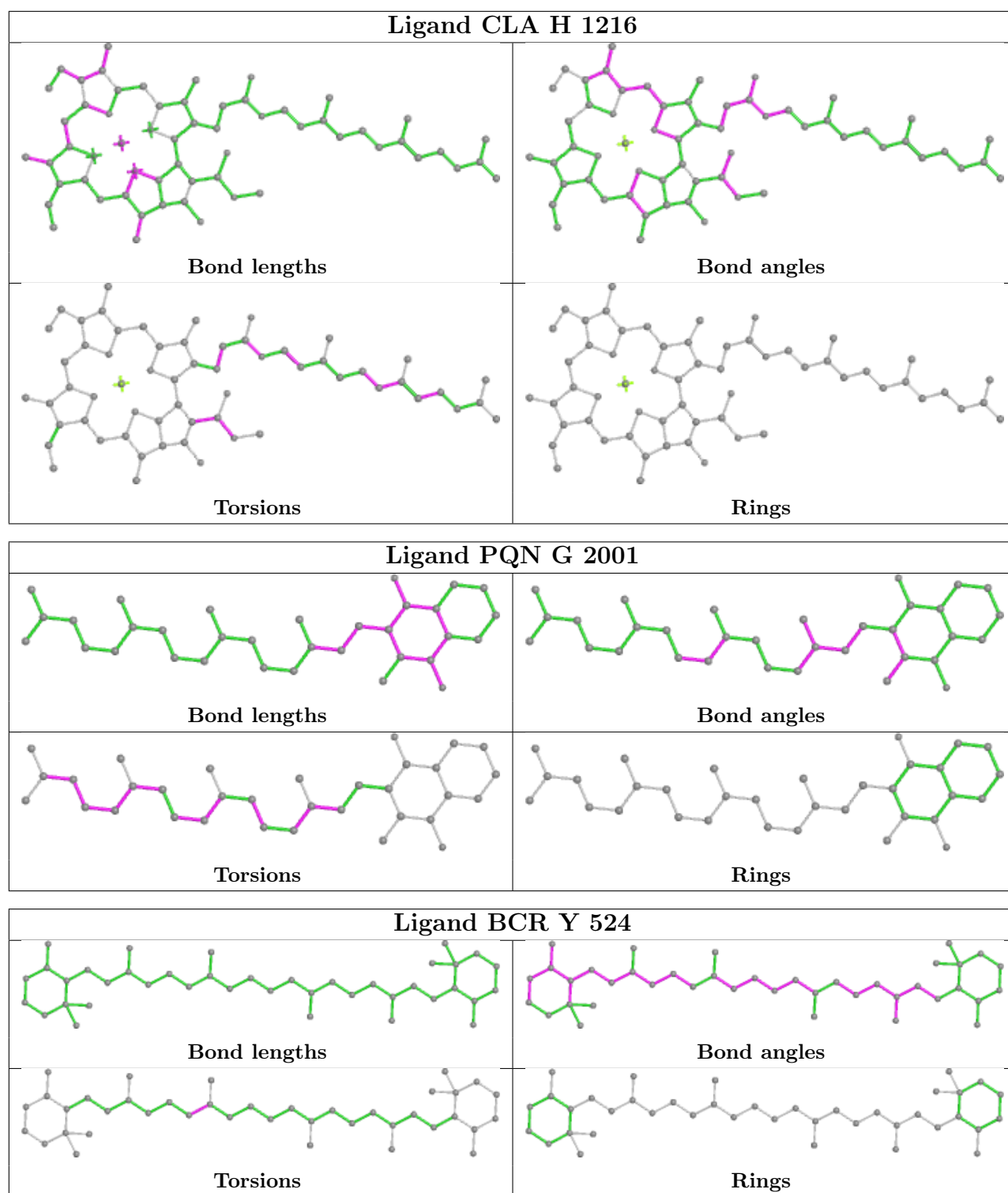


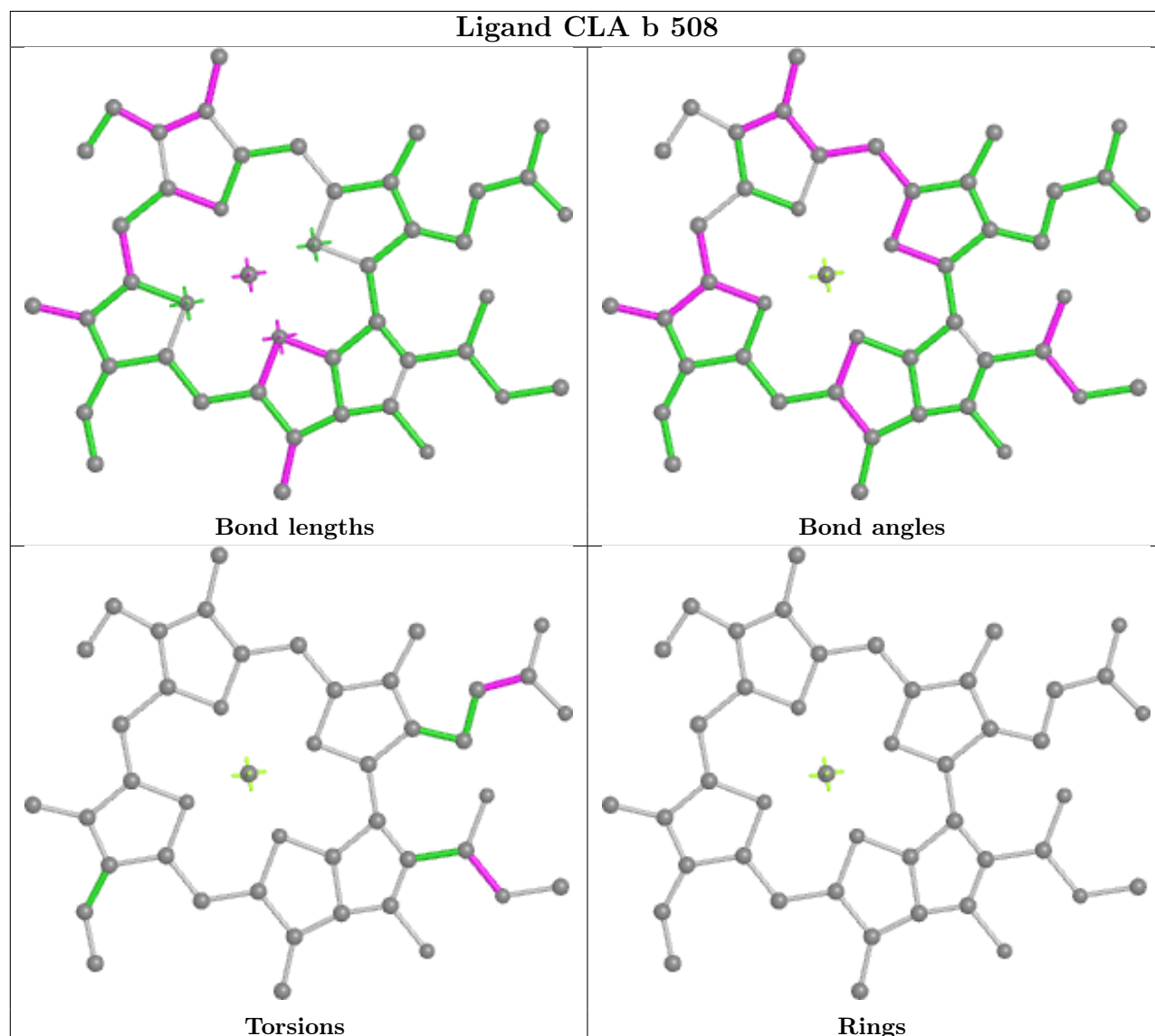
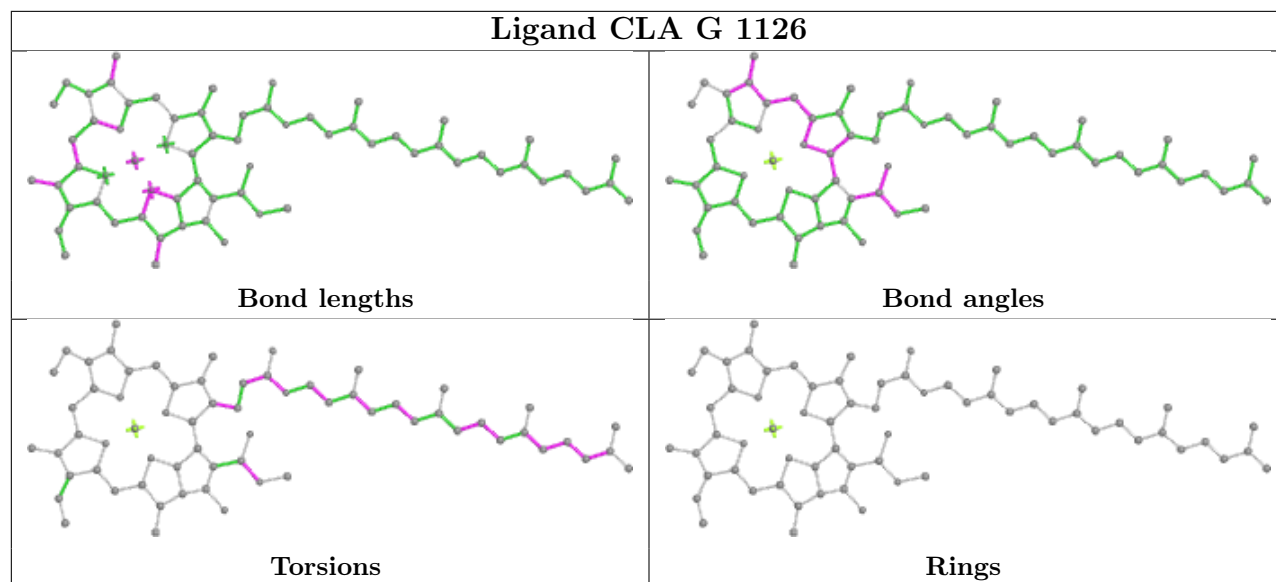


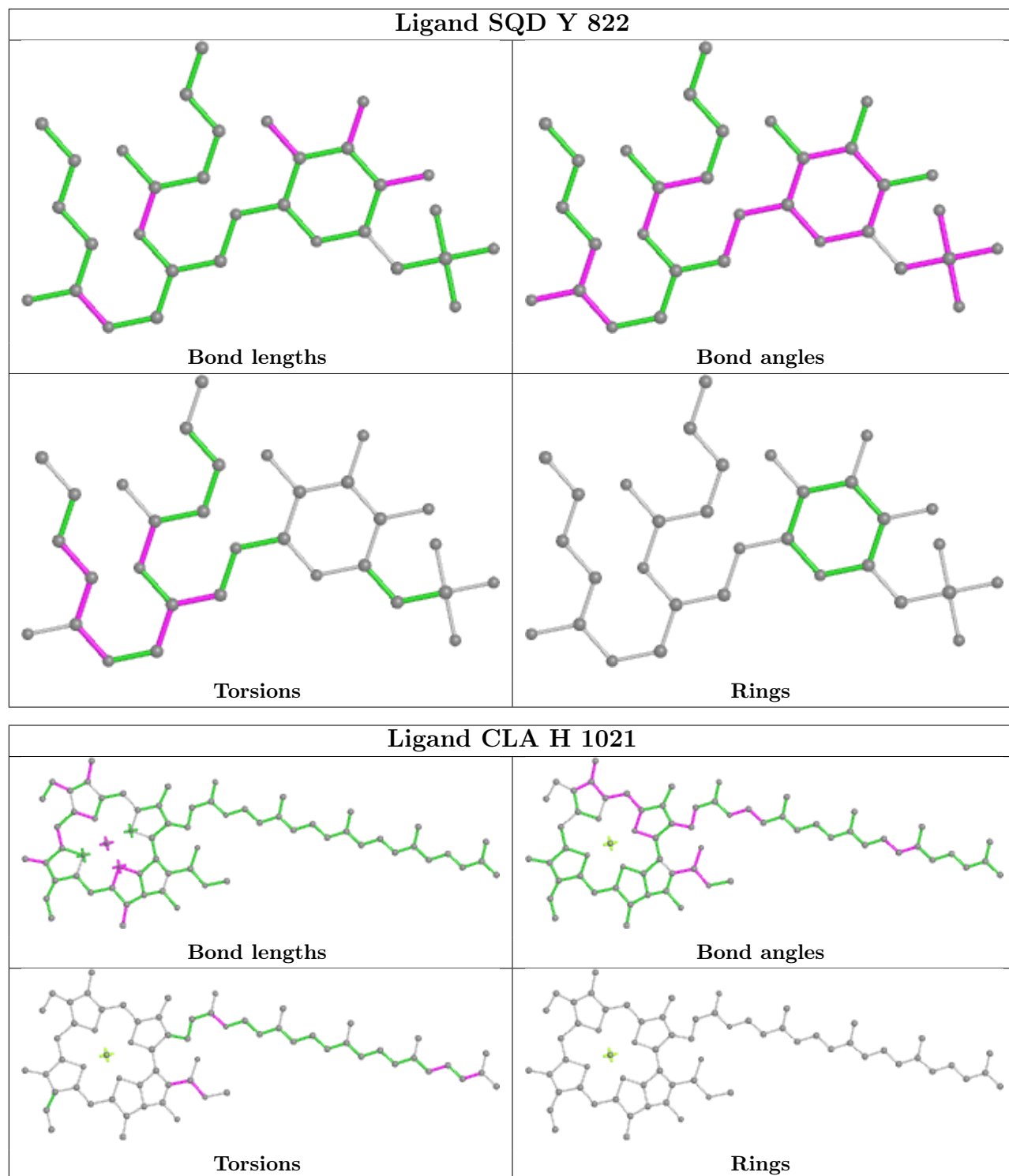


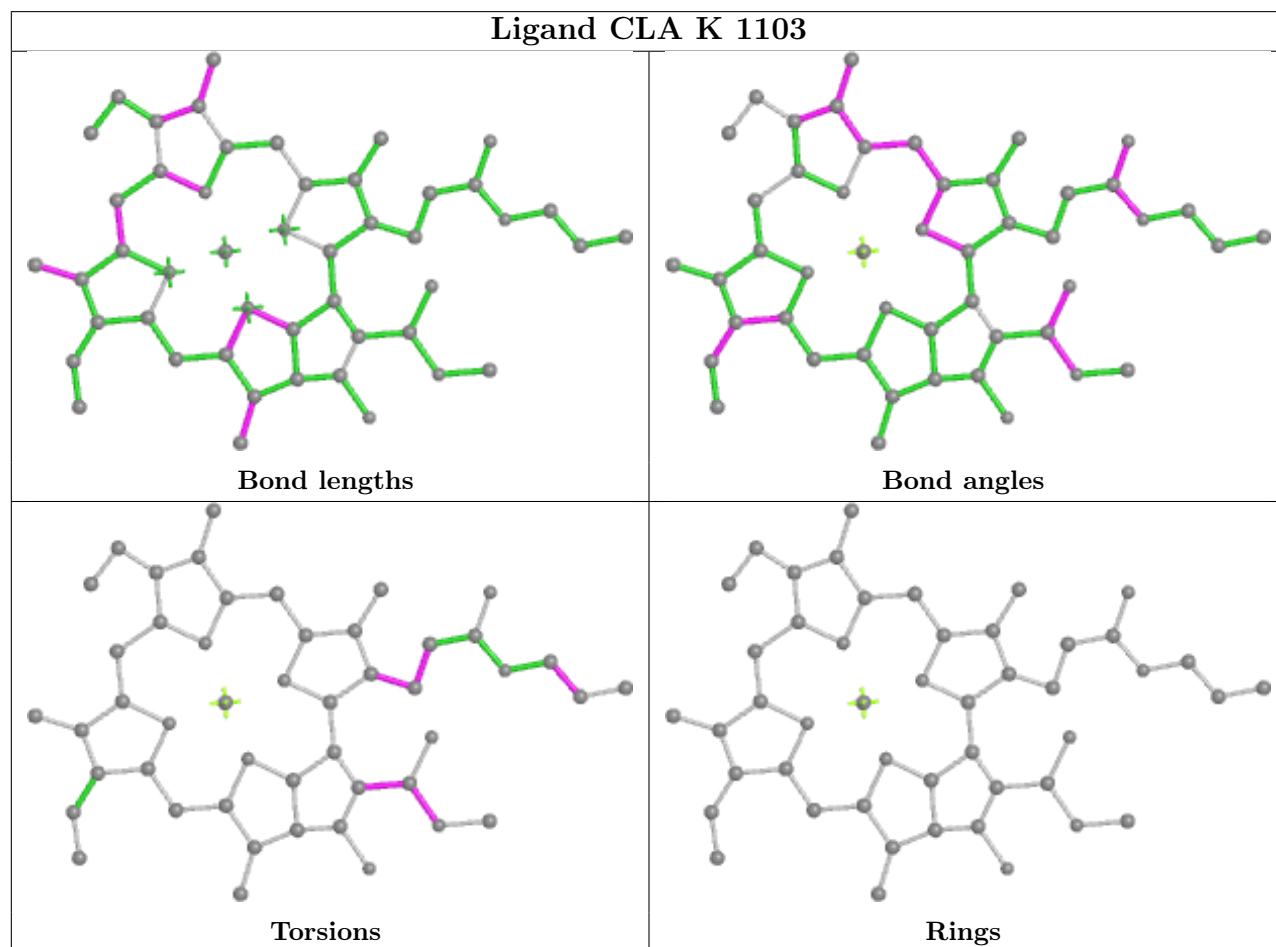
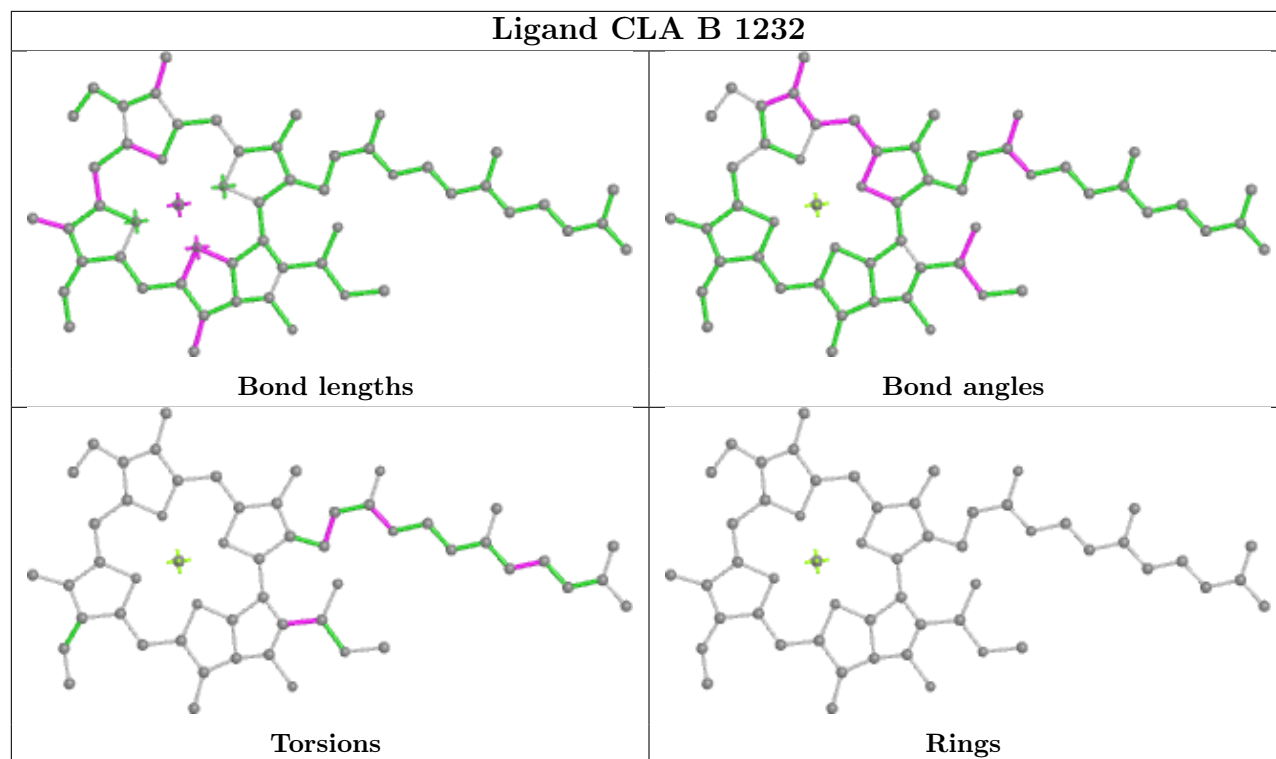


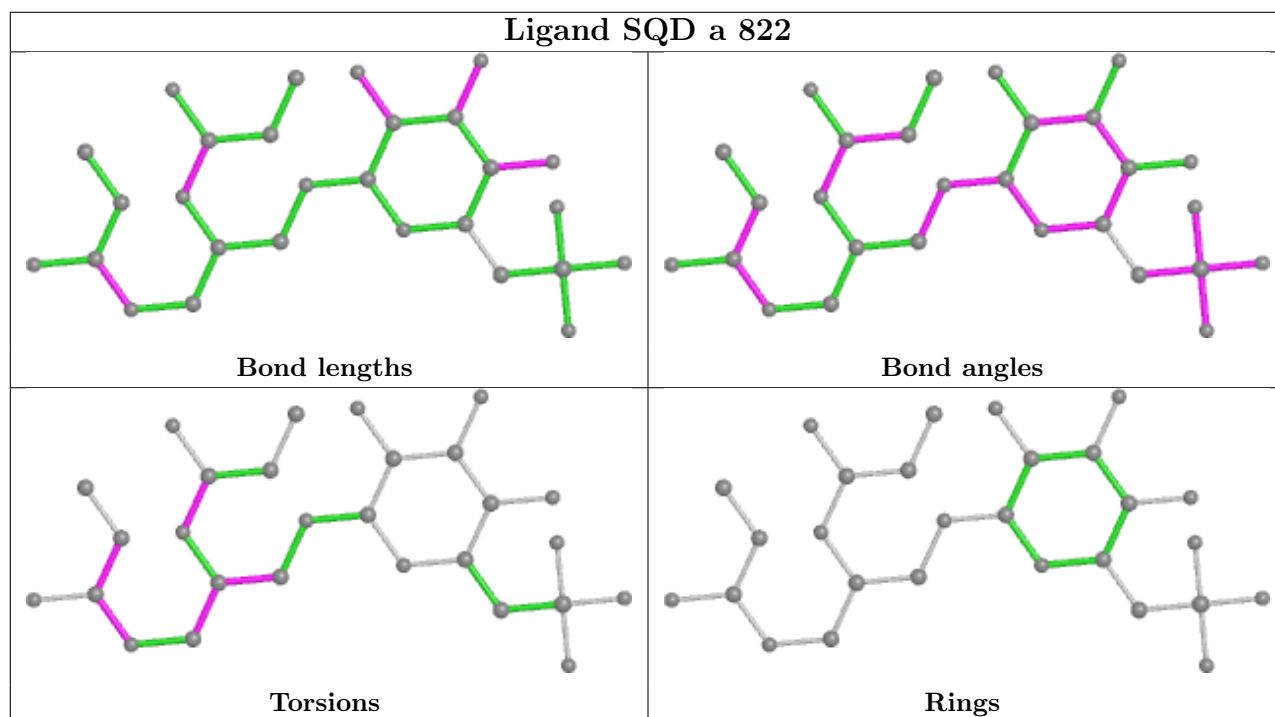
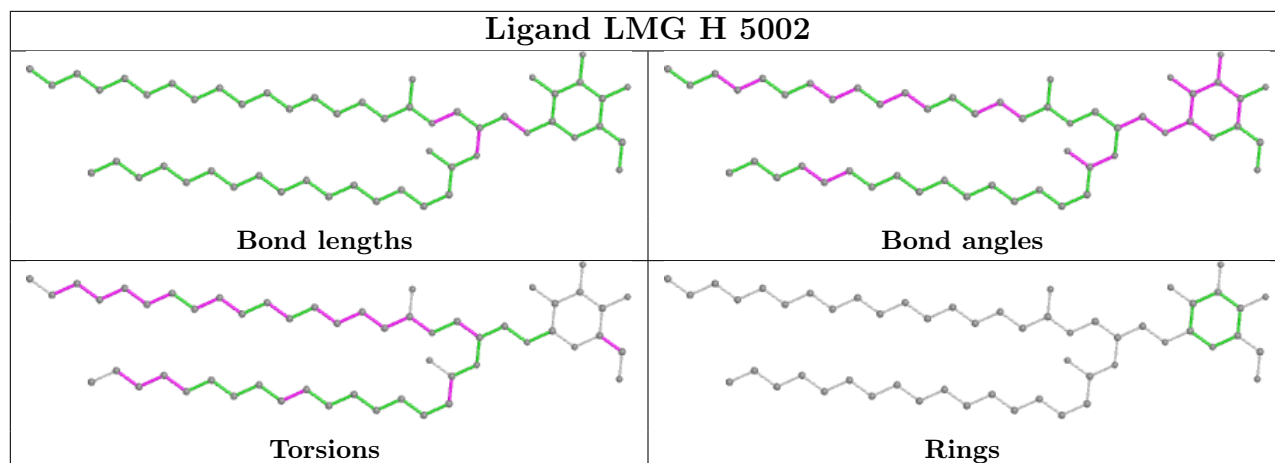


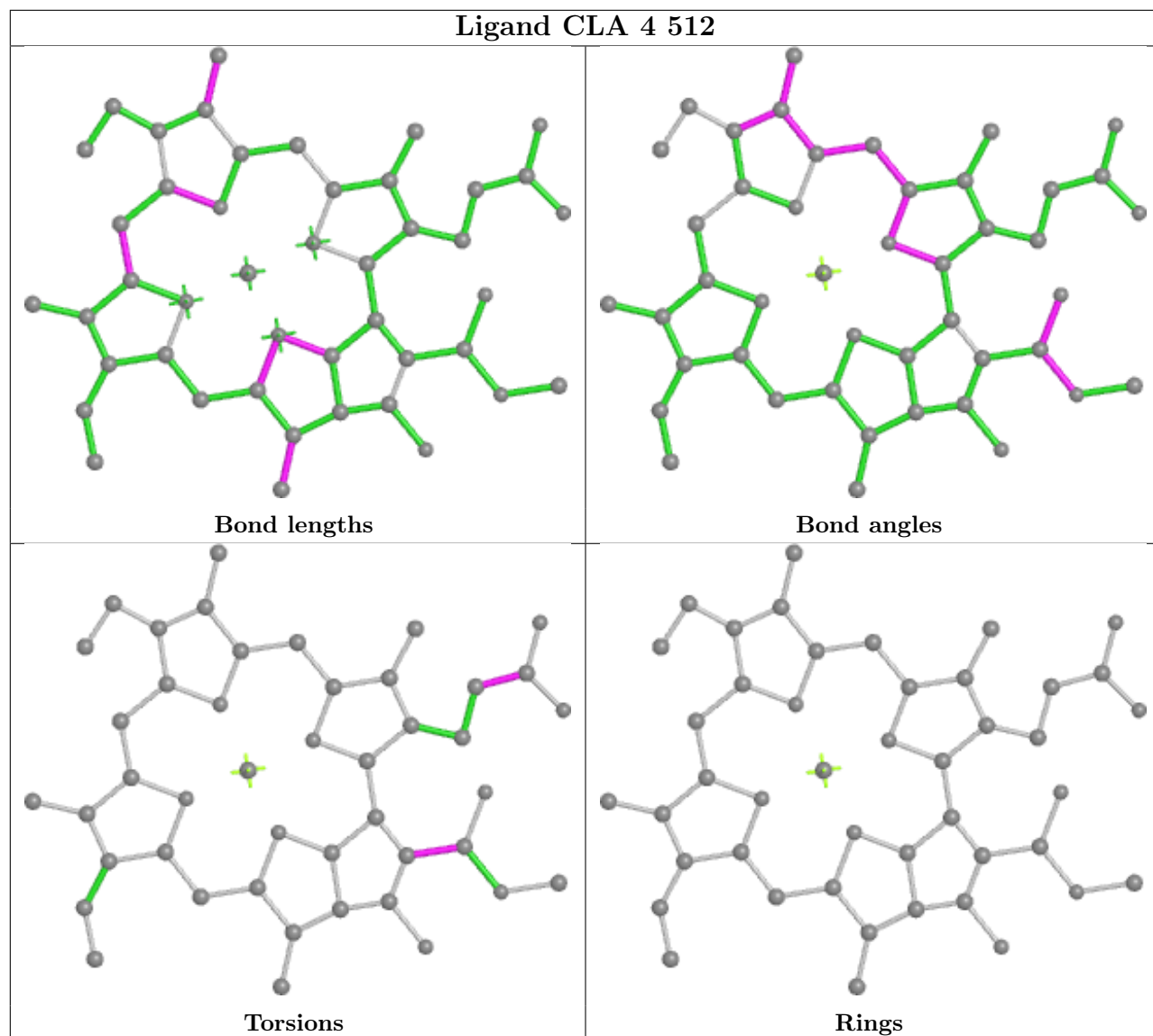


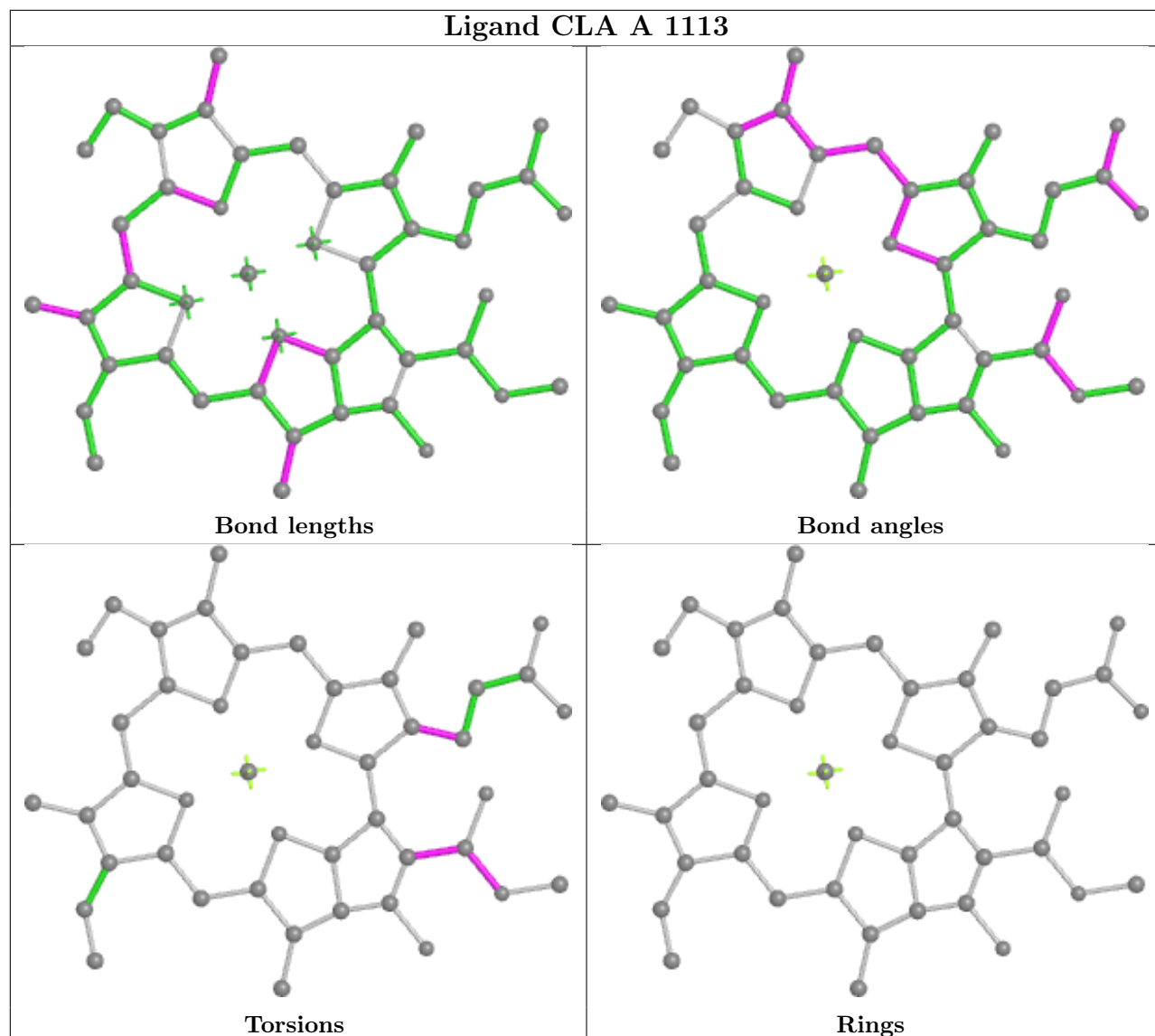




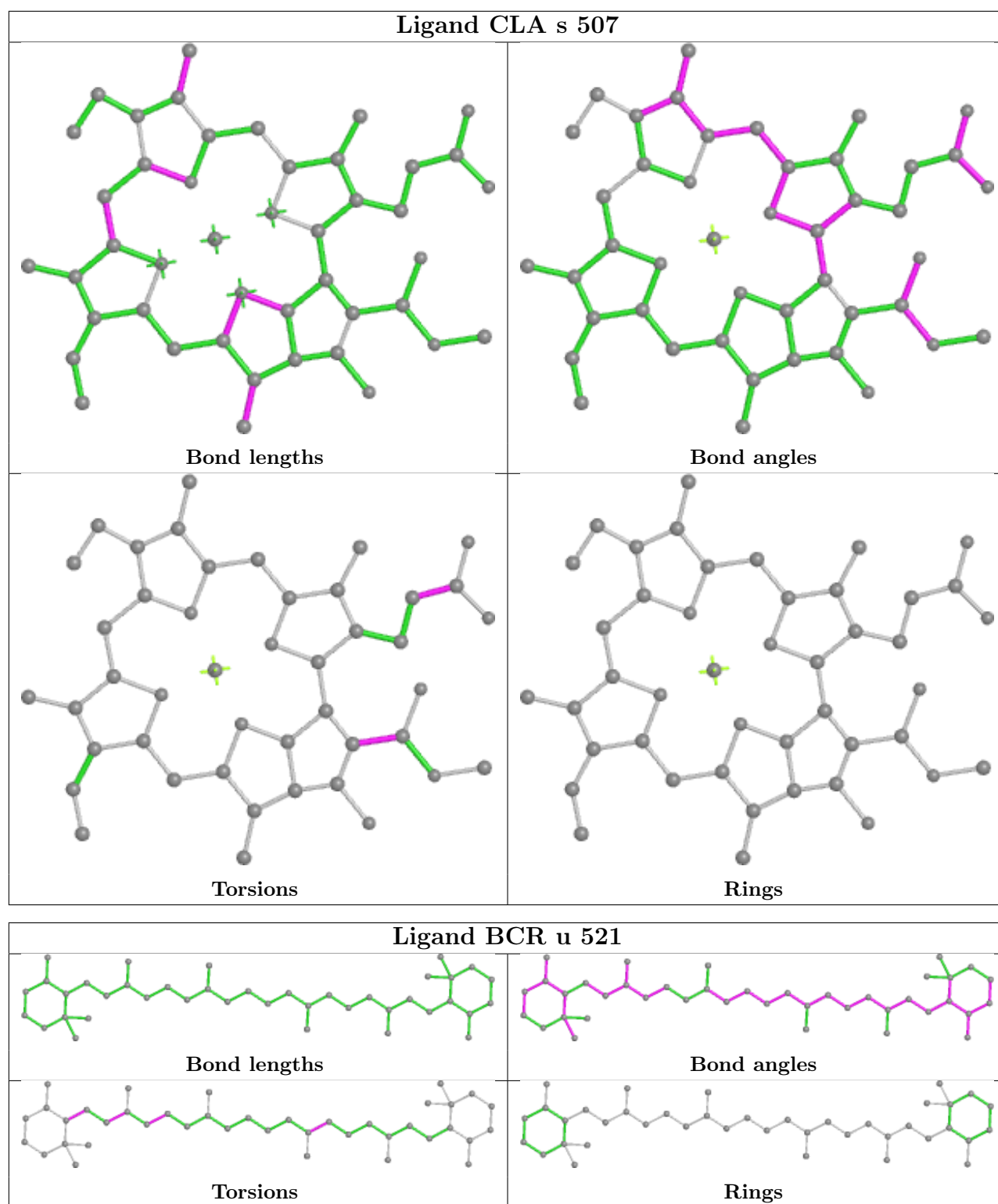


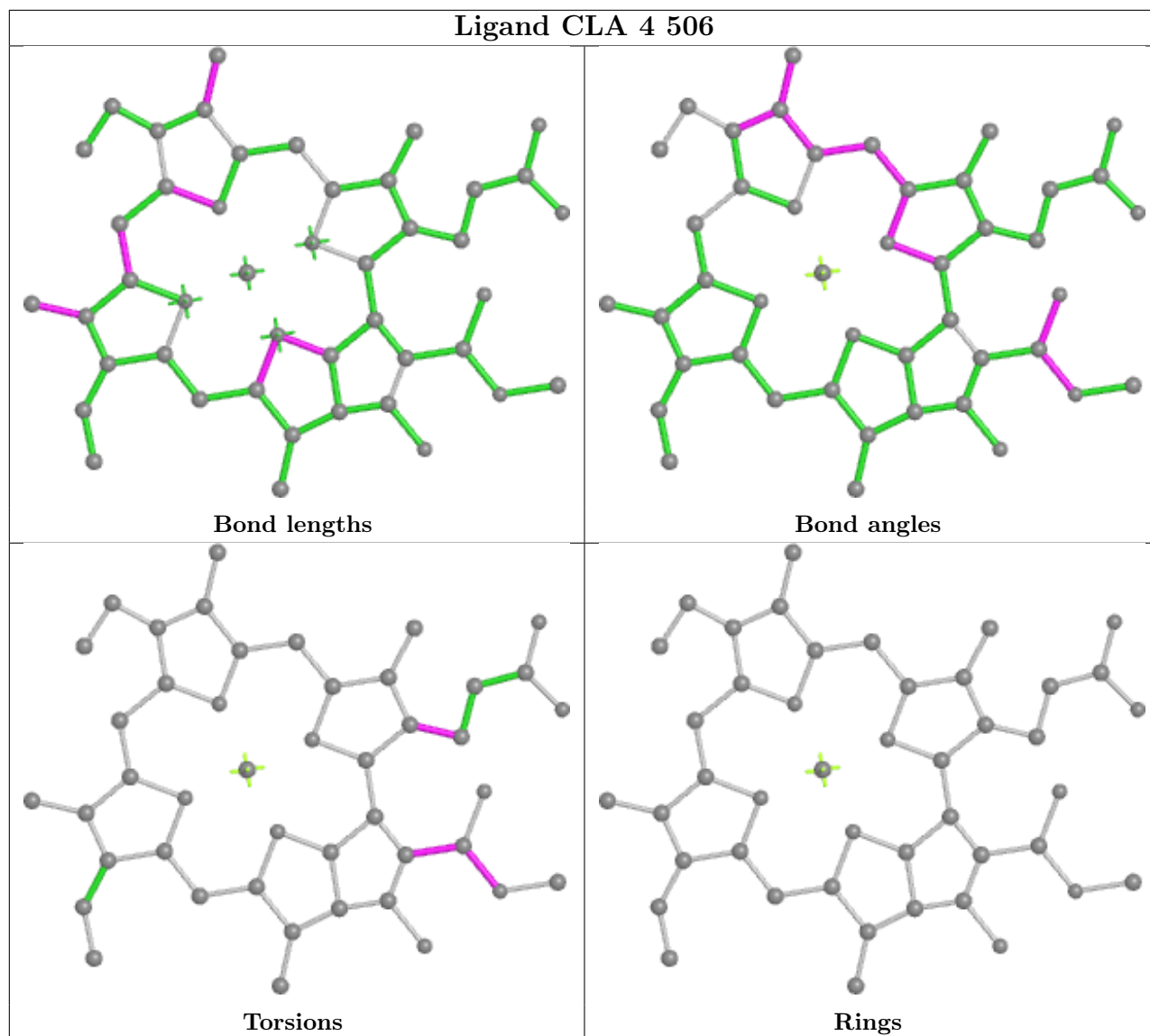
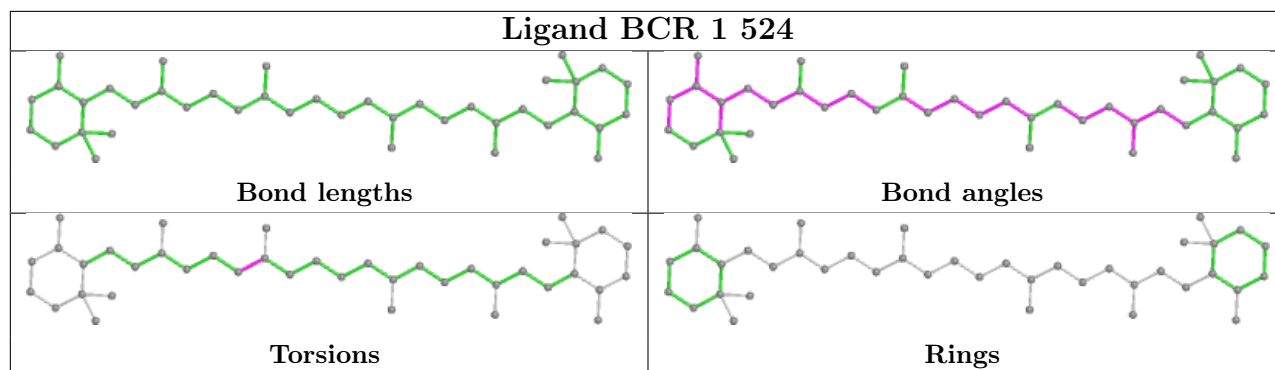


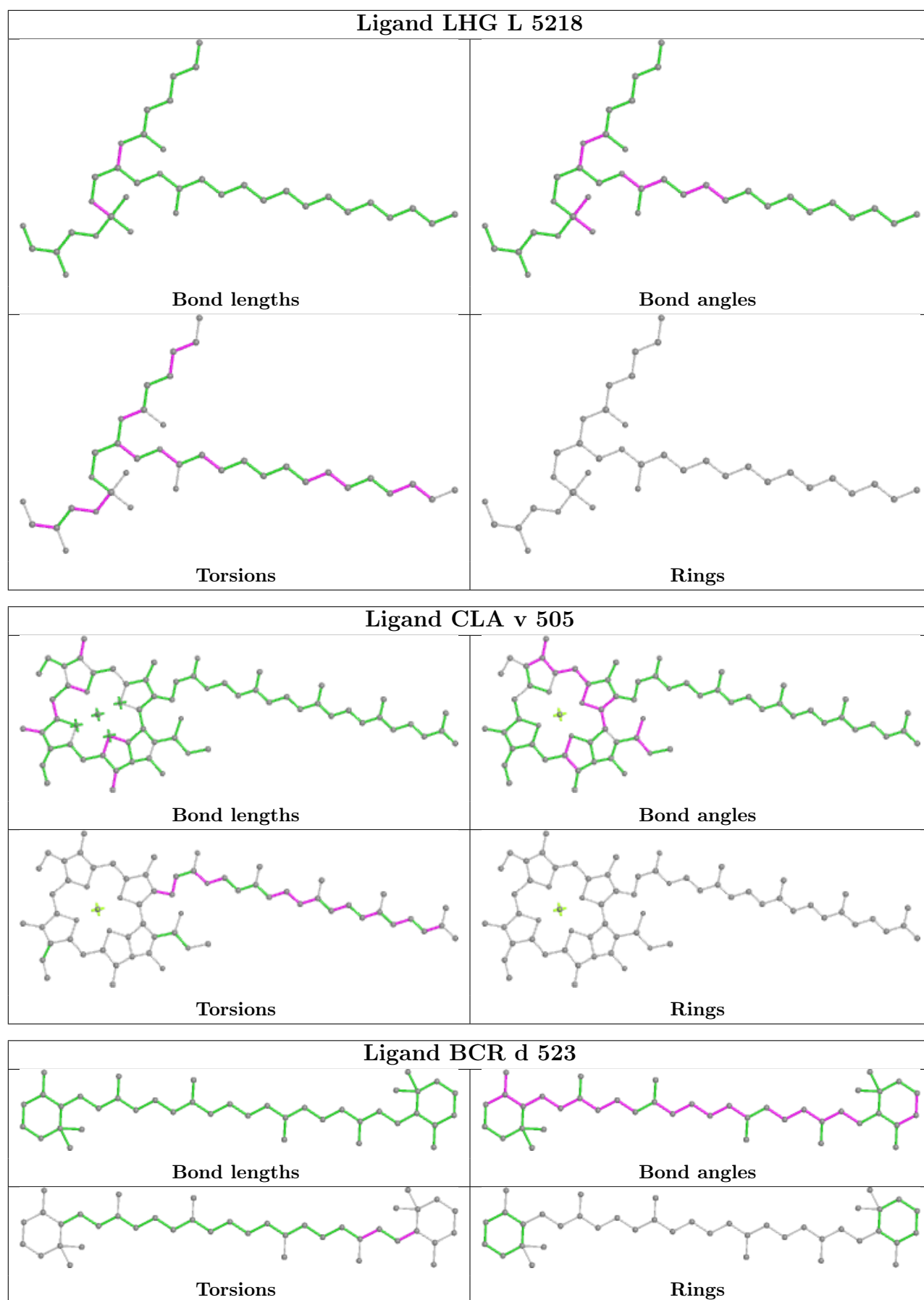


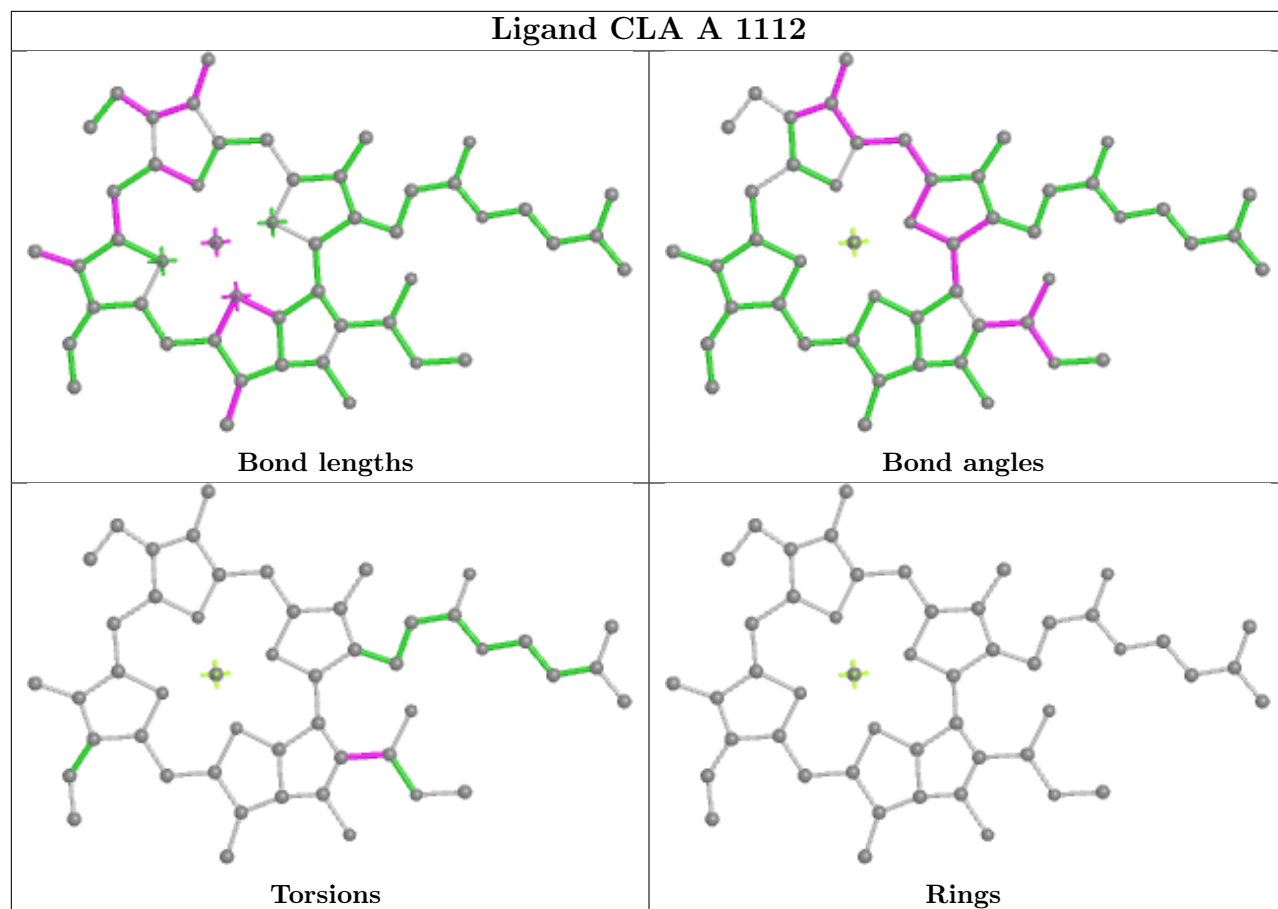


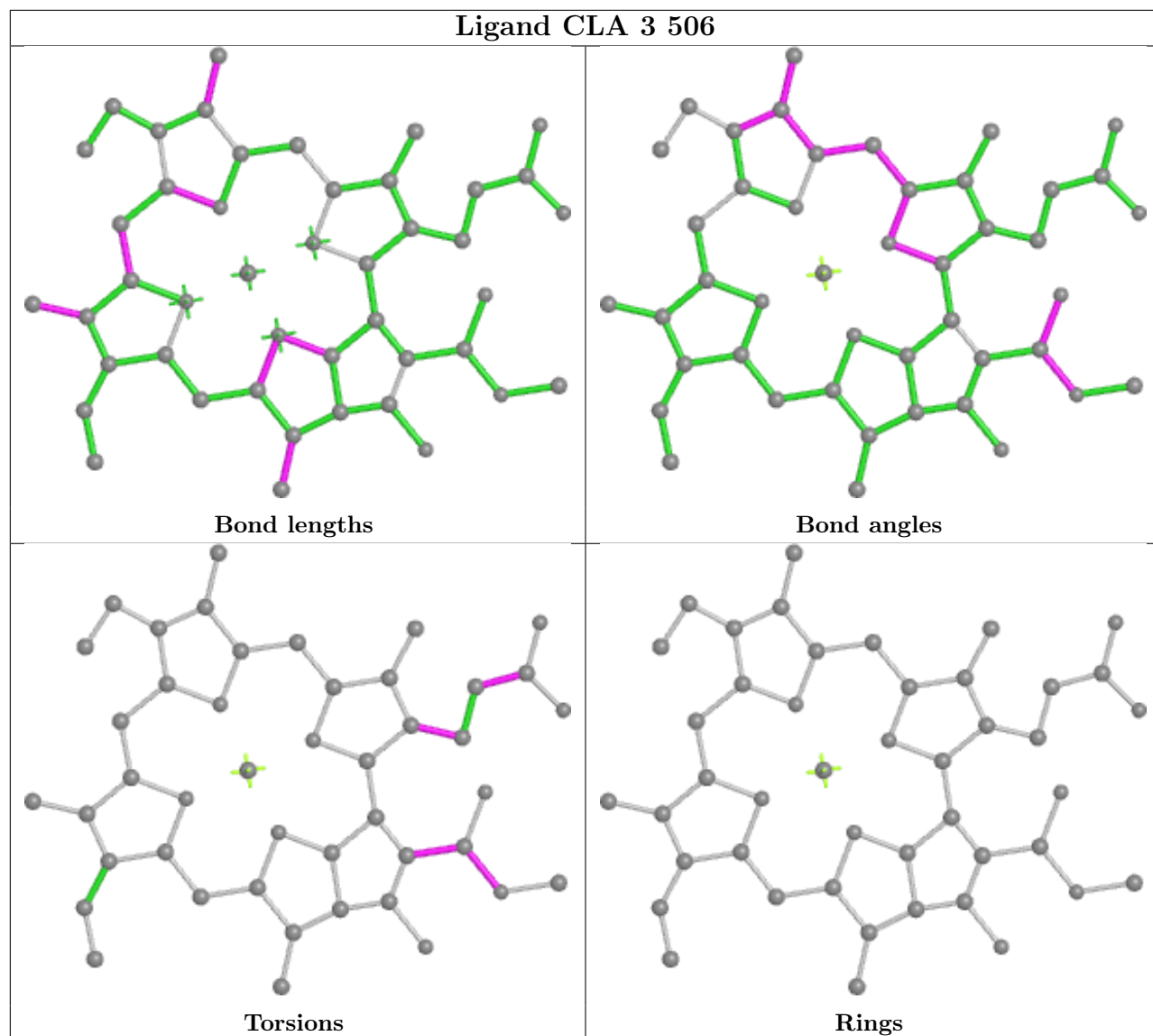


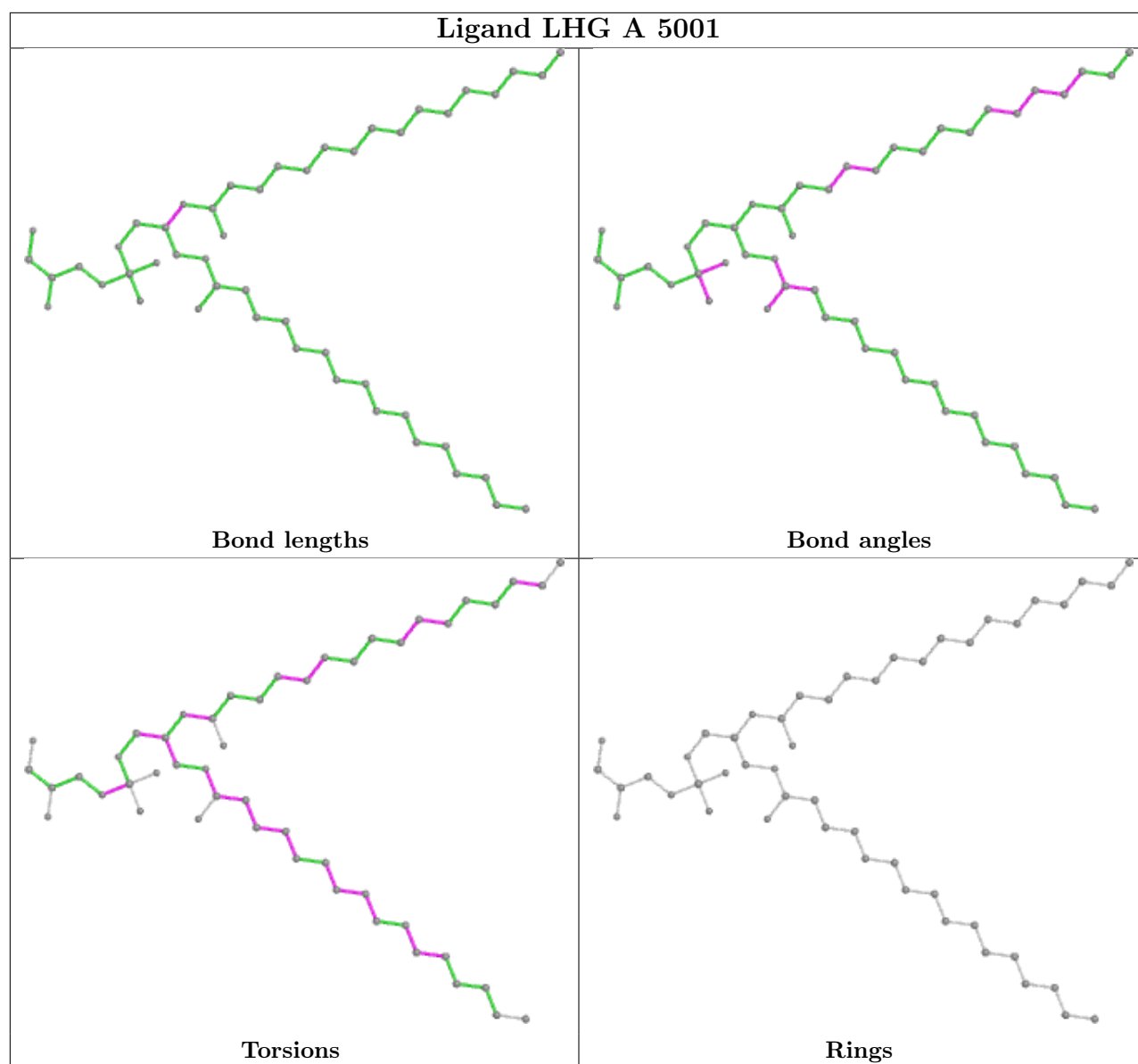


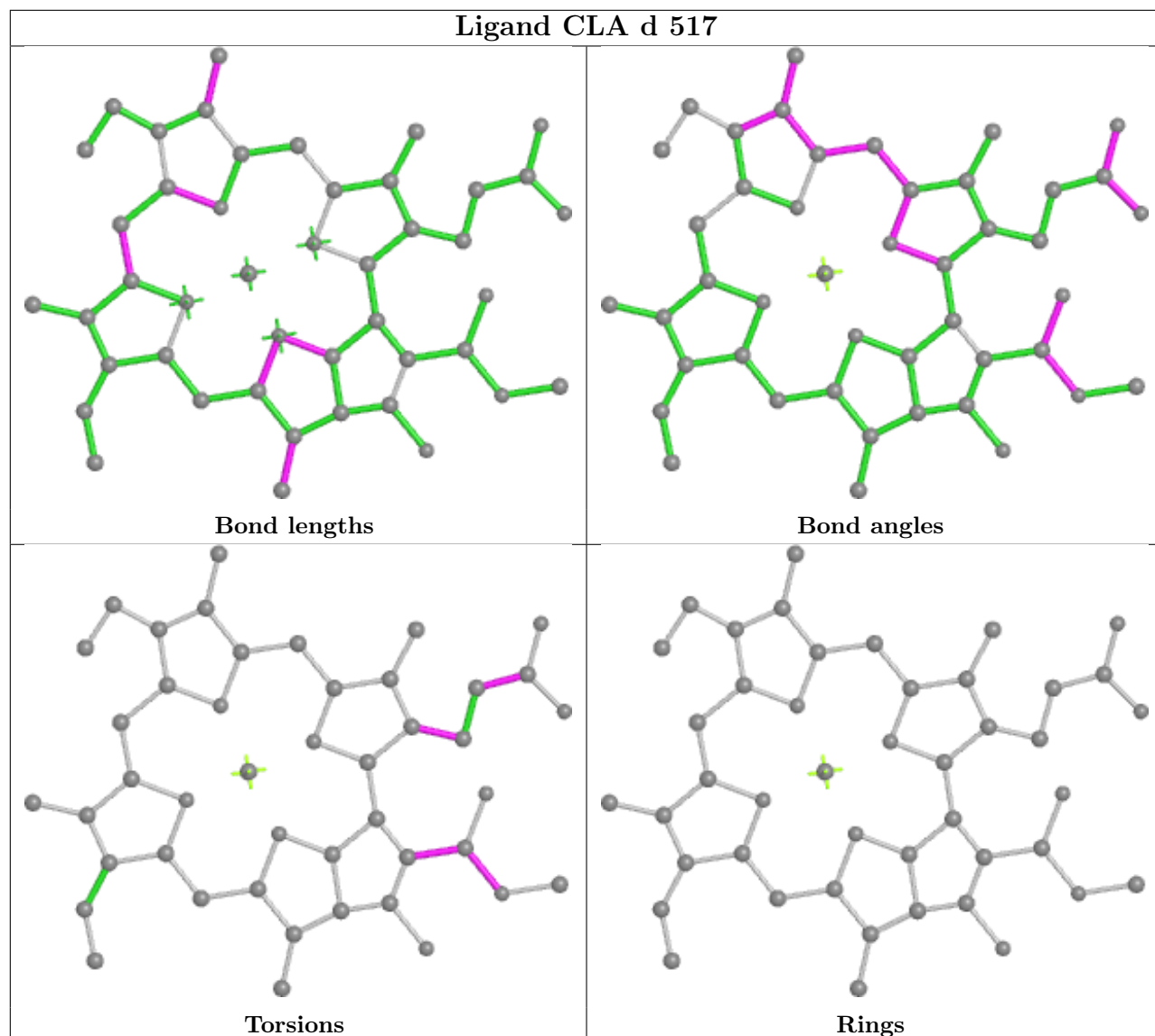


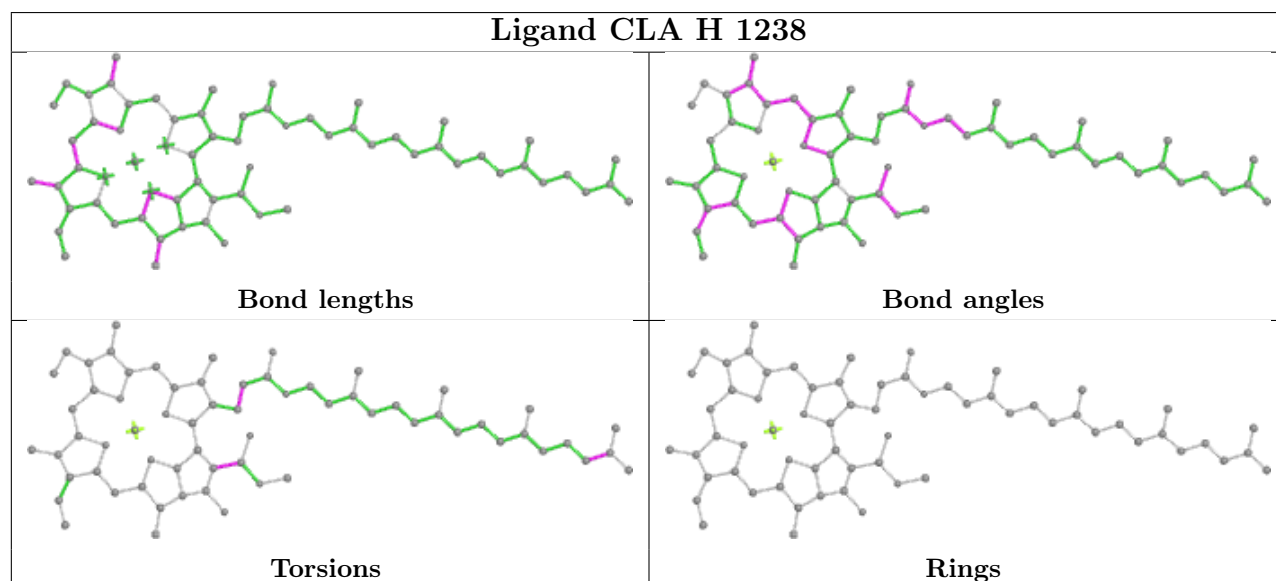
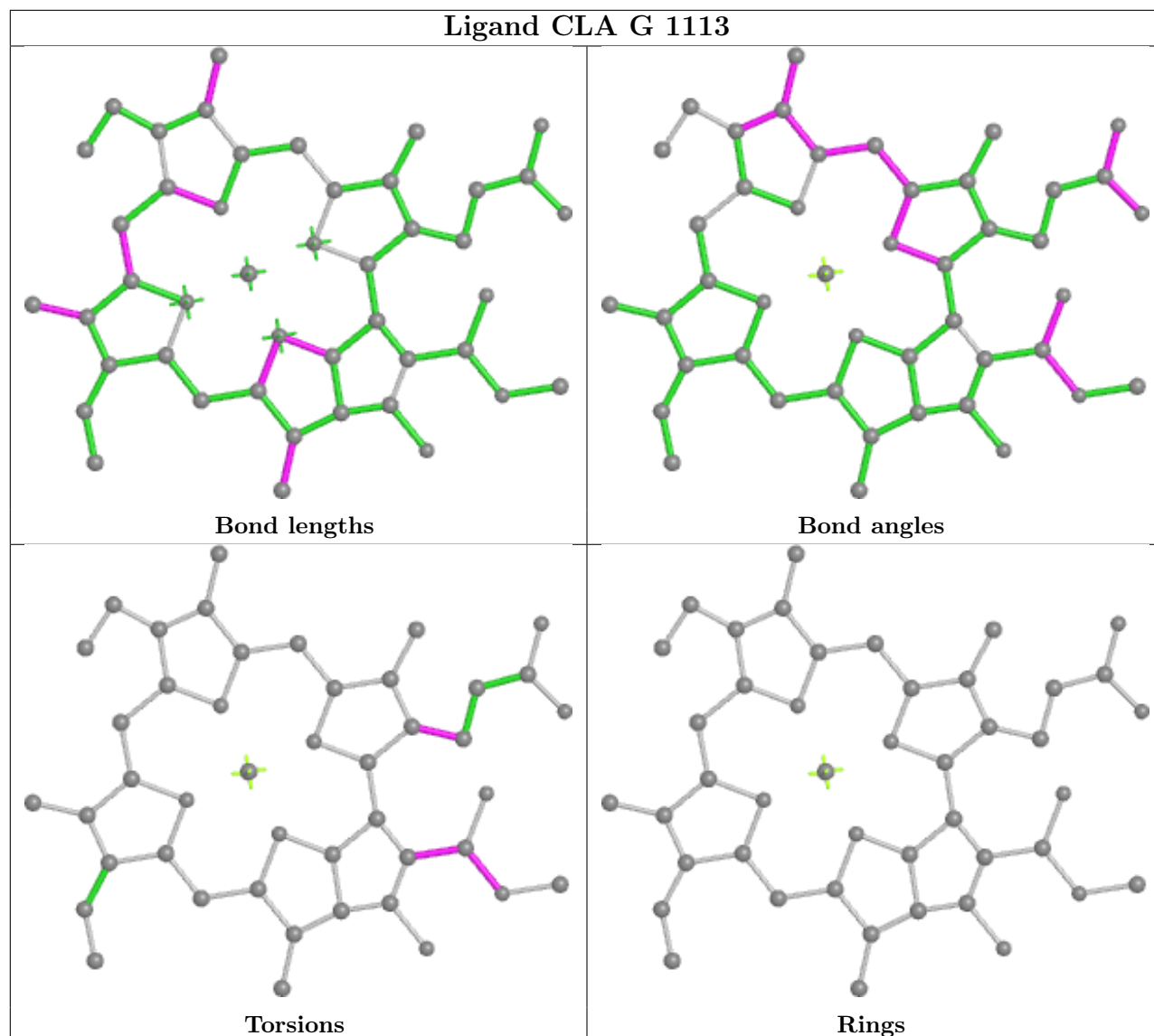




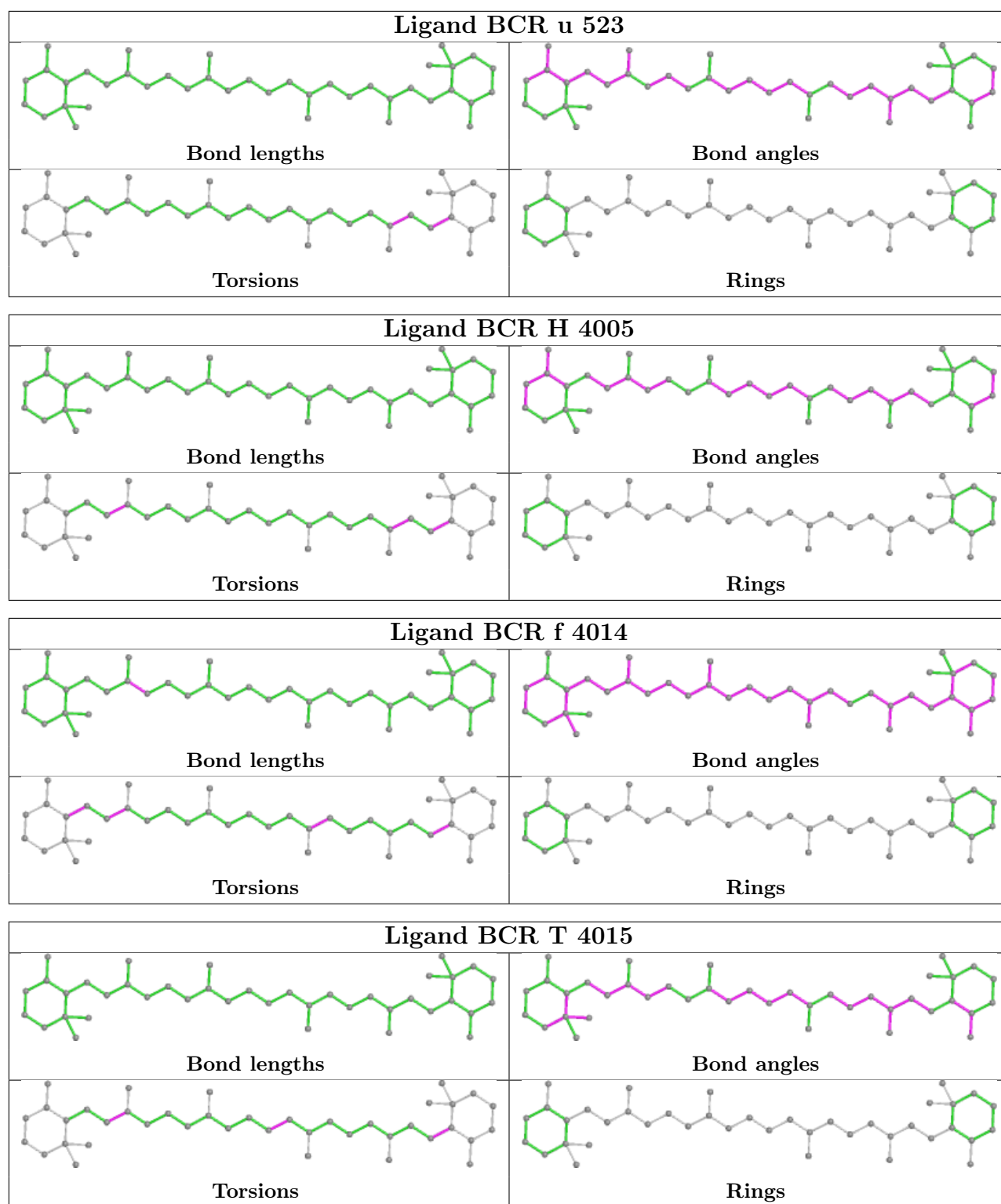


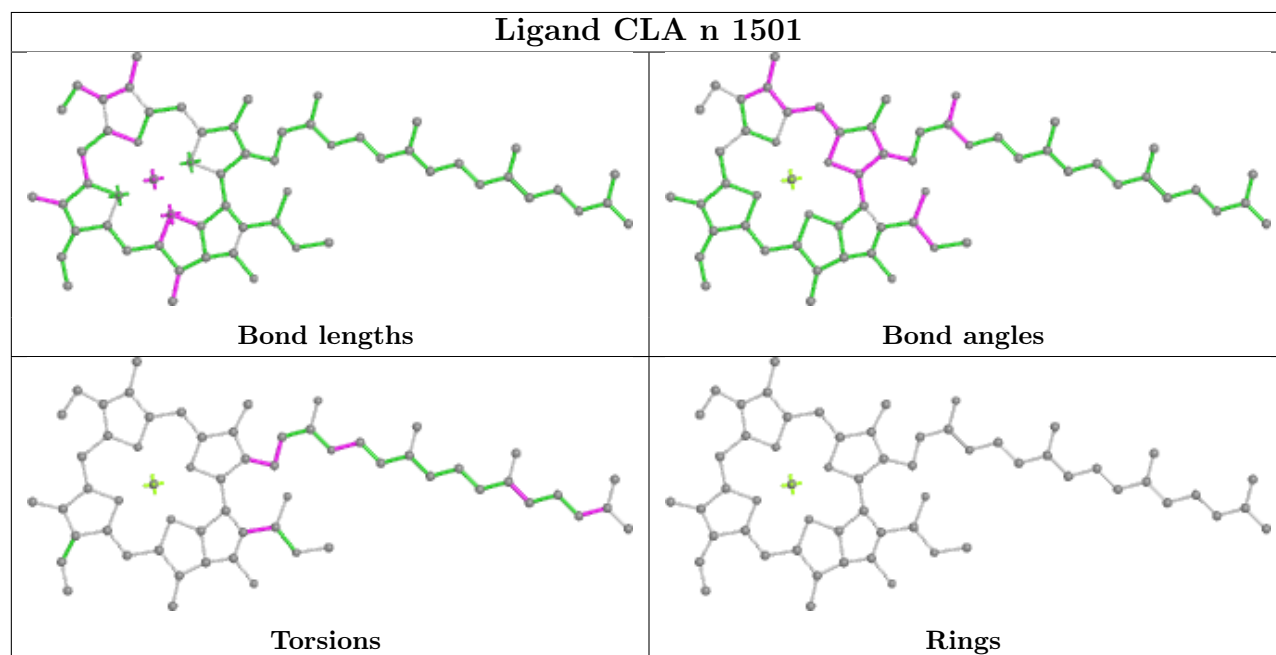
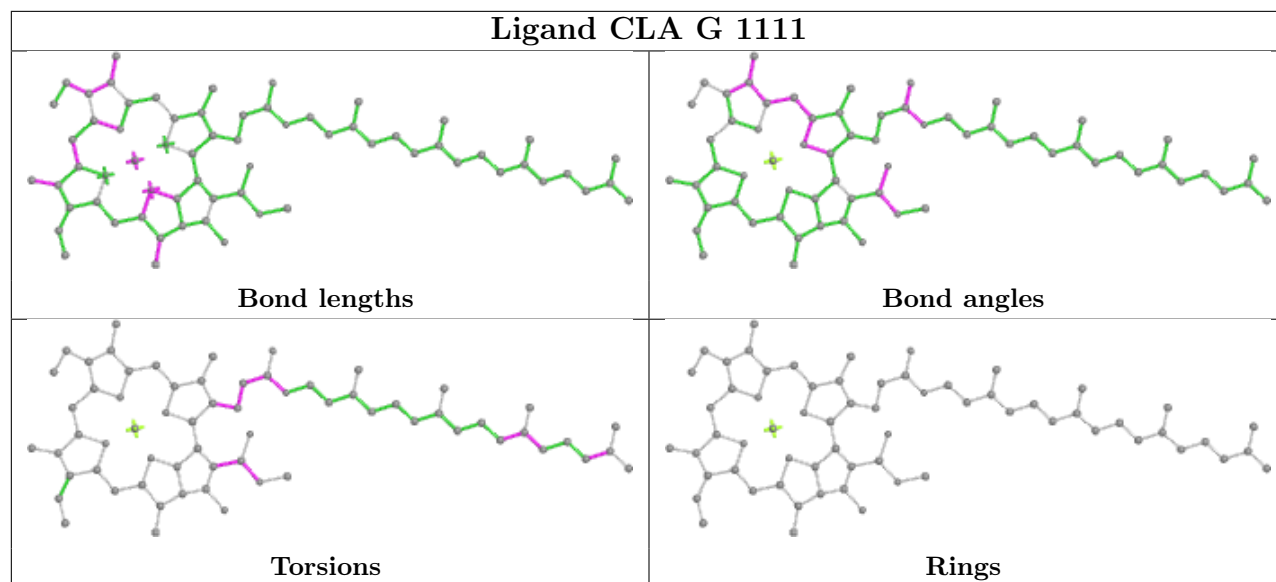


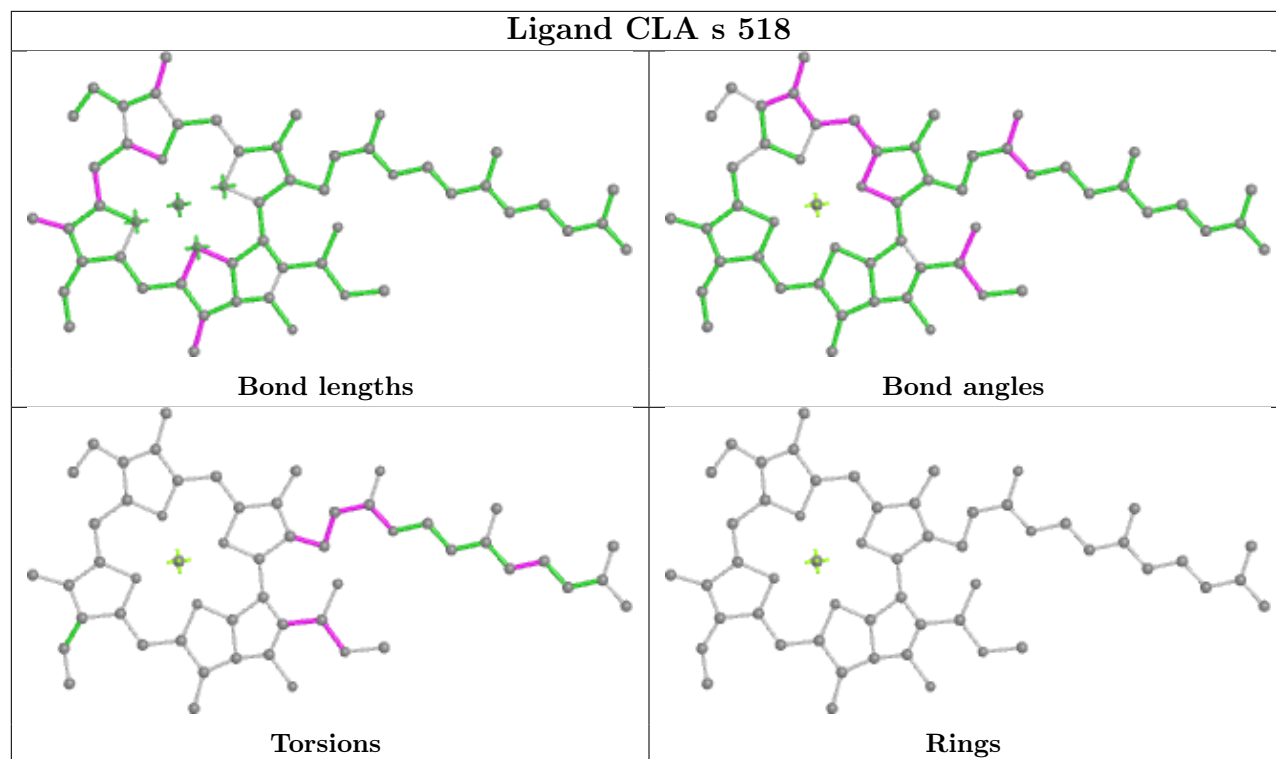


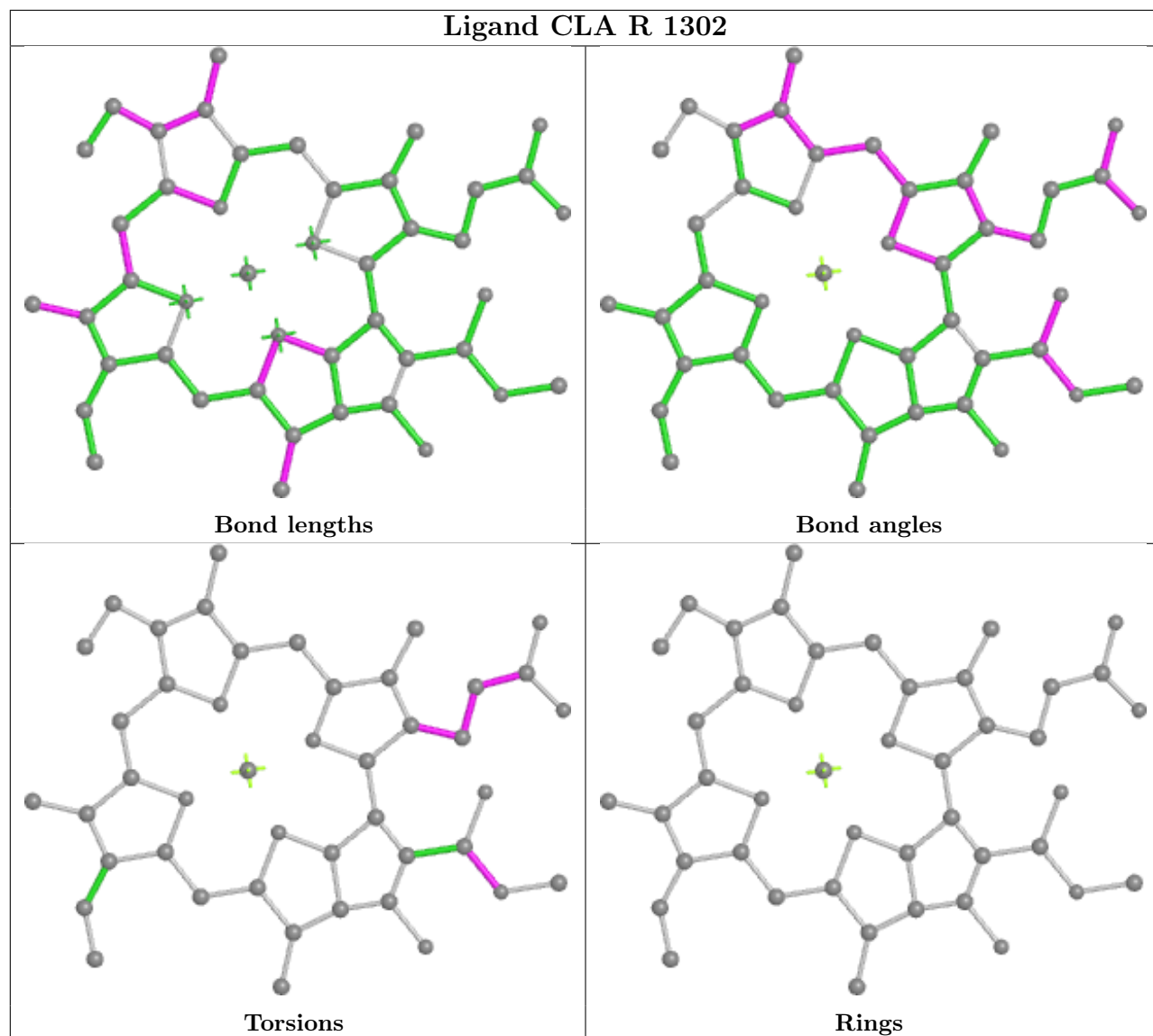


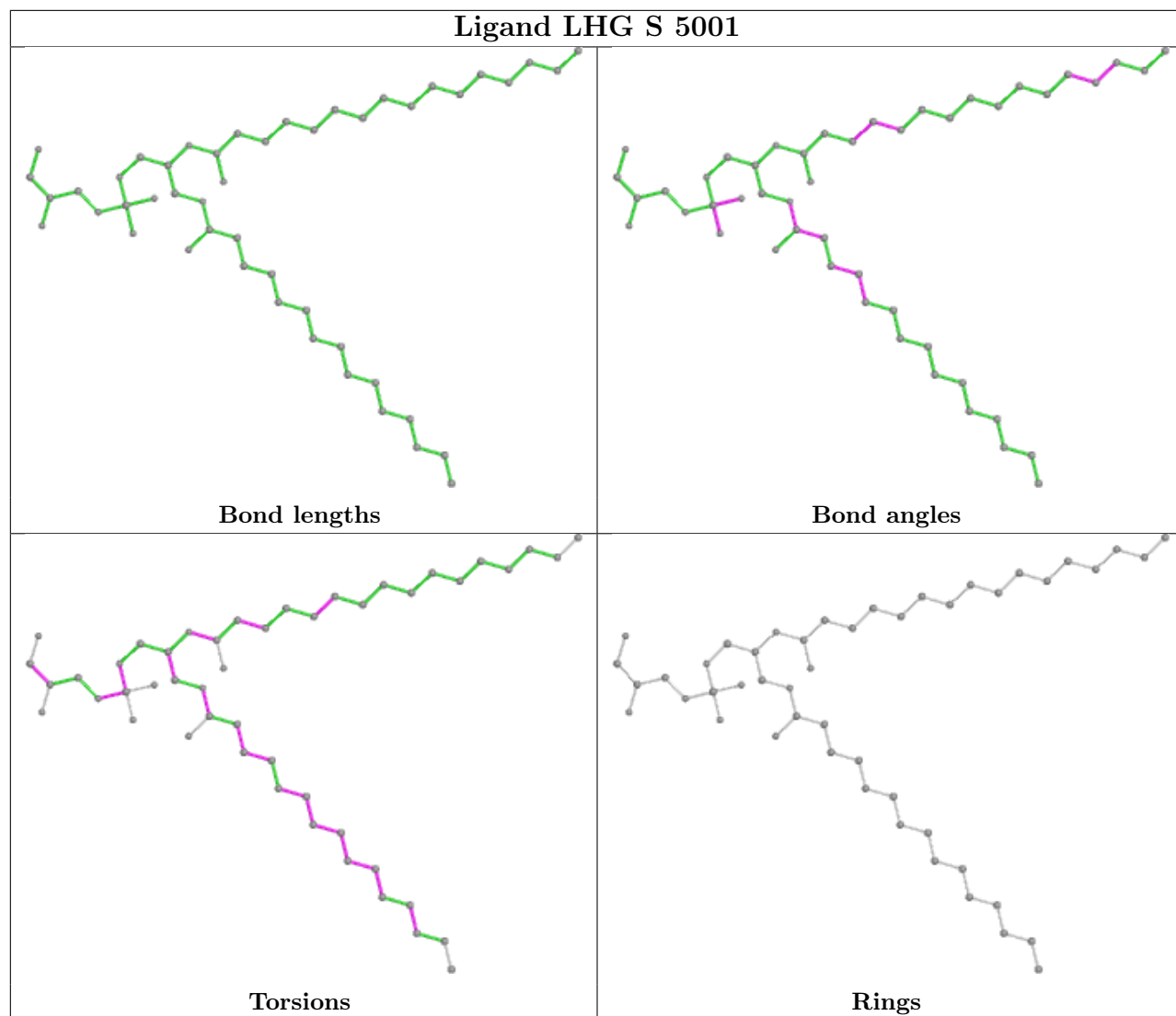


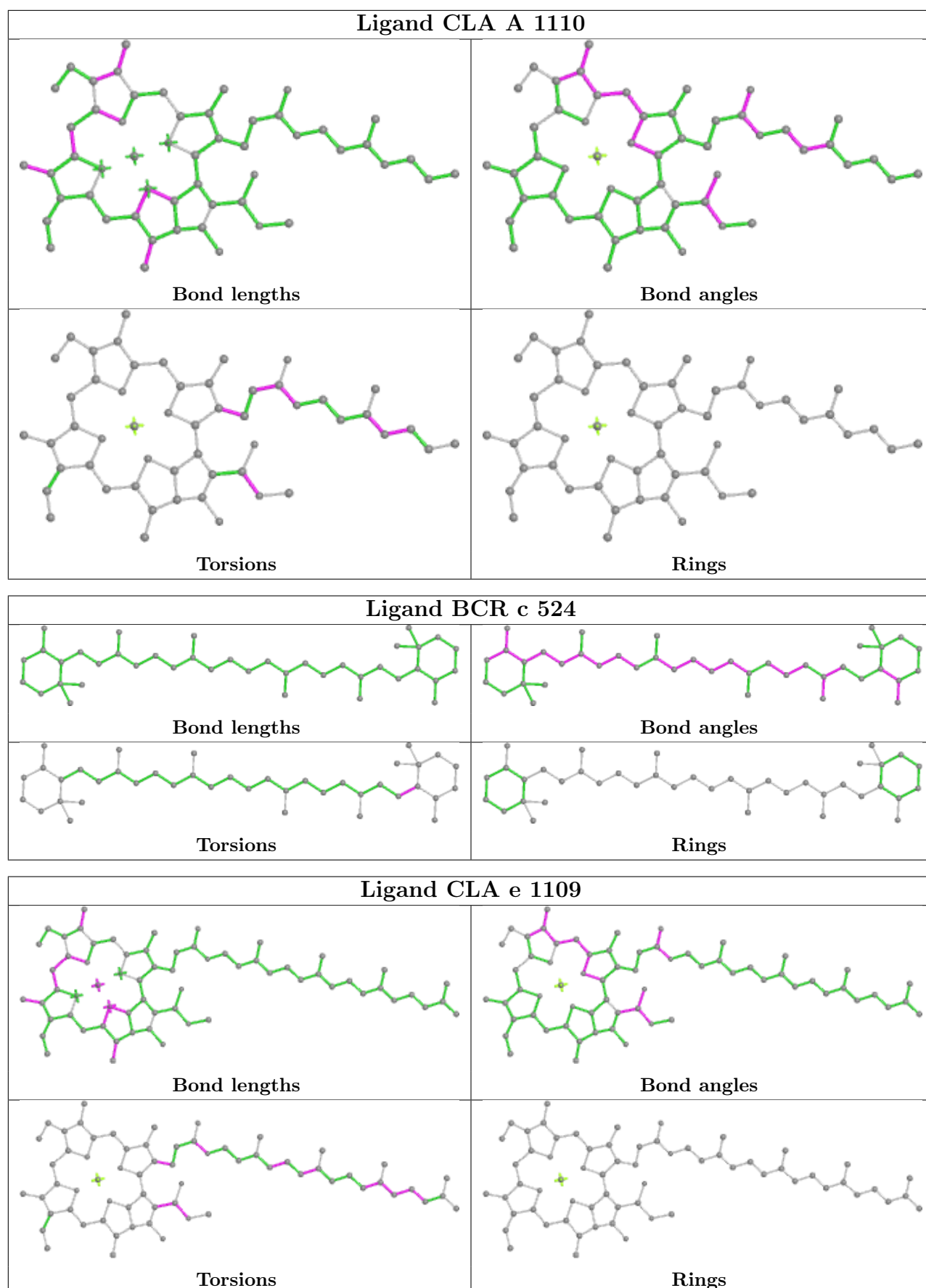


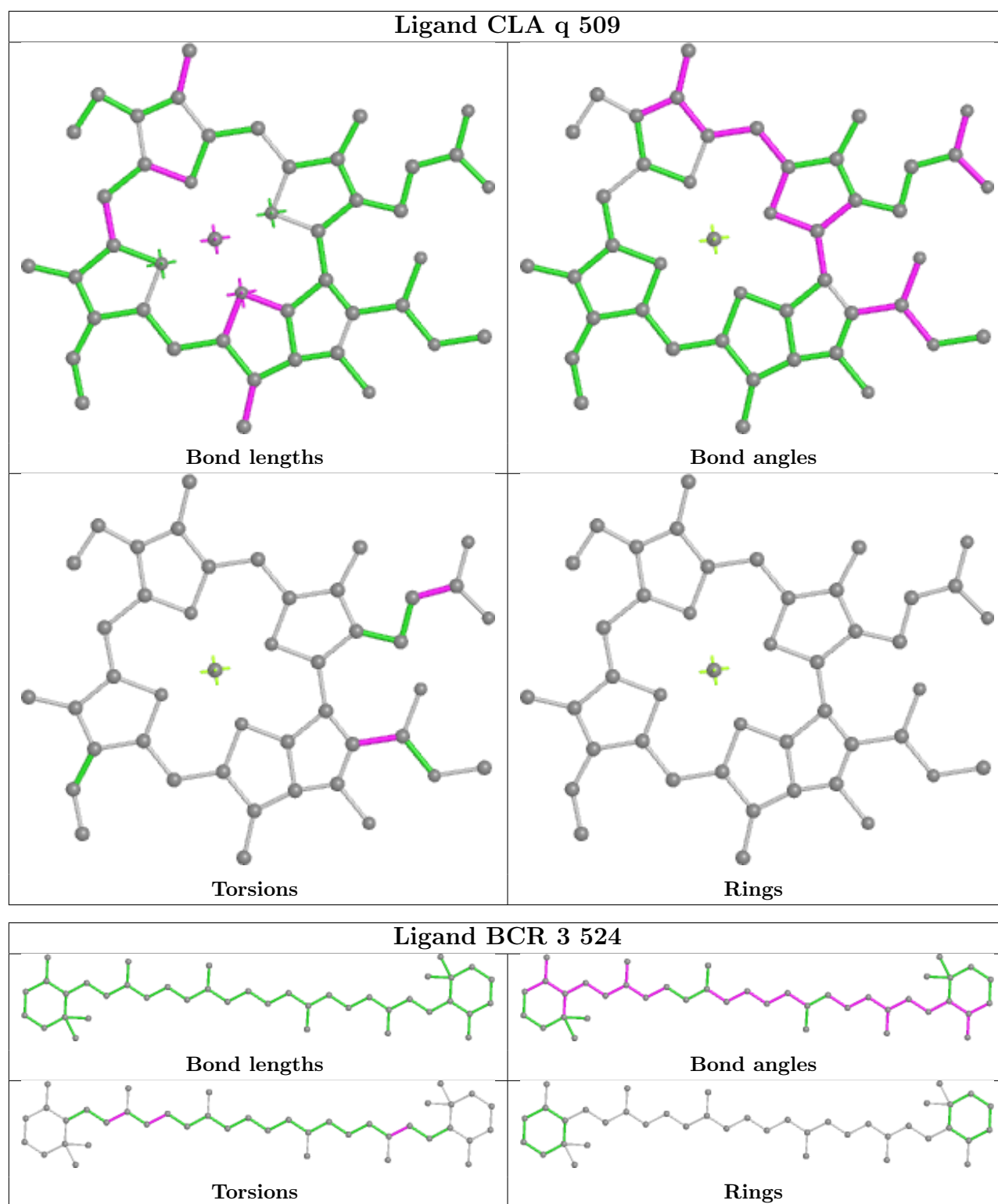


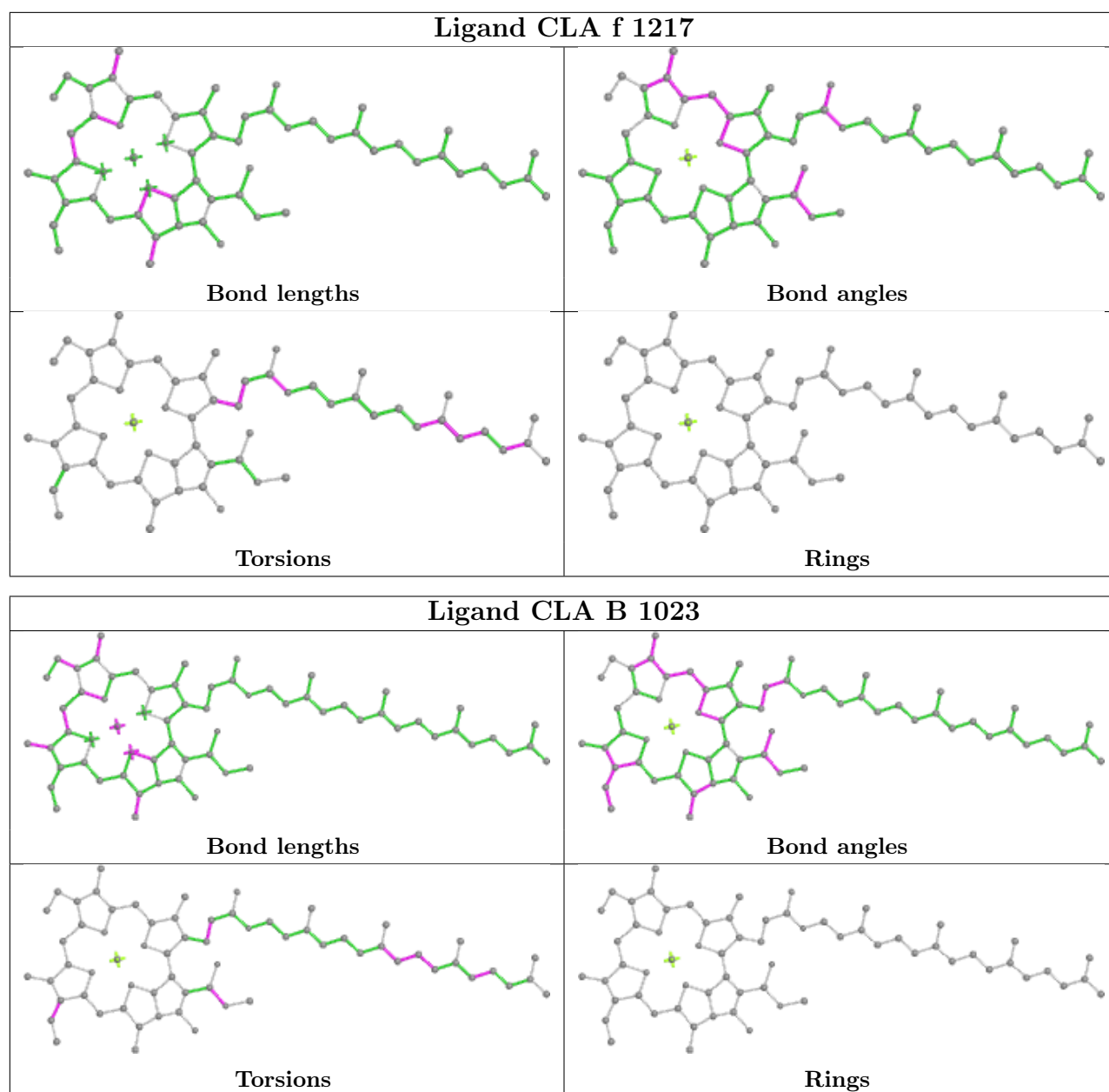




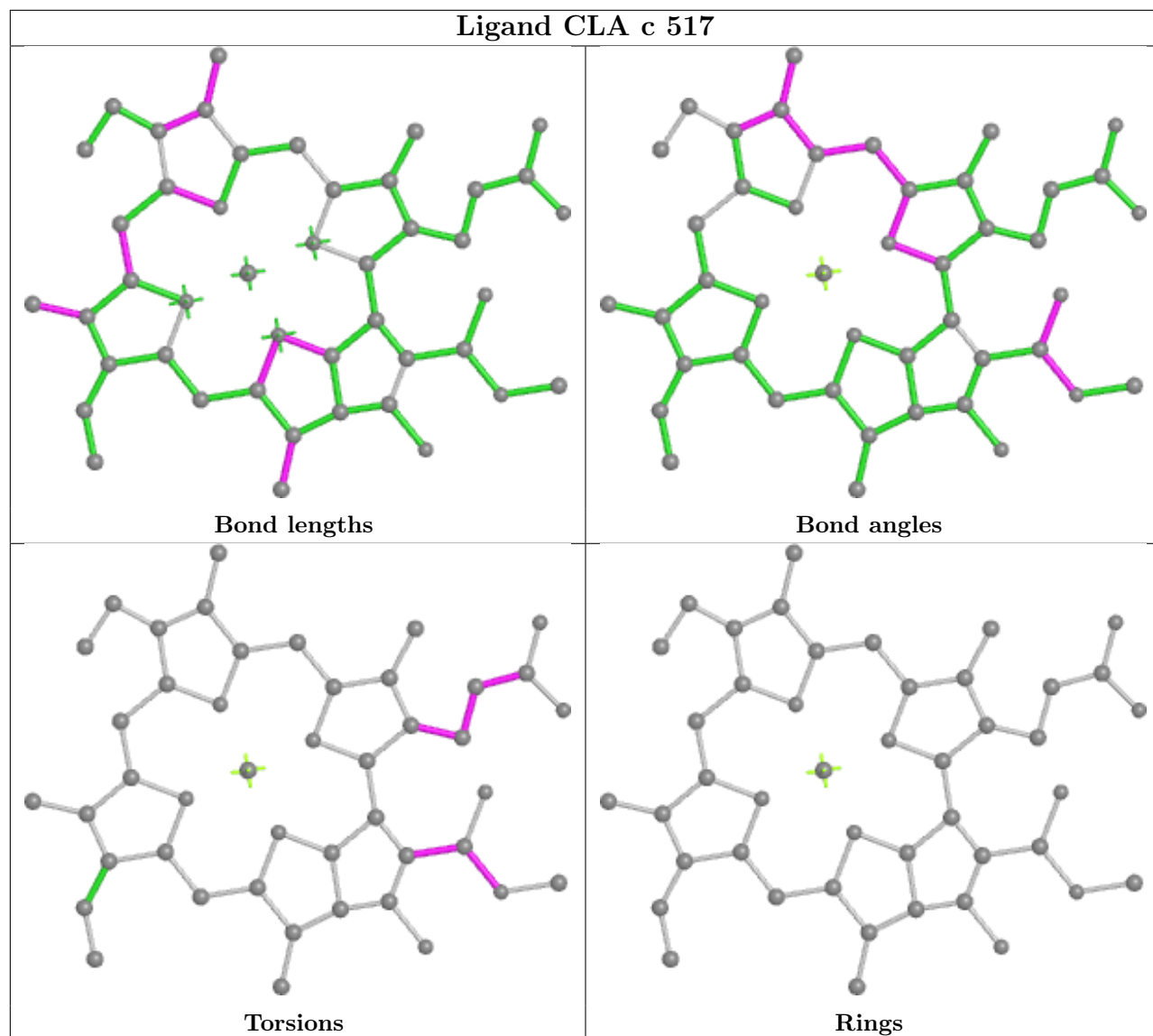


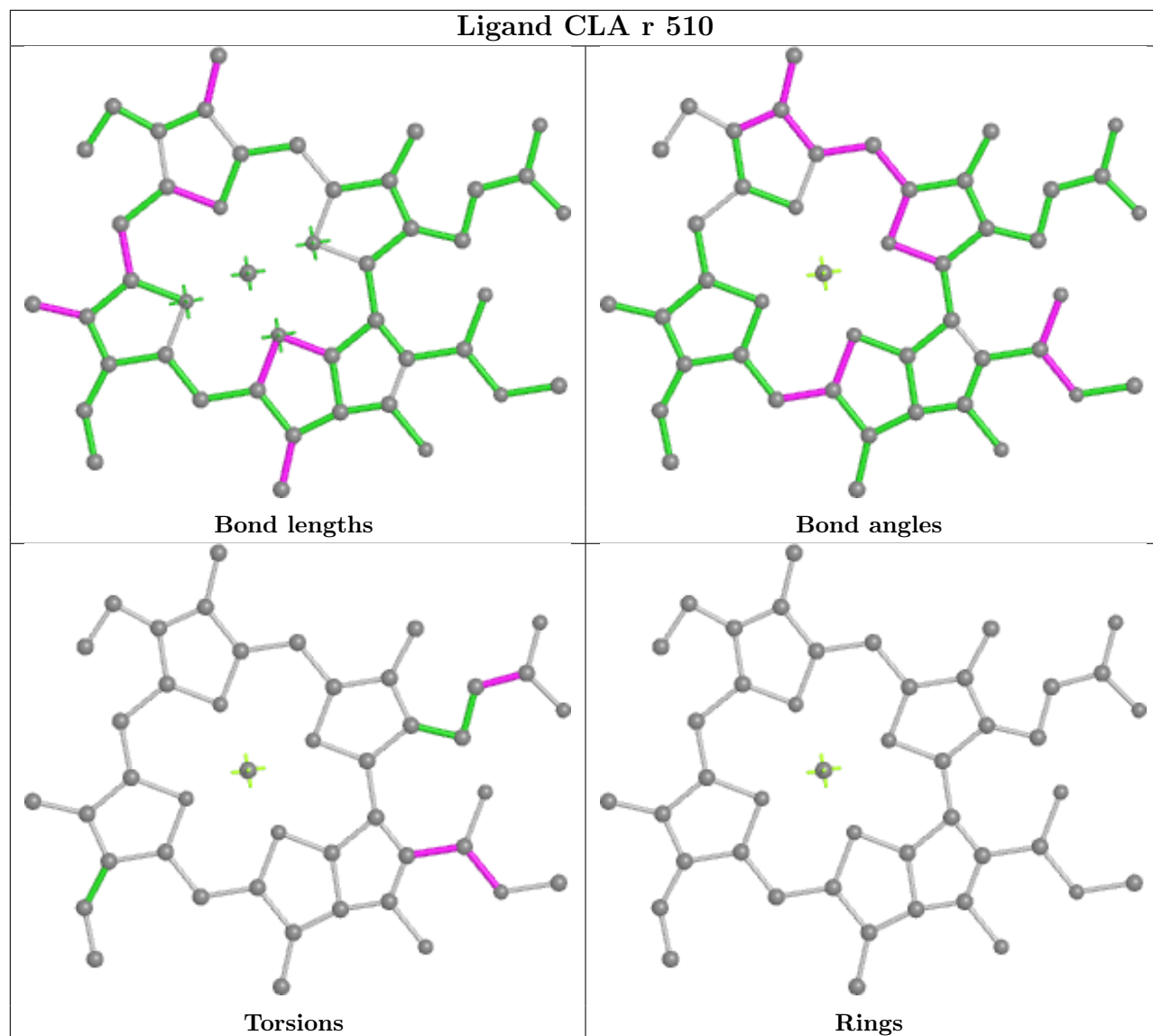


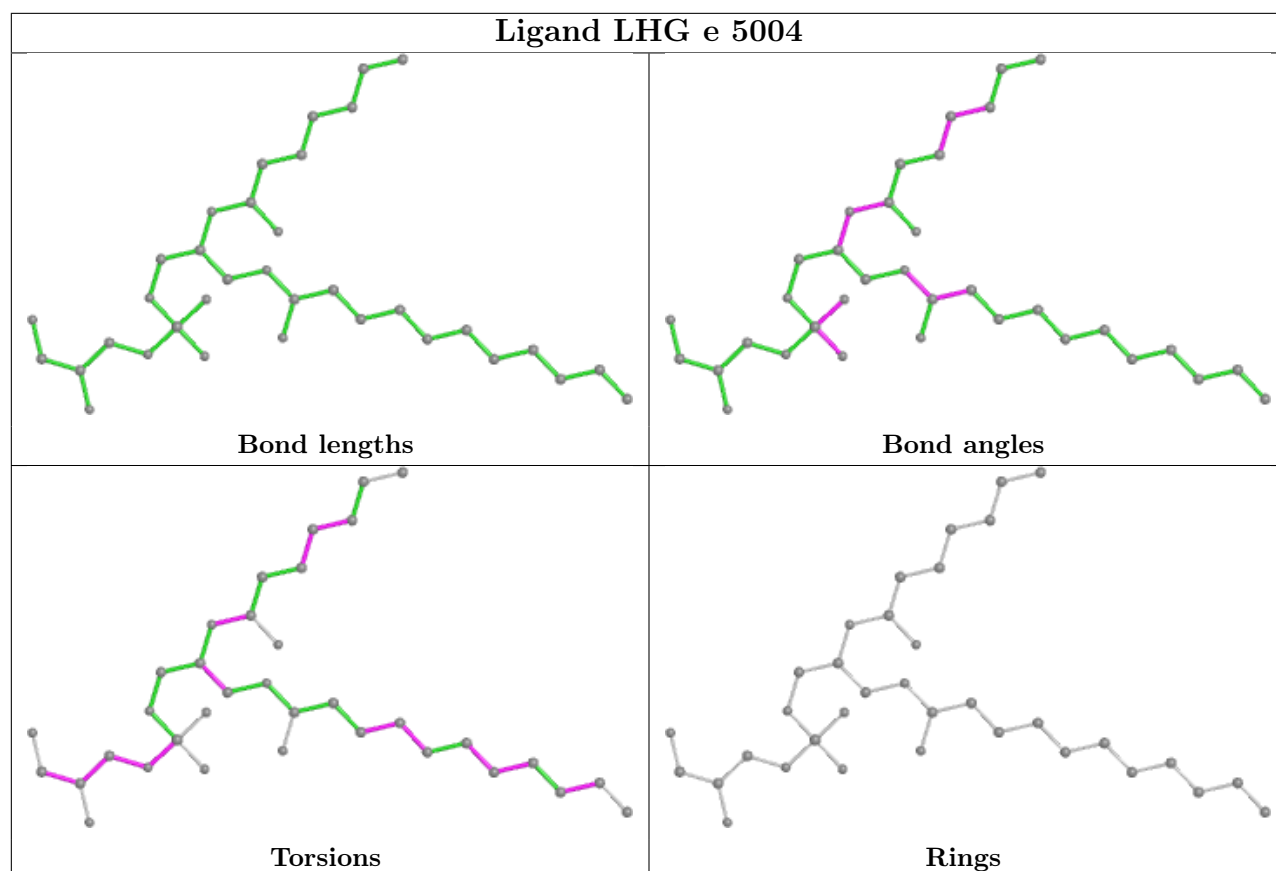
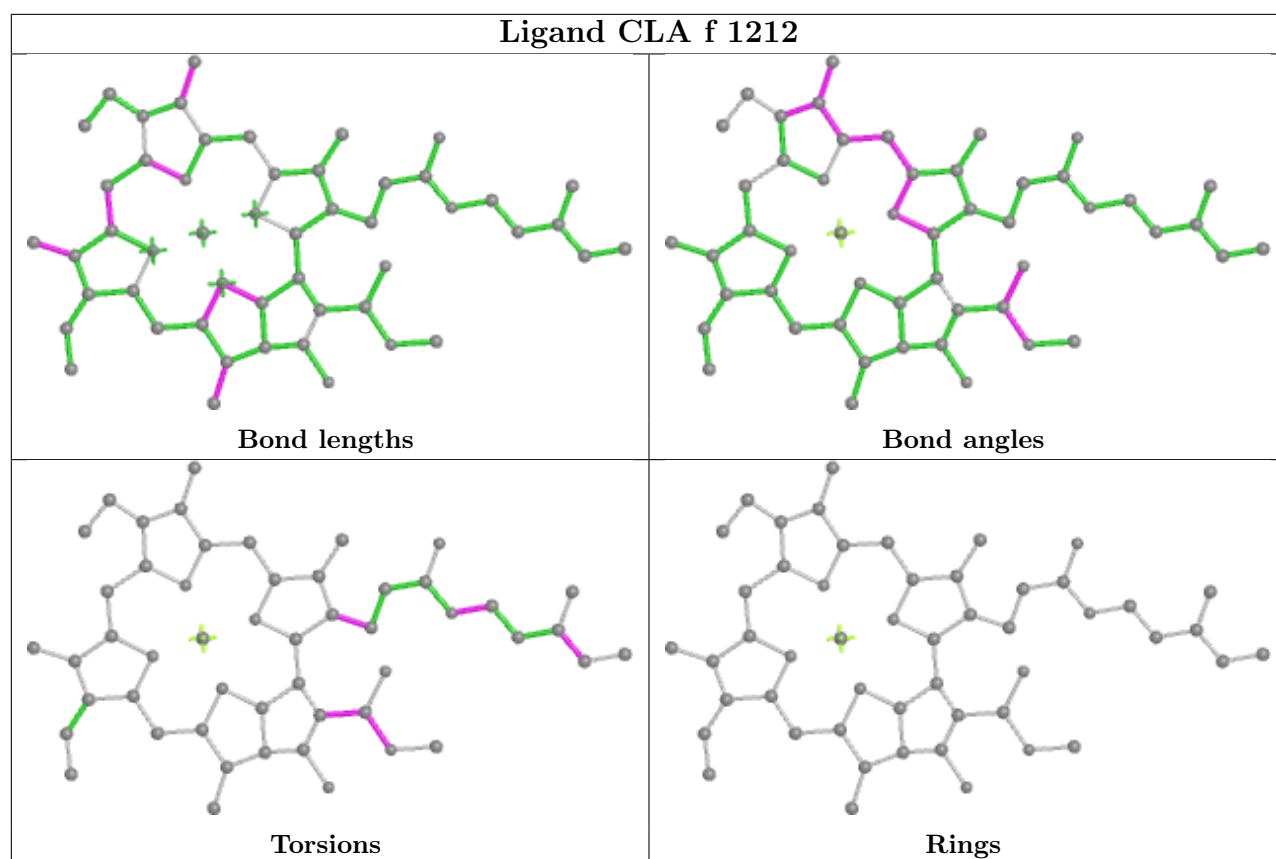


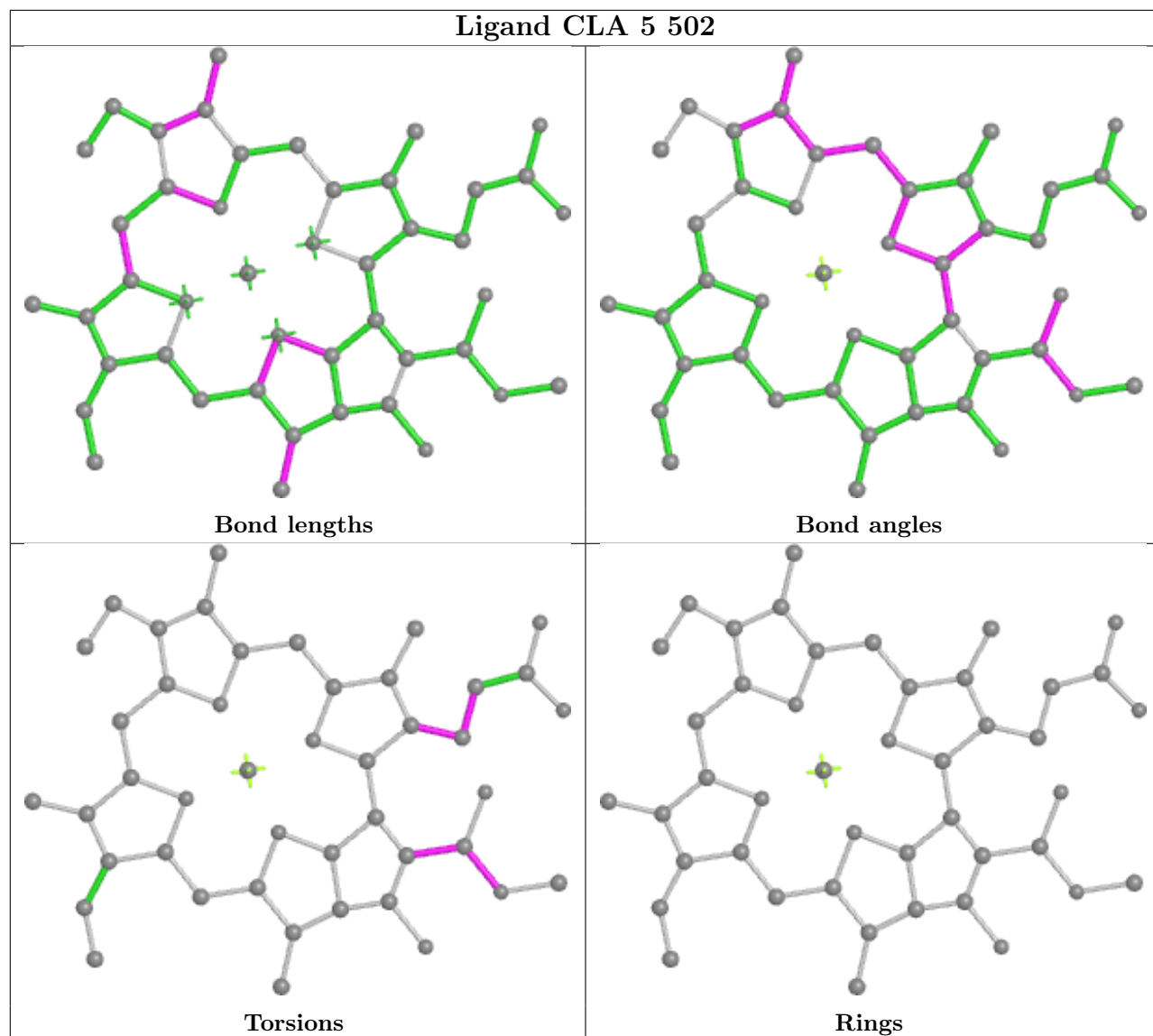


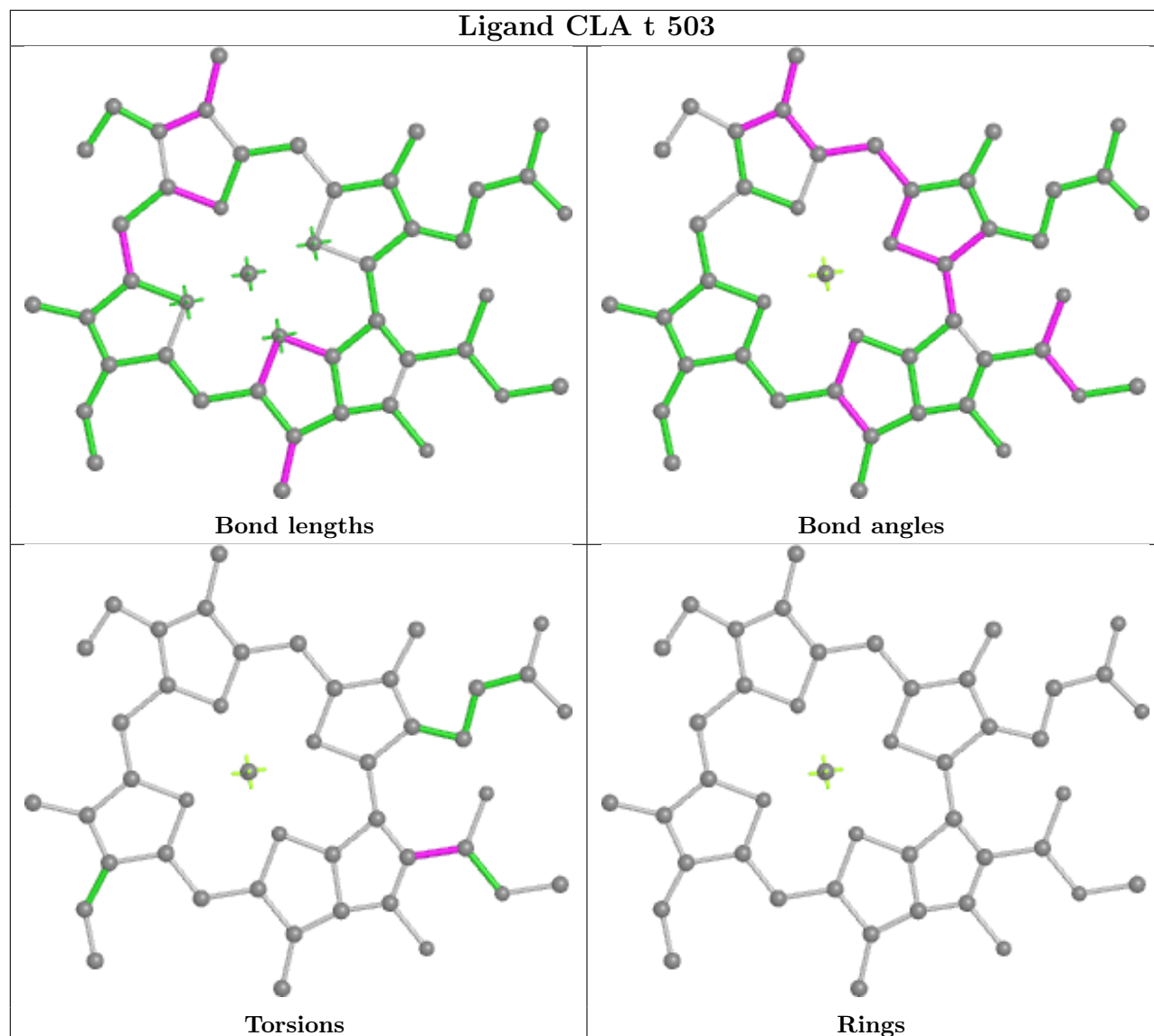


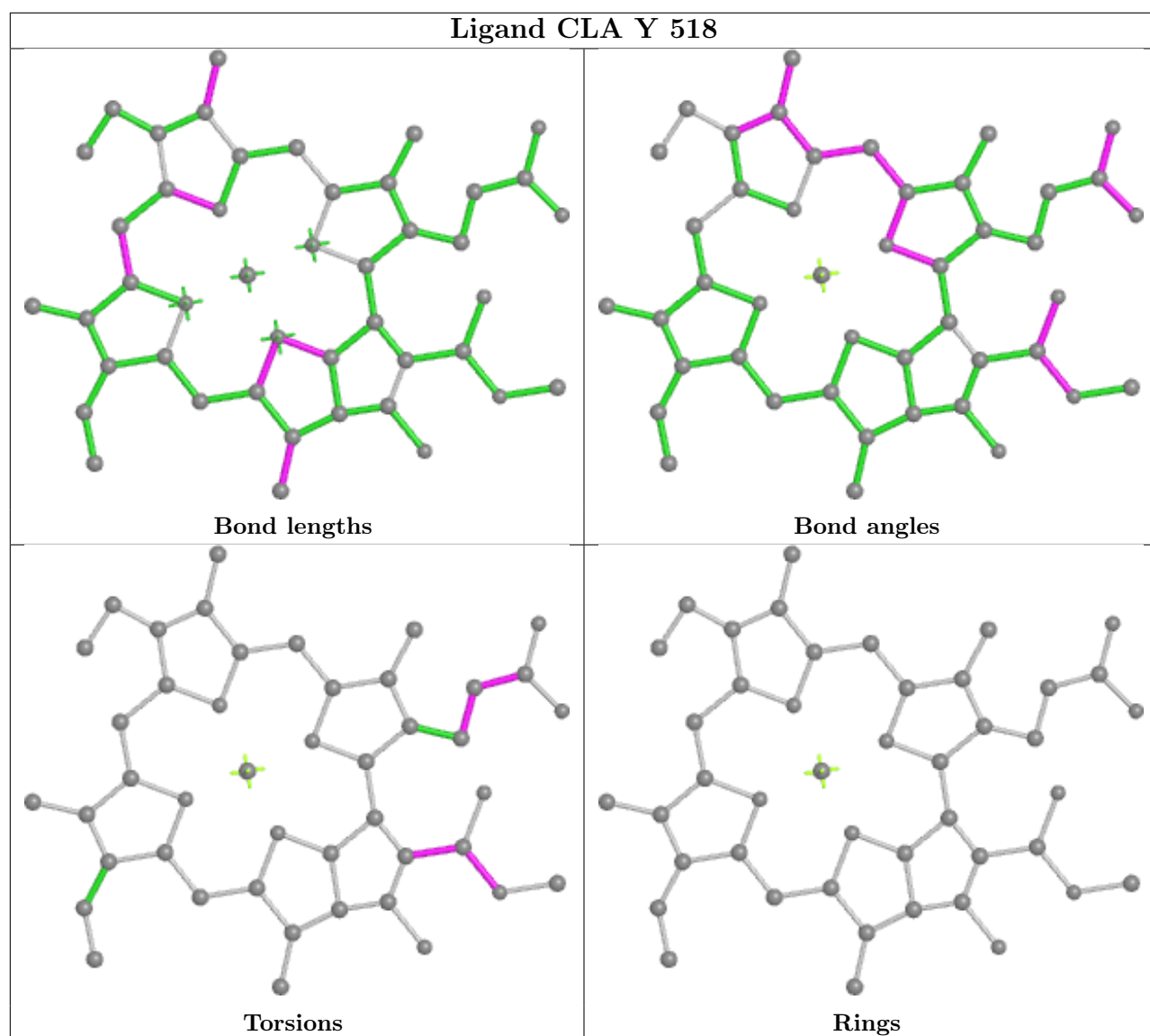


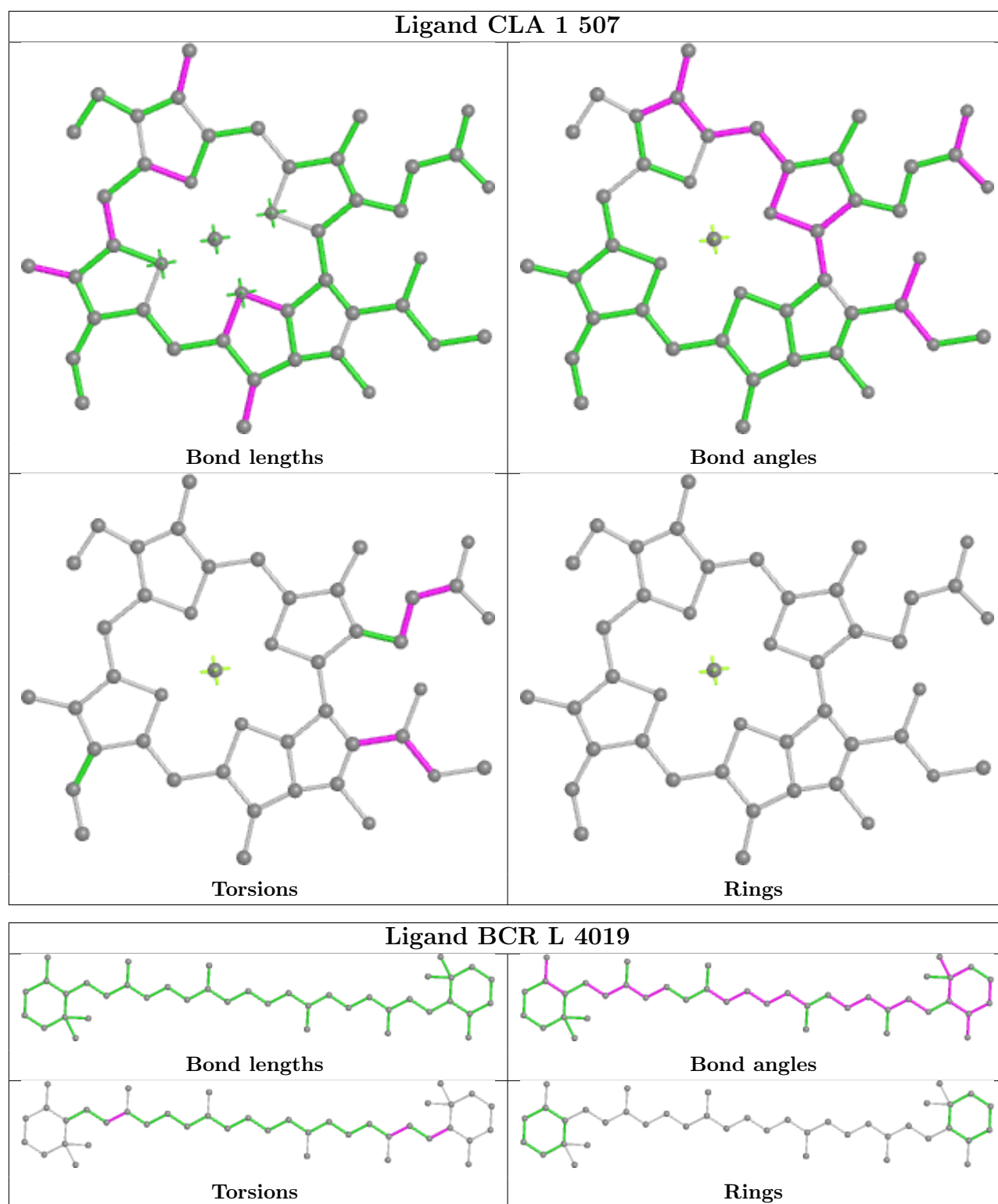


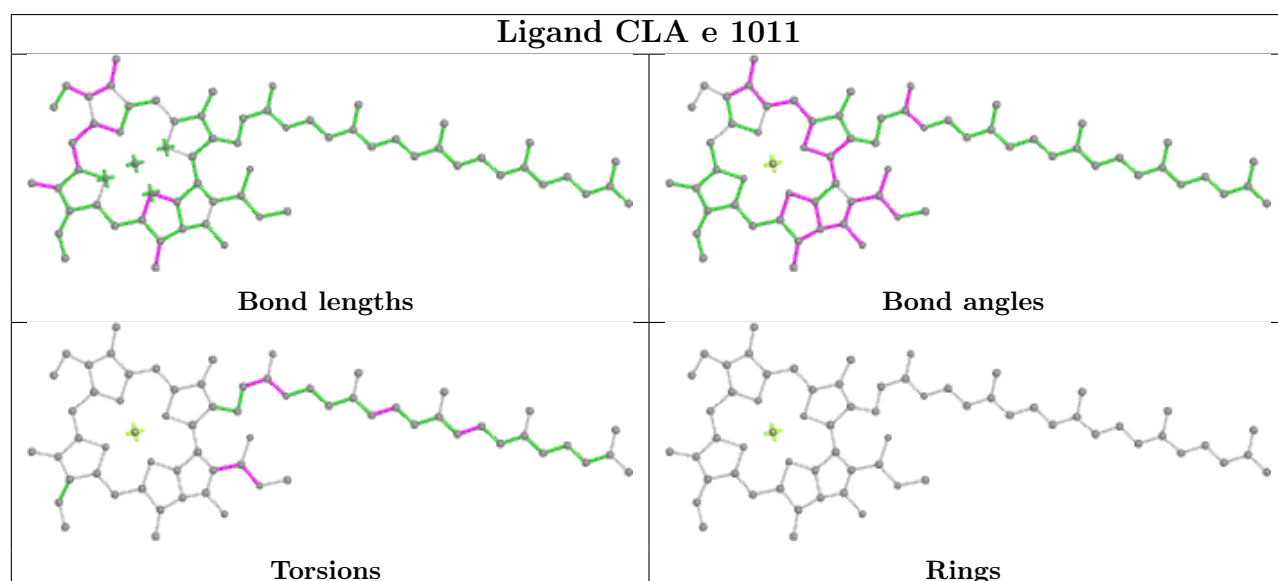
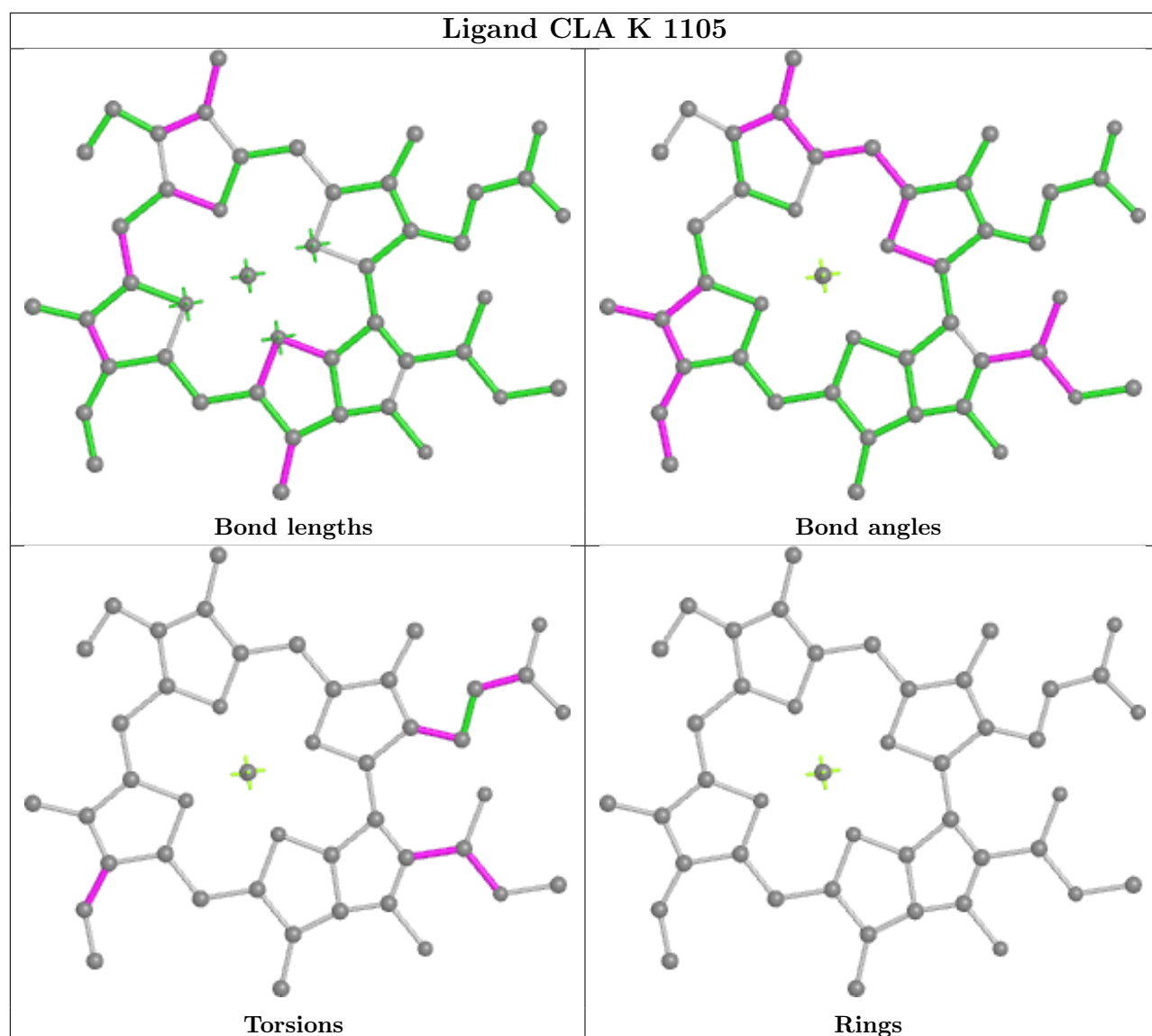




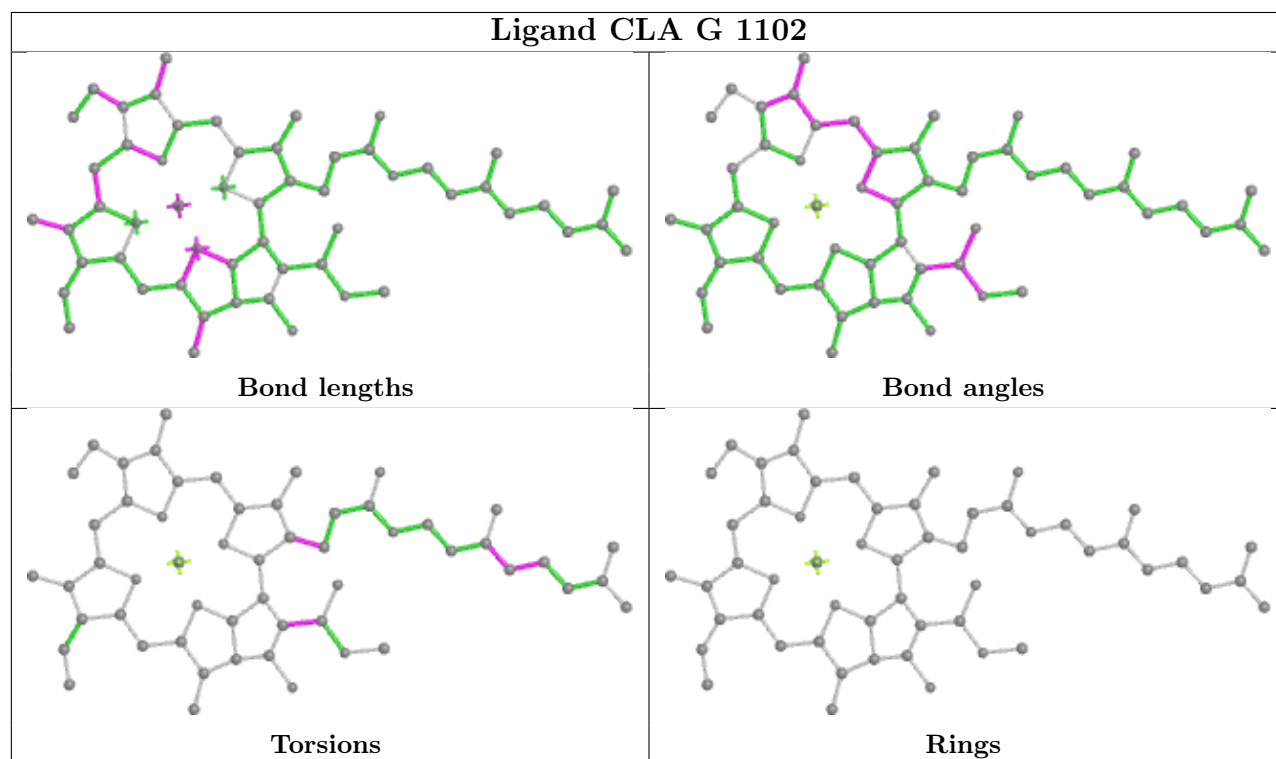
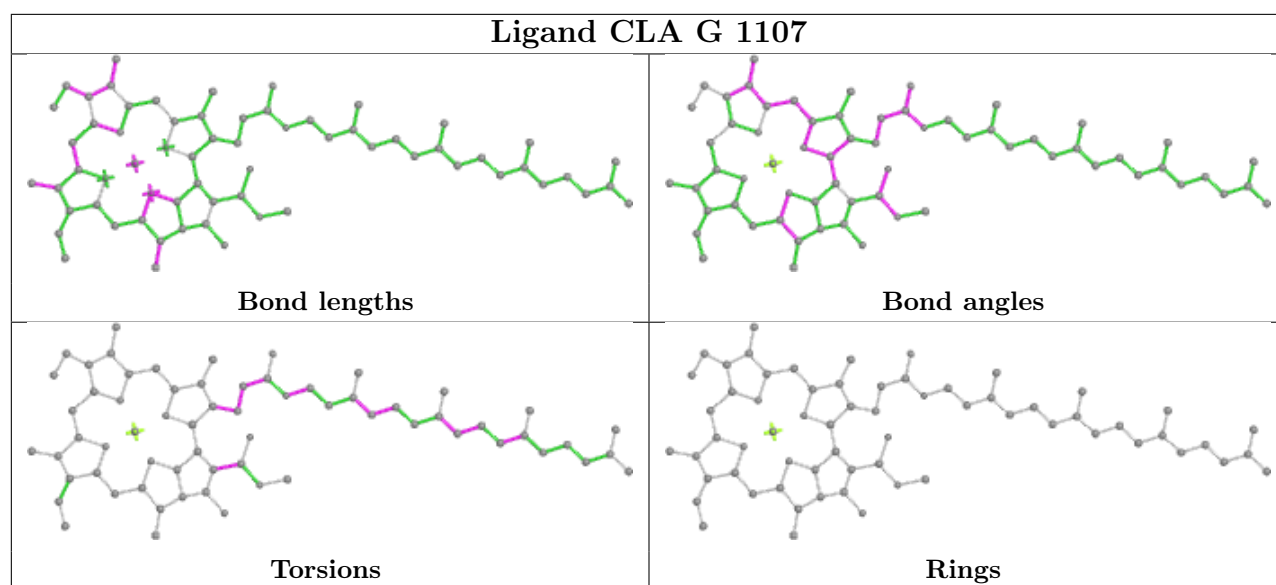


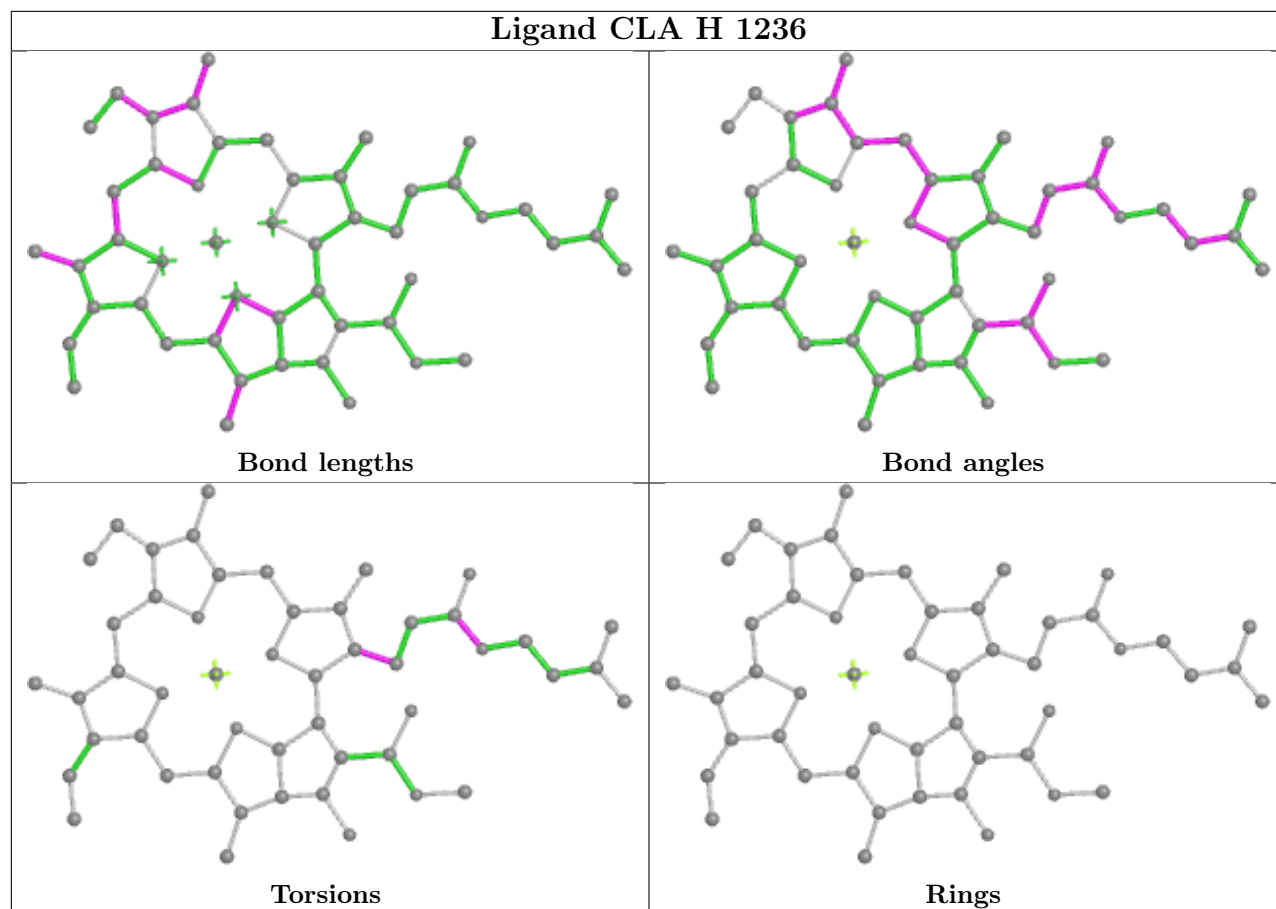


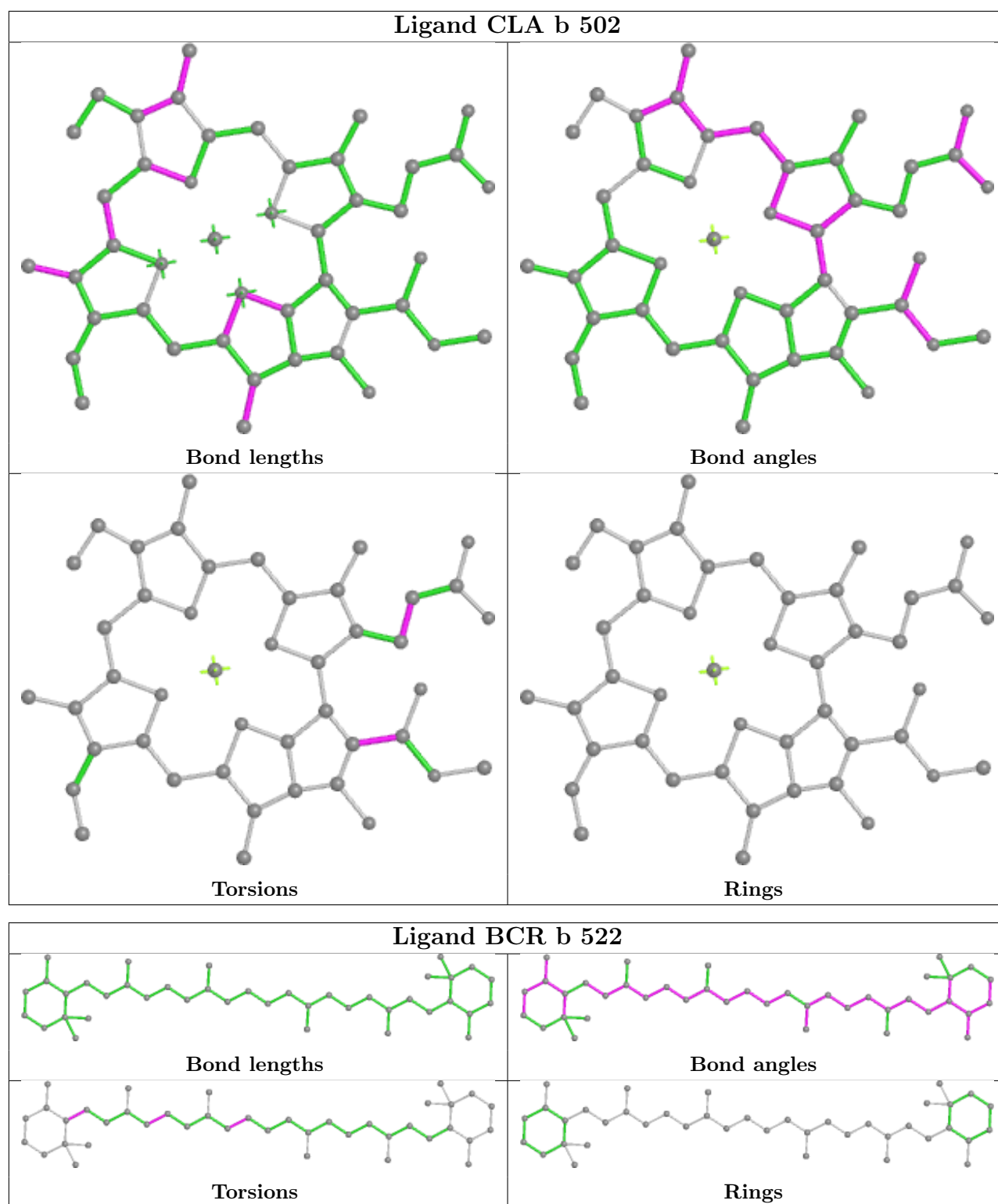


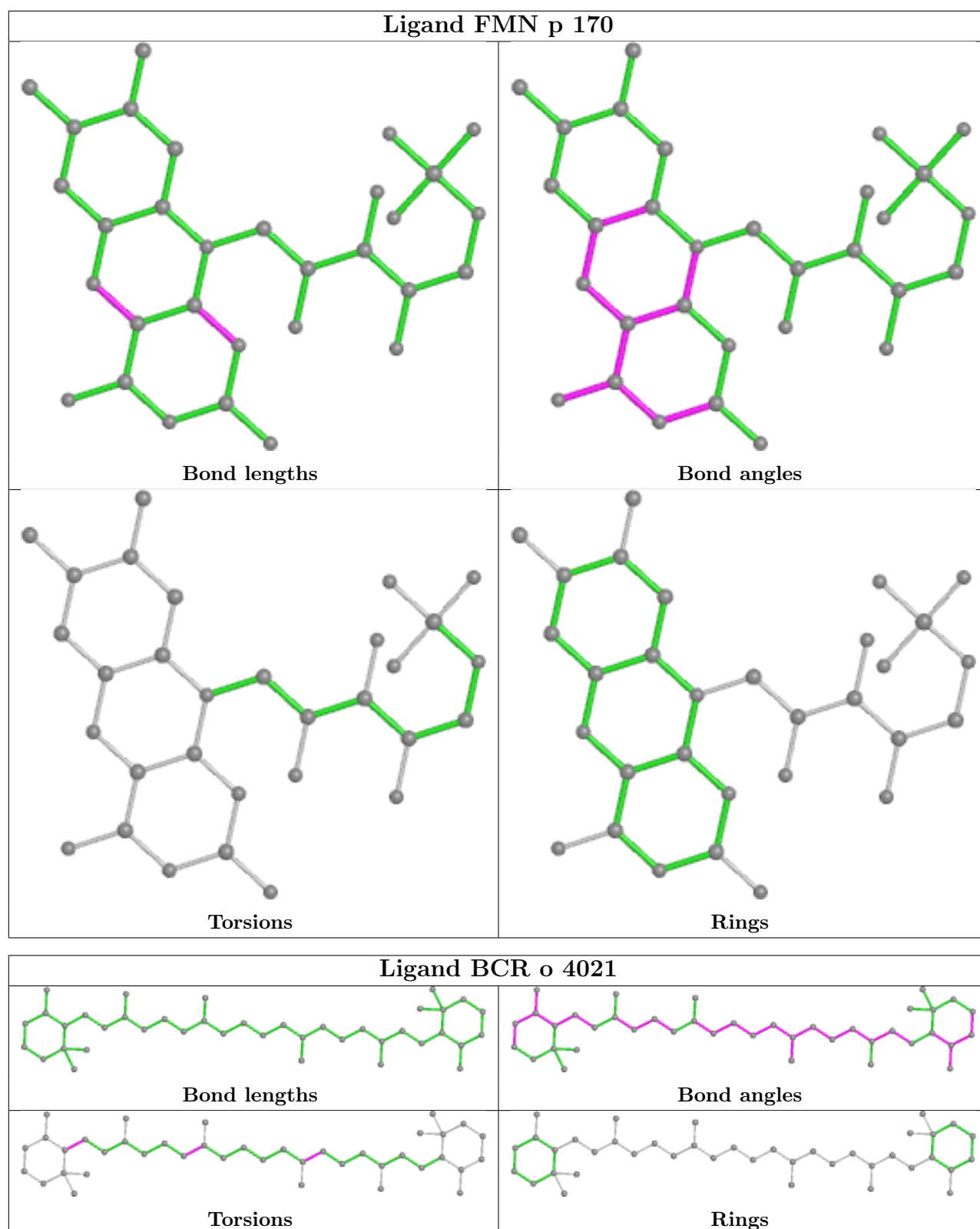


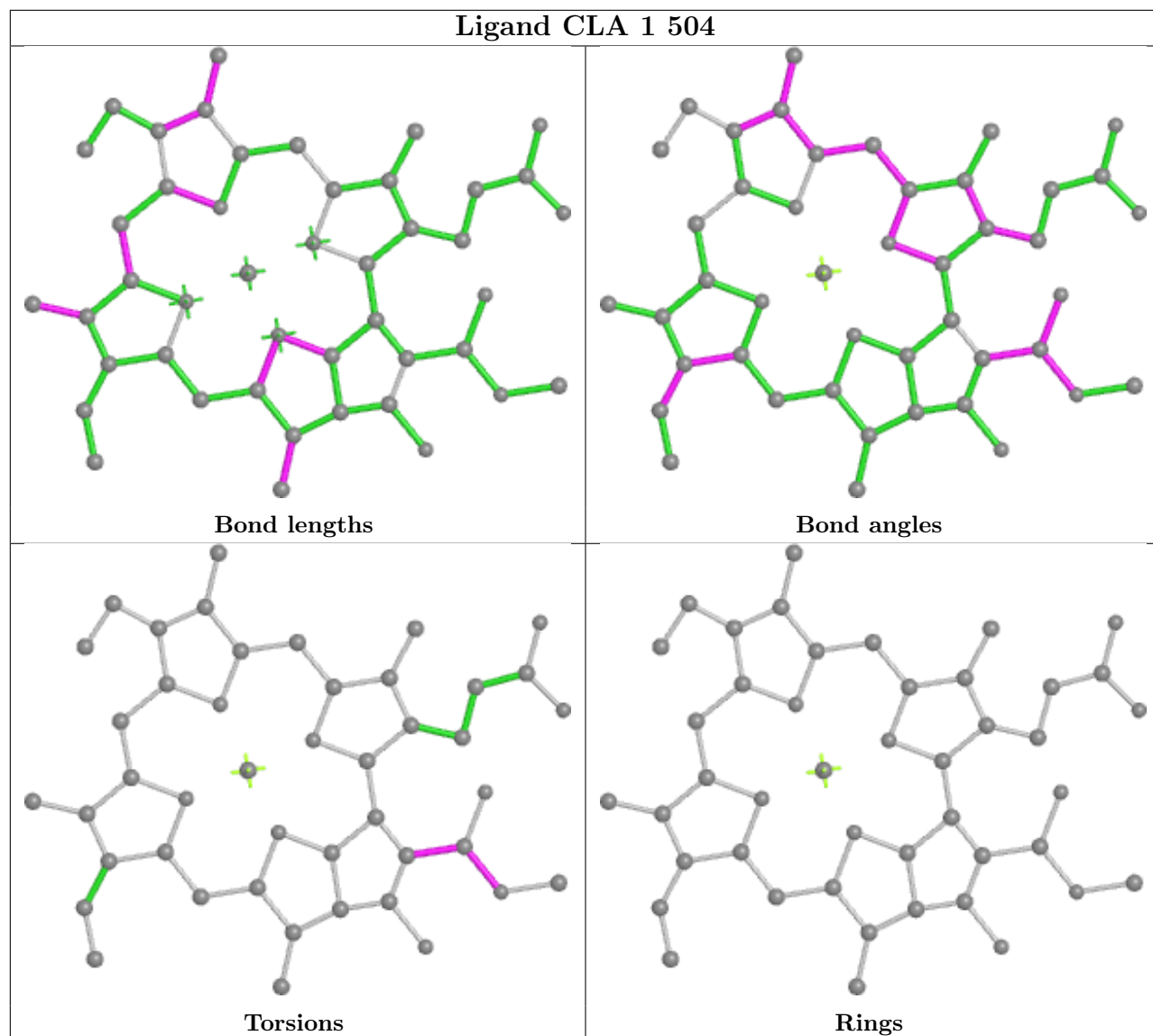


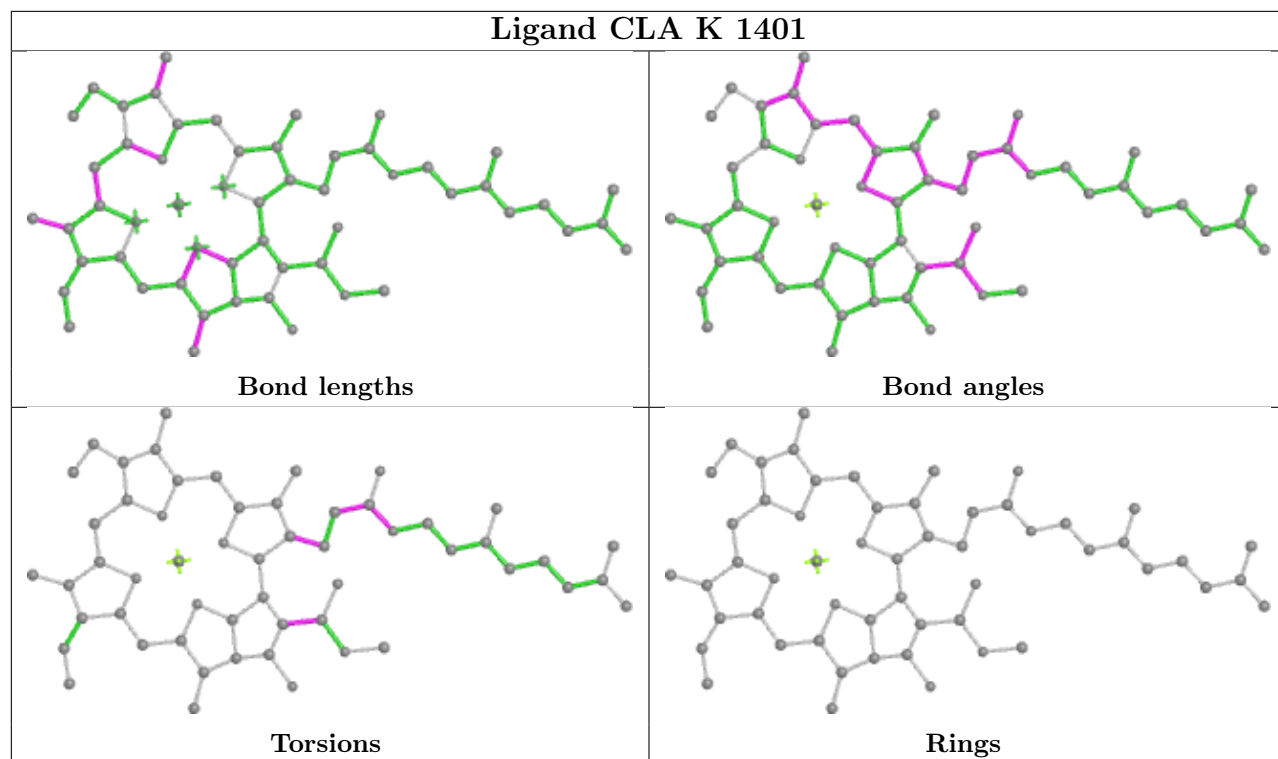


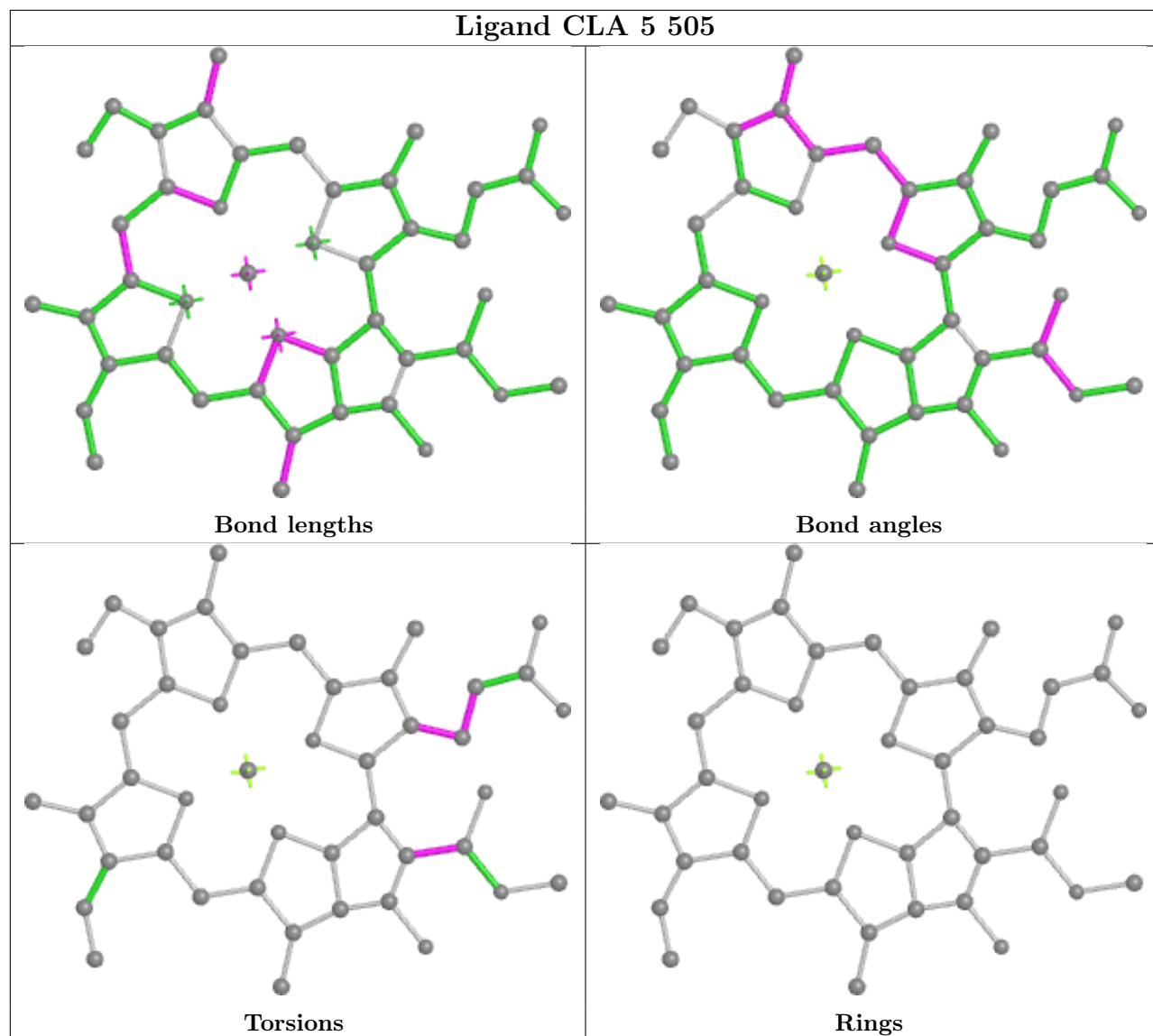


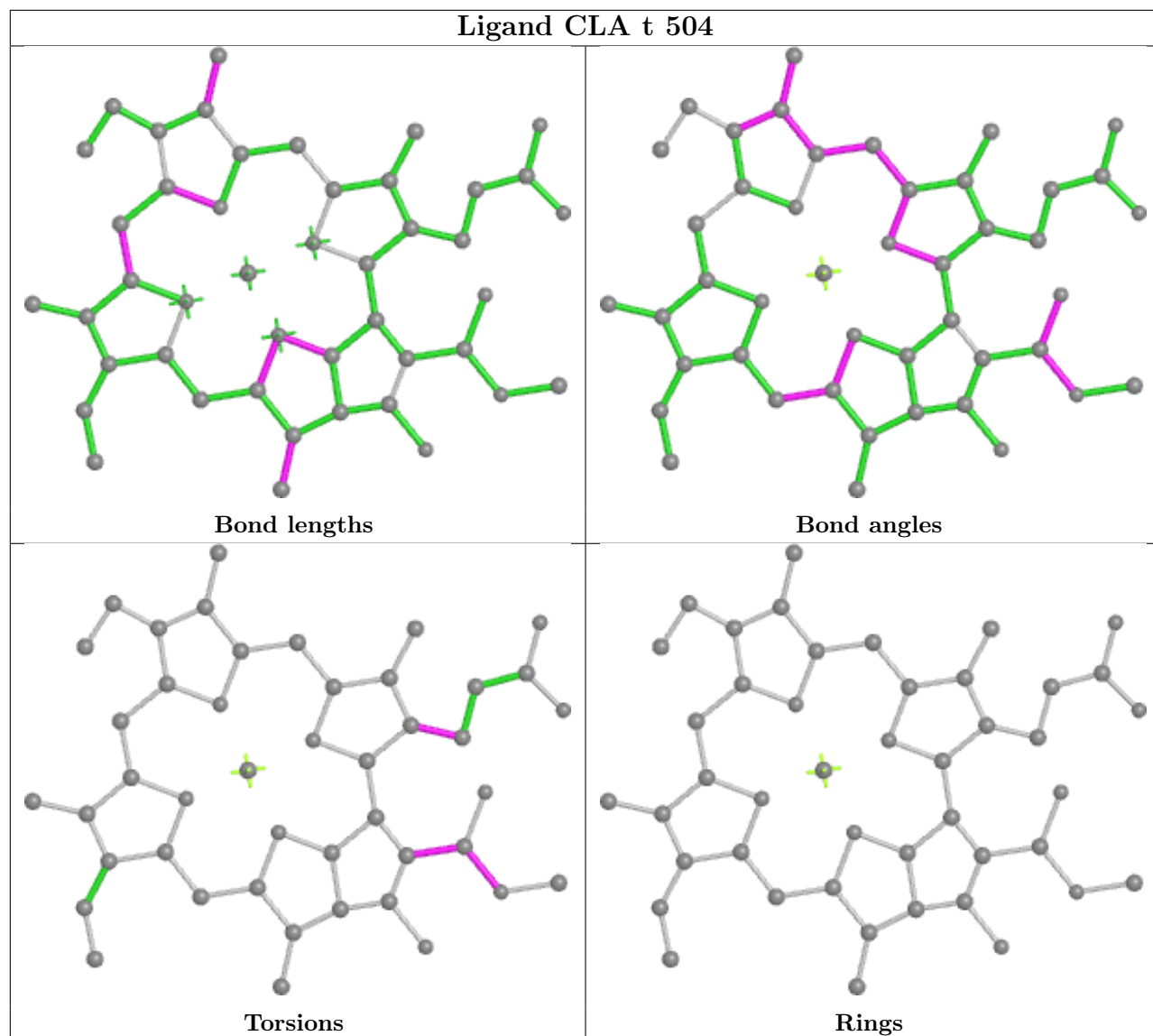




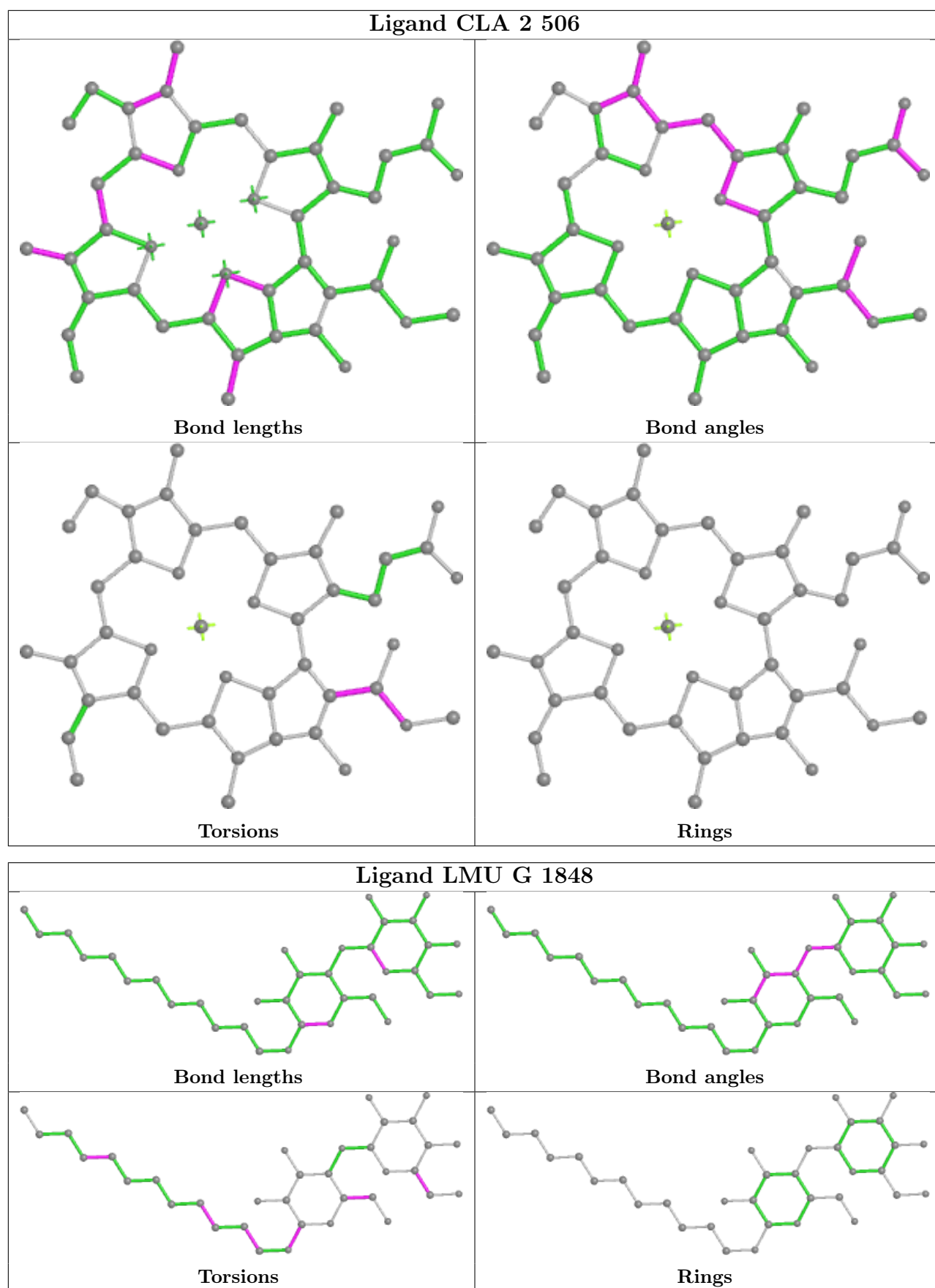


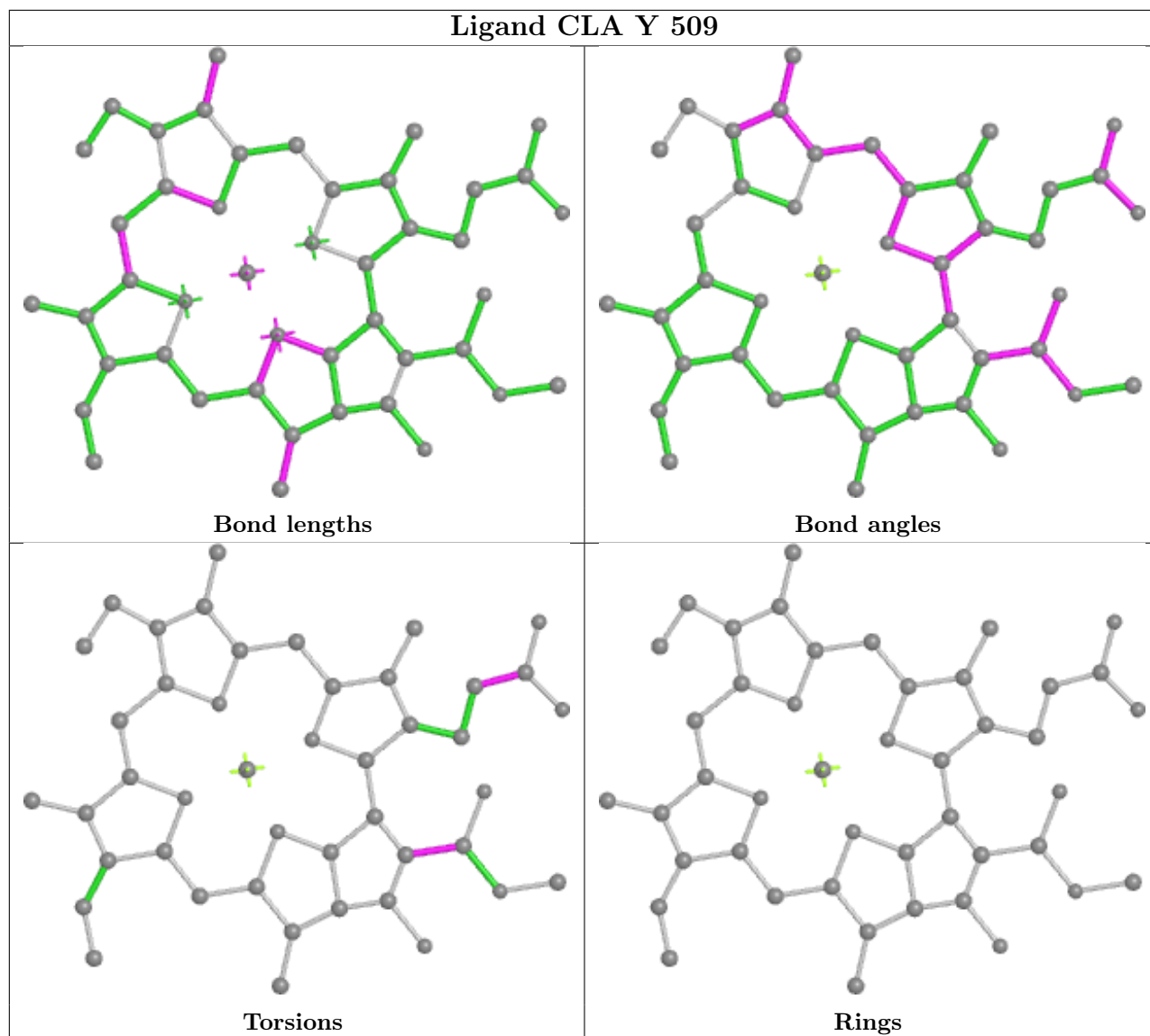
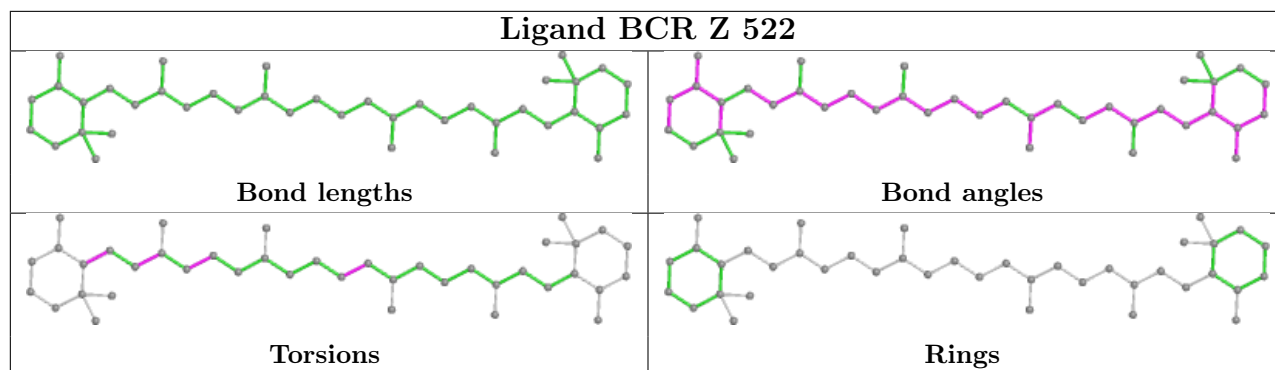


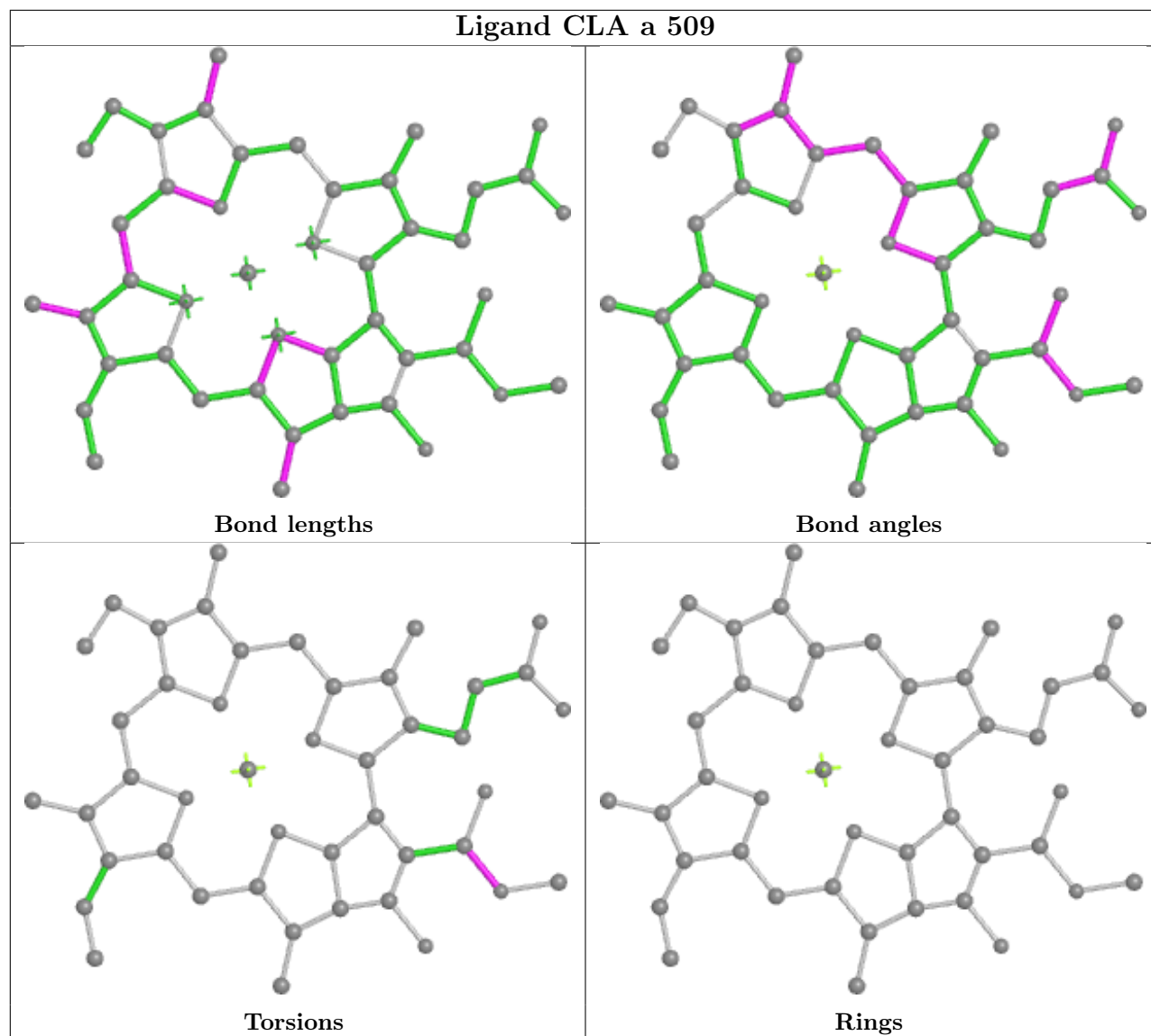
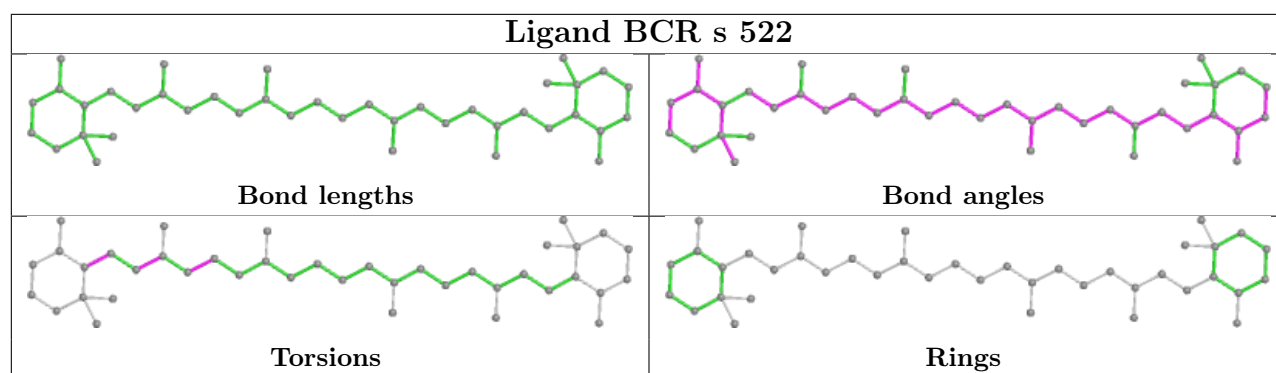


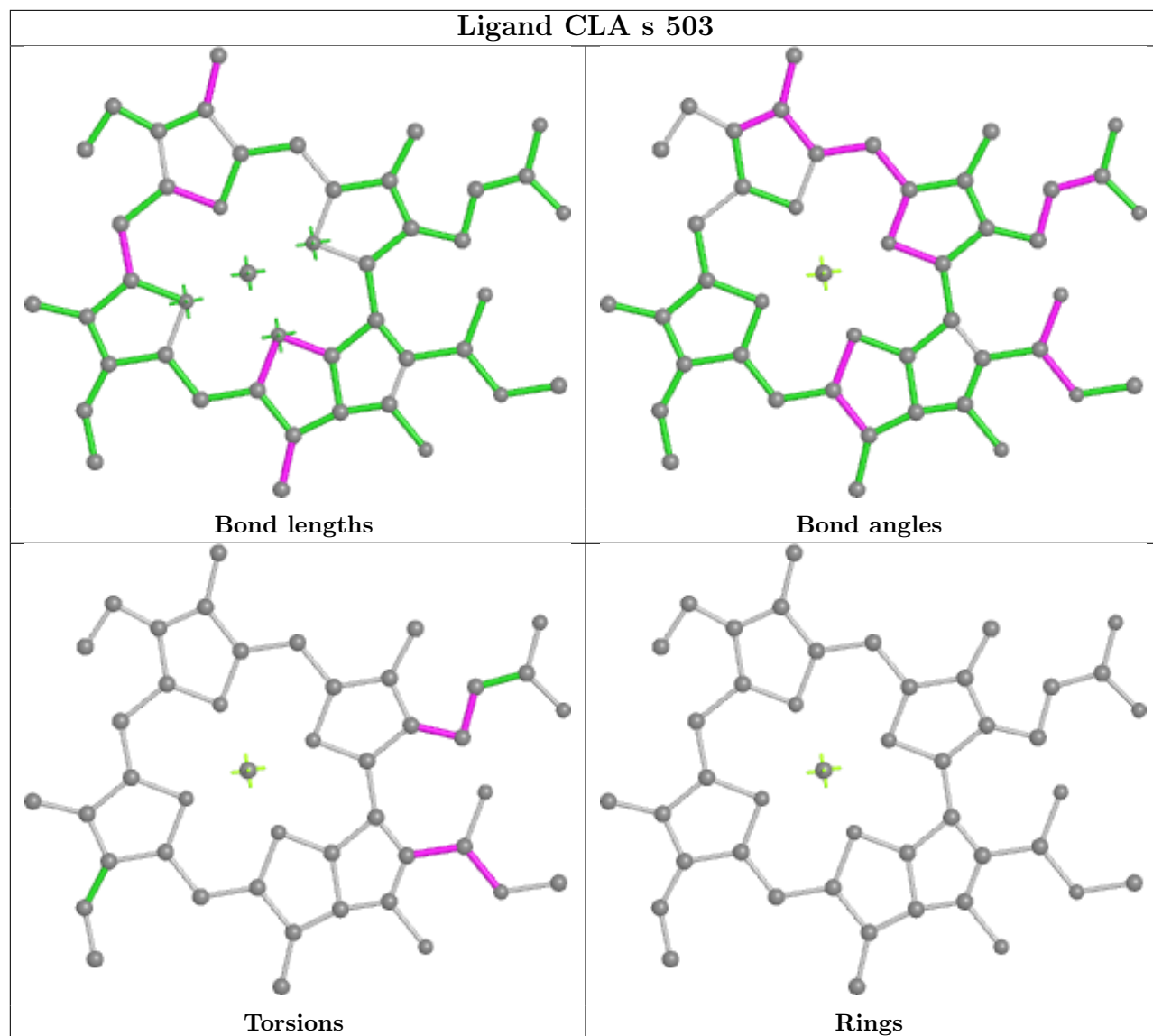


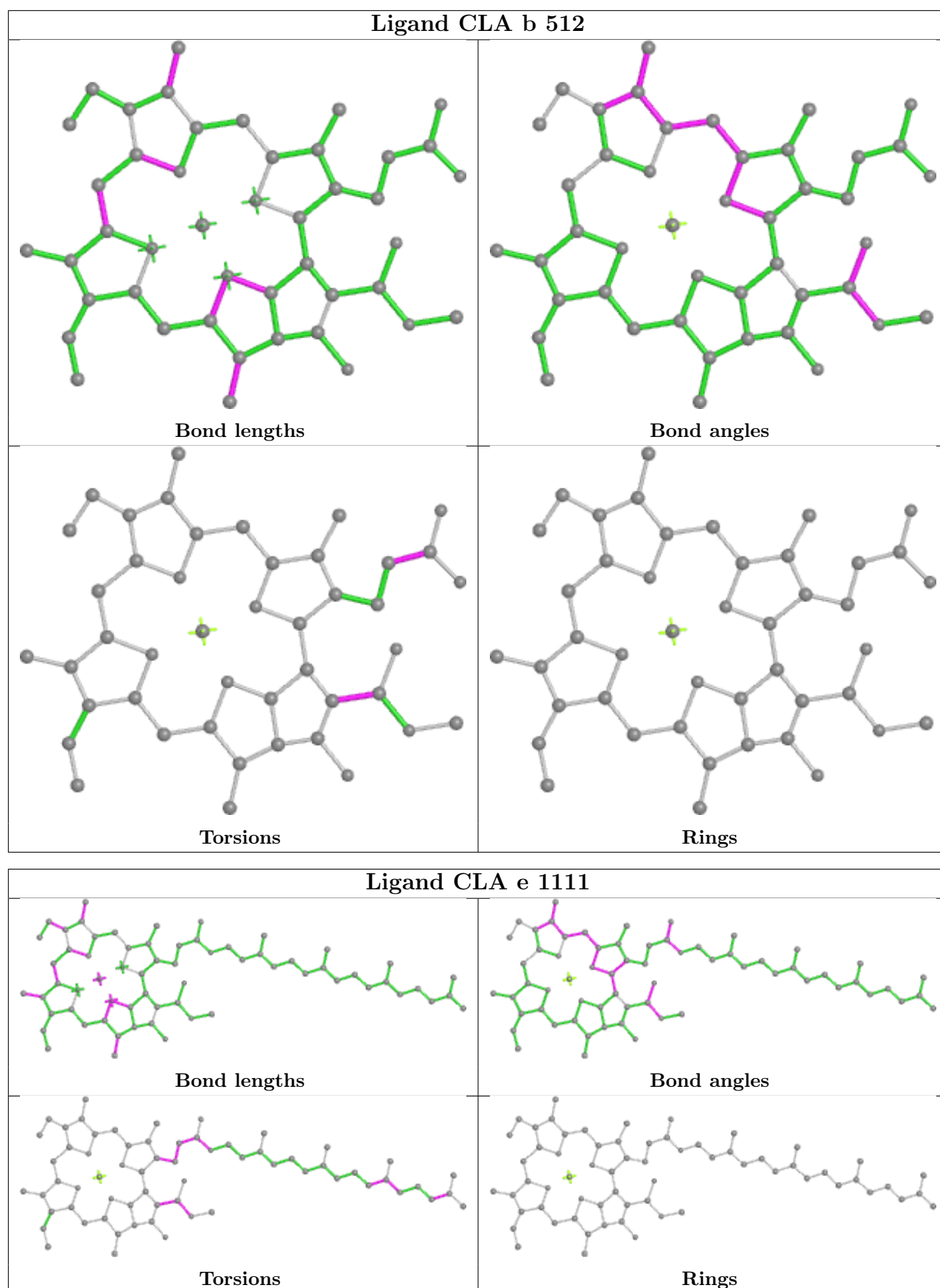


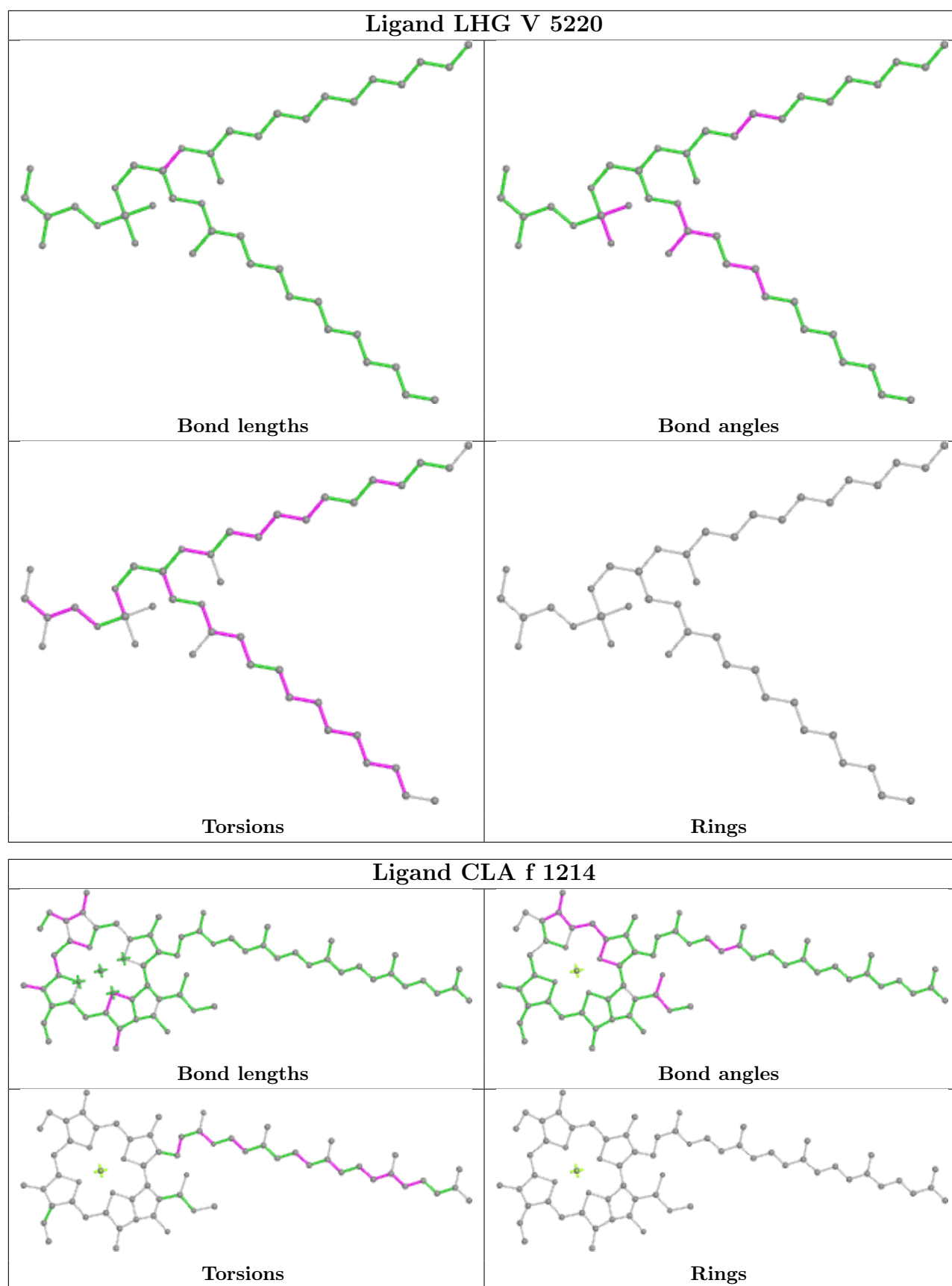


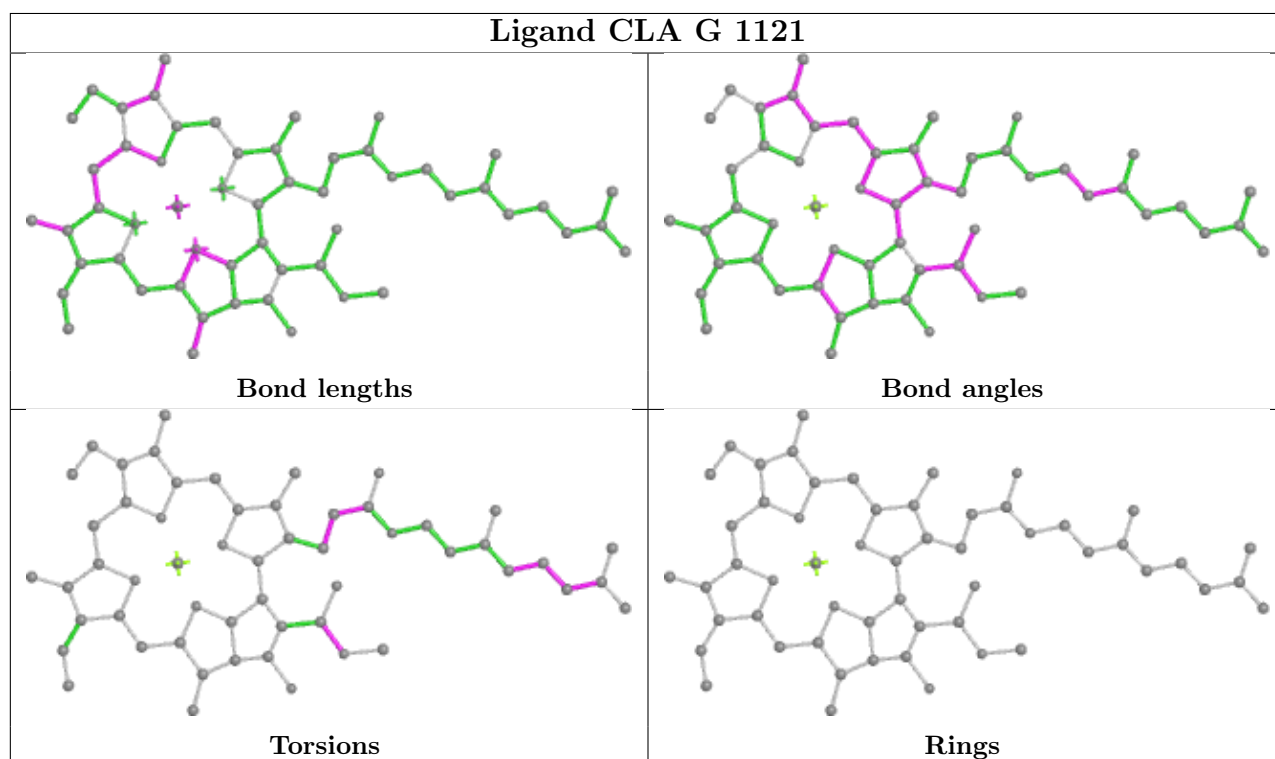
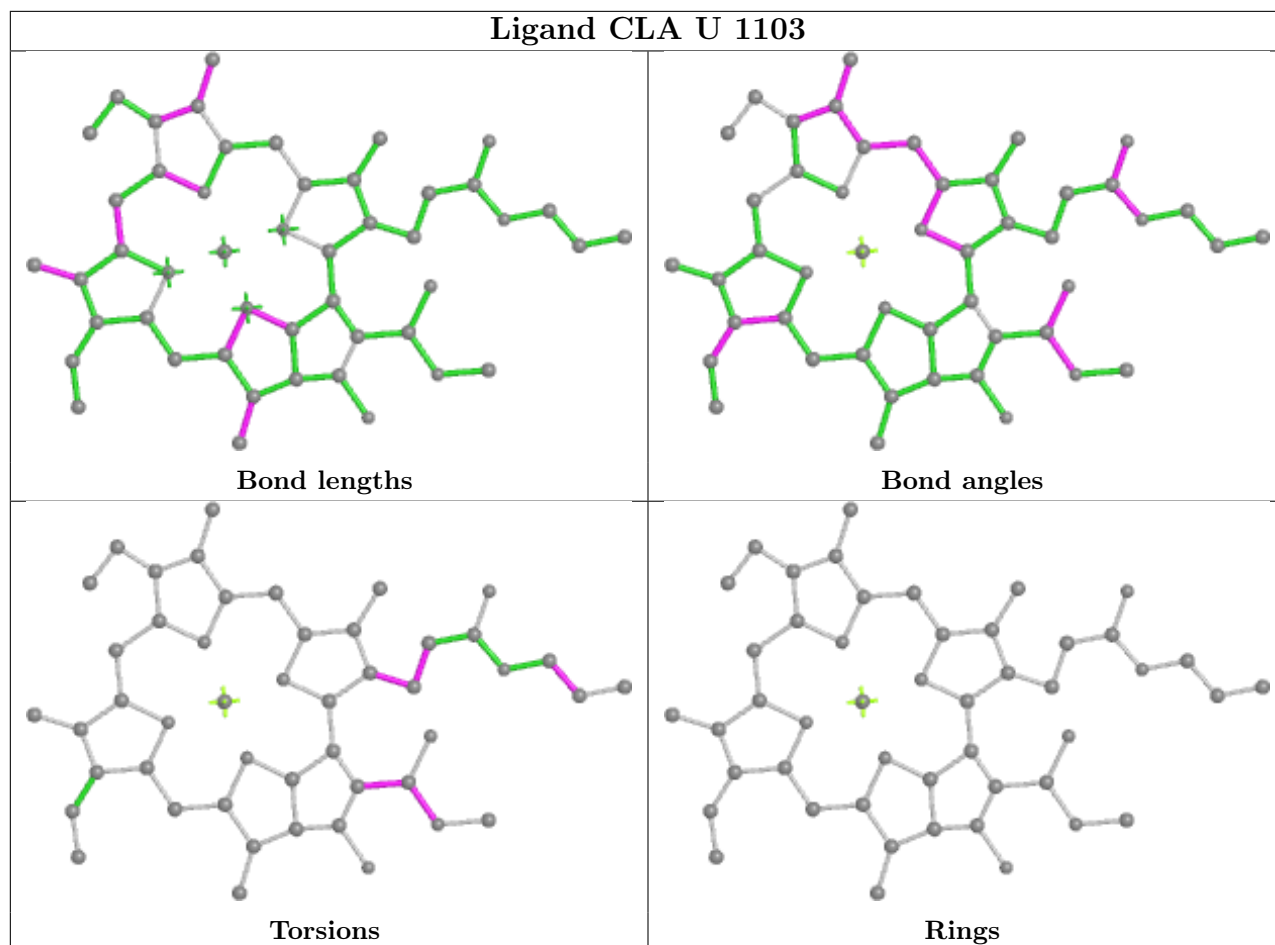


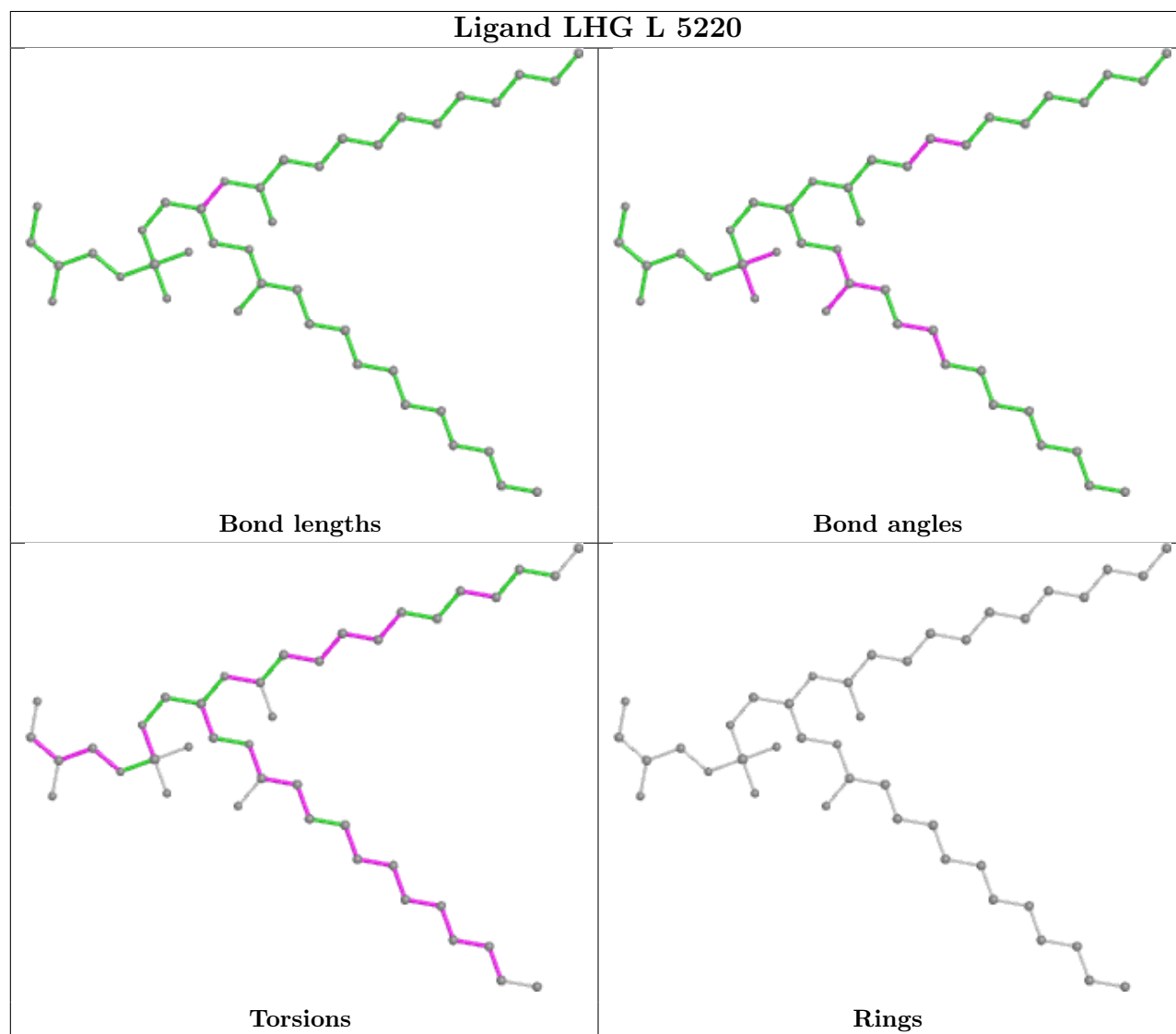
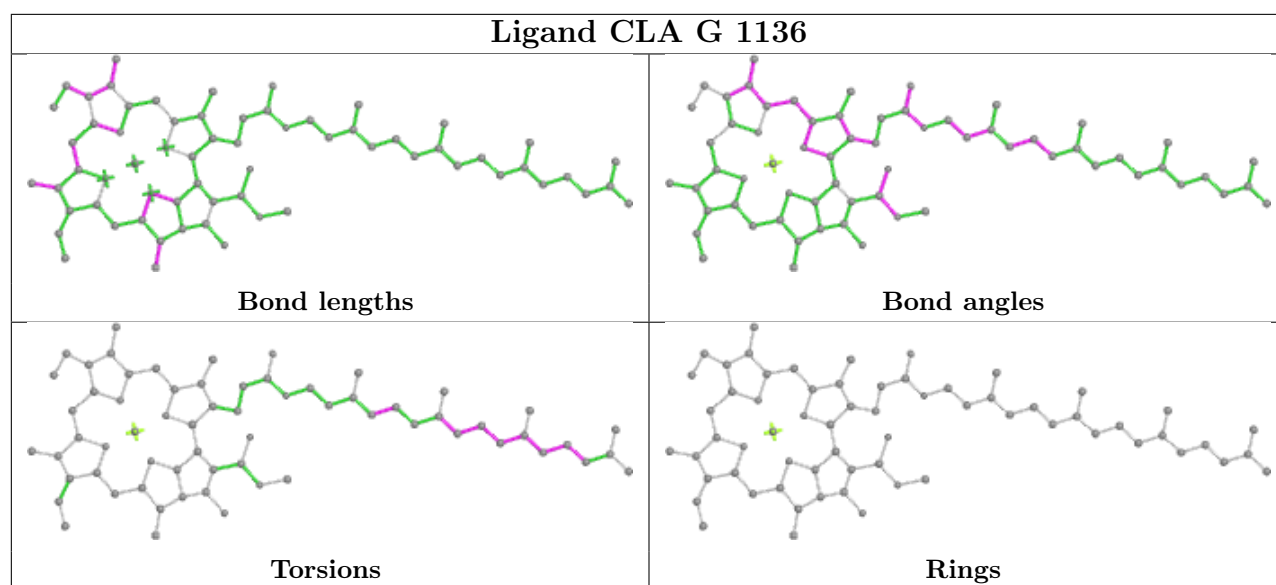




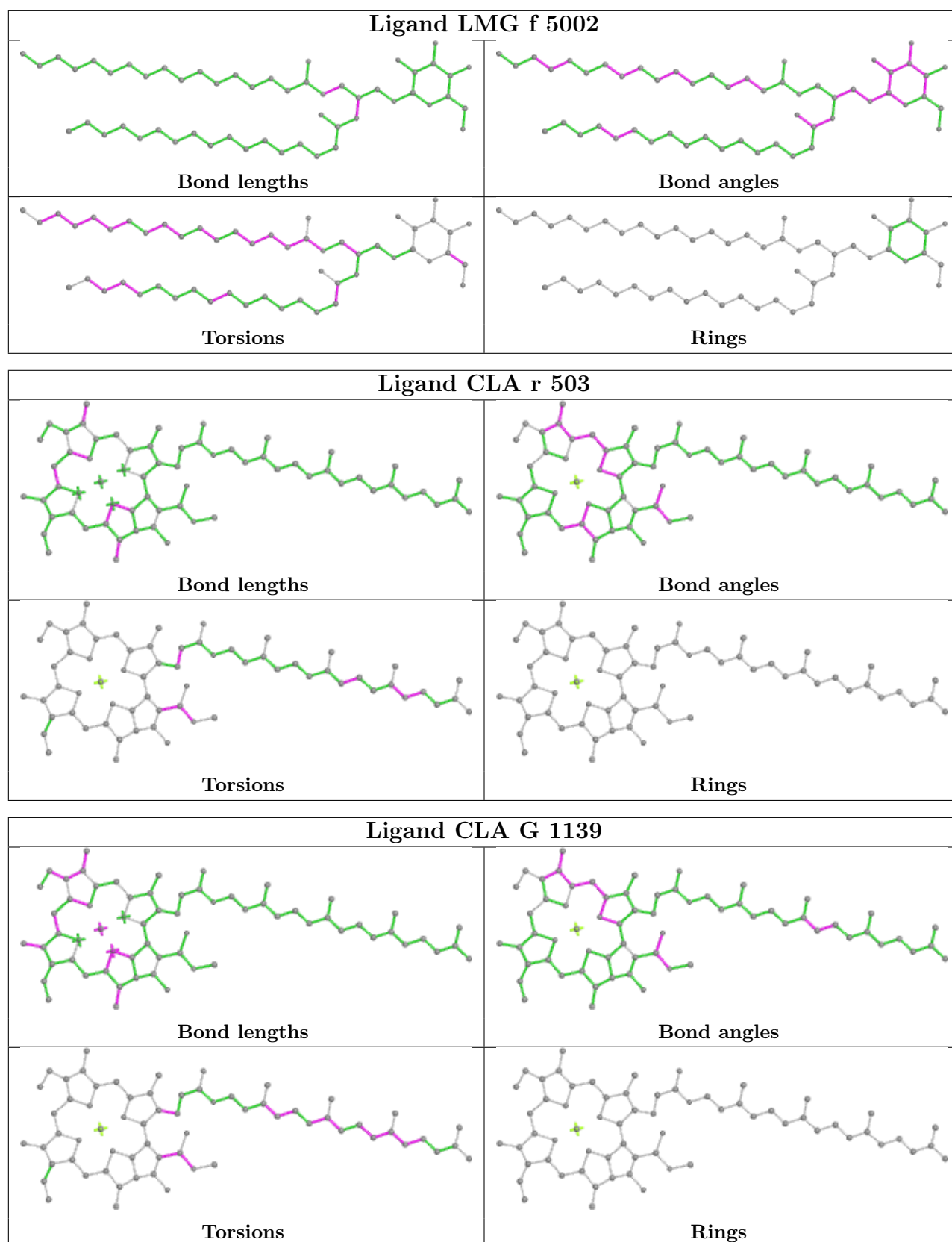


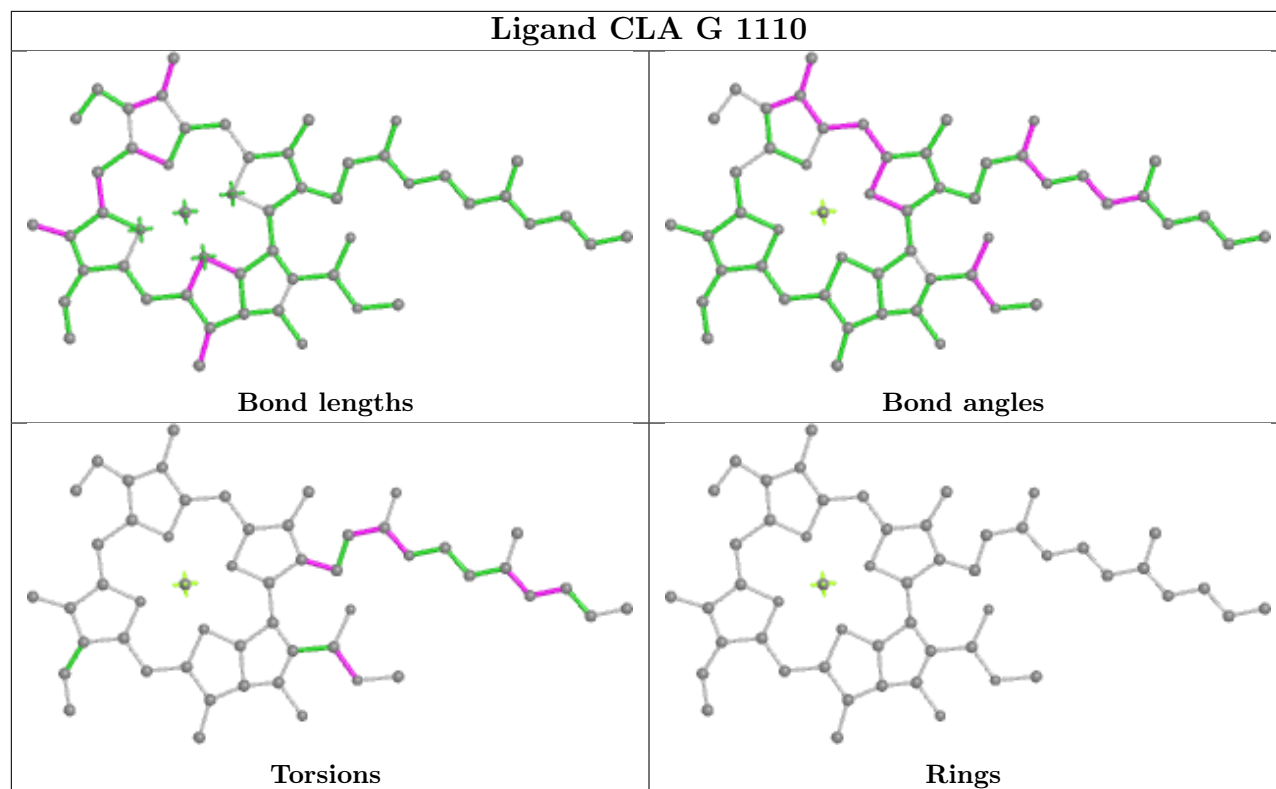


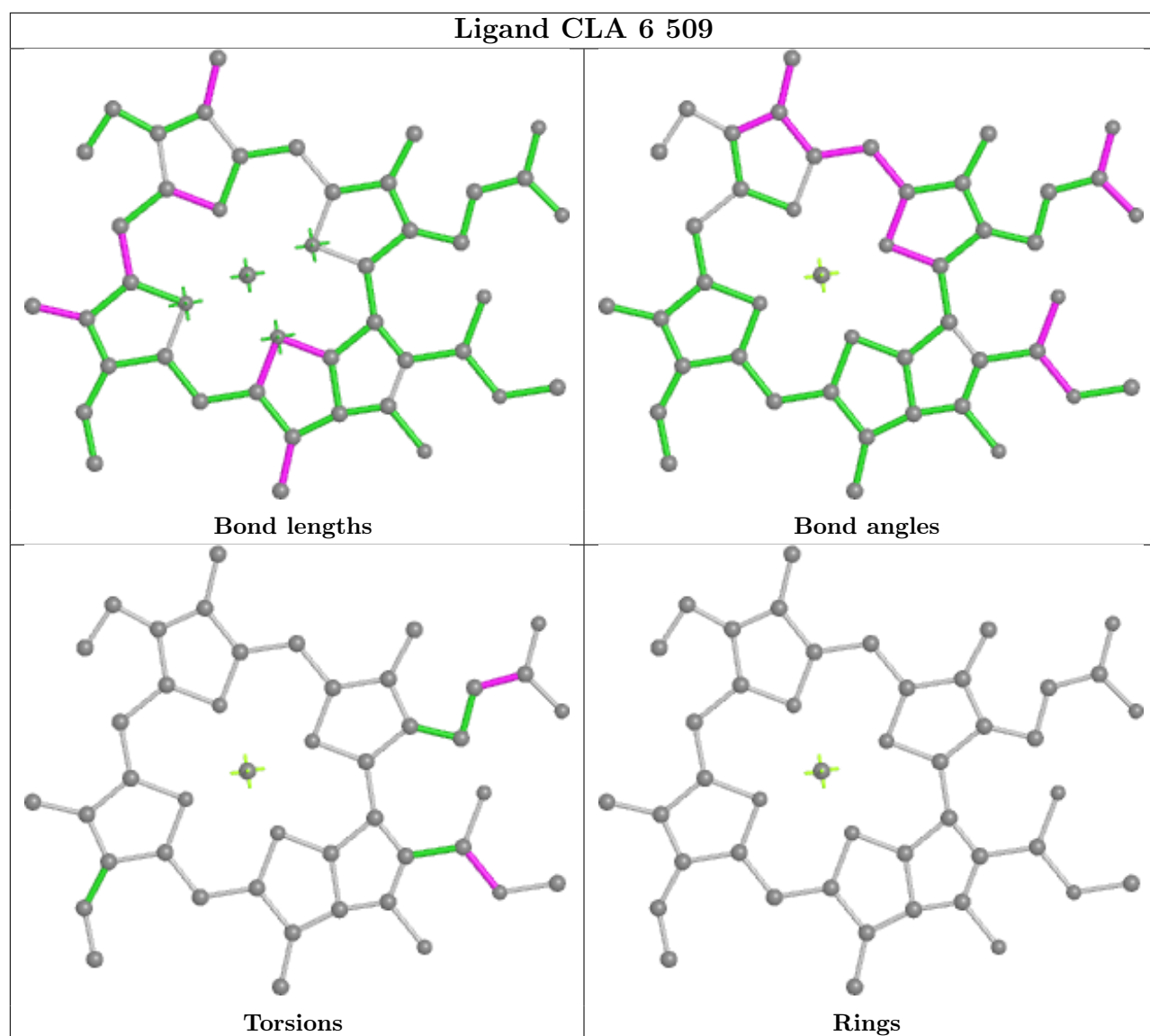


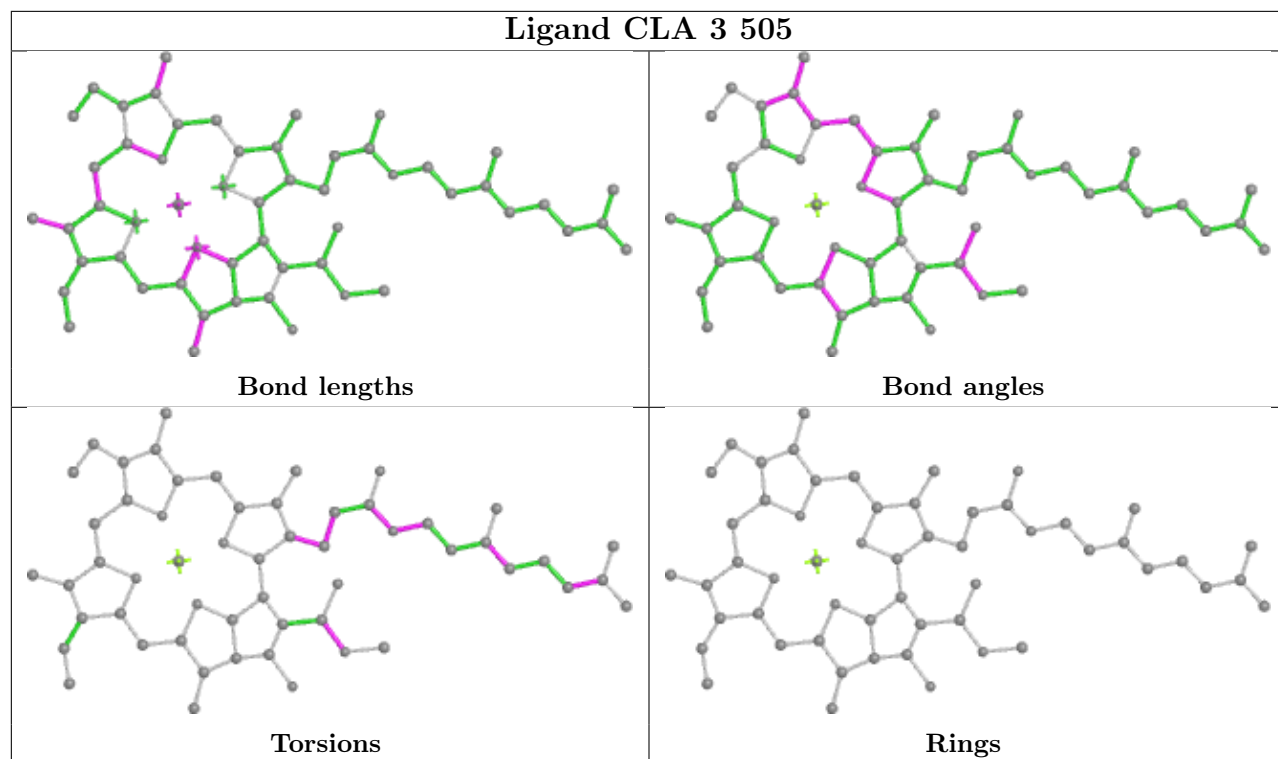


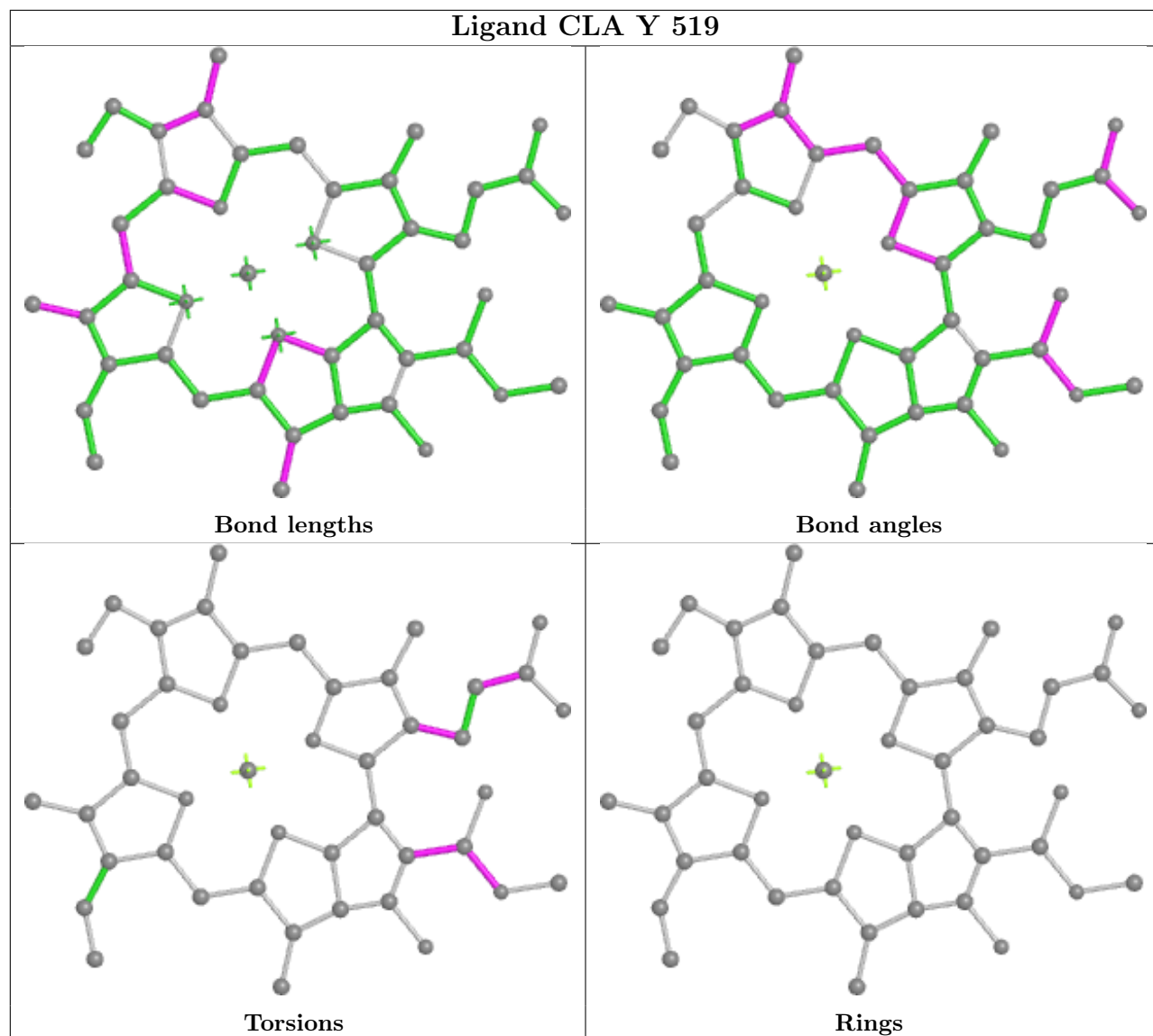


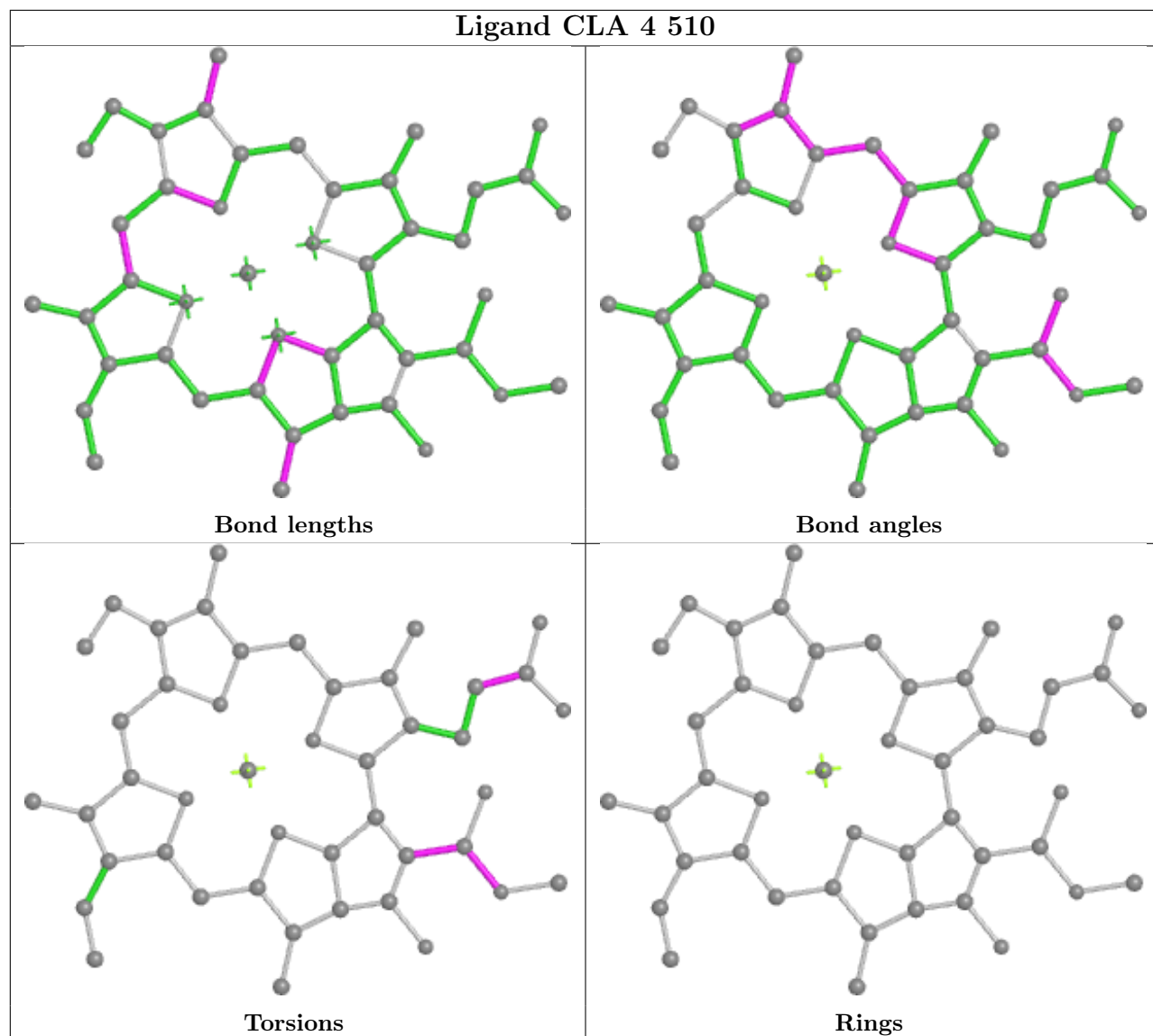


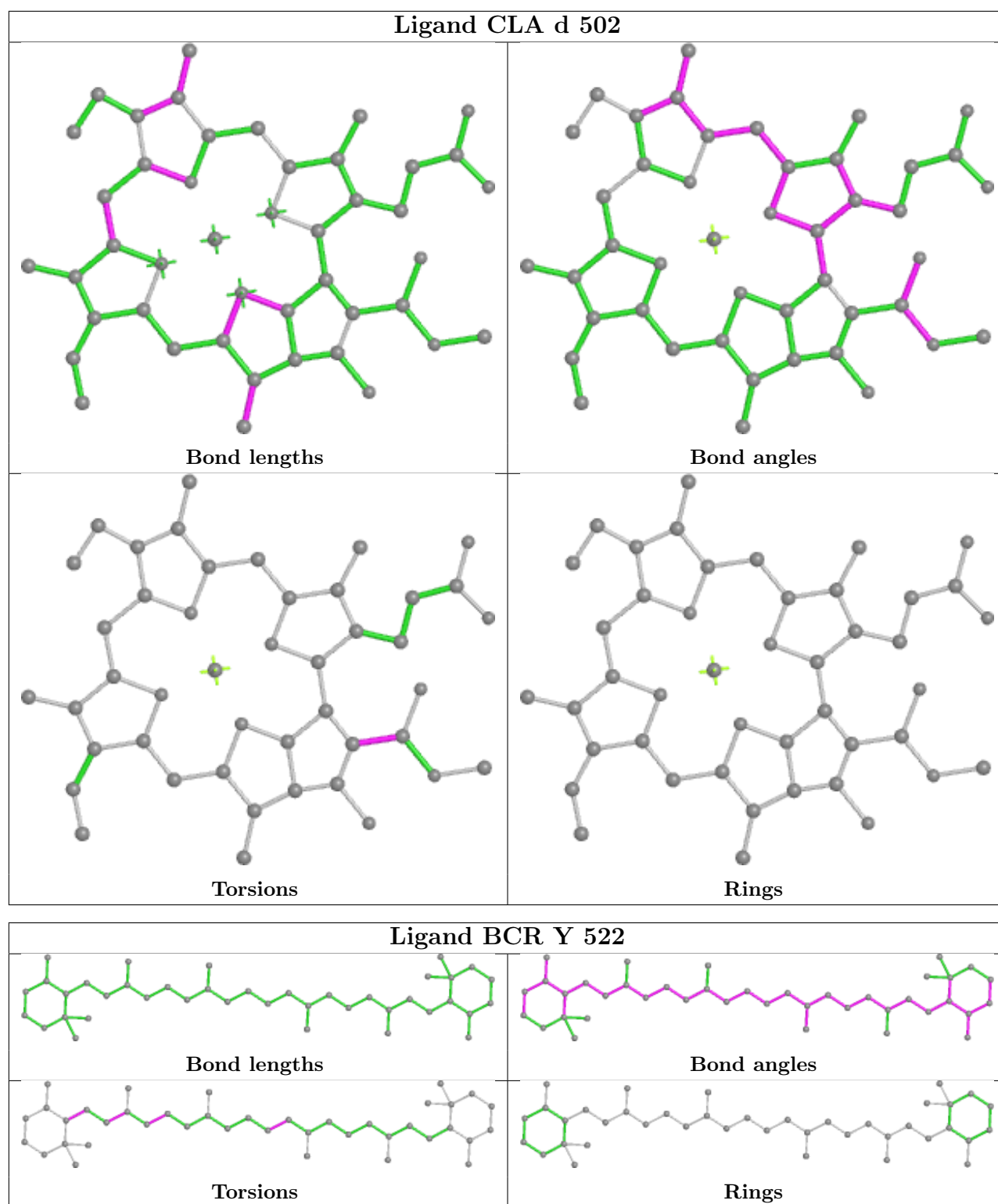


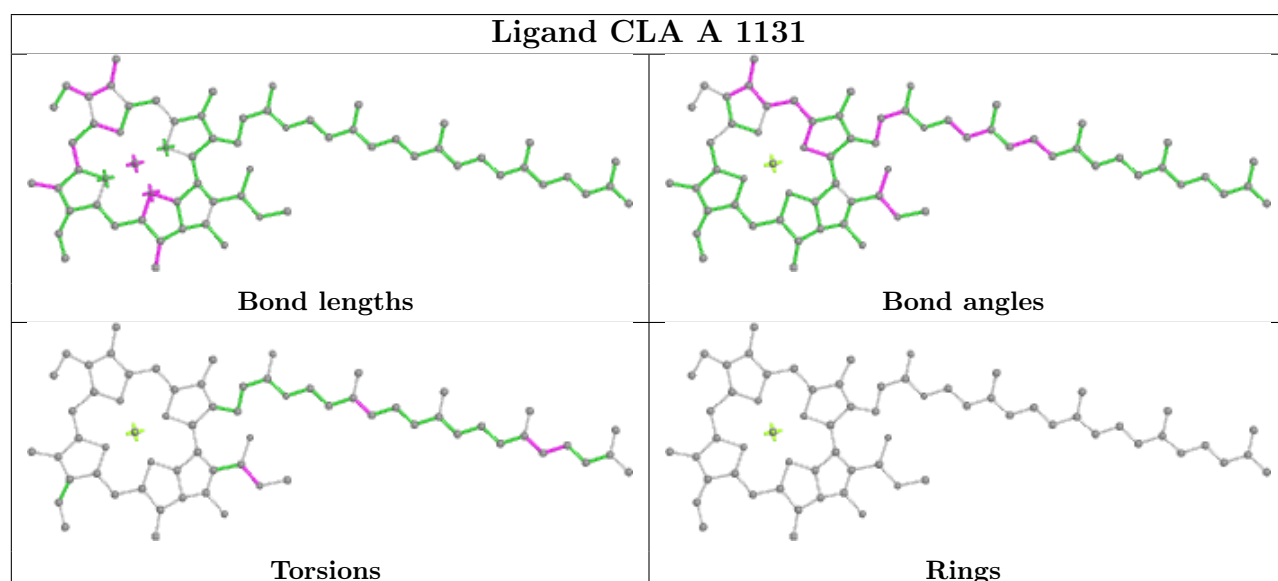
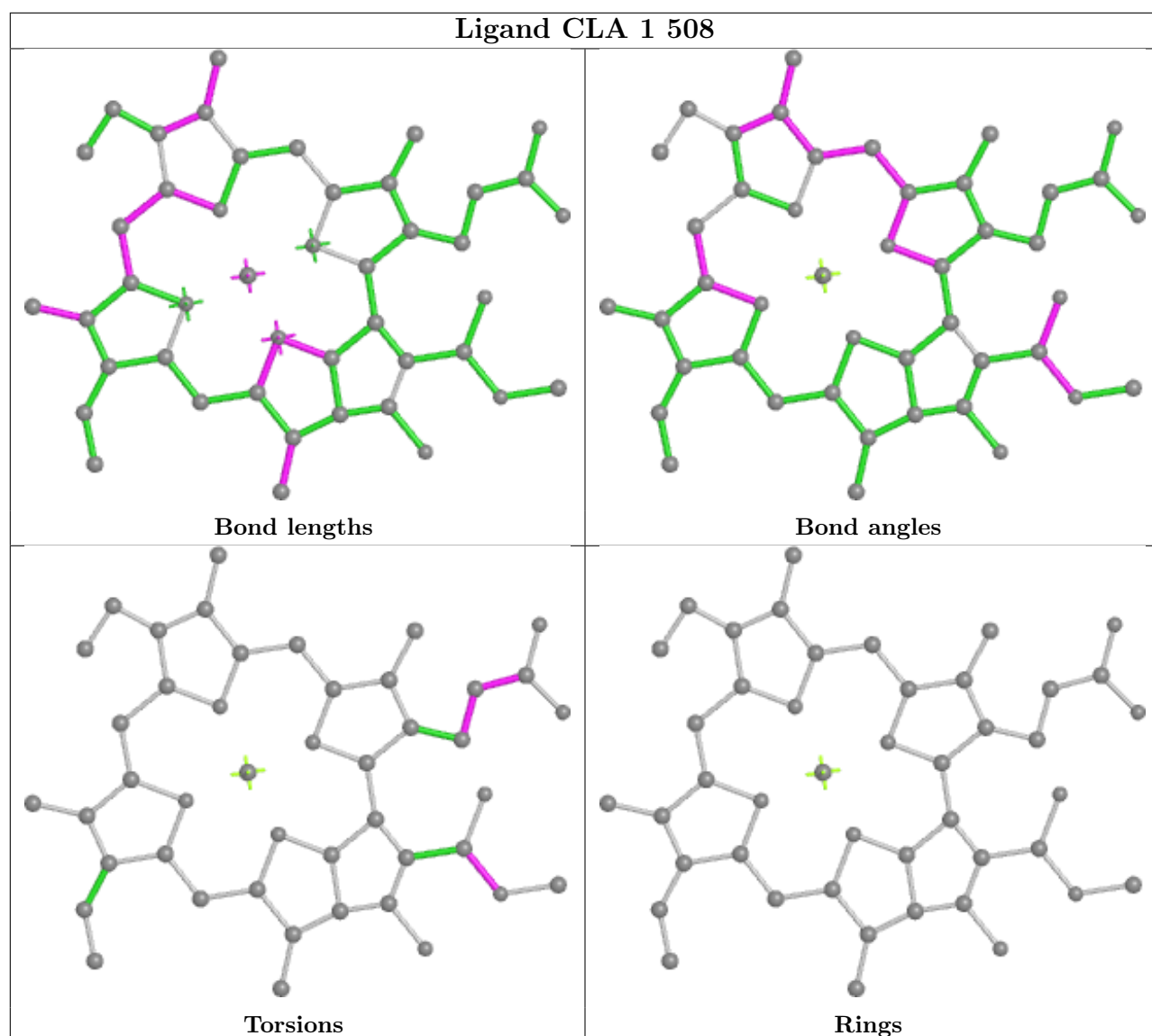




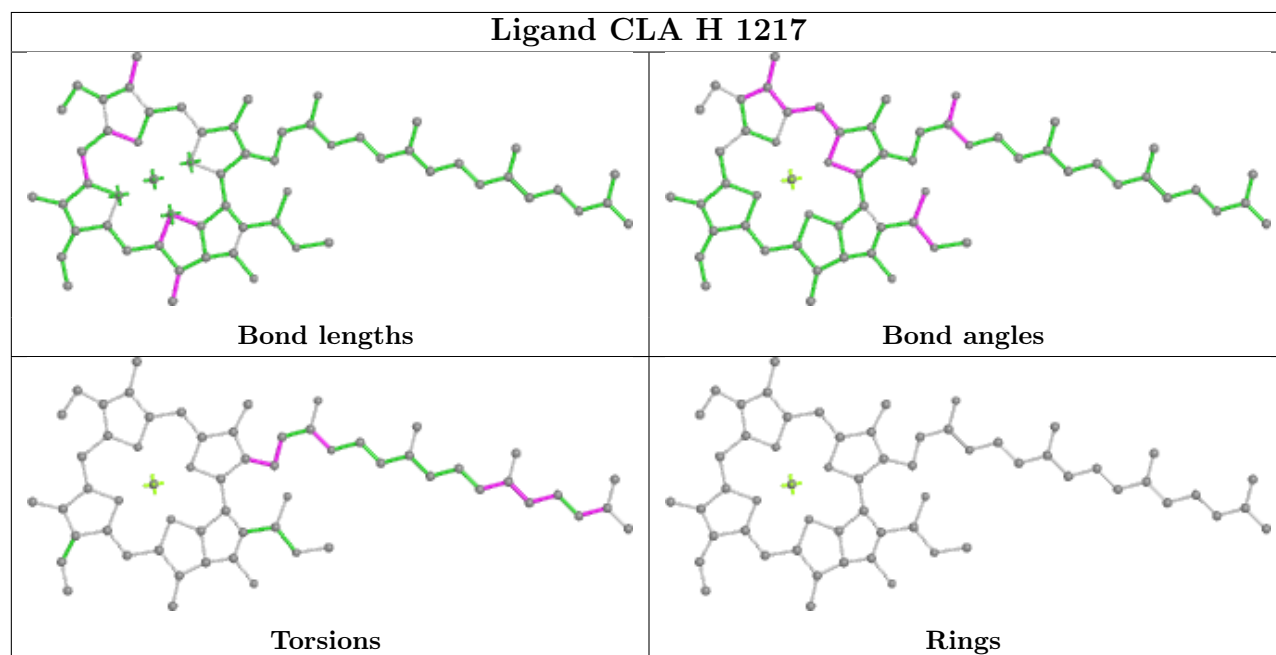
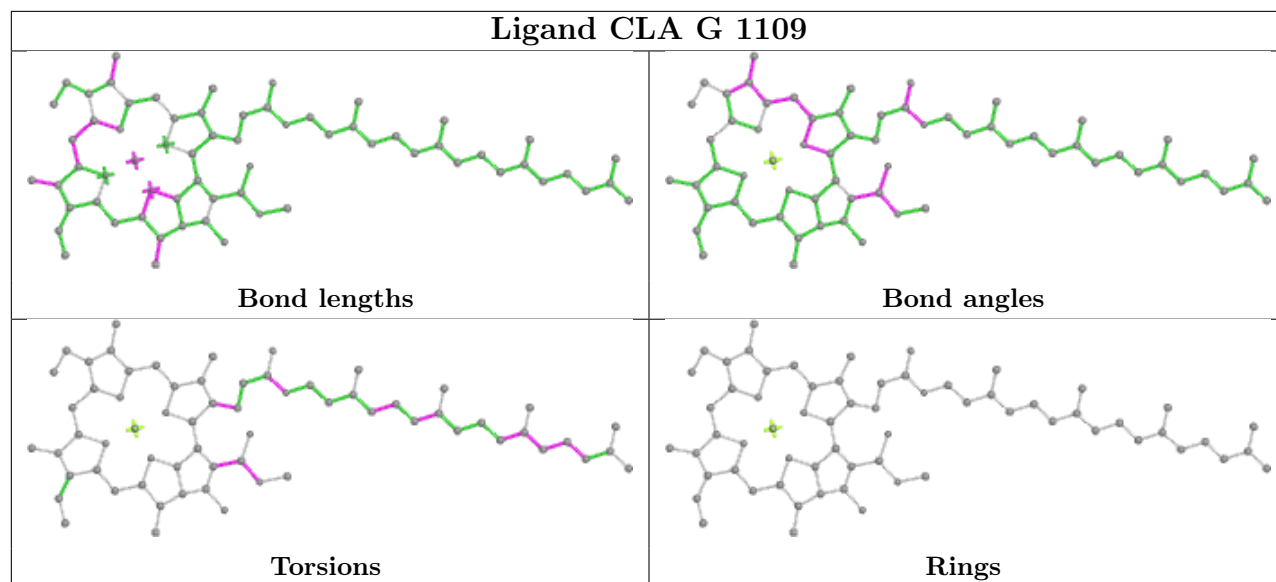


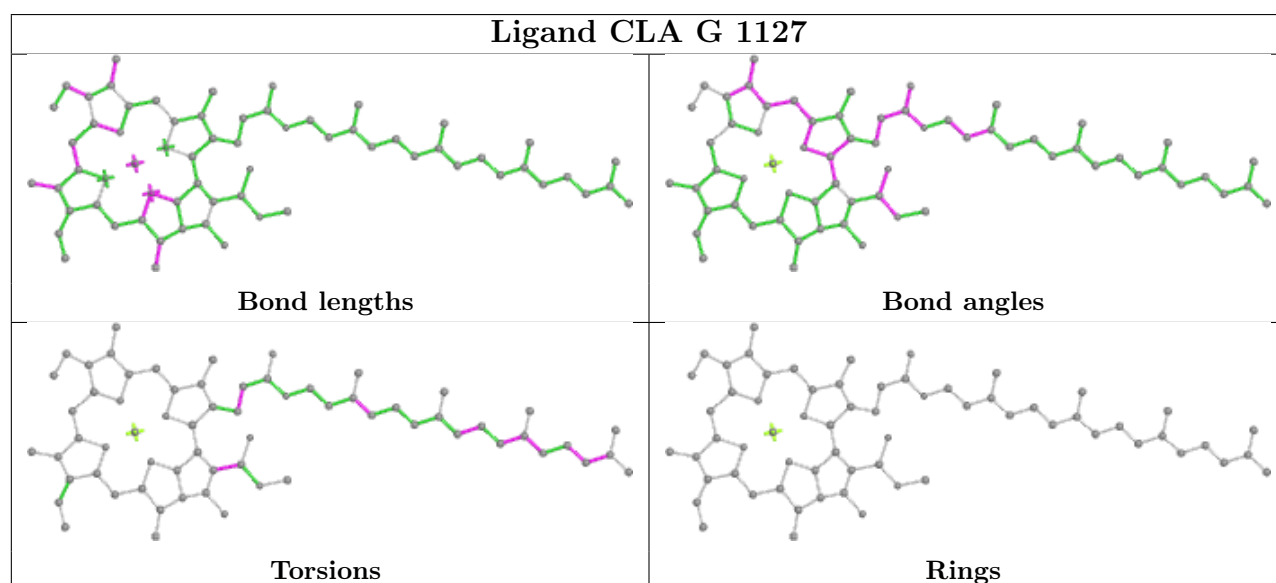
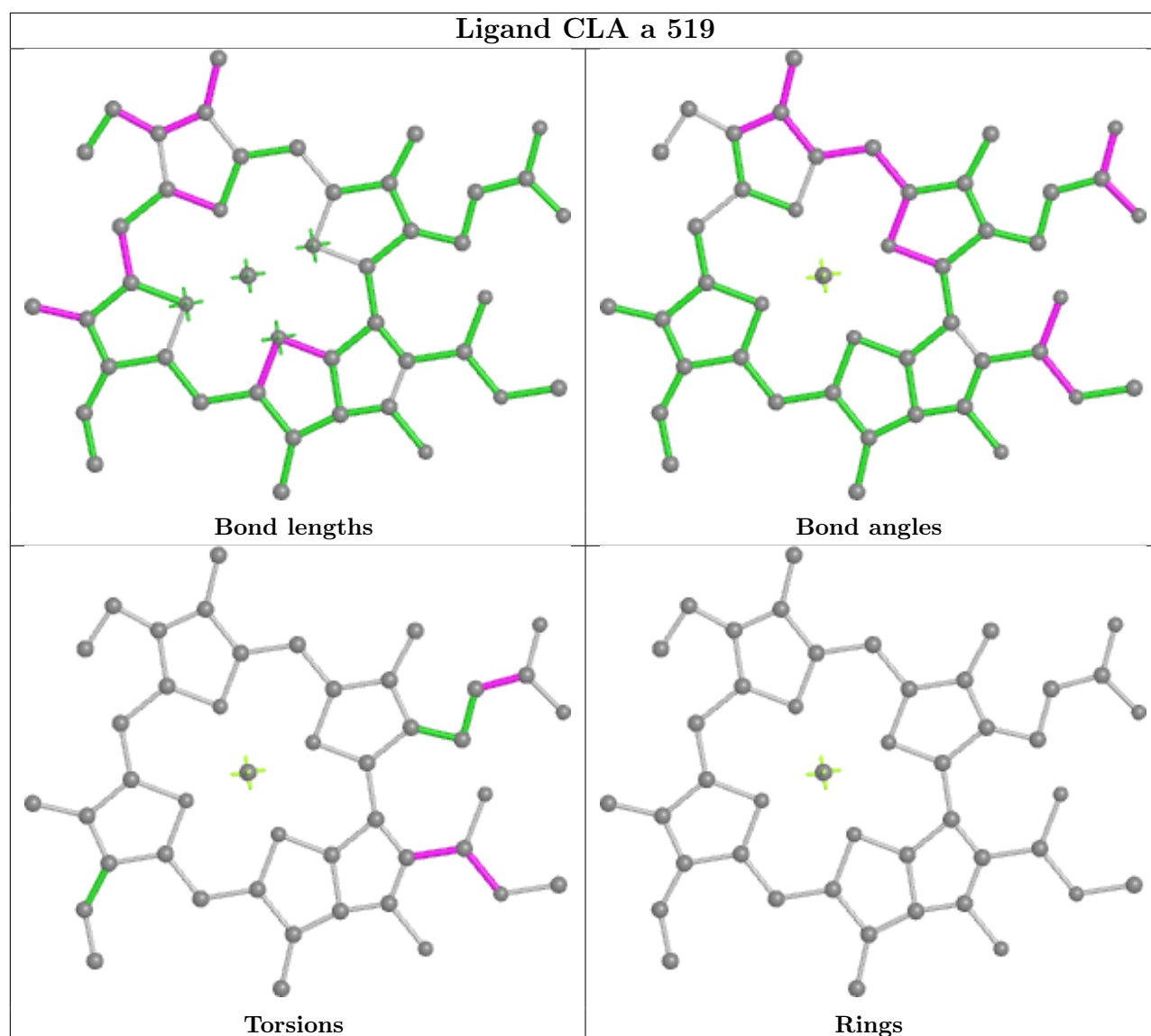


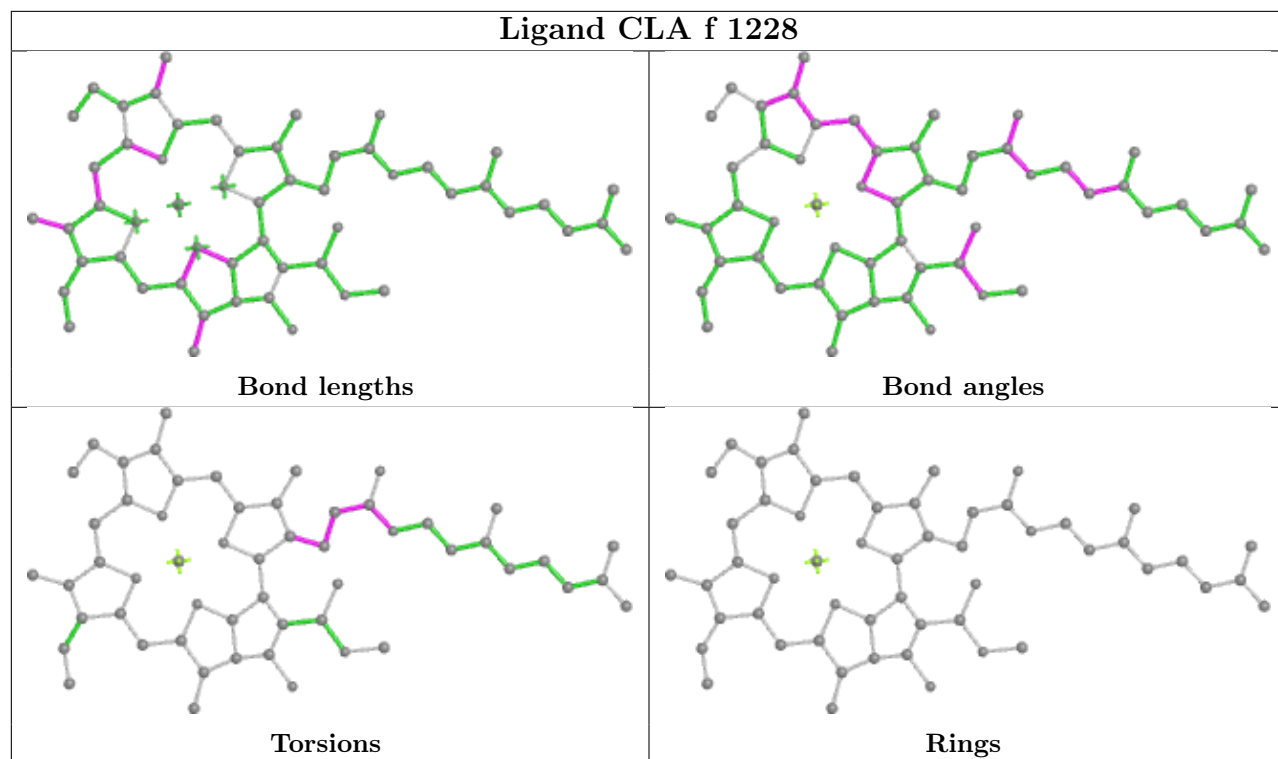


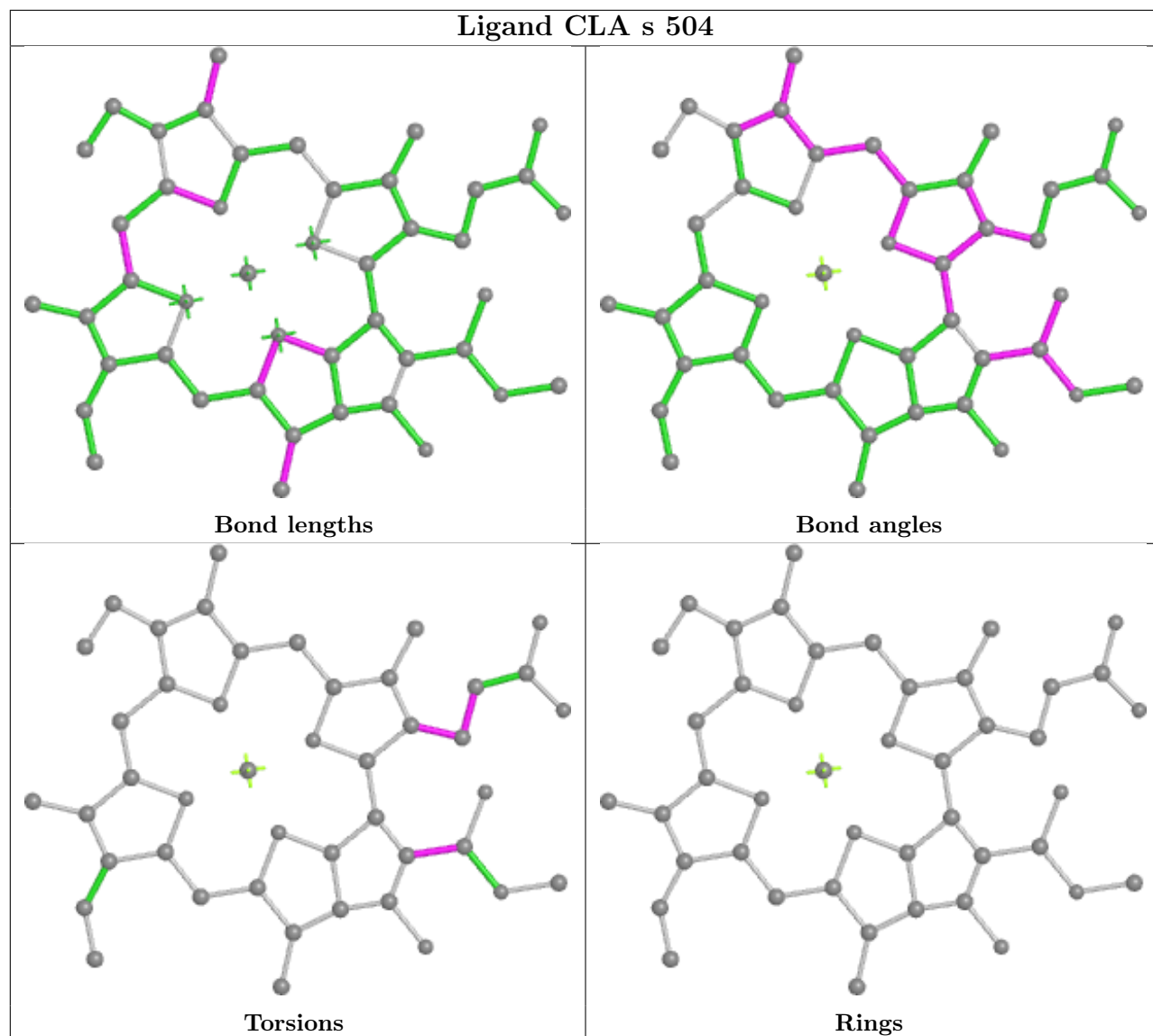


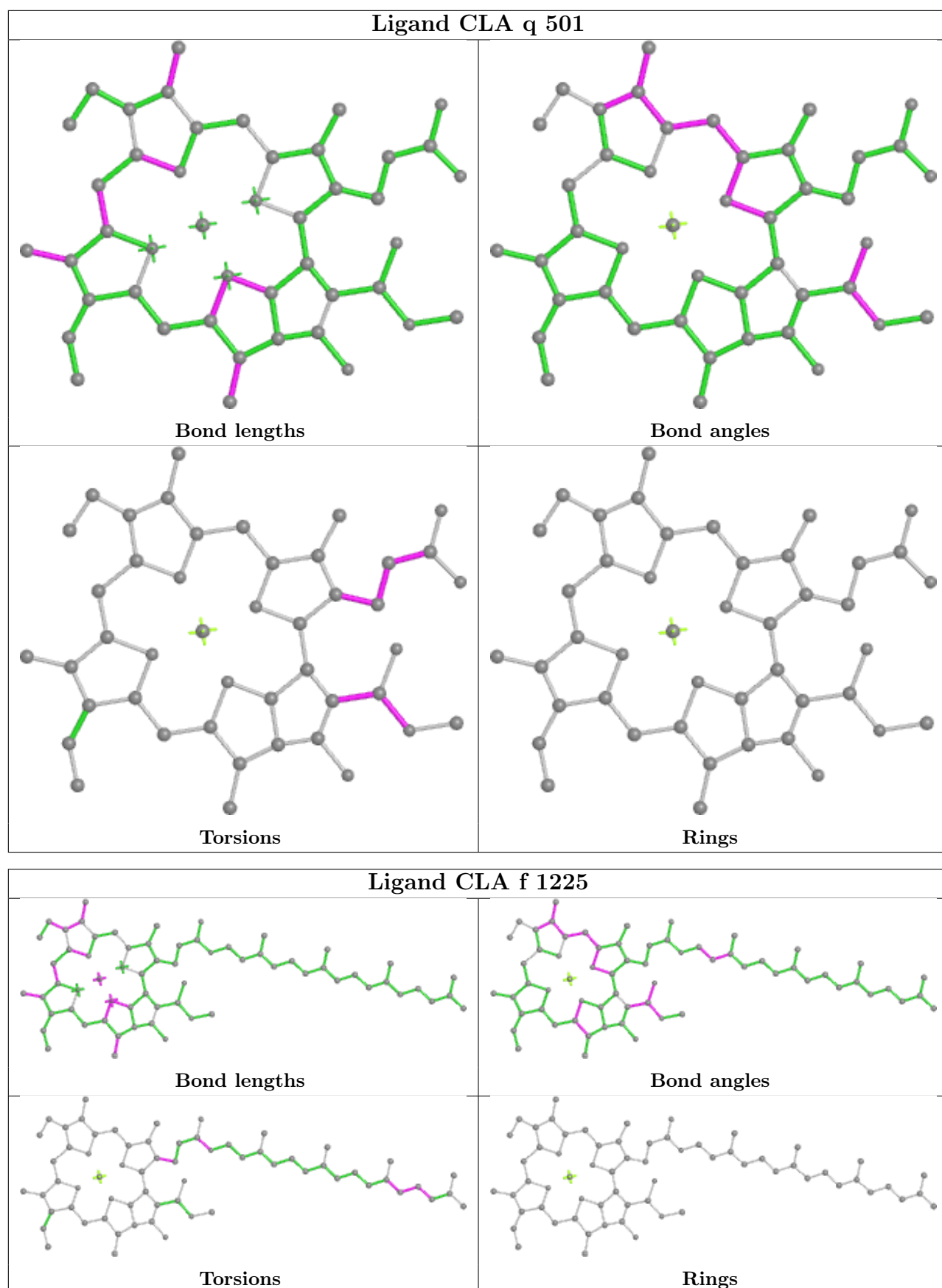


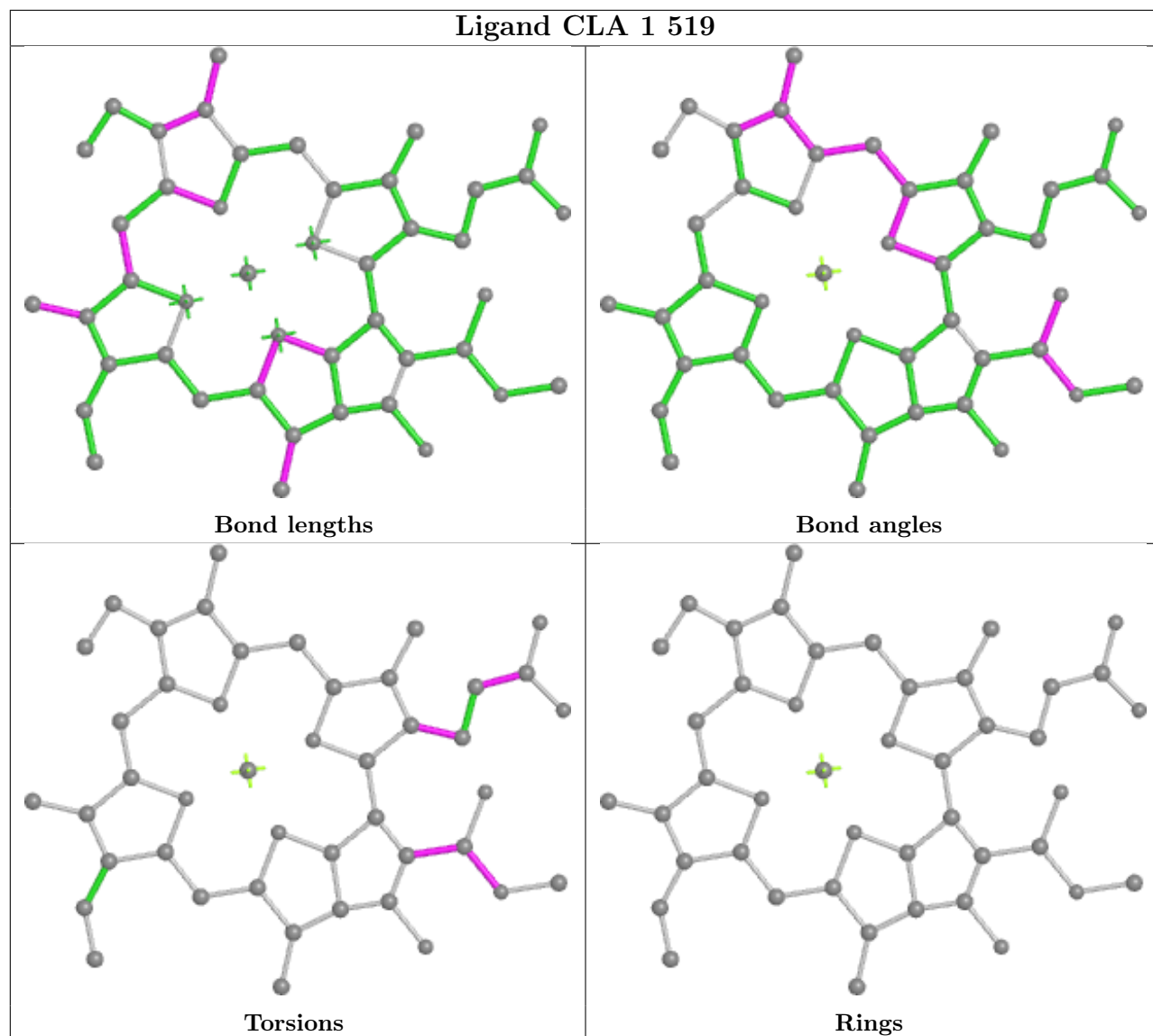


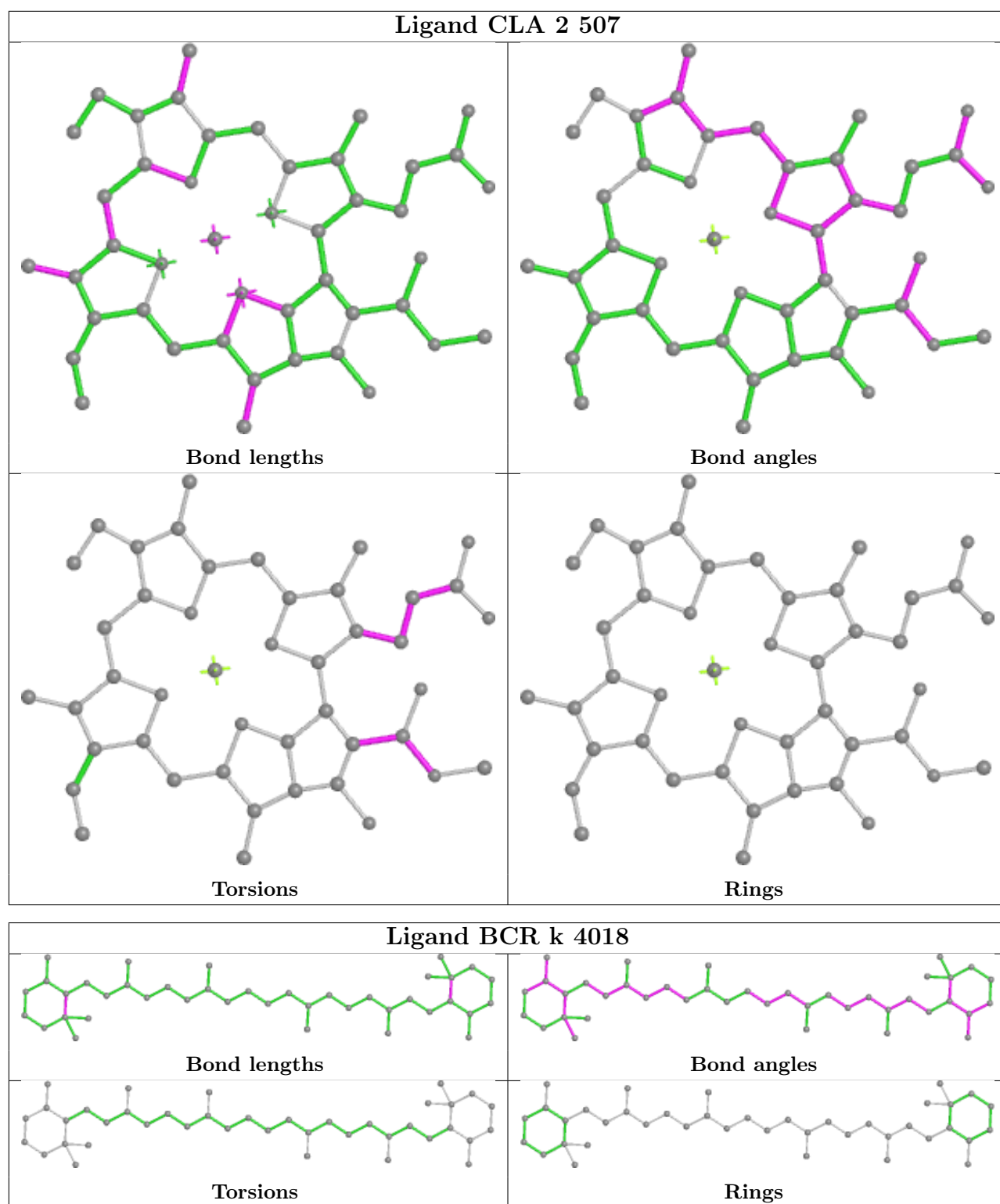


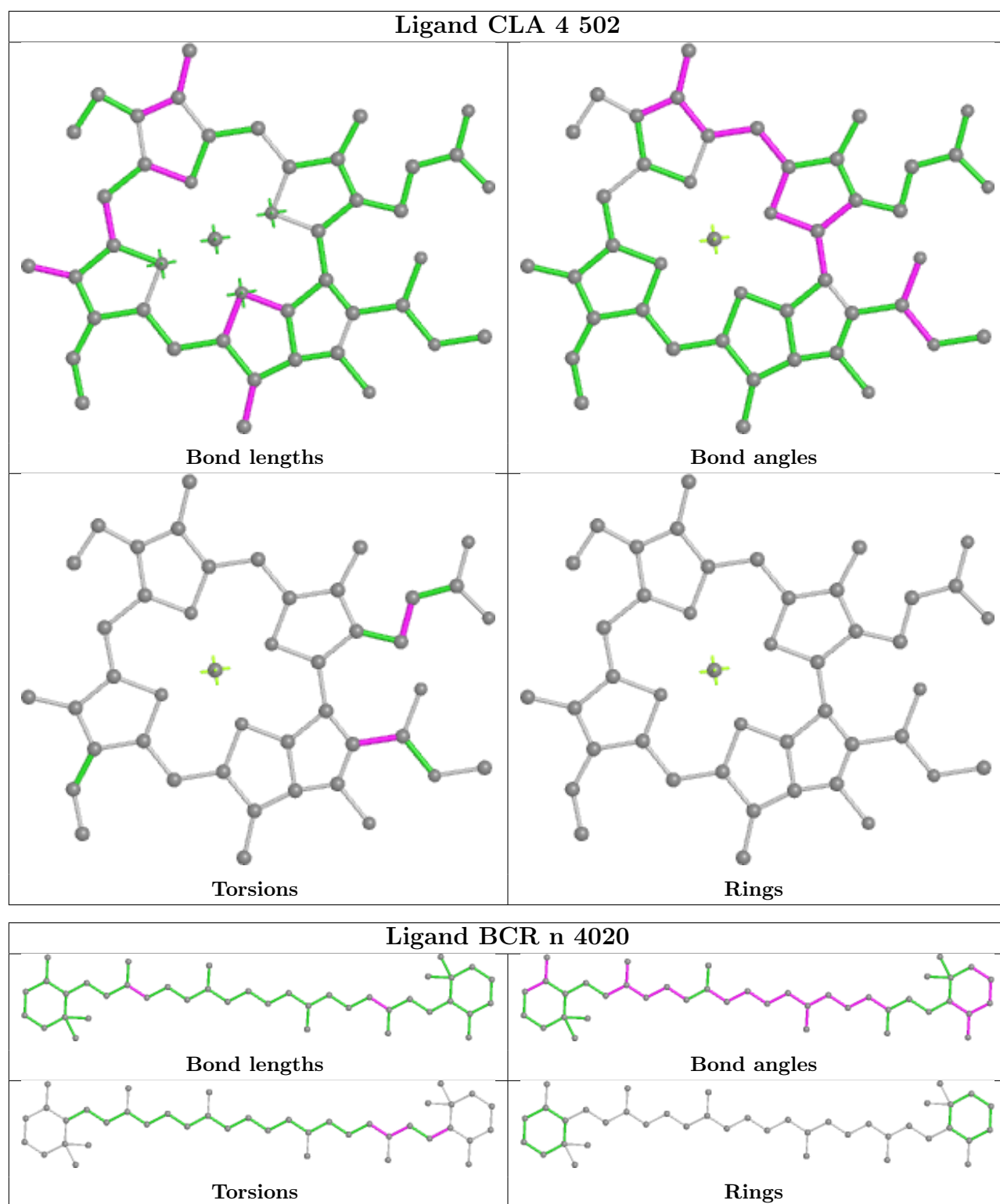




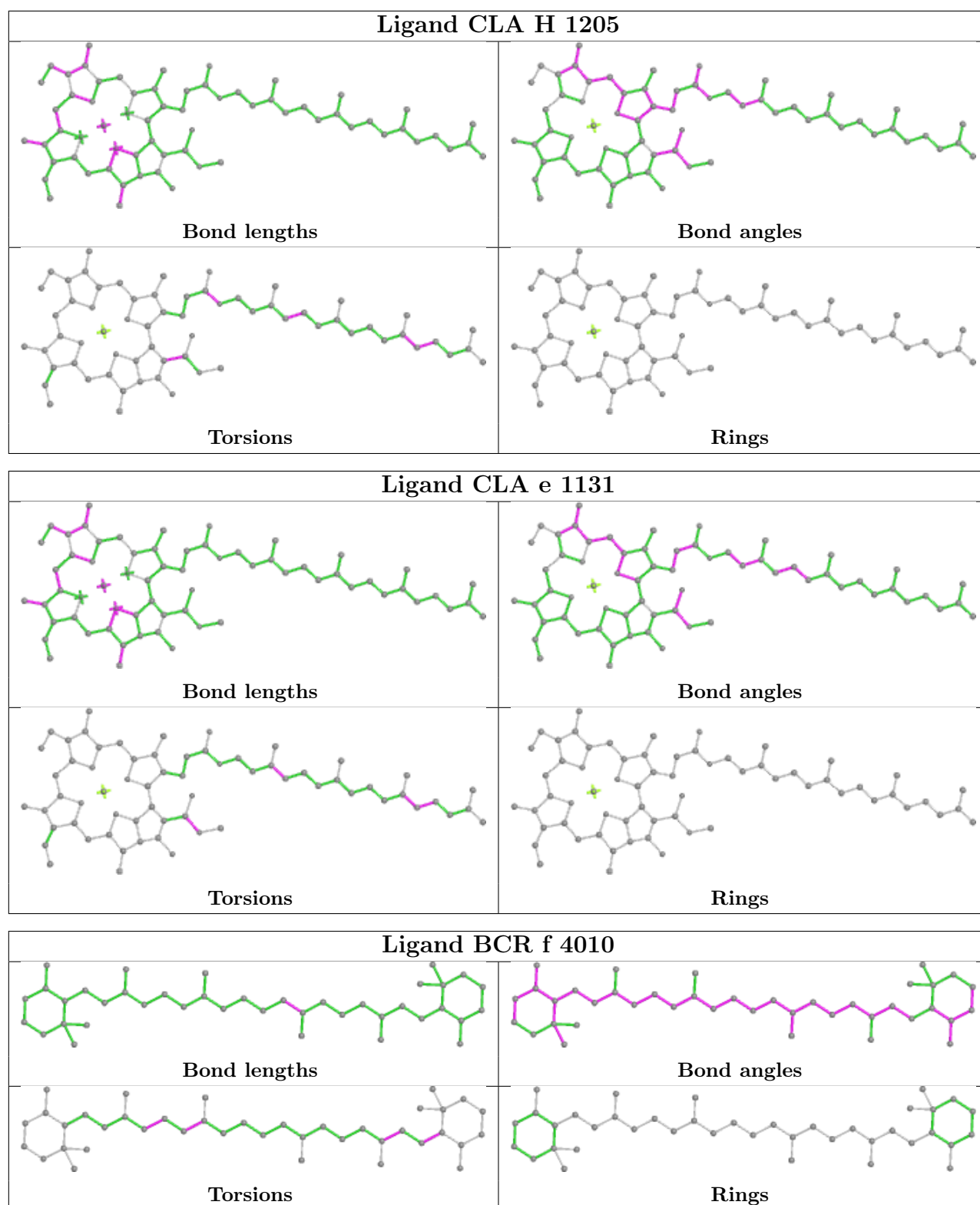


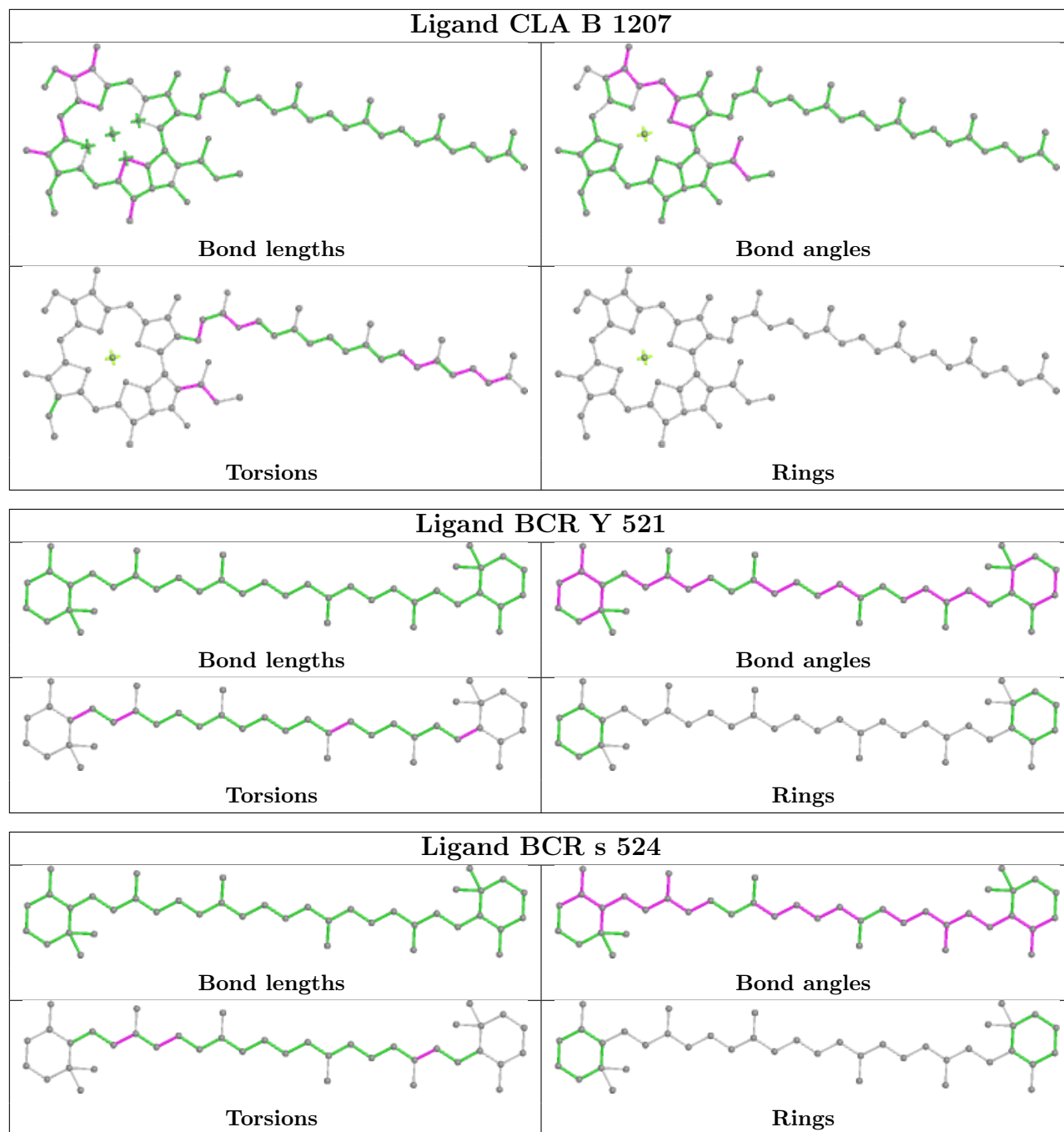


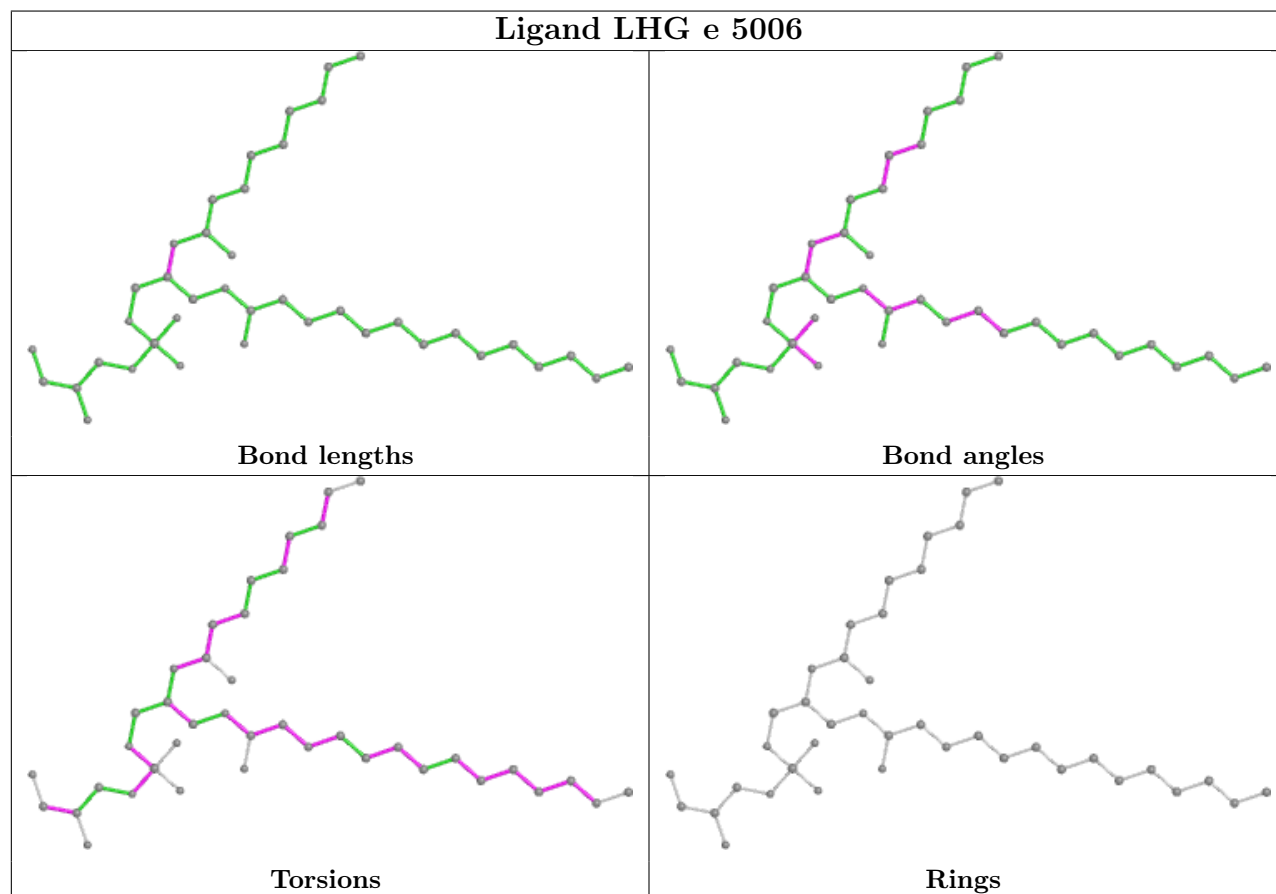
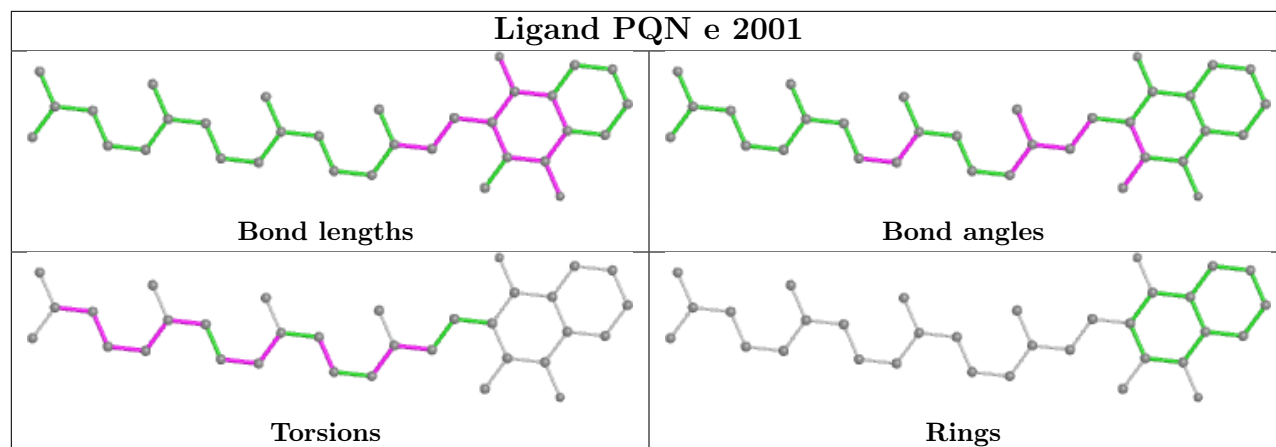


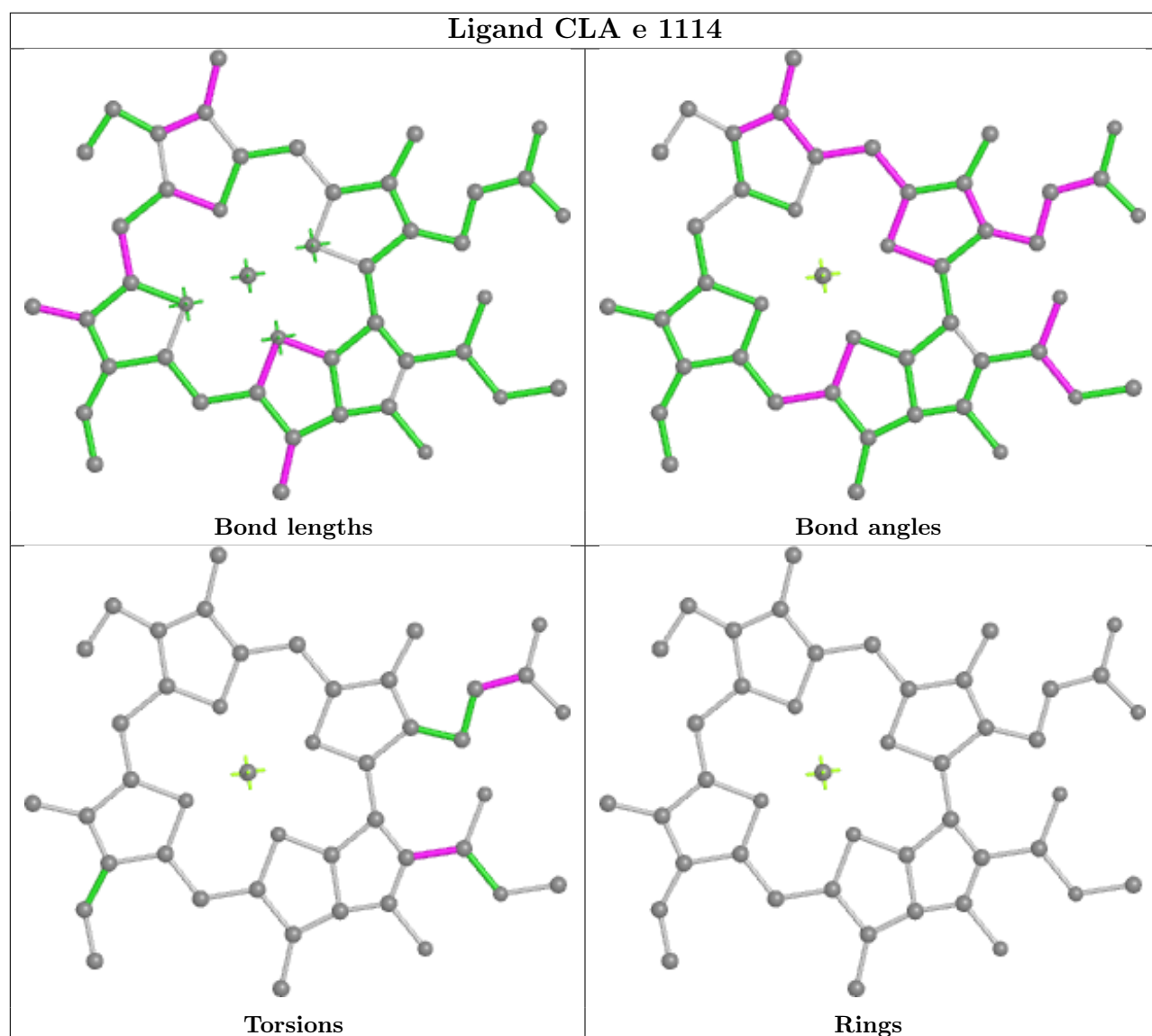


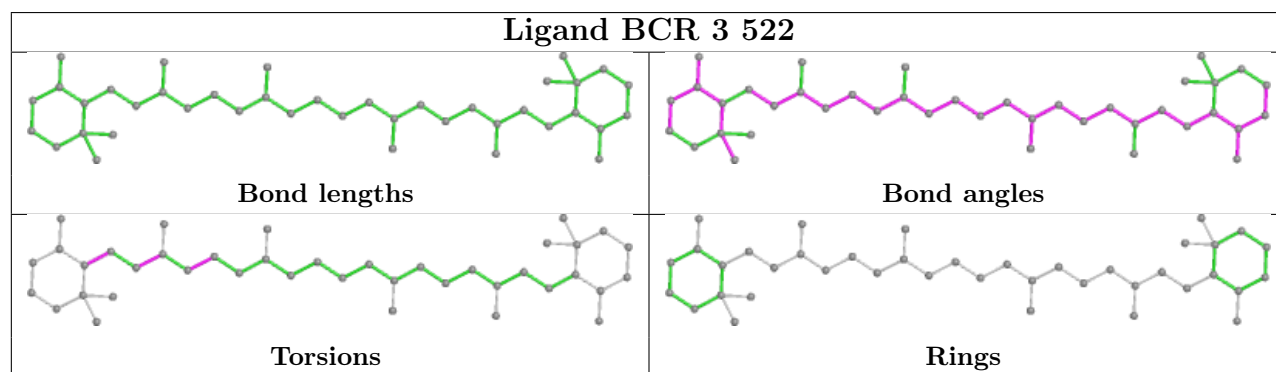
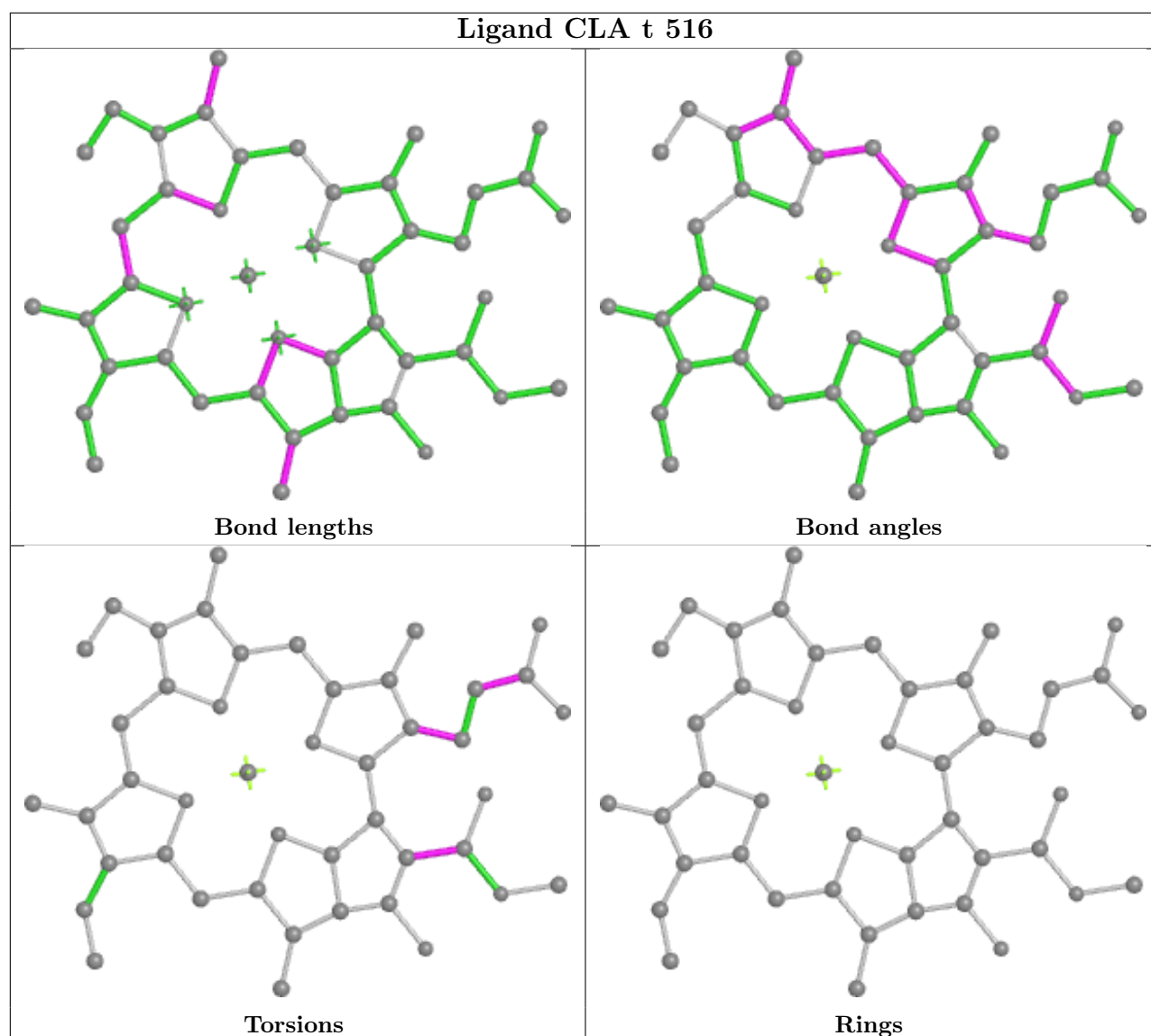


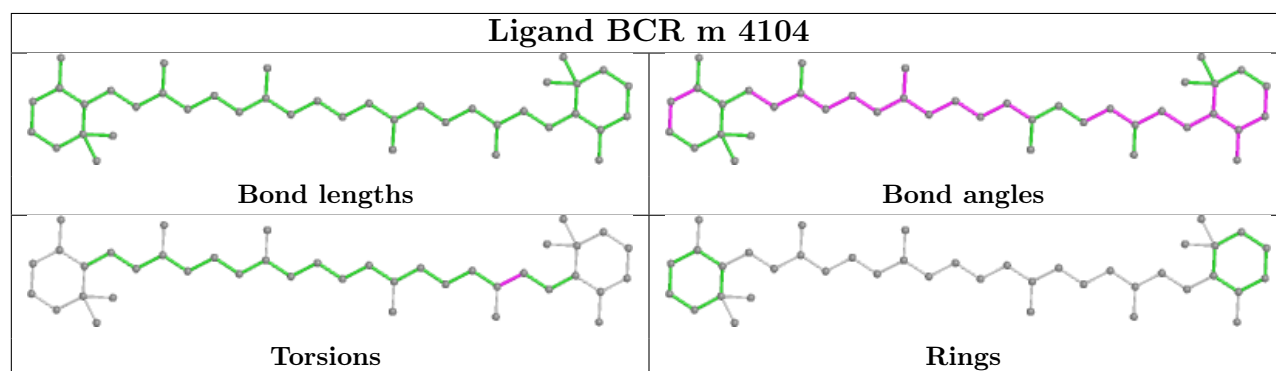
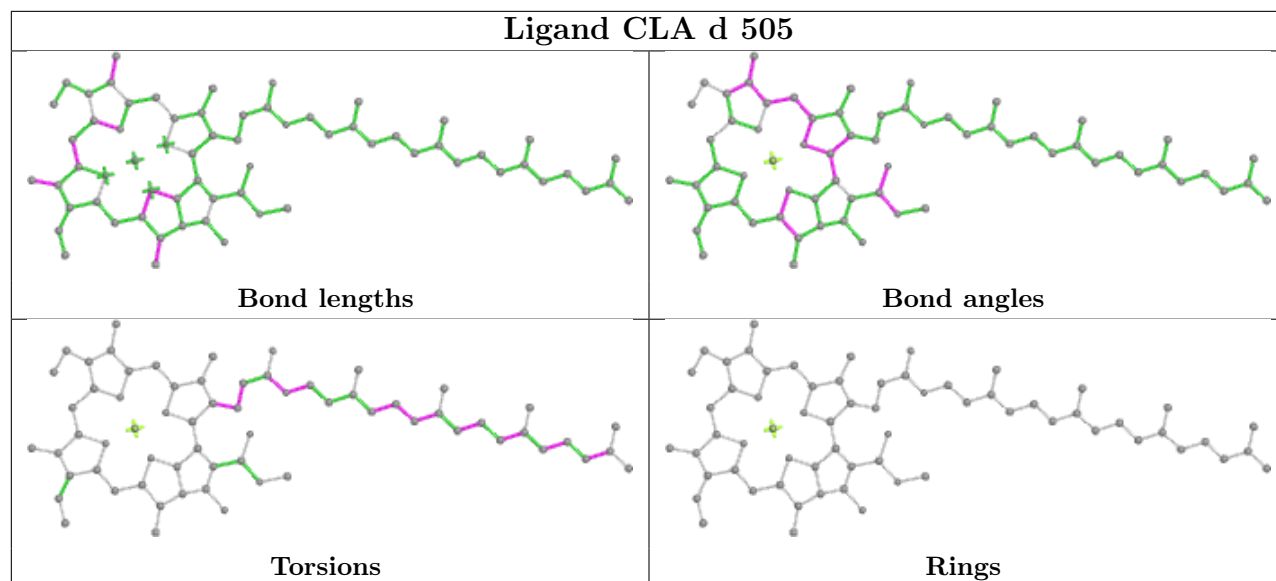
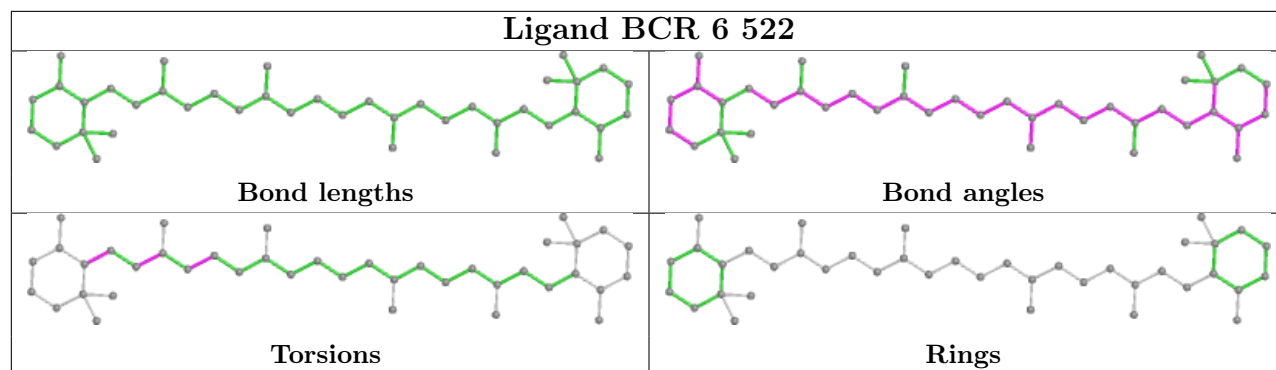


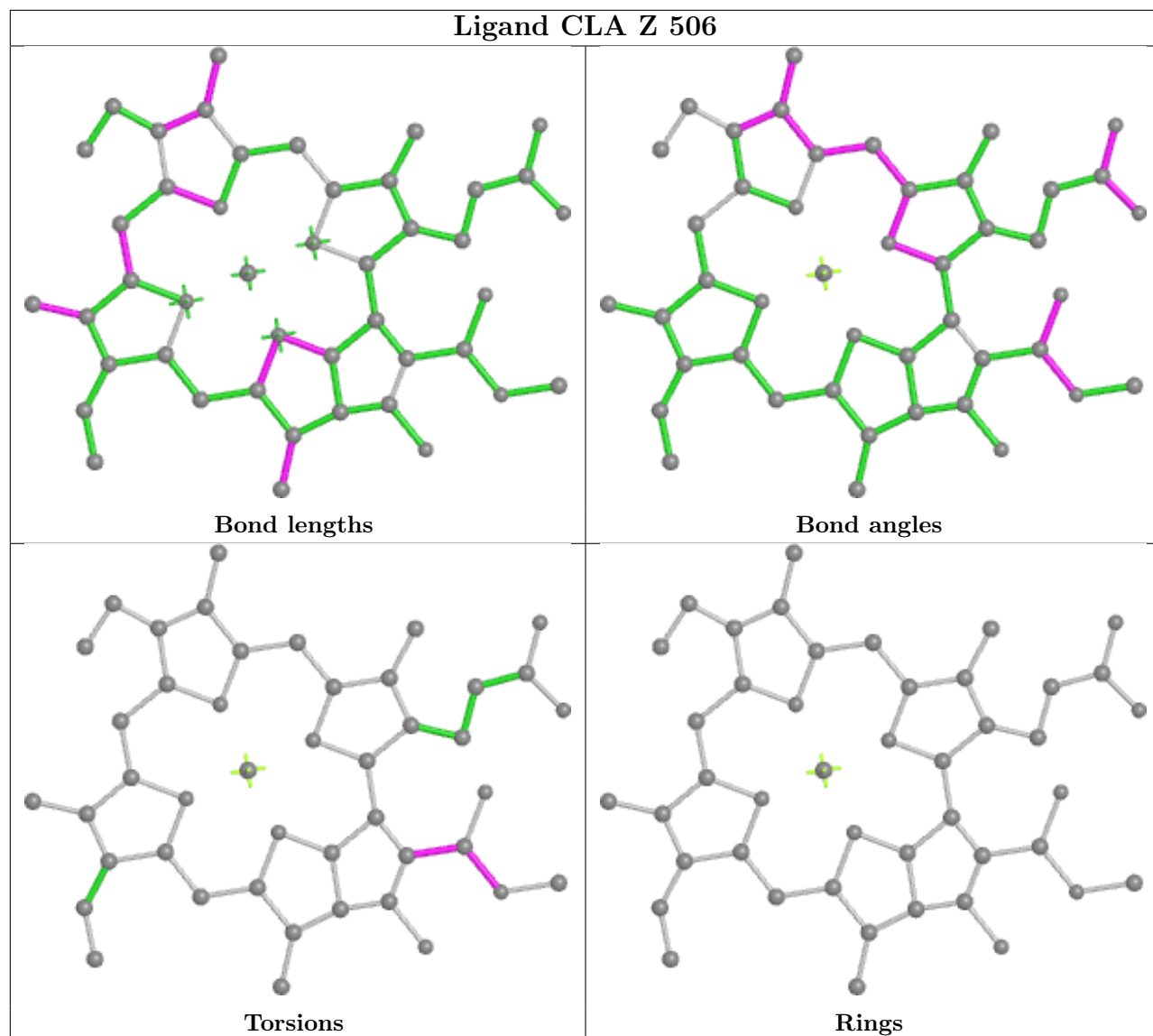


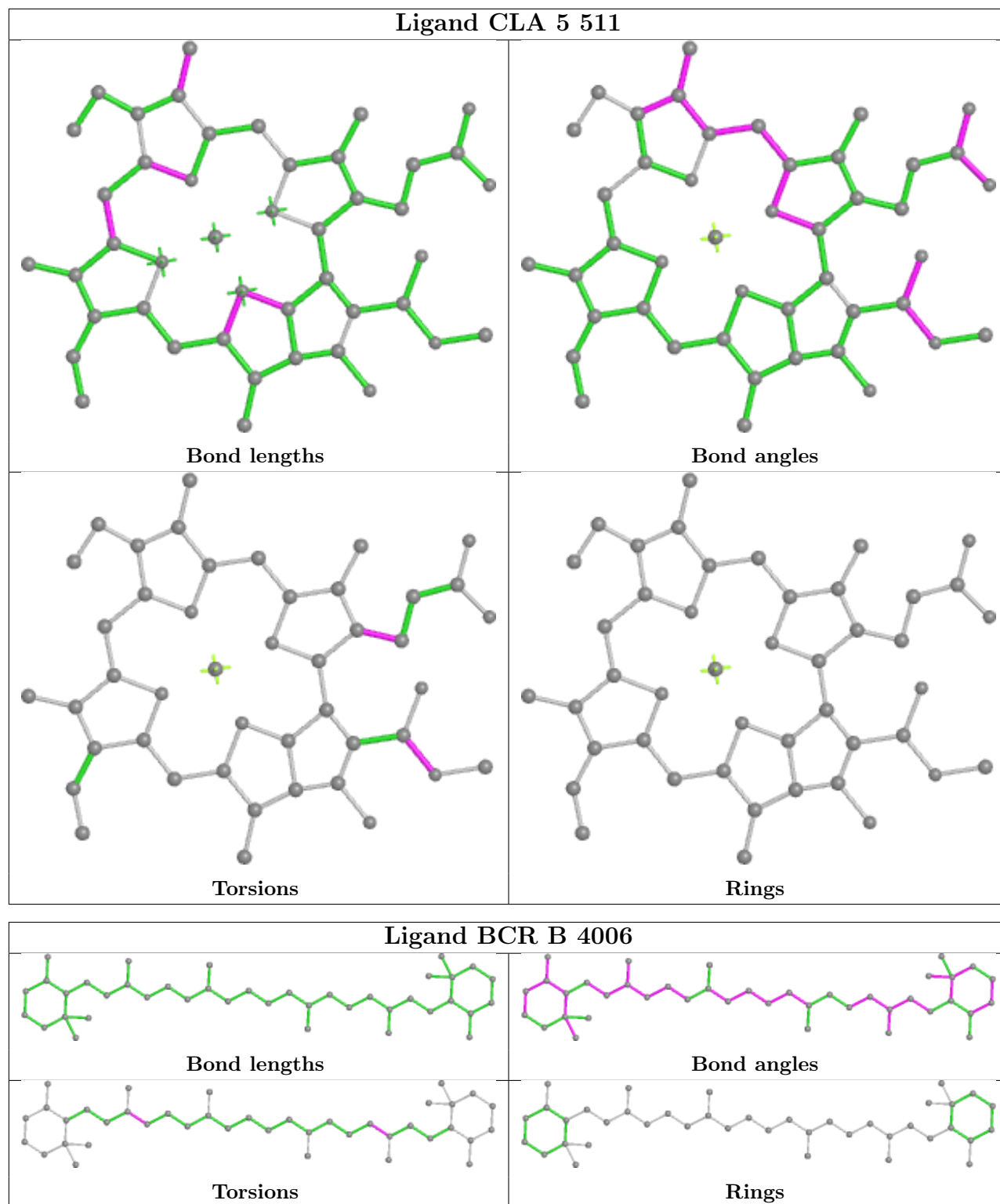




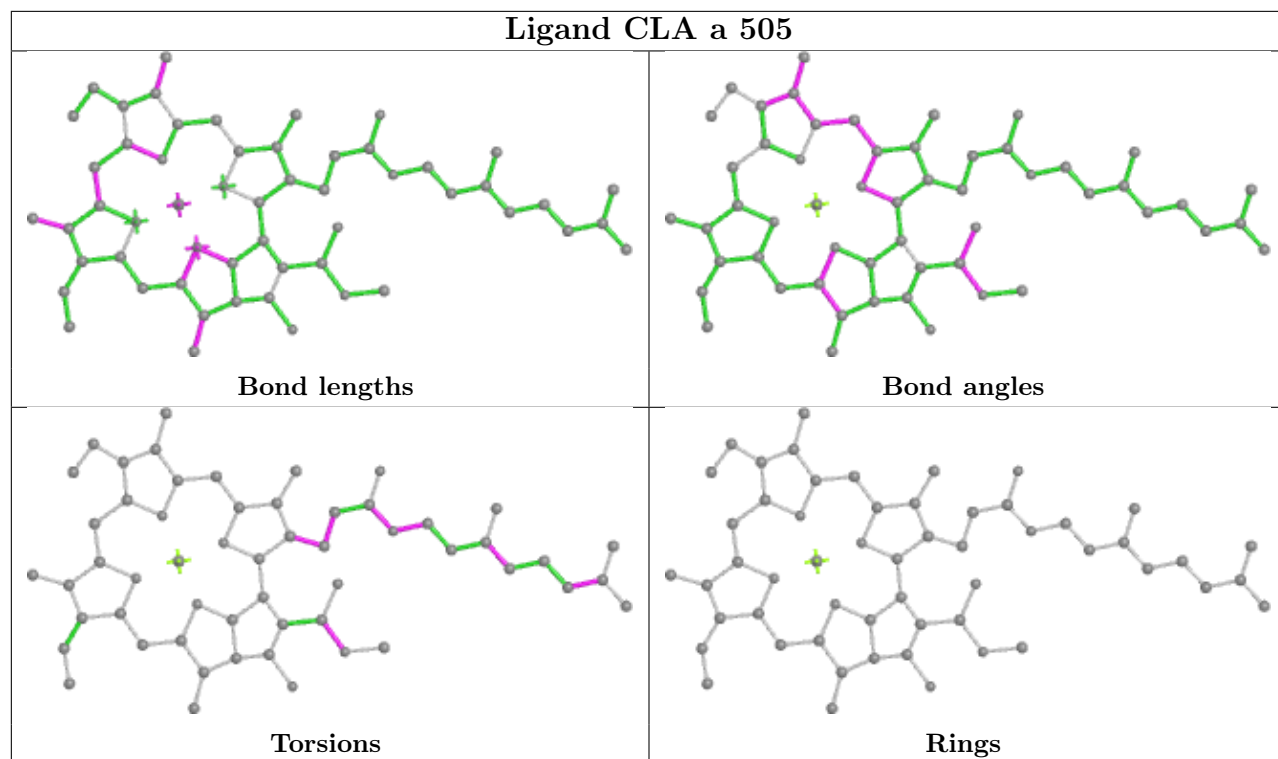


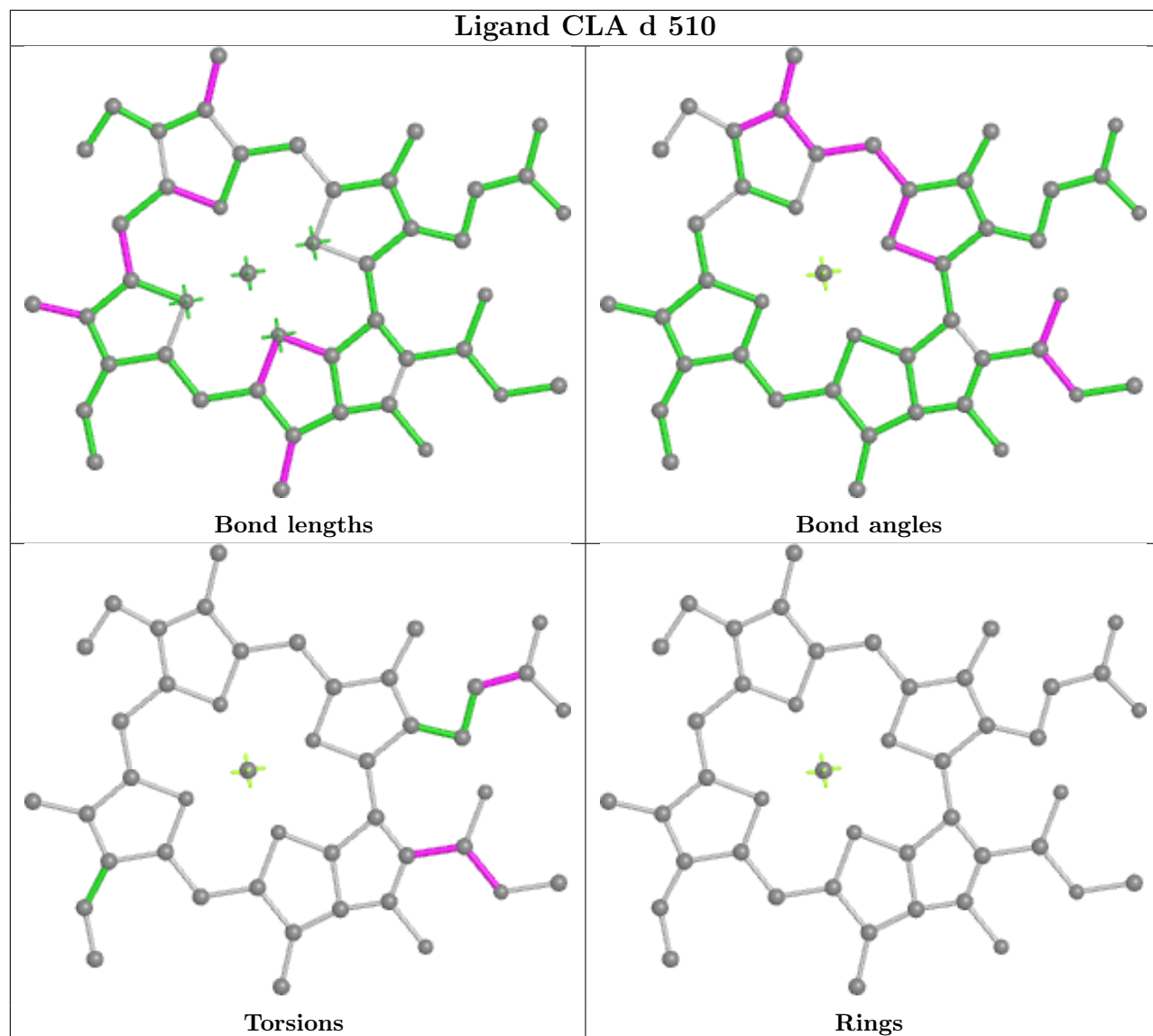


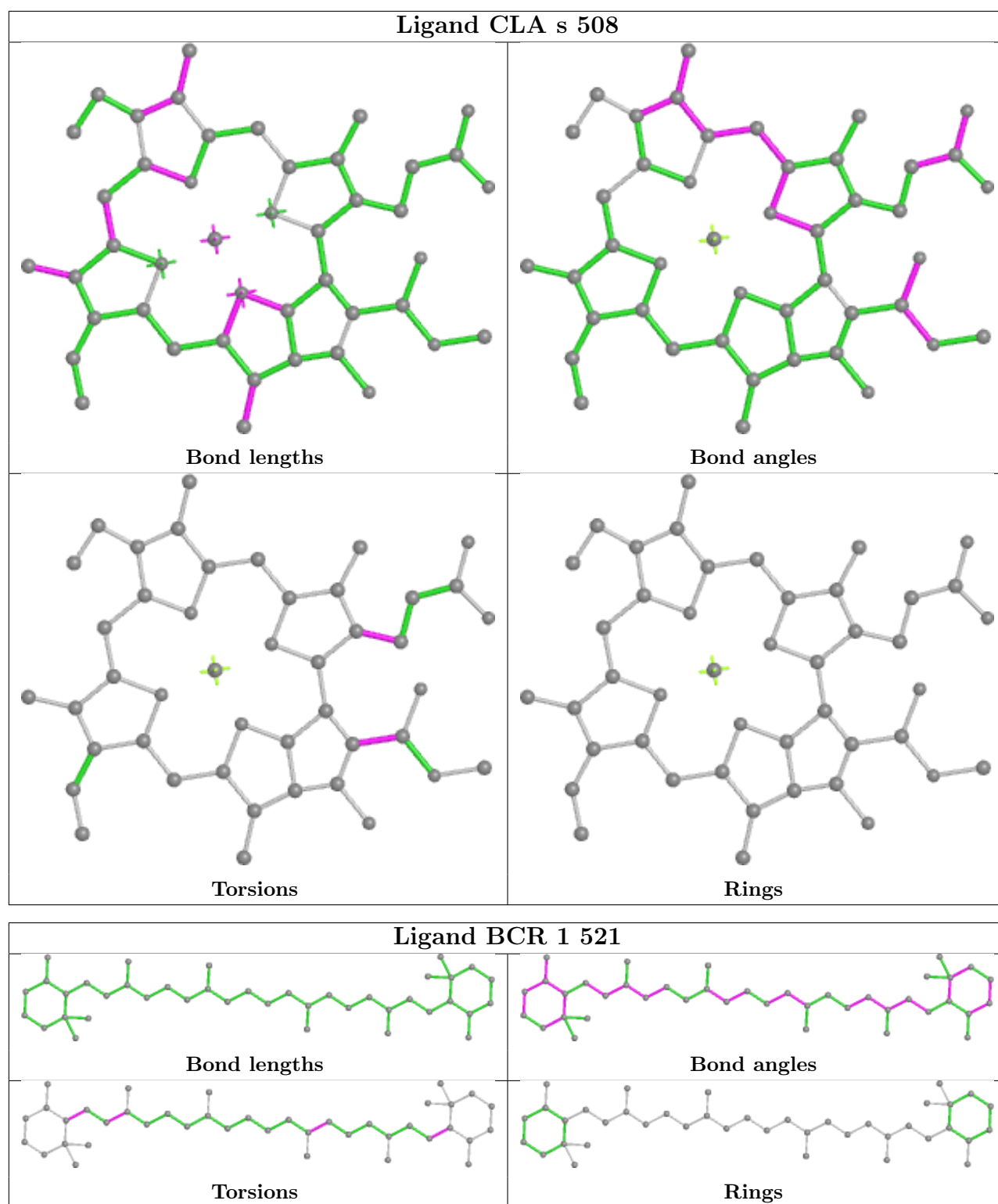


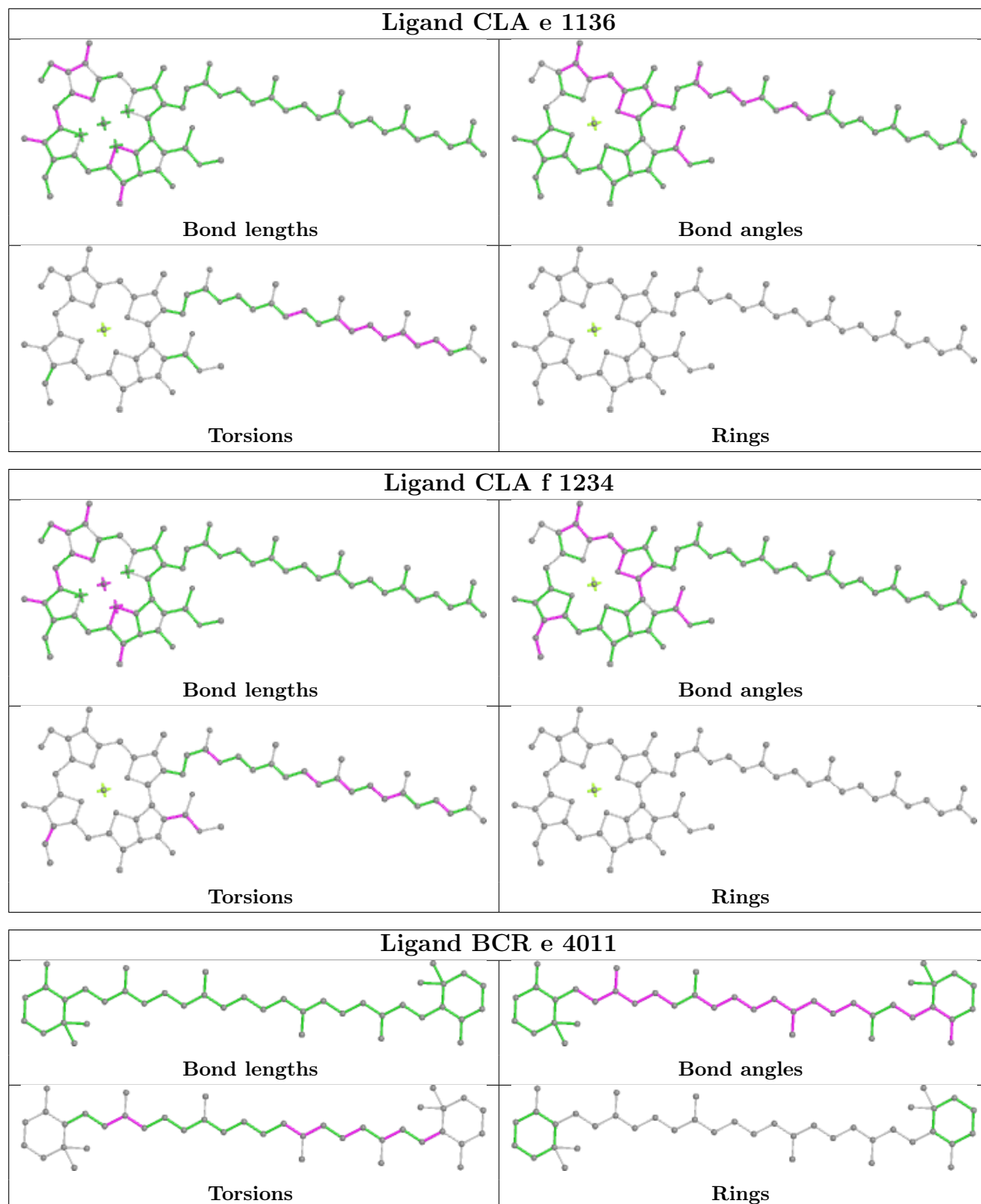


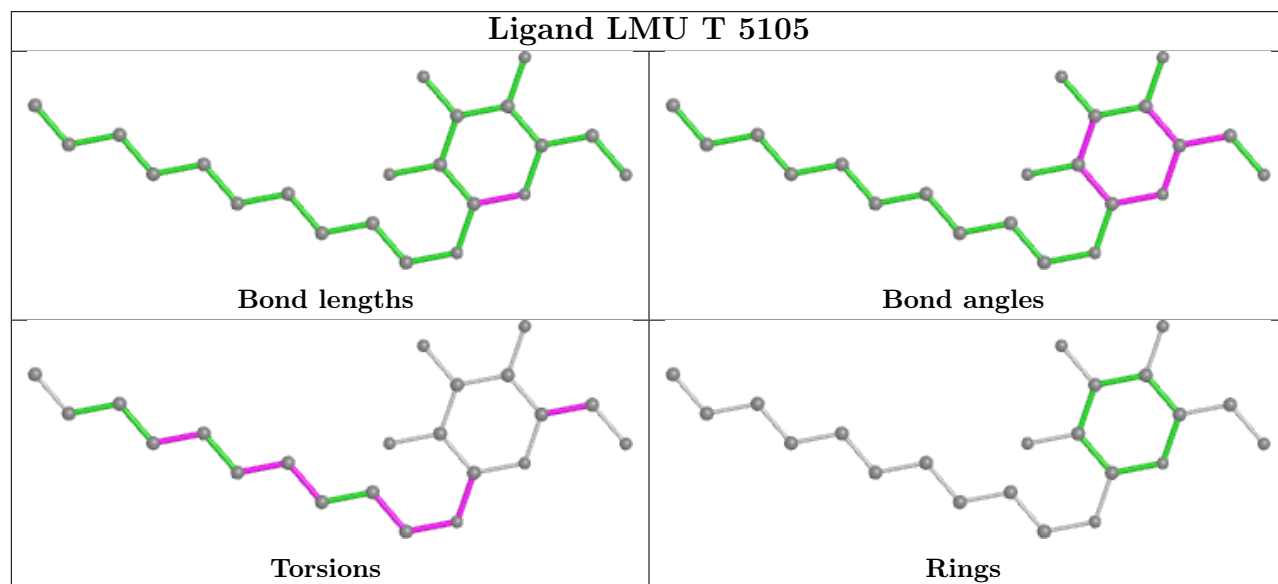
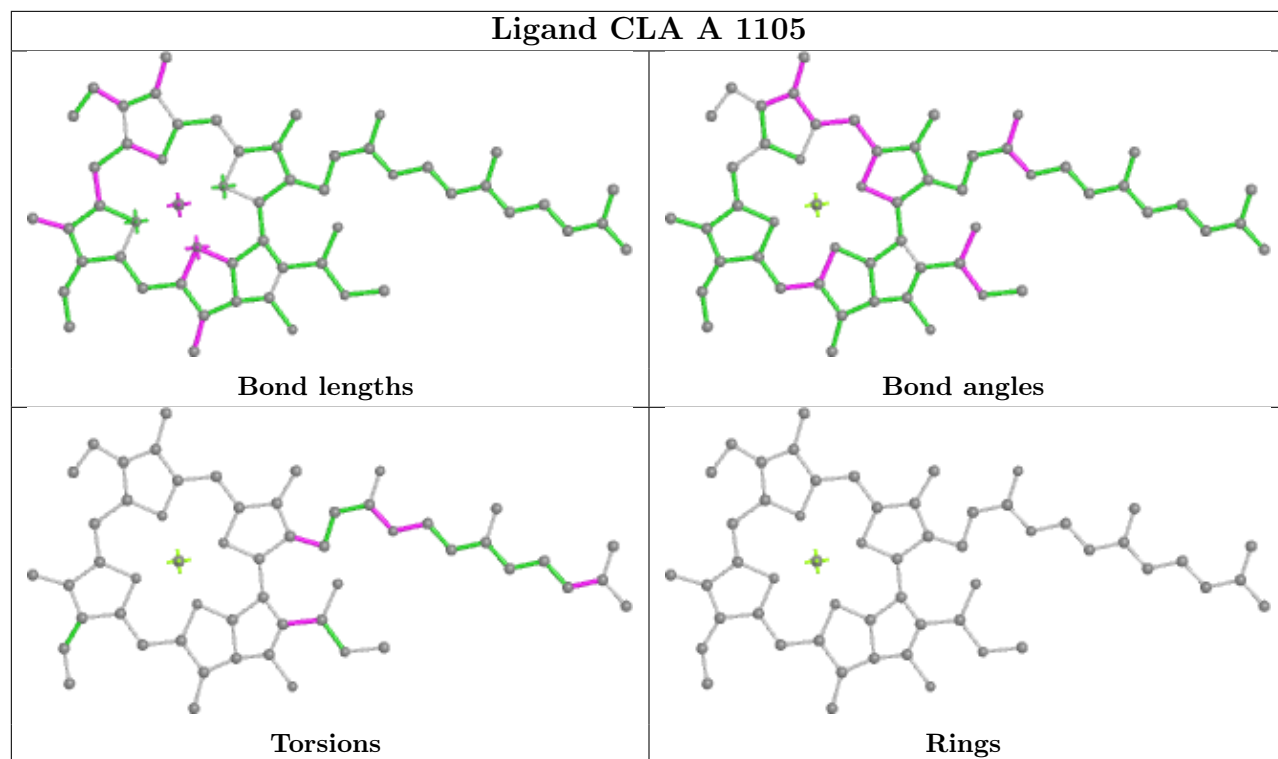


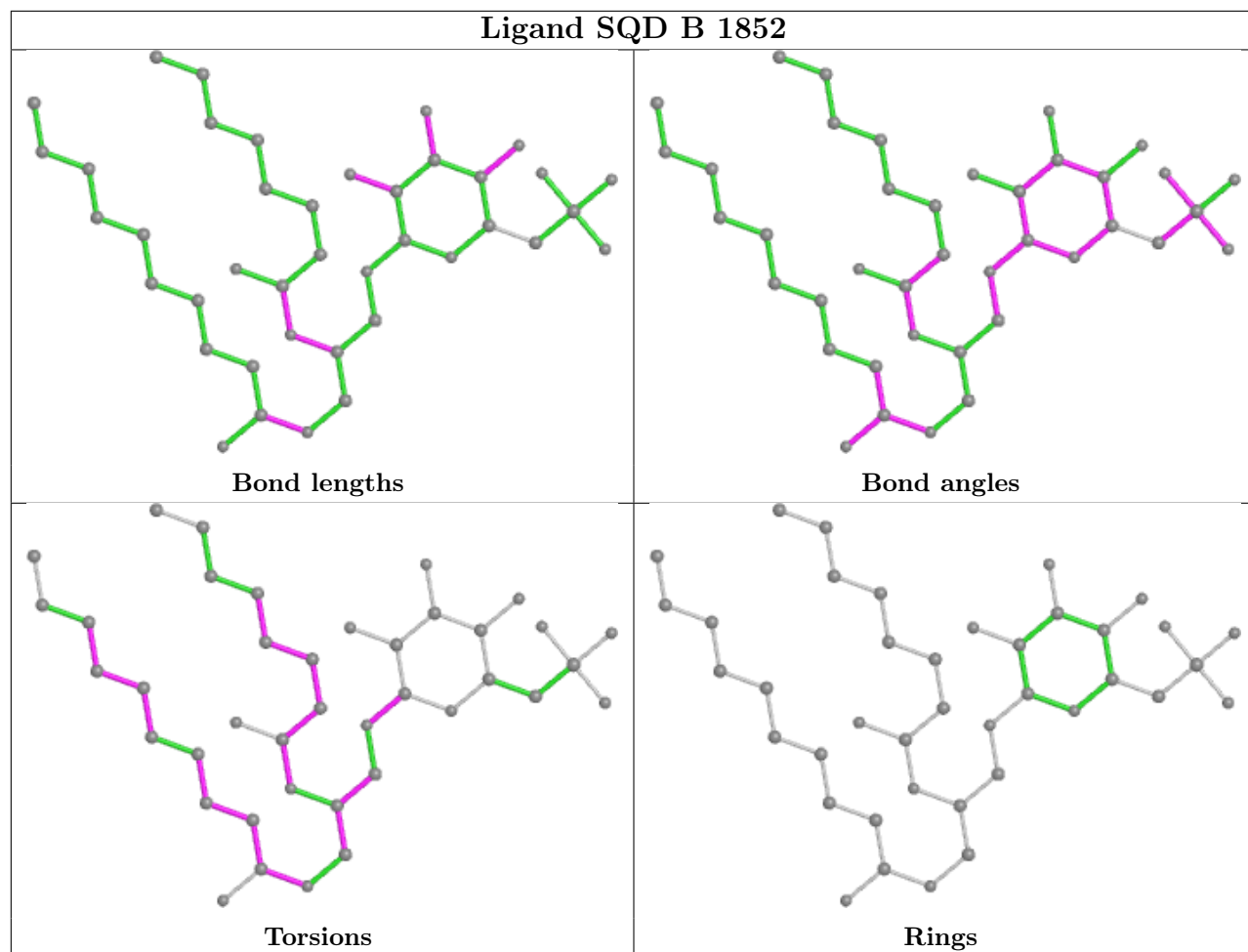


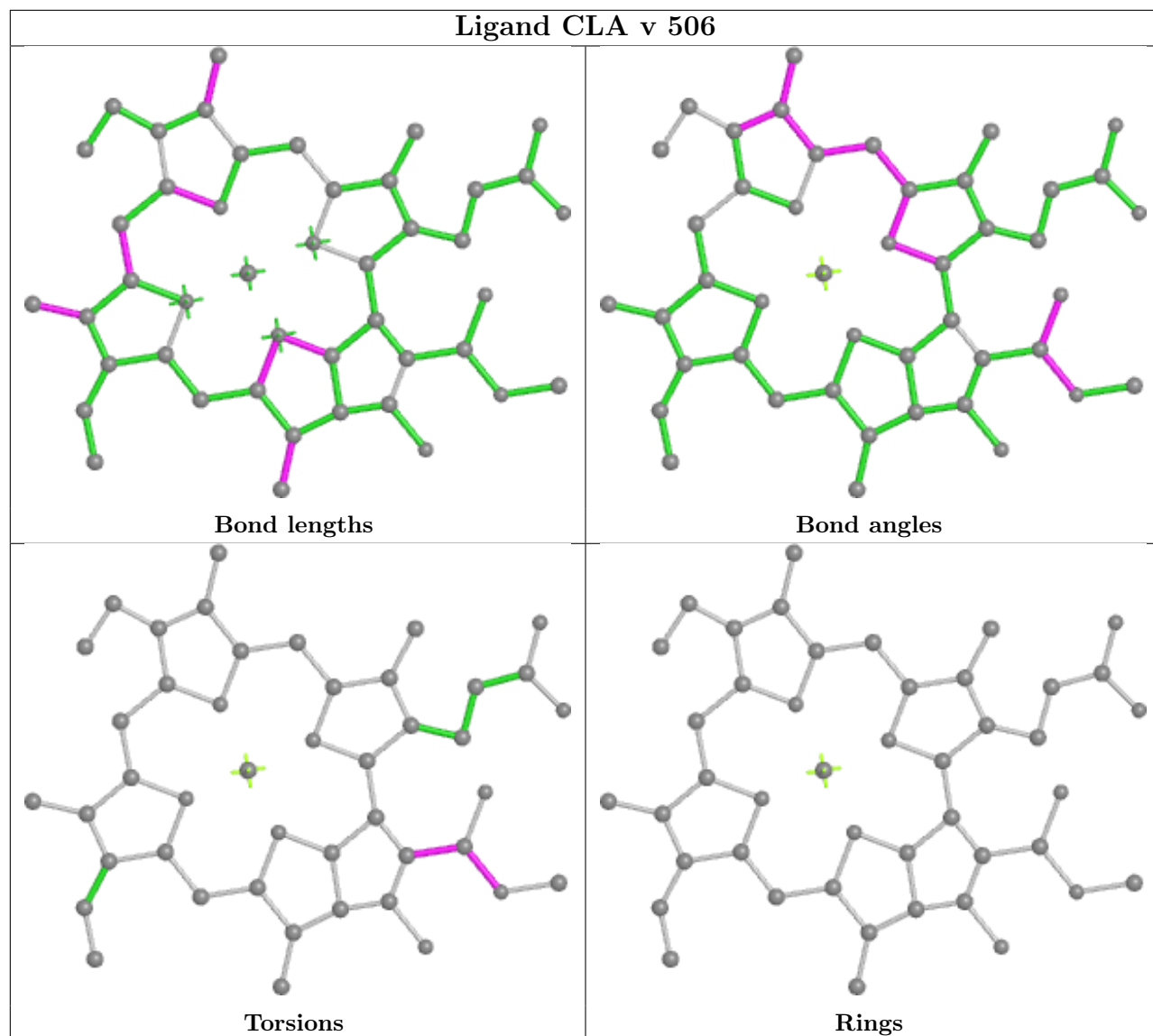


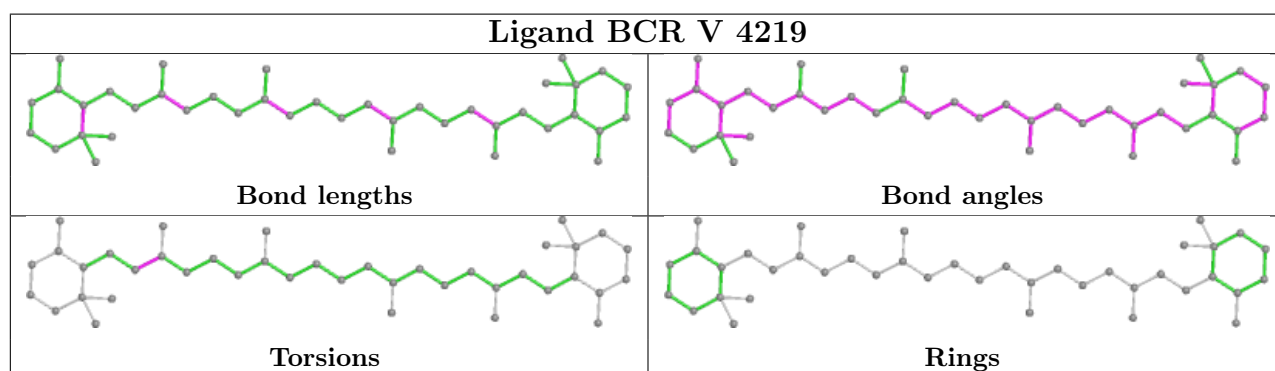
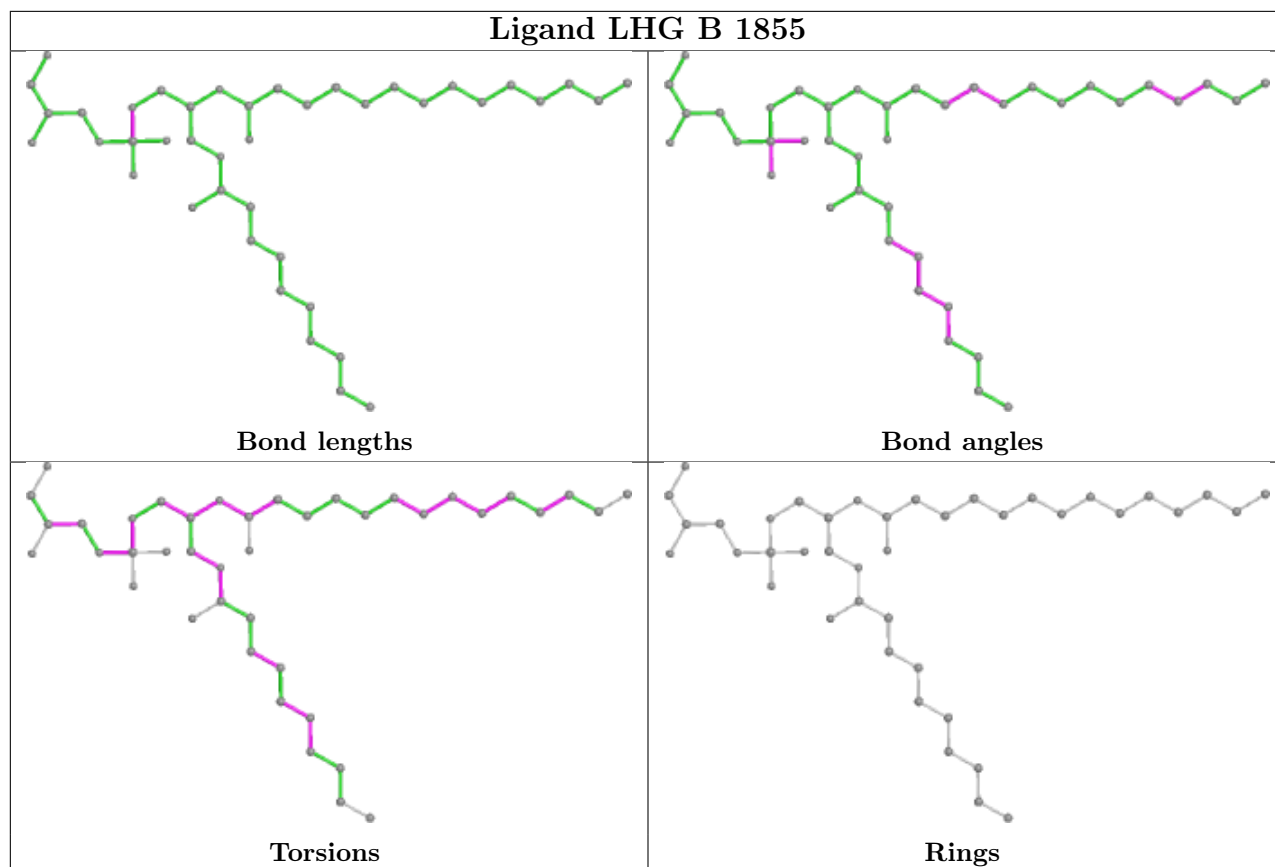




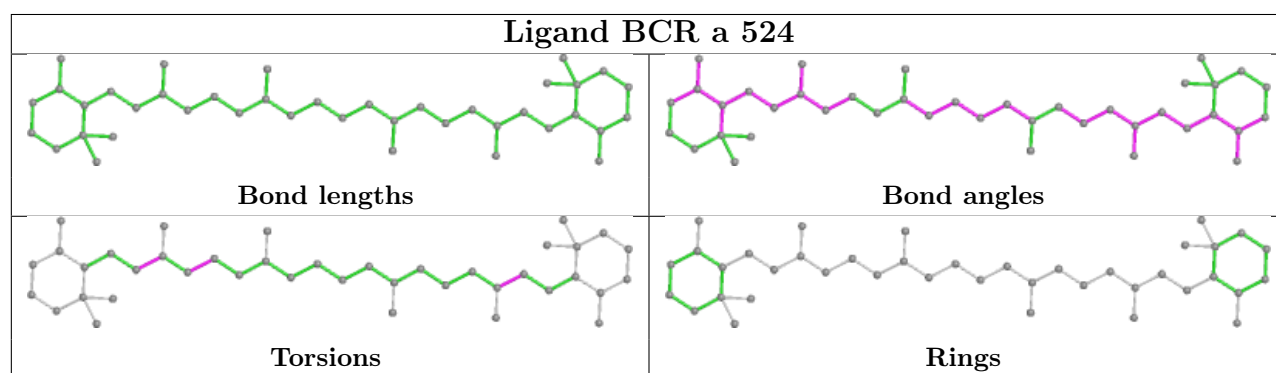
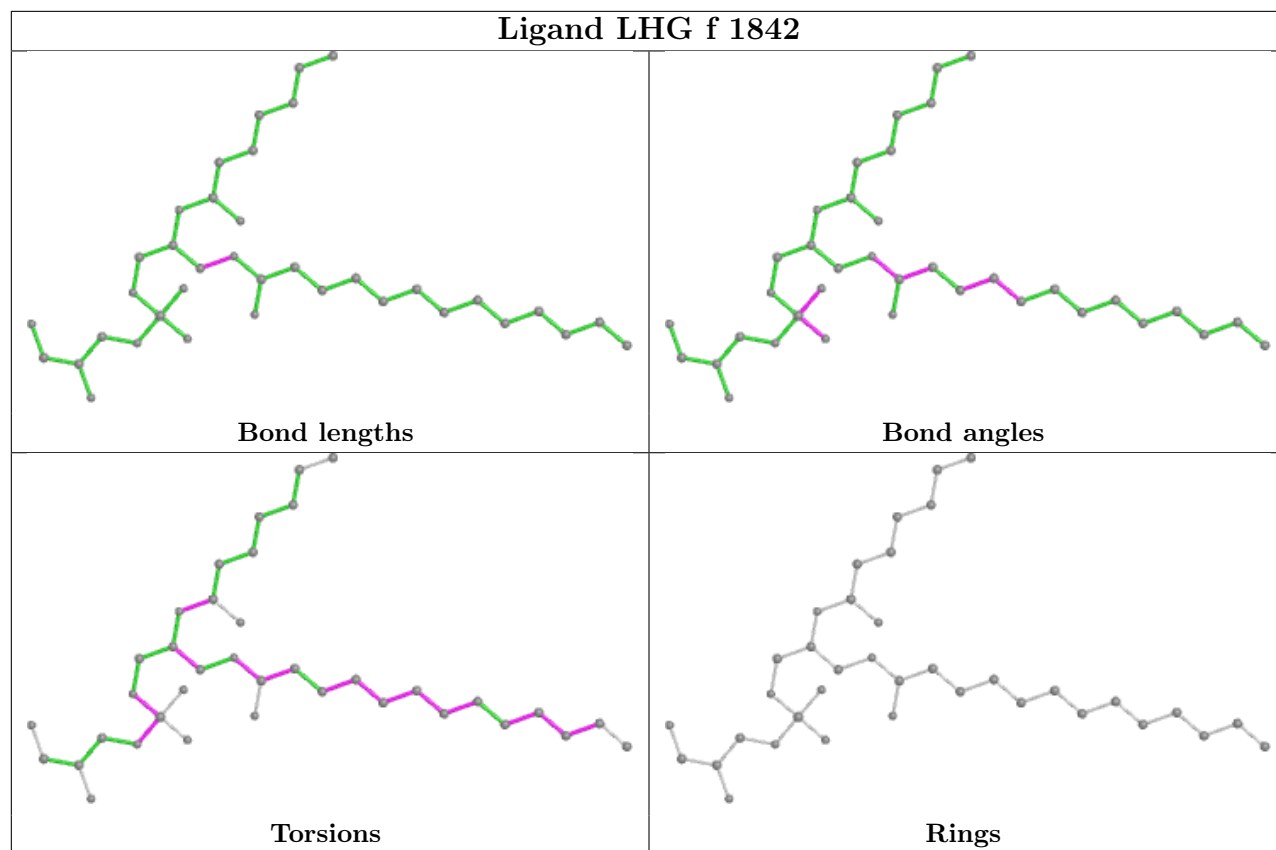


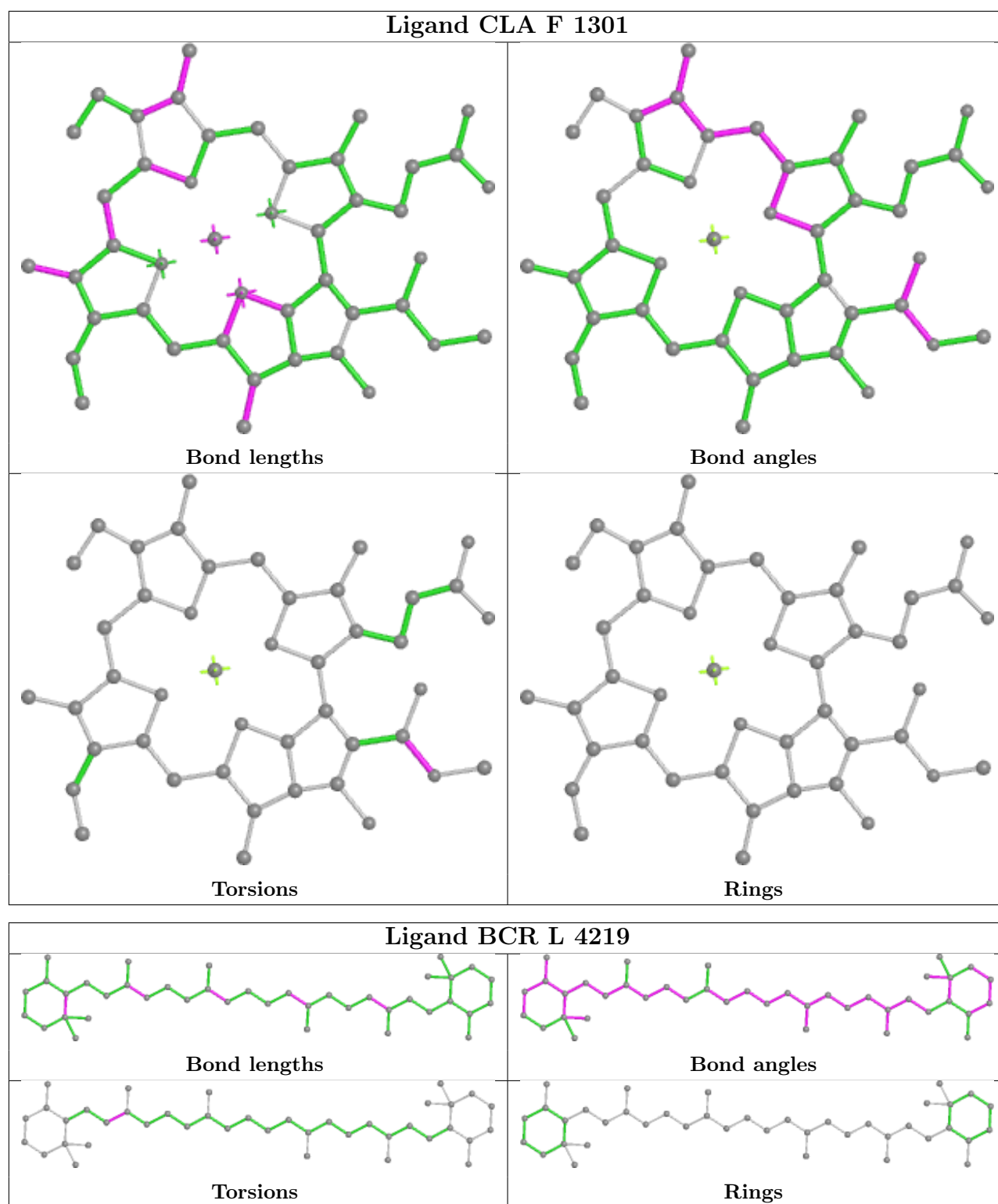


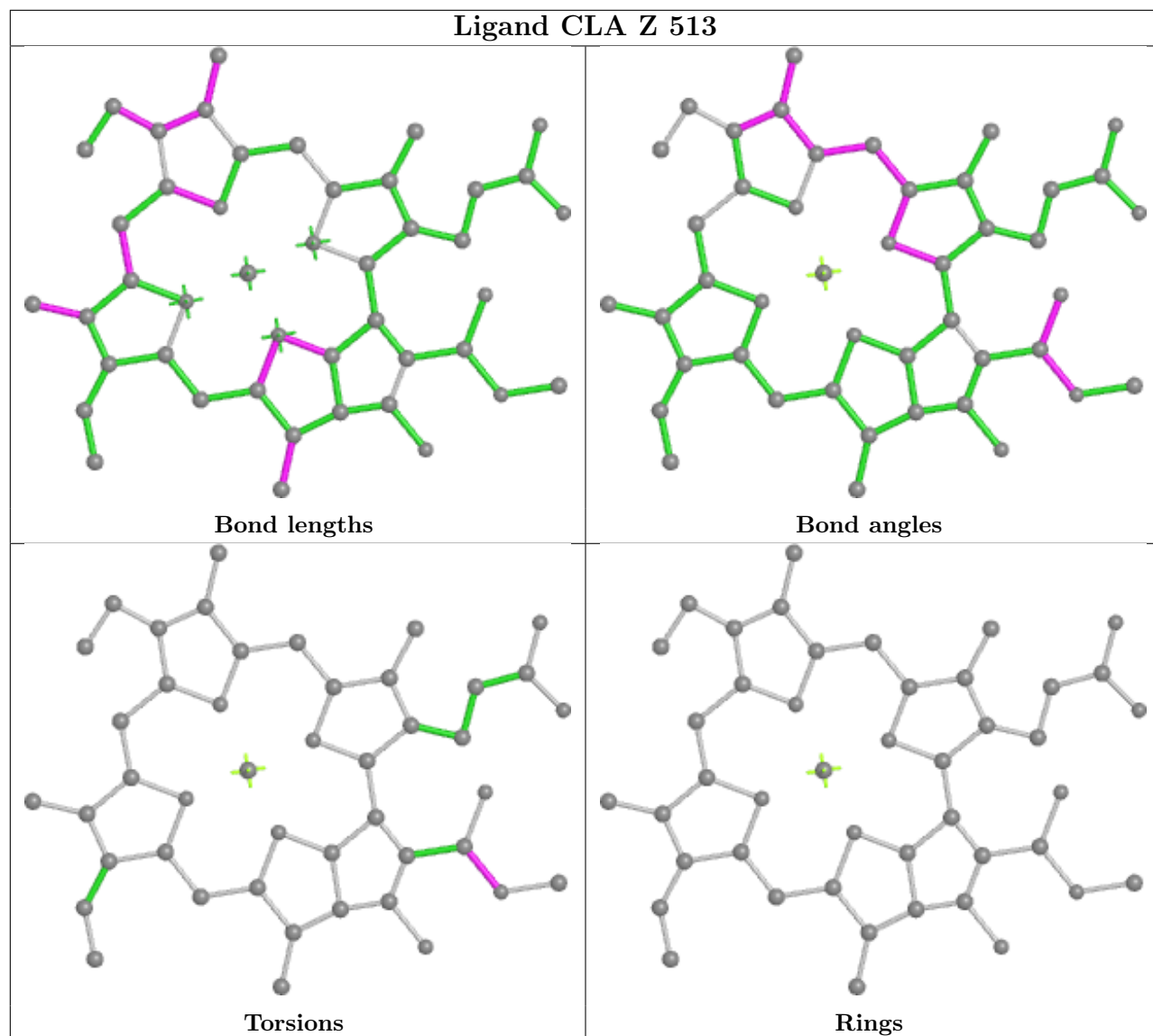


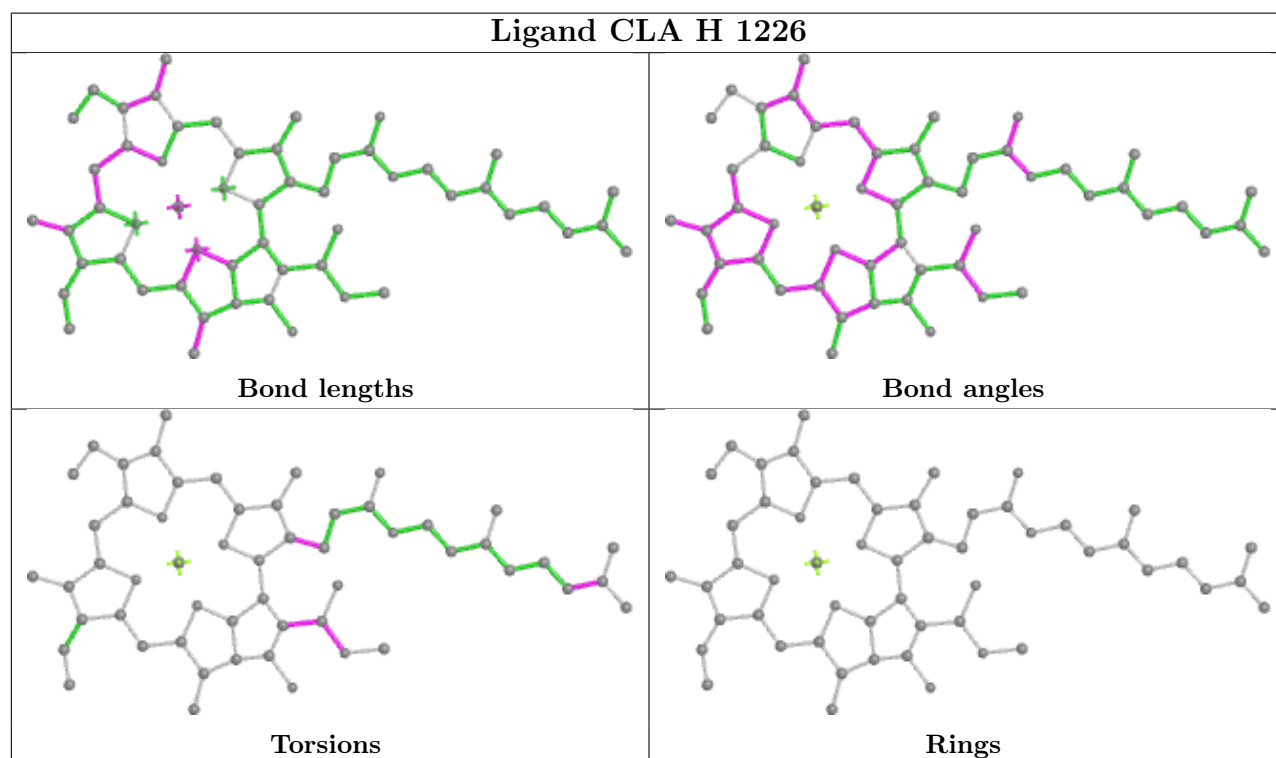
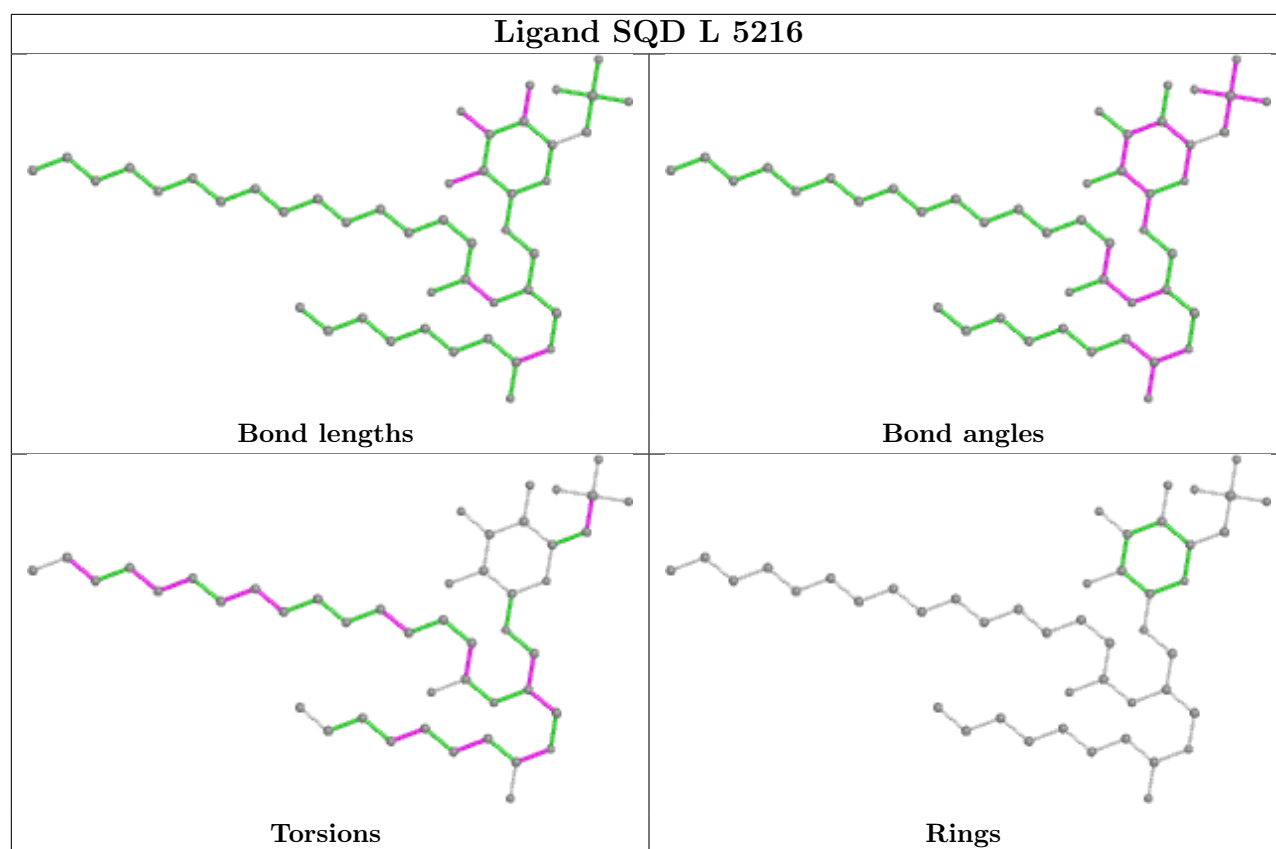


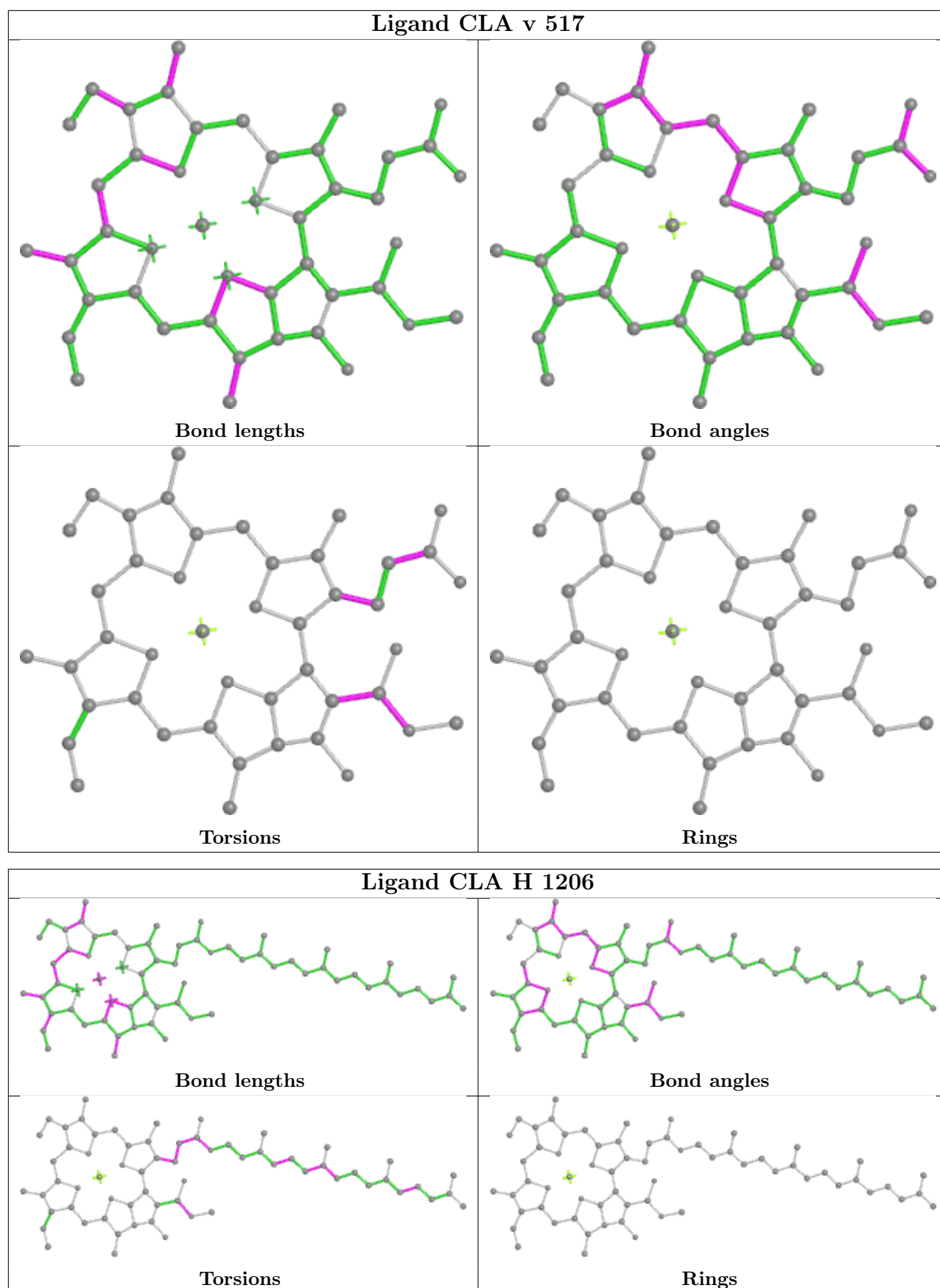


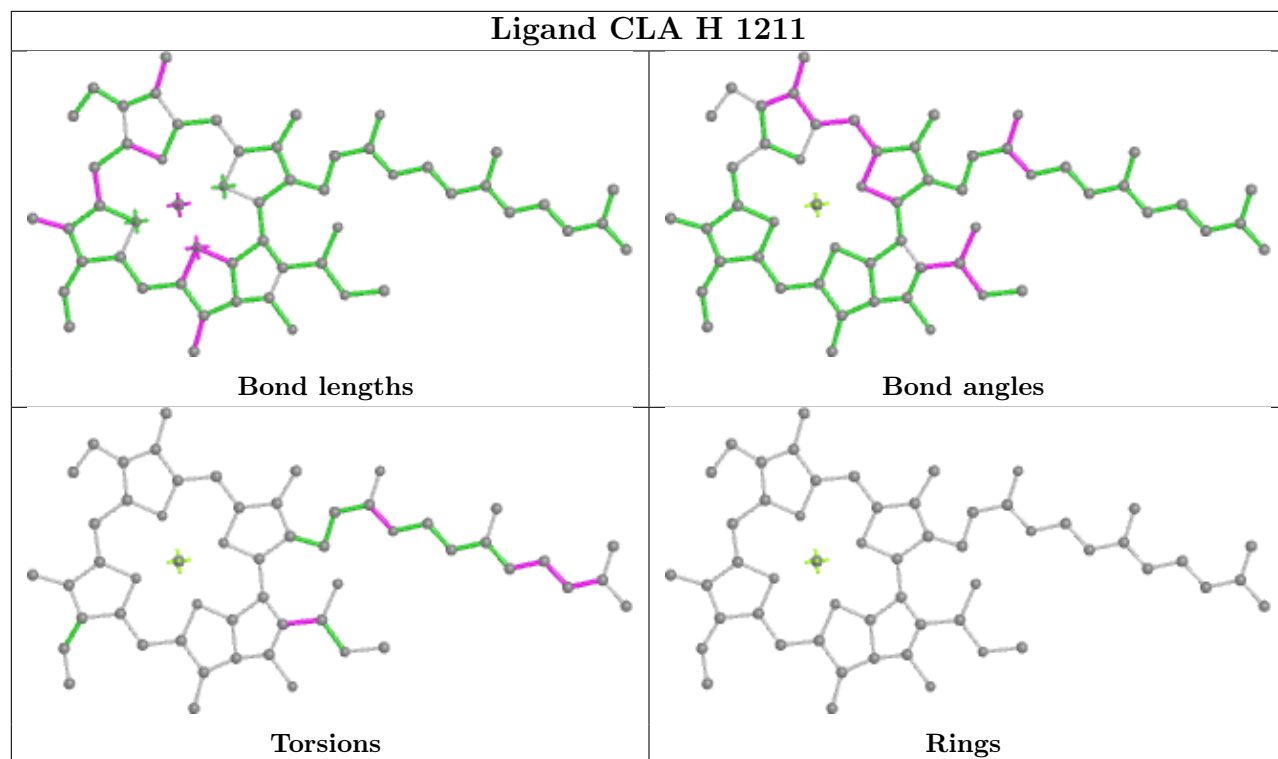


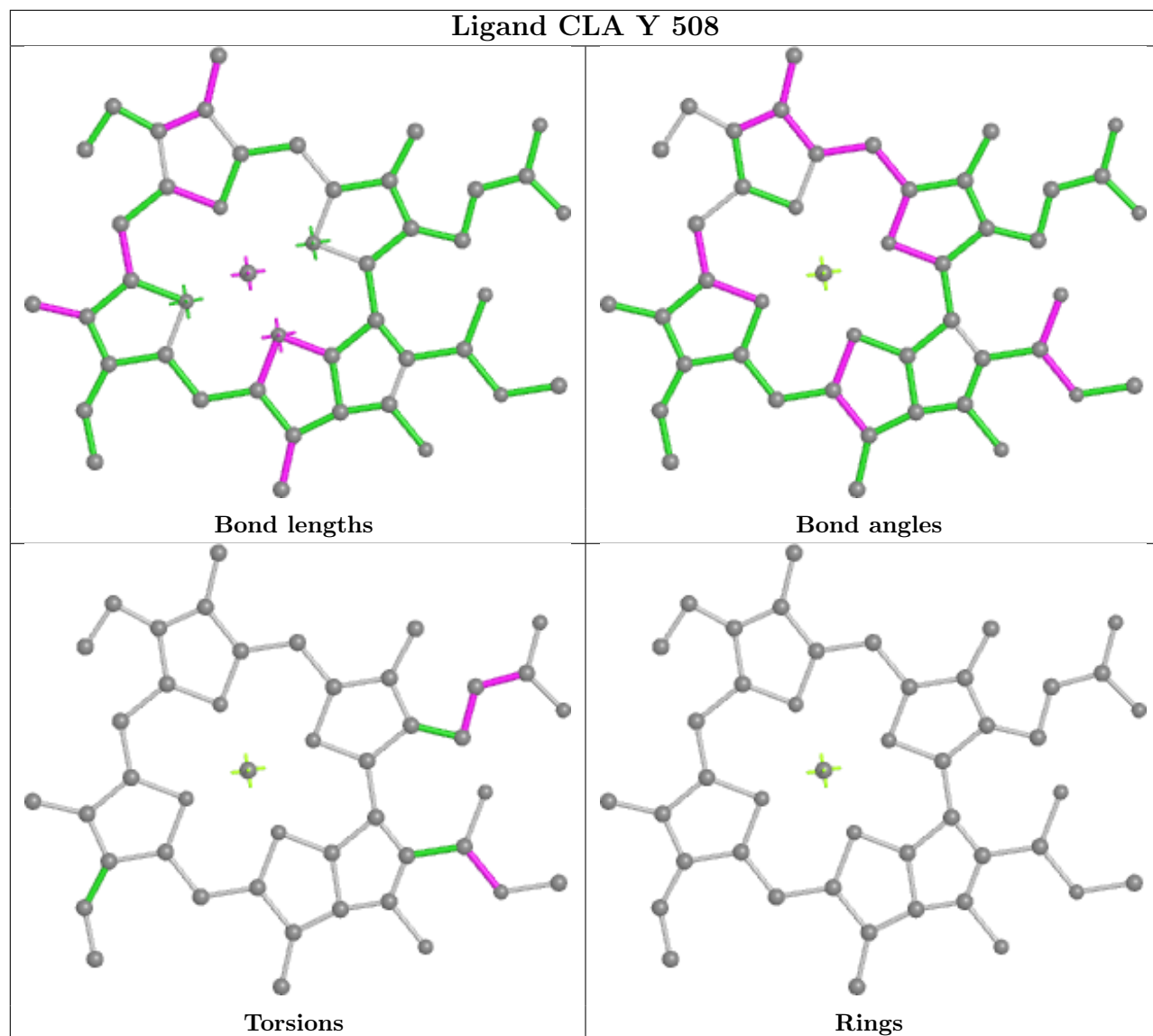


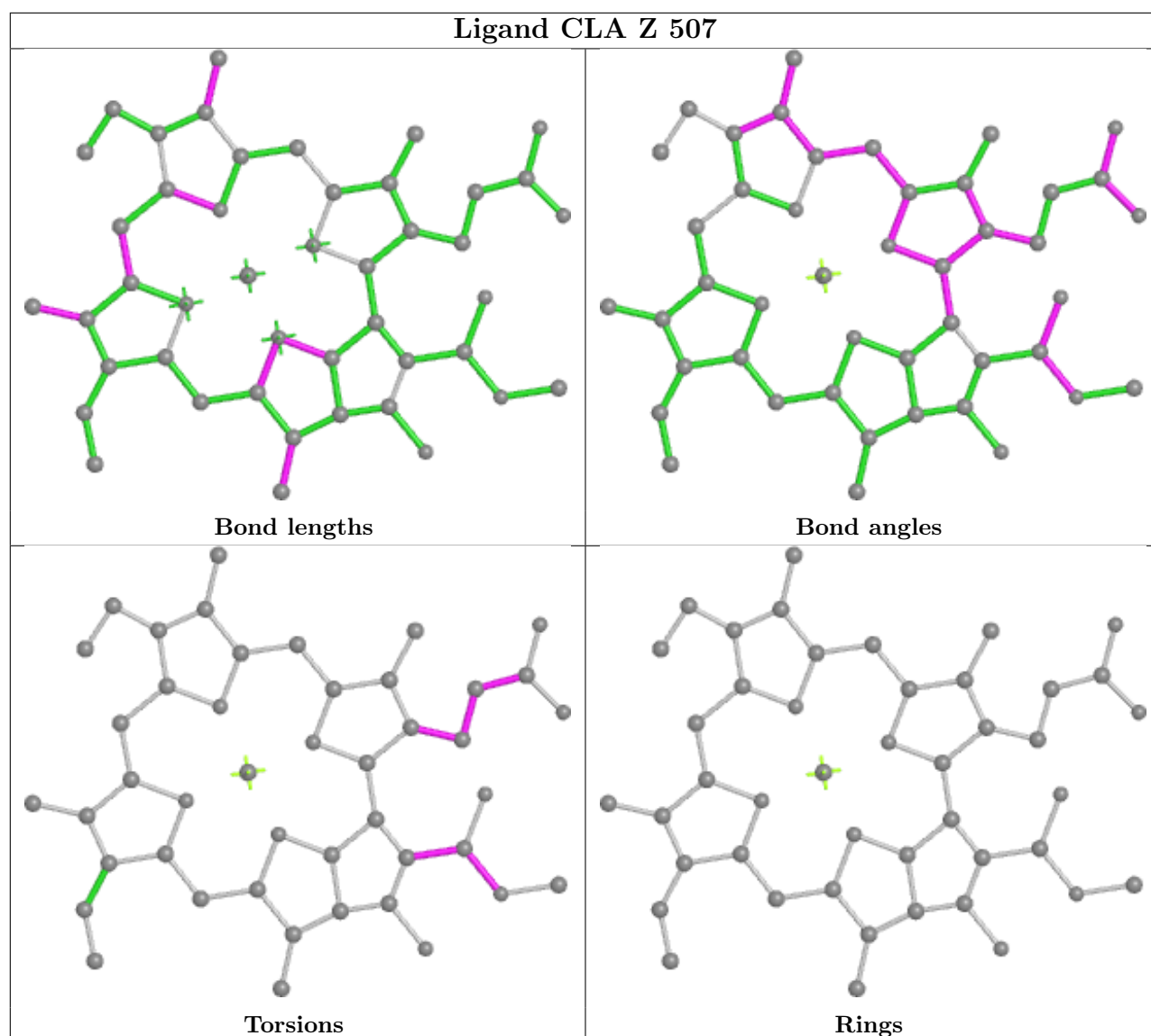




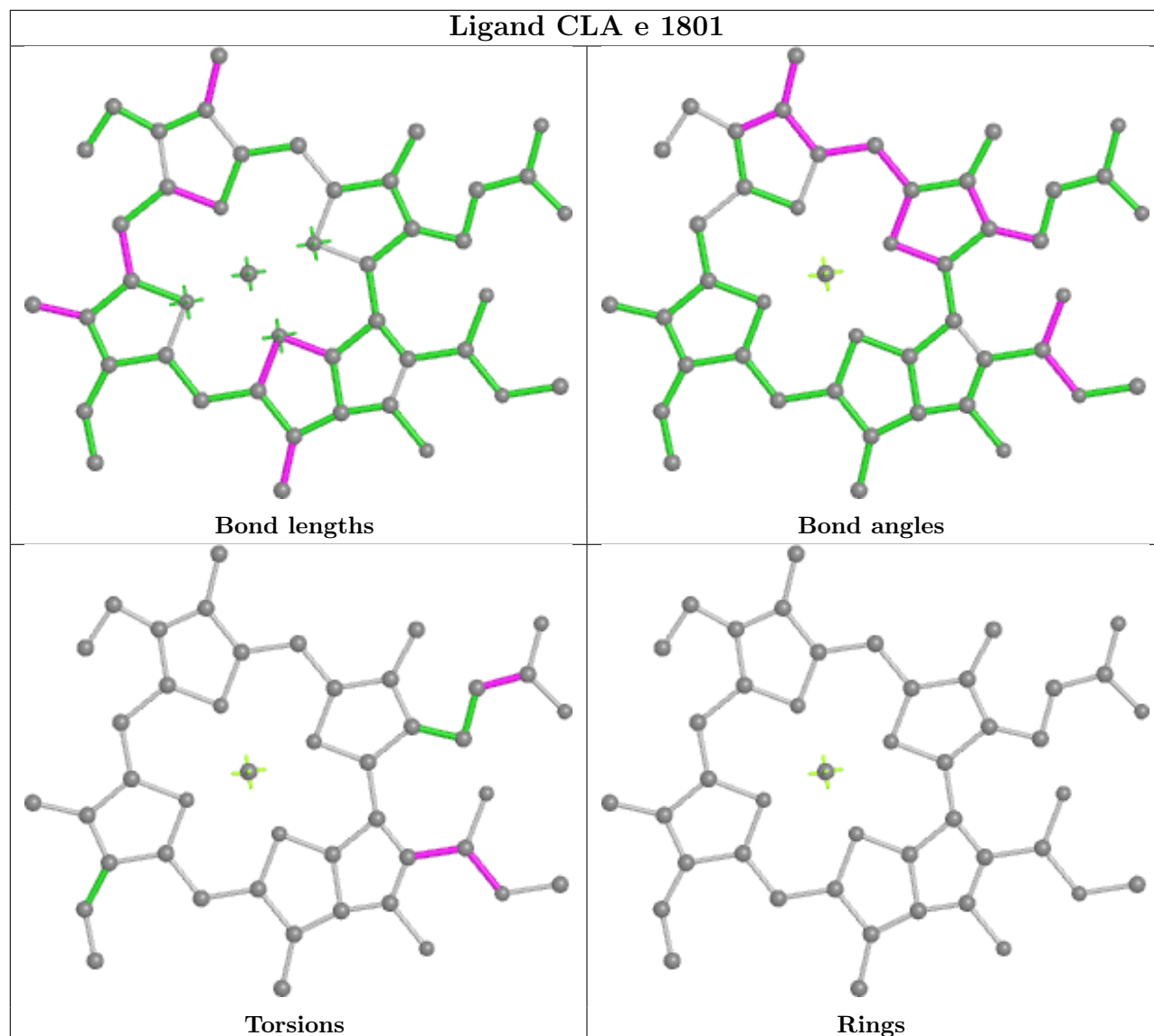


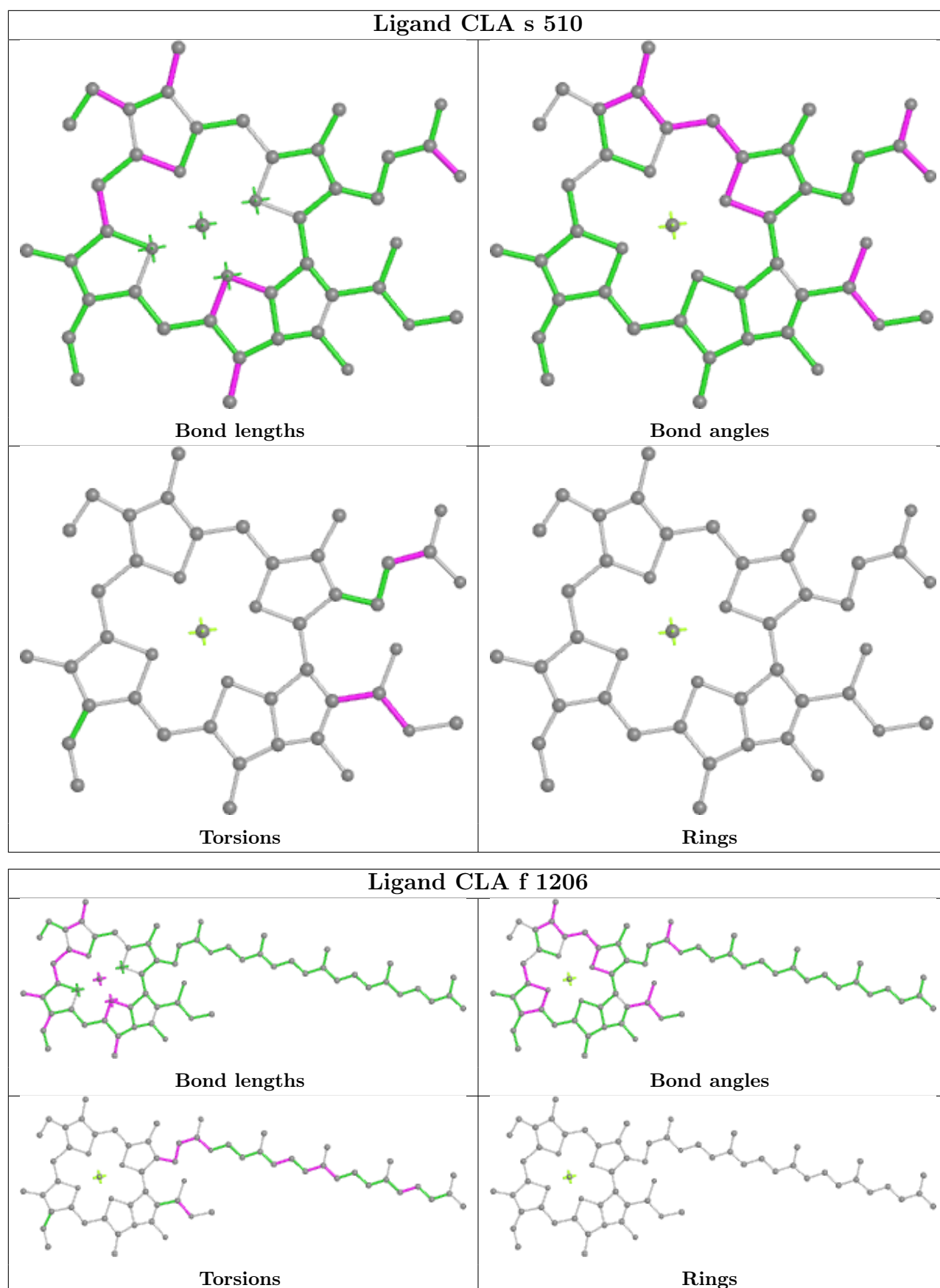


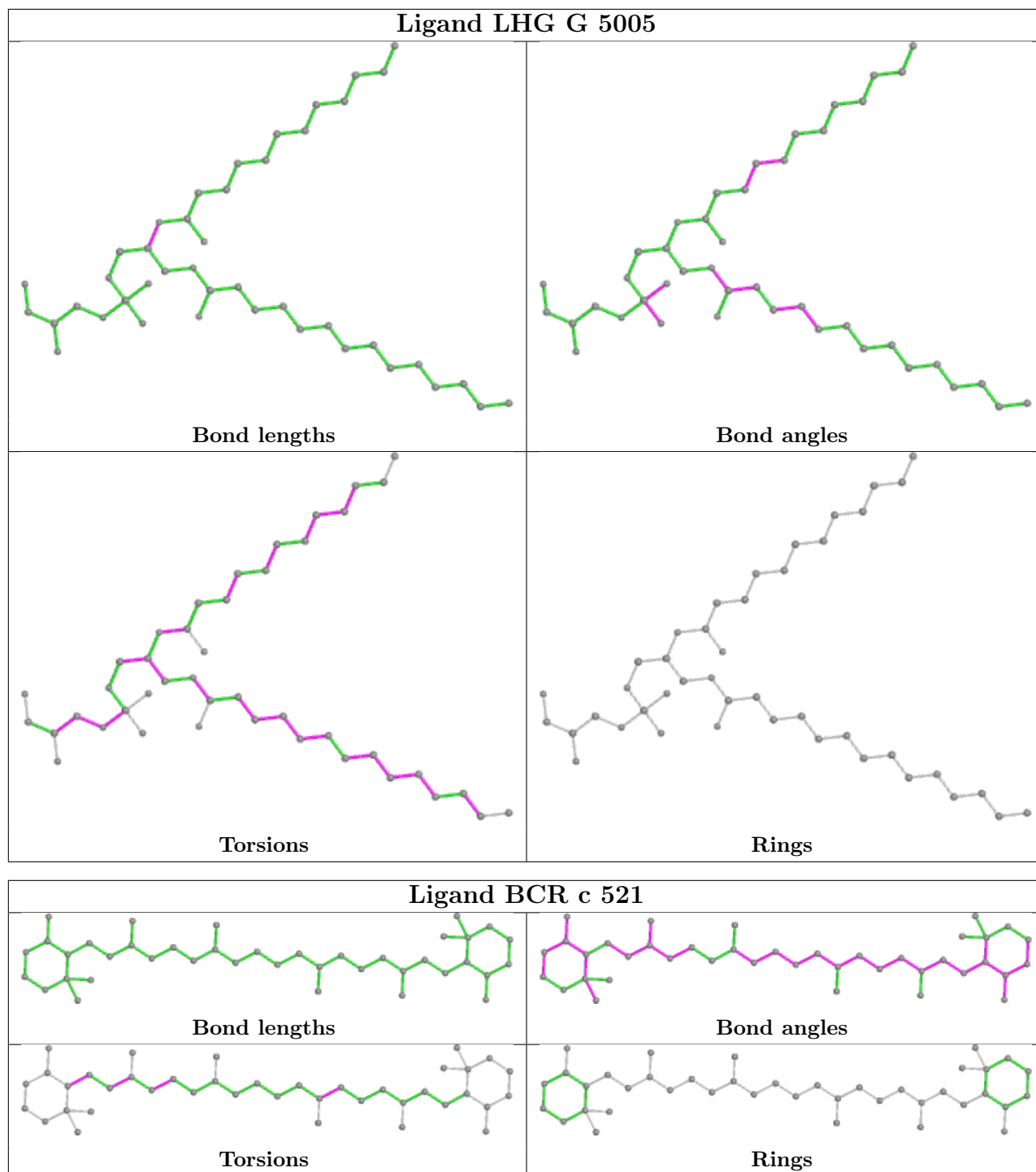


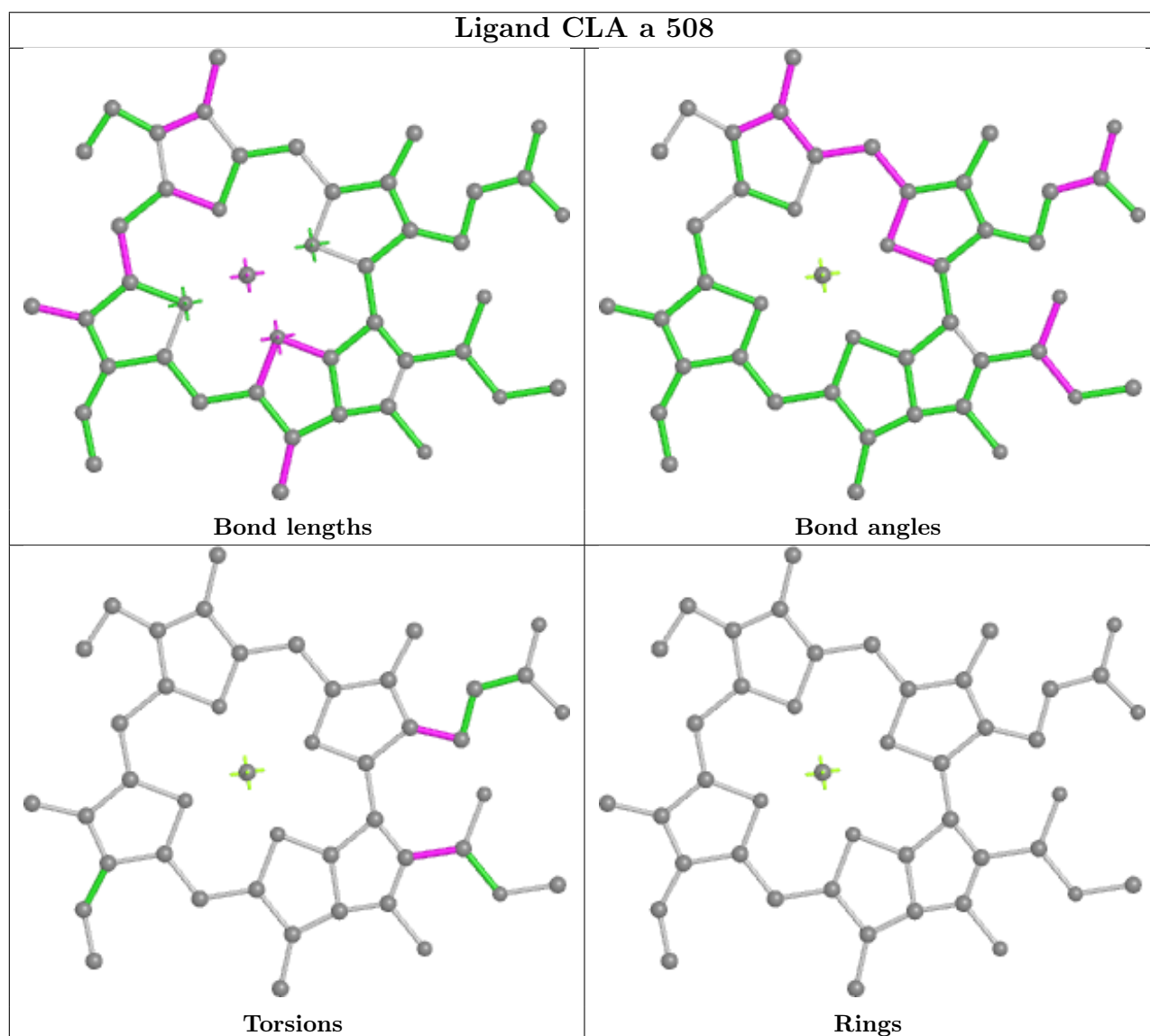
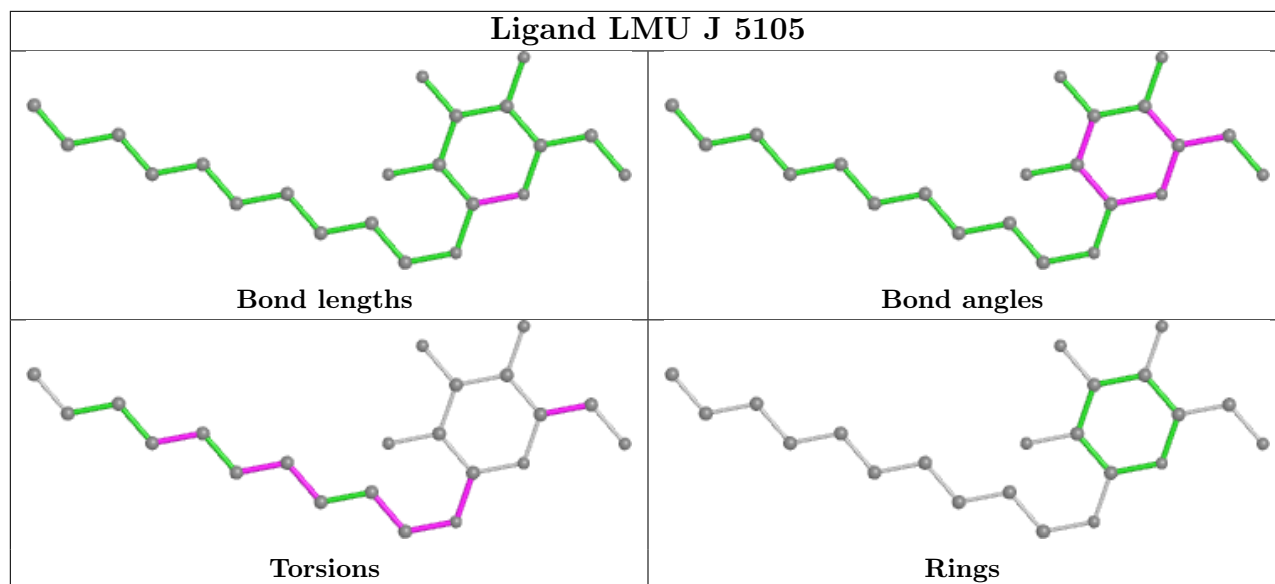


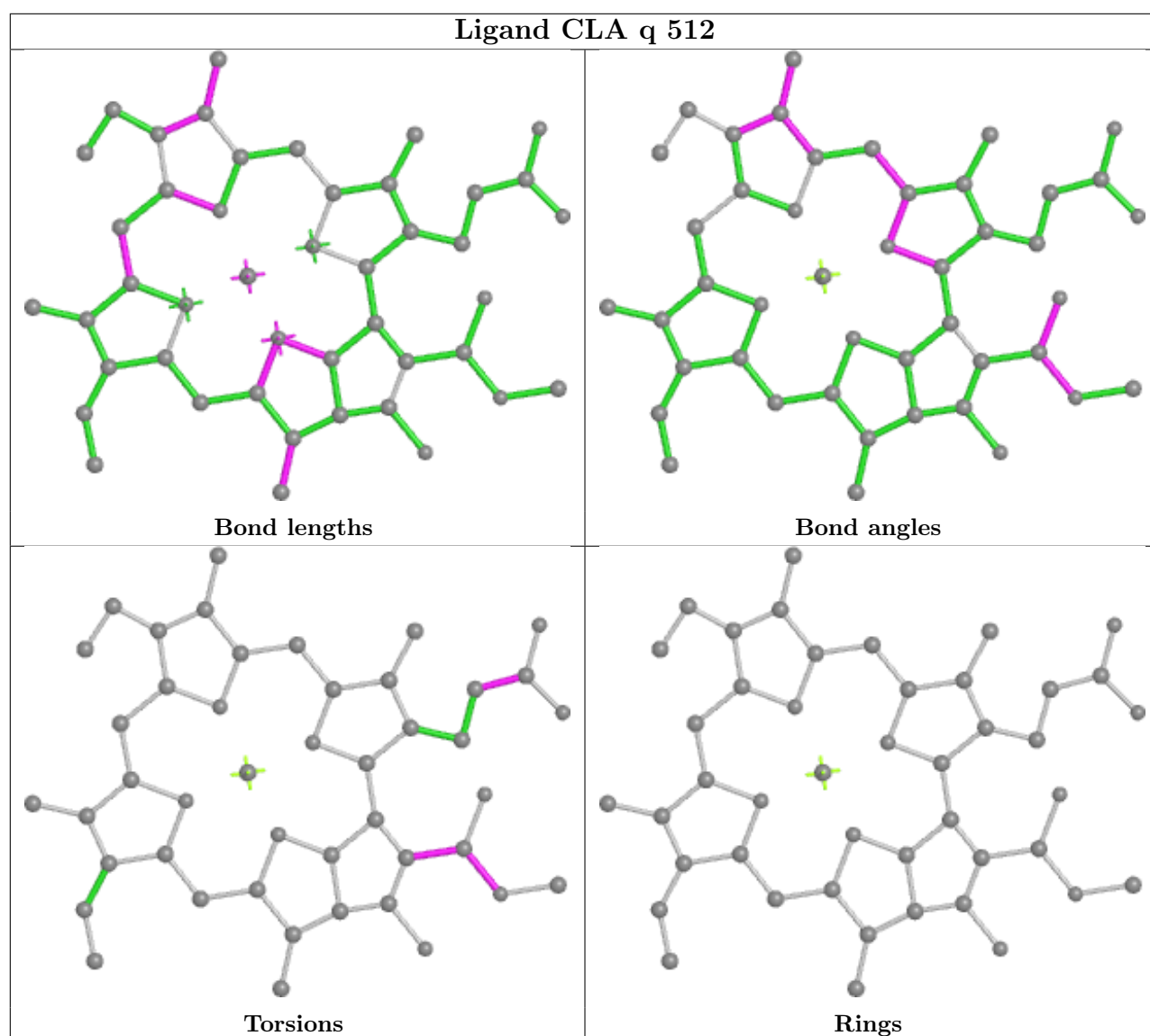
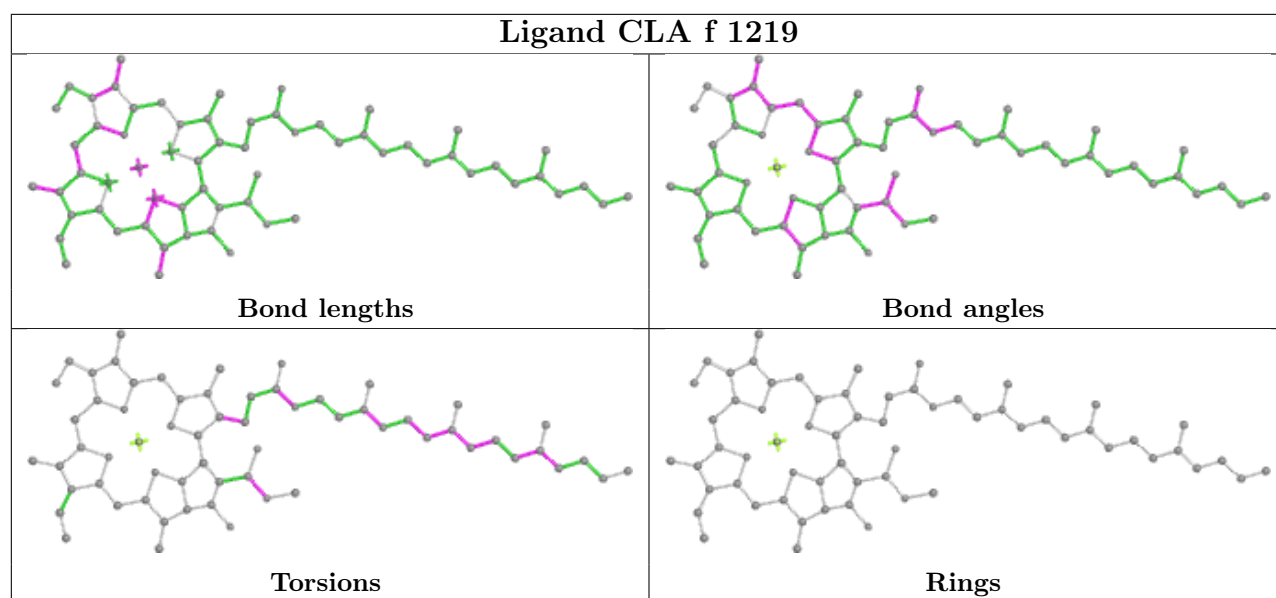


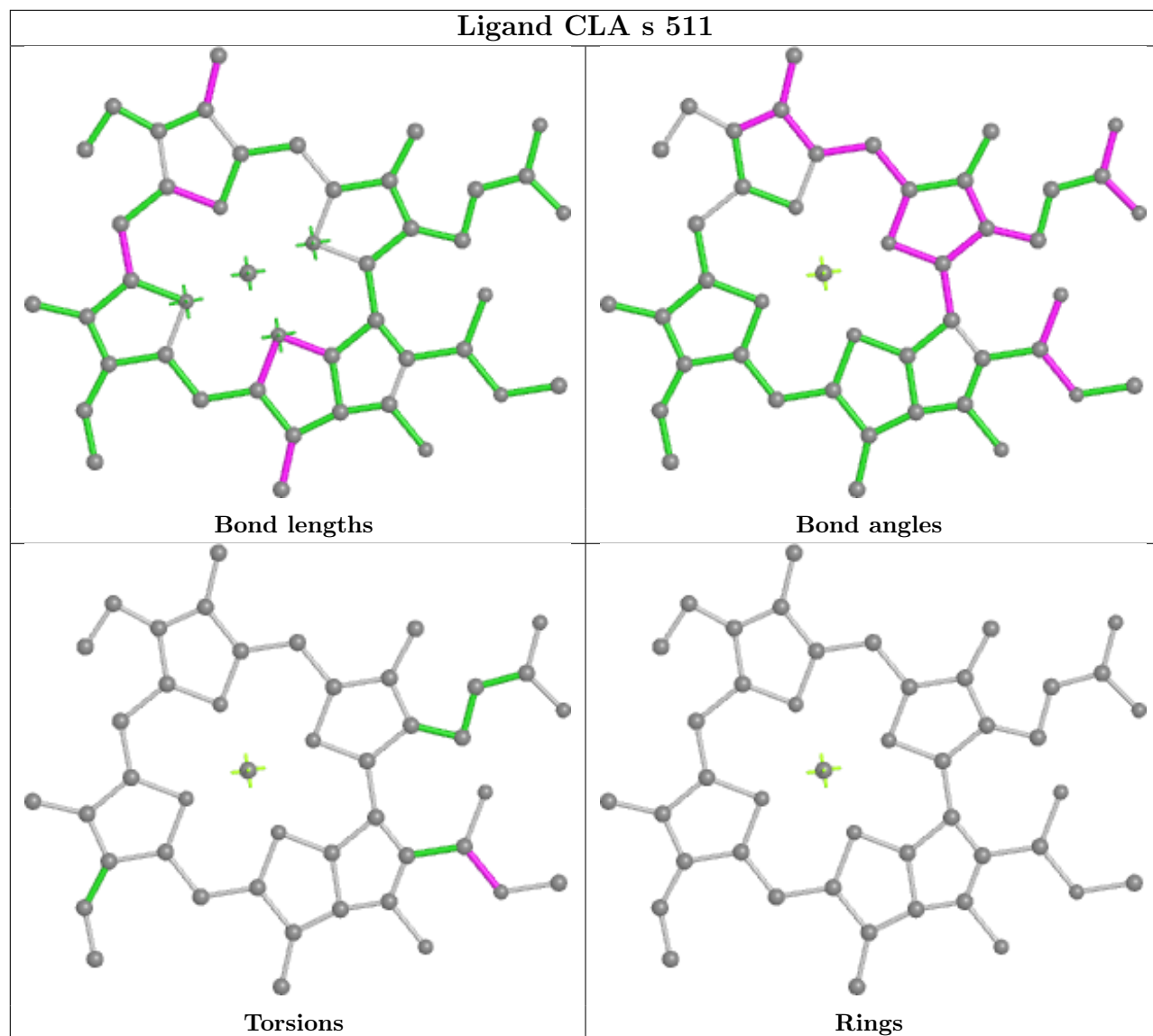


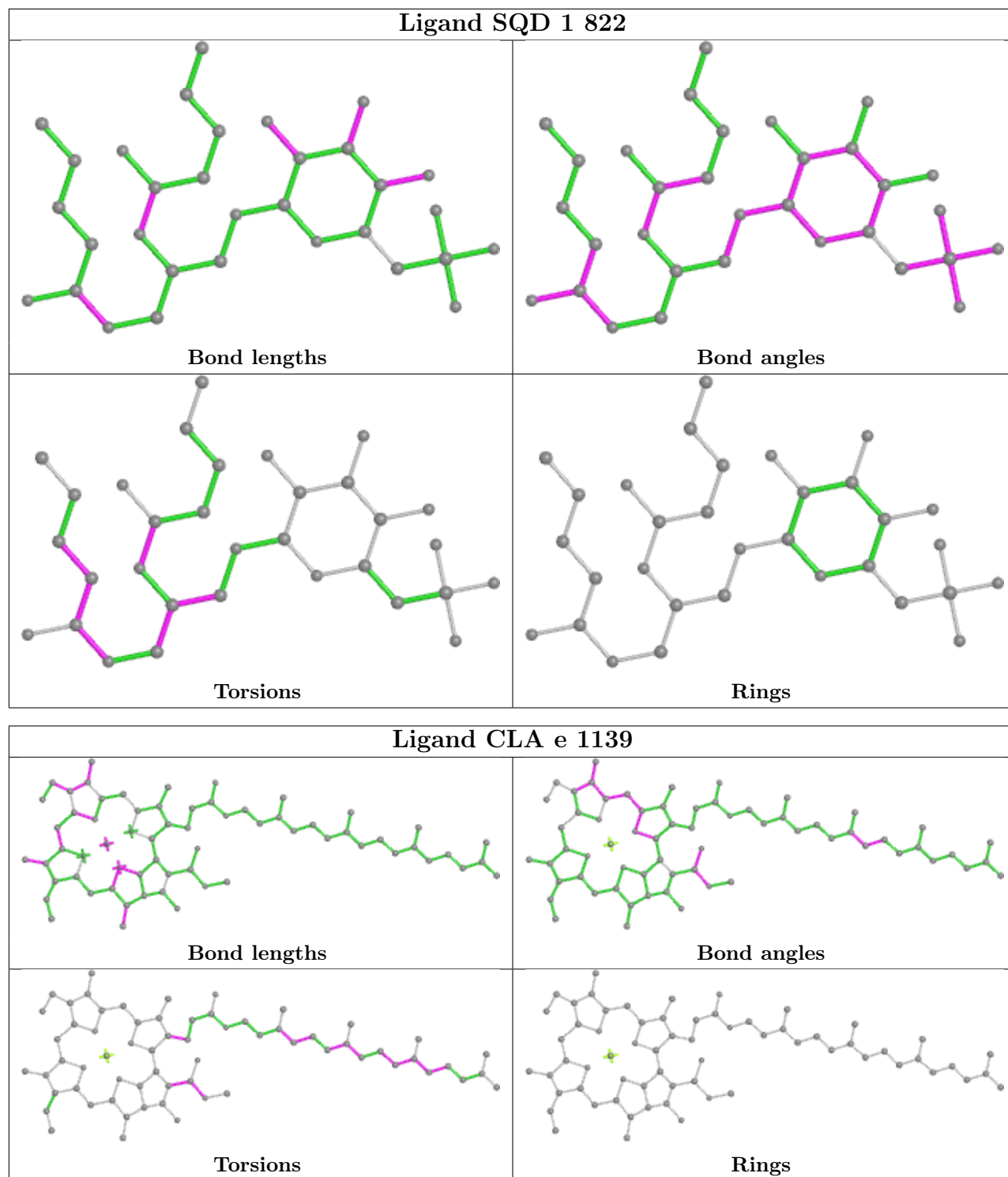


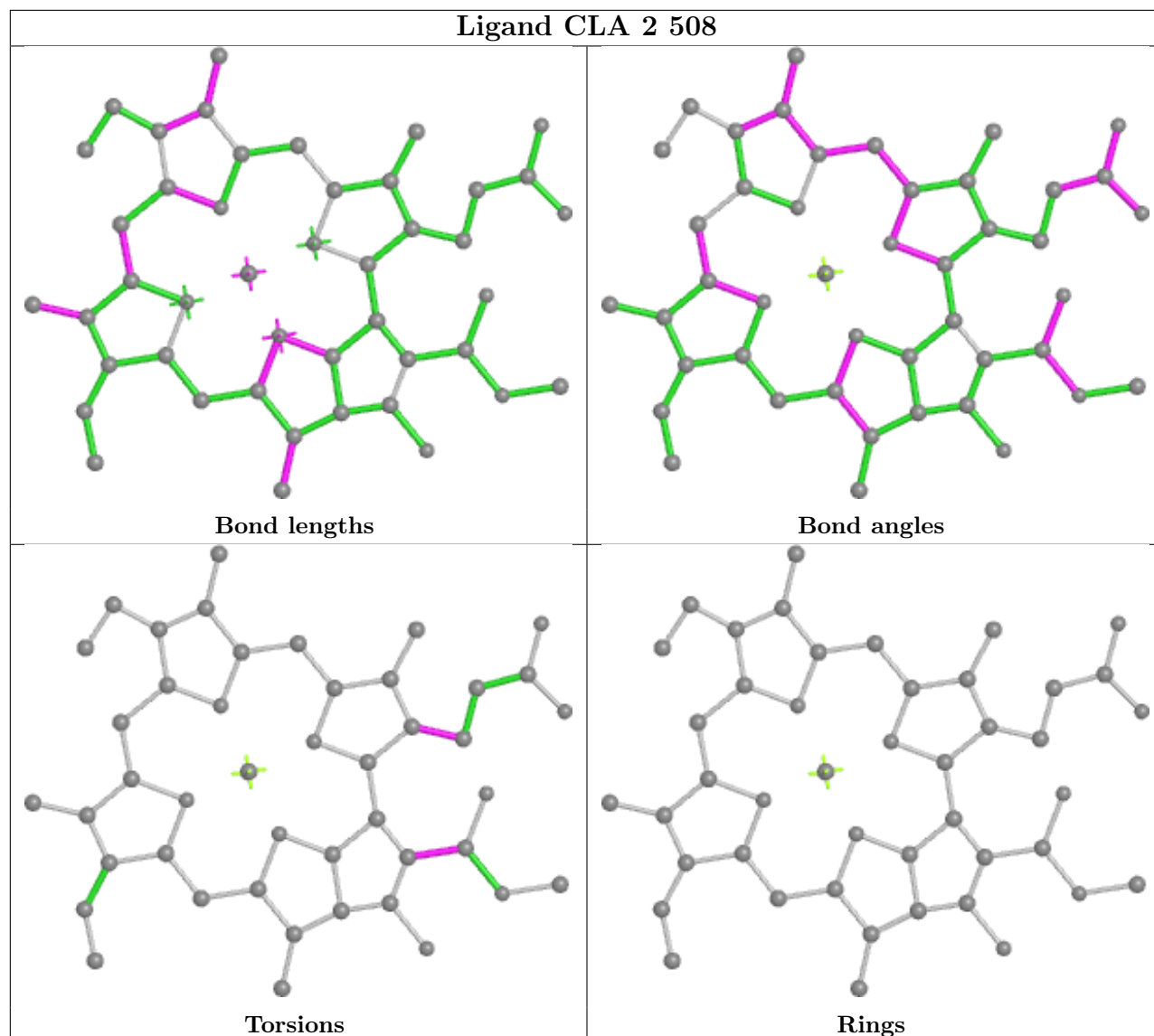




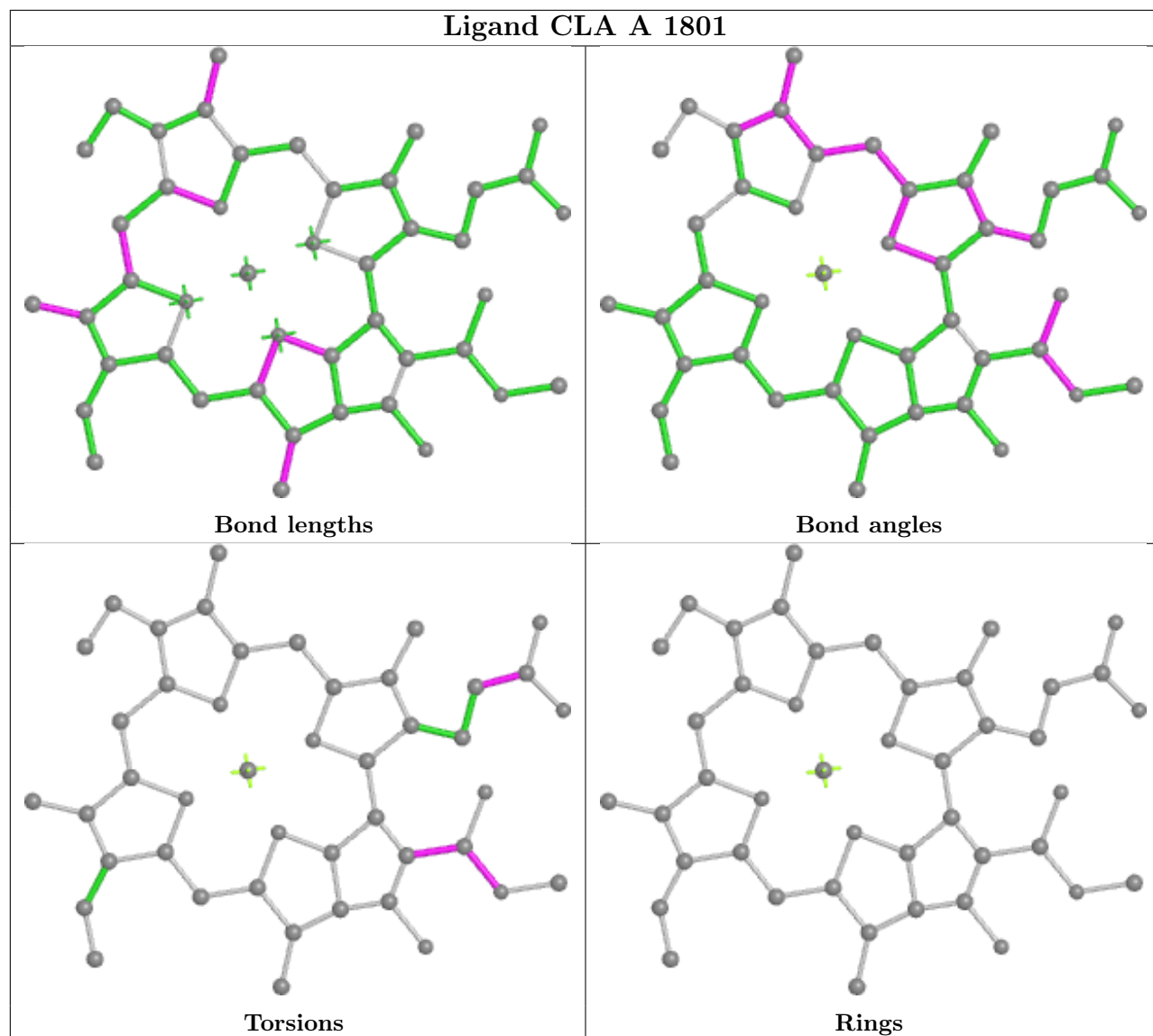


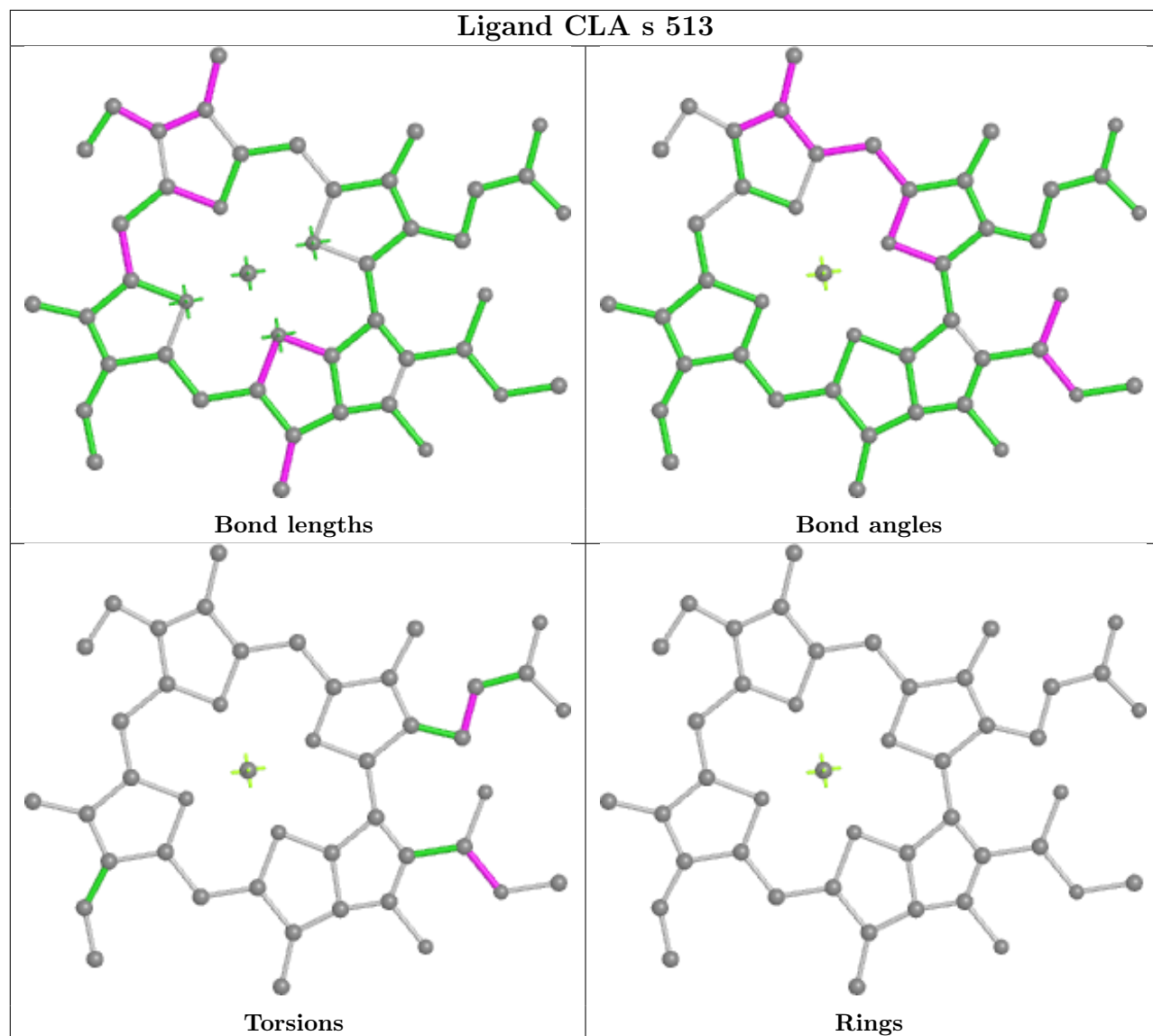


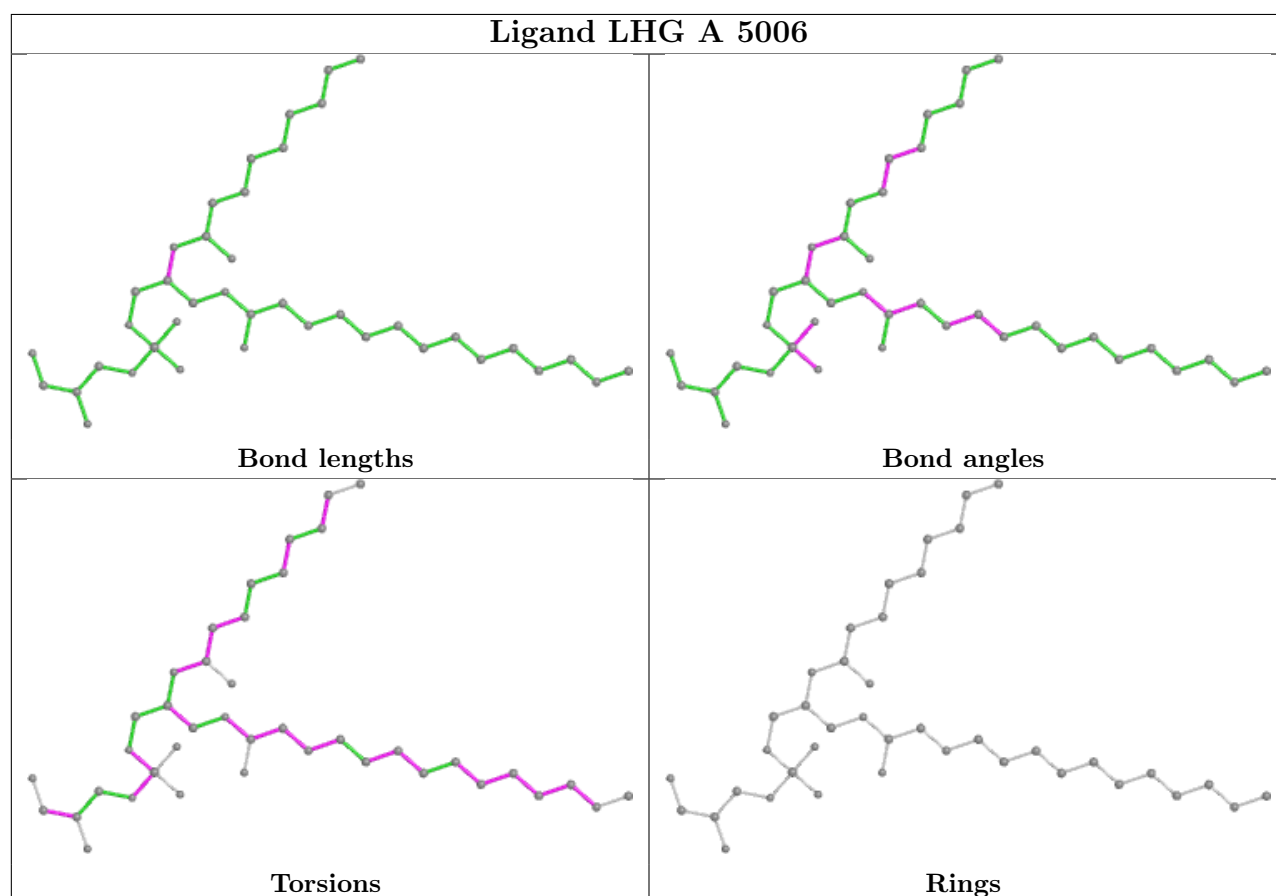
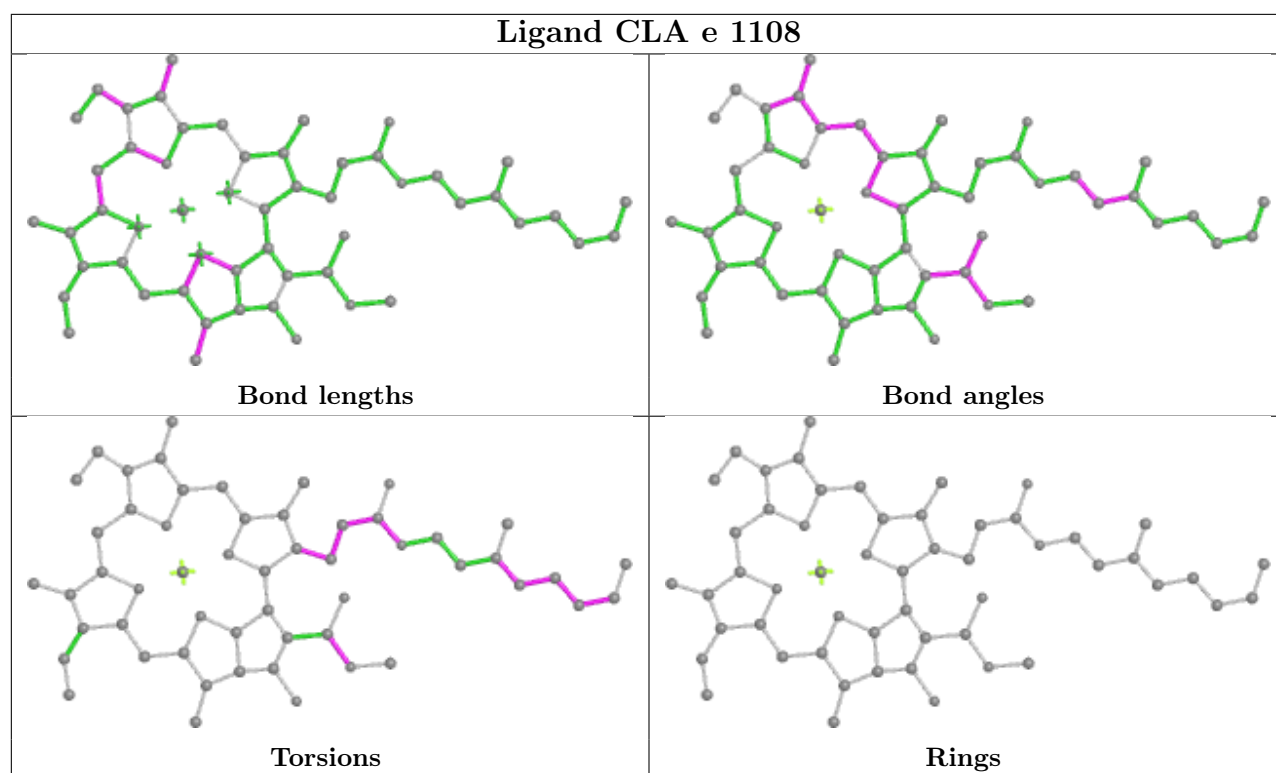


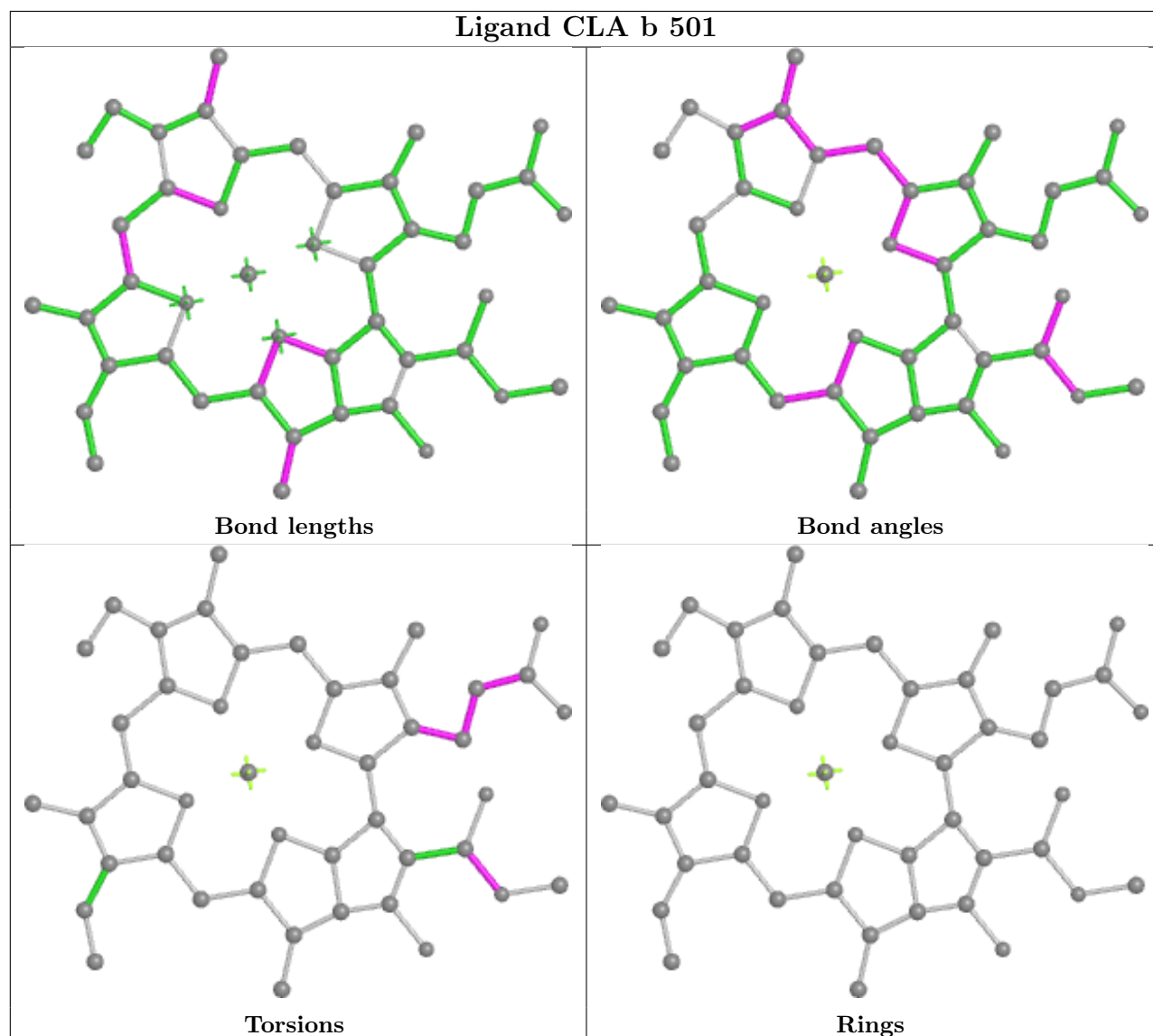
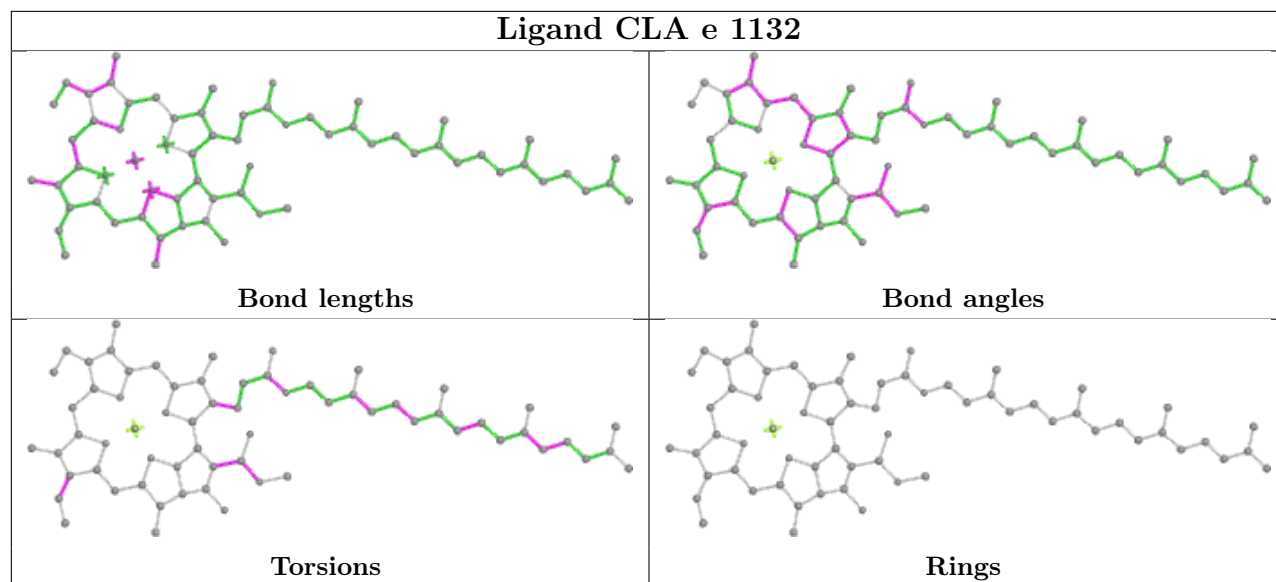


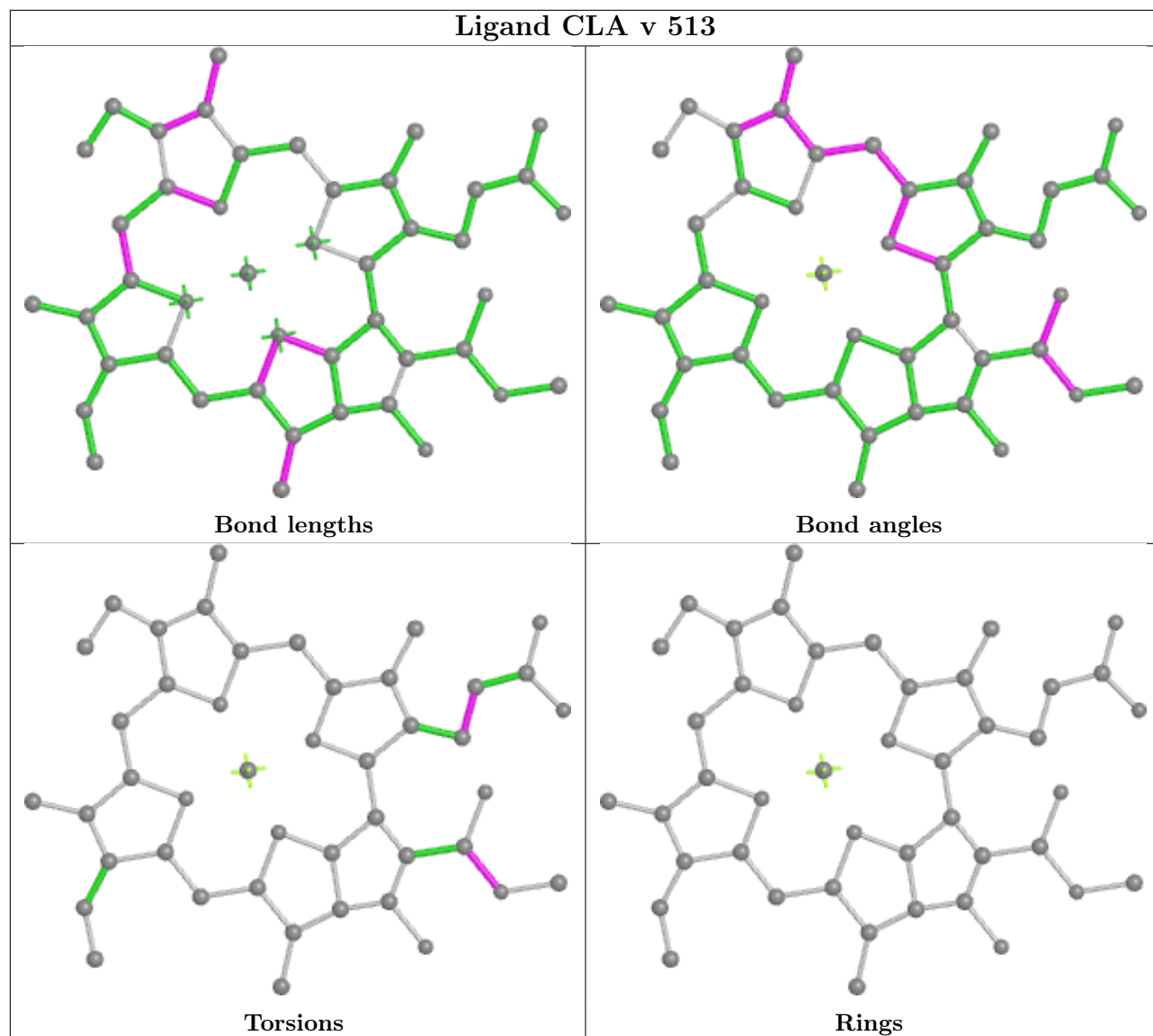


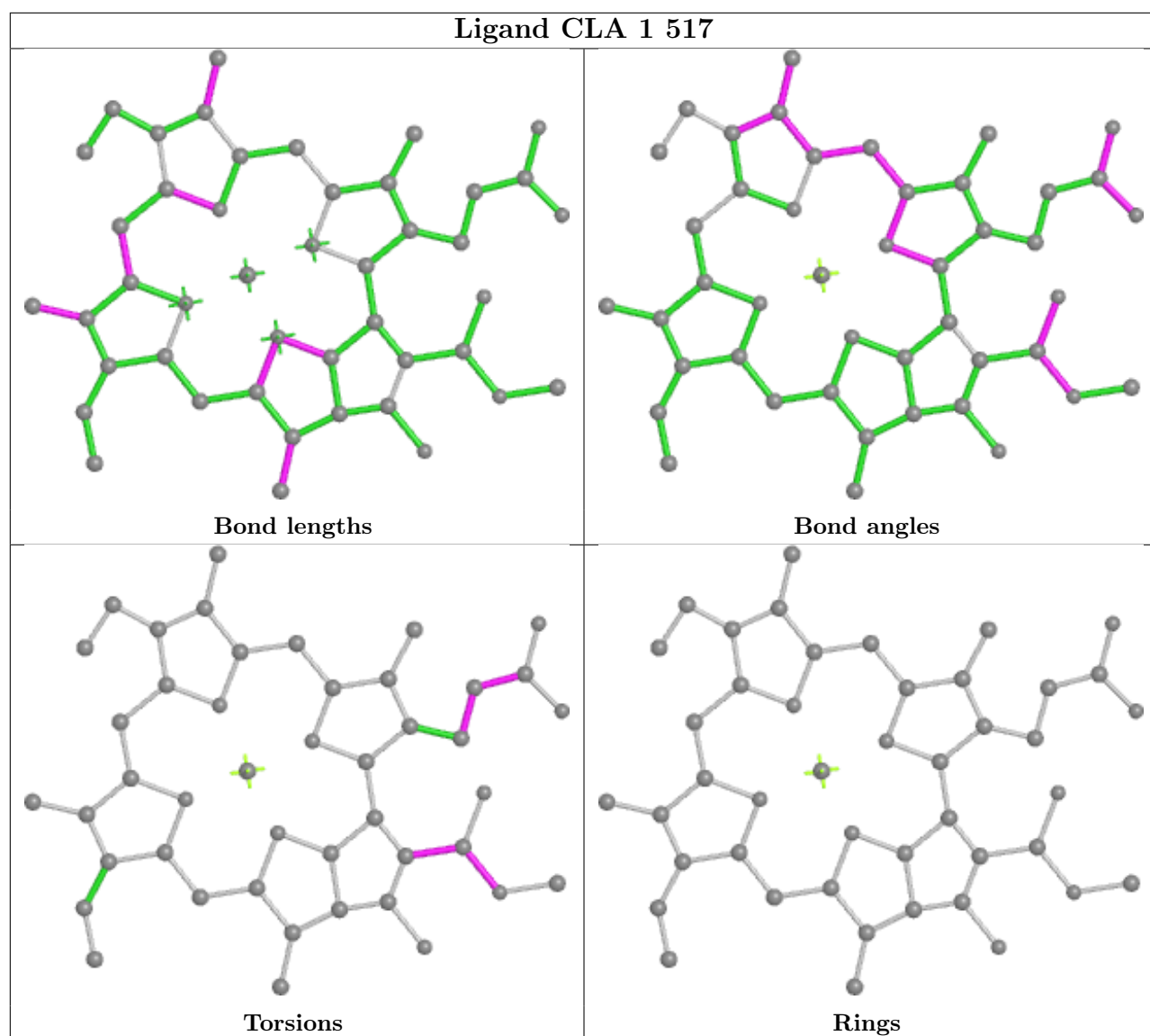


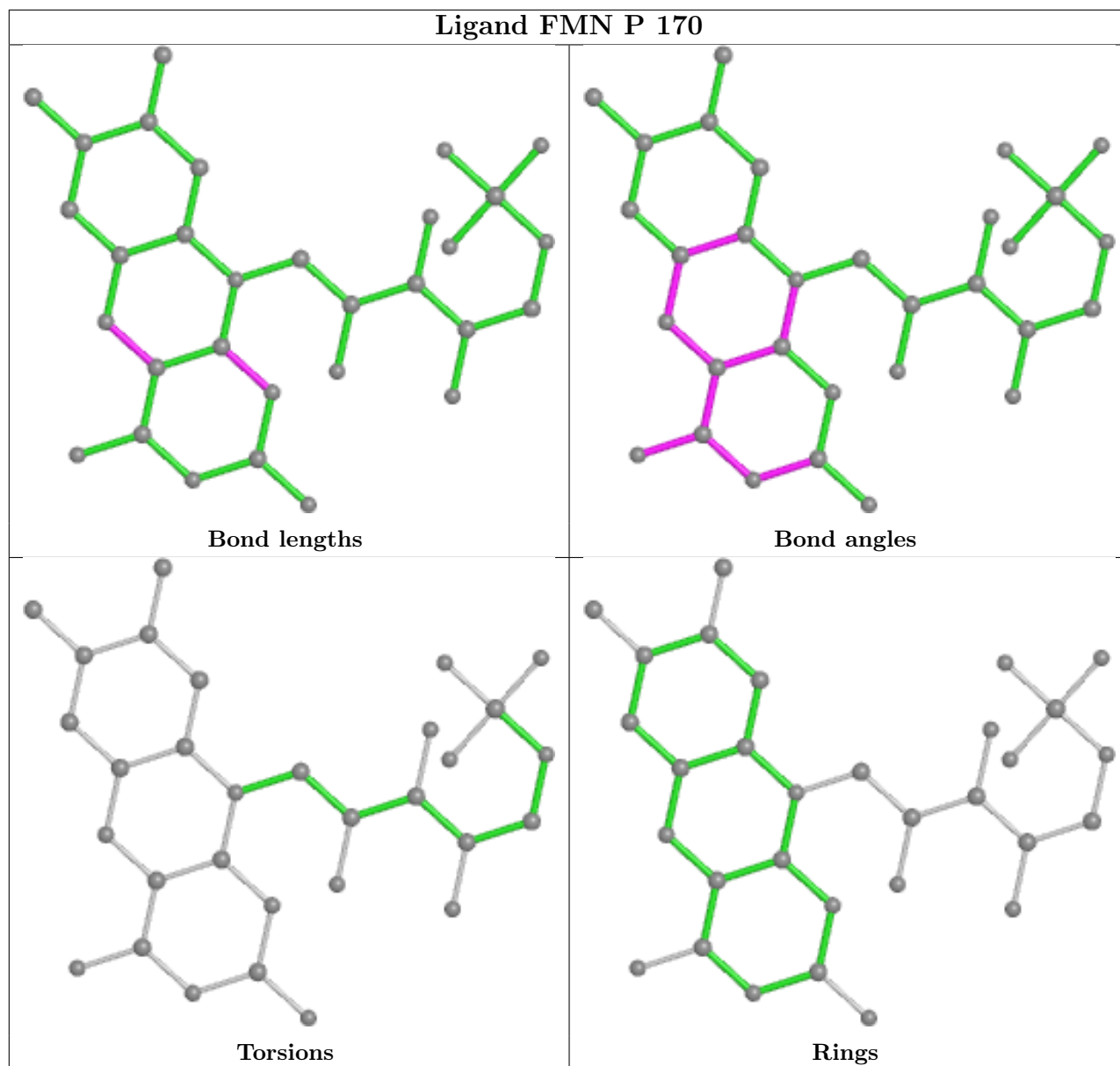


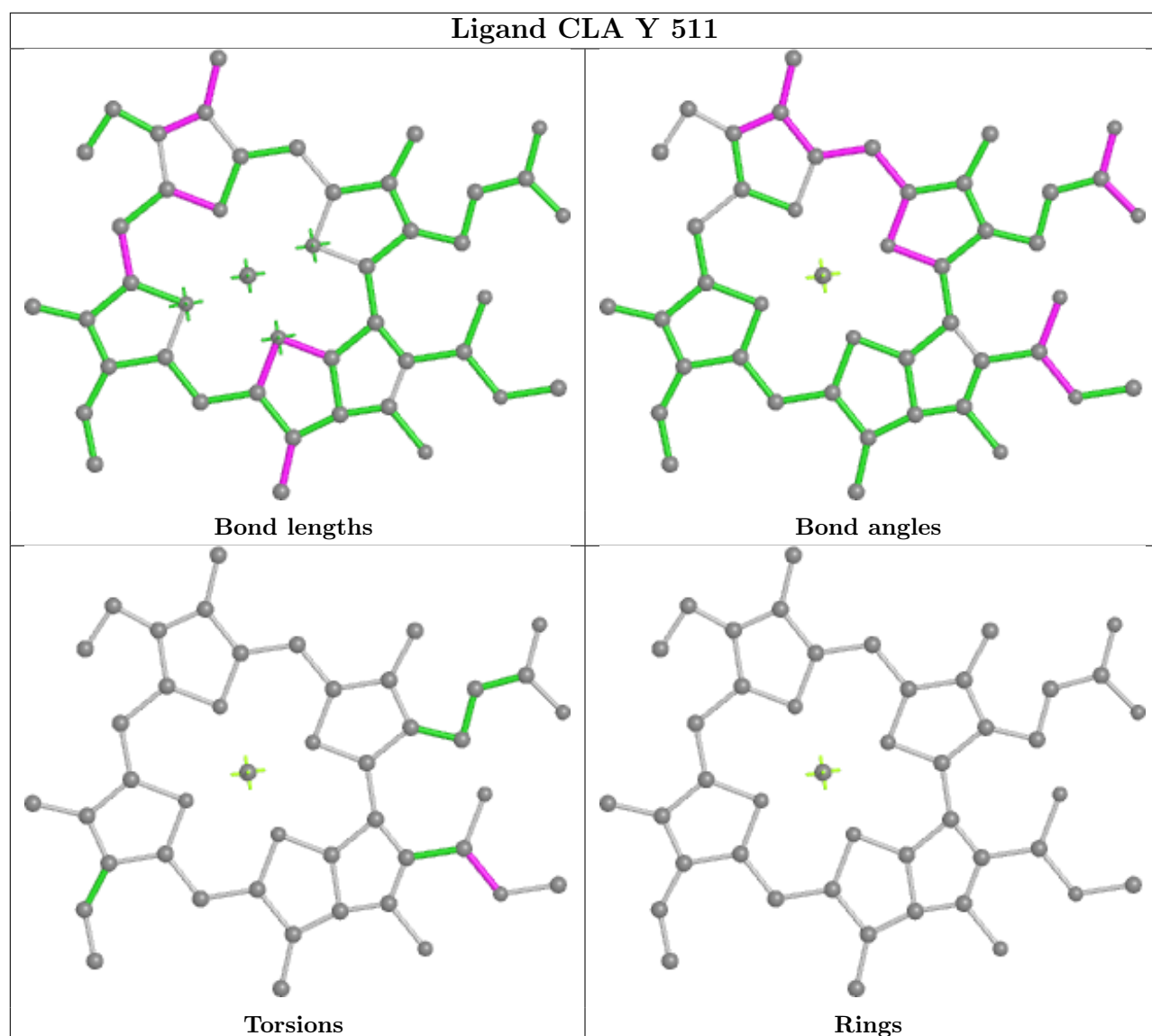




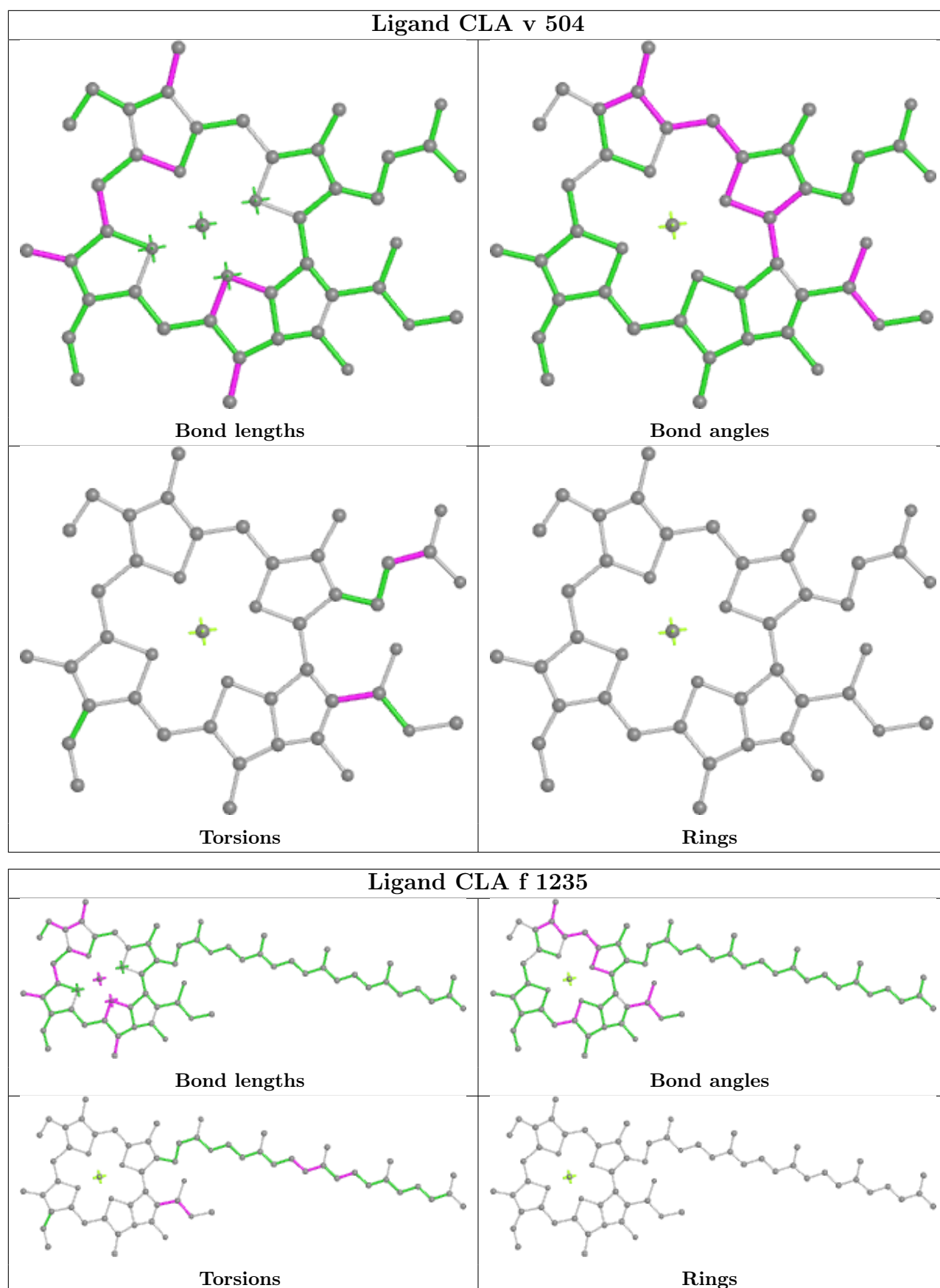


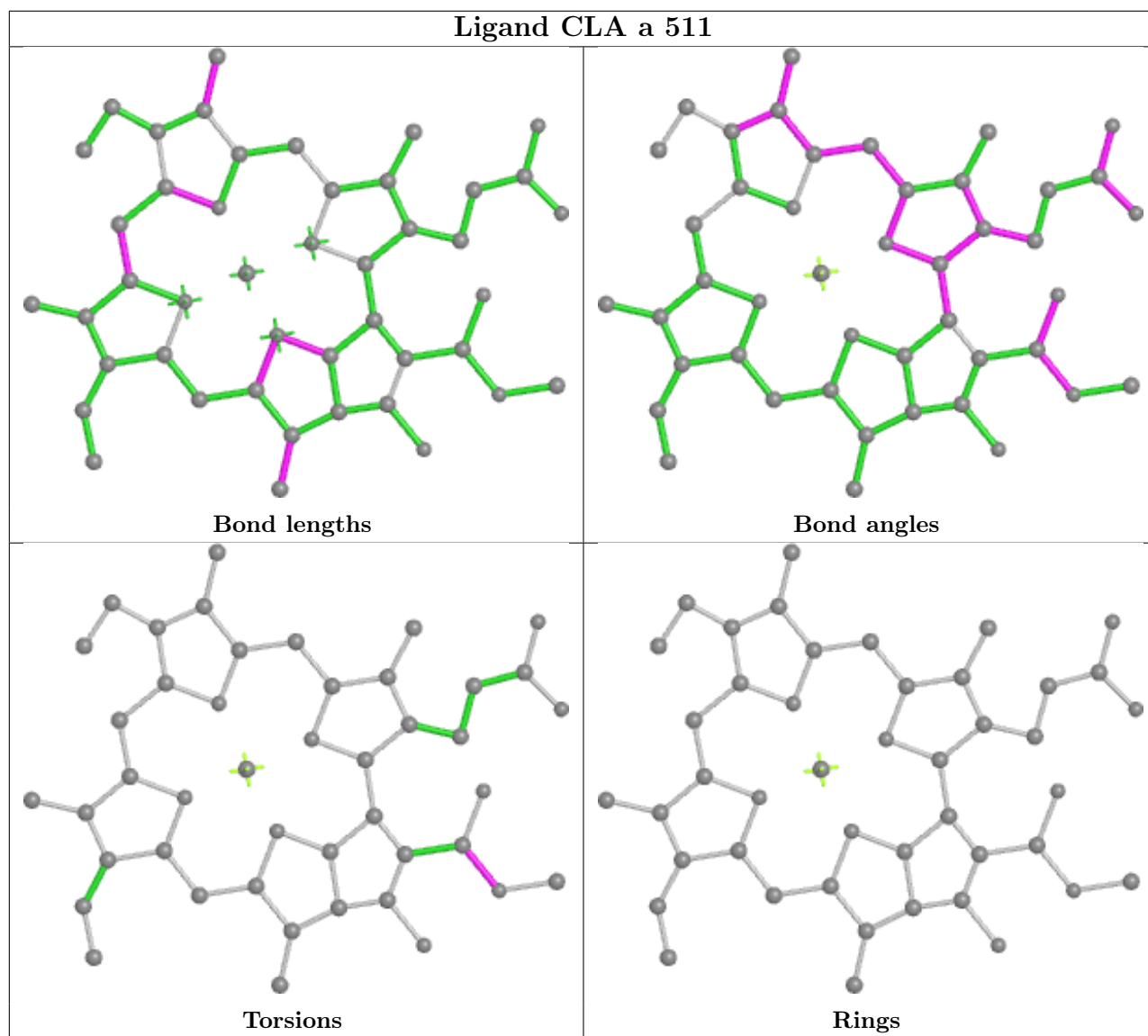
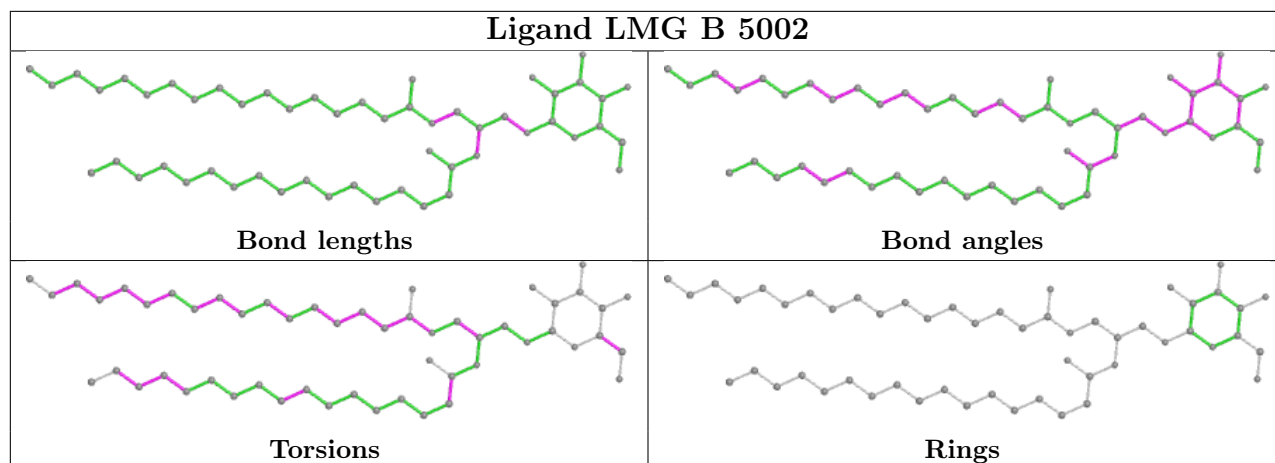


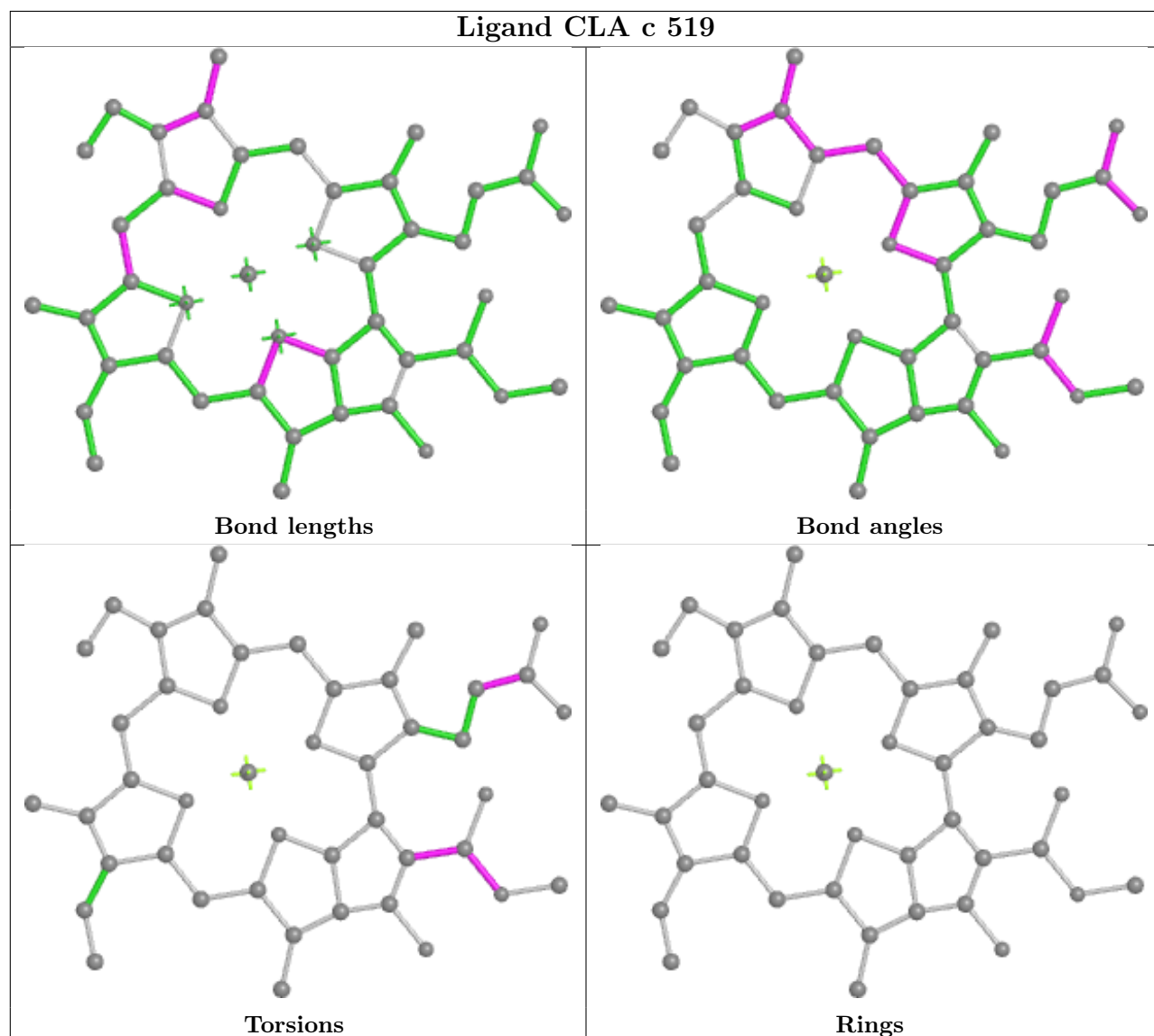
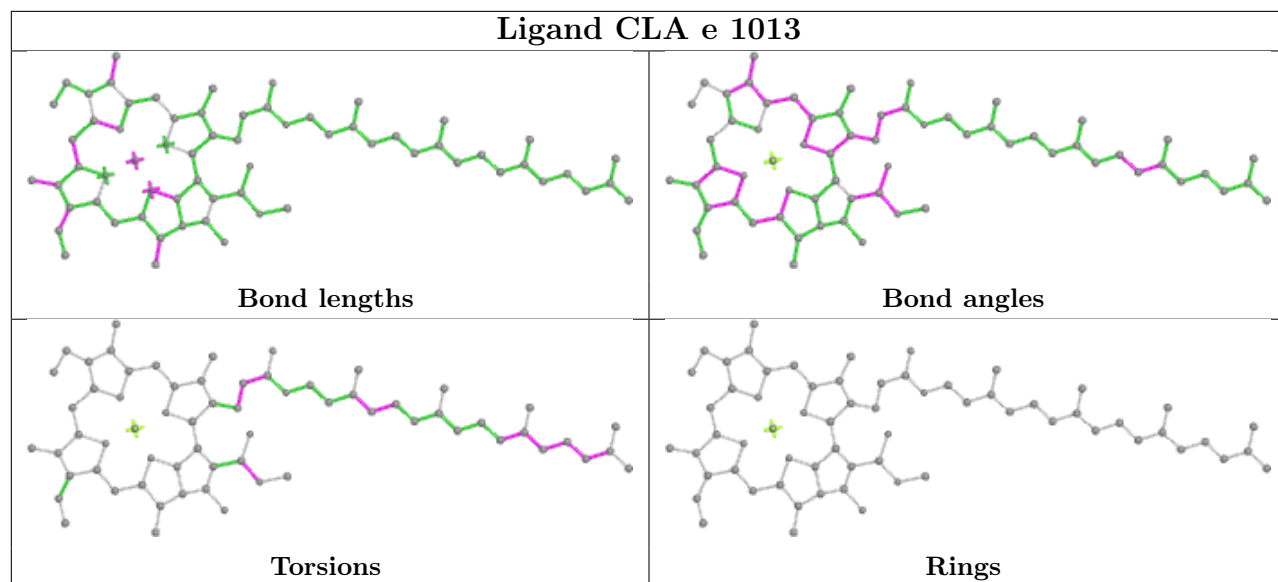


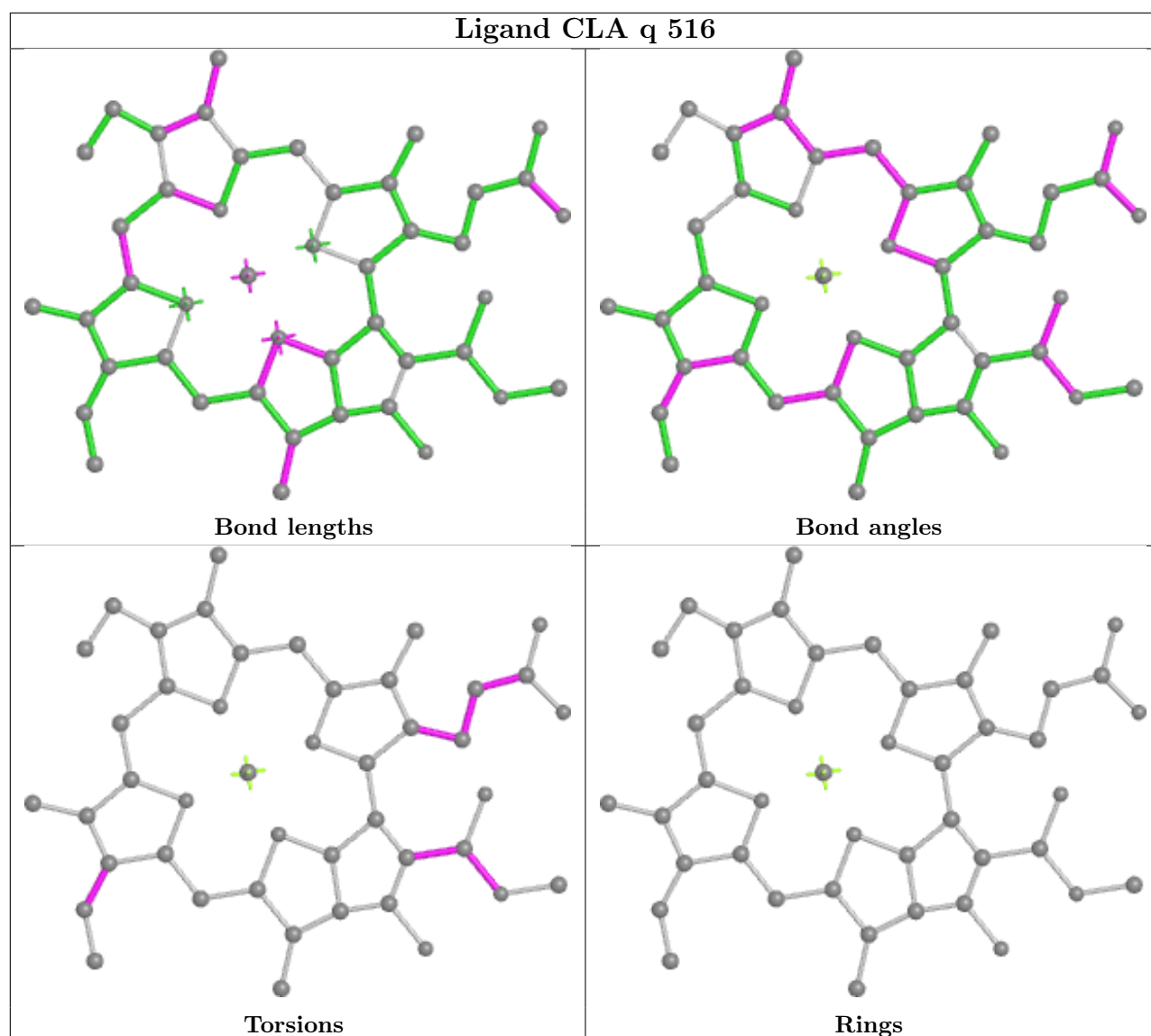


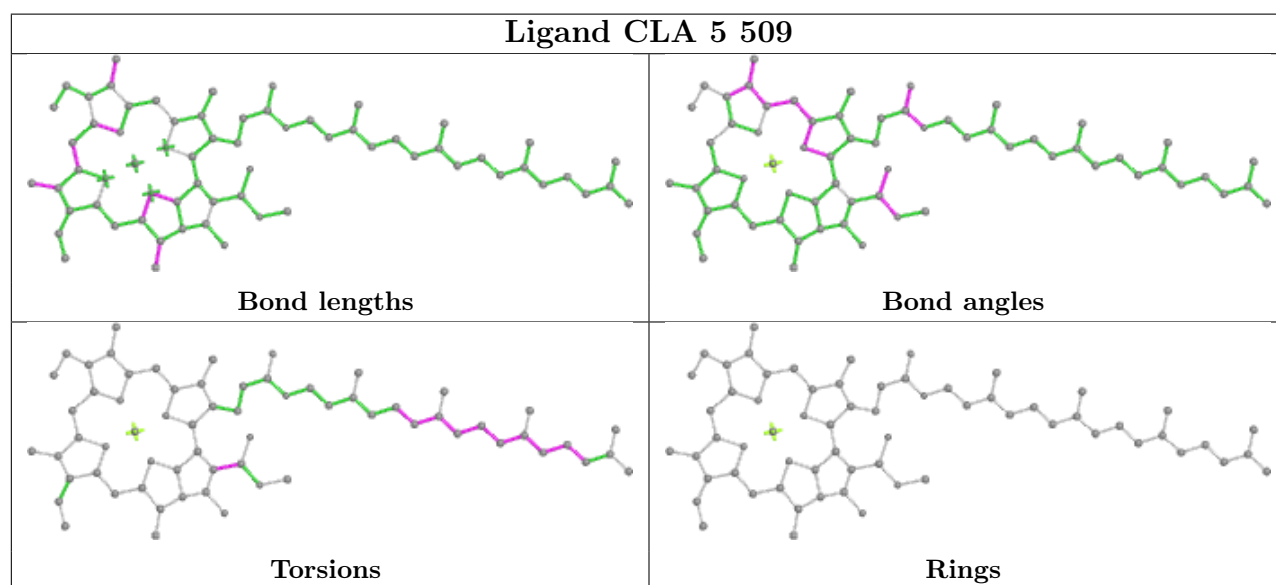
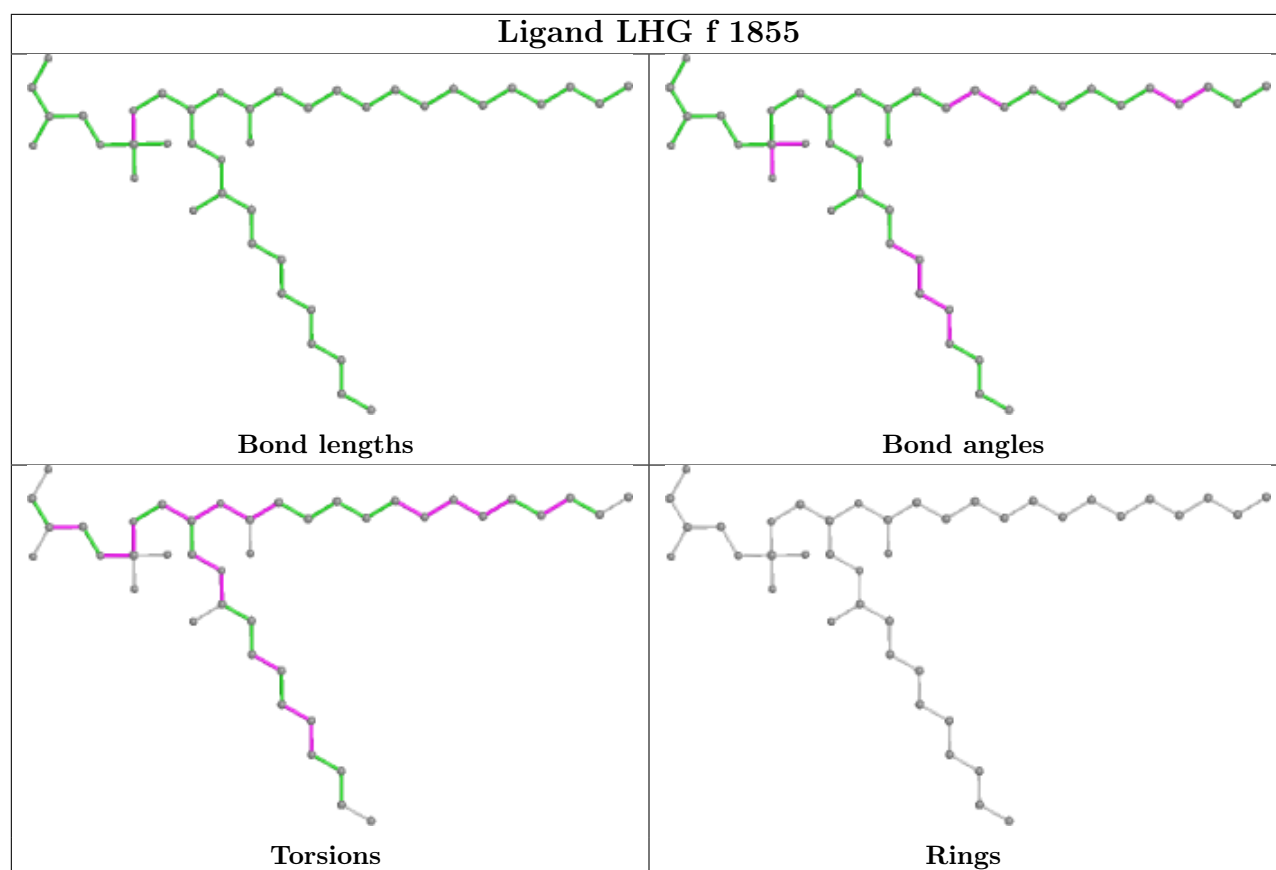


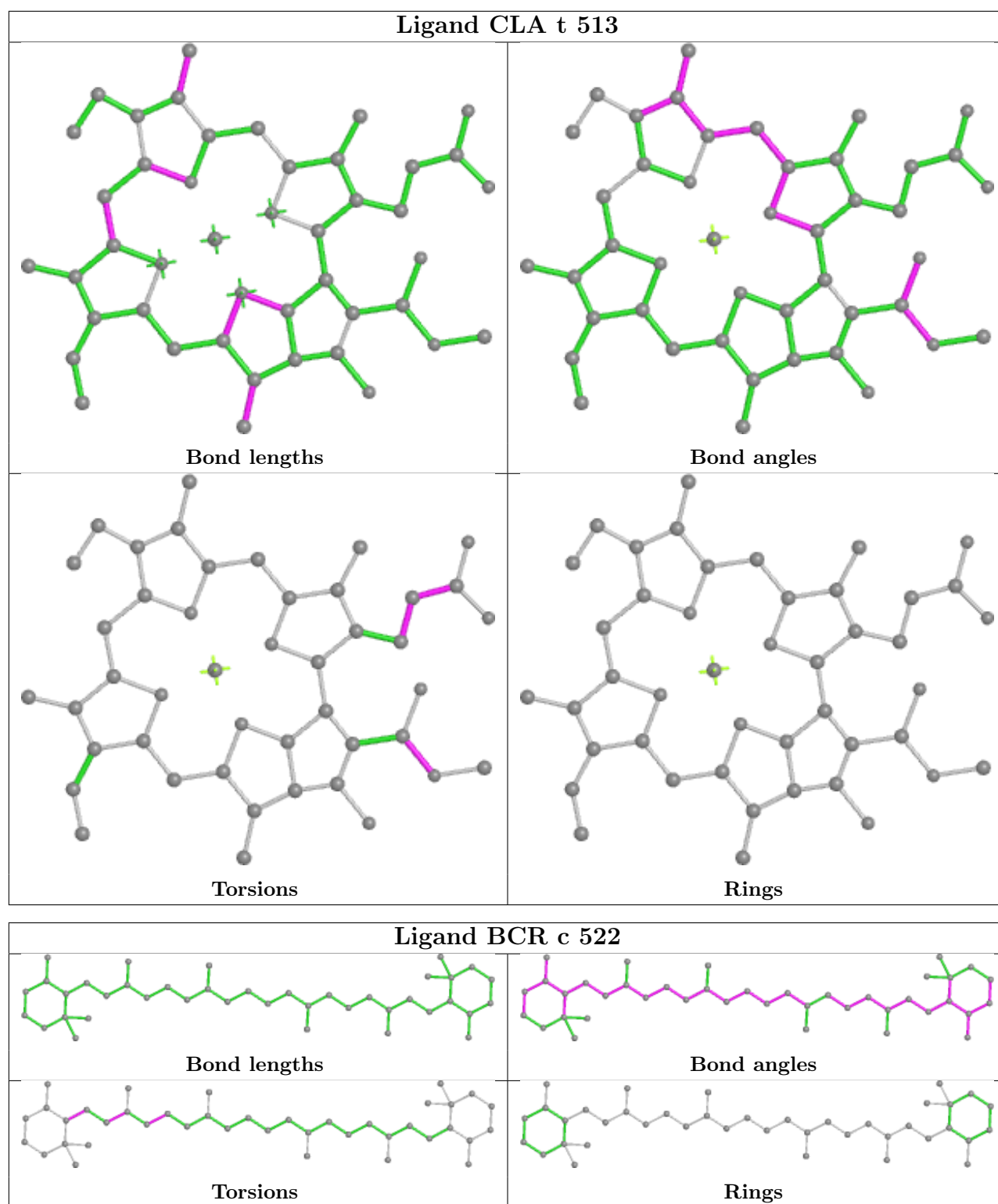


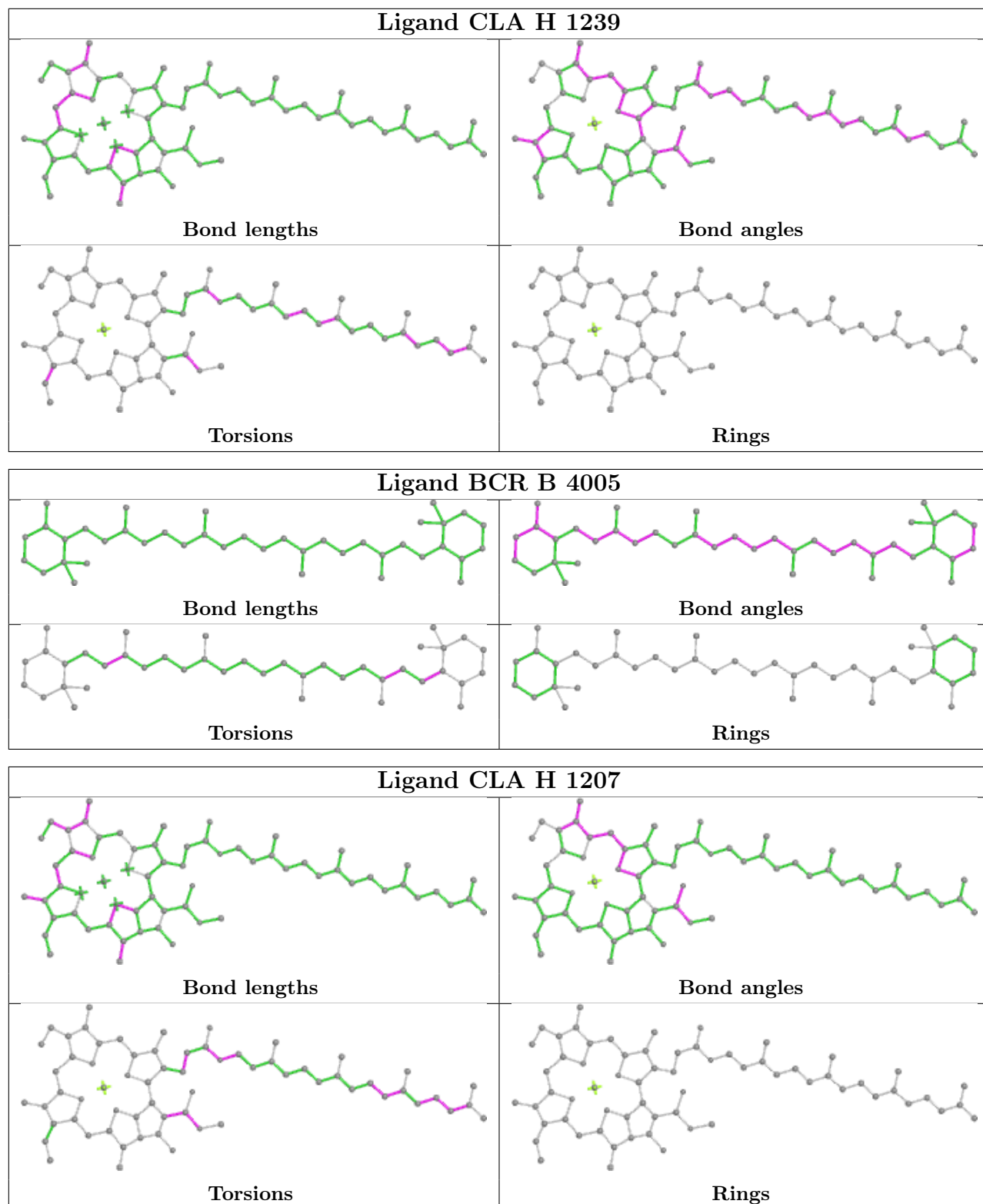


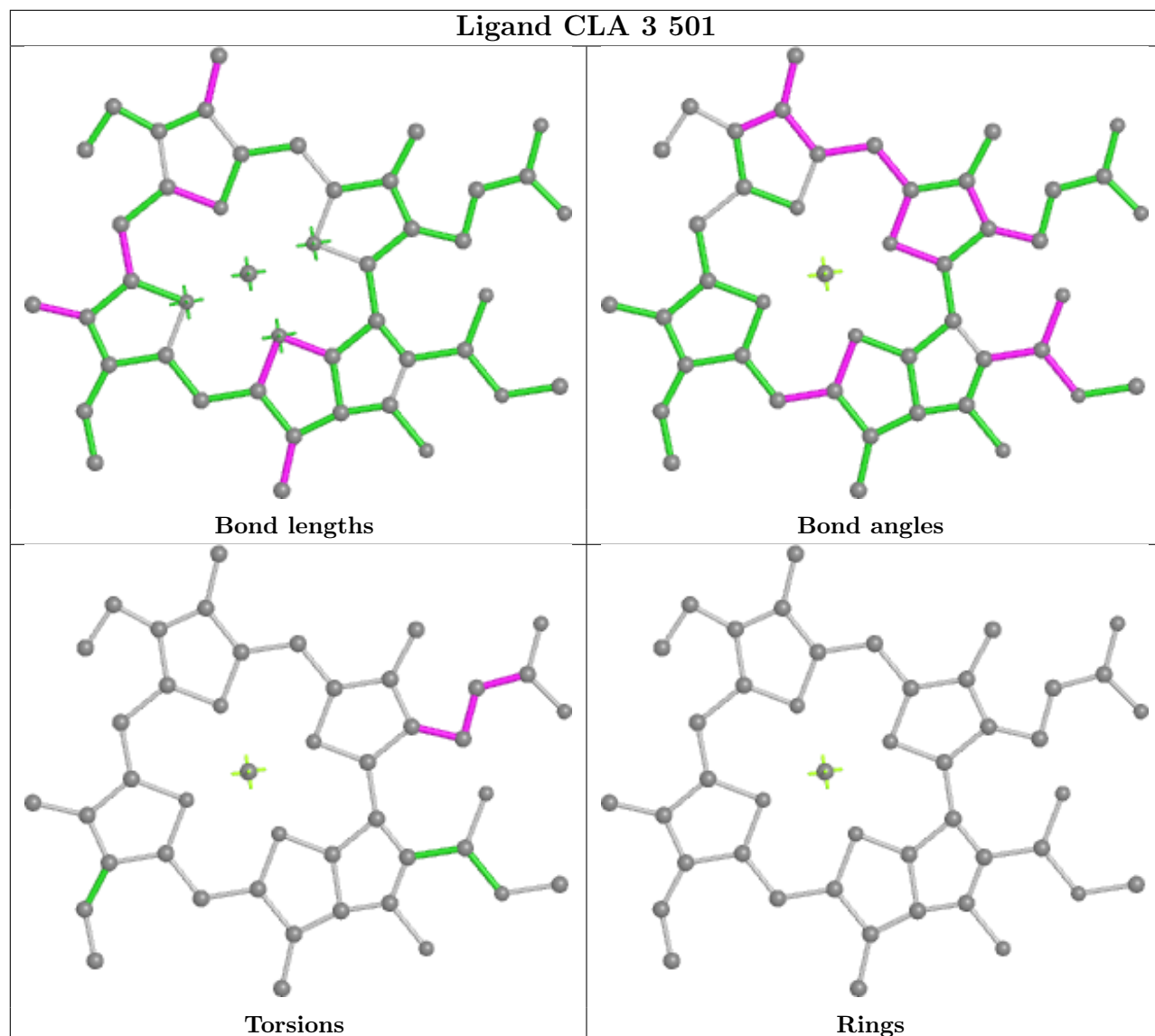




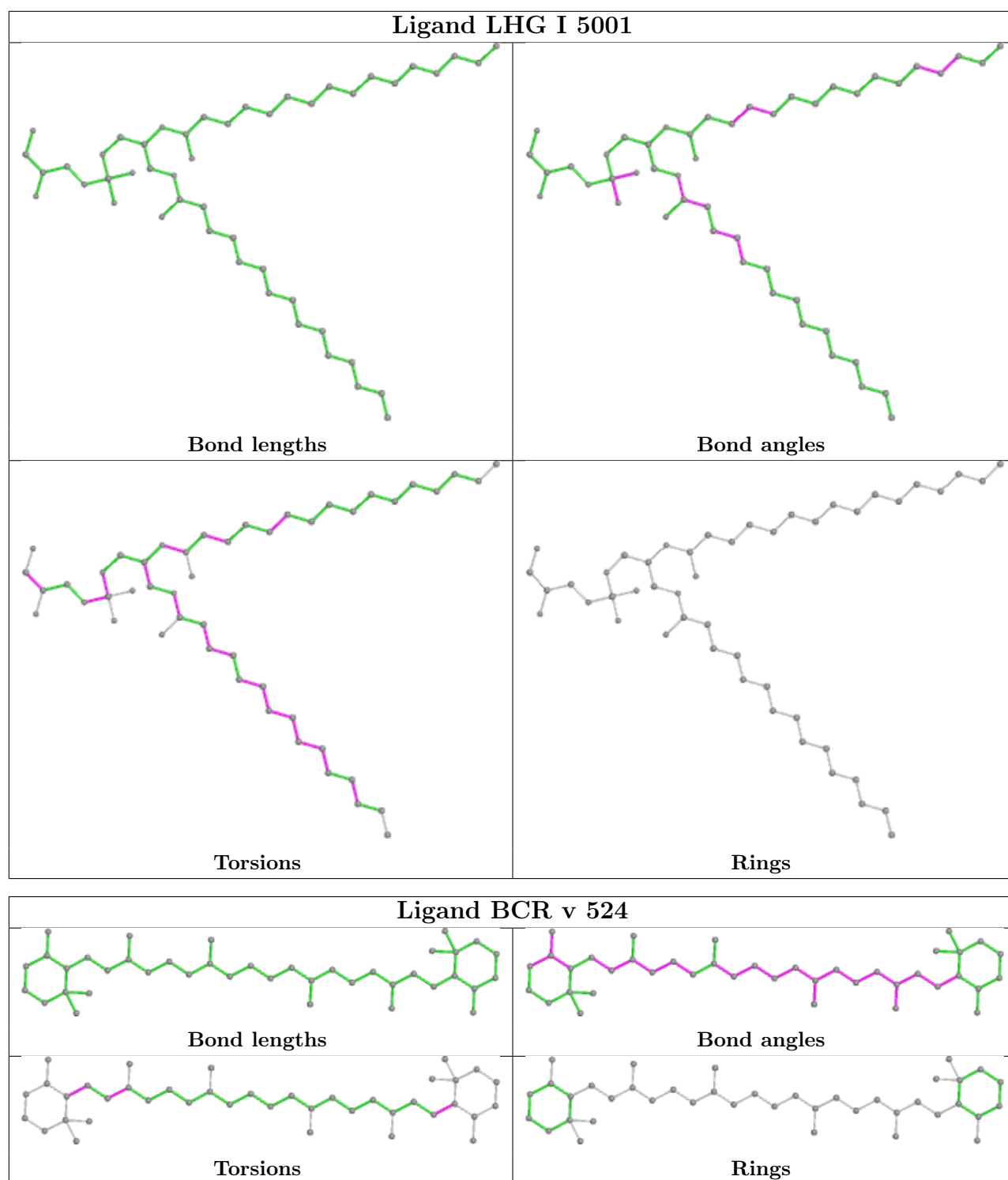


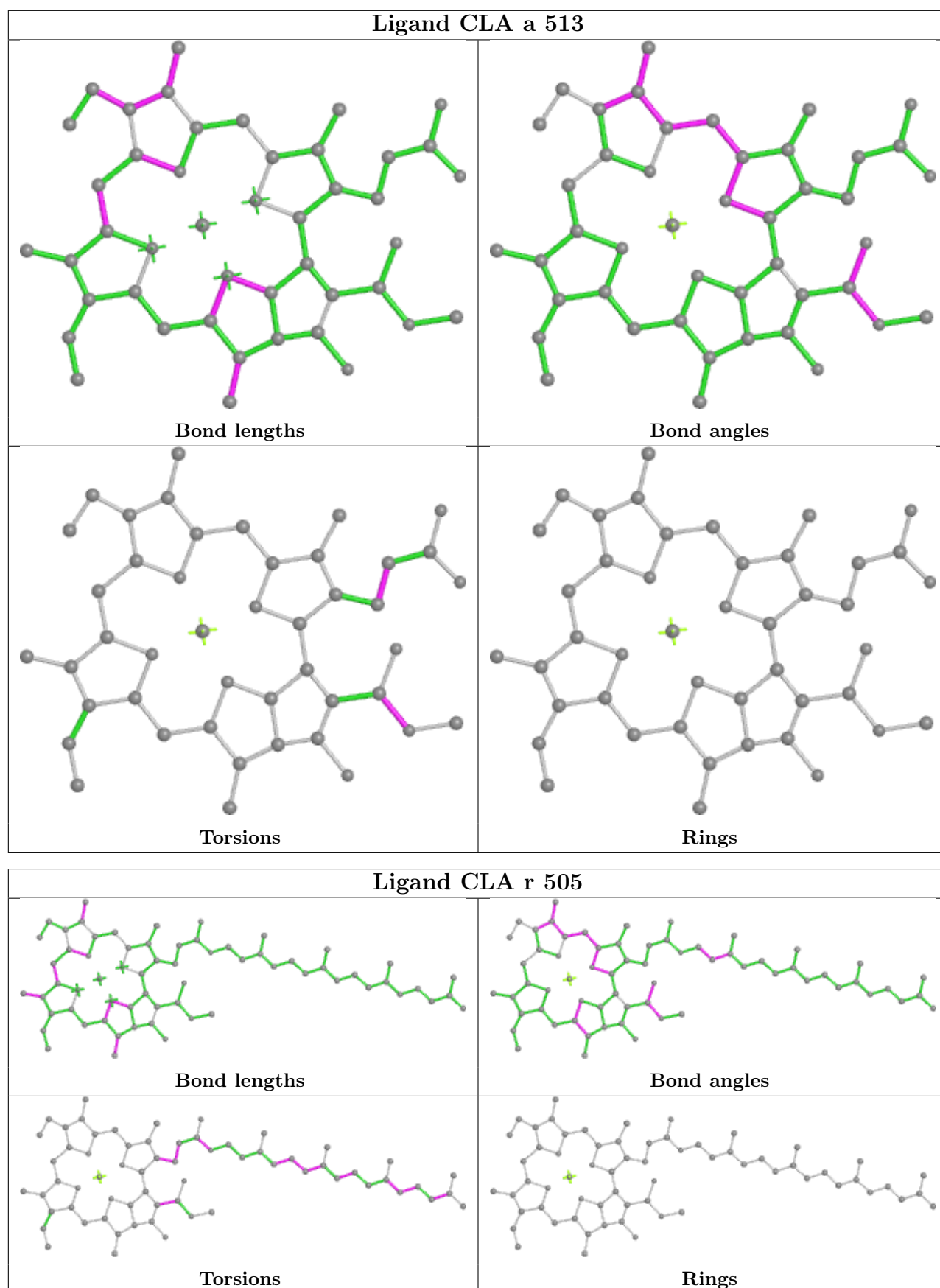


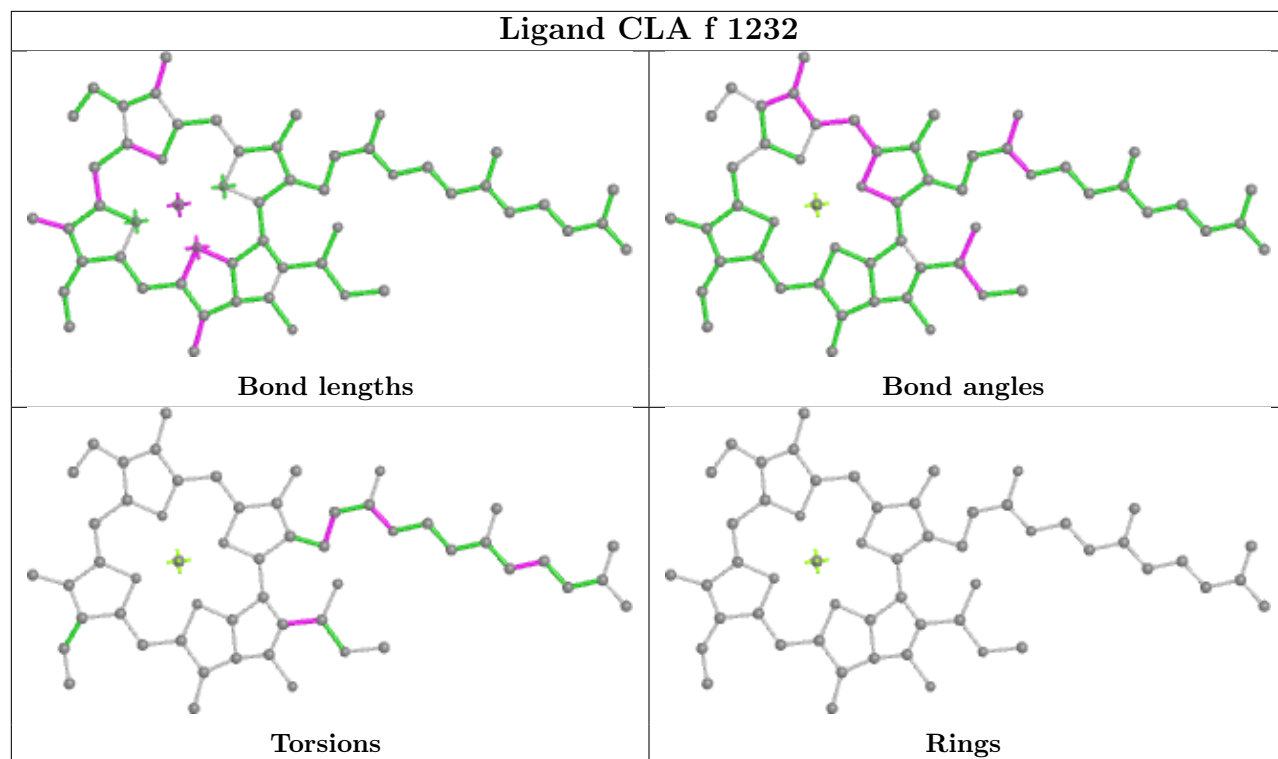


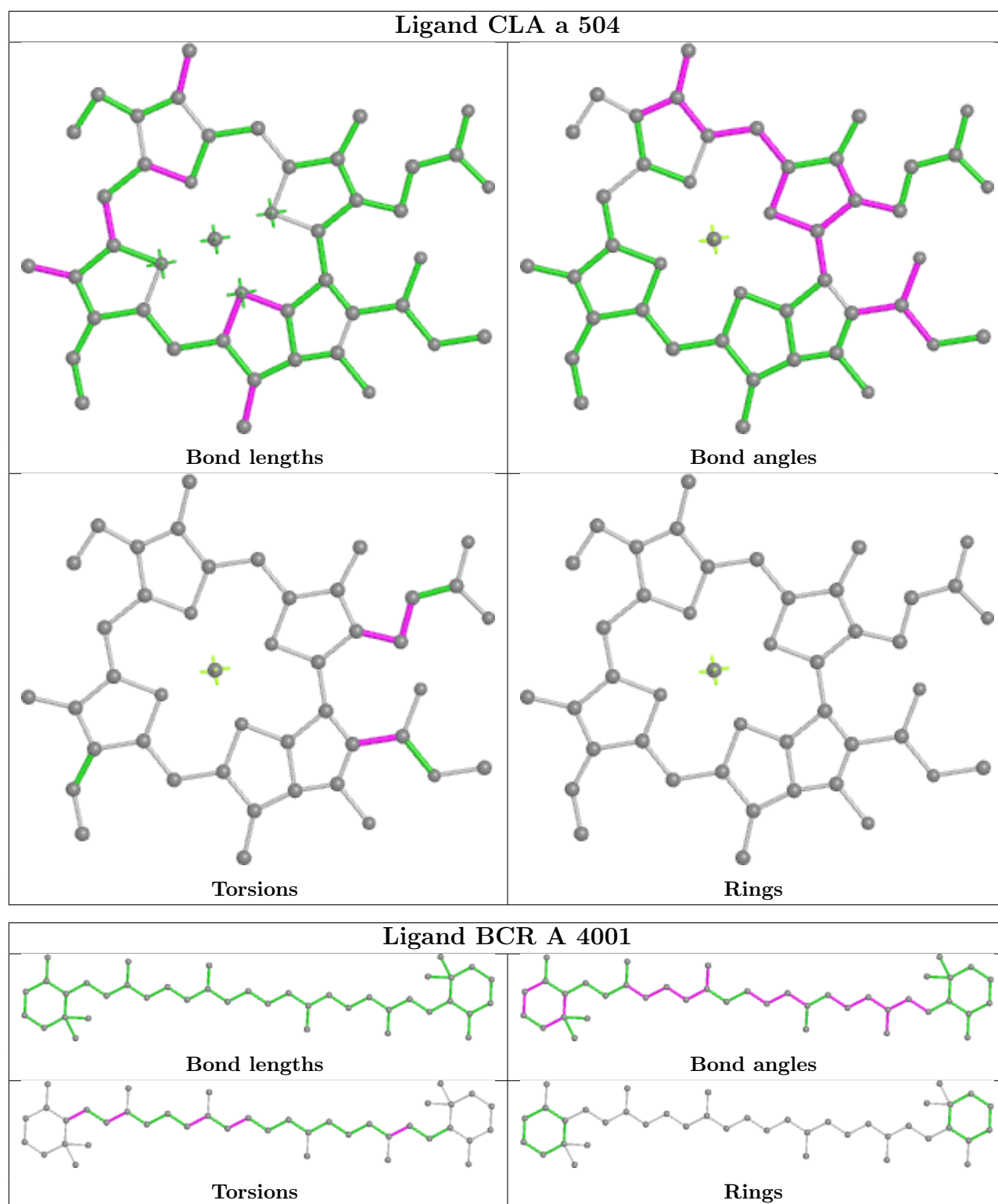


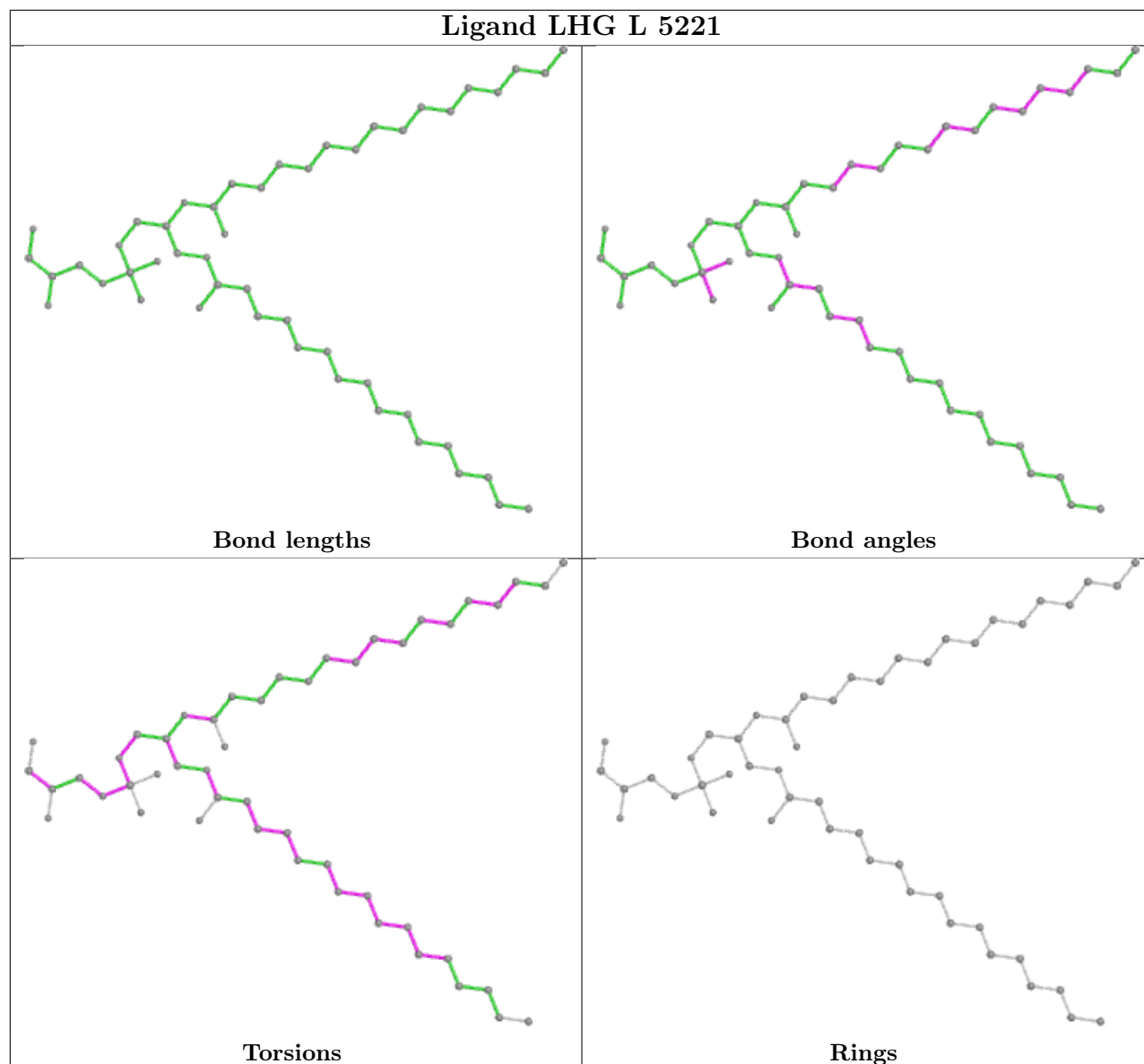
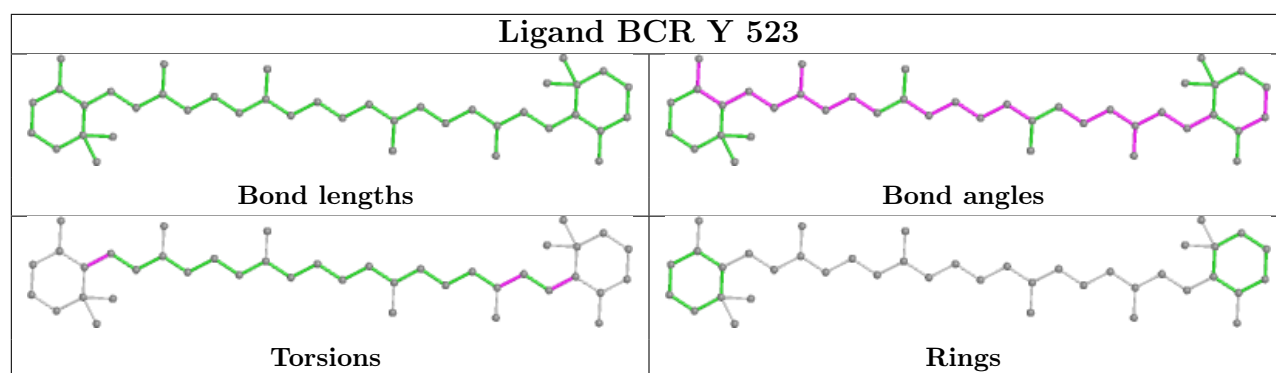


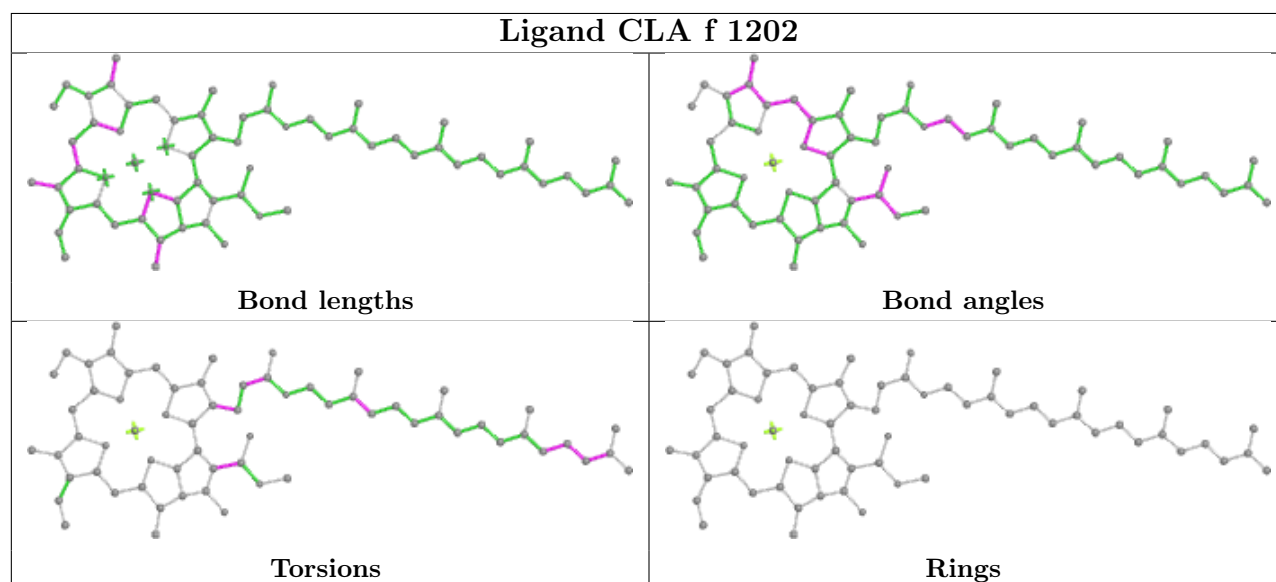
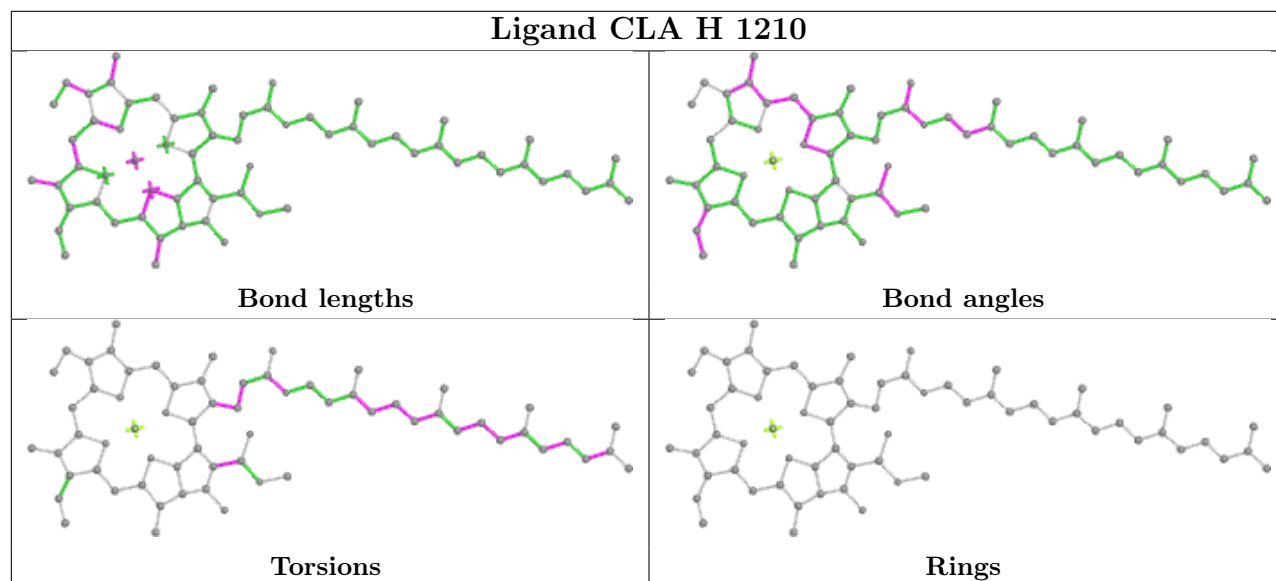
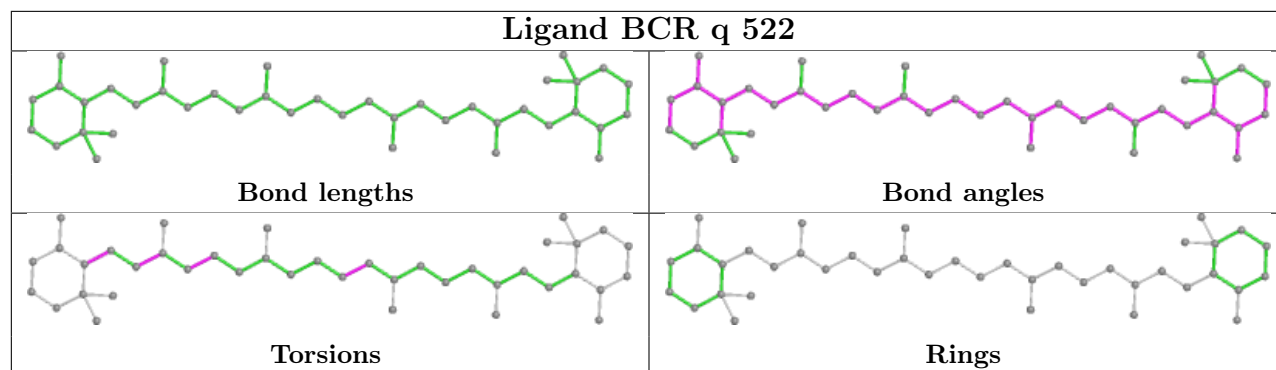


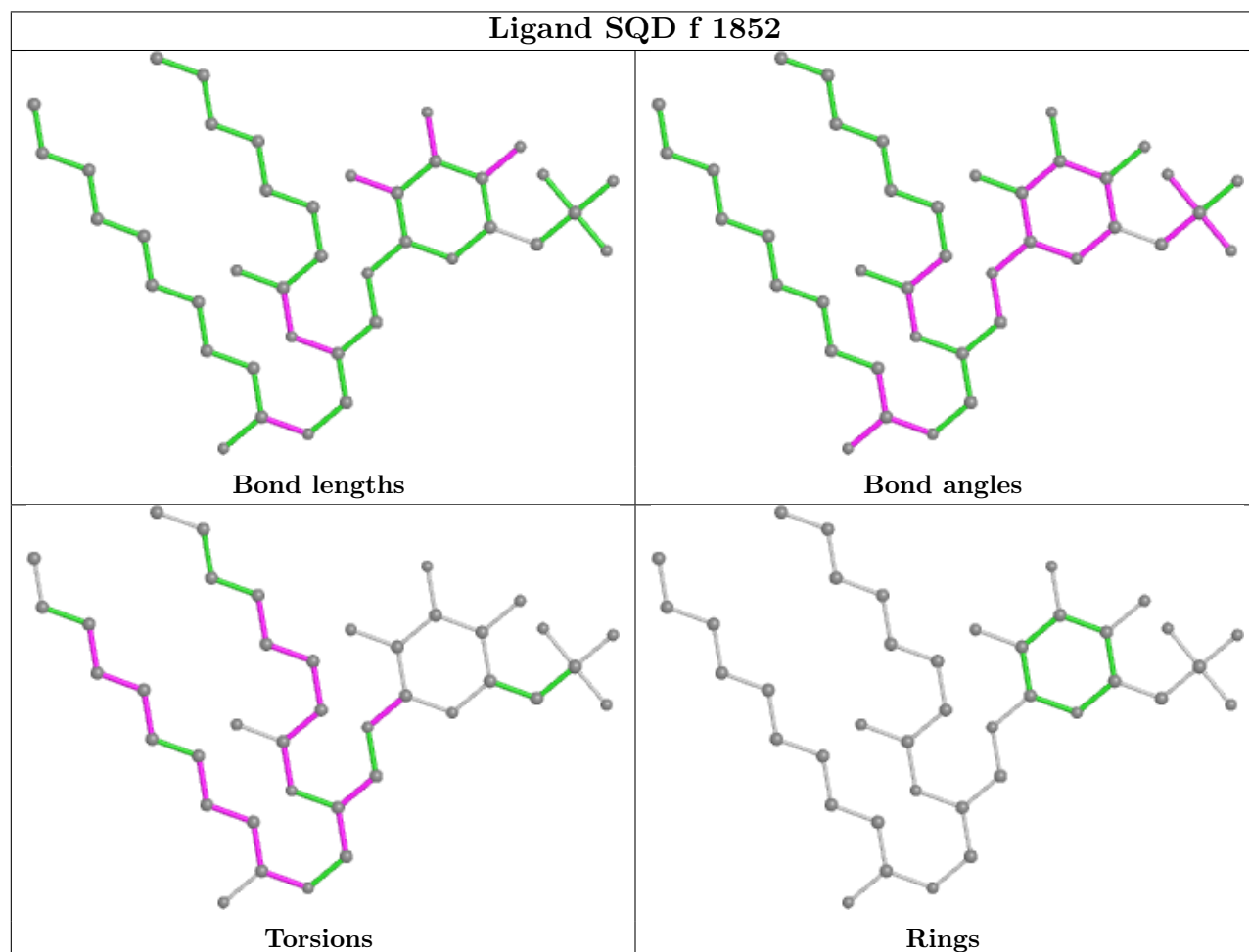
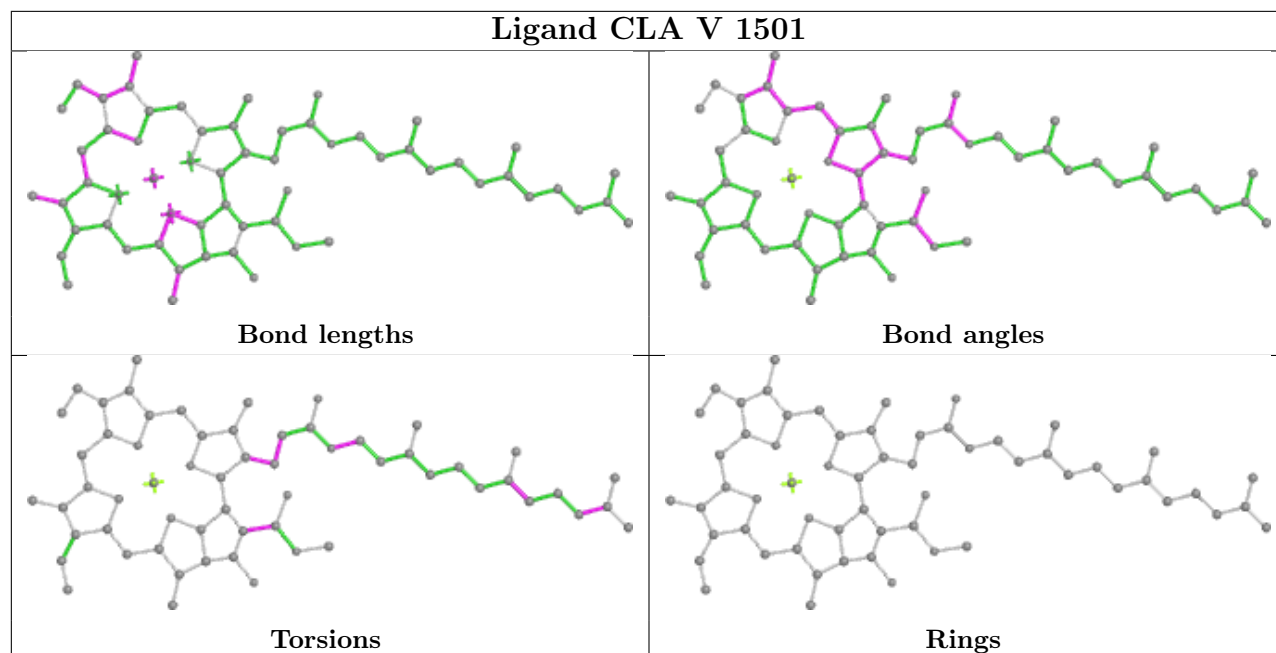


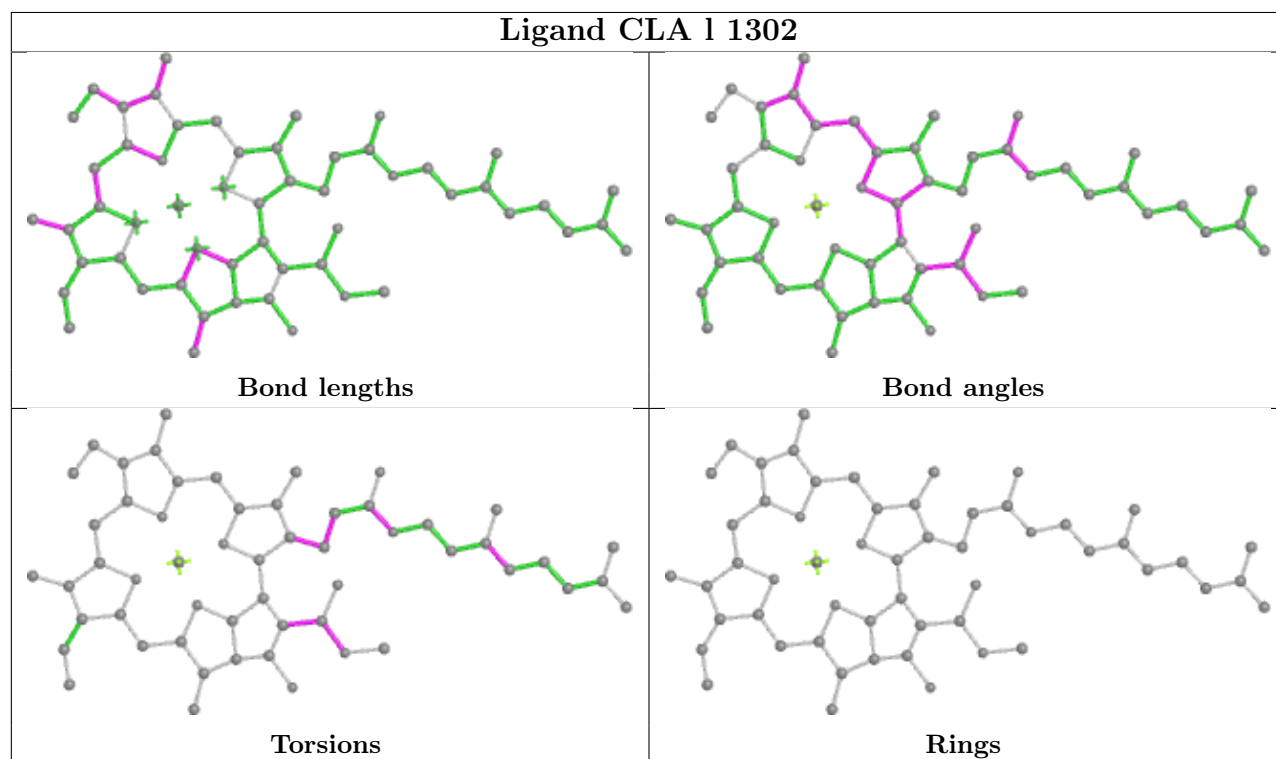
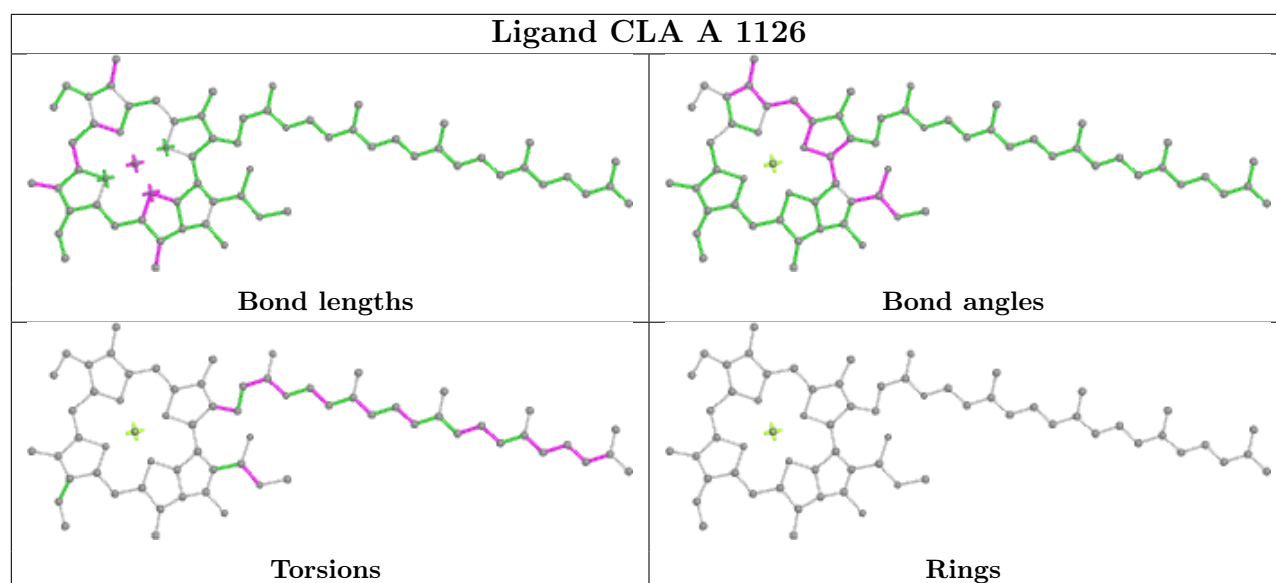




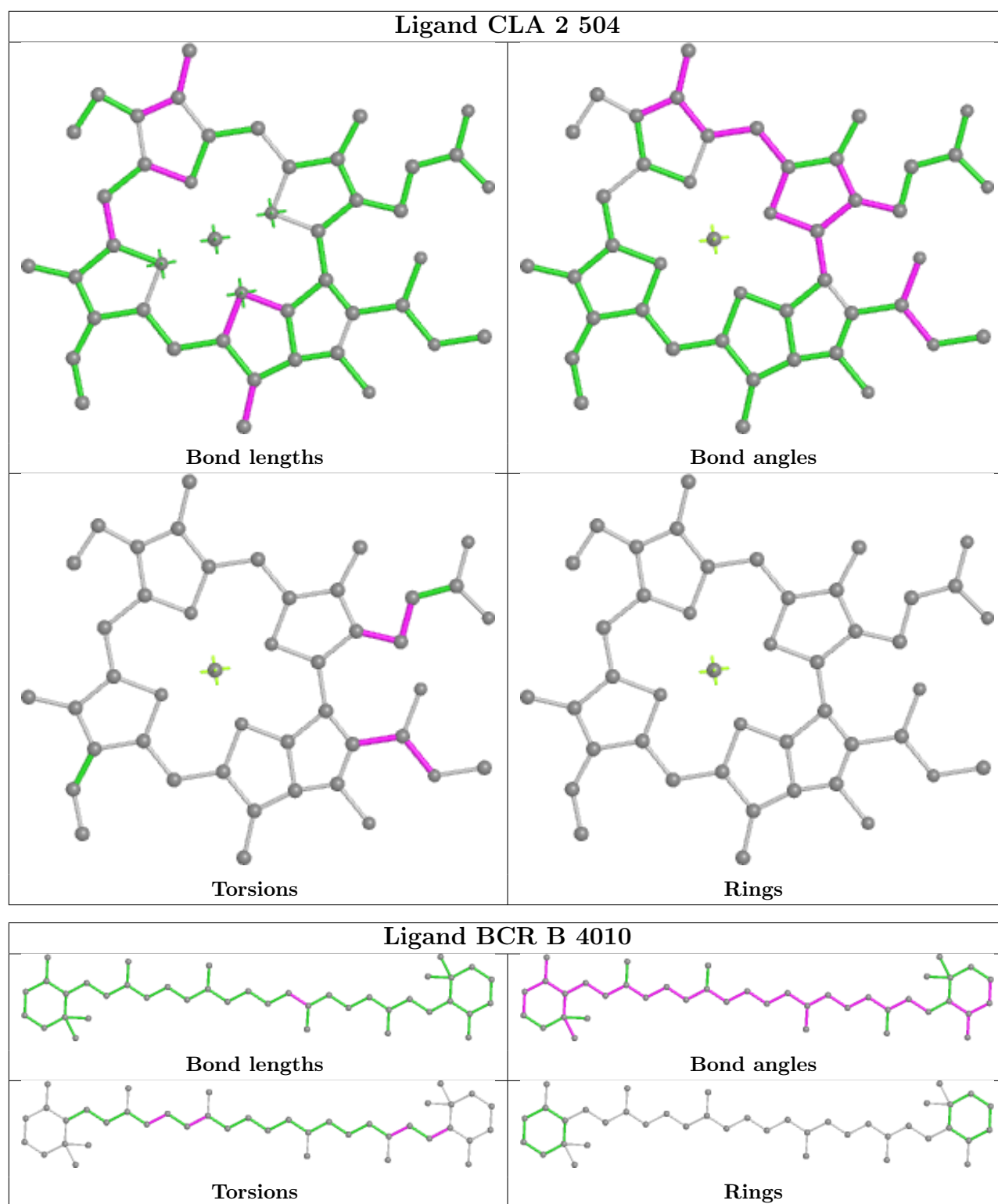


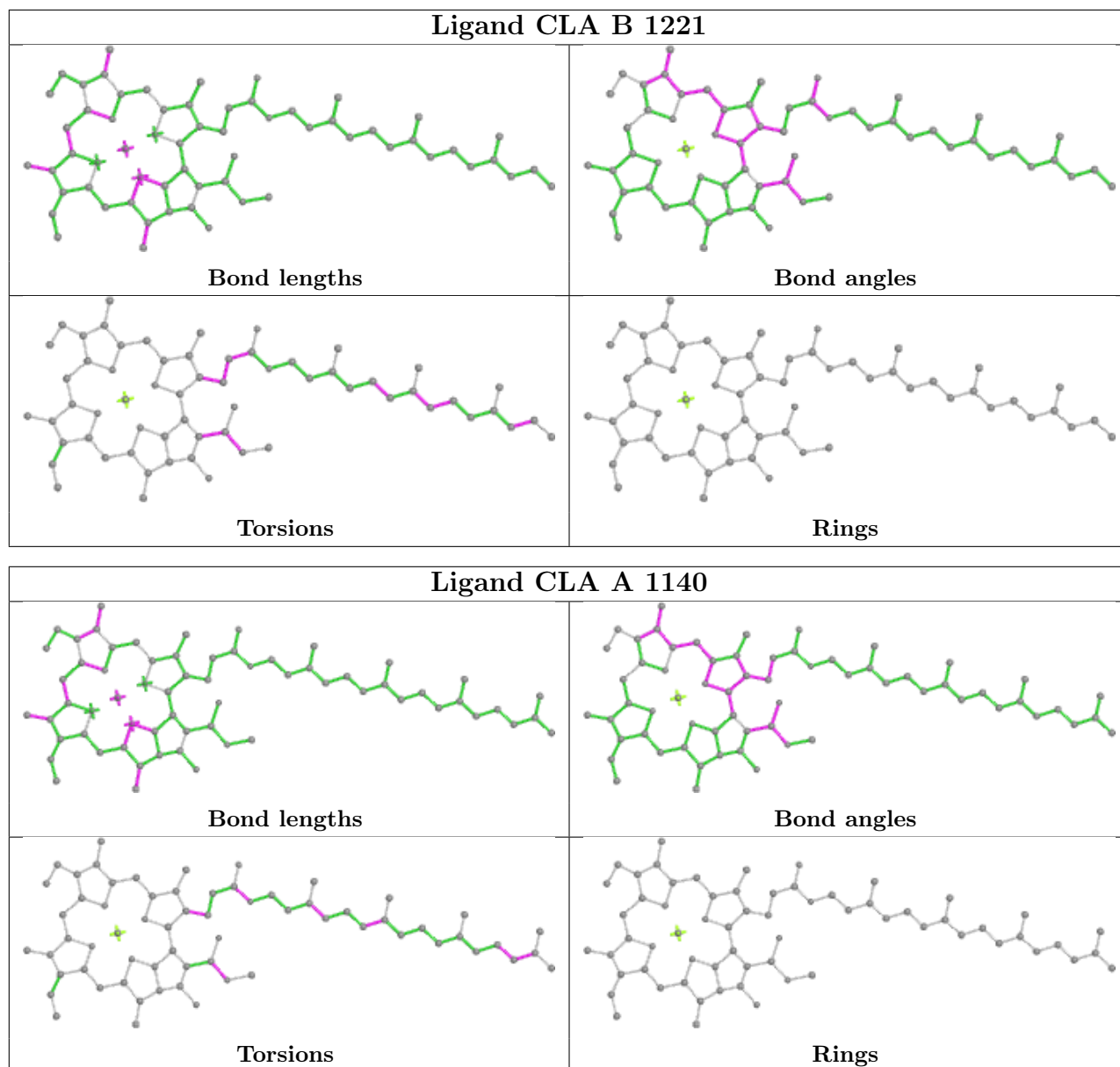


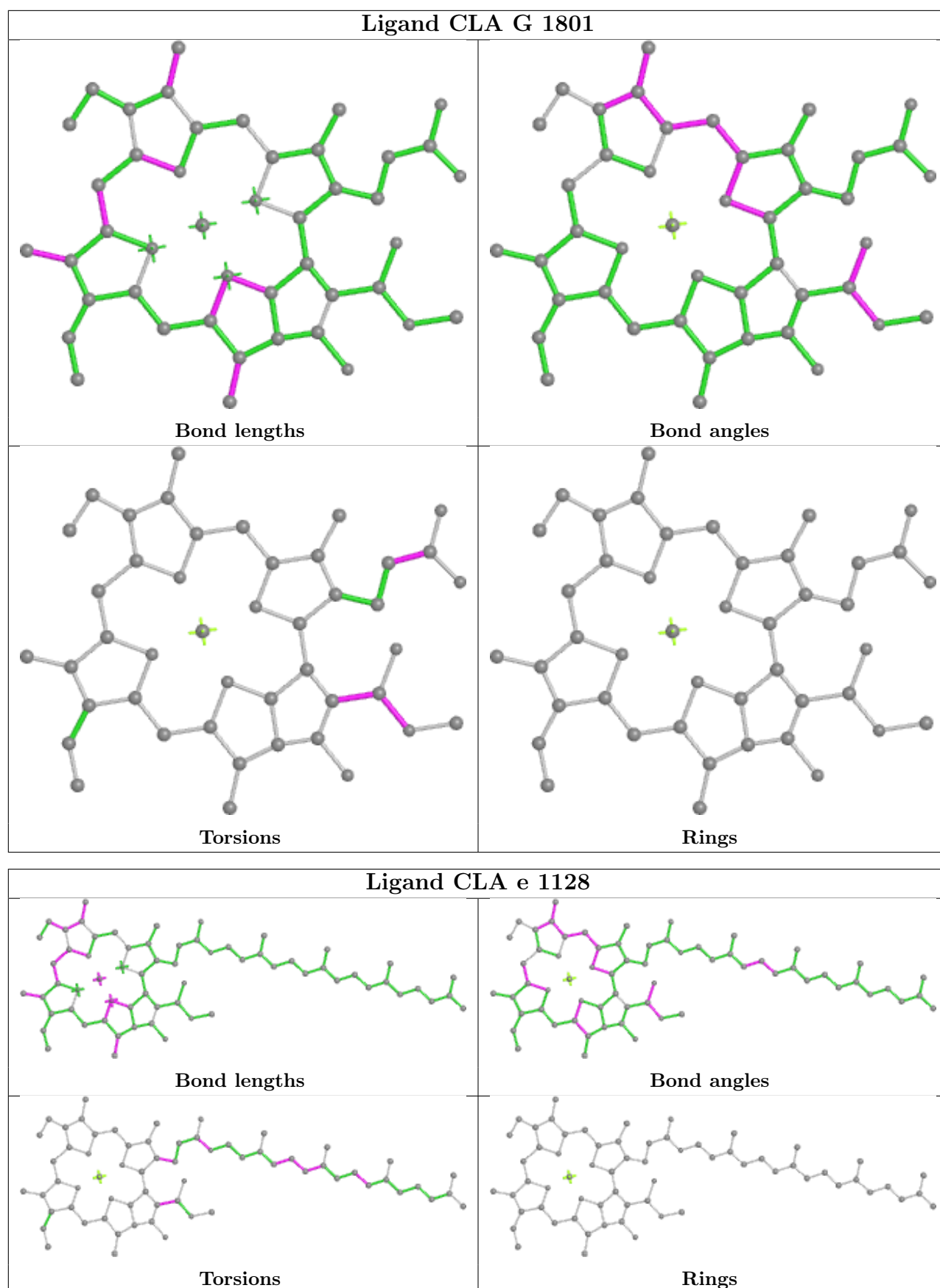


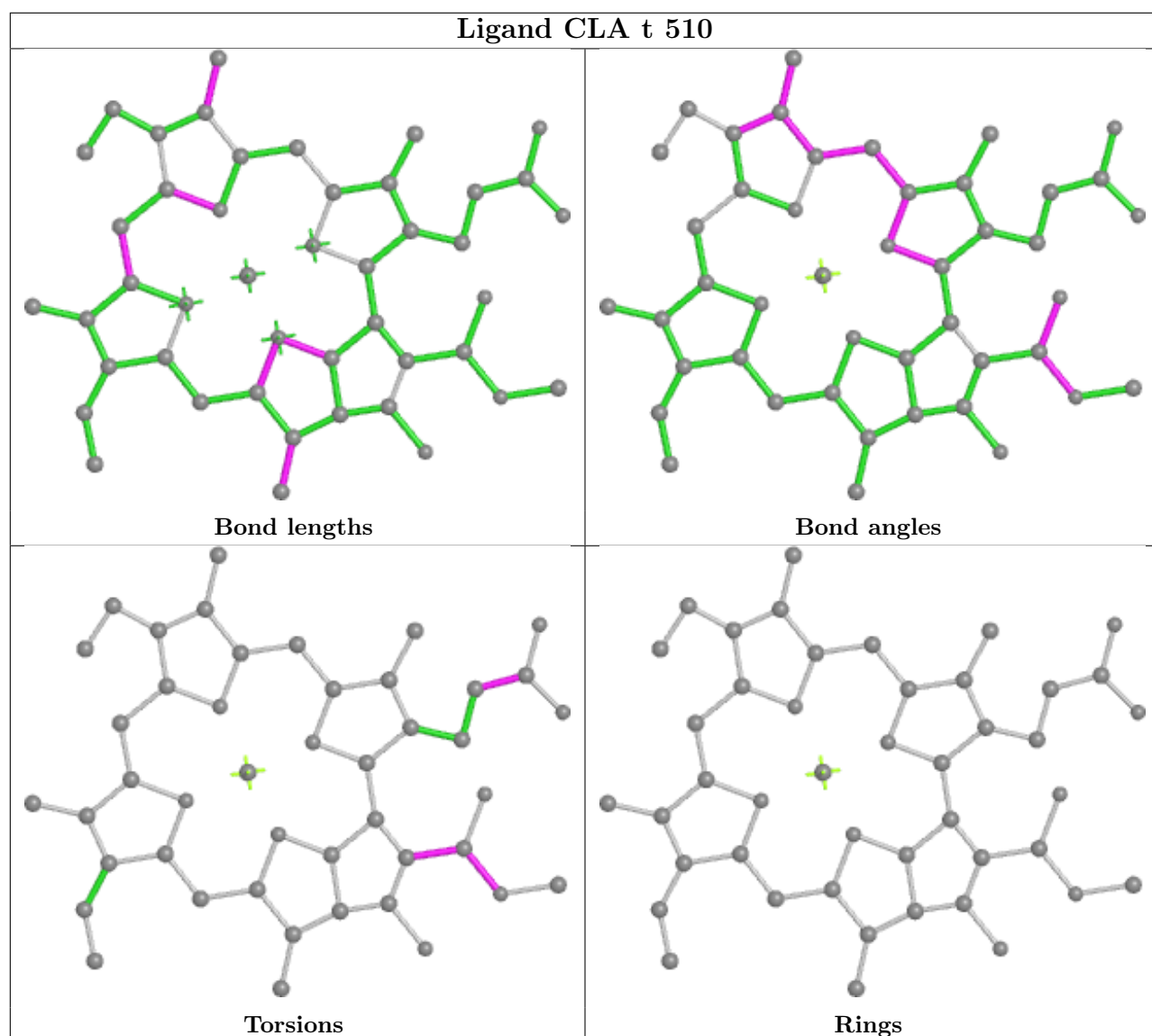


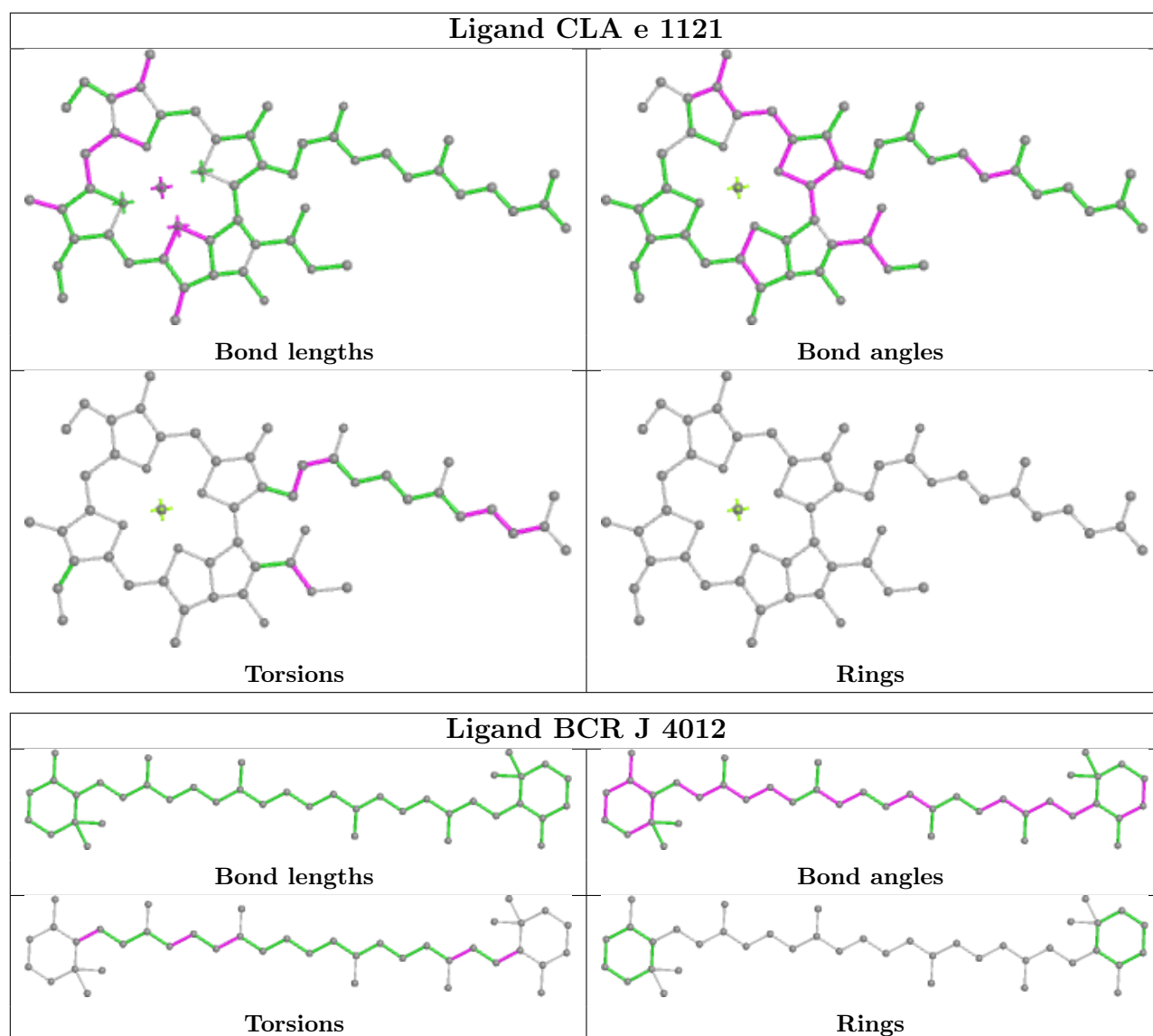


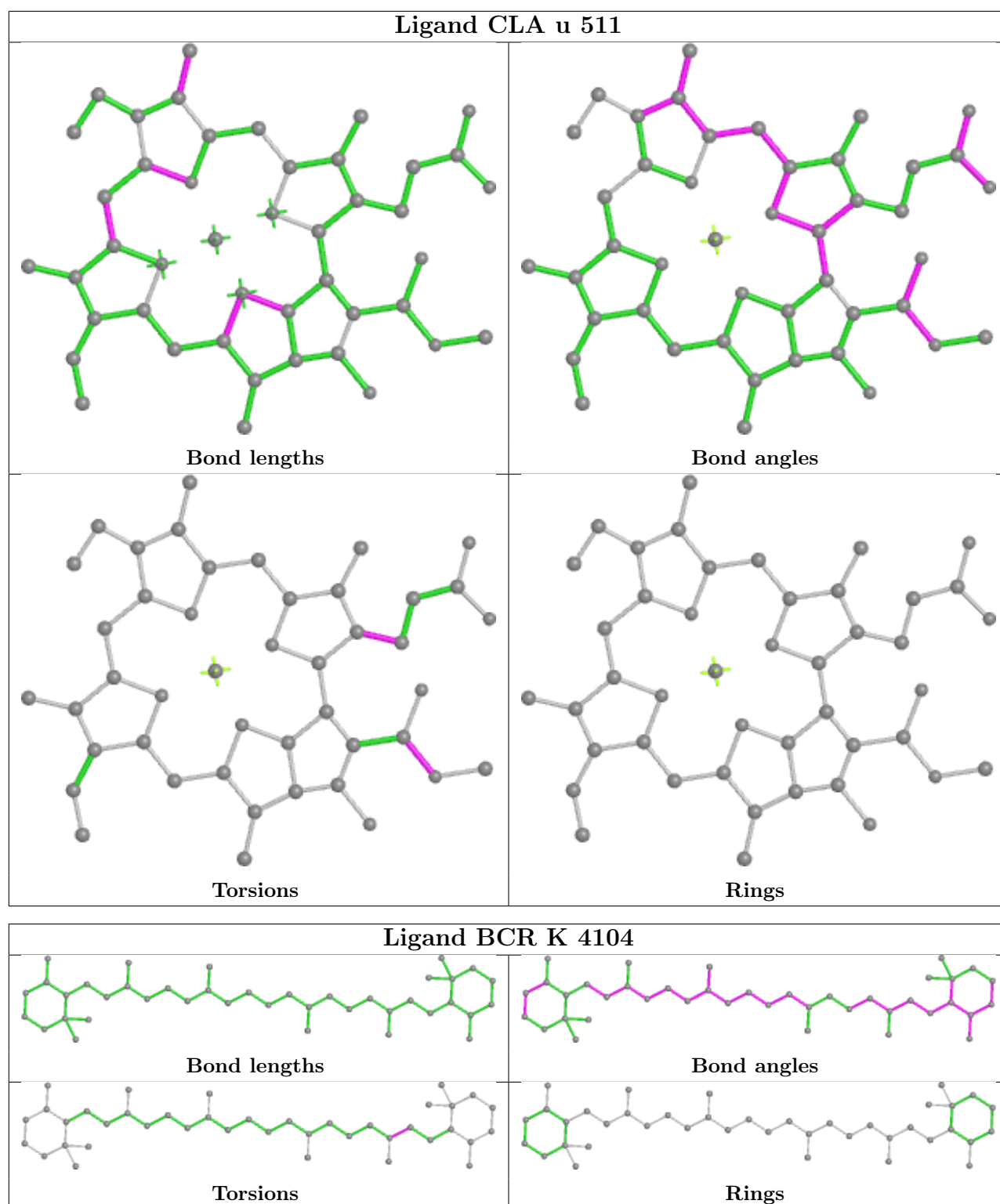


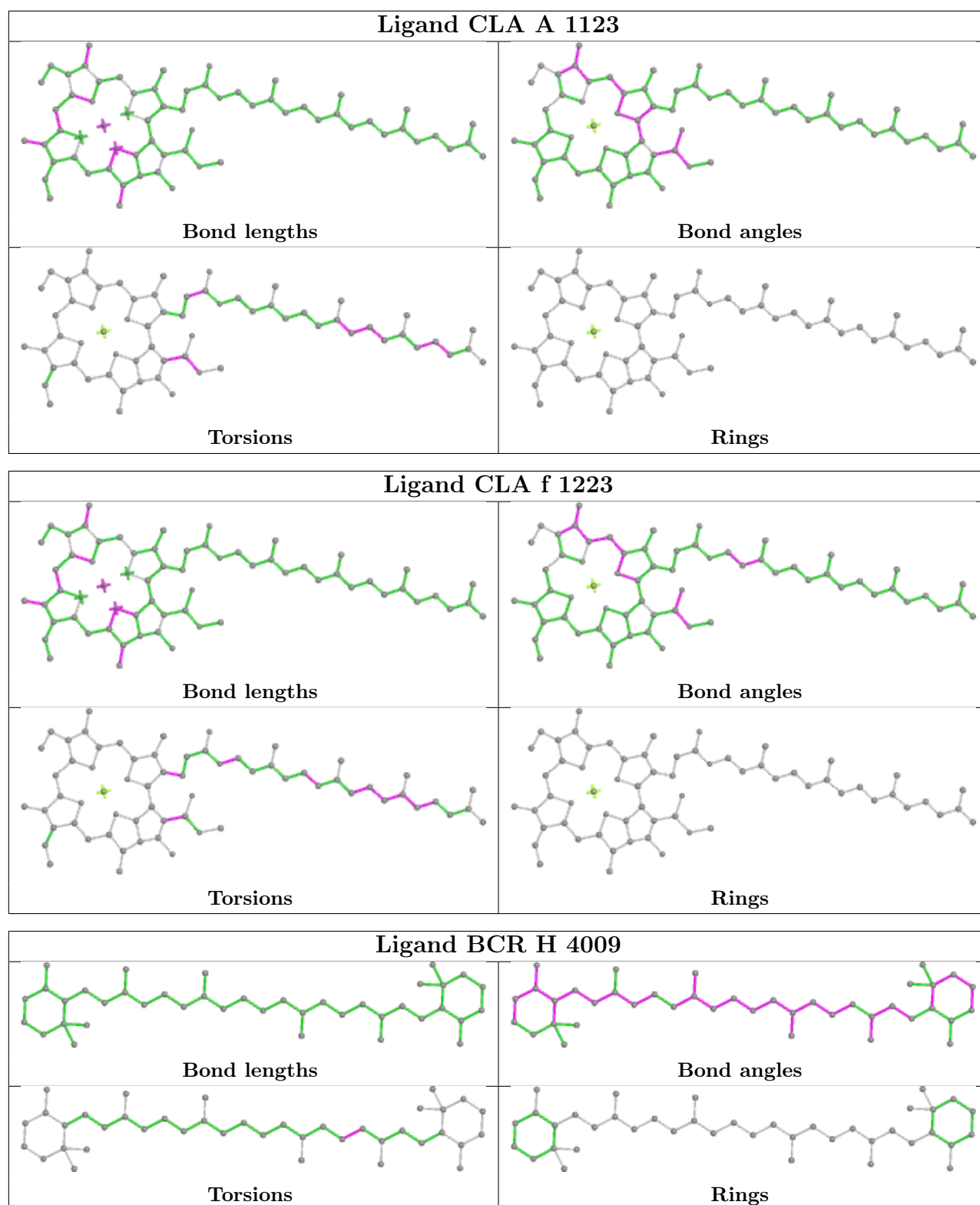


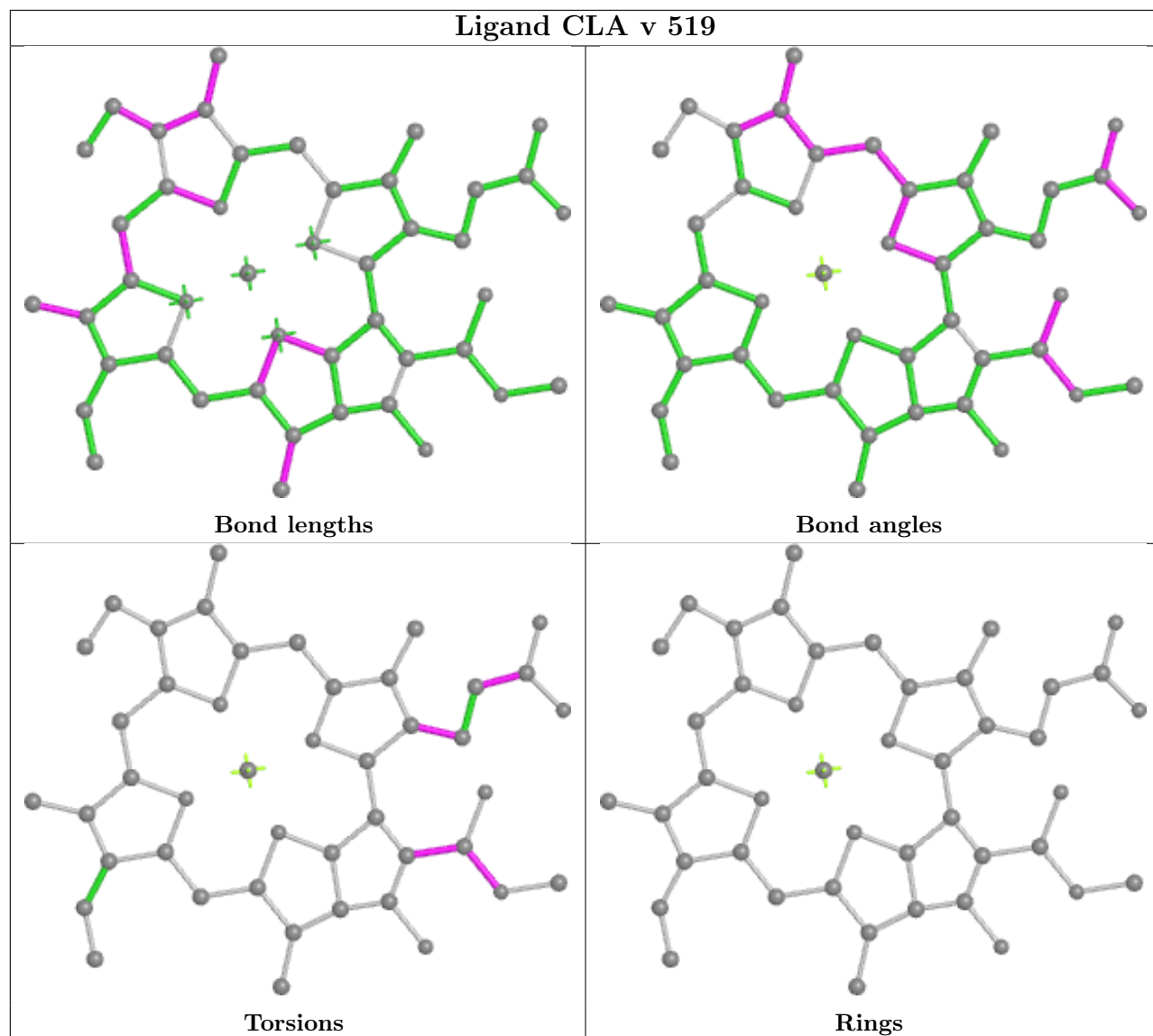




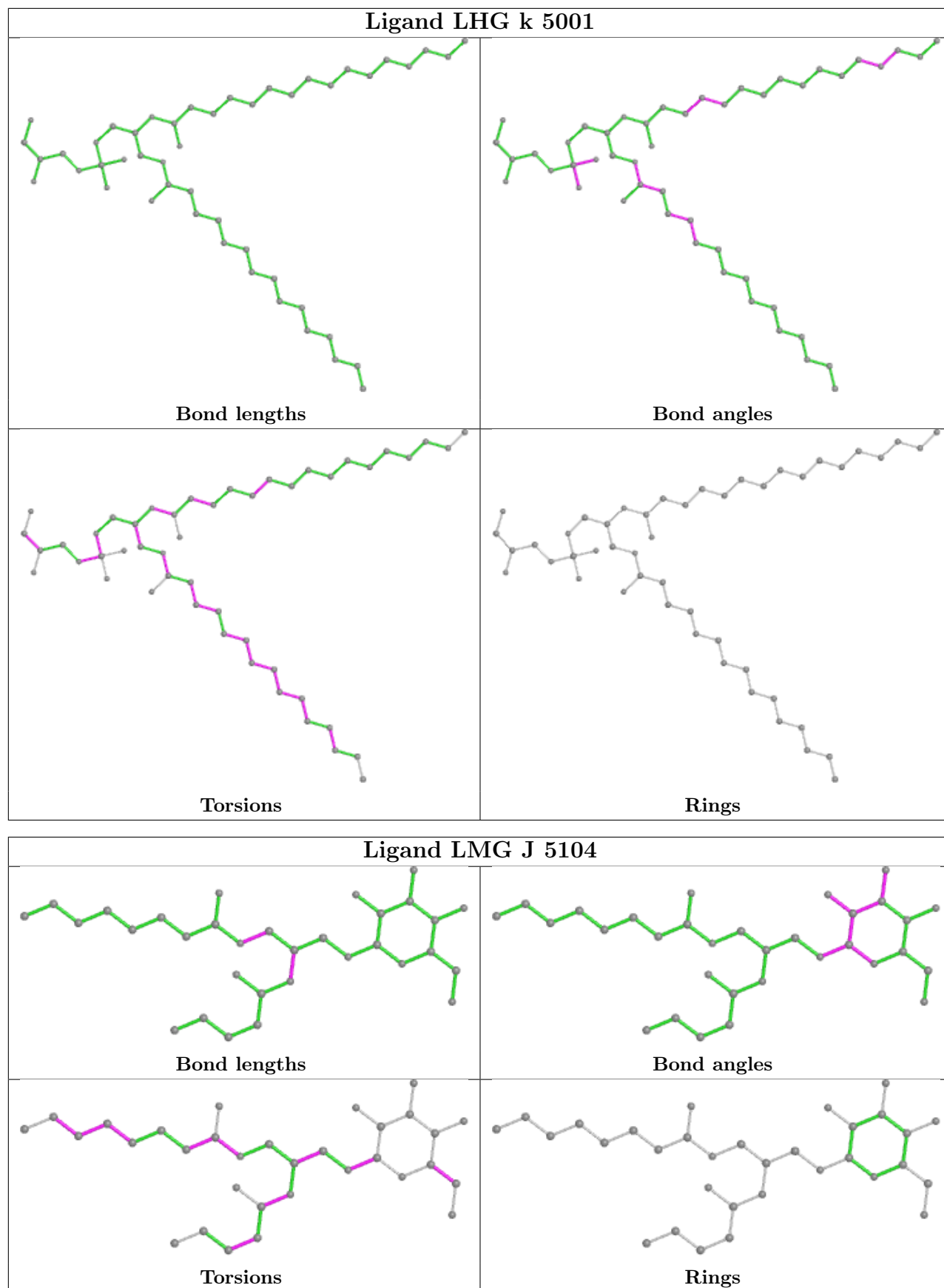


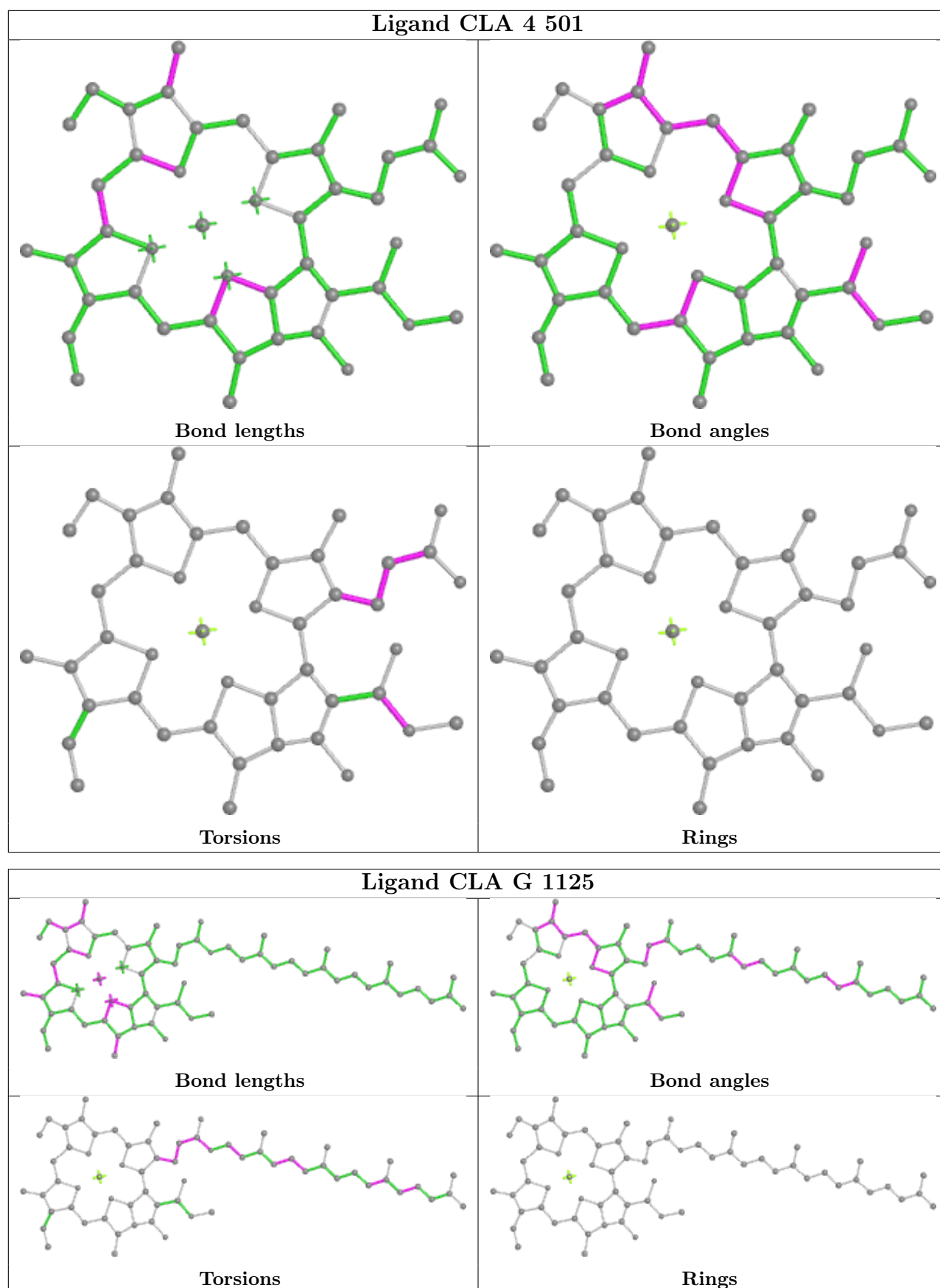


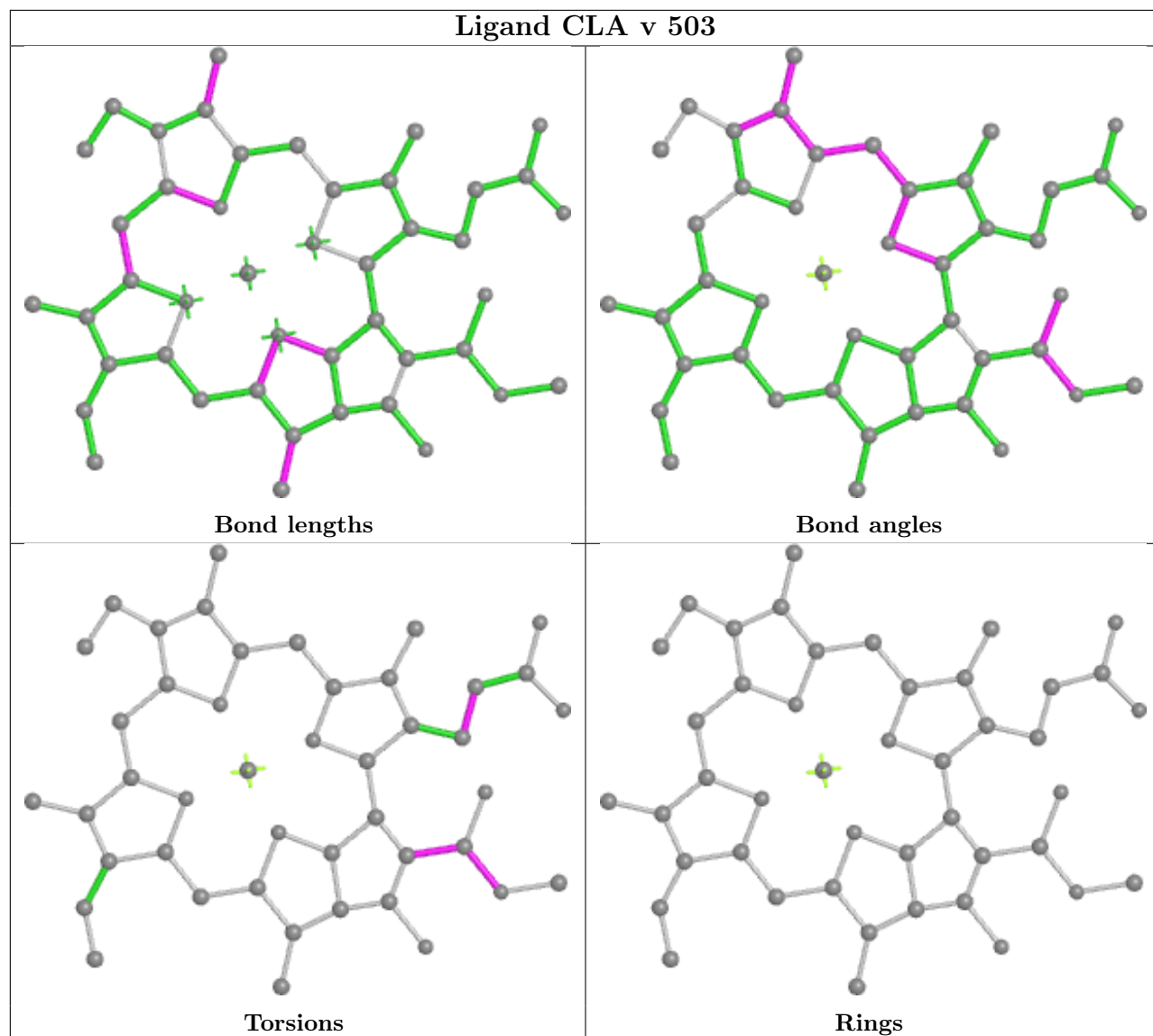


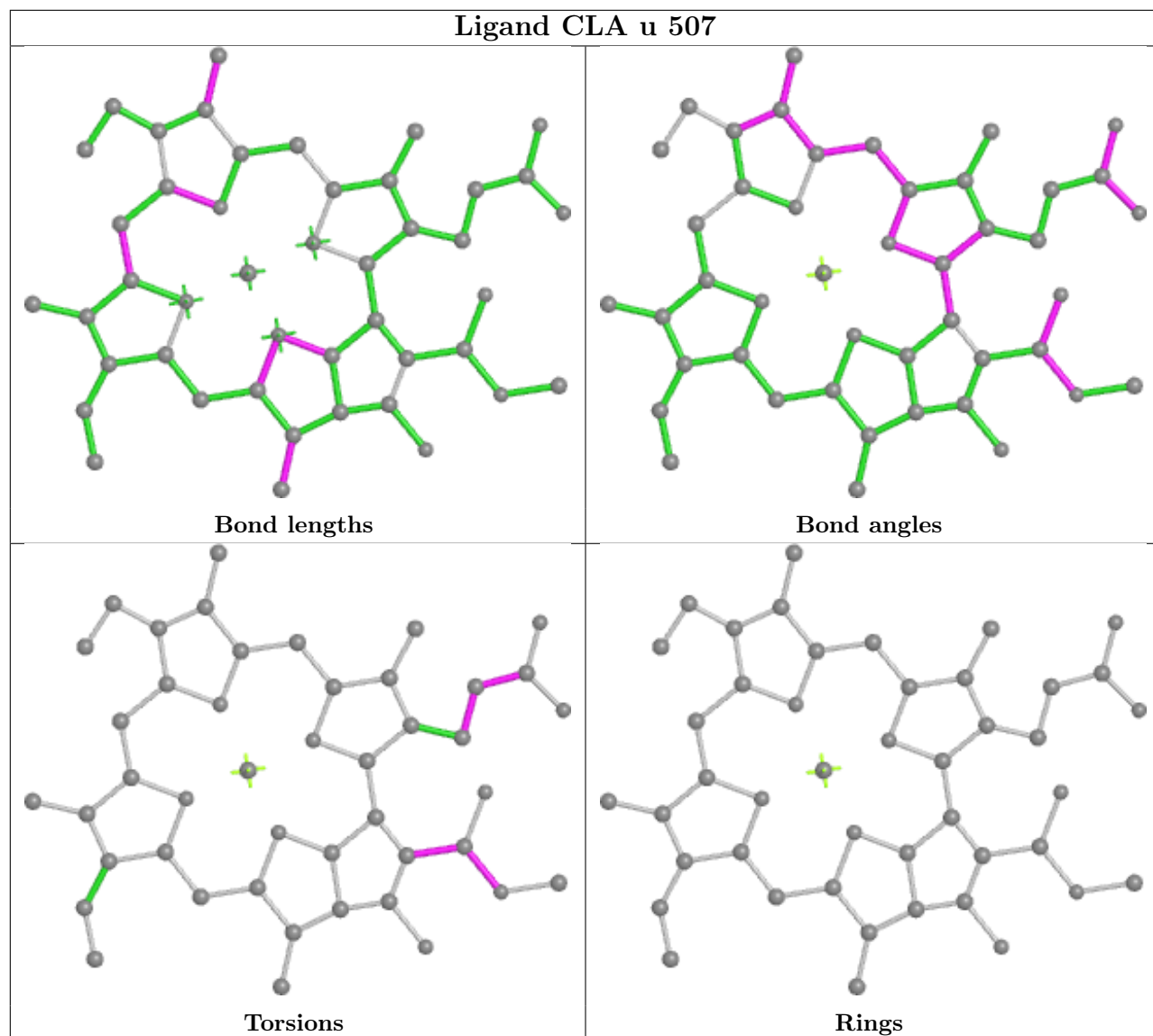


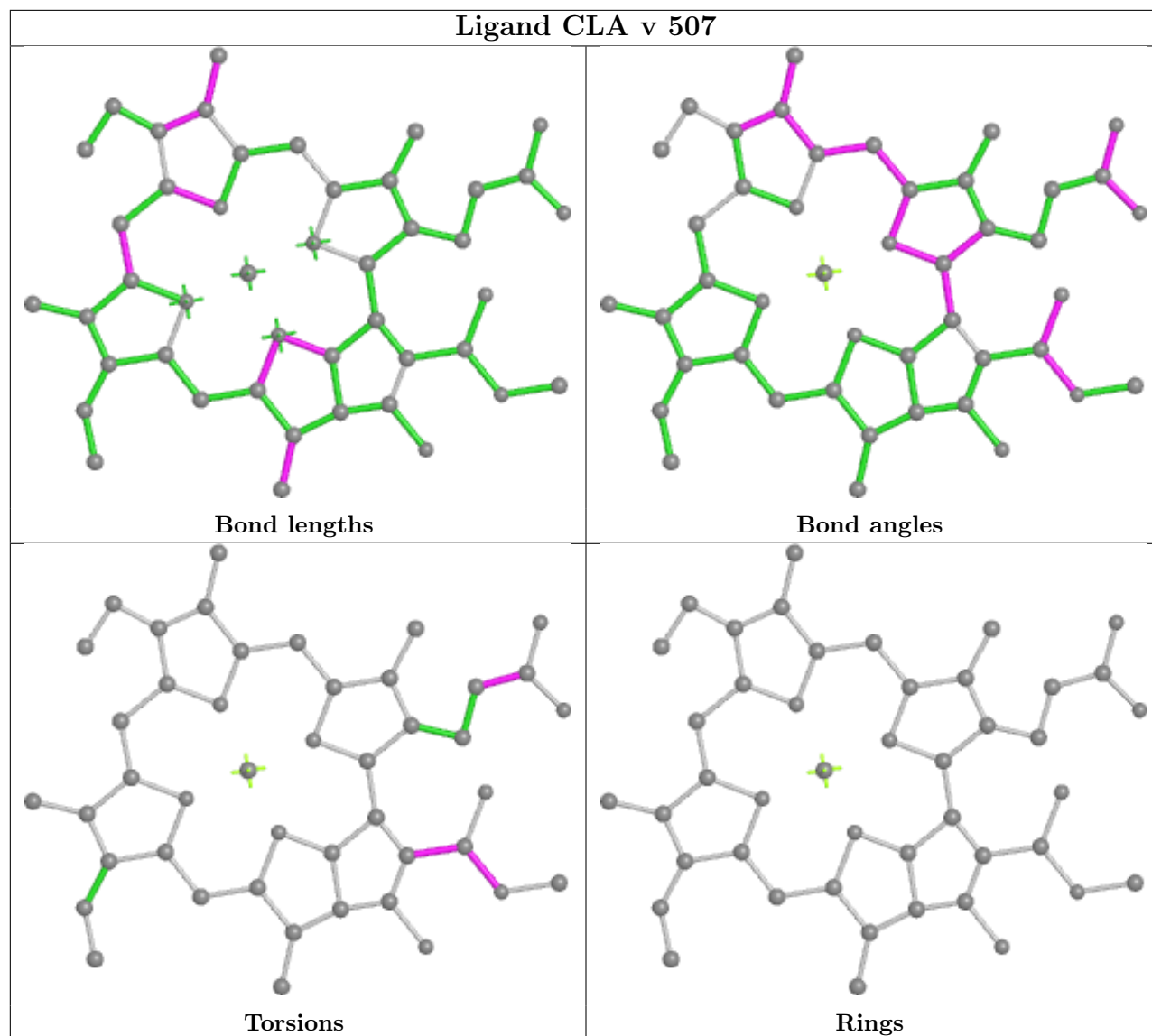


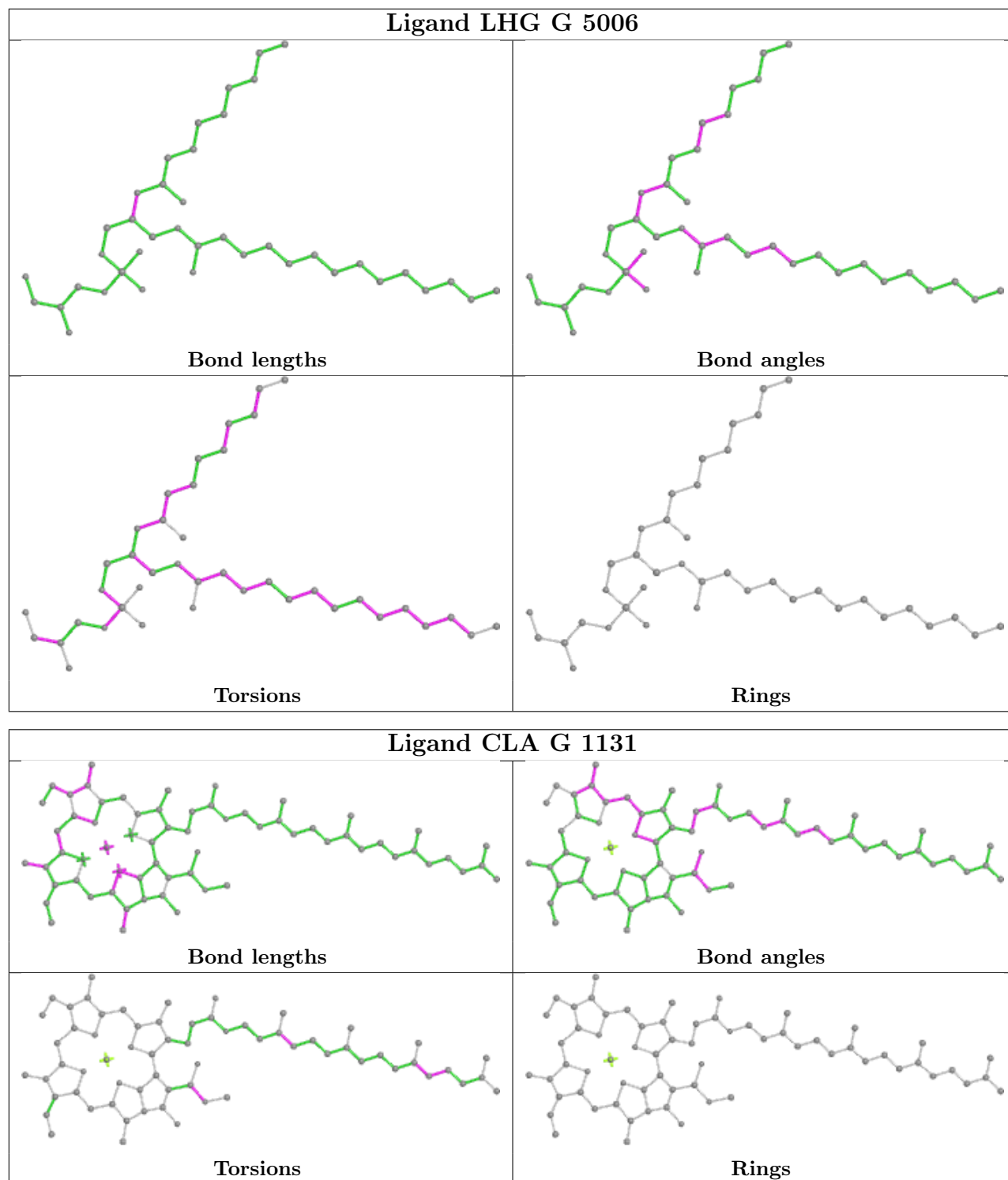


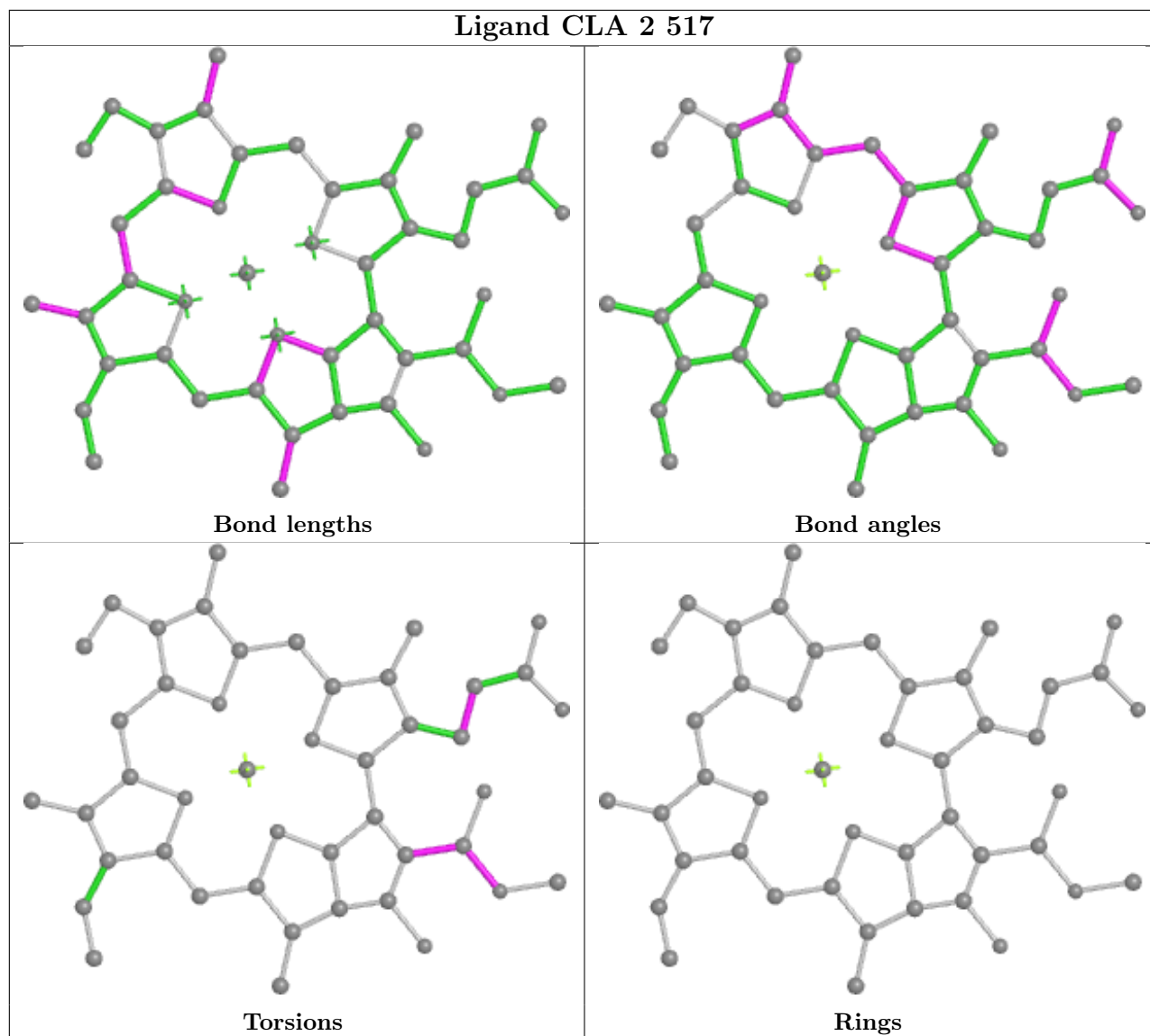
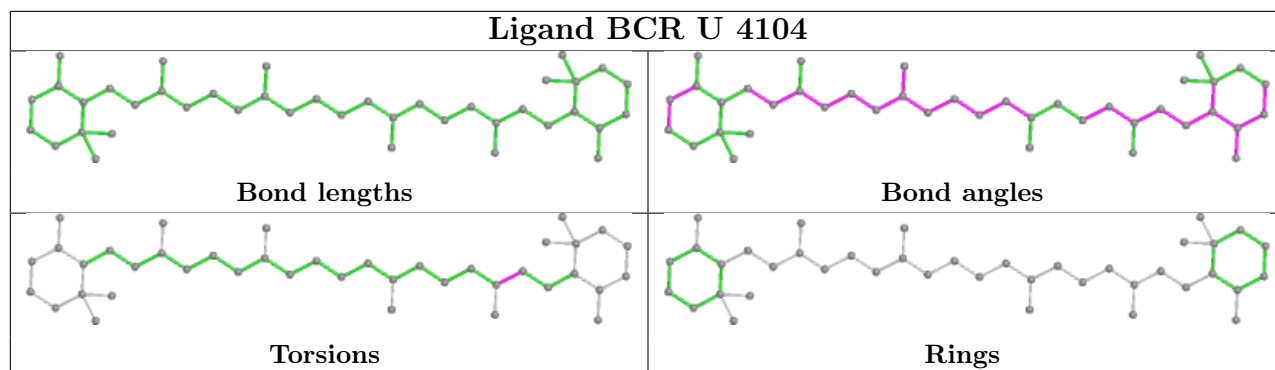


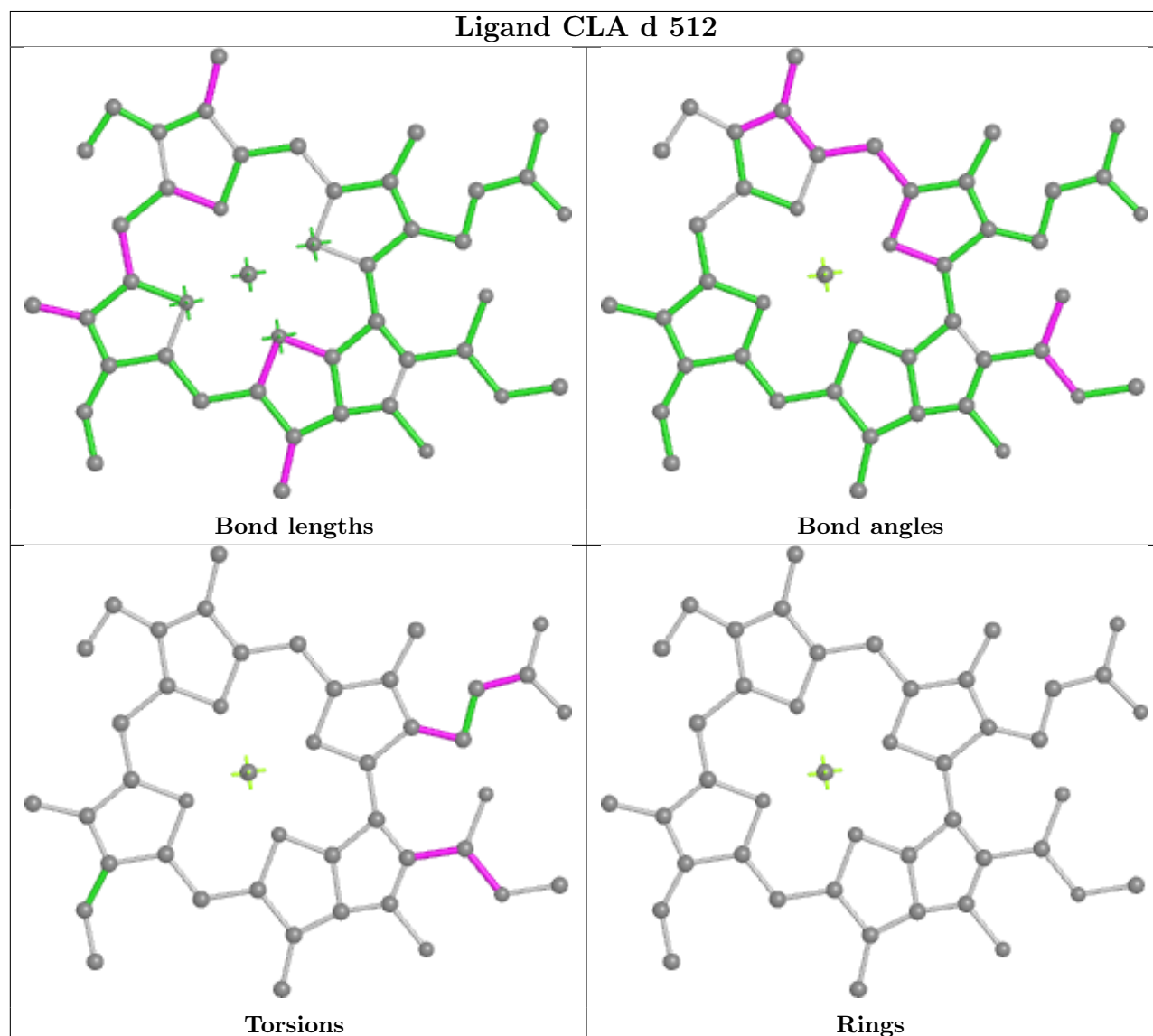
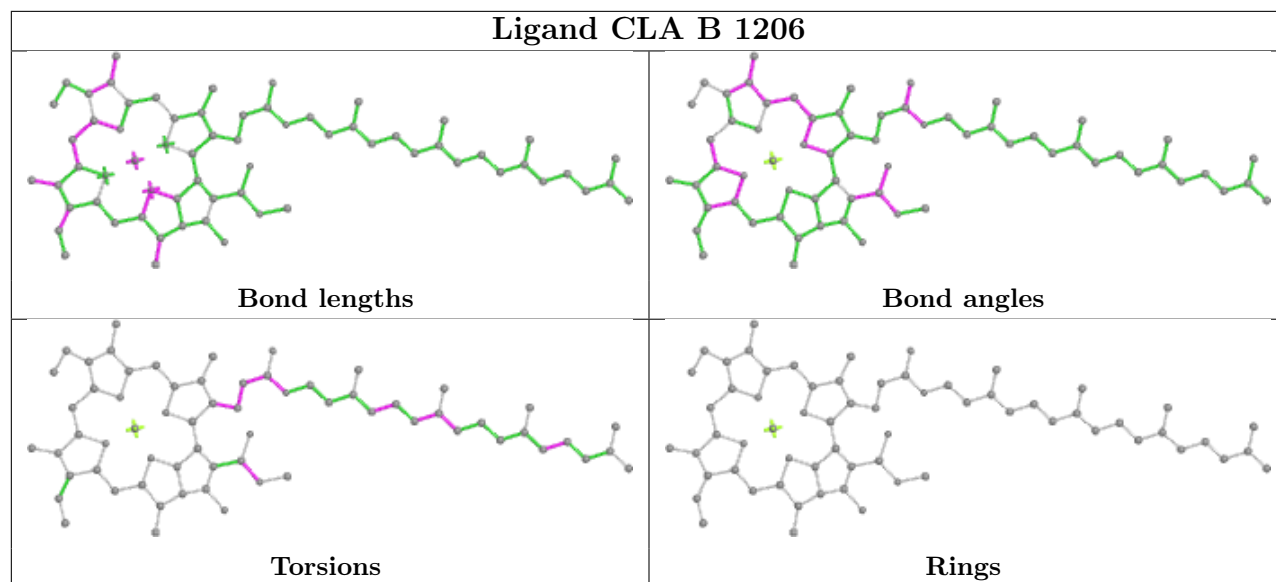




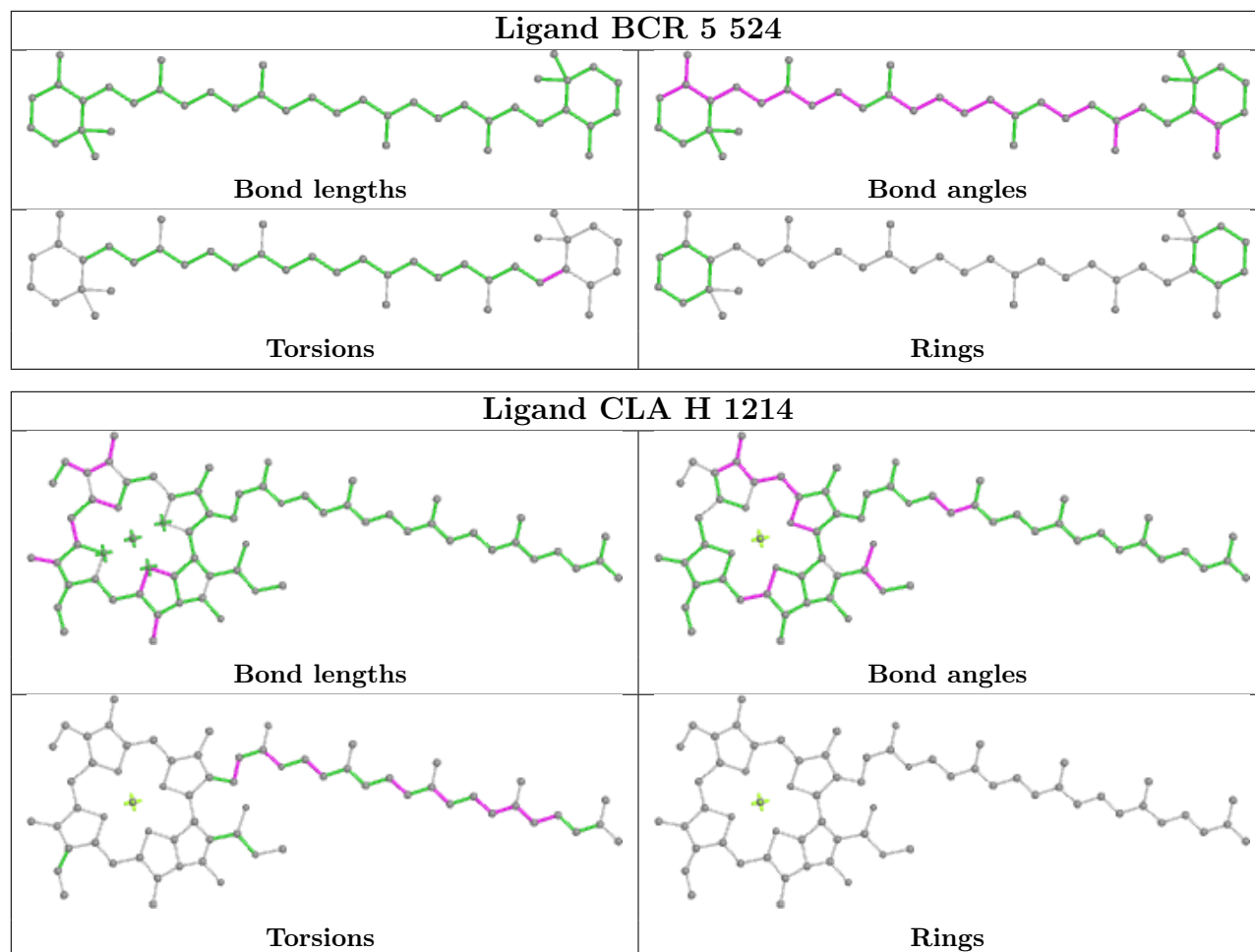


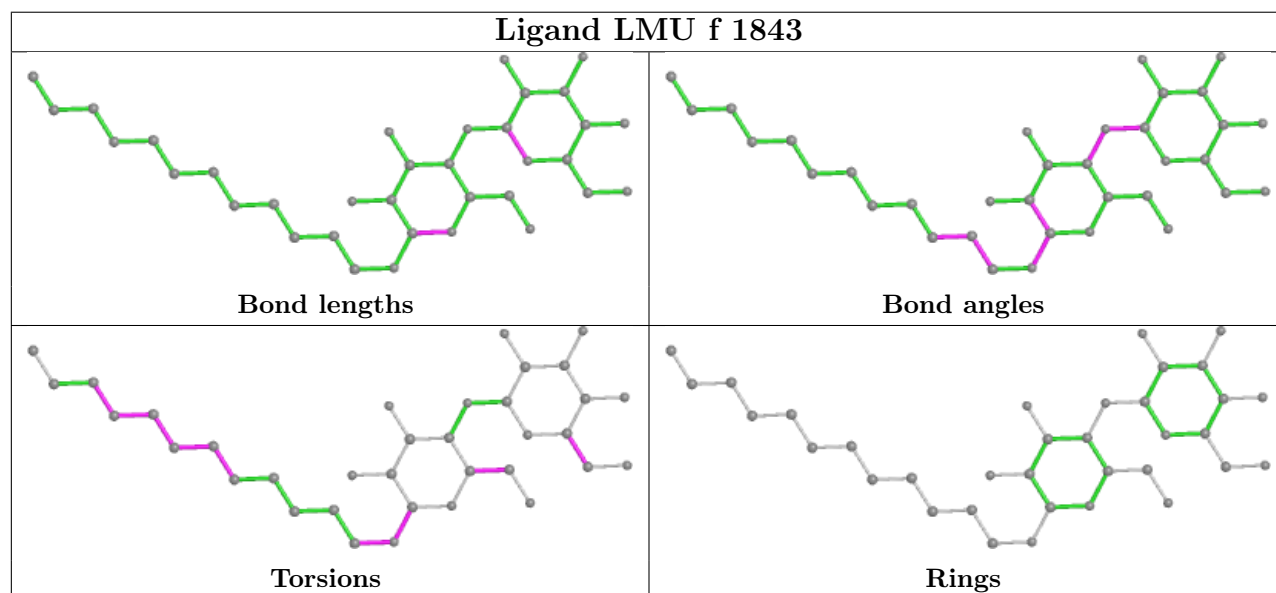
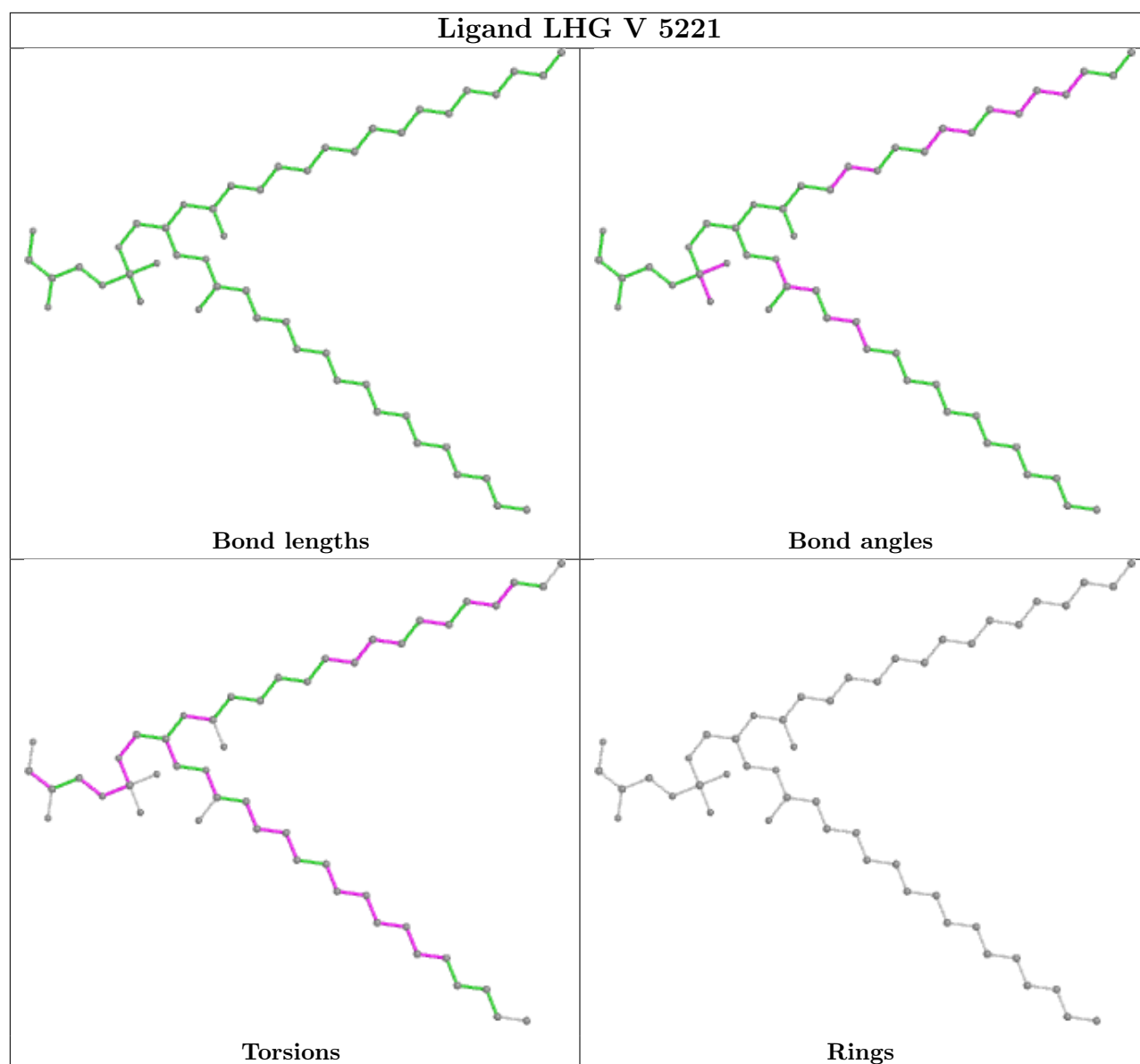


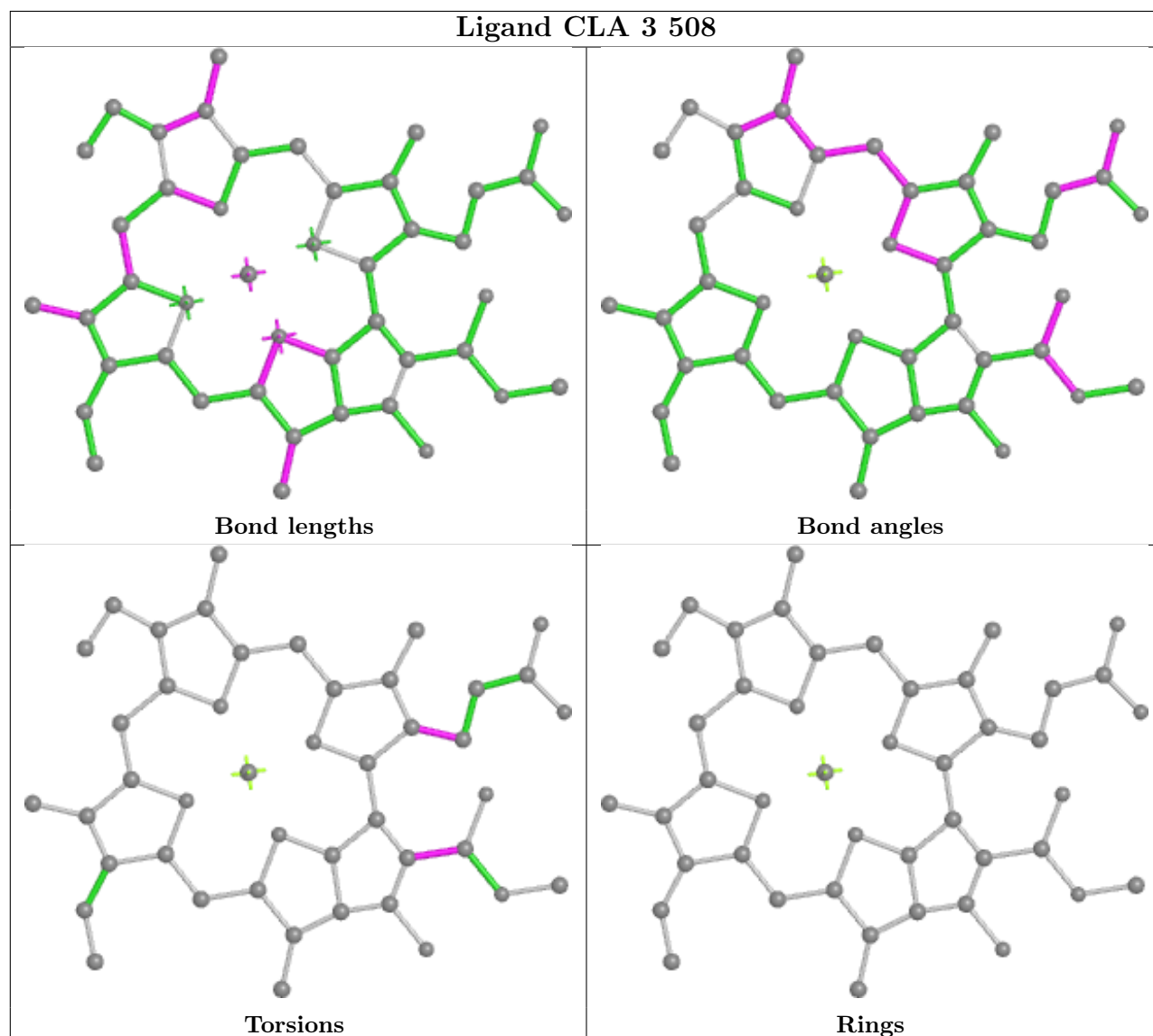
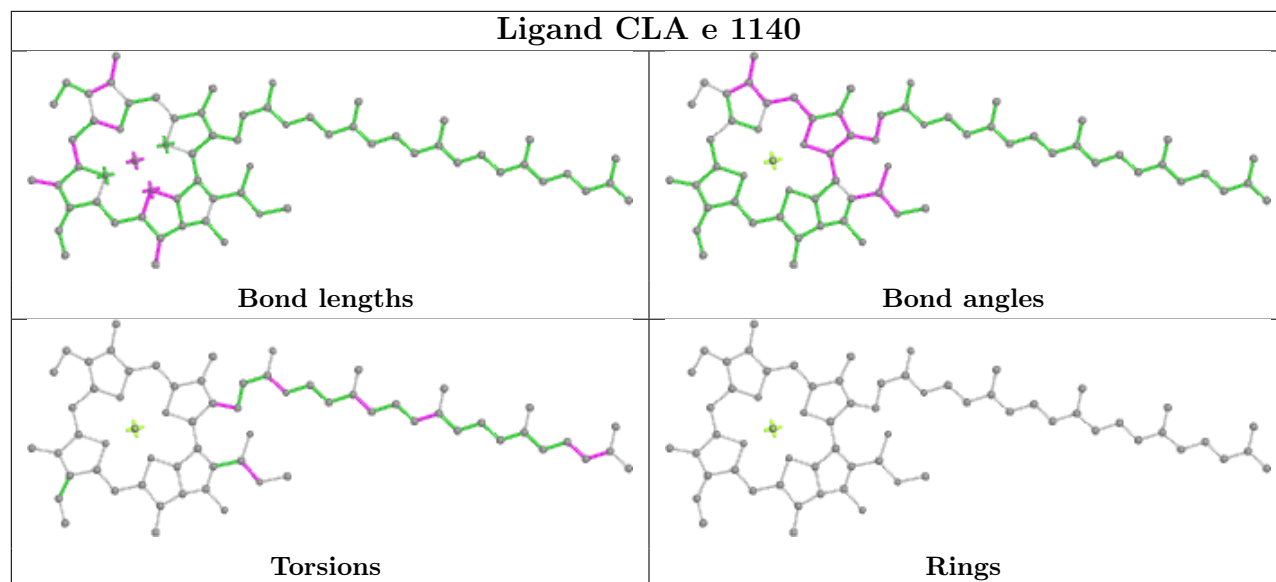


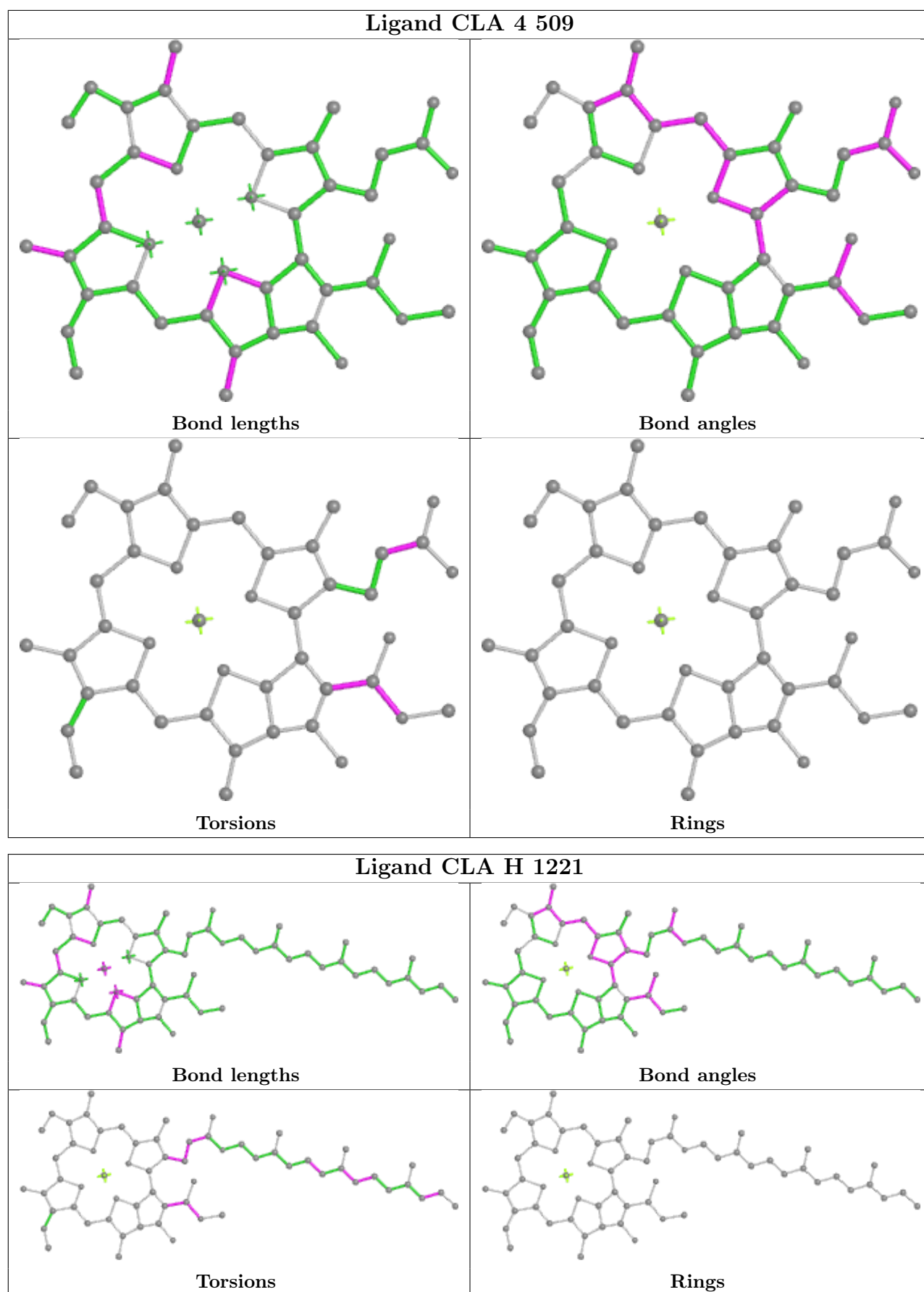


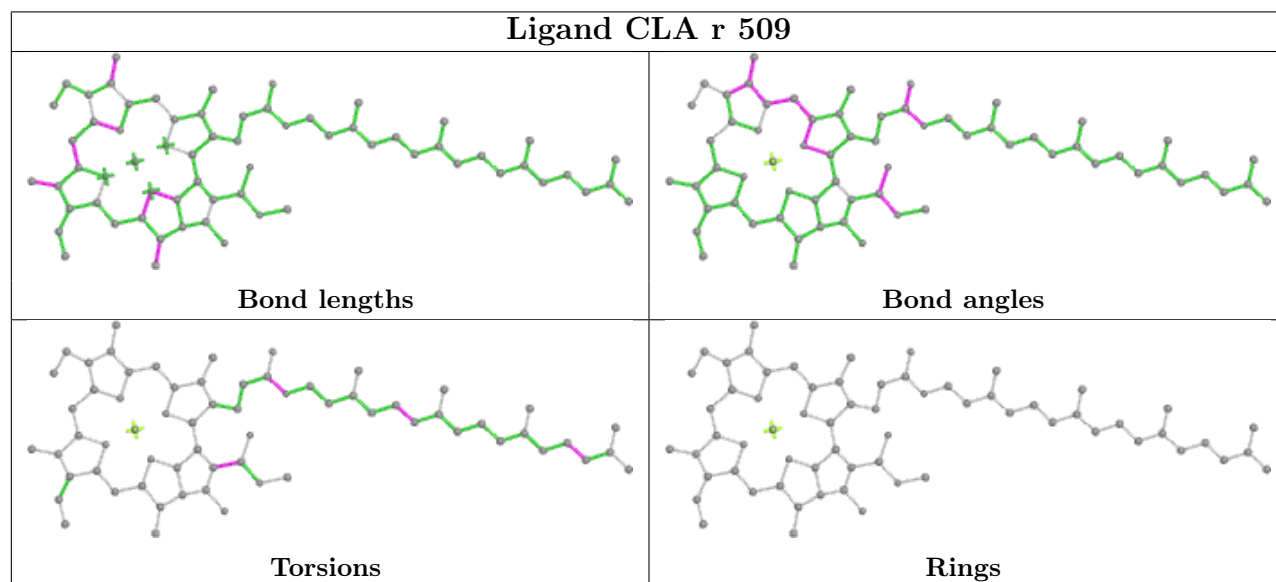
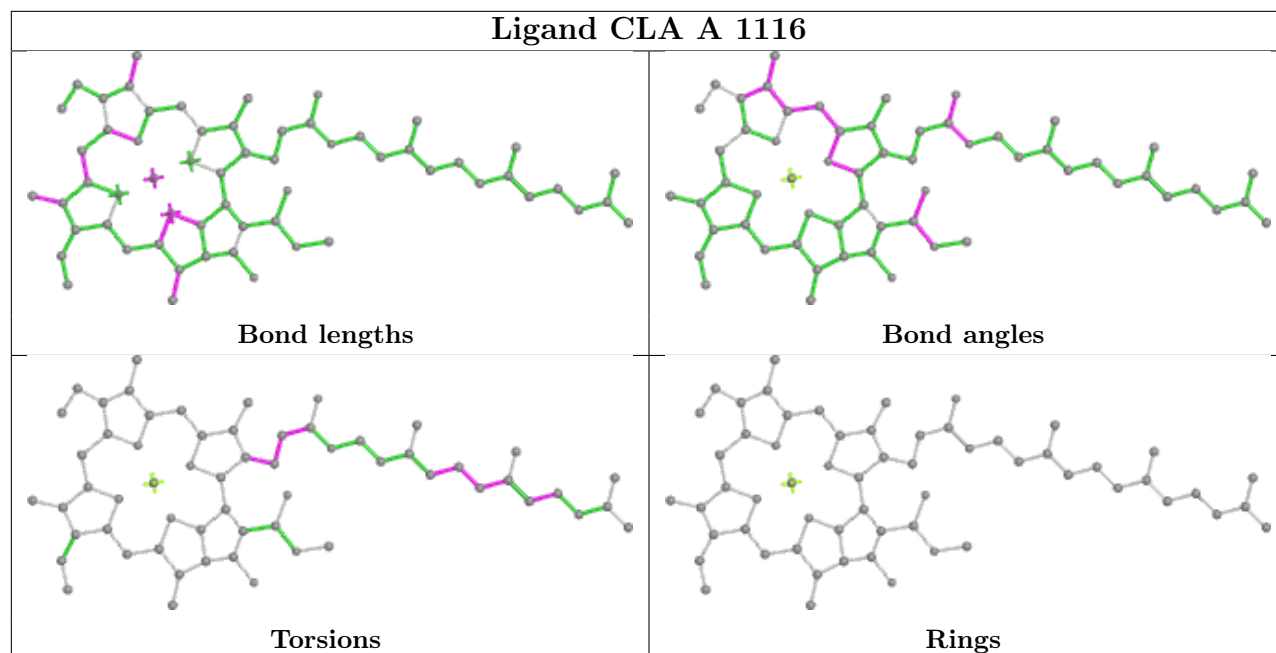


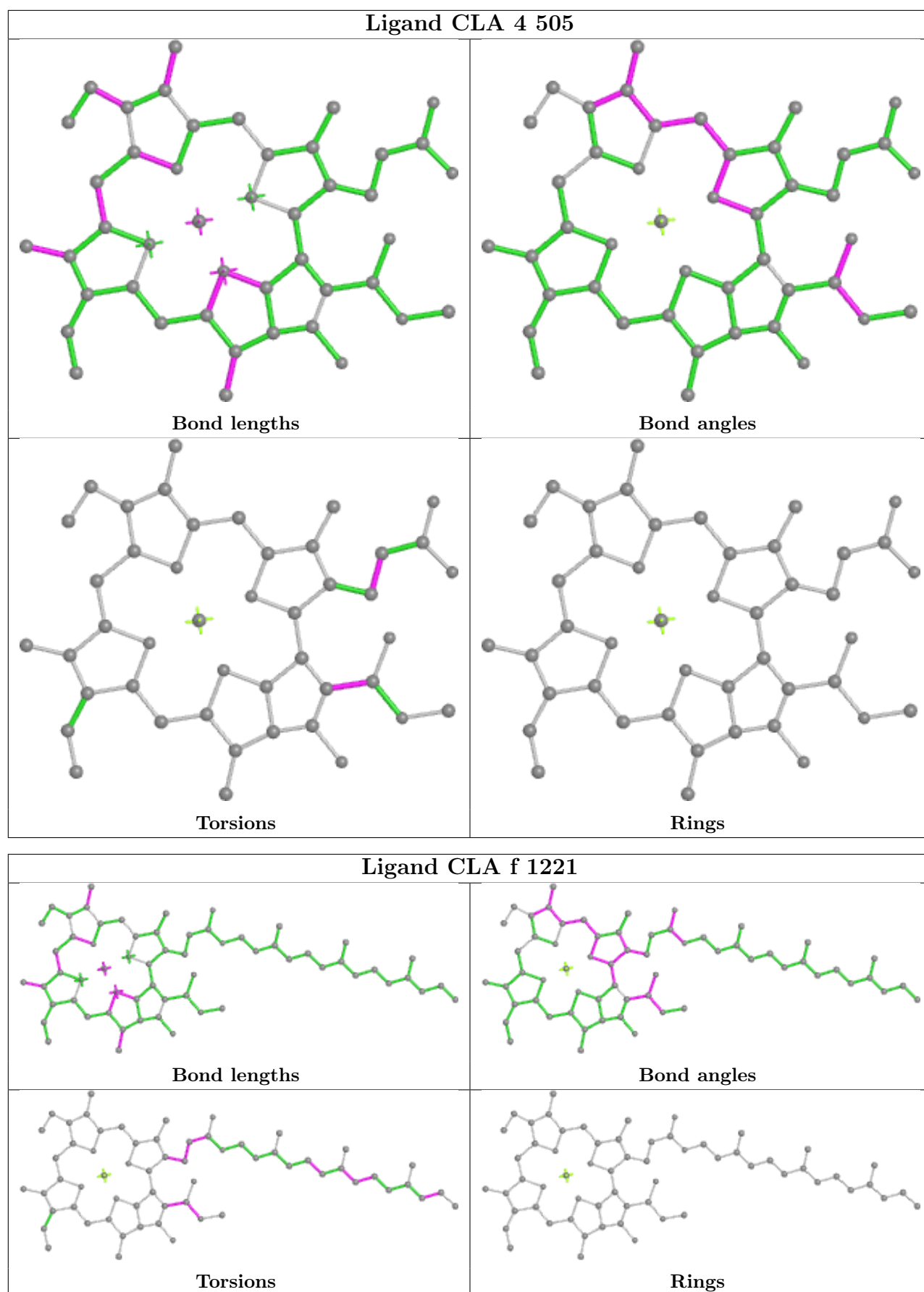


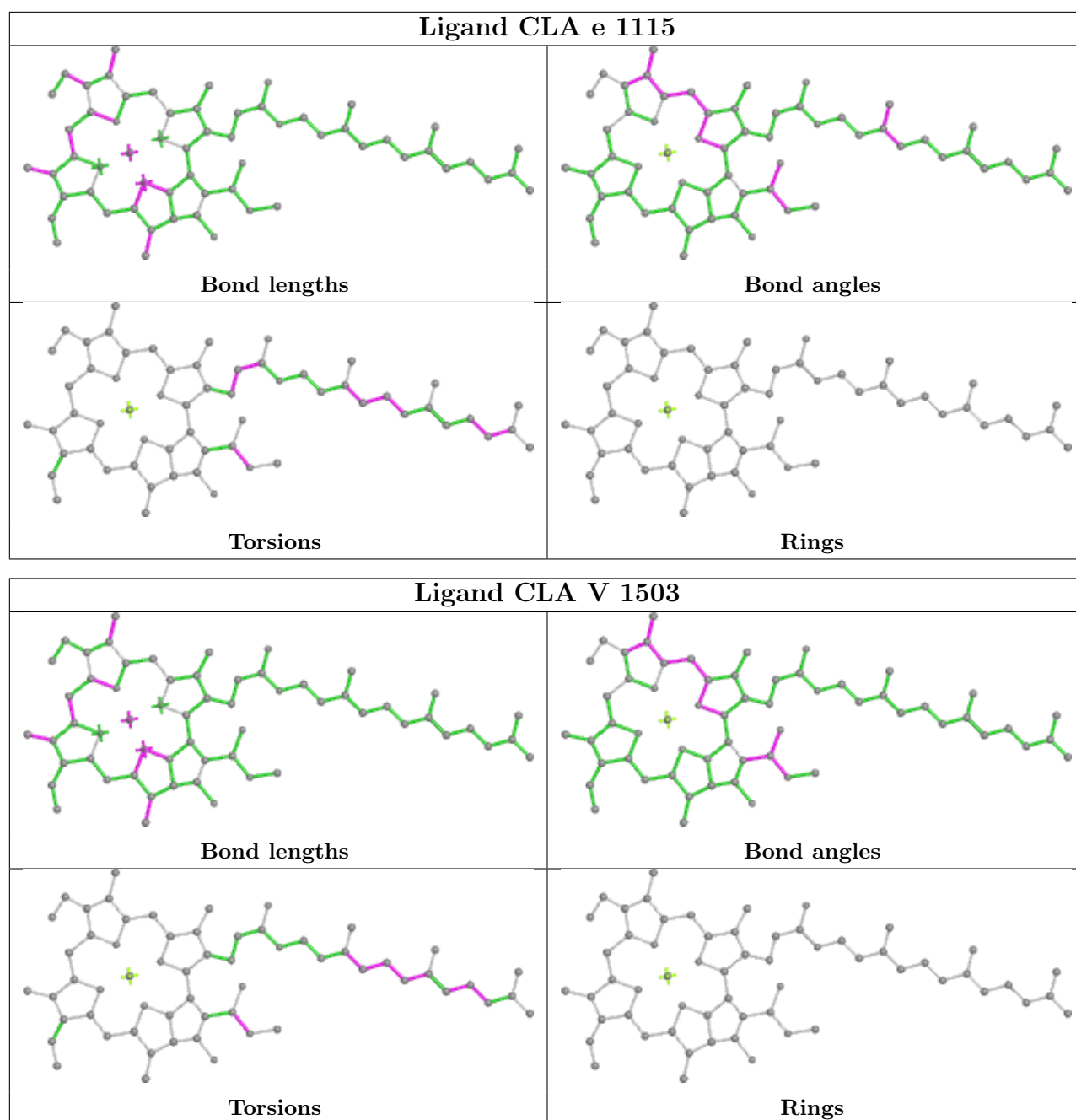


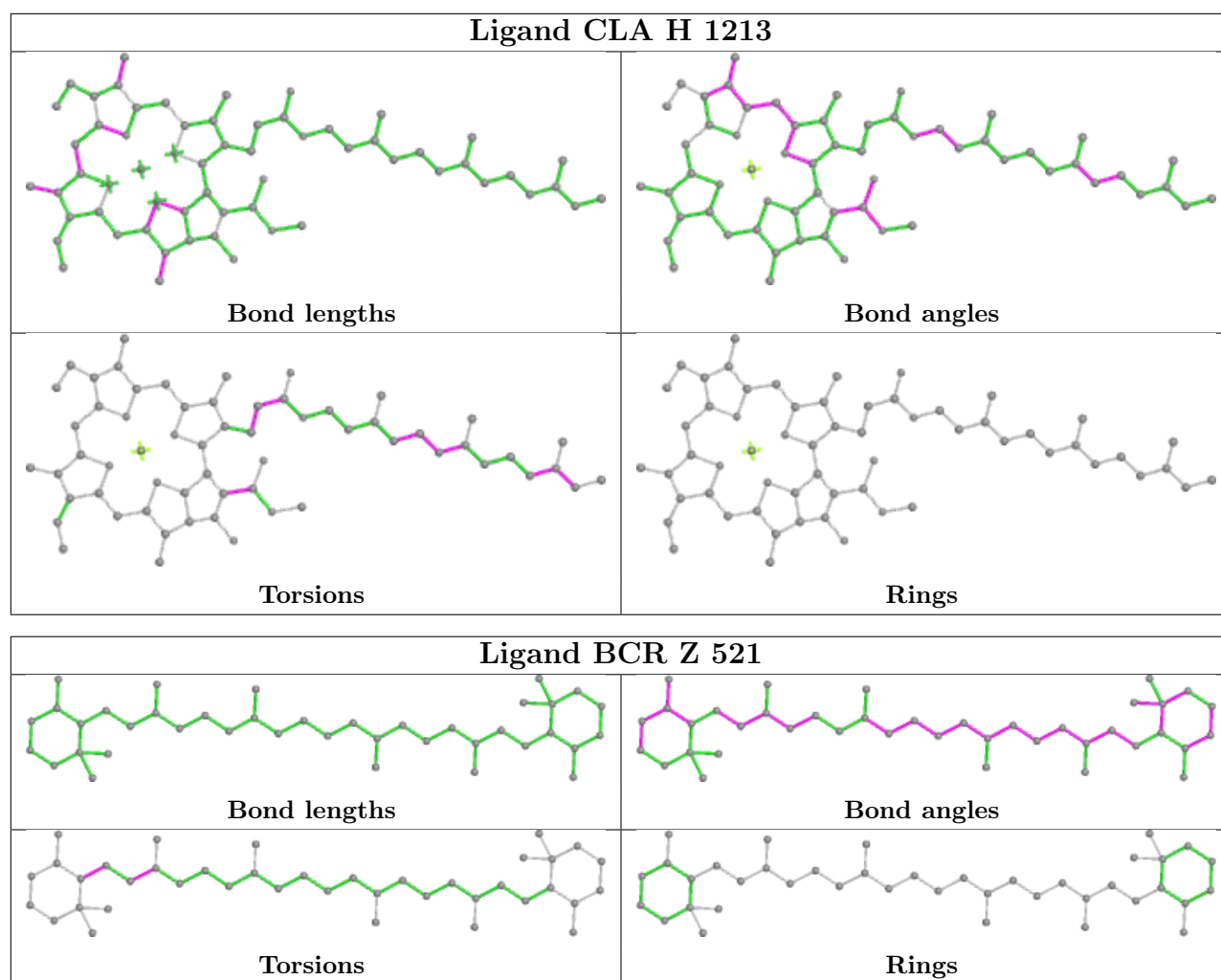




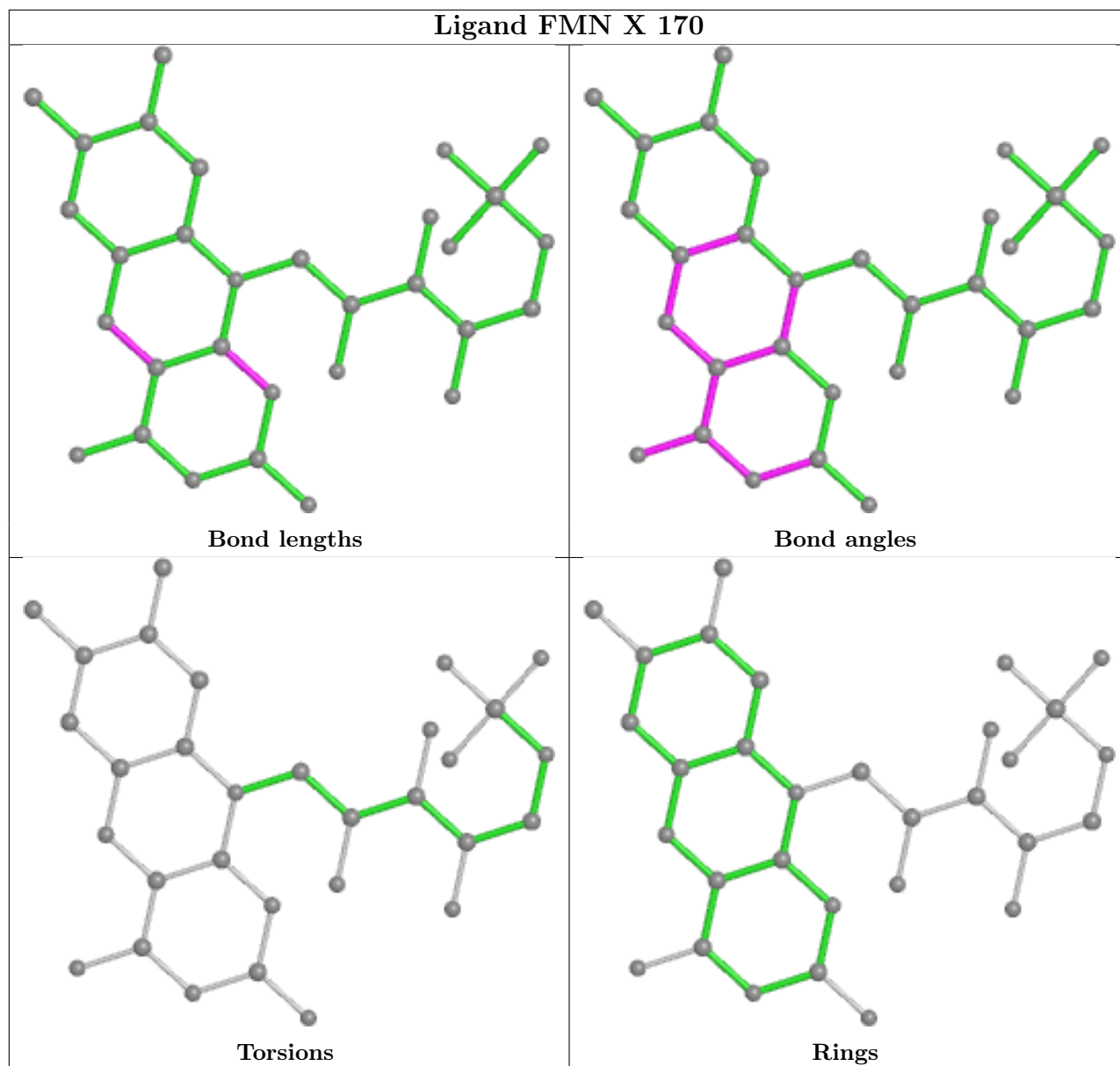


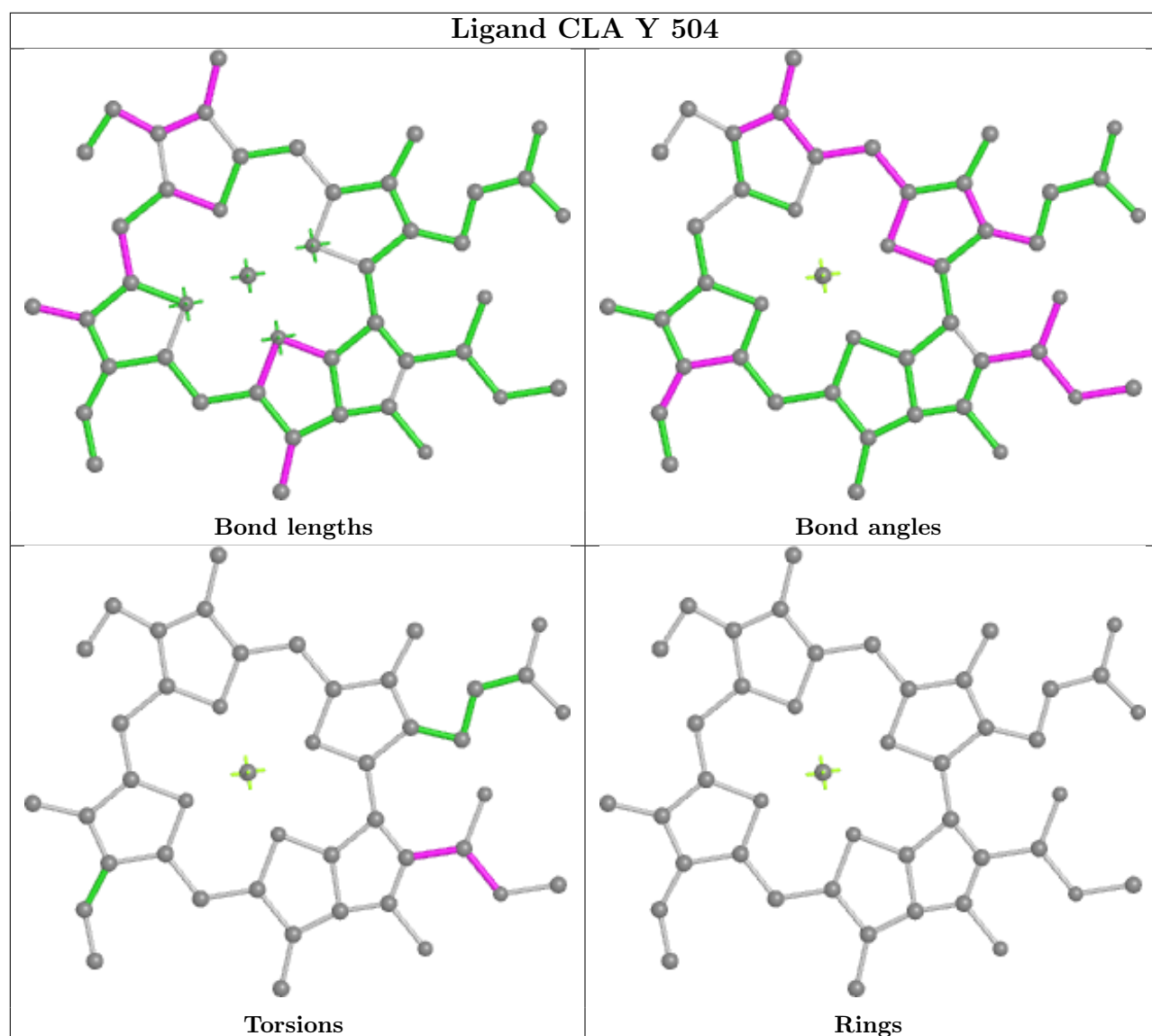


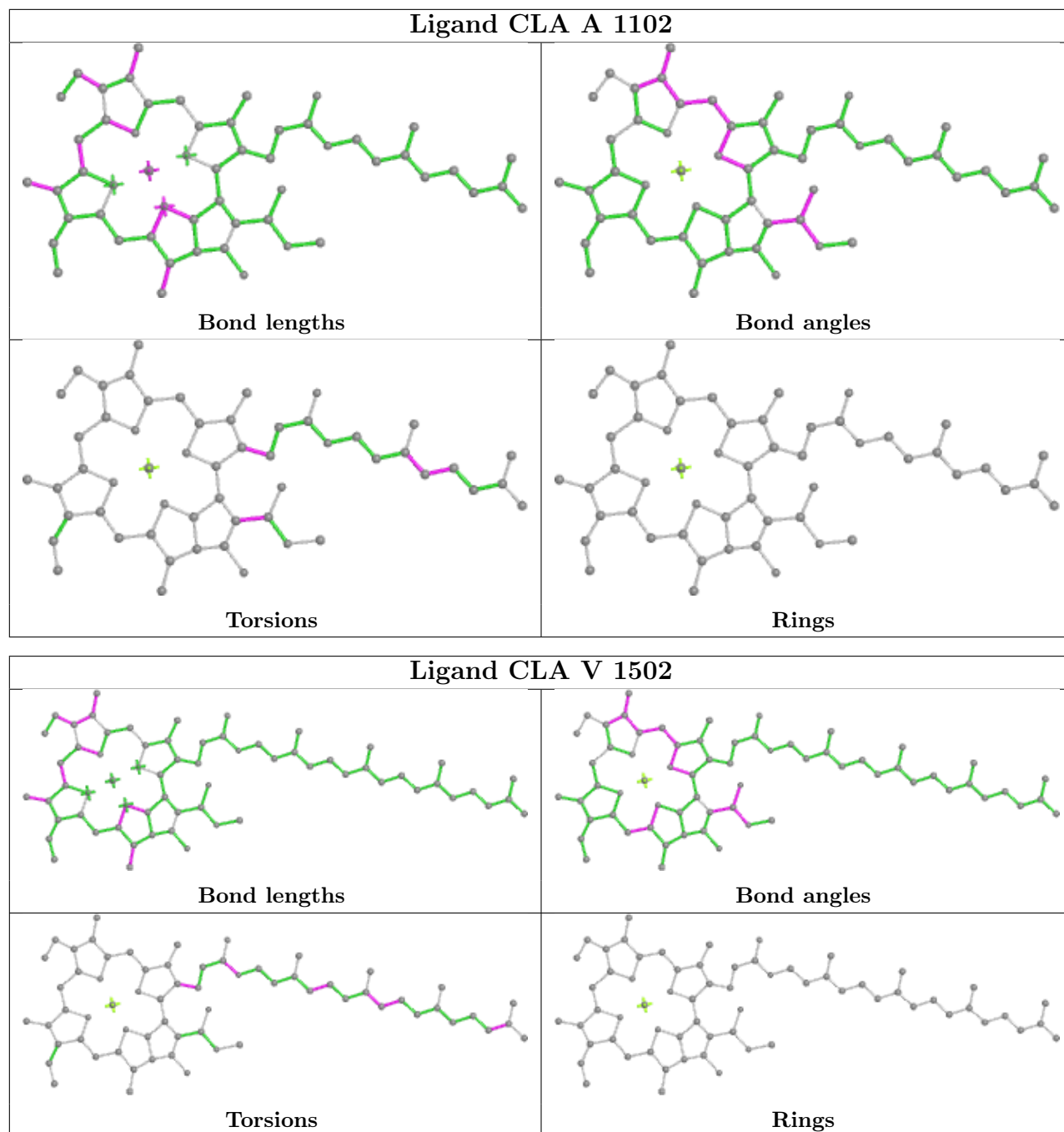


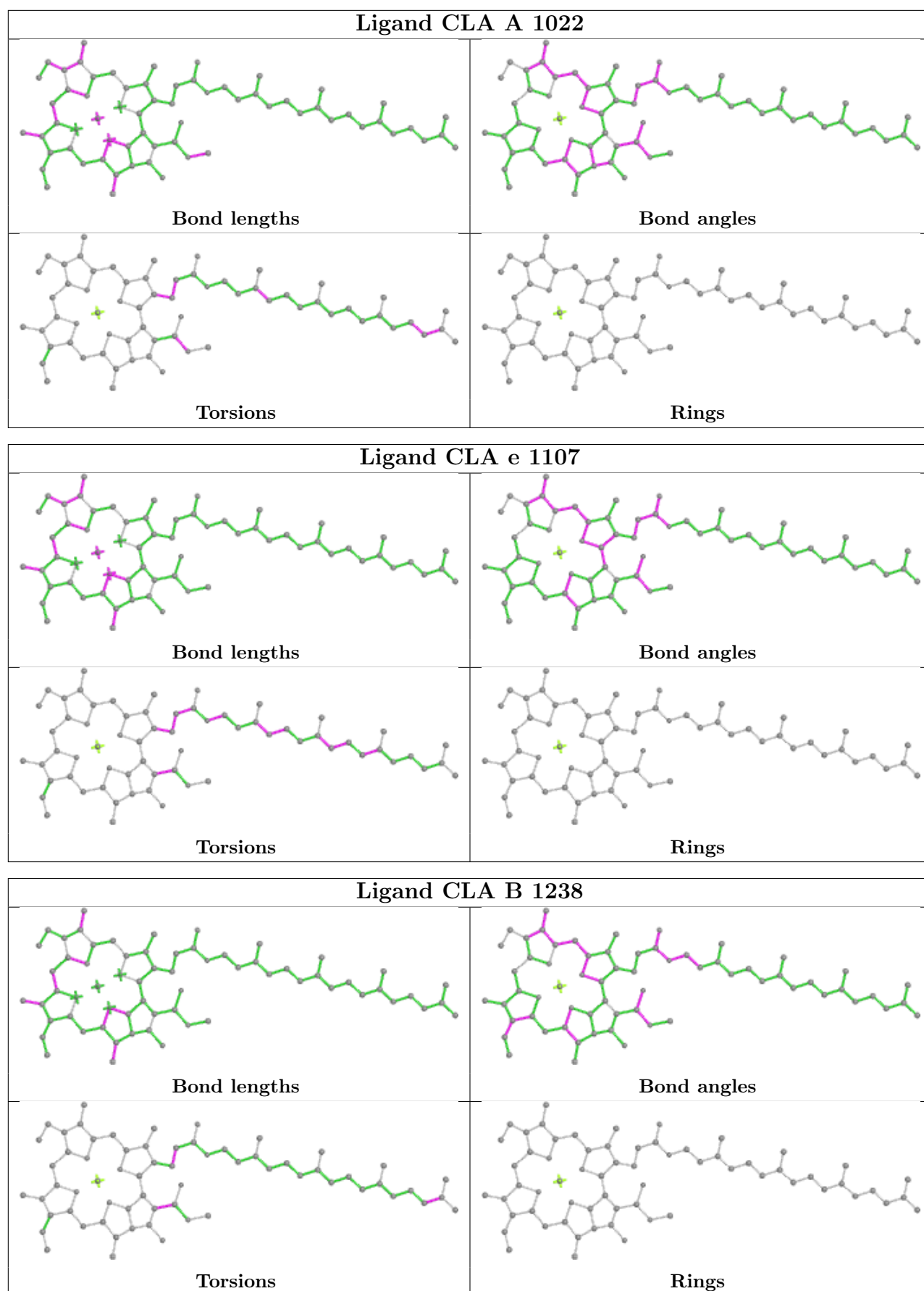


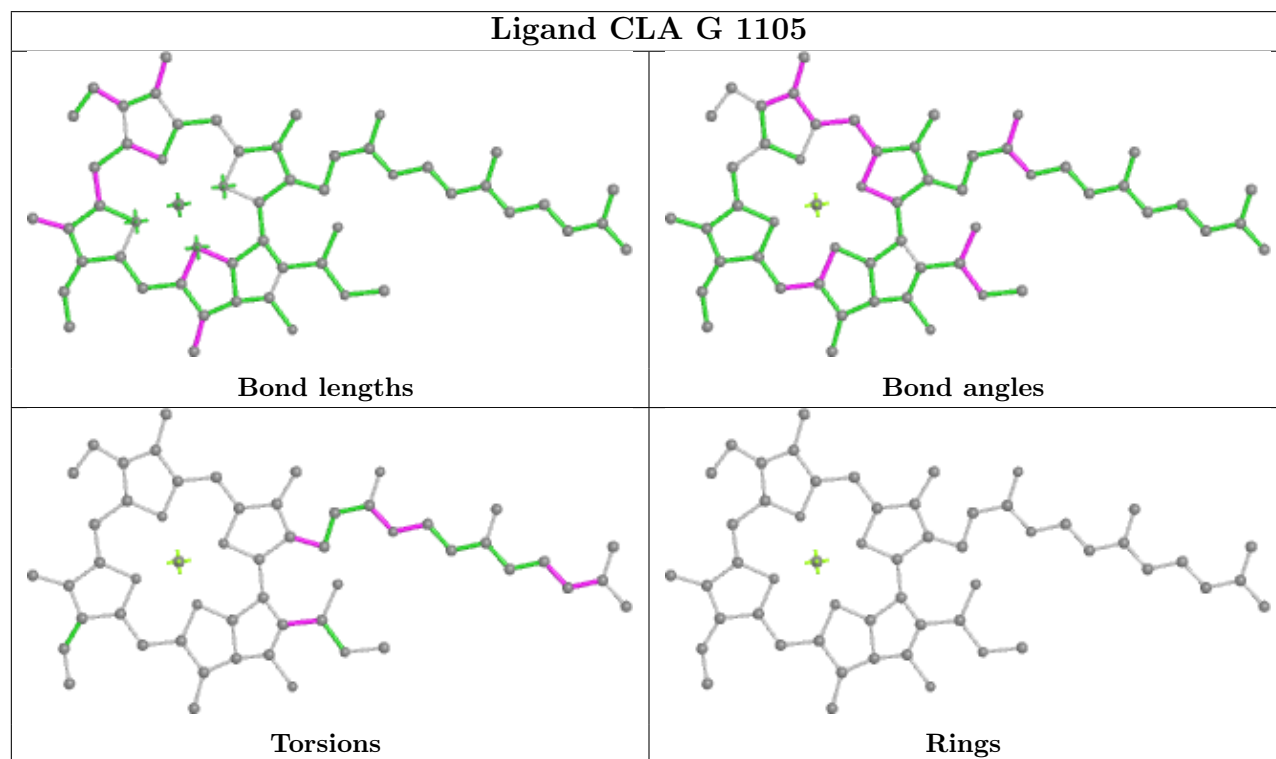
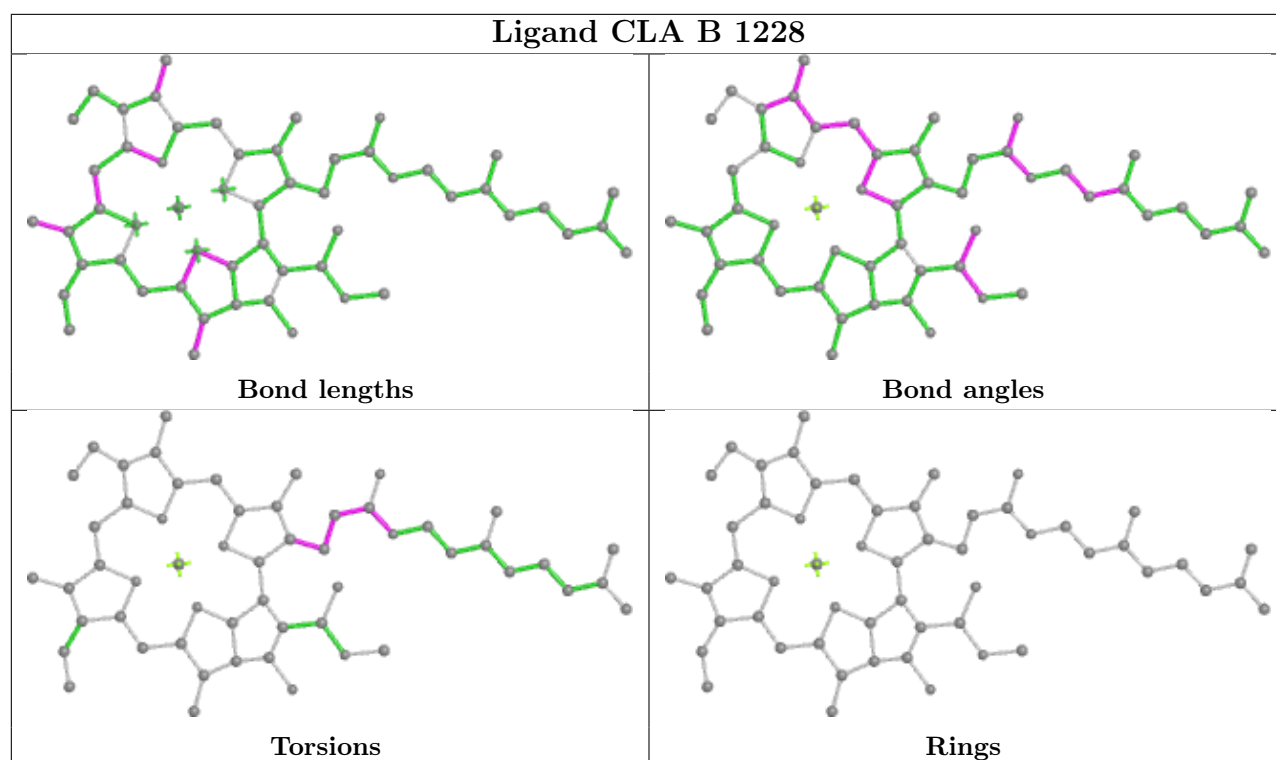


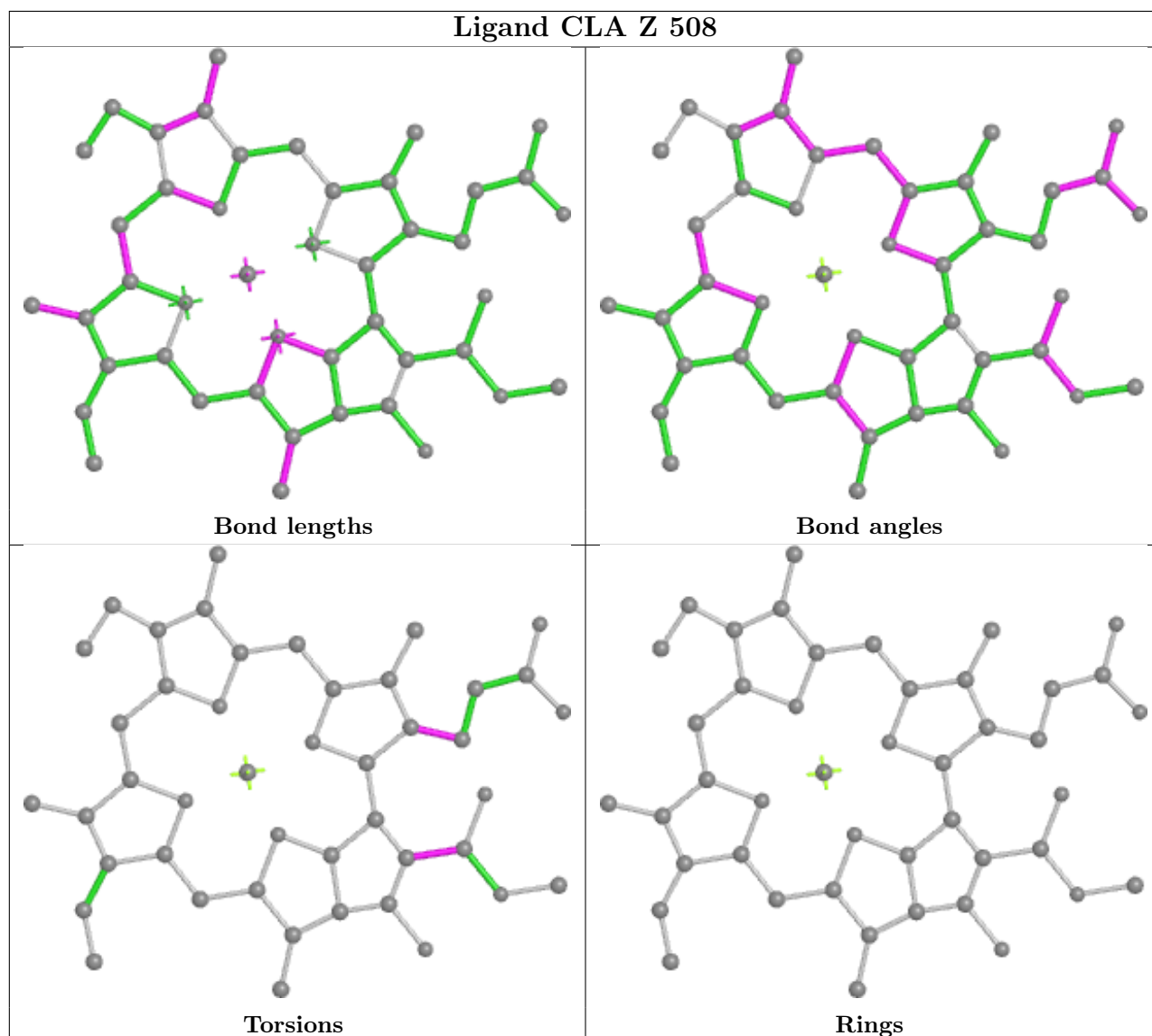
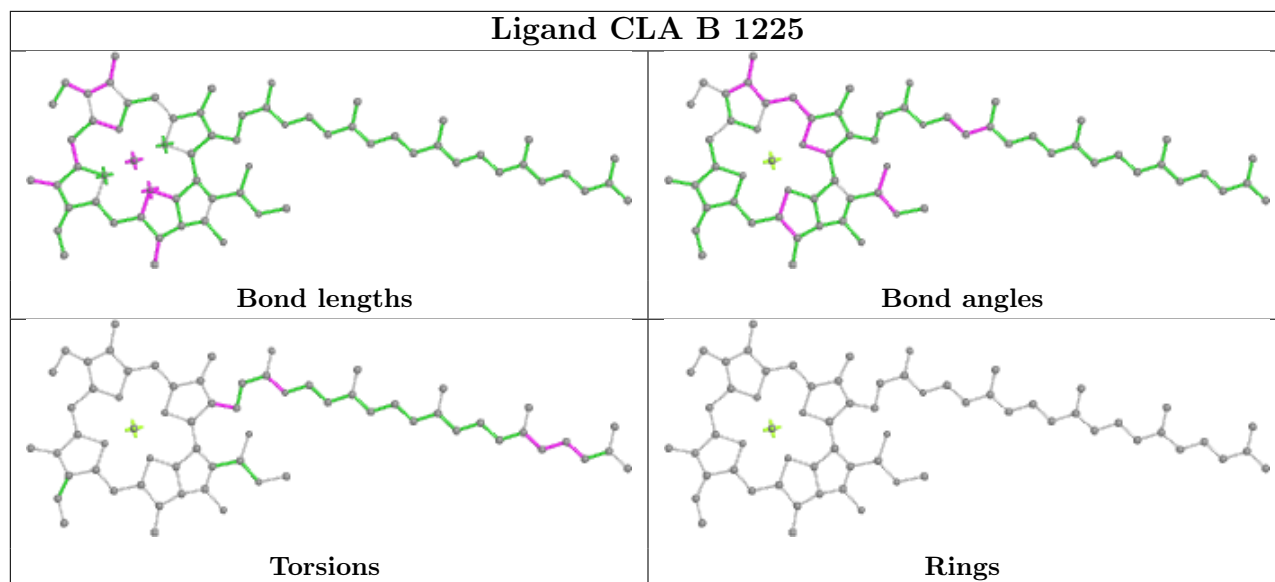


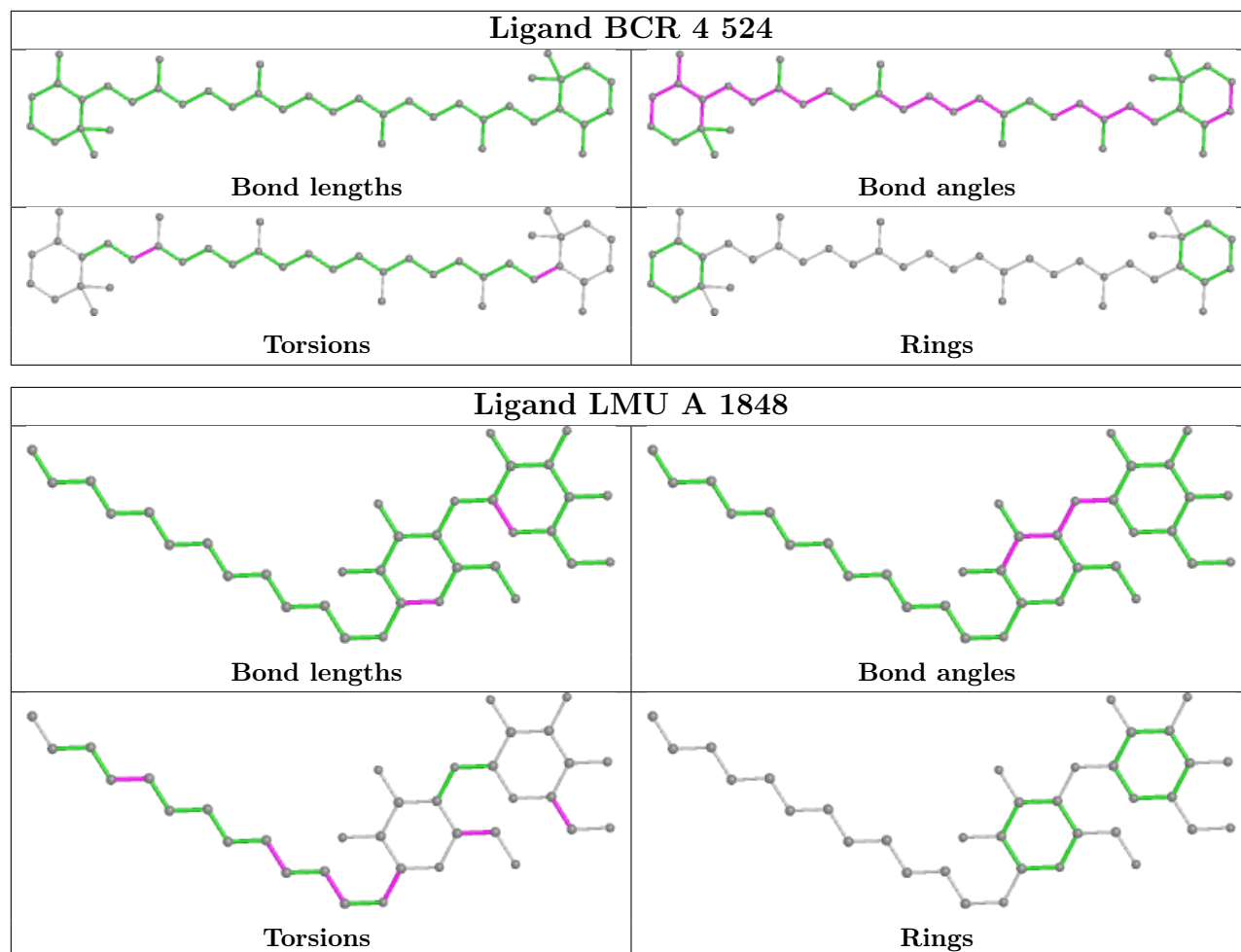




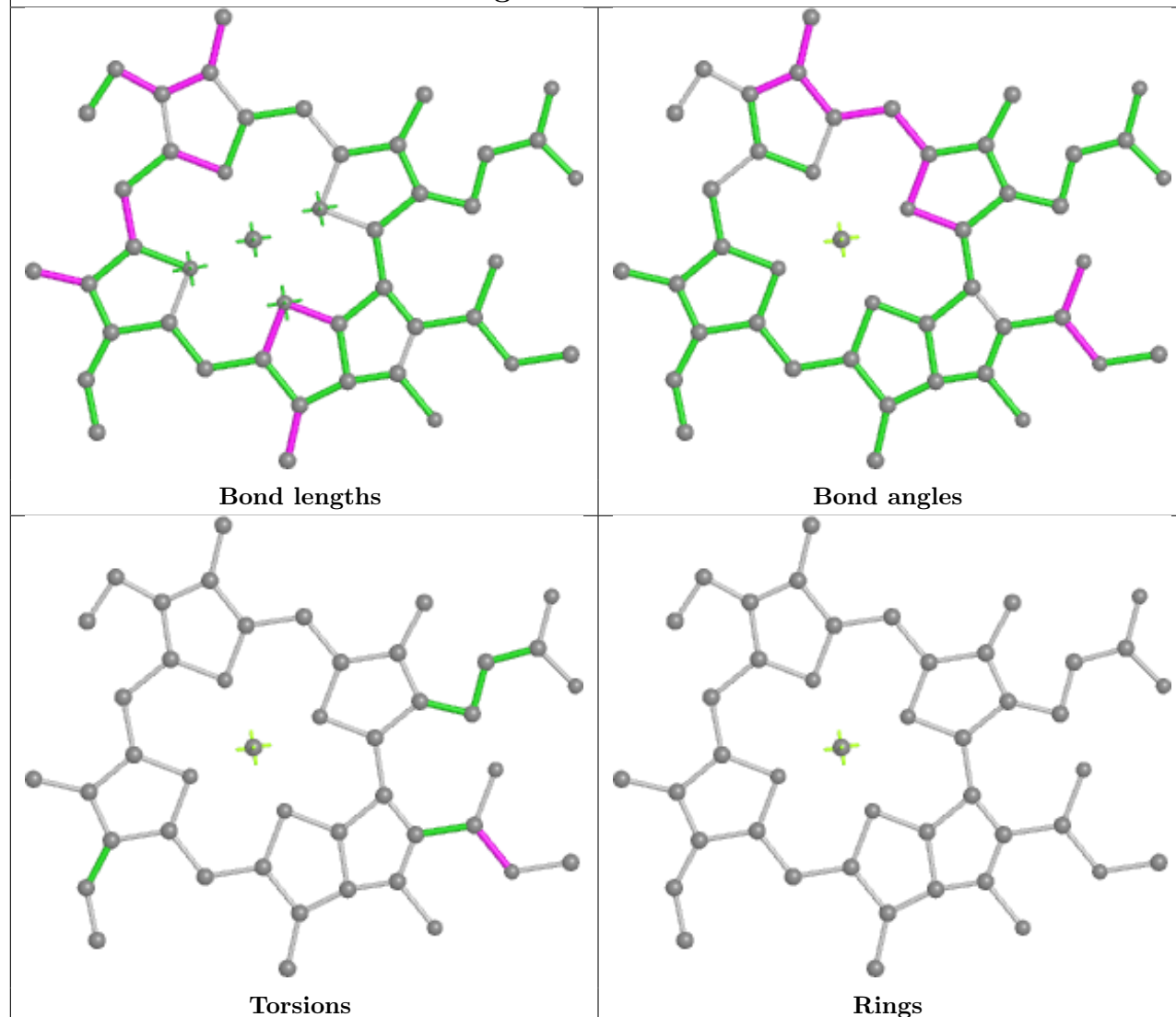




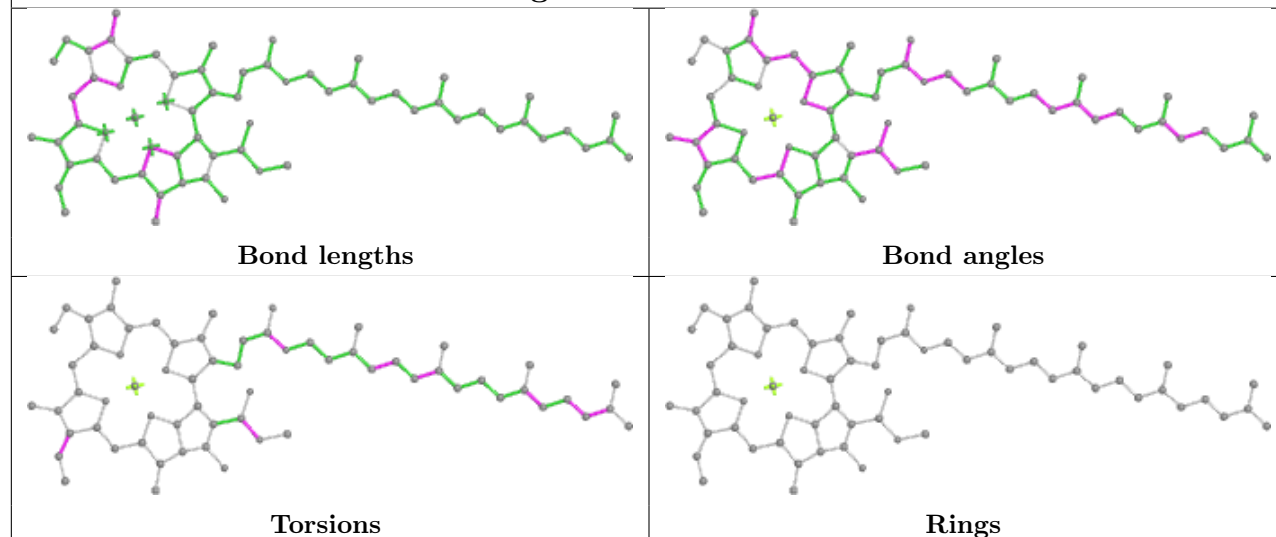




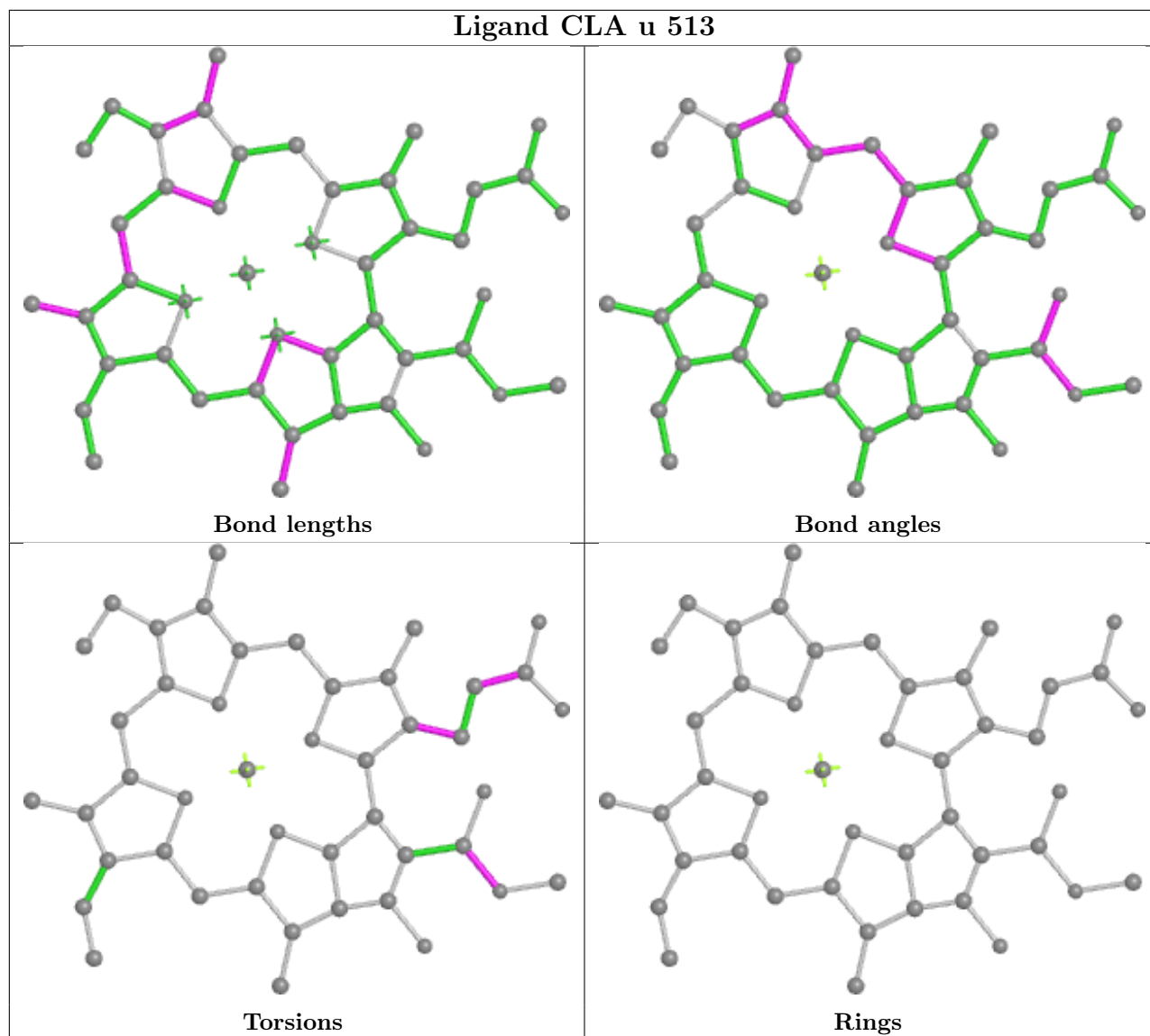
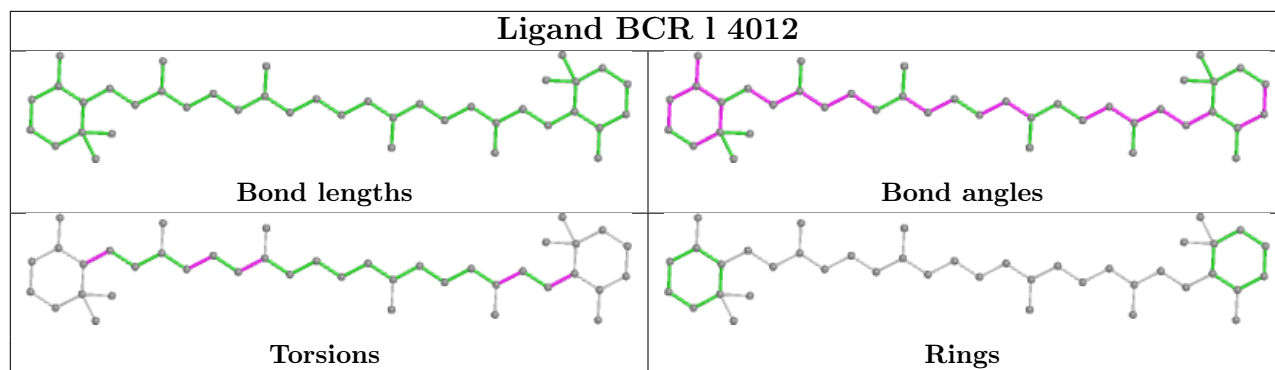
## Ligand CLA 2 513

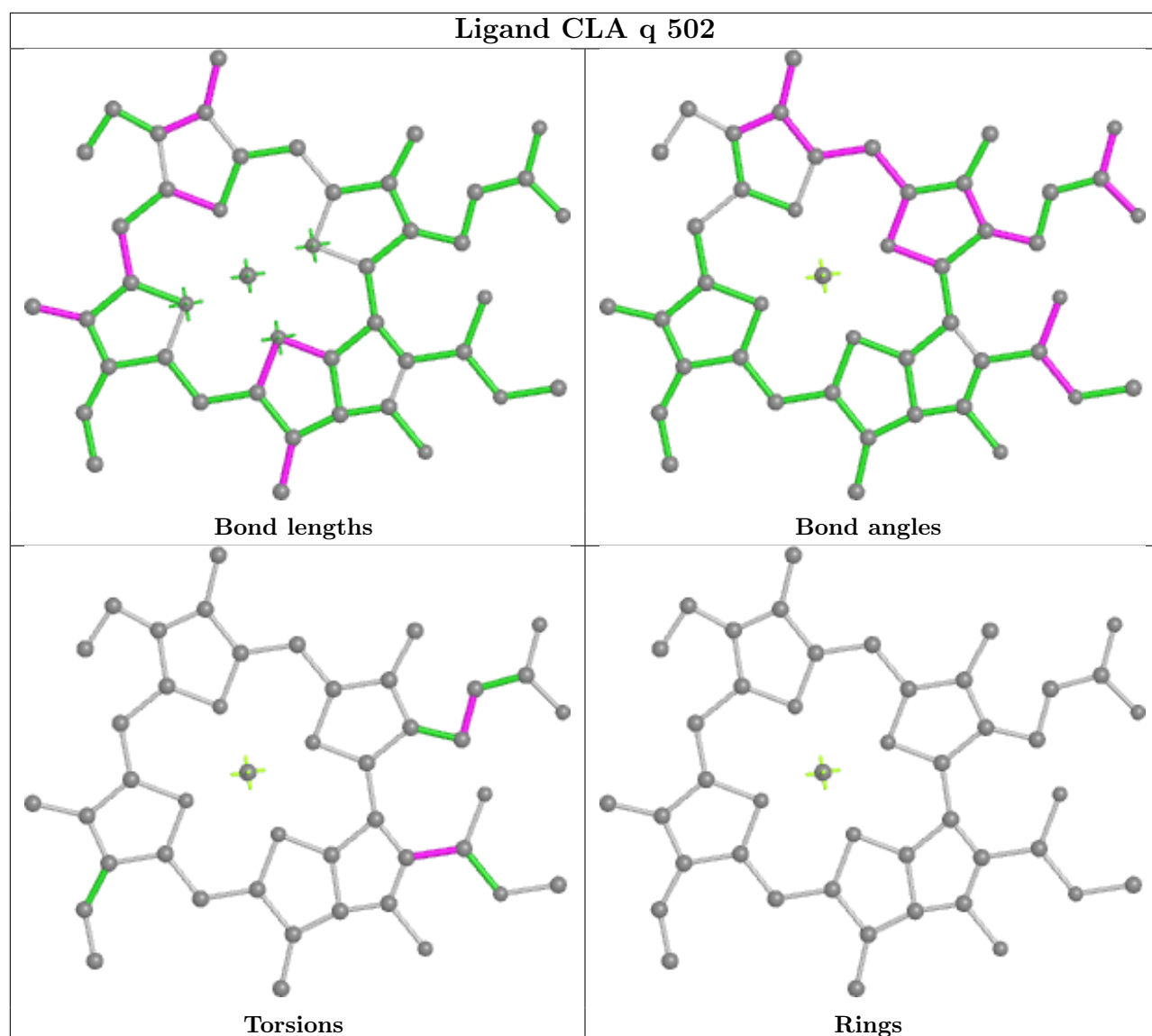


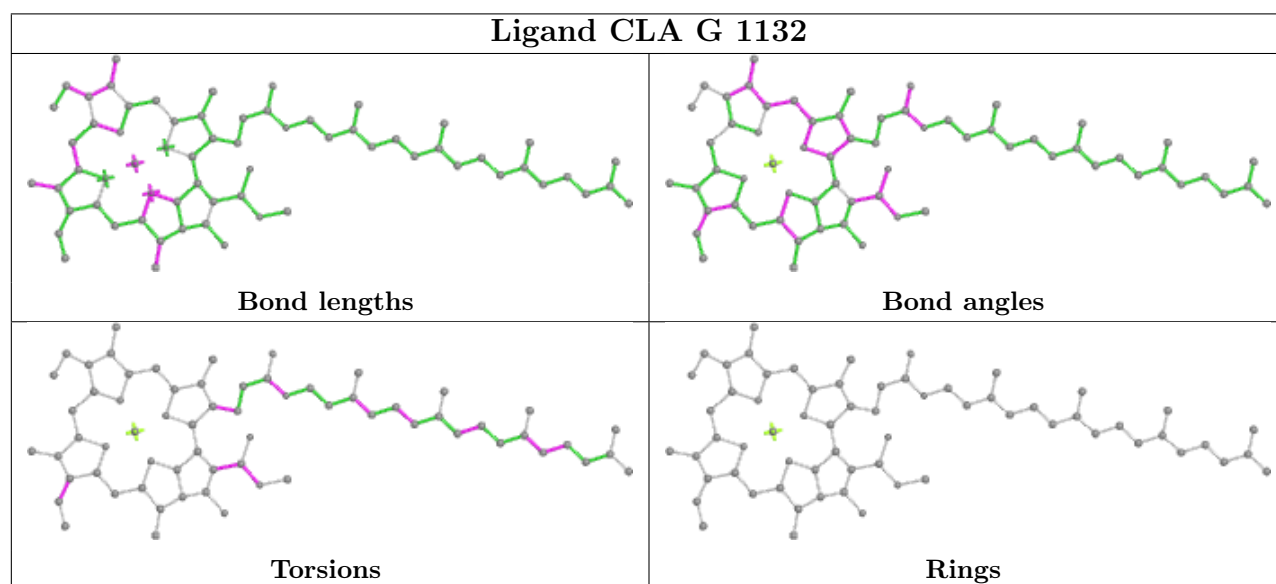
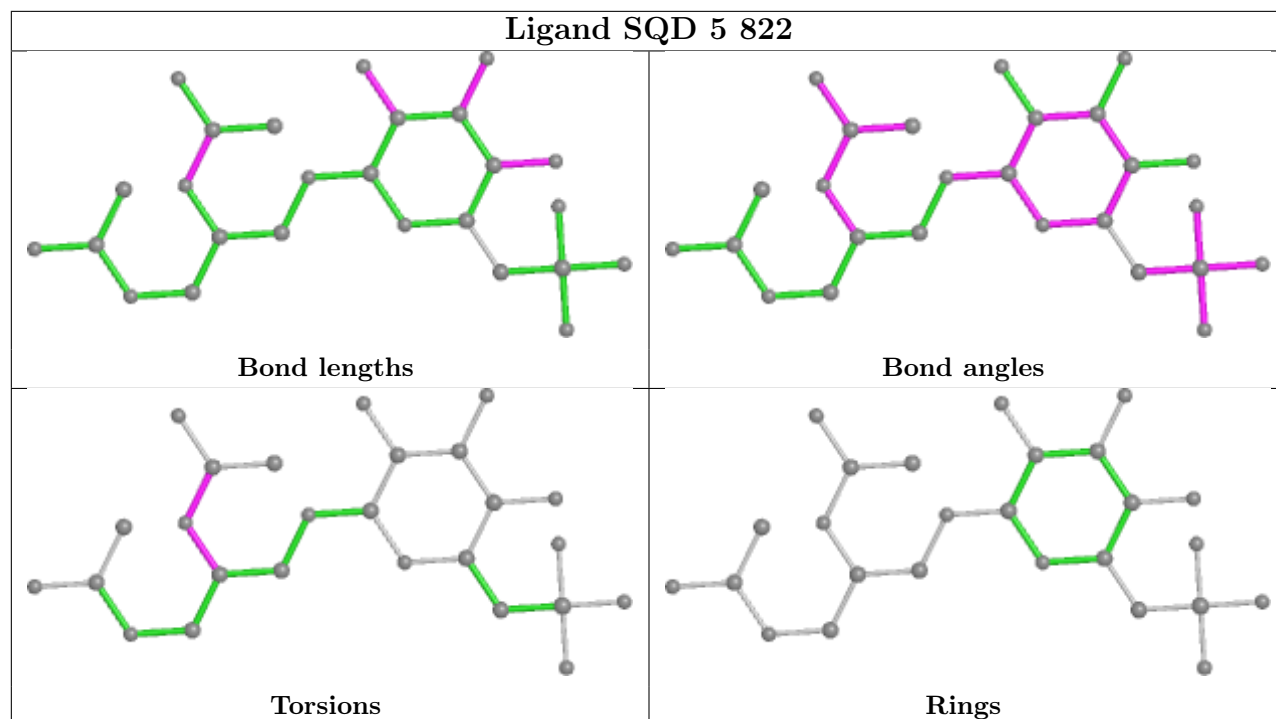
## Ligand CLA f 1239

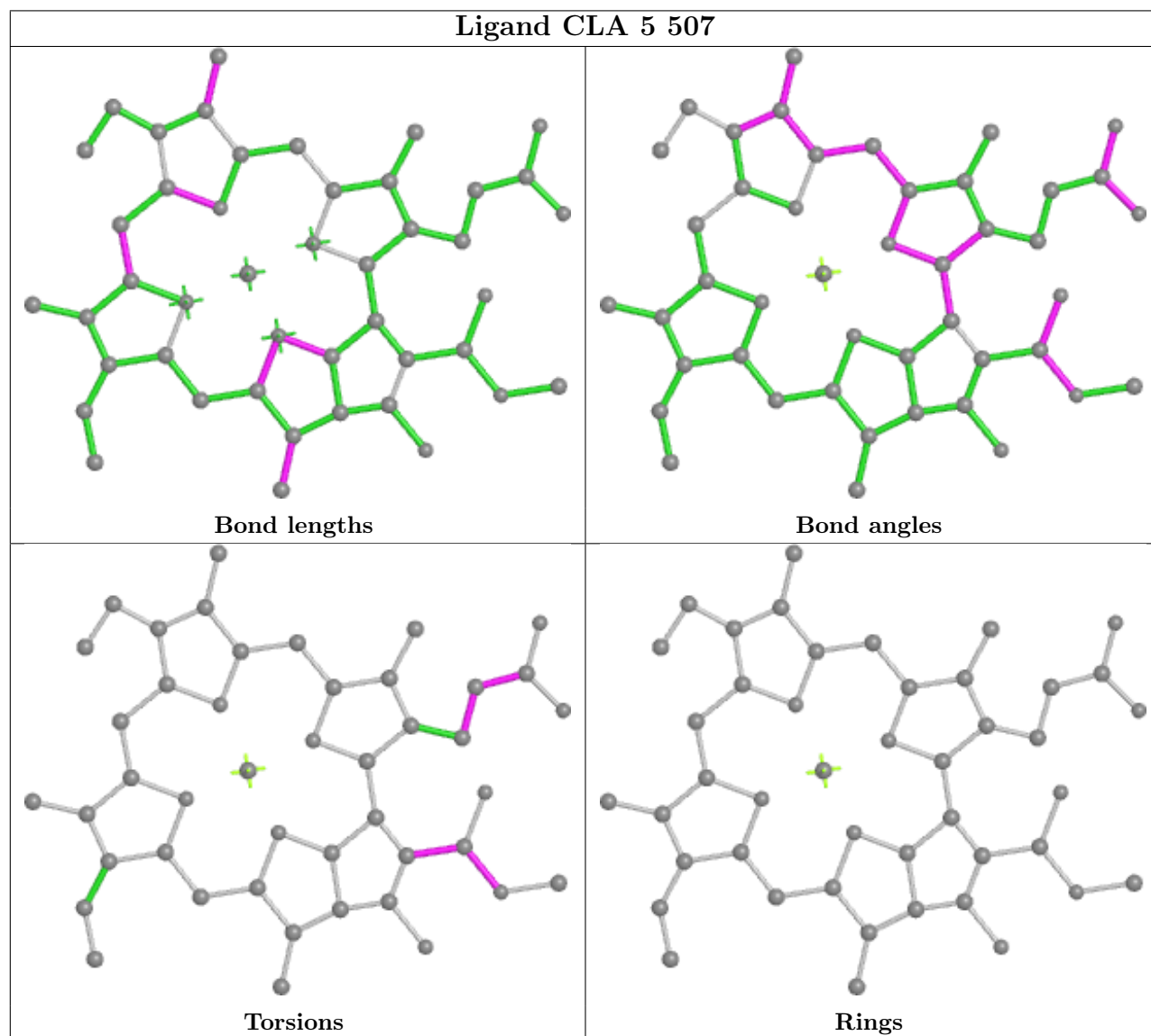
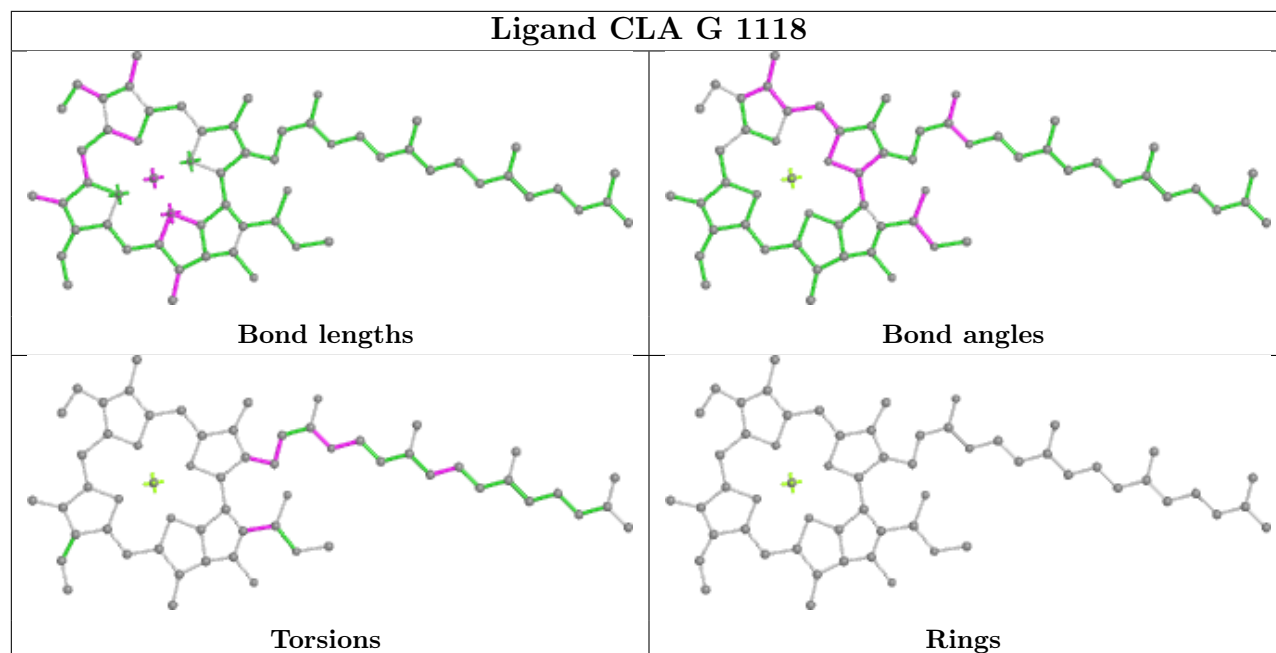


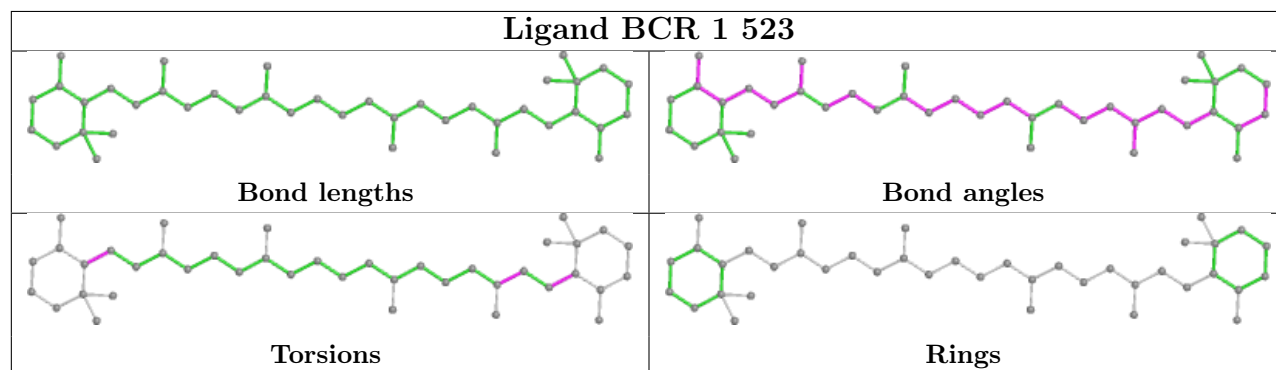
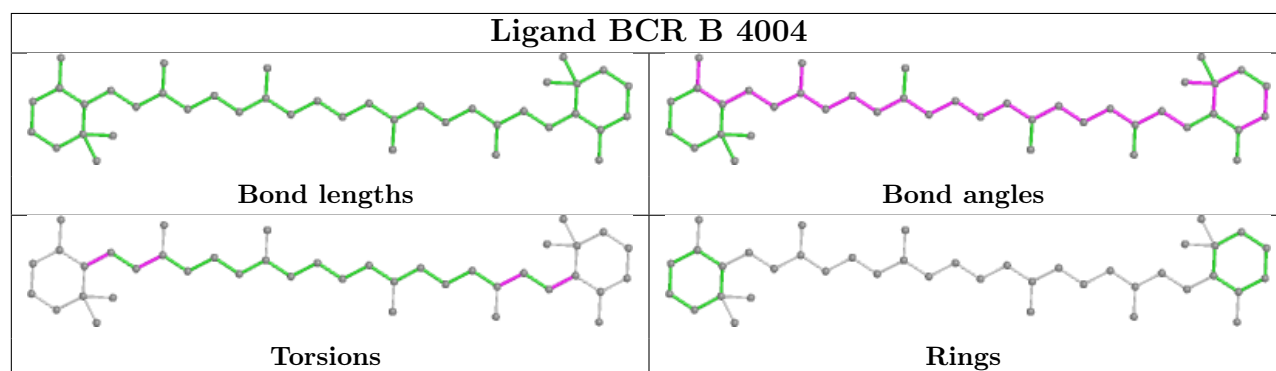
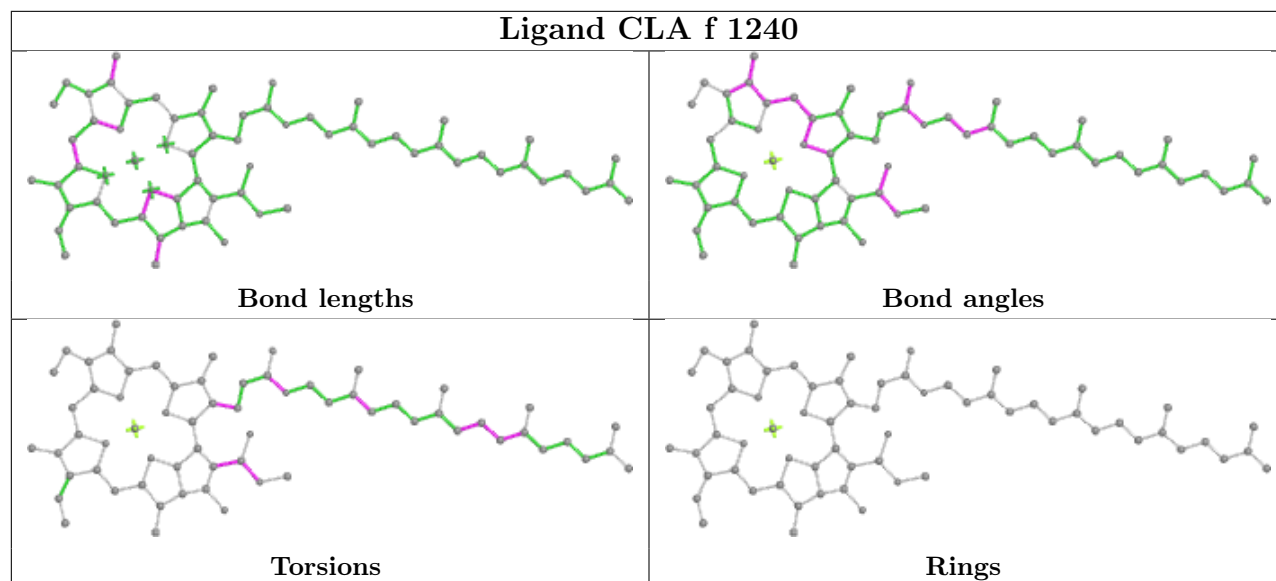
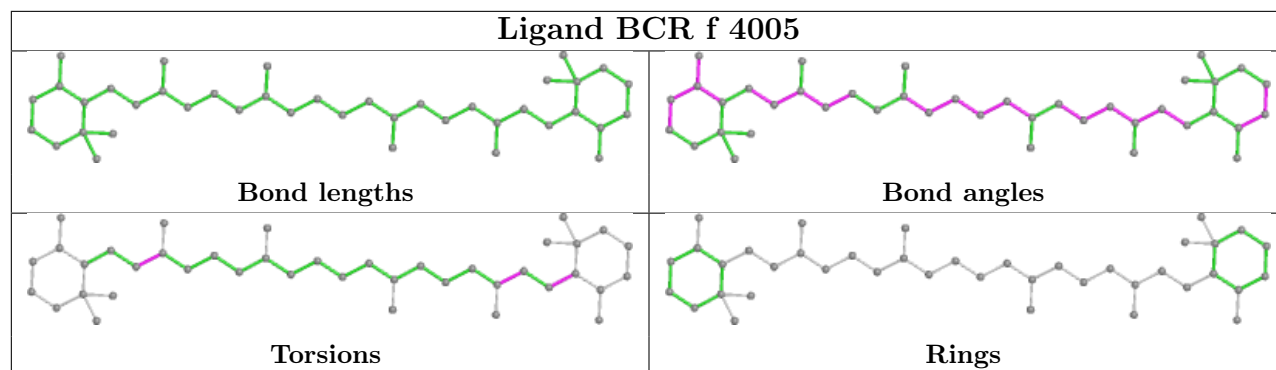


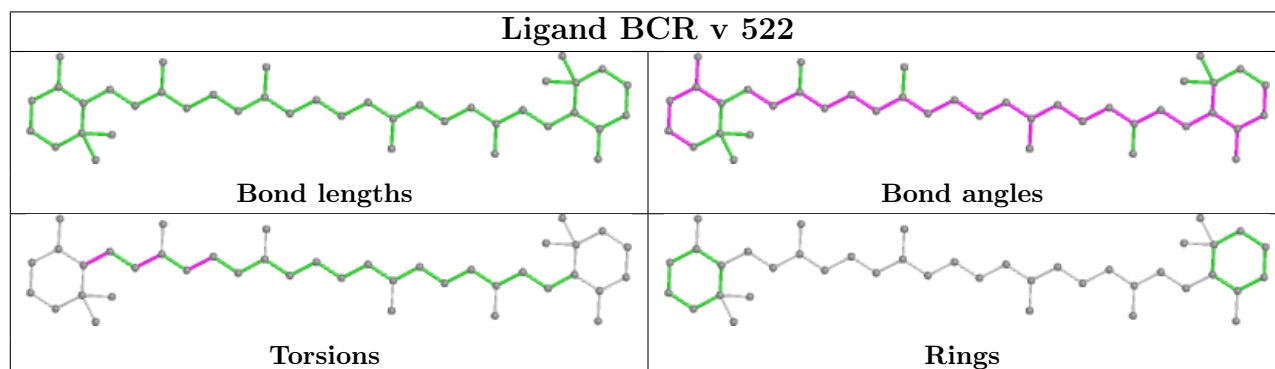
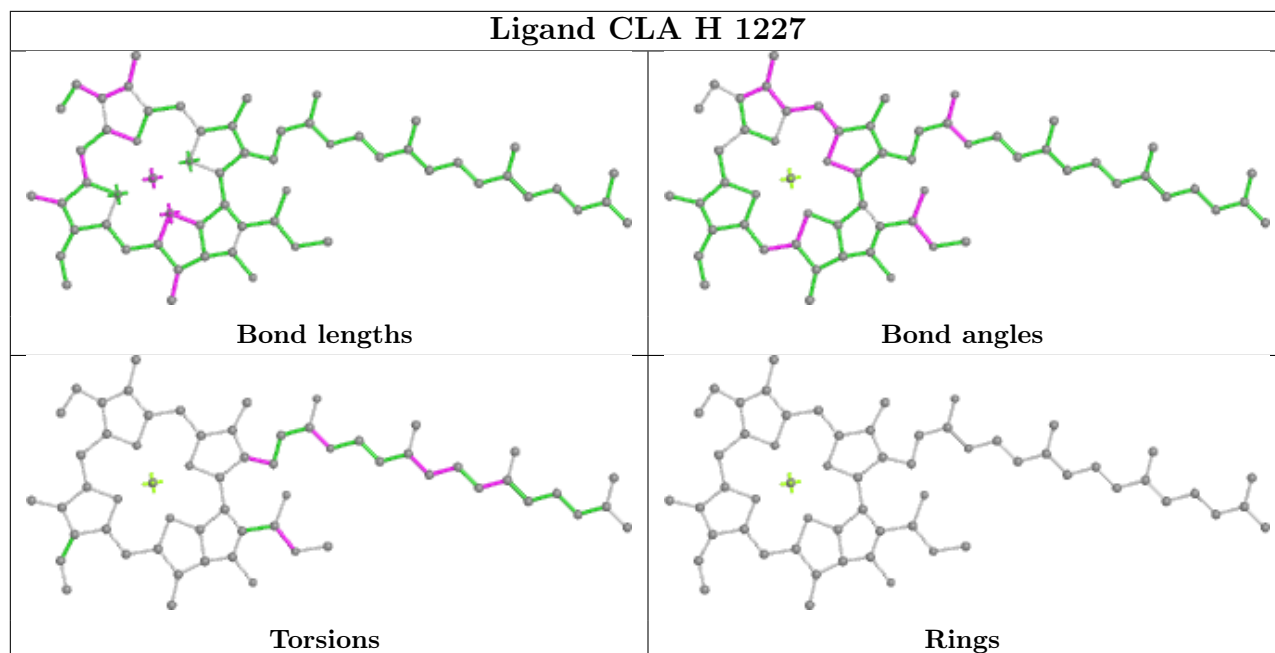


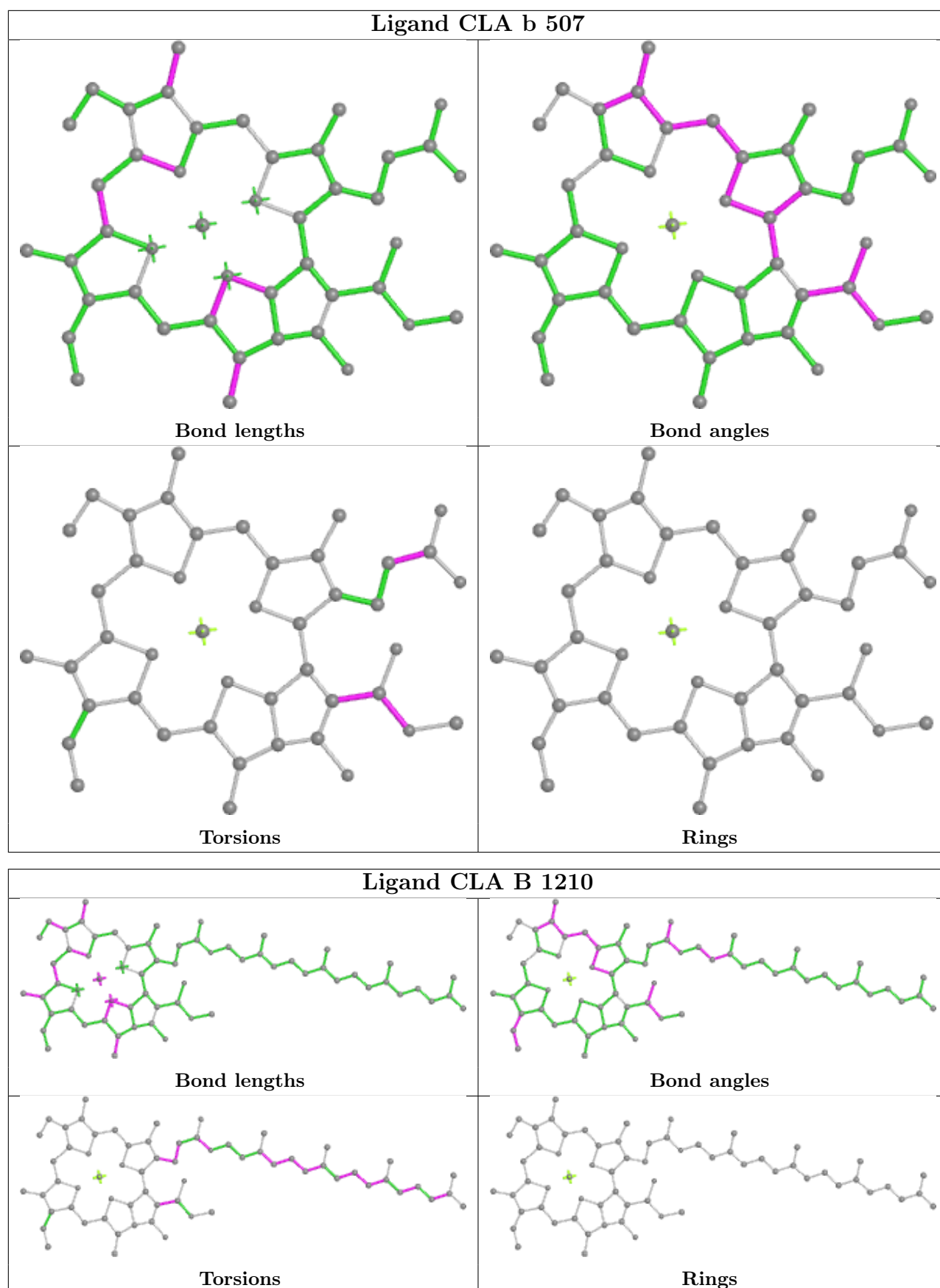


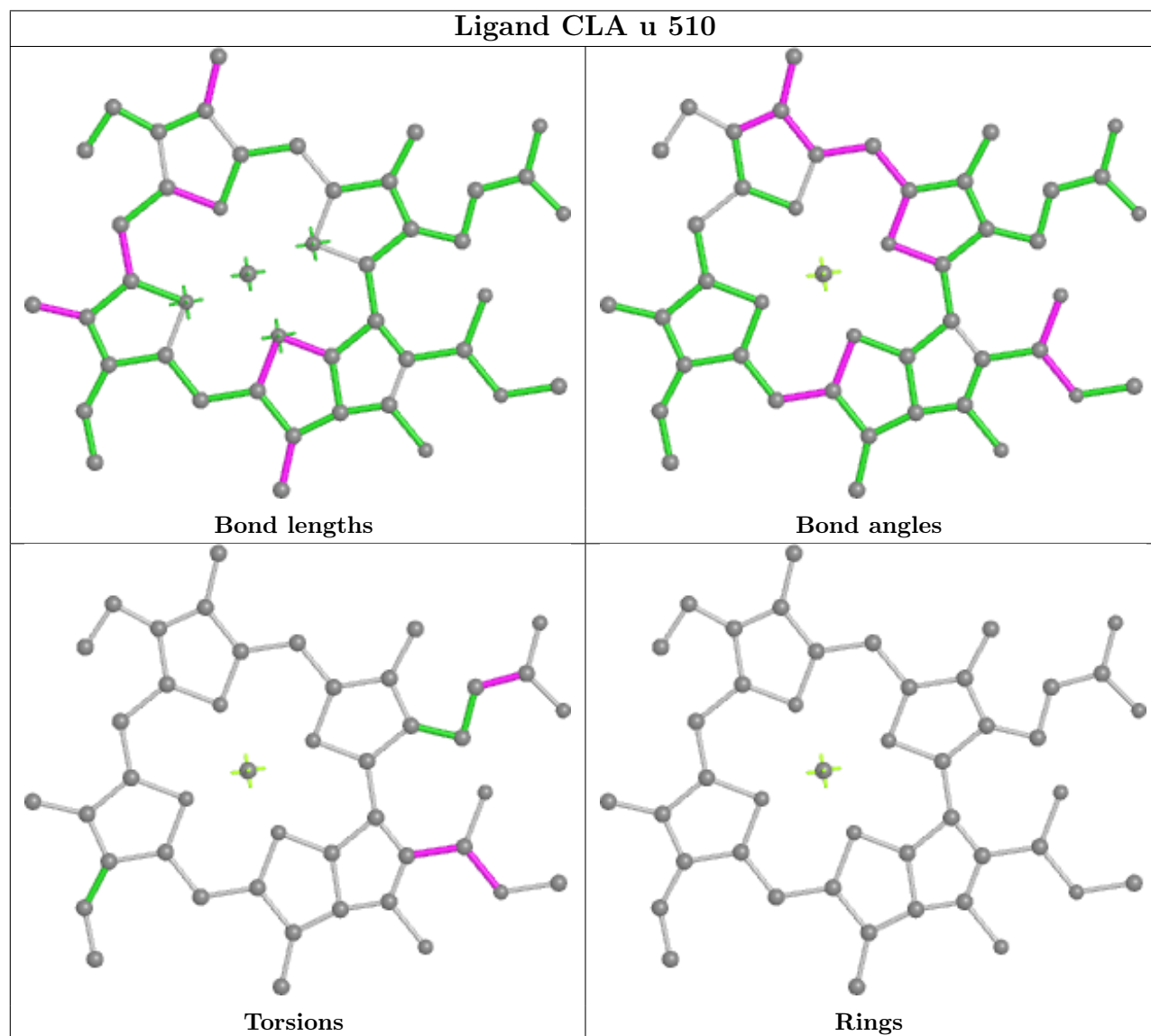
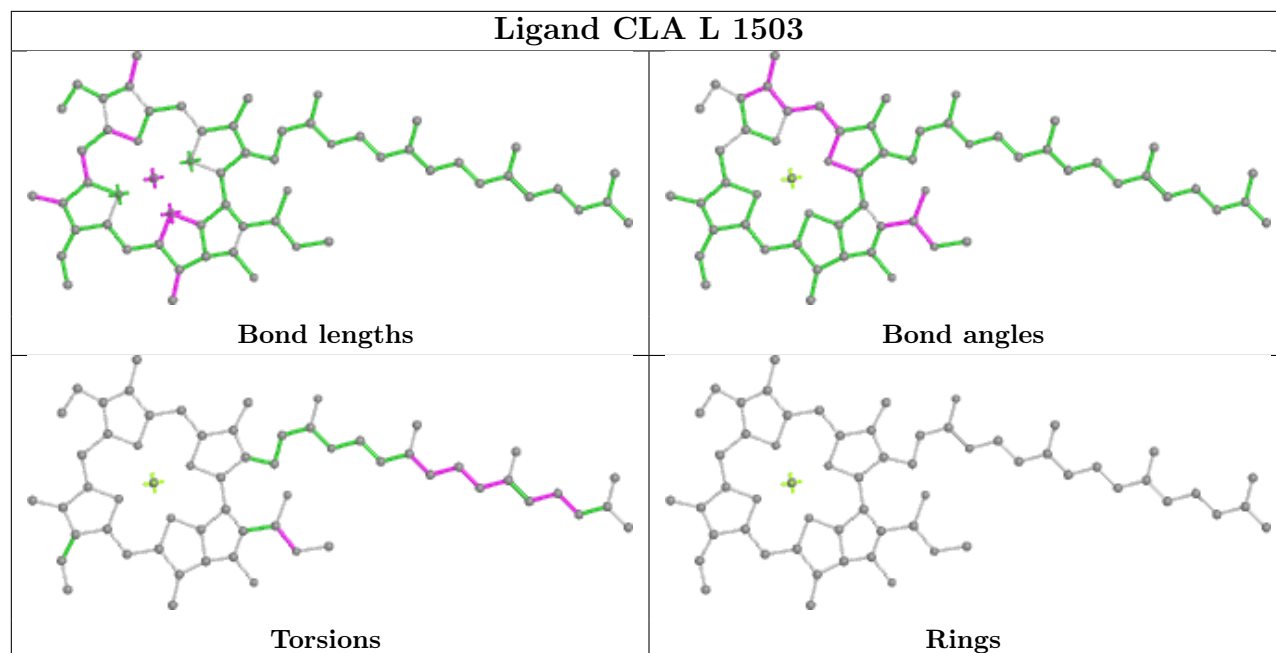




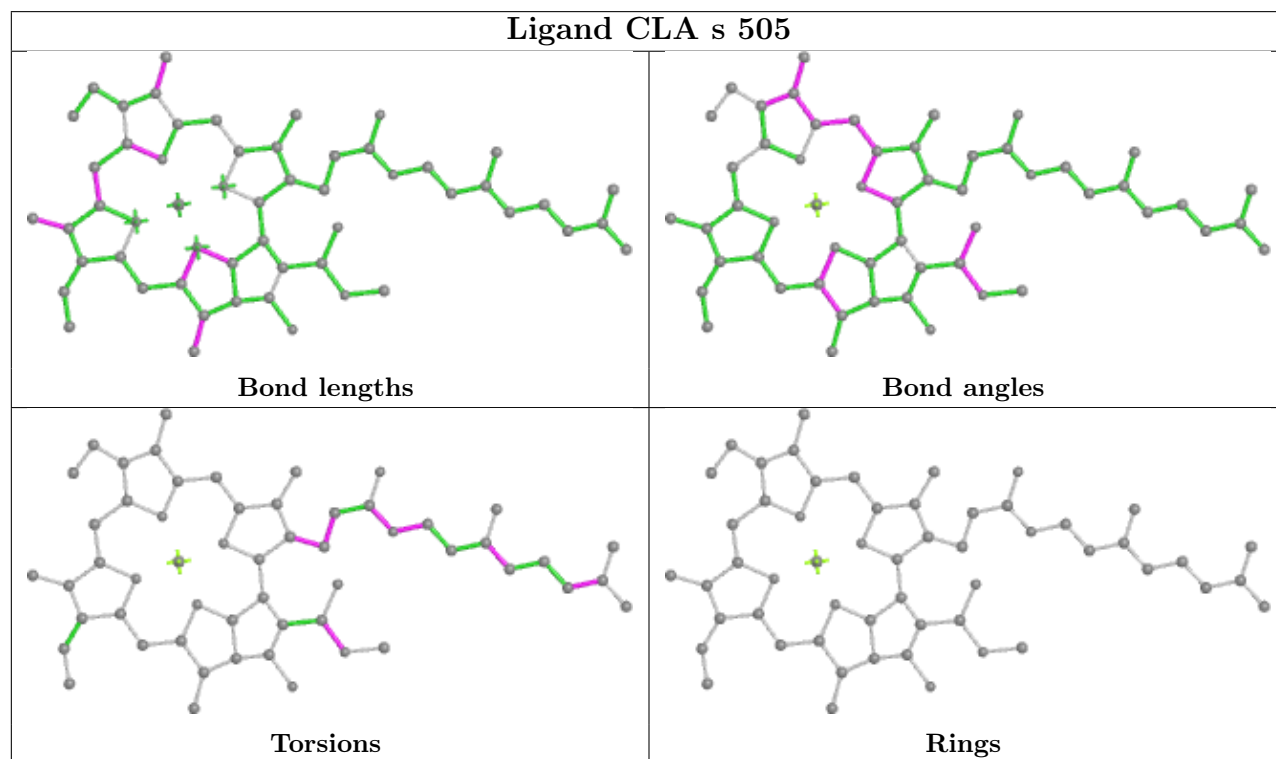
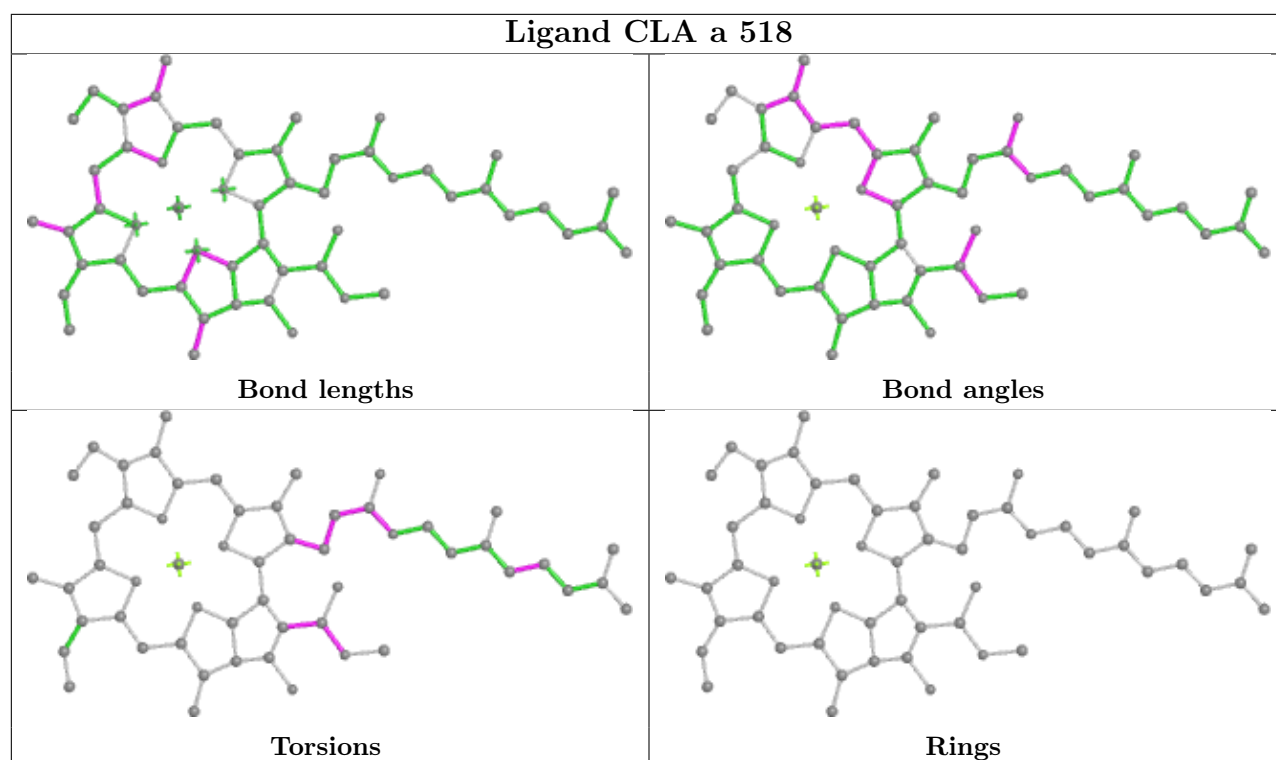


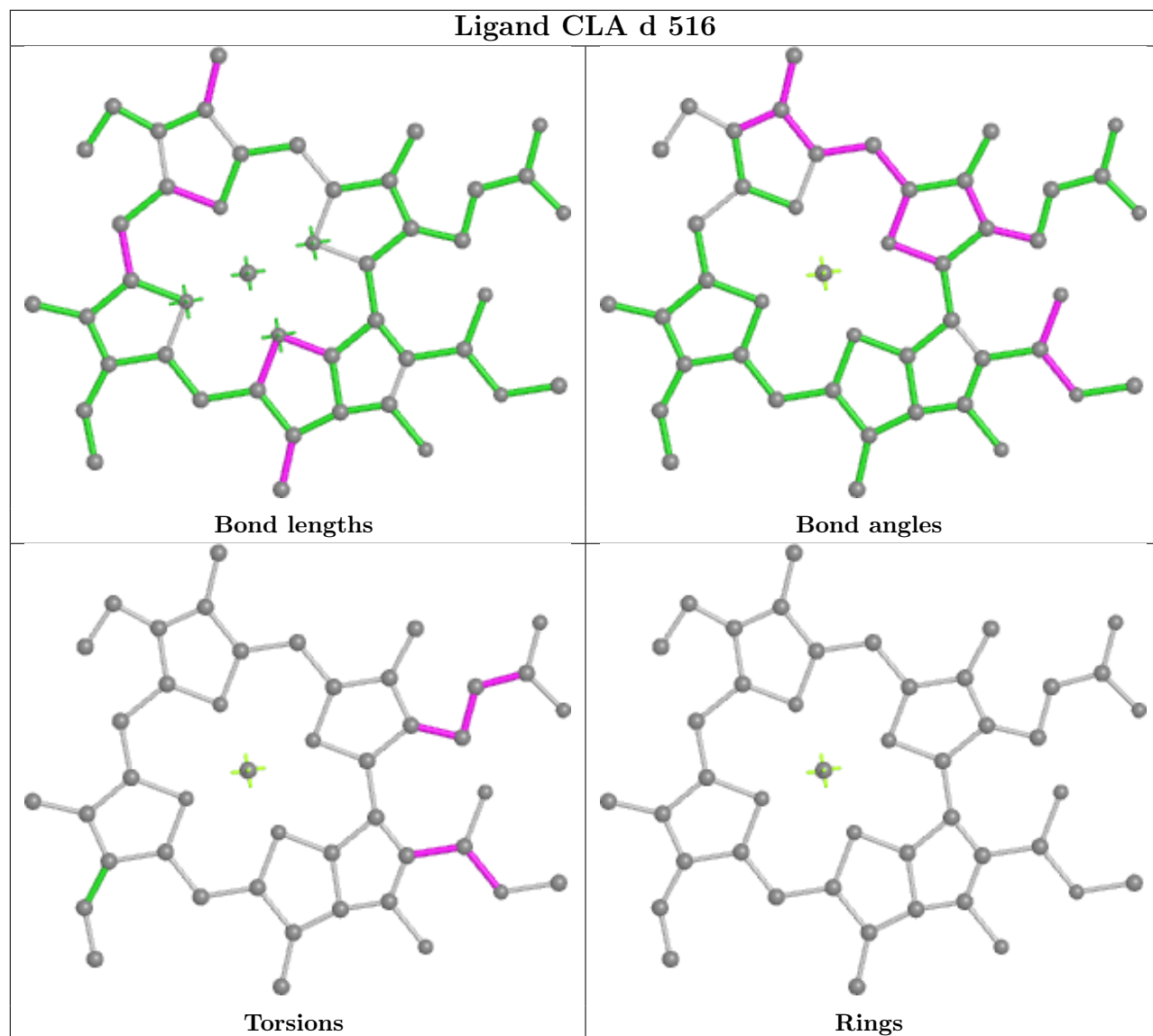


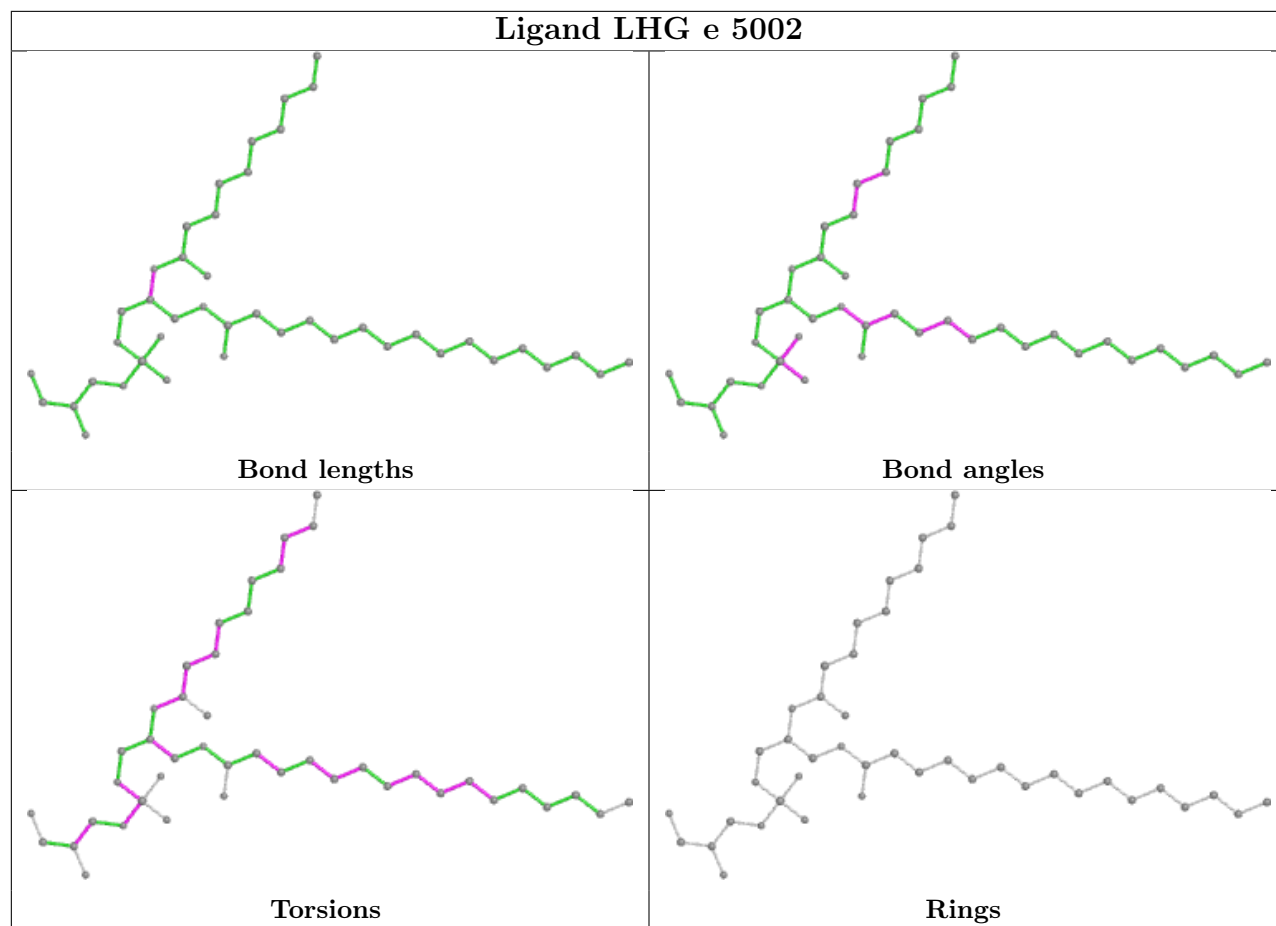


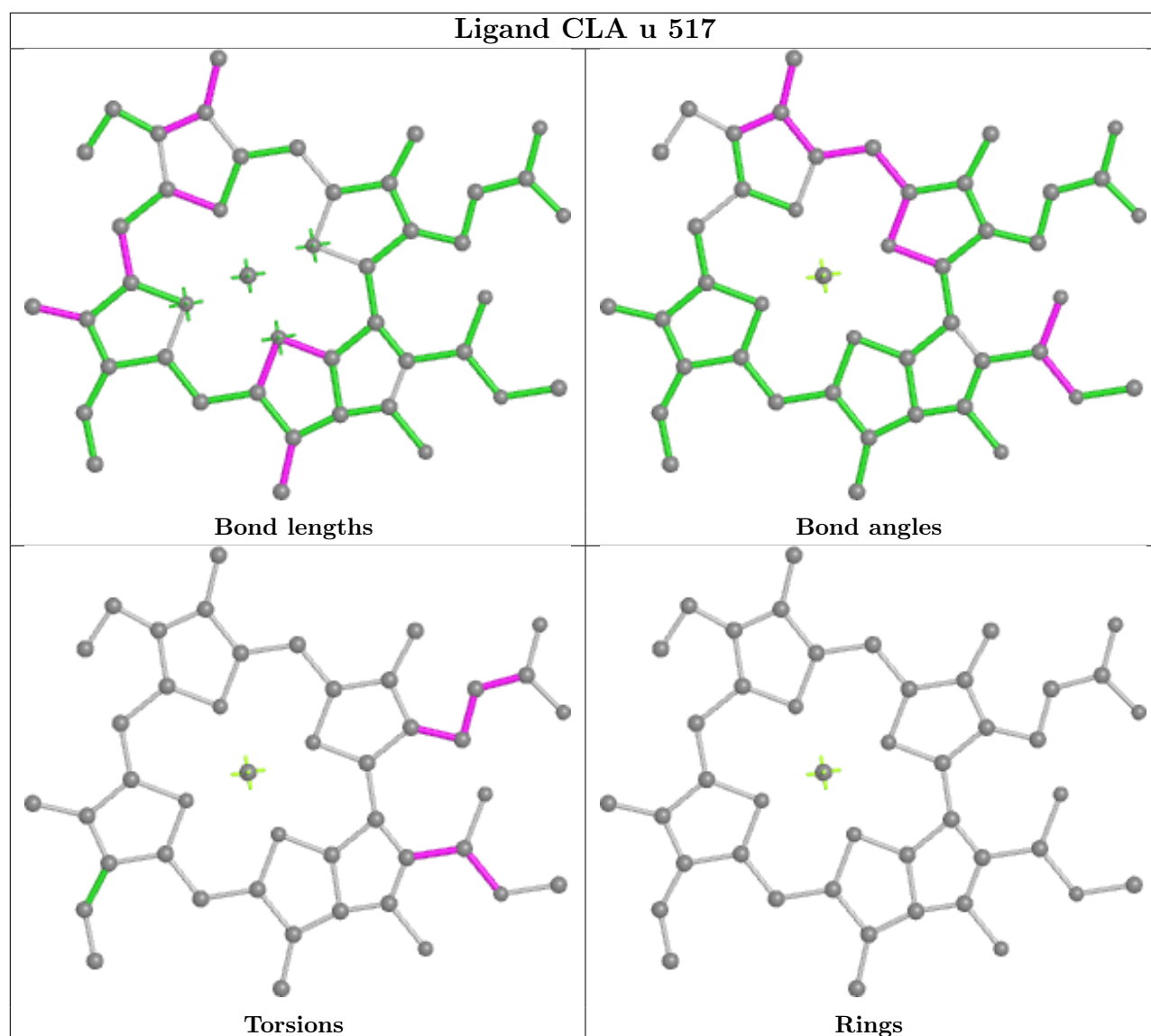


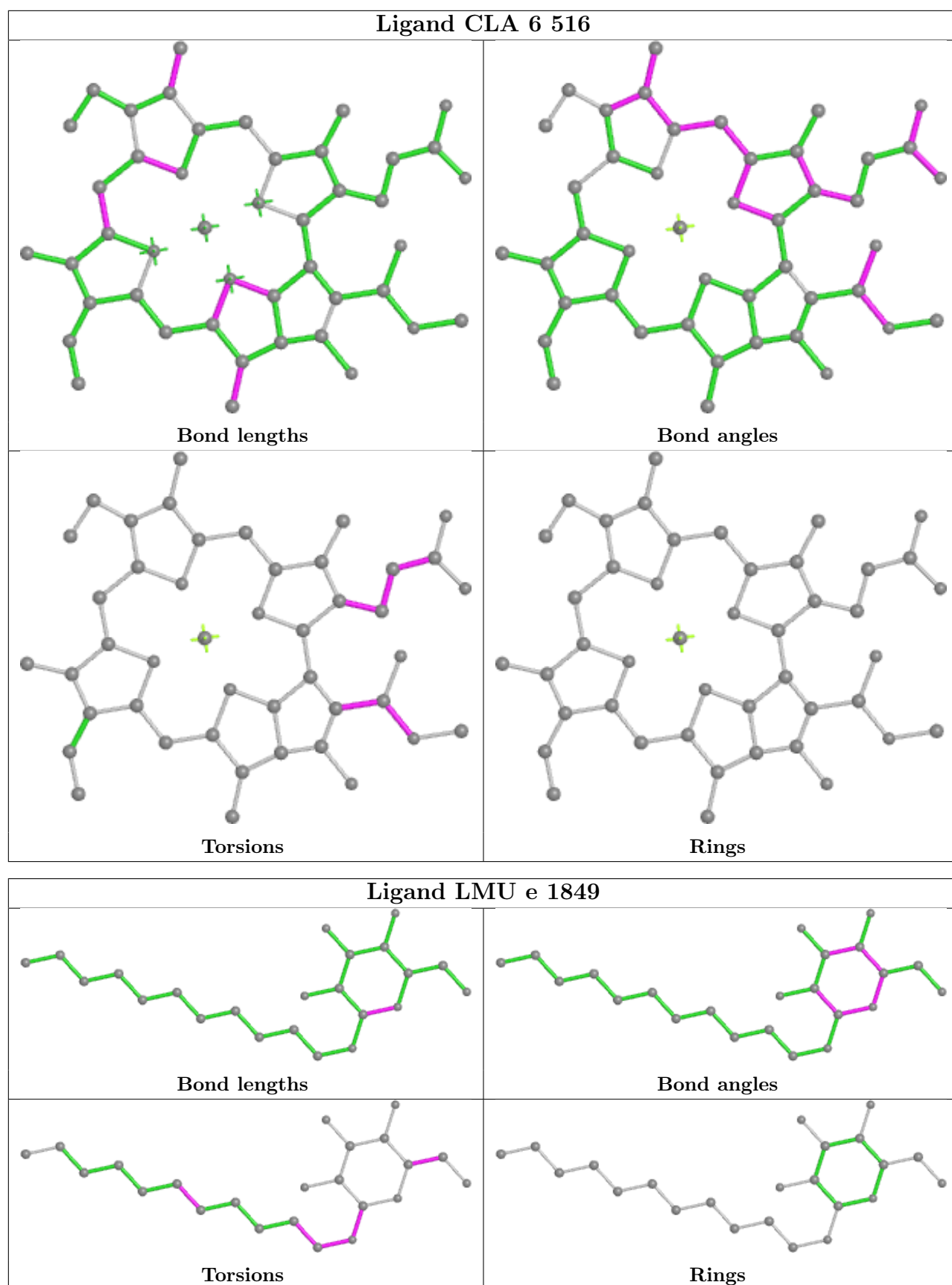


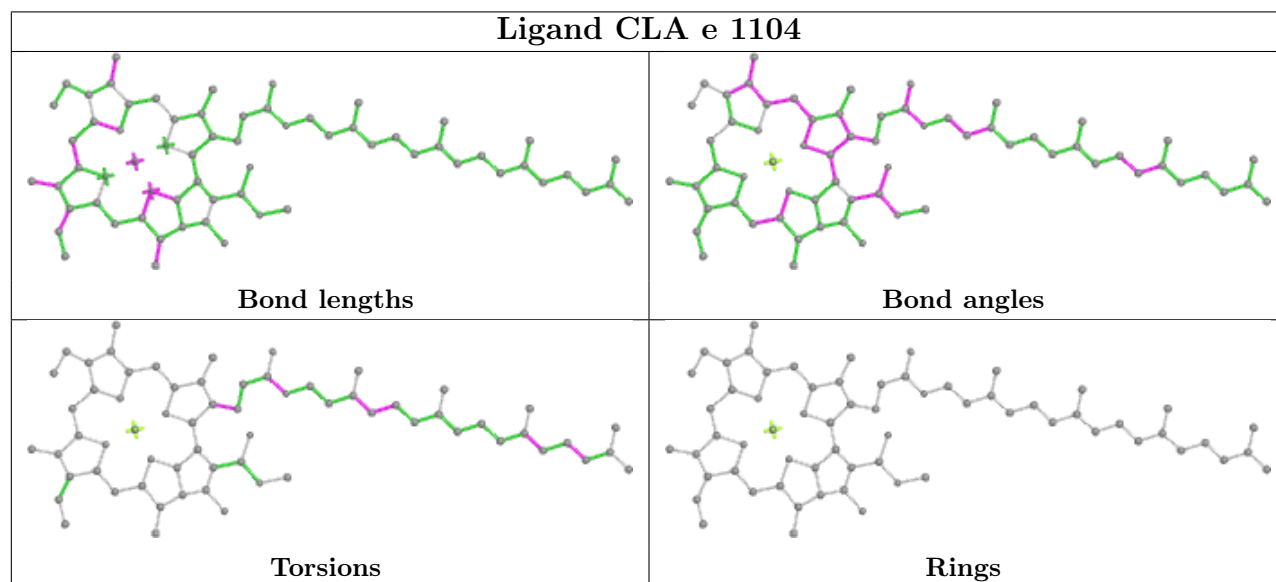
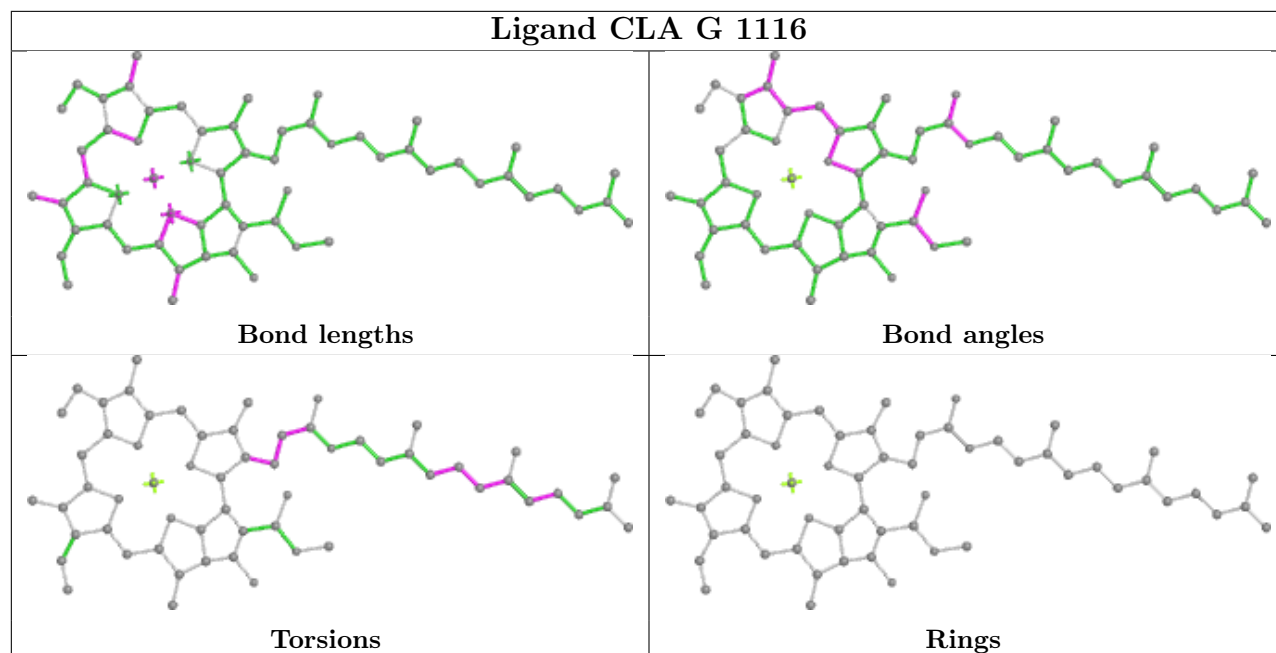


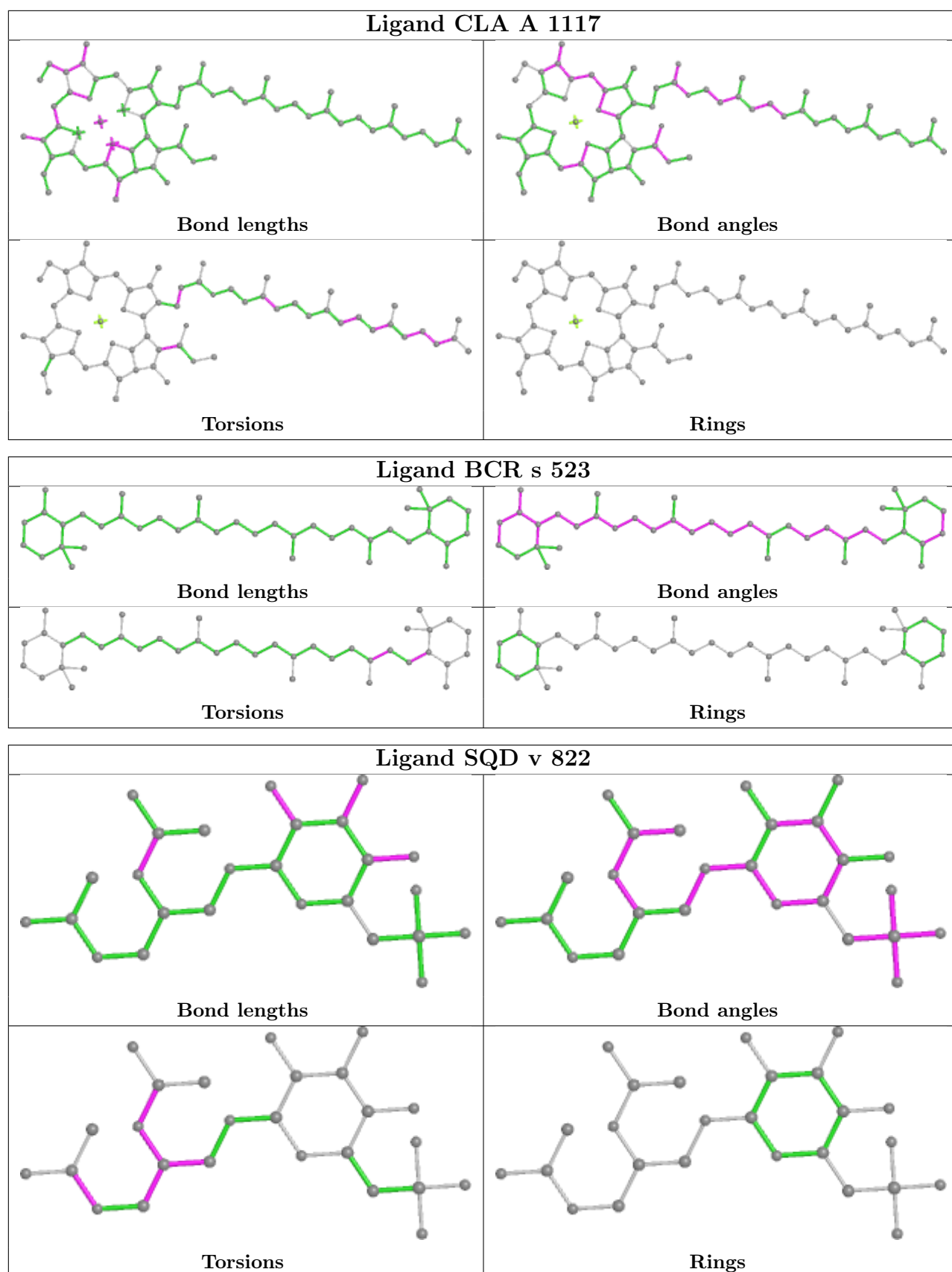


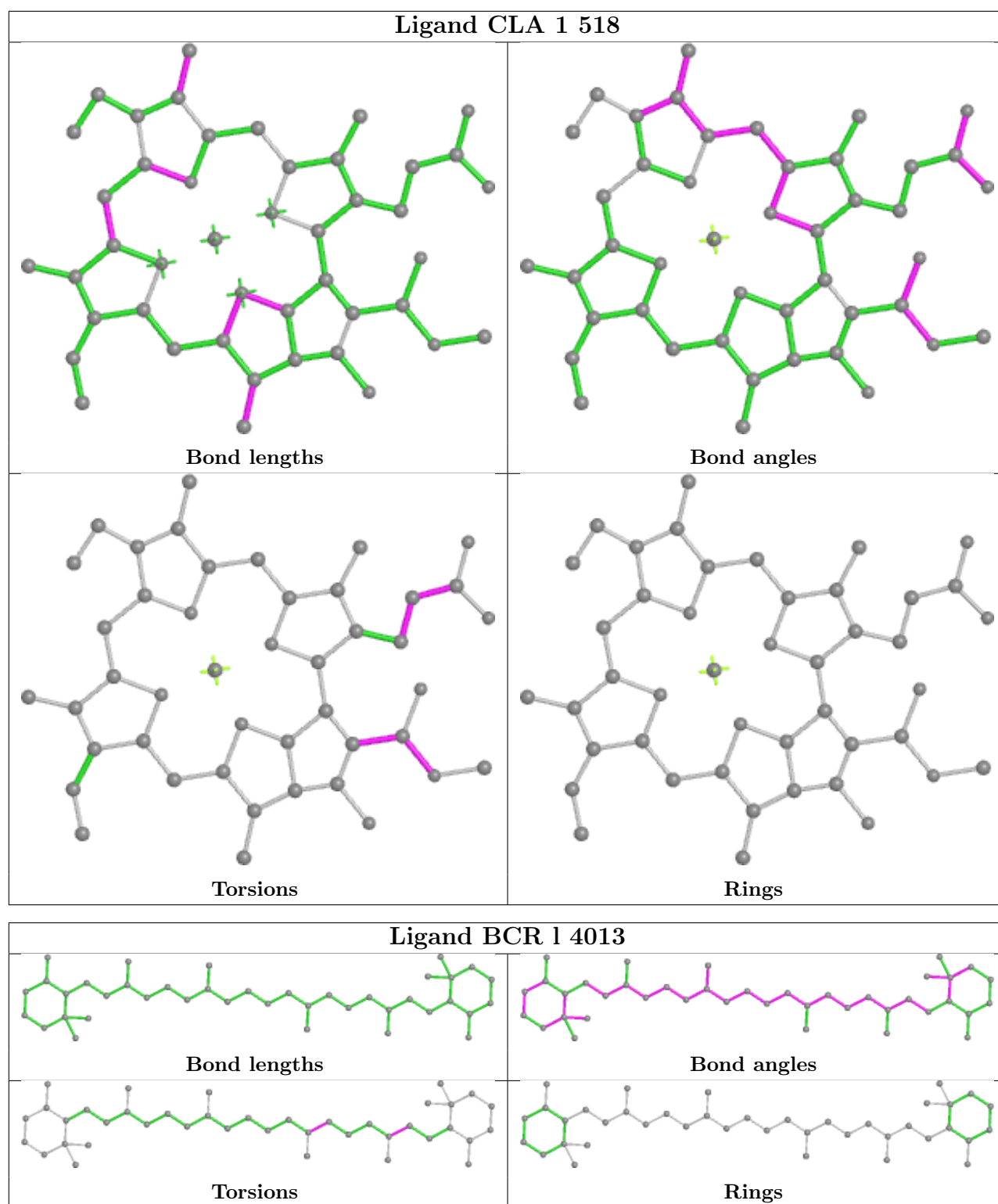




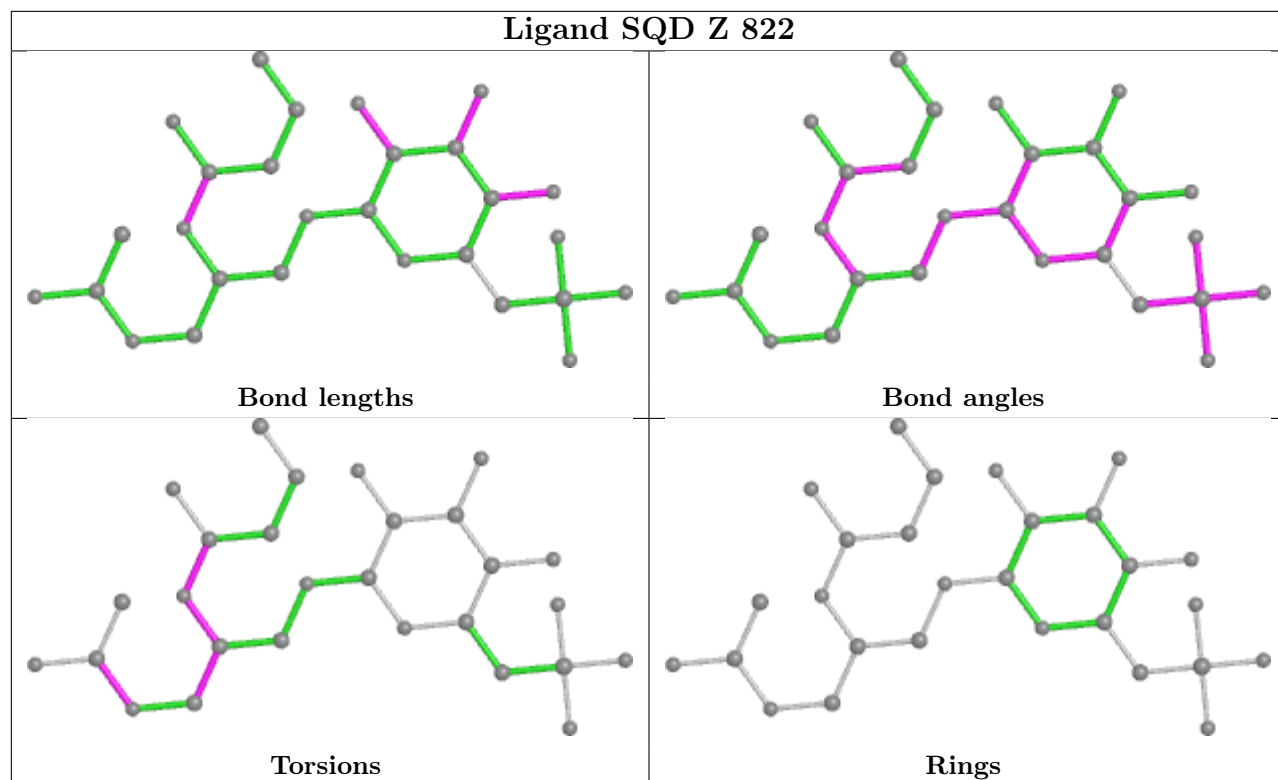


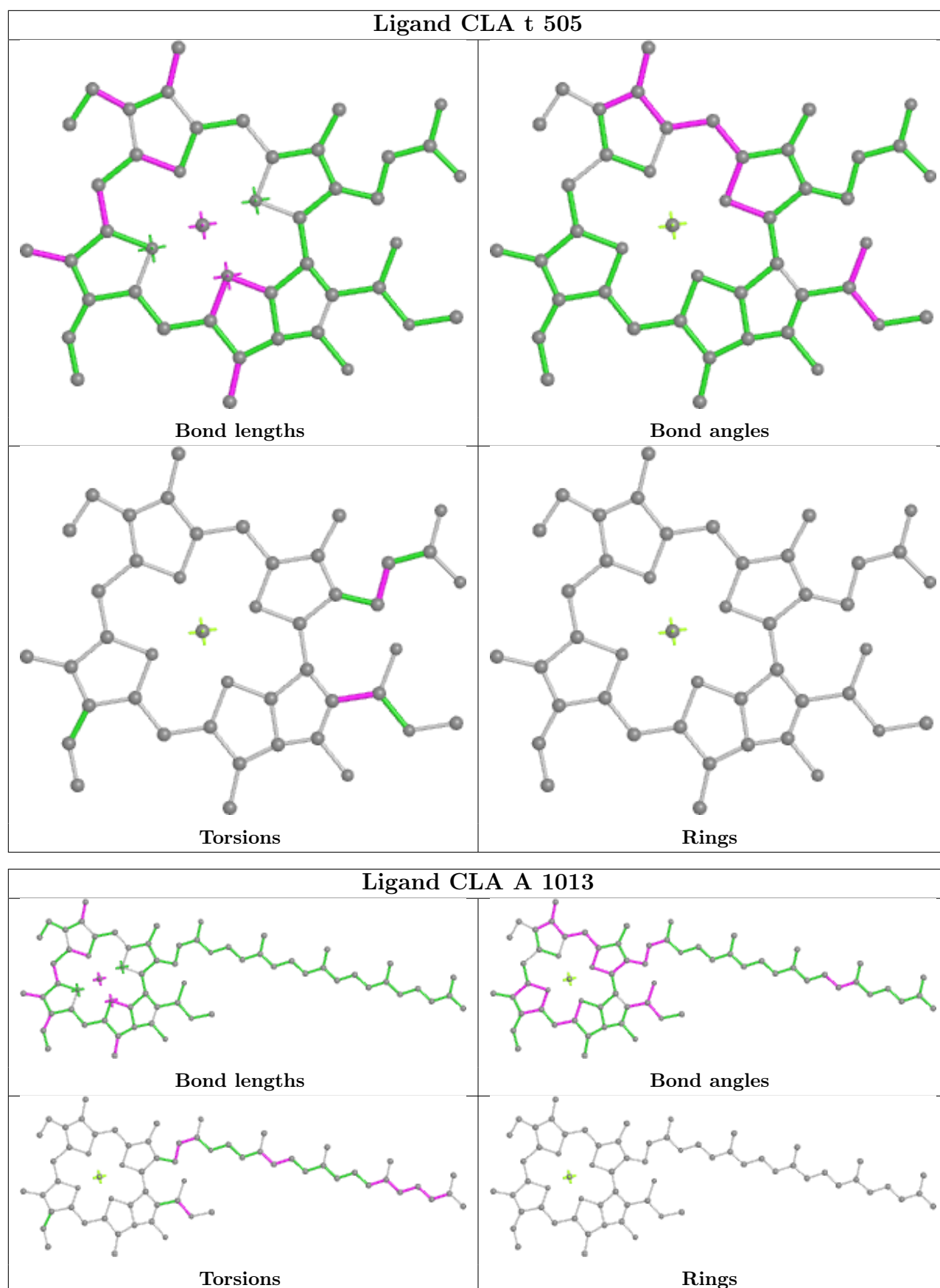


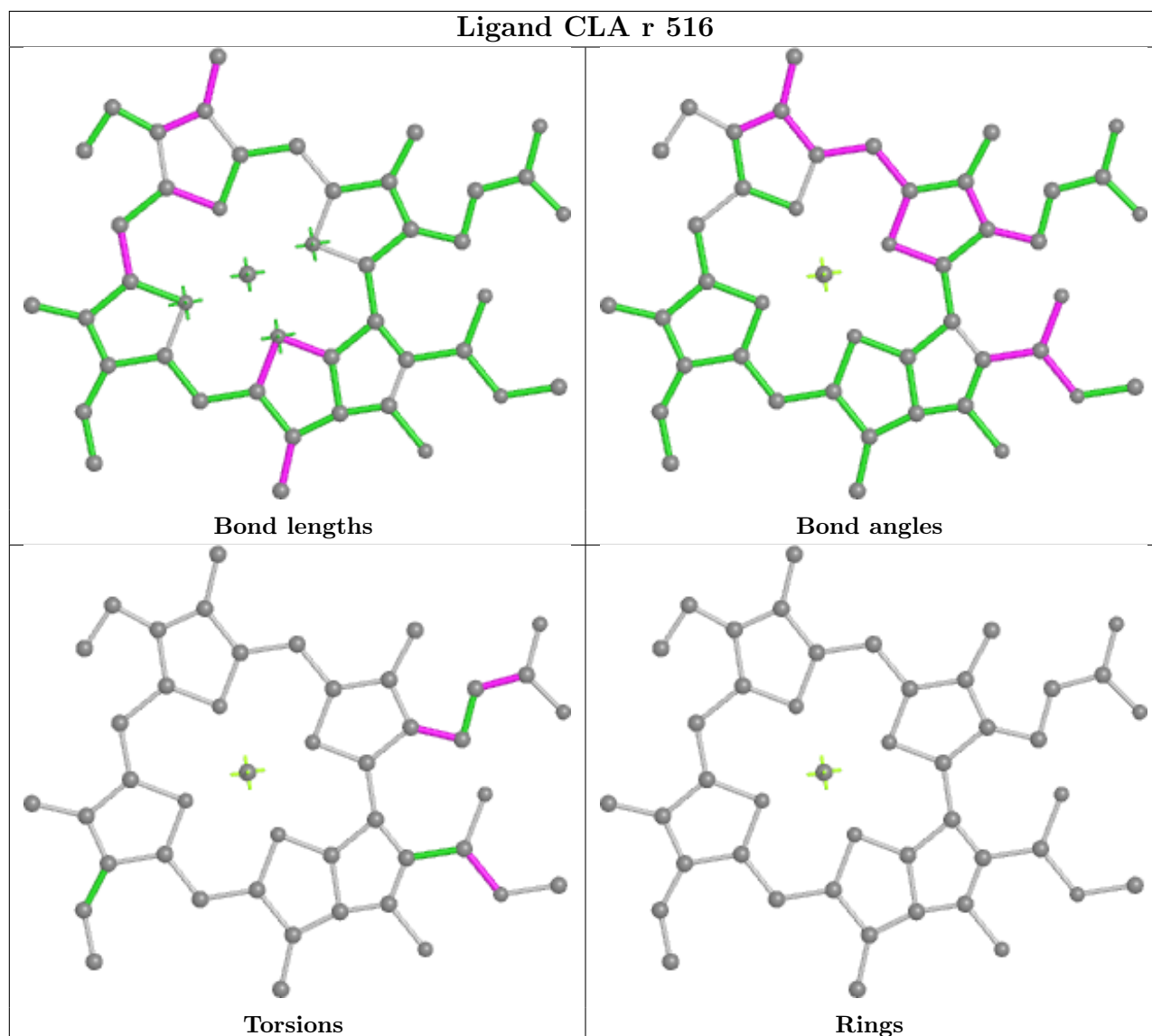
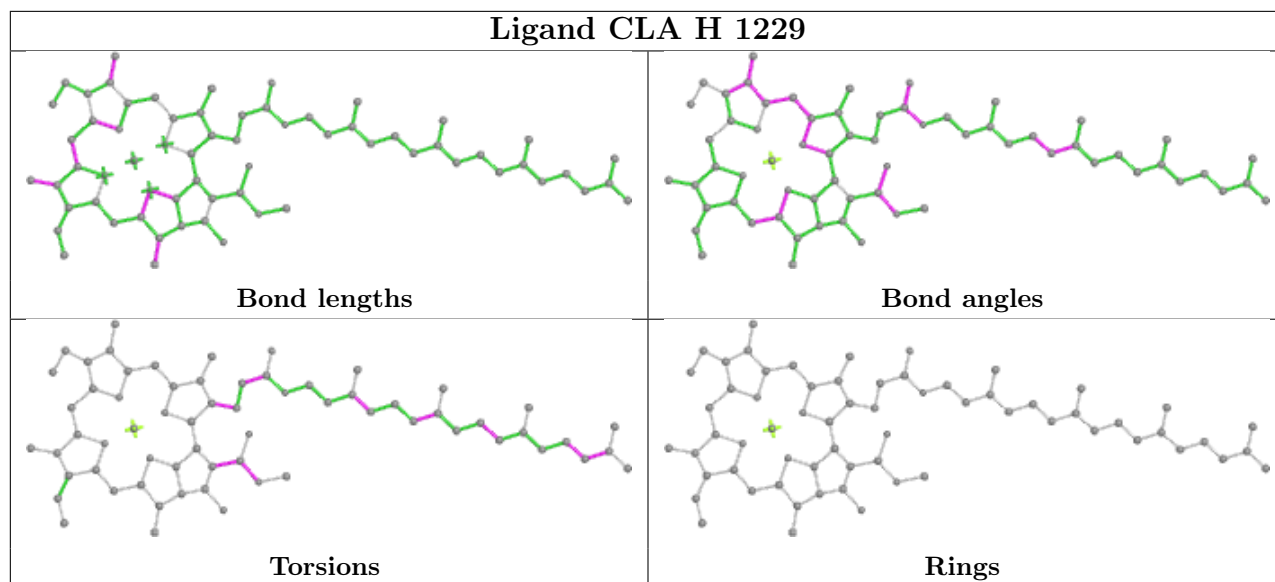


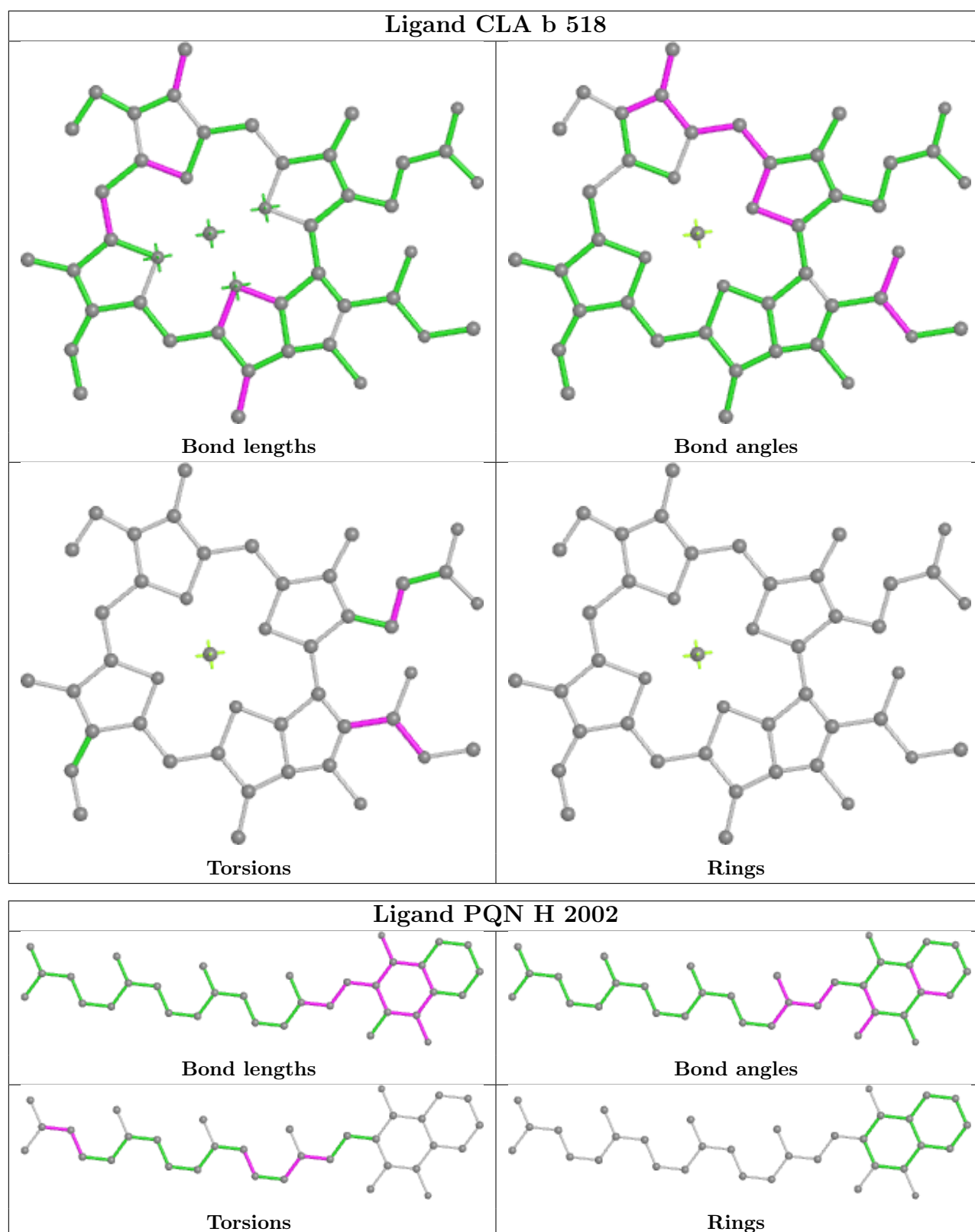


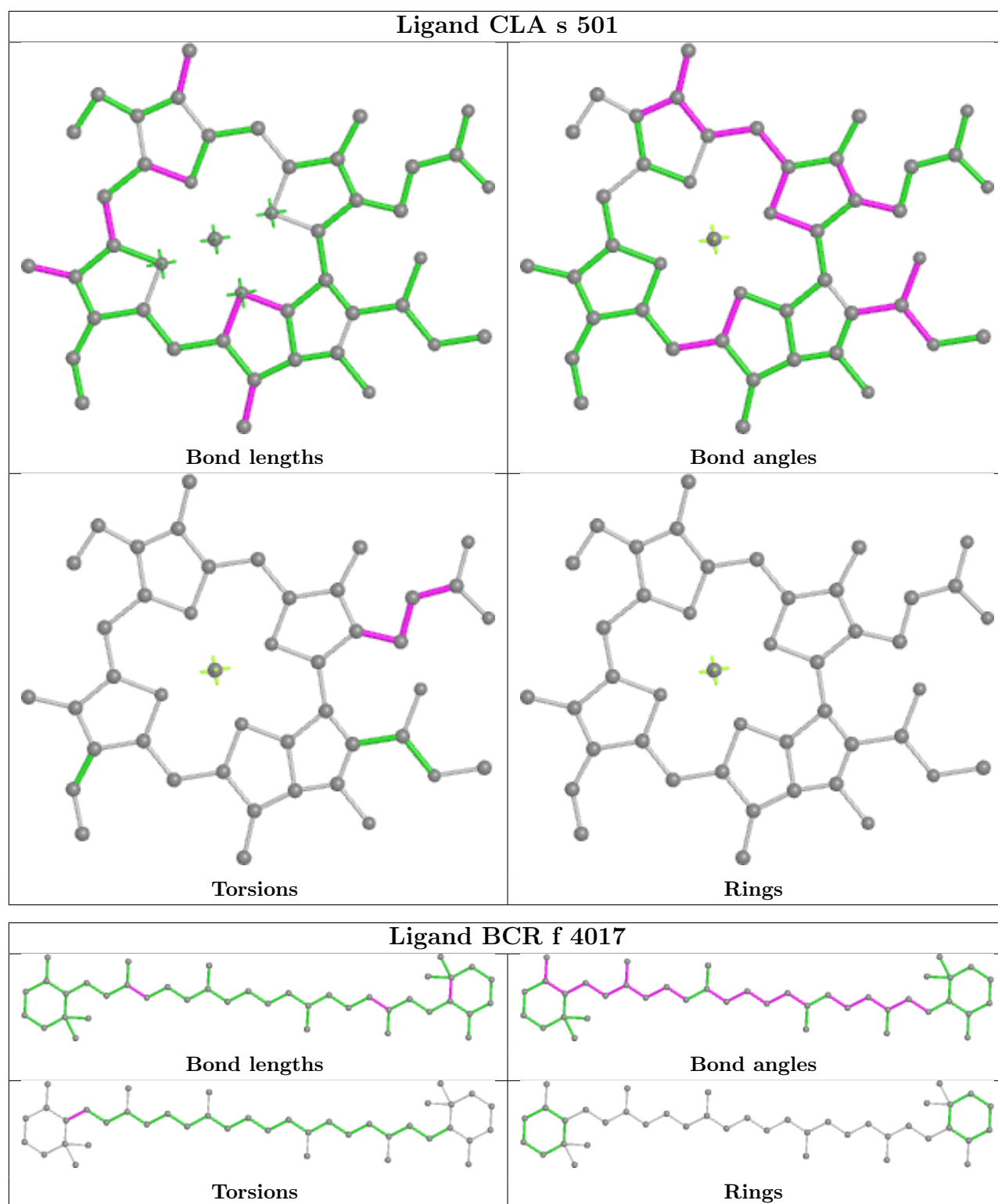


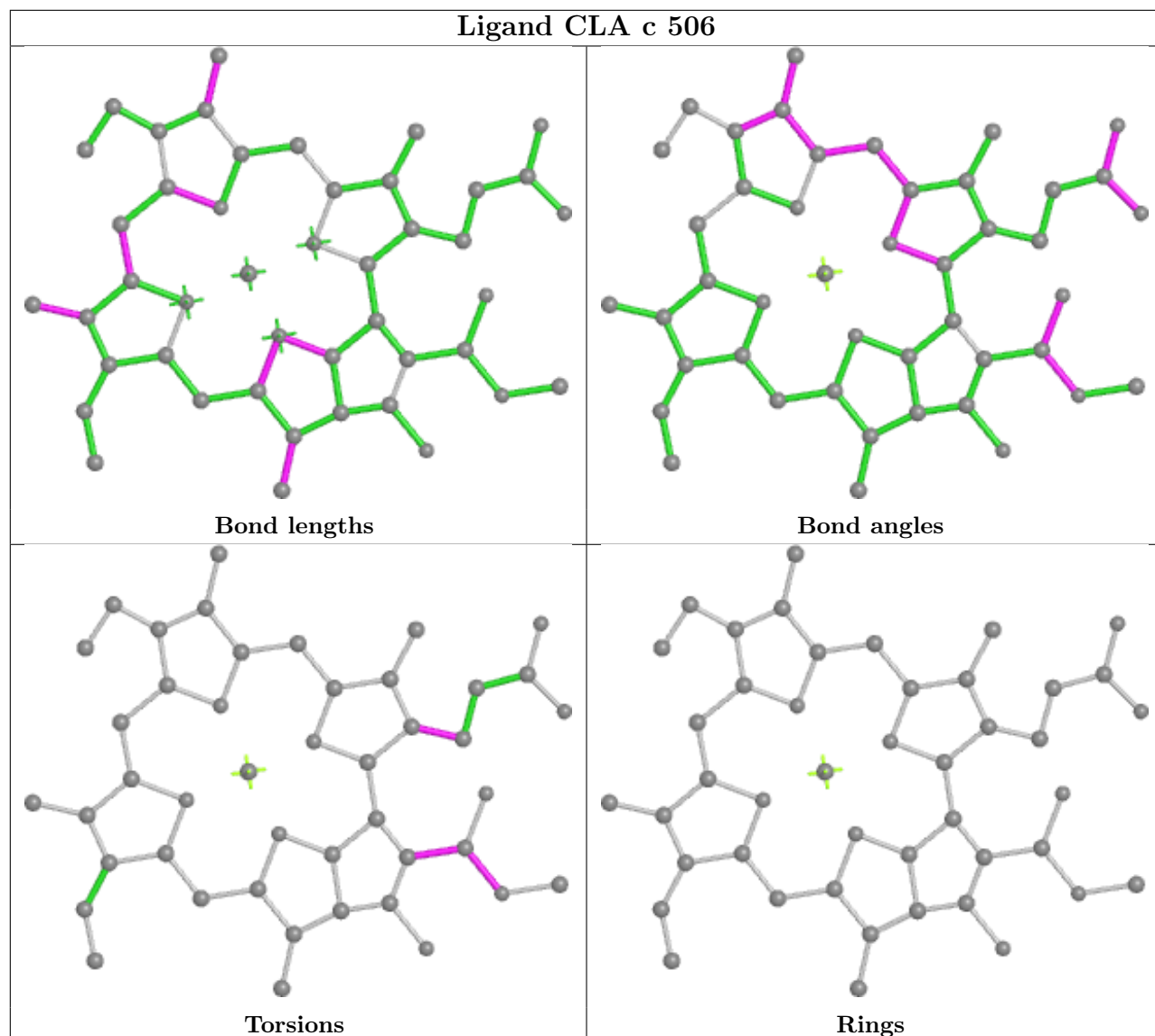


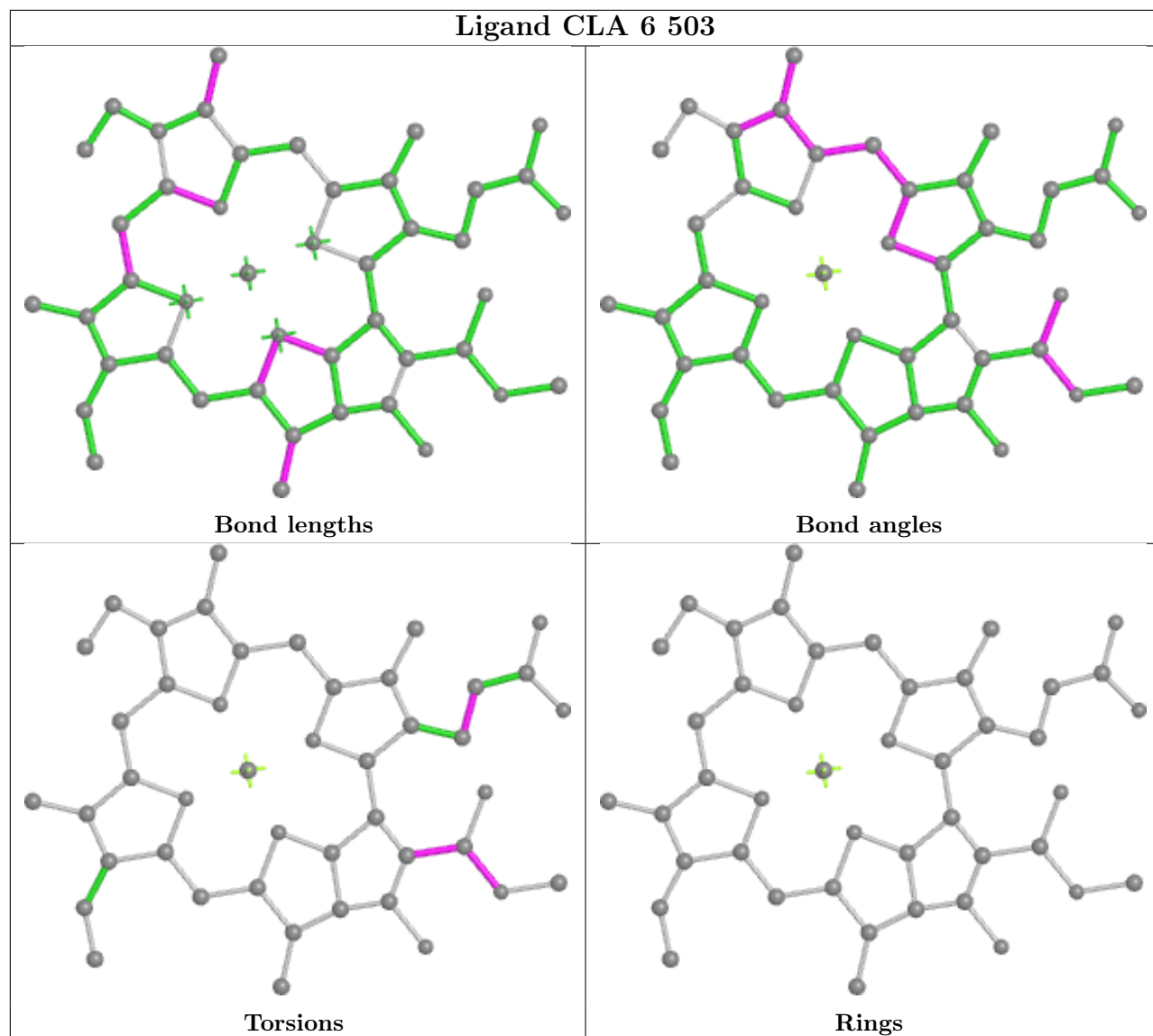


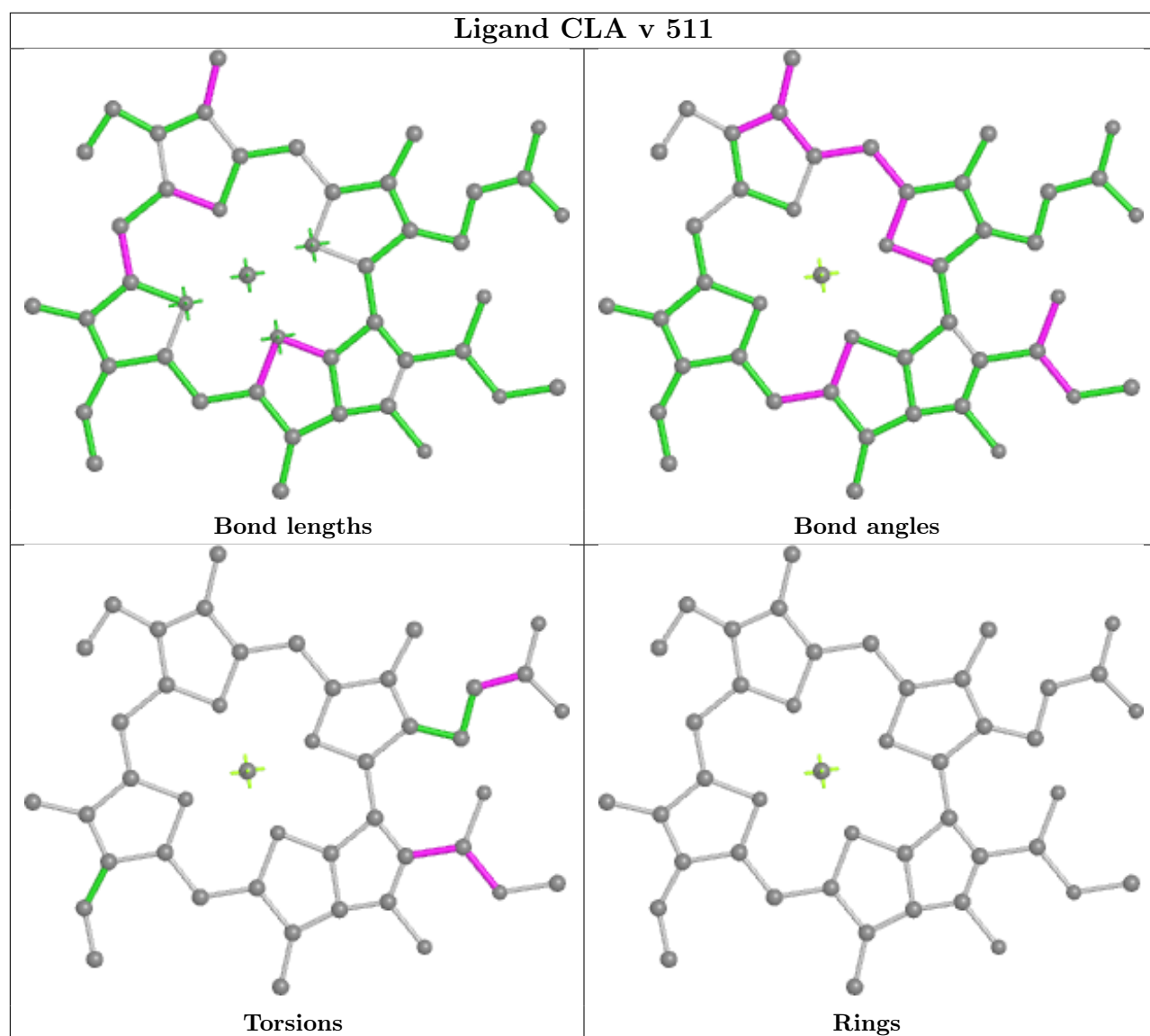




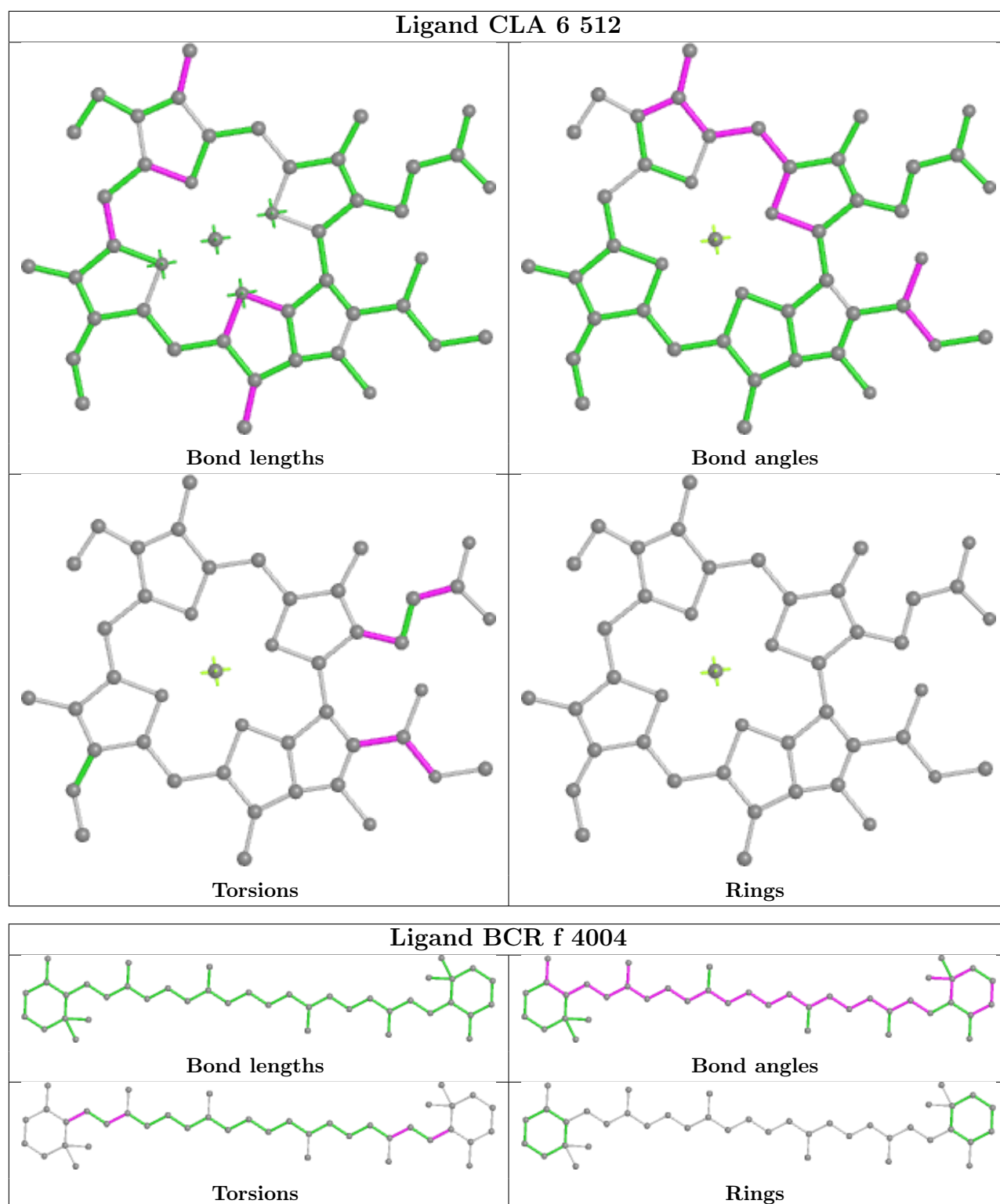


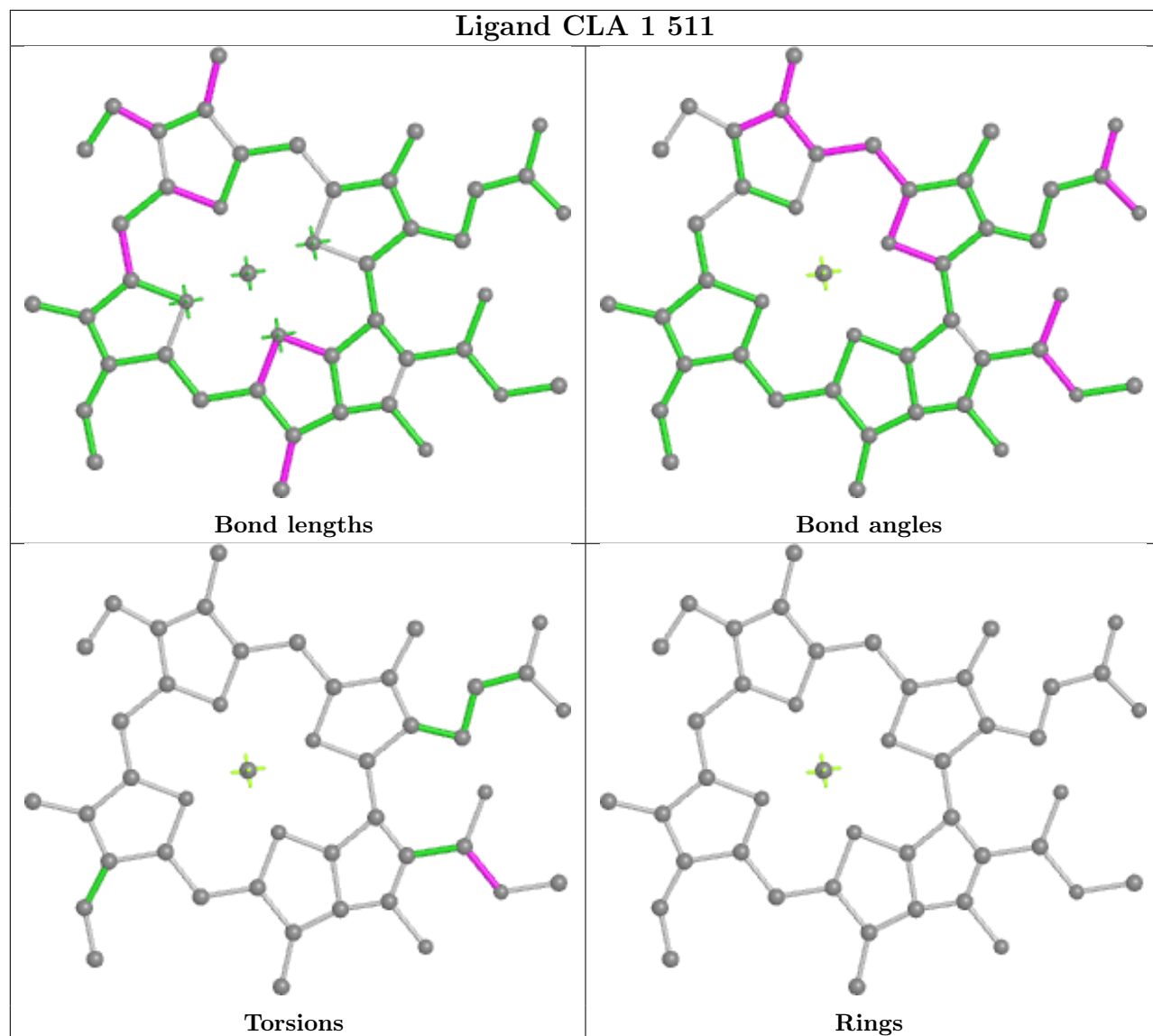


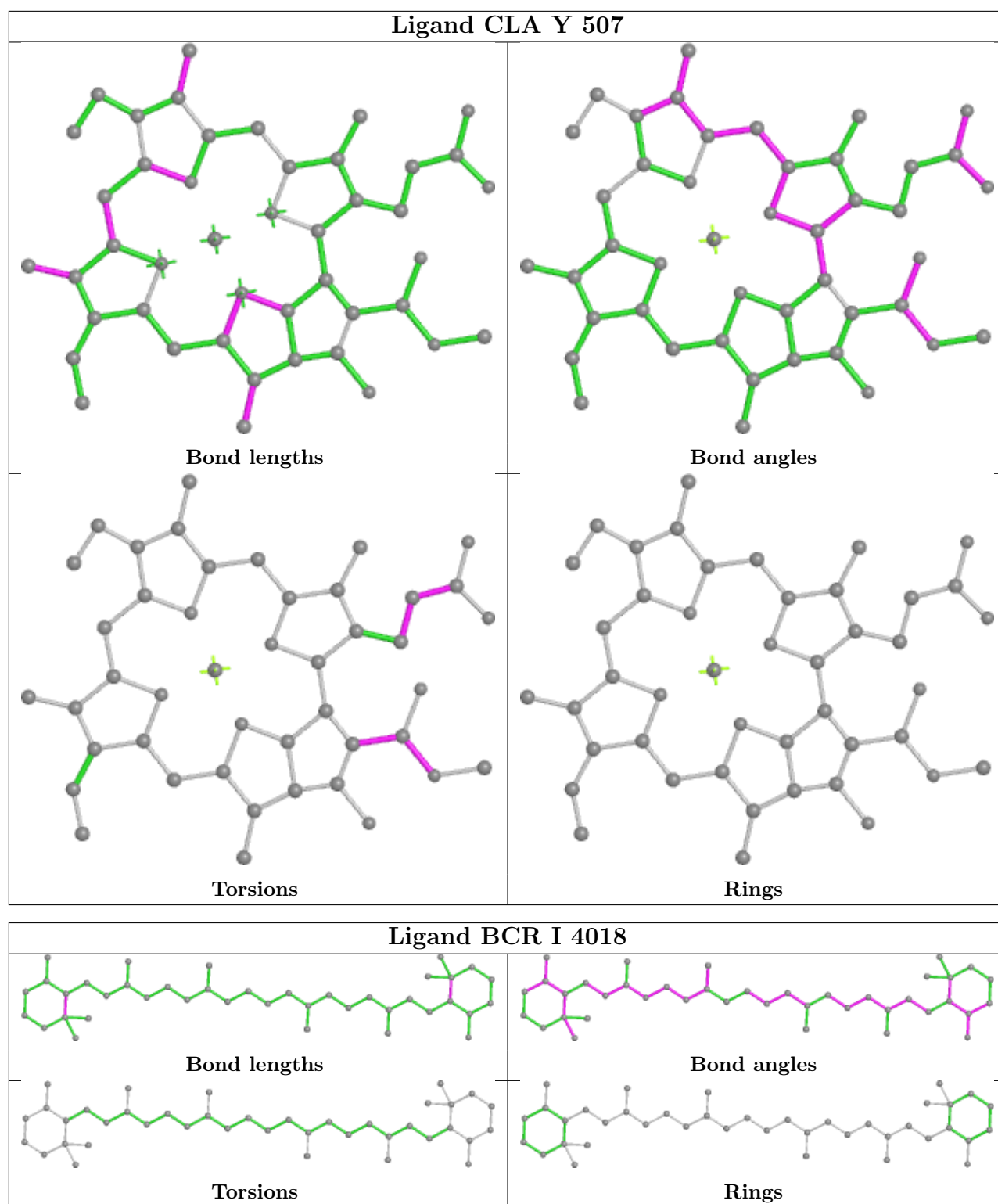


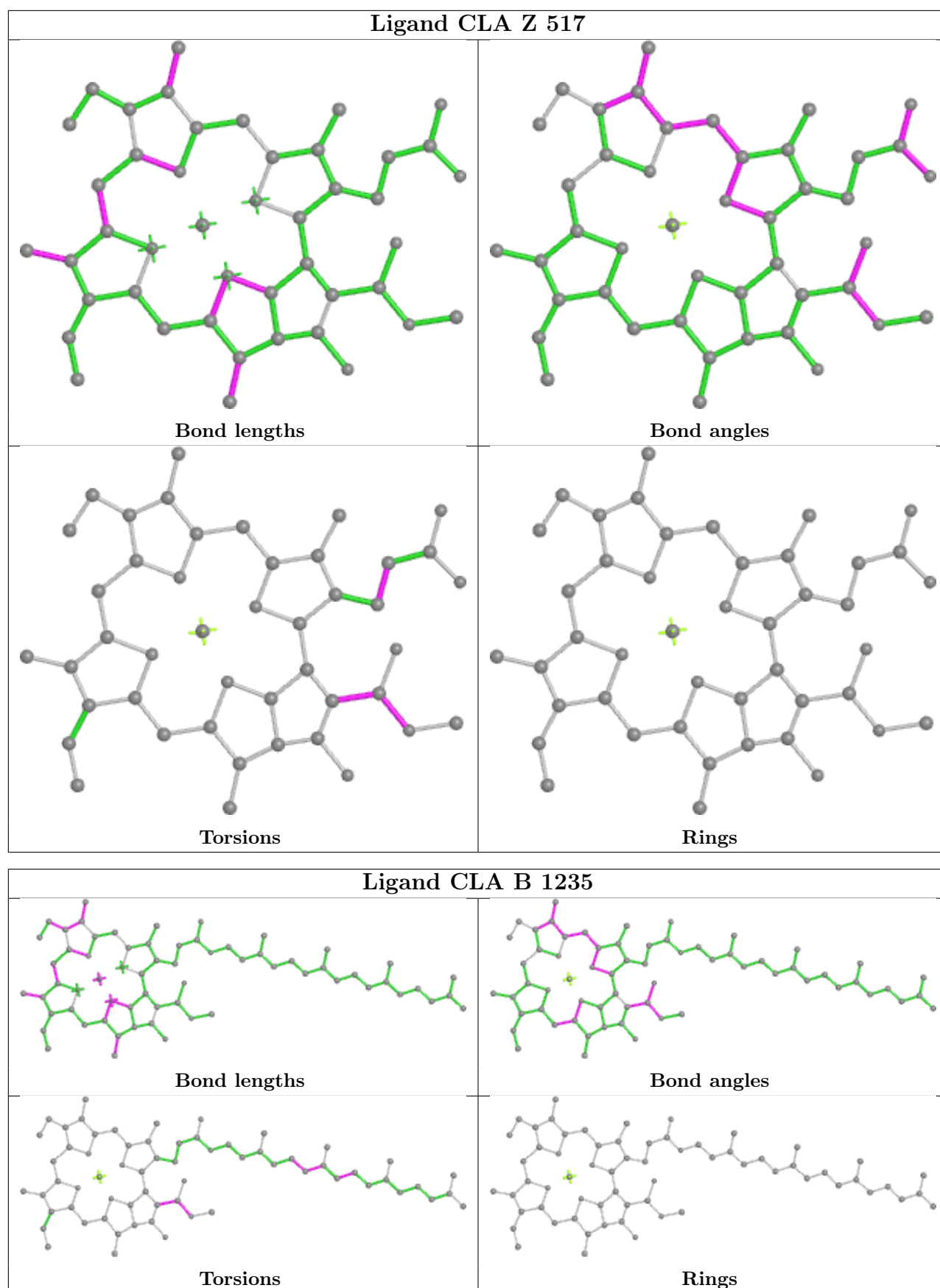


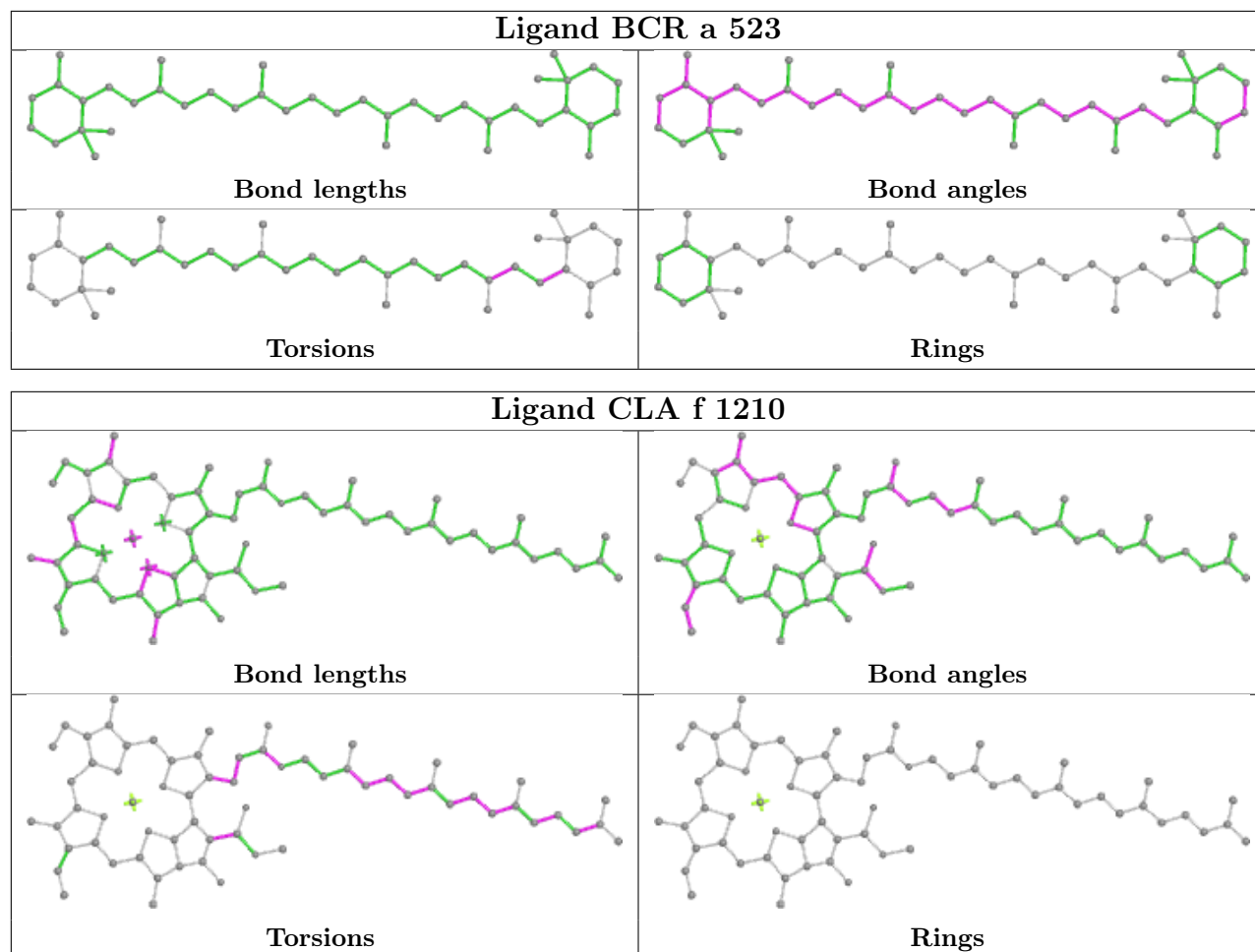


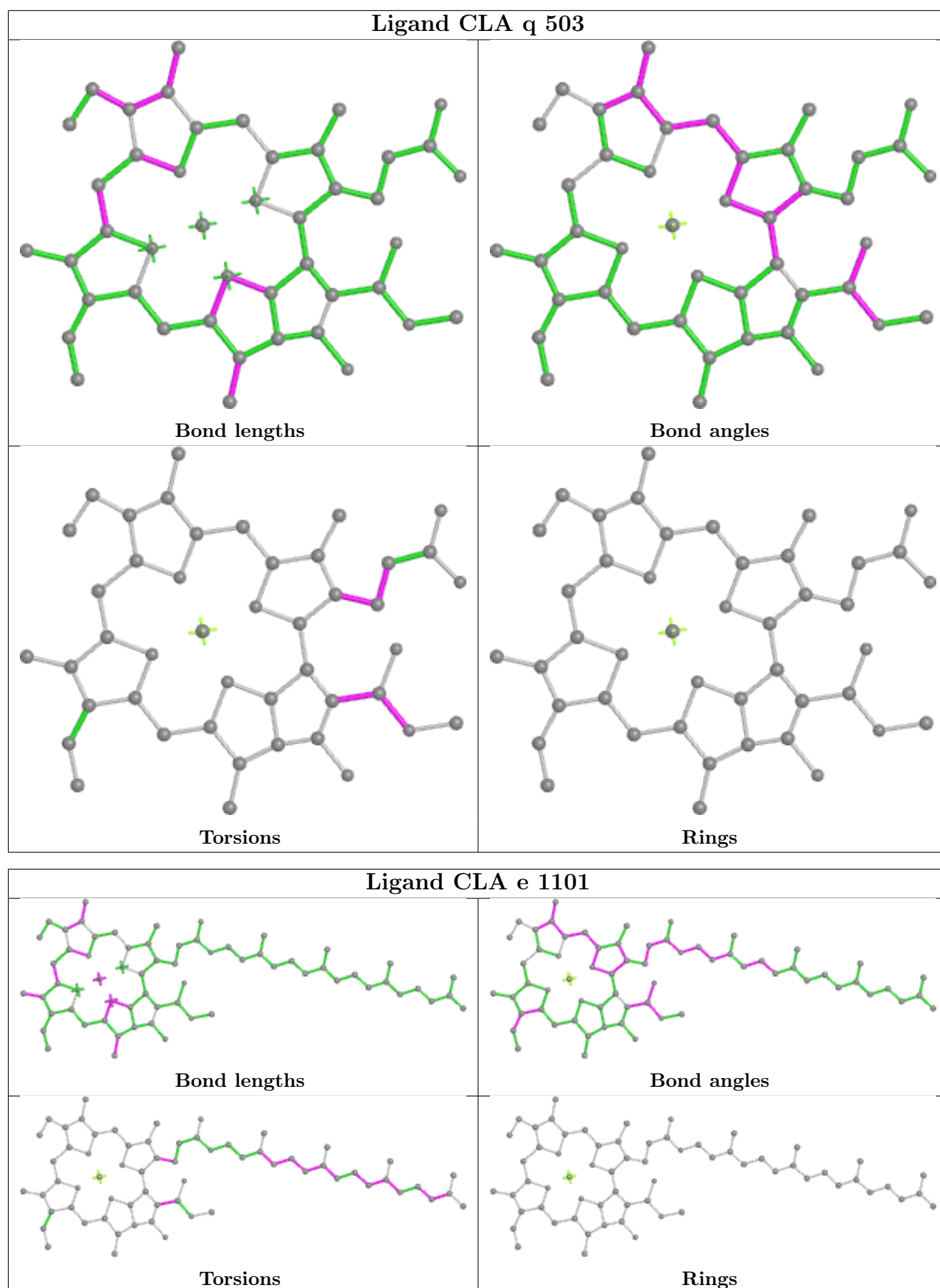


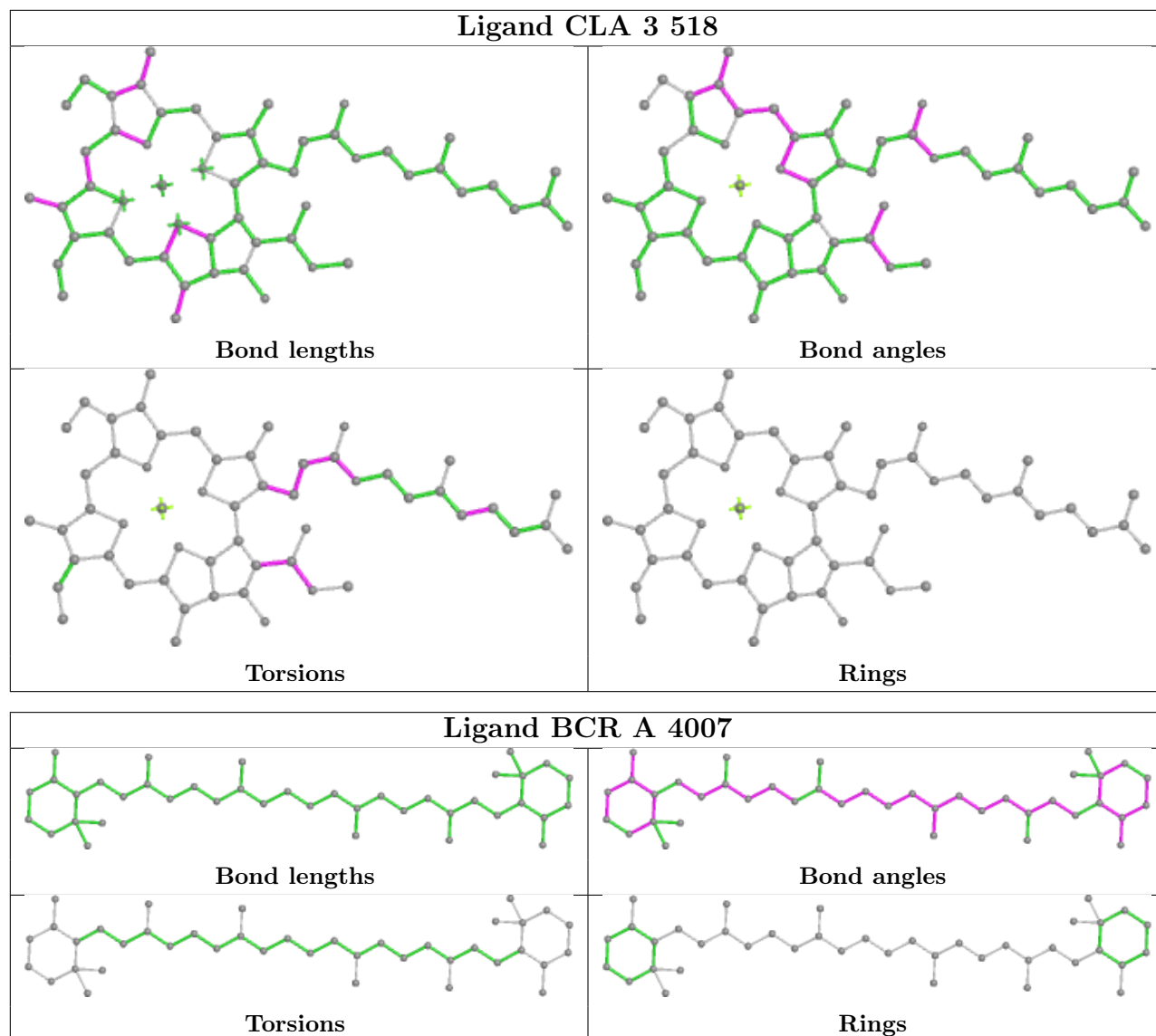


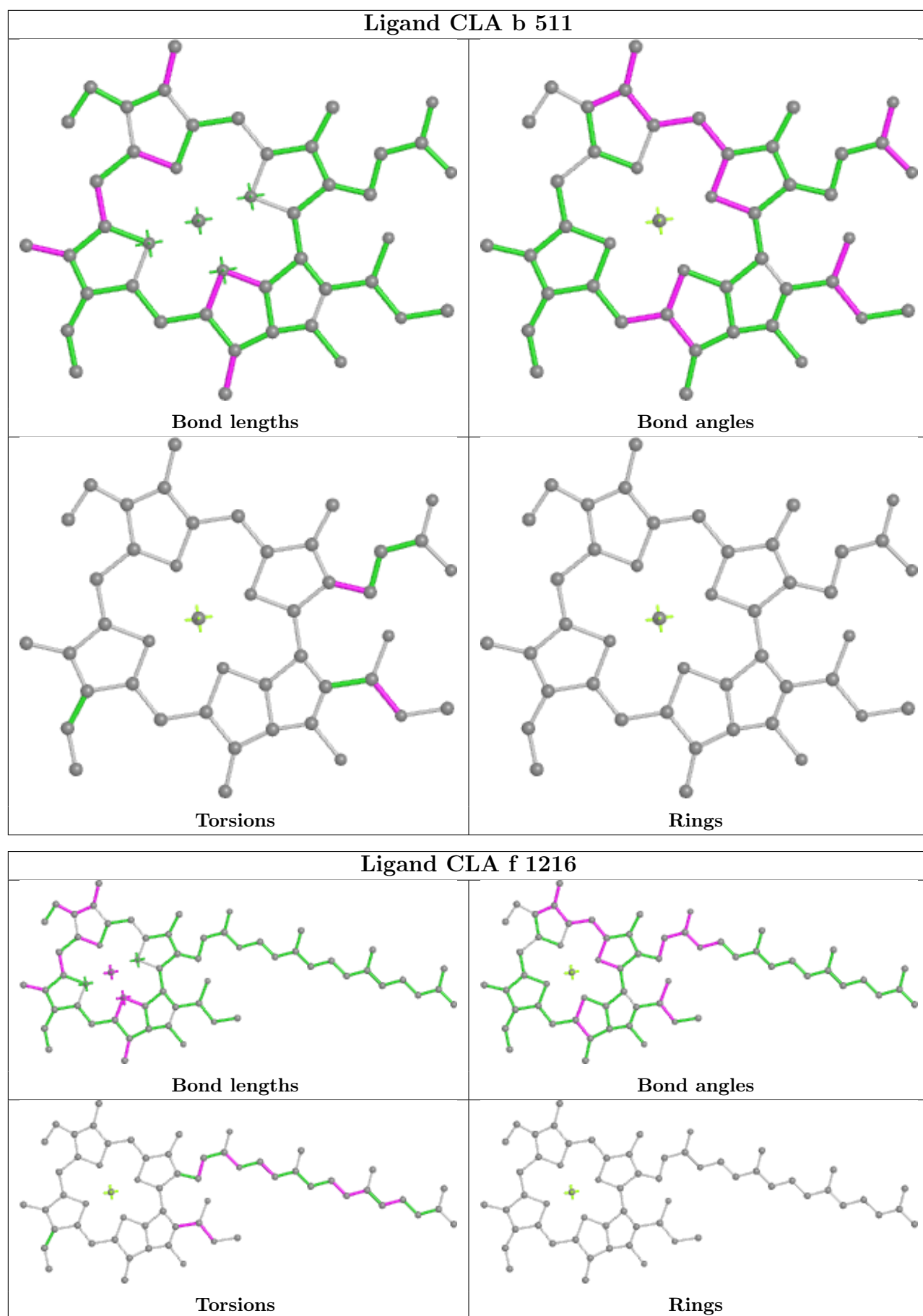




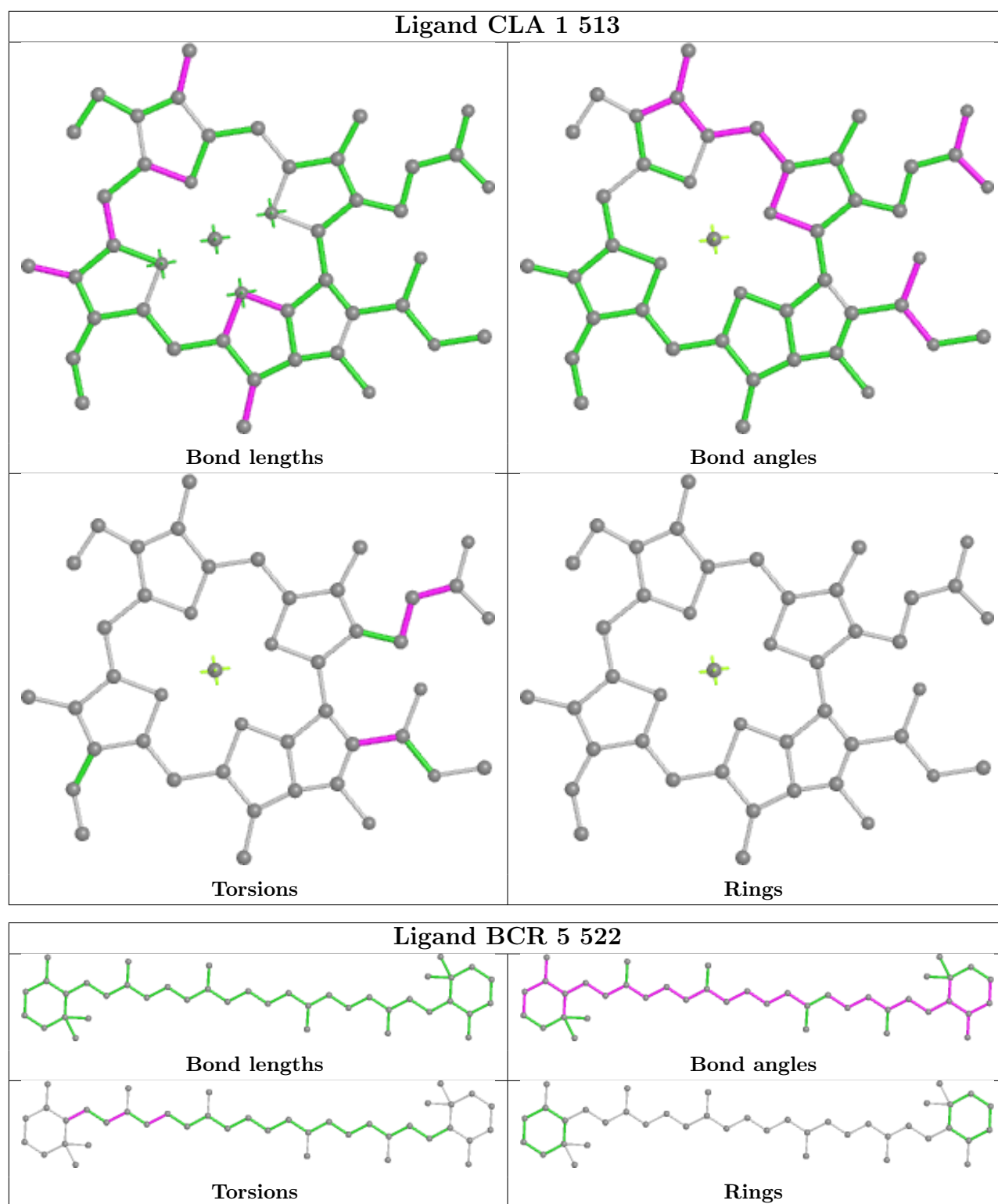


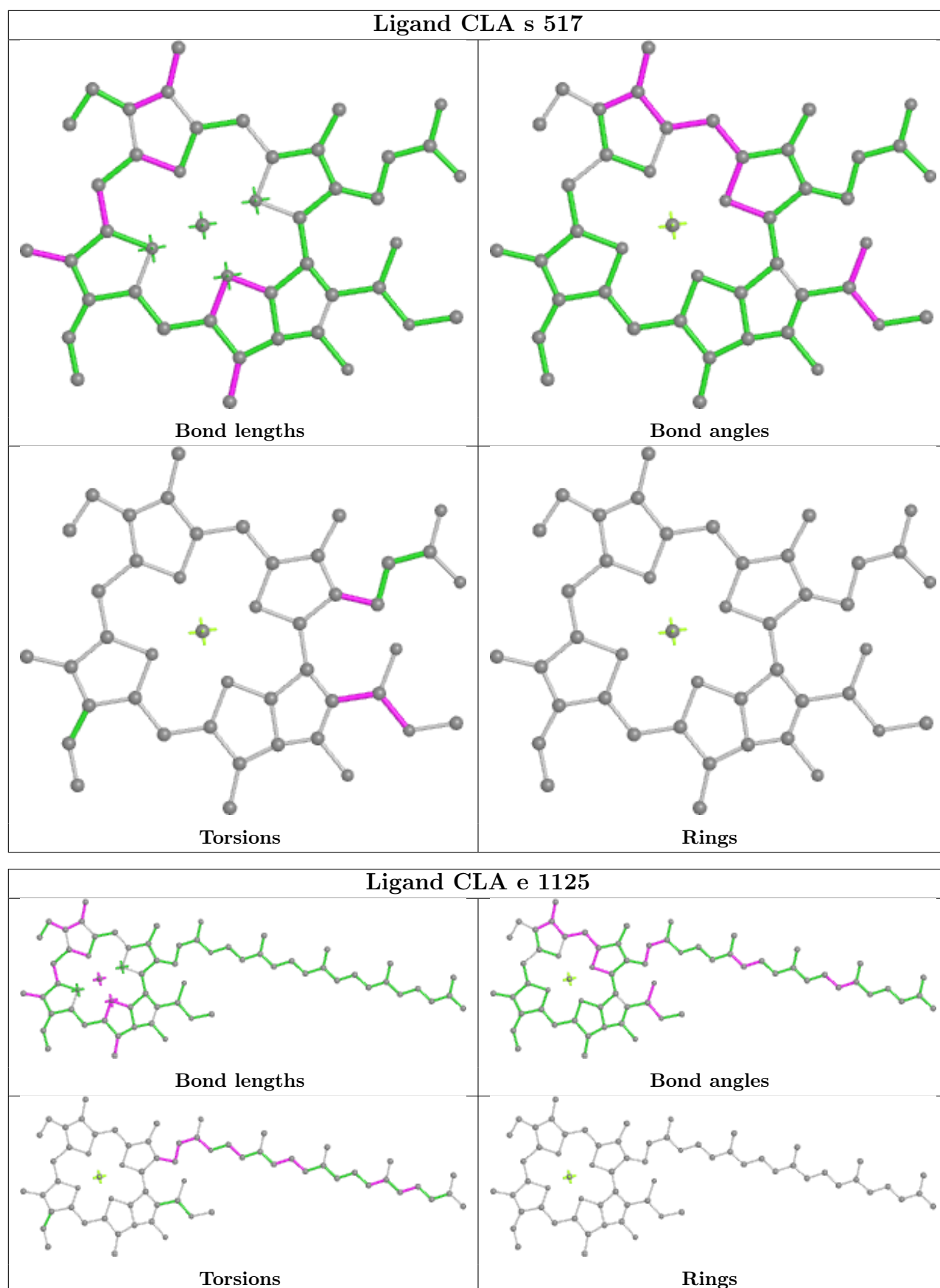


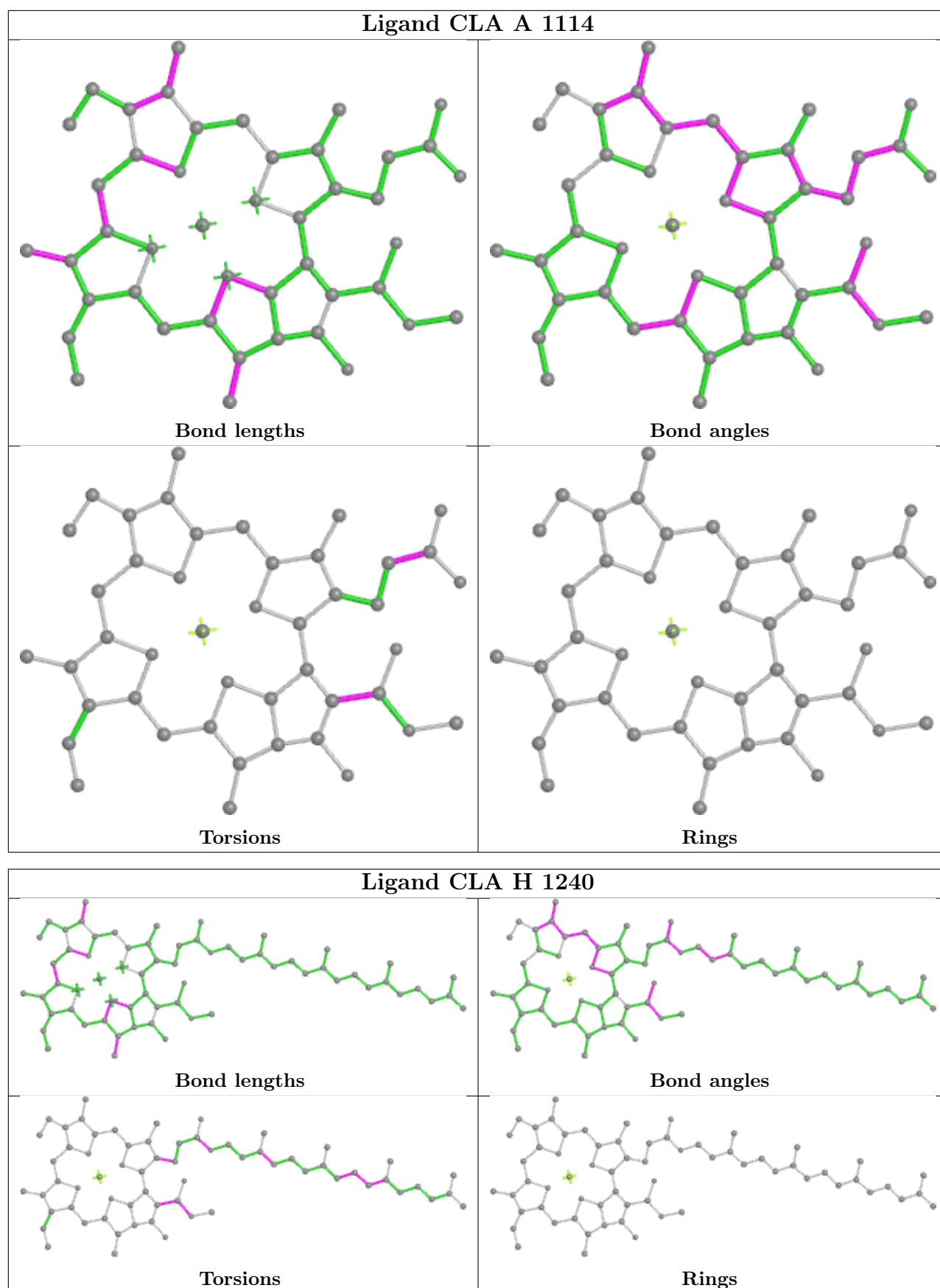


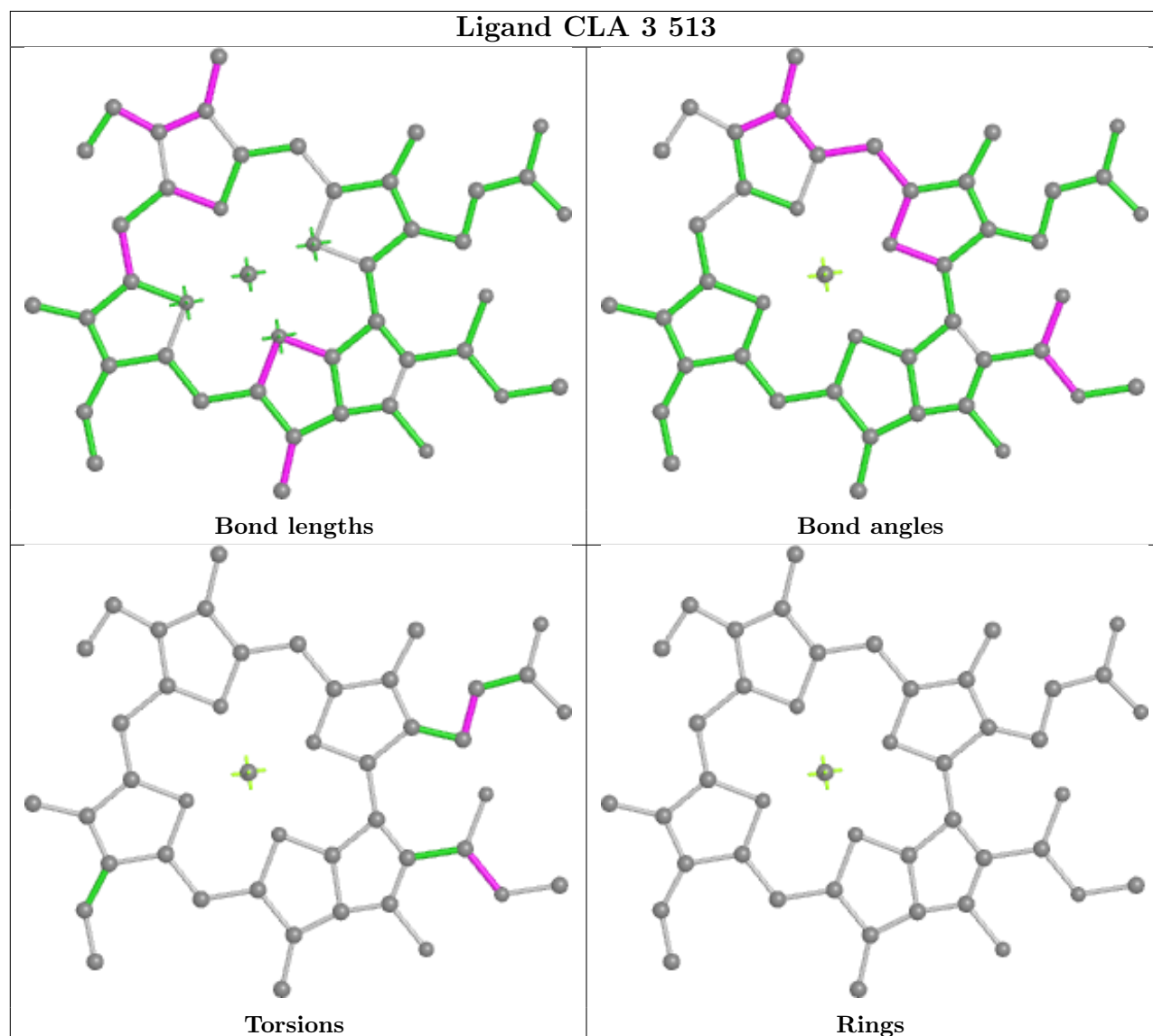
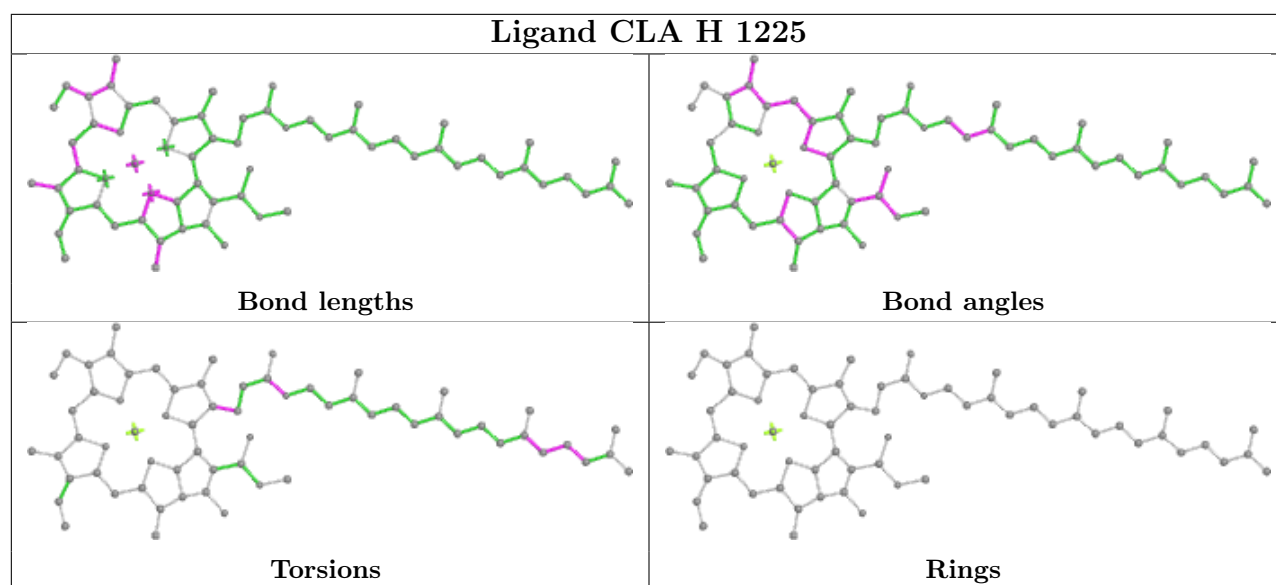


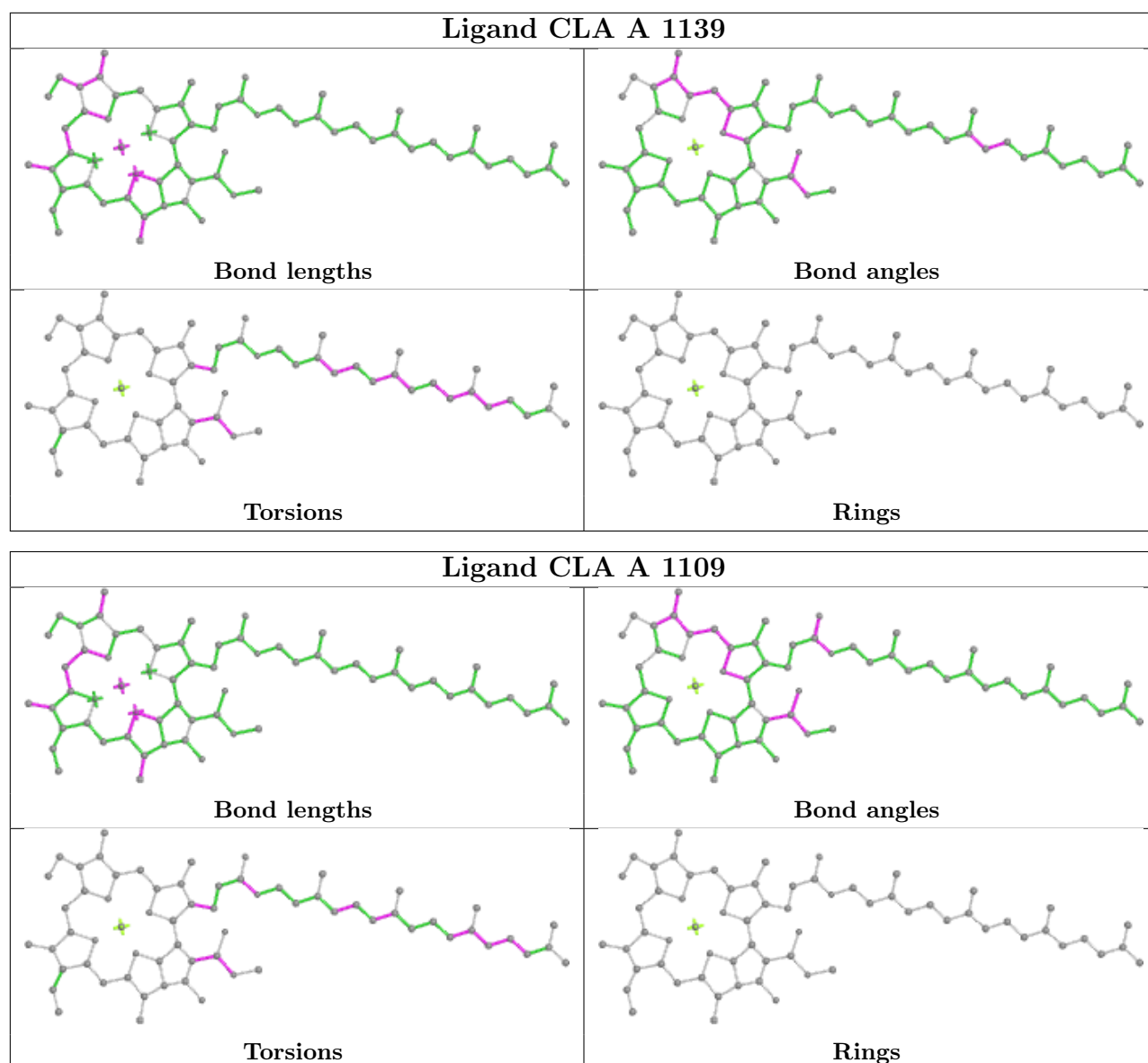


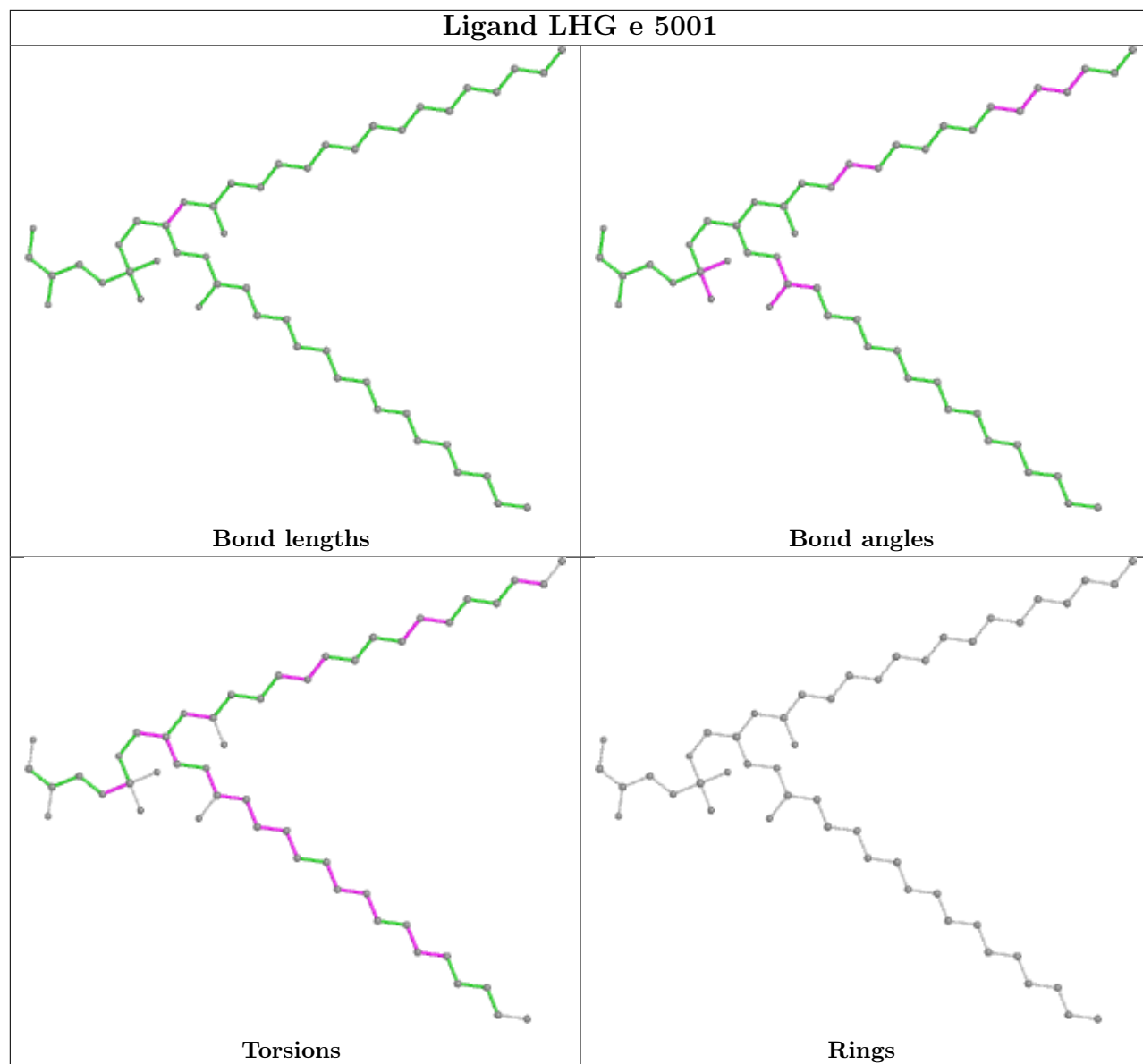


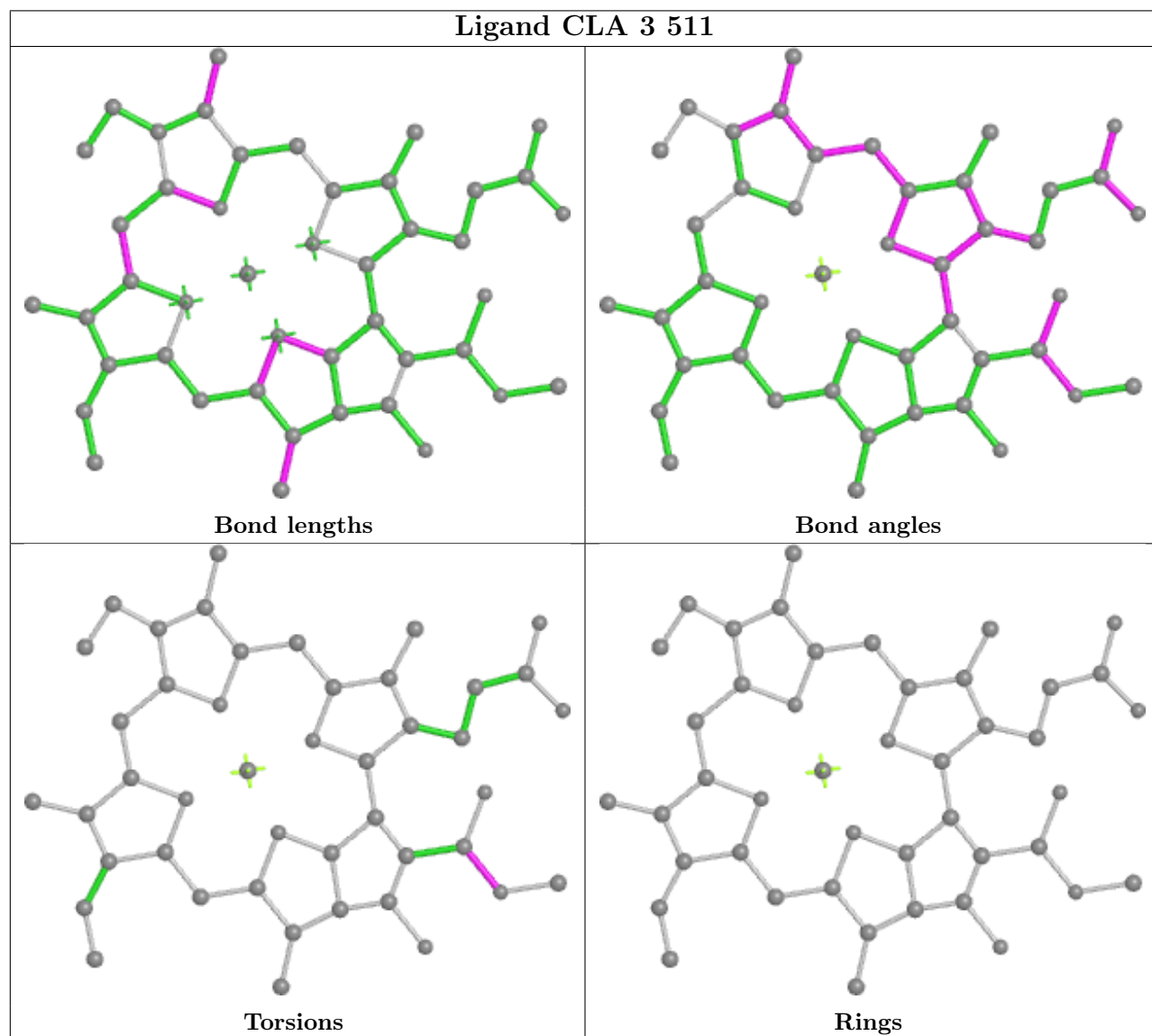
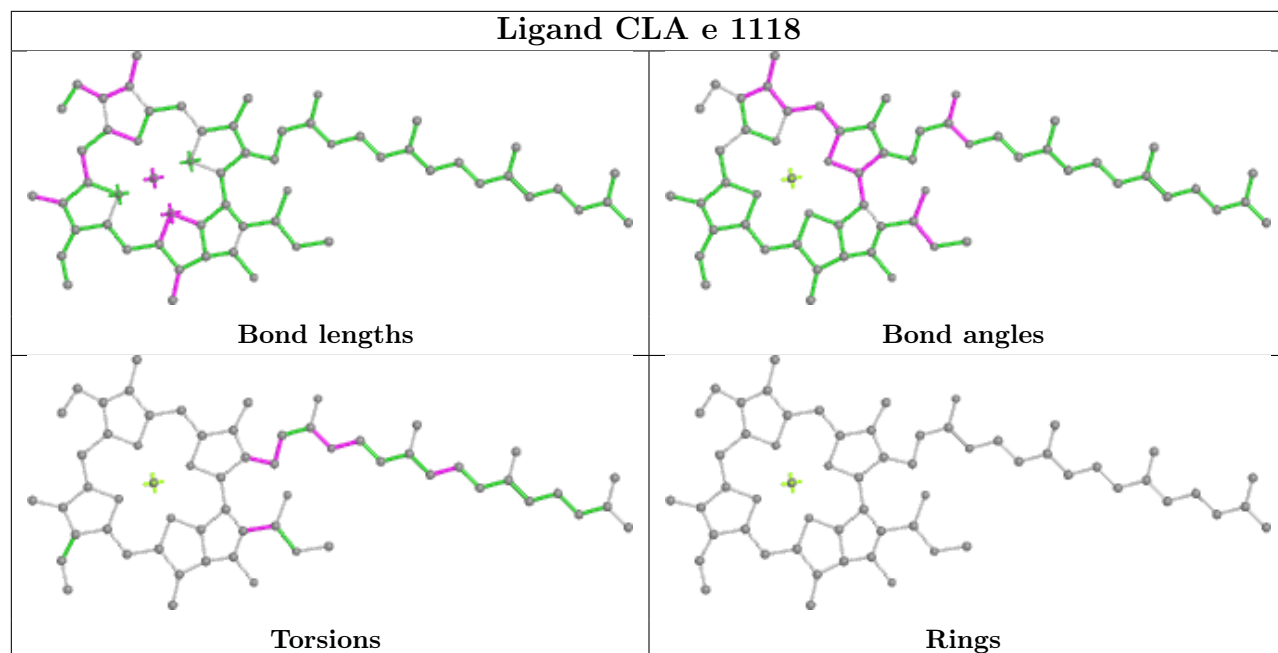


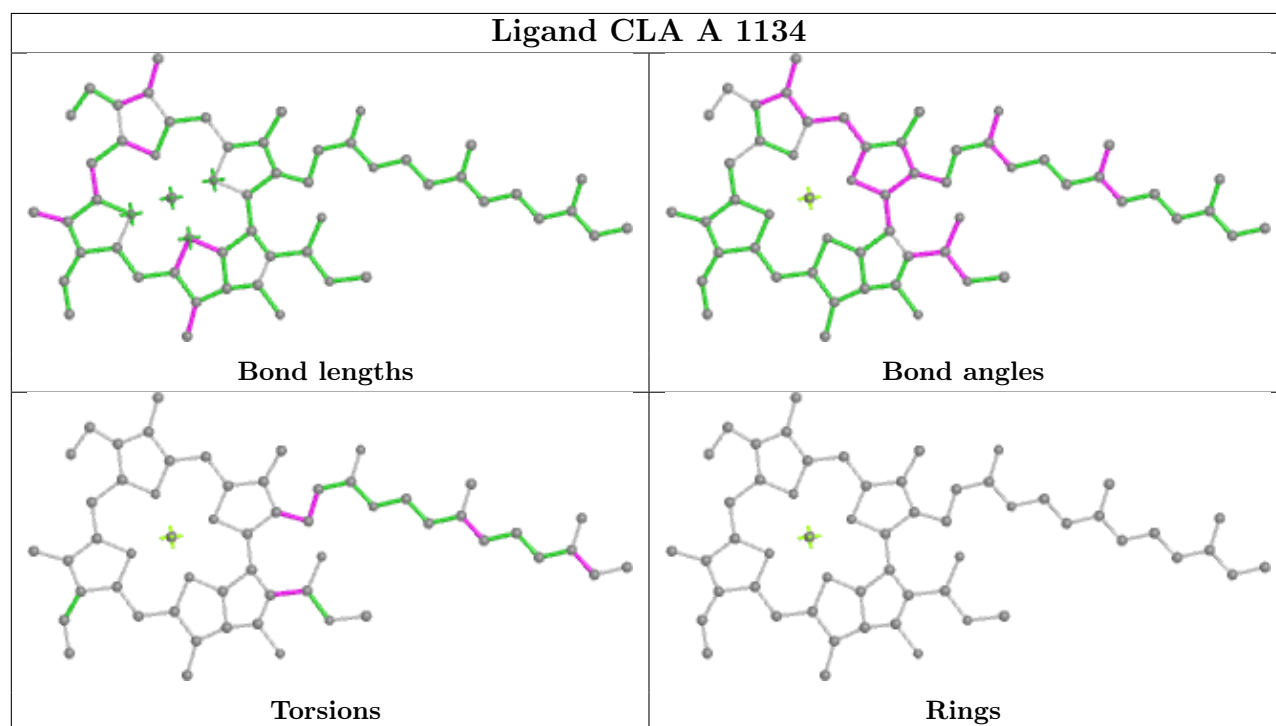
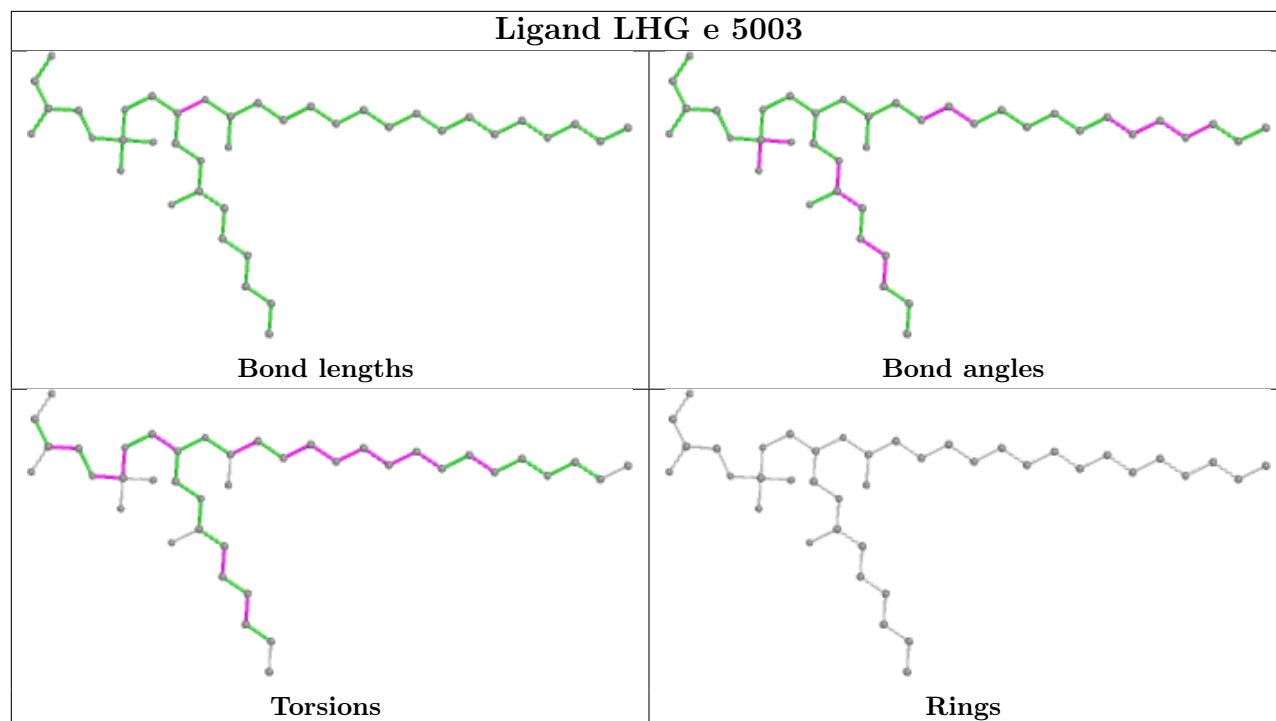




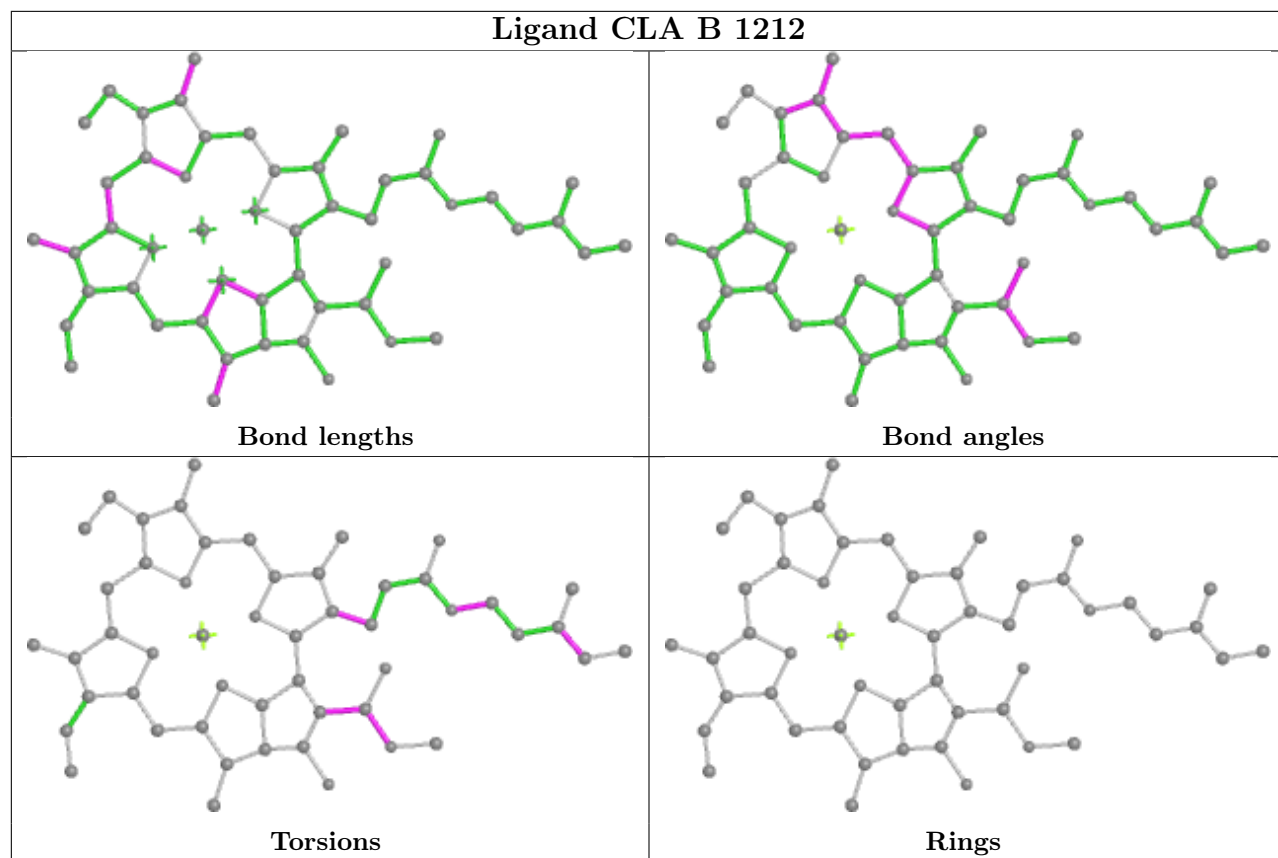


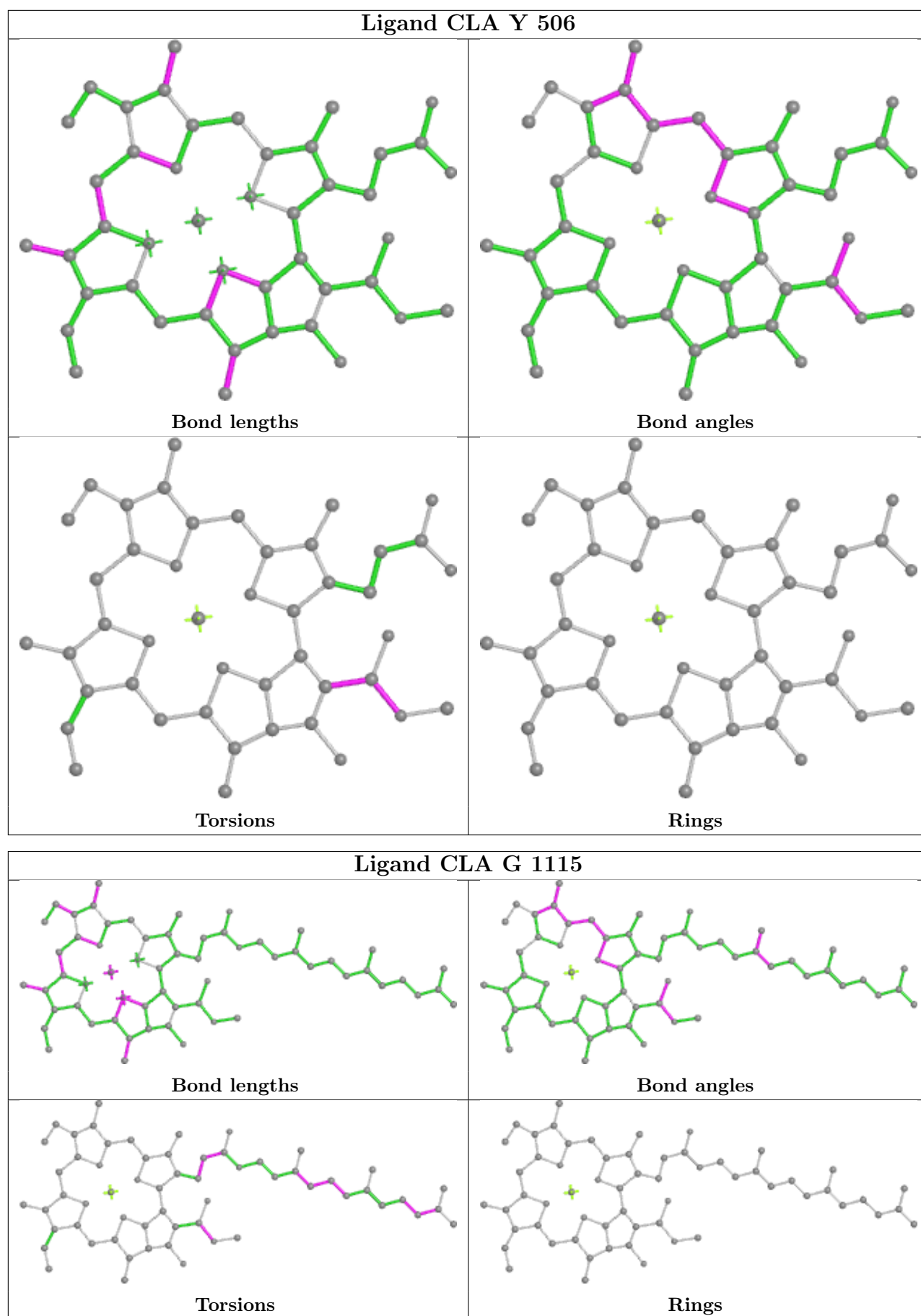


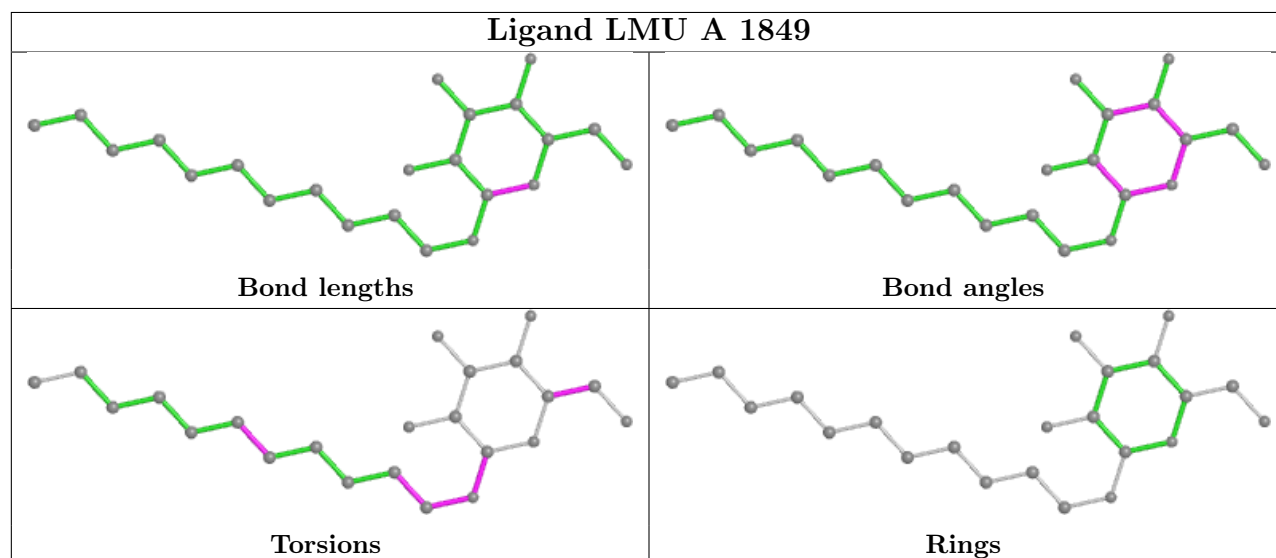
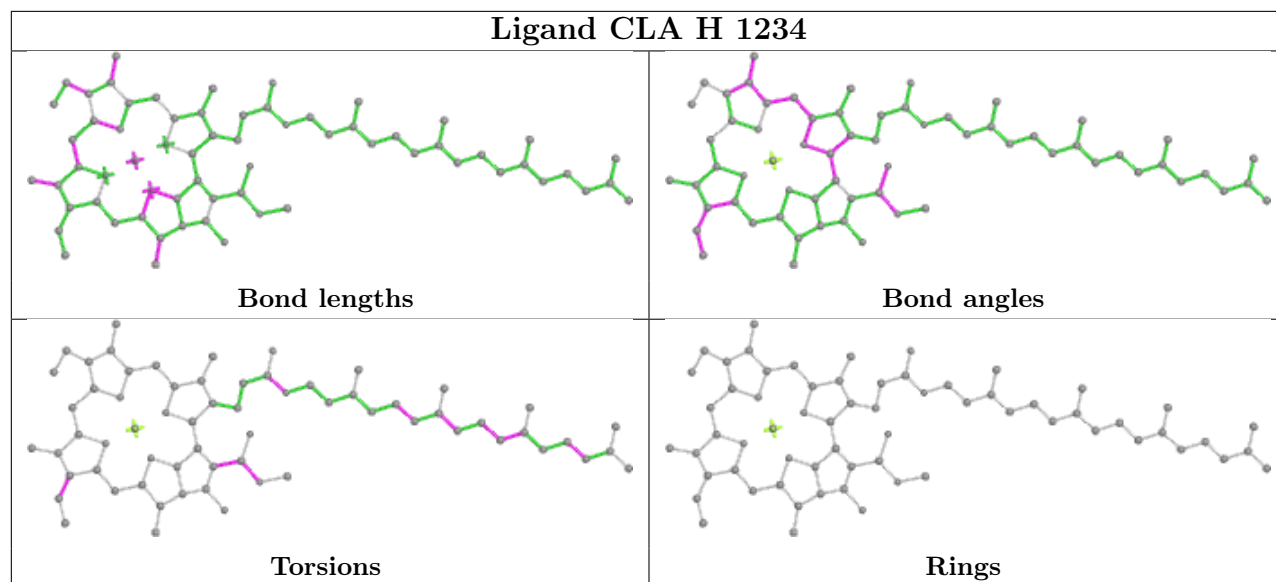


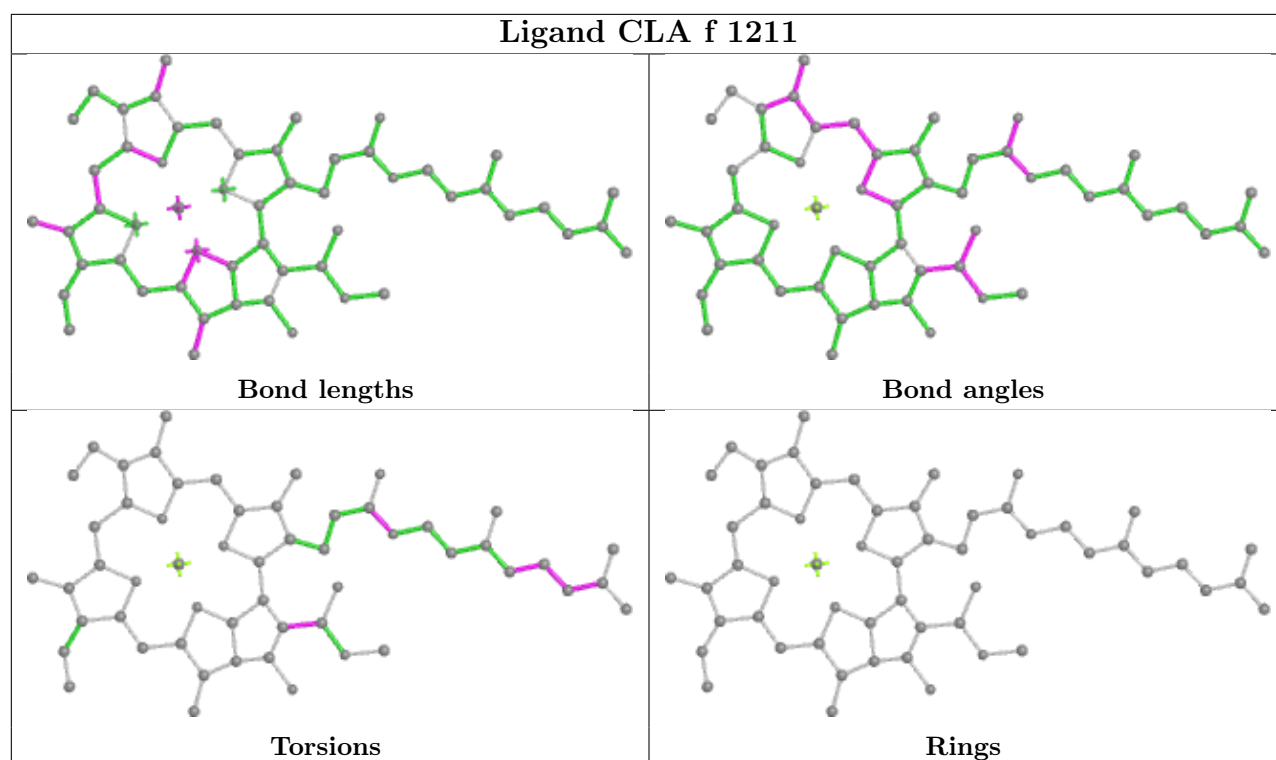












## 5.7 Other polymers [\(i\)](#)

There are no such residues in this entry.

## 5.8 Polymer linkage issues [\(i\)](#)

There are no chain breaks in this entry.

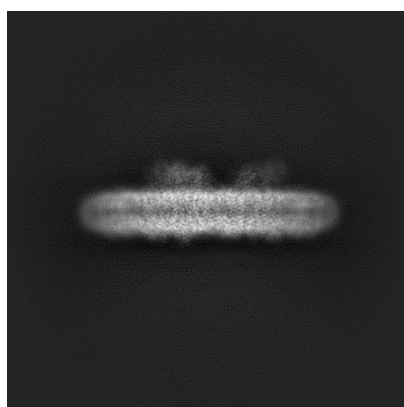
## 6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-9994. These allow visual inspection of the internal detail of the map and identification of artifacts.

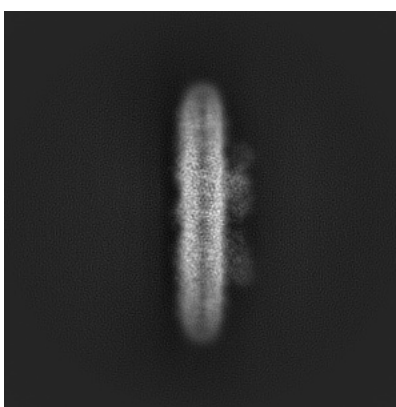
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

### 6.1 Orthogonal projections [i](#)

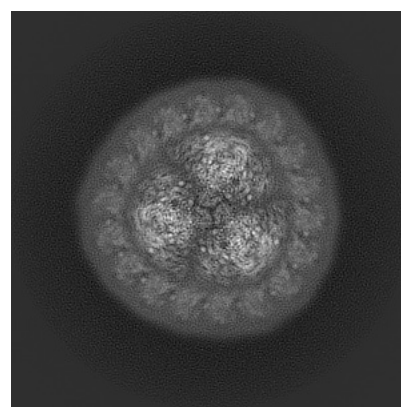
#### 6.1.1 Primary map



X



Y

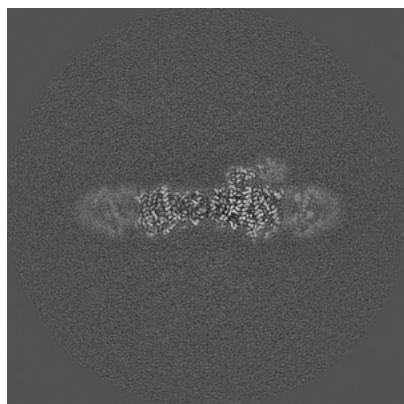


Z

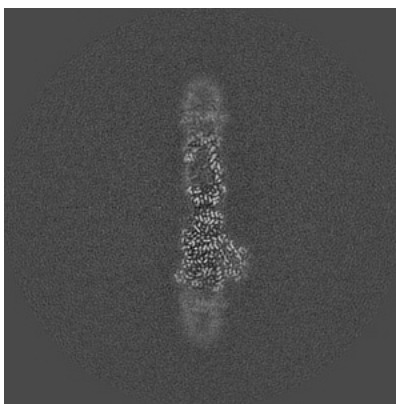
The images above show the map projected in three orthogonal directions.

### 6.2 Central slices [i](#)

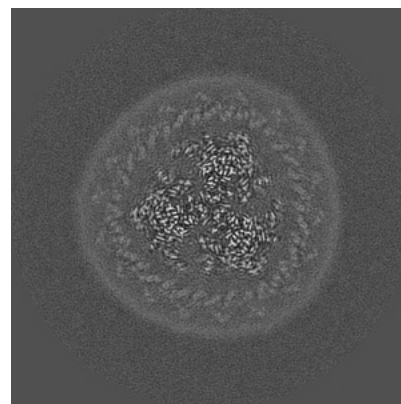
#### 6.2.1 Primary map



X Index: 240



Y Index: 240

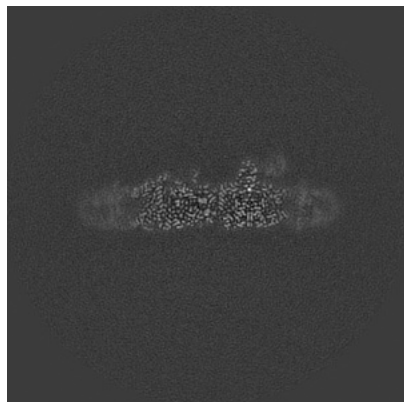


Z Index: 240

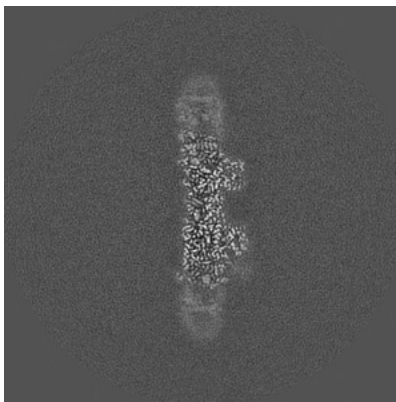
The images above show central slices of the map in three orthogonal directions.

## 6.3 Largest variance slices [i](#)

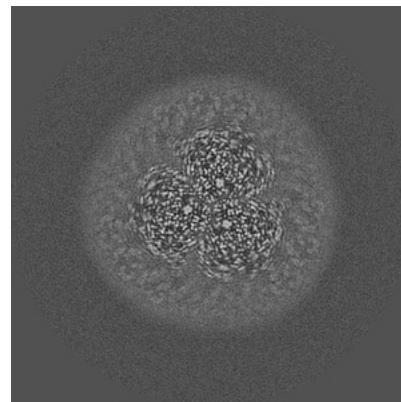
### 6.3.1 Primary map



X Index: 259



Y Index: 225



Z Index: 253

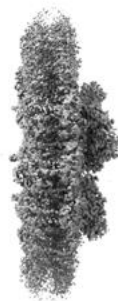
The images above show the largest variance slices of the map in three orthogonal directions.

## 6.4 Orthogonal surface views [i](#)

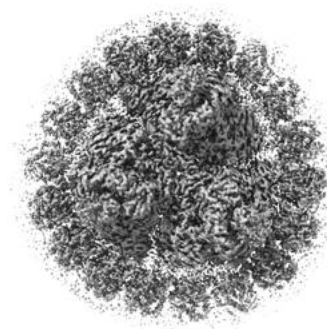
### 6.4.1 Primary map



X



Y



Z

The images above show the 3D surface view of the map at the recommended contour level 0.014. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

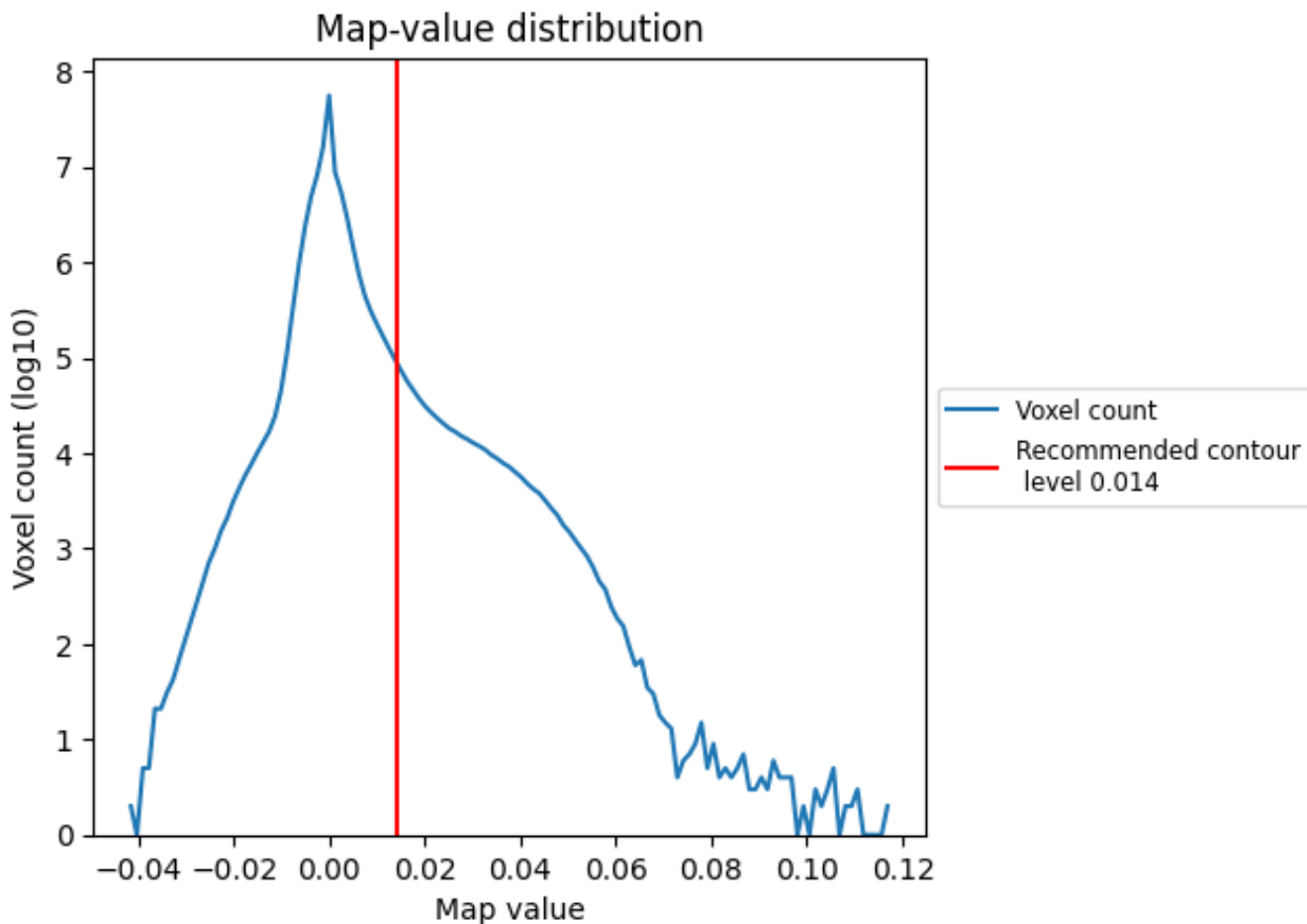
## 6.5 Mask visualisation

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

## 7 Map analysis [i](#)

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

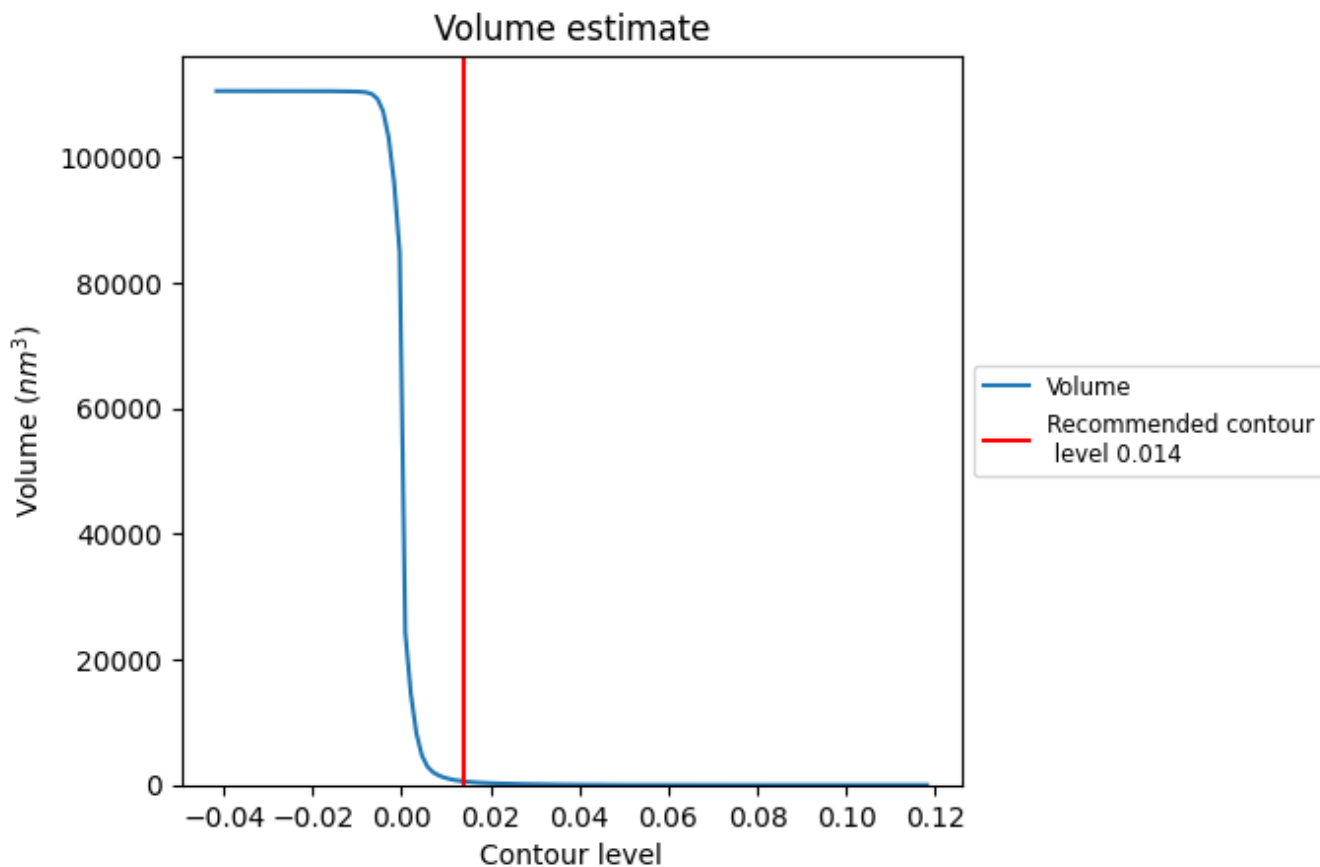
### 7.1 Map-value distribution [i](#)



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



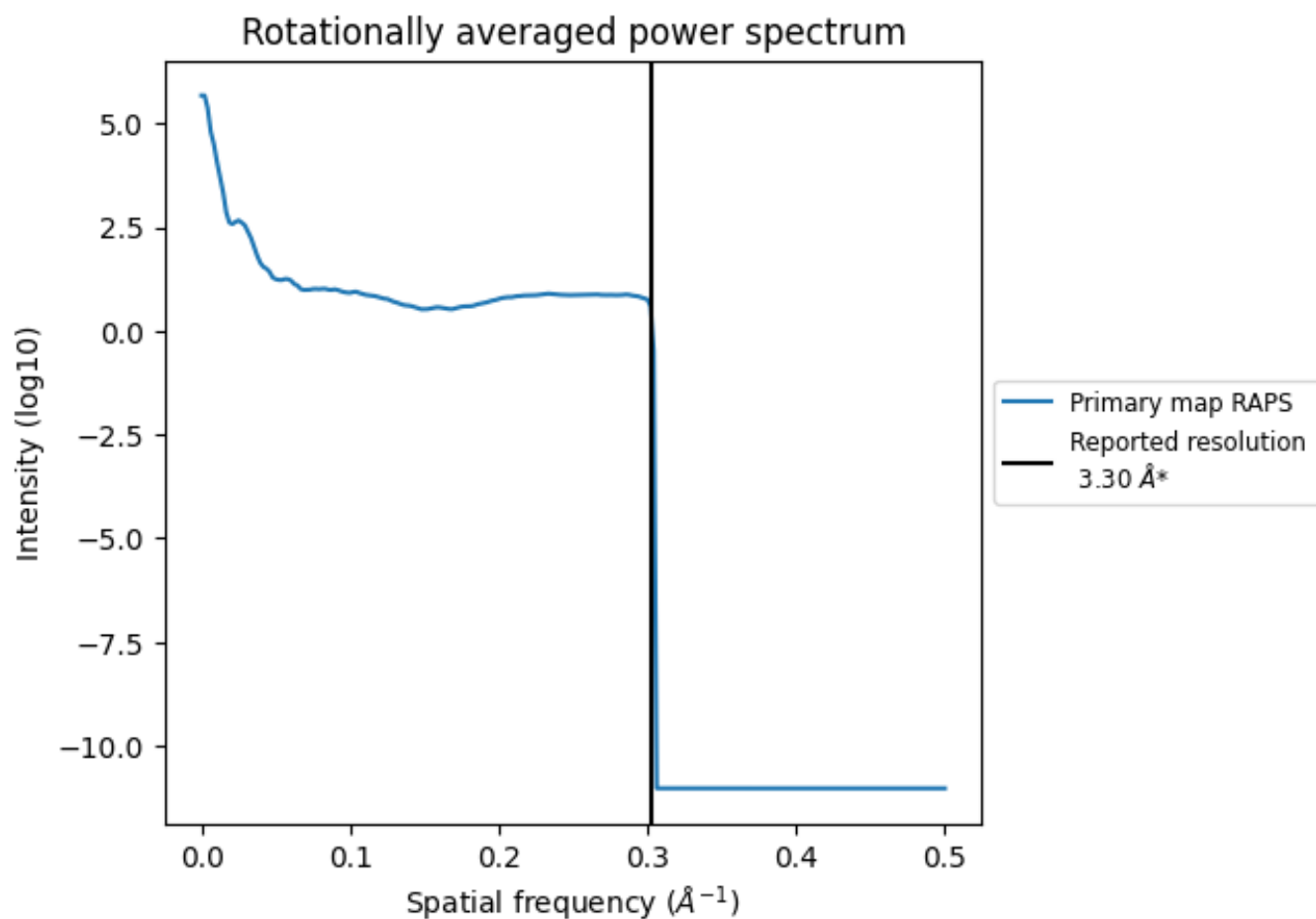
## 7.2 Volume estimate [i](#)



The volume at the recommended contour level is  $567 \text{ nm}^3$ ; this corresponds to an approximate mass of 512 kDa.

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

### 7.3 Rotationally averaged power spectrum [i](#)



\*Reported resolution corresponds to spatial frequency of 0.303 Å<sup>-1</sup>

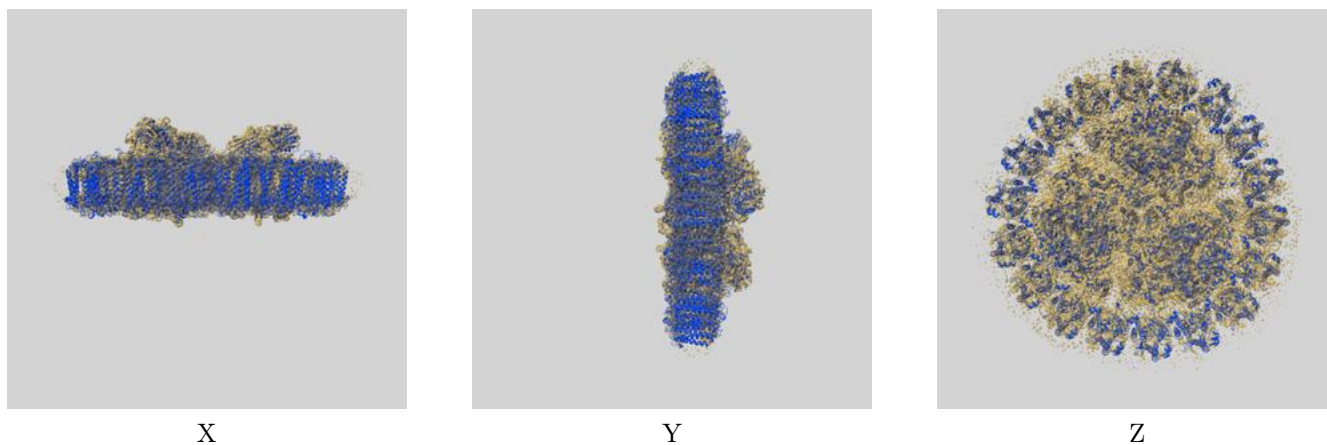
## 8 Fourier-Shell correlation

This section was not generated. No FSC curve or half-maps provided.

## 9 Map-model fit [i](#)

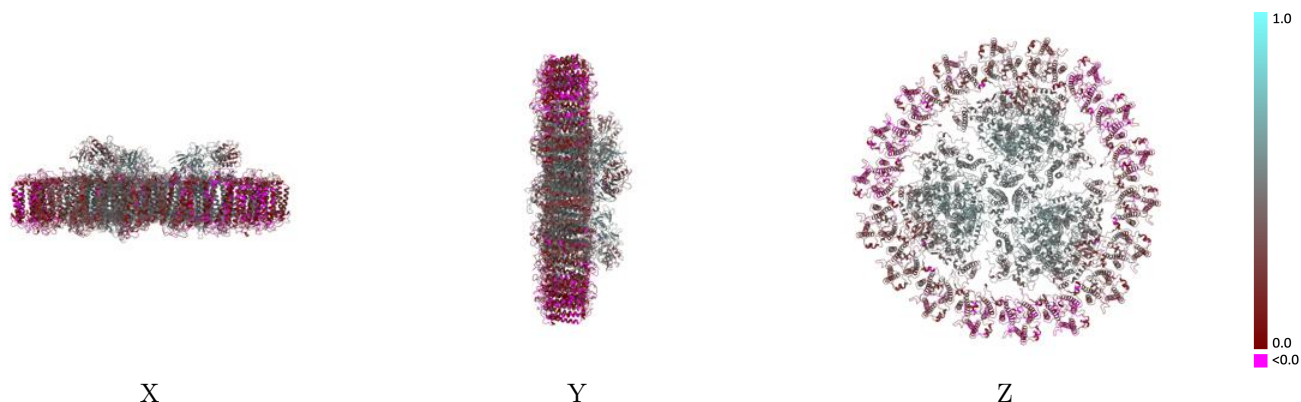
This section contains information regarding the fit between EMDB map EMD-9994 and PDB model 6KIF. Per-residue inclusion information can be found in section 3 on page 69.

### 9.1 Map-model overlay [i](#)



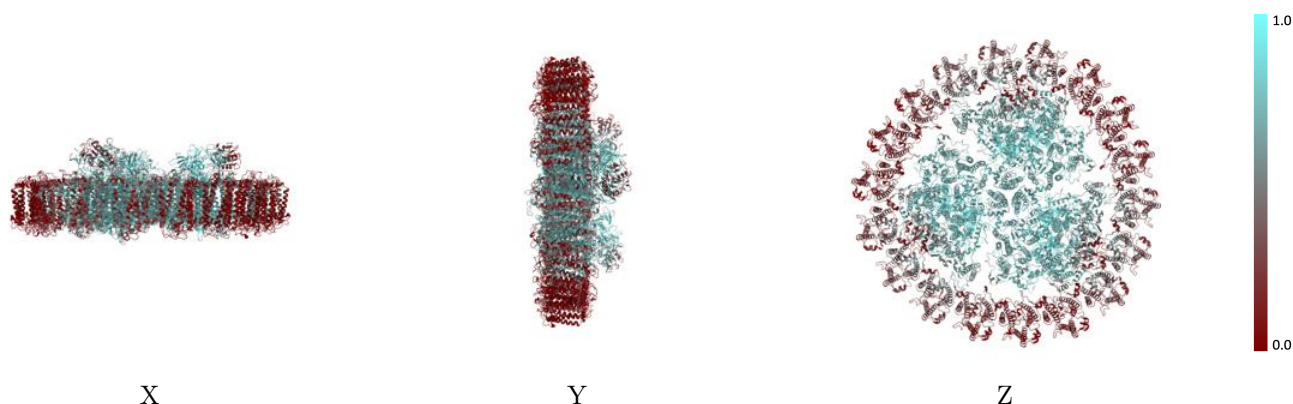
The images above show the 3D surface view of the map at the recommended contour level 0.014 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

## 9.2 Q-score mapped to coordinate model [i](#)



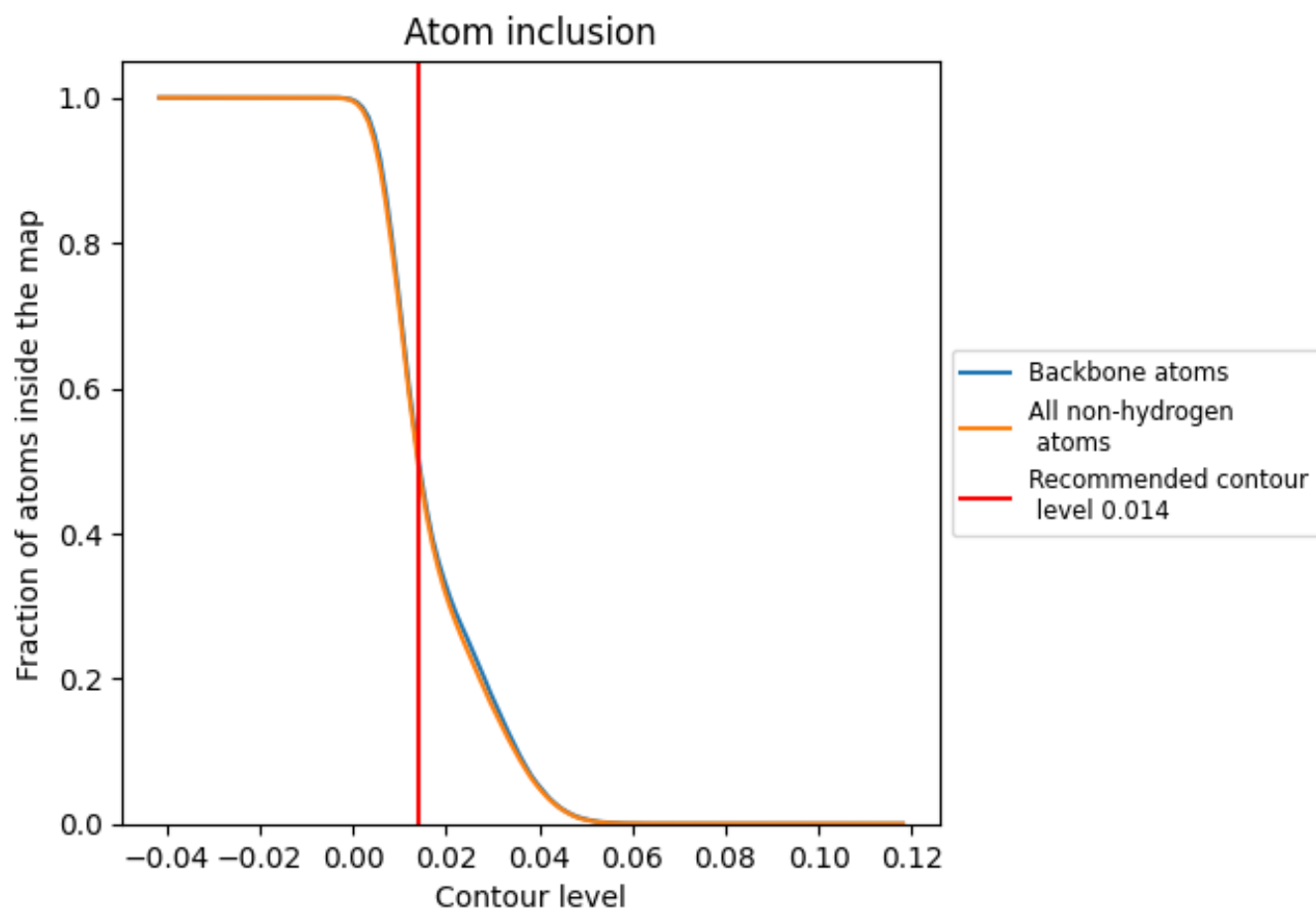
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions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

## 9.3 Atom inclusion mapped to coordinate model [i](#)



The images above show the model with each residue coloured according to its atom inclusion. This shows to what extent they are inside the map at the recommended contour level (0.014).







































































## 9.4 Atom inclusion [i](#)



At the recommended contour level, 50% of all backbone atoms, 50% of all non-hydrogen atoms, are inside the map.

## 9.5 Map-model fit summary









































The table lists the average atom inclusion at the recommended contour level (0.014) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.4953	 0.3600
1	 0.3257	 0.2570
2	 0.3296	 0.2860
3	 0.2646	 0.2560
4	 0.0824	 0.0950
5	 0.0787	 0.1060
6	 0.1419	 0.1610
A	 0.7563	 0.5190
B	 0.7499	 0.5000
C	 0.8750	 0.5350
D	 0.7924	 0.5270
E	 0.7269	 0.4830
F	 0.6904	 0.4570
G	 0.7554	 0.5150
H	 0.7495	 0.5000
I	 0.7507	 0.5410
J	 0.6790	 0.4920
K	 0.5304	 0.3470
L	 0.7814	 0.5400
M	 0.7061	 0.5080
N	 0.8717	 0.5370
O	 0.7933	 0.5260
P	 0.3706	 0.3350
Q	 0.7213	 0.4810
R	 0.6895	 0.4570
S	 0.7588	 0.5440
T	 0.6689	 0.4930
U	 0.5180	 0.3330
V	 0.7831	 0.5400
W	 0.6985	 0.5040
X	 0.3676	 0.3320
Y	 0.3176	 0.2520
Z	 0.3279	 0.2790
a	 0.2614	 0.2510
b	 0.0832	 0.0900



*Continued on next page...*

*Continued from previous page...*

Chain	Atom inclusion	Q-score
c	 0.0758	 0.1030
d	 0.1459	 0.1570
e	 0.7556	 0.5190
f	 0.7495	 0.4990
g	 0.8683	 0.5350
h	 0.7924	 0.5260
i	 0.7175	 0.4760
j	 0.6886	 0.4540
k	 0.7534	 0.5370
l	 0.6689	 0.4910
m	 0.5359	 0.3490
n	 0.7855	 0.5390
o	 0.7023	 0.5050
p	 0.3781	 0.3340
q	 0.3243	 0.2590
r	 0.3347	 0.2880
s	 0.2640	 0.2580
t	 0.0809	 0.0950
u	 0.0767	 0.1070
v	 0.1482	 0.1590