



Full wwPDB EM Validation Report ⓘ

Feb 2, 2025 – 01:15 am GMT

PDB ID : 9GRX
EMDB ID : EMD-51527
Title : NDH-PSI-LHCI supercomplex from *S. oleracea*
Authors : Introini, B.; Hahn, A.; Kuehlbrandt, W.
Deposited on : 2024-09-13
Resolution : 3.19 Å(reported)
Based on initial models : 4y28, ., 6khj

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

We welcome your comments at validation@mail.wwpdb.org

A user guide is available at

<https://www.wwpdb.org/validation/2017/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.dev113
Mogul : 1.8.4, CSD as541be (2020)
MolProbity : 4.02b-467
buster-report : 1.1.7 (2018)
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.40

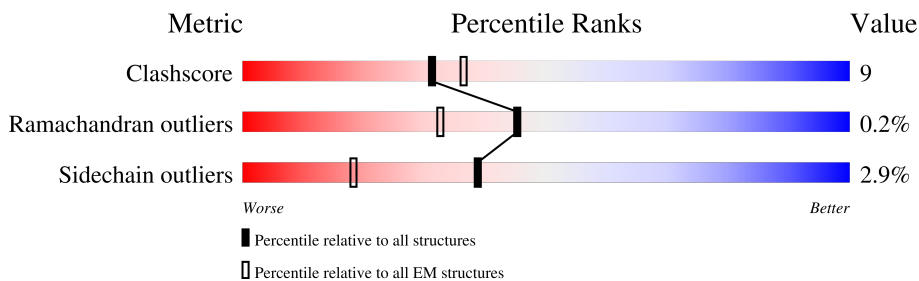
1 Overall quality at a glance i

The following experimental techniques were used to determine the structure:

ELECTRON MICROSCOPY

The reported resolution of this entry is 3.19 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	210492	15764
Ramachandran outliers	207382	16835
Sidechain outliers	206894	16415

The table below summarises the geometric issues observed across the polymeric chains and their fit to the map. The red, orange, yellow and green segments of the bar indicate the fraction of residues that contain outliers for ≥ 3 , 2, 1 and 0 types of geometric quality criteria respectively. A grey segment represents the fraction of residues that are not modelled. The numeric value for each fraction is indicated below the corresponding segment, with a dot representing fractions $\leq 5\%$. 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	0	157	
2	1	403	
3	2	372	
4	3	139	
5	4	93	
6	5	154	
7	6	125	
8	7	144	

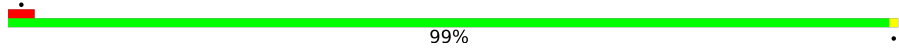
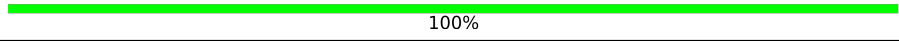
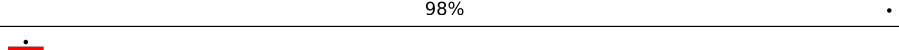
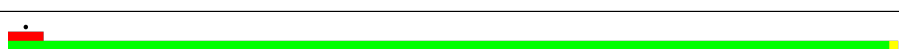
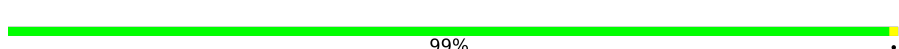
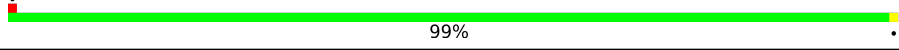
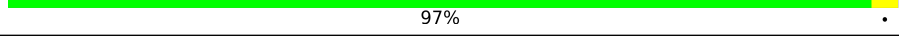
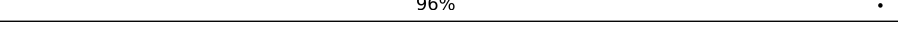
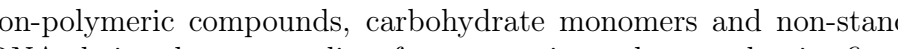
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Mol	Chain	Length	Quality of chain
9	8	143	80% 19%
10	9	174	81% 17%
11	A	350	82% 17%
12	B	488	74% 25%
13	C	115	82% 17%
14	D	498	81% 19%
15	E	100	79% 20%
16	F	742	78% 19%
17	G	176	80% 20%
18	H	389	77% 17% 5%
19	I	163	82% 18%
20	J	158	76% 23%
21	K	202	74% 22%
22	L	109	91% 9%
23	M	141	79% 19%
24	N	165	82% 18%
25	O	95	8% 91% 8%
26	U	240	5% 57% 10% 32%
27	a	742	99%
28	b	733	98%
29	c	81	98%
30	d	143	97%
31	e	68	6% 97%
32	f	153	97%
33	g	97	6% 97%

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Mol	Chain	Length	Quality of chain
34	h	95	 99%
35	i	31	 100%
36	j	42	 98%
37	k	130	 48% 49%
38	l	160	 99%
39	w	215	 99%
40	x	198	 99%
41	y	221	 97%
42	z	193	 96%

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
50	CLA	a	801	X	-	-	-
50	CLA	a	802	X	-	-	-
50	CLA	a	809	X	-	-	-
50	CLA	a	811	X	-	-	-
50	CLA	a	812	X	-	-	-
50	CLA	a	813	X	-	-	-
50	CLA	a	814	X	-	-	-
50	CLA	a	815	X	-	-	-
50	CLA	a	816	X	-	-	-
50	CLA	a	817	X	-	-	-
50	CLA	a	818	X	-	-	-
50	CLA	a	819	X	-	-	-
50	CLA	a	820	X	-	-	-
50	CLA	a	821	X	-	-	-
50	CLA	a	822	X	-	-	-
50	CLA	a	823	X	-	-	-
50	CLA	a	824	X	-	-	-
50	CLA	a	826	X	-	-	-
50	CLA	a	833	X	-	-	-
50	CLA	a	834	X	-	-	-
50	CLA	a	835	X	-	-	-
50	CLA	a	836	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
50	CLA	a	837	X	-	-	-
50	CLA	a	838	X	-	-	-
50	CLA	a	839	X	-	-	-
50	CLA	a	840	X	-	-	-
50	CLA	a	841	X	-	-	-
50	CLA	a	842	X	-	-	-
50	CLA	a	843	X	-	-	-
50	CLA	a	844	X	-	-	-
50	CLA	a	845	X	-	-	-
50	CLA	a	846	X	-	-	-
50	CLA	a	847	X	-	-	-
50	CLA	a	848	X	-	-	-
50	CLA	a	849	X	-	-	-
50	CLA	a	850	X	-	-	-
50	CLA	a	851	X	-	-	-
50	CLA	a	852	X	-	-	-
50	CLA	a	853	X	-	-	-
50	CLA	a	854	X	-	-	-
50	CLA	a	855	X	-	-	-
50	CLA	a	856	X	-	-	-
50	CLA	a	857	X	-	-	-
50	CLA	a	858	X	-	-	-
50	CLA	b	801	X	-	-	-
50	CLA	b	802	X	-	-	-
50	CLA	b	803	X	-	-	-
50	CLA	b	804	X	-	-	-
50	CLA	b	805	X	-	-	-
50	CLA	b	806	X	-	-	-
50	CLA	b	807	X	-	-	-
50	CLA	b	808	X	-	-	-
50	CLA	b	809	X	-	-	-
50	CLA	b	810	X	-	-	-
50	CLA	b	811	X	-	-	-
50	CLA	b	812	X	-	-	-
50	CLA	b	813	X	-	-	-
50	CLA	b	814	X	-	-	-
50	CLA	b	815	X	-	-	-
50	CLA	b	822	X	-	-	-
50	CLA	b	823	X	-	-	-
50	CLA	b	824	X	-	-	-
50	CLA	b	825	X	-	-	-
50	CLA	b	826	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
50	CLA	b	828	X	-	-	-
50	CLA	b	832	X	-	-	-
50	CLA	b	833	X	-	-	-
50	CLA	b	834	X	-	-	-
50	CLA	b	835	X	-	-	-
50	CLA	b	836	X	-	-	-
50	CLA	b	837	X	-	-	-
50	CLA	b	838	X	-	-	-
50	CLA	b	839	X	-	-	-
50	CLA	b	840	X	-	-	-
50	CLA	b	841	X	-	-	-
50	CLA	b	842	X	-	-	-
50	CLA	b	843	X	-	-	-
50	CLA	b	844	X	-	-	-
50	CLA	b	845	X	-	-	-
50	CLA	b	846	X	-	-	-
50	CLA	b	847	X	-	-	-
50	CLA	b	848	X	-	-	-
50	CLA	b	849	X	-	-	-
50	CLA	b	851	X	-	-	-
50	CLA	f	301	X	-	-	-
50	CLA	f	302	X	-	-	-
50	CLA	f	303	X	-	-	-
50	CLA	g	201	X	-	-	-
50	CLA	g	203	X	-	-	-
50	CLA	g	204	X	-	-	-
50	CLA	h	201	X	-	-	-
50	CLA	j	102	X	-	-	-
50	CLA	k	203	X	-	-	-
50	CLA	k	204	X	-	-	-
50	CLA	k	205	X	-	-	-
50	CLA	l	301	X	-	-	-
50	CLA	l	305	X	-	-	-
50	CLA	l	306	X	-	-	-
50	CLA	w	302	X	-	-	-
50	CLA	w	303	X	-	-	-
50	CLA	w	305	X	-	-	-
50	CLA	w	306	X	-	-	-
50	CLA	w	307	X	-	-	-
50	CLA	w	308	X	-	-	-
50	CLA	w	310	X	-	-	-
50	CLA	w	314	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
50	CLA	w	315	X	-	-	-
50	CLA	w	316	X	-	-	-
50	CLA	x	302	X	-	-	-
50	CLA	x	303	X	-	-	-
50	CLA	x	304	X	-	-	-
50	CLA	x	306	X	-	-	-
50	CLA	x	307	X	-	-	-
50	CLA	x	308	X	-	-	-
50	CLA	x	309	X	-	-	-
50	CLA	x	310	X	-	-	-
50	CLA	x	312	X	-	-	-
50	CLA	x	313	X	-	-	-
50	CLA	x	316	X	-	-	-
50	CLA	x	318	X	-	-	-
50	CLA	y	302	X	-	-	-
50	CLA	y	303	X	-	-	-
50	CLA	y	304	X	-	-	-
50	CLA	y	305	X	-	-	-
50	CLA	y	306	X	-	-	-
50	CLA	y	307	X	-	-	-
50	CLA	y	308	X	-	-	-
50	CLA	y	309	X	-	-	-
50	CLA	y	310	X	-	-	-
50	CLA	y	311	X	-	-	-
50	CLA	y	312	X	-	-	-
50	CLA	y	313	X	-	-	-
50	CLA	y	314	X	-	-	-
50	CLA	z	302	X	-	-	-
50	CLA	z	303	X	-	-	-
50	CLA	z	305	X	-	-	-
50	CLA	z	306	X	-	-	-
50	CLA	z	307	X	-	-	-
50	CLA	z	308	X	-	-	-
50	CLA	z	309	X	-	-	-
50	CLA	z	310	X	-	-	-
50	CLA	z	311	X	-	-	-
50	CLA	z	316	X	-	-	-
50	CLA	z	319	X	-	-	-
52	CL0	a	808	X	-	-	-
54	CHL	w	304	X	-	-	-
54	CHL	w	309	X	-	-	-
54	CHL	w	311	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
54	CHL	x	301	X	-	-	-
54	CHL	x	305	X	-	-	-
54	CHL	x	311	X	-	-	-
54	CHL	x	319	X	-	-	-
54	CHL	z	304	X	-	-	-
54	CHL	z	312	X	-	-	-

2 Entry composition

There are 55 unique types of molecules in this entry. The entry contains 83864 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 Photosynthetic NDH subunit of lumenal location 1, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	0	157	1317	840	227	248	2	0	0

- Molecule 2 is a protein called Photosynthetic NDH subunit of subcomplex B 1, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	1	403	3133	1994	515	607	17	0	0

- Molecule 3 is a protein called Photosynthetic NDH subunit of subcomplex B 2, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	2	300	2305	1463	383	452	7	0	0

- Molecule 4 is a protein called Photosynthetic NDH subunit of subcomplex B 3, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	3	139	1093	690	185	210	8	0	0

- Molecule 5 is a protein called Photosynthetic NDH subunit of subcomplex B 4, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	4	93	756	482	125	143	6	0	0

- Molecule 6 is a protein called Photosynthetic NDH subunit of subcomplex B 5, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	5	154	1258	816	194	242	6	0	0

- Molecule 7 is a protein called Photosynthetic NDH subunit of luminal location 2, chloroplast.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
7	6	125	1048	675	174	193	6	0	0

- Molecule 8 is a protein called Photosynthetic NDH subunit of luminal location 3, chloroplast.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
8	7	144	1156	739	198	213	6	0	0

- Molecule 9 is a protein called peptidylprolyl isomerase.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
9	8	143	1075	680	187	201	7	0	0

- Molecule 10 is a protein called Peptidyl-prolyl cis-trans isomerase.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
10	9	174	1326	836	233	251	6	0	0

- Molecule 11 is a protein called NAD(P)H-quinone oxidoreductase subunit 1, chloroplast.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
11	A	350	2728	1821	420	482	5	0	0

- Molecule 12 is a protein called NAD(P)H-quinone oxidoreductase subunit 2 A, chloroplast.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
12	B	488	3799	2506	583	683	27	0	0

- Molecule 13 is a protein called NAD(P)H-quinone oxidoreductase subunit 3, chloroplast.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
13	C	115	944	653	133	155	3	0	0

- Molecule 14 is a protein called NAD(P)H-quinone oxidoreductase chain 4, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
14	D	498	3955	2660	607	665	23	0	0

- Molecule 15 is a protein called NAD(P)H-quinone oxidoreductase subunit 4L, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
15	E	100	780	509	133	135	3	0	0

- Molecule 16 is a protein called NAD(P)H-quinone oxidoreductase subunit 5, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
16	F	722	5796	3885	889	990	32	0	0

- Molecule 17 is a protein called NAD(P)H-quinone oxidoreductase subunit 6, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
17	G	176	1357	910	204	238	5	0	0

- Molecule 18 is a protein called NAD(P)H-quinone oxidoreductase subunit H, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
18	H	371	3008	1948	506	535	19	0	0

- Molecule 19 is a protein called NAD(P)H-quinone oxidoreductase subunit I, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
19	I	163	1329	845	226	246	12	0	0

- Molecule 20 is a protein called NAD(P)H-quinone oxidoreductase subunit J, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
20	J	158	1324	864	224	231	5	0	0

- Molecule 21 is a protein called NAD(P)H-quinone oxidoreductase subunit K, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
21	K	202	1597	1020	272	294	11	0	0

- Molecule 22 is a protein called NAD(P)H-quinone oxidoreductase subunit L, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
22	L	109	936	639	147	144	6	0	0

- Molecule 23 is a protein called NAD(P)H-quinone oxidoreductase subunit M, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
23	M	141	1169	743	196	221	9	0	0

- Molecule 24 is a protein called NAD(P)H-quinone oxidoreductase subunit N, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
24	N	165	1323	862	228	228	5	0	0

- Molecule 25 is a protein called NAD(P)H-quinone oxidoreductase subunit O, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
25	O	95	786	515	127	142	2	0	0

- Molecule 26 is a protein called NAD(P)H-quinone oxidoreductase subunit U, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
26	U	163	1266	802	218	243	3	0	0

- Molecule 27 is a protein called Photosystem I P700 chlorophyll a apoprotein A1.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
27	a	742	5827	3817	991	1001	18	0	0

- Molecule 28 is a protein called Photosystem I P700 chlorophyll a apoprotein A2.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
28	b	733	5855	3841	996	1003	15	0	0

- Molecule 29 is a protein called Photosystem I iron-sulfur center.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
29	c	81	623	385	108	118	12	0	0

- Molecule 30 is a protein called Photosystem I reaction center subunit II, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
30	d	143	1132	729	194	205	4	0	0

- Molecule 31 is a protein called Photosystem I reaction center subunit IV, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
31	e	68	546	348	98	99	1	0	0

- Molecule 32 is a protein called Photosystem I reaction center subunit III, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
32	f	153	1211	785	206	217	3	0	0

- Molecule 33 is a protein called Photosystem I reaction center subunit V, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
33	g	97	759	493	123	141	2	0	0

- Molecule 34 is a protein called Photosystem I reaction center subunit VI, chloroplastic.

Mol	Chain	Residues	Atoms				AltConf	Trace
			Total	C	N	O		
34	h	95	737	479	120	138	0	0

- Molecule 35 is a protein called Photosystem I reaction center subunit VIII.

Mol	Chain	Residues	Atoms					AltConf	Trace
35	i	31	Total	C	N	O	S	0	0
			244	168	36	38	2		

- Molecule 36 is a protein called Photosystem I reaction center subunit IX.

Mol	Chain	Residues	Atoms					AltConf	Trace
36	j	42	Total	C	N	O	S	0	0
			345	236	51	57	1		

- Molecule 37 is a protein called PSI-K.

Mol	Chain	Residues	Atoms					AltConf	Trace
37	k	66	Total	C	N	O	S	0	0
			462	294	78	87	3		

- Molecule 38 is a protein called Photosystem I reaction center subunit XI, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
38	l	160	Total	C	N	O	S	0	0
			1200	791	192	212	5		

- Molecule 39 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
39	w	215	Total	C	N	O	S	0	0
			1689	1096	281	300	12		

- Molecule 40 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
40	x	198	Total	C	N	O	S	0	0
			1568	1023	256	284	5		

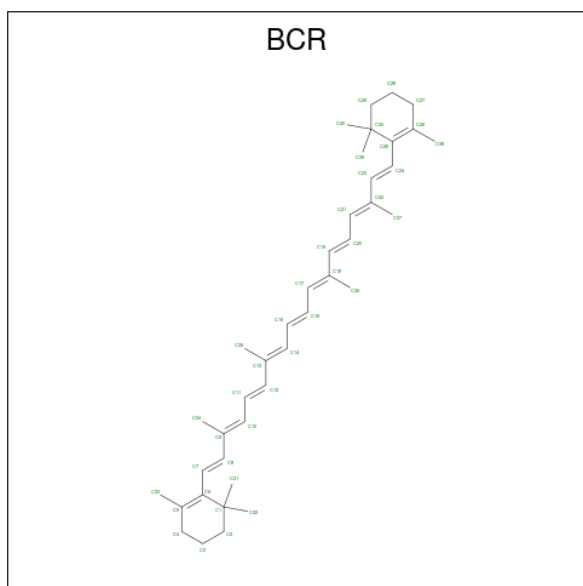
- Molecule 41 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
41	y	221	Total	C	N	O	S	0	0
			1713	1125	277	306	5		

- Molecule 42 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
42	z	193	1498	973	250	270	5	0	0

- Molecule 43 is BETA-CAROTENE (three-letter code: BCR) (formula: C₄₀H₅₆) (labeled as "Ligand of Interest" by depositor).



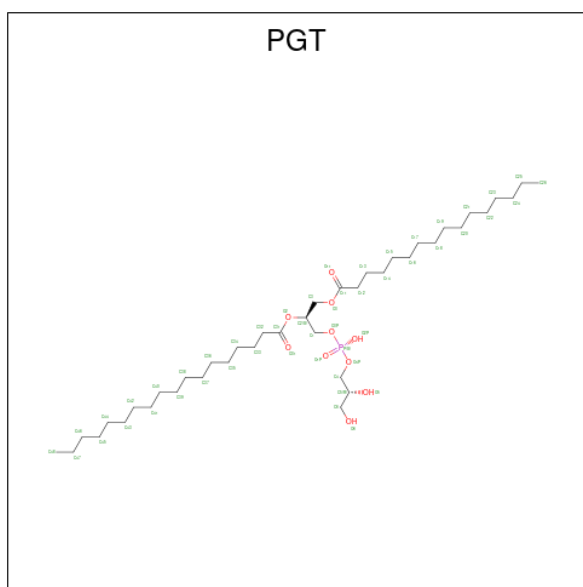
Mol	Chain	Residues	Atoms		AltConf
43	4	1	Total	C	0
			40	40	
43	a	1	Total	C	0
			27	27	
43	a	1	Total	C	0
			30	30	
43	a	1	Total	C	0
			39	39	
43	a	1	Total	C	0
			40	40	
43	a	1	Total	C	0
			40	40	
43	a	1	Total	C	0
			40	40	
43	a	1	Total	C	0
			39	39	
43	b	1	Total	C	0
			40	40	
43	b	1	Total	C	0
			40	40	

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Mol	Chain	Residues	Atoms	AltConf
43	b	1	Total C 40 40	0
43	b	1	Total C 40 40	0
43	b	1	Total C 40 40	0
43	b	1	Total C 40 40	0
43	b	1	Total C 40 40	0
43	f	1	Total C 40 40	0
43	g	1	Total C 40 40	0
43	i	1	Total C 40 40	0
43	j	1	Total C 40 40	0
43	j	1	Total C 40 40	0
43	k	1	Total C 40 40	0
43	k	1	Total C 40 40	0
43	l	1	Total C 40 40	0
43	l	1	Total C 40 40	0
43	l	1	Total C 40 40	0
43	w	1	Total C 40 40	0
43	x	1	Total C 40 40	0
43	y	1	Total C 40 40	0
43	z	1	Total C 40 40	0

- Molecule 44 is (1S)-2-{{[(2R)-2,3-DIHYDROXYPROPYL]OXY}(HYDROXY)PHOSPHORYL]OXY}-1-[(PALMITOYLOXY)METHYL]ETHYL STEARATE (three-letter code: PGT) (formula: C₄₀H₇₉O₁₀P) (labeled as "Ligand of Interest" by depositor).



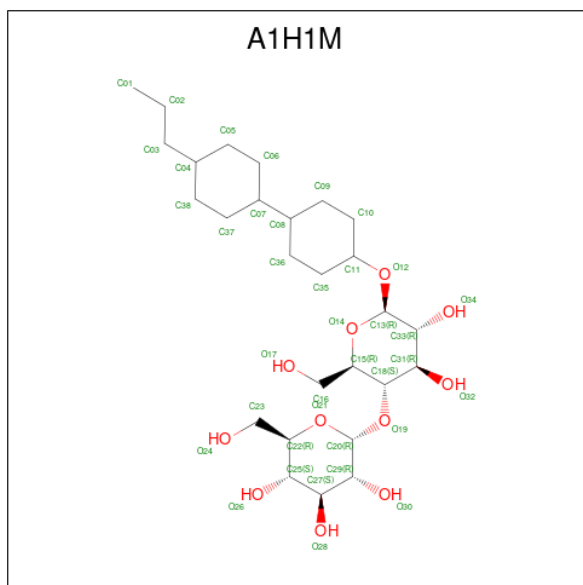
Mol	Chain	Residues	Atoms			AltConf	
			Total	C	O		P
44	5	1	35	24	10	1	0
44	A	1	32	21	10	1	0
44	A	1	37	26	10	1	0
44	A	1	38	27	10	1	0
44	A	1	44	33	10	1	0
44	B	1	34	23	10	1	0
44	B	1	42	31	10	1	0
44	B	1	46	35	10	1	0
44	B	1	35	24	10	1	0
44	D	1	34	23	10	1	0
44	F	1	43	32	10	1	0
44	I	1	44	33	10	1	0
44	L	1	40	29	10	1	0
44	N	1	26	15	10	1	0

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Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	P	
44	a	1	Total 32	C 21	O 10	P 1	0
44	a	1	Total 33	C 22	O 10	P 1	0
44	a	1	Total 46	C 35	O 10	P 1	0
44	b	1	Total 48	C 37	O 10	P 1	0
44	b	1	Total 39	C 28	O 10	P 1	0
44	f	1	Total 39	C 28	O 10	P 1	0
44	w	1	Total 40	C 29	O 10	P 1	0
44	z	1	Total 45	C 34	O 10	P 1	0
44	z	1	Total 33	C 22	O 10	P 1	0
44	z	1	Total 46	C 35	O 10	P 1	0

- Molecule 45 is 4-trans-(4-trans-Propylcyclohexyl)-cyclohexyl alpha-maltoside (three-letter code: A1H1M) (formula: C₂₇H₄₈O₁₁) (labeled as "Ligand of Interest" by depositor).



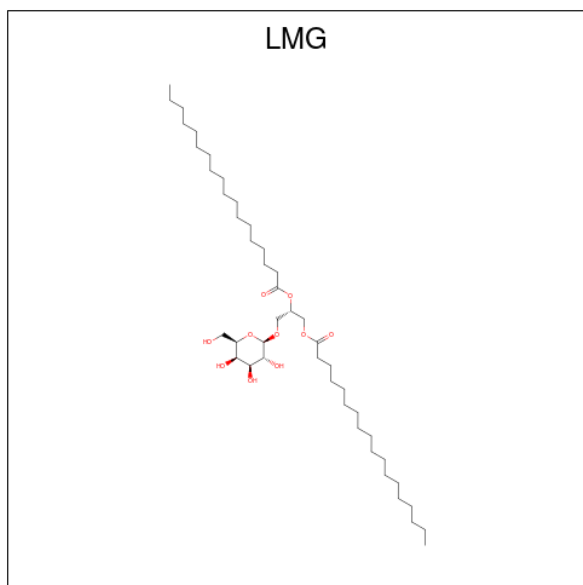
Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
45	5	1	Total 38	C 27	O 11	0

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Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
45	F	1	38	27	11	0

- Molecule 46 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (three-letter code: LMG) (formula: $C_{45}H_{86}O_{10}$) (labeled as "Ligand of Interest" by depositor).



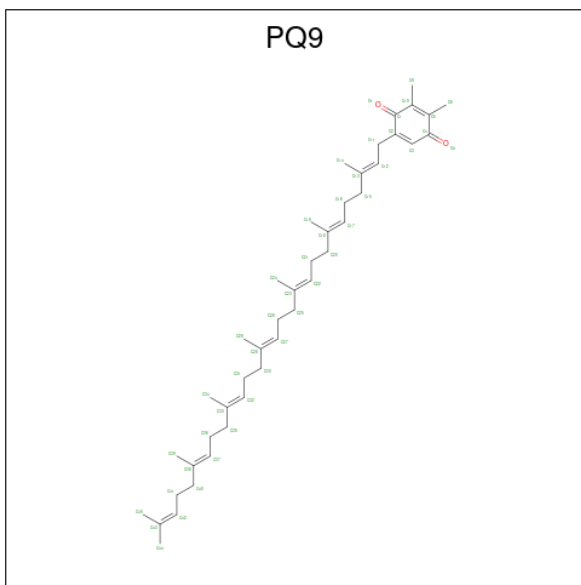
Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
46	7	1	41	31	10	0
46	B	1	37	27	10	0
46	D	1	34	24	10	0
46	F	1	28	18	10	0
46	H	1	33	23	10	0
46	f	1	34	24	10	0
46	j	1	34	24	10	0
46	j	1	37	27	10	0
46	w	1	40	30	10	0
46	x	1	48	38	10	0

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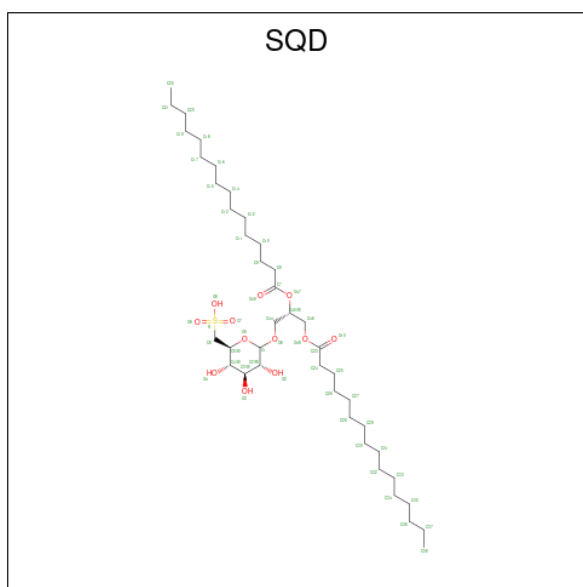
Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
46	z	1	40	30	10	0
46	z	1	36	26	10	0

- Molecule 47 is 5-[(2E,6E,10E,14E,18E,22E)-3,7,11,15,19,23,27-HEPTAMETHYLOCTACOSA-2,6,10,14,18,22,26-HEPTAENYL]-2,3-DIMETHYLBENZO-1,4-QUINONE (three-letter code: PQ9) (formula: C₄₃H₆₄O₂) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
47	A	1	36	34	2	0

- Molecule 48 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (three-letter code: SQD) (formula: C₄₁H₇₈O₁₂S) (labeled as "Ligand of Interest" by depositor).



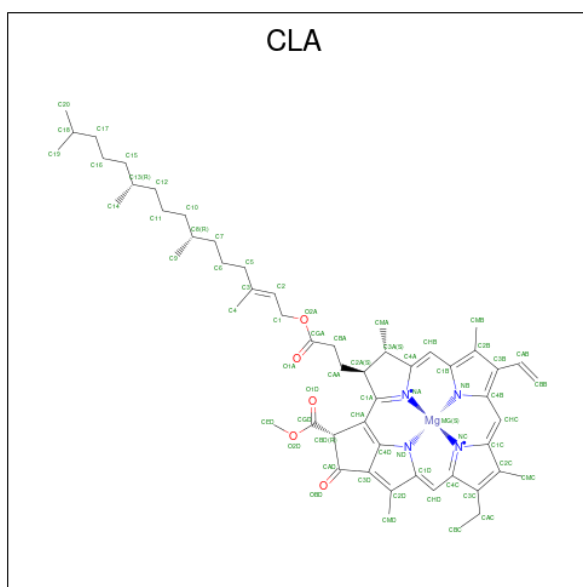
Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	S	
48	B	1	40	27	12	1	0
48	F	1	41	28	12	1	0
48	F	1	43	30	12	1	0
48	a	1	36	23	12	1	0
48	j	1	42	29	12	1	0
48	w	1	31	18	12	1	0
48	w	1	41	28	12	1	0

- Molecule 49 is IRON/SULFUR CLUSTER (three-letter code: SF4) (formula: Fe₄S₄) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms			AltConf
49	I	1	Total	Fe	S	0
			8	4	4	
49	I	1	Total	Fe	S	0
			8	4	4	
49	K	1	Total	Fe	S	0
			8	4	4	
49	a	1	Total	Fe	S	0
			8	4	4	
49	c	1	Total	Fe	S	0
			8	4	4	
49	c	1	Total	Fe	S	0
			8	4	4	

- Molecule 50 is CHLOROPHYLL A (three-letter code: CLA) (formula: $C_{55}H_{72}MgN_4O_5$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			52	42	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
50	a	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
50	a	1	Total	C	Mg	N	O	0
			59	49	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
50	a	1	Total	C	Mg	N	O	0
			63	53	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
50	a	1	51	41	1	4	5	0
50	a	1	55	45	1	4	5	0
50	a	1	65	55	1	4	5	0
50	a	1	45	35	1	4	5	0
50	a	1	65	55	1	4	5	0
50	a	1	65	55	1	4	5	0
50	a	1	58	48	1	4	5	0
50	a	1	65	55	1	4	5	0
50	a	1	65	55	1	4	5	0
50	a	1	65	55	1	4	5	0
50	a	1	65	55	1	4	5	0
50	a	1	42	34	1	4	3	0
50	a	1	55	45	1	4	5	0
50	a	1	65	55	1	4	5	0
50	a	1	65	55	1	4	5	0
50	a	1	57	47	1	4	5	0
50	a	1	65	55	1	4	5	0
50	a	1	65	55	1	4	5	0
50	a	1	42	35	1	3	3	0
50	a	1	52	42	1	4	5	0
50	a	1	65	55	1	4	5	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
50	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
50	a	1	Total 46	C 36	Mg 1	N 4	O 5	0
50	a	1	Total 51	C 41	Mg 1	N 4	O 5	0
50	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
50	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
50	a	1	Total 42	C 34	Mg 1	N 4	O 3	0
50	a	1	Total 64	C 54	Mg 1	N 4	O 5	0
50	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
50	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
50	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
50	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
50	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
50	b	1	Total 41	C 33	Mg 1	N 4	O 3	0
50	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
50	b	1	Total 52	C 42	Mg 1	N 4	O 5	0
50	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
50	b	1	Total 43	C 35	Mg 1	N 4	O 3	0
50	b	1	Total 59	C 49	Mg 1	N 4	O 5	0
50	b	1	Total 50	C 40	Mg 1	N 4	O 5	0
50	b	1	Total 45	C 35	Mg 1	N 4	O 5	0
50	b	1	Total 62	C 52	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
50	b	1	43	35	1	4	3	0
50	b	1	65	55	1	4	5	0
50	b	1	65	55	1	4	5	0
50	b	1	58	48	1	4	5	0
50	b	1	55	45	1	4	5	0
50	b	1	65	55	1	4	5	0
50	b	1	65	55	1	4	5	0
50	b	1	55	45	1	4	5	0
50	b	1	60	50	1	4	5	0
50	b	1	54	44	1	4	5	0
50	b	1	65	55	1	4	5	0
50	b	1	45	35	1	4	5	0
50	b	1	59	49	1	4	5	0
50	b	1	65	55	1	4	5	0
50	b	1	65	55	1	4	5	0
50	b	1	52	42	1	4	5	0
50	b	1	65	55	1	4	5	0
50	b	1	65	55	1	4	5	0
50	b	1	55	45	1	4	5	0
50	b	1	57	47	1	4	5	0
50	b	1	65	55	1	4	5	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
50	b	1	65	55	1	4	5	0
50	b	1	65	55	1	4	5	0
50	b	1	65	55	1	4	5	0
50	b	1	60	50	1	4	5	0
50	b	1	42	34	1	4	3	0
50	b	1	50	40	1	4	5	0
50	b	1	47	37	1	4	5	0
50	f	1	57	47	1	4	5	0
50	f	1	42	34	1	4	3	0
50	f	1	41	33	1	4	3	0
50	g	1	49	39	1	4	5	0
50	g	1	52	42	1	4	5	0
50	g	1	43	35	1	4	3	0
50	h	1	46	36	1	4	5	0
50	j	1	42	34	1	4	3	0
50	k	1	41	33	1	4	3	0
50	k	1	57	47	1	4	5	0
50	k	1	42	34	1	4	3	0
50	l	1	45	35	1	4	5	0
50	l	1	40	32	1	4	3	0
50	l	1	60	50	1	4	5	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
50	w	1	50	40	1	4	5	0
50	w	1	45	35	1	4	5	0
50	w	1	51	41	1	4	5	0
50	w	1	65	55	1	4	5	0
50	w	1	45	35	1	4	5	0
50	w	1	65	55	1	4	5	0
50	w	1	65	55	1	4	5	0
50	w	1	44	35	1	4	4	0
50	w	1	46	36	1	4	5	0
50	w	1	50	40	1	4	5	0
50	x	1	41	33	1	4	3	0
50	x	1	57	47	1	4	5	0
50	x	1	47	37	1	4	5	0
50	x	1	60	50	1	4	5	0
50	x	1	60	50	1	4	5	0
50	x	1	50	40	1	4	5	0
50	x	1	42	34	1	4	3	0
50	x	1	43	35	1	4	3	0
50	x	1	65	55	1	4	5	0
50	x	1	53	43	1	4	5	0
50	x	1	45	35	1	4	5	0

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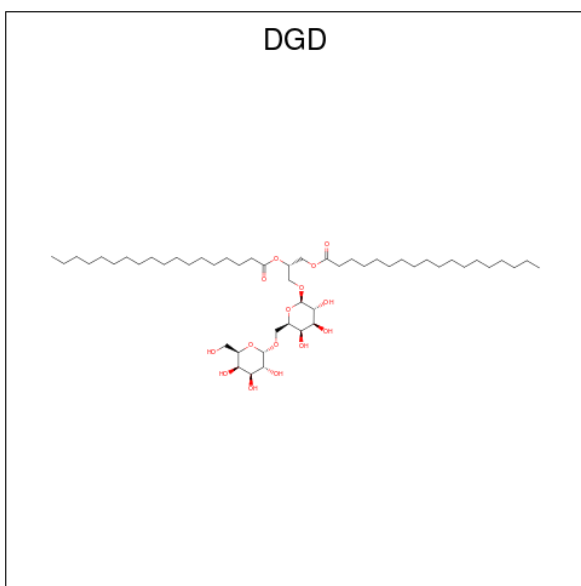
Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
50	x	1	45	35	1	4	5	0
50	y	1	52	42	1	4	5	0
50	y	1	55	45	1	4	5	0
50	y	1	39	33	1	4	1	0
50	y	1	45	35	1	4	5	0
50	y	1	40	32	1	4	3	0
50	y	1	41	33	1	4	3	0
50	y	1	65	55	1	4	5	0
50	y	1	42	34	1	4	3	0
50	y	1	65	55	1	4	5	0
50	y	1	51	41	1	4	5	0
50	y	1	51	41	1	4	5	0
50	y	1	65	55	1	4	5	0
50	y	1	65	55	1	4	5	0
50	z	1	55	45	1	4	5	0
50	z	1	41	33	1	4	3	0
50	z	1	50	40	1	4	5	0
50	z	1	56	46	1	4	5	0
50	z	1	60	50	1	4	5	0
50	z	1	43	33	1	4	5	0
50	z	1	42	34	1	4	3	0

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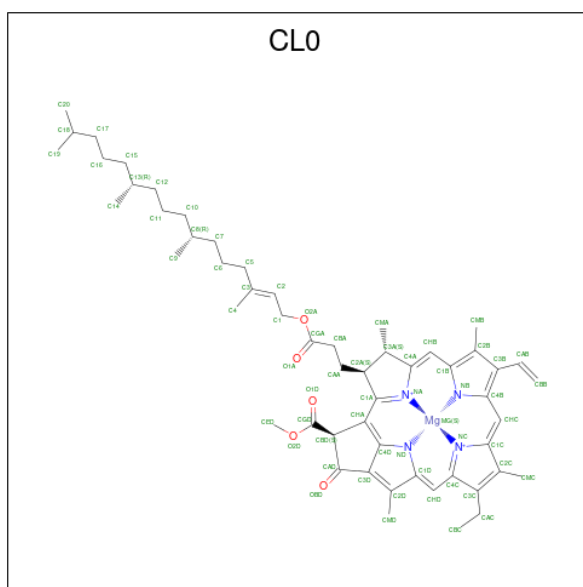
Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
50	z	1	Total 41	C 33	Mg 1	N 4	O 3	0
50	z	1	Total 55	C 45	Mg 1	N 4	O 5	0
50	z	1	Total 47	C 37	Mg 1	N 4	O 5	0
50	z	1	Total 42	C 34	Mg 1	N 4	O 3	0

- Molecule 51 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (three-letter code: DGD) (formula: $C_{51}H_{96}O_{15}$) (labeled as "Ligand of Interest" by depositor).



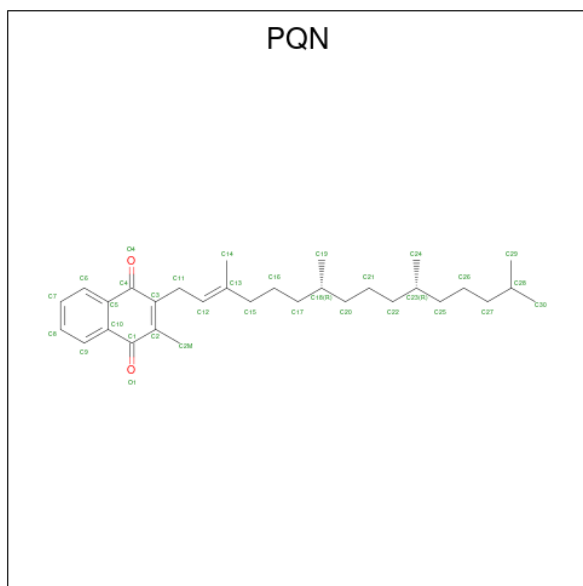
Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
51	a	1	Total 66	C 51	O 15	0
51	b	1	Total 59	C 44	O 15	0
51	x	1	Total 48	C 33	O 15	0

- Molecule 52 is CHLOROPHYLL A ISOMER (three-letter code: CL0) (formula: $C_{55}H_{72}MgN_4O_5$) (labeled as "Ligand of Interest" by depositor).



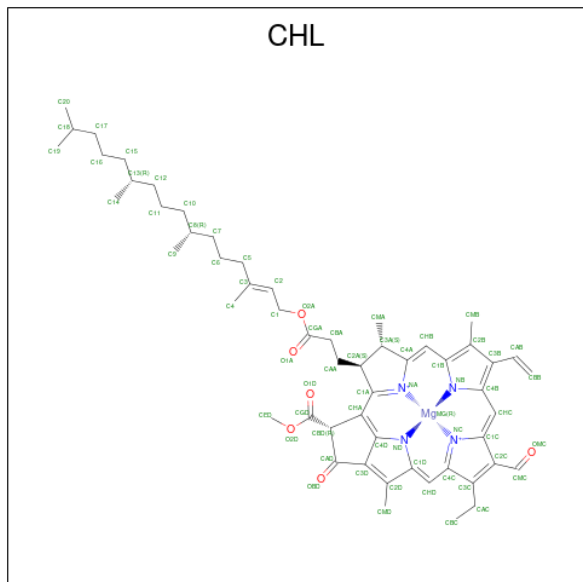
Mol	Chain	Residues	Atoms				AltConf	
			Total	C	Mg	N		O
52	a	1	61	52	1	4	4	0

- Molecule 53 is PHYLLOQUINONE (three-letter code: PQN) (formula: $C_{31}H_{46}O_2$) (labeled as "Ligand of Interest" by depositor).



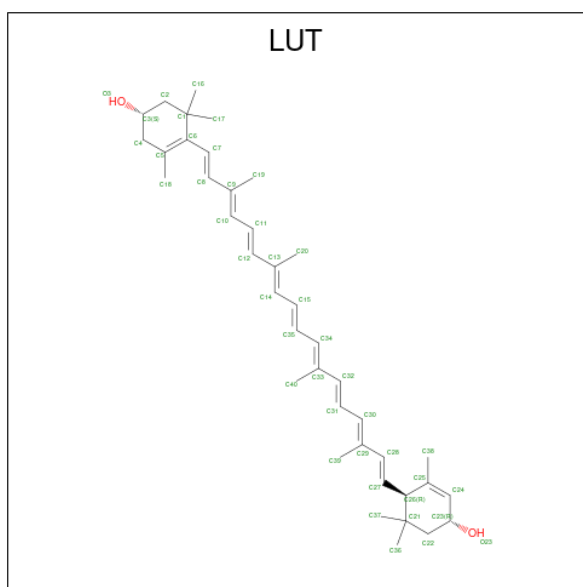
Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
53	a	1	33	31	2	0
53	b	1	33	31	2	0

- Molecule 54 is CHLOROPHYLL B (three-letter code: CHL) (formula: $C_{55}H_{70}MgN_4O_6$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf	
			Total	C	Mg	N		O
54	w	1	45	34	1	4	6	0
54	w	1	43	34	1	4	4	0
54	w	1	47	37	1	4	5	0
54	x	1	43	34	1	4	4	0
54	x	1	46	35	1	4	6	0
54	x	1	40	31	1	4	4	0
54	x	1	50	39	1	4	6	0
54	z	1	42	33	1	4	4	0
54	z	1	61	50	1	4	6	0

- Molecule 55 is (3R,3'R,6S)-4,5-DIDEHYDRO-5,6-DIHYDRO-BETA,BETA-CAROTENE-3,3'-DIOL (three-letter code: LUT) (formula: $C_{40}H_{56}O_2$) (labeled as "Ligand of Interest" by depositor).

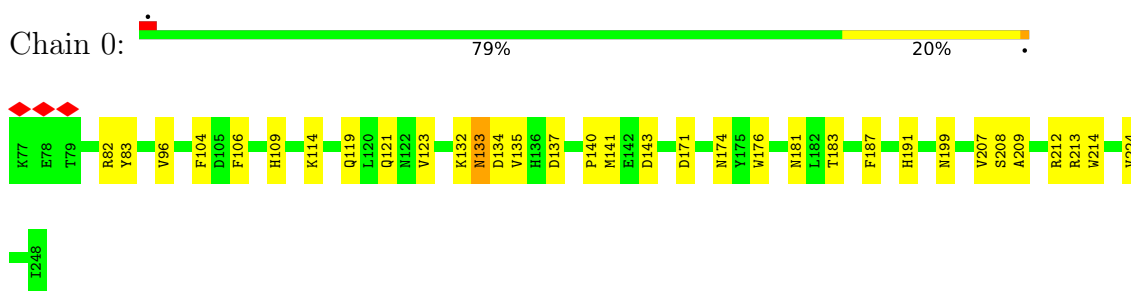


Mol	Chain	Residues	Atoms			AltConf
55	w	1	Total	C	O	0
			42	40	2	
55	w	1	Total	C	O	0
			42	40	2	
55	x	1	Total	C	O	0
			42	40	2	
55	x	1	Total	C	O	0
			42	40	2	
55	y	1	Total	C	O	0
			42	40	2	
55	y	1	Total	C	O	0
			42	40	2	
55	z	1	Total	C	O	0
			42	40	2	
55	z	1	Total	C	O	0
			42	40	2	

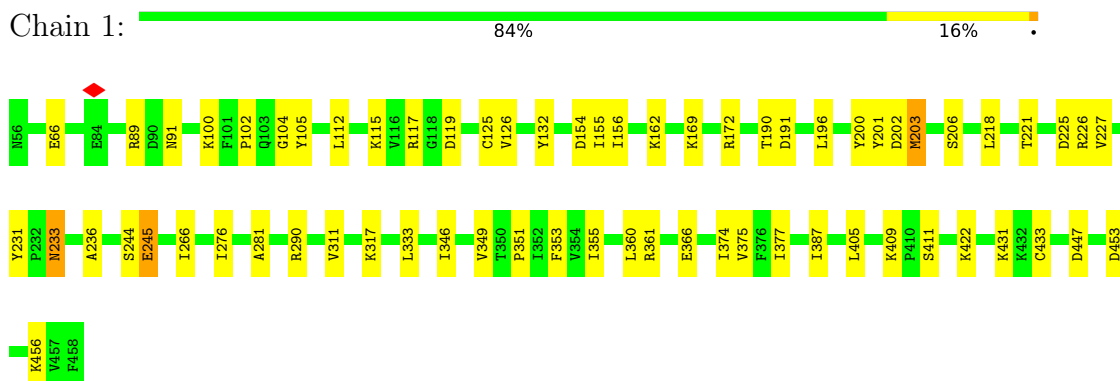
3 Residue-property plots i

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

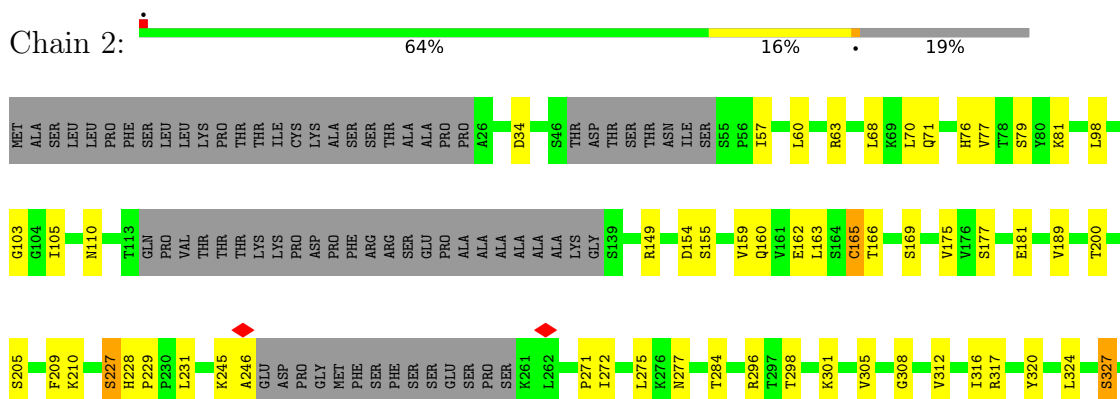
- Molecule 1: Photosynthetic NDH subunit of luminal location 1, chloroplastic



- Molecule 2: Photosynthetic NDH subunit of subcomplex B 1, chloroplastic

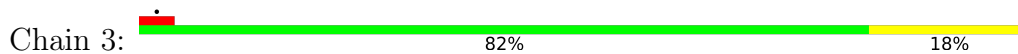


- Molecule 3: Photosynthetic NDH subunit of subcomplex B 2, chloroplastic

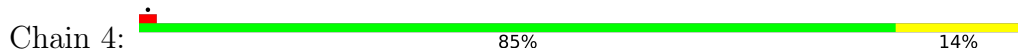




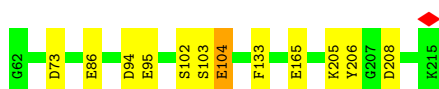
- Molecule 4: Photosynthetic NDH subunit of subcomplex B 3, chloroplatic



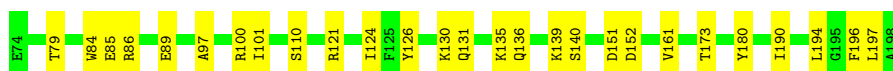
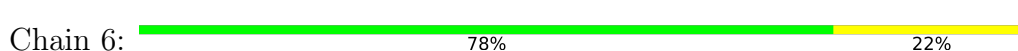
- Molecule 5: Photosynthetic NDH subunit of subcomplex B 4, chloroplatic



- Molecule 6: Photosynthetic NDH subunit of subcomplex B 5, chloroplatic



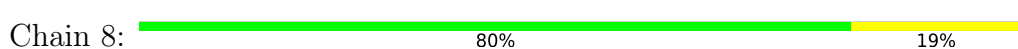
- Molecule 7: Photosynthetic NDH subunit of luminal location 2, chloroplatic



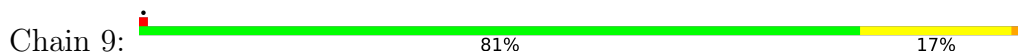
- Molecule 8: Photosynthetic NDH subunit of luminal location 3, chloroplatic

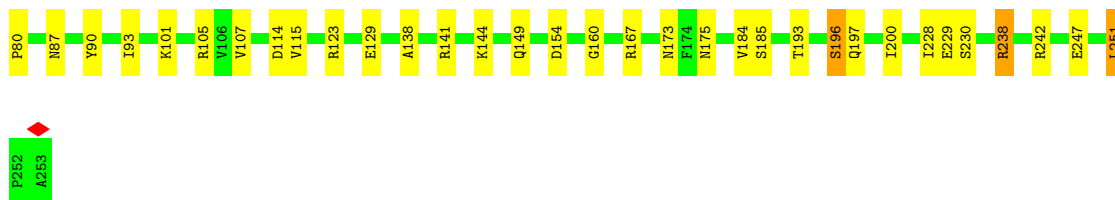


- Molecule 9: peptidylprolyl isomerase



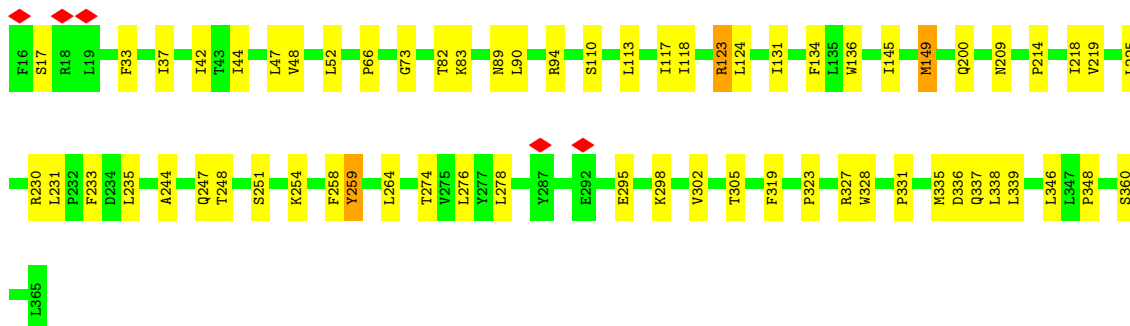
- Molecule 10: Peptidyl-prolyl cis-trans isomerase





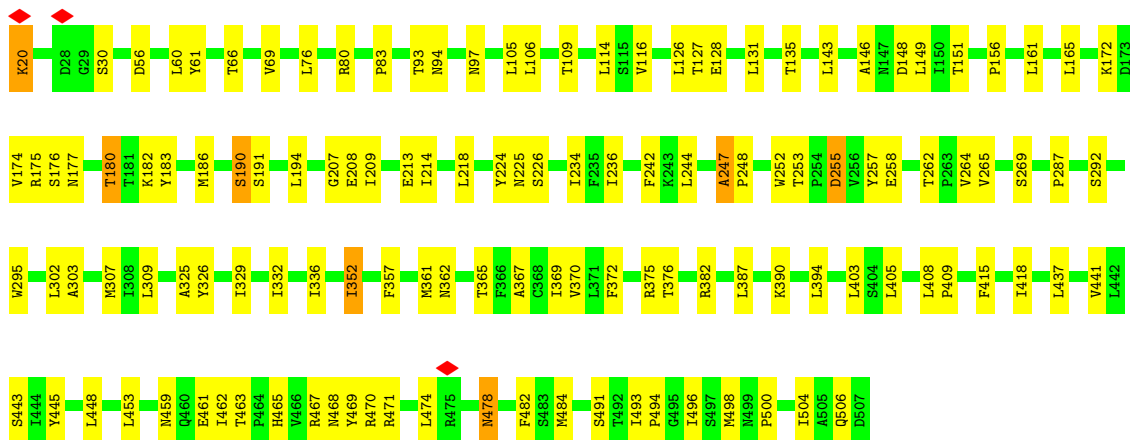
- Molecule 11: NAD(P)H-quinone oxidoreductase subunit 1, chloroplastic

Chain A: 82% 17%



- Molecule 12: NAD(P)H-quinone oxidoreductase subunit 2 A, chloroplastic

Chain B: 74% 25%



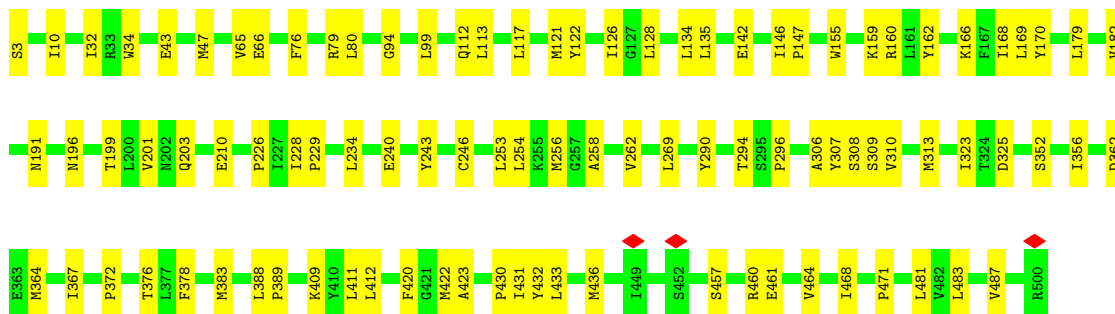
- Molecule 13: NAD(P)H-quinone oxidoreductase subunit 3, chloroplastic

Chain C: 82% 17%

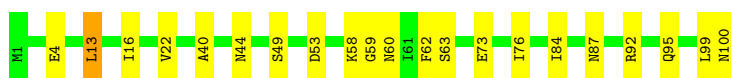
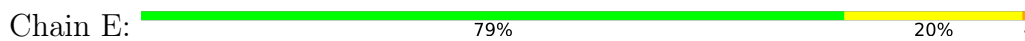


- Molecule 14: NAD(P)H-quinone oxidoreductase chain 4, chloroplastic

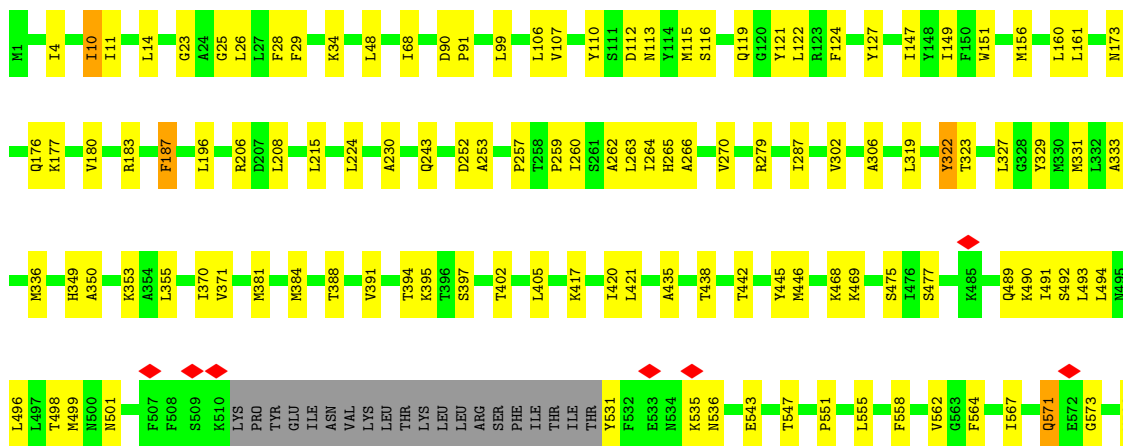
Chain D: 81% 19%



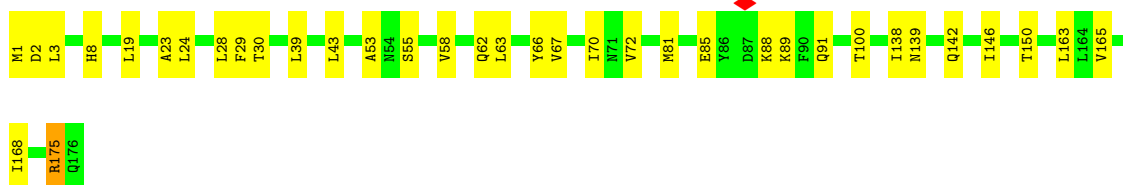
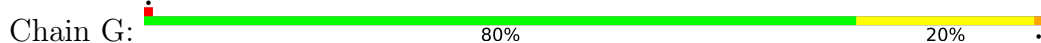
• Molecule 15: NAD(P)H-quinone oxidoreductase subunit 4L, chloroplastic




• Molecule 16: NAD(P)H-quinone oxidoreductase subunit 5, chloroplastic

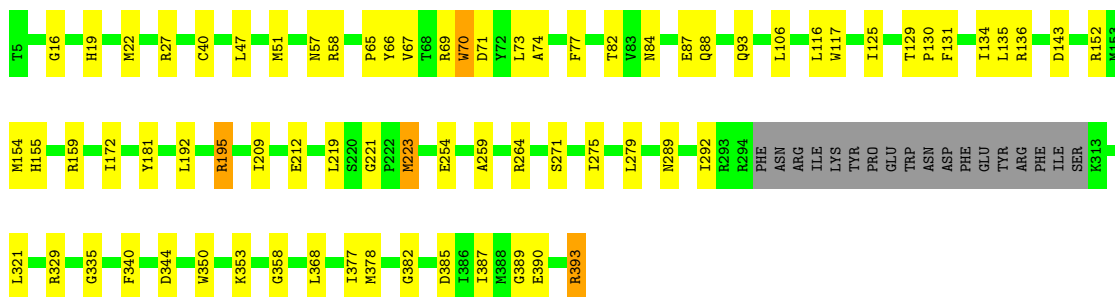


• Molecule 17: NAD(P)H-quinone oxidoreductase subunit 6, chloroplastic




• Molecule 18: NAD(P)H-quinone oxidoreductase subunit H, chloroplastic

Chain H:  77% 17% 5%



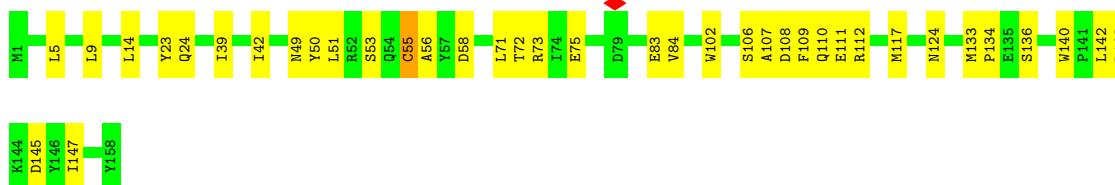
- Molecule 19: NAD(P)H-quinone oxidoreductase subunit I, chloroplastic

Chain I:  82% 18%



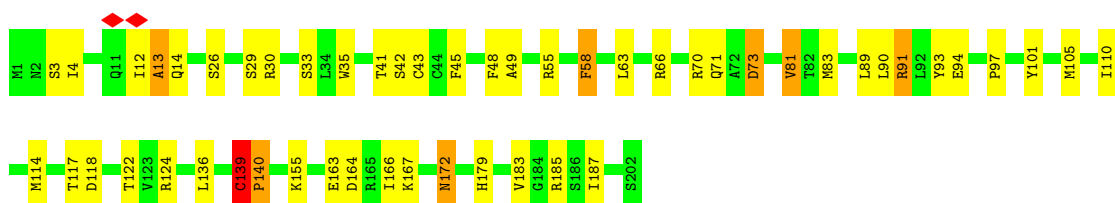
- Molecule 20: NAD(P)H-quinone oxidoreductase subunit J, chloroplastic

Chain J:  76% 23%




- Molecule 21: NAD(P)H-quinone oxidoreductase subunit K, chloroplastic

Chain K:  74% 22%

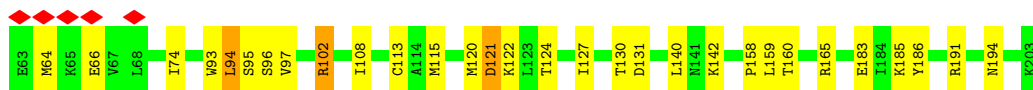
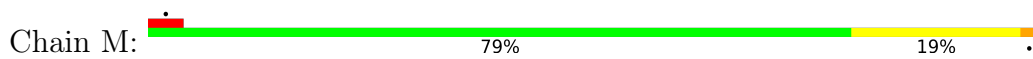


- Molecule 22: NAD(P)H-quinone oxidoreductase subunit L, chloroplastic

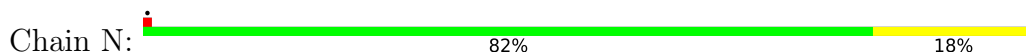
Chain L:  91% 9%



- Molecule 23: NAD(P)H-quinone oxidoreductase subunit M, chloroplastic



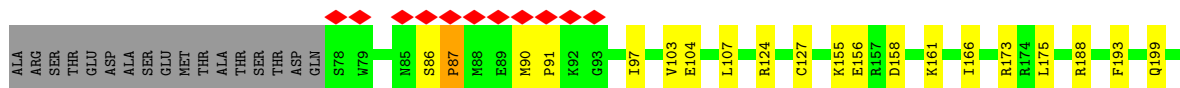
• Molecule 24: NAD(P)H-quinone oxidoreductase subunit N, chloroplastic



• Molecule 25: NAD(P)H-quinone oxidoreductase subunit O, chloroplastic



• Molecule 26: NAD(P)H-quinone oxidoreductase subunit U, chloroplastic



• Molecule 27: Photosystem I P700 chlorophyll a apoprotein A1



• Molecule 28: Photosystem I P700 chlorophyll a apoprotein A2



• Molecule 29: Photosystem I iron-sulfur center

Chain c:  98%



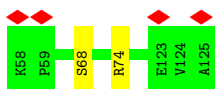
- Molecule 30: Photosystem I reaction center subunit II, chloroplastic

Chain d:  97%



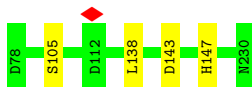
- Molecule 31: Photosystem I reaction center subunit IV, chloroplastic

Chain e:  97%



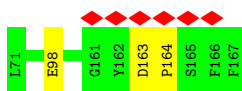
- Molecule 32: Photosystem I reaction center subunit III, chloroplastic

Chain f:  97%



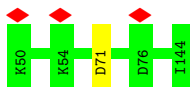
- Molecule 33: Photosystem I reaction center subunit V, chloroplastic

Chain g:  97%



- Molecule 34: Photosystem I reaction center subunit VI, chloroplastic

Chain h:  99%



- Molecule 35: Photosystem I reaction center subunit VIII

Chain i:  100%

There are no outlier residues recorded for this chain.

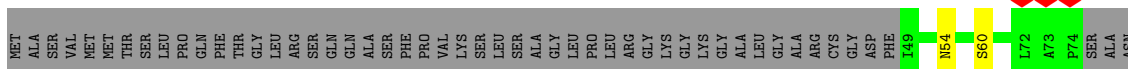
- Molecule 36: Photosystem I reaction center subunit IX

Chain j:  98%



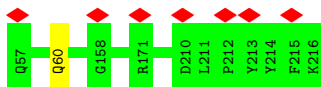
- Molecule 37: PSI-K

Chain k:  48%



- Molecule 38: Photosystem I reaction center subunit XI, chloroplastic

Chain l:  99%



- Molecule 39: Chlorophyll a-b binding protein, chloroplastic

Chain w:  99%



- Molecule 40: Chlorophyll a-b binding protein, chloroplastic

Chain x:  99%



- Molecule 41: Chlorophyll a-b binding protein, chloroplastic

Chain y:  97%



- Molecule 42: Chlorophyll a-b binding protein, chloroplastic

Chain z:  96%

E48	R55	H58	V134	S179	K180	D181	D236	I237	V238	P240
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4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	38385	Depositor
Resolution determination method	OTHER	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	40	Depositor
Minimum defocus (nm)	700	Depositor
Maximum defocus (nm)	1700	Depositor
Magnification	Not provided	
Image detector	GATAN K3 BIOQUANTUM (6k x 4k)	Depositor
Maximum map value	3.744	Depositor
Minimum map value	-0.387	Depositor
Average map value	0.043	Depositor
Map value standard deviation	0.080	Depositor
Recommended contour level	0.3	Depositor
Map size (Å)	428.544, 428.544, 428.544	wwPDB
Map dimensions	512, 512, 512	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.837, 0.837, 0.837	Depositor

5 Model quality

5.1 Standard geometry

Bond lengths and bond angles in the following residue types are not validated in this section: PQ9, A1H1M, PGT, LUT, DGD, SF4, LMG, CHL, CL0, CLA, SQD, PQN, BCR

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	0	0.27	0/1351	0.55	0/1831
2	1	0.26	0/3200	0.50	1/4340 (0.0%)
3	2	0.26	0/2350	0.51	1/3186 (0.0%)
4	3	0.26	0/1118	0.55	0/1512
5	4	0.28	0/777	0.55	1/1051 (0.1%)
6	5	0.29	0/1301	0.48	0/1770
7	6	0.27	0/1075	0.52	0/1448
8	7	0.29	0/1178	0.52	0/1589
9	8	0.28	0/1101	0.53	0/1494
10	9	0.26	0/1352	0.55	2/1821 (0.1%)
11	A	0.28	0/2795	0.49	1/3810 (0.0%)
12	B	0.29	0/3890	0.52	1/5290 (0.0%)
13	C	0.32	0/977	0.51	0/1333
14	D	0.27	0/4072	0.47	0/5535
15	E	0.27	0/791	0.54	0/1070
16	F	0.29	0/5965	0.50	1/8100 (0.0%)
17	G	0.27	0/1388	0.44	0/1893
18	H	0.27	0/3081	0.51	0/4170
19	I	0.27	0/1357	0.54	0/1839
20	J	0.27	0/1369	0.50	1/1862 (0.1%)
21	K	0.27	0/1633	0.54	0/2212
22	L	0.28	0/975	0.51	0/1328
23	M	0.28	0/1193	0.55	0/1611
24	N	0.25	0/1363	0.51	1/1852 (0.1%)
25	O	0.28	0/811	0.51	0/1100
26	U	0.28	0/1297	0.56	2/1764 (0.1%)
27	a	0.26	0/6024	0.45	0/8220
28	b	0.26	0/6067	0.46	0/8282
29	c	0.26	0/636	0.54	0/860
30	d	0.27	0/1162	0.53	0/1569
31	e	0.29	0/559	0.53	0/757
32	f	0.25	0/1239	0.47	0/1671

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
33	g	0.27	0/779	0.46	0/1055
34	h	0.25	0/758	0.46	0/1029
35	i	0.27	0/251	0.46	0/339
36	j	0.27	0/357	0.46	0/484
37	k	0.25	0/467	0.44	0/630
38	l	0.26	0/1235	0.45	0/1685
39	w	0.28	0/1750	0.52	1/2389 (0.0%)
40	x	0.26	0/1619	0.43	0/2206
41	y	0.28	0/1768	0.51	3/2400 (0.1%)
42	z	0.26	0/1546	0.44	0/2104
All	All	0.27	0/73977	0.50	16/100491 (0.0%)

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

Mol	Chain	#Chirality outliers	#Planarity outliers
11	A	0	1
18	H	0	1
21	K	0	2
39	w	0	1
All	All	0	5

There are no bond length outliers.

All (16) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
5	4	13	ASP	CB-CG-OD2	7.87	125.39	118.30
16	F	499	MET	CA-CB-CG	7.77	126.51	113.30
26	U	87	PRO	N-CA-CB	6.97	111.67	103.30
41	y	174	ASP	CB-CG-OD2	6.68	124.31	118.30
2	1	191	ASP	CB-CG-OD2	6.35	124.02	118.30
41	y	261	ASP	CB-CG-OD1	6.12	123.81	118.30
26	U	91	PRO	N-CA-CB	6.02	110.53	103.30
10	9	80	PRO	N-CA-CB	5.96	110.46	103.30
12	B	484	MET	CA-CB-CG	5.77	123.11	113.30
41	y	74	ASP	CB-CG-OD1	5.49	123.24	118.30
10	9	251	LEU	CA-CB-CG	5.24	127.36	115.30
20	J	108	ASP	CB-CG-OD1	5.13	122.92	118.30
39	w	110	MET	CB-CG-SD	5.07	127.60	112.40
11	A	258	PHE	CB-CA-C	-5.06	100.28	110.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
24	N	168	ASP	CB-CG-OD2	5.06	122.85	118.30
3	2	231	LEU	CA-CB-CG	5.02	126.84	115.30

There are no chirality outliers.

All (5) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
11	A	123	ARG	Sidechain
18	H	195	ARG	Sidechain
21	K	139	CYS	Peptide
21	K	91	ARG	Sidechain
39	w	212	SER	Peptide

5.2 Too-close contacts [i](#)

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

Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
1	0	1317	0	1268	16	0
2	1	3133	0	3096	41	0
3	2	2305	0	2298	34	0
4	3	1093	0	1078	17	0
5	4	756	0	700	13	0
6	5	1258	0	1147	10	0
7	6	1048	0	1020	17	0
8	7	1156	0	1172	6	0
9	8	1075	0	1051	15	0
10	9	1326	0	1307	16	0
11	A	2728	0	2807	53	0
12	B	3799	0	3881	87	0
13	C	944	0	951	20	0
14	D	3955	0	4064	64	0
15	E	780	0	824	16	0
16	F	5796	0	5847	107	0
17	G	1357	0	1415	31	0
18	H	3008	0	3025	52	0
19	I	1329	0	1310	17	0
20	J	1324	0	1283	21	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
21	K	1597	0	1619	41	0
22	L	936	0	930	9	0
23	M	1169	0	1155	23	0
24	N	1323	0	1334	16	0
25	O	786	0	789	6	0
26	U	1266	0	1182	13	0
27	a	5827	0	5685	0	0
28	b	5855	0	5629	0	0
29	c	623	0	602	0	0
30	d	1132	0	1145	0	0
31	e	546	0	555	0	0
32	f	1211	0	1236	0	0
33	g	759	0	736	0	0
34	h	737	0	733	0	0
35	i	244	0	262	0	0
36	j	345	0	347	0	0
37	k	462	0	474	0	0
38	l	1200	0	1208	0	0
39	w	1689	0	1617	0	0
40	x	1568	0	1516	0	0
41	y	1713	0	1679	0	0
42	z	1498	0	1471	0	0
43	4	40	0	56	4	0
43	a	255	0	348	0	0
43	b	280	0	392	0	0
43	f	40	0	56	0	0
43	g	40	0	56	0	0
43	i	40	0	56	0	0
43	j	80	0	112	0	0
43	k	80	0	112	0	0
43	l	120	0	168	0	0
43	w	40	0	56	0	0
43	x	40	0	55	0	0
43	y	40	0	56	0	0
43	z	40	0	55	0	0
44	5	35	0	40	2	0
44	A	151	0	185	3	0
44	B	157	0	200	6	0
44	D	34	0	38	1	0
44	F	43	0	59	0	0
44	I	44	0	61	0	0
44	L	40	0	50	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
44	N	26	0	22	2	0
44	a	111	0	132	0	0
44	b	87	0	117	0	0
44	f	39	0	48	0	0
44	w	40	0	53	0	0
44	z	124	0	164	0	0
45	5	38	0	0	0	0
45	F	38	0	0	6	0
46	7	41	0	52	0	0
46	B	37	0	44	1	0
46	D	34	0	38	1	0
46	F	28	0	26	1	0
46	H	33	0	36	1	0
46	f	34	0	38	0	0
46	j	71	0	82	0	0
46	w	40	0	50	0	0
46	x	48	0	66	0	0
46	z	76	0	92	0	0
47	A	36	0	45	16	0
48	B	40	0	44	10	0
48	F	84	0	96	18	0
48	a	36	0	36	0	0
48	j	42	0	51	0	0
48	w	72	0	72	0	0
49	I	16	0	0	1	0
49	K	8	0	0	0	0
49	a	8	0	0	0	0
49	c	16	0	0	0	0
50	a	2583	0	2598	0	0
50	b	2314	0	2287	0	0
50	f	140	0	113	0	0
50	g	144	0	115	0	0
50	h	46	0	33	0	0
50	j	42	0	31	0	0
50	k	140	0	108	0	0
50	l	145	0	116	0	0
50	w	526	0	461	0	0
50	x	608	0	518	0	0
50	y	676	0	603	0	0
50	z	532	0	432	0	0
51	a	66	0	96	0	0
51	b	59	0	79	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
51	x	48	0	54	0	0
52	a	61	0	62	0	0
53	a	33	0	46	0	0
53	b	33	0	46	0	0
54	w	135	0	88	0	0
54	x	179	0	115	0	0
54	z	103	0	84	0	0
55	w	84	0	112	0	0
55	x	84	0	112	0	0
55	y	84	0	112	0	0
55	z	84	0	112	0	0
All	All	83864	0	83596	652	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.

All (652) 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)
11:A:259:TYR:CE2	47:A:405:PQ9:H161	1.65	1.29
11:A:259:TYR:CD2	47:A:405:PQ9:H161	1.74	1.21
11:A:259:TYR:HD2	47:A:405:PQ9:C18	1.70	1.05
16:F:712:GLY:HA3	45:F:804:A1H1M:C38	1.97	0.94
11:A:259:TYR:CD2	47:A:405:PQ9:C16	2.56	0.89
16:F:712:GLY:CA	45:F:804:A1H1M:C38	2.52	0.88
11:A:259:TYR:CE2	47:A:405:PQ9:C16	2.56	0.87
11:A:259:TYR:HE2	47:A:405:PQ9:H161	1.39	0.86
16:F:262:ALA:O	16:F:266:ALA:HB3	1.76	0.86
16:F:23:GLY:HA2	48:F:805:SQD:H112	1.61	0.83
11:A:259:TYR:CD2	47:A:405:PQ9:C18	2.62	0.76
9:8:133:HIS:HD1	9:8:147:SER:HG	1.32	0.76
12:B:20:LYS:HB2	13:C:90:GLY:HA3	1.69	0.75
17:G:43:LEU:HD13	17:G:66:TYR:HB3	1.69	0.74
2:1:227:VAL:HG13	2:1:245:GLU:HB3	1.69	0.73
16:F:564:PHE:HA	16:F:567:ILE:HG22	1.71	0.73
14:D:383:MET:HG3	48:F:805:SQD:C30	2.20	0.72
21:K:4:ILE:HG22	23:M:186:TYR:HB2	1.72	0.71
18:H:51:MET:HG2	18:H:70:TRP:HE1	1.57	0.70
21:K:172:ASN:ND2	23:M:113:CYS:SG	2.64	0.70
3:2:160:GLN:HG3	3:2:177:SER:HB3	1.75	0.69
2:1:290:ARG:HH22	5:4:89:GLU:HG3	1.57	0.69

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
24:N:105:GLY:O	24:N:109:ASN:HB2	1.92	0.69
3:2:160:GLN:NE2	16:F:477:SER:O	2.24	0.69
20:J:147:ILE:HG21	25:O:103:ILE:HD11	1.74	0.69
16:F:672:TYR:CE2	48:F:801:SQD:H121	2.28	0.68
3:2:227:SER:HB3	3:2:246:ALA:HB1	1.75	0.68
13:C:66:ALA:HB1	17:G:72:VAL:HG22	1.76	0.68
16:F:490:LYS:HD2	16:F:492:SER:H	1.58	0.68
12:B:247:ALA:HB3	12:B:302:LEU:HD13	1.76	0.67
13:C:55:TRP:HE1	13:C:57:GLN:HE21	1.40	0.67
14:D:372:PRO:HB2	48:F:805:SQD:H442	1.75	0.67
12:B:177:ASN:HB3	15:E:84:ILE:HG12	1.77	0.66
19:I:20:ARG:HD2	26:U:216:PRO:HB2	1.78	0.66
4:3:81:ALA:HB3	4:3:184:VAL:HG22	1.77	0.66
14:D:431:ILE:HD11	48:F:801:SQD:C23	2.26	0.66
16:F:712:GLY:HA2	45:F:804:A1H1M:C38	2.24	0.65
1:0:121:GLN:HA	1:0:208:SER:O	1.97	0.65
2:1:346:ILE:HD12	2:1:351:PRO:HB3	1.80	0.64
2:1:361:ARG:HG3	2:1:374:ILE:HG21	1.79	0.64
11:A:42:ILE:HG23	11:A:264:LEU:HD21	1.80	0.63
18:H:172:ILE:HG23	18:H:279:LEU:HD22	1.80	0.63
2:1:411:SER:OG	2:1:433:CYS:SG	2.57	0.63
14:D:226:PRO:HD2	14:D:313:MET:HG3	1.80	0.63
14:D:372:PRO:HB2	48:F:805:SQD:C44	2.28	0.62
16:F:468:LYS:O	16:F:536:ASN:ND2	2.32	0.62
18:H:69:ARG:NH2	21:K:139:CYS:SG	2.69	0.62
18:H:93:GLN:O	18:H:289:ASN:ND2	2.33	0.62
16:F:90:ASP:OD2	16:F:279:ARG:NH1	2.33	0.61
3:2:70:LEU:HD21	3:2:163:LEU:HD11	1.81	0.61
2:1:203:MET:HB2	2:1:225:ASP:HB2	1.81	0.61
16:F:599:ASP:HB3	16:F:602:GLU:HB2	1.82	0.61
43:4:101:BCR:H23C	14:D:471:PRO:HB3	1.82	0.61
11:A:247:GLN:O	21:K:71:GLN:NE2	2.33	0.60
11:A:259:TYR:HE2	47:A:405:PQ9:C12	2.13	0.60
23:M:108:ILE:HB	23:M:124:THR:HG21	1.83	0.60
10:9:87:ASN:HD22	10:9:123:ARG:HD3	1.66	0.60
16:F:402:THR:HG23	16:F:446:MET:HB3	1.82	0.60
12:B:208:GLU:HB2	12:B:214:ILE:HG22	1.82	0.60
16:F:490:LYS:HB3	16:F:493:LEU:HG	1.82	0.60
3:2:63:ARG:NH2	3:2:155:SER:O	2.34	0.60
26:U:127:CYS:O	26:U:173:ARG:NH2	2.33	0.60
10:9:138:ALA:HB2	10:9:242:ARG:HH21	1.67	0.60

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:H:84:ASN:HA	18:H:87:GLU:HG2	1.84	0.60
14:D:32:ILE:HG12	14:D:112:GLN:HG2	1.83	0.59
13:C:114:LYS:O	17:G:175:ARG:NH2	2.32	0.59
2:1:156:ILE:HD11	2:1:196:LEU:HD21	1.83	0.59
18:H:154:MET:SD	18:H:154:MET:N	2.76	0.59
16:F:302:VAL:HG13	16:F:438:THR:HG21	1.83	0.59
48:B:604:SQD:H61	14:D:162:TYR:HB2	1.84	0.59
19:I:42:TYR:OH	19:I:126:GLU:OE1	2.20	0.58
24:N:94:ALA:HB2	24:N:217:LEU:HD13	1.85	0.58
11:A:251:SER:HB2	21:K:70:ARG:HB3	1.84	0.58
16:F:10:ILE:HD12	16:F:14:LEU:HD22	1.84	0.58
3:2:60:LEU:HD12	3:2:68:LEU:HD23	1.85	0.58
15:E:16:ILE:HG21	17:G:23:ALA:HB1	1.85	0.58
25:O:100:LEU:HB3	25:O:103:ILE:HD12	1.85	0.58
14:D:296:PRO:HG3	14:D:432:TYR:HB3	1.85	0.58
16:F:257:PRO:HG2	16:F:260:ILE:HG12	1.84	0.58
11:A:200:GLN:NE2	11:A:276:LEU:O	2.37	0.58
13:C:57:GLN:NE2	17:G:81:MET:O	2.35	0.58
20:J:73:ARG:NH2	20:J:75:GLU:OE1	2.37	0.58
10:9:90:TYR:HB3	10:9:251:LEU:HD22	1.86	0.58
10:9:173:ASN:ND2	10:9:175:ASN:OD1	2.37	0.58
10:9:184:VAL:HG22	10:9:200:ILE:HG12	1.86	0.58
43:4:101:BCR:H373	14:D:481:LEU:HD13	1.85	0.58
12:B:60:LEU:HD12	12:B:126:LEU:HD23	1.85	0.58
5:4:51:ASP:OD2	14:D:460:ARG:NH1	2.36	0.57
12:B:114:LEU:HD11	12:B:367:ALA:HA	1.85	0.57
21:K:81:VAL:HG11	21:K:89:LEU:HD22	1.85	0.57
15:E:13:LEU:HG	17:G:19:LEU:HD21	1.87	0.57
12:B:176:SER:O	12:B:180:THR:OG1	2.22	0.57
1:0:119:GLN:NE2	17:G:142:GLN:OE1	2.38	0.57
11:A:83:LYS:NZ	21:K:73:ASP:OD1	2.36	0.57
14:D:323:ILE:HD12	14:D:409:LYS:HD2	1.87	0.57
17:G:63:LEU:O	17:G:67:VAL:HB	2.04	0.57
9:8:90:ARG:NH2	9:8:204:PHE:O	2.34	0.57
12:B:443:SER:O	12:B:443:SER:OG	2.23	0.57
3:2:209:PHE:HE1	3:2:341:ILE:HG12	1.68	0.57
21:K:179:HIS:NE2	23:M:120:MET:O	2.30	0.57
14:D:134:LEU:HD22	14:D:182:VAL:HG22	1.87	0.57
16:F:319:LEU:O	16:F:323:THR:OG1	2.22	0.57
12:B:148:ASP:HB3	12:B:151:THR:HG22	1.86	0.56
12:B:149:LEU:HB2	12:B:209:ILE:HB	1.85	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:H:88:GLN:OE1	20:J:24:GLN:NE2	2.38	0.56
4:3:203:PRO:HA	16:F:490:LYS:NZ	2.20	0.56
24:N:131:THR:HA	24:N:135:LYS:HB2	1.87	0.56
12:B:390:LYS:HD2	12:B:469:TYR:HB3	1.86	0.56
14:D:210:GLU:HG3	14:D:269:LEU:HD23	1.88	0.56
2:1:202:ASP:OD1	12:B:382:ARG:NH1	2.38	0.56
18:H:271:SER:O	18:H:275:ILE:HD12	2.04	0.56
2:1:196:LEU:HB3	2:1:221:THR:HG23	1.88	0.56
48:B:604:SQD:H121	16:F:699:PRO:HB3	1.88	0.56
14:D:66:GLU:O	14:D:79:ARG:HA	2.06	0.56
1:0:134:ASP:OD2	1:0:174:ASN:ND2	2.38	0.56
7:6:161:VAL:HG12	11:A:17:SER:HB2	1.87	0.56
16:F:173:ASN:HB3	48:F:801:SQD:O8	2.06	0.56
9:8:121:GLY:HA3	9:8:182:VAL:HB	1.88	0.56
11:A:259:TYR:HE2	47:A:405:PQ9:C13	2.19	0.56
19:I:70:CYS:HB3	49:I:202:SF4:S1	2.46	0.56
3:2:296:ARG:NH2	4:3:114:ASP:OD2	2.40	0.55
3:2:317:ARG:NH1	3:2:320:TYR:O	2.36	0.55
8:7:115:ILE:HA	16:F:215:LEU:HD21	1.87	0.55
12:B:372:PHE:O	12:B:376:THR:HB	2.07	0.55
16:F:370:ILE:HG13	16:F:371:VAL:HG13	1.88	0.55
3:2:301:LYS:HG2	3:2:316:ILE:HG12	1.87	0.55
9:8:103:GLU:OE2	9:8:103:GLU:N	2.39	0.55
14:D:423:ALA:HB1	16:F:187:PHE:HD1	1.71	0.55
16:F:388:THR:HG23	16:F:395:LYS:HE2	1.89	0.55
2:1:66:GLU:O	15:E:95:GLN:NE2	2.40	0.55
4:3:184:VAL:HG21	16:F:491:ILE:HD11	1.87	0.55
5:4:67:THR:HG23	14:D:155:TRP:HA	1.89	0.55
12:B:143:LEU:HD13	12:B:156:PRO:HD3	1.88	0.55
16:F:571:GLN:NE2	16:F:573:GLY:O	2.40	0.55
7:6:121:ARG:NH2	17:G:53:ALA:O	2.40	0.54
12:B:172:LYS:O	15:E:87:ASN:ND2	2.40	0.54
12:B:415:PHE:HB3	12:B:496:ILE:HD12	1.89	0.54
18:H:71:ASP:HA	18:H:387:ILE:HD11	1.89	0.54
10:9:141:ARG:NH1	10:9:149:GLN:OE1	2.40	0.54
16:F:322:TYR:CZ	16:F:353:LYS:HE2	2.42	0.54
11:A:44:ILE:O	11:A:48:VAL:HG23	2.07	0.54
14:D:121:MET:HE1	14:D:253:LEU:HD21	1.90	0.54
15:E:100:ASN:ND2	45:F:804:A1H1M:O28	2.40	0.54
16:F:708:PHE:CE2	45:F:804:A1H1M:C02	2.90	0.54
10:9:101:LYS:NZ	14:D:203:GLN:OE1	2.36	0.54

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:B:357:PHE:O	12:B:361:MET:HG3	2.07	0.54
24:N:192:MET:O	24:N:195:SER:OG	2.25	0.54
1:0:123:VAL:HG11	1:0:224:VAL:HG11	1.88	0.54
7:6:79:THR:HA	9:8:203:CYS:HB3	1.89	0.54
14:D:356:ILE:HG13	14:D:367:ILE:HD13	1.88	0.54
19:I:126:GLU:HG3	24:N:124:ARG:HH12	1.73	0.54
21:K:93:TYR:OH	23:M:191:ARG:NH1	2.41	0.54
1:0:181:ASN:OD1	1:0:183:THR:OG1	2.26	0.54
16:F:25:GLY:O	16:F:29:PHE:N	2.36	0.54
16:F:306:ALA:HB2	16:F:438:THR:HG23	1.89	0.54
9:8:162:LYS:NZ	12:B:213:GLU:OE2	2.35	0.53
7:6:173:THR:O	7:6:173:THR:OG1	2.23	0.53
12:B:80:ARG:NH1	44:B:603:PGT:O6	2.41	0.53
12:B:409:PRO:HG3	14:D:142:GLU:HB3	1.88	0.53
8:7:153:LYS:O	8:7:157:MET:HG3	2.09	0.53
12:B:441:VAL:HG12	48:B:604:SQD:H282	1.90	0.53
21:K:105:MET:HB2	21:K:136:LEU:HD23	1.89	0.53
24:N:96:TYR:O	24:N:212:VAL:HA	2.08	0.53
3:2:154:ASP:OD2	16:F:475:SER:OG	2.23	0.53
7:6:85:GLU:HA	7:6:89:GLU:HG3	1.91	0.53
23:M:127:ILE:HD11	23:M:140:LEU:HD22	1.90	0.53
24:N:87:VAL:HG11	24:N:111:LEU:HD21	1.90	0.53
2:1:231:TYR:HB2	2:1:236:ALA:HB2	1.91	0.53
12:B:478:ASN:OD1	12:B:478:ASN:N	2.41	0.53
12:B:445:TYR:HE1	48:B:604:SQD:O3	1.91	0.53
15:E:13:LEU:HB3	15:E:40:ALA:HB2	1.91	0.53
18:H:264:ARG:HH21	18:H:385:ASP:HB2	1.74	0.53
5:4:75:GLN:O	5:4:79:GLU:HG3	2.09	0.52
19:I:43:PRO:HG2	24:N:99:HIS:HB3	1.91	0.52
21:K:183:VAL:HG22	23:M:159:LEU:HD22	1.90	0.52
14:D:389:PRO:HB2	16:F:149:ILE:HG23	1.91	0.52
14:D:433:LEU:O	14:D:436:MET:HB3	2.09	0.52
12:B:76:LEU:HD22	44:B:603:PGT:H132	1.91	0.52
16:F:496:LEU:HD12	16:F:498:THR:H	1.74	0.52
16:F:712:GLY:HA2	45:F:804:A1H1M:C37	2.39	0.52
18:H:58:ARG:HH22	21:K:117:THR:HB	1.73	0.52
11:A:124:LEU:HD11	11:A:305:THR:HB	1.92	0.52
12:B:248:PRO:HB3	46:F:802:LMG:H121	1.90	0.52
16:F:112:ASP:OD1	16:F:121:TYR:OH	2.21	0.52
16:F:113:ASN:HB2	16:F:547:THR:HB	1.91	0.52
12:B:303:ALA:O	12:B:307:MET:HG3	2.09	0.52

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
18:H:67:VAL:HG21	18:H:82:THR:HG21	1.91	0.52
2:1:453:ASP:O	2:1:456:LYS:NZ	2.37	0.52
3:2:275:LEU:HD13	3:2:341:ILE:HG21	1.91	0.52
3:2:277:ASN:O	3:2:327:SER:OG	2.26	0.52
16:F:107:VAL:HG21	16:F:263:LEU:HB2	1.91	0.52
18:H:254:GLU:HG2	18:H:259:ALA:HB2	1.92	0.52
19:I:153:TYR:HE1	22:L:166:VAL:HG21	1.74	0.52
16:F:349:HIS:O	16:F:353:LYS:HB2	2.10	0.51
14:D:383:MET:CG	48:F:805:SQD:C30	2.88	0.51
11:A:348:PRO:HG3	13:C:108:LEU:HD21	1.92	0.51
12:B:375:ARG:NH1	12:B:471:ARG:O	2.44	0.51
22:L:145:ARG:NH2	44:N:301:PGT:O5	2.43	0.51
14:D:65:VAL:HA	14:D:80:LEU:O	2.10	0.51
17:G:62:GLN:O	17:G:66:TYR:HB2	2.10	0.51
8:7:92:GLU:OE2	8:7:92:GLU:N	2.43	0.51
5:4:12:ARG:O	16:F:206:ARG:NH2	2.40	0.51
12:B:116:VAL:HA	12:B:126:LEU:HD11	1.91	0.51
18:H:344:ASP:HB2	18:H:350:TRP:HB2	1.93	0.51
14:D:196:ASN:HB3	14:D:199:THR:HG22	1.92	0.51
24:N:173:VAL:HG22	24:N:201:ARG:HB2	1.92	0.51
14:D:420:PHE:O	14:D:423:ALA:HB3	2.10	0.51
12:B:262:THR:HA	12:B:265:VAL:HG12	1.93	0.51
12:B:387:LEU:HD21	12:B:394:LEU:HD23	1.94	0.50
22:L:117:ASN:OD1	22:L:117:ASN:N	2.44	0.50
14:D:226:PRO:HD3	14:D:254:LEU:HD22	1.93	0.50
8:7:183:LEU:HD22	8:7:216:VAL:HG21	1.93	0.50
16:F:355:LEU:HB2	16:F:555:LEU:HB3	1.93	0.50
20:J:117:MET:HB3	20:J:142:LEU:HB2	1.92	0.50
12:B:56:ASP:N	12:B:56:ASP:OD1	2.40	0.50
12:B:165:LEU:HD21	15:E:76:ILE:HG12	1.94	0.50
12:B:445:TYR:HE1	48:B:604:SQD:HO3	1.53	0.50
16:F:672:TYR:CD2	48:F:801:SQD:H121	2.47	0.50
17:G:30:THR:OG1	17:G:91:GLN:N	2.44	0.50
18:H:47:LEU:HD13	21:K:41:THR:HG22	1.94	0.50
5:4:73:GLU:OE2	14:D:160:ARG:NH2	2.45	0.50
12:B:135:THR:HG21	17:G:165:VAL:HG21	1.94	0.50
20:J:133:MET:HE3	20:J:134:PRO:HD2	1.94	0.50
3:2:169:SER:O	3:2:169:SER:OG	2.26	0.50
6:5:102:SER:HB3	6:5:104:GLU:HG2	1.94	0.50
11:A:131:ILE:HD11	11:A:134:PHE:HD2	1.76	0.50
12:B:80:ARG:HD3	44:B:603:PGT:H11	1.94	0.50

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:J:9:LEU:HD22	20:J:14:LEU:HD22	1.94	0.50
21:K:122:THR:O	21:K:124:ARG:NH1	2.35	0.50
13:C:71:VAL:HG13	17:G:163:LEU:HB3	1.94	0.50
14:D:306:ALA:O	14:D:309:SER:OG	2.24	0.50
11:A:235:LEU:HD12	11:A:338:LEU:HD22	1.93	0.49
11:A:244:ALA:HB3	11:A:248:THR:HA	1.93	0.49
14:D:117:LEU:HD22	14:D:147:PRO:HA	1.94	0.49
16:F:176:GLN:HE22	48:F:801:SQD:H4	1.76	0.49
21:K:33:SER:OG	21:K:35:TRP:NE1	2.44	0.49
6:5:208:ASP:OD1	6:5:208:ASP:N	2.45	0.49
12:B:194:LEU:HD12	12:B:236:ILE:HA	1.94	0.49
20:J:107:ALA:HB1	20:J:111:GLU:HG3	1.93	0.49
21:K:187:ILE:H	21:K:187:ILE:HD12	1.76	0.49
14:D:234:LEU:HD22	14:D:310:VAL:HG23	1.94	0.49
23:M:142:LYS:NZ	23:M:183:GLU:OE1	2.44	0.49
9:8:137:ARG:HA	9:8:143:VAL:HA	1.95	0.49
3:2:105:ILE:HG12	3:2:205:SER:HB3	1.94	0.49
4:3:161:LYS:HD3	6:5:86:GLU:HG3	1.95	0.49
9:8:166:GLY:HA3	9:8:190:ILE:HG12	1.93	0.49
18:H:212:GLU:HB2	26:U:193:PHE:HD1	1.78	0.49
2:1:102:PRO:HG2	2:1:105:TYR:HB2	1.94	0.49
17:G:139:ASN:HB3	17:G:142:GLN:HB2	1.95	0.49
19:I:124:GLU:OE2	24:N:124:ARG:NE	2.44	0.49
24:N:183:SER:OG	24:N:186:GLU:OE1	2.28	0.49
12:B:234:ILE:HD11	16:F:739:PHE:HB2	1.95	0.49
18:H:58:ARG:NH1	21:K:118:ASP:OD2	2.46	0.49
25:O:145:ASP:OD1	25:O:145:ASP:N	2.36	0.49
16:F:161:LEU:HB3	16:F:260:ILE:HG21	1.95	0.49
6:5:104:GLU:HG2	6:5:104:GLU:H	1.38	0.48
11:A:48:VAL:HG11	22:L:129:PHE:HA	1.95	0.48
14:D:376:THR:HA	48:F:805:SQD:H242	1.95	0.48
16:F:442:THR:HA	16:F:445:TYR:CZ	2.48	0.48
44:D:602:PGT:H181	16:F:28:PHE:HE2	1.77	0.48
16:F:23:GLY:CA	48:F:805:SQD:H112	2.39	0.48
16:F:106:LEU:HB3	16:F:551:PRO:HB3	1.95	0.48
26:U:97:ILE:HD12	26:U:166:ILE:HD12	1.95	0.48
4:3:207:GLU:O	16:F:531:TYR:N	2.47	0.48
14:D:388:LEU:HD11	16:F:156:MET:HB2	1.94	0.48
16:F:322:TYR:CE2	16:F:405:LEU:HD23	2.48	0.48
18:H:152:ARG:O	18:H:155:HIS:NE2	2.46	0.48
4:3:143:GLU:HB2	4:3:184:VAL:HB	1.96	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:J:14:LEU:HD23	20:J:39:ILE:HG12	1.96	0.48
26:U:97:ILE:HG23	26:U:175:LEU:HD23	1.96	0.48
5:4:12:ARG:HB2	16:F:585:PRO:HG3	1.96	0.48
21:K:164:ASP:HA	21:K:167:LYS:HG3	1.96	0.48
3:2:181:GLU:OE2	16:F:469:LYS:NZ	2.46	0.48
20:J:55:CYS:SG	20:J:56:ALA:N	2.86	0.48
21:K:30:ARG:NH1	21:K:101:TYR:OH	2.46	0.48
23:M:93:TRP:O	23:M:95:SER:N	2.46	0.48
26:U:158:ASP:HA	26:U:161:LYS:HB2	1.96	0.48
1:0:83:TYR:HB3	1:0:96:VAL:HG13	1.95	0.48
1:0:212:ARG:HH21	1:0:213:ARG:HH21	1.62	0.48
16:F:489:GLN:N	16:F:489:GLN:OE1	2.47	0.48
3:2:210:LYS:HB3	3:2:308:GLY:HA3	1.95	0.48
4:3:118:TYR:HD1	4:3:136:SER:HB2	1.79	0.48
7:6:121:ARG:NH1	17:G:1:MET:O	2.47	0.47
10:9:160:GLY:O	10:9:197:GLN:NE2	2.48	0.47
11:A:90:LEU:HD11	13:C:40:LYS:HG2	1.96	0.47
16:F:381:MET:HA	16:F:384:MET:HB2	1.96	0.47
12:B:182:LYS:HA	16:F:721:ILE:HD13	1.96	0.47
14:D:430:PRO:HG2	16:F:183:ARG:HG2	1.94	0.47
16:F:99:LEU:HD11	16:F:350:ALA:HB3	1.96	0.47
11:A:225:LEU:HD21	11:A:323:PRO:HB3	1.96	0.47
14:D:191:ASN:OD1	14:D:191:ASN:N	2.45	0.47
16:F:180:VAL:HG11	48:F:801:SQD:H45	1.96	0.47
16:F:355:LEU:HD11	16:F:397:SER:HB2	1.97	0.47
18:H:131:PHE:HZ	21:K:49:ALA:HB1	1.80	0.47
4:3:123:ARG:HB2	4:3:126:LEU:HD12	1.97	0.47
18:H:130:PRO:O	18:H:134:ILE:HG23	2.14	0.47
2:1:104:GLY:HA3	12:B:172:LYS:HG3	1.95	0.47
4:3:140:GLU:HG3	4:3:166:TRP:CD1	2.50	0.47
14:D:243:TYR:HA	14:D:246:CYS:HB2	1.96	0.47
21:K:163:GLU:O	21:K:166:ILE:HG13	2.14	0.47
5:4:12:ARG:NH2	16:F:582:TRP:O	2.47	0.47
7:6:100:ARG:NH2	7:6:136:GLN:OE1	2.46	0.47
7:6:151:ASP:OD1	7:6:152:ASP:N	2.47	0.47
12:B:20:LYS:HA	12:B:20:LYS:HD3	1.50	0.47
14:D:159:LYS:HB2	14:D:240:GLU:HG2	1.97	0.47
16:F:10:ILE:O	16:F:14:LEU:HB2	2.14	0.47
23:M:121:ASP:OD1	23:M:122:LYS:NZ	2.36	0.47
2:1:117:ARG:NH2	2:1:119:ASP:OD2	2.43	0.47
3:2:79:SER:OG	3:2:81:LYS:NZ	2.47	0.47

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:A:200:GLN:NE2	11:A:209:ASN:OD1	2.30	0.47
12:B:114:LEU:HG	12:B:370:VAL:HG21	1.97	0.47
12:B:326:TYR:HA	12:B:329:ILE:HG12	1.97	0.47
26:U:210:GLU:H	26:U:210:GLU:HG3	1.43	0.47
12:B:20:LYS:HB2	13:C:90:GLY:CA	2.43	0.47
13:C:82:TRP:HD1	13:C:93:VAL:HB	1.80	0.47
15:E:22:VAL:HG11	17:G:100:THR:HG21	1.97	0.47
18:H:154:MET:HG2	21:K:140:PRO:HG2	1.95	0.47
11:A:214:PRO:O	11:A:218:ILE:HG13	2.15	0.47
12:B:247:ALA:HB1	12:B:248:PRO:HD2	1.97	0.47
16:F:243:GLN:HE22	16:F:331:MET:HG2	1.80	0.47
18:H:117:TRP:NE1	18:H:382:GLY:O	2.45	0.47
12:B:146:ALA:HB1	12:B:151:THR:HG23	1.97	0.47
16:F:112:ASP:OD1	16:F:112:ASP:N	4.16	0.47
21:K:12:ILE:HG22	21:K:163:GLU:HG3	1.97	0.47
2:1:422:LYS:HB3	2:1:422:LYS:HE2	1.67	0.46
10:9:144:LYS:HA	10:9:229:GLU:HG3	1.96	0.46
47:A:405:PQ9:H311	47:A:405:PQ9:H291	1.73	0.46
12:B:146:ALA:O	12:B:148:ASP:N	2.47	0.46
19:I:68:GLU:OE1	19:I:83:TRP:NE1	2.42	0.46
12:B:474:LEU:HD23	12:B:474:LEU:HA	1.78	0.46
17:G:85:GLU:HB3	17:G:88:LYS:HG2	1.96	0.46
20:J:50:TYR:HB3	20:J:72:THR:HG23	1.98	0.46
26:U:104:GLU:HA	26:U:107:LEU:HD12	1.97	0.46
1:0:140:PRO:HG2	1:0:143:ASP:HB3	1.98	0.46
7:6:131:GLN:O	7:6:135:LYS:HG2	2.16	0.46
11:A:52:LEU:HD11	22:L:129:PHE:HB2	1.96	0.46
13:C:114:LYS:HD3	13:C:114:LYS:HA	1.71	0.46
16:F:391:VAL:HG12	16:F:543:GLU:HA	1.97	0.46
19:I:46:LYS:HG3	19:I:155:ILE:HD12	1.97	0.46
21:K:83:MET:O	23:M:165:ARG:NH1	2.39	0.46
22:L:140:PRO:HB3	44:N:301:PGT:H2	1.98	0.46
9:8:160:VAL:HG23	9:8:162:LYS:HG2	1.96	0.46
9:8:192:PRO:HB3	9:8:213:ASN:HA	1.98	0.46
2:1:172:ARG:NH1	12:B:461:GLU:OE1	2.49	0.46
11:A:231:LEU:HB3	11:A:327:ARG:HA	1.98	0.46
12:B:445:TYR:CE1	48:B:604:SQD:O3	2.64	0.46
14:D:10:ILE:HG22	14:D:126:ILE:HG21	1.97	0.46
16:F:160:LEU:HD11	48:F:805:SQD:H292	1.96	0.46
11:A:328:TRP:O	18:H:129:THR:OG1	2.26	0.46
18:H:65:PRO:O	18:H:69:ARG:NH1	2.48	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
19:I:165:LYS:HD2	19:I:165:LYS:HA	1.76	0.46
12:B:83:PRO:HA	12:B:93:THR:O	2.15	0.46
12:B:500:PRO:O	12:B:504:ILE:HG13	2.16	0.46
14:D:43:GLU:O	14:D:47:MET:HG3	2.16	0.46
17:G:55:SER:HB3	17:G:58:VAL:HB	1.96	0.46
12:B:128:GLU:OE2	13:C:110:TYR:OH	2.31	0.46
18:H:221:GLY:HA3	18:H:335:GLY:HA2	1.97	0.46
18:H:358:GLY:N	18:H:390:GLU:OE2	2.43	0.46
21:K:105:MET:HA	21:K:136:LEU:HB3	1.97	0.46
5:4:65:ASP:N	5:4:65:ASP:OD1	2.48	0.46
19:I:156:ARG:HA	22:L:149:ARG:HD3	1.97	0.46
16:F:642:ASP:N	16:F:642:ASP:OD1	2.49	0.46
18:H:51:MET:N	18:H:393:ARG:OXT	2.43	0.46
18:H:73:LEU:HD22	18:H:116:LEU:HD23	1.98	0.46
4:3:155:GLU:O	4:3:159:LEU:HB2	2.16	0.45
12:B:253:THR:HG22	12:B:325:ALA:HB1	1.97	0.45
12:B:258:GLU:HB3	15:E:99:LEU:HD22	1.98	0.45
16:F:230:ALA:HB2	16:F:287:ILE:HD12	1.98	0.45
7:6:97:ALA:O	7:6:101:ILE:HG12	2.16	0.45
11:A:302:VAL:HG22	44:L:201:PGT:H381	1.97	0.45
11:A:360:SER:O	26:U:239:ASN:ND2	2.44	0.45
17:G:2:ASP:OD2	17:G:8:HIS:ND1	2.49	0.45
18:H:135:LEU:HD23	18:H:135:LEU:HA	1.83	0.45
2:1:353:PHE:HB2	2:1:374:ILE:HD12	1.97	0.45
6:5:95:GLU:HB3	16:F:119:GLN:HG3	1.98	0.45
11:A:113:LEU:HD11	13:C:14:LEU:HD13	1.98	0.45
12:B:463:THR:HG22	12:B:465:HIS:H	1.82	0.45
20:J:102:TRP:HE1	20:J:124:ASN:HB3	1.81	0.45
3:2:305:VAL:HG22	3:2:312:VAL:HG22	1.97	0.45
18:H:219:LEU:HD13	18:H:223:MET:HG2	1.97	0.45
2:1:196:LEU:HD22	2:1:201:TYR:HE2	1.81	0.45
7:6:190:ILE:O	7:6:194:LEU:HD23	2.17	0.45
14:D:307:TYR:OH	16:F:691:ASP:OD1	2.30	0.45
16:F:417:LYS:O	16:F:421:LEU:HG	2.17	0.45
20:J:49:ASN:OD1	26:U:199:GLN:NE2	2.43	0.45
25:O:91:VAL:HG11	25:O:100:LEU:HD11	1.99	0.45
9:8:131:ASN:HA	9:8:154:LEU:O	2.17	0.45
16:F:26:LEU:HD13	48:F:805:SQD:H2	1.98	0.45
3:2:110:ASN:OD1	3:2:200:THR:OG1	2.35	0.45
12:B:352:ILE:H	12:B:352:ILE:HG12	1.60	0.45
12:B:462:ILE:O	12:B:467:ARG:NH2	2.49	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:C:49:GLU:OE1	21:K:91:ARG:NH2	2.50	0.45
3:2:271:PRO:HG2	3:2:272:ILE:HD12	1.97	0.45
44:B:606:PGT:H62	14:D:113:LEU:HD13	1.97	0.45
15:E:60:ASN:ND2	17:G:55:SER:OG	2.50	0.45
19:I:127:LEU:HD23	24:N:124:ARG:HD3	1.98	0.45
2:1:112:LEU:HD11	12:B:174:VAL:HG12	1.98	0.45
16:F:177:LYS:NZ	16:F:669:ASP:OD2	2.39	0.45
17:G:39:LEU:O	17:G:43:LEU:HG	2.17	0.45
18:H:47:LEU:HD23	18:H:389:GLY:HA2	1.99	0.45
24:N:104:GLU:N	24:N:104:GLU:OE1	2.50	0.45
2:1:190:THR:CG2	48:B:604:SQD:H441	2.47	0.45
47:A:405:PQ9:H311	47:A:405:PQ9:H351	1.44	0.45
16:F:558:PHE:O	16:F:562:VAL:HB	2.17	0.45
2:1:89:ARG:HG3	2:1:100:LYS:HB3	1.99	0.44
12:B:218:LEU:HD22	12:B:224:TYR:HA	1.99	0.44
13:C:82:TRP:CD1	13:C:93:VAL:HB	2.52	0.44
16:F:319:LEU:HD23	16:F:322:TYR:HE1	1.83	0.44
16:F:322:TYR:HE2	16:F:405:LEU:HD23	1.82	0.44
21:K:35:TRP:N	21:K:73:ASP:OD2	2.38	0.44
2:1:115:LYS:HE2	15:E:99:LEU:HD23	1.99	0.44
2:1:266:ILE:HD12	2:1:281:ALA:HB2	1.99	0.44
2:1:317:LYS:HA	2:1:333:LEU:HD13	1.99	0.44
14:D:99:LEU:HD23	14:D:99:LEU:HA	1.87	0.44
18:H:74:ALA:HB1	18:H:77:PHE:HD2	1.82	0.44
5:4:12:ARG:HD2	16:F:68:ILE:HG13	1.99	0.44
5:4:31:VAL:HG22	44:5:301:PGT:H331	1.99	0.44
6:5:205:LYS:HE2	6:5:206:TYR:CZ	2.51	0.44
7:6:173:THR:HG22	13:C:5:TYR:HB2	1.99	0.44
17:G:146:ILE:O	17:G:150:THR:OG1	2.31	0.44
20:J:42:ILE:HG13	26:U:103:VAL:HG21	1.99	0.44
1:0:209:ALA:HB3	1:0:214:TRP:HE3	1.82	0.44
3:2:284:THR:HA	3:2:298:THR:HG23	2.00	0.44
11:A:33:PHE:O	11:A:37:ILE:HG22	2.16	0.44
23:M:93:TRP:O	23:M:94:LEU:C	2.56	0.44
2:1:447:ASP:OD1	2:1:447:ASP:N	2.40	0.44
12:B:257:TYR:HA	12:B:265:VAL:HG21	1.99	0.44
14:D:457:SER:HB2	14:D:461:GLU:HB2	1.98	0.44
16:F:10:ILE:HG13	16:F:11:ILE:N	2.33	0.44
16:F:491:ILE:HA	16:F:494:LEU:HD12	1.98	0.44
2:1:126:VAL:HG13	2:1:156:ILE:HB	1.99	0.44
10:9:114:ASP:HB3	10:9:175:ASN:HD21	1.83	0.44

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
47:A:405:PQ9:H61	47:A:405:PQ9:H91	1.83	0.44
20:J:140:TRP:HB2	20:J:143:ARG:HD3	1.99	0.44
1:0:106:PHE:HB3	1:0:109:HIS:HB2	1.99	0.44
1:0:133:ASN:OD1	1:0:133:ASN:N	2.51	0.44
3:2:60:LEU:HB3	3:2:159:VAL:HG21	1.98	0.44
17:G:67:VAL:HA	17:G:70:ILE:HG22	2.00	0.44
20:J:136:SER:HB2	23:M:160:THR:HB	2.00	0.44
23:M:194:ASN:OD1	23:M:194:ASN:N	2.50	0.44
1:0:141:MET:HG3	1:0:176:TRP:CE2	2.53	0.44
7:6:130:LYS:HD3	7:6:130:LYS:HA	1.75	0.44
44:B:602:PGT:H151	44:B:602:PGT:H121	1.74	0.44
14:D:290:TYR:O	14:D:294:THR:OG1	2.30	0.44
18:H:71:ASP:H	18:H:390:GLU:HB2	1.83	0.44
18:H:136:ARG:NH1	18:H:181:TYR:OH	2.44	0.44
4:3:148:LEU:HD13	4:3:172:ILE:HD13	1.98	0.44
12:B:361:MET:HE3	12:B:405:LEU:HA	1.99	0.44
14:D:258:ALA:O	14:D:262:VAL:HG23	2.17	0.44
3:2:165:CYS:SG	3:2:166:THR:N	2.91	0.43
12:B:448:LEU:HD11	14:D:168:ILE:HD13	1.99	0.43
21:K:90:LEU:HD23	23:M:97:VAL:HG23	1.98	0.43
44:5:301:PGT:H361	44:5:301:PGT:H332	1.89	0.43
3:2:189:VAL:HG12	3:2:360:TRP:HE3	1.84	0.43
7:6:86:ARG:HA	7:6:86:ARG:HD2	1.77	0.43
7:6:197:LEU:HD23	7:6:197:LEU:HA	1.87	0.43
11:A:259:TYR:OH	47:A:405:PQ9:O1	2.32	0.43
12:B:415:PHE:HA	12:B:418:ILE:HG12	2.01	0.43
13:C:110:TYR:CZ	17:G:168:ILE:HG23	2.53	0.43
14:D:47:MET:HE1	14:D:94:GLY:HA3	2.00	0.43
4:3:203:PRO:HA	16:F:490:LYS:HZ1	1.84	0.43
12:B:242:PHE:O	12:B:252:TRP:NE1	2.51	0.43
14:D:253:LEU:HA	14:D:256:MET:HG3	2.00	0.43
23:M:158:PRO:HB2	23:M:160:THR:HG23	1.99	0.43
24:N:219:GLU:HG2	24:N:226:LEU:HA	2.00	0.43
12:B:365:THR:O	12:B:369:ILE:HG12	2.18	0.43
14:D:160:ARG:HG2	14:D:160:ARG:HH11	1.82	0.43
21:K:110:ILE:HG22	21:K:111:THR:HG23	2.01	0.43
3:2:98:LEU:HD11	3:2:335:TYR:HB3	2.00	0.43
11:A:48:VAL:HG22	22:L:132:PHE:CG	2.53	0.43
12:B:292:SER:HA	12:B:295:TRP:NE1	2.34	0.43
13:C:11:TRP:CD1	17:G:3:LEU:HD11	2.53	0.43
3:2:57:ILE:HG22	3:2:71:GLN:HA	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2:317:ARG:HB2	3:2:345:PRO:HG3	2.00	0.43
12:B:94:ASN:OD1	12:B:97:ASN:ND2	2.52	0.43
2:1:226:ARG:O	2:1:244:SER:N	2.52	0.43
16:F:260:ILE:O	16:F:264:ILE:HB	2.18	0.43
11:A:66:PRO:HB2	11:A:73:GLY:HA3	2.00	0.43
12:B:105:LEU:O	12:B:109:THR:OG1	2.30	0.43
18:H:66:TYR:CE2	21:K:114:MET:HB2	2.54	0.43
23:M:93:TRP:C	23:M:95:SER:N	2.72	0.43
6:5:94:ASP:OD1	6:5:94:ASP:N	2.43	0.43
12:B:214:ILE:HD11	12:B:287:PRO:HB2	2.01	0.43
46:D:601:LMG:HC92	46:D:601:LMG:H291	1.81	0.43
16:F:353:LYS:HD2	16:F:353:LYS:HA	1.85	0.43
17:G:24:LEU:O	17:G:28:LEU:HB2	2.19	0.43
21:K:70:ARG:HA	21:K:97:PRO:HD3	2.01	0.43
2:1:125:CYS:HB2	2:1:155:ILE:HD13	2.00	0.42
2:1:375:VAL:HG12	2:1:377:ILE:HG12	2.01	0.42
11:A:94:ARG:HE	11:A:94:ARG:HB3	3.89	0.42
15:E:49:SER:HB2	15:E:59:GLY:HA3	2.00	0.42
19:I:76:ILE:HG13	19:I:78:LEU:HB2	2.01	0.42
21:K:58:PHE:CE1	21:K:63:LEU:HD23	2.54	0.42
2:1:405:LEU:HD22	2:1:431:LYS:HB3	2.01	0.42
47:A:405:PQ9:H162	47:A:405:PQ9:H143	1.93	0.42
47:A:405:PQ9:H261	47:A:405:PQ9:H242	1.85	0.42
48:B:604:SQD:H251	14:D:169:LEU:HD13	2.00	0.42
14:D:76:PHE:CD1	14:D:135:LEU:HB3	2.54	0.42
16:F:34:LYS:HG2	16:F:122:LEU:HD13	2.01	0.42
23:M:130:THR:O	23:M:130:THR:OG1	2.37	0.42
12:B:131:LEU:HD11	17:G:165:VAL:HG22	2.00	0.42
48:B:604:SQD:H81	14:D:166:LYS:HG3	2.00	0.42
19:I:80:VAL:HG22	24:N:143:HIS:CD2	2.54	0.42
2:1:154:ASP:OD2	2:1:172:ARG:NH2	2.41	0.42
44:A:403:PGT:H131	44:A:403:PGT:H161	1.66	0.42
14:D:128:LEU:HD22	14:D:256:MET:SD	2.59	0.42
16:F:183:ARG:HD3	16:F:183:ARG:HA	1.78	0.42
18:H:329:ARG:NH2	20:J:83:GLU:OE1	2.39	0.42
6:5:165:GLU:HG3	14:D:34:TRP:CZ2	2.54	0.42
12:B:493:ILE:HD12	12:B:493:ILE:HA	1.79	0.42
44:B:602:PGT:H161	44:B:602:PGT:H321	2.01	0.42
16:F:91:PRO:HB3	16:F:582:TRP:CD1	2.54	0.42
16:F:147:ILE:O	16:F:151:TRP:HB2	2.18	0.42
10:9:175:ASN:OD1	10:9:175:ASN:N	2.46	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
11:A:47:LEU:HD21	47:A:405:PQ9:H292	2.02	0.42
12:B:244:LEU:HD22	12:B:332:ILE:HD11	2.02	0.42
14:D:362:ASP:OD1	14:D:362:ASP:N	2.52	0.42
46:B:605:LMG:H112	46:B:605:LMG:HC8	1.65	0.42
14:D:464:VAL:O	14:D:468:ILE:HG13	2.20	0.42
16:F:110:TYR:HD1	16:F:259:PRO:HG3	1.84	0.42
16:F:270:VAL:HB	16:F:327:LEU:HD11	2.00	0.42
2:1:169:LYS:HD2	5:4:90:GLU:HG3	2.02	0.42
2:1:233:ASN:OD1	2:1:233:ASN:N	2.52	0.42
3:2:77:VAL:HB	3:2:105:ILE:HB	2.01	0.42
3:2:162:GLU:HG2	3:2:175:VAL:HG22	2.01	0.42
13:C:88:ILE:HD12	17:G:146:ILE:HD11	2.00	0.42
14:D:388:LEU:HD21	16:F:156:MET:HE2	2.01	0.42
16:F:571:GLN:HE22	16:F:597:PHE:HB2	1.85	0.42
18:H:192:LEU:HB2	19:I:28:ILE:HG21	2.02	0.42
23:M:74:ILE:HD12	23:M:74:ILE:HA	1.88	0.42
2:1:311:VAL:HG13	2:1:349:VAL:HG11	2.01	0.42
2:1:387:ILE:O	2:1:409:LYS:NZ	2.52	0.42
3:2:228:HIS:ND1	3:2:229:PRO:HD2	2.35	0.42
9:8:164:ILE:HG13	9:8:167:LEU:HB2	2.01	0.42
11:A:149:MET:HE2	11:A:149:MET:HB2	1.87	0.42
12:B:493:ILE:HG22	12:B:494:PRO:HD3	2.01	0.42
16:F:196:LEU:HB3	16:F:208:LEU:HD11	2.02	0.42
2:1:91:ASN:O	12:B:470:ARG:NH2	2.52	0.42
7:6:124:ILE:HD12	7:6:124:ILE:HA	1.90	0.42
8:7:144:ASN:OD1	8:7:144:ASN:N	2.52	0.42
10:9:107:VAL:HG13	10:9:251:LEU:HD21	2.02	0.42
14:D:146:ILE:HD13	14:D:146:ILE:HA	1.86	0.42
16:F:622:PHE:O	16:F:626:LYS:HB2	2.19	0.42
18:H:209:ILE:HG12	18:H:368:LEU:HD21	2.02	0.42
20:J:106:SER:OG	20:J:110:GLN:NE2	2.52	0.42
25:O:69:MET:HG2	25:O:143:LYS:HZ2	1.85	0.42
9:8:138:PHE:HB2	9:8:142:THR:HG23	2.01	0.41
9:8:218:TYR:HB3	9:8:220:VAL:HG13	2.02	0.41
10:9:196:SER:O	10:9:196:SER:OG	2.38	0.41
12:B:362:ASN:HA	12:B:365:THR:HG22	2.02	0.41
12:B:437:LEU:HD21	14:D:179:LEU:HD23	2.02	0.41
48:B:604:SQD:O2	48:B:604:SQD:H442	2.20	0.41
18:H:378:MET:N	18:H:378:MET:SD	2.92	0.41
21:K:45:PHE:O	21:K:48:PHE:HB3	2.20	0.41
2:1:206:SER:HB2	2:1:218:LEU:HD11	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2:162:GLU:HG3	3:2:175:VAL:HG13	2.02	0.41
16:F:323:THR:OG1	16:F:353:LYS:HE3	2.20	0.41
20:J:51:LEU:HA	20:J:71:LEU:HD23	2.01	0.41
1:0:104:PHE:CE1	1:0:114:LYS:HB3	2.55	0.41
10:9:93:ILE:HG21	10:9:228:ILE:HD11	2.02	0.41
11:A:219:VAL:HG13	11:A:346:LEU:HD22	2.02	0.41
44:A:402:PGT:O5	17:G:89:LYS:NZ	2.43	0.41
16:F:127:TYR:OH	48:F:805:SQD:H252	2.20	0.41
48:F:805:SQD:H4	48:F:805:SQD:O7	2.20	0.41
18:H:47:LEU:HD11	21:K:42:SER:HB2	2.02	0.41
18:H:131:PHE:O	18:H:134:ILE:HG12	2.21	0.41
10:9:238:ARG:HE	10:9:238:ARG:HB3	1.52	0.41
11:A:145:ILE:HD11	17:G:67:VAL:HG13	2.02	0.41
11:A:274:THR:HA	11:A:278:LEU:HB2	2.03	0.41
16:F:329:TYR:OH	16:F:435:ALA:O	2.39	0.41
16:F:333:ALA:HB2	16:F:420:ILE:HG12	2.02	0.41
16:F:394:THR:OG1	16:F:543:GLU:OE2	2.33	0.41
18:H:289:ASN:HB3	18:H:292:ILE:HG22	2.02	0.41
21:K:66:ARG:HE	21:K:66:ARG:HB3	1.65	0.41
23:M:64:MET:HG2	23:M:66:GLU:HG2	2.02	0.41
11:A:225:LEU:HD22	11:A:230:ARG:HB2	2.02	0.41
21:K:155:LYS:HB3	24:N:175:TRP:HH2	1.86	0.41
8:7:132:LEU:HA	8:7:132:LEU:HD23	1.86	0.41
4:3:201:ASP:CG	4:3:202:GLY:H	2.23	0.41
11:A:295:GLU:OE2	11:A:298:LYS:NZ	2.45	0.41
13:C:61:ARG:HA	13:C:64:MET:HE2	2.02	0.41
18:H:106:LEU:HD23	18:H:106:LEU:HA	2.17	0.41
21:K:94:GLU:OE2	23:M:102:ARG:NH2	2.54	0.41
2:1:200:TYR:CE2	12:B:453:LEU:HD11	2.55	0.41
4:3:199:GLU:O	4:3:200:LYS:HG2	2.21	0.41
5:4:41:TRP:HB2	6:5:133:PHE:HD2	1.85	0.41
12:B:255:ASP:OD1	12:B:255:ASP:N	2.54	0.41
12:B:332:ILE:O	12:B:336:ILE:HG12	2.21	0.41
18:H:143:ASP:OD2	21:K:55:ARG:NH2	2.54	0.41
46:H:401:LMG:O5	46:H:401:LMG:O4	2.27	0.41
19:I:76:ILE:HD12	19:I:103:ILE:HG22	2.01	0.41
21:K:3:SER:HB3	23:M:185:LYS:HD3	2.02	0.41
1:0:123:VAL:HG12	1:0:207:VAL:HG22	2.02	0.41
1:0:191:HIS:HA	1:0:207:VAL:O	2.21	0.41
2:1:276:ILE:HD13	2:1:276:ILE:HA	1.86	0.41
2:1:355:ILE:HG22	2:1:360:LEU:HD23	2.02	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
3:2:76:HIS:NE2	3:2:103:GLY:O	2.38	0.41
6:5:102:SER:HB3	6:5:104:GLU:CG	2.50	0.41
10:9:90:TYR:OH	10:9:247:GLU:OE2	2.30	0.41
11:A:335:MET:O	11:A:339:LEU:HG	2.21	0.41
11:A:336:ASP:OD1	11:A:337:GLN:N	2.53	0.41
12:B:161:LEU:HD21	15:E:73:GLU:HG2	2.02	0.41
12:B:207:GLY:O	15:E:58:LYS:NZ	2.33	0.41
14:D:483:LEU:O	14:D:487:VAL:HG13	2.21	0.41
16:F:253:ALA:HB1	16:F:265:HIS:NE2	2.36	0.41
18:H:209:ILE:HD11	18:H:368:LEU:HD11	2.01	0.41
19:I:41:GLN:O	19:I:45:GLU:N	2.52	0.41
21:K:12:ILE:HG13	21:K:13:ALA:H	1.86	0.41
23:M:108:ILE:HG12	23:M:115:MET:HB2	2.03	0.41
25:O:83:LEU:HD13	25:O:83:LEU:HA	1.88	0.41
26:U:213:ASP:OD1	26:U:213:ASP:N	2.54	0.41
11:A:82:THR:HB	21:K:29:SER:OG	2.21	0.41
11:A:264:LEU:HD23	11:A:264:LEU:HA	1.78	0.41
12:B:175:ARG:HE	12:B:175:ARG:HB2	1.71	0.41
12:B:403:LEU:HD22	12:B:408:LEU:HG	2.03	0.41
18:H:19:HIS:HB3	18:H:22:MET:HG2	2.02	0.41
15:E:92:ARG:H	15:E:92:ARG:HG2	1.48	0.40
16:F:48:LEU:HD12	16:F:48:LEU:HA	1.84	0.40
16:F:677:ILE:HG23	48:F:801:SQD:H1	2.03	0.40
3:2:324:LEU:O	3:2:343:THR:HA	2.21	0.40
12:B:66:THR:HA	12:B:69:VAL:HG22	2.03	0.40
12:B:190:SER:OG	12:B:191:SER:N	2.54	0.40
16:F:726:PHE:CD1	17:G:100:THR:HG22	2.56	0.40
18:H:340:PHE:HB3	18:H:353:LYS:HB3	2.04	0.40
4:3:80:PHE:HE2	4:3:100:ALA:HB3	1.86	0.40
11:A:89:ASN:OD1	11:A:254:LYS:NZ	2.54	0.40
11:A:278:LEU:HD11	11:A:319:PHE:HE2	1.86	0.40
12:B:309:LEU:HD22	16:F:713:ILE:HG21	2.04	0.40
20:J:109:PHE:O	20:J:112:ARG:HB2	2.21	0.40
43:4:101:BCR:H15C	43:4:101:BCR:H351	1.84	0.40
43:4:101:BCR:H361	43:4:101:BCR:H20C	1.81	0.40
7:6:139:LYS:HB2	7:6:139:LYS:NZ	2.36	0.40
11:A:117:ILE:HD11	11:A:136:TRP:HB2	2.03	0.40
11:A:118:ILE:HD13	11:A:118:ILE:HA	1.90	0.40
44:A:403:PGT:H362	44:A:403:PGT:H391	1.65	0.40
14:D:364:MET:HB3	14:D:367:ILE:HD11	2.02	0.40
14:D:423:ALA:HB1	16:F:187:PHE:CD1	2.55	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
16:F:567:ILE:HD12	16:F:567:ILE:HA	1.98	0.40
18:H:212:GLU:HB3	26:U:199:GLN:HB3	2.02	0.40
18:H:353:LYS:HG2	20:J:55:CYS:HB2	2.03	0.40
22:L:83:LEU:HD13	44:L:201:PGT:H41	2.03	0.40
1:0:132:LYS:HB3	1:0:137:ASP:HB2	2.04	0.40
4:3:155:GLU:HG2	4:3:168:LEU:HB2	2.03	0.40
9:8:167:LEU:HA	9:8:167:LEU:HD23	1.87	0.40
11:A:331:PRO:HB3	18:H:125:ILE:HG22	2.03	0.40
12:B:186:MET:HE2	12:B:252:TRP:HB3	2.03	0.40
14:D:228:ILE:HA	14:D:229:PRO:HA	1.94	0.40
16:F:115:MET:HG3	16:F:124:PHE:CD2	2.57	0.40
16:F:161:LEU:HD22	16:F:260:ILE:HG13	2.04	0.40
18:H:16:GLY:HA2	18:H:27:ARG:HG3	2.03	0.40
18:H:377:ILE:HB	18:H:378:MET:HE1	2.04	0.40
20:J:5:LEU:HD23	20:J:84:VAL:HG21	2.04	0.40

There are no symmetry-related clashes.

5.3 Torsion angles [i](#)

5.3.1 Protein backbone [i](#)

In the following table, the Percentiles column shows the percent Ramachandran outliers of the chain as a percentile score with respect to all 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	0	155/157 (99%)	152 (98%)	3 (2%)	0	100	100
2	1	401/403 (100%)	393 (98%)	8 (2%)	0	100	100
3	2	292/372 (78%)	286 (98%)	5 (2%)	1 (0%)	37	69
4	3	137/139 (99%)	129 (94%)	8 (6%)	0	100	100
5	4	91/93 (98%)	90 (99%)	1 (1%)	0	100	100
6	5	152/154 (99%)	149 (98%)	3 (2%)	0	100	100
7	6	123/125 (98%)	122 (99%)	1 (1%)	0	100	100
8	7	142/144 (99%)	141 (99%)	1 (1%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
9	8	141/143 (99%)	136 (96%)	5 (4%)	0	100	100
10	9	172/174 (99%)	167 (97%)	5 (3%)	0	100	100
11	A	348/350 (99%)	340 (98%)	8 (2%)	0	100	100
12	B	486/488 (100%)	453 (93%)	32 (7%)	1 (0%)	44	75
13	C	113/115 (98%)	103 (91%)	9 (8%)	1 (1%)	14	49
14	D	496/498 (100%)	483 (97%)	12 (2%)	1 (0%)	44	75
15	E	98/100 (98%)	96 (98%)	2 (2%)	0	100	100
16	F	718/742 (97%)	683 (95%)	33 (5%)	2 (0%)	37	69
17	G	174/176 (99%)	165 (95%)	9 (5%)	0	100	100
18	H	367/389 (94%)	352 (96%)	15 (4%)	0	100	100
19	I	161/163 (99%)	157 (98%)	4 (2%)	0	100	100
20	J	156/158 (99%)	152 (97%)	4 (3%)	0	100	100
21	K	200/202 (99%)	189 (94%)	8 (4%)	3 (2%)	8	38
22	L	107/109 (98%)	104 (97%)	3 (3%)	0	100	100
23	M	139/141 (99%)	129 (93%)	9 (6%)	1 (1%)	19	54
24	N	163/165 (99%)	156 (96%)	6 (4%)	1 (1%)	22	57
25	O	93/95 (98%)	90 (97%)	1 (1%)	2 (2%)	5	30
26	U	161/240 (67%)	151 (94%)	7 (4%)	3 (2%)	6	34
27	a	740/742 (100%)	721 (97%)	19 (3%)	0	100	100
28	b	731/733 (100%)	716 (98%)	15 (2%)	0	100	100
29	c	79/81 (98%)	77 (98%)	2 (2%)	0	100	100
30	d	141/143 (99%)	135 (96%)	6 (4%)	0	100	100
31	e	66/68 (97%)	62 (94%)	4 (6%)	0	100	100
32	f	151/153 (99%)	150 (99%)	1 (1%)	0	100	100
33	g	95/97 (98%)	91 (96%)	2 (2%)	2 (2%)	5	31
34	h	93/95 (98%)	92 (99%)	1 (1%)	0	100	100
35	i	29/31 (94%)	28 (97%)	1 (3%)	0	100	100
36	j	40/42 (95%)	40 (100%)	0	0	100	100
37	k	62/130 (48%)	61 (98%)	1 (2%)	0	100	100
38	l	158/160 (99%)	152 (96%)	6 (4%)	0	100	100
39	w	213/215 (99%)	202 (95%)	11 (5%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
40	x	196/198 (99%)	194 (99%)	2 (1%)	0	100	100
41	y	219/221 (99%)	214 (98%)	5 (2%)	0	100	100
42	z	191/193 (99%)	188 (98%)	3 (2%)	0	100	100
All	All	8990/9337 (96%)	8691 (97%)	281 (3%)	18 (0%)	45	75

All (18) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
16	F	501	ASN
21	K	140	PRO
23	M	94	LEU
25	O	61	LYS
26	U	86	SER
26	U	87	PRO
33	g	164	PRO
12	B	247	ALA
21	K	13	ALA
24	N	67	ILE
25	O	66	VAL
3	2	245	LYS
16	F	535	LYS
21	K	14	GLN
26	U	90	MET
13	C	55	TRP
14	D	412	LEU
33	g	163	ASP

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	0	143/143 (100%)	137 (96%)	6 (4%)	25	58
2	1	340/340 (100%)	334 (98%)	6 (2%)	54	77
3	2	260/321 (81%)	254 (98%)	6 (2%)	45	72

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
4	3	120/120 (100%)	119 (99%)	1 (1%)	79	90
5	4	76/76 (100%)	73 (96%)	3 (4%)	27	60
6	5	131/131 (100%)	128 (98%)	3 (2%)	45	72
7	6	112/112 (100%)	106 (95%)	6 (5%)	18	51
8	7	123/123 (100%)	121 (98%)	2 (2%)	58	79
9	8	114/115 (99%)	109 (96%)	5 (4%)	24	57
10	9	143/144 (99%)	133 (93%)	10 (7%)	12	42
11	A	296/304 (97%)	291 (98%)	5 (2%)	56	78
12	B	424/424 (100%)	403 (95%)	21 (5%)	20	54
13	C	99/99 (100%)	95 (96%)	4 (4%)	27	59
14	D	430/430 (100%)	420 (98%)	10 (2%)	45	72
15	E	86/86 (100%)	80 (93%)	6 (7%)	12	42
16	F	626/652 (96%)	611 (98%)	15 (2%)	44	71
17	G	153/153 (100%)	150 (98%)	3 (2%)	50	75
18	H	321/339 (95%)	313 (98%)	8 (2%)	42	71
19	I	150/150 (100%)	140 (93%)	10 (7%)	13	44
20	J	140/140 (100%)	135 (96%)	5 (4%)	30	62
21	K	180/180 (100%)	172 (96%)	8 (4%)	24	57
22	L	99/99 (100%)	97 (98%)	2 (2%)	50	75
23	M	129/129 (100%)	125 (97%)	4 (3%)	35	66
24	N	139/139 (100%)	135 (97%)	4 (3%)	37	67
25	O	87/87 (100%)	86 (99%)	1 (1%)	70	86
26	U	127/212 (60%)	120 (94%)	7 (6%)	18	51
27	a	598/598 (100%)	590 (99%)	8 (1%)	65	83
28	b	599/599 (100%)	581 (97%)	18 (3%)	36	66
29	c	71/71 (100%)	69 (97%)	2 (3%)	38	68
30	d	122/122 (100%)	118 (97%)	4 (3%)	33	64
31	e	60/60 (100%)	58 (97%)	2 (3%)	33	64
32	f	126/126 (100%)	122 (97%)	4 (3%)	34	65
33	g	82/82 (100%)	81 (99%)	1 (1%)	67	85
34	h	79/79 (100%)	78 (99%)	1 (1%)	65	83

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
35	i	27/27 (100%)	27 (100%)	0	100	100
36	j	37/37 (100%)	36 (97%)	1 (3%)	40	69
37	k	49/97 (50%)	45 (92%)	4 (8%)	9	36
38	l	123/123 (100%)	122 (99%)	1 (1%)	79	90
39	w	177/177 (100%)	176 (99%)	1 (1%)	84	92
40	x	166/166 (100%)	164 (99%)	2 (1%)	67	85
41	y	173/173 (100%)	170 (98%)	3 (2%)	56	78
42	z	154/154 (100%)	147 (96%)	7 (4%)	23	56
All	All	7691/7939 (97%)	7471 (97%)	220 (3%)	39	67

All (220) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	0	82	ARG
1	0	133	ASN
1	0	135	VAL
1	0	171	ASP
1	0	187	PHE
1	0	199	ASN
2	1	132	TYR
2	1	162	LYS
2	1	203	MET
2	1	233	ASN
2	1	245	GLU
2	1	366	GLU
3	2	34	ASP
3	2	149	ARG
3	2	165	CYS
3	2	227	SER
3	2	327	SER
3	2	367	GLU
4	3	138	MET
5	4	1	MET
5	4	13	ASP
5	4	50	LYS
6	5	73	ASP
6	5	103	SER
6	5	104	GLU
7	6	84	TRP

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Mol	Chain	Res	Type
7	6	110	SER
7	6	126	TYR
7	6	140	SER
7	6	180	TYR
7	6	196	PHE
8	7	136	ASP
8	7	161	PHE
9	8	101	SER
9	8	139	SER
9	8	142	THR
9	8	163	VAL
9	8	207	ASP
10	9	105	ARG
10	9	115	VAL
10	9	129	GLU
10	9	154	ASP
10	9	167	ARG
10	9	185	SER
10	9	193	THR
10	9	196	SER
10	9	230	SER
10	9	238	ARG
11	A	110	SER
11	A	123	ARG
11	A	149	MET
11	A	233	PHE
11	A	259	TYR
12	B	20	LYS
12	B	30	SER
12	B	61	TYR
12	B	106	LEU
12	B	127	THR
12	B	180	THR
12	B	183	TYR
12	B	190	SER
12	B	225	ASN
12	B	226	SER
12	B	255	ASP
12	B	264	VAL
12	B	269	SER
12	B	352	ILE
12	B	459	ASN

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Mol	Chain	Res	Type
12	B	468	ASN
12	B	478	ASN
12	B	482	PHE
12	B	491	SER
12	B	498	MET
12	B	506	GLN
13	C	49	GLU
13	C	53	ASP
13	C	73	ASP
13	C	100	PHE
14	D	3	SER
14	D	122	TYR
14	D	170	TYR
14	D	201	VAL
14	D	308	SER
14	D	325	ASP
14	D	352	SER
14	D	378	PHE
14	D	411	LEU
14	D	422	MET
15	E	4	GLU
15	E	13	LEU
15	E	44	ASN
15	E	53	ASP
15	E	62	PHE
15	E	63	SER
16	F	4	ILE
16	F	10	ILE
16	F	116	SER
16	F	187	PHE
16	F	224	LEU
16	F	252	ASP
16	F	322	TYR
16	F	336	MET
16	F	571	GLN
16	F	584	THR
16	F	603	PHE
16	F	652	ASP
16	F	693	ARG
16	F	729	LEU
16	F	741	PHE
17	G	29	PHE

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Mol	Chain	Res	Type
17	G	138	ILE
17	G	175	ARG
18	H	40	CYS
18	H	57	ASN
18	H	70	TRP
18	H	159	ARG
18	H	195	ARG
18	H	223	MET
18	H	321	LEU
18	H	393	ARG
19	I	11	TYR
19	I	20	ARG
19	I	50	SER
19	I	84	LYS
19	I	87	THR
19	I	98	SER
19	I	100	ASP
19	I	118	CYS
19	I	160	ASN
19	I	161	SER
20	J	23	TYR
20	J	53	SER
20	J	55	CYS
20	J	58	ASP
20	J	145	ASP
21	K	26	SER
21	K	43	CYS
21	K	58	PHE
21	K	73	ASP
21	K	81	VAL
21	K	139	CYS
21	K	172	ASN
21	K	185	ARG
22	L	121	MET
22	L	175	TRP
23	M	96	SER
23	M	102	ARG
23	M	121	ASP
23	M	131	ASP
24	N	75	LEU
24	N	86	ASP
24	N	161	ARG

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Mol	Chain	Res	Type
24	N	213	MET
25	O	145	ASP
26	U	124	ARG
26	U	155	LYS
26	U	156	GLU
26	U	188	ARG
26	U	202	ARG
26	U	203	TRP
26	U	210	GLU
27	a	15	ASP
27	a	259	THR
27	a	275	PHE
27	a	290	ASP
27	a	363	VAL
27	a	369	TYR
27	a	591	PHE
27	a	625	VAL
28	b	47	PHE
28	b	96	PHE
28	b	106	ARG
28	b	210	ASN
28	b	272	ASP
28	b	294	ASN
28	b	332	PHE
28	b	394	PHE
28	b	405	ASP
28	b	413	ASP
28	b	475	ASP
28	b	477	LEU
28	b	569	ASP
28	b	576	PHE
28	b	577	TYR
28	b	649	MET
28	b	662	MET
28	b	689	ASN
29	c	32	ASP
29	c	73	THR
30	d	125	ARG
30	d	155	GLN
30	d	157	TYR
30	d	172	ASP
31	e	68	SER

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Mol	Chain	Res	Type
31	e	74	ARG
32	f	105	SER
32	f	138	LEU
32	f	143	ASP
32	f	147	HIS
33	g	98	GLU
34	h	71	ASP
36	j	15	SER
37	k	54	ASN
37	k	60	SER
37	k	91	SER
37	k	97	ASP
38	l	60	GLN
39	w	153	THR
40	x	110	MET
40	x	156	ARG
41	y	60	SER
41	y	159	PHE
41	y	181	MET
42	z	55	ARG
42	z	58	HIS
42	z	134	VAL
42	z	179	SER
42	z	181	ASP
42	z	236	ASP
42	z	238	VAL

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (11) such sidechains are listed below:

Mol	Chain	Res	Type
1	0	119	GLN
10	9	173	ASN
13	C	57	GLN
16	F	176	GLN
17	G	142	GLN
18	H	289	ASN
20	J	24	GLN
21	K	172	ASN
28	b	156	HIS
39	w	240	GLN
42	z	209	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 oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

248 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
50	CLA	b	814	-	65,73,73	1.36	7 (10%)	76,113,113	1.86	12 (15%)
44	PGT	F	803	-	42,42,50	0.52	0	45,48,56	0.47	0
50	CLA	a	845	-	65,73,73	1.35	7 (10%)	76,113,113	1.70	10 (13%)
50	CLA	a	819	-	60,68,73	1.40	7 (11%)	70,107,113	1.75	9 (12%)
50	CLA	a	818	-	59,67,73	1.40	7 (11%)	68,105,113	1.72	11 (16%)
44	PGT	5	301	-	34,34,50	0.57	0	37,40,56	0.58	0
46	LMG	B	605	-	37,37,55	0.99	2 (5%)	45,45,63	1.06	2 (4%)
50	CLA	b	825	-	65,73,73	1.35	7 (10%)	76,113,113	1.65	11 (14%)
44	PGT	f	305	-	38,38,50	0.54	0	41,44,56	0.50	0
50	CLA	a	855	-	42,50,73	1.60	7 (16%)	48,85,113	1.97	7 (14%)
50	CLA	b	802	-	65,73,73	1.34	7 (10%)	76,113,113	1.60	9 (11%)
54	CHL	w	304	-	45,53,74	1.77	10 (22%)	52,89,114	2.17	13 (25%)
47	PQ9	A	405	-	36,36,45	2.93	19 (52%)	45,46,57	11.16	23 (51%)
50	CLA	a	851	27	46,54,73	1.56	7 (15%)	53,90,113	1.90	8 (15%)
50	CLA	x	306	-	60,68,73	1.40	8 (13%)	70,107,113	1.75	8 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
44	PGT	w	313	50	39,39,50	0.54	0	42,45,56	0.50	0
46	LMG	j	104	-	34,34,55	1.03	1 (2%)	42,42,63	1.15	2 (4%)
55	LUT	w	320	-	42,43,43	0.74	0	51,60,60	0.62	0
44	PGT	B	601	-	33,33,50	0.58	0	36,39,56	0.56	0
44	PGT	B	606	-	34,34,50	0.54	0	37,40,56	0.72	1 (2%)
50	CLA	a	812	-	59,66,73	1.36	8 (13%)	70,101,113	1.72	9 (12%)
43	BCR	b	850	-	41,41,41	0.70	0	56,56,56	1.18	6 (10%)
50	CLA	a	821	-	63,71,73	1.33	6 (9%)	77,110,113	1.89	12 (15%)
51	DGD	a	804	-	67,67,67	1.02	2 (2%)	81,81,81	1.00	1 (1%)
50	CLA	a	813	-	52,60,73	1.50	7 (13%)	60,97,113	1.75	9 (15%)
43	BCR	k	202	-	41,41,41	0.70	0	56,56,56	1.14	4 (7%)
43	BCR	x	314	-	41,41,41	0.61	0	56,56,56	1.16	4 (7%)
50	CLA	x	302	-	41,49,73	1.62	7 (17%)	47,84,113	2.08	9 (19%)
50	CLA	b	832	-	54,62,73	1.49	7 (12%)	62,99,113	1.82	9 (14%)
50	CLA	z	307	42	60,68,73	1.40	7 (11%)	70,107,113	1.76	10 (14%)
43	BCR	b	831	-	41,41,41	0.64	0	56,56,56	1.33	10 (17%)
46	LMG	j	105	-	37,37,55	0.96	1 (2%)	45,45,63	1.08	2 (4%)
50	CLA	z	311	-	55,63,73	1.46	7 (12%)	64,101,113	1.68	10 (15%)
50	CLA	y	307	-	41,49,73	1.57	6 (14%)	51,84,113	2.07	8 (15%)
51	DGD	x	317	-	49,49,67	1.12	0	63,63,81	1.05	2 (3%)
50	CLA	b	835	-	59,67,73	1.40	7 (11%)	68,105,113	1.73	10 (14%)
50	CLA	a	858	-	65,73,73	1.36	7 (10%)	76,113,113	1.54	8 (10%)
49	SF4	I	202	19	0,12,12	-	-	-	-	-
50	CLA	a	838	-	65,73,73	1.32	7 (10%)	76,113,113	1.78	10 (13%)
54	CHL	x	311	-	41,48,74	1.97	9 (21%)	42,82,114	2.05	6 (14%)
50	CLA	a	843	-	65,73,73	1.37	7 (10%)	76,113,113	1.73	10 (13%)
44	PGT	a	805	-	31,31,50	0.59	0	34,37,56	0.56	0
50	CLA	a	853	-	65,73,73	1.34	7 (10%)	76,113,113	1.73	11 (14%)
44	PGT	b	830	50	38,38,50	0.54	0	41,44,56	0.50	0
43	BCR	l	304	-	41,41,41	0.68	0	56,56,56	1.08	4 (7%)
50	CLA	a	814	-	65,73,73	1.35	7 (10%)	76,113,113	1.75	9 (11%)
50	CLA	x	312	40	65,73,73	1.34	7 (10%)	76,113,113	1.68	10 (13%)
50	CLA	y	314	41	65,73,73	1.36	7 (10%)	76,113,113	1.67	13 (17%)
43	BCR	f	304	-	41,41,41	0.67	0	56,56,56	1.05	4 (7%)
50	CLA	b	828	-	60,68,73	1.43	7 (11%)	70,107,113	1.66	8 (11%)
50	CLA	b	845	-	65,73,73	1.35	7 (10%)	76,113,113	1.49	11 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
50	CLA	b	847	-	60,68,73	1.39	6 (10%)	70,107,113	1.85	12 (17%)
50	CLA	a	802	-	60,68,73	1.41	7 (11%)	70,107,113	1.72	10 (14%)
48	SQD	F	805	-	42,43,54	0.45	0	51,54,65	0.80	2 (3%)
49	SF4	c	101	29	0,12,12	-	-	-	-	-
46	LMG	7	301	-	41,41,55	1.00	2 (4%)	49,49,63	1.23	4 (8%)
43	BCR	b	818	-	41,41,41	0.66	0	56,56,56	1.03	3 (5%)
48	SQD	F	801	-	40,41,54	0.44	1 (2%)	49,52,65	1.06	3 (6%)
50	CLA	b	805	28	65,73,73	1.35	7 (10%)	76,113,113	1.77	10 (13%)
44	PGT	z	317	50	45,45,50	0.51	0	48,51,56	0.48	0
50	CLA	a	815	27	65,73,73	1.34	8 (12%)	76,113,113	1.74	11 (14%)
50	CLA	w	303	39	45,53,73	1.58	8 (17%)	52,89,113	1.93	9 (17%)
50	CLA	a	850	-	65,73,73	1.34	6 (9%)	76,113,113	1.63	12 (15%)
50	CLA	z	303	-	41,49,73	1.64	8 (19%)	47,84,113	1.91	10 (21%)
49	SF4	I	201	19	0,12,12	-	-	-	-	-
50	CLA	y	306	-	39,48,73	1.57	7 (17%)	43,82,113	2.09	9 (20%)
50	CLA	w	316	39	50,58,73	1.53	7 (14%)	58,95,113	2.00	12 (20%)
43	BCR	i	101	-	41,41,41	0.65	0	56,56,56	1.13	2 (3%)
43	BCR	b	817	-	41,41,41	0.67	0	56,56,56	1.18	6 (10%)
50	CLA	a	816	-	42,50,73	1.57	7 (16%)	48,85,113	1.84	7 (14%)
50	CLA	a	854	-	65,73,73	1.34	7 (10%)	76,113,113	1.61	12 (15%)
50	CLA	b	849	-	50,58,73	1.53	7 (14%)	58,95,113	1.92	7 (12%)
50	CLA	j	102	36	42,50,73	1.58	7 (16%)	48,85,113	2.02	7 (14%)
50	CLA	y	308	-	65,73,73	1.35	7 (10%)	76,113,113	1.74	10 (13%)
50	CLA	a	833	-	65,73,73	1.36	7 (10%)	76,113,113	1.65	11 (14%)
50	CLA	b	846	-	65,73,73	1.34	7 (10%)	76,113,113	1.68	9 (11%)
54	CHL	x	305	-	46,54,74	1.73	10 (21%)	49,90,114	2.22	14 (28%)
51	DGD	b	821	-	60,60,67	1.02	0	74,74,81	1.03	3 (4%)
50	CLA	z	319	-	42,50,73	1.62	7 (16%)	48,85,113	1.89	5 (10%)
43	BCR	w	301	-	41,41,41	0.63	0	56,56,56	1.05	4 (7%)
53	PQN	b	827	-	34,34,34	1.02	3 (8%)	42,45,45	1.88	10 (23%)
50	CLA	z	305	-	50,58,73	1.53	7 (14%)	58,95,113	1.84	9 (15%)
55	LUT	x	320	-	42,43,43	0.82	0	51,60,60	0.58	0
50	CLA	b	842	-	57,65,73	1.44	7 (12%)	66,103,113	1.67	11 (16%)
50	CLA	z	316	44	47,55,73	1.53	7 (14%)	54,91,113	1.83	8 (14%)
50	CLA	b	826	-	55,63,73	1.47	7 (12%)	64,101,113	1.85	9 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
43	BCR	4	101	-	41,41,41	0.64	0	56,56,56	1.19	4 (7%)
50	CLA	k	205	-	42,50,73	1.58	7 (16%)	48,85,113	1.97	8 (16%)
55	LUT	y	315	-	42,43,43	0.85	0	51,60,60	0.61	0
44	PGT	A	404	-	43,43,50	0.51	0	46,49,56	0.46	0
44	PGT	I	203	-	43,43,50	0.52	0	46,49,56	0.47	0
50	CLA	b	833	-	65,73,73	1.32	7 (10%)	76,113,113	1.75	11 (14%)
43	BCR	a	827	-	40,40,41	0.67	0	54,54,56	1.13	5 (9%)
44	PGT	A	403	-	37,37,50	0.31	0	40,43,56	0.37	0
54	CHL	x	301	-	43,51,74	1.68	8 (18%)	45,86,114	2.20	8 (17%)
50	CLA	b	838	-	52,60,73	1.52	7 (13%)	60,97,113	1.88	10 (16%)
43	BCR	l	303	-	41,41,41	0.63	0	56,56,56	1.20	5 (8%)
50	CLA	k	203	-	41,49,73	1.65	8 (19%)	47,84,113	1.97	7 (14%)
44	PGT	b	829	-	47,47,50	0.50	0	50,53,56	0.45	0
46	LMG	w	312	-	40,40,55	0.95	1 (2%)	48,48,63	1.11	2 (4%)
50	CLA	b	823	-	55,63,73	1.47	8 (14%)	64,101,113	1.78	11 (17%)
50	CLA	x	304	40	47,55,73	1.54	7 (14%)	54,91,113	1.84	7 (12%)
43	BCR	z	318	-	41,41,41	0.68	0	56,56,56	1.41	6 (10%)
50	CLA	w	314	44	44,52,73	1.57	7 (15%)	49,87,113	2.03	8 (16%)
50	CLA	x	303	40	57,65,73	1.48	7 (12%)	66,103,113	1.73	12 (18%)
50	CLA	x	307	40	60,68,73	1.40	7 (11%)	70,107,113	1.81	11 (15%)
50	CLA	z	310	42	41,49,73	1.60	7 (17%)	47,84,113	2.07	10 (21%)
48	SQD	w	318	-	40,41,54	0.43	1 (2%)	49,52,65	0.92	3 (6%)
43	BCR	a	831	-	40,40,41	0.64	0	54,54,56	1.16	5 (9%)
50	CLA	b	836	-	65,73,73	1.36	7 (10%)	76,113,113	1.69	10 (13%)
50	CLA	w	310	-	65,73,73	1.36	7 (10%)	76,113,113	1.81	15 (19%)
50	CLA	z	306	42	56,64,73	1.43	6 (10%)	65,102,113	1.88	14 (21%)
50	CLA	a	842	-	65,73,73	1.34	7 (10%)	76,113,113	1.66	11 (14%)
50	CLA	b	840	-	65,73,73	1.34	7 (10%)	76,113,113	1.70	9 (11%)
50	CLA	a	849	-	65,73,73	1.36	7 (10%)	76,113,113	1.64	11 (14%)
50	CLA	y	305	41	45,53,73	1.57	7 (15%)	52,89,113	1.87	7 (13%)
50	CLA	b	834	-	45,53,73	1.57	7 (15%)	52,89,113	1.81	7 (13%)
50	CLA	z	308	-	42,50,73	2.14	11 (26%)	40,82,113	2.30	8 (20%)
43	BCR	a	828	-	41,41,41	0.71	0	56,56,56	1.09	3 (5%)
43	BCR	a	810	-	30,30,41	0.83	1 (3%)	39,39,56	1.34	6 (15%)
50	CLA	g	201	-	49,57,73	1.53	7 (14%)	55,93,113	1.72	8 (14%)
43	BCR	a	830	-	41,41,41	0.70	0	56,56,56	1.03	3 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
44	PGT	A	401	-	31,31,50	0.58	0	34,37,56	0.60	0
43	BCR	k	201	-	41,41,41	0.69	0	56,56,56	1.47	11 (19%)
50	CLA	b	851	-	47,55,73	1.52	7 (14%)	54,91,113	1.91	8 (14%)
43	BCR	y	301	-	41,41,41	0.66	0	56,56,56	1.04	3 (5%)
50	CLA	w	308	39	65,73,73	1.35	6 (9%)	76,113,113	1.77	12 (15%)
46	LMG	H	401	-	33,33,55	1.07	2 (6%)	41,41,63	1.26	4 (9%)
50	CLA	y	304	-	38,47,73	1.68	7 (18%)	45,81,113	1.98	8 (17%)
43	BCR	g	202	-	41,41,41	0.69	0	56,56,56	1.01	3 (5%)
44	PGT	B	603	-	45,45,50	0.51	0	48,51,56	0.46	0
50	CLA	b	808	-	43,51,73	1.58	7 (16%)	49,86,113	1.91	7 (14%)
54	CHL	w	311	-	47,55,74	1.59	8 (17%)	49,90,114	2.10	10 (20%)
46	LMG	z	314	-	40,40,55	1.12	4 (10%)	48,48,63	1.07	1 (2%)
52	CL0	a	808	-	61,69,73	2.35	18 (29%)	70,107,113	2.52	21 (30%)
50	CLA	b	812	-	62,70,73	1.39	7 (11%)	72,109,113	1.71	12 (16%)
50	CLA	l	305	38	40,48,73	1.66	7 (17%)	46,83,113	1.90	8 (17%)
43	BCR	a	803	-	27,27,41	0.70	0	34,35,56	1.23	2 (5%)
50	CLA	g	204	33	43,51,73	1.58	7 (16%)	49,86,113	1.85	8 (16%)
50	CLA	a	801	-	65,73,73	1.35	7 (10%)	76,113,113	1.70	10 (13%)
50	CLA	x	313	40	53,61,73	1.52	8 (15%)	61,98,113	1.76	12 (19%)
50	CLA	a	836	27	65,73,73	1.34	7 (10%)	76,113,113	1.65	10 (13%)
46	LMG	f	306	-	34,34,55	1.02	1 (2%)	42,42,63	1.15	2 (4%)
50	CLA	y	302	41	52,60,73	1.47	8 (15%)	65,97,113	2.11	12 (18%)
49	SF4	K	301	21	0,12,12	-	-	-	-	-
45	A1H1M	F	804	-	41,41,41	1.27	5 (12%)	58,58,58	1.85	16 (27%)
48	SQD	a	859	-	35,36,54	0.49	1 (2%)	44,47,65	0.84	2 (4%)
55	LUT	z	321	-	42,43,43	0.81	0	51,60,60	0.64	0
50	CLA	b	801	-	65,73,73	1.35	7 (10%)	76,113,113	1.67	11 (14%)
50	CLA	b	822	-	58,66,73	1.42	7 (12%)	67,104,113	1.82	9 (13%)
50	CLA	f	303	-	41,49,73	1.62	7 (17%)	47,84,113	1.97	8 (17%)
50	CLA	b	803	-	65,73,73	1.34	6 (9%)	76,113,113	1.88	12 (15%)
44	PGT	A	402	-	36,36,50	0.56	0	39,42,56	0.51	0
50	CLA	b	806	-	52,60,73	1.50	7 (13%)	60,97,113	1.89	9 (15%)
50	CLA	x	318	-	44,53,73	1.51	6 (13%)	49,88,113	1.99	8 (16%)
50	CLA	a	847	-	40,48,73	1.78	7 (17%)	40,76,113	1.50	7 (17%)
50	CLA	a	822	-	51,59,73	1.48	7 (13%)	59,96,113	2.07	10 (16%)
50	CLA	a	809	-	57,65,73	1.43	7 (12%)	66,103,113	1.83	12 (18%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
44	PGT	z	313	-	32,32,50	0.58	0	35,38,56	0.53	0
50	CLA	f	301	-	57,65,73	1.43	7 (12%)	66,103,113	1.89	10 (15%)
50	CLA	l	301	-	45,53,73	1.59	7 (15%)	52,89,113	1.91	7 (13%)
50	CLA	y	312	-	51,59,73	1.49	7 (13%)	59,96,113	1.83	8 (13%)
50	CLA	a	835	-	58,66,73	1.43	7 (12%)	67,104,113	1.81	10 (14%)
43	BCR	b	819	-	41,41,41	0.73	1 (2%)	56,56,56	1.23	6 (10%)
50	CLA	a	823	-	55,63,73	1.47	7 (12%)	64,101,113	1.78	9 (14%)
44	PGT	D	602	-	33,33,50	0.57	0	36,39,56	0.60	0
46	LMG	z	315	-	36,36,55	0.98	1 (2%)	44,44,63	1.14	2 (4%)
50	CLA	w	306	39	65,73,73	1.36	7 (10%)	76,113,113	1.67	11 (14%)
54	CHL	x	319	42	50,58,74	1.67	9 (18%)	52,94,114	2.14	11 (21%)
50	CLA	w	315	39	46,54,73	1.57	7 (15%)	53,90,113	1.94	8 (15%)
50	CLA	b	815	-	65,73,73	1.35	7 (10%)	76,113,113	1.77	10 (13%)
55	LUT	y	316	-	42,43,43	0.83	0	51,60,60	0.75	1 (1%)
49	SF4	a	832	27,28	0,12,12	-	-	-	-	-
50	CLA	f	302	-	42,50,73	1.59	7 (16%)	48,85,113	2.04	7 (14%)
43	BCR	b	820	-	41,41,41	0.70	0	56,56,56	1.15	5 (8%)
50	CLA	b	848	-	42,50,73	1.60	7 (16%)	48,85,113	2.02	8 (16%)
43	BCR	b	816	-	41,41,41	0.67	0	56,56,56	1.15	4 (7%)
46	LMG	x	315	-	48,48,55	0.84	1 (2%)	56,56,63	1.10	2 (3%)
50	CLA	x	308	-	50,58,73	1.54	7 (14%)	58,95,113	1.90	9 (15%)
50	CLA	y	303	-	55,63,73	1.47	7 (12%)	64,101,113	1.85	7 (10%)
50	CLA	z	302	-	55,63,73	1.47	8 (14%)	64,101,113	1.77	8 (12%)
50	CLA	x	310	-	43,51,73	1.57	7 (16%)	49,86,113	1.84	8 (16%)
50	CLA	a	841	-	55,63,73	1.45	7 (12%)	64,101,113	1.78	10 (15%)
50	CLA	b	837	-	65,73,73	1.34	7 (10%)	76,113,113	1.74	10 (13%)
48	SQD	B	604	-	39,40,54	0.51	1 (2%)	48,51,65	0.61	0
50	CLA	a	844	-	57,65,73	1.43	7 (12%)	66,103,113	1.73	11 (16%)
44	PGT	z	301	-	44,44,50	0.50	0	47,50,56	0.50	0
50	CLA	a	857	-	65,73,73	1.36	7 (10%)	76,113,113	1.72	9 (11%)
44	PGT	N	301	-	25,25,50	0.65	0	28,31,56	0.58	0
54	CHL	z	304	42	42,50,74	1.69	7 (16%)	44,85,114	2.31	8 (18%)
43	BCR	l	302	-	41,41,41	0.64	0	56,56,56	1.03	2 (3%)
50	CLA	w	307	-	45,53,73	1.60	7 (15%)	52,89,113	1.83	9 (17%)
44	PGT	a	806	50	32,32,50	0.60	0	35,38,56	0.53	0
44	PGT	L	201	-	39,39,50	0.54	0	42,45,56	0.54	0

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
50	CLA	x	309	-	42,50,73	1.58	7 (16%)	48,85,113	1.96	7 (14%)
45	A1H1M	5	302	-	41,41,41	1.08	2 (4%)	58,58,58	1.94	13 (22%)
50	CLA	a	837	-	65,73,73	1.36	7 (10%)	76,113,113	1.69	9 (11%)
53	PQN	a	825	-	34,34,34	1.01	3 (8%)	42,45,45	1.81	10 (23%)
50	CLA	y	313	41	65,73,73	1.36	7 (10%)	76,113,113	1.84	10 (13%)
54	CHL	z	312	42	61,69,74	1.54	10 (16%)	67,108,114	2.20	14 (20%)
50	CLA	a	839	-	65,73,73	1.34	7 (10%)	76,113,113	1.63	11 (14%)
54	CHL	w	309	-	43,51,74	1.69	7 (16%)	45,86,114	2.17	8 (17%)
50	CLA	l	306	-	60,68,73	1.41	8 (13%)	70,107,113	1.78	12 (17%)
50	CLA	b	804	-	41,49,73	1.62	8 (19%)	47,84,113	1.95	9 (19%)
50	CLA	b	813	-	43,51,73	1.59	7 (16%)	49,86,113	1.76	7 (14%)
44	PGT	a	807	-	45,45,50	0.51	0	48,51,56	0.50	0
55	LUT	w	319	-	42,43,43	0.80	0	51,60,60	0.86	1 (1%)
50	CLA	k	204	-	57,65,73	1.44	7 (12%)	66,103,113	1.86	10 (15%)
46	LMG	F	802	-	28,28,55	1.10	1 (3%)	36,36,63	1.16	2 (5%)
50	CLA	a	811	-	65,73,73	1.35	7 (10%)	76,113,113	1.75	10 (13%)
50	CLA	a	846	-	65,73,73	1.36	7 (10%)	76,113,113	1.76	11 (14%)
50	CLA	b	810	-	50,58,73	1.54	7 (14%)	58,95,113	1.83	7 (12%)
50	CLA	g	203	-	52,60,73	1.50	7 (13%)	60,97,113	1.76	8 (13%)
49	SF4	c	102	29	0,12,12	-	-	-	-	-
50	CLA	a	834	-	65,73,73	1.34	7 (10%)	76,113,113	1.69	8 (10%)
50	CLA	y	309	-	42,50,73	1.61	7 (16%)	48,85,113	1.76	7 (14%)
50	CLA	y	310	41	65,73,73	1.33	7 (10%)	76,113,113	1.74	10 (13%)
50	CLA	a	848	-	52,60,73	1.50	7 (13%)	60,97,113	1.78	9 (15%)
55	LUT	x	321	-	42,43,43	0.84	0	51,60,60	0.86	2 (3%)
46	LMG	D	601	-	34,34,55	1.01	1 (2%)	42,42,63	1.14	2 (4%)
48	SQD	w	317	-	30,31,54	0.52	1 (3%)	39,42,65	0.58	0
43	BCR	j	103	-	41,41,41	0.69	0	56,56,56	1.16	5 (8%)
50	CLA	a	820	-	65,73,73	1.35	7 (10%)	76,113,113	1.67	11 (14%)
50	CLA	w	302	-	50,58,73	1.55	7 (14%)	58,95,113	1.89	8 (13%)
55	LUT	z	320	-	42,43,43	0.90	0	51,60,60	0.70	0
50	CLA	b	844	28	65,73,73	1.37	7 (10%)	76,113,113	1.70	9 (11%)
50	CLA	a	852	-	51,59,73	1.50	7 (13%)	59,96,113	1.87	12 (20%)
44	PGT	B	602	-	41,41,50	0.53	0	44,47,56	0.44	0
50	CLA	b	807	-	65,73,73	1.34	7 (10%)	76,113,113	1.75	10 (13%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
43	BCR	j	101	-	41,41,41	0.70	0	56,56,56	1.15	3 (5%)
50	CLA	z	309	-	42,50,73	1.58	7 (16%)	48,85,113	1.95	8 (16%)
50	CLA	a	817	-	41,49,73	1.63	7 (17%)	47,84,113	1.89	7 (14%)
50	CLA	b	824	44	65,73,73	1.33	7 (10%)	76,113,113	1.79	9 (11%)
50	CLA	y	311	-	51,59,73	1.54	8 (15%)	59,96,113	1.97	9 (15%)
50	CLA	w	305	-	51,59,73	1.50	7 (13%)	59,96,113	1.98	9 (15%)
50	CLA	a	840	-	42,50,73	1.58	7 (16%)	48,85,113	1.89	6 (12%)
50	CLA	b	841	-	55,63,73	1.47	8 (14%)	64,101,113	1.87	9 (14%)
50	CLA	b	839	-	65,73,73	1.35	7 (10%)	76,113,113	1.72	10 (13%)
50	CLA	a	824	-	65,73,73	1.35	7 (10%)	76,113,113	1.77	10 (13%)
43	BCR	a	829	-	41,41,41	0.75	0	56,56,56	1.16	6 (10%)
48	SQD	j	106	-	41,42,54	0.44	1 (2%)	50,53,65	0.57	1 (2%)
50	CLA	a	826	44	45,53,73	1.55	7 (15%)	52,89,113	1.88	7 (13%)
50	CLA	a	856	-	64,72,73	1.34	7 (10%)	74,111,113	1.53	10 (13%)
50	CLA	b	811	-	45,53,73	1.58	7 (15%)	52,89,113	1.90	9 (17%)
50	CLA	x	316	-	45,53,73	1.57	7 (15%)	52,89,113	1.88	8 (15%)
50	CLA	b	843	-	65,73,73	1.34	8 (12%)	76,113,113	1.77	9 (11%)
50	CLA	h	201	34	46,54,73	1.56	7 (15%)	53,90,113	1.94	7 (13%)
50	CLA	b	809	-	59,67,73	1.42	7 (11%)	68,105,113	1.74	11 (16%)

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
50	CLA	b	814	-	1/1/15/20	12/37/115/115	-
44	PGT	F	803	-	-	12/47/47/55	-
50	CLA	a	845	-	1/1/15/20	15/37/115/115	-
50	CLA	a	819	-	1/1/14/20	12/31/109/115	-
50	CLA	a	818	-	1/1/13/20	11/30/108/115	-
44	PGT	5	301	-	-	17/39/39/55	-
46	LMG	B	605	-	-	17/32/52/70	0/1/1/1
50	CLA	b	825	-	1/1/15/20	14/37/115/115	-
44	PGT	f	305	-	-	14/43/43/55	-
50	CLA	a	855	-	1/1/10/20	2/10/88/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
50	CLA	b	802	-	1/1/15/20	23/37/115/115	-
54	CHL	w	304	-	3/3/16/26	6/15/111/137	-
50	CLA	a	851	27	1/1/11/20	6/15/93/115	-
47	PQ9	A	405	-	-	4/31/51/61	0/1/1/1
50	CLA	x	306	-	1/1/14/20	13/31/109/115	-
44	PGT	w	313	50	-	10/44/44/55	-
46	LMG	j	104	-	-	10/29/49/70	0/1/1/1
55	LUT	w	320	-	-	1/29/67/67	0/2/2/2
44	PGT	B	601	-	-	16/38/38/55	-
50	CLA	a	812	-	1/1/14/20	18/33/109/115	-
44	PGT	B	606	-	-	24/39/39/55	-
43	BCR	b	850	-	-	2/29/63/63	0/2/2/2
50	CLA	a	821	-	1/1/14/20	14/35/111/115	-
51	DGD	a	804	-	-	32/55/95/95	0/2/2/2
50	CLA	a	813	-	1/1/12/20	5/22/100/115	-
43	BCR	k	202	-	-	4/29/63/63	0/2/2/2
43	BCR	x	314	-	-	11/29/63/63	0/2/2/2
50	CLA	x	302	-	1/1/10/20	2/8/86/115	-
50	CLA	b	832	-	1/1/12/20	13/24/102/115	-
50	CLA	z	307	42	1/1/14/20	10/31/109/115	-
50	CLA	z	311	-	1/1/13/20	9/25/103/115	-
43	BCR	b	831	-	-	5/29/63/63	0/2/2/2
46	LMG	j	105	-	-	18/32/52/70	0/1/1/1
50	CLA	y	307	-	1/1/10/20	4/10/86/115	-
51	DGD	x	317	-	-	24/37/77/95	0/2/2/2
50	CLA	b	835	-	1/1/13/20	9/30/108/115	-
50	CLA	a	858	-	1/1/15/20	13/37/115/115	-
49	SF4	I	202	19	-	-	0/6/5/5
50	CLA	a	838	-	1/1/15/20	14/37/115/115	-
54	CHL	x	311	-	3/3/14/26	4/8/102/137	-
50	CLA	a	843	-	1/1/15/20	18/37/115/115	-
44	PGT	a	805	-	-	15/36/36/55	-
50	CLA	a	853	-	1/1/15/20	14/37/115/115	-
50	CLA	a	814	-	1/1/15/20	20/37/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
43	BCR	l	304	-	-	7/29/63/63	0/2/2/2
50	CLA	y	314	41	1/1/15/20	18/37/115/115	-
50	CLA	x	312	40	1/1/15/20	19/37/115/115	-
44	PGT	b	830	50	-	16/43/43/55	-
43	BCR	f	304	-	-	2/29/63/63	0/2/2/2
50	CLA	b	828	-	1/1/14/20	14/31/109/115	-
50	CLA	b	845	-	1/1/15/20	19/37/115/115	-
50	CLA	b	847	-	1/1/14/20	12/31/109/115	-
50	CLA	a	802	-	1/1/14/20	8/31/109/115	-
48	SQD	F	805	-	-	7/38/58/69	0/1/1/1
49	SF4	c	101	29	-	-	0/6/5/5
46	LMG	7	301	-	-	14/36/56/70	0/1/1/1
43	BCR	b	818	-	-	6/29/63/63	0/2/2/2
48	SQD	F	801	-	-	3/36/56/69	0/1/1/1
50	CLA	b	805	28	1/1/15/20	23/37/115/115	-
44	PGT	z	317	50	-	17/50/50/55	-
50	CLA	a	815	27	1/1/15/20	15/37/115/115	-
50	CLA	w	303	39	1/1/11/20	3/13/91/115	-
50	CLA	a	850	-	1/1/15/20	13/37/115/115	-
50	CLA	z	303	-	1/1/10/20	3/8/86/115	-
49	SF4	I	201	19	-	-	0/6/5/5
50	CLA	y	306	-	1/1/10/20	5/8/86/115	-
50	CLA	w	316	39	1/1/12/20	8/19/97/115	-
43	BCR	i	101	-	-	7/29/63/63	0/2/2/2
43	BCR	b	817	-	-	3/29/63/63	0/2/2/2
50	CLA	a	816	-	1/1/10/20	4/10/88/115	-
50	CLA	a	854	-	1/1/15/20	14/37/115/115	-
50	CLA	b	849	-	1/1/12/20	7/19/97/115	-
50	CLA	j	102	36	1/1/10/20	5/10/88/115	-
50	CLA	y	308	-	1/1/15/20	17/37/115/115	-
50	CLA	a	833	-	1/1/15/20	19/37/115/115	-
50	CLA	b	846	-	1/1/15/20	16/37/115/115	-
54	CHL	x	305	-	3/3/16/26	2/15/113/137	-
51	DGD	b	821	-	-	22/48/88/95	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
50	CLA	z	319	-	1/1/10/20	3/10/88/115	-
43	BCR	w	301	-	-	3/29/63/63	0/2/2/2
53	PQN	b	827	-	-	8/23/43/43	0/2/2/2
50	CLA	z	305	-	1/1/12/20	6/19/97/115	-
55	LUT	x	320	-	-	2/29/67/67	0/2/2/2
50	CLA	b	842	-	1/1/13/20	19/28/106/115	-
50	CLA	z	316	44	1/1/11/20	3/16/94/115	-
50	CLA	b	826	-	1/1/13/20	12/25/103/115	-
43	BCR	4	101	-	-	8/29/63/63	0/2/2/2
50	CLA	k	205	-	1/1/10/20	6/10/88/115	-
55	LUT	y	315	-	-	0/29/67/67	0/2/2/2
50	CLA	b	833	-	1/1/15/20	15/37/115/115	-
44	PGT	A	404	-	-	16/48/48/55	-
44	PGT	I	203	-	-	15/48/48/55	-
43	BCR	a	827	-	-	3/27/61/63	0/2/2/2
44	PGT	A	403	-	-	18/42/42/55	-
54	CHL	x	301	-	3/3/15/26	4/12/110/137	-
50	CLA	b	838	-	1/1/12/20	9/22/100/115	-
43	BCR	l	303	-	-	6/29/63/63	0/2/2/2
50	CLA	k	203	-	1/1/10/20	2/8/86/115	-
44	PGT	b	829	-	-	20/52/52/55	-
50	CLA	b	823	-	1/1/13/20	11/25/103/115	-
46	LMG	w	312	-	-	16/35/55/70	0/1/1/1
50	CLA	x	304	40	1/1/11/20	3/16/94/115	-
50	CLA	w	314	44	1/1/10/20	9/11/90/115	-
50	CLA	x	307	40	1/1/14/20	11/31/109/115	-
50	CLA	x	303	40	1/1/13/20	9/28/106/115	-
50	CLA	z	310	42	1/1/10/20	6/8/86/115	-
43	BCR	z	318	-	-	9/29/63/63	0/2/2/2
48	SQD	w	318	-	-	8/36/56/69	0/1/1/1
50	CLA	b	836	-	1/1/15/20	13/37/115/115	-
50	CLA	w	310	-	1/1/15/20	20/37/115/115	-
43	BCR	a	831	-	-	10/27/61/63	0/2/2/2
50	CLA	z	306	42	1/1/13/20	9/27/105/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
50	CLA	a	842	-	1/1/15/20	24/37/115/115	-
50	CLA	b	840	-	1/1/15/20	18/37/115/115	-
50	CLA	a	849	-	1/1/15/20	19/37/115/115	-
50	CLA	y	305	41	1/1/11/20	3/13/91/115	-
50	CLA	b	834	-	1/1/11/20	4/13/91/115	-
50	CLA	z	308	-	1/1/11/20	6/13/88/115	-
43	BCR	a	828	-	-	0/29/63/63	0/2/2/2
43	BCR	a	810	-	-	12/24/41/63	0/1/1/2
50	CLA	g	201	-	1/1/11/20	10/18/96/115	-
43	BCR	a	830	-	-	8/29/63/63	0/2/2/2
44	PGT	A	401	-	-	11/36/36/55	-
50	CLA	b	851	-	1/1/11/20	1/16/94/115	-
43	BCR	k	201	-	-	5/29/63/63	0/2/2/2
43	BCR	y	301	-	-	6/29/63/63	0/2/2/2
50	CLA	w	308	39	1/1/15/20	21/37/115/115	-
46	LMG	H	401	-	-	10/28/48/70	0/1/1/1
50	CLA	y	304	-	1/1/9/20	0/4/82/115	-
43	BCR	g	202	-	-	6/29/63/63	0/2/2/2
50	CLA	b	808	-	1/1/10/20	6/11/89/115	-
44	PGT	B	603	-	-	21/50/50/55	-
54	CHL	w	311	-	3/3/15/26	5/16/114/137	-
46	LMG	z	314	-	-	13/35/55/70	0/1/1/1
52	CL0	a	808	-	3/3/18/25	5/33/125/135	-
50	CLA	b	812	-	1/1/14/20	9/34/112/115	-
50	CLA	l	305	38	1/1/10/20	1/6/84/115	-
43	BCR	a	803	-	-	5/21/38/63	0/1/1/2
50	CLA	g	204	33	1/1/10/20	7/11/89/115	-
50	CLA	a	801	-	1/1/15/20	14/37/115/115	-
50	CLA	x	313	40	1/1/12/20	7/23/101/115	-
50	CLA	a	836	27	1/1/15/20	16/37/115/115	-
50	CLA	y	302	41	1/1/13/20	6/23/99/115	-
46	LMG	f	306	-	-	12/29/49/70	0/1/1/1
49	SF4	K	301	21	-	-	0/6/5/5
45	A1H1M	F	804	-	-	13/19/79/79	1/4/4/4
48	SQD	a	859	-	-	6/31/51/69	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
55	LUT	z	321	-	-	0/29/67/67	0/2/2/2
50	CLA	b	801	-	1/1/15/20	19/37/115/115	-
50	CLA	b	822	-	1/1/13/20	8/29/107/115	-
50	CLA	f	303	-	1/1/10/20	2/8/86/115	-
50	CLA	b	803	-	1/1/15/20	17/37/115/115	-
44	PGT	A	402	-	-	13/41/41/55	-
50	CLA	b	806	-	1/1/12/20	6/22/100/115	-
50	CLA	x	318	-	1/1/11/20	9/15/93/115	-
50	CLA	a	847	-	1/1/7/20	7/22/62/115	-
50	CLA	a	822	-	1/1/12/20	7/21/99/115	-
50	CLA	a	809	-	1/1/13/20	6/28/106/115	-
44	PGT	z	313	-	-	14/37/37/55	-
50	CLA	f	301	-	1/1/13/20	13/28/106/115	-
50	CLA	l	301	-	1/1/11/20	5/13/91/115	-
50	CLA	y	312	-	1/1/12/20	6/21/99/115	-
50	CLA	a	835	-	1/1/13/20	13/29/107/115	-
50	CLA	a	823	-	1/1/13/20	8/25/103/115	-
43	BCR	b	819	-	-	5/29/63/63	0/2/2/2
50	CLA	w	306	39	1/1/15/20	16/37/115/115	-
54	CHL	x	319	42	3/3/16/26	8/20/118/137	-
44	PGT	D	602	-	-	11/38/38/55	-
46	LMG	z	315	-	-	9/31/51/70	0/1/1/1
50	CLA	w	315	39	1/1/11/20	6/15/93/115	-
50	CLA	b	815	-	1/1/15/20	10/37/115/115	-
55	LUT	y	316	-	-	4/29/67/67	0/2/2/2
49	SF4	a	832	27,28	-	-	0/6/5/5
50	CLA	f	302	-	1/1/10/20	1/10/88/115	-
50	CLA	b	848	-	1/1/10/20	5/10/88/115	-
50	CLA	x	308	-	1/1/12/20	7/19/97/115	-
43	BCR	b	816	-	-	6/29/63/63	0/2/2/2
50	CLA	y	303	-	1/1/13/20	10/25/103/115	-
50	CLA	z	302	-	1/1/13/20	9/25/103/115	-
43	BCR	b	820	-	-	2/29/63/63	0/2/2/2
46	LMG	x	315	-	-	16/43/63/70	0/1/1/1
50	CLA	x	310	-	1/1/10/20	3/11/89/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
50	CLA	b	837	-	1/1/15/20	19/37/115/115	-
50	CLA	a	841	-	1/1/13/20	9/25/103/115	-
50	CLA	a	844	-	1/1/13/20	10/28/106/115	-
48	SQD	B	604	-	-	5/35/55/69	0/1/1/1
44	PGT	z	301	-	-	18/49/49/55	-
50	CLA	a	857	-	1/1/15/20	12/37/115/115	-
44	PGT	N	301	-	-	15/30/30/55	-
54	CHL	z	304	42	3/3/15/26	5/10/108/137	-
43	BCR	l	302	-	-	8/29/63/63	0/2/2/2
50	CLA	w	307	-	1/1/11/20	6/13/91/115	-
44	PGT	a	806	50	-	14/37/37/55	-
44	PGT	L	201	-	-	11/44/44/55	-
50	CLA	x	309	-	1/1/10/20	4/10/88/115	-
50	CLA	a	837	-	1/1/15/20	11/37/115/115	-
45	A1H1M	5	302	-	-	10/19/79/79	0/4/4/4
53	PQN	a	825	-	-	7/23/43/43	0/2/2/2
50	CLA	y	313	41	1/1/15/20	19/37/115/115	-
54	CHL	z	312	42	3/3/19/26	12/33/131/137	-
50	CLA	a	839	-	1/1/15/20	15/37/115/115	-
54	CHL	w	309	-	3/3/15/26	4/12/110/137	-
50	CLA	l	306	-	1/1/14/20	16/31/109/115	-
50	CLA	b	804	-	1/1/10/20	0/8/86/115	-
50	CLA	b	813	-	1/1/10/20	5/11/89/115	-
44	PGT	a	807	-	-	16/50/50/55	-
55	LUT	w	319	-	-	6/29/67/67	0/2/2/2
50	CLA	k	204	-	1/1/13/20	7/28/106/115	-
50	CLA	a	846	-	1/1/15/20	17/37/115/115	-
50	CLA	a	811	-	1/1/15/20	21/37/115/115	-
50	CLA	b	810	-	1/1/12/20	5/19/97/115	-
50	CLA	g	203	-	1/1/12/20	4/22/100/115	-
50	CLA	y	310	41	1/1/15/20	9/37/115/115	-
50	CLA	a	834	-	1/1/15/20	12/37/115/115	-
46	LMG	F	802	-	-	5/23/43/70	0/1/1/1
50	CLA	y	309	-	1/1/10/20	4/10/88/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
49	SF4	c	102	29	-	-	0/6/5/5
50	CLA	a	848	-	1/1/12/20	7/22/100/115	-
55	LUT	x	321	-	-	6/29/67/67	0/2/2/2
46	LMG	D	601	-	-	13/29/49/70	0/1/1/1
48	SQD	w	317	-	-	5/26/46/69	0/1/1/1
43	BCR	j	103	-	-	8/29/63/63	0/2/2/2
50	CLA	a	820	-	1/1/15/20	15/37/115/115	-
50	CLA	w	302	-	1/1/12/20	11/19/97/115	-
55	LUT	z	320	-	-	7/29/67/67	0/2/2/2
50	CLA	b	844	28	1/1/15/20	21/37/115/115	-
50	CLA	a	852	-	1/1/12/20	8/21/99/115	-
44	PGT	B	602	-	-	11/46/46/55	-
50	CLA	b	807	-	1/1/15/20	17/37/115/115	-
43	BCR	j	101	-	-	10/29/63/63	0/2/2/2
50	CLA	z	309	-	1/1/10/20	2/10/88/115	-
50	CLA	a	817	-	1/1/10/20	2/8/86/115	-
50	CLA	b	824	44	1/1/15/20	20/37/115/115	-
50	CLA	y	311	-	1/1/12/20	5/21/99/115	-
50	CLA	w	305	-	1/1/12/20	4/21/99/115	-
50	CLA	a	840	-	1/1/10/20	4/10/88/115	-
50	CLA	b	841	-	1/1/13/20	9/25/103/115	-
50	CLA	b	839	-	1/1/15/20	19/37/115/115	-
50	CLA	a	824	-	1/1/15/20	13/37/115/115	-
50	CLA	a	856	-	1/1/14/20	8/35/113/115	-
50	CLA	a	826	44	1/1/11/20	10/13/91/115	-
50	CLA	b	811	-	1/1/11/20	6/13/91/115	-
43	BCR	a	829	-	-	2/29/63/63	0/2/2/2
48	SQD	j	106	-	-	8/37/57/69	0/1/1/1
50	CLA	x	316	-	1/1/11/20	6/13/91/115	-
50	CLA	b	843	-	1/1/15/20	19/37/115/115	-
50	CLA	h	201	34	1/1/11/20	8/15/93/115	-
50	CLA	b	809	-	1/1/13/20	14/30/108/115	-

All (1175) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
52	a	808	CL0	MG-NA	9.16	2.28	2.06
47	A	405	PQ9	C3-C2	7.67	1.54	1.34
50	z	308	CLA	C3D-C4D	-7.02	1.41	1.51
47	A	405	PQ9	C11-C2	6.76	1.58	1.51
54	x	311	CHL	CHB-C4A	6.19	1.39	1.34
50	a	847	CLA	C1A-CHA	-6.03	1.38	1.51
54	z	312	CHL	CMC-C2C	5.52	1.56	1.45
54	w	309	CHL	CMC-C2C	5.52	1.56	1.45
54	x	319	CHL	CMC-C2C	5.46	1.56	1.45
54	w	304	CHL	CMC-C2C	5.45	1.56	1.45
54	x	301	CHL	CMC-C2C	5.44	1.56	1.45
54	x	311	CHL	CMC-C2C	5.44	1.56	1.45
54	z	304	CHL	CMC-C2C	5.42	1.56	1.45
50	x	303	CLA	MG-NA	5.40	2.19	2.06
54	x	305	CHL	CMC-C2C	5.40	1.56	1.45
50	z	319	CLA	MG-NA	5.29	2.18	2.06
54	w	311	CHL	CMC-C2C	5.24	1.56	1.45
50	w	307	CLA	MG-NA	5.24	2.18	2.06
50	k	203	CLA	MG-NA	5.21	2.18	2.06
50	x	313	CLA	MG-NA	5.19	2.18	2.06
52	a	808	CL0	O2A-C1	5.18	1.60	1.42
50	y	309	CLA	MG-NA	5.18	2.18	2.06
50	b	849	CLA	MG-NA	5.16	2.18	2.06
50	g	204	CLA	MG-NA	5.13	2.18	2.06
50	a	812	CLA	MG-NA	5.13	2.18	2.06
50	w	315	CLA	MG-NA	5.13	2.18	2.06
50	z	309	CLA	MG-NA	5.12	2.18	2.06
50	a	819	CLA	MG-NA	5.09	2.18	2.06
50	g	203	CLA	MG-NA	5.09	2.18	2.06
50	b	848	CLA	MG-NA	5.07	2.18	2.06
50	a	822	CLA	MG-NA	5.06	2.18	2.06
50	z	311	CLA	MG-NA	5.06	2.18	2.06
50	a	853	CLA	MG-NA	5.06	2.18	2.06
50	f	302	CLA	MG-NA	5.05	2.18	2.06
50	b	814	CLA	MG-NA	5.05	2.18	2.06
50	l	301	CLA	MG-NA	5.04	2.18	2.06
50	z	308	CLA	MG-NA	5.04	2.18	2.06
50	y	307	CLA	MG-NA	5.03	2.18	2.06
50	a	821	CLA	MG-NA	5.03	2.18	2.06
50	y	314	CLA	MG-NA	5.03	2.18	2.06
50	j	102	CLA	MG-NA	5.03	2.18	2.06
50	a	846	CLA	MG-NA	5.02	2.18	2.06
50	b	805	CLA	MG-NA	5.02	2.18	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	k	204	CLA	MG-NA	5.02	2.18	2.06
50	h	201	CLA	MG-NA	5.02	2.18	2.06
50	x	308	CLA	MG-NA	5.02	2.18	2.06
50	y	304	CLA	MG-NA	5.01	2.18	2.06
50	a	837	CLA	MG-NA	5.01	2.18	2.06
50	l	305	CLA	MG-NA	5.01	2.18	2.06
50	x	302	CLA	MG-NA	5.01	2.18	2.06
50	a	855	CLA	MG-NA	5.00	2.18	2.06
50	b	841	CLA	MG-NA	5.00	2.18	2.06
50	a	845	CLA	MG-NA	5.00	2.18	2.06
50	w	314	CLA	MG-NA	5.00	2.18	2.06
50	a	851	CLA	MG-NA	5.00	2.18	2.06
50	a	802	CLA	MG-NA	5.00	2.18	2.06
50	g	201	CLA	MG-NA	5.00	2.18	2.06
50	x	316	CLA	MG-NA	4.99	2.18	2.06
50	y	303	CLA	MG-NA	4.99	2.18	2.06
50	x	309	CLA	MG-NA	4.99	2.18	2.06
50	b	825	CLA	MG-NA	4.99	2.18	2.06
50	b	826	CLA	MG-NA	4.99	2.18	2.06
50	w	302	CLA	MG-NA	4.98	2.18	2.06
50	b	844	CLA	MG-NA	4.98	2.18	2.06
50	x	310	CLA	MG-NA	4.98	2.18	2.06
50	a	814	CLA	MG-NA	4.97	2.18	2.06
50	w	305	CLA	MG-NA	4.97	2.18	2.06
50	a	823	CLA	MG-NA	4.97	2.18	2.06
50	a	849	CLA	MG-NA	4.97	2.18	2.06
50	b	851	CLA	MG-NA	4.96	2.18	2.06
50	a	801	CLA	MG-NA	4.96	2.18	2.06
50	b	810	CLA	MG-NA	4.96	2.18	2.06
50	b	836	CLA	MG-NA	4.96	2.18	2.06
50	a	842	CLA	MG-NA	4.96	2.18	2.06
50	y	311	CLA	MG-NA	4.96	2.18	2.06
50	z	303	CLA	MG-NA	4.96	2.18	2.06
50	b	835	CLA	MG-NA	4.96	2.18	2.06
50	a	852	CLA	MG-NA	4.96	2.18	2.06
50	b	801	CLA	MG-NA	4.96	2.18	2.06
50	b	832	CLA	MG-NA	4.95	2.18	2.06
50	b	806	CLA	MG-NA	4.95	2.18	2.06
50	y	305	CLA	MG-NA	4.95	2.18	2.06
52	a	808	CL0	CHC-C1C	4.95	1.47	1.35
50	f	301	CLA	MG-NA	4.95	2.18	2.06
50	a	841	CLA	MG-NA	4.95	2.18	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	817	CLA	MG-NA	4.95	2.18	2.06
50	b	823	CLA	MG-NA	4.94	2.18	2.06
50	a	857	CLA	MG-NA	4.94	2.18	2.06
50	y	308	CLA	MG-NA	4.94	2.18	2.06
50	b	838	CLA	MG-NA	4.93	2.18	2.06
50	l	306	CLA	MG-NA	4.93	2.18	2.06
50	b	828	CLA	MG-NA	4.92	2.18	2.06
50	y	306	CLA	MG-NA	4.92	2.18	2.06
50	f	303	CLA	MG-NA	4.92	2.18	2.06
50	z	316	CLA	MG-NA	4.92	2.18	2.06
50	a	811	CLA	MG-NA	4.92	2.18	2.06
50	x	306	CLA	MG-NA	4.92	2.18	2.06
50	x	318	CLA	MG-NA	4.92	2.17	2.06
50	a	824	CLA	MG-NA	4.92	2.17	2.06
50	b	808	CLA	MG-NA	4.91	2.17	2.06
50	w	306	CLA	MG-NA	4.91	2.17	2.06
50	b	845	CLA	MG-NA	4.91	2.17	2.06
50	z	310	CLA	MG-NA	4.91	2.17	2.06
50	z	302	CLA	MG-NA	4.91	2.17	2.06
50	b	839	CLA	MG-NA	4.91	2.17	2.06
50	a	809	CLA	MG-NA	4.91	2.17	2.06
50	a	848	CLA	MG-NA	4.90	2.17	2.06
50	a	840	CLA	MG-NA	4.90	2.17	2.06
50	b	833	CLA	MG-NA	4.90	2.17	2.06
50	b	843	CLA	MG-NA	4.89	2.17	2.06
50	a	834	CLA	MG-NA	4.89	2.17	2.06
50	b	834	CLA	MG-NA	4.89	2.17	2.06
50	b	846	CLA	MG-NA	4.89	2.17	2.06
50	k	205	CLA	MG-NA	4.89	2.17	2.06
50	a	843	CLA	MG-NA	4.89	2.17	2.06
50	b	804	CLA	MG-NA	4.89	2.17	2.06
50	a	816	CLA	MG-NA	4.89	2.17	2.06
50	b	807	CLA	MG-NA	4.88	2.17	2.06
50	y	312	CLA	MG-NA	4.88	2.17	2.06
50	a	826	CLA	MG-NA	4.88	2.17	2.06
50	x	304	CLA	MG-NA	4.88	2.17	2.06
50	b	842	CLA	MG-NA	4.88	2.17	2.06
50	a	838	CLA	MG-NA	4.88	2.17	2.06
50	b	824	CLA	MG-NA	4.88	2.17	2.06
50	b	809	CLA	MG-NA	4.87	2.17	2.06
50	b	815	CLA	MG-NA	4.87	2.17	2.06
50	b	822	CLA	MG-NA	4.87	2.17	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	b	837	CLA	MG-NA	4.86	2.17	2.06
50	b	840	CLA	MG-NA	4.86	2.17	2.06
50	b	813	CLA	MG-NA	4.85	2.17	2.06
50	a	833	CLA	MG-NA	4.84	2.17	2.06
50	a	835	CLA	MG-NA	4.84	2.17	2.06
50	a	844	CLA	MG-NA	4.84	2.17	2.06
50	a	836	CLA	MG-NA	4.84	2.17	2.06
50	x	312	CLA	MG-NA	4.84	2.17	2.06
50	z	305	CLA	MG-NA	4.83	2.17	2.06
50	y	313	CLA	MG-NA	4.83	2.17	2.06
50	z	307	CLA	MG-NA	4.83	2.17	2.06
50	w	316	CLA	MG-NA	4.83	2.17	2.06
50	w	310	CLA	MG-NA	4.82	2.17	2.06
50	a	856	CLA	MG-NA	4.82	2.17	2.06
50	b	803	CLA	MG-NA	4.81	2.17	2.06
50	a	858	CLA	MG-NA	4.81	2.17	2.06
50	a	839	CLA	MG-NA	4.79	2.17	2.06
50	b	847	CLA	MG-NA	4.79	2.17	2.06
50	b	802	CLA	MG-NA	4.79	2.17	2.06
50	w	303	CLA	MG-NA	4.78	2.17	2.06
50	a	813	CLA	MG-NA	4.78	2.17	2.06
50	a	820	CLA	MG-NA	4.78	2.17	2.06
50	a	850	CLA	MG-NA	4.78	2.17	2.06
50	a	854	CLA	MG-NA	4.76	2.17	2.06
50	y	310	CLA	MG-NA	4.76	2.17	2.06
50	y	302	CLA	MG-NA	4.75	2.17	2.06
50	b	811	CLA	MG-NA	4.75	2.17	2.06
47	A	405	PQ9	C15-C13	4.75	1.61	1.51
50	b	812	CLA	MG-NA	4.74	2.17	2.06
50	a	818	CLA	MG-NA	4.74	2.17	2.06
50	w	308	CLA	MG-NA	4.73	2.17	2.06
50	a	815	CLA	MG-NA	4.71	2.17	2.06
50	x	307	CLA	MG-NA	4.70	2.17	2.06
50	z	306	CLA	MG-NA	4.66	2.17	2.06
52	a	808	CL0	O2D-CGD	4.64	1.45	1.30
52	a	808	CL0	C3C-C2C	4.45	1.46	1.36
52	a	808	CL0	CHD-C1D	4.42	1.47	1.38
50	z	308	CLA	C4B-NB	4.36	1.39	1.35
50	x	303	CLA	C4B-NB	4.35	1.39	1.35
50	y	307	CLA	C4B-NB	4.34	1.39	1.35
50	b	828	CLA	C4B-NB	4.33	1.39	1.35
50	z	303	CLA	C4B-NB	4.33	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	b	814	CLA	C4B-NB	4.32	1.39	1.35
50	y	303	CLA	C4B-NB	4.29	1.39	1.35
47	A	405	PQ9	C20-C18	4.27	1.60	1.51
50	x	313	CLA	C4B-NB	4.27	1.39	1.35
50	g	201	CLA	C4B-NB	4.27	1.39	1.35
52	a	808	CL0	C3D-C4D	-4.26	1.34	1.44
50	k	203	CLA	C4B-NB	4.25	1.39	1.35
50	l	305	CLA	C4B-NB	4.25	1.39	1.35
50	b	813	CLA	C4B-NB	4.25	1.39	1.35
50	b	841	CLA	C4B-NB	4.24	1.39	1.35
50	b	836	CLA	C4B-NB	4.24	1.39	1.35
50	z	319	CLA	C4B-NB	4.23	1.39	1.35
50	g	204	CLA	C4B-NB	4.23	1.39	1.35
50	a	820	CLA	C4B-NB	4.23	1.39	1.35
50	y	304	CLA	C4B-NB	4.23	1.39	1.35
50	z	308	CLA	C3D-CAD	-4.22	1.44	1.51
50	a	817	CLA	C4B-NB	4.22	1.39	1.35
50	a	856	CLA	C4B-NB	4.22	1.39	1.35
50	a	834	CLA	C4B-NB	4.21	1.39	1.35
50	b	815	CLA	C4B-NB	4.21	1.39	1.35
50	a	823	CLA	C4B-NB	4.21	1.39	1.35
50	y	309	CLA	C4B-NB	4.21	1.39	1.35
50	a	833	CLA	C4B-NB	4.20	1.39	1.35
50	b	802	CLA	C4B-NB	4.20	1.39	1.35
50	b	848	CLA	C4B-NB	4.19	1.38	1.35
50	b	823	CLA	C4B-NB	4.19	1.38	1.35
50	b	832	CLA	C4B-NB	4.19	1.38	1.35
50	z	305	CLA	C4B-NB	4.18	1.38	1.35
50	b	808	CLA	C4B-NB	4.18	1.38	1.35
50	x	302	CLA	C4B-NB	4.18	1.38	1.35
50	b	805	CLA	C4B-NB	4.18	1.38	1.35
50	a	842	CLA	C4B-NB	4.18	1.38	1.35
50	z	302	CLA	C4B-NB	4.17	1.38	1.35
50	b	844	CLA	C4B-NB	4.17	1.38	1.35
50	f	302	CLA	C4B-NB	4.17	1.38	1.35
50	b	810	CLA	C4B-NB	4.16	1.38	1.35
50	b	843	CLA	C4B-NB	4.16	1.38	1.35
50	w	314	CLA	C4B-NB	4.16	1.38	1.35
50	y	306	CLA	C4B-NB	4.16	1.38	1.35
50	y	314	CLA	C4B-NB	4.16	1.38	1.35
50	y	311	CLA	C4B-NB	4.16	1.38	1.35
50	a	821	CLA	C4B-NB	4.16	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	843	CLA	C4B-NB	4.15	1.38	1.35
50	b	849	CLA	C4B-NB	4.15	1.38	1.35
50	a	802	CLA	C4B-NB	4.15	1.38	1.35
50	w	302	CLA	C4B-NB	4.15	1.38	1.35
50	b	811	CLA	C4B-NB	4.15	1.38	1.35
50	a	858	CLA	C4B-NB	4.14	1.38	1.35
50	a	847	CLA	C4B-NB	4.14	1.38	1.35
50	a	837	CLA	C4B-NB	4.14	1.38	1.35
50	b	835	CLA	C4B-NB	4.14	1.38	1.35
50	z	309	CLA	C4B-NB	4.14	1.38	1.35
50	a	857	CLA	C4B-NB	4.14	1.38	1.35
50	a	851	CLA	C4B-NB	4.13	1.38	1.35
50	k	204	CLA	C4B-NB	4.13	1.38	1.35
50	x	310	CLA	C4B-NB	4.13	1.38	1.35
50	k	205	CLA	C4B-NB	4.13	1.38	1.35
50	a	855	CLA	C4B-NB	4.13	1.38	1.35
50	x	308	CLA	C4B-NB	4.12	1.38	1.35
50	b	842	CLA	C4B-NB	4.12	1.38	1.35
50	x	318	CLA	C4B-NB	4.12	1.38	1.35
50	b	812	CLA	C4B-NB	4.12	1.38	1.35
50	a	847	CLA	C1B-CHB	-4.11	1.34	1.45
50	g	203	CLA	C4B-NB	4.11	1.38	1.35
50	w	308	CLA	C4B-NB	4.11	1.38	1.35
50	a	844	CLA	C4B-NB	4.11	1.38	1.35
50	a	849	CLA	C4B-NB	4.11	1.38	1.35
50	x	309	CLA	C4B-NB	4.11	1.38	1.35
50	w	307	CLA	C4B-NB	4.11	1.38	1.35
50	a	813	CLA	C4B-NB	4.10	1.38	1.35
50	b	801	CLA	C4B-NB	4.10	1.38	1.35
50	l	301	CLA	C4B-NB	4.10	1.38	1.35
50	a	852	CLA	C4B-NB	4.10	1.38	1.35
50	b	840	CLA	C4B-NB	4.10	1.38	1.35
50	f	301	CLA	C4B-NB	4.10	1.38	1.35
50	f	303	CLA	C4B-NB	4.10	1.38	1.35
50	j	102	CLA	C4B-NB	4.10	1.38	1.35
50	b	809	CLA	C4B-NB	4.09	1.38	1.35
50	b	806	CLA	C4B-NB	4.09	1.38	1.35
50	z	310	CLA	C4B-NB	4.09	1.38	1.35
50	z	316	CLA	C4B-NB	4.09	1.38	1.35
50	a	839	CLA	C4B-NB	4.08	1.38	1.35
50	y	305	CLA	C4B-NB	4.07	1.38	1.35
50	x	306	CLA	C4B-NB	4.07	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	840	CLA	C4B-NB	4.06	1.38	1.35
50	b	846	CLA	C4B-NB	4.06	1.38	1.35
50	b	839	CLA	C4B-NB	4.06	1.38	1.35
50	b	826	CLA	C4B-NB	4.06	1.38	1.35
50	w	315	CLA	C4B-NB	4.06	1.38	1.35
54	x	311	CHL	C4B-NB	4.05	1.38	1.35
50	h	201	CLA	C4B-NB	4.05	1.38	1.35
50	a	814	CLA	C4B-NB	4.05	1.38	1.35
50	a	816	CLA	C4B-NB	4.04	1.38	1.35
50	a	846	CLA	C4B-NB	4.04	1.38	1.35
50	w	303	CLA	C4B-NB	4.04	1.38	1.35
50	b	837	CLA	C4B-NB	4.03	1.38	1.35
50	z	311	CLA	C4B-NB	4.03	1.38	1.35
50	w	306	CLA	C4B-NB	4.03	1.38	1.35
50	b	838	CLA	C4B-NB	4.02	1.38	1.35
50	a	845	CLA	C4B-NB	4.02	1.38	1.35
50	w	305	CLA	C4B-NB	4.02	1.38	1.35
50	b	824	CLA	C4B-NB	4.02	1.38	1.35
50	a	853	CLA	C4B-NB	4.02	1.38	1.35
50	b	804	CLA	C4B-NB	4.02	1.38	1.35
50	b	834	CLA	C4B-NB	4.01	1.38	1.35
50	a	818	CLA	C4B-NB	4.01	1.38	1.35
50	w	310	CLA	C4B-NB	4.01	1.38	1.35
50	b	851	CLA	C4B-NB	4.01	1.38	1.35
50	x	316	CLA	C4B-NB	4.00	1.38	1.35
50	a	811	CLA	C4B-NB	4.00	1.38	1.35
50	a	824	CLA	C4B-NB	4.00	1.38	1.35
50	l	306	CLA	C4B-NB	4.00	1.38	1.35
50	a	826	CLA	C4B-NB	3.99	1.38	1.35
50	a	801	CLA	C4B-NB	3.99	1.38	1.35
50	x	304	CLA	C4B-NB	3.97	1.38	1.35
50	y	313	CLA	C4B-NB	3.97	1.38	1.35
50	w	316	CLA	C4B-NB	3.96	1.38	1.35
50	a	854	CLA	C4B-NB	3.96	1.38	1.35
50	a	809	CLA	C4B-NB	3.96	1.38	1.35
50	y	312	CLA	C4B-NB	3.94	1.38	1.35
50	a	850	CLA	C4B-NB	3.94	1.38	1.35
50	b	822	CLA	C4B-NB	3.94	1.38	1.35
50	z	306	CLA	C4B-NB	3.93	1.38	1.35
50	y	308	CLA	C4B-NB	3.93	1.38	1.35
50	a	835	CLA	C4B-NB	3.93	1.38	1.35
50	a	848	CLA	C4B-NB	3.93	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	822	CLA	C4B-NB	3.92	1.38	1.35
50	b	803	CLA	C4B-NB	3.92	1.38	1.35
50	b	807	CLA	C4B-NB	3.92	1.38	1.35
50	b	825	CLA	C4B-NB	3.90	1.38	1.35
50	z	307	CLA	C4B-NB	3.90	1.38	1.35
50	a	819	CLA	C4B-NB	3.85	1.38	1.35
50	x	307	CLA	C4B-NB	3.85	1.38	1.35
47	A	405	PQ9	C25-C23	3.85	1.59	1.51
54	x	301	CHL	C4B-NB	3.85	1.38	1.35
50	a	841	CLA	C4B-NB	3.85	1.38	1.35
54	x	319	CHL	C4B-NB	3.84	1.38	1.35
54	w	304	CHL	C4B-NB	3.84	1.38	1.35
50	a	815	CLA	C4B-NB	3.83	1.38	1.35
54	w	309	CHL	C4B-NB	3.80	1.38	1.35
54	z	304	CHL	C4B-NB	3.80	1.38	1.35
50	a	836	CLA	C4B-NB	3.79	1.38	1.35
50	x	312	CLA	C4B-NB	3.78	1.38	1.35
50	a	838	CLA	C4B-NB	3.77	1.38	1.35
54	w	304	CHL	CAB-C3B	-3.75	1.43	1.51
50	b	845	CLA	C4B-NB	3.74	1.38	1.35
50	b	847	CLA	C4B-NB	3.73	1.38	1.35
50	y	302	CLA	C2C-C1C	3.71	1.46	1.40
54	x	305	CHL	C4B-NB	3.70	1.38	1.35
54	w	311	CHL	C4B-NB	3.68	1.38	1.35
52	a	808	CL0	MG-NC	3.67	2.15	2.06
54	z	312	CHL	C4B-NB	3.65	1.38	1.35
50	b	833	CLA	C4B-NB	3.64	1.38	1.35
54	x	311	CHL	C3B-C2B	-3.64	1.35	1.40
52	a	808	CL0	OBD-CAD	3.64	1.28	1.22
50	y	310	CLA	C4B-NB	3.55	1.38	1.35
47	A	405	PQ9	C10-C5	3.55	1.53	1.35
52	a	808	CL0	CHD-C4C	3.55	1.47	1.39
54	x	319	CHL	C3B-C2B	-3.54	1.35	1.40
47	A	405	PQ9	C11-C12	3.51	1.55	1.50
54	x	301	CHL	O2D-CGD	3.50	1.41	1.33
47	A	405	PQ9	C35-C33	3.50	1.61	1.51
54	z	304	CHL	O2D-CGD	3.49	1.41	1.33
50	b	844	CLA	C3B-C2B	-3.48	1.35	1.40
54	w	311	CHL	C3B-C2B	-3.48	1.35	1.40
54	x	305	CHL	C3B-C2B	-3.46	1.35	1.40
54	w	309	CHL	C3B-C2B	-3.46	1.35	1.40
54	w	309	CHL	O2D-CGD	3.45	1.41	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	b	847	CLA	CHC-C1C	3.45	1.43	1.35
54	w	304	CHL	O2D-CGD	3.45	1.41	1.33
54	x	311	CHL	O2D-CGD	3.45	1.41	1.33
50	b	845	CLA	CHC-C1C	3.44	1.43	1.35
54	w	311	CHL	O2D-CGD	3.44	1.41	1.33
54	z	312	CHL	O2D-CGD	3.44	1.41	1.33
50	w	308	CLA	CHC-C1C	3.42	1.43	1.35
50	a	813	CLA	CHC-C1C	3.38	1.43	1.35
54	x	319	CHL	O2D-CGD	3.38	1.41	1.33
50	b	812	CLA	CHC-C1C	3.38	1.43	1.35
50	b	811	CLA	CHC-C1C	3.38	1.43	1.35
50	w	303	CLA	CHC-C1C	3.38	1.43	1.35
54	x	301	CHL	C3B-C2B	-3.37	1.35	1.40
50	a	858	CLA	C3B-C2B	-3.37	1.35	1.40
50	z	308	CLA	C4D-ND	3.37	1.38	1.34
50	y	308	CLA	CHC-C1C	3.37	1.43	1.35
50	z	306	CLA	CHC-C1C	3.36	1.43	1.35
54	x	305	CHL	O2A-CGA	3.36	1.42	1.30
50	a	849	CLA	C3B-C2B	-3.35	1.35	1.40
50	b	801	CLA	C3B-C2B	-3.35	1.35	1.40
50	b	813	CLA	CHC-C1C	3.34	1.43	1.35
50	a	818	CLA	CHC-C1C	3.34	1.43	1.35
54	z	304	CHL	C3B-C2B	-3.34	1.35	1.40
50	a	835	CLA	CHC-C1C	3.33	1.43	1.35
54	w	304	CHL	O2A-CGA	3.33	1.41	1.30
50	a	839	CLA	CHC-C1C	3.33	1.43	1.35
50	b	803	CLA	CHC-C1C	3.33	1.43	1.35
50	x	307	CLA	CHC-C1C	3.33	1.43	1.35
50	z	307	CLA	CHC-C1C	3.33	1.43	1.35
50	l	306	CLA	CHC-C1C	3.33	1.43	1.35
50	b	839	CLA	CHC-C1C	3.32	1.43	1.35
50	a	815	CLA	CHC-C1C	3.32	1.43	1.35
50	y	313	CLA	CHC-C1C	3.31	1.43	1.35
50	b	804	CLA	CHC-C1C	3.31	1.43	1.35
50	b	822	CLA	CHC-C1C	3.31	1.43	1.35
50	b	814	CLA	CHC-C1C	3.31	1.43	1.35
50	w	306	CLA	CHC-C1C	3.31	1.43	1.35
50	a	843	CLA	C3B-C2B	-3.31	1.35	1.40
50	a	826	CLA	CHC-C1C	3.31	1.43	1.35
50	f	301	CLA	CHC-C1C	3.31	1.43	1.35
50	a	801	CLA	CHC-C1C	3.30	1.43	1.35
50	a	843	CLA	CHC-C1C	3.30	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	y	310	CLA	CHC-C1C	3.30	1.43	1.35
50	l	301	CLA	CHC-C1C	3.30	1.43	1.35
50	y	302	CLA	C4B-NB	3.30	1.38	1.35
50	x	303	CLA	C3B-C2B	-3.30	1.35	1.40
50	b	837	CLA	CHC-C1C	3.30	1.43	1.35
50	f	303	CLA	CHC-C1C	3.30	1.43	1.35
50	a	814	CLA	CHC-C1C	3.30	1.43	1.35
50	b	815	CLA	CHC-C1C	3.30	1.43	1.35
50	a	850	CLA	CHC-C1C	3.29	1.43	1.35
50	w	316	CLA	CHC-C1C	3.29	1.43	1.35
54	x	305	CHL	O2D-CGD	3.29	1.41	1.33
50	a	841	CLA	CHC-C1C	3.29	1.43	1.35
50	b	809	CLA	CHC-C1C	3.29	1.43	1.35
50	a	856	CLA	CHC-C1C	3.28	1.43	1.35
50	b	828	CLA	CHC-C1C	3.28	1.43	1.35
50	z	316	CLA	CHC-C1C	3.28	1.43	1.35
50	a	848	CLA	CHC-C1C	3.27	1.43	1.35
50	a	845	CLA	CHC-C1C	3.27	1.43	1.35
45	F	804	A1H1M	O12-C11	-3.27	1.40	1.44
50	w	302	CLA	CHC-C1C	3.27	1.43	1.35
50	a	820	CLA	CHC-C1C	3.27	1.43	1.35
50	a	833	CLA	C3B-C2B	-3.27	1.35	1.40
47	A	405	PQ9	C3-C4	3.26	1.53	1.44
50	a	857	CLA	C3B-C2B	-3.26	1.35	1.40
50	b	813	CLA	C3B-C2B	-3.26	1.35	1.40
50	a	851	CLA	CHC-C1C	3.26	1.43	1.35
50	b	842	CLA	CHC-C1C	3.26	1.43	1.35
50	z	305	CLA	CHC-C1C	3.26	1.43	1.35
50	l	305	CLA	CHC-C1C	3.26	1.43	1.35
50	a	809	CLA	CHC-C1C	3.26	1.43	1.35
50	b	826	CLA	CHC-C1C	3.26	1.43	1.35
50	y	304	CLA	CHC-C1C	3.26	1.43	1.35
50	b	825	CLA	CHC-C1C	3.26	1.43	1.35
50	b	851	CLA	CHC-C1C	3.26	1.43	1.35
50	b	834	CLA	CHC-C1C	3.25	1.43	1.35
50	y	305	CLA	CHC-C1C	3.25	1.43	1.35
50	a	858	CLA	CHC-C1C	3.25	1.43	1.35
50	x	312	CLA	CHC-C1C	3.25	1.43	1.35
50	a	842	CLA	CHC-C1C	3.24	1.43	1.35
50	x	316	CLA	CHC-C1C	3.24	1.43	1.35
50	a	846	CLA	C3B-C2B	-3.24	1.35	1.40
50	a	854	CLA	CHC-C1C	3.24	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	b	848	CLA	CHC-C1C	3.24	1.43	1.35
47	A	405	PQ9	C9-C10	3.24	1.57	1.50
50	f	302	CLA	CHC-C1C	3.24	1.43	1.35
50	b	810	CLA	CHC-C1C	3.24	1.43	1.35
50	b	808	CLA	CHC-C1C	3.24	1.43	1.35
50	z	310	CLA	CHC-C1C	3.23	1.43	1.35
50	a	840	CLA	CHC-C1C	3.23	1.43	1.35
50	w	314	CLA	CHC-C1C	3.23	1.43	1.35
50	k	204	CLA	CHC-C1C	3.23	1.43	1.35
50	a	816	CLA	CHC-C1C	3.23	1.43	1.35
50	j	102	CLA	CHC-C1C	3.23	1.43	1.35
50	a	820	CLA	C3B-C2B	-3.23	1.35	1.40
50	a	802	CLA	CHC-C1C	3.22	1.43	1.35
50	a	823	CLA	CHC-C1C	3.22	1.43	1.35
50	a	824	CLA	CHC-C1C	3.22	1.43	1.35
50	y	311	CLA	C3B-C2B	-3.22	1.35	1.40
50	b	807	CLA	CHC-C1C	3.22	1.43	1.35
50	g	201	CLA	CHC-C1C	3.22	1.43	1.35
50	z	319	CLA	C3B-C2B	-3.22	1.35	1.40
50	b	805	CLA	CHC-C1C	3.22	1.43	1.35
50	x	306	CLA	CHC-C1C	3.22	1.43	1.35
50	x	304	CLA	CHC-C1C	3.22	1.43	1.35
50	a	833	CLA	CHC-C1C	3.21	1.43	1.35
50	h	201	CLA	CHC-C1C	3.21	1.43	1.35
50	w	310	CLA	CHC-C1C	3.21	1.43	1.35
50	y	312	CLA	CHC-C1C	3.21	1.43	1.35
50	y	311	CLA	CHC-C1C	3.21	1.43	1.35
50	b	838	CLA	CHC-C1C	3.21	1.43	1.35
50	b	823	CLA	CHC-C1C	3.21	1.43	1.35
50	z	308	CLA	C3B-C2B	-3.21	1.35	1.40
50	a	836	CLA	CHC-C1C	3.20	1.43	1.35
50	b	802	CLA	C3B-C2B	-3.20	1.35	1.40
50	y	306	CLA	CHC-C1C	3.20	1.43	1.35
50	b	836	CLA	CHC-C1C	3.20	1.43	1.35
50	b	842	CLA	C3B-C2B	-3.20	1.35	1.40
50	y	307	CLA	CHC-C1C	3.20	1.43	1.35
50	b	812	CLA	C3B-C2B	-3.19	1.35	1.40
50	y	314	CLA	CHC-C1C	3.19	1.43	1.35
50	z	303	CLA	CHC-C1C	3.19	1.43	1.35
50	x	308	CLA	CHC-C1C	3.19	1.43	1.35
50	a	817	CLA	CHC-C1C	3.19	1.43	1.35
50	b	840	CLA	CHC-C1C	3.19	1.43	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	847	CLA	C3B-C2B	-3.19	1.35	1.40
50	x	310	CLA	CHC-C1C	3.19	1.43	1.35
50	a	811	CLA	CHC-C1C	3.19	1.43	1.35
50	b	808	CLA	C3B-C2B	-3.19	1.35	1.40
50	w	305	CLA	CHC-C1C	3.19	1.43	1.35
50	w	306	CLA	C3B-C2B	-3.19	1.35	1.40
50	a	844	CLA	C3B-C2B	-3.18	1.36	1.40
50	b	838	CLA	C3B-C2B	-3.18	1.36	1.40
50	a	855	CLA	CHC-C1C	3.18	1.43	1.35
50	y	309	CLA	CHC-C1C	3.18	1.43	1.35
50	a	813	CLA	C3B-C2B	-3.18	1.36	1.40
50	b	841	CLA	CHC-C1C	3.18	1.43	1.35
50	a	819	CLA	CHC-C1C	3.18	1.43	1.35
50	a	834	CLA	CHC-C1C	3.18	1.43	1.35
50	k	205	CLA	CHC-C1C	3.18	1.43	1.35
50	a	852	CLA	CHC-C1C	3.18	1.43	1.35
50	b	849	CLA	CHC-C1C	3.18	1.43	1.35
50	a	837	CLA	CHC-C1C	3.18	1.43	1.35
50	x	309	CLA	CHC-C1C	3.17	1.43	1.35
50	a	856	CLA	C3B-C2B	-3.17	1.36	1.40
50	b	806	CLA	CHC-C1C	3.17	1.43	1.35
50	z	302	CLA	CHC-C1C	3.17	1.43	1.35
54	x	311	CHL	MG-NA	3.16	2.13	2.06
50	a	844	CLA	CHC-C1C	3.16	1.43	1.35
50	b	802	CLA	CHC-C1C	3.16	1.43	1.35
50	x	302	CLA	CHC-C1C	3.16	1.43	1.35
50	a	848	CLA	C3B-C2B	-3.16	1.36	1.40
50	b	805	CLA	C3B-C2B	-3.16	1.36	1.40
50	b	846	CLA	C3B-C2B	-3.16	1.36	1.40
50	a	838	CLA	CHC-C1C	3.15	1.43	1.35
50	x	304	CLA	C3B-C2B	-3.15	1.36	1.40
50	a	853	CLA	CHC-C1C	3.15	1.43	1.35
50	b	804	CLA	C3B-C2B	-3.15	1.36	1.40
50	b	824	CLA	CHC-C1C	3.15	1.43	1.35
50	b	807	CLA	C3B-C2B	-3.15	1.36	1.40
50	y	306	CLA	C3B-C2B	-3.15	1.36	1.40
50	a	822	CLA	CHC-C1C	3.15	1.43	1.35
50	z	311	CLA	C3B-C2B	-3.14	1.36	1.40
50	x	312	CLA	C3B-C2B	-3.14	1.36	1.40
50	x	318	CLA	C3B-C2B	-3.14	1.36	1.40
47	A	405	PQ9	C5-C4	3.14	1.54	1.48
50	a	837	CLA	C3B-C2B	-3.14	1.36	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	z	312	CHL	C3B-C2B	-3.14	1.36	1.40
50	k	203	CLA	CHC-C1C	3.13	1.43	1.35
50	a	846	CLA	CHC-C1C	3.13	1.43	1.35
50	x	313	CLA	CHC-C1C	3.13	1.43	1.35
50	w	315	CLA	C3B-C2B	-3.13	1.36	1.40
50	b	832	CLA	CHC-C1C	3.13	1.43	1.35
50	z	308	CLA	CHC-C1C	3.13	1.43	1.35
50	l	305	CLA	C3B-C2B	-3.13	1.36	1.40
50	a	821	CLA	CHC-C1C	3.13	1.43	1.35
50	a	847	CLA	CHC-C1C	3.13	1.43	1.35
50	b	828	CLA	C3B-C2B	-3.13	1.36	1.40
52	a	808	CL0	C1D-ND	-3.13	1.33	1.37
50	b	843	CLA	C3B-C2B	-3.13	1.36	1.40
50	b	825	CLA	C3B-C2B	-3.12	1.36	1.40
50	b	846	CLA	CHC-C1C	3.12	1.43	1.35
50	b	836	CLA	C3B-C2B	-3.12	1.36	1.40
50	w	310	CLA	C3B-C2B	-3.12	1.36	1.40
50	b	833	CLA	C3B-C2B	-3.12	1.36	1.40
50	y	309	CLA	C3B-C2B	-3.12	1.36	1.40
50	a	850	CLA	C3B-C2B	-3.11	1.36	1.40
50	z	309	CLA	CHC-C1C	3.11	1.42	1.35
50	w	302	CLA	C3B-C2B	-3.11	1.36	1.40
50	b	833	CLA	CHC-C1C	3.11	1.42	1.35
50	y	303	CLA	CHC-C1C	3.11	1.42	1.35
50	a	814	CLA	C3B-C2B	-3.11	1.36	1.40
50	b	810	CLA	C3B-C2B	-3.11	1.36	1.40
50	w	307	CLA	CHC-C1C	3.10	1.42	1.35
50	g	203	CLA	C3B-C2B	-3.10	1.36	1.40
50	b	835	CLA	CHC-C1C	3.10	1.42	1.35
50	g	204	CLA	CHC-C1C	3.10	1.42	1.35
50	a	857	CLA	CHC-C1C	3.10	1.42	1.35
50	w	315	CLA	CHC-C1C	3.10	1.42	1.35
50	k	204	CLA	C3B-C2B	-3.10	1.36	1.40
50	a	823	CLA	C3B-C2B	-3.10	1.36	1.40
50	a	840	CLA	C3B-C2B	-3.10	1.36	1.40
50	z	303	CLA	C3B-C2B	-3.09	1.36	1.40
50	b	840	CLA	C3B-C2B	-3.09	1.36	1.40
54	w	309	CHL	MG-NA	3.09	2.13	2.06
50	b	832	CLA	C3B-C2B	-3.09	1.36	1.40
50	x	316	CLA	C3B-C2B	-3.09	1.36	1.40
50	a	812	CLA	CHC-C1C	3.09	1.42	1.35
50	a	802	CLA	C3B-C2B	-3.09	1.36	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	815	CLA	C3B-C2B	-3.08	1.36	1.40
50	z	306	CLA	C3B-C2B	-3.08	1.36	1.40
50	a	824	CLA	C3B-C2B	-3.08	1.36	1.40
50	b	809	CLA	C3B-C2B	-3.08	1.36	1.40
50	a	811	CLA	C3B-C2B	-3.08	1.36	1.40
50	g	204	CLA	C3B-C2B	-3.08	1.36	1.40
50	x	308	CLA	C3B-C2B	-3.08	1.36	1.40
50	k	203	CLA	C3B-C2B	-3.08	1.36	1.40
50	h	201	CLA	C3B-C2B	-3.08	1.36	1.40
50	y	304	CLA	C3B-C2B	-3.08	1.36	1.40
50	b	806	CLA	C3B-C2B	-3.08	1.36	1.40
50	x	313	CLA	C3B-C2B	-3.08	1.36	1.40
50	y	303	CLA	C3B-C2B	-3.07	1.36	1.40
50	a	849	CLA	CHC-C1C	3.07	1.42	1.35
50	f	303	CLA	C3B-C2B	-3.07	1.36	1.40
50	z	311	CLA	CHC-C1C	3.07	1.42	1.35
50	y	312	CLA	C3B-C2B	-3.07	1.36	1.40
50	y	305	CLA	C3B-C2B	-3.07	1.36	1.40
50	x	302	CLA	C3B-C2B	-3.07	1.36	1.40
50	y	313	CLA	C3B-C2B	-3.07	1.36	1.40
50	x	318	CLA	CHC-C1C	3.07	1.42	1.35
50	a	801	CLA	C3B-C2B	-3.06	1.36	1.40
50	b	803	CLA	C3B-C2B	-3.06	1.36	1.40
54	w	311	CHL	MG-NA	3.06	2.13	2.06
50	a	817	CLA	C3B-C2B	-3.06	1.36	1.40
50	b	848	CLA	C3B-C2B	-3.06	1.36	1.40
50	a	852	CLA	C3B-C2B	-3.06	1.36	1.40
50	b	843	CLA	CHC-C1C	3.06	1.42	1.35
50	z	319	CLA	CHC-C1C	3.06	1.42	1.35
50	a	853	CLA	C3B-C2B	-3.05	1.36	1.40
50	b	826	CLA	C3B-C2B	-3.05	1.36	1.40
50	g	203	CLA	CHC-C1C	3.05	1.42	1.35
50	a	855	CLA	C3B-C2B	-3.05	1.36	1.40
50	x	310	CLA	C3B-C2B	-3.05	1.36	1.40
50	f	302	CLA	C3B-C2B	-3.05	1.36	1.40
50	l	301	CLA	C3B-C2B	-3.05	1.36	1.40
50	a	835	CLA	C3B-C2B	-3.04	1.36	1.40
50	a	854	CLA	C3B-C2B	-3.04	1.36	1.40
54	x	319	CHL	MG-NA	3.04	2.13	2.06
50	b	823	CLA	C3B-C2B	-3.04	1.36	1.40
54	w	304	CHL	MG-NA	3.04	2.13	2.06
50	w	305	CLA	C3B-C2B	-3.04	1.36	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	g	201	CLA	C3B-C2B	-3.04	1.36	1.40
50	j	102	CLA	C3B-C2B	-3.03	1.36	1.40
50	b	815	CLA	C3B-C2B	-3.03	1.36	1.40
50	w	308	CLA	C3B-C2B	-3.03	1.36	1.40
54	x	301	CHL	MG-NA	3.03	2.13	2.06
50	b	822	CLA	C3B-C2B	-3.02	1.36	1.40
50	a	834	CLA	C3B-C2B	-3.02	1.36	1.40
50	b	841	CLA	C3B-C2B	-3.02	1.36	1.40
50	x	309	CLA	C3B-C2B	-3.02	1.36	1.40
45	F	804	A1H1M	O21-C22	-3.02	1.37	1.44
50	a	836	CLA	C3B-C2B	-3.02	1.36	1.40
50	w	303	CLA	C3B-C2B	-3.02	1.36	1.40
54	x	305	CHL	MG-NA	3.02	2.13	2.06
50	x	307	CLA	C3B-C2B	-3.01	1.36	1.40
50	b	837	CLA	C3B-C2B	-3.01	1.36	1.40
50	a	851	CLA	C3B-C2B	-3.01	1.36	1.40
54	z	312	CHL	O2A-CGA	3.01	1.42	1.33
50	w	308	CLA	C1D-ND	-3.01	1.34	1.37
50	b	834	CLA	C3B-C2B	-3.01	1.36	1.40
50	a	819	CLA	C3B-C2B	-3.01	1.36	1.40
50	z	316	CLA	C3B-C2B	-3.01	1.36	1.40
50	w	316	CLA	C3B-C2B	-3.00	1.36	1.40
50	a	816	CLA	C3B-C2B	-3.00	1.36	1.40
50	a	854	CLA	C1D-ND	-3.00	1.34	1.37
50	b	844	CLA	CHC-C1C	3.00	1.42	1.35
50	b	811	CLA	C3B-C2B	-3.00	1.36	1.40
50	y	314	CLA	C3B-C2B	-3.00	1.36	1.40
50	a	809	CLA	C3B-C2B	-3.00	1.36	1.40
50	b	824	CLA	C3B-C2B	-2.99	1.36	1.40
50	a	839	CLA	C3B-C2B	-2.98	1.36	1.40
50	y	310	CLA	C3B-C2B	-2.98	1.36	1.40
50	w	314	CLA	C3B-C2B	-2.98	1.36	1.40
54	z	304	CHL	MG-NA	2.98	2.13	2.06
50	x	306	CLA	C3B-C2B	-2.97	1.36	1.40
50	k	205	CLA	C3B-C2B	-2.97	1.36	1.40
50	x	303	CLA	CHC-C1C	2.97	1.42	1.35
50	a	836	CLA	C1D-ND	-2.95	1.34	1.37
50	z	309	CLA	C3B-C2B	-2.95	1.36	1.40
50	w	307	CLA	C3B-C2B	-2.94	1.36	1.40
50	b	801	CLA	CHC-C1C	2.94	1.42	1.35
54	x	319	CHL	O2A-CGA	2.94	1.41	1.33
50	a	838	CLA	C3B-C2B	-2.94	1.36	1.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	z	302	CLA	C3B-C2B	-2.94	1.36	1.40
52	a	808	CL0	C3D-C2D	2.93	1.47	1.39
50	z	305	CLA	C3B-C2B	-2.93	1.36	1.40
50	f	301	CLA	C3B-C2B	-2.92	1.36	1.40
50	a	845	CLA	C3B-C2B	-2.92	1.36	1.40
52	a	808	CL0	C4D-CHA	2.91	1.48	1.38
50	z	308	CLA	C1D-CHD	2.90	1.41	1.35
50	z	310	CLA	C3B-C2B	-2.89	1.36	1.40
50	l	306	CLA	C1D-ND	-2.89	1.34	1.37
50	z	307	CLA	C3B-C2B	-2.88	1.36	1.40
50	b	803	CLA	C1D-ND	-2.88	1.34	1.37
50	b	845	CLA	C1D-ND	-2.88	1.34	1.37
53	b	827	PQN	C10-C5	-2.87	1.35	1.40
50	y	308	CLA	C3B-C2B	-2.86	1.36	1.40
50	b	811	CLA	C1D-ND	-2.85	1.34	1.37
50	a	841	CLA	C3B-C2B	-2.84	1.36	1.40
50	b	839	CLA	C1D-ND	-2.83	1.34	1.37
50	a	818	CLA	C3B-C2B	-2.83	1.36	1.40
50	b	839	CLA	C3B-C2B	-2.83	1.36	1.40
50	b	835	CLA	C3B-C2B	-2.82	1.36	1.40
50	a	856	CLA	C1D-ND	-2.82	1.34	1.37
50	a	801	CLA	C1D-ND	-2.80	1.34	1.37
50	x	307	CLA	C1D-ND	-2.80	1.34	1.37
53	a	825	PQN	C10-C5	-2.80	1.36	1.40
50	a	826	CLA	C3B-C2B	-2.80	1.36	1.40
50	a	858	CLA	C1D-ND	-2.80	1.34	1.37
50	a	842	CLA	C3B-C2B	-2.80	1.36	1.40
50	x	304	CLA	C1D-ND	-2.80	1.34	1.37
47	A	405	PQ9	C30-C28	2.79	1.57	1.51
50	z	302	CLA	C1D-ND	-2.78	1.34	1.37
50	l	306	CLA	C3B-C2B	-2.78	1.36	1.40
50	y	313	CLA	C1D-ND	-2.77	1.34	1.37
50	y	308	CLA	C1D-ND	-2.77	1.34	1.37
50	a	845	CLA	C1D-ND	-2.76	1.34	1.37
54	z	312	CHL	MG-NA	2.76	2.12	2.06
47	A	405	PQ9	C24-C23	2.75	1.57	1.50
50	a	841	CLA	C1D-ND	-2.75	1.34	1.37
50	b	847	CLA	C1D-ND	-2.75	1.34	1.37
50	b	845	CLA	C3B-C2B	-2.75	1.36	1.40
50	a	835	CLA	C1D-ND	-2.74	1.34	1.37
50	a	850	CLA	C1D-ND	-2.74	1.34	1.37
50	z	316	CLA	C1D-ND	-2.74	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	w	316	CLA	C1D-ND	-2.74	1.34	1.37
50	a	811	CLA	C1D-ND	-2.73	1.34	1.37
50	b	813	CLA	C1D-ND	-2.73	1.34	1.37
50	z	306	CLA	C1D-ND	-2.73	1.34	1.37
50	a	824	CLA	C1D-ND	-2.73	1.34	1.37
50	b	838	CLA	C1D-ND	-2.72	1.34	1.37
50	y	312	CLA	C1D-ND	-2.71	1.34	1.37
46	z	314	LMG	C4-C5	2.71	1.58	1.53
50	a	838	CLA	C1D-ND	-2.71	1.34	1.37
47	A	405	PQ9	C2-C1	2.70	1.54	1.49
50	a	857	CLA	C1D-ND	-2.70	1.34	1.37
50	b	825	CLA	C1D-ND	-2.70	1.34	1.37
45	F	804	A1H1M	O14-C15	-2.70	1.37	1.44
50	b	806	CLA	C1D-ND	-2.70	1.34	1.37
50	b	842	CLA	C1D-ND	-2.70	1.34	1.37
50	a	843	CLA	C1D-ND	-2.70	1.34	1.37
50	a	816	CLA	C1D-ND	-2.70	1.34	1.37
50	b	815	CLA	C1D-ND	-2.69	1.34	1.37
50	y	310	CLA	C1D-ND	-2.69	1.34	1.37
50	a	809	CLA	C1D-ND	-2.69	1.34	1.37
50	a	818	CLA	C1D-ND	-2.69	1.34	1.37
50	a	813	CLA	C1D-ND	-2.69	1.34	1.37
50	b	826	CLA	C1D-ND	-2.68	1.34	1.37
50	b	802	CLA	C1D-ND	-2.68	1.34	1.37
50	z	307	CLA	C1D-ND	-2.68	1.34	1.37
50	a	848	CLA	C1D-ND	-2.67	1.34	1.37
50	b	836	CLA	C1D-ND	-2.67	1.34	1.37
50	a	815	CLA	C1D-ND	-2.67	1.34	1.37
50	b	844	CLA	C1D-ND	-2.67	1.34	1.37
50	b	851	CLA	C3B-C2B	-2.67	1.36	1.40
50	y	307	CLA	C1D-ND	-2.65	1.34	1.37
50	b	847	CLA	C3B-C2B	-2.65	1.36	1.40
50	x	306	CLA	C1D-ND	-2.65	1.34	1.37
50	w	307	CLA	C1D-ND	-2.65	1.34	1.37
50	b	814	CLA	C1D-ND	-2.65	1.34	1.37
50	f	301	CLA	C1D-ND	-2.65	1.34	1.37
50	z	310	CLA	C1D-ND	-2.64	1.34	1.37
50	y	311	CLA	C1D-ND	-2.64	1.34	1.37
50	a	817	CLA	C1D-ND	-2.64	1.34	1.37
50	a	840	CLA	C1D-ND	-2.64	1.34	1.37
50	b	804	CLA	C1D-ND	-2.64	1.34	1.37
50	b	822	CLA	C1D-ND	-2.64	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	826	CLA	C1D-ND	-2.64	1.34	1.37
50	b	814	CLA	C3B-C2B	-2.64	1.36	1.40
50	a	853	CLA	C1D-ND	-2.64	1.34	1.37
50	b	810	CLA	C1D-ND	-2.64	1.34	1.37
50	b	837	CLA	C1D-ND	-2.63	1.34	1.37
50	b	851	CLA	C1D-ND	-2.63	1.34	1.37
50	b	812	CLA	C1D-ND	-2.62	1.34	1.37
50	w	310	CLA	C1D-ND	-2.62	1.34	1.37
46	z	314	LMG	C3-C2	2.62	1.59	1.52
50	b	841	CLA	C1D-ND	-2.62	1.34	1.37
50	b	843	CLA	C1D-ND	-2.62	1.34	1.37
50	w	303	CLA	C1D-ND	-2.62	1.34	1.37
50	a	839	CLA	C1D-ND	-2.62	1.34	1.37
50	b	809	CLA	C1D-ND	-2.61	1.34	1.37
50	a	842	CLA	C1D-ND	-2.61	1.34	1.37
50	b	834	CLA	C1D-ND	-2.61	1.34	1.37
46	z	314	LMG	C4-C3	2.61	1.59	1.52
50	a	814	CLA	C1D-ND	-2.61	1.34	1.37
50	w	314	CLA	C1D-ND	-2.60	1.34	1.37
50	w	307	CLA	C1B-CHB	-2.60	1.33	1.41
50	z	303	CLA	C1D-ND	-2.59	1.34	1.37
50	a	802	CLA	C1D-ND	-2.59	1.34	1.37
50	a	823	CLA	C1D-ND	-2.59	1.34	1.37
50	a	821	CLA	C1D-ND	-2.59	1.34	1.37
50	y	304	CLA	C1D-ND	-2.59	1.34	1.37
50	a	846	CLA	C1D-ND	-2.59	1.34	1.37
50	f	302	CLA	C1D-ND	-2.59	1.34	1.37
50	w	302	CLA	C1D-ND	-2.59	1.34	1.37
50	l	305	CLA	C1D-ND	-2.59	1.34	1.37
50	y	302	CLA	C1D-ND	-2.59	1.34	1.37
50	a	822	CLA	C1D-ND	-2.59	1.34	1.37
50	x	313	CLA	C1D-ND	-2.58	1.34	1.37
50	b	808	CLA	C1D-ND	-2.58	1.34	1.37
50	b	823	CLA	C1D-ND	-2.58	1.34	1.37
50	k	205	CLA	C1D-ND	-2.58	1.34	1.37
50	l	301	CLA	C1D-ND	-2.58	1.34	1.37
50	y	305	CLA	C1D-ND	-2.58	1.34	1.37
50	k	204	CLA	C1D-ND	-2.58	1.34	1.37
50	g	204	CLA	C1D-ND	-2.58	1.34	1.37
50	x	312	CLA	C1D-ND	-2.57	1.34	1.37
50	b	848	CLA	C1D-ND	-2.57	1.34	1.37
50	a	833	CLA	C1D-ND	-2.57	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	855	CLA	C1D-ND	-2.57	1.34	1.37
50	b	828	CLA	C1D-ND	-2.57	1.34	1.37
50	a	851	CLA	C1D-ND	-2.57	1.34	1.37
50	a	837	CLA	C1D-ND	-2.56	1.34	1.37
50	w	306	CLA	C1D-ND	-2.56	1.34	1.37
50	b	835	CLA	C1D-ND	-2.56	1.34	1.37
54	z	312	CHL	C2-C3	2.56	1.39	1.33
50	g	201	CLA	C1D-ND	-2.56	1.34	1.37
50	x	309	CLA	C1D-ND	-2.56	1.34	1.37
50	b	833	CLA	C1D-ND	-2.56	1.34	1.37
50	z	319	CLA	C1B-CHB	-2.56	1.33	1.41
50	x	316	CLA	C1D-ND	-2.55	1.34	1.37
50	x	303	CLA	C1B-CHB	-2.55	1.33	1.41
50	a	812	CLA	C1D-ND	-2.55	1.34	1.37
50	z	305	CLA	C1D-ND	-2.55	1.34	1.37
50	a	849	CLA	C1D-ND	-2.55	1.34	1.37
50	f	303	CLA	C1D-ND	-2.55	1.34	1.37
50	b	807	CLA	C1D-ND	-2.55	1.34	1.37
50	w	315	CLA	C1B-CHB	-2.55	1.33	1.41
52	a	808	CL0	C1C-NC	-2.54	1.34	1.37
50	b	824	CLA	C1D-ND	-2.54	1.34	1.37
50	y	314	CLA	C1D-ND	-2.54	1.34	1.37
50	b	832	CLA	C1D-ND	-2.54	1.34	1.37
50	a	844	CLA	C1D-ND	-2.54	1.34	1.37
50	z	309	CLA	C1D-ND	-2.54	1.34	1.37
50	a	820	CLA	C1D-ND	-2.53	1.34	1.37
50	y	303	CLA	C1D-ND	-2.53	1.34	1.37
50	b	846	CLA	C1D-ND	-2.52	1.34	1.37
50	w	305	CLA	C1D-ND	-2.52	1.34	1.37
50	b	805	CLA	C1D-ND	-2.52	1.34	1.37
53	a	825	PQN	C2M-C2	-2.52	1.45	1.50
50	y	309	CLA	C1B-CHB	-2.52	1.34	1.41
50	b	849	CLA	C1D-ND	-2.52	1.34	1.37
53	b	827	PQN	C11-C12	-2.51	1.47	1.50
50	y	302	CLA	C4C-C3C	2.51	1.47	1.42
50	b	840	CLA	C1D-ND	-2.51	1.34	1.37
50	a	852	CLA	C1D-ND	-2.51	1.34	1.37
51	a	804	DGD	C1D-C2D	2.51	1.59	1.52
50	b	849	CLA	C1B-CHB	-2.50	1.34	1.41
50	z	309	CLA	C1B-CHB	-2.50	1.34	1.41
50	z	308	CLA	C4D-CHA	2.50	1.39	1.35
50	b	801	CLA	C1D-ND	-2.50	1.34	1.37

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	x	303	CLA	MG-NC	2.50	2.12	2.06
50	x	313	CLA	C1B-CHB	-2.50	1.34	1.41
52	a	808	CL0	C1B-CHB	2.50	1.47	1.41
43	a	810	BCR	C1-C6	-2.49	1.50	1.53
50	a	834	CLA	C1B-CHB	-2.49	1.34	1.41
50	h	201	CLA	C1D-ND	-2.49	1.34	1.37
50	w	315	CLA	C1D-ND	-2.49	1.34	1.37
50	j	102	CLA	C1D-ND	-2.49	1.34	1.37
50	l	306	CLA	C1B-CHB	-2.48	1.34	1.41
50	g	204	CLA	C1B-CHB	-2.48	1.34	1.41
50	g	203	CLA	C1D-ND	-2.48	1.34	1.37
50	a	845	CLA	C1B-CHB	-2.47	1.34	1.41
50	x	308	CLA	C1D-ND	-2.47	1.34	1.37
50	a	819	CLA	C1B-CHB	-2.47	1.34	1.41
50	a	819	CLA	C1D-ND	-2.47	1.34	1.37
50	a	849	CLA	C1B-CHB	-2.47	1.34	1.41
50	x	310	CLA	C1D-ND	-2.46	1.34	1.37
54	x	301	CHL	CHC-C1C	2.46	1.41	1.35
50	b	814	CLA	C1B-CHB	-2.46	1.34	1.41
54	z	312	CHL	CHC-C1C	2.46	1.41	1.35
50	z	311	CLA	C1D-ND	-2.46	1.34	1.37
50	a	820	CLA	C1B-CHB	-2.46	1.34	1.41
50	a	852	CLA	C1B-CHB	-2.46	1.34	1.41
50	z	308	CLA	C1B-CHB	-2.46	1.34	1.41
50	k	203	CLA	C1B-CHB	-2.46	1.34	1.41
50	g	201	CLA	C1B-CHB	-2.45	1.34	1.41
50	b	805	CLA	C1B-CHB	-2.45	1.34	1.41
50	a	843	CLA	C1B-CHB	-2.45	1.34	1.41
50	y	311	CLA	C1B-CHB	-2.45	1.34	1.41
50	z	311	CLA	C1B-CHB	-2.45	1.34	1.41
50	a	834	CLA	C1D-ND	-2.45	1.34	1.37
50	x	302	CLA	C1B-CHB	-2.45	1.34	1.41
50	b	849	CLA	C3B-C2B	-2.45	1.37	1.40
50	b	825	CLA	C1B-CHB	-2.44	1.34	1.41
50	a	813	CLA	C1B-CHB	-2.44	1.34	1.41
50	g	203	CLA	C1B-CHB	-2.44	1.34	1.41
50	x	312	CLA	C1B-CHB	-2.44	1.34	1.41
50	z	319	CLA	C1D-ND	-2.44	1.34	1.37
50	y	307	CLA	C1B-CHB	-2.44	1.34	1.41
50	b	848	CLA	C1B-CHB	-2.43	1.34	1.41
50	a	837	CLA	C1B-CHB	-2.43	1.34	1.41
54	x	319	CHL	CHC-C1C	2.43	1.41	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	a	850	CLA	C1B-CHB	-2.43	1.34	1.41
50	y	314	CLA	C1B-CHB	-2.43	1.34	1.41
54	z	304	CHL	CHC-C1C	2.43	1.41	1.35
50	a	814	CLA	C1B-CHB	-2.43	1.34	1.41
50	x	303	CLA	C1D-ND	-2.43	1.34	1.37
50	a	822	CLA	C1B-CHB	-2.43	1.34	1.41
50	x	313	CLA	MG-NC	2.42	2.12	2.06
50	b	851	CLA	C1B-CHB	-2.42	1.34	1.41
50	b	824	CLA	C1B-CHB	-2.42	1.34	1.41
50	y	304	CLA	C1B-CHB	-2.42	1.34	1.41
50	x	310	CLA	C1B-CHB	-2.42	1.34	1.41
50	b	833	CLA	C1B-CHB	-2.42	1.34	1.41
50	a	817	CLA	C1B-CHB	-2.42	1.34	1.41
50	b	836	CLA	C1B-CHB	-2.42	1.34	1.41
50	a	853	CLA	C1B-CHB	-2.42	1.34	1.41
53	b	827	PQN	C2M-C2	-2.42	1.45	1.50
50	w	305	CLA	C1B-CHB	-2.41	1.34	1.41
54	w	304	CHL	CHC-C1C	2.41	1.41	1.35
54	x	305	CHL	CBA-CGA	2.41	1.56	1.50
50	f	302	CLA	C1B-CHB	-2.41	1.34	1.41
54	w	304	CHL	CBA-CGA	2.41	1.56	1.50
50	k	204	CLA	C1B-CHB	-2.41	1.34	1.41
50	a	833	CLA	C1B-CHB	-2.41	1.34	1.41
50	a	809	CLA	C1B-CHB	-2.41	1.34	1.41
50	b	846	CLA	C1B-CHB	-2.41	1.34	1.41
50	b	810	CLA	C1B-CHB	-2.41	1.34	1.41
46	f	306	LMG	O8-C28	2.41	1.40	1.33
50	b	823	CLA	C1B-CHB	-2.41	1.34	1.41
50	l	305	CLA	C1B-CHB	-2.41	1.34	1.41
50	x	309	CLA	C1B-CHB	-2.41	1.34	1.41
50	b	835	CLA	C1B-CHB	-2.40	1.34	1.41
50	h	201	CLA	C1B-CHB	-2.40	1.34	1.41
50	l	301	CLA	C1B-CHB	-2.40	1.34	1.41
50	a	802	CLA	C1B-CHB	-2.40	1.34	1.41
50	j	102	CLA	C1B-CHB	-2.40	1.34	1.41
50	w	302	CLA	C1B-CHB	-2.40	1.34	1.41
50	a	822	CLA	C3B-C2B	-2.40	1.37	1.40
50	b	826	CLA	C1B-CHB	-2.40	1.34	1.41
50	y	303	CLA	C1B-CHB	-2.40	1.34	1.41
50	k	203	CLA	C1D-ND	-2.40	1.34	1.37
50	a	824	CLA	C1B-CHB	-2.40	1.34	1.41
52	a	808	CL0	C4B-CHC	2.40	1.47	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	y	309	CLA	C1D-ND	-2.40	1.34	1.37
50	a	841	CLA	C1B-CHB	-2.40	1.34	1.41
50	b	801	CLA	C1B-CHB	-2.39	1.34	1.41
46	j	104	LMG	O8-C28	2.39	1.40	1.33
50	b	843	CLA	C1B-CHB	-2.39	1.34	1.41
50	a	823	CLA	C1B-CHB	-2.39	1.34	1.41
50	b	841	CLA	C1B-CHB	-2.39	1.34	1.41
50	b	809	CLA	C1B-CHB	-2.39	1.34	1.41
50	b	828	CLA	C1B-CHB	-2.39	1.34	1.41
50	a	851	CLA	C1B-CHB	-2.39	1.34	1.41
50	z	306	CLA	C1B-CHB	-2.39	1.34	1.41
50	b	839	CLA	C1B-CHB	-2.39	1.34	1.41
50	a	838	CLA	C1B-CHB	-2.39	1.34	1.41
50	a	815	CLA	C1B-CHB	-2.38	1.34	1.41
50	b	808	CLA	C1B-CHB	-2.38	1.34	1.41
50	b	804	CLA	C1B-CHB	-2.38	1.34	1.41
50	z	303	CLA	C1B-CHB	-2.38	1.34	1.41
50	a	840	CLA	C1B-CHB	-2.38	1.34	1.41
50	b	813	CLA	C1B-CHB	-2.38	1.34	1.41
50	a	821	CLA	C1B-CHB	-2.38	1.34	1.41
50	w	306	CLA	C1B-CHB	-2.38	1.34	1.41
50	x	318	CLA	C1B-CHB	-2.38	1.34	1.41
50	a	801	CLA	C1B-CHB	-2.38	1.34	1.41
50	a	816	CLA	C1B-CHB	-2.38	1.34	1.41
50	z	307	CLA	C1B-CHB	-2.38	1.34	1.41
50	k	205	CLA	C1B-CHB	-2.38	1.34	1.41
50	y	306	CLA	C1B-CHB	-2.38	1.34	1.41
50	z	319	CLA	MG-NC	2.38	2.11	2.06
50	a	842	CLA	C1B-CHB	-2.38	1.34	1.41
50	b	837	CLA	C1B-CHB	-2.38	1.34	1.41
50	x	302	CLA	C1D-ND	-2.38	1.34	1.37
50	b	844	CLA	C1B-CHB	-2.37	1.34	1.41
50	k	203	CLA	MG-NC	2.37	2.11	2.06
54	w	309	CHL	CHC-C1C	2.37	1.41	1.35
50	a	811	CLA	C1B-CHB	-2.37	1.34	1.41
50	b	834	CLA	C1B-CHB	-2.37	1.34	1.41
50	w	316	CLA	C1B-CHB	-2.37	1.34	1.41
50	a	854	CLA	C1B-CHB	-2.37	1.34	1.41
50	b	812	CLA	C1B-CHB	-2.37	1.34	1.41
50	b	802	CLA	C1B-CHB	-2.37	1.34	1.41
50	a	847	CLA	CHB-C4A	2.37	1.39	1.31
50	b	840	CLA	C1B-CHB	-2.36	1.34	1.41

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	f	303	CLA	C1B-CHB	-2.36	1.34	1.41
50	a	858	CLA	C1B-CHB	-2.36	1.34	1.41
50	b	815	CLA	C1B-CHB	-2.36	1.34	1.41
50	w	315	CLA	MG-NC	2.36	2.11	2.06
50	a	846	CLA	C1B-CHB	-2.36	1.34	1.41
54	x	305	CHL	CHC-C1C	2.36	1.41	1.35
50	a	855	CLA	C1B-CHB	-2.36	1.34	1.41
50	b	838	CLA	C1B-CHB	-2.36	1.34	1.41
54	x	311	CHL	MG-NC	2.36	2.11	2.06
50	x	316	CLA	C1B-CHB	-2.36	1.34	1.41
50	w	310	CLA	C1B-CHB	-2.35	1.34	1.41
50	a	836	CLA	C1B-CHB	-2.35	1.34	1.41
50	a	856	CLA	C1B-CHB	-2.35	1.34	1.41
46	7	301	LMG	O8-C28	2.35	1.40	1.33
50	z	308	CLA	MG-NC	2.35	2.11	2.06
50	b	822	CLA	C1B-CHB	-2.35	1.34	1.41
46	B	605	LMG	O8-C28	2.35	1.40	1.33
50	z	302	CLA	C1B-CHB	-2.35	1.34	1.41
50	a	847	CLA	C1D-ND	-2.35	1.34	1.37
50	f	301	CLA	C1B-CHB	-2.35	1.34	1.41
50	b	842	CLA	C1B-CHB	-2.34	1.34	1.41
50	w	303	CLA	C1B-CHB	-2.34	1.34	1.41
50	y	305	CLA	C1B-CHB	-2.34	1.34	1.41
50	b	832	CLA	C1B-CHB	-2.34	1.34	1.41
50	w	307	CLA	MG-NC	2.34	2.11	2.06
50	b	807	CLA	C1B-CHB	-2.34	1.34	1.41
50	w	314	CLA	C1B-CHB	-2.34	1.34	1.41
50	y	312	CLA	C1B-CHB	-2.34	1.34	1.41
53	a	825	PQN	C11-C12	-2.34	1.47	1.50
50	a	857	CLA	C1B-CHB	-2.34	1.34	1.41
50	a	835	CLA	C1B-CHB	-2.33	1.34	1.41
50	b	849	CLA	MG-NC	2.33	2.11	2.06
50	z	310	CLA	C1B-CHB	-2.33	1.34	1.41
50	b	806	CLA	C1B-CHB	-2.33	1.34	1.41
50	x	306	CLA	C1B-CHB	-2.33	1.34	1.41
50	y	302	CLA	C1B-CHB	-2.32	1.34	1.41
50	a	844	CLA	C1B-CHB	-2.32	1.34	1.41
50	a	839	CLA	C1B-CHB	-2.32	1.34	1.41
50	z	316	CLA	C1B-CHB	-2.32	1.34	1.41
50	a	848	CLA	C1B-CHB	-2.32	1.34	1.41
50	b	847	CLA	C1B-CHB	-2.32	1.34	1.41
46	D	601	LMG	O8-C28	2.32	1.40	1.33

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	x	307	CLA	C1B-CHB	-2.32	1.34	1.41
50	b	803	CLA	C1B-CHB	-2.31	1.34	1.41
50	a	818	CLA	C1B-CHB	-2.31	1.34	1.41
50	b	832	CLA	MG-NC	2.31	2.11	2.06
46	z	314	LMG	O8-C28	2.30	1.40	1.33
50	a	826	CLA	C1B-CHB	-2.30	1.34	1.41
50	b	811	CLA	C1B-CHB	-2.29	1.34	1.41
50	y	313	CLA	C1B-CHB	-2.29	1.34	1.41
50	x	308	CLA	C1B-CHB	-2.29	1.34	1.41
50	z	305	CLA	C1B-CHB	-2.29	1.34	1.41
50	b	801	CLA	MG-NC	2.29	2.11	2.06
50	y	308	CLA	C1B-CHB	-2.29	1.34	1.41
50	b	845	CLA	C1B-CHB	-2.29	1.34	1.41
50	y	310	CLA	C1B-CHB	-2.29	1.34	1.41
50	g	204	CLA	MG-NC	2.28	2.11	2.06
50	y	309	CLA	MG-NC	2.28	2.11	2.06
50	z	302	CLA	MG-NC	2.28	2.11	2.06
50	x	308	CLA	MG-NC	2.28	2.11	2.06
50	w	308	CLA	C1B-CHB	-2.27	1.34	1.41
54	w	311	CHL	CHC-C1C	2.27	1.40	1.35
50	x	304	CLA	C1B-CHB	-2.27	1.34	1.41
50	z	309	CLA	MG-NC	2.27	2.11	2.06
50	a	849	CLA	MG-NC	2.26	2.11	2.06
50	y	314	CLA	MG-NC	2.26	2.11	2.06
46	x	315	LMG	O8-C28	2.26	1.39	1.33
50	a	802	CLA	MG-NC	2.25	2.11	2.06
52	a	808	CL0	O2A-CGA	-2.25	1.32	1.42
50	a	812	CLA	MG-NC	2.25	2.11	2.06
50	x	316	CLA	MG-NC	2.25	2.11	2.06
46	w	312	LMG	O8-C28	2.25	1.39	1.33
54	x	311	CHL	CHC-C1C	2.25	1.40	1.35
46	H	401	LMG	O8-C28	2.24	1.39	1.33
54	x	319	CHL	MG-NC	2.24	2.11	2.06
50	b	836	CLA	MG-NC	2.24	2.11	2.06
50	b	841	CLA	MG-NC	2.24	2.11	2.06
50	x	302	CLA	MG-NC	2.24	2.11	2.06
50	a	842	CLA	MG-NC	2.23	2.11	2.06
50	a	812	CLA	CAB-C3B	2.23	1.50	1.42
46	F	802	LMG	O8-C28	2.23	1.39	1.33
54	w	309	CHL	MG-NC	2.23	2.11	2.06
50	k	204	CLA	MG-NC	2.23	2.11	2.06
50	a	821	CLA	MG-NC	2.23	2.11	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	b	848	CLA	MG-NC	2.23	2.11	2.06
50	a	824	CLA	MG-NC	2.23	2.11	2.06
50	y	307	CLA	MG-NC	2.22	2.11	2.06
50	a	834	CLA	MG-NC	2.22	2.11	2.06
50	f	302	CLA	MG-NC	2.22	2.11	2.06
50	g	201	CLA	MG-NC	2.22	2.11	2.06
50	a	852	CLA	MG-NC	2.21	2.11	2.06
50	z	303	CLA	MG-NC	2.21	2.11	2.06
45	5	302	A1H1M	C10-C11	2.21	1.57	1.51
50	g	203	CLA	MG-NC	2.21	2.11	2.06
50	a	846	CLA	MG-NC	2.21	2.11	2.06
50	x	306	CLA	MG-NC	2.21	2.11	2.06
50	x	309	CLA	MG-NC	2.21	2.11	2.06
50	z	311	CLA	MG-NC	2.21	2.11	2.06
50	b	806	CLA	MG-NC	2.20	2.11	2.06
50	y	303	CLA	MG-NC	2.20	2.11	2.06
50	a	853	CLA	MG-NC	2.20	2.11	2.06
50	x	318	CLA	MG-NC	2.20	2.11	2.06
50	b	823	CLA	MG-NC	2.20	2.11	2.06
50	b	835	CLA	MG-NC	2.20	2.11	2.06
50	l	301	CLA	MG-NC	2.20	2.11	2.06
50	a	845	CLA	MG-NC	2.20	2.11	2.06
50	a	837	CLA	MG-NC	2.20	2.11	2.06
50	a	822	CLA	MG-NC	2.20	2.11	2.06
50	w	314	CLA	MG-NC	2.20	2.11	2.06
50	y	304	CLA	MG-NC	2.20	2.11	2.06
50	z	305	CLA	MG-NC	2.19	2.11	2.06
50	a	817	CLA	MG-NC	2.19	2.11	2.06
50	b	805	CLA	MG-NC	2.19	2.11	2.06
50	b	833	CLA	MG-NC	2.19	2.11	2.06
50	b	825	CLA	MG-NC	2.19	2.11	2.06
50	a	856	CLA	MG-NC	2.19	2.11	2.06
50	b	802	CLA	MG-NC	2.19	2.11	2.06
50	l	305	CLA	MG-NC	2.19	2.11	2.06
50	b	851	CLA	MG-NC	2.19	2.11	2.06
54	x	301	CHL	MG-NC	2.19	2.11	2.06
50	k	205	CLA	MG-NC	2.19	2.11	2.06
50	f	303	CLA	MG-NC	2.19	2.11	2.06
50	h	201	CLA	MG-NC	2.19	2.11	2.06
50	a	819	CLA	MG-NC	2.19	2.11	2.06
50	a	814	CLA	MG-NC	2.18	2.11	2.06
50	w	305	CLA	MG-NC	2.18	2.11	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	w	304	CHL	MG-NC	2.18	2.11	2.06
50	w	302	CLA	MG-NC	2.18	2.11	2.06
50	j	102	CLA	MG-NC	2.18	2.11	2.06
50	a	812	CLA	C4B-CHC	-2.18	1.39	1.43
50	b	810	CLA	MG-NC	2.17	2.11	2.06
50	y	305	CLA	MG-NC	2.17	2.11	2.06
50	a	811	CLA	MG-NC	2.17	2.11	2.06
50	a	801	CLA	MG-NC	2.17	2.11	2.06
50	a	857	CLA	MG-NC	2.17	2.11	2.06
50	b	842	CLA	MG-NC	2.17	2.11	2.06
54	z	304	CHL	MG-NC	2.17	2.11	2.06
50	b	837	CLA	MG-NC	2.17	2.11	2.06
50	w	306	CLA	MG-NC	2.17	2.11	2.06
46	j	105	LMG	O8-C28	2.17	1.39	1.33
50	b	814	CLA	MG-NC	2.16	2.11	2.06
50	z	302	CLA	CAA-C2A	2.16	1.58	1.54
50	b	843	CLA	MG-NC	2.16	2.11	2.06
50	b	840	CLA	MG-NC	2.16	2.11	2.06
50	b	839	CLA	MG-NC	2.16	2.11	2.06
50	a	841	CLA	MG-NC	2.16	2.11	2.06
50	a	851	CLA	MG-NC	2.16	2.11	2.06
50	b	826	CLA	MG-NC	2.16	2.11	2.06
50	a	823	CLA	MG-NC	2.15	2.11	2.06
50	b	846	CLA	MG-NC	2.15	2.11	2.06
50	x	310	CLA	MG-NC	2.15	2.11	2.06
50	b	834	CLA	MG-NC	2.15	2.11	2.06
46	z	315	LMG	O8-C28	2.15	1.39	1.33
45	F	804	A1H1M	C13-C33	2.15	1.58	1.52
50	a	858	CLA	MG-NC	2.15	2.11	2.06
50	a	855	CLA	MG-NC	2.14	2.11	2.06
54	x	305	CHL	C3B-CAB	-2.14	1.43	1.47
50	a	838	CLA	MG-NC	2.14	2.11	2.06
50	b	807	CLA	MG-NC	2.14	2.11	2.06
50	b	813	CLA	MG-NC	2.14	2.11	2.06
50	b	828	CLA	MG-NC	2.14	2.11	2.06
50	a	820	CLA	MG-NC	2.14	2.11	2.06
50	l	306	CLA	MG-NC	2.14	2.11	2.06
50	w	310	CLA	MG-NC	2.14	2.11	2.06
50	y	308	CLA	MG-NC	2.14	2.11	2.06
50	z	316	CLA	MG-NC	2.14	2.11	2.06
47	A	405	PQ9	C21-C22	2.14	1.57	1.50
50	b	808	CLA	MG-NC	2.14	2.11	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
50	b	804	CLA	MG-NC	2.13	2.11	2.06
50	b	809	CLA	MG-NC	2.13	2.11	2.06
50	f	301	CLA	MG-NC	2.13	2.11	2.06
50	z	310	CLA	MG-NC	2.13	2.11	2.06
50	y	302	CLA	CAA-C2A	2.13	1.58	1.54
50	w	303	CLA	MG-NC	2.13	2.11	2.06
50	a	835	CLA	MG-NC	2.12	2.11	2.06
54	x	305	CHL	MG-NC	2.12	2.11	2.06
50	b	838	CLA	MG-NC	2.12	2.11	2.06
54	w	311	CHL	MG-NC	2.12	2.11	2.06
50	a	836	CLA	MG-NC	2.12	2.11	2.06
50	y	311	CLA	MG-NC	2.11	2.11	2.06
48	F	801	SQD	O8-S	2.11	1.55	1.47
50	a	833	CLA	MG-NC	2.11	2.11	2.06
50	b	822	CLA	MG-NC	2.11	2.11	2.06
50	z	307	CLA	MG-NC	2.11	2.11	2.06
48	a	859	SQD	O8-S	2.10	1.55	1.47
43	b	819	BCR	C30-C25	-2.10	1.50	1.53
50	a	843	CLA	MG-NC	2.10	2.11	2.06
50	a	826	CLA	MG-NC	2.10	2.11	2.06
50	a	840	CLA	MG-NC	2.09	2.11	2.06
50	a	844	CLA	MG-NC	2.09	2.11	2.06
50	a	848	CLA	MG-NC	2.09	2.11	2.06
45	5	302	A1H1M	C35-C11	2.09	1.56	1.51
47	A	405	PQ9	O4-C4	-2.09	1.19	1.24
50	a	818	CLA	MG-NC	2.09	2.11	2.06
50	y	306	CLA	MG-NC	2.09	2.11	2.06
50	a	839	CLA	MG-NC	2.09	2.11	2.06
50	x	312	CLA	MG-NC	2.08	2.11	2.06
50	a	816	CLA	MG-NC	2.08	2.11	2.06
50	x	304	CLA	MG-NC	2.08	2.11	2.06
47	A	405	PQ9	C29-C28	2.08	1.56	1.50
48	w	318	SQD	O8-S	2.08	1.55	1.47
45	F	804	A1H1M	O19-C18	-2.08	1.38	1.43
50	b	844	CLA	MG-NC	2.07	2.11	2.06
50	a	809	CLA	MG-NC	2.07	2.11	2.06
50	a	813	CLA	MG-NC	2.07	2.11	2.06
50	x	313	CLA	CAA-C2A	2.07	1.57	1.54
47	A	405	PQ9	C10-C1	2.07	1.54	1.47
50	y	312	CLA	MG-NC	2.07	2.11	2.06
50	a	812	CLA	CHB-C1B	-2.07	1.34	1.39
50	x	306	CLA	CAA-C2A	2.07	1.57	1.54

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
54	w	311	CHL	C3B-CAB	-2.06	1.43	1.47
50	b	841	CLA	CAA-C2A	2.06	1.57	1.54
50	y	313	CLA	MG-NC	2.06	2.11	2.06
50	a	815	CLA	CAA-C2A	2.06	1.57	1.54
48	w	317	SQD	O8-S	2.06	1.54	1.47
50	b	824	CLA	MG-NC	2.06	2.11	2.06
50	b	812	CLA	MG-NC	2.05	2.11	2.06
50	a	812	CLA	CBB-CAB	-2.05	1.27	1.32
48	j	106	SQD	O8-S	2.05	1.54	1.47
50	w	303	CLA	CHD-C1D	2.05	1.42	1.38
50	k	203	CLA	CAA-C2A	2.05	1.57	1.53
46	B	605	LMG	O7-C10	2.05	1.40	1.34
50	x	307	CLA	MG-NC	2.05	2.11	2.06
51	a	804	DGD	O1G-C1A	2.04	1.39	1.33
50	a	854	CLA	MG-NC	2.04	2.11	2.06
50	b	811	CLA	MG-NC	2.04	2.11	2.06
48	B	604	SQD	O8-S	2.04	1.54	1.47
50	w	316	CLA	MG-NC	2.04	2.11	2.06
47	A	405	PQ9	C22-C23	2.03	1.37	1.33
50	b	815	CLA	MG-NC	2.03	2.11	2.06
54	x	301	CHL	O1D-CGD	2.03	1.26	1.21
52	a	808	CL0	C4D-ND	2.03	1.40	1.37
46	H	401	LMG	O6-C1	2.03	1.47	1.41
50	b	823	CLA	CAA-C2A	2.02	1.57	1.54
50	y	310	CLA	MG-NC	2.02	2.11	2.06
50	b	843	CLA	CAA-C2A	2.02	1.57	1.54
50	y	306	CLA	CAA-C2A	2.02	1.57	1.53
50	b	845	CLA	MG-NC	2.02	2.11	2.06
54	x	319	CHL	O1D-CGD	2.01	1.26	1.21
46	7	301	LMG	O6-C1	2.01	1.47	1.41
54	z	312	CHL	O1D-CGD	2.01	1.26	1.21
50	y	302	CLA	MG-NC	2.01	2.11	2.06
50	b	804	CLA	CAA-C2A	2.01	1.57	1.53
54	x	311	CHL	O1D-CGD	2.01	1.26	1.21
50	l	306	CLA	CAA-C2A	2.01	1.57	1.54
50	z	303	CLA	CAA-C2A	2.01	1.57	1.53
54	z	312	CHL	MG-NC	2.00	2.11	2.06
54	w	304	CHL	O1D-CGD	2.00	1.26	1.21
50	a	815	CLA	MG-NC	2.00	2.11	2.06
50	y	311	CLA	CAA-C2A	2.00	1.57	1.54

All (1719) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
47	A	405	PQ9	C34-C33-C35	-28.08	83.87	115.98
47	A	405	PQ9	C19-C18-C20	-27.38	69.21	115.27
47	A	405	PQ9	C24-C23-C25	-27.28	69.37	115.27
47	A	405	PQ9	C14-C13-C15	-26.98	69.88	115.27
47	A	405	PQ9	C29-C28-C27	17.84	169.45	123.68
47	A	405	PQ9	C15-C13-C12	-17.81	85.07	121.12
47	A	405	PQ9	C25-C23-C22	-17.60	85.50	121.12
47	A	405	PQ9	C20-C18-C17	-17.23	86.25	121.12
47	A	405	PQ9	C29-C28-C30	-16.75	87.09	115.27
47	A	405	PQ9	C34-C33-C32	16.62	166.31	123.68
54	z	312	CHL	C4A-NA-C1A	13.00	112.55	106.71
47	A	405	PQ9	C19-C18-C17	12.38	155.44	123.68
47	A	405	PQ9	C14-C13-C12	12.19	154.95	123.68
47	A	405	PQ9	C24-C23-C22	12.16	154.86	123.68
50	y	313	CLA	C4A-NA-C1A	11.23	111.76	106.71
50	b	803	CLA	C4A-NA-C1A	11.15	111.72	106.71
50	b	824	CLA	C4A-NA-C1A	10.98	111.64	106.71
50	a	822	CLA	C4A-NA-C1A	10.94	111.62	106.71
50	a	838	CLA	C4A-NA-C1A	10.94	111.62	106.71
50	a	846	CLA	C4A-NA-C1A	10.86	111.59	106.71
50	w	316	CLA	C4A-NA-C1A	10.85	111.58	106.71
54	x	319	CHL	C4A-NA-C1A	10.84	111.58	106.71
50	b	843	CLA	C4A-NA-C1A	10.73	111.53	106.71
50	b	833	CLA	C4A-NA-C1A	10.72	111.53	106.71
50	a	814	CLA	C4A-NA-C1A	10.62	111.48	106.71
50	b	805	CLA	C4A-NA-C1A	10.60	111.47	106.71
50	k	204	CLA	C4A-NA-C1A	10.60	111.47	106.71
50	f	302	CLA	C4A-NA-C1A	10.59	111.47	106.71
50	b	814	CLA	C4A-NA-C1A	10.55	111.45	106.71
50	w	305	CLA	C4A-NA-C1A	10.49	111.42	106.71
50	a	824	CLA	C4A-NA-C1A	10.48	111.42	106.71
50	b	807	CLA	C4A-NA-C1A	10.47	111.41	106.71
50	w	314	CLA	C4A-NA-C1A	10.45	111.40	106.71
54	x	305	CHL	C4A-NA-C1A	10.44	111.40	106.71
50	j	102	CLA	C4A-NA-C1A	10.40	111.38	106.71
50	h	201	CLA	C4A-NA-C1A	10.39	111.38	106.71
50	f	301	CLA	C4A-NA-C1A	10.38	111.37	106.71
50	z	310	CLA	C4A-NA-C1A	10.35	111.36	106.71
50	x	308	CLA	C4A-NA-C1A	10.31	111.34	106.71
50	w	308	CLA	C4A-NA-C1A	10.29	111.33	106.71
50	a	811	CLA	C4A-NA-C1A	10.28	111.33	106.71
50	y	304	CLA	C4A-NA-C1A	10.28	111.33	106.71
50	y	308	CLA	C4A-NA-C1A	10.27	111.33	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	y	303	CLA	C4A-NA-C1A	10.27	111.32	106.71
50	a	853	CLA	C4A-NA-C1A	10.25	111.31	106.71
50	b	841	CLA	C4A-NA-C1A	10.24	111.31	106.71
50	y	311	CLA	C4A-NA-C1A	10.23	111.31	106.71
50	b	837	CLA	C4A-NA-C1A	10.23	111.31	106.71
50	a	857	CLA	C4A-NA-C1A	10.22	111.30	106.71
50	b	826	CLA	C4A-NA-C1A	10.19	111.29	106.71
54	z	304	CHL	C4A-NA-C1A	10.18	111.28	106.71
50	b	848	CLA	C4A-NA-C1A	10.17	111.28	106.71
50	b	815	CLA	C4A-NA-C1A	10.13	111.26	106.71
50	y	310	CLA	C4A-NA-C1A	10.11	111.25	106.71
50	x	306	CLA	C4A-NA-C1A	10.09	111.24	106.71
50	b	806	CLA	C4A-NA-C1A	10.08	111.24	106.71
50	w	315	CLA	C4A-NA-C1A	10.07	111.23	106.71
54	x	301	CHL	C4A-NA-C1A	10.07	111.23	106.71
50	x	307	CLA	C4A-NA-C1A	10.06	111.23	106.71
50	x	318	CLA	C4A-NA-C1A	10.06	111.23	106.71
50	x	302	CLA	C4A-NA-C1A	10.05	111.22	106.71
50	w	302	CLA	C4A-NA-C1A	10.02	111.21	106.71
50	x	309	CLA	C4A-NA-C1A	10.00	111.20	106.71
50	a	821	CLA	C4A-NA-C1A	9.99	111.20	106.71
50	b	801	CLA	C4A-NA-C1A	9.99	111.20	106.71
50	a	855	CLA	C4A-NA-C1A	9.97	111.19	106.71
50	b	822	CLA	C4A-NA-C1A	9.97	111.19	106.71
50	a	801	CLA	C4A-NA-C1A	9.95	111.18	106.71
50	a	815	CLA	C4A-NA-C1A	9.94	111.18	106.71
50	b	840	CLA	C4A-NA-C1A	9.93	111.17	106.71
50	a	834	CLA	C4A-NA-C1A	9.92	111.16	106.71
50	b	838	CLA	C4A-NA-C1A	9.85	111.14	106.71
54	w	309	CHL	C4A-NA-C1A	9.82	111.12	106.71
54	w	304	CHL	C4A-NA-C1A	9.80	111.11	106.71
50	b	808	CLA	C4A-NA-C1A	9.78	111.10	106.71
50	a	843	CLA	C4A-NA-C1A	9.77	111.10	106.71
50	b	836	CLA	C4A-NA-C1A	9.77	111.10	106.71
50	a	851	CLA	C4A-NA-C1A	9.75	111.09	106.71
50	z	302	CLA	C4A-NA-C1A	9.75	111.09	106.71
50	a	837	CLA	C4A-NA-C1A	9.75	111.09	106.71
50	z	309	CLA	C4A-NA-C1A	9.74	111.08	106.71
50	a	809	CLA	C4A-NA-C1A	9.74	111.08	106.71
50	y	306	CLA	C4A-NA-C1A	9.73	111.08	106.71
50	z	305	CLA	C4A-NA-C1A	9.72	111.08	106.71
50	b	846	CLA	C4A-NA-C1A	9.70	111.07	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	l	301	CLA	C4A-NA-C1A	9.69	111.06	106.71
54	w	311	CHL	C4A-NA-C1A	9.68	111.06	106.71
50	z	307	CLA	C4A-NA-C1A	9.65	111.05	106.71
50	f	303	CLA	C4A-NA-C1A	9.65	111.04	106.71
50	k	205	CLA	C4A-NA-C1A	9.64	111.04	106.71
50	y	305	CLA	C4A-NA-C1A	9.62	111.03	106.71
50	a	819	CLA	C4A-NA-C1A	9.62	111.03	106.71
50	x	316	CLA	C4A-NA-C1A	9.62	111.03	106.71
50	b	844	CLA	C4A-NA-C1A	9.61	111.03	106.71
50	a	823	CLA	C4A-NA-C1A	9.60	111.02	106.71
50	b	847	CLA	C4A-NA-C1A	9.60	111.02	106.71
50	a	845	CLA	C4A-NA-C1A	9.59	111.02	106.71
50	b	810	CLA	C4A-NA-C1A	9.59	111.02	106.71
50	b	832	CLA	C4A-NA-C1A	9.57	111.01	106.71
50	l	306	CLA	C4A-NA-C1A	9.55	111.00	106.71
50	a	835	CLA	C4A-NA-C1A	9.54	111.00	106.71
50	k	203	CLA	C4A-NA-C1A	9.54	110.99	106.71
50	z	306	CLA	C4A-NA-C1A	9.52	110.98	106.71
50	y	302	CLA	C4A-NA-C1A	9.51	110.98	106.71
50	a	841	CLA	C4A-NA-C1A	9.50	110.98	106.71
50	b	823	CLA	C4A-NA-C1A	9.49	110.97	106.71
50	w	306	CLA	C4A-NA-C1A	9.49	110.97	106.71
50	w	303	CLA	C4A-NA-C1A	9.46	110.96	106.71
54	x	311	CHL	C4A-NA-C1A	9.44	110.95	106.71
50	a	826	CLA	C4A-NA-C1A	9.41	110.94	106.71
50	g	204	CLA	C4A-NA-C1A	9.40	110.93	106.71
50	a	802	CLA	C4A-NA-C1A	9.38	110.92	106.71
50	b	839	CLA	C4A-NA-C1A	9.34	110.91	106.71
50	b	849	CLA	C4A-NA-C1A	9.32	110.90	106.71
50	z	319	CLA	C4A-NA-C1A	9.29	110.88	106.71
50	a	812	CLA	C4A-NA-C1A	9.28	110.88	106.71
50	x	310	CLA	C4A-NA-C1A	9.28	110.88	106.71
50	z	316	CLA	C4A-NA-C1A	9.24	110.86	106.71
50	b	851	CLA	C4A-NA-C1A	9.21	110.85	106.71
50	a	836	CLA	C4A-NA-C1A	9.21	110.85	106.71
50	y	307	CLA	C4A-NA-C1A	9.20	110.84	106.71
50	a	840	CLA	C4A-NA-C1A	9.14	110.82	106.71
50	a	842	CLA	C4A-NA-C1A	9.13	110.81	106.71
50	a	852	CLA	C4A-NA-C1A	9.12	110.81	106.71
50	a	817	CLA	C4A-NA-C1A	9.08	110.79	106.71
50	b	804	CLA	C4A-NA-C1A	9.08	110.79	106.71
50	a	833	CLA	C4A-NA-C1A	9.07	110.78	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	z	308	CLA	C4A-NA-C1A	9.06	110.78	106.71
50	b	812	CLA	C4A-NA-C1A	9.06	110.78	106.71
50	b	811	CLA	C4A-NA-C1A	9.03	110.77	106.71
50	a	849	CLA	C4A-NA-C1A	8.98	110.74	106.71
50	y	314	CLA	C4A-NA-C1A	8.97	110.74	106.71
50	b	825	CLA	C4A-NA-C1A	8.95	110.73	106.71
50	w	310	CLA	C4A-NA-C1A	8.94	110.73	106.71
50	b	835	CLA	C4A-NA-C1A	8.91	110.71	106.71
50	x	312	CLA	C4A-NA-C1A	8.89	110.70	106.71
50	z	303	CLA	C4A-NA-C1A	8.88	110.70	106.71
50	x	304	CLA	C4A-NA-C1A	8.85	110.68	106.71
50	a	820	CLA	C4A-NA-C1A	8.82	110.67	106.71
50	y	312	CLA	C4A-NA-C1A	8.80	110.66	106.71
50	b	834	CLA	C4A-NA-C1A	8.79	110.66	106.71
47	A	405	PQ9	C30-C28-C27	-8.78	103.34	121.12
50	a	844	CLA	C4A-NA-C1A	8.78	110.65	106.71
50	a	848	CLA	C4A-NA-C1A	8.78	110.65	106.71
50	b	828	CLA	C4A-NA-C1A	8.78	110.65	106.71
50	b	809	CLA	C4A-NA-C1A	8.75	110.64	106.71
50	a	816	CLA	C4A-NA-C1A	8.74	110.64	106.71
50	l	305	CLA	C4A-NA-C1A	8.71	110.62	106.71
50	x	313	CLA	C4A-NA-C1A	8.66	110.60	106.71
50	a	839	CLA	C4A-NA-C1A	8.58	110.56	106.71
50	g	203	CLA	C4A-NA-C1A	8.53	110.54	106.71
50	b	802	CLA	C4A-NA-C1A	8.52	110.54	106.71
50	w	307	CLA	C4A-NA-C1A	8.52	110.54	106.71
50	z	311	CLA	C4A-NA-C1A	8.49	110.52	106.71
50	a	854	CLA	C4A-NA-C1A	8.47	110.52	106.71
50	a	850	CLA	C4A-NA-C1A	8.45	110.51	106.71
50	x	303	CLA	C4A-NA-C1A	8.43	110.50	106.71
50	y	309	CLA	C4A-NA-C1A	8.19	110.39	106.71
50	a	818	CLA	C4A-NA-C1A	8.16	110.38	106.71
47	A	405	PQ9	C11-C12-C13	-8.12	113.28	126.79
50	b	842	CLA	C4A-NA-C1A	8.10	110.35	106.71
50	b	813	CLA	C4A-NA-C1A	8.07	110.33	106.71
50	a	856	CLA	C4A-NA-C1A	7.83	110.23	106.71
50	a	858	CLA	C4A-NA-C1A	7.81	110.22	106.71
50	a	813	CLA	C4A-NA-C1A	7.80	110.21	106.71
50	g	201	CLA	C4A-NA-C1A	7.76	110.19	106.71
52	a	808	CL0	CMD-C2D-C1D	7.71	138.30	124.71
47	A	405	PQ9	C16-C17-C18	-7.51	109.58	127.66
52	a	808	CL0	C2C-C1C-NC	6.97	116.50	109.97

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
52	a	808	CL0	C2D-C1D-ND	6.73	115.06	110.10
53	b	827	PQN	C14-C13-C15	6.71	126.55	115.27
53	a	825	PQN	C14-C13-C15	6.46	126.14	115.27
47	A	405	PQ9	C21-C22-C23	-6.45	112.13	127.66
47	A	405	PQ9	C26-C27-C28	-6.15	112.85	127.66
52	a	808	CL0	C1C-C2C-C3C	-5.87	100.78	106.96
50	b	845	CLA	C4A-NA-C1A	5.85	109.33	106.71
50	y	307	CLA	CAB-C3B-C4B	5.79	137.36	128.46
50	y	302	CLA	CAB-C3B-C4B	5.72	137.25	128.46
43	z	318	BCR	C16-C17-C18	-5.70	119.18	127.31
50	a	821	CLA	CAB-C3B-C4B	5.68	137.20	128.46
52	a	808	CL0	C4A-NA-C1A	5.56	109.21	106.71
50	y	302	CLA	C1C-NC-C4C	5.43	109.15	106.71
50	z	308	CLA	C1D-CHD-C4C	5.37	126.38	120.68
54	z	304	CHL	CAA-C2A-C3A	-5.22	103.91	116.10
52	a	808	CL0	C1B-C2B-C3B	-5.08	102.19	106.92
45	5	302	A1H1M	C36-C08-C07	5.08	123.32	112.59
45	5	302	A1H1M	C06-C07-C08	4.93	122.99	112.59
52	a	808	CL0	C3D-C2D-C1D	-4.90	99.15	105.83
45	5	302	A1H1M	C13-O14-C15	4.87	123.24	113.69
53	b	827	PQN	C15-C13-C12	-4.80	111.40	121.12
50	a	852	CLA	O2D-CGD-CBD	4.80	119.80	111.27
50	b	849	CLA	CMB-C2B-C1B	-4.68	121.27	128.46
52	a	808	CL0	C1D-ND-C4D	-4.60	103.07	106.33
45	F	804	A1H1M	C06-C07-C08	4.58	122.27	112.59
45	F	804	A1H1M	C13-O14-C15	4.53	122.59	113.69
48	F	801	SQD	O47-C7-C8	-4.47	101.86	111.50
53	a	825	PQN	C15-C13-C12	-4.42	112.18	121.12
50	y	307	CLA	CAB-C3B-C2B	-4.41	116.05	124.69
47	A	405	PQ9	C11-C2-C1	4.41	120.46	116.88
50	b	839	CLA	O2D-CGD-CBD	4.36	119.02	111.27
50	y	309	CLA	O2D-CGD-CBD	4.33	118.96	111.27
43	4	101	BCR	C16-C17-C18	-4.32	121.14	127.31
47	A	405	PQ9	C35-C33-C32	-4.32	109.82	120.50
50	a	821	CLA	CAB-C3B-C2B	-4.32	116.23	124.69
50	a	847	CLA	O2D-CGD-CBD	4.30	118.90	111.27
54	z	304	CHL	O2D-CGD-CBD	4.29	118.90	111.27
54	w	304	CHL	CAB-C3B-C4B	4.27	135.03	128.46
45	5	302	A1H1M	C09-C10-C11	4.25	117.36	110.82
50	a	818	CLA	O2D-CGD-CBD	4.25	118.82	111.27
50	a	822	CLA	CMB-C2B-C1B	-4.24	121.95	128.46
43	a	803	BCR	C21-C20-C19	-4.21	117.03	125.34

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	b	810	CLA	O2D-CGD-CBD	4.20	118.74	111.27
54	x	319	CHL	O2D-CGD-CBD	4.20	118.73	111.27
50	z	308	CLA	OBD-CAD-CBD	-4.20	120.97	124.98
50	y	302	CLA	CAB-C3B-C2B	-4.18	116.49	124.69
54	w	309	CHL	CAA-C2A-C3A	-4.14	103.91	114.26
50	x	312	CLA	O2D-CGD-CBD	4.13	118.61	111.27
52	a	808	CL0	CHD-C1D-ND	-4.13	120.66	124.45
50	b	837	CLA	O2D-CGD-CBD	4.12	118.59	111.27
50	b	840	CLA	O2D-CGD-CBD	4.11	118.58	111.27
54	w	311	CHL	O2D-CGD-CBD	4.11	118.58	111.27
50	w	310	CLA	CAC-C3C-C2C	4.09	134.52	127.53
50	b	843	CLA	O2D-CGD-CBD	4.09	118.53	111.27
50	a	812	CLA	O2D-CGD-CBD	4.08	118.53	111.27
50	a	813	CLA	O2D-CGD-CBD	4.07	118.51	111.27
50	b	815	CLA	O2D-CGD-CBD	4.07	118.50	111.27
50	h	201	CLA	O2D-CGD-CBD	4.06	118.48	111.27
54	x	301	CHL	CAA-C2A-C3A	-4.06	104.13	114.26
50	a	819	CLA	O2D-CGD-CBD	4.05	118.46	111.27
50	w	314	CLA	O2D-CGD-CBD	4.05	118.46	111.27
50	a	834	CLA	O2D-CGD-CBD	4.04	118.45	111.27
50	x	304	CLA	O2D-CGD-CBD	4.04	118.44	111.27
50	f	301	CLA	O2D-CGD-CBD	4.03	118.43	111.27
54	w	309	CHL	O2D-CGD-CBD	4.03	118.43	111.27
50	a	801	CLA	O2D-CGD-CBD	4.03	118.43	111.27
50	b	847	CLA	O2D-CGD-CBD	4.03	118.42	111.27
50	b	849	CLA	O2D-CGD-CBD	4.02	118.41	111.27
43	k	201	BCR	C15-C14-C13	-4.02	121.58	127.31
50	a	845	CLA	O2D-CGD-CBD	4.01	118.39	111.27
50	z	319	CLA	O2D-CGD-CBD	4.01	118.39	111.27
50	y	303	CLA	O2D-CGD-CBD	4.00	118.38	111.27
50	b	836	CLA	O2D-CGD-CBD	4.00	118.38	111.27
50	b	809	CLA	O2D-CGD-CBD	3.99	118.36	111.27
50	z	308	CLA	O2D-CGD-CBD	3.99	118.36	111.27
50	z	310	CLA	O2D-CGD-CBD	3.99	118.35	111.27
50	a	817	CLA	O2D-CGD-CBD	3.98	118.34	111.27
50	b	814	CLA	CMB-C2B-C1B	-3.97	122.36	128.46
50	b	845	CLA	O2D-CGD-CBD	3.97	118.32	111.27
50	a	826	CLA	O2D-CGD-CBD	3.96	118.31	111.27
50	x	313	CLA	O2D-CGD-CBD	3.95	118.29	111.27
50	x	303	CLA	O2D-CGD-CBD	3.95	118.29	111.27
50	z	311	CLA	O2D-CGD-CBD	3.93	118.25	111.27
50	a	809	CLA	O2D-CGD-CBD	3.93	118.25	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	y	313	CLA	O2D-CGD-CBD	3.93	118.25	111.27
50	a	822	CLA	O2D-CGD-CBD	3.92	118.24	111.27
50	x	308	CLA	O2D-CGD-CBD	3.92	118.24	111.27
50	b	832	CLA	O2D-CGD-CBD	3.91	118.22	111.27
50	g	201	CLA	O2D-CGD-CBD	3.91	118.22	111.27
50	g	203	CLA	O2D-CGD-CBD	3.89	118.18	111.27
50	w	303	CLA	O2D-CGD-CBD	3.89	118.18	111.27
50	x	310	CLA	O2D-CGD-CBD	3.89	118.18	111.27
50	l	305	CLA	O2D-CGD-CBD	3.89	118.17	111.27
50	b	834	CLA	O2D-CGD-CBD	3.88	118.17	111.27
50	a	836	CLA	O2D-CGD-CBD	3.87	118.15	111.27
50	j	102	CLA	O2D-CGD-CBD	3.87	118.14	111.27
50	b	814	CLA	CHD-C1D-ND	-3.87	120.90	124.45
50	w	302	CLA	O2D-CGD-CBD	3.86	118.12	111.27
50	f	302	CLA	O2D-CGD-CBD	3.86	118.12	111.27
50	b	805	CLA	O2D-CGD-CBD	3.86	118.12	111.27
50	a	816	CLA	O2D-CGD-CBD	3.85	118.11	111.27
50	a	824	CLA	O2D-CGD-CBD	3.85	118.11	111.27
50	z	302	CLA	O2D-CGD-CBD	3.85	118.11	111.27
54	x	311	CHL	O2D-CGD-CBD	3.85	118.10	111.27
50	b	842	CLA	O2D-CGD-CBD	3.85	118.10	111.27
45	5	302	A1H1M	C36-C35-C11	3.84	116.73	110.82
50	a	835	CLA	O2D-CGD-CBD	3.84	118.09	111.27
50	a	814	CLA	O2D-CGD-CBD	3.84	118.09	111.27
50	b	826	CLA	O2D-CGD-CBD	3.84	118.08	111.27
50	b	822	CLA	O2D-CGD-CBD	3.82	118.06	111.27
50	w	310	CLA	CAC-C3C-C4C	-3.82	119.85	124.81
50	b	828	CLA	O2D-CGD-CBD	3.82	118.06	111.27
50	b	851	CLA	CMB-C2B-C1B	-3.82	122.59	128.46
50	a	842	CLA	O2D-CGD-CBD	3.81	118.05	111.27
50	b	802	CLA	O2D-CGD-CBD	3.81	118.05	111.27
50	k	203	CLA	O2D-CGD-CBD	3.81	118.04	111.27
50	a	853	CLA	O2D-CGD-CBD	3.81	118.04	111.27
50	a	854	CLA	O2D-CGD-CBD	3.81	118.04	111.27
50	w	310	CLA	O2D-CGD-CBD	3.81	118.04	111.27
50	a	815	CLA	O2D-CGD-CBD	3.81	118.03	111.27
50	b	851	CLA	O2D-CGD-CBD	3.80	118.02	111.27
50	w	305	CLA	C4-C3-C5	-3.80	111.64	115.98
50	y	314	CLA	O2D-CGD-CBD	3.80	118.01	111.27
50	k	205	CLA	O2D-CGD-CBD	3.79	118.01	111.27
50	b	838	CLA	O2D-CGD-CBD	3.79	118.01	111.27
43	a	831	BCR	C19-C18-C17	-3.79	116.38	124.81

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	b	824	CLA	O2D-CGD-CBD	3.79	118.00	111.27
50	y	306	CLA	O2D-CGD-CBD	3.78	117.99	111.27
45	5	302	A1H1M	C09-C08-C07	-3.77	104.61	112.59
50	y	305	CLA	O2D-CGD-CBD	3.77	117.97	111.27
50	b	844	CLA	O2D-CGD-CBD	3.77	117.96	111.27
50	l	306	CLA	CMB-C2B-C1B	-3.76	122.68	128.46
50	b	833	CLA	O2D-CGD-CBD	3.76	117.95	111.27
50	a	821	CLA	O2D-CGD-CBD	3.76	117.94	111.27
50	x	302	CLA	O2D-CGD-CBD	3.75	117.94	111.27
50	l	301	CLA	O2D-CGD-CBD	3.75	117.93	111.27
54	x	301	CHL	O2D-CGD-CBD	3.75	117.93	111.27
50	b	823	CLA	O2D-CGD-CBD	3.75	117.93	111.27
50	y	307	CLA	O2D-CGD-CBD	3.75	117.93	111.27
50	x	316	CLA	O2D-CGD-CBD	3.75	117.93	111.27
50	z	316	CLA	O2D-CGD-CBD	3.75	117.92	111.27
50	a	846	CLA	O2D-CGD-CBD	3.74	117.92	111.27
50	b	814	CLA	O2D-CGD-CBD	3.74	117.92	111.27
50	a	855	CLA	O2D-CGD-CBD	3.74	117.91	111.27
50	a	848	CLA	O2D-CGD-CBD	3.74	117.91	111.27
50	y	311	CLA	O2D-CGD-CBD	3.74	117.91	111.27
50	w	316	CLA	CHD-C1D-ND	-3.74	121.02	124.45
50	z	306	CLA	O2D-CGD-CBD	3.73	117.89	111.27
50	b	847	CLA	CHD-C1D-ND	-3.72	121.03	124.45
50	b	846	CLA	O2D-CGD-CBD	3.72	117.88	111.27
50	x	307	CLA	O2D-CGD-CBD	3.72	117.88	111.27
50	w	315	CLA	O2D-CGD-CBD	3.72	117.88	111.27
50	x	318	CLA	O2D-CGD-CBD	3.72	117.88	111.27
50	a	850	CLA	O2D-CGD-CBD	3.71	117.85	111.27
50	b	806	CLA	O2D-CGD-CBD	3.70	117.84	111.27
50	b	804	CLA	O2D-CGD-CBD	3.69	117.83	111.27
50	b	803	CLA	CHD-C1D-ND	-3.69	121.06	124.45
50	a	857	CLA	O2D-CGD-CBD	3.69	117.82	111.27
50	a	840	CLA	O2D-CGD-CBD	3.68	117.81	111.27
50	b	825	CLA	O2D-CGD-CBD	3.68	117.81	111.27
50	b	835	CLA	O2D-CGD-CBD	3.68	117.80	111.27
50	y	312	CLA	O2D-CGD-CBD	3.67	117.80	111.27
50	z	307	CLA	O2D-CGD-CBD	3.67	117.80	111.27
54	z	312	CHL	CHD-C1D-ND	-3.67	121.08	124.45
50	a	841	CLA	O2D-CGD-CBD	3.67	117.79	111.27
50	x	309	CLA	O2D-CGD-CBD	3.67	117.79	111.27
50	y	312	CLA	C4-C3-C5	-3.67	111.79	115.98
50	w	307	CLA	O2D-CGD-CBD	3.67	117.78	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	k	204	CLA	O2D-CGD-CBD	3.66	117.78	111.27
50	y	302	CLA	O2D-CGD-CBD	3.66	117.77	111.27
50	b	808	CLA	O2D-CGD-CBD	3.65	117.75	111.27
50	a	858	CLA	O2D-CGD-CBD	3.65	117.75	111.27
50	b	811	CLA	CHD-C1D-ND	-3.65	121.10	124.45
45	F	804	A1H1M	C36-C08-C07	3.65	120.29	112.59
50	w	305	CLA	O2D-CGD-CBD	3.64	117.75	111.27
50	b	807	CLA	O2D-CGD-CBD	3.64	117.74	111.27
54	x	305	CHL	O2D-CGD-CBD	3.64	117.74	111.27
45	F	804	A1H1M	C09-C08-C07	-3.64	104.90	112.59
54	w	304	CHL	O2D-CGD-CBD	3.64	117.73	111.27
43	j	101	BCR	C2-C1-C6	3.64	116.08	110.48
50	a	837	CLA	O2D-CGD-CBD	3.63	117.72	111.27
53	a	825	PQN	C9-C10-C5	3.62	123.29	119.26
43	4	101	BCR	C15-C14-C13	-3.62	122.14	127.31
50	b	847	CLA	CMB-C2B-C1B	-3.62	122.90	128.46
50	f	303	CLA	O2D-CGD-CBD	3.62	117.69	111.27
50	w	307	CLA	CMB-C2B-C1B	-3.61	122.91	128.46
50	y	308	CLA	O2D-CGD-CBD	3.61	117.68	111.27
45	5	302	A1H1M	O14-C15-C18	3.61	117.36	109.75
50	b	848	CLA	O2D-CGD-CBD	3.61	117.68	111.27
50	a	856	CLA	O2D-CGD-CBD	3.61	117.68	111.27
50	b	803	CLA	O2D-CGD-CBD	3.60	117.67	111.27
53	b	827	PQN	C9-C10-C5	3.60	123.26	119.26
50	a	839	CLA	O2D-CGD-CBD	3.60	117.66	111.27
51	a	804	DGD	O6D-C1D-O3G	-3.59	101.48	109.97
50	a	820	CLA	O2D-CGD-CBD	3.58	117.63	111.27
43	l	303	BCR	C37-C22-C23	3.58	123.72	118.08
50	z	305	CLA	O2D-CGD-CBD	3.58	117.63	111.27
50	a	849	CLA	O2D-CGD-CBD	3.58	117.63	111.27
50	z	308	CLA	OBD-CAD-C3D	3.58	130.43	125.86
50	b	801	CLA	O2D-CGD-CBD	3.56	117.60	111.27
54	w	304	CHL	CAB-C3B-C2B	-3.56	117.71	124.69
50	a	833	CLA	O2D-CGD-CBD	3.56	117.59	111.27
50	b	813	CLA	O2D-CGD-CBD	3.55	117.58	111.27
50	x	306	CLA	O2D-CGD-CBD	3.53	117.54	111.27
50	w	306	CLA	O2D-CGD-CBD	3.53	117.54	111.27
50	a	851	CLA	O2D-CGD-CBD	3.53	117.53	111.27
50	w	303	CLA	CHD-C1D-ND	-3.52	121.22	124.45
43	j	101	BCR	C16-C17-C18	-3.52	122.28	127.31
50	a	802	CLA	O2D-CGD-CBD	3.52	117.52	111.27
50	a	843	CLA	O2D-CGD-CBD	3.52	117.52	111.27

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	a	827	BCR	C16-C17-C18	-3.52	122.29	127.31
50	a	838	CLA	O2D-CGD-CBD	3.52	117.52	111.27
50	y	304	CLA	CHD-C1D-ND	-3.51	121.23	124.45
48	w	318	SQD	O47-C7-C8	3.50	119.04	111.50
45	F	804	A1H1M	C36-C35-C11	3.50	116.19	110.82
50	x	302	CLA	CAA-C2A-C3A	-3.49	107.95	116.10
50	b	815	CLA	CHD-C1D-ND	-3.49	121.25	124.45
54	x	311	CHL	CAA-C2A-C3A	-3.49	104.34	114.44
50	a	844	CLA	O2D-CGD-CBD	3.48	117.46	111.27
50	l	306	CLA	O2D-CGD-CBD	3.48	117.46	111.27
50	a	823	CLA	O2D-CGD-CBD	3.47	117.44	111.27
50	w	308	CLA	CHD-C1D-ND	-3.47	121.26	124.45
50	a	835	CLA	CHD-C1D-ND	-3.46	121.27	124.45
50	z	306	CLA	CHD-C1D-ND	-3.45	121.28	124.45
50	z	303	CLA	O2D-CGD-CBD	3.44	117.38	111.27
43	j	103	BCR	C20-C21-C22	-3.44	122.40	127.31
50	a	841	CLA	CMB-C2B-C1B	-3.43	123.19	128.46
50	a	844	CLA	CHD-C1D-ND	-3.43	121.30	124.45
54	z	312	CHL	O2D-CGD-CBD	3.43	117.36	111.27
50	a	837	CLA	O2A-CGA-CBA	3.43	122.67	111.91
50	a	854	CLA	CMB-C2B-C1B	-3.42	123.21	128.46
50	w	308	CLA	O2D-CGD-CBD	3.41	117.32	111.27
50	a	845	CLA	CMB-C2B-C1B	-3.41	123.23	128.46
50	a	820	CLA	CHD-C1D-ND	-3.40	121.33	124.45
50	y	310	CLA	O2D-CGD-CBD	3.39	117.29	111.27
50	b	849	CLA	CMB-C2B-C3B	3.39	131.02	124.68
50	b	848	CLA	CMB-C2B-C1B	-3.38	123.26	128.46
50	a	851	CLA	CMB-C2B-C1B	-3.37	123.28	128.46
50	a	822	CLA	C4-C3-C5	-3.37	112.13	115.98
50	b	841	CLA	O2D-CGD-CBD	3.37	117.25	111.27
50	a	842	CLA	CMB-C2B-C1B	-3.36	123.30	128.46
54	z	312	CHL	C1-C2-C3	3.36	131.86	126.04
50	b	838	CLA	CMB-C2B-C1B	-3.36	123.30	128.46
50	y	313	CLA	CMB-C2B-C1B	-3.34	123.33	128.46
50	z	309	CLA	O2D-CGD-CBD	3.34	117.20	111.27
50	b	835	CLA	CMB-C2B-C1B	-3.34	123.33	128.46
50	g	204	CLA	O2D-CGD-CBD	3.34	117.20	111.27
50	z	307	CLA	CMB-C2B-C1B	-3.33	123.35	128.46
43	b	850	BCR	C16-C17-C18	-3.32	122.57	127.31
43	b	819	BCR	C11-C10-C9	3.32	132.05	127.31
50	b	839	CLA	CMB-C2B-C1B	-3.32	123.36	128.46
50	y	302	CLA	O2A-CGA-CBA	3.32	122.32	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	k	201	BCR	C2-C1-C6	3.32	115.59	110.48
50	a	818	CLA	CMB-C2B-C1B	-3.31	123.37	128.46
50	a	811	CLA	CHD-C1D-ND	-3.30	121.42	124.45
50	y	308	CLA	CMB-C2B-C1B	-3.30	123.39	128.46
50	b	811	CLA	O2D-CGD-CBD	3.30	117.13	111.27
50	y	311	CLA	CMB-C2B-C1B	-3.30	123.39	128.46
50	z	309	CLA	CMB-C2B-C1B	-3.29	123.41	128.46
50	b	809	CLA	C12-C11-C10	-3.28	102.00	113.62
43	z	318	BCR	C20-C21-C22	-3.28	122.62	127.31
43	a	831	BCR	C19-C20-C21	-3.28	116.75	123.47
50	b	815	CLA	CMB-C2B-C1B	-3.27	123.43	128.46
43	x	314	BCR	C21-C20-C19	-3.27	113.02	123.22
45	F	804	A1H1M	O19-C20-O21	-3.27	101.55	110.67
50	b	804	CLA	CHD-C1D-ND	-3.26	121.45	124.45
43	b	831	BCR	C2-C1-C6	3.26	115.50	110.48
50	a	815	CLA	CHD-C1D-ND	-3.26	121.46	124.45
50	a	826	CLA	CMB-C2B-C1B	-3.25	123.46	128.46
50	a	819	CLA	CMB-C2B-C1B	-3.25	123.47	128.46
50	a	839	CLA	CHD-C1D-ND	-3.25	121.47	124.45
50	a	858	CLA	CHD-C1D-ND	-3.25	121.47	124.45
54	x	301	CHL	CHD-C1D-ND	-3.25	121.47	124.45
50	b	832	CLA	O2A-CGA-CBA	3.25	122.09	111.91
50	b	813	CLA	CHD-C1D-ND	-3.25	121.47	124.45
50	a	811	CLA	O2D-CGD-CBD	3.25	117.04	111.27
50	a	843	CLA	O2A-CGA-CBA	3.24	122.08	111.91
50	b	807	CLA	CHD-C1D-ND	-3.24	121.48	124.45
43	a	810	BCR	C37-C22-C23	3.24	121.75	114.60
50	b	844	CLA	CMB-C2B-C1B	-3.23	123.49	128.46
50	f	301	CLA	CMB-C2B-C1B	-3.23	123.50	128.46
50	x	312	CLA	CMB-C2B-C1B	-3.23	123.50	128.46
43	b	831	BCR	C20-C21-C22	-3.22	122.71	127.31
50	a	843	CLA	CHD-C1D-ND	-3.22	121.49	124.45
50	b	808	CLA	CHD-C1D-ND	-3.22	121.50	124.45
50	b	843	CLA	O2A-CGA-CBA	3.22	122.00	111.91
50	w	308	CLA	CMB-C2B-C1B	-3.21	123.53	128.46
50	b	812	CLA	CHD-C1D-ND	-3.21	121.50	124.45
50	y	311	CLA	C4-C3-C5	-3.20	112.32	115.98
50	b	812	CLA	CMB-C2B-C1B	-3.20	123.54	128.46
50	a	818	CLA	C12-C11-C10	-3.20	102.30	113.62
50	b	846	CLA	O2A-CGA-CBA	3.20	121.95	111.91
50	a	839	CLA	CMB-C2B-C1B	-3.20	123.55	128.46
50	z	308	CLA	CMB-C2B-C1B	-3.20	123.55	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	a	838	CLA	CMB-C2B-C1B	-3.19	123.56	128.46
50	g	201	CLA	O2A-CGA-CBA	3.19	121.92	111.91
50	b	812	CLA	O2D-CGD-CBD	3.18	116.92	111.27
50	w	315	CLA	CMB-C2B-C1B	-3.18	123.57	128.46
50	b	809	CLA	CMB-C2B-C1B	-3.18	123.58	128.46
54	x	305	CHL	C2C-C3C-C4C	3.18	108.75	106.49
50	b	802	CLA	O2A-CGA-CBA	3.17	121.86	111.91
50	b	842	CLA	O2A-CGA-CBA	3.17	121.86	111.91
50	g	201	CLA	CHD-C1D-ND	-3.16	121.55	124.45
50	a	847	CLA	CMB-C2B-C1B	-3.16	123.61	128.46
50	y	313	CLA	CHD-C1D-ND	-3.16	121.55	124.45
50	b	828	CLA	CMB-C2B-C1B	-3.16	123.61	128.46
50	f	301	CLA	CHD-C1D-ND	-3.16	121.55	124.45
43	b	831	BCR	C29-C30-C25	3.15	115.34	110.48
54	x	305	CHL	CAA-C2A-C3A	-3.15	104.14	112.78
50	x	304	CLA	CMB-C2B-C1B	-3.15	123.63	128.46
50	x	307	CLA	O2A-CGA-CBA	3.15	121.78	111.91
50	a	857	CLA	O2A-CGA-CBA	3.14	121.76	111.91
50	b	809	CLA	O2A-CGA-CBA	3.14	121.76	111.91
50	a	813	CLA	CHD-C1D-ND	-3.14	121.57	124.45
50	y	314	CLA	CHD-C1D-ND	-3.14	121.57	124.45
50	z	306	CLA	O2A-CGA-CBA	3.13	121.74	111.91
50	b	851	CLA	O2A-CGA-CBA	3.13	121.72	111.91
50	w	314	CLA	CHD-C1D-ND	-3.13	121.58	124.45
50	a	847	CLA	C2A-C3A-C4A	-3.13	104.31	110.29
50	a	840	CLA	CHD-C1D-ND	-3.13	121.58	124.45
50	a	821	CLA	C12-C11-C10	-3.12	102.58	113.62
50	a	849	CLA	CHD-C1D-ND	-3.12	121.59	124.45
50	a	839	CLA	O2A-CGA-CBA	3.12	121.70	111.91
43	k	201	BCR	C29-C30-C25	3.12	115.28	110.48
50	y	303	CLA	O2A-CGA-CBA	3.12	121.69	111.91
50	b	848	CLA	CHD-C1D-ND	-3.12	121.59	124.45
50	w	306	CLA	CMB-C2B-C1B	-3.11	123.68	128.46
50	a	802	CLA	O2A-CGA-CBA	3.11	121.66	111.91
50	b	822	CLA	CHD-C1D-ND	-3.11	121.60	124.45
50	b	839	CLA	CHD-C1D-ND	-3.11	121.60	124.45
50	a	822	CLA	CMB-C2B-C3B	3.11	130.49	124.68
50	x	304	CLA	CHD-C1D-ND	-3.10	121.60	124.45
50	y	306	CLA	CMB-C2B-C1B	-3.10	123.70	128.46
50	l	306	CLA	O2A-CGA-CBA	3.10	121.64	111.91
50	z	316	CLA	O2A-CGA-CBA	3.10	121.63	111.91
50	b	835	CLA	C12-C11-C10	-3.10	102.67	113.62

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	a	801	CLA	C1-C2-C3	3.10	131.40	126.04
50	b	846	CLA	CMB-C2B-C1B	-3.09	123.71	128.46
50	b	826	CLA	CHD-C1D-ND	-3.09	121.61	124.45
50	k	205	CLA	CHD-C1D-ND	-3.09	121.61	124.45
50	a	809	CLA	CMB-C2B-C1B	-3.09	123.71	128.46
50	a	823	CLA	CMB-C2B-C1B	-3.09	123.71	128.46
50	b	814	CLA	O2A-CGA-CBA	3.09	121.61	111.91
50	b	839	CLA	O2A-CGA-CBA	3.09	121.61	111.91
50	a	852	CLA	C4-C3-C5	-3.09	112.45	115.98
50	a	845	CLA	O2A-CGA-CBA	3.09	121.60	111.91
50	b	833	CLA	CMB-C2B-C1B	-3.09	123.72	128.46
50	b	837	CLA	O2A-CGA-CBA	3.09	121.59	111.91
50	a	843	CLA	CMB-C2B-C1B	-3.09	123.72	128.46
50	y	313	CLA	O2A-CGA-CBA	3.08	121.59	111.91
50	a	819	CLA	O2A-CGA-CBA	3.08	121.59	111.91
50	b	815	CLA	O2A-CGA-CBA	3.08	121.59	111.91
50	y	314	CLA	CMB-C2B-C1B	-3.08	123.73	128.46
50	y	310	CLA	O2A-CGA-CBA	3.08	121.58	111.91
50	a	855	CLA	CMB-C2B-C1B	-3.08	123.73	128.46
50	x	312	CLA	CHD-C1D-ND	-3.08	121.63	124.45
50	a	850	CLA	CMB-C2B-C1B	-3.08	123.74	128.46
50	b	845	CLA	CHD-C1D-ND	-3.08	121.63	124.45
50	w	305	CLA	O2A-CGA-CBA	3.07	121.55	111.91
50	y	314	CLA	O2A-CGA-CBA	3.07	121.55	111.91
54	w	309	CHL	CHD-C1D-ND	-3.07	121.63	124.45
50	w	302	CLA	CMB-C2B-C1B	-3.07	123.75	128.46
50	a	856	CLA	O2A-CGA-CBA	3.07	121.54	111.91
50	g	203	CLA	O2A-CGA-CBA	3.07	121.53	111.91
50	a	817	CLA	CMB-C2B-C1B	-3.07	123.75	128.46
50	k	204	CLA	O2A-CGA-CBA	3.07	121.53	111.91
50	b	806	CLA	O2A-CGA-CBA	3.07	121.53	111.91
43	b	817	BCR	C15-C14-C13	-3.06	122.94	127.31
50	z	319	CLA	CMB-C2B-C1B	-3.06	123.75	128.46
55	x	321	LUT	C28-C29-C30	3.06	123.64	118.94
50	a	811	CLA	O2A-CGA-CBA	3.06	121.52	111.91
50	b	825	CLA	CMB-C2B-C1B	-3.06	123.76	128.46
50	b	825	CLA	C1-C2-C3	3.06	131.33	126.04
50	a	824	CLA	O2A-CGA-CBA	3.06	121.50	111.91
50	w	314	CLA	CMB-C2B-C1B	-3.06	123.77	128.46
50	b	849	CLA	O2A-CGA-CBA	3.06	121.50	111.91
50	a	821	CLA	CHD-C1D-ND	-3.05	121.65	124.45
54	x	305	CHL	CHD-C1D-ND	-3.05	121.65	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	a	833	CLA	CMB-C2B-C1B	-3.05	123.77	128.46
50	z	303	CLA	CMB-C2B-C1B	-3.05	123.77	128.46
50	z	311	CLA	CMB-C2B-C1B	-3.05	123.77	128.46
50	b	810	CLA	O2A-CGA-CBA	3.05	121.49	111.91
50	a	836	CLA	CMB-C2B-C1B	-3.05	123.78	128.46
50	a	850	CLA	O2A-CGA-CBA	3.05	121.48	111.91
50	b	823	CLA	CMB-C2B-C1B	-3.04	123.78	128.46
50	l	305	CLA	CMB-C2B-C1B	-3.04	123.78	128.46
50	z	302	CLA	O2A-CGA-CBA	3.04	121.46	111.91
50	a	823	CLA	CHD-C1D-ND	-3.04	121.66	124.45
50	a	842	CLA	CHD-C1D-ND	-3.04	121.66	124.45
50	x	309	CLA	CMB-C2B-C1B	-3.04	123.78	128.46
50	x	304	CLA	O2A-CGA-CBA	3.04	121.46	111.91
50	b	834	CLA	CMB-C2B-C1B	-3.04	123.79	128.46
50	y	307	CLA	CMB-C2B-C1B	-3.04	123.79	128.46
50	a	818	CLA	O2A-CGA-CBA	3.04	121.44	111.91
50	a	834	CLA	CMB-C2B-C1B	-3.04	123.79	128.46
50	j	102	CLA	CMB-C2B-C1B	-3.04	123.79	128.46
50	w	315	CLA	CHD-C1D-ND	-3.04	121.66	124.45
50	f	302	CLA	CMB-C2B-C1B	-3.04	123.80	128.46
50	b	822	CLA	O2A-CGA-CBA	3.04	121.44	111.91
50	z	307	CLA	O2A-CGA-CBA	3.04	121.44	111.91
53	b	827	PQN	C2M-C2-C1	-3.04	111.24	116.27
50	b	806	CLA	CHD-C1D-ND	-3.03	121.67	124.45
50	w	316	CLA	O2A-CGA-CBA	3.03	121.42	111.91
50	a	834	CLA	O2A-CGA-CBA	3.03	121.42	111.91
50	a	815	CLA	O2A-CGA-CBA	3.03	121.42	111.91
50	w	316	CLA	CMB-C2B-C1B	-3.03	123.81	128.46
50	a	853	CLA	CMB-C2B-C1B	-3.03	123.81	128.46
50	y	310	CLA	CHD-C1D-ND	-3.03	121.67	124.45
50	b	841	CLA	O2A-CGA-CBA	3.02	121.40	111.91
52	a	808	CL0	CMC-C2C-C1C	3.02	129.65	125.04
50	a	852	CLA	CMB-C2B-C1B	-3.02	123.82	128.46
50	x	313	CLA	CMB-C2B-C1B	-3.02	123.82	128.46
43	l	303	BCR	C24-C23-C22	3.02	130.80	126.23
54	w	304	CHL	CAA-C2A-C3A	-3.02	104.51	112.78
50	k	205	CLA	CMB-C2B-C1B	-3.02	123.83	128.46
50	a	822	CLA	O2A-CGA-CBA	3.02	121.37	111.91
50	w	302	CLA	O2A-CGA-CBA	3.02	121.37	111.91
50	z	311	CLA	O2A-CGA-CBA	3.02	121.37	111.91
50	x	307	CLA	CMB-C2B-C1B	-3.01	123.83	128.46
50	b	832	CLA	CHD-C1D-ND	-3.01	121.69	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	z	304	CHL	CHD-C1D-ND	-3.01	121.69	124.45
50	z	306	CLA	CMB-C2B-C1B	-3.01	123.83	128.46
50	z	316	CLA	CMB-C2B-C1B	-3.01	123.84	128.46
50	x	303	CLA	O2A-CGA-CBA	3.01	121.35	111.91
50	b	813	CLA	CMB-C2B-C1B	-3.01	123.84	128.46
50	y	305	CLA	CMB-C2B-C1B	-3.01	123.84	128.46
50	b	824	CLA	CMB-C2B-C1B	-3.01	123.84	128.46
54	w	311	CHL	CAA-C2A-C3A	-3.01	104.54	112.78
52	a	808	CL0	O2D-CGD-O1D	-3.01	117.26	124.09
50	x	316	CLA	CMB-C2B-C1B	-3.01	123.84	128.46
50	a	851	CLA	CHD-C1D-ND	-3.00	121.69	124.45
50	b	806	CLA	CMB-C2B-C1B	-3.00	123.85	128.46
50	b	845	CLA	O2A-CGA-CBA	3.00	121.33	111.91
43	b	817	BCR	C2-C1-C6	3.00	115.10	110.48
50	b	805	CLA	O2A-CGA-CBA	3.00	121.31	111.91
50	b	837	CLA	CMB-C2B-C1B	-3.00	123.86	128.46
50	a	815	CLA	CMB-C2B-C1B	-3.00	123.86	128.46
50	a	813	CLA	O2A-CGA-CBA	3.00	121.31	111.91
50	w	303	CLA	CMB-C2B-C1B	-2.99	123.86	128.46
50	a	820	CLA	CMB-C2B-C1B	-2.99	123.86	128.46
50	y	309	CLA	CMB-C2B-C1B	-2.99	123.86	128.46
50	z	302	CLA	CMB-C2B-C1B	-2.99	123.86	128.46
43	j	103	BCR	C16-C17-C18	-2.99	123.04	127.31
50	a	824	CLA	CMB-C2B-C1B	-2.99	123.86	128.46
50	a	852	CLA	O2A-CGA-CBA	2.99	121.29	111.91
50	y	312	CLA	O2A-CGA-CBA	2.99	121.29	111.91
50	b	812	CLA	C1-C2-C3	2.99	131.21	126.04
50	k	203	CLA	CMB-C2B-C1B	-2.99	123.87	128.46
50	a	816	CLA	CMB-C2B-C1B	-2.99	123.87	128.46
50	b	843	CLA	CMB-C2B-C1B	-2.99	123.87	128.46
50	a	818	CLA	CHD-C1D-ND	-2.99	121.71	124.45
50	x	302	CLA	CMB-C2B-C1B	-2.99	123.87	128.46
50	a	816	CLA	CHD-C1D-ND	-2.98	121.71	124.45
50	b	842	CLA	CMB-C2B-C1B	-2.98	123.88	128.46
50	z	303	CLA	CMA-C3A-C2A	-2.98	109.14	116.10
50	a	856	CLA	CMB-C2B-C1B	-2.98	123.88	128.46
50	b	851	CLA	CHD-C1D-ND	-2.98	121.71	124.45
50	b	841	CLA	CMB-C2B-C1B	-2.98	123.89	128.46
50	y	311	CLA	CHD-C1D-ND	-2.98	121.72	124.45
50	a	809	CLA	O2A-CGA-CBA	2.98	121.25	111.91
50	x	302	CLA	C2A-C1A-CHA	2.98	129.05	123.85
50	a	824	CLA	CHD-C1D-ND	-2.98	121.72	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	b	836	CLA	CMB-C2B-C1B	-2.97	123.89	128.46
50	w	306	CLA	O2A-CGA-CBA	2.97	121.24	111.91
50	a	850	CLA	CHD-C1D-ND	-2.97	121.72	124.45
50	y	304	CLA	CMB-C2B-C1B	-2.97	123.90	128.46
50	x	303	CLA	C2D-C1D-ND	2.97	112.29	110.10
50	b	845	CLA	CMB-C2B-C1B	-2.97	123.90	128.46
50	a	813	CLA	CMB-C2B-C1B	-2.97	123.90	128.46
50	a	848	CLA	O2A-CGA-CBA	2.97	121.23	111.91
50	y	310	CLA	CMB-C2B-C1B	-2.97	123.90	128.46
50	z	305	CLA	CMB-C2B-C1B	-2.97	123.90	128.46
50	x	313	CLA	O2A-CGA-CBA	2.97	121.22	111.91
50	l	301	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	g	204	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	y	312	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	b	810	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	z	310	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	a	821	CLA	O2A-CGA-CBA	2.96	121.21	111.91
50	b	828	CLA	CHD-C1D-ND	-2.96	121.73	124.45
50	b	826	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	w	305	CLA	CMB-C2B-C1B	-2.96	123.91	128.46
50	l	301	CLA	CHD-C1D-ND	-2.96	121.73	124.45
50	a	836	CLA	O2A-CGA-CBA	2.96	121.19	111.91
50	a	833	CLA	C1-C2-C3	2.96	131.16	126.04
50	a	823	CLA	O2A-CGA-CBA	2.96	121.19	111.91
50	b	801	CLA	O2A-CGA-CBA	2.96	121.19	111.91
50	b	811	CLA	CMB-C2B-C1B	-2.95	123.92	128.46
50	x	310	CLA	CMB-C2B-C1B	-2.95	123.92	128.46
50	a	840	CLA	CMB-C2B-C1B	-2.95	123.93	128.46
50	a	801	CLA	CMB-C2B-C1B	-2.95	123.93	128.46
50	x	318	CLA	CMB-C2B-C1B	-2.95	123.93	128.46
50	b	844	CLA	CHD-C1D-ND	-2.95	121.75	124.45
50	a	842	CLA	O2A-CGA-CBA	2.95	121.15	111.91
50	a	833	CLA	CHD-C1D-ND	-2.94	121.75	124.45
50	b	844	CLA	O2A-CGA-CBA	2.94	121.14	111.91
50	a	802	CLA	CMB-C2B-C1B	-2.94	123.94	128.46
50	a	809	CLA	CHD-C1D-ND	-2.94	121.75	124.45
54	x	305	CHL	CBC-CAC-C3C	-2.94	104.34	112.43
50	b	802	CLA	CMB-C2B-C1B	-2.93	123.95	128.46
50	a	856	CLA	CHD-C1D-ND	-2.93	121.76	124.45
50	a	838	CLA	CHD-C1D-ND	-2.93	121.76	124.45
50	f	301	CLA	O2A-CGA-CBA	2.93	121.10	111.91
50	b	804	CLA	CMB-C2B-C1B	-2.92	123.97	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	f	302	CLA	CHD-C1D-ND	-2.92	121.77	124.45
50	y	302	CLA	CMB-C2B-C1B	-2.92	123.98	128.46
50	a	814	CLA	CMB-C2B-C1B	-2.91	123.99	128.46
50	a	835	CLA	O2A-CGA-CBA	2.91	121.05	111.91
50	a	835	CLA	CMB-C2B-C1B	-2.91	123.99	128.46
43	a	810	BCR	C11-C12-C13	2.90	134.57	126.42
50	b	838	CLA	CHD-C1D-ND	-2.90	121.79	124.45
50	w	310	CLA	CHD-C1D-ND	-2.90	121.79	124.45
50	a	857	CLA	CMB-C2B-C1B	-2.90	124.00	128.46
50	x	306	CLA	CMB-C2B-C1B	-2.90	124.00	128.46
50	b	803	CLA	C1-C2-C3	2.90	131.06	126.04
50	a	837	CLA	CHD-C1D-ND	-2.90	121.79	124.45
50	b	838	CLA	O2A-CGA-CBA	2.90	121.00	111.91
50	x	307	CLA	CHD-C1D-ND	-2.90	121.79	124.45
50	w	310	CLA	CMC-C2C-C1C	-2.90	120.62	125.04
50	z	305	CLA	O2A-CGA-CBA	2.90	121.00	111.91
50	x	308	CLA	O2A-CGA-CBA	2.90	121.00	111.91
43	b	819	BCR	C15-C14-C13	-2.90	123.18	127.31
50	w	306	CLA	CHD-C1D-ND	-2.90	121.79	124.45
50	a	841	CLA	O2A-CGA-CBA	2.90	120.99	111.91
50	b	826	CLA	O2A-CGA-CBA	2.90	120.99	111.91
50	b	840	CLA	CMB-C2B-C1B	-2.90	124.01	128.46
50	g	203	CLA	CMB-C2B-C1B	-2.90	124.01	128.46
50	y	311	CLA	O2A-CGA-CBA	2.89	120.99	111.91
54	w	304	CHL	CHD-C1D-ND	-2.89	121.79	124.45
50	g	201	CLA	CMB-C2B-C1B	-2.89	124.02	128.46
50	b	809	CLA	CHD-C1D-ND	-2.89	121.80	124.45
50	b	835	CLA	O2A-CGA-CBA	2.89	120.98	111.91
50	a	853	CLA	CHD-C1D-ND	-2.89	121.80	124.45
50	a	811	CLA	CMB-C2B-C1B	-2.89	124.03	128.46
50	b	807	CLA	O2A-CGA-CBA	2.89	120.96	111.91
50	b	803	CLA	O2A-CGA-CBA	2.89	120.96	111.91
50	f	303	CLA	CMB-C2B-C1B	-2.89	124.03	128.46
50	x	312	CLA	O2A-CGA-CBA	2.88	120.96	111.91
50	a	814	CLA	O2A-CGA-CBA	2.88	120.96	111.91
50	w	310	CLA	CMB-C2B-C1B	-2.88	124.03	128.46
50	a	849	CLA	O2A-CGA-CBA	2.88	120.95	111.91
50	y	308	CLA	O2A-CGA-CBA	2.88	120.94	111.91
50	y	310	CLA	C1-C2-C3	2.88	131.02	126.04
50	l	306	CLA	CHD-C1D-ND	-2.88	121.81	124.45
50	a	858	CLA	O2A-CGA-CBA	2.88	120.94	111.91
50	b	805	CLA	CHD-C1D-ND	-2.88	121.81	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	a	846	CLA	O2A-CGA-CBA	2.88	120.93	111.91
50	b	849	CLA	CHD-C1D-ND	-2.87	121.81	124.45
50	b	836	CLA	O2A-CGA-CBA	2.87	120.93	111.91
50	b	823	CLA	O2A-CGA-CBA	2.87	120.93	111.91
43	b	820	BCR	C15-C14-C13	-2.87	123.21	127.31
50	a	848	CLA	CHD-C1D-ND	-2.87	121.81	124.45
50	j	102	CLA	CHD-C1D-ND	-2.87	121.82	124.45
50	a	820	CLA	O2A-CGA-CBA	2.87	120.92	111.91
50	b	847	CLA	O2A-CGA-CBA	2.87	120.91	111.91
50	b	843	CLA	CHD-C1D-ND	-2.87	121.82	124.45
50	b	832	CLA	CMB-C2B-C1B	-2.87	124.06	128.46
50	k	204	CLA	CMB-C2B-C1B	-2.87	124.06	128.46
50	w	310	CLA	O2A-CGA-CBA	2.87	120.90	111.91
50	b	824	CLA	O2A-CGA-CBA	2.86	120.90	111.91
50	y	303	CLA	CMB-C2B-C1B	-2.86	124.06	128.46
50	w	316	CLA	O1D-CGD-CBD	-2.86	118.63	124.48
50	x	308	CLA	CMB-C2B-C1B	-2.86	124.07	128.46
50	b	814	CLA	CMB-C2B-C3B	2.86	130.02	124.68
50	b	822	CLA	CMB-C2B-C1B	-2.85	124.08	128.46
50	a	853	CLA	O2A-CGA-CBA	2.85	120.86	111.91
50	a	838	CLA	O2A-CGA-CBA	2.85	120.84	111.91
50	b	840	CLA	O2A-CGA-CBA	2.85	120.84	111.91
50	w	308	CLA	O2A-CGA-CBA	2.85	120.84	111.91
50	x	306	CLA	CHD-C1D-ND	-2.84	121.84	124.45
50	y	312	CLA	CHD-C1D-ND	-2.84	121.84	124.45
45	F	804	A1H1M	C09-C10-C11	2.84	115.19	110.82
50	b	833	CLA	O2A-CGA-CBA	2.84	120.82	111.91
50	a	801	CLA	O2A-CGA-CBA	2.84	120.82	111.91
50	a	837	CLA	CMB-C2B-C1B	-2.84	124.10	128.46
50	z	303	CLA	CHD-C1D-ND	-2.84	121.85	124.45
51	b	821	DGD	O6D-C1D-O3G	-2.83	103.26	109.97
52	a	808	CL0	CHB-C4A-NA	2.83	128.68	124.34
50	w	302	CLA	CHD-C1D-ND	-2.83	121.85	124.45
50	h	201	CLA	CMB-C2B-C1B	-2.83	124.11	128.46
50	y	303	CLA	C1-C2-C3	2.83	130.94	126.04
50	x	309	CLA	CHD-C1D-ND	-2.83	121.85	124.45
50	l	305	CLA	CHD-C1D-ND	-2.83	121.85	124.45
43	z	318	BCR	C15-C14-C13	-2.83	123.27	127.31
50	b	828	CLA	O2A-CGA-CBA	2.83	120.78	111.91
50	b	803	CLA	CMB-C2B-C1B	-2.83	124.12	128.46
50	z	316	CLA	CHD-C1D-ND	-2.83	121.86	124.45
50	b	825	CLA	O2A-CGA-CBA	2.83	120.78	111.91

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	w	316	CLA	O2D-CGD-O1D	-2.83	118.31	123.84
43	i	101	BCR	C16-C17-C18	-2.82	123.28	127.31
50	a	857	CLA	C1-C2-C3	2.82	130.91	126.04
50	b	834	CLA	CHD-C1D-ND	-2.82	121.87	124.45
50	b	805	CLA	CMB-C2B-C1B	-2.81	124.14	128.46
53	b	827	PQN	C11-C3-C4	-2.81	115.49	118.50
43	k	201	BCR	C16-C15-C14	-2.81	117.72	123.47
43	4	101	BCR	C29-C30-C25	2.81	114.81	110.48
54	z	312	CHL	CAA-C2A-C3A	-2.81	105.09	112.78
50	b	808	CLA	CMB-C2B-C1B	-2.80	124.15	128.46
50	b	802	CLA	C1-C2-C3	2.80	130.89	126.04
50	a	817	CLA	CMA-C3A-C2A	-2.80	109.56	116.10
52	a	808	CL0	C3C-C4C-NC	2.80	113.71	110.57
50	a	855	CLA	CHD-C1D-ND	-2.80	121.88	124.45
50	a	844	CLA	O2A-CGA-CBA	2.80	120.68	111.91
50	b	807	CLA	CMB-C2B-C1B	-2.80	124.17	128.46
50	x	303	CLA	CHD-C1D-ND	-2.80	121.89	124.45
43	a	810	BCR	C2-C1-C6	2.79	114.78	110.48
46	7	301	LMG	C1-O6-C5	2.79	119.17	113.69
50	b	825	CLA	CHD-C1D-ND	-2.79	121.89	124.45
54	z	304	CHL	CMA-C3A-C2A	-2.79	109.59	116.10
50	x	307	CLA	C1-C2-C3	2.79	130.86	126.04
45	F	804	A1H1M	O14-C13-C33	2.78	116.24	110.35
50	b	802	CLA	CHD-C1D-ND	-2.78	121.89	124.45
50	g	203	CLA	CHD-C1D-ND	-2.78	121.90	124.45
50	y	306	CLA	CHD-C1D-ND	-2.77	121.84	124.52
50	a	821	CLA	CMB-C2B-C1B	-2.77	124.20	128.46
50	a	849	CLA	CMB-C2B-C1B	-2.77	124.21	128.46
43	b	818	BCR	C2-C1-C6	2.77	114.74	110.48
54	w	311	CHL	CHD-C1D-ND	-2.77	121.91	124.45
50	z	307	CLA	C1-C2-C3	2.77	130.83	126.04
50	a	854	CLA	CHD-C1D-ND	-2.77	121.91	124.45
50	y	302	CLA	CHD-C1D-ND	-2.77	121.91	124.45
50	a	812	CLA	O2A-CGA-CBA	2.76	120.58	111.91
50	z	310	CLA	C2A-C1A-CHA	2.76	128.68	123.85
50	a	809	CLA	C1-C2-C3	2.76	130.82	126.04
46	H	401	LMG	C4-C3-C2	-2.76	106.01	110.82
50	a	812	CLA	CHD-C1D-ND	-2.76	121.92	124.45
50	a	858	CLA	CMB-C2B-C1B	-2.75	124.23	128.46
54	x	319	CHL	CHD-C1D-ND	-2.75	121.92	124.45
50	a	848	CLA	CMB-C2B-C1B	-2.75	124.23	128.46
50	w	310	CLA	O1D-CGD-CBD	-2.75	118.86	124.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	a	846	CLA	CMB-C2B-C1B	-2.75	124.24	128.46
53	b	827	PQN	C9-C10-C1	-2.75	116.07	120.10
50	a	826	CLA	CHD-C1D-ND	-2.75	121.93	124.45
50	f	303	CLA	CHD-C1D-ND	-2.75	121.93	124.45
50	x	310	CLA	CHD-C1D-ND	-2.74	121.93	124.45
50	b	832	CLA	C1-C2-C3	2.74	130.78	126.04
43	b	850	BCR	C2-C1-C6	2.74	114.70	110.48
50	b	851	CLA	CMB-C2B-C3B	2.74	129.80	124.68
43	k	202	BCR	C2-C1-C6	2.74	114.70	110.48
45	F	804	A1H1M	C37-C07-C08	-2.74	106.81	112.59
50	a	802	CLA	CHD-C1D-ND	-2.74	121.94	124.45
50	b	847	CLA	C1-C2-C3	2.73	130.77	126.04
43	b	816	BCR	C2-C1-C6	2.73	114.69	110.48
50	a	850	CLA	C1-C2-C3	2.73	130.77	126.04
50	l	306	CLA	CMB-C2B-C3B	2.73	129.78	124.68
52	a	808	CL0	O2A-CGA-CBA	2.73	124.59	110.26
43	y	301	BCR	C37-C22-C23	2.73	122.37	118.08
50	f	303	CLA	CMA-C3A-C2A	-2.73	109.74	116.10
50	y	303	CLA	CHD-C1D-ND	-2.73	121.95	124.45
50	x	318	CLA	CHD-C1D-ND	-2.73	121.88	124.52
50	b	841	CLA	O1D-CGD-CBD	-2.73	118.91	124.48
48	F	801	SQD	O47-C45-C46	-2.72	98.54	108.40
50	y	302	CLA	C1-C2-C3	2.72	130.75	126.04
50	b	840	CLA	C1-C2-C3	2.72	130.75	126.04
50	k	203	CLA	CHD-C1D-ND	-2.72	121.95	124.45
48	a	859	SQD	O47-C7-C8	2.72	117.36	111.50
50	x	303	CLA	C1-C2-C3	2.72	130.74	126.04
46	D	601	LMG	O1-C7-C8	-2.71	104.35	110.90
43	a	810	BCR	C11-C10-C9	-2.71	123.44	127.31
53	a	825	PQN	C6-C5-C4	-2.71	116.12	120.10
50	a	819	CLA	CHD-C1D-ND	-2.71	121.96	124.45
46	H	401	LMG	C1-O6-C5	2.71	119.01	113.69
50	a	833	CLA	O2A-CGA-CBA	2.71	120.42	111.91
46	j	104	LMG	O1-C7-C8	-2.71	104.36	110.90
43	a	827	BCR	C23-C22-C21	-2.71	118.78	124.81
50	a	815	CLA	C1-C2-C3	2.71	130.73	126.04
50	x	308	CLA	CHD-C1D-ND	-2.71	121.97	124.45
53	b	827	PQN	C6-C5-C4	-2.71	116.13	120.10
50	b	846	CLA	CHD-C1D-ND	-2.71	121.97	124.45
50	x	313	CLA	C2A-C1A-CHA	2.70	128.59	123.86
50	g	203	CLA	C1-C2-C3	2.70	130.72	126.04
50	a	822	CLA	CHD-C1D-ND	-2.70	121.97	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	b	850	BCR	C20-C21-C22	-2.70	123.45	127.31
50	x	303	CLA	CMB-C2B-C1B	-2.70	124.31	128.46
43	b	820	BCR	C15-C16-C17	-2.70	117.95	123.47
50	z	306	CLA	C2A-C1A-CHA	2.70	128.57	123.86
50	a	847	CLA	CHD-C1D-ND	-2.70	121.98	124.45
52	a	808	CL0	C4D-C3D-CAD	2.69	111.27	108.10
50	b	823	CLA	CHD-C1D-ND	-2.69	121.98	124.45
50	a	857	CLA	CHD-C1D-ND	-2.69	121.98	124.45
50	z	310	CLA	CHD-C1D-ND	-2.69	121.98	124.45
46	7	301	LMG	C1-C2-C3	-2.69	104.40	110.00
43	b	816	BCR	C29-C30-C25	2.68	114.61	110.48
50	b	810	CLA	CHD-C1D-ND	-2.68	121.99	124.45
43	x	314	BCR	C29-C30-C25	2.68	114.61	110.48
54	x	311	CHL	CHD-C1D-ND	-2.68	121.99	124.45
43	j	103	BCR	C2-C1-C6	2.68	114.61	110.48
50	b	836	CLA	C1-C2-C3	2.68	130.68	126.04
51	x	317	DGD	O6D-C1D-O3G	-2.68	103.64	109.97
50	a	845	CLA	C1-C2-C3	2.67	130.66	126.04
50	b	812	CLA	O2A-CGA-CBA	2.67	120.29	111.91
50	a	844	CLA	CMB-C2B-C1B	-2.67	124.36	128.46
43	k	202	BCR	C29-C30-C25	2.67	114.59	110.48
50	a	852	CLA	CHD-C1D-ND	-2.66	122.00	124.45
50	z	306	CLA	O2A-CGA-O1A	-2.66	116.87	123.59
50	a	836	CLA	CHD-C1D-ND	-2.66	122.01	124.45
50	z	319	CLA	C2D-C1D-ND	2.66	112.07	110.10
50	g	204	CLA	O1D-CGD-CBD	-2.66	119.04	124.48
50	a	817	CLA	CHD-C1D-ND	-2.66	122.01	124.45
54	z	312	CHL	C2A-C3A-C4A	2.66	106.16	101.87
50	w	305	CLA	C1-C2-C3	2.66	130.64	126.04
43	a	829	BCR	C29-C30-C25	2.65	114.57	110.48
50	a	837	CLA	C1-C2-C3	2.65	130.63	126.04
50	a	812	CLA	C1-C2-C3	2.65	130.63	126.04
50	a	835	CLA	C1-C2-C3	2.65	130.63	126.04
54	x	319	CHL	O2A-CGA-CBA	2.65	120.22	111.91
50	b	841	CLA	CHD-C1D-ND	-2.65	122.02	124.45
50	b	847	CLA	CMB-C2B-C3B	2.65	129.63	124.68
43	g	202	BCR	C16-C17-C18	-2.65	123.53	127.31
43	i	101	BCR	C2-C1-C6	2.64	114.55	110.48
50	l	305	CLA	CMA-C3A-C2A	-2.64	109.93	116.10
50	a	854	CLA	O2A-CGA-CBA	2.64	120.20	111.91
46	z	315	LMG	O1-C7-C8	-2.64	104.52	110.90
50	w	305	CLA	CHD-C1D-ND	-2.64	122.03	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	y	314	CLA	C1-C2-C3	2.64	130.60	126.04
50	b	849	CLA	C2D-C1D-ND	2.63	112.04	110.10
50	w	307	CLA	C2A-C1A-CHA	2.63	128.46	123.86
50	b	842	CLA	CHD-C1D-ND	-2.63	122.04	124.45
54	x	319	CHL	CAA-C2A-C3A	-2.63	105.58	112.78
50	b	807	CLA	C1-C2-C3	2.62	130.58	126.04
50	b	842	CLA	C1-C2-C3	2.62	130.58	126.04
54	z	312	CHL	O1D-CGD-CBD	-2.62	119.12	124.48
50	a	834	CLA	CHD-C1D-ND	-2.62	122.05	124.45
50	b	801	CLA	CMB-C2B-C1B	-2.62	124.44	128.46
54	z	312	CHL	O2A-CGA-CBA	2.62	120.12	111.91
54	w	309	CHL	CMB-C2B-C1B	-2.61	124.45	128.46
50	a	849	CLA	C1-C2-C3	2.61	130.56	126.04
50	a	820	CLA	C1-C2-C3	2.61	130.56	126.04
50	a	824	CLA	C4-C3-C5	-2.60	110.90	115.27
50	b	837	CLA	CHD-C1D-ND	-2.60	122.06	124.45
50	b	804	CLA	CMA-C3A-C2A	-2.60	110.03	116.10
54	w	304	CHL	CMB-C2B-C1B	-2.60	124.47	128.46
50	b	835	CLA	C1-C2-C3	2.60	130.54	126.04
50	k	204	CLA	C1-C2-C3	2.60	130.53	126.04
50	w	310	CLA	CBC-CAC-C3C	2.60	119.59	112.43
50	x	312	CLA	C1-C2-C3	2.59	130.53	126.04
50	y	305	CLA	CHD-C1D-ND	-2.59	122.07	124.45
50	h	201	CLA	CHD-C1D-ND	-2.59	122.07	124.45
50	a	846	CLA	CHD-C1D-ND	-2.59	122.07	124.45
50	b	836	CLA	CHD-C1D-ND	-2.59	122.07	124.45
50	z	307	CLA	CHD-C1D-ND	-2.59	122.07	124.45
50	a	843	CLA	C1-C2-C3	2.59	130.52	126.04
54	z	304	CHL	C2A-C3A-C4A	2.59	105.09	101.78
53	a	825	PQN	C9-C10-C1	-2.59	116.31	120.10
50	x	313	CLA	C1-C2-C3	2.59	130.52	126.04
43	a	829	BCR	C2-C1-C6	2.59	114.46	110.48
51	b	821	DGD	O5D-C6D-C5D	-2.58	104.27	109.05
50	y	307	CLA	CHD-C1D-ND	-2.58	122.08	124.45
50	b	835	CLA	CHD-C1D-ND	-2.58	122.08	124.45
47	A	405	PQ9	C11-C2-C3	-2.58	119.91	123.30
50	b	803	CLA	C2D-C1D-ND	2.58	112.00	110.10
50	z	319	CLA	CHD-C1D-ND	-2.58	122.09	124.45
43	z	318	BCR	C2-C1-C6	2.57	114.44	110.48
54	z	312	CHL	CMB-C2B-C1B	-2.57	124.51	128.46
50	b	841	CLA	C1-C2-C3	2.57	130.49	126.04
53	a	825	PQN	C10-C5-C4	2.57	123.46	120.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	z	304	CHL	CMB-C2B-C1B	-2.57	124.51	128.46
43	a	829	BCR	C28-C27-C26	-2.57	109.48	114.08
50	a	846	CLA	C1-C2-C3	2.57	130.49	126.04
46	w	312	LMG	O1-C7-C8	-2.57	104.70	110.90
50	y	308	CLA	CHD-C1D-ND	-2.57	122.09	124.45
43	b	817	BCR	C15-C16-C17	-2.57	118.21	123.47
54	x	301	CHL	CMB-C2B-C1B	-2.57	124.52	128.46
54	w	311	CHL	C2C-C3C-C4C	2.56	108.31	106.49
50	b	815	CLA	C1-C2-C3	2.56	130.47	126.04
50	a	858	CLA	C1-C2-C3	2.56	130.46	126.04
50	k	203	CLA	CAA-C2A-C3A	-2.56	110.14	116.10
50	k	204	CLA	CHD-C1D-ND	-2.55	122.11	124.45
54	x	319	CHL	CMB-C2B-C1B	-2.55	124.54	128.46
50	a	841	CLA	CHD-C1D-ND	-2.55	122.11	124.45
50	a	813	CLA	C1-C2-C3	2.55	130.45	126.04
43	w	301	BCR	C2-C1-C6	2.55	114.41	110.48
43	b	831	BCR	C24-C23-C22	-2.55	122.38	126.23
50	y	308	CLA	C1-C2-C3	2.55	130.45	126.04
50	a	801	CLA	CHD-C1D-ND	-2.55	122.11	124.45
53	a	825	PQN	C2M-C2-C1	-2.55	112.05	116.27
50	b	845	CLA	C1-C2-C3	2.55	130.45	126.04
50	w	307	CLA	CMB-C2B-C3B	2.55	129.44	124.68
43	g	202	BCR	C29-C30-C25	2.55	114.40	110.48
50	w	306	CLA	C1-C2-C3	2.54	130.44	126.04
50	l	306	CLA	O1D-CGD-CBD	-2.54	119.29	124.48
50	z	311	CLA	CHD-C1D-ND	-2.53	122.13	124.45
50	z	305	CLA	CHD-C1D-ND	-2.53	122.13	124.45
44	B	606	PGT	C2-O2-C31	2.53	124.02	117.79
50	a	802	CLA	C1-C2-C3	2.52	130.41	126.04
50	x	316	CLA	CHD-C1D-ND	-2.52	122.14	124.45
50	y	313	CLA	C1-C2-C3	2.52	130.41	126.04
43	b	819	BCR	C37-C22-C23	2.52	122.05	118.08
43	l	302	BCR	C29-C30-C25	2.52	114.36	110.48
50	y	306	CLA	CMA-C3A-C2A	-2.52	110.23	116.10
50	b	824	CLA	CHD-C1D-ND	-2.51	122.14	124.45
43	4	101	BCR	C2-C1-C6	2.51	114.35	110.48
50	a	814	CLA	CHD-C1D-ND	-2.51	122.15	124.45
50	a	833	CLA	O2A-CGA-O1A	-2.51	117.26	123.59
54	x	305	CHL	CMB-C2B-C1B	-2.51	124.61	128.46
43	w	301	BCR	C37-C22-C23	2.50	122.02	118.08
43	l	304	BCR	C29-C30-C25	2.50	114.33	110.48
50	a	839	CLA	C1-C2-C3	2.50	130.37	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
46	x	315	LMG	O1-C7-C8	-2.50	104.87	110.90
50	y	311	CLA	C1-C2-C3	2.50	130.36	126.04
47	A	405	PQ9	C6-C5-C4	2.49	120.08	114.99
46	j	105	LMG	O1-C7-C8	-2.49	104.89	110.90
50	z	306	CLA	C1-C2-C3	2.49	130.35	126.04
45	F	804	A1H1M	C13-C33-C31	2.49	115.18	110.00
50	k	203	CLA	CMA-C3A-C2A	-2.49	110.29	116.10
50	b	825	CLA	C4-C3-C5	-2.49	111.08	115.27
53	b	827	PQN	C10-C5-C4	2.49	123.37	120.68
50	k	203	CLA	C2D-C1D-ND	2.49	111.94	110.10
43	l	302	BCR	C2-C1-C6	2.48	114.30	110.48
50	y	312	CLA	C1-C2-C3	2.48	130.33	126.04
50	x	318	CLA	O2A-CGA-CBA	2.48	122.02	112.23
46	7	301	LMG	C4-C3-C2	-2.48	106.50	110.82
47	A	405	PQ9	C31-C32-C33	-2.48	121.70	127.66
54	z	312	CHL	O2A-CGA-O1A	-2.47	117.35	123.59
54	z	312	CHL	C2A-C1A-CHA	2.47	128.19	123.86
50	l	301	CLA	CED-O2D-CGD	2.47	121.53	115.94
50	a	848	CLA	C1-C2-C3	2.47	130.32	126.04
50	b	847	CLA	C3C-C4C-NC	-2.47	107.80	110.57
50	a	857	CLA	C12-C11-C10	-2.47	101.89	113.24
43	b	816	BCR	C15-C14-C13	-2.46	123.79	127.31
48	j	106	SQD	O6-C44-C45	-2.46	104.96	110.90
45	F	804	A1H1M	O26-C25-C27	-2.46	104.66	110.35
50	x	313	CLA	C2D-C1D-ND	2.46	111.92	110.10
50	a	811	CLA	C1-C2-C3	2.46	130.29	126.04
50	z	303	CLA	O1D-CGD-CBD	-2.46	119.46	124.48
50	b	839	CLA	C1-C2-C3	2.45	130.28	126.04
50	z	311	CLA	C1-C2-C3	2.45	130.28	126.04
50	a	834	CLA	C1-C2-C3	2.45	130.28	126.04
50	a	843	CLA	C12-C11-C10	-2.45	101.97	113.24
50	b	814	CLA	C1-C2-C3	2.45	130.28	126.04
50	a	824	CLA	C12-C11-C10	-2.45	101.99	113.24
46	z	314	LMG	O1-C7-C8	-2.45	105.00	110.90
54	x	319	CHL	C2A-C3A-C4A	2.45	105.82	101.87
50	b	814	CLA	C2D-C1D-ND	2.44	111.91	110.10
54	w	311	CHL	CMB-C2B-C1B	-2.44	124.71	128.46
50	b	837	CLA	C1-C2-C3	2.44	130.27	126.04
50	a	844	CLA	C1-C2-C3	2.44	130.26	126.04
50	b	823	CLA	C1-C2-C3	2.44	130.26	126.04
50	b	846	CLA	C1-C2-C3	2.44	130.26	126.04
50	a	819	CLA	C1-C2-C3	2.44	130.25	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	a	856	CLA	O1D-CGD-CBD	-2.44	119.50	124.48
50	b	814	CLA	C12-C11-C10	-2.43	102.05	113.24
54	x	311	CHL	C2C-C3C-C4C	2.43	108.29	106.49
50	a	802	CLA	O1D-CGD-CBD	-2.43	119.50	124.48
50	b	841	CLA	O2D-CGD-O1D	-2.43	119.08	123.84
50	a	841	CLA	CMB-C2B-C3B	2.43	129.23	124.68
54	w	304	CHL	C2A-C3A-C4A	2.43	105.80	101.87
50	y	309	CLA	C2D-C1D-ND	2.43	111.90	110.10
46	F	802	LMG	O1-C7-C8	-2.43	105.04	110.90
46	H	401	LMG	O1-C7-C8	-2.43	105.04	110.90
50	b	844	CLA	C1-C2-C3	2.43	130.24	126.04
50	b	833	CLA	CHD-C1D-ND	-2.43	122.22	124.45
43	a	827	BCR	C2-C1-C6	2.43	114.22	110.48
50	a	852	CLA	O2D-CGD-O1D	-2.43	119.10	123.84
50	l	306	CLA	O2D-CGD-O1D	-2.42	119.10	123.84
50	l	306	CLA	C2D-C1D-ND	2.42	111.89	110.10
43	b	819	BCR	C21-C20-C19	-2.42	115.66	123.22
54	w	309	CHL	C2C-C3C-C4C	2.42	108.22	106.49
46	f	306	LMG	O1-C7-C8	-2.42	105.06	110.90
50	a	814	CLA	C1-C2-C3	2.42	130.23	126.04
43	k	201	BCR	C24-C25-C26	2.42	127.32	121.46
54	x	305	CHL	C2A-C3A-C4A	2.42	105.78	101.87
54	w	311	CHL	C1-O2A-CGA	2.42	121.56	112.90
50	y	302	CLA	C4-C3-C5	-2.42	111.21	115.27
50	b	802	CLA	C2D-C1D-ND	2.41	111.88	110.10
50	a	836	CLA	C12-C11-C10	-2.41	102.16	113.24
54	w	311	CHL	CBC-CAC-C3C	-2.41	105.79	112.43
50	b	835	CLA	O1D-CGD-CBD	-2.41	119.55	124.48
43	l	303	BCR	C29-C30-C25	2.41	114.19	110.48
50	b	833	CLA	O1D-CGD-CBD	-2.41	119.56	124.48
43	g	202	BCR	C2-C1-C6	2.41	114.19	110.48
50	b	801	CLA	C1-C2-C3	2.41	130.20	126.04
52	a	808	CL0	C1-O2A-CGA	2.40	122.56	112.41
50	a	851	CLA	O2A-CGA-CBA	2.40	121.73	112.23
50	a	850	CLA	C12-C11-C10	-2.40	102.20	113.24
50	b	802	CLA	C12-C11-C10	-2.40	102.20	113.24
50	w	310	CLA	C12-C11-C10	-2.40	102.20	113.24
50	x	313	CLA	CHD-C1D-ND	-2.40	122.25	124.45
50	g	204	CLA	C2D-C1D-ND	2.40	111.87	110.10
50	a	818	CLA	C1-C2-C3	2.40	130.19	126.04
50	b	839	CLA	C12-C11-C10	-2.40	102.22	113.24
50	x	316	CLA	O2A-CGA-CBA	2.40	121.73	114.03

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	a	830	BCR	C2-C1-C6	2.40	114.17	110.48
50	a	845	CLA	CMB-C2B-C3B	2.39	129.16	124.68
50	a	812	CLA	C12-C11-C10	-2.39	102.24	113.24
50	y	312	CLA	C3C-C4C-NC	-2.39	107.89	110.57
43	l	303	BCR	C2-C1-C6	2.39	114.16	110.48
53	a	825	PQN	C11-C3-C4	-2.39	115.94	118.50
50	g	201	CLA	C2D-C1D-ND	2.39	111.87	110.10
45	5	302	A1H1M	C20-O21-C22	2.39	118.38	113.69
46	x	315	LMG	C1-C2-C3	-2.39	105.02	110.00
50	y	314	CLA	C4-C3-C5	-2.39	111.25	115.27
50	x	303	CLA	O2A-CGA-O1A	-2.39	117.57	123.59
50	x	313	CLA	O1D-CGD-CBD	-2.39	119.60	124.48
50	b	822	CLA	C1-C2-C3	2.39	130.17	126.04
50	a	823	CLA	C1-C2-C3	2.39	130.17	126.04
50	a	856	CLA	C2D-C1D-ND	2.38	111.86	110.10
50	z	309	CLA	C2D-C1D-ND	2.38	111.86	110.10
50	b	840	CLA	CHD-C1D-ND	-2.38	122.27	124.45
50	x	306	CLA	C12-C11-C10	-2.38	102.30	113.24
50	b	805	CLA	C1-C2-C3	2.38	130.16	126.04
50	a	826	CLA	O2A-CGA-CBA	2.38	121.68	114.03
50	w	315	CLA	O2A-CGA-CBA	2.38	121.63	112.23
50	a	842	CLA	C1-C2-C3	2.38	130.16	126.04
50	a	819	CLA	C12-C11-C10	-2.38	102.31	113.24
50	b	851	CLA	O1D-CGD-CBD	-2.38	119.62	124.48
50	b	845	CLA	C3C-C4C-NC	-2.38	107.91	110.57
50	b	809	CLA	C1-C2-C3	2.38	130.15	126.04
50	a	838	CLA	C12-C11-C10	-2.38	102.32	113.24
50	a	837	CLA	C12-C11-C10	-2.37	102.33	113.24
46	B	605	LMG	C1-C2-C3	-2.37	105.05	110.00
50	g	203	CLA	C2D-C1D-ND	2.37	111.85	110.10
54	x	301	CHL	C2C-C3C-C4C	2.37	108.18	106.49
43	b	850	BCR	C29-C30-C25	2.37	114.14	110.48
50	b	844	CLA	C12-C11-C10	-2.37	102.34	113.24
50	a	836	CLA	C1-C2-C3	2.37	130.14	126.04
50	z	309	CLA	CAA-C2A-C3A	-2.37	108.34	114.26
50	y	302	CLA	C3C-C4C-NC	-2.37	107.99	110.57
50	a	854	CLA	C12-C11-C10	-2.37	102.37	113.24
43	b	820	BCR	C2-C1-C6	2.37	114.12	110.48
43	j	103	BCR	C29-C30-C25	2.37	114.12	110.48
50	a	854	CLA	C1-C2-C3	2.36	130.13	126.04
45	F	804	A1H1M	O12-C13-O14	-2.36	104.07	110.67
50	w	315	CLA	C2D-C1D-ND	2.36	111.85	110.10

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	w	303	CLA	O2A-CGA-CBA	2.36	121.62	114.03
43	k	201	BCR	C21-C20-C19	-2.36	115.85	123.22
43	b	816	BCR	C37-C22-C23	2.36	121.80	118.08
43	a	803	BCR	C2-C1-C6	2.36	114.11	110.48
50	b	833	CLA	C12-C11-C10	-2.36	102.42	113.24
43	y	301	BCR	C21-C20-C19	-2.36	115.87	123.22
54	z	312	CHL	O2D-CGD-O1D	-2.35	119.24	123.84
45	5	302	A1H1M	O26-C25-C27	-2.35	104.91	110.35
50	y	310	CLA	O1D-CGD-CBD	-2.35	119.67	124.48
50	z	303	CLA	O2D-CGD-O1D	-2.35	119.24	123.84
50	x	318	CLA	C3D-C2D-C1D	-2.35	104.73	107.91
50	w	310	CLA	C1-C2-C3	2.35	130.10	126.04
50	z	307	CLA	O1D-CGD-CBD	-2.35	119.68	124.48
50	b	811	CLA	O1D-CGD-CBD	-2.35	119.69	124.48
50	x	312	CLA	C12-C11-C10	-2.34	102.48	113.24
50	y	306	CLA	C3D-C2D-C1D	-2.34	104.74	107.91
43	a	831	BCR	C2-C1-C6	2.34	114.09	110.48
50	a	858	CLA	C12-C11-C10	-2.34	102.48	113.24
50	w	306	CLA	O1D-CGD-CBD	-2.34	119.69	124.48
50	x	307	CLA	O1D-CGD-CBD	-2.34	119.70	124.48
43	x	314	BCR	C37-C22-C23	2.34	121.76	118.08
43	f	304	BCR	C37-C22-C23	2.34	121.76	118.08
50	y	309	CLA	CHD-C1D-ND	-2.34	122.31	124.45
50	a	850	CLA	C3C-C4C-NC	-2.34	107.95	110.57
50	b	844	CLA	C3C-C4C-NC	-2.34	107.95	110.57
50	b	801	CLA	CHD-C1D-ND	-2.34	122.31	124.45
43	a	810	BCR	C8-C9-C10	2.33	122.52	118.94
50	b	841	CLA	C2D-C1D-ND	2.33	111.82	110.10
50	a	802	CLA	C12-C11-C10	-2.33	102.52	113.24
50	b	839	CLA	O1D-CGD-CBD	-2.33	119.72	124.48
50	a	854	CLA	C3C-C4C-NC	-2.33	107.96	110.57
50	x	306	CLA	C1-C2-C3	2.33	130.07	126.04
50	a	842	CLA	C12-C11-C10	-2.33	102.55	113.24
50	b	840	CLA	C12-C11-C10	-2.33	102.55	113.24
50	a	801	CLA	C12-C11-C10	-2.33	102.55	113.24
50	b	843	CLA	C12-C11-C10	-2.33	102.55	113.24
43	a	828	BCR	C29-C30-C25	2.33	114.06	110.48
50	a	848	CLA	C4-C3-C5	-2.32	111.36	115.27
43	b	831	BCR	C16-C15-C14	-2.32	118.71	123.47
46	7	301	LMG	O1-C7-C8	-2.32	105.29	110.90
50	b	803	CLA	C2C-C1C-NC	-2.32	107.80	109.97
43	a	831	BCR	C37-C22-C23	2.32	121.74	118.08

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	w	302	CLA	C1-C2-C3	2.32	130.51	126.75
50	b	812	CLA	C4-C3-C5	-2.32	111.37	115.27
50	z	310	CLA	CMA-C3A-C2A	-2.32	110.68	116.10
50	w	307	CLA	O2A-CGA-CBA	2.32	121.48	114.03
46	z	315	LMG	C1-C2-C3	-2.32	105.17	110.00
43	l	304	BCR	C2-C1-C6	2.32	114.05	110.48
50	z	308	CLA	O2A-CGA-CBA	2.32	121.48	114.03
50	a	846	CLA	O1D-CGD-CBD	-2.32	119.74	124.48
50	b	835	CLA	CMB-C2B-C3B	2.32	129.01	124.68
50	f	303	CLA	O1D-CGD-CBD	-2.32	119.75	124.48
50	a	846	CLA	C12-C11-C10	-2.31	102.60	113.24
50	z	307	CLA	CMB-C2B-C3B	2.31	129.01	124.68
50	b	846	CLA	C12-C11-C10	-2.31	102.60	113.24
43	k	201	BCR	C33-C5-C4	-2.31	109.17	113.62
50	b	803	CLA	C12-C11-C10	-2.31	102.61	113.24
43	j	103	BCR	C37-C22-C21	-2.31	119.68	122.92
50	b	837	CLA	C12-C11-C10	-2.31	102.62	113.24
50	a	833	CLA	O2D-CGD-O1D	-2.31	119.32	123.84
50	b	811	CLA	O2A-CGA-CBA	2.31	121.45	114.03
50	a	844	CLA	O1D-CGD-CBD	-2.31	119.76	124.48
50	a	854	CLA	O2A-CGA-O1A	-2.31	117.76	123.59
50	b	803	CLA	C3C-C4C-NC	-2.31	107.98	110.57
50	g	204	CLA	CHD-C1D-ND	-2.31	122.33	124.45
54	z	304	CHL	C2A-C1A-CHA	2.31	127.88	123.85
43	b	820	BCR	C29-C30-C25	2.31	114.03	110.48
50	h	201	CLA	O2A-CGA-CBA	2.31	121.34	112.23
50	x	309	CLA	O1D-CGD-CBD	-2.31	119.77	124.48
50	w	314	CLA	C2D-C1D-ND	2.30	111.80	110.10
54	x	311	CHL	CMB-C2B-C1B	-2.30	124.92	128.46
50	b	805	CLA	C12-C11-C10	-2.30	102.66	113.24
50	x	318	CLA	O1D-CGD-CBD	-2.30	119.77	124.48
50	z	306	CLA	C2C-C1C-NC	-2.30	107.81	109.97
50	a	852	CLA	C1-C2-C3	2.30	130.02	126.04
52	a	808	CL0	C3A-C4A-CHB	-2.30	120.09	124.24
50	z	306	CLA	C4-C3-C5	-2.30	111.40	115.27
45	F	804	A1H1M	O28-C27-C29	-2.30	105.03	110.35
53	a	825	PQN	C17-C16-C15	-2.30	107.11	113.36
50	b	812	CLA	C12-C11-C10	-2.30	102.67	113.24
50	w	308	CLA	C2C-C1C-NC	-2.30	107.82	109.97
50	a	841	CLA	O1D-CGD-CBD	-2.30	119.78	124.48
43	z	318	BCR	C37-C22-C21	-2.30	119.70	122.92
50	a	854	CLA	CMB-C2B-C3B	2.30	128.98	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	f	301	CLA	C1-C2-C3	2.30	130.01	126.04
52	a	808	CL0	C3D-C4D-ND	2.30	113.95	110.24
50	a	853	CLA	C2D-C1D-ND	2.29	111.80	110.10
50	w	308	CLA	O1D-CGD-CBD	-2.29	119.79	124.48
55	w	319	LUT	C28-C29-C30	2.29	122.46	118.94
50	l	306	CLA	C12-C11-C10	-2.29	102.70	113.24
50	b	828	CLA	C1-C2-C3	2.29	130.01	126.04
50	x	307	CLA	C12-C11-C10	-2.29	102.71	113.24
50	b	806	CLA	C1-C2-C3	2.29	130.01	126.04
54	z	312	CHL	C4D-CHA-C1A	2.29	124.04	121.25
50	b	807	CLA	C3C-C4C-NC	-2.29	108.00	110.57
50	a	842	CLA	CMB-C2B-C3B	2.29	128.96	124.68
50	b	824	CLA	C1-C2-C3	2.29	130.00	126.04
50	b	833	CLA	C1-C2-C3	2.29	130.00	126.04
50	b	828	CLA	C12-C11-C10	-2.29	102.73	113.24
50	a	845	CLA	C12-C11-C10	-2.29	102.73	113.24
50	b	804	CLA	O1D-CGD-CBD	-2.28	119.81	124.48
43	b	817	BCR	C29-C30-C25	2.28	114.00	110.48
50	y	305	CLA	O2A-CGA-CBA	2.28	121.36	114.03
50	a	812	CLA	O2A-CGA-O1A	-2.28	117.83	123.59
50	z	307	CLA	C3C-C4C-NC	-2.28	108.01	110.57
50	y	314	CLA	C12-C11-C10	-2.28	102.76	113.24
50	g	204	CLA	O2D-CGD-O1D	-2.28	119.38	123.84
50	b	834	CLA	O2A-CGA-CBA	2.28	121.35	114.03
43	a	830	BCR	C29-C30-C25	2.28	113.99	110.48
43	a	828	BCR	C2-C1-C6	2.28	113.99	110.48
50	z	307	CLA	C12-C11-C10	-2.28	102.77	113.24
50	b	806	CLA	O1D-CGD-CBD	-2.28	119.82	124.48
50	x	307	CLA	C3C-C4C-NC	-2.28	108.02	110.57
50	b	822	CLA	O1D-CGD-CBD	-2.28	119.83	124.48
50	x	302	CLA	CMA-C3A-C2A	-2.27	110.79	116.10
50	w	314	CLA	CED-O2D-CGD	2.27	121.08	115.94
50	a	839	CLA	C3C-C4C-NC	-2.27	108.02	110.57
43	a	830	BCR	C20-C21-C22	-2.27	124.07	127.31
50	y	313	CLA	C3C-C4C-NC	-2.27	108.02	110.57
50	b	815	CLA	C12-C11-C10	-2.27	102.80	113.24
50	x	308	CLA	C2D-C1D-ND	2.27	111.78	110.10
50	y	305	CLA	O1D-CGD-CBD	-2.27	119.84	124.48
50	b	824	CLA	C12-C11-C10	-2.27	102.82	113.24
46	H	401	LMG	C1-C2-C3	-2.27	105.27	110.00
50	a	811	CLA	O1D-CGD-CBD	-2.27	119.84	124.48
50	b	826	CLA	C1-C2-C3	2.27	129.97	126.04

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	y	308	CLA	C12-C11-C10	-2.27	102.82	113.24
54	w	311	CHL	C2A-C1A-CHA	2.27	127.82	123.86
43	w	301	BCR	C29-C30-C25	2.27	113.97	110.48
50	a	809	CLA	O1D-CGD-CBD	-2.27	119.85	124.48
50	b	805	CLA	C2D-C1D-ND	2.26	111.77	110.10
43	a	831	BCR	C29-C30-C25	2.26	113.97	110.48
50	a	853	CLA	C12-C11-C10	-2.26	102.84	113.24
50	b	847	CLA	C12-C11-C10	-2.26	102.84	113.24
50	x	306	CLA	O2A-CGA-O1A	-2.26	117.88	123.59
50	a	818	CLA	C4-C3-C5	-2.26	111.46	115.27
50	a	816	CLA	C3C-C4C-NC	-2.26	108.03	110.57
50	w	308	CLA	C12-C11-C10	-2.26	102.86	113.24
50	a	812	CLA	C2D-C1D-ND	2.26	111.77	110.10
54	x	319	CHL	C2C-C3C-C4C	2.26	108.10	106.49
50	l	306	CLA	C1-C2-C3	2.26	129.95	126.04
50	a	845	CLA	C4-C3-C5	-2.26	111.47	115.27
50	l	301	CLA	O2A-CGA-CBA	2.26	121.28	114.03
50	a	847	CLA	C1B-CHB-C4A	2.26	129.51	125.75
43	f	304	BCR	C16-C15-C14	-2.25	118.86	123.47
46	F	802	LMG	O6-C1-O1	-2.25	104.64	109.97
43	k	201	BCR	C37-C22-C21	-2.25	119.77	122.92
50	b	839	CLA	CMB-C2B-C3B	2.25	128.89	124.68
43	f	304	BCR	C16-C17-C18	-2.25	124.10	127.31
50	b	836	CLA	C12-C11-C10	-2.25	102.90	113.24
50	a	843	CLA	O1D-CGD-CBD	-2.25	119.88	124.48
43	y	301	BCR	C2-C1-C6	2.25	113.94	110.48
50	z	305	CLA	C3C-C4C-NC	-2.25	108.05	110.57
50	z	309	CLA	CMB-C2B-C3B	2.25	128.88	124.68
50	b	823	CLA	O1D-CGD-CBD	-2.25	119.89	124.48
50	a	840	CLA	O1D-CGD-CBD	-2.25	119.89	124.48
45	5	302	A1H1M	O19-C20-O21	-2.25	104.40	110.67
50	y	306	CLA	C3C-C4C-NC	-2.25	108.05	110.57
50	a	826	CLA	C3C-C4C-NC	-2.24	108.05	110.57
50	k	205	CLA	C3C-C4C-NC	-2.24	108.05	110.57
50	a	818	CLA	CMB-C2B-C3B	2.24	128.87	124.68
50	b	848	CLA	CMB-C2B-C3B	2.24	128.87	124.68
50	a	839	CLA	C12-C11-C10	-2.24	102.94	113.24
50	x	303	CLA	CED-O2D-CGD	2.24	121.00	115.94
50	b	847	CLA	O2A-CGA-O1A	-2.24	117.94	123.59
50	a	856	CLA	C12-C11-C10	-2.24	102.95	113.24
50	w	307	CLA	CHD-C1D-ND	-2.24	122.40	124.45
50	w	310	CLA	O2D-CGD-O1D	-2.24	119.46	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	a	815	CLA	C3C-C4C-NC	-2.24	108.06	110.57
50	a	851	CLA	CMB-C2B-C3B	2.24	128.86	124.68
50	b	810	CLA	C1-C2-C3	2.24	130.37	126.75
43	b	818	BCR	C29-C30-C25	2.24	113.92	110.48
50	a	854	CLA	O1D-CGD-CBD	-2.24	119.91	124.48
50	a	820	CLA	C12-C11-C10	-2.23	102.97	113.24
50	a	819	CLA	CMB-C2B-C3B	2.23	128.86	124.68
43	b	819	BCR	C2-C1-C6	2.23	113.92	110.48
50	z	305	CLA	O1D-CGD-CBD	-2.23	119.92	124.48
50	z	309	CLA	CHD-C1D-ND	-2.23	122.40	124.45
50	a	848	CLA	O1D-CGD-CBD	-2.23	119.92	124.48
50	b	836	CLA	C4-C3-C5	-2.23	111.52	115.27
50	a	844	CLA	C3C-C4C-NC	-2.23	108.07	110.57
50	a	837	CLA	C2D-C1D-ND	2.23	111.75	110.10
50	a	846	CLA	O2D-CGD-O1D	-2.23	119.48	123.84
50	z	302	CLA	C1-C2-C3	2.23	129.90	126.04
50	a	823	CLA	C2D-C1D-ND	2.23	111.75	110.10
50	a	821	CLA	C1-C2-C3	2.23	129.89	126.04
50	y	310	CLA	C12-C11-C10	-2.22	103.02	113.24
50	b	842	CLA	O1D-CGD-CBD	-2.22	119.93	124.48
50	a	815	CLA	C12-C11-C10	-2.22	103.02	113.24
50	k	204	CLA	O1D-CGD-CBD	-2.22	119.94	124.48
50	z	316	CLA	O1D-CGD-CBD	-2.22	119.94	124.48
50	f	301	CLA	C12-C11-C10	-2.22	102.56	113.29
48	F	805	SQD	C4-C3-C2	-2.22	106.94	110.82
46	w	312	LMG	C1-C2-C3	-2.22	105.37	110.00
43	a	828	BCR	C37-C22-C23	2.22	121.58	118.08
50	w	306	CLA	C12-C11-C10	-2.22	103.04	113.24
50	a	855	CLA	O1D-CGD-CBD	-2.22	119.94	124.48
50	a	849	CLA	C2D-C1D-ND	2.22	111.74	110.10
50	y	310	CLA	C3C-C4C-NC	-2.22	108.08	110.57
50	y	308	CLA	CMB-C2B-C3B	2.22	128.82	124.68
43	b	831	BCR	C3-C4-C5	-2.21	110.12	114.08
50	a	814	CLA	C2D-C1D-ND	2.21	111.73	110.10
50	z	303	CLA	C2D-C1D-ND	2.21	111.73	110.10
43	l	304	BCR	C37-C22-C23	2.21	121.56	118.08
45	F	804	A1H1M	O32-C31-C33	-2.21	105.23	110.35
50	b	801	CLA	C12-C11-C10	-2.21	103.08	113.24
50	w	316	CLA	CMD-C2D-C1D	2.21	128.61	124.71
50	w	308	CLA	C3C-C4C-NC	-2.21	108.09	110.57
50	z	302	CLA	CBA-CAA-C2A	2.21	120.38	113.86
54	x	319	CHL	O2A-CGA-O1A	-2.21	118.02	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	f	304	BCR	C2-C1-C6	2.21	113.88	110.48
43	w	301	BCR	C21-C20-C19	-2.21	116.33	123.22
50	a	836	CLA	O1D-CGD-CBD	-2.21	119.97	124.48
50	b	848	CLA	C2D-C1D-ND	2.21	111.73	110.10
43	a	810	BCR	C34-C9-C10	-2.21	119.83	122.92
52	a	808	CL0	CMD-C2D-C3D	-2.20	122.54	127.61
50	a	809	CLA	C12-C11-C10	-2.20	102.65	113.29
50	a	851	CLA	O1D-CGD-CBD	-2.20	119.98	124.48
50	x	304	CLA	C3C-C4C-NC	-2.20	108.10	110.57
50	a	814	CLA	C12-C11-C10	-2.20	103.12	113.24
50	a	839	CLA	CMB-C2B-C3B	2.20	128.79	124.68
50	a	818	CLA	C2A-C1A-CHA	2.20	127.70	123.86
50	a	833	CLA	C12-C11-C10	-2.20	103.13	113.24
50	x	303	CLA	C12-C11-C10	-2.20	102.67	113.29
50	a	845	CLA	CHD-C1D-ND	-2.20	122.43	124.45
50	k	204	CLA	C12-C11-C10	-2.20	102.68	113.29
48	F	805	SQD	C1-O5-C5	2.20	118.00	113.69
54	w	304	CHL	O2D-CGD-O1D	-2.20	119.54	123.84
50	z	306	CLA	C3C-C4C-NC	-2.20	108.11	110.57
50	b	815	CLA	C3C-C4C-NC	-2.20	108.11	110.57
50	a	844	CLA	O2A-CGA-O1A	-2.19	118.06	123.59
50	b	811	CLA	C2C-C1C-NC	-2.19	107.92	109.97
46	j	104	LMG	C1-C2-C3	-2.19	105.43	110.00
50	f	301	CLA	CMB-C2B-C3B	2.19	128.78	124.68
50	l	305	CLA	CAA-C2A-C3A	-2.19	110.98	116.10
50	b	801	CLA	O1D-CGD-CBD	-2.19	120.00	124.48
50	a	838	CLA	O2A-CGA-O1A	-2.19	118.06	123.59
50	a	838	CLA	C1-C2-C3	2.19	129.83	126.04
50	a	818	CLA	C3C-C4C-NC	-2.19	108.12	110.57
50	b	812	CLA	C3C-C4C-NC	-2.19	108.12	110.57
50	b	846	CLA	C3C-C4C-NC	-2.19	108.12	110.57
50	y	308	CLA	C3C-C4C-NC	-2.19	108.12	110.57
50	f	301	CLA	C3C-C4C-NC	-2.19	108.12	110.57
50	y	311	CLA	O1D-CGD-CBD	-2.19	120.01	124.48
50	a	847	CLA	C2D-C1D-ND	2.19	111.72	110.10
50	w	305	CLA	C3C-C4C-NC	-2.19	108.12	110.57
50	a	811	CLA	C2D-C1D-ND	2.19	111.72	110.10
50	b	807	CLA	C12-C11-C10	-2.19	103.19	113.24
45	5	302	A1H1M	C37-C07-C08	-2.18	107.97	112.59
54	w	304	CHL	O2A-CGA-CBA	2.18	121.05	114.03
50	a	822	CLA	C1-C2-C3	2.18	129.82	126.04
50	z	310	CLA	C3C-C4C-NC	-2.18	108.12	110.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	y	313	CLA	C12-C11-C10	-2.18	103.21	113.24
50	a	811	CLA	C12-C11-C10	-2.18	103.22	113.24
50	a	849	CLA	C12-C11-C10	-2.18	103.22	113.24
43	j	101	BCR	C29-C30-C25	2.18	113.84	110.48
54	x	301	CHL	C2A-C1A-CHA	2.18	127.67	123.86
50	a	839	CLA	O1D-CGD-CBD	-2.18	120.03	124.48
50	x	312	CLA	CMB-C2B-C3B	2.18	128.75	124.68
50	z	306	CLA	O1D-CGD-CBD	-2.18	120.03	124.48
50	a	838	CLA	CMB-C2B-C3B	2.18	128.75	124.68
50	a	853	CLA	O1D-CGD-CBD	-2.18	120.03	124.48
50	w	303	CLA	C3C-C4C-NC	-2.18	108.13	110.57
50	a	820	CLA	C2D-C1D-ND	2.18	111.71	110.10
50	b	833	CLA	O2D-CGD-O1D	-2.17	119.59	123.84
50	x	303	CLA	CMD-C2D-C1D	2.17	128.54	124.71
50	b	811	CLA	O2D-CGD-O1D	-2.17	119.59	123.84
50	a	826	CLA	CMB-C2B-C3B	2.17	128.74	124.68
50	b	801	CLA	C2D-C1D-ND	2.17	111.70	110.10
50	w	307	CLA	C2D-C1D-ND	2.17	111.70	110.10
50	b	809	CLA	C3C-C4C-NC	-2.17	108.14	110.57
50	z	302	CLA	O2A-CGA-O1A	-2.17	118.12	123.59
50	f	303	CLA	CAA-C2A-C3A	-2.17	111.04	116.10
50	f	301	CLA	O2A-CGA-O1A	-2.17	118.12	123.59
50	a	855	CLA	C3C-C4C-NC	-2.17	108.14	110.57
50	x	302	CLA	CED-O2D-CGD	2.17	120.84	115.94
50	b	802	CLA	O1D-CGD-CBD	-2.17	120.05	124.48
50	y	304	CLA	C2D-C1D-ND	2.17	111.70	110.10
50	b	838	CLA	C1-C2-C3	2.17	129.79	126.04
50	a	844	CLA	C12-C11-C10	-2.17	102.83	113.29
50	a	821	CLA	C2D-C1D-ND	2.17	111.70	110.10
50	b	813	CLA	O1D-CGD-CBD	-2.17	120.05	124.48
50	b	822	CLA	C3C-C4C-NC	-2.16	108.14	110.57
50	b	824	CLA	C3C-C4C-NC	-2.16	108.14	110.57
50	a	821	CLA	O1D-CGD-CBD	-2.16	120.06	124.48
50	w	303	CLA	O1D-CGD-CBD	-2.16	120.06	124.48
54	w	304	CHL	O1D-CGD-CBD	-2.16	120.06	124.48
50	a	841	CLA	C3C-C4C-NC	-2.16	108.15	110.57
50	b	806	CLA	C2D-C1D-ND	2.16	111.70	110.10
50	a	842	CLA	C2D-C1D-ND	2.16	111.69	110.10
50	y	307	CLA	C2D-C1D-ND	2.16	111.69	110.10
50	a	824	CLA	O2A-CGA-O1A	-2.16	118.15	123.59
50	a	852	CLA	O1D-CGD-CBD	-2.16	120.07	124.48
50	y	313	CLA	CMB-C2B-C3B	2.16	128.71	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
45	5	302	A1H1M	O21-C22-C25	2.15	113.61	109.69
50	b	825	CLA	O2A-CGA-O1A	-2.15	118.16	123.59
50	b	838	CLA	C3C-C4C-NC	-2.15	108.16	110.57
50	b	809	CLA	C4-C3-C5	-2.15	111.65	115.27
50	w	316	CLA	C4D-CHA-C1A	2.15	123.87	121.25
50	w	308	CLA	O2D-CGD-O1D	-2.15	119.63	123.84
50	b	823	CLA	C3C-C4C-NC	-2.15	108.16	110.57
50	a	855	CLA	CMD-C2D-C1D	2.15	128.50	124.71
50	w	316	CLA	C3C-C4C-NC	-2.15	108.16	110.57
46	D	601	LMG	C1-C2-C3	-2.15	105.52	110.00
50	l	301	CLA	C3C-C4C-NC	-2.15	108.16	110.57
50	x	312	CLA	C4-C3-C5	-2.15	111.66	115.27
50	a	819	CLA	C2D-C1D-ND	2.15	111.69	110.10
50	b	832	CLA	O2A-CGA-O1A	-2.15	118.17	123.59
50	b	808	CLA	O1D-CGD-CBD	-2.15	120.09	124.48
50	b	804	CLA	C3C-C4C-NC	-2.15	108.16	110.57
50	w	315	CLA	O1D-CGD-CBD	-2.15	120.09	124.48
50	b	811	CLA	C3C-C4C-NC	-2.15	108.16	110.57
50	z	311	CLA	C3C-C4C-NC	-2.15	108.16	110.57
50	a	857	CLA	O1D-CGD-CBD	-2.15	120.09	124.48
50	b	846	CLA	O1D-CGD-CBD	-2.15	120.09	124.48
50	b	815	CLA	CMB-C2B-C3B	2.14	128.69	124.68
50	b	812	CLA	CMB-C2B-C3B	2.14	128.69	124.68
43	b	831	BCR	C37-C22-C21	-2.14	119.92	122.92
50	w	315	CLA	CMB-C2B-C3B	2.14	128.69	124.68
50	b	834	CLA	C3C-C4C-NC	-2.14	108.17	110.57
50	x	302	CLA	C2D-C1D-ND	2.14	111.68	110.10
50	y	314	CLA	C2D-C1D-ND	2.14	111.68	110.10
50	w	314	CLA	CMD-C2D-C1D	2.14	128.48	124.71
50	y	308	CLA	O1D-CGD-CBD	-2.14	120.11	124.48
50	x	309	CLA	C2D-C1D-ND	2.14	111.68	110.10
50	a	822	CLA	C2D-C1D-ND	2.14	111.68	110.10
50	b	826	CLA	C2D-C1D-ND	2.14	111.68	110.10
48	w	318	SQD	O47-C7-O49	-2.14	118.54	123.70
50	a	813	CLA	C3C-C4C-NC	-2.14	108.17	110.57
50	y	302	CLA	O2A-CGA-O1A	-2.14	118.20	123.59
50	b	834	CLA	O1D-CGD-CBD	-2.14	120.11	124.48
50	a	835	CLA	O1D-CGD-CBD	-2.13	120.12	124.48
50	w	310	CLA	CMC-C2C-C3C	2.13	131.91	126.12
43	a	829	BCR	C24-C23-C22	-2.13	123.01	126.23
54	x	319	CHL	C2A-C1A-CHA	2.13	127.59	123.86
50	a	843	CLA	C3C-C4C-NC	-2.13	108.18	110.57

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	f	303	CLA	C3C-C4C-NC	-2.13	108.18	110.57
50	b	842	CLA	CMD-C2D-C1D	2.13	128.47	124.71
50	b	842	CLA	C12-C11-C10	-2.13	103.00	113.29
50	a	820	CLA	O2A-CGA-O1A	-2.13	118.22	123.59
50	a	802	CLA	C2D-C1D-ND	2.13	111.67	110.10
50	w	306	CLA	C3C-C4C-NC	-2.13	108.18	110.57
54	z	312	CHL	C2C-C3C-C4C	2.13	108.01	106.49
50	z	310	CLA	CMD-C2D-C1D	2.13	128.47	124.71
50	w	316	CLA	C2D-C1D-ND	2.13	111.67	110.10
50	x	310	CLA	O1D-CGD-CBD	-2.13	120.13	124.48
50	b	843	CLA	C4-C3-C5	-2.13	111.69	115.27
50	a	854	CLA	O2D-CGD-O1D	-2.13	119.68	123.84
50	x	306	CLA	CMD-C2D-C1D	2.13	128.46	124.71
46	f	306	LMG	C1-C2-C3	-2.13	105.57	110.00
50	x	304	CLA	C4D-CHA-C1A	2.13	123.84	121.25
43	b	820	BCR	C37-C22-C23	2.13	121.43	118.08
50	a	801	CLA	O2A-CGA-O1A	-2.13	118.23	123.59
54	x	305	CHL	C4D-CHA-C1A	2.13	123.84	121.25
50	k	205	CLA	O1D-CGD-CBD	-2.13	120.14	124.48
50	a	857	CLA	C2D-C1D-ND	2.13	111.67	110.10
50	a	842	CLA	C4-C3-C5	-2.12	111.70	115.27
43	b	831	BCR	C28-C27-C26	-2.12	110.29	114.08
54	x	301	CHL	C2A-C3A-C4A	2.12	105.30	101.87
50	a	841	CLA	C1-C2-C3	2.12	129.71	126.04
43	b	817	BCR	C33-C5-C4	-2.12	109.54	113.62
50	z	305	CLA	C1-C2-C3	2.12	130.18	126.75
50	b	814	CLA	O1D-CGD-CBD	-2.12	120.15	124.48
50	b	842	CLA	C3C-C4C-NC	-2.12	108.19	110.57
50	y	311	CLA	C3C-C4C-NC	-2.12	108.19	110.57
45	F	804	A1H1M	O34-C33-C31	-2.12	105.45	110.35
50	h	201	CLA	C3C-C4C-NC	-2.12	108.19	110.57
50	w	307	CLA	O1D-CGD-CBD	-2.12	120.15	124.48
50	g	203	CLA	O2A-CGA-O1A	-2.12	118.25	123.59
50	a	809	CLA	C3C-C4C-NC	-2.12	108.20	110.57
50	a	850	CLA	O1D-CGD-CBD	-2.12	120.16	124.48
50	a	817	CLA	CAA-C2A-C3A	-2.11	111.16	116.10
50	x	302	CLA	CMD-C2D-C1D	2.11	128.44	124.71
50	a	834	CLA	C2D-C1D-ND	2.11	111.66	110.10
48	w	318	SQD	O47-C45-C44	-2.11	100.75	108.40
50	b	808	CLA	C3C-C4C-NC	-2.11	108.20	110.57
50	w	302	CLA	C3C-C4C-NC	-2.11	108.20	110.57
50	b	803	CLA	CHD-C4C-C3C	2.11	127.94	124.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
43	b	819	BCR	C15-C16-C17	-2.11	119.15	123.47
50	b	838	CLA	O1D-CGD-CBD	-2.11	120.17	124.48
50	z	310	CLA	CAA-C2A-C3A	-2.11	111.17	116.10
50	b	836	CLA	O2A-CGA-O1A	-2.11	118.27	123.59
50	b	825	CLA	CMB-C2B-C3B	2.11	128.63	124.68
50	x	307	CLA	O2A-CGA-O1A	-2.11	118.27	123.59
50	a	844	CLA	CMD-C2D-C1D	2.11	128.43	124.71
50	k	204	CLA	C2D-C1D-ND	2.11	111.66	110.10
50	y	314	CLA	CMB-C2B-C3B	2.11	128.62	124.68
43	b	850	BCR	C37-C22-C21	-2.11	119.97	122.92
54	x	305	CHL	O2A-CGA-O1A	-2.11	118.05	123.30
50	a	836	CLA	CMB-C2B-C3B	2.10	128.62	124.68
50	a	840	CLA	C3C-C4C-NC	-2.10	108.21	110.57
50	b	833	CLA	O2A-CGA-O1A	-2.10	118.28	123.59
43	k	201	BCR	C20-C21-C22	-2.10	124.31	127.31
50	w	310	CLA	O2A-CGA-O1A	-2.10	118.29	123.59
50	y	306	CLA	CAA-C2A-C3A	-2.10	111.19	116.10
50	a	835	CLA	O2A-CGA-O1A	-2.10	118.29	123.59
50	b	837	CLA	C3C-C4C-NC	-2.10	108.22	110.57
50	w	316	CLA	C1-C2-C3	2.10	130.15	126.75
50	b	838	CLA	CMB-C2B-C3B	2.10	128.60	124.68
50	x	308	CLA	O2A-CGA-O1A	-2.10	118.30	123.59
50	a	835	CLA	C3C-C4C-NC	-2.10	108.22	110.57
50	b	837	CLA	O1D-CGD-CBD	-2.10	120.19	124.48
50	x	310	CLA	C2D-C1D-ND	2.10	111.65	110.10
50	b	812	CLA	CMD-C2D-C1D	2.10	128.41	124.71
50	a	856	CLA	O2D-CGD-O1D	-2.09	119.74	123.84
50	b	851	CLA	C3C-C4C-NC	-2.09	108.22	110.57
50	a	824	CLA	O1D-CGD-CBD	-2.09	120.20	124.48
50	a	820	CLA	O1D-CGD-CBD	-2.09	120.20	124.48
43	z	318	BCR	C29-C30-C25	2.09	113.70	110.48
50	b	837	CLA	C2D-C1D-ND	2.09	111.64	110.10
50	a	846	CLA	O2A-CGA-O1A	-2.09	118.32	123.59
50	b	840	CLA	O1D-CGD-CBD	-2.09	120.21	124.48
50	b	807	CLA	O2A-CGA-O1A	-2.09	118.32	123.59
50	b	838	CLA	O2A-CGA-O1A	-2.09	118.32	123.59
50	y	309	CLA	O1D-CGD-CBD	-2.09	120.21	124.48
50	w	303	CLA	CMD-C2D-C1D	2.09	128.39	124.71
50	y	307	CLA	O1D-CGD-CBD	-2.09	120.21	124.48
43	b	850	BCR	C16-C15-C14	-2.09	119.20	123.47
50	b	847	CLA	C2C-C1C-NC	-2.09	108.02	109.97
50	b	823	CLA	O2A-CGA-O1A	-2.08	118.33	123.59

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	b	826	CLA	C3C-C4C-NC	-2.08	108.24	110.57
50	b	828	CLA	C3C-C4C-NC	-2.08	108.24	110.57
46	B	605	LMG	O1-C7-C8	-2.08	105.88	110.90
43	a	829	BCR	C16-C17-C18	-2.08	124.34	127.31
50	w	305	CLA	O1D-CGD-CBD	-2.08	120.23	124.48
54	w	304	CHL	C2C-C3C-C4C	2.08	107.97	106.49
50	b	832	CLA	O1D-CGD-CBD	-2.08	120.23	124.48
50	x	310	CLA	C3C-C4C-NC	-2.08	108.24	110.57
50	a	849	CLA	O1D-CGD-CBD	-2.08	120.23	124.48
54	x	305	CHL	O2A-CGA-CBA	2.08	120.71	114.03
50	a	820	CLA	CMB-C2B-C3B	2.08	128.57	124.68
43	x	314	BCR	C2-C1-C6	2.08	113.68	110.48
43	l	304	BCR	C28-C27-C26	-2.08	110.37	114.08
50	g	201	CLA	C3C-C4C-NC	-2.08	108.24	110.57
50	w	308	CLA	C1-C2-C3	2.08	129.63	126.04
50	a	822	CLA	O1D-CGD-CBD	-2.08	120.24	124.48
50	a	853	CLA	CMB-C2B-C3B	2.08	128.56	124.68
50	b	801	CLA	C3C-C4C-NC	-2.08	108.24	110.57
43	k	202	BCR	C34-C9-C10	-2.07	120.02	122.92
50	z	308	CLA	CMB-C2B-C3B	2.07	128.56	124.68
43	k	201	BCR	C28-C27-C26	-2.07	110.37	114.08
54	w	309	CHL	C2A-C3A-C4A	2.07	105.22	101.87
50	z	302	CLA	CHD-C1D-ND	-2.07	122.55	124.45
50	z	306	CLA	CED-O2D-CGD	2.07	120.62	115.94
50	a	809	CLA	CMB-C2B-C3B	2.07	128.55	124.68
50	b	809	CLA	CMB-C2B-C3B	2.07	128.55	124.68
50	x	313	CLA	O2A-CGA-O1A	-2.07	118.36	123.59
48	a	859	SQD	O8-S-C6	-2.07	102.44	105.74
50	x	312	CLA	O2A-CGA-O1A	-2.07	118.37	123.59
50	b	815	CLA	CMD-C2D-C1D	2.07	128.36	124.71
50	k	205	CLA	CMD-C2D-C1D	2.07	128.36	124.71
50	a	813	CLA	C4-C3-C5	-2.07	111.79	115.27
50	a	848	CLA	C3C-C4C-NC	-2.07	108.25	110.57
50	a	856	CLA	O2A-CGA-O1A	-2.07	118.37	123.59
50	z	309	CLA	CED-O2D-CGD	2.07	120.61	115.94
54	w	304	CHL	C4D-CHA-C1A	2.07	123.77	121.25
50	b	835	CLA	C2D-C1D-ND	2.07	111.63	110.10
54	w	309	CHL	C2A-C1A-CHA	2.07	127.47	123.86
50	l	305	CLA	C3C-C4C-NC	-2.07	108.31	110.57
50	z	311	CLA	O1D-CGD-CBD	-2.07	120.25	124.48
50	a	812	CLA	C4A-CHB-C1B	2.07	130.84	125.34
50	a	842	CLA	O1D-CGD-CBD	-2.07	120.26	124.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
54	x	305	CHL	C3C-C4C-NC	-2.07	108.25	110.57
50	y	314	CLA	O2A-CGA-O1A	-2.06	118.38	123.59
50	a	811	CLA	CMD-C2D-C1D	2.06	128.35	124.71
43	b	818	BCR	C37-C22-C23	2.06	121.33	118.08
43	k	201	BCR	C3-C4-C5	-2.06	110.40	114.08
48	F	801	SQD	O8-S-C6	-2.06	102.45	105.74
50	a	815	CLA	O1D-CGD-CBD	-2.06	120.27	124.48
50	a	837	CLA	O1D-CGD-CBD	-2.06	120.27	124.48
50	a	846	CLA	C2D-C1D-ND	2.06	111.62	110.10
50	b	845	CLA	O1D-CGD-CBD	-2.06	120.27	124.48
50	b	845	CLA	CMB-C2B-C3B	2.06	128.53	124.68
50	a	833	CLA	O1D-CGD-CBD	-2.06	120.27	124.48
50	b	809	CLA	O1D-CGD-CBD	-2.06	120.27	124.48
50	b	804	CLA	CMB-C2B-C3B	2.06	128.53	124.68
50	a	815	CLA	C4-C3-C5	-2.06	111.81	115.27
50	b	832	CLA	C2D-C1D-ND	2.06	111.62	110.10
43	a	827	BCR	C21-C20-C19	-2.06	119.53	124.67
50	b	825	CLA	C3C-C4C-NC	-2.06	108.26	110.57
50	x	316	CLA	O1D-CGD-CBD	-2.06	120.27	124.48
50	b	839	CLA	CMD-C2D-C1D	2.06	128.34	124.71
50	x	313	CLA	CED-O2D-CGD	2.06	120.59	115.94
50	b	814	CLA	CMD-C2D-C1D	2.06	128.34	124.71
50	b	843	CLA	C5-C3-C2	2.06	125.28	121.12
50	b	842	CLA	C4-C3-C5	-2.06	111.81	115.27
50	b	813	CLA	CMD-C2D-C1D	2.06	128.34	124.71
43	k	202	BCR	C37-C22-C23	2.06	121.31	118.08
50	w	306	CLA	O2D-CGD-O1D	-2.05	119.82	123.84
50	a	816	CLA	C2D-C1D-ND	2.05	111.62	110.10
50	b	805	CLA	CMD-C2D-C1D	2.05	128.33	124.71
50	b	801	CLA	O2D-CGD-O1D	-2.05	119.82	123.84
52	a	808	CL0	CHA-C4D-ND	2.05	136.79	132.50
50	b	810	CLA	C3C-C4C-NC	-2.05	108.27	110.57
54	x	319	CHL	O2D-CGD-O1D	-2.05	119.83	123.84
50	a	853	CLA	C1-C2-C3	2.05	129.59	126.04
50	a	850	CLA	C2A-C1A-CHA	2.05	127.45	123.86
50	z	306	CLA	C2D-C1D-ND	2.05	111.61	110.10
50	z	303	CLA	CAA-C2A-C3A	-2.05	111.31	116.10
50	a	839	CLA	CMD-C2D-C1D	2.05	128.32	124.71
50	b	840	CLA	C3C-C4C-NC	-2.05	108.27	110.57
50	a	813	CLA	CMB-C2B-C3B	2.05	128.51	124.68
50	z	316	CLA	C2D-C1D-ND	2.05	111.61	110.10
50	a	815	CLA	CMB-C2B-C3B	2.05	128.51	124.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	f	302	CLA	CMB-C2B-C3B	2.05	128.51	124.68
43	l	303	BCR	C21-C20-C19	-2.05	116.83	123.22
50	z	310	CLA	O1D-CGD-CBD	-2.05	120.30	124.48
55	y	316	LUT	C36-C21-C26	2.05	112.64	109.55
50	w	308	CLA	CMB-C2B-C3B	2.05	128.51	124.68
43	a	827	BCR	C30-C25-C26	-2.05	119.73	122.61
50	b	813	CLA	C3C-C4C-NC	-2.05	108.28	110.57
50	y	303	CLA	O2A-CGA-O1A	-2.04	118.43	123.59
50	y	304	CLA	CBA-CAA-C2A	2.04	118.02	113.47
50	b	824	CLA	CMB-C2B-C3B	2.04	128.50	124.68
50	a	858	CLA	O1D-CGD-CBD	-2.04	120.30	124.48
50	a	852	CLA	C2D-C1D-ND	2.04	111.61	110.10
50	b	836	CLA	C2D-C1D-ND	2.04	111.61	110.10
50	a	851	CLA	C3C-C4C-NC	-2.04	108.28	110.57
55	x	321	LUT	C39-C29-C28	-2.04	114.86	118.08
50	w	306	CLA	CMB-C2B-C3B	2.04	128.50	124.68
50	y	304	CLA	C3C-C4C-NC	-2.04	108.28	110.57
50	z	311	CLA	C2D-C1D-ND	2.04	111.61	110.10
54	x	305	CHL	O1D-CGD-CBD	-2.04	120.31	124.48
50	a	801	CLA	CMB-C2B-C3B	2.04	128.50	124.68
50	b	826	CLA	O1D-CGD-CBD	-2.04	120.31	124.48
45	F	804	A1H1M	C03-C04-C05	2.04	116.98	112.11
50	j	102	CLA	CMB-C2B-C3B	2.04	128.49	124.68
50	b	845	CLA	C2C-C1C-NC	-2.04	108.06	109.97
50	a	824	CLA	CMB-C2B-C3B	2.04	128.49	124.68
50	w	316	CLA	CMB-C2B-C3B	2.04	128.49	124.68
50	a	835	CLA	C2A-C1A-CHA	2.04	127.42	123.86
50	x	313	CLA	CMB-C2B-C3B	2.04	128.49	124.68
45	5	302	A1H1M	O12-C13-C33	2.04	113.38	108.10
50	z	305	CLA	CMD-C2D-C1D	2.04	128.30	124.71
50	b	822	CLA	O2A-CGA-O1A	-2.04	118.45	123.59
43	b	831	BCR	C33-C5-C4	-2.04	109.71	113.62
50	a	801	CLA	C3C-C4C-NC	-2.03	108.29	110.57
50	x	318	CLA	C3C-C4C-NC	-2.03	108.29	110.57
50	x	308	CLA	C1-C2-C3	2.03	130.04	126.75
50	b	848	CLA	CMD-C2D-C1D	2.03	128.30	124.71
50	b	843	CLA	C2D-C1D-ND	2.03	111.60	110.10
50	a	847	CLA	O1D-CGD-CBD	-2.03	120.32	124.48
50	a	850	CLA	CMB-C2B-C3B	2.03	128.48	124.68
50	b	848	CLA	O1D-CGD-CBD	-2.03	120.33	124.48
50	j	102	CLA	CMD-C2D-C1D	2.03	128.29	124.71
50	a	809	CLA	O2D-CGD-O1D	-2.03	119.87	123.84

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
53	b	827	PQN	C10-C1-C2	-2.03	116.06	118.95
50	b	844	CLA	O1D-CGD-CBD	-2.03	120.33	124.48
50	k	204	CLA	CMD-C2D-C1D	2.03	128.29	124.71
50	y	310	CLA	O2D-CGD-O1D	-2.03	119.87	123.84
50	b	814	CLA	C3C-C4C-NC	-2.03	108.30	110.57
50	x	307	CLA	CMB-C2B-C3B	2.03	128.47	124.68
50	a	814	CLA	CMD-C2D-C1D	2.03	128.29	124.71
50	f	302	CLA	C3C-C4C-NC	-2.03	108.30	110.57
50	y	314	CLA	CED-O2D-CGD	2.03	120.53	115.94
43	b	831	BCR	C16-C17-C18	-2.03	124.42	127.31
50	l	305	CLA	O1D-CGD-CBD	-2.03	120.34	124.48
50	a	833	CLA	C3C-C4C-NC	-2.02	108.30	110.57
50	j	102	CLA	C2D-C1D-ND	2.02	111.59	110.10
50	z	316	CLA	C3C-C4C-NC	-2.02	108.30	110.57
50	a	836	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
53	a	825	PQN	C10-C1-C2	-2.02	116.07	118.95
51	x	317	DGD	C6D-O5D-C1E	2.02	117.69	113.74
50	l	306	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
50	a	853	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
50	a	817	CLA	CMB-C2B-C3B	2.02	128.46	124.68
50	a	809	CLA	O2A-CGA-O1A	-2.02	118.49	123.59
50	a	821	CLA	C4-C3-C5	-2.02	111.87	115.27
50	w	303	CLA	CMB-C2B-C3B	2.02	128.46	124.68
50	x	316	CLA	C2D-C1D-ND	2.02	111.59	110.10
50	y	304	CLA	CMB-C2B-C3B	2.02	128.46	124.68
50	a	838	CLA	CMD-C2D-C1D	2.02	128.27	124.71
50	a	834	CLA	CMB-C2B-C3B	2.02	128.45	124.68
50	y	305	CLA	C3C-C4C-NC	-2.02	108.31	110.57
50	a	852	CLA	C3C-C4C-NC	-2.02	108.31	110.57
50	x	316	CLA	CMB-C2B-C3B	2.02	128.45	124.68
50	a	849	CLA	CMD-C2D-C1D	2.02	128.27	124.71
52	a	808	CL0	CHA-C1A-NA	-2.02	121.78	126.40
50	a	850	CLA	C4-C3-C5	-2.02	111.88	115.27
50	a	823	CLA	CMB-C2B-C3B	2.01	128.45	124.68
50	x	308	CLA	CMD-C2D-C1D	2.01	128.26	124.71
50	h	201	CLA	CED-O2D-CGD	2.01	120.49	115.94
50	b	806	CLA	CMD-C2D-C1D	2.01	128.26	124.71
50	a	823	CLA	C4-C3-C5	-2.01	111.88	115.27
50	k	205	CLA	CED-O2D-CGD	2.01	120.49	115.94
50	b	805	CLA	C4-C3-C5	-2.01	111.89	115.27
54	w	311	CHL	C2A-C3A-C4A	2.01	105.12	101.87
43	a	829	BCR	C20-C21-C22	-2.01	124.44	127.31

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
50	b	833	CLA	CMB-C2B-C3B	2.01	128.44	124.68
50	b	803	CLA	O1D-CGD-CBD	-2.01	120.37	124.48
50	b	812	CLA	O2A-CGA-O1A	-2.01	118.52	123.59
50	a	843	CLA	CED-O2D-CGD	2.01	120.48	115.94
50	a	852	CLA	CMB-C2B-C3B	2.01	128.44	124.68
43	b	817	BCR	C1-C6-C5	-2.01	119.78	122.61
50	b	807	CLA	C4-C3-C5	-2.01	111.89	115.27
53	b	827	PQN	C17-C16-C15	-2.01	107.90	113.36
50	a	802	CLA	C4-C3-C5	-2.01	111.89	115.27
50	b	823	CLA	C2D-C1D-ND	2.01	111.58	110.10
50	y	314	CLA	C3C-C4C-NC	-2.01	108.32	110.57
50	b	845	CLA	C3B-C4B-NB	-2.01	106.61	109.21
50	b	808	CLA	C2D-C1D-ND	2.01	111.58	110.10
51	b	821	DGD	O1G-C1G-C2G	-2.01	102.59	108.43
50	b	823	CLA	CMB-C2B-C3B	2.01	128.43	124.68
50	g	201	CLA	O1D-CGD-CBD	-2.01	120.38	124.48
50	z	311	CLA	CMD-C2D-C1D	2.01	128.25	124.71
50	a	816	CLA	CMB-C2B-C3B	2.00	128.43	124.68
50	z	303	CLA	CMB-C2B-C3B	2.00	128.43	124.68
50	y	306	CLA	O1D-CGD-CBD	-2.00	120.38	124.48
50	f	302	CLA	C2D-C1D-ND	2.00	111.58	110.10
54	x	305	CHL	O2D-CGD-O1D	-2.00	119.92	123.84
50	x	303	CLA	O1D-CGD-CBD	-2.00	120.39	124.48
50	y	313	CLA	O1D-CGD-CBD	-2.00	120.39	124.48
50	a	841	CLA	O2D-CGD-O1D	-2.00	119.92	123.84
50	b	804	CLA	O2D-CGD-O1D	-2.00	119.92	123.84
50	x	310	CLA	CMD-C2D-C1D	2.00	128.24	124.71
50	a	849	CLA	O2A-CGA-O1A	-2.00	118.54	123.59
50	a	845	CLA	O1D-CGD-CBD	-2.00	120.39	124.48
50	b	847	CLA	CMD-C2D-C1D	2.00	128.24	124.71
50	w	302	CLA	O1D-CGD-CBD	-2.00	120.39	124.48
50	b	825	CLA	C12-C11-C10	-2.00	104.04	113.24
50	y	309	CLA	CMD-C2D-C1D	2.00	128.24	124.71
50	x	309	CLA	CMB-C2B-C3B	2.00	128.42	124.68
50	y	304	CLA	CMD-C2D-C1D	2.00	128.24	124.71
46	j	105	LMG	C1-C2-C3	-2.00	105.83	110.00
50	g	204	CLA	CMB-C2B-C3B	2.00	128.42	124.68
50	w	314	CLA	CMB-C2B-C3B	2.00	128.42	124.68

All (174) chirality outliers are listed below:

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Mol	Chain	Res	Type	Atom
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Mol	Chain	Res	Type	Atom
50	a	801	CLA	ND
50	a	802	CLA	ND
50	a	809	CLA	ND
50	a	811	CLA	ND
50	a	812	CLA	ND
50	a	813	CLA	ND
50	a	814	CLA	ND
50	a	815	CLA	ND
50	a	816	CLA	ND
50	a	817	CLA	ND
50	a	818	CLA	ND
50	a	819	CLA	ND
50	a	820	CLA	ND
50	a	821	CLA	ND
50	a	822	CLA	ND
50	a	823	CLA	ND
50	a	824	CLA	ND
50	a	826	CLA	ND
50	a	833	CLA	ND
50	a	834	CLA	ND
50	a	835	CLA	ND
50	a	836	CLA	ND
50	a	837	CLA	ND
50	a	838	CLA	ND
50	a	839	CLA	ND
50	a	840	CLA	ND
50	a	841	CLA	ND
50	a	842	CLA	ND
50	a	843	CLA	ND
50	a	844	CLA	ND
50	a	845	CLA	ND
50	a	846	CLA	ND
50	a	847	CLA	ND
50	a	848	CLA	ND
50	a	849	CLA	ND
50	a	850	CLA	ND
50	a	851	CLA	ND
50	a	852	CLA	ND
50	a	853	CLA	ND
50	a	854	CLA	ND
50	a	855	CLA	ND

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Mol	Chain	Res	Type	Atom
50	a	856	CLA	ND
50	a	857	CLA	ND
50	a	858	CLA	ND
50	b	801	CLA	ND
50	b	802	CLA	ND
50	b	803	CLA	ND
50	b	804	CLA	ND
50	b	805	CLA	ND
50	b	806	CLA	ND
50	b	807	CLA	ND
50	b	808	CLA	ND
50	b	809	CLA	ND
50	b	810	CLA	ND
50	b	811	CLA	ND
50	b	812	CLA	ND
50	b	813	CLA	ND
50	b	814	CLA	ND
50	b	815	CLA	ND
50	b	822	CLA	ND
50	b	823	CLA	ND
50	b	824	CLA	ND
50	b	825	CLA	ND
50	b	826	CLA	ND
50	b	828	CLA	ND
50	b	832	CLA	ND
50	b	833	CLA	ND
50	b	834	CLA	ND
50	b	835	CLA	ND
50	b	836	CLA	ND
50	b	837	CLA	ND
50	b	838	CLA	ND
50	b	839	CLA	ND
50	b	840	CLA	ND
50	b	841	CLA	ND
50	b	842	CLA	ND
50	b	843	CLA	ND
50	b	844	CLA	ND
50	b	845	CLA	ND
50	b	846	CLA	ND
50	b	847	CLA	ND
50	b	848	CLA	ND
50	b	849	CLA	ND

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Mol	Chain	Res	Type	Atom
50	b	851	CLA	ND
50	f	301	CLA	ND
50	f	302	CLA	ND
50	f	303	CLA	ND
50	g	201	CLA	ND
50	g	203	CLA	ND
50	g	204	CLA	ND
50	h	201	CLA	ND
50	j	102	CLA	ND
50	k	203	CLA	ND
50	k	204	CLA	ND
50	k	205	CLA	ND
50	l	301	CLA	ND
50	l	305	CLA	ND
50	l	306	CLA	ND
50	w	302	CLA	ND
50	w	303	CLA	ND
50	w	305	CLA	ND
50	w	306	CLA	ND
50	w	307	CLA	ND
50	w	308	CLA	ND
50	w	310	CLA	ND
50	w	314	CLA	ND
50	w	315	CLA	ND
50	w	316	CLA	ND
50	x	302	CLA	ND
50	x	303	CLA	ND
50	x	304	CLA	ND
50	x	306	CLA	ND
50	x	307	CLA	ND
50	x	308	CLA	ND
50	x	309	CLA	ND
50	x	310	CLA	ND
50	x	312	CLA	ND
50	x	313	CLA	ND
50	x	316	CLA	ND
50	x	318	CLA	ND
50	y	302	CLA	ND
50	y	303	CLA	ND
50	y	304	CLA	ND
50	y	305	CLA	ND
50	y	306	CLA	ND

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Mol	Chain	Res	Type	Atom
50	y	307	CLA	ND
50	y	308	CLA	ND
50	y	309	CLA	ND
50	y	310	CLA	ND
50	y	311	CLA	ND
50	y	312	CLA	ND
50	y	313	CLA	ND
50	y	314	CLA	ND
50	z	302	CLA	ND
50	z	303	CLA	ND
50	z	305	CLA	ND
50	z	306	CLA	ND
50	z	307	CLA	ND
50	z	308	CLA	ND
50	z	309	CLA	ND
50	z	310	CLA	ND
50	z	311	CLA	ND
50	z	316	CLA	ND
50	z	319	CLA	ND
52	a	808	CL0	NA
52	a	808	CL0	NC
52	a	808	CL0	ND
54	w	304	CHL	NA
54	w	304	CHL	NC
54	w	304	CHL	ND
54	w	309	CHL	NA
54	w	309	CHL	NC
54	w	309	CHL	ND
54	w	311	CHL	NA
54	w	311	CHL	NC
54	w	311	CHL	ND
54	x	301	CHL	NA
54	x	301	CHL	NC
54	x	301	CHL	ND
54	x	305	CHL	NA
54	x	305	CHL	NC
54	x	305	CHL	ND
54	x	311	CHL	NA
54	x	311	CHL	NC
54	x	311	CHL	ND
54	x	319	CHL	NA
54	x	319	CHL	NC

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Mol	Chain	Res	Type	Atom
54	x	319	CHL	ND
54	z	304	CHL	NA
54	z	304	CHL	NC
54	z	304	CHL	ND
54	z	312	CHL	NA
54	z	312	CHL	NC
54	z	312	CHL	ND

All (2407) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
43	4	101	BCR	C5-C6-C7-C8
43	4	101	BCR	C7-C8-C9-C10
43	4	101	BCR	C7-C8-C9-C34
43	4	101	BCR	C21-C22-C23-C24
43	4	101	BCR	C37-C22-C23-C24
43	a	803	BCR	C5-C6-C7-C8
43	a	803	BCR	C7-C8-C9-C10
43	a	803	BCR	C7-C8-C9-C34
43	a	810	BCR	C11-C12-C13-C14
43	a	810	BCR	C11-C12-C13-C35
43	a	810	BCR	C17-C18-C19-C20
43	a	810	BCR	C36-C18-C19-C20
43	a	830	BCR	C21-C22-C23-C24
43	a	830	BCR	C37-C22-C23-C24
43	a	830	BCR	C23-C24-C25-C26
43	a	831	BCR	C7-C8-C9-C10
43	a	831	BCR	C7-C8-C9-C34
43	a	831	BCR	C21-C22-C23-C24
43	a	831	BCR	C37-C22-C23-C24
43	b	816	BCR	C7-C8-C9-C10
43	b	816	BCR	C7-C8-C9-C34
43	b	816	BCR	C9-C10-C11-C12
43	b	817	BCR	C9-C10-C11-C12
43	b	818	BCR	C7-C8-C9-C10
43	b	818	BCR	C7-C8-C9-C34
43	b	819	BCR	C1-C6-C7-C8
43	b	819	BCR	C5-C6-C7-C8
43	b	819	BCR	C7-C8-C9-C10
43	b	819	BCR	C7-C8-C9-C34
43	b	820	BCR	C21-C22-C23-C24
43	b	820	BCR	C37-C22-C23-C24

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Mol	Chain	Res	Type	Atoms
43	b	831	BCR	C17-C18-C19-C20
43	b	831	BCR	C36-C18-C19-C20
43	b	850	BCR	C21-C22-C23-C24
43	b	850	BCR	C37-C22-C23-C24
43	g	202	BCR	C17-C18-C19-C20
43	g	202	BCR	C36-C18-C19-C20
43	i	101	BCR	C21-C22-C23-C24
43	i	101	BCR	C37-C22-C23-C24
43	i	101	BCR	C23-C24-C25-C26
43	j	101	BCR	C11-C12-C13-C14
43	j	101	BCR	C11-C12-C13-C35
43	j	101	BCR	C19-C20-C21-C22
43	j	101	BCR	C21-C22-C23-C24
43	j	101	BCR	C37-C22-C23-C24
43	j	103	BCR	C17-C18-C19-C20
43	j	103	BCR	C36-C18-C19-C20
43	j	103	BCR	C23-C24-C25-C26
43	k	201	BCR	C17-C18-C19-C20
43	k	201	BCR	C36-C18-C19-C20
43	l	302	BCR	C7-C8-C9-C10
43	l	302	BCR	C7-C8-C9-C34
43	l	302	BCR	C23-C24-C25-C26
43	l	303	BCR	C21-C22-C23-C24
43	l	303	BCR	C37-C22-C23-C24
43	l	304	BCR	C1-C6-C7-C8
43	x	314	BCR	C5-C6-C7-C8
43	x	314	BCR	C7-C8-C9-C10
43	x	314	BCR	C7-C8-C9-C34
43	x	314	BCR	C11-C12-C13-C14
43	x	314	BCR	C11-C12-C13-C35
43	x	314	BCR	C17-C18-C19-C20
43	x	314	BCR	C36-C18-C19-C20
43	x	314	BCR	C23-C24-C25-C26
43	y	301	BCR	C5-C6-C7-C8
43	y	301	BCR	C21-C22-C23-C24
43	y	301	BCR	C37-C22-C23-C24
43	z	318	BCR	C13-C14-C15-C16
44	5	301	PGT	C1-O3P-P-O1P
44	A	401	PGT	C32-C31-O2-C2
44	A	401	PGT	O31-C31-O2-C2
44	A	401	PGT	C5-C4-O4P-P
44	A	403	PGT	C32-C31-O2-C2

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Mol	Chain	Res	Type	Atoms
44	A	403	PGT	C4-O4P-P-O1P
44	A	404	PGT	C32-C31-O2-C2
44	A	404	PGT	C1-O3P-P-O1P
44	A	404	PGT	C1-O3P-P-O4P
44	B	601	PGT	C32-C31-O2-C2
44	B	602	PGT	C32-C31-O2-C2
44	B	602	PGT	O31-C31-O2-C2
44	B	602	PGT	C1-O3P-P-O4P
44	B	603	PGT	C4-O4P-P-O3P
44	B	603	PGT	C4-O4P-P-O1P
44	B	603	PGT	C4-O4P-P-O2P
44	B	606	PGT	C32-C31-O2-C2
44	B	606	PGT	C2-C1-O3P-P
44	B	606	PGT	C1-O3P-P-O1P
44	B	606	PGT	C1-O3P-P-O4P
44	B	606	PGT	C4-O4P-P-O3P
44	B	606	PGT	C4-O4P-P-O1P
44	B	606	PGT	C5-C4-O4P-P
44	D	602	PGT	O3P-C1-C2-O2
44	F	803	PGT	C32-C31-O2-C2
44	F	803	PGT	O31-C31-O2-C2
44	F	803	PGT	C5-C4-O4P-P
44	I	203	PGT	C1-O3P-P-O1P
44	N	301	PGT	C1-O3P-P-O1P
44	N	301	PGT	C1-O3P-P-O4P
44	N	301	PGT	C4-O4P-P-O1P
44	a	805	PGT	C1-O3P-P-O1P
44	a	805	PGT	C1-O3P-P-O2P
44	a	805	PGT	C1-O3P-P-O4P
44	a	806	PGT	C32-C31-O2-C2
44	a	806	PGT	C1-O3P-P-O1P
44	a	806	PGT	C1-O3P-P-O2P
44	a	806	PGT	C4-O4P-P-O1P
44	a	807	PGT	C1-O3P-P-O2P
44	a	807	PGT	C5-C4-O4P-P
44	b	829	PGT	C32-C31-O2-C2
44	b	829	PGT	C1-O3P-P-O1P
44	b	830	PGT	C1-O3P-P-O4P
44	f	305	PGT	O31-C31-O2-C2
44	z	301	PGT	C2-C1-O3P-P
44	z	301	PGT	C1-O3P-P-O2P
44	z	301	PGT	C4-O4P-P-O3P

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Mol	Chain	Res	Type	Atoms
44	z	301	PGT	C5-C4-O4P-P
44	z	313	PGT	C32-C31-O2-C2
45	F	804	A1H1M	C06-C07-C08-C09
45	F	804	A1H1M	C06-C07-C08-C36
46	7	301	LMG	C11-C10-O7-C8
46	B	605	LMG	O1-C7-C8-O7
46	B	605	LMG	O9-C10-O7-C8
46	B	605	LMG	C11-C10-O7-C8
46	D	601	LMG	O9-C10-O7-C8
46	j	105	LMG	C2-C1-O1-C7
46	j	105	LMG	O6-C1-O1-C7
46	j	105	LMG	O9-C10-O7-C8
46	w	312	LMG	O9-C10-O7-C8
46	w	312	LMG	C11-C10-O7-C8
46	z	314	LMG	O7-C8-C9-O8
47	A	405	PQ9	C2-C11-C12-C13
47	A	405	PQ9	C25-C26-C27-C28
48	B	604	SQD	O5-C1-O6-C44
48	B	604	SQD	O5-C5-C6-S
48	a	859	SQD	O5-C1-O6-C44
48	w	318	SQD	O49-C7-O47-C45
48	w	318	SQD	C8-C7-O47-C45
50	a	801	CLA	O2A-C1-C2-C3
50	a	811	CLA	C1A-C2A-CAA-CBA
50	a	811	CLA	C3A-C2A-CAA-CBA
50	a	811	CLA	C2A-CAA-CBA-CGA
50	a	812	CLA	CBD-CGD-O2D-CED
50	a	812	CLA	C1-C2-C3-C4
50	a	813	CLA	CHA-CBD-CGD-O2D
50	a	815	CLA	CHA-CBD-CGD-O1D
50	a	815	CLA	C1-C2-C3-C5
50	a	816	CLA	CBD-CGD-O2D-CED
50	a	818	CLA	C3A-C2A-CAA-CBA
50	a	818	CLA	C1-C2-C3-C5
50	a	820	CLA	C4-C3-C5-C6
50	a	821	CLA	CBD-CGD-O2D-CED
50	a	822	CLA	C2-C3-C5-C6
50	a	822	CLA	C4-C3-C5-C6
50	a	824	CLA	C1-C2-C3-C5
50	a	826	CLA	C3A-C2A-CAA-CBA
50	a	826	CLA	CHA-CBD-CGD-O2D
50	a	826	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
50	a	833	CLA	C3A-C2A-CAA-CBA
50	a	833	CLA	C1-C2-C3-C4
50	a	833	CLA	C1-C2-C3-C5
50	a	833	CLA	C4-C3-C5-C6
50	a	835	CLA	C1-C2-C3-C4
50	a	836	CLA	C11-C10-C8-C7
50	a	837	CLA	C1A-C2A-CAA-CBA
50	a	837	CLA	C3A-C2A-CAA-CBA
50	a	837	CLA	CBD-CGD-O2D-CED
50	a	838	CLA	C3A-C2A-CAA-CBA
50	a	838	CLA	C1-C2-C3-C5
50	a	839	CLA	CHA-CBD-CGD-O1D
50	a	839	CLA	CBD-CGD-O2D-CED
50	a	840	CLA	CHA-CBD-CGD-O1D
50	a	840	CLA	CBD-CGD-O2D-CED
50	a	842	CLA	C1A-C2A-CAA-CBA
50	a	842	CLA	C3A-C2A-CAA-CBA
50	a	842	CLA	CHA-CBD-CGD-O1D
50	a	842	CLA	C1-C2-C3-C4
50	a	842	CLA	C1-C2-C3-C5
50	a	843	CLA	CBD-CGD-O2D-CED
50	a	844	CLA	CHA-CBD-CGD-O2D
50	a	845	CLA	C1-C2-C3-C5
50	a	846	CLA	C2-C3-C5-C6
50	a	846	CLA	C4-C3-C5-C6
50	a	847	CLA	C2A-C1A-CHA-C4D
50	a	849	CLA	C1A-C2A-CAA-CBA
50	a	849	CLA	CBD-CGD-O2D-CED
50	a	849	CLA	C1-C2-C3-C4
50	a	849	CLA	C1-C2-C3-C5
50	a	849	CLA	C4-C3-C5-C6
50	a	850	CLA	C1A-C2A-CAA-CBA
50	a	851	CLA	CHA-CBD-CGD-O1D
50	a	852	CLA	CHA-CBD-CGD-O2D
50	a	852	CLA	CAD-CBD-CGD-O1D
50	a	852	CLA	CAD-CBD-CGD-O2D
50	a	854	CLA	CHA-CBD-CGD-O2D
50	a	855	CLA	CBD-CGD-O2D-CED
50	a	856	CLA	CHA-CBD-CGD-O2D
50	a	856	CLA	CBD-CGD-O2D-CED
50	a	856	CLA	C1-C2-C3-C5
50	b	801	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
50	b	802	CLA	C1A-C2A-CAA-CBA
50	b	802	CLA	CHA-CBD-CGD-O1D
50	b	803	CLA	C1A-C2A-CAA-CBA
50	b	803	CLA	C3A-C2A-CAA-CBA
50	b	803	CLA	C11-C12-C13-C14
50	b	805	CLA	CBA-CGA-O2A-C1
50	b	805	CLA	O1A-CGA-O2A-C1
50	b	807	CLA	C1A-C2A-CAA-CBA
50	b	807	CLA	CBD-CGD-O2D-CED
50	b	807	CLA	O1D-CGD-O2D-CED
50	b	809	CLA	C1-C2-C3-C4
50	b	809	CLA	C1-C2-C3-C5
50	b	810	CLA	C1A-C2A-CAA-CBA
50	b	810	CLA	C3A-C2A-CAA-CBA
50	b	811	CLA	CHA-CBD-CGD-O1D
50	b	812	CLA	C1-C2-C3-C4
50	b	812	CLA	C1-C2-C3-C5
50	b	812	CLA	C11-C10-C8-C9
50	b	822	CLA	CHA-CBD-CGD-O1D
50	b	822	CLA	C4-C3-C5-C6
50	b	823	CLA	C1A-C2A-CAA-CBA
50	b	823	CLA	C2-C3-C5-C6
50	b	824	CLA	C11-C10-C8-C9
50	b	825	CLA	C1-C2-C3-C5
50	b	826	CLA	C1A-C2A-CAA-CBA
50	b	826	CLA	C3A-C2A-CAA-CBA
50	b	826	CLA	C4-C3-C5-C6
50	b	828	CLA	C1-C2-C3-C4
50	b	828	CLA	C2-C3-C5-C6
50	b	832	CLA	CBA-CGA-O2A-C1
50	b	832	CLA	O1A-CGA-O2A-C1
50	b	832	CLA	C1-C2-C3-C5
50	b	832	CLA	C4-C3-C5-C6
50	b	833	CLA	C11-C12-C13-C14
50	b	836	CLA	C11-C12-C13-C14
50	b	837	CLA	C3A-C2A-CAA-CBA
50	b	837	CLA	CHA-CBD-CGD-O2D
50	b	839	CLA	CHA-CBD-CGD-O1D
50	b	839	CLA	CHA-CBD-CGD-O2D
50	b	840	CLA	C1-C2-C3-C4
50	b	841	CLA	C1A-C2A-CAA-CBA
50	b	841	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
50	b	842	CLA	C1A-C2A-CAA-CBA
50	b	842	CLA	O1A-CGA-O2A-C1
50	b	842	CLA	C1-C2-C3-C4
50	b	842	CLA	C11-C10-C8-C9
50	b	844	CLA	C1A-C2A-CAA-CBA
50	b	844	CLA	CBD-CGD-O2D-CED
50	b	844	CLA	O2A-C1-C2-C3
50	b	844	CLA	C1-C2-C3-C4
50	b	844	CLA	C1-C2-C3-C5
50	b	844	CLA	C2-C3-C5-C6
50	b	844	CLA	C4-C3-C5-C6
50	b	845	CLA	C1A-C2A-CAA-CBA
50	b	845	CLA	C3A-C2A-CAA-CBA
50	b	846	CLA	C3A-C2A-CAA-CBA
50	b	847	CLA	O1A-CGA-O2A-C1
50	b	847	CLA	C2-C1-O2A-CGA
50	b	847	CLA	CBD-CGD-O2D-CED
50	b	848	CLA	CHA-CBD-CGD-O2D
50	b	849	CLA	C1A-C2A-CAA-CBA
50	f	301	CLA	C1A-C2A-CAA-CBA
50	f	301	CLA	C2A-CAA-CBA-CGA
50	f	303	CLA	CBD-CGD-O2D-CED
50	g	201	CLA	CBA-CGA-O2A-C1
50	g	201	CLA	O1A-CGA-O2A-C1
50	g	201	CLA	CBD-CGD-O2D-CED
50	g	203	CLA	CBD-CGD-O2D-CED
50	g	204	CLA	C2A-CAA-CBA-CGA
50	g	204	CLA	CBD-CGD-O2D-CED
50	h	201	CLA	C3A-C2A-CAA-CBA
50	h	201	CLA	CBD-CGD-O2D-CED
50	k	205	CLA	CHA-CBD-CGD-O2D
50	k	205	CLA	CBD-CGD-O2D-CED
50	l	306	CLA	C1A-C2A-CAA-CBA
50	l	306	CLA	C3A-C2A-CAA-CBA
50	l	306	CLA	C2-C3-C5-C6
50	l	306	CLA	C4-C3-C5-C6
50	w	302	CLA	C1A-C2A-CAA-CBA
50	w	302	CLA	C3A-C2A-CAA-CBA
50	w	302	CLA	C1-C2-C3-C5
50	w	303	CLA	C3A-C2A-CAA-CBA
50	w	303	CLA	C2A-CAA-CBA-CGA
50	w	306	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
50	w	307	CLA	C1A-C2A-CAA-CBA
50	w	307	CLA	C3A-C2A-CAA-CBA
50	w	307	CLA	CBD-CGD-O2D-CED
50	w	307	CLA	O1D-CGD-O2D-CED
50	w	308	CLA	C3A-C2A-CAA-CBA
50	w	310	CLA	C1A-C2A-CAA-CBA
50	w	314	CLA	C1A-C2A-CAA-CBA
50	w	314	CLA	C3A-C2A-CAA-CBA
50	w	314	CLA	CHA-CBD-CGD-O1D
50	w	314	CLA	CAD-CBD-CGD-O1D
50	w	314	CLA	CAD-CBD-CGD-O2D
50	w	314	CLA	CBD-CGD-O2D-CED
50	w	315	CLA	CHA-CBD-CGD-O1D
50	w	315	CLA	CBD-CGD-O2D-CED
50	w	315	CLA	O1D-CGD-O2D-CED
50	w	316	CLA	C1A-C2A-CAA-CBA
50	w	316	CLA	C3A-C2A-CAA-CBA
50	w	316	CLA	CBD-CGD-O2D-CED
50	w	316	CLA	O1D-CGD-O2D-CED
50	x	302	CLA	CBD-CGD-O2D-CED
50	x	303	CLA	C1A-C2A-CAA-CBA
50	x	303	CLA	CBD-CGD-O2D-CED
50	x	304	CLA	C2A-CAA-CBA-CGA
50	x	306	CLA	CAD-CBD-CGD-O2D
50	x	307	CLA	C4-C3-C5-C6
50	x	309	CLA	C1A-C2A-CAA-CBA
50	x	309	CLA	CHA-CBD-CGD-O2D
50	x	310	CLA	C3A-C2A-CAA-CBA
50	x	312	CLA	C3A-C2A-CAA-CBA
50	x	313	CLA	C2A-CAA-CBA-CGA
50	x	313	CLA	O1A-CGA-O2A-C1
50	x	313	CLA	CBD-CGD-O2D-CED
50	x	316	CLA	CHA-CBD-CGD-O2D
50	x	318	CLA	C1A-C2A-CAA-CBA
50	x	318	CLA	C2A-CAA-CBA-CGA
50	x	318	CLA	CHA-CBD-CGD-O2D
50	y	302	CLA	C1-C2-C3-C5
50	y	303	CLA	CBA-CGA-O2A-C1
50	y	303	CLA	O1A-CGA-O2A-C1
50	y	303	CLA	CHA-CBD-CGD-O1D
50	y	306	CLA	CHA-CBD-CGD-O1D
50	y	306	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
50	y	306	CLA	O1D-CGD-O2D-CED
50	y	307	CLA	C1A-C2A-CAA-CBA
50	y	307	CLA	C3A-C2A-CAA-CBA
50	y	307	CLA	CBD-CGD-O2D-CED
50	y	309	CLA	C1A-C2A-CAA-CBA
50	y	311	CLA	C1A-C2A-CAA-CBA
50	y	312	CLA	C1-C2-C3-C4
50	y	312	CLA	C1-C2-C3-C5
50	y	313	CLA	C2-C3-C5-C6
50	y	313	CLA	C4-C3-C5-C6
50	y	314	CLA	C2-C1-O2A-CGA
50	y	314	CLA	CHA-CBD-CGD-O1D
50	y	314	CLA	CHA-CBD-CGD-O2D
50	y	314	CLA	C1-C2-C3-C4
50	y	314	CLA	C1-C2-C3-C5
50	z	302	CLA	CHA-CBD-CGD-O1D
50	z	302	CLA	CHA-CBD-CGD-O2D
50	z	302	CLA	CBD-CGD-O2D-CED
50	z	303	CLA	CBD-CGD-O2D-CED
50	z	305	CLA	CHA-CBD-CGD-O1D
50	z	305	CLA	C1-C2-C3-C5
50	z	306	CLA	C1A-C2A-CAA-CBA
50	z	306	CLA	C3A-C2A-CAA-CBA
50	z	306	CLA	C2A-CAA-CBA-CGA
50	z	306	CLA	C1-C2-C3-C4
50	z	306	CLA	C1-C2-C3-C5
50	z	308	CLA	CHA-CBD-CGD-O1D
50	z	308	CLA	CHA-CBD-CGD-O2D
50	z	310	CLA	CHA-CBD-CGD-O1D
50	z	310	CLA	CAD-CBD-CGD-O1D
50	z	310	CLA	CAD-CBD-CGD-O2D
50	z	310	CLA	CBD-CGD-O2D-CED
51	a	804	DGD	C2D-C1D-O3G-C3G
51	a	804	DGD	O6D-C1D-O3G-C3G
51	a	804	DGD	C2E-C1E-O5D-C6D
51	a	804	DGD	O6E-C1E-O5D-C6D
51	b	821	DGD	C2B-C1B-O2G-C2G
51	b	821	DGD	O2G-C2G-C3G-O3G
51	x	317	DGD	O1B-C1B-O2G-C2G
51	x	317	DGD	O6D-C1D-O3G-C3G
51	x	317	DGD	C5D-C6D-O5D-C1E
54	w	304	CHL	C1C-C2C-CMC-OMC

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Mol	Chain	Res	Type	Atoms
54	w	304	CHL	C3C-C2C-CMC-OMC
54	w	309	CHL	C1A-C2A-CAA-CBA
54	w	309	CHL	C3A-C2A-CAA-CBA
54	w	311	CHL	C1A-C2A-CAA-CBA
54	w	311	CHL	CBD-CGD-O2D-CED
54	x	301	CHL	C1A-C2A-CAA-CBA
54	x	301	CHL	CHA-CBD-CGD-O2D
54	x	301	CHL	CBD-CGD-O2D-CED
54	x	311	CHL	CBD-CGD-O2D-CED
54	x	319	CHL	C1A-C2A-CAA-CBA
54	x	319	CHL	C3A-C2A-CAA-CBA
54	z	304	CHL	C1C-C2C-CMC-OMC
54	z	312	CHL	C3C-C2C-CMC-OMC
54	z	312	CHL	CBD-CGD-O2D-CED
55	w	319	LUT	C21-C26-C27-C28
55	w	319	LUT	C25-C26-C27-C28
55	w	319	LUT	C27-C28-C29-C30
55	w	319	LUT	C27-C28-C29-C39
55	x	321	LUT	C7-C8-C9-C10
55	x	321	LUT	C7-C8-C9-C19
55	x	321	LUT	C21-C26-C27-C28
55	x	321	LUT	C25-C26-C27-C28
55	y	316	LUT	C21-C26-C27-C28
55	y	316	LUT	C25-C26-C27-C28
55	y	316	LUT	C27-C28-C29-C30
55	y	316	LUT	C27-C28-C29-C39
55	z	320	LUT	C27-C28-C29-C39
50	w	310	CLA	C4C-C3C-CAC-CBC
50	b	848	CLA	O1D-CGD-O2D-CED
50	f	303	CLA	O1D-CGD-O2D-CED
50	h	201	CLA	O1D-CGD-O2D-CED
50	l	301	CLA	O1D-CGD-O2D-CED
50	w	314	CLA	O1D-CGD-O2D-CED
50	x	303	CLA	O1D-CGD-O2D-CED
54	w	309	CHL	O1D-CGD-O2D-CED
50	a	821	CLA	O1D-CGD-O2D-CED
50	k	205	CLA	O1D-CGD-O2D-CED
50	x	313	CLA	O1D-CGD-O2D-CED
50	z	302	CLA	O1D-CGD-O2D-CED
50	z	309	CLA	O1D-CGD-O2D-CED
54	x	301	CHL	O1D-CGD-O2D-CED
54	x	311	CHL	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
50	a	802	CLA	CBD-CGD-O2D-CED
50	a	811	CLA	CBD-CGD-O2D-CED
50	a	824	CLA	CBD-CGD-O2D-CED
50	b	802	CLA	CBD-CGD-O2D-CED
50	b	805	CLA	CBD-CGD-O2D-CED
50	b	808	CLA	CBD-CGD-O2D-CED
50	b	838	CLA	CBD-CGD-O2D-CED
50	b	845	CLA	CBD-CGD-O2D-CED
50	b	848	CLA	CBD-CGD-O2D-CED
50	f	301	CLA	CBD-CGD-O2D-CED
50	k	203	CLA	CBD-CGD-O2D-CED
50	l	301	CLA	CBD-CGD-O2D-CED
50	w	302	CLA	CBD-CGD-O2D-CED
50	w	306	CLA	CBD-CGD-O2D-CED
50	w	308	CLA	CBD-CGD-O2D-CED
50	x	306	CLA	CBD-CGD-O2D-CED
50	x	307	CLA	CBD-CGD-O2D-CED
50	y	310	CLA	CBD-CGD-O2D-CED
50	y	312	CLA	CBD-CGD-O2D-CED
50	z	307	CLA	CBD-CGD-O2D-CED
50	z	308	CLA	CBD-CGD-O2D-CED
50	z	309	CLA	CBD-CGD-O2D-CED
54	w	309	CHL	CBD-CGD-O2D-CED
54	x	319	CHL	CBD-CGD-O2D-CED
54	z	304	CHL	CBD-CGD-O2D-CED
44	B	602	PGT	O11-C11-O3-C3
44	a	805	PGT	O11-C11-O3-C3
44	b	830	PGT	O11-C11-O3-C3
44	z	301	PGT	O11-C11-O3-C3
48	w	318	SQD	O10-C23-O48-C46
50	a	809	CLA	O1A-CGA-O2A-C1
50	a	814	CLA	O1A-CGA-O2A-C1
50	a	857	CLA	O1A-CGA-O2A-C1
50	b	838	CLA	O1A-CGA-O2A-C1
50	x	306	CLA	O1A-CGA-O2A-C1
50	x	308	CLA	O1A-CGA-O2A-C1
50	w	310	CLA	C2C-C3C-CAC-CBC
50	a	812	CLA	O1D-CGD-O2D-CED
50	b	801	CLA	O1D-CGD-O2D-CED
50	f	301	CLA	O1D-CGD-O2D-CED
50	g	201	CLA	O1D-CGD-O2D-CED
50	g	203	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
54	z	304	CHL	O1D-CGD-O2D-CED
54	z	312	CHL	O1D-CGD-O2D-CED
50	a	851	CLA	CBA-CGA-O2A-C1
50	b	805	CLA	O1D-CGD-O2D-CED
50	b	845	CLA	O1D-CGD-O2D-CED
50	x	302	CLA	O1D-CGD-O2D-CED
50	y	312	CLA	O1D-CGD-O2D-CED
44	a	805	PGT	C12-C11-O3-C3
44	a	806	PGT	C12-C11-O3-C3
44	z	301	PGT	C12-C11-O3-C3
48	w	318	SQD	C24-C23-O48-C46
50	a	809	CLA	CBA-CGA-O2A-C1
50	a	815	CLA	CBA-CGA-O2A-C1
50	a	823	CLA	CBA-CGA-O2A-C1
50	a	857	CLA	CBA-CGA-O2A-C1
50	w	302	CLA	CBA-CGA-O2A-C1
50	a	815	CLA	CBD-CGD-O2D-CED
50	a	836	CLA	CBD-CGD-O2D-CED
50	a	845	CLA	CBD-CGD-O2D-CED
50	a	853	CLA	CBD-CGD-O2D-CED
50	a	857	CLA	CBD-CGD-O2D-CED
50	b	803	CLA	CBD-CGD-O2D-CED
50	b	806	CLA	CBD-CGD-O2D-CED
50	b	813	CLA	CBD-CGD-O2D-CED
50	b	823	CLA	CBD-CGD-O2D-CED
50	b	834	CLA	CBD-CGD-O2D-CED
50	x	318	CLA	CBD-CGD-O2D-CED
50	y	303	CLA	CBD-CGD-O2D-CED
50	y	308	CLA	CBD-CGD-O2D-CED
50	z	311	CLA	CBD-CGD-O2D-CED
44	5	301	PGT	O11-C11-O3-C3
44	A	401	PGT	O11-C11-O3-C3
44	A	404	PGT	O11-C11-O3-C3
44	B	601	PGT	O11-C11-O3-C3
44	I	203	PGT	O11-C11-O3-C3
44	a	806	PGT	O11-C11-O3-C3
44	b	829	PGT	O11-C11-O3-C3
46	7	301	LMG	O10-C28-O8-C9
46	D	601	LMG	O10-C28-O8-C9
46	j	104	LMG	O10-C28-O8-C9
46	z	315	LMG	O10-C28-O8-C9
50	a	801	CLA	O1A-CGA-O2A-C1

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Mol	Chain	Res	Type	Atoms
50	a	815	CLA	O1A-CGA-O2A-C1
50	a	823	CLA	O1A-CGA-O2A-C1
50	a	849	CLA	O1A-CGA-O2A-C1
50	b	815	CLA	O1A-CGA-O2A-C1
50	b	828	CLA	O1A-CGA-O2A-C1
50	b	836	CLA	O1A-CGA-O2A-C1
50	w	302	CLA	O1A-CGA-O2A-C1
50	w	316	CLA	O1A-CGA-O2A-C1
50	x	312	CLA	O1A-CGA-O2A-C1
50	y	314	CLA	O1A-CGA-O2A-C1
51	a	804	DGD	O1A-C1A-O1G-C1G
50	w	302	CLA	O1D-CGD-O2D-CED
50	x	306	CLA	O1D-CGD-O2D-CED
50	z	308	CLA	O1D-CGD-O2D-CED
50	a	839	CLA	C15-C16-C17-C18
50	a	811	CLA	O1D-CGD-O2D-CED
50	a	824	CLA	O1D-CGD-O2D-CED
50	a	826	CLA	O1D-CGD-O2D-CED
50	k	203	CLA	O1D-CGD-O2D-CED
45	5	302	A1H1M	O14-C13-O12-C11
45	F	804	A1H1M	C33-C13-O12-C11
50	b	851	CLA	CBD-CGD-O2D-CED
50	j	102	CLA	CBD-CGD-O2D-CED
54	w	304	CHL	CBD-CGD-O2D-CED
50	b	802	CLA	O1D-CGD-O2D-CED
50	b	803	CLA	O1D-CGD-O2D-CED
50	b	847	CLA	O1D-CGD-O2D-CED
44	A	403	PGT	O31-C31-O2-C2
44	A	404	PGT	O31-C31-O2-C2
44	B	601	PGT	O31-C31-O2-C2
44	B	606	PGT	O31-C31-O2-C2
44	b	829	PGT	O31-C31-O2-C2
44	z	313	PGT	O31-C31-O2-C2
46	7	301	LMG	O9-C10-O7-C8
51	b	821	DGD	O1B-C1B-O2G-C2G
45	5	302	A1H1M	C25-C22-C23-O24
50	a	839	CLA	O1A-CGA-O2A-C1
50	w	308	CLA	O1A-CGA-O2A-C1
50	a	851	CLA	O1A-CGA-O2A-C1
45	F	804	A1H1M	O14-C13-O12-C11
50	a	811	CLA	C3-C5-C6-C7
50	a	836	CLA	C3-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
50	f	301	CLA	C3-C5-C6-C7
53	b	827	PQN	C13-C15-C16-C17
44	A	401	PGT	C12-C11-O3-C3
44	B	601	PGT	C12-C11-O3-C3
44	B	602	PGT	C12-C11-O3-C3
44	I	203	PGT	C12-C11-O3-C3
44	b	829	PGT	C12-C11-O3-C3
44	b	830	PGT	C12-C11-O3-C3
46	7	301	LMG	C29-C28-O8-C9
46	D	601	LMG	C29-C28-O8-C9
46	j	104	LMG	C29-C28-O8-C9
50	a	801	CLA	CBA-CGA-O2A-C1
50	a	821	CLA	CBA-CGA-O2A-C1
50	a	833	CLA	CBA-CGA-O2A-C1
50	a	841	CLA	CBA-CGA-O2A-C1
50	a	842	CLA	CBA-CGA-O2A-C1
50	a	849	CLA	CBA-CGA-O2A-C1
50	b	842	CLA	CBA-CGA-O2A-C1
50	x	308	CLA	CBA-CGA-O2A-C1
50	x	312	CLA	CBA-CGA-O2A-C1
50	x	313	CLA	CBA-CGA-O2A-C1
51	a	804	DGD	C2A-C1A-O1G-C1G
44	f	305	PGT	C32-C31-O2-C2
46	D	601	LMG	C11-C10-O7-C8
46	j	105	LMG	C11-C10-O7-C8
51	x	317	DGD	C2B-C1B-O2G-C2G
47	A	405	PQ9	C20-C21-C22-C23
50	b	826	CLA	CBD-CGD-O2D-CED
50	h	201	CLA	CBA-CGA-O2A-C1
50	a	844	CLA	C4-C3-C5-C6
50	b	828	CLA	C4-C3-C5-C6
50	a	820	CLA	C2-C3-C5-C6
50	b	826	CLA	C2-C3-C5-C6
50	x	307	CLA	C2-C3-C5-C6
50	a	835	CLA	CBD-CGD-O2D-CED
50	a	841	CLA	CBD-CGD-O2D-CED
50	a	802	CLA	C2A-CAA-CBA-CGA
50	a	812	CLA	C2A-CAA-CBA-CGA
50	a	848	CLA	C2A-CAA-CBA-CGA
50	a	857	CLA	C2A-CAA-CBA-CGA
50	b	810	CLA	C2A-CAA-CBA-CGA
50	b	823	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
50	b	838	CLA	C2A-CAA-CBA-CGA
50	b	839	CLA	C2A-CAA-CBA-CGA
50	b	845	CLA	C2A-CAA-CBA-CGA
50	g	201	CLA	C2A-CAA-CBA-CGA
50	h	201	CLA	C2A-CAA-CBA-CGA
50	k	204	CLA	C2A-CAA-CBA-CGA
50	l	306	CLA	C2A-CAA-CBA-CGA
50	w	307	CLA	C2A-CAA-CBA-CGA
50	y	312	CLA	C2A-CAA-CBA-CGA
50	z	316	CLA	C2A-CAA-CBA-CGA
50	a	841	CLA	O1A-CGA-O2A-C1
50	a	816	CLA	O1D-CGD-O2D-CED
50	a	849	CLA	O1D-CGD-O2D-CED
44	A	403	PGT	C13-C14-C15-C16
50	b	801	CLA	C3-C5-C6-C7
50	b	802	CLA	C3-C5-C6-C7
50	b	805	CLA	C3-C5-C6-C7
50	b	847	CLA	C3-C5-C6-C7
50	y	308	CLA	C3-C5-C6-C7
44	5	301	PGT	C12-C11-O3-C3
44	A	404	PGT	C12-C11-O3-C3
46	z	315	LMG	C29-C28-O8-C9
50	a	839	CLA	CBA-CGA-O2A-C1
50	a	843	CLA	CBA-CGA-O2A-C1
50	a	848	CLA	CBA-CGA-O2A-C1
50	b	802	CLA	CBA-CGA-O2A-C1
50	b	815	CLA	CBA-CGA-O2A-C1
50	b	828	CLA	CBA-CGA-O2A-C1
50	b	836	CLA	CBA-CGA-O2A-C1
50	b	846	CLA	CBA-CGA-O2A-C1
50	l	306	CLA	CBA-CGA-O2A-C1
50	w	308	CLA	CBA-CGA-O2A-C1
50	w	316	CLA	CBA-CGA-O2A-C1
50	x	306	CLA	CBA-CGA-O2A-C1
46	w	312	LMG	O6-C5-C6-O5
50	a	837	CLA	O1D-CGD-O2D-CED
50	a	839	CLA	O1D-CGD-O2D-CED
50	z	310	CLA	O1D-CGD-O2D-CED
50	a	812	CLA	C1-C2-C3-C5
50	b	842	CLA	C1-C2-C3-C5
50	w	305	CLA	C1-C2-C3-C5
50	a	814	CLA	CBD-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
50	a	833	CLA	CBD-CGD-O2D-CED
50	b	835	CLA	CBD-CGD-O2D-CED
50	w	310	CLA	CBD-CGD-O2D-CED
44	a	806	PGT	O31-C31-O2-C2
50	a	812	CLA	O1A-CGA-O2A-C1
50	a	833	CLA	O1A-CGA-O2A-C1
50	a	842	CLA	O1A-CGA-O2A-C1
50	a	843	CLA	O1A-CGA-O2A-C1
50	b	802	CLA	O1A-CGA-O2A-C1
50	b	840	CLA	O1A-CGA-O2A-C1
50	b	841	CLA	O1A-CGA-O2A-C1
50	k	204	CLA	O1A-CGA-O2A-C1
50	w	310	CLA	O1A-CGA-O2A-C1
50	z	305	CLA	O1A-CGA-O2A-C1
50	w	306	CLA	O1D-CGD-O2D-CED
54	w	311	CHL	O1D-CGD-O2D-CED
43	a	810	BCR	C15-C16-C17-C18
43	b	819	BCR	C9-C10-C11-C12
43	g	202	BCR	C19-C20-C21-C22
43	k	201	BCR	C13-C14-C15-C16
50	a	818	CLA	CBD-CGD-O2D-CED
50	b	822	CLA	CBD-CGD-O2D-CED
50	x	308	CLA	CBD-CGD-O2D-CED
50	z	306	CLA	CBD-CGD-O2D-CED
50	a	843	CLA	O1D-CGD-O2D-CED
50	a	814	CLA	C3-C5-C6-C7
50	z	306	CLA	C3-C5-C6-C7
53	a	825	PQN	C13-C15-C16-C17
44	L	201	PGT	C12-C11-O3-C3
44	z	317	PGT	C12-C11-O3-C3
50	a	814	CLA	CBA-CGA-O2A-C1
50	b	838	CLA	CBA-CGA-O2A-C1
50	b	840	CLA	CBA-CGA-O2A-C1
50	b	847	CLA	CBA-CGA-O2A-C1
50	a	834	CLA	O1A-CGA-O2A-C1
50	a	845	CLA	O1A-CGA-O2A-C1
50	b	814	CLA	CBD-CGD-O2D-CED
50	b	843	CLA	CBD-CGD-O2D-CED
46	B	605	LMG	O6-C5-C6-O5
46	D	601	LMG	O6-C5-C6-O5
44	A	403	PGT	C36-C37-C38-C39
46	F	802	LMG	O6-C5-C6-O5

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Mol	Chain	Res	Type	Atoms
46	w	312	LMG	C4-C5-C6-O5
50	b	845	CLA	C10-C11-C12-C13
50	a	812	CLA	C3-C5-C6-C7
50	y	314	CLA	CBA-CGA-O2A-C1
46	H	401	LMG	O6-C5-C6-O5
50	b	823	CLA	O1A-CGA-O2A-C1
46	B	605	LMG	C29-C30-C31-C32
45	5	302	A1H1M	O21-C22-C23-O24
50	w	308	CLA	C4-C3-C5-C6
50	a	833	CLA	C2-C3-C5-C6
50	b	832	CLA	C2-C3-C5-C6
50	w	308	CLA	C2-C3-C5-C6
50	a	839	CLA	C2A-CAA-CBA-CGA
50	x	308	CLA	C2A-CAA-CBA-CGA
45	5	302	A1H1M	O14-C15-C16-O17
45	F	804	A1H1M	O14-C15-C16-O17
44	z	317	PGT	O11-C11-O3-C3
50	a	821	CLA	O1A-CGA-O2A-C1
50	b	846	CLA	O1A-CGA-O2A-C1
47	A	405	PQ9	C13-C15-C16-C17
44	B	606	PGT	C12-C11-O3-C3
50	k	204	CLA	CBA-CGA-O2A-C1
50	z	305	CLA	CBA-CGA-O2A-C1
51	a	804	DGD	O6E-C5E-C6E-O5E
50	z	303	CLA	O1D-CGD-O2D-CED
44	L	201	PGT	O11-C11-O3-C3
50	a	802	CLA	O1A-CGA-O2A-C1
44	D	602	PGT	C32-C31-O2-C2
50	a	809	CLA	C1-C2-C3-C5
50	a	835	CLA	C1-C2-C3-C5
50	b	836	CLA	C1-C2-C3-C5
50	b	840	CLA	C1-C2-C3-C5
50	w	310	CLA	C1-C2-C3-C5
50	x	306	CLA	C1-C2-C3-C5
50	a	855	CLA	O1D-CGD-O2D-CED
50	b	844	CLA	O1D-CGD-O2D-CED
50	y	307	CLA	O1D-CGD-O2D-CED
44	A	403	PGT	O4P-C4-C5-C6
44	z	313	PGT	O4P-C4-C5-C6
44	B	606	PGT	O11-C11-O3-C3
50	a	848	CLA	O1A-CGA-O2A-C1
50	a	844	CLA	C3-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
50	g	204	CLA	O1D-CGD-O2D-CED
44	B	603	PGT	C12-C11-O3-C3
44	F	803	PGT	C12-C11-O3-C3
44	N	301	PGT	C12-C11-O3-C3
50	a	802	CLA	CBA-CGA-O2A-C1
50	a	812	CLA	CBA-CGA-O2A-C1
50	a	834	CLA	CBA-CGA-O2A-C1
50	a	837	CLA	CBA-CGA-O2A-C1
50	a	845	CLA	CBA-CGA-O2A-C1
50	a	846	CLA	CBA-CGA-O2A-C1
50	b	807	CLA	CBA-CGA-O2A-C1
50	b	809	CLA	CBA-CGA-O2A-C1
50	b	841	CLA	CBA-CGA-O2A-C1
50	b	849	CLA	CBA-CGA-O2A-C1
50	w	310	CLA	CBA-CGA-O2A-C1
46	F	802	LMG	C4-C5-C6-O5
50	a	801	CLA	C15-C16-C17-C18
51	b	821	DGD	C4E-C5E-C6E-O5E
50	a	834	CLA	C15-C16-C17-C18
50	a	846	CLA	C15-C16-C17-C18
50	a	857	CLA	C5-C6-C7-C8
50	b	802	CLA	C10-C11-C12-C13
50	b	824	CLA	C8-C10-C11-C12
50	b	825	CLA	C10-C11-C12-C13
50	b	825	CLA	C15-C16-C17-C18
50	b	841	CLA	C5-C6-C7-C8
50	b	845	CLA	C15-C16-C17-C18
50	w	308	CLA	C10-C11-C12-C13
44	A	403	PGT	O4P-C4-C5-O5
44	B	601	PGT	O4P-C4-C5-O5
44	z	301	PGT	O4P-C4-C5-O5
44	z	301	PGT	C31-C32-C33-C34
46	B	605	LMG	C2-C1-O1-C7
46	j	104	LMG	C2-C1-O1-C7
48	B	604	SQD	C2-C1-O6-C44
48	a	859	SQD	C2-C1-O6-C44
51	b	821	DGD	C9B-CAB-CBB-CCB
46	B	605	LMG	C4-C5-C6-O5
46	H	401	LMG	C4-C5-C6-O5
50	b	822	CLA	C2-C3-C5-C6
50	a	814	CLA	C6-C7-C8-C9
50	a	815	CLA	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
50	a	820	CLA	C11-C10-C8-C9
50	a	820	CLA	C14-C13-C15-C16
50	a	835	CLA	C6-C7-C8-C9
50	a	839	CLA	C11-C12-C13-C14
50	a	839	CLA	C14-C13-C15-C16
50	a	842	CLA	C14-C13-C15-C16
50	a	843	CLA	C14-C13-C15-C16
50	a	849	CLA	C11-C10-C8-C9
50	a	858	CLA	C11-C12-C13-C14
50	b	803	CLA	C14-C13-C15-C16
50	b	807	CLA	C11-C12-C13-C14
50	b	807	CLA	C14-C13-C15-C16
50	b	812	CLA	C11-C12-C13-C14
50	b	825	CLA	C11-C10-C8-C9
50	b	837	CLA	C11-C10-C8-C9
50	b	837	CLA	C11-C12-C13-C14
50	b	843	CLA	C11-C12-C13-C14
50	b	843	CLA	C14-C13-C15-C16
50	b	845	CLA	C6-C7-C8-C9
50	b	846	CLA	C11-C12-C13-C14
50	w	306	CLA	C6-C7-C8-C9
50	w	306	CLA	C11-C12-C13-C14
50	w	310	CLA	C14-C13-C15-C16
50	x	312	CLA	C11-C10-C8-C9
50	x	308	CLA	O1D-CGD-O2D-CED
50	a	843	CLA	C13-C15-C16-C17
50	b	832	CLA	C2A-CAA-CBA-CGA
50	w	316	CLA	C2A-CAA-CBA-CGA
43	a	829	BCR	C7-C8-C9-C34
43	b	831	BCR	C37-C22-C23-C24
43	g	202	BCR	C37-C22-C23-C24
43	j	103	BCR	C37-C22-C23-C24
43	k	202	BCR	C36-C18-C19-C20
43	l	302	BCR	C37-C22-C23-C24
43	l	303	BCR	C36-C18-C19-C20
43	l	304	BCR	C36-C18-C19-C20
55	w	320	LUT	C7-C8-C9-C19
55	x	321	LUT	C27-C28-C29-C39
43	a	829	BCR	C7-C8-C9-C10
43	b	831	BCR	C21-C22-C23-C24
43	g	202	BCR	C21-C22-C23-C24
43	j	103	BCR	C21-C22-C23-C24

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Mol	Chain	Res	Type	Atoms
43	l	302	BCR	C21-C22-C23-C24
55	x	321	LUT	C27-C28-C29-C30
45	F	804	A1H1M	C18-C15-C16-O17
44	z	313	PGT	C31-C32-C33-C34
46	z	314	LMG	C10-C11-C12-C13
44	B	603	PGT	O11-C11-O3-C3
44	N	301	PGT	O11-C11-O3-C3
50	a	837	CLA	O1A-CGA-O2A-C1
50	l	306	CLA	O1A-CGA-O2A-C1
50	a	815	CLA	C15-C16-C17-C18
50	b	815	CLA	C5-C6-C7-C8
50	b	828	CLA	C8-C10-C11-C12
50	b	842	CLA	C5-C6-C7-C8
50	x	307	CLA	C8-C10-C11-C12
53	a	825	PQN	C18-C20-C21-C22
45	5	302	A1H1M	C01-C02-C03-C04
46	j	105	LMG	C29-C28-O8-C9
50	b	823	CLA	CBA-CGA-O2A-C1
50	a	820	CLA	C5-C6-C7-C8
50	a	820	CLA	C15-C16-C17-C18
50	a	824	CLA	C5-C6-C7-C8
50	a	836	CLA	C5-C6-C7-C8
50	a	853	CLA	C10-C11-C12-C13
50	b	846	CLA	C10-C11-C12-C13
50	w	310	CLA	C13-C15-C16-C17
50	y	308	CLA	C10-C11-C12-C13
44	A	403	PGT	C31-C32-C33-C34
44	B	601	PGT	C31-C32-C33-C34
46	7	301	LMG	C10-C11-C12-C13
51	a	804	DGD	C9B-CAB-CBB-CCB
50	a	811	CLA	C15-C16-C17-C18
50	a	812	CLA	C5-C6-C7-C8
50	a	814	CLA	C5-C6-C7-C8
50	a	814	CLA	C13-C15-C16-C17
50	a	819	CLA	C10-C11-C12-C13
50	a	833	CLA	C10-C11-C12-C13
50	a	836	CLA	C10-C11-C12-C13
50	a	837	CLA	C15-C16-C17-C18
50	a	849	CLA	C5-C6-C7-C8
50	a	858	CLA	C15-C16-C17-C18
50	b	824	CLA	C10-C11-C12-C13
50	b	837	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
50	b	840	CLA	C5-C6-C7-C8
50	b	840	CLA	C10-C11-C12-C13
50	b	840	CLA	C15-C16-C17-C18
50	b	843	CLA	C15-C16-C17-C18
50	l	306	CLA	C10-C11-C12-C13
50	w	306	CLA	C10-C11-C12-C13
50	w	308	CLA	C5-C6-C7-C8
53	a	825	PQN	C15-C16-C17-C18
44	B	603	PGT	C11-C12-C13-C14
44	b	830	PGT	C11-C12-C13-C14
46	x	315	LMG	C28-C29-C30-C31
51	x	317	DGD	C1B-C2B-C3B-C4B
50	a	840	CLA	O1D-CGD-O2D-CED
50	a	833	CLA	C15-C16-C17-C18
50	a	856	CLA	C15-C16-C17-C18
50	a	857	CLA	C15-C16-C17-C18
50	b	807	CLA	C13-C15-C16-C17
50	b	815	CLA	C15-C16-C17-C18
50	b	837	CLA	C5-C6-C7-C8
50	a	822	CLA	CBA-CGA-O2A-C1
51	a	804	DGD	CAA-CBA-CCA-CDA
46	j	104	LMG	O6-C5-C6-O5
46	j	105	LMG	O6-C5-C6-O5
50	a	836	CLA	C15-C16-C17-C18
50	b	809	CLA	C8-C10-C11-C12
50	b	839	CLA	C10-C11-C12-C13
50	w	310	CLA	C10-C11-C12-C13
45	F	804	A1H1M	C37-C07-C08-C09
45	F	804	A1H1M	C37-C07-C08-C36
44	b	829	PGT	C11-C12-C13-C14
44	z	301	PGT	C11-C12-C13-C14
50	b	842	CLA	C8-C10-C11-C12
50	a	837	CLA	C10-C11-C12-C13
50	b	803	CLA	C10-C11-C12-C13
50	b	833	CLA	C5-C6-C7-C8
50	x	303	CLA	C5-C6-C7-C8
50	a	814	CLA	C11-C10-C8-C7
50	a	814	CLA	C12-C13-C15-C16
50	a	843	CLA	C11-C12-C13-C15
50	a	850	CLA	C11-C12-C13-C15
50	b	802	CLA	C12-C13-C15-C16
50	b	824	CLA	C12-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
50	x	307	CLA	C11-C10-C8-C7
50	y	314	CLA	C11-C12-C13-C15
50	l	306	CLA	C3-C5-C6-C7
50	x	312	CLA	C3-C5-C6-C7
50	y	313	CLA	C3-C5-C6-C7
50	a	811	CLA	O1A-CGA-O2A-C1
43	x	314	BCR	C19-C20-C21-C22
50	a	833	CLA	C2A-CAA-CBA-CGA
50	a	837	CLA	C2A-CAA-CBA-CGA
50	a	844	CLA	C2A-CAA-CBA-CGA
50	b	809	CLA	C2A-CAA-CBA-CGA
50	b	822	CLA	C2A-CAA-CBA-CGA
50	g	203	CLA	C2A-CAA-CBA-CGA
50	a	846	CLA	O1D-CGD-O2D-CED
50	a	856	CLA	O1D-CGD-O2D-CED
50	b	838	CLA	O1D-CGD-O2D-CED
50	x	309	CLA	O1D-CGD-O2D-CED
51	x	317	DGD	C4D-C5D-C6D-O5D
50	a	819	CLA	C8-C10-C11-C12
50	a	846	CLA	C10-C11-C12-C13
50	b	833	CLA	C10-C11-C12-C13
50	y	310	CLA	C13-C15-C16-C17
45	F	804	A1H1M	O21-C20-O19-C18
51	b	821	DGD	O6E-C5E-C6E-O5E
44	F	803	PGT	O11-C11-O3-C3
50	a	819	CLA	O1A-CGA-O2A-C1
50	a	835	CLA	O1A-CGA-O2A-C1
50	a	844	CLA	O1A-CGA-O2A-C1
50	b	801	CLA	O1A-CGA-O2A-C1
50	b	812	CLA	C8-C10-C11-C12
50	w	308	CLA	C15-C16-C17-C18
50	x	312	CLA	C15-C16-C17-C18
44	D	602	PGT	O31-C31-O2-C2
46	D	601	LMG	C4-C5-C6-O5
50	b	813	CLA	C2A-CAA-CBA-CGA
50	a	820	CLA	C13-C15-C16-C17
50	a	842	CLA	C8-C10-C11-C12
50	a	846	CLA	C5-C6-C7-C8
50	a	850	CLA	C15-C16-C17-C18
50	b	824	CLA	C5-C6-C7-C8
50	b	836	CLA	C10-C11-C12-C13
50	w	308	CLA	C8-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
50	x	306	CLA	C10-C11-C12-C13
50	y	308	CLA	C15-C16-C17-C18
50	a	821	CLA	C15-C16-C17-C18
50	b	836	CLA	C5-C6-C7-C8
50	b	837	CLA	C15-C16-C17-C18
50	b	839	CLA	C13-C15-C16-C17
50	b	840	CLA	C13-C15-C16-C17
50	w	306	CLA	C8-C10-C11-C12
50	x	312	CLA	C10-C11-C12-C13
50	y	313	CLA	C10-C11-C12-C13
53	b	827	PQN	C20-C21-C22-C23
51	x	317	DGD	O6D-C5D-C6D-O5D
46	j	105	LMG	O10-C28-O8-C9
50	b	809	CLA	O1A-CGA-O2A-C1
50	b	841	CLA	O1D-CGD-O2D-CED
50	a	801	CLA	C13-C15-C16-C17
50	a	820	CLA	C8-C10-C11-C12
50	a	845	CLA	C8-C10-C11-C12
50	a	858	CLA	C10-C11-C12-C13
50	b	803	CLA	C15-C16-C17-C18
50	b	815	CLA	C13-C15-C16-C17
50	y	310	CLA	C10-C11-C12-C13
50	y	314	CLA	C10-C11-C12-C13
44	5	301	PGT	C1-O3P-P-O4P
44	A	401	PGT	C4-O4P-P-O3P
44	A	403	PGT	C4-O4P-P-O3P
44	B	601	PGT	C1-O3P-P-O4P
44	F	803	PGT	C4-O4P-P-O3P
44	I	203	PGT	C1-O3P-P-O4P
44	a	806	PGT	C1-O3P-P-O4P
44	a	806	PGT	C4-O4P-P-O3P
44	a	807	PGT	C4-O4P-P-O3P
44	z	301	PGT	C1-O3P-P-O4P
44	z	317	PGT	C1-O3P-P-O4P
50	b	825	CLA	C3-C5-C6-C7
45	5	302	A1H1M	C18-C15-C16-O17
50	a	820	CLA	CBA-CGA-O2A-C1
50	b	837	CLA	CBA-CGA-O2A-C1
50	f	301	CLA	CBA-CGA-O2A-C1
50	a	854	CLA	C10-C11-C12-C13
44	L	201	PGT	C11-C12-C13-C14
51	a	804	DGD	C1A-C2A-C3A-C4A

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Mol	Chain	Res	Type	Atoms
50	a	845	CLA	O1D-CGD-O2D-CED
44	z	301	PGT	O4P-C4-C5-C6
50	b	839	CLA	C4-C3-C5-C6
50	a	833	CLA	C5-C6-C7-C8
50	a	854	CLA	C15-C16-C17-C18
50	b	805	CLA	C5-C6-C7-C8
50	b	814	CLA	C10-C11-C12-C13
53	a	825	PQN	C23-C25-C26-C27
50	a	818	CLA	C2A-CAA-CBA-CGA
50	a	858	CLA	C2A-CAA-CBA-CGA
50	w	302	CLA	C2A-CAA-CBA-CGA
50	w	308	CLA	C2A-CAA-CBA-CGA
50	y	303	CLA	C2A-CAA-CBA-CGA
50	y	311	CLA	C2A-CAA-CBA-CGA
46	f	306	LMG	C29-C28-O8-C9
50	a	811	CLA	CBA-CGA-O2A-C1
50	b	803	CLA	CBA-CGA-O2A-C1
50	w	305	CLA	CBA-CGA-O2A-C1
43	a	803	BCR	C15-C16-C17-C18
44	L	201	PGT	C38-C39-C40-C41
54	x	305	CHL	O1D-CGD-O2D-CED
44	N	301	PGT	C32-C31-O2-C2
50	a	843	CLA	C15-C16-C17-C18
44	A	403	PGT	C34-C35-C36-C37
44	z	301	PGT	C35-C36-C37-C38
44	z	317	PGT	C15-C16-C17-C18
50	a	814	CLA	C16-C17-C18-C19
50	a	842	CLA	C16-C17-C18-C20
50	a	843	CLA	C16-C17-C18-C19
50	b	826	CLA	C6-C7-C8-C9
50	b	828	CLA	C11-C12-C13-C14
50	y	313	CLA	C16-C17-C18-C19
50	z	302	CLA	C6-C7-C8-C9
44	5	301	PGT	C37-C38-C39-C40
44	N	301	PGT	O31-C31-O2-C2
50	b	807	CLA	C10-C11-C12-C13
50	b	849	CLA	C1-C2-C3-C5
50	w	302	CLA	C1-C2-C3-C4
50	x	308	CLA	C1-C2-C3-C5
50	z	305	CLA	C1-C2-C3-C4
46	f	306	LMG	C11-C12-C13-C14
50	b	835	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
51	a	804	DGD	CAB-CBB-CCB-CDB
50	b	846	CLA	O1D-CGD-O2D-CED
54	x	319	CHL	O1D-CGD-O2D-CED
44	f	305	PGT	C34-C35-C36-C37
50	x	316	CLA	O1D-CGD-O2D-CED
46	w	312	LMG	C2-C1-O1-C7
44	z	317	PGT	C17-C18-C19-C20
50	a	821	CLA	C10-C11-C12-C13
51	a	804	DGD	C8A-C9A-CAA-CBA
50	a	834	CLA	C10-C11-C12-C13
50	b	844	CLA	C15-C16-C17-C18
46	f	306	LMG	O10-C28-O8-C9
50	a	819	CLA	C11-C12-C13-C14
50	a	843	CLA	C16-C17-C18-C20
50	b	825	CLA	C16-C17-C18-C20
50	w	308	CLA	O1D-CGD-O2D-CED
50	y	303	CLA	O1D-CGD-O2D-CED
46	H	401	LMG	C30-C31-C32-C33
46	w	312	LMG	C29-C30-C31-C32
50	a	845	CLA	C11-C10-C8-C9
50	b	815	CLA	C14-C13-C15-C16
50	b	825	CLA	C11-C12-C13-C14
50	b	843	CLA	C11-C10-C8-C9
50	y	313	CLA	C11-C10-C8-C9
50	a	818	CLA	O1D-CGD-O2D-CED
44	A	402	PGT	C31-C32-C33-C34
44	L	201	PGT	C13-C14-C15-C16
44	b	830	PGT	C35-C36-C37-C38
46	D	601	LMG	C30-C31-C32-C33
51	b	821	DGD	CEB-CFB-CGB-CHB
52	a	808	CL0	CAA-CBA-CGA-O2A
50	a	815	CLA	C2A-CAA-CBA-CGA
50	x	312	CLA	C2A-CAA-CBA-CGA
43	a	830	BCR	C36-C18-C19-C20
43	j	101	BCR	C36-C18-C19-C20
43	z	318	BCR	C11-C12-C13-C35
46	B	605	LMG	C32-C33-C34-C35
46	x	315	LMG	C31-C32-C33-C34
51	a	804	DGD	C3A-C4A-C5A-C6A
43	j	101	BCR	C17-C18-C19-C20
43	z	318	BCR	C11-C12-C13-C14
51	a	804	DGD	C4B-C5B-C6B-C7B

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Mol	Chain	Res	Type	Atoms
50	a	847	CLA	CBD-CGD-O2D-CED
46	j	105	LMG	C10-C11-C12-C13
50	a	847	CLA	O1D-CGD-O2D-CED
44	A	402	PGT	C12-C13-C14-C15
44	A	404	PGT	C16-C17-C18-C19
44	B	606	PGT	C13-C14-C15-C16
44	a	807	PGT	C32-C33-C34-C35
50	b	809	CLA	C10-C11-C12-C13
50	a	814	CLA	C16-C17-C18-C20
50	a	839	CLA	C16-C17-C18-C19
50	a	845	CLA	C16-C17-C18-C19
50	b	828	CLA	C11-C12-C13-C15
50	y	313	CLA	C16-C17-C18-C20
50	z	302	CLA	C6-C7-C8-C10
50	z	307	CLA	C11-C12-C13-C14
50	b	846	CLA	C8-C10-C11-C12
54	z	312	CHL	C8-C10-C11-C12
44	A	403	PGT	C35-C36-C37-C38
46	w	312	LMG	C15-C16-C17-C18
50	y	310	CLA	O1D-CGD-O2D-CED
46	H	401	LMG	C29-C30-C31-C32
53	a	825	PQN	C20-C21-C22-C23
50	b	849	CLA	O1A-CGA-O2A-C1
51	b	821	DGD	C6B-C7B-C8B-C9B
50	a	818	CLA	C10-C11-C12-C13
50	a	802	CLA	O1D-CGD-O2D-CED
50	a	836	CLA	C3A-C2A-CAA-CBA
50	b	802	CLA	C3A-C2A-CAA-CBA
50	b	805	CLA	C3A-C2A-CAA-CBA
50	b	808	CLA	C3A-C2A-CAA-CBA
50	b	823	CLA	C3A-C2A-CAA-CBA
50	b	834	CLA	C3A-C2A-CAA-CBA
50	b	839	CLA	C3A-C2A-CAA-CBA
50	b	840	CLA	C3A-C2A-CAA-CBA
50	b	844	CLA	C3A-C2A-CAA-CBA
50	b	849	CLA	C3A-C2A-CAA-CBA
50	f	301	CLA	C3A-C2A-CAA-CBA
50	g	204	CLA	C3A-C2A-CAA-CBA
50	x	304	CLA	C3A-C2A-CAA-CBA
50	x	318	CLA	C3A-C2A-CAA-CBA
50	y	311	CLA	C3A-C2A-CAA-CBA
50	z	302	CLA	C3A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
54	w	311	CHL	C3A-C2A-CAA-CBA
50	a	839	CLA	C16-C17-C18-C20
50	a	842	CLA	C16-C17-C18-C19
50	a	845	CLA	C16-C17-C18-C20
50	b	825	CLA	C16-C17-C18-C19
50	b	826	CLA	C6-C7-C8-C10
50	z	319	CLA	O1D-CGD-O2D-CED
50	w	314	CLA	C2A-CAA-CBA-CGA
51	x	317	DGD	O1G-C1G-C2G-C3G
50	b	832	CLA	CBD-CGD-O2D-CED
50	a	812	CLA	O2A-C1-C2-C3
50	a	819	CLA	O2A-C1-C2-C3
50	a	842	CLA	O2A-C1-C2-C3
50	a	857	CLA	O2A-C1-C2-C3
50	b	802	CLA	O2A-C1-C2-C3
50	b	809	CLA	O2A-C1-C2-C3
50	b	805	CLA	C15-C16-C17-C18
50	a	814	CLA	C4-C3-C5-C6
50	b	814	CLA	C4-C3-C5-C6
50	b	842	CLA	C4-C3-C5-C6
50	a	838	CLA	CBA-CGA-O2A-C1
50	a	813	CLA	C2-C3-C5-C6
50	a	836	CLA	C2-C3-C5-C6
50	b	805	CLA	C2-C3-C5-C6
50	b	833	CLA	C2-C3-C5-C6
50	f	301	CLA	C2-C3-C5-C6
44	a	805	PGT	C32-C31-O2-C2
46	x	315	LMG	C11-C10-O7-C8
50	z	307	CLA	O1D-CGD-O2D-CED
50	a	847	CLA	CMA-C3A-C4A-CHB
46	j	104	LMG	C29-C30-C31-C32
50	b	811	CLA	O1D-CGD-O2D-CED
44	D	602	PGT	C13-C14-C15-C16
51	x	317	DGD	C5A-C6A-C7A-C8A
50	h	201	CLA	O1A-CGA-O2A-C1
44	D	602	PGT	C12-C13-C14-C15
50	x	312	CLA	C2C-C3C-CAC-CBC
50	w	308	CLA	C3-C5-C6-C7
50	a	819	CLA	CBA-CGA-O2A-C1
46	x	315	LMG	C29-C30-C31-C32
50	a	814	CLA	C8-C10-C11-C12
50	b	805	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
44	B	601	PGT	O4P-C4-C5-C6
44	z	317	PGT	O4P-C4-C5-C6
44	a	805	PGT	O31-C31-O2-C2
51	a	804	DGD	C4E-C5E-C6E-O5E
51	b	821	DGD	C6A-C7A-C8A-C9A
50	b	828	CLA	C5-C6-C7-C8
50	y	302	CLA	C5-C6-C7-C8
50	b	807	CLA	O1A-CGA-O2A-C1
44	A	403	PGT	C14-C15-C16-C17
52	a	808	CL0	C16-C17-C18-C19
44	A	402	PGT	C11-C12-C13-C14
43	4	101	BCR	C1-C6-C7-C8
43	4	101	BCR	C23-C24-C25-C26
43	a	803	BCR	C1-C6-C7-C8
43	a	810	BCR	C5-C6-C7-C8
43	a	827	BCR	C5-C6-C7-C8
43	a	827	BCR	C21-C22-C23-C24
43	a	830	BCR	C23-C24-C25-C30
43	b	816	BCR	C5-C6-C7-C8
43	g	202	BCR	C23-C24-C25-C26
43	i	101	BCR	C5-C6-C7-C8
43	i	101	BCR	C23-C24-C25-C30
43	j	101	BCR	C23-C24-C25-C26
43	j	103	BCR	C5-C6-C7-C8
43	j	103	BCR	C23-C24-C25-C30
43	l	302	BCR	C23-C24-C25-C30
43	l	303	BCR	C5-C6-C7-C8
43	l	304	BCR	C5-C6-C7-C8
43	w	301	BCR	C5-C6-C7-C8
43	w	301	BCR	C23-C24-C25-C26
43	x	314	BCR	C1-C6-C7-C8
43	x	314	BCR	C23-C24-C25-C30
43	y	301	BCR	C1-C6-C7-C8
43	y	301	BCR	C23-C24-C25-C26
43	z	318	BCR	C23-C24-C25-C26
50	b	843	CLA	C3-C5-C6-C7
55	z	320	LUT	C1-C6-C7-C8
55	z	320	LUT	C5-C6-C7-C8
44	b	830	PGT	C37-C38-C39-C40
50	b	808	CLA	O1D-CGD-O2D-CED
50	a	838	CLA	C8-C10-C11-C12
50	a	838	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
50	b	839	CLA	C8-C10-C11-C12
50	b	844	CLA	C8-C10-C11-C12
50	b	847	CLA	C10-C11-C12-C13
51	a	804	DGD	C5B-C6B-C7B-C8B
50	a	811	CLA	C8-C10-C11-C12
50	a	846	CLA	C13-C15-C16-C17
50	a	854	CLA	C13-C15-C16-C17
45	5	302	A1H1M	C02-C03-C04-C05
52	a	808	CL0	C2-C1-O2A-CGA
50	a	811	CLA	C4-C3-C5-C6
50	a	836	CLA	C4-C3-C5-C6
50	b	824	CLA	C4-C3-C5-C6
50	f	301	CLA	C4-C3-C5-C6
53	b	827	PQN	C14-C13-C15-C16
50	a	811	CLA	C11-C12-C13-C15
50	a	812	CLA	C11-C12-C13-C15
50	a	815	CLA	C12-C13-C15-C16
50	a	820	CLA	C11-C10-C8-C7
50	a	833	CLA	C11-C12-C13-C15
50	a	838	CLA	C12-C13-C15-C16
50	a	842	CLA	C12-C13-C15-C16
50	a	843	CLA	C12-C13-C15-C16
50	b	803	CLA	C12-C13-C15-C16
50	b	806	CLA	C2-C3-C5-C6
50	b	812	CLA	C11-C12-C13-C15
50	b	814	CLA	C2-C3-C5-C6
50	b	824	CLA	C11-C10-C8-C7
50	b	837	CLA	C11-C10-C8-C7
50	b	843	CLA	C11-C10-C8-C7
50	b	843	CLA	C12-C13-C15-C16
50	w	306	CLA	C11-C12-C13-C15
50	x	312	CLA	C11-C10-C8-C7
50	y	313	CLA	C11-C10-C8-C7
50	a	821	CLA	C3-C5-C6-C7
50	a	801	CLA	C10-C11-C12-C13
50	a	849	CLA	C10-C11-C12-C13
50	b	828	CLA	C10-C11-C12-C13
50	a	815	CLA	C16-C17-C18-C19
44	w	313	PGT	O31-C31-O2-C2
46	x	315	LMG	O9-C10-O7-C8
44	z	313	PGT	C11-C12-C13-C14
46	H	401	LMG	C29-C28-O8-C9

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Mol	Chain	Res	Type	Atoms
50	a	835	CLA	CBA-CGA-O2A-C1
50	b	801	CLA	CBA-CGA-O2A-C1
51	x	317	DGD	C2A-C1A-O1G-C1G
50	a	809	CLA	C2A-CAA-CBA-CGA
50	a	845	CLA	C2A-CAA-CBA-CGA
50	a	853	CLA	C2A-CAA-CBA-CGA
50	b	805	CLA	C2A-CAA-CBA-CGA
50	w	310	CLA	C2A-CAA-CBA-CGA
50	b	805	CLA	C8-C10-C11-C12
50	b	843	CLA	C13-C15-C16-C17
50	a	823	CLA	C1-C2-C3-C5
50	f	302	CLA	O1D-CGD-O2D-CED
50	a	812	CLA	C12-C13-C15-C16
50	a	838	CLA	C13-C15-C16-C17
50	b	825	CLA	C13-C15-C16-C17
50	b	835	CLA	C8-C10-C11-C12
44	w	313	PGT	C15-C16-C17-C18
50	a	821	CLA	C11-C12-C13-C15
51	x	317	DGD	C3B-C4B-C5B-C6B
44	w	313	PGT	C32-C31-O2-C2
46	z	314	LMG	C11-C10-O7-C8
51	a	804	DGD	C2B-C1B-O2G-C2G
44	B	603	PGT	O3P-C1-C2-O2
50	a	853	CLA	C15-C16-C17-C18
50	w	310	CLA	C15-C16-C17-C18
46	z	314	LMG	C30-C31-C32-C33
46	z	314	LMG	O9-C10-O7-C8
51	a	804	DGD	O1B-C1B-O2G-C2G
44	5	301	PGT	C39-C40-C41-C42
44	z	317	PGT	C34-C35-C36-C37
48	F	801	SQD	C2-C1-O6-C44
51	x	317	DGD	C2D-C1D-O3G-C3G
50	l	306	CLA	C5-C6-C7-C8
44	b	830	PGT	C36-C37-C38-C39
50	b	801	CLA	C16-C17-C18-C20
46	B	605	LMG	C31-C32-C33-C34
50	a	857	CLA	C4-C3-C5-C6
50	b	845	CLA	C4-C3-C5-C6
44	N	301	PGT	C11-C12-C13-C14
54	z	312	CHL	C2-C3-C5-C6
50	a	811	CLA	C11-C12-C13-C14
50	a	833	CLA	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
50	a	836	CLA	C11-C10-C8-C9
50	a	838	CLA	C14-C13-C15-C16
50	a	843	CLA	C11-C12-C13-C14
50	a	850	CLA	C11-C12-C13-C14
50	a	858	CLA	C11-C10-C8-C9
50	b	801	CLA	C14-C13-C15-C16
50	b	802	CLA	C14-C13-C15-C16
50	b	824	CLA	C14-C13-C15-C16
50	b	839	CLA	C11-C10-C8-C9
50	w	306	CLA	C11-C10-C8-C9
50	x	307	CLA	C11-C10-C8-C9
50	y	308	CLA	C6-C7-C8-C9
50	y	313	CLA	C6-C7-C8-C9
50	a	856	CLA	C2A-CAA-CBA-CGA
50	b	844	CLA	C2A-CAA-CBA-CGA
44	B	603	PGT	C35-C36-C37-C38
55	w	319	LUT	C11-C12-C13-C20
45	F	804	A1H1M	C29-C20-O19-C18
50	x	307	CLA	O1D-CGD-O2D-CED
50	z	311	CLA	O1D-CGD-O2D-CED
46	7	301	LMG	C31-C32-C33-C34
50	a	818	CLA	C1A-C2A-CAA-CBA
50	a	826	CLA	C1A-C2A-CAA-CBA
50	a	833	CLA	C1A-C2A-CAA-CBA
50	a	836	CLA	C1A-C2A-CAA-CBA
50	a	838	CLA	C1A-C2A-CAA-CBA
50	a	852	CLA	C1A-C2A-CAA-CBA
50	b	805	CLA	C1A-C2A-CAA-CBA
50	b	808	CLA	C1A-C2A-CAA-CBA
50	b	834	CLA	C1A-C2A-CAA-CBA
50	b	835	CLA	C1A-C2A-CAA-CBA
50	b	837	CLA	C1A-C2A-CAA-CBA
50	b	838	CLA	C1A-C2A-CAA-CBA
50	b	840	CLA	C1A-C2A-CAA-CBA
50	b	846	CLA	C1A-C2A-CAA-CBA
50	g	204	CLA	C1A-C2A-CAA-CBA
50	h	201	CLA	C1A-C2A-CAA-CBA
50	w	303	CLA	C1A-C2A-CAA-CBA
50	w	305	CLA	C1A-C2A-CAA-CBA
50	w	308	CLA	C1A-C2A-CAA-CBA
50	x	304	CLA	C1A-C2A-CAA-CBA
50	x	310	CLA	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
50	x	312	CLA	C1A-C2A-CAA-CBA
50	y	305	CLA	C1A-C2A-CAA-CBA
50	z	302	CLA	C1A-C2A-CAA-CBA
50	z	305	CLA	C1A-C2A-CAA-CBA
54	x	305	CHL	C1A-C2A-CAA-CBA
50	a	815	CLA	C16-C17-C18-C20
52	a	808	CL0	C16-C17-C18-C20
48	j	106	SQD	C33-C34-C35-C36
51	a	804	DGD	CBA-CCA-CDA-CEA
51	b	821	DGD	C4B-C5B-C6B-C7B
50	b	814	CLA	C8-C10-C11-C12
50	b	824	CLA	C15-C16-C17-C18
50	b	843	CLA	C8-C10-C11-C12
50	y	314	CLA	C13-C15-C16-C17
44	a	807	PGT	C1-O3P-P-O4P
44	b	830	PGT	C4-O4P-P-O3P
44	A	404	PGT	C36-C37-C38-C39
51	a	804	DGD	CEB-CFB-CGB-CHB
44	A	403	PGT	C11-C12-C13-C14
44	A	403	PGT	O3P-C1-C2-C3
44	D	602	PGT	O3P-C1-C2-C3
44	f	305	PGT	C35-C36-C37-C38
44	z	317	PGT	C16-C17-C18-C19
50	y	310	CLA	C15-C16-C17-C18
50	z	306	CLA	CBA-CGA-O2A-C1
50	y	309	CLA	C3A-C2A-CAA-CBA
46	w	312	LMG	C31-C32-C33-C34
46	H	401	LMG	C11-C10-O7-C8
51	x	317	DGD	O1A-C1A-O1G-C1G
50	a	823	CLA	C2A-CAA-CBA-CGA
46	z	314	LMG	C7-C8-C9-O8
48	B	604	SQD	O6-C44-C45-C46
48	j	106	SQD	O6-C44-C45-C46
48	w	317	SQD	O6-C44-C45-C46
51	a	804	DGD	C1G-C2G-C3G-O3G
44	A	401	PGT	C35-C36-C37-C38
46	D	601	LMG	C13-C14-C15-C16
46	j	104	LMG	C30-C31-C32-C33
50	b	824	CLA	O1A-CGA-O2A-C1
50	z	302	CLA	O1A-CGA-O2A-C1
46	7	301	LMG	C8-C7-O1-C1
50	b	822	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
50	a	820	CLA	C10-C11-C12-C13
51	x	317	DGD	C4B-C5B-C6B-C7B
48	F	805	SQD	O47-C7-C8-C9
48	a	859	SQD	O47-C7-C8-C9
48	w	317	SQD	O47-C7-C8-C9
50	w	305	CLA	O1A-CGA-O2A-C1
54	x	319	CHL	O1A-CGA-O2A-C1
44	a	807	PGT	C42-C43-C44-C45
46	x	315	LMG	C34-C35-C36-C37
46	B	605	LMG	O6-C1-O1-C7
44	z	317	PGT	C12-C13-C14-C15
50	b	826	CLA	C5-C6-C7-C8
46	H	401	LMG	O10-C28-O8-C9
46	z	315	LMG	C30-C31-C32-C33
44	A	402	PGT	C32-C33-C34-C35
50	a	813	CLA	C4-C3-C5-C6
54	z	312	CHL	C4-C3-C5-C6
50	a	851	CLA	O1D-CGD-O2D-CED
50	z	311	CLA	CBA-CGA-O2A-C1
44	b	830	PGT	C15-C16-C17-C18
46	z	314	LMG	C33-C34-C35-C36
46	B	605	LMG	O8-C28-C29-C30
51	b	821	DGD	CFB-CGB-CHB-CIB
44	B	606	PGT	C3-C2-O2-C31
45	F	804	A1H1M	C35-C11-O12-C13
50	a	801	CLA	C2-C1-O2A-CGA
50	w	302	CLA	C2-C1-O2A-CGA
54	x	319	CHL	C2-C1-O2A-CGA
50	a	841	CLA	C3-C5-C6-C7
50	a	837	CLA	C8-C10-C11-C12
45	5	302	A1H1M	C37-C07-C08-C36
44	A	402	PGT	O3P-C1-C2-O2
44	a	805	PGT	O3P-C1-C2-O2
44	B	601	PGT	C11-C12-C13-C14
50	x	307	CLA	C5-C6-C7-C8
44	a	806	PGT	C16-C17-C18-C19
51	a	804	DGD	CFA-CGA-CHA-CIA
44	b	829	PGT	C12-C13-C14-C15
44	B	602	PGT	C11-C12-C13-C14
50	a	818	CLA	C5-C6-C7-C8
44	B	606	PGT	O2-C2-C3-O3
46	D	601	LMG	O7-C8-C9-O8

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Mol	Chain	Res	Type	Atoms
46	z	314	LMG	O1-C7-C8-O7
46	z	315	LMG	O7-C8-C9-O8
50	b	823	CLA	C1-C2-C3-C5
44	a	807	PGT	C38-C39-C40-C41
44	z	317	PGT	C14-C15-C16-C17
46	z	314	LMG	C34-C35-C36-C37
50	b	807	CLA	C8-C10-C11-C12
44	b	830	PGT	C32-C33-C34-C35
51	x	317	DGD	C7A-C8A-C9A-CAA
54	w	311	CHL	C2-C1-O2A-CGA
50	a	820	CLA	C12-C13-C15-C16
50	a	858	CLA	C11-C10-C8-C7
50	b	801	CLA	C12-C13-C15-C16
50	b	803	CLA	C11-C12-C13-C15
50	b	807	CLA	C11-C10-C8-C7
50	b	814	CLA	C11-C10-C8-C7
50	b	824	CLA	C11-C12-C13-C15
50	b	825	CLA	C11-C10-C8-C7
50	b	839	CLA	C6-C7-C8-C10
50	b	845	CLA	C11-C12-C13-C15
50	b	845	CLA	C12-C13-C15-C16
50	k	204	CLA	C11-C10-C8-C7
50	x	312	CLA	C11-C12-C13-C15
50	y	313	CLA	C6-C7-C8-C10
50	y	314	CLA	C2-C3-C5-C6
54	z	312	CHL	C11-C10-C8-C7
50	b	833	CLA	O1A-CGA-O2A-C1
50	a	812	CLA	C11-C12-C13-C14
50	a	824	CLA	C11-C12-C13-C14
50	a	834	CLA	C11-C12-C13-C14
50	a	842	CLA	C11-C12-C13-C14
50	a	845	CLA	C14-C13-C15-C16
50	b	801	CLA	C11-C10-C8-C9
50	b	814	CLA	C11-C10-C8-C9
50	b	833	CLA	C11-C10-C8-C9
50	b	839	CLA	C6-C7-C8-C9
50	b	842	CLA	C6-C7-C8-C9
50	b	843	CLA	C6-C7-C8-C9
50	b	845	CLA	C11-C12-C13-C14
50	b	846	CLA	C6-C7-C8-C9
50	k	204	CLA	C11-C10-C8-C9
46	j	105	LMG	C12-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
46	z	314	LMG	C13-C14-C15-C16
51	b	821	DGD	CCB-CDB-CEB-CFB
50	a	813	CLA	CBA-CGA-O2A-C1
50	b	807	CLA	C15-C16-C17-C18
50	b	815	CLA	C2A-CAA-CBA-CGA
50	b	840	CLA	C2A-CAA-CBA-CGA
44	D	602	PGT	C16-C17-C18-C19
46	w	312	LMG	C34-C35-C36-C37
43	b	817	BCR	C37-C22-C23-C24
55	x	320	LUT	C11-C12-C13-C20
44	B	602	PGT	C12-C13-C14-C15
43	k	202	BCR	C17-C18-C19-C20
43	z	318	BCR	C21-C22-C23-C24
50	x	312	CLA	C4C-C3C-CAC-CBC
44	B	606	PGT	O4P-C4-C5-C6
51	a	804	DGD	CFB-CGB-CHB-CIB
53	b	827	PQN	C18-C20-C21-C22
44	B	606	PGT	O3P-C1-C2-C3
50	b	844	CLA	C3-C5-C6-C7
44	5	301	PGT	C31-C32-C33-C34
46	7	301	LMG	C28-C29-C30-C31
50	b	837	CLA	O1A-CGA-O2A-C1
50	b	838	CLA	C4-C3-C5-C6
50	b	840	CLA	C4-C3-C5-C6
50	a	811	CLA	C2-C3-C5-C6
44	f	305	PGT	C31-C32-C33-C34
44	b	830	PGT	O4P-C4-C5-O5
46	j	105	LMG	C32-C33-C34-C35
50	b	801	CLA	C16-C17-C18-C19
50	a	826	CLA	C2A-CAA-CBA-CGA
50	b	825	CLA	C2A-CAA-CBA-CGA
50	y	313	CLA	CBA-CGA-O2A-C1
51	b	821	DGD	CAB-CBB-CCB-CDB
44	I	203	PGT	C5-C4-O4P-P
50	a	848	CLA	C3A-C2A-CAA-CBA
50	b	809	CLA	C3A-C2A-CAA-CBA
50	b	841	CLA	C3A-C2A-CAA-CBA
50	y	313	CLA	C3A-C2A-CAA-CBA
50	y	314	CLA	C5-C6-C7-C8
44	b	829	PGT	C16-C17-C18-C19
51	x	317	DGD	C6A-C7A-C8A-C9A
50	a	835	CLA	C10-C11-C12-C13

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Mol	Chain	Res	Type	Atoms
50	a	844	CLA	CBA-CGA-O2A-C1
50	b	839	CLA	CBA-CGA-O2A-C1
50	a	834	CLA	C8-C10-C11-C12
50	b	846	CLA	C15-C16-C17-C18
44	I	203	PGT	C1-C2-C3-O3
44	w	313	PGT	C1-C2-C3-O3
46	B	605	LMG	O1-C7-C8-C9
46	B	605	LMG	C7-C8-C9-O8
46	j	104	LMG	O1-C7-C8-C9
51	b	821	DGD	O1G-C1G-C2G-C3G
44	b	829	PGT	C32-C33-C34-C35
50	b	803	CLA	O2A-C1-C2-C3
50	b	822	CLA	O2A-C1-C2-C3
50	b	826	CLA	O2A-C1-C2-C3
48	j	106	SQD	C30-C31-C32-C33
50	a	822	CLA	O1A-CGA-O2A-C1
53	b	827	PQN	C12-C13-C15-C16
46	j	105	LMG	C11-C12-C13-C14
46	j	105	LMG	C29-C30-C31-C32
54	x	311	CHL	C3C-C2C-CMC-OMC
54	z	304	CHL	C3C-C2C-CMC-OMC
50	b	842	CLA	C3-C5-C6-C7
44	A	403	PGT	O3P-C1-C2-O2
44	B	606	PGT	O3P-C1-C2-O2
46	H	401	LMG	O9-C10-O7-C8
44	N	301	PGT	C12-C13-C14-C15
46	B	605	LMG	O7-C8-C9-O8
46	f	306	LMG	O7-C8-C9-O8
46	j	104	LMG	O1-C7-C8-O7
46	w	312	LMG	O7-C8-C9-O8
46	x	315	LMG	O7-C8-C9-O8
48	w	317	SQD	O6-C44-C45-O47
51	x	317	DGD	O1G-C1G-C2G-O2G
44	a	806	PGT	C15-C16-C17-C18
44	b	830	PGT	C32-C31-O2-C2
45	5	302	A1H1M	C02-C03-C04-C38
46	x	315	LMG	C17-C18-C19-C20
51	a	804	DGD	C6B-C7B-C8B-C9B
46	j	104	LMG	O6-C1-O1-C7
50	b	809	CLA	C5-C6-C7-C8
44	B	601	PGT	C14-C15-C16-C17
50	a	823	CLA	C2-C1-O2A-CGA

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Mol	Chain	Res	Type	Atoms
50	a	854	CLA	C2-C1-O2A-CGA
50	w	316	CLA	C2-C1-O2A-CGA
50	a	812	CLA	C11-C10-C8-C9
50	a	857	CLA	C14-C13-C15-C16
50	b	802	CLA	C6-C7-C8-C9
50	b	807	CLA	C11-C10-C8-C9
50	b	835	CLA	C11-C10-C8-C9
50	w	306	CLA	C14-C13-C15-C16
54	z	312	CHL	C11-C10-C8-C9
50	a	811	CLA	C10-C11-C12-C13
50	b	845	CLA	C5-C6-C7-C8
44	A	402	PGT	C2-C1-O3P-P
44	N	301	PGT	C2-C1-O3P-P
44	a	805	PGT	C2-C1-O3P-P
44	b	829	PGT	C2-C1-O3P-P
44	z	313	PGT	C2-C1-O3P-P
50	a	846	CLA	O1A-CGA-O2A-C1
44	A	403	PGT	C39-C40-C41-C42
50	a	819	CLA	C11-C12-C13-C15
50	b	802	CLA	C16-C17-C18-C19
43	a	830	BCR	C5-C6-C7-C8
43	j	101	BCR	C5-C6-C7-C8
43	j	103	BCR	C1-C6-C7-C8
43	l	302	BCR	C5-C6-C7-C8
43	w	301	BCR	C23-C24-C25-C30
50	b	824	CLA	C3-C5-C6-C7
50	a	824	CLA	C10-C11-C12-C13
50	b	802	CLA	C15-C16-C17-C18
50	w	310	CLA	CAA-CBA-CGA-O2A
44	I	203	PGT	C43-C44-C45-C46
43	a	830	BCR	C17-C18-C19-C20
43	l	303	BCR	C17-C18-C19-C20
43	l	304	BCR	C17-C18-C19-C20
50	b	801	CLA	C10-C11-C12-C13
50	a	858	CLA	C16-C17-C18-C19
50	b	844	CLA	O1A-CGA-O2A-C1
44	N	301	PGT	O3P-C1-C2-C3
50	a	843	CLA	C4-C3-C5-C6
50	a	811	CLA	C6-C7-C8-C10
50	a	812	CLA	C11-C10-C8-C7
50	a	834	CLA	C11-C12-C13-C15
50	a	838	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
50	a	839	CLA	C11-C12-C13-C15
50	a	842	CLA	C11-C10-C8-C7
50	a	842	CLA	C11-C12-C13-C15
50	a	845	CLA	C12-C13-C15-C16
50	a	846	CLA	C11-C10-C8-C7
50	a	846	CLA	C12-C13-C15-C16
50	a	849	CLA	C11-C10-C8-C7
50	a	850	CLA	C11-C10-C8-C7
50	a	857	CLA	C12-C13-C15-C16
50	a	858	CLA	C12-C13-C15-C16
50	b	801	CLA	C6-C7-C8-C10
50	b	801	CLA	C11-C10-C8-C7
50	b	805	CLA	C11-C12-C13-C15
50	b	805	CLA	C12-C13-C15-C16
50	b	812	CLA	C11-C10-C8-C7
50	b	825	CLA	C11-C12-C13-C15
50	b	833	CLA	C11-C10-C8-C7
50	b	833	CLA	C11-C12-C13-C15
50	b	835	CLA	C11-C10-C8-C7
50	b	836	CLA	C11-C12-C13-C15
50	b	836	CLA	C12-C13-C15-C16
50	b	839	CLA	C11-C12-C13-C15
50	b	842	CLA	C2-C3-C5-C6
50	b	842	CLA	C6-C7-C8-C10
50	b	842	CLA	C11-C10-C8-C7
50	b	843	CLA	C2-C3-C5-C6
50	b	843	CLA	C6-C7-C8-C10
50	b	844	CLA	C6-C7-C8-C10
50	b	846	CLA	C6-C7-C8-C10
50	b	846	CLA	C11-C12-C13-C15
50	b	846	CLA	C12-C13-C15-C16
50	w	308	CLA	C12-C13-C15-C16
50	x	306	CLA	C2-C3-C5-C6
50	y	310	CLA	C12-C13-C15-C16
53	a	825	PQN	C21-C22-C23-C25
43	a	810	BCR	C19-C20-C21-C22
43	k	201	BCR	C19-C20-C21-C22
43	z	318	BCR	C9-C10-C11-C12
50	z	307	CLA	C11-C12-C13-C15
44	b	830	PGT	O31-C31-O2-C2
44	z	313	PGT	C33-C34-C35-C36
50	a	842	CLA	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
50	b	806	CLA	C2A-CAA-CBA-CGA
50	b	811	CLA	C2A-CAA-CBA-CGA
51	x	317	DGD	C4A-C5A-C6A-C7A
46	7	301	LMG	C35-C36-C37-C38
45	F	804	A1H1M	C01-C02-C03-C04
44	a	807	PGT	C35-C36-C37-C38
50	l	306	CLA	C11-C12-C13-C14
50	b	845	CLA	C8-C10-C11-C12
50	a	836	CLA	CBA-CGA-O2A-C1
44	L	201	PGT	C32-C33-C34-C35
50	a	811	CLA	C5-C6-C7-C8
50	a	812	CLA	CAD-CBD-CGD-O2D
50	a	821	CLA	CAD-CBD-CGD-O2D
50	a	823	CLA	CAD-CBD-CGD-O2D
50	a	834	CLA	CAD-CBD-CGD-O2D
50	a	836	CLA	CAD-CBD-CGD-O2D
50	a	840	CLA	CAD-CBD-CGD-O2D
50	a	841	CLA	CAD-CBD-CGD-O2D
50	a	849	CLA	CAD-CBD-CGD-O2D
50	a	851	CLA	CAD-CBD-CGD-O2D
50	a	853	CLA	CAD-CBD-CGD-O2D
50	b	812	CLA	CAD-CBD-CGD-O2D
50	b	813	CLA	CAD-CBD-CGD-O2D
50	b	814	CLA	CAD-CBD-CGD-O2D
50	f	301	CLA	CAD-CBD-CGD-O2D
50	l	305	CLA	CAD-CBD-CGD-O2D
50	l	306	CLA	CAD-CBD-CGD-O2D
50	w	310	CLA	CAD-CBD-CGD-O2D
50	x	312	CLA	CAD-CBD-CGD-O2D
50	x	316	CLA	CAD-CBD-CGD-O2D
50	z	306	CLA	CAD-CBD-CGD-O2D
50	z	311	CLA	CAD-CBD-CGD-O2D
50	b	833	CLA	C8-C10-C11-C12
50	b	843	CLA	O1D-CGD-O2D-CED
50	a	836	CLA	O1D-CGD-O2D-CED
50	a	850	CLA	C16-C17-C18-C20
50	w	307	CLA	C2C-C3C-CAC-CBC
51	b	821	DGD	C8A-C9A-CAA-CBA
46	x	315	LMG	O6-C1-O1-C7
51	b	821	DGD	O6D-C1D-O3G-C3G
50	a	802	CLA	C5-C6-C7-C8
44	5	301	PGT	C5-C4-O4P-P

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Mol	Chain	Res	Type	Atoms
44	B	606	PGT	C1-C2-C3-O3
44	D	602	PGT	C5-C4-O4P-P
44	F	803	PGT	C2-C1-O3P-P
46	7	301	LMG	C7-C8-C9-O8
46	f	306	LMG	C7-C8-C9-O8
46	w	312	LMG	C7-C8-C9-O8
46	x	315	LMG	C7-C8-C9-O8
46	z	314	LMG	O1-C7-C8-C9
51	b	821	DGD	C1G-C2G-C3G-O3G
46	F	802	LMG	C11-C10-O7-C8
44	L	201	PGT	O3P-C1-C2-O2
50	g	201	CLA	O2A-C1-C2-C3
50	b	834	CLA	O1D-CGD-O2D-CED
50	a	801	CLA	CHA-CBD-CGD-O1D
50	a	801	CLA	CHA-CBD-CGD-O2D
50	a	813	CLA	CHA-CBD-CGD-O1D
50	a	815	CLA	CHA-CBD-CGD-O2D
50	a	819	CLA	CHA-CBD-CGD-O1D
50	a	819	CLA	CHA-CBD-CGD-O2D
50	a	826	CLA	CHA-CBD-CGD-O1D
50	a	838	CLA	CHA-CBD-CGD-O1D
50	a	849	CLA	CHA-CBD-CGD-O1D
50	a	856	CLA	CHA-CBD-CGD-O1D
50	b	808	CLA	CHA-CBD-CGD-O2D
50	b	811	CLA	CHA-CBD-CGD-O2D
50	b	822	CLA	CHA-CBD-CGD-O2D
50	b	824	CLA	CHA-CBD-CGD-O1D
50	b	836	CLA	CHA-CBD-CGD-O2D
50	b	837	CLA	CHA-CBD-CGD-O1D
50	b	842	CLA	CHA-CBD-CGD-O1D
50	b	843	CLA	CHA-CBD-CGD-O1D
50	b	843	CLA	CHA-CBD-CGD-O2D
50	g	204	CLA	CHA-CBD-CGD-O1D
50	j	102	CLA	CHA-CBD-CGD-O2D
50	k	205	CLA	CHA-CBD-CGD-O1D
50	w	306	CLA	CHA-CBD-CGD-O2D
50	x	306	CLA	CHA-CBD-CGD-O1D
50	x	307	CLA	CHA-CBD-CGD-O2D
50	x	309	CLA	CHA-CBD-CGD-O1D
50	x	316	CLA	CHA-CBD-CGD-O1D
50	y	303	CLA	CHA-CBD-CGD-O2D
50	y	310	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
50	z	307	CLA	CHA-CBD-CGD-O2D
50	a	824	CLA	C3-C5-C6-C7
50	y	302	CLA	C3-C5-C6-C7
50	b	803	CLA	O1A-CGA-O2A-C1
46	j	105	LMG	C34-C35-C36-C37
46	7	301	LMG	O7-C8-C9-O8
46	j	105	LMG	O1-C7-C8-O7
46	w	312	LMG	O1-C7-C8-O7
48	B	604	SQD	O6-C44-C45-O47
46	w	312	LMG	C30-C31-C32-C33
44	L	201	PGT	C14-C15-C16-C17
50	b	847	CLA	C11-C12-C13-C15
50	j	102	CLA	O1D-CGD-O2D-CED
51	x	317	DGD	C3A-C4A-C5A-C6A
44	f	305	PGT	C32-C33-C34-C35
44	z	301	PGT	C18-C19-C20-C21
46	x	315	LMG	C14-C15-C16-C17
50	g	203	CLA	C2-C3-C5-C6
46	F	802	LMG	O9-C10-O7-C8
50	a	811	CLA	C6-C7-C8-C9
50	a	814	CLA	C14-C13-C15-C16
50	a	838	CLA	C11-C10-C8-C9
50	b	805	CLA	C14-C13-C15-C16
50	b	839	CLA	C11-C12-C13-C14
50	b	844	CLA	C6-C7-C8-C9
50	b	846	CLA	C14-C13-C15-C16
50	y	310	CLA	C14-C13-C15-C16
46	j	104	LMG	C13-C14-C15-C16
50	b	803	CLA	C2C-C3C-CAC-CBC
48	j	106	SQD	C4-C5-C6-S
50	y	308	CLA	C16-C17-C18-C20
50	a	821	CLA	C2A-CAA-CBA-CGA
43	z	318	BCR	C37-C22-C23-C24
50	y	314	CLA	C15-C16-C17-C18
55	z	320	LUT	C27-C28-C29-C30
50	a	848	CLA	C1A-C2A-CAA-CBA
50	a	851	CLA	C1A-C2A-CAA-CBA
50	b	809	CLA	C1A-C2A-CAA-CBA
50	b	839	CLA	C1A-C2A-CAA-CBA
51	b	821	DGD	C1B-C2B-C3B-C4B
50	a	811	CLA	C16-C17-C18-C19
50	a	841	CLA	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
46	D	601	LMG	C12-C13-C14-C15
44	N	301	PGT	C4-O4P-P-O3P
44	z	317	PGT	C4-O4P-P-O3P
50	b	807	CLA	C1-C2-C3-C5
46	7	301	LMG	C34-C35-C36-C37
51	b	821	DGD	C7B-C8B-C9B-CAB
51	x	317	DGD	C8A-C9A-CAA-CBA
50	a	842	CLA	C3-C5-C6-C7
44	I	203	PGT	C2-C1-O3P-P
44	5	301	PGT	C1-O3P-P-O2P
44	A	401	PGT	C4-O4P-P-O1P
44	A	403	PGT	C4-O4P-P-O2P
44	B	601	PGT	C1-O3P-P-O1P
44	B	602	PGT	C1-O3P-P-O1P
44	F	803	PGT	C4-O4P-P-O1P
44	I	203	PGT	C1-O3P-P-O2P
44	N	301	PGT	C4-O4P-P-O2P
44	a	806	PGT	C4-O4P-P-O2P
44	a	807	PGT	C1-O3P-P-O1P
44	a	807	PGT	C4-O4P-P-O1P
44	b	830	PGT	C1-O3P-P-O2P
44	b	830	PGT	C4-O4P-P-O1P
44	w	313	PGT	C1-O3P-P-O2P
44	z	301	PGT	C4-O4P-P-O1P
44	z	317	PGT	C1-O3P-P-O1P
50	a	836	CLA	C16-C17-C18-C19
50	a	846	CLA	C16-C17-C18-C19
44	B	601	PGT	O3P-C1-C2-C3
44	B	603	PGT	O3P-C1-C2-C3
44	L	201	PGT	O3P-C1-C2-C3
44	a	805	PGT	O3P-C1-C2-C3
50	x	310	CLA	C2A-CAA-CBA-CGA
50	a	815	CLA	O1D-CGD-O2D-CED
50	b	832	CLA	C5-C6-C7-C8
44	b	829	PGT	C39-C40-C41-C42
50	a	801	CLA	CAD-CBD-CGD-O1D
50	a	819	CLA	CAD-CBD-CGD-O1D
50	a	826	CLA	CAD-CBD-CGD-O1D
50	a	835	CLA	CAD-CBD-CGD-O1D
50	a	838	CLA	CAD-CBD-CGD-O1D
50	a	839	CLA	CAD-CBD-CGD-O1D
50	a	852	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
50	b	824	CLA	CAD-CBD-CGD-O1D
50	b	832	CLA	CAD-CBD-CGD-O1D
50	k	205	CLA	CAD-CBD-CGD-O1D
50	x	316	CLA	CAD-CBD-CGD-O1D
54	z	304	CHL	CAD-CBD-CGD-O1D
44	A	404	PGT	C17-C18-C19-C20
44	I	203	PGT	C14-C15-C16-C17
44	L	201	PGT	C42-C43-C44-C45
44	B	601	PGT	O3P-C1-C2-O2
44	N	301	PGT	O3P-C1-C2-O2
44	z	317	PGT	O3P-C1-C2-O2
50	a	801	CLA	C11-C12-C13-C15
50	a	814	CLA	C6-C7-C8-C10
50	a	816	CLA	C3A-C2A-CAA-CBA
50	a	844	CLA	C11-C10-C8-C7
50	a	849	CLA	C3A-C2A-CAA-CBA
50	a	854	CLA	C11-C12-C13-C15
50	a	858	CLA	C11-C12-C13-C15
50	b	802	CLA	C6-C7-C8-C10
50	b	837	CLA	C6-C7-C8-C10
50	b	837	CLA	C12-C13-C15-C16
50	b	844	CLA	C11-C12-C13-C15
50	x	303	CLA	C6-C7-C8-C10
50	y	308	CLA	C12-C13-C15-C16
50	y	313	CLA	C11-C12-C13-C15
53	b	827	PQN	C22-C23-C25-C26
50	a	858	CLA	C1-C2-C3-C5
46	f	306	LMG	C11-C10-O7-C8
44	a	805	PGT	C14-C15-C16-C17
50	a	823	CLA	C6-C7-C8-C10
46	j	105	LMG	O1-C7-C8-C9
46	j	105	LMG	C7-C8-C9-O8
46	w	312	LMG	O1-C7-C8-C9
51	x	317	DGD	C1G-C2G-C3G-O3G
54	x	311	CHL	C1C-C2C-CMC-OMC
54	z	312	CHL	C1C-C2C-CMC-OMC
44	I	203	PGT	O2-C2-C3-O3
44	z	301	PGT	O2-C2-C3-O3
46	j	105	LMG	O7-C8-C9-O8
51	b	821	DGD	O1G-C1G-C2G-O2G
50	a	850	CLA	C16-C17-C18-C19
44	L	201	PGT	C2-C1-O3P-P

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Mol	Chain	Res	Type	Atoms
50	a	815	CLA	C13-C15-C16-C17
50	b	833	CLA	C15-C16-C17-C18
51	x	317	DGD	C2A-C3A-C4A-C5A
50	a	814	CLA	C11-C10-C8-C9
50	a	842	CLA	C11-C10-C8-C9
50	a	846	CLA	C11-C10-C8-C9
50	a	846	CLA	C14-C13-C15-C16
50	a	858	CLA	C14-C13-C15-C16
50	b	801	CLA	C6-C7-C8-C9
50	b	805	CLA	C11-C12-C13-C14
50	b	836	CLA	C14-C13-C15-C16
50	b	840	CLA	C6-C7-C8-C9
50	b	844	CLA	C14-C13-C15-C16
50	l	306	CLA	C11-C10-C8-C9
50	w	308	CLA	C14-C13-C15-C16
50	y	308	CLA	C14-C13-C15-C16
53	a	825	PQN	C21-C22-C23-C24
50	f	301	CLA	O1A-CGA-O2A-C1
44	A	404	PGT	C21-C22-C23-C24
50	y	308	CLA	C16-C17-C18-C19
50	x	312	CLA	C1-C2-C3-C5
50	z	311	CLA	C2A-CAA-CBA-CGA
50	a	849	CLA	CAA-CBA-CGA-O2A
50	b	814	CLA	C13-C15-C16-C17
43	a	810	BCR	C10-C11-C12-C13
43	a	810	BCR	C18-C19-C20-C21
43	z	318	BCR	C10-C11-C12-C13
55	z	320	LUT	C7-C8-C9-C19
44	a	805	PGT	C32-C33-C34-C35
44	z	317	PGT	O4P-C4-C5-O5
46	f	306	LMG	O9-C10-O7-C8
44	A	404	PGT	C32-C33-C34-C35
50	a	836	CLA	C16-C17-C18-C20
50	a	858	CLA	C16-C17-C18-C20
50	b	824	CLA	C16-C17-C18-C20
50	b	806	CLA	O1D-CGD-O2D-CED
50	g	201	CLA	C1-C2-C3-C4
54	x	319	CHL	C1-C2-C3-C4
44	b	829	PGT	C38-C39-C40-C41
44	D	602	PGT	C3-C2-O2-C31
44	N	301	PGT	C3-C2-O2-C31
44	A	402	PGT	O3P-C1-C2-C3

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Mol	Chain	Res	Type	Atoms
50	b	849	CLA	O1D-CGD-O2D-CED
50	b	803	CLA	C2A-CAA-CBA-CGA
50	x	306	CLA	C2A-CAA-CBA-CGA
50	a	821	CLA	C1-C2-C3-C5
50	b	847	CLA	C5-C6-C7-C8
50	a	833	CLA	C2-C1-O2A-CGA
50	a	842	CLA	C2-C1-O2A-CGA
50	b	807	CLA	C2-C1-O2A-CGA
50	b	825	CLA	C2-C1-O2A-CGA
54	z	312	CHL	C2-C1-O2A-CGA
44	f	305	PGT	C15-C16-C17-C18
46	x	315	LMG	C4-C5-C6-O5
50	a	854	CLA	C5-C6-C7-C8
44	A	404	PGT	C5-C4-O4P-P
44	A	402	PGT	C38-C39-C40-C41
50	a	853	CLA	O1D-CGD-O2D-CED
50	x	306	CLA	C11-C12-C13-C15
44	b	829	PGT	C41-C42-C43-C44
43	4	101	BCR	C23-C24-C25-C30
43	a	827	BCR	C1-C6-C7-C8
43	j	101	BCR	C23-C24-C25-C30
43	l	303	BCR	C1-C6-C7-C8
51	b	821	DGD	C3A-C4A-C5A-C6A
44	I	203	PGT	C11-C12-C13-C14
44	B	603	PGT	C17-C18-C19-C20
46	D	601	LMG	O6-C1-O1-C7
50	b	825	CLA	C8-C10-C11-C12
50	a	835	CLA	C2A-CAA-CBA-CGA
50	a	843	CLA	C2A-CAA-CBA-CGA
50	b	801	CLA	C2A-CAA-CBA-CGA
50	b	842	CLA	C2A-CAA-CBA-CGA
50	x	316	CLA	C2A-CAA-CBA-CGA
48	j	106	SQD	O6-C44-C45-O47
51	a	804	DGD	O2G-C2G-C3G-O3G
50	a	818	CLA	CBA-CGA-O2A-C1
44	5	301	PGT	C4-O4P-P-O3P
44	A	401	PGT	C1-O3P-P-O4P
44	A	402	PGT	C4-O4P-P-O3P
44	A	404	PGT	C4-O4P-P-O3P
44	B	602	PGT	C4-O4P-P-O3P
44	D	602	PGT	C4-O4P-P-O3P
44	I	203	PGT	C4-O4P-P-O3P

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Mol	Chain	Res	Type	Atoms
44	f	305	PGT	C1-O3P-P-O4P
44	f	305	PGT	C4-O4P-P-O3P
44	w	313	PGT	C4-O4P-P-O3P
44	z	313	PGT	C4-O4P-P-O3P
50	b	826	CLA	C1-C2-C3-C5
50	b	838	CLA	C1-C2-C3-C5
52	a	808	CL0	CBA-CGA-O2A-C1
45	F	804	A1H1M	C02-C03-C04-C05
50	z	319	CLA	CBD-CGD-O2D-CED
50	b	840	CLA	C6-C7-C8-C10
50	w	310	CLA	C12-C13-C15-C16
50	y	308	CLA	C6-C7-C8-C10
44	5	301	PGT	C33-C34-C35-C36
50	a	801	CLA	C11-C12-C13-C14
50	a	844	CLA	C11-C10-C8-C9
50	b	824	CLA	C11-C12-C13-C14
50	b	837	CLA	C6-C7-C8-C9
50	x	312	CLA	C11-C12-C13-C14
50	y	313	CLA	C11-C12-C13-C14
50	y	314	CLA	C11-C12-C13-C14
43	k	201	BCR	C15-C16-C17-C18
50	a	811	CLA	C16-C17-C18-C20
50	a	823	CLA	C6-C7-C8-C9
50	b	840	CLA	C16-C17-C18-C19
50	y	303	CLA	C6-C7-C8-C10
53	b	827	PQN	C15-C16-C17-C18
48	F	805	SQD	O49-C7-C8-C9
44	B	603	PGT	C36-C37-C38-C39
44	F	803	PGT	C13-C14-C15-C16
44	z	301	PGT	C37-C38-C39-C40
51	a	804	DGD	C4A-C5A-C6A-C7A
43	b	816	BCR	C37-C22-C23-C24
46	w	312	LMG	C14-C15-C16-C17
50	x	307	CLA	CBA-CGA-O2A-C1
50	y	308	CLA	O1A-CGA-O2A-C1
48	a	859	SQD	O49-C7-C8-C9
50	b	806	CLA	O1A-CGA-O2A-C1
44	z	317	PGT	C37-C38-C39-C40
50	x	312	CLA	C16-C17-C18-C20
48	w	317	SQD	O49-C7-C8-C9
44	b	829	PGT	C17-C18-C19-C20
50	y	308	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
44	A	402	PGT	C12-C11-O3-C3
50	a	824	CLA	C2A-CAA-CBA-CGA
50	y	303	CLA	C6-C7-C8-C9
48	j	106	SQD	C31-C32-C33-C34
44	B	603	PGT	C12-C13-C14-C15
44	a	807	PGT	C21-C22-C23-C24
51	x	317	DGD	C2B-C3B-C4B-C5B
50	b	802	CLA	C16-C17-C18-C20
50	a	814	CLA	C2-C3-C5-C6
50	a	843	CLA	C2-C3-C5-C6
50	a	854	CLA	O1A-CGA-O2A-C1
50	x	306	CLA	C2-C1-O2A-CGA
51	a	804	DGD	CEA-CFA-CGA-CHA
50	w	310	CLA	C8-C10-C11-C12
50	a	857	CLA	O1D-CGD-O2D-CED
44	a	807	PGT	C34-C35-C36-C37
46	f	306	LMG	O1-C7-C8-O7
50	a	814	CLA	C2A-CAA-CBA-CGA
50	a	820	CLA	C2A-CAA-CBA-CGA
50	b	846	CLA	C2A-CAA-CBA-CGA
44	A	403	PGT	C38-C39-C40-C41
46	j	105	LMG	C31-C32-C33-C34
45	5	302	A1H1M	C37-C07-C08-C09
50	b	828	CLA	C3A-C2A-CAA-CBA
50	b	842	CLA	C3A-C2A-CAA-CBA
50	b	847	CLA	C3A-C2A-CAA-CBA
50	x	303	CLA	C3A-C2A-CAA-CBA
50	y	312	CLA	C3A-C2A-CAA-CBA
50	z	308	CLA	C3A-C2A-CAA-CBA
54	w	304	CHL	CAA-CBA-CGA-O1A
51	a	804	DGD	C9A-CAA-CBA-CCA
50	a	843	CLA	C11-C10-C8-C9
50	a	850	CLA	C14-C13-C15-C16
50	a	854	CLA	C14-C13-C15-C16
50	b	802	CLA	C11-C12-C13-C14
50	b	840	CLA	C11-C10-C8-C9
50	x	303	CLA	C6-C7-C8-C9
50	y	314	CLA	C14-C13-C15-C16
53	b	827	PQN	C24-C23-C25-C26
50	a	853	CLA	C8-C10-C11-C12
44	A	404	PGT	C22-C23-C24-C25
43	a	810	BCR	C16-C17-C18-C36

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Mol	Chain	Res	Type	Atoms
43	a	831	BCR	C11-C10-C9-C34
43	a	831	BCR	C35-C13-C14-C15
43	b	818	BCR	C11-C10-C9-C34
43	b	818	BCR	C20-C21-C22-C37
43	f	304	BCR	C35-C13-C14-C15
43	l	304	BCR	C11-C10-C9-C34
46	z	315	LMG	C7-C8-C9-O8
44	B	603	PGT	C18-C19-C20-C21
46	B	605	LMG	O10-C28-C29-C30
50	x	306	CLA	C11-C12-C13-C14
50	x	312	CLA	C16-C17-C18-C19
50	a	846	CLA	O2A-C1-C2-C3
50	b	810	CLA	O2A-C1-C2-C3
50	b	841	CLA	O2A-C1-C2-C3
43	k	202	BCR	C37-C22-C23-C24
55	z	320	LUT	C11-C12-C13-C20
50	a	850	CLA	C5-C6-C7-C8
44	A	401	PGT	C3-C2-O2-C31
48	F	805	SQD	C44-C45-O47-C7
50	y	314	CLA	C4-C3-C5-C6
50	b	833	CLA	C1A-C2A-CAA-CBA
50	b	836	CLA	C1A-C2A-CAA-CBA
50	l	301	CLA	C1A-C2A-CAA-CBA
50	y	313	CLA	C1A-C2A-CAA-CBA
50	a	824	CLA	C6-C7-C8-C10
50	a	853	CLA	C11-C12-C13-C15
50	b	845	CLA	C6-C7-C8-C10
50	w	310	CLA	C11-C12-C13-C15
50	b	823	CLA	O1D-CGD-O2D-CED
50	b	802	CLA	C5-C6-C7-C8
44	B	603	PGT	C1-O3P-P-O4P
44	b	829	PGT	C1-O3P-P-O4P
44	5	301	PGT	C35-C36-C37-C38
50	a	850	CLA	CAA-CBA-CGA-O2A
44	f	305	PGT	O3P-C1-C2-O2
44	z	313	PGT	O3P-C1-C2-O2
48	w	317	SQD	C11-C10-C9-C8
50	a	835	CLA	C5-C6-C7-C8
50	b	844	CLA	C10-C11-C12-C13
50	b	828	CLA	O1D-CGD-O2D-CED
44	w	313	PGT	C33-C34-C35-C36
44	A	402	PGT	O11-C11-O3-C3

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Mol	Chain	Res	Type	Atoms
50	z	311	CLA	O1A-CGA-O2A-C1
46	z	315	LMG	O9-C10-O7-C8
44	5	301	PGT	C32-C33-C34-C35
43	a	810	BCR	C16-C17-C18-C19
43	a	831	BCR	C11-C10-C9-C8
43	a	831	BCR	C12-C13-C14-C15
43	b	818	BCR	C11-C10-C9-C8
43	b	818	BCR	C20-C21-C22-C23
43	f	304	BCR	C12-C13-C14-C15
43	l	304	BCR	C11-C10-C9-C8
51	a	804	DGD	O1G-C1G-C2G-O2G
44	a	807	PGT	C33-C34-C35-C36
44	b	829	PGT	C15-C16-C17-C18
43	l	302	BCR	C13-C14-C15-C16
50	a	820	CLA	O1A-CGA-O2A-C1
50	b	839	CLA	O1A-CGA-O2A-C1
50	b	843	CLA	C16-C17-C18-C20
44	I	203	PGT	C41-C42-C43-C44
50	a	818	CLA	C11-C12-C13-C14
50	a	824	CLA	C4-C3-C5-C6
50	b	836	CLA	C4-C3-C5-C6
50	a	841	CLA	C2-C1-O2A-CGA
50	a	853	CLA	C2-C1-O2A-CGA
50	b	839	CLA	C2-C1-O2A-CGA
50	x	312	CLA	C2-C1-O2A-CGA
50	w	306	CLA	O1A-CGA-O2A-C1
50	b	837	CLA	CAA-CBA-CGA-O2A
46	B	605	LMG	C34-C35-C36-C37
50	b	828	CLA	C2A-CAA-CBA-CGA
50	x	307	CLA	C2A-CAA-CBA-CGA
44	B	603	PGT	C44-C45-C46-C47
50	a	822	CLA	C1-C2-C3-C5
50	y	313	CLA	O1A-CGA-O2A-C1
43	a	810	BCR	C1-C6-C7-C8
43	a	830	BCR	C1-C6-C7-C8
43	a	831	BCR	C5-C6-C7-C8
43	i	101	BCR	C1-C6-C7-C8
43	y	301	BCR	C23-C24-C25-C30
44	D	602	PGT	C15-C16-C17-C18
50	l	301	CLA	CAA-CBA-CGA-O2A
43	l	304	BCR	C9-C10-C11-C12
46	x	315	LMG	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
50	b	807	CLA	C4-C3-C5-C6
43	b	817	BCR	C21-C22-C23-C24
50	b	848	CLA	C1A-C2A-CAA-CBA
50	b	803	CLA	C5-C6-C7-C8
50	y	310	CLA	C2-C3-C5-C6
50	a	847	CLA	C2A-C3A-C4A-CHB
50	a	850	CLA	C3-C5-C6-C7
50	b	846	CLA	C16-C17-C18-C19
50	b	814	CLA	C15-C16-C17-C18
50	z	307	CLA	C10-C11-C12-C13
50	a	812	CLA	C14-C13-C15-C16
50	l	301	CLA	CAA-CBA-CGA-O1A
50	w	306	CLA	C1-C2-C3-C5
51	a	804	DGD	CCB-CDB-CEB-CFB
44	B	601	PGT	C15-C16-C17-C18
50	a	834	CLA	C4-C3-C5-C6
50	b	823	CLA	C4-C3-C5-C6
46	x	315	LMG	C21-C22-C23-C24
50	a	845	CLA	C11-C10-C8-C7
50	a	849	CLA	C6-C7-C8-C10
50	b	802	CLA	C11-C10-C8-C7
50	b	805	CLA	C11-C10-C8-C7
54	w	304	CHL	CAA-CBA-CGA-O2A
50	y	303	CLA	C3-C5-C6-C7
50	a	820	CLA	C1-C2-C3-C4
50	a	838	CLA	C1-C2-C3-C4
50	a	845	CLA	C1-C2-C3-C4
50	b	814	CLA	C1-C2-C3-C4
50	b	832	CLA	C1-C2-C3-C4
50	l	306	CLA	C1-C2-C3-C4
50	w	310	CLA	C1-C2-C3-C4
50	x	303	CLA	C1-C2-C3-C4
50	y	302	CLA	C1-C2-C3-C4
50	y	313	CLA	C15-C16-C17-C18
46	D	601	LMG	C2-C1-O1-C7
50	b	843	CLA	C16-C17-C18-C19
44	B	603	PGT	C33-C34-C35-C36
46	x	315	LMG	O1-C7-C8-O7
50	a	856	CLA	O2A-C1-C2-C3
46	H	401	LMG	O7-C10-C11-C12
50	b	842	CLA	CAA-CBA-CGA-O2A
54	w	304	CHL	C2A-CAA-CBA-CGA

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Mol	Chain	Res	Type	Atoms
44	B	603	PGT	C14-C15-C16-C17
51	x	317	DGD	C2G-C1G-O1G-C1A
44	z	317	PGT	C19-C20-C21-C22
50	b	826	CLA	O1D-CGD-O2D-CED
50	a	850	CLA	C4-C3-C5-C6
50	b	845	CLA	C13-C15-C16-C17
44	B	606	PGT	C17-C18-C19-C20
44	B	601	PGT	C4-O4P-P-O3P
50	b	837	CLA	C1-C2-C3-C5
50	a	844	CLA	C2-C3-C5-C6
50	a	849	CLA	C2-C3-C5-C6
46	7	301	LMG	C29-C30-C31-C32
50	a	824	CLA	C6-C7-C8-C9
50	a	854	CLA	C11-C12-C13-C14
50	b	809	CLA	C6-C7-C8-C9
50	b	837	CLA	C14-C13-C15-C16
50	f	301	CLA	C11-C10-C8-C9
50	a	853	CLA	C3A-C2A-CAA-CBA
50	b	813	CLA	C3A-C2A-CAA-CBA
50	b	833	CLA	C3A-C2A-CAA-CBA
44	B	606	PGT	O3-C11-C12-C13
44	z	313	PGT	O2-C31-C32-C33
46	x	315	LMG	O6-C5-C6-O5
44	I	203	PGT	C34-C35-C36-C37
48	a	859	SQD	C46-C45-O47-C7
48	w	318	SQD	C46-C45-O47-C7
50	a	809	CLA	CAD-CBD-CGD-O2D
50	a	814	CLA	CAD-CBD-CGD-O2D
50	a	816	CLA	CAD-CBD-CGD-O2D
50	a	818	CLA	CAD-CBD-CGD-O2D
50	a	846	CLA	CAD-CBD-CGD-O2D
50	b	801	CLA	CAD-CBD-CGD-O2D
50	b	805	CLA	CAD-CBD-CGD-O2D
50	b	849	CLA	CAD-CBD-CGD-O2D
50	j	102	CLA	CAD-CBD-CGD-O2D
50	k	205	CLA	CAD-CBD-CGD-O2D
50	y	305	CLA	CAD-CBD-CGD-O2D
50	y	306	CLA	CAD-CBD-CGD-O2D
50	y	308	CLA	CAD-CBD-CGD-O2D
51	a	804	DGD	C1G-C2G-O2G-C1B
50	w	308	CLA	C16-C17-C18-C20
44	5	301	PGT	O31-C31-O2-C2

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Mol	Chain	Res	Type	Atoms
50	y	305	CLA	CAA-CBA-CGA-O2A
50	a	834	CLA	CAA-CBA-CGA-O2A
50	b	809	CLA	CAA-CBA-CGA-O2A
44	B	602	PGT	C15-C16-C17-C18
50	a	842	CLA	C4-C3-C5-C6
50	a	854	CLA	C4-C3-C5-C6
50	b	811	CLA	CAA-CBA-CGA-O2A
50	y	308	CLA	C8-C10-C11-C12
50	b	841	CLA	CAA-CBA-CGA-O2A
50	y	311	CLA	O1A-CGA-O2A-C1
43	b	816	BCR	C21-C22-C23-C24
55	w	319	LUT	C11-C12-C13-C14
50	a	847	CLA	C2A-CAA-CBA-CGA
44	w	313	PGT	C18-C19-C20-C21
46	D	601	LMG	C7-C8-C9-O8
50	x	303	CLA	CBA-CGA-O2A-C1
50	a	833	CLA	CAA-CBA-CGA-O2A
50	a	852	CLA	CAA-CBA-CGA-O2A
44	a	807	PGT	C15-C16-C17-C18
44	b	830	PGT	C12-C13-C14-C15
50	a	826	CLA	CAA-CBA-CGA-O2A
46	z	314	LMG	C32-C33-C34-C35
50	a	815	CLA	O2A-C1-C2-C3
50	a	833	CLA	O2A-C1-C2-C3
50	b	801	CLA	O2A-C1-C2-C3
50	b	805	CLA	O2A-C1-C2-C3
50	b	812	CLA	O2A-C1-C2-C3
50	b	823	CLA	O2A-C1-C2-C3
50	b	832	CLA	O2A-C1-C2-C3
50	b	835	CLA	O2A-C1-C2-C3
50	f	301	CLA	O2A-C1-C2-C3
50	w	308	CLA	O2A-C1-C2-C3
50	w	306	CLA	C2A-CAA-CBA-CGA
50	k	204	CLA	C8-C10-C11-C12
44	B	606	PGT	O2-C31-C32-C33
50	a	819	CLA	C3-C5-C6-C7
50	b	833	CLA	C16-C17-C18-C20
44	z	313	PGT	O4P-C4-C5-O5
51	a	804	DGD	C7B-C8B-C9B-CAB
50	a	817	CLA	CHA-CBD-CGD-O2D
50	a	833	CLA	CHA-CBD-CGD-O1D
50	a	842	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
50	a	844	CLA	CHA-CBD-CGD-O1D
50	a	847	CLA	CHA-CBD-CGD-O1D
50	a	852	CLA	CHA-CBD-CGD-O1D
50	a	858	CLA	CHA-CBD-CGD-O1D
50	b	801	CLA	CHA-CBD-CGD-O2D
50	b	803	CLA	CHA-CBD-CGD-O1D
50	b	805	CLA	CHA-CBD-CGD-O1D
50	b	805	CLA	CHA-CBD-CGD-O2D
50	b	806	CLA	CHA-CBD-CGD-O2D
50	b	810	CLA	CHA-CBD-CGD-O2D
50	b	815	CLA	CHA-CBD-CGD-O2D
50	b	835	CLA	CHA-CBD-CGD-O1D
50	b	840	CLA	CHA-CBD-CGD-O2D
50	b	848	CLA	CHA-CBD-CGD-O1D
50	g	204	CLA	CHA-CBD-CGD-O2D
50	w	302	CLA	CHA-CBD-CGD-O2D
50	w	314	CLA	CHA-CBD-CGD-O2D
50	w	315	CLA	CHA-CBD-CGD-O2D
50	x	318	CLA	CHA-CBD-CGD-O1D
50	y	306	CLA	CHA-CBD-CGD-O2D
50	y	309	CLA	CHA-CBD-CGD-O2D
50	z	303	CLA	CHA-CBD-CGD-O2D
50	z	307	CLA	CHA-CBD-CGD-O1D
50	z	310	CLA	CHA-CBD-CGD-O2D
50	z	311	CLA	CHA-CBD-CGD-O1D
50	a	848	CLA	CAA-CBA-CGA-O2A
50	a	854	CLA	CAA-CBA-CGA-O2A
44	f	305	PGT	O3P-C1-C2-C3
50	b	847	CLA	CAA-CBA-CGA-O2A
50	w	306	CLA	CAA-CBA-CGA-O2A
44	a	807	PGT	C20-C21-C22-C23
44	A	404	PGT	O2-C2-C3-O3
44	a	806	PGT	O2-C2-C3-O3
44	a	805	PGT	O2-C31-C32-C33
46	z	315	LMG	O8-C28-C29-C30
50	b	839	CLA	CAA-CBA-CGA-O2A
50	b	802	CLA	C2A-CAA-CBA-CGA
50	y	308	CLA	C13-C15-C16-C17
44	a	805	PGT	C11-C12-C13-C14
44	5	301	PGT	C11-C12-C13-C14
50	z	311	CLA	CAA-CBA-CGA-O2A
50	b	833	CLA	C4-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
50	a	835	CLA	C6-C7-C8-C10
50	a	857	CLA	C11-C12-C13-C15
50	a	853	CLA	C16-C17-C18-C19
50	a	853	CLA	C16-C17-C18-C20
50	l	306	CLA	C11-C12-C13-C15
50	w	308	CLA	C16-C17-C18-C19
50	a	849	CLA	C6-C7-C8-C9
50	b	802	CLA	C11-C10-C8-C9
50	y	313	CLA	C14-C13-C15-C16
50	x	318	CLA	O1D-CGD-O2D-CED
43	i	101	BCR	C13-C14-C15-C16
44	z	301	PGT	C17-C18-C19-C20
48	F	801	SQD	C4-C5-C6-S
48	F	805	SQD	C4-C5-C6-S
48	w	318	SQD	C4-C5-C6-S
44	5	301	PGT	C32-C31-O2-C2
46	z	315	LMG	C11-C10-O7-C8
44	f	305	PGT	O3-C11-C12-C13
46	f	306	LMG	O7-C10-C11-C12
50	x	318	CLA	CAA-CBA-CGA-O2A
50	a	801	CLA	CAA-CBA-CGA-O1A
50	b	838	CLA	CAA-CBA-CGA-O1A
50	a	854	CLA	C8-C10-C11-C12
50	b	801	CLA	C2-C3-C5-C6
50	b	815	CLA	C2-C3-C5-C6
50	a	809	CLA	CBD-CGD-O2D-CED
48	j	106	SQD	C32-C33-C34-C35
50	g	201	CLA	CAA-CBA-CGA-O1A
43	k	202	BCR	C21-C22-C23-C24
44	f	305	PGT	O4P-C4-C5-C6
50	a	822	CLA	C1A-C2A-CAA-CBA
50	a	835	CLA	C1A-C2A-CAA-CBA
50	a	839	CLA	C1A-C2A-CAA-CBA
50	a	853	CLA	C1A-C2A-CAA-CBA
50	b	813	CLA	C1A-C2A-CAA-CBA
50	z	308	CLA	C1A-C2A-CAA-CBA
44	B	606	PGT	O11-C11-C12-C13
50	y	308	CLA	CAA-CBA-CGA-O1A
50	b	808	CLA	C2A-CAA-CBA-CGA
44	z	313	PGT	C32-C33-C34-C35
54	z	312	CHL	C2C-C3C-CAC-CBC
50	w	308	CLA	C2-C1-O2A-CGA

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Mol	Chain	Res	Type	Atoms
44	b	829	PGT	C37-C38-C39-C40
50	b	835	CLA	CBA-CGA-O2A-C1
44	z	313	PGT	O31-C31-C32-C33
50	b	832	CLA	CAA-CBA-CGA-O1A
50	z	311	CLA	CAA-CBA-CGA-O1A
44	B	603	PGT	C41-C42-C43-C44
50	a	821	CLA	C12-C13-C15-C16
44	a	806	PGT	C1-C2-C3-O3
44	z	301	PGT	C1-C2-C3-O3
46	f	306	LMG	O1-C7-C8-C9
50	b	833	CLA	C2A-CAA-CBA-CGA
50	a	814	CLA	CAA-CBA-CGA-O1A
50	a	821	CLA	CAA-CBA-CGA-O1A
50	a	834	CLA	CAA-CBA-CGA-O1A
50	b	844	CLA	CAA-CBA-CGA-O1A
46	B	605	LMG	C35-C36-C37-C38
50	y	302	CLA	O1D-CGD-O2D-CED
44	B	603	PGT	C2-C1-O3P-P
46	f	306	LMG	O9-C10-C11-C12
50	a	811	CLA	CAA-CBA-CGA-O1A
44	B	606	PGT	C12-C13-C14-C15
44	A	401	PGT	C1-O3P-P-O1P
44	A	404	PGT	C4-O4P-P-O1P
44	B	602	PGT	C4-O4P-P-O1P
44	B	603	PGT	C1-O3P-P-O1P
44	b	829	PGT	C1-O3P-P-O2P
44	z	313	PGT	C4-O4P-P-O1P
44	B	606	PGT	O31-C31-C32-C33
46	H	401	LMG	O9-C10-C11-C12
50	l	306	CLA	CAA-CBA-CGA-O1A
50	w	315	CLA	CAA-CBA-CGA-O1A
50	x	313	CLA	CAA-CBA-CGA-O1A
44	w	313	PGT	O2-C31-C32-C33
50	w	315	CLA	CAA-CBA-CGA-O2A
46	w	312	LMG	O6-C1-O1-C7
44	B	606	PGT	C15-C16-C17-C18
43	a	831	BCR	C23-C24-C25-C26
50	a	824	CLA	C13-C15-C16-C17
50	a	841	CLA	CAA-CBA-CGA-O1A
50	g	201	CLA	CAA-CBA-CGA-O2A
50	y	308	CLA	CAA-CBA-CGA-O2A
50	y	311	CLA	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
44	F	803	PGT	C12-C13-C14-C15
46	F	802	LMG	C29-C30-C31-C32
50	b	843	CLA	C2A-CAA-CBA-CGA
50	y	302	CLA	C2A-CAA-CBA-CGA
50	z	316	CLA	CAA-CBA-CGA-O1A
46	7	301	LMG	C13-C14-C15-C16
54	z	312	CHL	C4C-C3C-CAC-CBC
46	f	306	LMG	C15-C16-C17-C18
50	b	824	CLA	CAA-CBA-CGA-O1A
50	a	802	CLA	C4-C3-C5-C6
44	F	803	PGT	C34-C35-C36-C37
44	w	313	PGT	C32-C33-C34-C35
46	z	314	LMG	C31-C32-C33-C34
50	b	840	CLA	C16-C17-C18-C20
48	F	805	SQD	C46-C45-O47-C7
48	F	805	SQD	O5-C5-C6-S
48	a	859	SQD	C44-C45-O47-C7
48	j	106	SQD	O5-C5-C6-S
48	w	318	SQD	C44-C45-O47-C7
48	w	318	SQD	O5-C5-C6-S
50	a	812	CLA	CAD-CBD-CGD-O1D
50	a	817	CLA	CAD-CBD-CGD-O1D
50	a	822	CLA	CAD-CBD-CGD-O1D
50	a	837	CLA	CAD-CBD-CGD-O1D
50	a	846	CLA	CAD-CBD-CGD-O1D
50	b	815	CLA	CAD-CBD-CGD-O1D
50	b	836	CLA	CAD-CBD-CGD-O1D
50	b	845	CLA	CAD-CBD-CGD-O1D
50	g	201	CLA	CAD-CBD-CGD-O1D
50	j	102	CLA	CAD-CBD-CGD-O1D
50	w	310	CLA	CAD-CBD-CGD-O1D
50	y	309	CLA	CAD-CBD-CGD-O1D
50	b	839	CLA	CAA-CBA-CGA-O1A
54	x	319	CHL	CAA-CBA-CGA-O1A
51	b	821	DGD	C8B-C9B-CAB-CBB
50	b	805	CLA	CAA-CBA-CGA-O2A
50	b	845	CLA	CAA-CBA-CGA-O2A
50	k	204	CLA	CAA-CBA-CGA-O2A
50	a	834	CLA	C14-C13-C15-C16
50	a	853	CLA	C11-C12-C13-C14
50	b	824	CLA	C6-C7-C8-C9
50	b	844	CLA	C11-C12-C13-C14

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Mol	Chain	Res	Type	Atoms
50	b	845	CLA	C14-C13-C15-C16
50	b	811	CLA	CAA-CBA-CGA-O1A
50	x	308	CLA	CAA-CBA-CGA-O1A
50	a	854	CLA	C3-C5-C6-C7
44	A	402	PGT	O3-C11-C12-C13
48	F	801	SQD	O47-C7-C8-C9
50	a	835	CLA	CAA-CBA-CGA-O2A
50	b	832	CLA	CAA-CBA-CGA-O2A
50	a	826	CLA	CAA-CBA-CGA-O1A
50	a	821	CLA	CAA-CBA-CGA-O2A
50	a	841	CLA	CAA-CBA-CGA-O2A
50	a	843	CLA	CAA-CBA-CGA-O2A
50	b	824	CLA	CAA-CBA-CGA-O2A
50	y	314	CLA	CAA-CBA-CGA-O2A
50	z	307	CLA	CAA-CBA-CGA-O2A
50	z	316	CLA	CAA-CBA-CGA-O2A
50	b	828	CLA	CAA-CBA-CGA-O1A
50	x	313	CLA	C4-C3-C5-C6
44	b	829	PGT	O3P-C1-C2-O2
50	a	801	CLA	C11-C10-C8-C7
50	a	824	CLA	C12-C13-C15-C16
50	a	839	CLA	C3A-C2A-CAA-CBA
50	a	850	CLA	C3A-C2A-CAA-CBA
50	b	807	CLA	C3A-C2A-CAA-CBA
50	b	809	CLA	C6-C7-C8-C10
50	b	814	CLA	C12-C13-C15-C16
50	b	824	CLA	C6-C7-C8-C10
50	b	837	CLA	C11-C12-C13-C15
50	w	308	CLA	C11-C10-C8-C7
50	w	310	CLA	C3A-C2A-CAA-CBA
50	y	314	CLA	C12-C13-C15-C16
50	z	319	CLA	C3A-C2A-CAA-CBA
50	a	842	CLA	CAA-CBA-CGA-O1A
44	B	601	PGT	O3-C11-C12-C13
44	5	301	PGT	C40-C41-C42-C43
43	b	831	BCR	C11-C12-C13-C14
43	z	318	BCR	C17-C18-C19-C20
55	x	320	LUT	C11-C12-C13-C14
55	z	320	LUT	C7-C8-C9-C10
50	a	852	CLA	CAA-CBA-CGA-O1A
50	b	842	CLA	CAA-CBA-CGA-O1A
50	y	313	CLA	CAA-CBA-CGA-O1A

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Mol	Chain	Res	Type	Atoms
44	F	803	PGT	C20-C21-C22-C23
48	F	805	SQD	C11-C12-C13-C14
50	b	802	CLA	C8-C10-C11-C12
44	A	402	PGT	O11-C11-C12-C13
44	a	805	PGT	O31-C31-C32-C33
44	f	305	PGT	O11-C11-C12-C13
46	z	315	LMG	O10-C28-C29-C30
50	a	845	CLA	CAA-CBA-CGA-O1A
50	w	306	CLA	CAA-CBA-CGA-O1A
50	z	307	CLA	CAA-CBA-CGA-O1A
50	a	802	CLA	C8-C10-C11-C12
50	h	201	CLA	CAA-CBA-CGA-O2A
50	a	842	CLA	C5-C6-C7-C8
50	z	307	CLA	C5-C6-C7-C8
50	a	843	CLA	CAA-CBA-CGA-O1A
50	a	848	CLA	CAA-CBA-CGA-O1A
50	x	318	CLA	CAA-CBA-CGA-O1A
50	b	847	CLA	C2A-CAA-CBA-CGA
44	b	829	PGT	C19-C20-C21-C22
50	b	826	CLA	O1A-CGA-O2A-C1
50	a	819	CLA	C5-C6-C7-C8
44	z	317	PGT	C11-C12-C13-C14
44	B	603	PGT	C40-C41-C42-C43
44	a	807	PGT	C13-C14-C15-C16

All (1) ring outliers are listed below:

Mol	Chain	Res	Type	Atoms
45	F	804	A1H1M	C08-C09-C10-C11-C35-C36

20 monomers are involved in 75 short contacts:

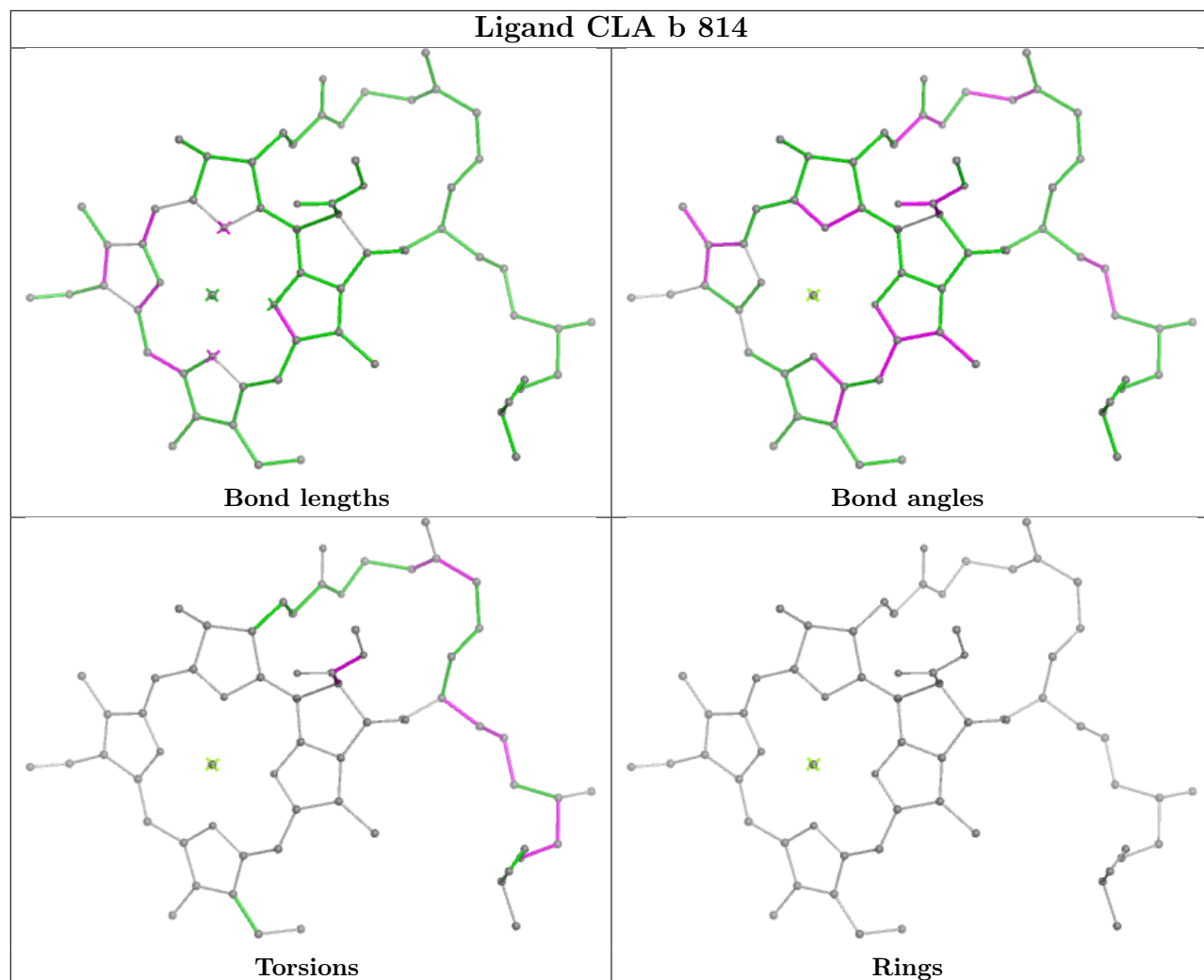
Mol	Chain	Res	Type	Clashes	Symm-Clashes
44	5	301	PGT	2	0
46	B	605	LMG	1	0
47	A	405	PQ9	16	0
44	B	606	PGT	1	0
49	I	202	SF4	1	0
48	F	805	SQD	11	0
48	F	801	SQD	7	0
43	4	101	BCR	4	0
44	A	403	PGT	2	0

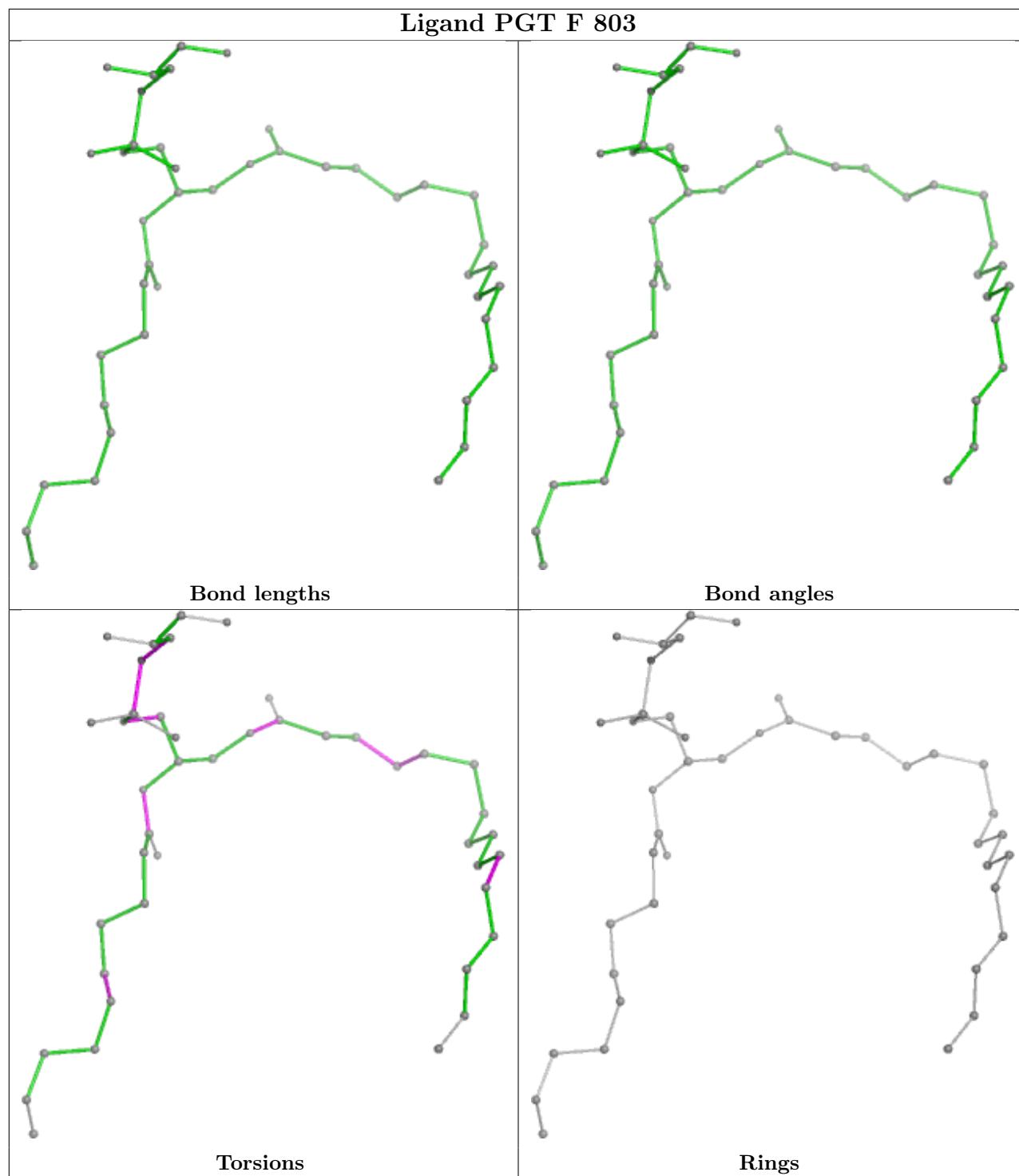
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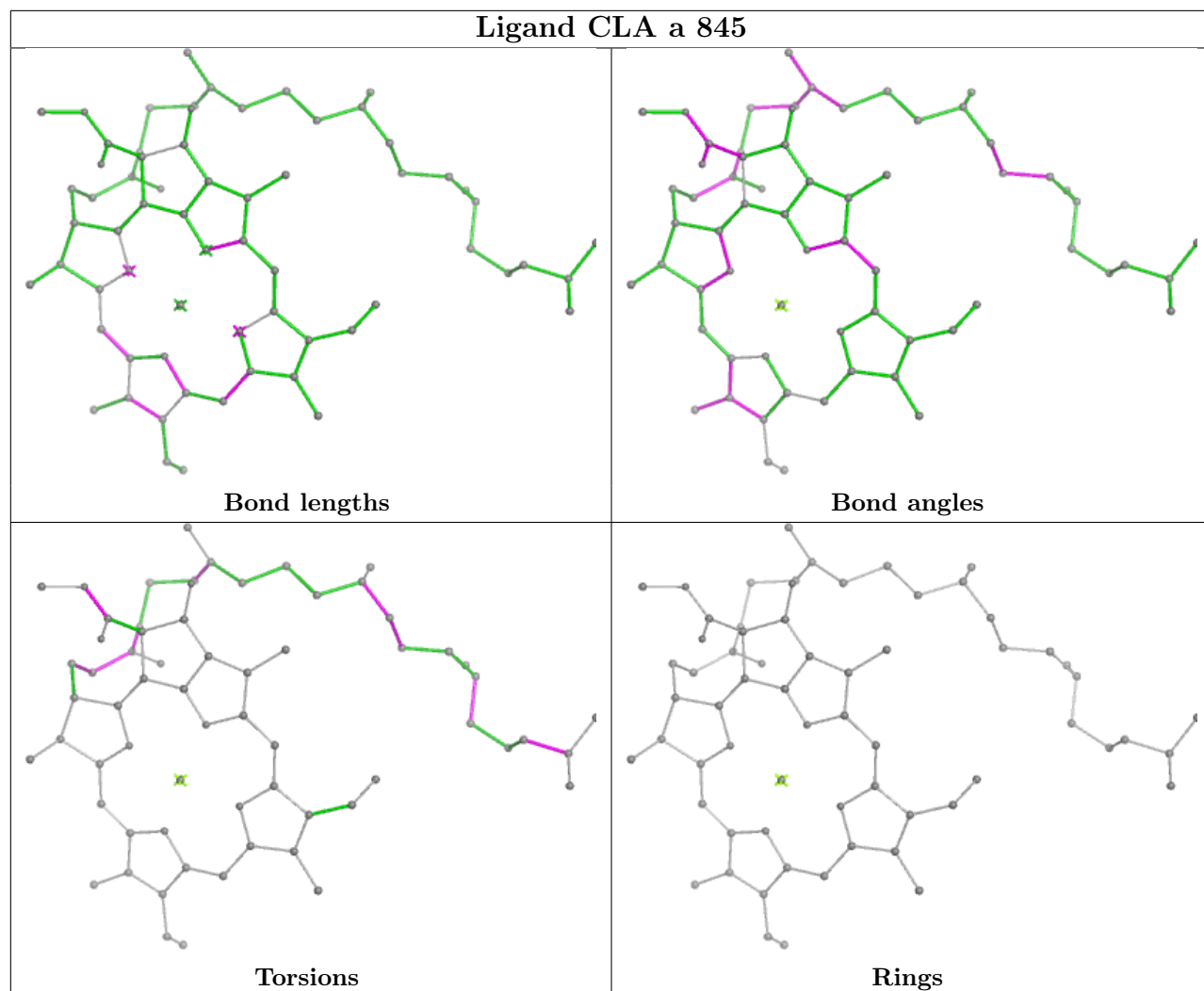
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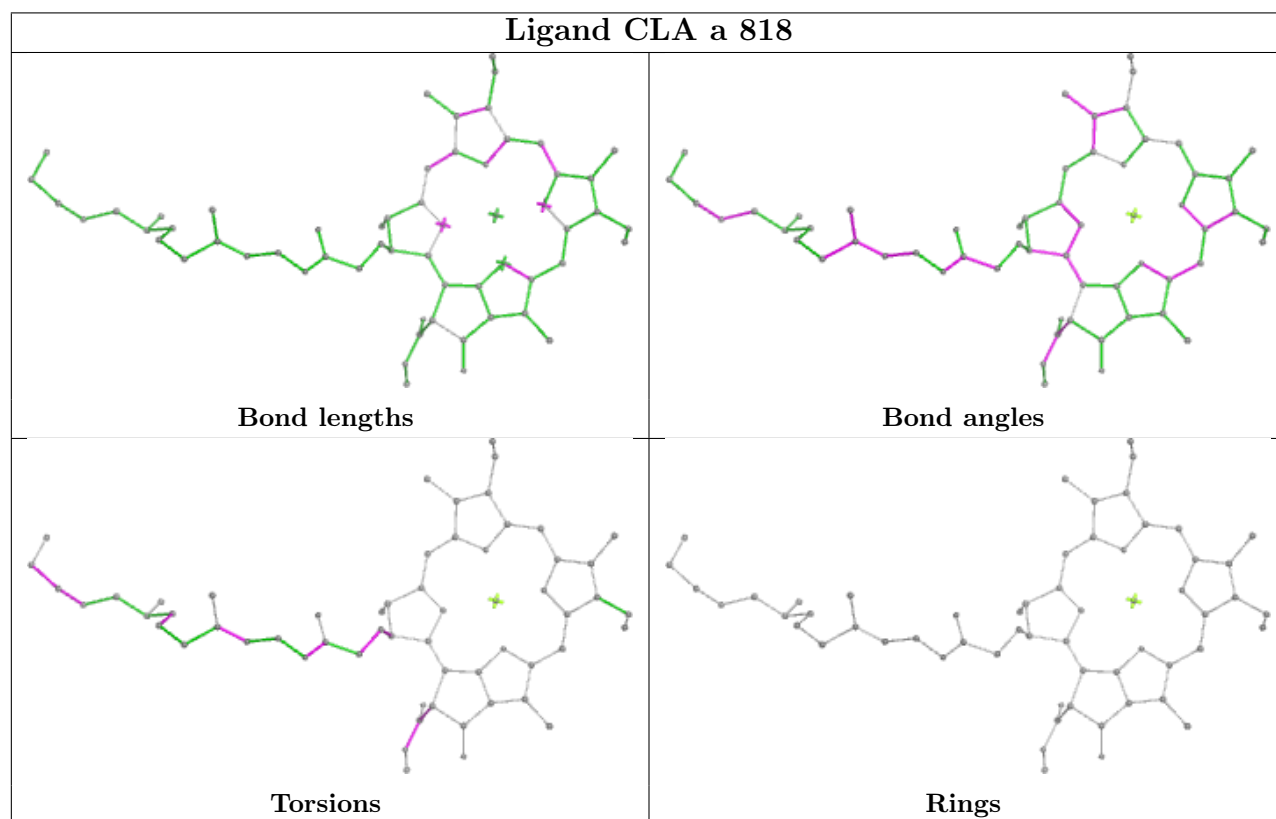
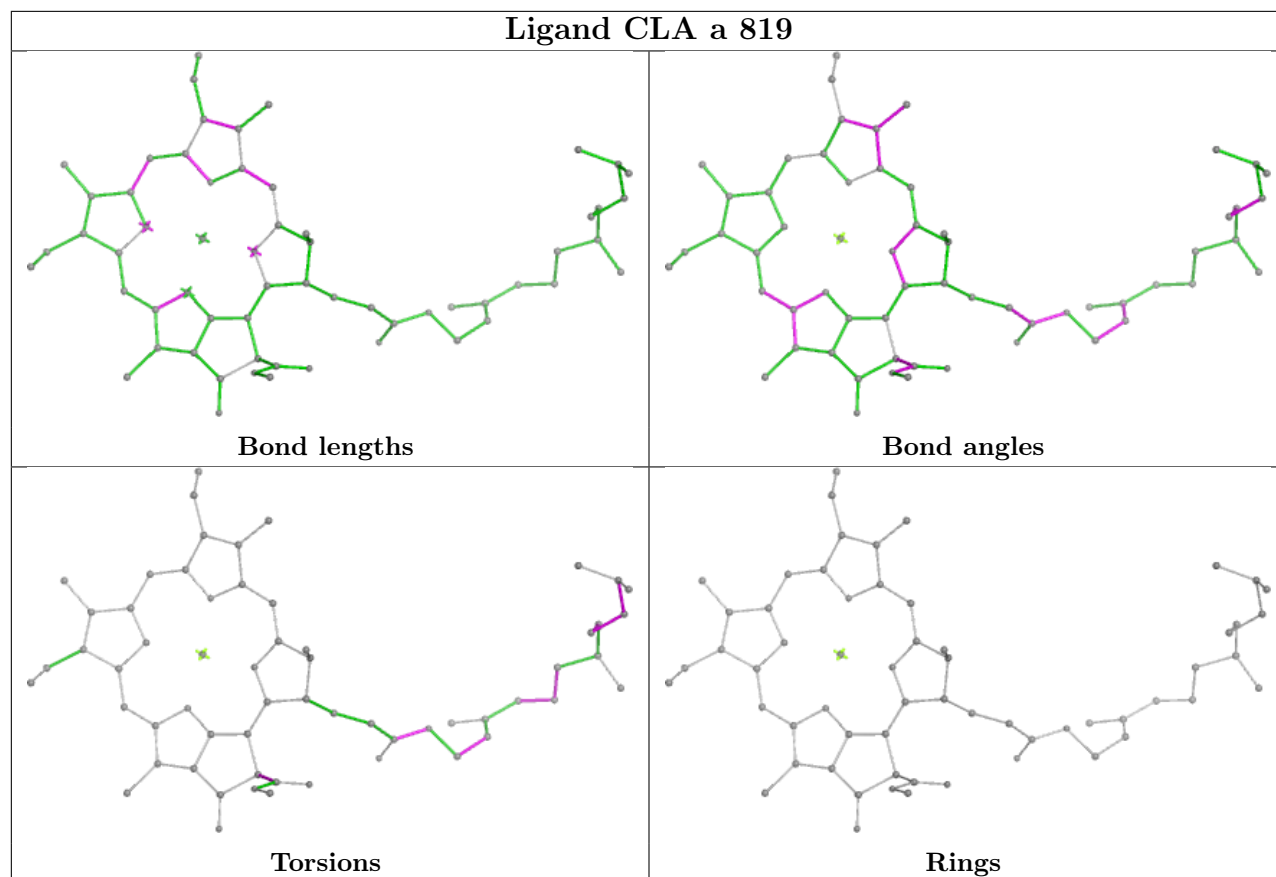
Mol	Chain	Res	Type	Clashes	Symm-Clashes
46	H	401	LMG	1	0
44	B	603	PGT	3	0
45	F	804	A1H1M	6	0
44	A	402	PGT	1	0
44	D	602	PGT	1	0
48	B	604	SQD	10	0
44	N	301	PGT	2	0
44	L	201	PGT	2	0
46	F	802	LMG	1	0
46	D	601	LMG	1	0
44	B	602	PGT	2	0

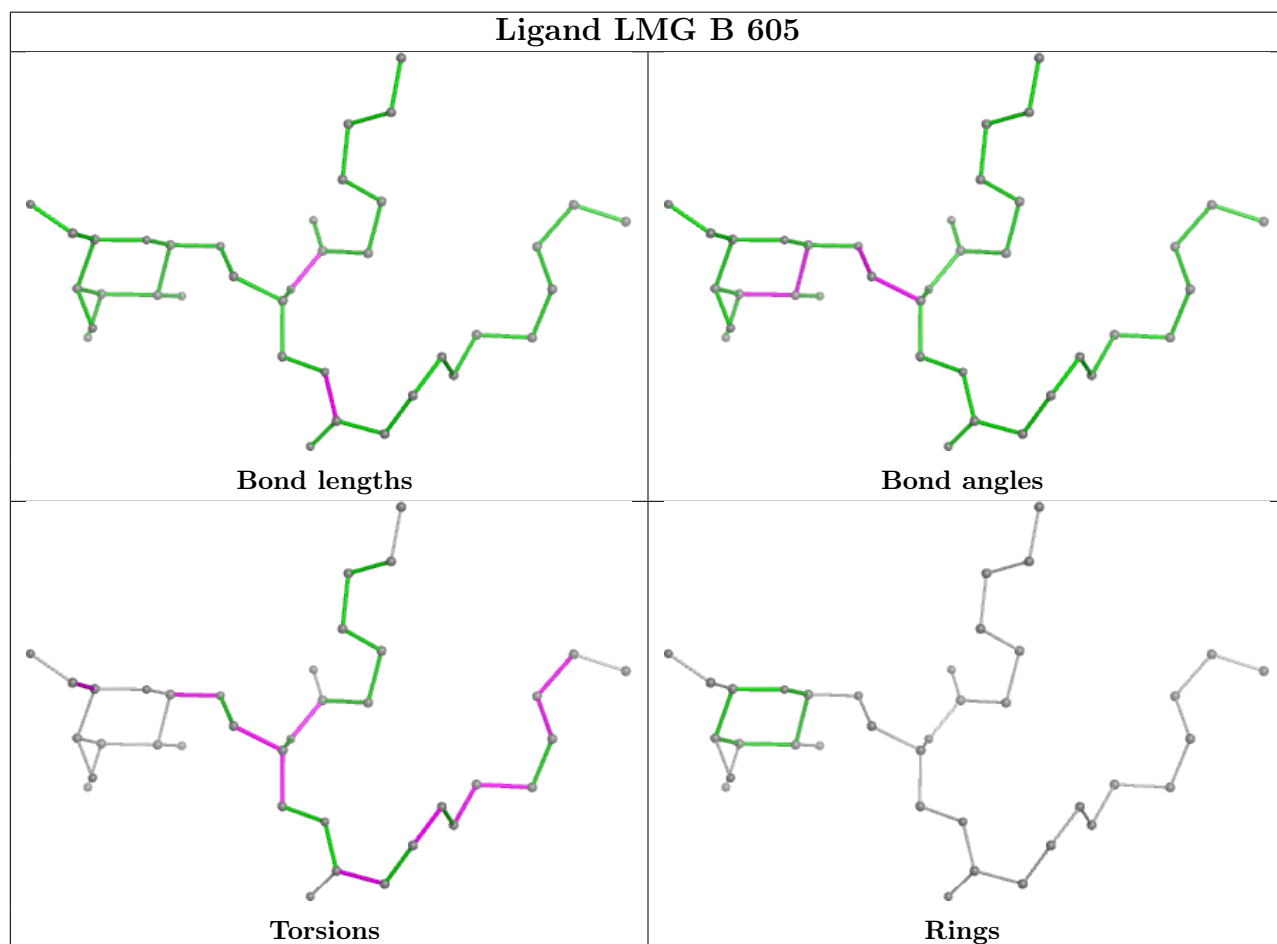
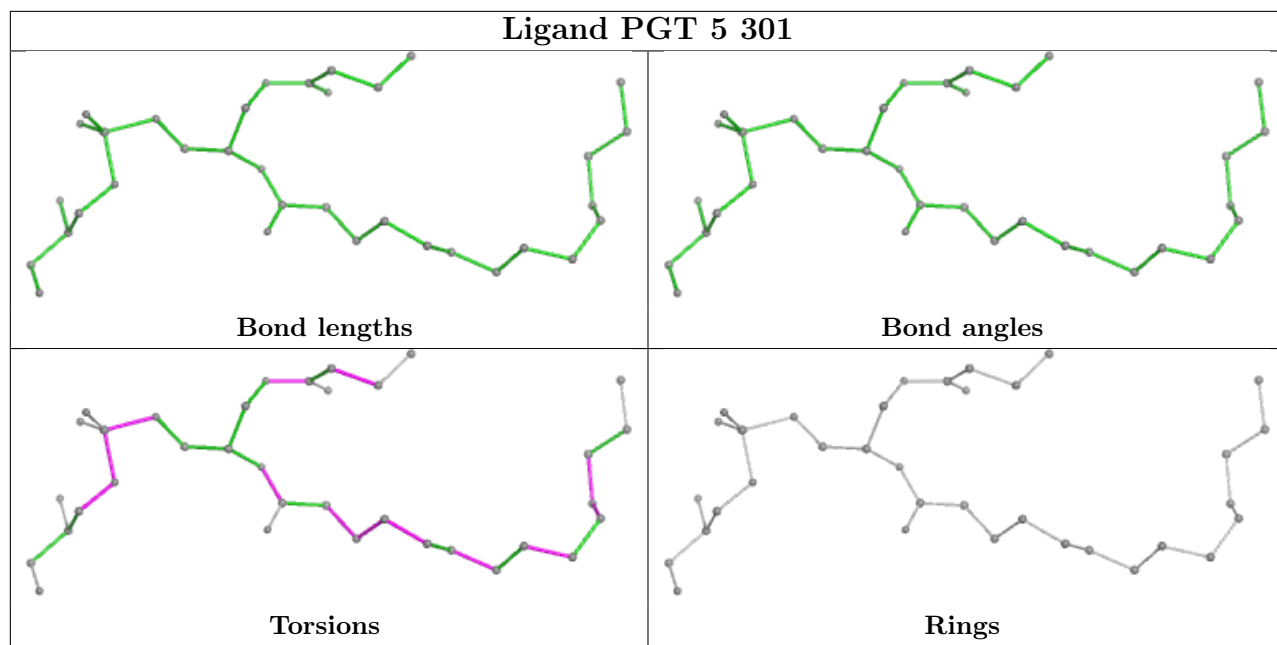
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

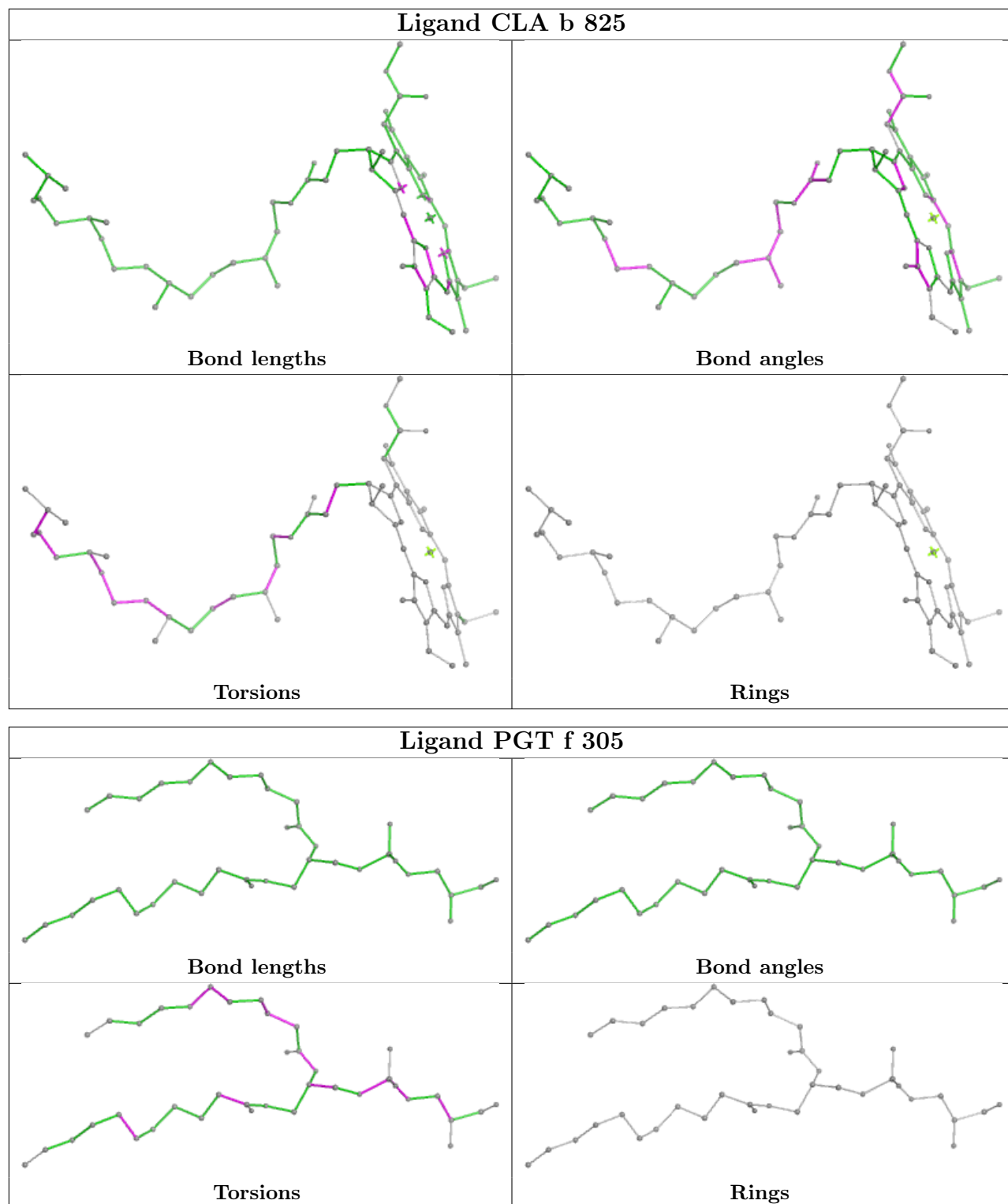


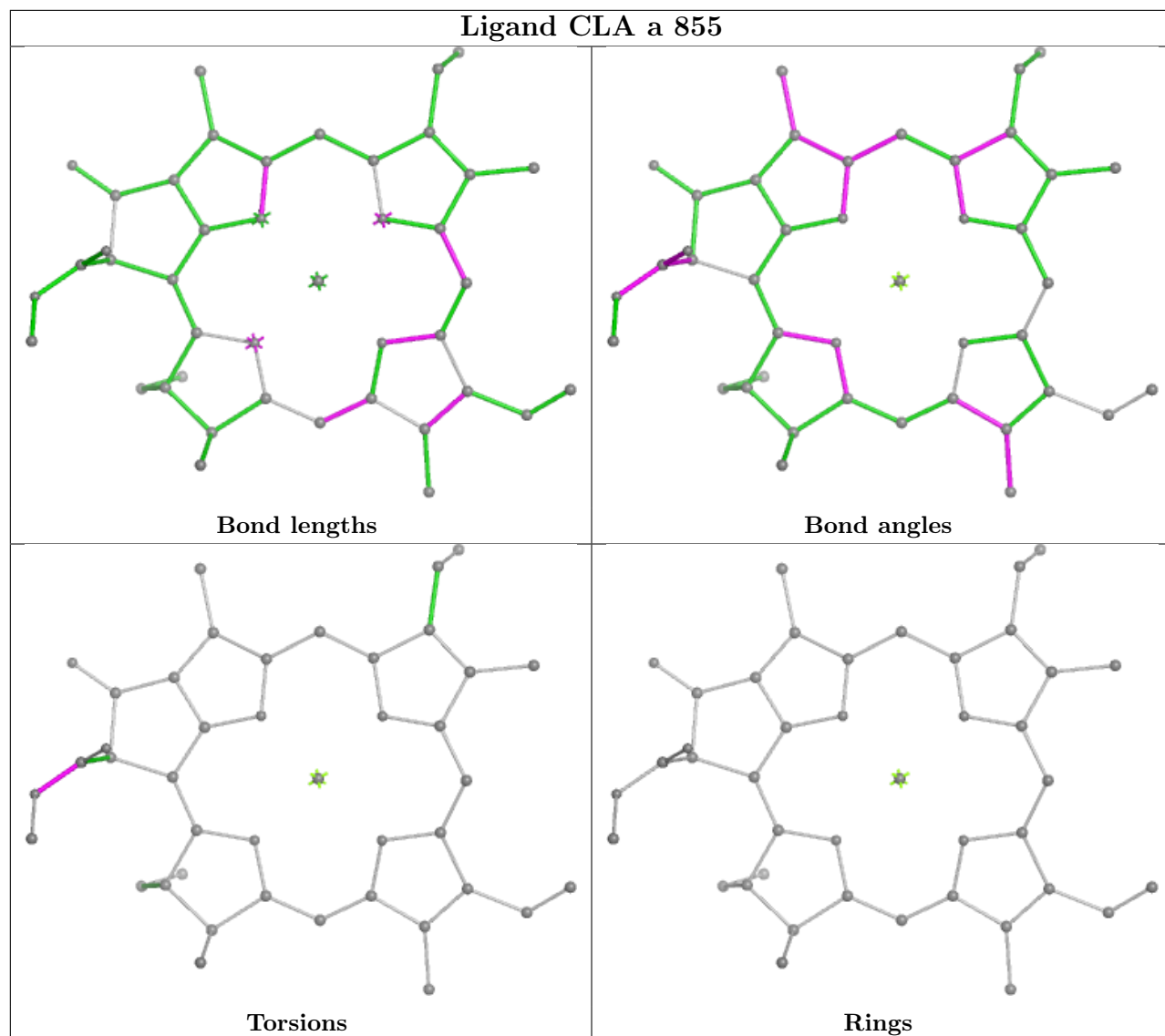


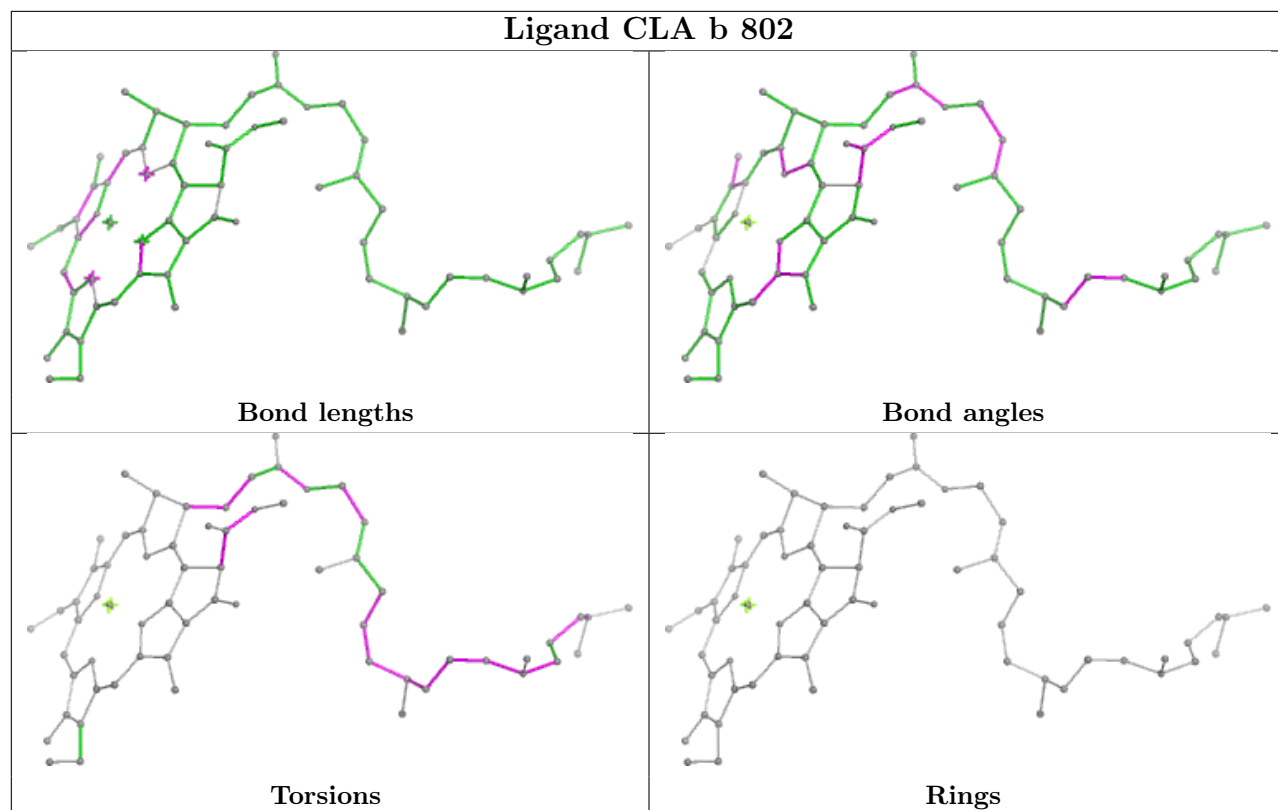


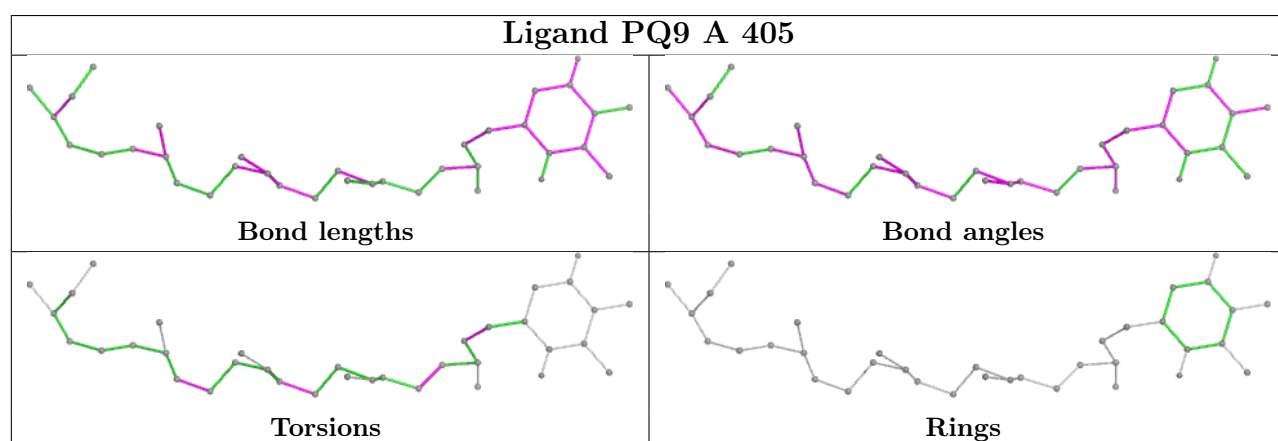
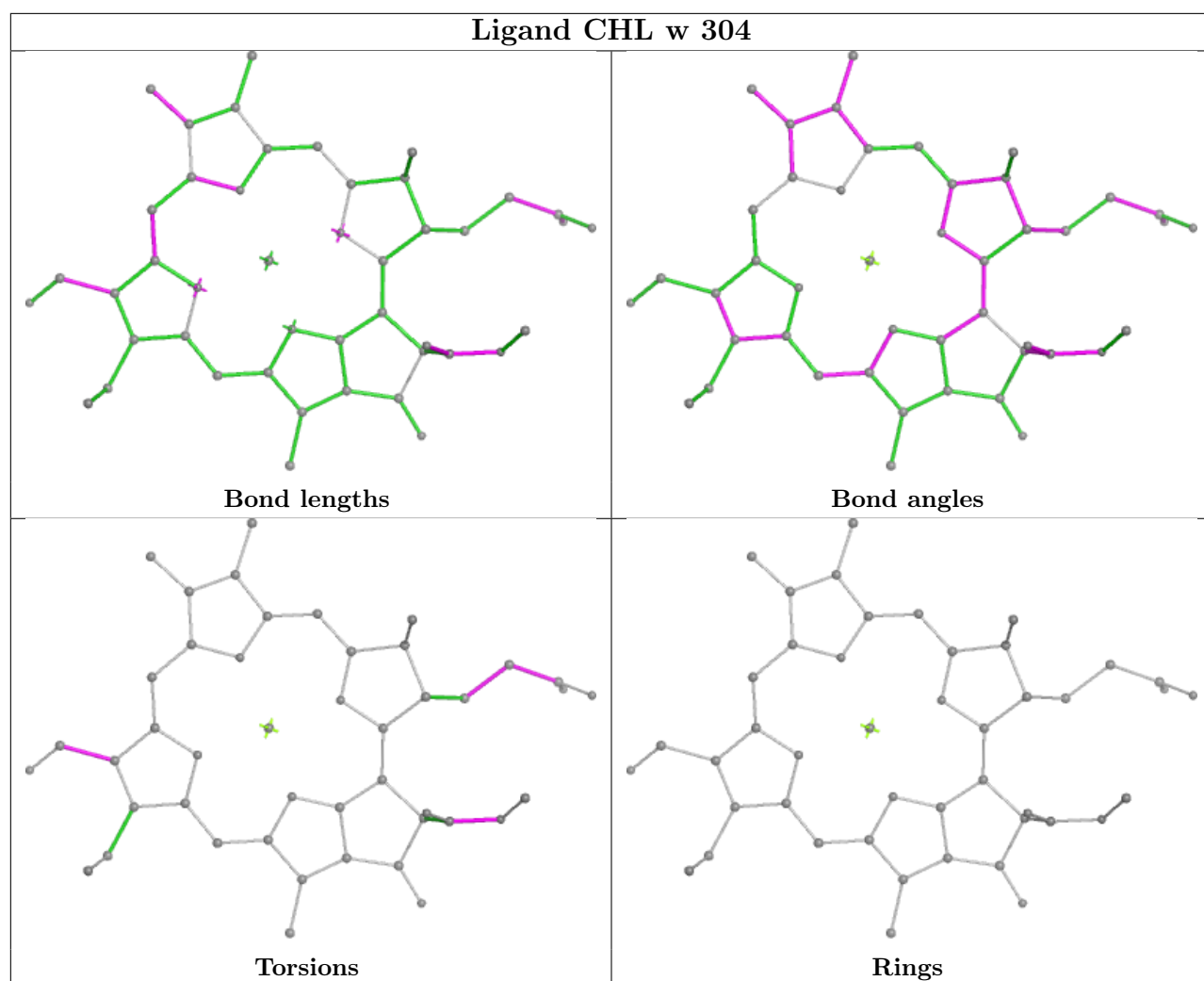


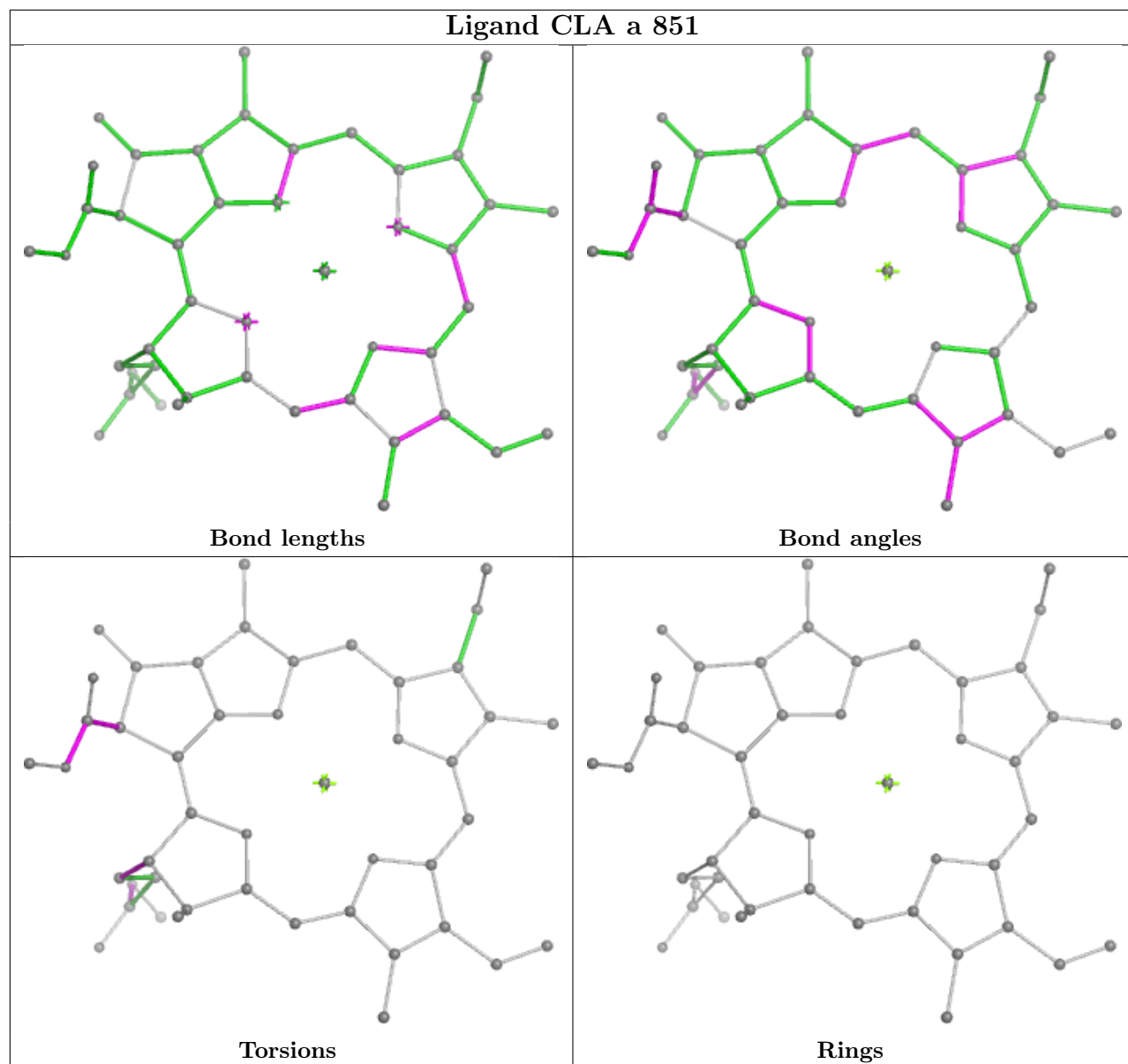


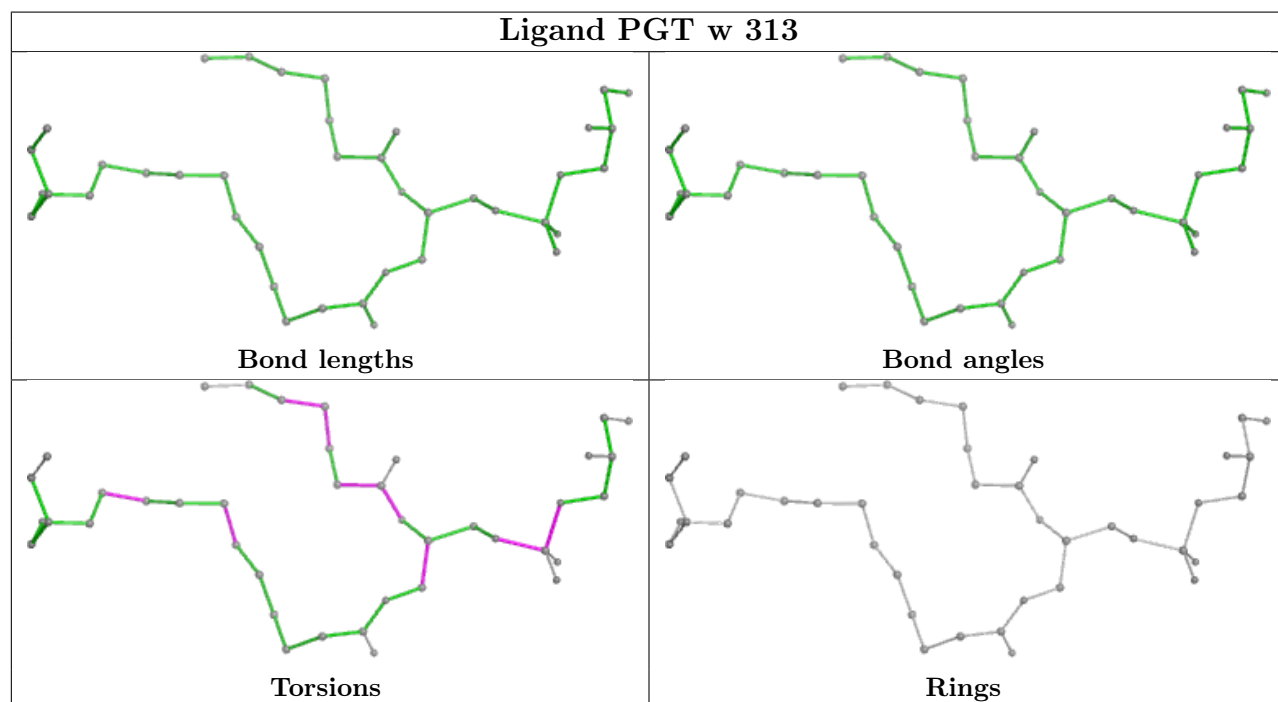
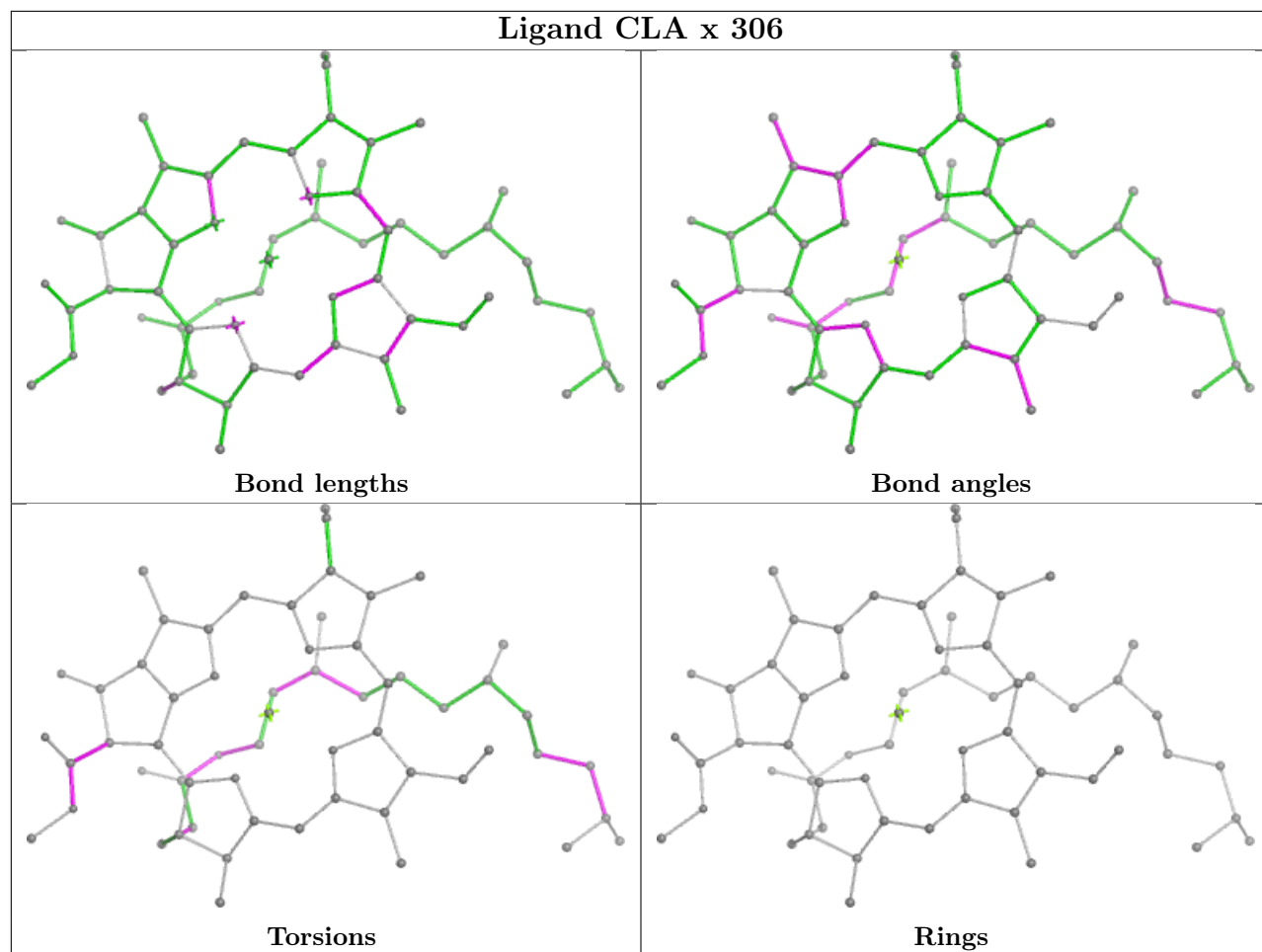


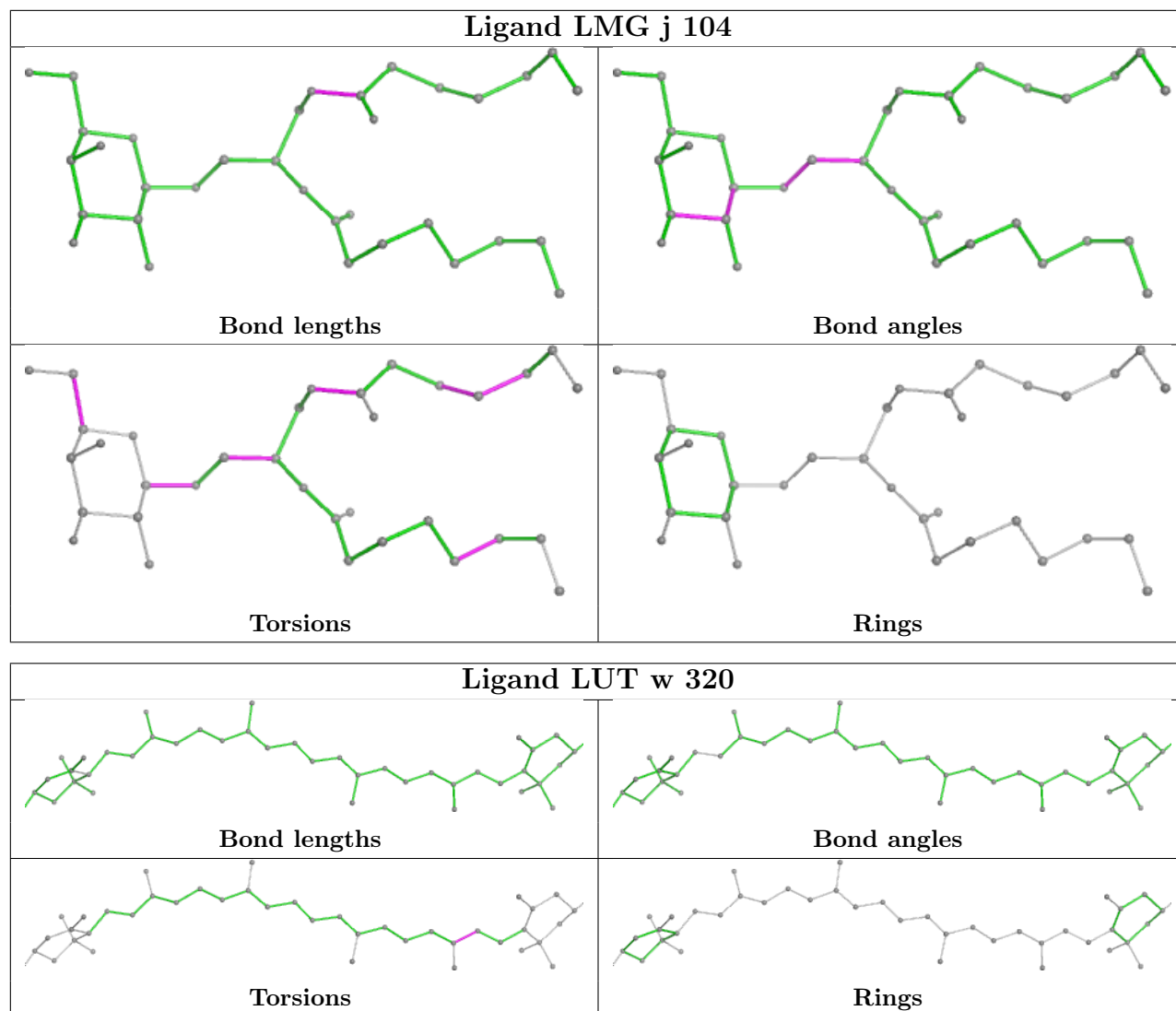


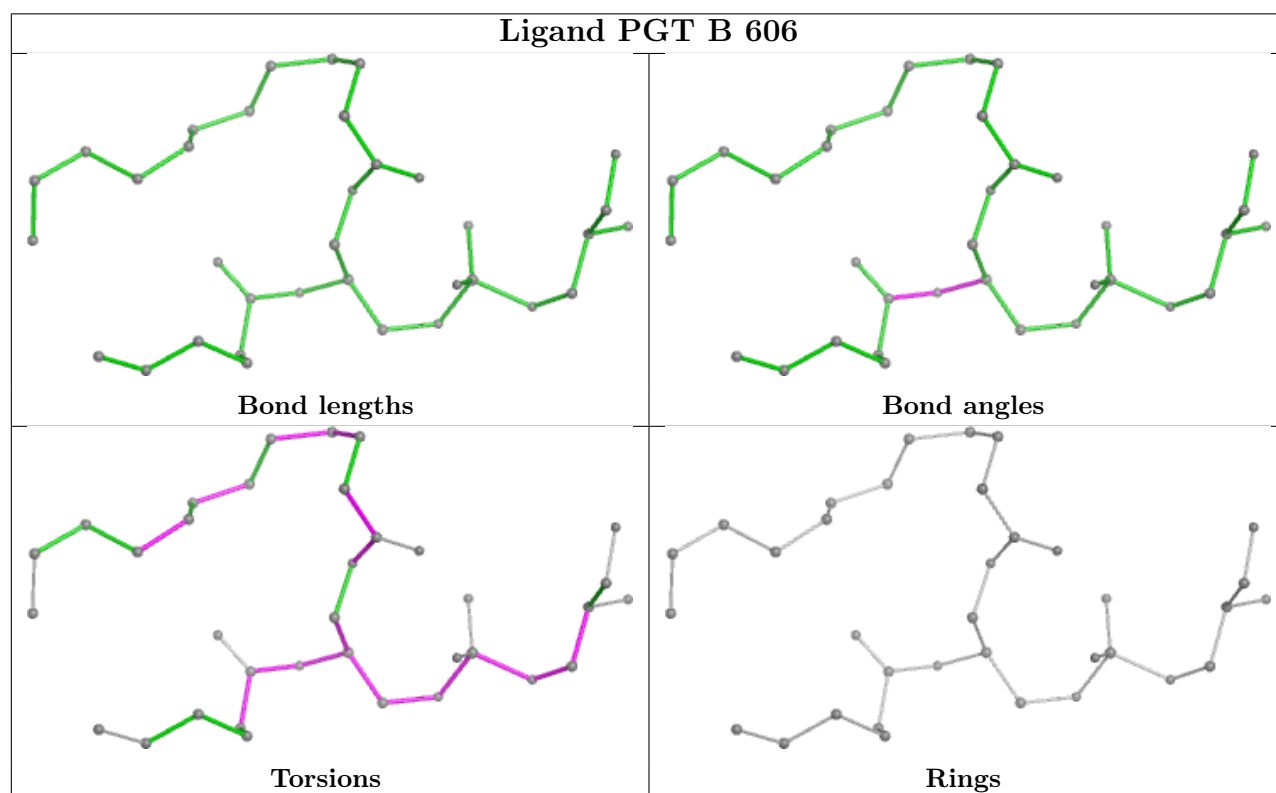
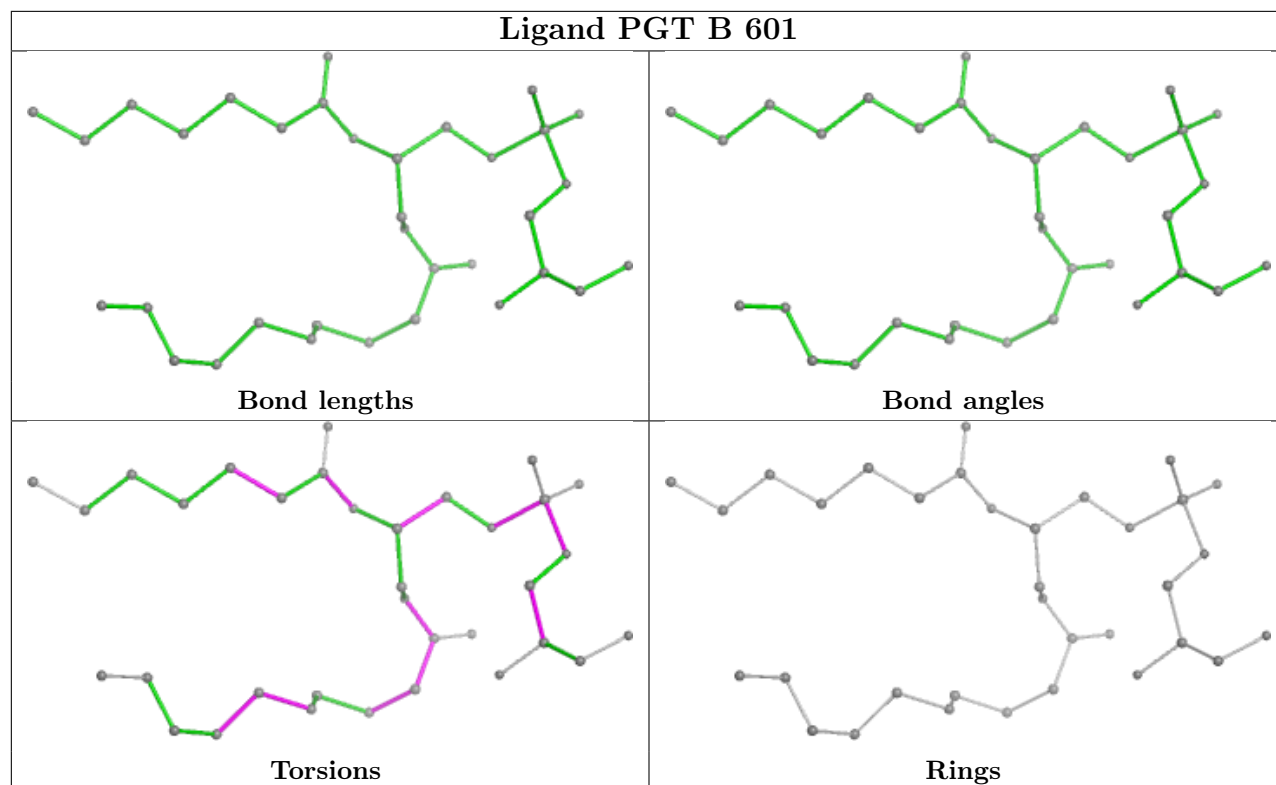


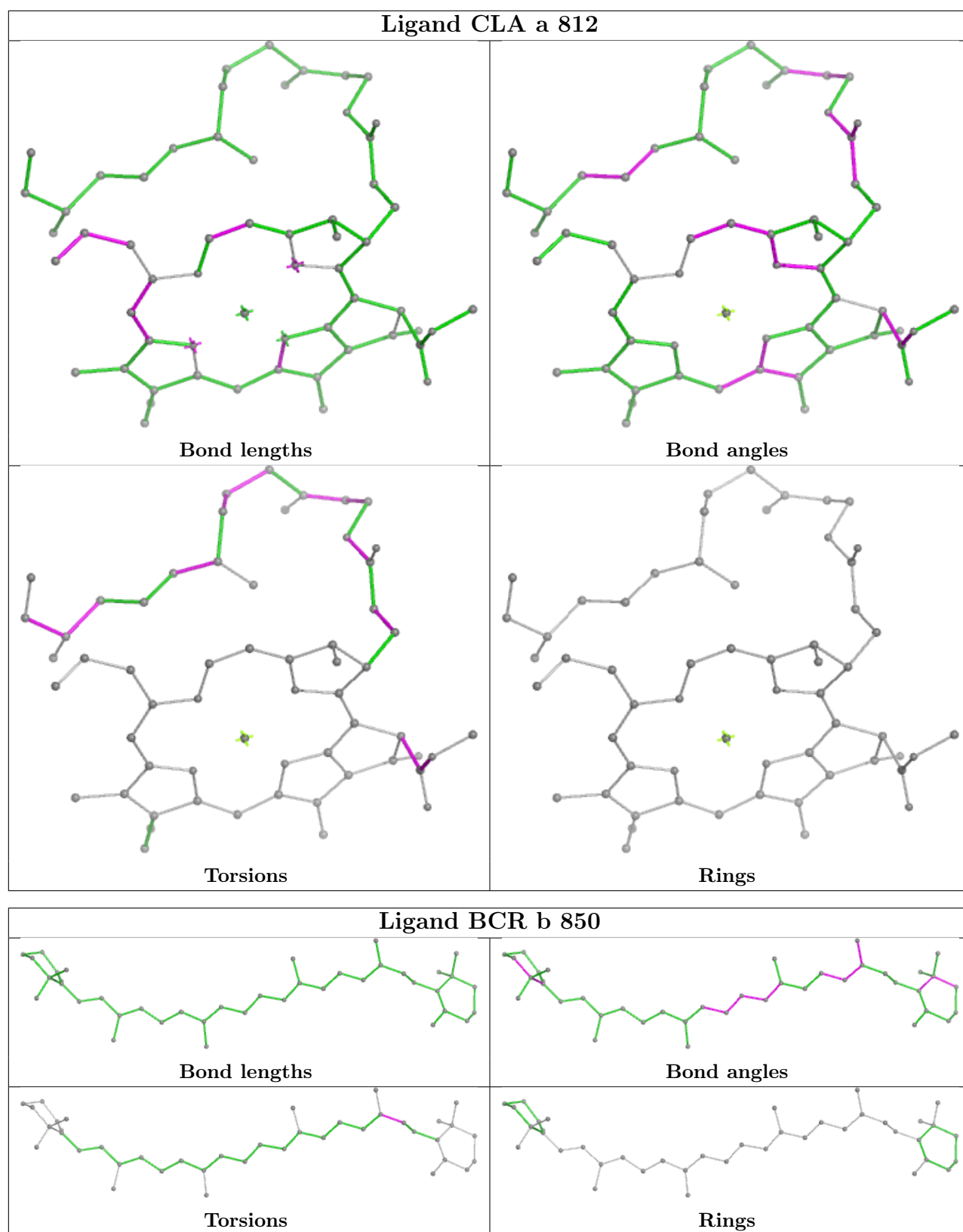


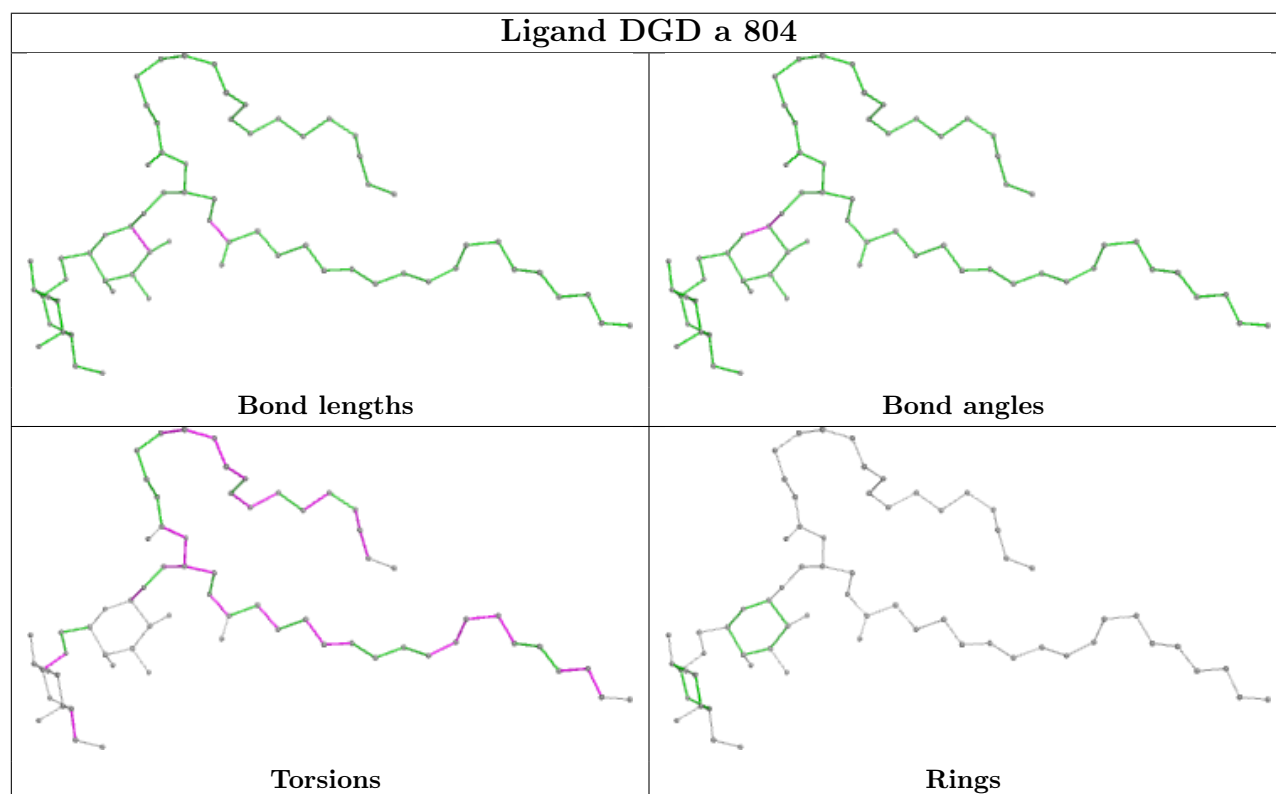
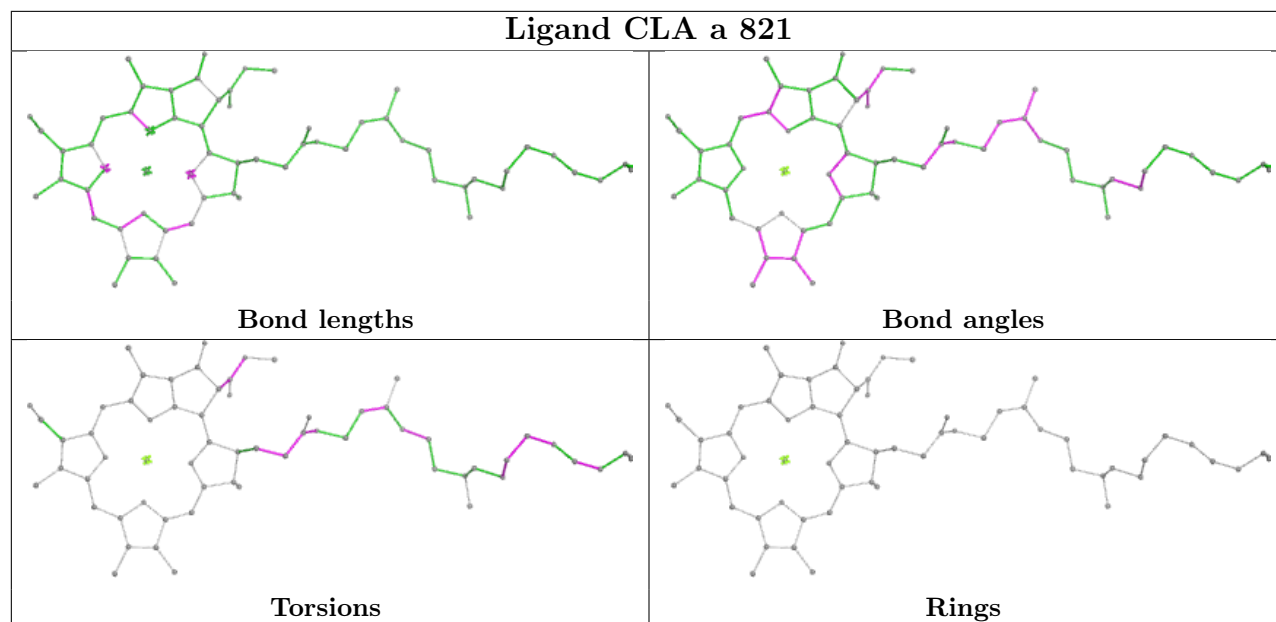


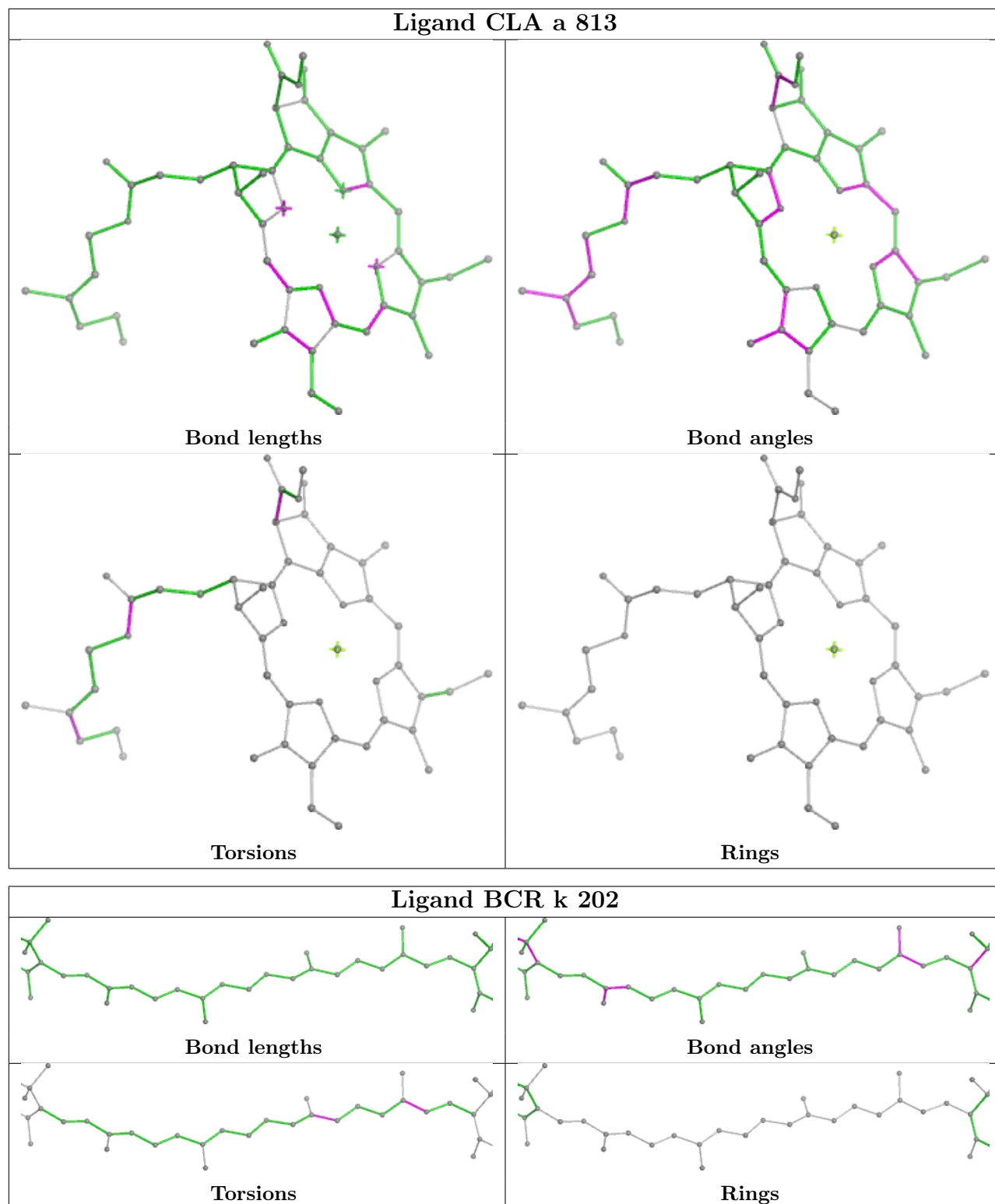


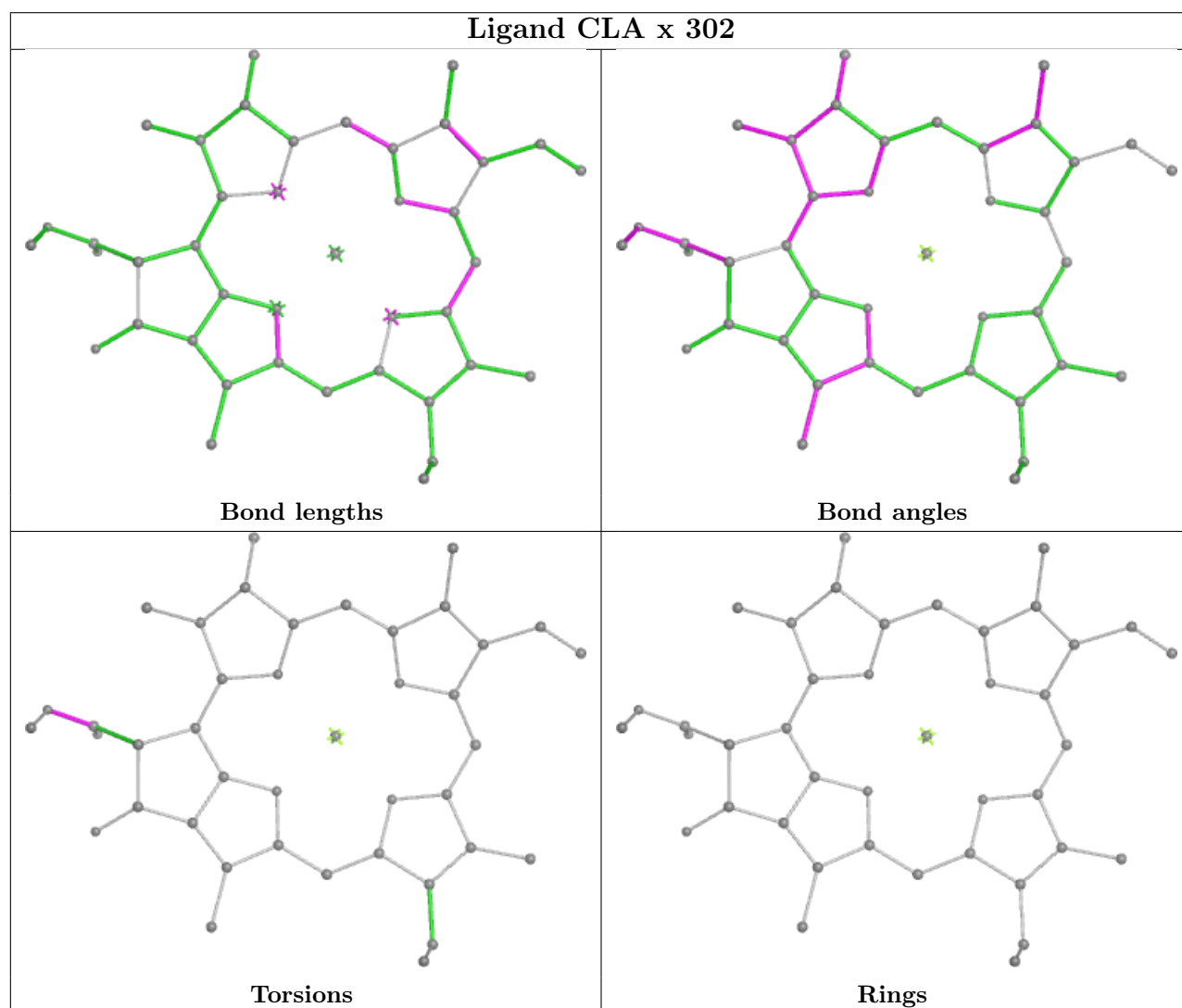
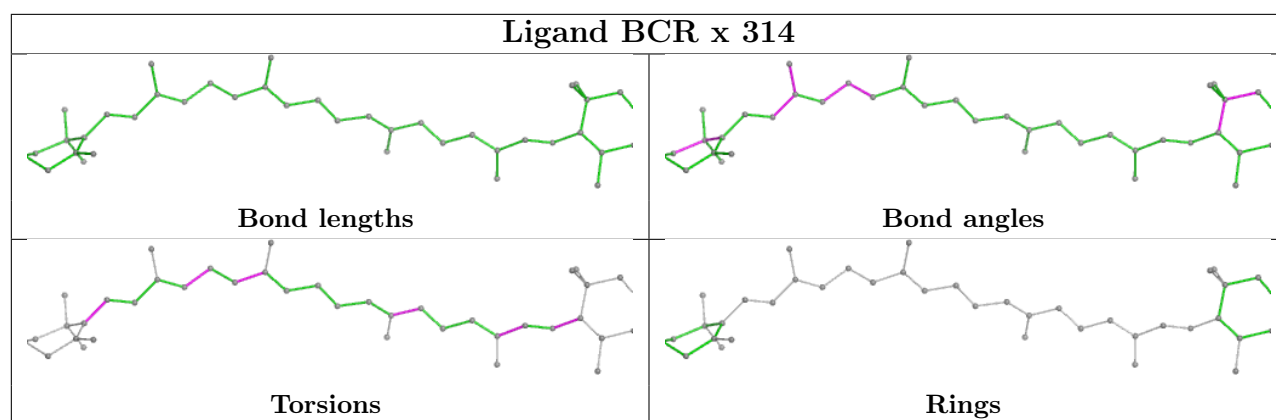


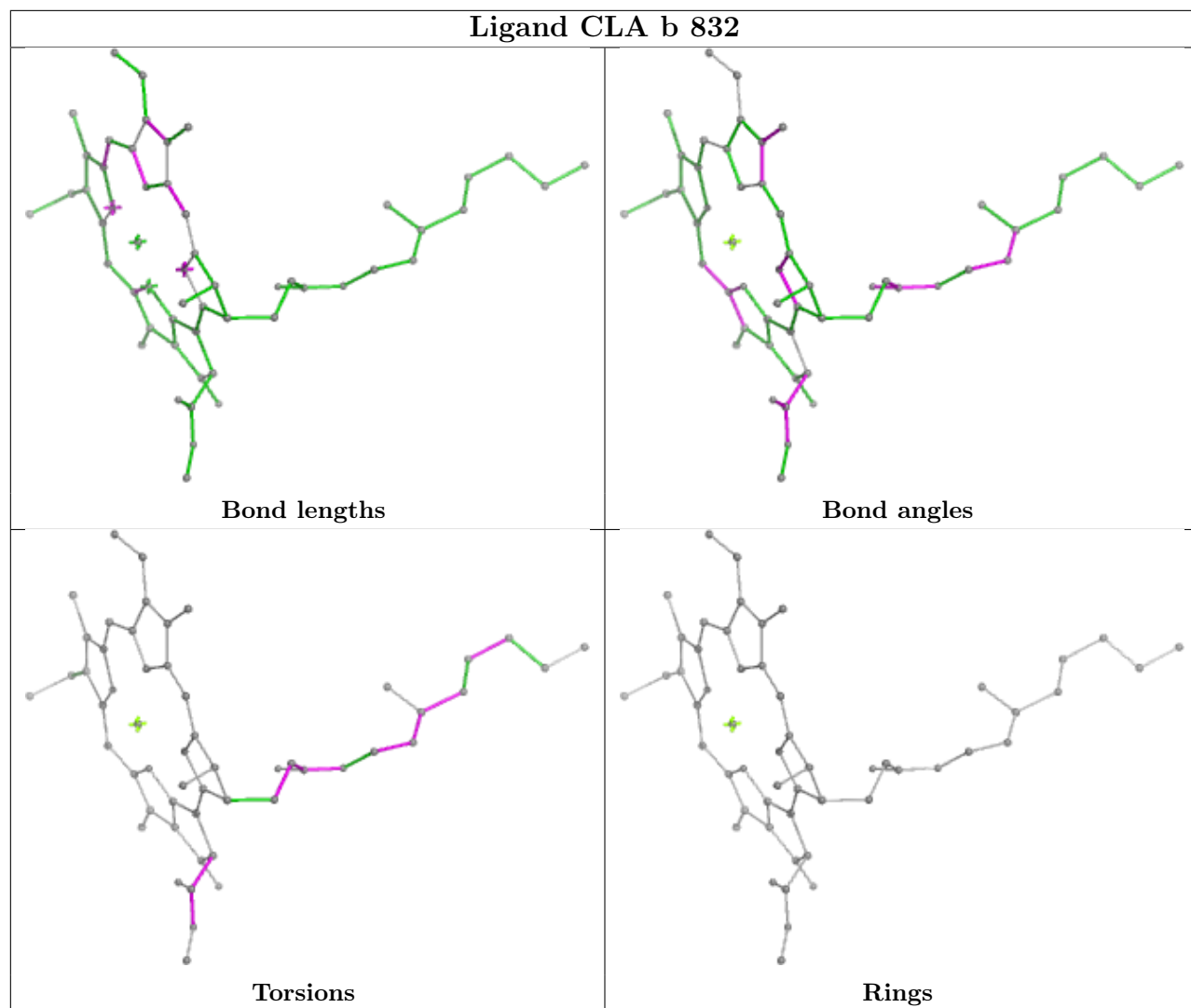


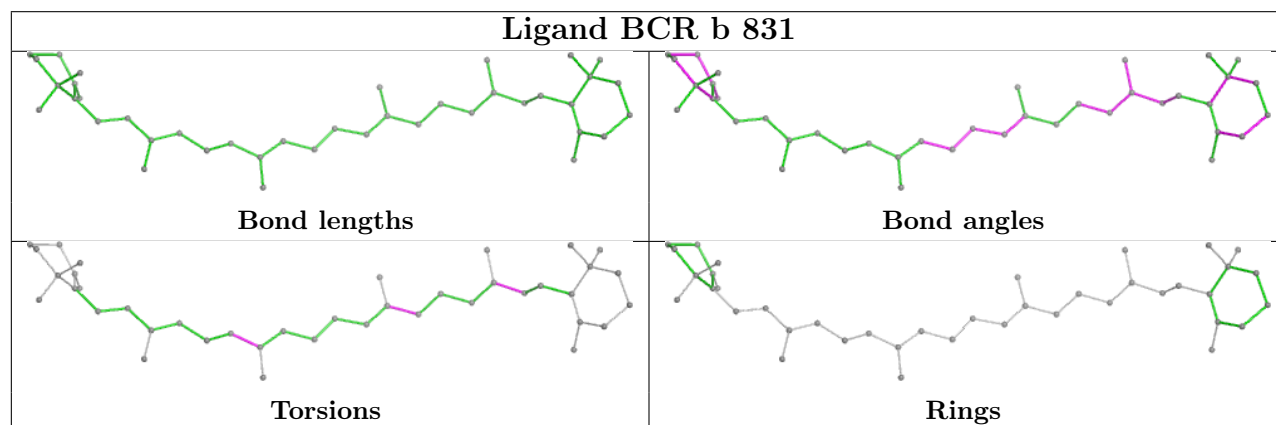
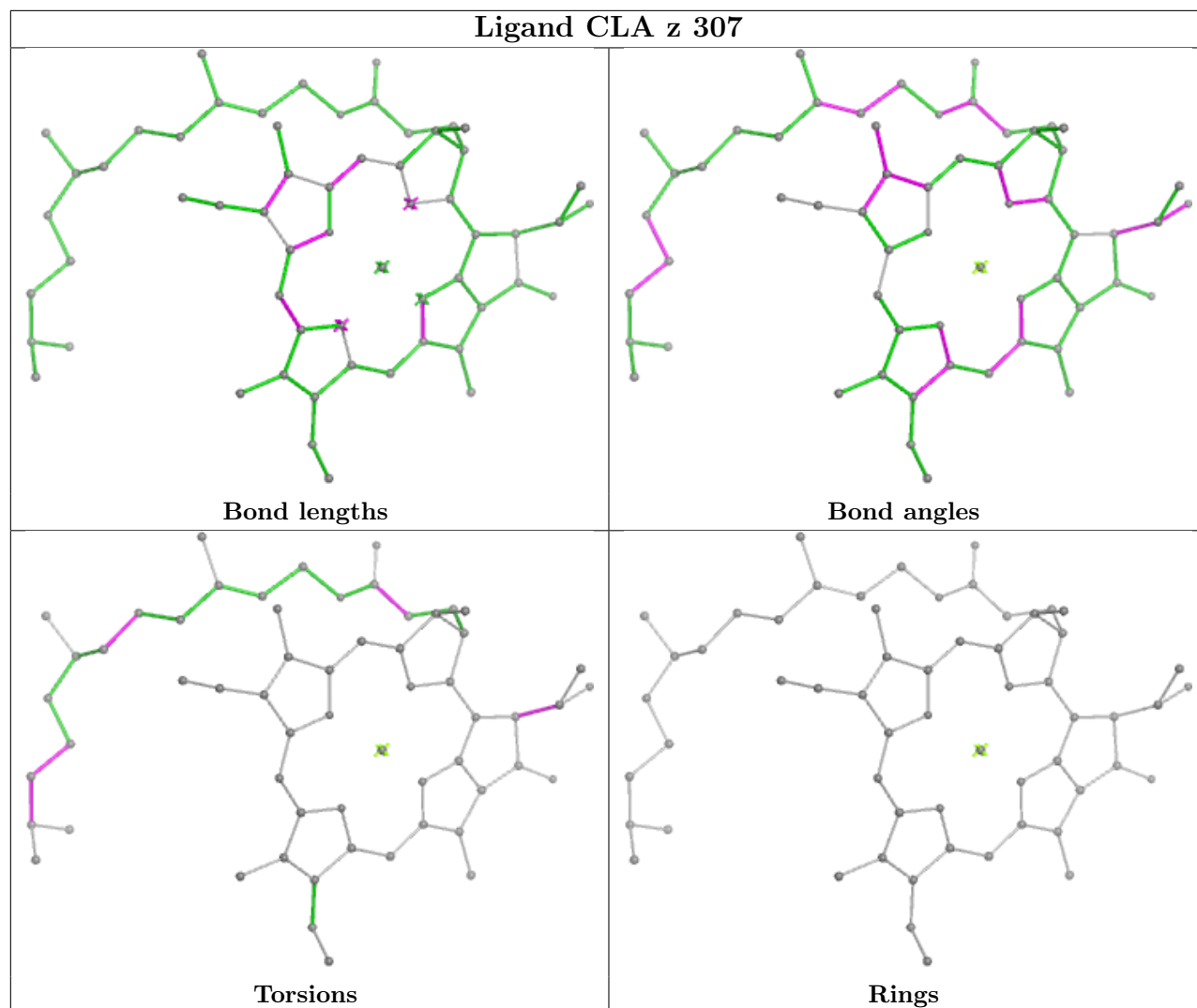


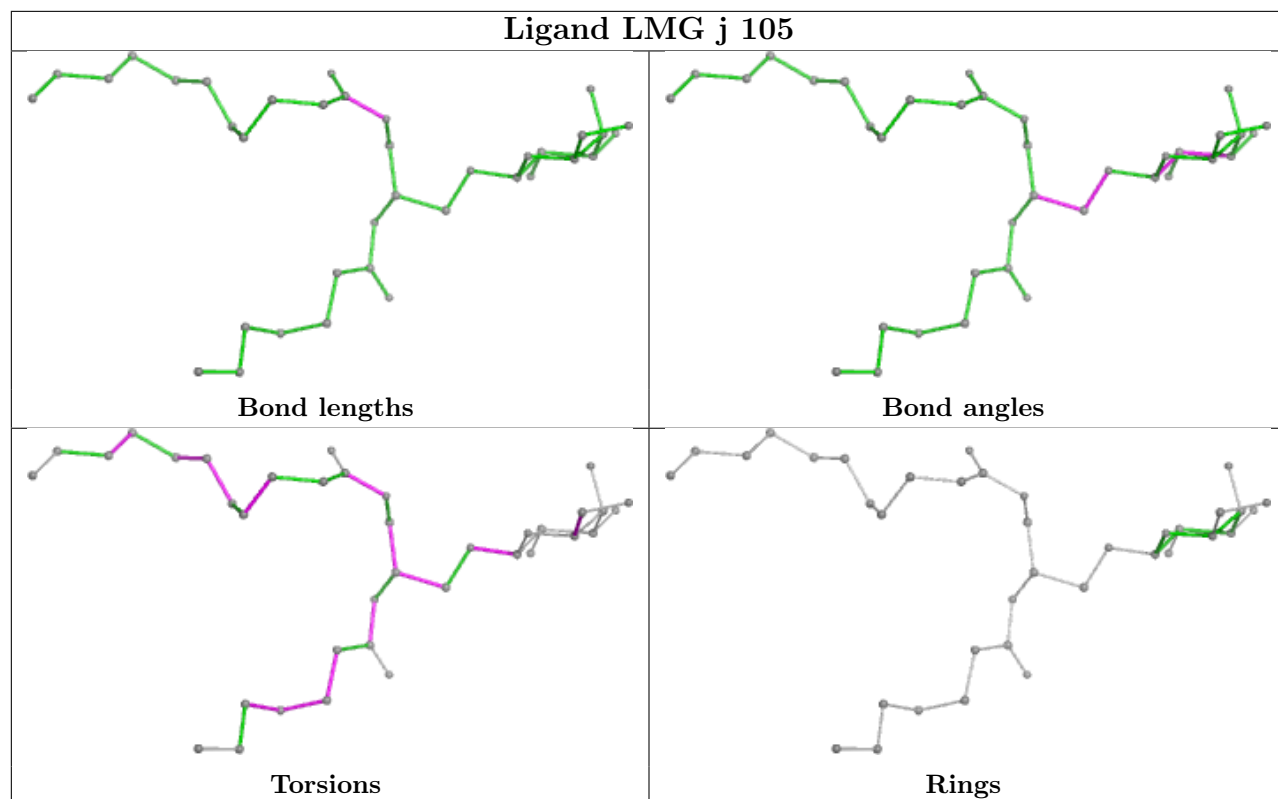


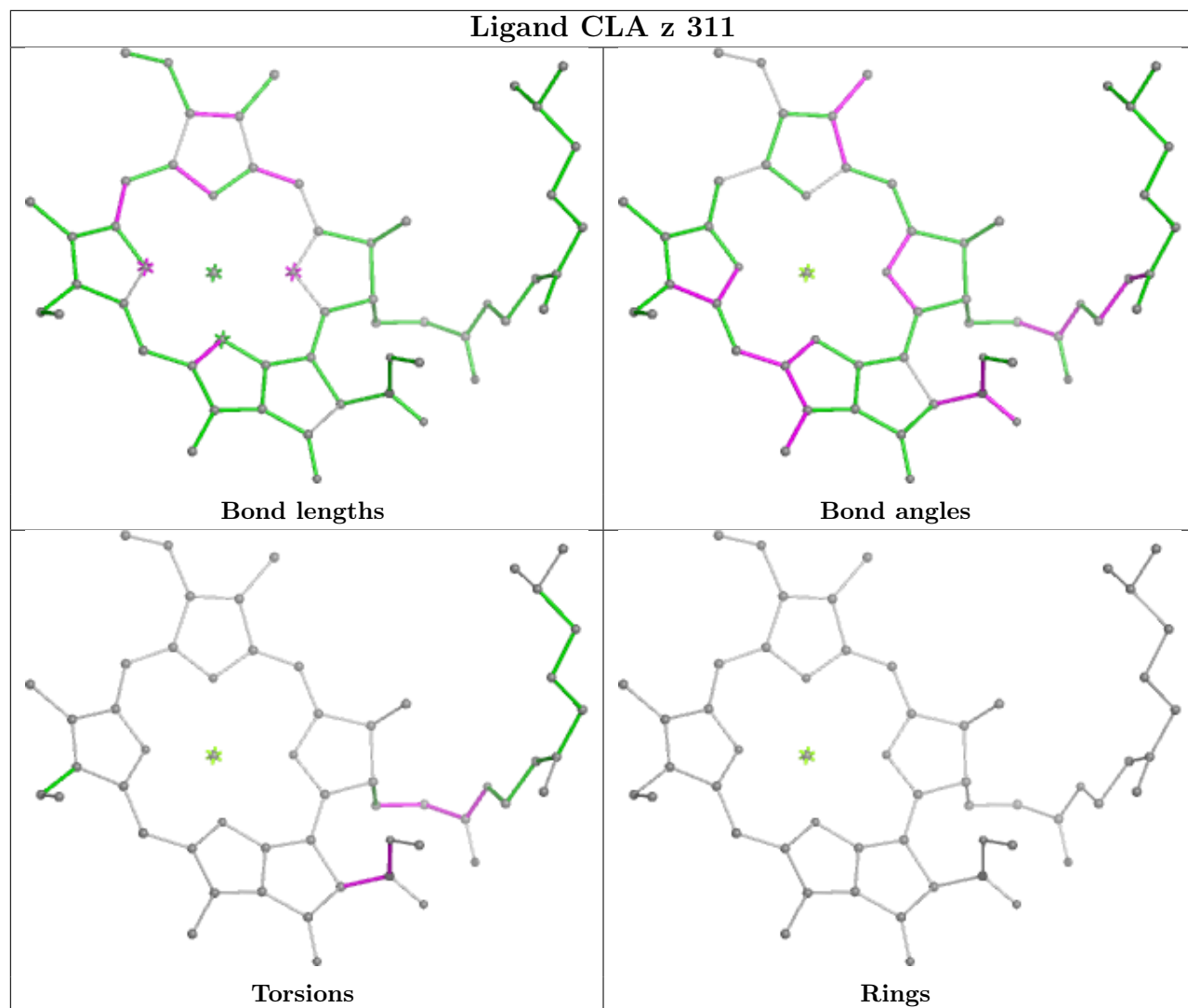


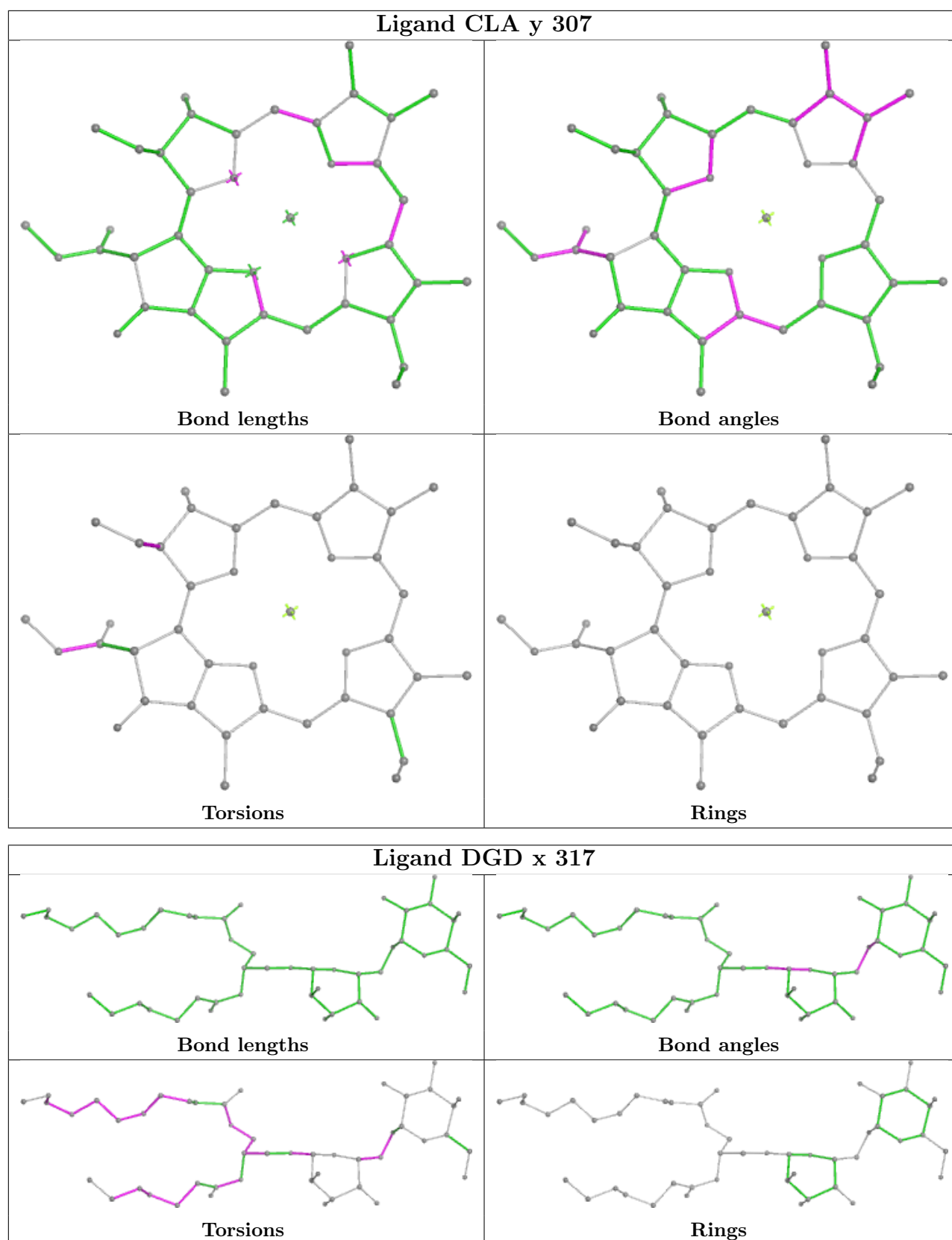


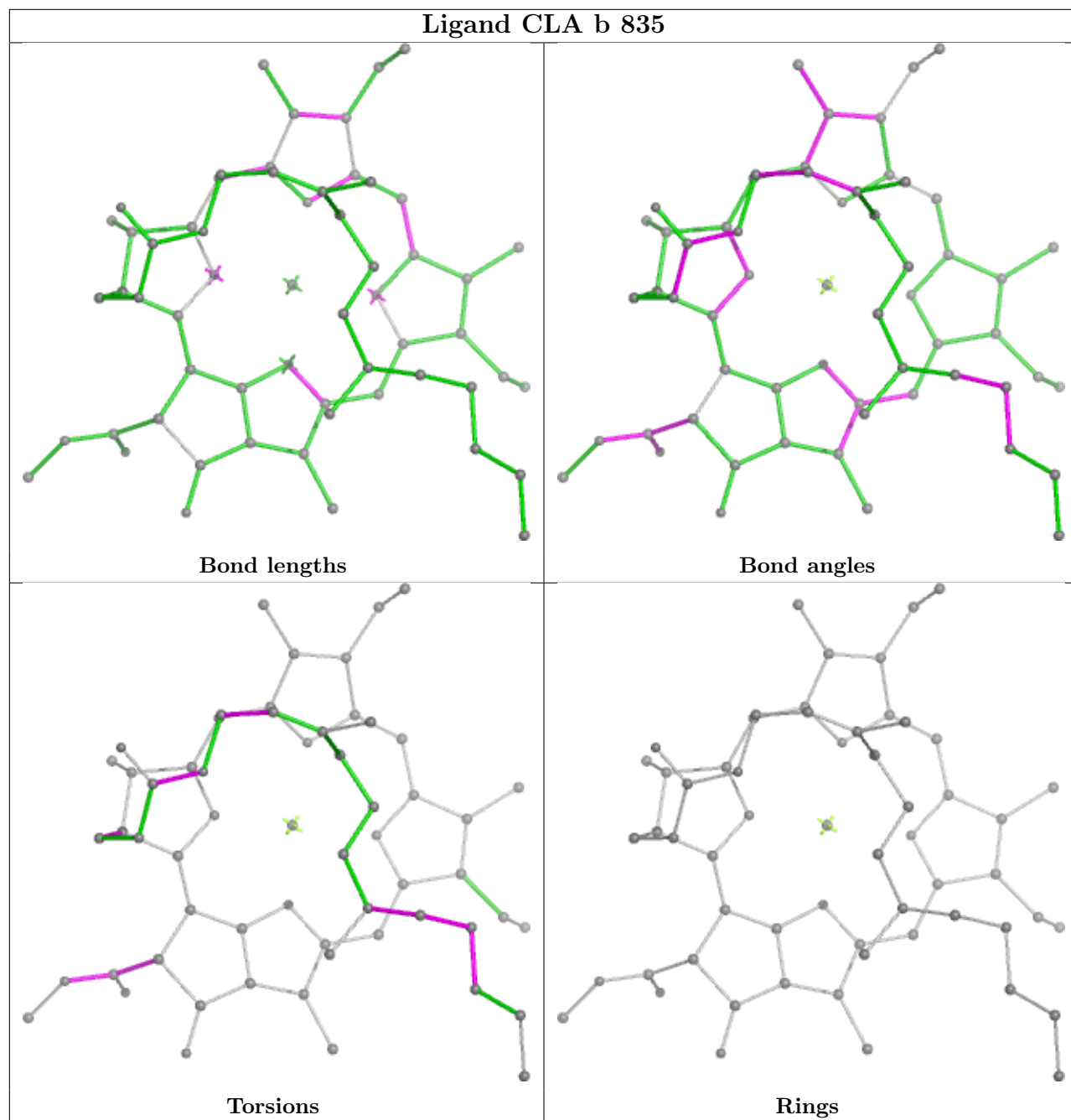


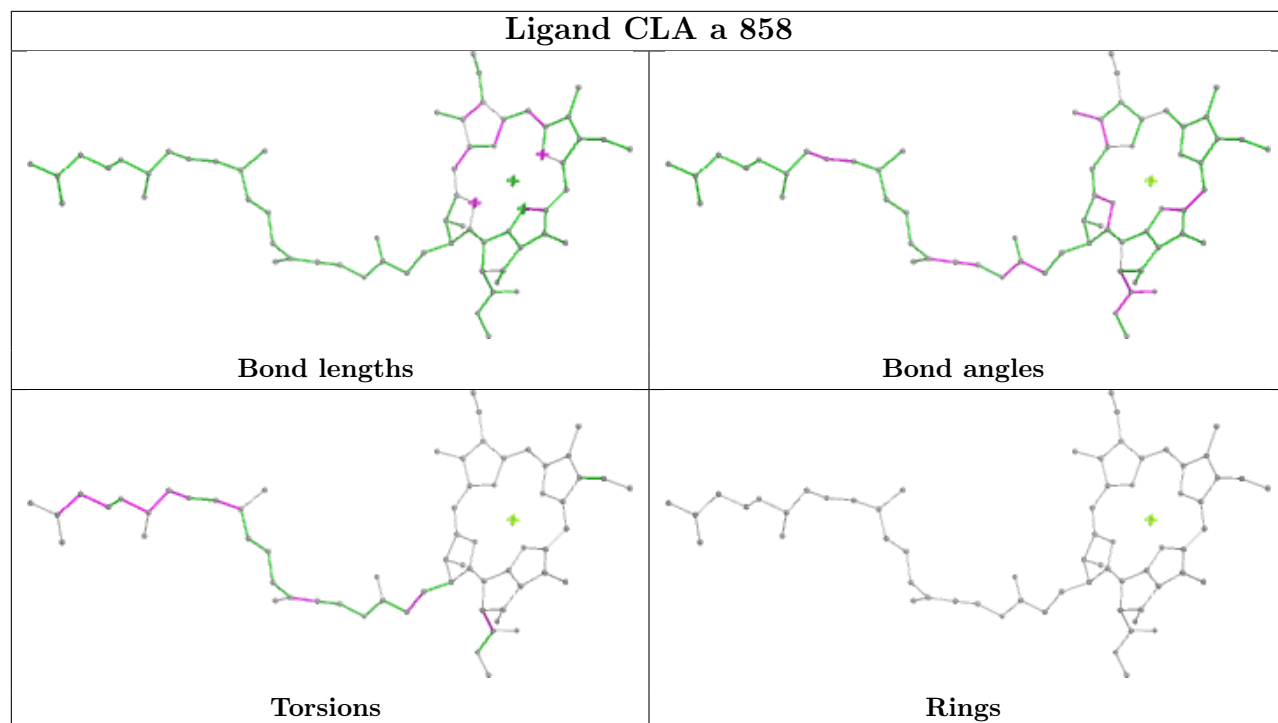


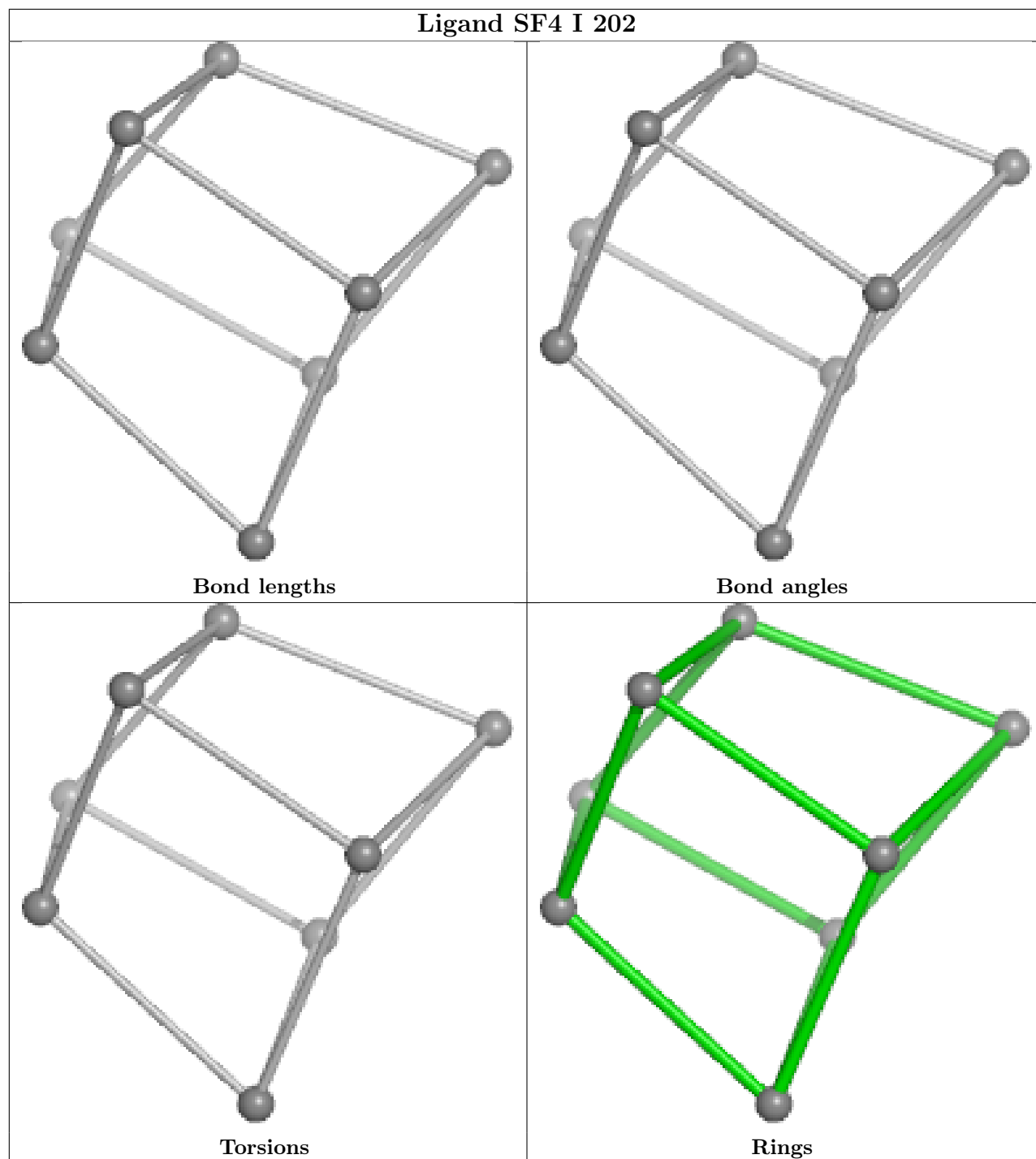


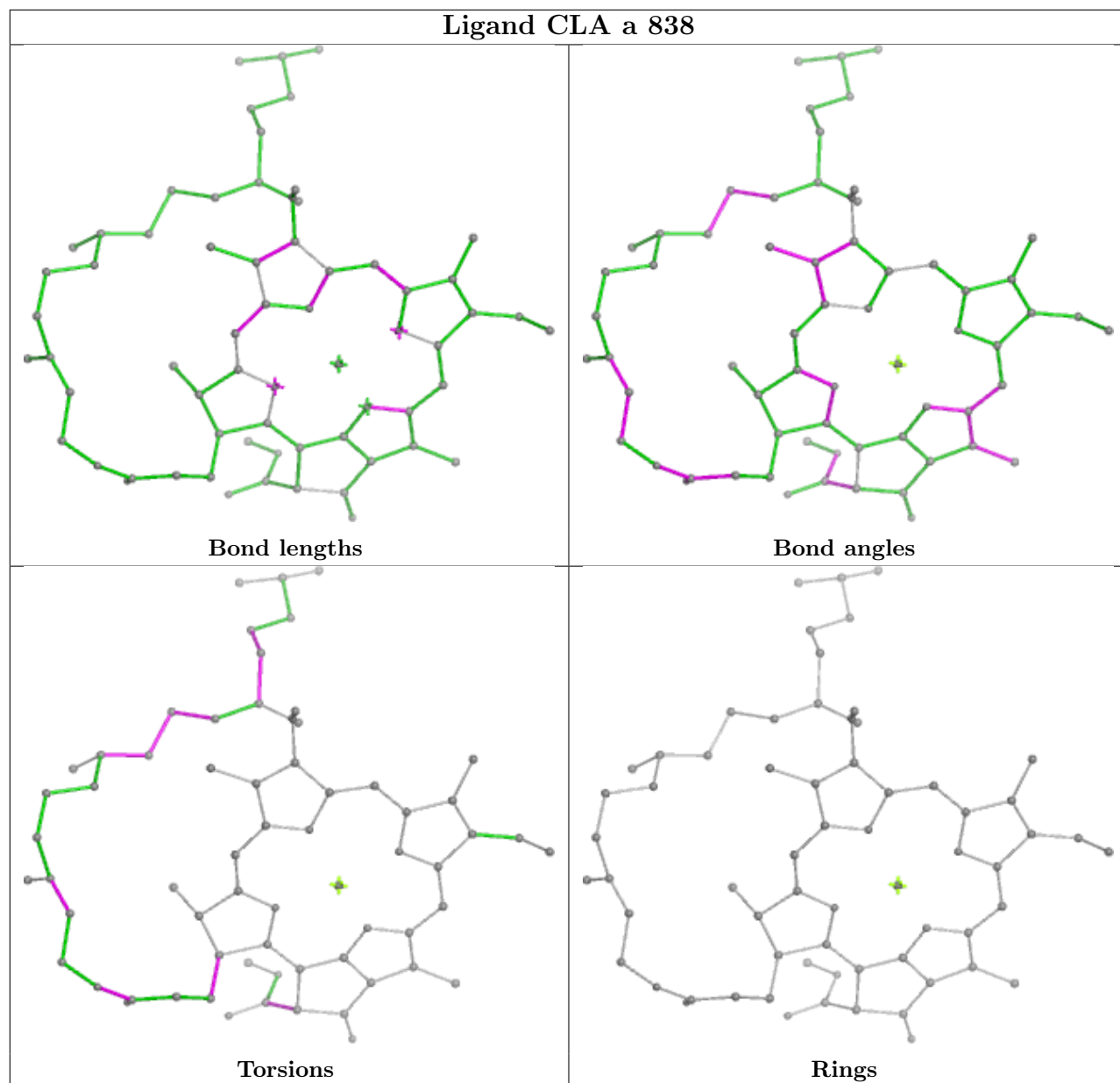


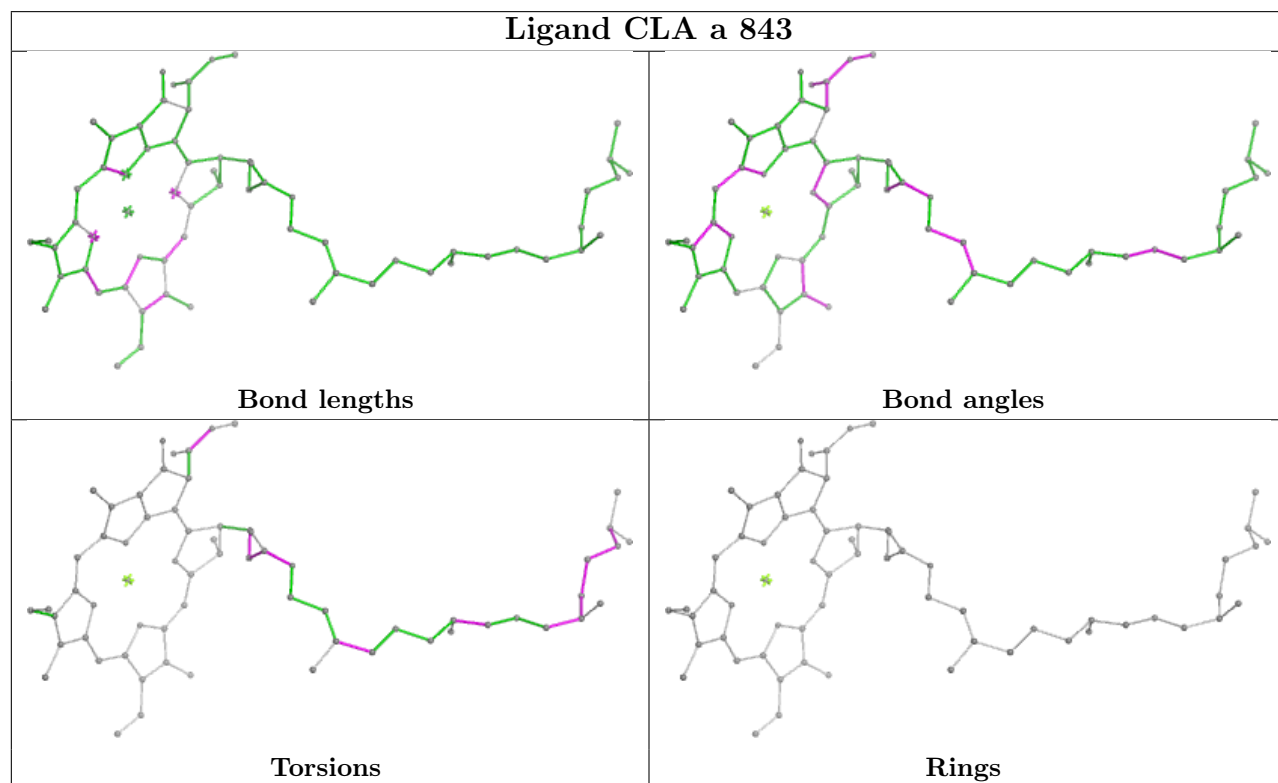
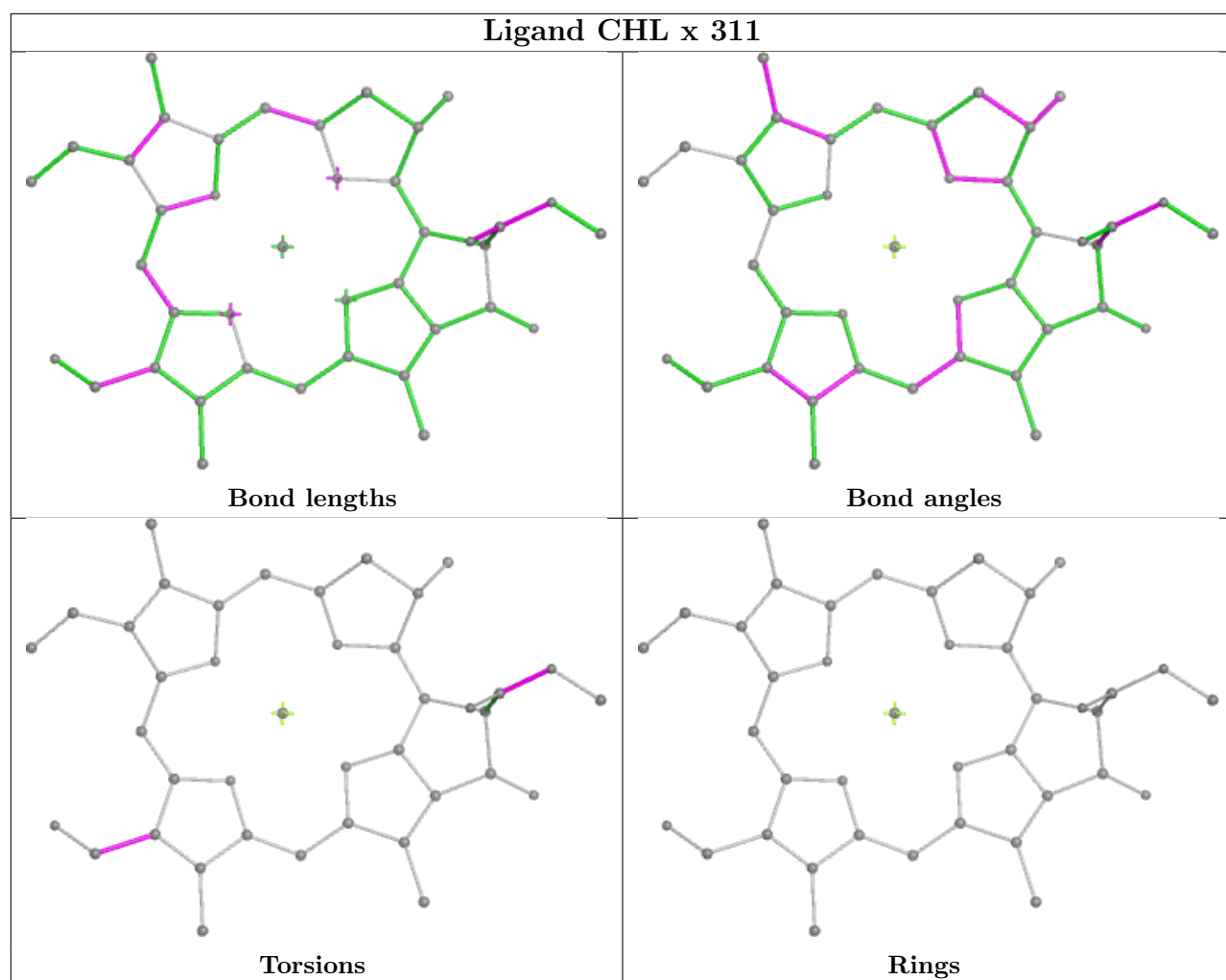


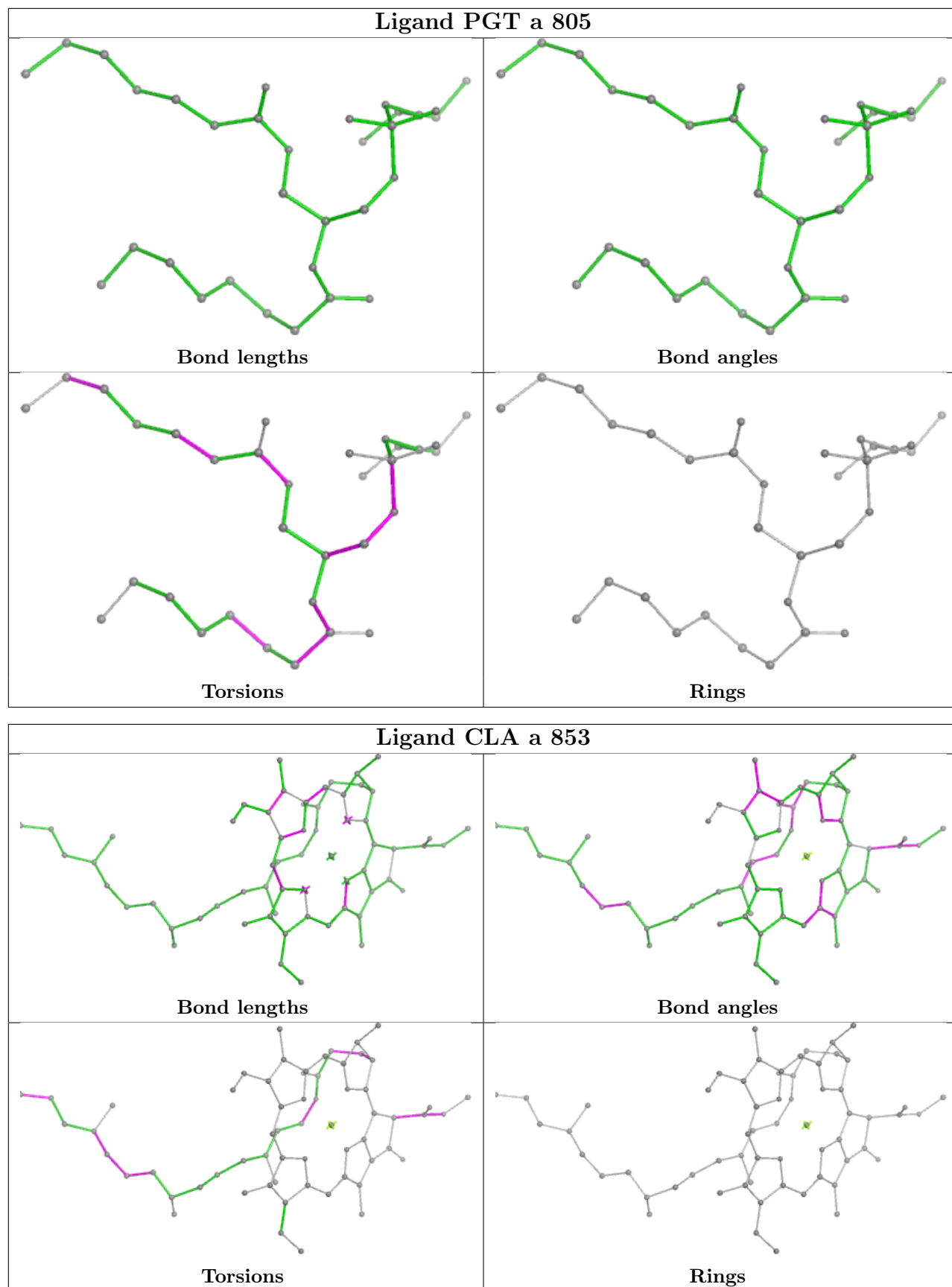


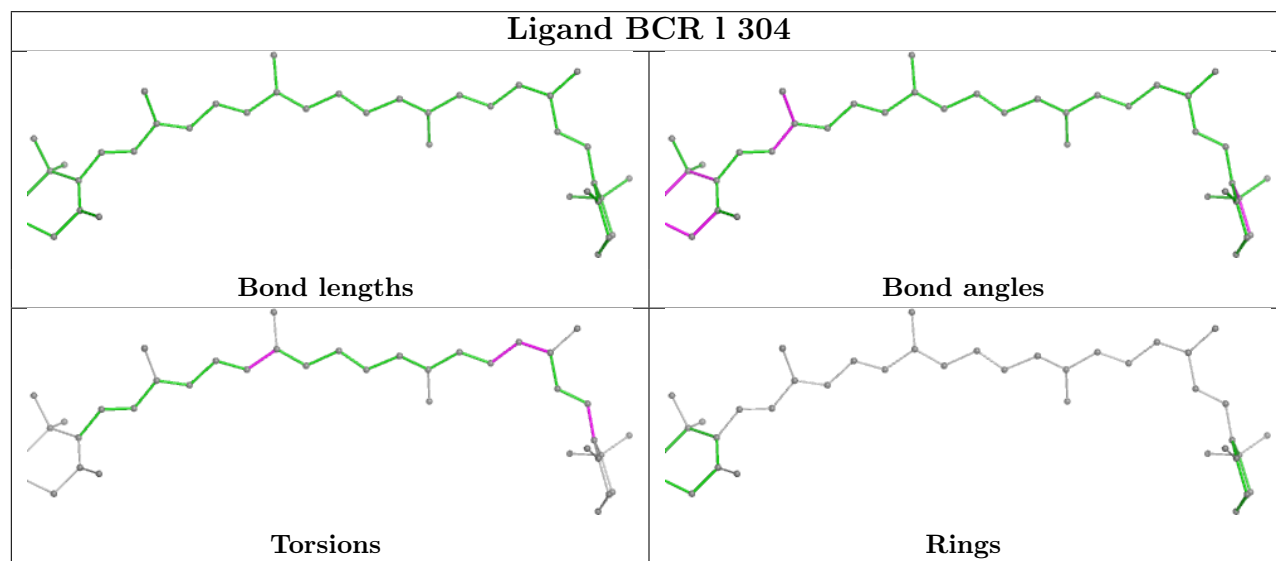
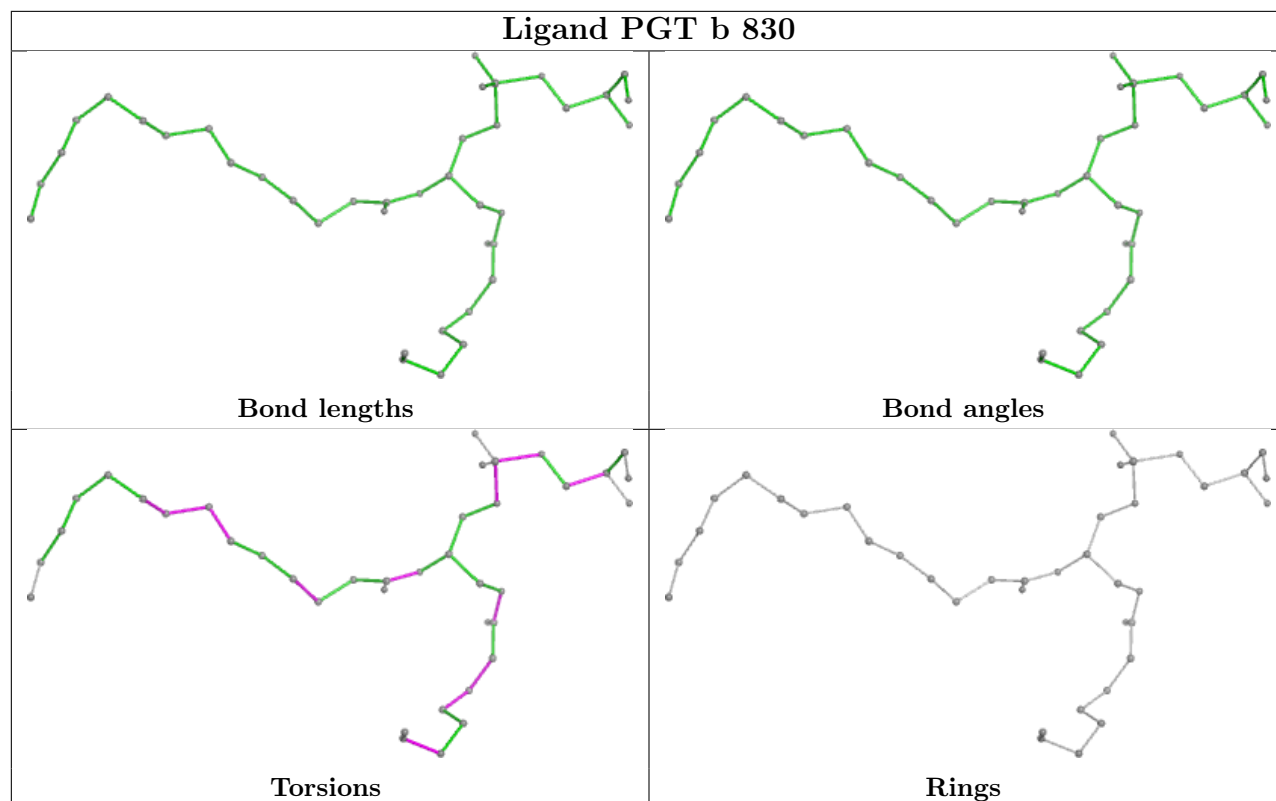


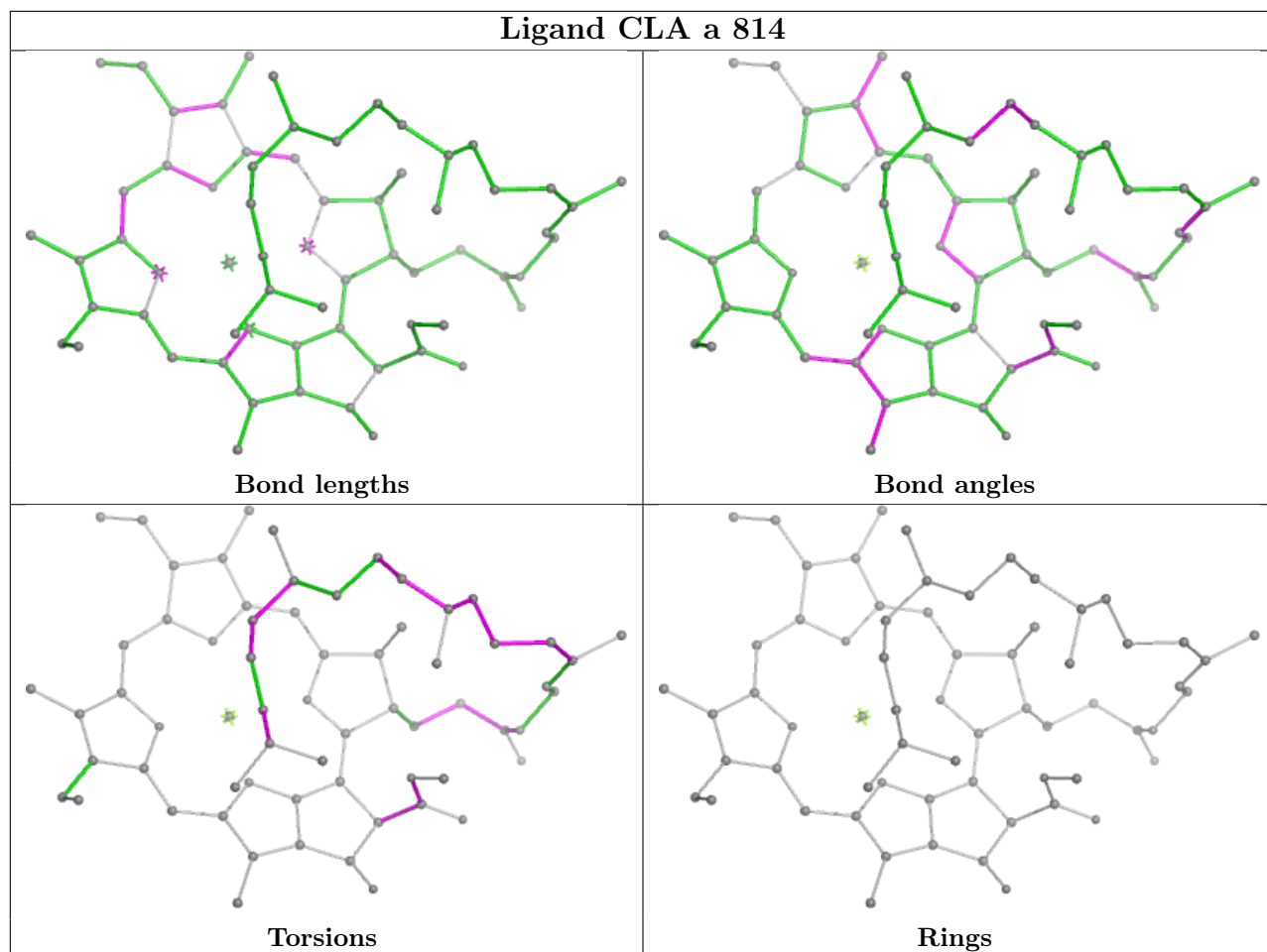


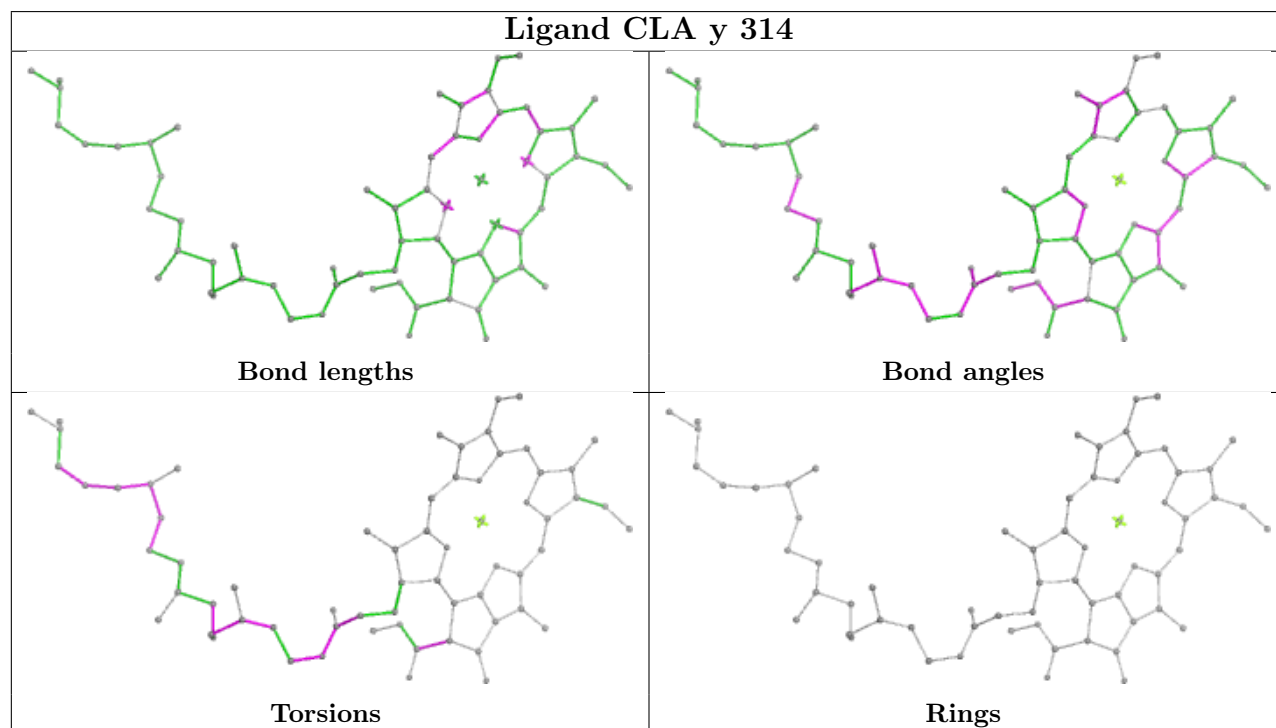
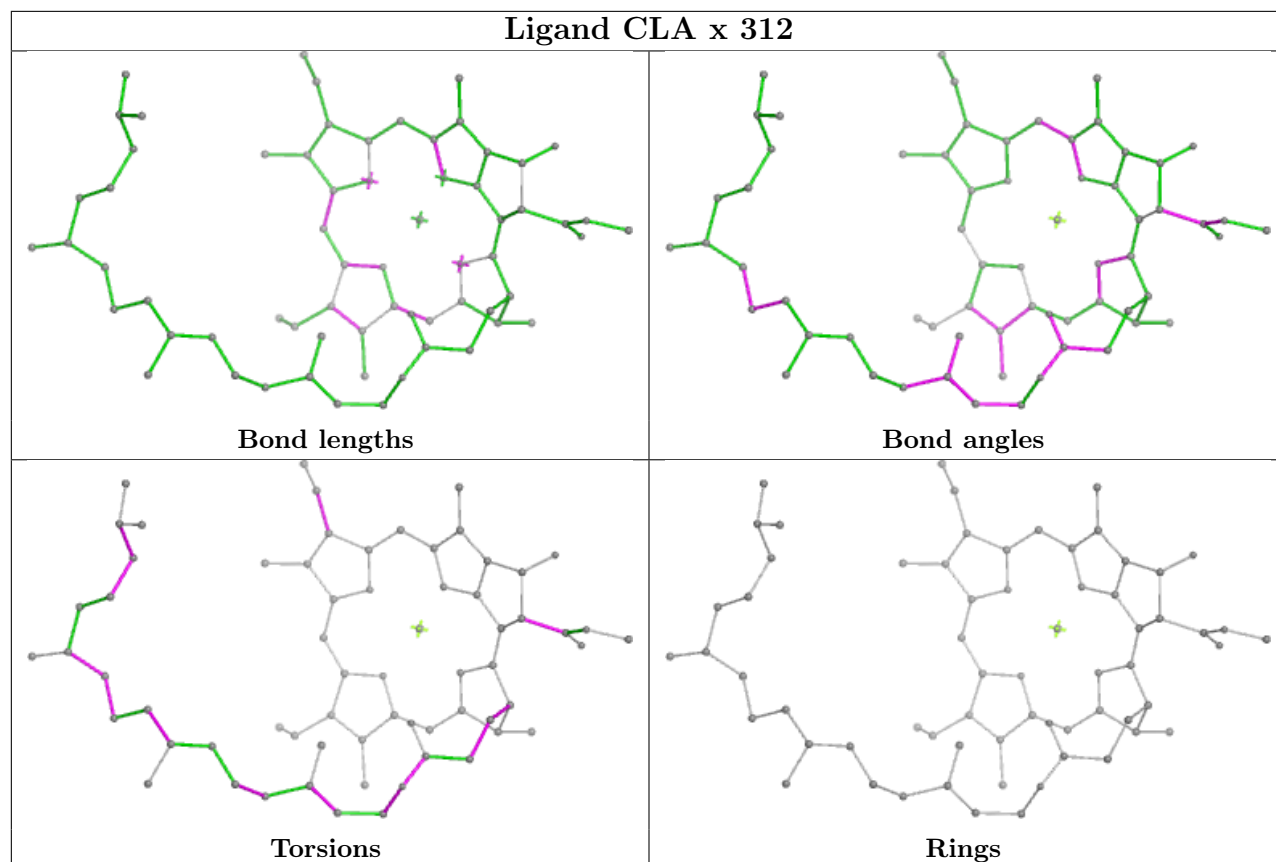


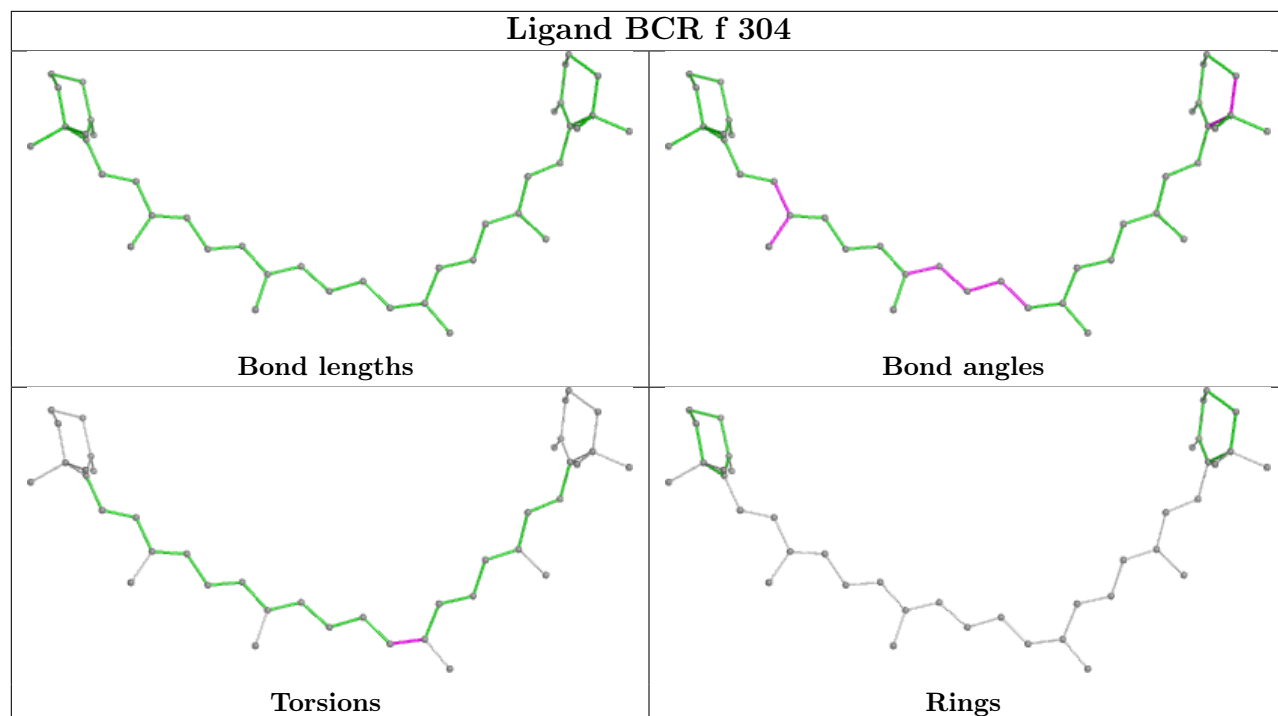


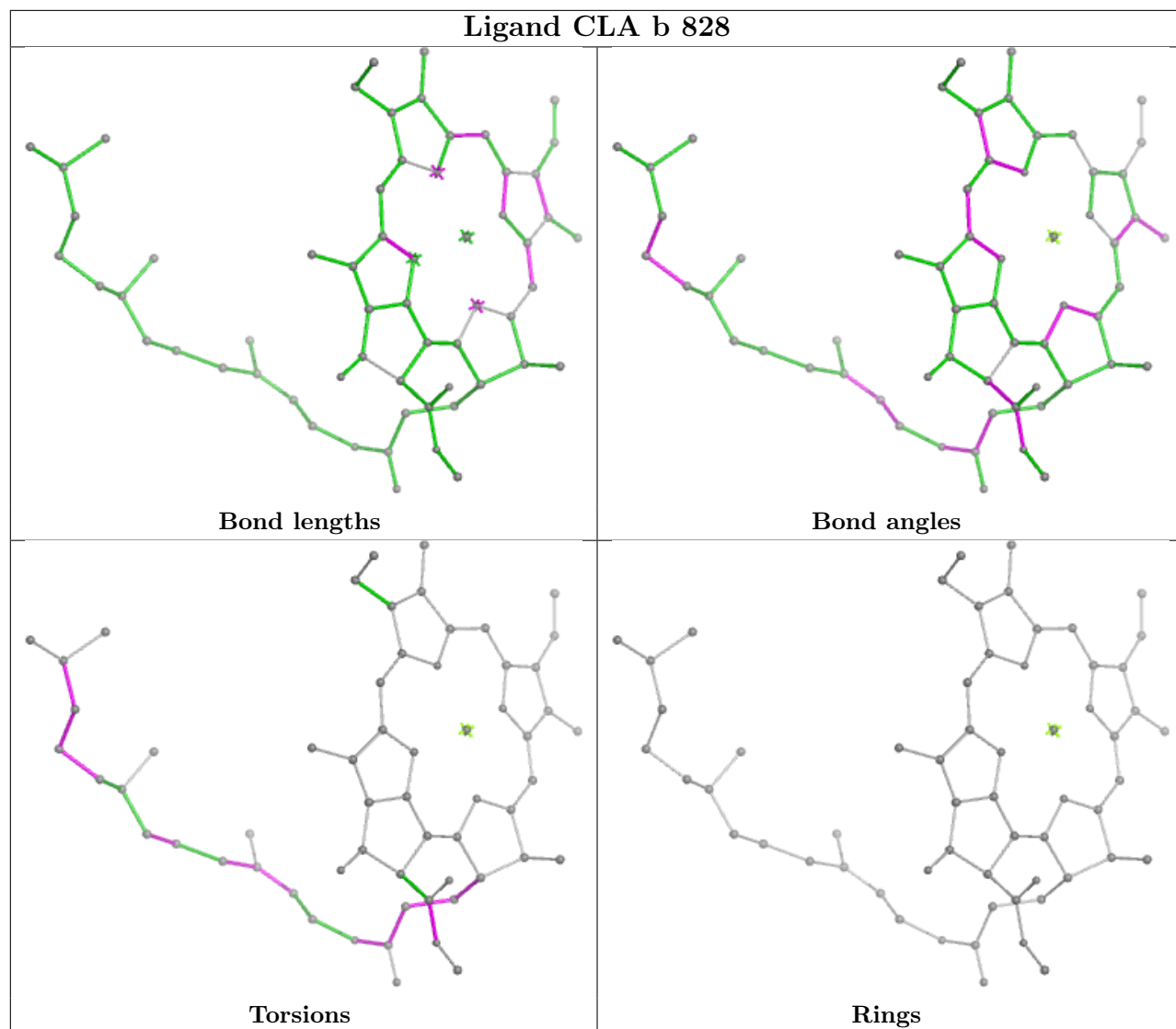


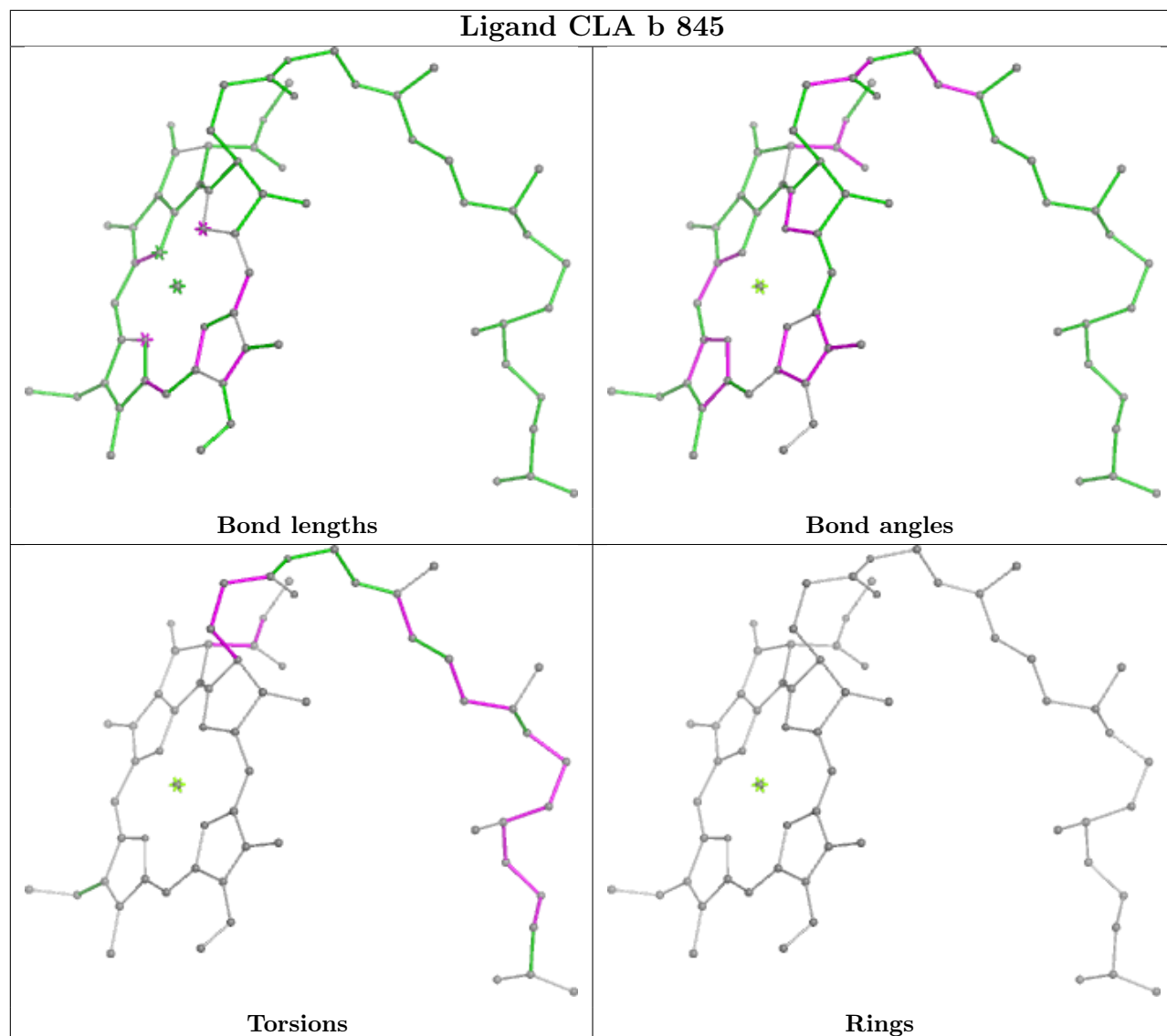


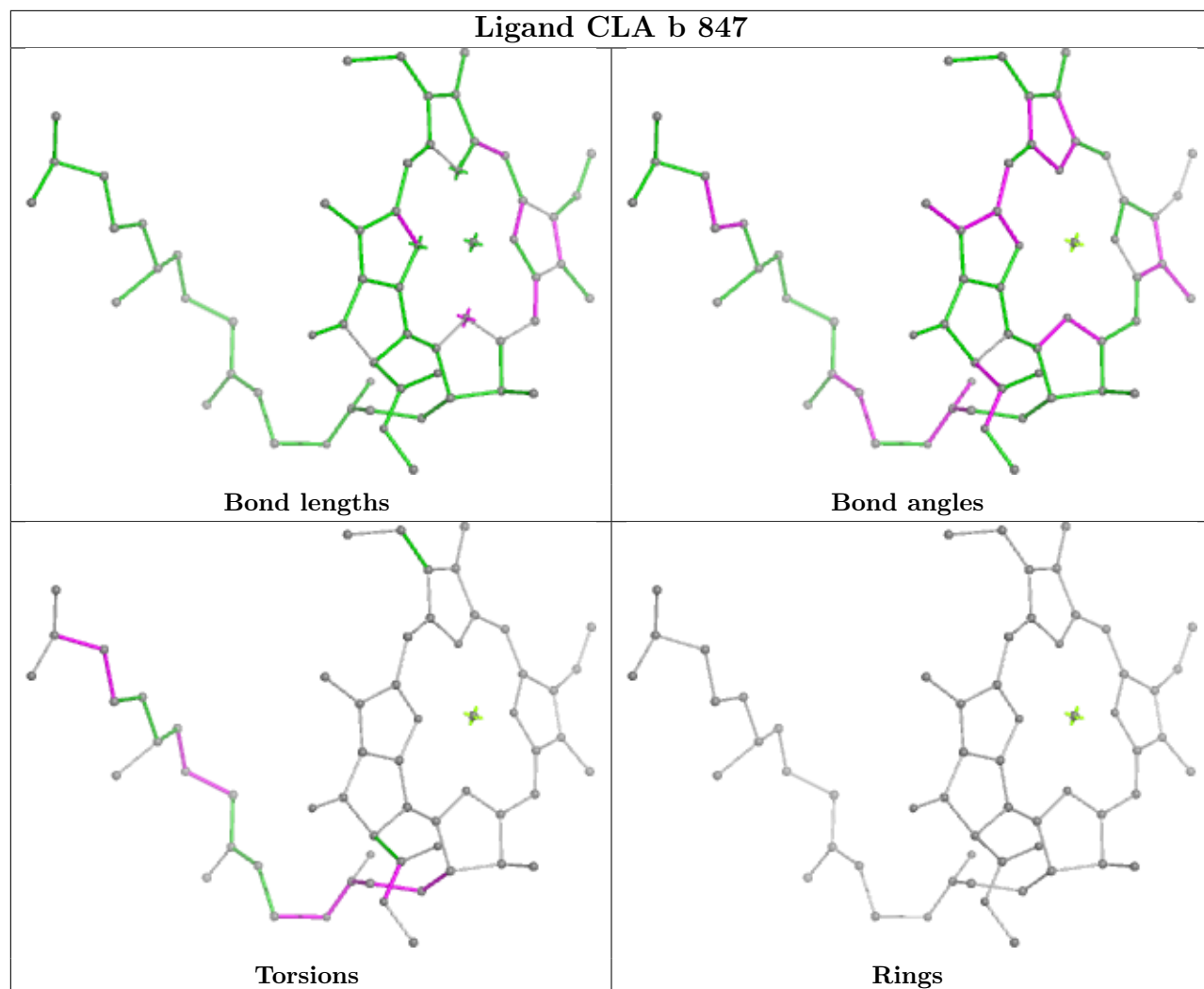


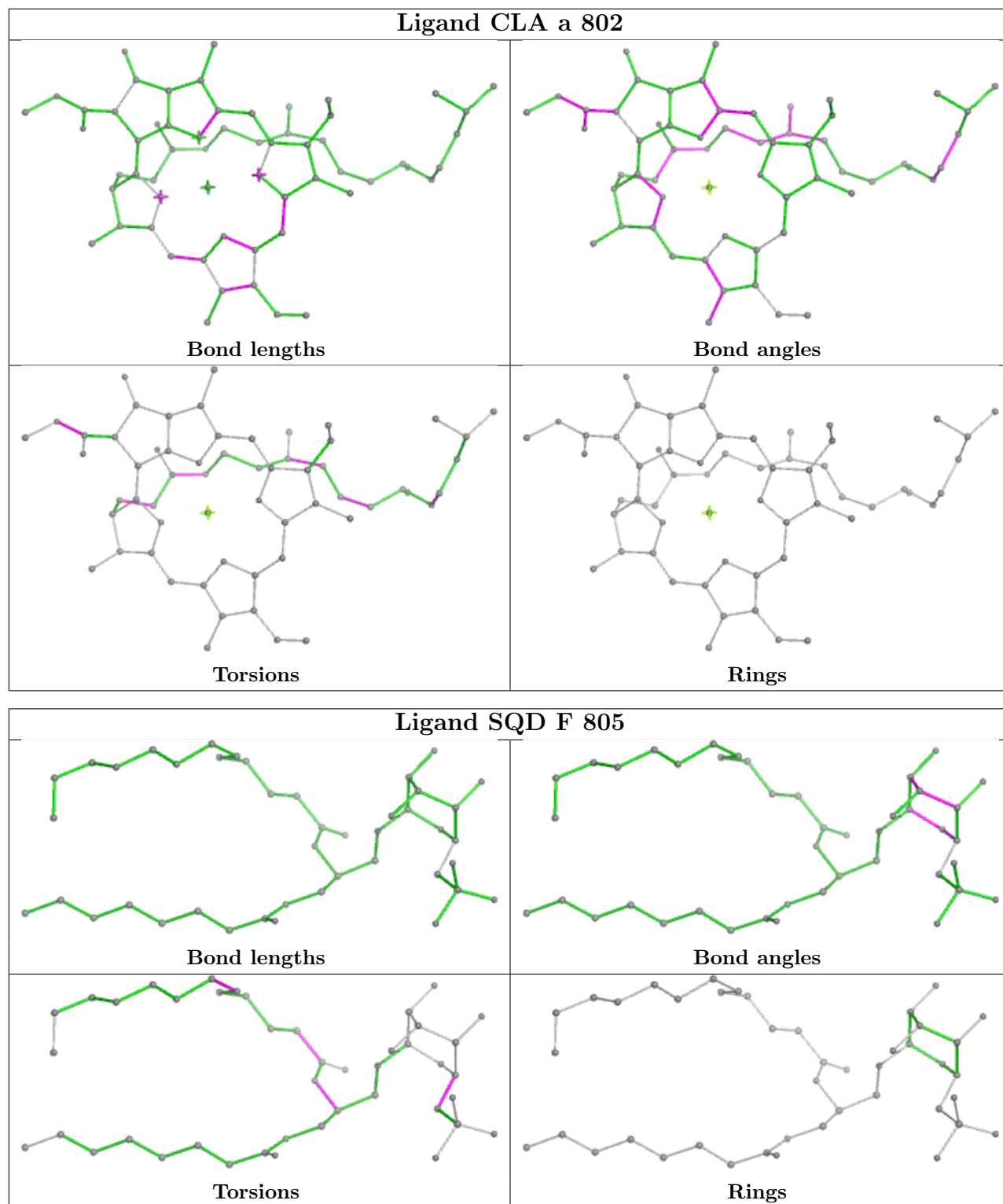


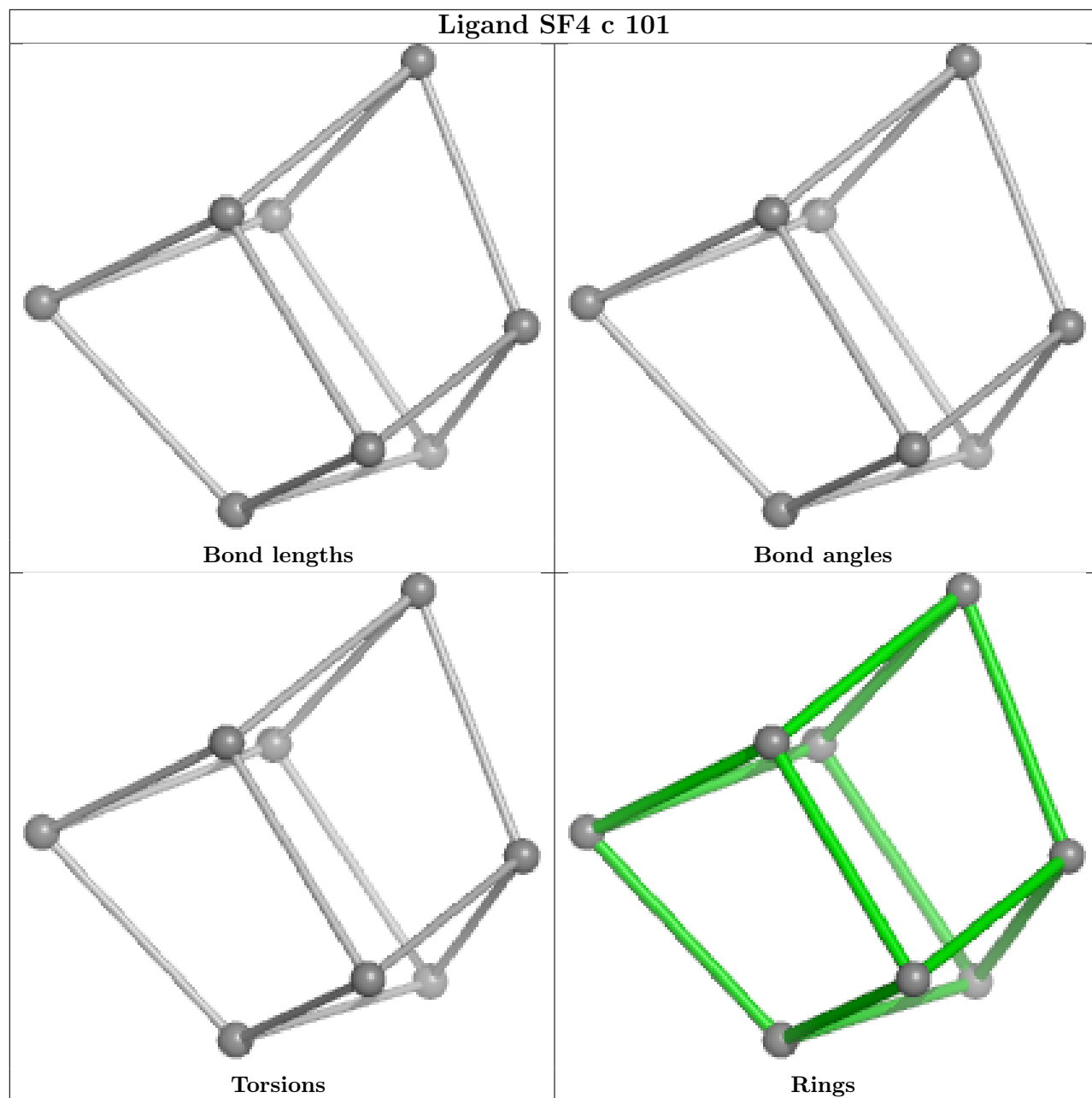


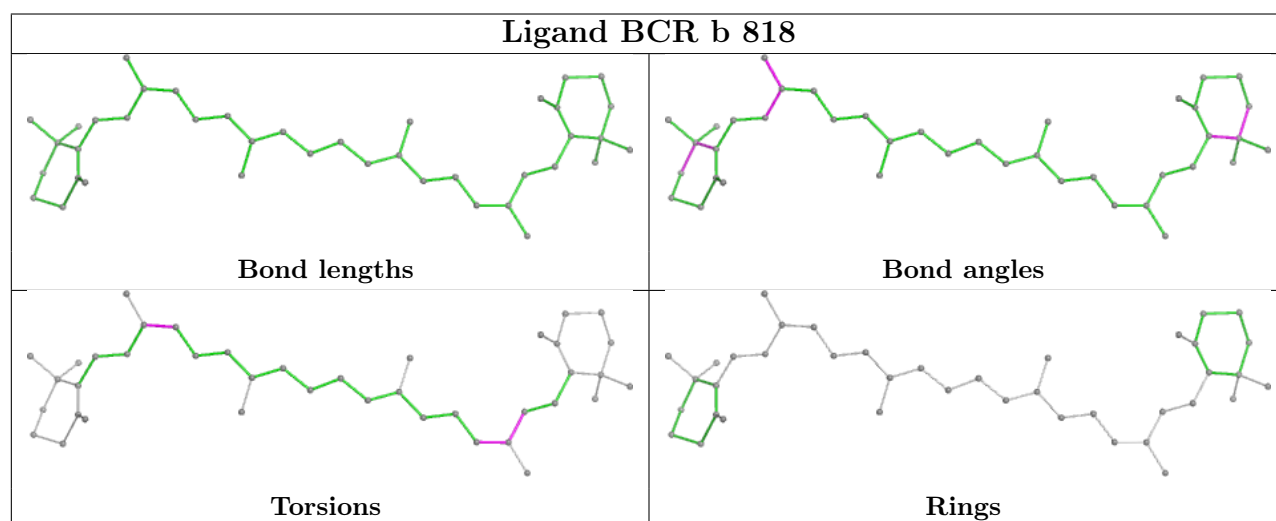
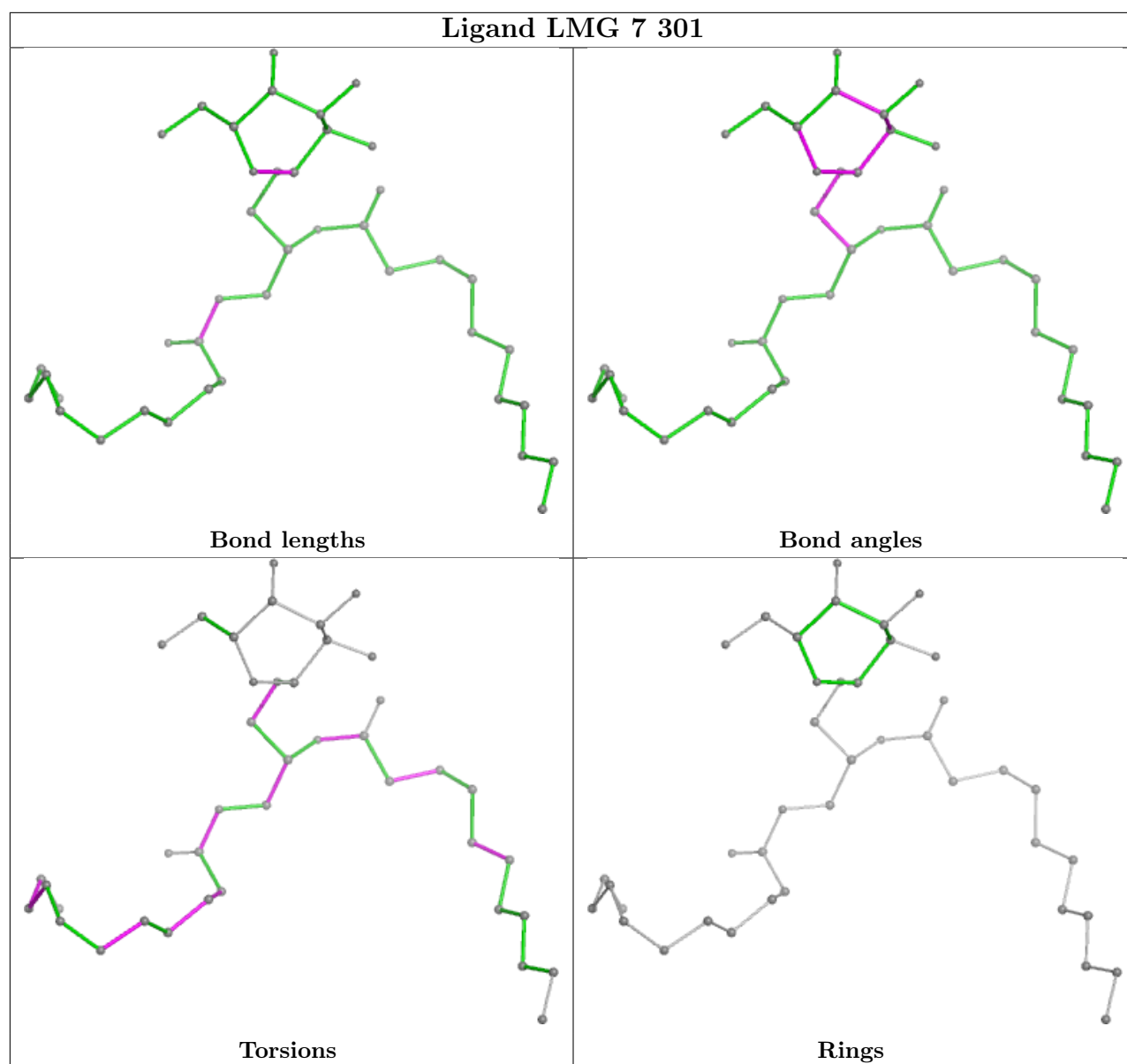


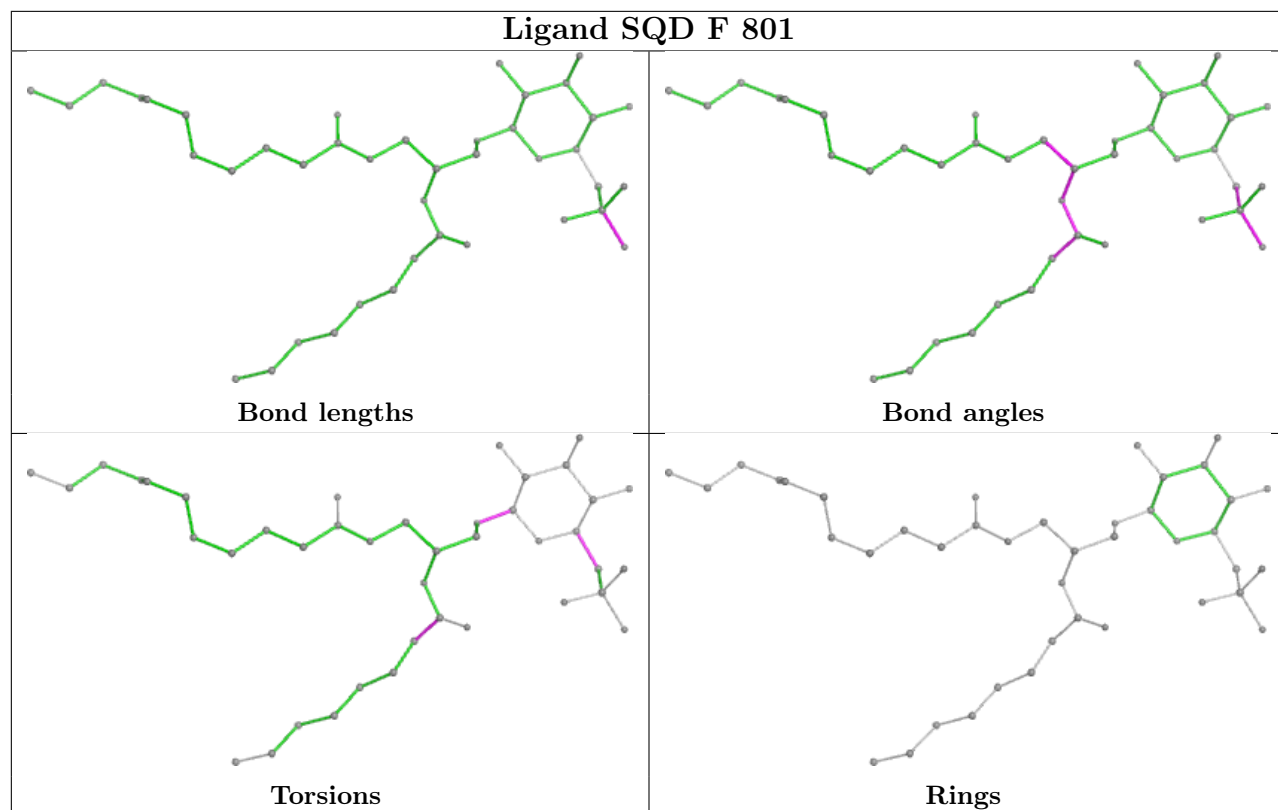


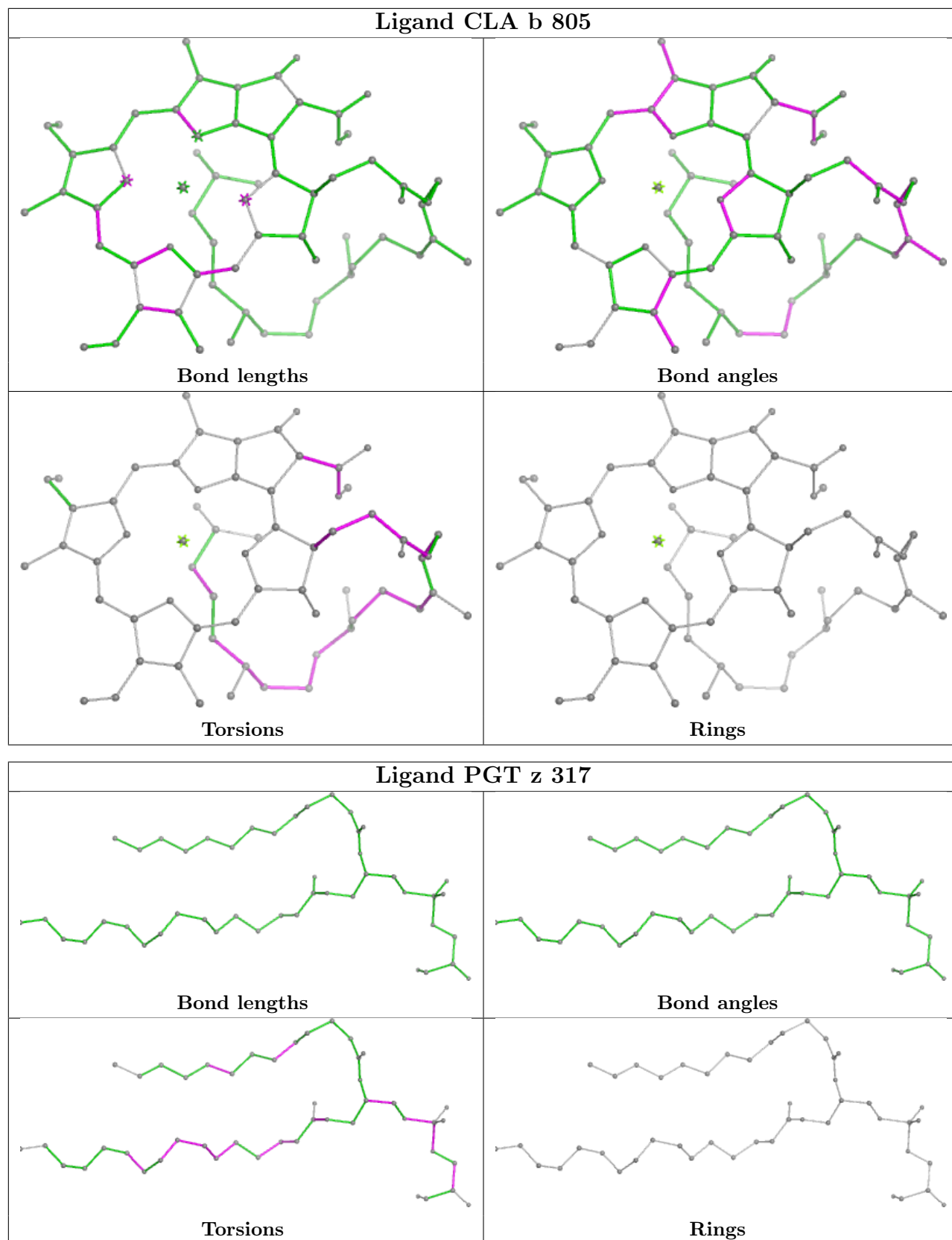


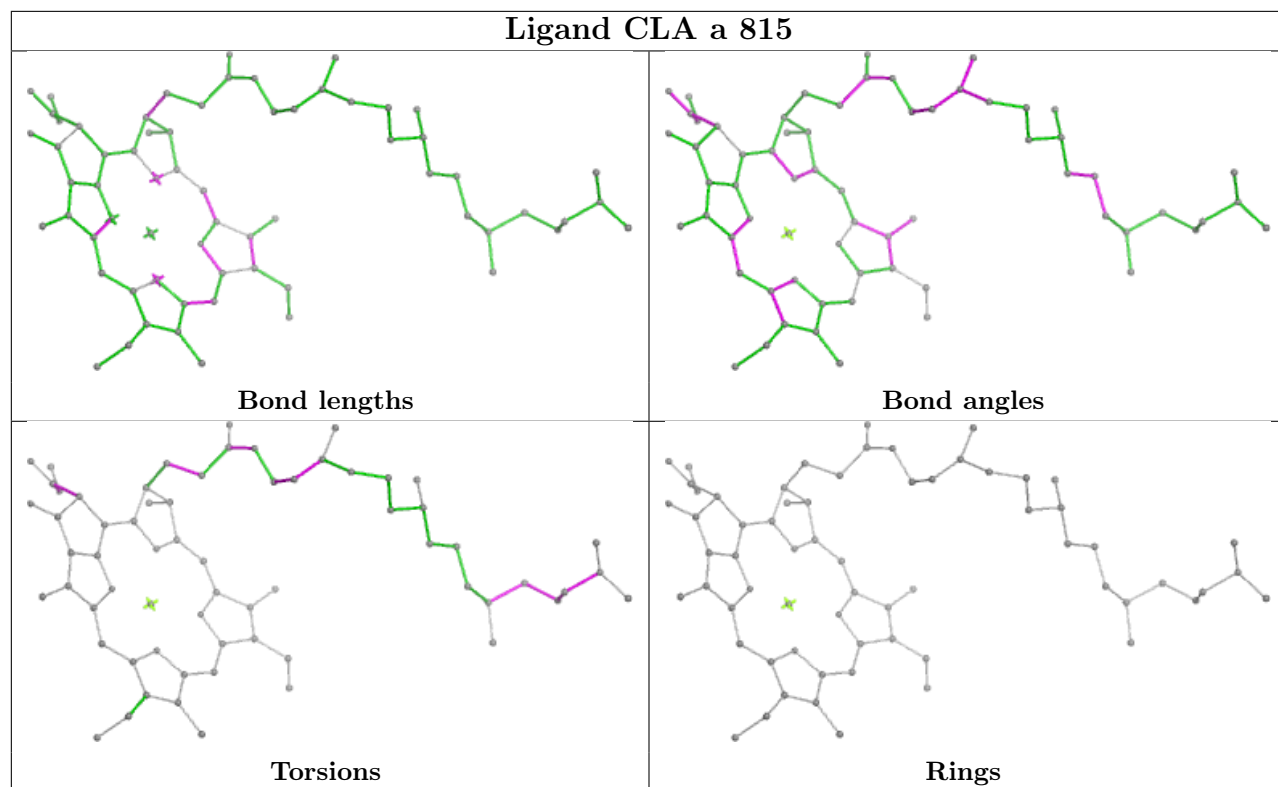


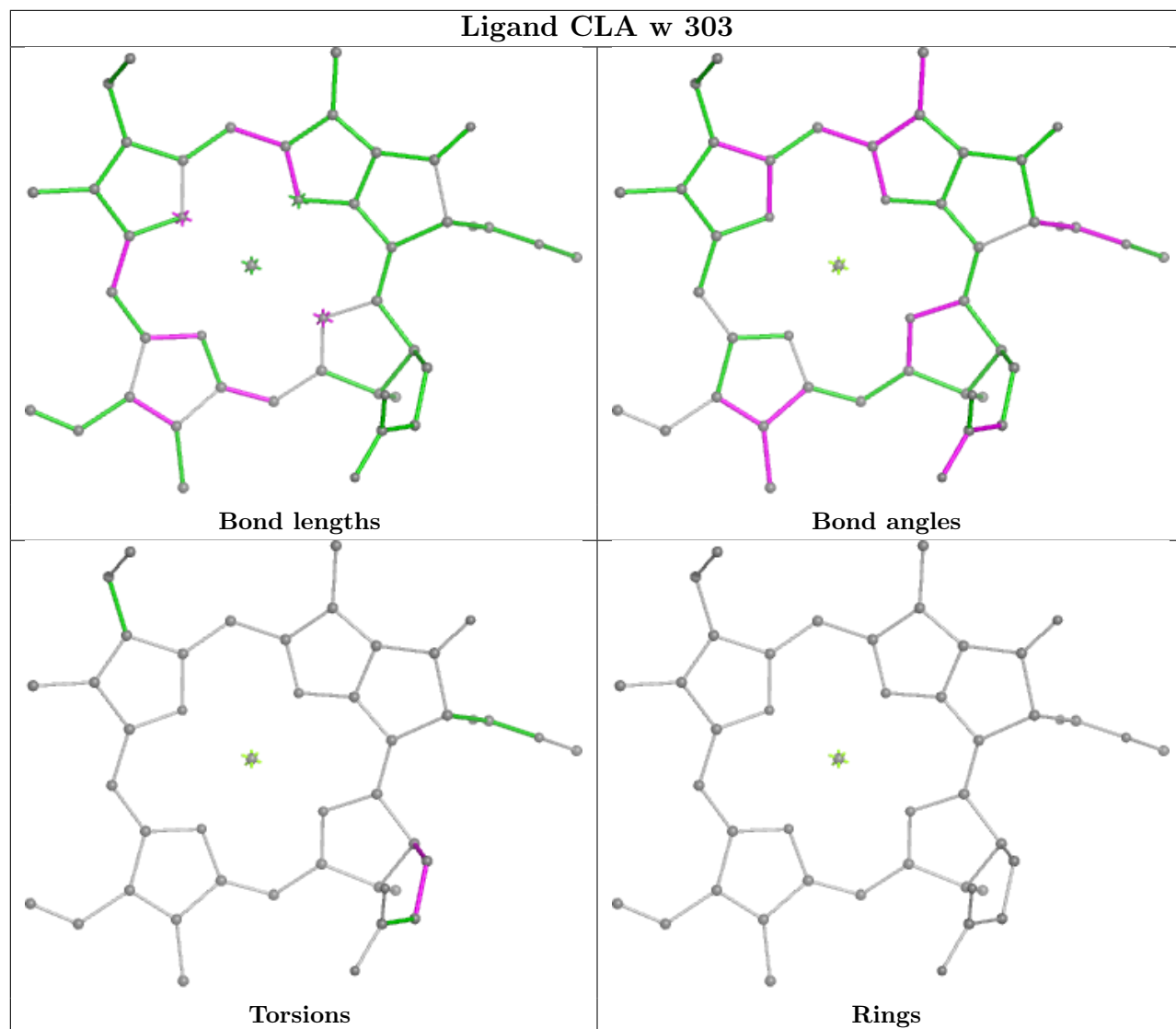


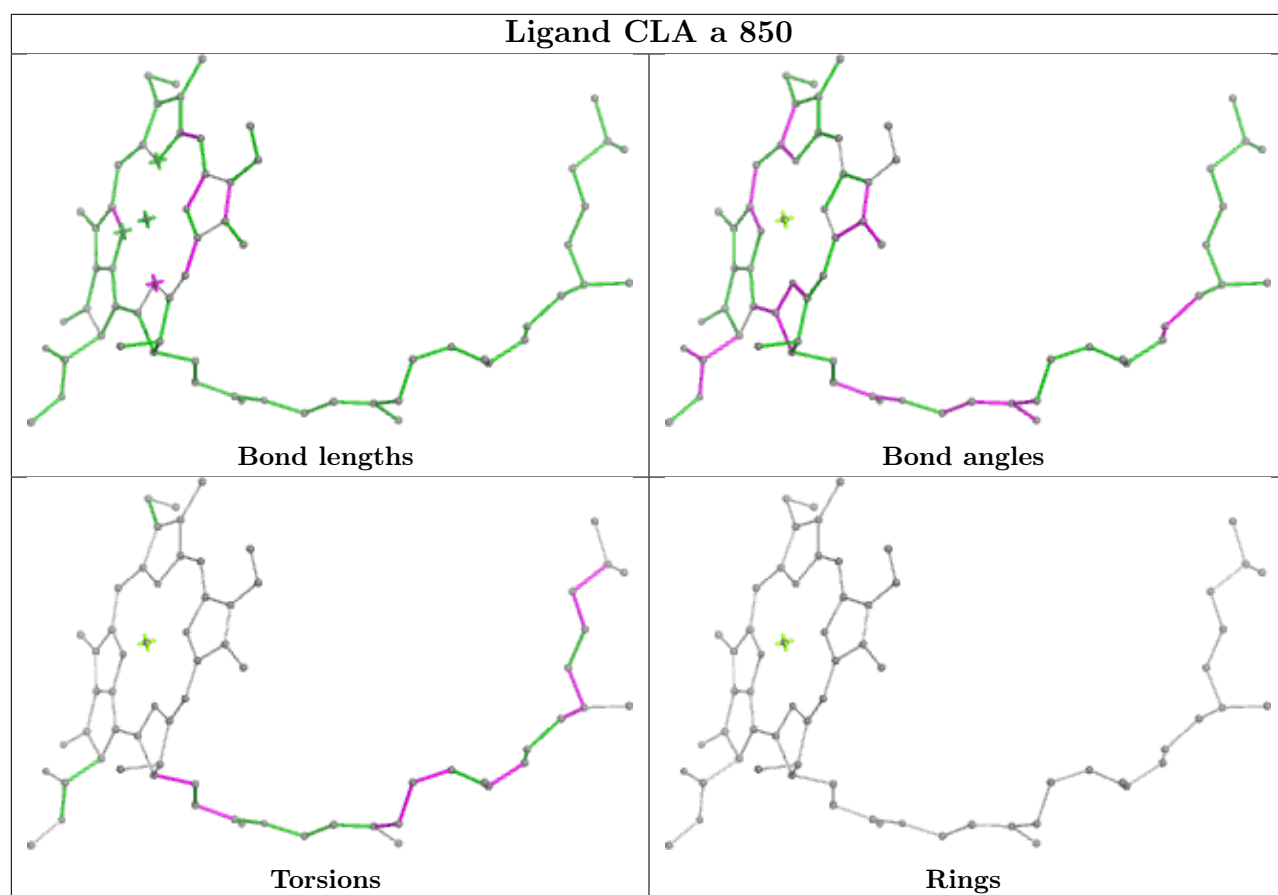


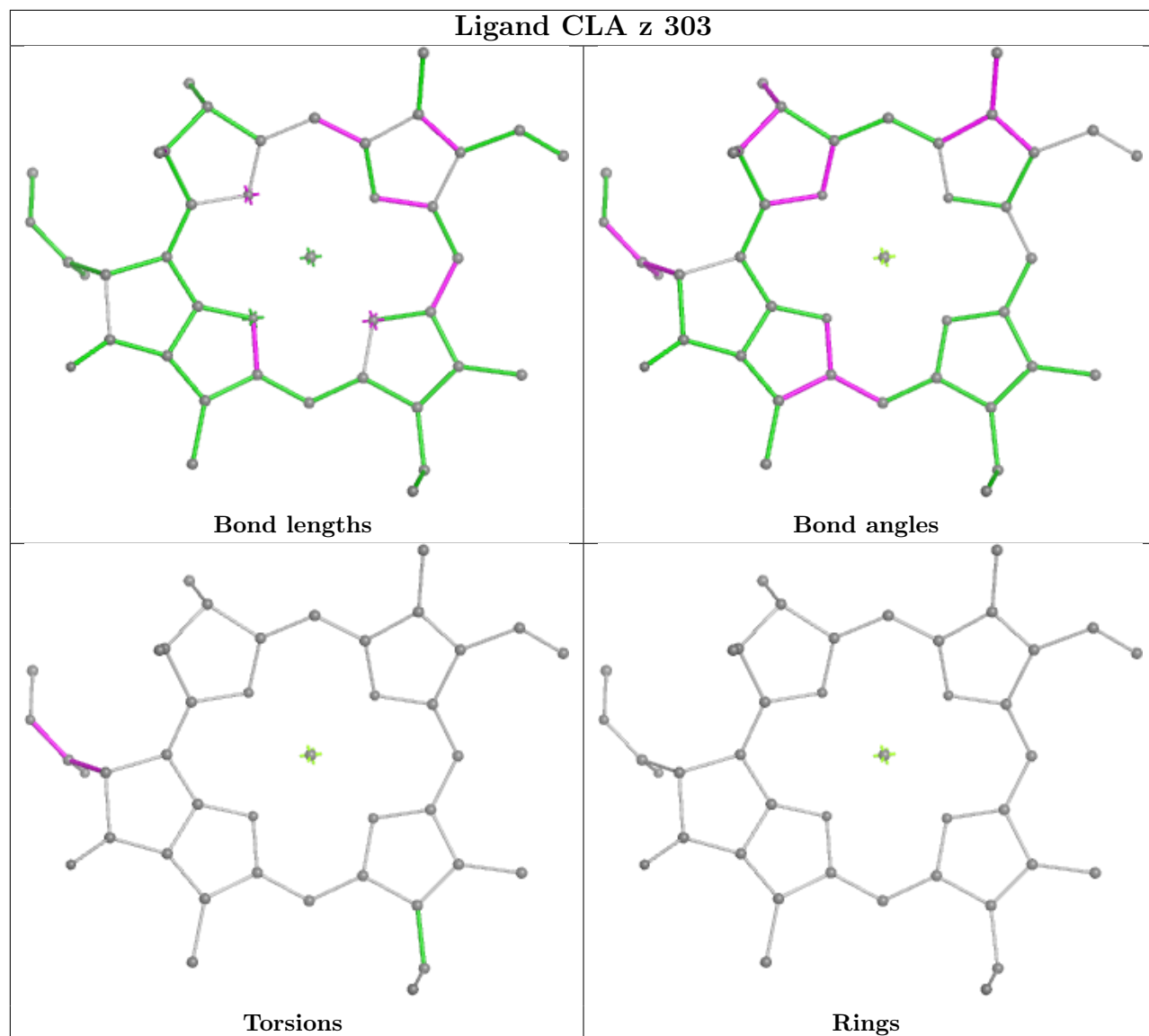


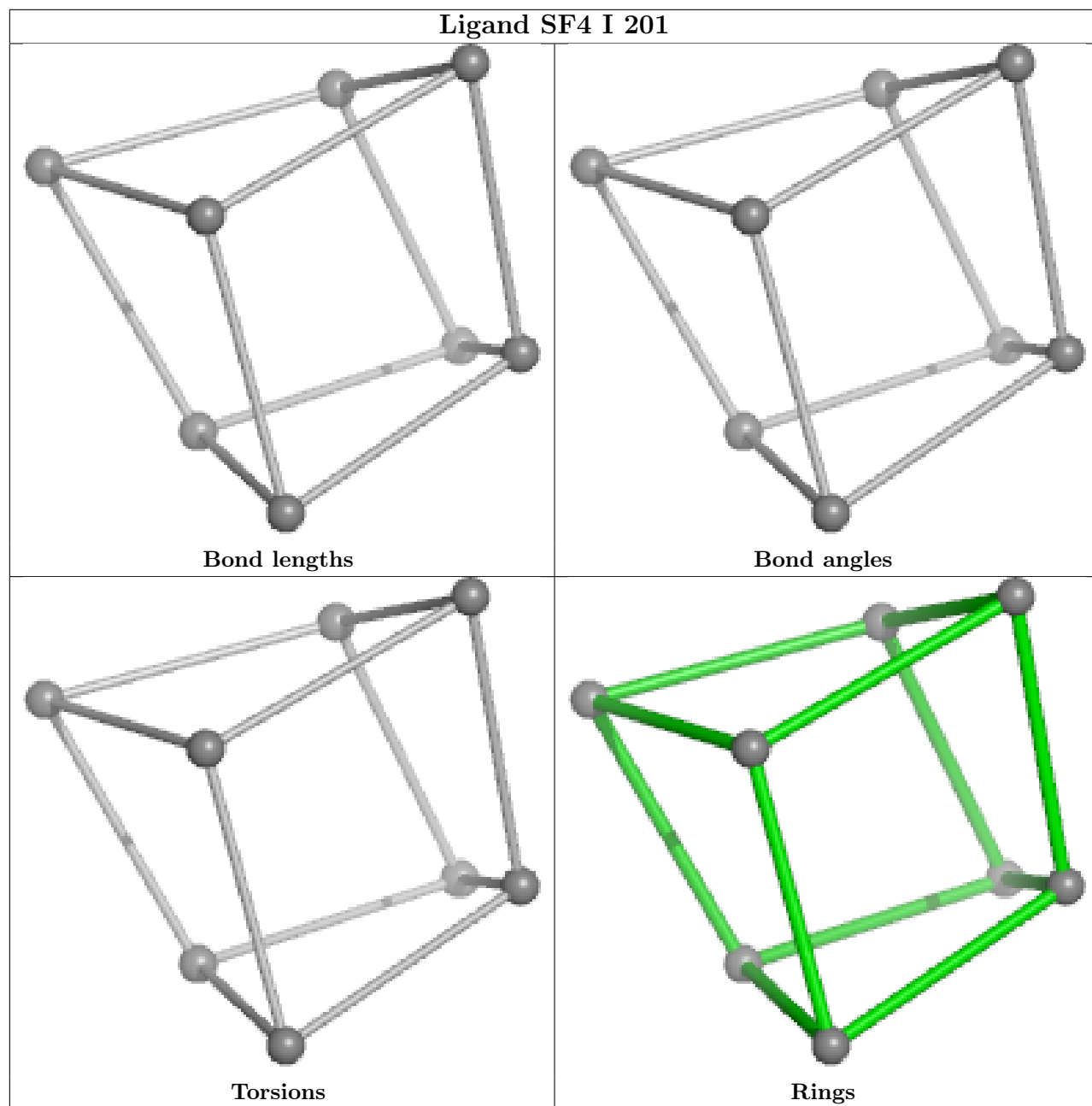


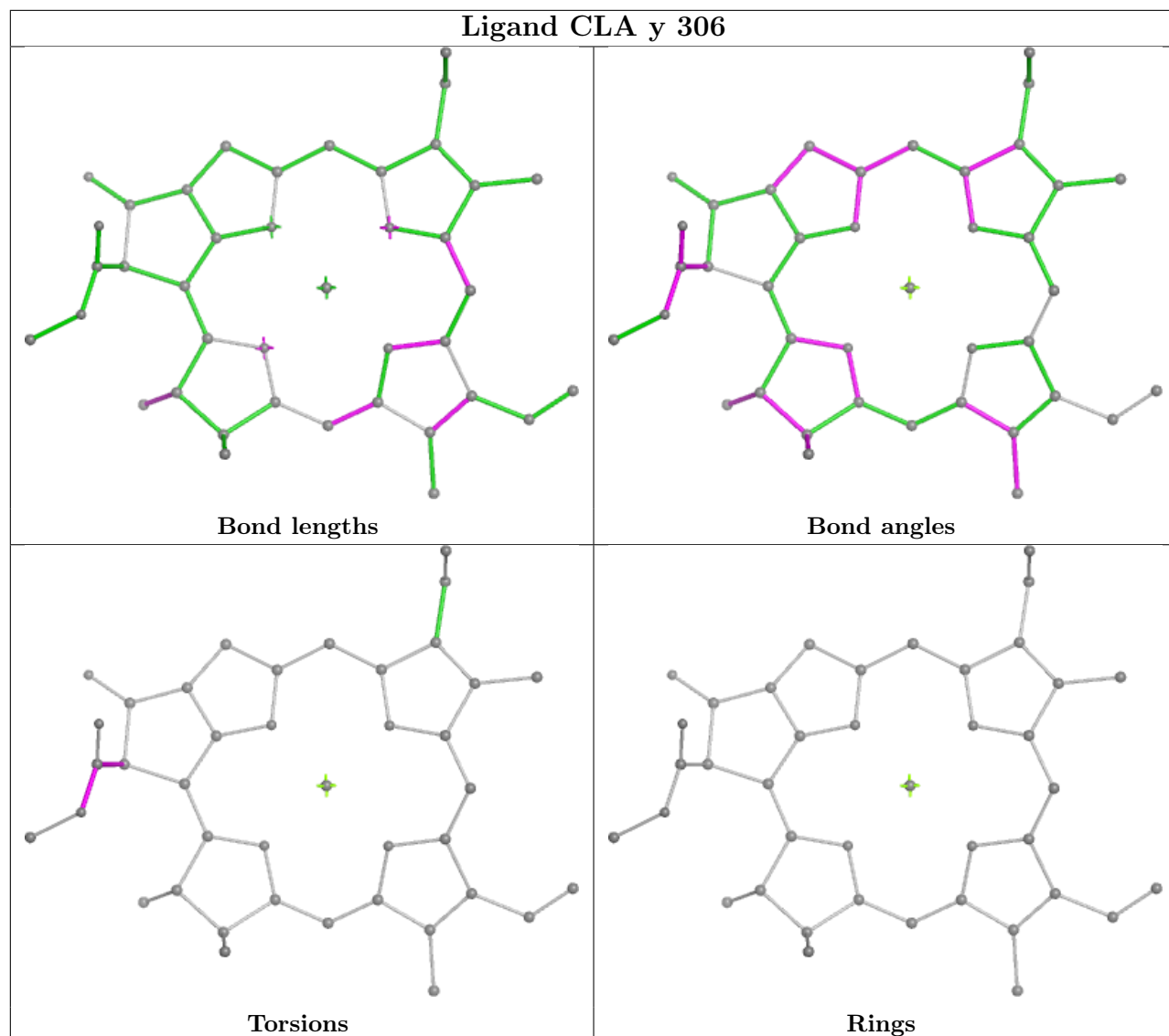


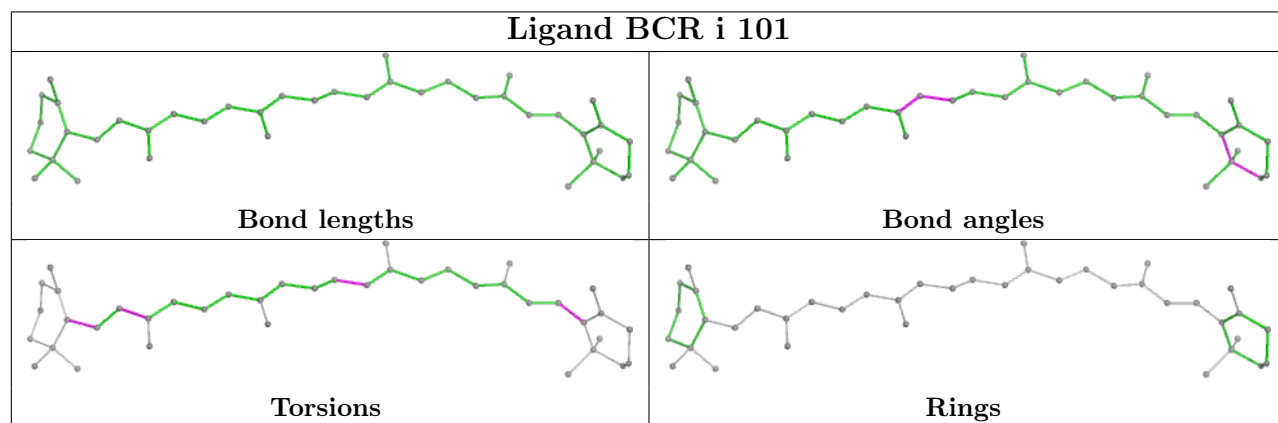
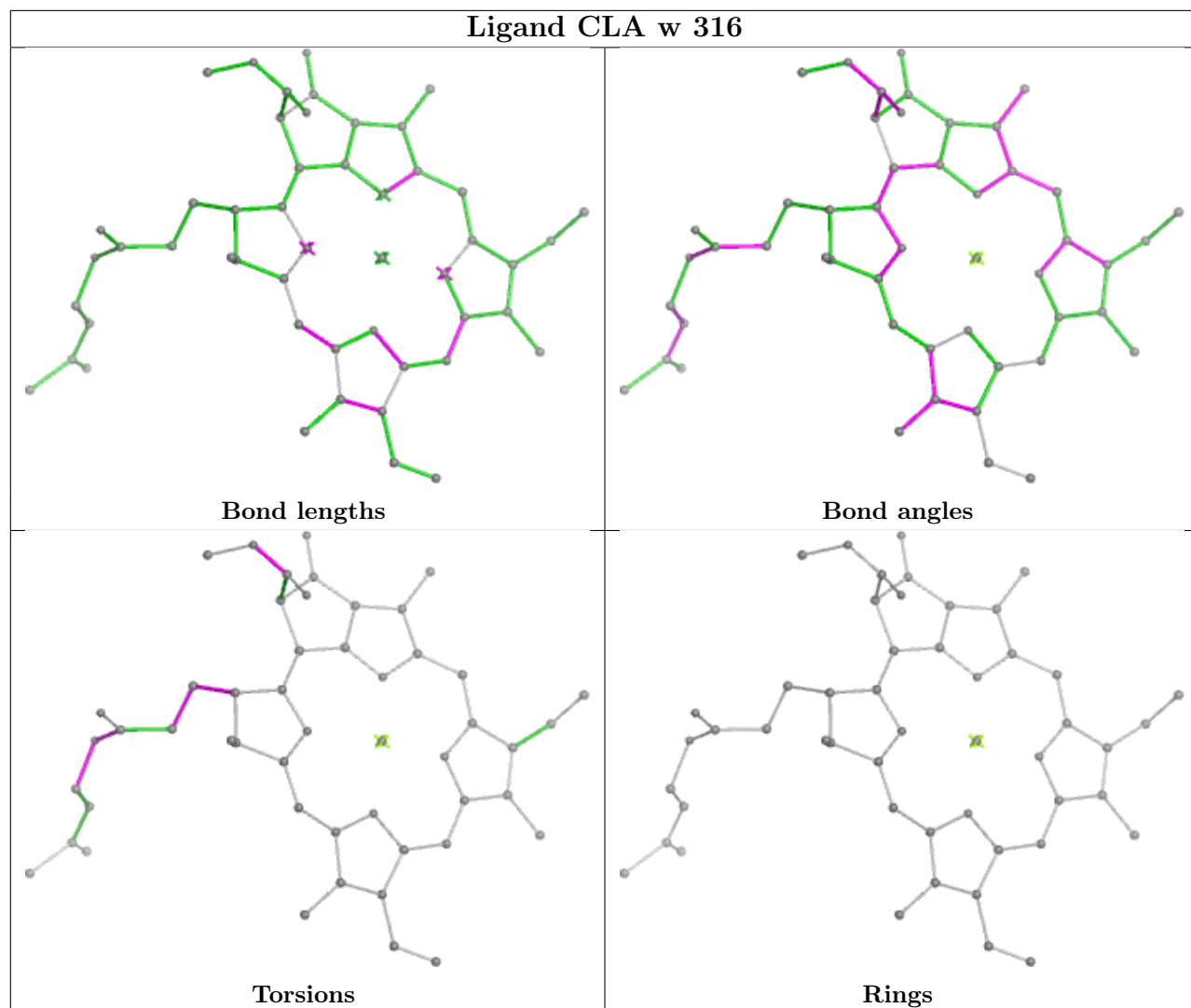


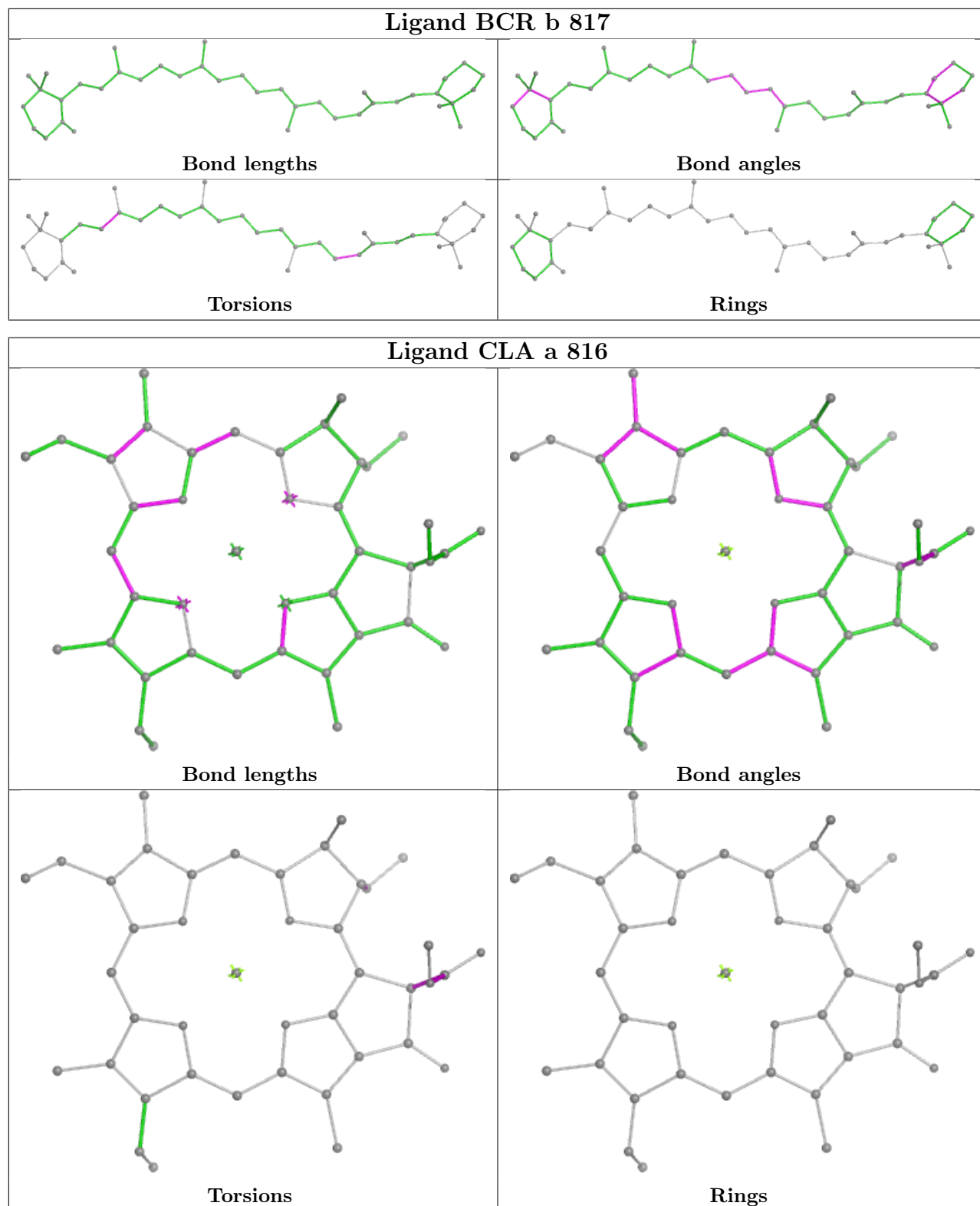


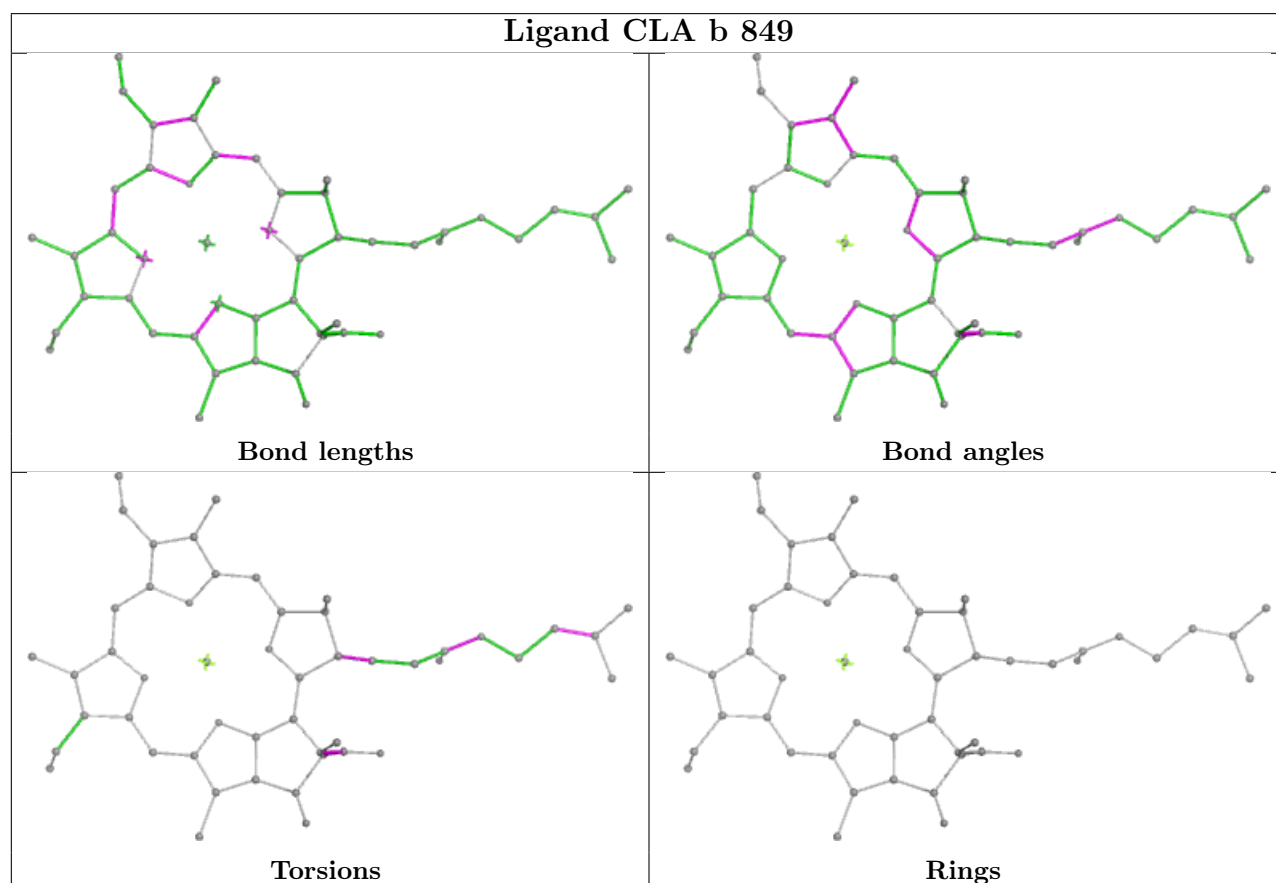
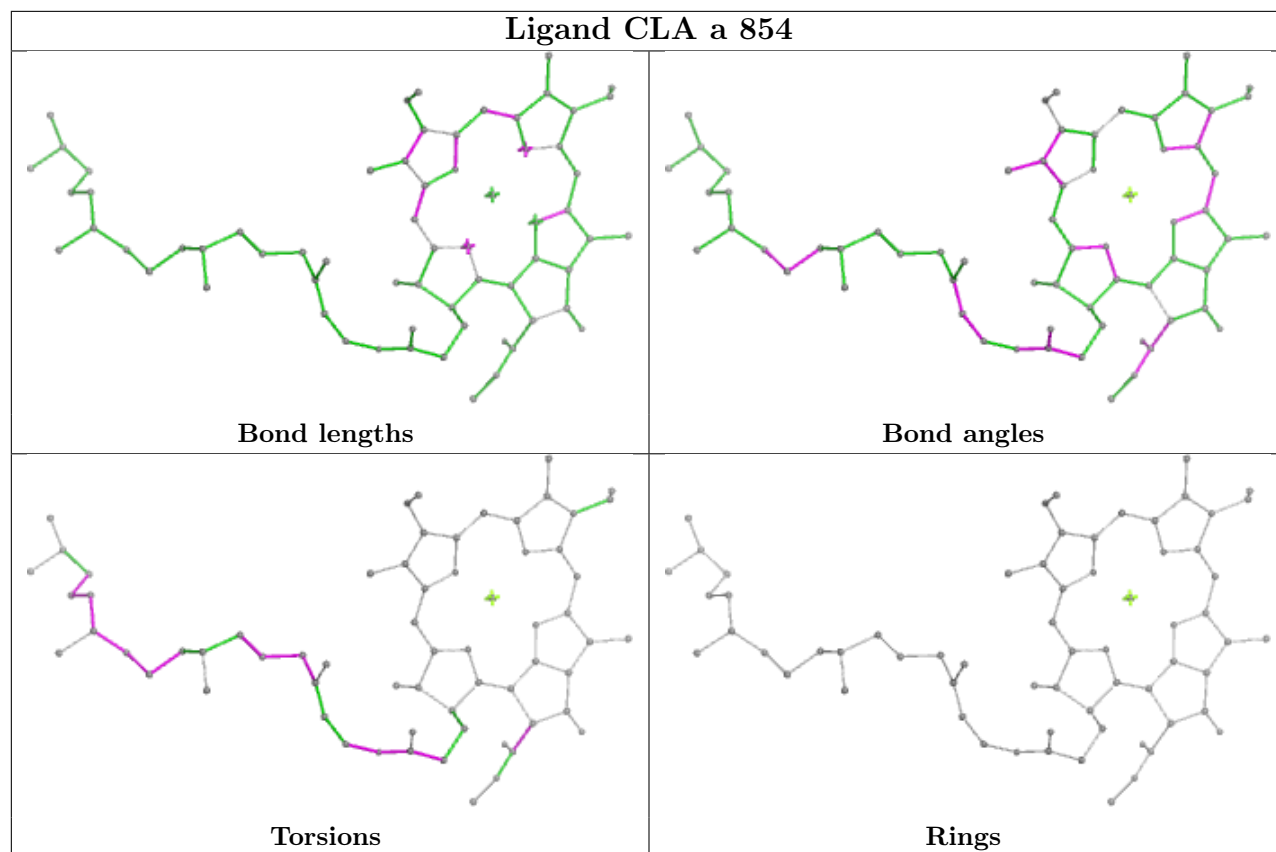


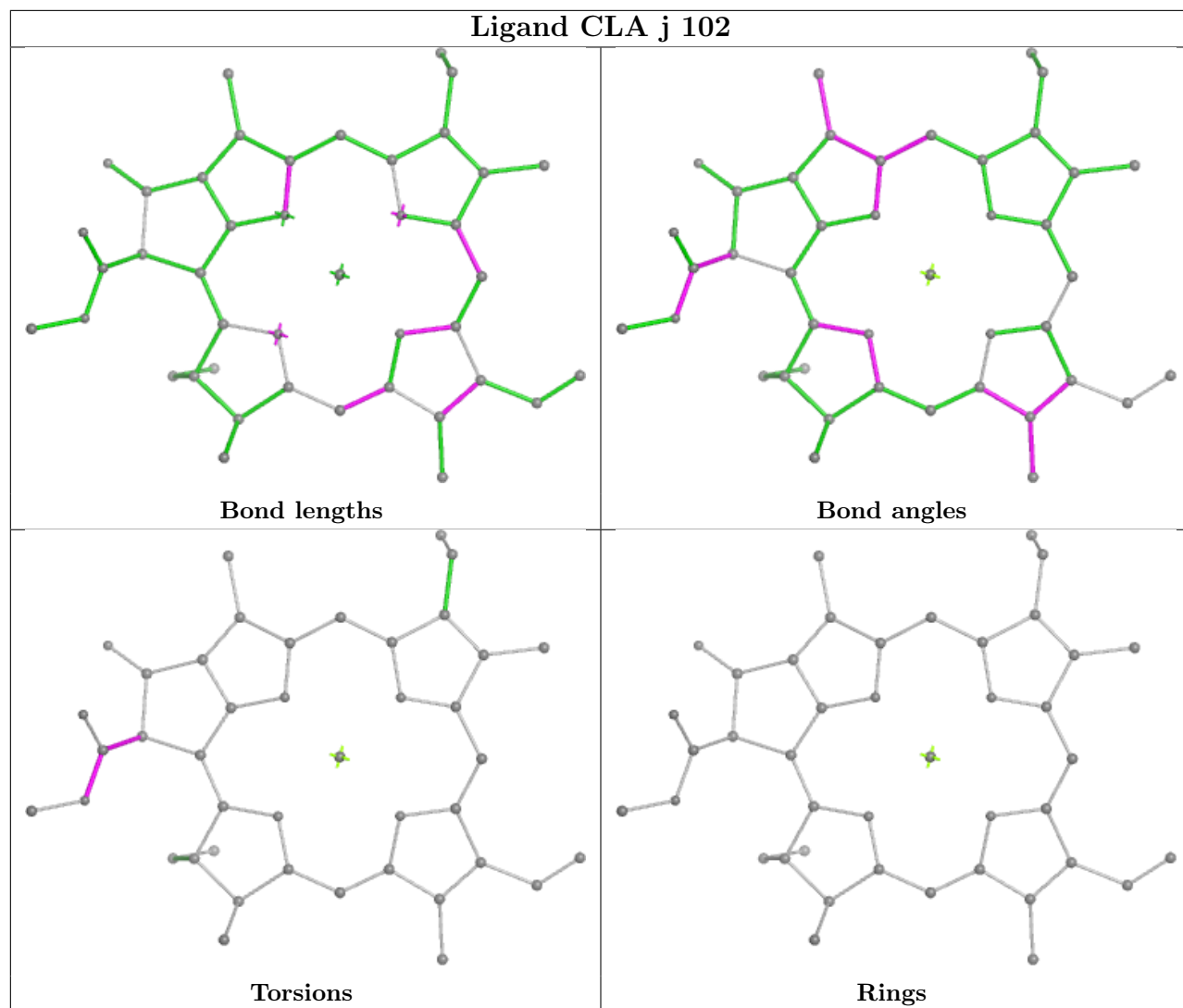


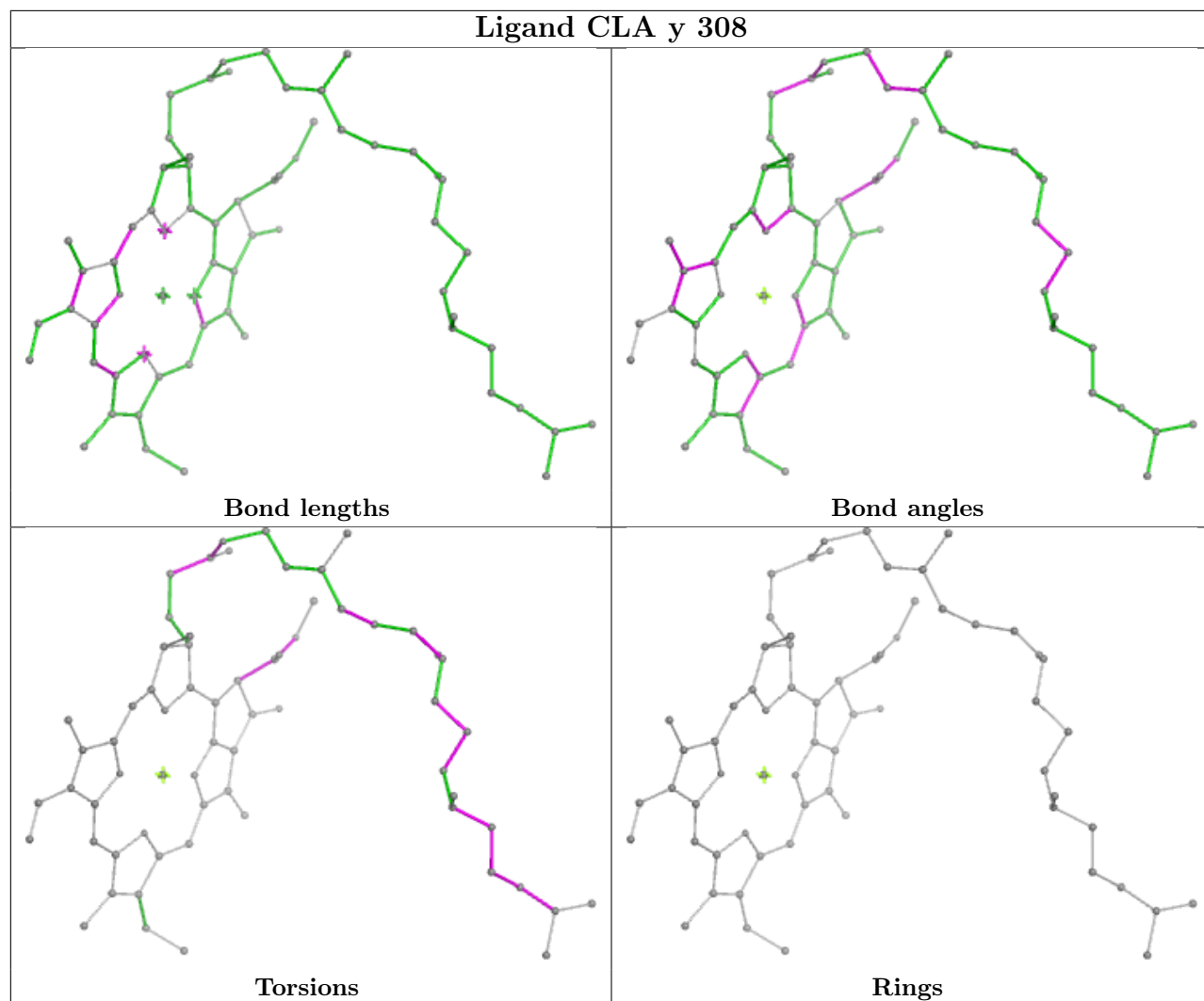


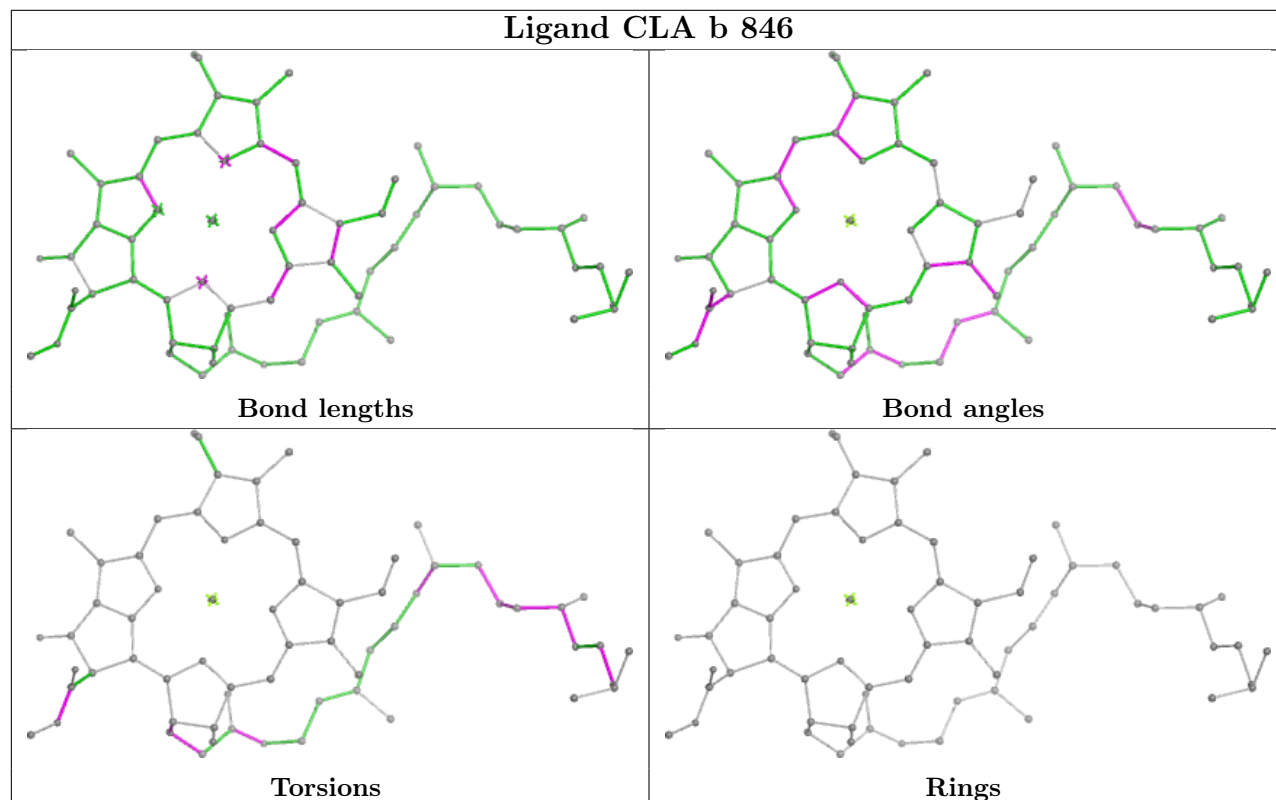
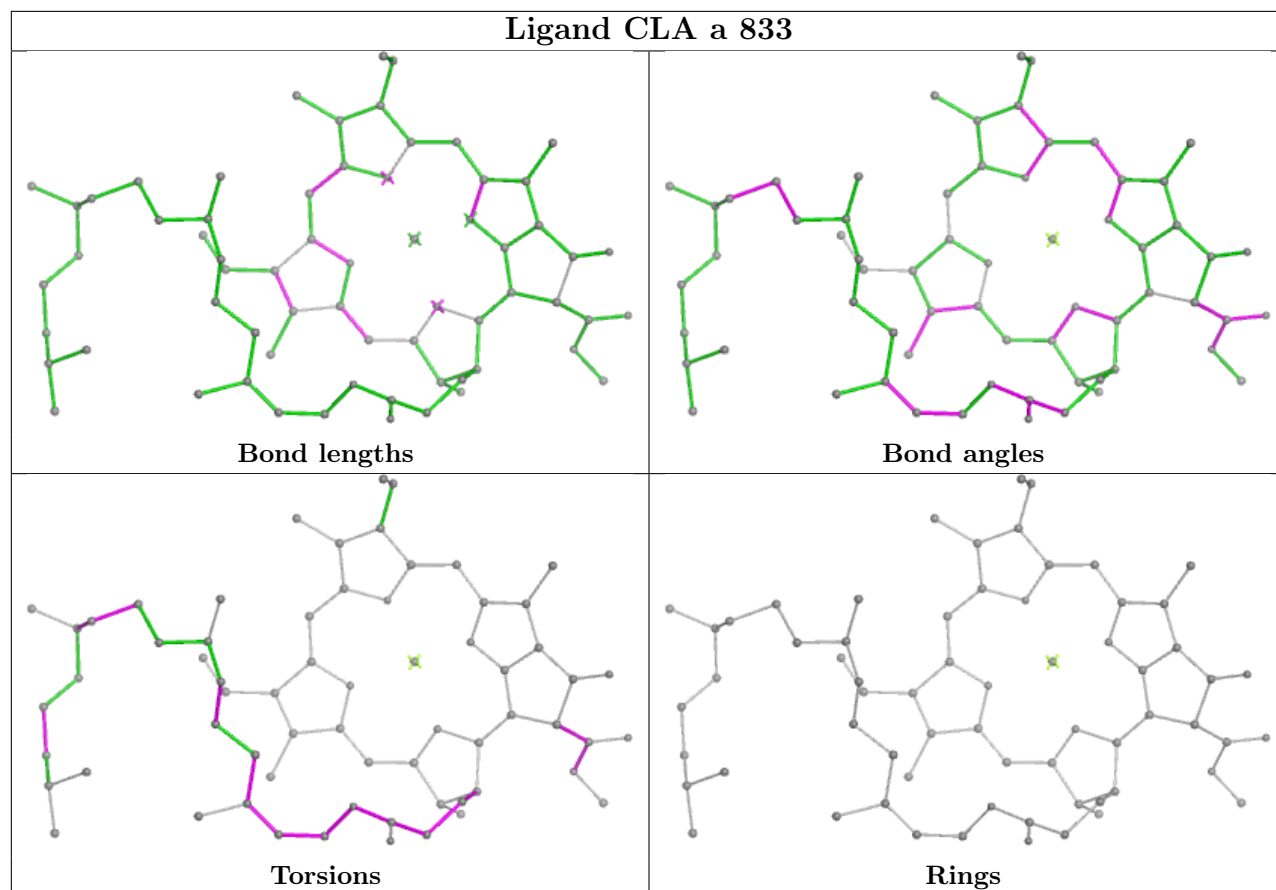


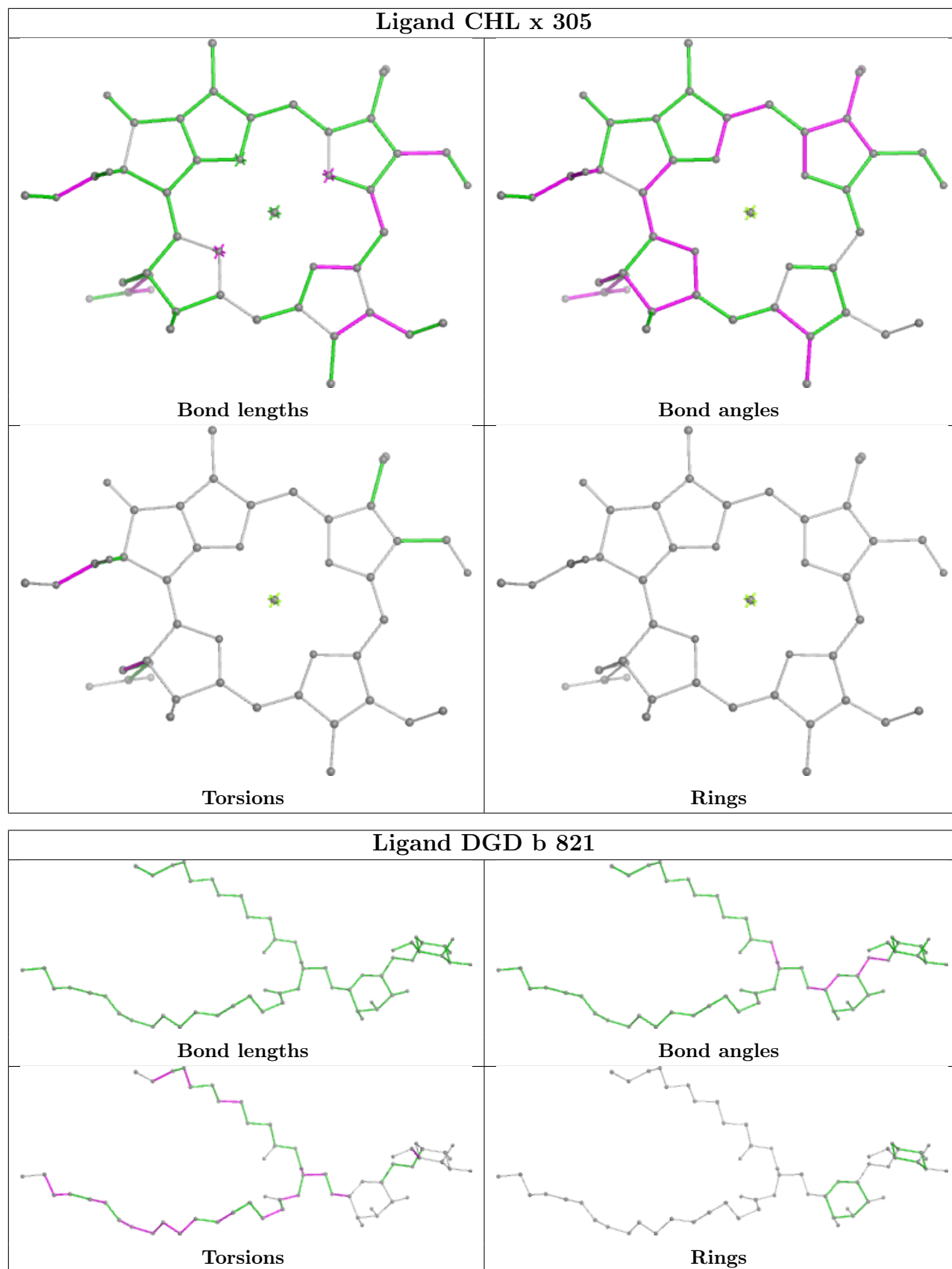


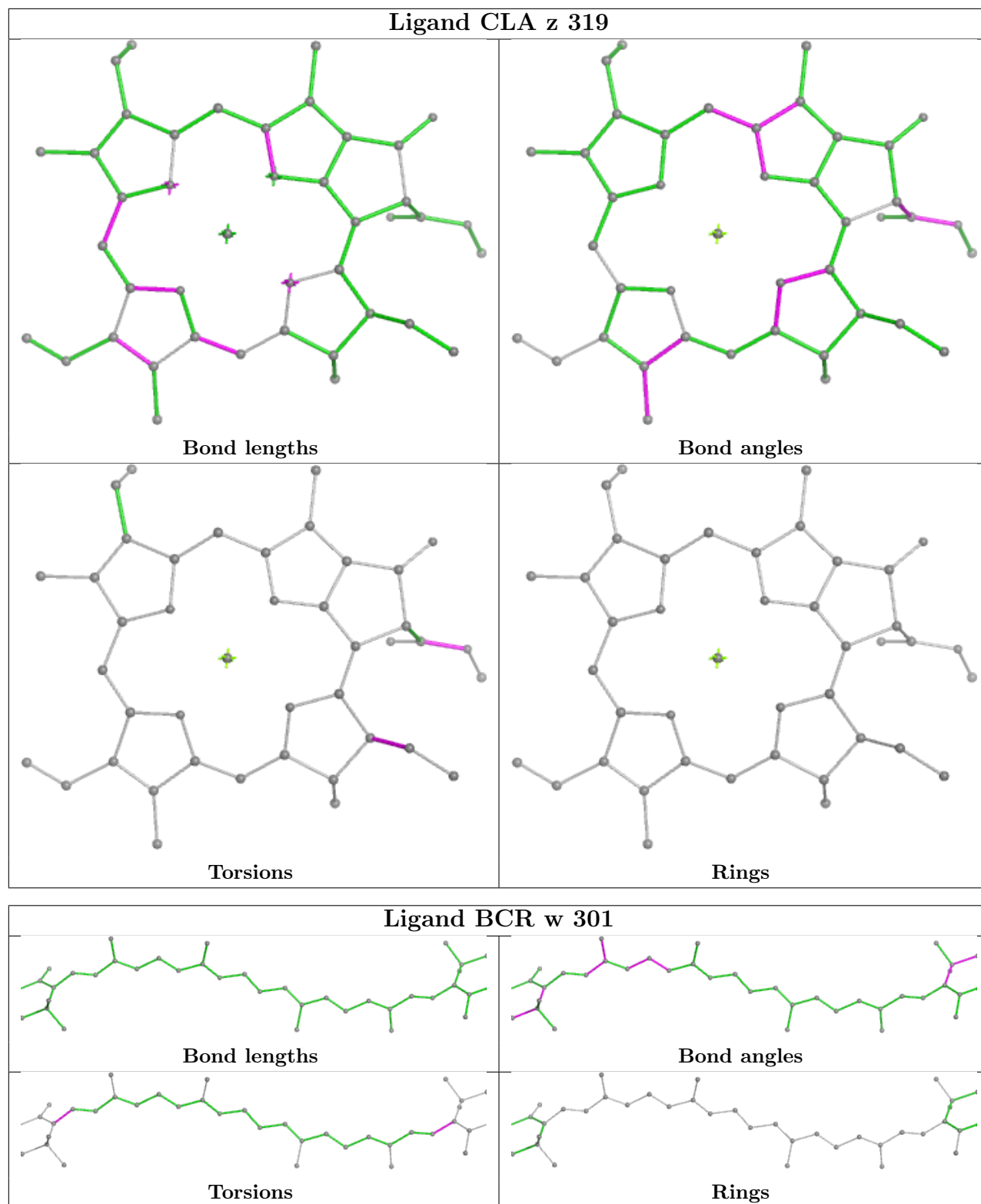


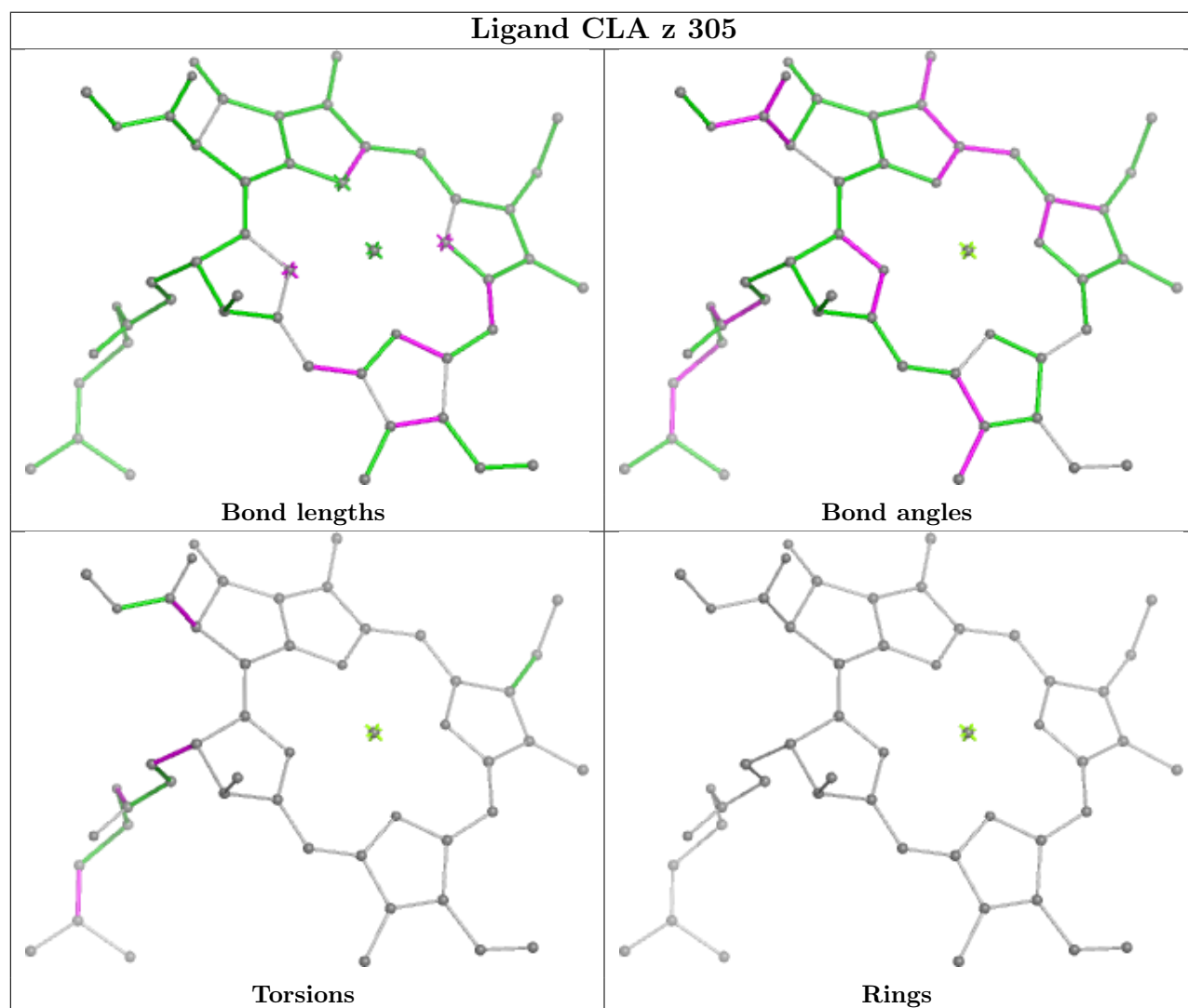
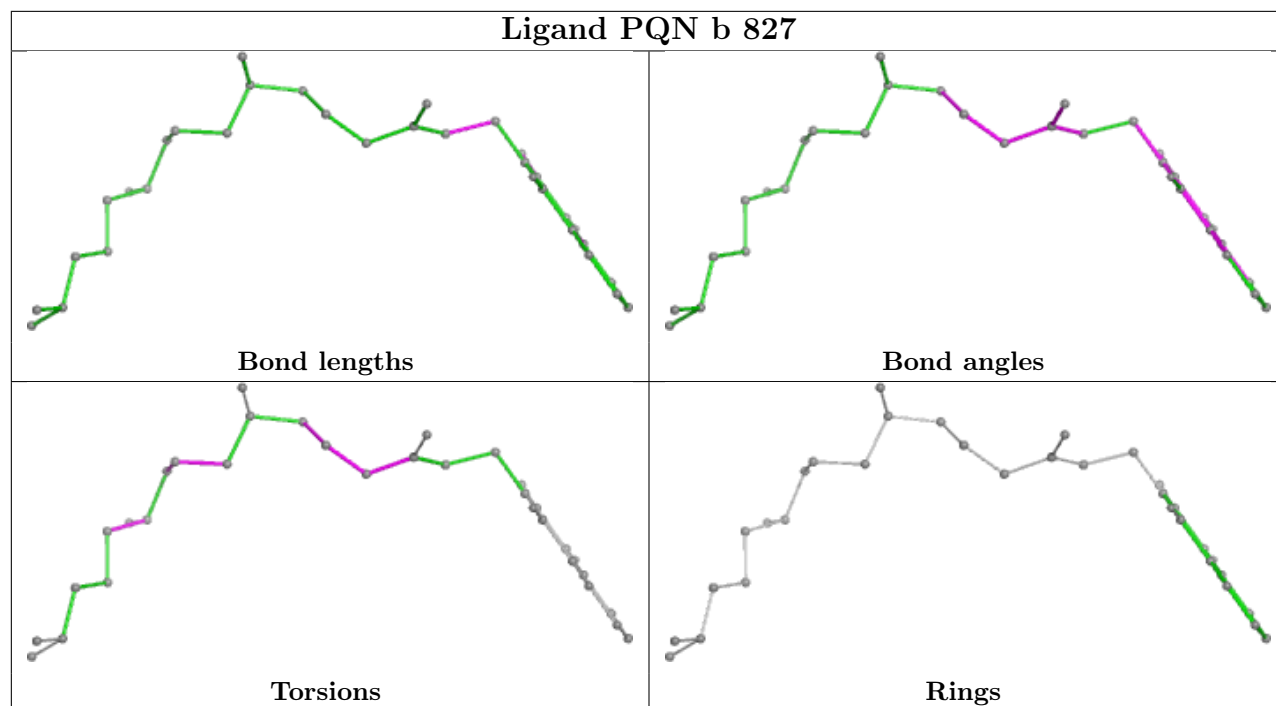


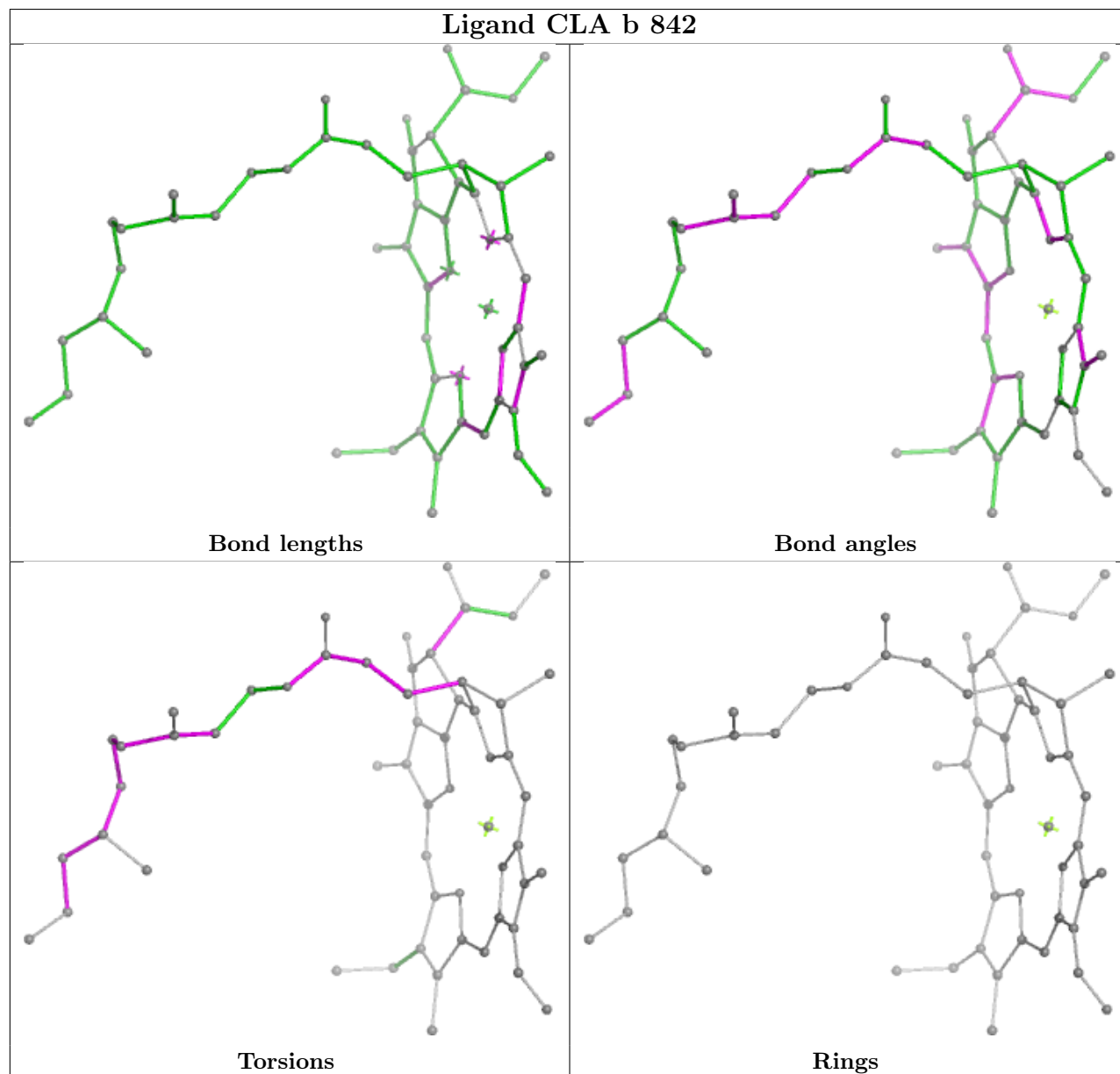
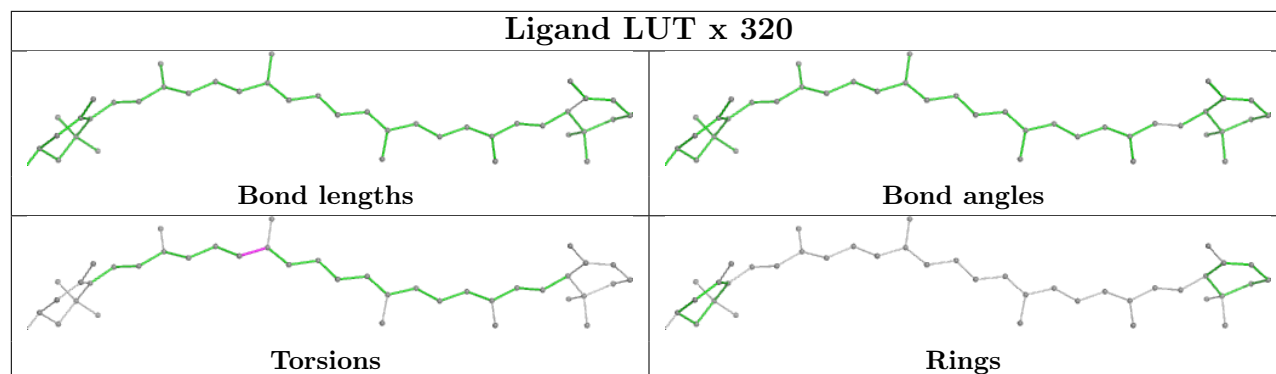


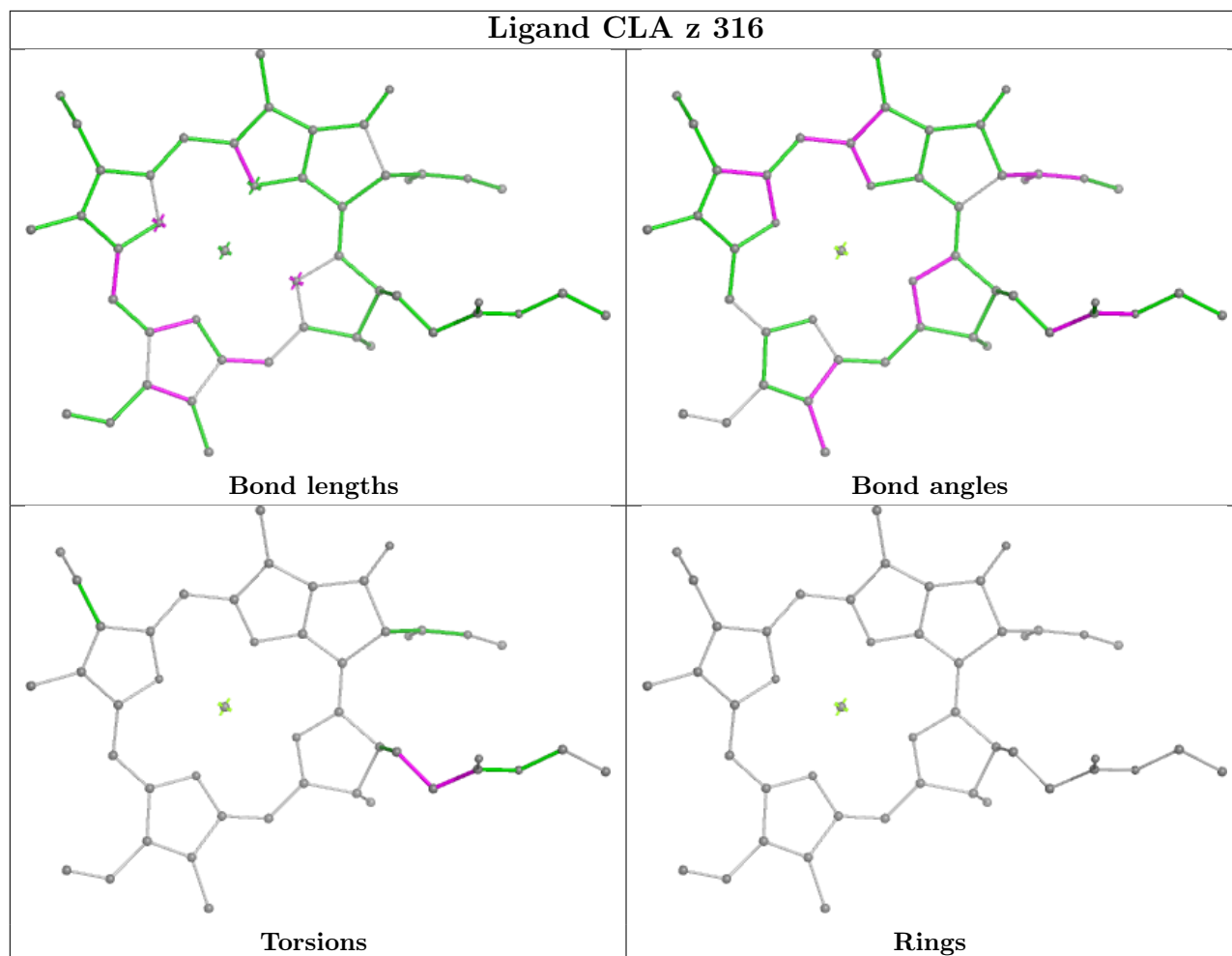


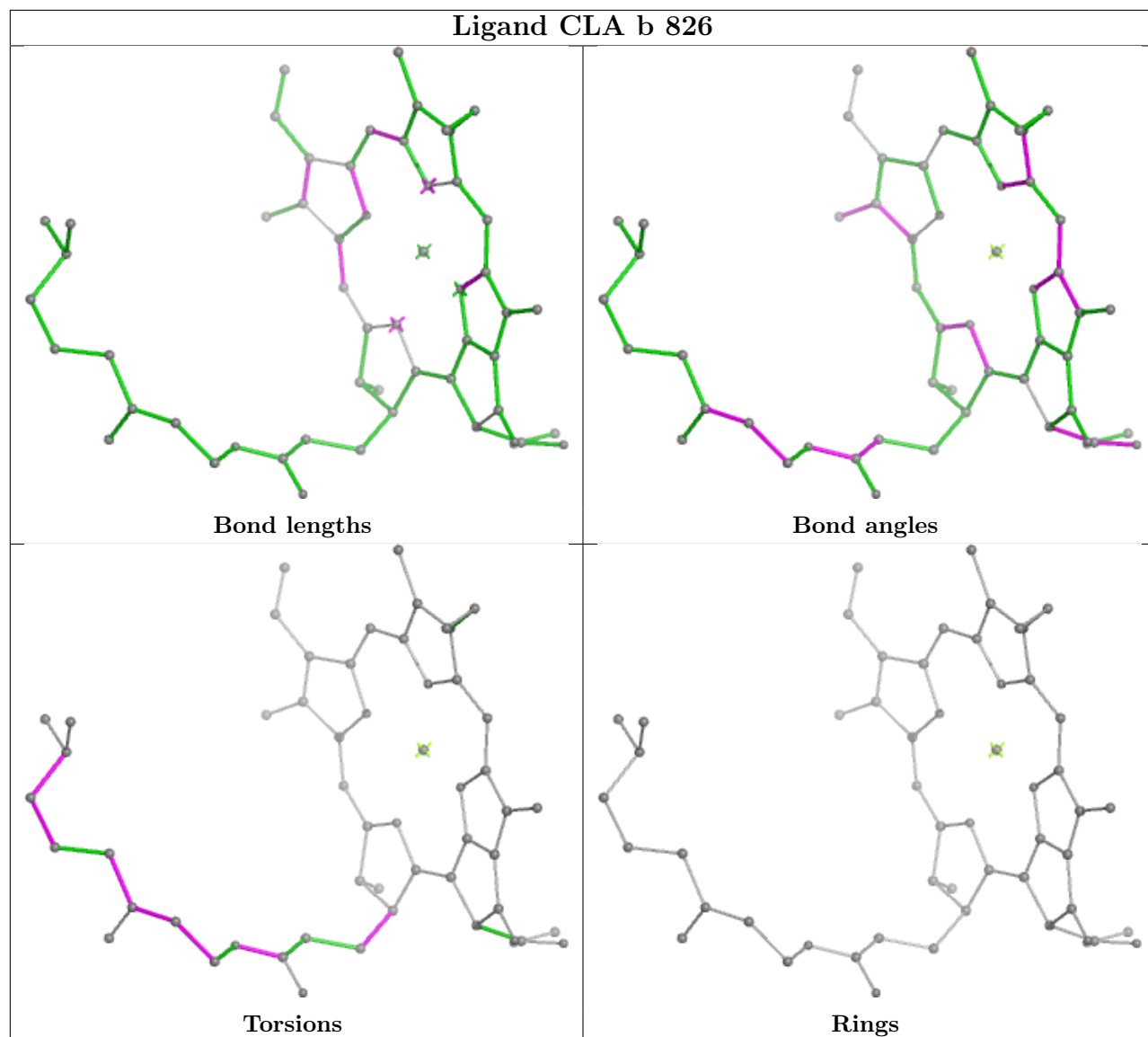


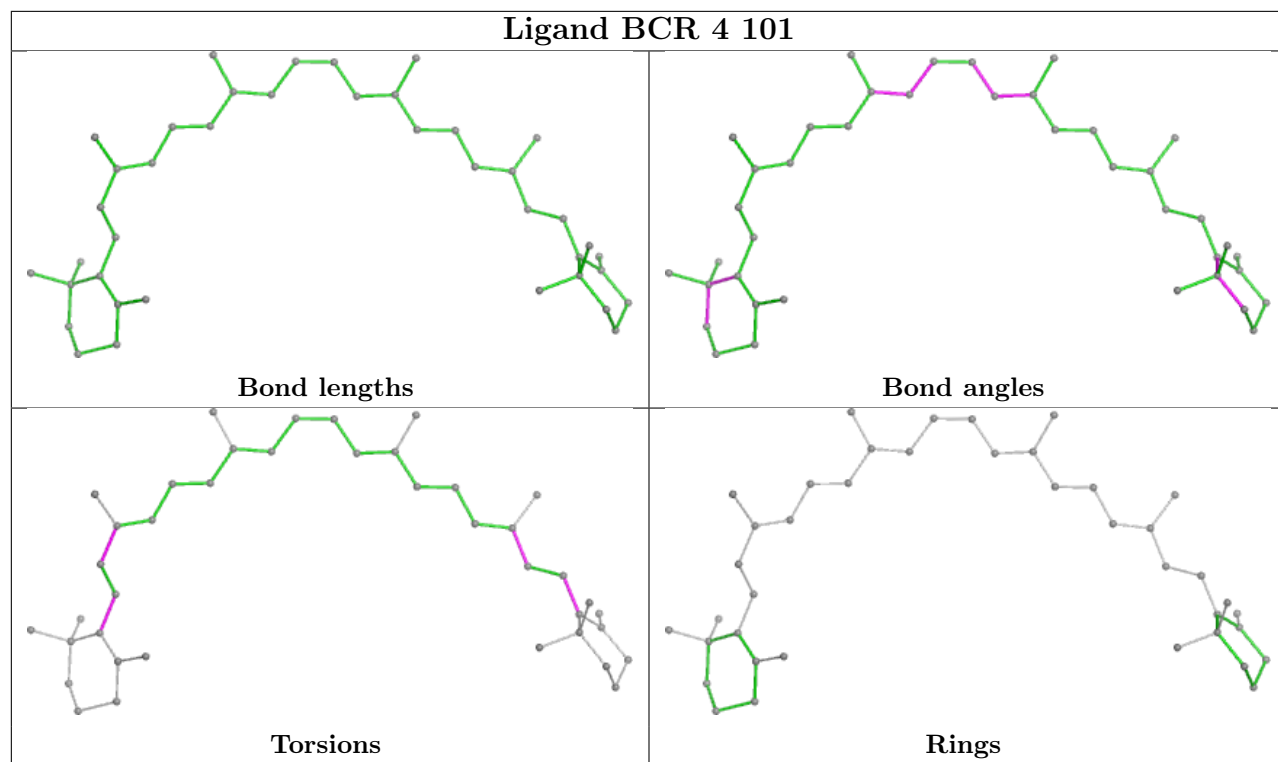


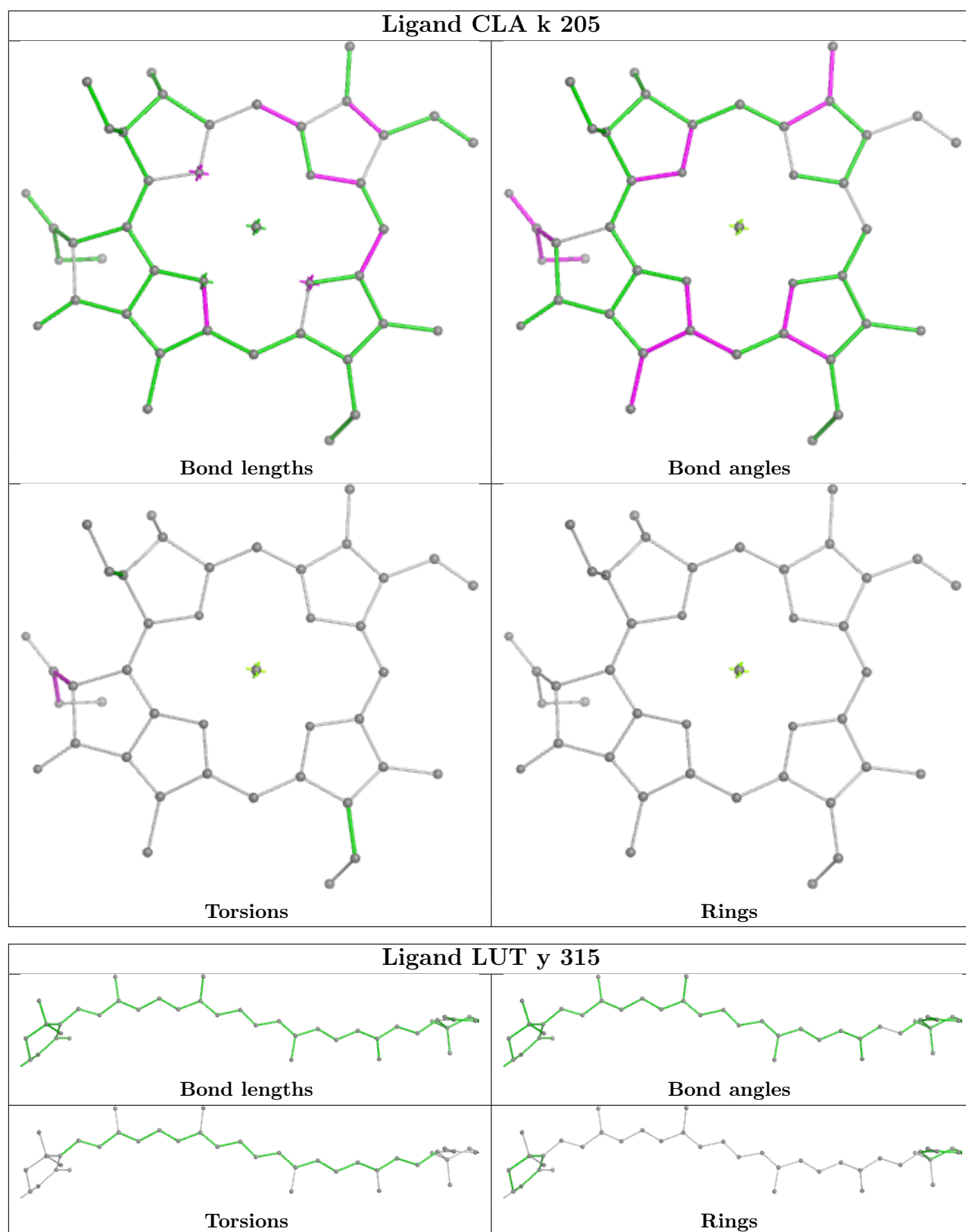


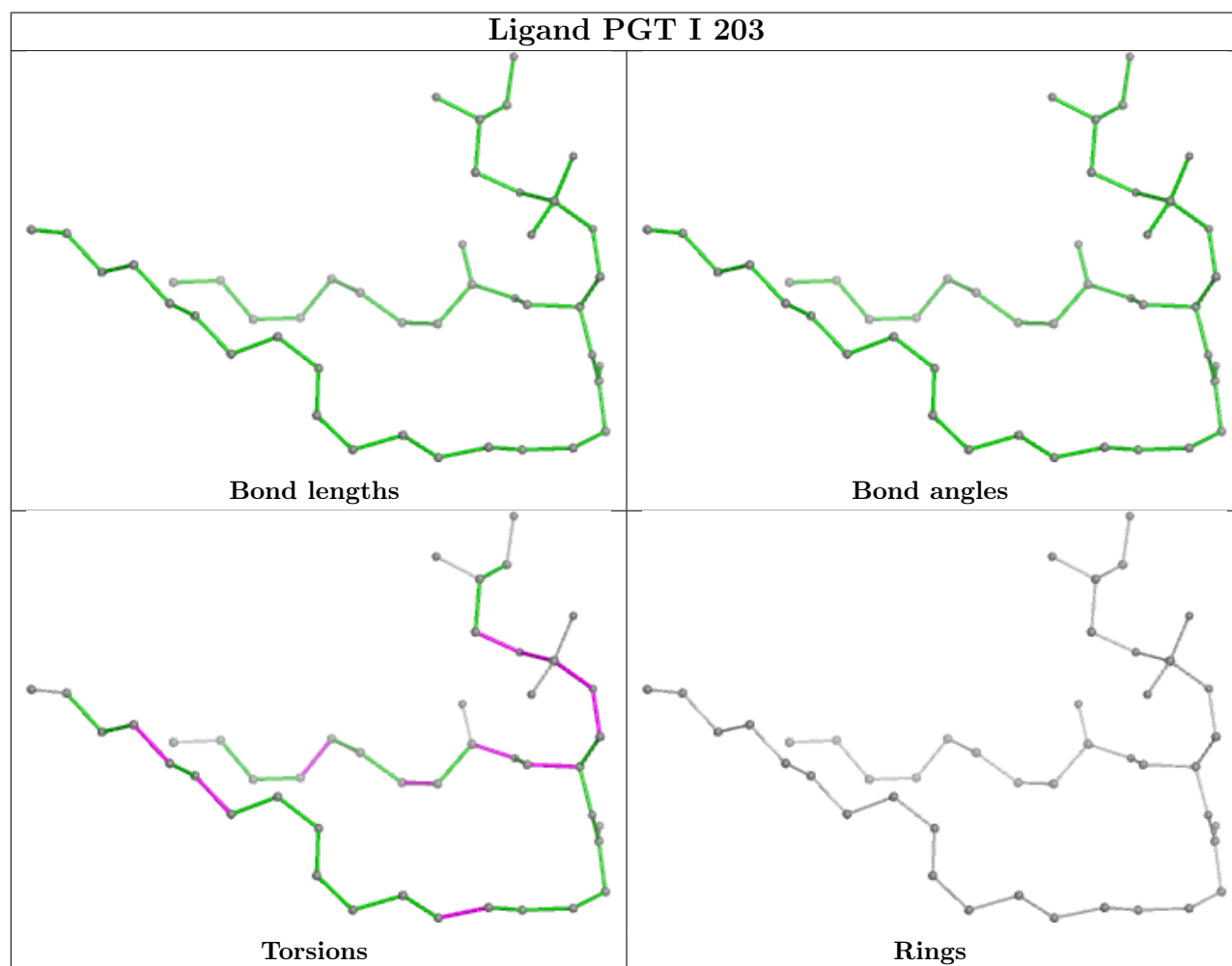
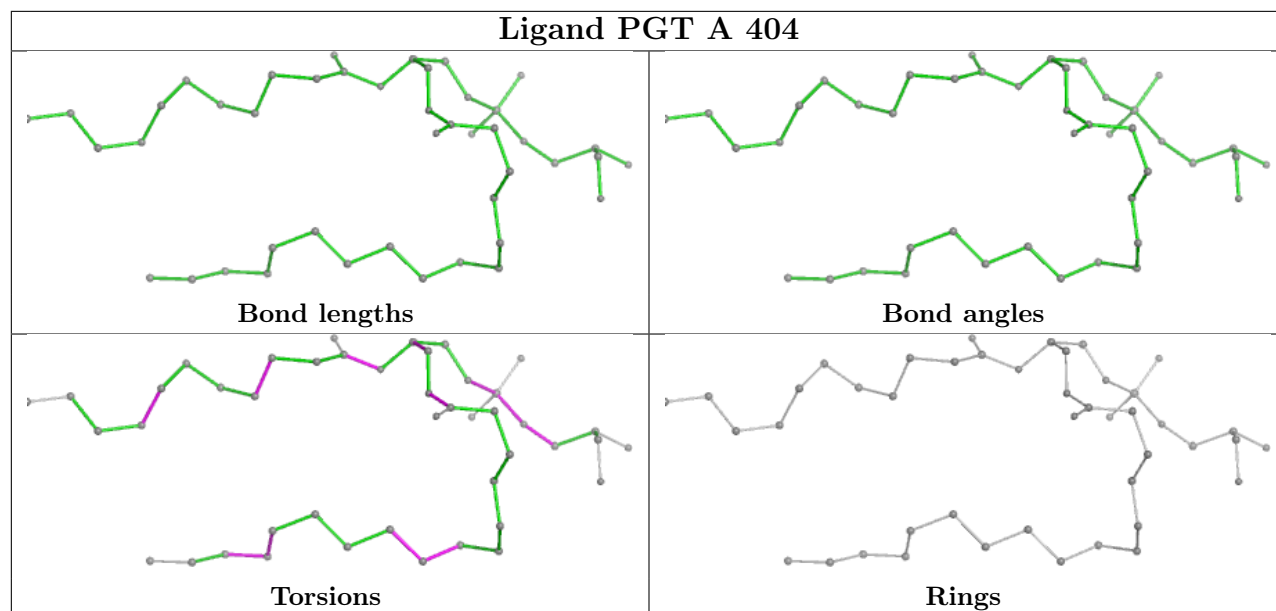


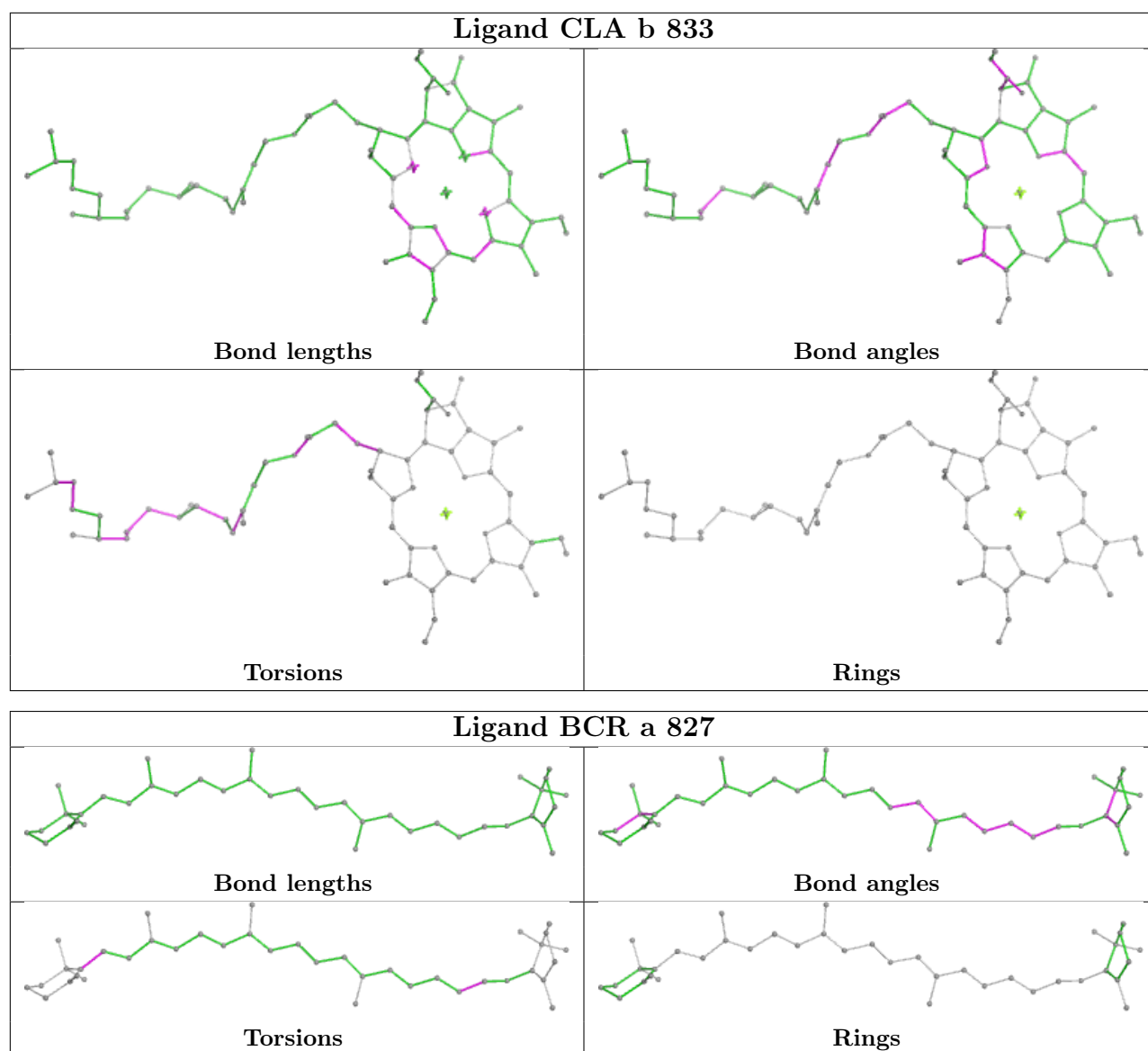


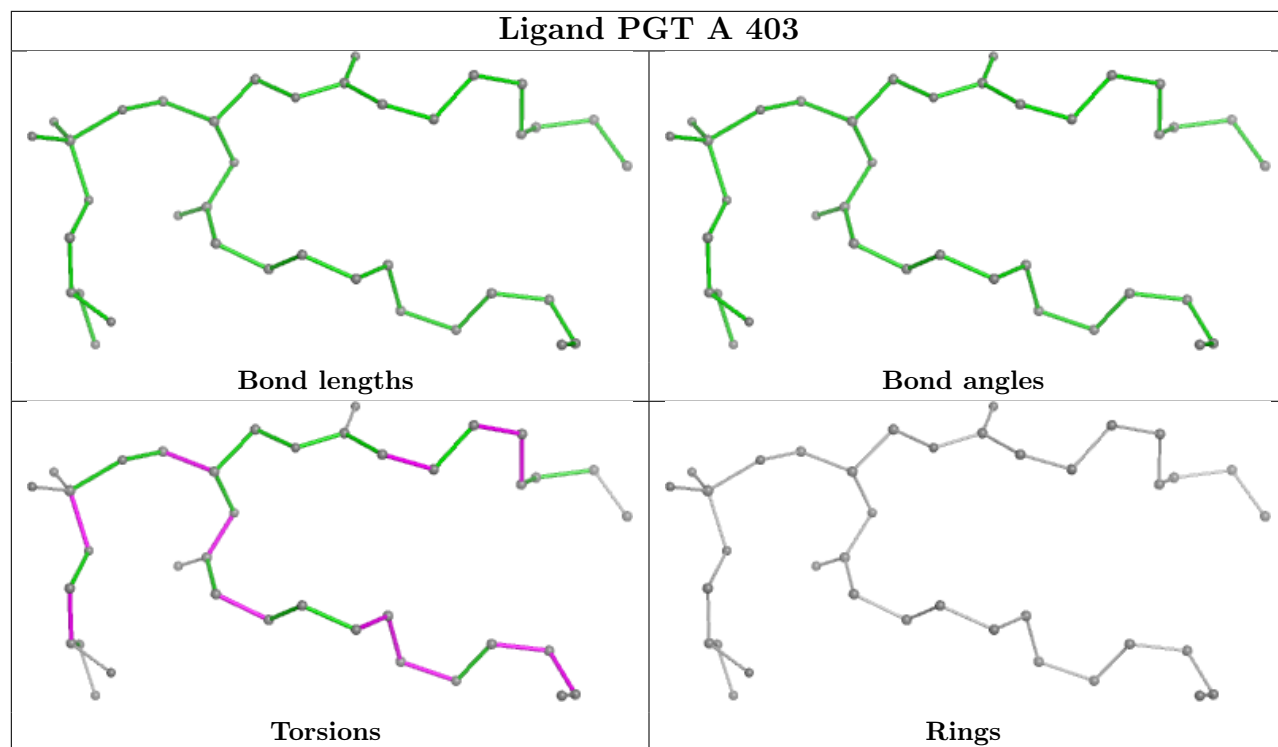


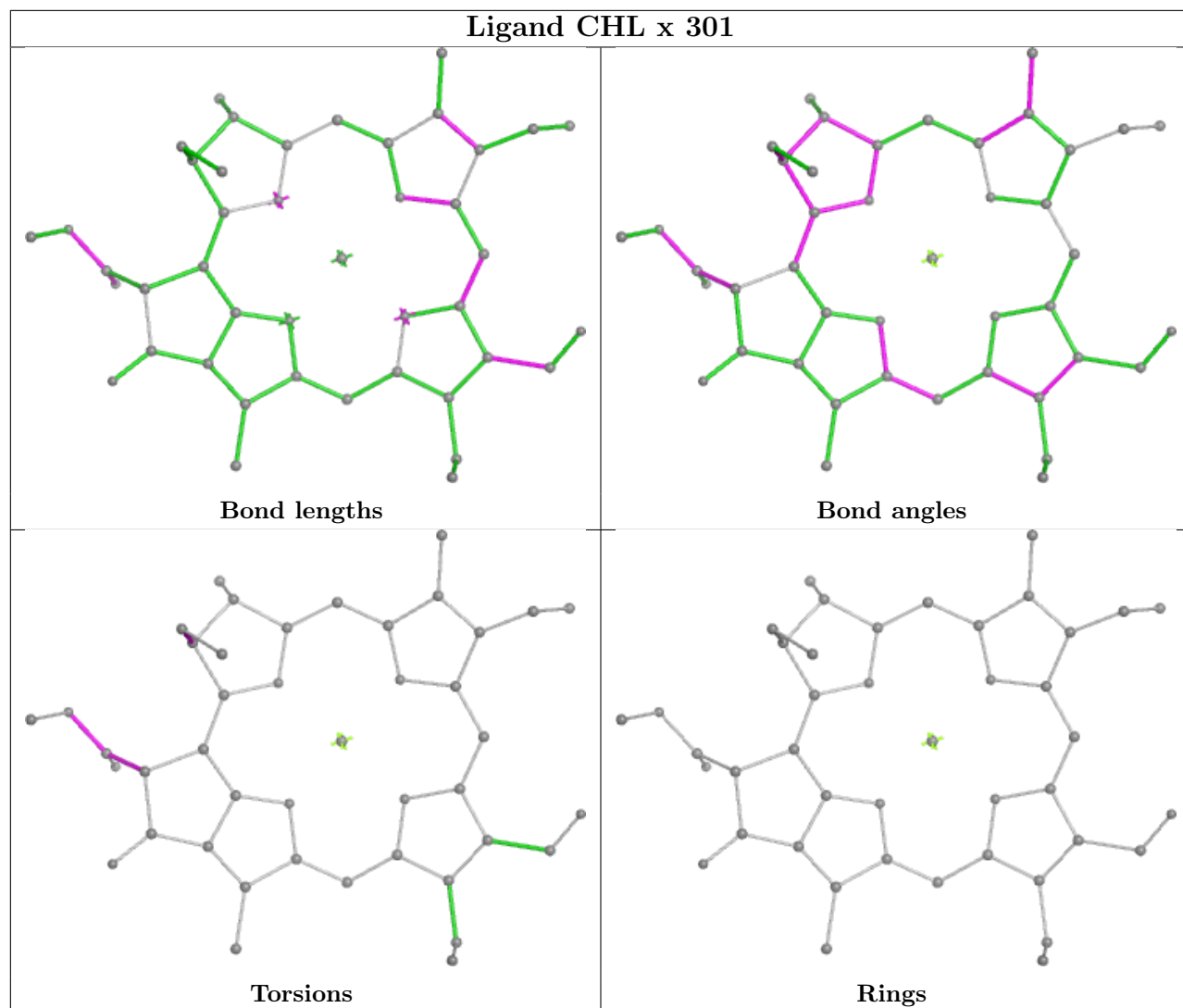


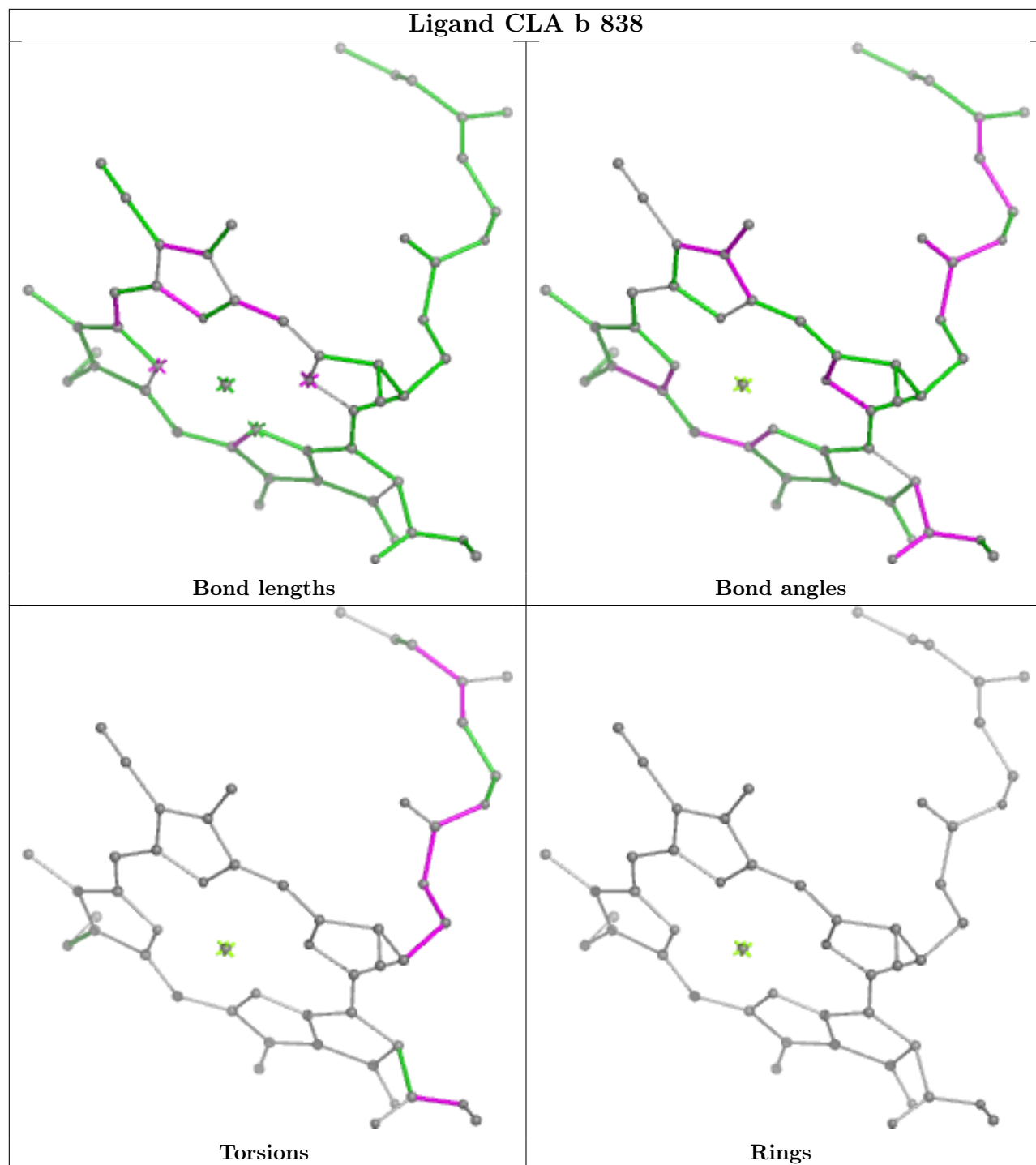


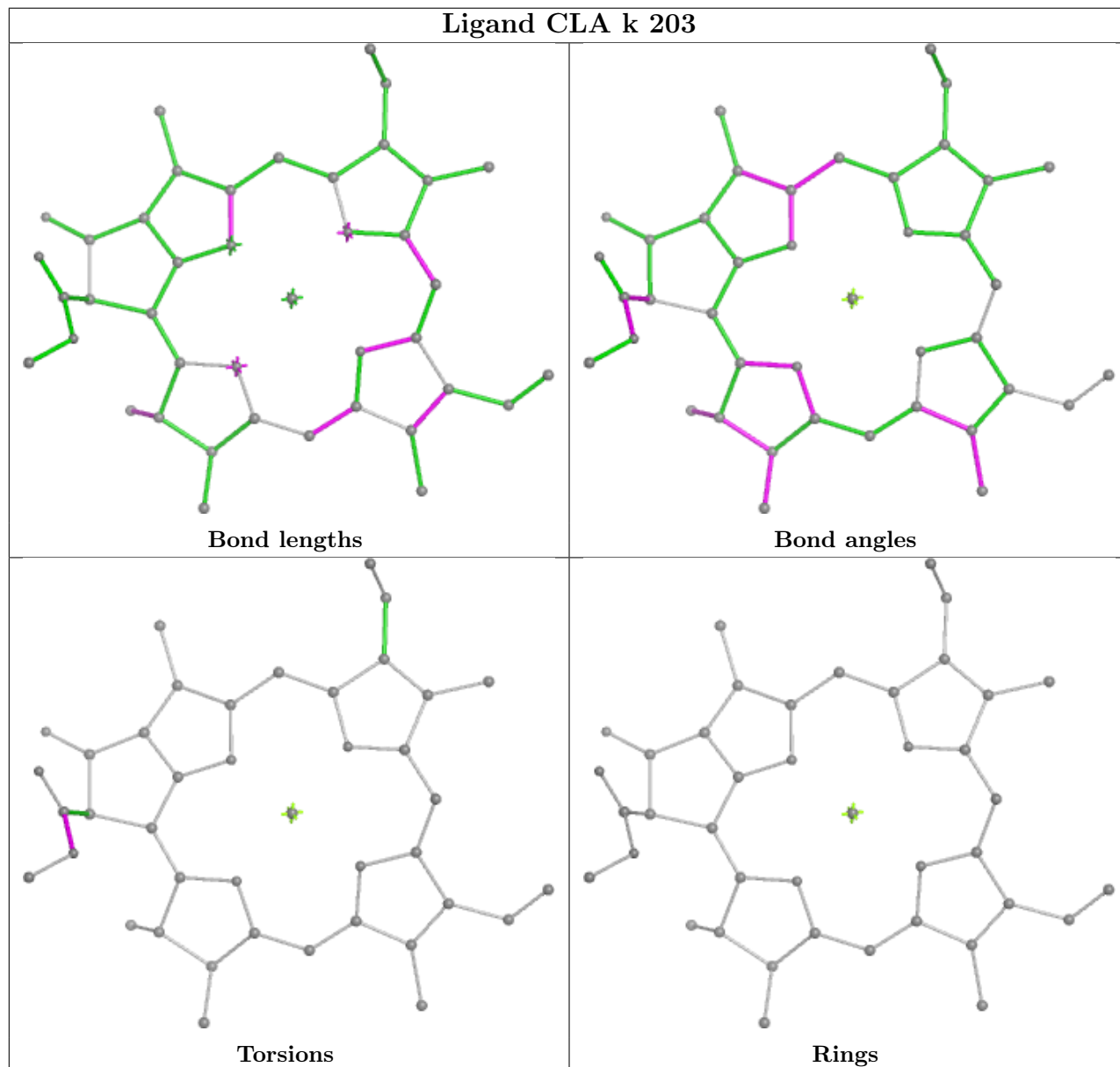
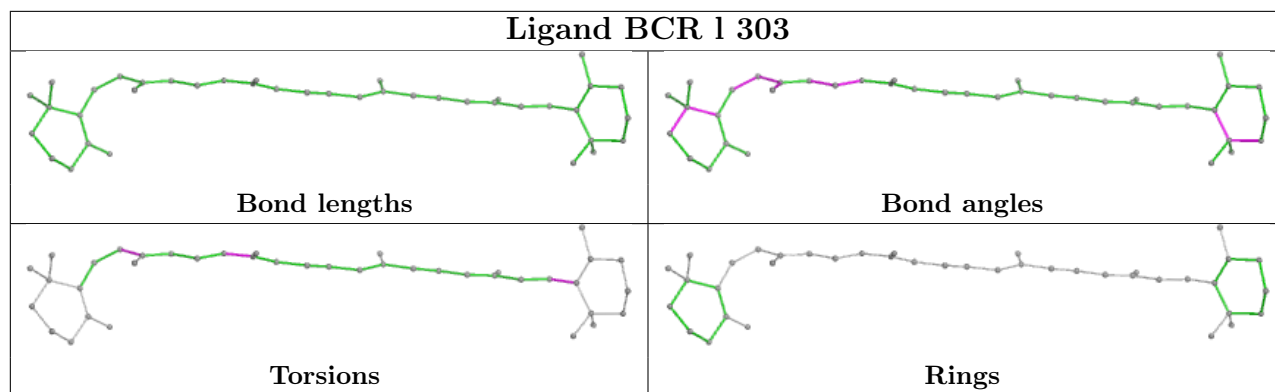


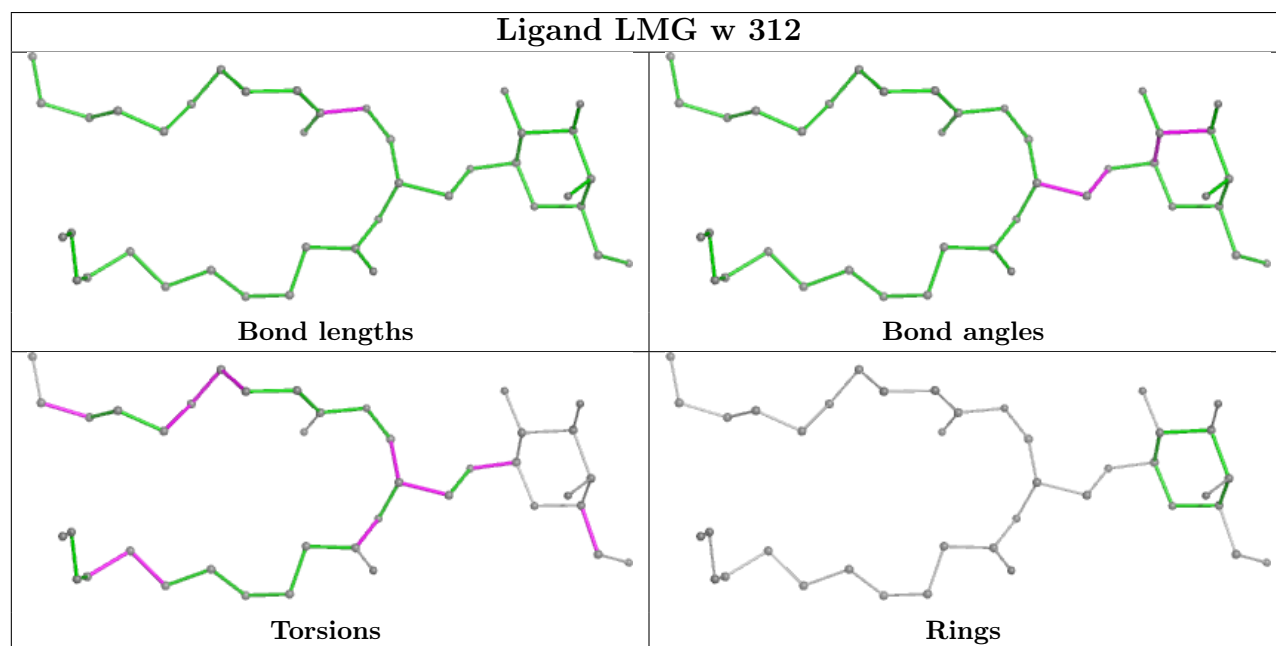
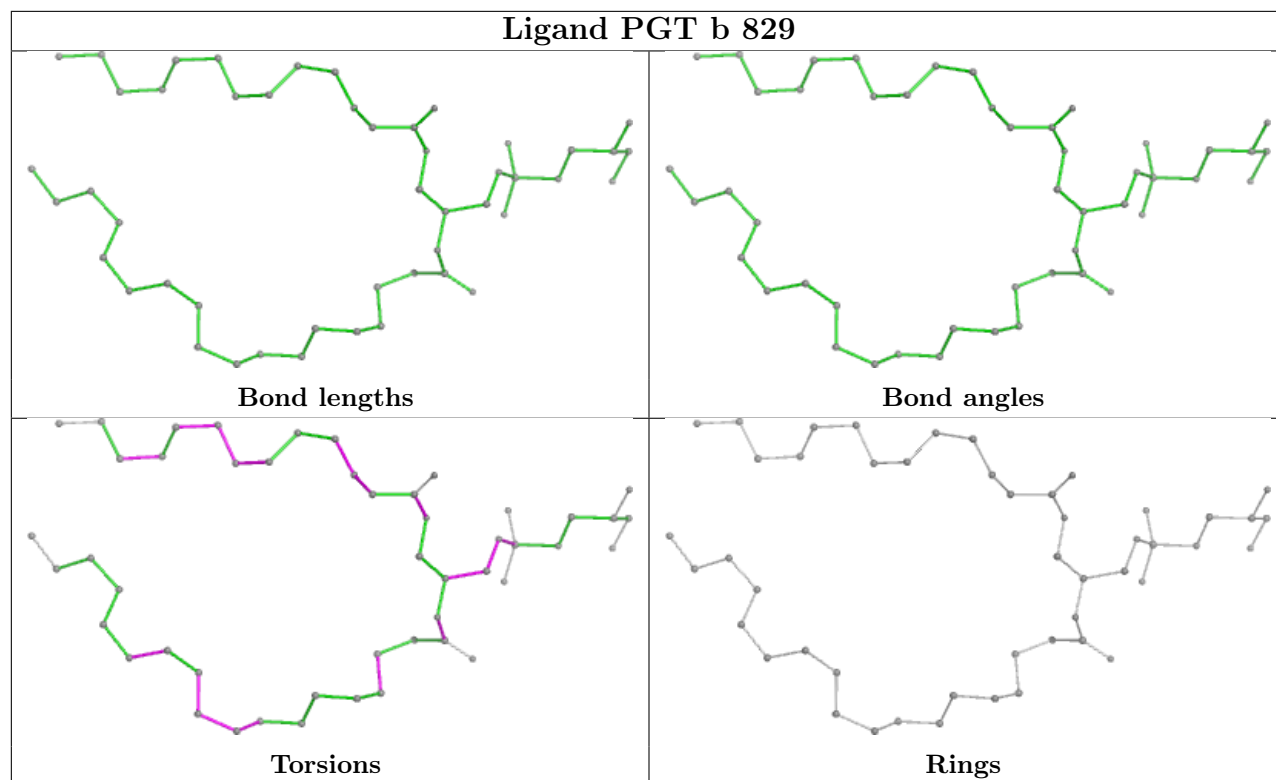


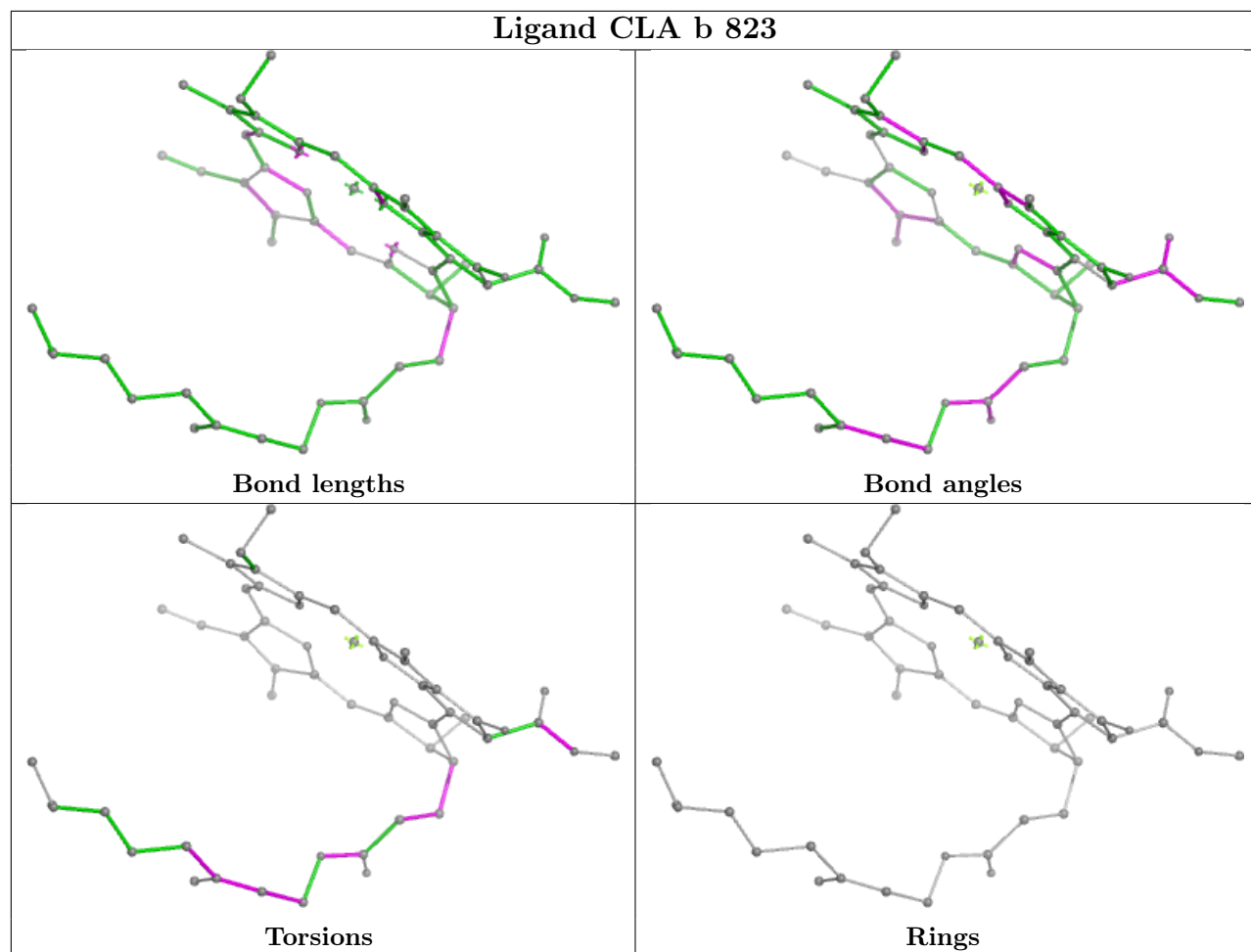


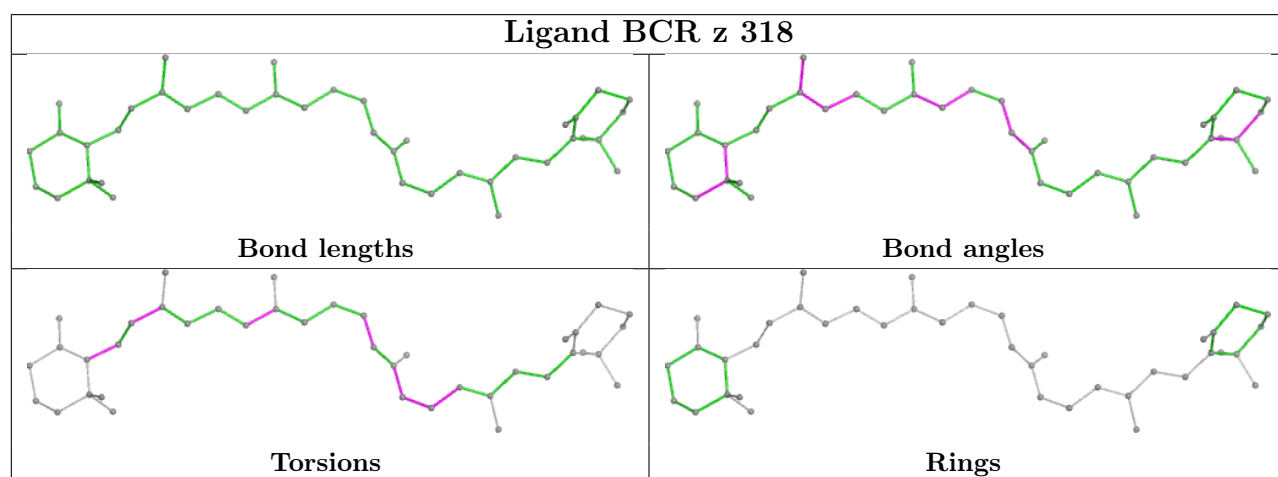
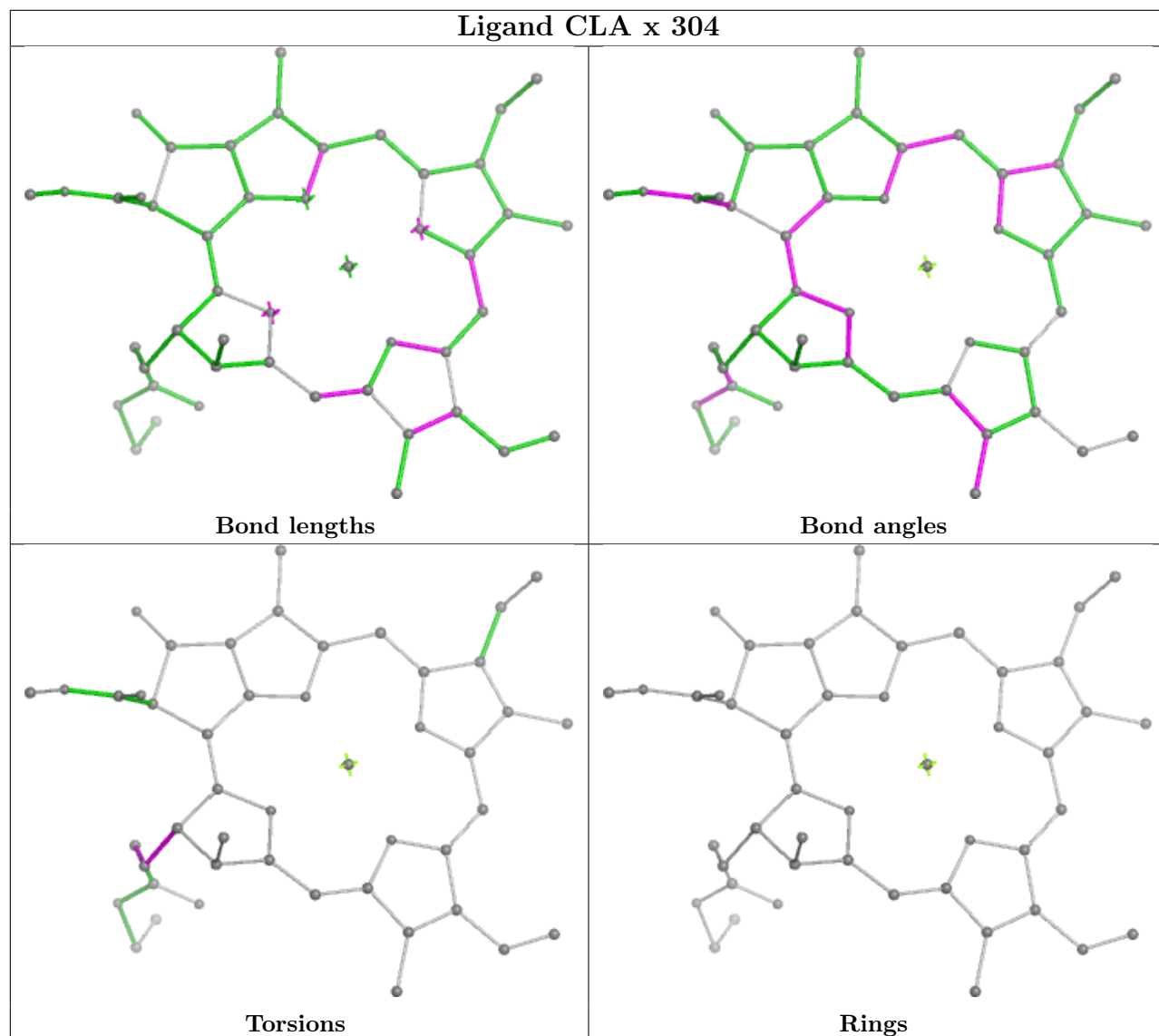


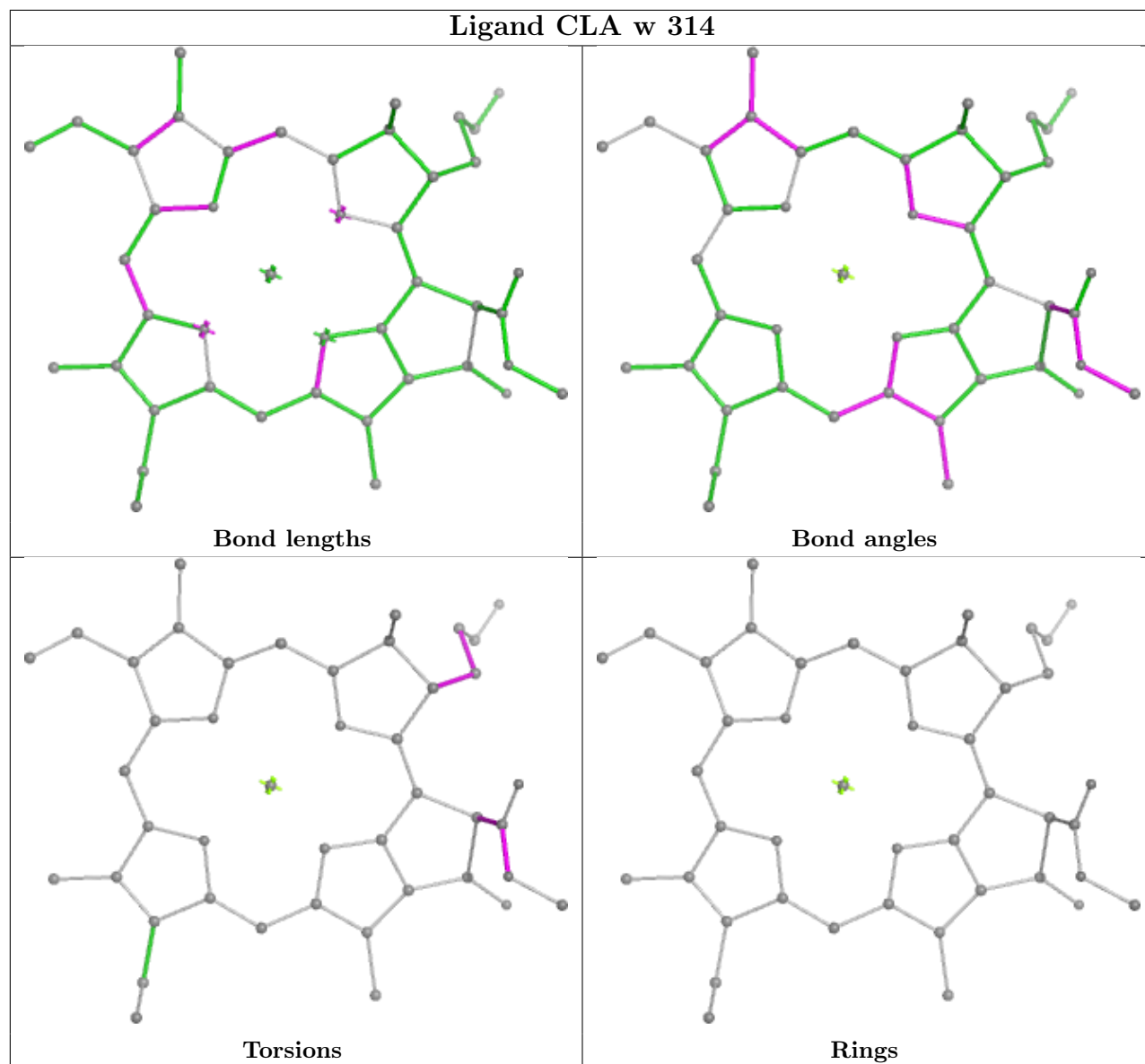


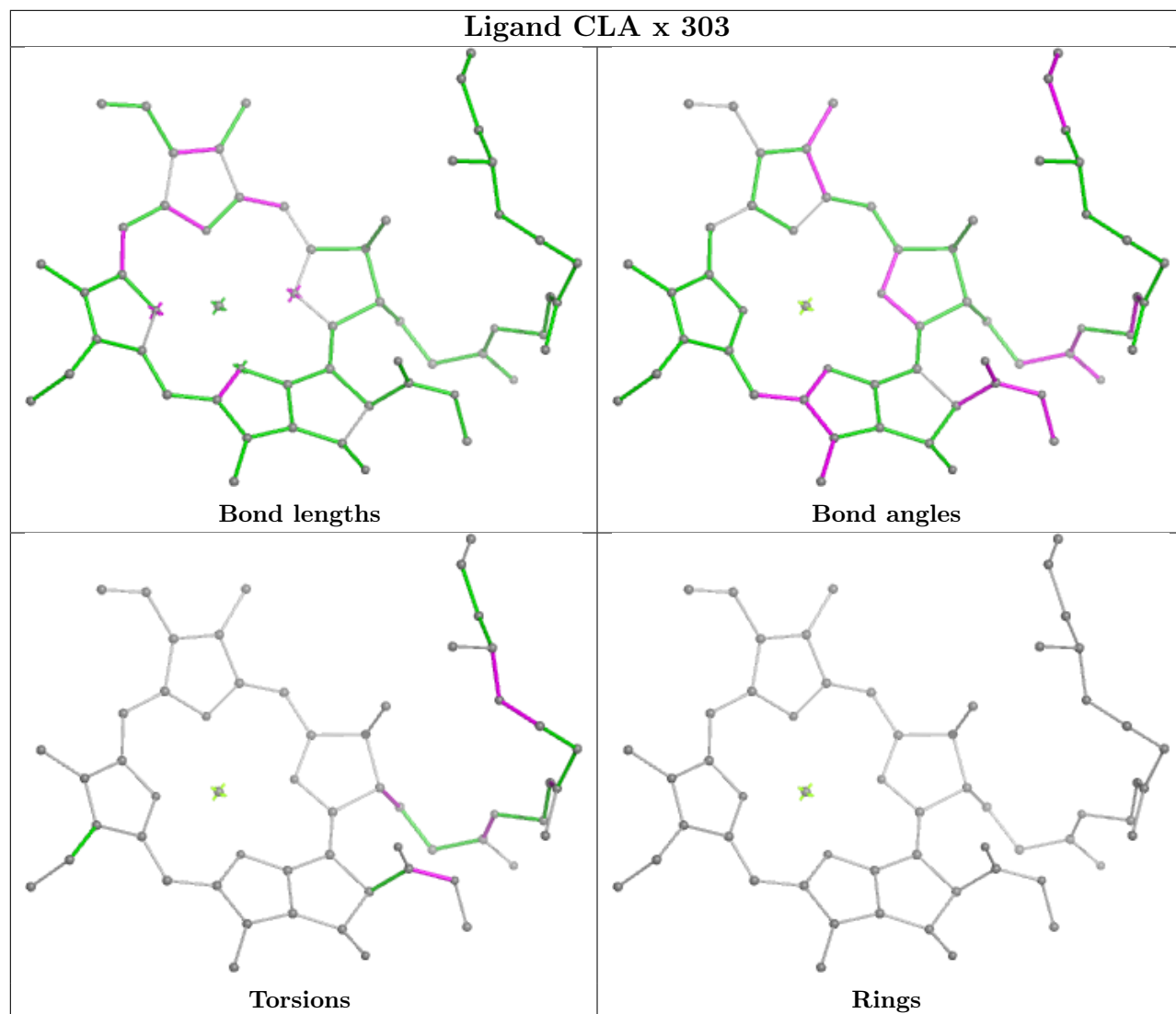


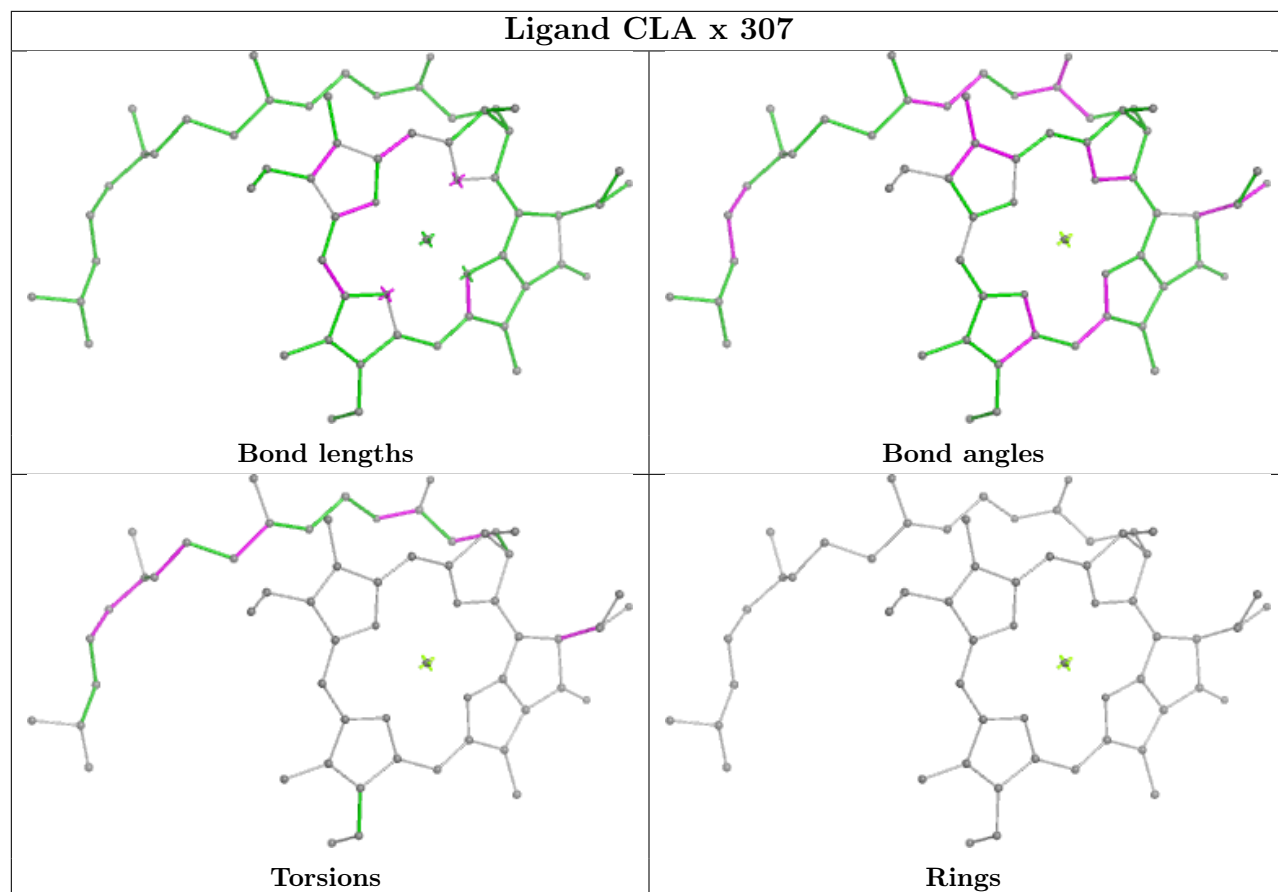


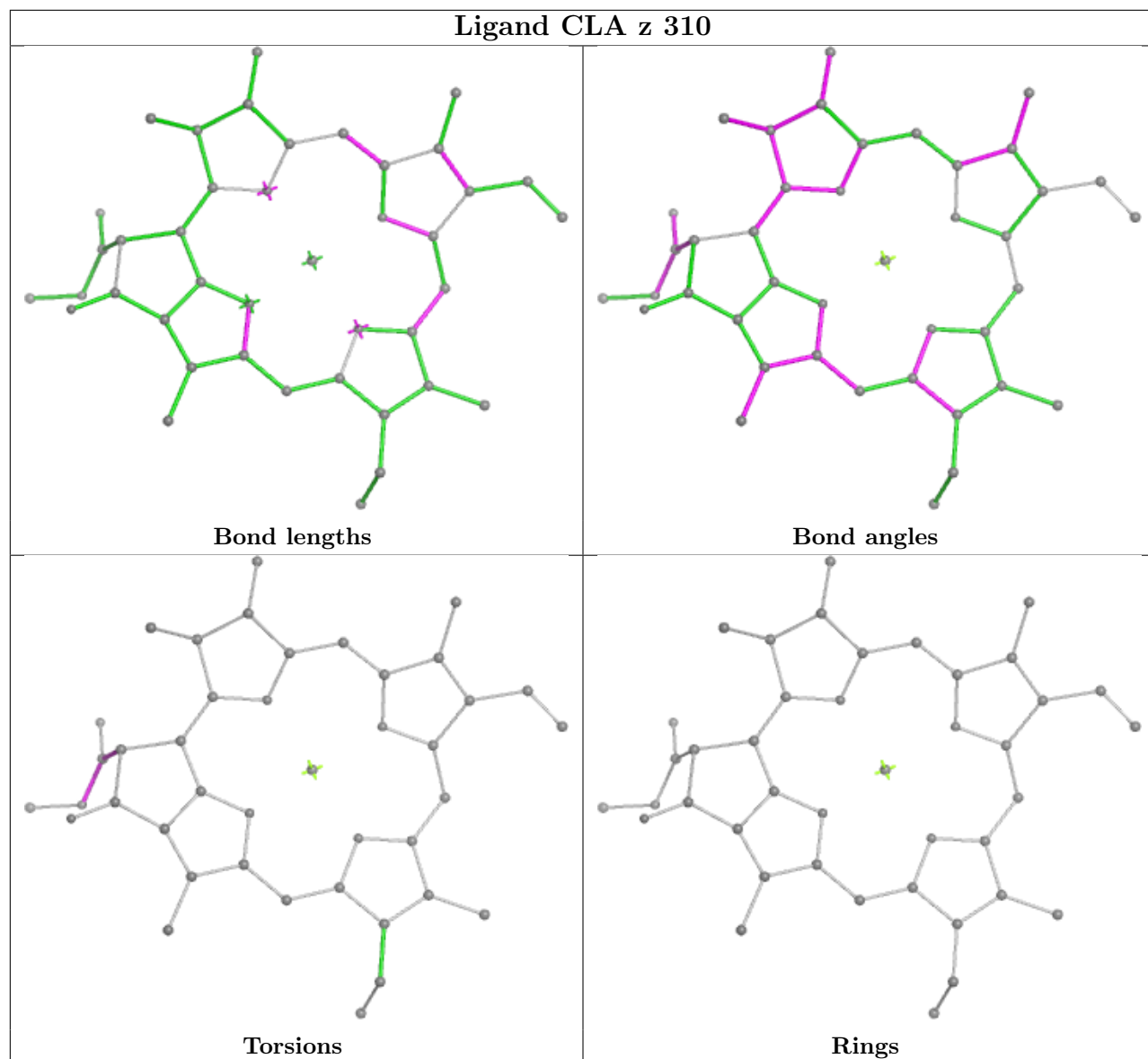


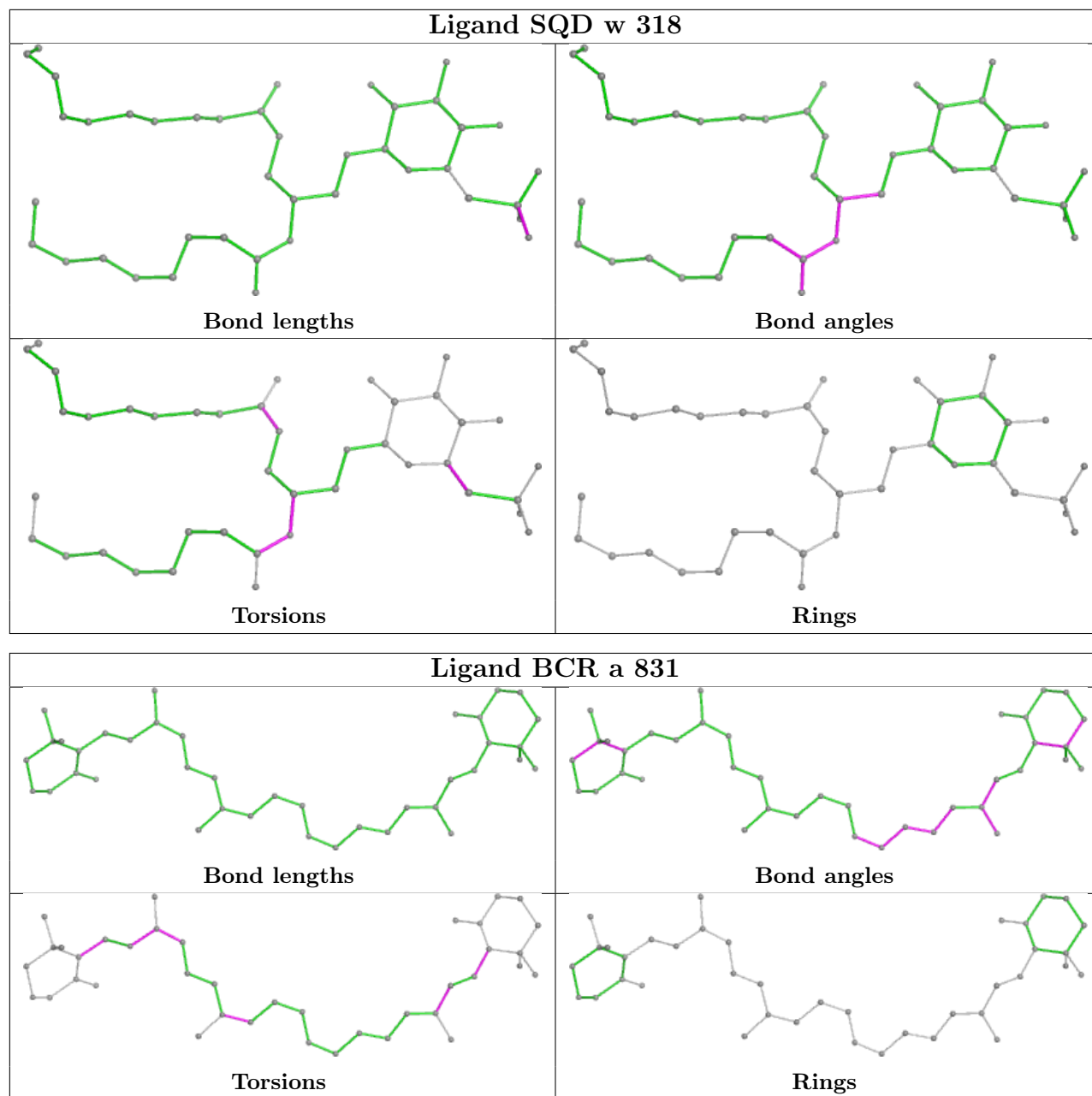


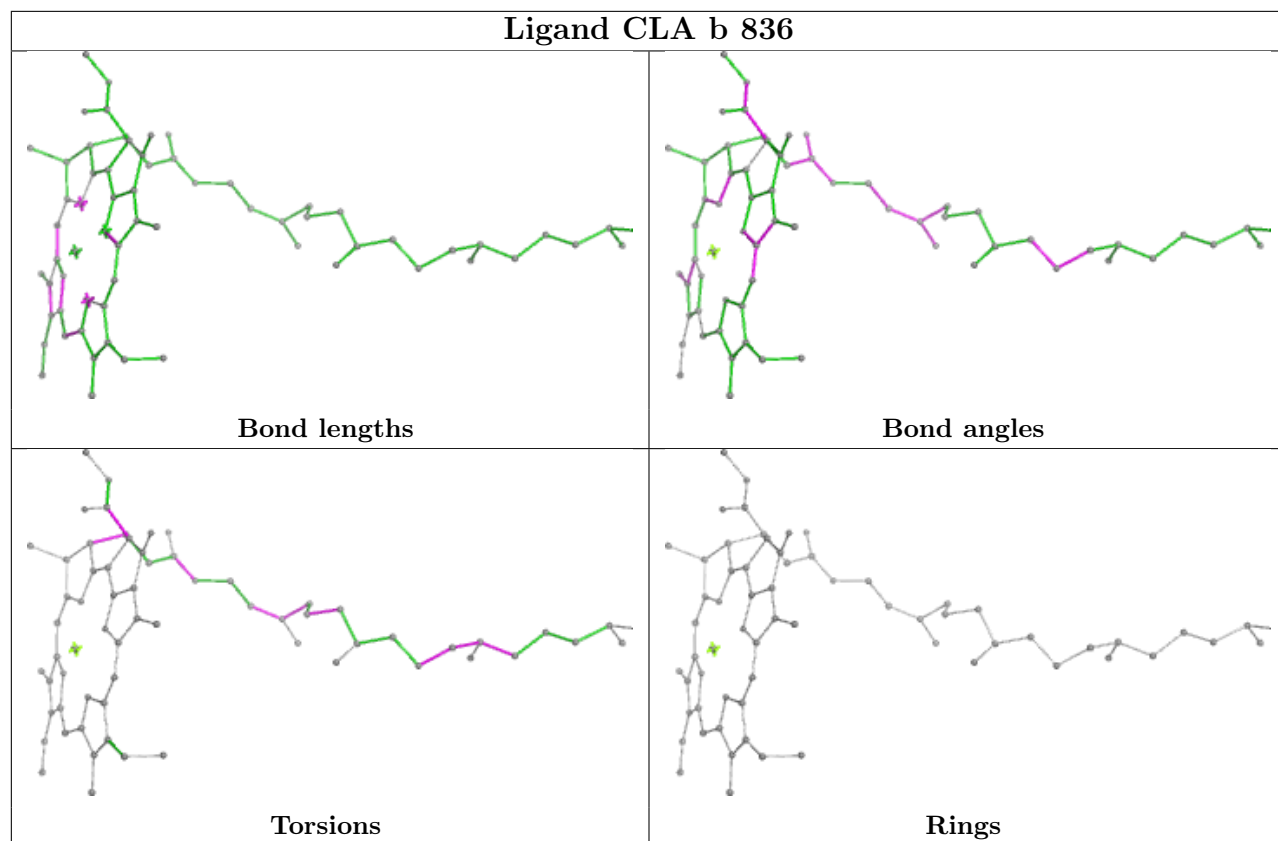


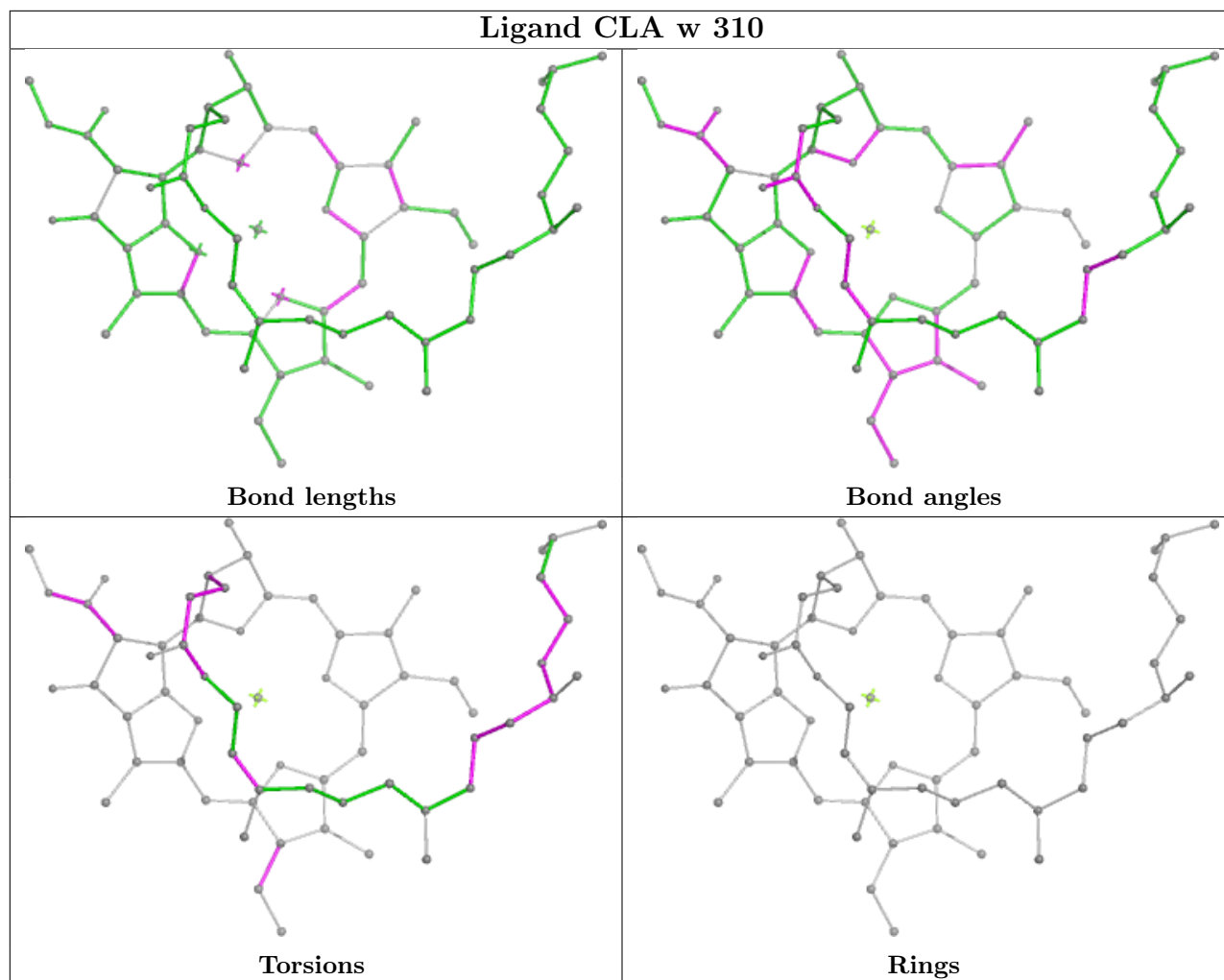


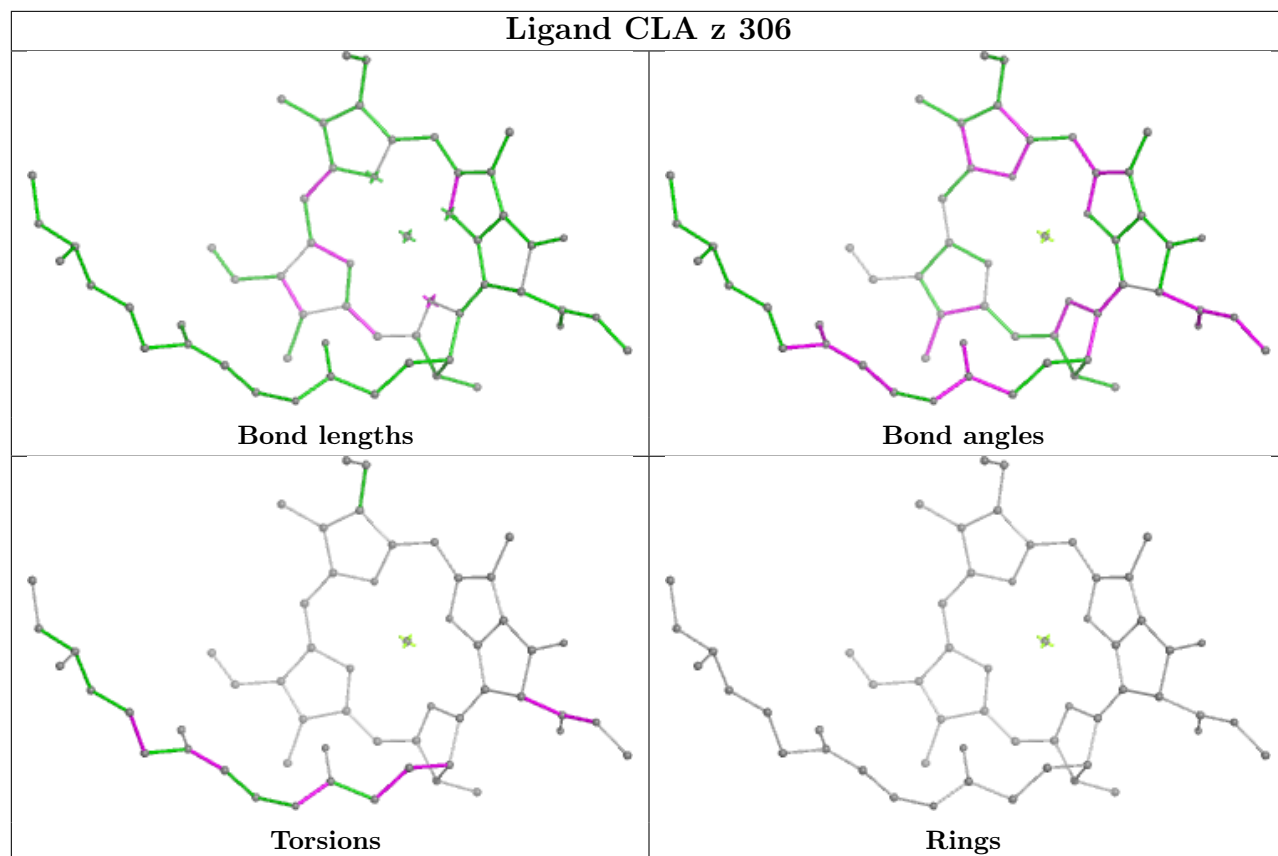


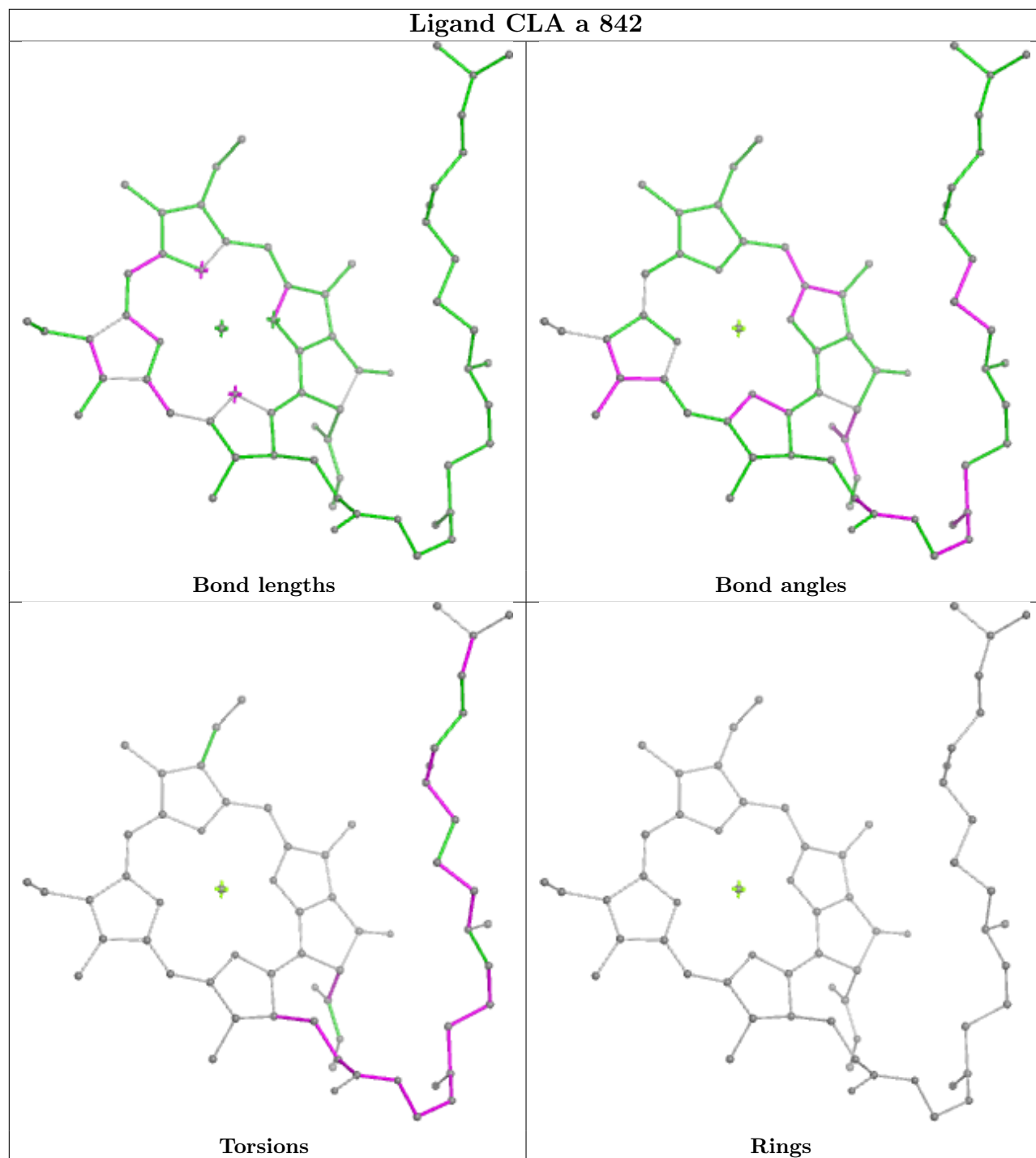


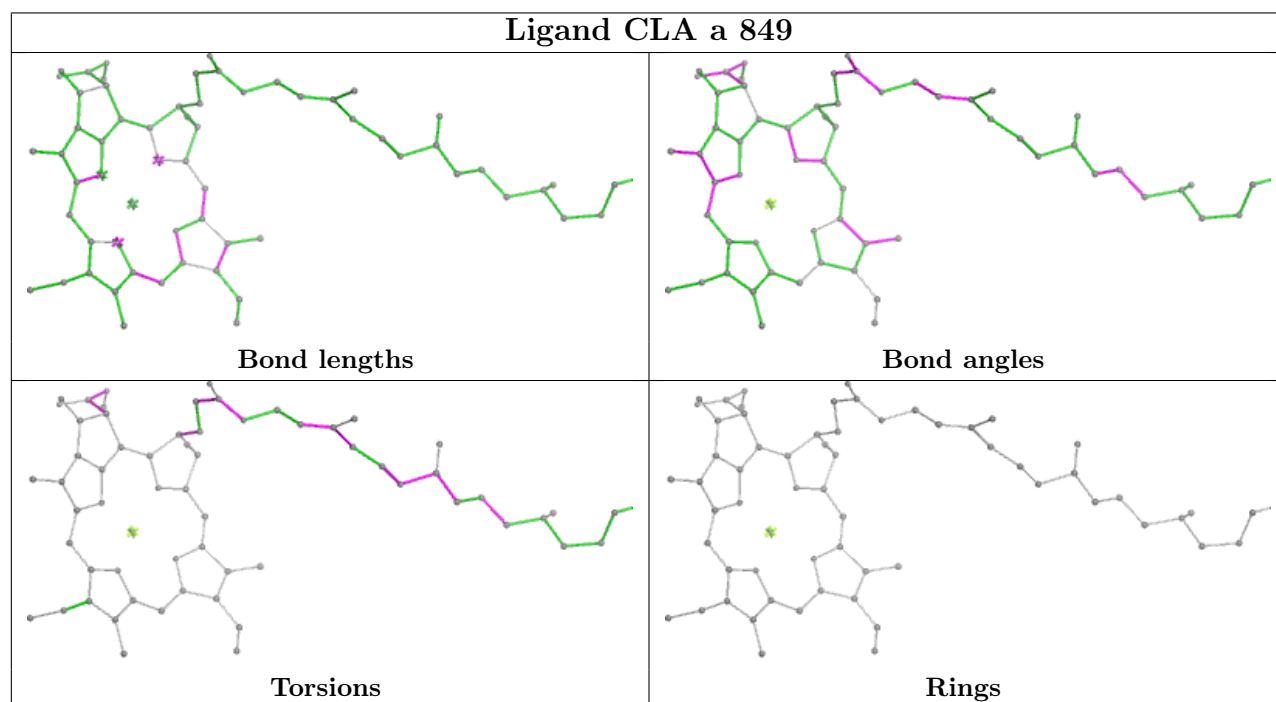
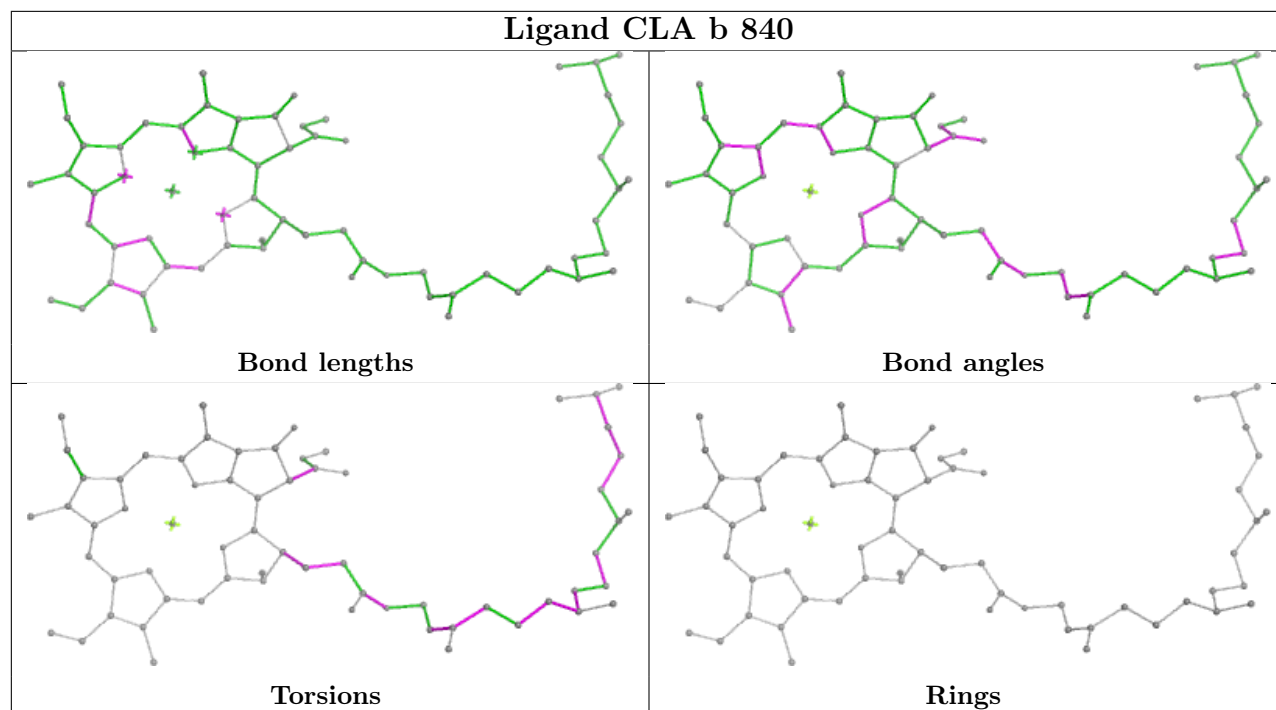


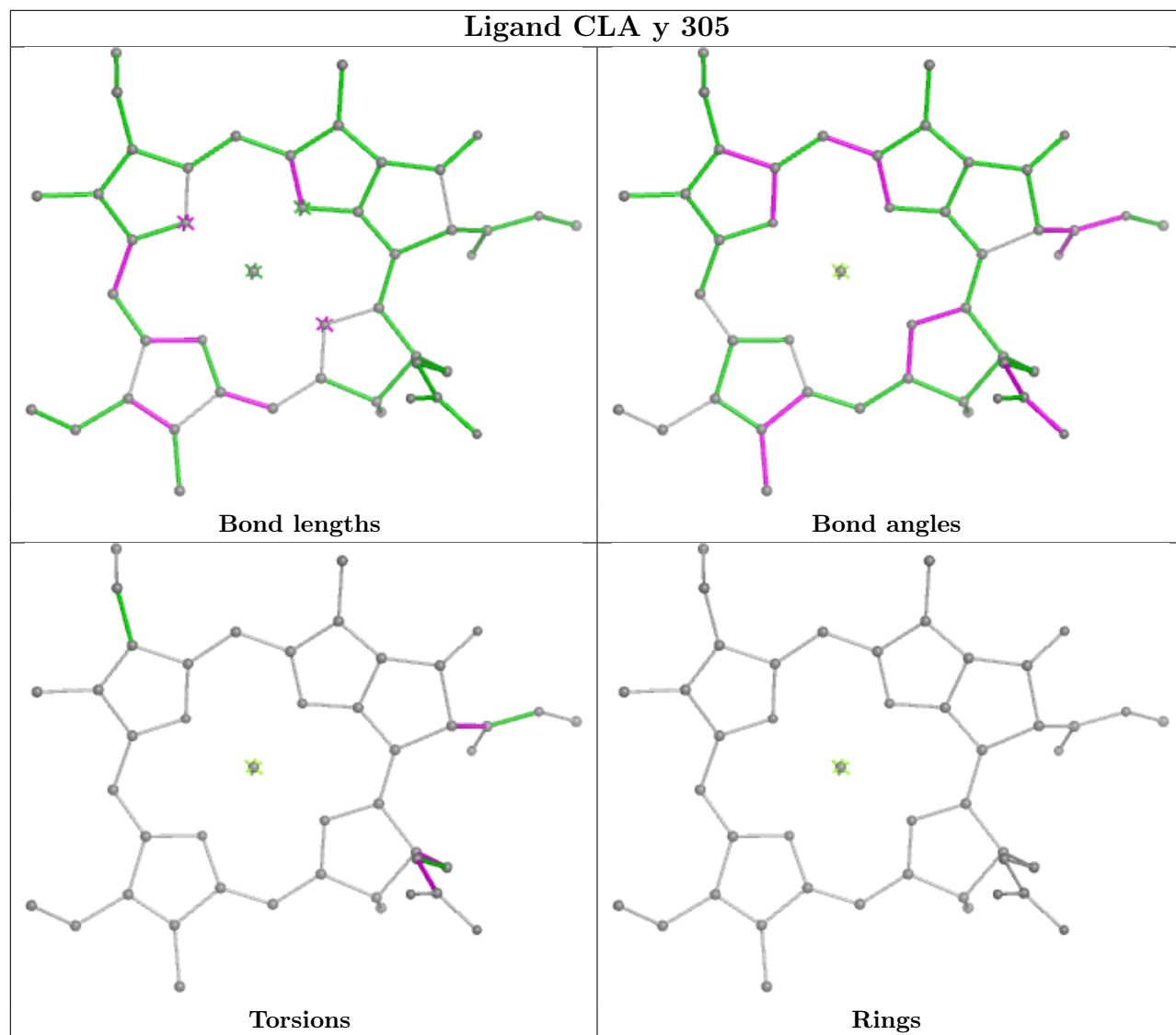


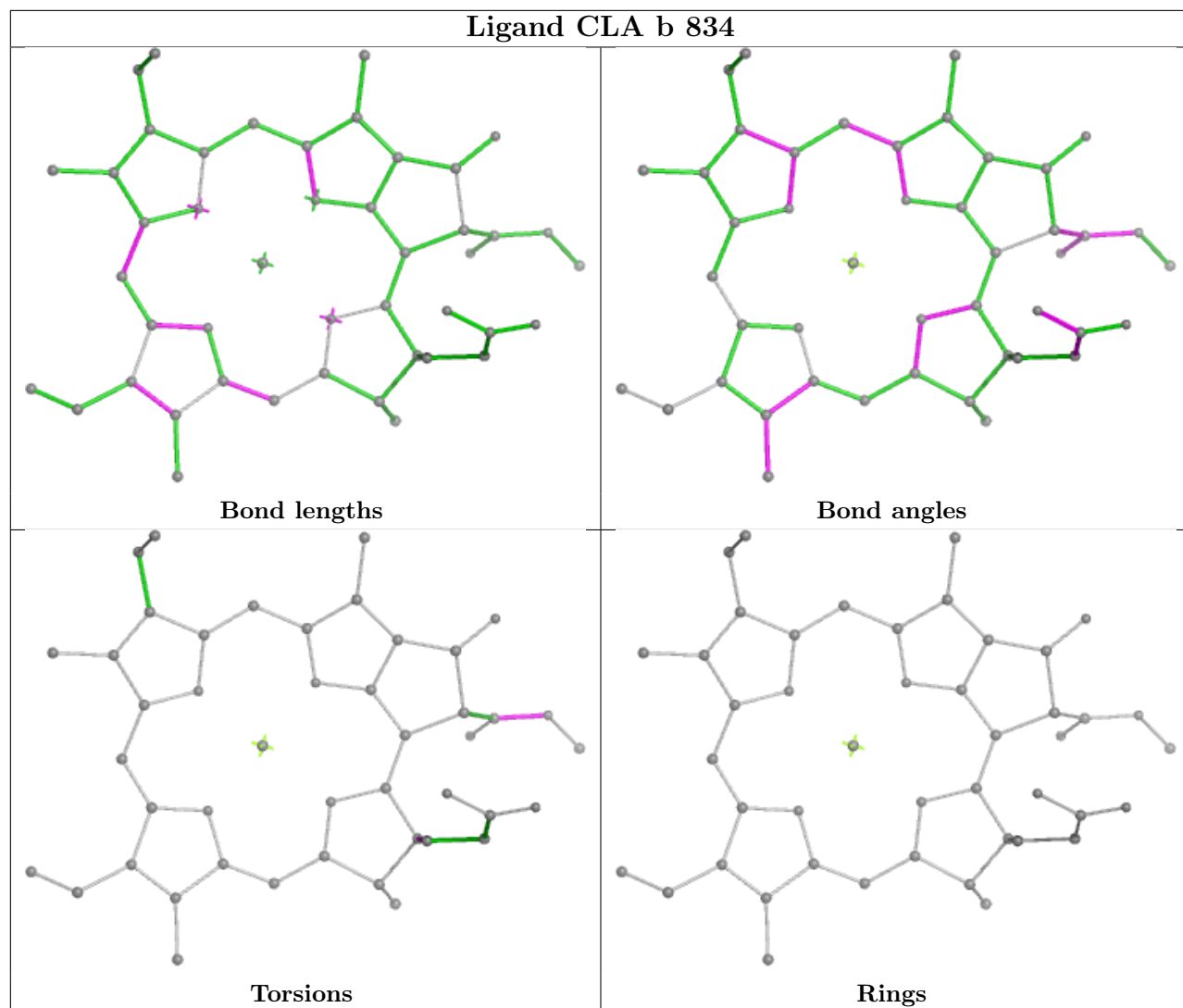


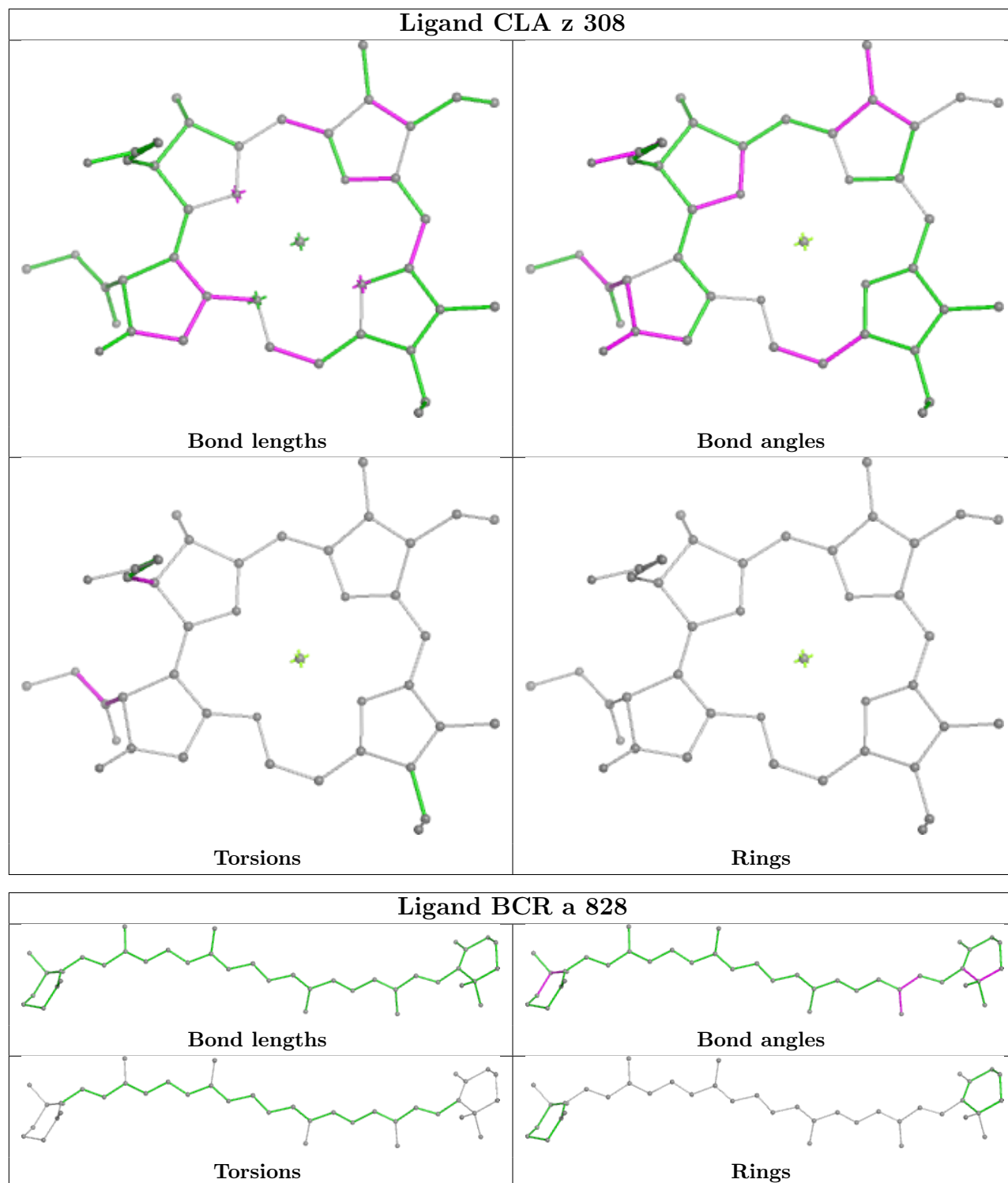


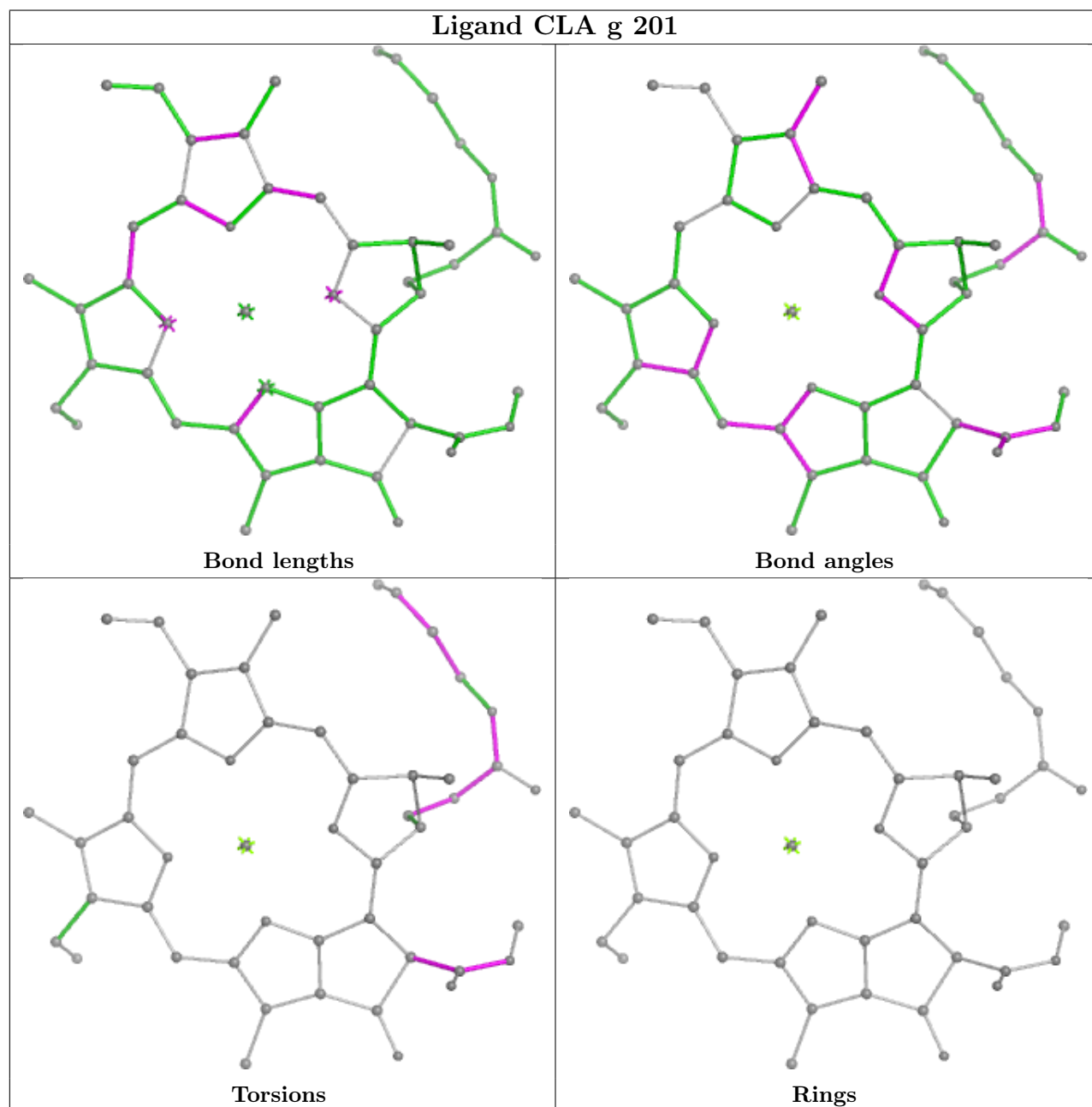
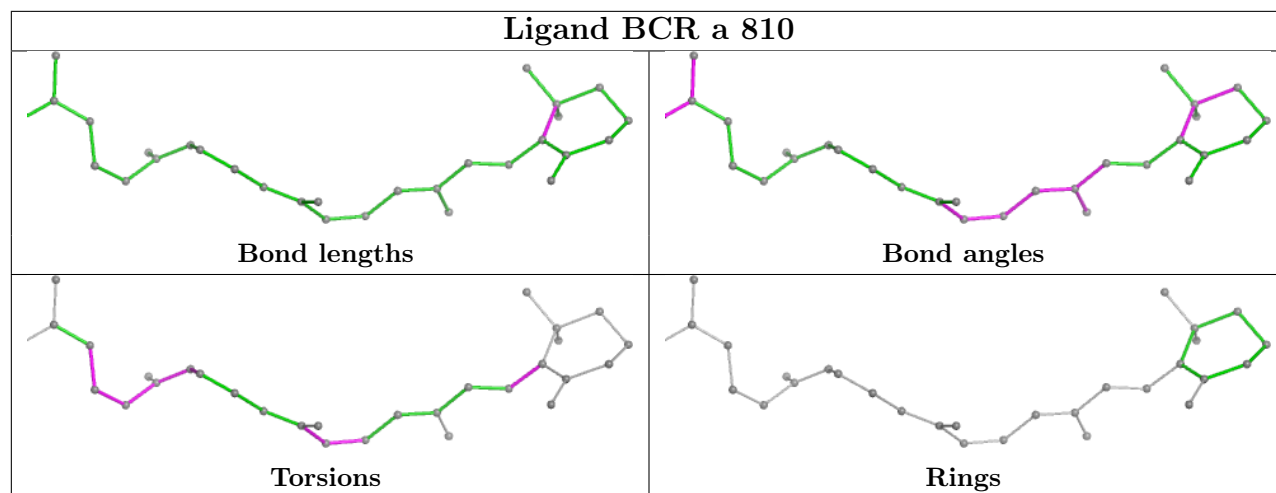


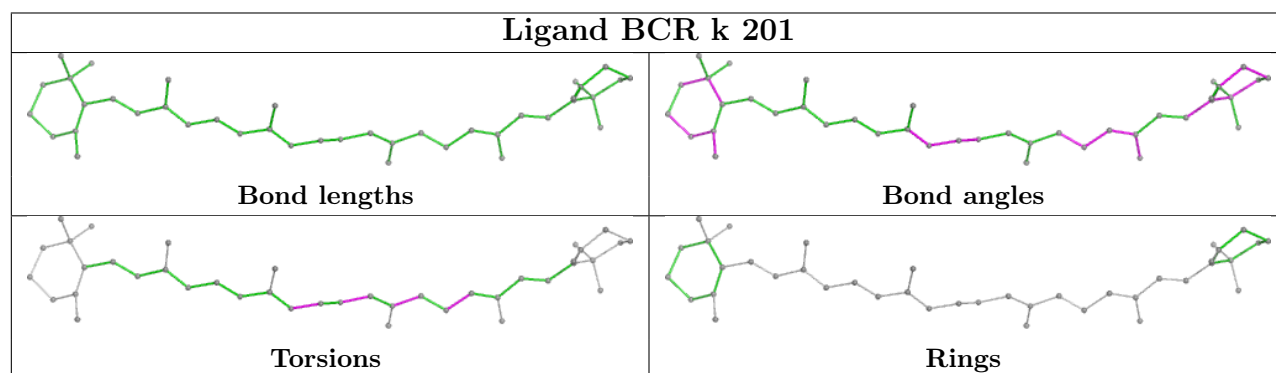
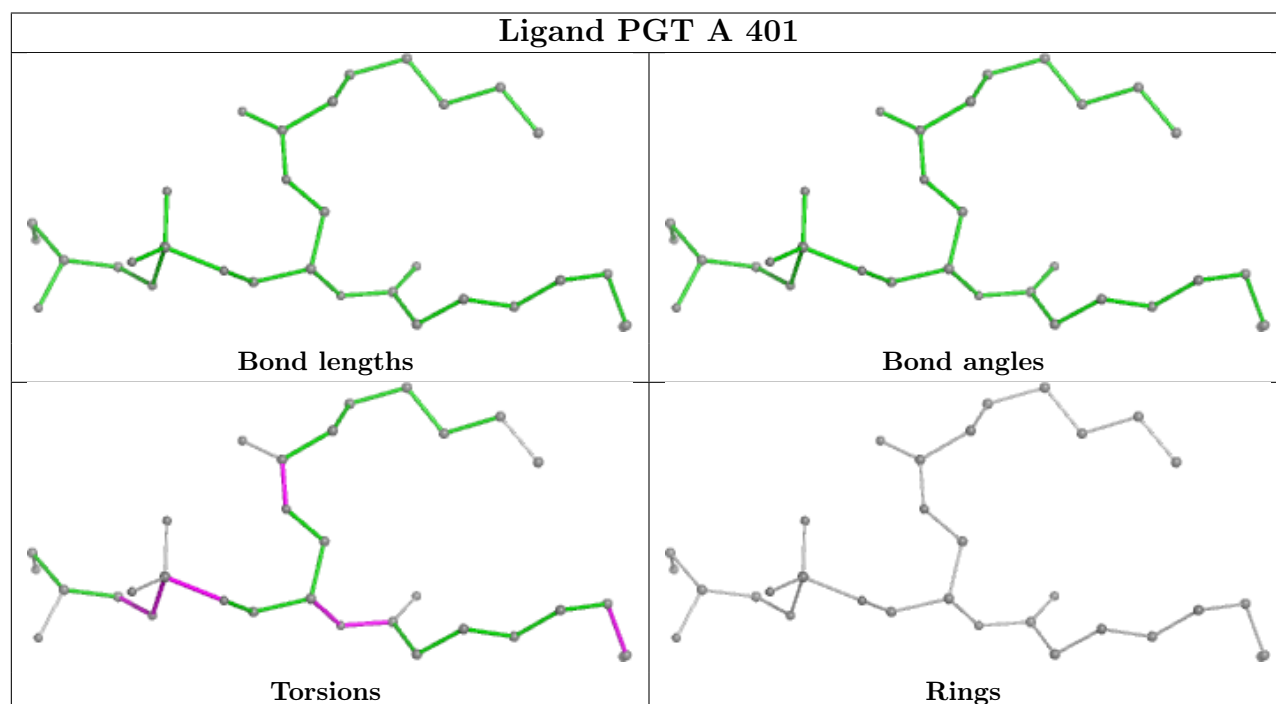
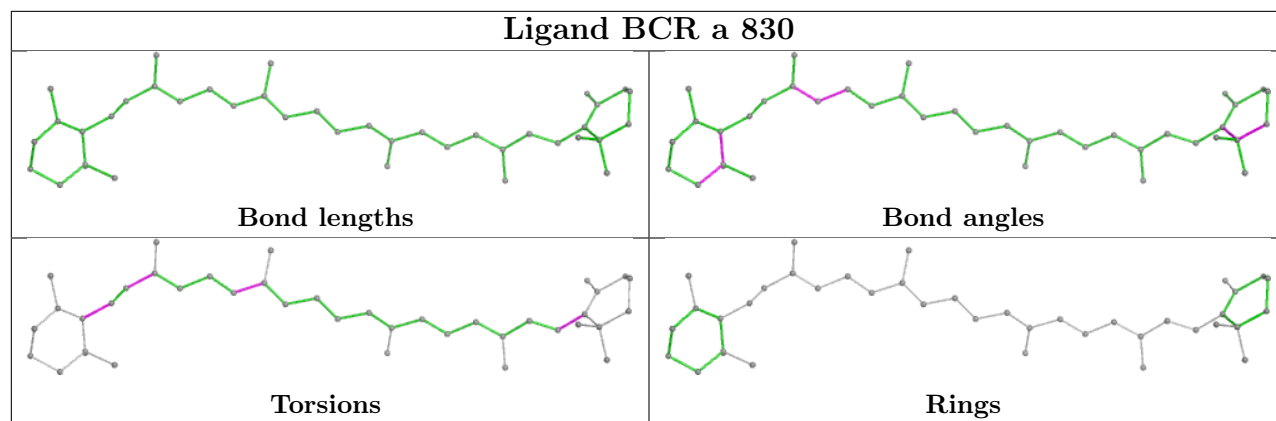


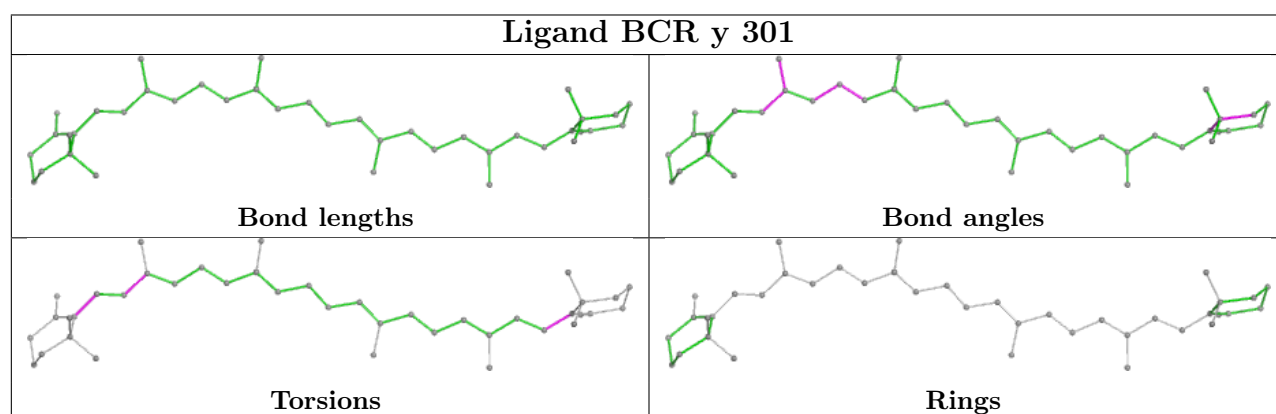
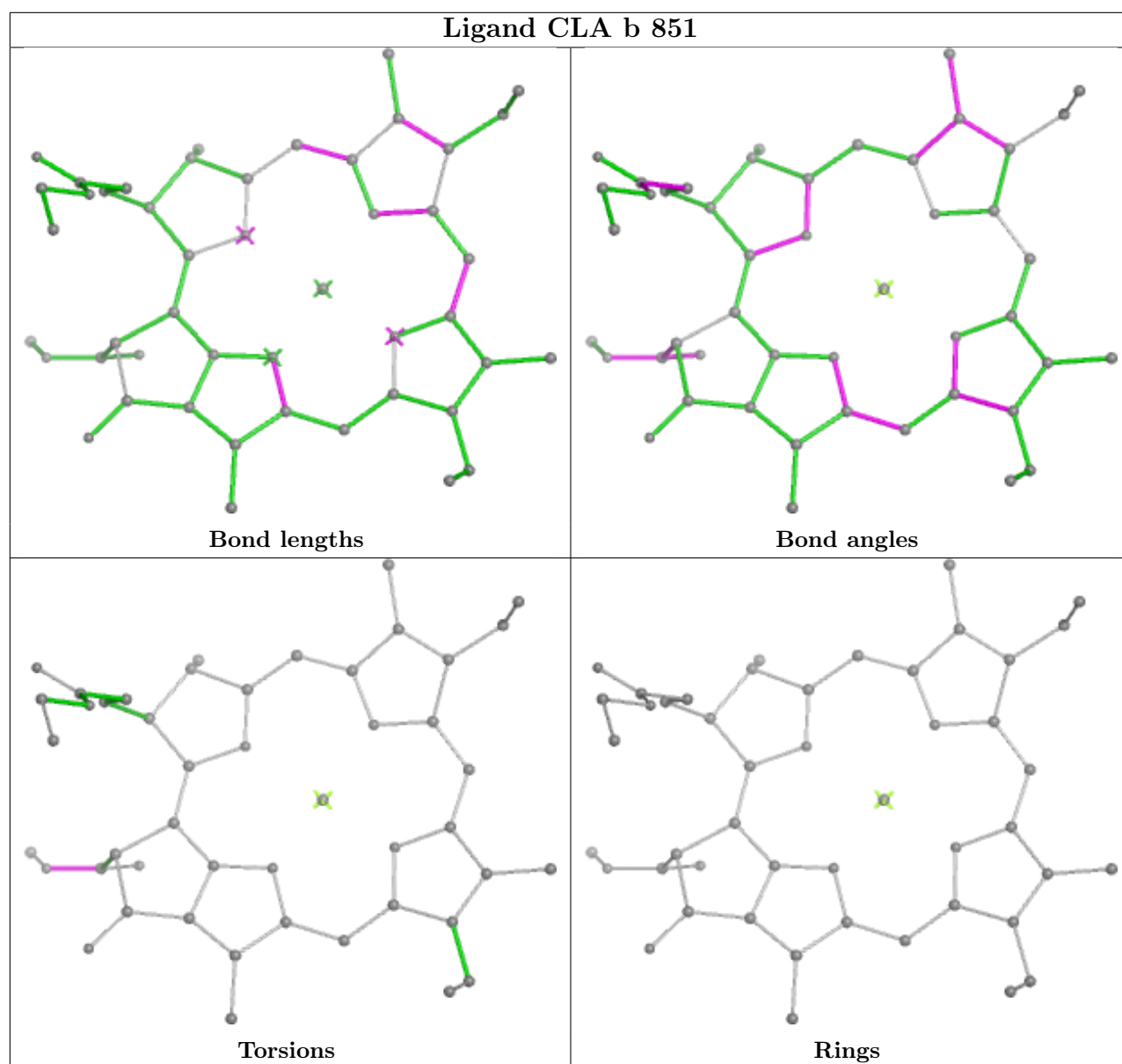


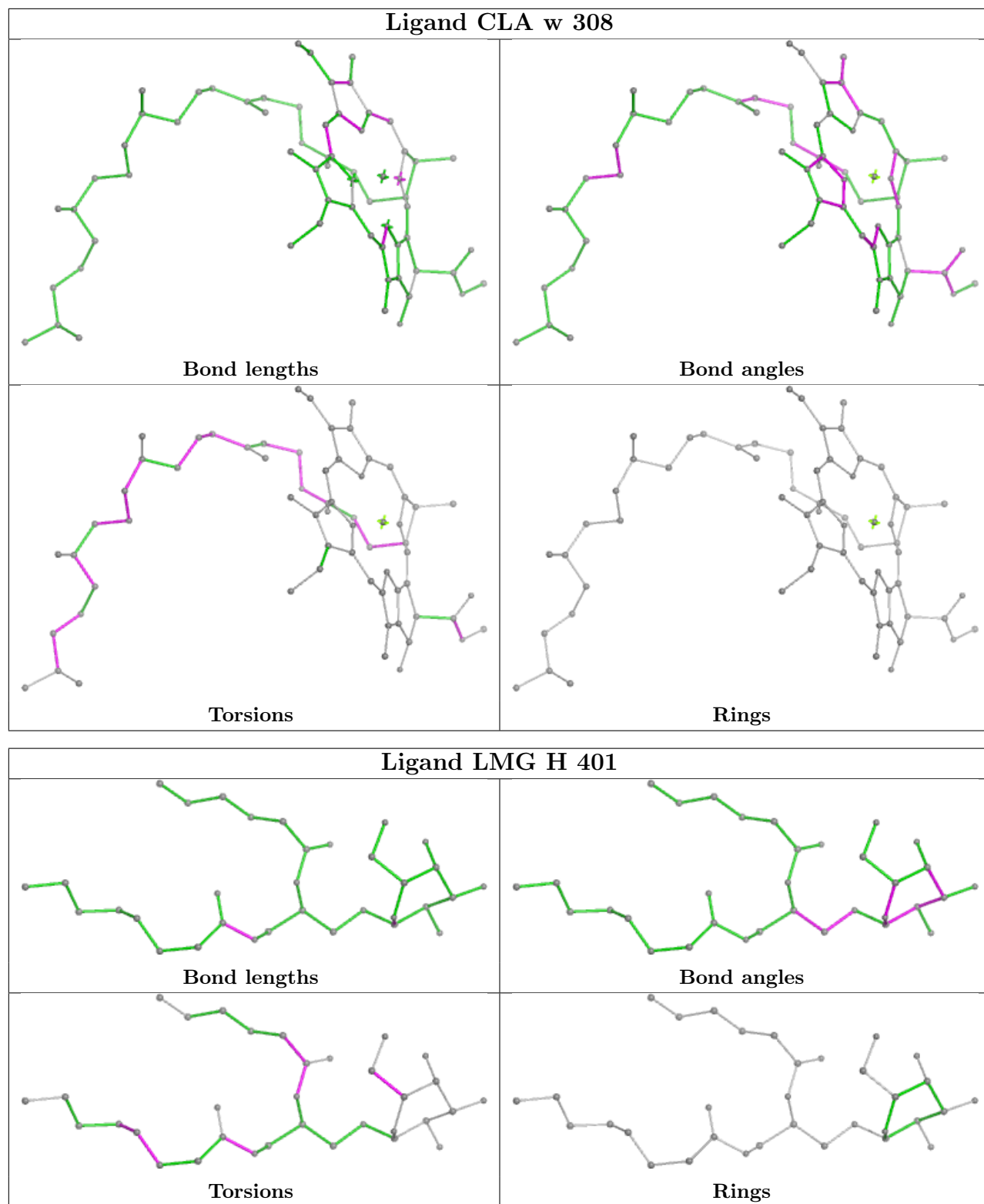


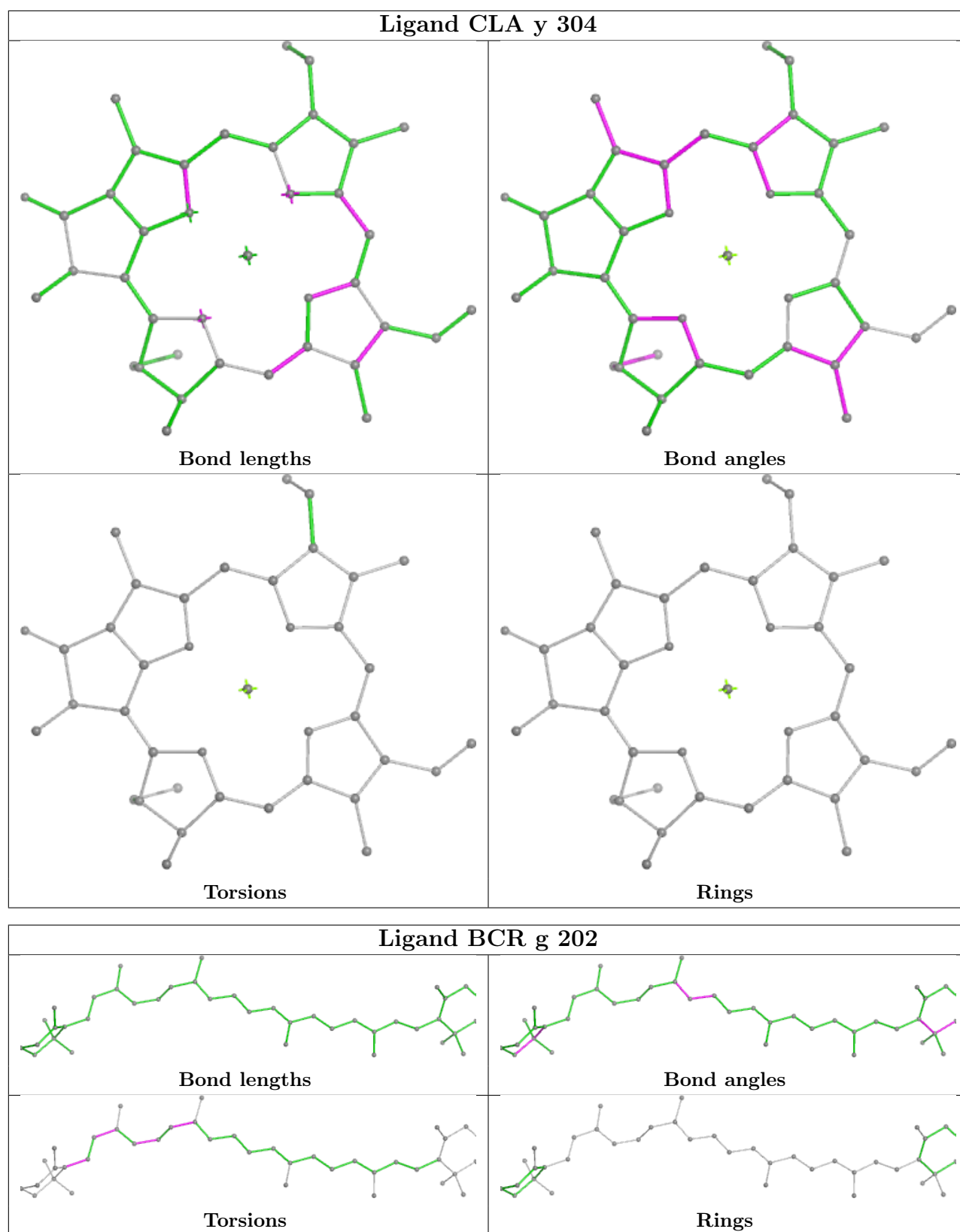


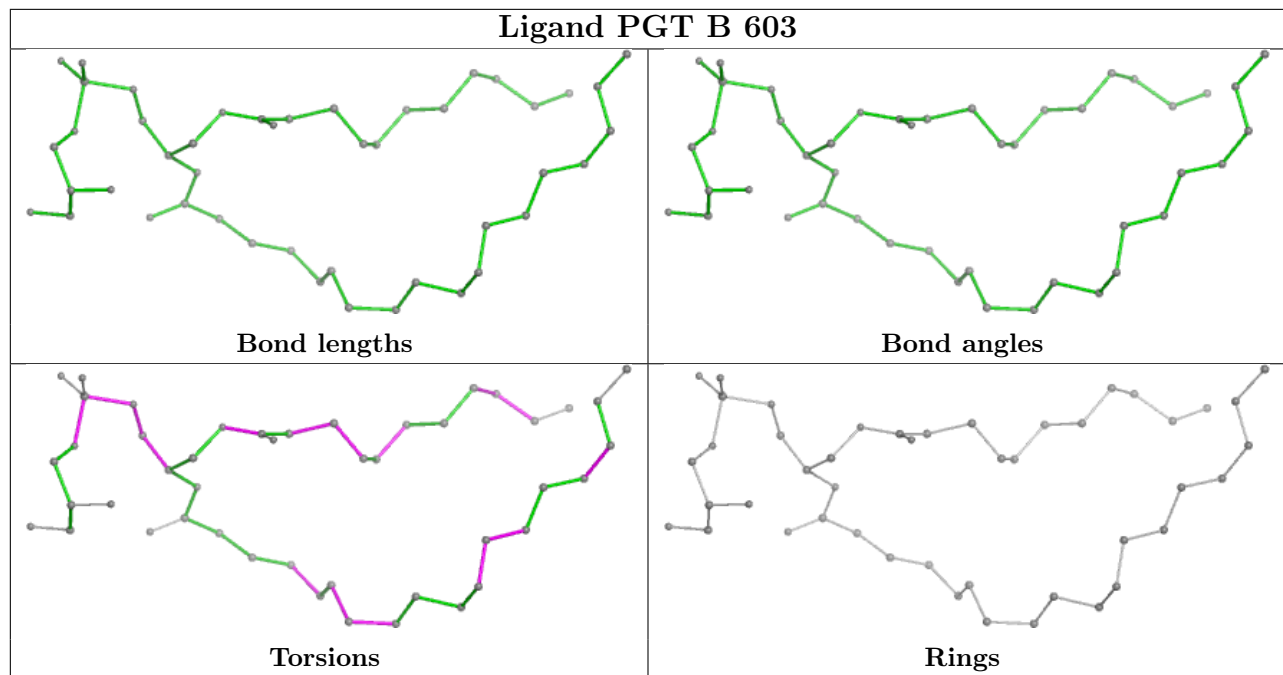


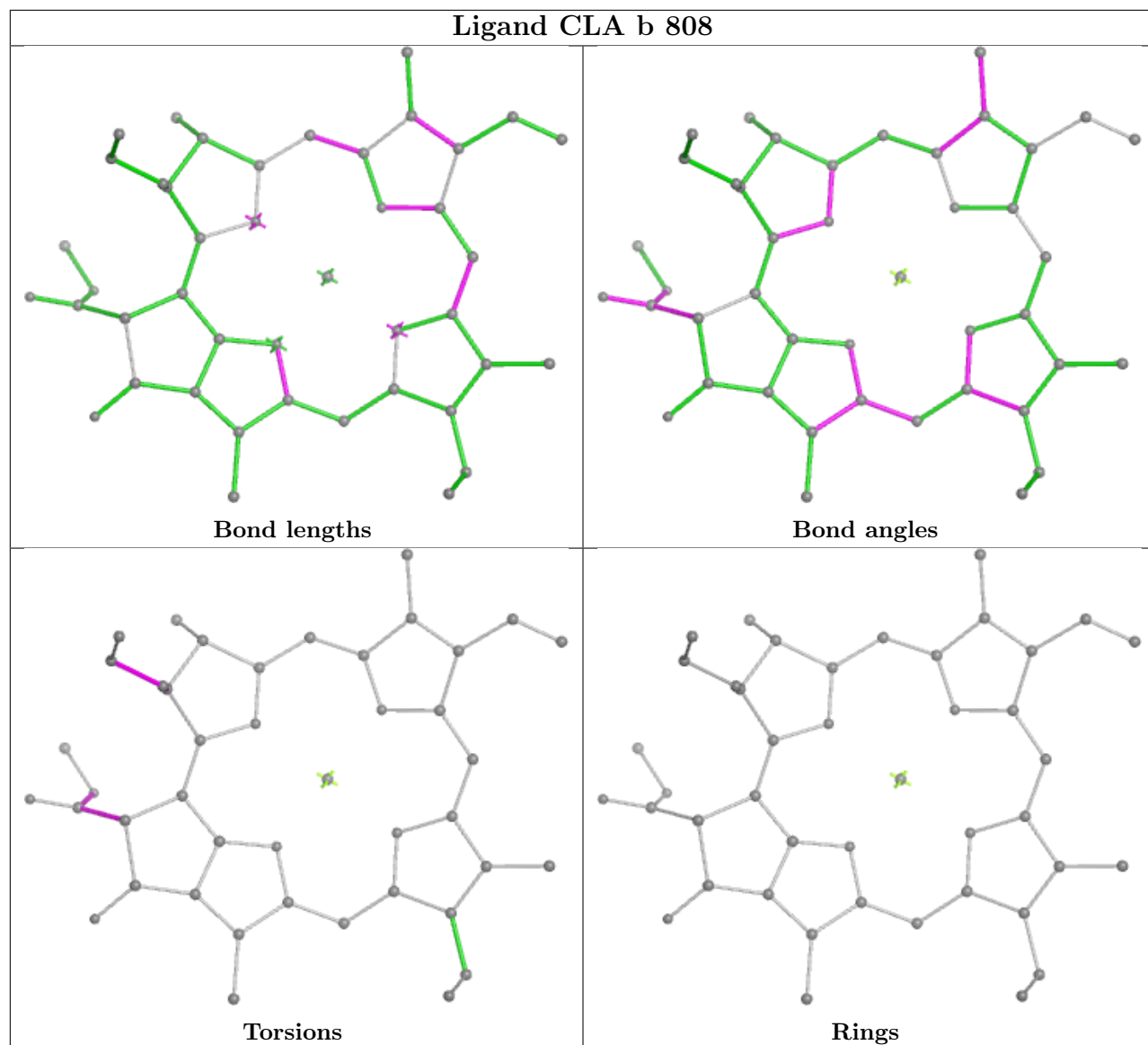


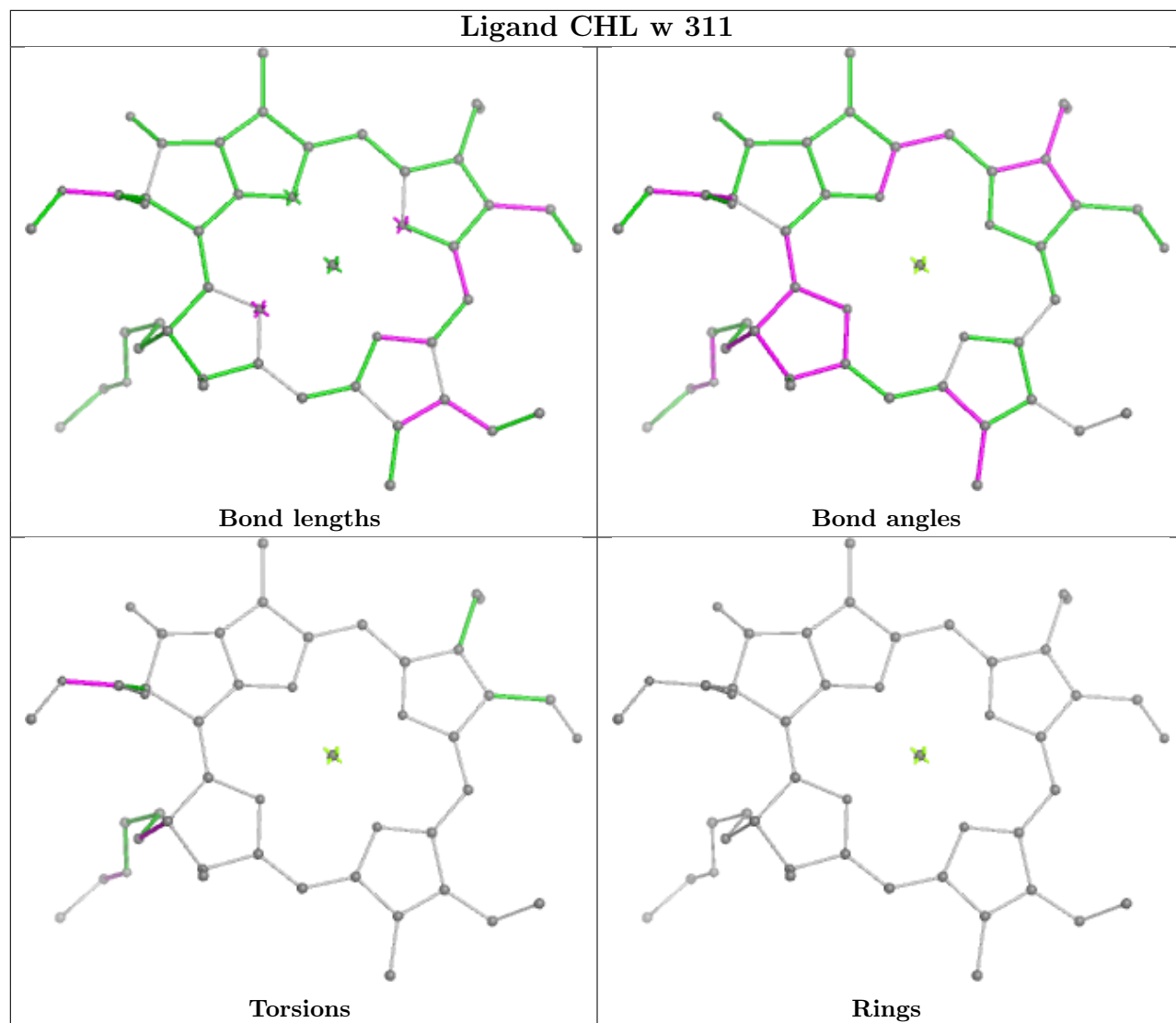


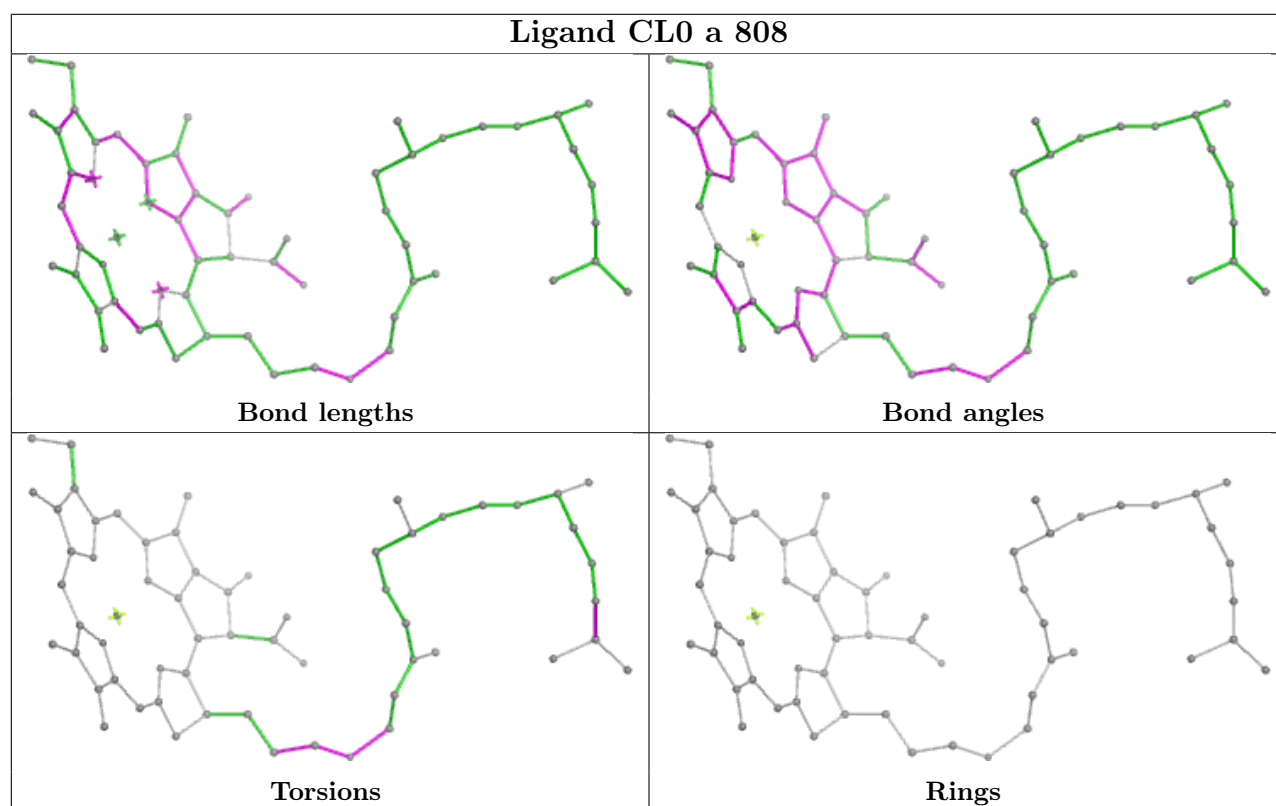
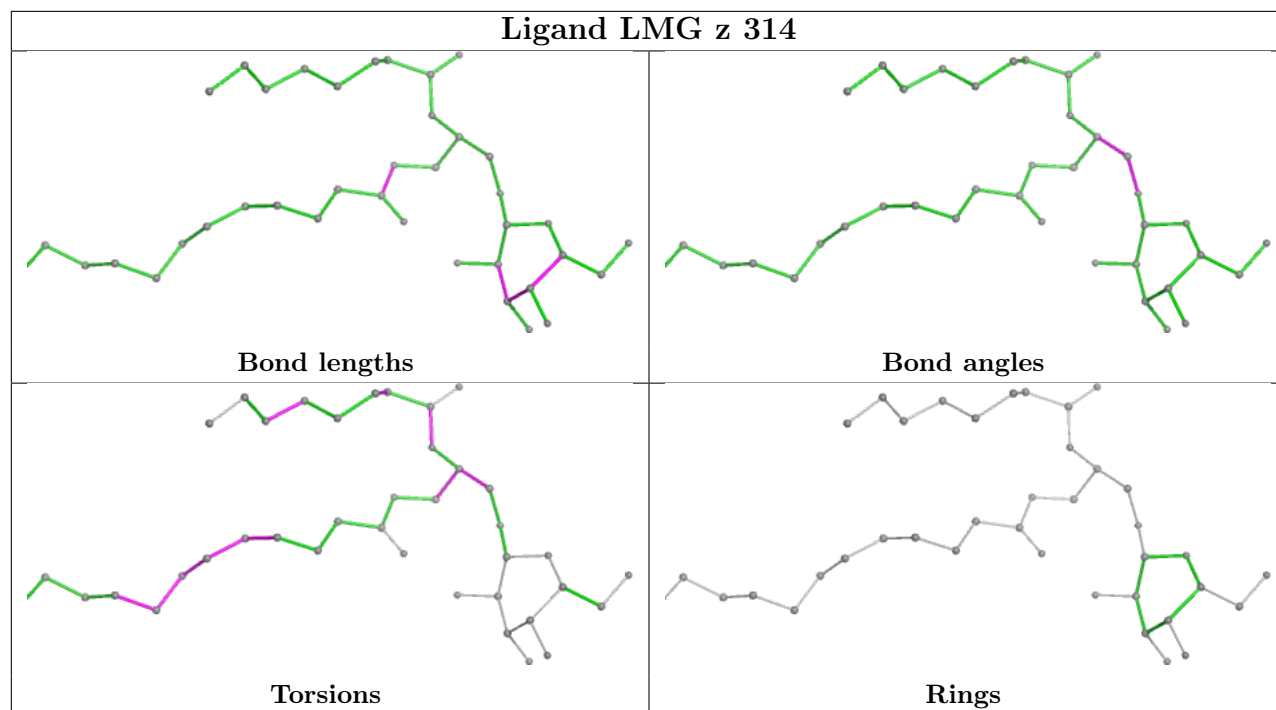


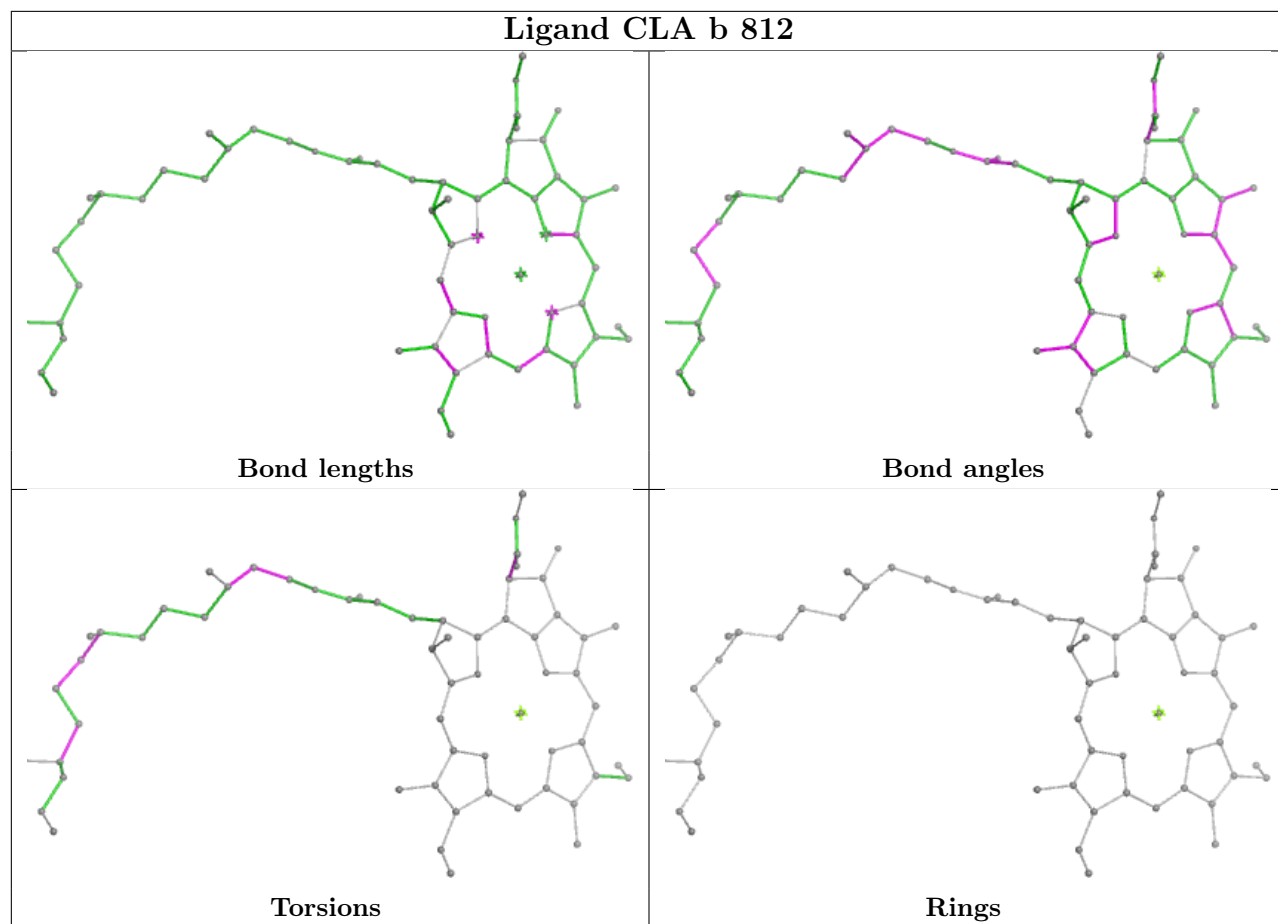


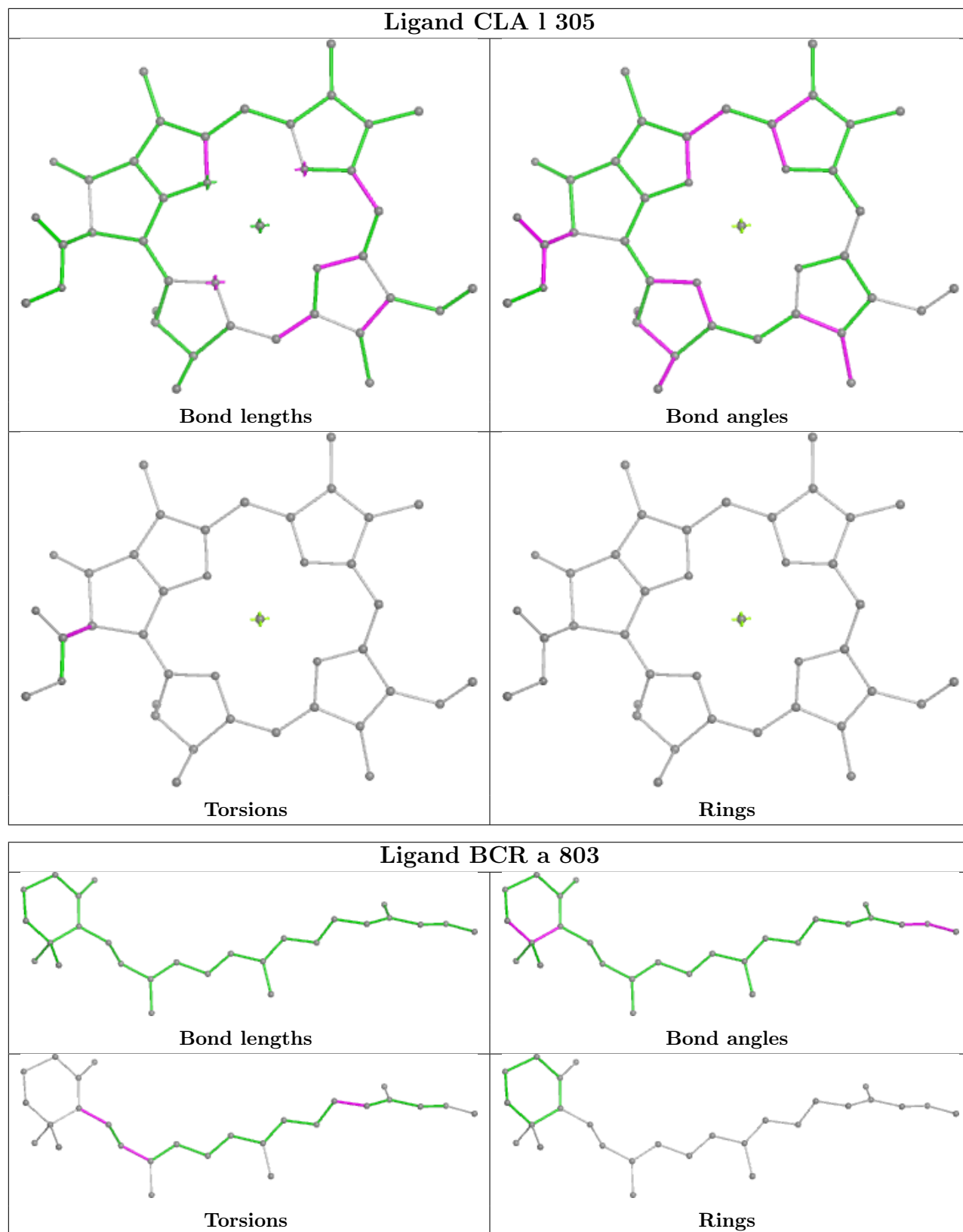


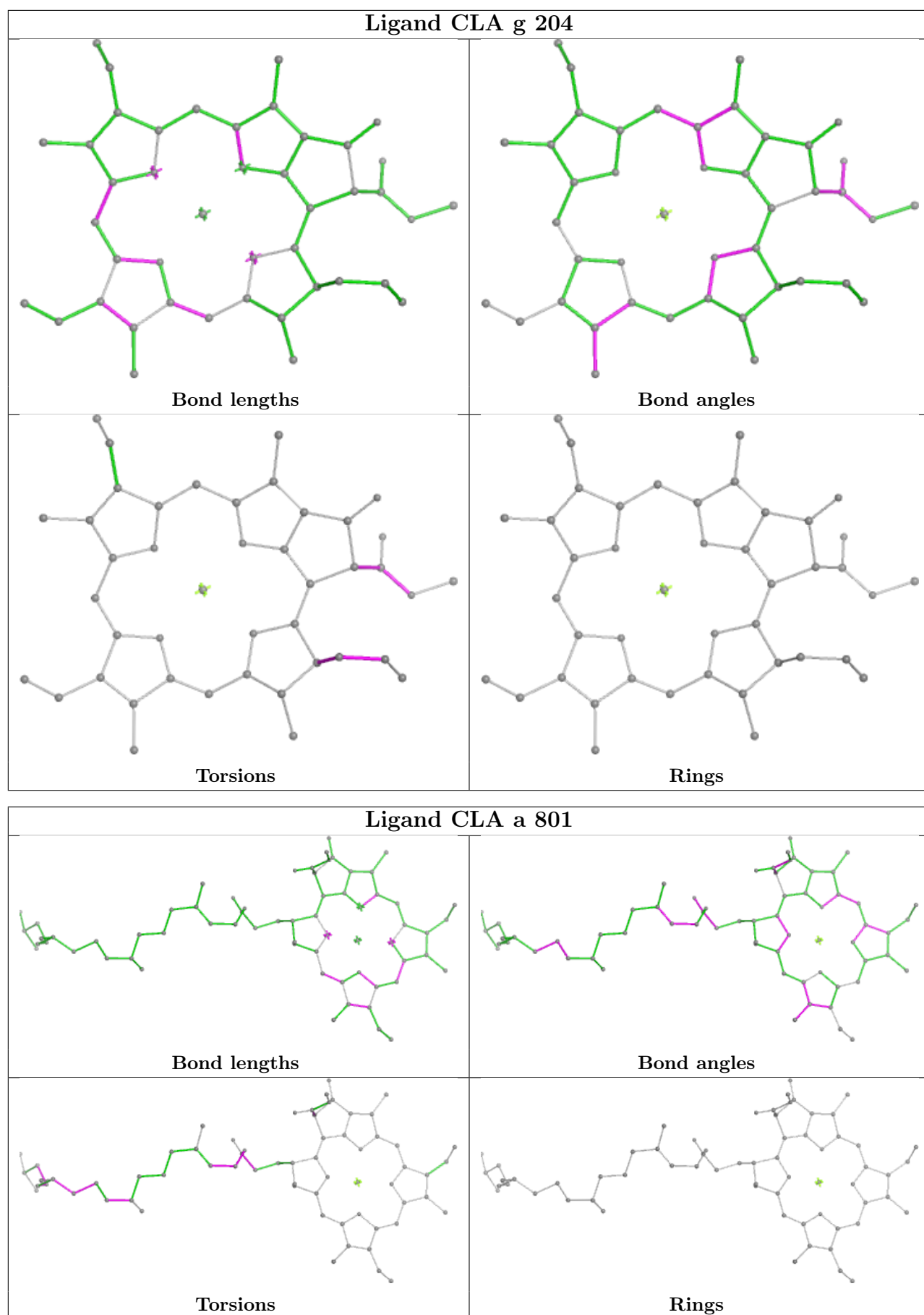


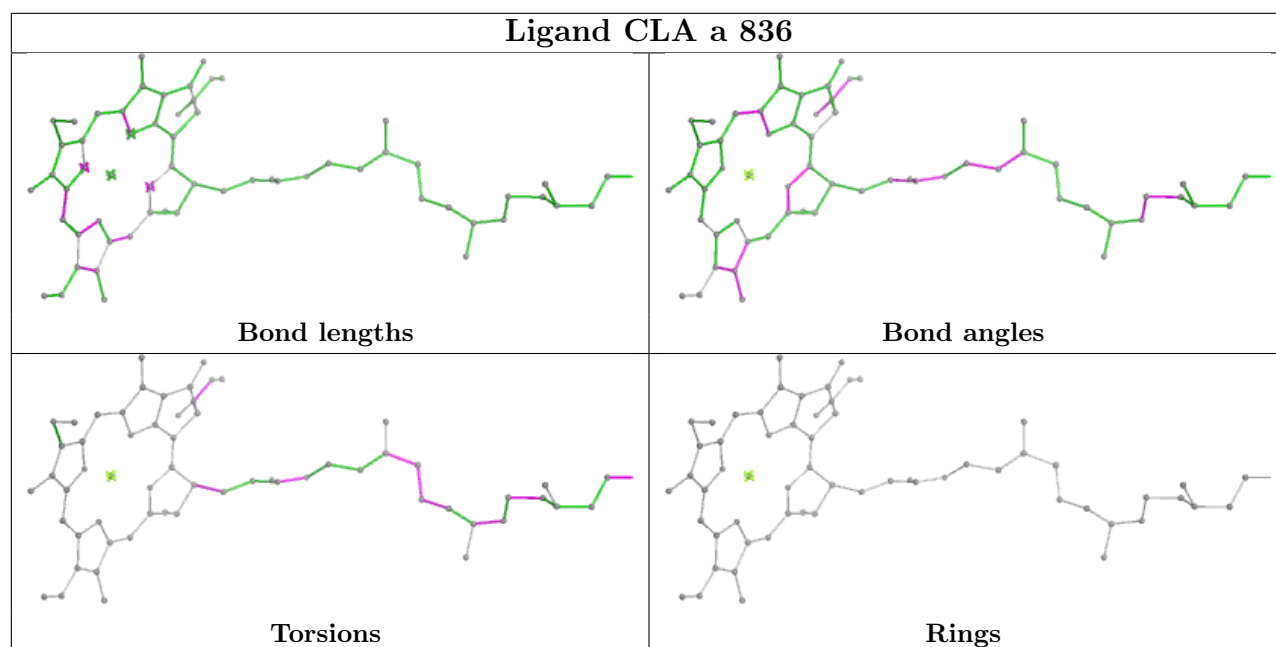
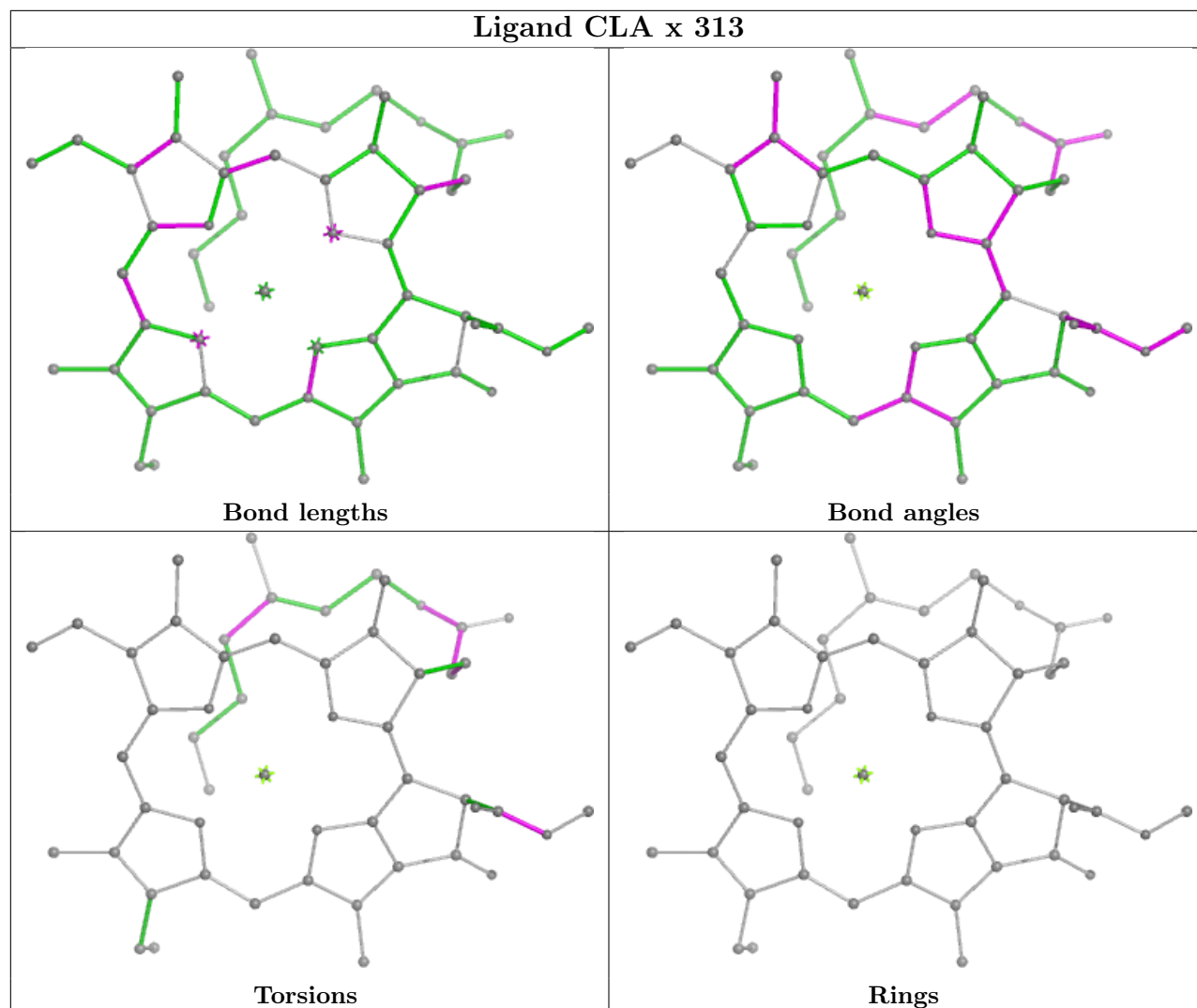


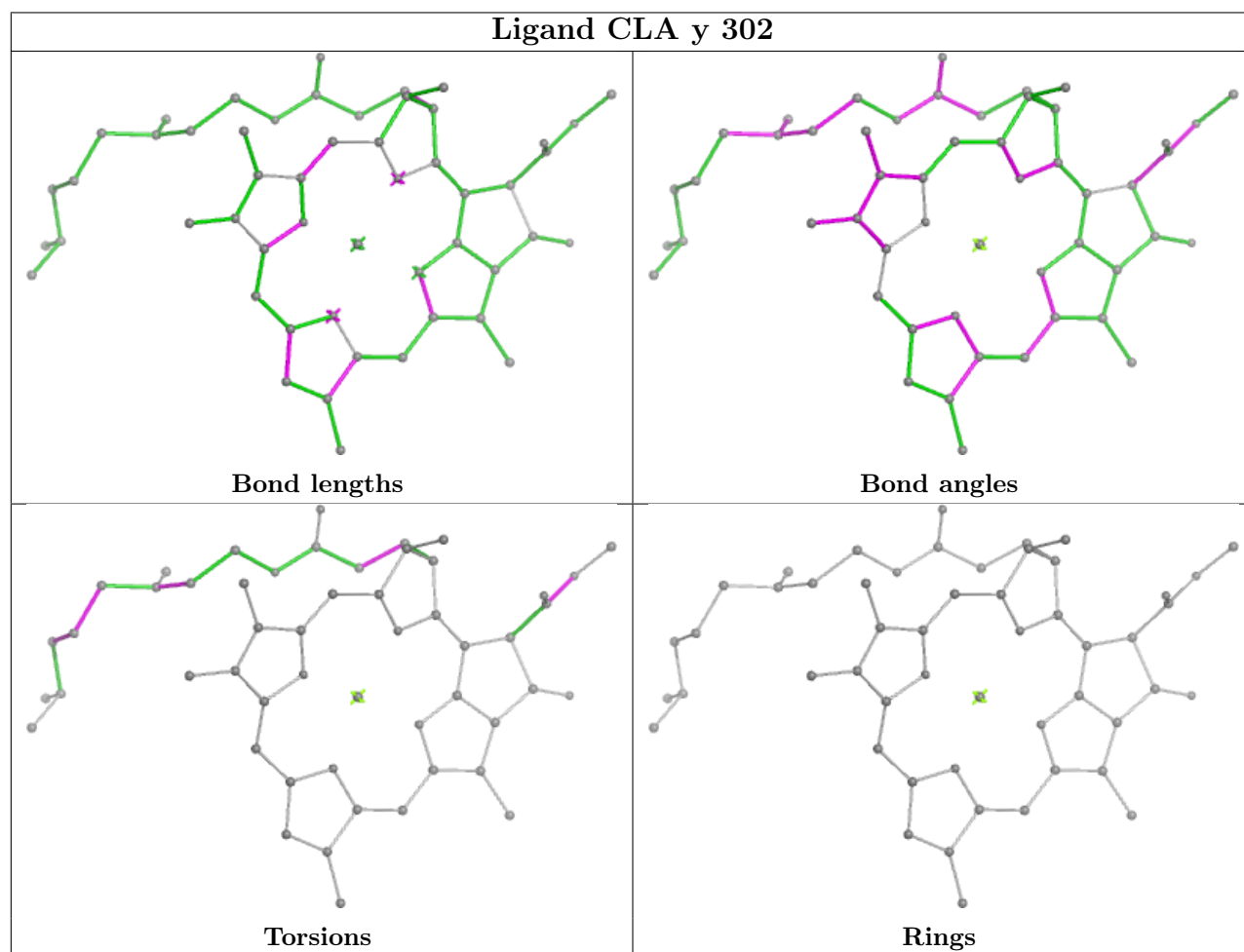
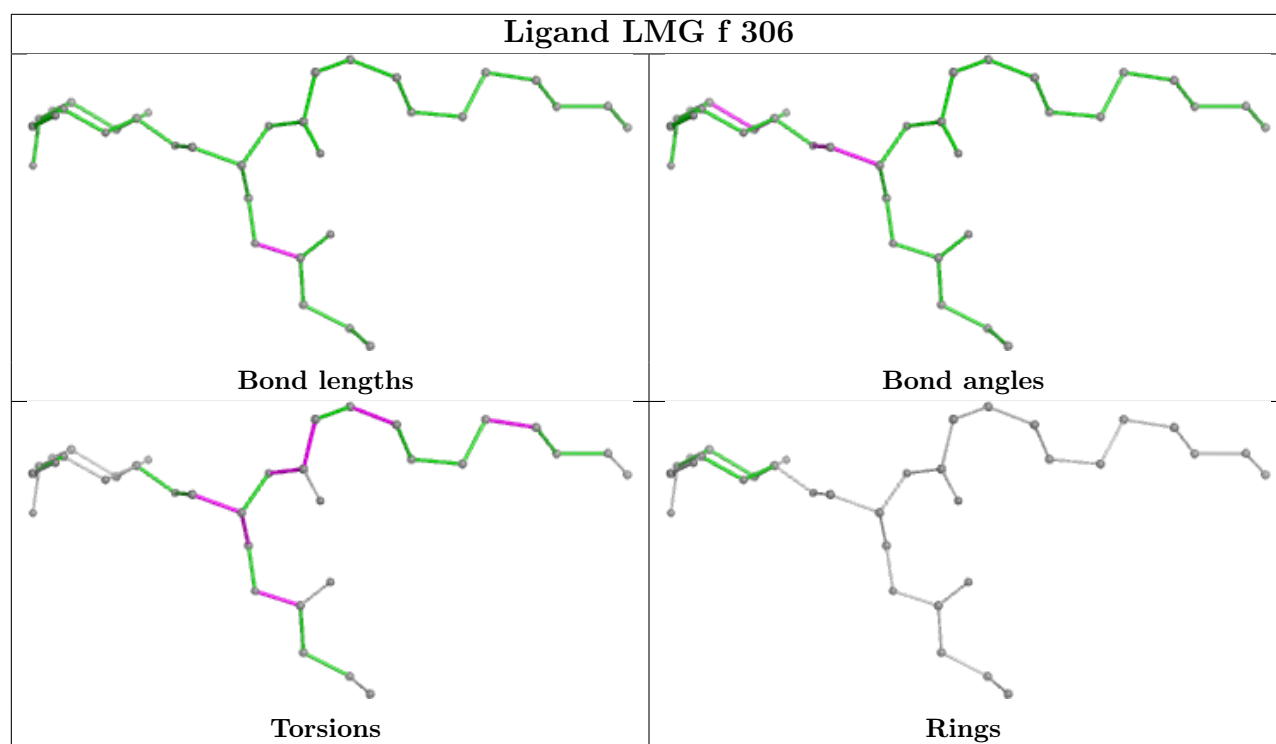


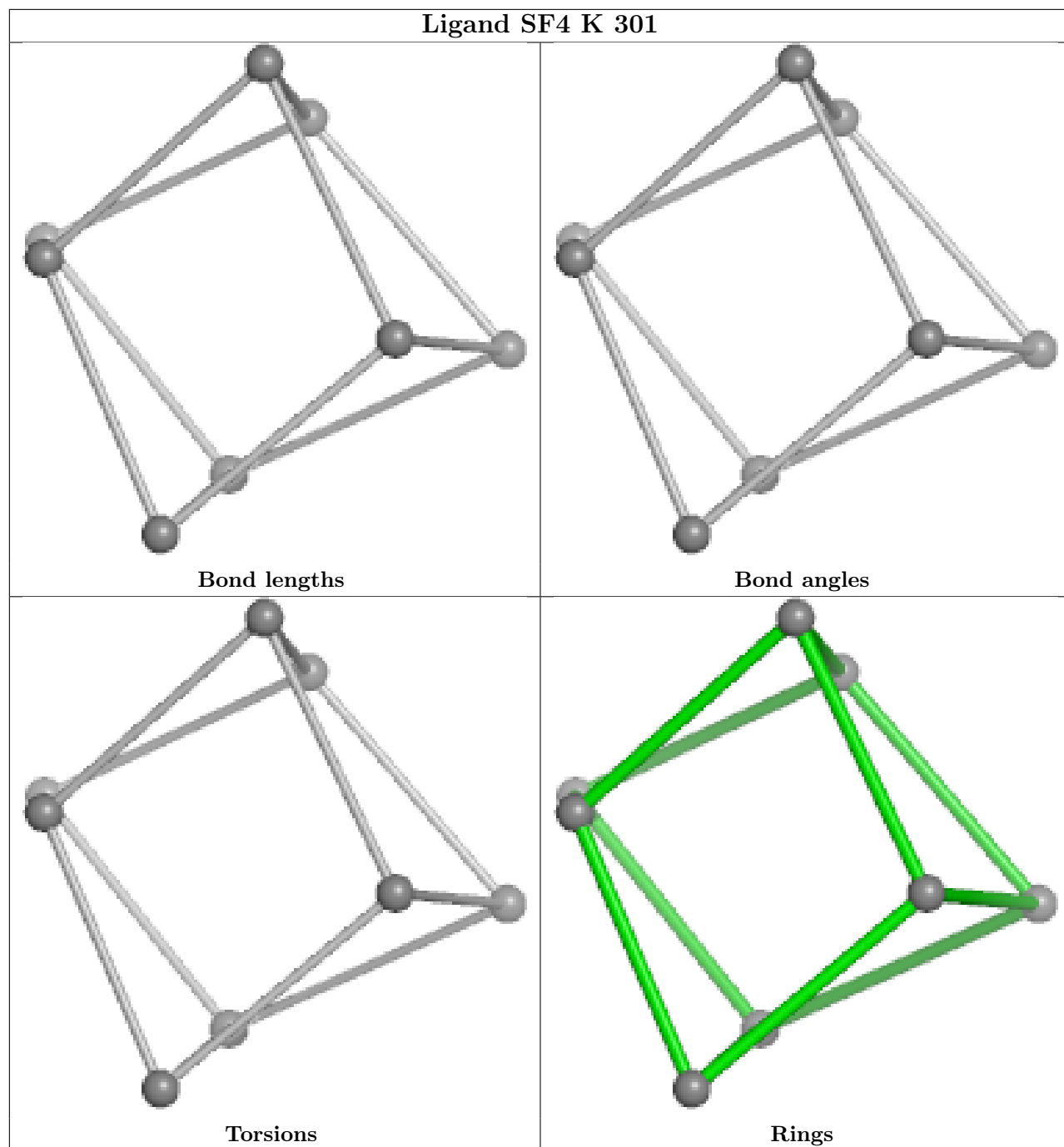


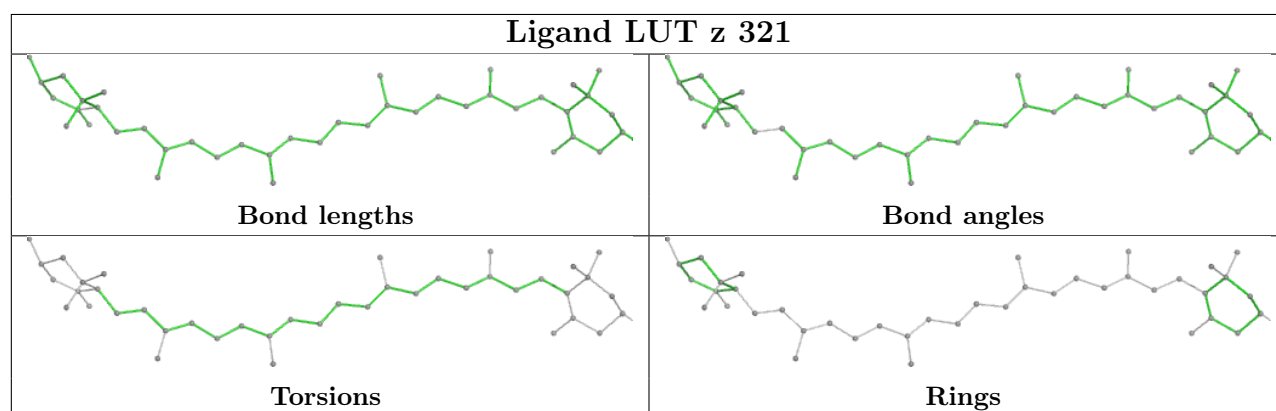
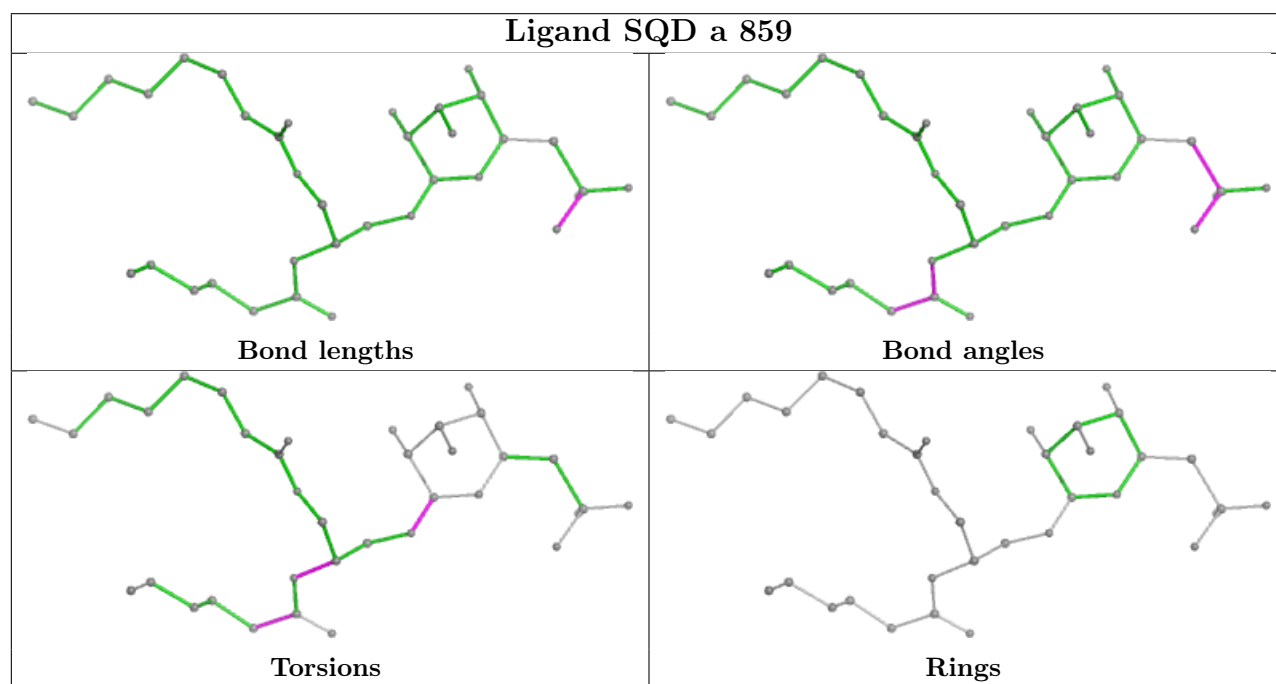
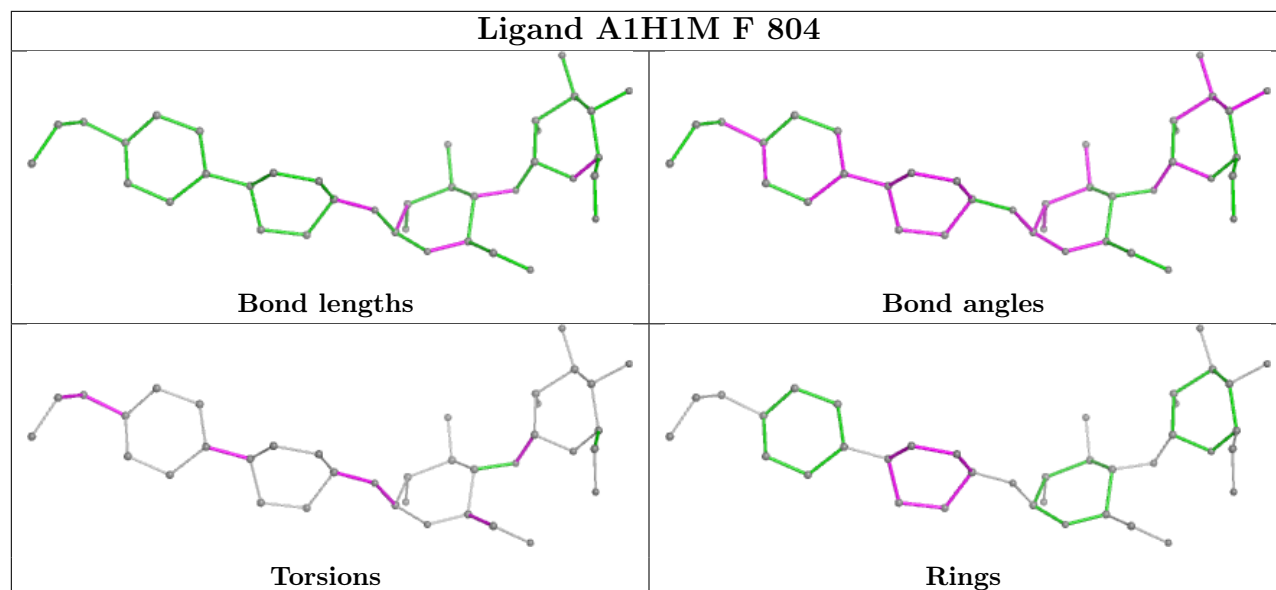


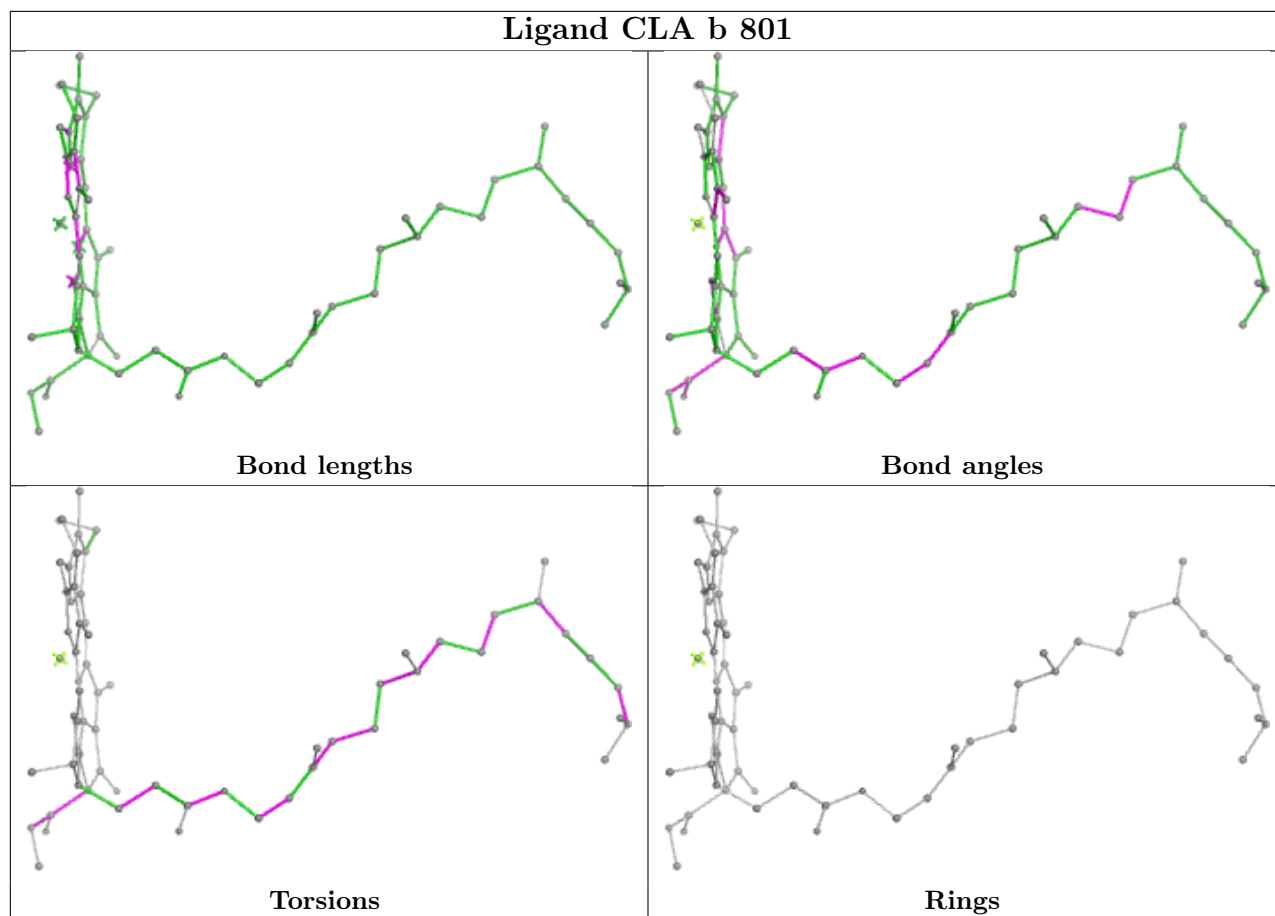


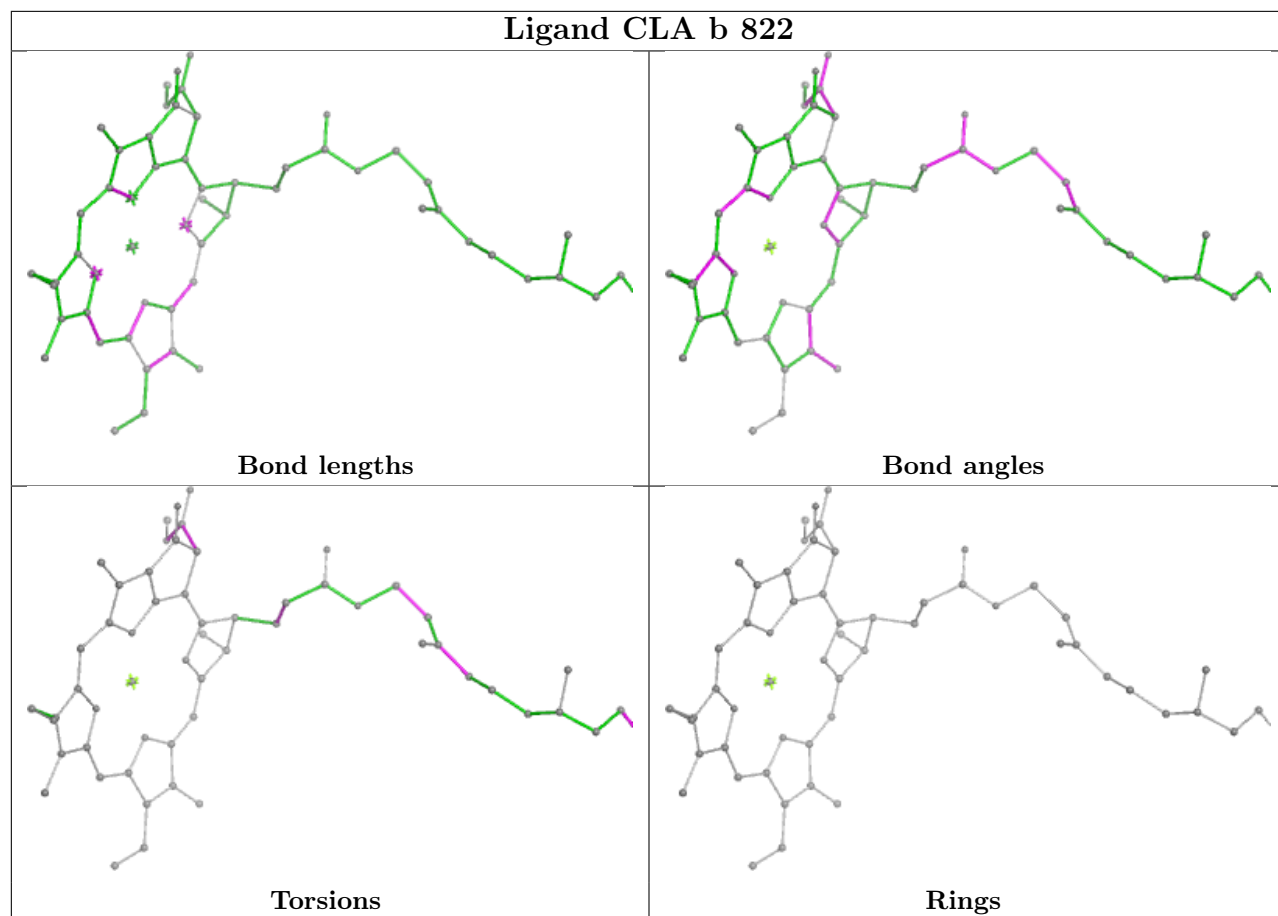


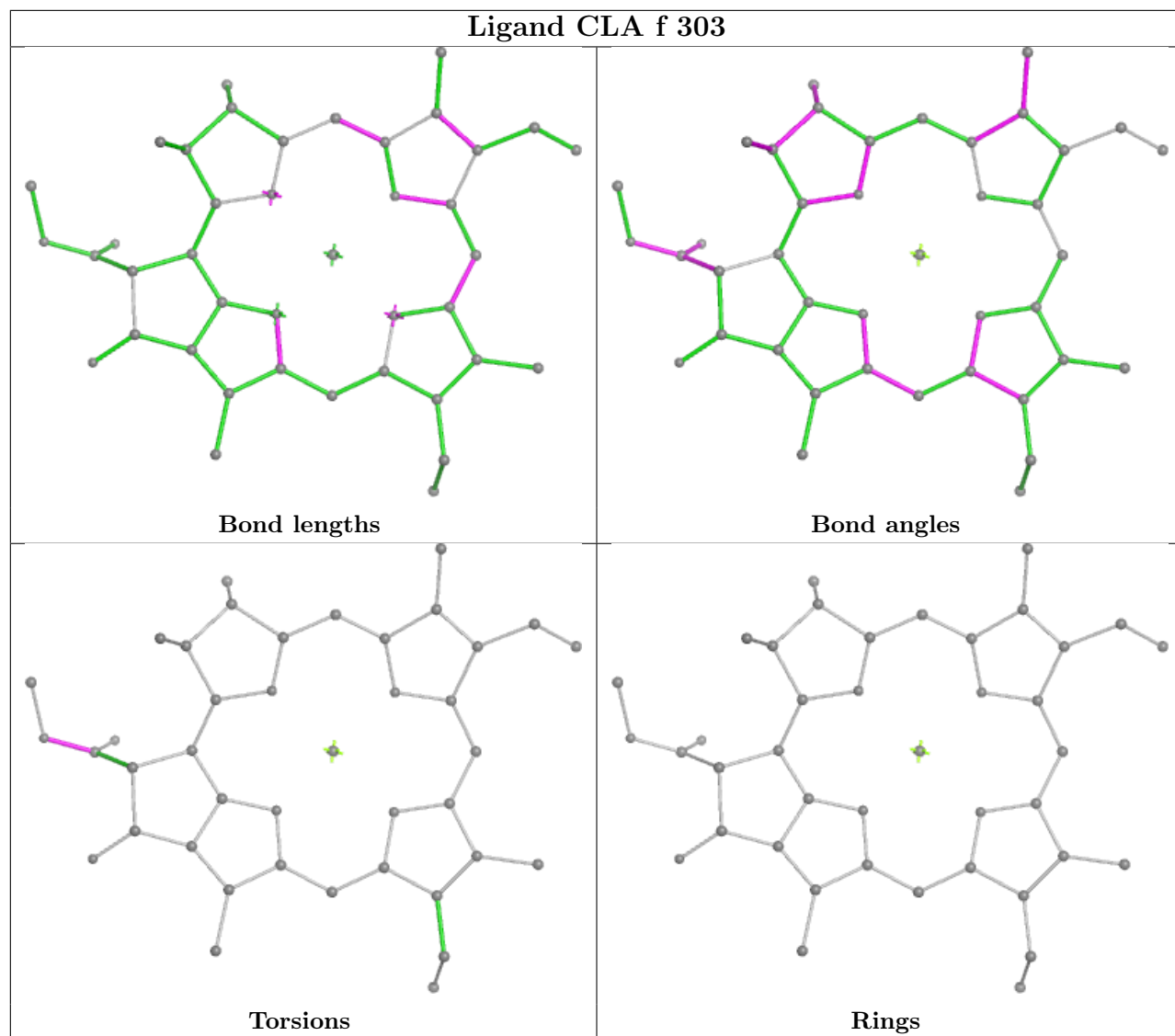


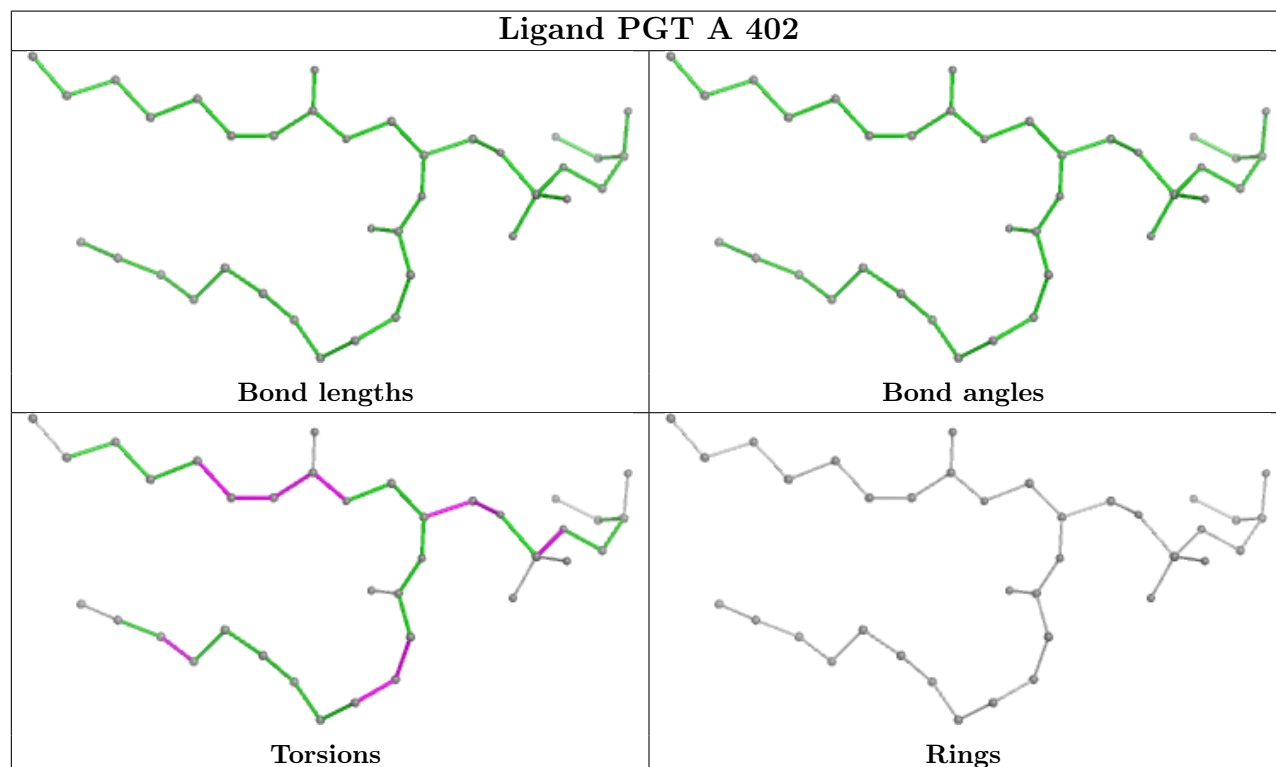
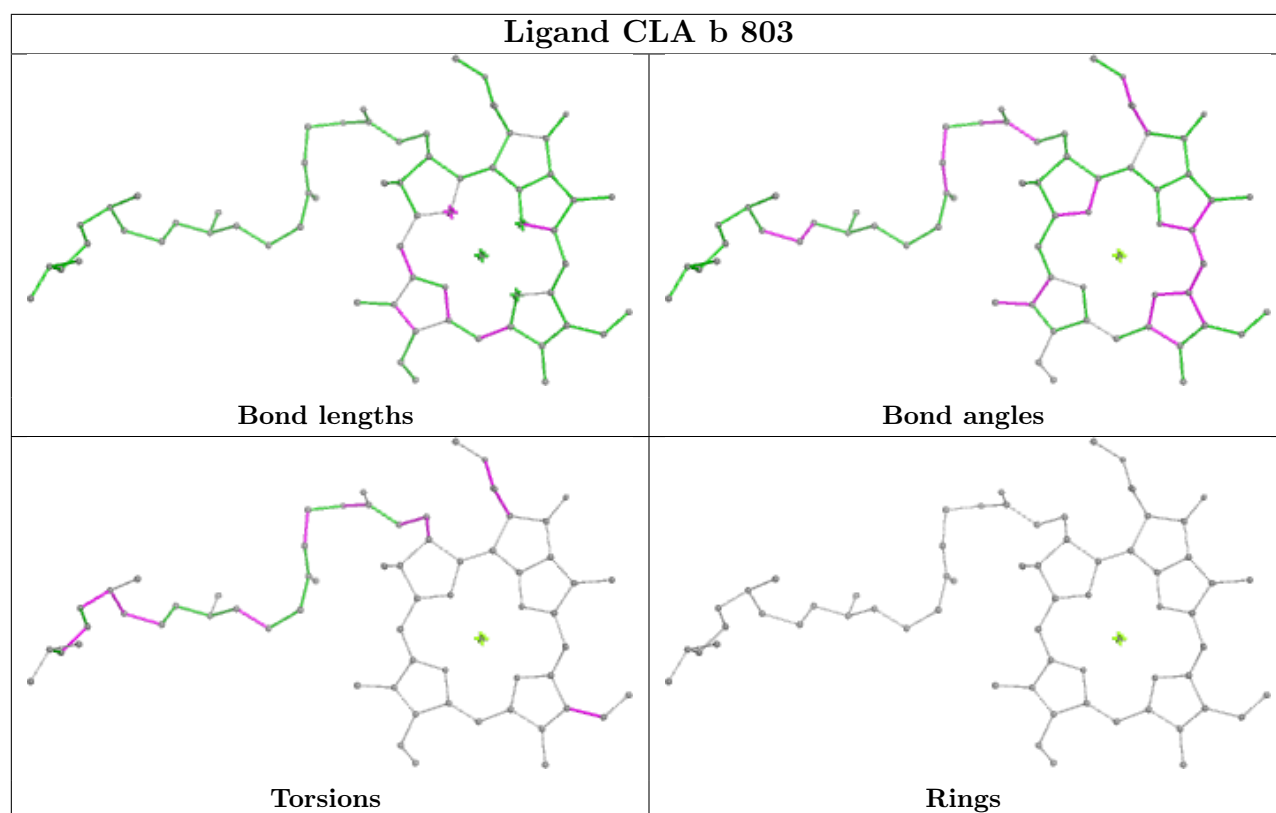


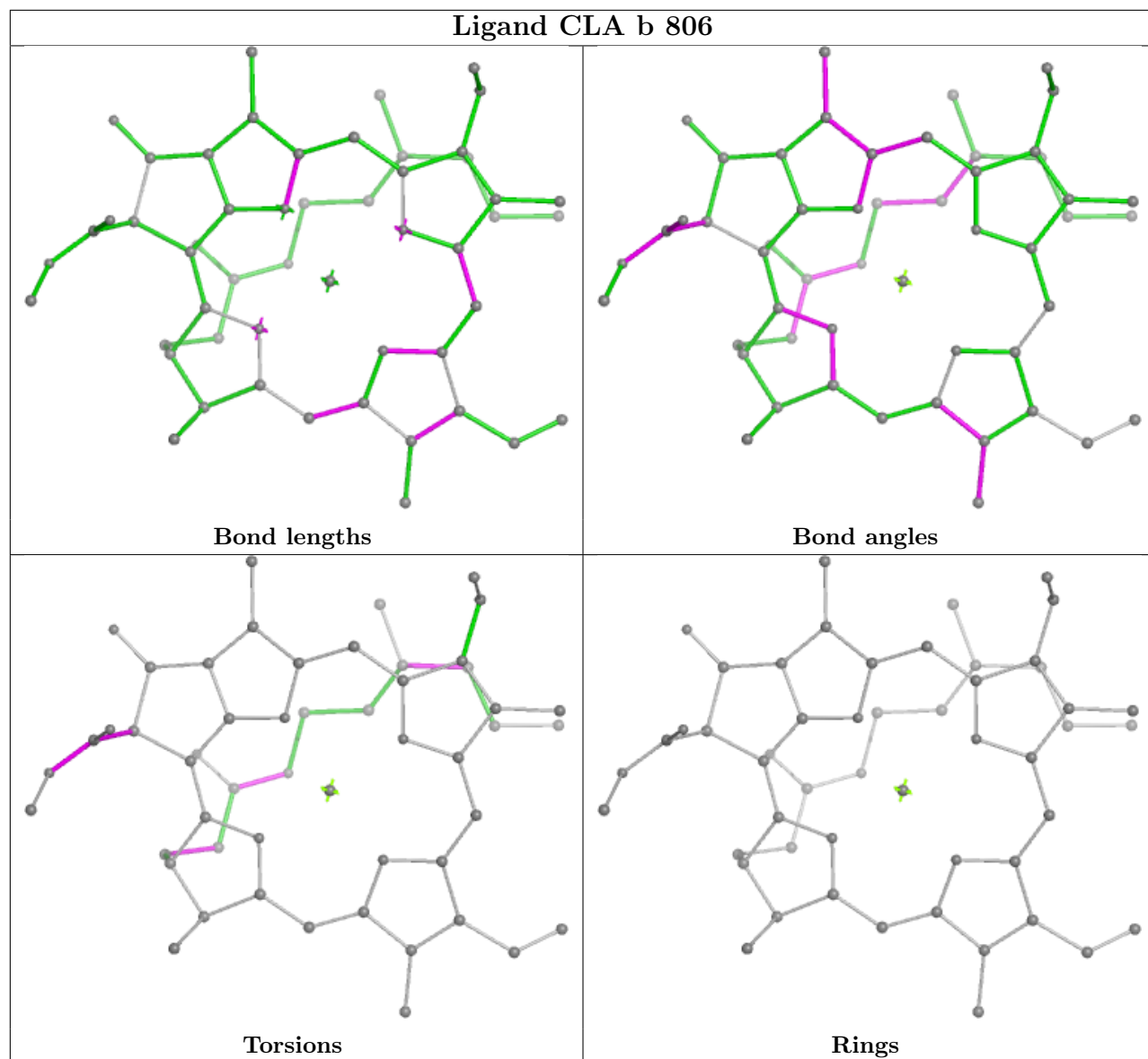


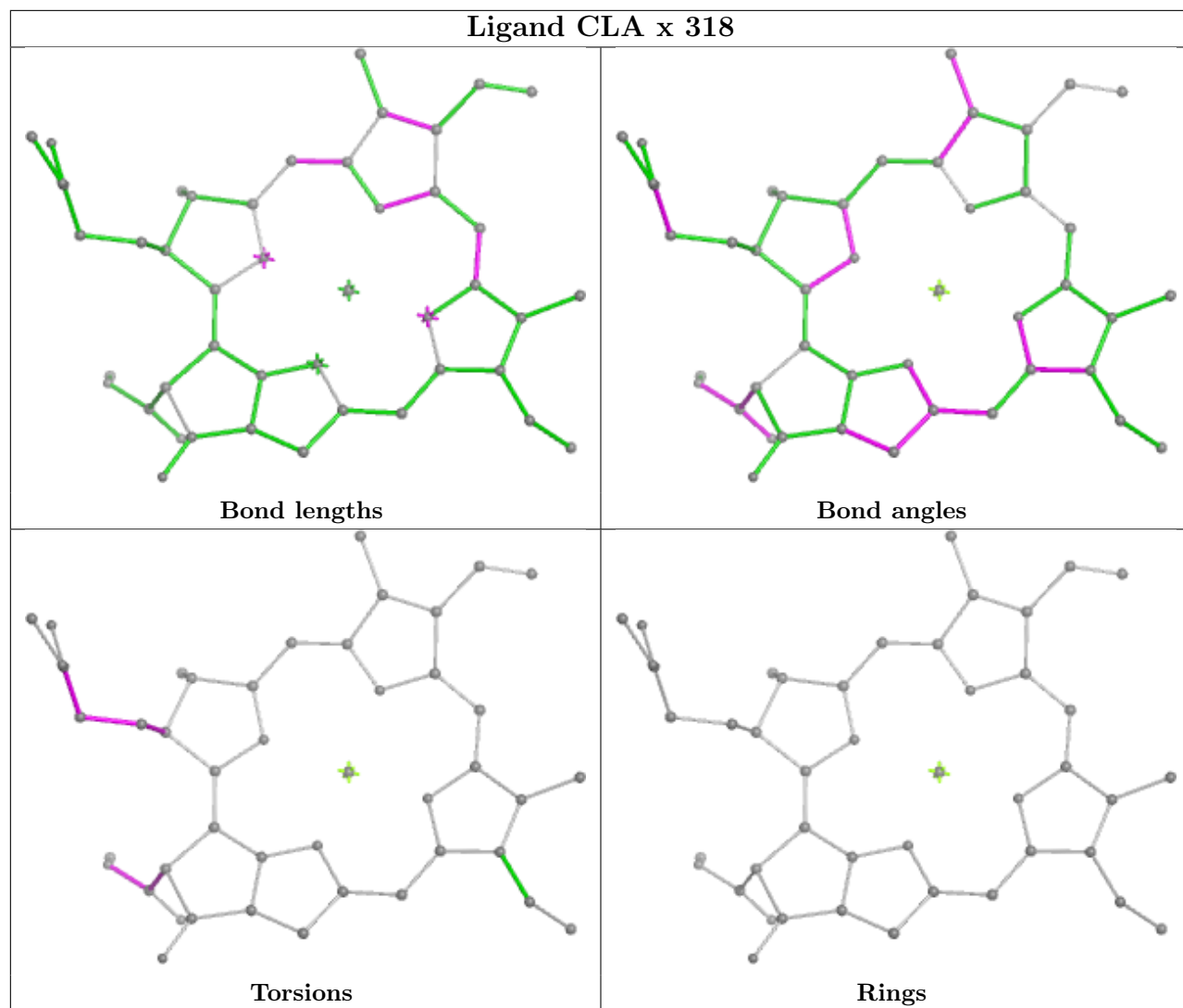


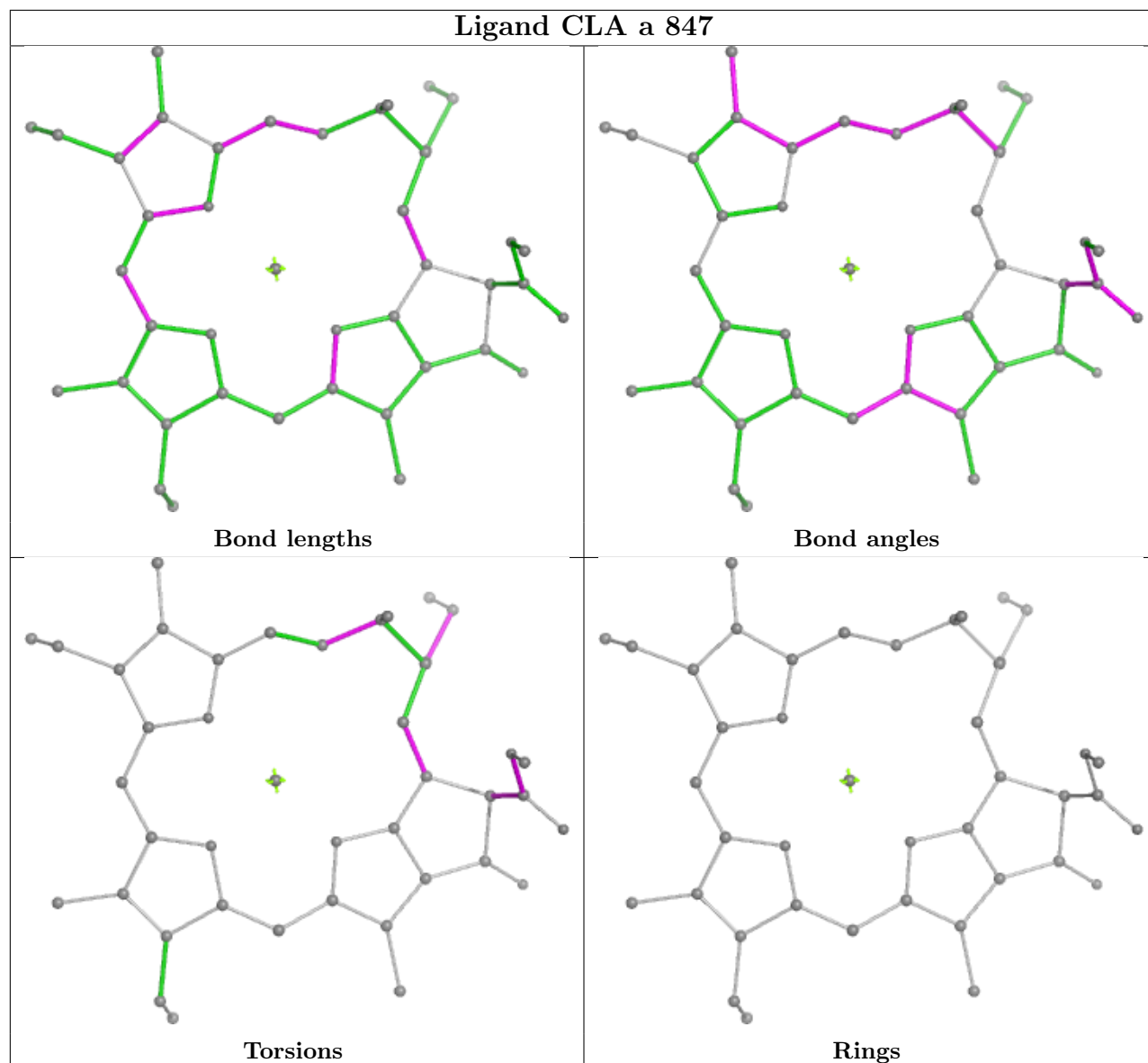


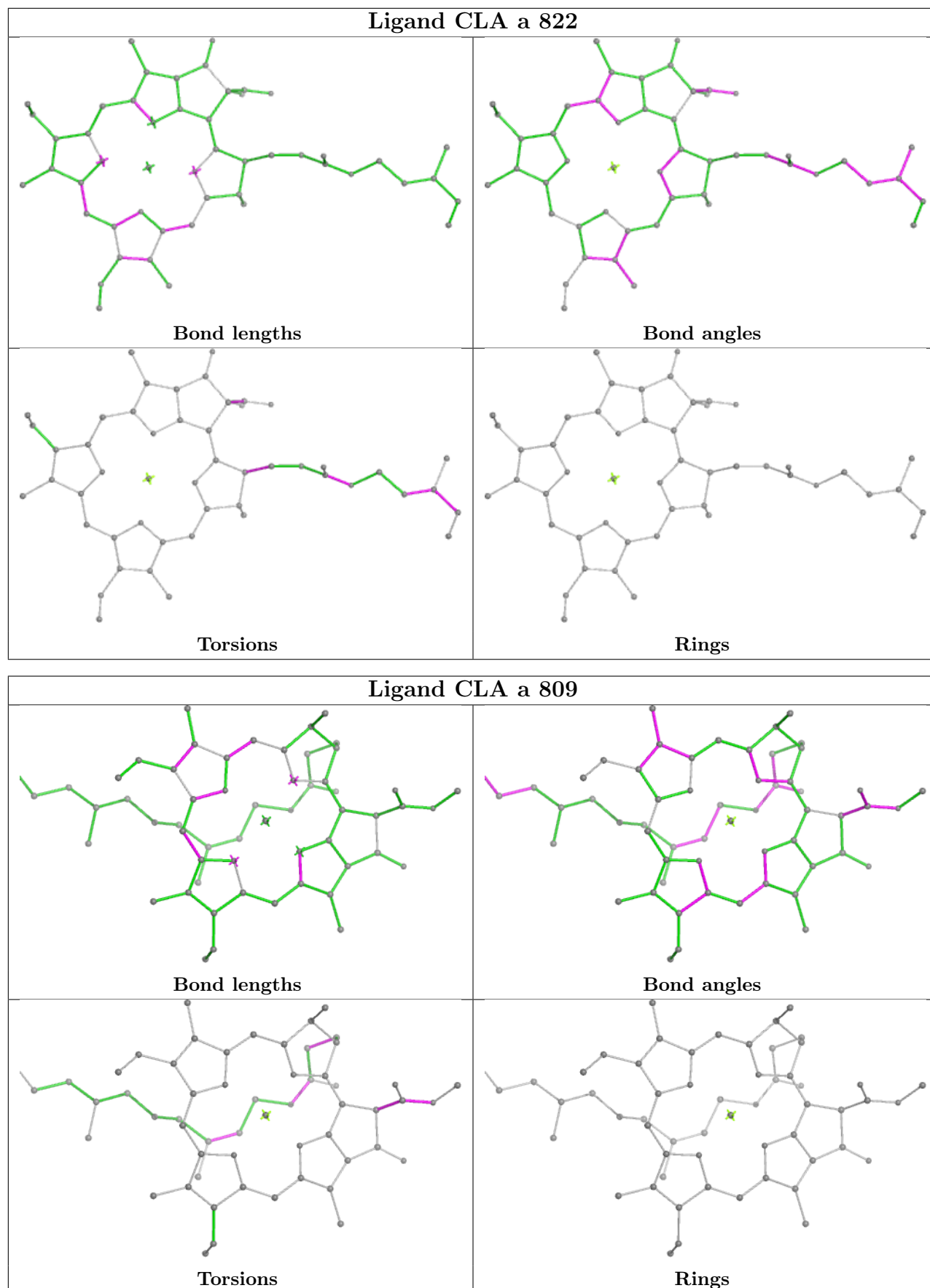


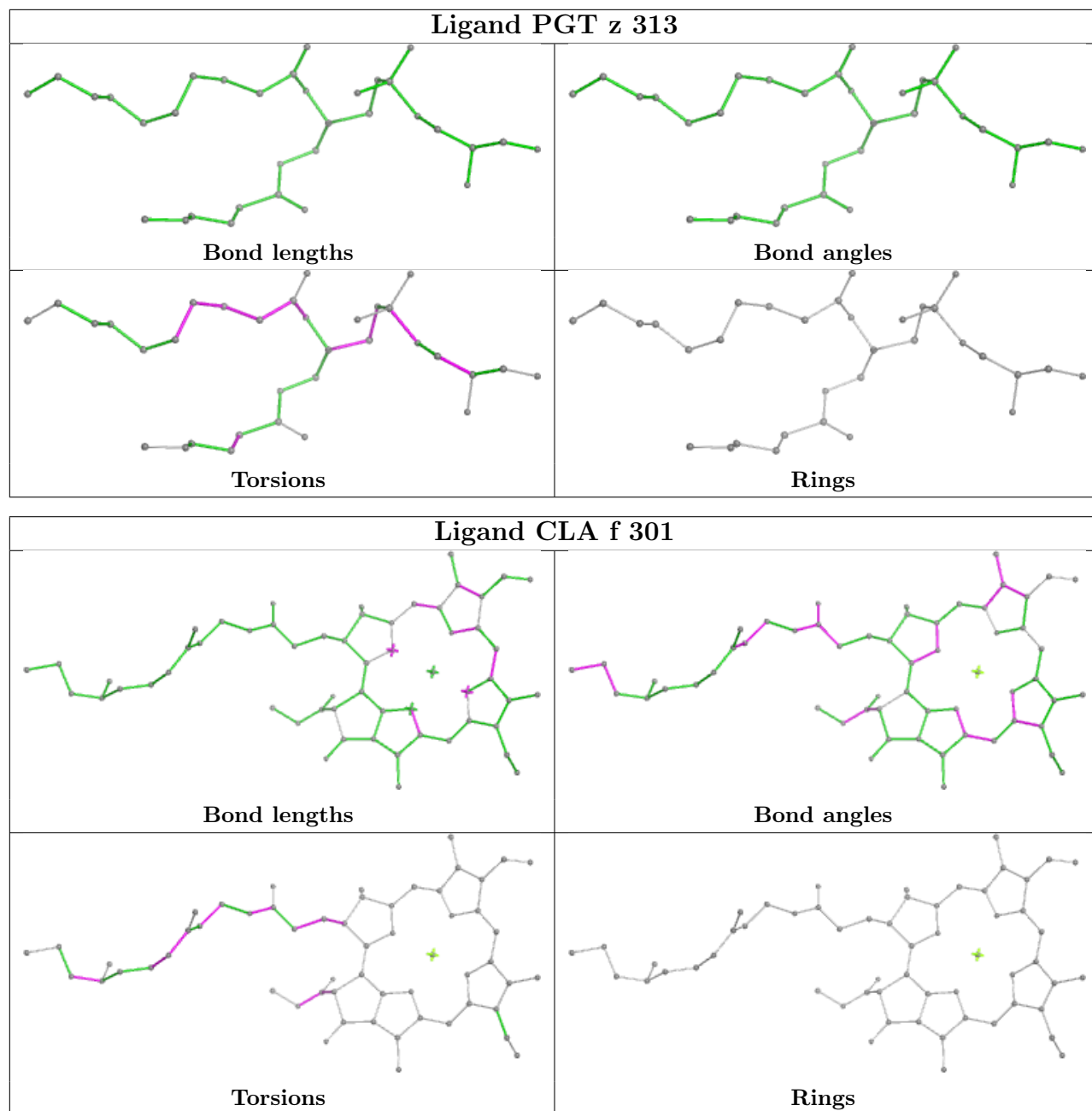


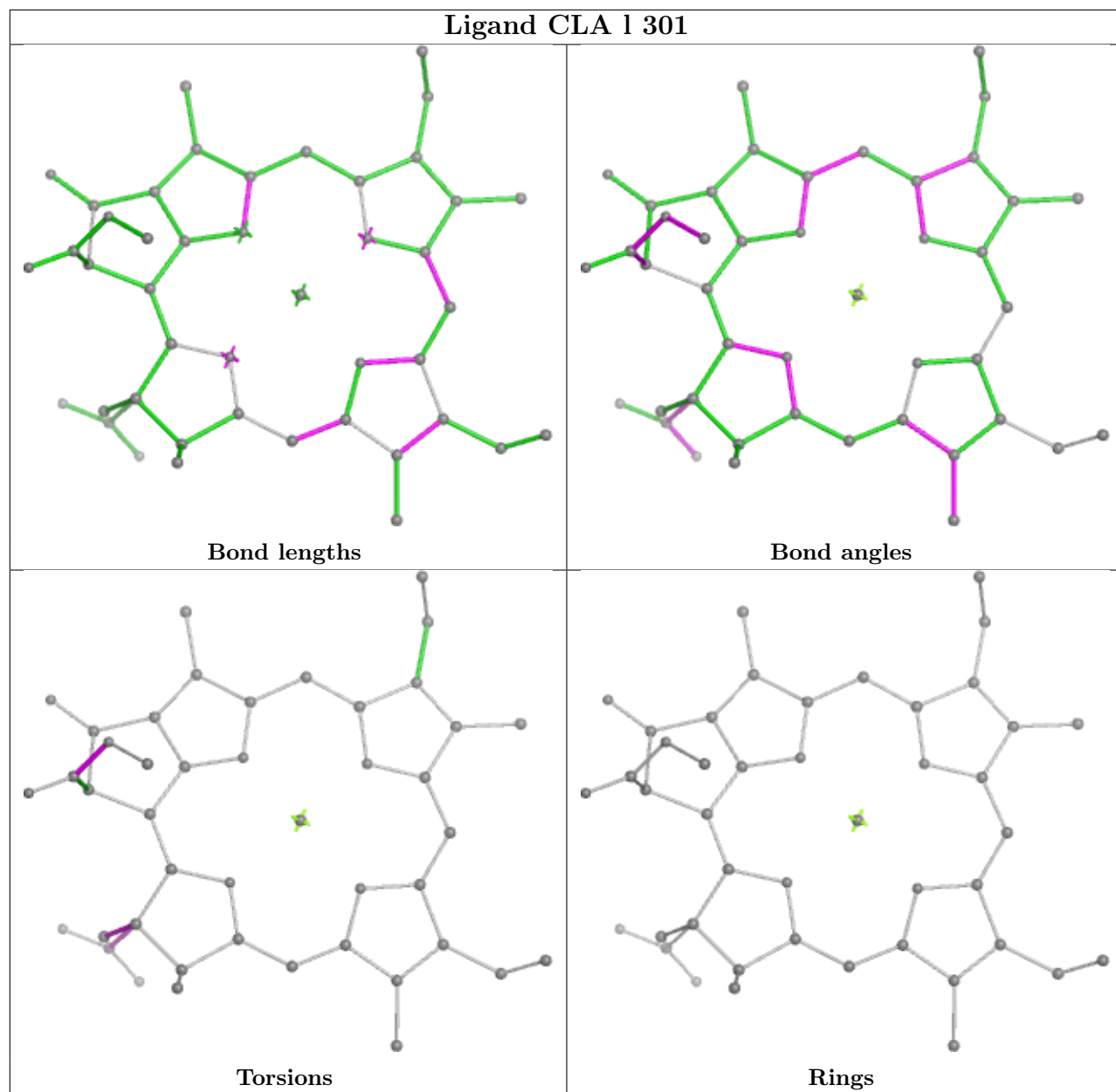


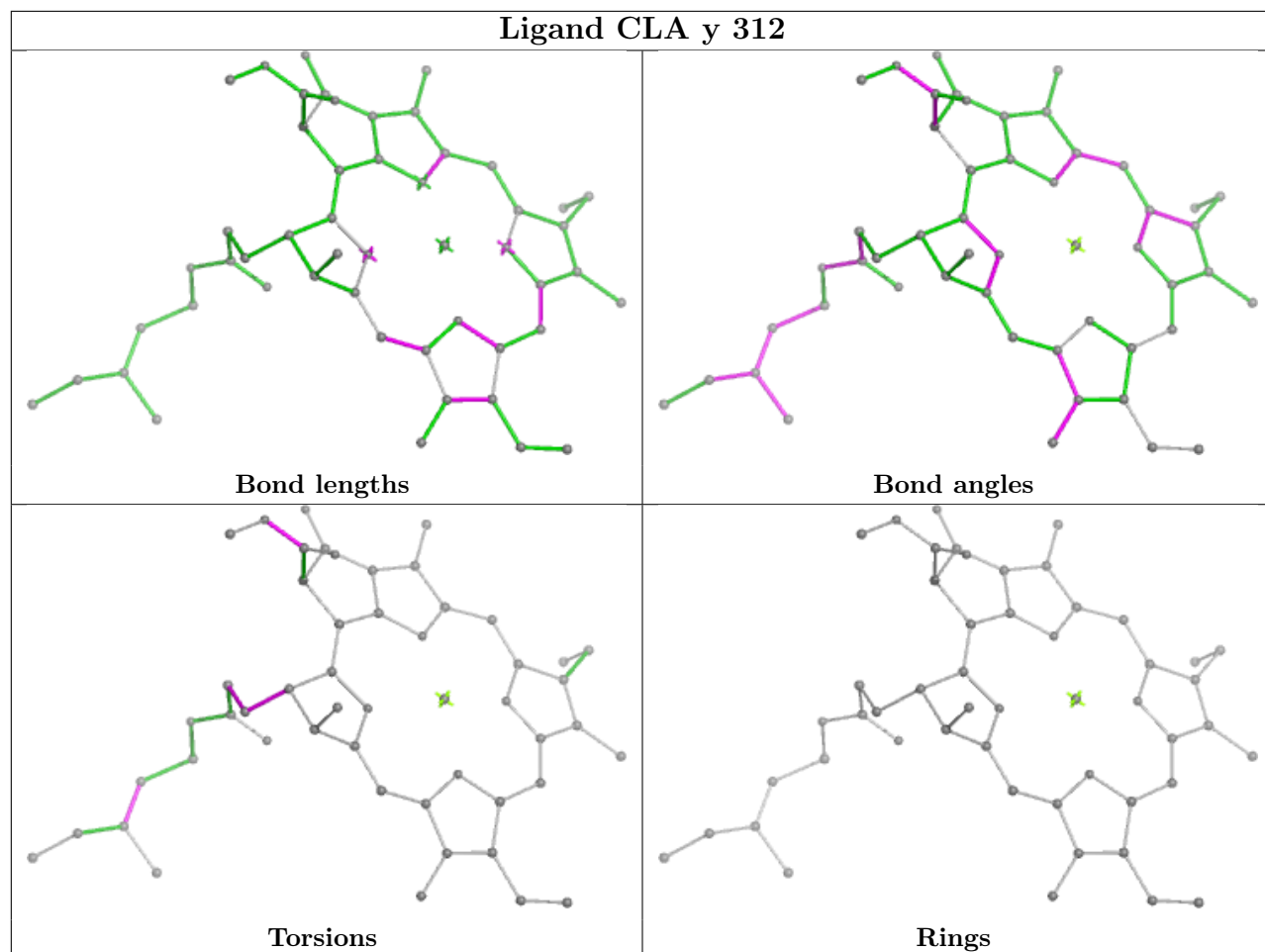




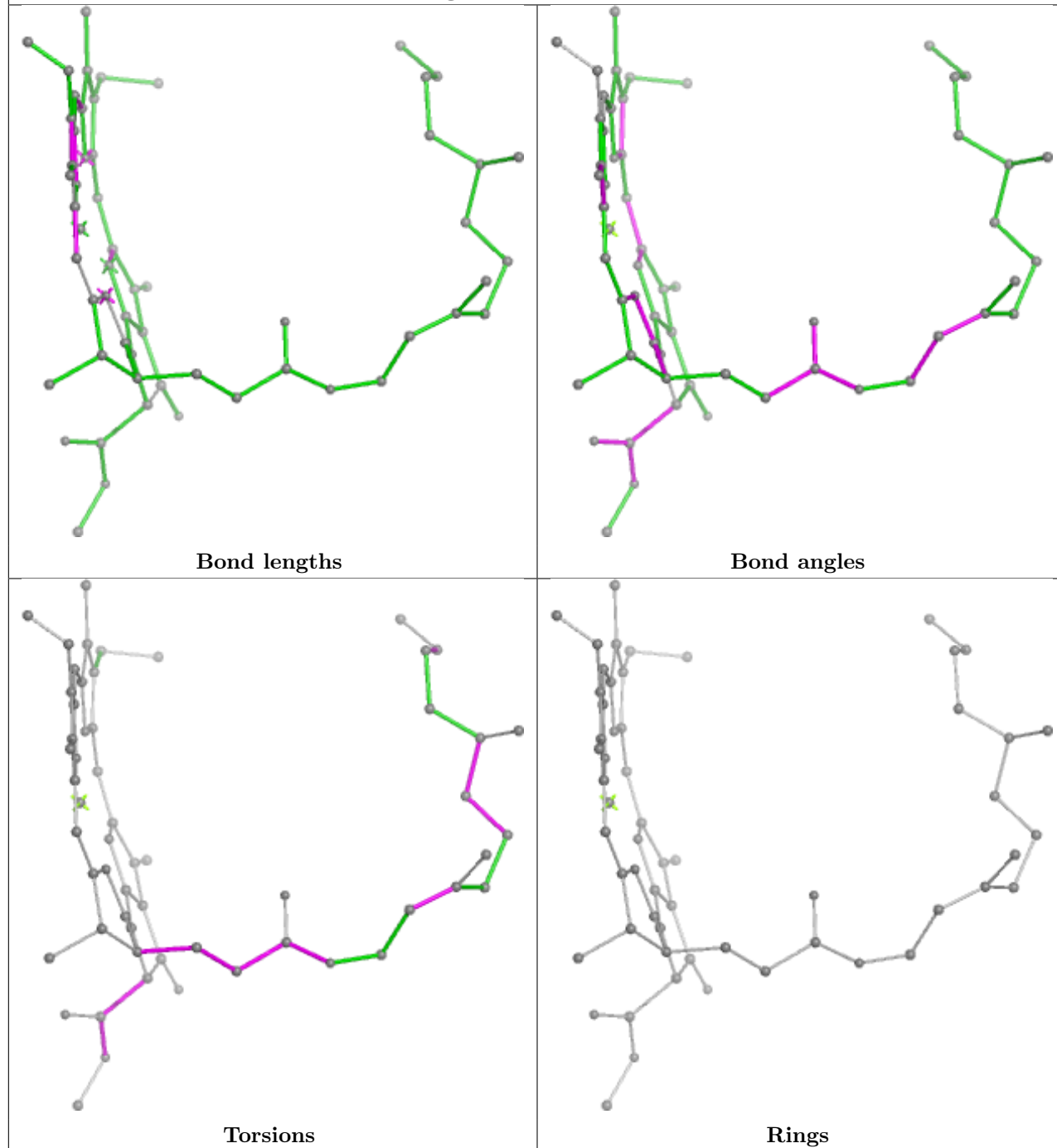


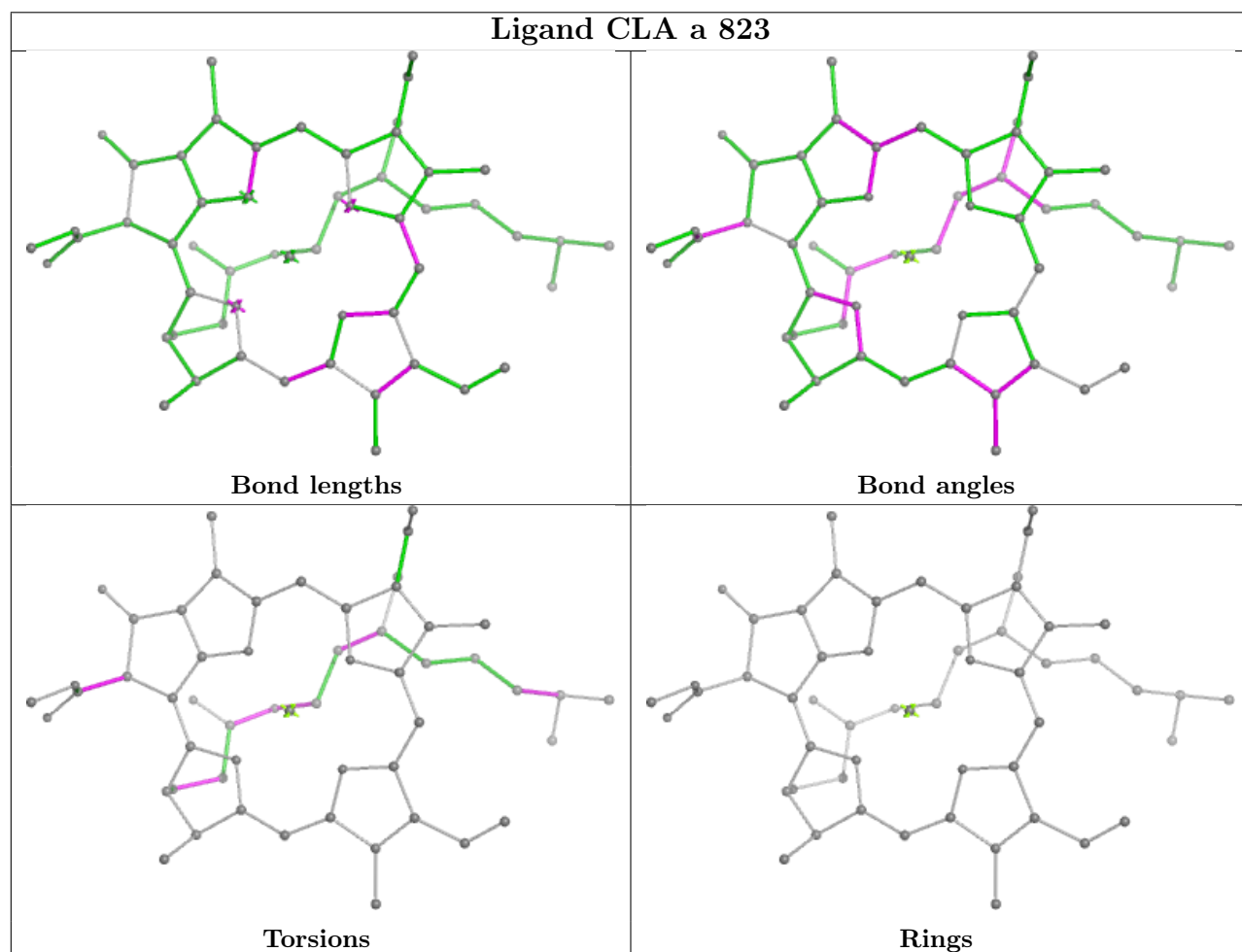
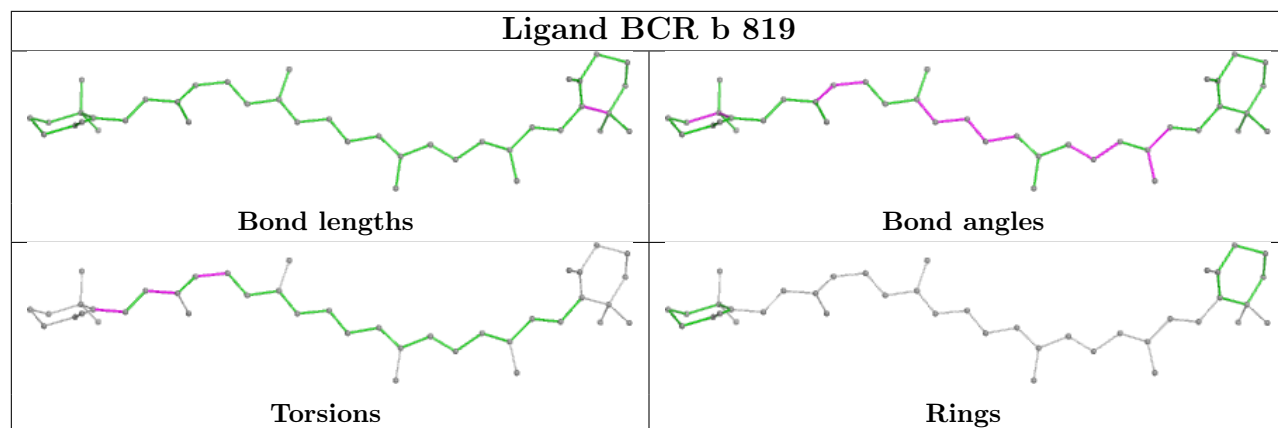


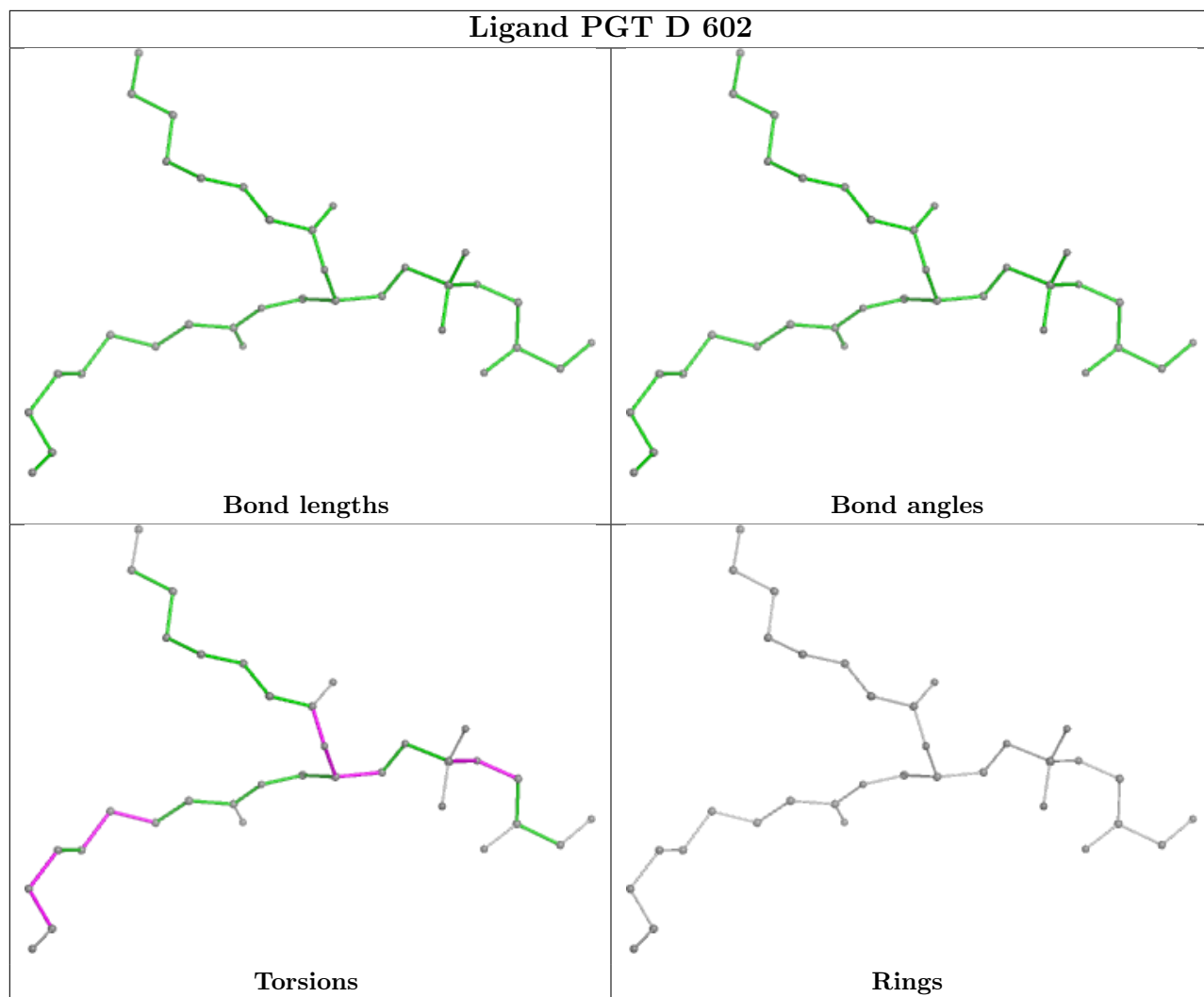


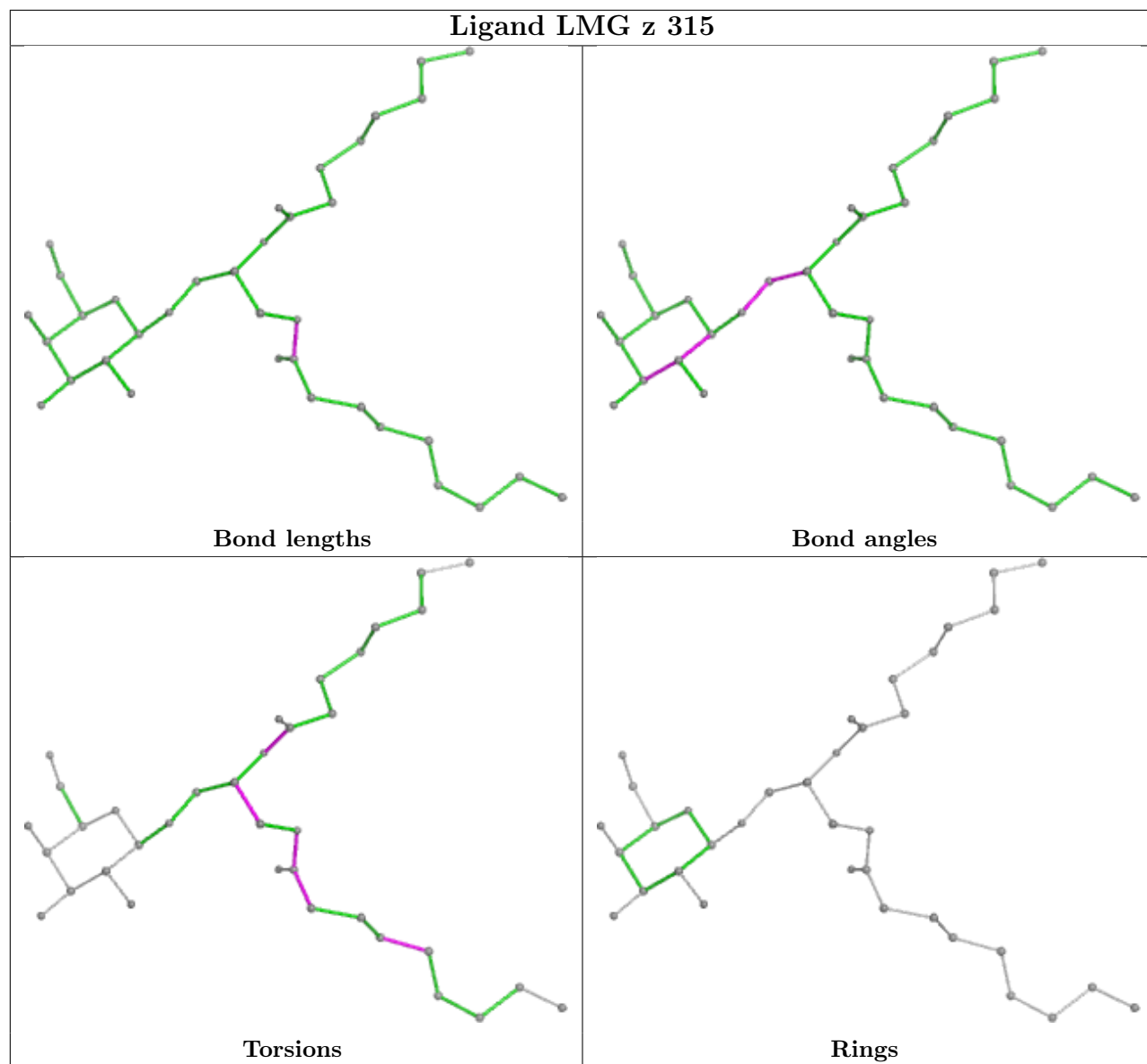


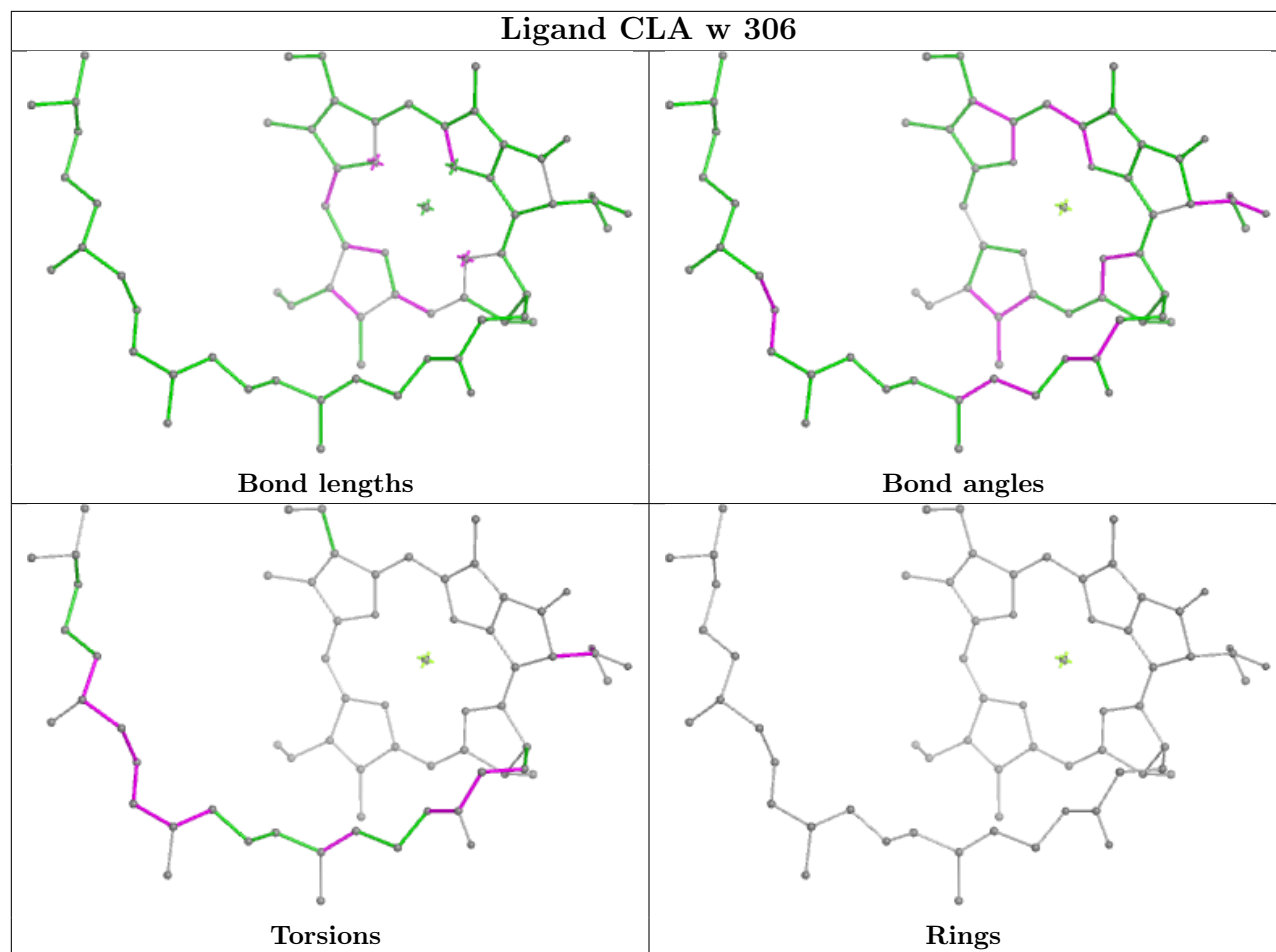
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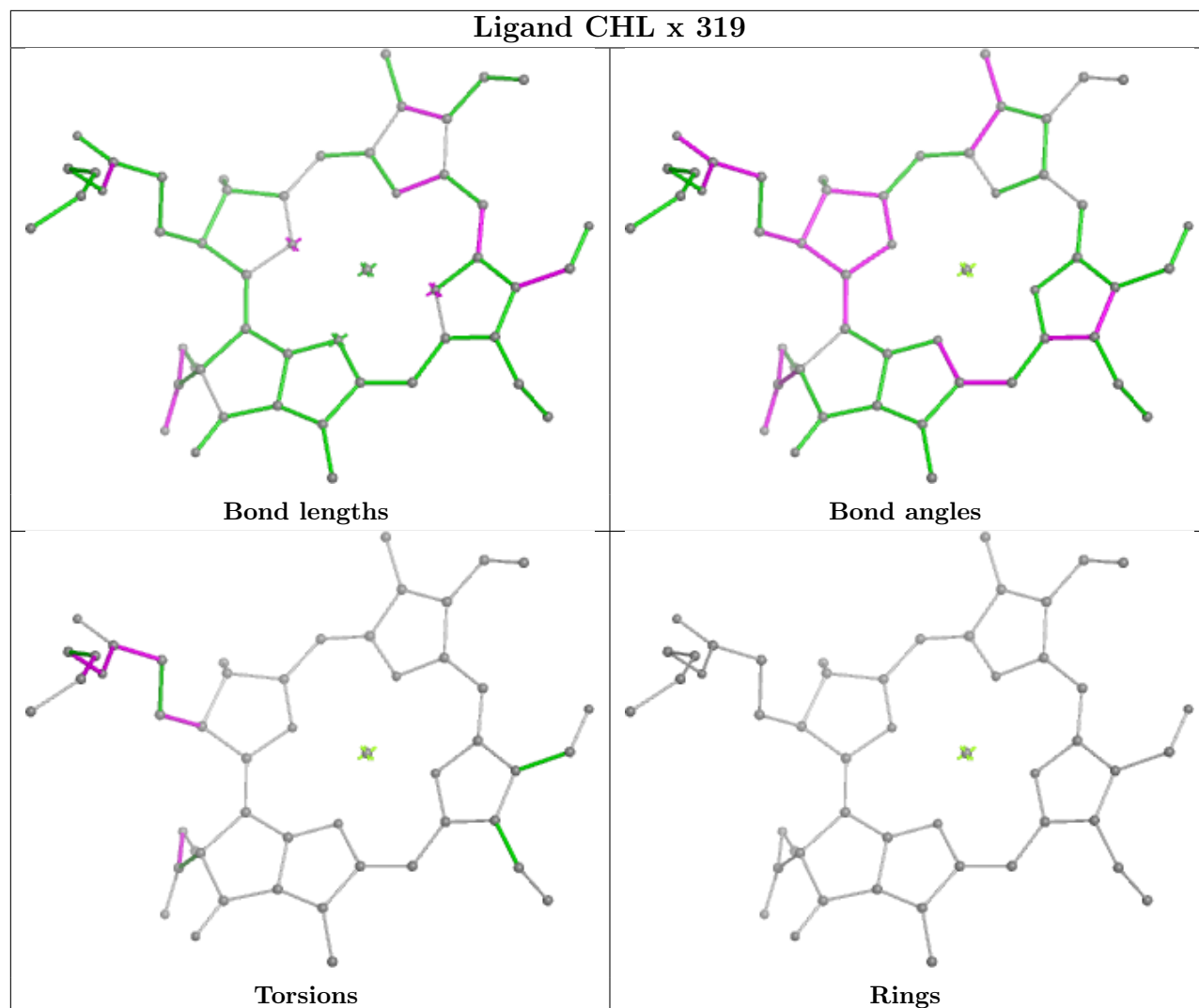


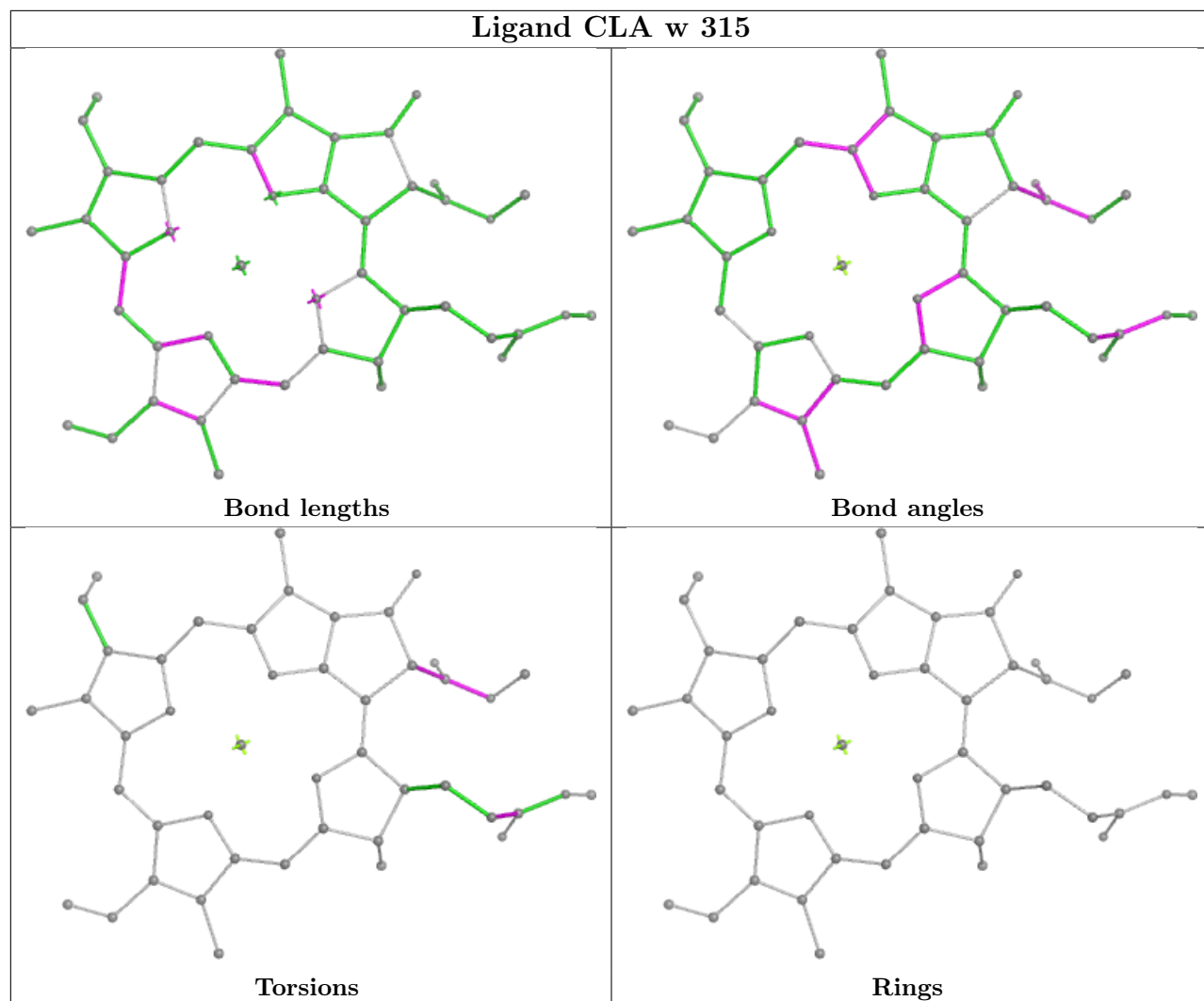


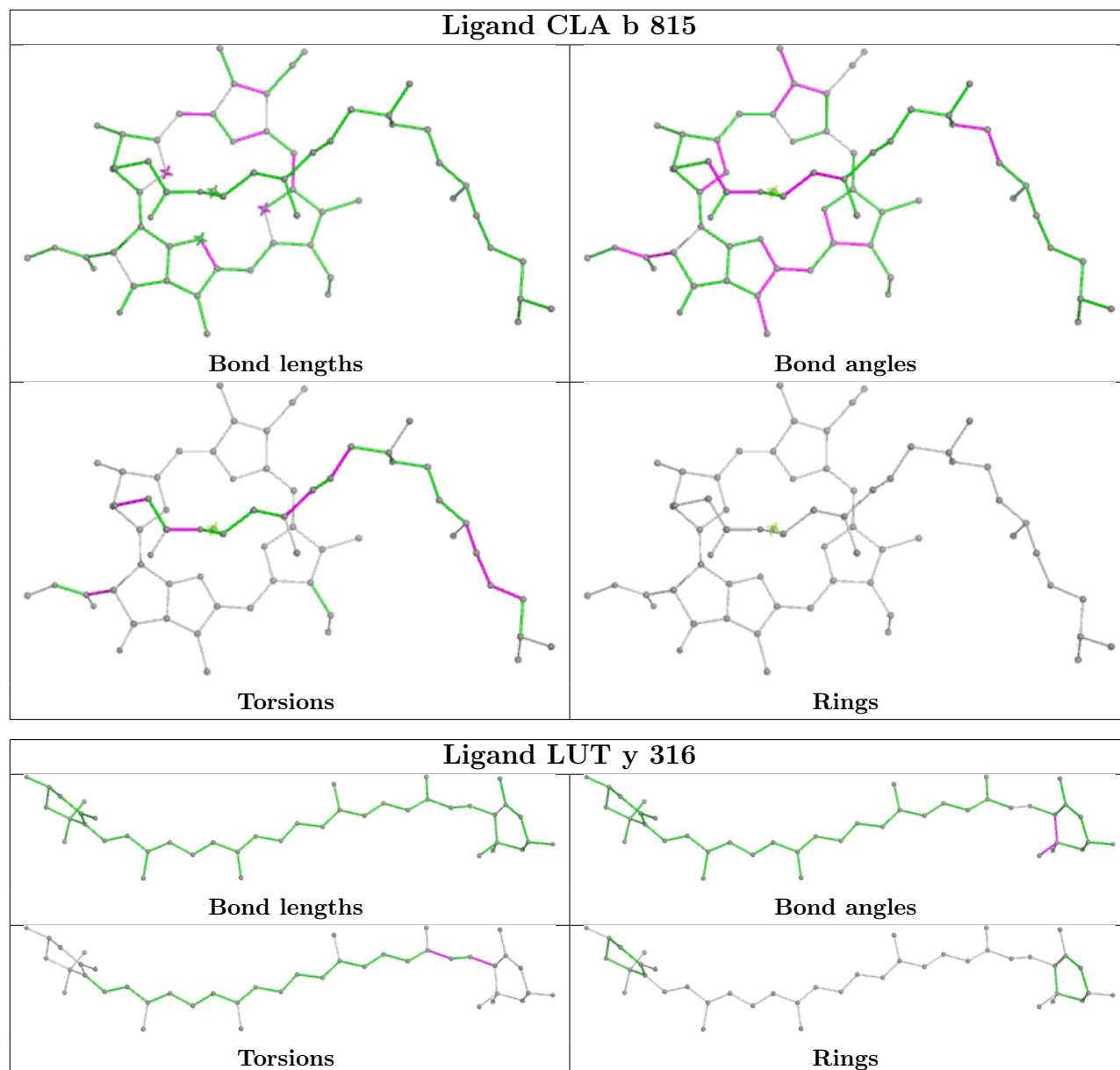


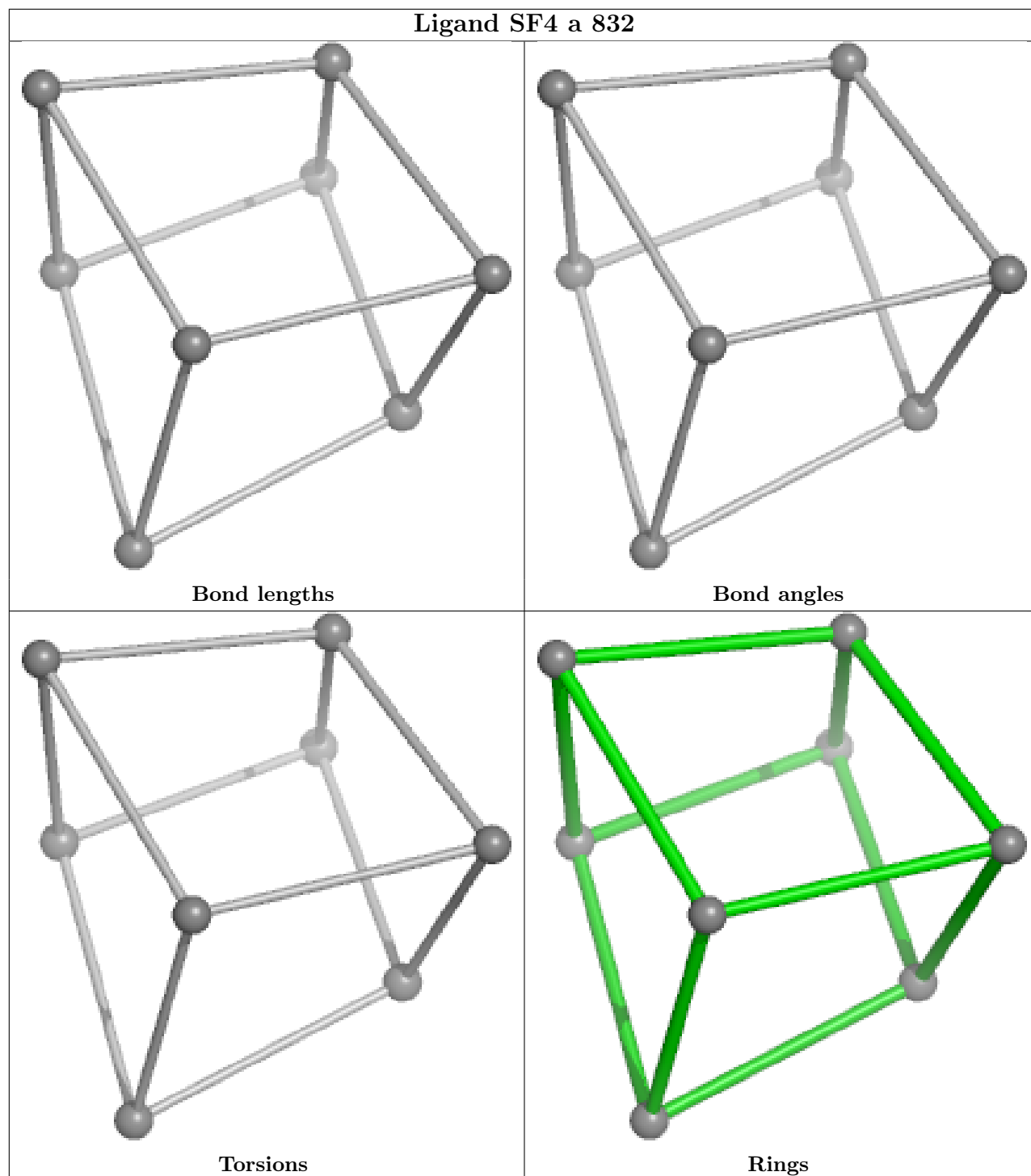


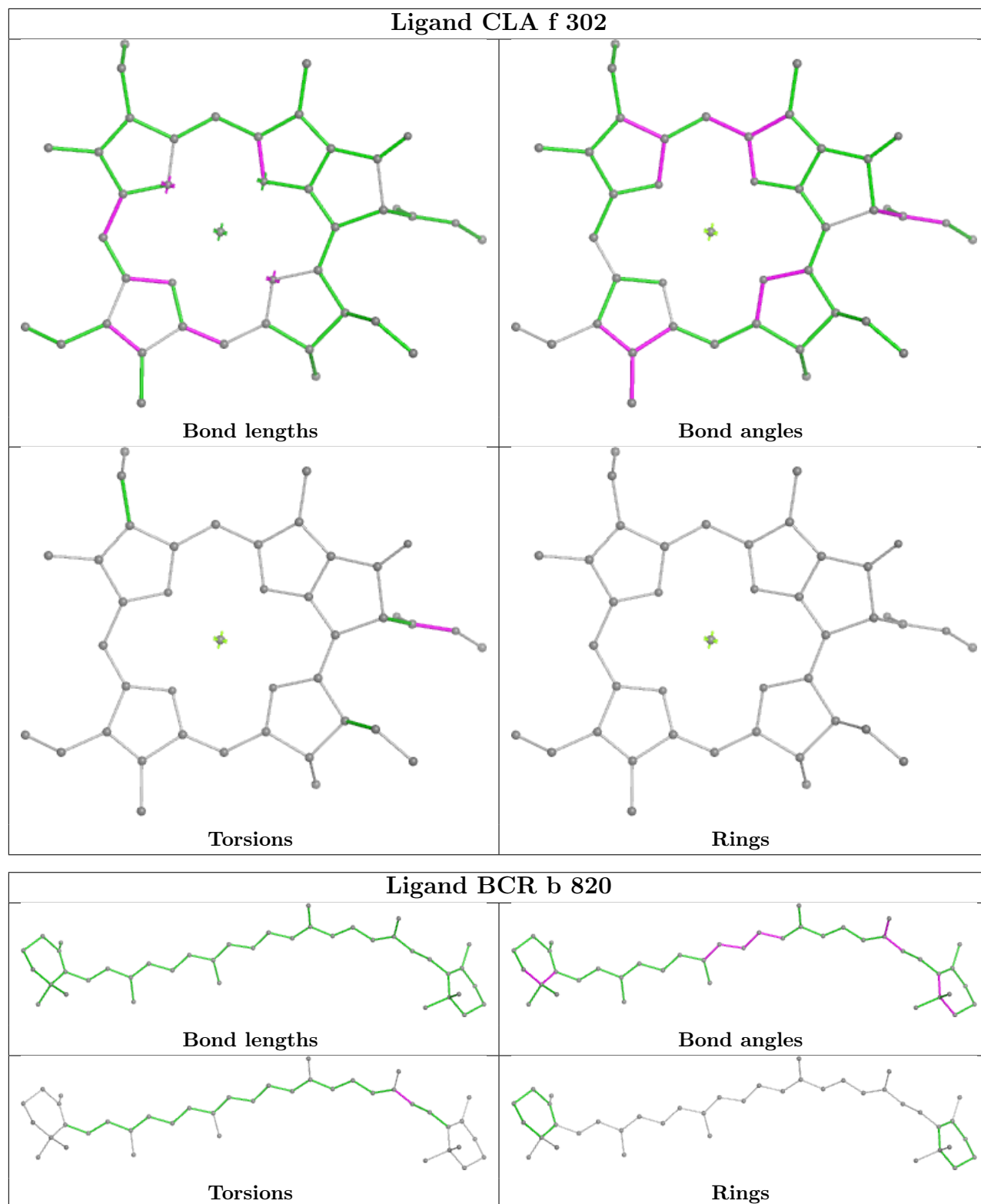


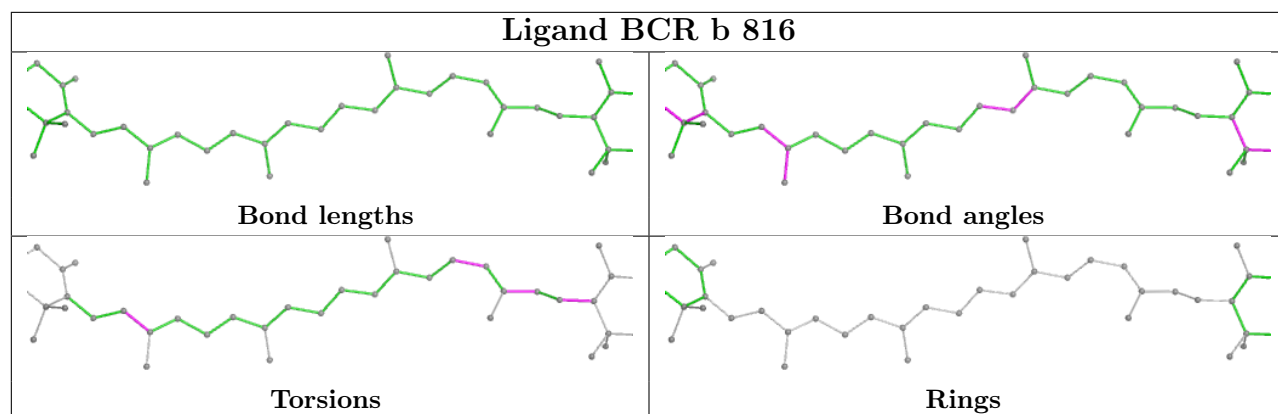
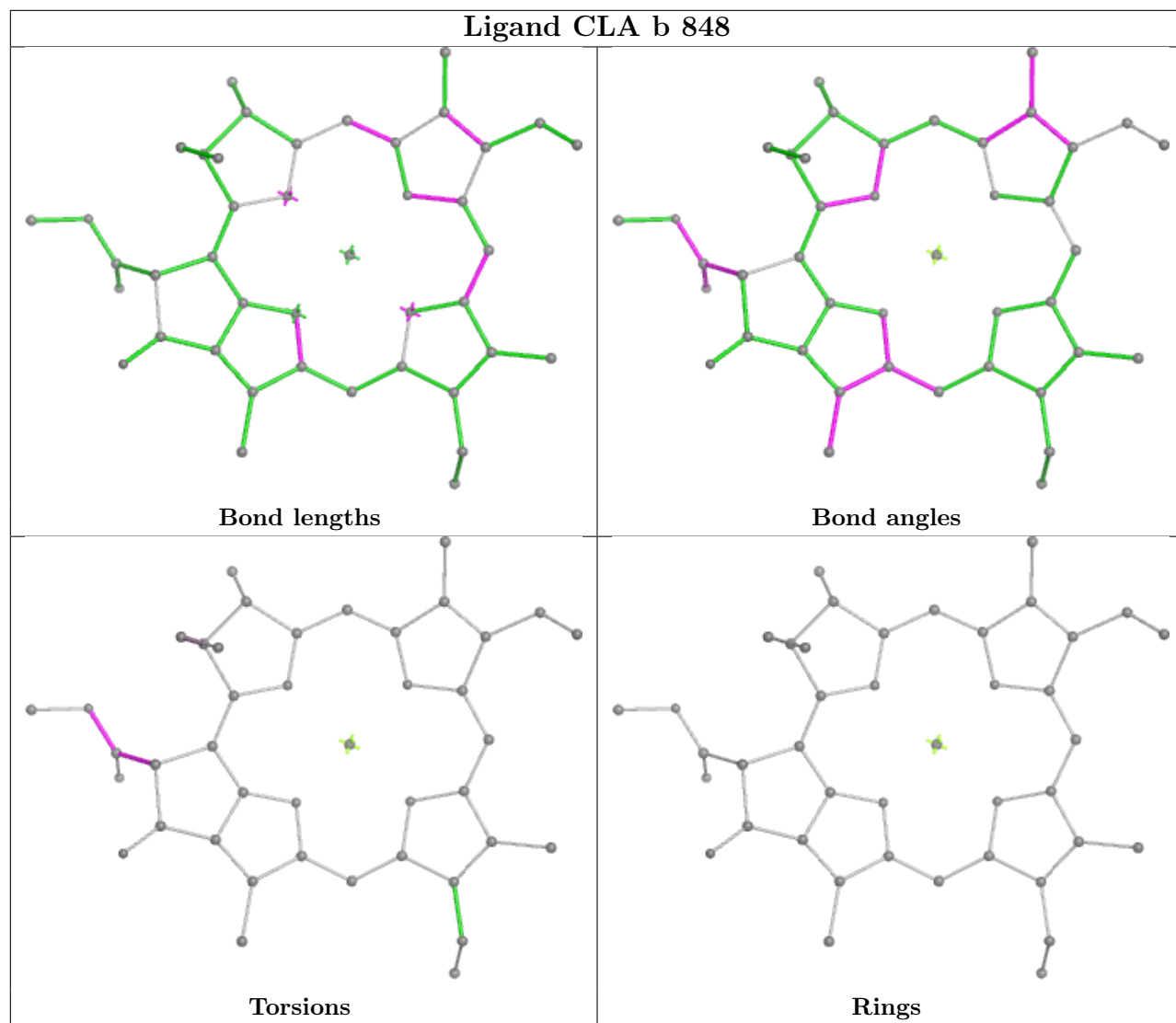


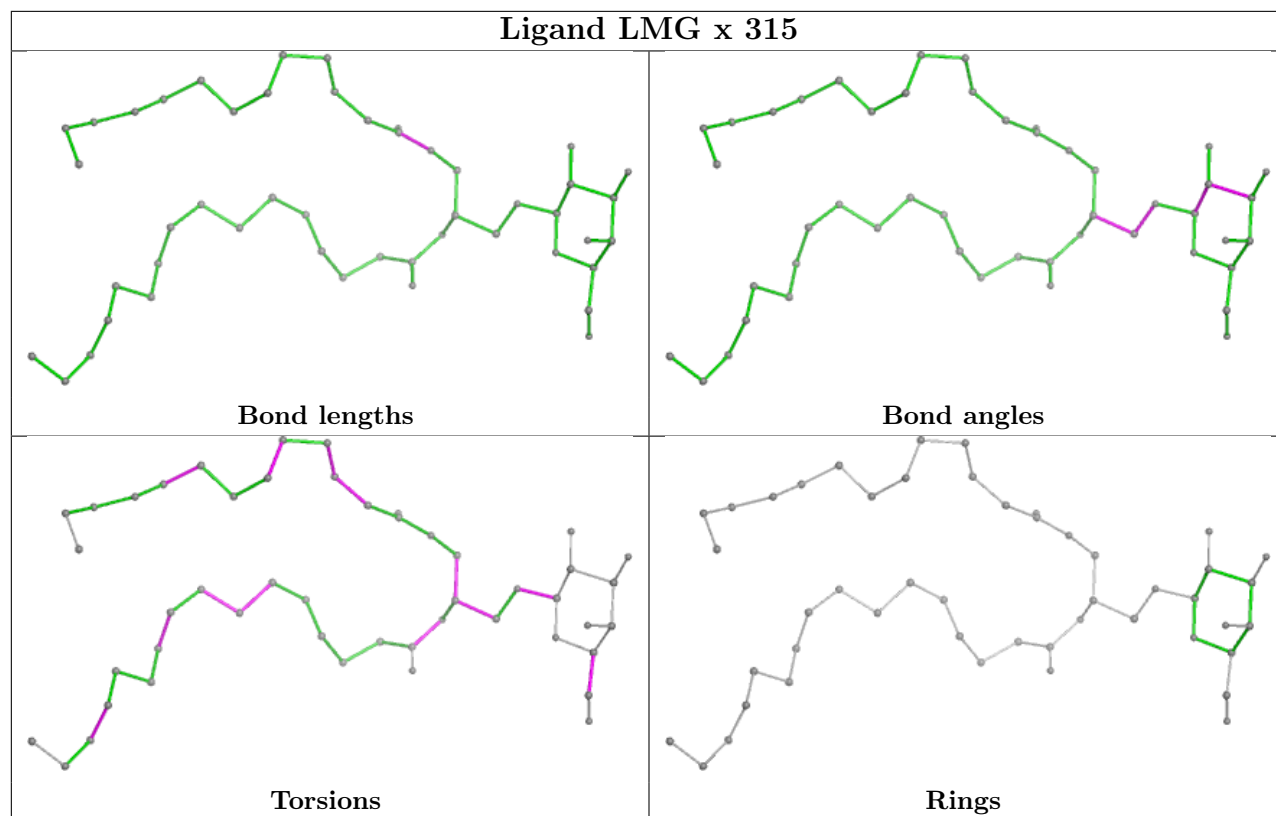


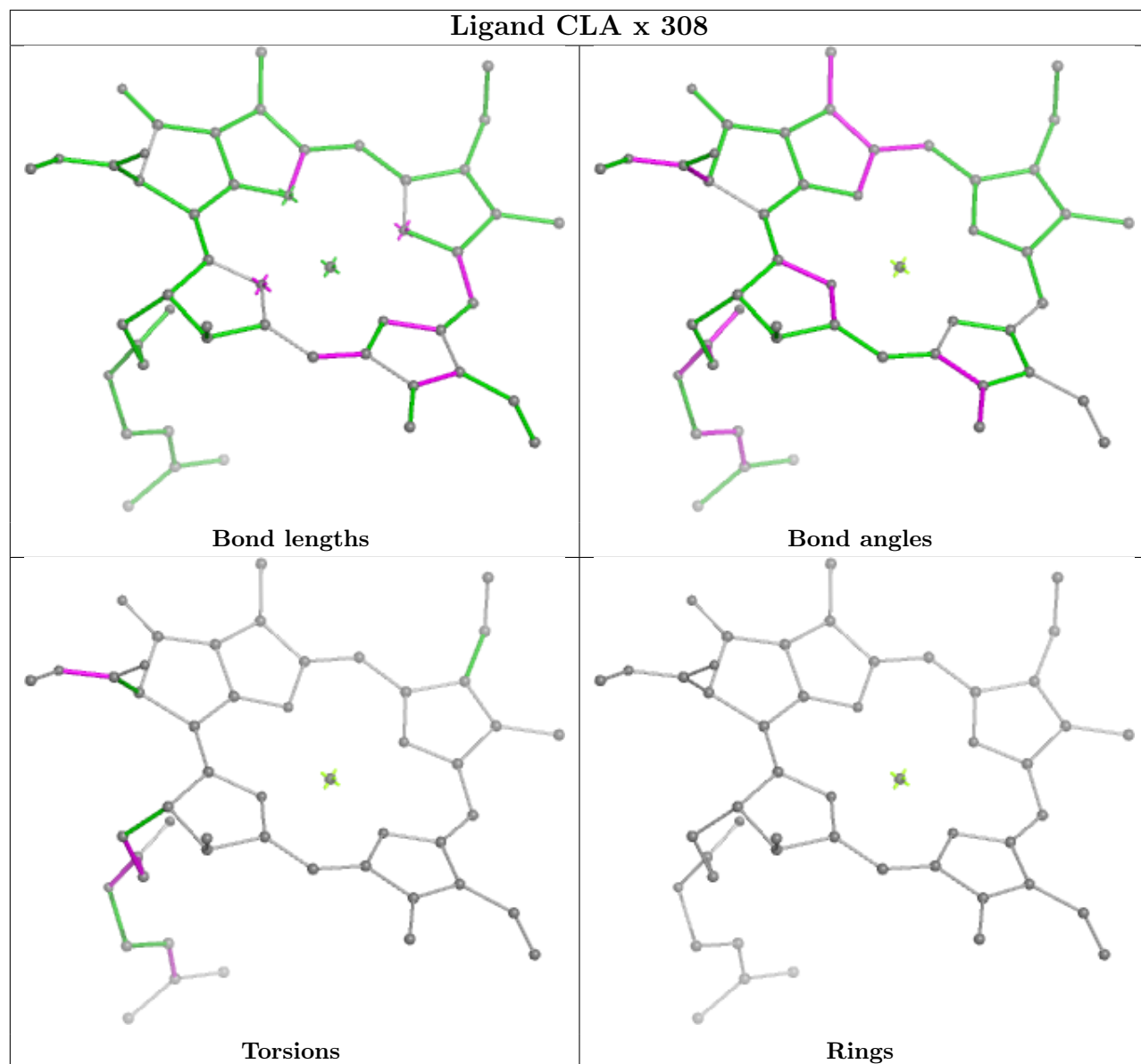


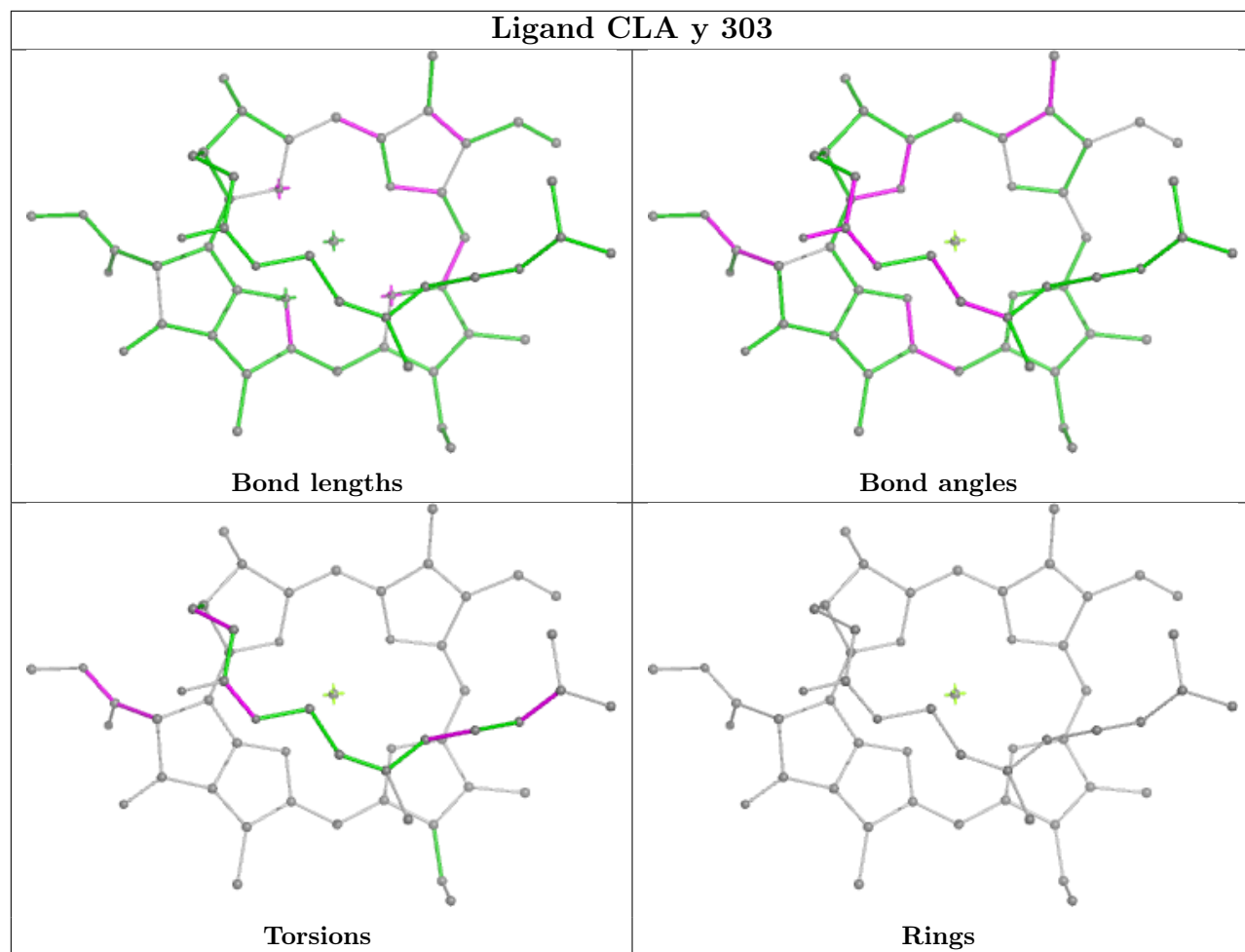


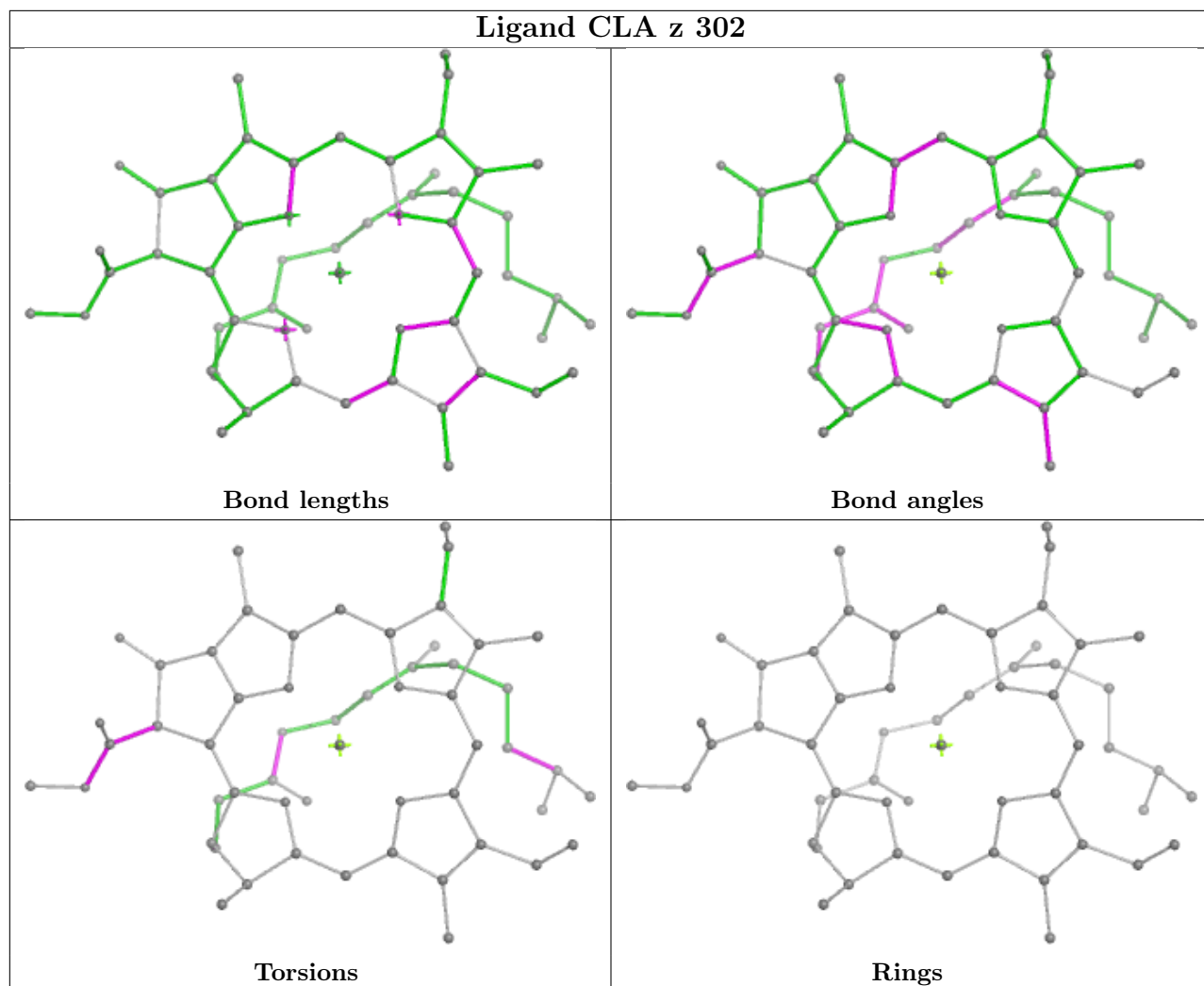


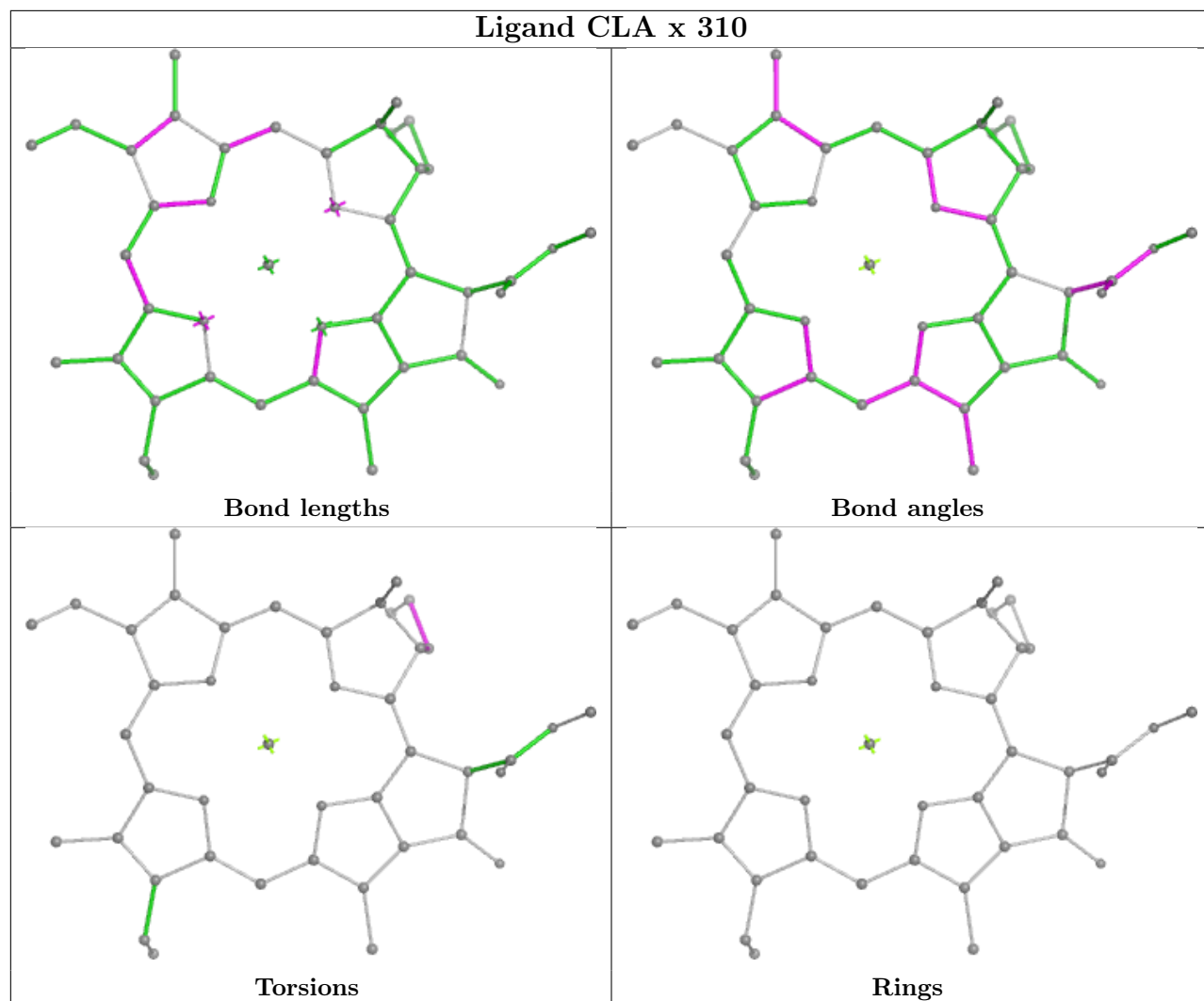


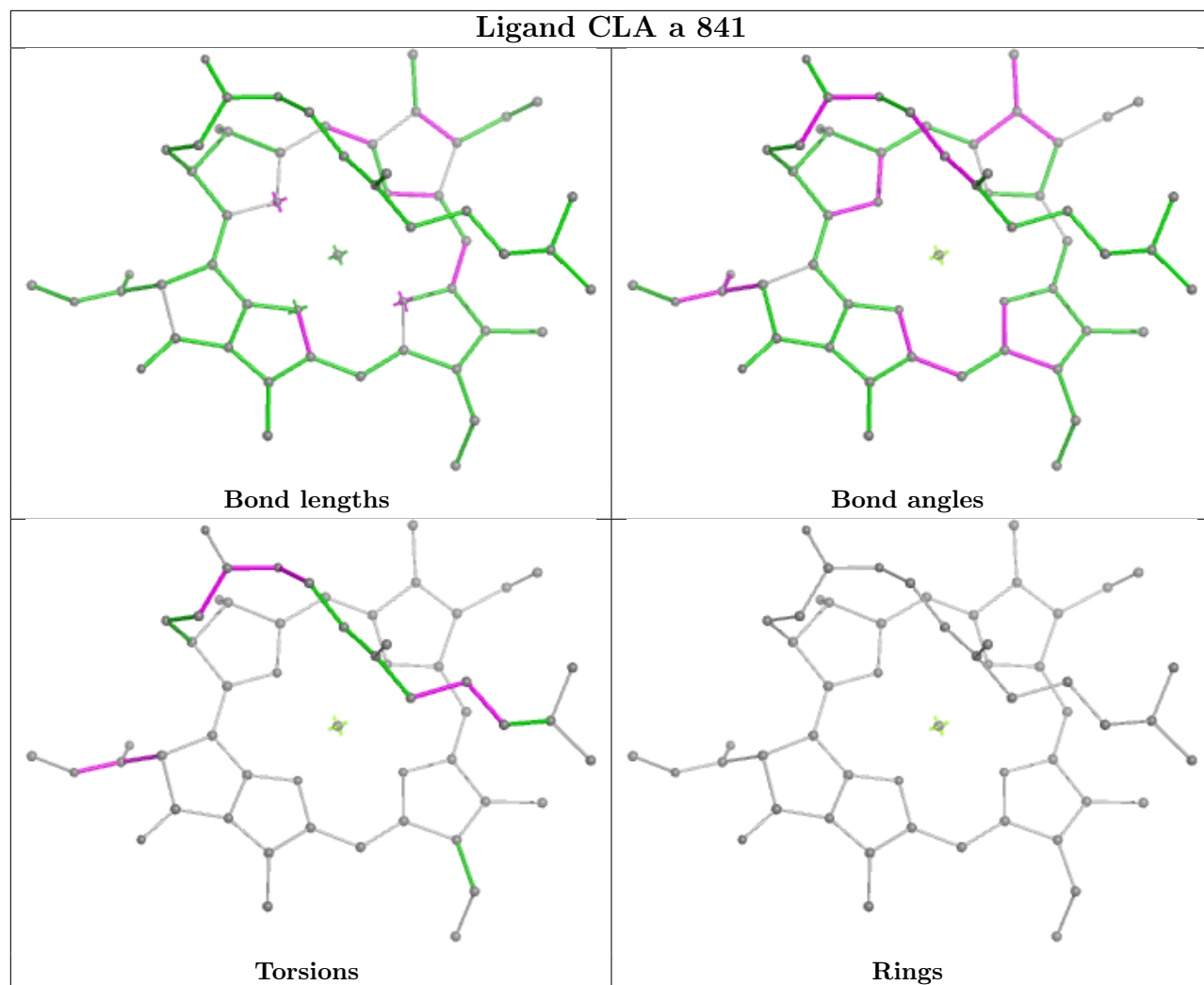


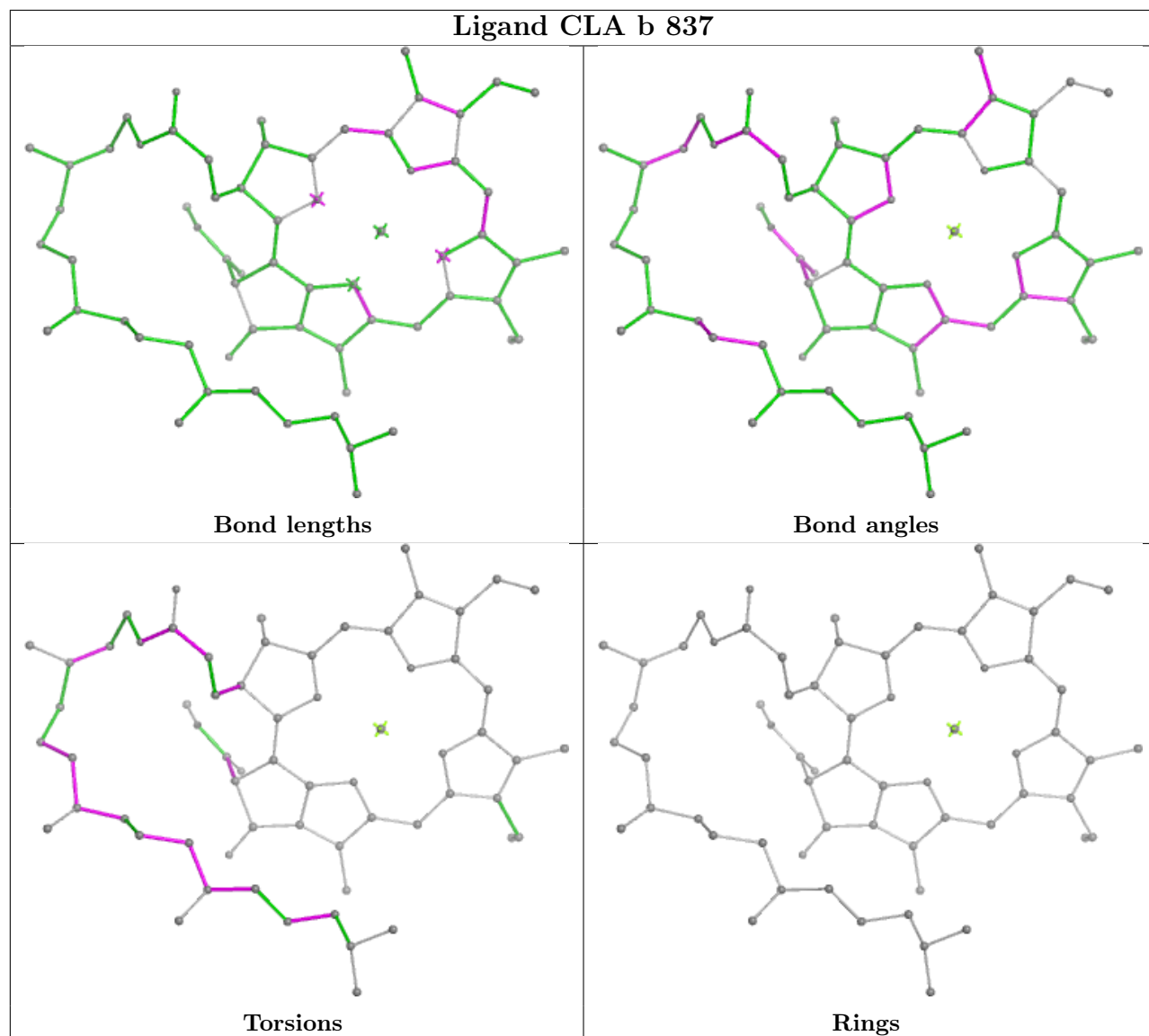


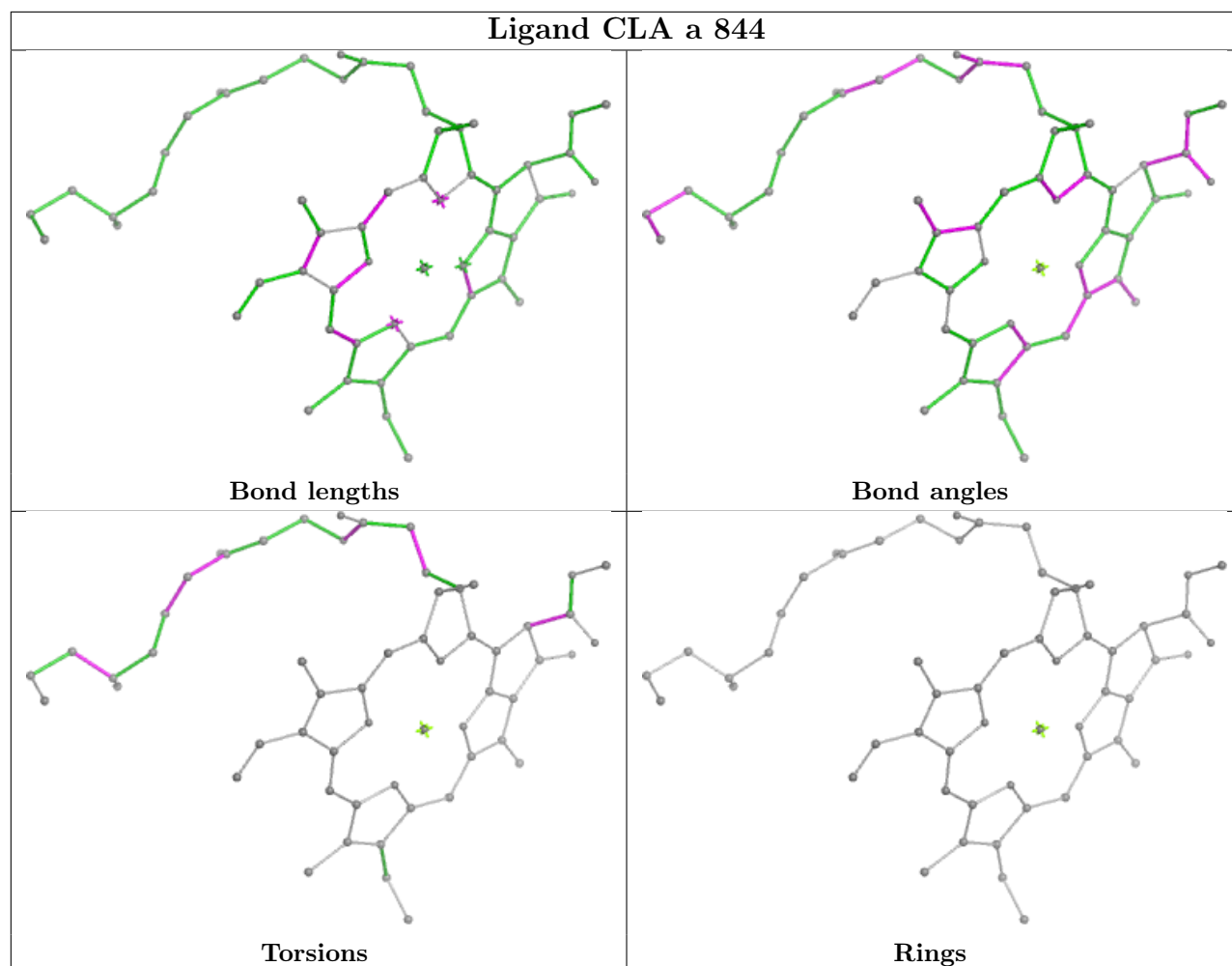
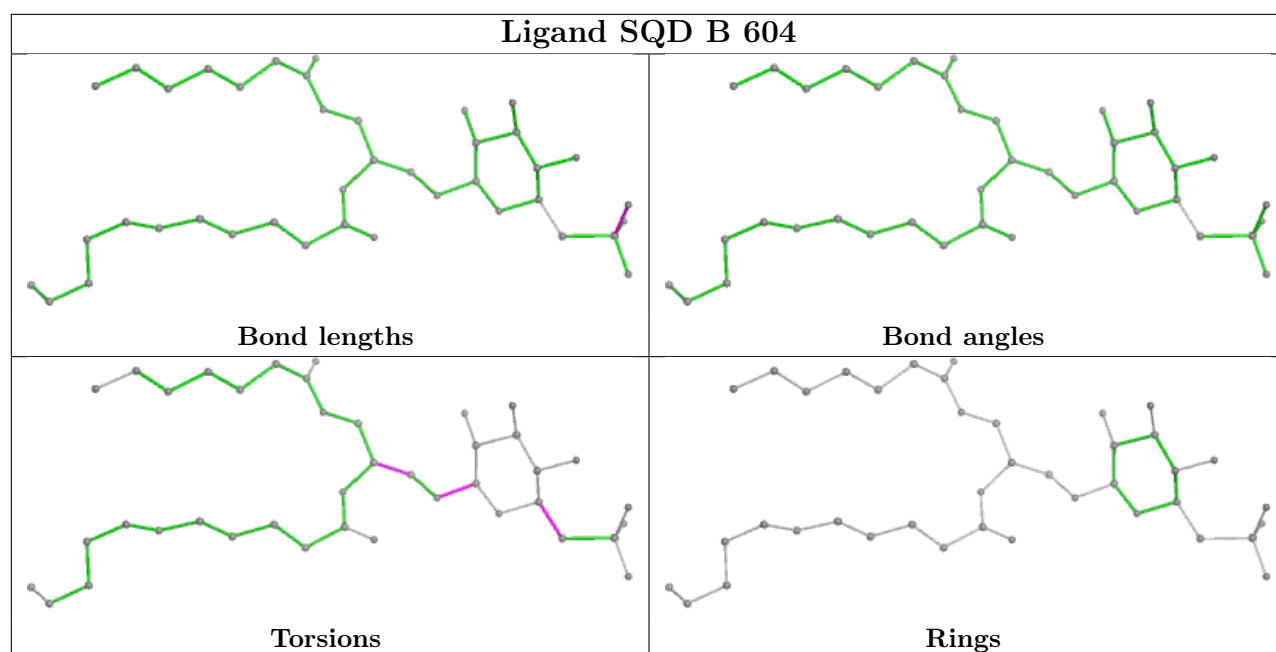


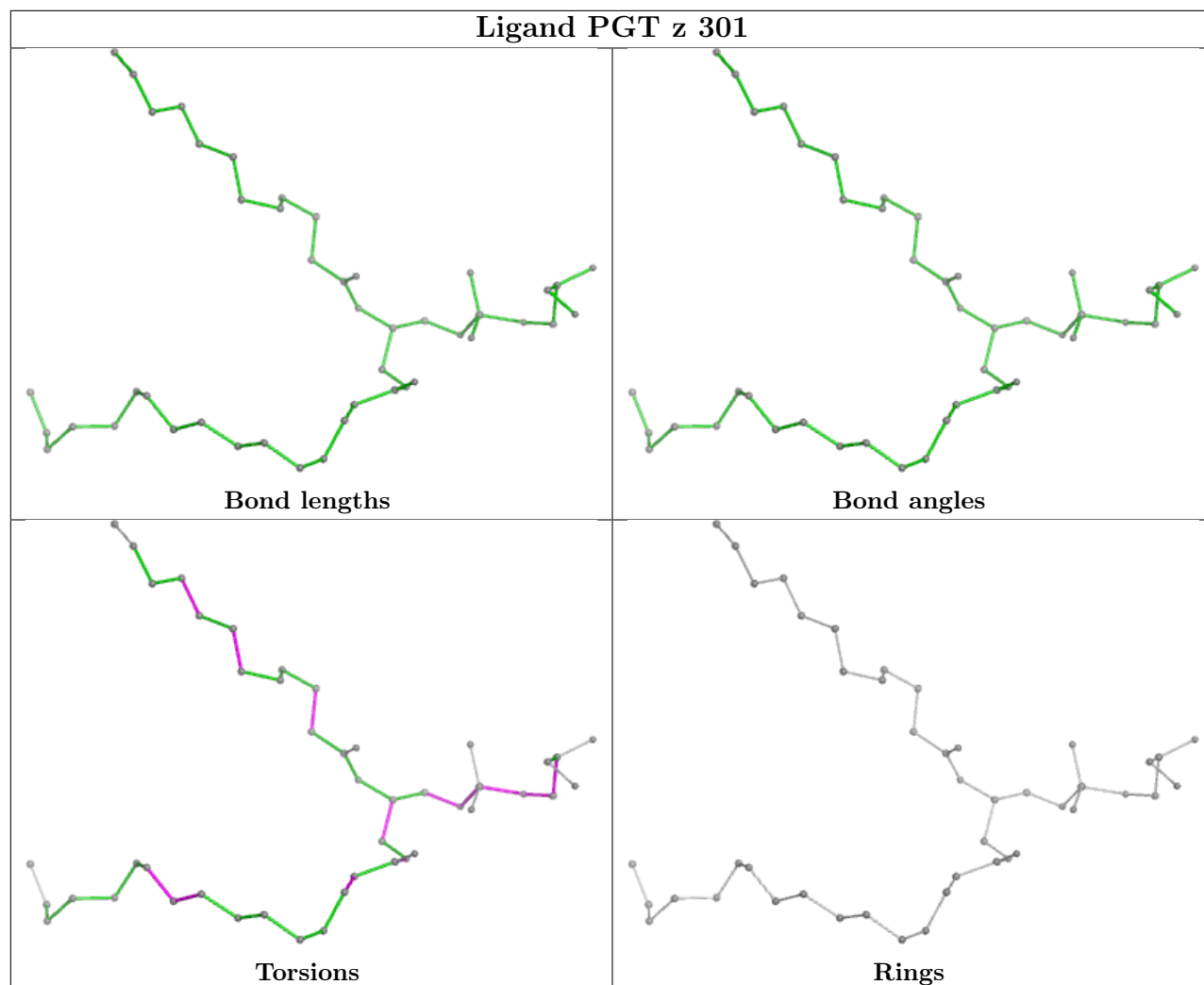


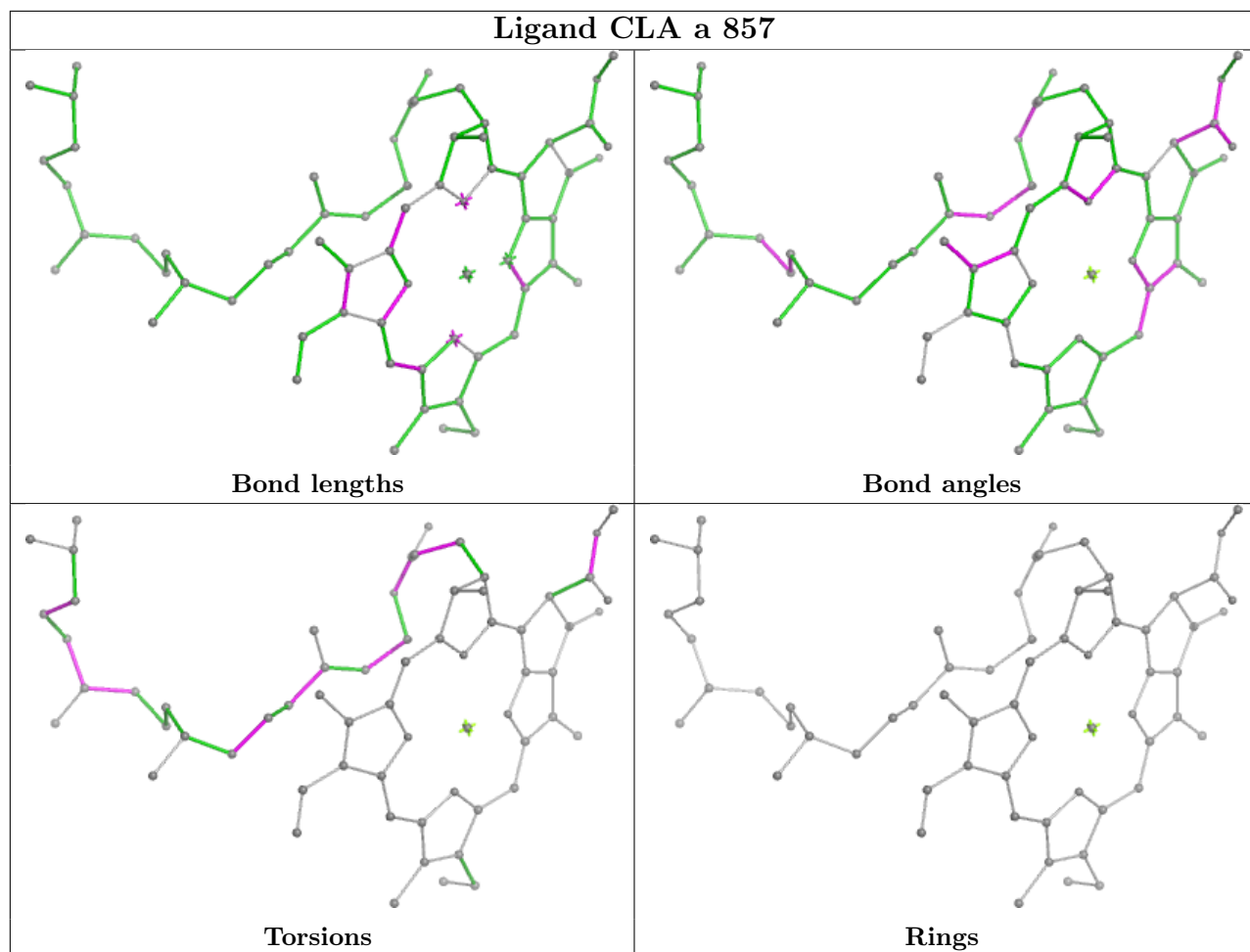


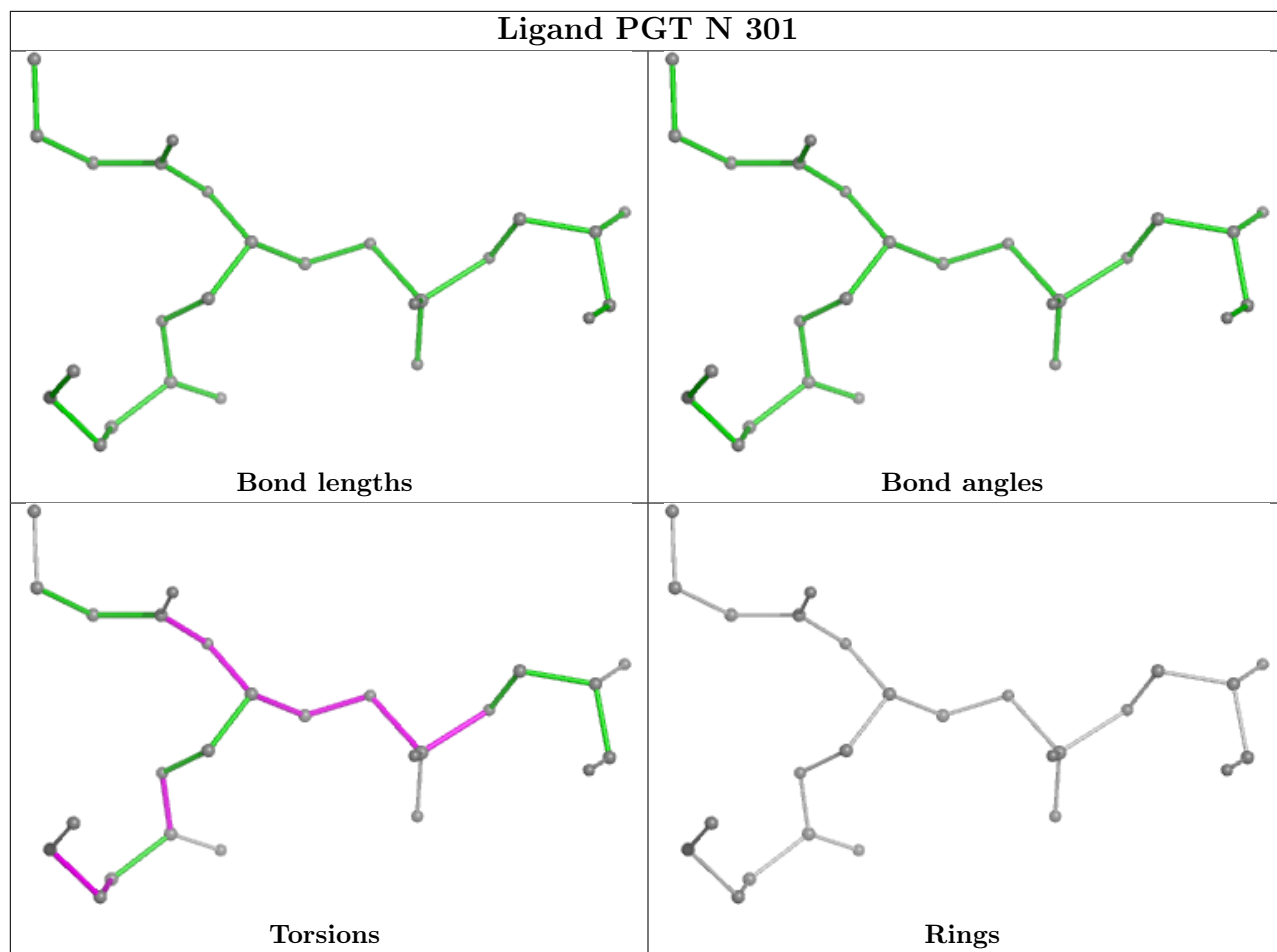


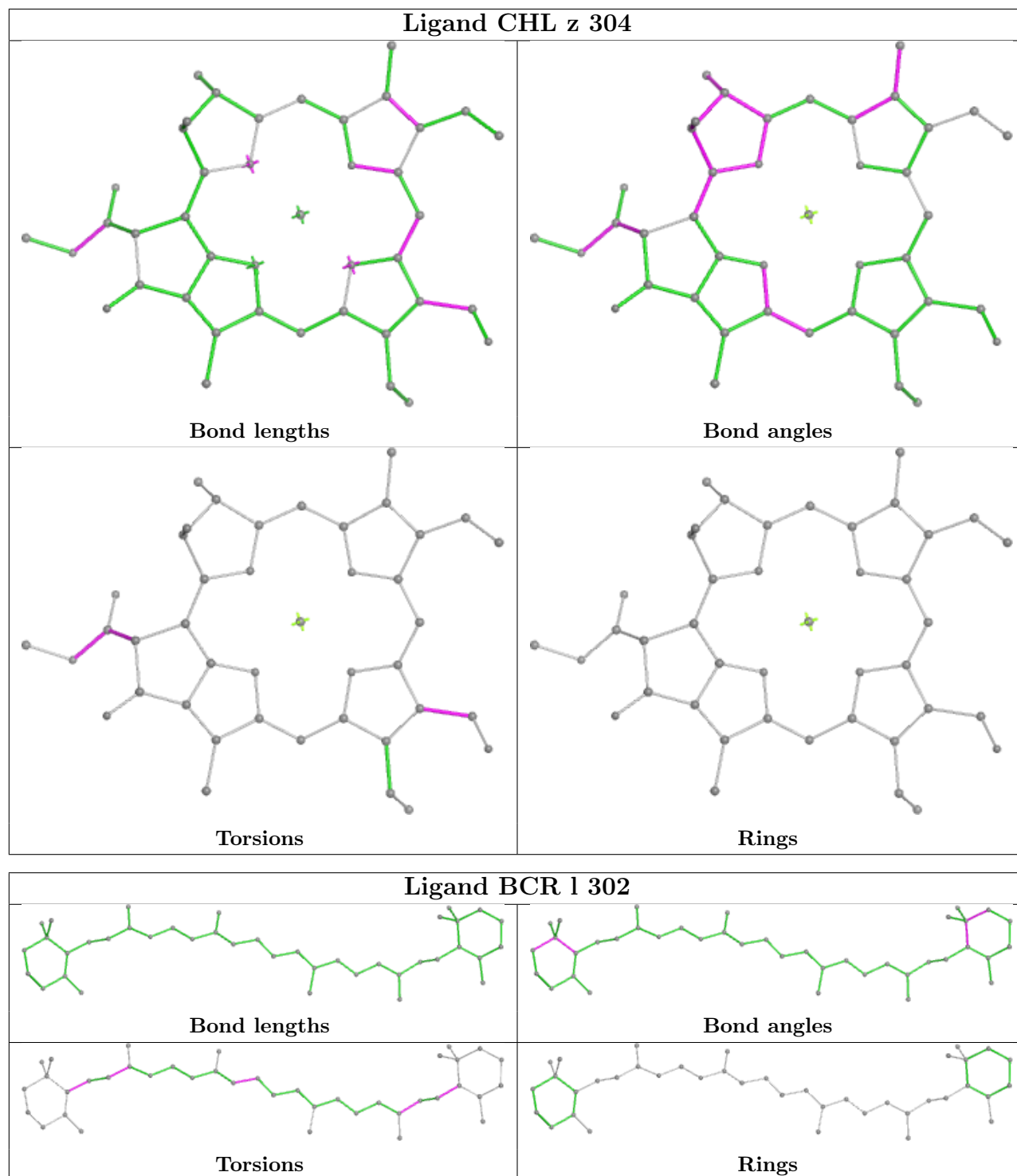


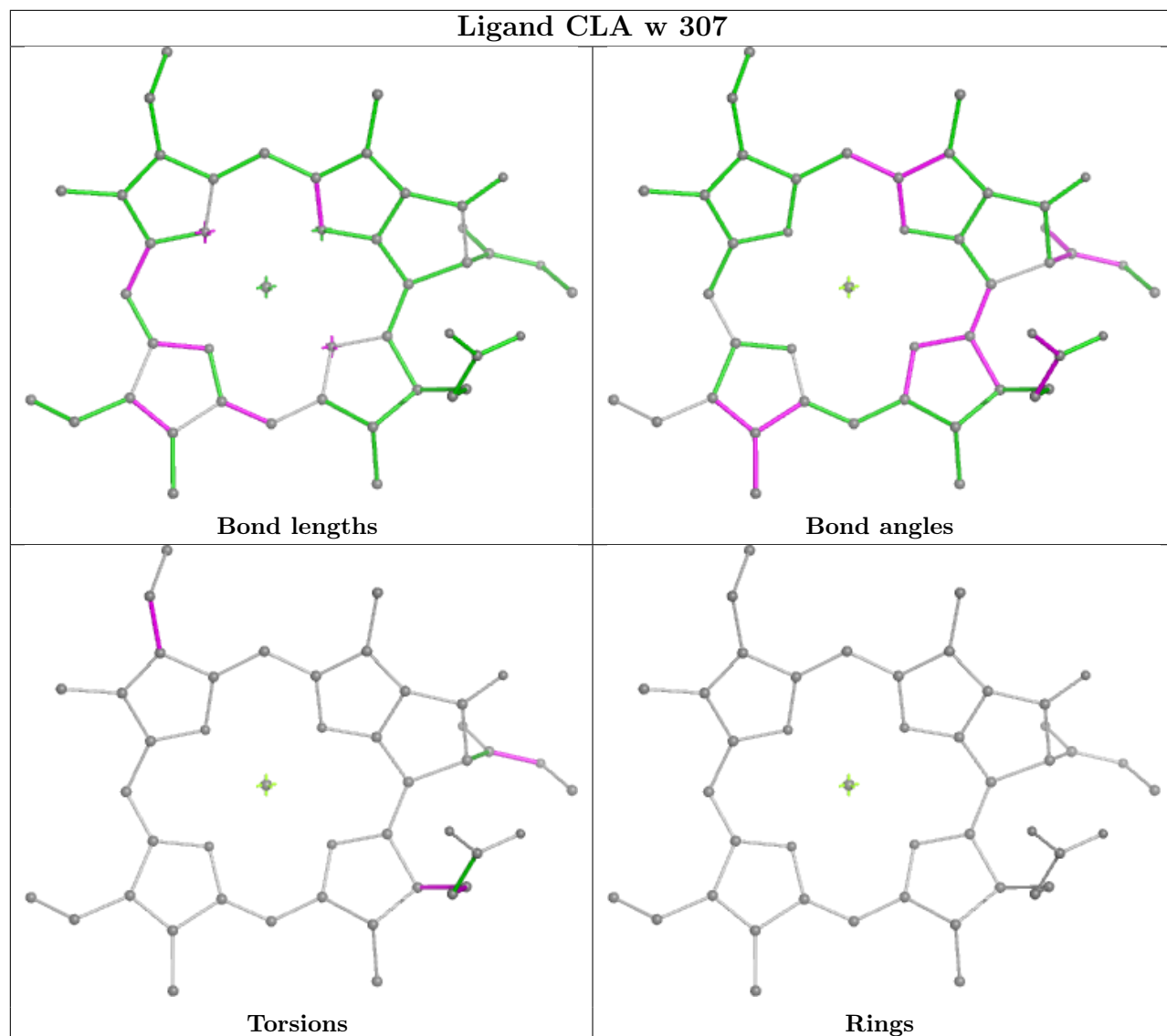


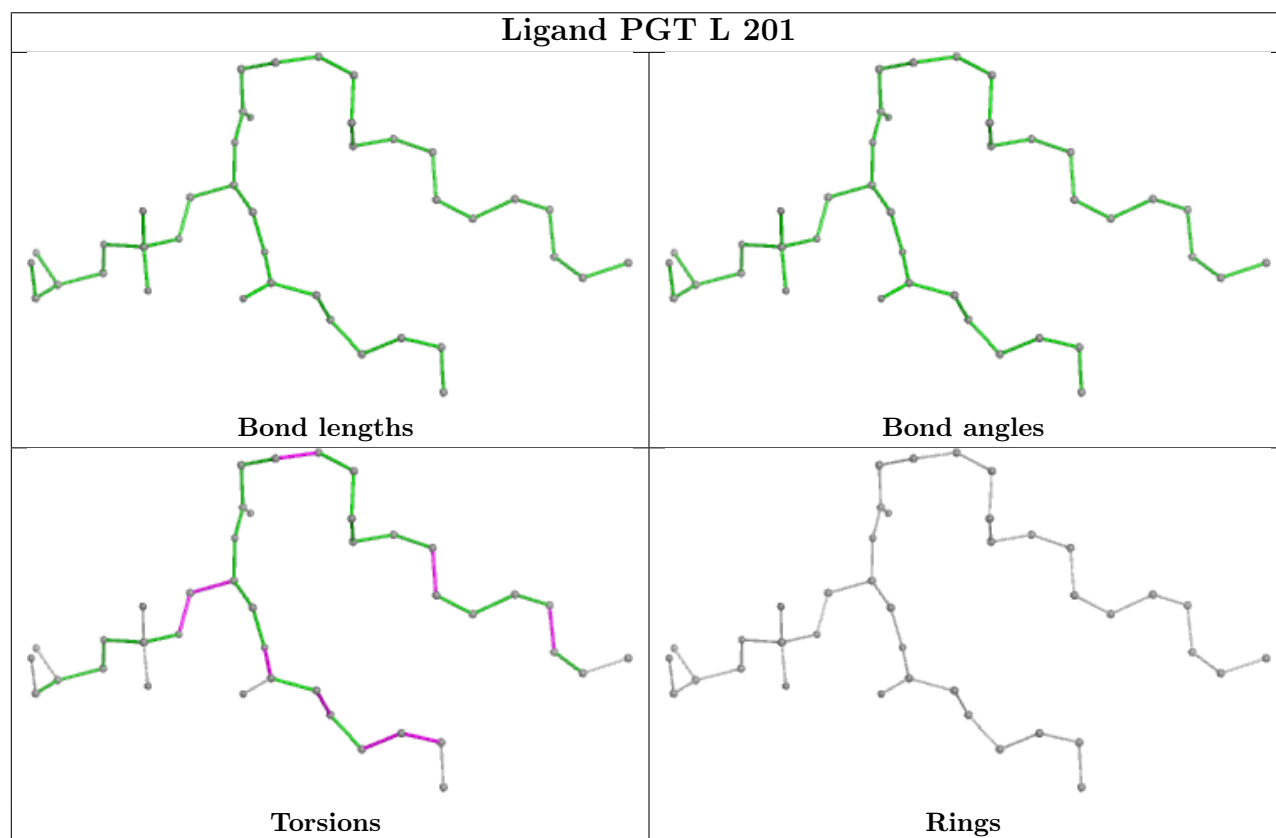
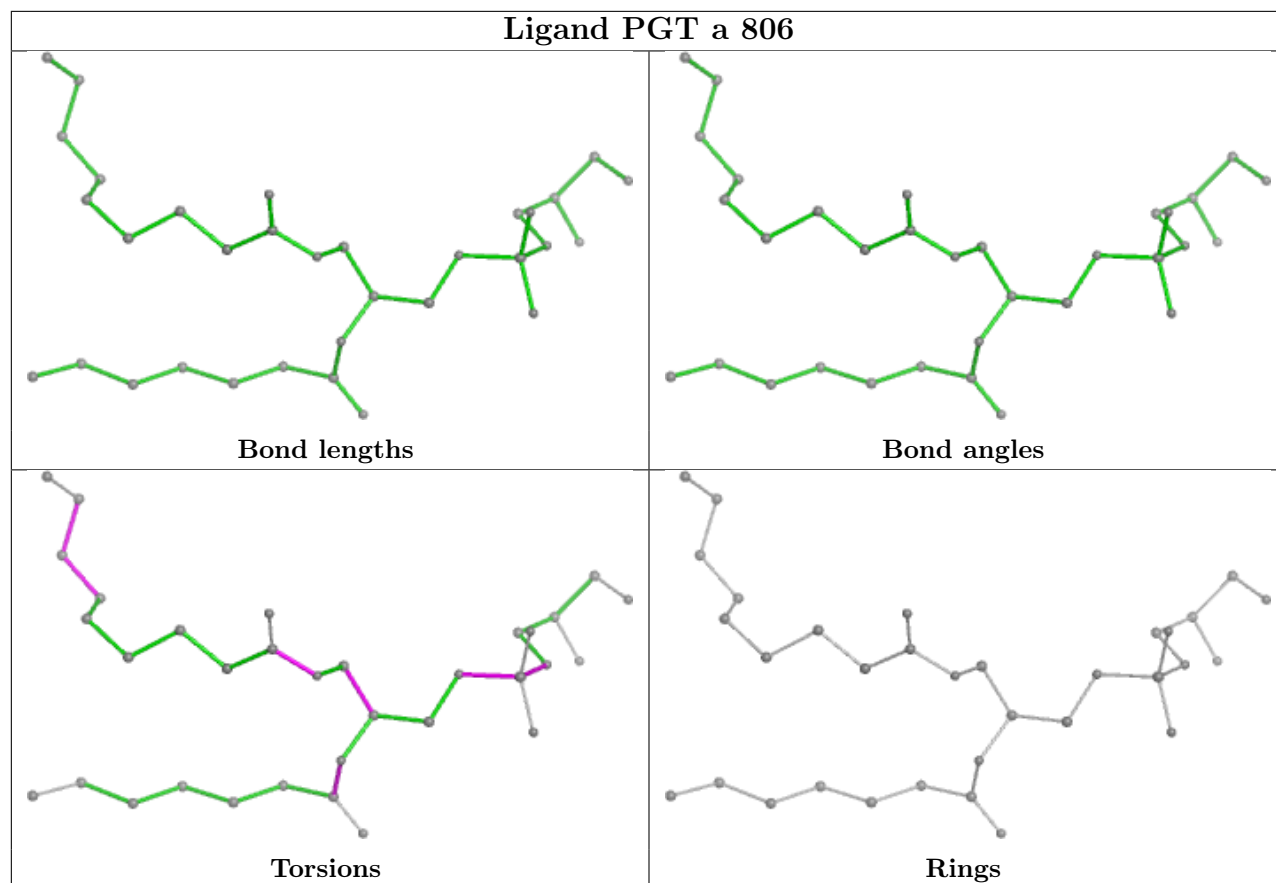


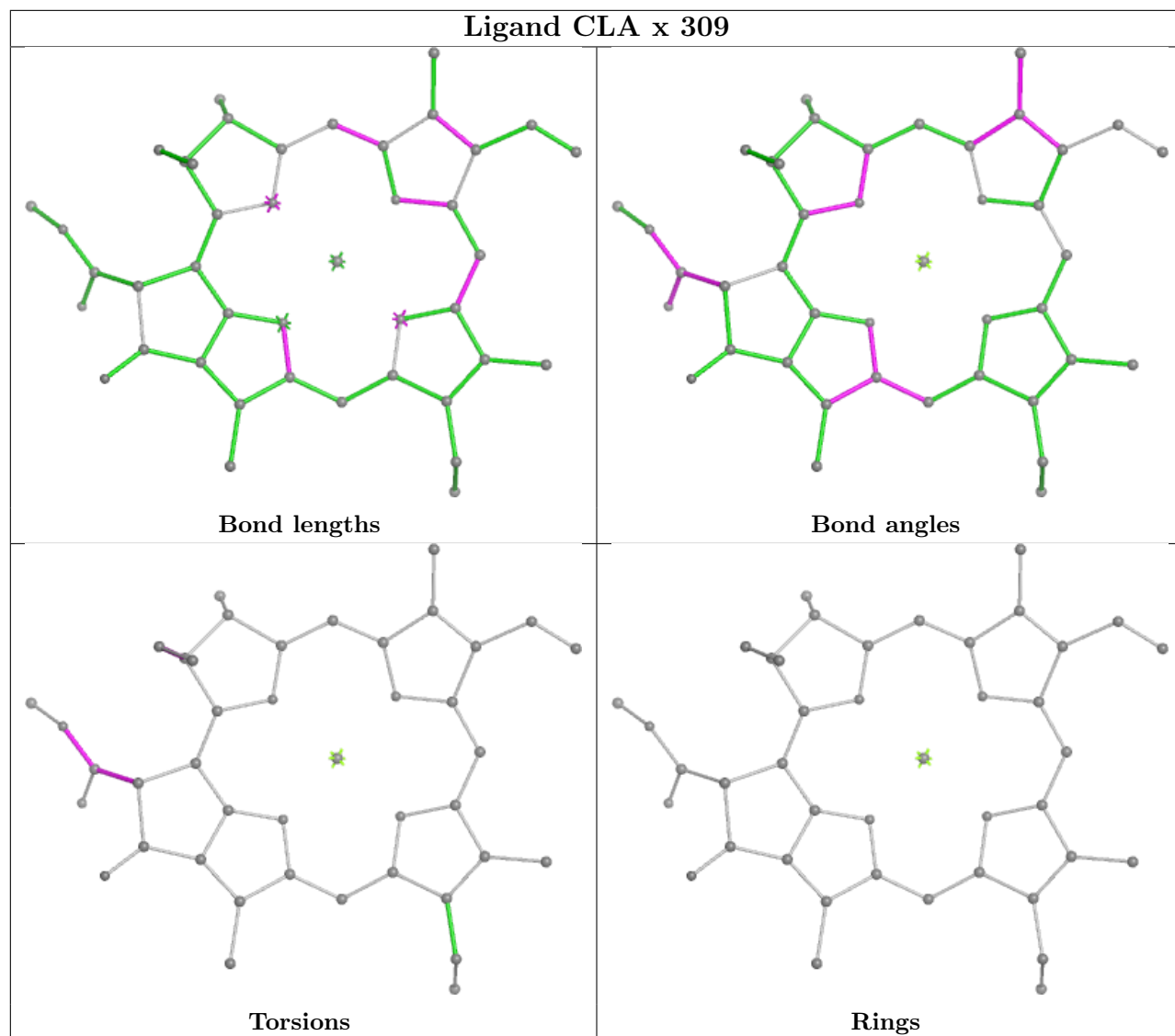


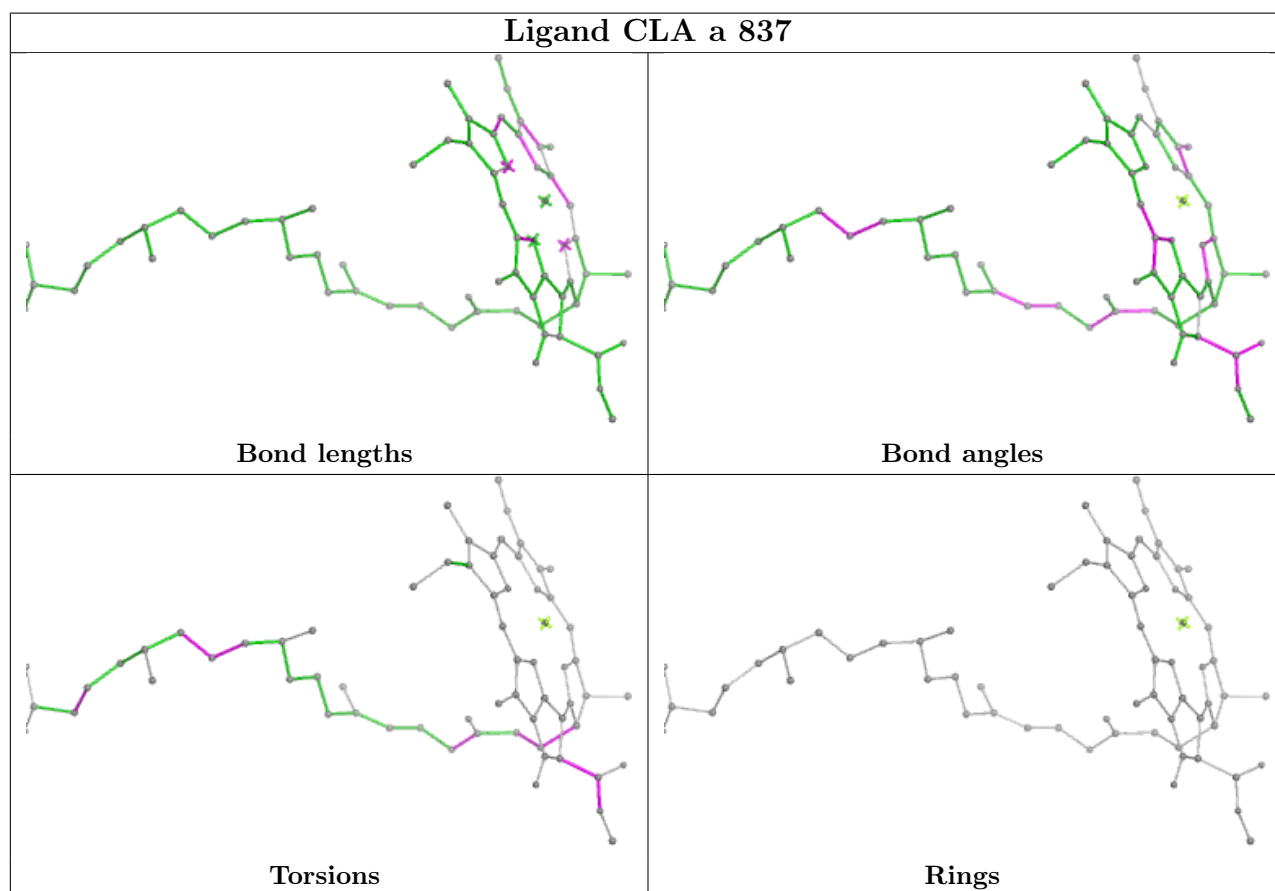
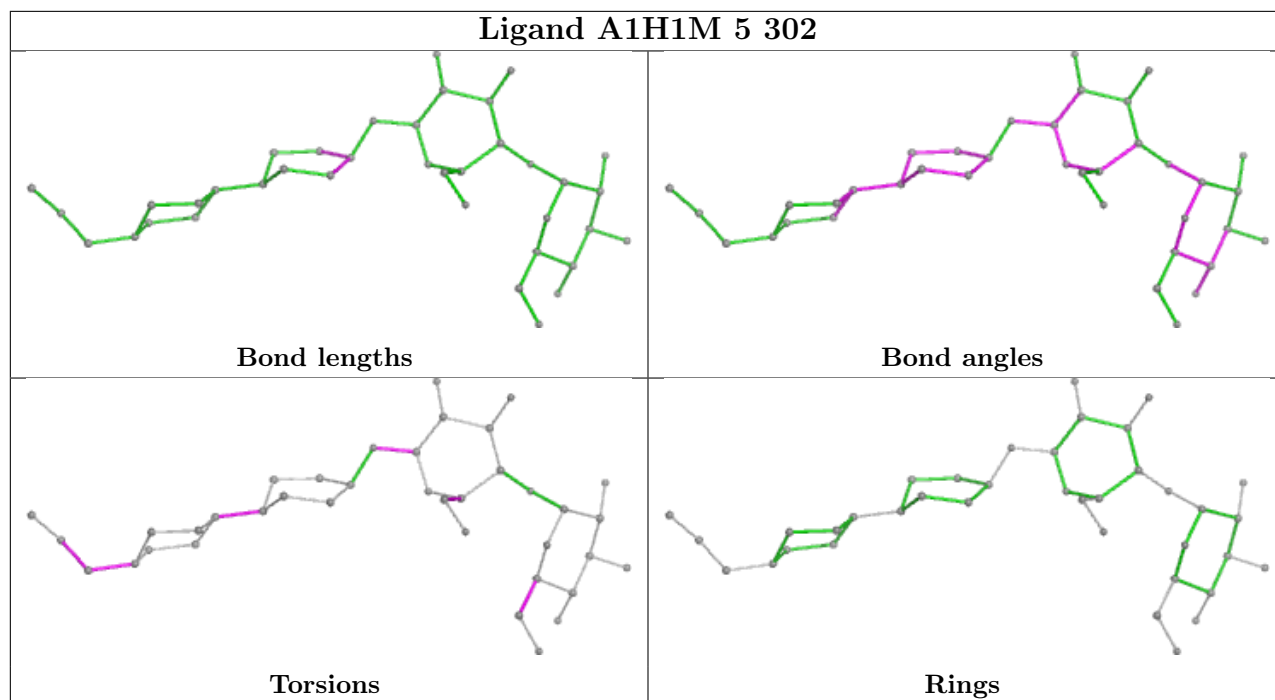


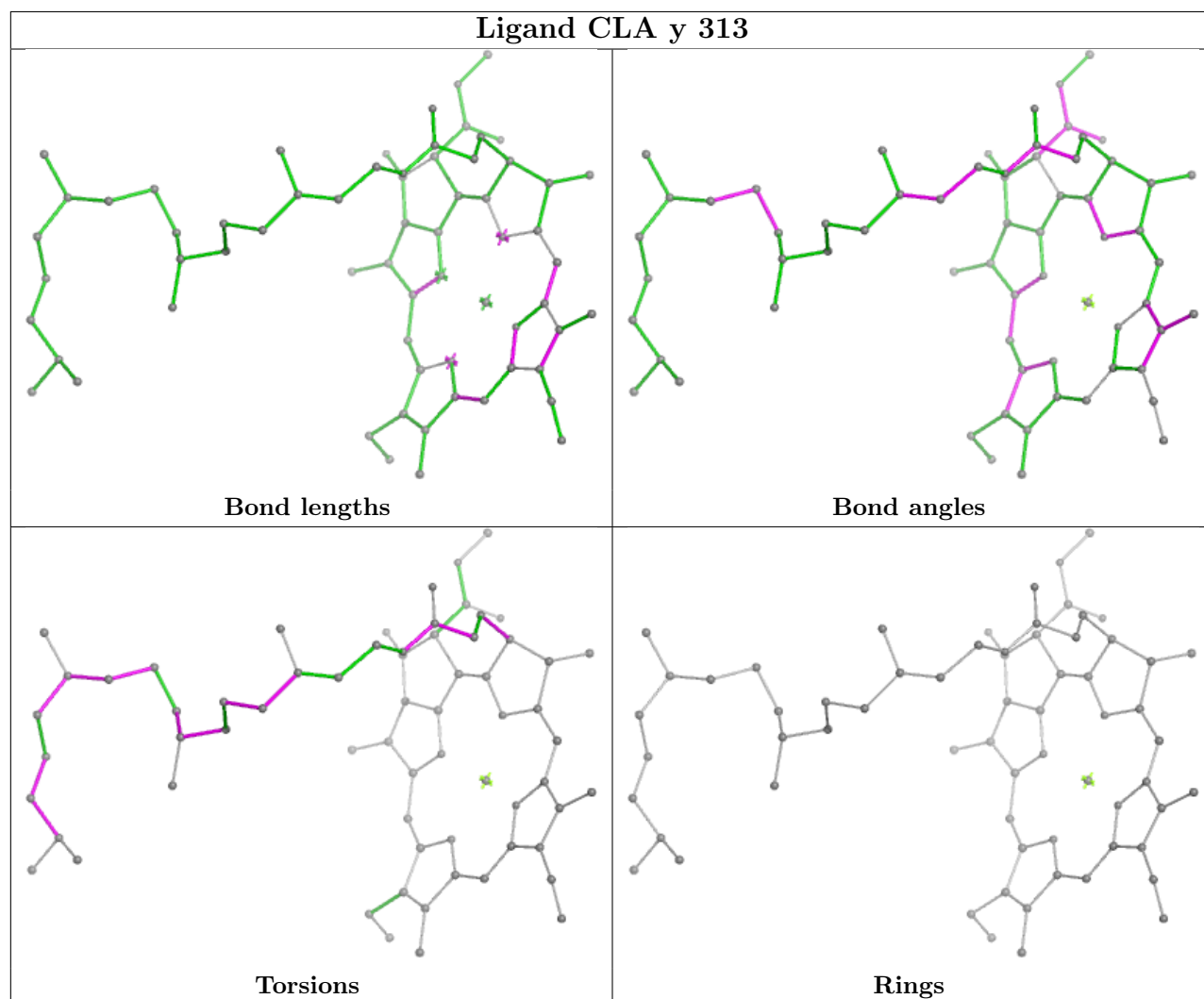
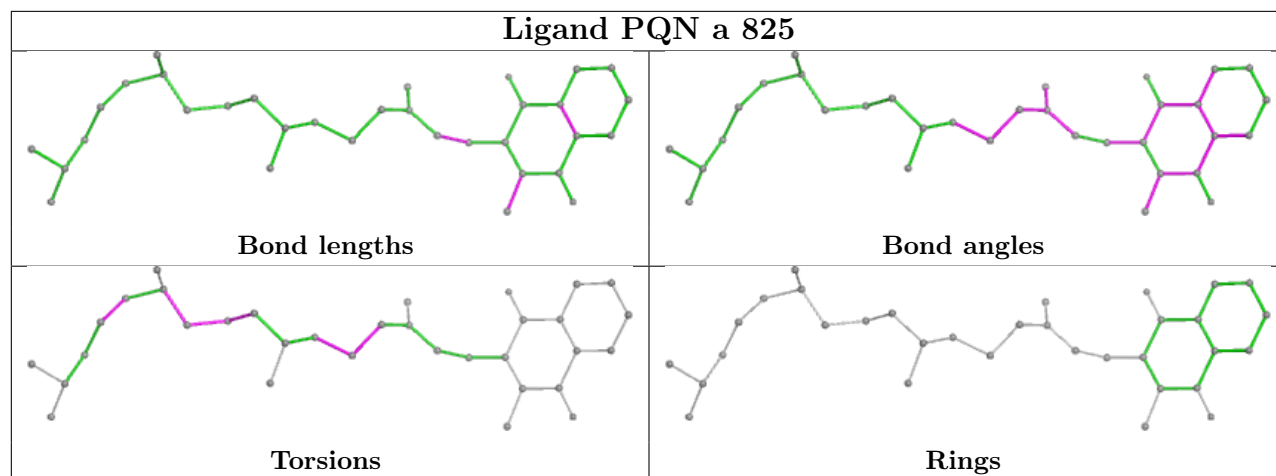


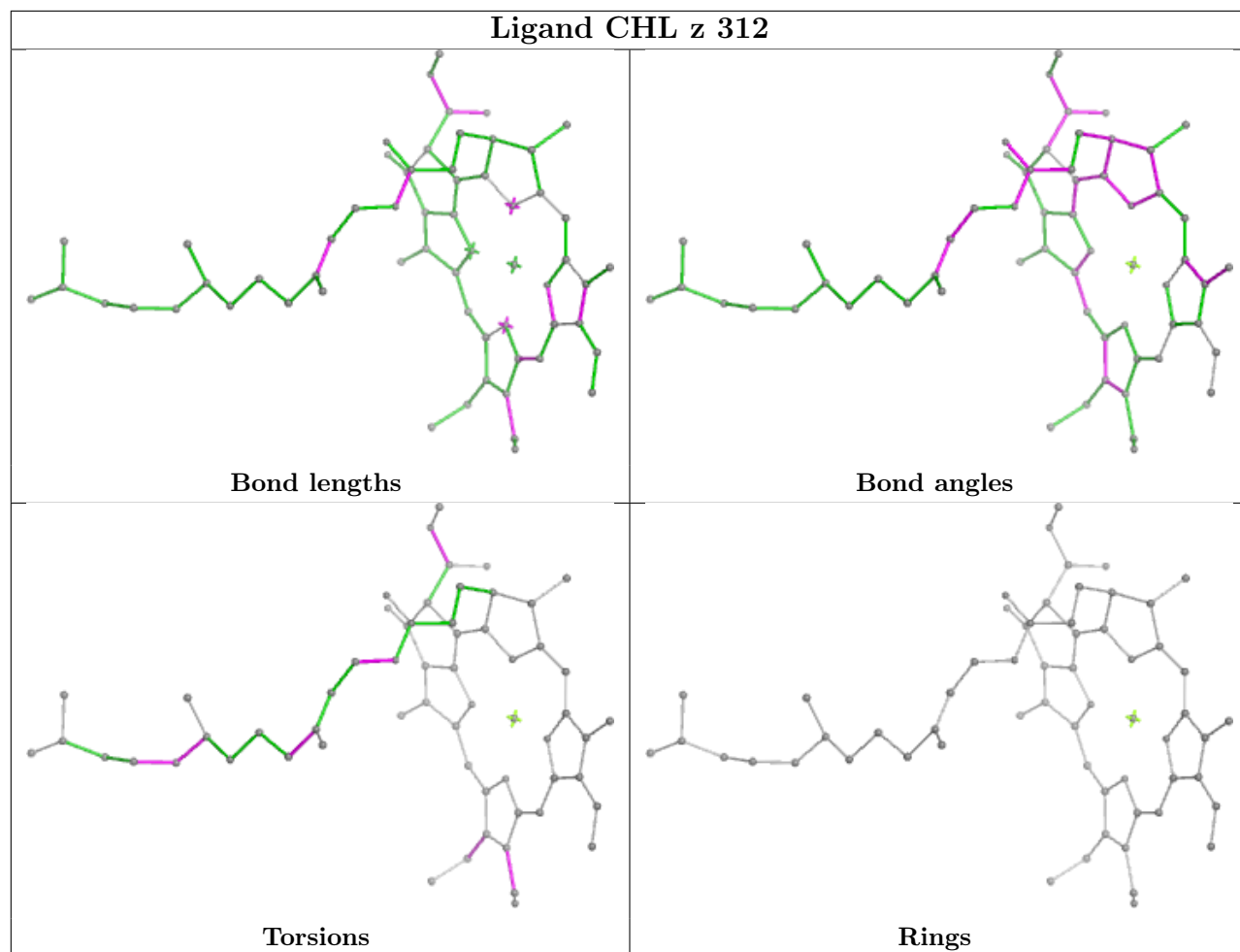


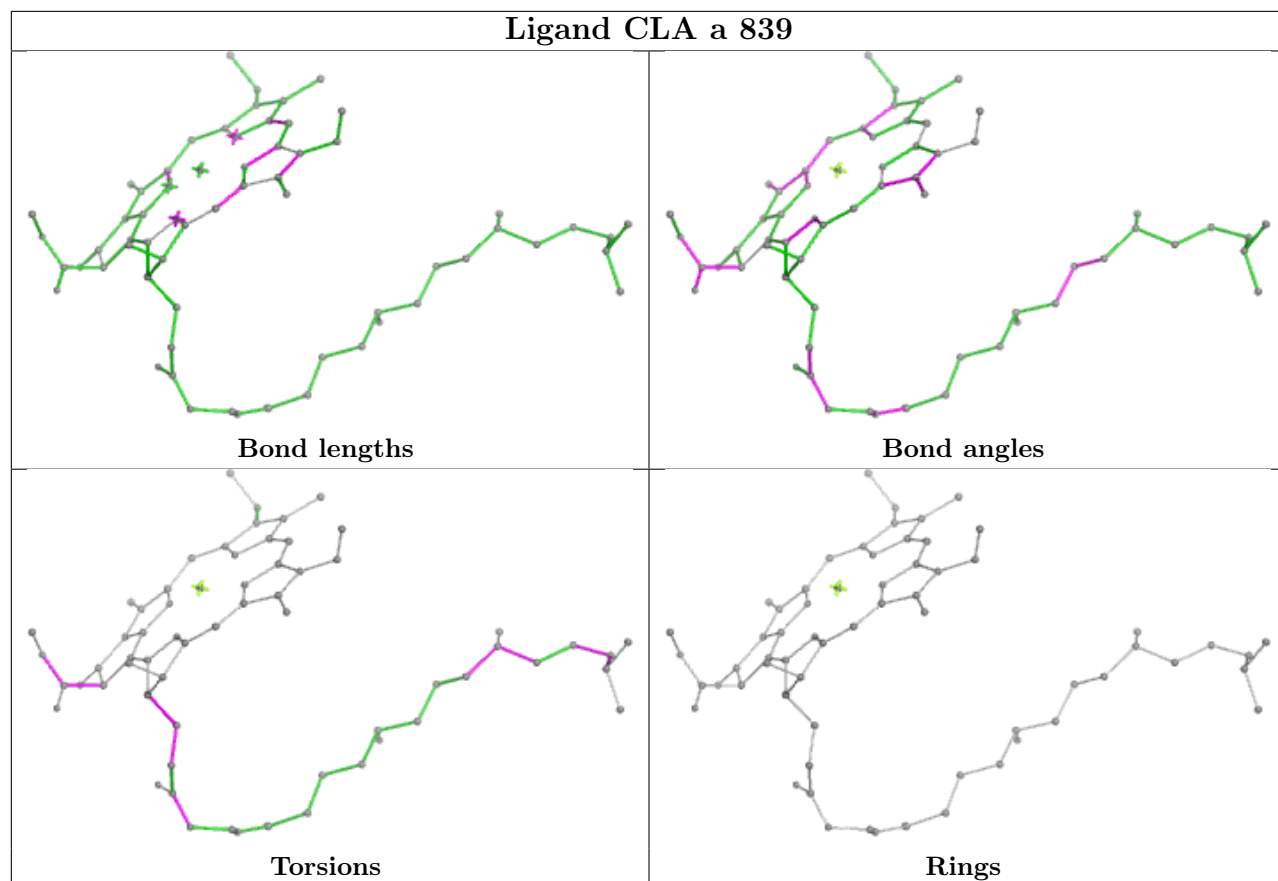


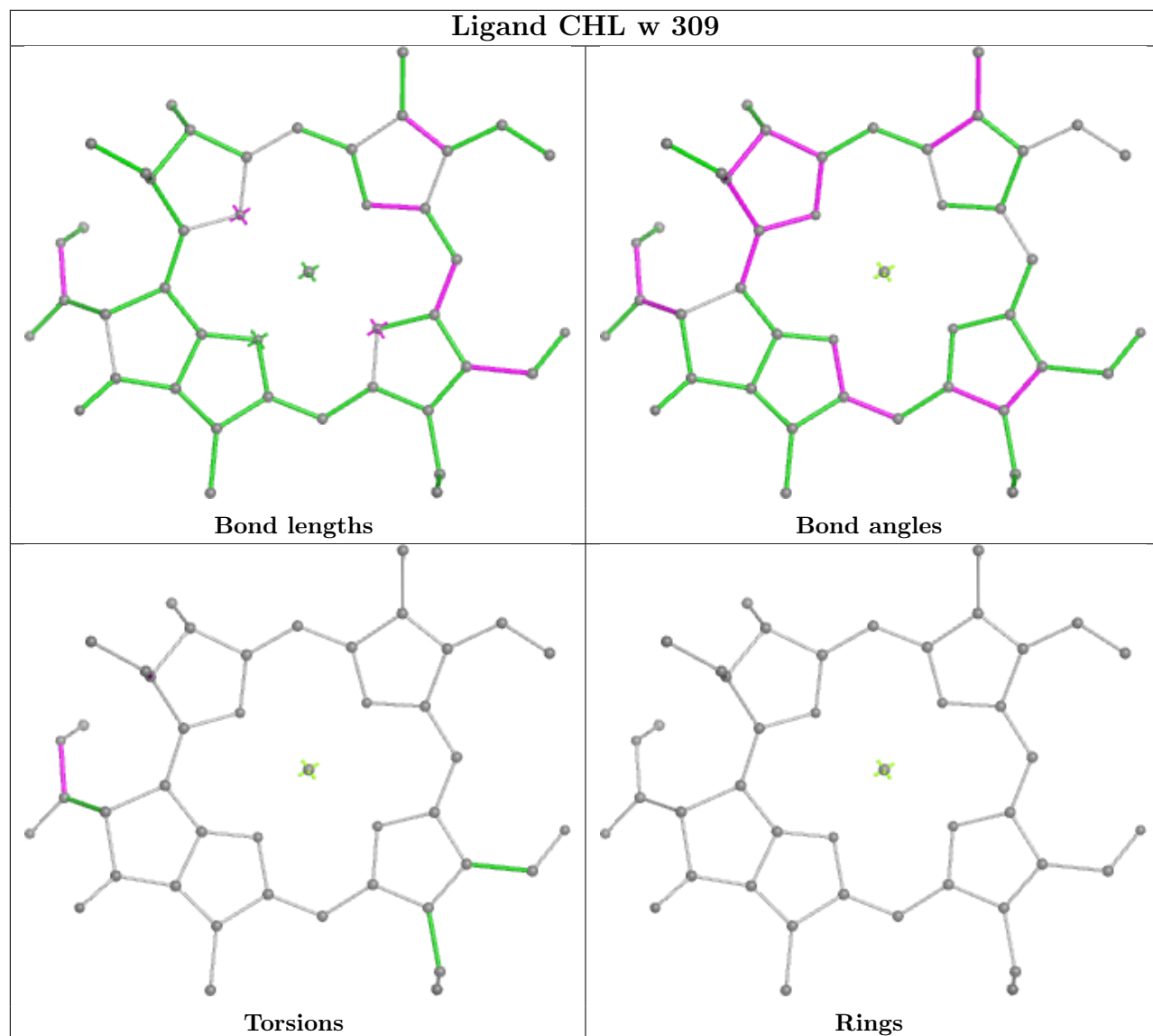


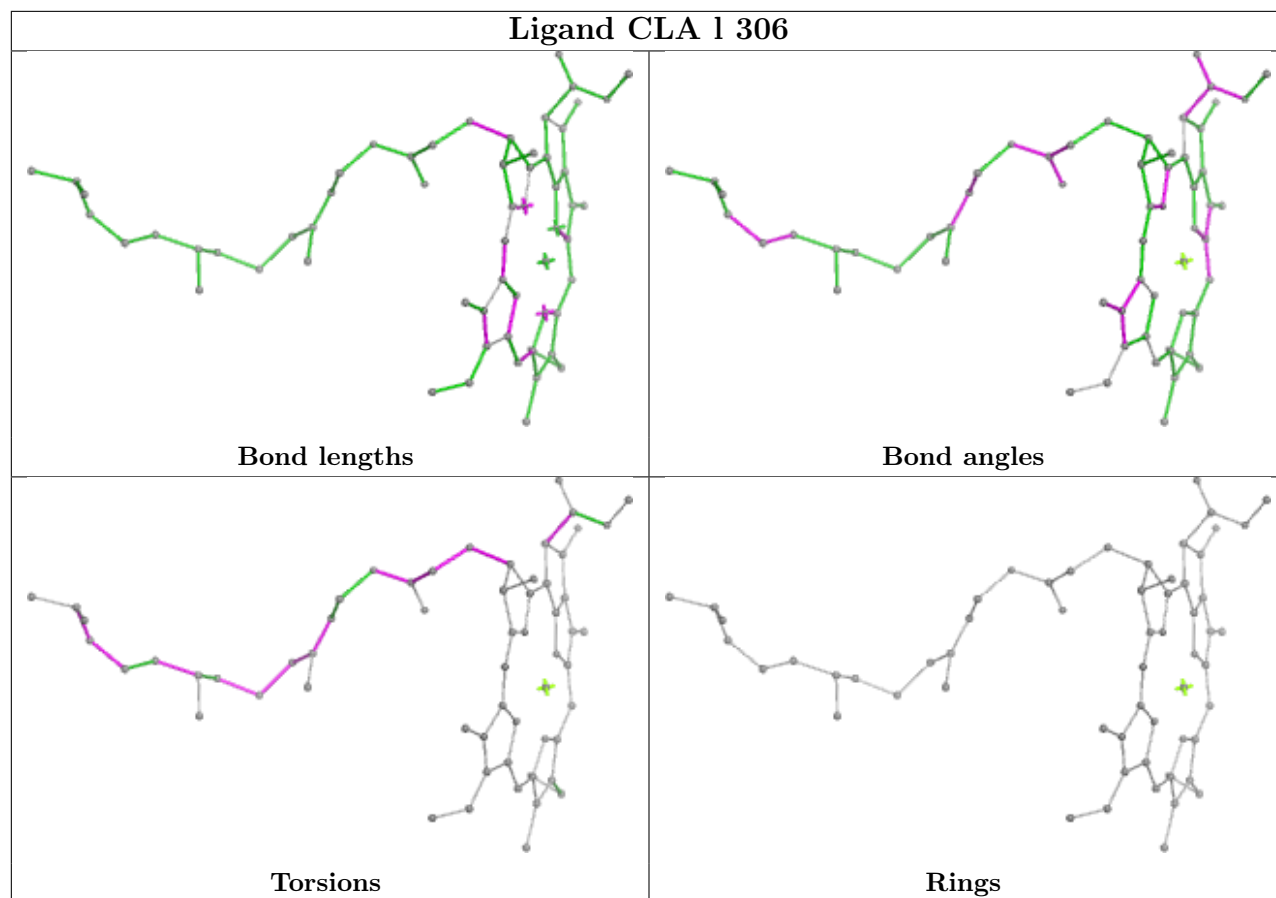


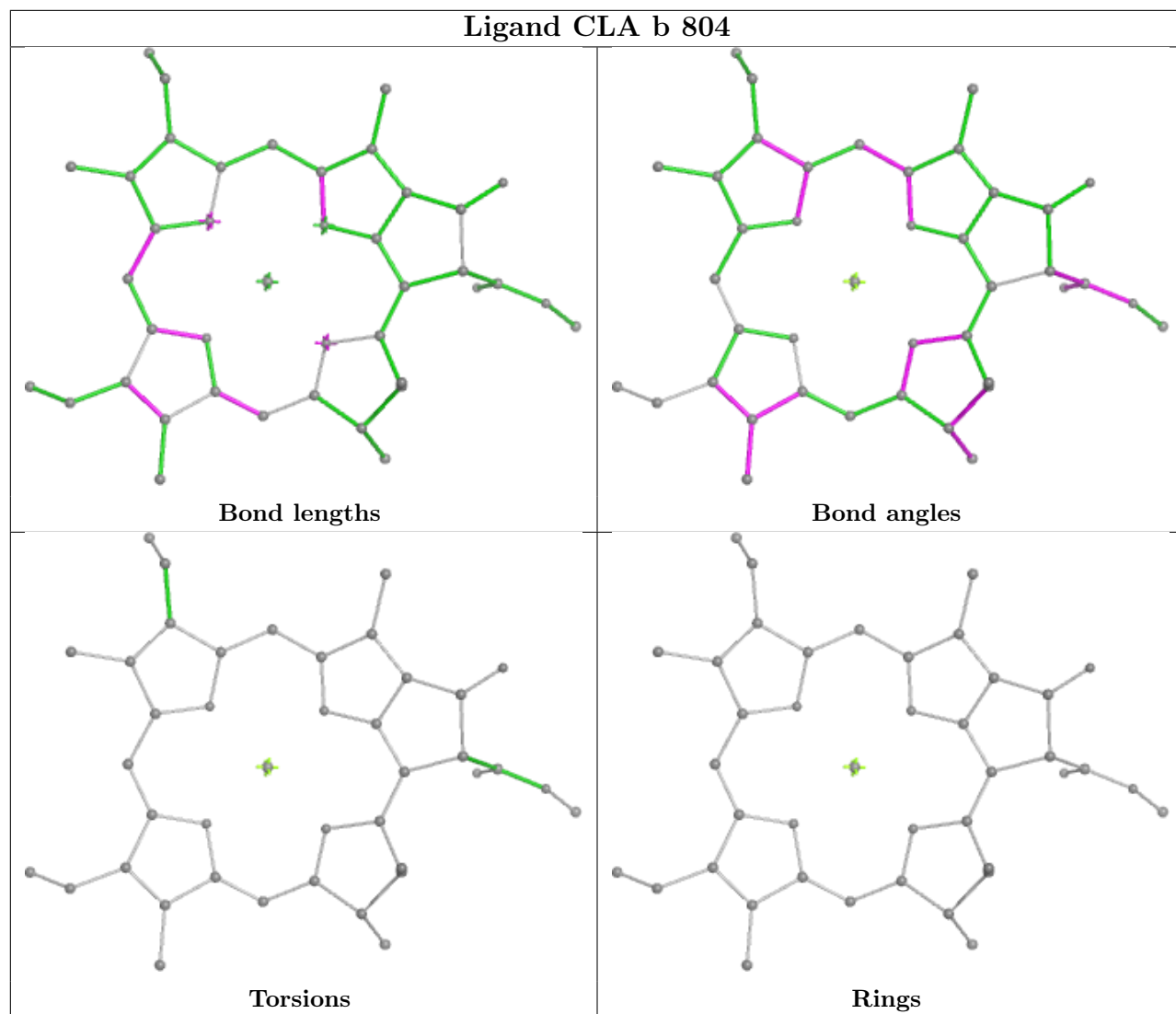


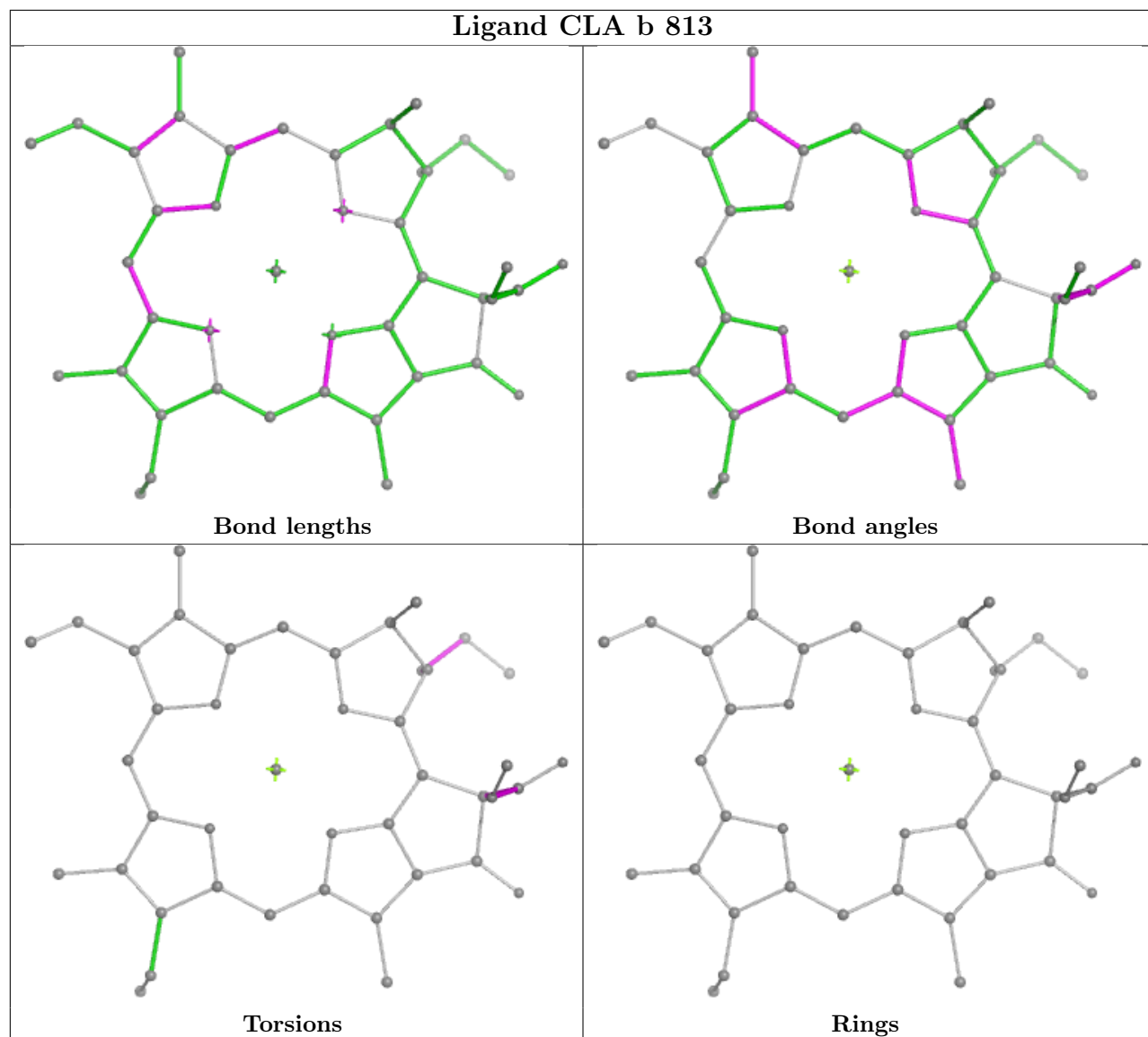


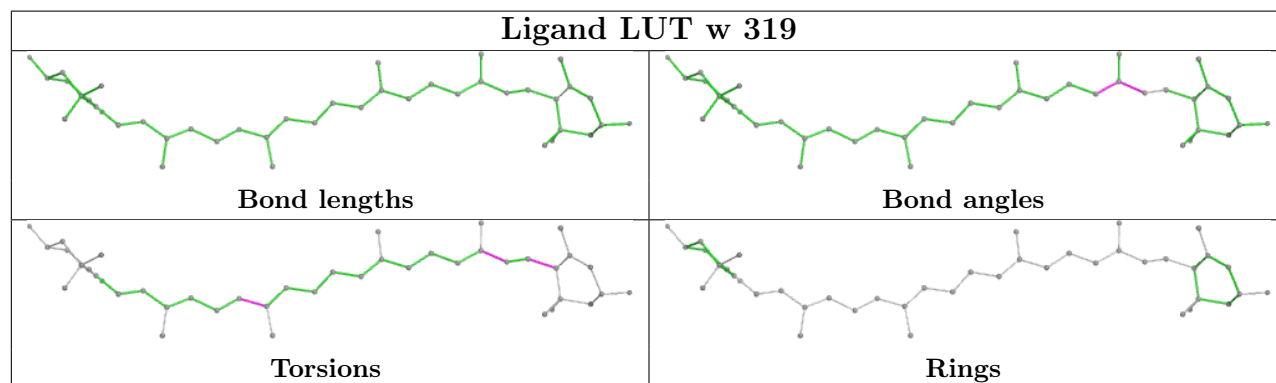
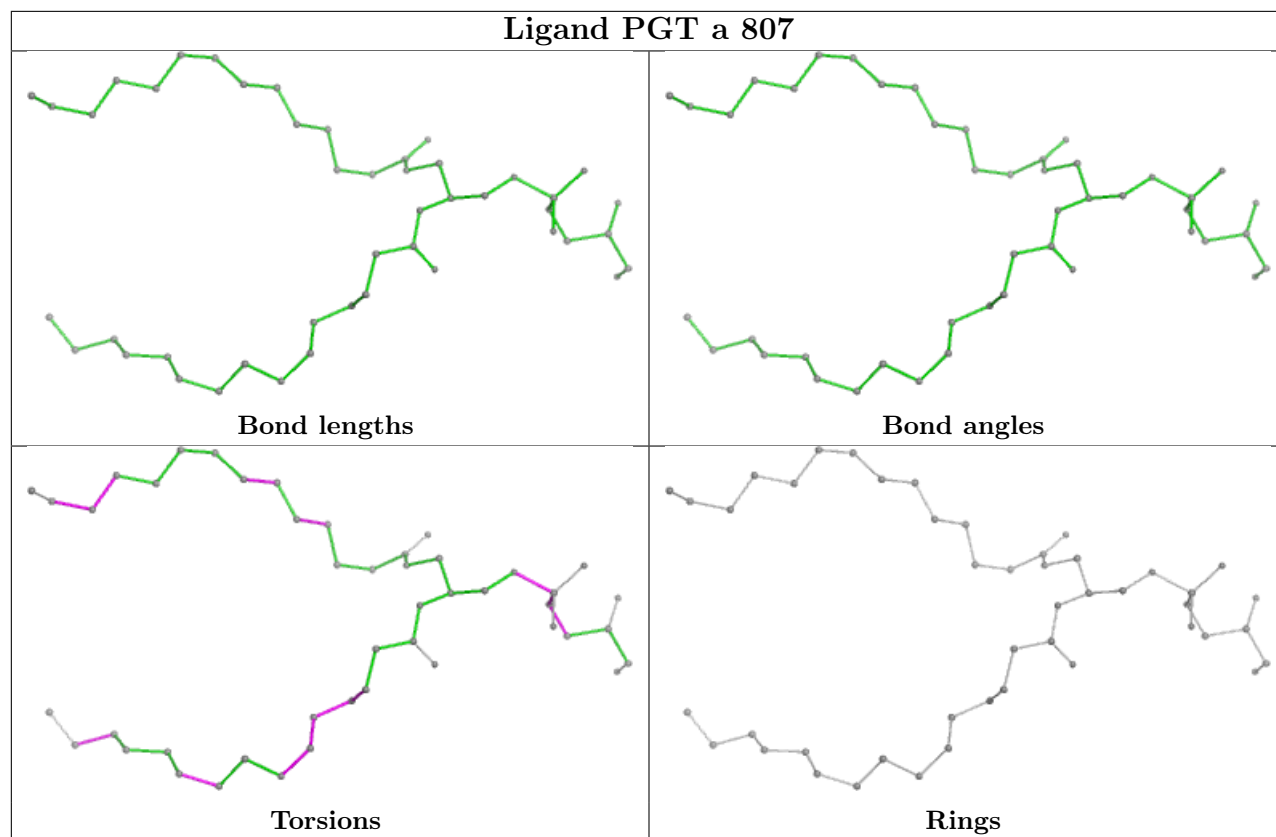


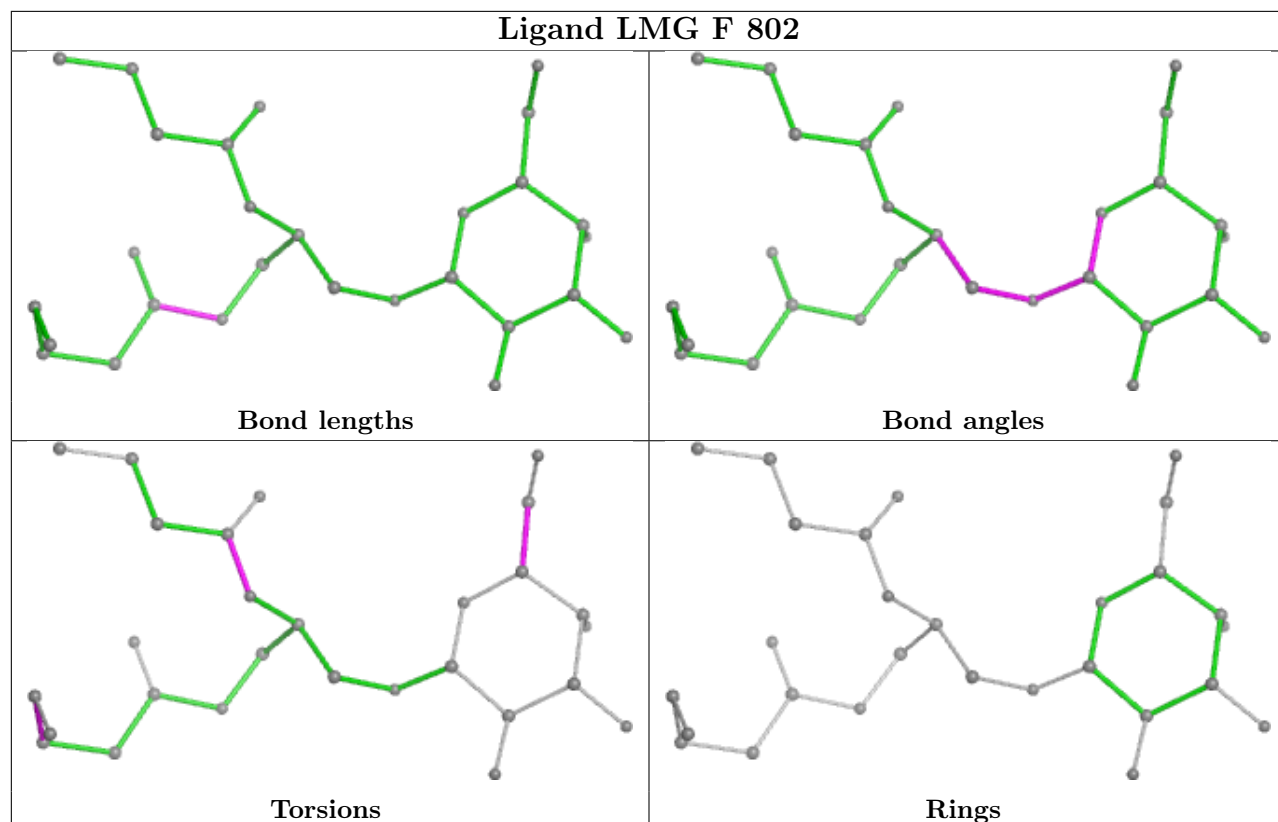
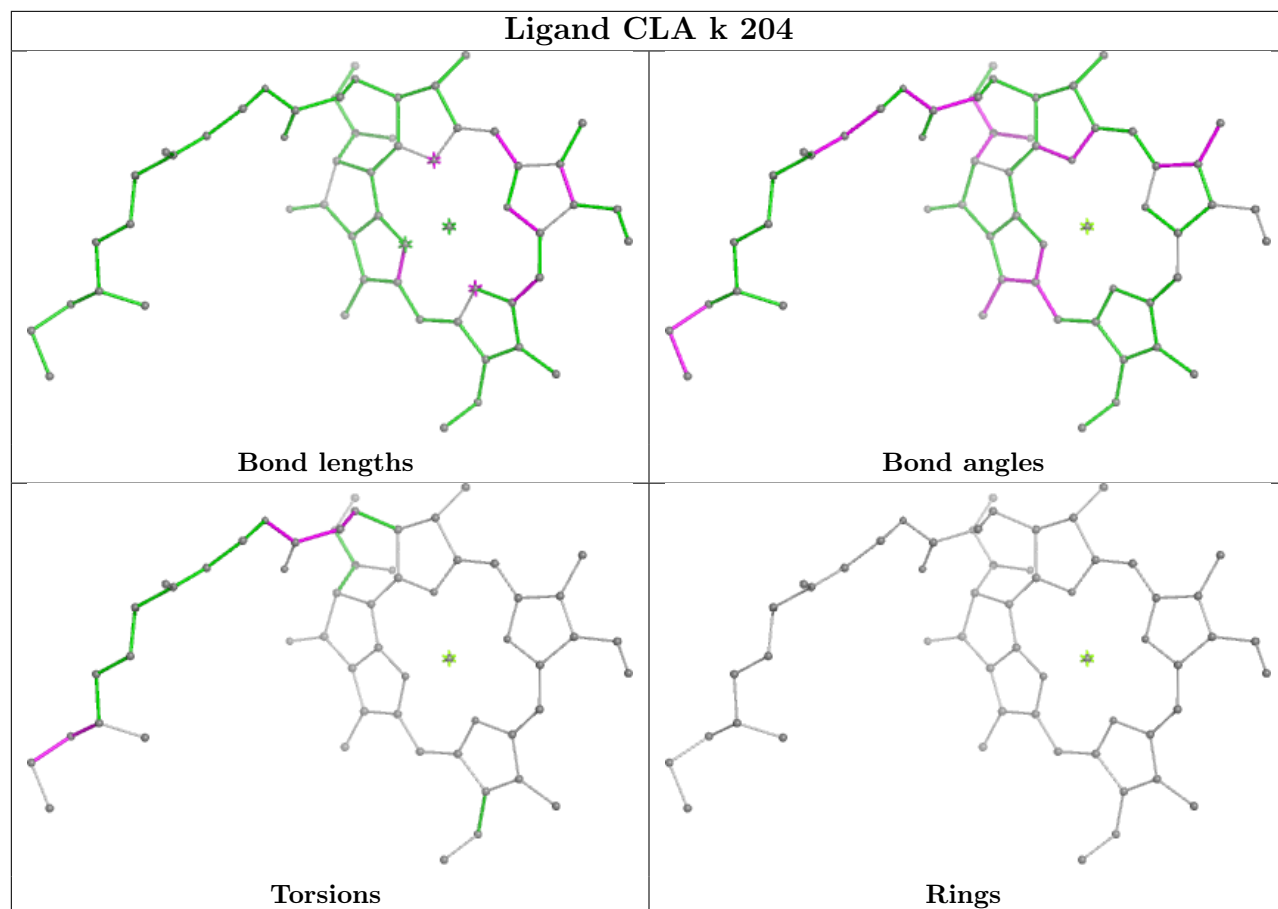


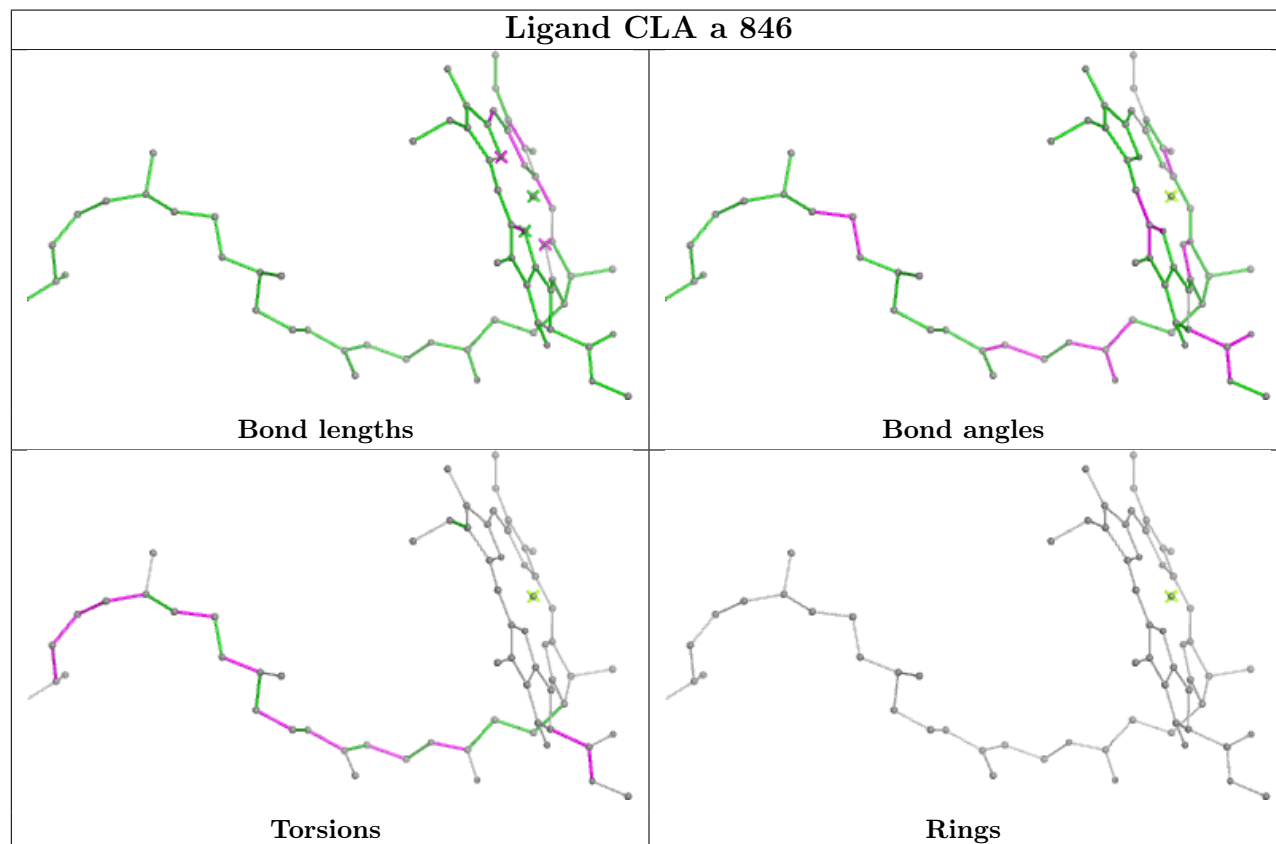
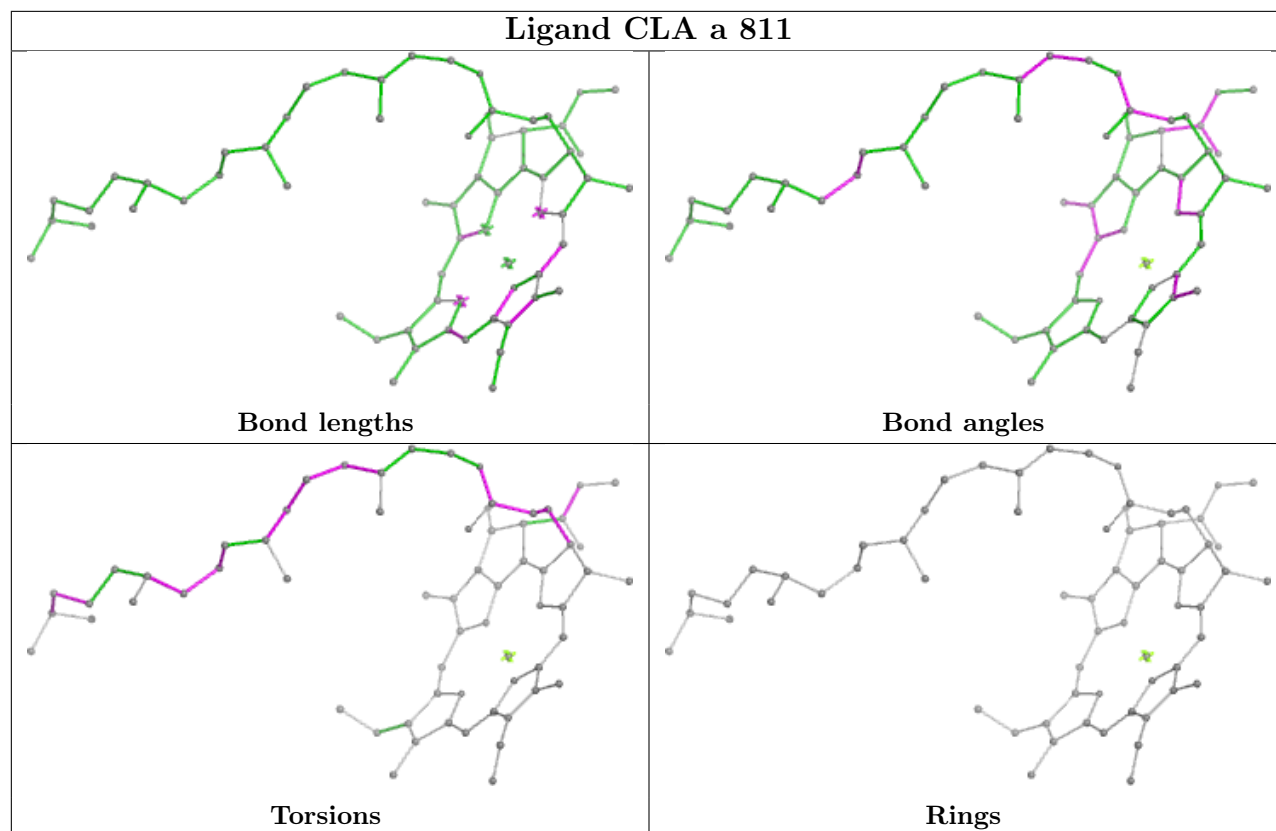


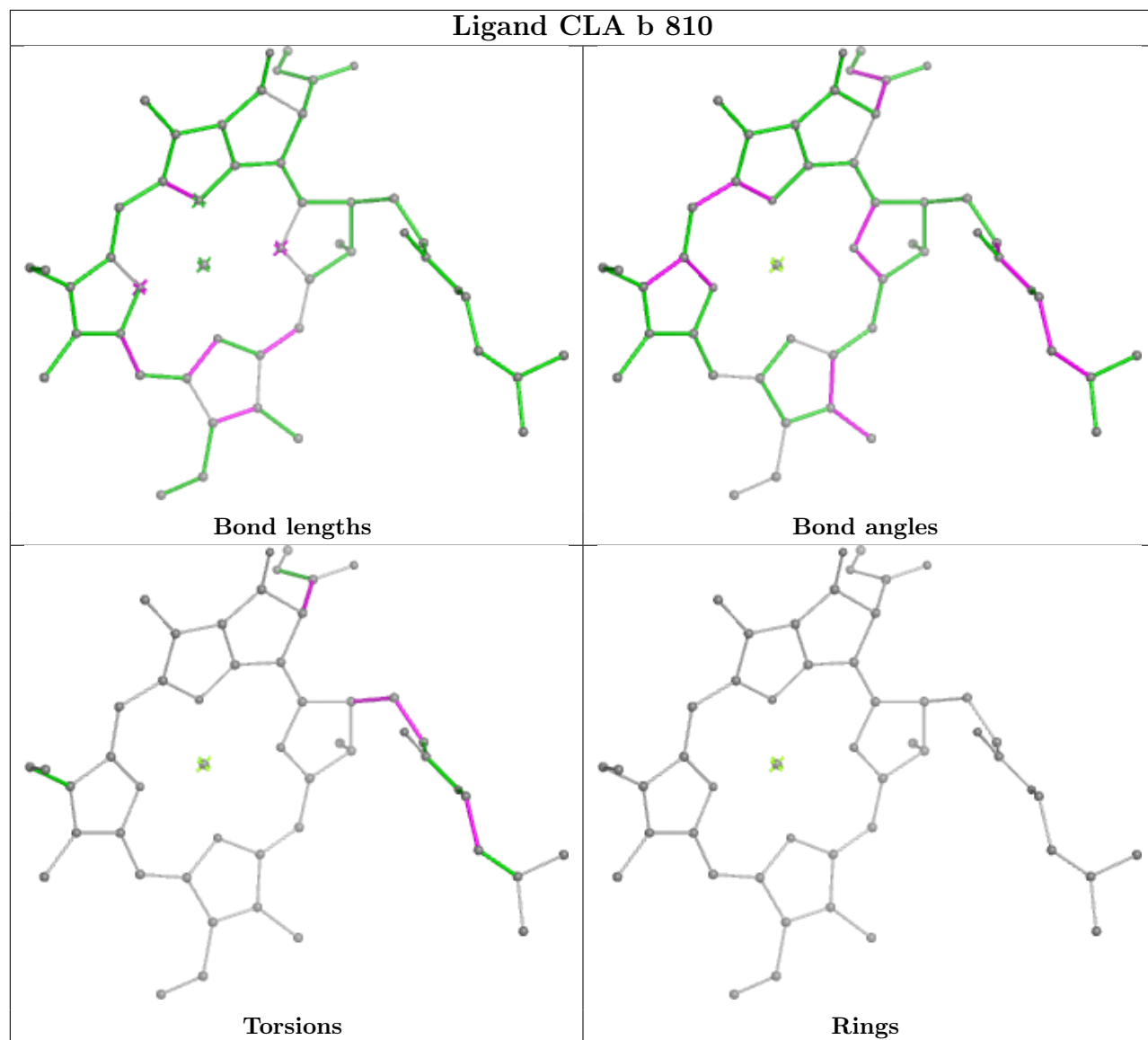


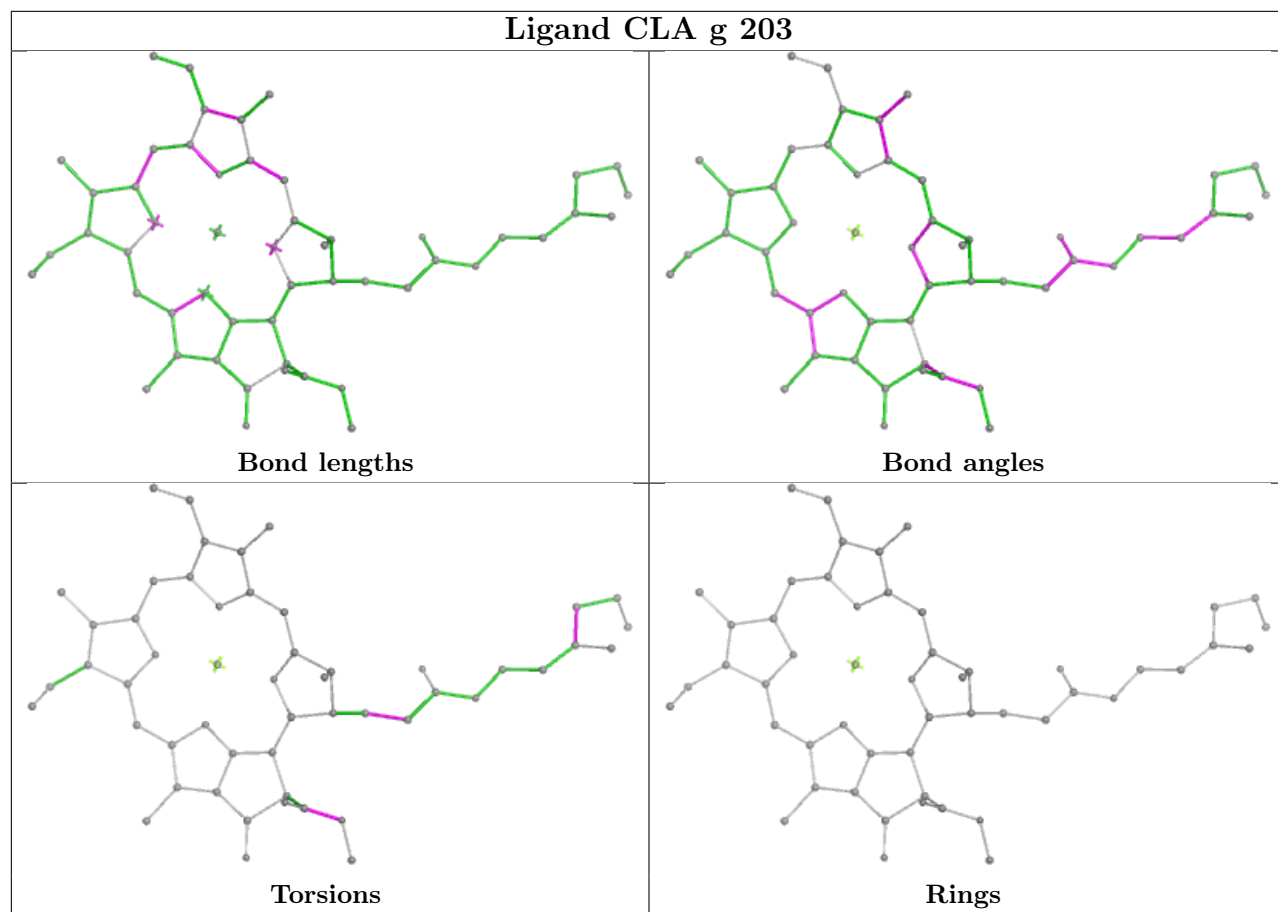


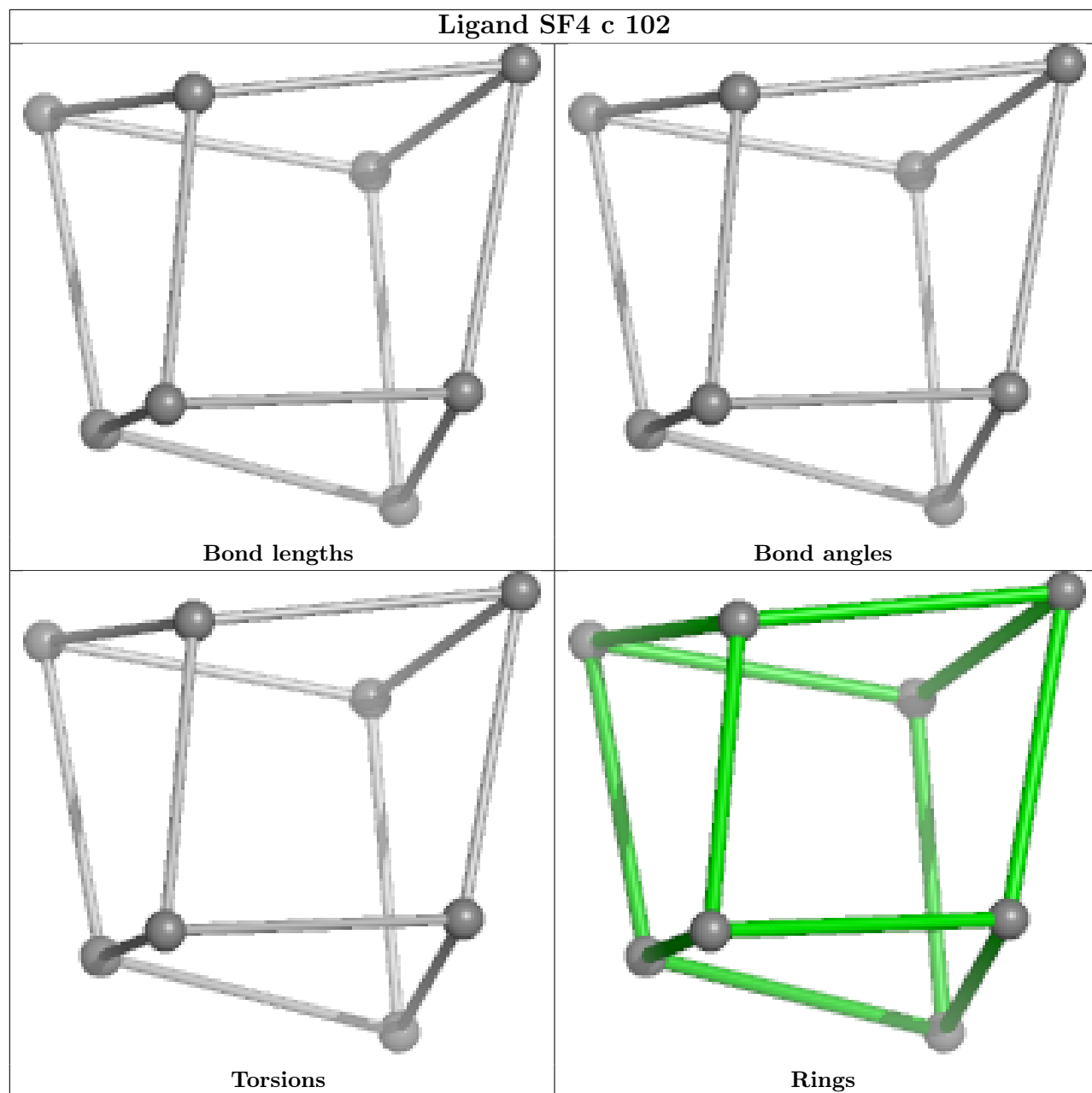


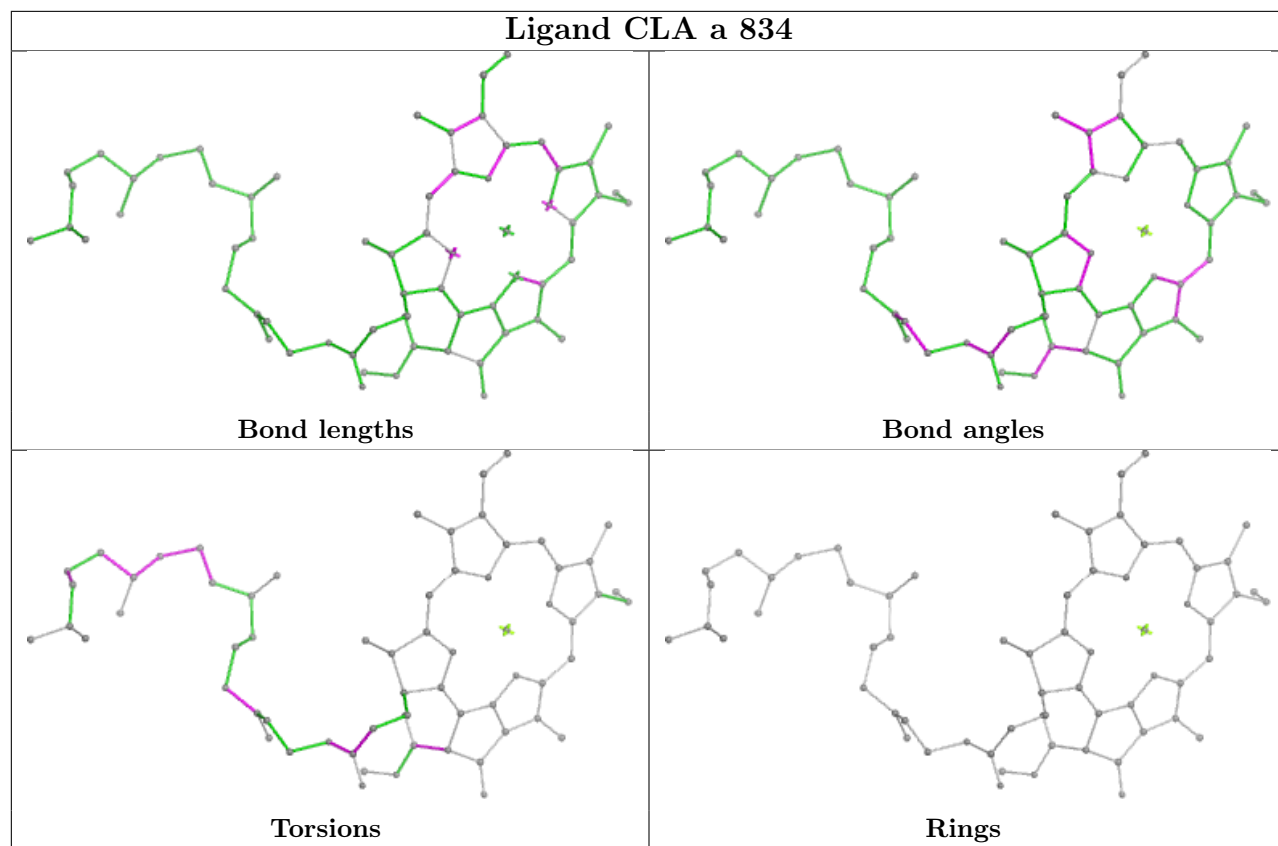


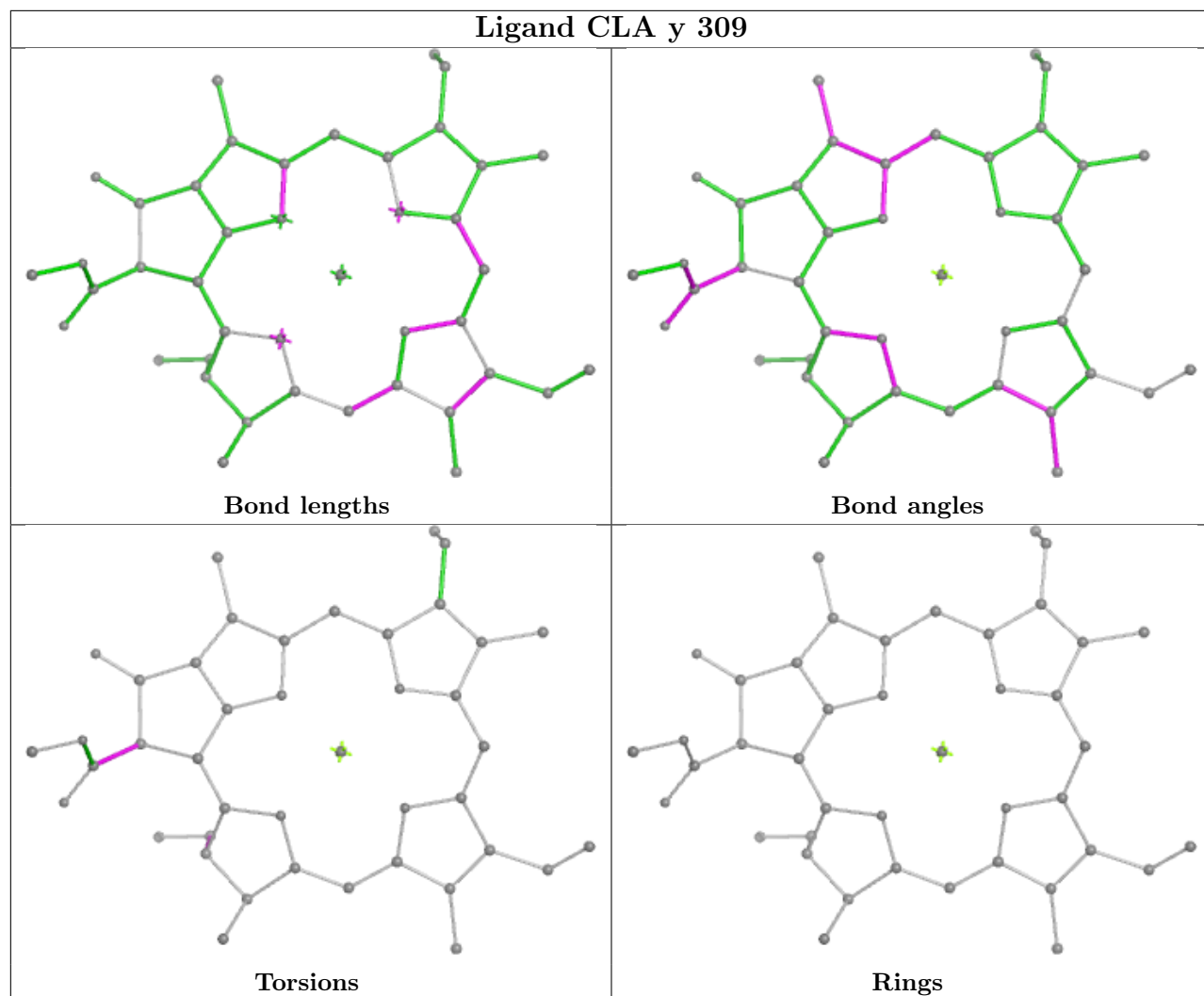


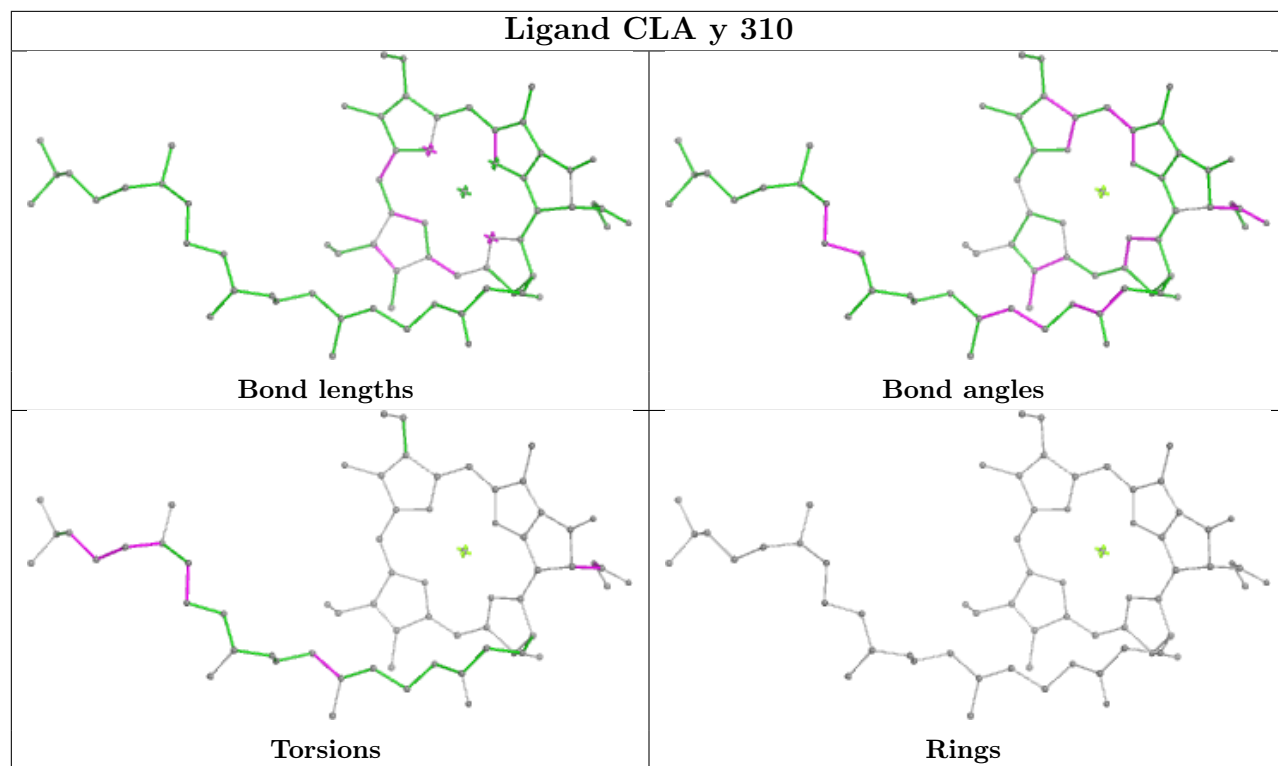


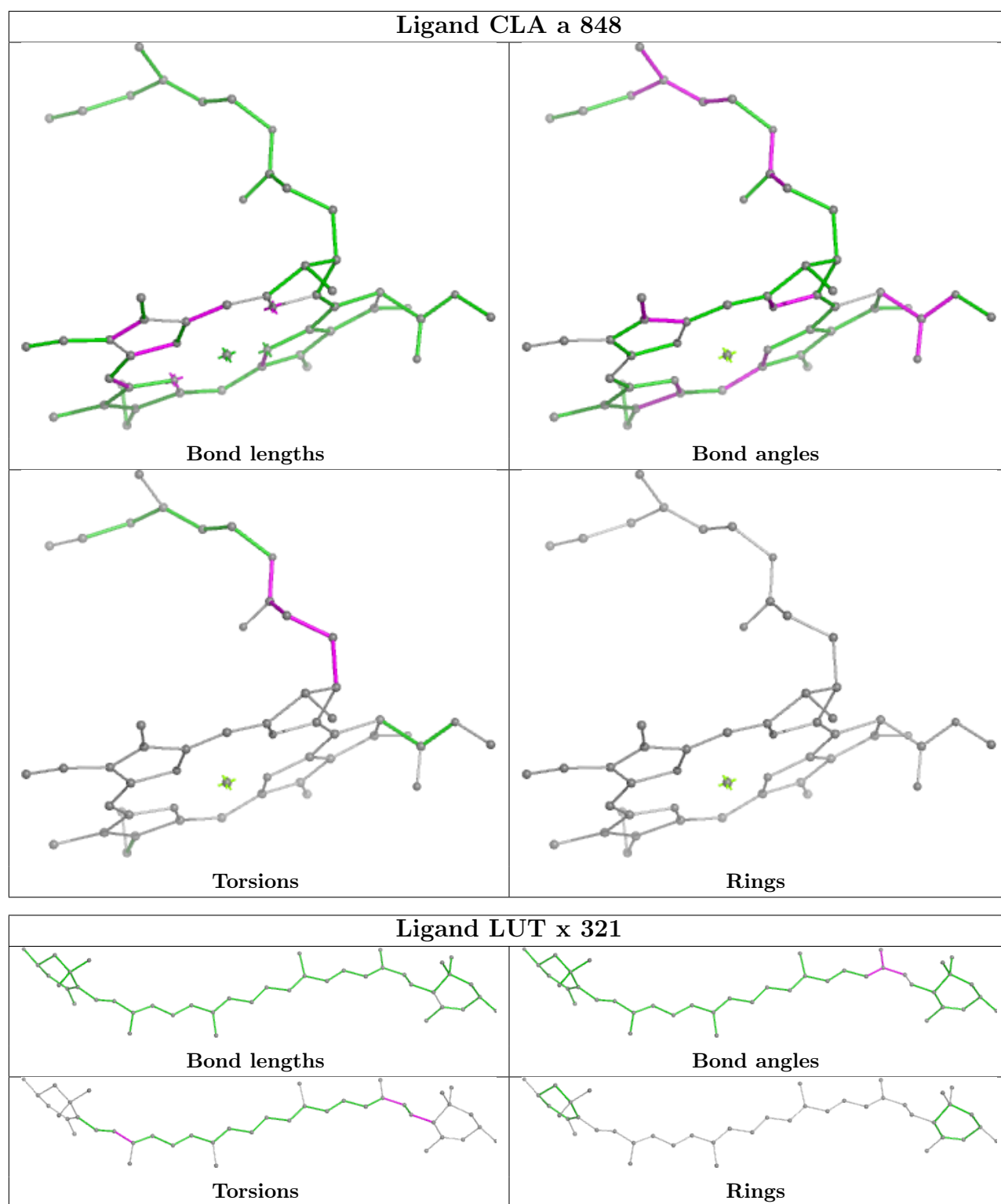


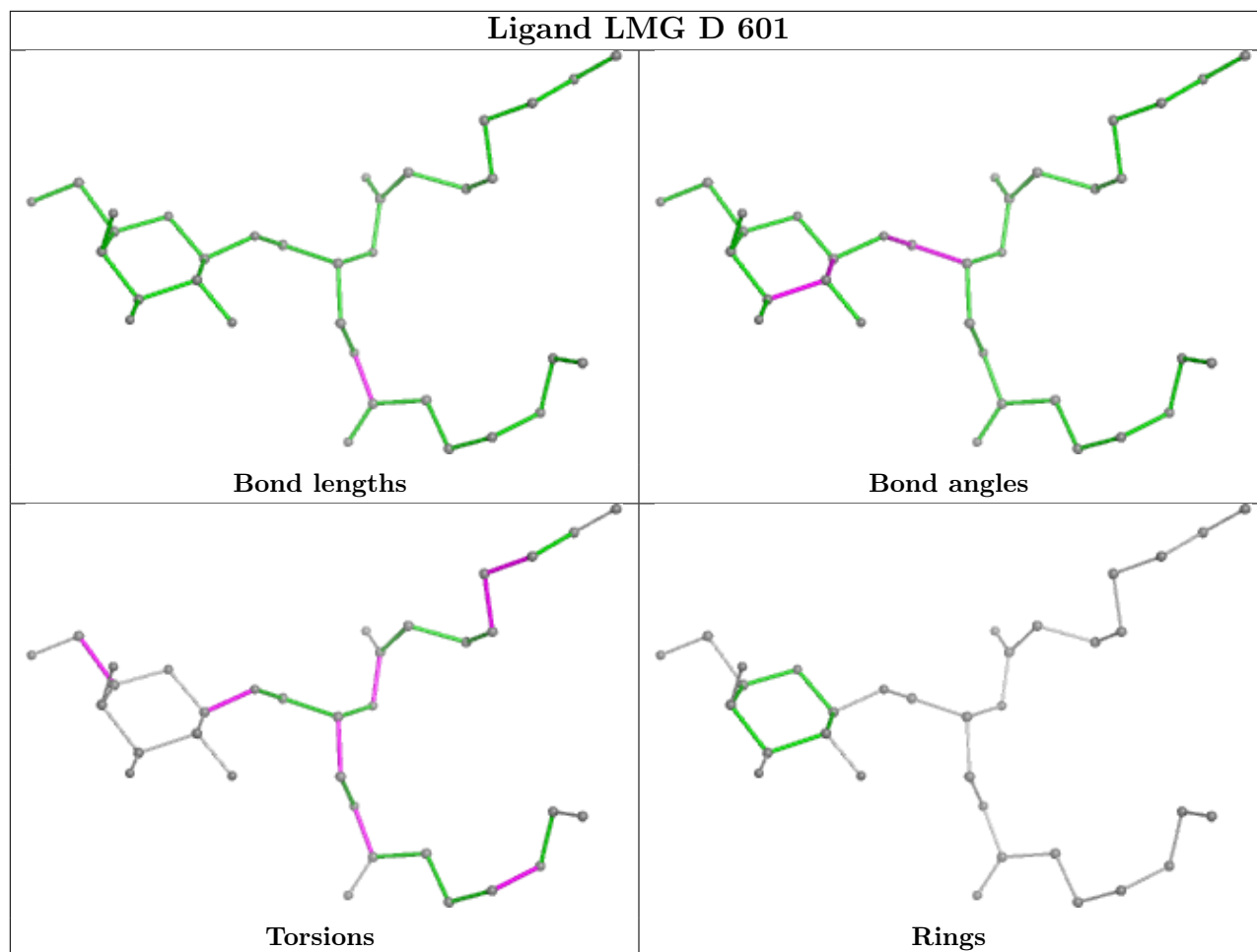


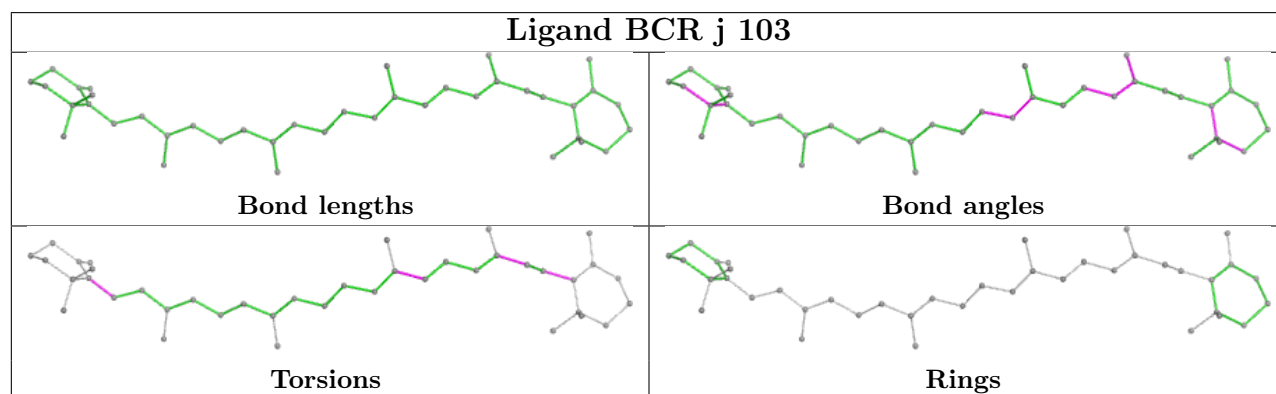
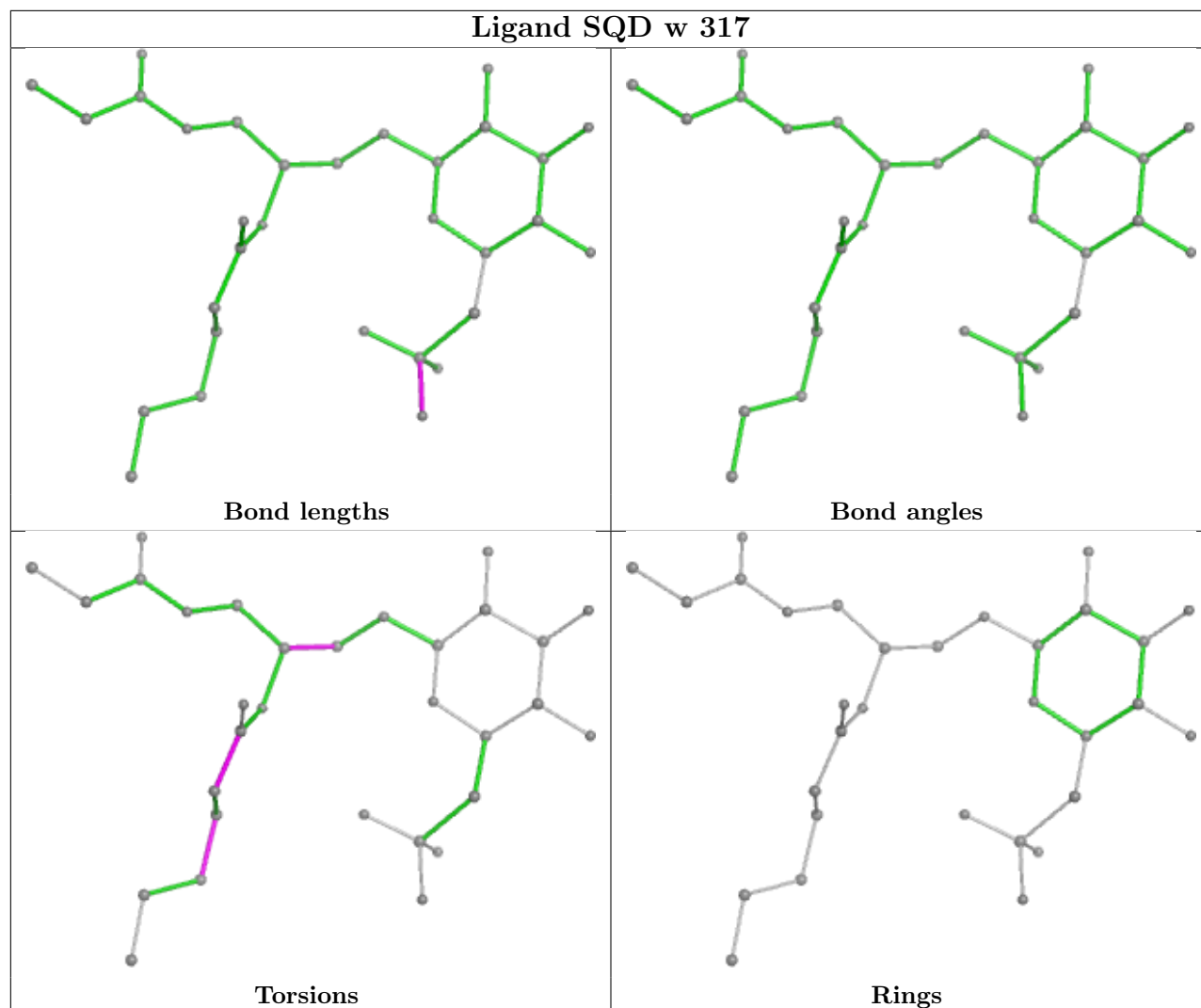


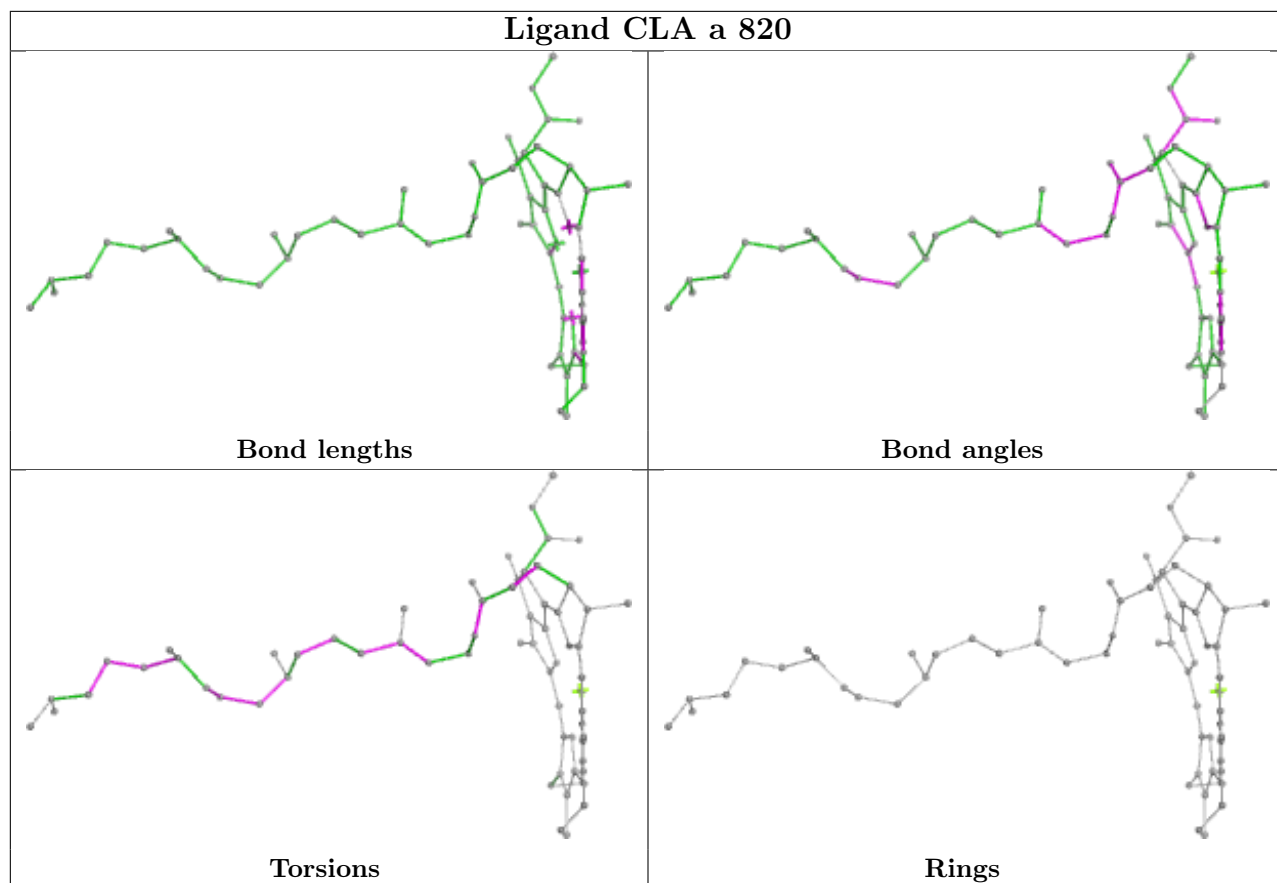


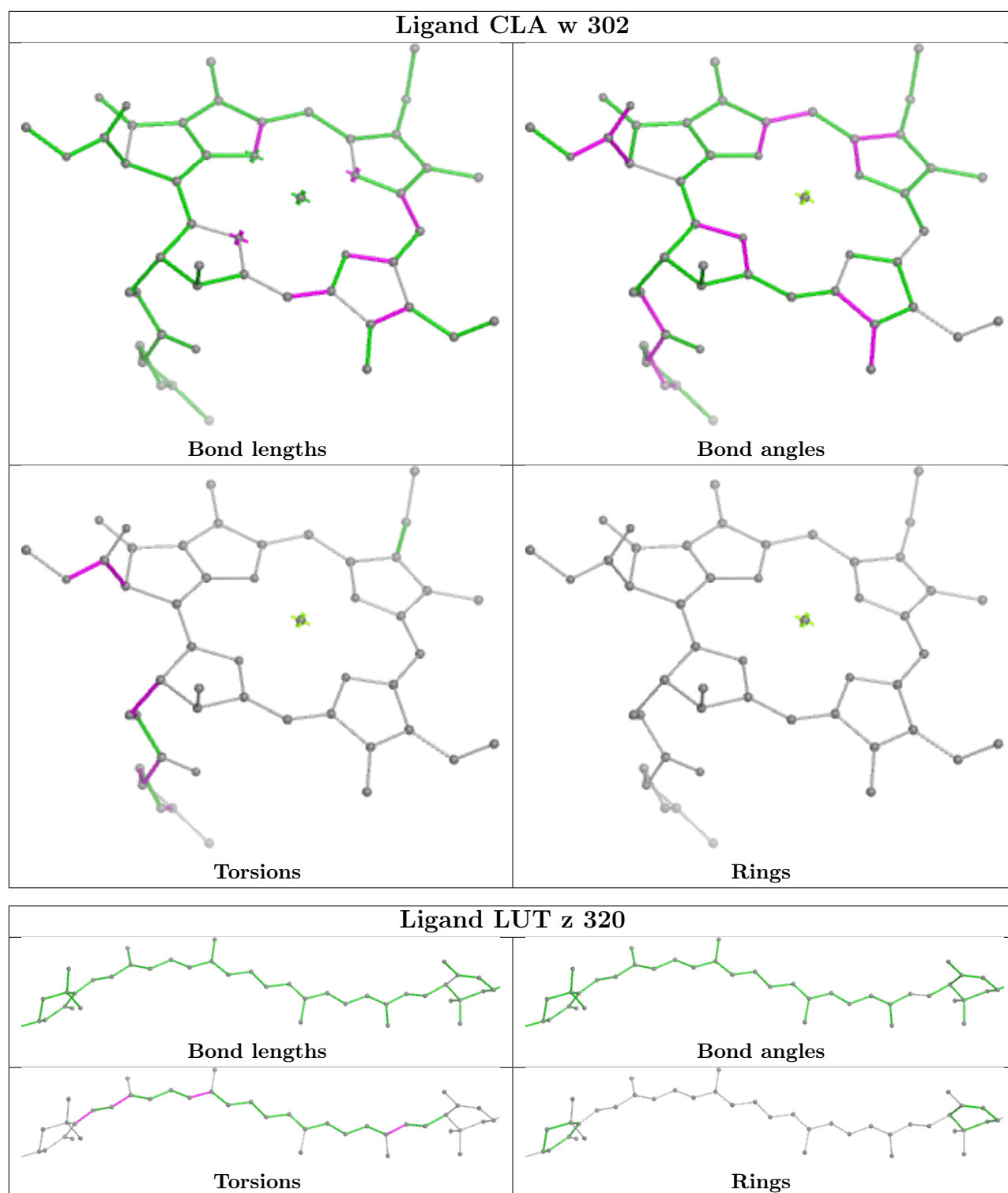


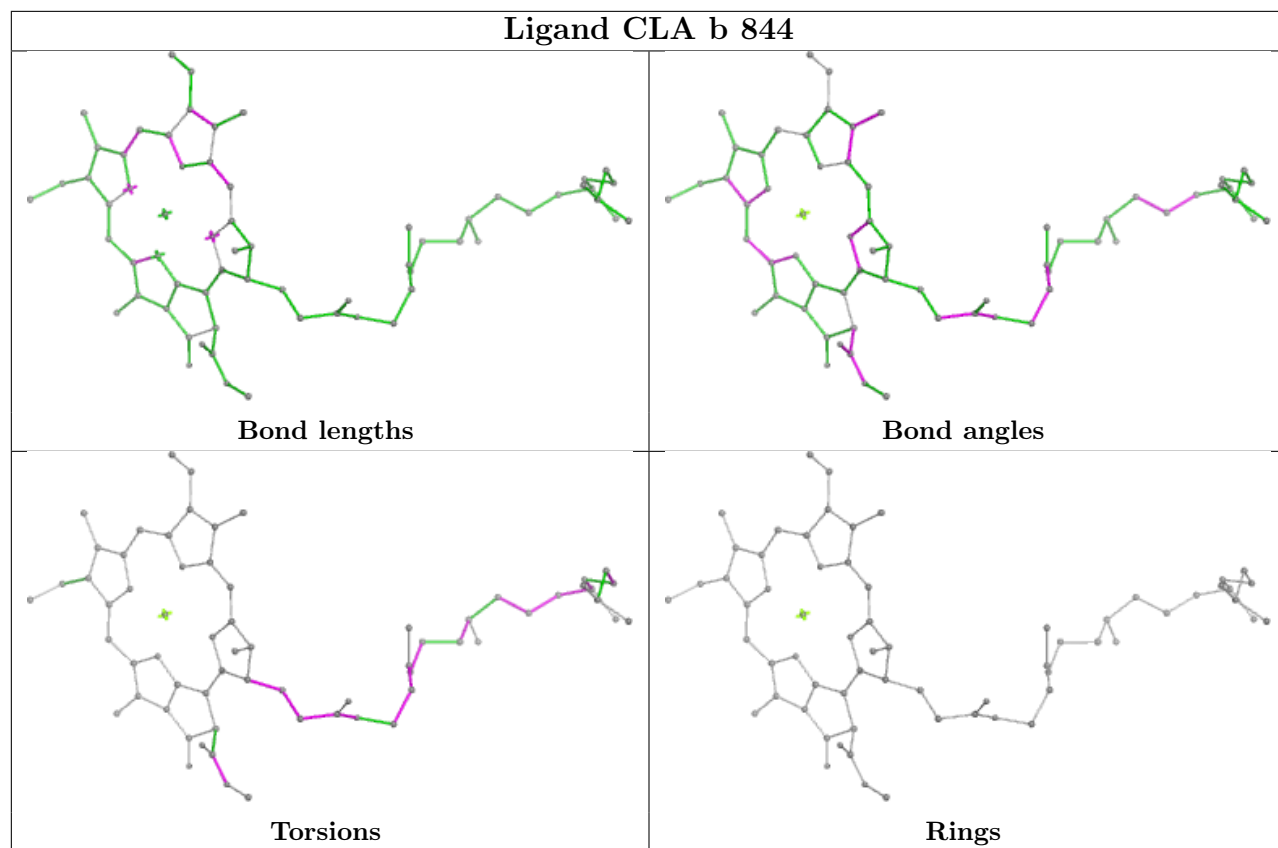


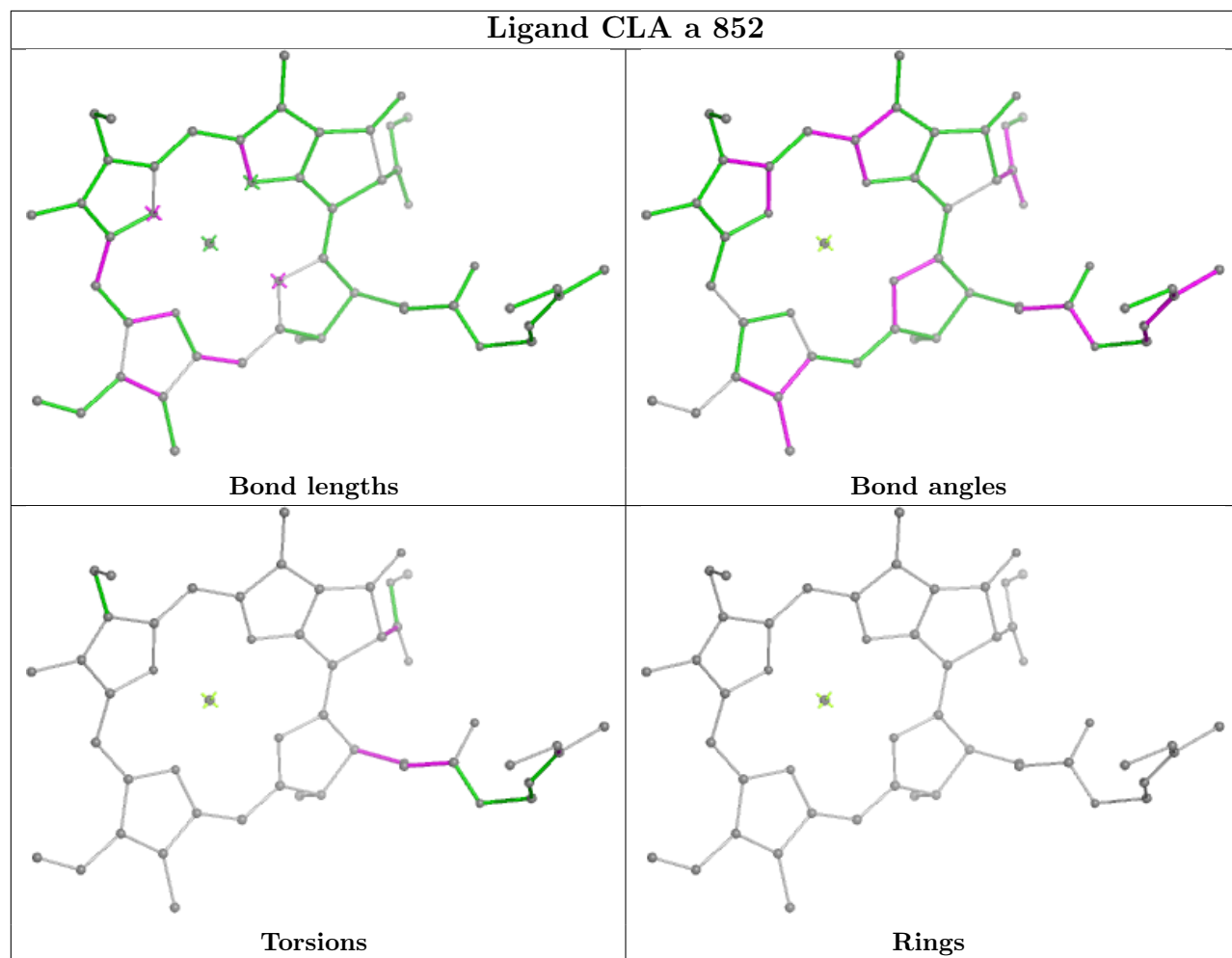


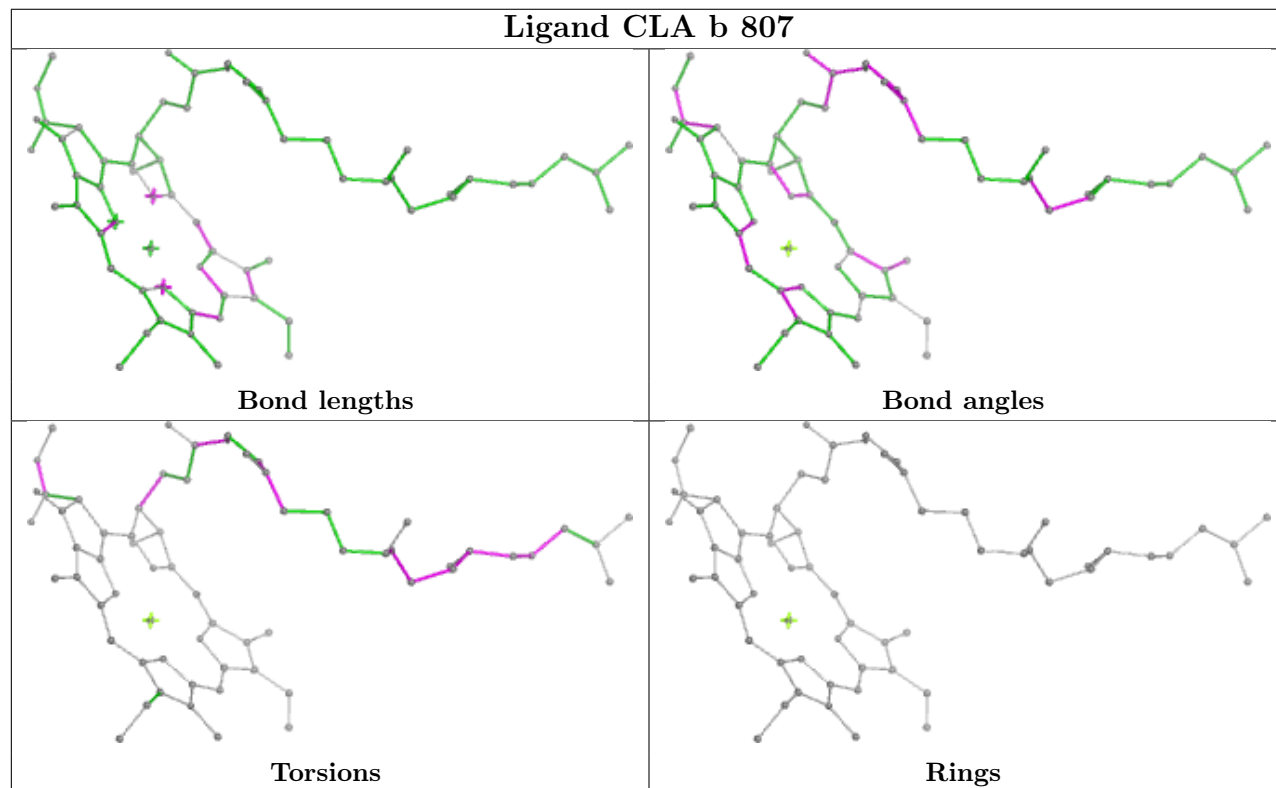
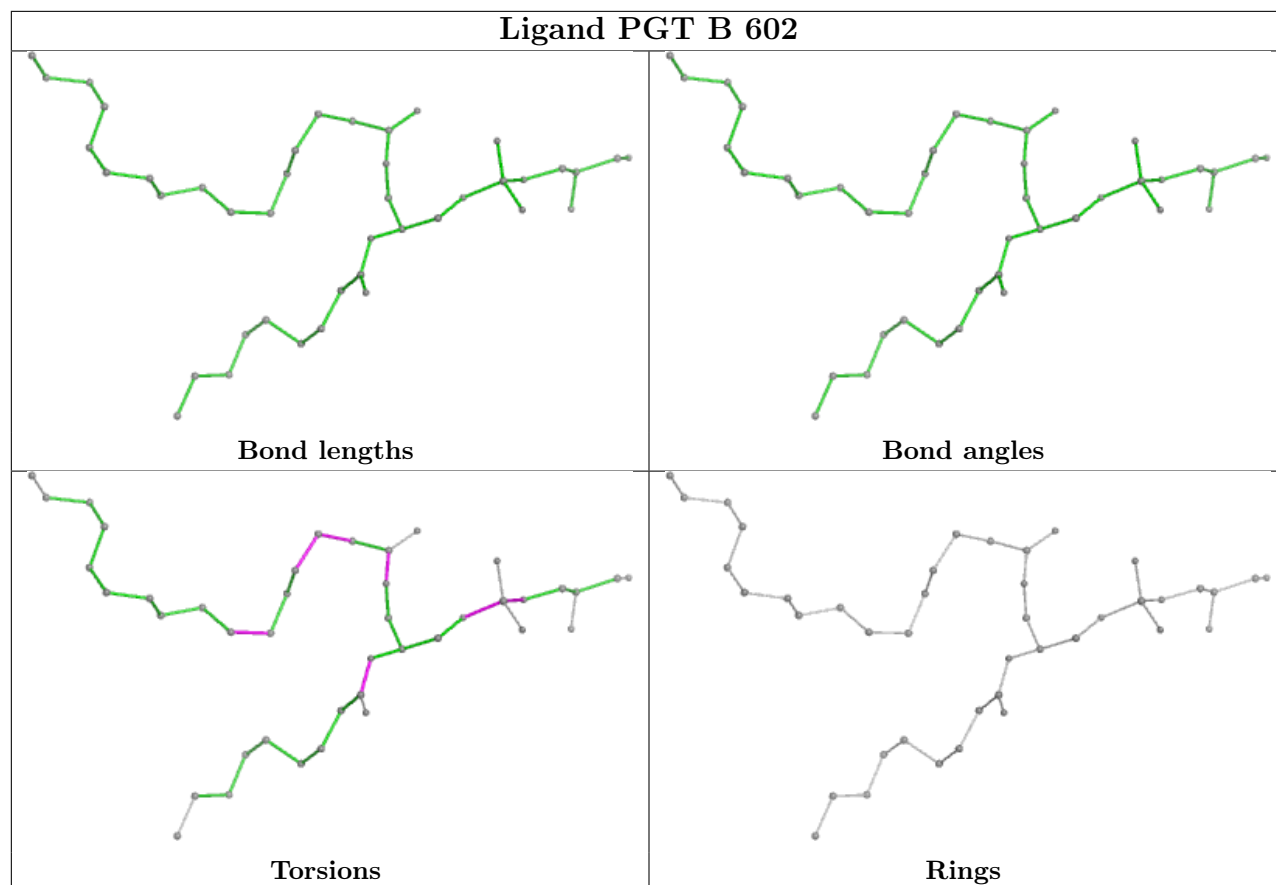


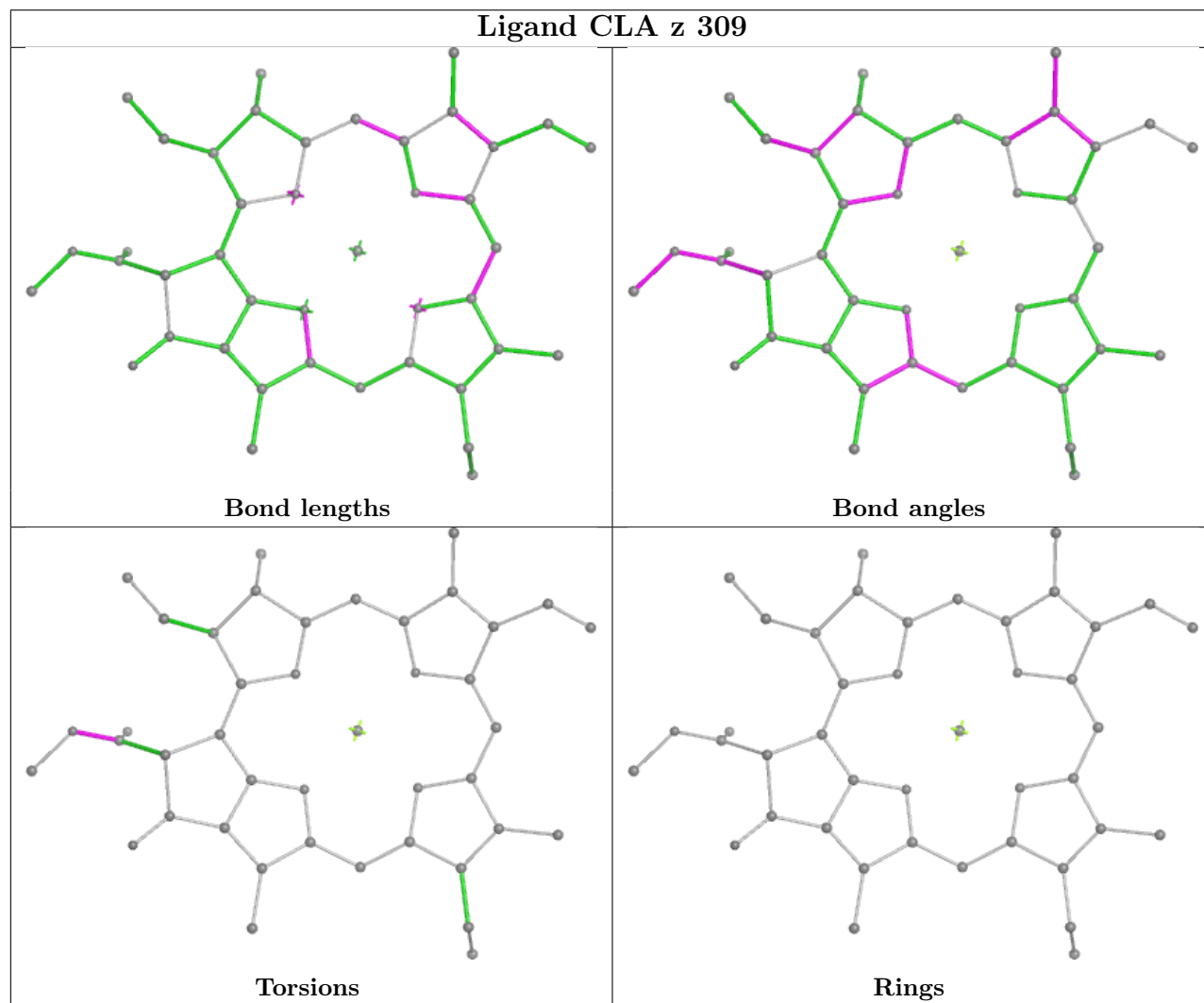
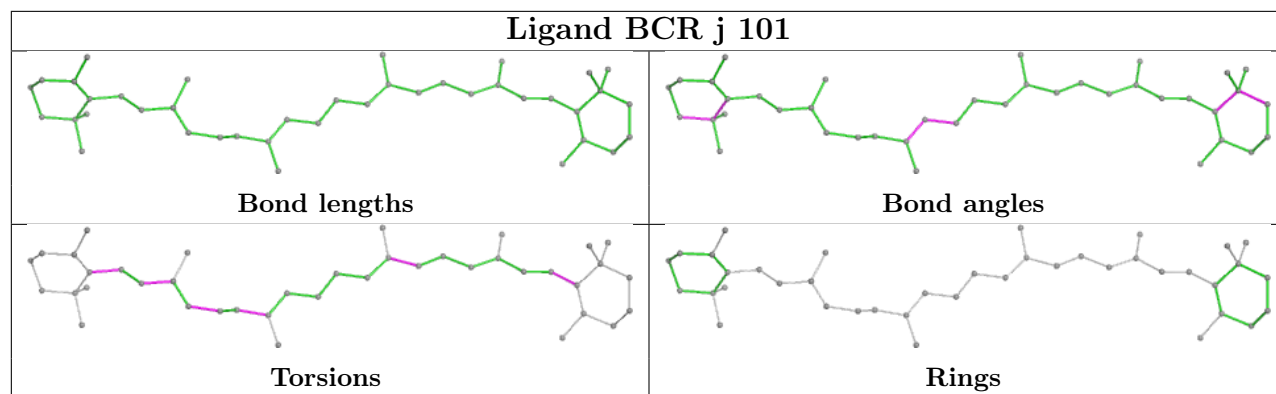


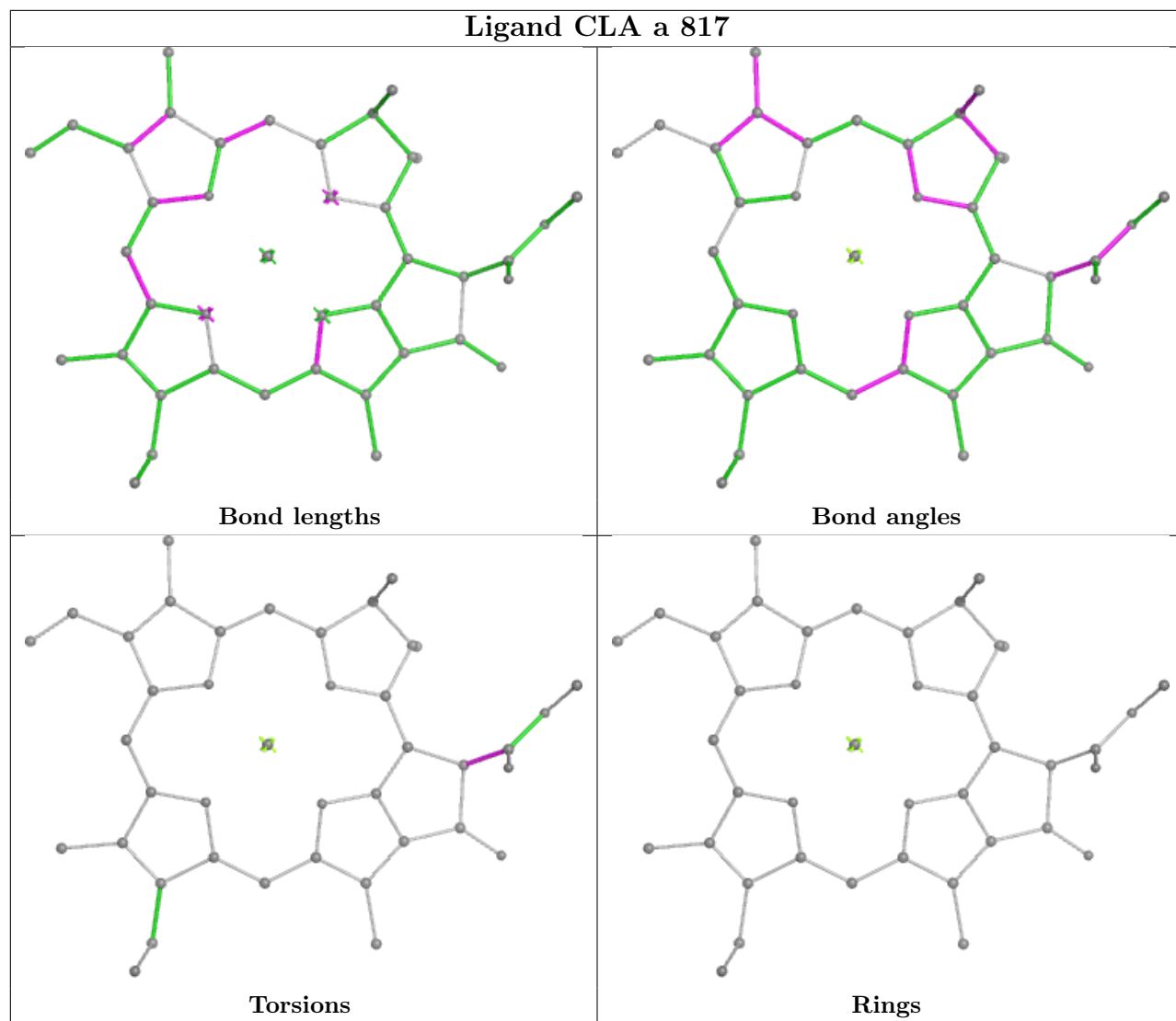


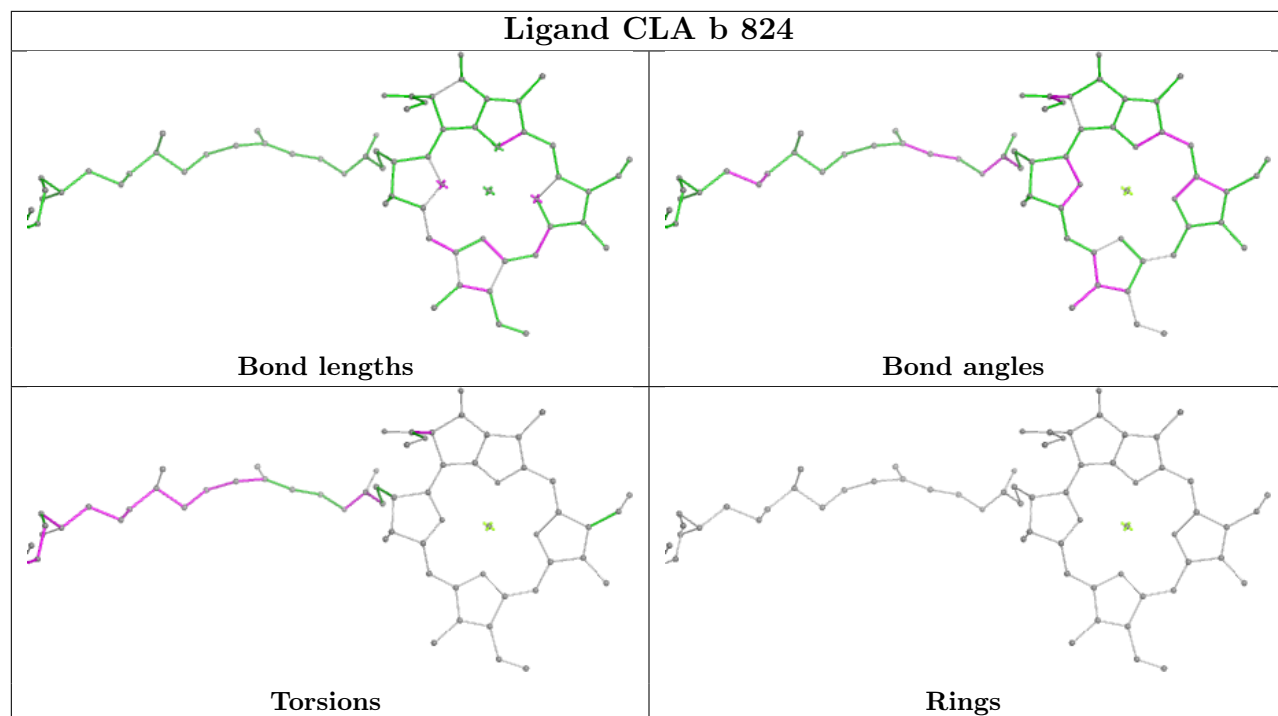


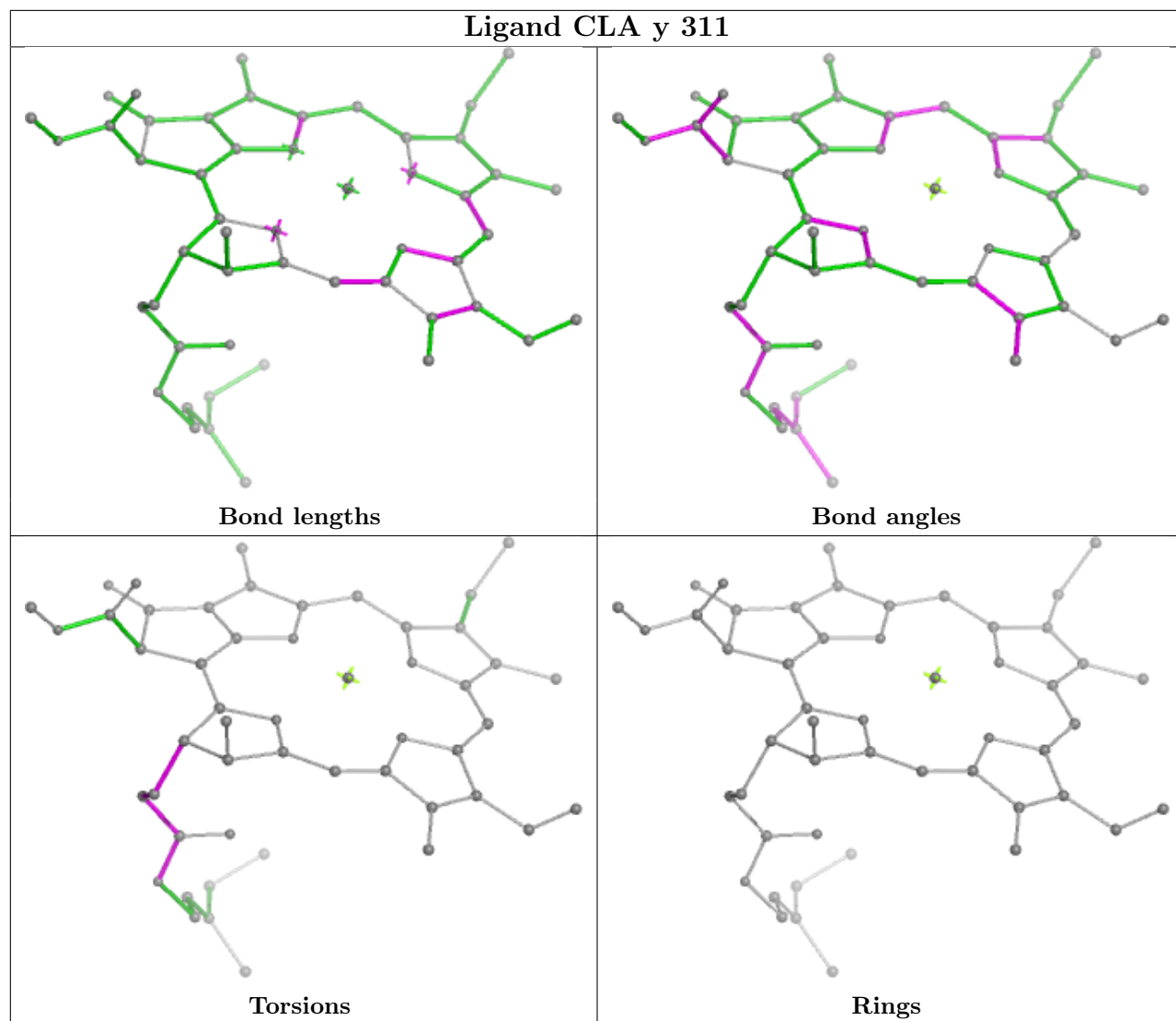


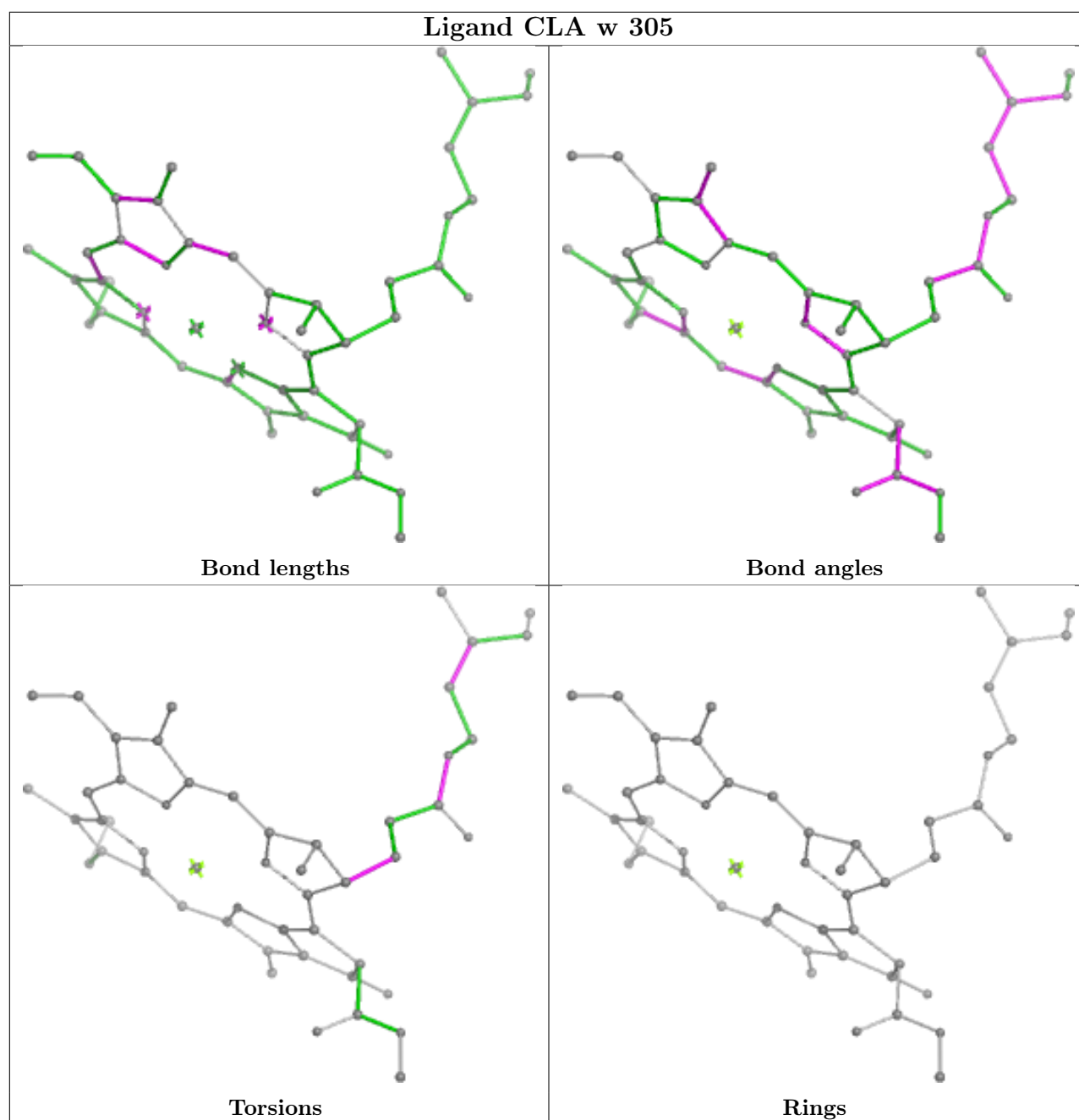


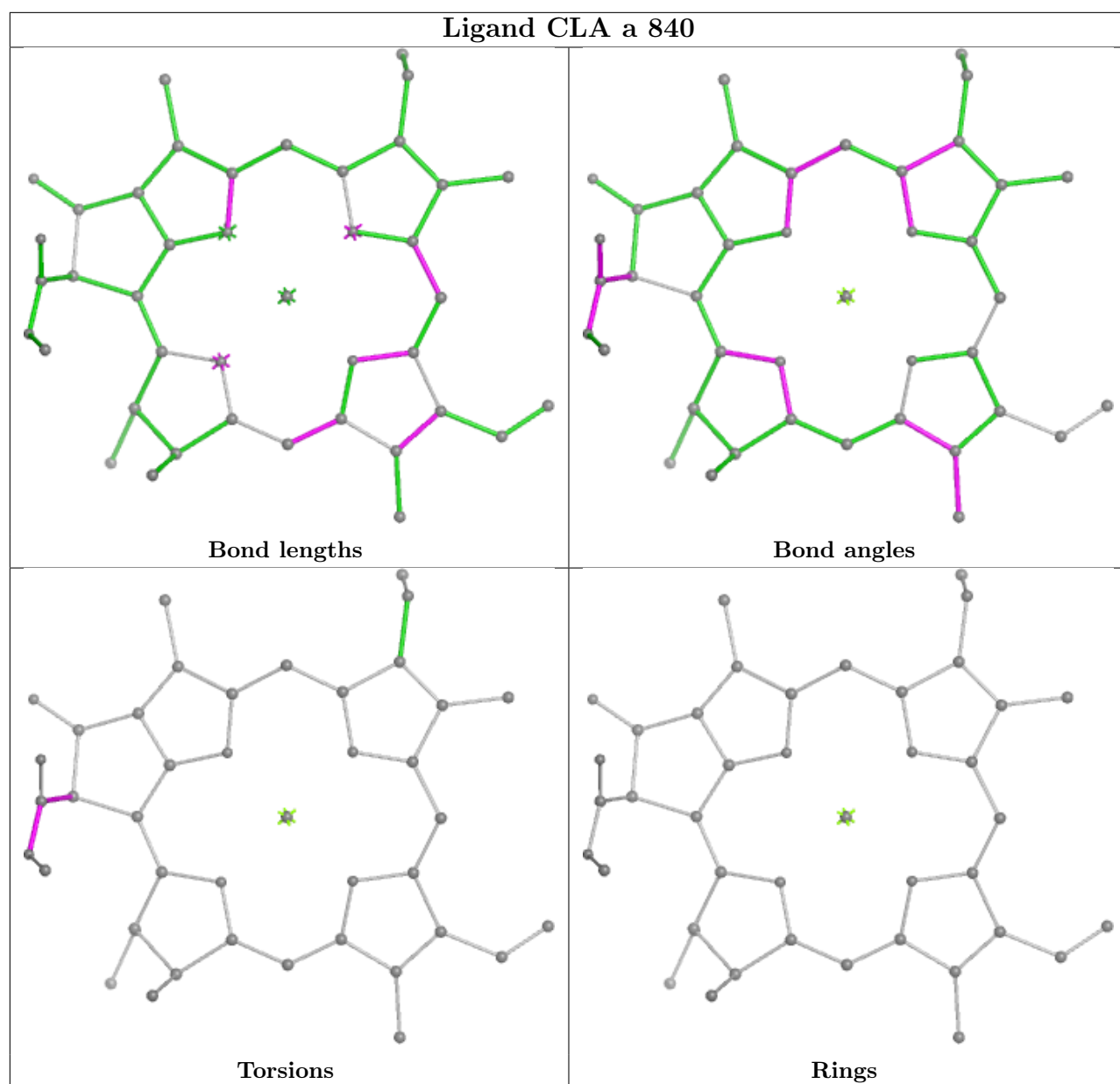


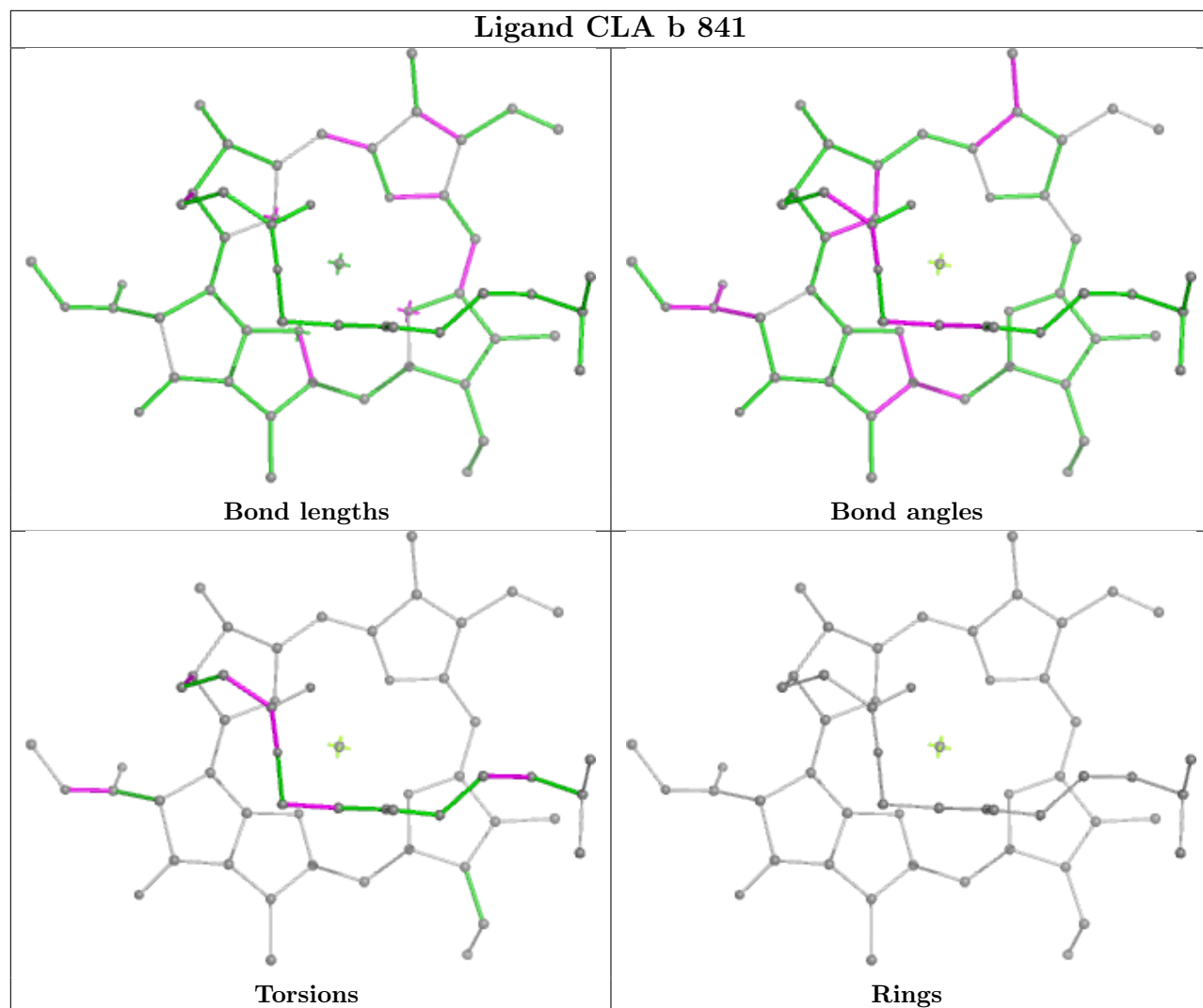


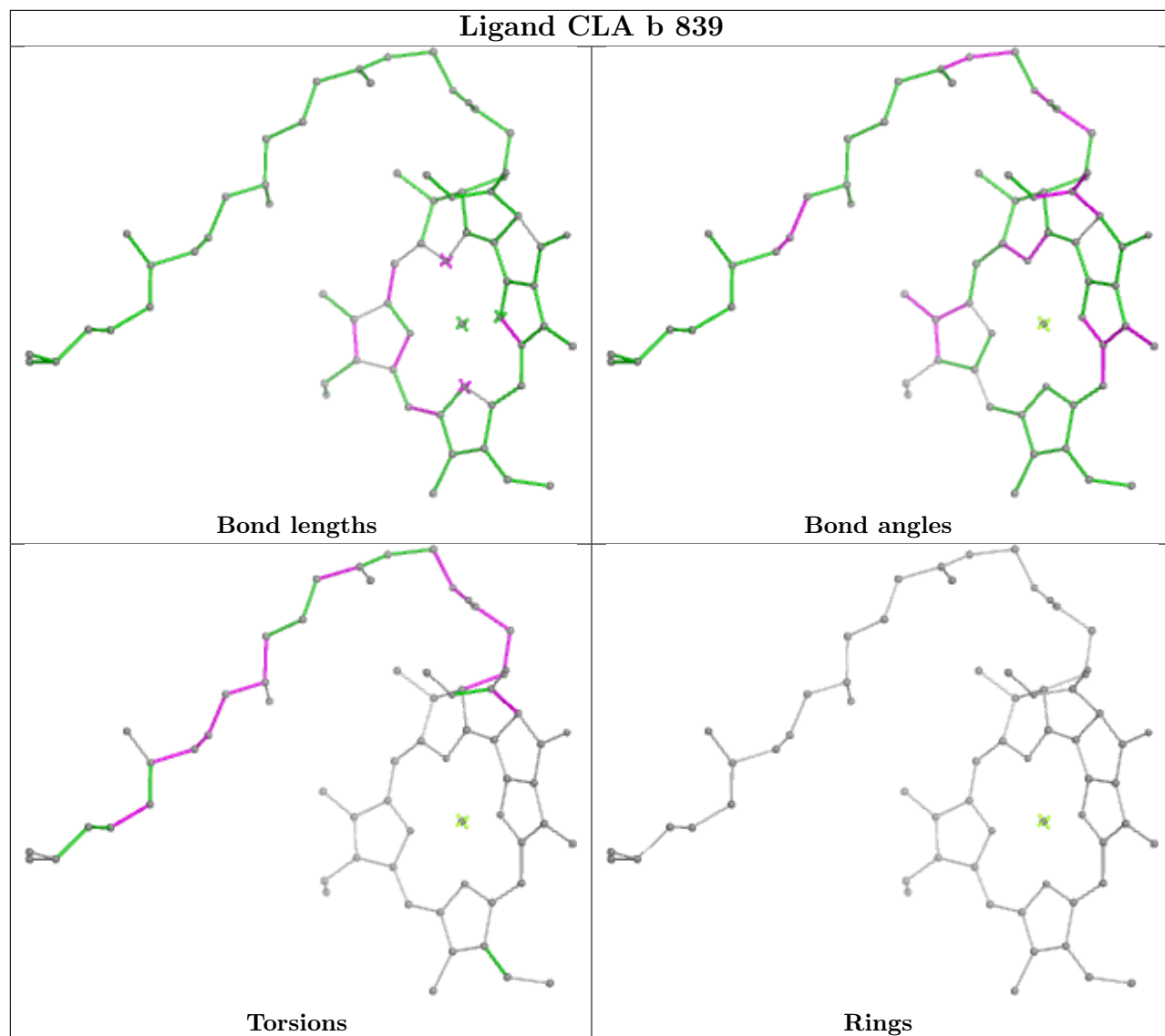


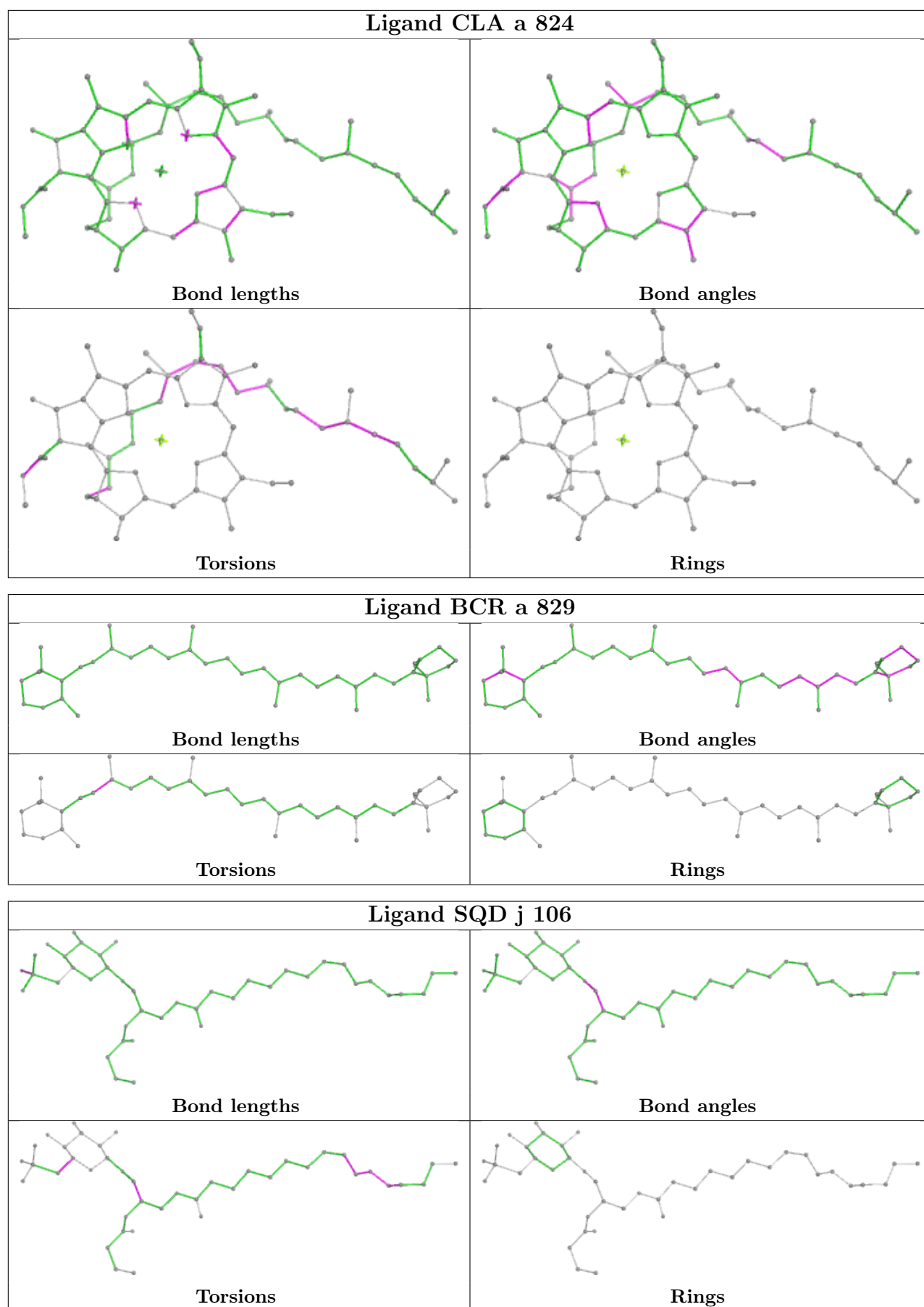


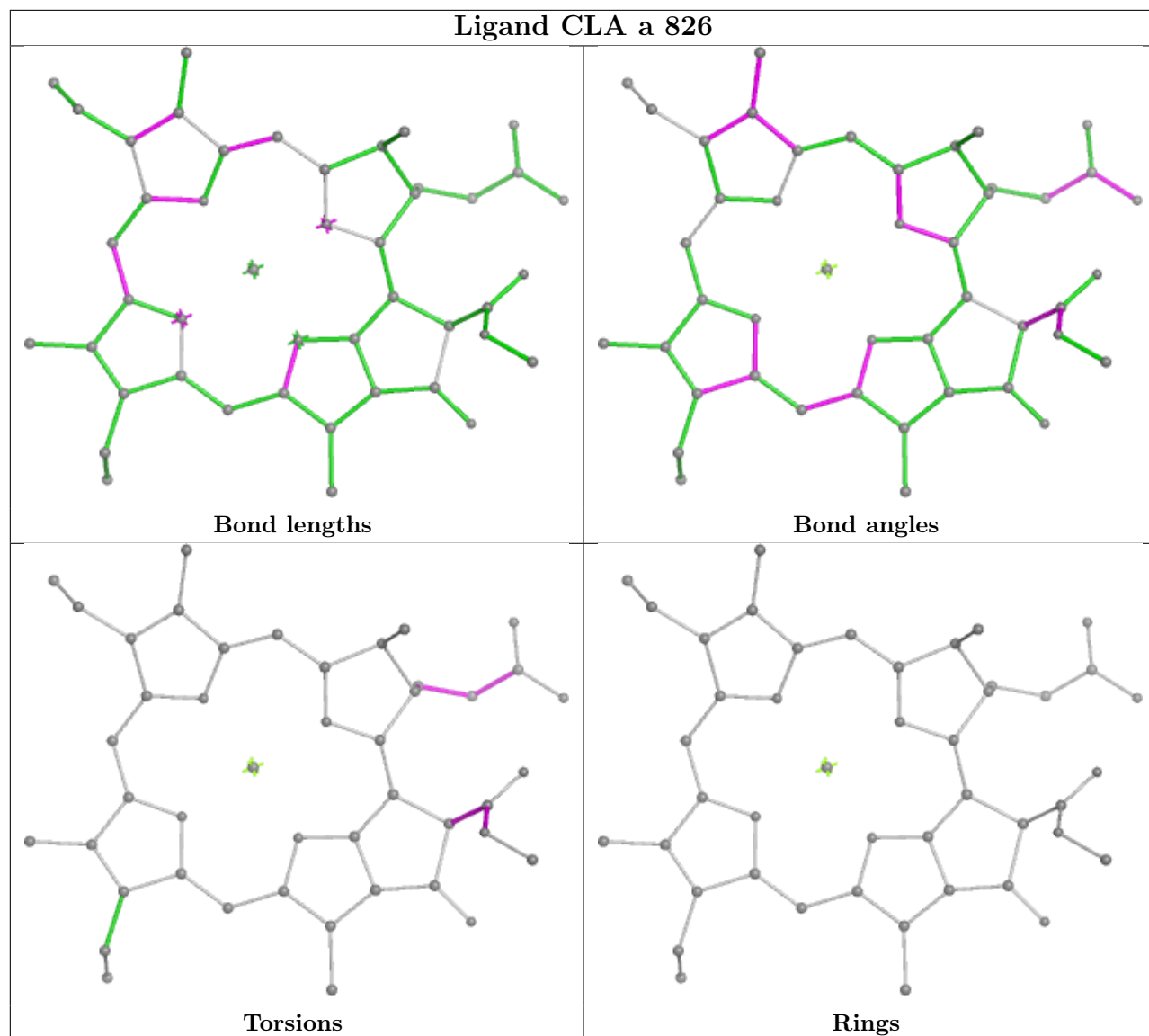


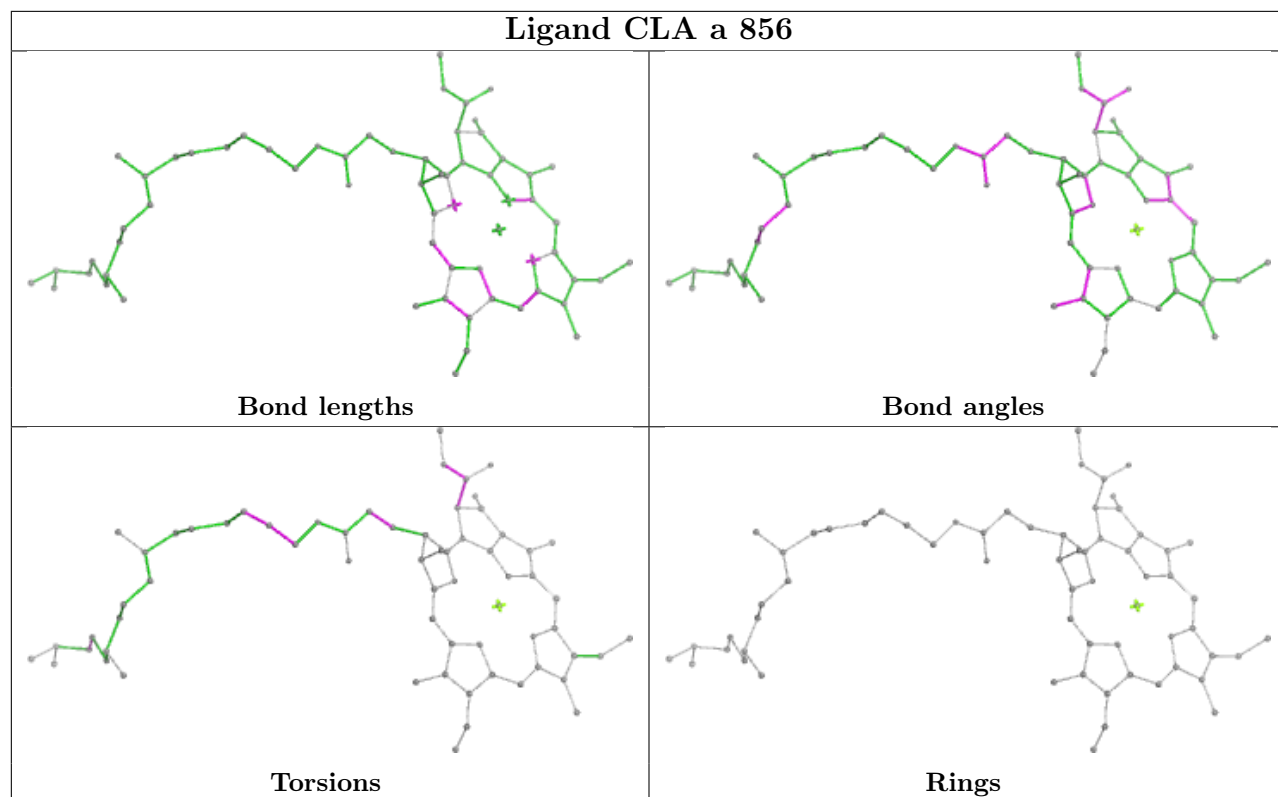


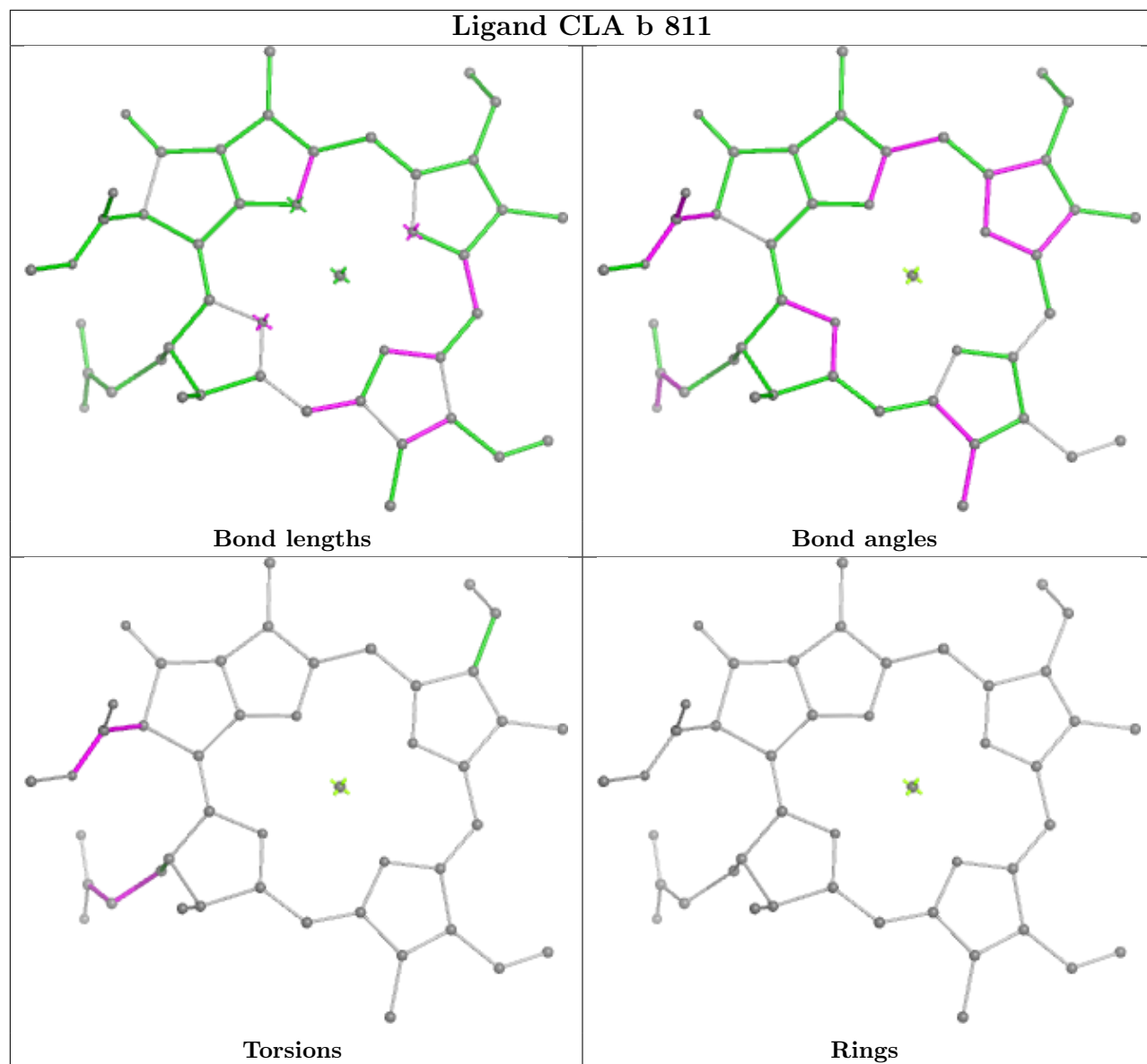


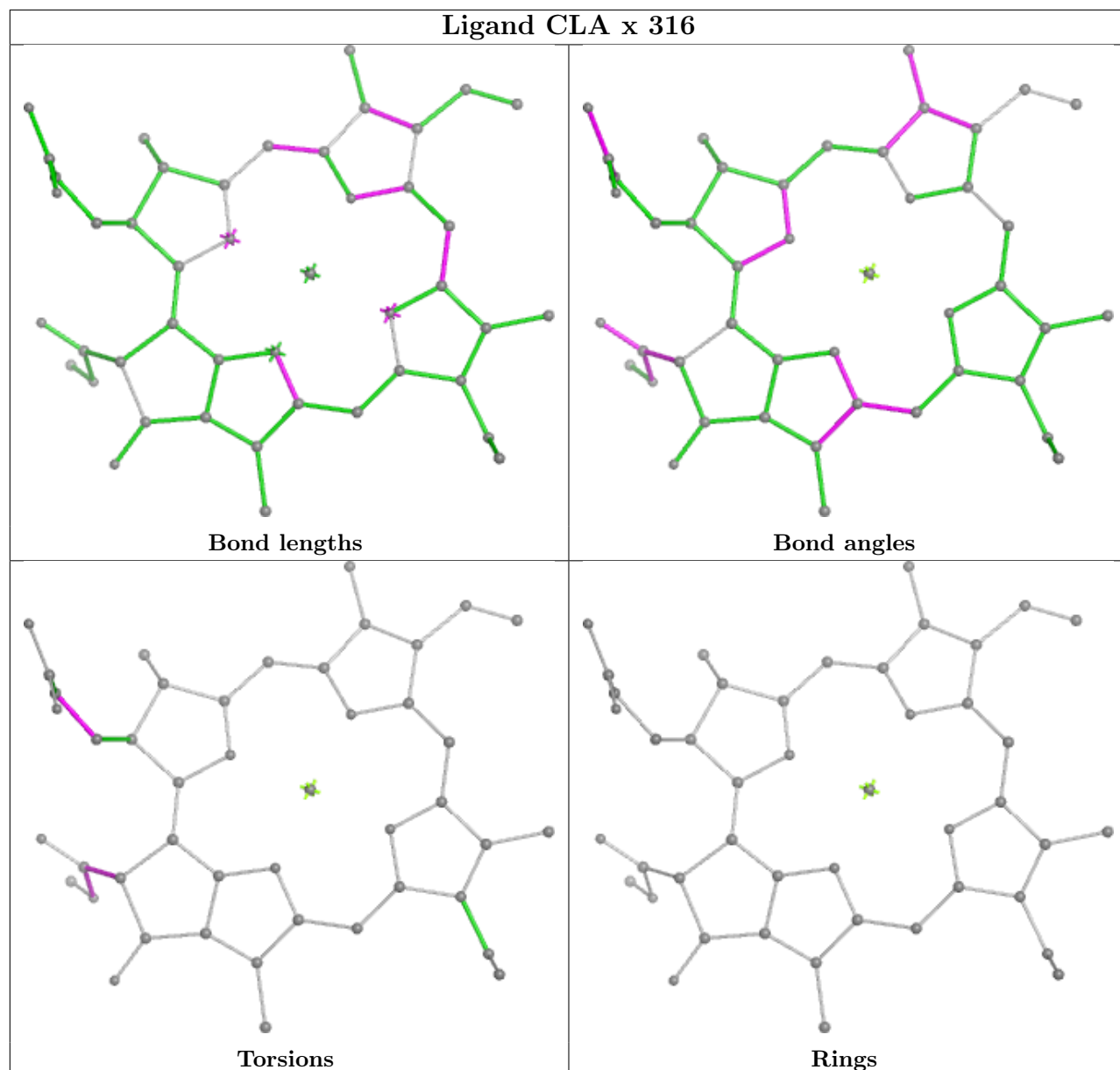


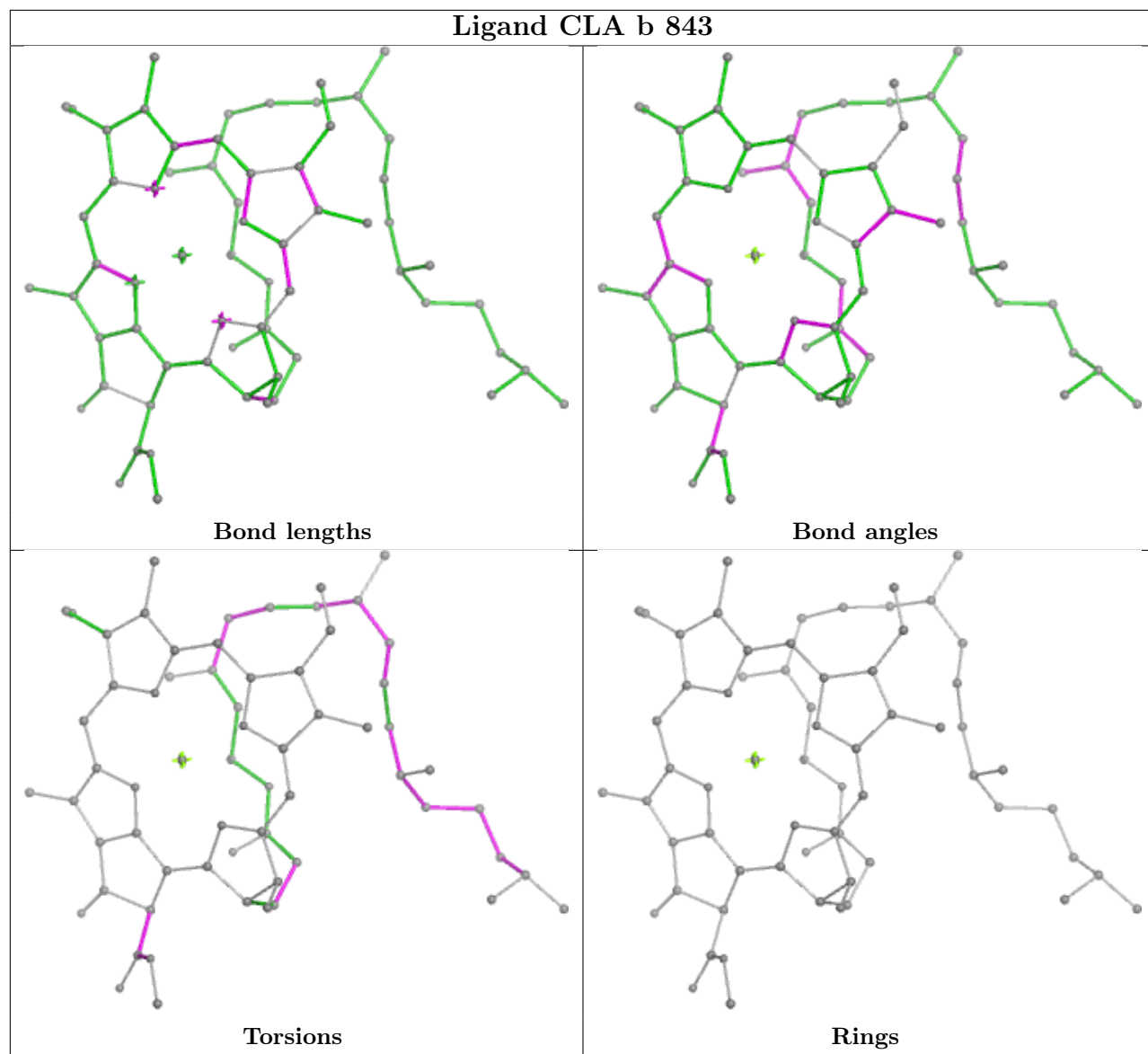


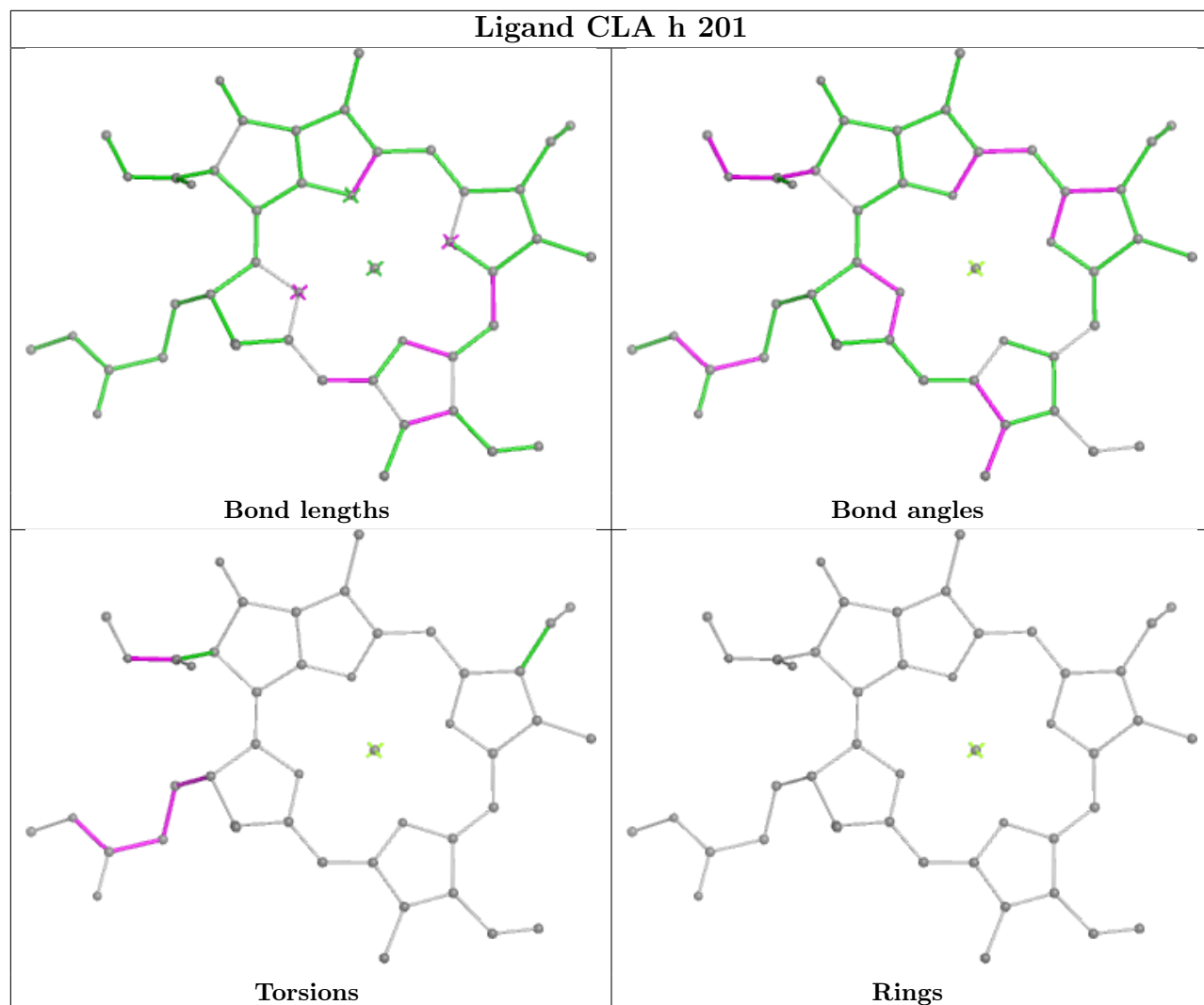


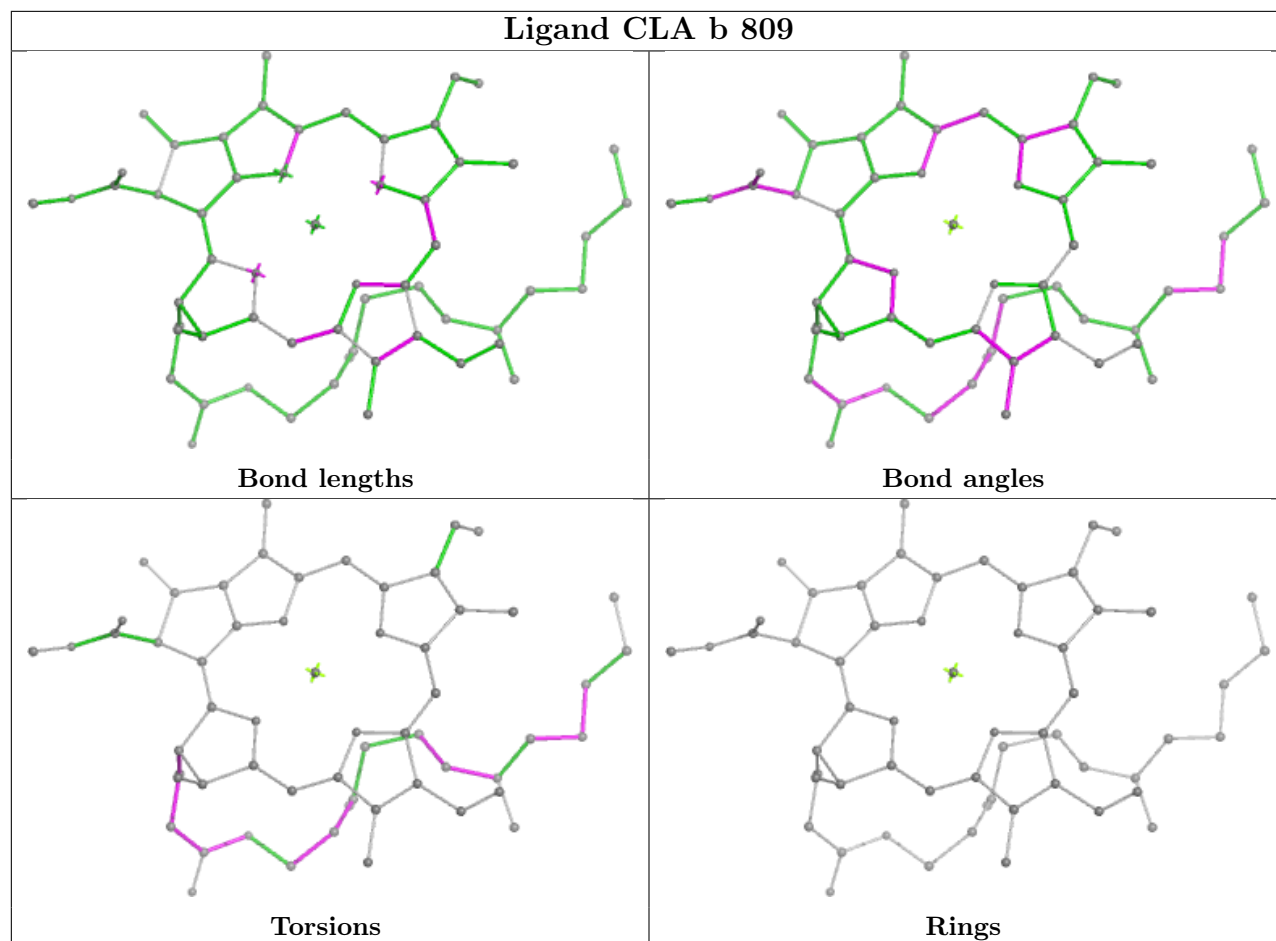












5.7 Other polymers [\(i\)](#)

There are no such residues in this entry.

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

There are no chain breaks in this entry.

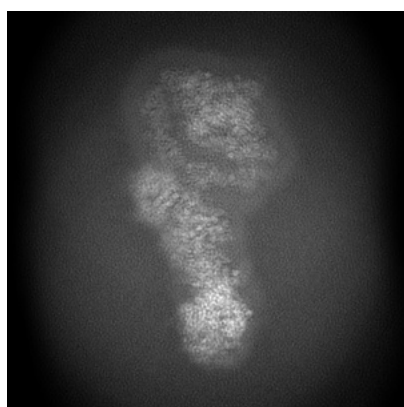
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-51527. These allow visual inspection of the internal detail of the map and identification of artifacts.

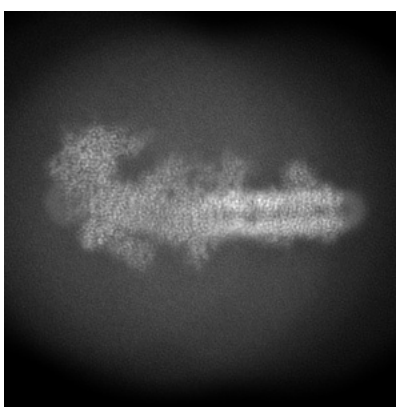
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

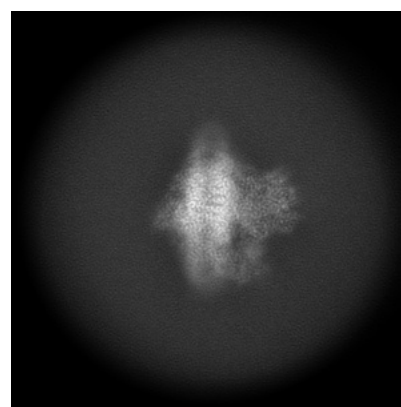
6.1.1 Primary map



X



Y

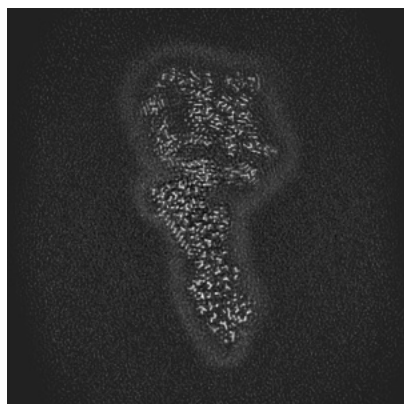


Z

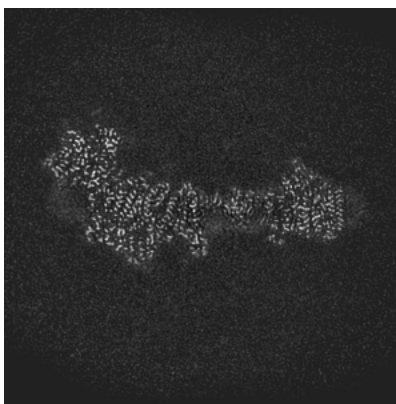
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

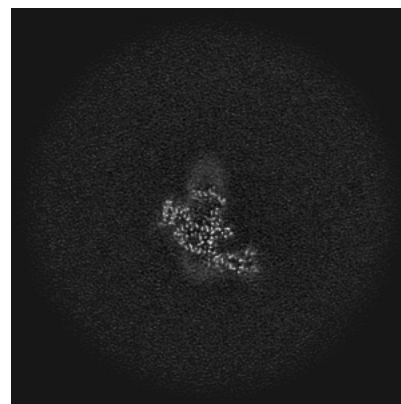
6.2.1 Primary map



X Index: 256



Y Index: 256

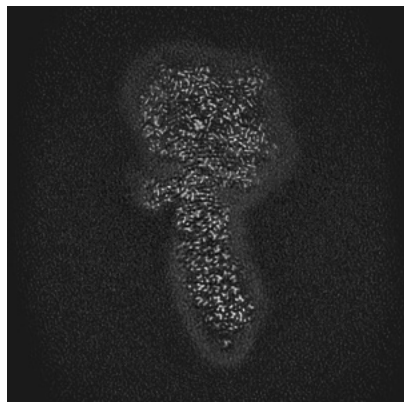


Z Index: 256

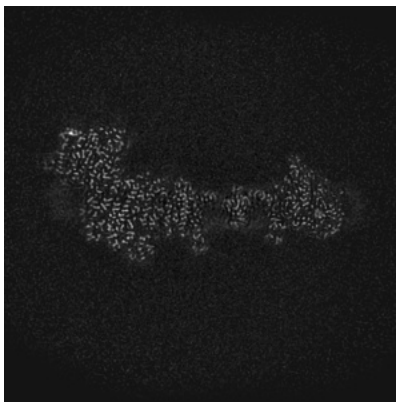
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

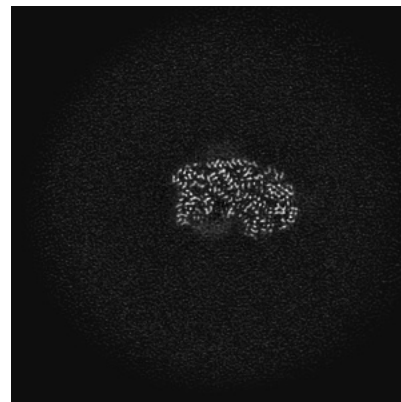
6.3.1 Primary map



X Index: 265



Y Index: 260

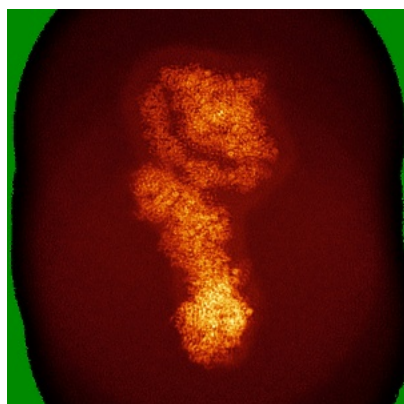


Z Index: 125

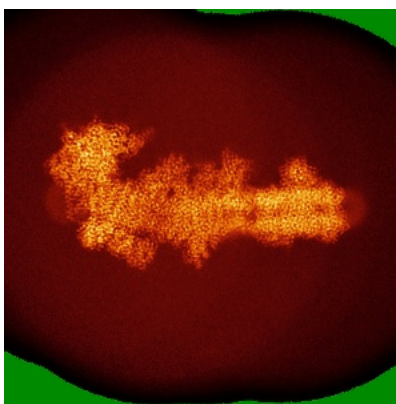
The images above show the largest variance slices of the map in three orthogonal directions.

6.4 Orthogonal standard-deviation projections (False-color) [i](#)

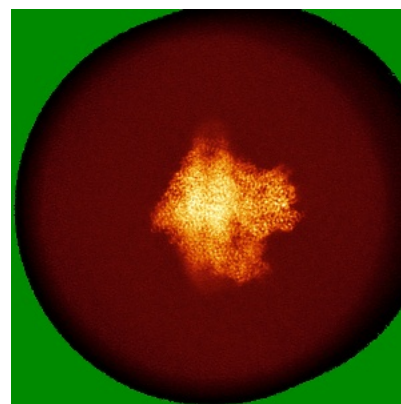
6.4.1 Primary map



X



Y

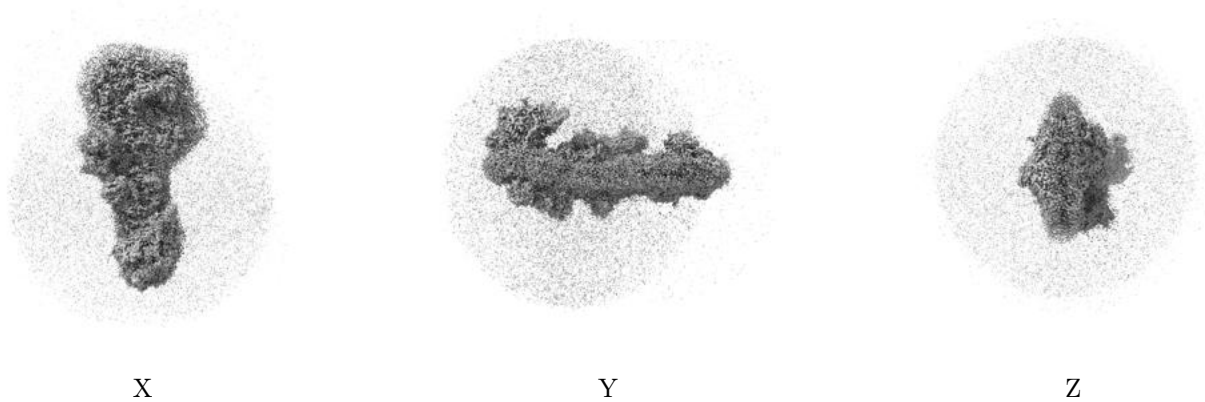


Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.3. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

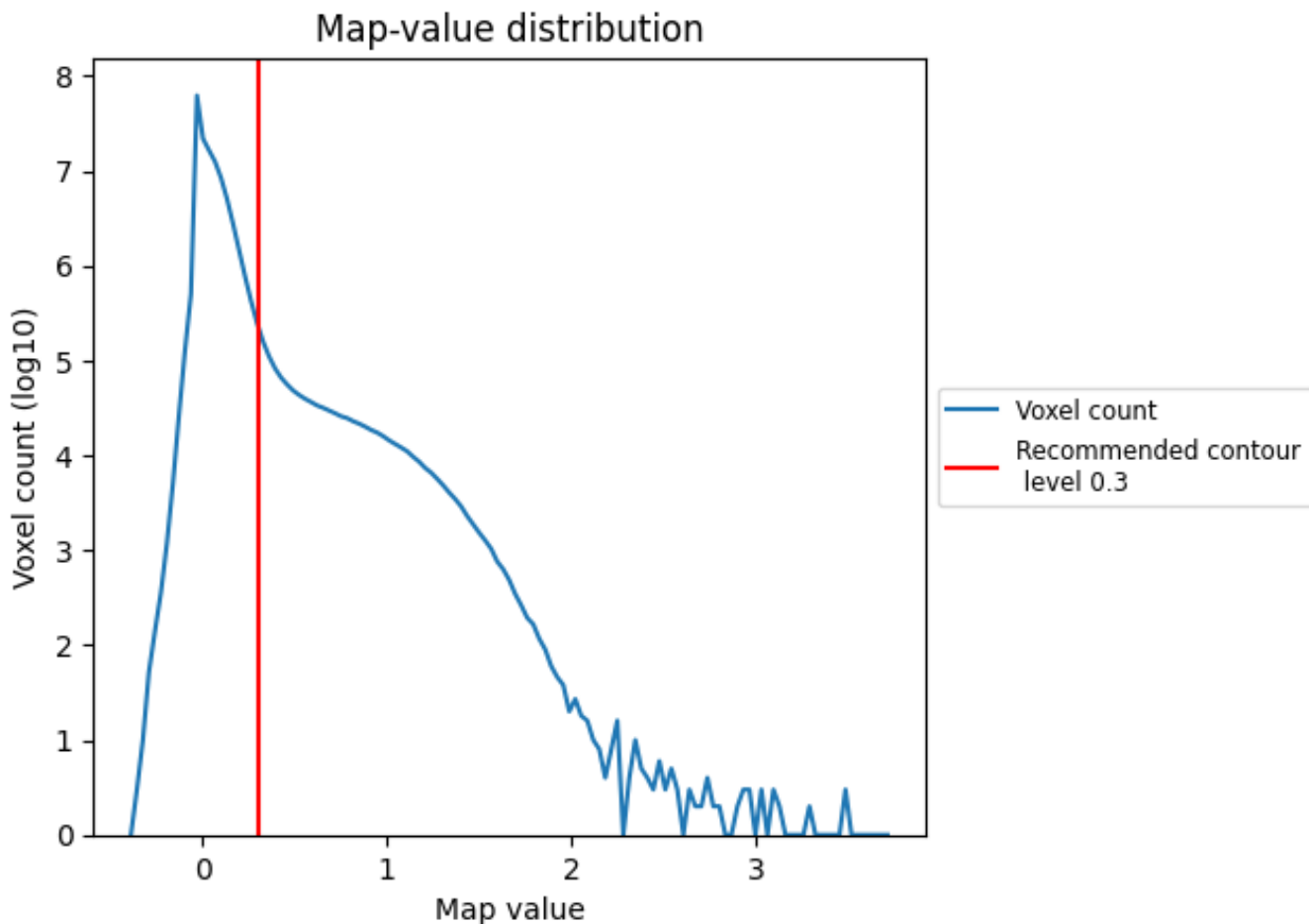
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

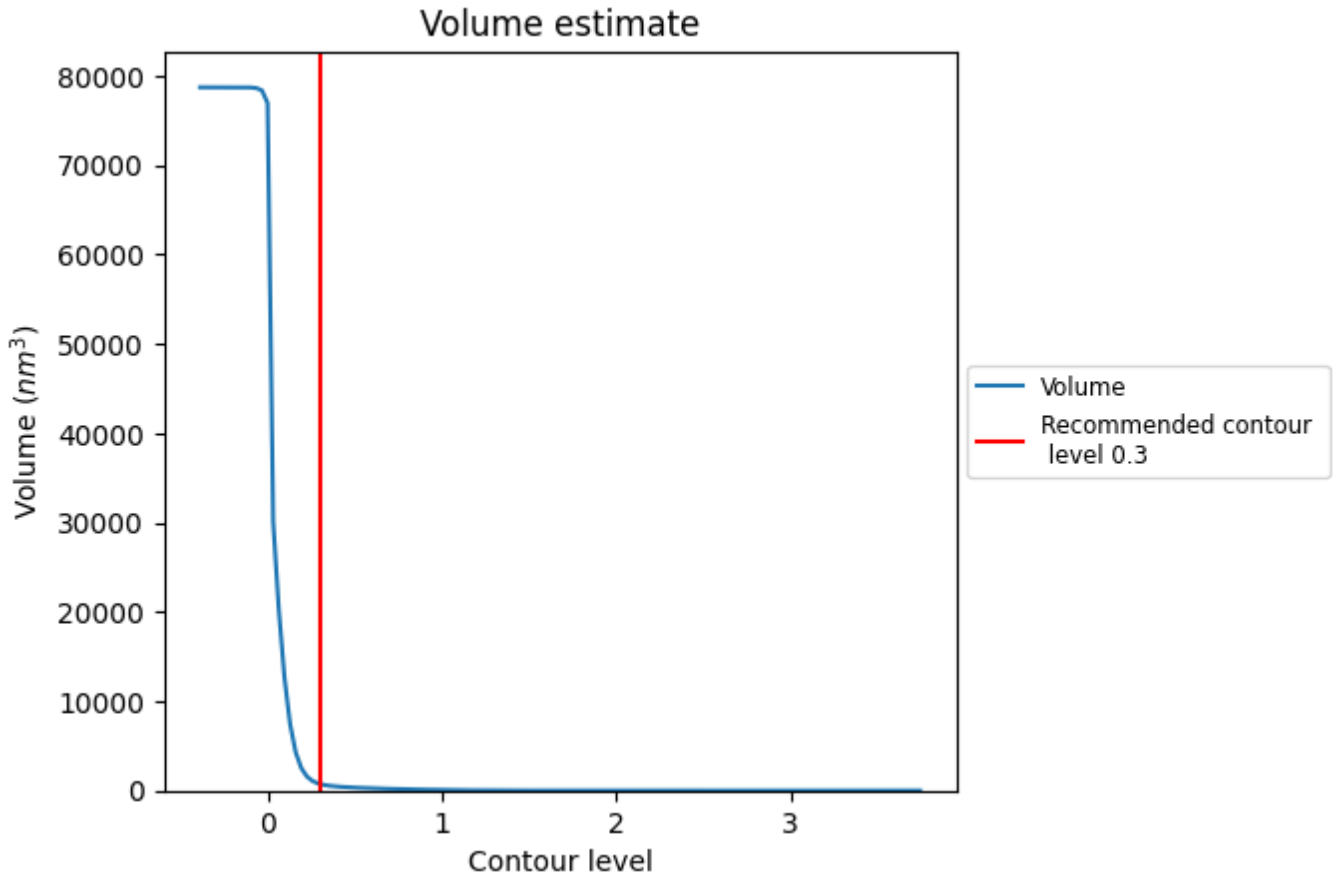
This section contains the results of statistical analysis of the map.

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.

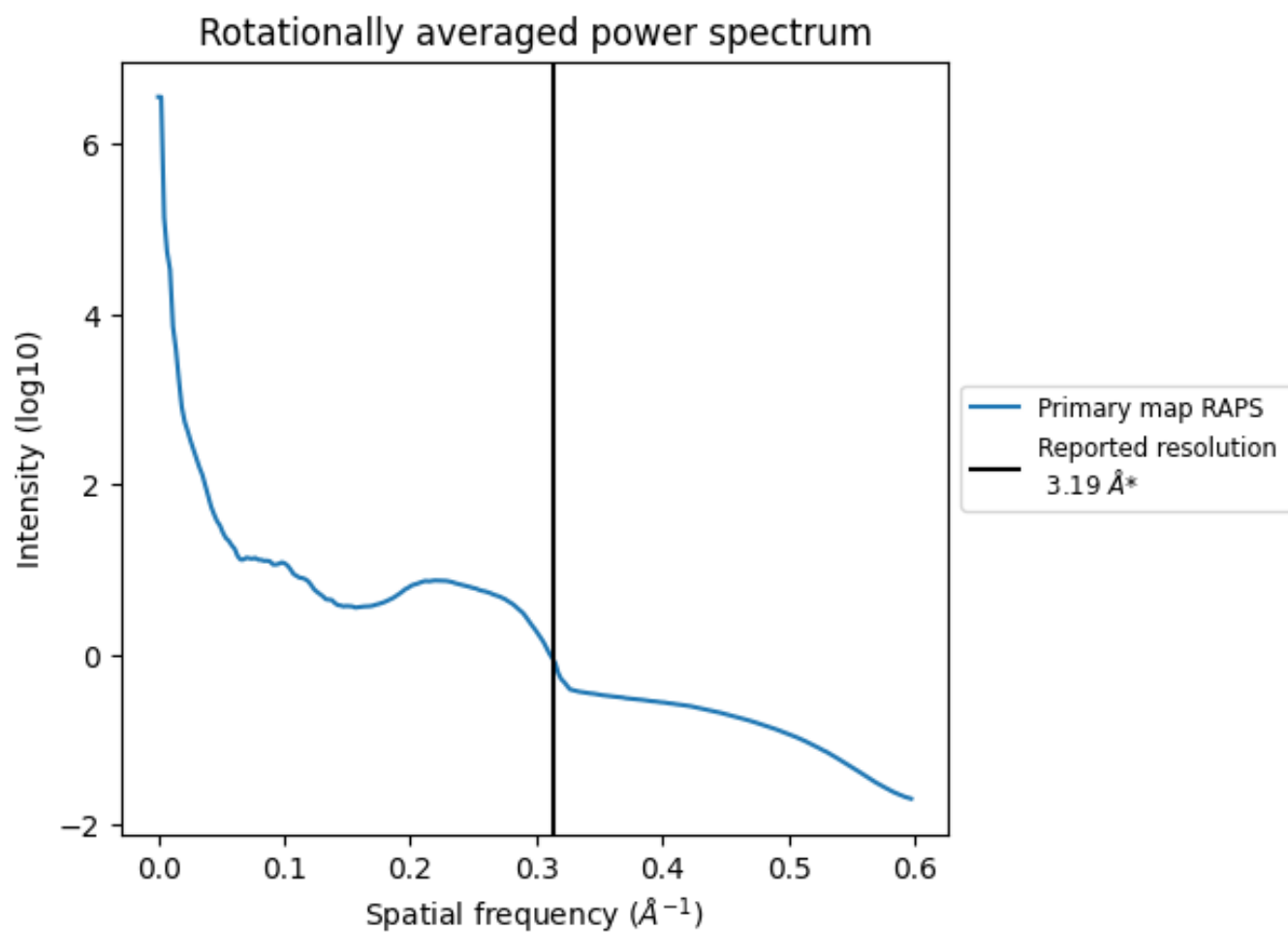
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 747 nm^3 ; this corresponds to an approximate mass of 675 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 0.313\AA^{-1}

8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

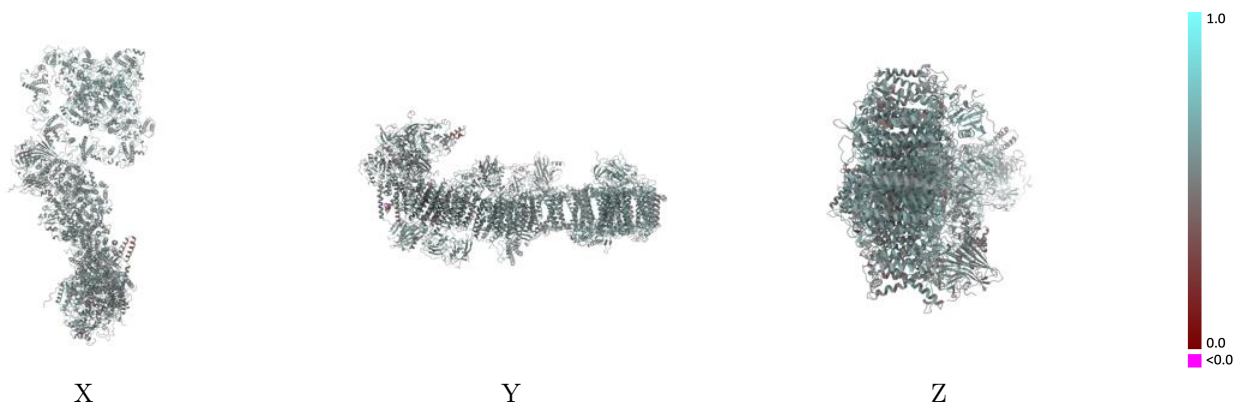
This section contains information regarding the fit between EMDB map EMD-51527 and PDB model 9GRX. Per-residue inclusion information can be found in section [3](#) on page [34](#).

9.1 Map-model overlay [i](#)



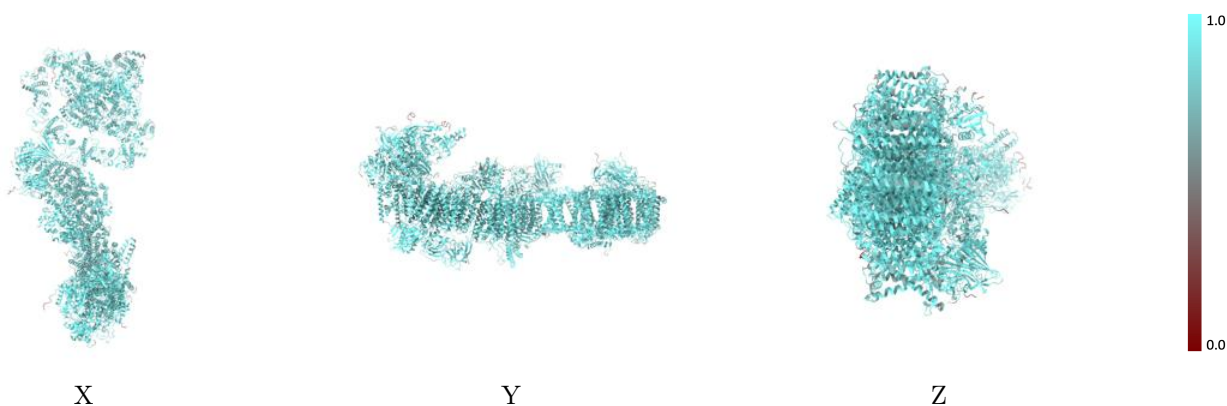
The images above show the 3D surface view of the map at the recommended contour level 0.3 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



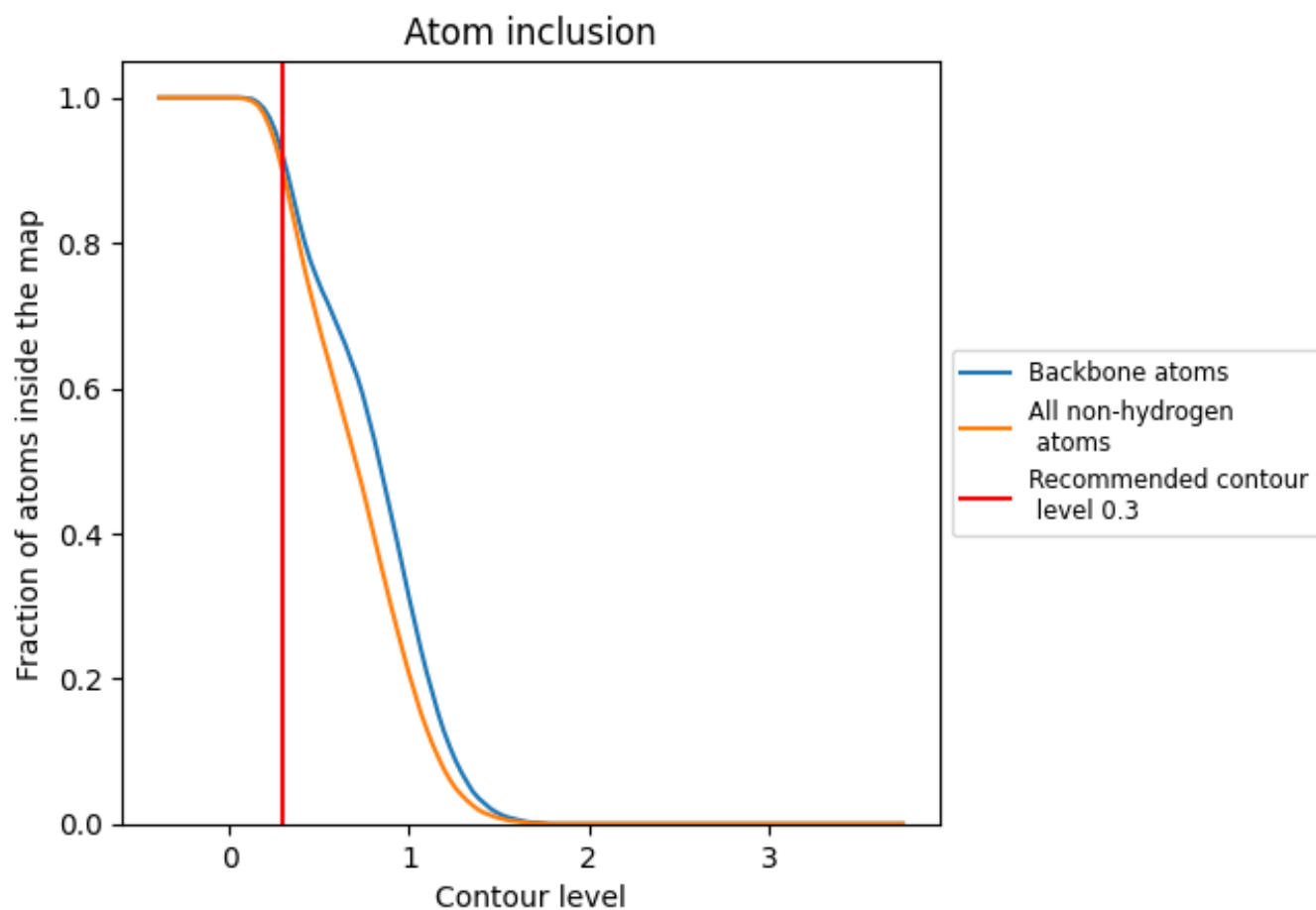
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.3).







































































9.4 Atom inclusion [i](#)



At the recommended contour level, 92% of all backbone atoms, 90% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary

















The table lists the average atom inclusion at the recommended contour level (0.3) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.8960	 0.5410
0	 0.9360	 0.5380
1	 0.9010	 0.5310
2	 0.9130	 0.5190
3	 0.8660	 0.5090
4	 0.9060	 0.5410
5	 0.9090	 0.5360
6	 0.9370	 0.5290
7	 0.9390	 0.5360
8	 0.9580	 0.5540
9	 0.9370	 0.5460
A	 0.8730	 0.5200
B	 0.8910	 0.5230
C	 0.8800	 0.5150
D	 0.9330	 0.5510
E	 0.9290	 0.5410
F	 0.9090	 0.5240
G	 0.8980	 0.5220
H	 0.8970	 0.5250
I	 0.9000	 0.5250
J	 0.9310	 0.5430
K	 0.8970	 0.5220
L	 0.9000	 0.5250
M	 0.8910	 0.5260
N	 0.9000	 0.5150
O	 0.8800	 0.5110
U	 0.8480	 0.4840
a	 0.9150	 0.5790
b	 0.9070	 0.5780
c	 0.9210	 0.5590
d	 0.9030	 0.5710
e	 0.8230	 0.5320
f	 0.8740	 0.5640
g	 0.7850	 0.5270
h	 0.7260	 0.5120



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Chain	Atom inclusion	Q-score
i	 0.8970	 0.5740
j	 0.8510	 0.5490
k	 0.8000	 0.4920
l	 0.8070	 0.5390
w	 0.9280	 0.5470
x	 0.8710	 0.5420
y	 0.9030	 0.5330
z	 0.8010	 0.5160