



Full wwPDB EM Validation Report ⓘ

Mar 24, 2026 – 10:55 AM JST

PDB ID : 9UH3 / pdb_00009uh3
EMDB ID : EMD-64153
Title : PSI-9 FCPI supercomplex from haptophyte *Chrysothila roscoffensis*
Authors : La Rocca, R.; Tsai, P.-C.; Kato, K.; Nakajima, Y.; Akita, F.; Shen, J.-R.
Deposited on : 2025-04-14
Resolution : 1.74 Å (reported)

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:

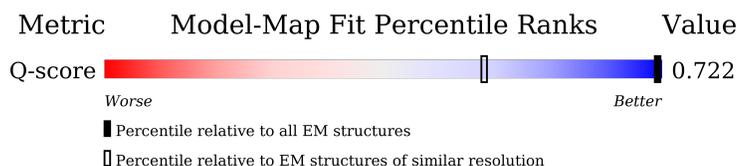
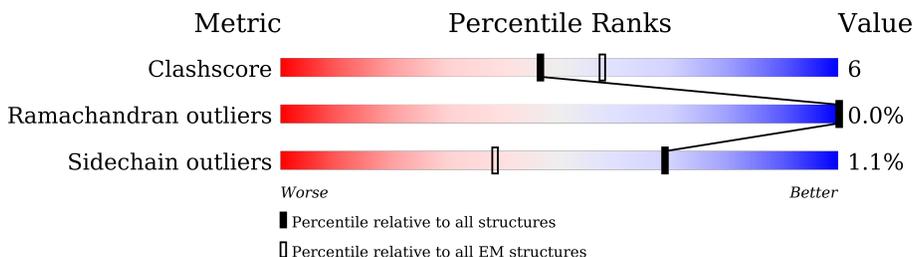
EMDB validation analysis : 0.0.1.dev132
Mogul : 1.8.5 (274361), CSD as541be (2020)
MolProbity : 4-5-2 with Phenix2.0
buster-report : 1.1.7 (2018)
Percentile statistics : 20231227.v01 (using entries in the PDB archive December 27th 2023)
EM percentile statistics : 202505.v01 (Using data in the EMDB archive up until May 2025)
MapQ : 1.9.13
Ideal geometry (proteins) : Engh & Huber (2001)
Ideal geometry (DNA, RNA) : Parkinson et al. (1996)
Validation Pipeline (wwPDB-VP) : 2.48.1

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 1.74 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.



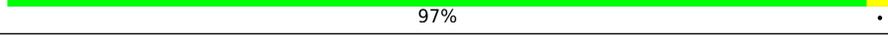
Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	210492	15764	-
Ramachandran outliers	207382	16835	-
Sidechain outliers	206894	16415	-
Q-score	-	25397	645 (1.25 - 2.24)

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	A	752	90% 9%
2	B	734	92% 7%
3	C	81	94% 5%
4	D	142	92% 5%

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Mol	Chain	Length	Quality of chain
5	E	67	 90% . . .
6	F	184	 80% 8% 12%
7	I	35	 86% 11% .
8	J	39	 77% 23%
9	L	141	 90% 9% .
10	M	29	 97% .
11	O	201	 81% 7% 12%
12	P	231	 75% 9% 16%
13	Q	197	 76% 9% 15%
14	R	90	 88% 10% .
15	S	215	 69% 7% 23%
16	U	191	 65% 8% 26%
17	G	209	 62% 12% 26%
18	H	169	 12% 71% 17% 12%
19	K	200	 17% 40% 8% 52%
20	T	202	 42% 7% 51%
21	k	89	 47% 15% 38%

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
22	CLA	A	802	X	-	-	-
22	CLA	A	803	X	-	-	-
22	CLA	A	804	X	-	-	-
22	CLA	A	805	X	-	-	-
22	CLA	A	806	X	-	-	-
22	CLA	A	809	X	-	-	-
22	CLA	A	810	X	-	-	-
22	CLA	A	811	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
22	CLA	A	812	X	-	-	-
22	CLA	A	815	X	-	-	-
22	CLA	A	816	X	-	-	-
22	CLA	A	817	X	-	-	-
22	CLA	A	818	X	-	-	-
22	CLA	A	820	X	-	-	-
22	CLA	A	821	X	-	-	-
22	CLA	A	822	X	-	-	-
22	CLA	A	823	X	-	-	-
22	CLA	A	824	X	-	-	-
22	CLA	A	825	X	-	-	-
22	CLA	A	828	X	-	-	-
22	CLA	A	829	X	-	-	-
22	CLA	A	831	X	-	-	-
22	CLA	A	832	X	-	-	-
22	CLA	A	833	X	-	-	-
22	CLA	A	835	X	-	-	-
22	CLA	A	836	X	-	-	-
22	CLA	A	838	X	-	-	-
22	CLA	A	845	X	-	-	-
22	CLA	A	850	X	-	-	-
22	CLA	A	853	X	-	-	-
22	CLA	A	854	X	-	-	-
22	CLA	A	855	X	-	-	-
22	CLA	A	856	X	-	-	-
22	CLA	B	801	X	-	-	-
22	CLA	B	802	X	-	-	-
22	CLA	B	803	X	-	-	-
22	CLA	B	804	X	-	-	-
22	CLA	B	805	X	-	-	-
22	CLA	B	807	X	-	-	-
22	CLA	B	808	X	-	-	-
22	CLA	B	811	X	-	-	-
22	CLA	B	815	X	-	-	-
22	CLA	B	816	X	-	-	-
22	CLA	B	819	X	-	-	-
22	CLA	B	820	X	-	-	-
22	CLA	B	821	X	-	-	-
22	CLA	B	822	X	-	-	-
22	CLA	B	826	X	-	-	-
22	CLA	B	828	X	-	-	-
22	CLA	B	829	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
22	CLA	B	830	X	-	-	-
22	CLA	B	831	X	-	-	-
22	CLA	B	832	X	-	-	-
22	CLA	B	834	X	-	-	-
22	CLA	B	842	X	-	-	-
22	CLA	B	843	X	-	-	-
22	CLA	B	844	X	-	-	-
22	CLA	B	845	X	-	-	-
22	CLA	B	847	X	-	-	-
22	CLA	F	802	X	-	-	-
22	CLA	F	803	X	-	-	-
22	CLA	F	804	X	-	-	-
22	CLA	G	202	X	-	-	-
22	CLA	G	203	X	-	-	-
22	CLA	G	206	X	-	-	-
22	CLA	G	208	X	-	-	-
22	CLA	G	209	X	-	-	-
22	CLA	G	210	X	-	-	-
22	CLA	G	215	X	-	-	-
22	CLA	H	202	X	-	-	-
22	CLA	H	203	X	-	-	-
22	CLA	H	204	X	-	-	-
22	CLA	H	205	X	-	-	-
22	CLA	H	206	X	-	-	-
22	CLA	H	208	X	-	-	-
22	CLA	H	209	X	-	-	-
22	CLA	H	213	X	-	-	-
22	CLA	J	103	X	-	-	-
22	CLA	K	203	X	-	-	-
22	CLA	K	205	X	-	-	-
22	CLA	K	206	X	-	-	-
22	CLA	L	204	X	-	-	-
22	CLA	O	205	X	-	-	-
22	CLA	O	206	X	-	-	-
22	CLA	O	207	X	-	-	-
22	CLA	O	208	X	-	-	-
22	CLA	P	207	X	-	-	-
22	CLA	P	208	X	-	-	-
22	CLA	P	209	X	-	-	-
22	CLA	P	213	X	-	-	-
22	CLA	P	214	X	-	-	-
22	CLA	P	216	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
22	CLA	Q	204	X	-	-	-
22	CLA	Q	205	X	-	-	-
22	CLA	Q	206	X	-	-	-
22	CLA	Q	207	X	-	-	-
22	CLA	Q	208	X	-	-	-
22	CLA	Q	211	X	-	-	-
22	CLA	Q	213	X	-	-	-
22	CLA	R	101	X	-	-	-
22	CLA	S	202	X	-	-	-
22	CLA	S	206	X	-	-	-
22	CLA	S	207	X	-	-	-
22	CLA	S	208	X	-	-	-
22	CLA	S	216	X	-	-	-
22	CLA	S	217	X	-	-	-
22	CLA	T	201	X	-	-	-
22	CLA	T	202	X	-	-	-
22	CLA	T	203	X	-	-	-
22	CLA	T	204	X	-	-	-
22	CLA	T	205	X	-	-	-
22	CLA	T	211	X	-	-	-
22	CLA	U	204	X	-	-	-
22	CLA	U	206	X	-	-	-
22	CLA	U	207	X	-	-	-
22	CLA	U	208	X	-	-	-
22	CLA	U	211	X	-	-	-
22	CLA	k	102	X	-	-	-
22	CLA	k	103	X	-	-	-

2 Entry composition

There are 35 unique types of molecules in this entry. The entry contains 42258 atoms, of which 0 are hydrogens and 0 are deuteriums.

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

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
1	A	741	5813	3807	984	994	28	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
2	B	732	5805	3823	977	984	21	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
3	C	80	599	366	106	116	11	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
4	D	138	1092	697	188	204	3	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
5	E	64	494	314	86	93	1	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
6	F	161	1246	802	209	229	6	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
7	I	34	266	183	35	46	2	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
8	J	39	305	204	45	54	2	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
9	L	140	1056	693	168	194	1	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
10	M	29	216	144	34	37	1	0	0

- Molecule 11 is a protein called Fucoxanthin chlorophyll a/c binding protein III (FCPI-3).

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
11	O	176	1341	872	217	244	8	0	0

- Molecule 12 is a protein called Fucoxanthin chlorophyll a/c binding protein VI (FCPI-6).

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
12	P	193	1441	927	239	264	11	0	0

- Molecule 13 is a protein called Fucoxanthin chlorophyll a/c binding protein IV (FCPI-4).

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
13	Q	167	1257	809	202	234	12	0	0

- Molecule 14 is a protein called Photosystem I reaction center subunit psaR.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
14	R	88	664	434	106	123	1	0	0

- Molecule 15 is a protein called Fucoxanthin chlorophyll a/c binding protein II (FCPI-2).

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
15	S	165	1238	802	204	226	6	0	0

- Molecule 16 is a protein called Fucoxanthin chlorophyll a/c binding protein I (FCPI-1).

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
16	U	141	1082	692	183	198	9	0	0

- Molecule 17 is a protein called Fucoxanthin chlorophyll a/c binding protein VII (FCPI-7).

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
17	G	155	1179	756	190	224	9	0	0

- Molecule 18 is a protein called Fucoxanthin chlorophyll a/c binding protein VIII (FCPI-8).

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
18	H	149	1128	725	185	206	12	0	0

- Molecule 19 is a protein called Fucoxanthin chlorophyll a/c binding protein IX (FCPI-9).

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
19	K	97	748	495	121	125	7	0	0

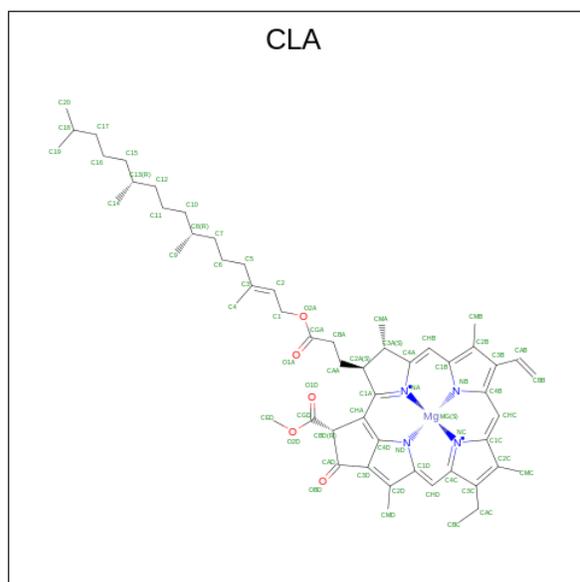
- Molecule 20 is a protein called Fucoxanthin chlorophyll a/c binding protein V (FCPI-5).

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
20	T	99	731	471	122	130	8	0	0

- Molecule 21 is a protein called Photosystem I reaction center subunit psaK.

Mol	Chain	Residues	Atoms					AltConf	Trace
			Total	C	N	O	S		
21	k	55	379	247	62	67	3	0	0

- Molecule 22 is CHLOROPHYLL A (CCD ID: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



Mol	Chain	Residues	Atoms					AltConf	
			Total	C	Mg	N	O		
22	A	1	Total	65	55	1	4	5	0
22	A	1	Total	55	45	1	4	5	0
22	A	1	Total	65	55	1	4	5	0
22	A	1	Total	65	55	1	4	5	0
22	A	1	Total	49	39	1	4	5	0
22	A	1	Total	65	55	1	4	5	0
22	A	1	Total	65	55	1	4	5	0
22	A	1	Total	56	46	1	4	5	0
22	A	1	Total	62	52	1	4	5	0
22	A	1	Total	54	44	1	4	5	0
22	A	1	Total	65	55	1	4	5	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
22	A	1	45	35	1	4	5	0
22	A	1	50	40	1	4	5	0
22	A	1	45	35	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	45	35	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	43	35	1	4	3	0
22	A	1	51	41	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	62	52	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	50	40	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	50	40	1	4	5	0
22	A	1	45	35	1	4	5	0
22	A	1	51	41	1	4	5	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
22	A	1	65	55	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	52	42	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	60	50	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	65	55	1	4	5	0
22	A	1	40	32	1	4	3	0
22	A	1	46	36	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	45	35	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
22	B	1	65	55	1	4	5	0
22	B	1	54	44	1	4	5	0
22	B	1	55	45	1	4	5	0
22	B	1	54	44	1	4	5	0
22	B	1	59	49	1	4	5	0
22	B	1	55	45	1	4	5	0
22	B	1	59	49	1	4	5	0
22	B	1	60	50	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	46	36	1	4	5	0
22	B	1	53	43	1	4	5	0
22	B	1	63	53	1	4	5	0
22	B	1	64	54	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	50	40	1	4	5	0
22	B	1	49	39	1	4	5	0
22	B	1	58	48	1	4	5	0
22	B	1	65	55	1	4	5	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
22	B	1	58	48	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	47	37	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	65	55	1	4	5	0
22	B	1	50	40	1	4	5	0
22	F	1	65	55	1	4	5	0
22	F	1	48	38	1	4	5	0
22	F	1	46	36	1	4	5	0
22	J	1	42	34	1	4	3	0
22	L	1	49	39	1	4	5	0
22	L	1	65	55	1	4	5	0
22	L	1	50	40	1	4	5	0
22	O	1	43	35	1	4	3	0
22	O	1	45	35	1	4	5	0
22	O	1	65	55	1	4	5	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
22	O	1	65	55	1	4	5	0
22	O	1	65	55	1	4	5	0
22	O	1	46	36	1	4	5	0
22	O	1	60	50	1	4	5	0
22	O	1	65	55	1	4	5	0
22	O	1	41	33	1	4	3	0
22	P	1	65	55	1	4	5	0
22	P	1	56	46	1	4	5	0
22	P	1	52	42	1	4	5	0
22	P	1	47	37	1	4	5	0
22	P	1	50	40	1	4	5	0
22	P	1	41	33	1	4	3	0
22	P	1	45	35	1	4	5	0
22	P	1	47	37	1	4	5	0
22	Q	1	48	38	1	4	5	0
22	Q	1	61	51	1	4	5	0
22	Q	1	60	50	1	4	5	0
22	Q	1	51	41	1	4	5	0
22	Q	1	46	36	1	4	5	0
22	Q	1	50	40	1	4	5	0
22	Q	1	65	55	1	4	5	0

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Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
22	Q	1	41	33	1	4	3	0
22	Q	1	65	55	1	4	5	0
22	Q	1	57	47	1	4	5	0
22	Q	1	65	55	1	4	5	0
22	R	1	45	35	1	4	5	0
22	R	1	65	55	1	4	5	0
22	S	1	65	55	1	4	5	0
22	S	1	46	36	1	4	5	0
22	S	1	46	36	1	4	5	0
22	S	1	45	35	1	4	5	0
22	S	1	52	42	1	4	5	0
22	S	1	65	55	1	4	5	0
22	S	1	65	55	1	4	5	0
22	U	1	61	51	1	4	5	0
22	U	1	65	55	1	4	5	0
22	U	1	45	35	1	4	5	0
22	U	1	65	55	1	4	5	0
22	U	1	46	36	1	4	5	0
22	U	1	42	34	1	4	3	0
22	U	1	65	55	1	4	5	0
22	U	1	52	42	1	4	5	0

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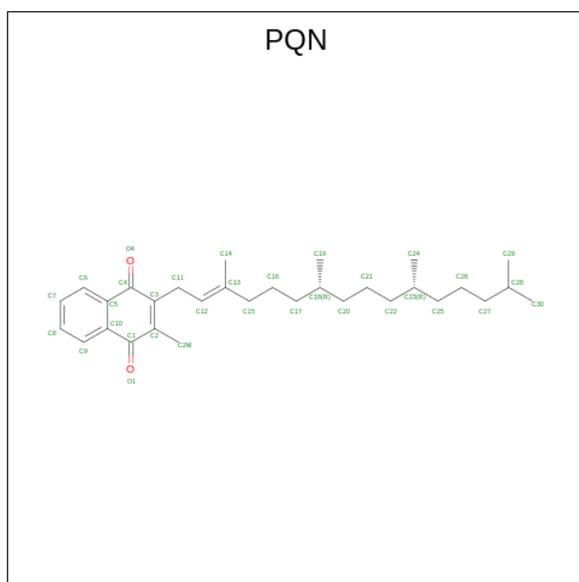
Mol	Chain	Residues	Atoms					AltConf
			Total	C	Mg	N	O	
22	G	1	45	35	1	4	5	0
22	G	1	41	33	1	4	3	0
22	G	1	45	35	1	4	5	0
22	G	1	43	35	1	4	3	0
22	G	1	61	51	1	4	5	0
22	G	1	65	55	1	4	5	0
22	G	1	60	50	1	4	5	0
22	G	1	55	45	1	4	5	0
22	G	1	56	46	1	4	5	0
22	G	1	45	35	1	4	5	0
22	G	1	45	35	1	4	5	0
22	H	1	40	32	1	4	3	0
22	H	1	60	50	1	4	5	0
22	H	1	61	51	1	4	5	0
22	H	1	44	35	1	4	4	0
22	H	1	45	35	1	4	5	0
22	H	1	65	55	1	4	5	0
22	H	1	58	48	1	4	5	0
22	H	1	41	33	1	4	3	0
22	H	1	45	35	1	4	5	0
22	H	1	65	55	1	4	5	0

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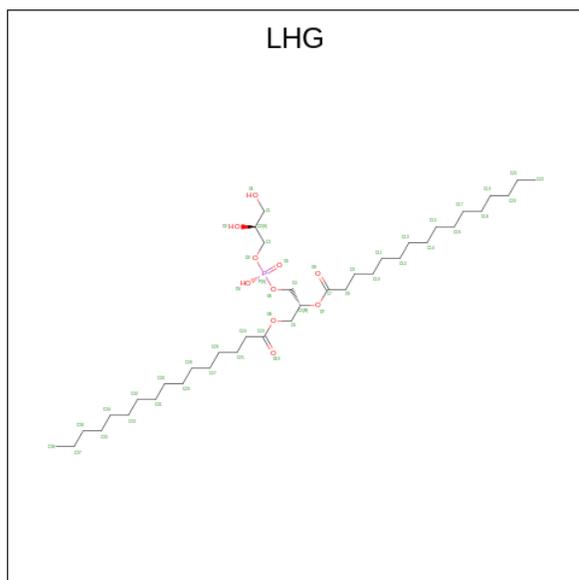
Mol	Chain	Residues	Atoms					AltConf
22	K	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
22	K	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
22	K	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
22	K	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
22	K	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
22	T	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
22	T	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
22	T	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
22	T	1	Total	C	Mg	N	O	0
			57	47	1	4	5	
22	T	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
22	T	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
22	T	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
22	T	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
22	T	1	Total	C	Mg	N	O	0
			46	36	1	4	5	
22	T	1	Total	C	Mg	N	O	0
			47	37	1	4	5	
22	k	1	Total	C	Mg	N	O	0
			42	34	1	4	3	
22	k	1	Total	C	Mg	N	O	0
			55	45	1	4	5	

- Molecule 23 is PHYLLOQUINONE (CCD ID: PQN) (formula: C₃₁H₄₆O₂) (labeled as "Ligand of Interest" by depositor).



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

- Molecule 24 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: $C_{38}H_{75}O_{10}P$).



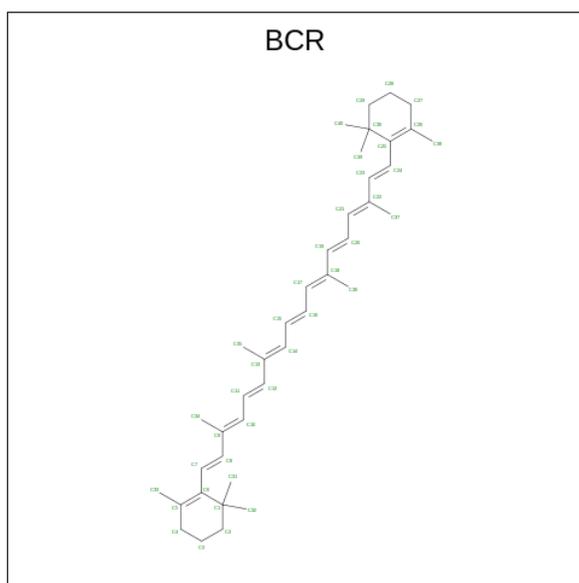
Mol	Chain	Residues	Atoms				AltConf
24	A	1	Total	C	O	P	0
			48	37	10	1	

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Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	P	
24	A	1	27	16	10	1	0
24	P	1	49	38	10	1	0
24	G	1	27	16	10	1	0

- Molecule 25 is BETA-CAROTENE (CCD ID: BCR) (formula: C₄₀H₅₆).



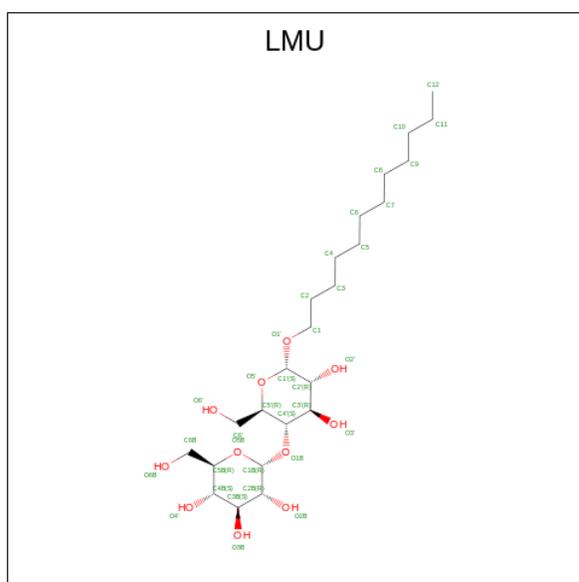
Mol	Chain	Residues	Atoms		AltConf
25	A	1	Total	C	0
			40	40	
25	A	1	Total	C	0
			40	40	
25	A	1	Total	C	0
			40	40	
25	A	1	Total	C	0
			40	40	
25	B	1	Total	C	0
			40	40	
25	B	1	Total	C	0
			40	40	
25	B	1	Total	C	0
			40	40	
25	B	1	Total	C	0
			40	40	

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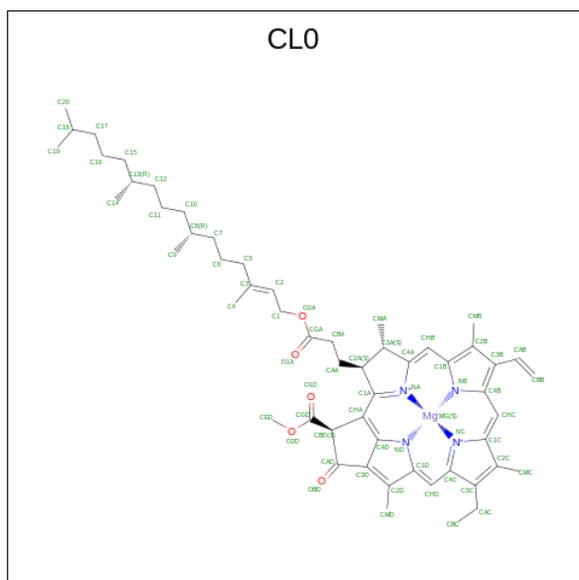
Mol	Chain	Residues	Atoms	AltConf
25	B	1	Total C 40 40	0
25	F	1	Total C 40 40	0
25	F	1	Total C 40 40	0
25	I	1	Total C 40 40	0
25	I	1	Total C 40 40	0
25	J	1	Total C 40 40	0
25	L	1	Total C 40 40	0
25	L	1	Total C 40 40	0
25	M	1	Total C 40 40	0
25	R	1	Total C 39 39	0
25	k	1	Total C 40 40	0

- Molecule 26 is DODECYL-ALPHA-D-MALTOSE (CCD ID: LMU) (formula: $C_{24}H_{46}O_{11}$).



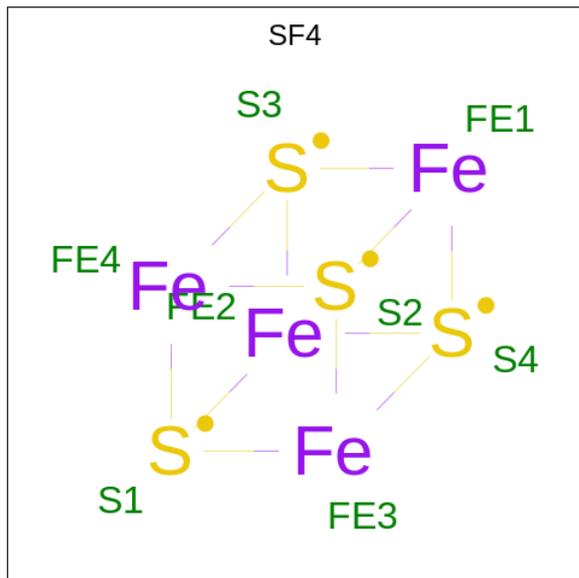
Mol	Chain	Residues	Atoms			AltConf
26	A	1	Total	C	O	0
			35	24	11	
26	A	1	Total	C	O	0
			35	24	11	
26	F	1	Total	C	O	0
			35	24	11	
26	F	1	Total	C	O	0
			35	24	11	
26	L	1	Total	C	O	0
			35	24	11	
26	M	1	Total	C	O	0
			35	24	11	
26	O	1	Total	C	O	0
			35	24	11	
26	P	1	Total	C	O	0
			25	14	11	
26	S	1	Total	C	O	0
			31	20	11	
26	K	1	Total	C	O	0
			35	24	11	
26	K	1	Total	C	O	0
			24	13	11	

- Molecule 27 is CHLOROPHYLL A ISOMER (CCD ID: CL0) (formula: $C_{55}H_{72}MgN_4O_5$).



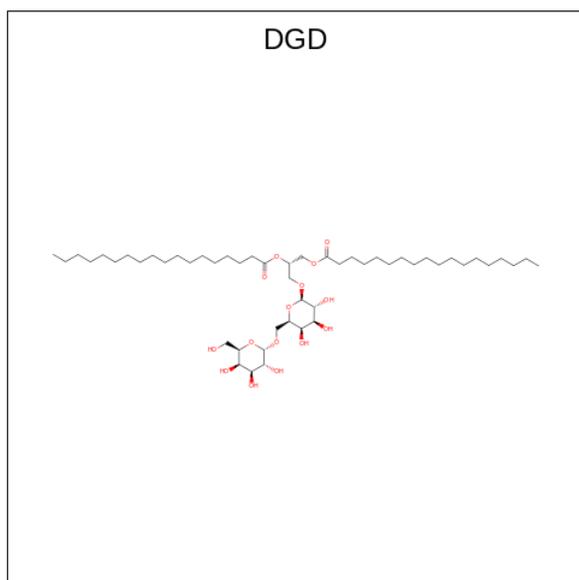
Mol	Chain	Residues	Atoms				AltConf	
27	A	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

- Molecule 28 is IRON/SULFUR CLUSTER (CCD ID: SF4) (formula: Fe_4S_4) (labeled as "Ligand of Interest" by depositor).



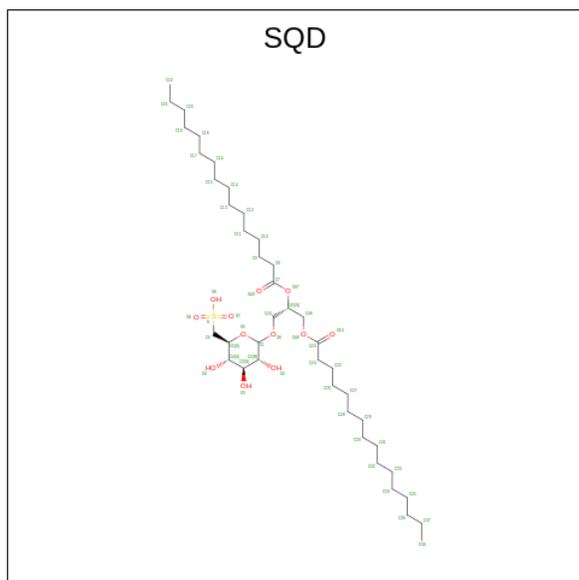
Mol	Chain	Residues	Atoms			AltConf
28	A	1	Total	Fe	S	0
			8	4	4	
28	C	1	Total	Fe	S	0
			8	4	4	
28	C	1	Total	Fe	S	0
			8	4	4	

- Molecule 29 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (CCD ID: DGD) (formula: $\text{C}_{51}\text{H}_{96}\text{O}_{15}$).



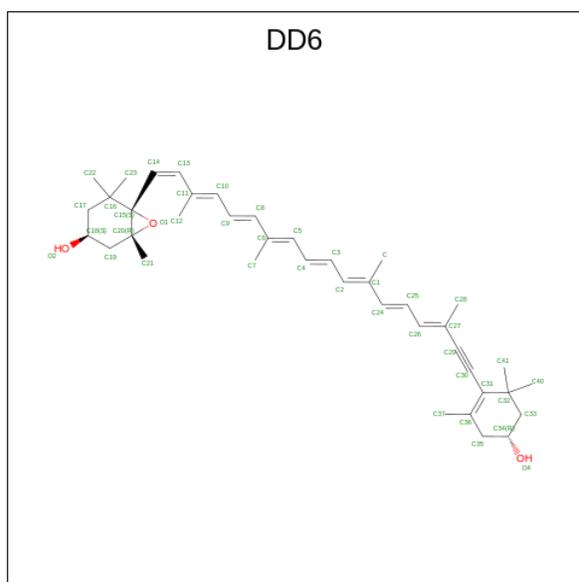
Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
29	B	1	60	45	15	0

- Molecule 30 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (CCD ID: SQD) (formula: $C_{41}H_{78}O_{12}S$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	S	
30	B	1	50	37	12	1	0
30	S	1	46	33	12	1	0

- Molecule 31 is (3S,3'R,5R,6S,7cis)-7',8'-didehydro-5,6-dihydro-5,6-epoxy-beta,beta-carotene-3,3'-diol (CCD ID: DD6) (formula: $C_{40}H_{54}O_3$).



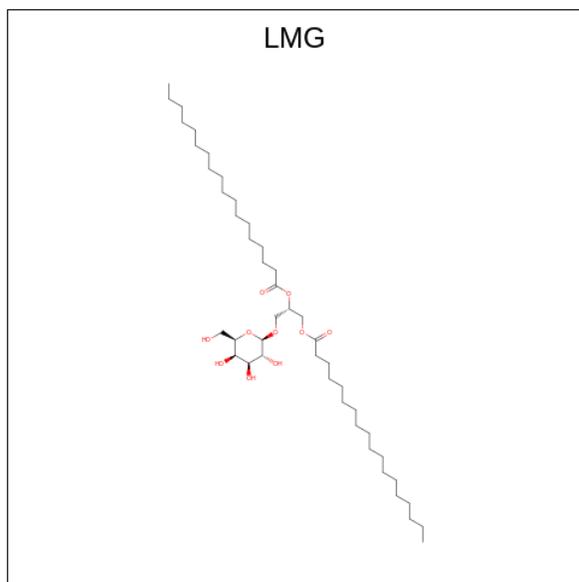
Mol	Chain	Residues	Atoms			AltConf
31	J	1	Total	C	O	0
			43	40	3	
31	O	1	Total	C	O	0
			43	40	3	
31	O	1	Total	C	O	0
			43	40	3	
31	O	1	Total	C	O	0
			43	40	3	
31	O	1	Total	C	O	0
			43	40	3	
31	O	1	Total	C	O	0
			43	40	3	
31	P	1	Total	C	O	0
			43	40	3	
31	P	1	Total	C	O	0
			43	40	3	
31	P	1	Total	C	O	0
			43	40	3	
31	P	1	Total	C	O	0
			43	40	3	
31	Q	1	Total	C	O	0
			43	40	3	
31	Q	1	Total	C	O	0
			43	40	3	
31	S	1	Total	C	O	0
			43	40	3	
31	S	1	Total	C	O	0
			43	40	3	

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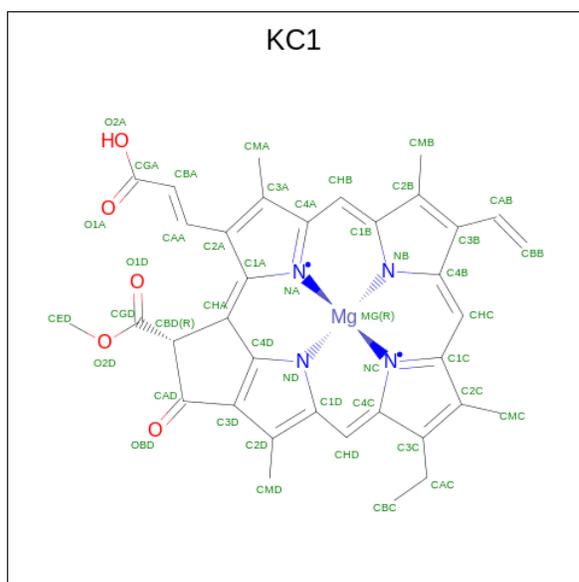
Mol	Chain	Residues	Atoms			AltConf
31	S	1	Total	C	O	0
			43	40	3	
31	S	1	Total	C	O	0
			43	40	3	
31	S	1	Total	C	O	0
			43	40	3	
31	U	1	Total	C	O	0
			43	40	3	
31	U	1	Total	C	O	0
			43	40	3	
31	U	1	Total	C	O	0
			26	25	1	
31	G	1	Total	C	O	0
			43	40	3	
31	G	1	Total	C	O	0
			43	40	3	
31	G	1	Total	C	O	0
			43	40	3	
31	G	1	Total	C	O	0
			43	40	3	
31	H	1	Total	C	O	0
			43	40	3	
31	H	1	Total	C	O	0
			43	40	3	
31	H	1	Total	C	O	0
			43	40	3	
31	K	1	Total	C	O	0
			43	40	3	
31	T	1	Total	C	O	0
			43	40	3	
31	T	1	Total	C	O	0
			43	40	3	
31	k	1	Total	C	O	0
			43	40	3	

- Molecule 32 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: C₄₅H₈₆O₁₀).



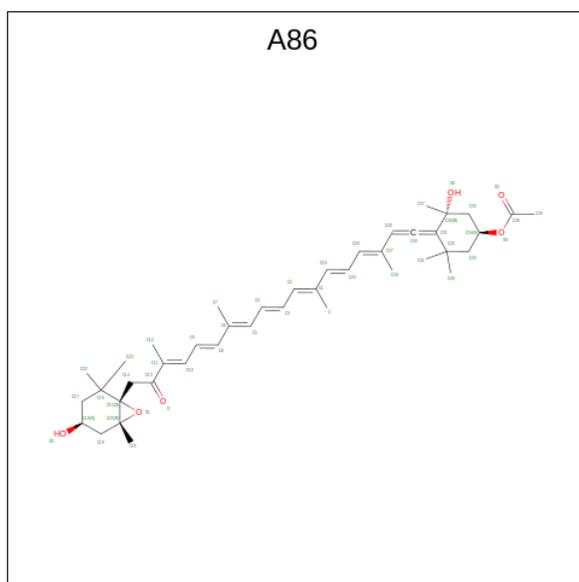
Mol	Chain	Residues	Atoms			AltConf
			Total	C	O	
32	J	1	39	29	10	0
32	P	1	34	24	10	0
32	P	1	25	15	10	0
32	Q	1	55	45	10	0
32	S	1	49	39	10	0
32	U	1	32	22	10	0

- Molecule 33 is Chlorophyll c1 (CCD ID: KC1) (formula: $C_{35}H_{30}MgN_4O_5$).



Mol	Chain	Residues	Atoms				AltConf	
			Total	C	Mg	N		O
33	O	1	45	35	1	4	5	0
33	P	1	45	35	1	4	5	0
33	P	1	45	35	1	4	5	0
33	P	1	44	35	1	4	4	0
33	P	1	45	35	1	4	5	0
33	Q	1	45	35	1	4	5	0
33	S	1	45	35	1	4	5	0
33	S	1	45	35	1	4	5	0
33	U	1	45	35	1	4	5	0
33	T	1	45	35	1	4	5	0

- Molecule 34 is (3S,3'S,5R,5'R,6S,6'R,8'R)-3,5'-dihydroxy-8-oxo-6',7'-didehydro-5,5',6,6',7,8-hexahydro-5,6-epoxy-beta,beta-caroten-3'-yl acetate (CCD ID: A86) (formula: C₄₂H₅₈O₆).



Mol	Chain	Residues	Atoms			AltConf
34	P	1	Total	C	O	0
			48	42	6	
34	Q	1	Total	C	O	0
			48	42	6	
34	Q	1	Total	C	O	0
			48	42	6	
34	Q	1	Total	C	O	0
			48	42	6	
34	R	1	Total	C	O	0
			44	40	4	
34	R	1	Total	C	O	0
			48	42	6	
34	U	1	Total	C	O	0
			48	42	6	

- Molecule 35 is water.

Mol	Chain	Residues	Atoms		AltConf
35	A	117	Total	O	0
			117	117	
35	B	211	Total	O	0
			211	211	
35	C	46	Total	O	0
			46	46	
35	D	21	Total	O	0
			21	21	
35	E	14	Total	O	0
			14	14	

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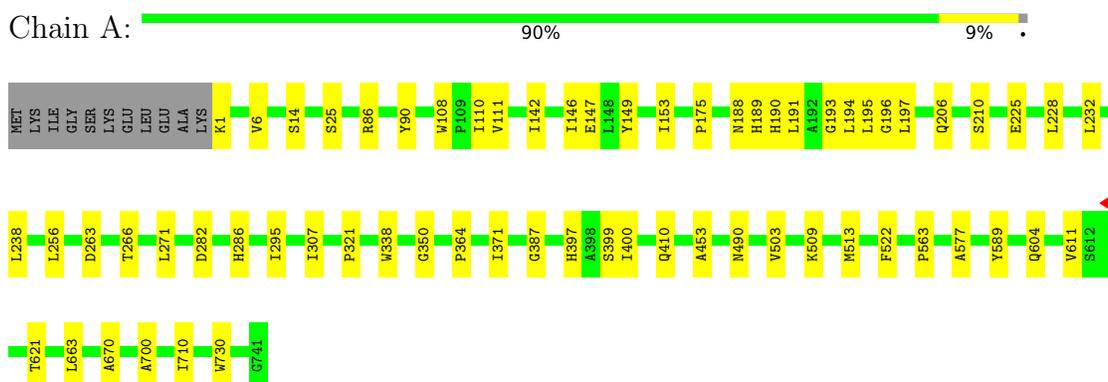
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Mol	Chain	Residues	Atoms		AltConf
35	F	21	Total 21	O 21	0
35	I	2	Total 2	O 2	0
35	J	3	Total 3	O 3	0
35	L	18	Total 18	O 18	0
35	M	2	Total 2	O 2	0
35	O	11	Total 11	O 11	0
35	P	18	Total 18	O 18	0
35	Q	9	Total 9	O 9	0
35	R	4	Total 4	O 4	0
35	S	11	Total 11	O 11	0
35	U	5	Total 5	O 5	0
35	k	1	Total 1	O 1	0

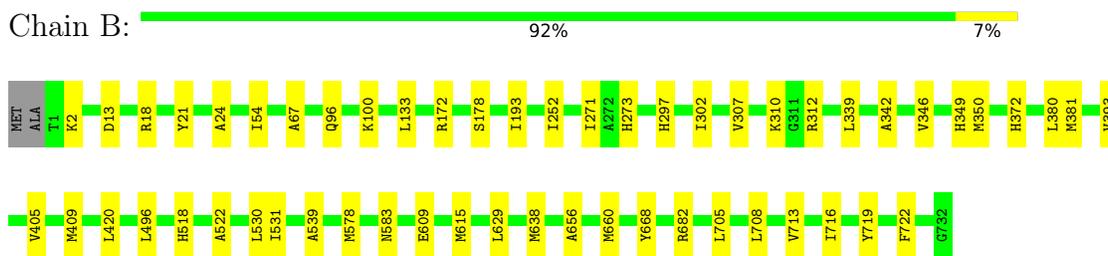
3 Residue-property plots

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

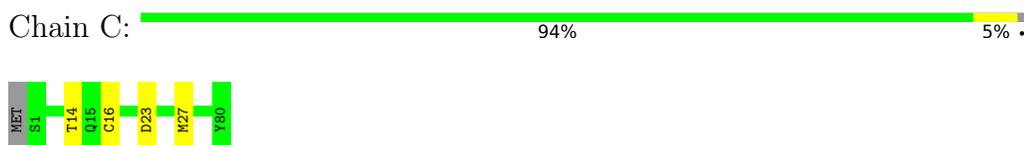
- Molecule 1: Photosystem I P700 chlorophyll a apoprotein A1 (psaA)



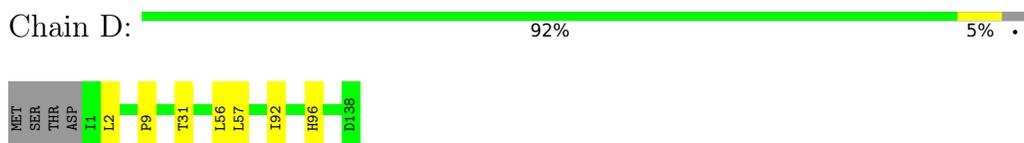
- Molecule 2: Photosystem I P700 chlorophyll a apoprotein A2 (psaB)



- Molecule 3: Photosystem I iron-sulfur center (psaC)



- Molecule 4: Photosystem I reaction center subunit II (psaD)



- Molecule 5: Photosystem I reaction center subunit IV (psaE)

Chain E:  90%



- Molecule 6: Photosystem I reaction center subunit III (psaF)

Chain F:  80% 8% 12%



- Molecule 7: Photosystem I reaction center subunit VIII (psaI)

Chain I:  86% 11%



- Molecule 8: Photosystem I reaction center subunit IX (psaJ)

Chain J:  77% 23%

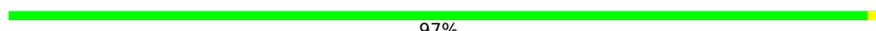


- Molecule 9: Photosystem I reaction center subunit XI (psaL)

Chain L:  90% 9%



- Molecule 10: Photosystem I reaction center subunit XII (psaM)

Chain M:  97%



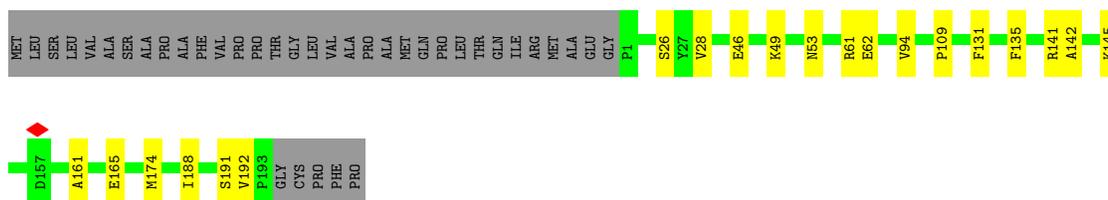
- Molecule 11: Fucoxanthin chlorophyll a/c binding protein III (FCPI-3)

Chain O:  81% 7% 12%



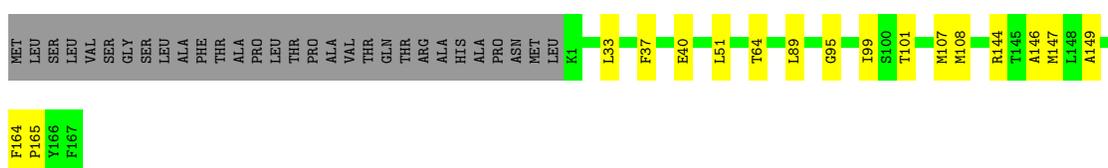
- Molecule 12: Fucoxanthin chlorophyll a/c binding protein VI (FCPI-6)

Chain P:  75% 9% 16%



- Molecule 13: Fucoxanthin chlorophyll a/c binding protein IV (FCPI-4)

Chain Q:  76% 9% 15%



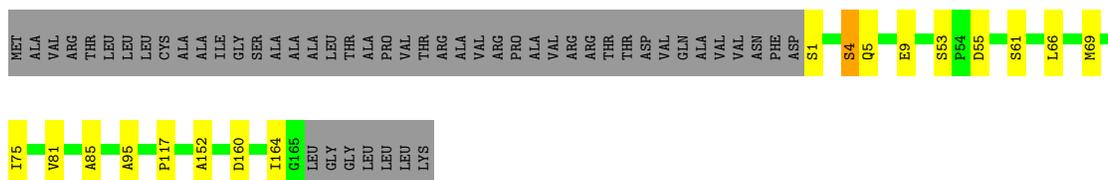
- Molecule 14: Photosystem I reaction center subunit psaR

Chain R:  88% 10% .



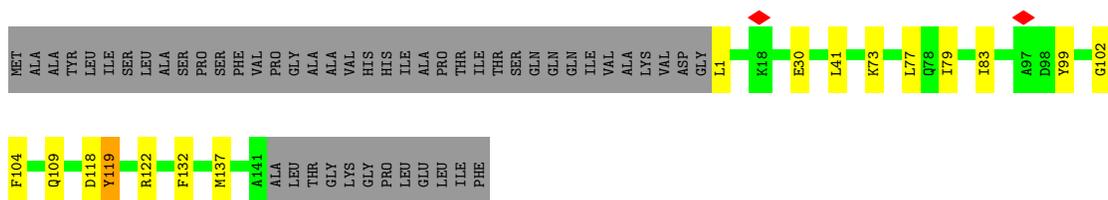
- Molecule 15: Fucoxanthin chlorophyll a/c binding protein II (FCPI-2)

Chain S:  69% 7% 23%



- Molecule 16: Fucoxanthin chlorophyll a/c binding protein I (FCPI-1)

Chain U:  65% 8% . 26%



- Molecule 17: Fucoxanthin chlorophyll a/c binding protein VII (FCPI-7)



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, C1	Depositor
Number of particles used	191444	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	TFS KRIOS	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	50	Depositor
Minimum defocus (nm)	800	Depositor
Maximum defocus (nm)	1800	Depositor
Magnification	165000	Depositor
Image detector	FEI FALCON IV (4k x 4k)	Depositor
Maximum map value	1.885	Depositor
Minimum map value	-0.618	Depositor
Average map value	-0.000	Depositor
Map value standard deviation	0.020	Depositor
Recommended contour level	0.065	Depositor
Map size (Å)	436.2, 436.2, 436.2	wwPDB
Map dimensions	600, 600, 600	wwPDB
Map angles (°)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (Å)	0.727, 0.727, 0.727	Depositor

5 Model quality i

5.1 Standard geometry i

Bond lengths and bond angles in the following residue types are not validated in this section: CL0, LMG, CLA, LMU, A86, DD6, PQN, BCR, SQD, LHG, DGD, KC1, SF4

The Z score for a bond length (or angle) is the number of standard deviations the observed value is removed from the expected value. A bond length (or angle) with $|Z| > 5$ is considered an outlier worth inspection. RMSZ is the root-mean-square of all Z scores of the bond lengths (or angles).

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
1	A	0.20	0/6007	0.40	0/8185
2	B	0.22	0/6015	0.41	0/8205
3	C	0.16	0/609	0.38	0/826
4	D	0.15	0/1116	0.38	0/1503
5	E	0.16	0/505	0.31	0/689
6	F	0.21	0/1275	0.42	0/1728
7	I	0.22	0/273	0.48	0/373
8	J	0.43	0/313	0.70	0/427
9	L	0.20	0/1081	0.43	0/1470
10	M	0.19	0/218	0.30	0/295
11	O	0.18	0/1376	0.39	0/1865
12	P	0.20	0/1480	0.37	0/2010
13	Q	0.16	0/1285	0.37	0/1736
14	R	0.19	0/681	0.35	0/930
15	S	0.14	0/1272	0.32	0/1732
16	U	0.24	0/1109	0.47	2/1499 (0.1%)
17	G	0.17	0/1204	0.39	0/1624
18	H	0.20	0/1149	0.41	0/1546
19	K	0.25	0/764	0.52	0/1029
20	T	0.24	0/741	0.44	0/999
21	k	0.14	0/383	0.30	0/519
All	All	0.20	0/28856	0.41	2/39190 (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	O	0	1
13	Q	0	2

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Mol	Chain	#Chirality outliers	#Planarity outliers
19	K	0	1
All	All	0	4

There are no bond length outliers.

All (2) bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
16	U	119	TYR	CA-C-N	5.81	128.54	120.29
16	U	119	TYR	C-N-CA	5.81	128.54	120.29

There are no chirality outliers.

All (4) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
19	K	20	ALA	Peptide
11	O	173	VAL	Peptide
13	Q	164	PHE	Peptide
13	Q	165	PRO	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	A	5813	0	5698	49	0
2	B	5805	0	5635	49	0
3	C	599	0	577	3	0
4	D	1092	0	1096	4	0
5	E	494	0	488	2	0
6	F	1246	0	1256	12	0
7	I	266	0	278	4	0
8	J	305	0	310	8	0
9	L	1056	0	1068	10	0
10	M	216	0	234	1	0
11	O	1341	0	1347	14	0
12	P	1441	0	1421	16	0
13	Q	1257	0	1260	9	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
14	R	664	0	668	5	0
15	S	1238	0	1217	13	0
16	U	1082	0	1058	12	0
17	G	1179	0	1166	22	0
18	H	1128	0	1134	18	0
19	K	748	0	777	12	0
20	T	731	0	749	23	0
21	k	379	0	409	10	0
22	A	2701	0	2712	65	0
22	B	2344	0	2385	79	0
22	F	159	0	141	4	0
22	G	561	0	486	20	0
22	H	524	0	475	14	0
22	J	42	0	31	1	0
22	K	245	0	201	7	0
22	L	164	0	150	4	0
22	O	495	0	475	13	0
22	P	403	0	337	8	0
22	Q	609	0	566	8	0
22	R	110	0	105	5	0
22	S	384	0	358	9	0
22	T	473	0	379	22	0
22	U	441	0	417	14	0
22	k	97	0	80	4	0
23	A	33	0	46	2	0
23	B	33	0	46	1	0
24	A	75	0	93	3	0
24	G	27	0	24	1	0
24	P	49	0	74	4	0
25	A	160	0	224	5	0
25	B	200	0	280	14	0
25	F	80	0	112	4	0
25	I	80	0	112	5	0
25	J	40	0	56	1	0
25	L	80	0	112	2	0
25	M	40	0	56	1	0
25	R	39	0	53	3	0
25	k	40	0	56	2	0
26	A	70	0	92	1	0
26	F	70	0	92	1	0
26	K	59	0	67	2	0
26	L	35	0	46	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
26	M	35	0	46	1	0
26	O	35	0	46	0	0
26	P	25	0	23	0	0
26	S	31	0	35	1	0
27	A	65	0	72	3	0
28	A	8	0	0	0	0
28	C	16	0	0	1	0
29	B	60	0	81	9	0
30	B	50	0	67	1	0
30	S	46	0	56	1	0
31	G	172	0	0	3	0
31	H	129	0	0	0	0
31	J	43	0	0	0	0
31	K	43	0	0	0	0
31	O	215	0	0	2	0
31	P	172	0	0	0	0
31	Q	86	0	0	0	0
31	S	215	0	0	0	0
31	T	86	0	0	0	0
31	U	112	0	0	1	0
31	k	43	0	0	0	0
32	J	39	0	48	3	0
32	P	59	0	58	4	0
32	Q	55	0	86	3	0
32	S	49	0	68	2	0
32	U	32	0	34	1	0
33	O	45	0	0	0	0
33	P	179	0	0	0	0
33	Q	45	0	0	0	0
33	S	90	0	0	0	0
33	T	45	0	0	1	0
33	U	45	0	0	0	0
34	P	48	0	0	0	0
34	Q	144	0	0	0	0
34	R	92	0	0	1	0
34	U	48	0	0	0	0
35	A	117	0	0	1	0
35	B	211	0	0	0	0
35	C	46	0	0	0	0
35	D	21	0	0	0	0
35	E	14	0	0	0	0
35	F	21	0	0	0	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
35	I	2	0	0	0	0
35	J	3	0	0	0	0
35	L	18	0	0	0	0
35	M	2	0	0	0	0
35	O	11	0	0	0	0
35	P	18	0	0	0	0
35	Q	9	0	0	0	0
35	R	4	0	0	0	0
35	S	11	0	0	0	0
35	U	5	0	0	0	0
35	k	1	0	0	0	0
All	All	42258	0	39505	480	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 6.

All (480) 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)
19:K:8:LEU:HD21	21:k:46:MET:SD	2.05	0.96
17:G:90:ILE:HG22	17:G:94:MET:HE2	1.50	0.94
12:P:46:GLU:OE2	12:P:49:LYS:HE3	1.68	0.93
20:T:56:MET:HE2	20:T:56:MET:HA	1.56	0.87
22:B:830:CLA:H152	25:F:805:BCR:H23C	1.65	0.78
13:Q:40:GLU:HG3	13:Q:107:MET:HE1	1.64	0.78
1:A:146:ILE:HD12	1:A:147:GLU:N	1.98	0.78
12:P:109:PRO:HG2	22:P:210:CLA:HBC3	1.66	0.77
1:A:149:TYR:CE2	1:A:153:ILE:HD11	2.20	0.76
22:A:822:CLA:H91	25:A:844:BCR:H23C	1.68	0.75
11:O:115:LYS:NZ	11:O:115:LYS:HB2	2.05	0.71
6:F:113:LYS:HE3	6:F:116:GLU:HG3	1.73	0.71
17:G:148:ARG:HA	17:G:151:MET:HE3	1.73	0.70
1:A:522:PHE:HA	22:A:833:CLA:HED1	1.73	0.70
20:T:56:MET:HE3	22:T:204:CLA:CBA	2.22	0.70
20:T:59:LEU:HD23	22:T:210:CLA:CBC	2.22	0.69
2:B:178:SER:HB3	22:B:847:CLA:HAC2	1.75	0.69
22:A:803:CLA:H72	25:A:842:BCR:HC8	1.74	0.69
1:A:232:LEU:HD23	1:A:238:LEU:CD2	2.23	0.69
1:A:321:PRO:HB3	9:L:1:SER:HB2	1.75	0.68
1:A:146:ILE:HD12	1:A:147:GLU:H	1.57	0.68
22:A:808:CLA:HBB2	22:A:811:CLA:HMA3	1.76	0.68

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:H:206:CLA:HBB2	22:H:213:CLA:H171	1.76	0.67
1:A:149:TYR:CZ	1:A:153:ILE:HD11	2.30	0.67
12:P:46:GLU:CD	12:P:49:LYS:HE3	2.19	0.67
16:U:73:LYS:O	16:U:77:LEU:HD22	1.95	0.67
1:A:193:GLY:O	1:A:197:LEU:HB2	1.95	0.67
9:L:25:ALA:HB2	16:U:104:PHE:HB3	1.76	0.67
22:B:817:CLA:HMD2	25:B:836:BCR:HC7	1.77	0.66
18:H:20:VAL:O	18:H:40:ARG:NH2	2.29	0.66
9:L:47:LEU:O	9:L:51:MET:HG3	1.96	0.65
22:Q:208:CLA:H3A	32:Q:217:LMG:H321	1.77	0.65
17:G:55:LEU:HD23	22:G:209:CLA:CMC	2.27	0.64
25:A:843:BCR:H23C	22:A:848:CLA:HBC2	1.80	0.64
2:B:13:ASP:HB3	2:B:18:ARG:HB2	1.79	0.64
6:F:71:LEU:HD22	6:F:82:GLU:HG2	1.82	0.61
22:B:845:CLA:H43	9:L:76:ILE:HD12	1.82	0.61
6:F:107:PHE:HB2	6:F:129:MET:HE1	1.81	0.61
20:T:56:MET:CE	22:T:204:CLA:HBA2	2.31	0.61
22:B:823:CLA:H11	25:B:837:BCR:H393	1.82	0.61
22:S:206:CLA:HBB2	22:S:216:CLA:HAB	1.83	0.60
22:G:205:CLA:H71	22:G:206:CLA:H72	1.83	0.60
22:B:818:CLA:HBB2	22:B:834:CLA:H52	1.83	0.60
20:T:108:SER:O	20:T:112:ASN:HB2	2.00	0.59
21:k:21:THR:HG21	21:k:48:TRP:HE1	1.66	0.59
22:B:812:CLA:H143	25:B:837:BCR:HC32	1.84	0.59
1:A:206:GLN:HA	1:A:210:SER:HB2	1.83	0.59
11:O:56:MET:HE1	22:O:209:CLA:HHC	1.83	0.59
15:S:1:SER:HB3	15:S:4:SER:HB2	1.84	0.58
22:B:803:CLA:HBC1	29:B:841:DGD:HA92	1.85	0.58
22:B:847:CLA:HBA1	13:Q:101:THR:HG21	1.86	0.58
20:T:56:MET:HE3	22:T:204:CLA:HBA2	1.85	0.58
22:B:820:CLA:H72	22:B:834:CLA:H191	1.86	0.58
10:M:26:ARG:HD2	15:S:9:GLU:HB3	1.86	0.57
21:k:5:ALA:HB1	21:k:73:LEU:HD22	1.87	0.57
12:P:53:ASN:HA	32:P:217:LMG:HC71	1.87	0.57
22:A:801:CLA:H18	25:F:801:BCR:H14C	1.87	0.57
22:B:824:CLA:H102	29:B:841:DGD:HBH1	1.87	0.57
22:A:835:CLA:H101	8:J:17:THR:HG23	1.87	0.56
9:L:32:ASN:HB3	22:L:202:CLA:HAC1	1.87	0.56
2:B:100:LYS:H	2:B:100:LYS:HD2	1.70	0.56
22:B:845:CLA:H42	15:S:66:LEU:HD12	1.87	0.56
1:A:146:ILE:HD12	1:A:147:GLU:HG3	1.87	0.56

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:453:ALA:O	2:B:638:MET:HE3	2.06	0.56
22:A:816:CLA:HBB2	22:A:816:CLA:H151	1.88	0.56
22:A:831:CLA:HBA2	22:k:103:CLA:H11	1.87	0.56
2:B:342:ALA:HB2	22:B:819:CLA:H43	1.88	0.56
22:S:206:CLA:HAA2	22:S:208:CLA:HBC2	1.87	0.55
1:A:86:ARG:HH12	1:A:149:TYR:HD1	1.52	0.55
18:H:41:GLU:OE1	18:H:108:MET:HE1	2.07	0.55
25:B:837:BCR:H16C	22:O:205:CLA:H172	1.88	0.55
22:A:805:CLA:H2	22:A:807:CLA:H52	1.89	0.55
22:A:802:CLA:H41	26:A:847:LMU:H112	1.89	0.55
2:B:24:ALA:HA	22:B:824:CLA:H43	1.87	0.55
12:P:135:PHE:HZ	32:P:217:LMG:HC2	1.72	0.54
22:F:802:CLA:HHC	22:F:802:CLA:HBB1	1.90	0.54
22:A:848:CLA:HHC	22:A:848:CLA:HBB1	1.89	0.54
11:O:54:GLN:HE22	22:O:208:CLA:HHD	1.72	0.54
22:B:806:CLA:HBB1	22:B:807:CLA:H202	1.89	0.54
22:B:829:CLA:H52	22:F:804:CLA:HBB2	1.89	0.54
6:F:123:VAL:HB	32:J:102:LMG:HC72	1.89	0.54
24:P:201:LHG:H192	22:R:104:CLA:H121	1.89	0.54
1:A:86:ARG:HH22	1:A:149:TYR:HB2	1.73	0.54
1:A:338:TRP:HB3	22:A:803:CLA:HAC1	1.89	0.54
1:A:730:TRP:NE1	22:A:824:CLA:O1A	2.40	0.54
22:A:816:CLA:H141	22:A:823:CLA:H193	1.90	0.54
22:A:845:CLA:HBC2	2:B:583:ASN:HB2	1.90	0.54
1:A:190:HIS:O	1:A:194:LEU:HB3	2.08	0.54
22:B:834:CLA:HBB2	22:R:104:CLA:O2A	2.08	0.54
32:J:102:LMG:H161	32:J:102:LMG:H211	1.89	0.54
18:H:151:PHE:O	18:H:155:VAL:HG23	2.07	0.54
21:k:54:SER:O	21:k:58:ILE:HG13	2.08	0.53
22:A:846:CLA:H91	25:k:104:BCR:H291	1.90	0.53
2:B:273:HIS:HB3	22:B:814:CLA:HMB2	1.90	0.53
13:Q:144:ARG:HA	13:Q:147:MET:HE3	1.90	0.53
17:G:29:TYR:HB2	24:G:216:LHG:HC42	1.89	0.53
22:A:824:CLA:H142	22:A:826:CLA:H18	1.90	0.53
2:B:409:MET:HG3	25:R:102:BCR:H402	1.89	0.53
1:A:146:ILE:CD1	1:A:147:GLU:HG3	2.39	0.53
22:A:835:CLA:HHC	22:A:835:CLA:HBB1	1.91	0.53
2:B:297:HIS:HB3	2:B:302:ILE:HD11	1.91	0.53
22:B:845:CLA:HED3	22:B:845:CLA:H51	1.90	0.53
11:O:111:SER:O	11:O:115:LYS:HG3	2.08	0.53
22:B:805:CLA:H91	29:B:841:DGD:HBN2	1.88	0.53

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:B:828:CLA:HHC	22:B:828:CLA:HBB1	1.91	0.53
20:T:56:MET:HE3	22:T:204:CLA:HBA1	1.91	0.53
16:U:30:GLU:HG2	22:U:209:CLA:HED1	1.91	0.52
22:S:206:CLA:HHC	22:S:206:CLA:HBB1	1.91	0.52
2:B:310:LYS:HG3	12:P:131:PHE:HE2	1.75	0.52
18:H:40:ARG:NH1	18:H:43:GLU:OE1	2.43	0.52
22:B:826:CLA:HBC3	25:F:805:BCR:H362	1.92	0.52
22:F:804:CLA:HHC	22:F:804:CLA:HBB1	1.91	0.52
12:P:165:GLU:OE1	22:P:211:CLA:HMA2	2.10	0.52
22:B:833:CLA:HHC	22:B:833:CLA:HBB1	1.92	0.52
22:Q:203:CLA:HHC	22:Q:203:CLA:HBB1	1.90	0.52
22:A:815:CLA:HHC	22:A:815:CLA:HBB1	1.91	0.52
17:G:91:PHE:HA	17:G:94:MET:HE3	1.92	0.52
22:B:829:CLA:H122	25:B:839:BCR:H311	1.92	0.52
22:B:830:CLA:H172	22:B:844:CLA:HBC1	1.90	0.52
13:Q:33:LEU:HD11	32:Q:217:LMG:H162	1.91	0.52
18:H:4:SER:HB3	18:H:24:GLY:HA3	1.92	0.52
18:H:155:VAL:HG11	22:H:213:CLA:H93	1.91	0.52
20:T:59:LEU:HD23	22:T:210:CLA:HBC1	1.92	0.52
22:k:102:CLA:HBB1	22:k:102:CLA:HHC	1.91	0.52
22:B:818:CLA:H3A	22:B:834:CLA:HED3	1.90	0.52
19:K:21:GLU:HB2	22:K:207:CLA:C1B	2.39	0.52
20:T:59:LEU:HD23	22:T:210:CLA:HBC2	1.92	0.52
22:T:201:CLA:HHC	22:T:201:CLA:HBB1	1.92	0.52
2:B:96:GLN:O	2:B:100:LYS:HD2	2.11	0.51
8:J:22:ILE:HG23	22:J:103:CLA:HBB2	1.92	0.51
12:P:174:MET:HE3	12:P:174:MET:O	2.10	0.51
17:G:153:GLY:C	17:G:157:MET:HE3	2.35	0.51
1:A:589:TYR:OH	27:A:849:CL0:H9	2.10	0.51
12:P:28:VAL:HG21	12:P:165:GLU:HB2	1.91	0.51
13:Q:89:LEU:HB3	22:Q:212:CLA:HBC1	1.91	0.51
15:S:152:ALA:HA	32:S:213:LMG:HC2	1.92	0.51
22:U:211:CLA:HBB1	22:U:211:CLA:HHC	1.93	0.51
19:K:6:LEU:HD12	21:k:46:MET:SD	2.50	0.51
2:B:719:TYR:HB2	22:B:801:CLA:HED2	1.93	0.51
22:U:204:CLA:H42	22:U:211:CLA:HED2	1.92	0.51
22:U:208:CLA:HHC	22:U:208:CLA:HBB1	1.93	0.51
22:A:828:CLA:H42	22:A:836:CLA:H2	1.92	0.51
22:H:209:CLA:HHC	22:H:209:CLA:HBB1	1.93	0.51
22:B:834:CLA:HAA2	24:P:201:LHG:H351	1.91	0.51
20:T:3:MET:HA	20:T:6:LEU:HB2	1.92	0.51

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
15:S:160:ASP:O	15:S:164:ILE:HG13	2.11	0.51
11:O:115:LYS:HB2	11:O:115:LYS:HZ3	1.73	0.51
2:B:578:MET:HG3	2:B:708:LEU:HD21	1.93	0.51
22:B:826:CLA:H43	32:P:202:LMG:H291	1.92	0.51
22:B:847:CLA:HHC	22:B:847:CLA:HBB1	1.92	0.51
22:A:835:CLA:H71	22:A:853:CLA:H171	1.92	0.51
22:B:806:CLA:H201	22:B:808:CLA:H192	1.93	0.51
9:L:22:THR:O	16:U:109:GLN:NE2	2.44	0.51
16:U:137:MET:HE2	31:U:212:DD6:O1	2.11	0.51
17:G:55:LEU:HD23	22:G:209:CLA:HAC2	1.93	0.51
22:H:210:CLA:HHC	22:H:210:CLA:HBB1	1.93	0.51
2:B:100:LYS:HD2	2:B:100:LYS:N	2.26	0.50
22:A:831:CLA:HHC	22:A:831:CLA:HBB1	1.93	0.50
22:G:215:CLA:HHC	22:G:215:CLA:HBB1	1.93	0.50
22:A:820:CLA:HHC	22:A:820:CLA:HBB1	1.94	0.50
22:U:207:CLA:H143	22:U:210:CLA:HBC1	1.93	0.50
17:G:55:LEU:HD23	22:G:209:CLA:HMC3	1.94	0.50
22:T:210:CLA:HHC	22:T:210:CLA:HBB1	1.92	0.50
22:H:202:CLA:HHC	22:H:202:CLA:HBB1	1.93	0.50
1:A:256:LEU:HD11	21:k:61:VAL:HG22	1.94	0.50
22:T:205:CLA:HHC	22:T:205:CLA:HBB1	1.93	0.50
22:B:809:CLA:H52	22:B:810:CLA:HBC2	1.92	0.50
22:B:814:CLA:HHC	22:B:814:CLA:HBB1	1.93	0.50
22:A:811:CLA:H111	26:K:201:LMU:H111	1.94	0.50
15:S:69:MET:HE2	15:S:75:ILE:HA	1.94	0.50
18:H:13:ARG:HB2	18:H:16:LEU:HD13	1.93	0.50
19:K:71:VAL:HA	19:K:74:VAL:HG22	1.94	0.50
11:O:115:LYS:NZ	11:O:115:LYS:CB	2.73	0.50
22:A:855:CLA:HHC	22:A:855:CLA:HBB1	1.94	0.50
22:B:807:CLA:HHC	22:B:807:CLA:HBB1	1.93	0.50
22:B:820:CLA:H143	22:B:834:CLA:H192	1.93	0.50
22:B:821:CLA:HHC	22:B:821:CLA:HBB1	1.94	0.50
32:S:213:LMG:H352	22:S:216:CLA:H93	1.93	0.50
17:G:78:ALA:HB1	22:G:209:CLA:HED3	1.94	0.50
18:H:22:ASP:HB2	22:H:207:CLA:HED2	1.94	0.50
2:B:24:ALA:HB2	29:B:841:DGD:HA32	1.94	0.49
22:B:832:CLA:HHC	22:B:832:CLA:HBB1	1.94	0.49
22:P:213:CLA:HHC	22:P:213:CLA:HBB1	1.94	0.49
18:H:129:ASP:OD1	18:H:129:ASP:N	2.38	0.49
22:A:854:CLA:H42	9:L:20:VAL:HG13	1.94	0.49
22:H:203:CLA:HHC	22:H:203:CLA:HBB1	1.92	0.49

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:B:818:CLA:HBB	22:B:834:CLA:O1D	2.13	0.49
22:O:207:CLA:HHC	22:O:207:CLA:HBB1	1.94	0.49
6:F:120:ILE:HG12	8:J:11:THR:HG22	1.95	0.49
17:G:55:LEU:HD23	22:G:209:CLA:HMC2	1.94	0.49
22:G:201:CLA:HHC	22:G:201:CLA:HBB1	1.95	0.49
22:H:205:CLA:HHC	22:H:205:CLA:HBB1	1.93	0.49
1:A:266:THR:OG1	1:A:282:ASP:OD1	2.25	0.49
22:B:816:CLA:H141	22:B:828:CLA:H52	1.93	0.49
22:A:810:CLA:HHC	22:A:810:CLA:HBB1	1.94	0.49
4:D:9:PRO:HG2	4:D:57:LEU:HD23	1.94	0.49
5:E:5:SER:HB2	5:E:63:PRO:HD3	1.95	0.49
22:A:817:CLA:HHC	22:A:817:CLA:HBB1	1.94	0.49
22:P:214:CLA:HHC	22:P:214:CLA:HBB1	1.95	0.49
32:U:201:LMG:H321	22:U:211:CLA:H42	1.94	0.49
1:A:397:HIS:HA	1:A:400:ILE:HD12	1.94	0.49
22:B:820:CLA:H43	22:B:828:CLA:HBB2	1.95	0.49
11:O:56:MET:HE3	31:O:212:DD6:C6	2.43	0.49
22:T:209:CLA:HHC	22:T:209:CLA:HBB1	1.95	0.49
4:D:2:LEU:HD23	4:D:92:ILE:HD13	1.94	0.48
17:G:71:TYR:HA	22:G:209:CLA:HED2	1.94	0.48
22:T:211:CLA:HHC	22:T:211:CLA:HBB1	1.94	0.48
22:O:202:CLA:HHC	22:O:202:CLA:HBB1	1.95	0.48
22:O:203:CLA:HHC	22:O:203:CLA:HBB1	1.94	0.48
14:R:49:ASN:ND2	34:R:103:A86:O3	2.46	0.48
19:K:83:LYS:NZ	19:K:95:GLY:O	2.46	0.48
7:I:29:LEU:HD22	30:S:201:SQD:H462	1.93	0.48
19:K:7:MET:SD	19:K:7:MET:N	2.87	0.48
13:Q:37:PHE:HB2	13:Q:108:MET:HE2	1.96	0.48
1:A:110:ILE:HG13	1:A:111:VAL:HG13	1.95	0.48
1:A:196:GLY:HA3	1:A:295:ILE:HG13	1.96	0.48
22:A:814:CLA:HHC	22:A:814:CLA:HBB1	1.94	0.48
22:K:207:CLA:HHC	22:K:207:CLA:HBB1	1.93	0.48
22:H:213:CLA:H51	22:H:213:CLA:HBA2	1.95	0.48
22:A:851:CLA:H172	6:F:101:GLY:HA2	1.95	0.48
2:B:172:ARG:HB2	22:B:842:CLA:HBC2	1.95	0.48
22:B:818:CLA:H42	22:B:819:CLA:H121	1.95	0.48
17:G:114:ASP:N	17:G:114:ASP:OD1	2.46	0.48
22:H:213:CLA:HBA1	22:H:213:CLA:H3A	1.68	0.48
1:A:86:ARG:NH1	1:A:149:TYR:HD1	2.11	0.48
22:B:826:CLA:HHC	22:B:826:CLA:HBB1	1.96	0.48
22:P:210:CLA:HHC	22:P:210:CLA:HBB1	1.94	0.48

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:K:203:CLA:HHC	22:K:203:CLA:HBB1	1.95	0.48
11:O:130:PHE:HD2	22:O:209:CLA:H11	1.79	0.48
1:A:86:ARG:NH1	1:A:149:TYR:CD1	2.81	0.48
23:A:837:PQN:H141	22:F:802:CLA:HBB2	1.95	0.48
22:P:207:CLA:H61	22:P:207:CLA:H41	1.72	0.48
22:S:208:CLA:HED3	22:S:209:CLA:HBC2	1.96	0.48
22:G:206:CLA:HBB2	31:G:214:DD6:C3	2.44	0.48
20:T:56:MET:CE	22:T:204:CLA:CBA	2.89	0.48
1:A:232:LEU:CD2	1:A:238:LEU:CD2	2.92	0.47
2:B:609:GLU:OE2	6:F:17:ARG:NH2	2.47	0.47
22:B:845:CLA:HBB1	22:B:845:CLA:HHC	1.94	0.47
22:R:104:CLA:HED2	22:R:104:CLA:HAA1	1.95	0.47
19:K:21:GLU:O	19:K:25:CYS:N	2.40	0.47
1:A:232:LEU:HD23	1:A:238:LEU:HD23	1.97	0.47
1:A:307:ILE:HD13	21:k:51:ALA:HB2	1.96	0.47
22:O:205:CLA:HED2	22:O:205:CLA:H72	1.95	0.47
22:G:203:CLA:HHC	22:G:203:CLA:HBB1	1.95	0.47
18:H:148:MET:HE1	22:H:207:CLA:HHC	1.96	0.47
22:A:816:CLA:HBC3	22:A:825:CLA:H121	1.96	0.47
27:A:849:CL0:H32	22:A:850:CLA:C1D	2.44	0.47
19:K:114:GLU:HA	19:K:117:ILE:HD12	1.97	0.47
20:T:59:LEU:CG	22:T:210:CLA:HBC1	2.44	0.47
22:A:850:CLA:H122	25:B:840:BCR:H12C	1.96	0.47
22:T:206:CLA:HHC	22:T:206:CLA:HBB1	1.95	0.47
1:A:108:TRP:CD2	22:A:807:CLA:HED3	2.49	0.47
1:A:563:PRO:HB3	1:A:710:ILE:HB	1.97	0.47
22:A:808:CLA:HBA1	22:A:810:CLA:HMD2	1.97	0.47
22:L:202:CLA:H3A	22:L:202:CLA:HBA2	1.75	0.47
22:U:209:CLA:HHC	22:U:209:CLA:HBB1	1.96	0.47
2:B:393:VAL:HG13	2:B:539:ALA:HB1	1.97	0.47
5:E:1:VAL:HG23	5:E:26:ILE:HD11	1.96	0.47
1:A:263:ASP:N	1:A:263:ASP:OD1	2.44	0.47
22:A:801:CLA:HMD3	2:B:531:ILE:HG12	1.97	0.47
9:L:6:PRO:HB3	9:L:11:PRO:HA	1.96	0.47
22:A:854:CLA:H12	9:L:30:LEU:HD11	1.96	0.46
22:B:802:CLA:H13	25:I:101:BCR:H281	1.96	0.46
20:T:112:ASN:HD22	22:T:207:CLA:HBB1	1.78	0.46
1:A:271:LEU:HD21	1:A:364:PRO:HD2	1.98	0.46
8:J:23:THR:HA	8:J:26:PHE:CE2	2.51	0.46
22:Q:204:CLA:H93	22:Q:204:CLA:H62	1.77	0.46
22:G:208:CLA:HHC	22:G:208:CLA:HBB1	1.97	0.46

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
20:T:56:MET:HA	20:T:56:MET:CE	2.37	0.46
2:B:346:VAL:HG21	22:B:823:CLA:HHD	1.98	0.46
11:O:25:PHE:HE1	22:O:202:CLA:HBC3	1.81	0.46
17:G:125:ASP:OD1	31:G:211:DD6:O4	2.34	0.46
20:T:112:ASN:HD22	22:T:207:CLA:CBB	2.28	0.46
23:A:837:PQN:H222	23:A:837:PQN:H18	1.71	0.46
16:U:30:GLU:OE1	16:U:102:GLY:N	2.47	0.46
22:A:813:CLA:HHC	22:A:813:CLA:HBB1	1.96	0.46
16:U:41:LEU:HD22	22:U:207:CLA:H93	1.98	0.46
1:A:90:TYR:OH	1:A:142:ILE:O	2.32	0.46
26:F:806:LMU:H2B	26:F:806:LMU:H4'	1.55	0.46
11:O:126:ASP:OD1	31:O:212:DD6:O2	2.33	0.46
12:P:61:ARG:NH2	22:P:207:CLA:O1D	2.49	0.46
17:G:141:MET:HB3	22:G:202:CLA:HED2	1.98	0.46
26:K:201:LMU:H12	26:K:201:LMU:H42	1.63	0.46
1:A:490:ASN:HB2	22:A:831:CLA:HED2	1.97	0.45
22:B:844:CLA:HHC	22:B:844:CLA:HBB1	1.98	0.45
18:H:152:SER:HB2	22:H:213:CLA:H162	1.97	0.45
19:K:25:CYS:HB3	19:K:120:GLY:HA3	1.98	0.45
1:A:228:LEU:HD22	22:A:814:CLA:HED1	1.97	0.45
6:F:115:ASN:N	6:F:115:ASN:OD1	2.46	0.45
11:O:11:LYS:NZ	11:O:12:PRO:O	2.49	0.45
1:A:399:SER:HB3	1:A:577:ALA:HB1	1.99	0.45
2:B:312:ARG:HB2	32:P:217:LMG:HC3	1.97	0.45
4:D:31:THR:HG22	4:D:56:LEU:HB2	1.99	0.45
22:Q:204:CLA:HHC	22:Q:204:CLA:HBB1	1.98	0.45
22:Q:208:CLA:H3A	32:Q:217:LMG:H342	1.98	0.45
22:A:801:CLA:H162	22:A:801:CLA:H122	1.87	0.45
2:B:339:LEU:HD11	22:B:804:CLA:H51	1.97	0.45
1:A:1:LYS:HD2	1:A:1:LYS:HA	1.69	0.45
18:H:78:HIS:HA	18:H:87:MET:HE3	1.99	0.45
3:C:14:THR:HG22	3:C:27:MET:HG3	1.97	0.45
8:J:20:MET:HA	8:J:20:MET:HE2	1.98	0.45
9:L:123:PHE:HE2	15:S:95:ALA:HA	1.82	0.45
20:T:116:ALA:HA	20:T:119:ALA:HB3	1.98	0.45
2:B:2:LYS:HD3	7:I:34:GLU:HB3	1.98	0.45
25:B:839:BCR:H15C	25:B:839:BCR:H351	1.83	0.45
6:F:96:TRP:HH2	22:G:205:CLA:H42	1.81	0.45
8:J:9:LEU:HB3	32:J:102:LMG:H141	1.99	0.45
14:R:86:ASN:HB3	14:R:88:LYS:HE2	1.99	0.45
15:S:5:GLN:O	15:S:9:GLU:HG3	2.17	0.45

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
1:A:350:GLY:HA2	1:A:387:GLY:HA2	1.99	0.45
2:B:271:ILE:HG23	22:B:815:CLA:HMA3	1.99	0.45
2:B:656:ALA:HB3	22:B:802:CLA:HBB2	1.99	0.45
2:B:705:LEU:HD22	29:B:841:DGD:HB22	1.99	0.45
22:B:817:CLA:HHC	22:B:817:CLA:HBB1	1.98	0.45
26:L:206:LMU:H72	15:S:85:ALA:HA	1.98	0.45
2:B:372:HIS:HE2	22:B:823:CLA:C1B	2.30	0.45
25:A:843:BCR:H20C	25:A:843:BCR:H361	1.75	0.44
22:A:845:CLA:H61	22:A:845:CLA:H41	1.76	0.44
22:R:101:CLA:HHC	22:R:101:CLA:HBB1	1.97	0.44
16:U:79:ILE:O	16:U:83:ILE:HG12	2.16	0.44
22:A:824:CLA:H102	22:A:824:CLA:H61	1.86	0.44
22:A:824:CLA:H91	22:A:826:CLA:H192	1.97	0.44
25:B:836:BCR:H20C	25:B:836:BCR:H361	1.85	0.44
26:M:102:LMU:H42	15:S:152:ALA:HB1	1.99	0.44
2:B:405:VAL:O	2:B:409:MET:HG2	2.18	0.44
25:R:102:BCR:H24C	25:R:102:BCR:H371	1.87	0.44
11:O:92:GLY:HA3	26:S:203:LMU:H11	1.99	0.44
24:A:839:LHG:H141	24:A:839:LHG:H112	1.85	0.44
2:B:193:ILE:HG12	2:B:252:ILE:HB	2.00	0.44
22:B:845:CLA:H61	22:B:845:CLA:H41	1.75	0.44
13:Q:146:ALA:HA	13:Q:149:ALA:HB3	1.99	0.44
22:O:209:CLA:H41	22:O:209:CLA:H62	1.65	0.44
12:P:161:ALA:O	12:P:165:GLU:HG2	2.18	0.44
18:H:95:GLY:O	18:H:99:ILE:HG12	2.18	0.44
22:A:838:CLA:HED1	22:U:210:CLA:HAA2	2.00	0.43
2:B:339:LEU:HB3	2:B:380:LEU:HD13	1.98	0.43
22:B:805:CLA:H152	22:B:805:CLA:H102	1.99	0.43
6:F:113:LYS:HE3	6:F:116:GLU:CG	2.45	0.43
2:B:54:ILE:HD11	25:M:101:BCR:HC8	2.00	0.43
2:B:705:LEU:HD23	29:B:841:DGD:HA21	2.00	0.43
22:B:845:CLA:H121	25:L:201:BCR:H271	2.00	0.43
19:K:26:ARG:HB3	22:K:204:CLA:HBC2	2.00	0.43
1:A:700:ALA:O	6:F:109:LYS:NZ	2.44	0.43
22:A:851:CLA:HBB2	6:F:101:GLY:HA3	2.00	0.43
2:B:629:LEU:HD22	2:B:722:PHE:HA	1.99	0.43
12:P:28:VAL:O	12:P:61:ARG:NH1	2.41	0.43
22:T:210:CLA:HED2	22:T:210:CLA:HBD	1.85	0.43
2:B:716:ILE:HG22	22:B:822:CLA:H52	2.01	0.43
25:J:104:BCR:H20C	25:J:104:BCR:H361	1.82	0.43
2:B:420:LEU:HD13	2:B:530:LEU:HA	2.00	0.43

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
13:Q:51:LEU:HB3	22:Q:216:CLA:HAB	2.00	0.43
19:K:8:LEU:CD2	21:k:46:MET:SD	2.93	0.43
22:K:204:CLA:HHC	22:K:204:CLA:HBB1	1.99	0.43
1:A:371:ILE:HG23	1:A:509:LYS:HG2	2.00	0.43
22:A:853:CLA:H91	22:A:853:CLA:H112	1.84	0.43
2:B:518:HIS:CG	22:B:830:CLA:HED3	2.54	0.43
2:B:522:ALA:HB2	22:B:830:CLA:HMA1	2.00	0.43
11:O:70:LYS:NZ	11:O:79:VAL:O	2.39	0.43
22:P:208:CLA:H62	22:P:208:CLA:H41	1.88	0.43
22:A:816:CLA:H91	22:A:825:CLA:H162	2.00	0.43
2:B:21:TYR:CE2	29:B:841:DGD:HG32	2.54	0.43
20:T:50:THR:HG21	22:T:204:CLA:H2A	2.00	0.43
22:B:806:CLA:H12	7:I:14:VAL:HG21	2.00	0.43
22:B:815:CLA:H91	22:B:815:CLA:H111	1.87	0.43
3:C:23:ASP:OD2	4:D:96:HIS:ND1	2.44	0.43
17:G:48:ARG:HA	17:G:51:MET:SD	2.58	0.43
25:k:104:BCR:H20C	25:k:104:BCR:H361	1.86	0.43
17:G:153:GLY:O	17:G:157:MET:HG3	2.18	0.43
22:K:205:CLA:C1D	22:K:206:CLA:HMD2	2.49	0.43
20:T:12:LYS:HE3	20:T:12:LYS:HB2	1.81	0.43
22:k:103:CLA:H11	22:k:103:CLA:H51	1.83	0.43
1:A:6:VAL:HA	1:A:175:PRO:HA	2.00	0.42
22:A:829:CLA:HBB1	22:A:829:CLA:HMB3	2.01	0.42
22:U:205:CLA:H92	22:U:206:CLA:HMA1	2.01	0.42
22:K:207:CLA:H61	22:K:207:CLA:H41	1.60	0.42
22:B:826:CLA:H42	25:F:805:BCR:H353	2.02	0.42
26:L:206:LMU:H21	15:S:81:VAL:HG22	2.00	0.42
14:R:81:TRP:O	14:R:85:GLN:HG2	2.18	0.42
22:G:206:CLA:HBB2	31:G:214:DD6:C4	2.49	0.42
22:A:846:CLA:H111	22:A:846:CLA:H72	1.85	0.42
25:I:102:BCR:H15C	25:I:102:BCR:H351	1.84	0.42
16:U:1:LEU:HD23	16:U:1:LEU:HA	1.94	0.42
17:G:136:ARG:HH12	22:G:204:CLA:HMA2	1.84	0.42
20:T:56:MET:CE	22:T:204:CLA:H3A	2.50	0.42
24:P:201:LHG:H261	24:P:201:LHG:H291	1.86	0.42
22:S:202:CLA:HMD2	22:S:216:CLA:HBC2	2.02	0.42
18:H:81:SER:HB2	18:H:87:MET:HE2	2.00	0.42
22:G:206:CLA:HED2	22:G:206:CLA:HBD	1.90	0.42
1:A:286:HIS:HE2	22:A:816:CLA:C2B	2.32	0.42
22:B:816:CLA:H143	22:B:816:CLA:H111	1.86	0.42
25:B:839:BCR:H24C	25:B:839:BCR:H371	1.86	0.42

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:U:208:CLA:HED2	22:U:208:CLA:HBD	1.88	0.42
22:A:836:CLA:H122	25:I:102:BCR:H19C	2.01	0.42
22:B:804:CLA:H203	22:B:804:CLA:H162	1.93	0.42
25:B:838:BCR:H15C	25:B:838:BCR:H351	1.89	0.42
22:B:842:CLA:H141	22:B:842:CLA:H162	1.76	0.42
3:C:16:CYS:HB3	28:C:102:SF4:S4	2.60	0.42
25:L:205:BCR:H11C	25:L:205:BCR:H341	1.90	0.42
12:P:188:ILE:O	12:P:191:SER:HB2	2.20	0.42
13:Q:95:GLY:O	13:Q:99:ILE:HG12	2.19	0.42
21:k:22:LYS:HE2	21:k:22:LYS:HB2	1.76	0.42
22:B:832:CLA:HBB2	23:B:835:PQN:H141	2.02	0.42
15:S:66:LEU:HD22	22:S:202:CLA:HMA1	2.00	0.42
15:S:117:PRO:HB2	22:S:217:CLA:HED3	2.01	0.42
16:U:132:PHE:HE1	22:U:205:CLA:H202	1.84	0.42
22:B:816:CLA:H91	22:B:816:CLA:H112	1.74	0.42
17:G:45:LYS:HE3	17:G:45:LYS:HB2	1.75	0.42
22:A:836:CLA:H92	22:A:836:CLA:H61	1.80	0.42
25:I:101:BCR:H361	25:I:101:BCR:H20C	1.80	0.42
1:A:191:LEU:HD23	1:A:195:LEU:HD12	2.00	0.41
24:A:839:LHG:H282	24:A:839:LHG:H312	1.72	0.41
2:B:349:HIS:ND1	22:B:814:CLA:OBD	2.49	0.41
2:B:682:ARG:HA	2:B:682:ARG:HD3	1.87	0.41
14:R:25:VAL:HB	14:R:30:TYR:CE2	2.54	0.41
17:G:107:SER:HB2	17:G:109:MET:HE3	2.02	0.41
17:G:159:HIS:HA	17:G:162:LEU:HD12	2.02	0.41
18:H:44:LEU:HG	18:H:117:GLY:HA3	2.02	0.41
22:H:213:CLA:HBA1	22:H:213:CLA:H12	1.69	0.41
2:B:713:VAL:HG22	29:B:841:DGD:HBV1	2.02	0.41
1:A:188:ASN:HB3	22:A:817:CLA:HMD1	2.02	0.41
1:A:604:GLN:HB3	1:A:621:THR:HG23	2.03	0.41
22:B:806:CLA:H161	22:B:806:CLA:H122	1.76	0.41
14:R:2:LYS:HA	14:R:2:LYS:HD3	1.69	0.41
22:R:104:CLA:H62	22:R:104:CLA:H41	1.76	0.41
1:A:670:ALA:HB3	22:A:801:CLA:HBB2	2.02	0.41
22:A:854:CLA:H41	22:L:203:CLA:H161	2.01	0.41
22:B:833:CLA:H92	22:B:833:CLA:H62	1.92	0.41
20:T:59:LEU:HG	22:T:210:CLA:HBC1	2.02	0.41
24:A:840:LHG:HC61	22:A:848:CLA:HMB1	2.03	0.41
2:B:660:MET:HB2	22:B:802:CLA:C1C	2.50	0.41
22:B:821:CLA:HED1	22:B:828:CLA:HAB	2.03	0.41
25:B:840:BCR:H20C	25:B:840:BCR:H361	1.85	0.41

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
12:P:62:GLU:OE1	12:P:141:ARG:NH1	2.46	0.41
18:H:130:ALA:HA	18:H:133:LYS:HB3	2.03	0.41
25:A:841:BCR:H15C	25:A:841:BCR:H351	1.93	0.41
22:A:853:CLA:H93	8:J:16:LEU:HD11	2.02	0.41
2:B:496:LEU:HD23	2:B:496:LEU:HA	1.91	0.41
25:B:837:BCR:H15C	25:B:837:BCR:H351	1.92	0.41
16:U:122:ARG:NH1	22:U:211:CLA:O2D	2.53	0.41
17:G:19:PRO:O	17:G:40:ARG:NH1	2.46	0.41
17:G:43:GLU:HG3	22:G:207:CLA:NB	2.36	0.41
30:B:846:SQD:H151	22:S:217:CLA:H112	2.03	0.41
19:K:31:ALA:HB1	19:K:127:PHE:CZ	2.56	0.41
1:A:663:LEU:HD11	2:B:615:MET:HB2	2.03	0.41
22:A:845:CLA:HHB	22:B:801:CLA:H202	2.02	0.41
27:A:849:CL0:H34	35:A:930:HOH:O	2.20	0.41
2:B:668:TYR:OH	22:B:802:CLA:OBD	2.35	0.41
22:B:805:CLA:H72	22:B:805:CLA:H111	1.93	0.41
22:B:824:CLA:C2D	29:B:841:DGD:HB61	2.51	0.41
25:I:101:BCR:H24C	25:I:101:BCR:H371	1.95	0.41
18:H:51:MET:HG3	18:H:144:GLY:HA2	2.02	0.41
20:T:12:LYS:NZ	22:T:206:CLA:O1D	2.37	0.41
20:T:18:MET:HE1	20:T:112:ASN:HB3	2.02	0.41
20:T:112:ASN:HD21	33:T:208:KC1:C1A	2.34	0.41
22:A:816:CLA:H72	22:A:816:CLA:H111	1.81	0.41
22:A:833:CLA:H51	22:A:833:CLA:H11	1.84	0.41
22:B:826:CLA:HAC1	22:B:831:CLA:HBC3	2.02	0.41
22:L:204:CLA:HED2	22:L:204:CLA:HBD	1.91	0.41
12:P:131:PHE:HB2	24:P:201:LHG:HC92	2.03	0.41
16:U:119:TYR:CE2	22:U:210:CLA:HHB	2.56	0.41
22:G:205:CLA:H72	22:G:206:CLA:H13	2.02	0.41
21:k:10:MET:HG3	22:k:102:CLA:C3D	2.51	0.41
1:A:503:VAL:HG22	1:A:513:MET:HB2	2.03	0.40
18:H:152:SER:HB2	22:H:213:CLA:H141	2.01	0.40
22:B:812:CLA:H91	22:B:812:CLA:H112	1.86	0.40
22:Q:213:CLA:H12	22:Q:213:CLA:H52	1.89	0.40
25:R:102:BCR:H15C	25:R:102:BCR:H351	1.91	0.40
2:B:350:MET:HE2	2:B:350:MET:HB3	1.87	0.40
2:B:381:MET:HE1	25:B:839:BCR:H361	2.03	0.40
22:B:809:CLA:H61	22:O:205:CLA:H93	2.03	0.40
1:A:189:HIS:CE1	22:A:810:CLA:NA	2.89	0.40
2:B:67:ALA:HB2	2:B:133:LEU:HB2	2.04	0.40
11:O:56:MET:HE1	22:O:209:CLA:HAB	2.04	0.40

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Atom-1	Atom-2	Interatomic distance (Å)	Clash overlap (Å)
22:O:205:CLA:H62	22:O:205:CLA:H41	1.88	0.40
22:G:205:CLA:H62	22:G:205:CLA:H41	1.67	0.40
22:A:826:CLA:H202	22:A:835:CLA:HHB	2.03	0.40
22:A:836:CLA:H191	7:I:24:ALA:HB2	2.04	0.40
22:B:827:CLA:O1D	8:J:36:ASP:HA	2.21	0.40
25:B:838:BCR:H24C	25:B:838:BCR:H371	1.90	0.40
12:P:142:ALA:HB3	12:P:145:LYS:HG3	2.03	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	A	739/752 (98%)	719 (97%)	20 (3%)	0	100	100
2	B	730/734 (100%)	712 (98%)	18 (2%)	0	100	100
3	C	78/81 (96%)	77 (99%)	1 (1%)	0	100	100
4	D	136/142 (96%)	132 (97%)	4 (3%)	0	100	100
5	E	62/67 (92%)	61 (98%)	1 (2%)	0	100	100
6	F	159/184 (86%)	155 (98%)	4 (2%)	0	100	100
7	I	32/35 (91%)	32 (100%)	0	0	100	100
8	J	37/39 (95%)	37 (100%)	0	0	100	100
9	L	138/141 (98%)	137 (99%)	1 (1%)	0	100	100
10	M	27/29 (93%)	27 (100%)	0	0	100	100
11	O	174/201 (87%)	170 (98%)	3 (2%)	1 (1%)	22	8
12	P	191/231 (83%)	188 (98%)	3 (2%)	0	100	100
13	Q	165/197 (84%)	157 (95%)	8 (5%)	0	100	100
14	R	86/90 (96%)	84 (98%)	2 (2%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
15	S	163/215 (76%)	160 (98%)	3 (2%)	0	100	100
16	U	139/191 (73%)	138 (99%)	1 (1%)	0	100	100
17	G	149/209 (71%)	146 (98%)	3 (2%)	0	100	100
18	H	145/169 (86%)	140 (97%)	5 (3%)	0	100	100
19	K	89/200 (44%)	87 (98%)	2 (2%)	0	100	100
20	T	91/202 (45%)	89 (98%)	2 (2%)	0	100	100
21	k	51/89 (57%)	50 (98%)	1 (2%)	0	100	100
All	All	3581/4198 (85%)	3498 (98%)	82 (2%)	1 (0%)	100	100

All (1) Ramachandran outliers are listed below:

Mol	Chain	Res	Type
11	O	174	PRO

5.3.2 Protein sidechains [i](#)

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

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

Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
1	A	603/612 (98%)	598 (99%)	5 (1%)	79	70
2	B	590/591 (100%)	589 (100%)	1 (0%)	92	89
3	C	68/69 (99%)	68 (100%)	0	100	100
4	D	118/122 (97%)	118 (100%)	0	100	100
5	E	53/55 (96%)	52 (98%)	1 (2%)	52	30
6	F	133/152 (88%)	132 (99%)	1 (1%)	79	70
7	I	31/32 (97%)	31 (100%)	0	100	100
8	J	32/32 (100%)	32 (100%)	0	100	100
9	L	111/112 (99%)	110 (99%)	1 (1%)	75	66
10	M	21/21 (100%)	21 (100%)	0	100	100
11	O	145/161 (90%)	145 (100%)	0	100	100

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Mol	Chain	Analysed	Rotameric	Outliers	Percentiles	
12	P	144/173 (83%)	141 (98%)	3 (2%)	48	25
13	Q	133/157 (85%)	132 (99%)	1 (1%)	79	70
14	R	71/73 (97%)	70 (99%)	1 (1%)	62	45
15	S	125/162 (77%)	121 (97%)	4 (3%)	34	11
16	U	110/148 (74%)	108 (98%)	2 (2%)	54	32
17	G	127/167 (76%)	127 (100%)	0	100	100
18	H	119/137 (87%)	115 (97%)	4 (3%)	32	9
19	K	78/153 (51%)	75 (96%)	3 (4%)	28	7
20	T	73/153 (48%)	70 (96%)	3 (4%)	26	6
21	k	38/65 (58%)	36 (95%)	2 (5%)	19	3
All	All	2923/3347 (87%)	2891 (99%)	32 (1%)	69	55

All (32) residues with a non-rotameric sidechain are listed below:

Mol	Chain	Res	Type
1	A	14	SER
1	A	25	SER
1	A	225	GLU
1	A	410	GLN
1	A	611	VAL
2	B	307	VAL
5	E	5	SER
6	F	44	GLN
9	L	140	ILE
12	P	26	SER
12	P	94	VAL
12	P	192	VAL
13	Q	64	THR
14	R	77	HIS
15	S	4	SER
15	S	53	SER
15	S	55	ASP
15	S	61	SER
16	U	99	TYR
16	U	118	ASP
18	H	12	LYS
18	H	58	VAL
18	H	92	LEU

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Mol	Chain	Res	Type
18	H	129	ASP
19	K	6	LEU
19	K	81	THR
19	K	115	LYS
20	T	19	LEU
20	T	22	VAL
20	T	110	ILE
21	k	2	PHE
21	k	6	LYS

Sometimes sidechains can be flipped to improve hydrogen bonding and reduce clashes. All (14) such sidechains are listed below:

Mol	Chain	Res	Type
1	A	431	ASN
1	A	627	ASN
2	B	112	ASN
2	B	641	GLN
3	C	3	ASN
4	D	115	ASN
4	D	128	ASN
6	F	44	GLN
9	L	32	ASN
9	L	69	ASN
14	R	86	ASN
17	G	3	ASN
17	G	102	ASN
18	H	157	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

272 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
22	CLA	B	834	35	65,73,73	1.28	7 (10%)	76,113,113	1.08	7 (9%)
22	CLA	B	843	2	65,73,73	1.34	7 (10%)	76,113,113	0.95	4 (5%)
22	CLA	B	826	2	49,57,73	1.52	7 (14%)	55,93,113	1.01	3 (5%)
26	LMU	P	221	-	26,26,36	1.30	2 (7%)	37,37,47	1.34	4 (10%)
22	CLA	K	204	19	42,50,73	1.59	8 (19%)	48,85,113	1.19	4 (8%)
22	CLA	L	203	9	65,73,73	1.22	7 (10%)	76,113,113	1.00	4 (5%)
22	CLA	B	816	35	65,73,73	1.28	6 (9%)	76,113,113	0.88	3 (3%)
22	CLA	T	207	20	65,73,73	1.20	6 (9%)	76,113,113	1.06	4 (5%)
28	SF4	C	102	3	0,12,12	-	-	-	-	-
22	CLA	T	202	20	41,49,73	1.55	7 (17%)	47,84,113	1.28	4 (8%)
24	LHG	P	201	-	48,48,48	0.60	2 (4%)	51,54,54	1.24	5 (9%)
29	DGD	B	841	-	61,61,67	0.96	2 (3%)	75,75,81	1.35	8 (10%)
22	CLA	U	204	35	61,69,73	1.28	7 (11%)	71,108,113	1.09	4 (5%)
22	CLA	A	834	1	65,73,73	1.36	7 (10%)	76,113,113	0.97	5 (6%)
24	LHG	A	839	-	47,47,48	0.64	0	50,53,54	1.20	5 (10%)
22	CLA	A	826	1	65,73,73	1.35	7 (10%)	76,113,113	0.89	4 (5%)
22	CLA	B	824	2	65,73,73	1.33	7 (10%)	76,113,113	0.92	4 (5%)
25	BCR	A	842	-	41,41,41	1.07	2 (4%)	56,56,56	1.12	4 (7%)
31	DD6	H	212	-	39,45,45	1.61	8 (20%)	52,67,67	1.59	10 (19%)
22	CLA	A	845	35	65,73,73	1.27	7 (10%)	76,113,113	0.95	4 (5%)
22	CLA	Q	216	35	65,73,73	1.20	6 (9%)	76,113,113	0.98	5 (6%)
22	CLA	F	802	35	65,73,73	1.30	7 (10%)	76,113,113	0.98	4 (5%)
22	CLA	A	803	1	65,73,73	1.21	6 (9%)	76,113,113	1.04	5 (6%)
22	CLA	B	819	35	63,71,73	1.30	7 (11%)	73,110,113	1.09	6 (8%)
22	CLA	B	832	35	65,73,73	1.27	7 (10%)	76,113,113	0.96	4 (5%)
22	CLA	F	804	6	46,54,73	1.50	7 (15%)	53,90,113	1.10	4 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
25	BCR	B	837	-	41,41,41	1.03	2 (4%)	56,56,56	1.19	4 (7%)
22	CLA	Q	208	13	50,58,73	1.44	7 (14%)	58,95,113	1.56	8 (13%)
22	CLA	A	809	1	62,70,73	1.28	7 (11%)	72,109,113	1.01	4 (5%)
22	CLA	H	207	18	65,73,73	1.24	8 (12%)	76,113,113	1.29	7 (9%)
22	CLA	A	835	1	65,73,73	1.32	7 (10%)	76,113,113	0.93	3 (3%)
33	KC1	O	210	11	48,53,53	1.85	12 (25%)	55,89,89	1.30	6 (10%)
31	DD6	G	211	-	39,45,45	1.59	8 (20%)	52,67,67	1.53	8 (15%)
22	CLA	B	812	2	59,67,73	1.33	7 (11%)	68,105,113	1.04	5 (7%)
22	CLA	G	201	17	45,53,73	1.51	6 (13%)	52,89,113	1.12	4 (7%)
22	CLA	U	205	16	65,73,73	1.26	8 (12%)	76,113,113	1.00	4 (5%)
22	CLA	A	808	1	56,64,73	1.33	7 (12%)	65,102,113	1.04	4 (6%)
22	CLA	P	209	-	52,60,73	1.40	7 (13%)	60,97,113	1.09	4 (6%)
24	LHG	G	216	-	26,26,48	0.85	1 (3%)	29,32,54	1.17	2 (6%)
31	DD6	G	214	-	39,45,45	1.63	7 (17%)	52,67,67	1.67	12 (23%)
22	CLA	A	853	1	65,73,73	1.25	7 (10%)	76,113,113	1.00	4 (5%)
22	CLA	L	202	9	49,57,73	1.46	7 (14%)	55,93,113	1.25	7 (12%)
31	DD6	O	201	-	39,45,45	1.56	8 (20%)	52,67,67	1.51	10 (19%)
22	CLA	A	817	1	45,53,73	1.54	7 (15%)	52,89,113	1.16	4 (7%)
31	DD6	S	205	-	39,45,45	1.54	7 (17%)	52,67,67	1.56	10 (19%)
22	CLA	H	206	18	45,53,73	1.60	7 (15%)	52,89,113	1.08	4 (7%)
31	DD6	T	213	-	39,45,45	1.51	9 (23%)	52,67,67	2.12	15 (28%)
22	CLA	B	807	2	65,73,73	1.32	7 (10%)	76,113,113	0.90	3 (3%)
28	SF4	C	101	3	0,12,12	-	-	-	-	-
22	CLA	A	855	-	39,48,73	1.65	7 (17%)	45,82,113	1.27	6 (13%)
32	LMG	U	201	-	32,32,55	0.99	0	40,40,63	1.12	2 (5%)
22	CLA	A	801	-	65,73,73	1.24	7 (10%)	76,113,113	0.96	5 (6%)
26	LMU	A	857	-	36,36,36	0.41	0	47,47,47	0.73	1 (2%)
31	DD6	G	212	-	39,45,45	1.63	7 (17%)	52,67,67	1.58	10 (19%)
34	A86	P	204	-	44,50,50	1.62	6 (13%)	51,76,76	1.70	11 (21%)
34	A86	R	105	-	44,50,50	1.62	6 (13%)	51,76,76	1.55	9 (17%)
22	CLA	G	210	17	45,53,73	1.59	7 (15%)	52,89,113	1.15	3 (5%)
34	A86	Q	201	-	44,50,50	1.58	6 (13%)	51,76,76	1.59	8 (15%)
22	CLA	A	831	1	45,53,73	1.52	7 (15%)	52,89,113	1.20	4 (7%)
22	CLA	O	209	11	65,73,73	1.28	7 (10%)	76,113,113	1.09	6 (7%)
31	DD6	O	212	-	39,45,45	1.63	8 (20%)	52,67,67	1.73	9 (17%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
22	CLA	A	850	35	65,73,73	1.22	6 (9%)	76,113,113	1.03	5 (6%)
22	CLA	O	202	11	43,51,73	1.53	6 (13%)	49,86,113	1.21	5 (10%)
26	LMU	M	102	-	36,36,36	1.18	2 (5%)	47,47,47	1.02	2 (4%)
22	CLA	Q	212	13	65,73,73	1.31	7 (10%)	76,113,113	1.08	7 (9%)
31	DD6	O	215	-	39,45,45	1.53	7 (17%)	52,67,67	1.68	11 (21%)
25	BCR	I	101	-	41,41,41	1.09	2 (4%)	56,56,56	1.26	5 (8%)
31	DD6	U	203	-	39,45,45	1.62	7 (17%)	52,67,67	1.75	11 (21%)
22	CLA	A	854	1	65,73,73	1.23	7 (10%)	76,113,113	1.04	7 (9%)
22	CLA	O	208	11	60,68,73	1.24	6 (10%)	70,107,113	1.06	5 (7%)
33	KC1	S	210	15	48,53,53	1.86	11 (22%)	55,89,89	1.22	4 (7%)
32	LMG	P	217	-	25,25,55	1.39	4 (16%)	33,33,63	1.47	7 (21%)
31	DD6	P	220	-	39,45,45	1.60	7 (17%)	52,67,67	1.76	11 (21%)
22	CLA	B	827	2	58,66,73	1.37	7 (12%)	67,104,113	1.10	6 (8%)
28	SF4	A	852	2,1	0,12,12	-	-	-	-	-
22	CLA	B	804	2	65,73,73	1.22	6 (9%)	76,113,113	1.03	5 (6%)
22	CLA	R	101	35	45,53,73	1.59	7 (15%)	52,89,113	1.10	4 (7%)
31	DD6	S	204	-	39,45,45	1.53	8 (20%)	52,67,67	1.54	8 (15%)
22	CLA	B	803	2	45,53,73	1.58	7 (15%)	52,89,113	1.13	4 (7%)
22	CLA	A	846	1	60,68,73	1.38	7 (11%)	70,107,113	1.00	4 (5%)
31	DD6	U	214	-	24,26,45	1.66	5 (20%)	30,35,67	1.64	6 (20%)
22	CLA	B	817	2	46,54,73	1.49	7 (15%)	53,90,113	1.14	4 (7%)
24	LHG	A	840	22	26,26,48	0.86	1 (3%)	29,32,54	1.33	3 (10%)
22	CLA	B	830	2	65,73,73	1.27	7 (10%)	76,113,113	0.98	4 (5%)
22	CLA	T	210	20	46,54,73	1.55	7 (15%)	53,90,113	1.16	5 (9%)
25	BCR	L	205	-	41,41,41	1.03	2 (4%)	56,56,56	1.29	5 (8%)
22	CLA	U	206	16	45,53,73	1.51	7 (15%)	52,89,113	1.12	4 (7%)
22	CLA	S	202	35	65,73,73	1.20	6 (9%)	76,113,113	1.20	6 (7%)
22	CLA	O	207	11	46,54,73	1.52	8 (17%)	53,90,113	1.16	5 (9%)
22	CLA	B	829	2	58,66,73	1.36	7 (12%)	67,104,113	1.13	6 (8%)
22	CLA	T	204	-	57,65,73	1.29	6 (10%)	66,103,113	1.11	5 (7%)
22	CLA	K	206	19	45,53,73	1.65	7 (15%)	52,89,113	1.07	3 (5%)
22	CLA	O	206	35	65,73,73	1.25	7 (10%)	76,113,113	1.01	5 (6%)
22	CLA	K	207	19	58,66,73	1.33	7 (12%)	67,104,113	1.32	5 (7%)
22	CLA	J	103	8	42,50,73	1.53	7 (16%)	48,85,113	1.18	5 (10%)
22	CLA	B	823	2	65,73,73	1.30	7 (10%)	76,113,113	1.07	5 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
25	BCR	F	801	-	41,41,41	1.01	2 (4%)	56,56,56	1.19	4 (7%)
22	CLA	L	204	35	50,58,73	1.42	8 (16%)	58,95,113	1.23	5 (8%)
22	CLA	Q	203	13	48,56,73	1.46	7 (14%)	55,92,113	1.09	4 (7%)
22	CLA	T	211	-	47,55,73	1.50	6 (12%)	54,91,113	1.22	5 (9%)
22	CLA	U	210	16	65,73,73	1.23	6 (9%)	76,113,113	1.03	5 (6%)
22	CLA	T	201	-	42,50,73	1.63	7 (16%)	48,85,113	1.01	3 (6%)
25	BCR	A	841	-	41,41,41	1.02	2 (4%)	56,56,56	1.23	2 (3%)
26	LMU	F	806	-	36,36,36	1.28	3 (8%)	47,47,47	1.54	8 (17%)
22	CLA	A	811	1	65,73,73	1.26	7 (10%)	76,113,113	1.00	4 (5%)
22	CLA	P	216	12	47,55,73	1.50	7 (14%)	54,91,113	1.24	5 (9%)
22	CLA	A	851	1	65,73,73	1.26	7 (10%)	76,113,113	1.00	3 (3%)
33	KC1	P	212	12	46,52,53	1.95	11 (23%)	49,87,89	1.34	6 (12%)
33	KC1	T	208	20	48,53,53	2.00	12 (25%)	55,89,89	1.20	4 (7%)
32	LMG	S	213	-	49,49,55	0.73	1 (2%)	57,57,63	1.29	6 (10%)
25	BCR	F	805	-	41,41,41	1.04	2 (4%)	56,56,56	1.18	5 (8%)
31	DD6	k	101	-	39,45,45	1.54	8 (20%)	52,67,67	1.50	8 (15%)
22	CLA	A	823	1	65,73,73	1.29	6 (9%)	76,113,113	0.95	4 (5%)
22	CLA	P	210	35	47,55,73	1.48	6 (12%)	54,91,113	1.10	4 (7%)
25	BCR	B	839	-	41,41,41	1.05	2 (4%)	56,56,56	1.18	5 (8%)
33	KC1	S	212	15	48,53,53	1.83	10 (20%)	55,89,89	1.33	7 (12%)
22	CLA	A	824	1	62,70,73	1.30	7 (11%)	72,109,113	1.09	5 (6%)
22	CLA	B	806	2	65,73,73	1.24	7 (10%)	76,113,113	1.01	4 (5%)
22	CLA	B	813	2	55,63,73	1.49	7 (12%)	64,101,113	1.07	4 (6%)
25	BCR	B	838	-	41,41,41	1.08	2 (4%)	56,56,56	1.25	4 (7%)
22	CLA	O	204	11	65,73,73	1.27	7 (10%)	76,113,113	0.99	5 (6%)
22	CLA	A	819	1	43,51,73	1.54	7 (16%)	49,86,113	1.17	4 (8%)
22	CLA	k	103	35	55,63,73	1.41	7 (12%)	64,101,113	1.07	4 (6%)
22	CLA	A	827	1	50,58,73	1.51	7 (14%)	58,95,113	1.07	4 (6%)
22	CLA	G	205	17	61,69,73	1.25	7 (11%)	71,108,113	1.17	8 (11%)
22	CLA	O	211	11	41,49,73	1.58	7 (17%)	47,84,113	1.32	6 (12%)
31	DD6	H	211	-	39,45,45	1.61	6 (15%)	52,67,67	1.76	9 (17%)
22	CLA	A	816	1	65,73,73	1.24	7 (10%)	76,113,113	1.05	5 (6%)
26	LMU	A	847	-	36,36,36	1.21	2 (5%)	47,47,47	0.88	1 (2%)
31	DD6	Q	202	-	39,45,45	1.60	7 (17%)	52,67,67	1.71	12 (23%)
26	LMU	S	203	-	32,32,36	1.35	4 (12%)	43,43,47	1.60	6 (13%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
26	LMU	F	807	-	36,36,36	1.21	2 (5%)	47,47,47	0.95	2 (4%)
31	DD6	P	218	-	39,45,45	1.74	8 (20%)	52,67,67	1.92	10 (19%)
31	DD6	K	208	-	39,45,45	1.67	8 (20%)	52,67,67	1.69	10 (19%)
30	SQD	S	201	-	45,46,54	1.03	5 (11%)	54,57,65	1.58	9 (16%)
22	CLA	H	210	18	45,53,73	1.61	6 (13%)	52,89,113	1.17	5 (9%)
33	KC1	P	203	-	48,53,53	1.94	12 (25%)	55,89,89	0.99	2 (3%)
22	CLA	Q	204	-	61,69,73	1.29	6 (9%)	71,108,113	1.04	4 (5%)
22	CLA	P	214	12	45,53,73	1.58	6 (13%)	52,89,113	1.19	4 (7%)
22	CLA	U	207	35	65,73,73	1.19	6 (9%)	76,113,113	1.20	10 (13%)
22	CLA	A	818	35	65,73,73	1.18	6 (9%)	76,113,113	1.07	7 (9%)
22	CLA	B	814	2	59,67,73	1.31	6 (10%)	68,105,113	1.06	4 (5%)
22	CLA	B	818	2	53,61,73	1.36	7 (13%)	61,98,113	1.10	6 (9%)
22	CLA	B	847	2	50,58,73	1.45	7 (14%)	58,95,113	1.05	3 (5%)
22	CLA	B	811	2	54,62,73	1.40	7 (12%)	62,99,113	1.09	5 (8%)
25	BCR	A	844	-	41,41,41	1.09	2 (4%)	56,56,56	1.19	6 (10%)
22	CLA	Q	211	13	41,49,73	1.61	7 (17%)	47,84,113	1.35	6 (12%)
31	DD6	S	211	-	39,45,45	1.55	8 (20%)	52,67,67	1.52	8 (15%)
22	CLA	H	204	18	61,69,73	1.26	7 (11%)	71,108,113	1.10	5 (7%)
31	DD6	O	214	-	39,45,45	1.55	7 (17%)	52,67,67	1.62	9 (17%)
22	CLA	S	209	15	52,60,73	1.36	5 (9%)	60,97,113	1.15	4 (6%)
22	CLA	B	815	2	60,68,73	1.31	7 (11%)	70,107,113	1.06	5 (7%)
22	CLA	A	833	1	65,73,73	1.28	6 (9%)	76,113,113	1.05	6 (7%)
22	CLA	A	848	1	65,73,73	1.28	6 (9%)	76,113,113	1.07	6 (7%)
33	KC1	Q	210	13	48,53,53	1.87	11 (22%)	55,89,89	1.21	6 (10%)
22	CLA	A	806	1	65,73,73	1.22	7 (10%)	76,113,113	1.11	6 (7%)
22	CLA	Q	205	13	60,68,73	1.31	7 (11%)	70,107,113	1.01	4 (5%)
22	CLA	P	208	12	56,64,73	1.36	7 (12%)	65,102,113	1.10	6 (9%)
22	CLA	R	104	14	65,73,73	1.37	7 (10%)	76,113,113	1.01	5 (6%)
22	CLA	B	828	35	65,73,73	1.27	7 (10%)	76,113,113	1.00	4 (5%)
22	CLA	A	807	1	65,73,73	1.25	7 (10%)	76,113,113	1.02	5 (6%)
22	CLA	T	205	-	46,54,73	1.47	6 (13%)	53,90,113	1.20	4 (7%)
25	BCR	B	836	-	41,41,41	1.08	2 (4%)	56,56,56	1.16	4 (7%)
25	BCR	B	840	-	41,41,41	1.08	2 (4%)	56,56,56	1.15	5 (8%)
26	LMU	K	202	-	25,25,36	1.26	3 (12%)	36,36,47	1.80	11 (30%)
33	KC1	U	213	16	48,53,53	1.87	13 (27%)	55,89,89	1.03	3 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
25	BCR	J	104	-	41,41,41	1.08	2 (4%)	56,56,56	1.19	4 (7%)
22	CLA	B	821	2	65,73,73	1.33	7 (10%)	76,113,113	0.90	4 (5%)
31	DD6	S	215	-	39,45,45	1.60	7 (17%)	52,67,67	1.71	10 (19%)
22	CLA	B	809	2	54,62,73	1.48	8 (14%)	67,100,113	1.01	4 (5%)
22	CLA	U	209	16	42,50,73	1.77	7 (16%)	48,85,113	1.10	3 (6%)
25	BCR	M	101	-	41,41,41	1.06	2 (4%)	56,56,56	1.27	7 (12%)
25	BCR	I	102	-	41,41,41	1.06	2 (4%)	56,56,56	1.24	4 (7%)
34	A86	U	202	-	44,50,50	1.65	6 (13%)	51,76,76	1.48	7 (13%)
22	CLA	T	209	20	41,49,73	1.63	8 (19%)	47,84,113	1.23	5 (10%)
22	CLA	Q	209	13	65,73,73	1.29	7 (10%)	76,113,113	0.95	4 (5%)
31	DD6	O	213	-	39,45,45	1.54	8 (20%)	52,67,67	1.50	10 (19%)
32	LMG	P	202	-	34,34,55	1.03	2 (5%)	42,42,63	1.28	4 (9%)
22	CLA	S	208	15	45,53,73	1.42	5 (11%)	52,89,113	1.27	6 (11%)
22	CLA	H	202	-	39,48,73	1.60	6 (15%)	45,82,113	1.37	7 (15%)
22	CLA	A	838	24	52,60,73	1.44	7 (13%)	60,97,113	1.16	5 (8%)
22	CLA	H	203	18	60,68,73	1.33	7 (11%)	70,107,113	1.01	5 (7%)
22	CLA	T	203	20	46,54,73	1.52	8 (17%)	53,90,113	1.13	4 (7%)
22	CLA	Q	213	35	57,65,73	1.35	7 (12%)	66,103,113	1.17	8 (12%)
31	DD6	H	201	-	39,45,45	1.72	9 (23%)	52,67,67	1.91	13 (25%)
22	CLA	B	833	2	65,73,73	1.31	7 (10%)	76,113,113	0.92	4 (5%)
22	CLA	O	203	-	45,53,73	1.54	7 (15%)	52,89,113	1.14	4 (7%)
22	CLA	G	206	17	65,73,73	1.39	7 (10%)	76,113,113	1.01	6 (7%)
31	DD6	P	215	-	39,45,45	1.67	6 (15%)	52,67,67	1.90	11 (21%)
22	CLA	P	211	12	50,58,73	1.36	6 (12%)	58,95,113	1.11	3 (5%)
22	CLA	A	830	1	50,58,73	1.42	7 (14%)	58,95,113	1.06	3 (5%)
22	CLA	F	803	35	48,56,73	1.50	7 (14%)	55,92,113	1.30	6 (10%)
26	LMU	K	201	-	36,36,36	1.18	3 (8%)	47,47,47	1.59	9 (19%)
31	DD6	P	205	-	39,45,45	1.56	7 (17%)	52,67,67	1.65	10 (19%)
34	A86	Q	218	-	44,50,50	1.65	6 (13%)	51,76,76	1.48	9 (17%)
22	CLA	H	208	-	58,66,73	1.29	6 (10%)	67,104,113	1.08	5 (7%)
22	CLA	A	820	1	51,59,73	1.46	7 (13%)	59,96,113	1.16	5 (8%)
33	KC1	P	206	12	48,53,53	1.86	13 (27%)	55,89,89	0.97	2 (3%)
22	CLA	B	831	2	47,55,73	1.51	7 (14%)	54,91,113	1.14	4 (7%)
30	SQD	B	846	-	49,50,54	1.00	5 (10%)	58,61,65	1.62	9 (15%)
31	DD6	J	101	-	39,45,45	1.55	8 (20%)	52,67,67	1.63	10 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
22	CLA	G	215	17	45,53,73	1.49	5 (11%)	52,89,113	1.24	4 (7%)
22	CLA	A	804	1	65,73,73	1.23	7 (10%)	76,113,113	1.02	6 (7%)
22	CLA	S	206	15	46,54,73	1.46	6 (13%)	53,90,113	1.12	4 (7%)
22	CLA	k	102	21	42,50,73	1.58	7 (16%)	48,85,113	1.11	3 (6%)
22	CLA	B	844	2	65,73,73	1.33	7 (10%)	76,113,113	1.01	4 (5%)
22	CLA	A	836	35	65,73,73	1.25	7 (10%)	76,113,113	1.06	6 (7%)
23	PQN	A	837	-	34,34,34	0.38	0	42,45,45	0.44	0
22	CLA	A	828	1	65,73,73	1.33	7 (10%)	76,113,113	0.92	3 (3%)
22	CLA	A	815	1	65,73,73	1.31	7 (10%)	76,113,113	1.00	4 (5%)
22	CLA	B	822	2	65,73,73	1.29	7 (10%)	76,113,113	1.01	3 (3%)
22	CLA	Q	206	13	50,59,73	1.52	7 (14%)	57,96,113	1.08	4 (7%)
25	BCR	A	843	-	41,41,41	1.05	2 (4%)	56,56,56	1.21	4 (7%)
33	KC1	P	219	12	48,53,53	1.83	11 (22%)	55,89,89	0.87	1 (1%)
22	CLA	B	802	-	65,73,73	1.25	8 (12%)	76,113,113	1.07	9 (11%)
22	CLA	A	829	1	65,73,73	1.25	6 (9%)	76,113,113	1.04	5 (6%)
22	CLA	P	213	12	41,49,73	1.64	7 (17%)	47,84,113	1.25	4 (8%)
22	CLA	Q	207	13	46,54,73	1.49	7 (15%)	53,90,113	1.32	8 (15%)
22	CLA	T	206	20	42,50,73	1.92	7 (16%)	48,85,113	1.07	3 (6%)
22	CLA	A	810	1	54,62,73	1.39	6 (11%)	62,99,113	1.08	4 (6%)
22	CLA	S	207	15	46,54,73	1.59	7 (15%)	53,90,113	1.20	5 (9%)
22	CLA	A	821	35	65,73,73	1.30	7 (10%)	76,113,113	1.02	5 (6%)
22	CLA	S	217	15	65,73,73	1.25	8 (12%)	76,113,113	1.13	7 (9%)
31	DD6	S	214	-	39,45,45	1.55	7 (17%)	52,67,67	1.78	11 (21%)
22	CLA	A	825	1	65,73,73	1.28	7 (10%)	76,113,113	0.97	4 (5%)
32	LMG	Q	217	-	55,55,55	0.71	0	63,63,63	1.32	6 (9%)
27	CL0	A	849	1	65,73,73	1.53	8 (12%)	76,113,113	0.99	5 (6%)
22	CLA	A	856	-	46,54,73	1.46	7 (15%)	53,90,113	1.17	5 (9%)
22	CLA	B	801	2	65,73,73	1.32	7 (10%)	76,113,113	0.83	3 (3%)
22	CLA	A	822	35	65,73,73	1.19	5 (7%)	76,113,113	1.03	5 (6%)
22	CLA	H	209	18	41,49,73	1.59	6 (14%)	47,84,113	1.28	4 (8%)
31	DD6	U	212	-	39,45,45	1.59	6 (15%)	52,67,67	1.77	11 (21%)
22	CLA	B	842	2	65,73,73	1.29	7 (10%)	76,113,113	0.99	4 (5%)
22	CLA	U	211	16	52,60,73	1.45	7 (13%)	60,97,113	1.10	5 (8%)
25	BCR	L	201	-	41,41,41	1.08	2 (4%)	56,56,56	1.17	4 (7%)
22	CLA	B	805	2	65,73,73	1.27	7 (10%)	76,113,113	0.94	5 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
25	BCR	R	102	-	40,40,41	1.15	2 (5%)	54,54,56	1.41	10 (18%)
22	CLA	G	204	17	43,51,73	1.53	8 (18%)	49,86,113	1.22	4 (8%)
22	CLA	G	207	17	60,68,73	1.25	6 (10%)	70,107,113	1.15	4 (5%)
22	CLA	G	209	17	56,64,73	1.29	6 (10%)	65,102,113	1.17	6 (9%)
22	CLA	U	208	16	46,54,73	1.51	7 (15%)	53,90,113	1.19	5 (9%)
31	DD6	G	213	-	39,45,45	1.56	8 (20%)	52,67,67	1.50	7 (13%)
32	LMG	J	102	-	39,39,55	0.88	1 (2%)	47,47,63	1.23	4 (8%)
22	CLA	B	810	2	55,63,73	1.31	6 (10%)	64,101,113	1.08	5 (7%)
22	CLA	A	813	1	50,58,73	1.52	6 (12%)	58,95,113	1.14	4 (6%)
22	CLA	B	845	2	65,73,73	1.26	7 (10%)	76,113,113	1.29	8 (10%)
22	CLA	S	216	35	65,73,73	1.21	7 (10%)	76,113,113	1.02	5 (6%)
22	CLA	G	202	-	41,49,73	1.56	7 (17%)	47,84,113	1.26	5 (10%)
22	CLA	A	812	1	45,53,73	1.53	7 (15%)	52,89,113	1.16	5 (9%)
22	CLA	G	203	17	45,53,73	1.60	7 (15%)	52,89,113	1.14	4 (7%)
22	CLA	B	825	2	50,58,73	1.50	7 (14%)	58,95,113	1.09	4 (6%)
22	CLA	O	205	11	65,73,73	1.32	7 (10%)	76,113,113	1.03	5 (6%)
22	CLA	A	832	1	51,59,73	1.44	7 (13%)	59,96,113	1.18	6 (10%)
22	CLA	A	805	1	49,57,73	1.49	7 (14%)	55,93,113	1.12	5 (9%)
23	PQN	B	835	-	34,34,34	0.40	0	42,45,45	0.41	0
22	CLA	P	207	12	65,73,73	1.22	7 (10%)	76,113,113	1.08	5 (6%)
22	CLA	B	808	2	65,73,73	1.27	7 (10%)	76,113,113	0.97	6 (7%)
26	LMU	O	216	-	36,36,36	1.22	2 (5%)	47,47,47	1.06	1 (2%)
22	CLA	A	814	35	45,53,73	1.53	8 (17%)	52,89,113	1.15	5 (9%)
31	DD6	T	212	-	39,45,45	1.65	7 (17%)	52,67,67	1.78	10 (19%)
22	CLA	H	205	18	44,52,73	1.55	7 (15%)	49,87,113	1.09	3 (6%)
22	CLA	K	205	19	55,63,73	1.36	8 (14%)	64,101,113	1.09	5 (7%)
34	A86	Q	214	-	44,50,50	1.59	6 (13%)	51,76,76	1.62	9 (17%)
22	CLA	B	820	35	64,72,73	1.22	6 (9%)	74,111,113	1.02	5 (6%)
26	LMU	L	206	-	36,36,36	1.18	2 (5%)	47,47,47	1.20	3 (6%)
22	CLA	K	203	19	45,53,73	1.80	7 (15%)	52,89,113	1.91	11 (21%)
22	CLA	G	208	-	55,63,73	1.36	7 (12%)	64,101,113	1.12	5 (7%)
31	DD6	Q	215	-	39,45,45	1.60	8 (20%)	52,67,67	1.58	10 (19%)
34	A86	R	103	-	40,46,50	1.68	7 (17%)	45,70,76	1.77	13 (28%)
22	CLA	A	802	1	55,63,73	1.34	8 (14%)	64,101,113	1.07	5 (7%)
25	BCR	k	104	-	41,41,41	1.05	2 (4%)	56,56,56	1.26	5 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
22	CLA	H	213	-	65,73,73	1.24	6 (9%)	76,113,113	1.20	7 (9%)

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
22	CLA	B	834	35	1/1/15/20	0/37/115/115	-
22	CLA	B	843	2	1/1/15/20	3/37/115/115	-
22	CLA	B	826	2	1/1/11/20	2/18/96/115	-
26	LMU	P	221	-	-	6/11/51/61	0/2/2/2
22	CLA	K	204	19	-	0/10/88/115	-
22	CLA	L	203	9	-	0/37/115/115	-
22	CLA	B	816	35	1/1/15/20	7/37/115/115	-
22	CLA	T	207	20	-	5/37/115/115	-
28	SF4	C	102	3	-	-	0/6/5/5
22	CLA	T	202	20	1/1/10/20	2/8/86/115	-
24	LHG	P	201	-	-	38/53/53/53	-
29	DGD	B	841	-	-	19/49/89/95	0/2/2/2
22	CLA	U	204	35	1/1/14/20	9/33/111/115	-
22	CLA	A	834	1	-	8/37/115/115	-
24	LHG	A	839	-	-	17/52/52/53	-
22	CLA	A	826	1	-	2/37/115/115	-
22	CLA	B	824	2	-	3/37/115/115	-
25	BCR	A	842	-	-	10/29/63/63	0/2/2/2
31	DD6	H	212	-	-	10/26/80/80	0/3/3/3
22	CLA	A	845	35	1/1/15/20	9/37/115/115	-
22	CLA	Q	216	35	-	8/37/115/115	-
22	CLA	F	802	35	1/1/15/20	0/37/115/115	-
22	CLA	A	803	1	1/1/15/20	6/37/115/115	-
22	CLA	B	819	35	1/1/14/20	4/35/113/115	-
22	CLA	B	832	35	1/1/15/20	4/37/115/115	-
22	CLA	F	804	6	1/1/11/20	5/15/93/115	-
25	BCR	B	837	-	-	7/29/63/63	0/2/2/2
22	CLA	Q	208	13	1/1/12/20	1/19/97/115	-
22	CLA	A	809	1	1/1/14/20	3/34/112/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	CLA	H	207	18	-	13/37/115/115	-
22	CLA	A	835	1	1/1/15/20	1/37/115/115	-
33	KC1	O	210	11	-	0/15/71/71	-
31	DD6	G	211	-	-	8/26/80/80	0/3/3/3
22	CLA	B	812	2	-	2/30/108/115	-
22	CLA	G	201	17	-	3/13/91/115	-
22	CLA	U	205	16	-	4/37/115/115	-
22	CLA	A	808	1	-	2/27/105/115	-
22	CLA	P	209	-	1/1/12/20	3/22/100/115	-
24	LHG	G	216	-	-	14/31/31/53	-
31	DD6	G	214	-	-	10/26/80/80	0/3/3/3
22	CLA	A	853	1	1/1/15/20	9/37/115/115	-
22	CLA	L	202	9	-	6/18/96/115	-
31	DD6	O	201	-	-	6/26/80/80	0/3/3/3
22	CLA	A	817	1	1/1/11/20	1/13/91/115	-
31	DD6	S	205	-	-	11/26/80/80	0/3/3/3
22	CLA	H	206	18	1/1/11/20	2/13/91/115	-
31	DD6	T	213	-	-	12/26/80/80	0/3/3/3
22	CLA	B	807	2	1/1/15/20	5/37/115/115	-
28	SF4	C	101	3	-	-	0/6/5/5
22	CLA	A	855	-	1/1/9/20	1/8/82/115	-
32	LMG	U	201	-	-	13/27/47/70	0/1/1/1
22	CLA	A	801	-	-	6/37/115/115	-
26	LMU	A	857	-	-	12/21/61/61	0/2/2/2
31	DD6	G	212	-	-	6/26/80/80	0/3/3/3
34	A86	P	204	-	-	9/34/90/90	0/3/3/3
34	A86	R	105	-	-	11/34/90/90	0/3/3/3
22	CLA	G	210	17	1/1/11/20	4/13/91/115	-
34	A86	Q	201	-	-	14/34/90/90	0/3/3/3
22	CLA	A	831	1	1/1/11/20	4/13/91/115	-
22	CLA	O	209	11	-	9/37/115/115	-
31	DD6	O	212	-	-	10/26/80/80	0/3/3/3
22	CLA	A	850	35	1/1/15/20	2/37/115/115	-
22	CLA	O	202	11	-	0/11/89/115	-
26	LMU	M	102	-	-	9/21/61/61	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	CLA	Q	212	13	-	8/37/115/115	-
31	DD6	O	215	-	-	15/26/80/80	0/3/3/3
25	BCR	I	101	-	-	5/29/63/63	0/2/2/2
31	DD6	U	203	-	-	12/26/80/80	0/3/3/3
22	CLA	A	854	1	1/1/15/20	7/37/115/115	-
22	CLA	O	208	11	1/1/14/20	2/31/109/115	-
33	KC1	S	210	15	-	1/15/71/71	-
32	LMG	P	217	-	-	12/19/39/70	0/1/1/1
31	DD6	P	220	-	-	11/26/80/80	0/3/3/3
22	CLA	B	827	2	-	2/29/107/115	-
28	SF4	A	852	2,1	-	-	0/6/5/5
22	CLA	B	804	2	1/1/15/20	8/37/115/115	-
22	CLA	R	101	35	1/1/11/20	0/13/91/115	-
31	DD6	S	204	-	-	7/26/80/80	0/3/3/3
22	CLA	B	803	2	1/1/11/20	3/13/91/115	-
22	CLA	A	846	1	-	4/31/109/115	-
31	DD6	U	214	-	-	8/14/37/80	0/1/1/3
22	CLA	B	817	2	-	2/15/93/115	-
24	LHG	A	840	22	-	13/31/31/53	-
22	CLA	B	830	2	1/1/15/20	1/37/115/115	-
22	CLA	T	210	20	-	4/15/93/115	-
25	BCR	L	205	-	-	8/29/63/63	0/2/2/2
22	CLA	U	206	16	1/1/11/20	2/13/91/115	-
22	CLA	S	202	35	1/1/15/20	5/37/115/115	-
22	CLA	O	207	11	1/1/11/20	5/15/93/115	-
22	CLA	B	829	2	1/1/13/20	3/29/107/115	-
22	CLA	T	204	-	1/1/13/20	13/28/106/115	-
22	CLA	K	206	19	1/1/11/20	4/13/91/115	-
22	CLA	O	206	35	1/1/15/20	6/37/115/115	-
22	CLA	K	207	19	-	9/29/107/115	-
22	CLA	J	103	8	1/1/10/20	4/10/88/115	-
22	CLA	B	823	2	-	2/37/115/115	-
25	BCR	F	801	-	-	6/29/63/63	0/2/2/2
22	CLA	L	204	35	1/1/12/20	6/19/97/115	-
22	CLA	Q	203	13	-	2/17/95/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	CLA	T	211	-	1/1/11/20	3/16/94/115	-
22	CLA	T	201	-	1/1/10/20	0/10/88/115	-
22	CLA	U	210	16	-	2/37/115/115	-
25	BCR	A	841	-	-	7/29/63/63	0/2/2/2
26	LMU	F	806	-	-	16/21/61/61	0/2/2/2
22	CLA	A	811	1	1/1/15/20	3/37/115/115	-
22	CLA	P	216	12	1/1/11/20	0/16/94/115	-
22	CLA	A	851	1	-	6/37/115/115	-
33	KC1	P	212	12	-	4/12/68/71	-
33	KC1	T	208	20	-	1/15/71/71	-
32	LMG	S	213	-	-	24/44/64/70	0/1/1/1
25	BCR	F	805	-	-	8/29/63/63	0/2/2/2
31	DD6	k	101	-	-	9/26/80/80	0/3/3/3
22	CLA	A	823	1	1/1/15/20	3/37/115/115	-
22	CLA	P	210	35	-	4/16/94/115	-
25	BCR	B	839	-	-	4/29/63/63	0/2/2/2
33	KC1	S	212	15	-	5/15/71/71	-
22	CLA	A	824	1	1/1/14/20	5/34/112/115	-
22	CLA	B	806	2	-	3/37/115/115	-
22	CLA	B	813	2	-	3/25/103/115	-
25	BCR	B	838	-	-	5/29/63/63	0/2/2/2
22	CLA	O	204	11	-	3/37/115/115	-
22	CLA	A	819	1	-	1/11/89/115	-
22	CLA	k	103	35	1/1/13/20	4/25/103/115	-
22	CLA	A	827	1	-	2/19/97/115	-
22	CLA	G	205	17	-	10/33/111/115	-
22	CLA	O	211	11	-	0/8/86/115	-
31	DD6	H	211	-	-	13/26/80/80	0/3/3/3
22	CLA	A	816	1	1/1/15/20	2/37/115/115	-
26	LMU	A	847	-	-	10/21/61/61	0/2/2/2
31	DD6	Q	202	-	-	5/26/80/80	0/3/3/3
26	LMU	S	203	-	-	10/17/57/61	0/2/2/2
26	LMU	F	807	-	-	7/21/61/61	0/2/2/2
31	DD6	P	218	-	-	10/26/80/80	0/3/3/3
31	DD6	K	208	-	-	10/26/80/80	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
30	SQD	S	201	-	-	21/41/61/69	0/1/1/1
22	CLA	H	210	18	-	4/13/91/115	-
33	KC1	P	203	-	-	0/15/71/71	-
22	CLA	Q	204	-	1/1/14/20	8/33/111/115	-
22	CLA	P	214	12	1/1/11/20	4/13/91/115	-
22	CLA	U	207	35	1/1/15/20	4/37/115/115	-
22	CLA	A	818	35	1/1/15/20	3/37/115/115	-
22	CLA	B	847	2	1/1/12/20	5/19/97/115	-
22	CLA	B	814	2	-	7/30/108/115	-
22	CLA	B	818	2	-	4/23/101/115	-
22	CLA	B	811	2	1/1/12/20	3/24/102/115	-
25	BCR	A	844	-	-	8/29/63/63	0/2/2/2
22	CLA	Q	211	13	1/1/10/20	2/8/86/115	-
31	DD6	S	211	-	-	13/26/80/80	0/3/3/3
22	CLA	H	204	18	1/1/14/20	4/33/111/115	-
31	DD6	O	214	-	-	8/26/80/80	0/3/3/3
22	CLA	S	209	15	-	3/22/100/115	-
22	CLA	B	815	2	1/1/14/20	2/31/109/115	-
22	CLA	A	833	1	1/1/15/20	2/37/115/115	-
22	CLA	A	848	1	-	6/37/115/115	-
33	KC1	Q	210	13	-	2/15/71/71	-
22	CLA	A	806	1	1/1/15/20	8/37/115/115	-
22	CLA	Q	205	13	1/1/14/20	6/31/109/115	-
22	CLA	P	208	12	1/1/13/20	6/27/105/115	-
22	CLA	T	205	-	1/1/11/20	2/15/93/115	-
22	CLA	B	828	35	1/1/15/20	1/37/115/115	-
22	CLA	A	807	1	-	3/37/115/115	-
22	CLA	R	104	14	-	7/37/115/115	-
25	BCR	B	836	-	-	8/29/63/63	0/2/2/2
25	BCR	B	840	-	-	8/29/63/63	0/2/2/2
26	LMU	K	202	-	-	4/10/50/61	0/2/2/2
33	KC1	U	213	16	-	1/15/71/71	-
25	BCR	J	104	-	-	8/29/63/63	0/2/2/2
22	CLA	B	821	2	1/1/15/20	0/37/115/115	-
31	DD6	S	215	-	-	14/26/80/80	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	CLA	B	809	2	-	2/25/101/115	-
22	CLA	U	209	16	-	2/10/88/115	-
25	BCR	M	101	-	-	8/29/63/63	0/2/2/2
25	BCR	I	102	-	-	10/29/63/63	0/2/2/2
34	A86	U	202	-	-	18/34/90/90	0/3/3/3
22	CLA	T	209	20	-	2/8/86/115	-
22	CLA	Q	209	13	-	9/37/115/115	-
31	DD6	O	213	-	-	11/26/80/80	0/3/3/3
32	LMG	P	202	-	-	12/29/49/70	0/1/1/1
22	CLA	S	208	15	1/1/11/20	0/13/91/115	-
22	CLA	H	202	-	1/1/9/20	0/8/82/115	-
22	CLA	A	838	24	1/1/12/20	2/22/100/115	-
22	CLA	H	203	18	1/1/14/20	9/31/109/115	-
22	CLA	T	203	20	1/1/11/20	6/15/93/115	-
22	CLA	Q	213	35	1/1/13/20	7/28/106/115	-
31	DD6	H	201	-	-	11/26/80/80	0/3/3/3
22	CLA	G	206	17	1/1/15/20	16/37/115/115	-
22	CLA	B	833	2	-	4/37/115/115	-
22	CLA	O	203	-	-	2/13/91/115	-
31	DD6	P	215	-	-	12/26/80/80	0/3/3/3
22	CLA	P	211	12	-	2/19/97/115	-
22	CLA	F	803	35	1/1/11/20	3/17/95/115	-
22	CLA	A	830	1	-	1/19/97/115	-
26	LMU	K	201	-	-	10/21/61/61	0/2/2/2
31	DD6	P	205	-	-	5/26/80/80	0/3/3/3
34	A86	Q	218	-	-	13/34/90/90	0/3/3/3
22	CLA	H	208	-	1/1/13/20	6/29/107/115	-
22	CLA	A	820	1	1/1/12/20	4/21/99/115	-
33	KC1	P	206	12	-	2/15/71/71	-
22	CLA	B	831	2	1/1/11/20	0/16/94/115	-
30	SQD	B	846	-	-	18/45/65/69	0/1/1/1
31	DD6	J	101	-	-	5/26/80/80	0/3/3/3
22	CLA	G	215	17	1/1/11/20	5/13/91/115	-
22	CLA	A	804	1	1/1/15/20	12/37/115/115	-
22	CLA	S	206	15	1/1/11/20	0/15/93/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	CLA	k	102	21	1/1/10/20	1/10/88/115	-
22	CLA	B	844	2	1/1/15/20	3/37/115/115	-
22	CLA	A	836	35	1/1/15/20	6/37/115/115	-
23	PQN	A	837	-	-	3/23/43/43	0/2/2/2
22	CLA	A	828	1	1/1/15/20	3/37/115/115	-
22	CLA	A	815	1	1/1/15/20	7/37/115/115	-
22	CLA	B	822	2	1/1/15/20	5/37/115/115	-
22	CLA	Q	206	13	1/1/12/20	4/20/98/115	-
25	BCR	A	843	-	-	4/29/63/63	0/2/2/2
33	KC1	P	219	12	-	3/15/71/71	-
22	CLA	B	802	-	1/1/15/20	5/37/115/115	-
22	CLA	A	829	1	1/1/15/20	3/37/115/115	-
22	CLA	P	213	12	1/1/10/20	2/8/86/115	-
22	CLA	Q	207	13	1/1/11/20	7/15/93/115	-
22	CLA	T	206	20	-	1/10/88/115	-
22	CLA	A	810	1	1/1/12/20	2/24/102/115	-
22	CLA	S	207	15	1/1/11/20	2/15/93/115	-
22	CLA	A	821	35	1/1/15/20	9/37/115/115	-
22	CLA	S	217	15	1/1/15/20	2/37/115/115	-
31	DD6	S	214	-	-	16/26/80/80	0/3/3/3
22	CLA	A	825	1	1/1/15/20	5/37/115/115	-
32	LMG	Q	217	-	-	24/50/70/70	0/1/1/1
27	CL0	A	849	1	-	5/37/135/135	-
22	CLA	A	856	-	1/1/11/20	3/15/93/115	-
22	CLA	B	801	2	1/1/15/20	5/37/115/115	-
22	CLA	A	822	35	1/1/15/20	5/37/115/115	-
22	CLA	H	209	18	1/1/10/20	3/8/86/115	-
31	DD6	U	212	-	-	14/26/80/80	0/3/3/3
22	CLA	B	842	2	1/1/15/20	4/37/115/115	-
22	CLA	U	211	16	1/1/12/20	6/22/100/115	-
25	BCR	L	201	-	-	10/29/63/63	0/2/2/2
22	CLA	B	805	2	1/1/15/20	5/37/115/115	-
25	BCR	R	102	-	-	10/27/61/63	0/2/2/2
22	CLA	G	204	17	-	2/11/89/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
22	CLA	G	209	17	1/1/13/20	6/27/105/115	-
22	CLA	G	207	17	-	7/31/109/115	-
22	CLA	U	208	16	1/1/11/20	4/15/93/115	-
31	DD6	G	213	-	-	11/26/80/80	0/3/3/3
32	LMG	J	102	-	-	26/34/54/70	0/1/1/1
22	CLA	G	202	-	1/1/10/20	0/8/86/115	-
22	CLA	B	845	2	1/1/15/20	8/37/115/115	-
22	CLA	S	216	35	1/1/15/20	1/37/115/115	-
22	CLA	A	813	1	-	1/19/97/115	-
22	CLA	G	203	17	1/1/11/20	6/13/91/115	-
22	CLA	A	812	1	1/1/11/20	1/13/91/115	-
22	CLA	B	810	2	-	0/25/103/115	-
22	CLA	B	825	2	-	1/19/97/115	-
22	CLA	O	205	11	1/1/15/20	8/37/115/115	-
22	CLA	A	832	1	1/1/12/20	1/21/99/115	-
22	CLA	A	805	1	1/1/11/20	2/18/96/115	-
23	PQN	B	835	-	-	1/23/43/43	0/2/2/2
22	CLA	P	207	12	1/1/15/20	8/37/115/115	-
22	CLA	B	808	2	1/1/15/20	6/37/115/115	-
26	LMU	O	216	-	-	14/21/61/61	0/2/2/2
22	CLA	A	814	35	-	5/13/91/115	-
31	DD6	T	212	-	-	9/26/80/80	0/3/3/3
22	CLA	H	205	18	1/1/10/20	3/11/90/115	-
22	CLA	K	205	19	1/1/13/20	4/25/103/115	-
34	A86	Q	214	-	-	11/34/90/90	0/3/3/3
22	CLA	B	820	35	1/1/14/20	2/36/114/115	-
26	LMU	L	206	-	-	7/21/61/61	0/2/2/2
22	CLA	K	203	19	1/1/11/20	2/13/91/115	-
22	CLA	G	208	-	1/1/13/20	4/25/103/115	-
31	DD6	Q	215	-	-	9/26/80/80	0/3/3/3
34	A86	R	103	-	-	8/30/84/90	0/3/3/3
22	CLA	A	802	1	1/1/13/20	2/25/103/115	-
25	BCR	k	104	-	-	8/29/63/63	0/2/2/2
22	CLA	H	213	-	1/1/15/20	13/37/115/115	-

All (1677) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	R	103	A86	C13-C11	-6.66	1.36	1.49
34	R	105	A86	C13-C11	-6.57	1.36	1.49
34	Q	218	A86	C13-C11	-6.52	1.37	1.49
22	K	203	CLA	MG-NA	6.36	2.21	2.06
34	Q	214	A86	C13-C11	-6.35	1.37	1.49
34	P	204	A86	C13-C11	-6.14	1.37	1.49
34	U	202	A86	C13-C11	-6.10	1.37	1.49
22	T	206	CLA	MG-NC	5.92	2.20	2.06
34	Q	201	A86	C13-C11	-5.85	1.38	1.49
22	U	209	CLA	MG-NC	5.56	2.19	2.06
22	G	206	CLA	MG-NA	5.48	2.19	2.06
31	P	218	DD6	C10-C11	5.37	1.42	1.35
27	A	849	CL0	MG-NA	5.12	2.18	2.06
33	T	208	KC1	MG-NA	5.11	2.18	2.06
22	B	824	CLA	MG-NA	5.09	2.18	2.06
22	A	826	CLA	MG-NA	5.08	2.18	2.06
22	S	207	CLA	MG-NA	5.04	2.18	2.06
22	U	209	CLA	C4B-NB	5.03	1.39	1.35
22	F	802	CLA	C4B-NB	4.98	1.39	1.35
22	R	101	CLA	C4B-NB	4.98	1.39	1.35
22	K	206	CLA	MG-NA	4.97	2.18	2.06
22	G	209	CLA	C1C-C2C	-4.96	1.35	1.44
22	K	204	CLA	C4B-NB	4.95	1.39	1.35
22	H	210	CLA	MG-NA	4.94	2.18	2.06
22	T	211	CLA	C4B-NB	4.93	1.39	1.35
22	T	206	CLA	C4B-NB	4.91	1.39	1.35
33	P	219	KC1	C1D-ND	4.89	1.39	1.35
22	A	855	CLA	C4B-NB	4.87	1.39	1.35
22	P	213	CLA	C4B-NB	4.87	1.39	1.35
22	A	834	CLA	MG-NA	4.85	2.17	2.06
22	A	835	CLA	C4B-NB	4.84	1.39	1.35
22	B	803	CLA	MG-NA	4.83	2.17	2.06
22	A	813	CLA	MG-NA	4.82	2.17	2.06
22	H	206	CLA	MG-NA	4.82	2.17	2.06
22	P	214	CLA	C4B-NB	4.82	1.39	1.35
22	B	843	CLA	MG-NA	4.81	2.17	2.06
22	T	209	CLA	C4B-NB	4.81	1.39	1.35
22	G	203	CLA	C4B-NB	4.81	1.39	1.35
22	A	810	CLA	C4B-NB	4.80	1.39	1.35
22	H	210	CLA	C4B-NB	4.79	1.39	1.35
22	K	207	CLA	C4B-NB	4.79	1.39	1.35
22	O	207	CLA	C4B-NB	4.78	1.39	1.35
22	T	210	CLA	C4B-NB	4.78	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	T	208	KC1	C1D-ND	4.78	1.39	1.35
22	A	818	CLA	C1C-C2C	-4.78	1.35	1.44
33	Q	210	KC1	C1D-ND	4.78	1.39	1.35
22	H	205	CLA	C4B-NB	4.76	1.39	1.35
22	T	201	CLA	C4B-NB	4.75	1.39	1.35
22	B	813	CLA	MG-NA	4.74	2.17	2.06
22	G	201	CLA	C4B-NB	4.74	1.39	1.35
22	B	844	CLA	MG-NA	4.74	2.17	2.06
22	G	208	CLA	C4B-NB	4.74	1.39	1.35
22	Q	206	CLA	MG-NA	4.74	2.17	2.06
27	A	849	CL0	MG-NC	4.72	2.17	2.06
22	A	825	CLA	MG-NA	4.72	2.17	2.06
22	B	828	CLA	C4B-NB	4.71	1.39	1.35
22	P	210	CLA	C4B-NB	4.70	1.39	1.35
33	P	203	KC1	C1D-ND	4.70	1.39	1.35
22	B	816	CLA	C4B-NB	4.69	1.39	1.35
22	T	205	CLA	C4B-NB	4.69	1.39	1.35
22	H	203	CLA	C4B-NB	4.69	1.39	1.35
22	O	203	CLA	C4B-NB	4.68	1.39	1.35
22	G	215	CLA	C4B-NB	4.67	1.39	1.35
22	U	211	CLA	C4B-NB	4.67	1.39	1.35
22	A	831	CLA	C4B-NB	4.67	1.39	1.35
22	A	823	CLA	MG-NA	4.67	2.17	2.06
22	A	828	CLA	MG-NA	4.66	2.17	2.06
22	B	844	CLA	C4B-NB	4.66	1.39	1.35
22	A	805	CLA	MG-NA	4.66	2.17	2.06
22	U	208	CLA	C4B-NB	4.65	1.39	1.35
22	k	102	CLA	C4B-NB	4.65	1.39	1.35
22	Q	204	CLA	C4B-NB	4.64	1.39	1.35
22	B	847	CLA	C4C-C3C	-4.64	1.37	1.45
33	U	213	KC1	C1D-ND	4.64	1.39	1.35
22	H	202	CLA	C4B-NB	4.64	1.39	1.35
22	R	104	CLA	MG-NA	4.63	2.17	2.06
22	B	807	CLA	C4B-NB	4.63	1.39	1.35
22	H	209	CLA	C4B-NB	4.63	1.39	1.35
22	A	808	CLA	C4C-C3C	-4.62	1.37	1.45
22	F	803	CLA	MG-NA	4.62	2.17	2.06
22	Q	203	CLA	C4B-NB	4.62	1.39	1.35
22	B	847	CLA	C4B-NB	4.62	1.39	1.35
22	A	823	CLA	C4C-C3C	-4.61	1.37	1.45
33	S	210	KC1	C1D-ND	4.60	1.39	1.35
22	B	833	CLA	C4B-NB	4.59	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	807	CLA	C4C-C3C	-4.59	1.37	1.45
33	P	206	KC1	C4C-C3C	-4.58	1.37	1.45
22	B	826	CLA	C4B-NB	4.58	1.39	1.35
22	B	817	CLA	C4C-C3C	-4.58	1.37	1.45
22	B	821	CLA	MG-NA	4.57	2.17	2.06
22	O	202	CLA	C4B-NB	4.57	1.39	1.35
22	A	832	CLA	MG-NA	4.57	2.17	2.06
33	P	203	KC1	MG-NA	4.57	2.17	2.06
22	B	826	CLA	MG-NA	4.57	2.17	2.06
22	A	817	CLA	C4B-NB	4.57	1.39	1.35
22	A	820	CLA	C4B-NB	4.57	1.39	1.35
22	B	822	CLA	C4C-C3C	-4.56	1.37	1.45
22	B	842	CLA	MG-NA	4.56	2.17	2.06
22	F	804	CLA	C4B-NB	4.56	1.39	1.35
22	K	203	CLA	C4B-NB	4.55	1.39	1.35
22	P	209	CLA	C4C-C3C	-4.55	1.37	1.45
22	O	205	CLA	MG-NA	4.55	2.17	2.06
22	B	817	CLA	C4B-NB	4.55	1.39	1.35
22	B	821	CLA	C4B-NB	4.55	1.39	1.35
22	G	210	CLA	MG-NA	4.54	2.17	2.06
22	G	203	CLA	MG-NA	4.54	2.17	2.06
22	A	814	CLA	C4B-NB	4.54	1.39	1.35
22	B	814	CLA	C4B-NB	4.54	1.39	1.35
22	K	206	CLA	C4B-NB	4.54	1.39	1.35
22	B	811	CLA	C4C-C3C	-4.53	1.37	1.45
22	S	207	CLA	C4C-C3C	-4.53	1.37	1.45
22	A	813	CLA	C4B-NB	4.53	1.39	1.35
22	A	806	CLA	C4C-C3C	-4.52	1.37	1.45
22	k	103	CLA	C4C-C3C	-4.52	1.37	1.45
22	B	806	CLA	C4C-C3C	-4.52	1.37	1.45
27	A	849	CL0	C4B-NB	4.52	1.39	1.35
22	B	834	CLA	C4C-C3C	-4.52	1.37	1.45
22	G	204	CLA	C4C-C3C	-4.51	1.37	1.45
22	A	815	CLA	MG-NA	4.51	2.17	2.06
22	Q	209	CLA	C4C-C3C	-4.51	1.37	1.45
22	A	821	CLA	MG-NA	4.50	2.17	2.06
22	S	206	CLA	C4B-NB	4.50	1.39	1.35
22	B	803	CLA	C4C-C3C	-4.50	1.37	1.45
22	B	844	CLA	C4C-C3C	-4.49	1.37	1.45
22	Q	212	CLA	MG-NA	4.49	2.16	2.06
22	A	817	CLA	C4C-C3C	-4.49	1.37	1.45
22	B	815	CLA	C4C-C3C	-4.49	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	833	CLA	C4C-C3C	-4.49	1.37	1.45
22	K	203	CLA	C4C-C3C	-4.49	1.37	1.45
22	A	822	CLA	C4C-C3C	-4.49	1.37	1.45
22	A	853	CLA	C4C-C3C	-4.49	1.37	1.45
22	A	848	CLA	C4B-NB	4.49	1.39	1.35
22	S	206	CLA	C4C-C3C	-4.48	1.37	1.45
31	P	218	DD6	C2-C1	4.48	1.41	1.35
22	A	809	CLA	C4C-C3C	-4.48	1.37	1.45
22	A	838	CLA	C4C-C3C	-4.48	1.37	1.45
22	B	801	CLA	C4C-C3C	-4.48	1.37	1.45
22	G	210	CLA	C4C-C3C	-4.48	1.37	1.45
22	U	210	CLA	C4C-C3C	-4.47	1.37	1.45
22	O	209	CLA	C4C-C3C	-4.47	1.37	1.45
31	P	215	DD6	C5-C6	4.47	1.41	1.35
22	A	815	CLA	C4B-NB	4.47	1.39	1.35
31	O	212	DD6	C10-C11	4.47	1.41	1.35
33	Q	210	KC1	C4C-C3C	-4.47	1.37	1.45
22	B	813	CLA	C4B-NB	4.47	1.39	1.35
22	B	819	CLA	C1C-C2C	-4.46	1.35	1.44
22	B	823	CLA	C4C-C3C	-4.46	1.37	1.45
22	P	208	CLA	C4C-C3C	-4.46	1.37	1.45
22	T	205	CLA	C4C-C3C	-4.46	1.37	1.45
22	T	201	CLA	C4C-C3C	-4.46	1.37	1.45
22	B	832	CLA	C4B-NB	4.46	1.39	1.35
22	B	827	CLA	C4C-C3C	-4.46	1.37	1.45
27	A	849	CL0	C1C-C2C	-4.46	1.35	1.44
22	B	826	CLA	C4C-C3C	-4.46	1.37	1.45
22	R	101	CLA	C4C-C3C	-4.45	1.37	1.45
31	P	215	DD6	C2-C1	4.45	1.41	1.35
22	L	203	CLA	C4C-C3C	-4.45	1.37	1.45
22	U	206	CLA	C4C-C3C	-4.45	1.37	1.45
22	Q	212	CLA	C4C-C3C	-4.45	1.37	1.45
22	B	816	CLA	C4C-C3C	-4.45	1.37	1.45
22	B	825	CLA	MG-NA	4.45	2.16	2.06
22	A	829	CLA	C4C-C3C	-4.45	1.37	1.45
22	B	805	CLA	C4C-C3C	-4.45	1.37	1.45
22	P	214	CLA	C4C-C3C	-4.45	1.37	1.45
22	H	207	CLA	C4C-C3C	-4.45	1.37	1.45
22	O	203	CLA	C4C-C3C	-4.44	1.37	1.45
22	T	202	CLA	C4C-C3C	-4.44	1.37	1.45
22	S	216	CLA	C4C-C3C	-4.44	1.37	1.45
22	B	823	CLA	MG-NA	4.44	2.16	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	U	207	CLA	C4C-C3C	-4.44	1.37	1.45
22	B	820	CLA	C4C-C3C	-4.44	1.37	1.45
22	H	206	CLA	C4C-C3C	-4.44	1.37	1.45
22	B	809	CLA	C4B-NB	4.44	1.39	1.35
22	A	819	CLA	C4C-C3C	-4.44	1.37	1.45
22	A	824	CLA	C4C-C3C	-4.44	1.37	1.45
22	A	834	CLA	C4C-C3C	-4.44	1.37	1.45
22	T	203	CLA	C4C-C3C	-4.44	1.37	1.45
22	A	851	CLA	C1C-C2C	-4.44	1.36	1.44
22	H	205	CLA	C4C-C3C	-4.44	1.37	1.45
22	U	205	CLA	C4C-C3C	-4.43	1.37	1.45
22	B	814	CLA	C4C-C3C	-4.43	1.37	1.45
22	Q	207	CLA	C4C-C3C	-4.43	1.37	1.45
22	A	802	CLA	C4C-C3C	-4.43	1.37	1.45
22	R	104	CLA	C4C-C3C	-4.43	1.37	1.45
22	A	854	CLA	C4C-C3C	-4.43	1.37	1.45
22	G	206	CLA	C4C-C3C	-4.43	1.37	1.45
22	B	808	CLA	C4B-NB	4.43	1.39	1.35
22	G	203	CLA	C4C-C3C	-4.43	1.37	1.45
33	S	212	KC1	C4C-C3C	-4.42	1.37	1.45
22	A	828	CLA	C4C-C3C	-4.42	1.37	1.45
33	S	212	KC1	C1D-ND	4.42	1.39	1.35
22	A	812	CLA	C4C-C3C	-4.42	1.37	1.45
33	O	210	KC1	C4C-C3C	-4.42	1.37	1.45
22	T	206	CLA	MG-ND	4.42	2.14	2.05
22	U	204	CLA	C4C-C3C	-4.41	1.37	1.45
31	P	218	DD6	C5-C6	4.41	1.41	1.35
22	A	805	CLA	C4C-C3C	-4.41	1.37	1.45
22	B	821	CLA	C4C-C3C	-4.41	1.37	1.45
22	P	213	CLA	C4C-C3C	-4.41	1.37	1.45
22	O	205	CLA	C4B-NB	4.41	1.39	1.35
22	B	819	CLA	C4C-C3C	-4.41	1.37	1.45
22	T	210	CLA	C4C-C3C	-4.41	1.37	1.45
22	Q	212	CLA	C1C-C2C	-4.41	1.36	1.44
22	A	813	CLA	C4C-C3C	-4.41	1.37	1.45
22	A	820	CLA	C4C-C3C	-4.41	1.37	1.45
22	Q	204	CLA	C1C-C2C	-4.41	1.36	1.44
22	U	211	CLA	C4C-C3C	-4.41	1.37	1.45
22	B	822	CLA	MG-NA	4.41	2.16	2.06
22	Q	205	CLA	C4B-NB	4.41	1.39	1.35
22	A	811	CLA	C4C-C3C	-4.40	1.37	1.45
27	A	849	CL0	C4C-C3C	-4.40	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	Q	206	CLA	C4C-C3C	-4.40	1.37	1.45
22	O	202	CLA	C1C-C2C	-4.40	1.36	1.44
22	B	831	CLA	C4C-C3C	-4.40	1.37	1.45
22	G	202	CLA	C4C-C3C	-4.40	1.37	1.45
31	T	212	DD6	C10-C11	4.40	1.41	1.35
22	B	830	CLA	C4C-C3C	-4.40	1.37	1.45
22	A	846	CLA	MG-NA	4.40	2.16	2.06
22	A	803	CLA	C1C-C2C	-4.40	1.36	1.44
22	G	201	CLA	C4C-C3C	-4.39	1.37	1.45
22	B	813	CLA	C4C-C3C	-4.39	1.37	1.45
22	K	205	CLA	C4B-NB	4.39	1.39	1.35
22	H	213	CLA	C4C-C3C	-4.39	1.37	1.45
22	B	825	CLA	C4C-C3C	-4.39	1.37	1.45
22	A	848	CLA	C1C-C2C	-4.39	1.36	1.44
22	B	807	CLA	C1C-C2C	-4.39	1.36	1.44
22	B	834	CLA	MG-NA	4.39	2.16	2.06
22	A	836	CLA	C4C-C3C	-4.39	1.37	1.45
22	T	207	CLA	C4C-C3C	-4.39	1.37	1.45
22	k	102	CLA	C4C-C3C	-4.39	1.37	1.45
22	A	832	CLA	C4C-C3C	-4.39	1.37	1.45
22	A	850	CLA	C4C-C3C	-4.39	1.37	1.45
22	B	809	CLA	C4C-C3C	-4.38	1.37	1.45
34	U	202	A86	C5-C6	4.38	1.41	1.35
22	H	204	CLA	C4C-C3C	-4.38	1.37	1.45
22	B	845	CLA	C4C-C3C	-4.38	1.37	1.45
22	A	827	CLA	MG-NA	4.38	2.16	2.06
22	B	815	CLA	C1C-C2C	-4.38	1.36	1.44
22	Q	212	CLA	C4B-NB	4.38	1.39	1.35
22	k	102	CLA	C1C-C2C	-4.38	1.36	1.44
22	J	103	CLA	C4C-C3C	-4.38	1.37	1.45
22	K	207	CLA	C1C-C2C	-4.38	1.36	1.44
22	B	827	CLA	MG-NA	4.38	2.16	2.06
22	Q	205	CLA	C4C-C3C	-4.38	1.37	1.45
22	A	808	CLA	C1C-C2C	-4.38	1.36	1.44
22	A	823	CLA	C1C-C2C	-4.37	1.36	1.44
22	L	202	CLA	C4C-C3C	-4.37	1.37	1.45
22	P	216	CLA	C4C-C3C	-4.37	1.37	1.45
22	A	814	CLA	C4C-C3C	-4.37	1.37	1.45
22	G	207	CLA	C4C-C3C	-4.37	1.37	1.45
22	G	205	CLA	C4C-C3C	-4.37	1.37	1.45
22	B	845	CLA	C4B-NB	4.37	1.39	1.35
22	P	211	CLA	C4C-C3C	-4.37	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	812	CLA	MG-NA	4.37	2.16	2.06
22	Q	206	CLA	C4B-NB	4.37	1.39	1.35
22	A	825	CLA	C4C-C3C	-4.37	1.37	1.45
22	G	208	CLA	C4C-C3C	-4.36	1.37	1.45
22	A	833	CLA	MG-NA	4.36	2.16	2.06
22	H	208	CLA	C4C-C3C	-4.36	1.37	1.45
22	T	211	CLA	C4C-C3C	-4.36	1.37	1.45
22	A	829	CLA	C1C-C2C	-4.36	1.36	1.44
22	L	203	CLA	C1C-C2C	-4.36	1.36	1.44
22	A	846	CLA	C1C-C2C	-4.36	1.36	1.44
22	A	846	CLA	C4B-NB	4.36	1.39	1.35
22	A	836	CLA	C4B-NB	4.36	1.39	1.35
33	U	213	KC1	C4C-C3C	-4.36	1.37	1.45
22	A	812	CLA	MG-NA	4.36	2.16	2.06
22	B	834	CLA	C1C-C2C	-4.36	1.36	1.44
22	S	202	CLA	C1C-C2C	-4.36	1.36	1.44
22	B	812	CLA	C4C-C3C	-4.36	1.37	1.45
31	Q	215	DD6	C10-C11	4.36	1.41	1.35
22	O	205	CLA	C4C-C3C	-4.36	1.37	1.45
33	T	208	KC1	C4C-C3C	-4.36	1.37	1.45
22	A	816	CLA	C4C-C3C	-4.35	1.37	1.45
22	O	204	CLA	C4C-C3C	-4.35	1.37	1.45
22	T	204	CLA	C4C-C3C	-4.35	1.37	1.45
33	P	212	KC1	C4C-C3C	-4.35	1.37	1.45
22	B	802	CLA	C1C-C2C	-4.35	1.36	1.44
22	Q	216	CLA	C4C-C3C	-4.35	1.37	1.45
22	H	203	CLA	C1C-C2C	-4.35	1.36	1.44
33	P	203	KC1	C1C-C2C	-4.35	1.36	1.44
22	B	808	CLA	C1C-C2C	-4.35	1.36	1.44
22	Q	213	CLA	C4C-C3C	-4.35	1.37	1.45
22	H	202	CLA	C1C-C2C	-4.35	1.36	1.44
22	k	103	CLA	C4B-NB	4.35	1.39	1.35
31	P	215	DD6	C10-C11	4.34	1.41	1.35
22	P	216	CLA	MG-NA	4.34	2.16	2.06
22	B	842	CLA	C1C-C2C	-4.34	1.36	1.44
22	B	824	CLA	C4B-NB	4.34	1.39	1.35
22	A	810	CLA	C4C-C3C	-4.34	1.37	1.45
22	B	828	CLA	C1C-C2C	-4.34	1.36	1.44
33	P	212	KC1	C1C-C2C	-4.34	1.36	1.44
22	T	206	CLA	MG-NA	4.34	2.16	2.06
33	Q	210	KC1	C1C-C2C	-4.34	1.36	1.44
22	H	210	CLA	C4C-C3C	-4.34	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	S	209	CLA	C4C-C3C	-4.34	1.37	1.45
22	G	210	CLA	C4B-NB	4.34	1.39	1.35
22	A	855	CLA	C4C-C3C	-4.34	1.37	1.45
22	P	209	CLA	C1C-C2C	-4.34	1.36	1.44
22	O	211	CLA	C4C-C3C	-4.34	1.37	1.45
22	P	210	CLA	C4C-C3C	-4.34	1.37	1.45
22	T	209	CLA	C4C-C3C	-4.34	1.37	1.45
22	P	207	CLA	C4C-C3C	-4.34	1.37	1.45
33	S	212	KC1	C4D-ND	-4.34	1.31	1.35
22	O	206	CLA	C4C-C3C	-4.33	1.37	1.45
22	L	202	CLA	C1C-C2C	-4.33	1.36	1.44
22	P	209	CLA	C4B-NB	4.33	1.39	1.35
22	U	210	CLA	C1C-C2C	-4.33	1.36	1.44
22	A	807	CLA	C4C-C3C	-4.33	1.37	1.45
22	H	203	CLA	C4C-C3C	-4.33	1.37	1.45
22	B	809	CLA	MG-NA	4.33	2.16	2.06
22	A	826	CLA	C4C-C3C	-4.33	1.37	1.45
22	Q	211	CLA	C4B-NB	4.33	1.39	1.35
22	B	818	CLA	C4C-C3C	-4.33	1.37	1.45
22	T	210	CLA	C1C-C2C	-4.33	1.36	1.44
22	A	856	CLA	C4C-C3C	-4.33	1.37	1.45
22	O	205	CLA	C1C-C2C	-4.33	1.36	1.44
22	H	209	CLA	C4C-C3C	-4.32	1.37	1.45
22	O	204	CLA	C4B-NB	4.32	1.39	1.35
22	A	845	CLA	C4C-C3C	-4.32	1.37	1.45
22	B	818	CLA	C1C-C2C	-4.32	1.36	1.44
22	A	833	CLA	C4C-C3C	-4.32	1.37	1.45
22	A	851	CLA	C4C-C3C	-4.32	1.37	1.45
22	T	203	CLA	C4B-NB	4.32	1.39	1.35
22	Q	211	CLA	C1C-C2C	-4.32	1.36	1.44
22	A	801	CLA	C4C-C3C	-4.32	1.37	1.45
22	A	827	CLA	C4C-C3C	-4.32	1.37	1.45
22	A	811	CLA	C1C-C2C	-4.32	1.36	1.44
33	T	208	KC1	C1C-C2C	-4.32	1.36	1.44
22	A	804	CLA	C4C-C3C	-4.32	1.37	1.45
22	B	827	CLA	C1C-C2C	-4.32	1.36	1.44
22	K	206	CLA	C4C-C3C	-4.32	1.37	1.45
22	A	820	CLA	C1C-C2C	-4.32	1.36	1.44
22	Q	203	CLA	C1C-C2C	-4.32	1.36	1.44
22	A	821	CLA	C4C-C3C	-4.32	1.37	1.45
31	K	208	DD6	C5-C6	4.32	1.41	1.35
22	O	209	CLA	C4B-NB	4.32	1.39	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	F	804	CLA	C4C-C3C	-4.32	1.37	1.45
22	A	821	CLA	C4B-NB	4.31	1.39	1.35
22	G	202	CLA	C4B-NB	4.31	1.39	1.35
22	O	208	CLA	C1C-C2C	-4.31	1.36	1.44
22	K	207	CLA	C4C-C3C	-4.31	1.37	1.45
22	A	816	CLA	C4B-NB	4.31	1.39	1.35
22	A	809	CLA	C1C-C2C	-4.31	1.36	1.44
33	S	212	KC1	C1C-C2C	-4.31	1.36	1.44
22	U	206	CLA	C1C-C2C	-4.31	1.36	1.44
22	A	830	CLA	C4C-C3C	-4.31	1.37	1.45
22	A	846	CLA	C4C-C3C	-4.31	1.37	1.45
22	P	210	CLA	C1C-C2C	-4.31	1.36	1.44
22	A	853	CLA	C1C-C2C	-4.31	1.36	1.44
22	A	824	CLA	MG-NA	4.30	2.16	2.06
22	G	204	CLA	C4B-NB	4.30	1.39	1.35
33	O	210	KC1	C4A-C3A	-4.30	1.36	1.44
22	B	823	CLA	C1C-C2C	-4.30	1.36	1.44
22	B	825	CLA	C1C-C2C	-4.30	1.36	1.44
22	B	833	CLA	C1C-C2C	-4.30	1.36	1.44
22	B	821	CLA	C1C-C2C	-4.30	1.36	1.44
22	T	204	CLA	C1C-C2C	-4.30	1.36	1.44
22	K	203	CLA	C1C-C2C	-4.30	1.36	1.44
22	P	216	CLA	C4B-NB	4.30	1.39	1.35
31	G	212	DD6	C2-C1	4.30	1.41	1.35
22	B	828	CLA	C4C-C3C	-4.30	1.37	1.45
22	T	206	CLA	C4C-C3C	-4.30	1.37	1.45
22	S	202	CLA	C4C-C3C	-4.30	1.37	1.45
22	H	210	CLA	C1C-C2C	-4.30	1.36	1.44
22	A	831	CLA	C4C-C3C	-4.30	1.37	1.45
22	H	209	CLA	C1C-C2C	-4.30	1.36	1.44
33	P	219	KC1	C1C-C2C	-4.30	1.36	1.44
22	B	802	CLA	C4C-C3C	-4.30	1.37	1.45
22	H	206	CLA	C4B-NB	4.30	1.39	1.35
22	Q	213	CLA	C1C-C2C	-4.30	1.36	1.44
22	A	828	CLA	C4B-NB	4.29	1.39	1.35
22	B	831	CLA	C4B-NB	4.29	1.39	1.35
22	Q	213	CLA	C4B-NB	4.29	1.39	1.35
22	A	817	CLA	C1C-C2C	-4.29	1.36	1.44
22	B	804	CLA	C4C-C3C	-4.29	1.37	1.45
22	U	211	CLA	MG-NA	4.29	2.16	2.06
22	A	803	CLA	C4C-C3C	-4.29	1.37	1.45
22	K	205	CLA	C4C-C3C	-4.29	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	O	211	CLA	C1C-C2C	-4.29	1.36	1.44
22	B	827	CLA	C4B-NB	4.29	1.39	1.35
22	S	207	CLA	C1C-C2C	-4.29	1.36	1.44
22	A	813	CLA	C1C-C2C	-4.29	1.36	1.44
31	T	212	DD6	C2-C1	4.28	1.41	1.35
22	Q	216	CLA	C1C-C2C	-4.28	1.36	1.44
22	G	210	CLA	C1C-C2C	-4.28	1.36	1.44
22	K	204	CLA	C4C-C3C	-4.28	1.37	1.45
22	B	808	CLA	C4C-C3C	-4.28	1.37	1.45
22	Q	205	CLA	C1C-C2C	-4.28	1.36	1.44
22	B	812	CLA	C1C-C2C	-4.28	1.36	1.44
22	A	835	CLA	C4C-C3C	-4.28	1.37	1.45
22	B	804	CLA	C1C-C2C	-4.28	1.36	1.44
22	Q	208	CLA	C4C-C3C	-4.28	1.37	1.45
22	G	215	CLA	C4C-C3C	-4.28	1.37	1.45
22	A	802	CLA	C4B-NB	4.28	1.39	1.35
22	O	207	CLA	C4C-C3C	-4.28	1.37	1.45
22	P	208	CLA	C1C-C2C	-4.27	1.36	1.44
22	P	211	CLA	C1C-C2C	-4.27	1.36	1.44
22	A	854	CLA	C4B-NB	4.27	1.39	1.35
22	R	104	CLA	C4B-NB	4.27	1.39	1.35
22	A	827	CLA	C1C-C2C	-4.27	1.36	1.44
22	S	217	CLA	C4C-C3C	-4.27	1.37	1.45
22	A	812	CLA	C1C-C2C	-4.27	1.36	1.44
22	R	104	CLA	C1C-C2C	-4.27	1.36	1.44
22	S	217	CLA	C1C-C2C	-4.27	1.36	1.44
33	S	210	KC1	C4C-C3C	-4.27	1.37	1.45
22	O	206	CLA	C1C-C2C	-4.27	1.36	1.44
34	U	202	A86	C2-C1	4.27	1.41	1.35
22	U	210	CLA	C4B-NB	4.27	1.39	1.35
22	S	208	CLA	C4C-C3C	-4.27	1.37	1.45
22	G	215	CLA	C1C-C2C	-4.26	1.36	1.44
22	B	810	CLA	C4C-C3C	-4.26	1.37	1.45
22	B	823	CLA	C4B-NB	4.26	1.39	1.35
22	O	211	CLA	C4B-NB	4.26	1.39	1.35
22	T	207	CLA	C1C-C2C	-4.26	1.36	1.44
22	T	210	CLA	MG-NA	4.26	2.16	2.06
31	G	212	DD6	C5-C6	4.26	1.41	1.35
22	O	203	CLA	C1C-C2C	-4.26	1.36	1.44
22	T	205	CLA	C1C-C2C	-4.26	1.36	1.44
22	B	833	CLA	MG-NA	4.26	2.16	2.06
22	F	803	CLA	C1C-C2C	-4.26	1.36	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	834	CLA	C4B-NB	4.26	1.39	1.35
22	A	816	CLA	C1C-C2C	-4.26	1.36	1.44
22	S	217	CLA	C4B-NB	4.25	1.39	1.35
22	H	213	CLA	C1C-C2C	-4.25	1.36	1.44
22	A	828	CLA	C1C-C2C	-4.25	1.36	1.44
22	B	820	CLA	C4B-NB	4.25	1.39	1.35
33	O	210	KC1	C1D-ND	4.25	1.39	1.35
22	A	830	CLA	C1C-C2C	-4.25	1.36	1.44
22	S	206	CLA	C1C-C2C	-4.25	1.36	1.44
22	K	206	CLA	C1C-C2C	-4.25	1.36	1.44
22	O	204	CLA	C1C-C2C	-4.25	1.36	1.44
22	U	209	CLA	C4C-C3C	-4.25	1.37	1.45
22	A	815	CLA	C4C-C3C	-4.25	1.37	1.45
22	A	826	CLA	C1C-C2C	-4.25	1.36	1.44
22	B	830	CLA	C1C-C2C	-4.25	1.36	1.44
22	A	818	CLA	C4C-C3C	-4.25	1.37	1.45
22	R	104	CLA	MG-NC	4.25	2.16	2.06
22	U	211	CLA	C1C-C2C	-4.25	1.36	1.44
22	P	207	CLA	C1C-C2C	-4.25	1.36	1.44
22	Q	209	CLA	C1C-C2C	-4.25	1.36	1.44
22	B	824	CLA	C4C-C3C	-4.25	1.37	1.45
22	A	856	CLA	C4B-NB	4.25	1.39	1.35
22	H	204	CLA	C4B-NB	4.25	1.39	1.35
22	F	802	CLA	C4C-C3C	-4.24	1.37	1.45
22	A	801	CLA	C4B-NB	4.24	1.39	1.35
22	P	216	CLA	C1C-C2C	-4.24	1.36	1.44
31	U	212	DD6	C10-C11	4.24	1.41	1.35
22	B	803	CLA	C4B-NB	4.24	1.39	1.35
22	B	805	CLA	C4B-NB	4.24	1.39	1.35
31	O	212	DD6	C2-C1	4.24	1.41	1.35
22	S	208	CLA	C1C-C2C	-4.24	1.36	1.44
22	L	202	CLA	C4B-NB	4.24	1.39	1.35
22	H	207	CLA	C4B-NB	4.24	1.39	1.35
22	A	855	CLA	C1C-C2C	-4.24	1.36	1.44
22	B	843	CLA	C1C-C2C	-4.24	1.36	1.44
33	S	210	KC1	C1C-C2C	-4.24	1.36	1.44
31	K	208	DD6	C2-C1	4.24	1.41	1.35
33	U	213	KC1	C1C-C2C	-4.24	1.36	1.44
22	U	204	CLA	C4B-NB	4.24	1.39	1.35
22	T	203	CLA	MG-NA	4.24	2.16	2.06
22	k	103	CLA	C1C-C2C	-4.24	1.36	1.44
22	Q	207	CLA	C1C-C2C	-4.24	1.36	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	O	210	KC1	C1C-C2C	-4.24	1.36	1.44
22	B	810	CLA	C4B-NB	4.24	1.39	1.35
22	S	207	CLA	C4B-NB	4.24	1.39	1.35
22	A	801	CLA	C1C-C2C	-4.23	1.36	1.44
22	B	810	CLA	C1C-C2C	-4.23	1.36	1.44
31	H	211	DD6	C2-C1	4.23	1.41	1.35
22	A	822	CLA	C1C-C2C	-4.23	1.36	1.44
22	A	825	CLA	C1C-C2C	-4.23	1.36	1.44
31	G	211	DD6	C10-C11	4.23	1.41	1.35
22	H	208	CLA	C4B-NB	4.23	1.39	1.35
22	A	804	CLA	C1C-C2C	-4.23	1.36	1.44
22	A	810	CLA	C1C-C2C	-4.23	1.36	1.44
33	P	206	KC1	C1D-ND	4.23	1.39	1.35
22	Q	208	CLA	C4B-NB	4.23	1.39	1.35
31	K	208	DD6	C10-C11	4.23	1.41	1.35
22	A	829	CLA	MG-NA	4.23	2.16	2.06
22	G	207	CLA	C4B-NB	4.23	1.39	1.35
22	U	205	CLA	C4B-NB	4.22	1.39	1.35
22	L	204	CLA	C4C-C3C	-4.22	1.37	1.45
22	A	807	CLA	MG-NA	4.22	2.16	2.06
22	A	856	CLA	C1C-C2C	-4.22	1.36	1.44
22	G	201	CLA	C1C-C2C	-4.22	1.36	1.44
22	A	824	CLA	C4B-NB	4.22	1.39	1.35
22	B	829	CLA	MG-NA	4.22	2.16	2.06
22	B	819	CLA	C4B-NB	4.22	1.39	1.35
22	U	208	CLA	C1C-C2C	-4.22	1.36	1.44
22	T	209	CLA	C1C-C2C	-4.22	1.36	1.44
22	Q	209	CLA	MG-NA	4.22	2.16	2.06
22	Q	211	CLA	C4C-C3C	-4.22	1.37	1.45
22	U	207	CLA	C1C-C2C	-4.22	1.36	1.44
22	T	203	CLA	C1C-C2C	-4.22	1.36	1.44
22	B	847	CLA	C1C-C2C	-4.22	1.36	1.44
22	A	838	CLA	C4B-NB	4.22	1.39	1.35
22	Q	206	CLA	C1C-C2C	-4.22	1.36	1.44
22	B	843	CLA	C4C-C3C	-4.22	1.37	1.45
22	B	832	CLA	MG-NA	4.21	2.16	2.06
22	B	829	CLA	C4C-C3C	-4.21	1.37	1.45
22	P	213	CLA	C1C-C2C	-4.21	1.36	1.44
33	P	212	KC1	C1D-ND	4.21	1.39	1.35
22	A	819	CLA	C1C-C2C	-4.21	1.36	1.44
22	O	208	CLA	C4C-C3C	-4.21	1.37	1.45
22	B	826	CLA	C1C-C2C	-4.21	1.36	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	G	203	CLA	C1C-C2C	-4.21	1.36	1.44
22	G	206	CLA	C1C-C2C	-4.21	1.36	1.44
22	O	202	CLA	C4C-C3C	-4.21	1.37	1.45
31	S	215	DD6	C5-C6	4.21	1.41	1.35
31	Q	202	DD6	C10-C11	4.21	1.41	1.35
22	B	811	CLA	MG-NA	4.21	2.16	2.06
22	U	207	CLA	C4B-NB	4.21	1.39	1.35
22	Q	203	CLA	C4C-C3C	-4.21	1.37	1.45
22	F	804	CLA	C1C-C2C	-4.21	1.36	1.44
22	Q	208	CLA	C1C-C2C	-4.20	1.36	1.44
22	T	211	CLA	C1C-C2C	-4.20	1.36	1.44
31	T	212	DD6	C5-C6	4.20	1.41	1.35
22	B	820	CLA	C1C-C2C	-4.20	1.36	1.44
22	B	845	CLA	C1C-C2C	-4.20	1.36	1.44
22	H	205	CLA	C1C-C2C	-4.20	1.36	1.44
33	P	206	KC1	C1C-C2C	-4.20	1.36	1.44
31	G	214	DD6	C5-C6	4.20	1.41	1.35
22	B	832	CLA	C1C-C2C	-4.20	1.36	1.44
22	A	805	CLA	C1C-C2C	-4.20	1.36	1.44
22	A	806	CLA	C1C-C2C	-4.20	1.36	1.44
22	A	819	CLA	C4B-NB	4.20	1.39	1.35
22	U	208	CLA	C4C-C3C	-4.20	1.37	1.45
22	B	824	CLA	C1C-C2C	-4.20	1.36	1.44
22	T	202	CLA	C1C-C2C	-4.19	1.36	1.44
22	A	804	CLA	C4B-NB	4.19	1.38	1.35
22	Q	209	CLA	C4B-NB	4.19	1.38	1.35
22	U	206	CLA	C4B-NB	4.19	1.38	1.35
22	A	833	CLA	C1C-C2C	-4.19	1.36	1.44
31	H	201	DD6	C5-C6	4.19	1.41	1.35
22	J	103	CLA	C1C-C2C	-4.19	1.36	1.44
22	B	832	CLA	C4C-C3C	-4.19	1.37	1.45
33	P	203	KC1	C4C-C3C	-4.19	1.37	1.45
22	H	208	CLA	C1C-C2C	-4.19	1.36	1.44
22	A	833	CLA	C4B-NB	4.19	1.38	1.35
22	O	207	CLA	C1C-C2C	-4.19	1.36	1.44
22	B	829	CLA	C1C-C2C	-4.19	1.36	1.44
22	G	204	CLA	C1C-C2C	-4.19	1.36	1.44
22	J	103	CLA	C4B-NB	4.18	1.38	1.35
22	P	214	CLA	C1C-C2C	-4.18	1.36	1.44
22	T	201	CLA	C1C-C2C	-4.18	1.36	1.44
22	A	854	CLA	C1C-C2C	-4.18	1.36	1.44
22	B	830	CLA	C4B-NB	4.18	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	805	CLA	MG-NA	4.18	2.16	2.06
31	H	212	DD6	C5-C6	4.18	1.41	1.35
22	A	814	CLA	C1C-C2C	-4.18	1.36	1.44
22	Q	207	CLA	C4B-NB	4.18	1.38	1.35
31	S	214	DD6	C10-C11	4.17	1.41	1.35
22	A	805	CLA	C4B-NB	4.17	1.38	1.35
22	L	204	CLA	C4B-NB	4.17	1.38	1.35
22	O	206	CLA	C4B-NB	4.17	1.38	1.35
22	G	202	CLA	C1C-C2C	-4.17	1.36	1.44
22	A	807	CLA	C1C-C2C	-4.17	1.36	1.44
22	H	213	CLA	C4B-NB	4.17	1.38	1.35
22	B	818	CLA	C4B-NB	4.17	1.38	1.35
22	B	814	CLA	C1C-C2C	-4.17	1.36	1.44
22	P	214	CLA	MG-NA	4.17	2.16	2.06
22	S	209	CLA	C1C-C2C	-4.17	1.36	1.44
22	S	216	CLA	C1C-C2C	-4.17	1.36	1.44
22	T	206	CLA	C1C-C2C	-4.17	1.36	1.44
22	A	821	CLA	C1C-C2C	-4.16	1.36	1.44
22	U	205	CLA	C1C-C2C	-4.16	1.36	1.44
22	U	204	CLA	C1C-C2C	-4.16	1.36	1.44
22	A	831	CLA	C1C-C2C	-4.16	1.36	1.44
22	A	835	CLA	C1C-C2C	-4.16	1.36	1.44
22	B	813	CLA	C1C-C2C	-4.16	1.36	1.44
22	A	809	CLA	C4B-NB	4.16	1.38	1.35
22	K	205	CLA	C1C-C2C	-4.16	1.36	1.44
22	G	209	CLA	C4C-C3C	-4.16	1.37	1.45
22	B	831	CLA	MG-NA	4.16	2.16	2.06
22	F	802	CLA	C1C-C2C	-4.16	1.36	1.44
22	G	205	CLA	C1C-C2C	-4.16	1.36	1.44
22	A	834	CLA	MG-NC	4.15	2.16	2.06
22	L	204	CLA	C1C-C2C	-4.15	1.36	1.44
31	H	212	DD6	C2-C1	4.15	1.41	1.35
22	B	815	CLA	MG-NA	4.15	2.16	2.06
22	A	834	CLA	C1C-C2C	-4.15	1.36	1.44
33	P	219	KC1	C4C-C3C	-4.15	1.37	1.45
22	B	817	CLA	C1C-C2C	-4.15	1.36	1.44
22	B	811	CLA	C1C-C2C	-4.15	1.36	1.44
22	A	836	CLA	C1C-C2C	-4.15	1.36	1.44
22	B	805	CLA	C1C-C2C	-4.15	1.36	1.44
22	A	826	CLA	C4B-NB	4.15	1.38	1.35
22	B	812	CLA	C4B-NB	4.15	1.38	1.35
22	B	842	CLA	C4C-C3C	-4.15	1.37	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	A	802	CLA	C1C-C2C	-4.15	1.36	1.44
22	B	819	CLA	MG-NA	4.15	2.16	2.06
22	S	209	CLA	C4B-NB	4.15	1.38	1.35
22	G	207	CLA	C1C-C2C	-4.14	1.36	1.44
22	B	843	CLA	C4B-NB	4.14	1.38	1.35
22	G	208	CLA	C1C-C2C	-4.14	1.36	1.44
22	H	204	CLA	C1C-C2C	-4.14	1.36	1.44
34	P	204	A86	C2-C1	4.14	1.41	1.35
22	A	832	CLA	C1C-C2C	-4.14	1.36	1.44
22	B	811	CLA	C4B-NB	4.14	1.38	1.35
22	B	815	CLA	C4B-NB	4.14	1.38	1.35
22	B	801	CLA	C1C-C2C	-4.14	1.36	1.44
22	T	202	CLA	C4B-NB	4.14	1.38	1.35
22	B	844	CLA	C1C-C2C	-4.14	1.36	1.44
22	T	204	CLA	C4B-NB	4.14	1.38	1.35
22	B	806	CLA	C1C-C2C	-4.14	1.36	1.44
22	B	807	CLA	MG-NA	4.13	2.16	2.06
22	A	815	CLA	C1C-C2C	-4.13	1.36	1.44
22	B	809	CLA	C1C-C2C	-4.13	1.36	1.44
22	A	845	CLA	C4B-NB	4.13	1.38	1.35
22	B	829	CLA	C4B-NB	4.13	1.38	1.35
22	B	816	CLA	C1C-C2C	-4.13	1.36	1.44
34	P	204	A86	C5-C6	4.13	1.41	1.35
22	P	208	CLA	MG-NA	4.12	2.16	2.06
31	H	201	DD6	C2-C1	4.12	1.41	1.35
22	Q	204	CLA	C4C-C3C	-4.12	1.37	1.45
31	G	212	DD6	C10-C11	4.12	1.41	1.35
22	S	208	CLA	C4B-NB	4.12	1.38	1.35
22	F	803	CLA	C4C-C3C	-4.11	1.38	1.45
22	A	850	CLA	C4B-NB	4.11	1.38	1.35
22	B	802	CLA	C4B-NB	4.11	1.38	1.35
22	F	803	CLA	C4B-NB	4.11	1.38	1.35
22	B	822	CLA	C1C-C2C	-4.11	1.36	1.44
22	R	101	CLA	C1C-C2C	-4.10	1.36	1.44
22	A	817	CLA	MG-NA	4.10	2.16	2.06
31	U	203	DD6	C10-C11	4.10	1.41	1.35
22	A	845	CLA	MG-NA	4.10	2.16	2.06
22	A	838	CLA	C1C-C2C	-4.10	1.36	1.44
31	Q	202	DD6	C5-C6	4.10	1.41	1.35
22	A	811	CLA	MG-NA	4.10	2.16	2.06
22	S	202	CLA	C4B-NB	4.10	1.38	1.35
22	A	832	CLA	C4B-NB	4.10	1.38	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	G	205	CLA	C4B-NB	4.09	1.38	1.35
22	A	853	CLA	C4B-NB	4.09	1.38	1.35
31	H	201	DD6	C10-C11	4.09	1.41	1.35
22	B	831	CLA	C1C-C2C	-4.09	1.36	1.44
22	B	801	CLA	MG-NC	4.09	2.16	2.06
31	Q	202	DD6	C2-C1	4.08	1.41	1.35
22	A	827	CLA	C4B-NB	4.08	1.38	1.35
22	S	216	CLA	C4B-NB	4.08	1.38	1.35
31	S	215	DD6	C2-C1	4.08	1.41	1.35
22	G	206	CLA	C4B-NB	4.08	1.38	1.35
22	B	803	CLA	C1C-C2C	-4.08	1.36	1.44
22	L	202	CLA	MG-NA	4.08	2.16	2.06
22	A	834	CLA	C4B-NB	4.08	1.38	1.35
33	Q	210	KC1	C4D-ND	-4.08	1.31	1.35
22	A	850	CLA	C1C-C2C	-4.08	1.36	1.44
22	B	804	CLA	C4B-NB	4.08	1.38	1.35
22	H	206	CLA	C1C-C2C	-4.08	1.36	1.44
33	P	212	KC1	C4A-C3A	-4.07	1.36	1.44
22	A	851	CLA	C4B-NB	4.07	1.38	1.35
22	A	835	CLA	MG-NA	4.07	2.15	2.06
31	Q	215	DD6	C5-C6	4.07	1.41	1.35
31	U	214	DD6	C2-C1	4.07	1.41	1.35
22	Q	208	CLA	MG-NA	4.07	2.15	2.06
22	B	822	CLA	C4B-NB	4.07	1.38	1.35
31	Q	215	DD6	C2-C1	4.07	1.41	1.35
22	O	209	CLA	MG-NA	4.06	2.15	2.06
31	P	220	DD6	C10-C11	4.06	1.41	1.35
22	H	202	CLA	C4C-C3C	-4.06	1.38	1.45
22	B	842	CLA	C4B-NB	4.06	1.38	1.35
22	B	801	CLA	MG-NA	4.06	2.15	2.06
22	P	208	CLA	C4B-NB	4.06	1.38	1.35
31	G	214	DD6	C2-C1	4.06	1.41	1.35
22	L	203	CLA	C4B-NB	4.05	1.38	1.35
22	O	208	CLA	C4B-NB	4.05	1.38	1.35
22	B	801	CLA	C4B-NB	4.05	1.38	1.35
34	Q	218	A86	C2-C1	4.05	1.41	1.35
22	A	845	CLA	C1C-C2C	-4.05	1.36	1.44
31	S	215	DD6	C10-C11	4.04	1.41	1.35
22	A	848	CLA	MG-NA	4.04	2.15	2.06
22	U	209	CLA	C1C-C2C	-4.04	1.36	1.44
31	P	205	DD6	C10-C11	4.03	1.41	1.35
22	A	820	CLA	MG-NA	4.03	2.15	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
26	S	203	LMU	O5'-C1'	4.03	1.52	1.41
22	A	830	CLA	MG-NA	4.03	2.15	2.06
22	O	204	CLA	MG-NA	4.02	2.15	2.06
33	U	213	KC1	C3B-C4B	-4.02	1.38	1.46
22	A	822	CLA	C4B-NB	4.02	1.38	1.35
22	A	825	CLA	C4B-NB	4.02	1.38	1.35
31	J	101	DD6	C10-C11	4.02	1.41	1.35
22	K	204	CLA	C1C-C2C	-4.02	1.36	1.44
31	O	214	DD6	C5-C6	4.02	1.41	1.35
31	U	203	DD6	C5-C6	4.01	1.41	1.35
33	S	210	KC1	C4A-C3A	-4.01	1.36	1.44
31	S	214	DD6	C2-C1	4.01	1.41	1.35
22	Q	216	CLA	C4B-NB	4.01	1.38	1.35
22	H	207	CLA	C1C-C2C	-4.01	1.36	1.44
31	U	212	DD6	C5-C6	4.01	1.41	1.35
22	T	209	CLA	MG-NA	4.01	2.15	2.06
31	P	220	DD6	C5-C6	4.01	1.41	1.35
31	O	214	DD6	C10-C11	4.01	1.41	1.35
31	P	220	DD6	C2-C1	4.00	1.41	1.35
22	O	203	CLA	MG-NA	4.00	2.15	2.06
33	P	203	KC1	C3B-C4B	-4.00	1.39	1.46
22	A	838	CLA	MG-NA	4.00	2.15	2.06
31	H	211	DD6	C10-C11	4.00	1.41	1.35
22	A	807	CLA	C4B-NB	4.00	1.38	1.35
22	A	814	CLA	MG-NA	4.00	2.15	2.06
33	P	212	KC1	C4D-ND	-4.00	1.31	1.35
22	A	812	CLA	C4B-NB	3.99	1.38	1.35
22	O	207	CLA	MG-NA	3.99	2.15	2.06
22	A	855	CLA	MG-NA	3.98	2.15	2.06
22	U	205	CLA	MG-NA	3.98	2.15	2.06
31	G	213	DD6	C10-C11	3.98	1.41	1.35
22	k	103	CLA	MG-NA	3.97	2.15	2.06
26	F	806	LMU	O5'-C1'	3.97	1.52	1.41
22	B	825	CLA	C4B-NB	3.97	1.38	1.35
22	A	811	CLA	C4B-NB	3.97	1.38	1.35
22	A	806	CLA	C4B-NB	3.97	1.38	1.35
22	A	830	CLA	C4B-NB	3.97	1.38	1.35
22	T	201	CLA	MG-NA	3.96	2.15	2.06
22	P	213	CLA	MG-NA	3.96	2.15	2.06
22	A	829	CLA	C4B-NB	3.96	1.38	1.35
31	U	212	DD6	C2-C1	3.96	1.41	1.35
22	O	209	CLA	C1C-C2C	-3.96	1.36	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	H	205	CLA	MG-NA	3.96	2.15	2.06
22	A	819	CLA	MG-NA	3.95	2.15	2.06
34	Q	218	A86	C5-C6	3.95	1.41	1.35
22	A	808	CLA	C4B-NB	3.95	1.38	1.35
22	B	806	CLA	C4B-NB	3.95	1.38	1.35
22	T	211	CLA	MG-NA	3.95	2.15	2.06
22	Q	207	CLA	MG-NA	3.95	2.15	2.06
22	P	207	CLA	C4B-NB	3.94	1.38	1.35
22	H	203	CLA	MG-NA	3.94	2.15	2.06
34	Q	201	A86	C2-C1	3.94	1.41	1.35
33	P	206	KC1	C3B-C4B	-3.94	1.39	1.46
31	H	211	DD6	C5-C6	3.94	1.41	1.35
22	B	813	CLA	MG-NC	3.94	2.15	2.06
22	A	824	CLA	C1C-C2C	-3.93	1.37	1.44
22	L	204	CLA	MG-NA	3.93	2.15	2.06
33	P	203	KC1	C4A-C3A	-3.93	1.37	1.44
31	O	212	DD6	C5-C6	3.93	1.41	1.35
22	G	209	CLA	C4B-NB	3.93	1.38	1.35
22	K	204	CLA	MG-NA	3.93	2.15	2.06
22	Q	213	CLA	MG-NA	3.92	2.15	2.06
33	S	212	KC1	C1B-C2B	-3.92	1.37	1.45
33	T	208	KC1	C4A-C3A	-3.91	1.37	1.44
22	A	803	CLA	C4B-NB	3.91	1.38	1.35
22	A	823	CLA	C4B-NB	3.91	1.38	1.35
31	S	205	DD6	C10-C11	3.91	1.41	1.35
33	P	219	KC1	C3B-C4B	-3.91	1.39	1.46
31	O	201	DD6	C5-C6	3.91	1.41	1.35
22	Q	211	CLA	MG-NA	3.91	2.15	2.06
31	G	211	DD6	C2-C1	3.90	1.41	1.35
31	O	214	DD6	C2-C1	3.90	1.41	1.35
22	H	213	CLA	MG-NA	3.90	2.15	2.06
22	F	804	CLA	MG-NA	3.90	2.15	2.06
31	G	211	DD6	C5-C6	3.89	1.40	1.35
22	A	853	CLA	MG-NA	3.89	2.15	2.06
31	U	203	DD6	C2-C1	3.89	1.40	1.35
22	T	207	CLA	C4B-NB	3.89	1.38	1.35
33	O	210	KC1	C3B-C4B	-3.88	1.39	1.46
22	K	205	CLA	MG-NA	3.87	2.15	2.06
31	H	212	DD6	C10-C11	3.87	1.40	1.35
22	A	848	CLA	C4C-C3C	-3.87	1.38	1.45
22	B	843	CLA	MG-NC	3.87	2.15	2.06
22	F	802	CLA	MG-NA	3.87	2.15	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	806	CLA	MG-NA	3.86	2.15	2.06
22	R	101	CLA	MG-NA	3.86	2.15	2.06
34	Q	201	A86	C5-C6	3.85	1.40	1.35
22	K	206	CLA	MG-NC	3.84	2.15	2.06
22	k	102	CLA	MG-NA	3.84	2.15	2.06
22	O	206	CLA	MG-NA	3.83	2.15	2.06
22	U	206	CLA	MG-NA	3.83	2.15	2.06
31	G	214	DD6	C10-C11	3.83	1.40	1.35
33	S	210	KC1	C1B-C2B	-3.83	1.37	1.45
31	S	214	DD6	C5-C6	3.83	1.40	1.35
33	P	206	KC1	MG-NA	3.83	2.15	2.06
34	R	105	A86	C2-C1	3.82	1.40	1.35
33	U	213	KC1	MG-NA	3.81	2.15	2.06
31	S	204	DD6	C10-C11	3.81	1.40	1.35
33	U	213	KC1	C4A-C3A	-3.81	1.37	1.44
31	P	205	DD6	C2-C1	3.81	1.40	1.35
22	A	827	CLA	MG-NC	3.81	2.15	2.06
31	O	201	DD6	C10-C11	3.81	1.40	1.35
33	P	206	KC1	C4A-C3A	-3.80	1.37	1.44
22	A	809	CLA	MG-NA	3.80	2.15	2.06
22	U	208	CLA	MG-NA	3.79	2.15	2.06
22	P	210	CLA	MG-NA	3.79	2.15	2.06
22	Q	205	CLA	MG-NA	3.79	2.15	2.06
31	O	213	DD6	C2-C1	3.79	1.40	1.35
22	J	103	CLA	MG-NA	3.79	2.15	2.06
33	P	219	KC1	C4D-ND	-3.77	1.31	1.35
22	O	202	CLA	MG-NA	3.77	2.15	2.06
22	H	202	CLA	MG-NA	3.77	2.15	2.06
22	B	830	CLA	MG-NA	3.77	2.15	2.06
22	A	804	CLA	MG-NA	3.77	2.15	2.06
22	G	208	CLA	MG-NA	3.77	2.15	2.06
31	S	211	DD6	C5-C6	3.77	1.40	1.35
33	P	219	KC1	C4A-C3A	-3.77	1.37	1.44
22	S	217	CLA	MG-NA	3.77	2.15	2.06
33	S	212	KC1	C4A-C3A	-3.76	1.37	1.44
31	O	215	DD6	C2-C1	3.76	1.40	1.35
33	T	208	KC1	C3B-C4B	-3.76	1.39	1.46
22	B	825	CLA	MG-NC	3.76	2.15	2.06
22	G	201	CLA	MG-NA	3.76	2.15	2.06
22	P	211	CLA	C4B-NB	3.76	1.38	1.35
22	A	850	CLA	MG-NA	3.76	2.15	2.06
31	J	101	DD6	C5-C6	3.75	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	P	205	DD6	C5-C6	3.75	1.40	1.35
22	O	211	CLA	MG-NA	3.74	2.15	2.06
33	S	212	KC1	C3B-C4B	-3.73	1.39	1.46
34	Q	214	A86	C5-C6	3.73	1.40	1.35
22	Q	204	CLA	MG-NA	3.72	2.15	2.06
33	P	212	KC1	MG-NA	3.72	2.15	2.06
33	O	210	KC1	C4D-ND	-3.72	1.31	1.35
33	T	208	KC1	C1B-C2B	-3.72	1.38	1.45
33	S	210	KC1	C4D-ND	-3.71	1.31	1.35
33	Q	210	KC1	C3B-C4B	-3.71	1.39	1.46
31	S	205	DD6	C5-C6	3.71	1.40	1.35
31	J	101	DD6	C2-C1	3.71	1.40	1.35
22	A	810	CLA	MG-NA	3.70	2.15	2.06
33	P	212	KC1	C3B-C4B	-3.70	1.39	1.46
22	B	847	CLA	MG-NA	3.70	2.15	2.06
31	G	213	DD6	C5-C6	3.69	1.40	1.35
31	S	211	DD6	C10-C11	3.69	1.40	1.35
31	S	204	DD6	C5-C6	3.69	1.40	1.35
22	A	818	CLA	C4B-NB	3.69	1.38	1.35
33	S	210	KC1	C3B-C4B	-3.68	1.39	1.46
31	G	213	DD6	C2-C1	3.68	1.40	1.35
31	k	101	DD6	C5-C6	3.68	1.40	1.35
34	Q	214	A86	C2-C1	3.68	1.40	1.35
33	P	212	KC1	C1B-C2B	-3.68	1.38	1.45
22	Q	203	CLA	MG-NA	3.68	2.15	2.06
22	B	845	CLA	MG-NA	3.67	2.15	2.06
33	Q	210	KC1	C1B-C2B	-3.67	1.38	1.45
31	O	201	DD6	C2-C1	3.66	1.40	1.35
22	G	204	CLA	MG-NA	3.66	2.15	2.06
22	A	831	CLA	MG-NA	3.65	2.14	2.06
22	U	204	CLA	MG-NA	3.65	2.14	2.06
26	F	807	LMU	O5'-C1'	3.65	1.51	1.41
33	P	206	KC1	C4D-ND	-3.65	1.32	1.35
33	O	210	KC1	C1B-C2B	-3.65	1.38	1.45
22	P	209	CLA	MG-NA	3.64	2.14	2.06
33	Q	210	KC1	C4A-C3A	-3.64	1.37	1.44
22	P	207	CLA	MG-NA	3.63	2.14	2.06
22	B	808	CLA	MG-NA	3.63	2.14	2.06
22	H	209	CLA	MG-NA	3.63	2.14	2.06
31	S	205	DD6	C2-C1	3.63	1.40	1.35
31	S	211	DD6	C2-C1	3.63	1.40	1.35
22	G	202	CLA	MG-NA	3.62	2.14	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	A	801	CLA	MG-NA	3.62	2.14	2.06
22	A	816	CLA	MG-NA	3.62	2.14	2.06
26	P	221	LMU	O5'-C1'	3.62	1.51	1.41
33	T	208	KC1	C4D-ND	-3.62	1.32	1.35
34	R	105	A86	C5-C6	3.62	1.40	1.35
22	G	206	CLA	MG-NC	3.61	2.14	2.06
33	Q	210	KC1	MG-NA	3.61	2.14	2.06
26	O	216	LMU	O5'-C1'	3.61	1.51	1.41
31	O	215	DD6	C10-C11	3.60	1.40	1.35
22	A	846	CLA	MG-NC	3.60	2.14	2.06
22	B	804	CLA	MG-NA	3.59	2.14	2.06
31	k	101	DD6	C10-C11	3.59	1.40	1.35
22	B	817	CLA	MG-NA	3.59	2.14	2.06
31	O	213	DD6	C5-C6	3.59	1.40	1.35
26	A	847	LMU	O5'-C1'	3.59	1.51	1.41
33	P	206	KC1	C1B-C2B	-3.58	1.38	1.45
26	F	806	LMU	O5B-C1B	3.57	1.50	1.41
22	A	808	CLA	MG-NA	3.57	2.14	2.06
22	B	802	CLA	MG-NA	3.57	2.14	2.06
22	H	207	CLA	MG-NA	3.55	2.14	2.06
22	A	856	CLA	MG-NA	3.55	2.14	2.06
22	U	209	CLA	MG-NA	3.54	2.14	2.06
22	A	854	CLA	MG-NA	3.54	2.14	2.06
22	A	828	CLA	MG-NC	3.54	2.14	2.06
33	P	203	KC1	C1B-C2B	-3.54	1.38	1.45
31	H	211	DD6	C26-C27	3.53	1.44	1.37
31	O	215	DD6	C5-C6	3.53	1.40	1.35
22	A	851	CLA	MG-NA	3.53	2.14	2.06
33	P	219	KC1	C1B-C2B	-3.52	1.38	1.45
22	B	828	CLA	MG-NA	3.52	2.14	2.06
33	P	203	KC1	C4D-ND	-3.52	1.32	1.35
22	H	208	CLA	MG-NA	3.51	2.14	2.06
22	S	209	CLA	MG-NA	3.51	2.14	2.06
22	G	215	CLA	MG-NA	3.51	2.14	2.06
31	k	101	DD6	C2-C1	3.51	1.40	1.35
34	U	202	A86	C26-C27	3.50	1.40	1.35
22	A	835	CLA	MG-NC	3.50	2.14	2.06
22	A	836	CLA	MG-NA	3.49	2.14	2.06
33	U	213	KC1	C1B-C2B	-3.49	1.38	1.45
22	T	202	CLA	MG-NA	3.47	2.14	2.06
33	U	213	KC1	C4D-ND	-3.46	1.32	1.35
22	B	814	CLA	MG-NA	3.43	2.14	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	S	204	DD6	C2-C1	3.43	1.40	1.35
26	L	206	LMU	O5'-C1'	3.42	1.50	1.41
26	K	202	LMU	O5B-C1B	3.42	1.50	1.41
31	T	213	DD6	C5-C6	3.42	1.40	1.35
26	O	216	LMU	O5B-C1B	3.42	1.50	1.41
26	M	102	LMU	O5'-C1'	3.42	1.50	1.41
31	U	203	DD6	C26-C27	3.40	1.44	1.37
31	G	214	DD6	C26-C27	3.40	1.44	1.37
26	P	221	LMU	O5B-C1B	3.40	1.50	1.41
33	S	210	KC1	MG-NA	3.39	2.14	2.06
34	R	103	A86	C26-C27	3.39	1.40	1.35
34	Q	201	A86	C26-C27	3.37	1.40	1.35
22	Q	216	CLA	MG-NA	3.37	2.14	2.06
34	Q	218	A86	C26-C27	3.37	1.40	1.35
22	T	204	CLA	MG-NA	3.37	2.14	2.06
22	S	216	CLA	MG-NA	3.37	2.14	2.06
26	A	847	LMU	O5B-C1B	3.36	1.50	1.41
26	L	206	LMU	O5B-C1B	3.35	1.50	1.41
22	U	210	CLA	MG-NA	3.35	2.14	2.06
31	U	214	DD6	C8-C6	-3.34	1.41	1.50
26	K	201	LMU	O5B-C1B	3.34	1.50	1.41
33	O	210	KC1	MG-NA	3.33	2.14	2.06
22	K	207	CLA	MG-NA	3.33	2.14	2.06
22	T	205	CLA	MG-NA	3.33	2.14	2.06
31	P	215	DD6	C26-C27	3.32	1.44	1.37
22	S	202	CLA	MG-NA	3.32	2.14	2.06
26	S	203	LMU	O5B-C1B	3.31	1.50	1.41
25	R	102	BCR	C30-C25	-3.31	1.49	1.53
31	K	208	DD6	C26-C27	3.31	1.43	1.37
22	A	826	CLA	MG-NC	3.30	2.14	2.06
31	U	214	DD6	C26-C27	3.30	1.43	1.37
33	T	208	KC1	MG-NC	3.29	2.14	2.06
22	A	802	CLA	MG-NA	3.29	2.14	2.06
22	A	803	CLA	MG-NA	3.29	2.14	2.06
31	Q	202	DD6	C26-C27	3.28	1.43	1.37
22	B	829	CLA	MG-NC	3.28	2.14	2.06
33	S	212	KC1	MG-NA	3.28	2.14	2.06
33	T	208	KC1	MG-NB	3.27	2.12	2.05
22	B	816	CLA	MG-NA	3.26	2.14	2.06
31	O	213	DD6	C26-C27	3.26	1.43	1.37
22	A	851	CLA	MG-NC	3.25	2.14	2.06
34	P	204	A86	C26-C27	3.25	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	H	206	CLA	MG-NC	3.25	2.14	2.06
31	G	212	DD6	C26-C27	3.25	1.43	1.37
32	P	217	LMG	C4-C5	3.25	1.59	1.53
25	B	836	BCR	C1-C6	-3.24	1.49	1.53
26	K	201	LMU	O5'-C1'	3.24	1.50	1.41
31	O	213	DD6	C10-C11	3.24	1.40	1.35
26	F	807	LMU	O5B-C1B	3.23	1.50	1.41
22	Q	206	CLA	MG-NC	3.23	2.13	2.06
22	H	204	CLA	MG-NA	3.22	2.13	2.06
31	P	218	DD6	C26-C27	3.22	1.43	1.37
22	S	206	CLA	MG-NA	3.22	2.13	2.06
22	B	810	CLA	MG-NA	3.21	2.13	2.06
22	B	818	CLA	MG-NA	3.21	2.13	2.06
22	G	205	CLA	MG-NA	3.20	2.13	2.06
32	P	217	LMG	C4-C3	3.19	1.60	1.52
31	H	201	DD6	C24-C1	-3.18	1.39	1.45
31	T	213	DD6	C2-C1	3.18	1.40	1.35
22	O	208	CLA	MG-NA	3.18	2.13	2.06
25	A	844	BCR	C1-C6	-3.18	1.49	1.53
33	P	219	KC1	MG-NA	3.18	2.13	2.06
31	T	213	DD6	C26-C27	3.17	1.43	1.37
22	B	831	CLA	MG-NC	3.16	2.13	2.06
31	O	212	DD6	C26-C27	3.16	1.43	1.37
31	S	215	DD6	C26-C27	3.15	1.43	1.37
22	G	207	CLA	MG-NA	3.14	2.13	2.06
26	M	102	LMU	O5B-C1B	3.14	1.49	1.41
31	H	212	DD6	C26-C27	3.14	1.43	1.37
22	B	820	CLA	MG-NA	3.13	2.13	2.06
22	L	203	CLA	MG-NA	3.13	2.13	2.06
22	A	806	CLA	MG-NA	3.12	2.13	2.06
31	P	220	DD6	C26-C27	3.12	1.43	1.37
26	K	202	LMU	O5'-C1'	3.11	1.49	1.41
27	A	849	CL0	MG-ND	-3.11	1.99	2.05
22	B	830	CLA	MG-NC	3.11	2.13	2.06
30	S	201	SQD	O48-C23	3.11	1.42	1.33
22	B	824	CLA	MG-NC	3.10	2.13	2.06
25	R	102	BCR	C1-C6	-3.09	1.49	1.53
22	A	845	CLA	MG-NC	3.08	2.13	2.06
31	T	212	DD6	C26-C27	3.08	1.43	1.37
34	R	103	A86	C5-C6	3.07	1.39	1.35
31	O	201	DD6	C26-C27	3.07	1.43	1.37
33	P	203	KC1	MG-NC	3.06	2.13	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	A	833	CLA	MG-NC	3.06	2.13	2.06
22	B	809	CLA	MG-NC	3.06	2.13	2.06
31	T	213	DD6	C10-C11	3.05	1.39	1.35
22	P	211	CLA	MG-NA	3.03	2.13	2.06
22	B	842	CLA	MG-NC	3.03	2.13	2.06
22	T	207	CLA	MG-NA	3.03	2.13	2.06
22	A	848	CLA	MG-NC	3.03	2.13	2.06
22	A	822	CLA	MG-NA	3.02	2.13	2.06
22	S	208	CLA	MG-NA	3.01	2.13	2.06
31	Q	215	DD6	C26-C27	3.00	1.43	1.37
22	F	803	CLA	MG-NC	2.99	2.13	2.06
31	U	212	DD6	C26-C27	2.99	1.43	1.37
30	B	846	SQD	O48-C23	2.98	1.42	1.33
22	G	210	CLA	MG-NC	2.98	2.13	2.06
25	J	104	BCR	C30-C25	-2.98	1.49	1.53
22	Q	212	CLA	MG-NC	2.97	2.13	2.06
31	T	213	DD6	C8-C6	-2.97	1.39	1.45
22	F	802	CLA	MG-NC	2.96	2.13	2.06
31	S	205	DD6	C26-C27	2.94	1.43	1.37
31	k	101	DD6	C26-C27	2.93	1.43	1.37
22	G	209	CLA	MG-NA	2.93	2.13	2.06
22	B	811	CLA	MG-NC	2.93	2.13	2.06
22	A	805	CLA	MG-NC	2.93	2.13	2.06
22	K	203	CLA	MG-NC	2.93	2.13	2.06
22	B	822	CLA	MG-NC	2.92	2.13	2.06
25	B	840	BCR	C30-C25	-2.91	1.49	1.53
31	O	215	DD6	C26-C27	2.91	1.43	1.37
31	G	211	DD6	C26-C27	2.90	1.43	1.37
22	T	201	CLA	C1D-C2D	-2.90	1.39	1.45
25	B	838	BCR	C1-C6	-2.90	1.49	1.53
25	M	101	BCR	C30-C25	-2.89	1.49	1.53
22	P	214	CLA	MG-NC	2.89	2.13	2.06
22	A	824	CLA	MG-NC	2.89	2.13	2.06
22	A	838	CLA	MG-NC	2.89	2.13	2.06
31	G	213	DD6	C26-C27	2.89	1.43	1.37
25	A	842	BCR	C30-C25	-2.88	1.49	1.53
34	R	105	A86	C26-C27	2.88	1.39	1.35
22	U	209	CLA	MG-ND	2.87	2.11	2.05
25	L	201	BCR	C1-C6	-2.87	1.49	1.53
31	H	201	DD6	C25-C26	-2.85	1.34	1.43
31	J	101	DD6	C26-C27	2.85	1.43	1.37
25	A	842	BCR	C1-C6	-2.84	1.49	1.53

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	807	CLA	MG-NC	2.83	2.13	2.06
31	H	201	DD6	C26-C27	2.82	1.42	1.37
34	R	103	A86	C8-C6	-2.82	1.39	1.45
22	B	808	CLA	MG-NC	2.82	2.13	2.06
22	A	821	CLA	MG-NC	2.82	2.13	2.06
25	A	843	BCR	C1-C6	-2.81	1.49	1.53
25	F	805	BCR	C1-C6	-2.81	1.49	1.53
22	B	823	CLA	MG-NC	2.80	2.12	2.06
22	B	833	CLA	MG-NC	2.80	2.12	2.06
30	B	846	SQD	O47-C7	2.80	1.42	1.34
25	k	104	BCR	C1-C6	-2.79	1.49	1.53
25	L	201	BCR	C30-C25	-2.78	1.49	1.53
33	S	210	KC1	C2A-C3A	2.78	1.42	1.37
25	I	102	BCR	C1-C6	-2.78	1.49	1.53
22	B	809	CLA	CAB-C3B	-2.78	1.45	1.51
22	A	818	CLA	MG-NA	2.77	2.12	2.06
34	Q	214	A86	C26-C27	2.77	1.39	1.35
30	S	201	SQD	O47-C7	2.77	1.42	1.34
22	B	803	CLA	MG-NC	2.77	2.12	2.06
31	S	204	DD6	C26-C27	2.75	1.42	1.37
25	M	101	BCR	C1-C6	-2.75	1.50	1.53
25	I	101	BCR	C1-C6	-2.75	1.50	1.53
22	S	207	CLA	MG-NC	2.75	2.12	2.06
22	O	205	CLA	MG-NC	2.75	2.12	2.06
22	B	826	CLA	MG-NC	2.75	2.12	2.06
25	B	839	BCR	C1-C6	-2.74	1.50	1.53
22	k	103	CLA	C1D-C2D	-2.74	1.39	1.45
22	A	815	CLA	MG-NC	2.74	2.12	2.06
25	B	840	BCR	C1-C6	-2.73	1.50	1.53
22	A	832	CLA	MG-NC	2.73	2.12	2.06
22	A	836	CLA	MG-NC	2.72	2.12	2.06
25	I	102	BCR	C30-C25	-2.72	1.50	1.53
34	R	103	A86	C2-C1	2.71	1.39	1.35
31	P	205	DD6	C26-C27	2.71	1.42	1.37
22	G	203	CLA	MG-NC	2.69	2.12	2.06
31	S	211	DD6	C13-C11	-2.69	1.40	1.45
22	U	207	CLA	MG-NA	2.69	2.12	2.06
31	S	214	DD6	C26-C27	2.68	1.42	1.37
32	P	202	LMG	C4-C5	2.67	1.58	1.53
25	F	801	BCR	C1-C6	-2.66	1.50	1.53
27	A	849	CL0	C3D-C4D	-2.66	1.38	1.44
31	S	211	DD6	C24-C1	-2.66	1.40	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	A	820	CLA	C3D-C4D	-2.65	1.38	1.44
22	B	845	CLA	MG-NC	2.65	2.12	2.06
31	O	213	DD6	C8-C6	-2.64	1.40	1.45
33	U	213	KC1	C2A-C3A	2.64	1.42	1.37
33	P	203	KC1	C2A-C3A	2.64	1.42	1.37
22	A	820	CLA	MG-NC	2.64	2.12	2.06
27	A	849	CL0	C1D-C2D	-2.63	1.40	1.45
22	A	812	CLA	MG-NC	2.63	2.12	2.06
31	O	214	DD6	C26-C27	2.63	1.42	1.37
22	B	827	CLA	C1D-C2D	-2.62	1.40	1.45
25	B	839	BCR	C30-C25	-2.62	1.50	1.53
25	L	205	BCR	C30-C25	-2.62	1.50	1.53
22	R	101	CLA	MG-NC	2.62	2.12	2.06
31	k	101	DD6	C8-C6	-2.61	1.40	1.45
22	G	210	CLA	C3D-C4D	-2.61	1.38	1.44
22	K	203	CLA	C4D-CHA	2.61	1.47	1.38
22	Q	209	CLA	MG-NC	2.60	2.12	2.06
25	J	104	BCR	C1-C6	-2.59	1.50	1.53
22	O	209	CLA	C3D-C4D	-2.59	1.38	1.44
22	P	216	CLA	MG-NC	2.58	2.12	2.06
31	O	215	DD6	C24-C1	-2.58	1.40	1.45
22	B	843	CLA	C3D-C4D	-2.58	1.38	1.44
22	B	816	CLA	C1D-C2D	-2.58	1.40	1.45
22	G	206	CLA	C3D-C4D	-2.57	1.38	1.44
22	K	203	CLA	C1D-C2D	-2.57	1.40	1.45
22	k	103	CLA	MG-NC	2.57	2.12	2.06
22	B	816	CLA	C3D-C4D	-2.57	1.38	1.44
22	B	845	CLA	C3D-C4D	-2.57	1.38	1.44
22	B	805	CLA	MG-NC	2.56	2.12	2.06
22	R	101	CLA	C1D-C2D	-2.56	1.40	1.45
22	Q	206	CLA	C3D-C4D	-2.56	1.38	1.44
22	O	209	CLA	C1D-C2D	-2.55	1.40	1.45
31	S	204	DD6	C24-C1	-2.55	1.40	1.45
22	A	830	CLA	MG-NC	2.55	2.12	2.06
25	B	838	BCR	C30-C25	-2.54	1.50	1.53
31	k	101	DD6	C13-C11	-2.54	1.40	1.45
33	T	208	KC1	C2A-C3A	2.53	1.42	1.37
22	B	806	CLA	C3D-C4D	-2.53	1.38	1.44
34	Q	214	A86	C24-C1	-2.52	1.40	1.45
22	B	844	CLA	MG-NC	2.52	2.12	2.06
22	A	819	CLA	MG-NC	2.52	2.12	2.06
22	B	821	CLA	C3D-C4D	-2.52	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	B	832	CLA	C3D-C4D	-2.52	1.38	1.44
31	G	211	DD6	C24-C1	-2.52	1.40	1.45
22	A	813	CLA	C3D-C4D	-2.51	1.38	1.44
22	B	821	CLA	C1D-C2D	-2.51	1.40	1.45
25	B	837	BCR	C1-C6	-2.51	1.50	1.53
22	P	211	CLA	C3D-C4D	-2.51	1.38	1.44
22	H	210	CLA	MG-NC	2.51	2.12	2.06
22	U	208	CLA	C3D-C4D	-2.51	1.38	1.44
25	L	205	BCR	C1-C6	-2.51	1.50	1.53
22	L	202	CLA	MG-NC	2.51	2.12	2.06
34	R	105	A86	C24-C1	-2.50	1.40	1.45
22	B	820	CLA	C3D-C4D	-2.50	1.38	1.44
22	S	206	CLA	C3D-C4D	-2.50	1.38	1.44
31	T	213	DD6	C13-C11	-2.50	1.40	1.45
22	P	213	CLA	MG-NC	2.50	2.12	2.06
22	O	205	CLA	C3D-C4D	-2.49	1.38	1.44
31	J	101	DD6	C24-C1	-2.49	1.40	1.45
22	B	813	CLA	C3D-C4D	-2.49	1.38	1.44
22	B	801	CLA	C1D-C2D	-2.49	1.40	1.45
31	O	213	DD6	C13-C11	-2.49	1.40	1.45
31	U	214	DD6	C5-C6	2.49	1.41	1.35
22	Q	211	CLA	C3D-C4D	-2.49	1.38	1.44
31	k	101	DD6	C24-C1	-2.49	1.40	1.45
31	P	205	DD6	C13-C11	-2.49	1.40	1.45
22	G	207	CLA	C3D-C4D	-2.48	1.38	1.44
22	B	833	CLA	C3D-C4D	-2.48	1.38	1.44
22	B	818	CLA	MG-NC	2.48	2.12	2.06
22	A	828	CLA	C3D-C4D	-2.48	1.38	1.44
22	Q	211	CLA	MG-NC	2.48	2.12	2.06
22	B	823	CLA	C3D-C4D	-2.48	1.38	1.44
22	B	804	CLA	C3D-C4D	-2.48	1.38	1.44
22	B	818	CLA	C3D-C4D	-2.48	1.38	1.44
22	L	203	CLA	C3D-C4D	-2.48	1.38	1.44
22	A	830	CLA	C3D-C4D	-2.48	1.38	1.44
22	B	824	CLA	C3D-C4D	-2.48	1.38	1.44
22	A	803	CLA	C3D-C4D	-2.48	1.38	1.44
32	P	217	LMG	O4-C4	-2.48	1.37	1.43
22	A	831	CLA	C3D-C4D	-2.48	1.38	1.44
22	B	811	CLA	C3D-C4D	-2.47	1.38	1.44
22	B	812	CLA	C3D-C4D	-2.47	1.38	1.44
22	A	809	CLA	C3D-C4D	-2.47	1.38	1.44
22	B	830	CLA	C3D-C4D	-2.47	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	A	807	CLA	MG-NC	2.47	2.12	2.06
22	Q	209	CLA	C3D-C4D	-2.47	1.38	1.44
22	H	202	CLA	C3D-C4D	-2.47	1.38	1.44
22	B	827	CLA	MG-NC	2.47	2.12	2.06
22	U	211	CLA	MG-NC	2.47	2.12	2.06
25	F	805	BCR	C30-C25	-2.46	1.50	1.53
22	T	203	CLA	MG-NC	2.46	2.12	2.06
22	A	827	CLA	C1D-C2D	-2.46	1.40	1.45
22	A	838	CLA	C1D-C2D	-2.46	1.40	1.45
33	U	213	KC1	MG-NC	2.46	2.12	2.06
22	T	207	CLA	C3D-C4D	-2.46	1.38	1.44
22	B	802	CLA	MG-NC	2.46	2.12	2.06
22	A	829	CLA	MG-NC	2.46	2.12	2.06
22	A	827	CLA	C3D-C4D	-2.46	1.38	1.44
22	G	215	CLA	C3D-C4D	-2.46	1.38	1.44
33	U	213	KC1	C1A-CHA	2.46	1.47	1.40
22	Q	208	CLA	MG-NC	2.45	2.12	2.06
31	O	213	DD6	C24-C1	-2.45	1.40	1.45
22	O	207	CLA	C3D-C4D	-2.45	1.38	1.44
22	T	210	CLA	MG-NC	2.45	2.12	2.06
22	B	807	CLA	C1D-C2D	-2.45	1.40	1.45
22	R	104	CLA	C3D-C4D	-2.45	1.38	1.44
22	B	809	CLA	C3D-C4D	-2.45	1.38	1.44
22	H	206	CLA	C3D-C4D	-2.44	1.38	1.44
22	L	204	CLA	C3D-C4D	-2.44	1.38	1.44
22	B	805	CLA	C3D-C4D	-2.44	1.38	1.44
22	k	102	CLA	C3D-C4D	-2.44	1.38	1.44
22	S	209	CLA	C3D-C4D	-2.44	1.38	1.44
22	P	208	CLA	C3D-C4D	-2.44	1.38	1.44
22	Q	207	CLA	MG-NC	2.44	2.12	2.06
22	U	207	CLA	C3D-C4D	-2.44	1.38	1.44
22	A	813	CLA	MG-NC	2.44	2.12	2.06
22	A	846	CLA	C3D-C4D	-2.44	1.38	1.44
22	T	201	CLA	MG-NC	2.44	2.12	2.06
22	O	208	CLA	C3D-C4D	-2.44	1.38	1.44
22	A	802	CLA	C3D-C4D	-2.44	1.38	1.44
25	A	844	BCR	C30-C25	-2.44	1.50	1.53
25	B	837	BCR	C30-C25	-2.44	1.50	1.53
22	A	810	CLA	C3D-C4D	-2.44	1.38	1.44
22	Q	207	CLA	C3D-C4D	-2.44	1.38	1.44
31	G	214	DD6	C8-C6	-2.44	1.40	1.45
22	A	802	CLA	MG-NC	2.43	2.12	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
33	P	206	KC1	MG-NC	2.43	2.12	2.06
22	B	814	CLA	C3D-C4D	-2.43	1.38	1.44
22	O	202	CLA	C3D-C4D	-2.43	1.38	1.44
22	T	205	CLA	C3D-C4D	-2.43	1.38	1.44
25	B	836	BCR	C30-C25	-2.43	1.50	1.53
22	K	207	CLA	C3D-C4D	-2.43	1.38	1.44
22	F	804	CLA	C3D-C4D	-2.43	1.38	1.44
22	A	838	CLA	C3D-C4D	-2.43	1.38	1.44
22	B	810	CLA	C3D-C4D	-2.43	1.38	1.44
22	A	818	CLA	C3D-C4D	-2.42	1.38	1.44
25	k	104	BCR	C30-C25	-2.42	1.50	1.53
22	P	207	CLA	C3D-C4D	-2.42	1.38	1.44
22	H	204	CLA	C3D-C4D	-2.42	1.38	1.44
22	B	806	CLA	MG-NC	2.42	2.12	2.06
22	P	216	CLA	C3D-C4D	-2.42	1.38	1.44
24	A	840	LHG	O7-C5	-2.42	1.40	1.46
22	Q	212	CLA	C1D-C2D	-2.42	1.40	1.45
22	Q	216	CLA	C3D-C4D	-2.41	1.38	1.44
22	J	103	CLA	C3D-C4D	-2.41	1.38	1.44
22	A	825	CLA	C3D-C4D	-2.41	1.38	1.44
22	U	206	CLA	C3D-C4D	-2.41	1.38	1.44
22	U	210	CLA	C3D-C4D	-2.41	1.38	1.44
22	A	815	CLA	C3D-C4D	-2.41	1.38	1.44
22	B	817	CLA	C3D-C4D	-2.41	1.38	1.44
22	Q	205	CLA	C3D-C4D	-2.41	1.38	1.44
22	Q	213	CLA	C3D-C4D	-2.41	1.38	1.44
22	Q	203	CLA	C3D-C4D	-2.41	1.38	1.44
22	A	822	CLA	C3D-C4D	-2.41	1.38	1.44
31	P	205	DD6	C24-C1	-2.41	1.40	1.45
22	T	204	CLA	C3D-C4D	-2.41	1.38	1.44
22	A	801	CLA	C1D-C2D	-2.41	1.40	1.45
22	A	826	CLA	C3D-C4D	-2.40	1.38	1.44
22	B	815	CLA	C3D-C4D	-2.40	1.38	1.44
22	S	216	CLA	C3D-C4D	-2.40	1.38	1.44
22	A	854	CLA	C3D-C4D	-2.40	1.38	1.44
22	H	207	CLA	C3D-C4D	-2.40	1.38	1.44
22	K	205	CLA	C3D-C4D	-2.40	1.38	1.44
22	H	203	CLA	C3D-C4D	-2.40	1.38	1.44
22	P	210	CLA	C3D-C4D	-2.40	1.38	1.44
31	S	204	DD6	C8-C6	-2.40	1.40	1.45
22	A	817	CLA	C3D-C4D	-2.40	1.38	1.44
22	S	202	CLA	C3D-C4D	-2.40	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	A	804	CLA	C3D-C4D	-2.40	1.38	1.44
22	A	853	CLA	C3D-C4D	-2.40	1.38	1.44
22	S	208	CLA	C3D-C4D	-2.40	1.38	1.44
22	P	208	CLA	MG-NC	2.40	2.12	2.06
22	B	847	CLA	C3D-C4D	-2.39	1.38	1.44
22	U	205	CLA	C3D-C4D	-2.39	1.38	1.44
22	P	213	CLA	C3D-C4D	-2.39	1.38	1.44
22	O	206	CLA	C3D-C4D	-2.39	1.38	1.44
22	O	203	CLA	C3D-C4D	-2.39	1.38	1.44
22	H	208	CLA	C3D-C4D	-2.39	1.38	1.44
31	G	214	DD6	C13-C11	-2.39	1.40	1.45
22	G	209	CLA	C1D-C2D	-2.39	1.40	1.45
22	B	824	CLA	C1D-C2D	-2.39	1.40	1.45
22	L	204	CLA	MG-NC	2.39	2.11	2.06
22	P	209	CLA	C3D-C4D	-2.39	1.38	1.44
22	T	203	CLA	C3D-C4D	-2.39	1.38	1.44
22	H	210	CLA	C3D-C4D	-2.39	1.38	1.44
22	A	823	CLA	C1D-C2D	-2.39	1.40	1.45
22	A	819	CLA	C3D-C4D	-2.39	1.38	1.44
22	O	204	CLA	MG-NC	2.39	2.11	2.06
22	A	805	CLA	C3D-C4D	-2.38	1.38	1.44
22	B	826	CLA	C3D-C4D	-2.38	1.38	1.44
22	S	217	CLA	C3D-C4D	-2.38	1.38	1.44
31	O	201	DD6	C8-C6	-2.38	1.40	1.45
31	T	212	DD6	C24-C1	-2.38	1.40	1.45
22	B	825	CLA	C3D-C4D	-2.38	1.38	1.44
22	S	207	CLA	C3D-C4D	-2.38	1.38	1.44
33	T	208	KC1	C1A-CHA	2.38	1.46	1.40
22	A	816	CLA	C3D-C4D	-2.38	1.38	1.44
22	P	211	CLA	C1D-C2D	-2.38	1.40	1.45
22	A	806	CLA	C3D-C4D	-2.38	1.38	1.44
22	T	209	CLA	C3D-C4D	-2.38	1.38	1.44
22	G	206	CLA	C1D-C2D	-2.38	1.40	1.45
31	O	214	DD6	C24-C1	-2.38	1.40	1.45
22	G	209	CLA	C3D-C4D	-2.38	1.38	1.44
22	O	204	CLA	C3D-C4D	-2.38	1.38	1.44
31	P	205	DD6	C8-C6	-2.38	1.40	1.45
22	G	205	CLA	C3D-C4D	-2.38	1.38	1.44
22	A	823	CLA	C3D-C4D	-2.38	1.38	1.44
22	K	204	CLA	C3D-C4D	-2.38	1.38	1.44
22	A	807	CLA	C3D-C4D	-2.38	1.38	1.44
22	A	811	CLA	C3D-C4D	-2.38	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	O	215	DD6	C8-C6	-2.38	1.40	1.45
22	B	808	CLA	C3D-C4D	-2.38	1.38	1.44
25	A	841	BCR	C1-C6	-2.38	1.50	1.53
22	Q	204	CLA	C3D-C4D	-2.38	1.38	1.44
22	U	211	CLA	C3D-C4D	-2.38	1.38	1.44
24	G	216	LHG	P-O6	2.37	1.68	1.59
22	B	844	CLA	C1D-C2D	-2.37	1.40	1.45
34	R	105	A86	C8-C6	-2.37	1.40	1.45
22	A	835	CLA	C3D-C4D	-2.37	1.38	1.44
22	B	829	CLA	C3D-C4D	-2.37	1.38	1.44
22	B	818	CLA	C1D-C2D	-2.37	1.40	1.45
25	I	101	BCR	C30-C25	-2.37	1.50	1.53
31	H	212	DD6	C13-C11	-2.37	1.40	1.45
33	P	206	KC1	C1A-CHA	2.37	1.46	1.40
33	O	210	KC1	MG-NC	2.37	2.11	2.06
22	G	204	CLA	C3D-C4D	-2.37	1.38	1.44
22	K	206	CLA	C3D-C4D	-2.37	1.38	1.44
31	S	211	DD6	C8-C6	-2.37	1.40	1.45
33	S	210	KC1	C1A-CHA	2.37	1.46	1.40
31	G	213	DD6	C24-C1	-2.37	1.40	1.45
31	S	214	DD6	C9-C8	2.37	1.40	1.34
22	B	844	CLA	C3D-C4D	-2.37	1.38	1.44
22	L	202	CLA	C3D-C4D	-2.37	1.38	1.44
33	S	210	KC1	C1B-NB	-2.37	1.34	1.37
33	P	212	KC1	C1A-CHA	2.37	1.46	1.40
22	H	209	CLA	C3D-C4D	-2.37	1.38	1.44
22	B	828	CLA	MG-NC	2.36	2.11	2.06
22	U	204	CLA	C3D-C4D	-2.36	1.38	1.44
22	O	206	CLA	MG-NC	2.36	2.11	2.06
22	A	829	CLA	C3D-C4D	-2.36	1.38	1.44
22	B	828	CLA	C3D-C4D	-2.36	1.38	1.44
22	A	832	CLA	C3D-C4D	-2.36	1.38	1.44
22	B	801	CLA	C3D-C4D	-2.36	1.38	1.44
31	G	213	DD6	C13-C11	-2.36	1.40	1.45
22	U	204	CLA	MG-NC	2.36	2.11	2.06
22	A	848	CLA	C3D-C4D	-2.36	1.38	1.44
31	G	213	DD6	C8-C6	-2.35	1.40	1.45
22	B	819	CLA	C3D-C4D	-2.35	1.38	1.44
22	A	814	CLA	C3D-C4D	-2.35	1.38	1.44
22	k	103	CLA	C3D-C4D	-2.35	1.38	1.44
33	P	212	KC1	C2A-C3A	2.35	1.42	1.37
22	A	825	CLA	MG-NC	2.35	2.11	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	S	204	DD6	C13-C11	-2.35	1.40	1.45
22	A	836	CLA	C3D-C4D	-2.35	1.38	1.44
22	A	850	CLA	C3D-C4D	-2.35	1.38	1.44
22	B	834	CLA	C1D-C2D	-2.35	1.40	1.45
22	B	802	CLA	C1D-C2D	-2.35	1.40	1.45
22	B	812	CLA	MG-NC	2.35	2.11	2.06
22	A	855	CLA	C3D-C4D	-2.35	1.38	1.44
22	O	211	CLA	C3D-C4D	-2.35	1.38	1.44
22	T	210	CLA	C3D-C4D	-2.35	1.38	1.44
22	T	202	CLA	C3D-C4D	-2.35	1.38	1.44
22	A	851	CLA	C3D-C4D	-2.35	1.38	1.44
22	A	809	CLA	MG-NC	2.35	2.11	2.06
22	A	831	CLA	MG-NC	2.35	2.11	2.06
31	G	211	DD6	C8-C6	-2.34	1.40	1.45
22	B	827	CLA	C3D-C4D	-2.34	1.38	1.44
33	P	203	KC1	C1A-CHA	2.34	1.46	1.40
22	G	203	CLA	C1D-C2D	-2.34	1.40	1.45
22	H	205	CLA	C3D-C4D	-2.34	1.38	1.44
22	A	808	CLA	C3D-C4D	-2.34	1.38	1.44
22	Q	208	CLA	C1D-C2D	-2.34	1.40	1.45
22	A	821	CLA	C1D-C2D	-2.34	1.40	1.45
22	O	211	CLA	MG-NC	2.34	2.11	2.06
22	A	834	CLA	C3D-C4D	-2.33	1.38	1.44
22	K	205	CLA	MG-NC	2.33	2.11	2.06
22	B	843	CLA	C1D-C2D	-2.33	1.40	1.45
22	B	832	CLA	MG-NC	2.33	2.11	2.06
33	U	213	KC1	C1B-NB	-2.33	1.34	1.37
22	A	814	CLA	MG-NC	2.33	2.11	2.06
22	Q	208	CLA	C3D-C4D	-2.33	1.38	1.44
31	S	214	DD6	C24-C1	-2.33	1.40	1.45
22	H	203	CLA	MG-NC	2.33	2.11	2.06
22	F	802	CLA	C3D-C4D	-2.33	1.38	1.44
22	B	847	CLA	C1D-C2D	-2.33	1.40	1.45
22	F	802	CLA	C1D-C2D	-2.33	1.40	1.45
22	B	834	CLA	C3D-C4D	-2.33	1.38	1.44
22	B	831	CLA	C3D-C4D	-2.33	1.38	1.44
22	A	825	CLA	C1D-C2D	-2.32	1.40	1.45
31	Q	215	DD6	C24-C1	-2.32	1.41	1.45
22	B	829	CLA	C1D-C2D	-2.32	1.40	1.45
31	S	205	DD6	C8-C6	-2.32	1.41	1.45
22	B	805	CLA	C1D-C2D	-2.32	1.40	1.45
22	A	833	CLA	C3D-C4D	-2.32	1.38	1.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	A	824	CLA	C3D-C4D	-2.32	1.38	1.44
22	G	201	CLA	C3D-C4D	-2.32	1.38	1.44
22	B	819	CLA	C1D-C2D	-2.32	1.40	1.45
22	A	856	CLA	C3D-C4D	-2.32	1.38	1.44
22	B	822	CLA	C3D-C4D	-2.32	1.38	1.44
22	A	817	CLA	C1D-C2D	-2.32	1.40	1.45
22	G	202	CLA	C3D-C4D	-2.32	1.38	1.44
25	F	801	BCR	C30-C25	-2.32	1.50	1.53
31	O	201	DD6	C24-C1	-2.32	1.41	1.45
22	G	210	CLA	C1D-C2D	-2.32	1.40	1.45
22	A	806	CLA	C1D-C2D	-2.32	1.40	1.45
22	F	804	CLA	MG-NC	2.32	2.11	2.06
30	B	846	SQD	O3-C3	-2.32	1.37	1.43
22	R	101	CLA	C3D-C4D	-2.31	1.39	1.44
33	P	206	KC1	C2A-C3A	2.31	1.42	1.37
22	G	204	CLA	C1D-C2D	-2.31	1.40	1.45
31	O	212	DD6	C24-C1	-2.31	1.41	1.45
31	H	211	DD6	C13-C11	-2.31	1.41	1.45
31	J	101	DD6	C13-C11	-2.31	1.41	1.45
22	O	204	CLA	C1D-C2D	-2.30	1.40	1.45
22	H	205	CLA	C1D-C2D	-2.30	1.40	1.45
22	G	208	CLA	C3D-C4D	-2.30	1.39	1.44
22	A	846	CLA	C1D-C2D	-2.30	1.40	1.45
22	B	819	CLA	MG-NC	2.30	2.11	2.06
31	S	205	DD6	C24-C1	-2.30	1.41	1.45
22	A	812	CLA	C3D-C4D	-2.30	1.39	1.44
25	A	841	BCR	C30-C25	-2.30	1.50	1.53
22	B	822	CLA	C1D-C2D	-2.30	1.40	1.45
25	A	843	BCR	C30-C25	-2.29	1.50	1.53
22	A	819	CLA	C1D-C2D	-2.29	1.40	1.45
22	G	203	CLA	C3D-C4D	-2.29	1.39	1.44
31	P	220	DD6	C8-C6	-2.29	1.41	1.45
22	T	206	CLA	C3D-C4D	-2.29	1.39	1.44
31	O	201	DD6	C13-C11	-2.29	1.41	1.45
31	P	220	DD6	C13-C11	-2.29	1.41	1.45
31	S	215	DD6	C8-C6	-2.29	1.41	1.45
33	Q	210	KC1	C1A-CHA	2.29	1.46	1.40
22	Q	212	CLA	C3D-C4D	-2.29	1.39	1.44
22	P	209	CLA	C1D-C2D	-2.28	1.40	1.45
22	B	807	CLA	C3D-C4D	-2.28	1.39	1.44
22	B	803	CLA	C1D-C2D	-2.28	1.40	1.45
22	B	821	CLA	MG-NC	2.28	2.11	2.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	A	830	CLA	C1D-C2D	-2.28	1.40	1.45
22	G	205	CLA	C1D-C2D	-2.28	1.40	1.45
22	A	811	CLA	C1D-C2D	-2.28	1.40	1.45
22	Q	211	CLA	C1D-C2D	-2.28	1.40	1.45
22	O	209	CLA	CHC-C1C	2.28	1.40	1.35
31	S	205	DD6	C13-C11	-2.28	1.41	1.45
22	B	842	CLA	C3D-C4D	-2.28	1.39	1.44
26	K	202	LMU	O5B-C5B	2.28	1.49	1.44
22	H	205	CLA	MG-NC	2.28	2.11	2.06
22	B	806	CLA	C1D-C2D	-2.28	1.40	1.45
22	B	808	CLA	C1D-C2D	-2.28	1.40	1.45
22	R	104	CLA	C1D-C2D	-2.28	1.40	1.45
26	S	203	LMU	O5'-C5'	2.27	1.49	1.44
22	A	816	CLA	MG-NC	2.27	2.11	2.06
22	K	204	CLA	MG-NC	2.27	2.11	2.06
22	P	214	CLA	C3D-C4D	-2.27	1.39	1.44
22	B	803	CLA	C3D-C4D	-2.27	1.39	1.44
31	H	201	DD6	C13-C11	-2.27	1.41	1.45
34	R	103	A86	C24-C1	-2.27	1.41	1.45
22	F	803	CLA	C3D-C4D	-2.27	1.39	1.44
22	H	213	CLA	C3D-C4D	-2.27	1.39	1.44
22	A	801	CLA	MG-NC	2.27	2.11	2.06
22	B	804	CLA	MG-NC	2.27	2.11	2.06
32	S	213	LMG	O7-C8	-2.27	1.40	1.46
22	A	828	CLA	C1D-C2D	-2.27	1.40	1.45
31	U	203	DD6	C8-C6	-2.26	1.41	1.45
22	T	211	CLA	C3D-C4D	-2.26	1.39	1.44
30	B	846	SQD	O2-C2	-2.26	1.37	1.43
26	S	203	LMU	O5B-C5B	2.26	1.49	1.44
34	Q	201	A86	C24-C1	-2.26	1.41	1.45
22	T	201	CLA	C3D-C4D	-2.26	1.39	1.44
22	Q	209	CLA	C1D-C2D	-2.26	1.40	1.45
31	H	212	DD6	C8-C6	-2.26	1.41	1.45
22	A	807	CLA	C1D-C2D	-2.26	1.40	1.45
22	A	801	CLA	C3D-C4D	-2.26	1.39	1.44
31	H	212	DD6	C24-C1	-2.26	1.41	1.45
33	P	206	KC1	C1B-NB	-2.26	1.35	1.37
22	S	206	CLA	C1D-C2D	-2.25	1.40	1.45
22	A	804	CLA	C1D-C2D	-2.25	1.40	1.45
31	H	211	DD6	C8-C6	-2.25	1.41	1.45
22	A	826	CLA	C1D-C2D	-2.25	1.40	1.45
31	U	214	DD6	C24-C1	-2.25	1.41	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	Q	201	A86	C8-C6	-2.25	1.41	1.45
31	J	101	DD6	C8-C6	-2.25	1.41	1.45
22	Q	206	CLA	C1D-C2D	-2.25	1.40	1.45
26	F	806	LMU	O5B-C5B	2.25	1.49	1.44
22	U	211	CLA	C1D-C2D	-2.25	1.40	1.45
22	A	845	CLA	C1D-C2D	-2.24	1.40	1.45
31	G	214	DD6	C24-C1	-2.24	1.41	1.45
22	P	216	CLA	C1D-C2D	-2.24	1.40	1.45
33	Q	210	KC1	C2A-C3A	2.24	1.41	1.37
31	T	213	DD6	C9-C10	-2.24	1.36	1.43
22	B	802	CLA	C3D-C4D	-2.24	1.39	1.44
34	Q	218	A86	C24-C1	-2.24	1.41	1.45
31	S	215	DD6	C13-C11	-2.24	1.41	1.45
22	A	821	CLA	C3D-C4D	-2.24	1.39	1.44
33	O	210	KC1	C3B-C2B	2.24	1.41	1.37
22	U	205	CLA	MG-NC	2.24	2.11	2.06
31	O	215	DD6	C25-C26	-2.23	1.36	1.43
22	S	207	CLA	C1D-C2D	-2.23	1.40	1.45
22	A	851	CLA	C1D-C2D	-2.23	1.40	1.45
22	B	833	CLA	C1D-C2D	-2.23	1.40	1.45
31	H	201	DD6	C36-C31	-2.23	1.32	1.34
22	B	831	CLA	C1D-C2D	-2.23	1.40	1.45
22	U	208	CLA	MG-NC	2.22	2.11	2.06
22	K	204	CLA	CHC-C1C	2.22	1.40	1.35
22	A	836	CLA	C1D-C2D	-2.22	1.40	1.45
31	T	213	DD6	C24-C1	-2.22	1.41	1.45
22	B	812	CLA	C1D-C2D	-2.22	1.40	1.45
22	B	830	CLA	C1D-C2D	-2.22	1.40	1.45
22	A	810	CLA	C1D-C2D	-2.22	1.40	1.45
22	S	217	CLA	C1D-C2D	-2.22	1.41	1.45
30	S	201	SQD	O4-C4	-2.22	1.37	1.43
22	J	103	CLA	C1D-C2D	-2.21	1.41	1.45
22	Q	205	CLA	C1D-C2D	-2.21	1.41	1.45
34	P	204	A86	C24-C1	-2.21	1.41	1.45
22	k	102	CLA	C1D-C2D	-2.21	1.41	1.45
31	U	203	DD6	C13-C11	-2.21	1.41	1.45
22	B	823	CLA	C1D-C2D	-2.21	1.41	1.45
33	P	219	KC1	MG-NC	2.21	2.11	2.06
22	A	835	CLA	C1D-C2D	-2.21	1.41	1.45
22	B	826	CLA	C1D-C2D	-2.21	1.41	1.45
22	A	850	CLA	MG-NC	2.21	2.11	2.06
34	Q	214	A86	C8-C6	-2.21	1.41	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
34	U	202	A86	C24-C1	-2.20	1.41	1.45
22	A	808	CLA	MG-NC	2.20	2.11	2.06
22	H	206	CLA	C1D-C2D	-2.20	1.41	1.45
22	A	855	CLA	MG-NC	2.20	2.11	2.06
22	U	205	CLA	C1D-C2D	-2.20	1.41	1.45
22	A	856	CLA	MG-NC	2.20	2.11	2.06
31	P	220	DD6	C24-C1	-2.20	1.41	1.45
33	P	203	KC1	C1B-NB	-2.20	1.35	1.37
31	O	212	DD6	C13-C11	-2.20	1.41	1.45
33	O	210	KC1	C1B-NB	-2.19	1.35	1.37
22	B	847	CLA	MG-NC	2.19	2.11	2.06
31	K	208	DD6	C8-C6	-2.19	1.41	1.45
22	A	853	CLA	MG-NC	2.19	2.11	2.06
22	U	205	CLA	CHC-C1C	2.19	1.40	1.35
31	G	211	DD6	C25-C26	-2.19	1.36	1.43
22	k	102	CLA	MG-NC	2.19	2.11	2.06
22	T	209	CLA	MG-NC	2.19	2.11	2.06
22	B	828	CLA	C1D-C2D	-2.19	1.41	1.45
34	Q	218	A86	C8-C6	-2.19	1.41	1.45
22	U	206	CLA	MG-NC	2.19	2.11	2.06
22	A	815	CLA	C1D-C2D	-2.19	1.41	1.45
22	A	808	CLA	C1D-C2D	-2.19	1.41	1.45
22	B	815	CLA	C1D-C2D	-2.19	1.41	1.45
22	U	204	CLA	C1D-C2D	-2.18	1.41	1.45
31	G	213	DD6	C25-C26	-2.18	1.36	1.43
22	A	845	CLA	C3D-C4D	-2.18	1.39	1.44
22	B	825	CLA	C1D-C2D	-2.18	1.41	1.45
31	U	212	DD6	C24-C1	-2.18	1.41	1.45
33	P	212	KC1	C1B-NB	-2.18	1.35	1.37
33	P	219	KC1	C1A-CHA	2.18	1.46	1.40
22	B	813	CLA	C1D-C2D	-2.18	1.41	1.45
22	Q	213	CLA	MG-NC	2.18	2.11	2.06
22	Q	213	CLA	C1D-C2D	-2.18	1.41	1.45
31	G	212	DD6	C8-C6	-2.17	1.41	1.45
31	S	204	DD6	C25-C26	-2.17	1.36	1.43
22	O	211	CLA	C1D-C2D	-2.17	1.41	1.45
31	O	214	DD6	C8-C6	-2.17	1.41	1.45
22	Q	207	CLA	C1D-C2D	-2.17	1.41	1.45
22	G	202	CLA	MG-NC	2.17	2.11	2.06
22	A	806	CLA	MG-NC	2.17	2.11	2.06
22	U	206	CLA	C1D-C2D	-2.17	1.41	1.45
31	G	212	DD6	C13-C11	-2.17	1.41	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	A	824	CLA	C1D-C2D	-2.17	1.41	1.45
33	S	212	KC1	C1A-CHA	2.17	1.46	1.40
22	H	202	CLA	MG-NC	2.16	2.11	2.06
31	S	211	DD6	C26-C27	2.16	1.41	1.37
22	Q	205	CLA	MG-NC	2.16	2.11	2.06
26	K	201	LMU	O5B-C5B	2.16	1.49	1.44
22	S	217	CLA	MG-NC	2.16	2.11	2.06
22	A	812	CLA	C1D-C2D	-2.16	1.41	1.45
22	A	853	CLA	C1D-C2D	-2.16	1.41	1.45
31	O	212	DD6	C8-C6	-2.16	1.41	1.45
22	B	842	CLA	C1D-C2D	-2.16	1.41	1.45
31	k	101	DD6	C25-C26	-2.16	1.36	1.43
31	P	215	DD6	C24-C1	-2.15	1.41	1.45
30	S	201	SQD	O2-C2	-2.15	1.37	1.43
22	B	832	CLA	C1D-C2D	-2.15	1.41	1.45
22	U	207	CLA	C1D-C2D	-2.15	1.41	1.45
22	A	854	CLA	C1D-C2D	-2.15	1.41	1.45
22	H	207	CLA	C1D-C2D	-2.15	1.41	1.45
31	J	101	DD6	C25-C26	-2.15	1.36	1.43
22	Q	203	CLA	C1D-C2D	-2.15	1.41	1.45
29	B	841	DGD	O1G-C1G	-2.15	1.40	1.45
34	P	204	A86	C8-C6	-2.15	1.41	1.45
31	P	218	DD6	C8-C6	-2.15	1.41	1.45
31	G	212	DD6	C24-C1	-2.14	1.41	1.45
22	B	845	CLA	C1D-C2D	-2.14	1.41	1.45
31	O	213	DD6	C25-C26	-2.14	1.36	1.43
22	A	820	CLA	C1D-C2D	-2.14	1.41	1.45
22	B	820	CLA	C1D-C2D	-2.14	1.41	1.45
22	A	802	CLA	C1D-C2D	-2.14	1.41	1.45
33	O	210	KC1	C1A-CHA	2.14	1.46	1.40
22	A	832	CLA	C1D-C2D	-2.14	1.41	1.45
33	Q	210	KC1	MG-NC	2.13	2.11	2.06
31	K	208	DD6	C25-C26	-2.13	1.36	1.43
33	P	219	KC1	CHD-C4C	2.13	1.40	1.35
22	H	207	CLA	MG-NC	2.12	2.11	2.06
22	T	204	CLA	C1D-C2D	-2.12	1.41	1.45
22	L	202	CLA	C1D-C2D	-2.12	1.41	1.45
22	P	208	CLA	C1D-C2D	-2.12	1.41	1.45
30	B	846	SQD	O4-C4	-2.12	1.38	1.43
22	K	204	CLA	C1D-C2D	-2.12	1.41	1.45
22	T	203	CLA	C1D-C2D	-2.12	1.41	1.45
34	U	202	A86	C8-C6	-2.12	1.41	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	O	203	CLA	C1D-C2D	-2.12	1.41	1.45
22	Q	204	CLA	MG-NC	2.12	2.11	2.06
31	P	218	DD6	C9-C8	2.12	1.40	1.34
22	A	818	CLA	C1D-C2D	-2.12	1.41	1.45
31	Q	202	DD6	C24-C1	-2.12	1.41	1.45
22	T	211	CLA	MG-NC	2.12	2.11	2.06
31	P	218	DD6	C13-C11	-2.12	1.41	1.45
31	P	218	DD6	C24-C1	-2.11	1.41	1.45
31	O	212	DD6	C25-C26	-2.11	1.36	1.43
22	H	207	CLA	CHC-C1C	2.11	1.40	1.35
31	S	214	DD6	C25-C26	-2.11	1.36	1.43
22	Q	203	CLA	MG-NC	2.11	2.11	2.06
22	F	804	CLA	C1D-C2D	-2.11	1.41	1.45
31	Q	215	DD6	C25-C26	-2.11	1.36	1.43
22	B	817	CLA	MG-NC	2.11	2.11	2.06
31	K	208	DD6	C13-C11	-2.11	1.41	1.45
22	P	207	CLA	C1D-C2D	-2.10	1.41	1.45
22	A	814	CLA	C1D-C2D	-2.10	1.41	1.45
22	O	207	CLA	MG-NC	2.10	2.11	2.06
22	F	803	CLA	C1D-C2D	-2.10	1.41	1.45
22	H	204	CLA	C1D-C2D	-2.10	1.41	1.45
24	P	201	LHG	P-O6	2.10	1.67	1.59
31	U	212	DD6	C8-C6	-2.10	1.41	1.45
22	A	816	CLA	C1D-C2D	-2.10	1.41	1.45
31	T	212	DD6	C25-C26	-2.09	1.37	1.43
22	K	206	CLA	C1D-C2D	-2.09	1.41	1.45
22	O	207	CLA	C1D-C2D	-2.09	1.41	1.45
22	P	213	CLA	C1D-C2D	-2.09	1.41	1.45
31	Q	215	DD6	C8-C6	-2.09	1.41	1.45
22	Q	216	CLA	C1D-C2D	-2.09	1.41	1.45
22	G	201	CLA	C1D-C2D	-2.09	1.41	1.45
22	G	208	CLA	CHC-C1C	2.09	1.40	1.35
22	S	202	CLA	MG-NC	2.09	2.11	2.06
31	H	201	DD6	C8-C6	-2.09	1.41	1.45
32	P	202	LMG	O8-C9	-2.09	1.40	1.45
22	O	207	CLA	CHC-C1C	2.08	1.40	1.35
22	U	210	CLA	C1D-C2D	-2.08	1.41	1.45
22	B	815	CLA	MG-NC	2.08	2.11	2.06
31	P	215	DD6	C8-C6	-2.08	1.41	1.45
22	A	811	CLA	MG-NC	2.08	2.11	2.06
31	U	203	DD6	C24-C1	-2.08	1.41	1.45
22	H	204	CLA	CHC-C1C	2.08	1.40	1.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
31	Q	202	DD6	C8-C6	-2.07	1.41	1.45
22	A	809	CLA	C1D-C2D	-2.07	1.41	1.45
22	L	204	CLA	C1D-C2D	-2.07	1.41	1.45
22	A	855	CLA	C1D-C2D	-2.07	1.41	1.45
22	T	205	CLA	C1D-C2D	-2.07	1.41	1.45
22	G	204	CLA	MG-NC	2.07	2.11	2.06
22	S	217	CLA	CHC-C1C	2.07	1.40	1.35
31	Q	215	DD6	C13-C11	-2.07	1.41	1.45
22	G	205	CLA	CHC-C1C	2.07	1.40	1.35
22	B	814	CLA	C1D-C2D	-2.07	1.41	1.45
22	T	207	CLA	C1D-C2D	-2.07	1.41	1.45
22	L	203	CLA	MG-NC	2.06	2.11	2.06
22	A	804	CLA	MG-NC	2.06	2.11	2.06
31	O	214	DD6	C13-C11	-2.06	1.41	1.45
22	K	207	CLA	CHC-C1C	2.06	1.40	1.35
22	G	208	CLA	C1D-C2D	-2.06	1.41	1.45
22	O	203	CLA	MG-NC	2.06	2.11	2.06
22	B	809	CLA	C1D-C2D	-2.06	1.41	1.45
22	T	202	CLA	C1D-C2D	-2.06	1.41	1.45
22	A	831	CLA	C1D-C2D	-2.06	1.41	1.45
22	L	203	CLA	C1D-C2D	-2.06	1.41	1.45
22	O	208	CLA	C1D-C2D	-2.06	1.41	1.45
22	U	208	CLA	C1D-C2D	-2.06	1.41	1.45
22	P	209	CLA	MG-NC	2.06	2.11	2.06
31	G	211	DD6	C13-C11	-2.06	1.41	1.45
22	T	209	CLA	C1D-C2D	-2.06	1.41	1.45
22	K	205	CLA	C1D-C2D	-2.05	1.41	1.45
33	P	206	KC1	C3B-C2B	2.05	1.41	1.37
22	P	207	CLA	MG-NC	2.05	2.11	2.06
22	O	206	CLA	C1D-C2D	-2.05	1.41	1.45
22	P	210	CLA	C1D-C2D	-2.05	1.41	1.45
22	G	207	CLA	C1D-C2D	-2.05	1.41	1.45
22	L	204	CLA	CHC-C1C	2.05	1.40	1.35
22	B	810	CLA	C1D-C2D	-2.05	1.41	1.45
22	O	205	CLA	C1D-C2D	-2.05	1.41	1.45
22	G	202	CLA	C1D-C2D	-2.05	1.41	1.45
22	T	202	CLA	MG-NC	2.04	2.11	2.06
31	K	208	DD6	C24-C1	-2.04	1.41	1.45
31	Q	202	DD6	C13-C11	-2.04	1.41	1.45
22	T	209	CLA	CHC-C1C	2.04	1.40	1.35
34	R	103	A86	C9-C10	-2.04	1.37	1.43
22	A	834	CLA	C1D-C2D	-2.04	1.41	1.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
22	A	856	CLA	C1D-C2D	-2.04	1.41	1.45
22	O	202	CLA	C1D-C2D	-2.04	1.41	1.45
31	S	211	DD6	C25-C26	-2.04	1.37	1.43
22	A	817	CLA	MG-NC	2.04	2.11	2.06
22	T	210	CLA	C1D-C2D	-2.04	1.41	1.45
22	G	204	CLA	CHC-C1C	2.04	1.40	1.35
22	K	205	CLA	CHC-C1C	2.04	1.40	1.35
31	H	212	DD6	C25-C26	-2.04	1.37	1.43
22	A	854	CLA	CHC-C1C	2.04	1.40	1.35
22	H	213	CLA	C1D-C2D	-2.03	1.41	1.45
22	B	817	CLA	C1D-C2D	-2.03	1.41	1.45
31	T	212	DD6	C8-C6	-2.03	1.41	1.45
32	P	217	LMG	O7-C8	-2.03	1.41	1.46
31	O	201	DD6	C25-C26	-2.03	1.37	1.43
22	S	216	CLA	C1D-C2D	-2.03	1.41	1.45
22	H	209	CLA	C1D-C2D	-2.03	1.41	1.45
22	H	208	CLA	MG-NC	2.03	2.11	2.06
22	A	803	CLA	C1D-C2D	-2.03	1.41	1.45
22	K	207	CLA	C1D-C2D	-2.03	1.41	1.45
22	B	802	CLA	CHC-C1C	2.02	1.40	1.35
22	A	802	CLA	CHC-C1C	2.02	1.40	1.35
22	B	834	CLA	MG-NC	2.02	2.11	2.06
31	T	213	DD6	C25-C26	-2.02	1.37	1.43
22	S	216	CLA	MG-NC	2.02	2.11	2.06
22	A	814	CLA	CHC-C1C	2.02	1.40	1.35
22	A	805	CLA	C1D-C2D	-2.01	1.41	1.45
29	B	841	DGD	C3G-C2G	2.01	1.56	1.50
33	U	213	KC1	C3B-C2B	2.01	1.41	1.37
33	S	212	KC1	C1B-NB	-2.01	1.35	1.37
22	U	209	CLA	C3D-C4D	-2.01	1.39	1.44
22	B	811	CLA	C1D-C2D	-2.01	1.41	1.45
32	J	102	LMG	C4-C5	2.01	1.57	1.53
22	J	103	CLA	MG-NC	2.01	2.11	2.06
24	P	201	LHG	O7-C5	-2.01	1.41	1.46
22	T	203	CLA	CHC-C1C	2.00	1.40	1.35
22	H	203	CLA	C1D-C2D	-2.00	1.41	1.45
30	S	201	SQD	O3-C3	-2.00	1.38	1.43
31	S	215	DD6	C24-C1	-2.00	1.41	1.45

All (1474) bond angle outliers are listed below:

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	T	213	DD6	C10-C9-C8	6.24	142.68	123.22
22	Q	208	CLA	C1-O2A-CGA	6.05	132.31	116.44
22	K	203	CLA	CAA-C2A-C3A	-5.98	96.40	112.78
31	H	201	DD6	C28-C27-C29	5.69	128.11	116.84
22	H	207	CLA	O2A-C1-C2	5.48	123.04	108.64
22	K	207	CLA	O2A-C1-C2	5.45	122.95	108.64
22	Q	208	CLA	O2A-C1-C2	5.32	122.62	108.64
31	U	212	DD6	C3-C4-C5	5.29	134.31	123.47
34	P	204	A86	C17-C16-C15	5.25	114.52	109.16
31	O	212	DD6	C4-C3-C2	5.25	134.23	123.47
31	T	213	DD6	C8-C6-C5	5.19	126.91	118.94
34	R	105	A86	C17-C16-C15	5.16	114.43	109.16
31	P	218	DD6	C10-C9-C8	5.09	139.10	123.22
31	P	218	DD6	C4-C3-C2	5.05	133.82	123.47
31	S	214	DD6	C12-C11-C10	-5.05	115.85	122.92
26	S	203	LMU	O1B-C4'-C5'	5.03	123.22	109.45
31	H	211	DD6	C4-C3-C2	4.82	133.35	123.47
22	S	202	CLA	CHD-C1D-ND	-4.82	120.02	124.45
31	H	201	DD6	C4-C3-C2	4.81	133.33	123.47
31	O	215	DD6	C12-C11-C10	-4.76	116.26	122.92
31	P	218	DD6	C9-C10-C11	4.75	134.08	127.31
22	K	203	CLA	C1D-ND-C4D	4.74	109.70	106.33
30	S	201	SQD	O9-S-C6	4.72	112.55	106.94
31	T	213	DD6	C4-C3-C2	4.68	133.05	123.47
31	U	203	DD6	C4-C3-C2	4.67	133.03	123.47
31	P	215	DD6	C3-C4-C5	4.66	133.03	123.47
31	P	220	DD6	C12-C11-C10	-4.66	116.40	122.92
31	T	212	DD6	C12-C11-C10	-4.62	116.44	122.92
34	Q	201	A86	C3-C4-C5	4.62	132.94	123.47
31	P	218	DD6	C3-C4-C5	4.62	132.93	123.47
31	P	215	DD6	C4-C3-C2	4.61	132.92	123.47
31	T	212	DD6	C3-C4-C5	4.53	132.76	123.47
31	P	215	DD6	C12-C11-C10	-4.52	116.59	122.92
31	T	213	DD6	C12-C11-C10	-4.50	116.62	122.92
31	G	214	DD6	C24-C1-C2	4.50	125.84	118.94
31	O	212	DD6	C3-C4-C5	4.49	132.67	123.47
31	O	214	DD6	C12-C11-C10	-4.49	116.64	122.92
26	S	203	LMU	O5B-C5B-C4B	4.45	117.78	109.69
31	P	220	DD6	C13-C11-C10	4.45	125.77	118.94
34	Q	214	A86	C17-C16-C15	4.40	113.65	109.16
31	S	214	DD6	C3-C4-C5	4.38	132.45	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	H	201	DD6	C37-C36-C31	-4.37	118.41	124.35
31	S	211	DD6	C3-C4-C5	4.32	132.33	123.47
22	G	207	CLA	CHD-C1D-ND	-4.31	120.49	124.45
31	J	101	DD6	C12-C11-C10	-4.31	116.89	122.92
31	Q	202	DD6	C3-C4-C5	4.28	132.25	123.47
26	K	201	LMU	C1B-O1B-C4'	-4.28	107.37	117.96
31	H	211	DD6	C3-C4-C5	4.27	132.23	123.47
22	B	817	CLA	CHD-C1D-ND	-4.27	120.53	124.45
34	R	103	A86	C28-C27-C26	-4.25	116.97	122.92
22	A	822	CLA	CHD-C1D-ND	-4.25	120.55	124.45
22	P	214	CLA	CHD-C1D-ND	-4.24	120.56	124.45
31	Q	202	DD6	C12-C11-C10	-4.23	116.99	122.92
33	O	210	KC1	C2A-C3A-C4A	4.23	109.63	106.49
30	B	846	SQD	O9-S-C6	4.23	111.97	106.94
31	S	205	DD6	C12-C11-C10	-4.22	117.01	122.92
31	O	201	DD6	C12-C11-C10	-4.21	117.02	122.92
31	Q	215	DD6	C4-C3-C2	4.20	132.09	123.47
31	P	205	DD6	C12-C11-C10	-4.20	117.04	122.92
22	T	211	CLA	CHD-C1D-ND	-4.20	120.60	124.45
22	H	210	CLA	CHD-C1D-ND	-4.19	120.60	124.45
22	B	814	CLA	CHD-C1D-ND	-4.19	120.60	124.45
22	K	203	CLA	C4D-CHA-C1A	4.18	126.34	121.25
31	Q	215	DD6	C12-C11-C10	-4.17	117.08	122.92
31	G	214	DD6	C-C1-C2	-4.16	117.09	122.92
22	L	203	CLA	CHD-C1D-ND	-4.16	120.63	124.45
31	S	214	DD6	C7-C6-C5	-4.15	117.10	122.92
22	S	208	CLA	CHD-C1D-ND	-4.15	120.64	124.45
22	G	215	CLA	CHD-C1D-ND	-4.13	120.66	124.45
22	Q	207	CLA	C4D-CHA-C1A	4.12	126.27	121.25
31	T	212	DD6	C13-C11-C10	4.12	125.27	118.94
31	G	214	DD6	C12-C11-C10	-4.11	117.16	122.92
22	B	845	CLA	O2A-C1-C2	-4.11	97.83	108.64
24	P	201	LHG	O4-P-O5	4.11	132.56	112.24
22	K	203	CLA	C2A-C1A-CHA	4.11	131.04	123.86
31	H	211	DD6	C12-C11-C10	-4.10	117.18	122.92
22	H	202	CLA	CHD-C1D-ND	-4.10	120.68	124.45
31	K	208	DD6	C3-C4-C5	4.09	131.85	123.47
24	A	840	LHG	O4-P-O5	4.09	132.44	112.24
22	B	829	CLA	C4D-CHA-C1A	4.09	126.22	121.25
26	F	806	LMU	C3B-C4B-C5B	4.07	117.50	110.24
24	G	216	LHG	O4-P-O5	4.07	132.34	112.24
34	U	202	A86	C3-C4-C5	4.06	131.80	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	R	103	A86	C-C1-C2	-4.06	117.23	122.92
31	U	212	DD6	C12-C11-C10	-4.06	117.24	122.92
31	G	212	DD6	C12-C11-C10	-4.05	117.25	122.92
31	K	208	DD6	C12-C11-C10	-4.05	117.25	122.92
31	S	204	DD6	C12-C11-C10	-4.05	117.25	122.92
22	K	207	CLA	CHD-C1D-ND	-4.05	120.73	124.45
31	H	211	DD6	C8-C6-C5	4.04	125.14	118.94
26	K	202	LMU	O5B-C5B-C4B	4.04	117.03	109.69
31	H	201	DD6	C12-C11-C10	-4.04	117.27	122.92
31	G	211	DD6	C12-C11-C10	-4.03	117.27	122.92
31	G	213	DD6	C12-C11-C10	-4.03	117.27	122.92
22	S	209	CLA	CHD-C1D-ND	-4.03	120.75	124.45
24	A	839	LHG	O4-P-O5	4.03	132.16	112.24
31	U	203	DD6	C-C1-C2	-4.03	117.28	122.92
31	U	203	DD6	C12-C11-C10	-4.03	117.28	122.92
22	A	829	CLA	CHD-C1D-ND	-4.03	120.75	124.45
22	S	216	CLA	CHD-C1D-ND	-4.02	120.76	124.45
26	K	202	LMU	C2'-C3'-C4'	4.02	118.85	109.68
31	S	215	DD6	C4-C3-C2	4.01	131.69	123.47
22	A	803	CLA	CHD-C1D-ND	-4.00	120.78	124.45
22	U	207	CLA	CHD-C1D-ND	-3.99	120.79	124.45
31	k	101	DD6	C12-C11-C10	-3.99	117.34	122.92
31	H	212	DD6	C3-C4-C5	3.98	131.64	123.47
31	P	220	DD6	C3-C4-C5	3.98	131.63	123.47
26	K	202	LMU	C3B-C4B-C5B	3.98	117.33	110.24
34	Q	218	A86	C3-C4-C5	3.97	131.61	123.47
30	B	846	SQD	O47-C7-C8	3.97	120.06	111.50
31	O	213	DD6	C12-C11-C10	-3.97	117.36	122.92
22	B	804	CLA	CHD-C1D-ND	-3.97	120.80	124.45
31	S	215	DD6	C12-C11-C10	-3.96	117.37	122.92
22	H	207	CLA	C4D-CHA-C1A	3.96	126.07	121.25
22	U	210	CLA	CHD-C1D-ND	-3.96	120.82	124.45
22	G	209	CLA	C4D-CHA-C1A	3.96	126.06	121.25
31	T	213	DD6	C-C1-C2	-3.95	117.38	122.92
22	T	207	CLA	CHD-C1D-ND	-3.95	120.83	124.45
26	F	806	LMU	O5B-C5B-C4B	3.94	116.85	109.69
31	S	211	DD6	C12-C11-C10	-3.94	117.41	122.92
34	P	204	A86	C3-C4-C5	3.93	131.53	123.47
31	P	220	DD6	C4-C3-C2	3.93	131.53	123.47
22	T	205	CLA	CHD-C1D-ND	-3.93	120.84	124.45
25	F	801	BCR	C2-C1-C6	3.93	116.53	110.48
31	T	213	DD6	C7-C6-C5	-3.92	117.42	122.92

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	J	101	DD6	C3-C4-C5	3.92	131.51	123.47
22	A	805	CLA	CHD-C1D-ND	-3.92	120.85	124.45
34	U	202	A86	C4-C3-C2	3.92	131.50	123.47
25	A	841	BCR	C2-C1-C6	3.91	116.50	110.48
31	T	213	DD6	C3-C4-C5	3.91	131.49	123.47
22	A	831	CLA	C4D-CHA-C1A	3.90	126.00	121.25
22	Q	207	CLA	CHD-C1D-ND	-3.90	120.87	124.45
31	J	101	DD6	C13-C11-C10	3.89	124.92	118.94
30	S	201	SQD	O9-S-O7	-3.89	100.48	113.95
22	A	850	CLA	C4D-CHA-C1A	3.88	125.98	121.25
22	H	207	CLA	CHD-C1D-ND	-3.87	120.90	124.45
22	K	203	CLA	CHA-C1A-NA	-3.86	117.55	126.40
22	B	811	CLA	CHD-C1D-ND	-3.86	120.90	124.45
30	B	846	SQD	O9-S-O7	-3.86	100.58	113.95
31	U	214	DD6	C4-C3-C2	3.85	131.37	123.47
31	U	203	DD6	C24-C1-C2	3.84	124.83	118.94
22	G	208	CLA	CHD-C1D-ND	-3.84	120.93	124.45
34	Q	214	A86	C3-C4-C5	3.84	131.34	123.47
31	G	212	DD6	C4-C3-C2	3.84	131.34	123.47
30	S	201	SQD	O47-C7-C8	3.84	119.77	111.50
22	P	207	CLA	CHD-C1D-ND	-3.84	120.93	124.45
22	A	838	CLA	C4D-CHA-C1A	3.84	125.92	121.25
31	U	214	DD6	C3-C4-C5	3.83	131.33	123.47
31	H	211	DD6	C7-C6-C5	-3.83	117.56	122.92
22	T	202	CLA	CHD-C1D-ND	-3.83	120.93	124.45
22	P	207	CLA	C4D-CHA-C1A	3.83	125.91	121.25
26	L	206	LMU	C2'-C3'-C4'	3.83	118.42	109.68
22	B	806	CLA	CHD-C1D-ND	-3.82	120.94	124.45
34	Q	201	A86	C17-C16-C15	3.82	113.06	109.16
30	B	846	SQD	O8-S-C6	3.82	111.83	105.74
22	B	815	CLA	C4D-CHA-C1A	3.81	125.89	121.25
22	Q	204	CLA	CHD-C1D-ND	-3.81	120.95	124.45
31	G	212	DD6	C3-C4-C5	3.81	131.28	123.47
22	F	803	CLA	C4D-CHA-C1A	3.81	125.89	121.25
31	O	214	DD6	C4-C3-C2	3.81	131.27	123.47
22	B	815	CLA	CHD-C1D-ND	-3.80	120.97	124.45
26	K	201	LMU	O1'-C1'-C2'	3.79	114.22	108.30
22	A	816	CLA	C4D-CHA-C1A	3.79	125.86	121.25
31	H	212	DD6	C12-C11-C10	-3.79	117.61	122.92
22	O	202	CLA	CHD-C1D-ND	-3.79	120.97	124.45
31	S	205	DD6	C3-C4-C5	3.79	131.23	123.47
22	O	207	CLA	CHD-C1D-ND	-3.79	120.97	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	B	812	CLA	CHD-C1D-ND	-3.78	120.98	124.45
31	O	214	DD6	C3-C4-C5	3.78	131.21	123.47
22	A	831	CLA	CHD-C1D-ND	-3.77	120.99	124.45
22	A	850	CLA	CHD-C1D-ND	-3.77	120.99	124.45
31	U	212	DD6	C8-C6-C5	3.77	124.73	118.94
31	U	212	DD6	C7-C6-C5	-3.77	117.64	122.92
22	F	804	CLA	C4D-CHA-C1A	3.77	125.83	121.25
22	H	204	CLA	CHD-C1D-ND	-3.77	120.99	124.45
22	O	206	CLA	C4D-CHA-C1A	3.76	125.83	121.25
31	G	211	DD6	C4-C3-C2	3.76	131.17	123.47
22	A	854	CLA	CHD-C1D-ND	-3.75	121.00	124.45
31	T	212	DD6	C4-C3-C2	3.75	131.16	123.47
22	H	208	CLA	CHD-C1D-ND	-3.75	121.01	124.45
31	H	211	DD6	C-C1-C2	-3.75	117.68	122.92
22	B	817	CLA	C4D-CHA-C1A	3.74	125.81	121.25
22	A	802	CLA	CHD-C1D-ND	-3.74	121.01	124.45
34	Q	201	A86	C7-C6-C5	-3.74	117.68	122.92
22	B	813	CLA	C4D-CHA-C1A	3.74	125.80	121.25
22	A	819	CLA	C4D-CHA-C1A	3.74	125.80	121.25
22	Q	204	CLA	C4D-CHA-C1A	3.74	125.80	121.25
31	S	215	DD6	C3-C4-C5	3.73	131.11	123.47
22	T	202	CLA	C4D-CHA-C1A	3.73	125.79	121.25
22	B	806	CLA	C4D-CHA-C1A	3.73	125.78	121.25
25	k	104	BCR	C2-C1-C6	3.72	116.22	110.48
31	K	208	DD6	C4-C3-C2	3.72	131.10	123.47
22	B	845	CLA	C1-O2A-CGA	3.72	126.21	116.44
22	B	831	CLA	C4D-CHA-C1A	3.72	125.78	121.25
22	H	204	CLA	C4D-CHA-C1A	3.72	125.78	121.25
22	B	810	CLA	CHD-C1D-ND	-3.72	121.04	124.45
22	G	207	CLA	C4D-CHA-C1A	3.71	125.77	121.25
22	S	206	CLA	CHD-C1D-ND	-3.71	121.04	124.45
26	P	221	LMU	C1B-O1B-C4'	-3.71	108.79	117.96
22	U	204	CLA	C4D-CHA-C1A	3.70	125.75	121.25
31	P	205	DD6	C3-C4-C5	3.70	131.06	123.47
22	O	208	CLA	CHD-C1D-ND	-3.70	121.05	124.45
31	S	215	DD6	C-C1-C2	-3.70	117.74	122.92
31	P	215	DD6	C8-C6-C5	3.70	124.61	118.94
22	L	203	CLA	C4D-CHA-C1A	3.69	125.74	121.25
31	G	213	DD6	C4-C3-C2	3.69	131.03	123.47
22	A	811	CLA	C4D-CHA-C1A	3.69	125.74	121.25
22	P	214	CLA	C4D-CHA-C1A	3.69	125.74	121.25
22	O	205	CLA	CHD-C1D-ND	-3.69	121.07	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	A	813	CLA	CHD-C1D-ND	-3.68	121.07	124.45
22	T	211	CLA	C4D-CHA-C1A	3.68	125.73	121.25
22	B	820	CLA	CHD-C1D-ND	-3.67	121.08	124.45
31	U	203	DD6	C3-C4-C5	3.67	130.99	123.47
22	K	207	CLA	C4D-CHA-C1A	3.67	125.72	121.25
31	O	212	DD6	C12-C11-C10	-3.67	117.78	122.92
31	O	213	DD6	C4-C3-C2	3.67	130.99	123.47
22	A	851	CLA	C4D-CHA-C1A	3.67	125.71	121.25
22	Q	203	CLA	C4D-CHA-C1A	3.67	125.71	121.25
22	A	833	CLA	CHD-C1D-ND	-3.67	121.08	124.45
22	S	206	CLA	C4D-CHA-C1A	3.67	125.71	121.25
22	G	204	CLA	C4D-CHA-C1A	3.66	125.70	121.25
22	S	202	CLA	C4D-CHA-C1A	3.66	125.70	121.25
22	U	208	CLA	C4D-CHA-C1A	3.66	125.70	121.25
31	P	215	DD6	C7-C6-C5	-3.66	117.80	122.92
22	B	825	CLA	C4D-CHA-C1A	3.65	125.69	121.25
22	G	209	CLA	CHD-C1D-ND	-3.65	121.10	124.45
22	B	830	CLA	CHD-C1D-ND	-3.65	121.10	124.45
22	T	204	CLA	CHD-C1D-ND	-3.65	121.10	124.45
22	Q	213	CLA	CHD-C1D-ND	-3.65	121.10	124.45
22	A	814	CLA	C4D-CHA-C1A	3.64	125.68	121.25
22	O	206	CLA	CHD-C1D-ND	-3.64	121.11	124.45
22	K	205	CLA	CHD-C1D-ND	-3.64	121.11	124.45
32	P	202	LMG	C1-C2-C3	-3.64	102.42	110.00
31	T	212	DD6	C7-C6-C5	-3.64	117.83	122.92
22	Q	203	CLA	CHD-C1D-ND	-3.63	121.11	124.45
22	H	213	CLA	CHD-C1D-ND	-3.63	121.12	124.45
26	S	203	LMU	C3B-C4B-C5B	3.63	116.71	110.24
22	A	809	CLA	CHD-C1D-ND	-3.62	121.12	124.45
22	F	802	CLA	C4D-CHA-C1A	3.62	125.66	121.25
22	A	854	CLA	C4D-CHA-C1A	3.62	125.66	121.25
22	A	822	CLA	C4D-CHA-C1A	3.62	125.66	121.25
22	A	836	CLA	C4D-CHA-C1A	3.62	125.66	121.25
22	B	842	CLA	C4D-CHA-C1A	3.62	125.65	121.25
22	A	814	CLA	CHD-C1D-ND	-3.62	121.13	124.45
22	A	829	CLA	C4D-CHA-C1A	3.61	125.65	121.25
25	M	101	BCR	C2-C1-C6	3.61	116.04	110.48
22	Q	216	CLA	CHD-C1D-ND	-3.61	121.14	124.45
31	S	204	DD6	C3-C4-C5	3.61	130.87	123.47
22	A	855	CLA	C4D-CHA-C1A	3.60	125.63	121.25
22	A	848	CLA	C4D-CHA-C1A	3.60	125.63	121.25
26	K	201	LMU	C2'-C3'-C4'	3.60	117.90	109.68

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	T	212	DD6	C8-C6-C5	3.60	124.46	118.94
22	A	820	CLA	CHD-C1D-ND	-3.60	121.15	124.45
22	H	203	CLA	C4D-CHA-C1A	3.59	125.62	121.25
22	P	209	CLA	C4D-CHA-C1A	3.59	125.62	121.25
29	B	841	DGD	O5D-C6D-C5D	-3.59	102.41	109.05
22	T	209	CLA	CHD-C1D-ND	-3.58	121.16	124.45
22	B	809	CLA	CHD-C1D-ND	-3.57	121.17	124.45
22	G	208	CLA	C4D-CHA-C1A	3.57	125.59	121.25
22	H	203	CLA	CHD-C1D-ND	-3.57	121.17	124.45
22	B	828	CLA	C4D-CHA-C1A	3.57	125.59	121.25
31	S	215	DD6	C24-C1-C2	3.57	124.41	118.94
31	P	220	DD6	C-C1-C2	-3.56	117.93	122.92
34	R	103	A86	C4-C3-C2	3.56	130.76	123.47
31	O	212	DD6	C7-C6-C5	-3.56	117.94	122.92
22	A	856	CLA	C4D-CHA-C1A	3.56	125.58	121.25
22	O	204	CLA	C4D-CHA-C1A	3.56	125.58	121.25
22	A	816	CLA	CHD-C1D-ND	-3.56	121.19	124.45
31	P	215	DD6	C23-C16-C17	-3.55	102.81	108.98
22	G	202	CLA	CHD-C1D-ND	-3.55	121.19	124.45
31	P	205	DD6	C7-C6-C5	-3.55	117.95	122.92
22	T	210	CLA	CHD-C1D-ND	-3.55	121.19	124.45
26	P	221	LMU	C1B-C2B-C3B	3.54	117.37	110.00
22	R	101	CLA	C4D-CHA-C1A	3.54	125.55	121.25
34	Q	214	A86	C7-C6-C5	-3.54	117.97	122.92
34	Q	218	A86	C4-C3-C2	3.53	130.71	123.47
31	P	215	DD6	C13-C11-C10	3.53	124.35	118.94
22	H	209	CLA	C4D-CHA-C1A	3.53	125.54	121.25
31	Q	202	DD6	C7-C6-C5	-3.53	117.98	122.92
22	O	211	CLA	C4D-CHA-C1A	3.52	125.53	121.25
31	P	218	DD6	C7-C6-C5	-3.52	117.99	122.92
22	A	855	CLA	CHD-C1D-ND	-3.52	121.22	124.45
22	G	205	CLA	CHD-C1D-ND	-3.52	121.22	124.45
22	L	204	CLA	CHD-C1D-ND	-3.52	121.22	124.45
22	B	825	CLA	CHD-C1D-ND	-3.51	121.22	124.45
31	G	211	DD6	C3-C4-C5	3.51	130.67	123.47
31	O	201	DD6	C4-C3-C2	3.51	130.67	123.47
22	P	210	CLA	CHD-C1D-ND	-3.51	121.23	124.45
22	K	203	CLA	CAA-C2A-C1A	3.51	123.46	111.97
22	B	813	CLA	CHD-C1D-ND	-3.50	121.23	124.45
31	S	205	DD6	C7-C6-C5	-3.50	118.02	122.92
31	J	101	DD6	C7-C6-C5	-3.50	118.02	122.92
31	P	215	DD6	C15-C14-C13	3.50	133.39	125.99

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	k	101	DD6	C-C1-C2	-3.50	118.02	122.92
31	P	205	DD6	C4-C3-C2	3.50	130.64	123.47
22	H	208	CLA	C4D-CHA-C1A	3.50	125.50	121.25
22	A	833	CLA	C4D-CHA-C1A	3.49	125.50	121.25
22	B	847	CLA	C4D-CHA-C1A	3.49	125.50	121.25
22	S	216	CLA	C4D-CHA-C1A	3.49	125.49	121.25
22	A	856	CLA	CHD-C1D-ND	-3.49	121.25	124.45
22	A	835	CLA	C4D-CHA-C1A	3.48	125.48	121.25
22	K	204	CLA	CHD-C1D-ND	-3.47	121.26	124.45
31	O	214	DD6	C7-C6-C5	-3.47	118.06	122.92
34	R	105	A86	C4-C3-C2	3.47	130.59	123.47
22	J	103	CLA	CHD-C1D-ND	-3.47	121.26	124.45
22	A	819	CLA	CHD-C1D-ND	-3.47	121.27	124.45
22	U	211	CLA	C4D-CHA-C1A	3.47	125.47	121.25
31	G	212	DD6	C-C1-C2	-3.46	118.07	122.92
22	P	208	CLA	CHD-C1D-ND	-3.46	121.27	124.45
31	H	201	DD6	C3-C4-C5	3.46	130.56	123.47
22	A	848	CLA	CHD-C1D-ND	-3.46	121.28	124.45
22	B	822	CLA	C4D-CHA-C1A	3.46	125.46	121.25
31	k	101	DD6	C3-C4-C5	3.46	130.56	123.47
22	A	803	CLA	C4D-CHA-C1A	3.46	125.45	121.25
31	H	212	DD6	C4-C3-C2	3.45	130.54	123.47
22	T	209	CLA	C4D-CHA-C1A	3.45	125.44	121.25
22	A	824	CLA	CHD-C1D-ND	-3.44	121.29	124.45
22	G	205	CLA	CAA-C2A-C3A	-3.44	103.35	112.78
22	B	845	CLA	CHD-C1D-ND	-3.44	121.29	124.45
22	H	202	CLA	C4D-CHA-C1A	3.43	125.43	121.25
22	S	207	CLA	CHD-C1D-ND	-3.43	121.30	124.45
31	K	208	DD6	C-C1-C2	-3.43	118.12	122.92
22	B	844	CLA	C4D-CHA-C1A	3.43	125.42	121.25
22	S	209	CLA	C4D-CHA-C1A	3.43	125.42	121.25
22	F	804	CLA	CHD-C1D-ND	-3.43	121.31	124.45
22	G	202	CLA	C4D-CHA-C1A	3.42	125.42	121.25
31	O	215	DD6	C4-C3-C2	3.42	130.49	123.47
22	A	818	CLA	CHD-C1D-ND	-3.42	121.31	124.45
31	P	220	DD6	C7-C6-C5	-3.42	118.13	122.92
34	P	204	A86	C7-C6-C5	-3.42	118.13	122.92
22	U	209	CLA	CHD-C1D-ND	-3.42	121.31	124.45
31	Q	202	DD6	C4-C3-C2	3.42	130.48	123.47
31	S	211	DD6	C7-C6-C5	-3.42	118.14	122.92
31	k	101	DD6	C4-C3-C2	3.42	130.47	123.47
31	P	218	DD6	C8-C6-C5	3.42	124.18	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	H	212	DD6	C-C1-C2	-3.42	118.14	122.92
31	U	214	DD6	C-C1-C2	-3.41	118.14	122.92
22	A	853	CLA	CHD-C1D-ND	-3.41	121.32	124.45
33	P	212	KC1	CHC-C4B-NB	-3.41	121.32	124.45
22	B	823	CLA	CHD-C1D-ND	-3.41	121.32	124.45
31	S	214	DD6	C13-C11-C10	3.41	124.18	118.94
22	A	825	CLA	C4D-CHA-C1A	3.41	125.40	121.25
22	H	213	CLA	C4D-CHA-C1A	3.41	125.40	121.25
34	Q	201	A86	C8-C6-C5	3.41	124.17	118.94
24	A	840	LHG	O8-C23-C24	3.41	120.31	111.38
22	A	806	CLA	CHD-C1D-ND	-3.41	121.32	124.45
31	K	208	DD6	C7-C6-C5	-3.40	118.16	122.92
22	P	209	CLA	CHD-C1D-ND	-3.40	121.33	124.45
22	G	204	CLA	CHD-C1D-ND	-3.40	121.33	124.45
31	U	212	DD6	C-C1-C2	-3.40	118.16	122.92
34	P	204	A86	C4-C3-C2	3.40	130.44	123.47
22	B	847	CLA	CHD-C1D-ND	-3.40	121.33	124.45
22	B	830	CLA	C4D-CHA-C1A	3.40	125.38	121.25
22	P	213	CLA	CHD-C1D-ND	-3.40	121.33	124.45
22	G	215	CLA	C4D-CHA-C1A	3.40	125.38	121.25
31	Q	202	DD6	C-C1-C2	-3.39	118.17	122.92
31	S	204	DD6	C-C1-C2	-3.39	118.17	122.92
22	A	815	CLA	CHD-C1D-ND	-3.39	121.34	124.45
31	G	214	DD6	C8-C6-C5	3.39	124.14	118.94
22	U	207	CLA	CAA-C2A-C3A	-3.39	103.51	112.78
22	U	205	CLA	CHD-C1D-ND	-3.39	121.34	124.45
22	B	811	CLA	C4D-CHA-C1A	3.38	125.37	121.25
31	S	204	DD6	C4-C3-C2	3.38	130.41	123.47
22	O	207	CLA	C4D-CHA-C1A	3.38	125.37	121.25
22	L	204	CLA	C4D-CHA-C1A	3.38	125.36	121.25
22	U	204	CLA	CHD-C1D-ND	-3.38	121.35	124.45
22	T	203	CLA	CHD-C1D-ND	-3.38	121.35	124.45
34	Q	218	A86	C7-C6-C5	-3.38	118.19	122.92
22	H	209	CLA	CHD-C1D-ND	-3.38	121.35	124.45
31	Q	215	DD6	C-C1-C2	-3.38	118.19	122.92
31	S	204	DD6	C7-C6-C5	-3.38	118.19	122.92
31	S	215	DD6	C7-C6-C5	-3.38	118.19	122.92
22	T	204	CLA	C4D-CHA-C1A	3.37	125.36	121.25
31	O	214	DD6	C-C1-C2	-3.37	118.20	122.92
22	G	201	CLA	CHD-C1D-ND	-3.37	121.36	124.45
22	G	206	CLA	C4D-CHA-C1A	3.37	125.35	121.25
30	S	201	SQD	O7-S-C6	3.37	110.94	106.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	Q	215	DD6	C7-C6-C5	-3.37	118.21	122.92
31	P	220	DD6	C24-C1-C2	3.36	124.10	118.94
22	B	810	CLA	C4D-CHA-C1A	3.36	125.34	121.25
22	A	804	CLA	CHD-C1D-ND	-3.36	121.36	124.45
22	Q	209	CLA	C4D-CHA-C1A	3.36	125.34	121.25
30	B	846	SQD	C44-O6-C1	3.36	120.30	113.74
22	A	815	CLA	C4D-CHA-C1A	3.35	125.33	121.25
31	S	214	DD6	C10-C9-C8	3.35	133.68	123.22
22	O	203	CLA	CHD-C1D-ND	-3.35	121.37	124.45
22	L	202	CLA	CHD-C1D-ND	-3.35	121.37	124.45
34	U	202	A86	C7-C6-C5	-3.35	118.23	122.92
22	A	832	CLA	CHD-C1D-ND	-3.35	121.38	124.45
22	S	207	CLA	C4D-CHA-C1A	3.35	125.32	121.25
22	Q	205	CLA	C4D-CHA-C1A	3.34	125.32	121.25
22	T	205	CLA	C4D-CHA-C1A	3.34	125.32	121.25
22	U	206	CLA	C4D-CHA-C1A	3.34	125.31	121.25
31	P	205	DD6	C8-C6-C5	3.33	124.06	118.94
22	P	216	CLA	C4D-CHA-C1A	3.33	125.31	121.25
22	G	203	CLA	C4D-CHA-C1A	3.33	125.31	121.25
22	B	823	CLA	C1-O2A-CGA	3.33	125.19	116.44
22	B	814	CLA	C4D-CHA-C1A	3.33	125.30	121.25
22	A	808	CLA	C4D-CHA-C1A	3.33	125.30	121.25
22	A	846	CLA	C4D-CHA-C1A	3.33	125.30	121.25
22	Q	213	CLA	C4D-CHA-C1A	3.33	125.30	121.25
22	Q	206	CLA	C4D-CHA-C1A	3.33	125.30	121.25
31	P	218	DD6	C-C1-C2	-3.32	118.27	122.92
31	O	201	DD6	C-C1-C2	-3.32	118.27	122.92
22	A	808	CLA	CHD-C1D-ND	-3.32	121.40	124.45
22	K	203	CLA	CAA-CBA-CGA	3.32	121.31	112.51
31	G	213	DD6	C-C1-C2	-3.32	118.28	122.92
22	A	827	CLA	C4D-CHA-C1A	3.31	125.28	121.25
31	H	211	DD6	C24-C1-C2	3.31	124.02	118.94
22	B	823	CLA	C4D-CHA-C1A	3.31	125.28	121.25
22	U	208	CLA	CHD-C1D-ND	-3.31	121.41	124.45
22	B	831	CLA	CHD-C1D-ND	-3.31	121.42	124.45
31	P	205	DD6	C-C1-C2	-3.30	118.30	122.92
31	H	212	DD6	C7-C6-C5	-3.30	118.30	122.92
22	A	830	CLA	C4D-CHA-C1A	3.30	125.26	121.25
31	G	211	DD6	C7-C6-C5	-3.30	118.31	122.92
31	U	203	DD6	C7-C6-C5	-3.29	118.31	122.92
22	B	827	CLA	C4D-CHA-C1A	3.29	125.26	121.25
31	O	215	DD6	C3-C4-C5	3.29	130.21	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	O	215	DD6	C-C1-C2	-3.29	118.32	122.92
22	T	207	CLA	C4D-CHA-C1A	3.29	125.25	121.25
22	B	828	CLA	CHD-C1D-ND	-3.29	121.43	124.45
34	Q	218	A86	C-C1-C2	-3.29	118.32	122.92
22	A	813	CLA	C4D-CHA-C1A	3.29	125.25	121.25
22	O	208	CLA	C4D-CHA-C1A	3.29	125.25	121.25
22	Q	206	CLA	CHD-C1D-ND	-3.29	121.43	124.45
22	A	805	CLA	C4D-CHA-C1A	3.28	125.24	121.25
22	A	810	CLA	C4D-CHA-C1A	3.28	125.24	121.25
22	K	203	CLA	CHD-C1D-ND	-3.28	121.44	124.45
31	P	215	DD6	C-C1-C2	-3.28	118.33	122.92
31	O	215	DD6	C14-C13-C11	3.27	130.61	125.53
22	T	206	CLA	CHD-C1D-ND	-3.27	121.45	124.45
22	A	845	CLA	C4D-CHA-C1A	3.27	125.23	121.25
31	G	211	DD6	C-C1-C2	-3.27	118.34	122.92
22	Q	208	CLA	C4D-CHA-C1A	3.27	125.22	121.25
22	A	832	CLA	C4D-CHA-C1A	3.26	125.22	121.25
22	Q	209	CLA	CHD-C1D-ND	-3.26	121.45	124.45
33	O	210	KC1	CAA-C2A-C1A	3.26	139.74	124.75
22	B	832	CLA	C4D-CHA-C1A	3.26	125.22	121.25
22	B	833	CLA	CHD-C1D-ND	-3.26	121.46	124.45
31	O	201	DD6	C3-C4-C5	3.26	130.15	123.47
22	A	812	CLA	C4D-CHA-C1A	3.26	125.22	121.25
22	B	834	CLA	CHD-C1D-ND	-3.26	121.46	124.45
25	L	205	BCR	C3-C4-C5	-3.26	108.26	114.08
22	B	809	CLA	C4D-CHA-C1A	3.26	125.21	121.25
22	P	216	CLA	C4A-NA-C1A	3.25	108.17	106.71
31	G	212	DD6	C7-C6-C5	-3.25	118.37	122.92
22	k	102	CLA	C4D-CHA-C1A	3.25	125.21	121.25
22	Q	211	CLA	CHD-C1D-ND	-3.25	121.47	124.45
25	B	839	BCR	C15-C16-C17	-3.25	116.83	123.47
31	G	214	DD6	C7-C6-C5	-3.24	118.38	122.92
30	B	846	SQD	O7-S-C6	3.24	110.79	106.94
22	H	210	CLA	C4D-CHA-C1A	3.24	125.19	121.25
31	k	101	DD6	C24-C1-C2	3.24	123.91	118.94
22	K	204	CLA	C4D-CHA-C1A	3.24	125.19	121.25
22	S	217	CLA	CHD-C1D-ND	-3.24	121.48	124.45
22	O	204	CLA	CHD-C1D-ND	-3.24	121.48	124.45
34	R	105	A86	C7-C6-C5	-3.24	118.39	122.92
31	G	212	DD6	C24-C1-C2	3.23	123.90	118.94
22	T	210	CLA	C4D-CHA-C1A	3.23	125.19	121.25
22	k	103	CLA	C4A-NA-C1A	3.23	108.16	106.71

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	O	211	CLA	CHD-C1D-ND	-3.23	121.48	124.45
22	S	217	CLA	C4D-CHA-C1A	3.23	125.18	121.25
25	L	205	BCR	C2-C1-C6	3.23	115.45	110.48
34	R	105	A86	C-C1-C2	-3.22	118.41	122.92
31	O	215	DD6	O1-C20-C19	-3.22	110.96	113.38
22	A	853	CLA	C4D-CHA-C1A	3.22	125.17	121.25
22	U	206	CLA	CHD-C1D-ND	-3.22	121.50	124.45
22	O	203	CLA	C4D-CHA-C1A	3.22	125.16	121.25
22	O	205	CLA	C4D-CHA-C1A	3.21	125.16	121.25
34	P	204	A86	C-C1-C2	-3.21	118.42	122.92
22	U	205	CLA	C4D-CHA-C1A	3.21	125.16	121.25
26	L	206	LMU	C1B-O1B-C4'	-3.21	110.01	117.96
31	O	215	DD6	C7-C6-C5	-3.21	118.42	122.92
31	T	213	DD6	C24-C1-C2	3.21	123.87	118.94
22	A	823	CLA	CHD-C1D-ND	-3.21	121.50	124.45
22	O	202	CLA	C4D-CHA-C1A	3.21	125.15	121.25
31	H	201	DD6	C7-C6-C5	-3.21	118.43	122.92
31	k	101	DD6	C7-C6-C5	-3.21	118.43	122.92
22	A	809	CLA	C4D-CHA-C1A	3.21	125.15	121.25
31	H	212	DD6	C24-C1-C2	3.21	123.86	118.94
22	A	830	CLA	CHD-C1D-ND	-3.20	121.51	124.45
31	J	101	DD6	C8-C6-C5	3.20	123.85	118.94
22	L	202	CLA	C4D-CHA-C1A	3.20	125.14	121.25
22	U	204	CLA	O2A-C1-C2	3.20	117.05	108.64
31	P	218	DD6	C24-C1-C2	3.20	123.85	118.94
31	S	205	DD6	C8-C6-C5	3.20	123.85	118.94
31	S	214	DD6	C-C1-C2	-3.20	118.44	122.92
22	T	203	CLA	C4D-CHA-C1A	3.20	125.14	121.25
34	U	202	A86	C-C1-C2	-3.20	118.45	122.92
22	B	818	CLA	CHD-C1D-ND	-3.19	121.52	124.45
31	P	205	DD6	C13-C11-C10	3.19	123.84	118.94
31	J	101	DD6	C4-C3-C2	3.19	130.01	123.47
22	A	818	CLA	C4D-CHA-C1A	3.19	125.13	121.25
22	Q	216	CLA	C4D-CHA-C1A	3.19	125.13	121.25
31	O	213	DD6	C-C1-C2	-3.18	118.46	122.92
22	B	845	CLA	C4D-CHA-C1A	3.18	125.12	121.25
22	A	811	CLA	CHD-C1D-ND	-3.18	121.53	124.45
31	G	213	DD6	C7-C6-C5	-3.18	118.47	122.92
22	B	834	CLA	C4D-CHA-C1A	3.18	125.12	121.25
25	J	104	BCR	C2-C1-C6	3.18	115.38	110.48
22	A	836	CLA	CHD-C1D-ND	-3.18	121.53	124.45
22	B	844	CLA	CHD-C1D-ND	-3.18	121.53	124.45

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	213	CLA	C4D-CHA-C1A	3.18	125.12	121.25
22	A	834	CLA	C4D-CHA-C1A	3.18	125.12	121.25
22	H	205	CLA	C4D-CHA-C1A	3.17	125.11	121.25
22	k	103	CLA	C4D-CHA-C1A	3.17	125.11	121.25
22	A	806	CLA	C4D-CHA-C1A	3.17	125.11	121.25
22	A	801	CLA	CHD-C1D-ND	-3.17	121.54	124.45
31	O	212	DD6	C8-C6-C5	3.17	123.81	118.94
31	P	220	DD6	C8-C6-C5	3.17	123.80	118.94
31	O	214	DD6	C8-C6-C5	3.17	123.80	118.94
22	A	820	CLA	C4D-CHA-C1A	3.17	125.10	121.25
31	Q	202	DD6	C8-C6-C5	3.16	123.80	118.94
22	Q	212	CLA	CHD-C1D-ND	-3.16	121.55	124.45
22	U	207	CLA	C4D-CHA-C1A	3.16	125.09	121.25
22	A	810	CLA	CHD-C1D-ND	-3.16	121.55	124.45
22	B	804	CLA	C4D-CHA-C1A	3.15	125.08	121.25
22	A	824	CLA	C4D-CHA-C1A	3.15	125.08	121.25
22	Q	205	CLA	CHD-C1D-ND	-3.15	121.56	124.45
34	Q	201	A86	C-C1-C2	-3.15	118.52	122.92
22	R	104	CLA	C4D-CHA-C1A	3.14	125.07	121.25
22	B	834	CLA	O2A-C1-C2	3.14	116.88	108.64
34	R	103	A86	C24-C1-C2	3.14	123.75	118.94
31	J	101	DD6	C-C1-C2	-3.13	118.53	122.92
31	O	201	DD6	C7-C6-C5	-3.13	118.53	122.92
22	B	833	CLA	C4D-CHA-C1A	3.13	125.06	121.25
22	A	834	CLA	CHD-C1D-ND	-3.13	121.58	124.45
22	B	819	CLA	CHA-C1A-NA	-3.13	119.24	126.40
22	B	821	CLA	C4D-CHA-C1A	3.12	125.05	121.25
22	U	210	CLA	C4D-CHA-C1A	3.12	125.05	121.25
31	S	204	DD6	C24-C1-C2	3.12	123.73	118.94
34	P	204	A86	C8-C6-C5	3.12	123.72	118.94
31	K	208	DD6	C8-C6-C5	3.12	123.72	118.94
22	A	828	CLA	C4D-CHA-C1A	3.12	125.04	121.25
34	Q	214	A86	C4-C3-C2	3.11	129.85	123.47
31	G	214	DD6	C3-C4-C5	3.11	129.85	123.47
22	A	838	CLA	CHD-C1D-ND	-3.11	121.59	124.45
22	B	826	CLA	CHD-C1D-ND	-3.11	121.60	124.45
22	P	210	CLA	C4D-CHA-C1A	3.10	125.03	121.25
22	Q	211	CLA	C4D-CHA-C1A	3.10	125.03	121.25
22	A	846	CLA	CHD-C1D-ND	-3.10	121.60	124.45
33	S	210	KC1	CHC-C4B-NB	-3.10	121.60	124.45
22	H	206	CLA	CHD-C1D-ND	-3.10	121.61	124.45
31	Q	202	DD6	C24-C1-C2	3.09	123.69	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	A	851	CLA	CHD-C1D-ND	-3.09	121.61	124.45
22	B	829	CLA	CHD-C1D-ND	-3.09	121.62	124.45
34	Q	214	A86	C8-C6-C5	3.09	123.68	118.94
22	K	205	CLA	C4D-CHA-C1A	3.09	125.00	121.25
26	O	216	LMU	C2'-C3'-C4'	3.09	116.73	109.68
34	U	202	A86	C8-C6-C5	3.08	123.67	118.94
22	A	835	CLA	CHD-C1D-ND	-3.08	121.62	124.45
31	U	203	DD6	C26-C25-C24	3.08	132.83	123.22
26	K	202	LMU	C4B-C3B-C2B	3.08	116.20	110.82
22	R	104	CLA	CHD-C1D-ND	-3.07	121.63	124.45
34	R	105	A86	C3-C4-C5	3.07	129.77	123.47
22	B	832	CLA	CHD-C1D-ND	-3.07	121.63	124.45
34	Q	214	A86	C28-C27-C26	-3.07	118.62	122.92
25	M	101	BCR	C3-C4-C5	-3.07	108.60	114.08
22	A	821	CLA	CHA-C1A-NA	-3.07	119.37	126.40
26	F	806	LMU	O1B-C4'-C5'	3.07	117.85	109.45
22	A	825	CLA	CHD-C1D-ND	-3.07	121.64	124.45
22	P	211	CLA	CHD-C1D-ND	-3.06	121.64	124.45
22	B	826	CLA	C4D-CHA-C1A	3.06	124.97	121.25
34	Q	214	A86	C-C1-C2	-3.06	118.64	122.92
31	G	213	DD6	C3-C4-C5	3.06	129.74	123.47
31	U	214	DD6	C24-C1-C2	3.06	123.63	118.94
34	Q	218	A86	C8-C6-C5	3.06	123.63	118.94
22	B	808	CLA	C4D-CHA-C1A	3.05	124.96	121.25
31	U	212	DD6	C24-C1-C2	3.05	123.62	118.94
22	H	213	CLA	C4A-NA-C1A	3.05	108.08	106.71
31	S	211	DD6	C8-C6-C5	3.04	123.61	118.94
31	Q	215	DD6	C3-C4-C5	3.04	129.71	123.47
25	I	102	BCR	C27-C26-C25	3.04	127.15	122.73
34	Q	214	A86	C35-C34-C33	3.04	115.18	109.88
22	Q	212	CLA	C4A-NA-C1A	3.04	108.07	106.71
31	T	212	DD6	C-C1-C2	-3.04	118.67	122.92
31	H	211	DD6	C10-C9-C8	3.03	132.69	123.22
22	F	802	CLA	CHD-C1D-ND	-3.03	121.67	124.45
31	K	208	DD6	C24-C1-C2	3.03	123.59	118.94
31	S	205	DD6	C-C1-C2	-3.03	118.68	122.92
22	K	206	CLA	CHD-C1D-ND	-3.03	121.67	124.45
22	A	804	CLA	C4D-CHA-C1A	3.02	124.92	121.25
31	G	213	DD6	C24-C1-C2	3.02	123.57	118.94
22	Q	212	CLA	CHA-C1A-NA	-3.02	119.49	126.40
31	G	211	DD6	C24-C1-C2	3.02	123.57	118.94
31	U	212	DD6	C4-C3-C2	3.02	129.65	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	A	817	CLA	C4D-CHA-C1A	3.01	124.92	121.25
31	T	213	DD6	C9-C10-C11	-3.01	123.01	127.31
22	P	216	CLA	CHD-C1D-ND	-3.01	121.69	124.45
22	H	205	CLA	CHD-C1D-ND	-3.01	121.69	124.45
31	O	215	DD6	C24-C1-C2	3.00	123.55	118.94
22	A	807	CLA	CHD-C1D-ND	-3.00	121.69	124.45
31	O	214	DD6	C24-C1-C2	3.00	123.54	118.94
22	B	803	CLA	CHD-C1D-ND	-3.00	121.70	124.45
31	S	215	DD6	C8-C6-C5	3.00	123.54	118.94
22	A	802	CLA	C4D-CHA-C1A	3.00	124.90	121.25
22	P	208	CLA	C4D-CHA-C1A	3.00	124.89	121.25
22	A	812	CLA	CHD-C1D-ND	-3.00	121.70	124.45
22	B	843	CLA	C4D-CHA-C1A	2.99	124.89	121.25
22	Q	208	CLA	CHD-C1D-ND	-2.99	121.71	124.45
22	B	807	CLA	C4D-CHA-C1A	2.98	124.88	121.25
31	Q	215	DD6	C8-C6-C5	2.98	123.51	118.94
22	k	102	CLA	CHD-C1D-ND	-2.97	121.72	124.45
22	J	103	CLA	C4D-CHA-C1A	2.97	124.86	121.25
22	F	803	CLA	CHD-C1D-ND	-2.97	121.72	124.45
26	L	206	LMU	C1'-C2'-C3'	2.97	116.18	110.00
25	R	102	BCR	C19-C18-C17	-2.96	118.21	124.81
22	B	819	CLA	CHD-C1D-ND	-2.96	121.73	124.45
31	S	204	DD6	C8-C6-C5	2.96	123.48	118.94
22	B	827	CLA	CHD-C1D-ND	-2.96	121.74	124.45
25	L	205	BCR	C11-C10-C9	-2.96	123.09	127.31
31	P	215	DD6	C24-C1-C2	2.95	123.47	118.94
31	S	214	DD6	C4-C3-C2	2.95	129.52	123.47
31	O	213	DD6	C7-C6-C5	-2.95	118.79	122.92
22	G	205	CLA	C4D-CHA-C1A	2.95	124.84	121.25
22	A	807	CLA	C4D-CHA-C1A	2.95	124.84	121.25
22	B	816	CLA	C4D-CHA-C1A	2.95	124.83	121.25
34	Q	218	A86	C24-C1-C2	2.94	123.46	118.94
22	A	817	CLA	CHD-C1D-ND	-2.94	121.75	124.45
25	M	101	BCR	C11-C10-C9	-2.94	123.11	127.31
22	O	209	CLA	CHD-C1D-ND	-2.94	121.75	124.45
31	O	201	DD6	C24-C1-C2	2.94	123.45	118.94
22	B	827	CLA	C4A-NA-C1A	2.93	108.03	106.71
27	A	849	CL0	CHA-C1A-NA	-2.93	119.68	126.40
31	Q	215	DD6	C24-C1-C2	2.93	123.44	118.94
22	U	211	CLA	CHD-C1D-ND	-2.93	121.76	124.45
25	I	102	BCR	C15-C16-C17	-2.93	117.47	123.47
22	H	206	CLA	C4D-CHA-C1A	2.93	124.81	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	Q	208	CLA	CHA-C1A-NA	-2.93	119.70	126.40
22	B	820	CLA	C4D-CHA-C1A	2.92	124.81	121.25
31	S	215	DD6	C26-C25-C24	2.92	132.33	123.22
22	G	201	CLA	C4D-CHA-C1A	2.92	124.80	121.25
32	J	102	LMG	O6-C1-O1	-2.92	103.06	109.97
22	P	216	CLA	CHA-C1A-NA	-2.92	119.71	126.40
22	H	213	CLA	CHA-C1A-NA	-2.92	119.72	126.40
31	O	213	DD6	C3-C4-C5	2.92	129.45	123.47
34	R	103	A86	C26-C25-C24	2.92	132.32	123.22
31	Q	215	DD6	C13-C11-C10	2.91	123.41	118.94
22	G	210	CLA	C4D-CHA-C1A	2.91	124.79	121.25
22	k	103	CLA	CHA-C1A-NA	-2.91	119.74	126.40
22	B	802	CLA	C4D-CHA-C1A	2.91	124.79	121.25
33	Q	210	KC1	CHC-C4B-NB	-2.90	121.79	124.45
31	G	212	DD6	C8-C6-C5	2.90	123.39	118.94
31	U	203	DD6	C8-C6-C5	2.90	123.39	118.94
22	A	825	CLA	CHA-C1A-NA	-2.89	119.77	126.40
22	B	822	CLA	CHA-C1A-NA	-2.89	119.77	126.40
22	B	808	CLA	CHD-C1D-ND	-2.89	121.80	124.45
22	B	816	CLA	CHD-C1D-ND	-2.88	121.81	124.45
22	K	206	CLA	C4D-CHA-C1A	2.88	124.75	121.25
34	R	103	A86	C7-C6-C5	-2.88	118.89	122.92
22	Q	212	CLA	C4D-CHA-C1A	2.88	124.75	121.25
22	A	815	CLA	CHA-C1A-NA	-2.88	119.81	126.40
22	A	834	CLA	CHA-C1A-NA	-2.87	119.82	126.40
22	A	845	CLA	CHA-C1A-NA	-2.87	119.82	126.40
22	B	827	CLA	CHA-C1A-NA	-2.87	119.82	126.40
22	B	842	CLA	CHD-C1D-ND	-2.87	121.82	124.45
22	A	817	CLA	CHA-C1A-NA	-2.87	119.83	126.40
22	G	210	CLA	CHD-C1D-ND	-2.87	121.82	124.45
22	B	805	CLA	C4D-CHA-C1A	2.87	124.74	121.25
22	K	203	CLA	C4A-NA-C1A	2.87	108.00	106.71
22	T	201	CLA	CHA-C1A-NA	-2.87	119.84	126.40
22	B	822	CLA	CHD-C1D-ND	-2.86	121.82	124.45
22	S	202	CLA	CMD-C2D-C1D	2.86	129.76	124.71
22	A	845	CLA	CHD-C1D-ND	-2.86	121.82	124.45
24	P	201	LHG	O8-C23-C24	2.86	120.88	111.91
31	H	212	DD6	C8-C6-C5	2.86	123.33	118.94
31	P	205	DD6	C10-C9-C8	2.86	132.14	123.22
22	L	202	CLA	CHA-C1A-NA	-2.86	119.85	126.40
22	B	802	CLA	CHA-C1A-NA	-2.86	119.86	126.40
31	G	211	DD6	C8-C6-C5	2.85	123.32	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	P	205	DD6	C24-C1-C2	2.85	123.32	118.94
22	A	807	CLA	CHA-C1A-NA	-2.85	119.87	126.40
22	A	810	CLA	C4A-NA-C1A	2.85	107.99	106.71
31	O	212	DD6	C22-C16-C17	-2.85	104.03	108.98
22	F	802	CLA	C4A-NA-C1A	2.85	107.99	106.71
34	R	105	A86	C24-C1-C2	2.85	123.31	118.94
22	B	821	CLA	CHD-C1D-ND	-2.84	121.84	124.45
26	K	201	LMU	O5'-C5'-C4'	2.84	115.74	109.75
22	B	805	CLA	CHD-C1D-ND	-2.84	121.84	124.45
22	F	803	CLA	CHA-C1A-NA	-2.84	119.90	126.40
34	U	202	A86	C28-C27-C26	-2.84	118.95	122.92
25	L	201	BCR	C15-C16-C17	-2.83	117.67	123.47
32	P	217	LMG	C4-C3-C2	2.83	115.76	110.82
22	G	203	CLA	CHA-C1A-NA	-2.83	119.92	126.40
22	O	211	CLA	CAA-C2A-C3A	-2.82	109.51	116.10
22	B	801	CLA	CHA-C1A-NA	-2.82	119.94	126.40
22	B	844	CLA	CHA-C1A-NA	-2.82	119.94	126.40
31	S	214	DD6	C8-C6-C5	2.82	123.27	118.94
22	A	807	CLA	C4A-NA-C1A	2.82	107.97	106.71
26	P	221	LMU	O5B-C1B-C2B	2.82	116.31	110.35
33	Q	210	KC1	CBA-CAA-C2A	2.81	136.00	125.27
22	T	211	CLA	CHA-C1A-NA	-2.81	119.95	126.40
34	R	103	A86	C3-C4-C5	2.81	129.24	123.47
22	U	211	CLA	CHA-C1A-NA	-2.81	119.96	126.40
32	P	217	LMG	O1-C1-C2	-2.81	103.91	108.30
31	S	214	DD6	C24-C1-C2	2.81	123.25	118.94
22	A	812	CLA	CHA-C1A-NA	-2.81	119.97	126.40
22	B	844	CLA	C4A-NA-C1A	2.81	107.97	106.71
22	R	101	CLA	CHA-C1A-NA	-2.81	119.97	126.40
30	S	201	SQD	O8-S-C6	2.81	110.21	105.74
31	S	205	DD6	C4-C3-C2	2.81	129.22	123.47
31	U	212	DD6	C34-C35-C36	2.80	117.44	111.85
29	B	841	DGD	CDB-CCB-CBB	-2.80	100.19	114.42
31	k	101	DD6	C8-C6-C5	2.80	123.24	118.94
22	A	838	CLA	CHA-C1A-NA	-2.80	119.98	126.40
22	B	808	CLA	CHA-C1A-NA	-2.80	119.98	126.40
22	B	834	CLA	CHA-C1A-NA	-2.80	119.99	126.40
22	G	203	CLA	CHD-C1D-ND	-2.80	121.88	124.45
22	A	813	CLA	CHA-C1A-NA	-2.80	119.99	126.40
22	B	826	CLA	CHA-C1A-NA	-2.80	119.99	126.40
22	B	833	CLA	CHA-C1A-NA	-2.80	119.99	126.40
22	A	823	CLA	C4D-CHA-C1A	2.79	124.65	121.25

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	Q	208	CLA	CAA-CBA-CGA	2.79	121.42	113.25
22	A	810	CLA	CHA-C1A-NA	-2.79	120.01	126.40
34	R	105	A86	C8-C6-C5	2.79	123.22	118.94
22	Q	207	CLA	CHA-C1A-NA	-2.79	120.01	126.40
31	S	211	DD6	C-C1-C2	-2.79	119.02	122.92
22	B	812	CLA	C4D-CHA-C1A	2.79	124.64	121.25
22	B	818	CLA	CHA-C1A-NA	-2.79	120.01	126.40
31	O	212	DD6	C-C1-C2	-2.79	119.02	122.92
22	R	104	CLA	CHA-C1A-NA	-2.79	120.02	126.40
22	A	827	CLA	CHD-C1D-ND	-2.79	121.89	124.45
33	S	212	KC1	CHC-C4B-NB	-2.78	121.90	124.45
22	S	217	CLA	CHA-C1A-NA	-2.78	120.03	126.40
31	O	213	DD6	C24-C1-C2	2.78	123.21	118.94
22	O	209	CLA	C4D-CHA-C1A	2.78	124.63	121.25
22	S	207	CLA	CHA-C1A-NA	-2.78	120.03	126.40
22	G	206	CLA	CHA-C1A-NA	-2.78	120.04	126.40
34	P	204	A86	C24-C1-C2	2.78	123.20	118.94
34	R	103	A86	C20-C19-C18	2.77	118.24	112.75
34	Q	201	A86	C4-C3-C2	2.77	129.16	123.47
22	T	206	CLA	C4D-CHA-C1A	2.77	124.62	121.25
22	B	802	CLA	CHD-C1D-ND	-2.77	121.91	124.45
22	A	835	CLA	CHA-C1A-NA	-2.77	120.05	126.40
31	O	214	DD6	C13-C11-C10	2.77	123.19	118.94
33	T	208	KC1	CAB-C3B-C4B	2.77	131.58	124.90
22	G	201	CLA	CHA-C1A-NA	-2.76	120.08	126.40
25	R	102	BCR	C39-C30-C25	-2.76	105.83	110.30
22	P	211	CLA	C4D-CHA-C1A	2.76	124.60	121.25
22	A	828	CLA	CHA-C1A-NA	-2.76	120.09	126.40
22	Q	211	CLA	CHA-C1A-NA	-2.76	120.09	126.40
22	A	827	CLA	CHA-C1A-NA	-2.75	120.09	126.40
22	F	802	CLA	CHA-C1A-NA	-2.75	120.09	126.40
22	B	805	CLA	CHA-C1A-NA	-2.75	120.09	126.40
22	A	848	CLA	CHA-C1A-NA	-2.75	120.10	126.40
22	B	831	CLA	CHA-C1A-NA	-2.75	120.10	126.40
34	Q	218	A86	C28-C27-C26	-2.75	119.07	122.92
22	B	842	CLA	CHA-C1A-NA	-2.75	120.10	126.40
22	H	206	CLA	CHA-C1A-NA	-2.75	120.10	126.40
25	I	101	BCR	C2-C1-C6	2.75	114.71	110.48
22	K	206	CLA	CHA-C1A-NA	-2.75	120.10	126.40
22	B	832	CLA	CHA-C1A-NA	-2.75	120.11	126.40
22	H	205	CLA	CHA-C1A-NA	-2.75	120.11	126.40
30	B	846	SQD	C1-O5-C5	2.75	119.08	113.69

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
34	Q	201	A86	C28-C27-C26	-2.75	119.08	122.92
22	B	803	CLA	CHA-C1A-NA	-2.75	120.11	126.40
22	A	850	CLA	CHA-C1A-NA	-2.74	120.11	126.40
22	L	204	CLA	C4A-NA-C1A	2.74	107.94	106.71
22	A	821	CLA	C4A-NA-C1A	2.74	107.94	106.71
22	T	210	CLA	CHA-C1A-NA	-2.74	120.13	126.40
31	T	212	DD6	C24-C1-C2	2.74	123.14	118.94
22	P	208	CLA	CHA-C1A-NA	-2.74	120.13	126.40
22	A	855	CLA	CHA-C1A-NA	-2.74	120.25	126.41
22	O	211	CLA	CHA-C1A-NA	-2.74	120.13	126.40
22	B	818	CLA	C4D-CHA-C1A	2.73	124.58	121.25
22	A	828	CLA	CHD-C1D-ND	-2.73	121.94	124.45
31	U	212	DD6	C33-C34-C35	2.73	114.05	110.30
22	A	832	CLA	CHA-C1A-NA	-2.73	120.14	126.40
22	L	204	CLA	CHA-C1A-NA	-2.73	120.14	126.40
31	S	205	DD6	C13-C11-C10	2.73	123.13	118.94
32	U	201	LMG	O6-C1-O1	-2.73	103.51	109.97
26	F	806	LMU	C4B-C3B-C2B	2.73	115.59	110.82
22	U	209	CLA	CHA-C1A-NA	-2.73	120.15	126.40
22	O	203	CLA	CHA-C1A-NA	-2.73	120.15	126.40
32	P	217	LMG	O6-C5-C4	2.73	114.65	109.69
31	G	214	DD6	C26-C25-C24	2.73	131.73	123.22
22	Q	213	CLA	C1-O2A-CGA	2.73	123.60	116.44
22	B	847	CLA	CHA-C1A-NA	-2.73	120.15	126.40
31	J	101	DD6	C24-C1-C2	2.73	123.13	118.94
26	K	201	LMU	O5B-C5B-C4B	2.73	114.64	109.69
22	K	204	CLA	CHA-C1A-NA	-2.73	120.16	126.40
22	B	824	CLA	CHA-C1A-NA	-2.72	120.16	126.40
22	B	828	CLA	CHA-C1A-NA	-2.72	120.16	126.40
22	A	817	CLA	C4A-NA-C1A	2.72	107.93	106.71
22	O	204	CLA	CHA-C1A-NA	-2.72	120.17	126.40
22	G	209	CLA	C4A-NA-C1A	2.72	107.93	106.71
22	B	843	CLA	CHA-C1A-NA	-2.72	120.17	126.40
22	A	811	CLA	CHA-C1A-NA	-2.72	120.18	126.40
22	F	803	CLA	C4A-NA-C1A	2.72	107.93	106.71
22	A	830	CLA	CHA-C1A-NA	-2.72	120.18	126.40
25	k	104	BCR	C27-C26-C25	2.72	126.67	122.73
33	S	210	KC1	CAB-C3B-C4B	2.71	131.45	124.90
22	A	801	CLA	CHA-C1A-NA	-2.71	120.18	126.40
31	K	208	DD6	C34-C35-C36	2.71	117.26	111.85
26	K	201	LMU	C3'-C4'-C5'	2.71	117.14	110.93
22	S	202	CLA	CHD-C1D-C2D	2.71	131.16	125.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	P	213	CLA	CHA-C1A-NA	-2.71	120.19	126.40
22	B	803	CLA	C4D-CHA-C1A	2.71	124.55	121.25
22	Q	212	CLA	CAA-C2A-C1A	2.71	120.85	111.97
31	H	201	DD6	C25-C26-C27	2.71	134.44	126.58
22	G	206	CLA	CHD-C1D-ND	-2.71	121.97	124.45
22	A	826	CLA	CHD-C1D-ND	-2.71	121.97	124.45
31	Q	202	DD6	C13-C11-C10	2.70	123.09	118.94
31	U	203	DD6	C33-C32-C31	2.70	115.09	109.62
22	R	101	CLA	CHD-C1D-ND	-2.70	121.97	124.45
22	O	209	CLA	CHA-C1A-NA	-2.70	120.22	126.40
22	B	807	CLA	CHD-C1D-ND	-2.70	121.97	124.45
26	F	806	LMU	O1B-C1B-C2B	2.70	115.09	108.10
27	A	849	CL0	C4D-CHA-C1A	2.70	124.53	121.25
22	A	854	CLA	CHA-C1A-NA	-2.70	120.22	126.40
22	Q	213	CLA	CHA-C1A-NA	-2.70	120.22	126.40
22	K	205	CLA	CHA-C1A-NA	-2.70	120.22	126.40
22	Q	211	CLA	CAA-C2A-C3A	-2.70	109.81	116.10
34	U	202	A86	C24-C1-C2	2.70	123.08	118.94
25	J	104	BCR	C24-C23-C22	-2.69	122.16	126.23
31	O	215	DD6	C8-C6-C5	2.69	123.07	118.94
22	O	202	CLA	CHA-C1A-NA	-2.69	120.24	126.40
26	K	202	LMU	O1B-C4'-C3'	2.69	114.43	107.28
22	A	804	CLA	CHA-C1A-NA	-2.68	120.25	126.40
31	G	213	DD6	C8-C6-C5	2.68	123.06	118.94
22	A	820	CLA	CHA-C1A-NA	-2.68	120.25	126.40
22	A	851	CLA	CHA-C1A-NA	-2.68	120.26	126.40
22	A	821	CLA	C4D-CHA-C1A	2.68	124.51	121.25
25	R	102	BCR	C19-C20-C21	-2.68	117.98	123.47
25	I	102	BCR	C15-C14-C13	-2.68	123.49	127.31
22	A	814	CLA	CHA-C1A-NA	-2.68	120.27	126.40
22	O	203	CLA	C4A-NA-C1A	2.68	107.91	106.71
26	K	201	LMU	C4B-C3B-C2B	2.68	115.49	110.82
22	Q	206	CLA	CHA-C1A-NA	-2.67	120.27	126.40
22	U	205	CLA	CHA-C1A-NA	-2.67	120.28	126.40
22	B	821	CLA	CHA-C1A-NA	-2.67	120.28	126.40
22	F	803	CLA	C1-O2A-CGA	2.67	123.45	116.44
34	R	103	A86	C28-C27-C29	-2.67	112.74	118.93
22	A	846	CLA	CHA-C1A-NA	-2.67	120.28	126.40
22	G	204	CLA	CHA-C1A-NA	-2.67	120.28	126.40
34	P	204	A86	C28-C27-C26	-2.67	119.18	122.92
22	B	819	CLA	C4D-CHA-C1A	2.67	124.50	121.25
22	P	210	CLA	CHA-C1A-NA	-2.67	120.29	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	A	833	CLA	O2A-C1-C2	2.67	115.64	108.64
22	U	211	CLA	C4A-NA-C1A	2.66	107.90	106.71
22	B	812	CLA	CHA-C1A-NA	-2.66	120.30	126.40
22	H	202	CLA	CHA-C1A-NA	-2.66	120.42	126.41
22	J	103	CLA	CHA-C1A-NA	-2.66	120.30	126.40
22	k	102	CLA	CHA-C1A-NA	-2.66	120.30	126.40
22	U	206	CLA	CHA-C1A-NA	-2.66	120.30	126.40
22	G	210	CLA	CHA-C1A-NA	-2.66	120.31	126.40
31	H	201	DD6	C35-C36-C31	2.66	126.61	120.57
22	A	824	CLA	O2A-C1-C2	2.66	115.62	108.64
31	Q	202	DD6	O1-C20-C19	-2.66	111.39	113.38
22	H	210	CLA	CHA-C1A-NA	-2.66	120.31	126.40
31	U	203	DD6	C13-C11-C10	2.66	123.02	118.94
22	G	208	CLA	CHA-C1A-NA	-2.66	120.31	126.40
22	A	823	CLA	CHA-C1A-NA	-2.66	120.32	126.40
22	U	209	CLA	C4D-CHA-C1A	2.65	124.48	121.25
22	A	824	CLA	CHA-C1A-NA	-2.65	120.32	126.40
22	T	205	CLA	CHA-C1A-NA	-2.65	120.33	126.40
33	T	208	KC1	CHC-C4B-NB	-2.65	122.02	124.45
22	G	202	CLA	CHA-C1A-NA	-2.65	120.33	126.40
25	B	839	BCR	C15-C14-C13	-2.65	123.53	127.31
22	G	209	CLA	CHA-C1A-NA	-2.65	120.33	126.40
22	B	806	CLA	CHA-C1A-NA	-2.65	120.33	126.40
25	B	838	BCR	C27-C26-C25	2.65	126.58	122.73
22	T	203	CLA	CHA-C1A-NA	-2.65	120.33	126.40
22	F	804	CLA	CHA-C1A-NA	-2.65	120.33	126.40
22	G	205	CLA	CHA-C1A-NA	-2.65	120.33	126.40
32	Q	217	LMG	O6-C1-O1	-2.65	103.71	109.97
22	B	829	CLA	CHA-C1A-NA	-2.65	120.34	126.40
22	U	210	CLA	CHA-C1A-NA	-2.65	120.34	126.40
22	A	801	CLA	CMB-C2B-C1B	-2.64	124.40	128.46
22	B	823	CLA	CHA-C1A-NA	-2.64	120.35	126.40
22	O	211	CLA	C4A-NA-C1A	2.64	107.89	106.71
22	Q	204	CLA	CHA-C1A-NA	-2.64	120.35	126.40
22	O	209	CLA	C7-C6-C5	2.64	120.53	113.36
34	R	105	A86	C28-C27-C26	-2.64	119.23	122.92
22	B	815	CLA	CHA-C1A-NA	-2.64	120.36	126.40
22	B	845	CLA	CHA-C1A-NA	-2.64	120.36	126.40
22	B	830	CLA	CHA-C1A-NA	-2.63	120.37	126.40
22	P	209	CLA	CHA-C1A-NA	-2.63	120.37	126.40
22	G	215	CLA	CHA-C1A-NA	-2.63	120.37	126.40
22	A	856	CLA	CHA-C1A-NA	-2.63	120.37	126.40

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	U	204	CLA	CHA-C1A-NA	-2.63	120.37	126.40
26	P	221	LMU	C4B-C3B-C2B	2.63	115.41	110.82
22	H	209	CLA	CHA-C1A-NA	-2.63	120.38	126.40
33	P	212	KC1	CAB-C3B-C4B	2.63	131.24	124.90
22	P	211	CLA	CHA-C1A-NA	-2.63	120.39	126.40
22	A	831	CLA	CHA-C1A-NA	-2.62	120.39	126.40
22	O	207	CLA	CHA-C1A-NA	-2.62	120.39	126.40
22	Q	205	CLA	CHA-C1A-NA	-2.62	120.39	126.40
22	B	816	CLA	CHA-C1A-NA	-2.62	120.40	126.40
31	Q	202	DD6	C15-C14-C13	2.62	131.53	125.99
22	T	209	CLA	CHA-C1A-NA	-2.62	120.40	126.40
26	K	202	LMU	O1B-C4'-C5'	-2.62	102.28	109.45
22	A	819	CLA	CHA-C1A-NA	-2.62	120.41	126.40
22	H	208	CLA	CHA-C1A-NA	-2.61	120.41	126.40
22	A	826	CLA	C4D-CHA-C1A	2.61	124.43	121.25
22	B	811	CLA	CHA-C1A-NA	-2.61	120.42	126.40
22	Q	207	CLA	C4A-NA-C1A	2.61	107.88	106.71
22	A	829	CLA	CHA-C1A-NA	-2.61	120.42	126.40
22	B	810	CLA	CHA-C1A-NA	-2.61	120.42	126.40
22	P	214	CLA	CHA-C1A-NA	-2.61	120.43	126.40
22	S	202	CLA	CHA-C1A-NA	-2.61	120.43	126.40
22	A	809	CLA	CHA-C1A-NA	-2.60	120.43	126.40
22	O	206	CLA	CHA-C1A-NA	-2.60	120.43	126.40
22	S	209	CLA	CHA-C1A-NA	-2.60	120.43	126.40
22	U	208	CLA	CHA-C1A-NA	-2.60	120.44	126.40
22	A	818	CLA	CHA-C1A-NA	-2.60	120.44	126.40
26	M	102	LMU	O5'-C5'-C4'	2.60	115.24	109.75
26	F	806	LMU	C3'-C4'-C5'	-2.60	104.96	110.93
22	B	825	CLA	CHA-C1A-NA	-2.60	120.44	126.40
33	S	212	KC1	CAB-C3B-C4B	2.60	131.17	124.90
22	T	202	CLA	CHA-C1A-NA	-2.60	120.45	126.40
22	A	826	CLA	CHA-C1A-NA	-2.59	120.46	126.40
22	T	206	CLA	CHA-C1A-NA	-2.59	120.46	126.40
22	T	211	CLA	C4A-NA-C1A	2.59	107.87	106.71
22	H	207	CLA	CHA-C1A-NA	-2.59	120.46	126.40
31	O	201	DD6	C8-C6-C5	2.59	122.92	118.94
31	H	201	DD6	C8-C6-C5	2.59	122.92	118.94
26	M	102	LMU	C1B-O1B-C4'	-2.59	111.55	117.96
31	O	201	DD6	C13-C11-C10	2.59	122.92	118.94
30	S	201	SQD	O6-C1-C2	2.59	112.35	108.30
22	S	208	CLA	C4D-CHA-C1A	2.59	124.40	121.25
22	L	202	CLA	C1-O2A-CGA	2.59	123.24	116.44

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	S	211	DD6	C13-C11-C10	2.59	122.91	118.94
31	H	201	DD6	C24-C1-C2	2.59	122.91	118.94
25	k	104	BCR	C15-C16-C17	-2.59	118.17	123.47
22	A	855	CLA	C4A-NA-C1A	2.59	107.87	106.71
22	K	207	CLA	CHA-C1A-NA	-2.59	120.48	126.40
22	B	804	CLA	CHA-C1A-NA	-2.59	120.48	126.40
22	A	805	CLA	CHA-C1A-NA	-2.58	120.48	126.40
22	A	836	CLA	CHA-C1A-NA	-2.58	120.48	126.40
22	A	816	CLA	CHA-C1A-NA	-2.58	120.49	126.40
22	A	806	CLA	CHA-C1A-NA	-2.58	120.49	126.40
22	A	848	CLA	C4A-NA-C1A	2.58	107.87	106.71
22	P	207	CLA	CHA-C1A-NA	-2.58	120.49	126.40
22	Q	203	CLA	CHA-C1A-NA	-2.58	120.49	126.40
25	R	102	BCR	C29-C30-C25	2.58	114.45	110.48
22	T	204	CLA	CHA-C1A-NA	-2.58	120.50	126.40
25	A	844	BCR	C28-C27-C26	-2.58	109.48	114.08
22	B	820	CLA	CHA-C1A-NA	-2.57	120.50	126.40
22	B	824	CLA	CHD-C1D-ND	-2.57	122.09	124.45
33	Q	210	KC1	CAB-C3B-C4B	2.57	131.11	124.90
22	B	809	CLA	CHA-C1A-NA	-2.57	120.51	126.40
22	H	203	CLA	CHA-C1A-NA	-2.57	120.52	126.40
22	Q	216	CLA	CHA-C1A-NA	-2.57	120.52	126.40
31	P	220	DD6	C9-C10-C11	2.57	130.97	127.31
22	Q	211	CLA	C4A-NA-C1A	2.56	107.86	106.71
22	B	843	CLA	CHD-C1D-ND	-2.56	122.10	124.45
22	B	813	CLA	CHA-C1A-NA	-2.56	120.54	126.40
22	S	208	CLA	CHA-C1A-NA	-2.56	120.54	126.40
31	P	218	DD6	C12-C11-C10	-2.55	119.34	122.92
22	A	808	CLA	CHA-C1A-NA	-2.55	120.55	126.40
22	B	817	CLA	CHA-C1A-NA	-2.55	120.55	126.40
31	T	213	DD6	C34-C35-C36	2.55	116.93	111.85
22	S	216	CLA	CHA-C1A-NA	-2.55	120.56	126.40
25	B	836	BCR	C7-C8-C9	-2.55	122.39	126.23
24	A	839	LHG	O8-C23-C24	2.55	119.90	111.91
25	M	101	BCR	C15-C14-C13	-2.55	123.68	127.31
22	A	801	CLA	C4D-CHA-C1A	2.54	124.34	121.25
25	L	205	BCR	C27-C26-C25	2.54	126.42	122.73
25	A	843	BCR	C2-C1-C6	2.54	114.39	110.48
25	F	801	BCR	C27-C26-C25	2.54	126.42	122.73
33	S	212	KC1	C2A-C3A-C4A	2.54	108.37	106.49
22	A	833	CLA	CHA-C1A-NA	-2.54	120.59	126.40
34	Q	201	A86	C24-C1-C2	2.53	122.83	118.94

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
26	K	202	LMU	C1'-C2'-C3'	2.53	115.27	110.00
22	H	202	CLA	CHD-C1D-C2D	2.53	130.79	125.48
24	A	840	LHG	C11-C10-C9	-2.53	101.57	114.42
22	L	202	CLA	C4A-NA-C1A	2.53	107.84	106.71
22	L	203	CLA	CHA-C1A-NA	-2.53	120.61	126.40
24	P	201	LHG	C11-C10-C9	-2.53	101.60	114.42
32	S	213	LMG	O6-C1-O1	-2.53	103.99	109.97
31	O	215	DD6	C12-C11-C13	2.52	122.06	118.08
34	Q	214	A86	C24-C1-C2	2.52	122.81	118.94
22	A	802	CLA	CHA-C1A-NA	-2.52	120.62	126.40
25	L	201	BCR	C27-C26-C25	2.52	126.39	122.73
30	B	846	SQD	O48-C23-C24	2.51	119.80	111.91
22	A	803	CLA	CHA-C1A-NA	-2.51	120.65	126.40
22	H	204	CLA	CHA-C1A-NA	-2.51	120.65	126.40
26	S	203	LMU	O5'-C1'-O1'	2.51	115.92	109.97
22	O	205	CLA	CHA-C1A-NA	-2.51	120.66	126.40
22	K	203	CLA	CHA-C4D-ND	2.51	137.74	132.50
33	Q	210	KC1	C1A-C2A-C3A	-2.51	105.13	107.11
31	Q	202	DD6	C23-C16-C17	-2.50	104.63	108.98
22	T	201	CLA	C4D-CHA-C1A	2.50	124.30	121.25
31	O	213	DD6	C28-C27-C29	2.50	121.80	116.84
22	O	208	CLA	CHA-C1A-NA	-2.50	120.67	126.40
22	B	802	CLA	CMB-C2B-C1B	-2.50	124.62	128.46
22	S	217	CLA	C7-C6-C5	-2.49	106.58	113.36
25	M	101	BCR	C15-C16-C17	-2.49	118.36	123.47
22	B	814	CLA	CHA-C1A-NA	-2.49	120.69	126.40
22	A	806	CLA	O2A-C1-C2	2.49	115.19	108.64
25	R	102	BCR	C17-C16-C15	-2.49	119.26	124.81
22	G	209	CLA	CHC-C1C-NC	2.49	127.98	124.20
22	A	853	CLA	CHA-C1A-NA	-2.49	120.69	126.40
31	O	213	DD6	C37-C36-C31	-2.49	120.97	124.35
25	L	201	BCR	C15-C14-C13	-2.49	123.76	127.31
34	Q	218	A86	C22-C16-C17	-2.49	104.66	108.98
22	G	207	CLA	CHA-C1A-NA	-2.49	120.71	126.40
22	B	807	CLA	CHA-C1A-NA	-2.49	120.71	126.40
22	T	207	CLA	CHA-C1A-NA	-2.48	120.72	126.40
22	G	207	CLA	CHD-C1D-C2D	2.48	130.67	125.48
25	I	101	BCR	C16-C15-C14	-2.47	118.41	123.47
26	K	201	LMU	C1-O1'-C1'	-2.47	109.74	113.84
22	B	824	CLA	C4D-CHA-C1A	2.47	124.25	121.25
31	T	212	DD6	C9-C10-C11	2.47	130.83	127.31
31	S	215	DD6	C29-C30-C31	-2.47	169.18	175.43

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	K	208	DD6	C37-C36-C31	-2.46	121.00	124.35
30	S	201	SQD	O48-C23-C24	2.46	119.63	111.91
22	A	846	CLA	C4A-NA-C1A	2.46	107.81	106.71
25	B	840	BCR	C16-C15-C14	-2.46	118.44	123.47
22	S	206	CLA	CHA-C1A-NA	-2.46	120.77	126.40
22	A	821	CLA	CHD-C1D-ND	-2.46	122.20	124.45
31	J	101	DD6	C10-C9-C8	2.45	130.88	123.22
22	A	832	CLA	CMB-C2B-C1B	-2.45	124.70	128.46
26	S	203	LMU	O1'-C1'-C2'	2.45	112.13	108.30
22	Q	209	CLA	CHA-C1A-NA	-2.45	120.79	126.40
22	T	201	CLA	C4A-NA-C1A	2.45	107.81	106.71
32	P	217	LMG	O3-C3-C2	-2.45	104.69	110.35
33	P	212	KC1	C1A-C2A-C3A	-2.45	105.17	107.11
22	G	203	CLA	C4A-NA-C1A	2.44	107.80	106.71
24	A	839	LHG	C11-C10-C9	-2.44	102.06	114.42
26	F	807	LMU	C2'-C3'-C4'	2.43	115.24	109.68
31	T	213	DD6	C28-C27-C29	-2.43	112.02	116.84
22	A	818	CLA	CMB-C2B-C1B	-2.43	124.72	128.46
25	R	102	BCR	C40-C30-C25	2.43	114.24	110.30
31	U	214	DD6	C26-C25-C24	2.43	130.79	123.22
22	U	207	CLA	CAA-CBA-CGA	2.43	120.35	113.25
31	S	211	DD6	O1-C20-C19	-2.43	111.56	113.38
31	S	205	DD6	C24-C1-C2	2.43	122.67	118.94
26	S	203	LMU	C1B-O5B-C5B	2.43	118.45	113.69
22	A	816	CLA	CMB-C2B-C1B	-2.43	124.73	128.46
25	B	840	BCR	C27-C26-C25	2.42	126.25	122.73
31	S	215	DD6	C34-C35-C36	2.42	116.67	111.85
33	O	210	KC1	C1A-C2A-C3A	-2.42	105.20	107.11
25	A	844	BCR	C15-C16-C17	-2.41	118.53	123.47
31	S	214	DD6	C37-C36-C31	-2.41	121.07	124.35
31	O	213	DD6	C8-C6-C5	2.41	122.64	118.94
25	B	836	BCR	C33-C5-C6	-2.41	121.82	124.53
25	J	104	BCR	C27-C26-C25	2.41	126.23	122.73
22	H	213	CLA	CAA-CBA-CGA	2.41	120.29	113.25
22	O	209	CLA	CMB-C2B-C1B	-2.41	124.77	128.46
22	A	832	CLA	C4A-NA-C1A	2.40	107.79	106.71
22	A	806	CLA	C1-O2A-CGA	2.40	122.73	116.44
22	U	207	CLA	O2A-C1-C2	2.40	114.93	108.64
25	B	836	BCR	C29-C30-C25	2.40	114.17	110.48
22	B	845	CLA	CAA-C2A-C3A	-2.40	106.22	112.78
25	F	805	BCR	C35-C13-C14	-2.39	119.57	122.92
25	A	842	BCR	C27-C26-C25	2.39	126.21	122.73

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	A	829	CLA	CMB-C2B-C1B	-2.39	124.79	128.46
22	G	205	CLA	C2A-C1A-CHA	2.39	128.03	123.86
22	G	215	CLA	CHD-C1D-C2D	2.39	130.49	125.48
34	R	103	A86	C10-C9-C8	2.38	130.66	123.22
25	F	805	BCR	C2-C1-C6	2.38	114.15	110.48
22	B	843	CLA	CGD-CBD-CAD	-2.38	103.02	110.73
22	G	206	CLA	CMB-C2B-C1B	-2.38	124.81	128.46
32	Q	217	LMG	O1-C7-C8	-2.37	105.17	110.90
22	B	819	CLA	C4A-NA-C1A	2.37	107.77	106.71
22	T	204	CLA	O2A-C1-C2	2.37	114.87	108.64
22	U	205	CLA	CMB-C2B-C1B	-2.37	124.83	128.46
31	H	211	DD6	C13-C11-C10	2.36	122.57	118.94
25	F	805	BCR	C27-C26-C25	2.36	126.16	122.73
22	O	208	CLA	O2A-C1-C2	2.36	114.84	108.64
33	P	203	KC1	OBD-CAD-CBD	-2.36	122.53	125.89
33	P	212	KC1	CBA-CAA-C2A	2.35	134.25	125.27
22	B	833	CLA	C4A-NA-C1A	2.35	107.76	106.71
32	P	217	LMG	C6-C5-C4	-2.35	107.50	113.00
33	S	210	KC1	CHC-C4B-C3B	2.35	129.28	125.26
25	B	837	BCR	C28-C27-C26	-2.35	109.88	114.08
22	O	202	CLA	CHD-C1D-C2D	2.34	130.39	125.48
26	F	807	LMU	C1B-O1B-C4'	-2.34	112.17	117.96
31	P	215	DD6	C22-C16-C17	-2.34	104.92	108.98
22	Q	208	CLA	C4A-NA-C1A	2.34	107.76	106.71
22	A	822	CLA	CHA-C1A-NA	-2.34	121.04	126.40
22	A	812	CLA	C4A-NA-C1A	2.34	107.76	106.71
33	T	208	KC1	CBA-CAA-C2A	2.34	134.18	125.27
22	B	814	CLA	CHD-C1D-C2D	2.34	130.38	125.48
22	H	202	CLA	CMD-C2D-C1D	2.34	128.83	124.71
31	G	212	DD6	C13-C11-C10	2.33	122.52	118.94
22	B	829	CLA	C4A-NA-C1A	2.33	107.75	106.71
22	A	803	CLA	CMB-C2B-C1B	-2.33	124.88	128.46
25	M	101	BCR	C27-C26-C25	2.33	126.12	122.73
22	P	213	CLA	CAA-C2A-C3A	-2.33	110.66	116.10
22	A	848	CLA	C1D-ND-C4D	2.33	107.99	106.33
33	P	206	KC1	CBA-CAA-C2A	2.33	134.15	125.27
22	U	207	CLA	CHA-C1A-NA	-2.33	121.07	126.40
22	H	213	CLA	C1-O2A-CGA	2.33	122.55	116.44
25	A	843	BCR	C28-C27-C26	-2.32	109.93	114.08
31	U	203	DD6	C22-C16-C17	-2.32	104.95	108.98
31	S	205	DD6	C33-C32-C31	2.32	114.32	109.62
34	R	103	A86	C19-C18-C17	2.32	115.25	110.77

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	P	220	DD6	C34-C35-C36	-2.32	107.23	111.85
22	T	211	CLA	CHD-C1D-C2D	2.32	130.34	125.48
31	G	214	DD6	C13-C11-C10	2.32	122.50	118.94
30	B	846	SQD	C4-C3-C2	2.31	114.86	110.82
25	B	837	BCR	C15-C16-C17	-2.31	118.73	123.47
31	T	213	DD6	C12-C11-C13	2.31	121.72	118.08
22	H	210	CLA	CAA-CBA-CGA	2.31	118.64	112.51
25	R	102	BCR	C33-C5-C6	-2.31	121.93	124.53
22	S	209	CLA	CHD-C1D-C2D	2.31	130.32	125.48
32	S	213	LMG	C40-C39-C38	-2.31	102.71	114.42
33	S	212	KC1	CAA-C2A-C1A	2.31	135.35	124.75
22	B	801	CLA	C4D-CHA-C1A	2.31	124.06	121.25
22	S	217	CLA	O2A-C1-C2	-2.30	102.58	108.64
29	B	841	DGD	CFB-CEB-CDB	-2.30	102.74	114.42
27	A	849	CL0	C4A-NA-C1A	2.30	107.74	106.71
22	H	207	CLA	CAA-C2A-C3A	2.30	119.07	112.78
31	H	201	DD6	C-C1-C2	-2.30	119.70	122.92
22	A	822	CLA	CHD-C1D-C2D	2.30	130.30	125.48
33	P	212	KC1	CHC-C4B-C3B	2.30	129.19	125.26
22	B	832	CLA	C4A-NA-C1A	2.30	107.74	106.71
22	U	210	CLA	C4A-NA-C1A	2.30	107.74	106.71
22	Q	204	CLA	CHD-C1D-C2D	2.29	130.29	125.48
29	B	841	DGD	O6D-C1D-O3G	-2.29	104.55	109.97
32	P	202	LMG	C1-O6-C5	-2.29	109.19	113.69
34	Q	218	A86	C19-C18-C17	2.29	115.19	110.77
22	P	208	CLA	O2A-C1-C2	2.29	114.64	108.64
33	S	212	KC1	CHC-C4B-C3B	2.29	129.17	125.26
22	S	216	CLA	CHD-C1D-C2D	2.29	130.27	125.48
22	B	802	CLA	CAC-C3C-C4C	2.28	127.77	124.81
25	A	842	BCR	C2-C1-C6	2.28	114.00	110.48
31	O	212	DD6	C4-C5-C6	2.28	130.57	127.31
25	B	840	BCR	C2-C1-C6	2.28	113.99	110.48
33	P	212	KC1	C1B-CHB-C4A	2.28	130.98	126.06
31	O	212	DD6	C24-C1-C2	2.28	122.44	118.94
22	A	838	CLA	C4A-NA-C1A	2.28	107.73	106.71
22	G	204	CLA	CMB-C2B-C1B	-2.28	124.96	128.46
32	Q	217	LMG	O3-C3-C2	-2.28	105.08	110.35
22	Q	212	CLA	CAA-C2A-C3A	-2.27	106.55	112.78
22	A	829	CLA	CHD-C1D-C2D	2.27	130.25	125.48
22	H	202	CLA	C2A-C1A-CHA	2.27	126.23	122.71
22	B	808	CLA	C4A-NA-C1A	2.27	107.73	106.71
34	R	103	A86	C22-C16-C17	-2.27	105.04	108.98

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
32	S	213	LMG	O3-C3-C2	-2.27	105.11	110.35
25	B	839	BCR	C27-C26-C25	2.27	126.02	122.73
33	P	206	KC1	OBD-CAD-CBD	-2.26	122.66	125.89
22	S	202	CLA	C4A-NA-C1A	2.26	107.72	106.71
25	A	843	BCR	C29-C30-C25	2.26	113.96	110.48
22	A	818	CLA	CHC-C1C-NC	2.26	127.63	124.20
25	A	844	BCR	C11-C10-C9	-2.25	124.09	127.31
33	O	210	KC1	OBD-CAD-CBD	-2.25	122.67	125.89
31	O	215	DD6	C23-C16-C17	-2.25	105.07	108.98
33	Q	210	KC1	OBD-CAD-CBD	-2.25	122.68	125.89
32	S	213	LMG	C6-C5-C4	-2.25	107.73	113.00
22	O	204	CLA	CMB-C2B-C1B	-2.25	125.00	128.46
31	G	214	DD6	C3-C2-C1	2.25	130.52	127.31
34	R	105	A86	C23-C16-C17	-2.25	105.07	108.98
22	S	208	CLA	CHD-C1D-C2D	2.25	130.20	125.48
22	B	845	CLA	CGD-CBD-CAD	-2.25	103.45	110.73
30	S	201	SQD	C44-O6-C1	2.25	118.13	113.74
26	A	847	LMU	C1B-O1B-C4'	-2.25	112.40	117.96
31	K	208	DD6	C13-C11-C10	2.25	122.39	118.94
34	R	103	A86	C8-C6-C5	2.25	122.39	118.94
22	B	827	CLA	C1D-ND-C4D	2.25	107.93	106.33
22	B	818	CLA	C2A-C1A-CHA	2.25	127.79	123.86
25	I	102	BCR	C2-C1-C6	2.24	113.93	110.48
22	O	207	CLA	C1-O2A-CGA	2.24	123.49	116.11
22	P	214	CLA	CHD-C1D-C2D	2.24	130.18	125.48
22	Q	207	CLA	C1-O2A-CGA	2.23	123.47	116.11
22	B	817	CLA	CHD-C1D-C2D	2.23	130.16	125.48
31	H	212	DD6	C12-C11-C13	2.23	121.59	118.08
22	B	810	CLA	CHD-C1D-C2D	2.23	130.16	125.48
26	F	806	LMU	C6B-C5B-C4B	-2.23	107.79	113.00
31	H	201	DD6	C32-C31-C36	-2.23	119.49	122.63
22	A	803	CLA	CHD-C1D-C2D	2.22	130.15	125.48
22	H	206	CLA	CMB-C2B-C1B	-2.22	125.05	128.46
22	A	831	CLA	CHD-C1D-C2D	2.22	130.14	125.48
25	F	805	BCR	C11-C10-C9	-2.22	124.14	127.31
22	U	207	CLA	C3A-C2A-C1A	-2.22	98.01	101.34
22	K	203	CLA	C3D-C4D-ND	-2.22	106.64	110.24
22	B	819	CLA	C2A-C1A-CHA	2.22	127.74	123.86
22	A	811	CLA	CMB-C2B-C1B	-2.22	125.05	128.46
22	B	803	CLA	CMB-C2B-C1B	-2.22	125.05	128.46
25	B	836	BCR	C28-C27-C26	-2.22	110.12	114.08
24	P	201	LHG	C20-C19-C18	-2.22	103.17	114.42

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
33	U	213	KC1	CBA-CAA-C2A	2.22	133.72	125.27
25	k	104	BCR	C3-C4-C5	-2.22	110.12	114.08
22	A	820	CLA	CHD-C1D-C2D	2.22	130.13	125.48
25	k	104	BCR	C15-C14-C13	-2.21	124.15	127.31
32	S	213	LMG	C38-C37-C36	-2.21	103.18	114.42
22	T	207	CLA	CHD-C1D-C2D	2.21	130.12	125.48
22	A	845	CLA	CMB-C2B-C1B	-2.21	125.06	128.46
26	K	202	LMU	C1B-O5B-C5B	2.21	118.03	113.69
22	O	202	CLA	C1D-ND-C4D	2.21	107.91	106.33
33	O	210	KC1	CBA-CAA-C2A	2.21	133.70	125.27
25	B	839	BCR	C8-C7-C6	-2.21	121.00	127.20
24	A	839	LHG	C27-C26-C25	-2.20	103.24	114.42
22	T	205	CLA	CHD-C1D-C2D	2.20	130.10	125.48
32	Q	217	LMG	C40-C39-C38	-2.20	103.25	114.42
22	U	207	CLA	C2A-C3A-C4A	-2.20	98.31	101.87
22	A	854	CLA	C4A-NA-C1A	2.20	107.70	106.71
24	G	216	LHG	O8-C23-C24	2.20	118.81	111.91
22	U	207	CLA	CHD-C1D-C2D	2.20	130.09	125.48
33	P	219	KC1	OBD-CAD-CBD	-2.20	122.76	125.89
33	T	208	KC1	OBD-CAD-CBD	-2.20	122.76	125.89
32	J	102	LMG	O3-C3-C2	-2.20	105.27	110.35
22	B	829	CLA	CMB-C2B-C1B	-2.20	125.09	128.46
31	S	214	DD6	C9-C8-C6	2.19	132.57	126.42
25	B	840	BCR	C10-C11-C12	-2.19	116.38	123.22
22	A	813	CLA	CHD-C1D-C2D	2.19	130.07	125.48
22	P	207	CLA	CHD-C1D-C2D	2.19	130.07	125.48
22	A	822	CLA	CMB-C2B-C1B	-2.19	125.10	128.46
29	B	841	DGD	CAB-C9B-C8B	-2.19	103.31	114.42
25	A	842	BCR	C15-C16-C17	-2.19	118.99	123.47
22	B	804	CLA	CHD-C1D-C2D	2.19	130.07	125.48
33	U	213	KC1	OBD-CAD-CBD	-2.19	122.77	125.89
22	Q	213	CLA	C4A-NA-C1A	2.19	107.69	106.71
22	G	208	CLA	C4A-NA-C1A	2.19	107.69	106.71
31	T	212	DD6	C37-C36-C31	-2.19	121.38	124.35
22	K	205	CLA	CHD-C1D-C2D	2.19	130.06	125.48
31	U	214	DD6	C33-C32-C31	2.19	114.05	109.62
22	H	204	CLA	CHD-C1D-C2D	2.18	130.06	125.48
25	M	101	BCR	C24-C23-C22	-2.18	122.94	126.23
25	I	101	BCR	C29-C30-C25	2.18	113.84	110.48
22	A	855	CLA	C2A-C1A-CHA	2.18	126.10	122.71
34	P	204	A86	C35-C34-C33	2.18	113.68	109.88
22	Q	212	CLA	C2A-C1A-CHA	2.18	127.67	123.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	A	814	CLA	C4A-NA-C1A	2.18	107.69	106.71
22	B	820	CLA	CHD-C1D-C2D	2.18	130.05	125.48
32	P	217	LMG	O6-C1-O1	-2.18	104.81	109.97
22	A	854	CLA	CMB-C2B-C1B	-2.18	125.11	128.46
22	H	208	CLA	CHD-C1D-C2D	2.18	130.05	125.48
32	Q	217	LMG	C38-C37-C36	-2.18	103.37	114.42
22	Q	207	CLA	CHD-C1D-C2D	2.18	130.04	125.48
25	L	201	BCR	C33-C5-C6	-2.18	122.08	124.53
22	B	834	CLA	CMB-C2B-C1B	-2.18	125.12	128.46
33	S	210	KC1	OBD-CAD-CBD	-2.17	122.79	125.89
22	A	818	CLA	O2A-C1-C2	2.17	114.35	108.64
31	H	212	DD6	C33-C32-C31	2.17	114.03	109.62
22	A	812	CLA	CMB-C2B-C1B	-2.17	125.13	128.46
25	B	839	BCR	C2-C1-C6	2.17	113.82	110.48
22	A	848	CLA	CHD-C1D-C2D	2.17	130.03	125.48
22	R	104	CLA	CMB-C2B-C1B	-2.17	125.13	128.46
30	S	201	SQD	C4-C3-C2	2.17	114.61	110.82
22	B	808	CLA	C1D-ND-C4D	2.17	107.88	106.33
25	B	838	BCR	C2-C1-C6	2.17	113.82	110.48
25	A	841	BCR	C27-C26-C25	2.17	125.88	122.73
22	A	834	CLA	C4A-NA-C1A	2.17	107.68	106.71
31	T	213	DD6	C29-C30-C31	-2.17	169.94	175.43
22	K	207	CLA	CHD-C1D-C2D	2.17	130.02	125.48
25	A	842	BCR	C15-C14-C13	-2.17	124.22	127.31
22	B	815	CLA	CMB-C2B-C1B	-2.16	125.14	128.46
31	P	220	DD6	C26-C25-C24	2.16	129.97	123.22
22	U	210	CLA	CHD-C1D-C2D	2.16	130.02	125.48
33	P	203	KC1	C1A-C2A-C3A	-2.16	105.40	107.11
22	K	205	CLA	CMB-C2B-C1B	-2.16	125.14	128.46
31	U	212	DD6	C37-C36-C31	-2.16	121.41	124.35
22	L	204	CLA	CHD-C1D-C2D	2.16	130.01	125.48
22	S	217	CLA	C4A-NA-C1A	2.16	107.68	106.71
25	A	844	BCR	C29-C30-C25	2.16	113.80	110.48
22	A	850	CLA	CMB-C2B-C1B	-2.16	125.15	128.46
24	P	201	LHG	C27-C26-C25	-2.16	103.48	114.42
22	B	812	CLA	CHD-C1D-C2D	2.16	130.00	125.48
22	T	203	CLA	CMB-C2B-C1B	-2.16	125.15	128.46
25	B	838	BCR	C30-C25-C26	-2.16	119.58	122.61
31	H	201	DD6	C13-C11-C10	2.16	122.25	118.94
22	O	208	CLA	CHD-C1D-C2D	2.15	130.00	125.48
22	O	205	CLA	CHD-C1D-C2D	2.15	130.00	125.48
22	B	802	CLA	C2A-C1A-CHA	2.15	127.62	123.86

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	Q	215	DD6	C22-C16-C17	-2.15	105.25	108.98
33	S	212	KC1	OBD-CAD-CBD	-2.15	122.82	125.89
31	H	212	DD6	C23-C16-C17	-2.15	105.25	108.98
22	A	804	CLA	C1D-ND-C4D	2.15	107.86	106.33
31	T	213	DD6	C37-C36-C31	-2.15	121.43	124.35
22	U	206	CLA	CMB-C2B-C1B	-2.15	125.16	128.46
22	B	802	CLA	C4A-NA-C1A	2.15	107.67	106.71
22	A	854	CLA	CHD-C1D-C2D	2.15	129.98	125.48
22	A	824	CLA	CMB-C2B-C1B	-2.15	125.17	128.46
22	H	202	CLA	C2D-C1D-ND	-2.15	108.52	110.10
22	A	838	CLA	CMB-C2B-C1B	-2.14	125.17	128.46
22	B	811	CLA	CMB-C2B-C1B	-2.14	125.17	128.46
22	O	209	CLA	O2D-CGD-CBD	2.14	115.07	111.27
22	B	811	CLA	CHD-C1D-C2D	2.14	129.97	125.48
22	L	203	CLA	CHD-C1D-C2D	2.14	129.97	125.48
22	B	815	CLA	CHD-C1D-C2D	2.14	129.97	125.48
22	G	205	CLA	CMB-C2B-C1B	-2.14	125.17	128.46
22	Q	213	CLA	CHD-C1D-C2D	2.14	129.97	125.48
22	B	810	CLA	CMB-C2B-C1B	-2.14	125.18	128.46
22	S	217	CLA	CMB-C2B-C1B	-2.14	125.18	128.46
22	Q	203	CLA	CHD-C1D-C2D	2.14	129.96	125.48
22	B	831	CLA	C4A-NA-C1A	2.14	107.67	106.71
22	H	210	CLA	CHD-C1D-C2D	2.13	129.96	125.48
22	B	813	CLA	CMB-C2B-C1B	-2.13	125.18	128.46
22	J	103	CLA	CMB-C2B-C1B	-2.13	125.18	128.46
22	T	202	CLA	CHD-C1D-C2D	2.13	129.96	125.48
22	B	812	CLA	CMB-C2B-C1B	-2.13	125.19	128.46
22	G	202	CLA	CAA-C2A-C3A	-2.13	111.13	116.10
22	A	805	CLA	CHD-C1D-C2D	2.13	129.95	125.48
22	A	833	CLA	CMB-C2B-C1B	-2.13	125.19	128.46
22	S	207	CLA	C4A-NA-C1A	2.13	107.66	106.71
32	P	202	LMG	O1-C7-C8	-2.13	105.77	110.90
26	A	857	LMU	O1'-C1'-C2'	2.12	111.62	108.30
22	O	206	CLA	CHD-C1D-C2D	2.12	129.93	125.48
22	B	805	CLA	C4A-NA-C1A	2.12	107.66	106.71
22	A	821	CLA	C2A-C1A-CHA	2.12	127.57	123.86
22	B	804	CLA	CMB-C2B-C1B	-2.12	125.20	128.46
31	G	214	DD6	C10-C9-C8	2.12	129.84	123.22
34	P	204	A86	C23-C16-C17	-2.12	105.30	108.98
22	G	208	CLA	CHD-C1D-C2D	2.12	129.92	125.48
22	Q	205	CLA	CMB-C2B-C1B	-2.12	125.21	128.46
22	U	207	CLA	CMB-C2B-C1B	-2.12	125.21	128.46

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	H	213	CLA	CHD-C1D-C2D	2.12	129.92	125.48
25	J	104	BCR	C15-C16-C17	-2.12	119.14	123.47
22	B	834	CLA	C4A-NA-C1A	2.12	107.66	106.71
25	F	805	BCR	C16-C15-C14	-2.11	119.14	123.47
22	H	204	CLA	CMB-C2B-C1B	-2.11	125.22	128.46
31	G	211	DD6	C28-C27-C29	2.11	121.02	116.84
31	Q	215	DD6	C37-C36-C31	-2.11	121.48	124.35
25	B	840	BCR	C15-C16-C17	-2.11	119.15	123.47
25	R	102	BCR	C27-C26-C25	2.11	125.80	122.73
22	A	808	CLA	CMB-C2B-C1B	-2.11	125.22	128.46
22	T	209	CLA	CHD-C1D-C2D	2.11	129.91	125.48
22	T	204	CLA	CHD-C1D-C2D	2.11	129.90	125.48
26	K	202	LMU	O5'-C5'-C4'	2.11	114.20	109.75
31	G	214	DD6	C4-C3-C2	2.11	127.79	123.47
22	Q	216	CLA	CHD-C1D-C2D	2.11	129.90	125.48
22	G	205	CLA	C2A-C3A-C4A	-2.11	98.47	101.87
22	B	806	CLA	CMB-C2B-C1B	-2.10	125.23	128.46
22	S	206	CLA	CHD-C1D-C2D	2.10	129.89	125.48
22	B	818	CLA	CMB-C2B-C1B	-2.10	125.23	128.46
22	B	824	CLA	CMB-C2B-C1B	-2.10	125.24	128.46
26	K	202	LMU	O3'-C3'-C2'	-2.10	105.50	110.35
22	U	208	CLA	O2D-CGD-CBD	2.10	115.00	111.27
32	J	102	LMG	C1-C2-C3	-2.10	105.63	110.00
22	P	208	CLA	CMB-C2B-C1B	-2.10	125.24	128.46
31	O	201	DD6	C26-C25-C24	2.10	129.76	123.22
24	A	839	LHG	C18-C17-C16	-2.10	103.79	114.42
26	K	201	LMU	C1'-O5'-C5'	-2.10	109.58	113.69
22	O	206	CLA	C4A-NA-C1A	2.10	107.65	106.71
22	P	210	CLA	CHD-C1D-C2D	2.09	129.87	125.48
22	H	207	CLA	CMB-C2B-C1B	-2.09	125.25	128.46
32	Q	217	LMG	C42-C41-C40	-2.09	103.80	114.42
22	F	803	CLA	CMB-C2B-C1B	-2.09	125.25	128.46
22	H	207	CLA	CHD-C1D-C2D	2.09	129.87	125.48
22	P	216	CLA	C1D-ND-C4D	2.09	107.82	106.33
22	A	832	CLA	CAA-C2A-C1A	2.09	118.83	111.97
22	T	210	CLA	C4A-NA-C1A	2.09	107.65	106.71
25	L	205	BCR	C15-C14-C13	-2.09	124.33	127.31
22	A	818	CLA	CHD-C1D-C2D	2.09	129.86	125.48
22	A	804	CLA	CMB-C2B-C1B	-2.09	125.25	128.46
33	S	212	KC1	O2D-CGD-CBD	2.09	114.98	111.27
22	A	804	CLA	C4A-NA-C1A	2.09	107.64	106.71
22	U	208	CLA	CHD-C1D-C2D	2.09	129.86	125.48

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	A	833	CLA	CHD-C1D-C2D	2.09	129.86	125.48
22	A	820	CLA	O2D-CGD-CBD	2.09	114.98	111.27
22	B	802	CLA	CMB-C2B-C3B	2.09	128.58	124.68
22	A	801	CLA	C2A-C1A-CHA	2.09	127.51	123.86
22	L	202	CLA	CMB-C2B-C1B	-2.09	125.26	128.46
31	P	205	DD6	C33-C32-C31	2.09	113.85	109.62
22	B	828	CLA	C1D-ND-C4D	2.09	107.82	106.33
22	A	819	CLA	CMB-C2B-C1B	-2.09	125.26	128.46
22	B	842	CLA	CMB-C2B-C1B	-2.08	125.26	128.46
22	O	207	CLA	CHD-C1D-C2D	2.08	129.85	125.48
25	I	101	BCR	C28-C27-C26	-2.08	110.36	114.08
22	B	834	CLA	C1D-ND-C4D	2.08	107.81	106.33
32	U	201	LMG	O3-C3-C2	-2.08	105.54	110.35
22	A	826	CLA	CMB-C2B-C1B	-2.08	125.27	128.46
27	A	849	CL0	C2A-C1A-CHA	2.08	127.50	123.86
22	R	101	CLA	C1D-ND-C4D	2.08	107.81	106.33
22	A	836	CLA	O2A-C1-C2	2.08	114.10	108.64
31	G	212	DD6	C26-C25-C24	2.08	129.70	123.22
22	H	203	CLA	C4A-NA-C1A	2.08	107.64	106.71
22	A	806	CLA	CMB-C2B-C1B	-2.08	125.27	128.46
22	A	816	CLA	CHD-C1D-C2D	2.08	129.84	125.48
25	F	801	BCR	C38-C26-C27	-2.08	109.63	113.62
31	S	204	DD6	C26-C25-C24	2.08	129.69	123.22
32	P	217	LMG	O2-C2-C1	-2.07	105.01	110.05
31	O	214	DD6	C10-C9-C8	2.07	129.69	123.22
26	F	806	LMU	O1B-C4'-C3'	2.07	112.79	107.28
22	A	825	CLA	CMB-C2B-C1B	-2.07	125.28	128.46
22	A	802	CLA	CHD-C1D-C2D	2.07	129.82	125.48
31	O	201	DD6	C23-C16-C17	-2.07	105.39	108.98
33	Q	210	KC1	CHC-C4B-C3B	2.07	128.80	125.26
22	B	819	CLA	CMB-C2B-C1B	-2.07	125.29	128.46
22	O	205	CLA	CMB-C2B-C1B	-2.07	125.29	128.46
22	B	801	CLA	C2A-C1A-CHA	2.07	127.47	123.86
22	A	827	CLA	C4A-NA-C1A	2.07	107.64	106.71
32	P	202	LMG	O6-C1-O1	-2.07	105.08	109.97
25	A	844	BCR	C15-C14-C13	-2.06	124.36	127.31
27	A	849	CL0	CHD-C4C-C3C	2.06	127.87	124.84
22	A	814	CLA	CHD-C1D-C2D	2.06	129.81	125.48
22	A	856	CLA	CHD-C1D-C2D	2.06	129.81	125.48
31	P	218	DD6	C23-C16-C17	-2.06	105.40	108.98
22	Q	213	CLA	O2D-CGD-CBD	2.06	114.93	111.27
31	G	212	DD6	C37-C36-C31	-2.06	121.55	124.35

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	A	853	CLA	CMB-C2B-C1B	-2.06	125.30	128.46
22	B	845	CLA	CHD-C1D-C2D	2.06	129.80	125.48
32	J	102	LMG	C9-C8-C7	-2.06	106.91	111.79
22	G	202	CLA	CHD-C1D-C2D	2.06	129.80	125.48
29	B	841	DGD	CBB-CAB-C9B	-2.06	103.97	114.42
33	O	210	KC1	CHB-C4A-NA	2.06	127.45	124.20
22	H	203	CLA	CHD-C1D-C2D	2.06	129.80	125.48
29	B	841	DGD	O2D-C2D-C1D	-2.06	105.05	110.05
22	B	802	CLA	C1D-ND-C4D	2.06	107.80	106.33
22	A	834	CLA	CMB-C2B-C1B	-2.05	125.31	128.46
22	A	823	CLA	CMB-C2B-C1B	-2.05	125.31	128.46
22	P	208	CLA	CHD-C1D-C2D	2.05	129.79	125.48
22	A	809	CLA	CHD-C1D-C2D	2.05	129.78	125.48
31	k	101	DD6	C12-C11-C13	2.05	121.31	118.08
22	B	827	CLA	CAA-C2A-C1A	2.05	118.69	111.97
22	A	850	CLA	CHD-C1D-C2D	2.05	129.78	125.48
22	A	802	CLA	CMB-C2B-C1B	-2.05	125.31	128.46
31	J	101	DD6	C37-C36-C31	-2.05	121.56	124.35
22	A	807	CLA	CMB-C2B-C1B	-2.05	125.32	128.46
22	B	820	CLA	CMB-C2B-C1B	-2.05	125.32	128.46
22	Q	216	CLA	CMB-C2B-C1B	-2.05	125.32	128.46
22	P	207	CLA	CMB-C2B-C1B	-2.05	125.32	128.46
31	T	213	DD6	C26-C25-C24	2.05	129.60	123.22
25	R	102	BCR	C7-C8-C9	-2.04	123.15	126.23
22	B	809	CLA	CHD-C1D-C2D	2.04	129.76	125.48
25	B	838	BCR	C31-C1-C6	2.04	113.61	110.30
22	A	855	CLA	CHD-C1D-C2D	2.04	129.76	125.48
25	R	102	BCR	C24-C23-C22	-2.04	123.16	126.23
22	G	205	CLA	CHD-C1D-C2D	2.04	129.75	125.48
22	G	206	CLA	CMB-C2B-C3B	2.04	128.49	124.68
22	S	208	CLA	C2A-C1A-CHA	2.04	127.42	123.86
22	A	854	CLA	C1D-ND-C4D	2.04	107.78	106.33
22	B	823	CLA	CHD-C1D-C2D	2.03	129.75	125.48
22	T	210	CLA	CHD-C1D-C2D	2.03	129.75	125.48
22	S	216	CLA	CMB-C2B-C1B	-2.03	125.34	128.46
22	A	836	CLA	CMB-C2B-C1B	-2.03	125.34	128.46
22	O	204	CLA	C1D-ND-C4D	2.03	107.78	106.33
22	A	815	CLA	CHD-C1D-C2D	2.03	129.74	125.48
22	B	821	CLA	C4A-NA-C1A	2.03	107.62	106.71
22	k	103	CLA	CHD-C1D-ND	-2.03	122.59	124.45
22	S	207	CLA	CMB-C2B-C1B	-2.03	125.35	128.46
33	U	213	KC1	C1B-CHB-C4A	2.03	130.43	126.06

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
31	U	212	DD6	C26-C25-C24	2.03	129.54	123.22
25	B	837	BCR	C29-C30-C25	2.02	113.60	110.48
22	Q	211	CLA	CMB-C2B-C1B	-2.02	125.35	128.46
31	G	214	DD6	C33-C32-C31	2.02	113.72	109.62
22	P	209	CLA	C4A-NA-C1A	2.02	107.61	106.71
34	P	204	A86	C20-C19-C18	-2.02	108.75	112.75
22	Q	208	CLA	CMB-C2B-C1B	-2.02	125.36	128.46
22	F	804	CLA	CHD-C1D-C2D	2.02	129.72	125.48
22	B	805	CLA	CMB-C2B-C1B	-2.02	125.36	128.46
22	B	829	CLA	O2A-C1-C2	2.02	113.94	108.64
22	Q	209	CLA	CMB-C2B-C1B	-2.02	125.36	128.46
22	B	830	CLA	CHD-C1D-C2D	2.02	129.71	125.48
22	B	808	CLA	CMB-C2B-C1B	-2.02	125.36	128.46
22	O	211	CLA	CMB-C2B-C1B	-2.02	125.36	128.46
31	O	213	DD6	C12-C11-C13	2.02	121.25	118.08
22	Q	213	CLA	CMB-C2B-C1B	-2.02	125.37	128.46
22	G	201	CLA	CHD-C1D-C2D	2.02	129.71	125.48
22	H	209	CLA	CAA-C2A-C3A	-2.02	111.39	116.10
22	B	818	CLA	CHD-C1D-C2D	2.01	129.71	125.48
22	Q	207	CLA	CMB-C2B-C1B	-2.01	125.37	128.46
22	T	209	CLA	CAA-C2A-C3A	-2.01	111.40	116.10
22	Q	207	CLA	CMD-C2D-C1D	2.01	128.26	124.71
25	I	101	BCR	C15-C16-C17	-2.01	119.35	123.47
31	S	211	DD6	C24-C1-C2	2.01	122.03	118.94
22	R	104	CLA	C4A-NA-C1A	2.01	107.61	106.71
25	A	844	BCR	C33-C5-C6	-2.01	122.27	124.53
22	G	206	CLA	O2D-CGD-CBD	2.01	114.84	111.27
22	H	208	CLA	CMB-C2B-C1B	-2.01	125.37	128.46
31	Q	202	DD6	C26-C25-C24	2.01	129.49	123.22
22	A	805	CLA	CMB-C2B-C1B	-2.01	125.38	128.46
22	A	856	CLA	CMB-C2B-C1B	-2.01	125.38	128.46
22	Q	206	CLA	CMB-C2B-C1B	-2.01	125.38	128.46
31	S	205	DD6	C23-C16-C15	2.01	115.47	110.05
22	A	836	CLA	C1D-ND-C4D	2.01	107.76	106.33
22	K	204	CLA	CHD-C1D-C2D	2.01	129.69	125.48
25	F	801	BCR	C3-C4-C5	-2.01	110.50	114.08
25	B	837	BCR	C34-C9-C10	-2.01	120.11	122.92
22	U	211	CLA	CAA-C2A-C1A	2.01	118.55	111.97
22	J	103	CLA	CHD-C1D-C2D	2.01	129.69	125.48
29	B	841	DGD	C6D-O5D-C1E	2.01	117.66	113.74
22	L	202	CLA	CHD-C1D-C2D	2.00	129.68	125.48
25	A	843	BCR	C16-C15-C14	-2.00	119.37	123.47

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
22	G	209	CLA	CAC-C3C-C4C	2.00	127.41	124.81
32	S	213	LMG	O2-C2-C1	-2.00	105.18	110.05
26	K	202	LMU	C3'-C4'-C5'	2.00	115.51	110.93
22	S	208	CLA	CMB-C2B-C1B	-2.00	125.39	128.46
22	B	825	CLA	CHD-C1D-C2D	2.00	129.68	125.48

All (119) chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
22	A	802	CLA	ND
22	A	803	CLA	ND
22	A	804	CLA	ND
22	A	805	CLA	ND
22	A	806	CLA	ND
22	A	809	CLA	ND
22	A	810	CLA	ND
22	A	811	CLA	ND
22	A	812	CLA	ND
22	A	815	CLA	ND
22	A	816	CLA	ND
22	A	817	CLA	ND
22	A	818	CLA	ND
22	A	820	CLA	ND
22	A	821	CLA	ND
22	A	822	CLA	ND
22	A	823	CLA	ND
22	A	824	CLA	ND
22	A	825	CLA	ND
22	A	828	CLA	ND
22	A	829	CLA	ND
22	A	831	CLA	ND
22	A	832	CLA	ND
22	A	833	CLA	ND
22	A	835	CLA	ND
22	A	836	CLA	ND
22	A	838	CLA	ND
22	A	845	CLA	ND
22	A	850	CLA	ND
22	A	853	CLA	ND
22	A	854	CLA	ND
22	A	855	CLA	ND
22	A	856	CLA	ND

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Mol	Chain	Res	Type	Atom
22	B	801	CLA	ND
22	B	802	CLA	ND
22	B	803	CLA	ND
22	B	804	CLA	ND
22	B	805	CLA	ND
22	B	807	CLA	ND
22	B	808	CLA	ND
22	B	811	CLA	ND
22	B	815	CLA	ND
22	B	816	CLA	ND
22	B	819	CLA	ND
22	B	820	CLA	ND
22	B	821	CLA	ND
22	B	822	CLA	ND
22	B	826	CLA	ND
22	B	828	CLA	ND
22	B	829	CLA	ND
22	B	830	CLA	ND
22	B	831	CLA	ND
22	B	832	CLA	ND
22	B	834	CLA	ND
22	B	842	CLA	ND
22	B	843	CLA	ND
22	B	844	CLA	ND
22	B	845	CLA	ND
22	B	847	CLA	ND
22	F	802	CLA	ND
22	F	803	CLA	ND
22	F	804	CLA	ND
22	J	103	CLA	ND
22	L	204	CLA	ND
22	O	205	CLA	ND
22	O	206	CLA	ND
22	O	207	CLA	ND
22	O	208	CLA	ND
22	P	207	CLA	ND
22	P	208	CLA	ND
22	P	209	CLA	ND
22	P	213	CLA	ND
22	P	214	CLA	ND
22	P	216	CLA	ND
22	Q	204	CLA	ND

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Mol	Chain	Res	Type	Atom
22	Q	205	CLA	ND
22	Q	206	CLA	ND
22	Q	207	CLA	ND
22	Q	208	CLA	ND
22	Q	211	CLA	ND
22	Q	213	CLA	ND
22	R	101	CLA	ND
22	S	202	CLA	ND
22	S	206	CLA	ND
22	S	207	CLA	ND
22	S	208	CLA	ND
22	S	216	CLA	ND
22	S	217	CLA	ND
22	U	204	CLA	ND
22	U	206	CLA	ND
22	U	207	CLA	ND
22	U	208	CLA	ND
22	U	211	CLA	ND
22	G	202	CLA	ND
22	G	203	CLA	ND
22	G	206	CLA	ND
22	G	208	CLA	ND
22	G	209	CLA	ND
22	G	210	CLA	ND
22	G	215	CLA	ND
22	H	202	CLA	ND
22	H	203	CLA	ND
22	H	204	CLA	ND
22	H	205	CLA	ND
22	H	206	CLA	ND
22	H	208	CLA	ND
22	H	209	CLA	ND
22	H	213	CLA	ND
22	K	203	CLA	ND
22	K	205	CLA	ND
22	K	206	CLA	ND
22	T	201	CLA	ND
22	T	202	CLA	ND
22	T	203	CLA	ND
22	T	204	CLA	ND
22	T	205	CLA	ND
22	T	211	CLA	ND

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Mol	Chain	Res	Type	Atom
22	k	102	CLA	ND
22	k	103	CLA	ND

All (1618) torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
22	A	804	CLA	C1A-C2A-CAA-CBA
22	A	804	CLA	C3A-C2A-CAA-CBA
22	A	806	CLA	CBA-CGA-O2A-C1
22	A	806	CLA	O1A-CGA-O2A-C1
22	A	806	CLA	CHA-CBD-CGD-O2D
22	A	814	CLA	C2A-CAA-CBA-CGA
22	A	815	CLA	C3A-C2A-CAA-CBA
22	A	816	CLA	CHA-CBD-CGD-O1D
22	A	816	CLA	CHA-CBD-CGD-O2D
22	A	820	CLA	CBD-CGD-O2D-CED
22	A	820	CLA	O1D-CGD-O2D-CED
22	A	820	CLA	C4-C3-C5-C6
22	A	826	CLA	CHA-CBD-CGD-O1D
22	A	826	CLA	CHA-CBD-CGD-O2D
22	A	829	CLA	CHA-CBD-CGD-O1D
22	A	829	CLA	CHA-CBD-CGD-O2D
22	A	831	CLA	CHA-CBD-CGD-O1D
22	A	831	CLA	CHA-CBD-CGD-O2D
22	A	834	CLA	CHA-CBD-CGD-O2D
22	A	838	CLA	CBD-CGD-O2D-CED
22	A	838	CLA	O1D-CGD-O2D-CED
22	A	848	CLA	CHA-CBD-CGD-O1D
22	A	848	CLA	CHA-CBD-CGD-O2D
22	A	856	CLA	C1A-C2A-CAA-CBA
22	B	801	CLA	CHA-CBD-CGD-O1D
22	B	807	CLA	CHA-CBD-CGD-O1D
22	B	807	CLA	CHA-CBD-CGD-O2D
22	B	818	CLA	CHA-CBD-CGD-O1D
22	B	818	CLA	CHA-CBD-CGD-O2D
22	B	820	CLA	CHA-CBD-CGD-O1D
22	B	820	CLA	CHA-CBD-CGD-O2D
22	B	823	CLA	CBA-CGA-O2A-C1
22	B	823	CLA	O1A-CGA-O2A-C1
22	B	845	CLA	C1A-C2A-CAA-CBA
22	B	847	CLA	C1A-C2A-CAA-CBA
22	B	847	CLA	C3A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
22	F	803	CLA	CBA-CGA-O2A-C1
22	F	803	CLA	O1A-CGA-O2A-C1
22	F	804	CLA	C1A-C2A-CAA-CBA
22	J	103	CLA	CHA-CBD-CGD-O1D
22	J	103	CLA	CHA-CBD-CGD-O2D
22	L	202	CLA	C1A-C2A-CAA-CBA
22	L	202	CLA	CBA-CGA-O2A-C1
22	L	202	CLA	O1A-CGA-O2A-C1
22	L	204	CLA	CBD-CGD-O2D-CED
22	L	204	CLA	O1D-CGD-O2D-CED
22	O	203	CLA	CHA-CBD-CGD-O1D
22	O	203	CLA	CHA-CBD-CGD-O2D
22	O	209	CLA	CBD-CGD-O2D-CED
22	O	209	CLA	O1D-CGD-O2D-CED
22	O	209	CLA	C2-C3-C5-C6
22	O	209	CLA	C4-C3-C5-C6
22	P	207	CLA	C2-C3-C5-C6
22	P	207	CLA	C4-C3-C5-C6
22	P	208	CLA	C1A-C2A-CAA-CBA
22	P	208	CLA	C4-C3-C5-C6
22	P	209	CLA	CHA-CBD-CGD-O1D
22	P	209	CLA	CHA-CBD-CGD-O2D
22	P	211	CLA	CBD-CGD-O2D-CED
22	P	211	CLA	O1D-CGD-O2D-CED
22	P	213	CLA	CBD-CGD-O2D-CED
22	P	213	CLA	O1D-CGD-O2D-CED
22	P	214	CLA	CHA-CBD-CGD-O1D
22	P	214	CLA	CHA-CBD-CGD-O2D
22	Q	207	CLA	C1A-C2A-CAA-CBA
22	Q	208	CLA	C2-C1-O2A-CGA
22	Q	209	CLA	C2-C3-C5-C6
22	Q	209	CLA	C4-C3-C5-C6
22	Q	211	CLA	CBD-CGD-O2D-CED
22	Q	211	CLA	O1D-CGD-O2D-CED
22	Q	213	CLA	CBA-CGA-O2A-C1
22	Q	213	CLA	O1A-CGA-O2A-C1
22	Q	213	CLA	CBD-CGD-O2D-CED
22	Q	213	CLA	O1D-CGD-O2D-CED
22	R	104	CLA	CBD-CGD-O2D-CED
22	R	104	CLA	O1D-CGD-O2D-CED
22	S	207	CLA	CBD-CGD-O2D-CED
22	S	207	CLA	O1D-CGD-O2D-CED

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Mol	Chain	Res	Type	Atoms
22	U	204	CLA	C1A-C2A-CAA-CBA
22	U	204	CLA	C3A-C2A-CAA-CBA
22	U	204	CLA	CHA-CBD-CGD-O1D
22	U	204	CLA	CHA-CBD-CGD-O2D
22	U	208	CLA	CBD-CGD-O2D-CED
22	U	208	CLA	O1D-CGD-O2D-CED
22	G	203	CLA	C1A-C2A-CAA-CBA
22	G	203	CLA	C3A-C2A-CAA-CBA
22	G	204	CLA	C1A-C2A-CAA-CBA
22	G	204	CLA	C3A-C2A-CAA-CBA
22	G	205	CLA	C4-C3-C5-C6
22	G	206	CLA	C1A-C2A-CAA-CBA
22	G	206	CLA	C3A-C2A-CAA-CBA
22	G	206	CLA	CBD-CGD-O2D-CED
22	G	206	CLA	O1D-CGD-O2D-CED
22	G	207	CLA	C4-C3-C5-C6
22	G	208	CLA	CHA-CBD-CGD-O1D
22	G	208	CLA	CHA-CBD-CGD-O2D
22	G	209	CLA	CHA-CBD-CGD-O1D
22	G	209	CLA	CHA-CBD-CGD-O2D
22	G	210	CLA	CBD-CGD-O2D-CED
22	G	210	CLA	O1D-CGD-O2D-CED
22	G	215	CLA	CHA-CBD-CGD-O1D
22	G	215	CLA	CHA-CBD-CGD-O2D
22	H	203	CLA	C1A-C2A-CAA-CBA
22	H	203	CLA	C3A-C2A-CAA-CBA
22	H	207	CLA	C3A-C2A-CAA-CBA
22	H	207	CLA	CHA-CBD-CGD-O1D
22	H	207	CLA	CHA-CBD-CGD-O2D
22	H	208	CLA	CHA-CBD-CGD-O1D
22	H	208	CLA	CHA-CBD-CGD-O2D
22	H	208	CLA	CAD-CBD-CGD-O1D
22	H	209	CLA	CBD-CGD-O2D-CED
22	H	209	CLA	O1D-CGD-O2D-CED
22	H	210	CLA	C1A-C2A-CAA-CBA
22	H	213	CLA	C1A-C2A-CAA-CBA
22	H	213	CLA	C3A-C2A-CAA-CBA
22	H	213	CLA	CBA-CGA-O2A-C1
22	H	213	CLA	O1A-CGA-O2A-C1
22	H	213	CLA	C11-C10-C8-C9
22	K	207	CLA	CHA-CBD-CGD-O1D
22	K	207	CLA	CHA-CBD-CGD-O2D

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Mol	Chain	Res	Type	Atoms
22	K	207	CLA	C2-C3-C5-C6
22	K	207	CLA	C4-C3-C5-C6
22	T	202	CLA	CHA-CBD-CGD-O1D
22	T	202	CLA	CHA-CBD-CGD-O2D
22	T	204	CLA	C1A-C2A-CAA-CBA
22	T	205	CLA	CBD-CGD-O2D-CED
22	T	205	CLA	O1D-CGD-O2D-CED
22	T	207	CLA	CBD-CGD-O2D-CED
22	T	207	CLA	O1D-CGD-O2D-CED
22	T	210	CLA	CBD-CGD-O2D-CED
22	T	210	CLA	O1D-CGD-O2D-CED
22	k	103	CLA	CHA-CBD-CGD-O1D
22	k	103	CLA	CHA-CBD-CGD-O2D
24	A	839	LHG	C4-O6-P-O4
24	A	840	LHG	C3-O3-P-O5
24	A	840	LHG	C4-O6-P-O4
24	P	201	LHG	O2-C2-C3-O3
24	P	201	LHG	C3-O3-P-O4
24	P	201	LHG	C4-O6-P-O3
24	P	201	LHG	C4-O6-P-O4
24	P	201	LHG	C4-O6-P-O5
24	G	216	LHG	C1-C2-C3-O3
24	G	216	LHG	C3-O3-P-O4
24	G	216	LHG	C3-O3-P-O6
24	G	216	LHG	C4-O6-P-O3
24	G	216	LHG	C4-O6-P-O5
25	A	841	BCR	C20-C21-C22-C37
25	A	841	BCR	C21-C22-C23-C24
25	A	841	BCR	C23-C24-C25-C30
25	A	842	BCR	C7-C8-C9-C34
25	A	842	BCR	C21-C22-C23-C24
25	A	842	BCR	C37-C22-C23-C24
25	A	843	BCR	C7-C8-C9-C34
25	A	844	BCR	C1-C6-C7-C8
25	A	844	BCR	C11-C12-C13-C35
25	A	844	BCR	C21-C22-C23-C24
25	A	844	BCR	C37-C22-C23-C24
25	B	836	BCR	C37-C22-C23-C24
25	B	837	BCR	C1-C6-C7-C8
25	B	837	BCR	C6-C7-C8-C9
25	B	837	BCR	C7-C8-C9-C34
25	B	837	BCR	C21-C22-C23-C24

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Mol	Chain	Res	Type	Atoms
25	B	837	BCR	C37-C22-C23-C24
25	B	839	BCR	C23-C24-C25-C30
25	B	840	BCR	C37-C22-C23-C24
25	F	801	BCR	C7-C8-C9-C10
25	F	801	BCR	C7-C8-C9-C34
25	F	801	BCR	C37-C22-C23-C24
25	F	805	BCR	C7-C8-C9-C34
25	F	805	BCR	C37-C22-C23-C24
25	I	102	BCR	C7-C8-C9-C34
25	I	102	BCR	C23-C24-C25-C26
25	I	102	BCR	C23-C24-C25-C30
25	J	104	BCR	C7-C8-C9-C34
25	J	104	BCR	C11-C12-C13-C14
25	J	104	BCR	C21-C22-C23-C24
25	J	104	BCR	C37-C22-C23-C24
25	L	201	BCR	C1-C6-C7-C8
25	L	201	BCR	C21-C22-C23-C24
25	L	201	BCR	C37-C22-C23-C24
25	L	205	BCR	C22-C23-C24-C25
25	L	205	BCR	C23-C24-C25-C30
25	M	101	BCR	C7-C8-C9-C10
25	M	101	BCR	C7-C8-C9-C34
25	M	101	BCR	C21-C22-C23-C24
25	M	101	BCR	C37-C22-C23-C24
25	R	102	BCR	C7-C8-C9-C10
25	R	102	BCR	C7-C8-C9-C34
25	R	102	BCR	C20-C21-C22-C37
25	R	102	BCR	C23-C24-C25-C30
25	k	104	BCR	C1-C6-C7-C8
25	k	104	BCR	C6-C7-C8-C9
25	k	104	BCR	C7-C8-C9-C10
25	k	104	BCR	C7-C8-C9-C34
26	A	857	LMU	O5'-C1'-O1'-C1
26	F	806	LMU	C2B-C1B-O1B-C4'
26	O	216	LMU	O5'-C1'-O1'-C1
26	O	216	LMU	C2-C1-O1'-C1'
26	S	203	LMU	C2'-C1'-O1'-C1
26	S	203	LMU	C2-C1-O1'-C1'
27	A	849	CL0	C1-C2-C3-C4
27	A	849	CL0	C1-C2-C3-C5
29	B	841	DGD	O2G-C2G-C3G-O3G
30	B	846	SQD	C5-C6-S-O8

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Mol	Chain	Res	Type	Atoms
30	B	846	SQD	C5-C6-S-O9
30	S	201	SQD	O5-C1-O6-C44
30	S	201	SQD	O6-C44-C45-O47
30	S	201	SQD	O5-C5-C6-S
31	J	101	DD6	C10-C11-C13-C14
31	J	101	DD6	C12-C11-C13-C14
31	O	201	DD6	C10-C11-C13-C14
31	O	201	DD6	C12-C11-C13-C14
31	O	201	DD6	C13-C14-C15-O1
31	O	212	DD6	C-C1-C24-C25
31	O	212	DD6	C1-C2-C3-C4
31	O	212	DD6	C2-C3-C4-C5
31	O	212	DD6	C3-C4-C5-C6
31	O	212	DD6	C4-C5-C6-C7
31	O	212	DD6	C4-C5-C6-C8
31	O	213	DD6	C9-C10-C11-C12
31	O	213	DD6	C9-C10-C11-C13
31	O	213	DD6	C10-C11-C13-C14
31	O	213	DD6	C12-C11-C13-C14
31	O	213	DD6	C2-C3-C4-C5
31	O	213	DD6	C5-C6-C8-C9
31	O	213	DD6	C7-C6-C8-C9
31	O	214	DD6	C10-C11-C13-C14
31	O	214	DD6	C12-C11-C13-C14
31	O	214	DD6	C11-C13-C14-C15
31	O	214	DD6	C2-C3-C4-C5
31	O	214	DD6	C4-C5-C6-C7
31	O	214	DD6	C4-C5-C6-C8
31	O	215	DD6	C-C1-C24-C25
31	O	215	DD6	C2-C1-C24-C25
31	O	215	DD6	C9-C10-C11-C12
31	O	215	DD6	C9-C10-C11-C13
31	O	215	DD6	C11-C13-C14-C15
31	O	215	DD6	C24-C25-C26-C27
31	O	215	DD6	C2-C3-C4-C5
31	O	215	DD6	C4-C5-C6-C7
31	O	215	DD6	C4-C5-C6-C8
31	O	215	DD6	C5-C6-C8-C9
31	O	215	DD6	C7-C6-C8-C9
31	P	205	DD6	C13-C14-C15-O1
31	P	215	DD6	C9-C10-C11-C12
31	P	215	DD6	C9-C10-C11-C13

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Mol	Chain	Res	Type	Atoms
31	P	215	DD6	C11-C13-C14-C15
31	P	215	DD6	C13-C14-C15-C16
31	P	215	DD6	C13-C14-C15-C20
31	P	215	DD6	C13-C14-C15-O1
31	P	215	DD6	C2-C3-C4-C5
31	P	215	DD6	C4-C5-C6-C7
31	P	215	DD6	C4-C5-C6-C8
31	P	218	DD6	C10-C11-C13-C14
31	P	218	DD6	C11-C13-C14-C15
31	P	218	DD6	C13-C14-C15-O1
31	P	218	DD6	C2-C3-C4-C5
31	P	218	DD6	C4-C5-C6-C7
31	P	218	DD6	C4-C5-C6-C8
31	P	220	DD6	C9-C10-C11-C12
31	P	220	DD6	C9-C10-C11-C13
31	P	220	DD6	C11-C13-C14-C15
31	P	220	DD6	C1-C24-C25-C26
31	P	220	DD6	C24-C25-C26-C27
31	Q	215	DD6	C-C1-C24-C25
31	Q	215	DD6	C2-C1-C24-C25
31	Q	215	DD6	C9-C10-C11-C12
31	Q	215	DD6	C9-C10-C11-C13
31	Q	215	DD6	C10-C11-C13-C14
31	Q	215	DD6	C12-C11-C13-C14
31	Q	215	DD6	C11-C13-C14-C15
31	S	204	DD6	C2-C3-C4-C5
31	S	204	DD6	C4-C5-C6-C7
31	S	204	DD6	C4-C5-C6-C8
31	S	205	DD6	C10-C11-C13-C14
31	S	205	DD6	C12-C11-C13-C14
31	S	205	DD6	C2-C3-C4-C5
31	S	205	DD6	C4-C5-C6-C7
31	S	205	DD6	C4-C5-C6-C8
31	S	205	DD6	C5-C6-C8-C9
31	S	205	DD6	C7-C6-C8-C9
31	S	211	DD6	C-C1-C24-C25
31	S	211	DD6	C2-C1-C24-C25
31	S	211	DD6	C11-C13-C14-C15
31	S	211	DD6	C13-C14-C15-O1
31	S	214	DD6	C9-C10-C11-C12
31	S	214	DD6	C9-C10-C11-C13
31	S	214	DD6	C11-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
31	S	214	DD6	C5-C6-C8-C9
31	S	214	DD6	C7-C6-C8-C9
31	S	215	DD6	C9-C10-C11-C12
31	S	215	DD6	C9-C10-C11-C13
31	S	215	DD6	C10-C11-C13-C14
31	S	215	DD6	C12-C11-C13-C14
31	S	215	DD6	C11-C13-C14-C15
31	S	215	DD6	C2-C3-C4-C5
31	S	215	DD6	C4-C5-C6-C7
31	S	215	DD6	C4-C5-C6-C8
31	U	203	DD6	C1-C2-C3-C4
31	U	203	DD6	C1-C24-C25-C26
31	U	203	DD6	C2-C3-C4-C5
31	U	212	DD6	C10-C11-C13-C14
31	U	212	DD6	C12-C11-C13-C14
31	U	212	DD6	C11-C13-C14-C15
31	U	212	DD6	C2-C3-C4-C5
31	U	212	DD6	C5-C6-C8-C9
31	U	212	DD6	C7-C6-C8-C9
31	U	214	DD6	C-C1-C24-C25
31	U	214	DD6	C2-C1-C24-C25
31	U	214	DD6	C24-C25-C26-C27
31	U	214	DD6	C2-C3-C4-C5
31	U	214	DD6	C3-C4-C5-C6
31	U	214	DD6	C4-C5-C6-C7
31	G	211	DD6	C11-C13-C14-C15
31	G	211	DD6	C4-C5-C6-C7
31	G	211	DD6	C4-C5-C6-C8
31	G	212	DD6	C-C1-C24-C25
31	G	212	DD6	C2-C1-C24-C25
31	G	212	DD6	C2-C3-C4-C5
31	G	212	DD6	C4-C5-C6-C7
31	G	212	DD6	C4-C5-C6-C8
31	G	213	DD6	C-C1-C24-C25
31	G	213	DD6	C2-C1-C24-C25
31	G	213	DD6	C2-C3-C4-C5
31	G	213	DD6	C4-C5-C6-C7
31	G	213	DD6	C4-C5-C6-C8
31	G	214	DD6	C1-C24-C25-C26
31	G	214	DD6	C27-C29-C30-C31
31	H	201	DD6	C10-C11-C13-C14
31	H	201	DD6	C12-C11-C13-C14

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Mol	Chain	Res	Type	Atoms
31	H	201	DD6	C11-C13-C14-C15
31	H	211	DD6	C9-C10-C11-C12
31	H	211	DD6	C9-C10-C11-C13
31	H	211	DD6	C11-C13-C14-C15
31	H	211	DD6	C1-C2-C3-C4
31	H	212	DD6	C9-C10-C11-C12
31	H	212	DD6	C9-C10-C11-C13
31	H	212	DD6	C10-C11-C13-C14
31	H	212	DD6	C12-C11-C13-C14
31	H	212	DD6	C13-C14-C15-O1
31	H	212	DD6	C4-C5-C6-C7
31	H	212	DD6	C4-C5-C6-C8
31	H	212	DD6	C5-C6-C8-C9
31	H	212	DD6	C7-C6-C8-C9
31	K	208	DD6	C-C1-C24-C25
31	K	208	DD6	C2-C1-C24-C25
31	K	208	DD6	C2-C3-C4-C5
31	K	208	DD6	C4-C5-C6-C7
31	K	208	DD6	C4-C5-C6-C8
31	K	208	DD6	C5-C6-C8-C9
31	K	208	DD6	C7-C6-C8-C9
31	T	212	DD6	C9-C10-C11-C12
31	T	212	DD6	C9-C10-C11-C13
31	T	212	DD6	C3-C4-C5-C6
31	T	212	DD6	C4-C5-C6-C7
31	T	212	DD6	C4-C5-C6-C8
31	T	213	DD6	C9-C10-C11-C12
31	T	213	DD6	C9-C10-C11-C13
31	T	213	DD6	C11-C13-C14-C15
31	T	213	DD6	C1-C2-C3-C4
31	T	213	DD6	C1-C24-C25-C26
31	T	213	DD6	C24-C25-C26-C27
31	T	213	DD6	C3-C4-C5-C6
31	k	101	DD6	C10-C11-C13-C14
31	k	101	DD6	C12-C11-C13-C14
31	k	101	DD6	C5-C6-C8-C9
31	k	101	DD6	C7-C6-C8-C9
32	J	102	LMG	C2-C1-O1-C7
32	J	102	LMG	O6-C1-O1-C7
32	J	102	LMG	O9-C10-O7-C8
32	Q	217	LMG	C2-C1-O1-C7
32	Q	217	LMG	O6-C1-O1-C7

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Mol	Chain	Res	Type	Atoms
32	U	201	LMG	C2-C1-O1-C7
32	U	201	LMG	O6-C1-O1-C7
32	U	201	LMG	C11-C10-O7-C8
33	P	206	KC1	C2A-CAA-CBA-CGA
33	P	212	KC1	CAD-CBD-CGD-O2D
33	P	212	KC1	CHA-CBD-CGD-O2D
33	P	219	KC1	C1A-C2A-CAA-CBA
33	Q	210	KC1	C2A-CAA-CBA-CGA
33	S	212	KC1	C3A-C2A-CAA-CBA
33	S	212	KC1	CBD-CGD-O2D-CED
33	S	212	KC1	O1D-CGD-O2D-CED
34	P	204	A86	C-C1-C2-C3
34	P	204	A86	C24-C1-C2-C3
34	P	204	A86	C2-C3-C4-C5
34	P	204	A86	C35-C34-O4-C38
34	P	204	A86	C39-C38-O4-C34
34	Q	201	A86	C9-C10-C11-C12
34	Q	201	A86	C10-C11-C13-O
34	Q	201	A86	C12-C11-C13-O
34	Q	201	A86	C5-C6-C8-C9
34	Q	201	A86	C7-C6-C8-C9
34	Q	201	A86	C6-C8-C9-C10
34	Q	214	A86	C2-C3-C4-C5
34	Q	214	A86	C39-C38-O4-C34
34	Q	214	A86	O5-C38-O4-C34
34	Q	214	A86	C4-C5-C6-C7
34	Q	214	A86	C4-C5-C6-C8
34	Q	214	A86	C5-C6-C8-C9
34	Q	214	A86	C7-C6-C8-C9
34	Q	214	A86	C6-C8-C9-C10
34	Q	218	A86	C-C1-C24-C25
34	Q	218	A86	C2-C1-C24-C25
34	Q	218	A86	C1-C2-C3-C4
34	Q	218	A86	C1-C24-C25-C26
34	Q	218	A86	C26-C27-C29-C30
34	Q	218	A86	C28-C27-C29-C30
34	Q	218	A86	C4-C5-C6-C7
34	Q	218	A86	C4-C5-C6-C8
34	Q	218	A86	C6-C8-C9-C10
34	R	103	A86	C6-C8-C9-C10
34	R	105	A86	C2-C3-C4-C5
34	R	105	A86	C39-C38-O4-C34

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Mol	Chain	Res	Type	Atoms
34	R	105	A86	O5-C38-O4-C34
34	U	202	A86	C10-C11-C13-O
34	U	202	A86	C12-C11-C13-O
34	U	202	A86	C2-C3-C4-C5
34	U	202	A86	C4-C5-C6-C7
34	U	202	A86	C4-C5-C6-C8
34	U	202	A86	C5-C6-C8-C9
34	U	202	A86	C7-C6-C8-C9
34	U	202	A86	C6-C8-C9-C10
26	S	203	LMU	C5'-C4'-O1B-C1B
26	F	806	LMU	O5B-C1B-O1B-C4'
34	U	202	A86	C39-C38-O4-C34
34	Q	201	A86	C39-C38-O4-C34
22	O	207	CLA	O1A-CGA-O2A-C1
22	Q	207	CLA	O1A-CGA-O2A-C1
22	O	207	CLA	CBA-CGA-O2A-C1
22	Q	207	CLA	CBA-CGA-O2A-C1
26	K	202	LMU	C3'-C4'-O1B-C1B
22	A	836	CLA	C3-C5-C6-C7
22	B	816	CLA	C3-C5-C6-C7
22	O	209	CLA	C3-C5-C6-C7
22	Q	204	CLA	C3-C5-C6-C7
22	Q	213	CLA	C3-C5-C6-C7
22	U	205	CLA	C3-C5-C6-C7
22	K	205	CLA	C3-C5-C6-C7
22	T	204	CLA	C3-C5-C6-C7
34	P	204	A86	O5-C38-O4-C34
26	L	206	LMU	O5'-C5'-C6'-O6'
26	M	102	LMU	O5'-C5'-C6'-O6'
26	O	216	LMU	O5B-C5B-C6B-O6B
22	A	845	CLA	C4-C3-C5-C6
22	B	809	CLA	C4-C3-C5-C6
22	K	205	CLA	C4-C3-C5-C6
26	O	216	LMU	C4'-C5'-C6'-O6'
22	B	809	CLA	C2-C3-C5-C6
22	B	845	CLA	C2-C3-C5-C6
22	P	208	CLA	C2-C3-C5-C6
22	K	205	CLA	C2-C3-C5-C6
22	L	204	CLA	C2A-CAA-CBA-CGA
26	O	216	LMU	O5'-C5'-C6'-O6'
32	U	201	LMG	O9-C10-O7-C8
31	P	218	DD6	C11-C10-C9-C8

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Mol	Chain	Res	Type	Atoms
31	Q	215	DD6	C24-C25-C26-C27
31	S	211	DD6	C24-C25-C26-C27
31	U	203	DD6	C3-C4-C5-C6
31	U	212	DD6	C24-C25-C26-C27
31	H	201	DD6	C24-C25-C26-C27
31	K	208	DD6	C24-C25-C26-C27
22	B	814	CLA	C3-C5-C6-C7
22	B	833	CLA	C3-C5-C6-C7
22	Q	205	CLA	C3-C5-C6-C7
26	P	221	LMU	O5'-C5'-C6'-O6'
24	A	840	LHG	C8-C7-O7-C5
24	A	839	LHG	C23-C24-C25-C26
26	O	216	LMU	C2B-C1B-O1B-C4'
32	S	213	LMG	O6-C5-C6-O5
31	G	214	DD6	C2-C3-C4-C5
29	B	841	DGD	O6E-C5E-C6E-O5E
32	J	102	LMG	O6-C5-C6-O5
26	O	216	LMU	C4B-C5B-C6B-O6B
32	S	213	LMG	C4-C5-C6-O5
26	L	206	LMU	O5B-C5B-C6B-O6B
26	S	203	LMU	O5'-C5'-C6'-O6'
24	A	840	LHG	O9-C7-O7-C5
26	F	807	LMU	O5'-C5'-C6'-O6'
22	B	813	CLA	C4-C3-C5-C6
22	O	205	CLA	C4-C3-C5-C6
22	H	203	CLA	C4-C3-C5-C6
22	H	204	CLA	C4-C3-C5-C6
22	B	813	CLA	C2-C3-C5-C6
22	O	205	CLA	C2-C3-C5-C6
22	G	205	CLA	C2-C3-C5-C6
22	G	207	CLA	C2-C3-C5-C6
22	H	203	CLA	C2-C3-C5-C6
22	H	204	CLA	C2-C3-C5-C6
22	A	845	CLA	C2A-CAA-CBA-CGA
24	A	839	LHG	C28-C29-C30-C31
26	F	806	LMU	O5'-C5'-C6'-O6'
26	S	203	LMU	O5'-C1'-O1'-C1
32	J	102	LMG	C29-C28-O8-C9
26	L	206	LMU	C4'-C5'-C6'-O6'
26	P	221	LMU	C4'-C5'-C6'-O6'
26	M	102	LMU	C4'-C5'-C6'-O6'
32	P	217	LMG	C29-C28-O8-C9

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Mol	Chain	Res	Type	Atoms
26	O	216	LMU	O5B-C1B-O1B-C4'
34	U	202	A86	O5-C38-O4-C34
27	A	849	CL0	CBA-CGA-O2A-C1
31	P	218	DD6	C1-C2-C3-C4
31	S	214	DD6	C24-C25-C26-C27
31	S	214	DD6	C3-C4-C5-C6
34	Q	201	A86	O5-C38-O4-C34
24	G	216	LHG	O2-C2-C3-O3
22	Q	203	CLA	O2A-C1-C2-C3
26	A	857	LMU	C2'-C1'-O1'-C1
26	F	806	LMU	C4'-C5'-C6'-O6'
22	A	845	CLA	C2-C3-C5-C6
22	B	816	CLA	C14-C13-C15-C16
22	Q	204	CLA	C6-C7-C8-C9
22	Q	212	CLA	C11-C12-C13-C14
22	B	847	CLA	C2A-CAA-CBA-CGA
25	I	101	BCR	C37-C22-C23-C24
25	I	102	BCR	C37-C22-C23-C24
25	J	104	BCR	C11-C12-C13-C35
25	L	201	BCR	C11-C12-C13-C35
31	O	215	DD6	C12-C11-C13-C14
31	P	218	DD6	C12-C11-C13-C14
31	P	220	DD6	C-C1-C24-C25
31	S	204	DD6	C7-C6-C8-C9
31	S	211	DD6	C12-C11-C13-C14
31	S	214	DD6	C12-C11-C13-C14
31	S	215	DD6	C-C1-C24-C25
31	U	203	DD6	C-C1-C24-C25
31	H	211	DD6	C12-C11-C13-C14
31	T	212	DD6	C7-C6-C8-C9
31	T	213	DD6	C12-C11-C13-C14
25	B	837	BCR	C7-C8-C9-C10
25	I	102	BCR	C21-C22-C23-C24
31	O	215	DD6	C10-C11-C13-C14
31	P	220	DD6	C2-C1-C24-C25
31	S	211	DD6	C10-C11-C13-C14
31	S	214	DD6	C10-C11-C13-C14
31	S	215	DD6	C2-C1-C24-C25
31	U	203	DD6	C2-C1-C24-C25
31	H	201	DD6	C2-C1-C24-C25
31	H	211	DD6	C10-C11-C13-C14
31	T	212	DD6	C5-C6-C8-C9

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Mol	Chain	Res	Type	Atoms
31	T	213	DD6	C10-C11-C13-C14
26	A	857	LMU	O5'-C5'-C6'-O6'
22	A	824	CLA	C10-C11-C12-C13
22	Q	216	CLA	C5-C6-C7-C8
26	S	203	LMU	C4'-C5'-C6'-O6'
24	P	201	LHG	C24-C23-O8-C6
32	P	217	LMG	O10-C28-O8-C9
22	A	811	CLA	C10-C11-C12-C13
22	Q	212	CLA	C10-C11-C12-C13
22	G	209	CLA	C5-C6-C7-C8
30	S	201	SQD	C7-C8-C9-C10
31	Q	215	DD6	C2-C3-C4-C5
22	A	809	CLA	C8-C10-C11-C12
22	A	822	CLA	C13-C15-C16-C17
22	B	812	CLA	C5-C6-C7-C8
22	T	204	CLA	C5-C6-C7-C8
24	A	840	LHG	C7-C8-C9-C10
32	Q	217	LMG	C28-C29-C30-C31
26	M	102	LMU	O5B-C5B-C6B-O6B
26	K	202	LMU	O5B-C5B-C6B-O6B
32	Q	217	LMG	O6-C5-C6-O5
22	B	816	CLA	C8-C10-C11-C12
22	B	830	CLA	C13-C15-C16-C17
32	P	217	LMG	O6-C5-C6-O5
26	F	807	LMU	C4'-C5'-C6'-O6'
22	B	816	CLA	C12-C13-C15-C16
22	B	842	CLA	C11-C10-C8-C7
22	B	819	CLA	C3-C5-C6-C7
27	A	849	CL0	O1A-CGA-O2A-C1
31	P	218	DD6	C3-C4-C5-C6
31	P	220	DD6	C3-C4-C5-C6
31	U	203	DD6	C24-C25-C26-C27
31	G	213	DD6	C24-C25-C26-C27
31	H	211	DD6	C24-C25-C26-C27
31	H	211	DD6	C3-C4-C5-C6
34	Q	218	A86	C11-C10-C9-C8
22	A	807	CLA	C2A-CAA-CBA-CGA
22	A	825	CLA	C2A-CAA-CBA-CGA
22	G	215	CLA	C2A-CAA-CBA-CGA
22	A	853	CLA	C8-C10-C11-C12
24	P	201	LHG	O10-C23-O8-C6
32	J	102	LMG	O10-C28-O8-C9

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Mol	Chain	Res	Type	Atoms
26	P	221	LMU	O5'-C1'-O1'-C1
22	A	854	CLA	C15-C16-C17-C18
22	H	213	CLA	C5-C6-C7-C8
25	k	104	BCR	C10-C11-C12-C13
31	J	101	DD6	C1-C24-C25-C26
31	O	212	DD6	C1-C24-C25-C26
31	O	214	DD6	C1-C24-C25-C26
31	O	215	DD6	C1-C24-C25-C26
31	S	215	DD6	C1-C24-C25-C26
31	H	211	DD6	C1-C24-C25-C26
34	P	204	A86	C1-C24-C25-C26
34	U	202	A86	C1-C24-C25-C26
26	M	102	LMU	C4B-C5B-C6B-O6B
22	Q	204	CLA	C5-C6-C7-C8
22	B	844	CLA	C13-C15-C16-C17
22	Q	209	CLA	C5-C6-C7-C8
26	A	857	LMU	C3'-C4'-O1B-C1B
26	M	102	LMU	O1'-C1-C2-C3
32	J	102	LMG	C4-C5-C6-O5
22	U	205	CLA	C5-C6-C7-C8
22	H	213	CLA	C8-C10-C11-C12
24	P	201	LHG	C3-O3-P-O6
22	B	845	CLA	C3-C5-C6-C7
24	P	201	LHG	C1-C2-C3-O3
22	H	207	CLA	C13-C15-C16-C17
22	A	856	CLA	C2A-CAA-CBA-CGA
22	B	832	CLA	C2A-CAA-CBA-CGA
22	H	203	CLA	C2A-CAA-CBA-CGA
24	P	201	LHG	C23-C24-C25-C26
31	H	201	DD6	C2-C3-C4-C5
31	P	220	DD6	C1-C2-C3-C4
31	S	215	DD6	C24-C25-C26-C27
34	Q	201	A86	C11-C10-C9-C8
32	J	102	LMG	C11-C10-O7-C8
25	A	842	BCR	C20-C21-C22-C37
25	L	201	BCR	C16-C17-C18-C36
31	J	101	DD6	C4-C5-C6-C7
31	O	213	DD6	C4-C5-C6-C7
31	Q	202	DD6	C4-C5-C6-C7
31	S	205	DD6	C9-C10-C11-C12
31	S	211	DD6	C4-C5-C6-C7
31	S	214	DD6	C4-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
31	U	203	DD6	C4-C5-C6-C7
31	U	212	DD6	C4-C5-C6-C7
31	G	213	DD6	C9-C10-C11-C12
31	G	214	DD6	C9-C10-C11-C12
31	H	201	DD6	C4-C5-C6-C7
31	H	211	DD6	C4-C5-C6-C7
31	k	101	DD6	C9-C10-C11-C12
34	R	103	A86	C25-C26-C27-C28
34	R	105	A86	C-C1-C2-C3
34	U	202	A86	C-C1-C2-C3
26	F	806	LMU	C6-C7-C8-C9
32	S	213	LMG	C31-C32-C33-C34
33	S	212	KC1	C2A-CAA-CBA-CGA
34	R	103	A86	C9-C10-C11-C12
34	R	105	A86	C9-C10-C11-C12
32	J	102	LMG	C14-C15-C16-C17
32	S	213	LMG	C28-C29-C30-C31
24	P	201	LHG	C11-C10-C9-C8
24	P	201	LHG	C33-C34-C35-C36
30	S	201	SQD	C12-C13-C14-C15
32	P	202	LMG	C31-C32-C33-C34
24	P	201	LHG	C10-C11-C12-C13
30	S	201	SQD	C29-C30-C31-C32
32	S	213	LMG	C33-C34-C35-C36
29	B	841	DGD	C4B-C5B-C6B-C7B
25	A	841	BCR	C20-C21-C22-C23
25	I	101	BCR	C16-C17-C18-C19
25	I	102	BCR	C20-C21-C22-C23
26	O	216	LMU	C2'-C1'-O1'-C1
26	P	221	LMU	C2'-C1'-O1'-C1
31	J	101	DD6	C4-C5-C6-C8
31	O	213	DD6	C4-C5-C6-C8
31	Q	202	DD6	C4-C5-C6-C8
31	S	205	DD6	C9-C10-C11-C13
31	S	211	DD6	C4-C5-C6-C8
31	S	214	DD6	C4-C5-C6-C8
31	U	203	DD6	C4-C5-C6-C8
31	U	212	DD6	C4-C5-C6-C8
31	G	213	DD6	C9-C10-C11-C13
31	G	214	DD6	C9-C10-C11-C13
31	H	201	DD6	C4-C5-C6-C8
31	H	211	DD6	C4-C5-C6-C8

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Mol	Chain	Res	Type	Atoms
31	k	101	DD6	C9-C10-C11-C13
34	R	103	A86	C25-C26-C27-C29
34	R	105	A86	C24-C1-C2-C3
34	U	202	A86	C24-C1-C2-C3
24	A	839	LHG	C24-C25-C26-C27
26	S	203	LMU	O5B-C5B-C6B-O6B
24	P	201	LHG	C28-C29-C30-C31
22	A	851	CLA	C11-C10-C8-C9
24	P	201	LHG	C14-C15-C16-C17
30	B	846	SQD	C32-C33-C34-C35
32	J	102	LMG	C15-C16-C17-C18
22	A	806	CLA	C2A-CAA-CBA-CGA
22	B	819	CLA	C2A-CAA-CBA-CGA
25	B	836	BCR	C7-C8-C9-C34
31	Q	202	DD6	C12-C11-C13-C14
31	S	214	DD6	C-C1-C24-C25
31	H	201	DD6	C-C1-C24-C25
31	H	211	DD6	C-C1-C24-C25
31	T	213	DD6	C-C1-C24-C25
26	L	206	LMU	C3-C4-C5-C6
24	P	201	LHG	O1-C1-C2-C3
25	B	836	BCR	C7-C8-C9-C10
31	Q	202	DD6	C10-C11-C13-C14
31	S	214	DD6	C2-C1-C24-C25
31	H	211	DD6	C2-C1-C24-C25
31	T	213	DD6	C2-C1-C24-C25
26	A	847	LMU	C1-C2-C3-C4
22	A	834	CLA	C3-C5-C6-C7
22	B	827	CLA	C5-C6-C7-C8
26	F	807	LMU	C5-C6-C7-C8
24	P	201	LHG	C17-C18-C19-C20
26	A	857	LMU	C7-C8-C9-C10
26	F	806	LMU	C7-C8-C9-C10
26	M	102	LMU	C11-C10-C9-C8
29	B	841	DGD	C5A-C6A-C7A-C8A
30	S	201	SQD	C11-C12-C13-C14
32	Q	217	LMG	C31-C32-C33-C34
22	P	207	CLA	C16-C17-C18-C20
32	P	217	LMG	O6-C1-O1-C7
26	A	847	LMU	C11-C10-C9-C8
29	B	841	DGD	CAB-CBB-CCB-CDB
32	Q	217	LMG	C15-C16-C17-C18

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Mol	Chain	Res	Type	Atoms
32	U	201	LMG	C29-C30-C31-C32
26	F	806	LMU	C2-C3-C4-C5
26	F	807	LMU	O1'-C1-C2-C3
30	S	201	SQD	C31-C32-C33-C34
22	A	846	CLA	C8-C10-C11-C12
26	A	847	LMU	C5-C6-C7-C8
30	B	846	SQD	C28-C29-C30-C31
22	F	804	CLA	C3A-C2A-CAA-CBA
22	P	208	CLA	C3A-C2A-CAA-CBA
22	Q	207	CLA	C3A-C2A-CAA-CBA
22	K	206	CLA	C3A-C2A-CAA-CBA
22	T	203	CLA	C3A-C2A-CAA-CBA
26	M	102	LMU	C1-C2-C3-C4
26	O	216	LMU	C1-C2-C3-C4
26	F	807	LMU	C2-C1-O1'-C1'
26	K	201	LMU	C3-C4-C5-C6
30	B	846	SQD	C13-C14-C15-C16
32	J	102	LMG	C13-C14-C15-C16
24	P	201	LHG	C7-C8-C9-C10
22	P	207	CLA	C16-C17-C18-C19
30	S	201	SQD	C26-C27-C28-C29
24	P	201	LHG	C29-C30-C31-C32
31	Q	202	DD6	C2-C3-C4-C5
31	S	214	DD6	C2-C3-C4-C5
31	G	211	DD6	C2-C3-C4-C5
31	H	212	DD6	C2-C3-C4-C5
34	Q	201	A86	C2-C3-C4-C5
34	Q	218	A86	C2-C3-C4-C5
34	Q	201	A86	C9-C10-C11-C13
34	R	103	A86	C9-C10-C11-C13
34	R	105	A86	C9-C10-C11-C13
34	U	202	A86	C9-C10-C11-C13
22	A	821	CLA	C4-C3-C5-C6
22	B	845	CLA	C4-C3-C5-C6
22	O	206	CLA	C4-C3-C5-C6
22	G	208	CLA	C4-C3-C5-C6
22	O	206	CLA	C2-C3-C5-C6
22	G	206	CLA	C2-C3-C5-C6
22	G	208	CLA	C2-C3-C5-C6
32	S	213	LMG	C30-C31-C32-C33
32	S	213	LMG	C34-C35-C36-C37
24	P	201	LHG	O1-C1-C2-O2

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Mol	Chain	Res	Type	Atoms
24	A	839	LHG	C27-C28-C29-C30
26	A	847	LMU	C4-C5-C6-C7
26	F	807	LMU	C4-C5-C6-C7
32	Q	217	LMG	C32-C33-C34-C35
24	G	216	LHG	C7-C8-C9-C10
32	P	217	LMG	C10-C11-C12-C13
23	B	835	PQN	C23-C25-C26-C27
32	Q	217	LMG	C29-C28-O8-C9
22	B	815	CLA	C8-C10-C11-C12
24	P	201	LHG	C9-C10-C11-C12
26	O	216	LMU	C4-C5-C6-C7
29	B	841	DGD	C4E-C5E-C6E-O5E
22	U	204	CLA	C10-C11-C12-C13
32	P	202	LMG	C12-C13-C14-C15
25	A	841	BCR	C23-C24-C25-C26
25	A	843	BCR	C5-C6-C7-C8
25	A	844	BCR	C5-C6-C7-C8
25	A	844	BCR	C23-C24-C25-C26
25	A	844	BCR	C23-C24-C25-C30
25	B	836	BCR	C1-C6-C7-C8
25	B	836	BCR	C5-C6-C7-C8
25	B	837	BCR	C5-C6-C7-C8
25	B	839	BCR	C23-C24-C25-C26
25	F	805	BCR	C5-C6-C7-C8
25	L	201	BCR	C5-C6-C7-C8
25	L	205	BCR	C1-C6-C7-C8
25	L	205	BCR	C5-C6-C7-C8
25	L	205	BCR	C23-C24-C25-C26
25	R	102	BCR	C1-C6-C7-C8
25	R	102	BCR	C5-C6-C7-C8
25	R	102	BCR	C23-C24-C25-C26
25	k	104	BCR	C5-C6-C7-C8
32	Q	217	LMG	C23-C24-C25-C26
22	K	207	CLA	CBA-CGA-O2A-C1
22	B	802	CLA	C13-C15-C16-C17
24	P	201	LHG	C8-C7-O7-C5
24	P	201	LHG	C24-C25-C26-C27
32	J	102	LMG	C19-C20-C21-C22
24	P	201	LHG	C16-C17-C18-C19
29	B	841	DGD	CDB-CEB-CFB-CGB
22	A	806	CLA	C4-C3-C5-C6
22	A	801	CLA	C11-C12-C13-C15

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Mol	Chain	Res	Type	Atoms
22	A	821	CLA	C2-C3-C5-C6
22	A	823	CLA	C2-C3-C5-C6
22	S	217	CLA	C2-C3-C5-C6
22	H	213	CLA	C6-C7-C8-C10
22	K	207	CLA	C11-C10-C8-C7
26	A	857	LMU	C5'-C4'-O1B-C1B
34	Q	218	A86	C39-C38-O4-C34
31	S	214	DD6	C1-C2-C3-C4
24	A	839	LHG	C9-C10-C11-C12
22	Q	212	CLA	C8-C10-C11-C12
22	G	205	CLA	C8-C10-C11-C12
24	A	839	LHG	C30-C31-C32-C33
26	F	806	LMU	O1'-C1-C2-C3
22	A	824	CLA	C5-C6-C7-C8
24	P	201	LHG	C13-C14-C15-C16
32	P	202	LMG	C30-C31-C32-C33
32	P	217	LMG	C11-C10-O7-C8
24	A	840	LHG	O6-C4-C5-O7
33	P	212	KC1	C4B-C3B-CAB-CBB
33	Q	210	KC1	C4B-C3B-CAB-CBB
33	S	212	KC1	C4B-C3B-CAB-CBB
24	A	839	LHG	C26-C27-C28-C29
24	A	839	LHG	C32-C33-C34-C35
26	F	806	LMU	C2'-C1'-O1'-C1
32	J	102	LMG	O7-C8-C9-O8
26	A	857	LMU	C11-C10-C9-C8
24	P	201	LHG	C30-C31-C32-C33
22	A	823	CLA	C4-C3-C5-C6
22	S	217	CLA	C4-C3-C5-C6
26	A	847	LMU	C4'-C5'-C6'-O6'
31	O	212	DD6	C27-C29-C30-C31
31	O	213	DD6	C27-C29-C30-C31
31	O	215	DD6	C27-C29-C30-C31
31	S	211	DD6	C27-C29-C30-C31
31	U	203	DD6	C27-C29-C30-C31
31	T	213	DD6	C27-C29-C30-C31
22	A	801	CLA	C11-C12-C13-C14
22	A	804	CLA	C11-C12-C13-C14
22	B	842	CLA	C11-C10-C8-C9
22	Q	216	CLA	C14-C13-C15-C16
22	K	207	CLA	C11-C10-C8-C9
22	G	209	CLA	C3-C5-C6-C7

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Mol	Chain	Res	Type	Atoms
31	P	205	DD6	C12-C11-C13-C14
31	P	220	DD6	C7-C6-C8-C9
26	K	202	LMU	C4B-C5B-C6B-O6B
25	L	205	BCR	C7-C8-C9-C10
31	P	205	DD6	C10-C11-C13-C14
31	P	220	DD6	C5-C6-C8-C9
22	K	207	CLA	O1A-CGA-O2A-C1
22	A	807	CLA	C1A-C2A-CAA-CBA
22	A	815	CLA	C1A-C2A-CAA-CBA
22	B	822	CLA	C1A-C2A-CAA-CBA
22	H	207	CLA	C1A-C2A-CAA-CBA
22	K	206	CLA	C1A-C2A-CAA-CBA
22	T	203	CLA	C1A-C2A-CAA-CBA
26	O	216	LMU	C11-C10-C9-C8
31	G	211	DD6	C24-C25-C26-C27
22	A	804	CLA	C8-C10-C11-C12
22	O	208	CLA	C5-C6-C7-C8
24	G	216	LHG	C24-C25-C26-C27
22	B	844	CLA	C15-C16-C17-C18
24	A	840	LHG	O6-C4-C5-C6
29	B	841	DGD	C9B-CAB-CBB-CCB
30	B	846	SQD	C27-C28-C29-C30
32	Q	217	LMG	C41-C42-C43-C44
29	B	841	DGD	CEB-CFB-CGB-CHB
32	P	202	LMG	C29-C28-O8-C9
22	B	814	CLA	C4-C3-C5-C6
22	G	206	CLA	C4-C3-C5-C6
24	A	839	LHG	C10-C11-C12-C13
32	S	213	LMG	C39-C40-C41-C42
22	B	842	CLA	C10-C11-C12-C13
22	T	207	CLA	C10-C11-C12-C13
30	S	201	SQD	C32-C33-C34-C35
22	O	205	CLA	C8-C10-C11-C12
26	O	216	LMU	C3-C4-C5-C6
29	B	841	DGD	C1G-C2G-C3G-O3G
30	B	846	SQD	C44-C45-C46-O48
32	P	217	LMG	C7-C8-C9-O8
32	Q	217	LMG	O1-C7-C8-C9
32	S	213	LMG	C7-C8-C9-O8
22	A	821	CLA	C15-C16-C17-C18
32	P	202	LMG	C13-C14-C15-C16
26	A	857	LMU	C9-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
32	P	202	LMG	C32-C33-C34-C35
32	U	201	LMG	C4-C5-C6-O5
32	U	201	LMG	C12-C13-C14-C15
22	L	204	CLA	CAA-CBA-CGA-O2A
32	U	201	LMG	C31-C32-C33-C34
32	Q	217	LMG	C24-C25-C26-C27
26	A	847	LMU	O5B-C5B-C6B-O6B
30	S	201	SQD	C13-C14-C15-C16
24	A	839	LHG	C29-C30-C31-C32
26	F	806	LMU	C4-C5-C6-C7
30	S	201	SQD	C27-C28-C29-C30
25	A	842	BCR	C16-C17-C18-C36
25	B	840	BCR	C11-C10-C9-C34
25	I	102	BCR	C20-C21-C22-C37
26	F	806	LMU	O5B-C5B-C6B-O6B
31	G	211	DD6	C9-C10-C11-C12
22	A	825	CLA	C4-C3-C5-C6
22	G	209	CLA	C4-C3-C5-C6
26	A	847	LMU	C3-C4-C5-C6
33	P	219	KC1	C2A-CAA-CBA-CGA
32	U	201	LMG	C29-C28-O8-C9
26	L	206	LMU	C9-C10-C11-C12
26	L	206	LMU	C2-C3-C4-C5
26	A	857	LMU	C2-C3-C4-C5
26	K	201	LMU	C2B-C1B-O1B-C4'
26	P	221	LMU	C2-C1-O1'-C1'
26	K	202	LMU	C5'-C4'-O1B-C1B
25	A	842	BCR	C20-C21-C22-C23
25	A	844	BCR	C20-C21-C22-C23
25	I	101	BCR	C20-C21-C22-C23
31	G	211	DD6	C9-C10-C11-C13
32	Q	217	LMG	O7-C8-C9-O8
32	U	201	LMG	O1-C7-C8-O7
32	J	102	LMG	C12-C13-C14-C15
32	J	102	LMG	C29-C30-C31-C32
22	B	829	CLA	C5-C6-C7-C8
26	A	847	LMU	C9-C10-C11-C12
22	A	804	CLA	C11-C12-C13-C15
22	B	822	CLA	C6-C7-C8-C10
22	O	206	CLA	C12-C13-C15-C16
22	Q	204	CLA	C6-C7-C8-C10
22	Q	209	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
22	Q	212	CLA	C11-C12-C13-C15
22	Q	216	CLA	C12-C13-C15-C16
22	S	202	CLA	C11-C12-C13-C15
22	G	206	CLA	C6-C7-C8-C10
22	G	209	CLA	C2-C3-C5-C6
22	A	822	CLA	C3-C5-C6-C7
22	B	822	CLA	C6-C7-C8-C9
22	B	845	CLA	C11-C12-C13-C14
22	O	206	CLA	C14-C13-C15-C16
22	Q	205	CLA	C6-C7-C8-C9
31	S	215	DD6	C1-C2-C3-C4
25	L	205	BCR	C7-C8-C9-C34
31	P	215	DD6	C-C1-C24-C25
31	U	203	DD6	C12-C11-C13-C14
31	U	212	DD6	C-C1-C24-C25
31	T	212	DD6	C12-C11-C13-C14
25	F	801	BCR	C21-C22-C23-C24
31	U	203	DD6	C10-C11-C13-C14
30	S	201	SQD	C25-C26-C27-C28
29	B	841	DGD	O1B-C1B-O2G-C2G
26	K	201	LMU	C5-C6-C7-C8
32	Q	217	LMG	C35-C36-C37-C38
29	B	841	DGD	C5B-C6B-C7B-C8B
24	P	201	LHG	O6-C4-C5-C6
24	P	201	LHG	C32-C33-C34-C35
22	Q	216	CLA	C4-C3-C5-C6
22	A	806	CLA	C2-C3-C5-C6
22	A	825	CLA	C2-C3-C5-C6
22	A	853	CLA	C13-C15-C16-C17
32	S	213	LMG	C36-C37-C38-C39
24	P	201	LHG	C11-C12-C13-C14
22	L	202	CLA	C3A-C2A-CAA-CBA
22	T	204	CLA	C3A-C2A-CAA-CBA
33	P	212	KC1	CBD-CGD-O2D-CED
26	S	203	LMU	C4B-C5B-C6B-O6B
26	A	857	LMU	C2-C1-O1'-C1'
34	Q	214	A86	O-C13-C14-C15
34	R	105	A86	O-C13-C14-C15
32	S	213	LMG	C37-C38-C39-C40
22	U	204	CLA	C3-C5-C6-C7
29	B	841	DGD	C4A-C5A-C6A-C7A
30	B	846	SQD	O6-C44-C45-C46

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Mol	Chain	Res	Type	Atoms
30	S	201	SQD	O6-C44-C45-C46
32	P	202	LMG	O1-C7-C8-C9
32	S	213	LMG	O1-C7-C8-C9
32	U	201	LMG	O1-C7-C8-C9
22	S	202	CLA	O2A-C1-C2-C3
29	B	841	DGD	C2A-C3A-C4A-C5A
22	B	807	CLA	C3-C5-C6-C7
22	A	854	CLA	C4-C3-C5-C6
32	U	201	LMG	C30-C31-C32-C33
22	A	836	CLA	C5-C6-C7-C8
30	S	201	SQD	C23-C24-C25-C26
22	T	204	CLA	C2A-CAA-CBA-CGA
22	B	804	CLA	C15-C16-C17-C18
24	P	201	LHG	C18-C19-C20-C21
32	J	102	LMG	C11-C12-C13-C14
32	S	213	LMG	O7-C8-C9-O8
26	F	806	LMU	C5-C6-C7-C8
26	L	206	LMU	C4B-C5B-C6B-O6B
34	Q	201	A86	C10-C11-C13-C14
34	U	202	A86	C10-C11-C13-C14
32	P	217	LMG	O9-C10-O7-C8
22	A	807	CLA	C2-C1-O2A-CGA
22	A	830	CLA	C2-C1-O2A-CGA
22	O	208	CLA	C2-C1-O2A-CGA
22	U	207	CLA	C2-C1-O2A-CGA
22	Q	216	CLA	C2-C3-C5-C6
22	A	804	CLA	C11-C10-C8-C9
22	R	104	CLA	C11-C10-C8-C9
22	U	204	CLA	C6-C7-C8-C9
22	H	213	CLA	C6-C7-C8-C9
22	T	204	CLA	C11-C10-C8-C9
24	P	201	LHG	C2-C3-O3-P
22	A	850	CLA	C2A-CAA-CBA-CGA
25	A	841	BCR	C1-C6-C7-C8
25	A	841	BCR	C5-C6-C7-C8
25	A	842	BCR	C23-C24-C25-C26
25	A	843	BCR	C1-C6-C7-C8
25	B	836	BCR	C23-C24-C25-C26
25	B	836	BCR	C23-C24-C25-C30
25	B	838	BCR	C5-C6-C7-C8
25	B	839	BCR	C1-C6-C7-C8
25	B	839	BCR	C5-C6-C7-C8

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Mol	Chain	Res	Type	Atoms
25	B	840	BCR	C1-C6-C7-C8
25	B	840	BCR	C5-C6-C7-C8
25	B	840	BCR	C23-C24-C25-C26
25	B	840	BCR	C23-C24-C25-C30
25	F	805	BCR	C1-C6-C7-C8
25	I	102	BCR	C5-C6-C7-C8
25	L	201	BCR	C23-C24-C25-C26
25	L	201	BCR	C23-C24-C25-C30
25	M	101	BCR	C5-C6-C7-C8
25	k	104	BCR	C23-C24-C25-C26
25	k	104	BCR	C23-C24-C25-C30
22	A	815	CLA	CAA-CBA-CGA-O2A
32	Q	217	LMG	C18-C19-C20-C21
25	B	836	BCR	C21-C22-C23-C24
25	I	102	BCR	C7-C8-C9-C10
31	O	212	DD6	C2-C1-C24-C25
31	U	214	DD6	C4-C5-C6-C8
31	T	212	DD6	C10-C11-C13-C14
32	J	102	LMG	C20-C21-C22-C23
26	M	102	LMU	C7-C8-C9-C10
26	A	857	LMU	C4'-C5'-C6'-O6'
22	A	825	CLA	C12-C13-C15-C16
22	A	851	CLA	C11-C10-C8-C7
22	O	209	CLA	C6-C7-C8-C10
22	P	207	CLA	C11-C12-C13-C15
22	Q	205	CLA	C6-C7-C8-C10
22	U	204	CLA	C6-C7-C8-C10
22	G	205	CLA	C11-C10-C8-C7
22	G	206	CLA	C11-C12-C13-C15
22	H	213	CLA	C11-C10-C8-C7
23	A	837	PQN	C17-C18-C20-C21
26	K	201	LMU	O1'-C1-C2-C3
31	O	201	DD6	C24-C25-C26-C27
31	O	212	DD6	C24-C25-C26-C27
31	O	214	DD6	C24-C25-C26-C27
31	S	211	DD6	C1-C2-C3-C4
31	k	101	DD6	C3-C4-C5-C6
30	S	201	SQD	C24-C23-O48-C46
22	Q	209	CLA	C13-C15-C16-C17
22	B	814	CLA	CAA-CBA-CGA-O2A
24	A	840	LHG	C11-C10-C9-C8
31	O	201	DD6	C9-C10-C11-C12

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Mol	Chain	Res	Type	Atoms
31	S	204	DD6	C9-C10-C11-C12
31	S	211	DD6	C9-C10-C11-C12
31	H	201	DD6	C9-C10-C11-C12
34	R	103	A86	C-C1-C2-C3
34	R	105	A86	C4-C5-C6-C7
34	Q	218	A86	O5-C38-O4-C34
22	H	207	CLA	C1-C2-C3-C5
34	U	202	A86	C9-C10-C11-C12
22	B	845	CLA	C13-C15-C16-C17
22	A	804	CLA	CAD-CBD-CGD-O2D
22	A	805	CLA	CAD-CBD-CGD-O2D
22	A	812	CLA	CAD-CBD-CGD-O2D
22	A	813	CLA	CAD-CBD-CGD-O2D
22	A	822	CLA	CAD-CBD-CGD-O2D
22	A	835	CLA	CAD-CBD-CGD-O2D
22	A	855	CLA	CAD-CBD-CGD-O2D
22	B	812	CLA	CAD-CBD-CGD-O2D
22	B	817	CLA	CAD-CBD-CGD-O2D
22	F	803	CLA	CAD-CBD-CGD-O2D
22	L	202	CLA	CAD-CBD-CGD-O2D
22	U	209	CLA	CAD-CBD-CGD-O2D
22	G	201	CLA	CAD-CBD-CGD-O2D
22	G	203	CLA	CAD-CBD-CGD-O2D
22	T	203	CLA	CAD-CBD-CGD-O2D
22	k	102	CLA	CAD-CBD-CGD-O2D
32	J	102	LMG	C7-C8-O7-C10
33	P	206	KC1	CAD-CBD-CGD-O2D
34	P	204	A86	C28-C27-C29-C30
26	S	203	LMU	C1-C2-C3-C4
26	F	807	LMU	C3-C4-C5-C6
30	S	201	SQD	C30-C31-C32-C33
32	U	201	LMG	O6-C5-C6-O5
25	L	205	BCR	C6-C7-C8-C9
25	R	102	BCR	C22-C23-C24-C25
29	B	841	DGD	O6D-C1D-O3G-C3G
26	K	201	LMU	O5B-C1B-O1B-C4'
24	G	216	LHG	C2-C3-O3-P
32	J	102	LMG	C7-C8-C9-O8
24	P	201	LHG	O6-C4-C5-O7
22	T	207	CLA	C8-C10-C11-C12
33	S	210	KC1	C4B-C3B-CAB-CBB
33	T	208	KC1	C4B-C3B-CAB-CBB

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Mol	Chain	Res	Type	Atoms
26	A	847	LMU	O5'-C5'-C6'-O6'
22	A	803	CLA	CHA-CBD-CGD-O1D
22	A	803	CLA	CHA-CBD-CGD-O2D
22	A	806	CLA	CHA-CBD-CGD-O1D
22	A	821	CLA	CHA-CBD-CGD-O1D
22	A	821	CLA	CHA-CBD-CGD-O2D
22	A	834	CLA	CHA-CBD-CGD-O1D
22	B	808	CLA	CHA-CBD-CGD-O2D
22	B	819	CLA	CHA-CBD-CGD-O1D
22	B	819	CLA	CHA-CBD-CGD-O2D
22	B	824	CLA	CHA-CBD-CGD-O1D
22	B	824	CLA	CHA-CBD-CGD-O2D
22	O	205	CLA	CHA-CBD-CGD-O1D
22	O	205	CLA	CHA-CBD-CGD-O2D
22	P	210	CLA	CHA-CBD-CGD-O2D
22	Q	212	CLA	CHA-CBD-CGD-O1D
22	Q	212	CLA	CHA-CBD-CGD-O2D
22	G	203	CLA	CHA-CBD-CGD-O1D
22	G	207	CLA	CHA-CBD-CGD-O2D
22	H	203	CLA	CHA-CBD-CGD-O1D
22	H	203	CLA	CHA-CBD-CGD-O2D
22	H	204	CLA	CHA-CBD-CGD-O2D
22	H	213	CLA	CHA-CBD-CGD-O1D
22	H	213	CLA	CHA-CBD-CGD-O2D
22	K	203	CLA	CHA-CBD-CGD-O1D
22	K	203	CLA	CHA-CBD-CGD-O2D
22	T	204	CLA	CHA-CBD-CGD-O1D
31	G	213	DD6	C1-C2-C3-C4
22	A	815	CLA	C8-C10-C11-C12
34	R	105	A86	C4-C5-C6-C8
22	A	821	CLA	C8-C10-C11-C12
32	P	202	LMG	O1-C7-C8-O7
34	Q	201	A86	C13-C14-C15-O1
34	Q	214	A86	C13-C14-C15-O1
34	R	105	A86	C13-C14-C15-O1
34	U	202	A86	C13-C14-C15-O1
22	A	818	CLA	C4-C3-C5-C6
22	A	834	CLA	C4-C3-C5-C6
22	A	854	CLA	C2-C3-C5-C6
31	P	205	DD6	C27-C29-C30-C31
31	U	212	DD6	C27-C29-C30-C31
31	U	214	DD6	C27-C29-C30-C31

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Mol	Chain	Res	Type	Atoms
22	A	825	CLA	C14-C13-C15-C16
22	A	854	CLA	C11-C10-C8-C9
22	B	804	CLA	C11-C10-C8-C9
22	B	805	CLA	C10-C11-C12-C13
26	A	847	LMU	C7-C8-C9-C10
29	B	841	DGD	C3B-C4B-C5B-C6B
31	S	204	DD6	C5-C6-C8-C9
31	U	212	DD6	C2-C1-C24-C25
22	A	814	CLA	C1A-C2A-CAA-CBA
22	A	828	CLA	C16-C17-C18-C20
32	S	213	LMG	C29-C30-C31-C32
22	T	207	CLA	C2-C1-O2A-CGA
32	S	213	LMG	C17-C18-C19-C20
31	U	212	DD6	C3-C4-C5-C6
24	A	840	LHG	C3-O3-P-O6
22	K	207	CLA	C3-C5-C6-C7
22	R	104	CLA	C2-C3-C5-C6
24	P	201	LHG	C3-O3-P-O5
22	L	202	CLA	O2A-C1-C2-C3
24	A	839	LHG	C24-C23-O8-C6
22	G	207	CLA	C8-C10-C11-C12
22	G	206	CLA	C2A-CAA-CBA-CGA
22	A	803	CLA	CAD-CBD-CGD-O1D
22	A	814	CLA	CAD-CBD-CGD-O1D
22	A	820	CLA	C2-C3-C5-C6
22	B	804	CLA	CAD-CBD-CGD-O1D
22	J	103	CLA	CAD-CBD-CGD-O1D
22	U	207	CLA	CAD-CBD-CGD-O1D
22	T	204	CLA	CAD-CBD-CGD-O1D
22	T	211	CLA	CAD-CBD-CGD-O1D
30	B	846	SQD	C5-C6-S-O7
30	S	201	SQD	O48-C23-C24-C25
22	B	815	CLA	C10-C11-C12-C13
32	J	102	LMG	C28-C29-C30-C31
32	Q	217	LMG	C36-C37-C38-C39
22	R	104	CLA	C4-C3-C5-C6
22	B	804	CLA	C11-C10-C8-C7
22	Q	216	CLA	C11-C10-C8-C7
22	H	207	CLA	C11-C12-C13-C15
30	B	846	SQD	C34-C35-C36-C37
32	P	217	LMG	C2-C1-O1-C7
30	B	846	SQD	O6-C44-C45-O47

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Mol	Chain	Res	Type	Atoms
30	B	846	SQD	O47-C45-C46-O48
32	P	217	LMG	O7-C8-C9-O8
32	Q	217	LMG	O1-C7-C8-O7
32	S	213	LMG	O1-C7-C8-O7
22	B	822	CLA	C4-C3-C5-C6
22	Q	206	CLA	C4-C3-C5-C6
26	K	201	LMU	O5'-C5'-C6'-O6'
22	A	834	CLA	C2-C3-C5-C6
22	B	822	CLA	C2-C3-C5-C6
22	A	854	CLA	C6-C7-C8-C9
22	G	205	CLA	C11-C10-C8-C9
23	A	837	PQN	C19-C18-C20-C21
32	S	213	LMG	C16-C17-C18-C19
31	S	214	DD6	C6-C8-C9-C10
34	P	204	A86	C11-C10-C9-C8
29	B	841	DGD	CBB-CCB-CDB-CEB
32	J	102	LMG	C17-C18-C19-C20
22	A	833	CLA	C13-C15-C16-C17
22	A	853	CLA	C10-C11-C12-C13
31	P	215	DD6	C2-C1-C24-C25
26	K	201	LMU	C4-C5-C6-C7
26	M	102	LMU	C6-C7-C8-C9
22	A	805	CLA	C1-C2-C3-C4
22	B	826	CLA	C1-C2-C3-C4
22	A	829	CLA	C15-C16-C17-C18
26	P	221	LMU	O5B-C1B-O1B-C4'
22	A	836	CLA	C2-C1-O2A-CGA
22	U	211	CLA	C2-C1-O2A-CGA
22	G	206	CLA	C2-C1-O2A-CGA
29	B	841	DGD	C3A-C4A-C5A-C6A
34	U	202	A86	C12-C11-C13-C14
32	P	202	LMG	C29-C30-C31-C32
24	P	201	LHG	C27-C28-C29-C30
22	A	828	CLA	C16-C17-C18-C19
26	O	216	LMU	C9-C10-C11-C12
25	A	842	BCR	C23-C24-C25-C30
25	I	102	BCR	C1-C6-C7-C8
25	M	101	BCR	C23-C24-C25-C26
25	M	101	BCR	C23-C24-C25-C30
26	F	806	LMU	C1-C2-C3-C4
32	J	102	LMG	C21-C22-C23-C24
25	J	104	BCR	C12-C13-C14-C15

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Mol	Chain	Res	Type	Atoms
25	R	102	BCR	C20-C21-C22-C23
31	S	204	DD6	C9-C10-C11-C13
31	S	211	DD6	C9-C10-C11-C13
22	A	848	CLA	C4C-C3C-CAC-CBC
24	G	216	LHG	O7-C5-C6-O8
24	A	839	LHG	C3-O3-P-O6
32	J	102	LMG	O1-C7-C8-C9
22	P	207	CLA	C11-C12-C13-C14
22	G	206	CLA	C6-C7-C8-C9
22	G	206	CLA	C11-C12-C13-C14
25	R	102	BCR	C19-C20-C21-C22
31	G	214	DD6	C24-C25-C26-C27
22	G	207	CLA	C11-C12-C13-C15
26	K	201	LMU	C2-C3-C4-C5
22	L	204	CLA	CAA-CBA-CGA-O1A
25	B	840	BCR	C21-C22-C23-C24
22	A	808	CLA	C4-C3-C5-C6
22	O	205	CLA	C16-C17-C18-C20
32	S	213	LMG	C38-C39-C40-C41
22	B	803	CLA	CAA-CBA-CGA-O2A
26	F	806	LMU	O5'-C1'-O1'-C1
31	O	213	DD6	C1-C2-C3-C4
31	P	215	DD6	C1-C2-C3-C4
24	A	840	LHG	C10-C11-C12-C13
22	A	808	CLA	C2-C3-C5-C6
32	S	213	LMG	C18-C19-C20-C21
22	A	827	CLA	C2-C1-O2A-CGA
22	B	801	CLA	C2-C1-O2A-CGA
27	A	849	CL0	C2-C1-O2A-CGA
22	H	206	CLA	CAA-CBA-CGA-O1A
22	A	846	CLA	C2A-CAA-CBA-CGA
22	H	208	CLA	C2A-CAA-CBA-CGA
24	A	840	LHG	O10-C23-C24-C25
30	B	846	SQD	C12-C13-C14-C15
22	O	206	CLA	C13-C15-C16-C17
22	A	856	CLA	C3A-C2A-CAA-CBA
22	B	845	CLA	C3A-C2A-CAA-CBA
22	B	807	CLA	C4-C3-C5-C6
22	B	811	CLA	C4-C3-C5-C6
31	H	201	DD6	C27-C29-C30-C31
31	K	208	DD6	C27-C29-C30-C31
22	A	824	CLA	C14-C13-C15-C16

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Mol	Chain	Res	Type	Atoms
22	A	834	CLA	C14-C13-C15-C16
22	B	802	CLA	C6-C7-C8-C9
22	O	209	CLA	C11-C10-C8-C9
22	S	202	CLA	C11-C10-C8-C9
22	A	831	CLA	CAA-CBA-CGA-O1A
22	H	207	CLA	CBA-CGA-O2A-C1
32	Q	217	LMG	C17-C18-C19-C20
24	G	216	LHG	C4-C5-C6-O8
25	B	838	BCR	C20-C21-C22-C37
25	F	805	BCR	C35-C13-C14-C15
25	L	201	BCR	C11-C10-C9-C34
31	G	214	DD6	C-C1-C2-C3
31	K	208	DD6	C9-C10-C11-C12
22	A	848	CLA	C2C-C3C-CAC-CBC
22	A	824	CLA	O2A-C1-C2-C3
22	A	836	CLA	O2A-C1-C2-C3
22	B	813	CLA	O2A-C1-C2-C3
22	U	206	CLA	CAA-CBA-CGA-O1A
31	G	214	DD6	C-C1-C24-C25
22	A	814	CLA	CAA-CBA-CGA-O1A
22	U	206	CLA	CAA-CBA-CGA-O2A
22	B	811	CLA	C1A-C2A-CAA-CBA
22	B	818	CLA	C1A-C2A-CAA-CBA
22	B	824	CLA	C1A-C2A-CAA-CBA
22	A	824	CLA	C12-C13-C15-C16
22	A	834	CLA	C6-C7-C8-C10
22	A	845	CLA	C11-C10-C8-C7
22	R	104	CLA	C11-C12-C13-C15
22	H	207	CLA	C12-C13-C15-C16
22	P	214	CLA	CAA-CBA-CGA-O2A
31	U	212	DD6	C1-C2-C3-C4
31	k	101	DD6	C1-C2-C3-C4
22	B	832	CLA	C16-C17-C18-C20
22	P	207	CLA	C2A-CAA-CBA-CGA
22	Q	213	CLA	C2A-CAA-CBA-CGA
22	A	833	CLA	C10-C11-C12-C13
22	A	834	CLA	C13-C15-C16-C17
22	P	214	CLA	CAA-CBA-CGA-O1A
33	P	219	KC1	C3A-C2A-CAA-CBA
22	G	206	CLA	C13-C15-C16-C17
22	B	803	CLA	CAA-CBA-CGA-O1A
22	B	806	CLA	C4-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
22	A	853	CLA	C2-C3-C5-C6
22	B	807	CLA	C2-C3-C5-C6
25	B	838	BCR	C20-C21-C22-C23
25	B	840	BCR	C20-C21-C22-C23
25	F	805	BCR	C12-C13-C14-C15
25	L	201	BCR	C11-C10-C9-C8
31	O	201	DD6	C9-C10-C11-C13
31	G	214	DD6	C24-C1-C2-C3
24	P	201	LHG	O7-C5-C6-O8
34	R	103	A86	C11-C10-C9-C8
22	B	832	CLA	C15-C16-C17-C18
22	H	207	CLA	O1A-CGA-O2A-C1
32	Q	217	LMG	O10-C28-O8-C9
22	G	203	CLA	CAA-CBA-CGA-O2A
22	H	206	CLA	CAA-CBA-CGA-O2A
22	G	205	CLA	C5-C6-C7-C8
22	A	848	CLA	C4-C3-C5-C6
22	A	851	CLA	C4-C3-C5-C6
22	A	845	CLA	C2-C1-O2A-CGA
22	B	833	CLA	C2-C1-O2A-CGA
22	L	204	CLA	C2-C1-O2A-CGA
26	K	201	LMU	C1-C2-C3-C4
22	A	831	CLA	CAA-CBA-CGA-O2A
22	A	836	CLA	C15-C16-C17-C18
22	G	206	CLA	C5-C6-C7-C8
22	Q	206	CLA	C2A-CAA-CBA-CGA
25	A	842	BCR	C1-C6-C7-C8
25	A	842	BCR	C5-C6-C7-C8
25	B	838	BCR	C1-C6-C7-C8
25	B	838	BCR	C23-C24-C25-C30
25	F	801	BCR	C1-C6-C7-C8
25	F	805	BCR	C23-C24-C25-C30
25	I	101	BCR	C1-C6-C7-C8
25	I	101	BCR	C5-C6-C7-C8
25	J	104	BCR	C23-C24-C25-C30
25	M	101	BCR	C1-C6-C7-C8
22	A	814	CLA	CAA-CBA-CGA-O2A
31	S	205	DD6	C24-C25-C26-C27
34	Q	201	A86	C3-C4-C5-C6
22	U	211	CLA	C4-C3-C5-C6
22	S	202	CLA	C5-C6-C7-C8
22	A	818	CLA	C2-C3-C5-C6

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Mol	Chain	Res	Type	Atoms
22	S	209	CLA	CAA-CBA-CGA-O2A
32	Q	217	LMG	C8-C7-O1-C1
26	S	203	LMU	C3-C4-C5-C6
22	G	203	CLA	CAA-CBA-CGA-O1A
22	O	205	CLA	C16-C17-C18-C19
22	O	209	CLA	C5-C6-C7-C8
29	B	841	DGD	C1B-C2B-C3B-C4B
23	A	837	PQN	C18-C20-C21-C22
22	G	201	CLA	CAA-CBA-CGA-O1A
22	A	845	CLA	C10-C11-C12-C13
22	H	207	CLA	C15-C16-C17-C18
22	B	816	CLA	C4-C3-C5-C6
22	Q	204	CLA	C4-C3-C5-C6
22	T	204	CLA	C4-C3-C5-C6
22	A	804	CLA	C11-C10-C8-C7
22	B	806	CLA	C2-C3-C5-C6
22	H	207	CLA	C1-C2-C3-C4
24	A	840	LHG	O8-C23-C24-C25
31	G	211	DD6	C3-C4-C5-C6
24	A	839	LHG	C34-C35-C36-C37
22	G	201	CLA	CAA-CBA-CGA-O2A
22	G	207	CLA	C11-C12-C13-C14
30	S	201	SQD	C10-C11-C12-C13
34	Q	214	A86	C-C1-C2-C3
22	A	804	CLA	C4-C3-C5-C6
22	A	850	CLA	C4-C3-C5-C6
22	B	808	CLA	C4-C3-C5-C6
22	B	827	CLA	C4-C3-C5-C6
22	U	205	CLA	C4-C3-C5-C6
22	G	210	CLA	CAA-CBA-CGA-O1A
22	K	206	CLA	CAA-CBA-CGA-O2A
22	B	816	CLA	C11-C10-C8-C9
22	Q	209	CLA	C11-C10-C8-C9
22	Q	212	CLA	C11-C10-C8-C9
22	Q	216	CLA	C11-C10-C8-C9
22	H	207	CLA	C11-C12-C13-C14
22	A	853	CLA	C3A-C2A-CAA-CBA
22	O	207	CLA	C3A-C2A-CAA-CBA
22	H	205	CLA	C3A-C2A-CAA-CBA
22	H	210	CLA	C3A-C2A-CAA-CBA
22	A	804	CLA	C10-C11-C12-C13
24	P	201	LHG	C25-C26-C27-C28

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Mol	Chain	Res	Type	Atoms
30	B	846	SQD	C25-C26-C27-C28
22	A	810	CLA	CAD-CBD-CGD-O2D
22	A	817	CLA	CAD-CBD-CGD-O2D
22	A	819	CLA	CAD-CBD-CGD-O2D
22	A	832	CLA	CAD-CBD-CGD-O2D
22	A	846	CLA	CAD-CBD-CGD-O2D
22	B	811	CLA	CAD-CBD-CGD-O2D
22	B	832	CLA	CAD-CBD-CGD-O2D
22	B	844	CLA	CAD-CBD-CGD-O2D
22	J	103	CLA	CAD-CBD-CGD-O2D
22	O	206	CLA	CAD-CBD-CGD-O2D
22	S	202	CLA	CAD-CBD-CGD-O2D
22	U	211	CLA	CAD-CBD-CGD-O2D
22	H	213	CLA	CAD-CBD-CGD-O2D
22	T	206	CLA	CAD-CBD-CGD-O2D
33	U	213	KC1	CAD-CBD-CGD-O2D
22	A	809	CLA	C2-C1-O2A-CGA
22	P	210	CLA	CAA-CBA-CGA-O2A
32	P	217	LMG	O7-C10-C11-C12
22	A	801	CLA	C8-C10-C11-C12
22	A	804	CLA	C2-C3-C5-C6
22	A	851	CLA	C2-C3-C5-C6
22	A	811	CLA	CAA-CBA-CGA-O2A
24	A	839	LHG	O8-C23-C24-C25
32	P	202	LMG	O7-C10-C11-C12
31	G	214	DD6	C2-C1-C24-C25
32	S	213	LMG	C32-C33-C34-C35
32	Q	217	LMG	C7-C8-C9-O8
22	H	210	CLA	CAA-CBA-CGA-O1A
26	F	806	LMU	C11-C10-C9-C8
22	B	843	CLA	CAA-CBA-CGA-O2A
22	U	208	CLA	CAA-CBA-CGA-O2A
22	A	806	CLA	O2A-C1-C2-C3
22	A	818	CLA	O2A-C1-C2-C3
22	A	821	CLA	O2A-C1-C2-C3
22	A	822	CLA	O2A-C1-C2-C3
22	B	814	CLA	O2A-C1-C2-C3
22	B	818	CLA	O2A-C1-C2-C3
22	R	104	CLA	O2A-C1-C2-C3
22	K	205	CLA	O2A-C1-C2-C3
22	B	808	CLA	CAA-CBA-CGA-O2A
22	k	103	CLA	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
22	A	801	CLA	CHA-CBD-CGD-O1D
22	A	801	CLA	CHA-CBD-CGD-O2D
22	A	827	CLA	CHA-CBD-CGD-O1D
22	A	845	CLA	CHA-CBD-CGD-O1D
22	A	845	CLA	CHA-CBD-CGD-O2D
22	A	851	CLA	CHA-CBD-CGD-O1D
22	A	851	CLA	CHA-CBD-CGD-O2D
22	A	853	CLA	CHA-CBD-CGD-O1D
22	A	853	CLA	CHA-CBD-CGD-O2D
22	B	801	CLA	CHA-CBD-CGD-O2D
22	B	803	CLA	CHA-CBD-CGD-O2D
22	B	804	CLA	CHA-CBD-CGD-O1D
22	B	804	CLA	CHA-CBD-CGD-O2D
22	B	808	CLA	CHA-CBD-CGD-O1D
22	B	825	CLA	CHA-CBD-CGD-O2D
22	F	804	CLA	CHA-CBD-CGD-O1D
22	F	804	CLA	CHA-CBD-CGD-O2D
22	O	204	CLA	CHA-CBD-CGD-O1D
22	O	204	CLA	CHA-CBD-CGD-O2D
22	P	210	CLA	CHA-CBD-CGD-O1D
22	Q	204	CLA	CHA-CBD-CGD-O1D
22	Q	204	CLA	CHA-CBD-CGD-O2D
22	Q	205	CLA	CHA-CBD-CGD-O1D
22	Q	205	CLA	CHA-CBD-CGD-O2D
22	Q	207	CLA	CHA-CBD-CGD-O1D
22	Q	207	CLA	CHA-CBD-CGD-O2D
22	Q	209	CLA	CHA-CBD-CGD-O2D
22	U	207	CLA	CHA-CBD-CGD-O1D
22	U	209	CLA	CHA-CBD-CGD-O2D
22	U	210	CLA	CHA-CBD-CGD-O1D
22	U	210	CLA	CHA-CBD-CGD-O2D
22	G	207	CLA	CHA-CBD-CGD-O1D
22	H	204	CLA	CHA-CBD-CGD-O1D
22	T	204	CLA	CHA-CBD-CGD-O2D
22	T	209	CLA	CHA-CBD-CGD-O1D
22	T	209	CLA	CHA-CBD-CGD-O2D
22	K	206	CLA	CAA-CBA-CGA-O1A
22	B	805	CLA	C4-C3-C5-C6
22	U	211	CLA	C2-C3-C5-C6
22	A	804	CLA	C3-C5-C6-C7
34	R	103	A86	C24-C1-C2-C3
22	U	211	CLA	CAA-CBA-CGA-O2A

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Mol	Chain	Res	Type	Atoms
22	G	205	CLA	CAA-CBA-CGA-O2A
22	T	211	CLA	CAA-CBA-CGA-O2A
32	J	102	LMG	O1-C7-C8-O7
22	Q	212	CLA	C15-C16-C17-C18
22	A	821	CLA	CAA-CBA-CGA-O2A
22	B	805	CLA	CAA-CBA-CGA-O2A
22	H	208	CLA	CAA-CBA-CGA-O2A
22	T	210	CLA	CAA-CBA-CGA-O2A
32	P	202	LMG	C4-C5-C6-O5
22	B	804	CLA	C2A-CAA-CBA-CGA
22	T	203	CLA	C2A-CAA-CBA-CGA
22	H	210	CLA	CAA-CBA-CGA-O2A
24	G	216	LHG	C23-C24-C25-C26
24	P	201	LHG	C15-C16-C17-C18
22	A	854	CLA	C6-C7-C8-C10
22	B	814	CLA	C2-C3-C5-C6
22	T	204	CLA	C2-C3-C5-C6
31	S	205	DD6	C27-C29-C30-C31
31	S	215	DD6	C27-C29-C30-C31
24	A	840	LHG	C9-C10-C11-C12
32	S	213	LMG	O6-C1-O1-C7
22	Q	209	CLA	C14-C13-C15-C16
22	G	215	CLA	CAA-CBA-CGA-O2A
22	A	802	CLA	CAA-CBA-CGA-O2A
24	G	216	LHG	O7-C7-C8-C9
22	A	815	CLA	CAA-CBA-CGA-O1A
22	B	814	CLA	CAA-CBA-CGA-O1A
32	S	213	LMG	C40-C41-C42-C43
22	G	210	CLA	CAA-CBA-CGA-O2A
22	A	815	CLA	C2A-CAA-CBA-CGA
22	B	802	CLA	C2A-CAA-CBA-CGA
22	P	210	CLA	CAA-CBA-CGA-O1A
22	B	829	CLA	C10-C11-C12-C13
22	B	828	CLA	C4-C3-C5-C6
22	B	808	CLA	C2-C3-C5-C6
22	H	203	CLA	CAA-CBA-CGA-O2A
26	A	857	LMU	C6-C7-C8-C9
25	J	104	BCR	C7-C8-C9-C10
22	A	809	CLA	C1A-C2A-CAA-CBA
22	A	853	CLA	C1A-C2A-CAA-CBA
22	B	804	CLA	C1A-C2A-CAA-CBA
22	B	842	CLA	C1A-C2A-CAA-CBA

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Mol	Chain	Res	Type	Atoms
22	O	207	CLA	C1A-C2A-CAA-CBA
22	G	205	CLA	C1A-C2A-CAA-CBA
22	H	205	CLA	C1A-C2A-CAA-CBA
30	B	846	SQD	O49-C7-C8-C9
32	J	102	LMG	O9-C10-C11-C12
32	Q	217	LMG	O10-C28-C29-C30
22	A	822	CLA	C15-C16-C17-C18
22	B	833	CLA	C10-C11-C12-C13
22	A	811	CLA	CAA-CBA-CGA-O1A
22	k	103	CLA	CAA-CBA-CGA-O1A
22	B	806	CLA	C2A-CAA-CBA-CGA
22	U	205	CLA	C2A-CAA-CBA-CGA
24	A	839	LHG	C4-O6-P-O3
22	B	833	CLA	C16-C17-C18-C19
22	O	204	CLA	C16-C17-C18-C19
22	B	843	CLA	CAA-CBA-CGA-O1A
22	A	815	CLA	C13-C15-C16-C17
22	B	808	CLA	CAA-CBA-CGA-O1A
22	U	208	CLA	CAA-CBA-CGA-O1A
24	G	216	LHG	O9-C7-C8-C9
30	B	846	SQD	C2-C1-O6-C44
22	B	843	CLA	C16-C17-C18-C20
22	B	826	CLA	O2A-C1-C2-C3
22	F	804	CLA	CAA-CBA-CGA-O2A
31	k	101	DD6	C4-C5-C6-C7
25	A	843	BCR	C23-C24-C25-C30
25	F	801	BCR	C5-C6-C7-C8
25	F	805	BCR	C23-C24-C25-C26
22	B	805	CLA	CAA-CBA-CGA-O1A
22	T	204	CLA	C8-C10-C11-C12
22	B	847	CLA	CAA-CBA-CGA-O2A
22	G	215	CLA	CAA-CBA-CGA-O1A
31	P	205	DD6	C1-C24-C25-C26
31	G	213	DD6	C1-C24-C25-C26
22	A	803	CLA	C2A-CAA-CBA-CGA
22	U	211	CLA	CAA-CBA-CGA-O1A
22	G	205	CLA	CAA-CBA-CGA-O1A
22	H	208	CLA	CAA-CBA-CGA-O1A
32	P	217	LMG	O9-C10-C11-C12
22	Q	203	CLA	CAA-CBA-CGA-O2A
24	P	201	LHG	C31-C32-C33-C34
22	T	210	CLA	CAA-CBA-CGA-O1A

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Mol	Chain	Res	Type	Atoms
30	S	201	SQD	O10-C23-C24-C25
22	A	853	CLA	C4-C3-C5-C6
22	A	823	CLA	CAD-CBD-CGD-O1D
22	B	829	CLA	CAD-CBD-CGD-O1D
22	B	845	CLA	CAD-CBD-CGD-O1D
22	Q	204	CLA	CAD-CBD-CGD-O1D
22	Q	213	CLA	CAD-CBD-CGD-O1D
22	Q	216	CLA	CAD-CBD-CGD-O1D
22	S	209	CLA	CAD-CBD-CGD-O1D
22	H	205	CLA	CAD-CBD-CGD-O1D
22	H	209	CLA	CAD-CBD-CGD-O1D
22	B	801	CLA	C15-C16-C17-C18
22	A	836	CLA	C6-C7-C8-C9
22	A	845	CLA	C11-C10-C8-C9
22	B	805	CLA	C11-C12-C13-C14
22	O	209	CLA	C6-C7-C8-C9
22	S	216	CLA	C11-C10-C8-C9
22	U	204	CLA	C11-C10-C8-C9
32	Q	217	LMG	C22-C23-C24-C25
22	P	207	CLA	C15-C16-C17-C18
22	Q	205	CLA	C5-C6-C7-C8
24	A	839	LHG	O10-C23-C24-C25
22	A	801	CLA	CAA-CBA-CGA-O2A
22	G	206	CLA	CAA-CBA-CGA-O2A
30	B	846	SQD	O47-C7-C8-C9
32	Q	217	LMG	O8-C28-C29-C30
30	B	846	SQD	C14-C15-C16-C17
22	P	208	CLA	CAA-CBA-CGA-O2A
22	P	209	CLA	CAA-CBA-CGA-O2A
22	Q	206	CLA	CAA-CBA-CGA-O2A
22	B	814	CLA	C5-C6-C7-C8
30	S	201	SQD	C11-C10-C9-C8
22	A	821	CLA	CAA-CBA-CGA-O1A
22	T	211	CLA	CAA-CBA-CGA-O1A
32	P	202	LMG	O9-C10-C11-C12
22	B	816	CLA	C11-C12-C13-C15
22	Q	206	CLA	C2-C3-C5-C6
22	Q	209	CLA	C6-C7-C8-C10
22	S	209	CLA	C3A-C2A-CAA-CBA
22	U	207	CLA	C3A-C2A-CAA-CBA
22	G	205	CLA	C3A-C2A-CAA-CBA
22	T	204	CLA	C11-C10-C8-C7

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Mol	Chain	Res	Type	Atoms
22	B	847	CLA	CAA-CBA-CGA-O1A
22	H	203	CLA	CAA-CBA-CGA-O1A
32	S	213	LMG	O9-C10-C11-C12
22	A	803	CLA	CAA-CBA-CGA-O2A
22	A	810	CLA	CAA-CBA-CGA-O2A
22	B	802	CLA	CAA-CBA-CGA-O2A
22	T	203	CLA	CAA-CBA-CGA-O2A
31	G	212	DD6	C5-C6-C8-C9
31	G	213	DD6	C10-C11-C13-C14
22	A	803	CLA	CAA-CBA-CGA-O1A
22	G	206	CLA	CAA-CBA-CGA-O1A
32	S	213	LMG	O10-C28-C29-C30
26	F	806	LMU	C2-C1-O1'-C1'
26	K	201	LMU	C2-C1-O1'-C1'
22	A	846	CLA	CAA-CBA-CGA-O2A
32	J	102	LMG	O7-C10-C11-C12
22	A	802	CLA	CAA-CBA-CGA-O1A
22	P	208	CLA	CAA-CBA-CGA-O1A
22	A	854	CLA	C5-C6-C7-C8
22	O	205	CLA	C15-C16-C17-C18
22	B	817	CLA	CAA-CBA-CGA-O2A
22	Q	207	CLA	CAA-CBA-CGA-O2A
22	B	802	CLA	CAA-CBA-CGA-O1A
22	T	203	CLA	CAA-CBA-CGA-O1A
22	A	828	CLA	C10-C11-C12-C13
22	A	848	CLA	C10-C11-C12-C13
22	B	801	CLA	CAA-CBA-CGA-O2A
22	O	207	CLA	CAA-CBA-CGA-O2A

There are no ring outliers.

190 monomers are involved in 325 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
22	B	834	CLA	7	0
22	B	826	CLA	5	0
22	K	204	CLA	2	0
22	L	203	CLA	1	0
22	B	816	CLA	3	0
22	T	207	CLA	2	0
28	C	102	SF4	1	0
24	P	201	LHG	4	0
29	B	841	DGD	9	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
22	U	204	CLA	1	0
24	A	839	LHG	2	0
22	A	826	CLA	3	0
22	B	824	CLA	3	0
25	A	842	BCR	1	0
22	A	845	CLA	3	0
22	Q	216	CLA	1	0
22	F	802	CLA	2	0
22	A	803	CLA	2	0
22	B	819	CLA	2	0
22	B	832	CLA	2	0
22	F	804	CLA	2	0
25	B	837	BCR	4	0
22	Q	208	CLA	2	0
22	H	207	CLA	2	0
22	A	835	CLA	4	0
31	G	211	DD6	1	0
22	B	812	CLA	2	0
22	G	201	CLA	1	0
22	U	205	CLA	2	0
22	A	808	CLA	2	0
24	G	216	LHG	1	0
31	G	214	DD6	2	0
22	A	853	CLA	3	0
22	L	202	CLA	2	0
22	A	817	CLA	2	0
22	H	206	CLA	1	0
22	B	807	CLA	2	0
22	A	855	CLA	1	0
32	U	201	LMG	1	0
22	A	801	CLA	4	0
22	A	831	CLA	3	0
22	O	209	CLA	4	0
31	O	212	DD6	2	0
22	A	850	CLA	2	0
22	O	202	CLA	2	0
26	M	102	LMU	1	0
22	Q	212	CLA	1	0
25	I	101	BCR	3	0
22	A	854	CLA	3	0
22	O	208	CLA	1	0
32	P	217	LMG	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
22	B	827	CLA	1	0
22	B	804	CLA	2	0
22	R	101	CLA	1	0
22	B	803	CLA	1	0
22	A	846	CLA	2	0
22	B	817	CLA	2	0
24	A	840	LHG	1	0
22	B	830	CLA	4	0
22	T	210	CLA	7	0
25	L	205	BCR	1	0
22	U	206	CLA	1	0
22	S	202	CLA	2	0
22	O	207	CLA	1	0
22	B	829	CLA	2	0
22	T	204	CLA	7	0
22	K	206	CLA	1	0
22	K	207	CLA	3	0
22	J	103	CLA	1	0
22	B	823	CLA	3	0
25	F	801	BCR	1	0
22	L	204	CLA	1	0
22	Q	203	CLA	1	0
22	T	211	CLA	1	0
22	U	210	CLA	3	0
22	T	201	CLA	1	0
25	A	841	BCR	1	0
26	F	806	LMU	1	0
22	A	811	CLA	2	0
22	A	851	CLA	2	0
33	T	208	KC1	1	0
32	S	213	LMG	2	0
25	F	805	BCR	3	0
22	A	823	CLA	1	0
22	P	210	CLA	2	0
25	B	839	BCR	4	0
22	A	824	CLA	4	0
22	B	806	CLA	4	0
25	B	838	BCR	2	0
22	k	103	CLA	2	0
22	G	205	CLA	4	0
22	A	816	CLA	6	0
26	A	847	LMU	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
26	S	203	LMU	1	0
30	S	201	SQD	1	0
22	H	210	CLA	1	0
22	Q	204	CLA	2	0
22	P	214	CLA	1	0
22	U	207	CLA	2	0
22	B	814	CLA	3	0
22	B	818	CLA	4	0
22	B	847	CLA	3	0
25	A	844	BCR	1	0
22	S	209	CLA	1	0
22	B	815	CLA	2	0
22	A	833	CLA	2	0
22	A	848	CLA	3	0
22	P	208	CLA	1	0
22	R	104	CLA	4	0
22	B	828	CLA	4	0
22	A	807	CLA	2	0
22	T	205	CLA	1	0
25	B	836	BCR	2	0
25	B	840	BCR	2	0
25	J	104	BCR	1	0
22	B	821	CLA	2	0
22	B	809	CLA	2	0
22	U	209	CLA	2	0
25	M	101	BCR	1	0
25	I	102	BCR	2	0
22	T	209	CLA	1	0
32	P	202	LMG	1	0
22	S	208	CLA	2	0
22	H	202	CLA	1	0
22	A	838	CLA	1	0
22	H	203	CLA	1	0
22	Q	213	CLA	1	0
22	B	833	CLA	2	0
22	O	203	CLA	1	0
22	G	206	CLA	5	0
22	P	211	CLA	1	0
26	K	201	LMU	2	0
22	A	820	CLA	1	0
22	B	831	CLA	1	0
30	B	846	SQD	1	0

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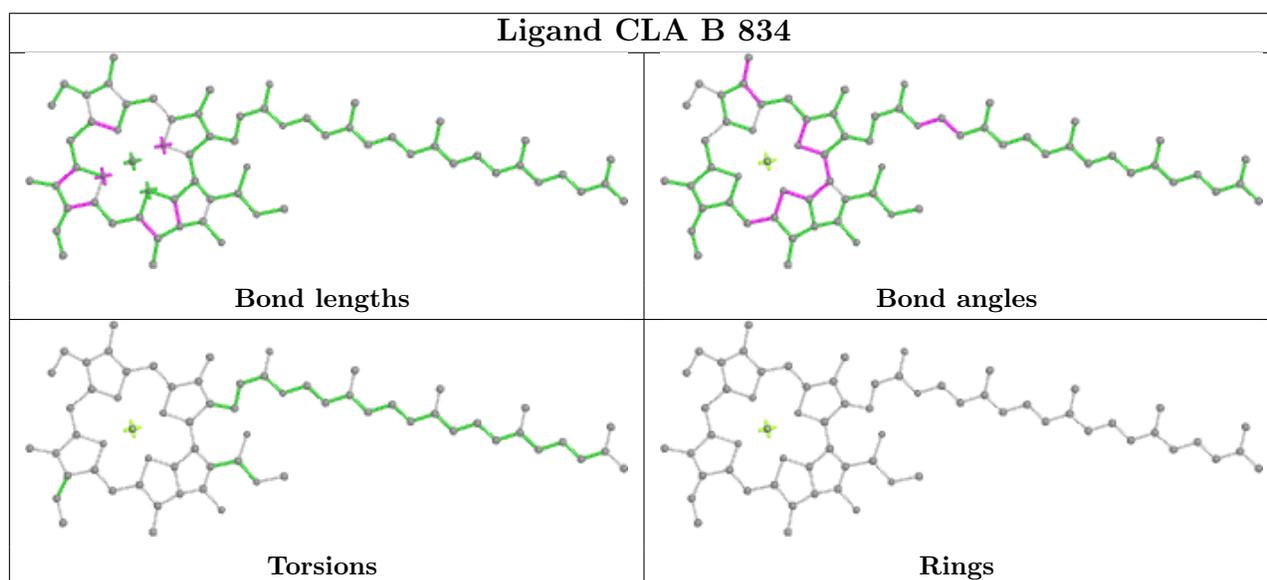
Mol	Chain	Res	Type	Clashes	Symm-Clashes
22	G	215	CLA	1	0
22	S	206	CLA	3	0
22	k	102	CLA	2	0
22	B	844	CLA	2	0
22	A	836	CLA	4	0
23	A	837	PQN	2	0
22	A	828	CLA	1	0
22	A	815	CLA	1	0
22	B	822	CLA	1	0
25	A	843	BCR	2	0
22	B	802	CLA	4	0
22	A	829	CLA	1	0
22	P	213	CLA	1	0
22	T	206	CLA	2	0
22	A	810	CLA	3	0
22	S	217	CLA	2	0
22	A	825	CLA	2	0
32	Q	217	LMG	3	0
27	A	849	CL0	3	0
22	B	801	CLA	2	0
22	A	822	CLA	1	0
22	H	209	CLA	1	0
31	U	212	DD6	1	0
22	B	842	CLA	2	0
22	U	211	CLA	4	0
25	L	201	BCR	1	0
22	B	805	CLA	3	0
25	R	102	BCR	3	0
22	G	204	CLA	1	0
22	G	207	CLA	1	0
22	G	209	CLA	6	0
22	U	208	CLA	2	0
32	J	102	LMG	3	0
22	B	810	CLA	1	0
22	A	813	CLA	1	0
22	B	845	CLA	6	0
22	S	216	CLA	3	0
22	G	202	CLA	1	0
22	G	203	CLA	1	0
22	O	205	CLA	4	0
22	A	805	CLA	1	0
23	B	835	PQN	1	0

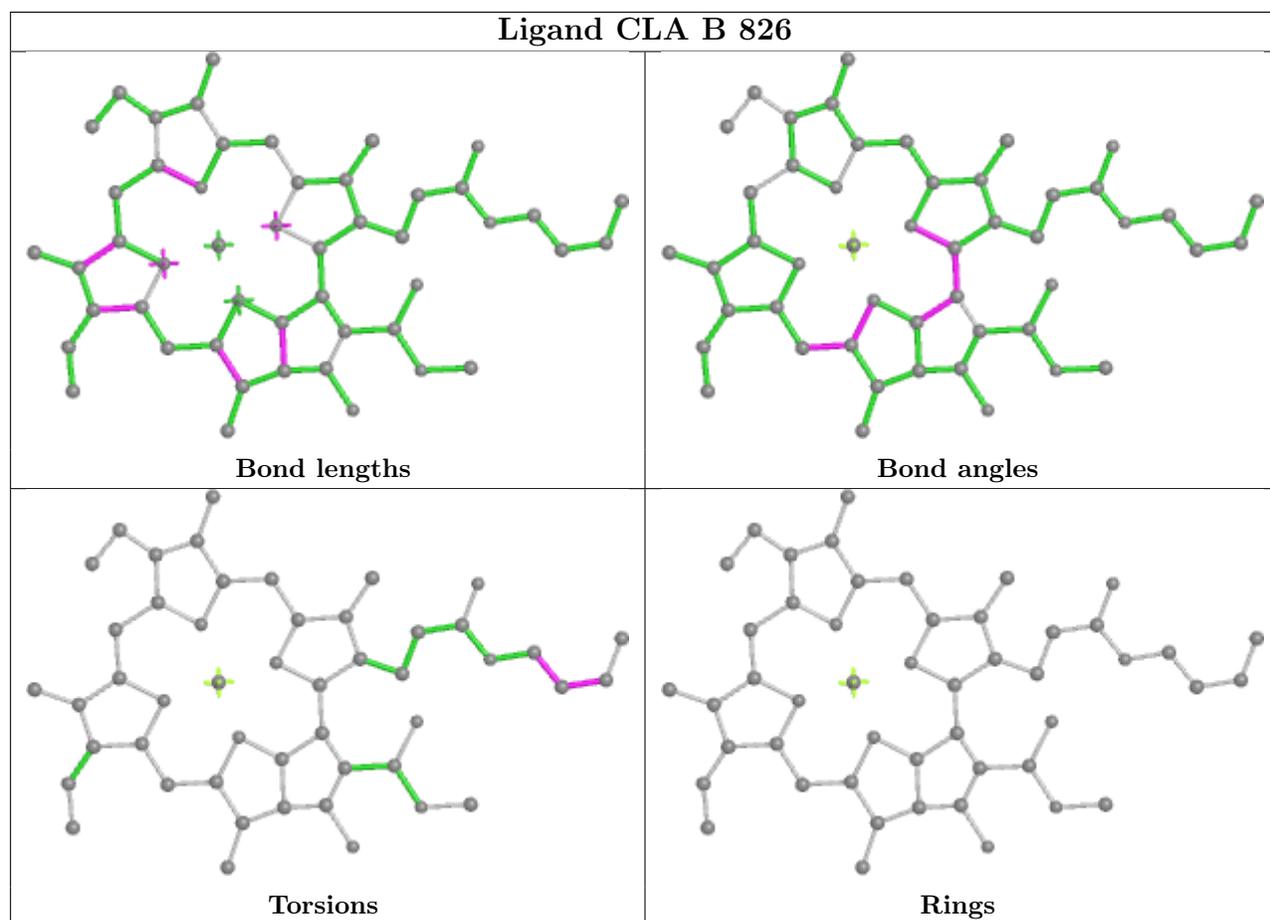
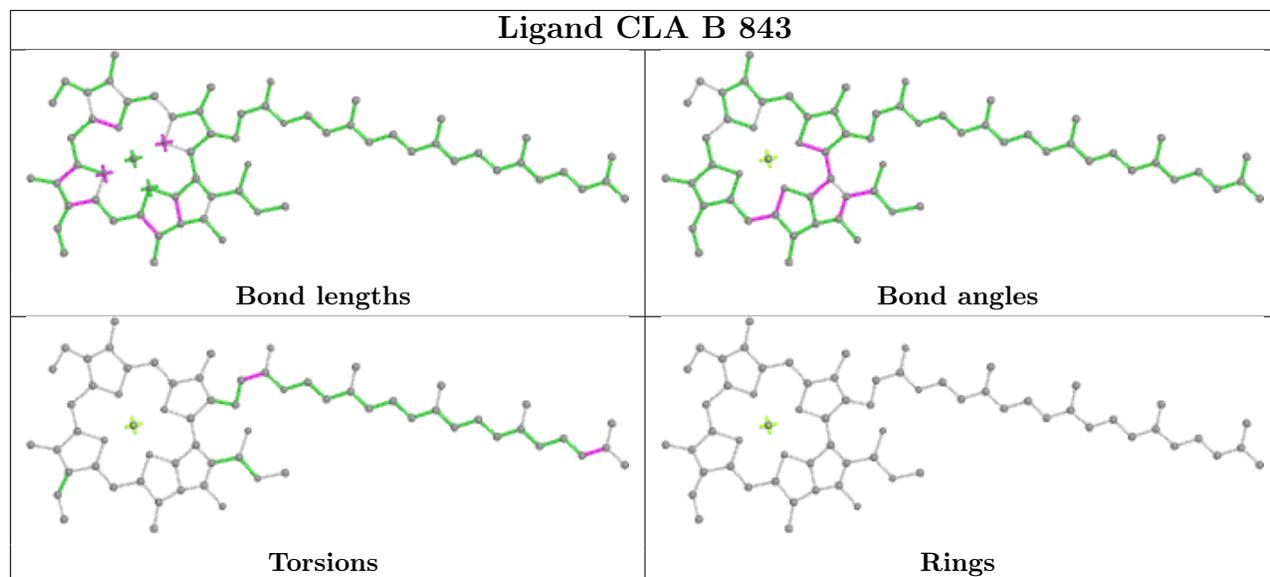
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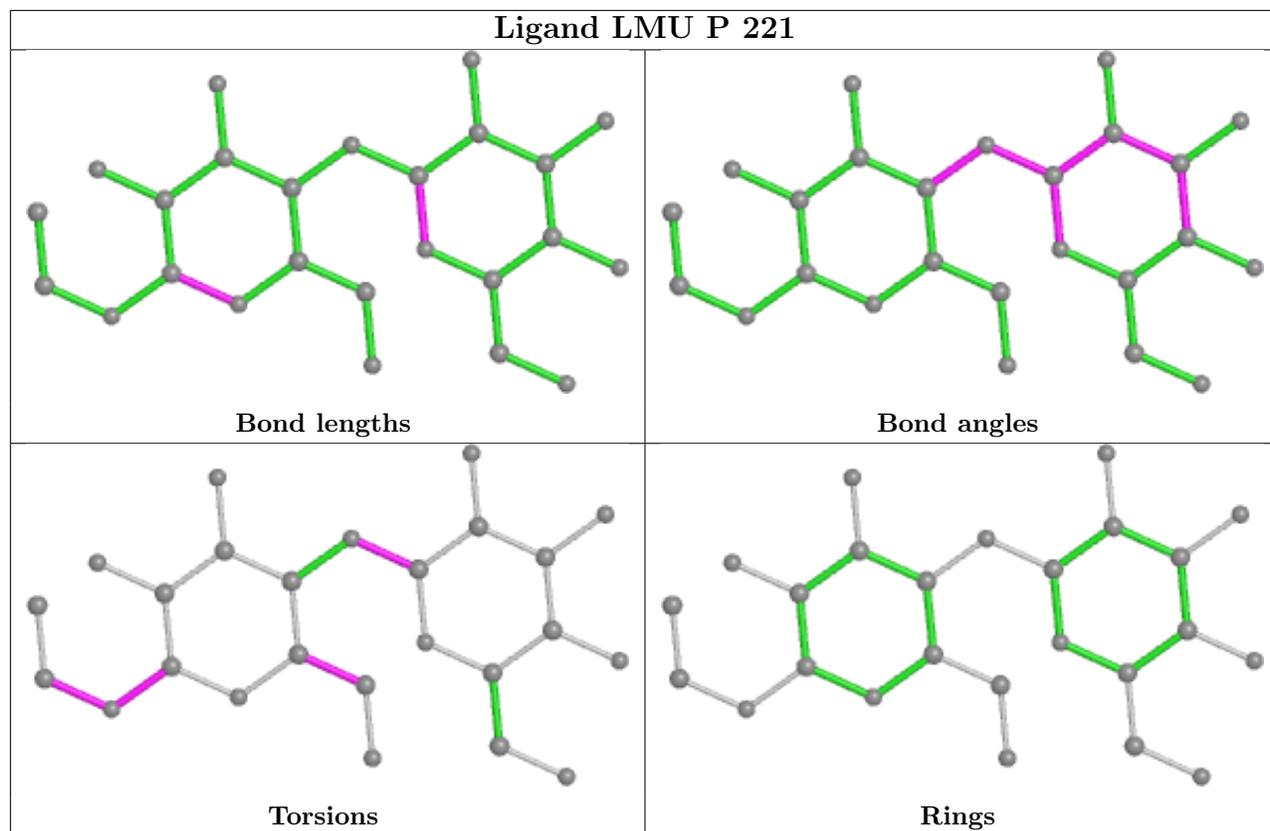
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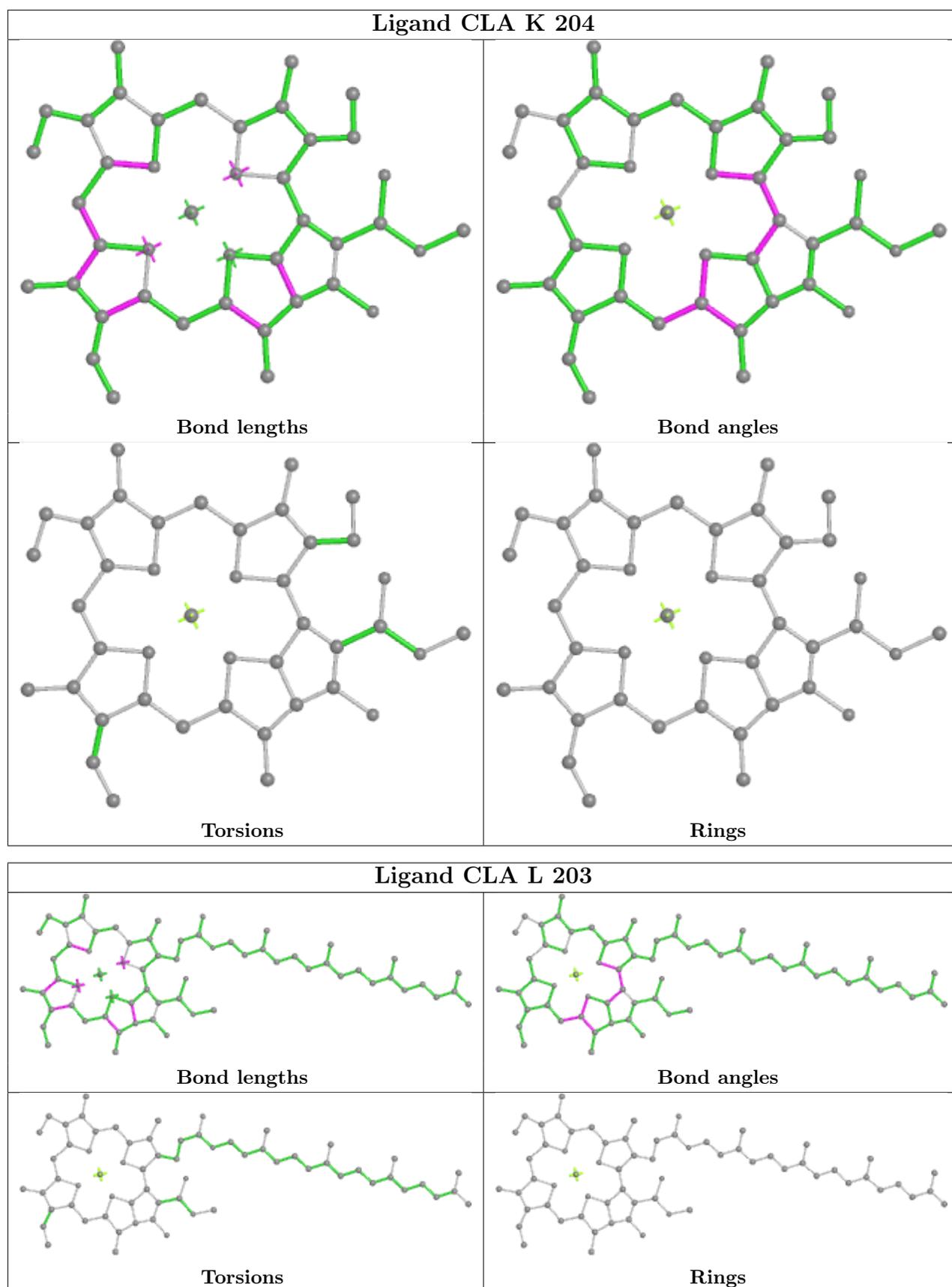
Mol	Chain	Res	Type	Clashes	Symm-Clashes
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22	B	808	CLA	1	0
22	A	814	CLA	2	0
22	H	205	CLA	1	0
22	K	205	CLA	1	0
22	B	820	CLA	3	0
26	L	206	LMU	2	0
22	K	203	CLA	1	0
22	G	208	CLA	1	0
34	R	103	A86	1	0
22	A	802	CLA	1	0
25	k	104	BCR	2	0
22	H	213	CLA	7	0

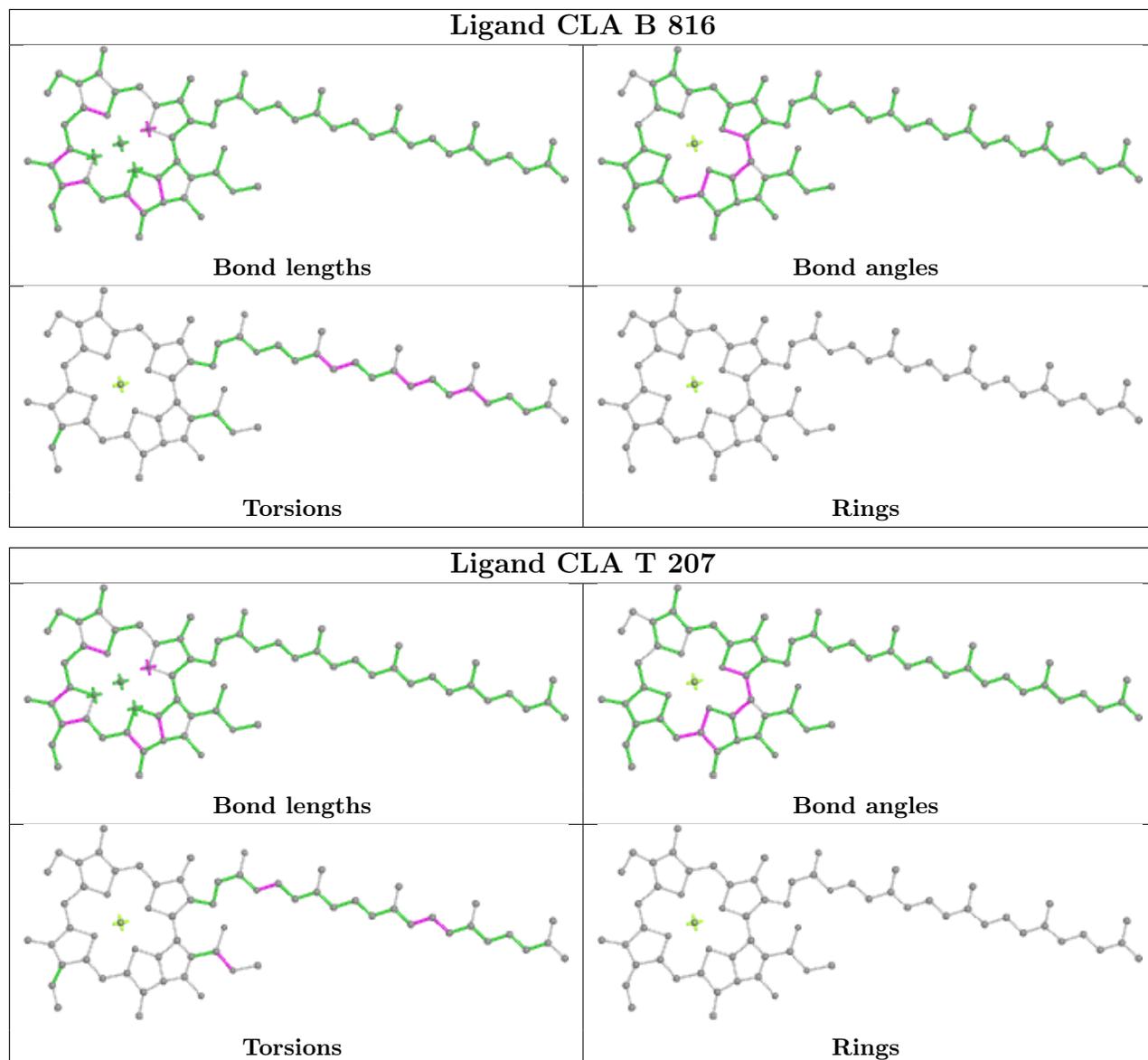
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included.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

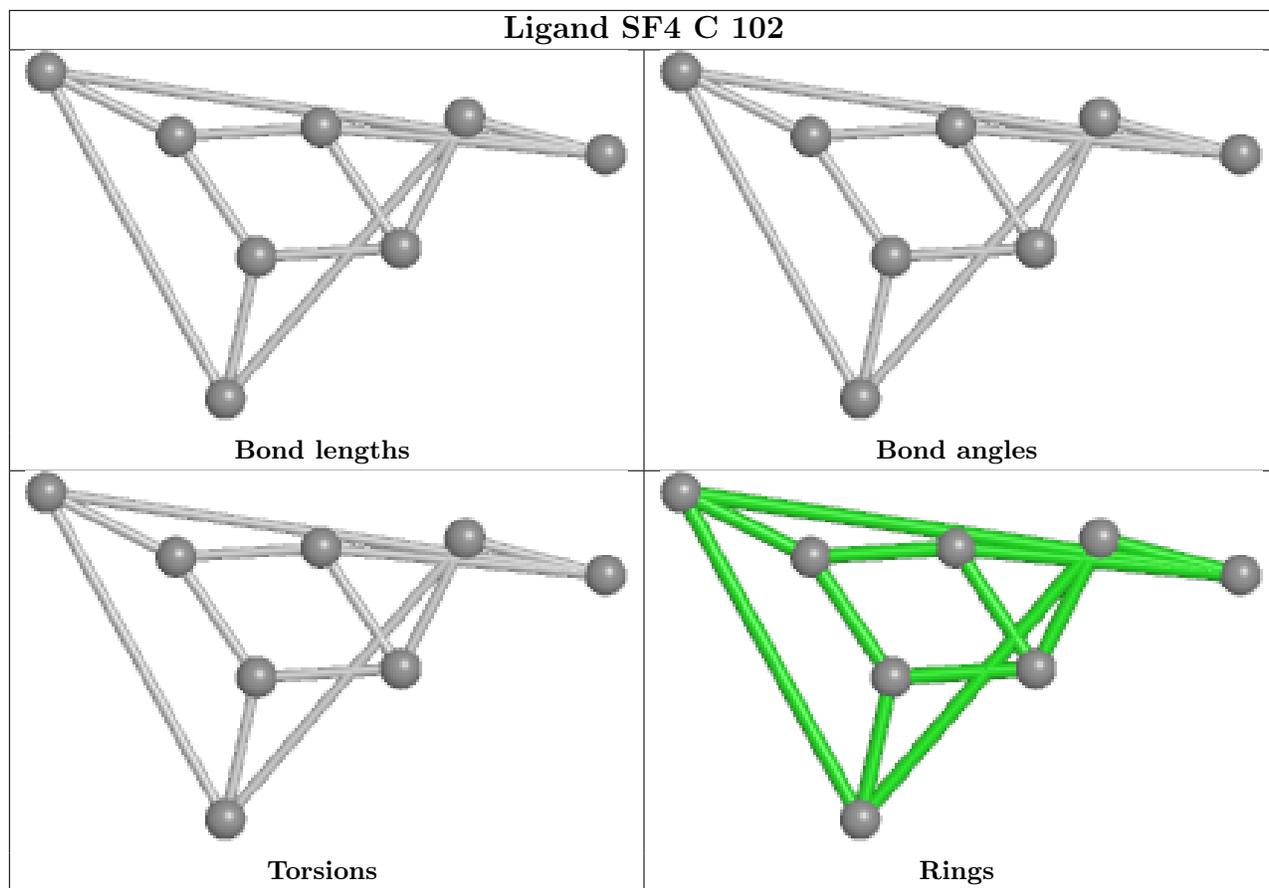


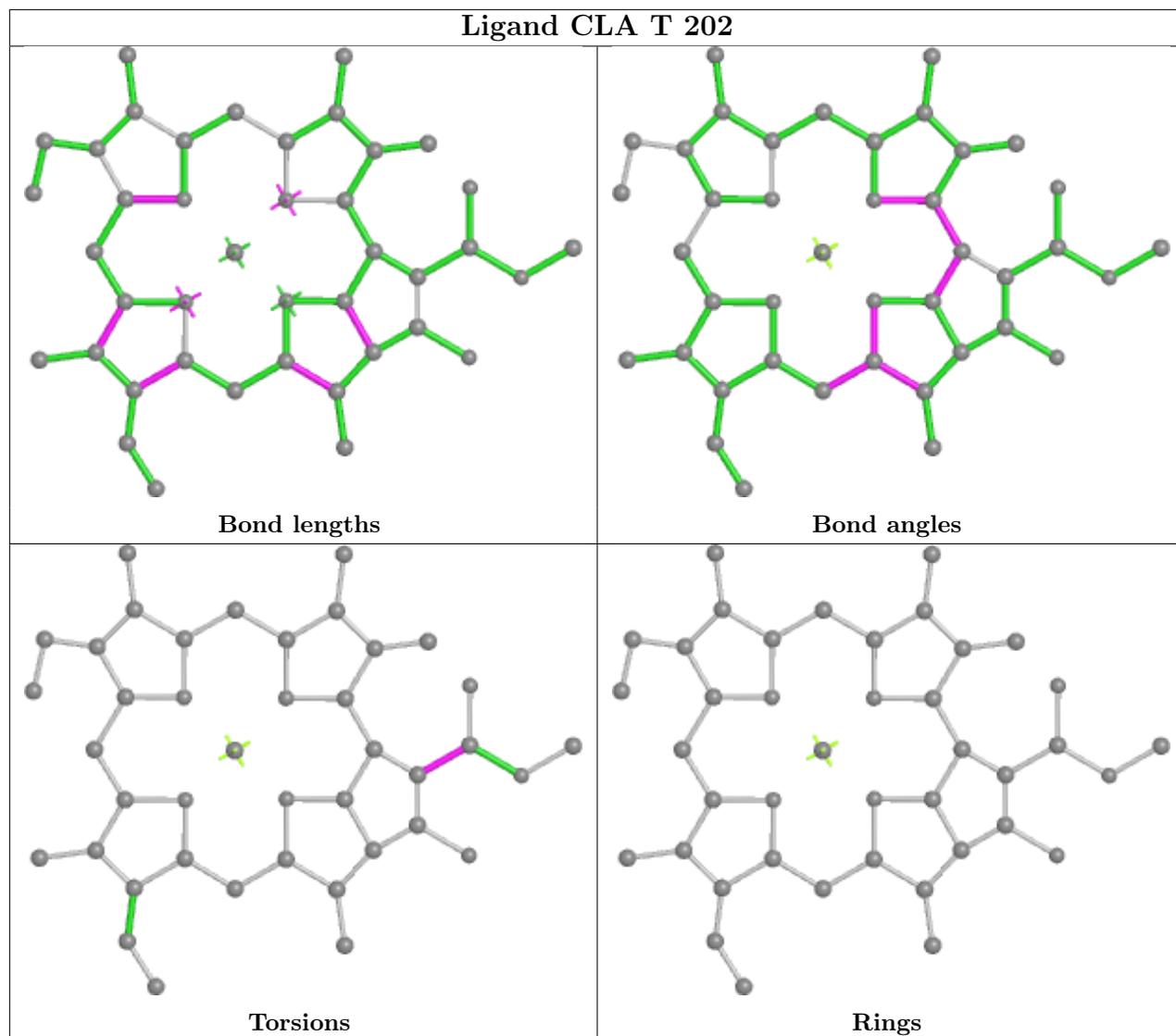


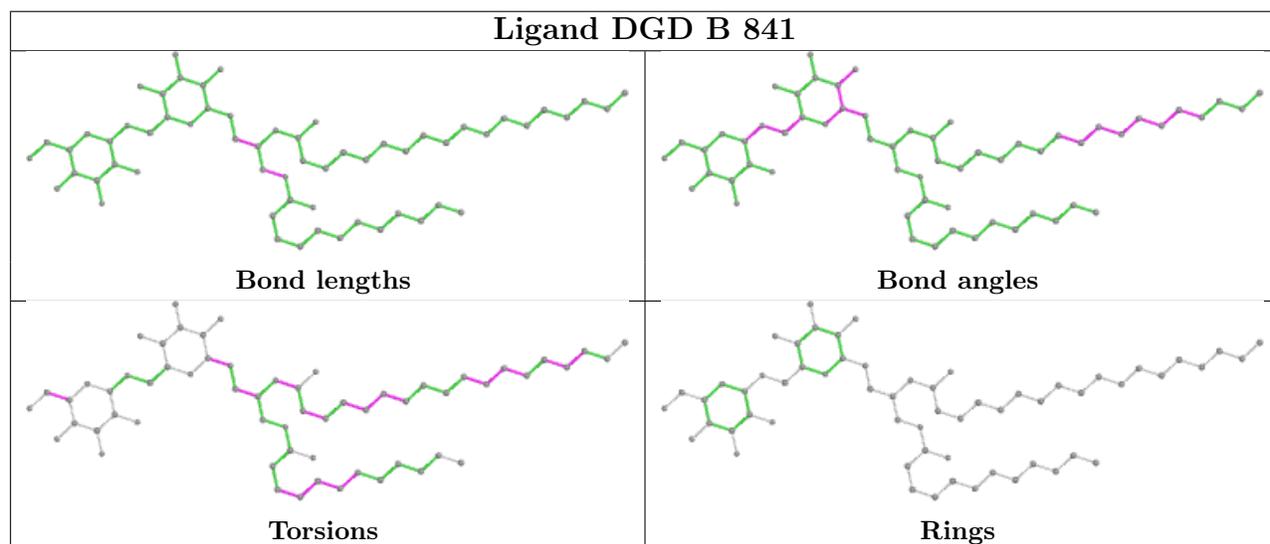
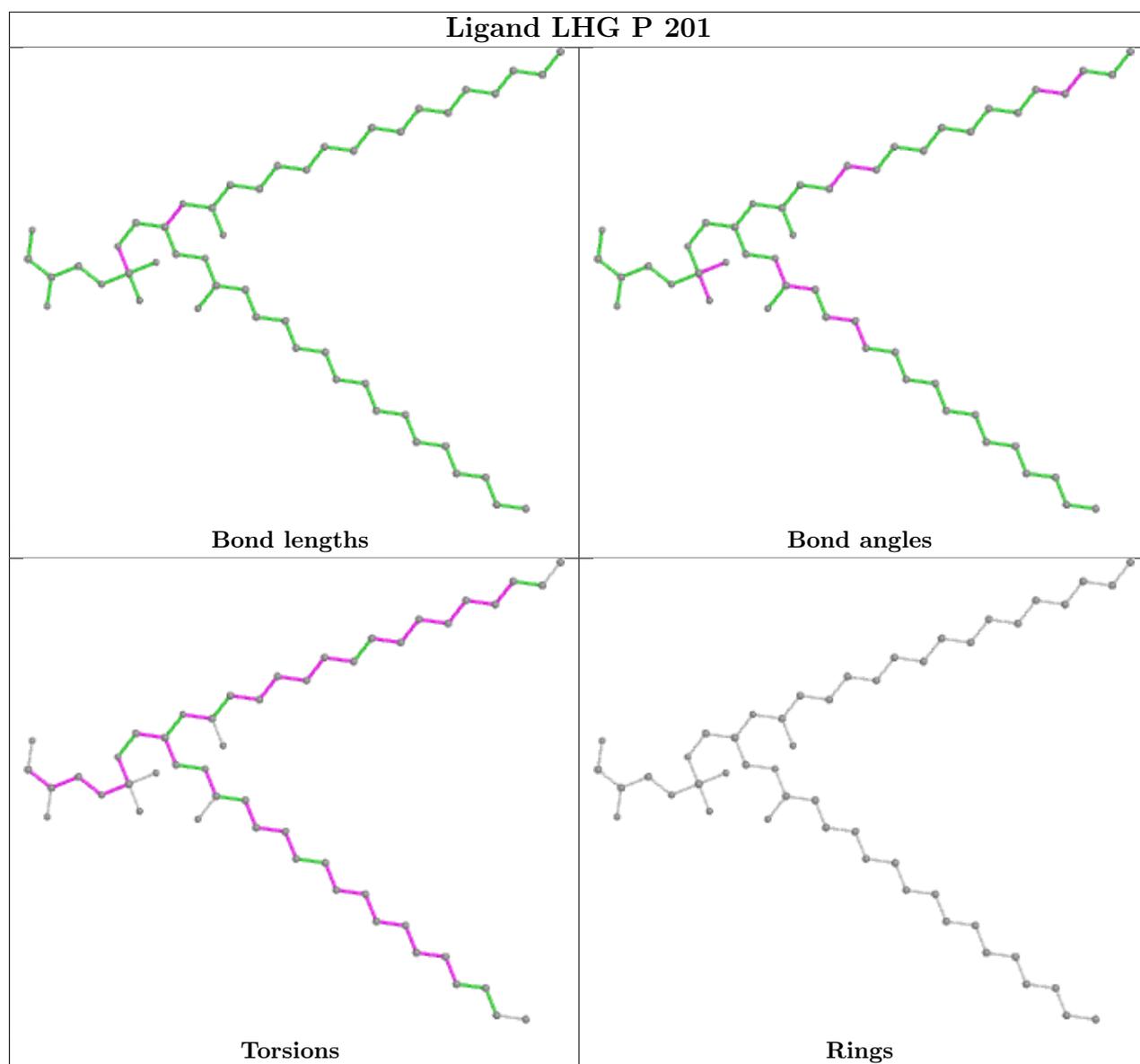


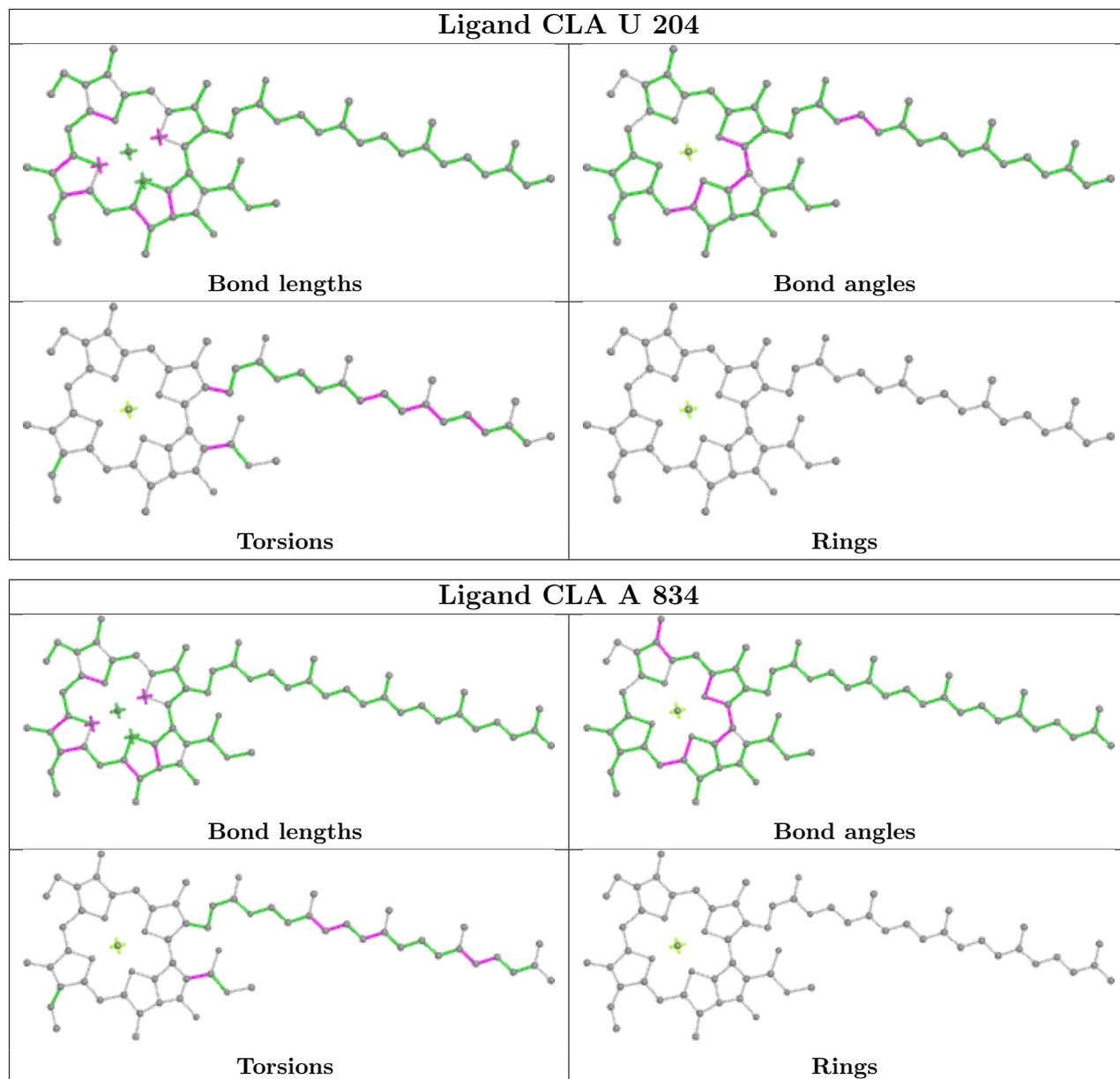


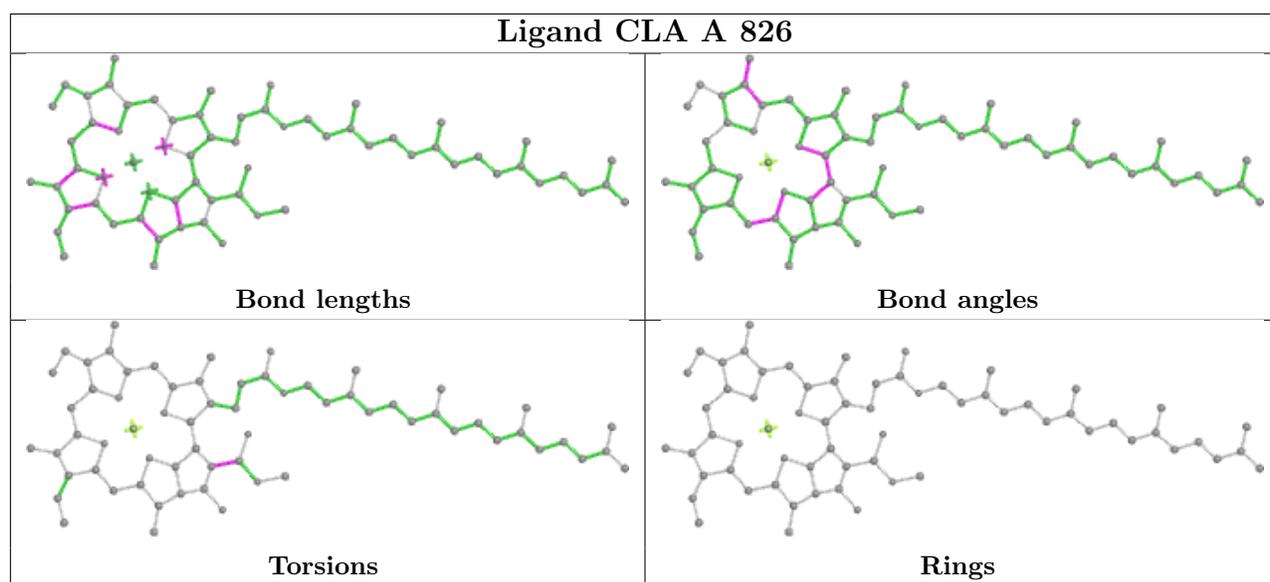
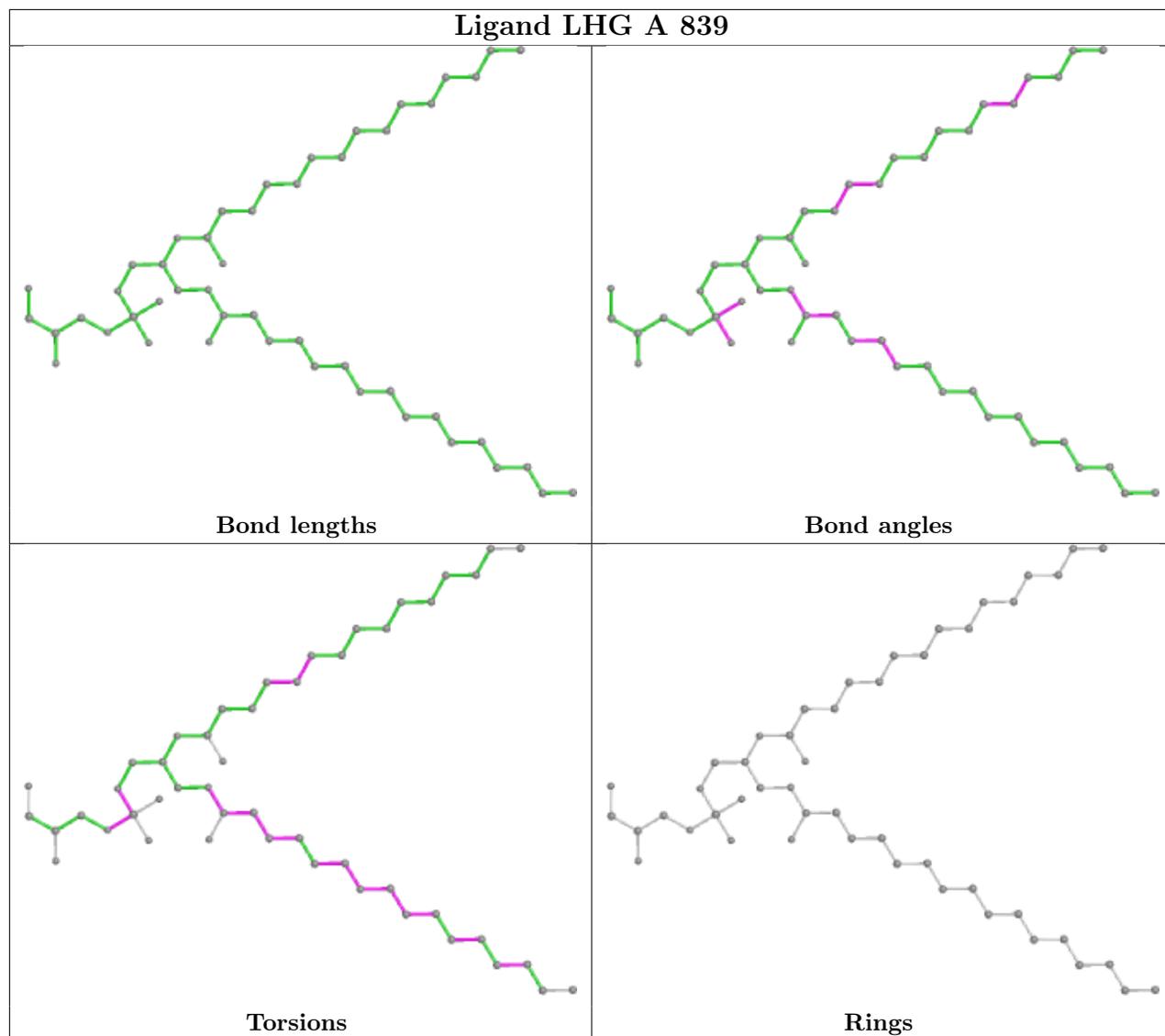


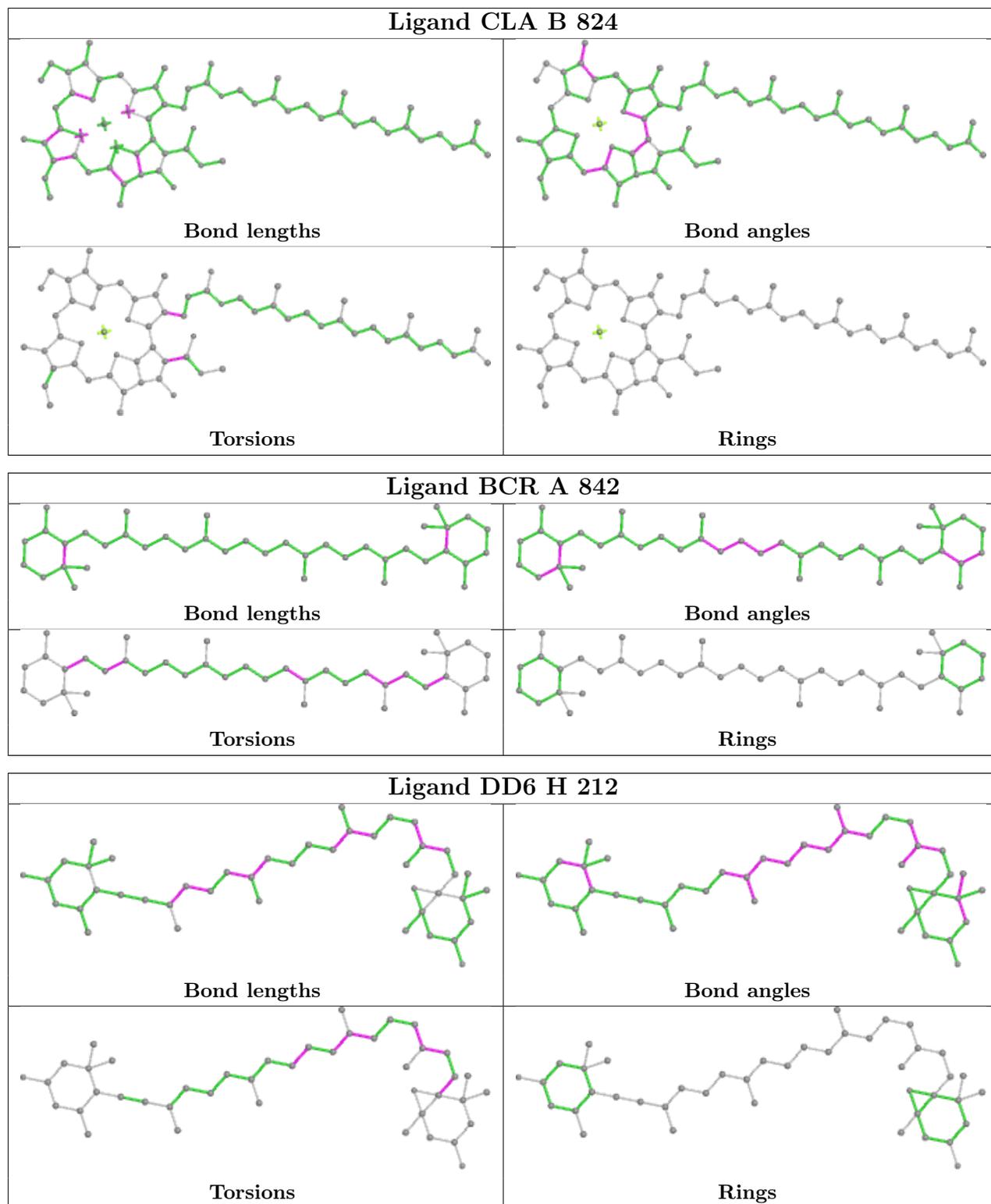


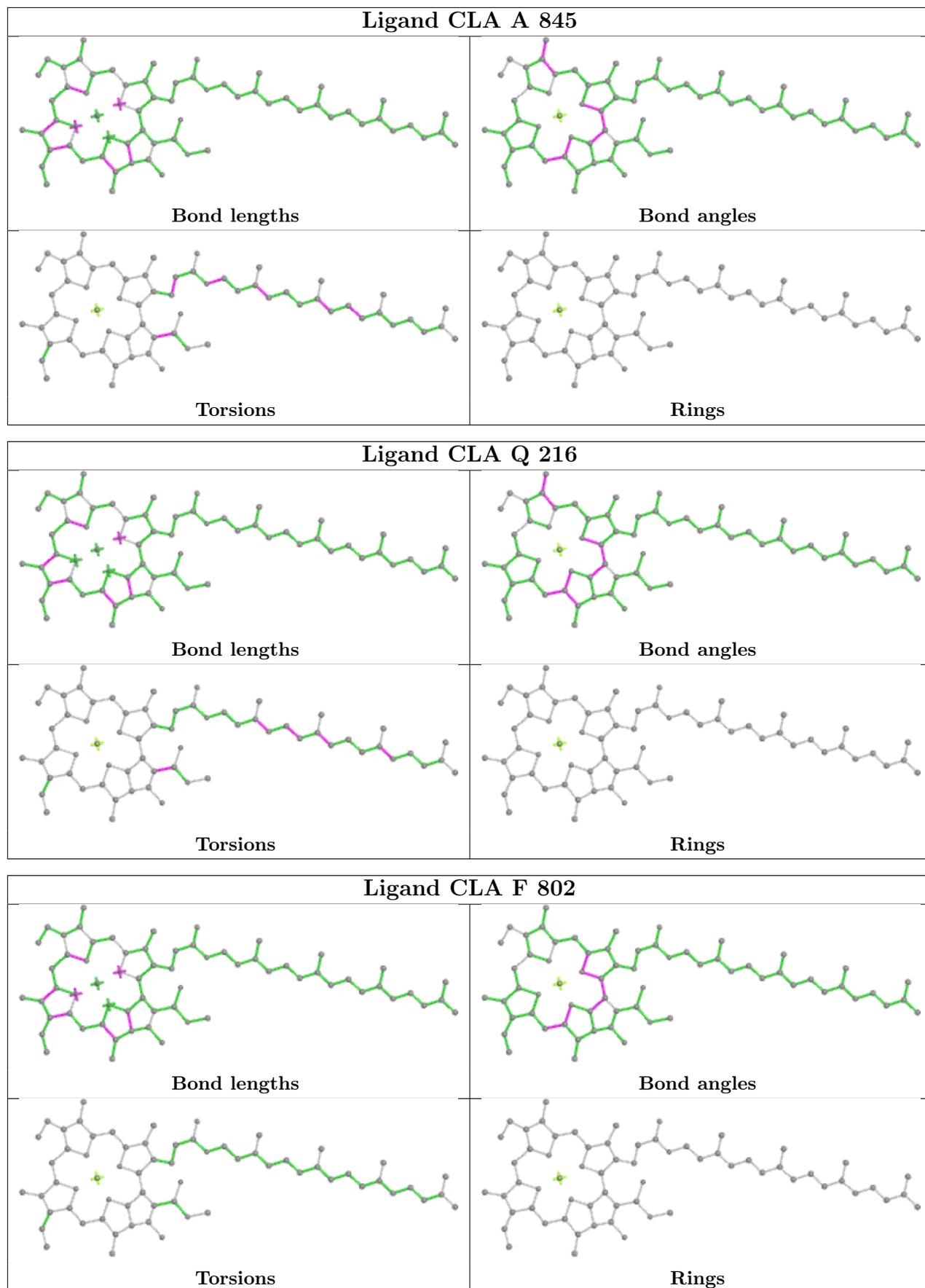


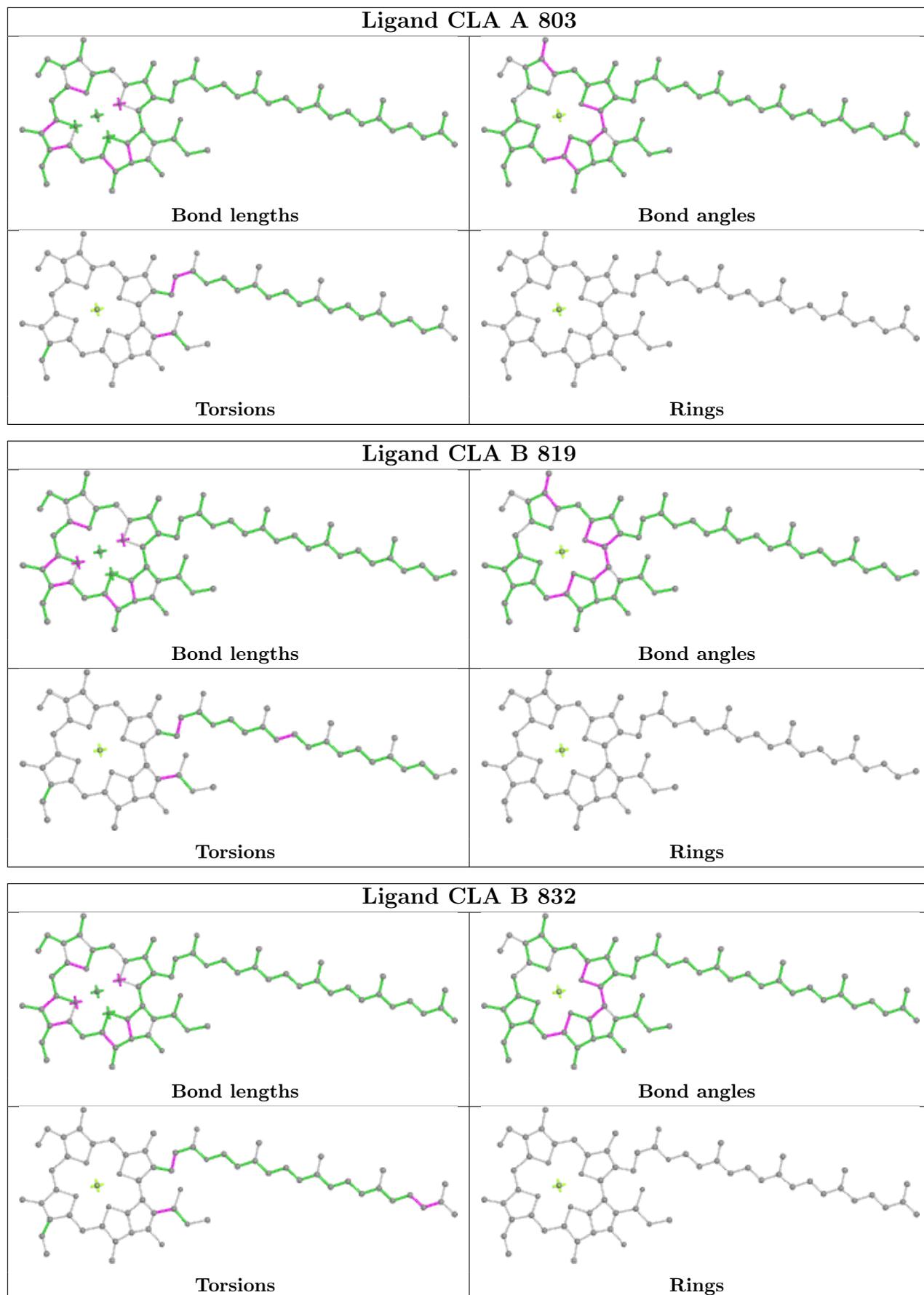


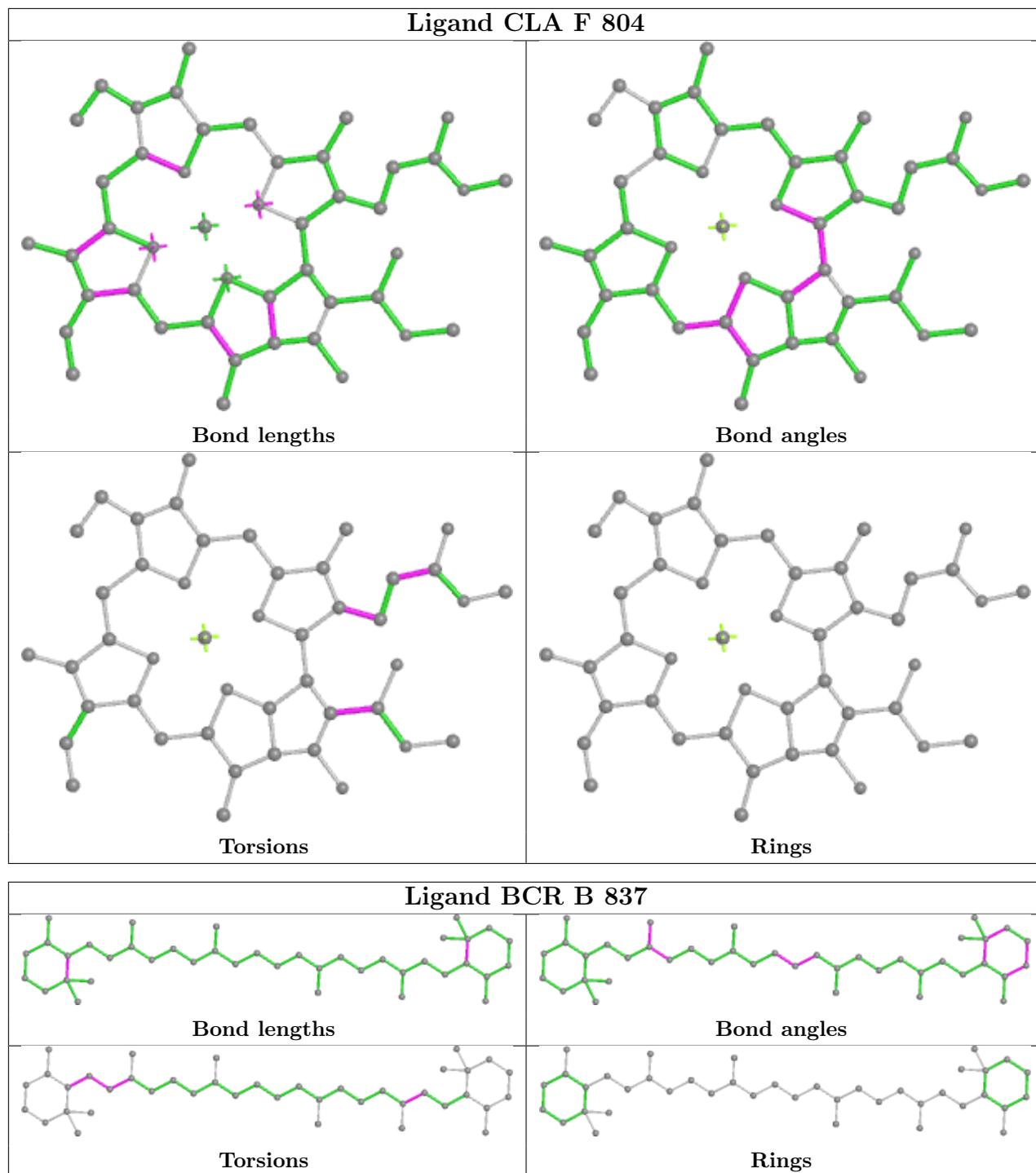


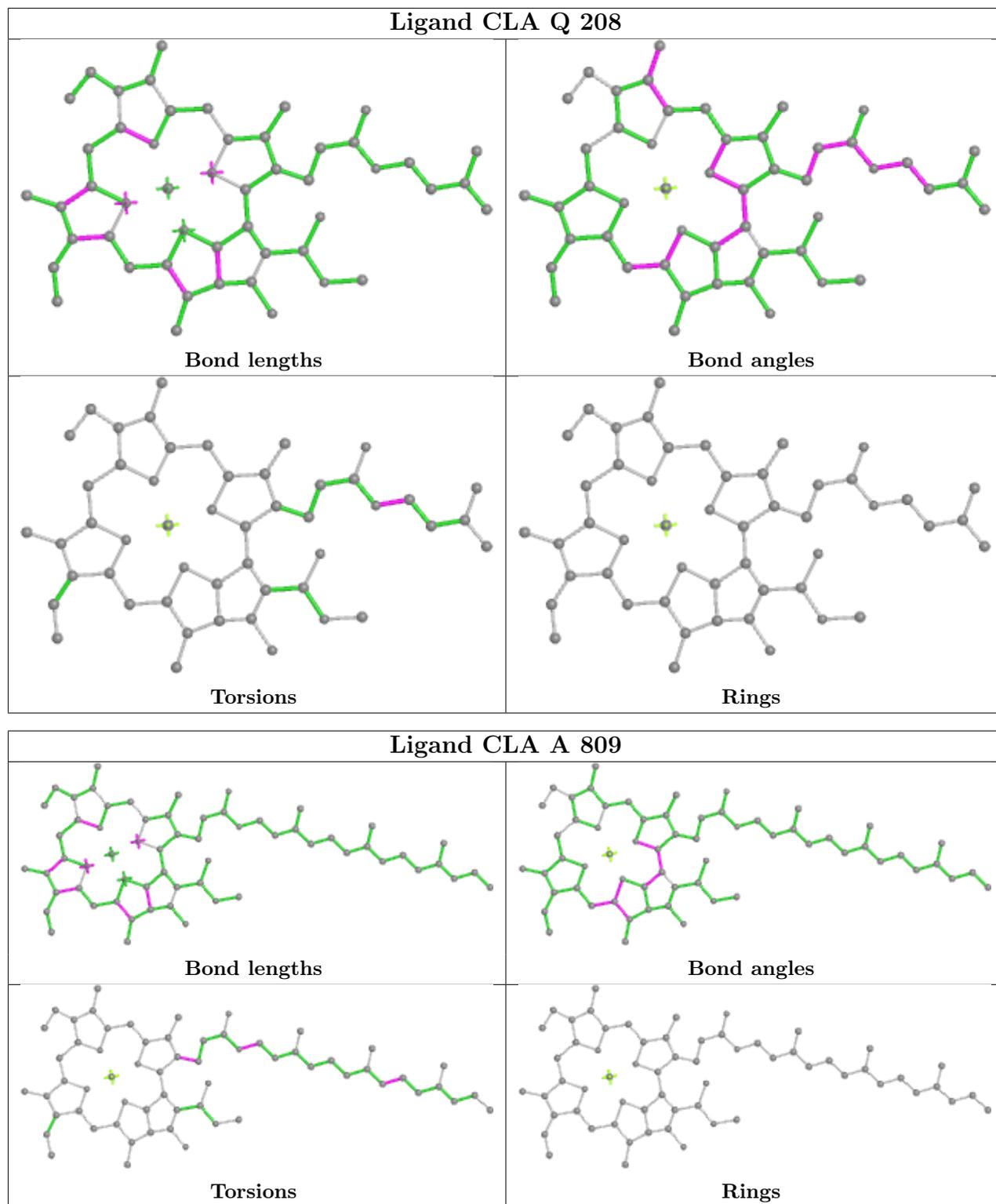


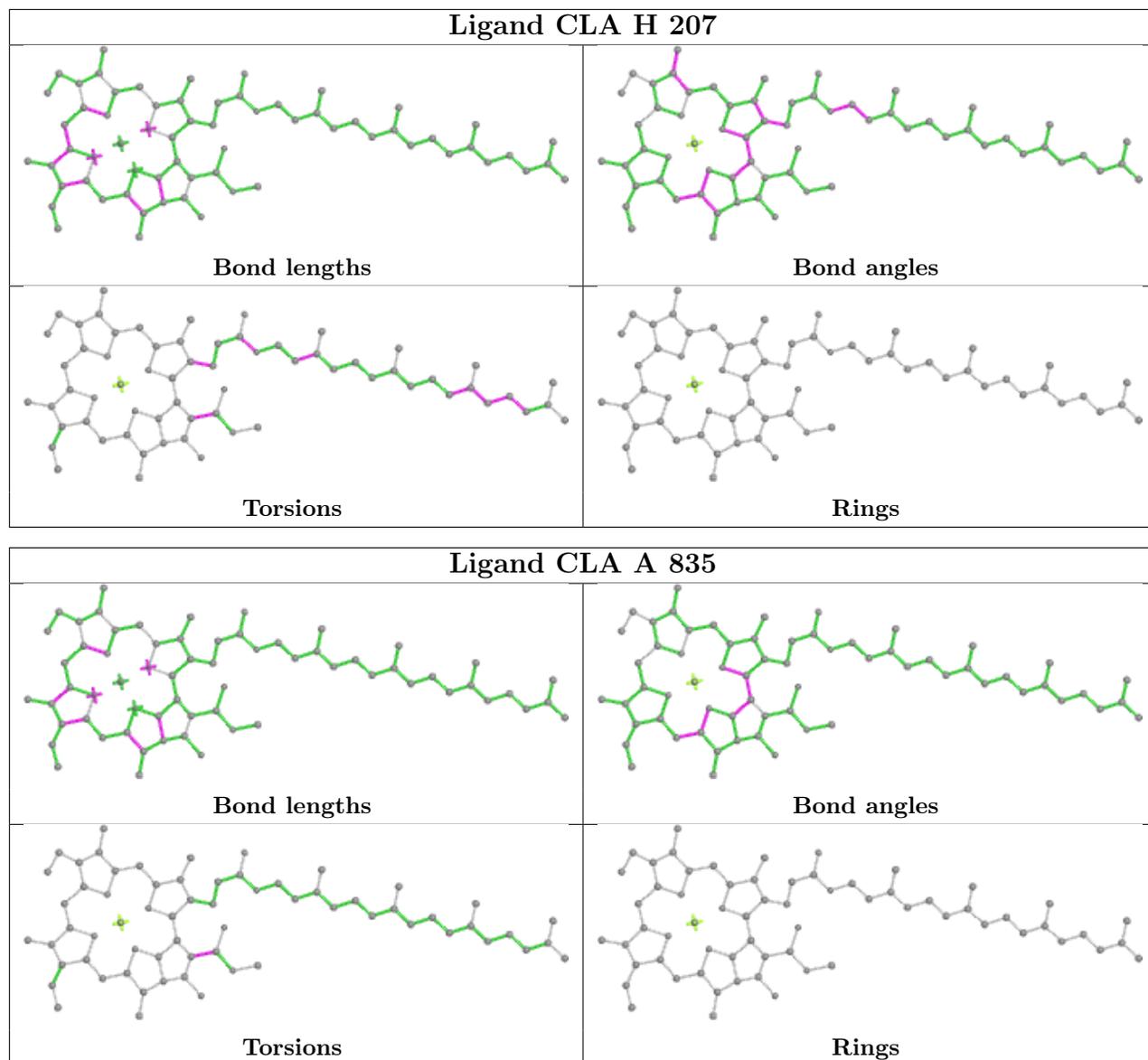


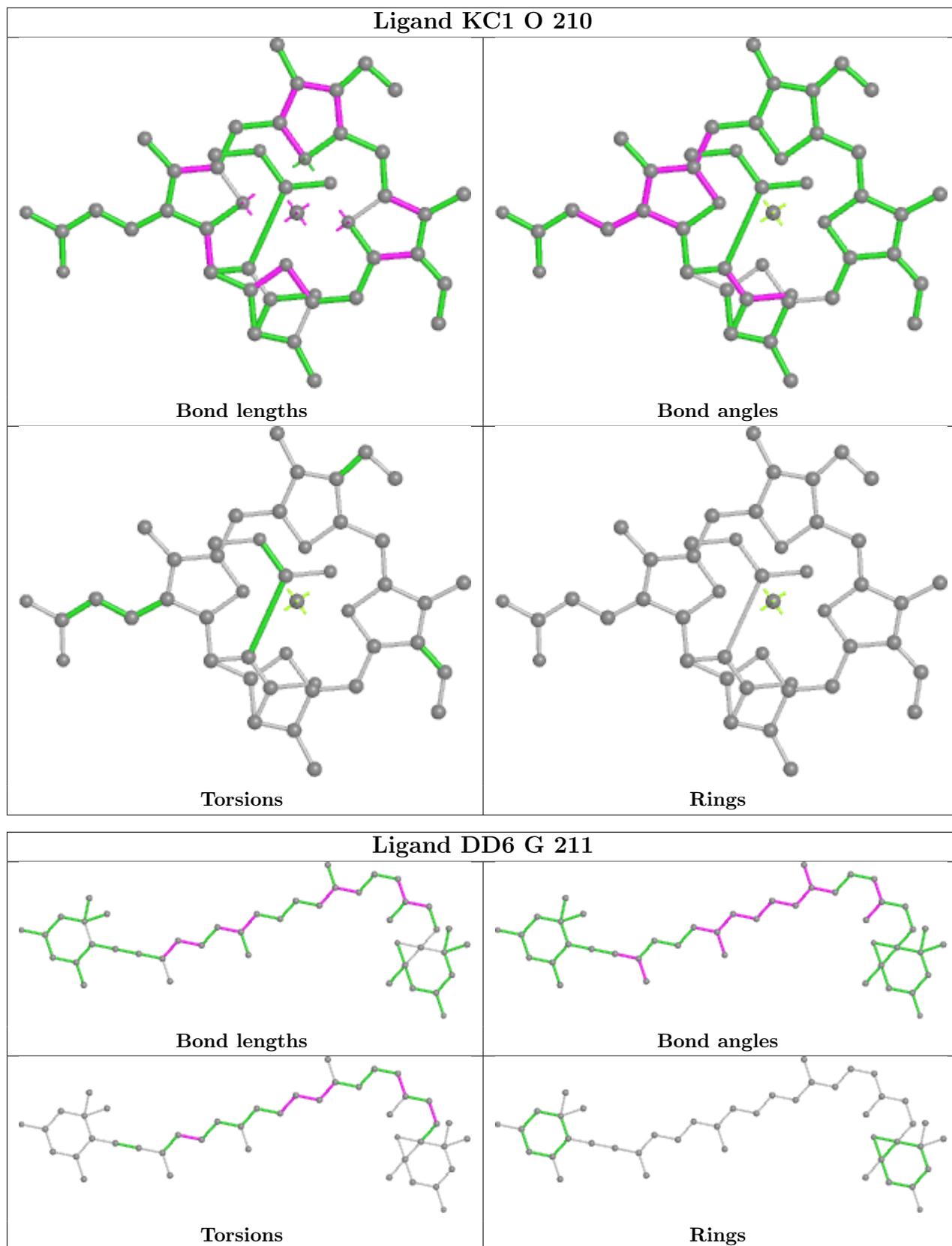


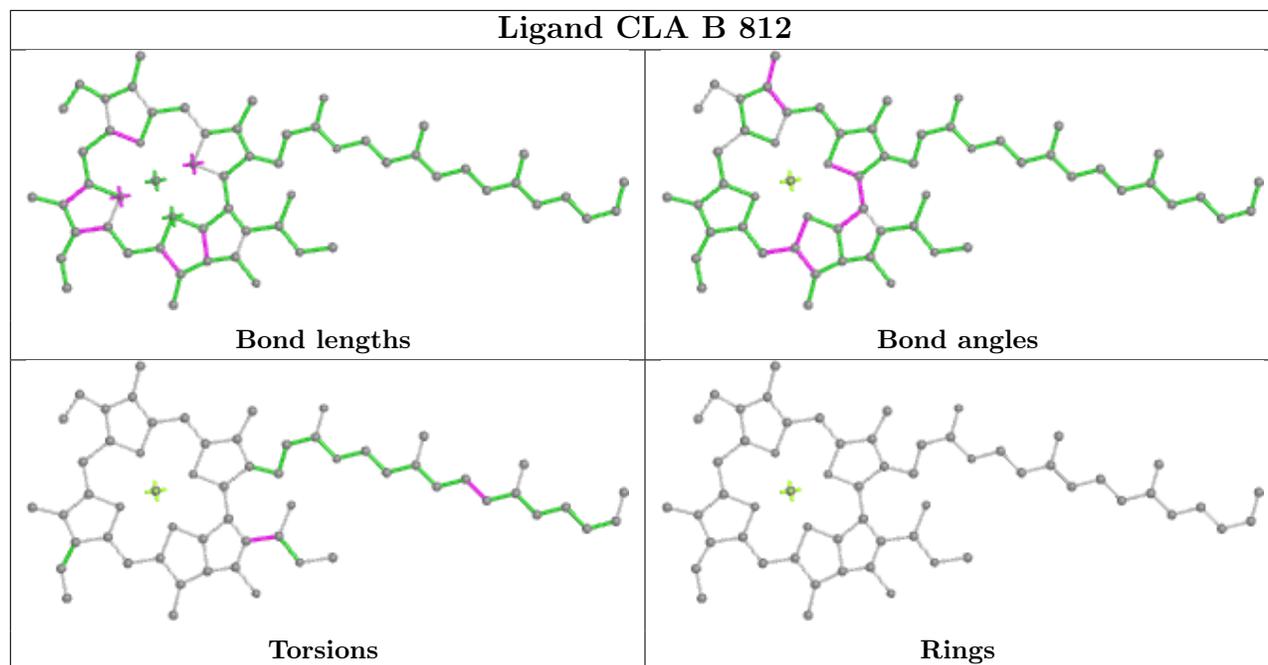


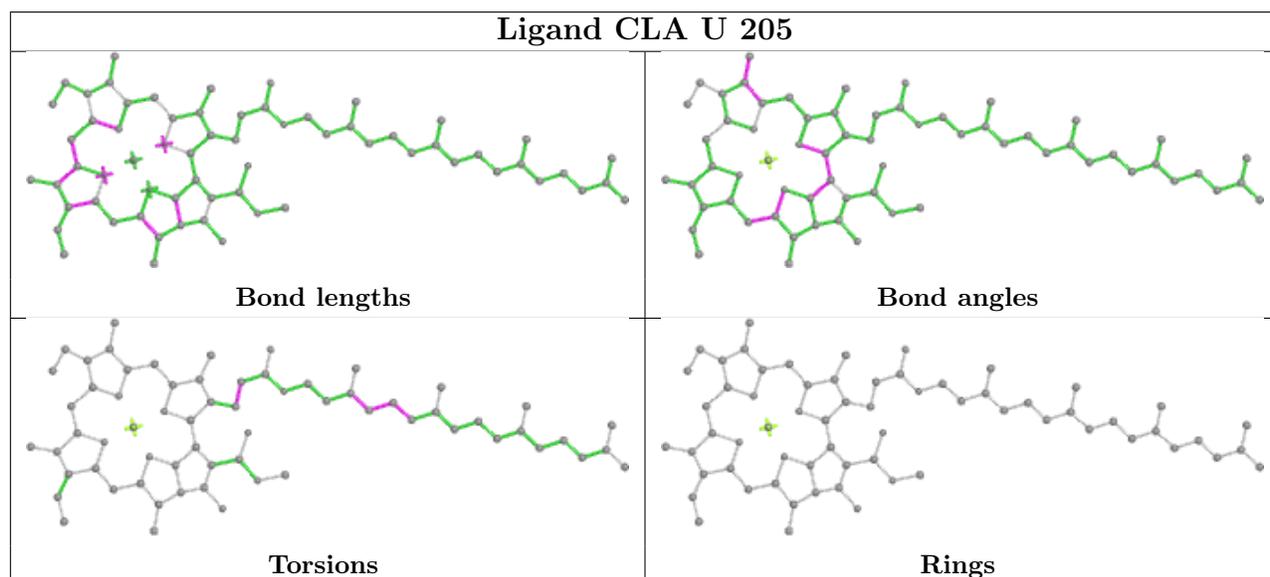
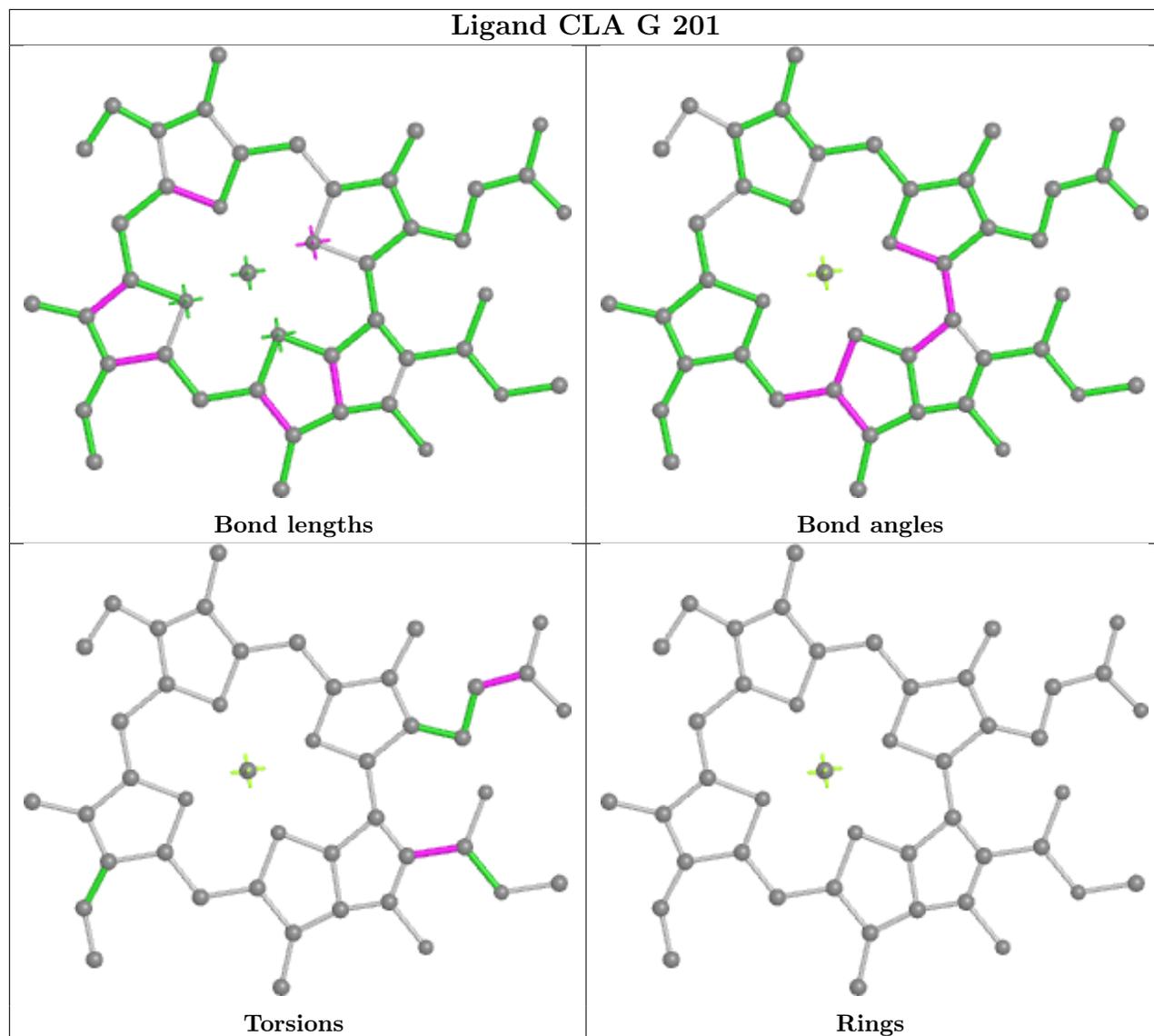


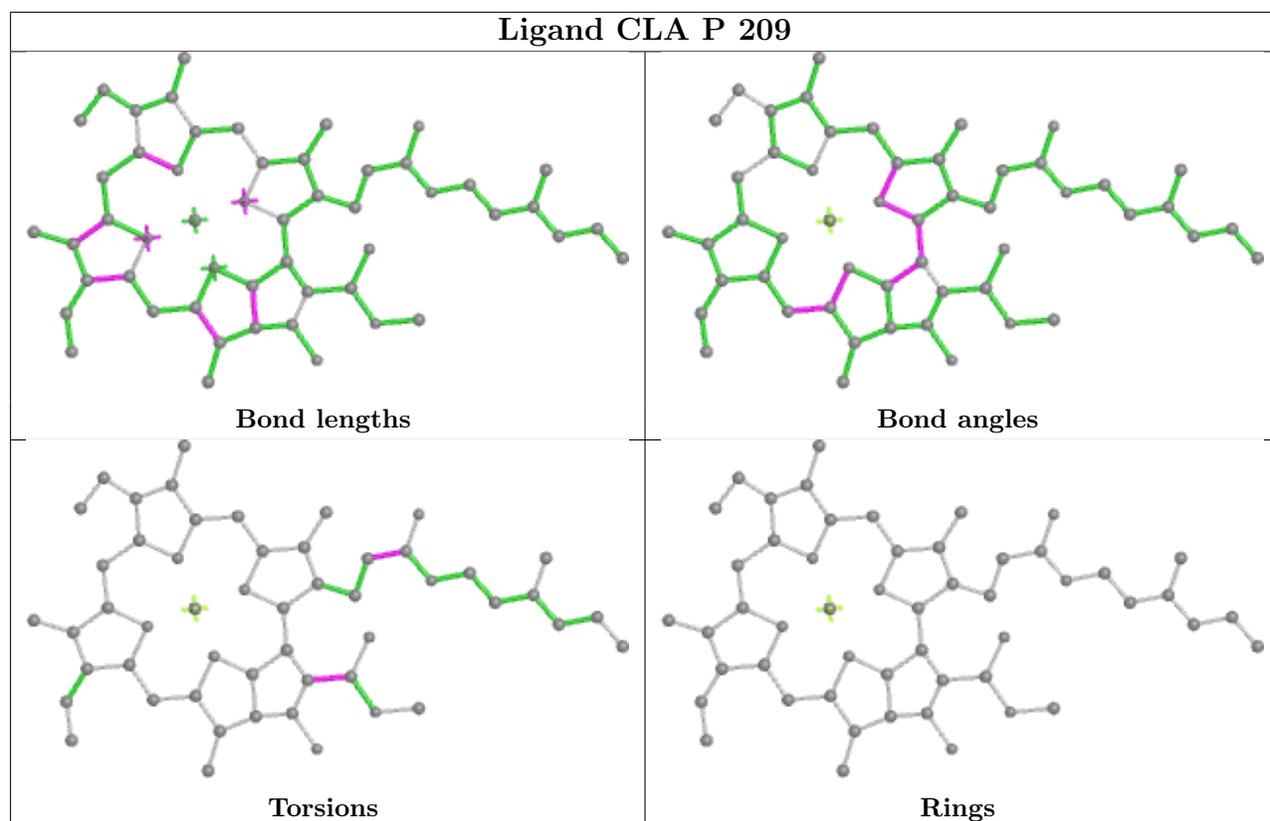
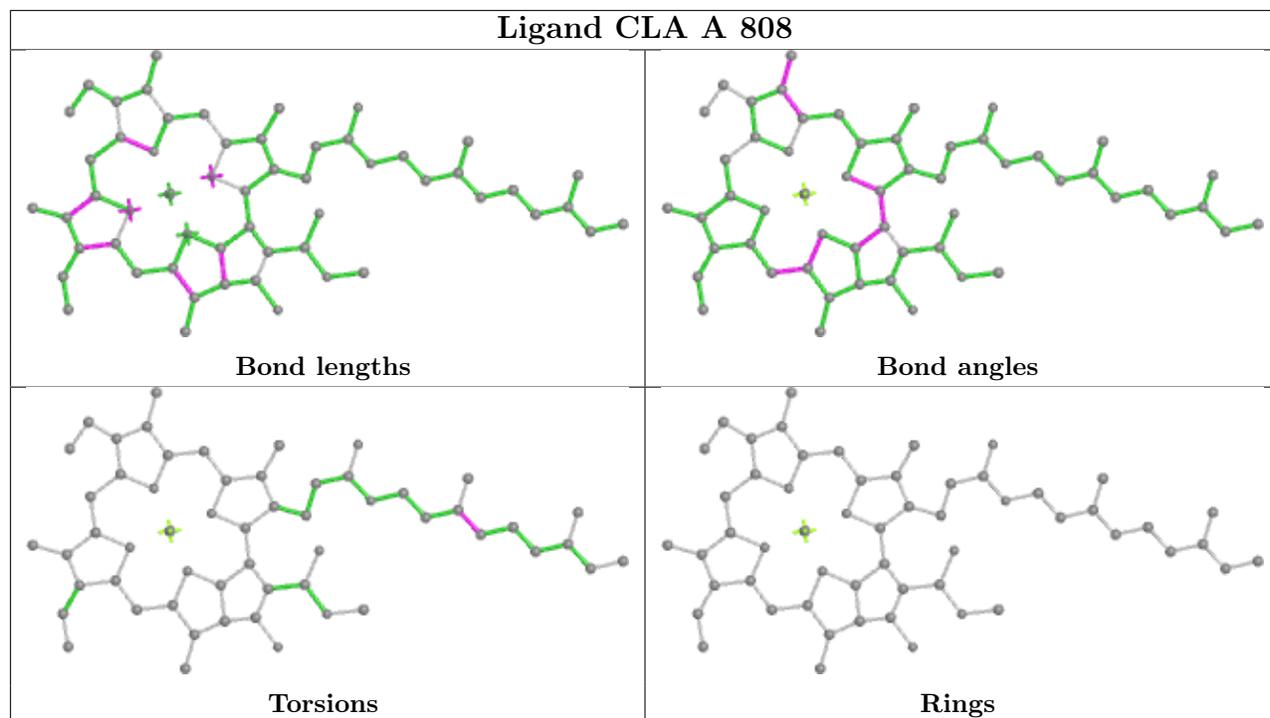


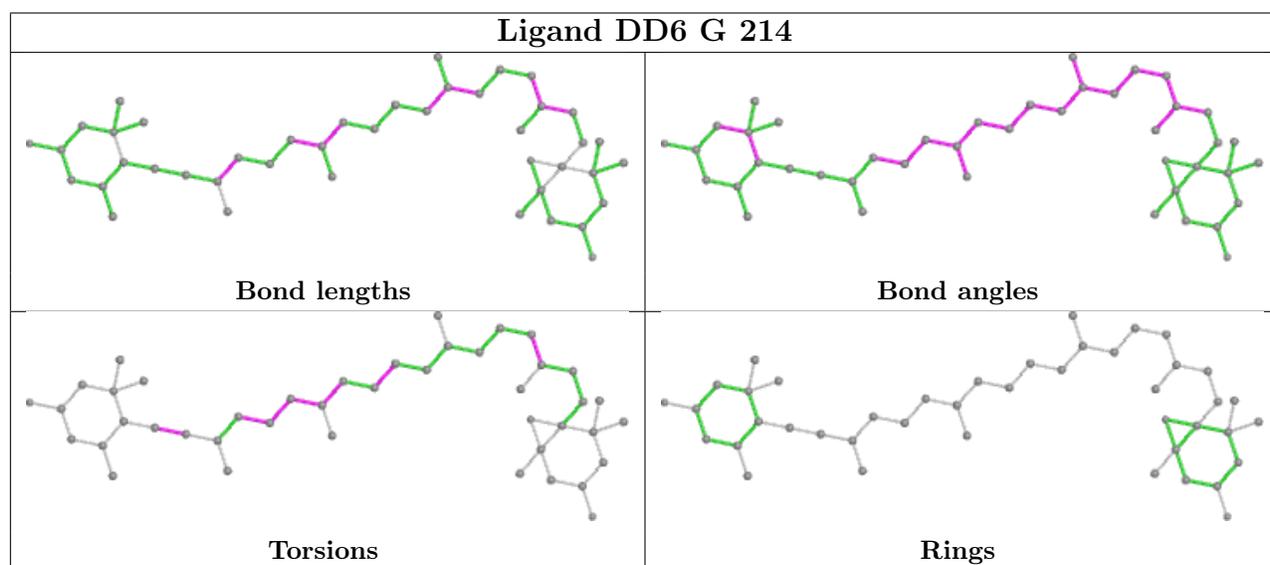
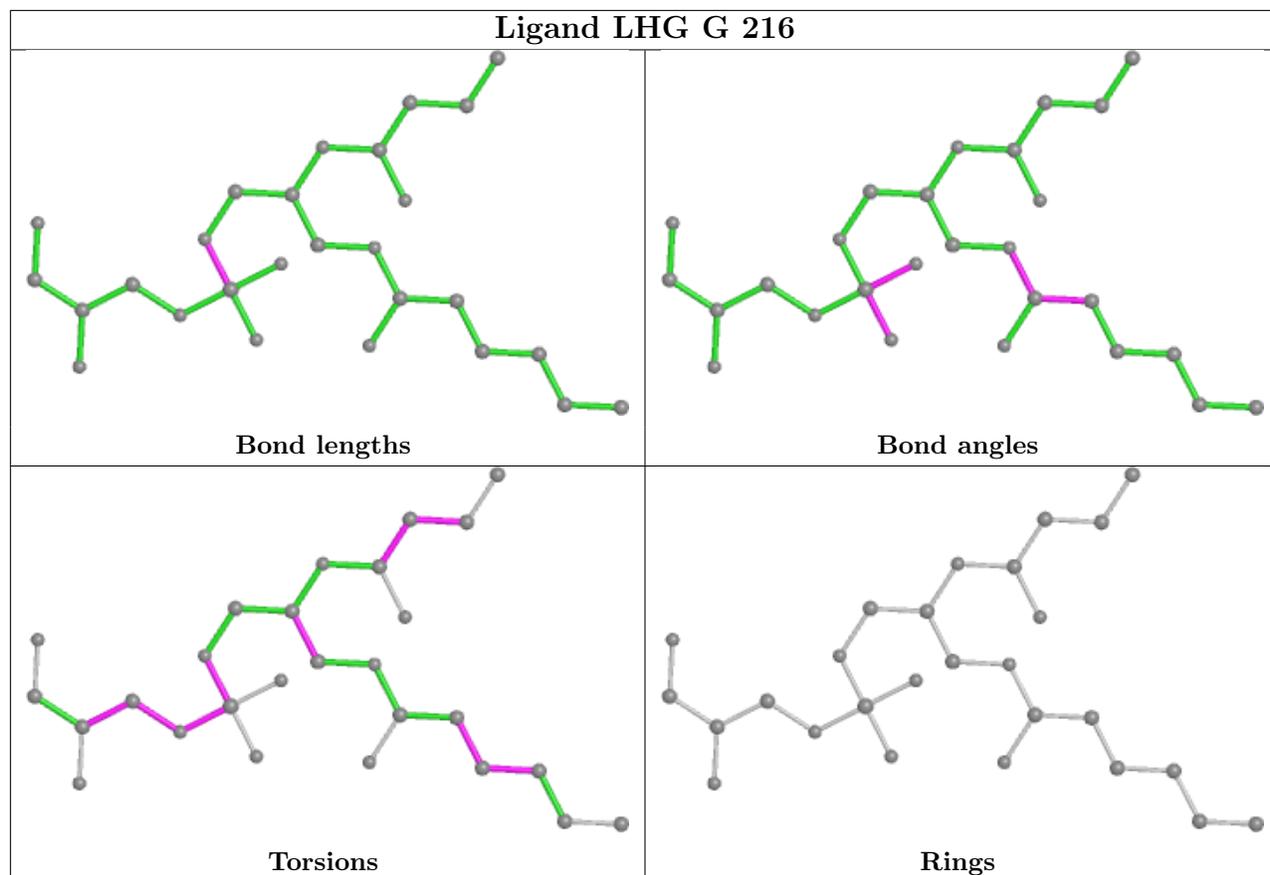


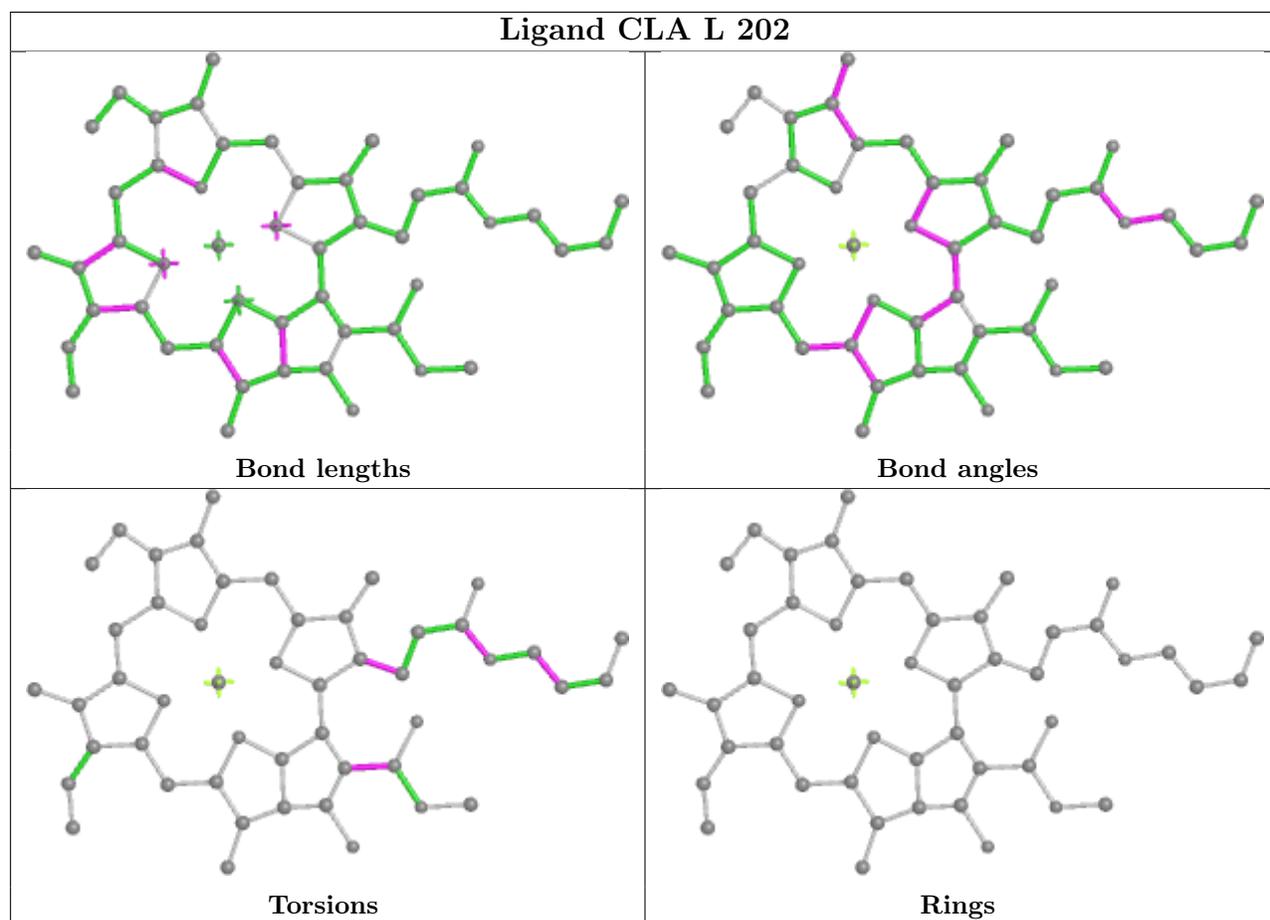
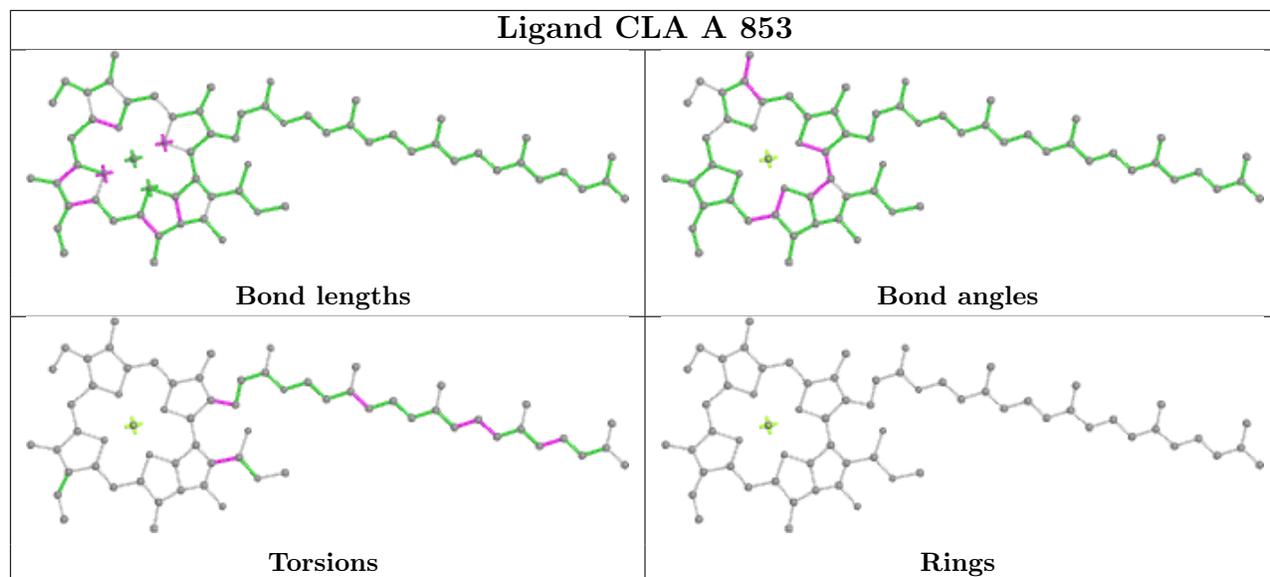


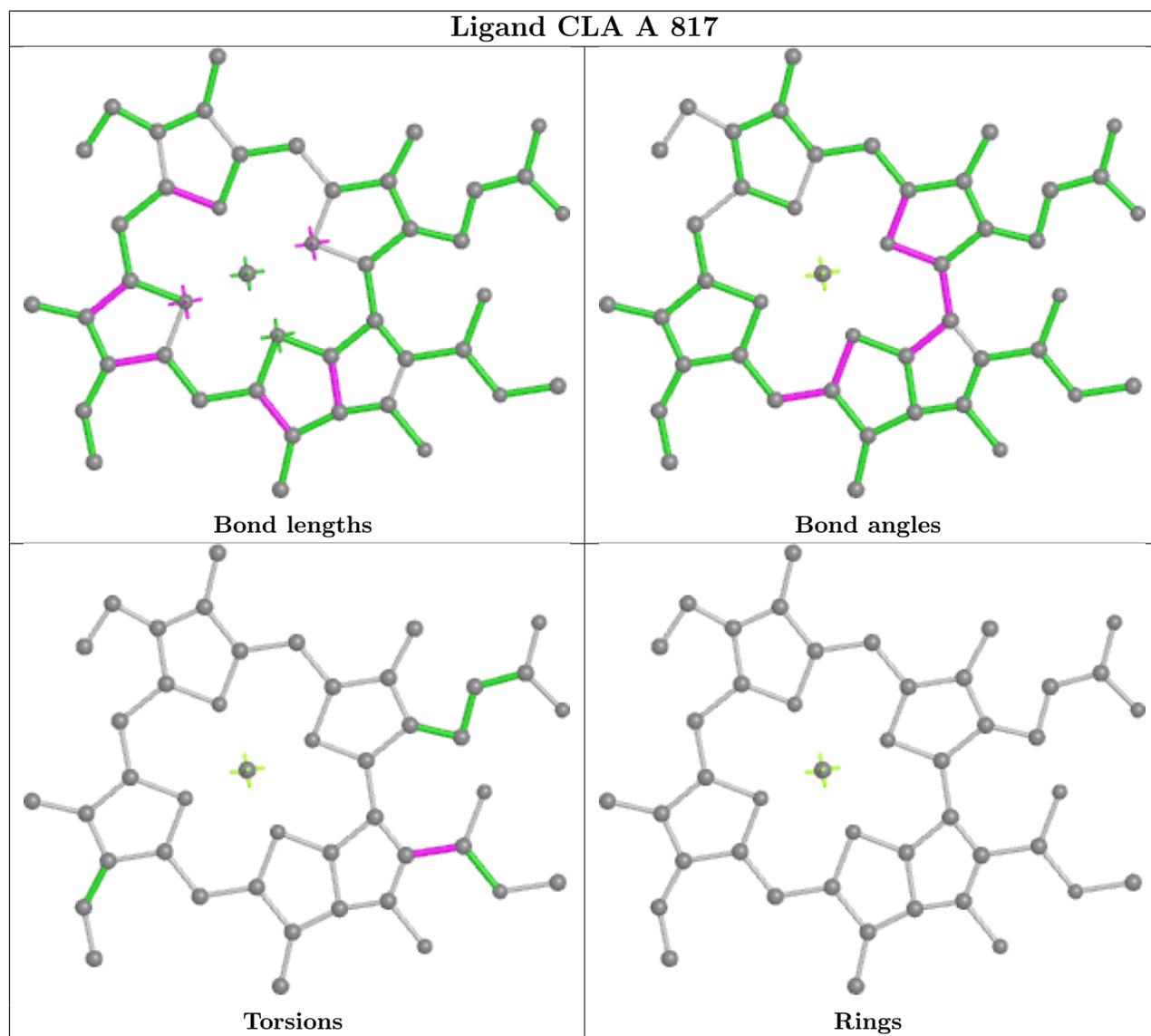
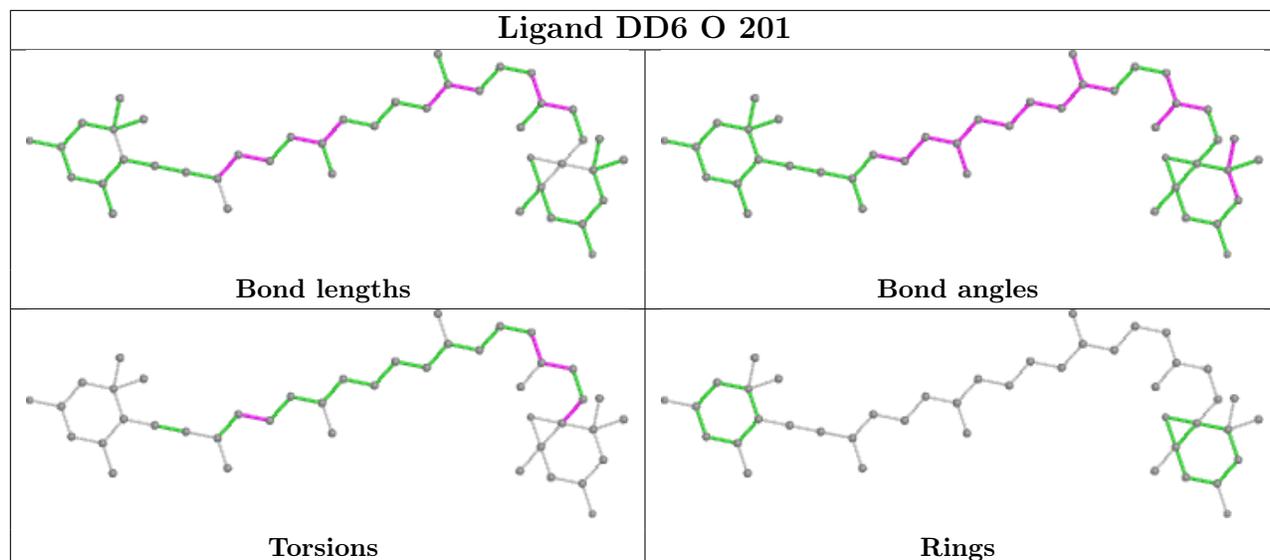


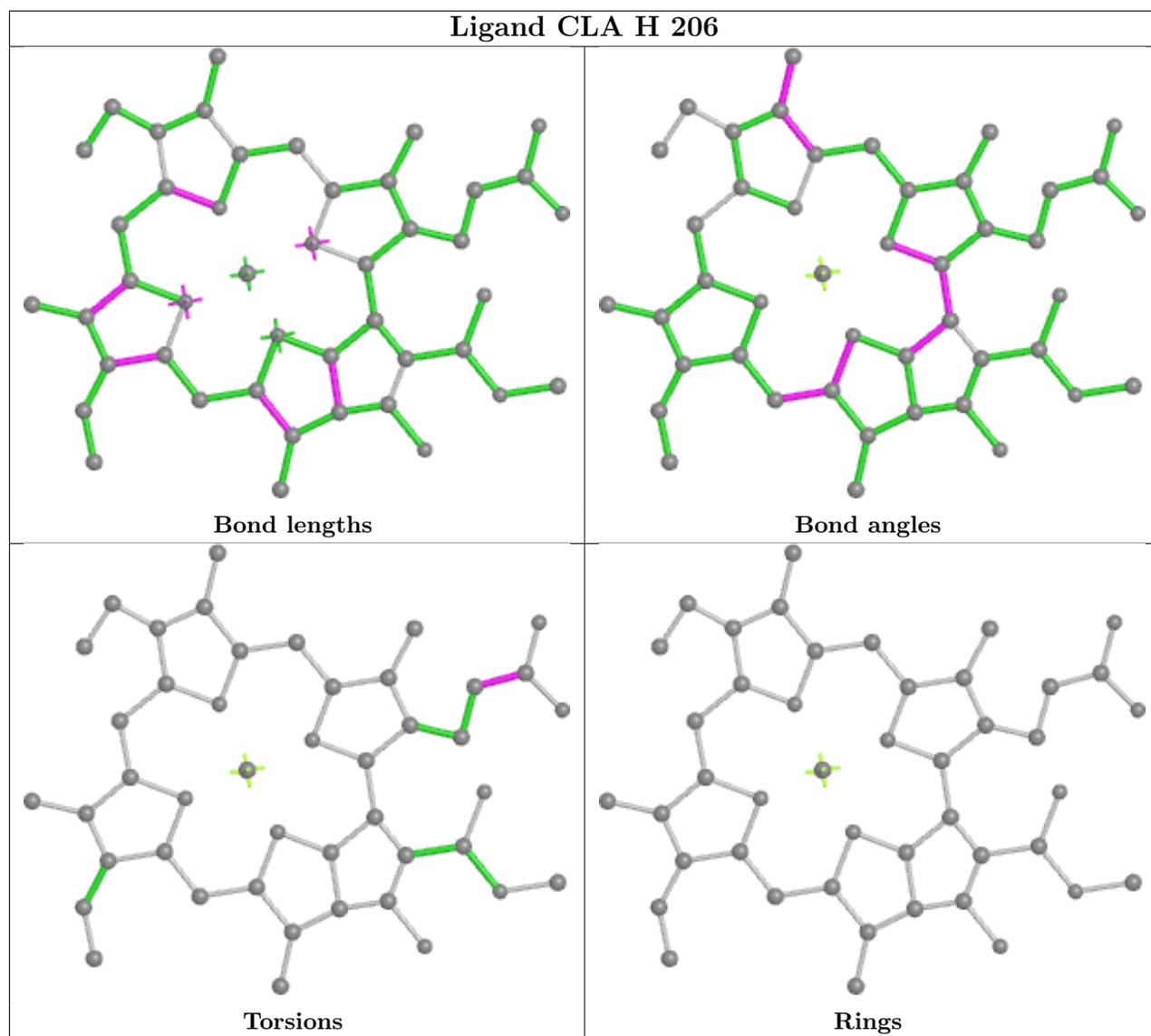
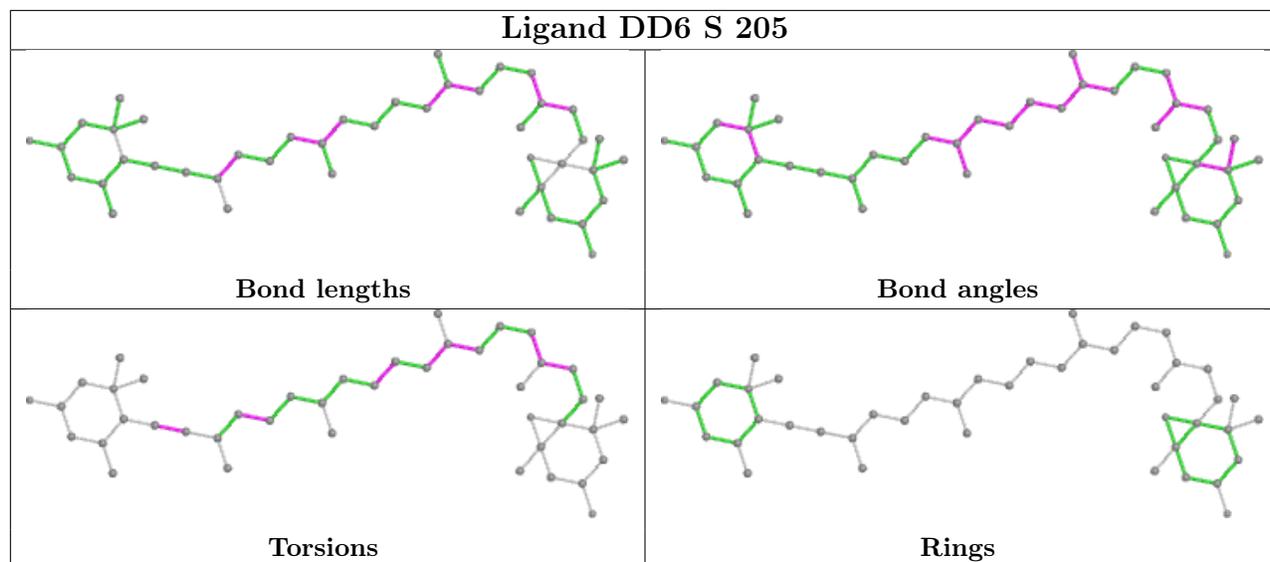


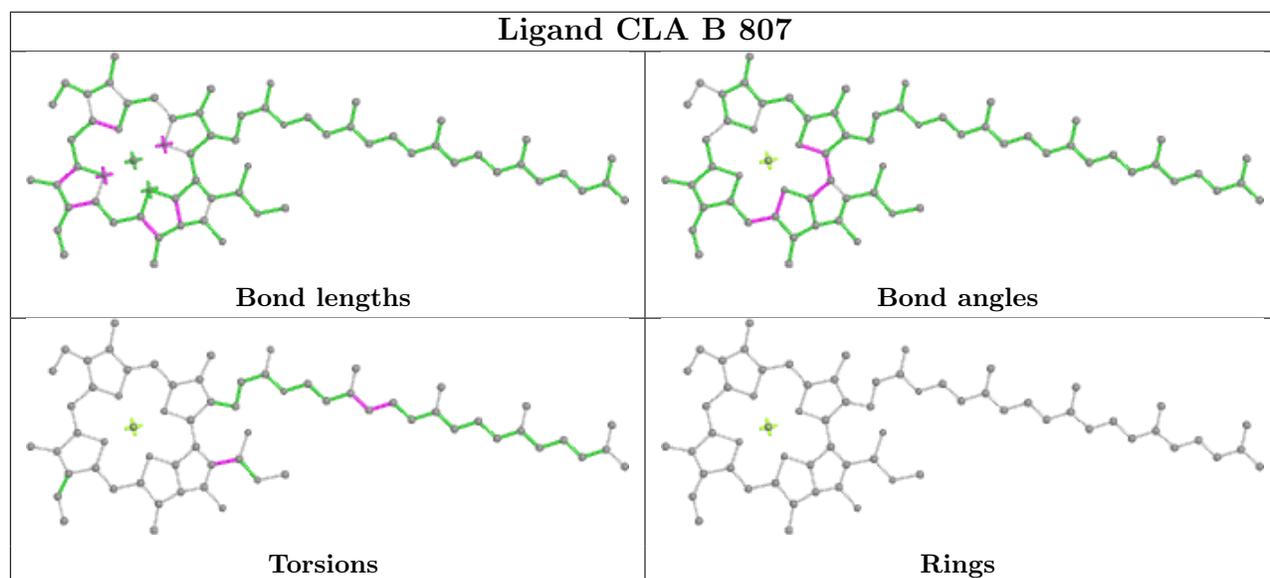
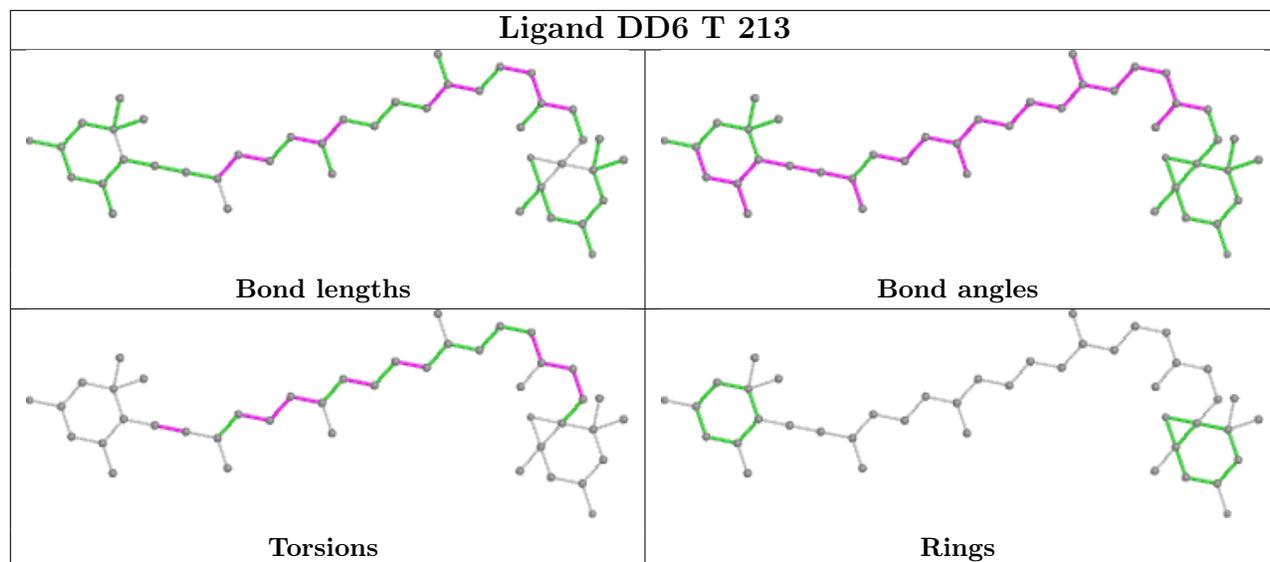


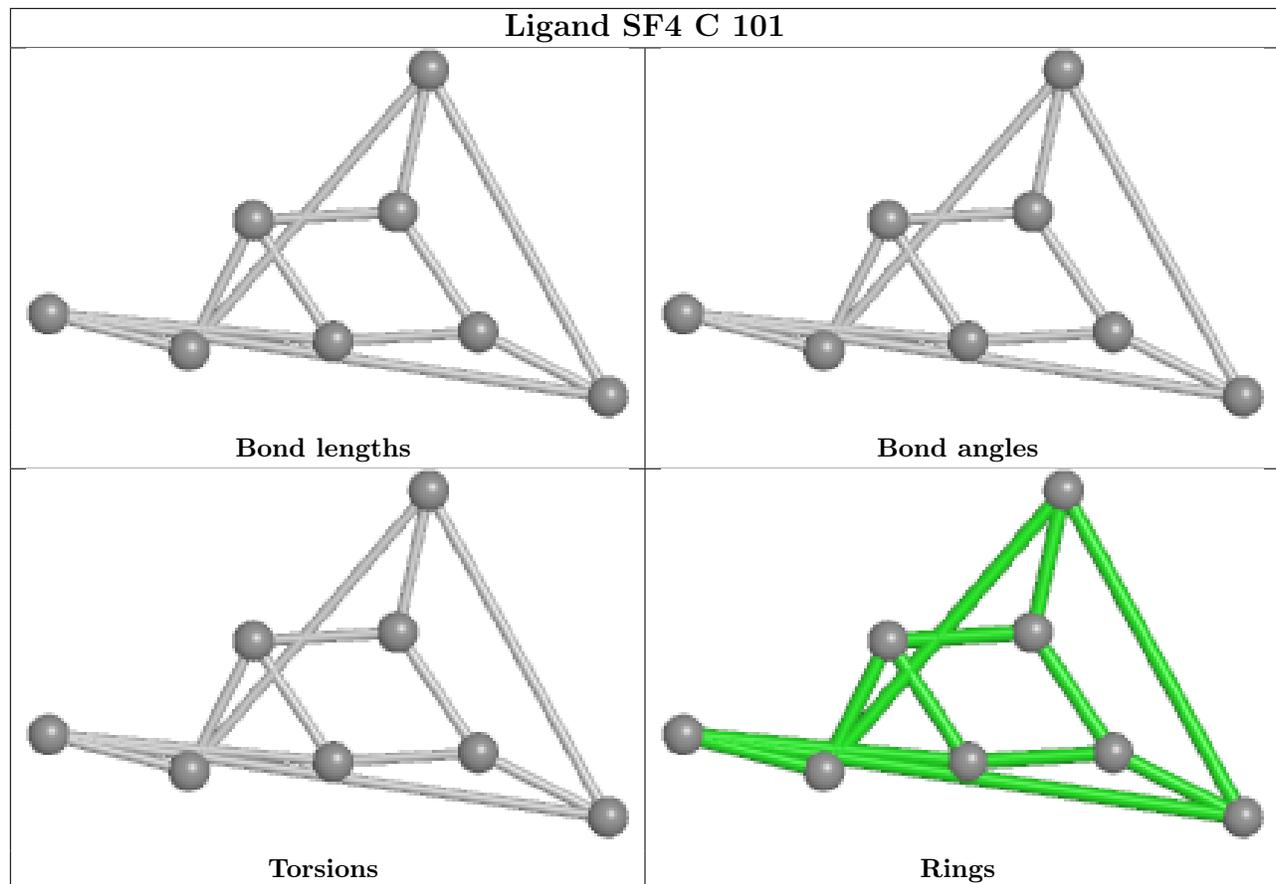


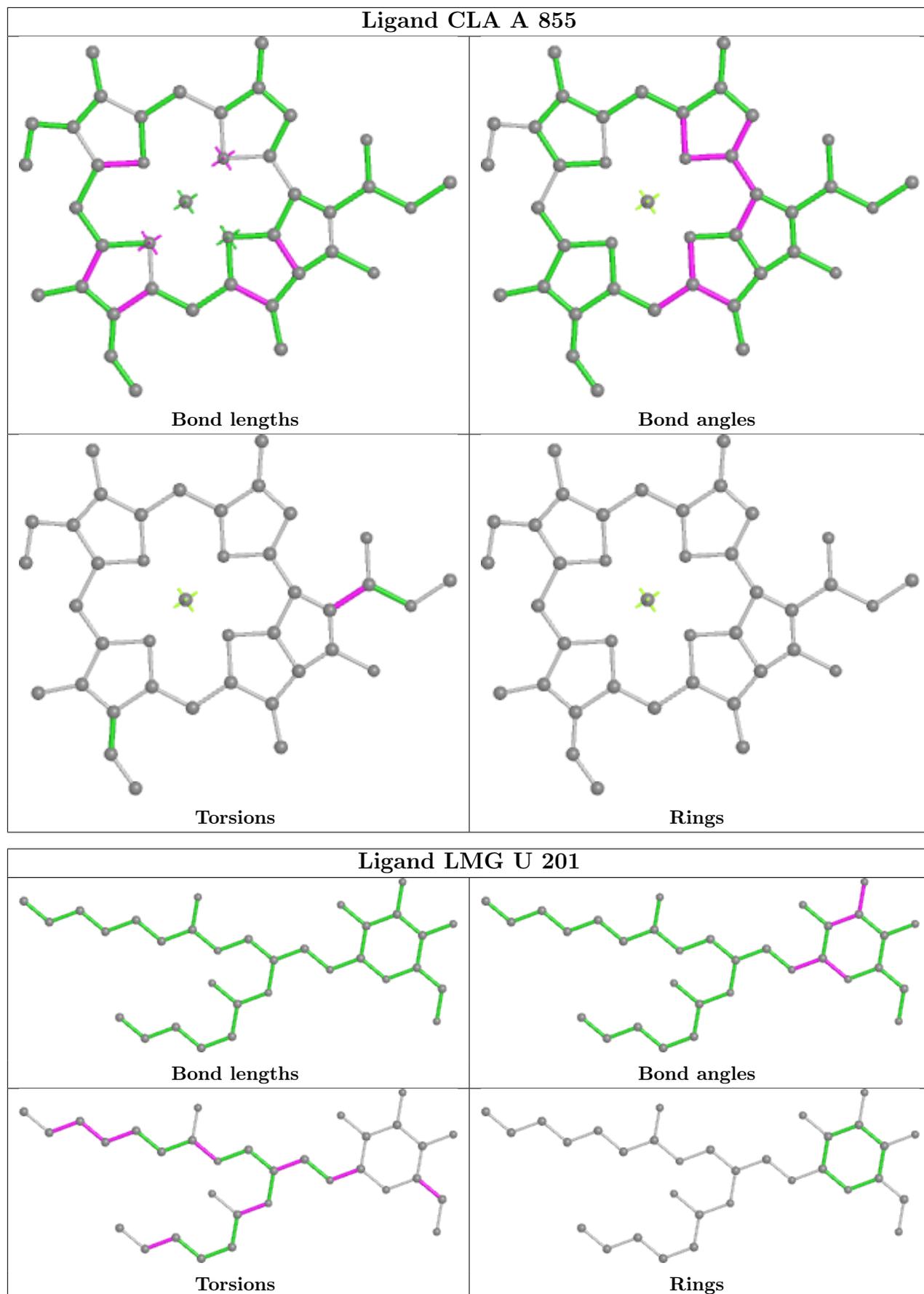


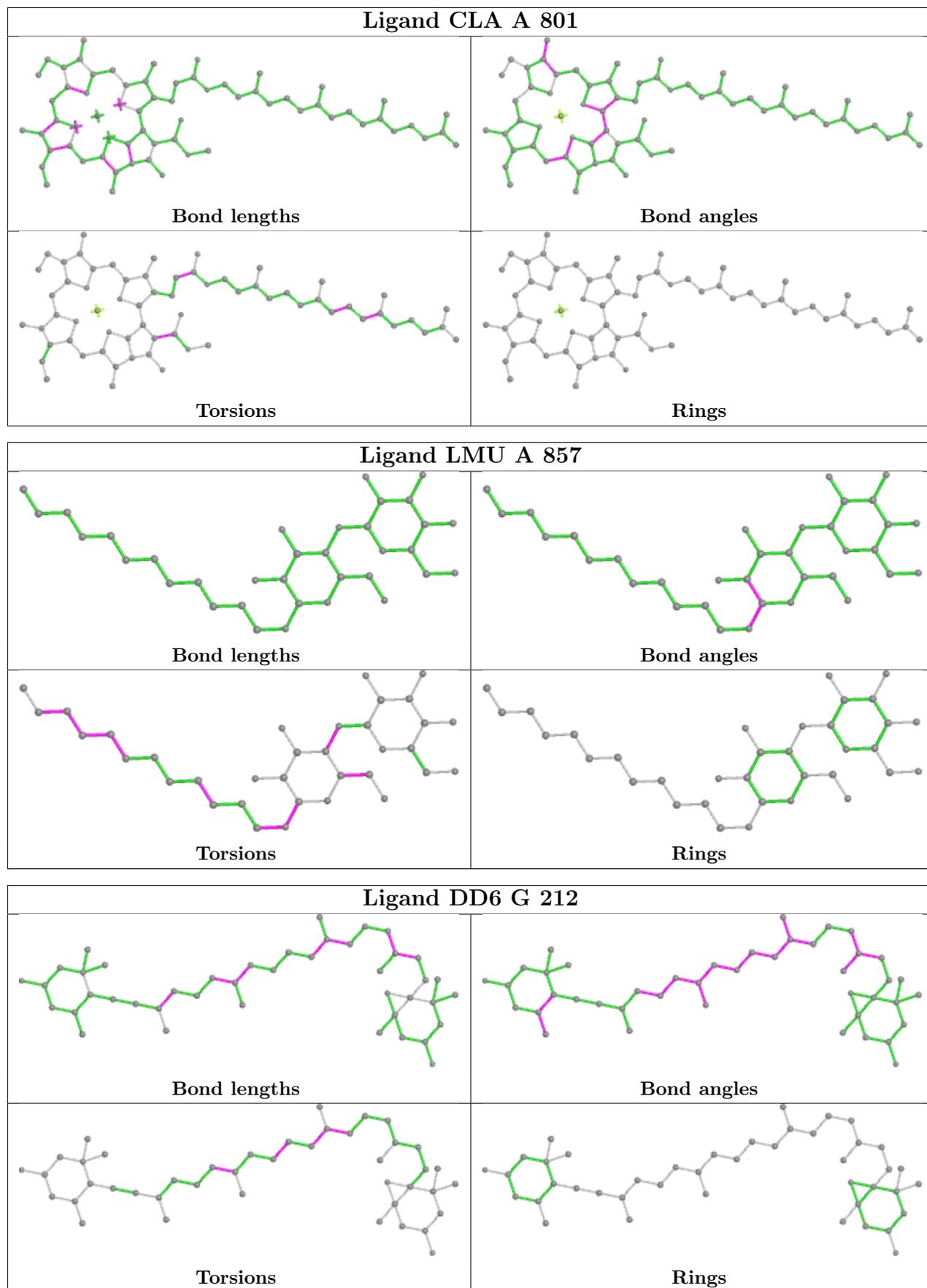


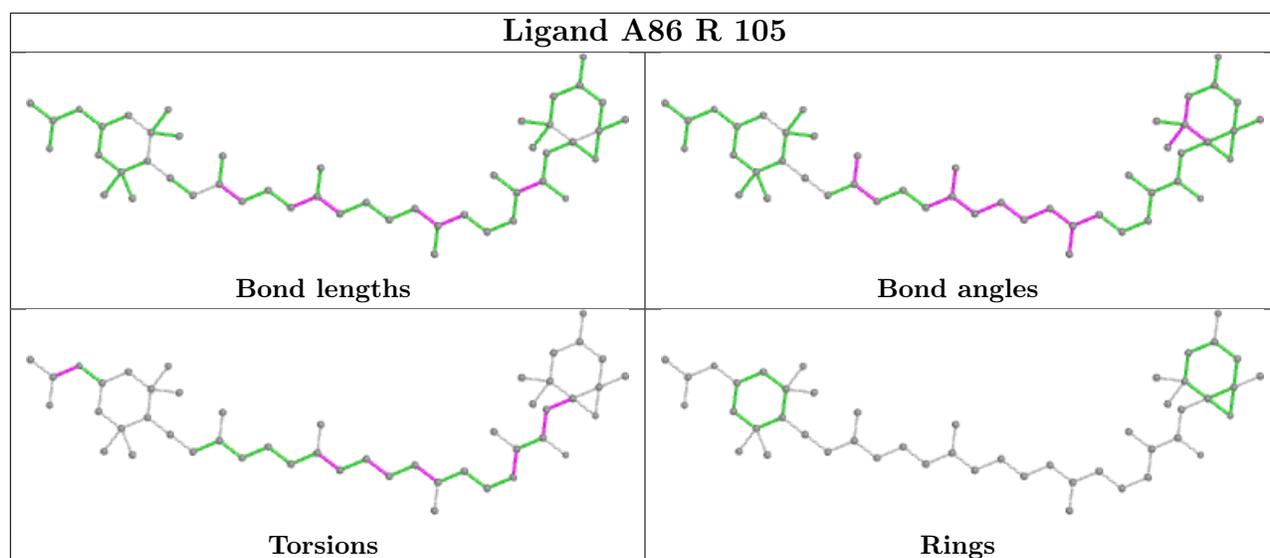
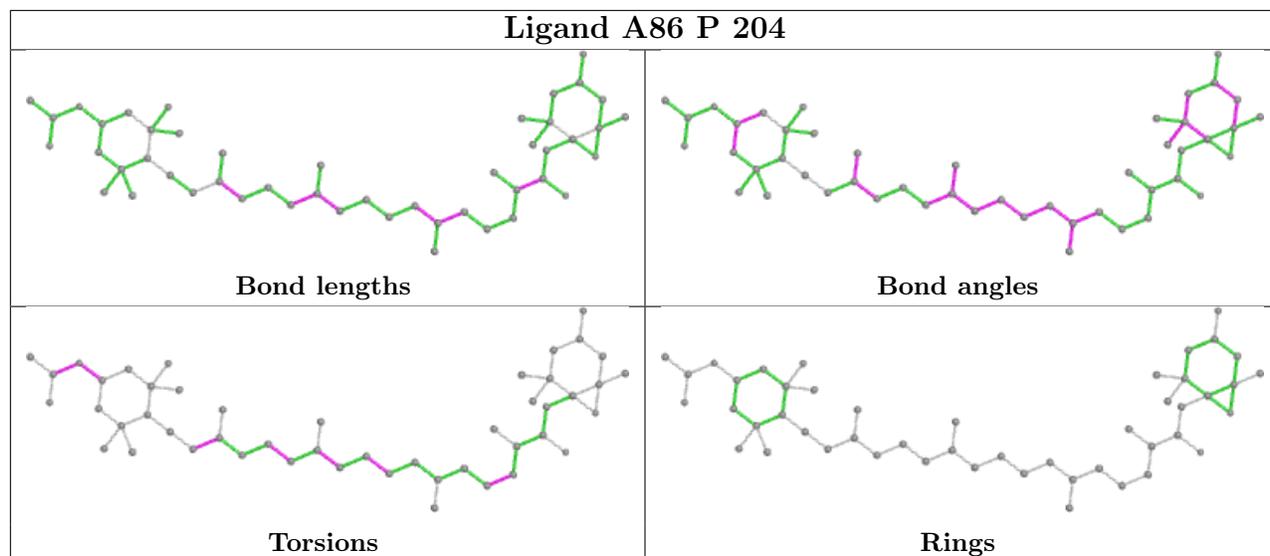


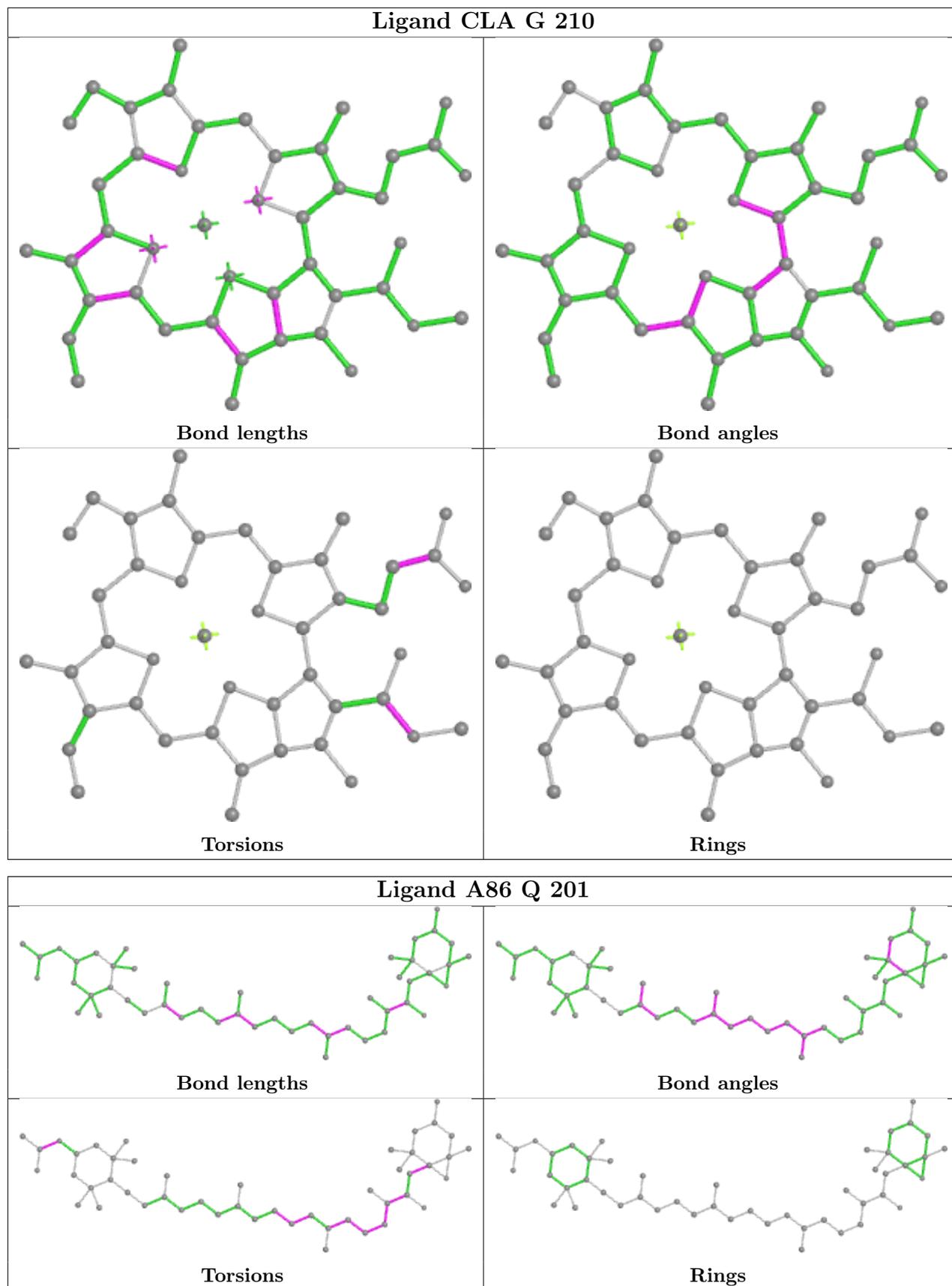




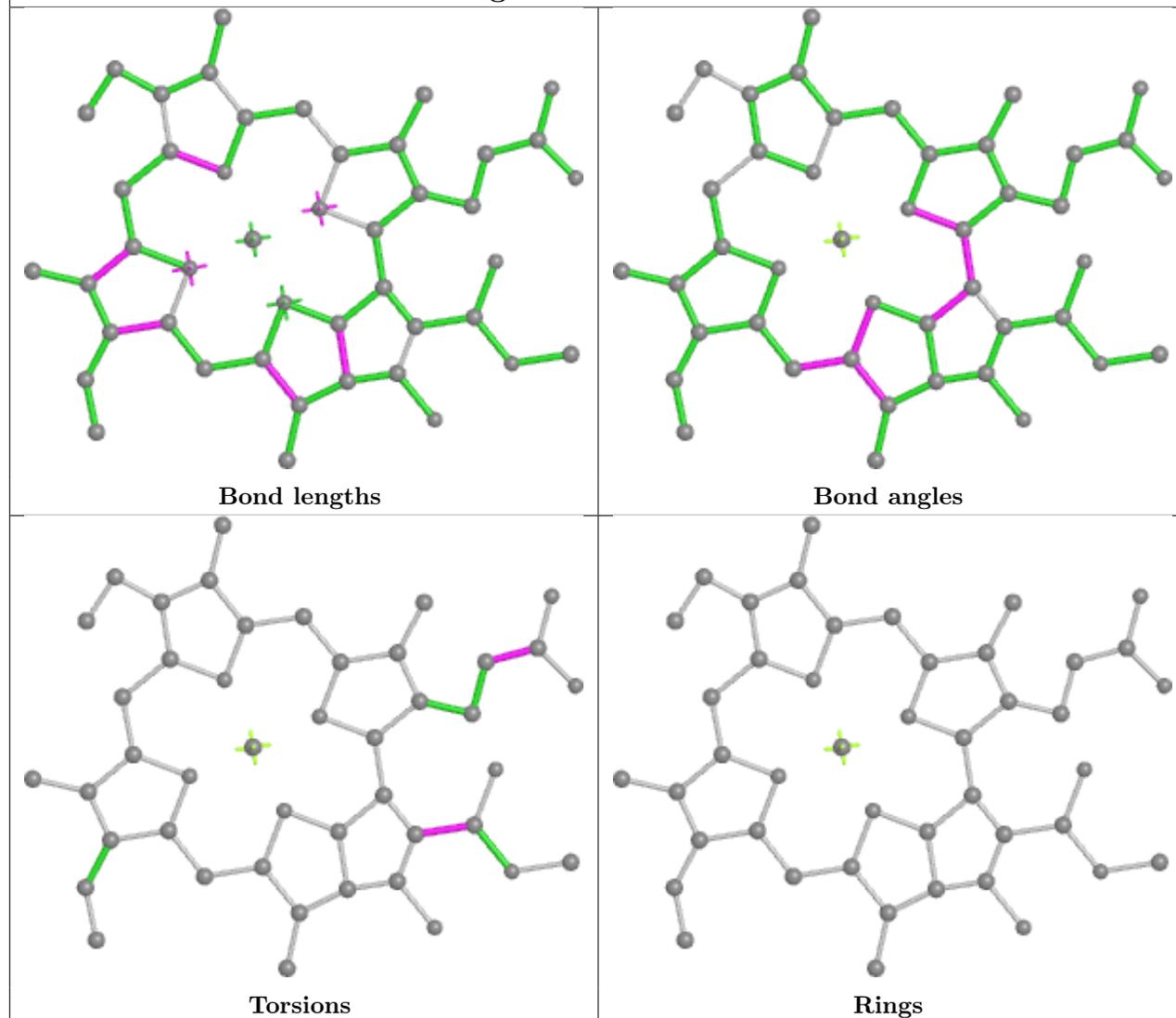




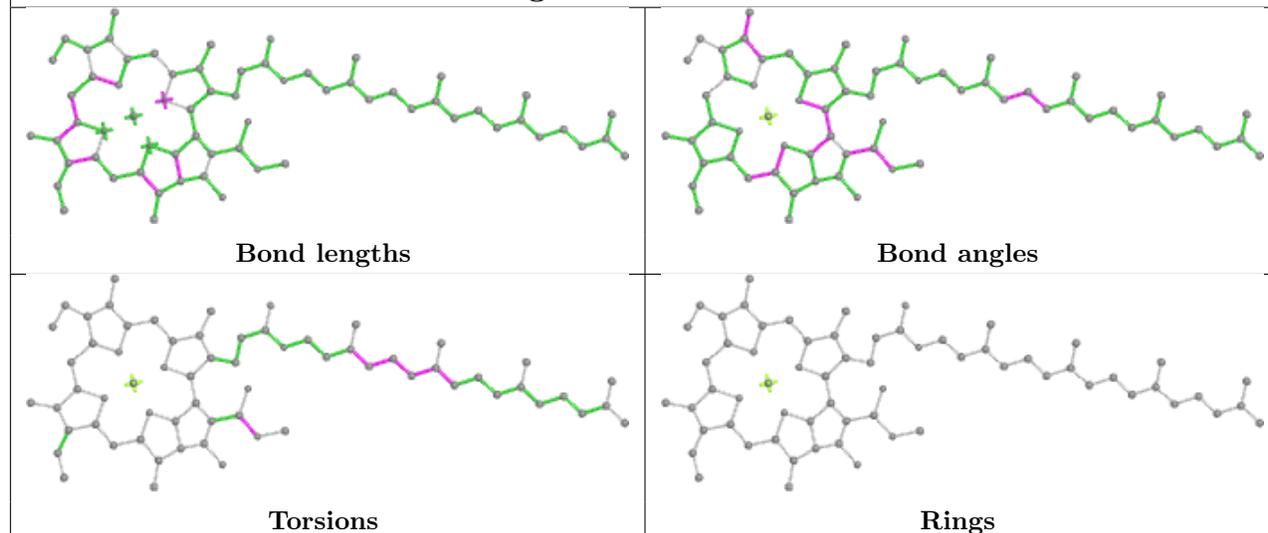


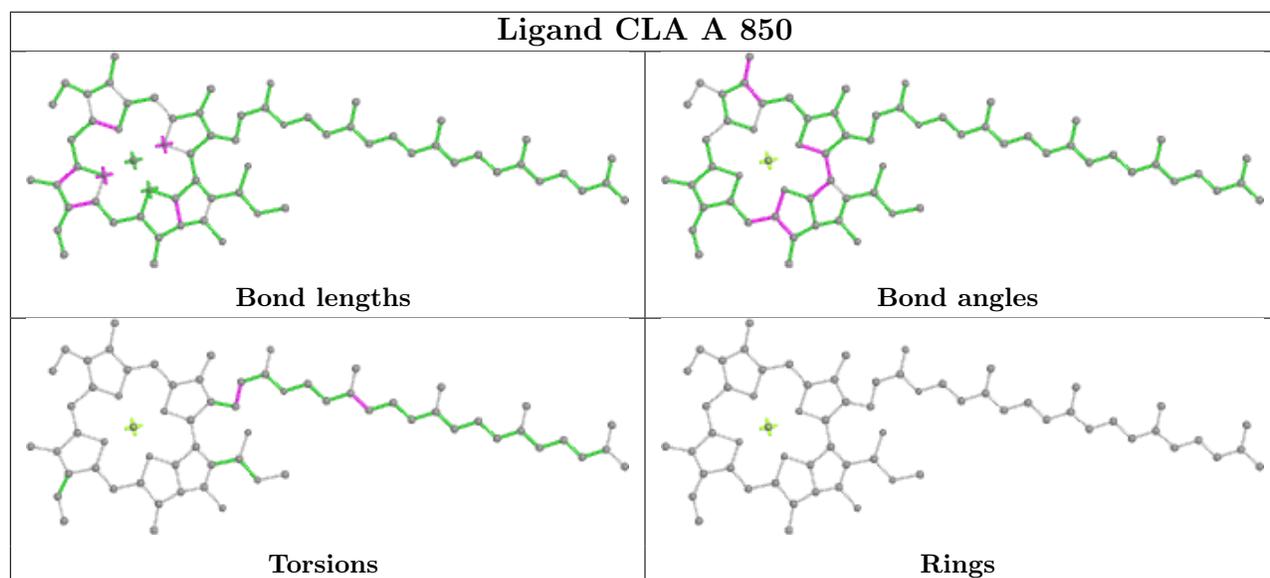
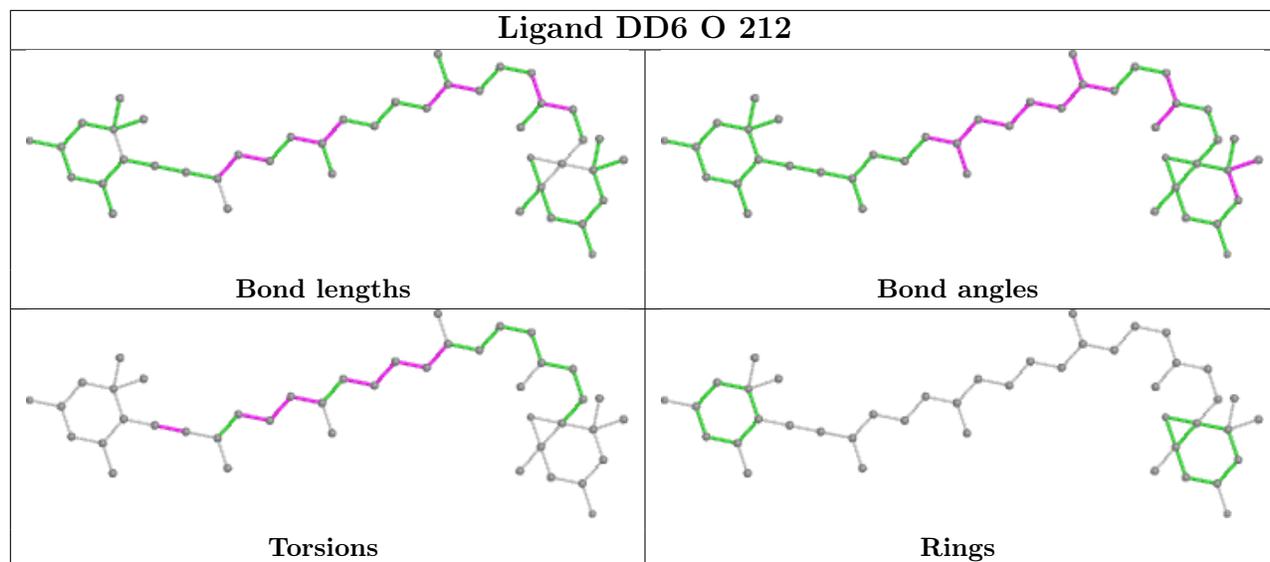


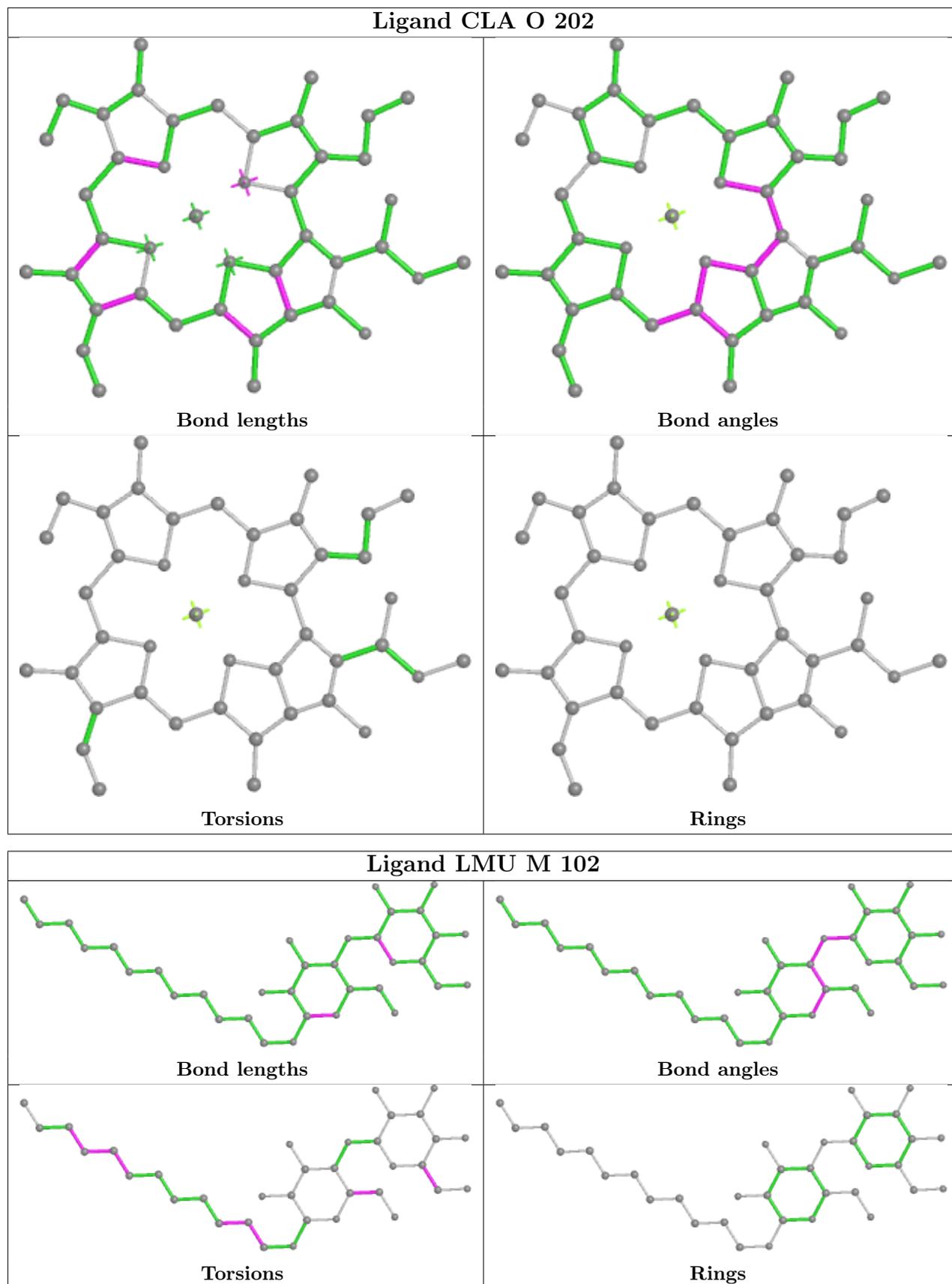
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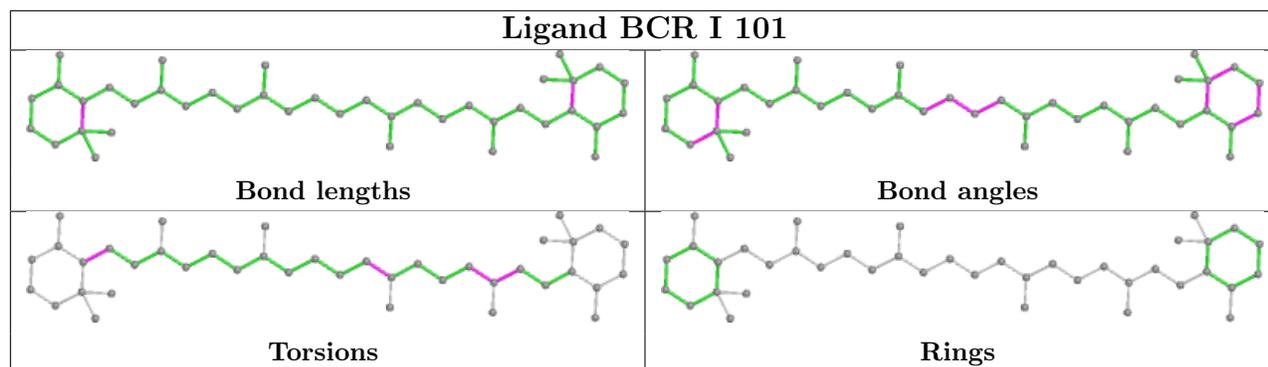
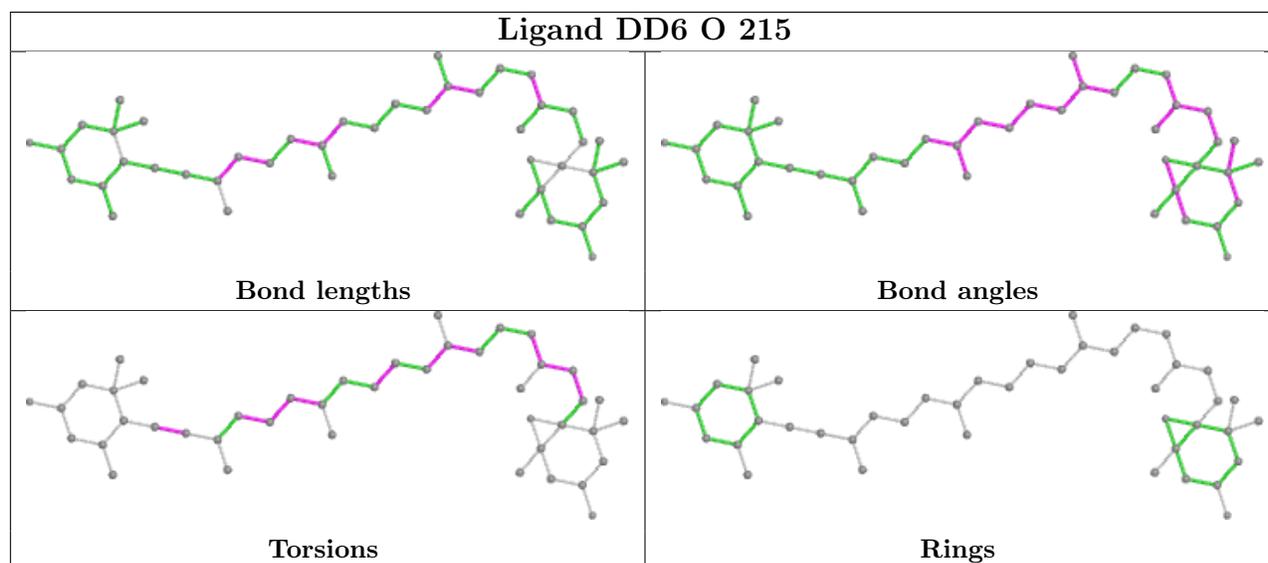
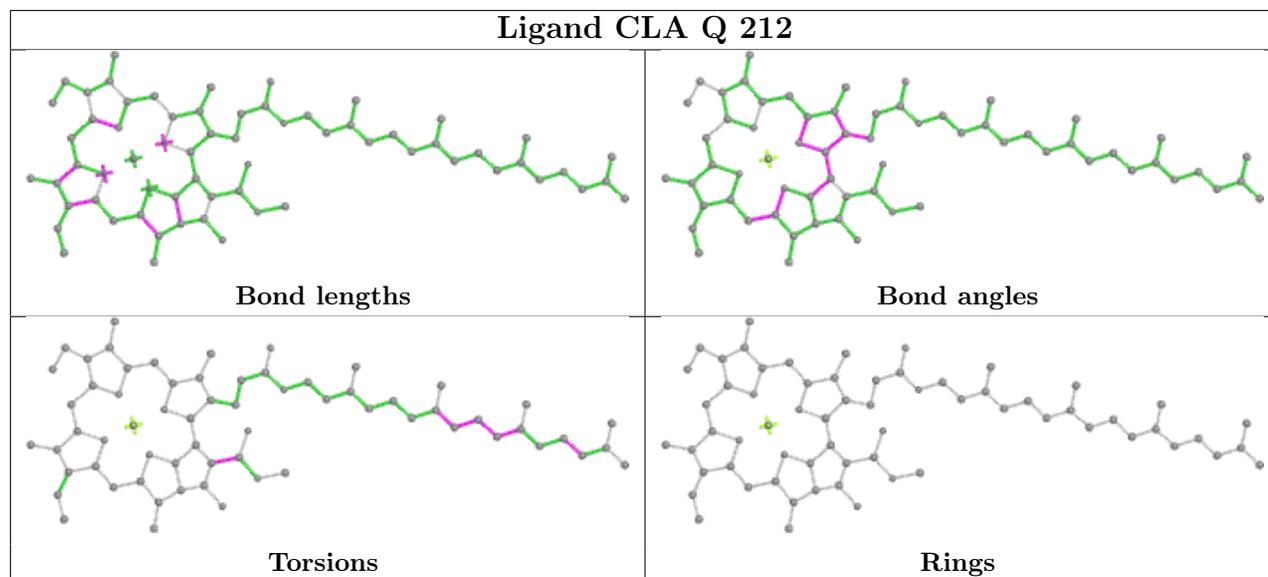


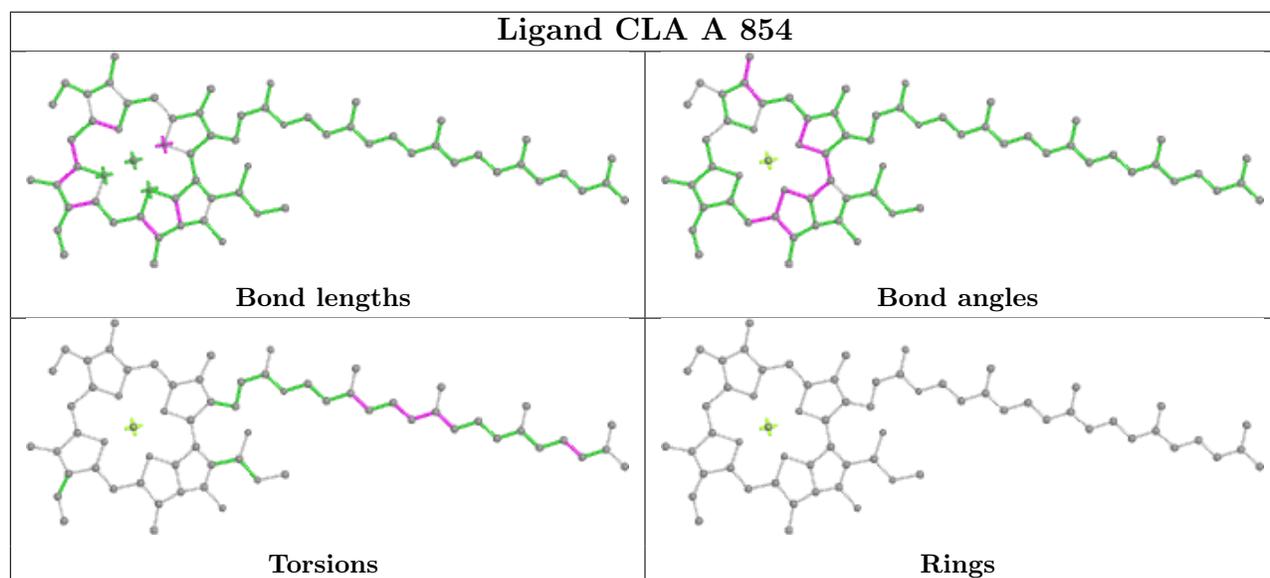
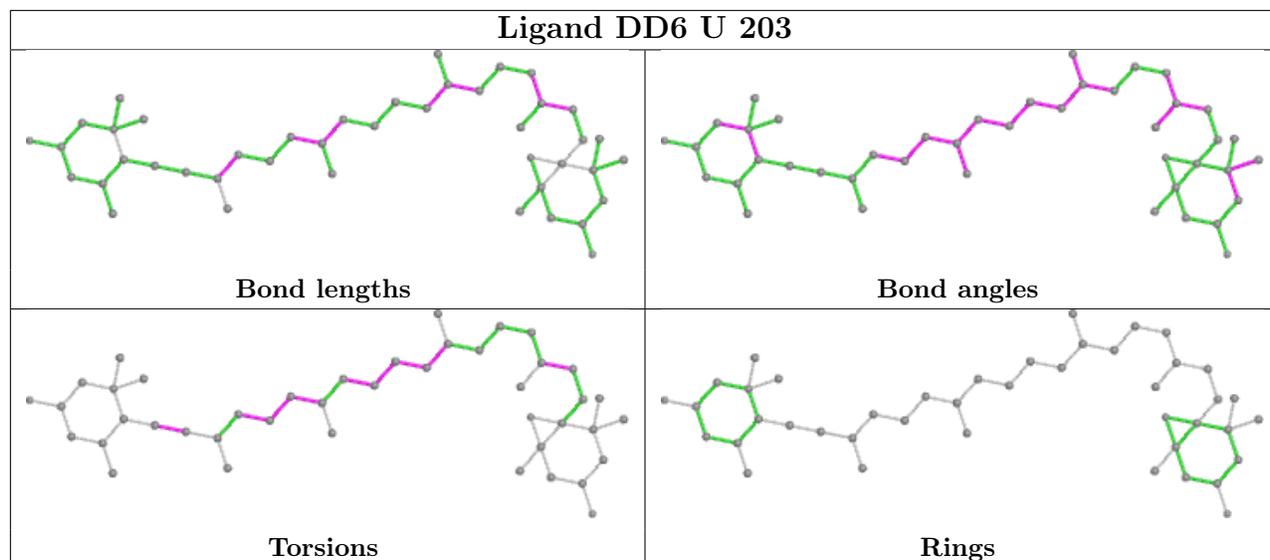
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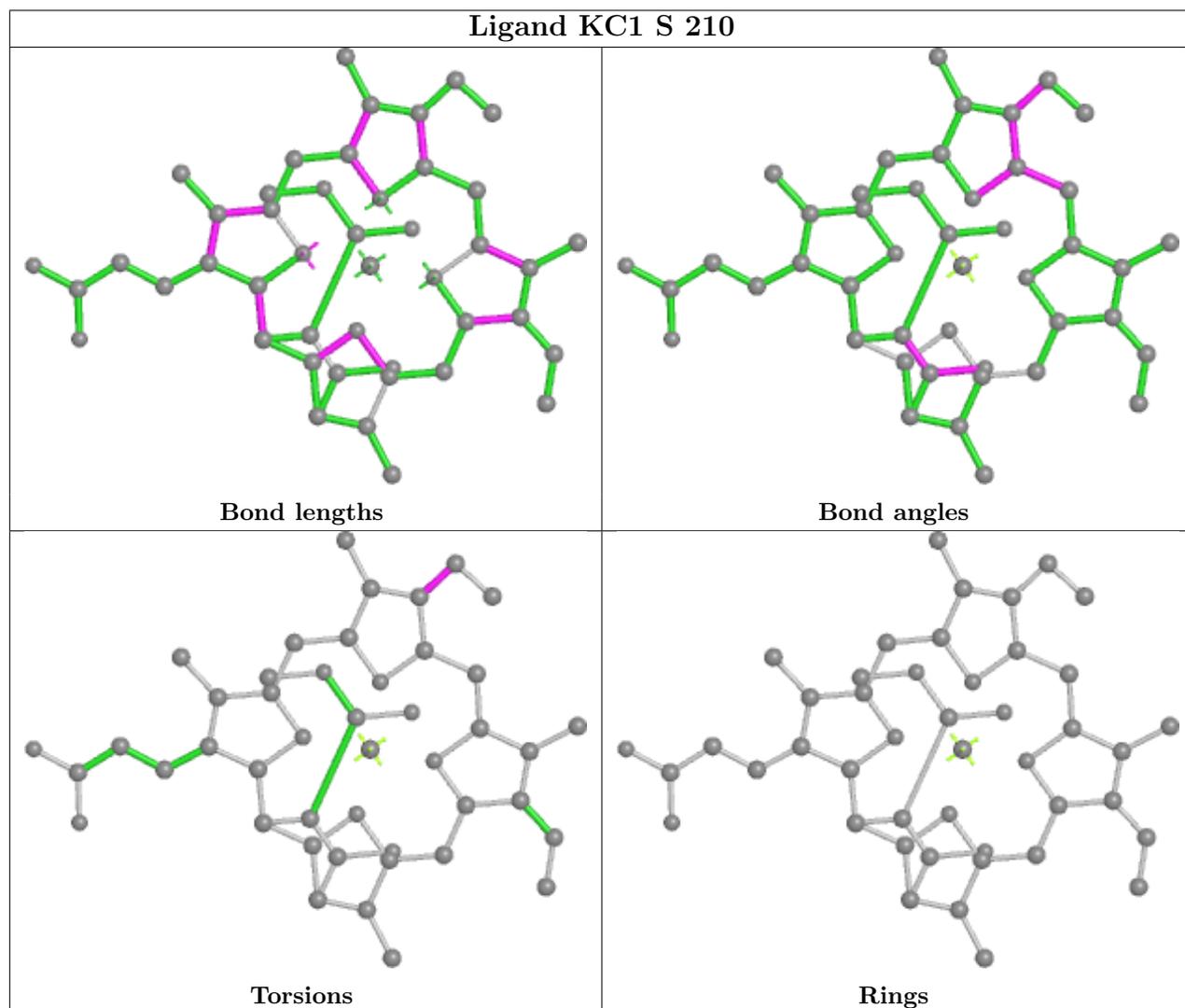
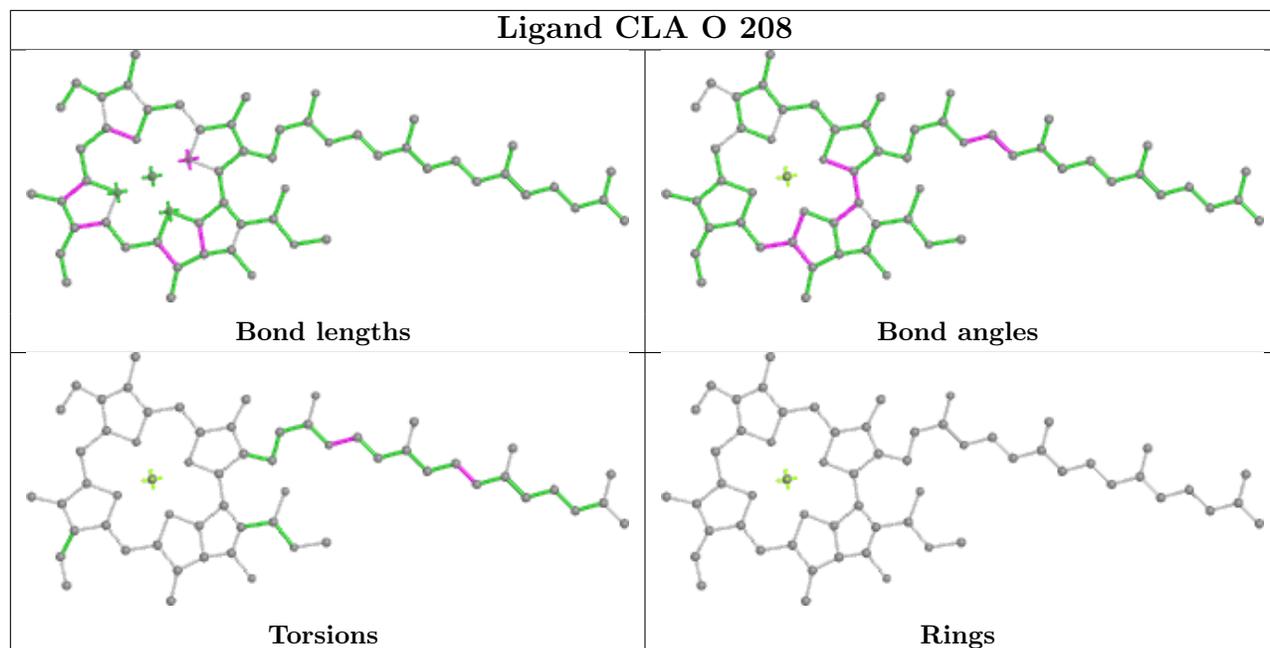


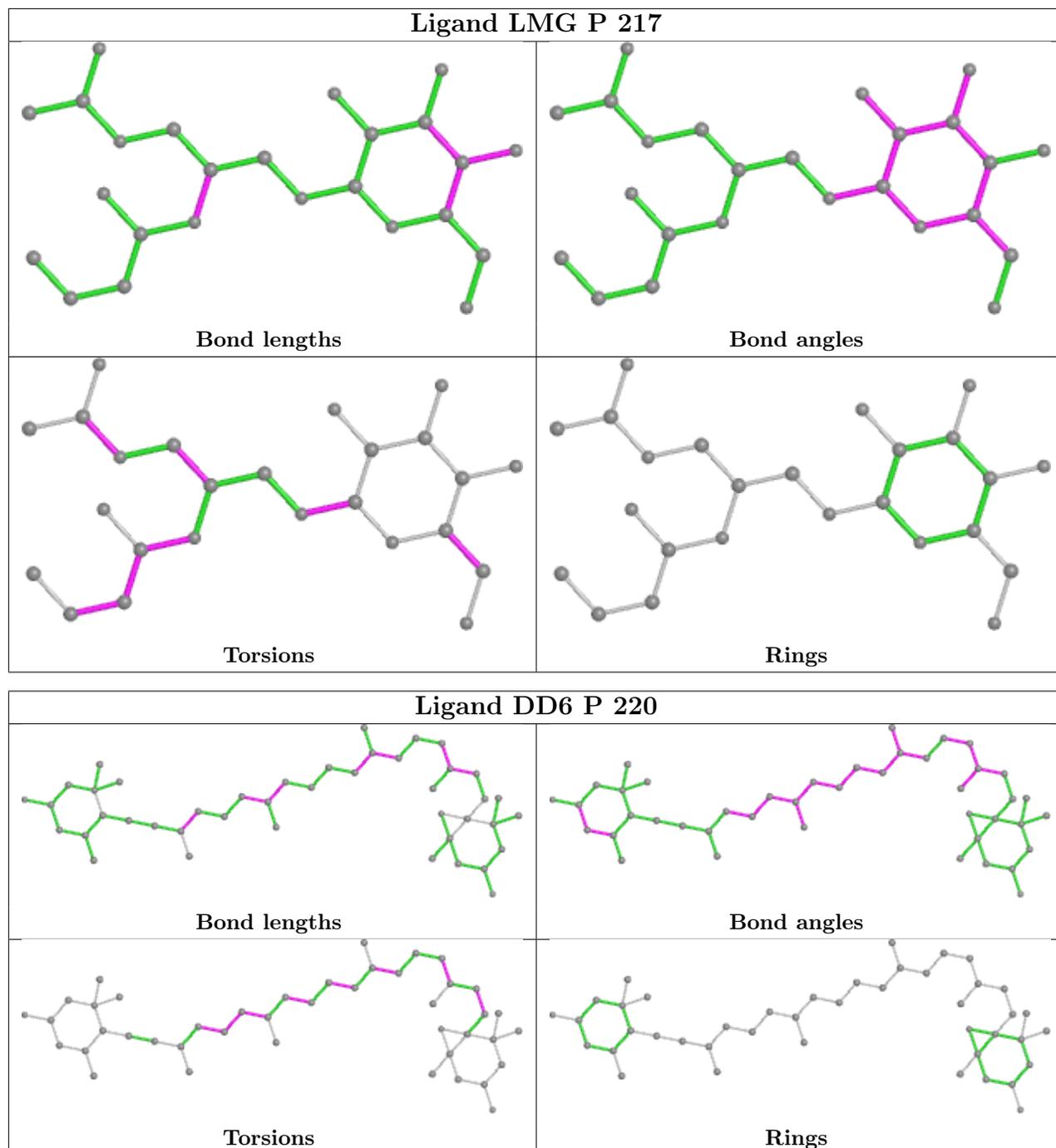


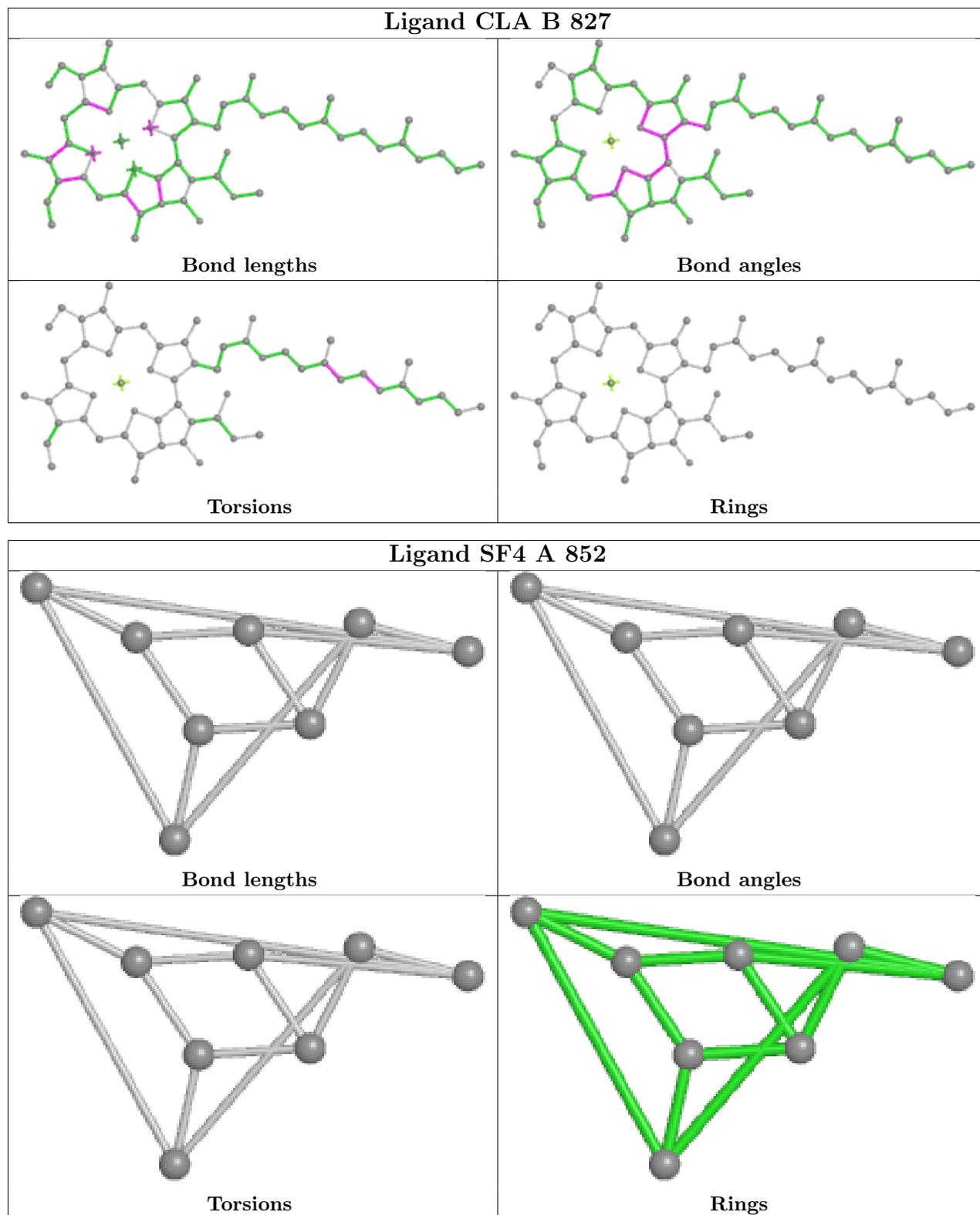


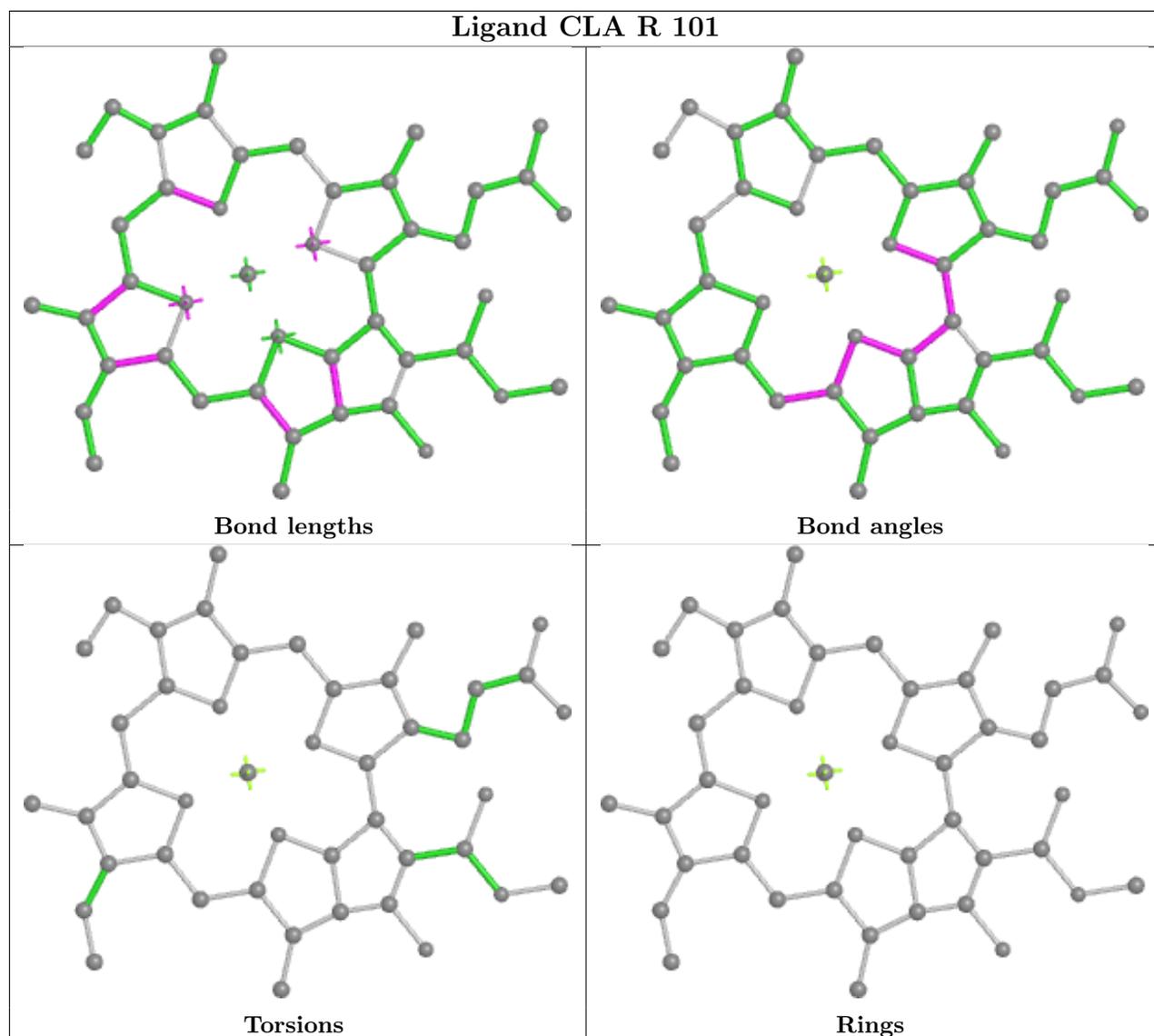
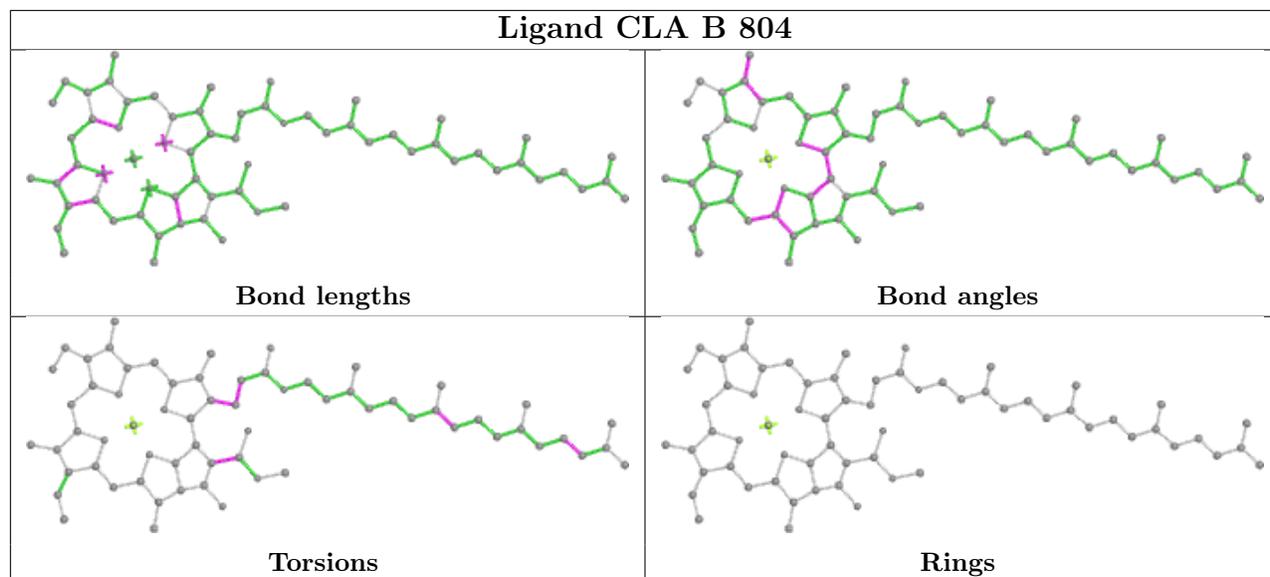


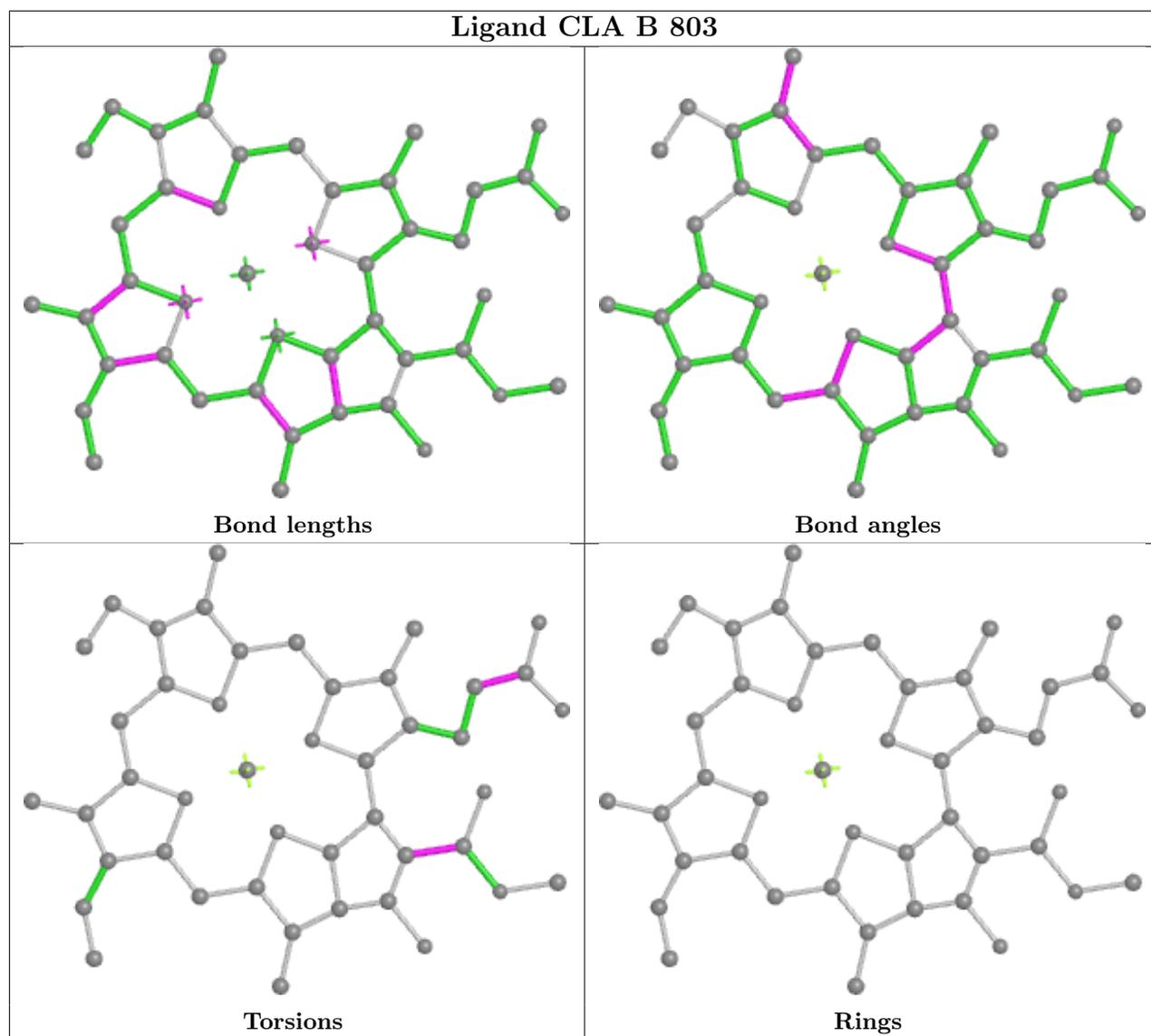
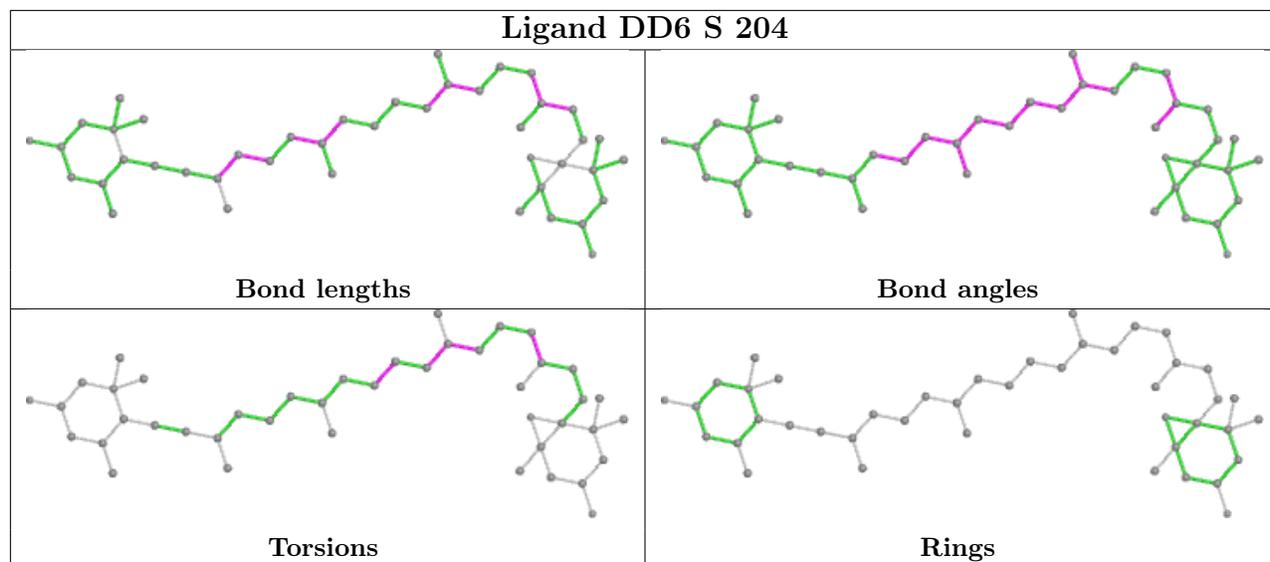


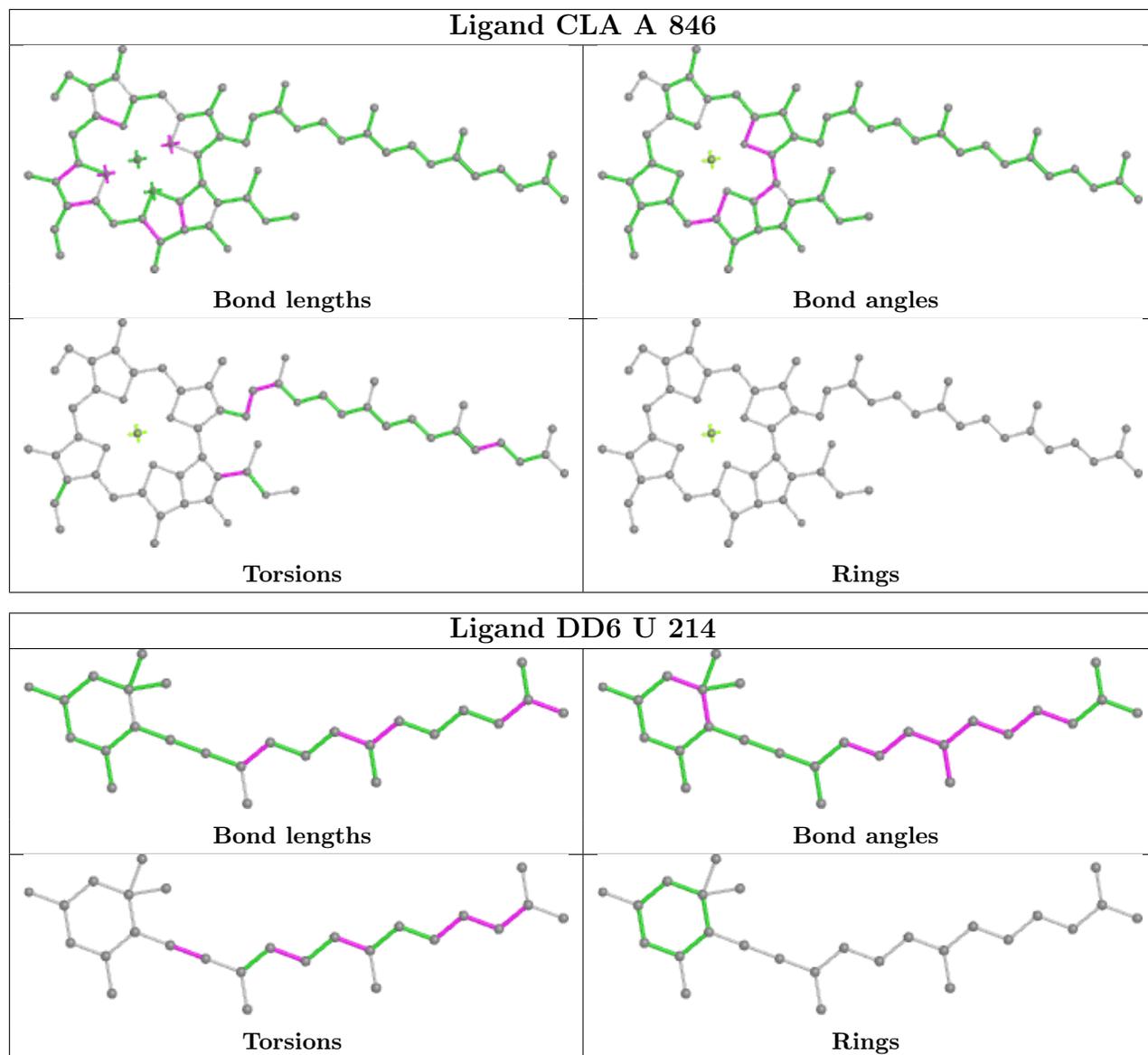


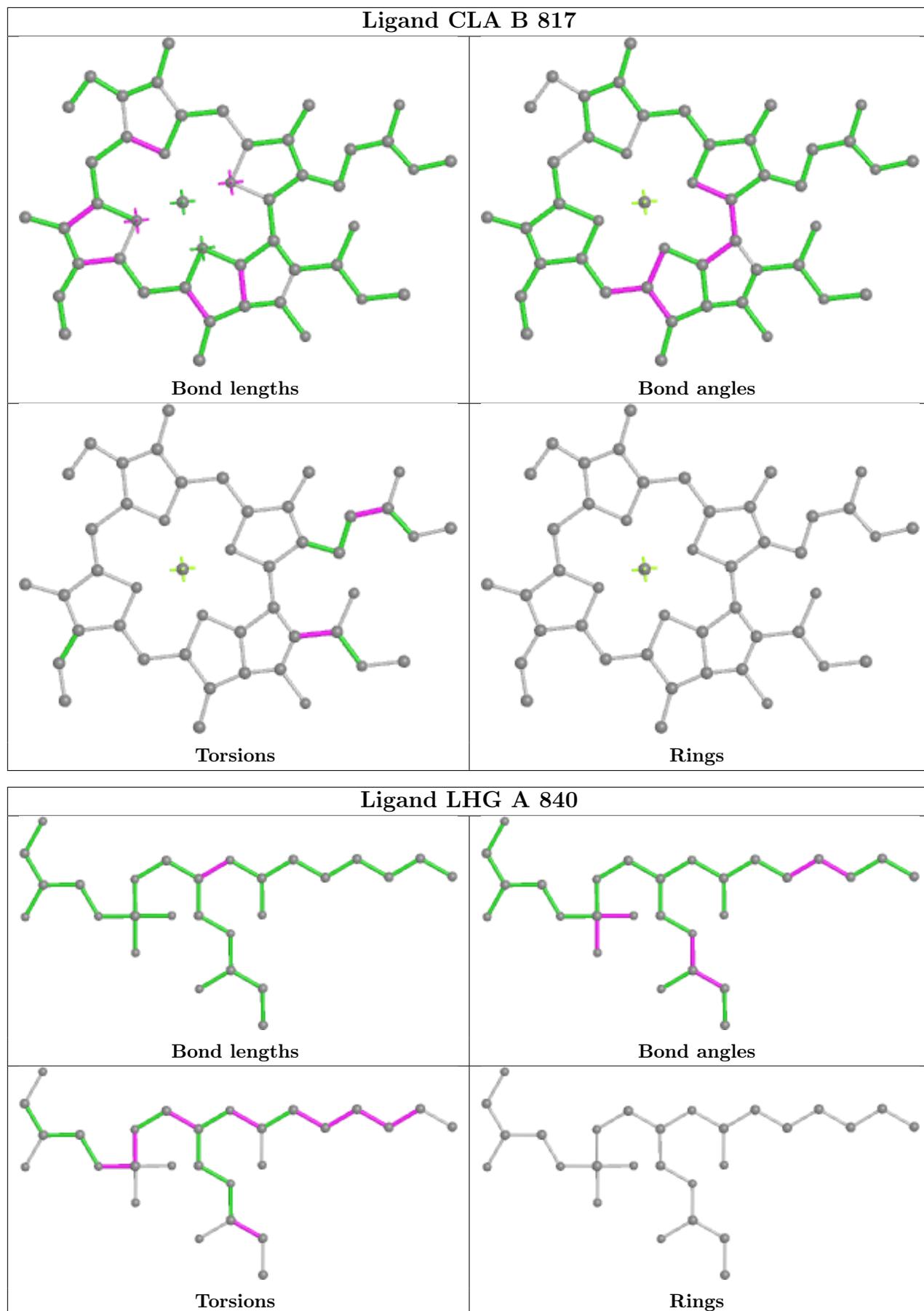


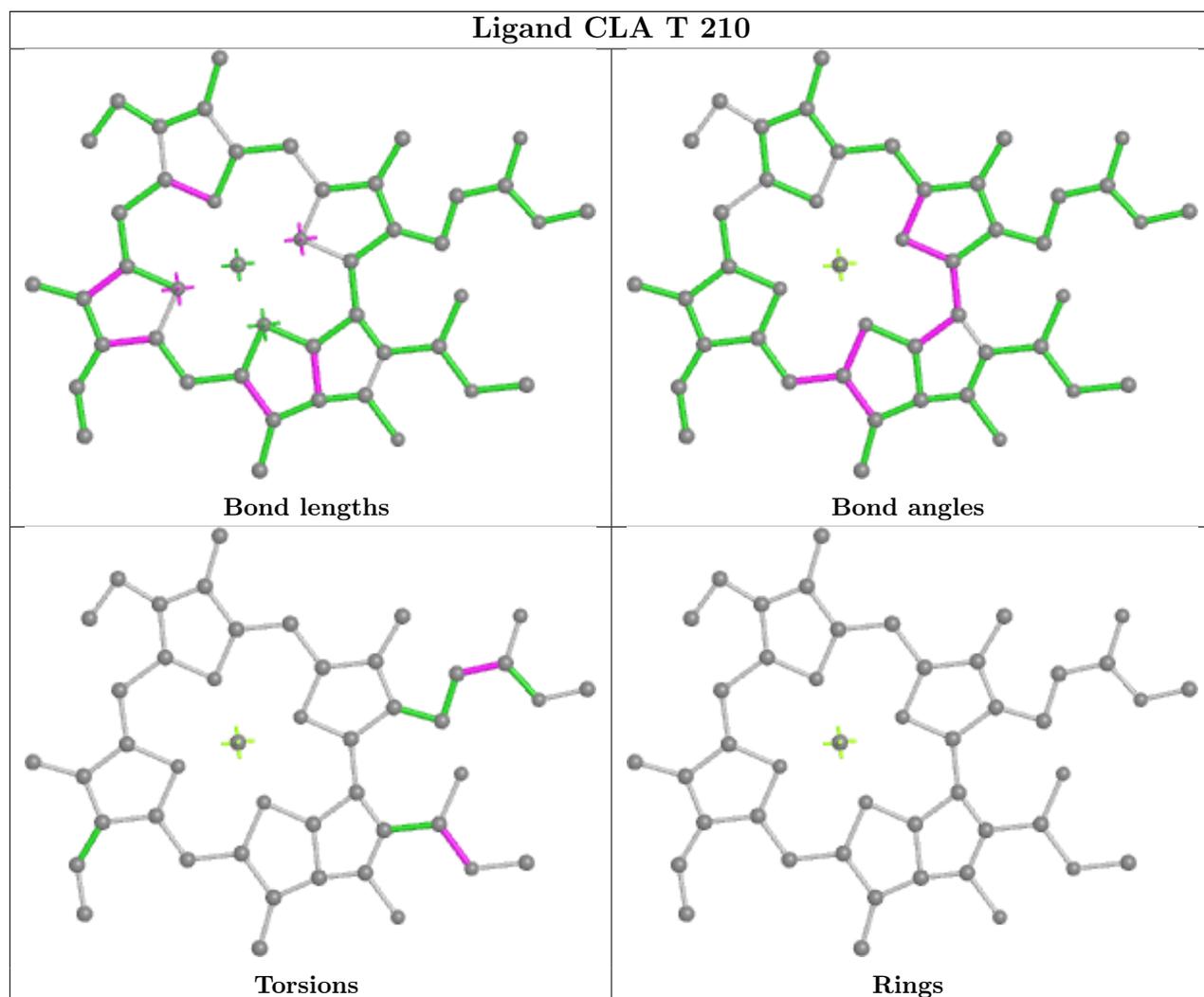
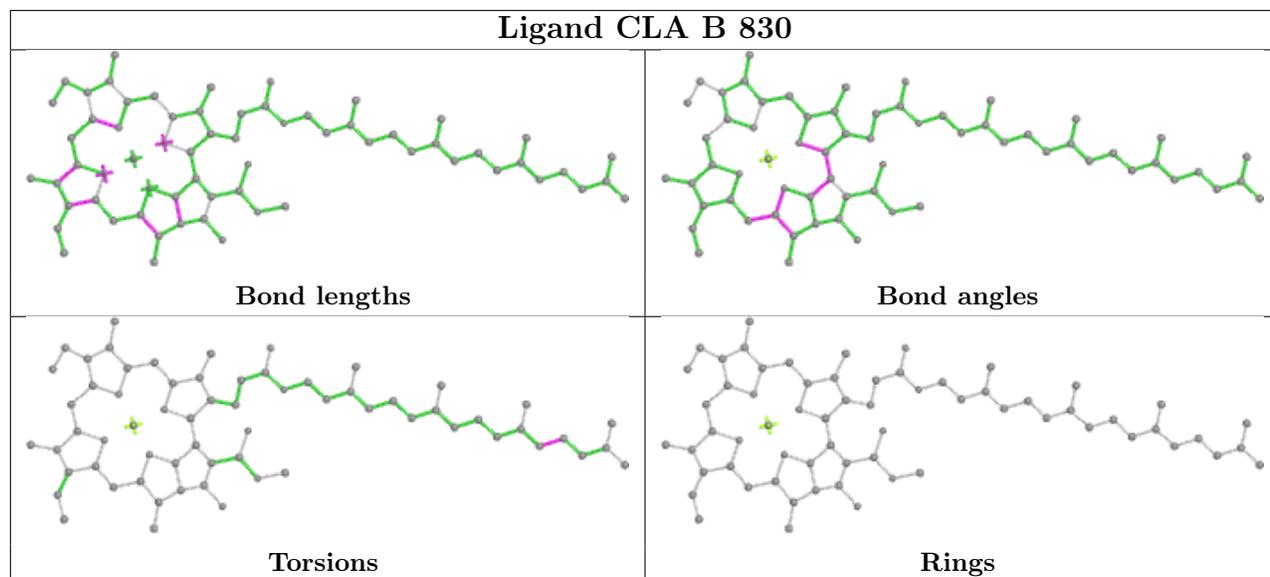


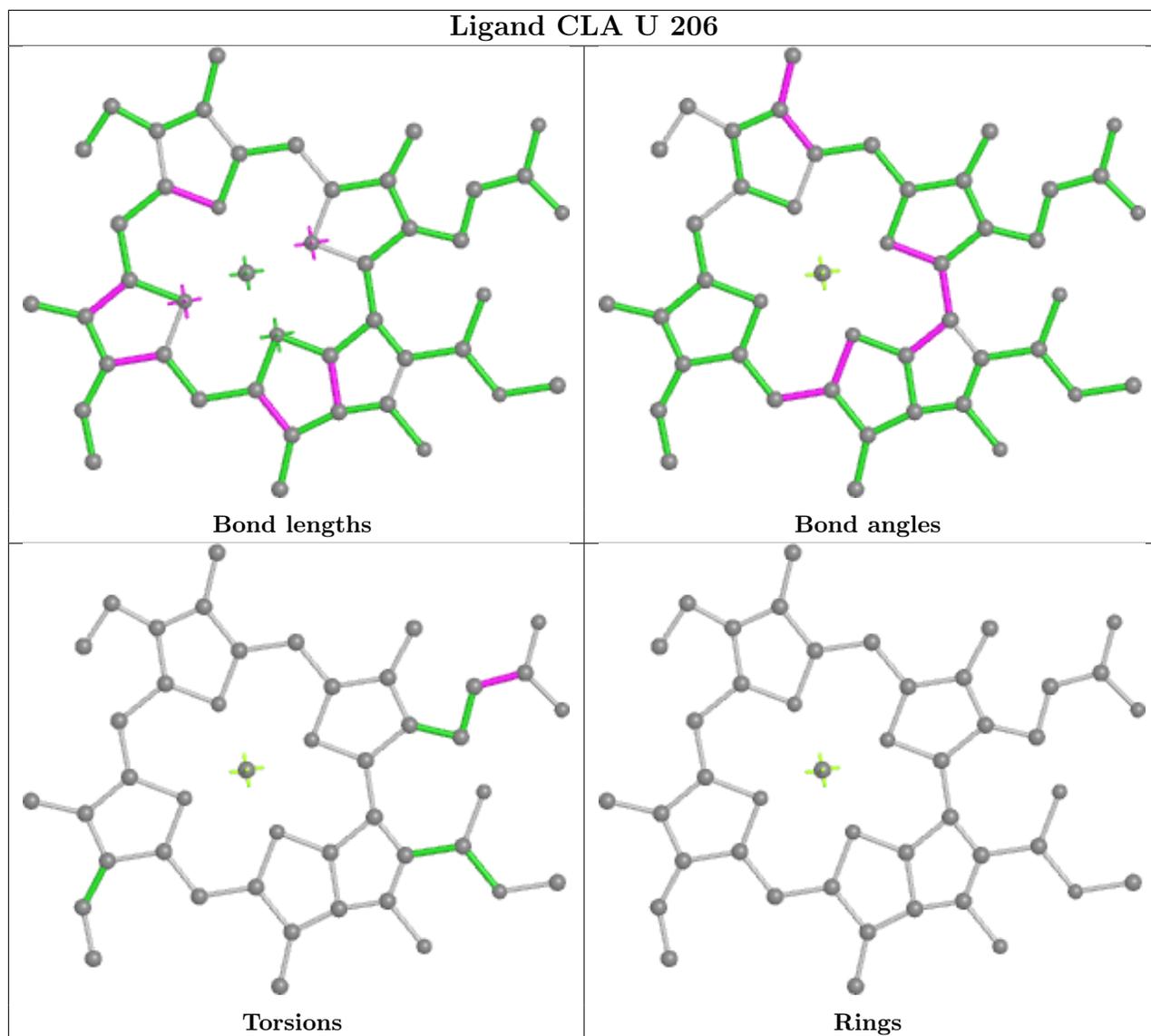
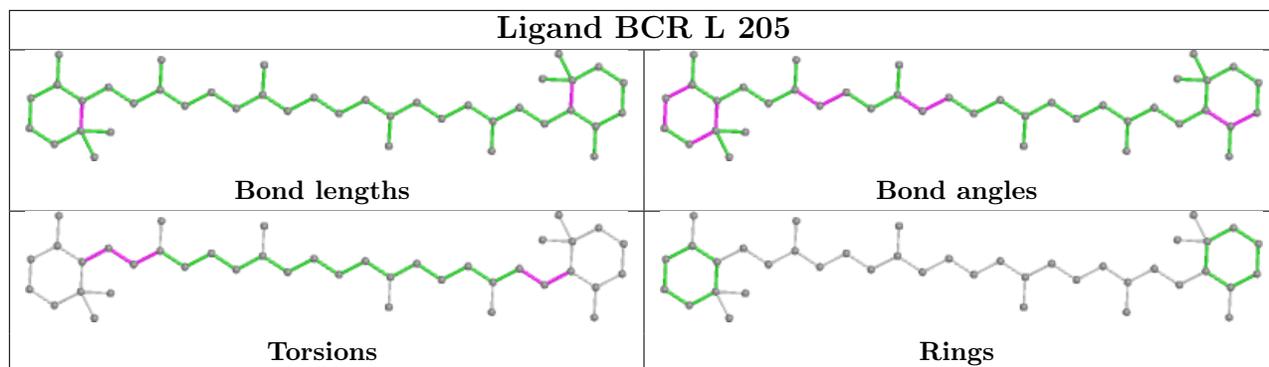


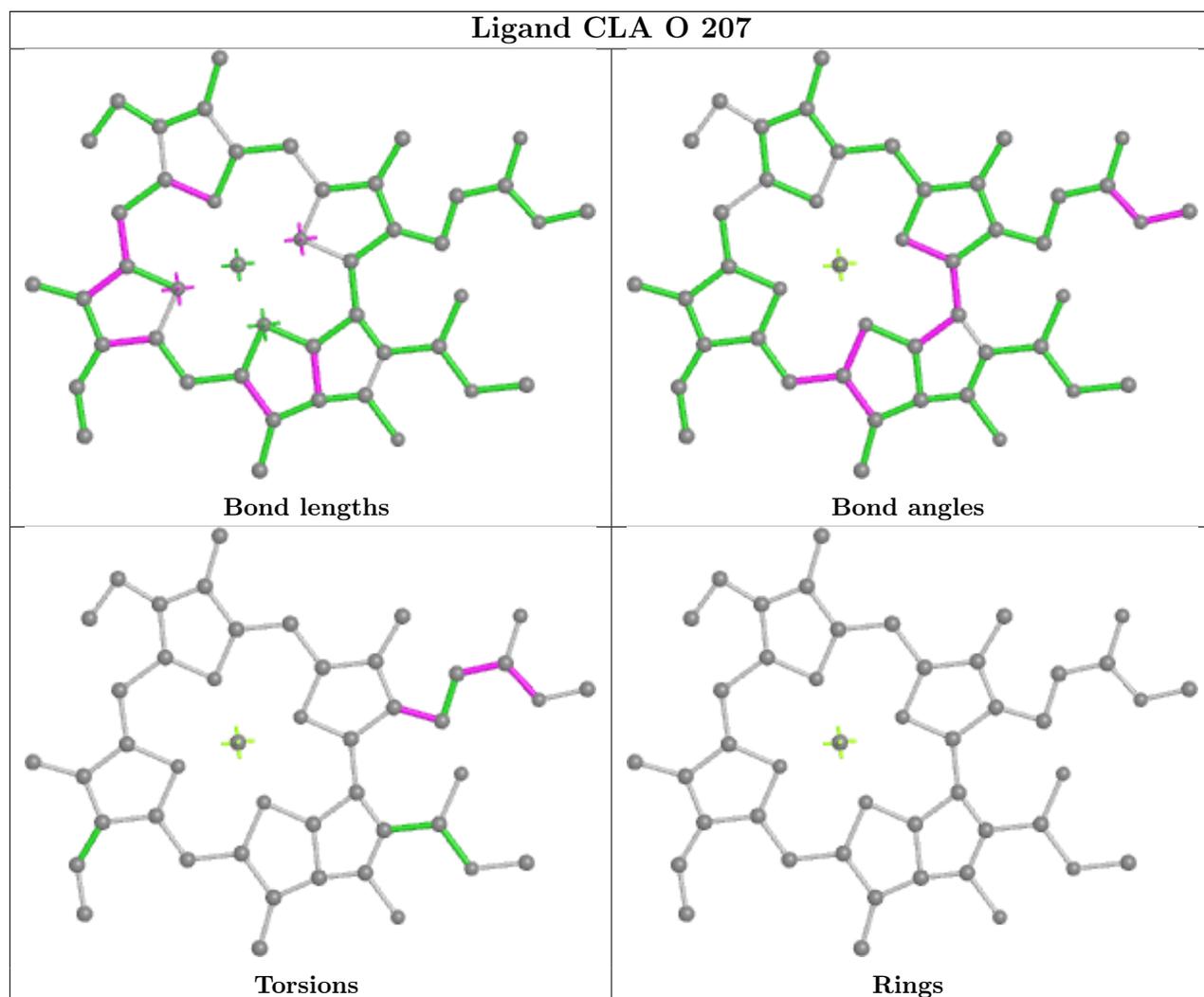
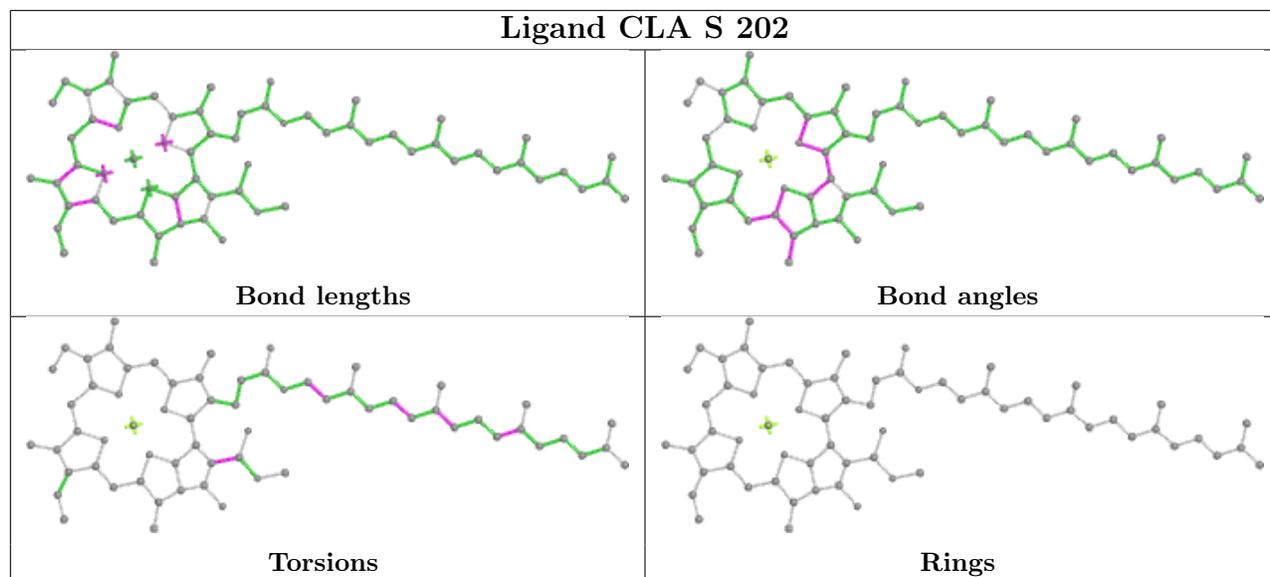


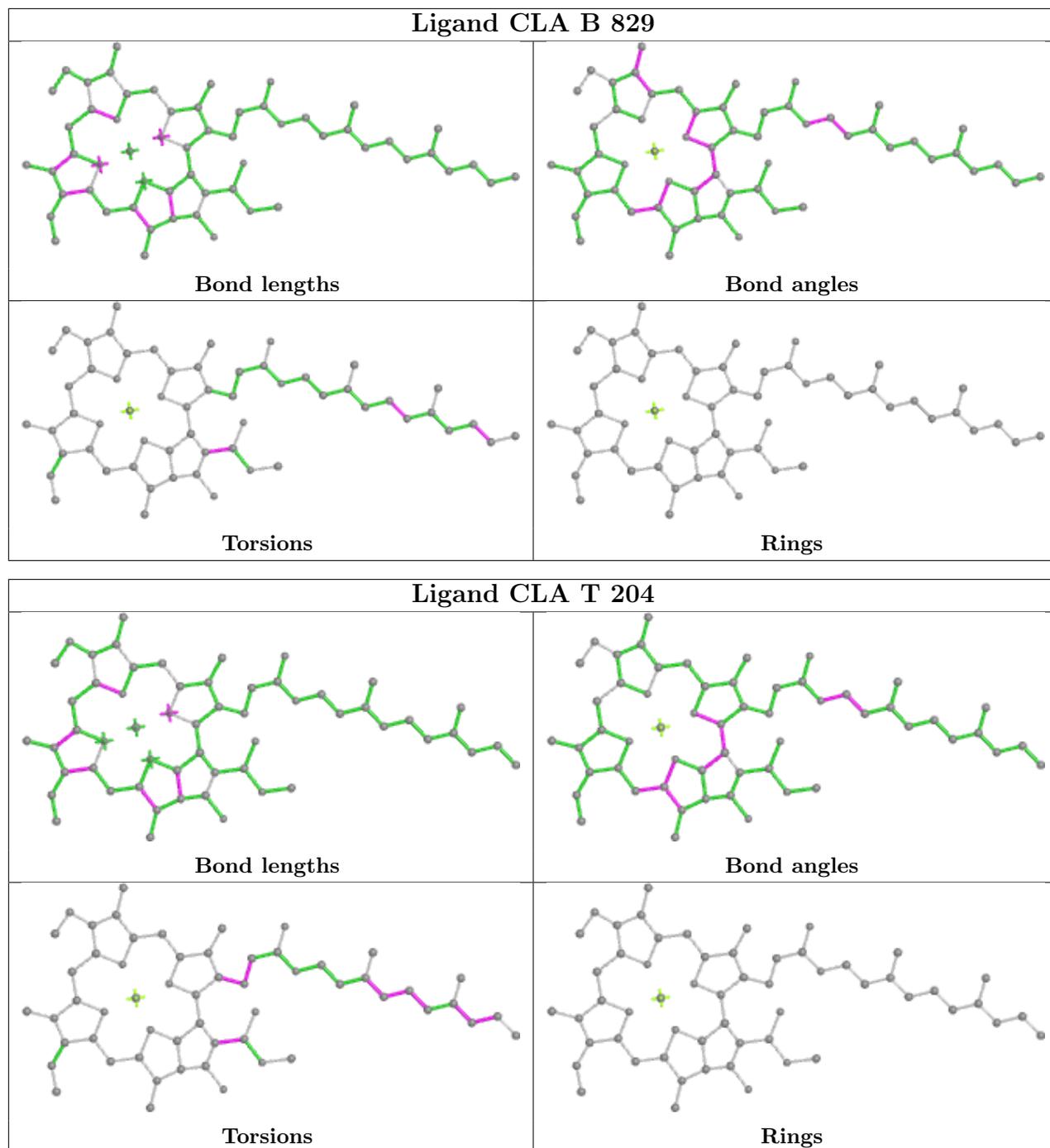


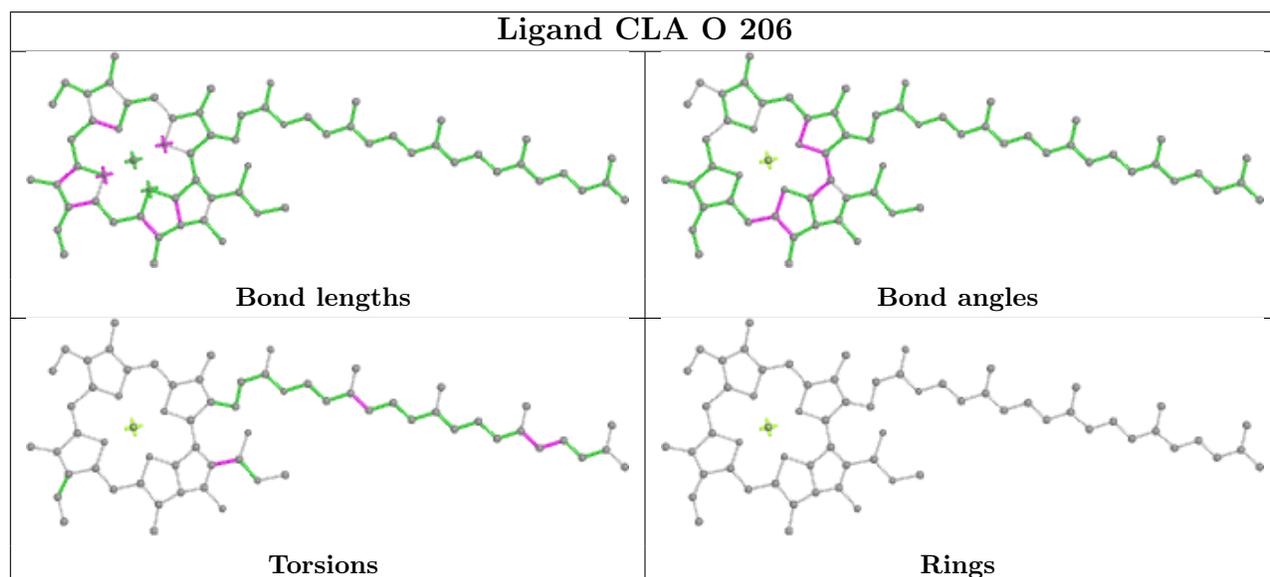
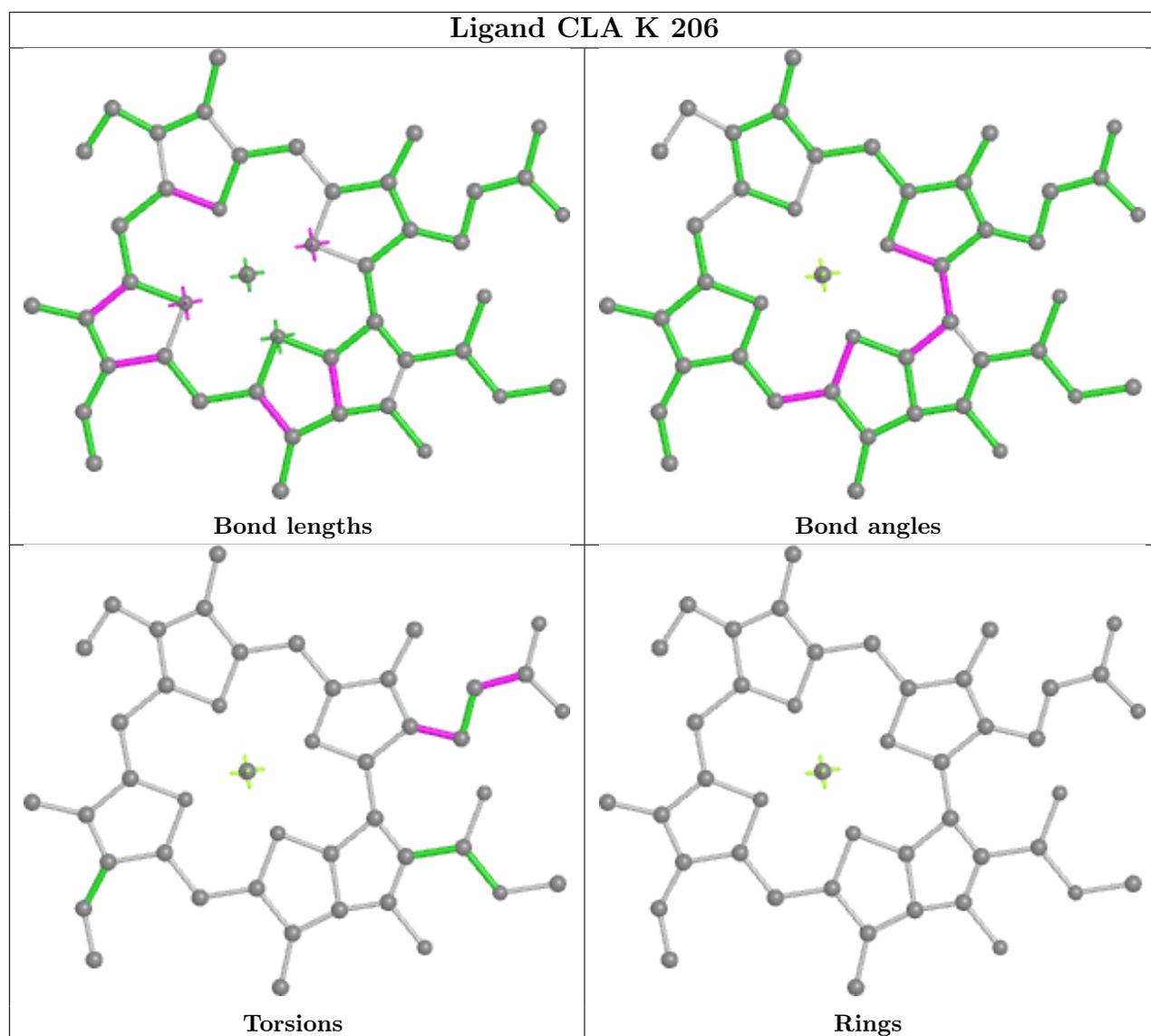


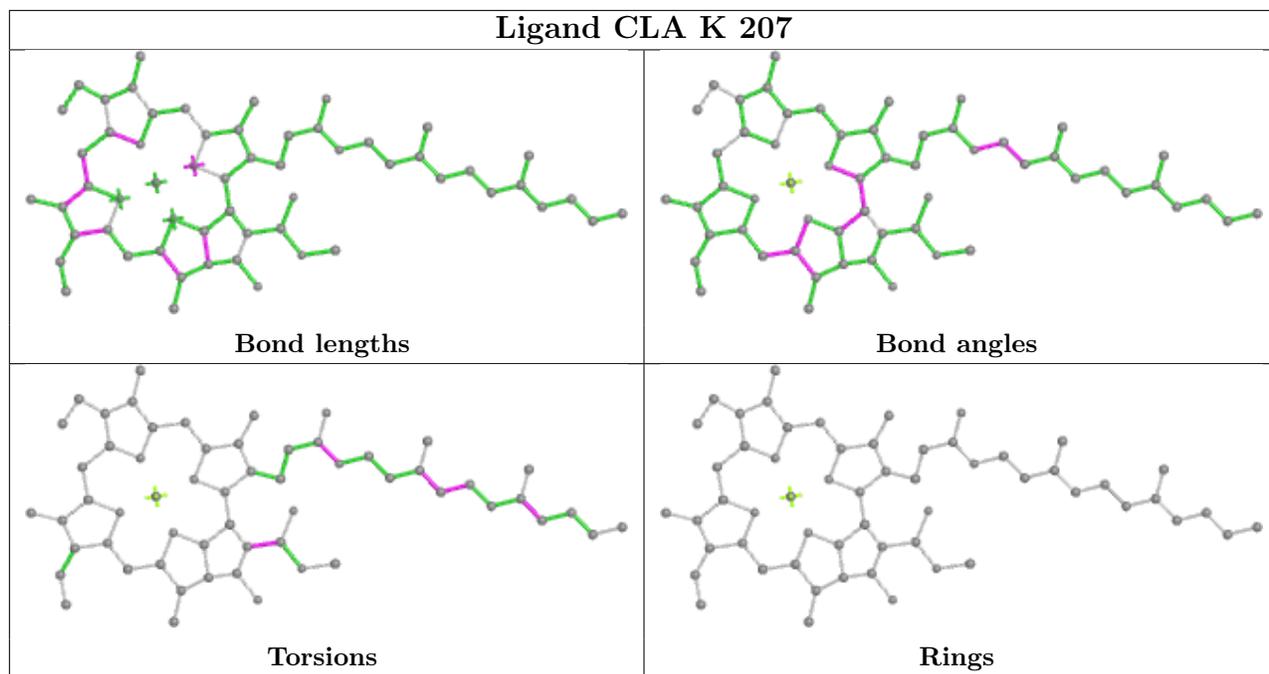


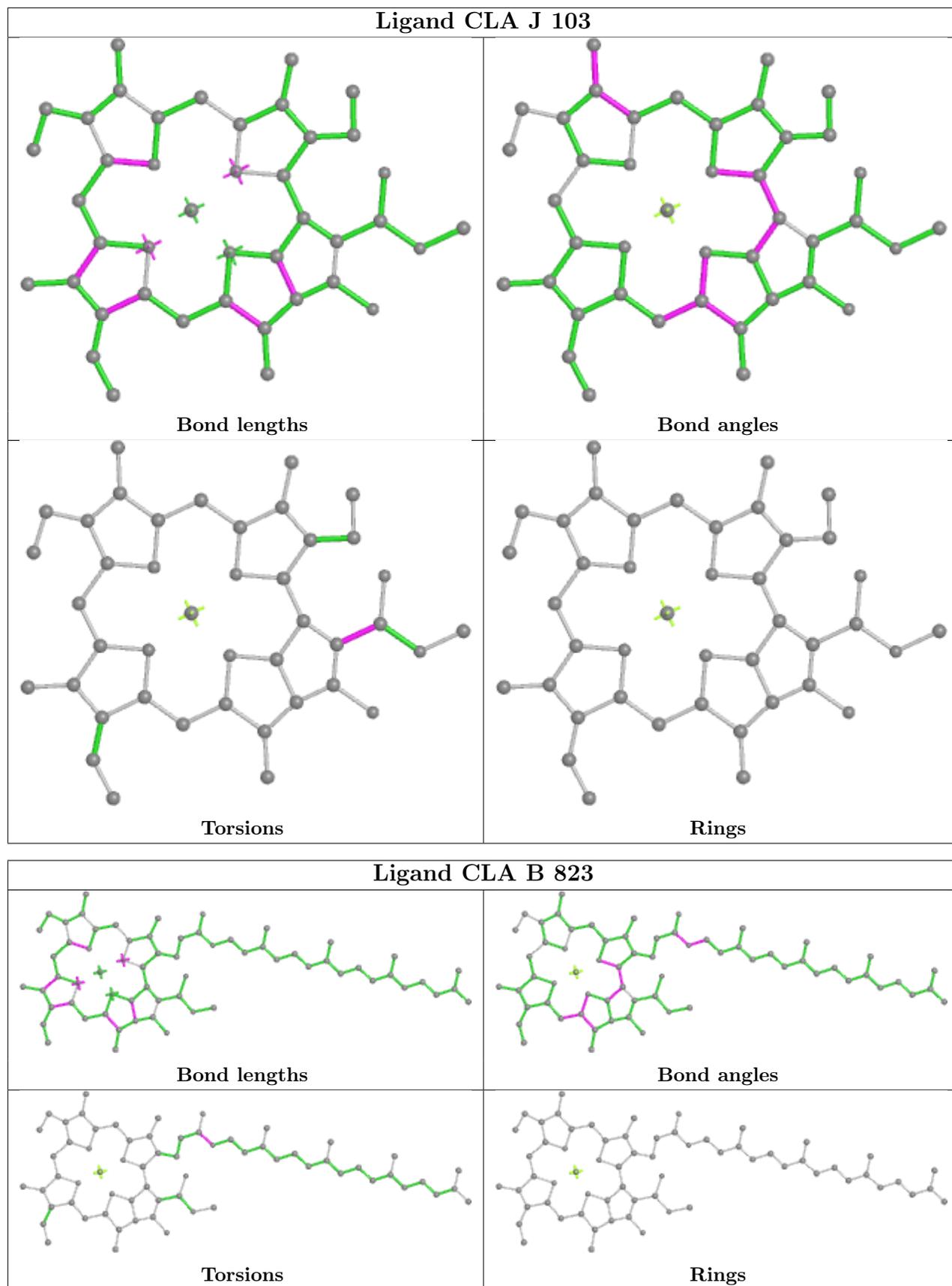


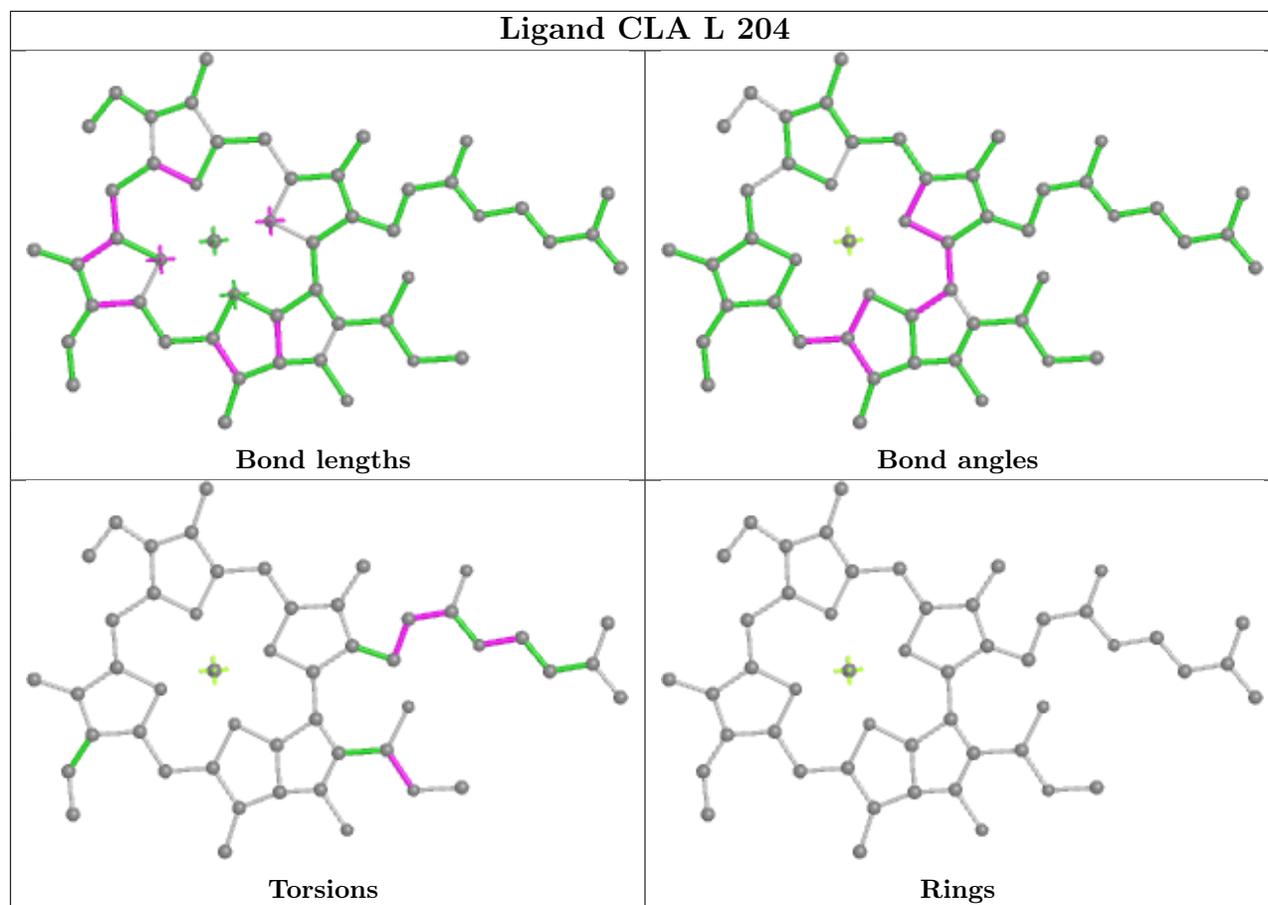
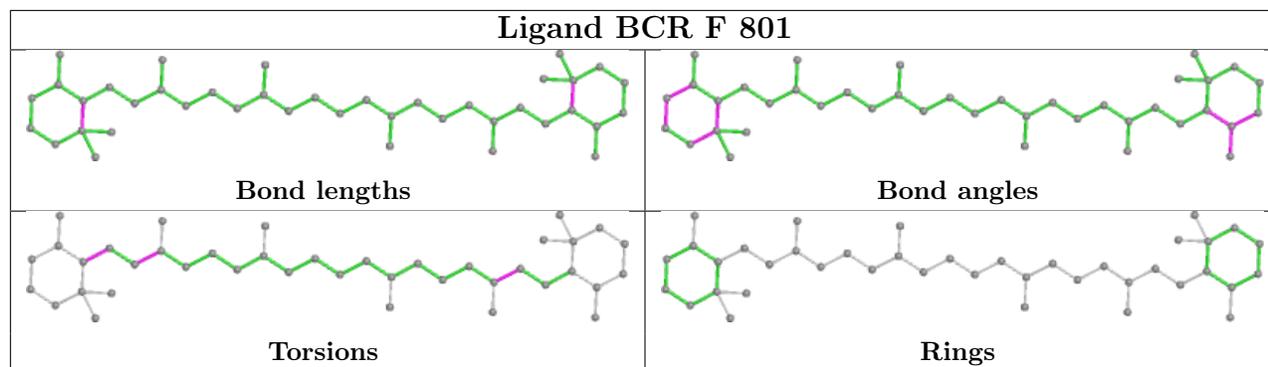


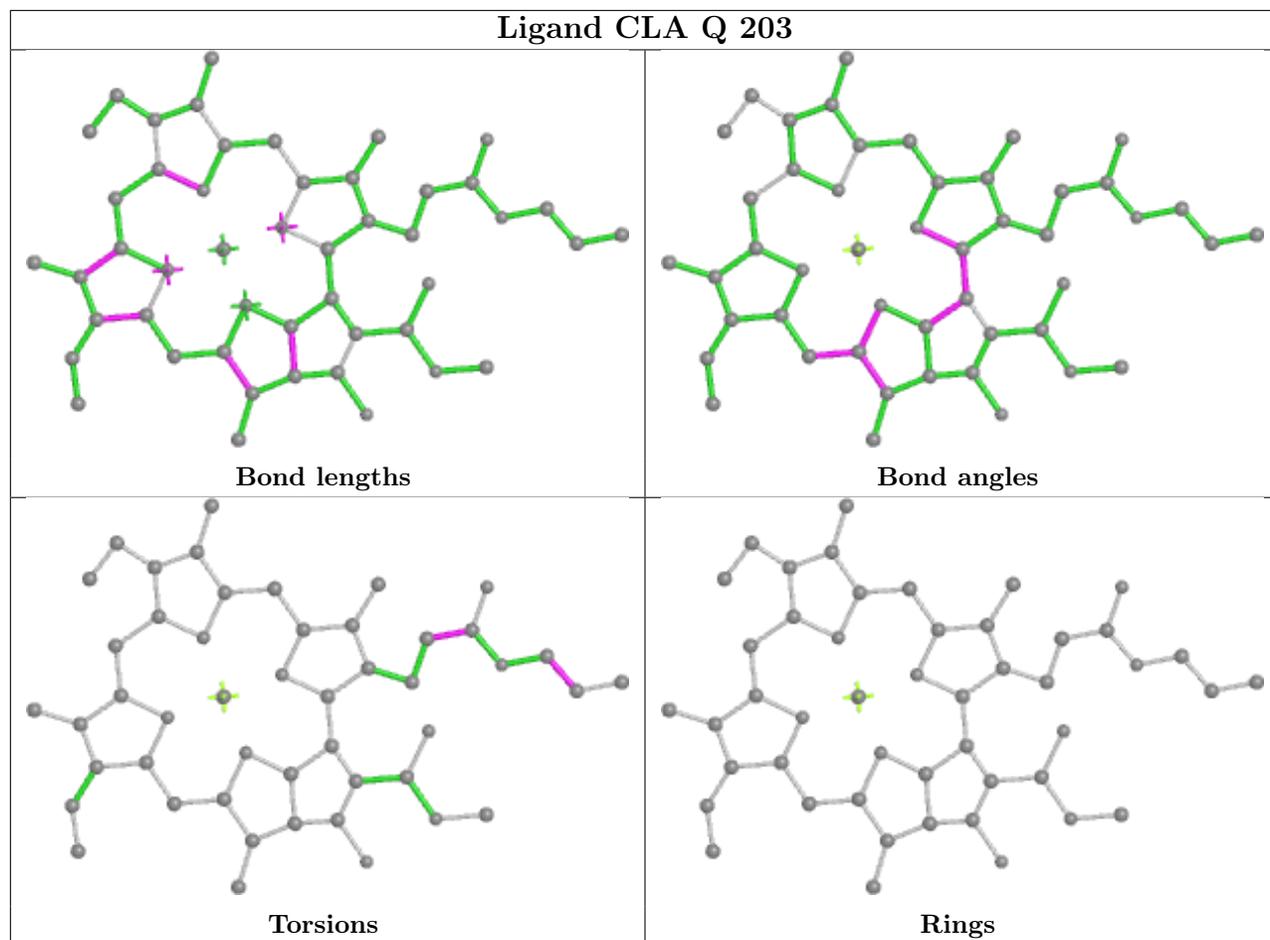


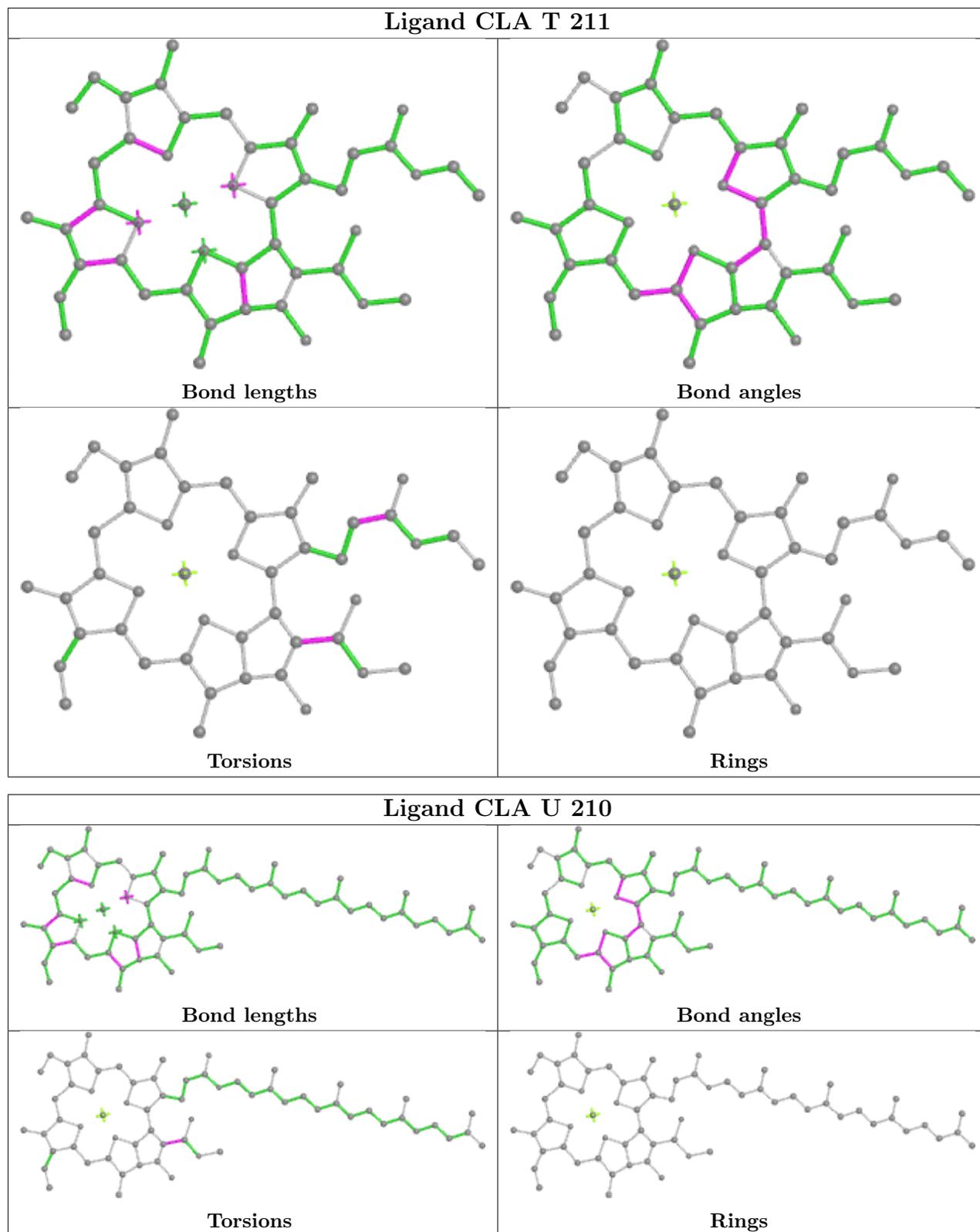


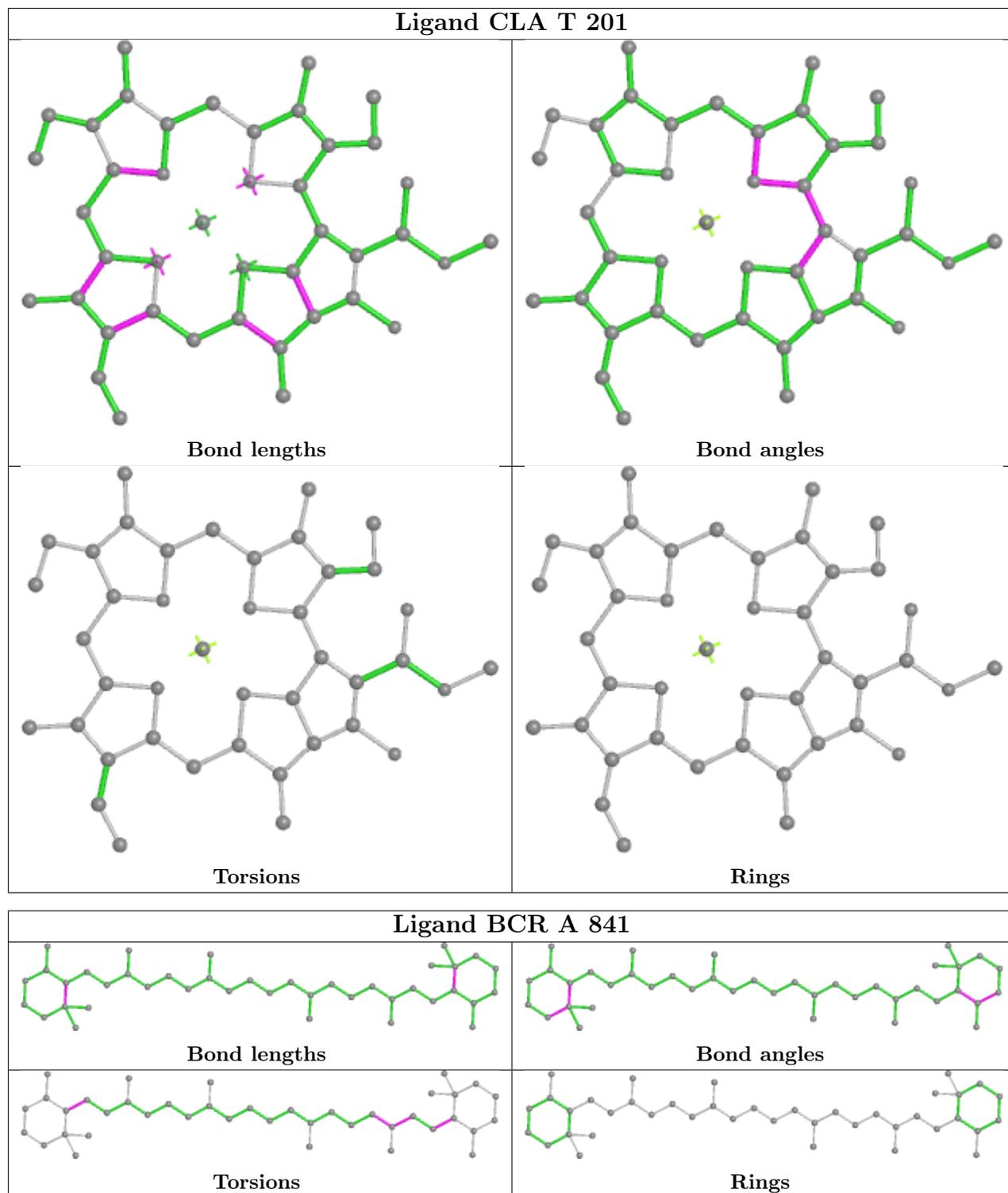


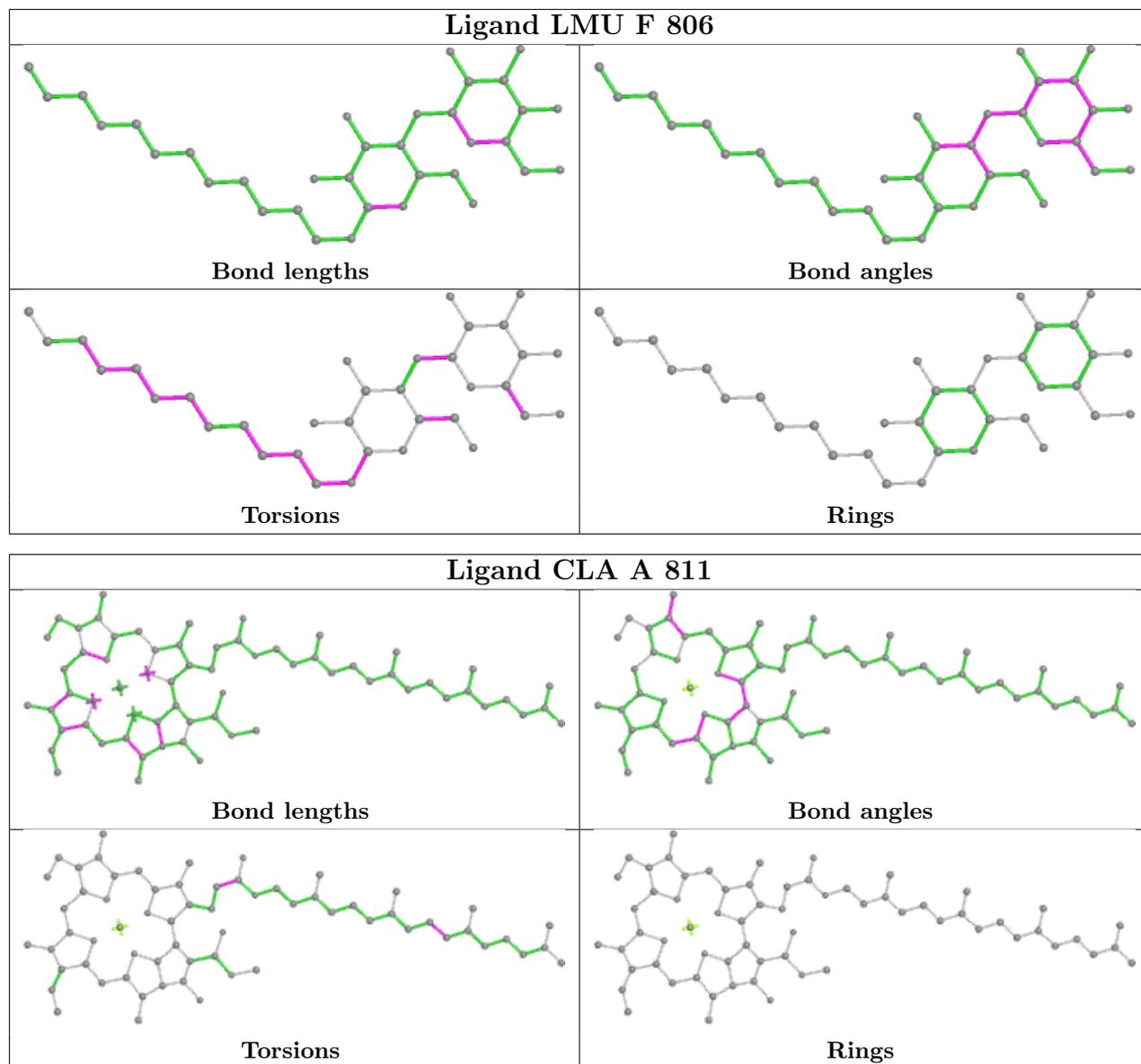


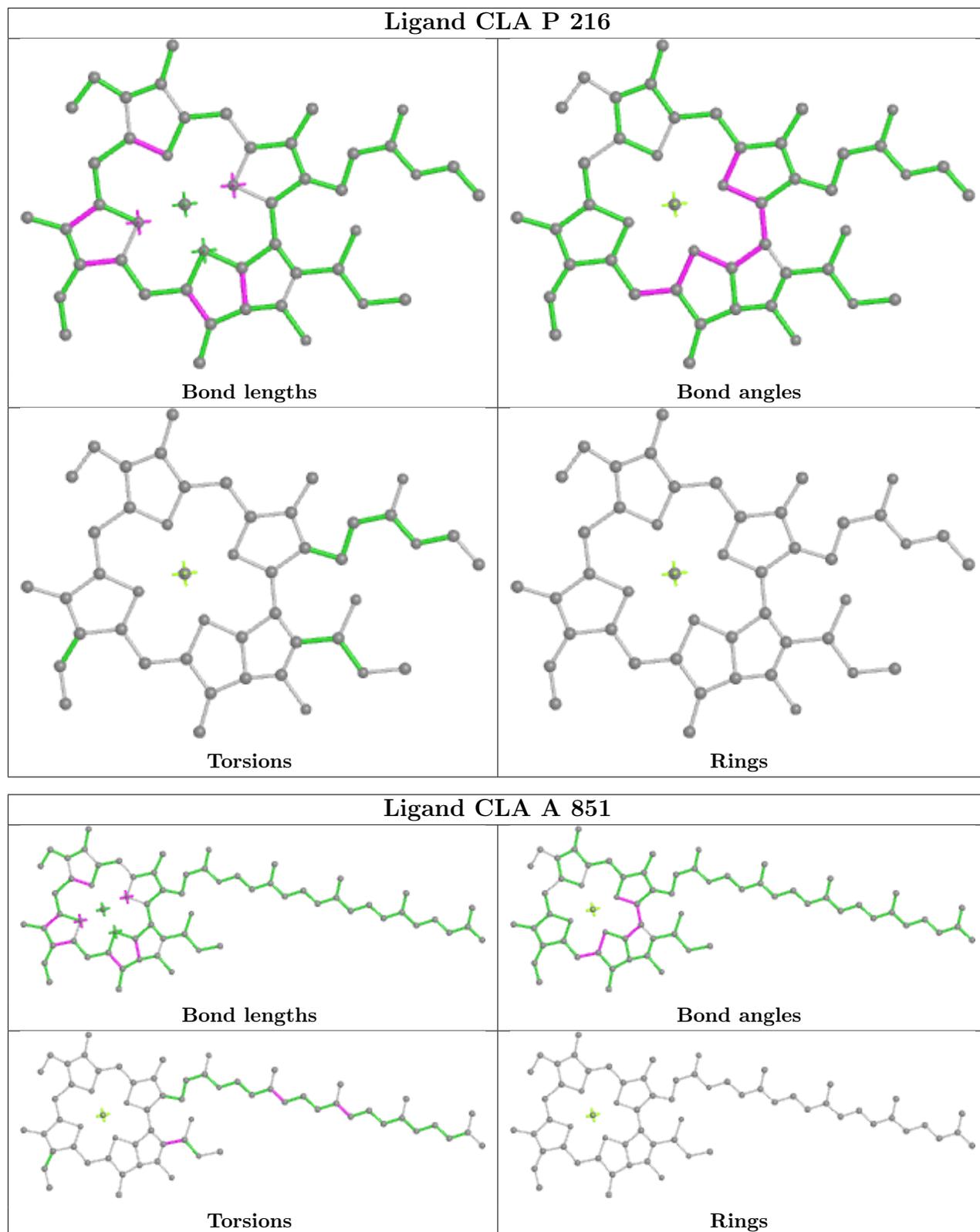


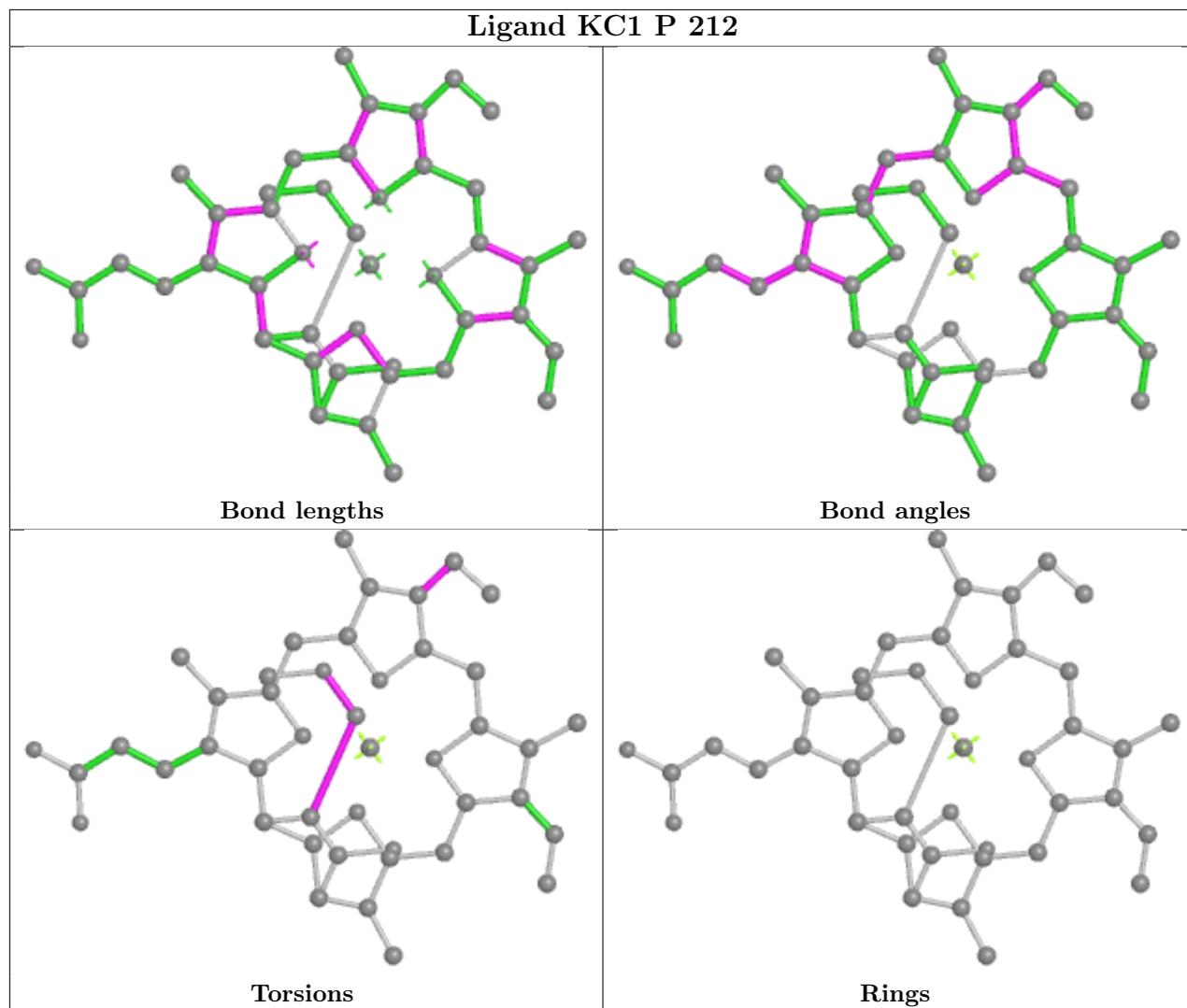


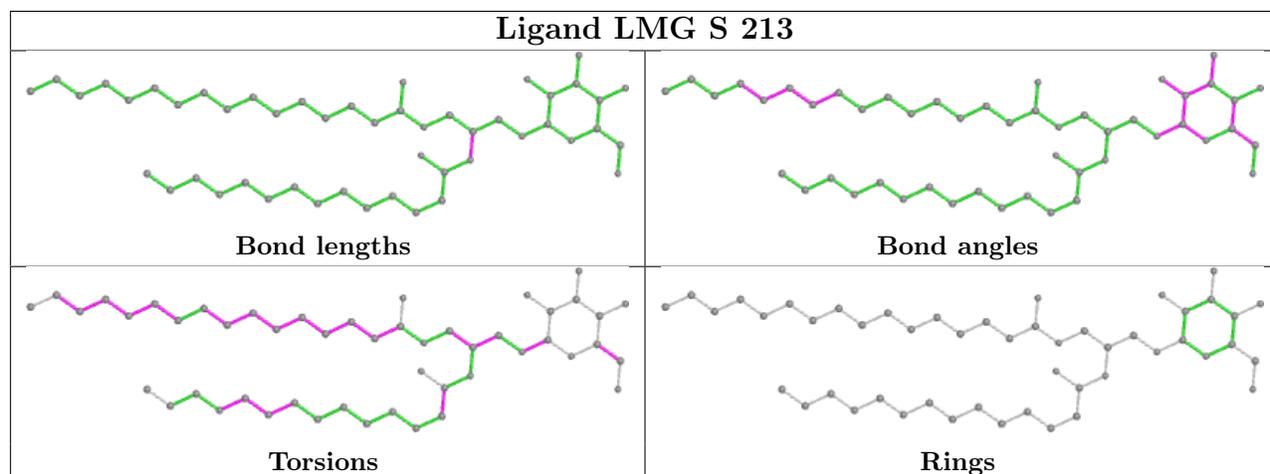
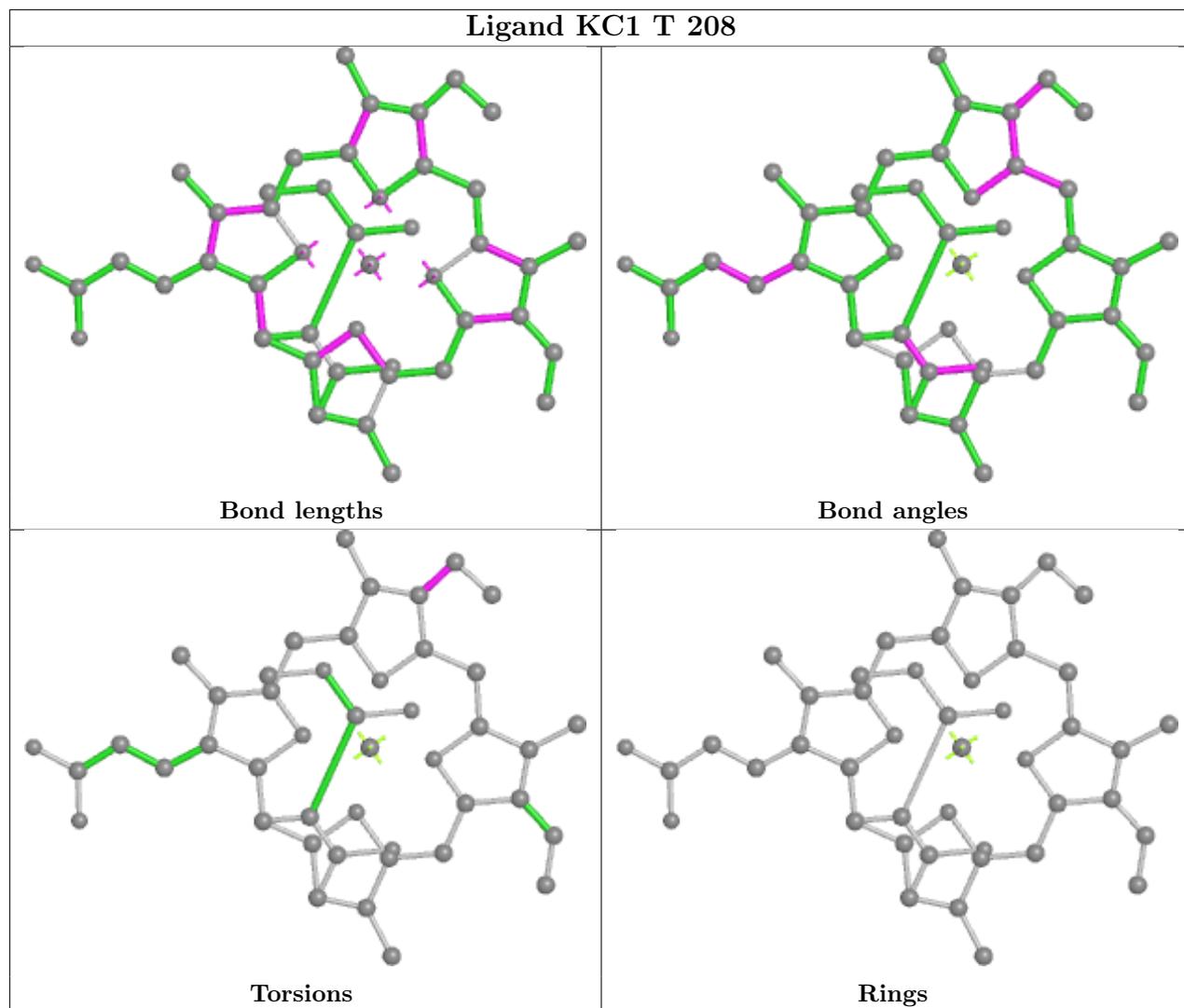


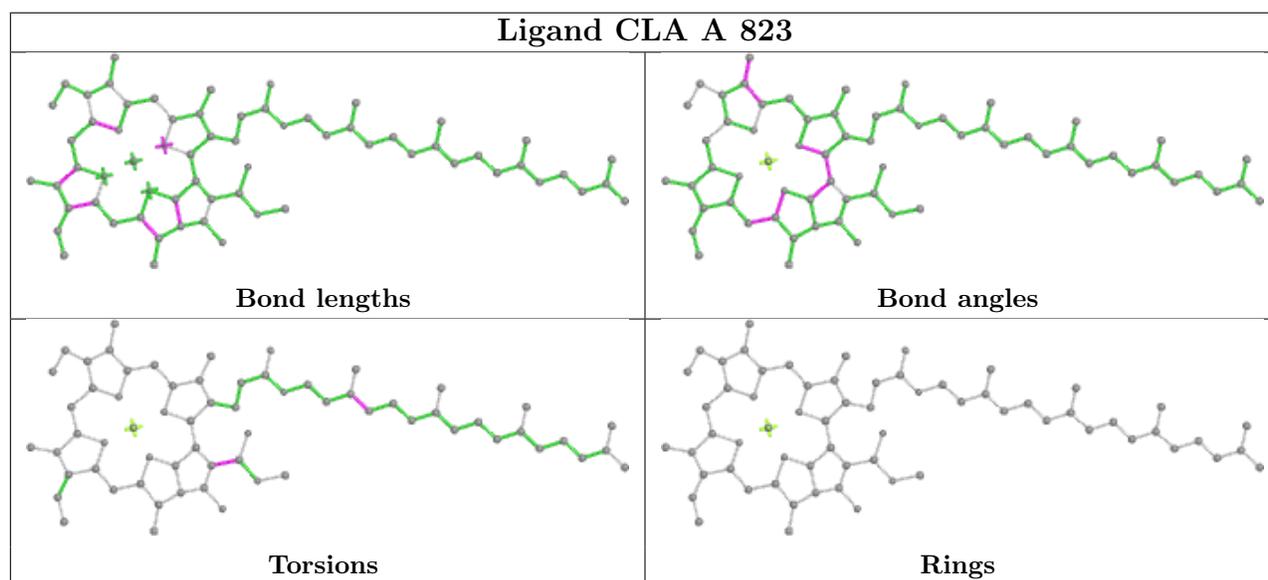
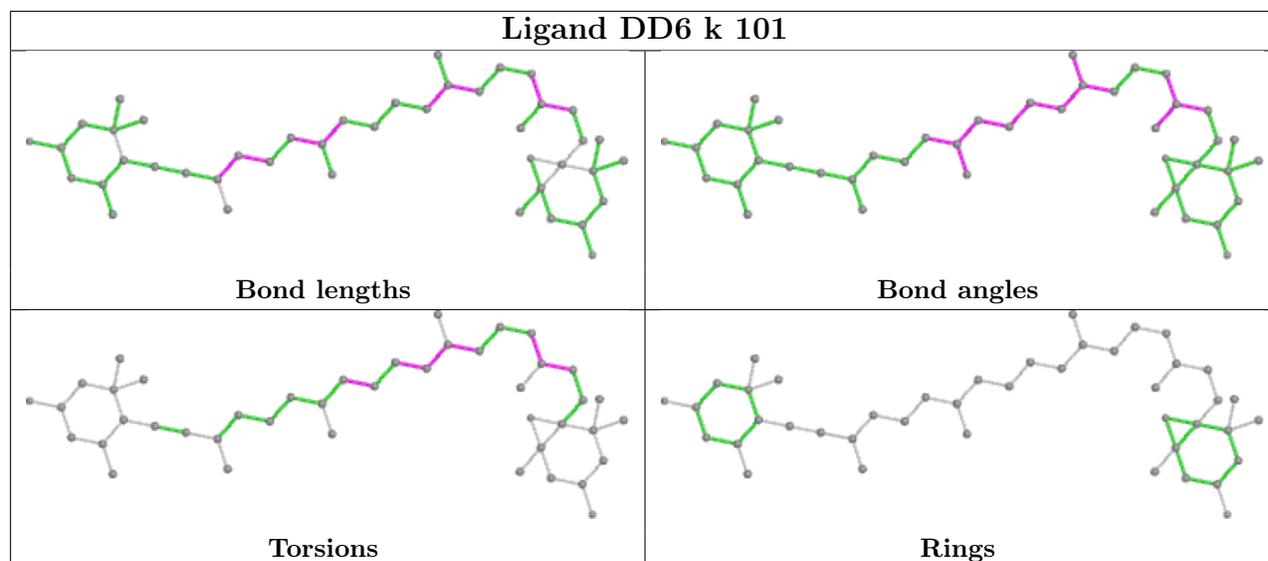
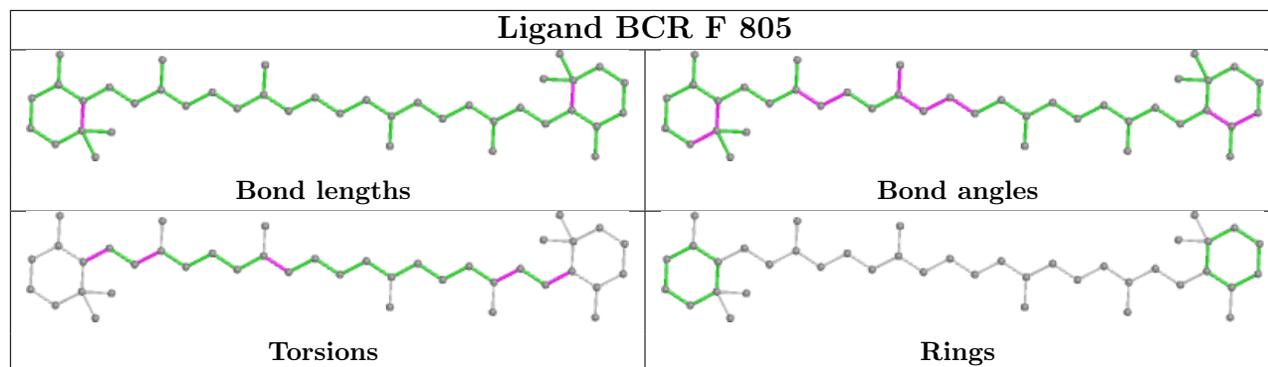


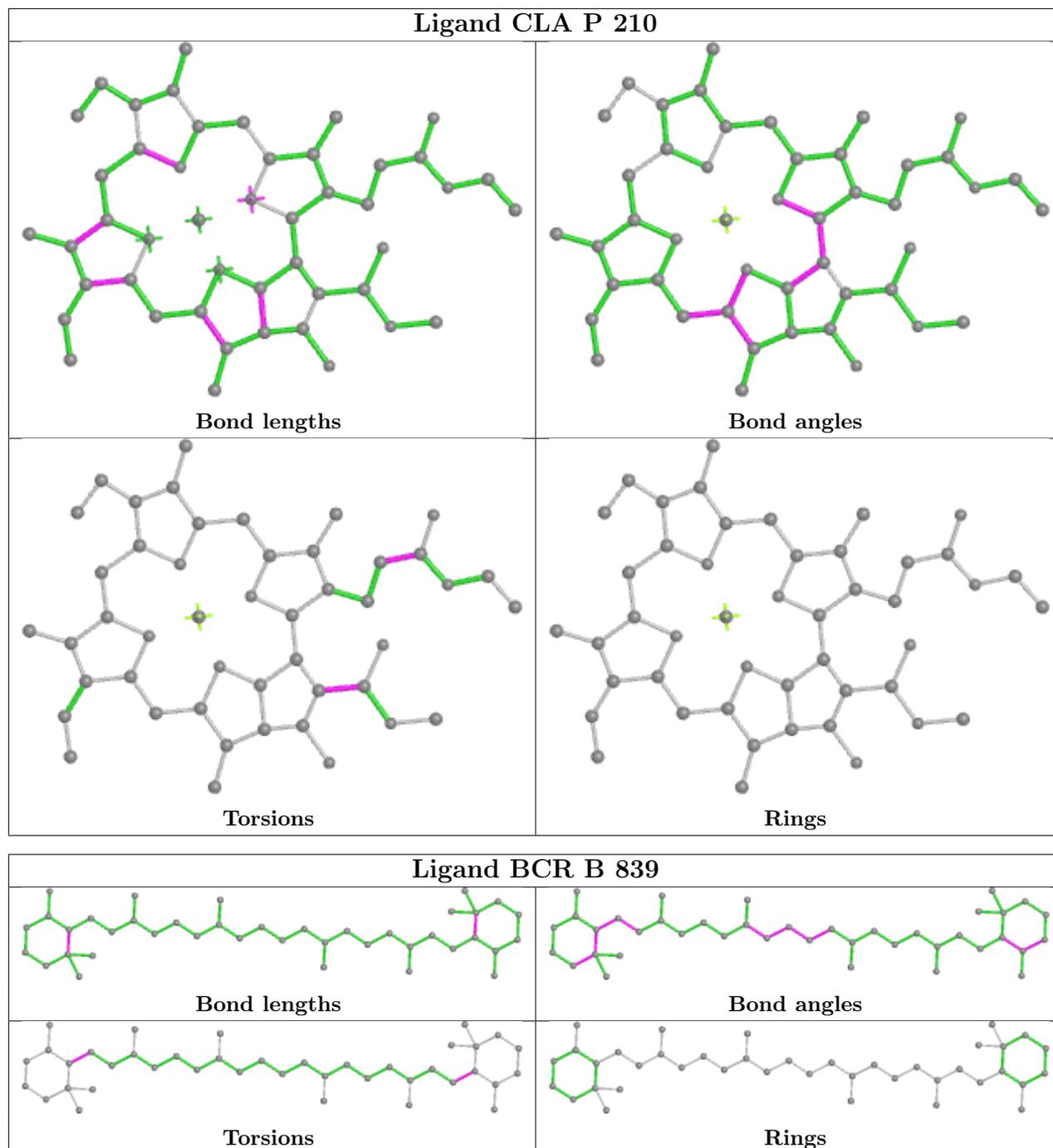


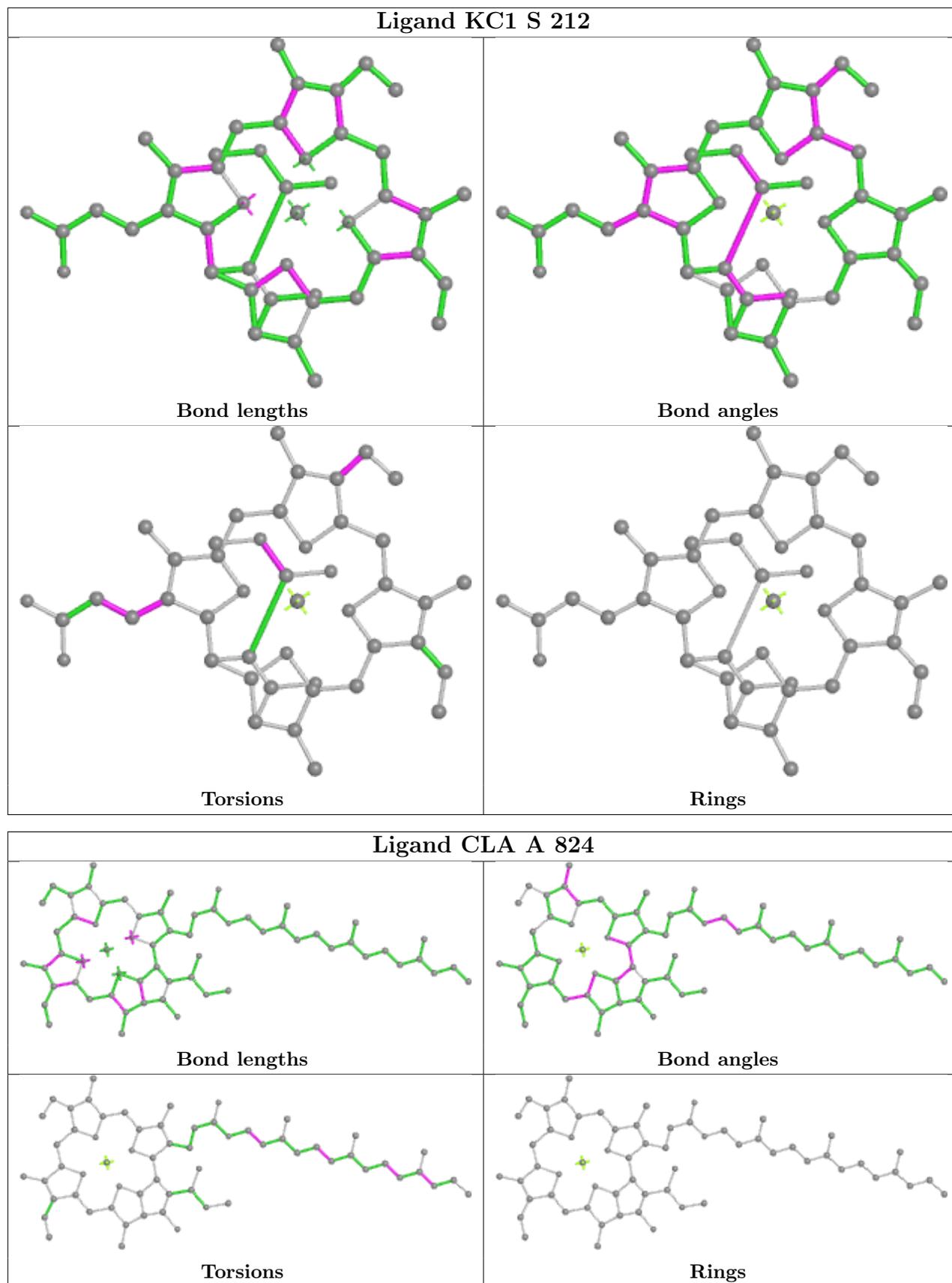


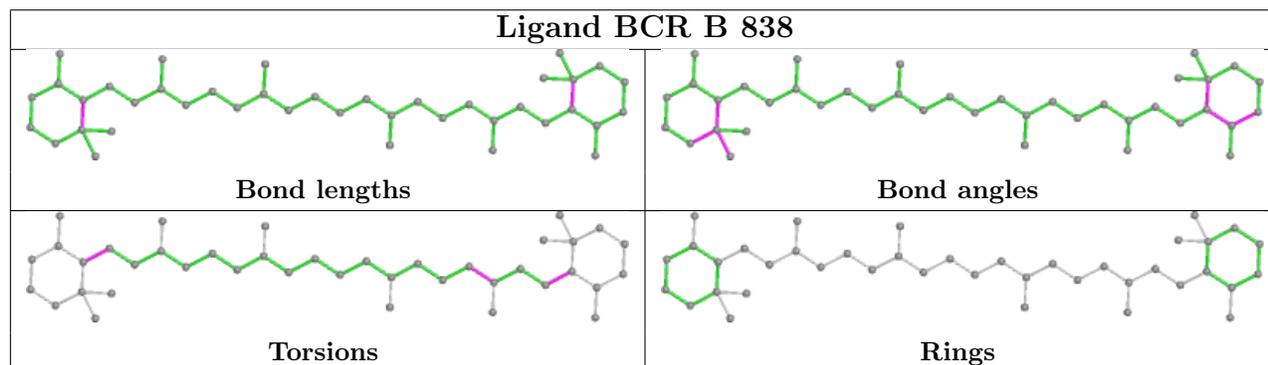
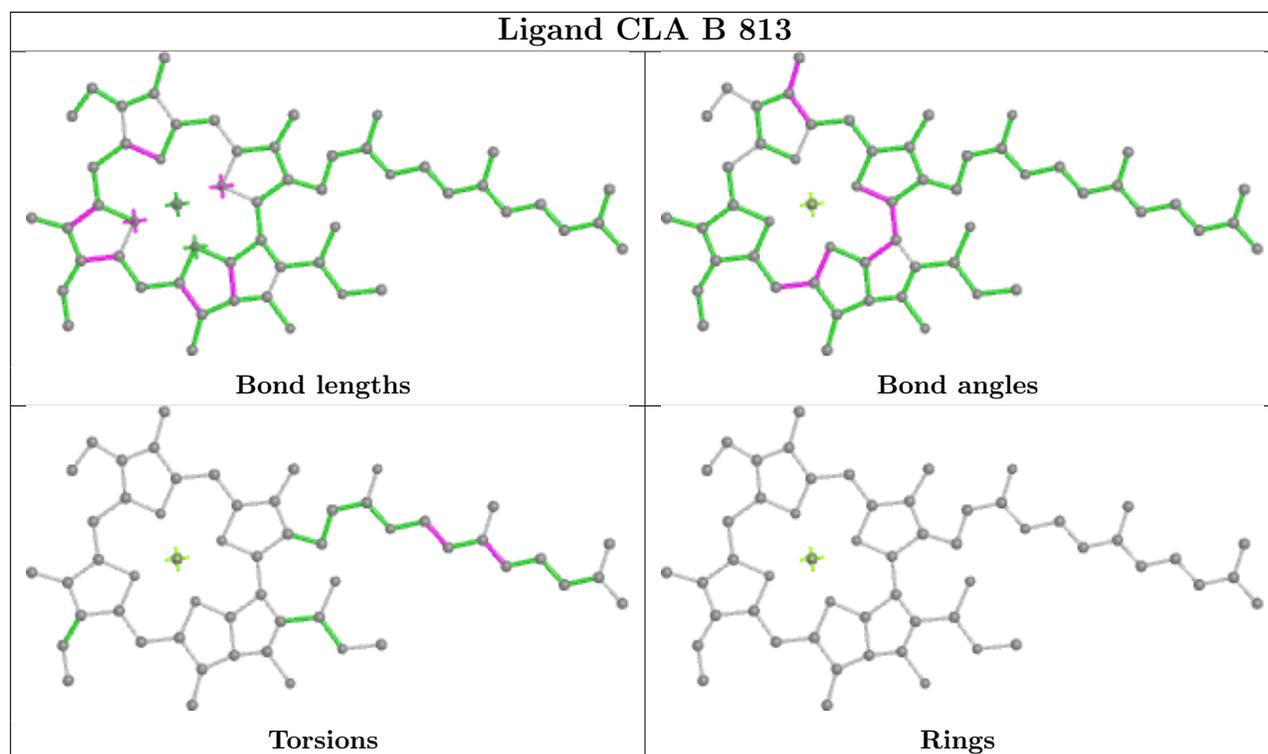
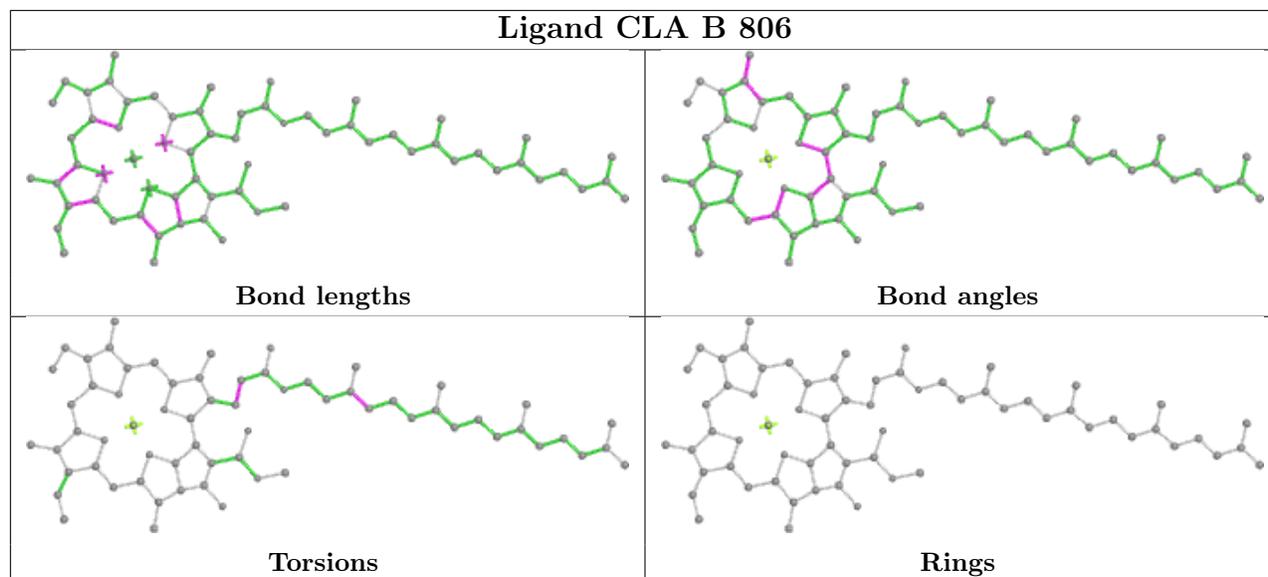


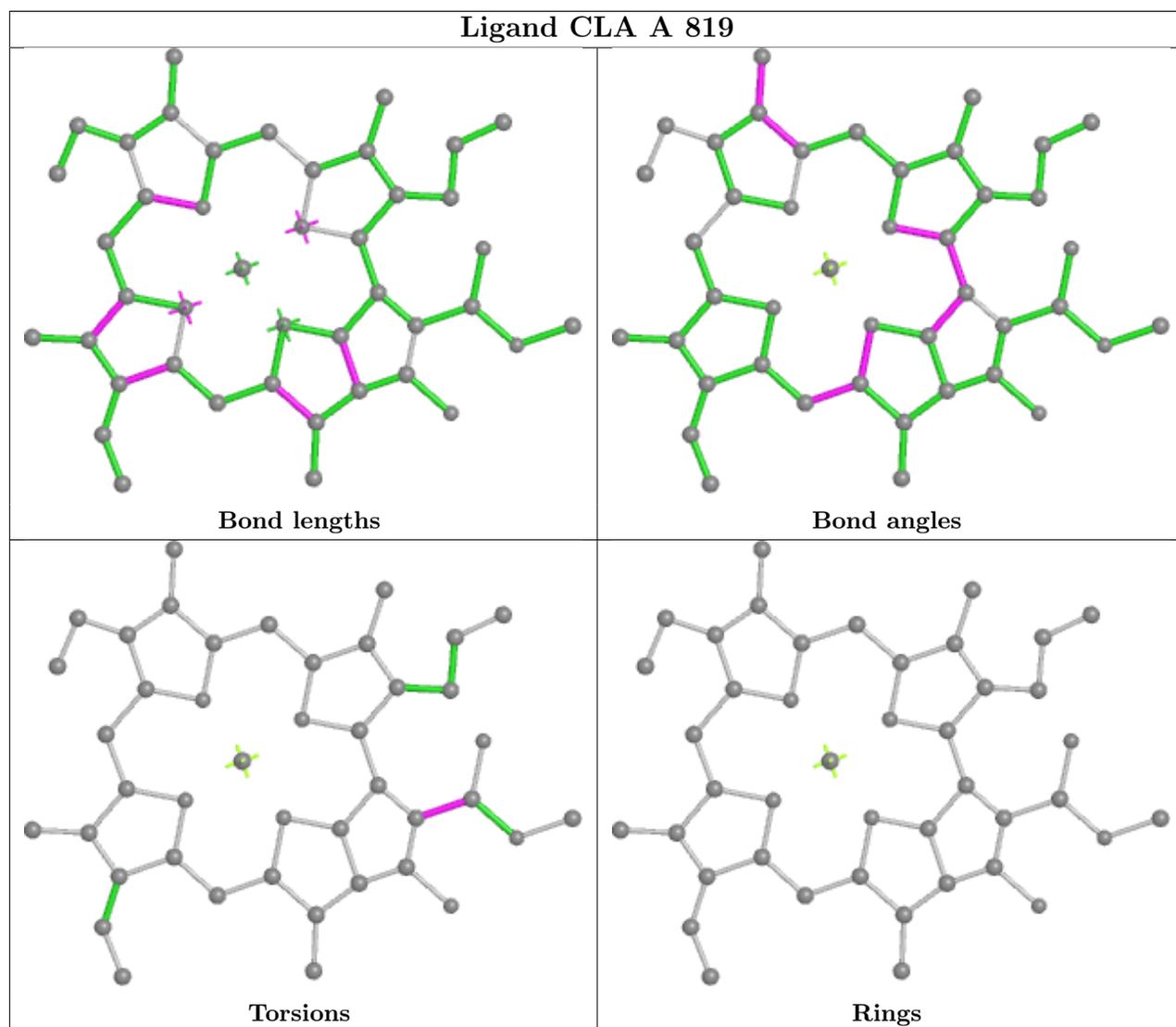
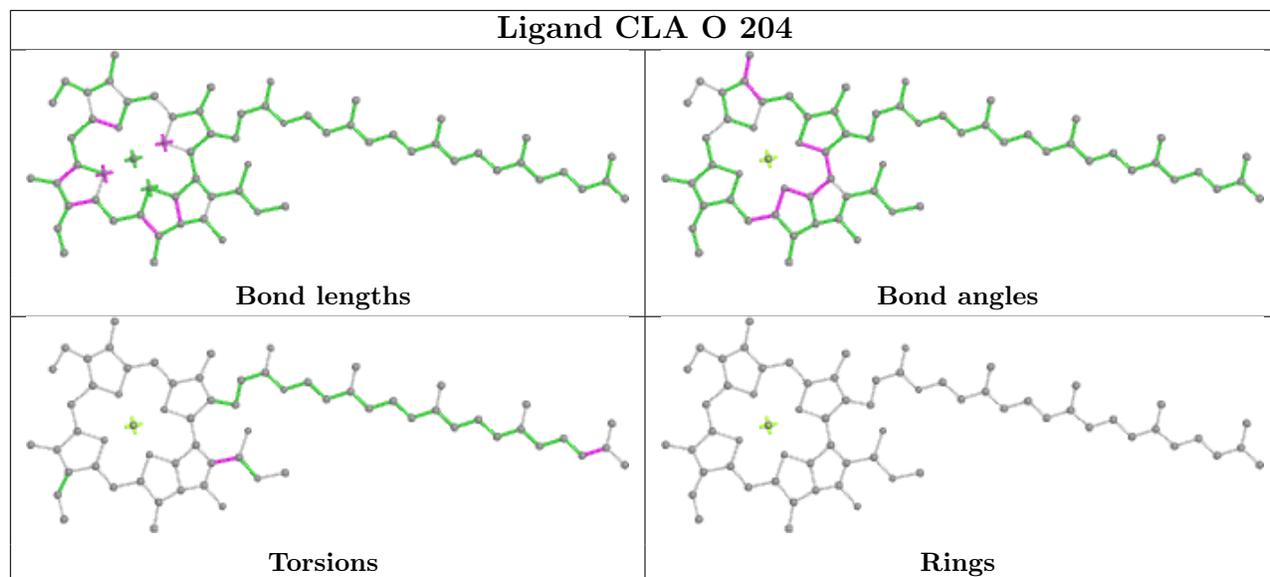


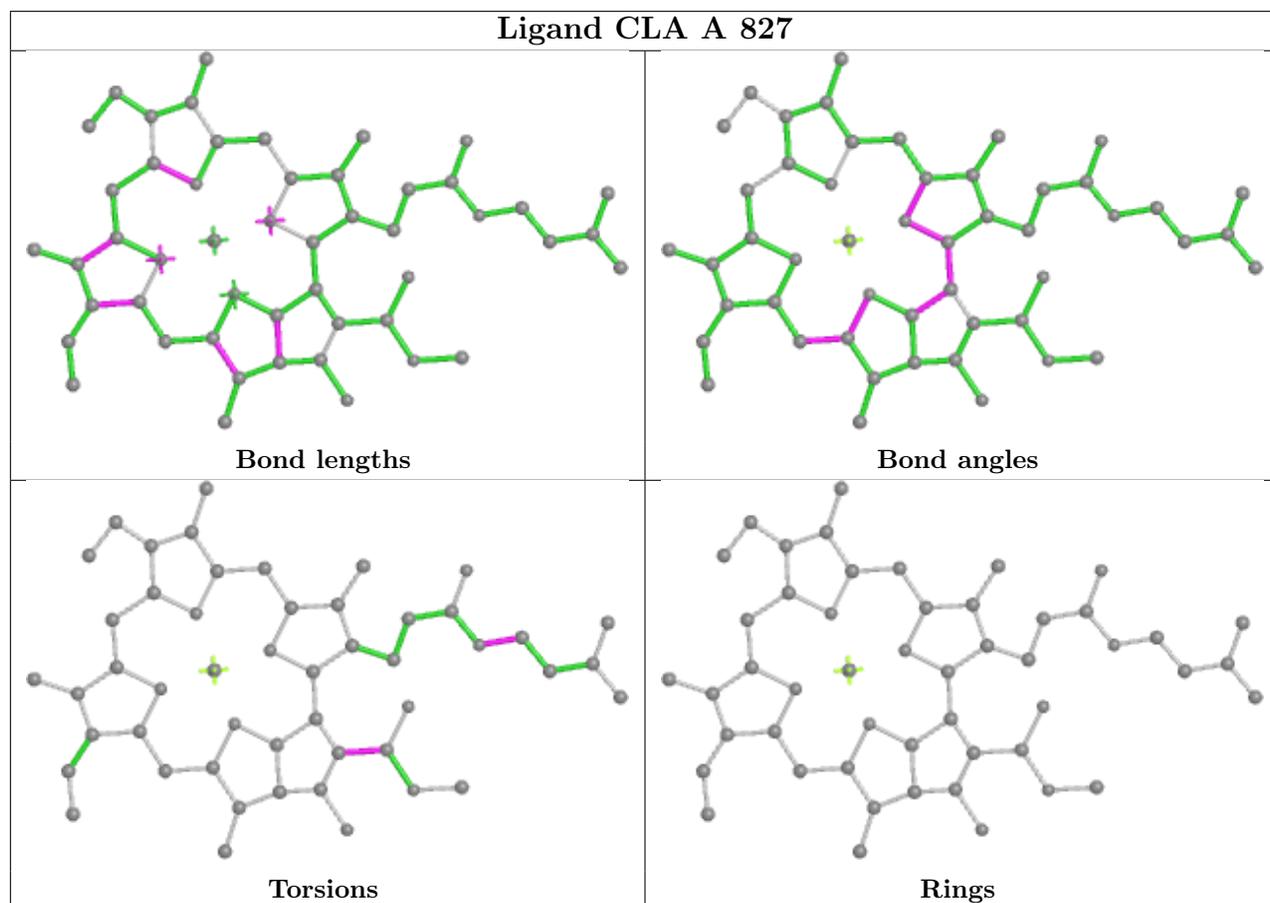
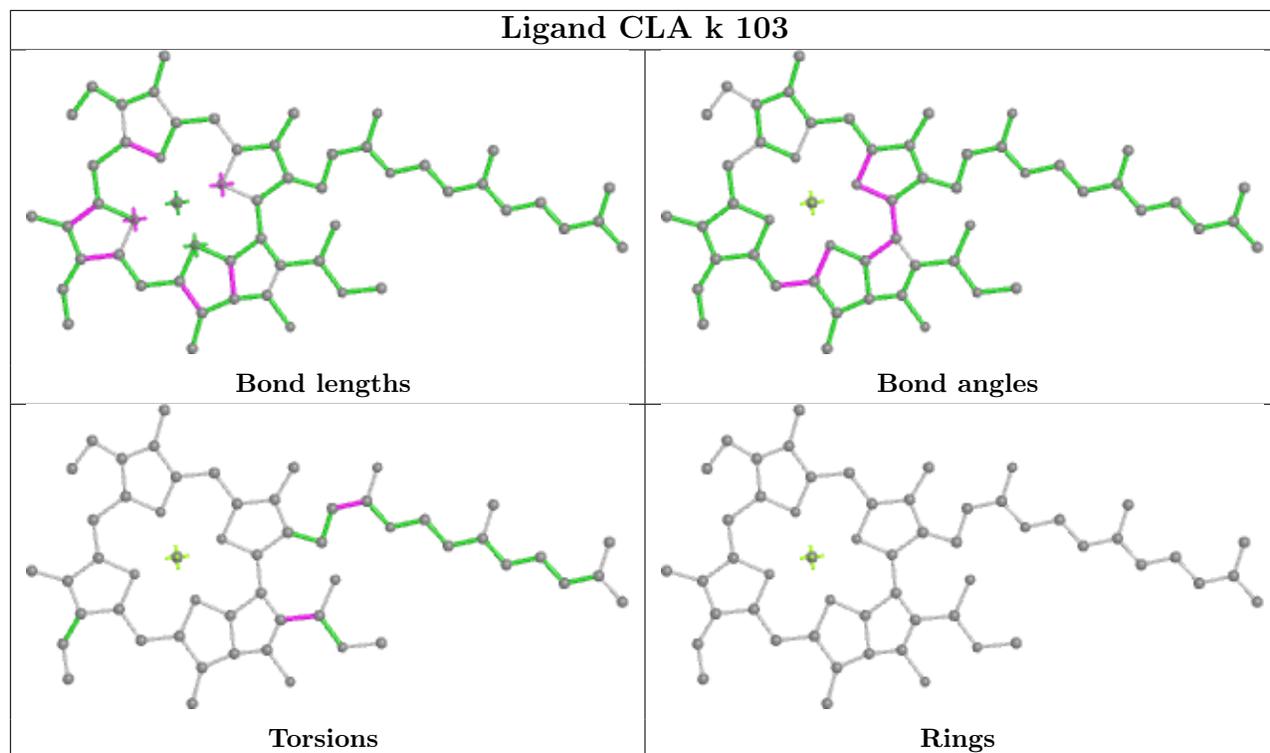


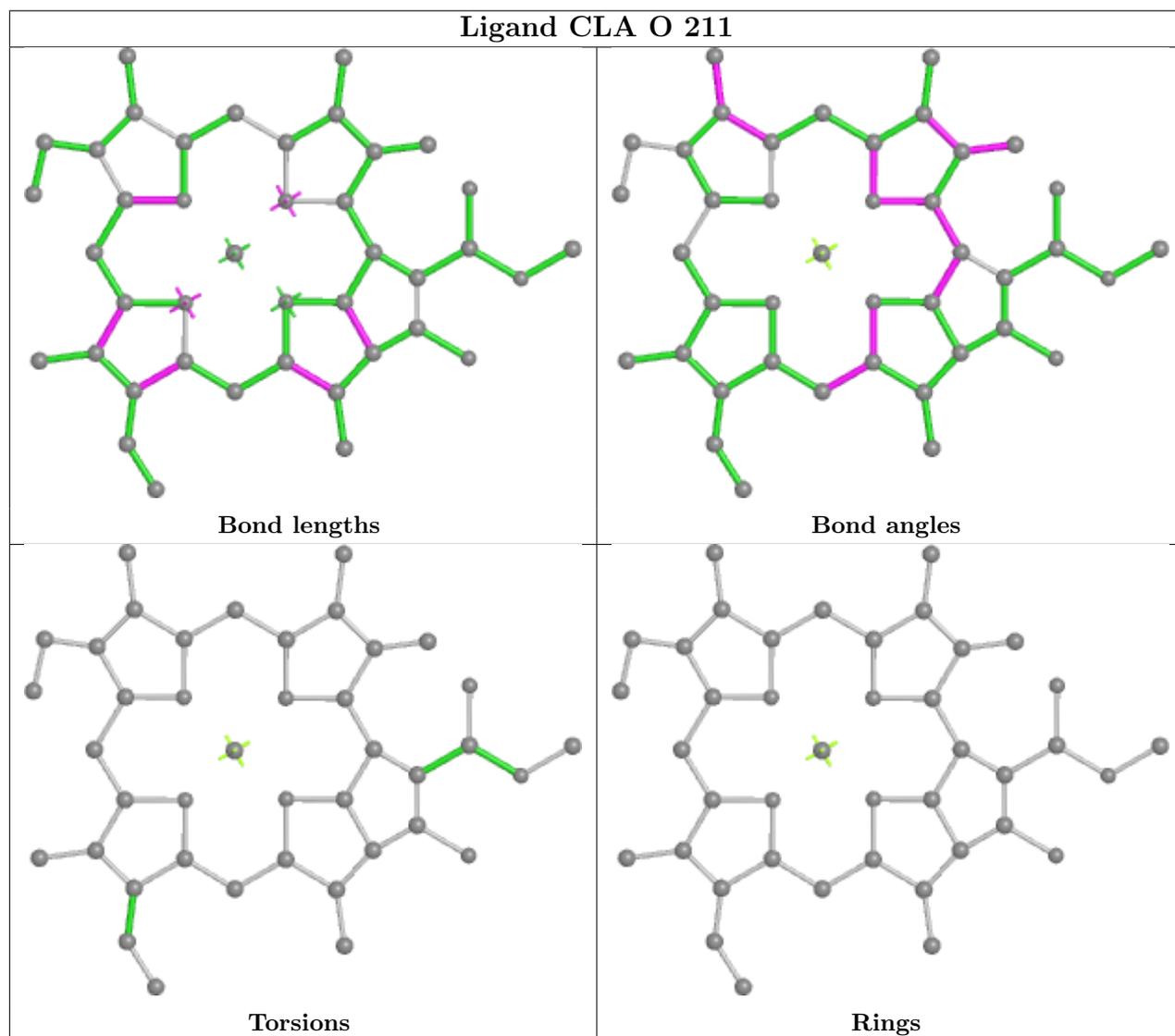
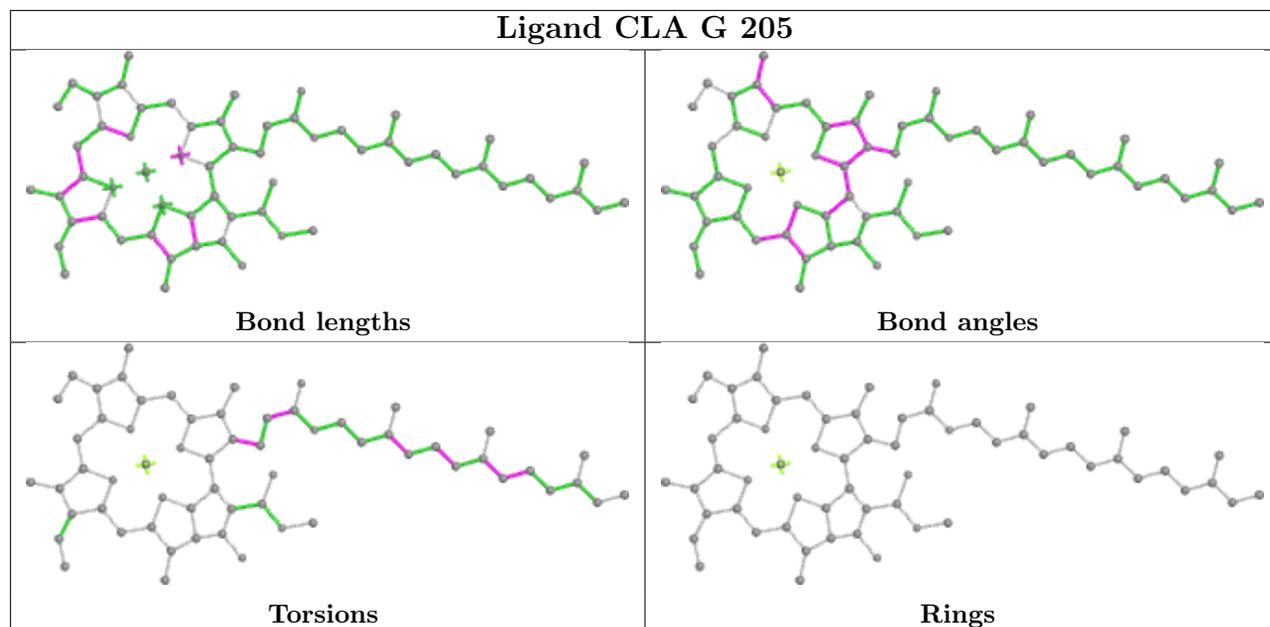


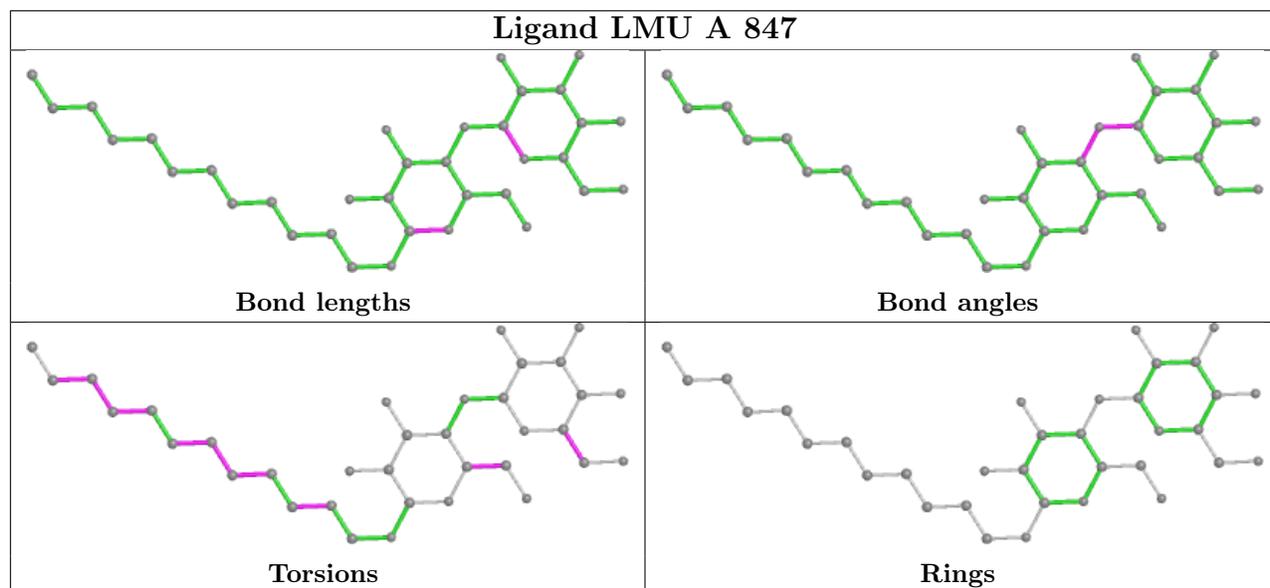
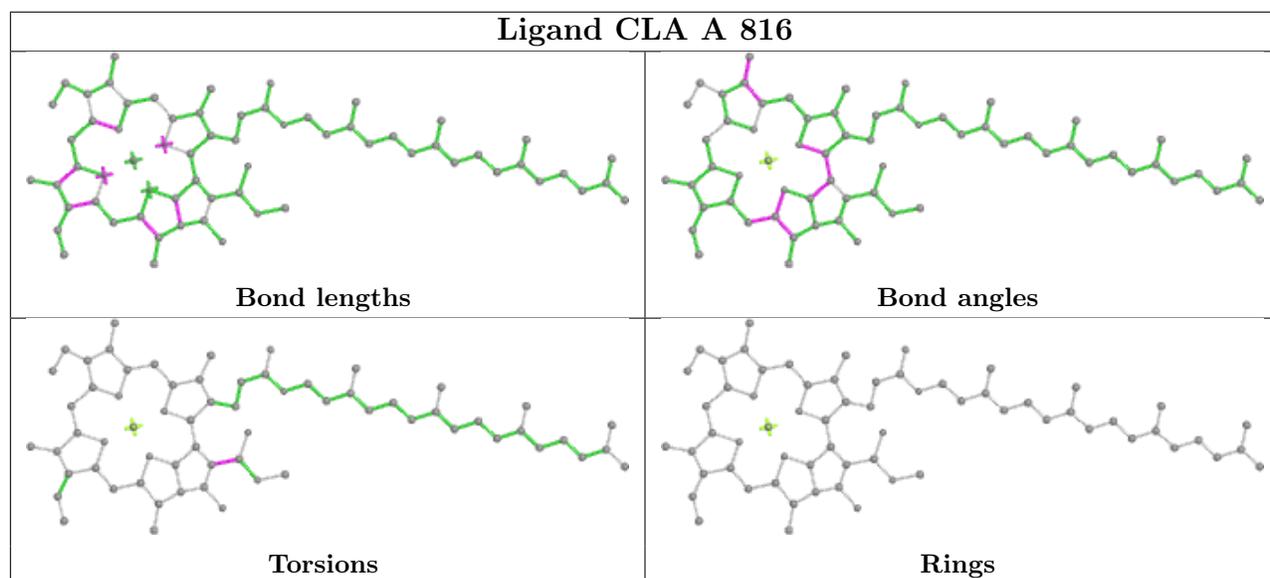
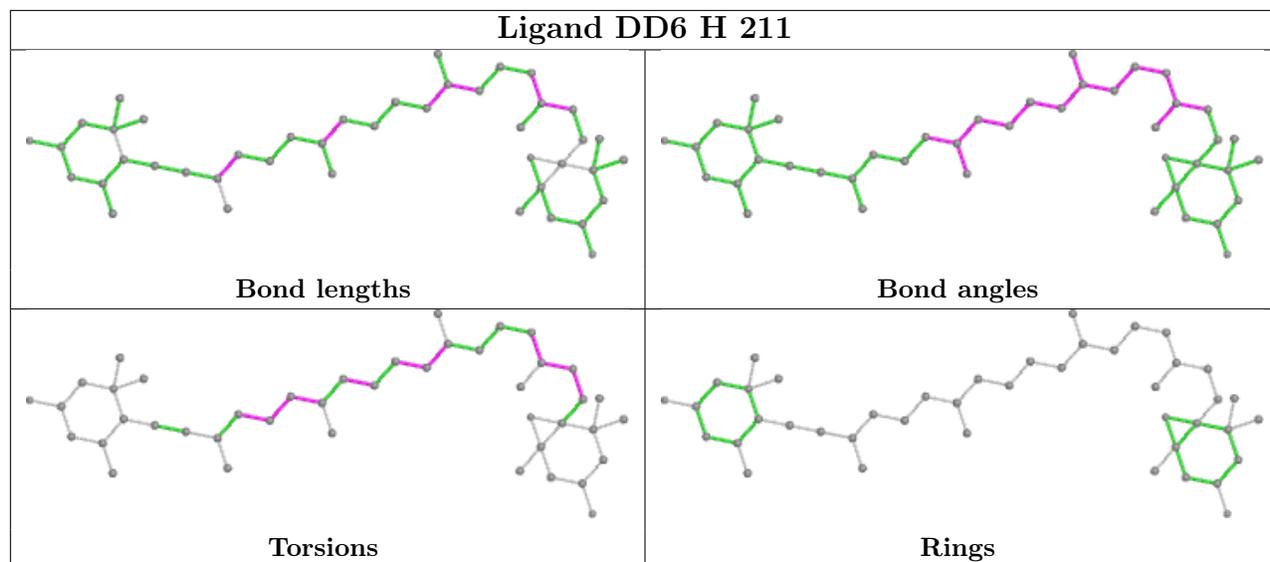


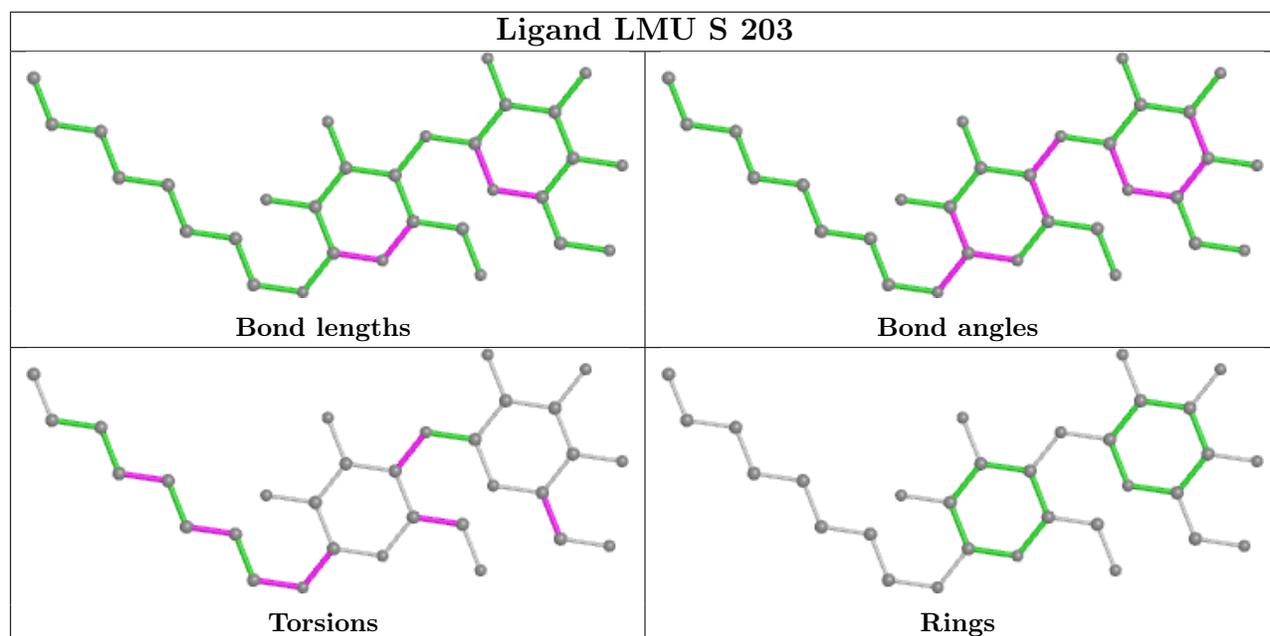
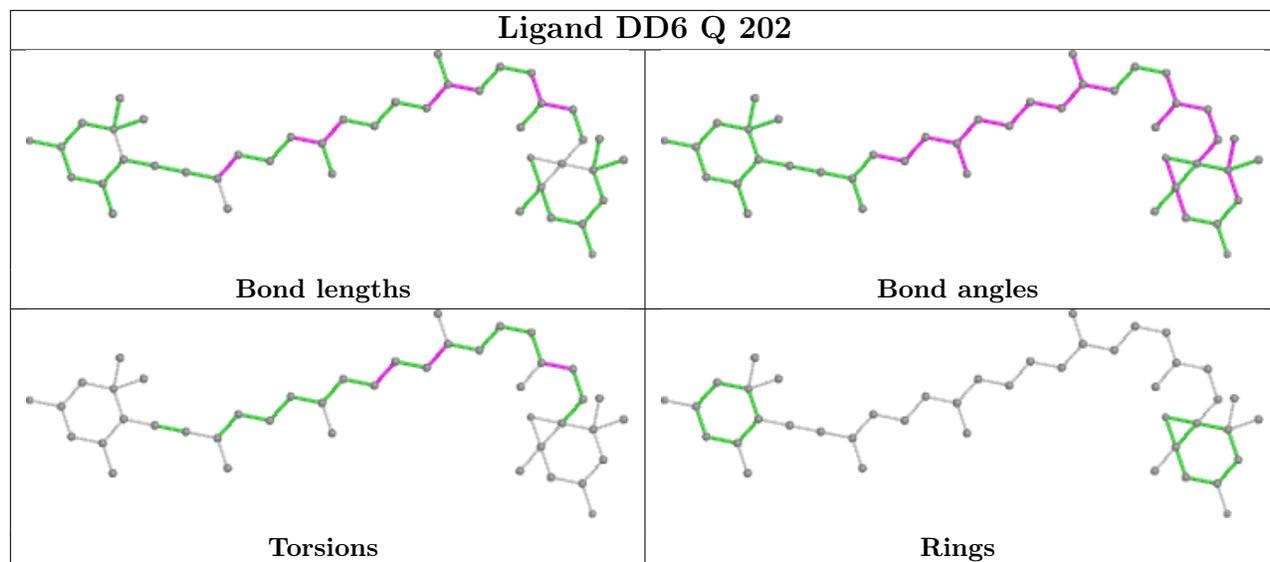


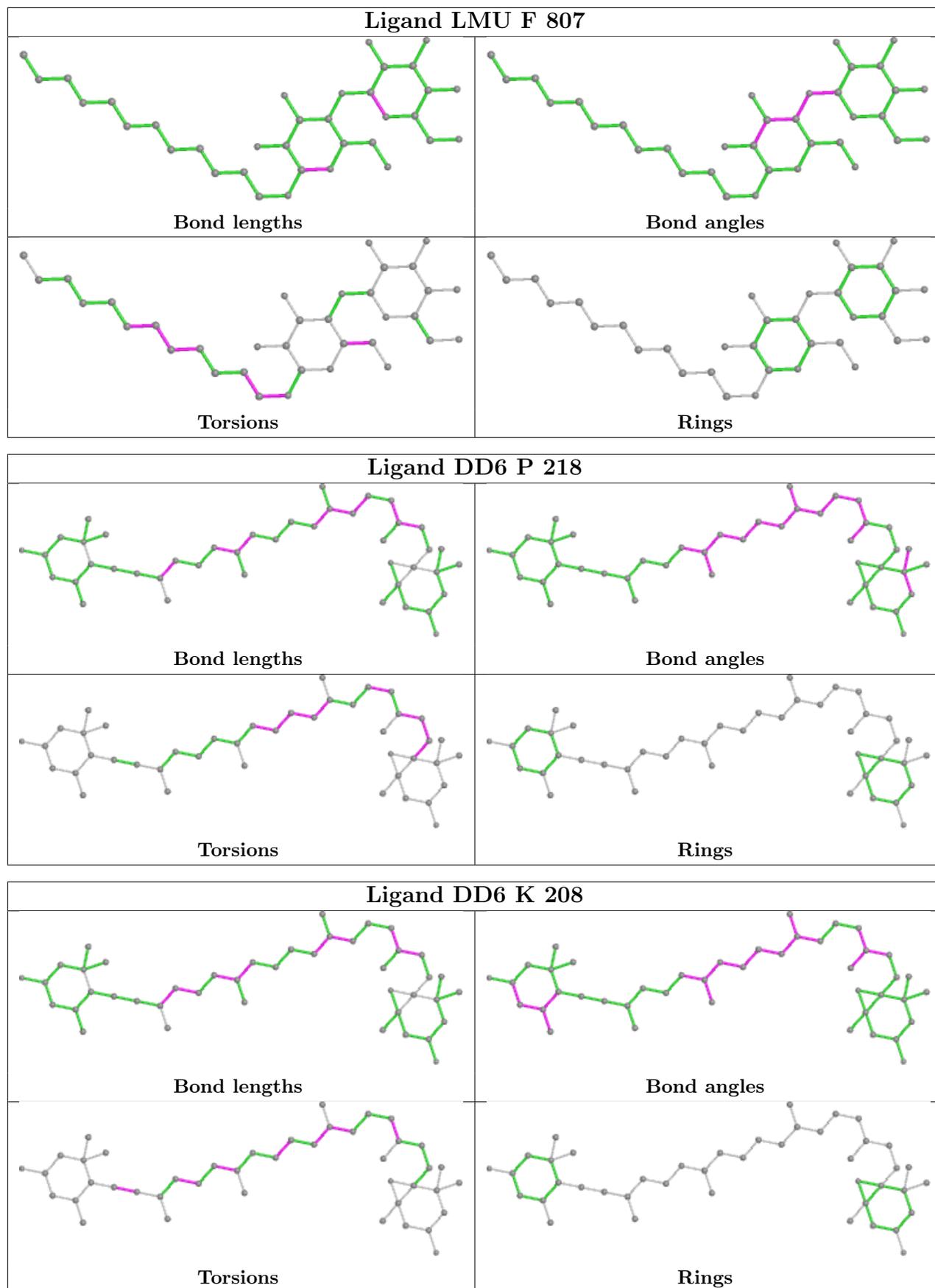


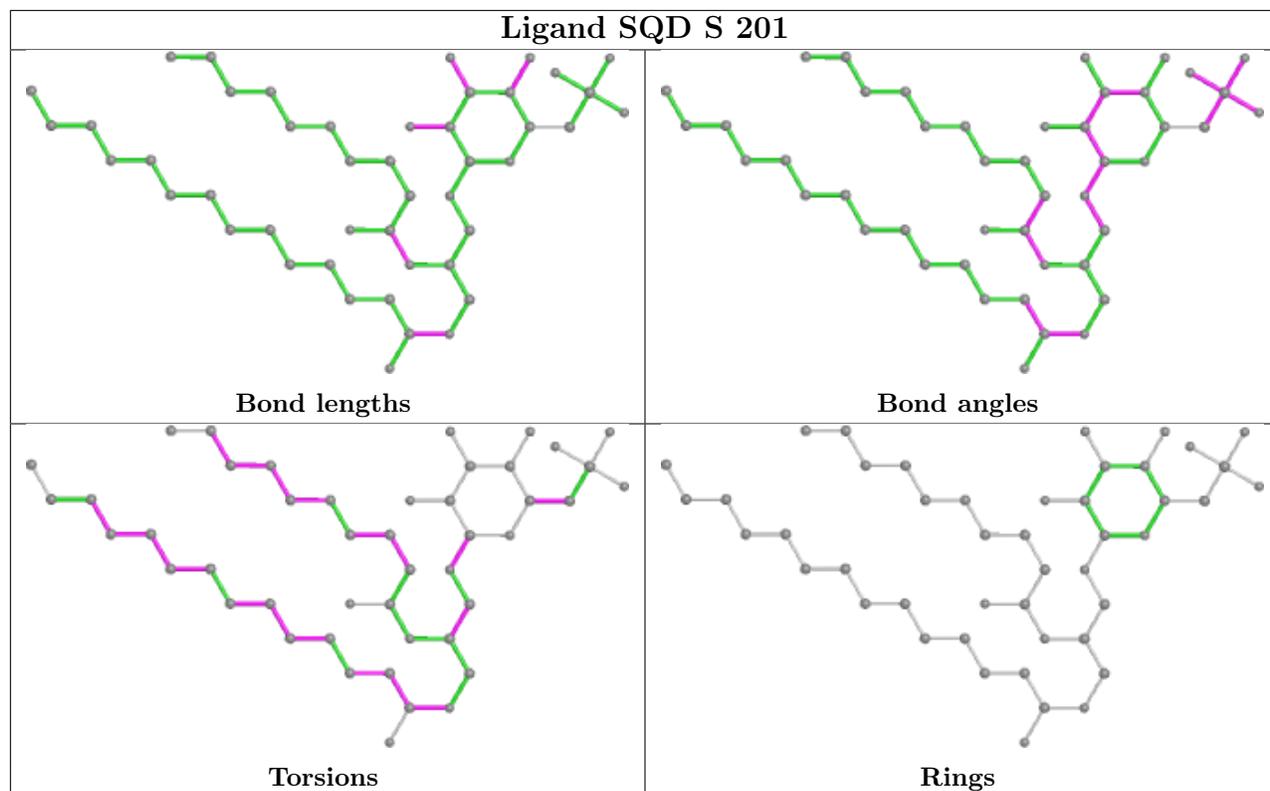


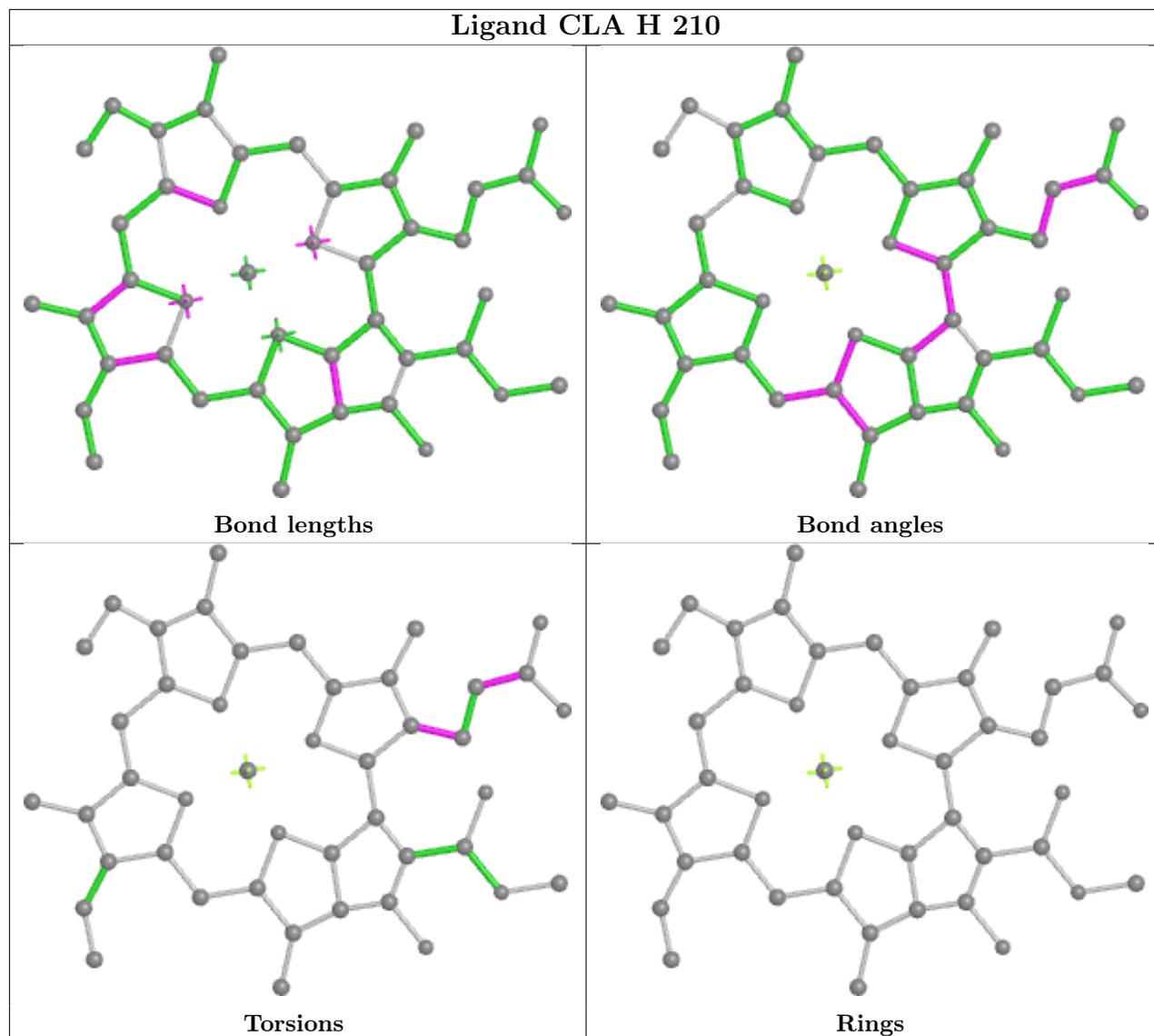


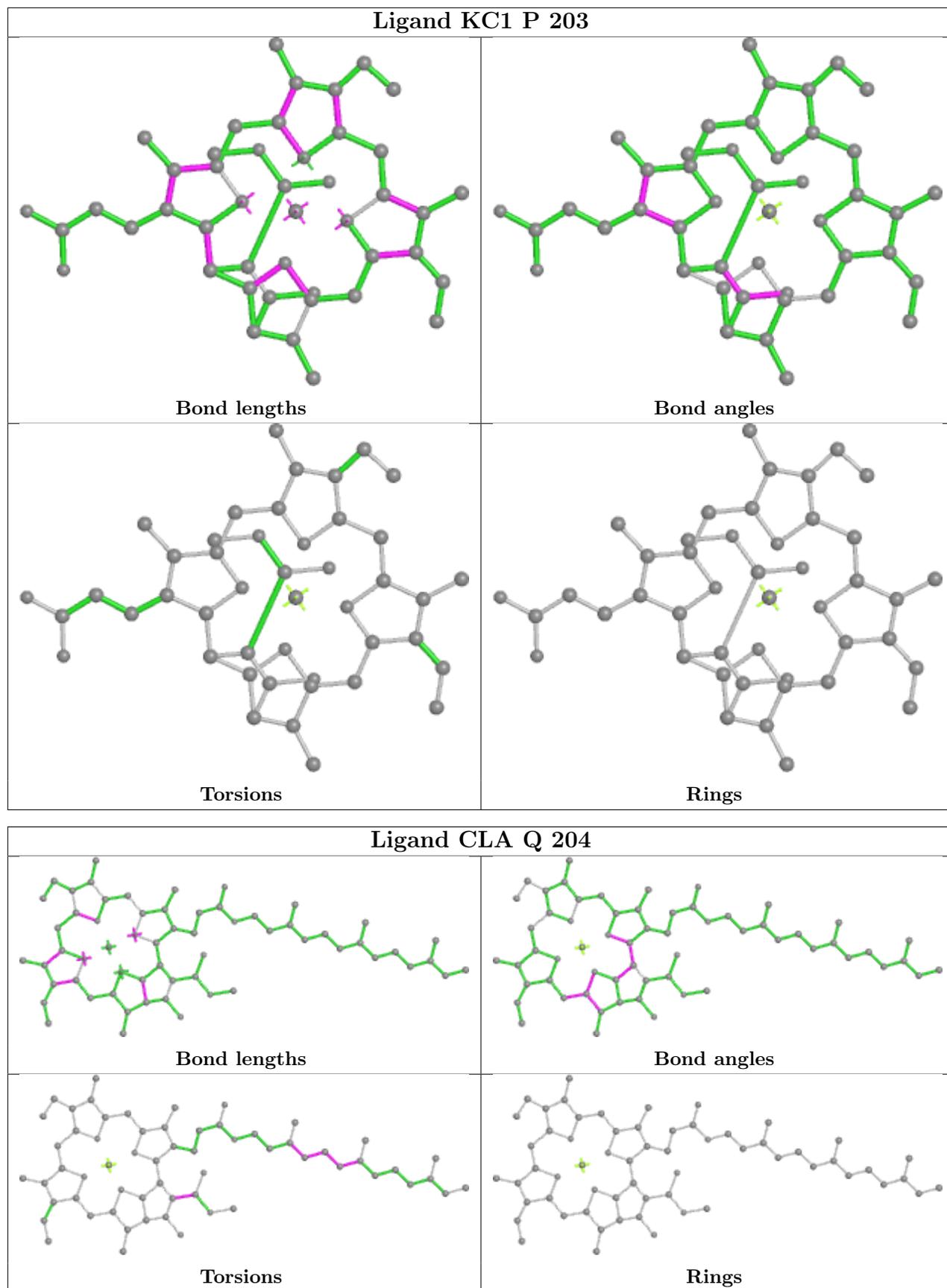


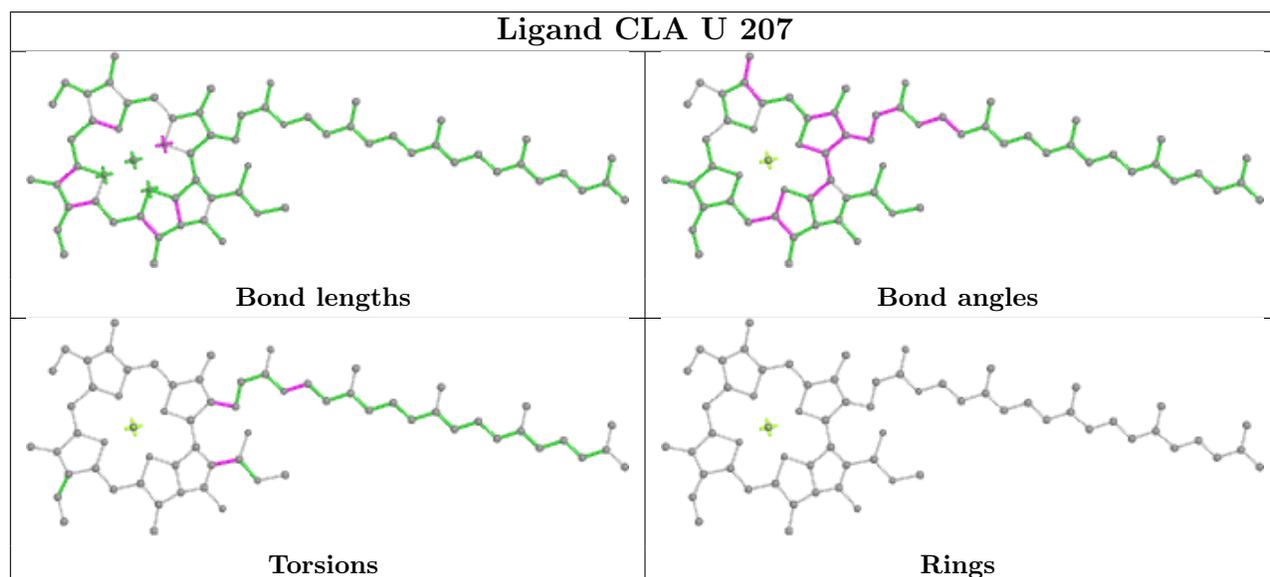
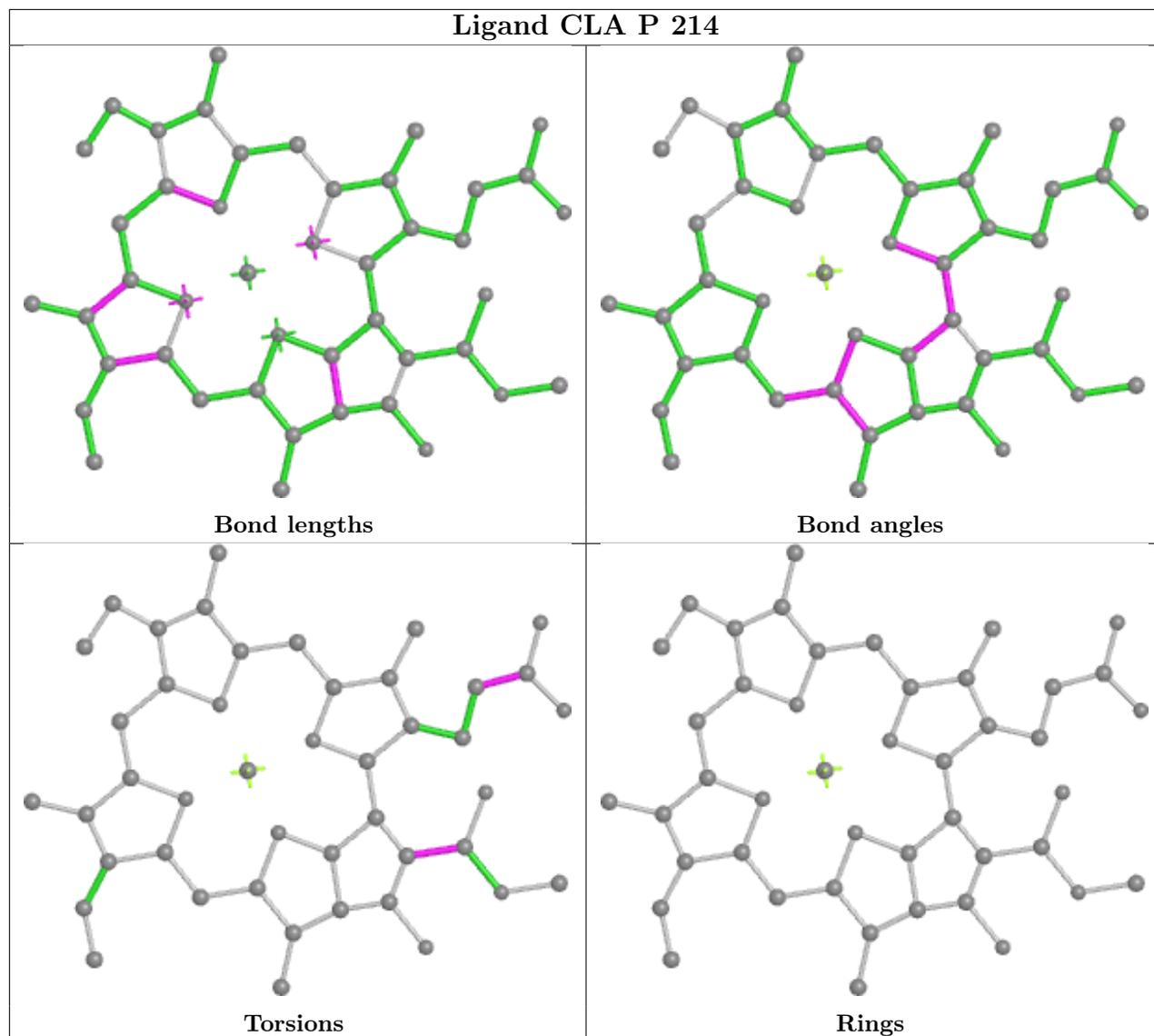


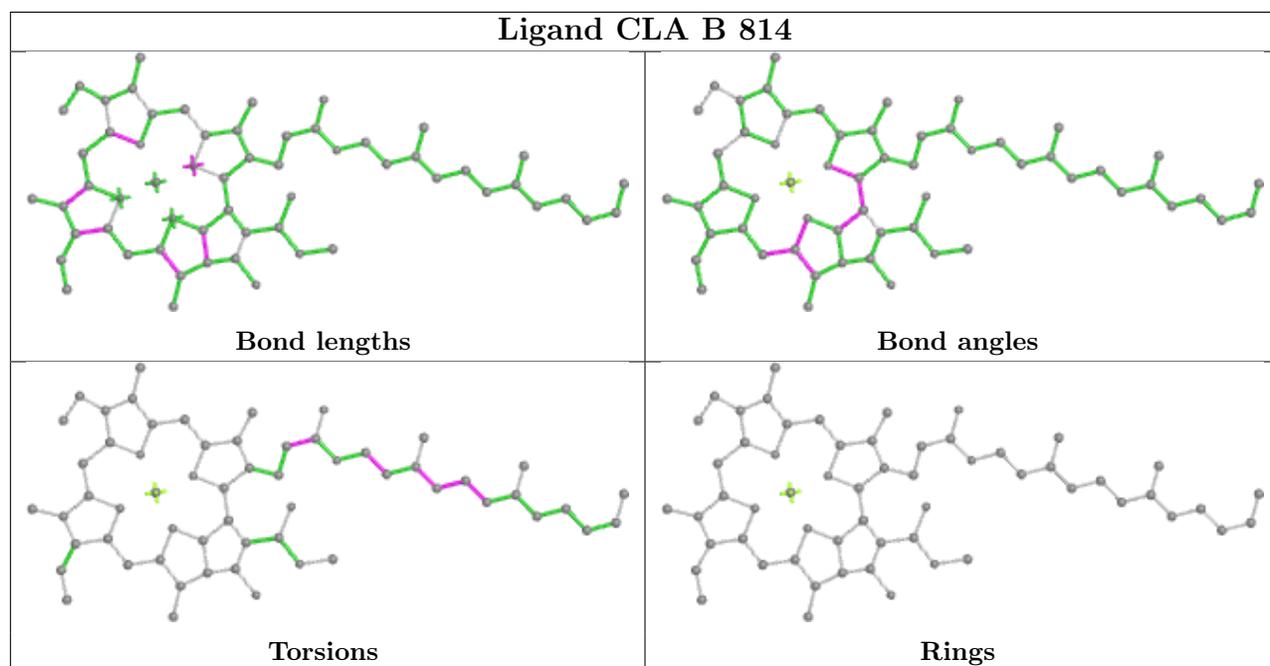
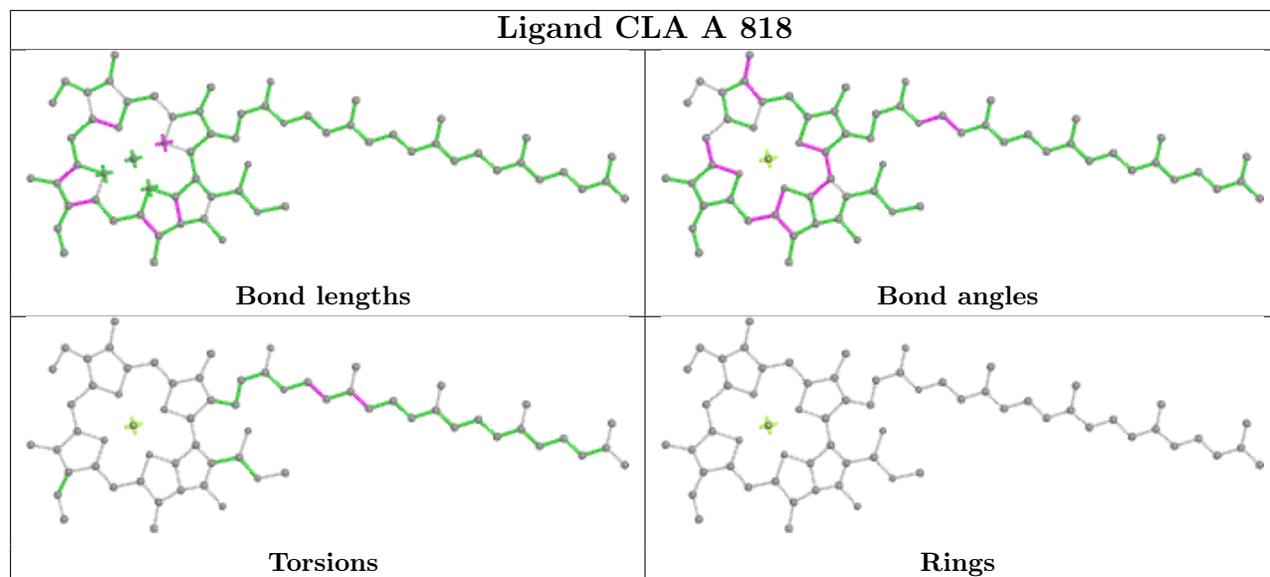


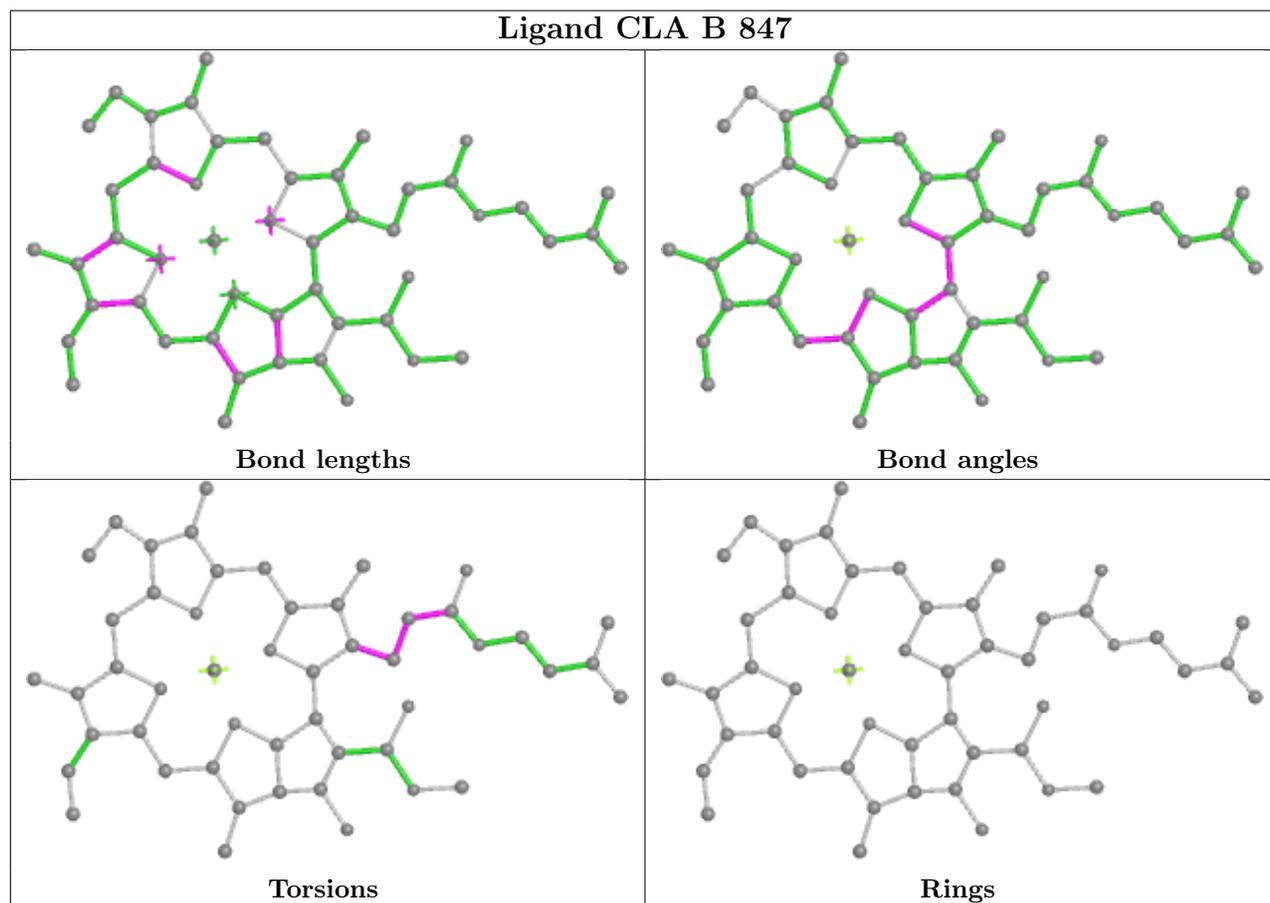
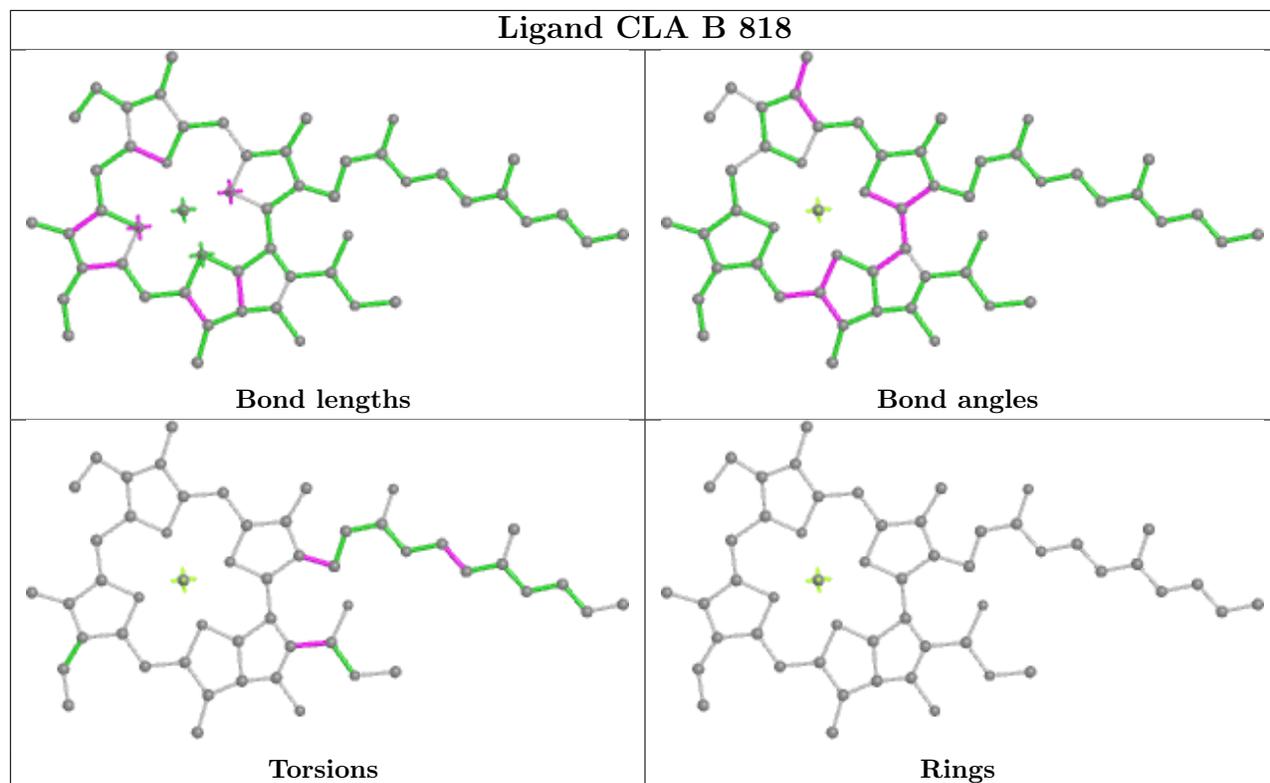


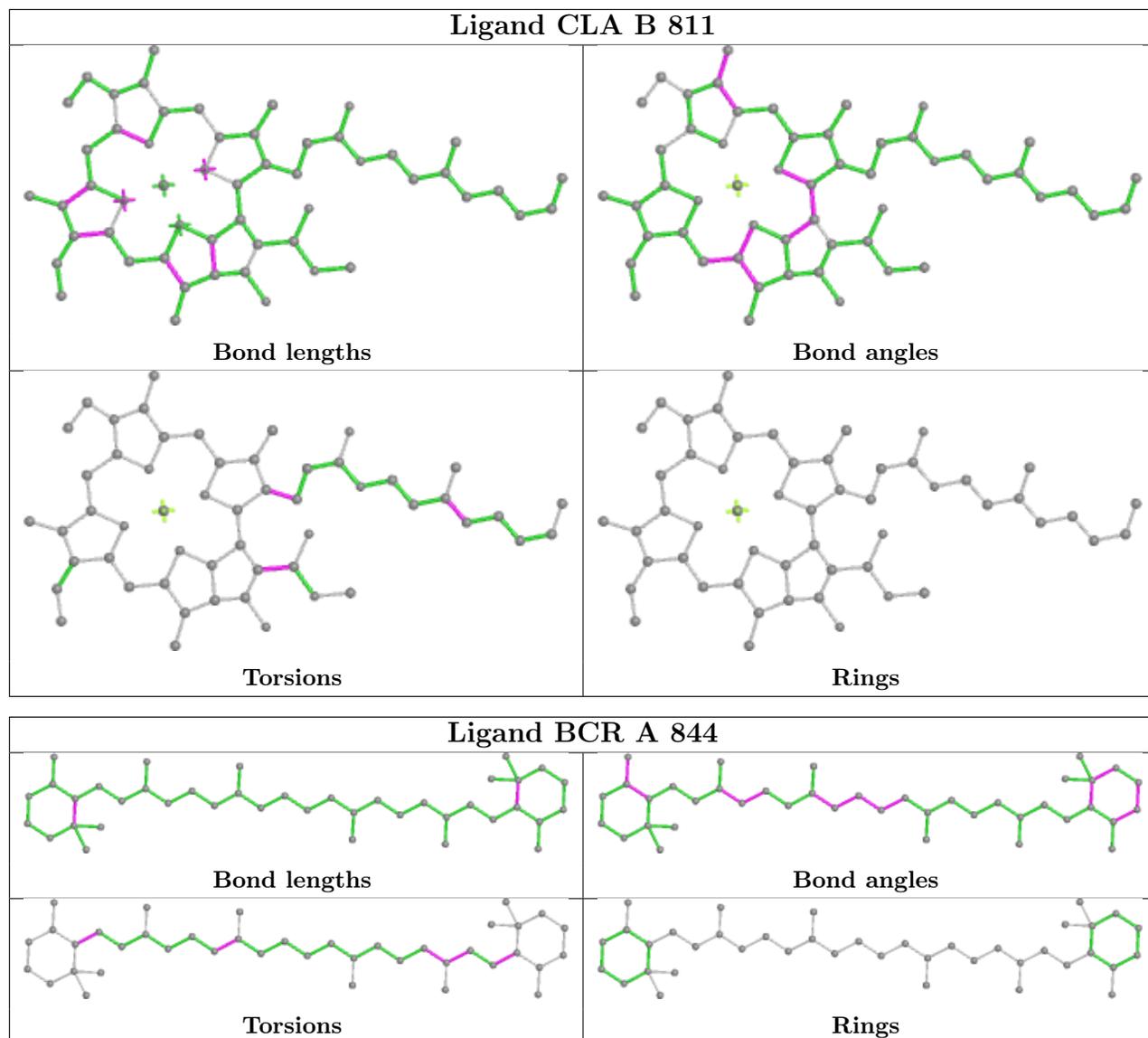


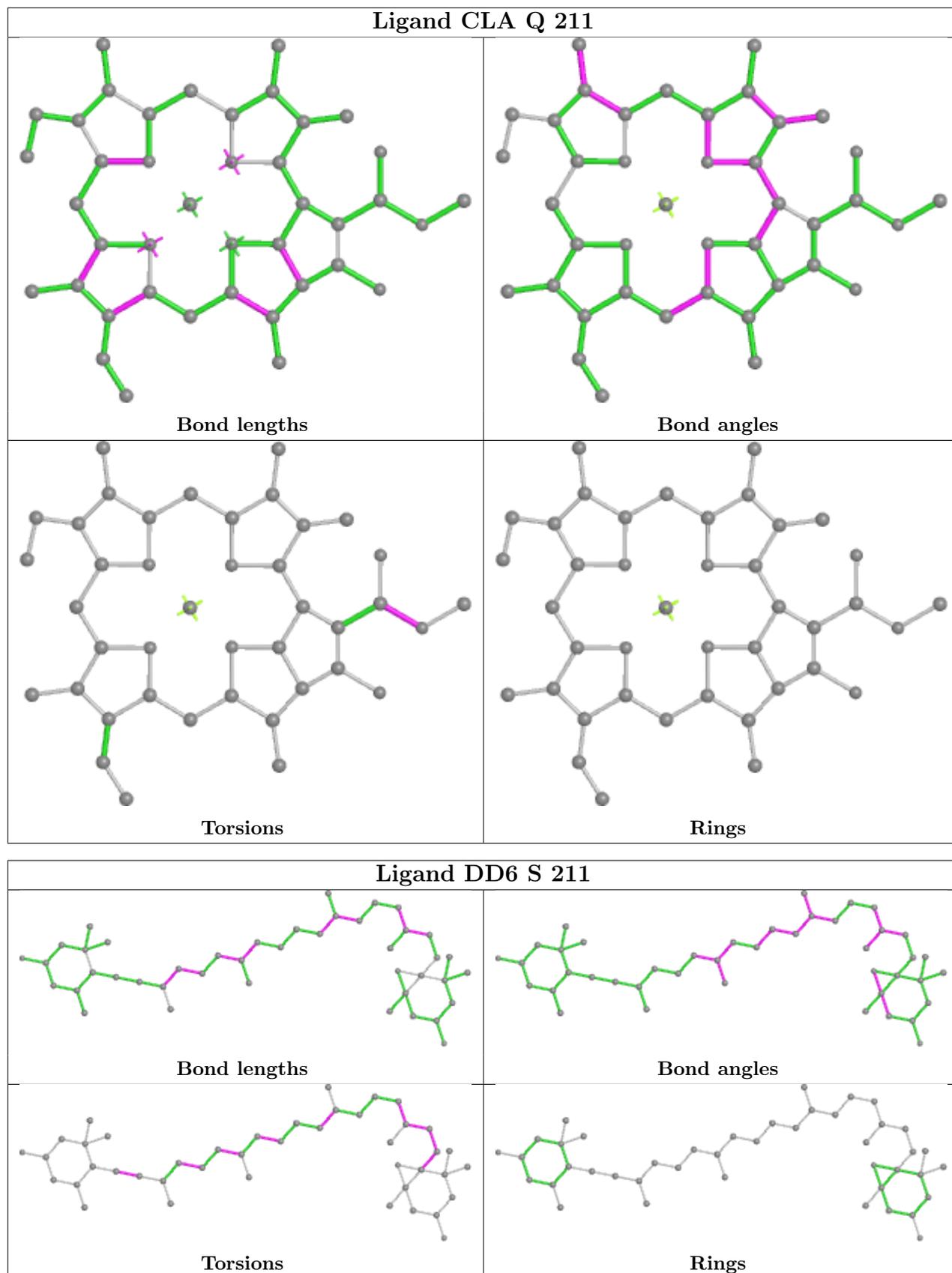


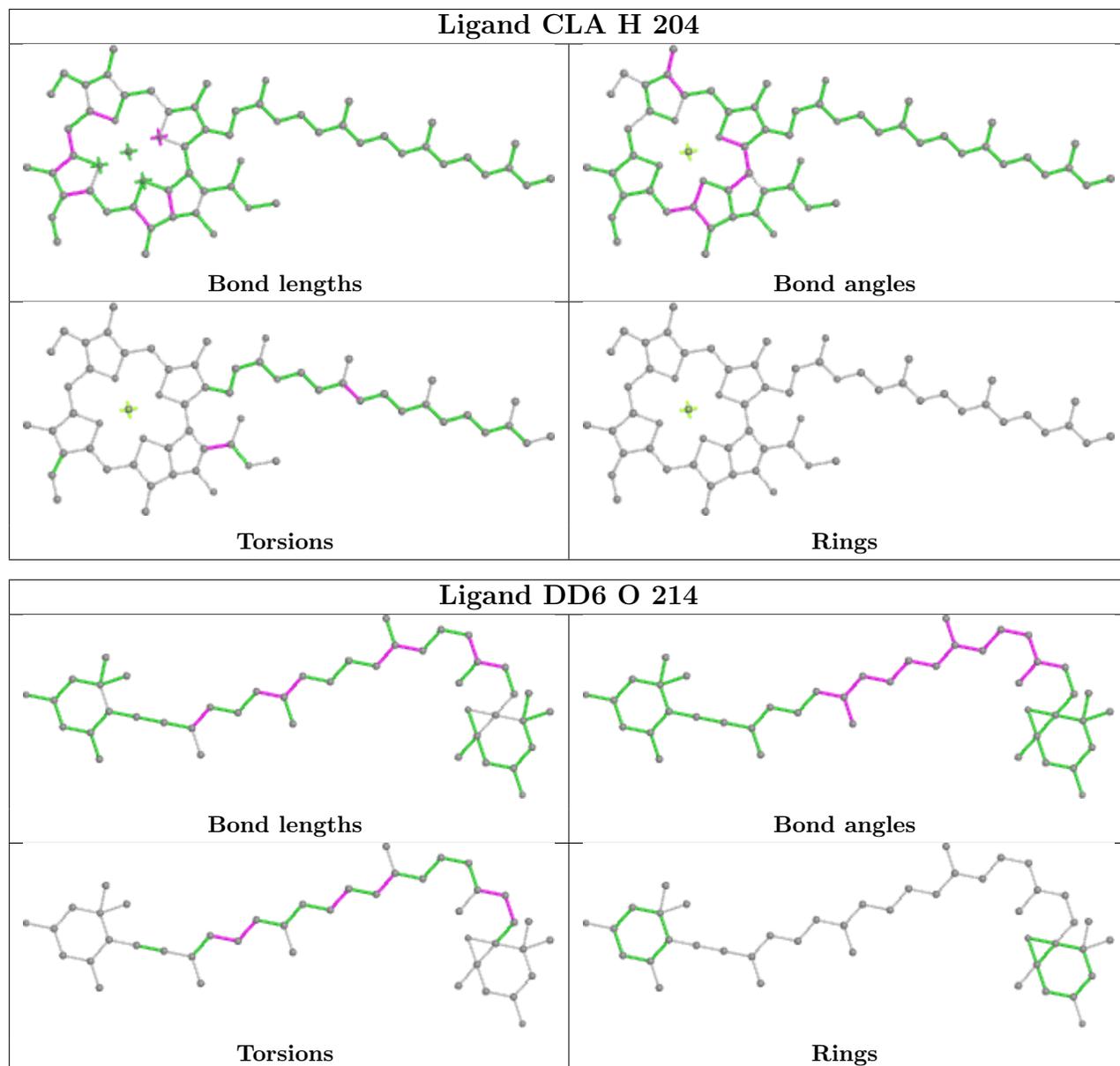


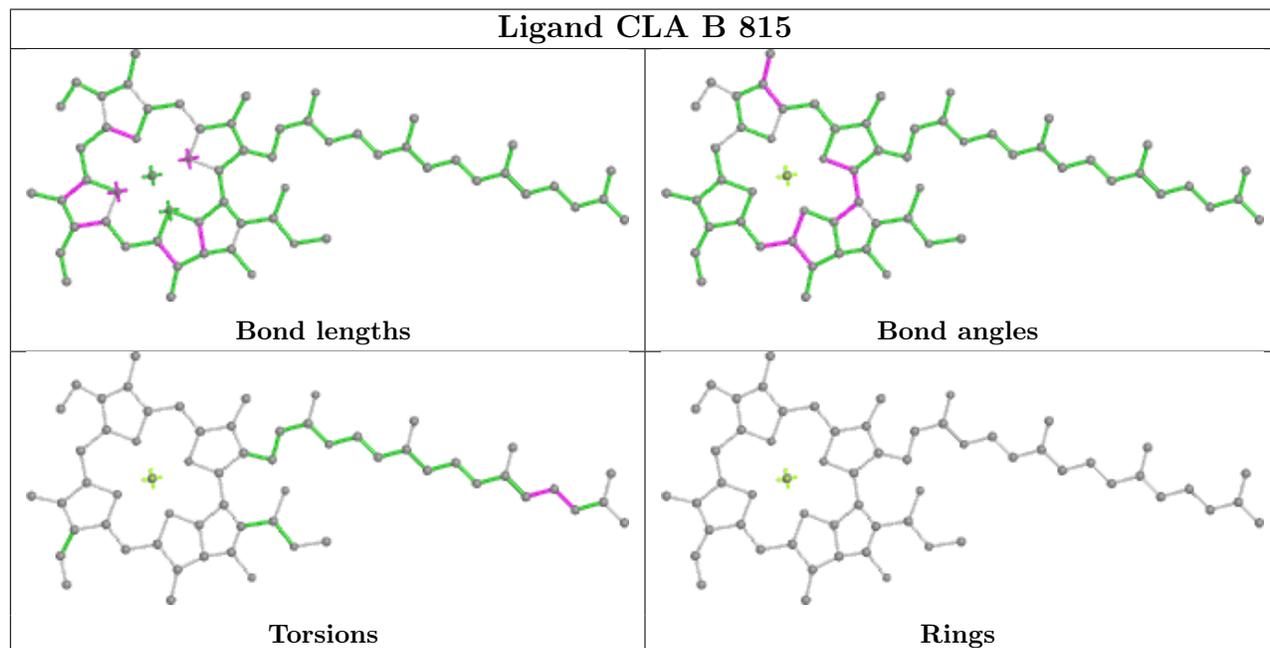
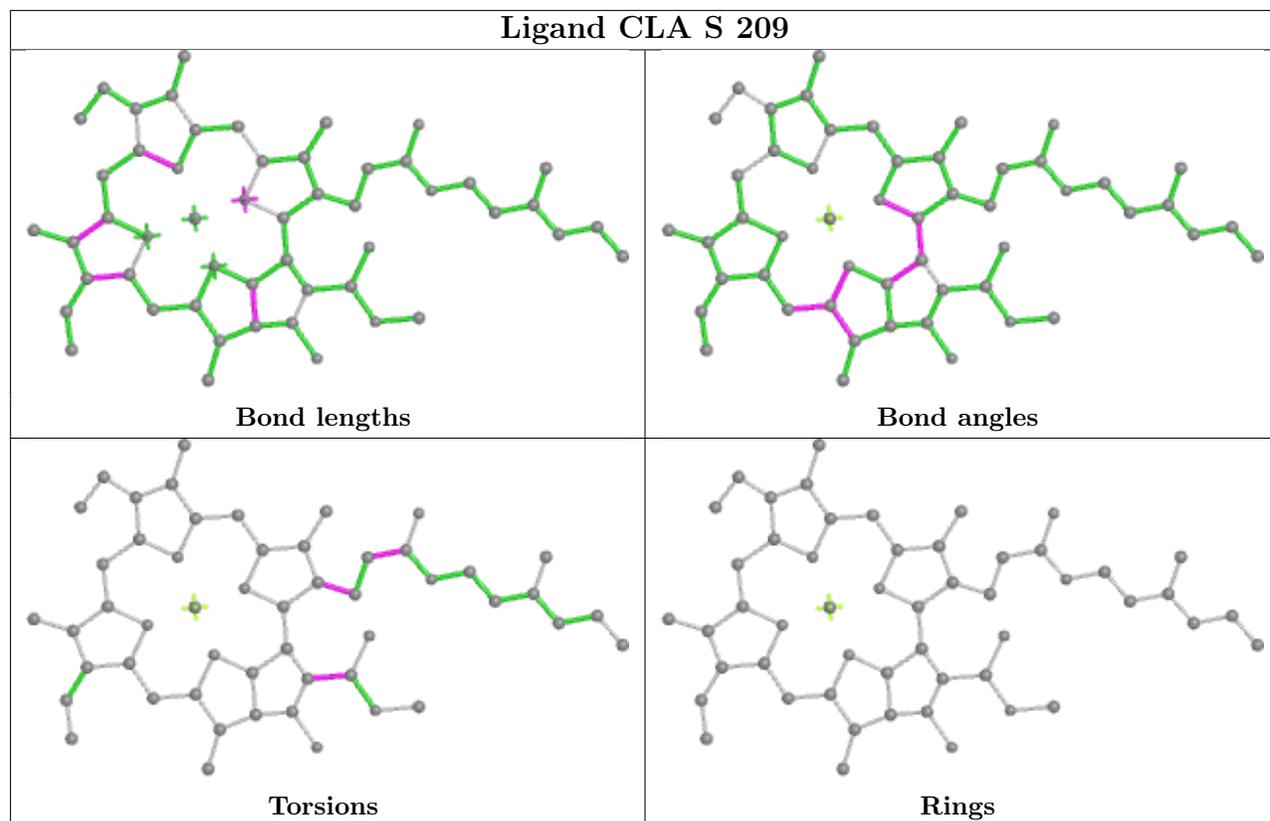


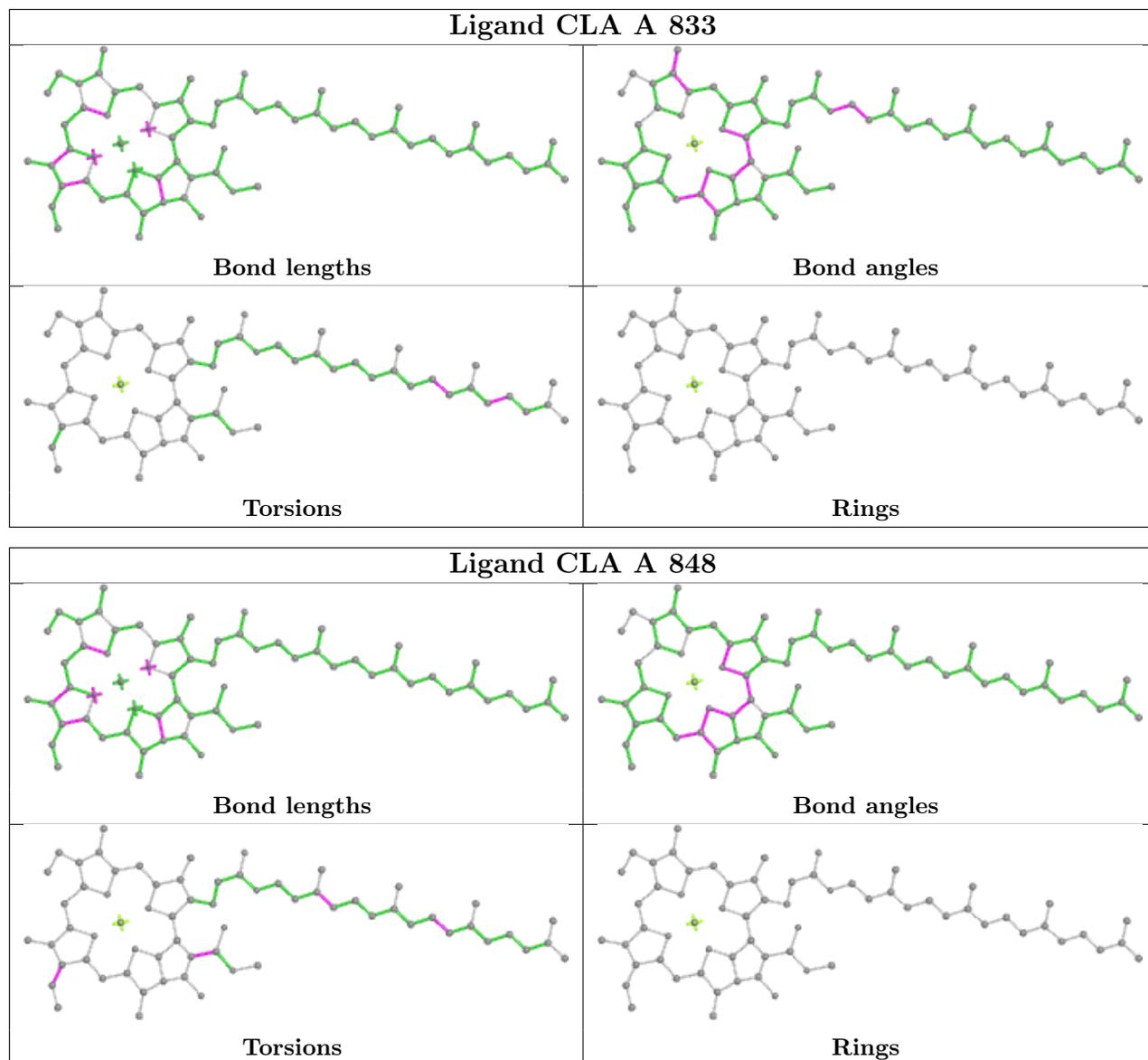


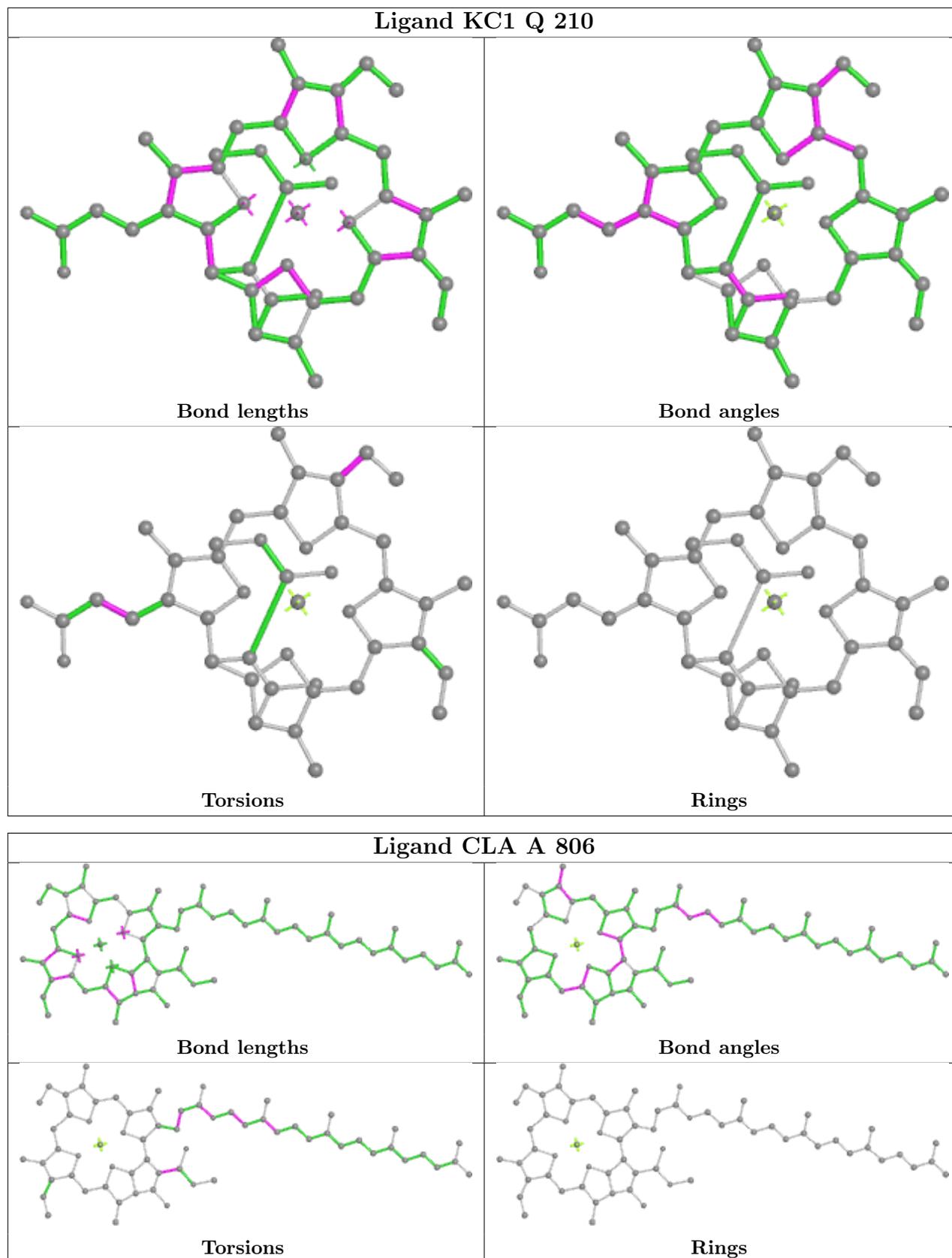


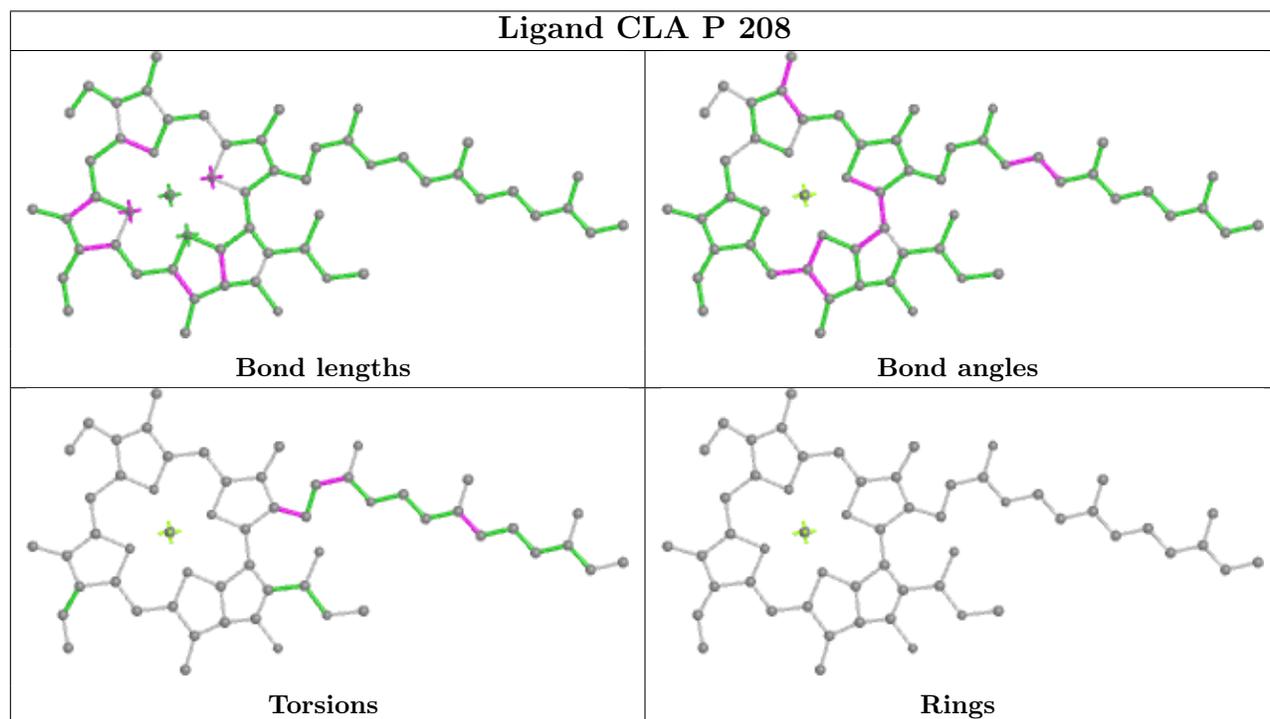
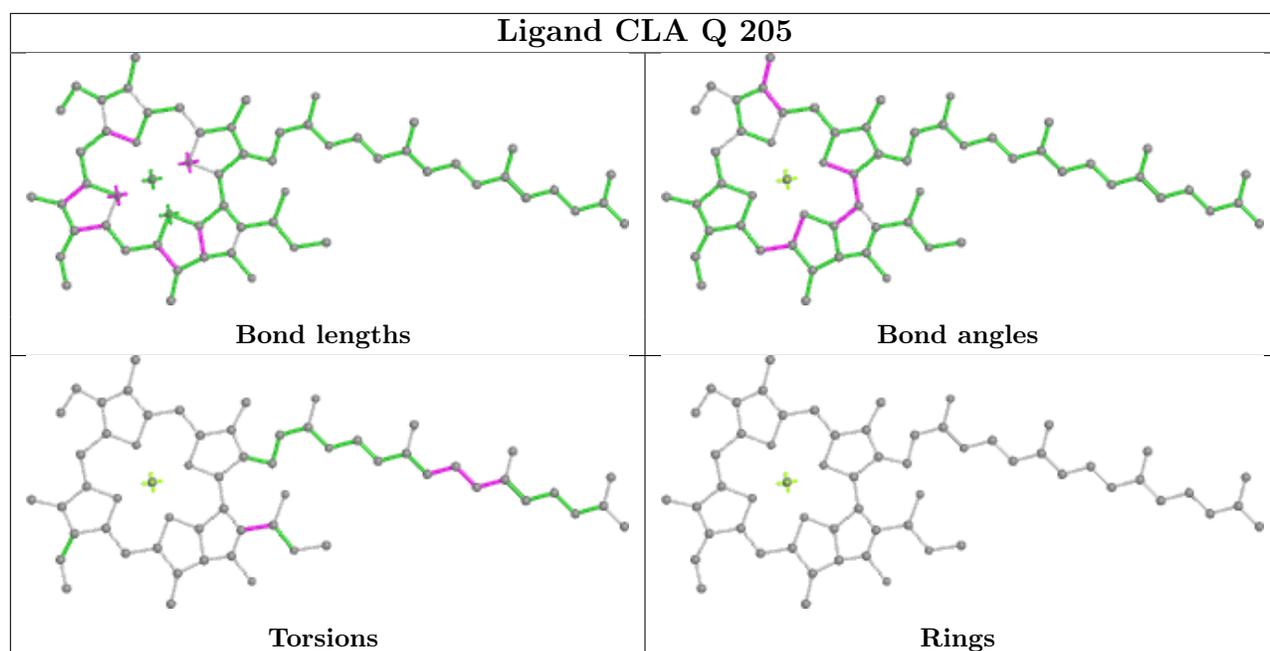


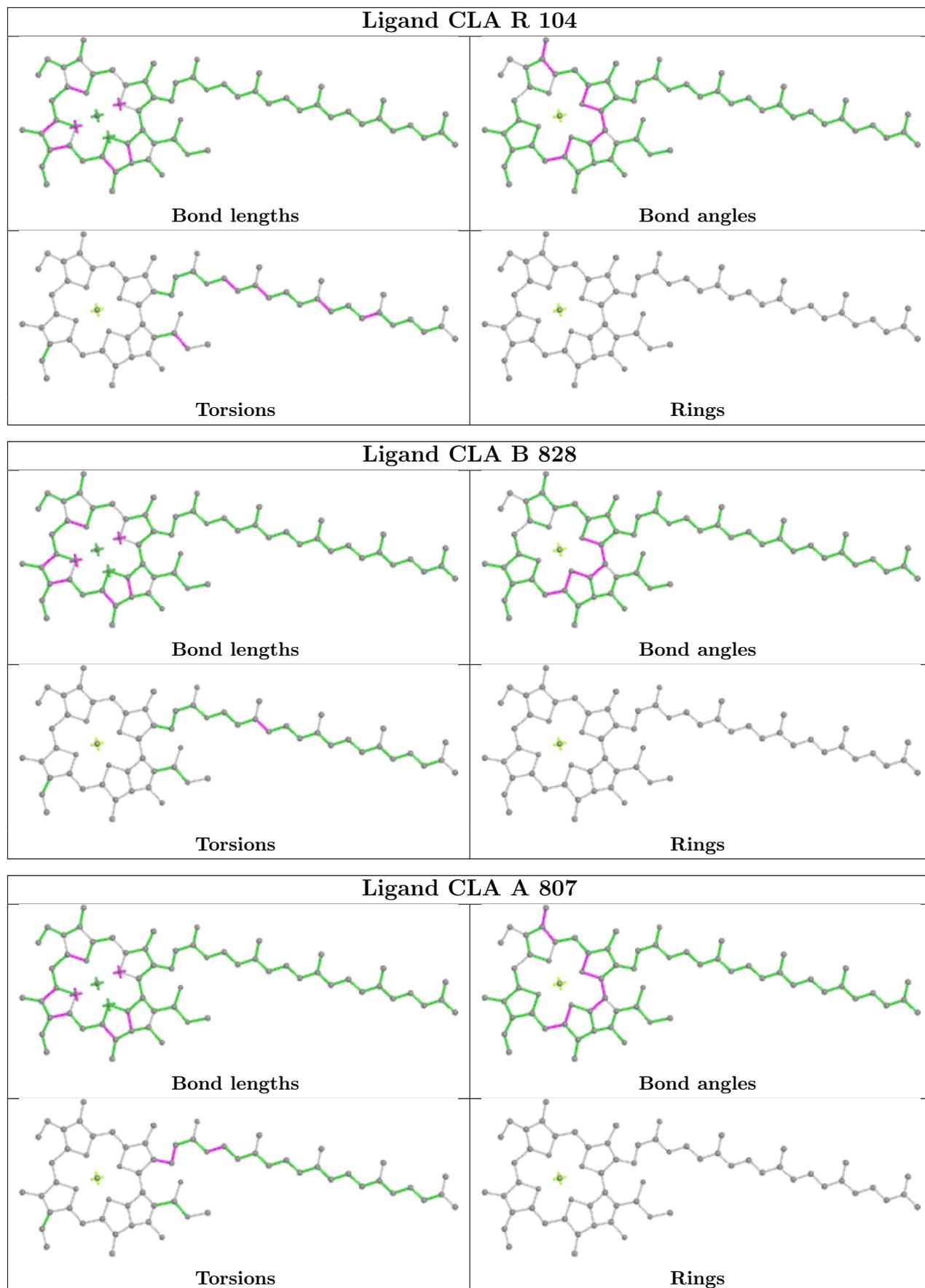


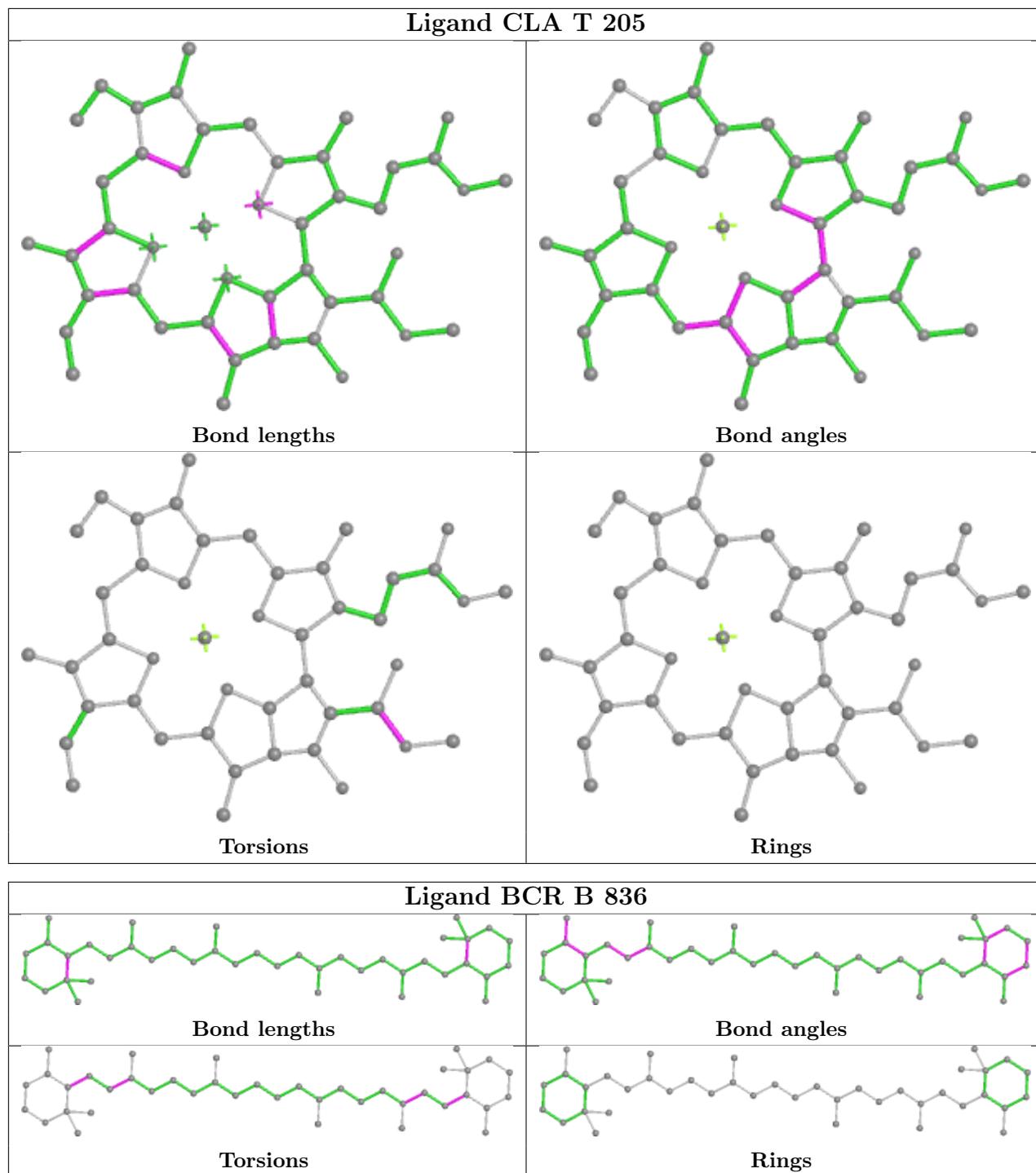


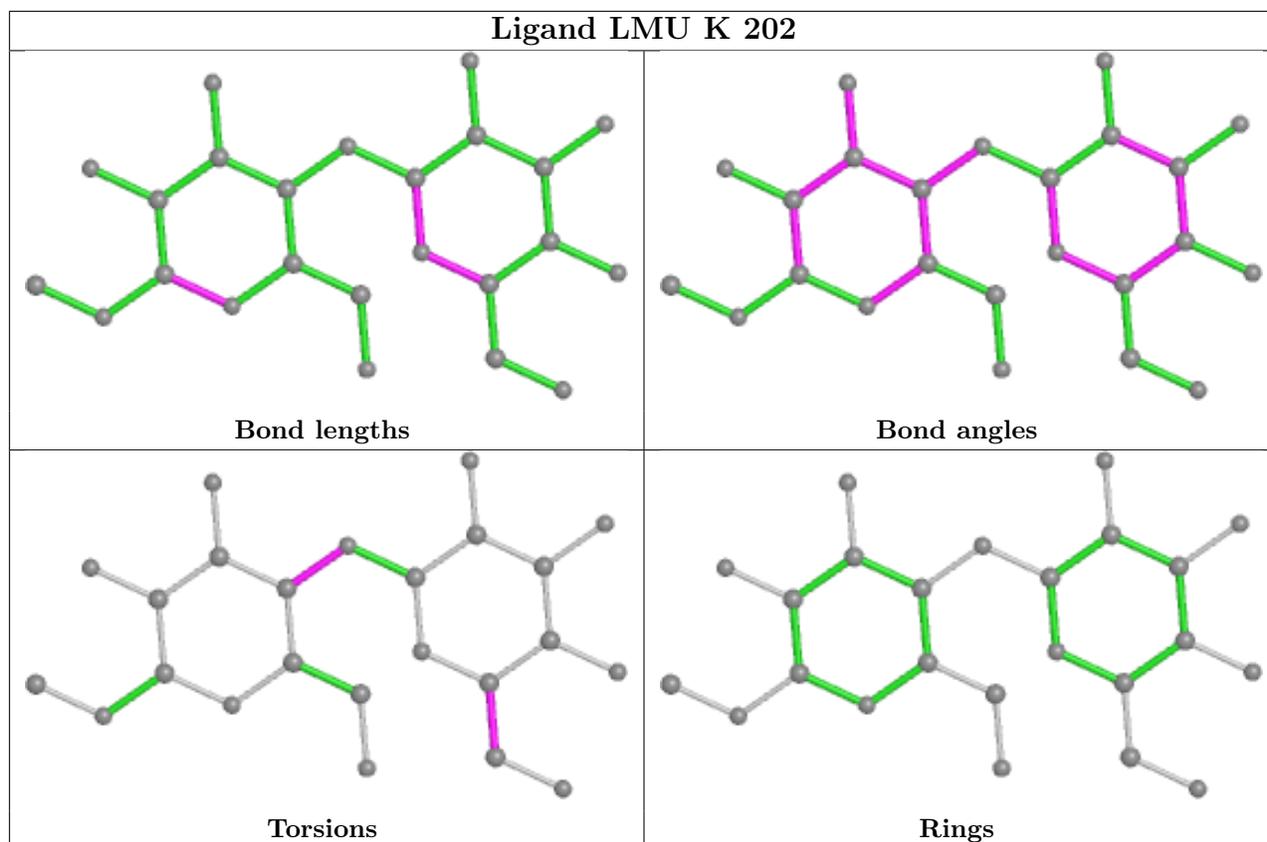
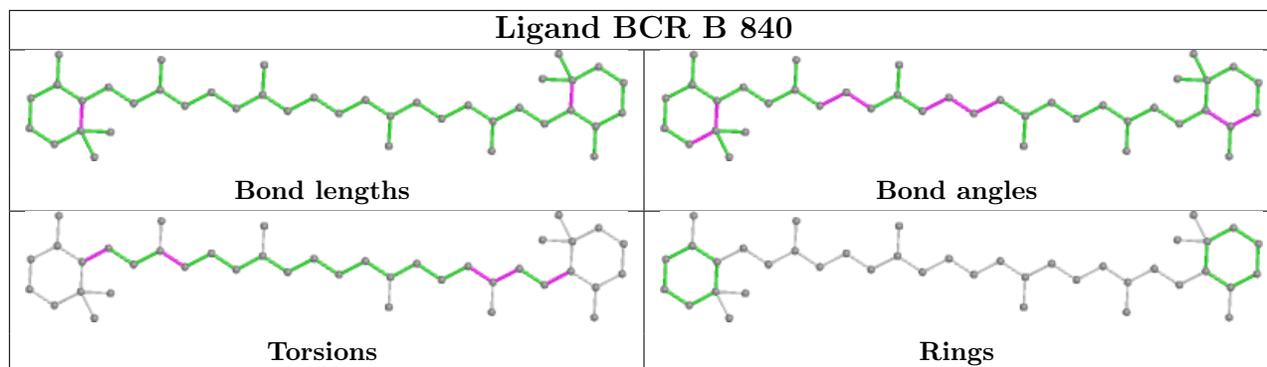


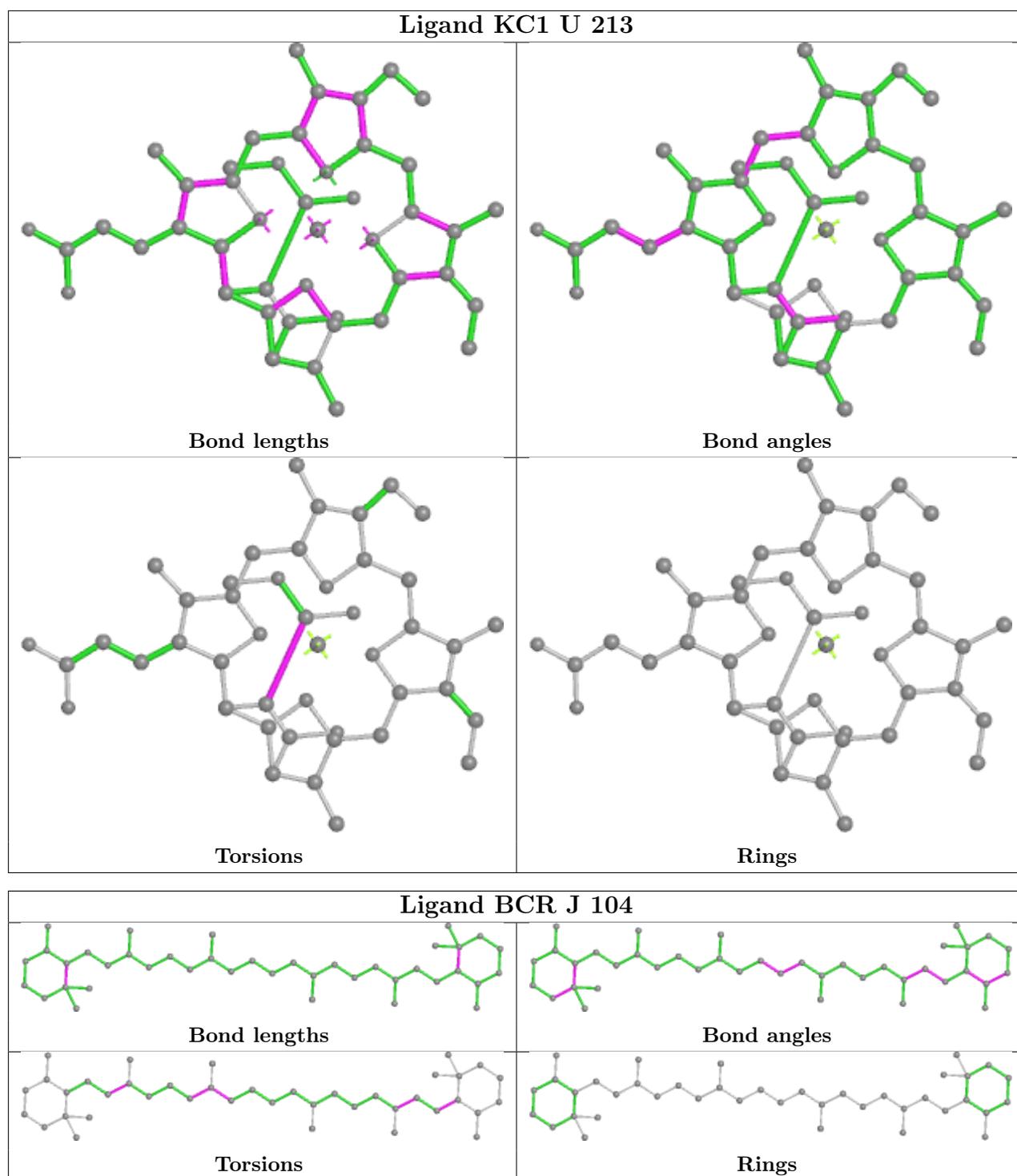


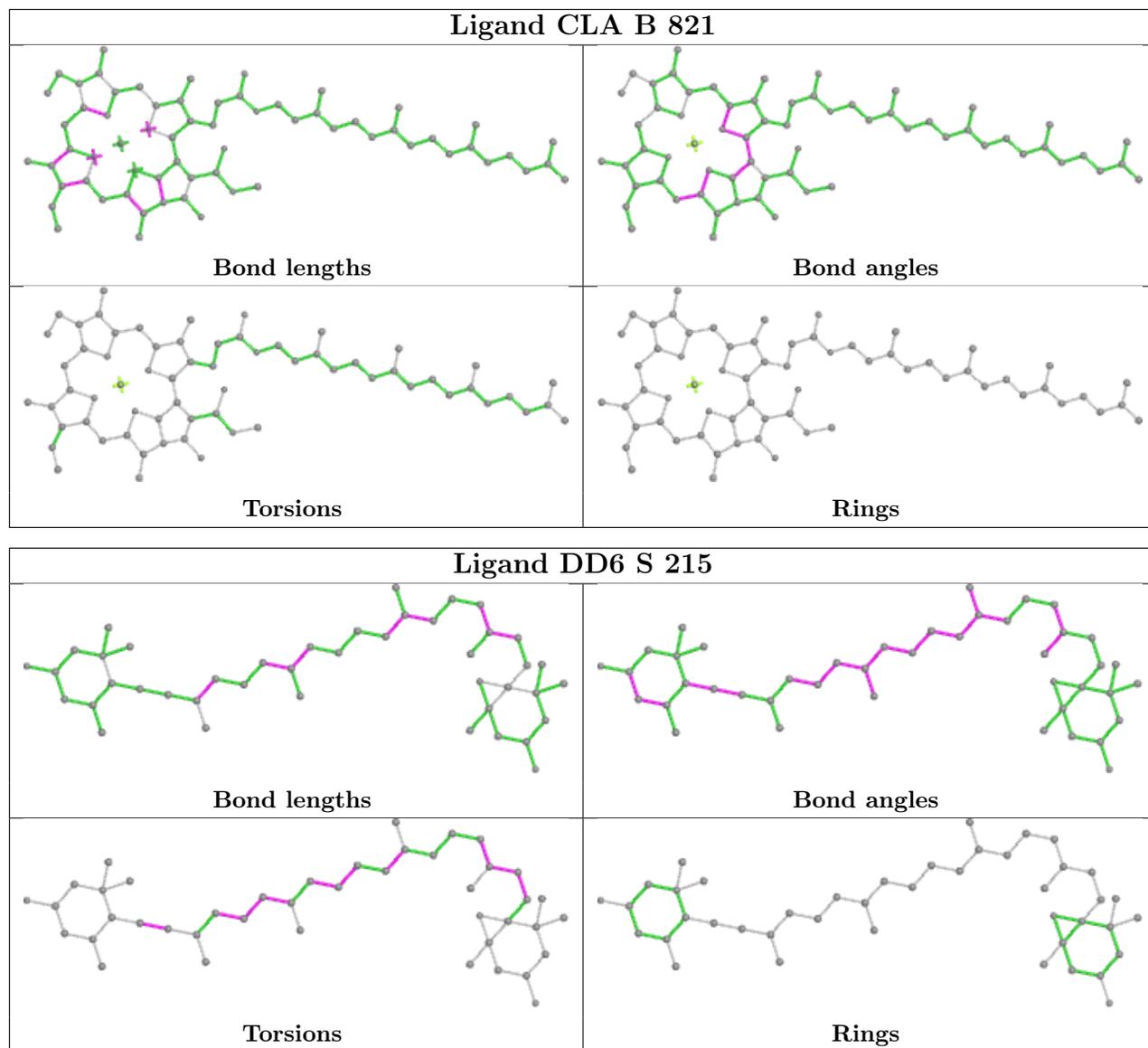


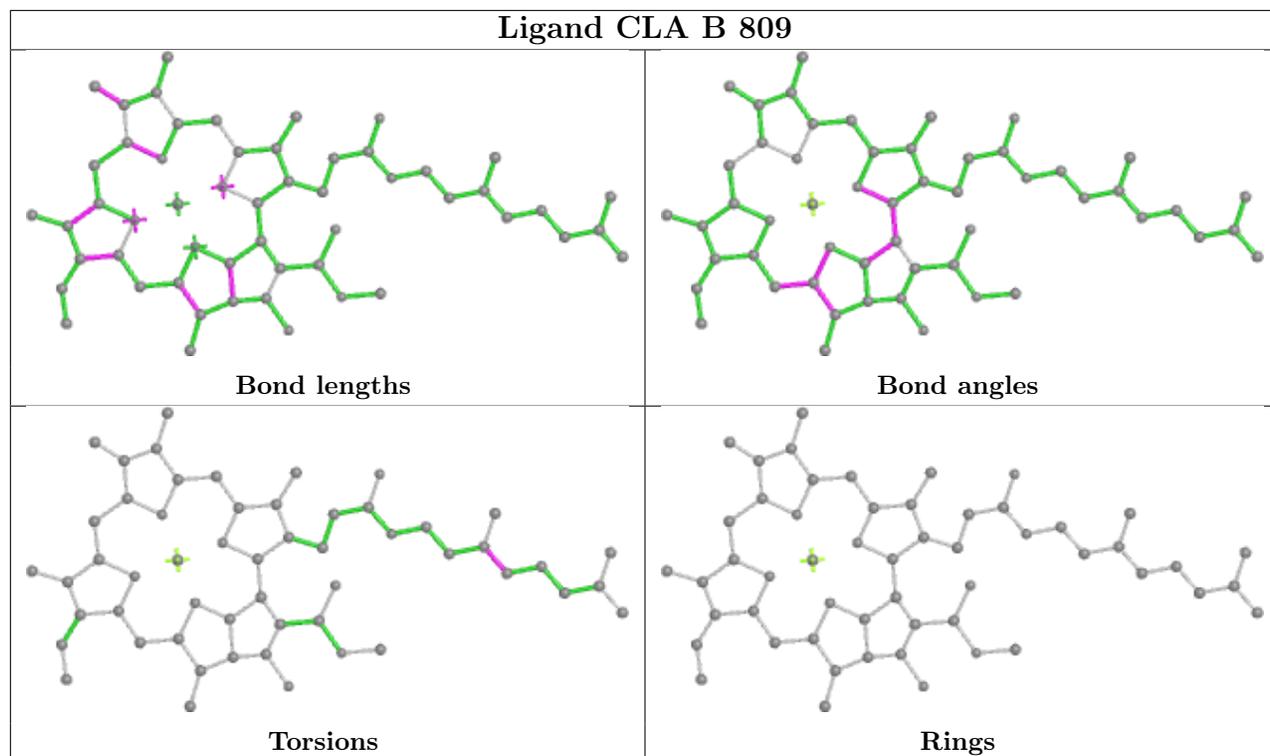


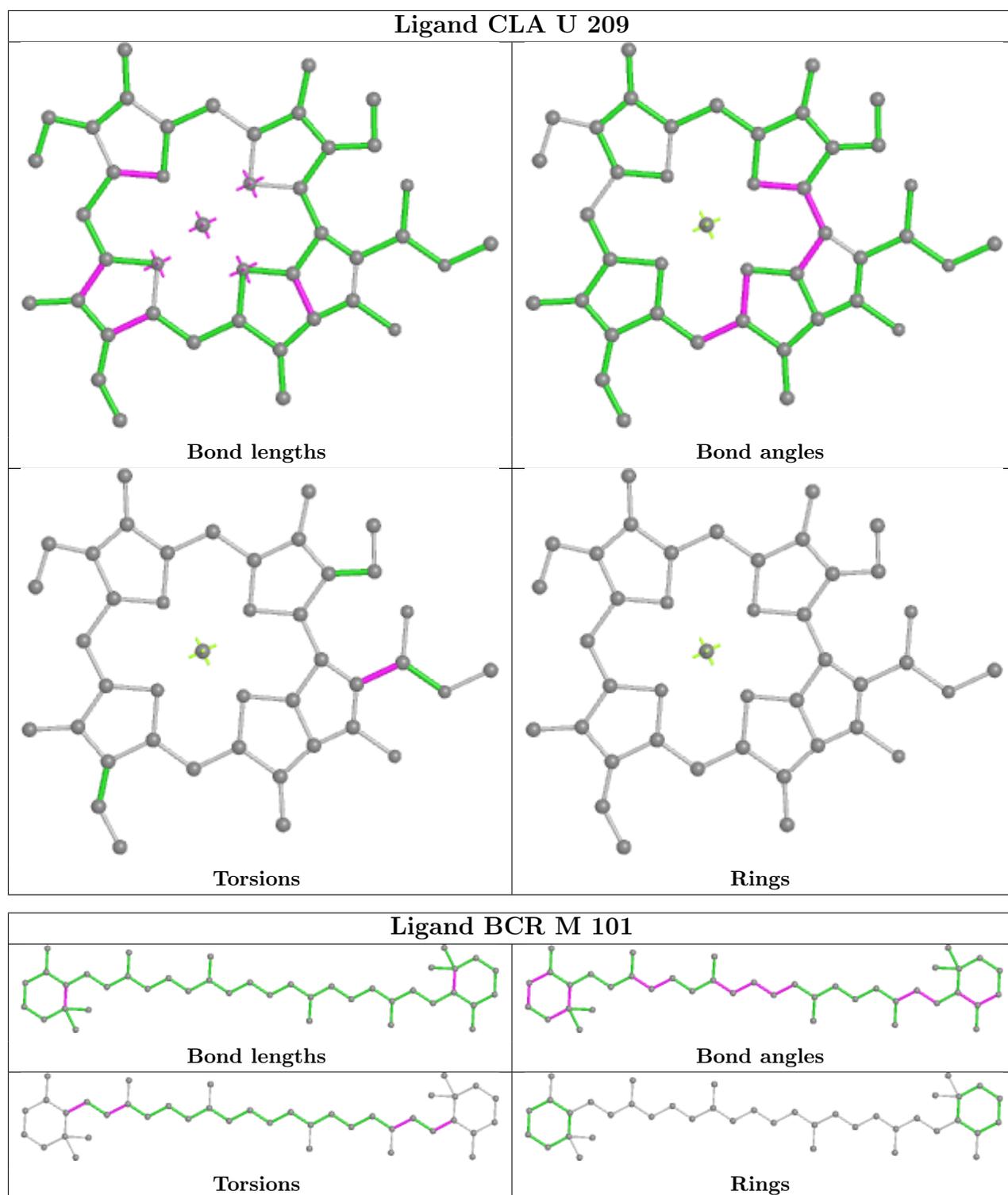


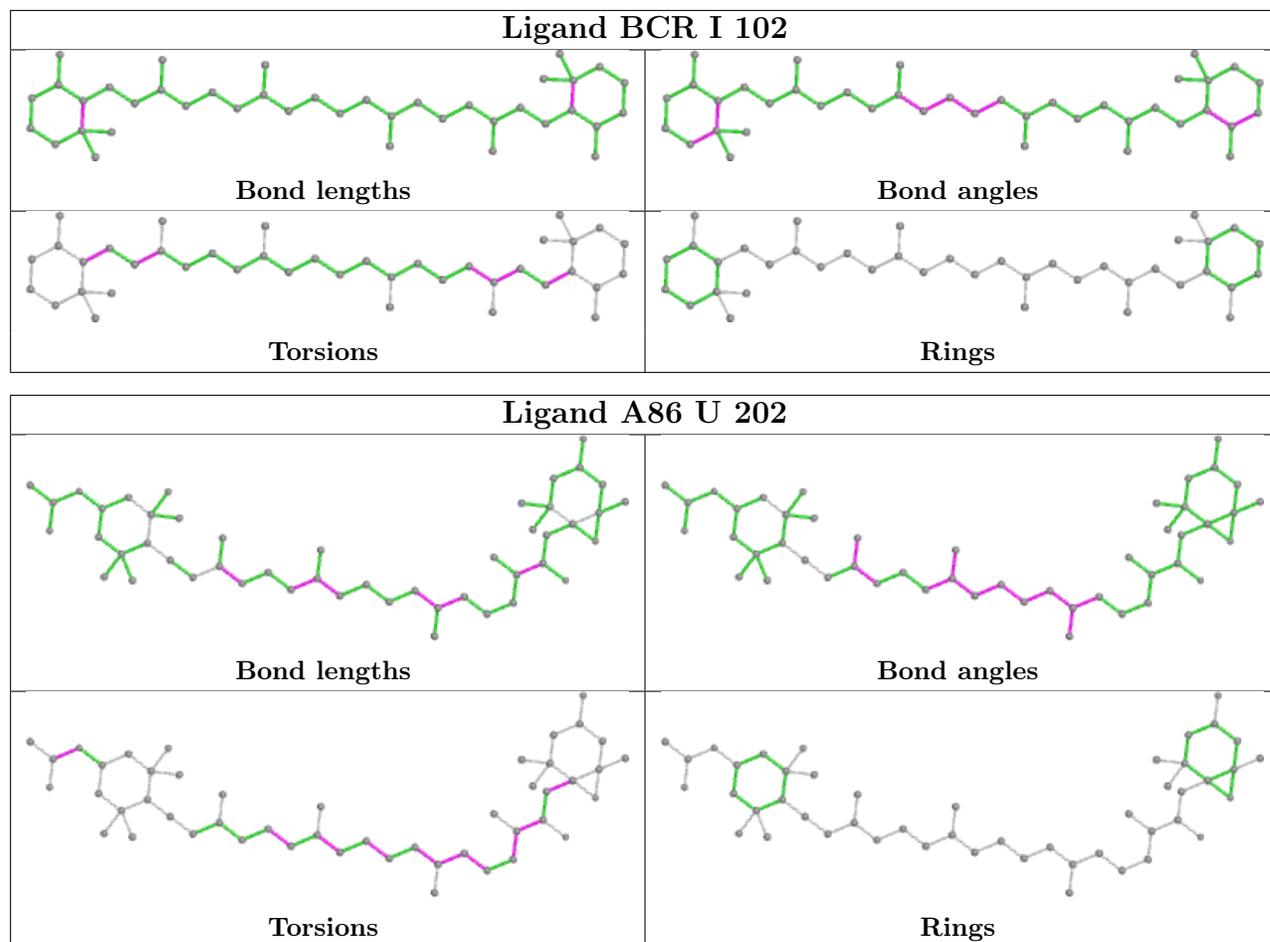


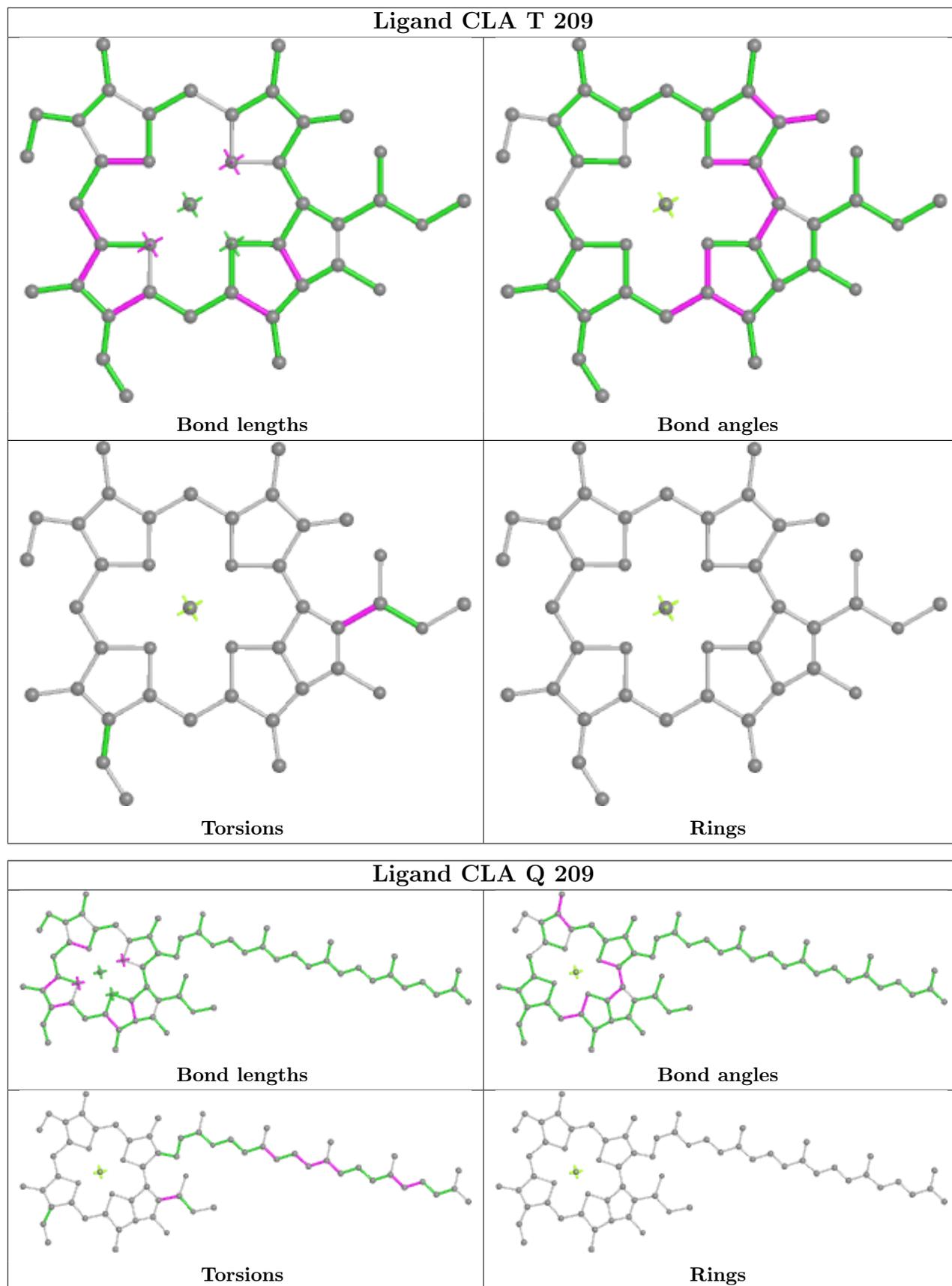


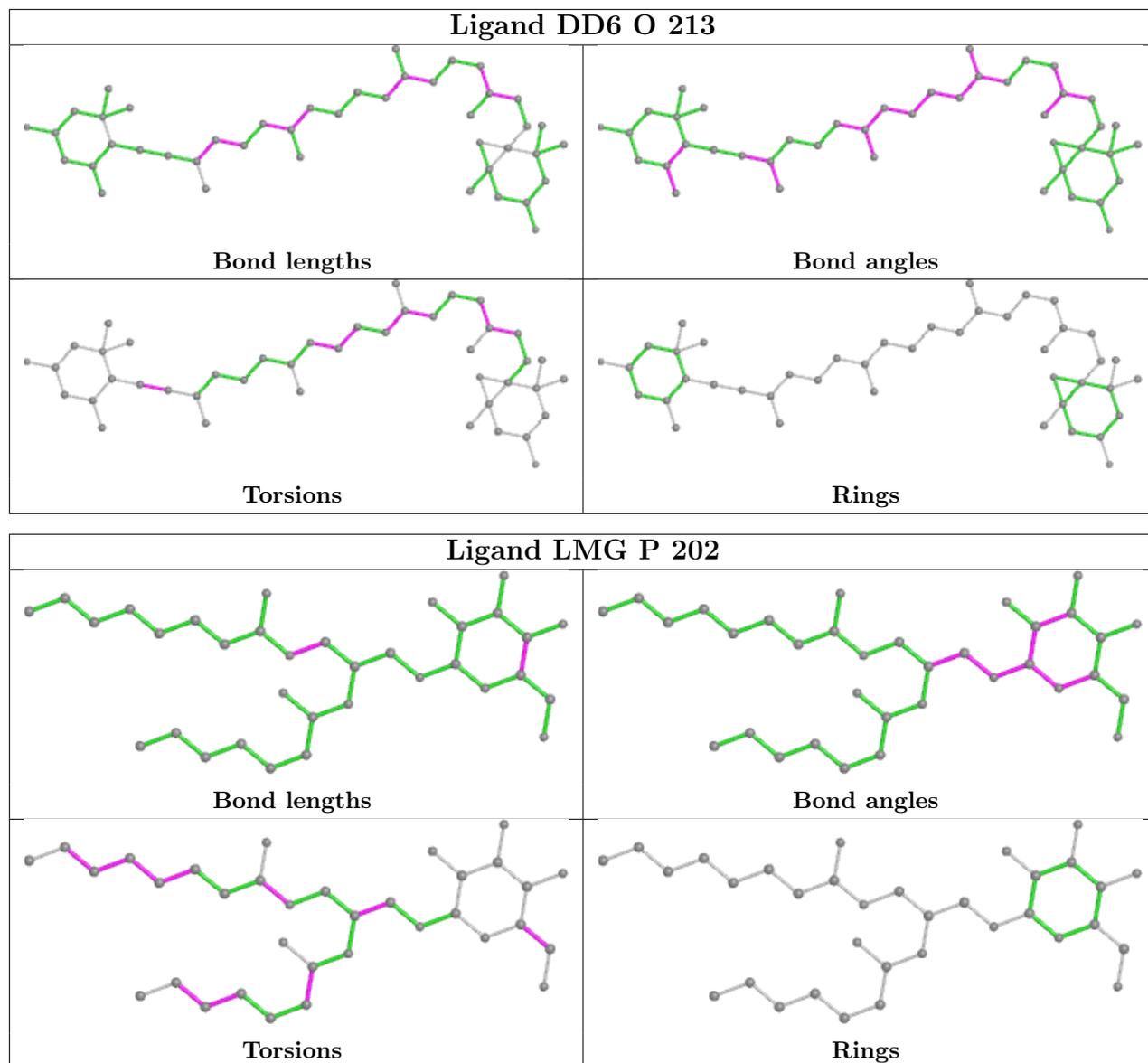


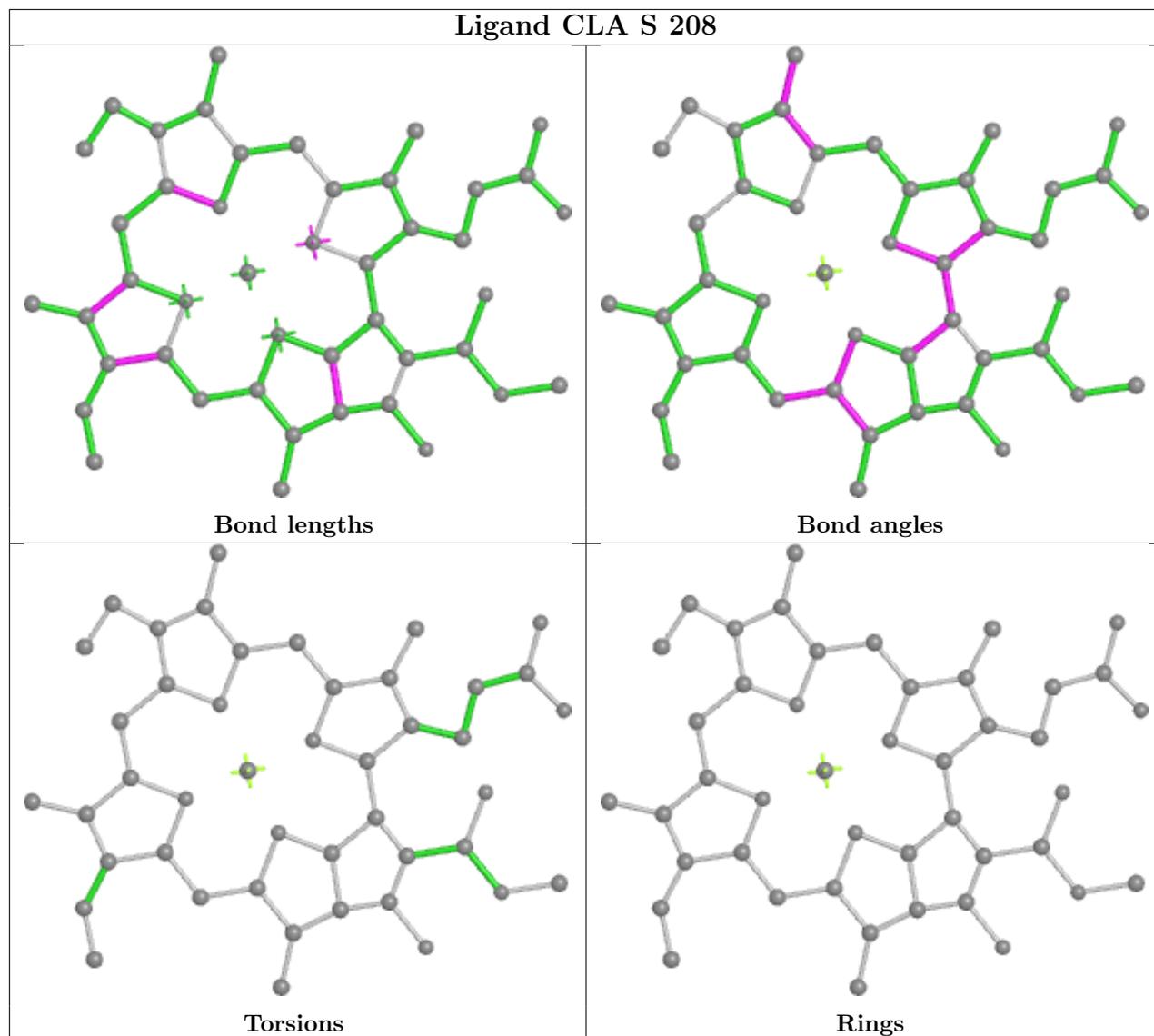


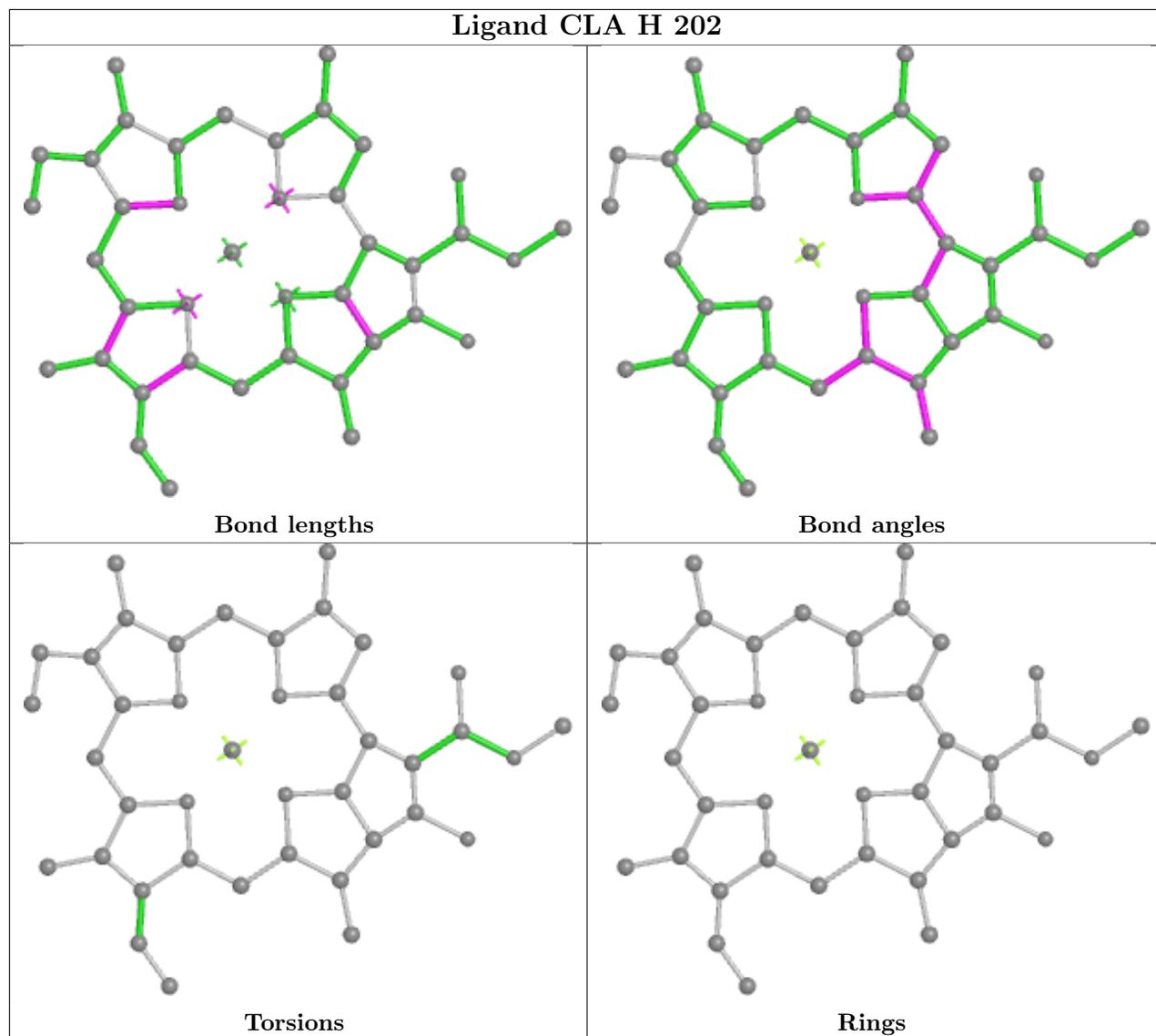


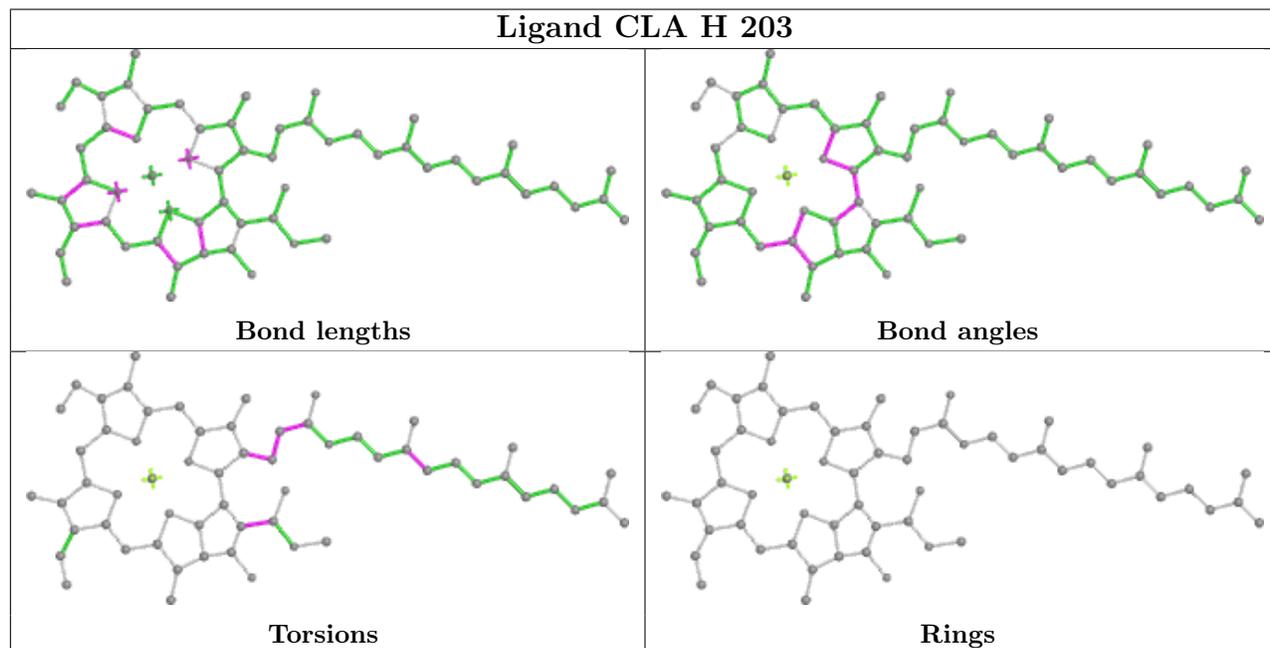
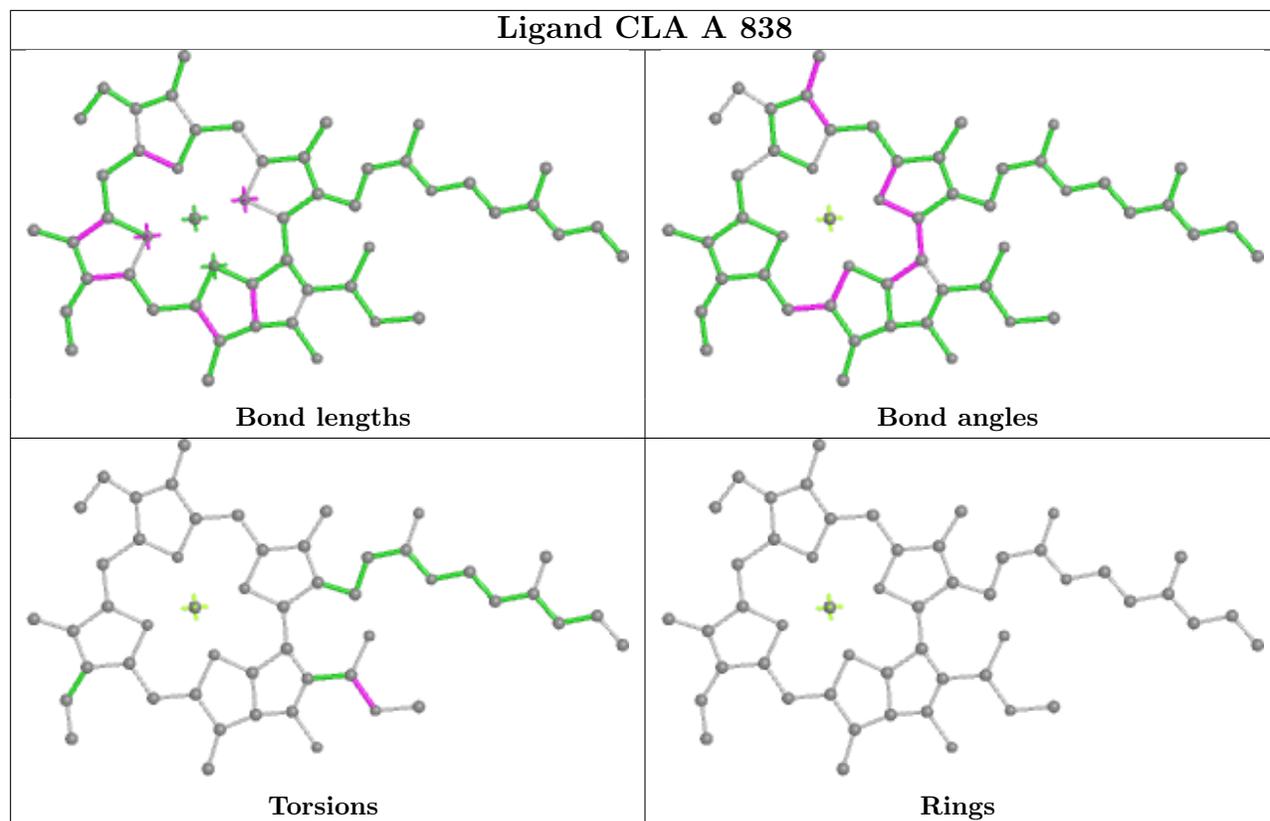


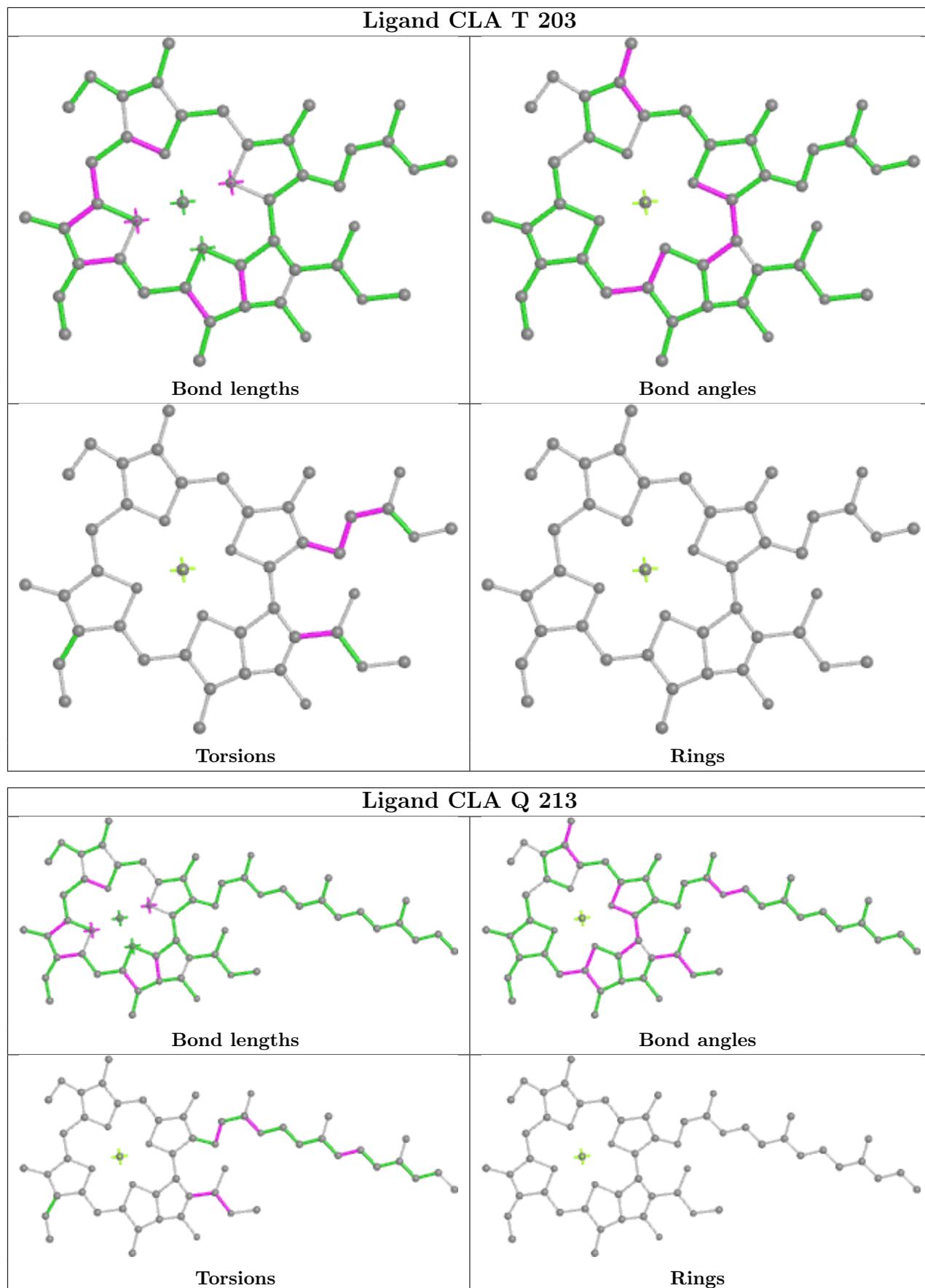


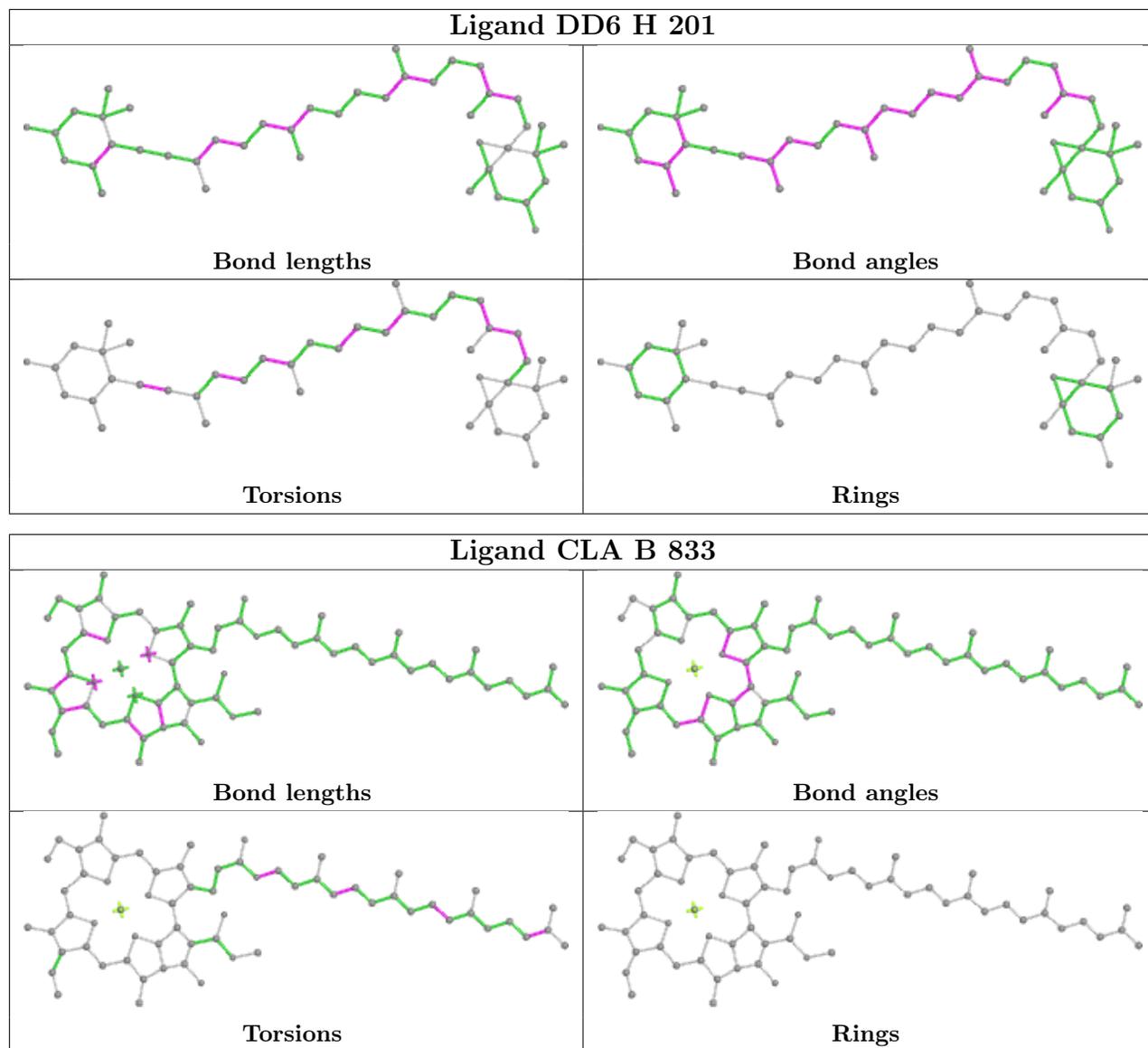


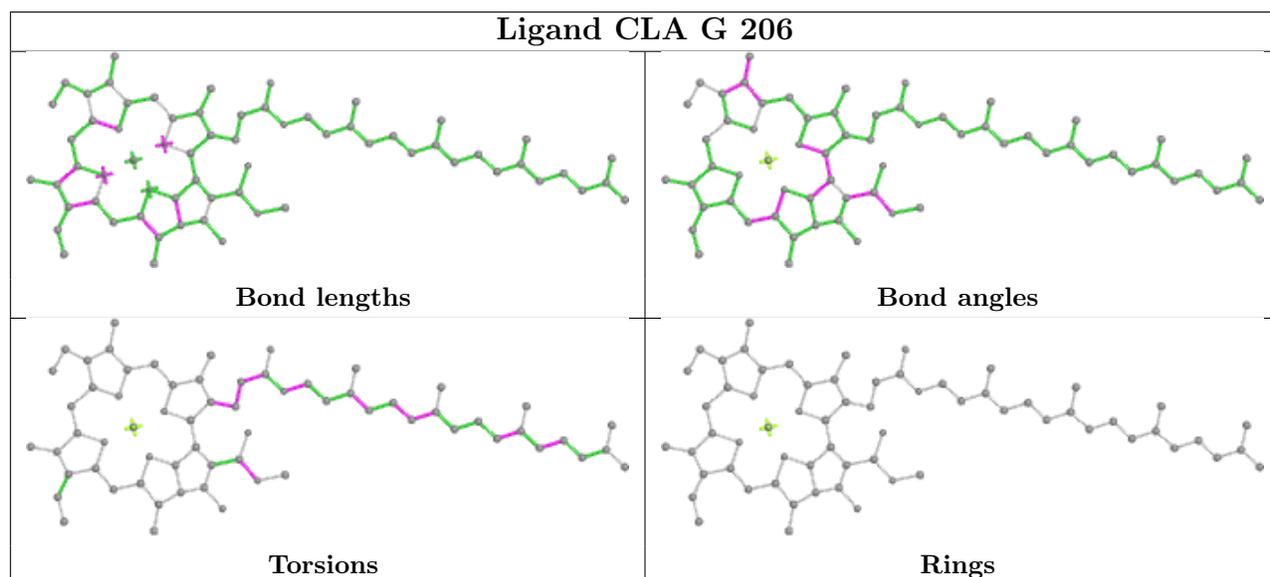
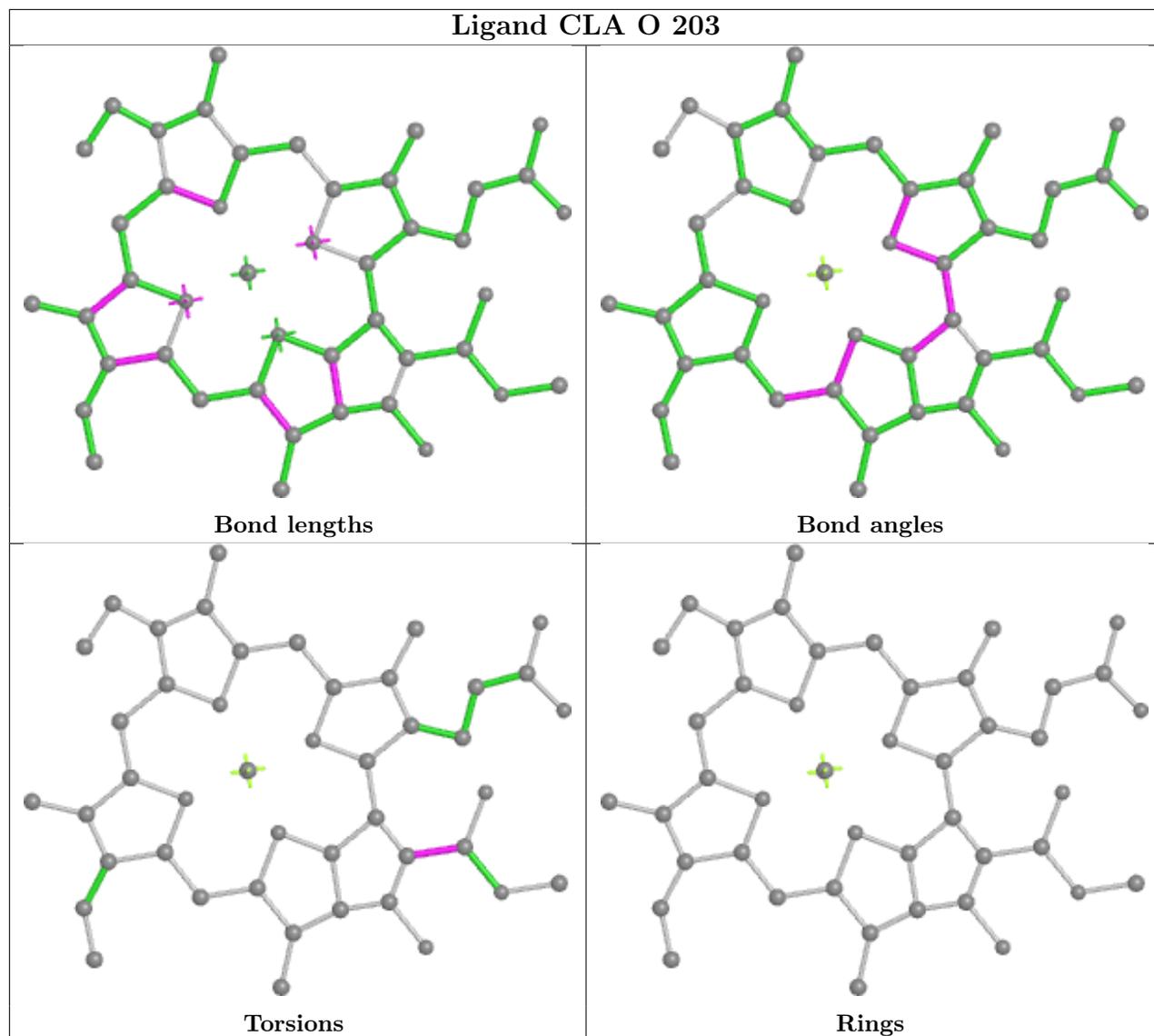


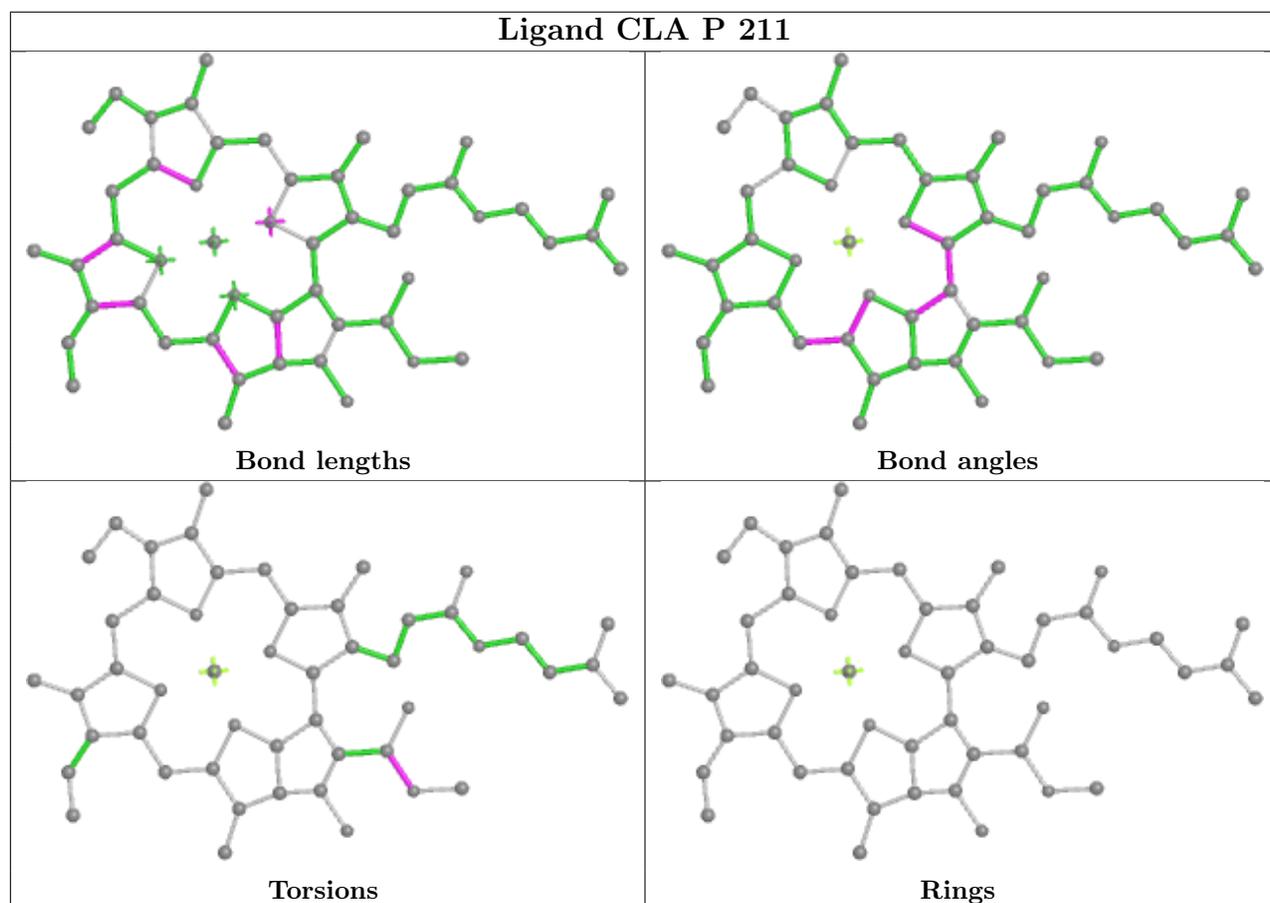
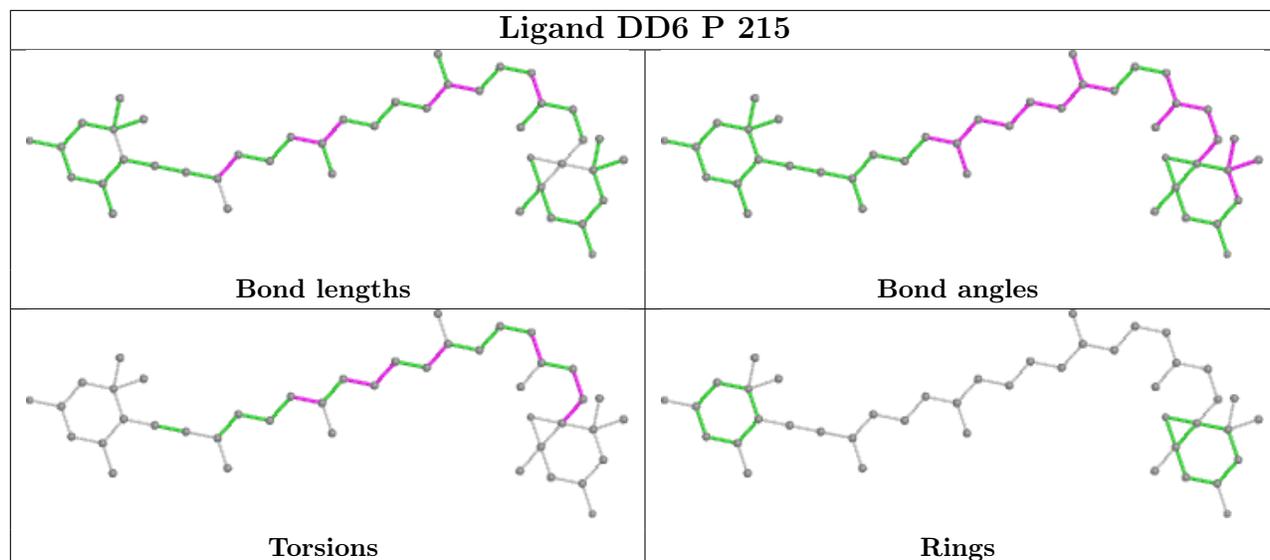


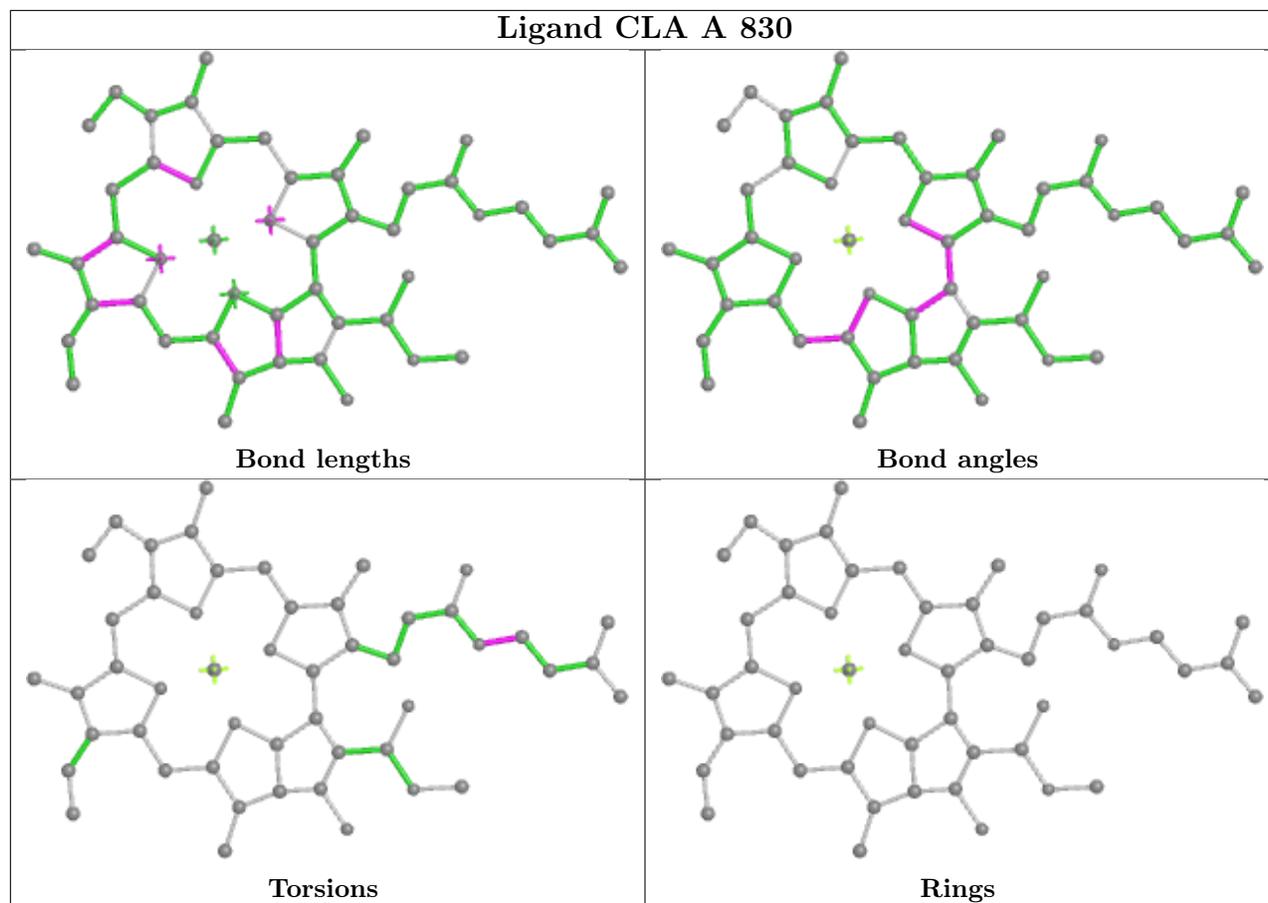


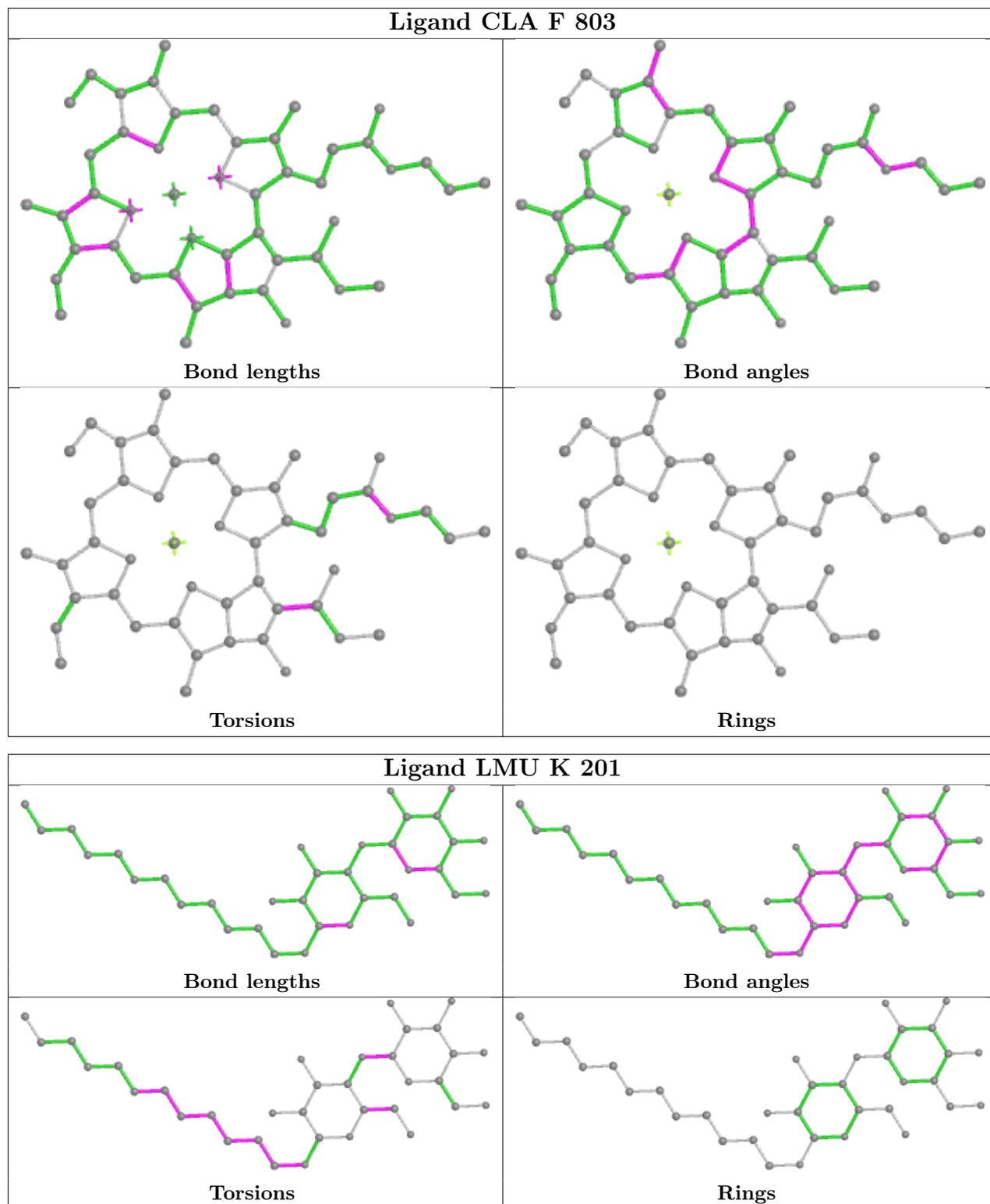


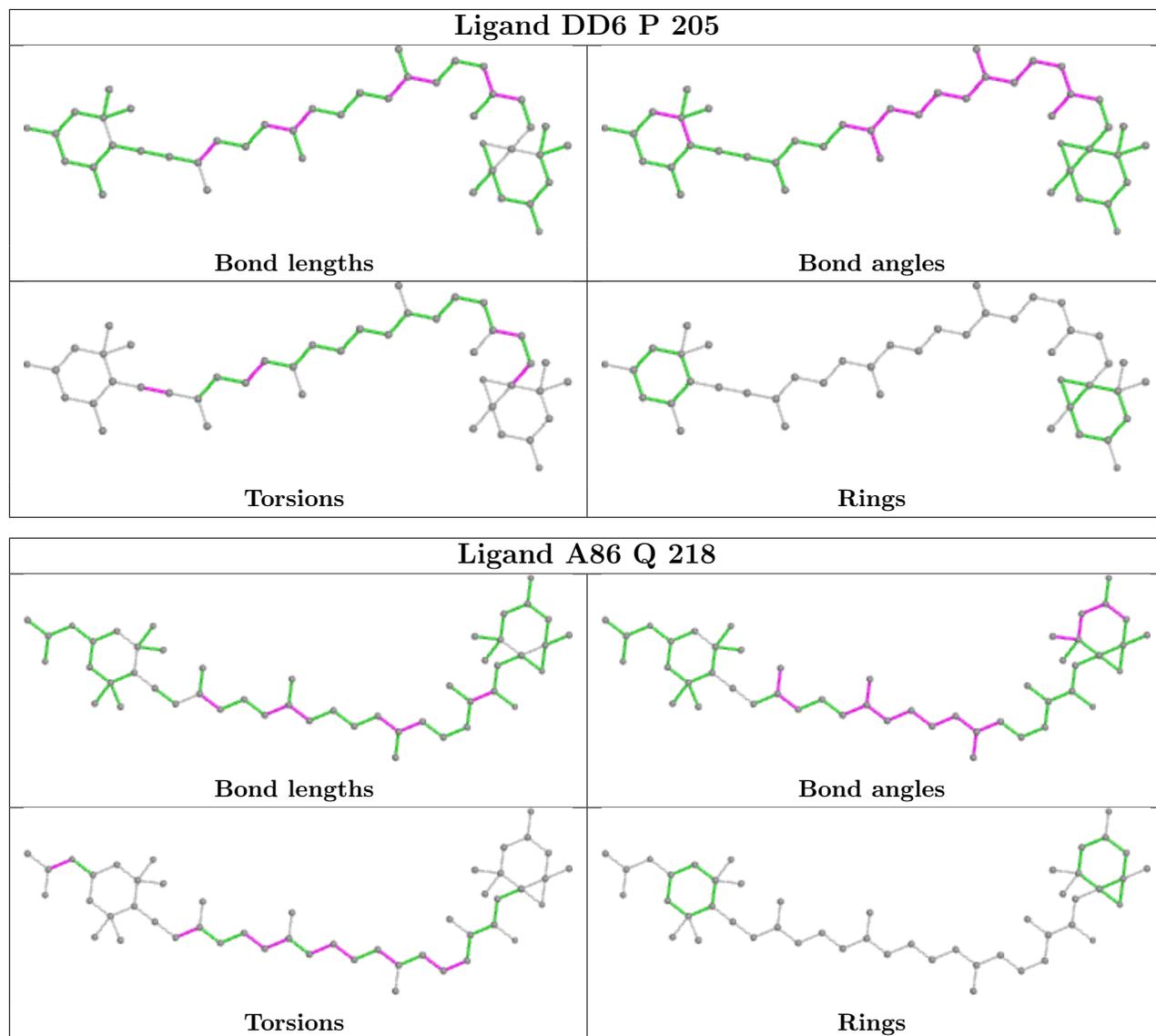


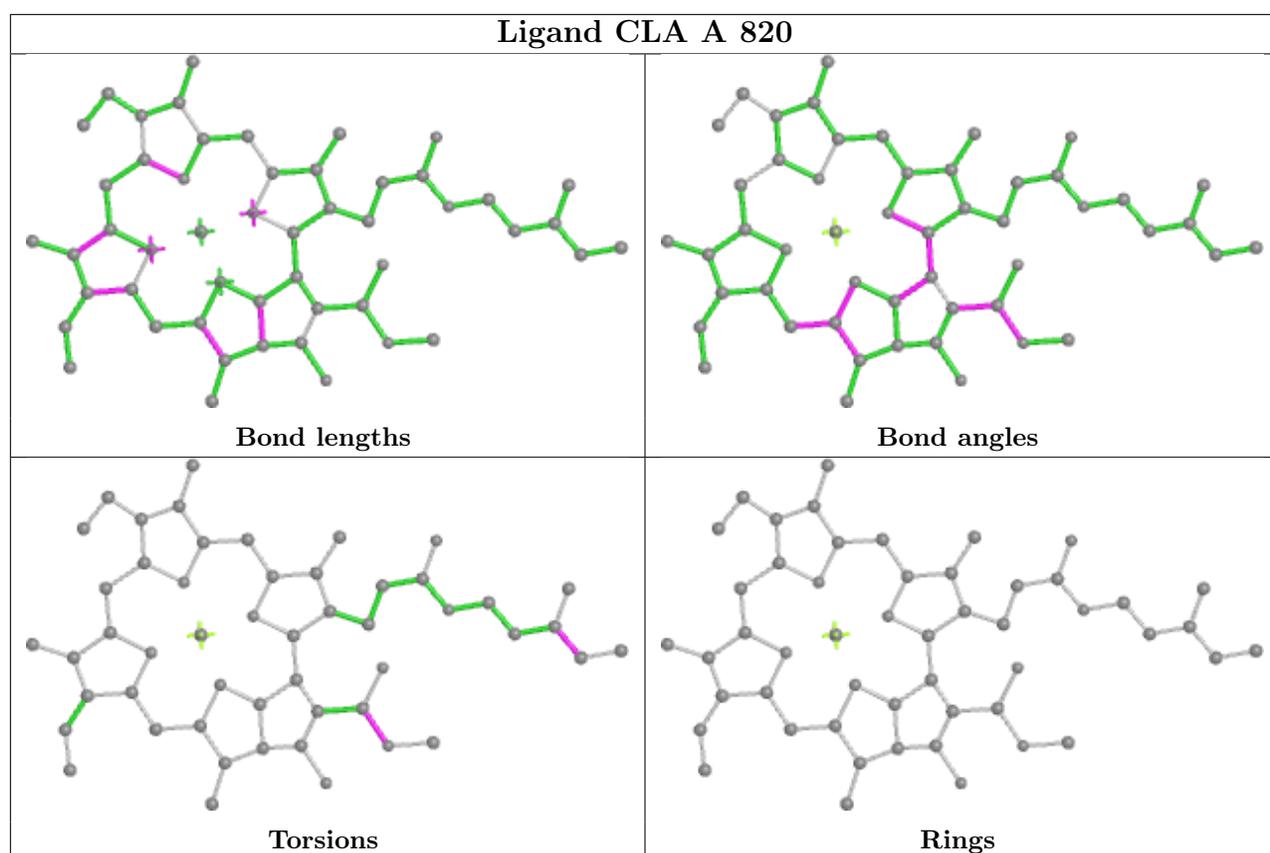
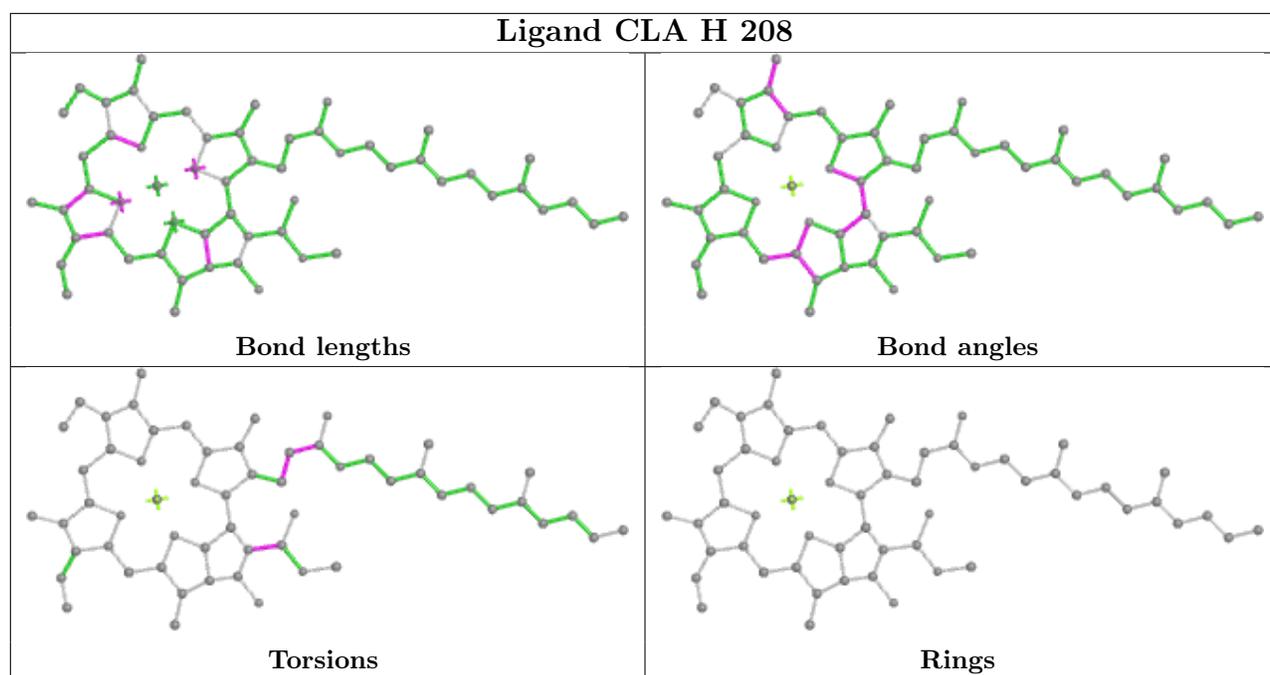


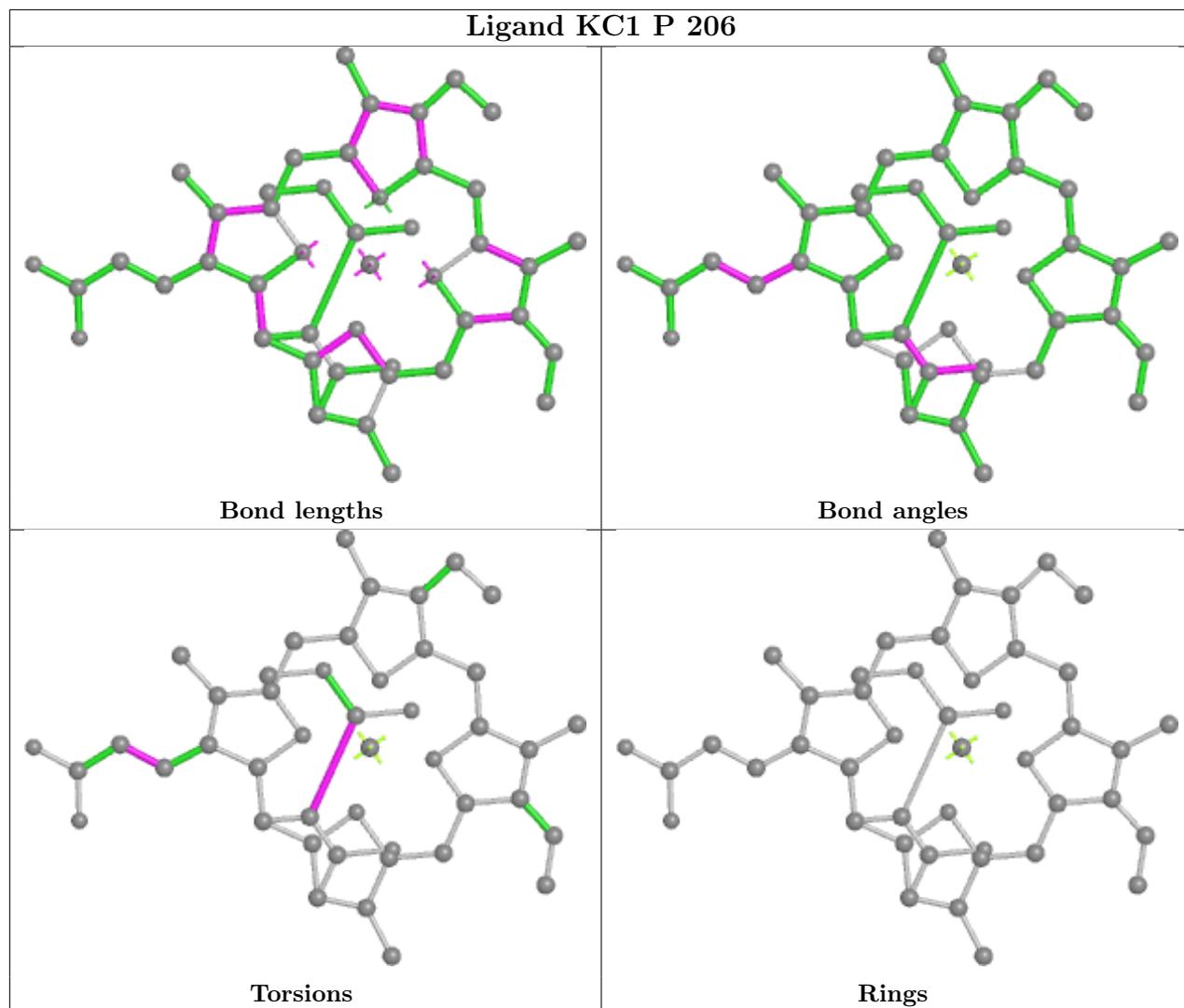


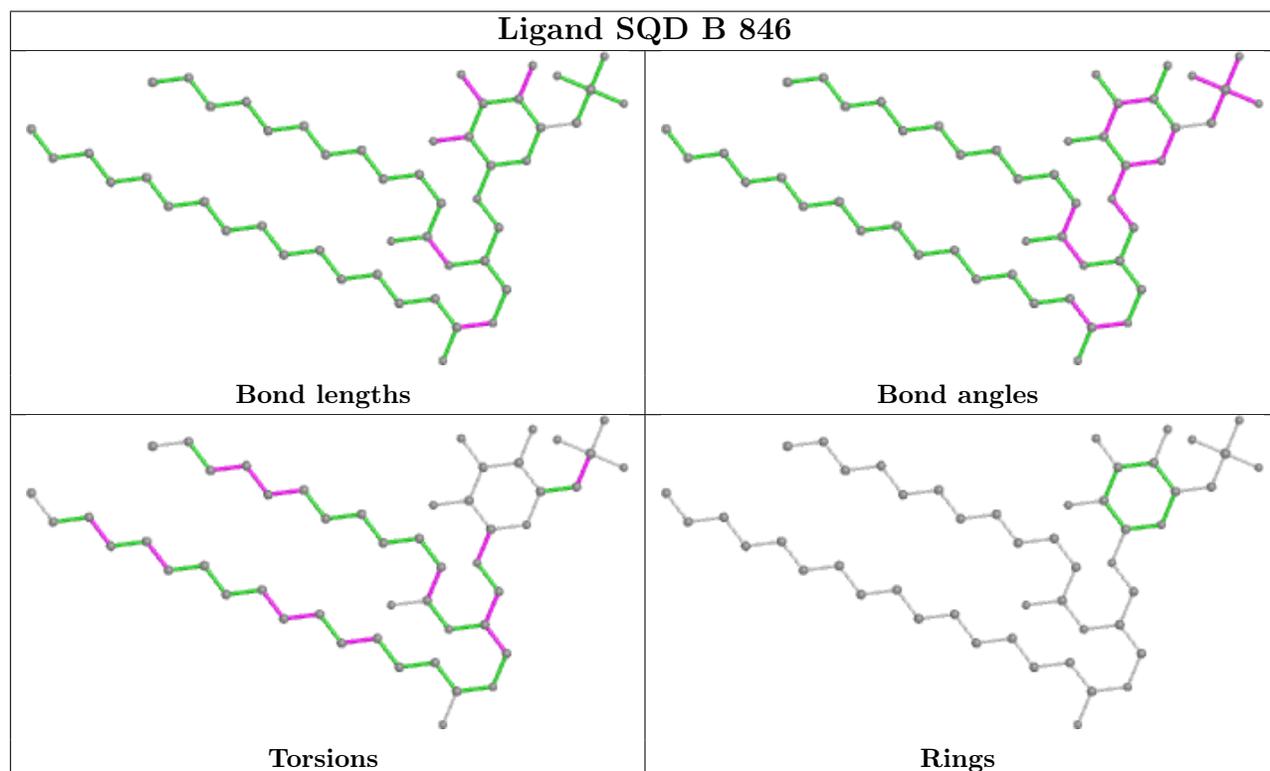
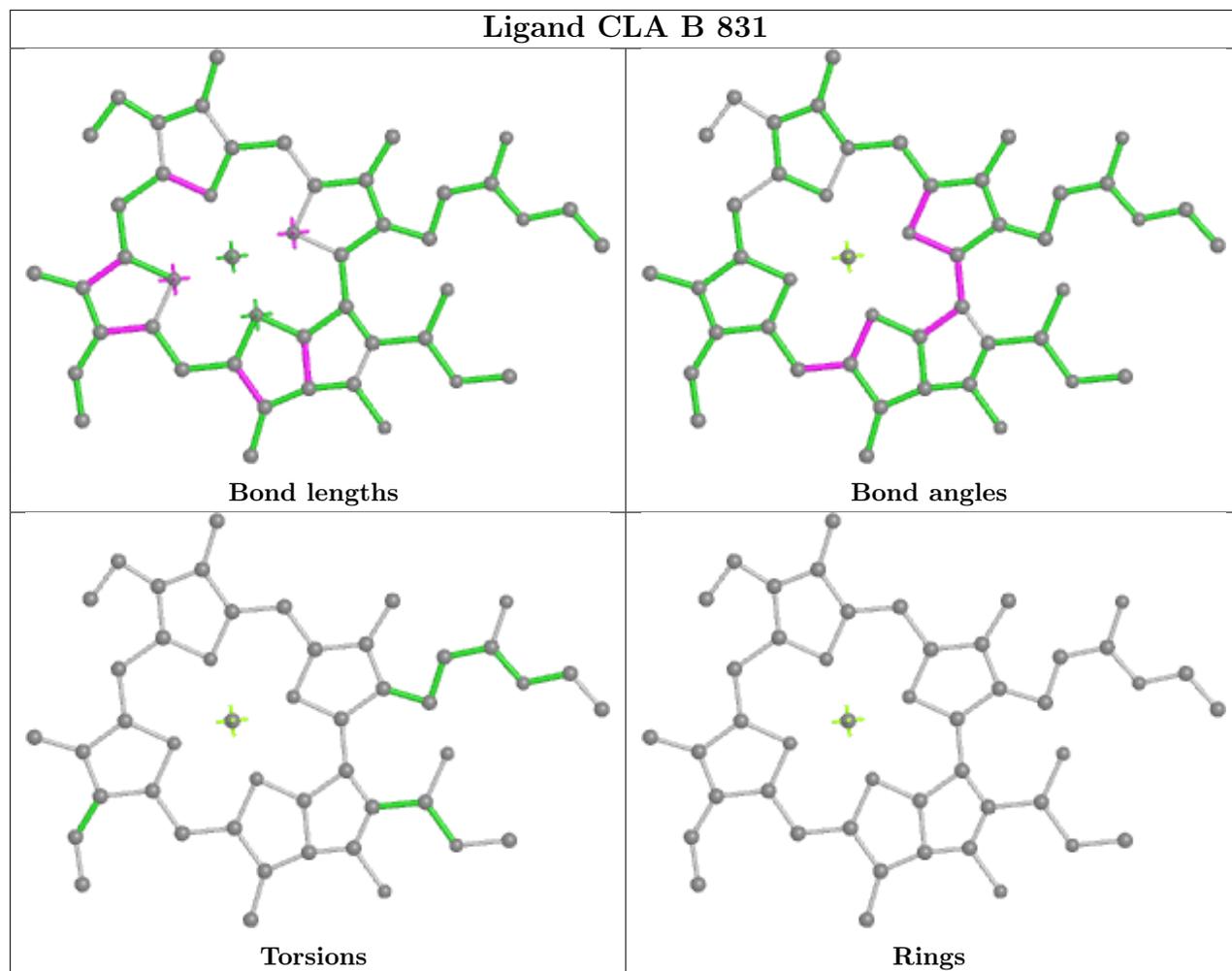


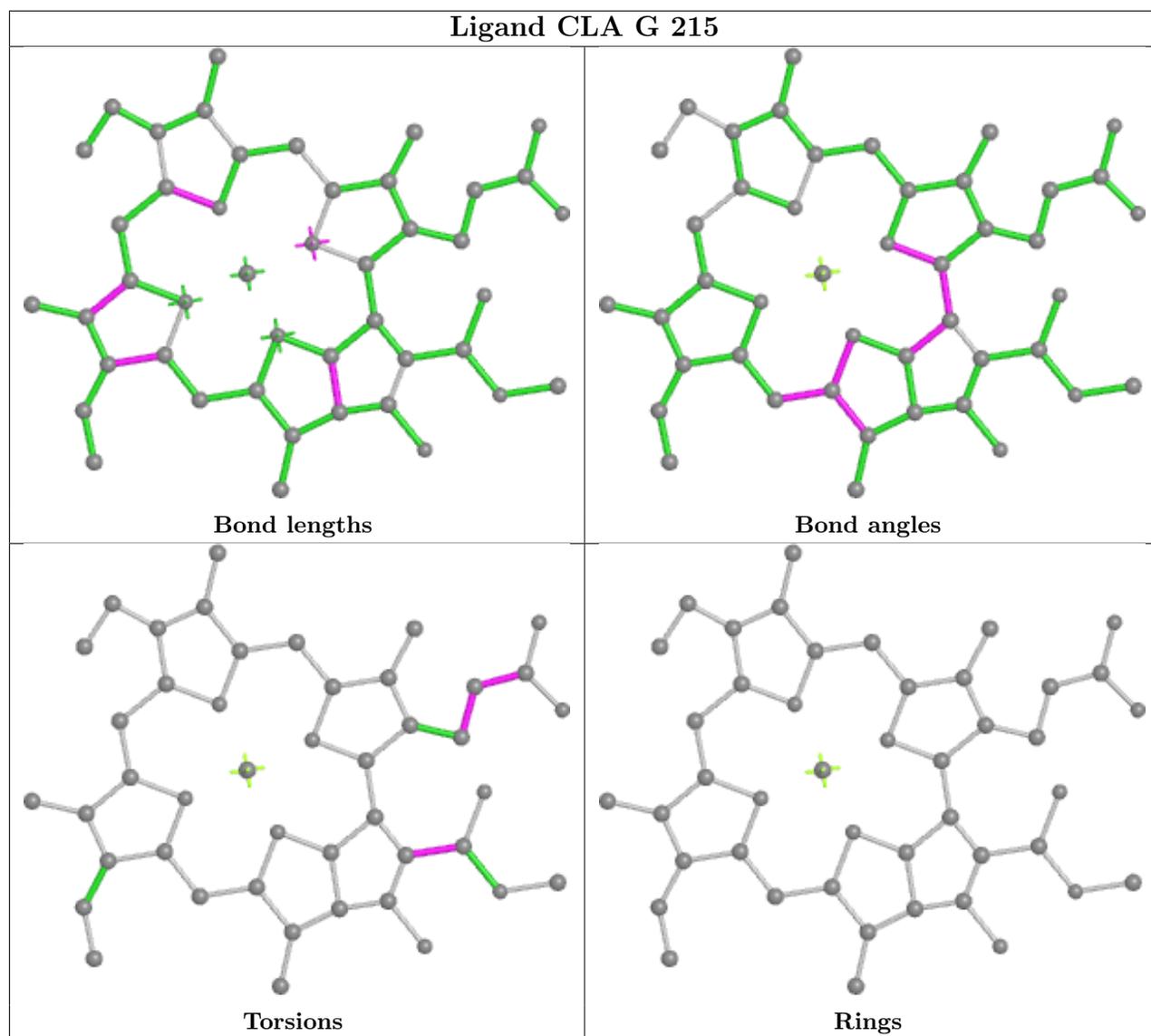
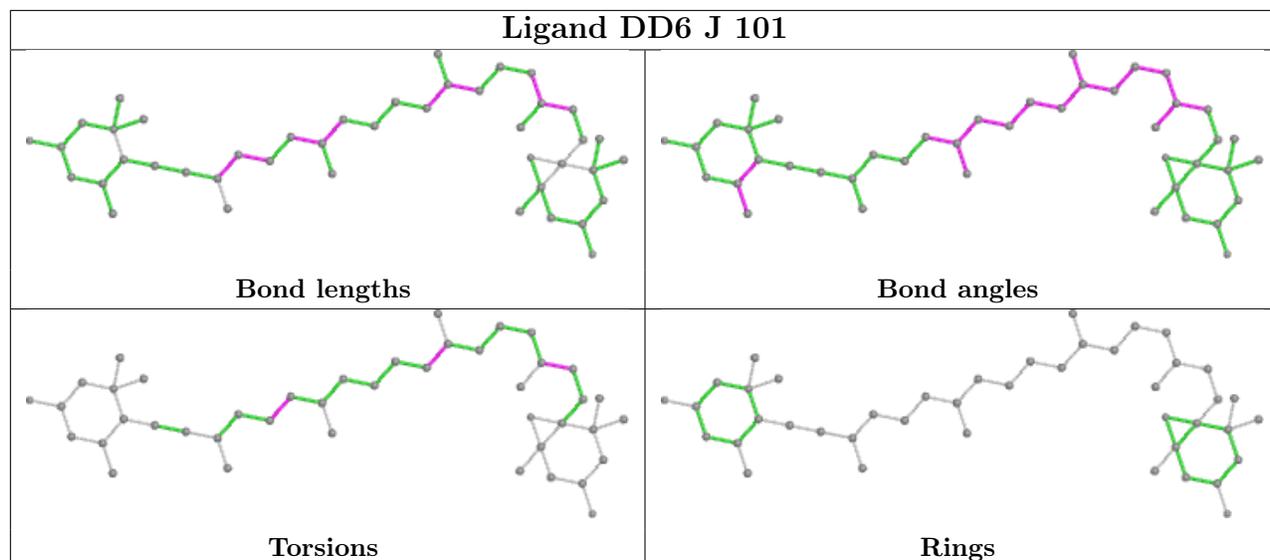


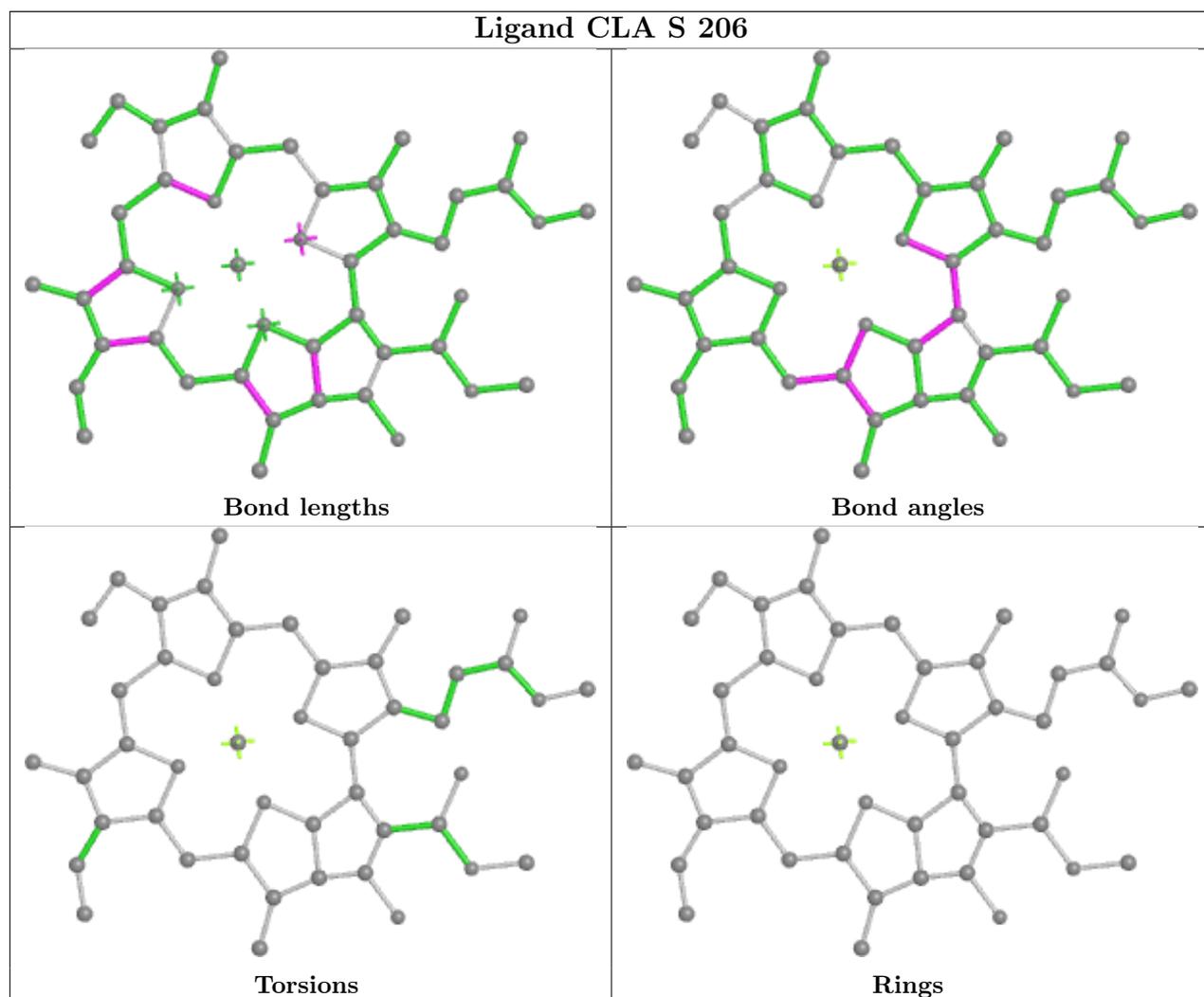
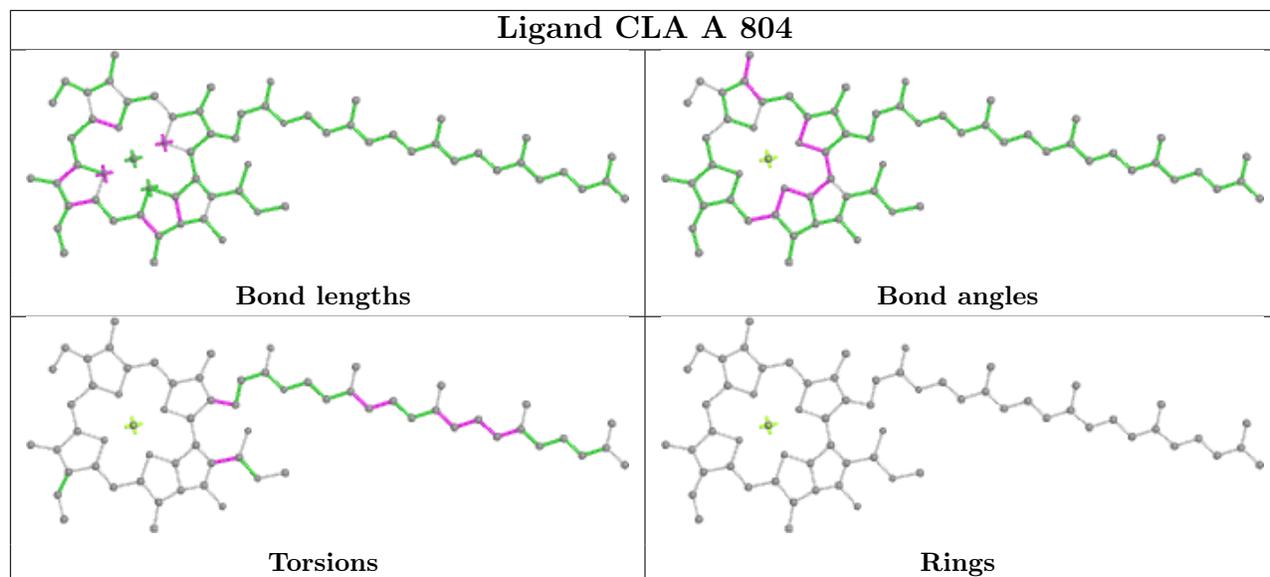


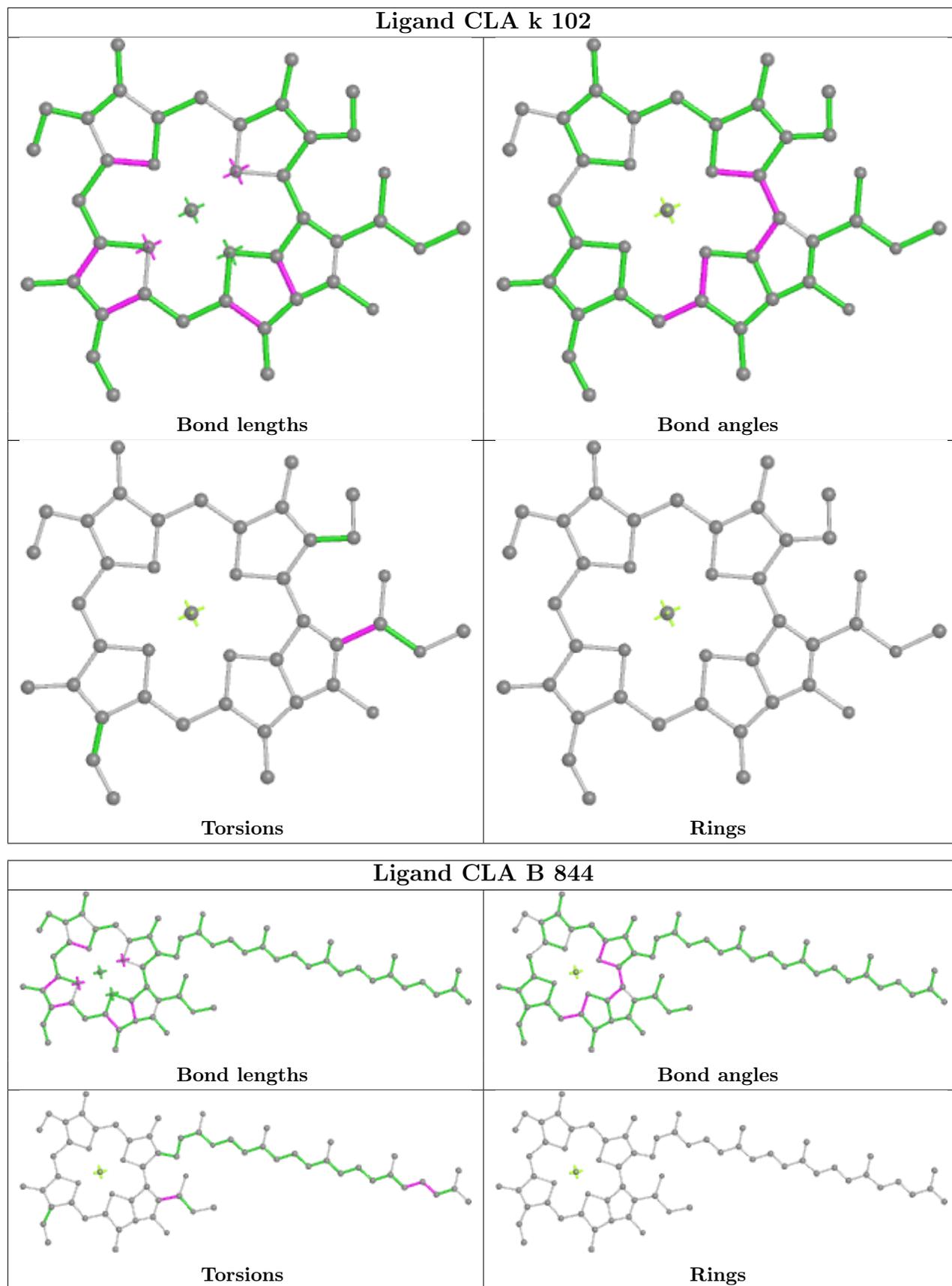


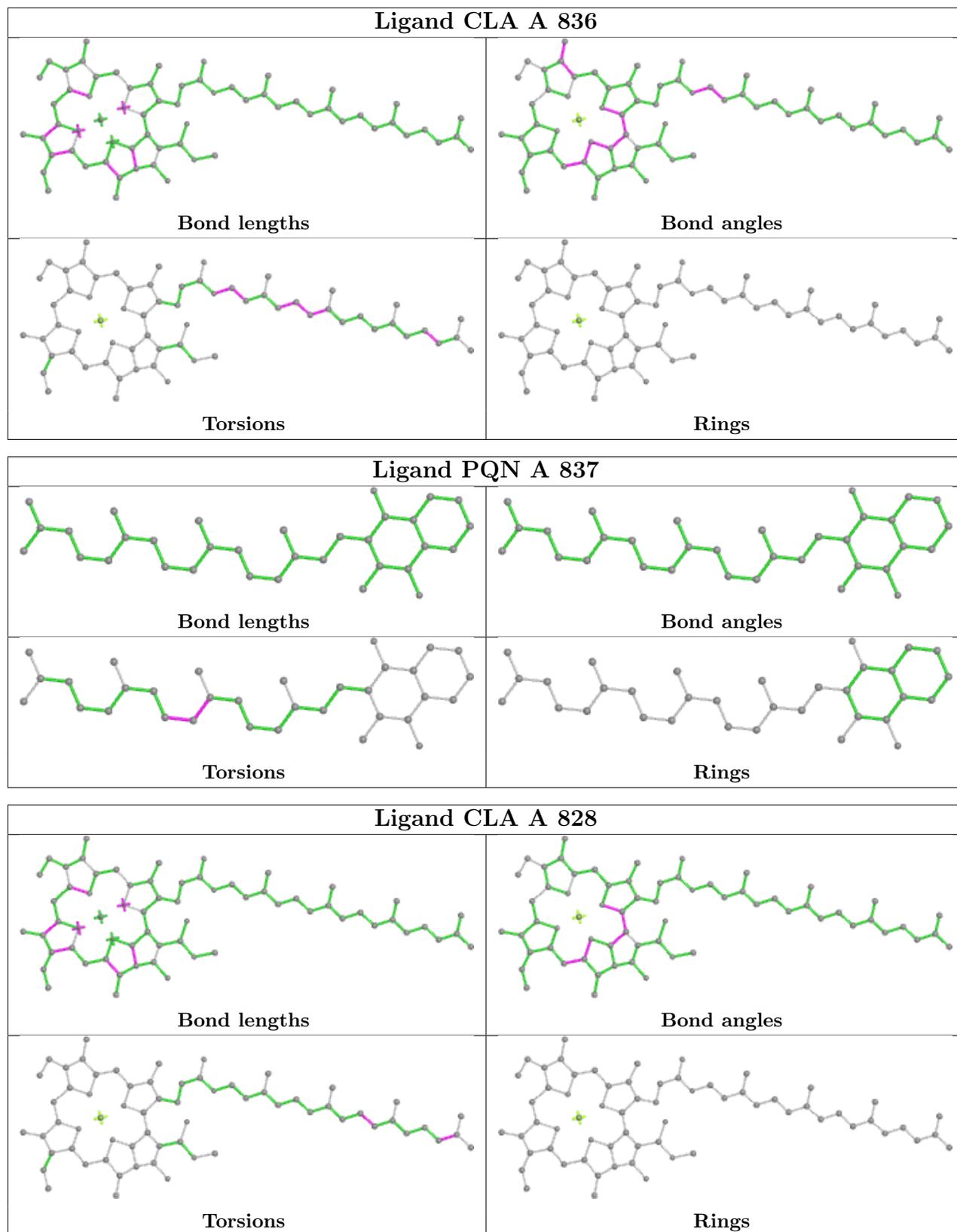


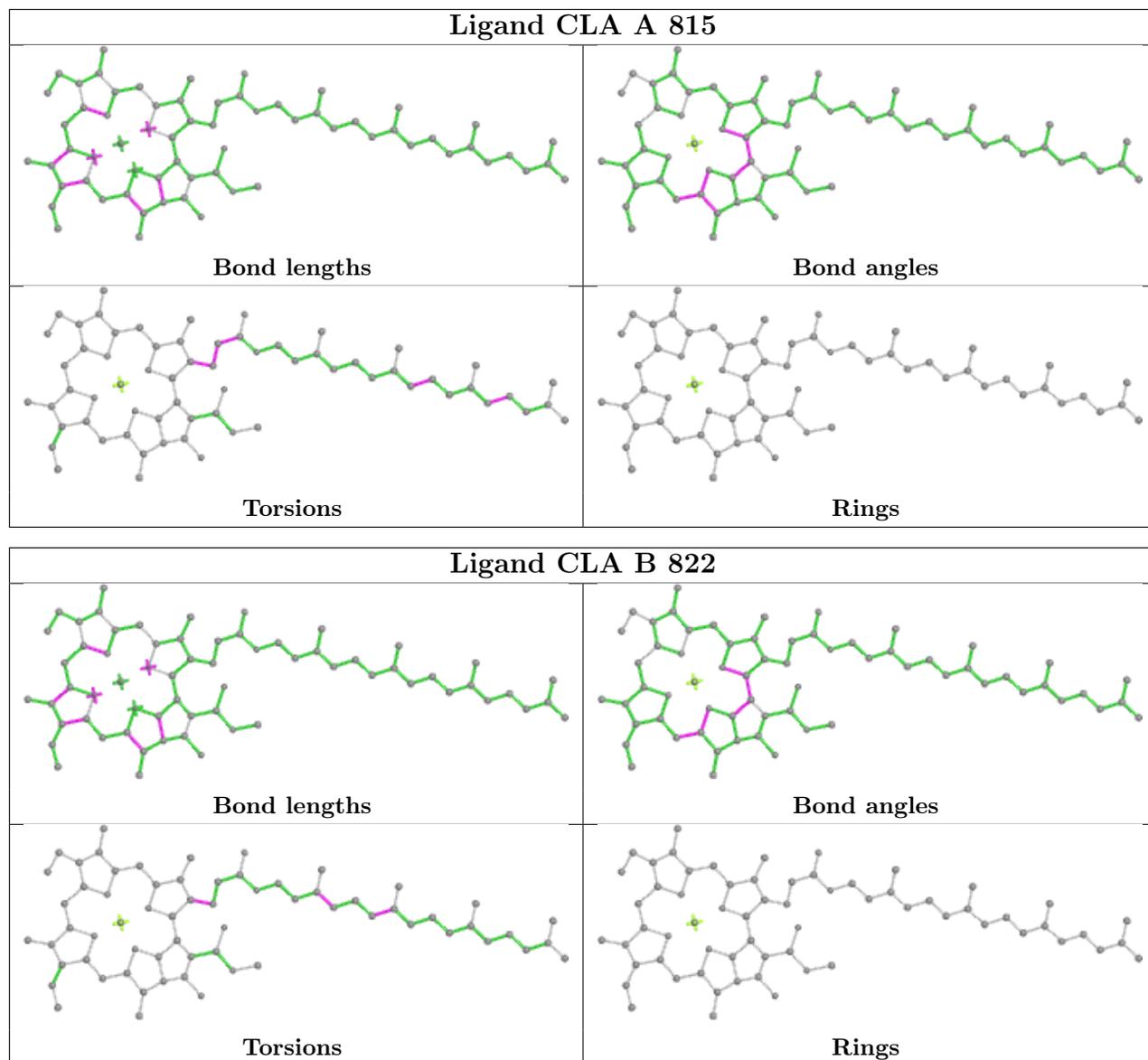


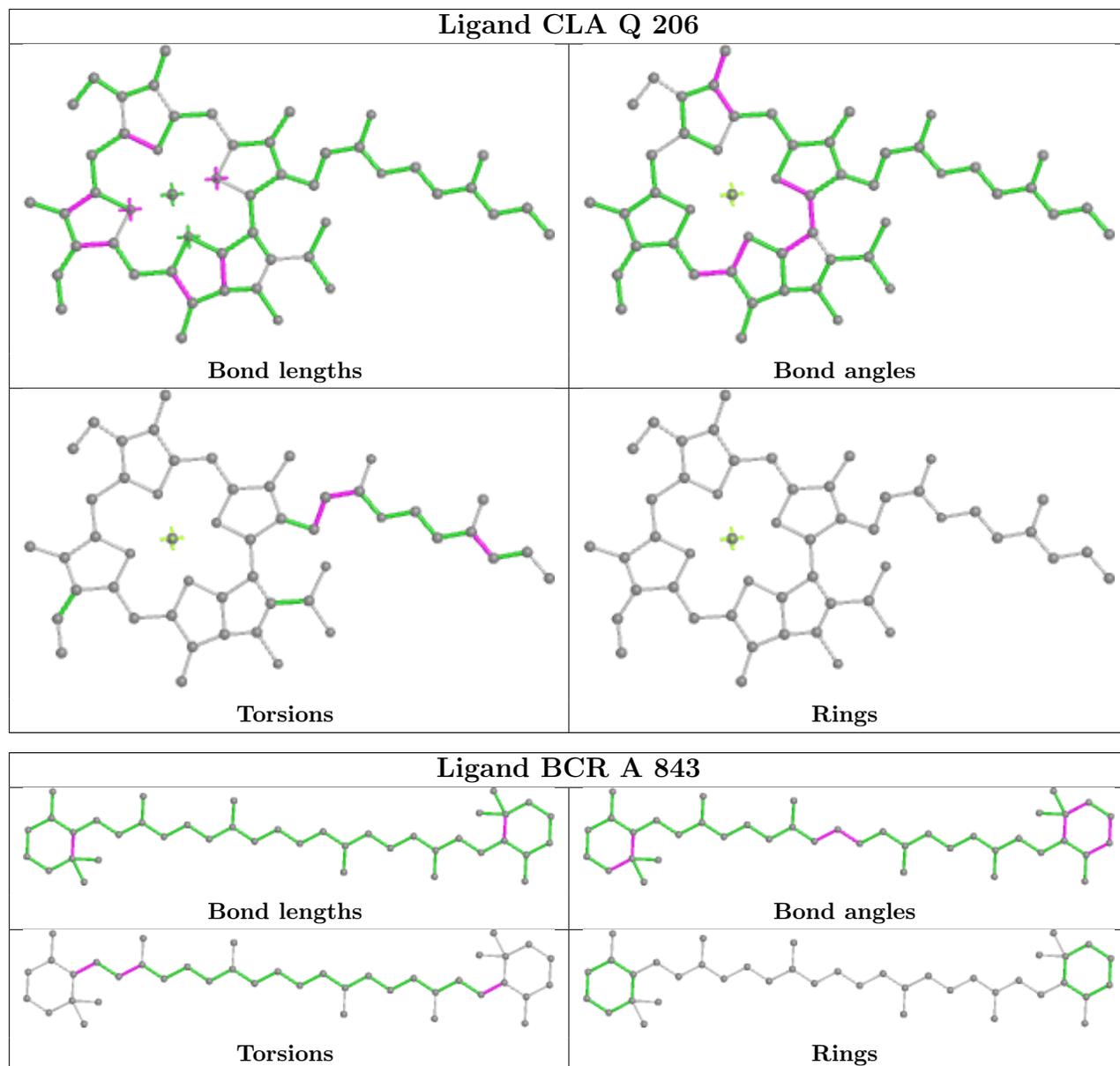


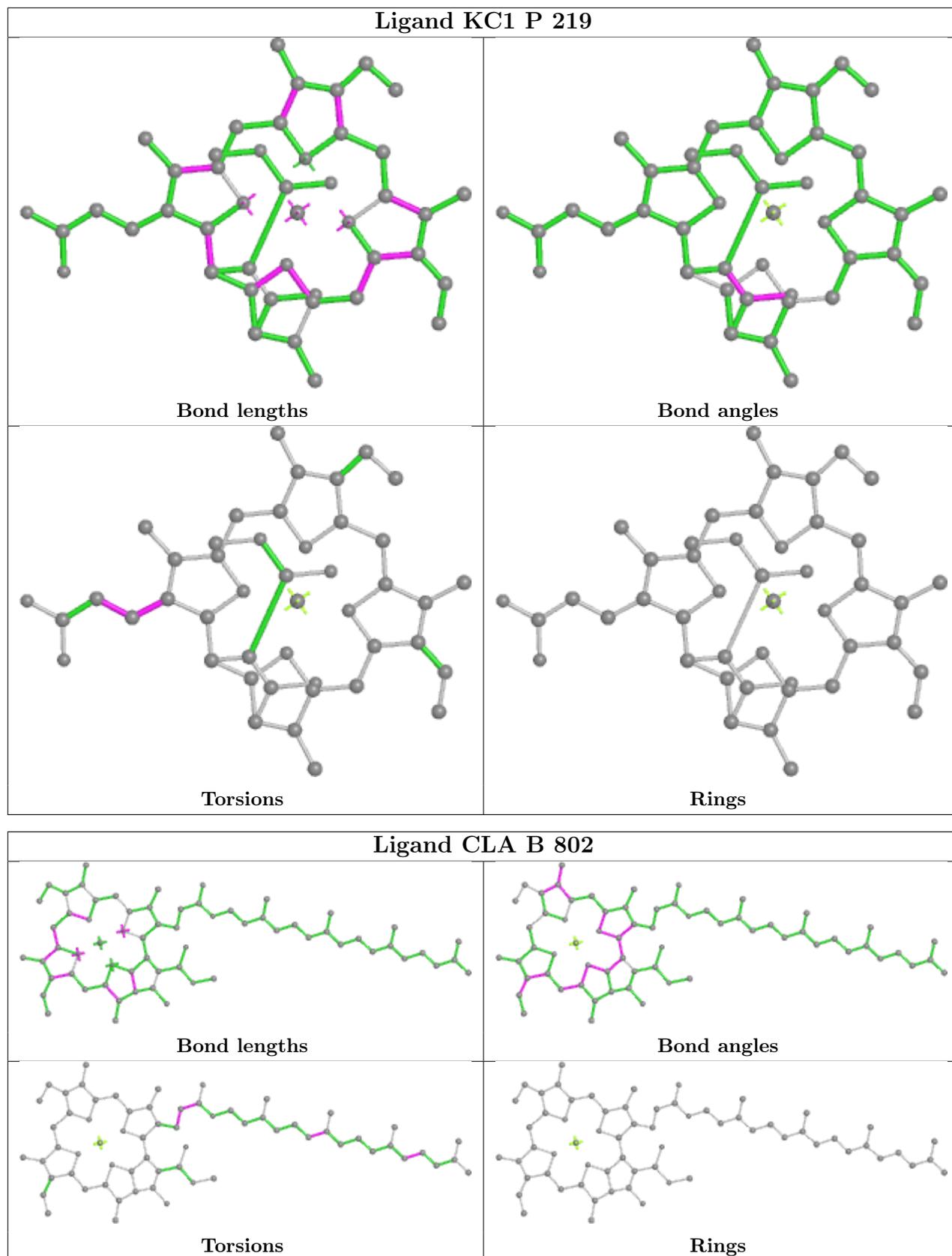


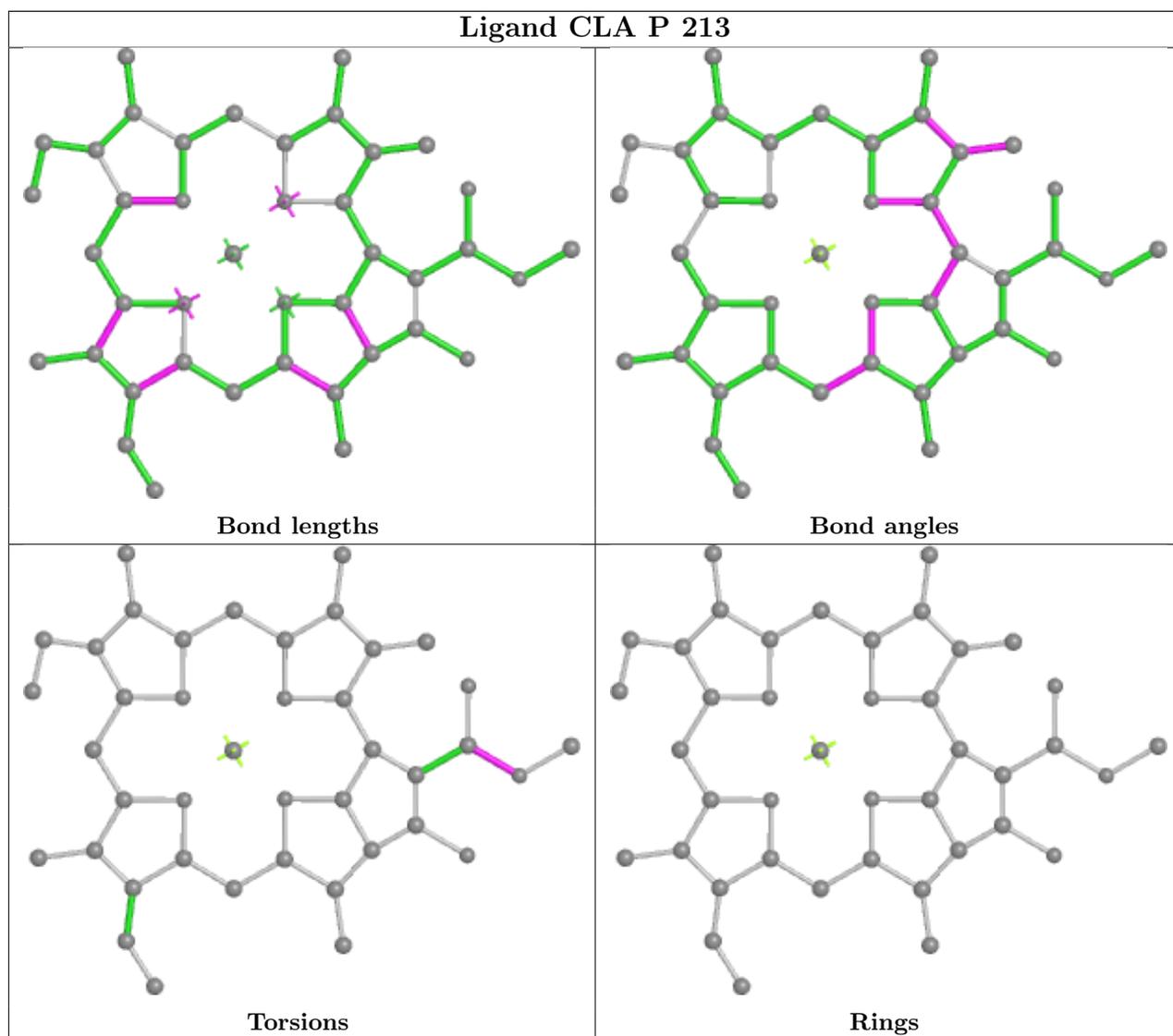
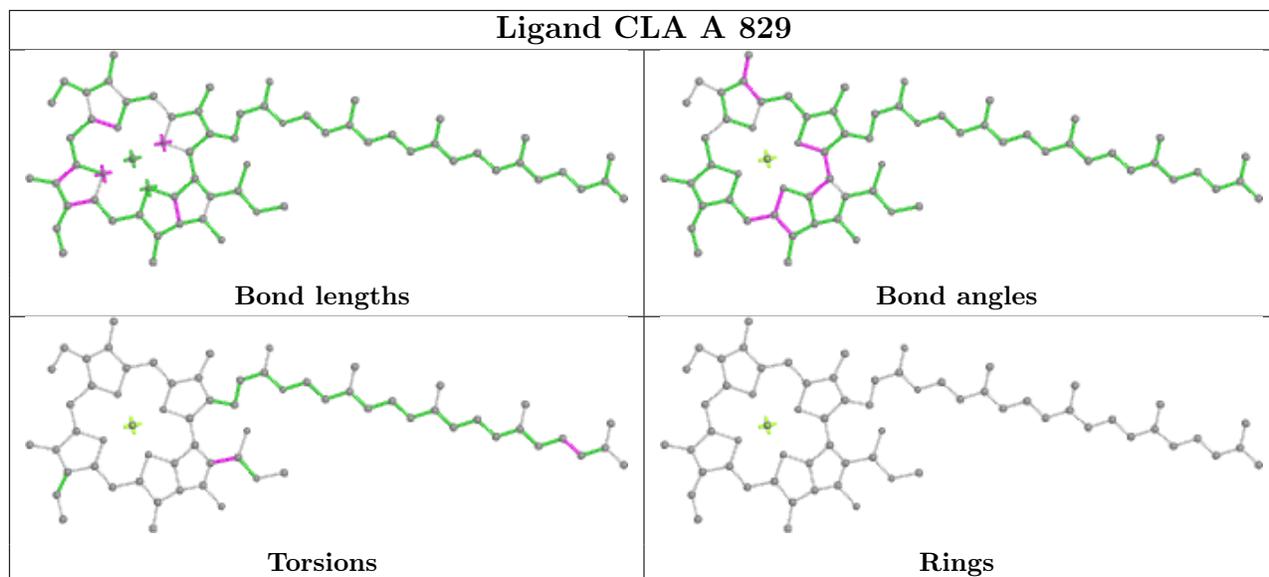


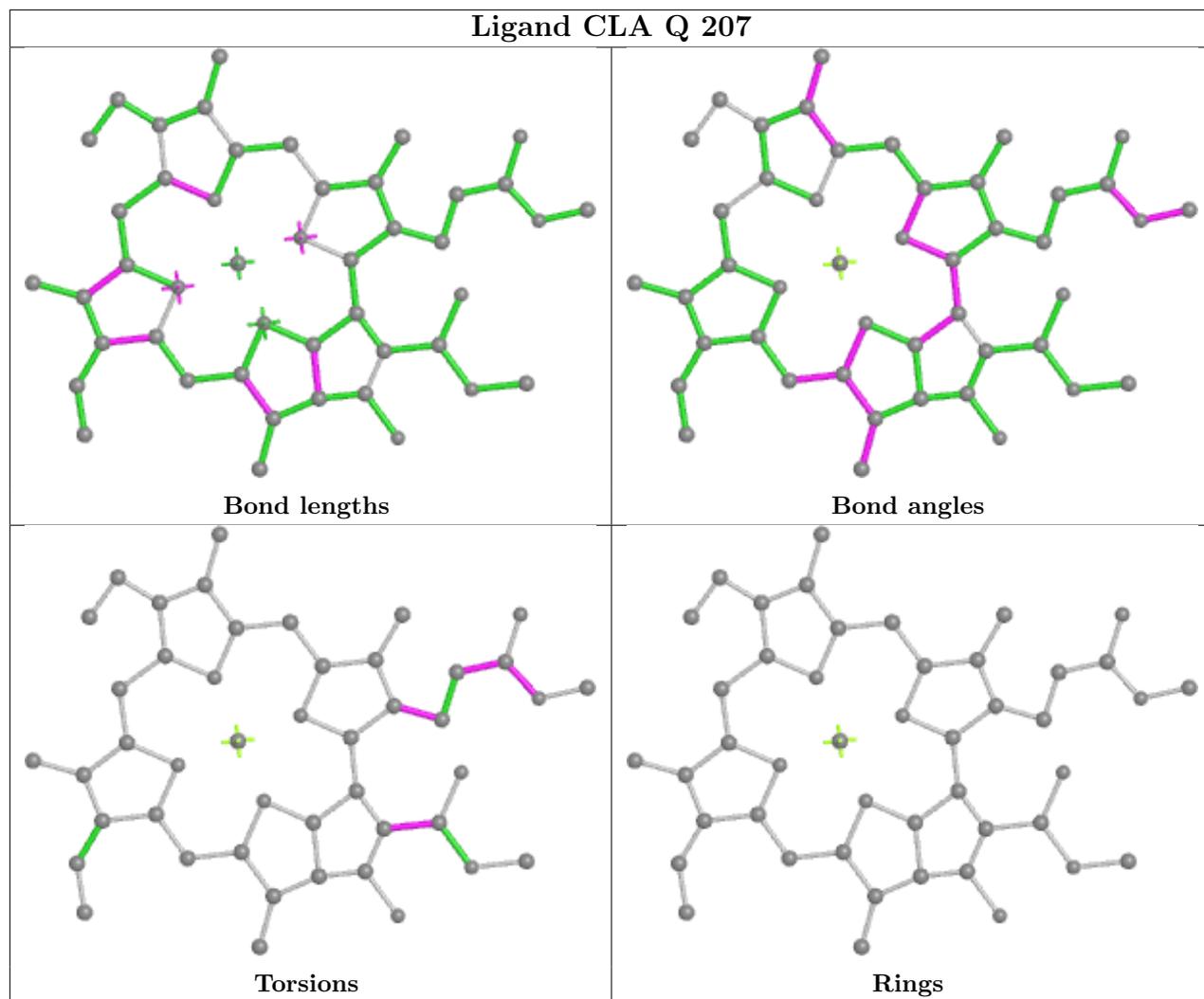


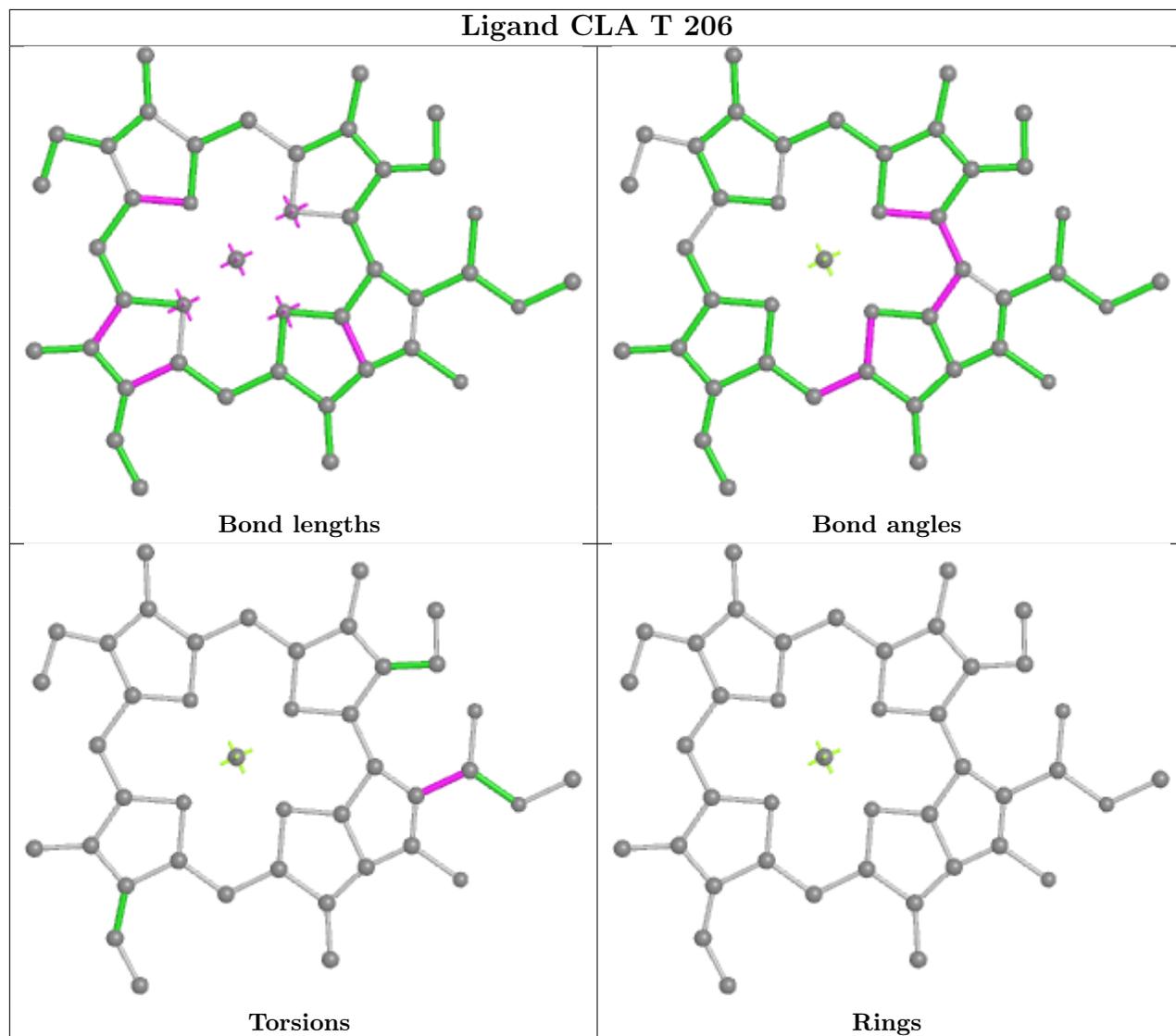


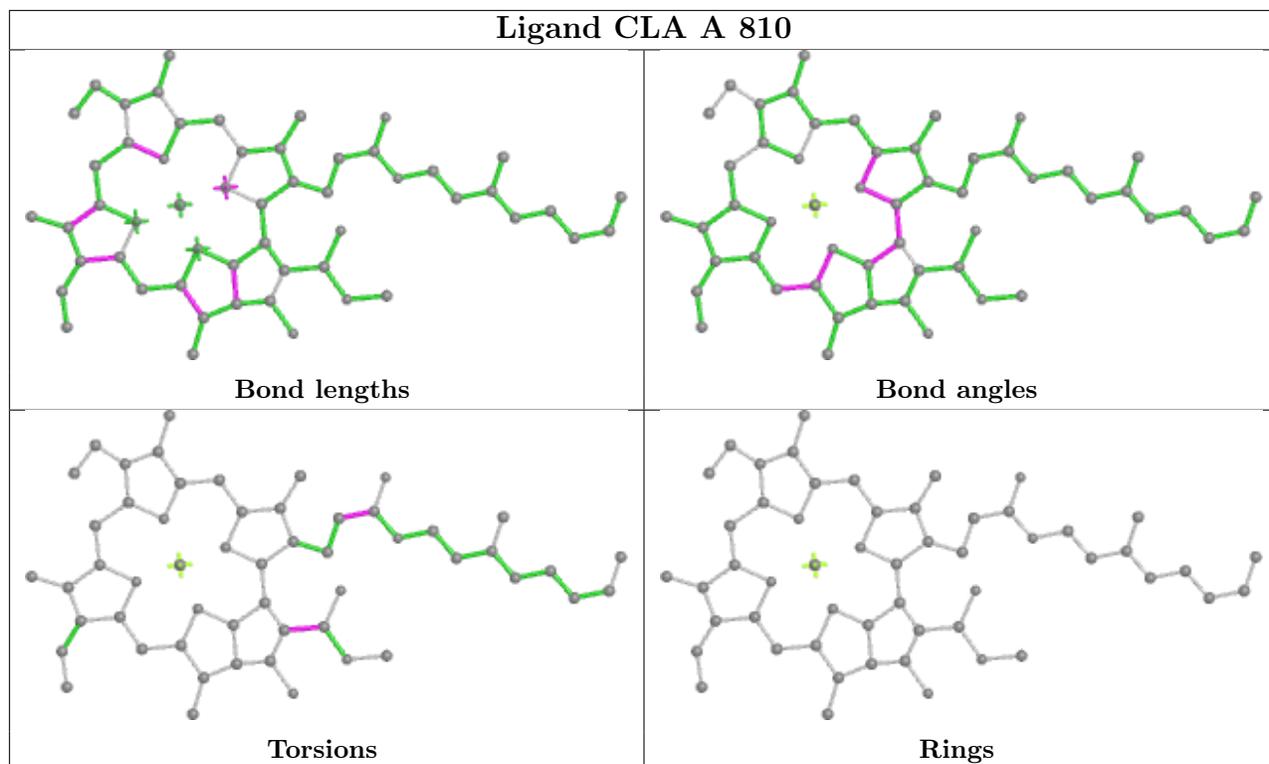


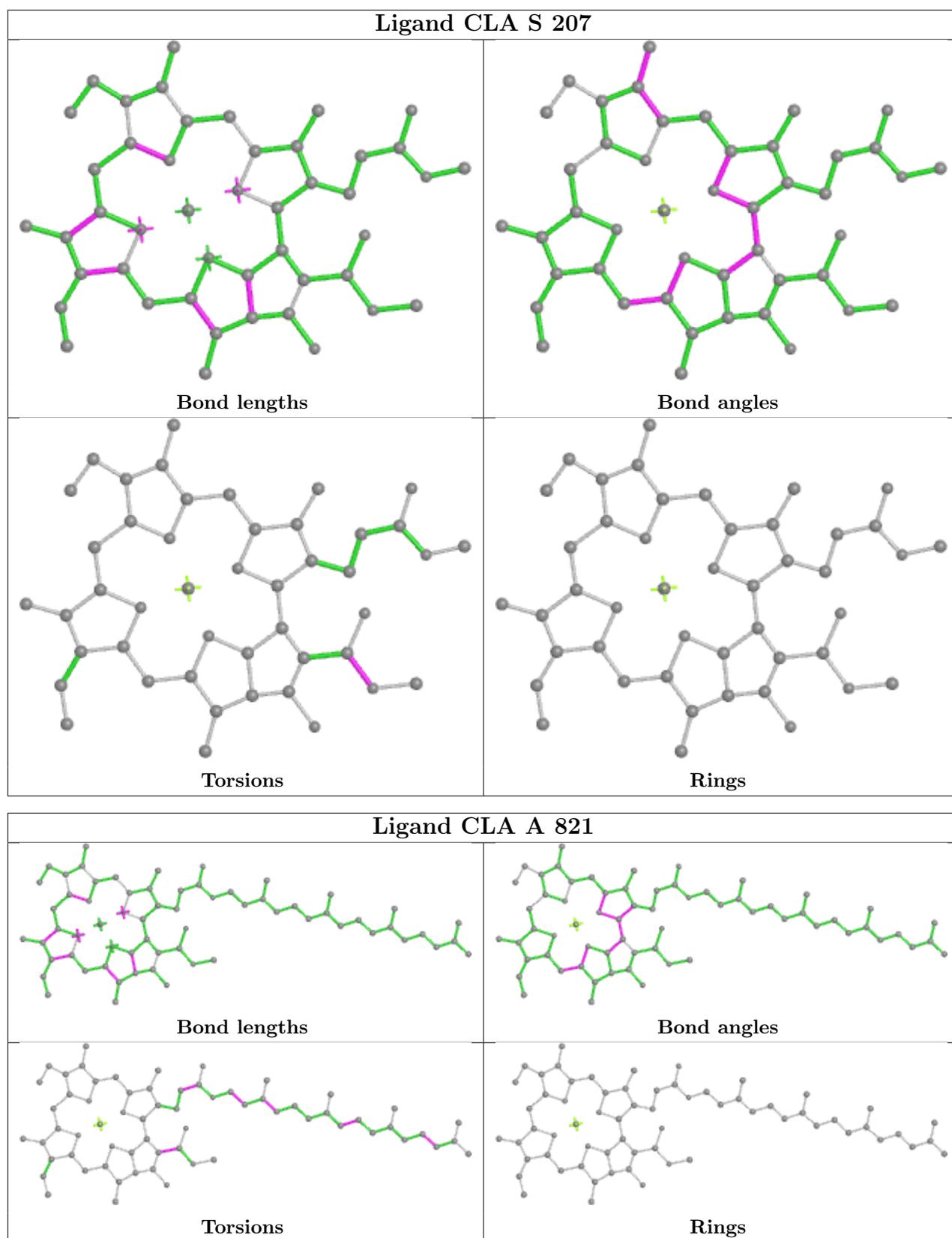


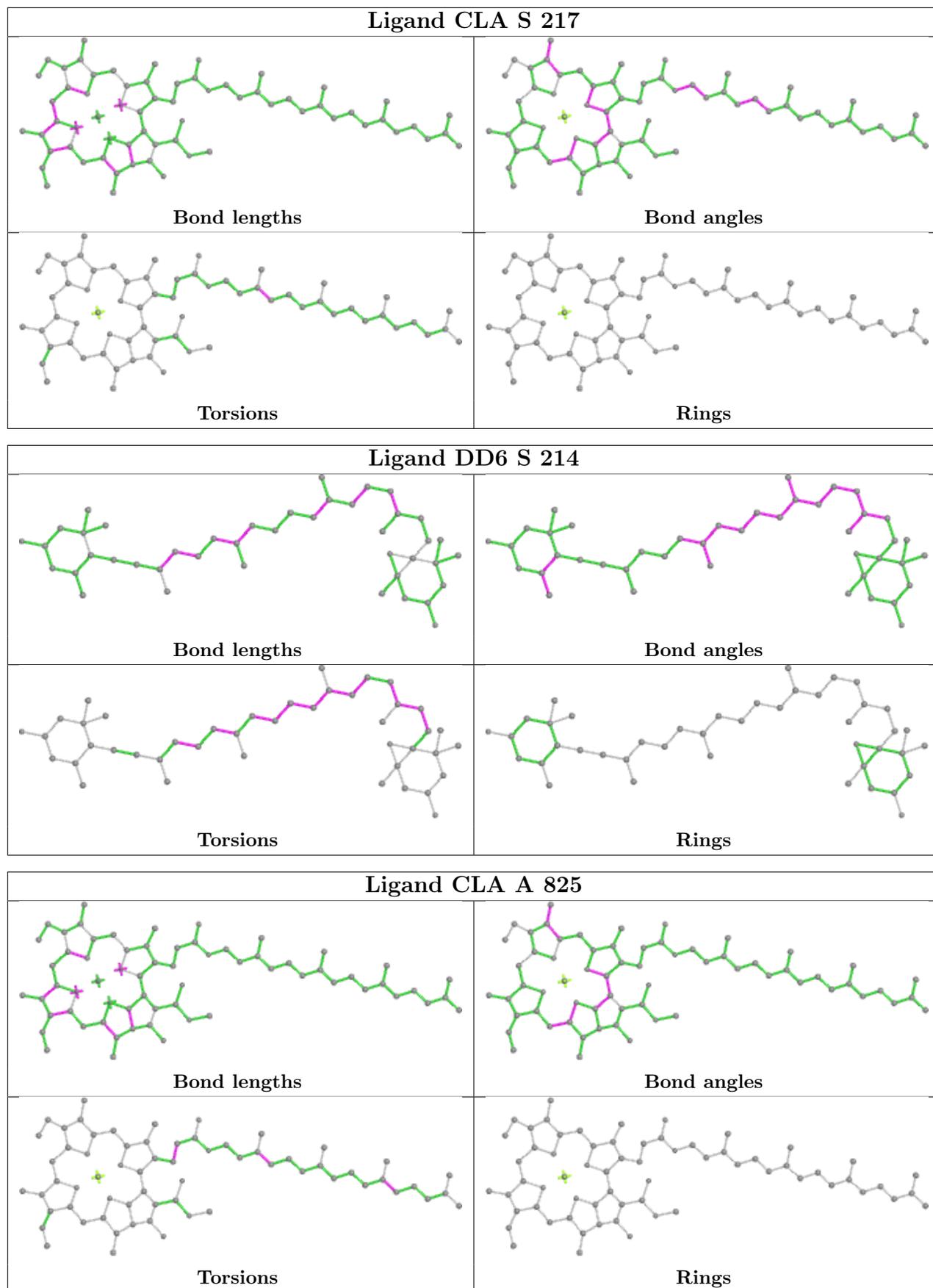


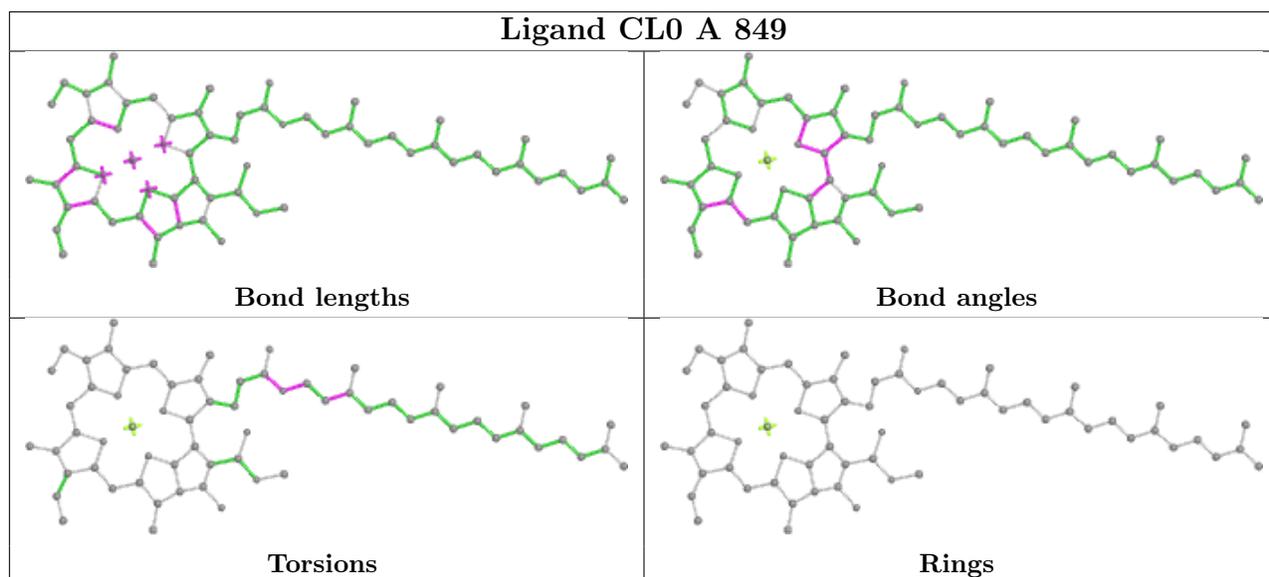
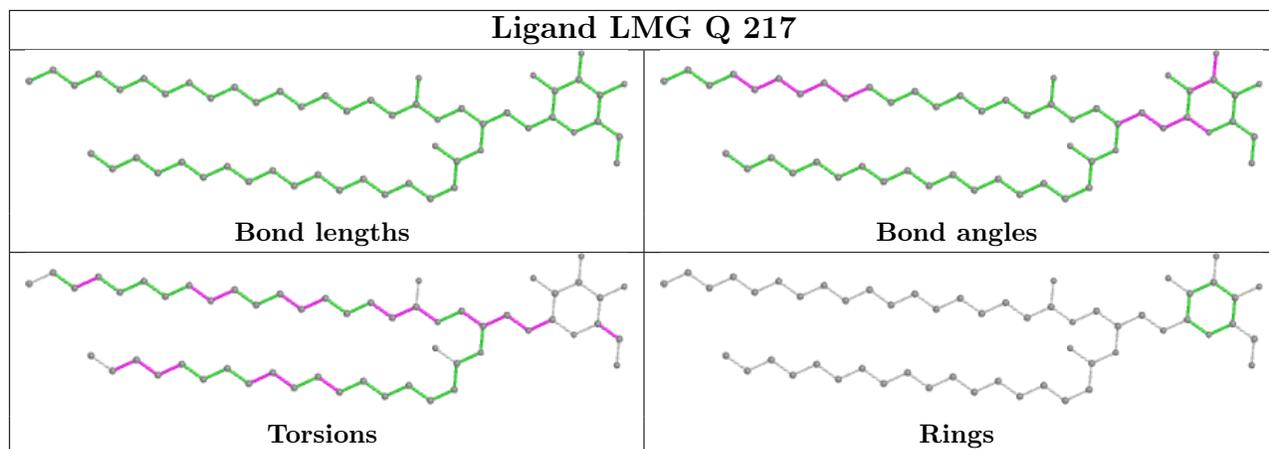


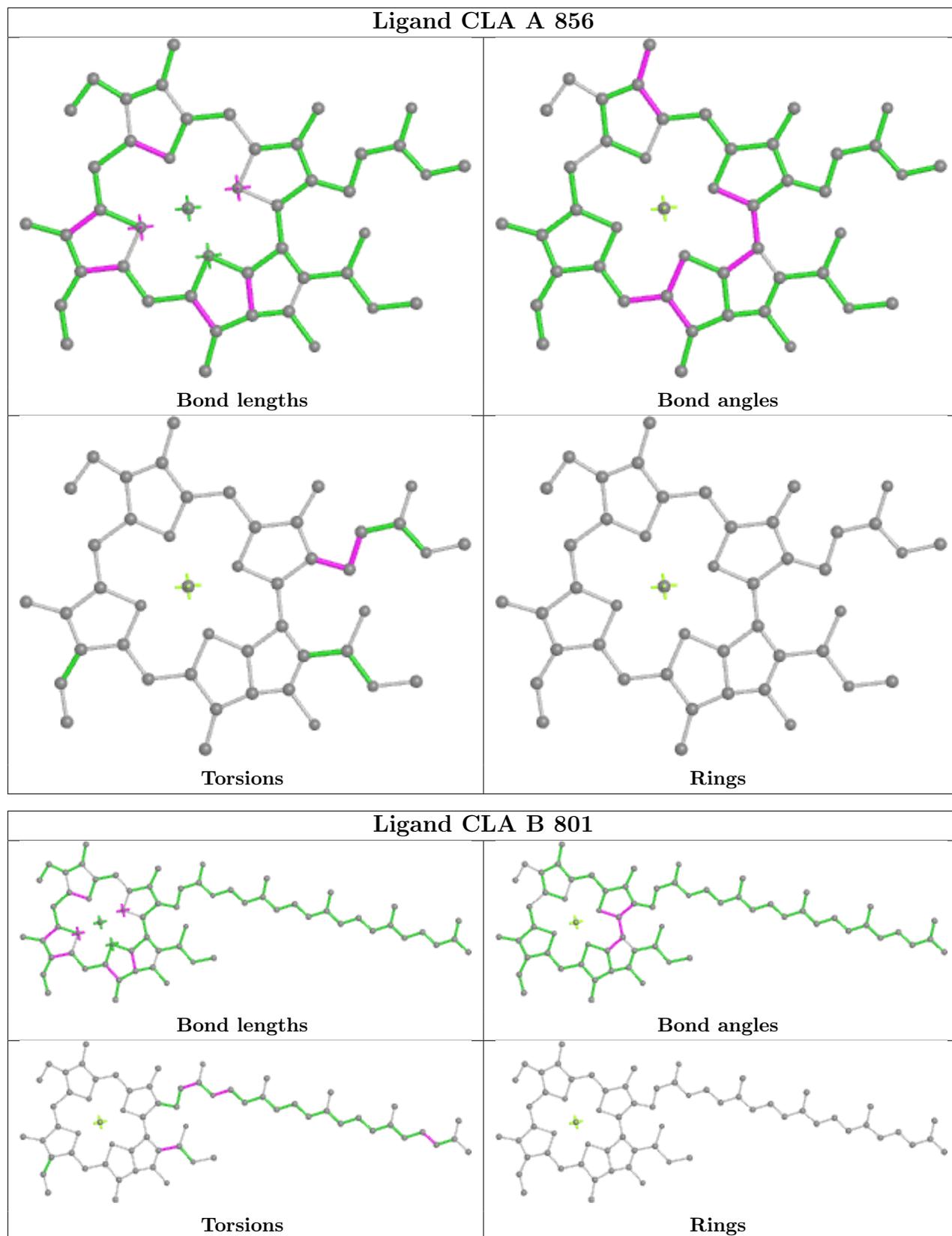


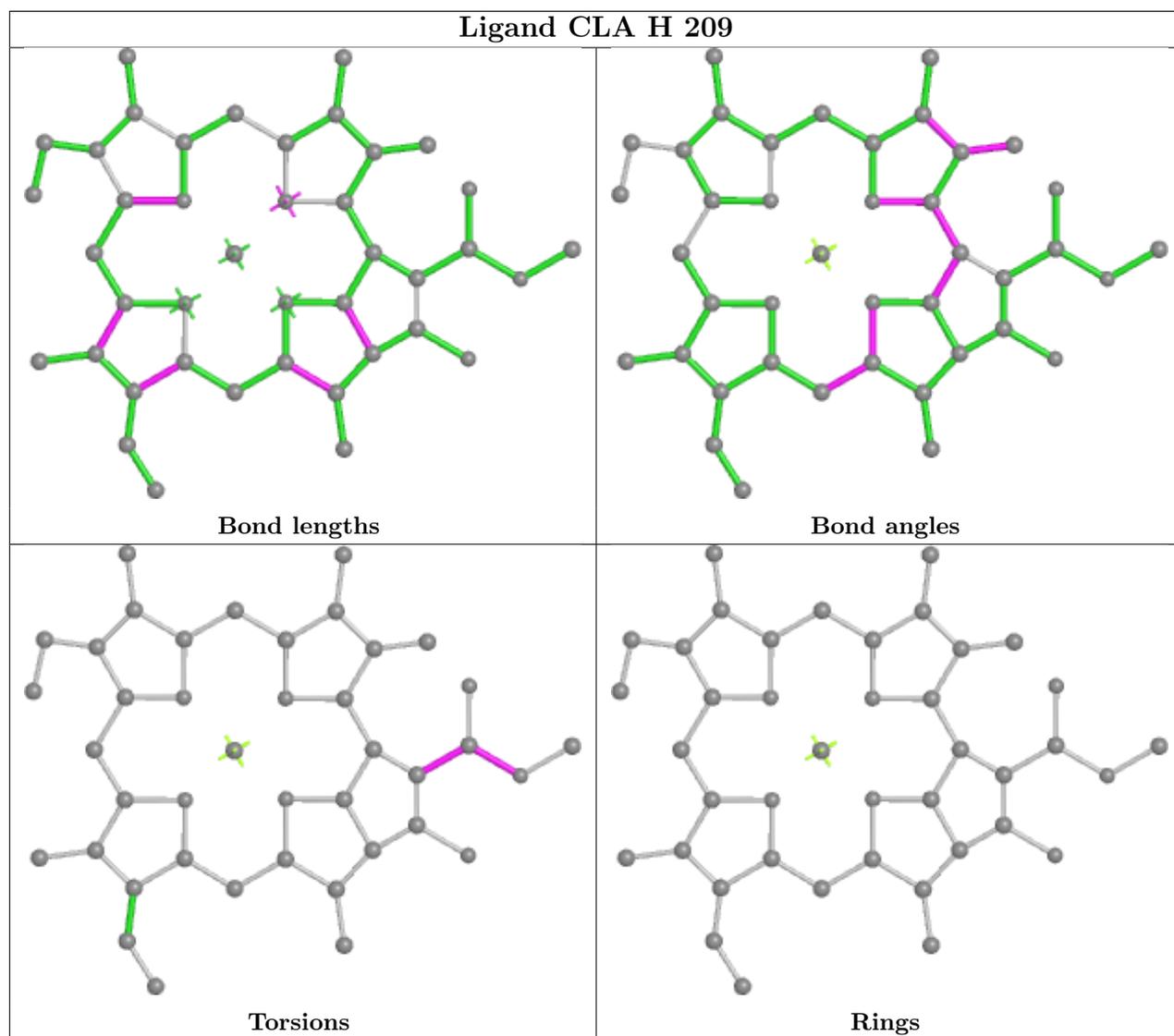
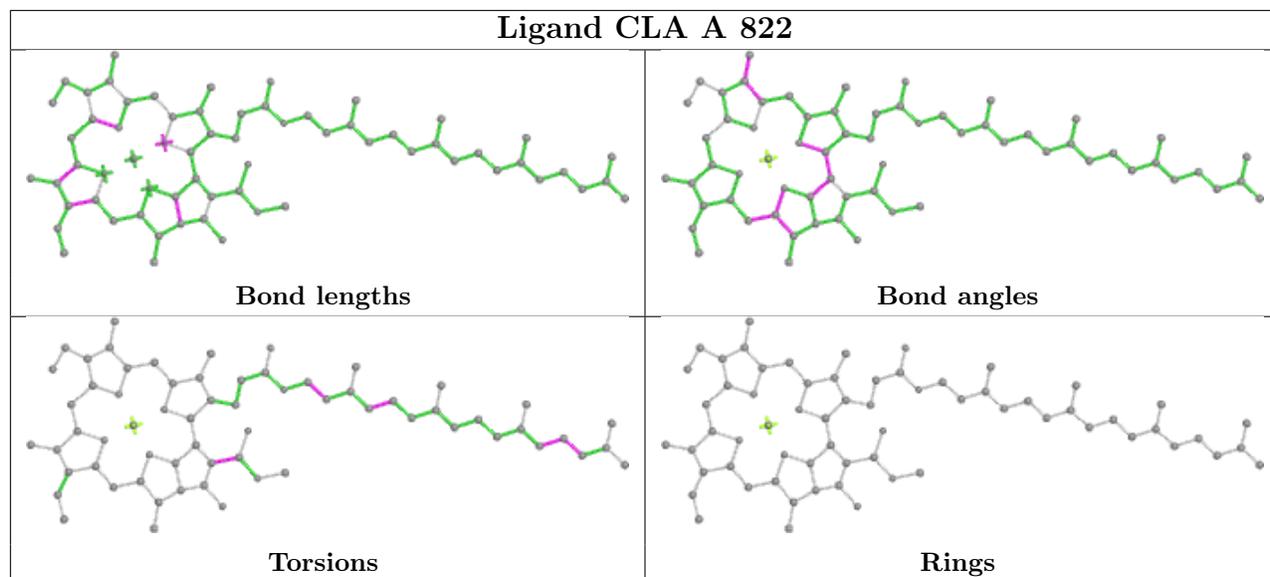


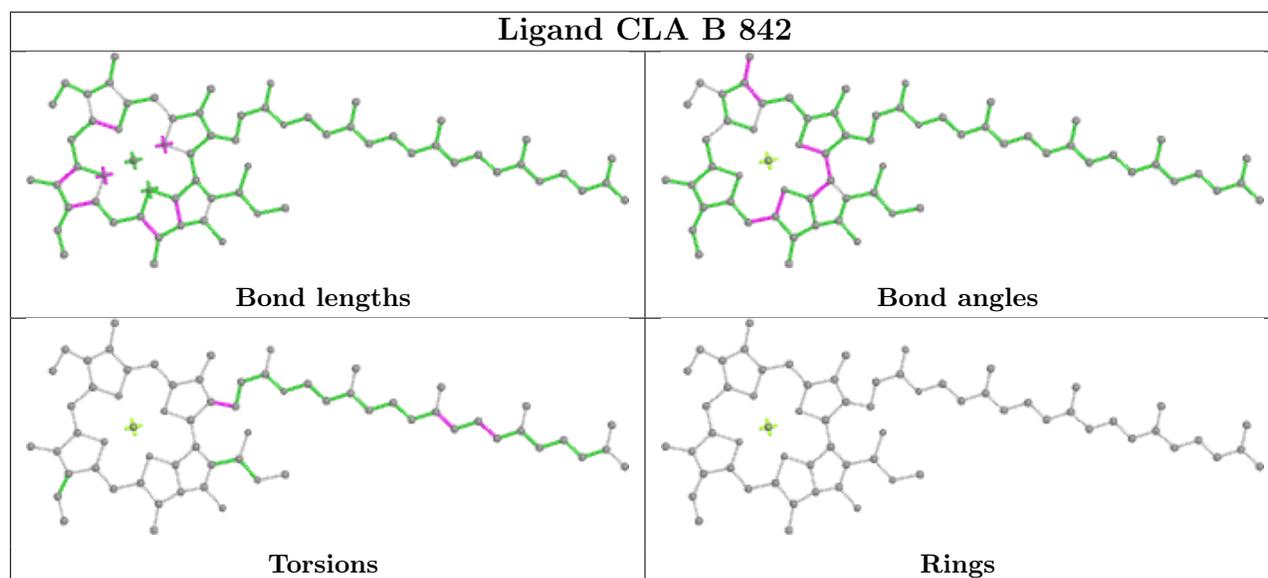
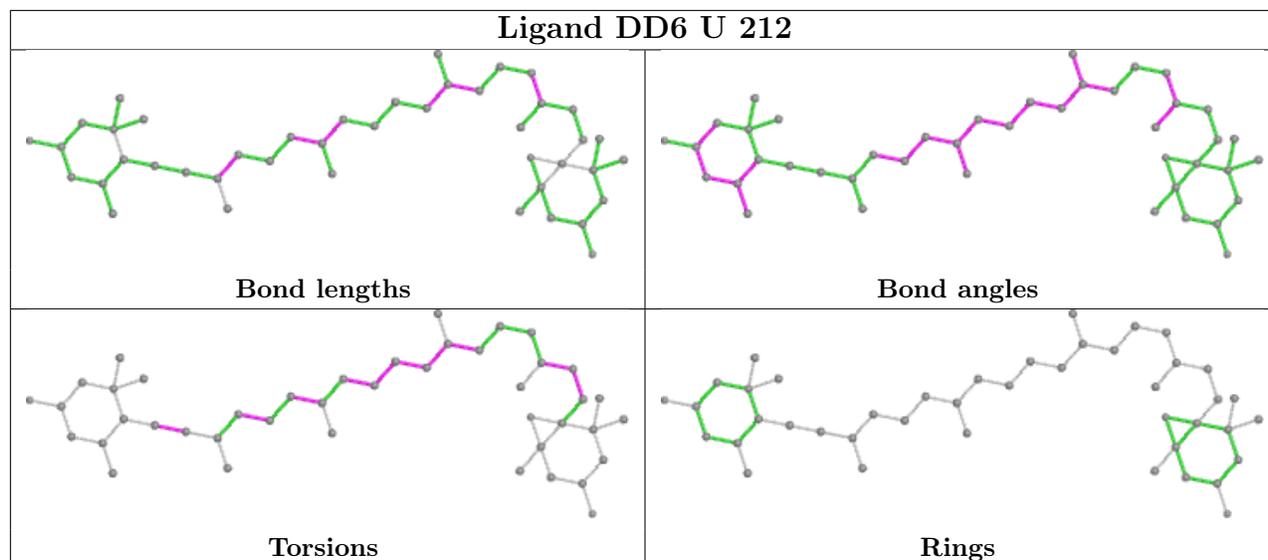


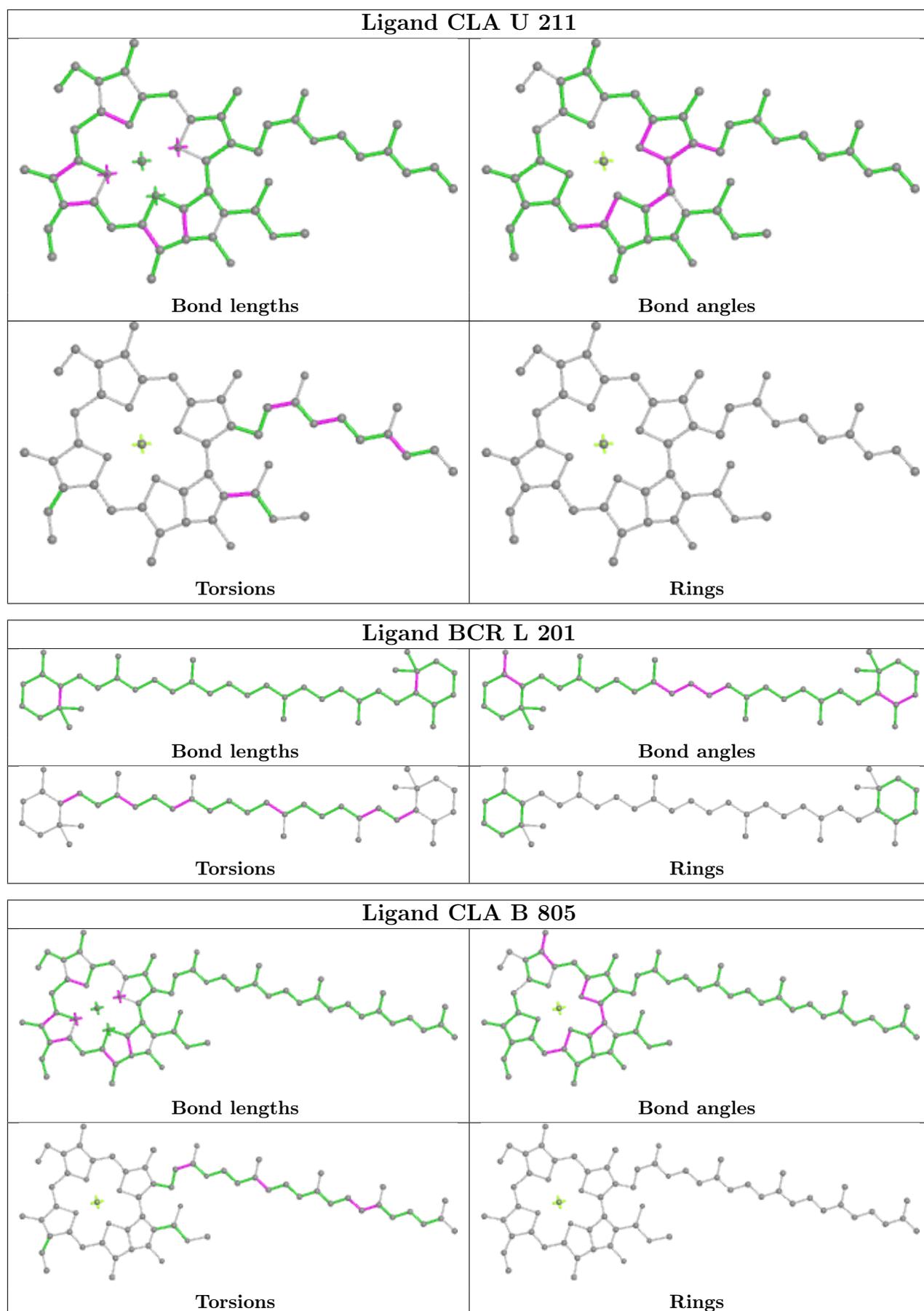


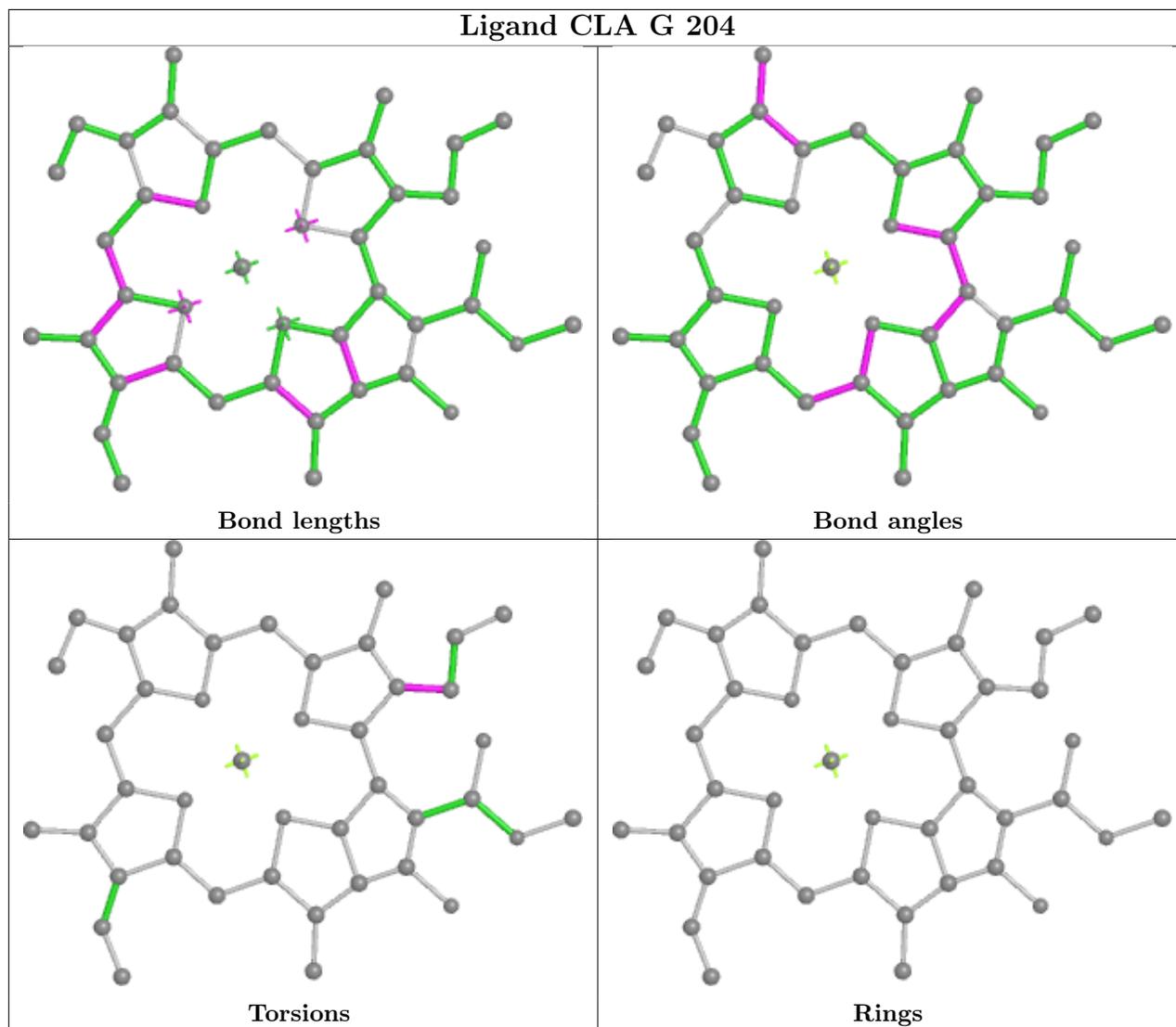
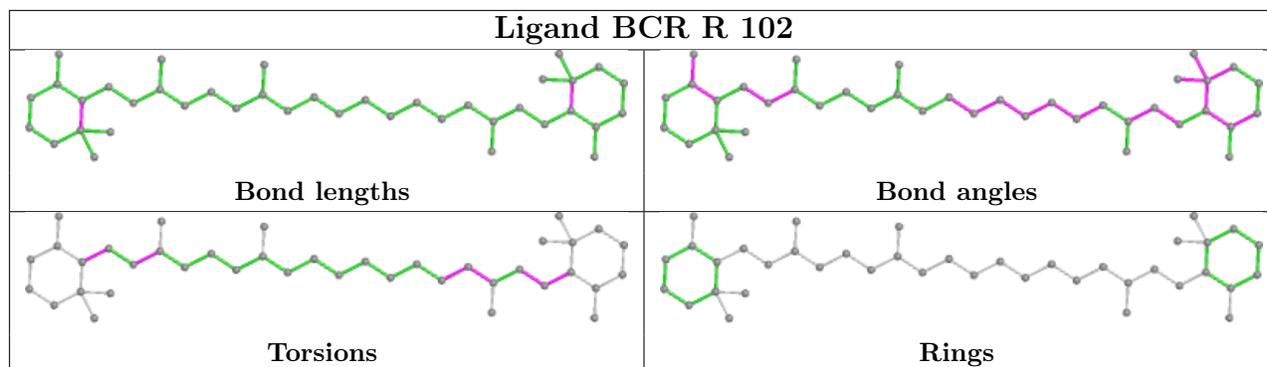


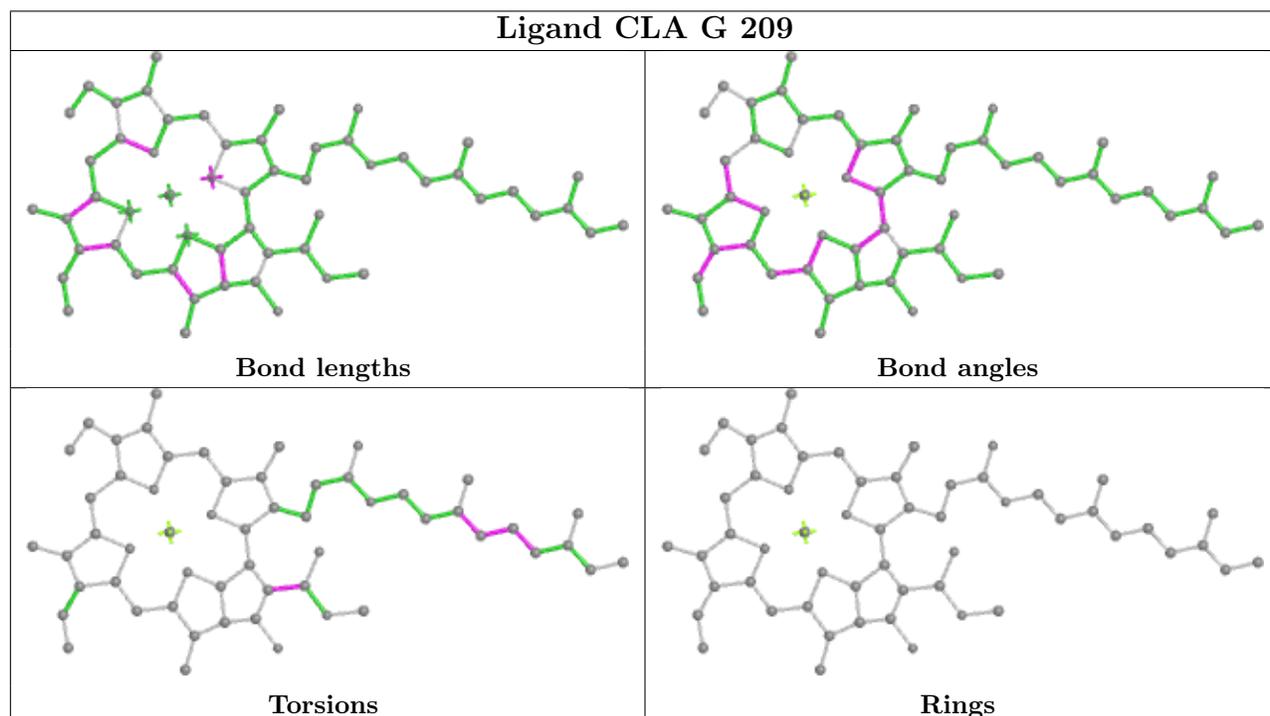
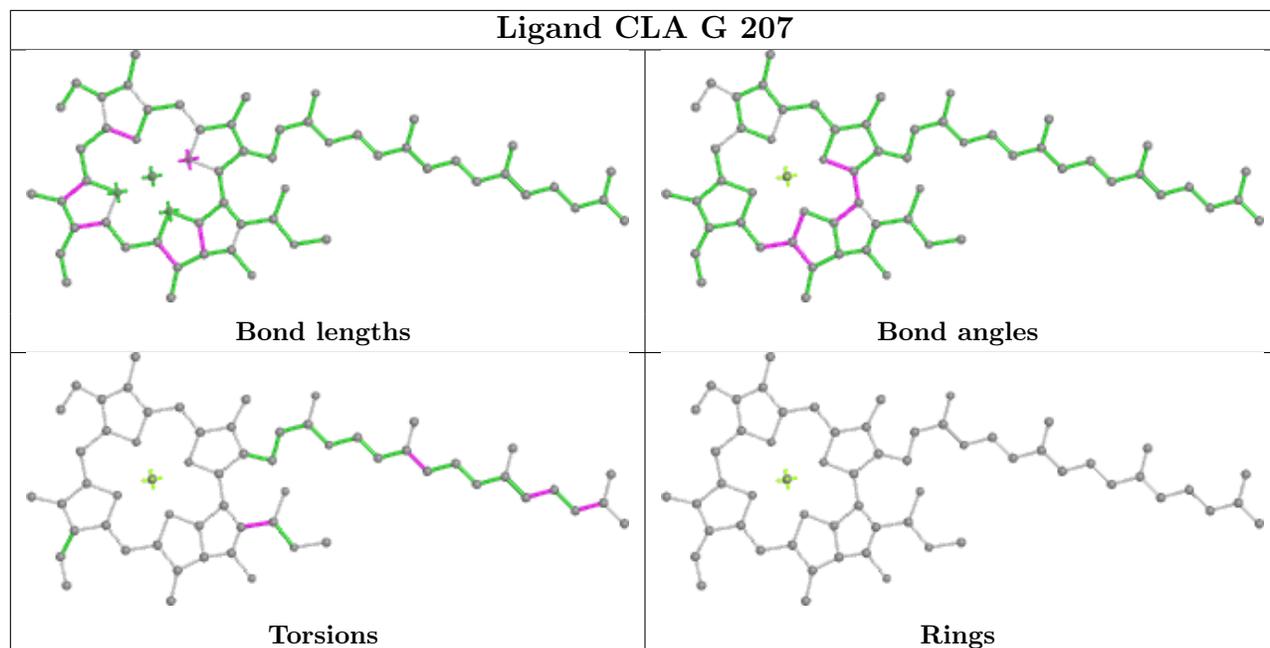


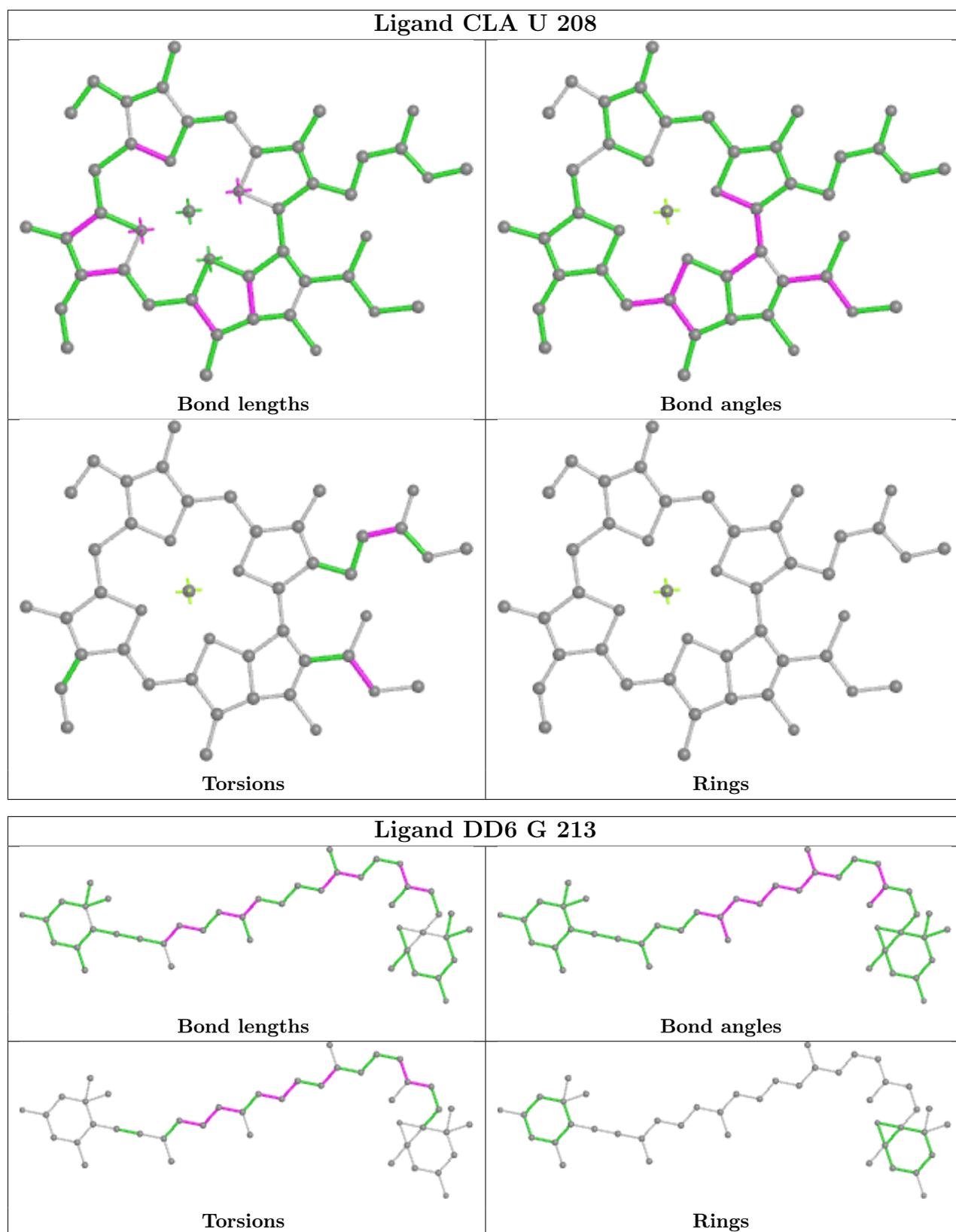


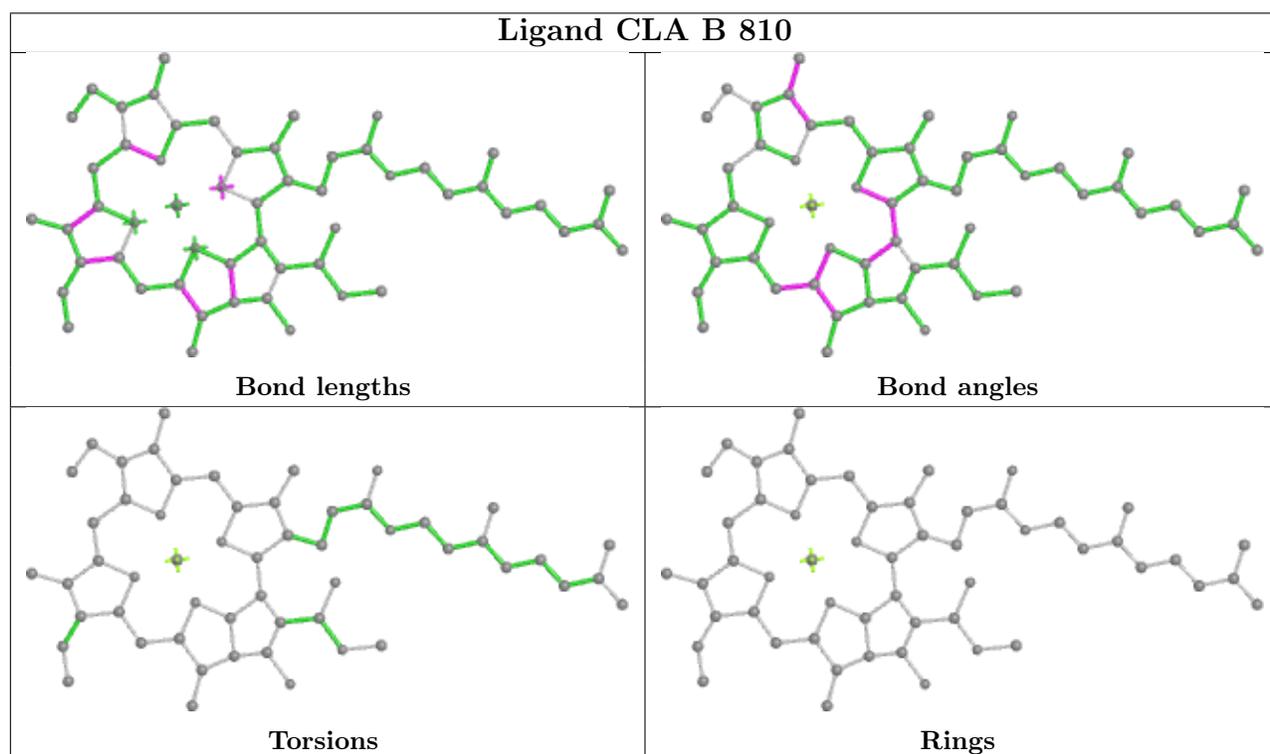
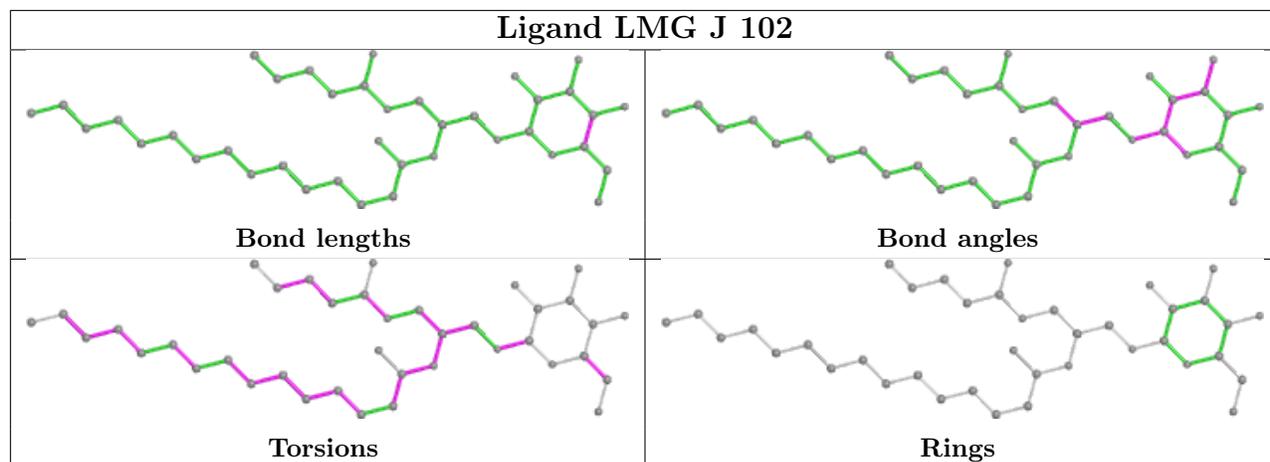


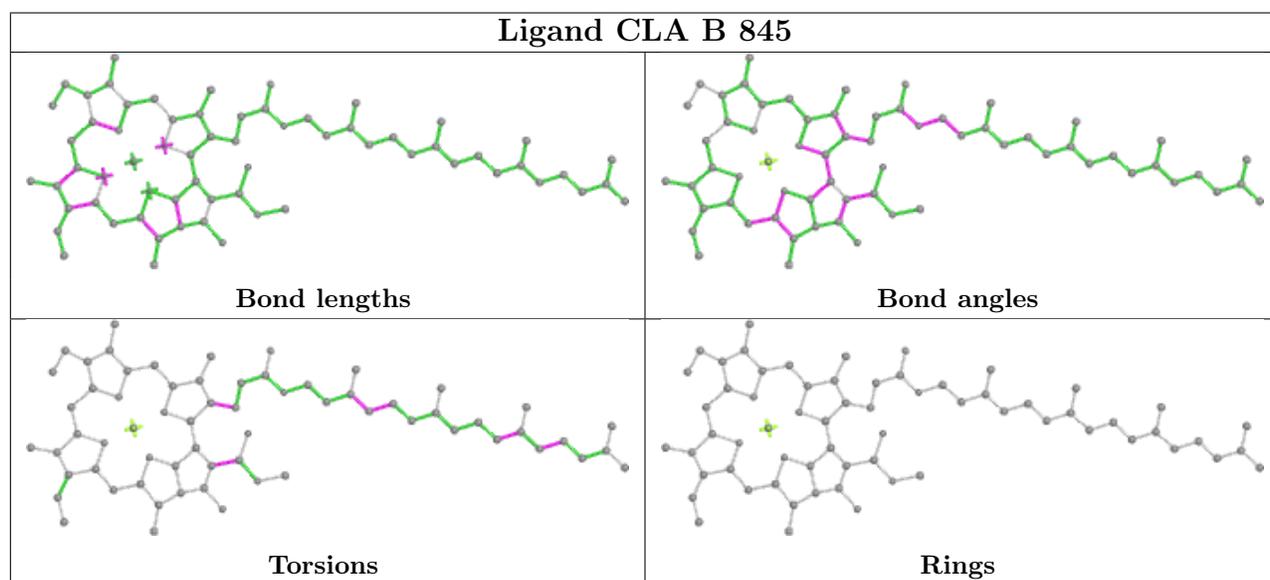
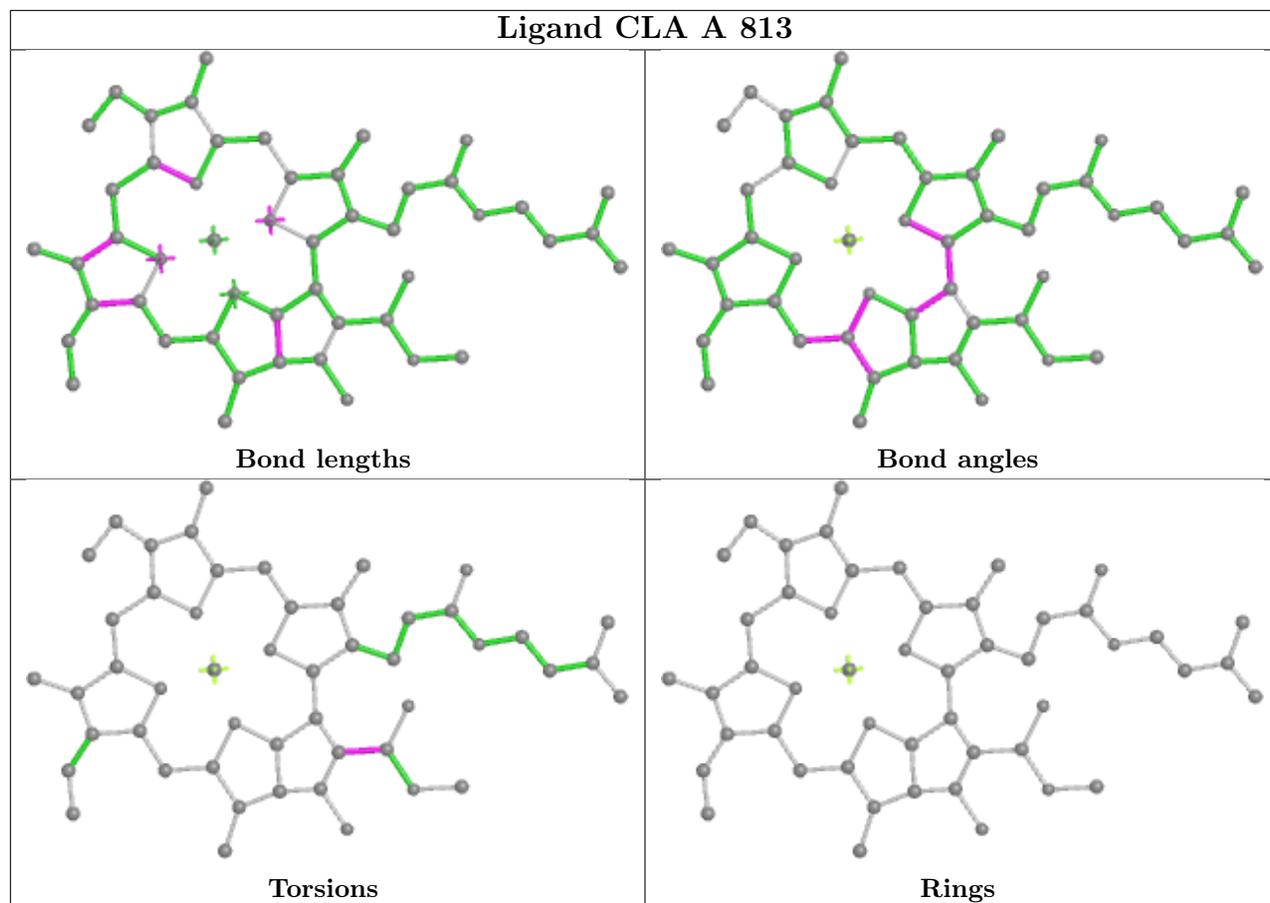


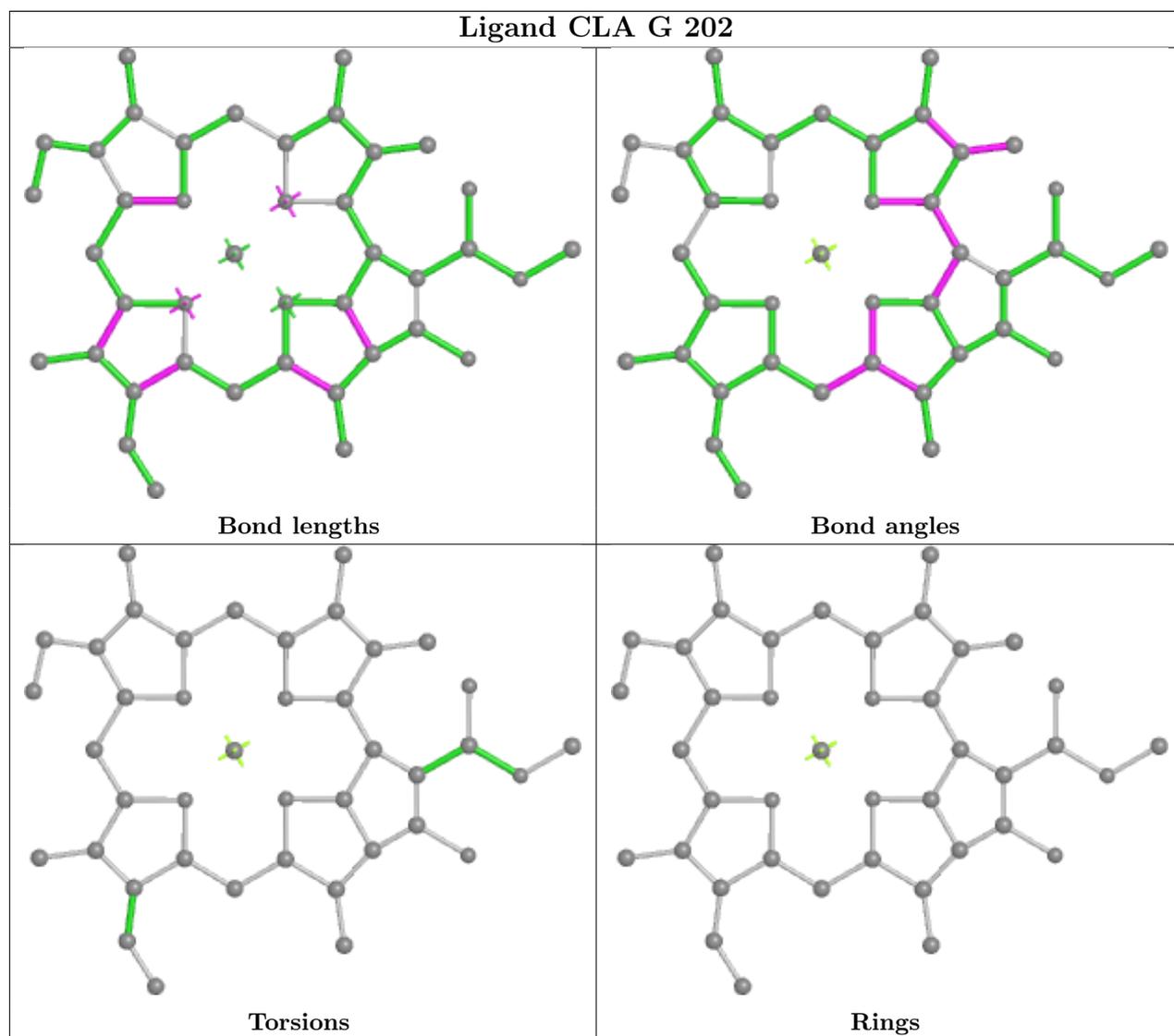
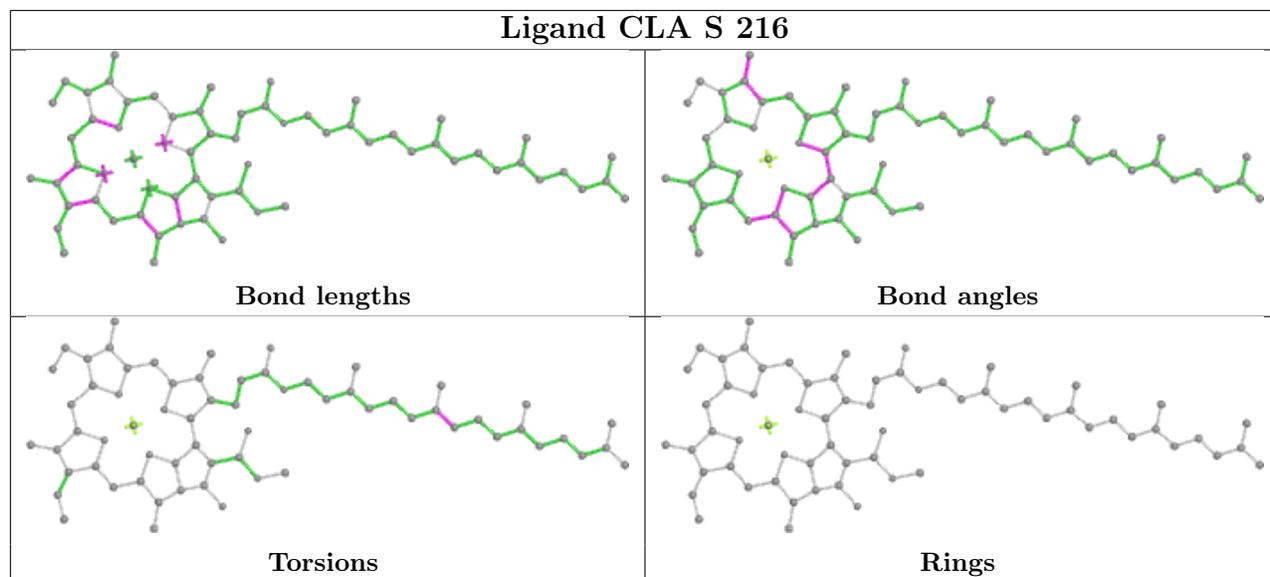


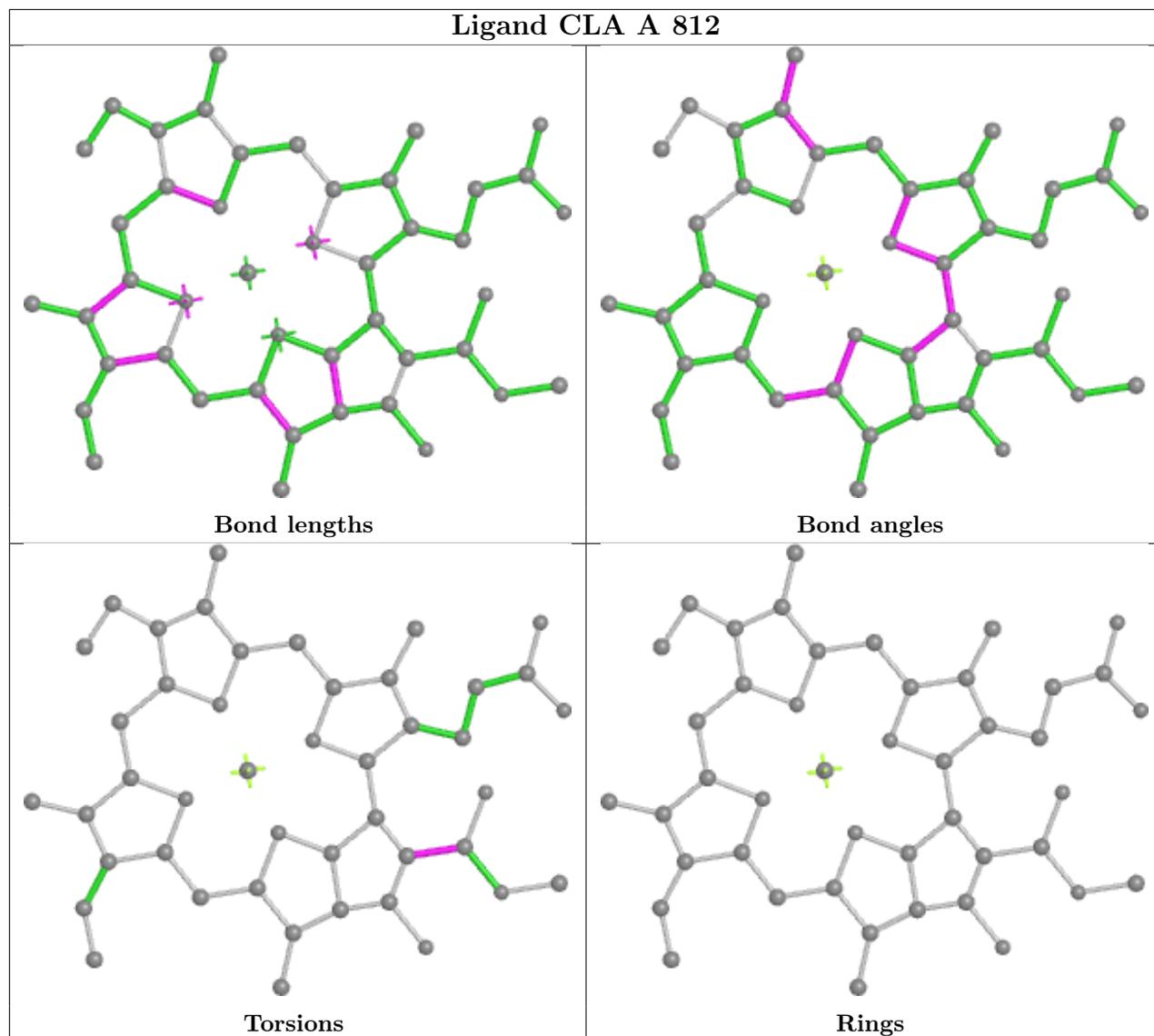


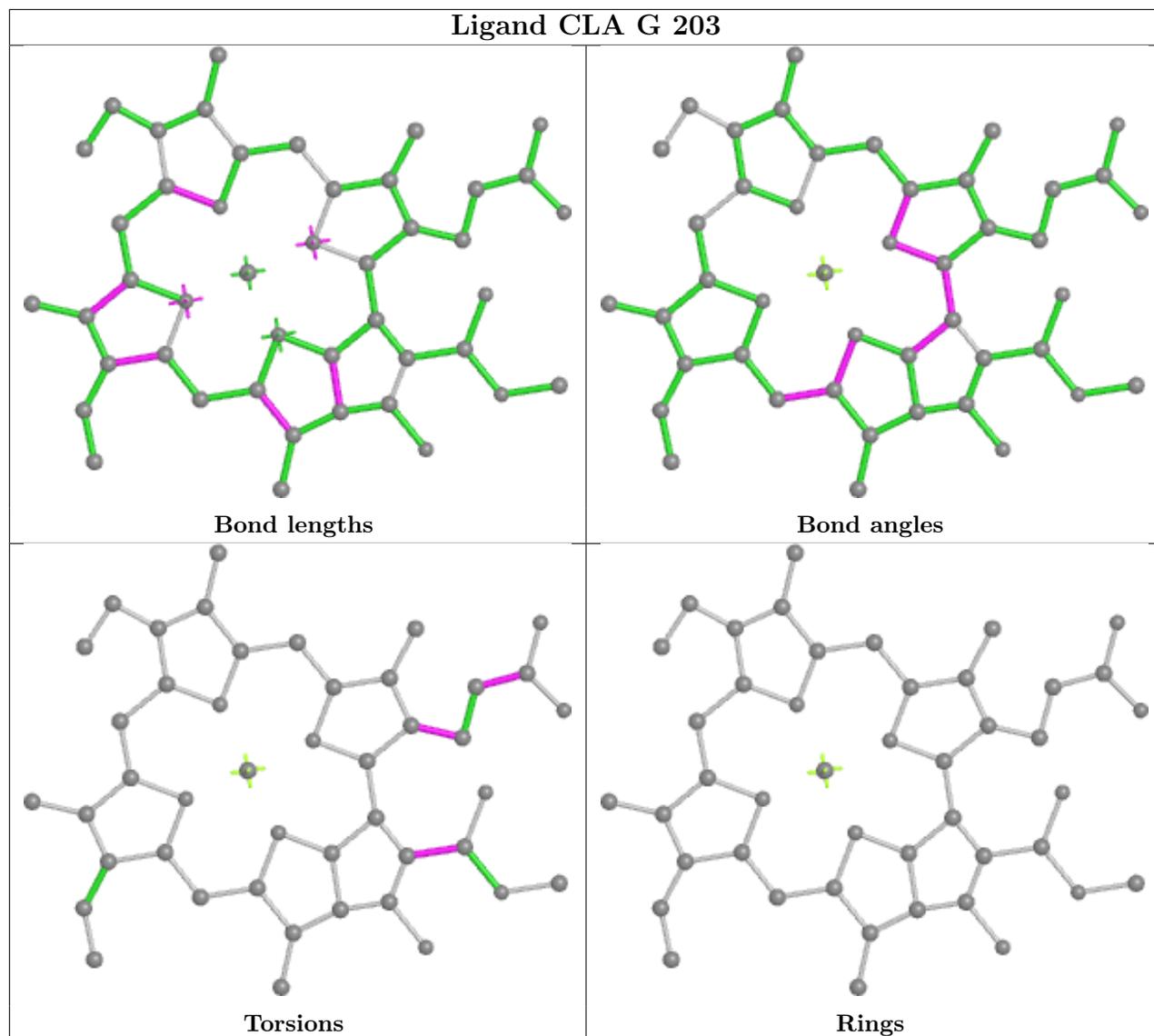


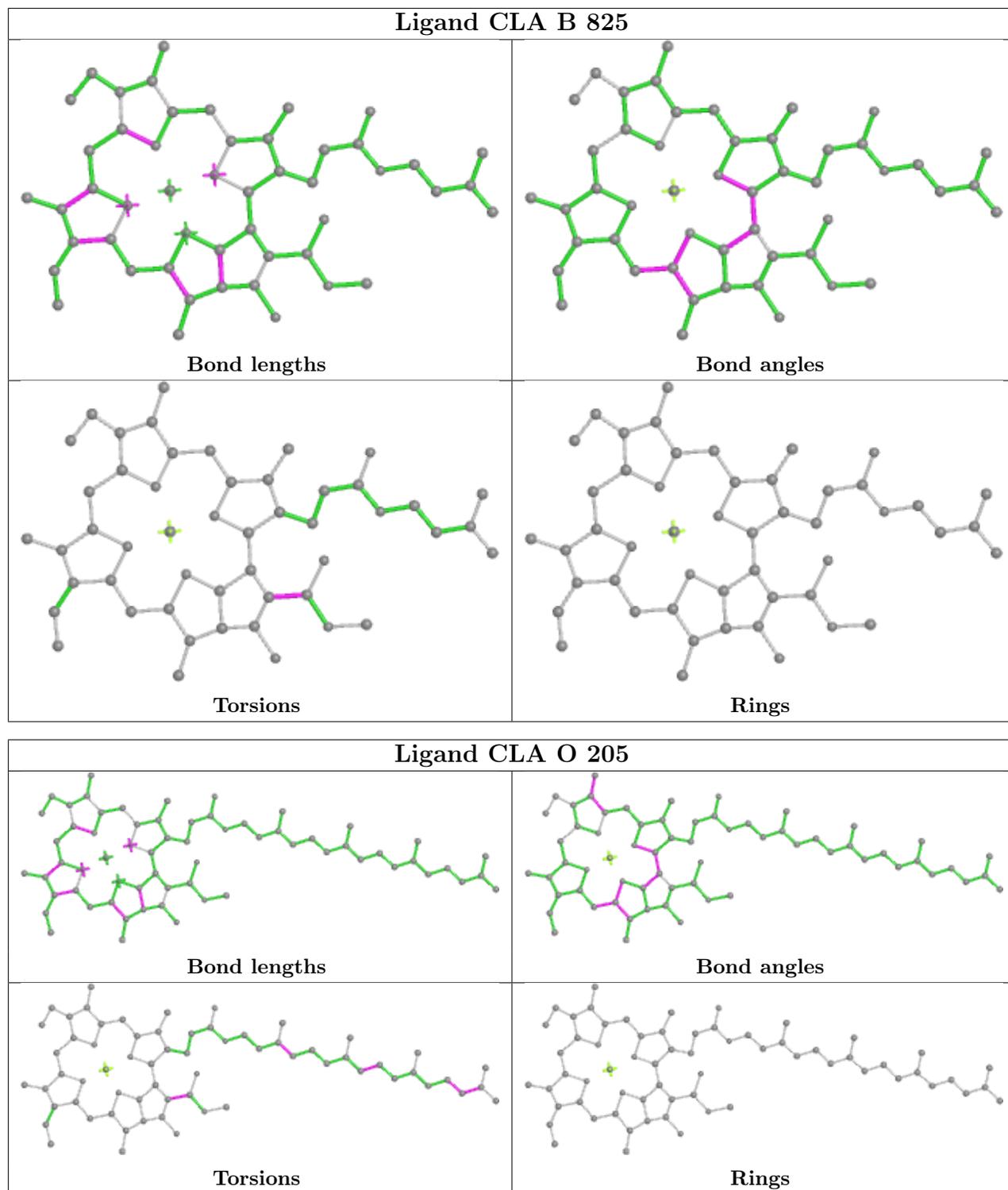


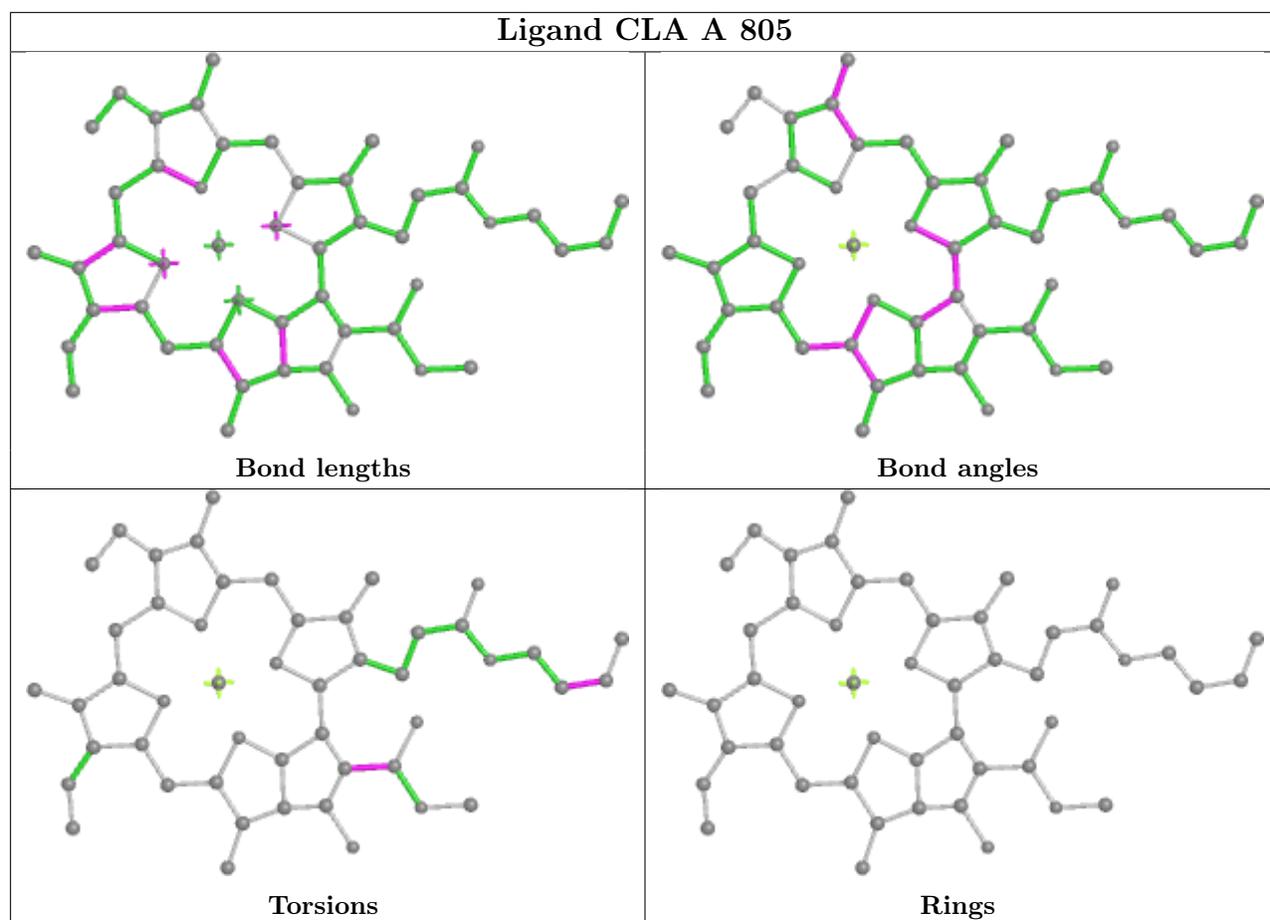
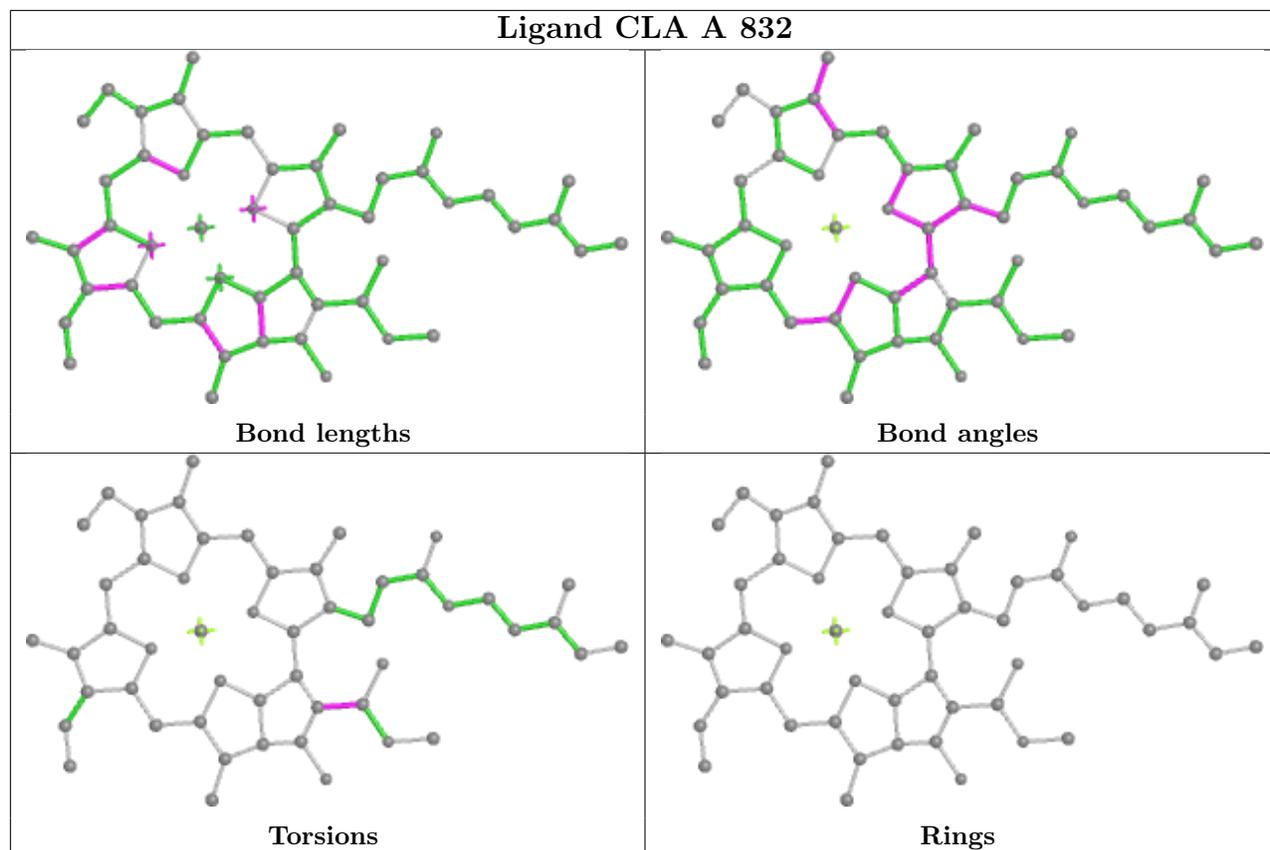


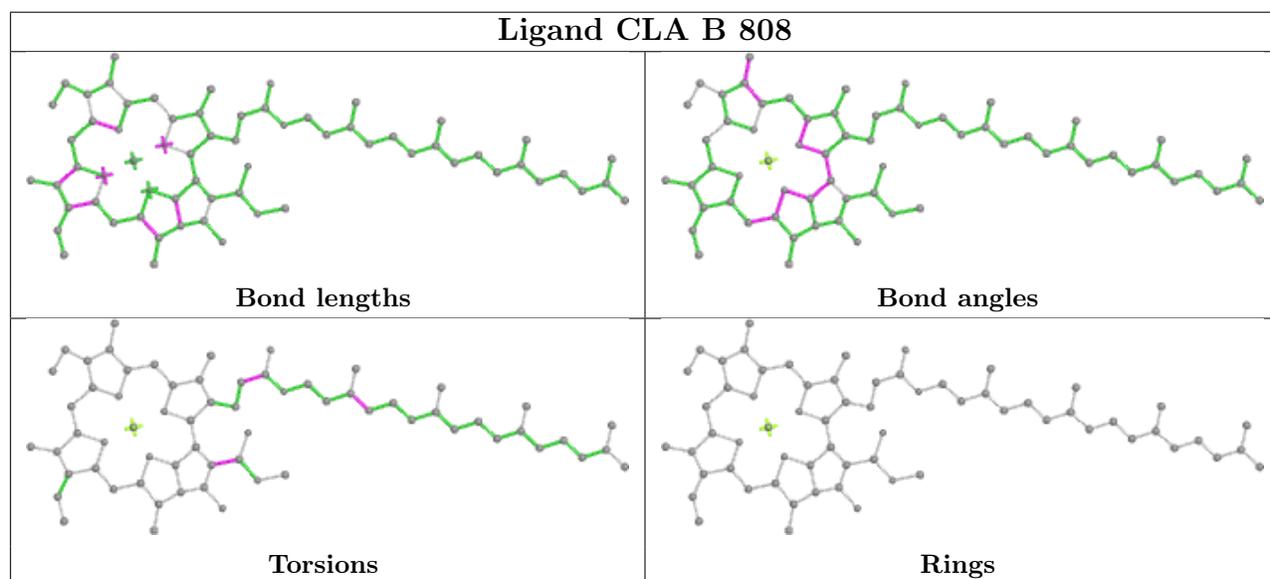
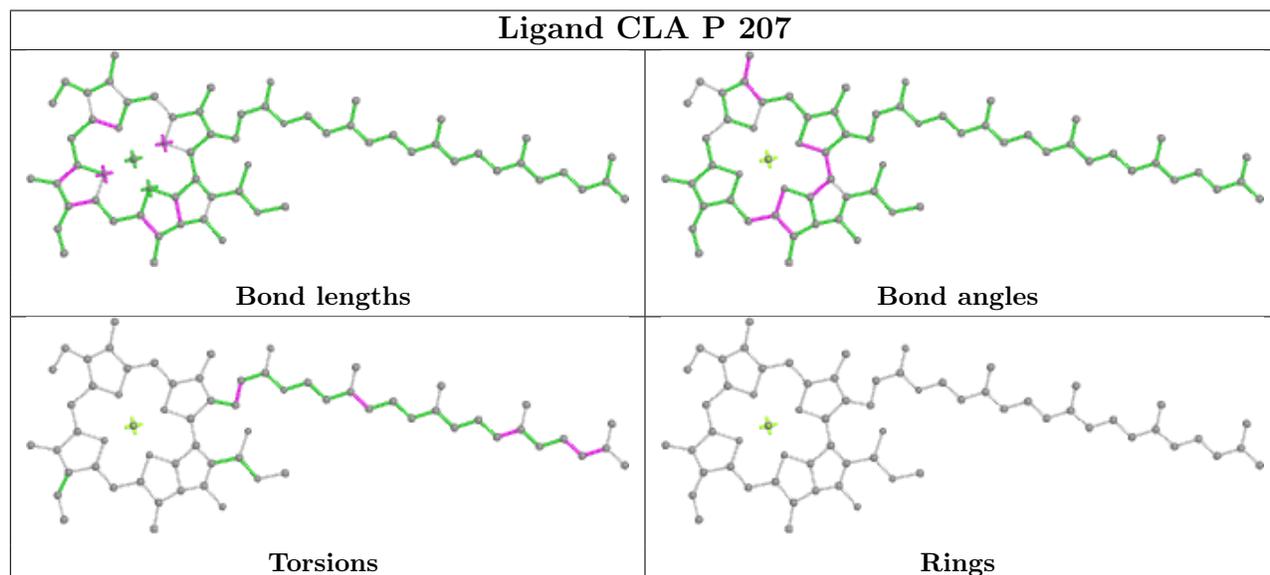
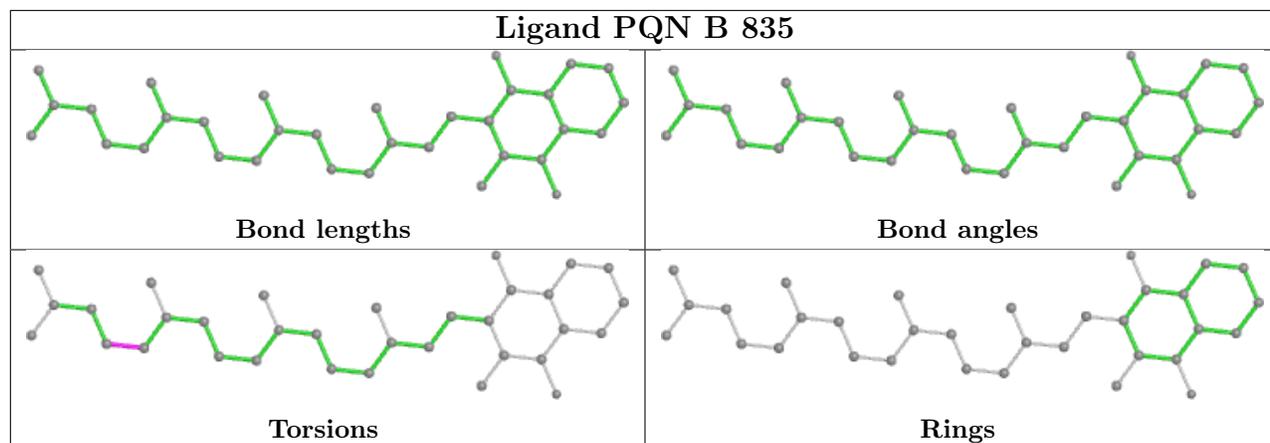


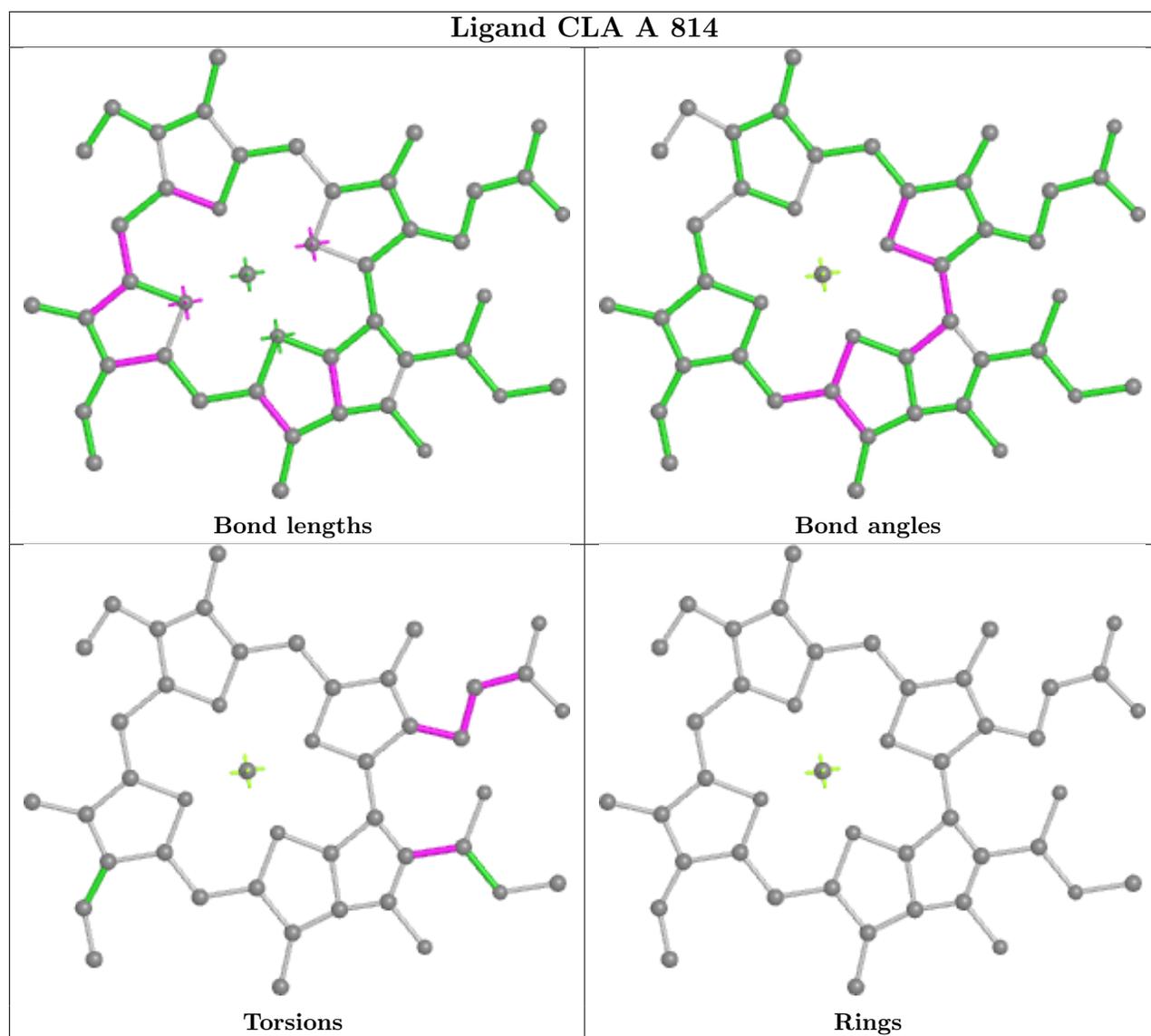
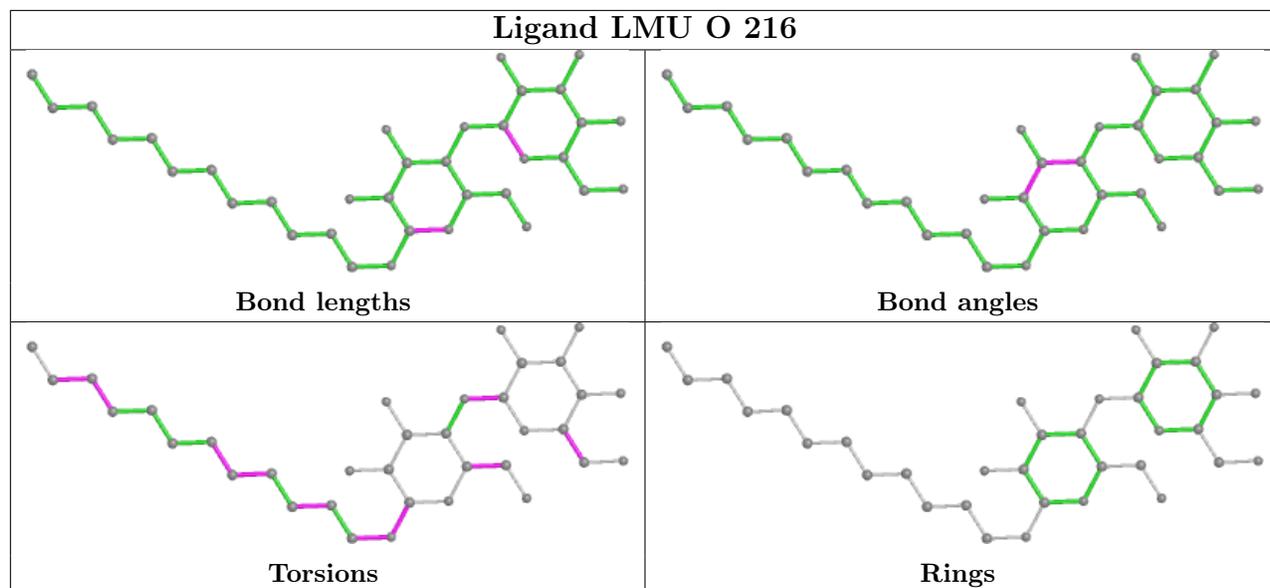


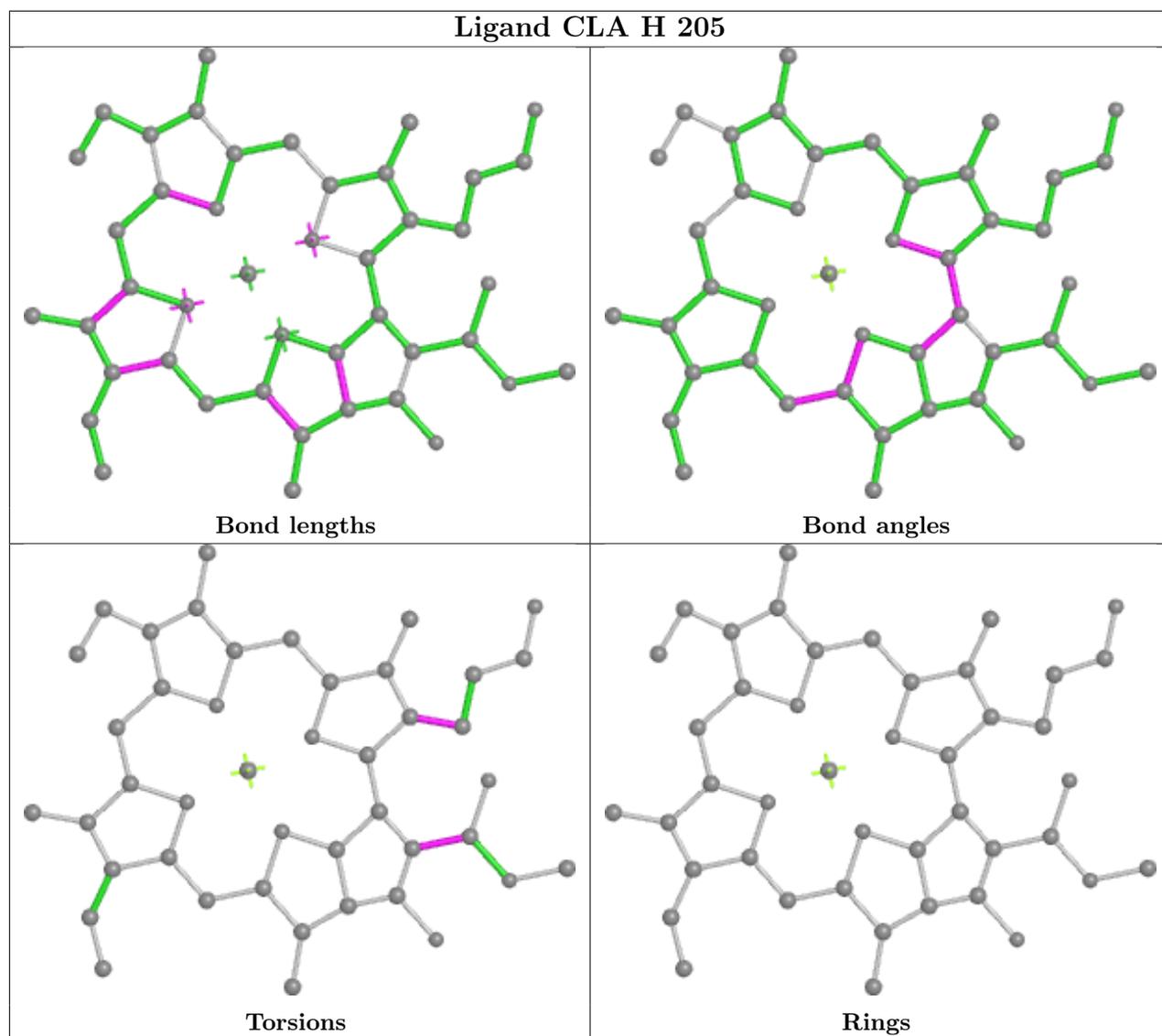
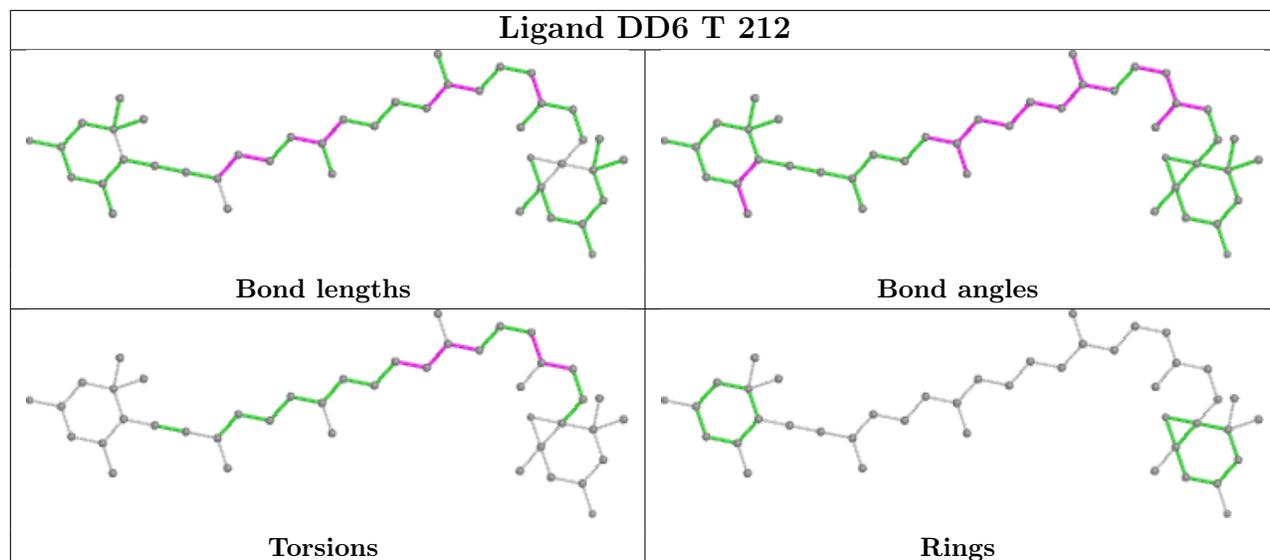


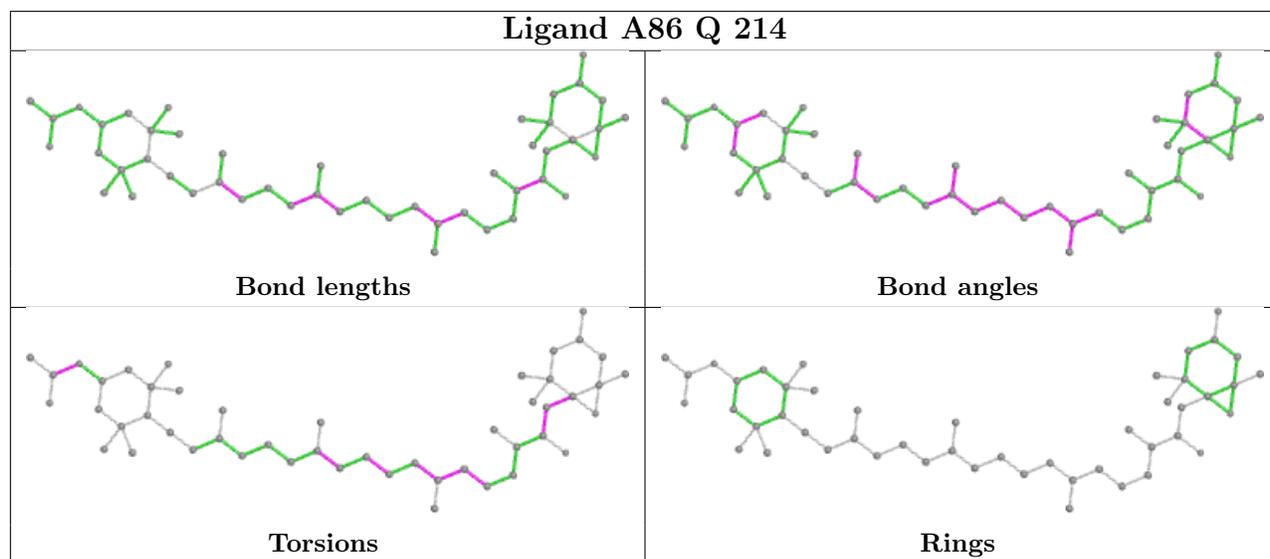
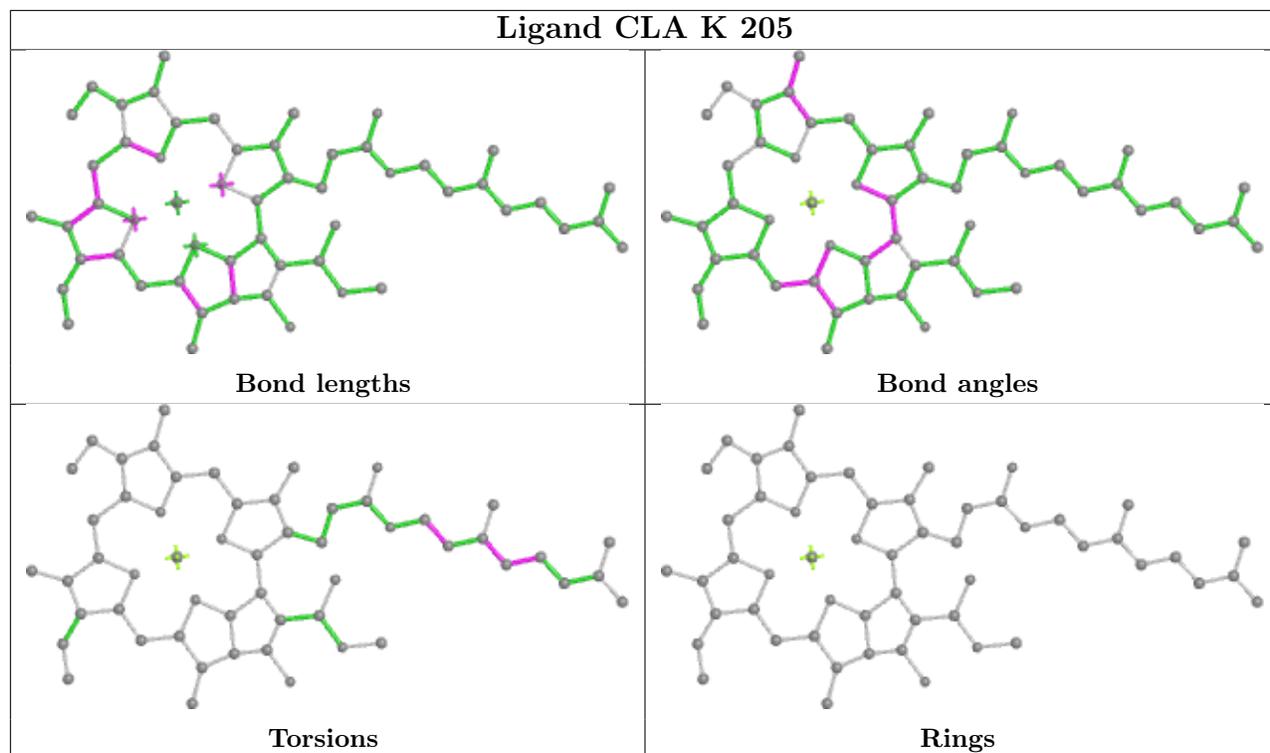


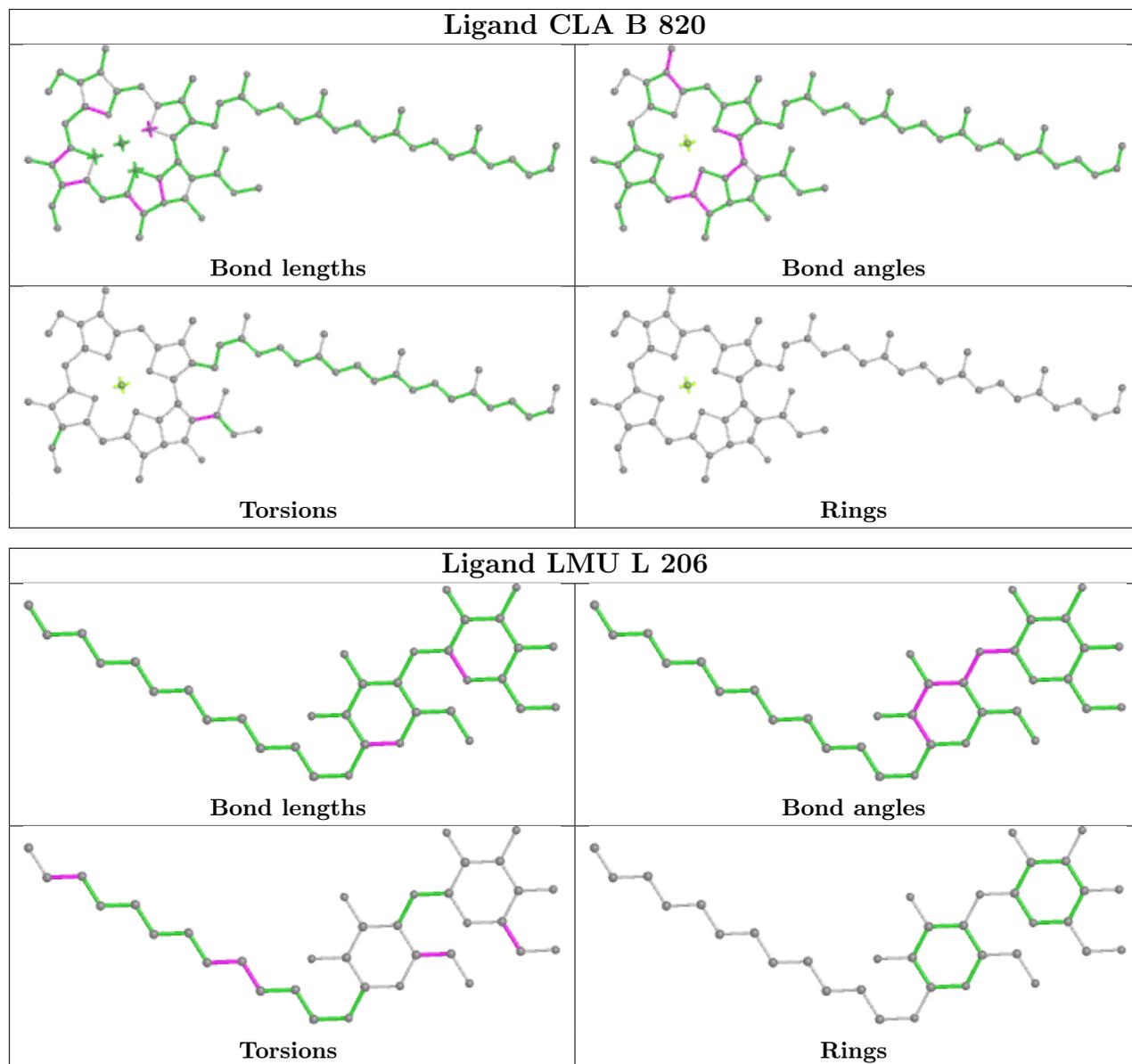


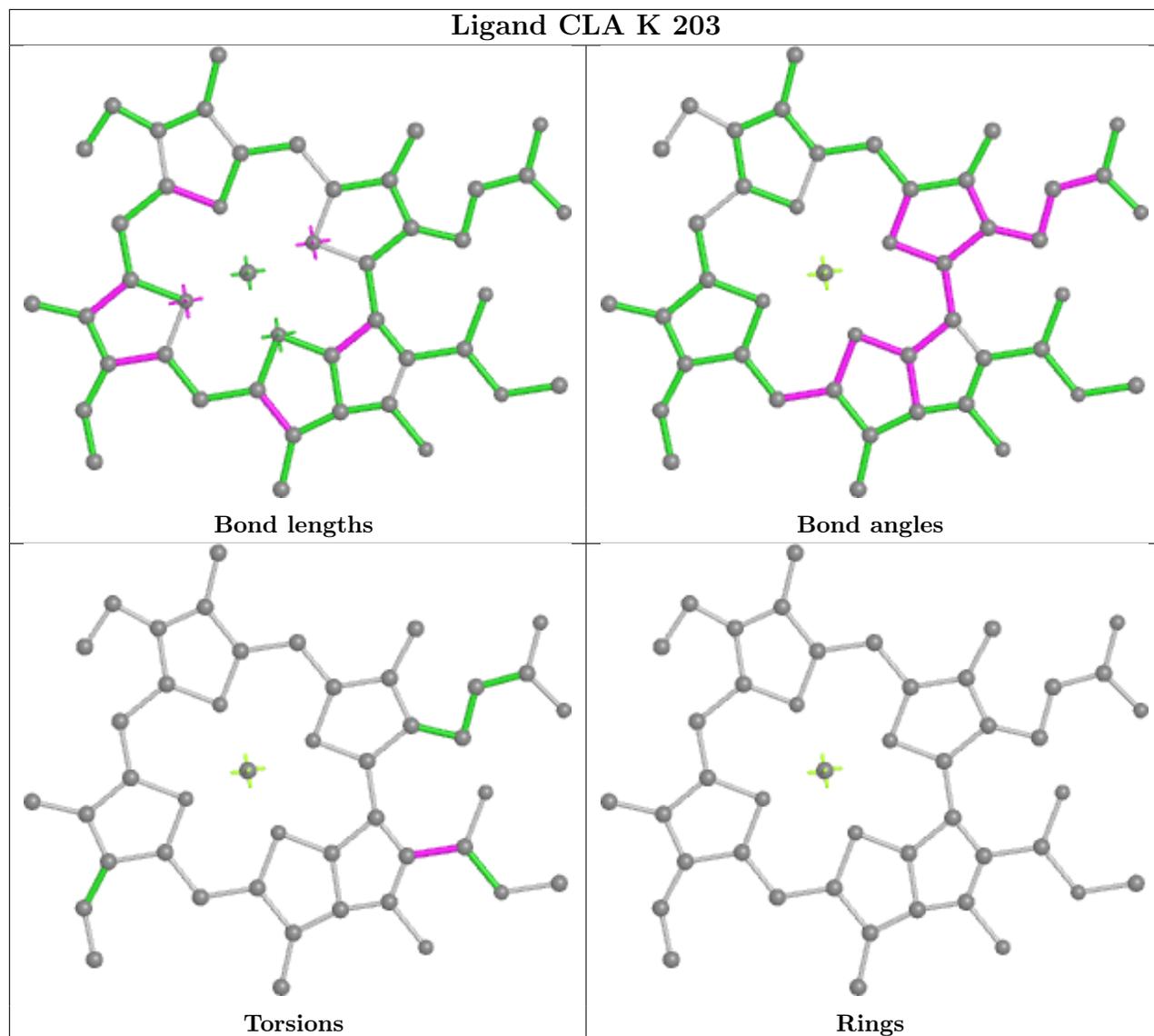


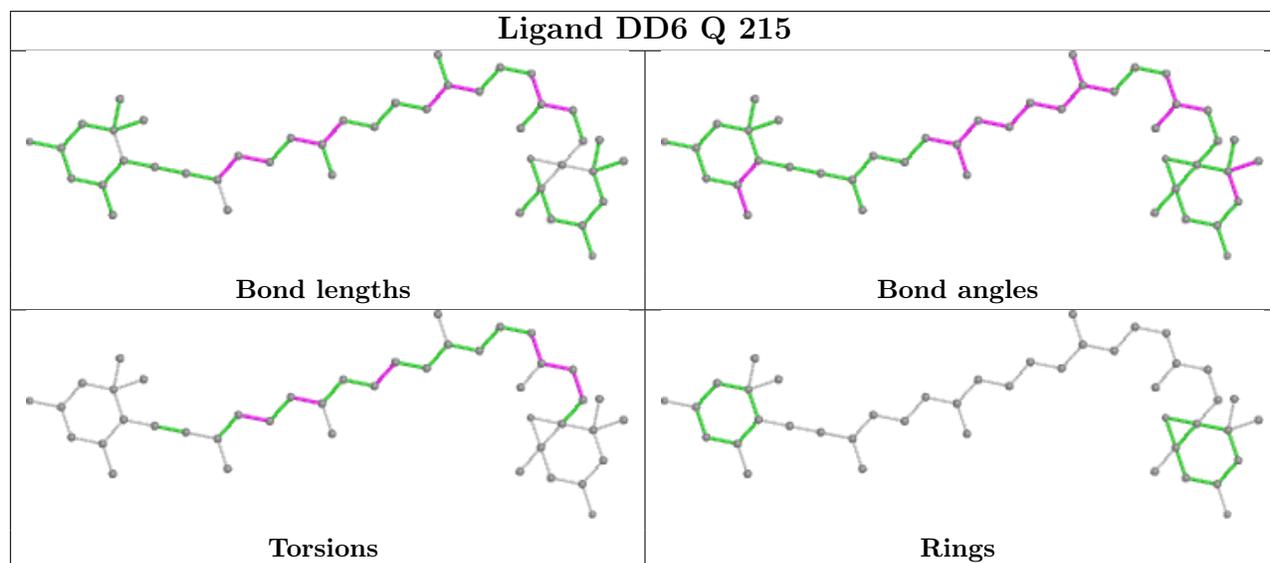
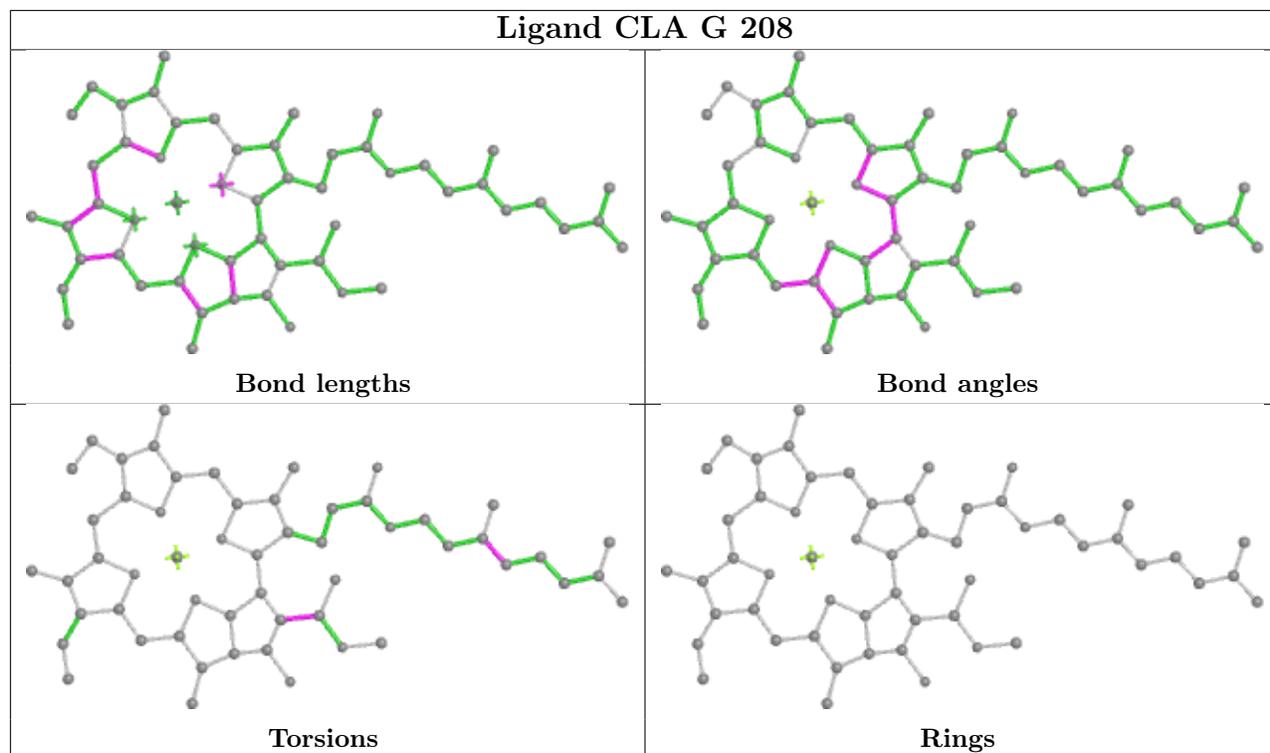


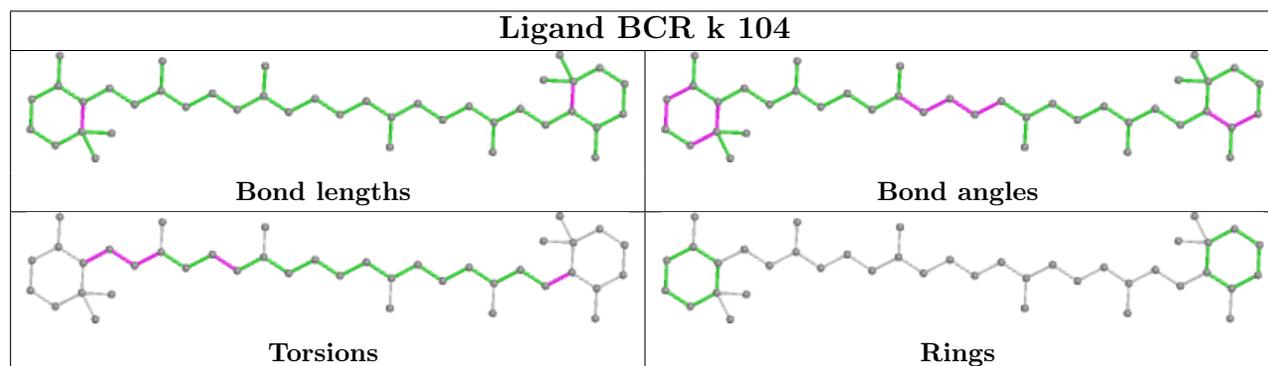
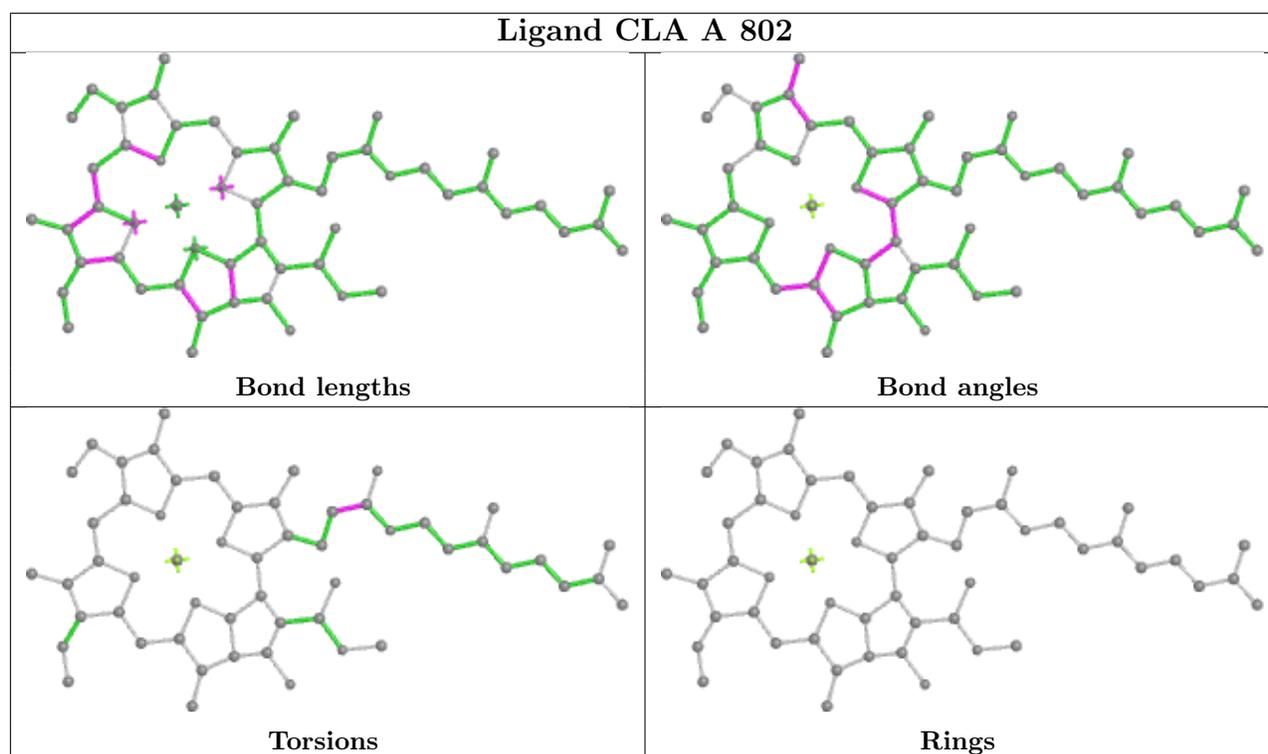
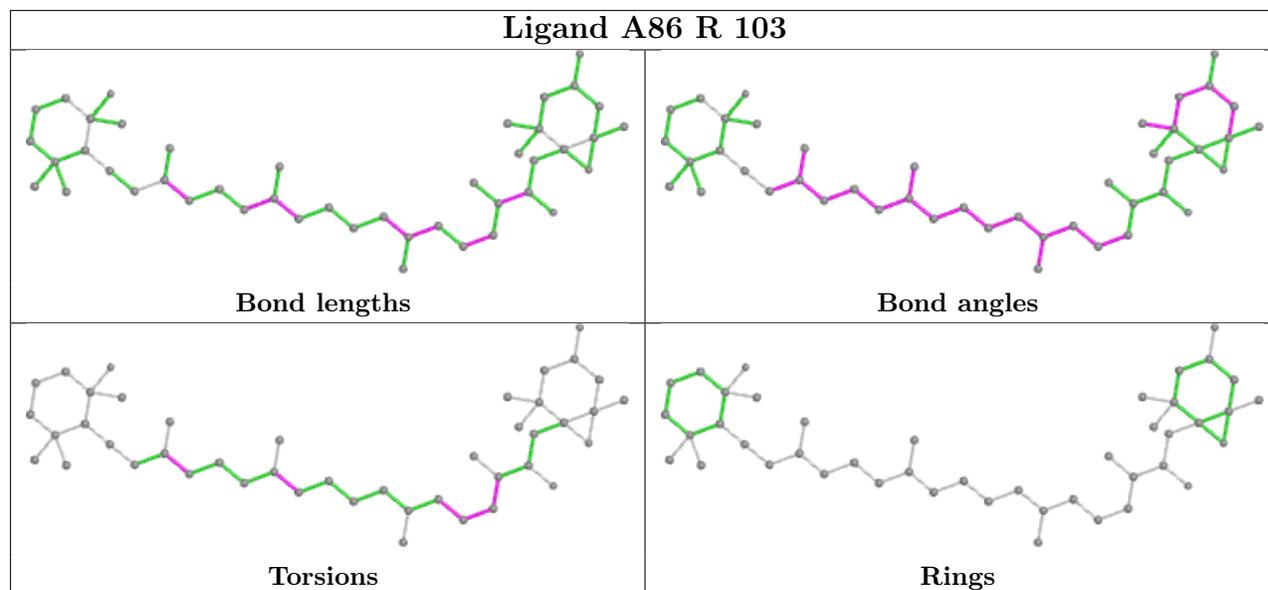


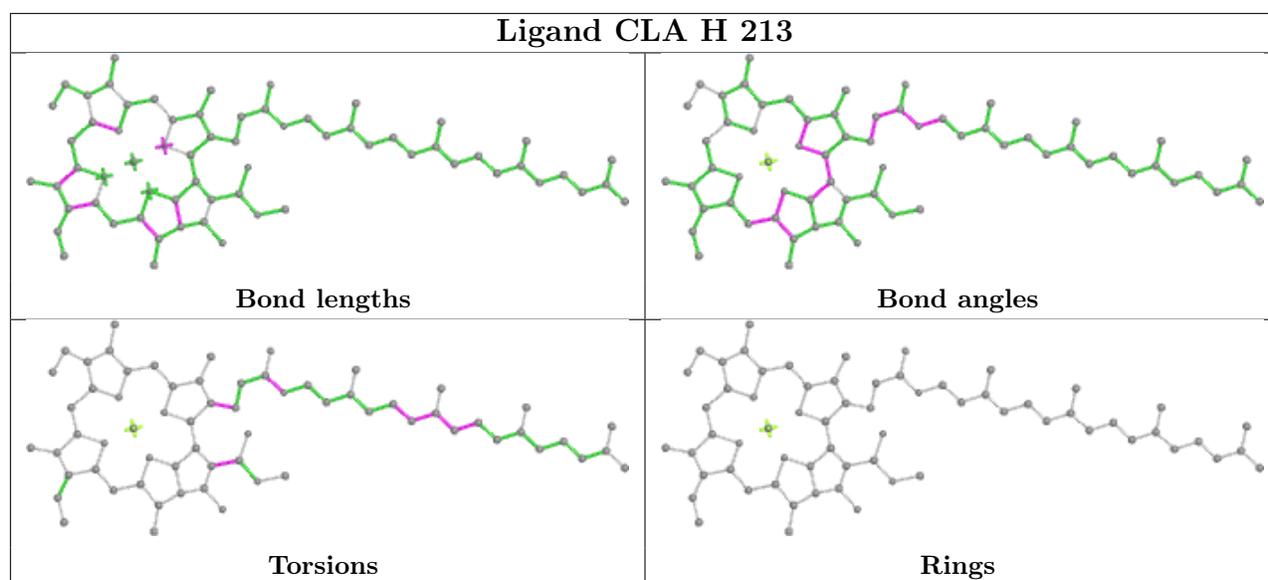












5.7 Other polymers [i](#)

There are no such residues in this entry.

5.8 Polymer linkage issues [i](#)

There are no chain breaks in this entry.

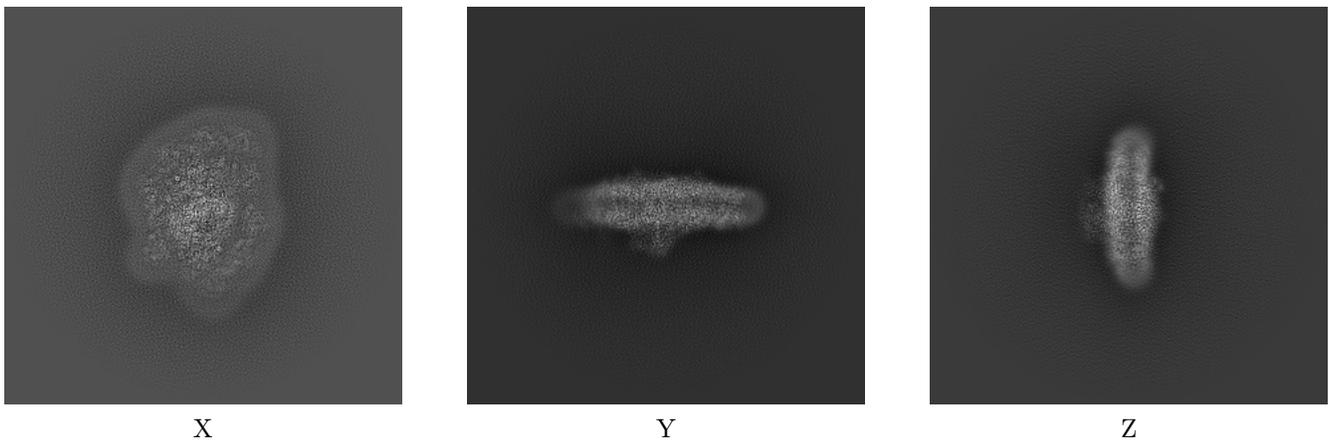
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-64153. These allow visual inspection of the internal detail of the map and identification of artifacts.

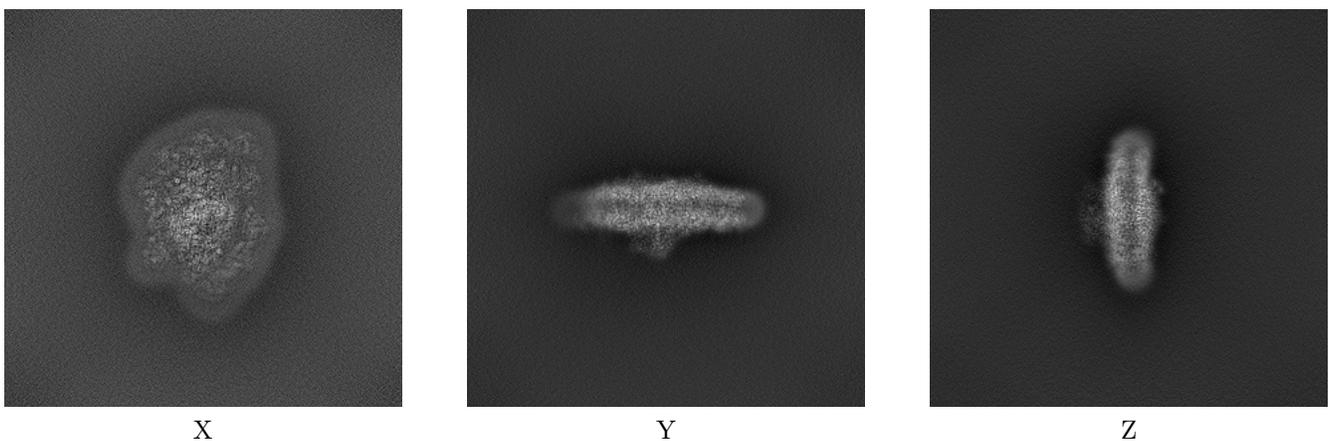
Images derived from a raw map, generated by summing the deposited half-maps, are presented below the corresponding image components of the primary map to allow further visual inspection and comparison with those of the primary map.

6.1 Orthogonal projections [i](#)

6.1.1 Primary map



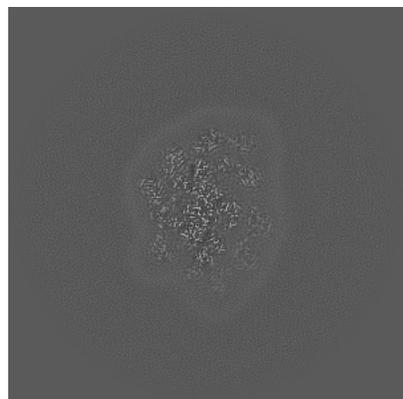
6.1.2 Raw map



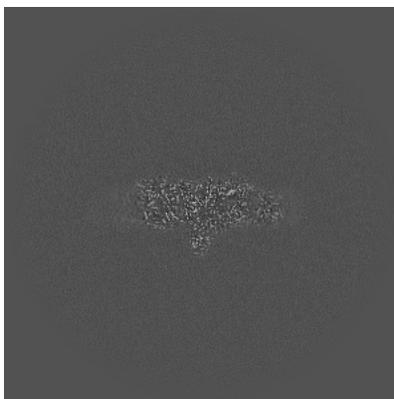
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

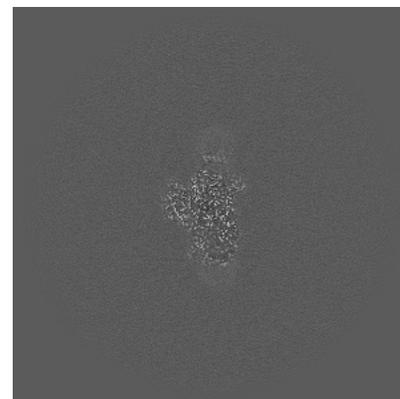
6.2.1 Primary map



X Index: 300

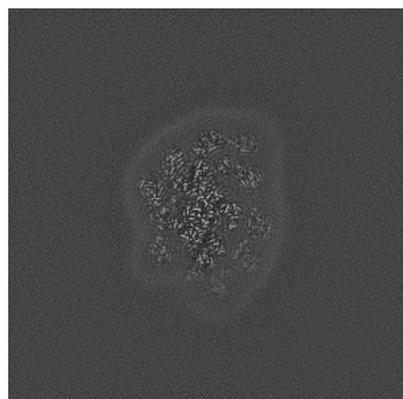


Y Index: 300

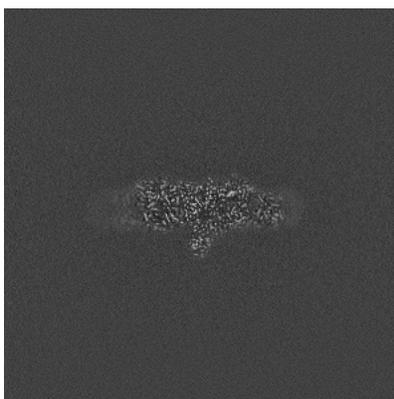


Z Index: 300

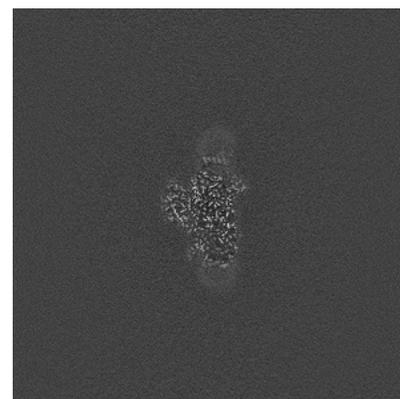
6.2.2 Raw map



X Index: 300



Y Index: 300

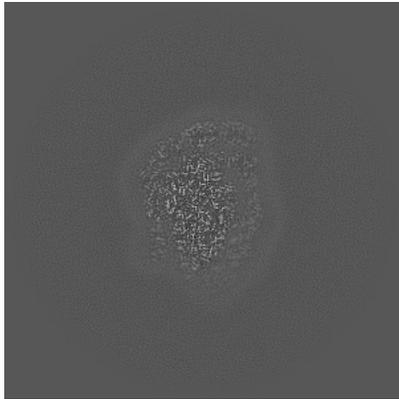


Z Index: 300

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

6.3 Largest variance slices [i](#)

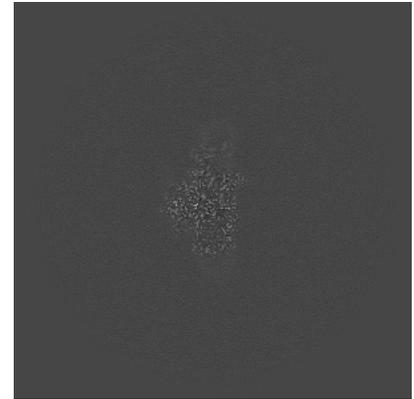
6.3.1 Primary map



X Index: 316

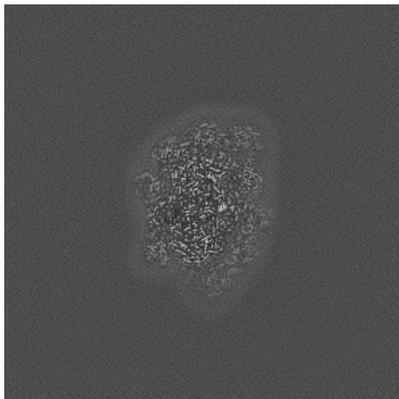


Y Index: 290

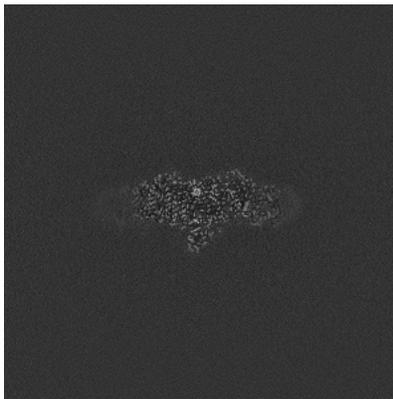


Z Index: 288

6.3.2 Raw map



X Index: 285



Y Index: 289

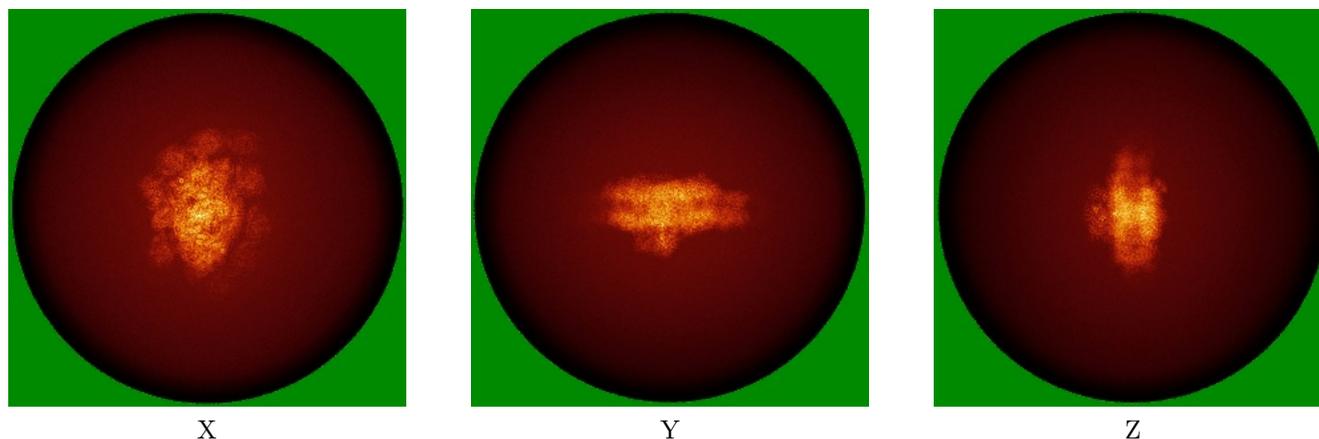


Z Index: 288

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

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

6.4.1 Primary map

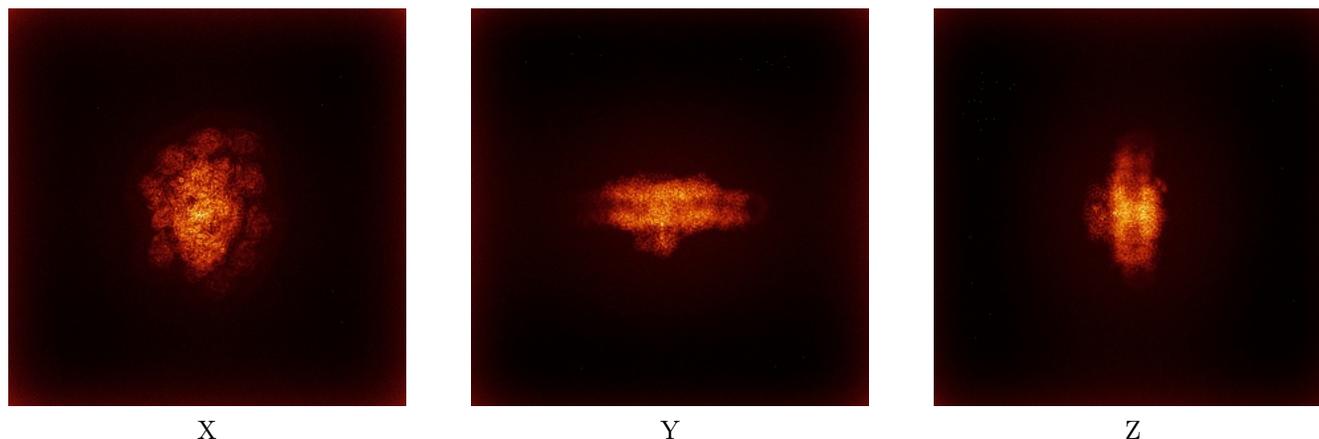


X

Y

Z

6.4.2 Raw map



X

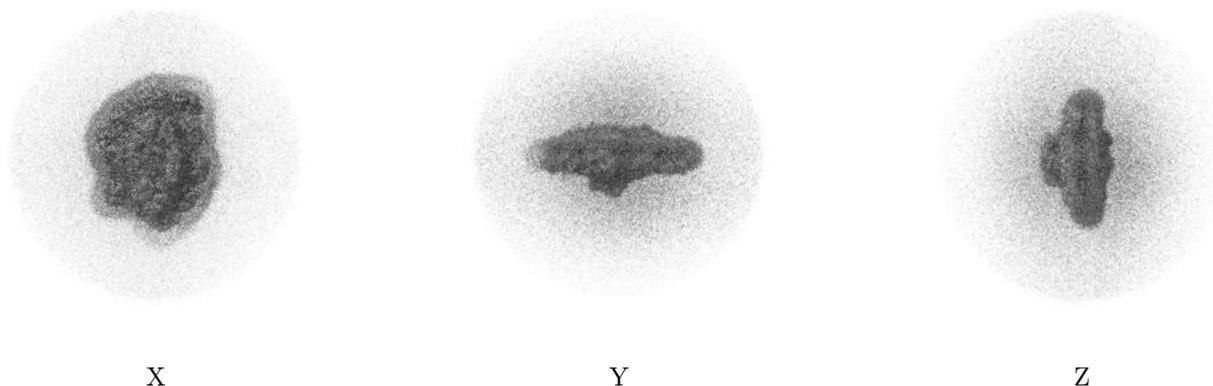
Y

Z

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

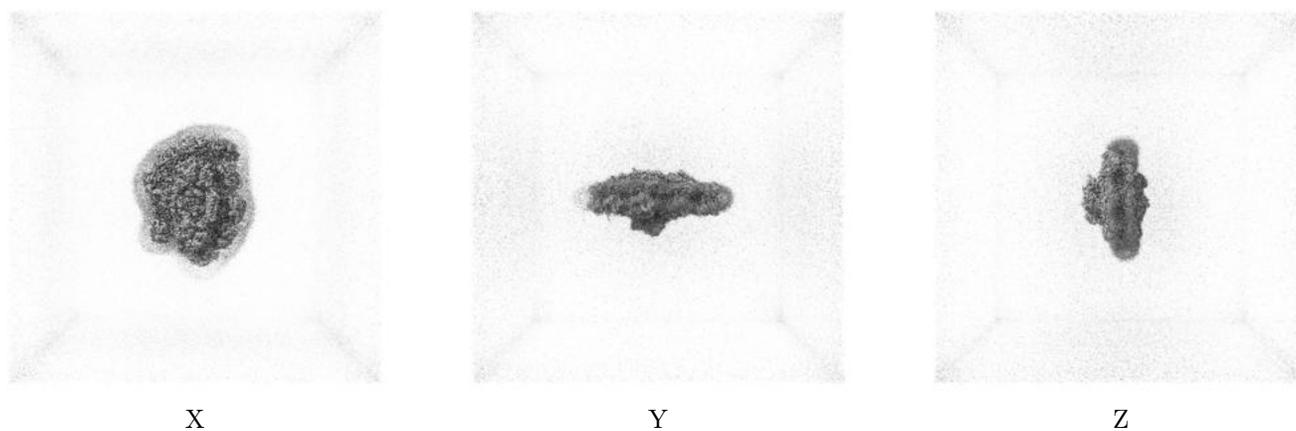
6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 0.065. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

6.5.2 Raw map



These images show the 3D surface of the raw map. The raw map's contour level was selected so that its surface encloses the same volume as the primary map does at its recommended contour level.

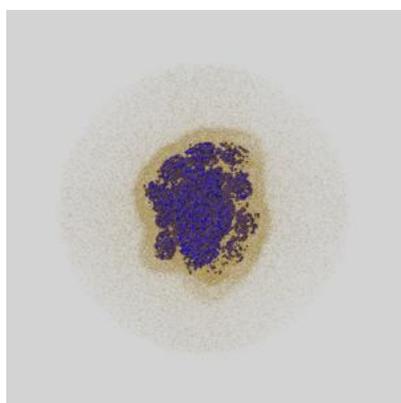
6.6 Mask visualisation [i](#)

This section shows the 3D surface view of the primary map at 50% transparency overlaid with the specified mask at 0% transparency

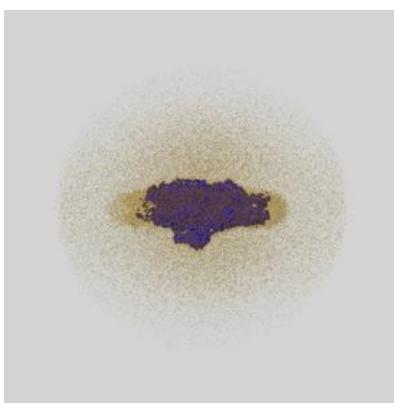
A mask typically either:

- Encompasses the whole structure
- Separates out a domain, a functional unit, a monomer or an area of interest from a larger structure

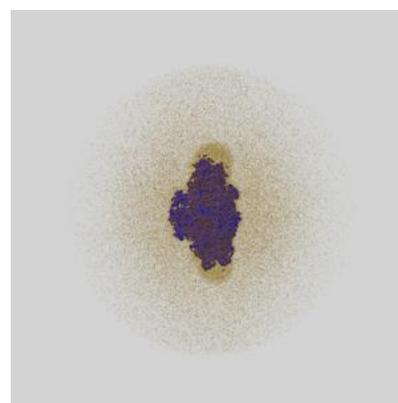
6.6.1 emd_64153_msk_1.map [i](#)



X



Y

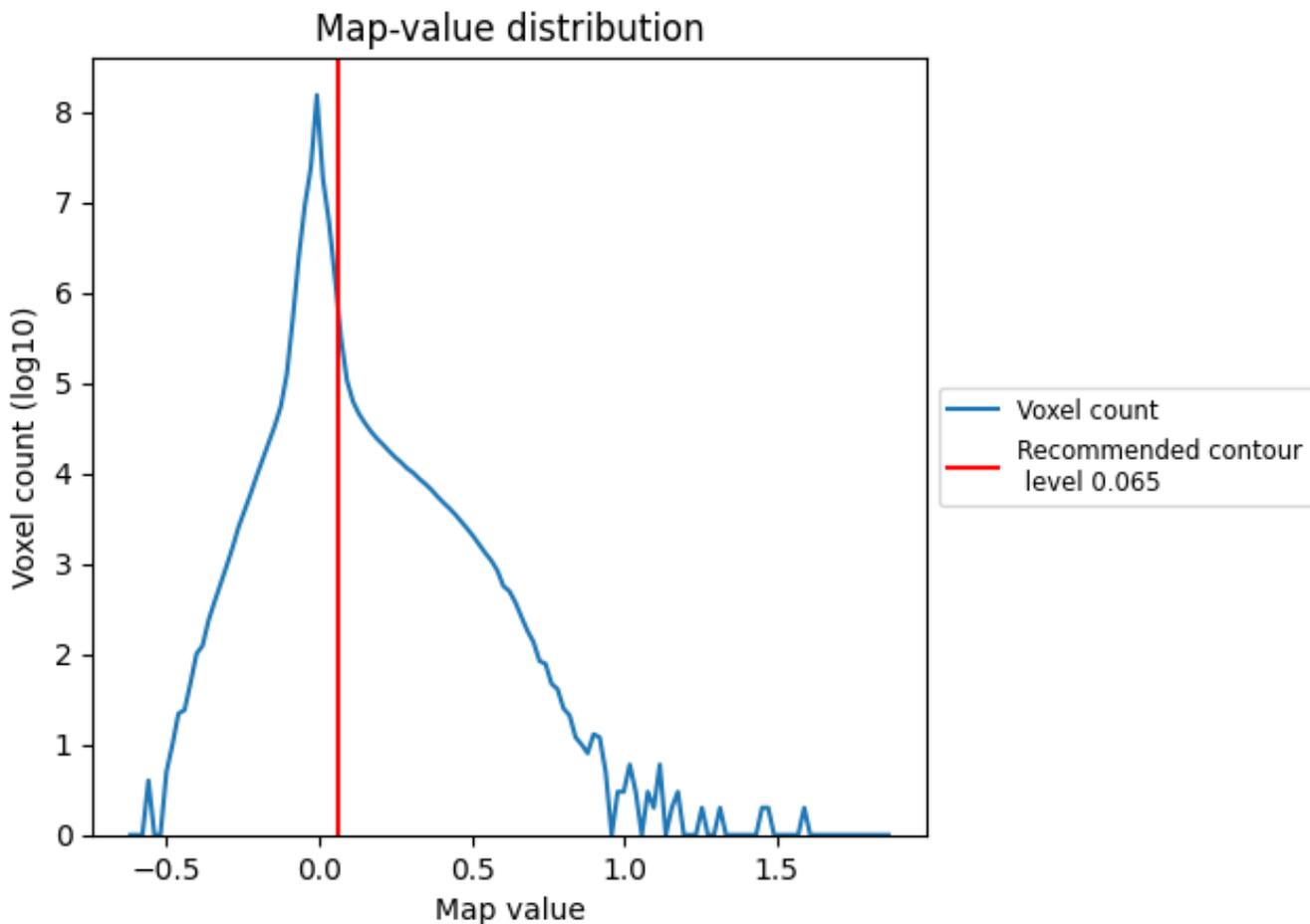


Z

7 Map analysis [i](#)

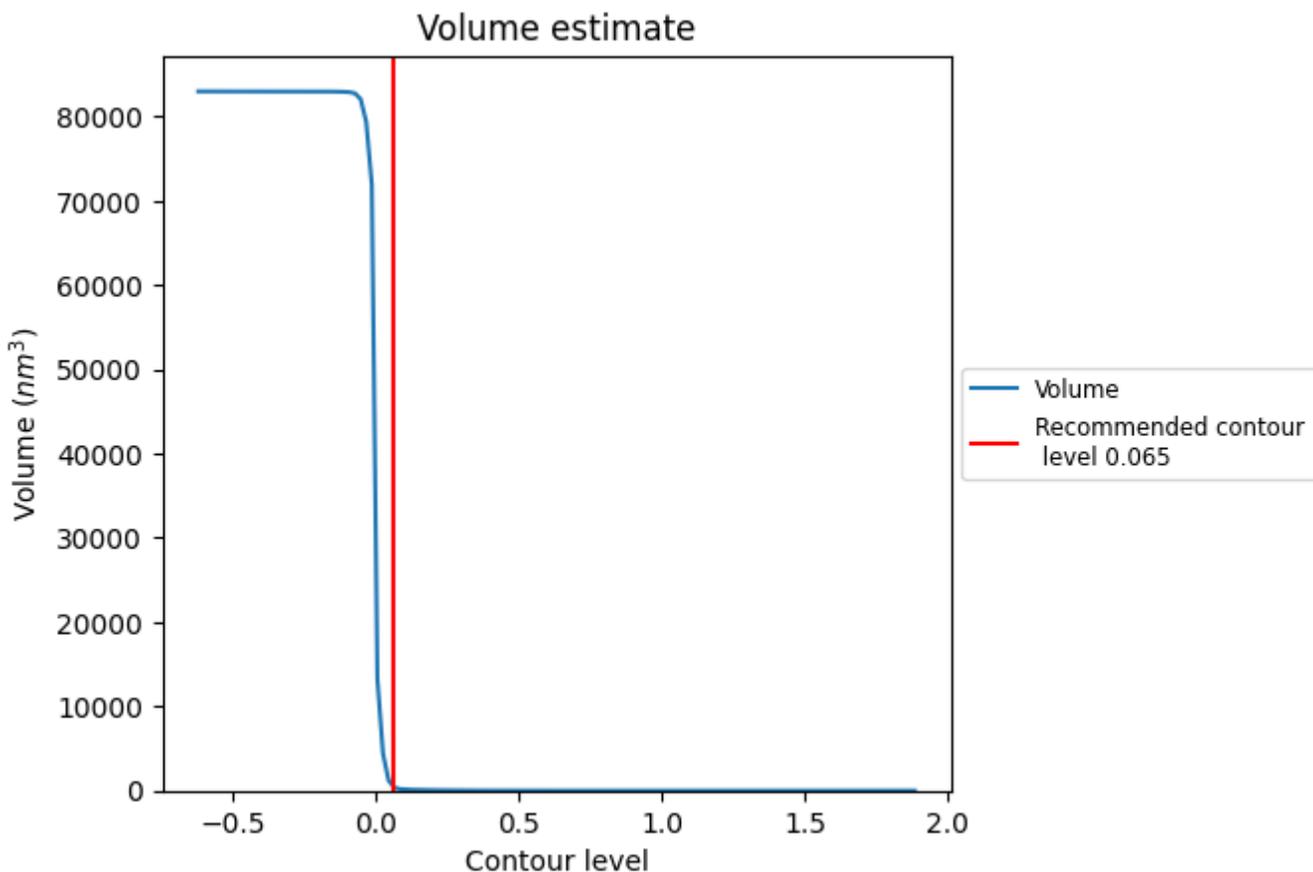
This section contains the results of statistical analysis of the map.

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.

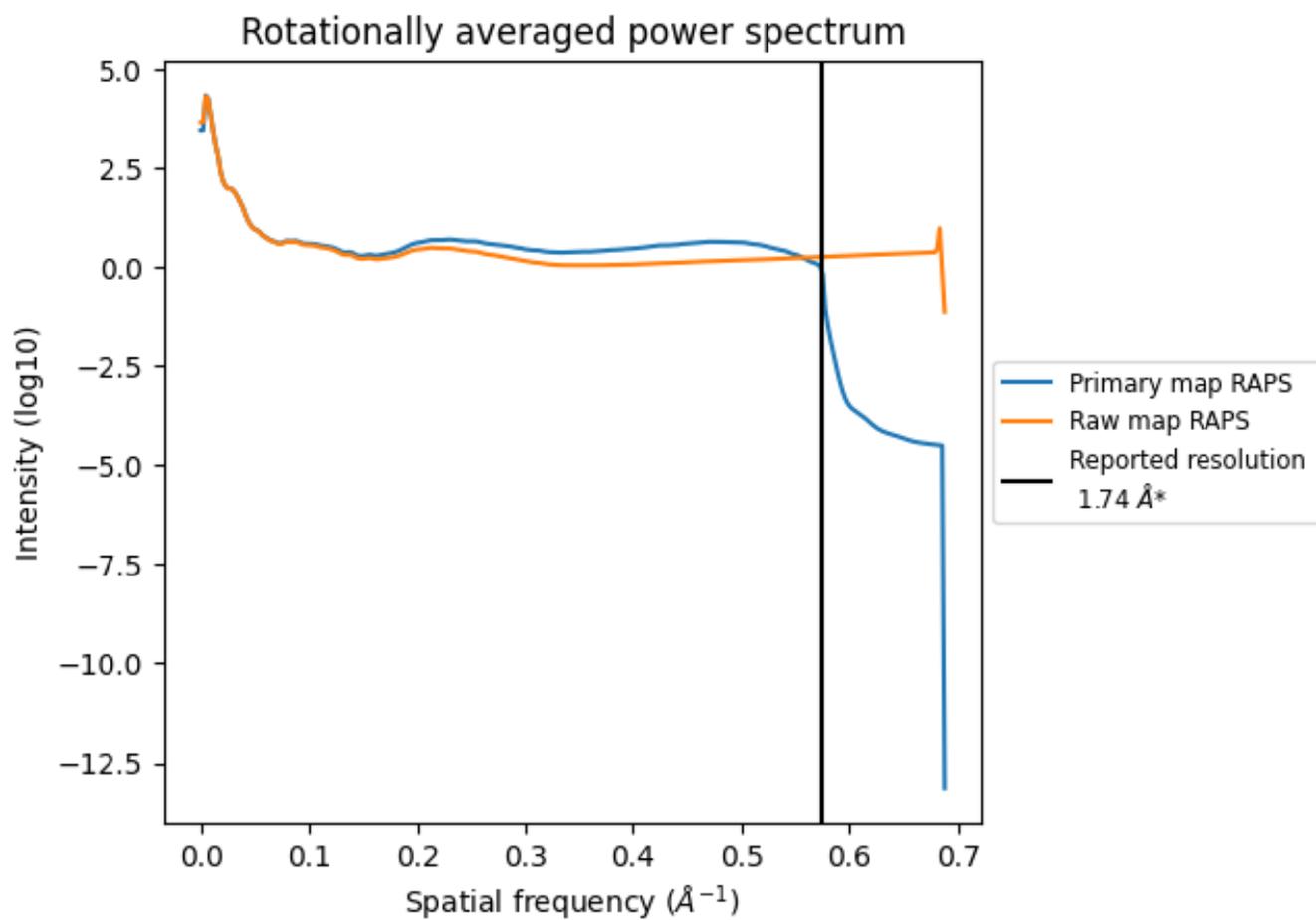
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 416 nm^3 ; this corresponds to an approximate mass of 375 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

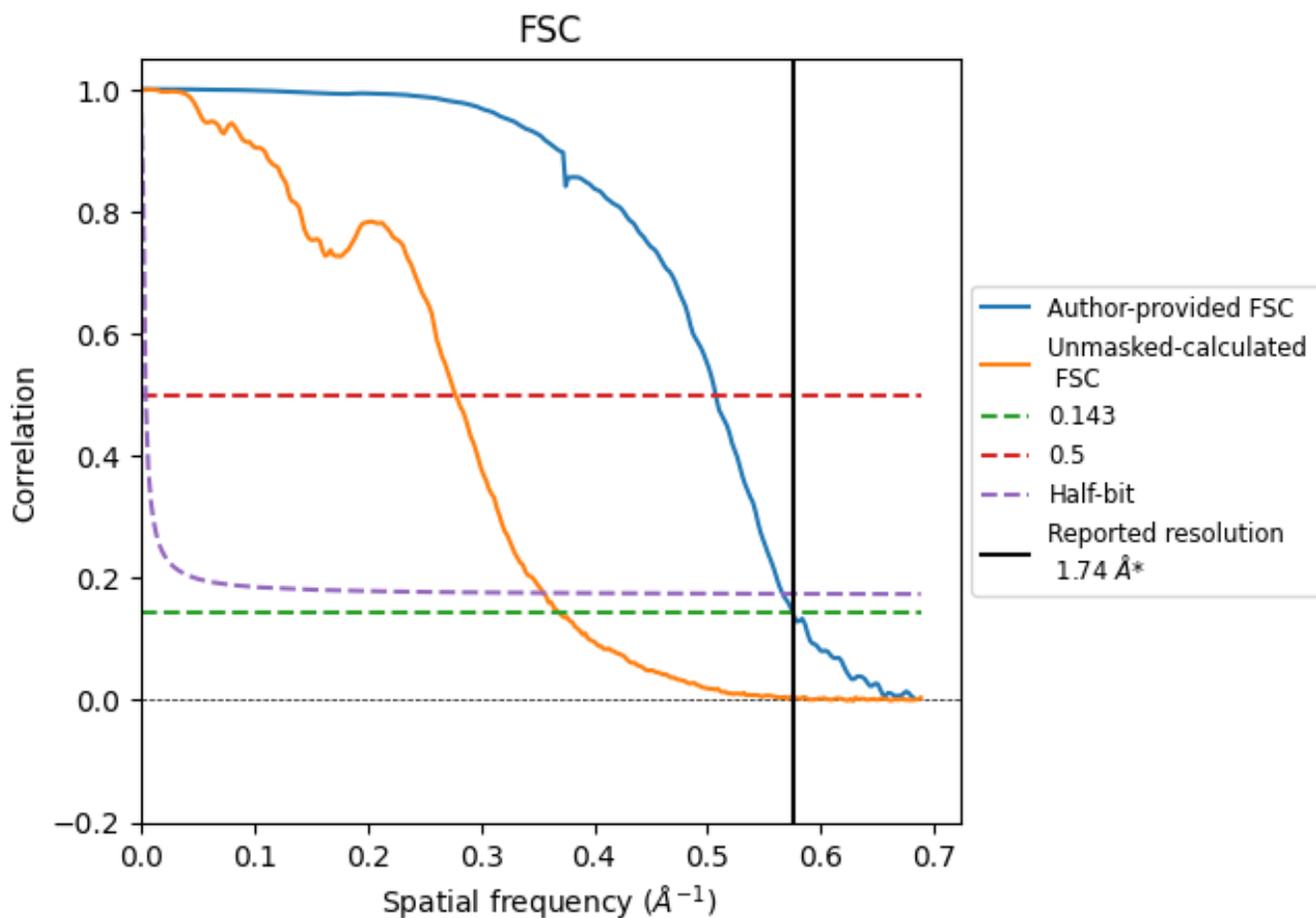


*Reported resolution corresponds to spatial frequency of 0.575 Å⁻¹

8 Fourier-Shell correlation [i](#)

Fourier-Shell Correlation (FSC) is the most commonly used method to estimate the resolution of single-particle and subtomogram-averaged maps. The shape of the curve depends on the imposed symmetry, mask and whether or not the two 3D reconstructions used were processed from a common reference. The reported resolution is shown as a black line. A curve is displayed for the half-bit criterion in addition to lines showing the 0.143 gold standard cut-off and 0.5 cut-off.

8.1 FSC [i](#)



*Reported resolution corresponds to spatial frequency of 0.575 Å⁻¹

8.2 Resolution estimates [i](#)

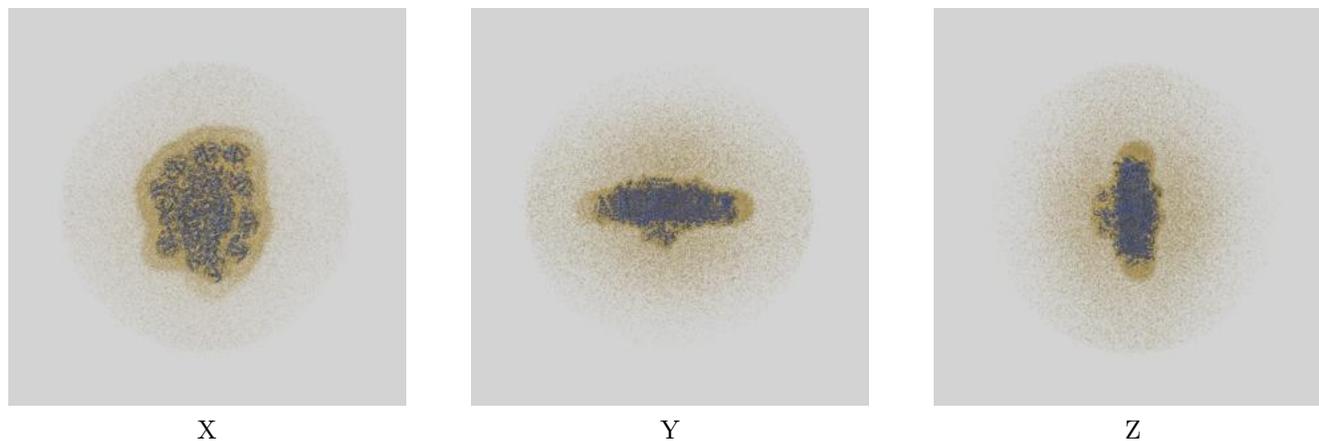
Resolution estimate (Å)	Estimation criterion (FSC cut-off)		
	0.143	0.5	Half-bit
Reported by author	1.74	-	-
Author-provided FSC curve	1.74	1.97	1.77
Unmasked-calculated*	2.71	3.60	2.82

*Resolution estimate based on FSC curve calculated by comparison of deposited half-maps. The value from deposited half-maps intersecting FSC 0.143 CUT-OFF 2.71 differs from the reported value 1.74 by more than 10 %

9 Map-model fit [i](#)

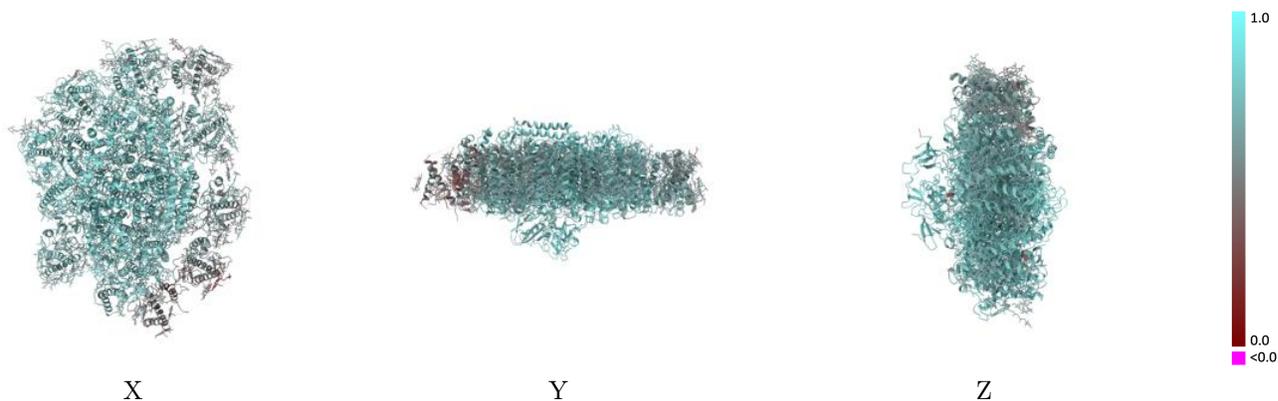
This section contains information regarding the fit between EMDB map EMD-64153 and PDB model 9UH3. Per-residue inclusion information can be found in section 3 on page 31.

9.1 Map-model overlay [i](#)



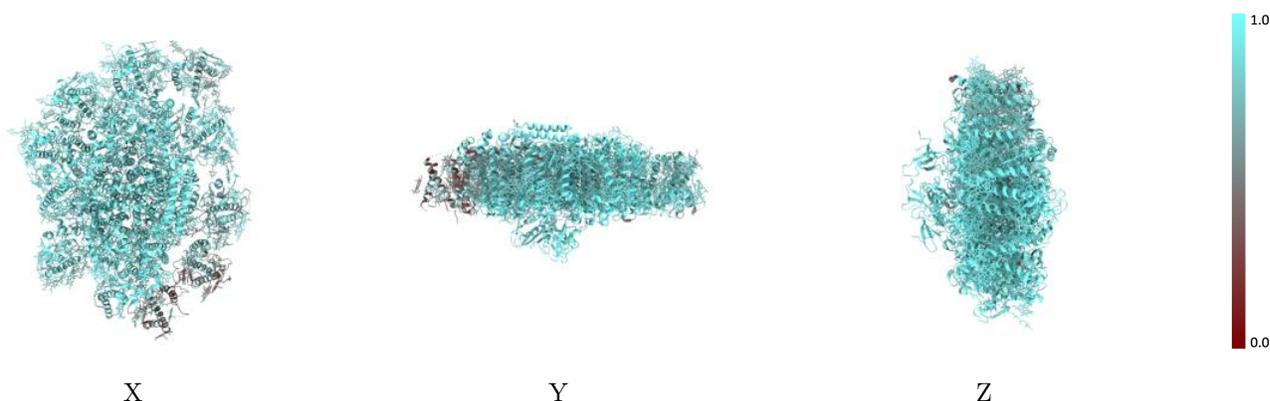
The images above show the 3D surface view of the map at the recommended contour level 0.065 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



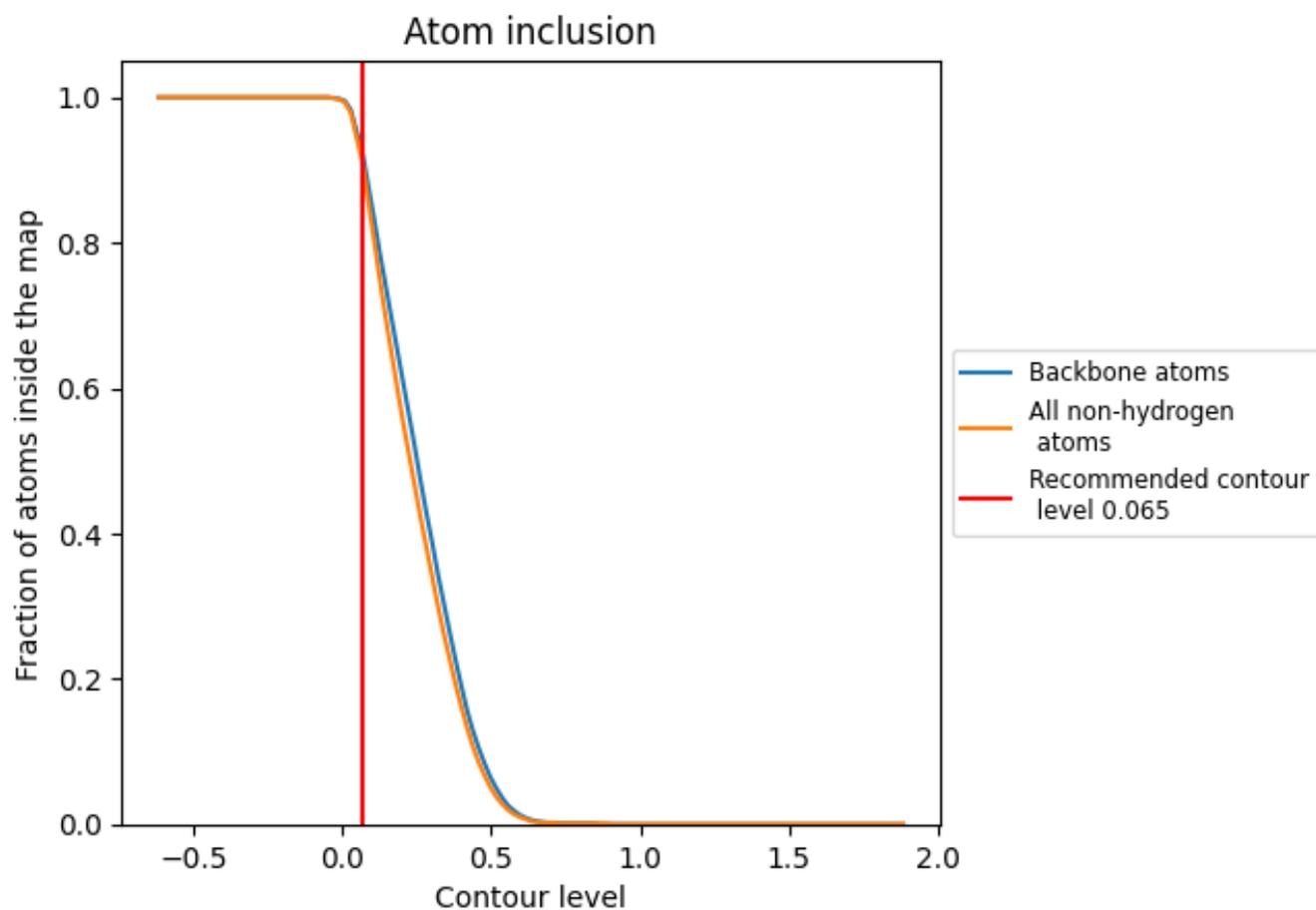
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (0.065).

9.4 Atom inclusion [i](#)



At the recommended contour level, 93% of all backbone atoms, 91% 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 (0.065) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9140	 0.7220
A	 0.9690	 0.7790
B	 0.9840	 0.8090
C	 0.9980	 0.8330
D	 0.9700	 0.7820
E	 0.9520	 0.7730
F	 0.9550	 0.7550
G	 0.7920	 0.5830
H	 0.6390	 0.5150
I	 0.9860	 0.8110
J	 0.9650	 0.7480
K	 0.4900	 0.4410
L	 0.9560	 0.7740
M	 0.9790	 0.7990
O	 0.9340	 0.7160
P	 0.8940	 0.6600
Q	 0.8910	 0.6650
R	 0.9550	 0.7440
S	 0.9440	 0.7330
T	 0.7520	 0.5480
U	 0.8730	 0.6620
k	 0.8200	 0.6270

