



wwPDB EM Validation Summary Report ⓘ

Mar 9, 2026 – 03:19 PM UTC

PDB ID : 9LE7 / pdb_00009le7
EMDB ID : EMD-63017
Title : Coordinates of Cryo-EM structure of the Arabidopsis thaliana C4S4M4-type PSII supercomplex
Authors : Chen, S.J.B.; Wu, C.; Wu, J.H.; Sui, S.F.; Zhang, L.X.
Deposited on : 2025-01-07
Resolution : 3.80 Å(reported)

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

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

A user guide is available at

<https://www.wwpdb.org/validation/2017/EMValidationReportHelp>
with specific help available everywhere you see the ⓘ 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:

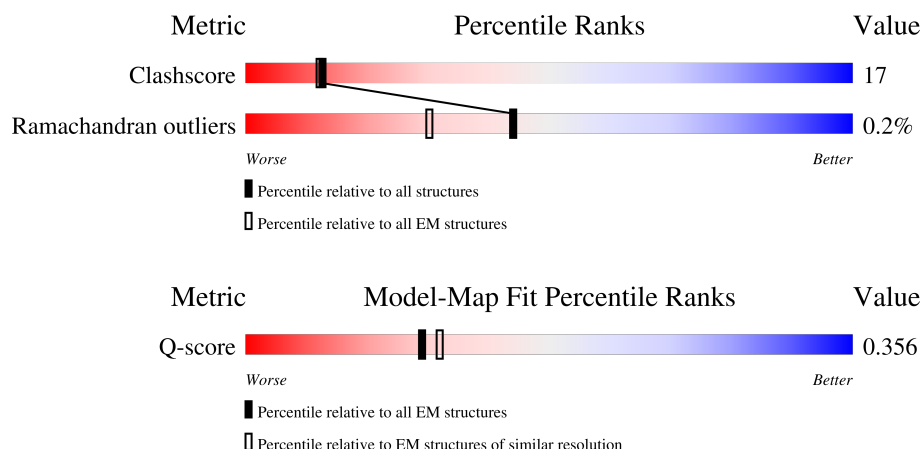
EMDB validation analysis : 0.0.1.dev132
Mogul : 2022.3.0, CSD as543be (2022)
MolProbity : 4-5-2 with Phenix2.0
Buster-report : wwPDB partial adaption of 1.1.7 (2018)
Percentile statistics : 20250101.v01 (using entries in the PDB archive January 1st 2025)
EM percentile statistics : 202505.v01 (Using data 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) : 2.49

1 Overall quality at a glance i

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

The reported resolution of this entry is 3.80 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.













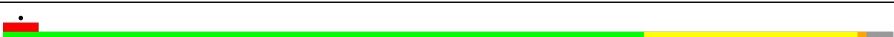


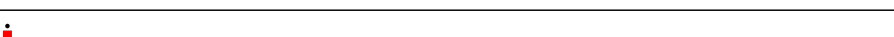
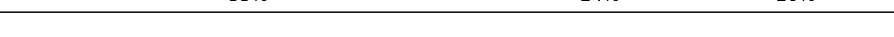
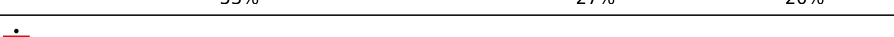



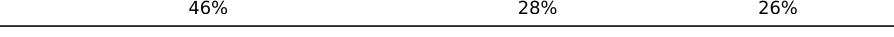





Metric	Whole archive (#Entries)	EM structures (#Entries)	Similar EM resolution (#Entries, resolution range(Å))
Clashscore	229148	23984	-
Ramachandran outliers	224038	23583	-
Q-score	-	25397	10198 (3.30 - 4.30)

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	5	266	<div> <div>50%</div> <div>25%</div> <div>24%</div> </div>
1	7	266	<div> <div>49%</div> <div>26%</div> <div>24%</div> </div>
1	9	266	<div> <div>49%</div> <div>27%</div> <div>24%</div> </div>
1	AA	266	<div> <div>48%</div> <div>27%</div> <div>24%</div> </div>
2	0	243	<div> <div>53%</div> <div>38%</div> <div>9%</div> </div>

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Mol	Chain	Length	Quality of chain
2	6	243	
3	8	212	
3	AB	212	
4	B	508	
4	BE	508	
4	b	508	
4	v	508	
5	2	352	
5	BG	352	
5	D	352	
5	d	352	
6	3	83	
6	BH	83	
6	E	83	
6	e	83	
7	4	39	
7	BI	39	
7	F	39	
7	f	39	
8	A2	232	
8	Au	232	
8	BB	232	
8	BJ	232	
8	BQ	232	
8	Ba	232	

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Mol	Chain	Length	Quality of chain
8	G	232	
8	N	232	
8	Y	232	
8	g	232	
8	n	232	
8	y	232	
9	Av	72	
9	BK	72	
9	H	72	
9	h	72	
10	Aw	36	
10	BL	36	
10	I	36	
10	i	36	
11	Ay	37	
11	BN	37	
11	K	37	
11	k	37	
12	Az	38	
12	BO	38	
12	L	38	
12	l	38	
13	A1	34	
13	BP	34	
13	M	34	



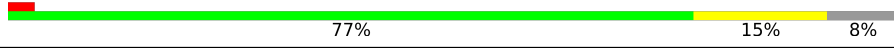



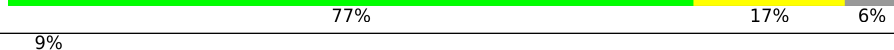
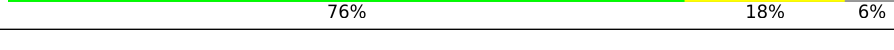
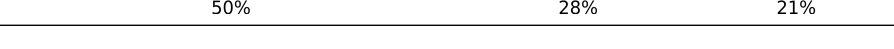
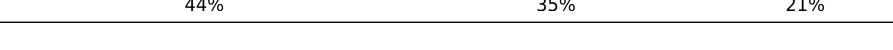
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Mol	Chain	Length	Quality of chain
13	m	34	
14	A6	232	
14	BV	232	
14	S	232	
14	s	232	
15	A7	33	
15	BW	33	
15	T	33	
15	t	33	
16	A8	28	
16	BX	28	
16	U	28	
16	u	28	
17	A0	54	
17	BY	54	
17	W	54	
17	w	54	
18	BA	42	
18	BZ	42	
18	X	42	
18	x	42	
19	BC	62	
19	Bb	62	
19	Z	62	
19	z	62	

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Mol	Chain	Length	Quality of chain
20	A	352	
20	BD	352	
20	R	352	
20	a	352	
21	1	459	
21	BF	459	
21	C	459	
21	c	459	
22	BU	250	
22	r	250	

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
23	CHL	0	601	X	-	-	-
23	CHL	0	605	X	-	-	-
23	CHL	0	606	X	-	-	-
23	CHL	0	607	X	-	-	-
23	CHL	0	608	X	-	-	-
23	CHL	0	609	X	-	-	-
23	CHL	5	601	X	-	-	-
23	CHL	5	605	X	-	-	-
23	CHL	5	606	X	-	-	-
23	CHL	5	607	X	-	-	-
23	CHL	5	608	X	-	-	-
23	CHL	5	609	X	-	-	-
23	CHL	6	601	X	-	-	-
23	CHL	6	605	X	-	-	-
23	CHL	6	606	X	-	-	-
23	CHL	6	607	X	-	-	-
23	CHL	6	608	X	-	-	-
23	CHL	6	609	X	-	-	-
23	CHL	7	302	X	-	-	-
23	CHL	7	306	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
23	CHL	7	307	X	-	-	-
23	CHL	7	308	X	-	-	-
23	CHL	7	309	X	-	-	-
23	CHL	7	310	X	-	-	-
23	CHL	8	304	X	-	-	-
23	CHL	8	305	X	-	-	-
23	CHL	8	306	X	-	-	-
23	CHL	8	307	X	-	-	-
23	CHL	9	601	X	-	-	-
23	CHL	9	605	X	-	-	-
23	CHL	9	606	X	-	-	-
23	CHL	9	607	X	-	-	-
23	CHL	9	608	X	-	-	-
23	CHL	9	609	X	-	-	-
23	CHL	A2	601	X	-	-	-
23	CHL	A2	605	X	-	-	-
23	CHL	A2	606	X	-	-	-
23	CHL	A2	607	X	-	-	-
23	CHL	A2	608	X	-	-	-
23	CHL	A2	609	X	-	-	-
23	CHL	A6	601	X	-	-	-
23	CHL	A6	605	X	-	-	-
23	CHL	A6	606	X	-	-	-
23	CHL	A6	607	X	-	-	-
23	CHL	AA	302	X	-	-	-
23	CHL	AA	306	X	-	-	-
23	CHL	AA	307	X	-	-	-
23	CHL	AA	308	X	-	-	-
23	CHL	AA	309	X	-	-	-
23	CHL	AA	310	X	-	-	-
23	CHL	AB	304	X	-	-	-
23	CHL	AB	305	X	-	-	-
23	CHL	AB	306	X	-	-	-
23	CHL	AB	307	X	-	-	-
23	CHL	Au	601	X	-	-	-
23	CHL	Au	605	X	-	-	-
23	CHL	Au	606	X	-	-	-
23	CHL	Au	607	X	-	-	-
23	CHL	Au	608	X	-	-	-
23	CHL	Au	609	X	-	-	-
23	CHL	BB	302	X	-	-	-
23	CHL	BB	306	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
23	CHL	BB	307	X	-	-	-
23	CHL	BB	308	X	-	-	-
23	CHL	BB	309	X	-	-	-
23	CHL	BB	310	X	-	-	-
23	CHL	BH	601	X	-	-	-
23	CHL	BJ	601	X	-	-	-
23	CHL	BJ	605	X	-	-	-
23	CHL	BJ	606	X	-	-	-
23	CHL	BJ	607	X	-	-	-
23	CHL	BJ	608	X	-	-	-
23	CHL	BJ	609	X	-	-	-
23	CHL	BQ	601	X	-	-	-
23	CHL	BQ	605	X	-	-	-
23	CHL	BQ	606	X	-	-	-
23	CHL	BQ	607	X	-	-	-
23	CHL	BQ	608	X	-	-	-
23	CHL	BQ	609	X	-	-	-
23	CHL	BU	605	X	-	-	-
23	CHL	BU	606	X	-	-	-
23	CHL	BU	607	X	-	-	-
23	CHL	BU	613	X	-	-	-
23	CHL	BV	601	X	-	-	-
23	CHL	BV	605	X	-	-	-
23	CHL	BV	606	X	-	-	-
23	CHL	BV	607	X	-	-	-
23	CHL	Ba	302	X	-	-	-
23	CHL	Ba	306	X	-	-	-
23	CHL	Ba	307	X	-	-	-
23	CHL	Ba	308	X	-	-	-
23	CHL	Ba	309	X	-	-	-
23	CHL	Ba	310	X	-	-	-
23	CHL	G	601	X	-	-	-
23	CHL	G	605	X	-	-	-
23	CHL	G	606	X	-	-	-
23	CHL	G	607	X	-	-	-
23	CHL	G	608	X	-	-	-
23	CHL	G	609	X	-	-	-
23	CHL	N	601	X	-	-	-
23	CHL	N	605	X	-	-	-
23	CHL	N	606	X	-	-	-
23	CHL	N	607	X	-	-	-
23	CHL	N	608	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
23	CHL	N	609	X	-	-	-
23	CHL	S	601	X	-	-	-
23	CHL	S	605	X	-	-	-
23	CHL	S	606	X	-	-	-
23	CHL	S	607	X	-	-	-
23	CHL	Y	302	X	-	-	-
23	CHL	Y	306	X	-	-	-
23	CHL	Y	307	X	-	-	-
23	CHL	Y	308	X	-	-	-
23	CHL	Y	309	X	-	-	-
23	CHL	Y	310	X	-	-	-
23	CHL	e	601	X	-	-	-
23	CHL	g	601	X	-	-	-
23	CHL	g	605	X	-	-	-
23	CHL	g	606	X	-	-	-
23	CHL	g	607	X	-	-	-
23	CHL	g	608	X	-	-	-
23	CHL	g	609	X	-	-	-
23	CHL	n	601	X	-	-	-
23	CHL	n	605	X	-	-	-
23	CHL	n	606	X	-	-	-
23	CHL	n	607	X	-	-	-
23	CHL	n	608	X	-	-	-
23	CHL	n	609	X	-	-	-
23	CHL	r	605	X	-	-	-
23	CHL	r	606	X	-	-	-
23	CHL	r	607	X	-	-	-
23	CHL	r	613	X	-	-	-
23	CHL	s	601	X	-	-	-
23	CHL	s	605	X	-	-	-
23	CHL	s	606	X	-	-	-
23	CHL	s	607	X	-	-	-
23	CHL	y	302	X	-	-	-
23	CHL	y	306	X	-	-	-
23	CHL	y	307	X	-	-	-
23	CHL	y	308	X	-	-	-
23	CHL	y	309	X	-	-	-
23	CHL	y	310	X	-	-	-
24	CLA	0	602	X	-	-	-
24	CLA	0	603	X	-	-	-
24	CLA	0	604	X	-	-	-
24	CLA	0	610	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	CLA	0	611	X	-	-	-
24	CLA	0	612	X	-	-	-
24	CLA	0	613	X	-	-	-
24	CLA	0	614	X	-	-	-
24	CLA	1	502	X	-	-	-
24	CLA	1	503	X	-	-	-
24	CLA	1	504	X	-	-	-
24	CLA	1	505	X	-	-	-
24	CLA	1	506	X	-	-	-
24	CLA	1	507	X	-	-	-
24	CLA	1	508	X	-	-	-
24	CLA	1	509	X	-	-	-
24	CLA	1	510	X	-	-	-
24	CLA	1	511	X	-	-	-
24	CLA	1	512	X	-	-	-
24	CLA	1	513	X	-	-	-
24	CLA	2	402	X	-	-	-
24	CLA	2	403	X	-	-	-
24	CLA	5	602	X	-	-	-
24	CLA	5	603	X	-	-	-
24	CLA	5	604	X	-	-	-
24	CLA	5	610	X	-	-	-
24	CLA	5	611	X	-	-	-
24	CLA	5	612	X	-	-	-
24	CLA	5	613	X	-	-	-
24	CLA	5	614	X	-	-	-
24	CLA	6	602	X	-	-	-
24	CLA	6	603	X	-	-	-
24	CLA	6	604	X	-	-	-
24	CLA	6	610	X	-	-	-
24	CLA	6	611	X	-	-	-
24	CLA	6	612	X	-	-	-
24	CLA	6	613	X	-	-	-
24	CLA	6	614	X	-	-	-
24	CLA	7	303	X	-	-	-
24	CLA	7	304	X	-	-	-
24	CLA	7	305	X	-	-	-
24	CLA	7	311	X	-	-	-
24	CLA	7	312	X	-	-	-
24	CLA	7	313	X	-	-	-
24	CLA	7	314	X	-	-	-
24	CLA	7	315	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	CLA	8	301	X	-	-	-
24	CLA	8	302	X	-	-	-
24	CLA	8	303	X	-	-	-
24	CLA	8	308	X	-	-	-
24	CLA	8	309	X	-	-	-
24	CLA	8	310	X	-	-	-
24	CLA	9	602	X	-	-	-
24	CLA	9	603	X	-	-	-
24	CLA	9	604	X	-	-	-
24	CLA	9	610	X	-	-	-
24	CLA	9	611	X	-	-	-
24	CLA	9	612	X	-	-	-
24	CLA	9	613	X	-	-	-
24	CLA	9	614	X	-	-	-
24	CLA	A	405	X	-	-	-
24	CLA	A	406	X	-	-	-
24	CLA	A	407	X	-	-	-
24	CLA	A	410	X	-	-	-
24	CLA	A2	602	X	-	-	-
24	CLA	A2	603	X	-	-	-
24	CLA	A2	604	X	-	-	-
24	CLA	A2	610	X	-	-	-
24	CLA	A2	611	X	-	-	-
24	CLA	A2	612	X	-	-	-
24	CLA	A2	613	X	-	-	-
24	CLA	A2	614	X	-	-	-
24	CLA	A6	602	X	-	-	-
24	CLA	A6	603	X	-	-	-
24	CLA	A6	604	X	-	-	-
24	CLA	A6	608	X	-	-	-
24	CLA	A6	609	X	-	-	-
24	CLA	A6	610	X	-	-	-
24	CLA	A6	611	X	-	-	-
24	CLA	A6	612	X	-	-	-
24	CLA	A6	613	X	-	-	-
24	CLA	AA	303	X	-	-	-
24	CLA	AA	304	X	-	-	-
24	CLA	AA	305	X	-	-	-
24	CLA	AA	311	X	-	-	-
24	CLA	AA	312	X	-	-	-
24	CLA	AA	313	X	-	-	-
24	CLA	AA	314	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	CLA	AA	315	X	-	-	-
24	CLA	AB	301	X	-	-	-
24	CLA	AB	302	X	-	-	-
24	CLA	AB	303	X	-	-	-
24	CLA	AB	308	X	-	-	-
24	CLA	AB	309	X	-	-	-
24	CLA	AB	310	X	-	-	-
24	CLA	Au	602	X	-	-	-
24	CLA	Au	603	X	-	-	-
24	CLA	Au	604	X	-	-	-
24	CLA	Au	610	X	-	-	-
24	CLA	Au	611	X	-	-	-
24	CLA	Au	612	X	-	-	-
24	CLA	Au	613	X	-	-	-
24	CLA	Au	614	X	-	-	-
24	CLA	Aw	102	X	-	-	-
24	CLA	B	601	X	-	-	-
24	CLA	B	602	X	-	-	-
24	CLA	B	603	X	-	-	-
24	CLA	B	604	X	-	-	-
24	CLA	B	605	X	-	-	-
24	CLA	B	606	X	-	-	-
24	CLA	B	607	X	-	-	-
24	CLA	B	608	X	-	-	-
24	CLA	B	609	X	-	-	-
24	CLA	B	610	X	-	-	-
24	CLA	B	611	X	-	-	-
24	CLA	B	612	X	-	-	-
24	CLA	B	613	X	-	-	-
24	CLA	B	614	X	-	-	-
24	CLA	B	615	X	-	-	-
24	CLA	B	616	X	-	-	-
24	CLA	BB	303	X	-	-	-
24	CLA	BB	304	X	-	-	-
24	CLA	BB	305	X	-	-	-
24	CLA	BB	311	X	-	-	-
24	CLA	BB	312	X	-	-	-
24	CLA	BB	313	X	-	-	-
24	CLA	BB	314	X	-	-	-
24	CLA	BB	315	X	-	-	-
24	CLA	BD	405	X	-	-	-
24	CLA	BD	406	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	CLA	BD	407	X	-	-	-
24	CLA	BD	410	X	-	-	-
24	CLA	BE	602	X	-	-	-
24	CLA	BE	603	X	-	-	-
24	CLA	BE	604	X	-	-	-
24	CLA	BE	605	X	-	-	-
24	CLA	BE	606	X	-	-	-
24	CLA	BE	607	X	-	-	-
24	CLA	BE	608	X	-	-	-
24	CLA	BE	609	X	-	-	-
24	CLA	BE	610	X	-	-	-
24	CLA	BE	611	X	-	-	-
24	CLA	BE	612	X	-	-	-
24	CLA	BE	613	X	-	-	-
24	CLA	BE	614	X	-	-	-
24	CLA	BE	615	X	-	-	-
24	CLA	BE	616	X	-	-	-
24	CLA	BE	617	X	-	-	-
24	CLA	BF	502	X	-	-	-
24	CLA	BF	503	X	-	-	-
24	CLA	BF	504	X	-	-	-
24	CLA	BF	505	X	-	-	-
24	CLA	BF	506	X	-	-	-
24	CLA	BF	507	X	-	-	-
24	CLA	BF	508	X	-	-	-
24	CLA	BF	509	X	-	-	-
24	CLA	BF	510	X	-	-	-
24	CLA	BF	511	X	-	-	-
24	CLA	BF	512	X	-	-	-
24	CLA	BF	513	X	-	-	-
24	CLA	BF	514	X	-	-	-
24	CLA	BG	401	X	-	-	-
24	CLA	BG	402	X	-	-	-
24	CLA	BJ	602	X	-	-	-
24	CLA	BJ	603	X	-	-	-
24	CLA	BJ	604	X	-	-	-
24	CLA	BJ	610	X	-	-	-
24	CLA	BJ	611	X	-	-	-
24	CLA	BJ	612	X	-	-	-
24	CLA	BJ	613	X	-	-	-
24	CLA	BJ	614	X	-	-	-
24	CLA	BQ	602	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	CLA	BQ	603	X	-	-	-
24	CLA	BQ	604	X	-	-	-
24	CLA	BQ	610	X	-	-	-
24	CLA	BQ	611	X	-	-	-
24	CLA	BQ	612	X	-	-	-
24	CLA	BQ	613	X	-	-	-
24	CLA	BQ	614	X	-	-	-
24	CLA	BU	601	X	-	-	-
24	CLA	BU	602	X	-	-	-
24	CLA	BU	603	X	-	-	-
24	CLA	BU	604	X	-	-	-
24	CLA	BU	608	X	-	-	-
24	CLA	BU	609	X	-	-	-
24	CLA	BU	610	X	-	-	-
24	CLA	BU	611	X	-	-	-
24	CLA	BU	612	X	-	-	-
24	CLA	BU	614	X	-	-	-
24	CLA	BV	602	X	-	-	-
24	CLA	BV	603	X	-	-	-
24	CLA	BV	604	X	-	-	-
24	CLA	BV	608	X	-	-	-
24	CLA	BV	609	X	-	-	-
24	CLA	BV	610	X	-	-	-
24	CLA	BV	611	X	-	-	-
24	CLA	BV	612	X	-	-	-
24	CLA	BV	613	X	-	-	-
24	CLA	Ba	303	X	-	-	-
24	CLA	Ba	304	X	-	-	-
24	CLA	Ba	305	X	-	-	-
24	CLA	Ba	311	X	-	-	-
24	CLA	Ba	312	X	-	-	-
24	CLA	Ba	313	X	-	-	-
24	CLA	Ba	314	X	-	-	-
24	CLA	Ba	315	X	-	-	-
24	CLA	C	502	X	-	-	-
24	CLA	C	503	X	-	-	-
24	CLA	C	504	X	-	-	-
24	CLA	C	505	X	-	-	-
24	CLA	C	506	X	-	-	-
24	CLA	C	507	X	-	-	-
24	CLA	C	508	X	-	-	-
24	CLA	C	509	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	CLA	C	510	X	-	-	-
24	CLA	C	511	X	-	-	-
24	CLA	C	512	X	-	-	-
24	CLA	C	513	X	-	-	-
24	CLA	D	401	X	-	-	-
24	CLA	D	402	X	-	-	-
24	CLA	G	602	X	-	-	-
24	CLA	G	603	X	-	-	-
24	CLA	G	604	X	-	-	-
24	CLA	G	610	X	-	-	-
24	CLA	G	611	X	-	-	-
24	CLA	G	612	X	-	-	-
24	CLA	G	613	X	-	-	-
24	CLA	G	614	X	-	-	-
24	CLA	I	102	X	-	-	-
24	CLA	N	602	X	-	-	-
24	CLA	N	603	X	-	-	-
24	CLA	N	604	X	-	-	-
24	CLA	N	610	X	-	-	-
24	CLA	N	611	X	-	-	-
24	CLA	N	612	X	-	-	-
24	CLA	N	613	X	-	-	-
24	CLA	N	614	X	-	-	-
24	CLA	R	404	X	-	-	-
24	CLA	R	405	X	-	-	-
24	CLA	R	406	X	-	-	-
24	CLA	R	409	X	-	-	-
24	CLA	S	602	X	-	-	-
24	CLA	S	603	X	-	-	-
24	CLA	S	604	X	-	-	-
24	CLA	S	608	X	-	-	-
24	CLA	S	609	X	-	-	-
24	CLA	S	610	X	-	-	-
24	CLA	S	611	X	-	-	-
24	CLA	S	612	X	-	-	-
24	CLA	S	613	X	-	-	-
24	CLA	Y	303	X	-	-	-
24	CLA	Y	304	X	-	-	-
24	CLA	Y	305	X	-	-	-
24	CLA	Y	311	X	-	-	-
24	CLA	Y	312	X	-	-	-
24	CLA	Y	313	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	CLA	Y	314	X	-	-	-
24	CLA	Y	315	X	-	-	-
24	CLA	a	405	X	-	-	-
24	CLA	a	406	X	-	-	-
24	CLA	a	407	X	-	-	-
24	CLA	a	410	X	-	-	-
24	CLA	b	602	X	-	-	-
24	CLA	b	603	X	-	-	-
24	CLA	b	604	X	-	-	-
24	CLA	b	605	X	-	-	-
24	CLA	b	606	X	-	-	-
24	CLA	b	607	X	-	-	-
24	CLA	b	608	X	-	-	-
24	CLA	b	609	X	-	-	-
24	CLA	b	610	X	-	-	-
24	CLA	b	611	X	-	-	-
24	CLA	b	612	X	-	-	-
24	CLA	b	613	X	-	-	-
24	CLA	b	614	X	-	-	-
24	CLA	b	615	X	-	-	-
24	CLA	b	616	X	-	-	-
24	CLA	b	617	X	-	-	-
24	CLA	c	502	X	-	-	-
24	CLA	c	503	X	-	-	-
24	CLA	c	504	X	-	-	-
24	CLA	c	505	X	-	-	-
24	CLA	c	506	X	-	-	-
24	CLA	c	507	X	-	-	-
24	CLA	c	508	X	-	-	-
24	CLA	c	509	X	-	-	-
24	CLA	c	510	X	-	-	-
24	CLA	c	511	X	-	-	-
24	CLA	c	512	X	-	-	-
24	CLA	c	513	X	-	-	-
24	CLA	c	514	X	-	-	-
24	CLA	d	401	X	-	-	-
24	CLA	d	402	X	-	-	-
24	CLA	g	602	X	-	-	-
24	CLA	g	603	X	-	-	-
24	CLA	g	604	X	-	-	-
24	CLA	g	610	X	-	-	-
24	CLA	g	611	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	CLA	g	612	X	-	-	-
24	CLA	g	613	X	-	-	-
24	CLA	g	614	X	-	-	-
24	CLA	n	602	X	-	-	-
24	CLA	n	603	X	-	-	-
24	CLA	n	604	X	-	-	-
24	CLA	n	610	X	-	-	-
24	CLA	n	611	X	-	-	-
24	CLA	n	612	X	-	-	-
24	CLA	n	613	X	-	-	-
24	CLA	n	614	X	-	-	-
24	CLA	r	601	X	-	-	-
24	CLA	r	602	X	-	-	-
24	CLA	r	603	X	-	-	-
24	CLA	r	604	X	-	-	-
24	CLA	r	608	X	-	-	-
24	CLA	r	609	X	-	-	-
24	CLA	r	610	X	-	-	-
24	CLA	r	611	X	-	-	-
24	CLA	r	612	X	-	-	-
24	CLA	r	614	X	-	-	-
24	CLA	s	602	X	-	-	-
24	CLA	s	603	X	-	-	-
24	CLA	s	604	X	-	-	-
24	CLA	s	608	X	-	-	-
24	CLA	s	609	X	-	-	-
24	CLA	s	610	X	-	-	-
24	CLA	s	611	X	-	-	-
24	CLA	s	612	X	-	-	-
24	CLA	s	613	X	-	-	-
24	CLA	v	601	X	-	-	-
24	CLA	v	602	X	-	-	-
24	CLA	v	603	X	-	-	-
24	CLA	v	604	X	-	-	-
24	CLA	v	605	X	-	-	-
24	CLA	v	606	X	-	-	-
24	CLA	v	607	X	-	-	-
24	CLA	v	608	X	-	-	-
24	CLA	v	609	X	-	-	-
24	CLA	v	610	X	-	-	-
24	CLA	v	611	X	-	-	-
24	CLA	v	612	X	-	-	-

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Mol	Type	Chain	Res	Chirality	Geometry	Clashes	Electron density
24	CLA	v	613	X	-	-	-
24	CLA	v	614	X	-	-	-
24	CLA	v	615	X	-	-	-
24	CLA	v	616	X	-	-	-
24	CLA	y	303	X	-	-	-
24	CLA	y	304	X	-	-	-
24	CLA	y	305	X	-	-	-
24	CLA	y	311	X	-	-	-
24	CLA	y	312	X	-	-	-
24	CLA	y	313	X	-	-	-
24	CLA	y	314	X	-	-	-
24	CLA	y	315	X	-	-	-

2 Entry composition [i](#)

There are 38 unique types of molecules in this entry. The entry contains 146846 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 Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
1	5	201	Total	C	N	O	S	0	0
			1529	991	249	285	4		
1	7	201	Total	C	N	O	S	0	0
			1530	991	249	285	5		
1	9	201	Total	C	N	O	S	0	0
			1529	991	249	285	4		
1	AA	201	Total	C	N	O	S	0	0
			1530	991	249	285	5		

- Molecule 2 is a protein called Chlorophyll a-b binding protein 3, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
2	6	222	Total	C	N	O	S	0	0
			1716	1120	280	311	5		
2	0	222	Total	C	N	O	S	0	0
			1716	1120	280	311	5		

- Molecule 3 is a protein called Chlorophyll a-b binding protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
3	8	192	Total	C	N	O	S	0	0
			1512	993	245	270	4		
3	AB	192	Total	C	N	O	S	0	0
			1512	993	245	270	4		

- Molecule 4 is a protein called Photosystem II CP47 reaction center protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
4	B	479	Total	C	N	O	S	0	0
			3757	2462	636	647	12		
4	b	479	Total	C	N	O	S	0	0
			3757	2462	636	647	12		

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Mol	Chain	Residues	Atoms					AltConf	Trace
4	v	479	Total	C	N	O	S	0	0
			3757	2462	636	647	12		
4	BE	479	Total	C	N	O	S	0	0
			3757	2462	636	647	12		

- Molecule 5 is a protein called Photosystem II D2 protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
5	D	342	Total	C	N	O	S	0	0
			2723	1800	445	466	12		
5	d	342	Total	C	N	O	S	0	0
			2723	1800	445	466	12		
5	2	342	Total	C	N	O	S	0	0
			2723	1800	445	466	12		
5	BG	342	Total	C	N	O	S	0	0
			2723	1800	445	466	12		

- Molecule 6 is a protein called Cytochrome b559 subunit alpha.

Mol	Chain	Residues	Atoms				AltConf	Trace
6	E	66	Total	C	N	O	0	0
			544	357	88	99		
6	e	66	Total	C	N	O	0	0
			544	357	88	99		
6	3	66	Total	C	N	O	0	0
			544	357	88	99		
6	BH	66	Total	C	N	O	0	0
			544	357	88	99		

- Molecule 7 is a protein called Cytochrome b559 subunit beta.

Mol	Chain	Residues	Atoms					AltConf	Trace
7	F	29	Total	C	N	O	S	0	0
			225	147	40	37	1		
7	f	29	Total	C	N	O	S	0	0
			225	147	40	37	1		
7	4	29	Total	C	N	O	S	0	0
			225	147	40	37	1		
7	BI	29	Total	C	N	O	S	0	0
			225	147	40	37	1		

- Molecule 8 is a protein called Chlorophyll a-b binding protein 1, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
8	G	206	Total 1562	C 1010	N 255	O 292	S 5	0	0
8	N	202	Total 1536	C 994	N 251	O 286	S 5	0	0
8	Y	213	Total 1621	C 1048	N 266	O 302	S 5	0	0
8	g	206	Total 1562	C 1010	N 255	O 292	S 5	0	0
8	n	202	Total 1536	C 994	N 251	O 286	S 5	0	0
8	y	213	Total 1621	C 1048	N 266	O 302	S 5	0	0
8	Au	206	Total 1562	C 1010	N 255	O 292	S 5	0	0
8	A2	202	Total 1536	C 994	N 251	O 286	S 5	0	0
8	BB	213	Total 1621	C 1048	N 266	O 302	S 5	0	0
8	BJ	206	Total 1562	C 1010	N 255	O 292	S 5	0	0
8	BQ	202	Total 1536	C 994	N 251	O 286	S 5	0	0
8	Ba	213	Total 1621	C 1048	N 266	O 302	S 5	0	0

- Molecule 9 is a protein called Photosystem II reaction center protein H.

Mol	Chain	Residues	Atoms					AltConf	Trace
9	H	59	Total 438	C 289	N 68	O 79	S 2	0	0
9	h	59	Total 438	C 289	N 68	O 79	S 2	0	0
9	Av	59	Total 438	C 289	N 68	O 79	S 2	0	0
9	BK	59	Total 438	C 289	N 68	O 79	S 2	0	0

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

Mol	Chain	Residues	Atoms					AltConf	Trace
10	I	35	Total 286	C 195	N 44	O 46	S 1	0	0
10	i	35	Total 286	C 195	N 44	O 46	S 1	0	0

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Mol	Chain	Residues	Atoms					AltConf	Trace
10	Aw	35	Total	C	N	O	S	0	0
			286	195	44	46	1		
10	BL	35	Total	C	N	O	S	0	0
			286	195	44	46	1		

- Molecule 11 is a protein called Photosystem II reaction center protein K.

Mol	Chain	Residues	Atoms					AltConf	Trace
11	K	37	Total	C	N	O	S	0	0
			302	211	44	46	1		
11	k	37	Total	C	N	O	S	0	0
			302	211	44	46	1		
11	Ay	37	Total	C	N	O	S	0	0
			302	211	44	46	1		
11	BN	37	Total	C	N	O	S	0	0
			302	211	44	46	1		

- Molecule 12 is a protein called Photosystem II reaction center protein L.

Mol	Chain	Residues	Atoms					AltConf	Trace
12	L	35	Total	C	N	O		0	0
			293	195	45	53			
12	l	35	Total	C	N	O		0	0
			293	195	45	53			
12	Az	35	Total	C	N	O		0	0
			293	195	45	53			
12	BO	35	Total	C	N	O		0	0
			293	195	45	53			

- Molecule 13 is a protein called Photosystem II reaction center protein M.

Mol	Chain	Residues	Atoms					AltConf	Trace
13	M	32	Total	C	N	O	S	0	0
			250	173	35	41	1		
13	m	32	Total	C	N	O	S	0	0
			250	173	35	41	1		
13	A1	32	Total	C	N	O	S	0	0
			250	173	35	41	1		
13	BP	32	Total	C	N	O	S	0	0
			250	173	35	41	1		

- Molecule 14 is a protein called Chlorophyll a-b binding protein CP26, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
14	S	216	Total	C	N	O	S	0	0
			1670	1091	272	303	4		
14	s	216	Total	C	N	O	S	0	0
			1670	1091	272	303	4		
14	A6	216	Total	C	N	O	S	0	0
			1670	1091	272	303	4		
14	BV	216	Total	C	N	O	S	0	0
			1670	1091	272	303	4		

- Molecule 15 is a protein called Photosystem II reaction center protein T.

Mol	Chain	Residues	Atoms					AltConf	Trace
15	T	29	Total	C	N	O	S	0	0
			239	168	33	37	1		
15	t	29	Total	C	N	O	S	0	0
			239	168	33	37	1		
15	A7	29	Total	C	N	O	S	0	0
			239	168	33	37	1		
15	BW	29	Total	C	N	O	S	0	0
			239	168	33	37	1		

- Molecule 16 is a protein called Photosystem II 5 kDa protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
16	U	25	Total	C	N	O	S	0	0
			195	122	36	34	3		
16	u	25	Total	C	N	O	S	0	0
			195	122	36	34	3		
16	A8	25	Total	C	N	O	S	0	0
			195	122	36	34	3		
16	BX	25	Total	C	N	O	S	0	0
			195	122	36	34	3		

- Molecule 17 is a protein called Photosystem II reaction center W protein, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
17	W	54	Total	C	N	O	S	0	0
			428	282	61	84	1		
17	w	54	Total	C	N	O	S	0	0
			428	282	61	84	1		
17	A0	54	Total	C	N	O	S	0	0
			428	282	61	84	1		

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Mol	Chain	Residues	Atoms					AltConf	Trace
17	BY	54	Total	C	N	O	S	0	0
			428	282	61	84	1		

- Molecule 18 is a protein called (thale cress) hypothetical protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
18	X	36	Total	C	N	O		0	0
			248	162	39	47			
18	x	36	Total	C	N	O		0	0
			248	162	39	47			
18	BA	36	Total	C	N	O		0	0
			248	162	39	47			
18	BZ	36	Total	C	N	O		0	0
			248	162	39	47			

- Molecule 19 is a protein called Photosystem II reaction center protein Z.

Mol	Chain	Residues	Atoms					AltConf	Trace
19	Z	62	Total	C	N	O	S	0	0
			465	313	69	82	1		
19	z	62	Total	C	N	O	S	0	0
			465	313	69	82	1		
19	BC	62	Total	C	N	O	S	0	0
			465	313	69	82	1		
19	Bb	62	Total	C	N	O	S	0	0
			465	313	69	82	1		

- Molecule 20 is a protein called Photosystem II protein D1.

Mol	Chain	Residues	Atoms					AltConf	Trace
20	A	323	Total	C	N	O	S	0	0
			2525	1652	415	445	13		
20	a	323	Total	C	N	O	S	0	0
			2525	1652	415	445	13		
20	R	323	Total	C	N	O	S	0	0
			2525	1652	415	445	13		
20	BD	323	Total	C	N	O	S	0	0
			2525	1652	415	445	13		

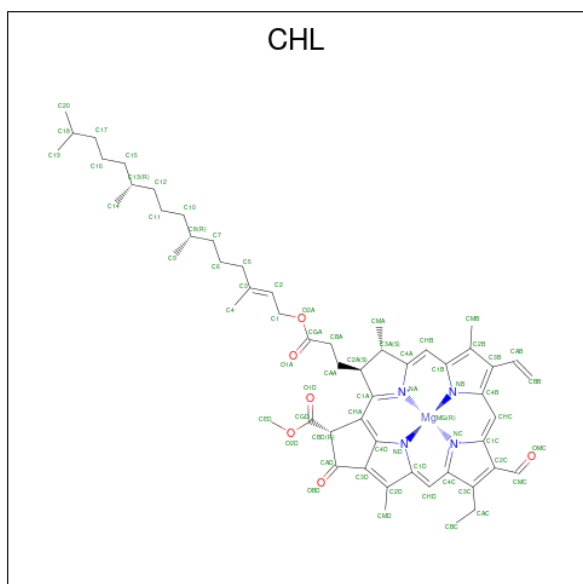
- Molecule 21 is a protein called Photosystem II CP43 reaction center protein.

Mol	Chain	Residues	Atoms					AltConf	Trace
21	C	433	Total 3373	C 2221	N 563	O 578	S 11	0	0
21	c	432	Total 3365	C 2217	N 561	O 576	S 11	0	0
21	1	433	Total 3373	C 2221	N 563	O 578	S 11	0	0
21	BF	432	Total 3365	C 2217	N 561	O 576	S 11	0	0

- Molecule 22 is a protein called Chlorophyll a-b binding protein CP29.1, chloroplastic.

Mol	Chain	Residues	Atoms					AltConf	Trace
22	r	197	Total 1539	C 1004	N 251	O 281	S 3	0	0
22	BU	197	Total 1539	C 1004	N 251	O 281	S 3	0	0

- Molecule 23 is CHLOROPHYLL B (CCD ID: CHL) (formula: $C_{55}H_{70}MgN_4O_6$).



Mol	Chain	Residues	Atoms						AltConf
23	5	1	Total 46	C 35	Mg 1	N 4	O 6	0	
23	5	1	Total 46	C 35	Mg 1	N 4	O 6	0	
23	5	1	Total 46	C 35	Mg 1	N 4	O 6	0	
23	5	1	Total 62	C 51	Mg 1	N 4	O 6	0	

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Mol	Chain	Residues	Atoms					AltConf
23	5	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	5	1	Total 61	C 50	Mg 1	N 4	O 6	0
23	6	1	Total 63	C 52	Mg 1	N 4	O 6	0
23	6	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	6	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	6	1	Total 53	C 42	Mg 1	N 4	O 6	0
23	6	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	6	1	Total 60	C 49	Mg 1	N 4	O 6	0
23	7	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	7	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	7	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	7	1	Total 60	C 49	Mg 1	N 4	O 6	0
23	7	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	7	1	Total 60	C 49	Mg 1	N 4	O 6	0
23	8	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	8	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	8	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	8	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	G	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	G	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	G	1	Total 50	C 39	Mg 1	N 4	O 6	0

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Mol	Chain	Residues	Atoms					AltConf
23	G	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	G	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	G	1	Total 58	C 48	Mg 1	N 4	O 5	0
23	N	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	N	1	Total 48	C 37	Mg 1	N 4	O 6	0
23	N	1	Total 50	C 39	Mg 1	N 4	O 6	0
23	N	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	N	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	N	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	S	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	S	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	S	1	Total 57	C 46	Mg 1	N 4	O 6	0
23	S	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	Y	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	Y	1	Total 48	C 37	Mg 1	N 4	O 6	0
23	Y	1	Total 50	C 39	Mg 1	N 4	O 6	0
23	Y	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	Y	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	Y	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	e	1	Total 45	C 34	Mg 1	N 4	O 6	0
23	g	1	Total 65	C 54	Mg 1	N 4	O 6	0

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Mol	Chain	Residues	Atoms					AltConf
23	g	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	g	1	Total 50	C 39	Mg 1	N 4	O 6	0
23	g	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	g	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	g	1	Total 60	C 49	Mg 1	N 4	O 6	0
23	n	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	n	1	Total 48	C 37	Mg 1	N 4	O 6	0
23	n	1	Total 50	C 39	Mg 1	N 4	O 6	0
23	n	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	n	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	n	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	s	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	s	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	s	1	Total 57	C 46	Mg 1	N 4	O 6	0
23	s	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	y	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	y	1	Total 48	C 37	Mg 1	N 4	O 6	0
23	y	1	Total 50	C 39	Mg 1	N 4	O 6	0
23	y	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	y	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	y	1	Total 65	C 54	Mg 1	N 4	O 6	0

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Mol	Chain	Residues	Atoms					AltConf
23	r	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	r	1	Total 55	C 44	Mg 1	N 4	O 6	0
23	r	1	Total 60	C 49	Mg 1	N 4	O 6	0
23	r	1	Total 42	C 33	Mg 1	N 4	O 4	0
23	9	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	9	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	9	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	9	1	Total 62	C 51	Mg 1	N 4	O 6	0
23	9	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	9	1	Total 61	C 50	Mg 1	N 4	O 6	0
23	0	1	Total 63	C 52	Mg 1	N 4	O 6	0
23	0	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	0	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	0	1	Total 53	C 42	Mg 1	N 4	O 6	0
23	0	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	0	1	Total 60	C 49	Mg 1	N 4	O 6	0
23	AA	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	AA	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	AA	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	AA	1	Total 60	C 49	Mg 1	N 4	O 6	0
23	AA	1	Total 46	C 35	Mg 1	N 4	O 6	0

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Mol	Chain	Residues	Atoms					AltConf
23	AA	1	Total	C	Mg	N	O	0
			60	49	1	4	6	
23	AB	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
23	AB	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
23	AB	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
23	AB	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
23	Au	1	Total	C	Mg	N	O	0
			65	54	1	4	6	
23	Au	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
23	Au	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
23	Au	1	Total	C	Mg	N	O	0
			65	54	1	4	6	
23	Au	1	Total	C	Mg	N	O	0
			65	54	1	4	6	
23	Au	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
23	A2	1	Total	C	Mg	N	O	0
			65	54	1	4	6	
23	A2	1	Total	C	Mg	N	O	0
			48	37	1	4	6	
23	A2	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
23	A2	1	Total	C	Mg	N	O	0
			65	54	1	4	6	
23	A2	1	Total	C	Mg	N	O	0
			65	54	1	4	6	
23	A2	1	Total	C	Mg	N	O	0
			65	54	1	4	6	
23	A6	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
23	A6	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
23	A6	1	Total	C	Mg	N	O	0
			57	46	1	4	6	
23	A6	1	Total	C	Mg	N	O	0
			46	35	1	4	6	

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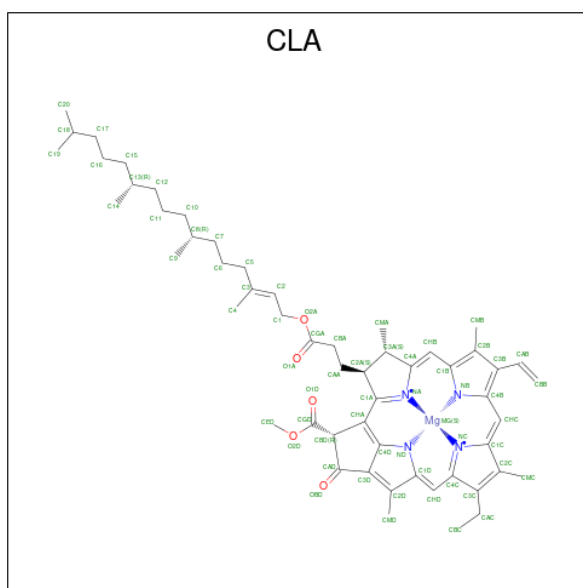
Mol	Chain	Residues	Atoms					AltConf
23	BB	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	BB	1	Total 48	C 37	Mg 1	N 4	O 6	0
23	BB	1	Total 50	C 39	Mg 1	N 4	O 6	0
23	BB	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	BB	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	BB	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	BH	1	Total 45	C 34	Mg 1	N 4	O 6	0
23	BJ	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	BJ	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	BJ	1	Total 50	C 39	Mg 1	N 4	O 6	0
23	BJ	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	BJ	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	BJ	1	Total 60	C 49	Mg 1	N 4	O 6	0
23	BQ	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	BQ	1	Total 48	C 37	Mg 1	N 4	O 6	0
23	BQ	1	Total 50	C 39	Mg 1	N 4	O 6	0
23	BQ	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	BQ	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	BQ	1	Total 65	C 54	Mg 1	N 4	O 6	0
23	BV	1	Total 46	C 35	Mg 1	N 4	O 6	0
23	BV	1	Total 46	C 35	Mg 1	N 4	O 6	0

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Mol	Chain	Residues	Atoms					AltConf
23	BV	1	Total	C	Mg	N	O	0
			57	46	1	4	6	
23	BV	1	Total	C	Mg	N	O	0
			46	35	1	4	6	
23	Ba	1	Total	C	Mg	N	O	0
			65	54	1	4	6	
23	Ba	1	Total	C	Mg	N	O	0
			48	37	1	4	6	
23	Ba	1	Total	C	Mg	N	O	0
			50	39	1	4	6	
23	Ba	1	Total	C	Mg	N	O	0
			65	54	1	4	6	
23	Ba	1	Total	C	Mg	N	O	0
			65	54	1	4	6	
23	Ba	1	Total	C	Mg	N	O	0
			65	54	1	4	6	
23	BU	1	Total	C	Mg	N	O	0
			65	54	1	4	6	
23	BU	1	Total	C	Mg	N	O	0
			55	44	1	4	6	
23	BU	1	Total	C	Mg	N	O	0
			60	49	1	4	6	
23	BU	1	Total	C	Mg	N	O	0
			42	33	1	4	4	

- Molecule 24 is CHLOROPHYLL A (CCD ID: CLA) (formula: $C_{55}H_{72}MgN_4O_5$).



Mol	Chain	Residues	Atoms					AltConf
24	5	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
24	5	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
24	5	1	Total	C	Mg	N	O	0
			50	40	1	4	5	
24	5	1	Total	C	Mg	N	O	0
			56	46	1	4	5	
24	5	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	5	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	5	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
24	5	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	6	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
24	6	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
24	6	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	6	1	Total	C	Mg	N	O	0
			60	50	1	4	5	
24	6	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
24	6	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	6	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
24	6	1	Total	C	Mg	N	O	0
			48	38	1	4	5	
24	7	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
24	7	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
24	7	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	7	1	Total	C	Mg	N	O	0
			48	39	1	4	4	
24	7	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	7	1	Total	C	Mg	N	O	0
			45	35	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
24	7	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	7	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	8	1	Total 41	C 33	Mg 1	N 4	O 3	0
24	8	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	8	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	8	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	8	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	8	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	B	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	D	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	D	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	G	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	G	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	G	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	G	1	Total 64	C 54	Mg 1	N 4	O 5	0
24	G	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	G	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	G	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	G	1	Total 48	C 38	Mg 1	N 4	O 5	0
24	I	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	N	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	N	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	N	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	N	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	N	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	N	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	N	1	Total 60	C 50	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
24	N	1	Total 48	C 38	Mg 1	N 4	O 5	0
24	S	1	Total 61	C 51	Mg 1	N 4	O 5	0
24	S	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	S	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	S	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	S	1	Total 53	C 44	Mg 1	N 4	O 4	0
24	S	1	Total 56	C 46	Mg 1	N 4	O 5	0
24	S	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	S	1	Total 55	C 45	Mg 1	N 4	O 5	0
24	S	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	Y	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	Y	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	Y	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	Y	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	Y	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	Y	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	Y	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	Y	1	Total 48	C 38	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	b	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	d	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	d	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	g	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	g	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	g	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	g	1	Total 64	C 54	Mg 1	N 4	O 5	0
24	g	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	g	1	Total 60	C 50	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
24	g	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	g	1	Total 48	C 38	Mg 1	N 4	O 5	0
24	n	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	n	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	n	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	n	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	n	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	n	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	n	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	n	1	Total 48	C 38	Mg 1	N 4	O 5	0
24	s	1	Total 61	C 51	Mg 1	N 4	O 5	0
24	s	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	s	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	s	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	s	1	Total 55	C 45	Mg 1	N 4	O 5	0
24	s	1	Total 56	C 46	Mg 1	N 4	O 5	0
24	s	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	s	1	Total 55	C 45	Mg 1	N 4	O 5	0
24	s	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	y	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	y	1	Total 65	C 55	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
24	y	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	y	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	y	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	y	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	y	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	y	1	Total 48	C 38	Mg 1	N 4	O 5	0
24	A	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	A	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	A	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	A	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	C	1	Total 65	C 55	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
24	C	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	a	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	a	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	a	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	c	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	r	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	r	1	Total 58	C 49	Mg 1	N 4	O 4	0
24	r	1	Total 60	C 50	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
24	r	1	Total 48	C 38	Mg 1	N 4	O 5	0
24	r	1	Total 58	C 48	Mg 1	N 4	O 5	0
24	r	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	r	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	r	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	r	1	Total 37	C 31	Mg 1	N 4	O 1	0
24	r	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	9	1	Total 61	C 51	Mg 1	N 4	O 5	0
24	9	1	Total 55	C 45	Mg 1	N 4	O 5	0
24	9	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	9	1	Total 56	C 46	Mg 1	N 4	O 5	0
24	9	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	9	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	9	1	Total 55	C 45	Mg 1	N 4	O 5	0
24	9	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	0	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	0	1	Total 55	C 45	Mg 1	N 4	O 5	0
24	0	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	0	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	0	1	Total 55	C 45	Mg 1	N 4	O 5	0
24	0	1	Total 45	C 35	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
24	0	1	Total	C	Mg	N	O	0
			58	48	1	4	5	
24	0	1	Total	C	Mg	N	O	0
			48	38	1	4	5	
24	AA	1	Total	C	Mg	N	O	0
			61	51	1	4	5	
24	AA	1	Total	C	Mg	N	O	0
			55	45	1	4	5	
24	AA	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	AA	1	Total	C	Mg	N	O	0
			48	39	1	4	4	
24	AA	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	AA	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	AA	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	AA	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	AB	1	Total	C	Mg	N	O	0
			41	33	1	4	3	
24	AB	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	AB	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	AB	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	AB	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	AB	1	Total	C	Mg	N	O	0
			45	35	1	4	5	
24	v	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
24	v	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
24	v	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
24	v	1	Total	C	Mg	N	O	0
			65	55	1	4	5	
24	v	1	Total	C	Mg	N	O	0
			65	55	1	4	5	

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Mol	Chain	Residues	Atoms					AltConf
24	v	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	v	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	v	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	v	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	v	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	v	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	v	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	v	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	v	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	v	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	v	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	2	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	2	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	Au	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	Au	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	Au	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	Au	1	Total 64	C 54	Mg 1	N 4	O 5	0
24	Au	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	Au	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	Au	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	Au	1	Total 48	C 38	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
24	Aw	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	A2	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	A2	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	A2	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	A2	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	A2	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	A2	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	A2	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	A2	1	Total 48	C 38	Mg 1	N 4	O 5	0
24	A6	1	Total 61	C 51	Mg 1	N 4	O 5	0
24	A6	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	A6	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	A6	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	A6	1	Total 53	C 44	Mg 1	N 4	O 4	0
24	A6	1	Total 56	C 46	Mg 1	N 4	O 5	0
24	A6	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	A6	1	Total 55	C 45	Mg 1	N 4	O 5	0
24	A6	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	BB	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BB	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BB	1	Total 50	C 40	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
24	BB	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	BB	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	BB	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	BB	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BB	1	Total 48	C 38	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BE	1	Total 65	C 55	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
24	BG	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BG	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BJ	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BJ	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BJ	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	BJ	1	Total 64	C 54	Mg 1	N 4	O 5	0
24	BJ	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	BJ	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	BJ	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BJ	1	Total 48	C 38	Mg 1	N 4	O 5	0
24	BQ	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BQ	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BQ	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	BQ	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BQ	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	BQ	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	BQ	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	BQ	1	Total 48	C 38	Mg 1	N 4	O 5	0
24	BV	1	Total 61	C 51	Mg 1	N 4	O 5	0
24	BV	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	BV	1	Total 50	C 40	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
24	BV	1	Total 45	C 35	Mg 1	N 4	O 5	0
24	BV	1	Total 55	C 45	Mg 1	N 4	O 5	0
24	BV	1	Total 56	C 46	Mg 1	N 4	O 5	0
24	BV	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	BV	1	Total 55	C 45	Mg 1	N 4	O 5	0
24	BV	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	Ba	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	Ba	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	Ba	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	Ba	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	Ba	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	Ba	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	Ba	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	Ba	1	Total 48	C 38	Mg 1	N 4	O 5	0
24	R	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	R	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	R	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	R	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	1	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	1	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	1	1	Total 65	C 55	Mg 1	N 4	O 5	0

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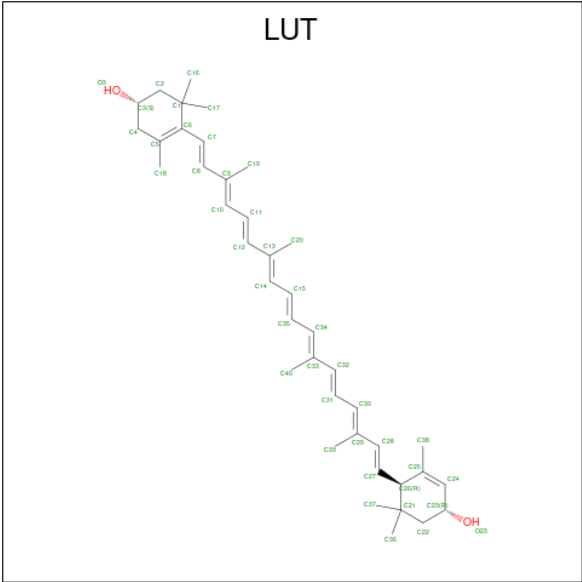
Mol	Chain	Residues	Atoms					AltConf
24	1	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	1	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	1	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	1	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	1	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	1	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	1	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	1	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	1	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BD	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BD	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BD	1	Total 50	C 40	Mg 1	N 4	O 5	0
24	BD	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	BF	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BF	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BF	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BF	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BF	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BF	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BF	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BF	1	Total 65	C 55	Mg 1	N 4	O 5	0

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Mol	Chain	Residues	Atoms					AltConf
24	BF	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BF	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BF	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BF	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BF	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BU	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	BU	1	Total 58	C 49	Mg 1	N 4	O 4	0
24	BU	1	Total 60	C 50	Mg 1	N 4	O 5	0
24	BU	1	Total 48	C 38	Mg 1	N 4	O 5	0
24	BU	1	Total 58	C 48	Mg 1	N 4	O 5	0
24	BU	1	Total 65	C 55	Mg 1	N 4	O 5	0
24	BU	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	BU	1	Total 49	C 39	Mg 1	N 4	O 5	0
24	BU	1	Total 37	C 31	Mg 1	N 4	O 1	0
24	BU	1	Total 45	C 35	Mg 1	N 4	O 5	0

- Molecule 25 is (3R,3'R,6S)-4,5-DIDEHYDRO-5,6-DIHYDRO-BETA,BETA-CAROTENE-3,3'-DIOL (CCD ID: LUT) (formula: C₄₀H₅₆O₂).



Mol	Chain	Residues	Atoms			AltConf
25	5	1	Total	C	O	0
			42	40	2	
25	5	1	Total	C	O	0
			42	40	2	
25	6	1	Total	C	O	0
			42	40	2	
25	6	1	Total	C	O	0
			42	40	2	
25	7	1	Total	C	O	0
			42	40	2	
25	7	1	Total	C	O	0
			42	40	2	
25	8	1	Total	C	O	0
			42	40	2	
25	G	1	Total	C	O	0
			42	40	2	
25	G	1	Total	C	O	0
			42	40	2	
25	N	1	Total	C	O	0
			42	40	2	
25	N	1	Total	C	O	0
			42	40	2	
25	S	1	Total	C	O	0
			42	40	2	
25	S	1	Total	C	O	0
			42	40	2	
25	Y	1	Total	C	O	0
			42	40	2	

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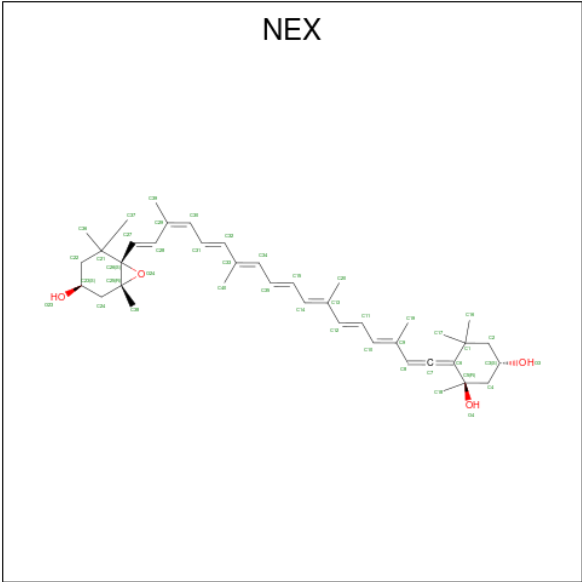
Mol	Chain	Residues	Atoms			AltConf
25	Y	1	Total	C	O	0
			42	40	2	
25	g	1	Total	C	O	0
			42	40	2	
25	g	1	Total	C	O	0
			42	40	2	
25	n	1	Total	C	O	0
			42	40	2	
25	n	1	Total	C	O	0
			42	40	2	
25	s	1	Total	C	O	0
			42	40	2	
25	s	1	Total	C	O	0
			42	40	2	
25	y	1	Total	C	O	0
			42	40	2	
25	y	1	Total	C	O	0
			42	40	2	
25	r	1	Total	C	O	0
			42	40	2	
25	9	1	Total	C	O	0
			42	40	2	
25	9	1	Total	C	O	0
			42	40	2	
25	0	1	Total	C	O	0
			42	40	2	
25	0	1	Total	C	O	0
			42	40	2	
25	AA	1	Total	C	O	0
			42	40	2	
25	AA	1	Total	C	O	0
			42	40	2	
25	AB	1	Total	C	O	0
			42	40	2	
25	Au	1	Total	C	O	0
			42	40	2	
25	Au	1	Total	C	O	0
			42	40	2	
25	A2	1	Total	C	O	0
			42	40	2	
25	A2	1	Total	C	O	0
			42	40	2	

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Mol	Chain	Residues	Atoms			AltConf
25	A6	1	Total	C	O	0
			42	40	2	
25	A6	1	Total	C	O	0
			42	40	2	
25	BB	1	Total	C	O	0
			42	40	2	
25	BB	1	Total	C	O	0
			42	40	2	
25	BJ	1	Total	C	O	0
			42	40	2	
25	BJ	1	Total	C	O	0
			42	40	2	
25	BQ	1	Total	C	O	0
			42	40	2	
25	BQ	1	Total	C	O	0
			42	40	2	
25	BV	1	Total	C	O	0
			42	40	2	
25	BV	1	Total	C	O	0
			42	40	2	
25	Ba	1	Total	C	O	0
			42	40	2	
25	Ba	1	Total	C	O	0
			42	40	2	
25	BU	1	Total	C	O	0
			42	40	2	

- Molecule 26 is (1R,3R)-6-[(3E,5E,7E,9E,11E,13E,15E,17E)-18-[(1S,4R,6R)-4-HYDROXY-2,2,6-TRIMETHYL-7-OXABICYCLO[4.1.0]HEPT-1-YL]-3,7,12,16-TETRAMETHYLOCTA DECA-1,3,5,7,9,11,13,15,17-NONAENYLIDENE]-1,5,5-TRIMETHYLCYCLOHEXANE-1,3-DIOL (CCD ID: NEX) (formula: C₄₀H₅₆O₄).



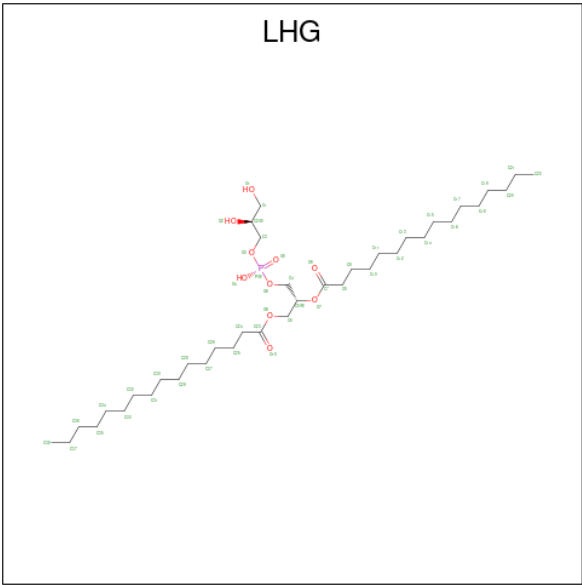
Mol	Chain	Residues	Atoms			AltConf
26	5	1	Total	C	O	0
			44	40	4	
26	7	1	Total	C	O	0
			44	40	4	
26	G	1	Total	C	O	0
			44	40	4	
26	N	1	Total	C	O	0
			44	40	4	
26	S	1	Total	C	O	0
			44	40	4	
26	Y	1	Total	C	O	0
			44	40	4	
26	g	1	Total	C	O	0
			44	40	4	
26	n	1	Total	C	O	0
			44	40	4	
26	s	1	Total	C	O	0
			44	40	4	
26	y	1	Total	C	O	0
			44	40	4	
26	r	1	Total	C	O	0
			44	40	4	
26	9	1	Total	C	O	0
			44	40	4	
26	AA	1	Total	C	O	0
			44	40	4	
26	Au	1	Total	C	O	0
			44	40	4	

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Mol	Chain	Residues	Atoms			AltConf
26	A2	1	Total	C	O	0
			44	40	4	
26	A6	1	Total	C	O	0
			44	40	4	
26	BB	1	Total	C	O	0
			44	40	4	
26	BB	1	Total	C	O	0
			44	40	4	
26	BJ	1	Total	C	O	0
			44	40	4	
26	BQ	1	Total	C	O	0
			44	40	4	
26	BV	1	Total	C	O	0
			44	40	4	
26	Ba	1	Total	C	O	0
			44	40	4	

- Molecule 27 is 1,2-DIPALMITOYL-PHOSPHATIDYL-GLYCEROLE (CCD ID: LHG) (formula: C₃₈H₇₅O₁₀P).



Mol	Chain	Residues	Atoms				AltConf
27	5	1	Total	C	O	P	0
			41	30	10	1	
27	6	1	Total	C	O	P	0
			47	36	10	1	
27	B	1	Total	C	O	P	0
			49	38	10	1	

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Mol	Chain	Residues	Atoms				AltConf
27	B	1	Total 46	C 35	O 10	P 1	0
27	D	1	Total 49	C 38	O 10	P 1	0
27	G	1	Total 49	C 38	O 10	P 1	0
27	L	1	Total 49	C 38	O 10	P 1	0
27	N	1	Total 49	C 38	O 10	P 1	0
27	W	1	Total 49	C 38	O 10	P 1	0
27	Y	1	Total 49	C 38	O 10	P 1	0
27	b	1	Total 49	C 38	O 10	P 1	0
27	b	1	Total 46	C 35	O 10	P 1	0
27	b	1	Total 49	C 38	O 10	P 1	0
27	d	1	Total 49	C 38	O 10	P 1	0
27	g	1	Total 49	C 38	O 10	P 1	0
27	n	1	Total 49	C 38	O 10	P 1	0
27	w	1	Total 49	C 38	O 10	P 1	0
27	y	1	Total 49	C 38	O 10	P 1	0
27	C	1	Total 49	C 38	O 10	P 1	0
27	C	1	Total 49	C 38	O 10	P 1	0
27	c	1	Total 49	C 38	O 10	P 1	0
27	c	1	Total 49	C 38	O 10	P 1	0
27	r	1	Total 42	C 31	O 10	P 1	0
27	9	1	Total 41	C 30	O 10	P 1	0

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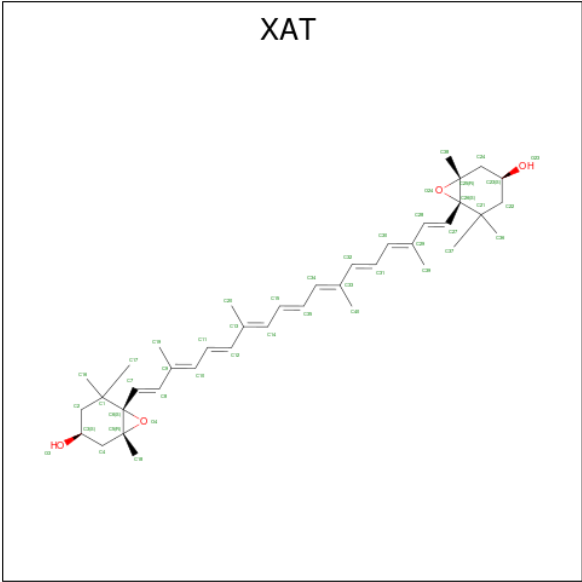
Mol	Chain	Residues	Atoms				AltConf
27	0	1	Total 47	C 36	O 10	P 1	0
27	v	1	Total 49	C 38	O 10	P 1	0
27	2	1	Total 46	C 35	O 10	P 1	0
27	2	1	Total 49	C 38	O 10	P 1	0
27	Au	1	Total 49	C 38	O 10	P 1	0
27	Az	1	Total 49	C 38	O 10	P 1	0
27	A2	1	Total 49	C 38	O 10	P 1	0
27	A0	1	Total 49	C 38	O 10	P 1	0
27	BB	1	Total 49	C 38	O 10	P 1	0
27	BE	1	Total 49	C 38	O 10	P 1	0
27	BE	1	Total 46	C 35	O 10	P 1	0
27	BE	1	Total 49	C 38	O 10	P 1	0
27	BG	1	Total 49	C 38	O 10	P 1	0
27	BJ	1	Total 49	C 38	O 10	P 1	0
27	BQ	1	Total 49	C 38	O 10	P 1	0
27	BY	1	Total 49	C 38	O 10	P 1	0
27	Ba	1	Total 49	C 38	O 10	P 1	0
27	1	1	Total 49	C 38	O 10	P 1	0
27	1	1	Total 49	C 38	O 10	P 1	0
27	BF	1	Total 49	C 38	O 10	P 1	0
27	BF	1	Total 49	C 38	O 10	P 1	0

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Mol	Chain	Residues	Atoms				AltConf
			Total	C	O	P	
27	BU	1	42	31	10	1	0

- Molecule 28 is (3S,5R,6S,3'S,5'R,6'S)-5,6,5',6'-DIEPOXY-5,6,5',6'- TETRAHYDRO-BETA ,BETA-CAROTENE-3,3'-DIOL (CCD ID: XAT) (formula: C₄₀H₅₆O₄).



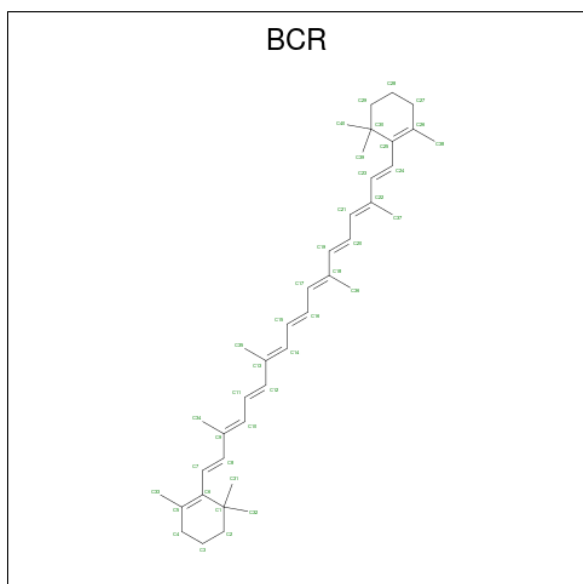
Mol	Chain	Residues	Atoms			AltConf
28	5	1	Total	C	O	0
			44	40	4	
28	7	1	Total	C	O	0
			44	40	4	
28	7	1	Total	C	O	0
			44	40	4	
28	8	1	Total	C	O	0
			44	40	4	
28	G	1	Total	C	O	0
			44	40	4	
28	N	1	Total	C	O	0
			44	40	4	
28	Y	1	Total	C	O	0
			44	40	4	
28	g	1	Total	C	O	0
			44	40	4	
28	n	1	Total	C	O	0
			44	40	4	
28	y	1	Total	C	O	0
			44	40	4	

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Mol	Chain	Residues	Atoms			AltConf
28	r	1	Total	C	O	0
			44	40	4	
28	9	1	Total	C	O	0
			44	40	4	
28	AA	1	Total	C	O	0
			44	40	4	
28	AA	1	Total	C	O	0
			44	40	4	
28	AB	1	Total	C	O	0
			44	40	4	
28	Au	1	Total	C	O	0
			44	40	4	
28	A2	1	Total	C	O	0
			44	40	4	
28	BB	1	Total	C	O	0
			44	40	4	
28	BJ	1	Total	C	O	0
			44	40	4	
28	BQ	1	Total	C	O	0
			44	40	4	
28	Ba	1	Total	C	O	0
			44	40	4	
28	BU	1	Total	C	O	0
			44	40	4	

- Molecule 29 is BETA-CAROTENE (CCD ID: BCR) (formula: $C_{40}H_{56}$) (labeled as "Ligand of Interest" by depositor).



Mol	Chain	Residues	Atoms	AltConf
29	8	1	Total C 40 40	0
29	B	1	Total C 40 40	0
29	B	1	Total C 40 40	0
29	B	1	Total C 40 40	0
29	B	1	Total C 40 40	0
29	F	1	Total C 40 40	0
29	H	1	Total C 40 40	0
29	K	1	Total C 40 40	0
29	K	1	Total C 40 40	0
29	b	1	Total C 40 40	0
29	b	1	Total C 40 40	0
29	b	1	Total C 40 40	0
29	b	1	Total C 40 40	0
29	f	1	Total C 40 40	0
29	h	1	Total C 40 40	0
29	k	1	Total C 40 40	0
29	z	1	Total C 40 40	0
29	z	1	Total C 40 40	0
29	A	1	Total C 40 40	0
29	C	1	Total C 40 40	0
29	C	1	Total C 40 40	0
29	a	1	Total C 40 40	0

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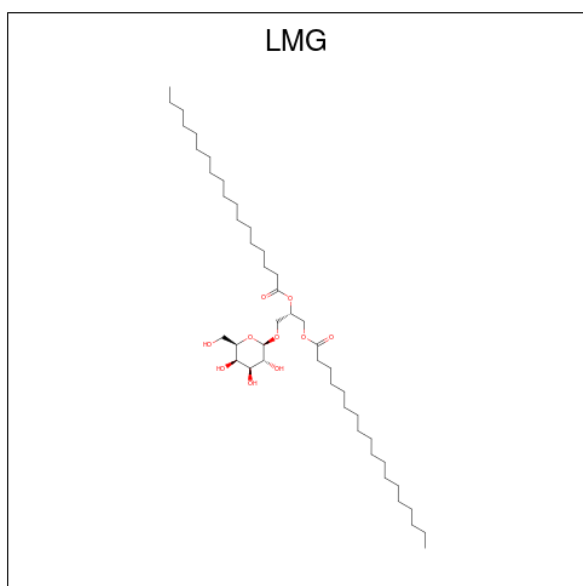
Mol	Chain	Residues	Atoms	AltConf
29	c	1	Total C 40 40	0
29	AB	1	Total C 40 40	0
29	v	1	Total C 40 40	0
29	v	1	Total C 40 40	0
29	v	1	Total C 40 40	0
29	v	1	Total C 40 40	0
29	4	1	Total C 40 40	0
29	Av	1	Total C 40 40	0
29	Ay	1	Total C 40 40	0
29	Ay	1	Total C 40 40	0
29	BE	1	Total C 40 40	0
29	BE	1	Total C 40 40	0
29	BE	1	Total C 40 40	0
29	BE	1	Total C 40 40	0
29	BI	1	Total C 40 40	0
29	BK	1	Total C 40 40	0
29	BN	1	Total C 40 40	0
29	Bb	1	Total C 40 40	0
29	R	1	Total C 40 40	0
29	1	1	Total C 40 40	0
29	1	1	Total C 40 40	0

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Mol	Chain	Residues	Atoms		AltConf
29	BD	1	Total	C	0
			40	40	
29	BF	1	Total	C	0
			40	40	
29	BF	1	Total	C	0
			40	40	

- Molecule 30 is 1,2-DISTEAROYL-MONOGALACTOSYL-DIGLYCERIDE (CCD ID: LMG) (formula: $C_{45}H_{86}O_{10}$).



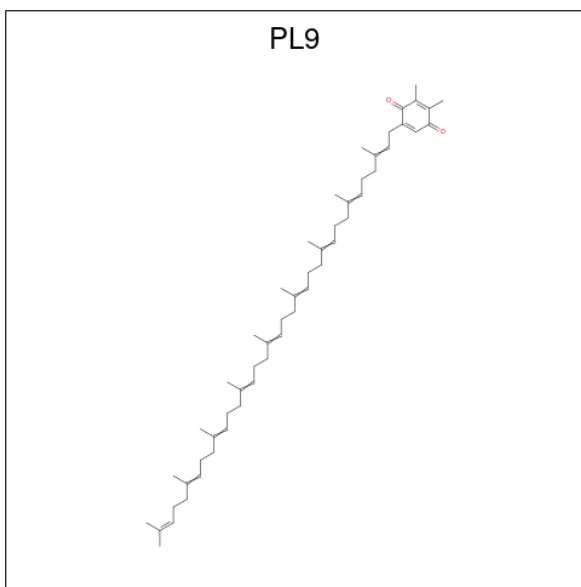
Mol	Chain	Residues	Atoms			AltConf
30	B	1	Total	C	O	0
			51	41	10	
30	B	1	Total	C	O	0
			40	30	10	
30	D	1	Total	C	O	0
			46	36	10	
30	I	1	Total	C	O	0
			40	30	10	
30	b	1	Total	C	O	0
			51	41	10	
30	d	1	Total	C	O	0
			46	36	10	
30	i	1	Total	C	O	0
			48	38	10	
30	A	1	Total	C	O	0
			48	38	10	

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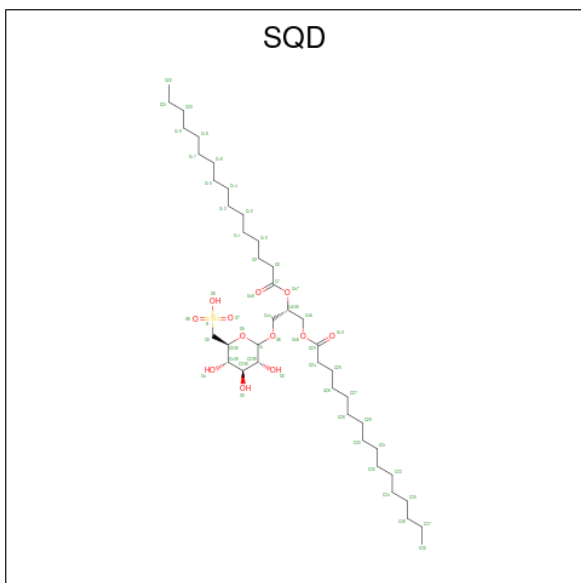
Mol	Chain	Residues	Atoms			AltConf
30	C	1	Total	C	O	0
			51	41	10	
30	C	1	Total	C	O	0
			51	41	10	
30	c	1	Total	C	O	0
			51	41	10	
30	c	1	Total	C	O	0
			51	41	10	
30	v	1	Total	C	O	0
			51	41	10	
30	v	1	Total	C	O	0
			40	30	10	
30	2	1	Total	C	O	0
			46	36	10	
30	Aw	1	Total	C	O	0
			40	30	10	
30	A0	1	Total	C	O	0
			48	38	10	
30	BE	1	Total	C	O	0
			51	41	10	
30	BG	1	Total	C	O	0
			46	36	10	
30	BL	1	Total	C	O	0
			48	38	10	
30	1	1	Total	C	O	0
			51	41	10	
30	1	1	Total	C	O	0
			51	41	10	
30	BF	1	Total	C	O	0
			51	41	10	
30	BF	1	Total	C	O	0
			51	41	10	

- Molecule 31 is 2,3-DIMETHYL-5-(3,7,11,15,19,23,27,31,35-NONAMETHYL-2,6,10,14,18,22,26,30,34-HEXATRIACONTANONAENYL-2,5-CYCLOHEXADIENE-1,4-DIONE-2,3-DIMETHYL-5-SOLANESYL-1,4-BENZOQUINONE (CCD ID: PL9) (formula: C₅₃H₈₀O₂).



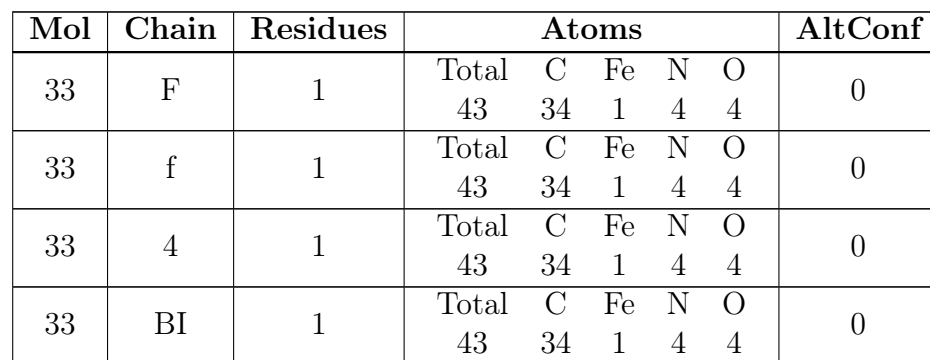
Mol	Chain	Residues	Atoms			AltConf
31	D	1	Total	C	O	0
			55	53	2	
31	d	1	Total	C	O	0
			55	53	2	
31	2	1	Total	C	O	0
			55	53	2	
31	BG	1	Total	C	O	0
			55	53	2	

- Molecule 32 is 1,2-DI-O-ACYL-3-O-[6-DEOXY-6-SULFO-ALPHA-D-GLUCOPYRANOSYL]-SN-GLYCEROL (CCD ID: SQD) (formula: $C_{41}H_{78}O_{12}S$).

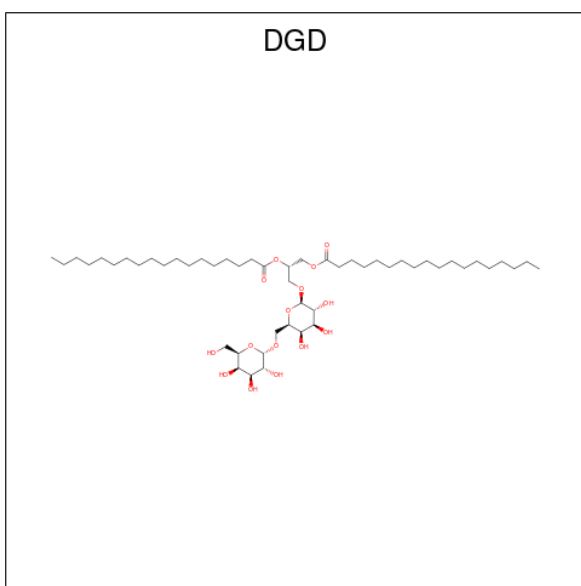


Mol	Chain	Residues	Atoms				AltConf
32	D	1	Total	C	O	S	0
			50	37	12	1	
32	L	1	Total	C	O	S	0
			42	29	12	1	
32	L	1	Total	C	O	S	0
			54	41	12	1	
32	d	1	Total	C	O	S	0
			50	37	12	1	
32	l	1	Total	C	O	S	0
			54	41	12	1	
32	l	1	Total	C	O	S	0
			42	29	12	1	
32	A	1	Total	C	O	S	0
			54	41	12	1	
32	a	1	Total	C	O	S	0
			54	41	12	1	
32	2	1	Total	C	O	S	0
			50	37	12	1	
32	Az	1	Total	C	O	S	0
			42	29	12	1	
32	A1	1	Total	C	O	S	0
			54	41	12	1	
32	BG	1	Total	C	O	S	0
			50	37	12	1	
32	BO	1	Total	C	O	S	0
			54	41	12	1	
32	BO	1	Total	C	O	S	0
			42	29	12	1	
32	R	1	Total	C	O	S	0
			54	41	12	1	
32	BD	1	Total	C	O	S	0
			54	41	12	1	

- Molecule 33 is PROTOPORPHYRIN IX CONTAINING FE (CCD ID: HEM) (formula: $C_{34}H_{32}FeN_4O_4$).

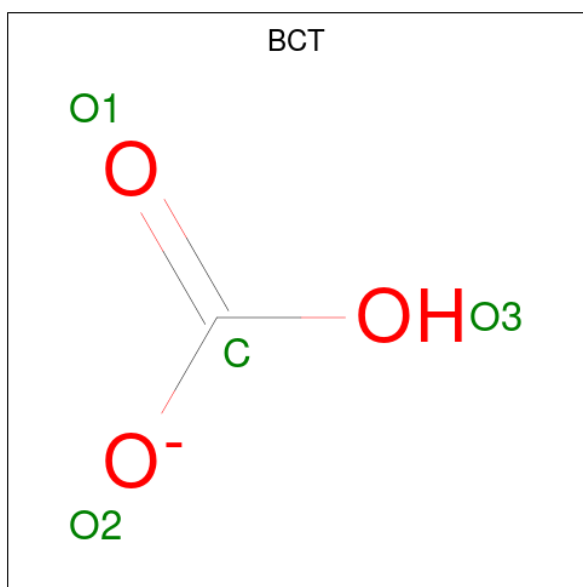


- Molecule 34 is DIGALACTOSYL DIACYL GLYCEROL (DGDG) (CCD ID: DGD) (formula: $C_{51}H_{96}O_{15}$).



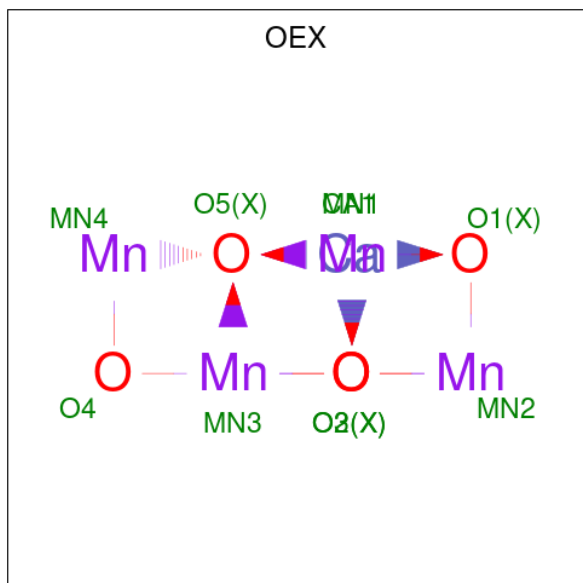
Mol	Chain	Residues	Atoms			AltConf
34	H	1	Total	C	O	0
			62	47	15	
34	h	1	Total	C	O	0
			62	47	15	
34	A	1	Total	C	O	0
			59	44	15	
34	C	1	Total	C	O	0
			55	40	15	
34	C	1	Total	C	O	0
			62	47	15	
34	C	1	Total	C	O	0
			60	45	15	
34	a	1	Total	C	O	0
			59	44	15	
34	a	1	Total	C	O	0
			60	45	15	
34	c	1	Total	C	O	0
			55	40	15	
34	c	1	Total	C	O	0
			62	47	15	
34	Av	1	Total	C	O	0
			62	47	15	
34	BK	1	Total	C	O	0
			62	47	15	
34	R	1	Total	C	O	0
			59	44	15	
34	1	1	Total	C	O	0
			55	40	15	
34	1	1	Total	C	O	0
			62	47	15	
34	1	1	Total	C	O	0
			60	45	15	
34	BD	1	Total	C	O	0
			59	44	15	
34	BD	1	Total	C	O	0
			60	45	15	
34	BF	1	Total	C	O	0
			55	40	15	
34	BF	1	Total	C	O	0
			62	47	15	

- Molecule 35 is BICARBONATE ION (CCD ID: BCT) (formula: CHO_3).



Mol	Chain	Residues	Atoms			AltConf
35	A	1	Total	C	O	0
			4	1	3	
35	a	1	Total	C	O	0
			4	1	3	
35	2	1	Total	C	O	0
			4	1	3	
35	BD	1	Total	C	O	0
			4	1	3	

- Molecule 36 is CA-MN4-O5 CLUSTER (CCD ID: OEX) (formula: CaMn_4O_5).

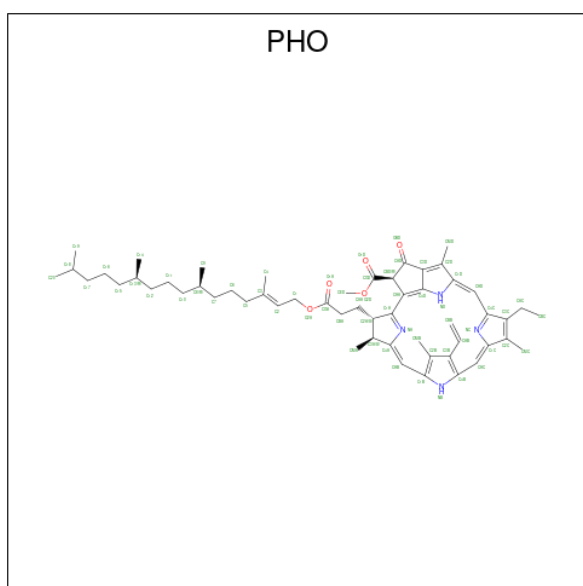


Mol	Chain	Residues	Atoms				AltConf
36	A	1	Total	Ca	Mn	O	0
			10	1	4	5	
36	a	1	Total	Ca	Mn	O	0
			10	1	4	5	
36	R	1	Total	Ca	Mn	O	0
			10	1	4	5	
36	BD	1	Total	Ca	Mn	O	0
			10	1	4	5	

- Molecule 37 is FE (II) ION (CCD ID: FE2) (formula: Fe).

Mol	Chain	Residues	Atoms		AltConf
37	A	1	Total	Fe	0
			1	1	
37	a	1	Total	Fe	0
			1	1	
37	R	1	Total	Fe	0
			1	1	
37	BD	1	Total	Fe	0
			1	1	

- Molecule 38 is PHEOPHYTIN A (CCD ID: PHO) (formula: C₅₅H₇₄N₄O₅).



Mol	Chain	Residues	Atoms				AltConf
38	A	1	Total	C	N	O	0
			64	55	4	5	
38	A	1	Total	C	N	O	0
			64	55	4	5	

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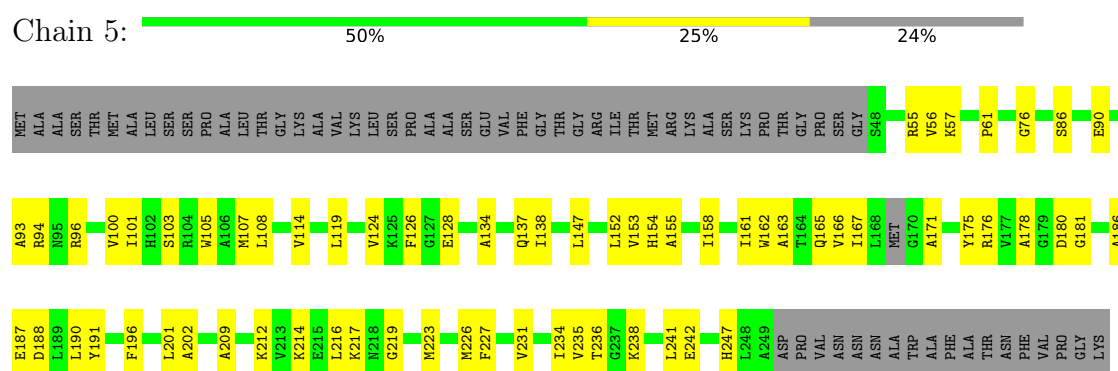
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Mol	Chain	Residues	Atoms				AltConf
38	a	1	Total 64	C 55	N 4	O 5	0
38	a	1	Total 64	C 55	N 4	O 5	0
38	R	1	Total 64	C 55	N 4	O 5	0
38	R	1	Total 64	C 55	N 4	O 5	0
38	BD	1	Total 64	C 55	N 4	O 5	0
38	BD	1	Total 64	C 55	N 4	O 5	0

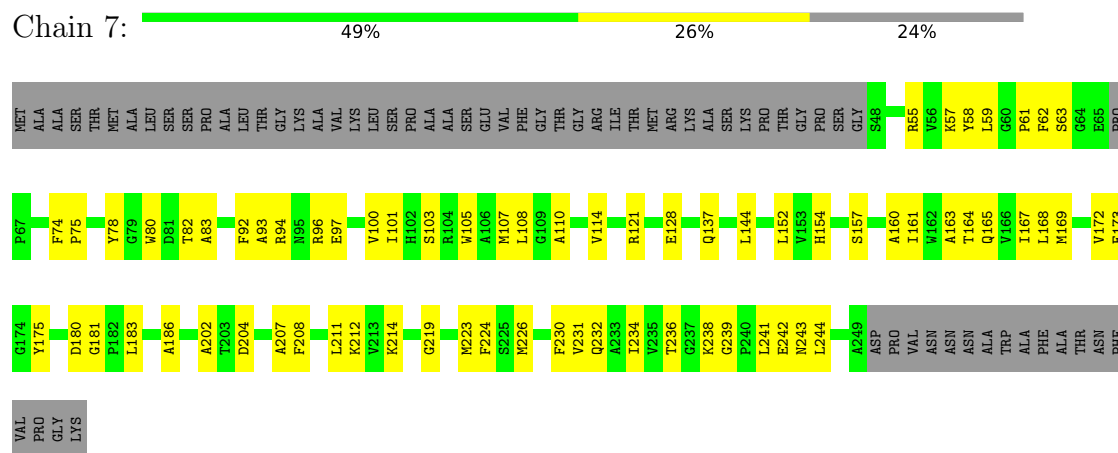
3 Residue-property plots

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.

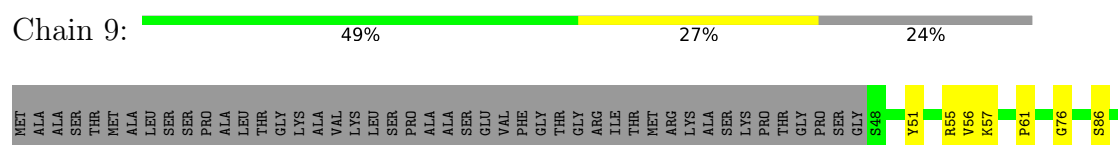
- Molecule 1: Chlorophyll a-b binding protein, chloroplastic

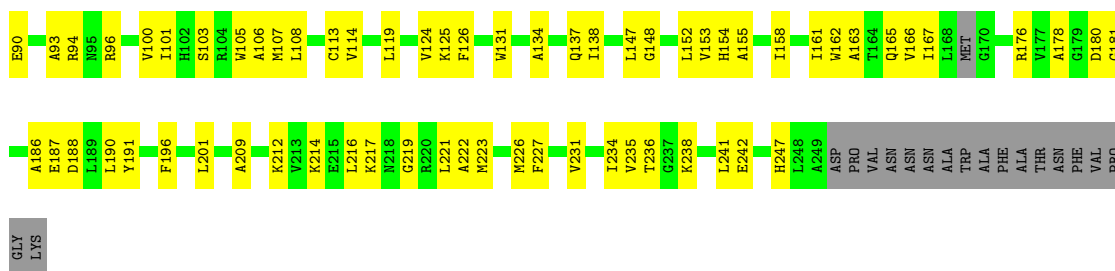


- Molecule 1: Chlorophyll a-b binding protein, chloroplastic



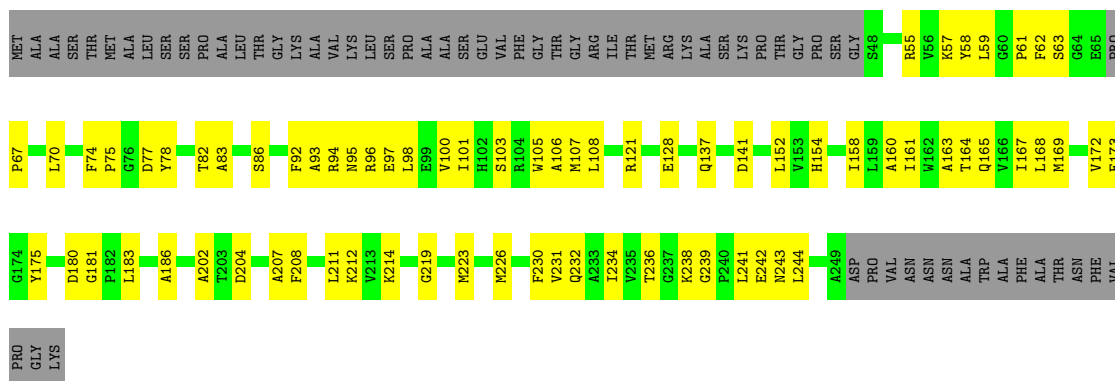
- Molecule 1: Chlorophyll a-b binding protein, chloroplastic





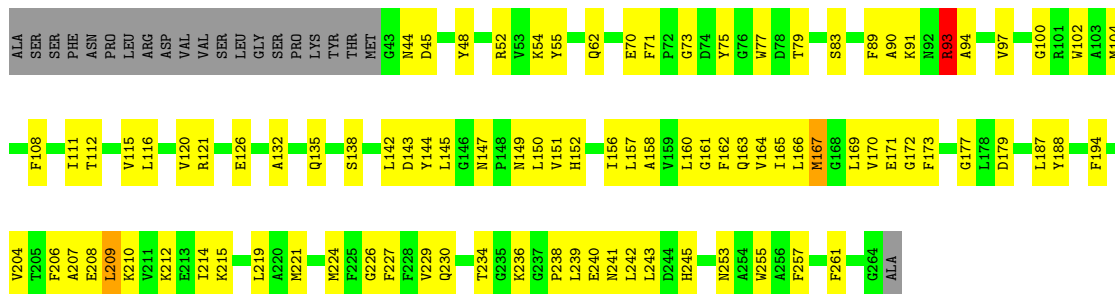
- Molecule 1: Chlorophyll a-b binding protein, chloroplastic

Chain AA:



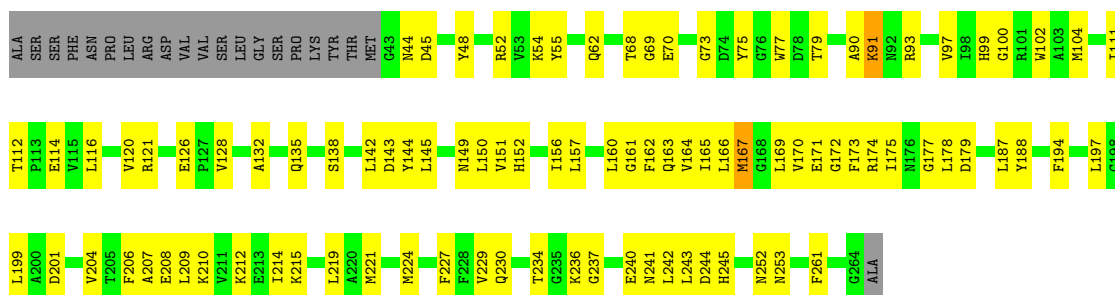
- Molecule 2: Chlorophyll a-b binding protein 3, chloroplastic

Chain 6:

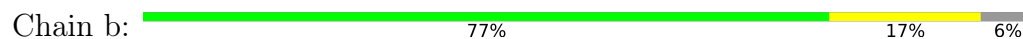
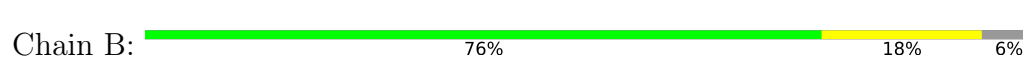


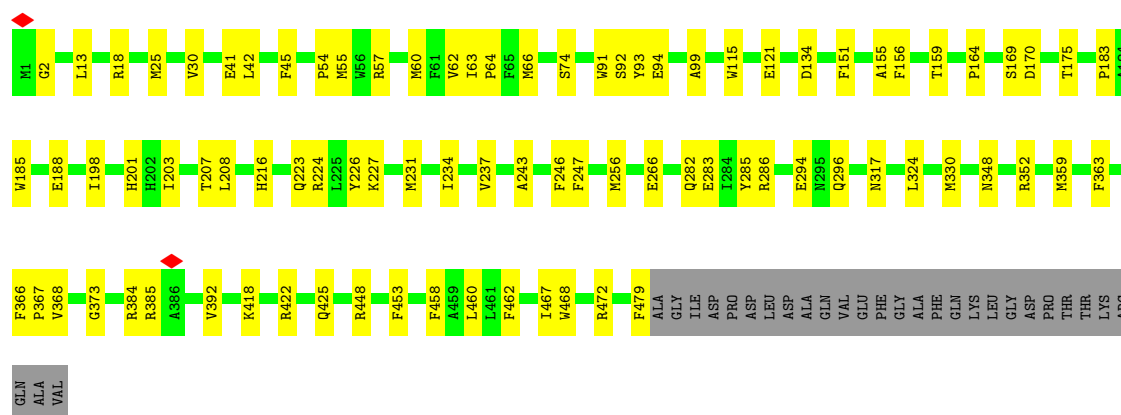
- Molecule 2: Chlorophyll a-b binding protein 3, chloroplastic

Chain 0:



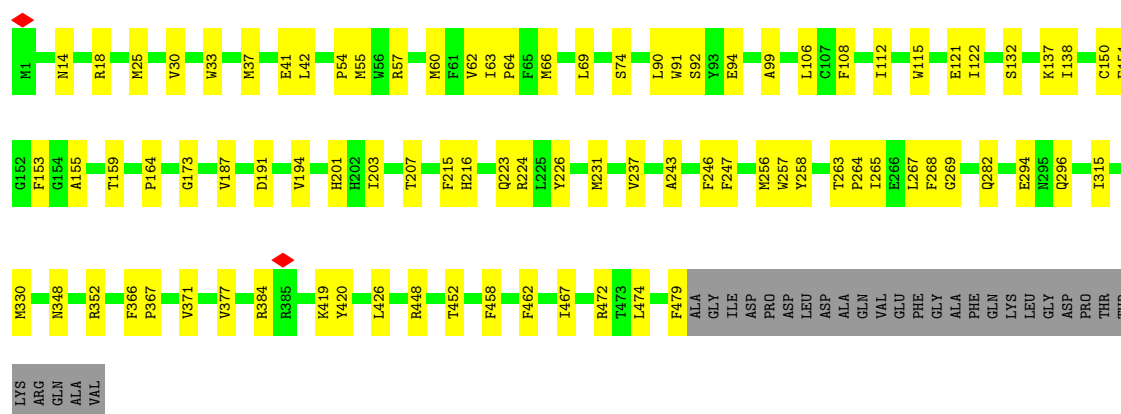
- Chain 8:  54% 36% 9%





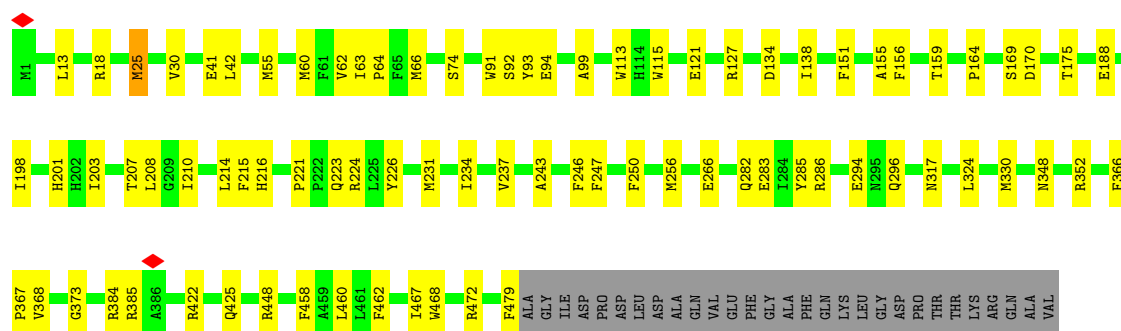
• Molecule 4: Photosystem II CP47 reaction center protein

Chain v: 77% 17% 6%



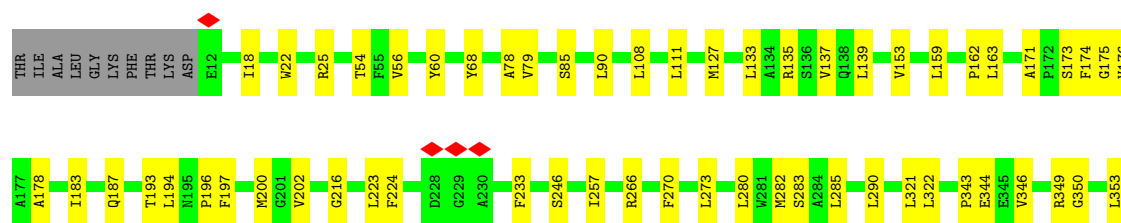
• Molecule 4: Photosystem II CP47 reaction center protein

Chain BE: 78% 16% 6%



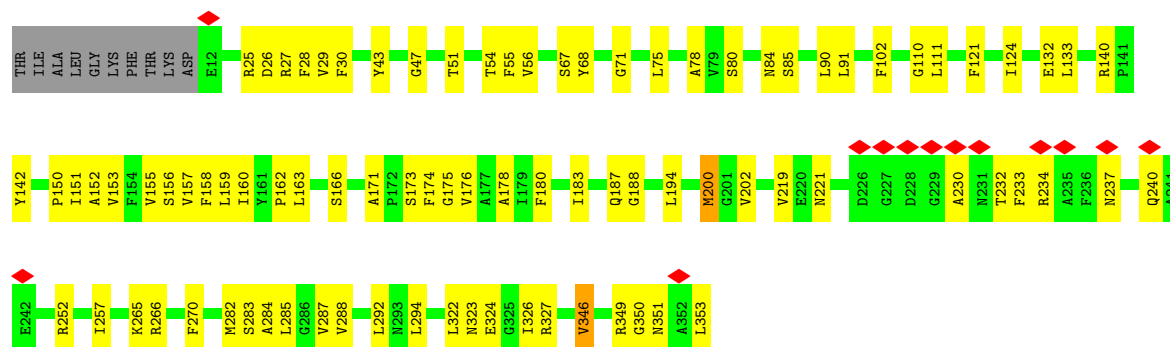
• Molecule 5: Photosystem II D2 protein

Chain D: 81% 16% 3%



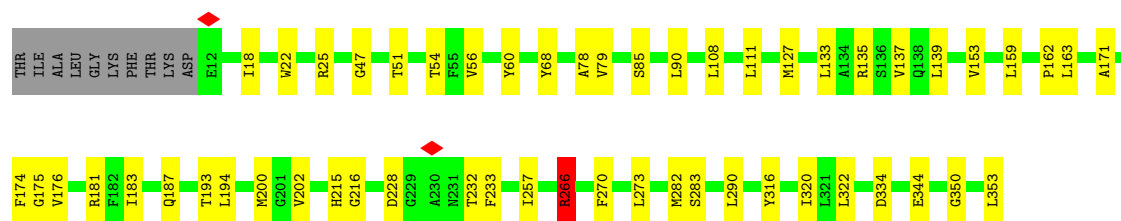
• Molecule 5: Photosystem II D2 protein

Chain d: 72% 24%



• Molecule 5: Photosystem II D2 protein

Chain 2: 82% 15%



• Molecule 5: Photosystem II D2 protein

Chain BG: 75% 22%



• Molecule 6: Cytochrome b559 subunit alpha



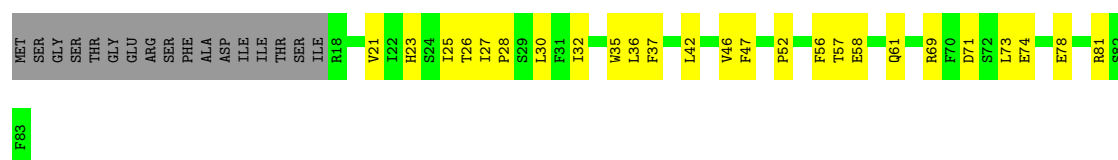
- Molecule 6: Cytochrome b559 subunit alpha



- Molecule 6: Cytochrome b559 subunit alpha



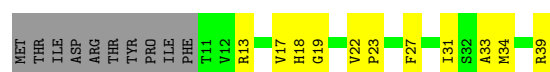
- Molecule 6: Cytochrome b559 subunit alpha



- Molecule 7: Cytochrome b559 subunit beta



- Molecule 7: Cytochrome b559 subunit beta

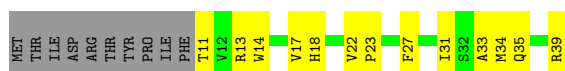


- Molecule 7: Cytochrome b559 subunit beta





- Molecule 7: Cytochrome b559 subunit beta



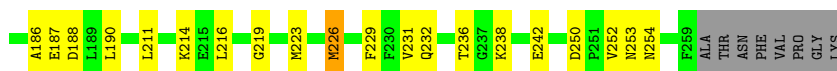
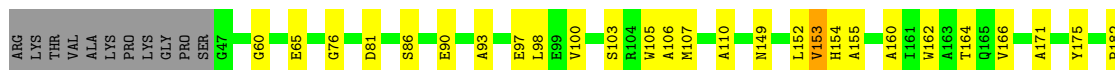
- Molecule 8: Chlorophyll a-b binding protein 1, chloroplastic



- Molecule 8: Chlorophyll a-b binding protein 1, chloroplastic

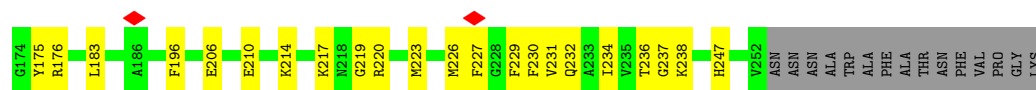


- Molecule 8: Chlorophyll a-b binding protein 1, chloroplastic

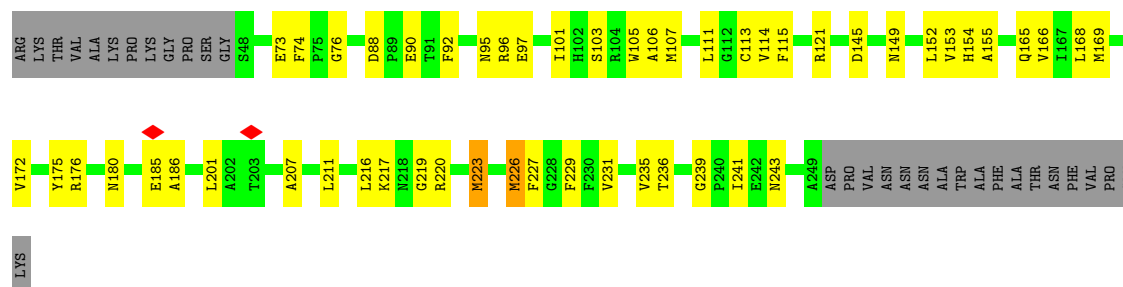


- Molecule 8: Chlorophyll a-b binding protein 1, chloroplastic

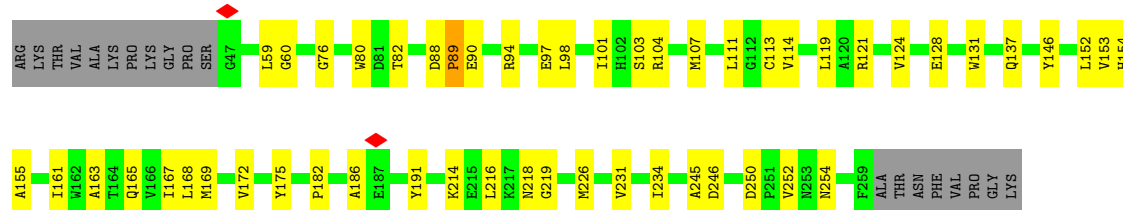




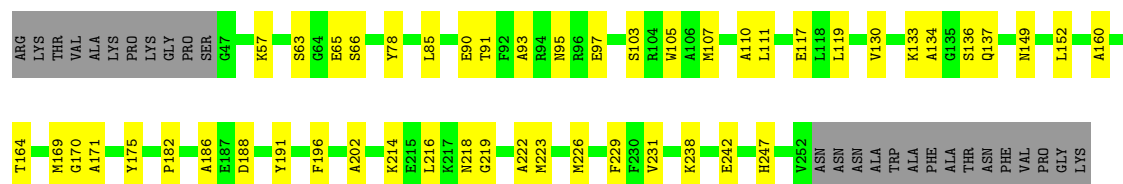
- Molecule 8: Chlorophyll a-b binding protein 1, chloroplastic



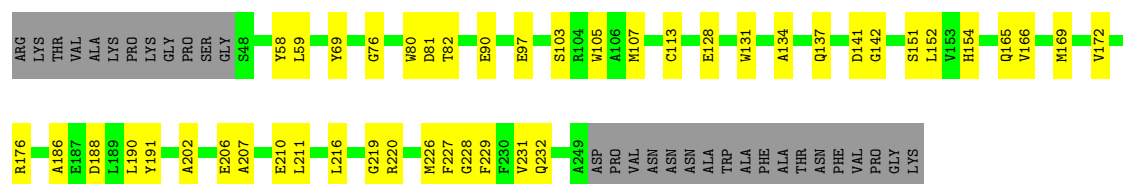
- Molecule 8: Chlorophyll a-b binding protein 1, chloroplastic




- Molecule 8: Chlorophyll a-b binding protein 1, chloroplastic

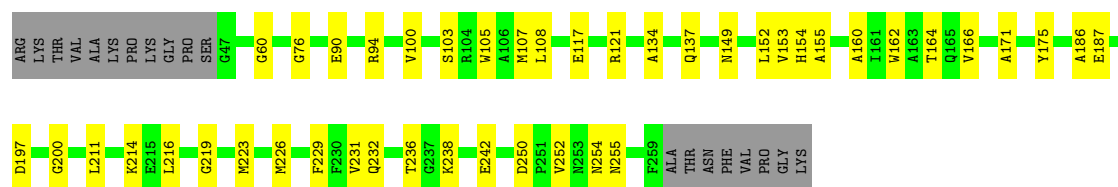


- Molecule 8: Chlorophyll a-b binding protein 1, chloroplastic



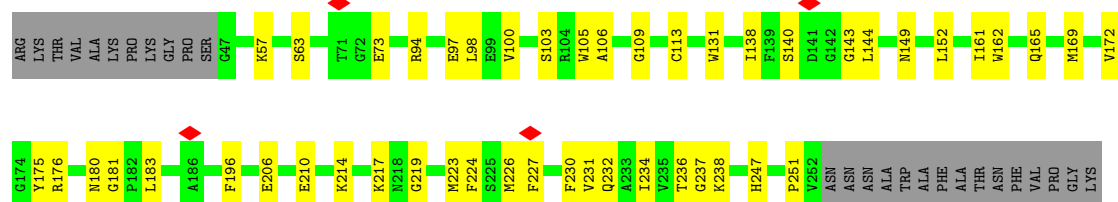
- Molecule 8: Chlorophyll a-b binding protein 1, chloroplastic

Chain BB: 



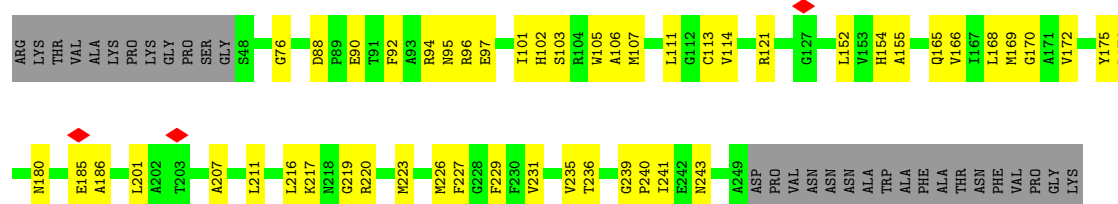
- Molecule 8: Chlorophyll a-b binding protein 1, chloroplastic

Chain BJ: 



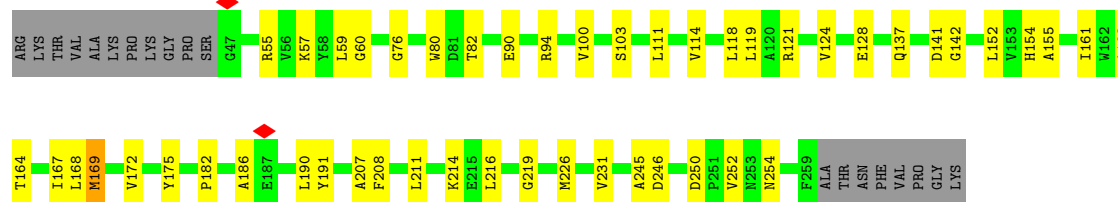
- Molecule 8: Chlorophyll a-b binding protein 1, chloroplastic

Chain BQ: 



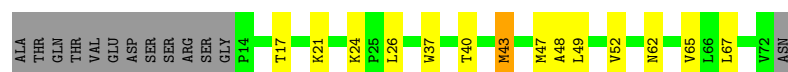
- Molecule 8: Chlorophyll a-b binding protein 1, chloroplastic

Chain Ba: 

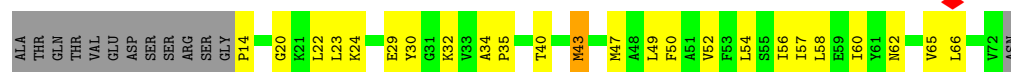


- Molecule 9: Photosystem II reaction center protein H

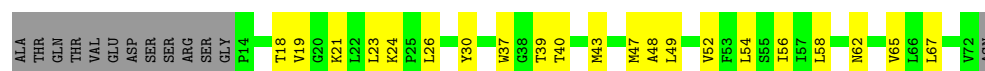
Chain H: 



- Molecule 9: Photosystem II reaction center protein H



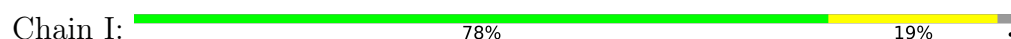
- Molecule 9: Photosystem II reaction center protein H



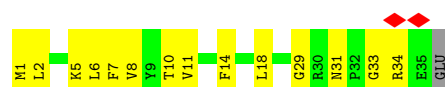
- Molecule 9: Photosystem II reaction center protein H



- Molecule 10: Photosystem II reaction center protein I



- Molecule 10: Photosystem II reaction center protein I




- Molecule 10: Photosystem II reaction center protein I

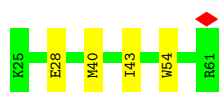


- Molecule 10: Photosystem II reaction center protein I



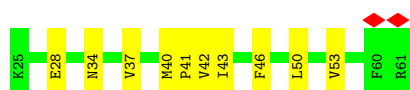
- Molecule 11: Photosystem II reaction center protein K

Chain K:  89% 11%




- Molecule 11: Photosystem II reaction center protein K

Chain k:  5% 73% 27%




- Molecule 11: Photosystem II reaction center protein K

Chain Ay:  89% 11%



- Molecule 11: Photosystem II reaction center protein K

Chain BN:  5% 84% 16%



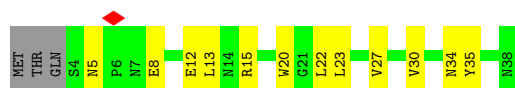
- Molecule 12: Photosystem II reaction center protein L

Chain L:  5% 66% 26% 8%



- Molecule 12: Photosystem II reaction center protein L

Chain l:  61% 32% 8%



- Molecule 12: Photosystem II reaction center protein L

Chain Az:  5% 68% 24% 8%



- Molecule 12: Photosystem II reaction center protein L

Chain BO:  63% 29% 8%



- Molecule 13: Photosystem II reaction center protein M

Chain M:  56% 35% 6%



- Molecule 13: Photosystem II reaction center protein M

Chain m:  50% 41% 6%



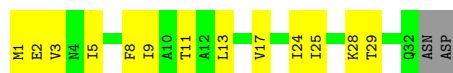
- Molecule 13: Photosystem II reaction center protein M

Chain A1:  53% 41% 6%



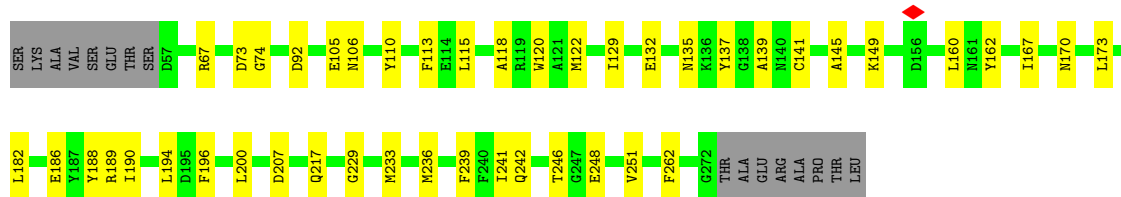
- Molecule 13: Photosystem II reaction center protein M

Chain BP:  56% 38% 6%



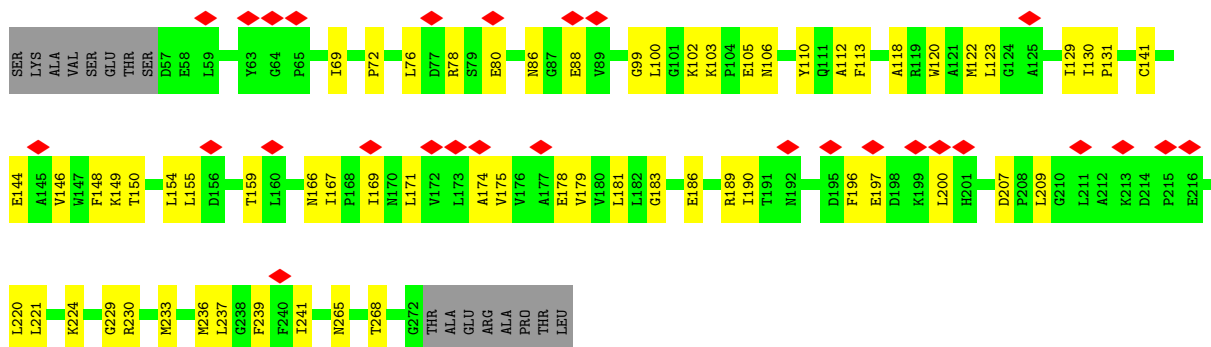
- Molecule 14: Chlorophyll a-b binding protein CP26, chloroplastic

Chain S:  74% 19% 7%

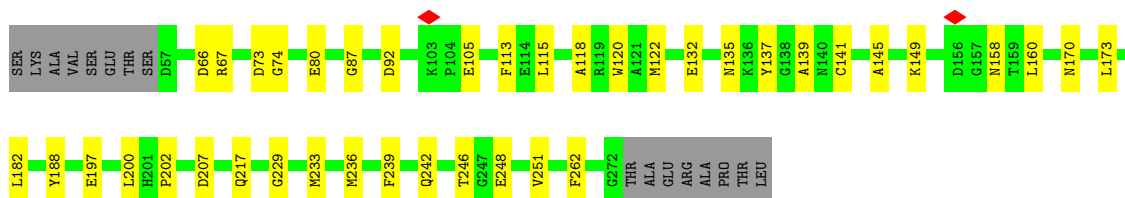
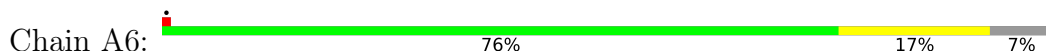


- Molecule 14: Chlorophyll a-b binding protein CP26, chloroplastic

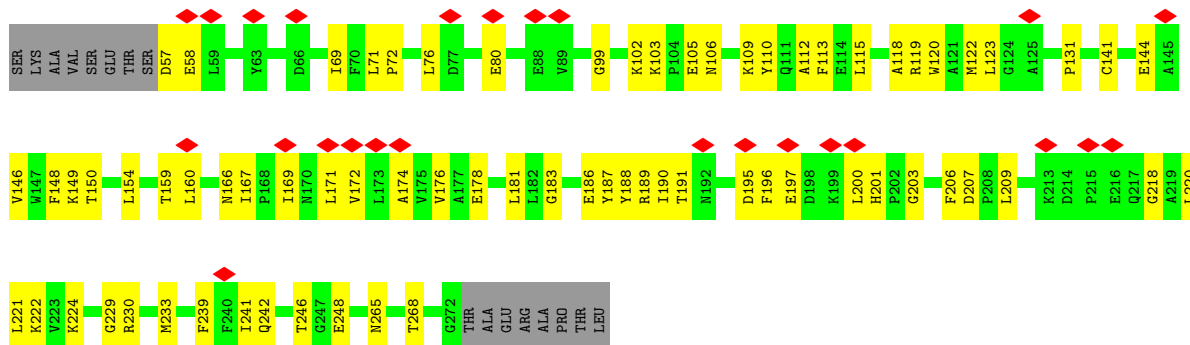
Chain s:  12% 66% 27% 7%



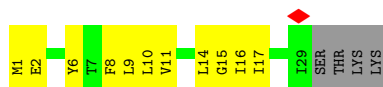
- Molecule 14: Chlorophyll a-b binding protein CP26, chloroplastic



- Molecule 14: Chlorophyll a-b binding protein CP26, chloroplastic



- Molecule 15: Photosystem II reaction center protein T

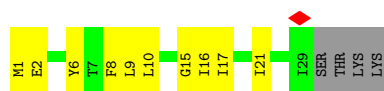


- Molecule 15: Photosystem II reaction center protein T





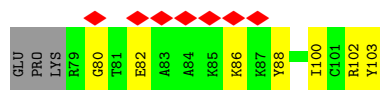
- Molecule 15: Photosystem II reaction center protein T



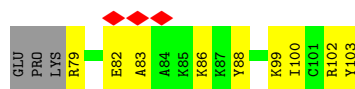
- Molecule 15: Photosystem II reaction center protein T



- Molecule 16: Photosystem II 5 kDa protein, chloroplastic



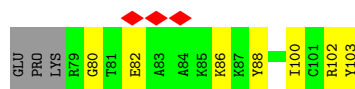
- Molecule 16: Photosystem II 5 kDa protein, chloroplastic



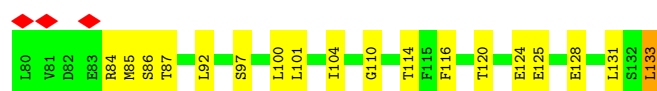
- Molecule 16: Photosystem II 5 kDa protein, chloroplastic



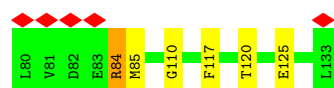
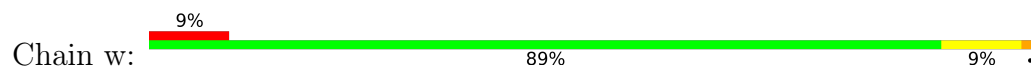
- Molecule 16: Photosystem II 5 kDa protein, chloroplastic



- Molecule 17: Photosystem II reaction center W protein, chloroplastic



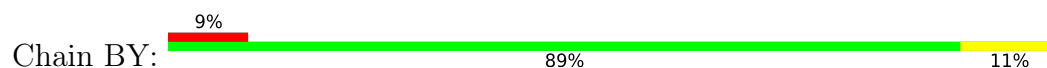
- Molecule 17: Photosystem II reaction center W protein, chloroplastic



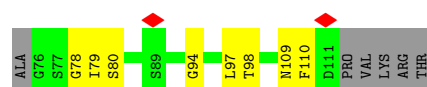
- Molecule 17: Photosystem II reaction center W protein, chloroplastic



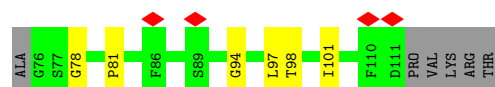
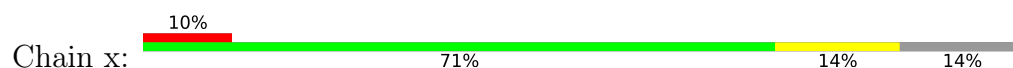
- Molecule 17: Photosystem II reaction center W protein, chloroplastic



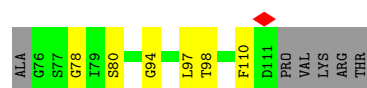
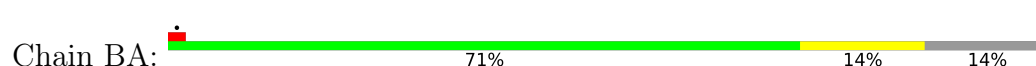
- Molecule 18: (thale cress) hypothetical protein



- Molecule 18: (thale cress) hypothetical protein

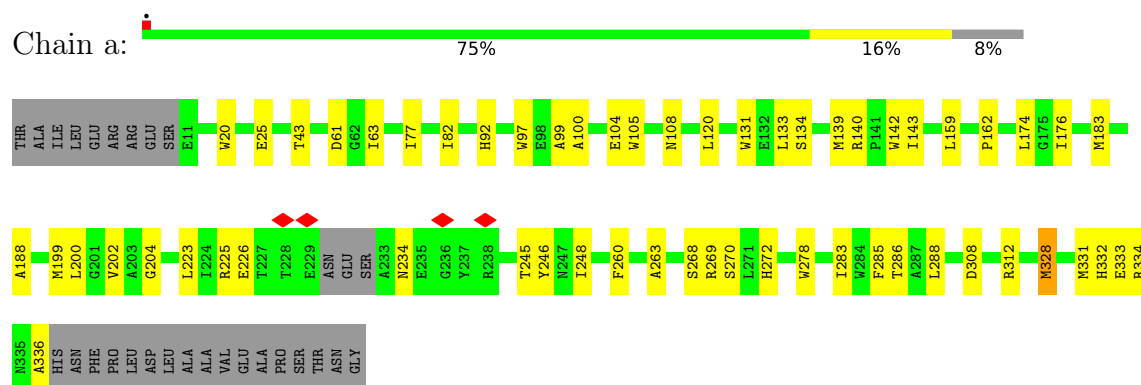


- Molecule 18: (thale cress) hypothetical protein

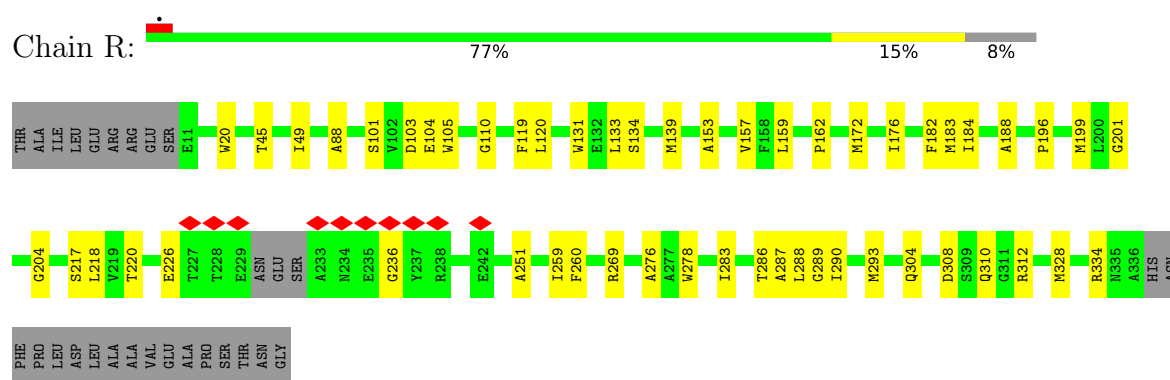


- WORLDWIDE
PDB
PROTEIN DATA BANK

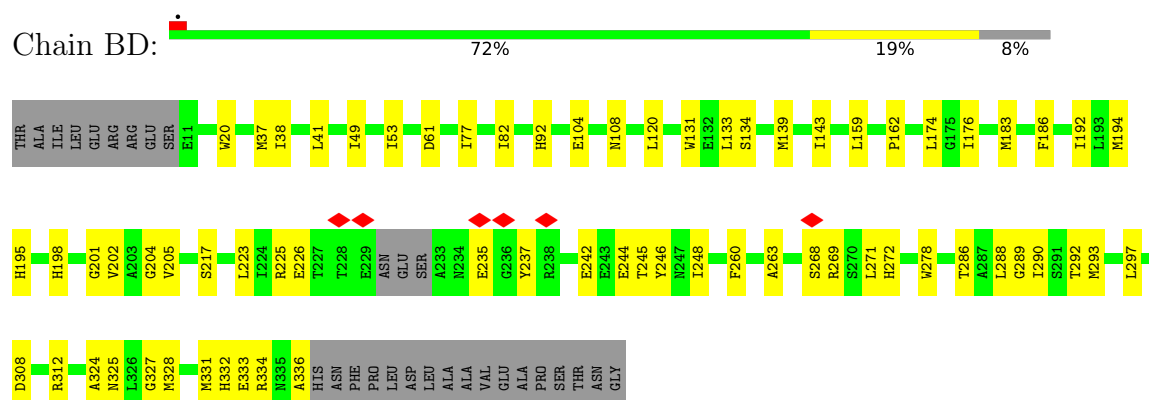
- Molecule 20: Photosystem II protein D1



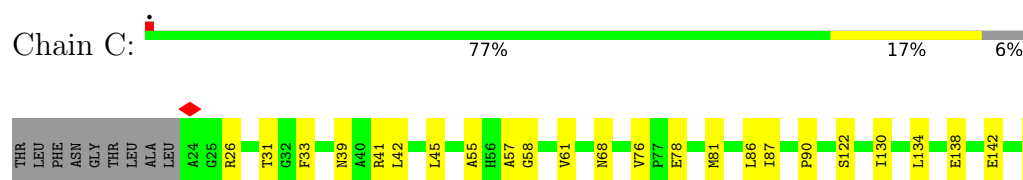
- Molecule 20: Photosystem II protein D1



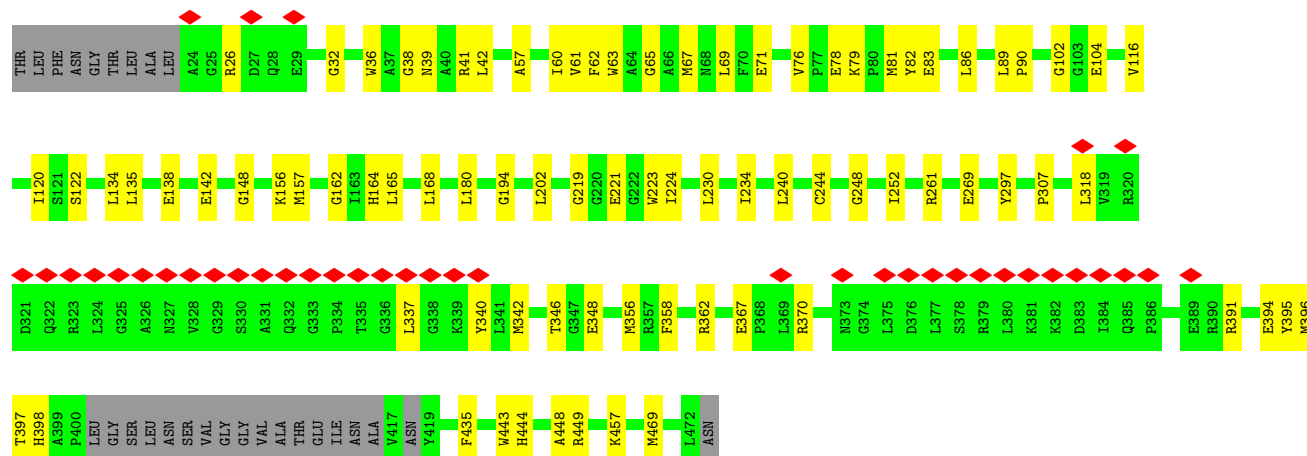
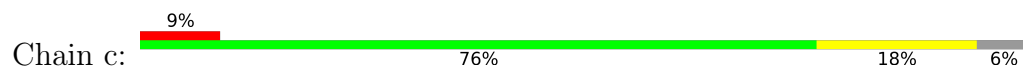
- Molecule 20: Photosystem II protein D1



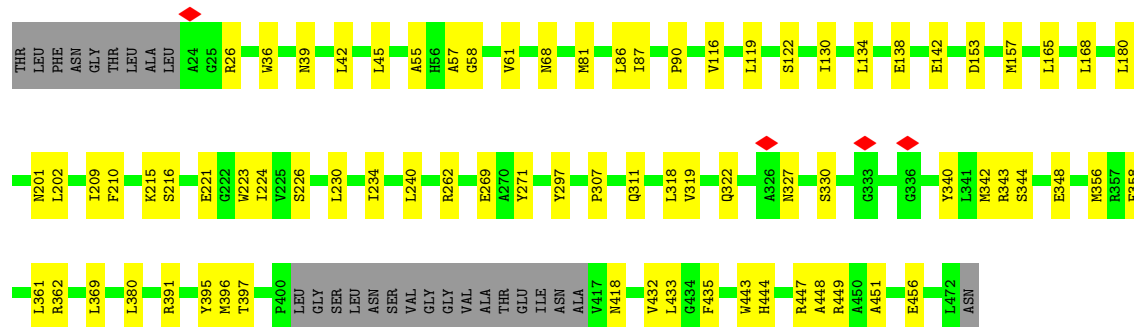
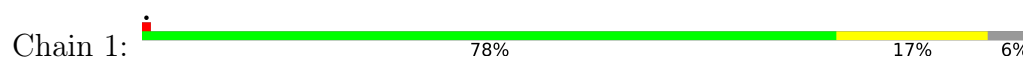
- Molecule 21: Photosystem II CP43 reaction center protein



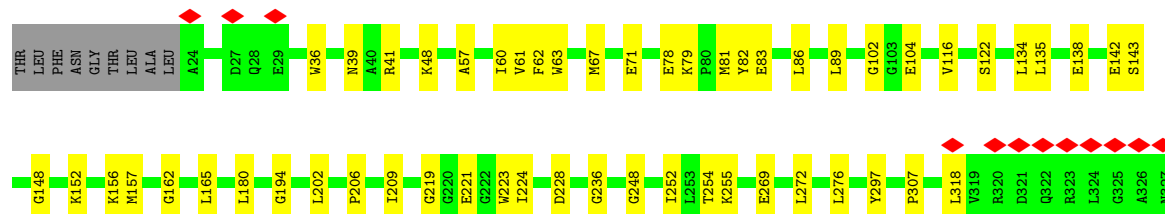
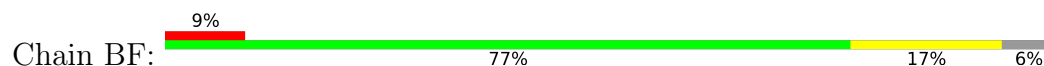
- Molecule 21: Photosystem II CP43 reaction center protein

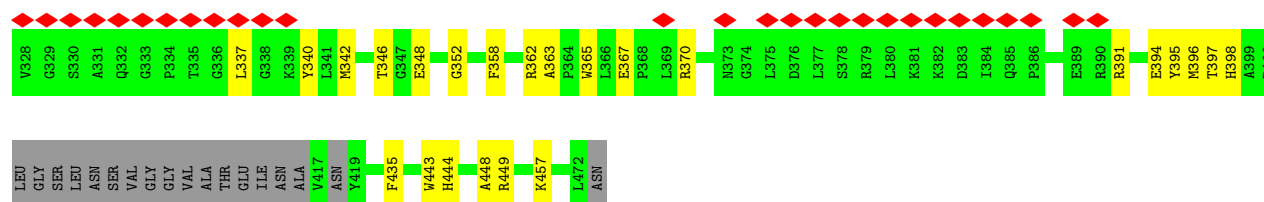


- Molecule 21: Photosystem II CP43 reaction center protein



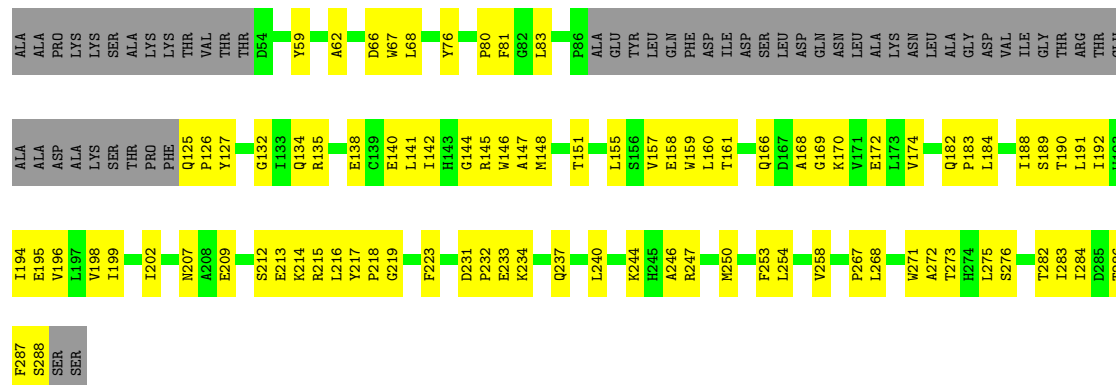
- Molecule 21: Photosystem II CP43 reaction center protein





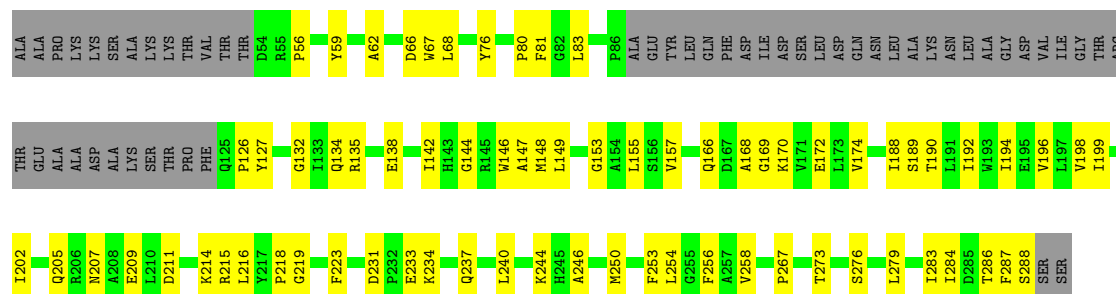
- Molecule 22: Chlorophyll a-b binding protein CP29.1, chloroplastic

Chain r: 44% 35% 21%



- Molecule 22: Chlorophyll a-b binding protein CP29.1, chloroplastic

Chain BU: 50% 28% 21%



4 Experimental information

Property	Value	Source
EM reconstruction method	SINGLE PARTICLE	Depositor
Imposed symmetry	POINT, Not provided	
Number of particles used	48981	Depositor
Resolution determination method	FSC 0.143 CUT-OFF	Depositor
CTF correction method	PHASE FLIPPING AND AMPLITUDE CORRECTION	Depositor
Microscope	FEI TALOS ARCTICA	Depositor
Voltage (kV)	300	Depositor
Electron dose ($e^-/\text{\AA}^2$)	50.5	Depositor
Minimum defocus (nm)	1200	Depositor
Maximum defocus (nm)	2200	Depositor
Magnification	Not provided	
Image detector	GATAN K3 (6k x 4k)	Depositor
Maximum map value	45.874	Depositor
Minimum map value	-18.604	Depositor
Average map value	0.011	Depositor
Map value standard deviation	1.000	Depositor
Recommended contour level	4.5	Depositor
Map size (\AA)	770.4, 770.4, 770.4	wwPDB
Map dimensions	720, 720, 720	wwPDB
Map angles ($^\circ$)	90.0, 90.0, 90.0	wwPDB
Pixel spacing (\AA)	1.07, 1.07, 1.07	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: PHO, OEX, FE2, BCR, SQD, HEM, XAT, LUT, LHG, CHL, DGD, CLA, PL9, LMG, BCT, NEX

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	5	0.26	0/1573	0.44	0/2137
1	7	0.28	0/1573	0.45	0/2134
1	9	0.25	0/1573	0.38	0/2137
1	AA	0.31	0/1573	0.45	0/2134
2	0	0.34	0/1768	0.55	2/2405 (0.1%)
2	6	0.36	0/1768	0.58	3/2405 (0.1%)
3	8	0.27	0/1564	0.54	0/2123
3	AB	0.29	0/1564	0.55	0/2123
4	B	0.23	0/3886	0.34	1/5293 (0.0%)
4	BE	0.24	0/3886	0.36	1/5293 (0.0%)
4	b	0.22	0/3886	0.35	0/5293
4	v	0.23	0/3886	0.32	0/5293
5	2	0.35	0/2816	0.40	1/3837 (0.0%)
5	BG	0.32	1/2816 (0.0%)	0.41	0/3837
5	D	0.25	0/2816	0.35	0/3837
5	d	0.31	1/2816 (0.0%)	0.41	1/3837 (0.0%)
6	3	0.15	0/562	0.34	0/763
6	BH	0.17	0/562	0.33	0/763
6	E	0.15	0/562	0.34	0/763
6	e	0.15	0/562	0.30	0/763
7	4	0.17	0/230	0.34	0/311
7	BI	0.15	0/230	0.31	0/311
7	F	0.15	0/230	0.31	0/311
7	f	0.17	0/230	0.33	0/311
8	A2	0.29	0/1580	0.40	0/2146
8	Au	0.23	0/1607	0.33	0/2184
8	BB	0.31	0/1669	0.37	0/2270
8	BJ	0.15	0/1607	0.38	0/2184
8	BQ	0.19	0/1580	0.40	0/2146
8	Ba	0.19	0/1669	0.37	1/2270 (0.0%)
8	G	0.25	0/1607	0.38	1/2184 (0.0%)
8	N	0.28	0/1580	0.40	0/2146

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
8	Y	0.31	0/1669	0.39	1/2270 (0.0%)
8	g	0.15	0/1607	0.38	0/2184
8	n	0.26	0/1580	0.48	2/2146 (0.1%)
8	y	0.25	0/1669	0.46	1/2270 (0.0%)
9	Av	0.29	0/447	0.52	0/608
9	BK	0.27	0/447	0.48	0/608
9	H	0.28	0/447	0.48	1/608 (0.2%)
9	h	0.28	0/447	0.52	1/608 (0.2%)
10	Aw	0.28	0/294	0.41	0/397
10	BL	0.27	0/294	0.39	0/397
10	I	0.27	0/294	0.40	0/397
10	i	0.27	0/294	0.50	0/397
11	Ay	0.22	0/313	0.44	0/428
11	BN	0.22	0/313	0.45	0/428
11	K	0.20	0/313	0.40	0/428
11	k	0.21	0/313	0.45	0/428
12	Az	0.28	0/301	0.33	0/409
12	BO	0.25	0/301	0.30	0/409
12	L	0.25	0/301	0.39	0/409
12	l	0.26	0/301	0.33	0/409
13	A1	0.26	0/254	0.50	0/347
13	BP	0.27	0/254	0.53	0/347
13	M	0.31	0/254	0.53	0/347
13	m	0.26	0/254	0.53	0/347
14	A6	0.22	0/1715	0.37	0/2328
14	BV	0.17	0/1715	0.36	0/2328
14	S	0.19	0/1715	0.35	0/2328
14	s	0.16	0/1715	0.34	0/2328
15	A7	0.26	0/246	0.34	0/333
15	BW	0.29	0/246	0.36	0/333
15	T	0.33	0/246	0.43	0/333
15	t	0.21	0/246	0.33	0/333
16	A8	0.17	0/197	0.26	0/261
16	BX	0.15	0/197	0.36	0/261
16	U	0.16	0/197	0.28	0/261
16	u	0.16	0/197	0.34	0/261
17	A0	0.26	0/439	0.41	0/594
17	BY	0.21	0/439	0.33	0/594
17	W	0.26	0/439	0.43	1/594 (0.2%)
17	w	0.26	0/439	0.44	0/594
18	BA	0.15	0/250	0.42	0/339
18	BZ	0.16	0/250	0.39	0/339
18	X	0.15	0/250	0.42	0/339

Mol	Chain	Bond lengths		Bond angles	
		RMSZ	# Z >5	RMSZ	# Z >5
18	x	0.16	0/250	0.44	0/339
19	BC	0.20	0/475	0.43	0/649
19	Bb	0.19	0/475	0.39	0/649
19	Z	0.23	0/475	0.49	0/649
19	z	0.19	0/475	0.37	0/649
20	A	0.27	0/2602	0.37	0/3546
20	BD	0.26	0/2602	0.37	0/3546
20	R	0.32	0/2602	0.42	1/3546 (0.0%)
20	a	0.25	0/2602	0.38	1/3546 (0.0%)
21	1	0.28	0/3487	0.37	0/4750
21	BF	0.27	0/3478	0.35	0/4736
21	C	0.24	0/3487	0.36	0/4750
21	c	0.26	0/3478	0.38	0/4736
22	BU	0.35	0/1585	0.48	0/2161
22	r	0.31	0/1585	0.52	0/2161
All	All	0.26	2/109588 (0.0%)	0.40	20/149064 (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
2	6	0	1
3	8	0	1
5	2	0	1
17	w	0	1
All	All	0	4

All (2) bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
5	d	346	VAL	CB-CG1	-5.66	1.33	1.52
5	BG	346	VAL	CB-CG1	-5.54	1.34	1.52

The worst 5 of 20 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	0	167	MET	CG-SD-CE	-9.25	80.54	100.90
8	y	89	PRO	CA-N-CD	-8.75	99.75	112.00
20	a	328	MET	CG-SD-CE	-7.01	85.48	100.90
8	n	226	MET	CG-SD-CE	-6.92	85.69	100.90

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Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
2	6	167	MET	CG-SD-CE	-6.76	86.02	100.90

There are no chirality outliers.

All (4) planarity outliers are listed below:

Mol	Chain	Res	Type	Group
5	2	266	ARG	Sidechain
2	6	93	ARG	Sidechain
3	8	223	ARG	Sidechain
17	w	84	ARG	Sidechain

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	5	1529	0	1470	72	0
1	7	1530	0	1473	68	0
1	9	1529	0	1470	68	0
1	AA	1530	0	1473	82	0
2	0	1716	0	1658	115	0
2	6	1716	0	1658	113	0
3	8	1512	0	1444	81	0
3	AB	1512	0	1444	95	0
4	B	3757	0	3641	84	0
4	BE	3757	0	3641	88	0
4	b	3757	0	3641	93	0
4	v	3757	0	3641	83	0
5	2	2723	0	2615	68	0
5	BG	2723	0	2615	85	0
5	D	2723	0	2615	65	0
5	d	2723	0	2615	99	0
6	3	544	0	519	17	0
6	BH	544	0	519	20	0
6	E	544	0	519	18	0
6	e	544	0	519	21	0
7	4	225	0	233	10	0
7	BI	225	0	233	13	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
7	F	225	0	233	9	0
7	f	225	0	233	13	0
8	A2	1536	0	1480	44	0
8	Au	1562	0	1503	43	0
8	BB	1621	0	1550	36	0
8	BJ	1562	0	1503	47	0
8	BQ	1536	0	1480	49	0
8	Ba	1621	0	1550	35	0
8	G	1562	0	1503	52	0
8	N	1536	0	1480	42	0
8	Y	1621	0	1550	43	0
8	g	1562	0	1503	47	0
8	n	1536	0	1480	51	0
8	y	1621	0	1550	42	0
9	Av	438	0	465	27	0
9	BK	438	0	465	23	0
9	H	438	0	465	19	0
9	h	438	0	465	29	0
10	Aw	286	0	295	2	0
10	BL	286	0	295	7	0
10	I	286	0	295	7	0
10	i	286	0	295	10	0
11	Ay	302	0	313	5	0
11	BN	302	0	313	4	0
11	K	302	0	313	5	0
11	k	302	0	313	9	0
12	Az	293	0	283	11	0
12	BO	293	0	283	12	0
12	L	293	0	283	13	0
12	l	293	0	283	16	0
13	A1	250	0	279	16	0
13	BP	250	0	279	15	0
13	M	250	0	279	15	0
13	m	250	0	279	15	0
14	A6	1670	0	1649	36	0
14	BV	1670	0	1649	74	0
14	S	1670	0	1649	42	0
14	s	1670	0	1649	67	0
15	A7	239	0	255	9	0
15	BW	239	0	255	5	0
15	T	239	0	255	12	0
15	t	239	0	255	8	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
16	A8	195	0	206	14	0
16	BX	195	0	206	8	0
16	U	195	0	206	16	0
16	u	195	0	206	11	0
17	A0	428	0	405	13	0
17	BY	428	0	405	4	0
17	W	428	0	405	17	0
17	w	428	0	405	8	0
18	BA	248	0	266	7	0
18	BZ	248	0	266	8	0
18	X	248	0	266	8	0
18	x	248	0	266	7	0
19	BC	465	0	495	16	0
19	Bb	465	0	495	15	0
19	Z	465	0	495	16	0
19	z	465	0	495	17	0
20	A	2525	0	2443	50	0
20	BD	2525	0	2443	68	0
20	R	2525	0	2443	58	0
20	a	2525	0	2443	65	0
21	1	3373	0	3302	58	0
21	BF	3365	0	3295	62	0
21	C	3373	0	3302	60	0
21	c	3365	0	3295	81	0
22	BU	1539	0	1502	75	0
22	r	1539	0	1502	93	0
23	0	314	0	238	35	0
23	5	307	0	228	43	0
23	6	314	0	238	42	0
23	7	304	0	222	32	0
23	8	184	0	124	10	0
23	9	307	0	228	40	0
23	A2	358	0	318	47	0
23	A6	195	0	136	15	0
23	AA	304	0	222	34	0
23	AB	184	0	124	15	0
23	Au	349	0	300	39	0
23	BB	358	0	318	48	0
23	BH	45	0	28	0	0
23	BJ	351	0	303	54	0
23	BQ	358	0	318	51	0
23	BU	222	0	179	36	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
23	BV	195	0	136	20	0
23	Ba	358	0	318	45	0
23	G	349	0	300	50	0
23	N	358	0	318	45	0
23	S	195	0	136	15	0
23	Y	358	0	318	47	0
23	e	45	0	28	0	0
23	g	351	0	303	52	0
23	n	358	0	318	54	0
23	r	222	0	179	35	0
23	s	195	0	136	20	0
23	y	358	0	318	45	0
24	0	426	0	373	37	0
24	1	780	0	864	34	0
24	2	130	0	144	8	0
24	5	412	0	348	41	0
24	6	426	0	373	43	0
24	7	389	0	311	28	0
24	8	266	0	194	20	0
24	9	412	0	348	37	0
24	A	240	0	242	14	0
24	A2	473	0	468	23	0
24	A6	463	0	390	14	0
24	AA	389	0	311	28	0
24	AB	266	0	194	25	0
24	Au	477	0	477	20	0
24	Aw	65	0	72	3	0
24	B	1040	0	1152	73	0
24	BB	473	0	468	18	0
24	BD	240	0	242	18	0
24	BE	1040	0	1152	69	0
24	BF	845	0	936	39	0
24	BG	130	0	144	8	0
24	BJ	477	0	477	25	0
24	BQ	473	0	468	27	0
24	BU	518	0	452	36	0
24	BV	465	0	393	29	0
24	Ba	473	0	468	21	0
24	C	780	0	864	36	0
24	D	130	0	144	7	0
24	G	477	0	477	21	0
24	I	65	0	72	3	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
24	N	473	0	468	23	0
24	R	240	0	242	12	0
24	S	463	0	390	20	0
24	Y	473	0	468	22	0
24	a	240	0	242	17	0
24	b	1040	0	1152	74	0
24	c	845	0	936	47	0
24	d	130	0	144	7	0
24	g	477	0	477	21	0
24	n	473	0	468	25	0
24	r	518	0	452	37	0
24	s	465	0	393	29	0
24	v	1040	0	1152	79	0
24	y	473	0	468	19	0
25	0	84	0	112	19	0
25	5	84	0	112	15	0
25	6	84	0	112	17	0
25	7	84	0	112	13	0
25	8	42	0	56	6	0
25	9	84	0	112	18	0
25	A2	84	0	112	12	0
25	A6	84	0	112	10	0
25	AA	84	0	112	14	0
25	AB	42	0	56	9	0
25	Au	84	0	112	12	0
25	BB	84	0	112	11	0
25	BJ	84	0	112	17	0
25	BQ	84	0	112	11	0
25	BU	42	0	56	10	0
25	BV	84	0	112	10	0
25	Ba	84	0	112	7	0
25	G	84	0	112	11	0
25	N	84	0	112	10	0
25	S	84	0	112	11	0
25	Y	84	0	112	9	0
25	g	84	0	112	16	0
25	n	84	0	112	11	0
25	r	42	0	56	9	0
25	s	84	0	112	16	0
25	y	84	0	112	9	0
26	5	44	0	56	1	0
26	7	44	0	56	5	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
26	9	44	0	56	1	0
26	A2	44	0	56	3	0
26	A6	44	0	56	2	0
26	AA	44	0	56	4	0
26	Au	44	0	56	1	0
26	BB	88	0	112	8	0
26	BJ	44	0	56	1	0
26	BQ	44	0	56	3	0
26	BV	44	0	56	5	0
26	Ba	44	0	56	2	0
26	G	44	0	56	1	0
26	N	44	0	56	3	0
26	S	44	0	56	3	0
26	Y	44	0	56	1	0
26	g	44	0	56	1	0
26	n	44	0	56	3	0
26	r	44	0	56	5	0
26	s	44	0	56	5	0
26	y	44	0	56	3	0
27	0	47	0	67	8	0
27	1	98	0	148	4	0
27	2	95	0	139	1	0
27	5	41	0	55	3	0
27	6	47	0	67	5	0
27	9	41	0	55	3	0
27	A0	49	0	74	1	0
27	A2	49	0	74	3	0
27	Au	49	0	74	4	0
27	Az	49	0	74	3	0
27	B	95	0	139	2	0
27	BB	49	0	74	7	0
27	BE	144	0	213	3	0
27	BF	98	0	148	3	0
27	BG	49	0	74	1	0
27	BJ	49	0	74	4	0
27	BQ	49	0	74	6	0
27	BU	42	0	57	5	0
27	BY	49	0	74	1	0
27	Ba	49	0	74	4	0
27	C	98	0	148	5	0
27	D	49	0	74	3	0
27	G	49	0	74	3	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
27	L	49	0	74	3	0
27	N	49	0	74	5	0
27	W	49	0	74	1	0
27	Y	49	0	74	6	0
27	b	144	0	213	6	0
27	c	98	0	148	3	0
27	d	49	0	74	1	0
27	g	49	0	74	4	0
27	n	49	0	74	5	0
27	r	42	0	57	6	0
27	v	49	0	74	2	0
27	w	49	0	74	1	0
27	y	49	0	74	5	0
28	5	44	0	56	11	0
28	7	88	0	112	4	0
28	8	44	0	56	6	0
28	9	44	0	56	11	0
28	A2	44	0	56	6	0
28	AA	88	0	112	6	0
28	AB	44	0	56	6	0
28	Au	44	0	56	4	0
28	BB	44	0	56	6	0
28	BJ	44	0	56	1	0
28	BQ	44	0	56	5	0
28	BU	44	0	56	4	0
28	Ba	44	0	56	2	0
28	G	44	0	56	4	0
28	N	44	0	56	5	0
28	Y	44	0	56	5	0
28	g	44	0	56	1	0
28	n	44	0	56	2	0
28	r	44	0	56	5	0
28	y	44	0	56	3	0
29	1	80	0	112	7	0
29	4	40	0	56	3	0
29	8	40	0	56	6	0
29	A	40	0	56	3	0
29	AB	40	0	56	5	0
29	Av	40	0	56	4	0
29	Ay	80	0	112	8	0
29	B	160	0	224	20	0
29	BD	40	0	56	2	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
29	BE	160	0	224	15	0
29	BF	80	0	112	6	0
29	BI	40	0	56	2	0
29	BK	40	0	56	8	0
29	BN	40	0	56	2	0
29	Bb	40	0	56	3	0
29	C	80	0	112	5	0
29	F	40	0	56	1	0
29	H	40	0	56	5	0
29	K	80	0	112	5	0
29	R	40	0	56	1	0
29	a	40	0	56	3	0
29	b	160	0	224	16	0
29	c	40	0	56	3	0
29	f	40	0	56	2	0
29	h	40	0	56	7	0
29	k	40	0	56	1	0
29	v	160	0	224	16	0
29	z	80	0	112	8	0
30	1	102	0	144	5	0
30	2	46	0	62	0	0
30	A	48	0	66	1	0
30	A0	48	0	66	1	0
30	Aw	40	0	50	1	0
30	B	91	0	122	0	0
30	BE	51	0	72	1	0
30	BF	102	0	144	5	0
30	BG	46	0	62	0	0
30	BL	48	0	66	2	0
30	C	102	0	144	5	0
30	D	46	0	62	0	0
30	I	40	0	50	3	0
30	b	51	0	72	1	0
30	c	102	0	144	7	0
30	d	46	0	62	0	0
30	i	48	0	66	2	0
30	v	91	0	122	0	0
31	2	55	0	80	1	0
31	BG	55	0	80	2	0
31	D	55	0	80	1	0
31	d	55	0	80	3	0
32	2	50	0	67	3	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
32	A	54	0	78	8	0
32	A1	54	0	78	2	0
32	Az	42	0	48	3	0
32	BD	54	0	78	6	0
32	BG	50	0	67	4	0
32	BO	96	0	126	6	0
32	D	50	0	67	1	0
32	L	96	0	126	5	0
32	R	54	0	78	9	0
32	a	54	0	78	6	0
32	d	50	0	67	3	0
32	l	96	0	126	7	0
33	4	43	0	30	3	0
33	BI	43	0	30	2	0
33	F	43	0	30	1	0
33	f	43	0	30	2	0
34	1	177	0	228	7	0
34	A	59	0	76	2	0
34	Av	62	0	82	6	0
34	BD	119	0	154	2	0
34	BF	117	0	150	4	0
34	BK	62	0	82	6	0
34	C	177	0	228	5	0
34	H	62	0	82	6	0
34	R	59	0	76	2	0
34	a	119	0	154	3	0
34	c	117	0	150	4	0
34	h	62	0	82	4	0
35	2	4	0	1	0	0
35	A	4	0	1	0	0
35	BD	4	0	1	0	0
35	a	4	0	1	0	0
36	A	10	0	0	0	0
36	BD	10	0	0	1	0
36	R	10	0	0	0	0
36	a	10	0	0	1	0
37	A	1	0	0	0	0
37	BD	1	0	0	0	0
37	R	1	0	0	0	0
37	a	1	0	0	0	0
38	A	128	0	148	8	0
38	BD	128	0	148	6	0

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Mol	Chain	Non-H	H(model)	H(added)	Clashes	Symm-Clashes
38	R	128	0	148	7	0
38	a	128	0	148	4	0
All	All	146846	0	146920	4896	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 17.

The worst 5 of 4896 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)
8:n:103:SER:HA	8:n:223:MET:HE1	1.25	1.18
8:BJ:226:MET:HE1	25:BJ:616:LUT:H12	1.27	1.14
4:BE:223:GLN:HE22	9:BK:35:PRO:HA	0.97	1.11
5:d:326:ILE:HG12	20:a:328:MET:HE1	1.39	1.05
2:0:172:GLY:HA3	1:AA:62:PHE:CE1	1.96	1.01

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	5	146/266 (55%)	145 (99%)	0	1 (1%)	18	51
1	7	158/266 (59%)	155 (98%)	3 (2%)	0	100	100
1	9	197/266 (74%)	196 (100%)	0	1 (0%)	24	57
1	AA	197/266 (74%)	194 (98%)	3 (2%)	0	100	100
2	0	220/243 (90%)	211 (96%)	8 (4%)	1 (0%)	24	57
2	6	180/243 (74%)	175 (97%)	4 (2%)	1 (1%)	21	54
3	AB	190/212 (90%)	182 (96%)	8 (4%)	0	100	100
4	b	475/508 (94%)	471 (99%)	4 (1%)	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
4	v	450/508 (89%)	440 (98%)	10 (2%)	0	100	100
5	2	6/352 (2%)	6 (100%)	0	0	100	100
6	e	23/83 (28%)	21 (91%)	2 (9%)	0	100	100
7	f	27/39 (69%)	27 (100%)	0	0	100	100
8	N	200/232 (86%)	199 (100%)	0	1 (0%)	24	57
8	Y	211/232 (91%)	209 (99%)	1 (0%)	1 (0%)	24	57
8	g	204/232 (88%)	202 (99%)	2 (1%)	0	100	100
8	n	200/232 (86%)	199 (100%)	0	1 (0%)	24	57
8	y	211/232 (91%)	209 (99%)	1 (0%)	1 (0%)	24	57
9	H	45/72 (62%)	41 (91%)	4 (9%)	0	100	100
9	h	57/72 (79%)	52 (91%)	5 (9%)	0	100	100
10	I	33/36 (92%)	33 (100%)	0	0	100	100
10	i	33/36 (92%)	33 (100%)	0	0	100	100
11	K	35/37 (95%)	35 (100%)	0	0	100	100
11	k	35/37 (95%)	35 (100%)	0	0	100	100
12	L	33/38 (87%)	32 (97%)	1 (3%)	0	100	100
12	l	33/38 (87%)	33 (100%)	0	0	100	100
13	M	30/34 (88%)	28 (93%)	1 (3%)	1 (3%)	3	24
13	m	30/34 (88%)	29 (97%)	0	1 (3%)	3	24
14	S	214/232 (92%)	212 (99%)	2 (1%)	0	100	100
14	s	214/232 (92%)	211 (99%)	3 (1%)	0	100	100
15	T	27/33 (82%)	27 (100%)	0	0	100	100
15	t	27/33 (82%)	27 (100%)	0	0	100	100
16	U	23/28 (82%)	23 (100%)	0	0	100	100
16	u	23/28 (82%)	22 (96%)	1 (4%)	0	100	100
17	W	52/54 (96%)	51 (98%)	1 (2%)	0	100	100
17	w	52/54 (96%)	50 (96%)	2 (4%)	0	100	100
18	X	34/42 (81%)	33 (97%)	0	1 (3%)	3	25
18	x	34/42 (81%)	33 (97%)	1 (3%)	0	100	100
19	Z	60/62 (97%)	60 (100%)	0	0	100	100
19	z	60/62 (97%)	60 (100%)	0	0	100	100

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Mol	Chain	Analysed	Favoured	Allowed	Outliers	Percentiles	
20	A	319/352 (91%)	308 (97%)	11 (3%)	0	100	100
20	a	319/352 (91%)	310 (97%)	9 (3%)	0	100	100
21	BF	304/459 (66%)	303 (100%)	1 (0%)	0	100	100
21	C	429/459 (94%)	427 (100%)	2 (0%)	0	100	100
21	c	427/459 (93%)	425 (100%)	2 (0%)	0	100	100
22	BU	193/250 (77%)	189 (98%)	4 (2%)	0	100	100
22	r	193/250 (77%)	185 (96%)	8 (4%)	0	100	100
All	All	6663/8329 (80%)	6548 (98%)	104 (2%)	11 (0%)	44	73

5 of 11 Ramachandran outliers are listed below:

Mol	Chain	Res	Type
13	m	3	VAL
13	M	3	VAL
18	X	79	ILE
8	y	153	VAL
1	5	153	VAL

5.3.2 Protein sidechains [i](#)

There are no protein residues with a non-rotameric sidechain to report in this entry.

5.3.3 RNA [i](#)

There are no RNA molecules in this entry.

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

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

5.5 Carbohydrates [i](#)

There are no oligosaccharides in this entry.

5.6 Ligand geometry [i](#)

Of 766 ligands modelled in this entry, 4 are monoatomic - leaving 762 for Mogul analysis.

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

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	$\# Z > 2$	Counts	RMSZ	$\# Z > 2$
23	CHL	0	607	-	47,61,74	3.66	19 (40%)	41,98,114	2.25	14 (34%)
23	CHL	5	601	1	40,54,74	4.09	19 (47%)	34,90,114	2.43	11 (32%)
24	CLA	7	305	-	49,53,73	1.37	9 (18%)	58,89,113	1.39	5 (8%)
24	CLA	C	506	21	69,73,73	1.17	10 (14%)	82,113,113	1.28	5 (6%)
24	CLA	r	601	22	53,57,73	1.29	9 (16%)	61,93,113	1.51	5 (8%)
34	DGD	R	401	-	60,60,67	0.92	2 (3%)	74,74,81	1.38	7 (9%)
24	CLA	b	605	4	69,73,73	1.15	7 (10%)	82,113,113	1.32	6 (7%)
30	LMG	c	518	-	51,51,55	0.72	1 (1%)	59,59,63	1.33	4 (6%)
23	CHL	6	601	2	55,69,74	3.47	19 (34%)	49,106,114	2.13	14 (28%)
26	NEX	5	617	-	40,46,46	1.26	6 (15%)	50,70,70	1.57	9 (18%)
24	CLA	5	611	27	49,53,73	1.37	9 (18%)	58,89,113	1.42	4 (6%)
24	CLA	r	612	22	39,44,73	1.45	8 (20%)	47,76,113	1.51	4 (8%)
24	CLA	s	603	14	49,53,73	1.40	8 (16%)	58,89,113	1.42	4 (6%)
29	BCR	a	411	-	41,41,41	1.26	4 (9%)	56,56,56	1.21	6 (10%)
24	CLA	c	514	21	69,73,73	1.15	9 (13%)	82,113,113	1.34	4 (4%)
27	LHG	Az	102	-	48,48,48	0.69	2 (4%)	51,54,54	1.31	7 (13%)
28	XAT	7	301	-	41,47,47	4.76	25 (60%)	54,74,74	6.71	36 (66%)
24	CLA	6	611	27	59,63,73	1.23	9 (15%)	70,101,113	1.47	7 (10%)
24	CLA	6	613	-	62,66,73	1.26	9 (14%)	73,104,113	1.47	6 (8%)
29	BCR	b	601	-	41,41,41	1.19	2 (4%)	56,56,56	1.32	8 (14%)
31	PL9	d	403	-	55,55,55	1.67	9 (16%)	68,69,69	1.63	15 (22%)
28	XAT	BJ	619	-	41,47,47	4.73	25 (60%)	54,74,74	6.69	36 (66%)
24	CLA	BV	602	14	65,69,73	1.21	9 (13%)	77,108,113	1.27	5 (6%)
24	CLA	Au	613	-	69,73,73	1.17	8 (11%)	82,113,113	1.30	4 (4%)
24	CLA	A	405	20	69,73,73	1.17	9 (13%)	82,113,113	1.30	7 (8%)
29	BCR	b	618	-	41,41,41	1.21	3 (7%)	56,56,56	1.29	8 (14%)
24	CLA	6	604	-	49,53,73	1.37	8 (16%)	58,89,113	1.66	9 (15%)
24	CLA	BJ	603	8	69,73,73	1.18	9 (13%)	82,113,113	1.27	6 (7%)
24	CLA	1	511	21	69,73,73	1.17	9 (13%)	82,113,113	1.33	6 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
25	LUT	Y	316	-	42,43,43	1.34	7 (16%)	51,60,60	1.44	11 (21%)
25	LUT	6	615	-	42,43,43	1.37	4 (9%)	51,60,60	1.30	10 (19%)
23	CHL	BV	601	-	40,54,74	4.13	18 (45%)	34,90,114	2.50	11 (32%)
25	LUT	Ba	316	-	42,43,43	1.31	8 (19%)	51,60,60	1.38	10 (19%)
24	CLA	B	608	4	69,73,73	1.16	9 (13%)	82,113,113	1.31	5 (6%)
29	BCR	1	514	-	41,41,41	1.31	4 (9%)	56,56,56	1.23	7 (12%)
23	CHL	8	305	-	40,54,74	4.08	19 (47%)	34,90,114	2.13	10 (29%)
24	CLA	1	507	-	69,73,73	1.16	8 (11%)	82,113,113	1.29	4 (4%)
23	CHL	S	605	14	40,54,74	4.04	19 (47%)	34,90,114	2.73	12 (35%)
23	CHL	BQ	606	8	44,58,74	3.95	19 (43%)	37,94,114	2.07	12 (32%)
23	CHL	BQ	607	-	57,71,74	3.46	19 (33%)	52,109,114	2.11	13 (25%)
24	CLA	1	505	-	69,73,73	1.15	9 (13%)	82,113,113	1.27	5 (6%)
29	BCR	z	102	-	41,41,41	1.30	4 (9%)	56,56,56	1.34	8 (14%)
34	DGD	BF	518	-	63,63,67	0.88	2 (3%)	77,77,81	1.40	8 (10%)
24	CLA	BD	406	-	69,73,73	1.15	7 (10%)	82,113,113	1.33	6 (7%)
29	BCR	BK	101	-	41,41,41	1.20	2 (4%)	56,56,56	1.34	9 (16%)
24	CLA	s	610	-	60,64,73	1.24	9 (15%)	71,102,113	1.46	7 (9%)
23	CHL	N	605	8	42,56,74	3.90	19 (45%)	36,92,114	2.43	11 (30%)
23	CHL	A2	605	8	42,56,74	3.88	19 (45%)	36,92,114	2.46	11 (30%)
28	XAT	7	318	-	41,47,47	4.69	26 (63%)	54,74,74	6.84	36 (66%)
23	CHL	BU	605	22	57,71,74	3.17	20 (35%)	52,109,114	2.18	11 (21%)
29	BCR	C	514	-	41,41,41	1.30	4 (9%)	56,56,56	1.24	6 (10%)
23	CHL	BU	613	22	36,50,74	4.18	19 (52%)	29,85,114	2.54	13 (44%)
28	XAT	r	616	-	41,47,47	4.63	23 (56%)	54,74,74	6.77	38 (70%)
24	CLA	9	602	1	65,69,73	1.20	9 (13%)	77,108,113	1.29	5 (6%)
24	CLA	BV	613	14	53,57,73	1.31	8 (15%)	61,93,113	1.44	5 (8%)
24	CLA	N	613	8	64,68,73	1.22	8 (12%)	76,107,113	1.38	6 (7%)
23	CHL	G	601	8	57,71,74	3.35	19 (33%)	52,109,114	2.42	15 (28%)
24	CLA	b	610	-	69,73,73	1.15	9 (13%)	82,113,113	1.33	5 (6%)
24	CLA	C	509	21	69,73,73	1.16	9 (13%)	82,113,113	1.31	6 (7%)
25	LUT	BB	316	-	42,43,43	1.35	8 (19%)	51,60,60	1.46	11 (21%)
25	LUT	G	616	-	42,43,43	1.31	8 (19%)	51,60,60	1.44	10 (19%)
29	BCR	b	620	-	41,41,41	1.19	2 (4%)	56,56,56	1.24	4 (7%)
24	CLA	C	510	21	69,73,73	1.16	9 (13%)	82,113,113	1.29	5 (6%)
34	DGD	BK	102	-	63,63,67	0.97	3 (4%)	77,77,81	1.47	10 (12%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CHL	A6	606	-	49,63,74	3.64	19 (38%)	42,99,114	2.77	14 (33%)
23	CHL	A6	607	14	40,54,74	4.17	19 (47%)	34,90,114	2.29	12 (35%)
24	CLA	BE	604	4	69,73,73	1.15	9 (13%)	82,113,113	1.29	4 (4%)
24	CLA	AB	303	-	49,53,73	1.35	8 (16%)	58,89,113	1.47	4 (6%)
24	CLA	n	612	-	64,68,73	1.20	9 (14%)	76,107,113	1.35	7 (9%)
26	NEX	G	617	-	40,46,46	1.20	5 (12%)	50,70,70	1.60	9 (18%)
23	CHL	9	601	1	40,54,74	4.08	19 (47%)	34,90,114	2.45	11 (32%)
28	XAT	BU	616	-	41,47,47	4.61	22 (53%)	54,74,74	6.77	38 (70%)
24	CLA	Ba	303	8	69,73,73	1.16	8 (11%)	82,113,113	1.26	4 (4%)
32	SQD	2	408	-	48,50,54	1.59	8 (16%)	58,61,65	1.47	8 (13%)
34	DGD	BF	517	-	56,56,67	0.97	3 (5%)	70,70,81	1.49	11 (15%)
24	CLA	BE	602	-	69,73,73	1.17	9 (13%)	82,113,113	1.26	6 (7%)
24	CLA	BB	304	8	69,73,73	1.17	10 (14%)	82,113,113	1.28	5 (6%)
29	BCR	k	101	-	41,41,41	1.21	3 (7%)	56,56,56	1.26	6 (10%)
24	CLA	BE	617	4	69,73,73	1.15	9 (13%)	82,113,113	1.29	5 (6%)
24	CLA	S	609	14	56,61,73	1.28	9 (16%)	65,98,113	1.35	5 (7%)
24	CLA	BJ	604	-	54,58,73	1.33	8 (14%)	64,95,113	1.41	5 (7%)
23	CHL	BB	310	-	57,71,74	3.36	19 (33%)	52,109,114	2.03	14 (26%)
30	LMG	D	405	-	46,46,55	0.77	1 (2%)	54,54,63	1.35	5 (9%)
32	SQD	A	413	-	52,54,54	1.54	8 (15%)	62,65,65	1.28	6 (9%)
23	CHL	n	609	-	57,71,74	3.51	19 (33%)	52,109,114	1.98	13 (25%)
24	CLA	S	611	-	53,57,73	1.32	9 (16%)	61,93,113	1.40	5 (8%)
25	LUT	BV	614	-	42,43,43	1.31	8 (19%)	51,60,60	1.40	10 (19%)
24	CLA	N	612	-	64,68,73	1.20	9 (14%)	76,107,113	1.35	4 (5%)
23	CHL	r	613	22	36,50,74	4.18	18 (50%)	29,85,114	2.61	13 (44%)
24	CLA	BU	612	22	39,44,73	1.44	9 (23%)	47,76,113	1.52	5 (10%)
24	CLA	b	608	-	69,73,73	1.17	9 (13%)	82,113,113	1.29	6 (7%)
29	BCR	BE	618	-	41,41,41	1.18	3 (7%)	56,56,56	1.43	10 (17%)
23	CHL	AB	307	3	40,54,74	4.10	20 (50%)	34,90,114	2.15	10 (29%)
24	CLA	g	612	-	64,68,73	1.23	8 (12%)	76,107,113	1.26	4 (5%)
24	CLA	BB	305	-	54,58,73	1.32	9 (16%)	64,95,113	1.43	6 (9%)
24	CLA	BE	609	4	69,73,73	1.16	7 (10%)	82,113,113	1.41	7 (8%)
23	CHL	s	605	14	40,54,74	4.12	19 (47%)	34,90,114	2.52	13 (38%)
24	CLA	g	614	8	52,56,73	1.34	8 (15%)	61,92,113	1.44	5 (8%)
23	CHL	g	606	-	44,58,74	3.99	19 (43%)	37,94,114	2.27	11 (29%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CHL	6	607	-	47,61,74	3.66	19 (40%)	41,98,114	2.28	13 (31%)
27	LHG	c	519	-	48,48,48	0.55	0	51,54,54	1.28	6 (11%)
29	BCR	Av	101	-	41,41,41	1.21	3 (7%)	56,56,56	1.32	9 (16%)
27	LHG	N	618	24	48,48,48	0.63	1 (2%)	51,54,54	1.29	6 (11%)
23	CHL	BJ	605	8	40,54,74	4.18	20 (50%)	34,90,114	2.57	10 (29%)
26	NEX	Ba	318	-	40,46,46	1.21	7 (17%)	50,70,70	1.52	9 (18%)
24	CLA	Au	612	-	64,68,73	1.21	9 (14%)	76,107,113	1.31	5 (6%)
24	CLA	AB	301	3	45,49,73	1.44	10 (22%)	54,83,113	1.46	4 (7%)
24	CLA	Au	614	-	52,56,73	1.32	9 (17%)	61,92,113	1.44	6 (9%)
24	CLA	BV	608	-	49,53,73	1.40	8 (16%)	58,89,113	1.37	4 (6%)
27	LHG	g	618	24	48,48,48	0.64	1 (2%)	51,54,54	1.29	6 (11%)
28	XAT	n	619	-	41,47,47	4.69	26 (63%)	54,74,74	6.79	36 (66%)
23	CHL	8	307	3	40,54,74	4.06	19 (47%)	34,90,114	2.56	14 (41%)
23	CHL	s	607	-	40,54,74	4.25	18 (45%)	34,90,114	1.98	10 (29%)
24	CLA	G	612	-	64,68,73	1.21	9 (14%)	76,107,113	1.29	5 (6%)
24	CLA	A2	603	8	69,73,73	1.15	9 (13%)	82,113,113	1.31	5 (6%)
24	CLA	7	313	-	49,53,73	1.36	9 (18%)	58,89,113	1.46	4 (6%)
24	CLA	Y	305	-	54,58,73	1.31	9 (16%)	64,95,113	1.43	6 (9%)
24	CLA	N	610	-	69,73,73	1.16	9 (13%)	82,113,113	1.43	9 (10%)
24	CLA	n	602	8	69,73,73	1.17	7 (10%)	82,113,113	1.23	5 (6%)
24	CLA	N	611	27	64,68,73	1.19	8 (12%)	76,107,113	1.33	6 (7%)
27	LHG	Au	618	24	48,48,48	0.61	1 (2%)	51,54,54	1.29	6 (11%)
27	LHG	BU	617	24	41,41,48	0.77	1 (2%)	44,47,54	1.37	7 (15%)
24	CLA	c	510	21	69,73,73	1.17	10 (14%)	82,113,113	1.30	5 (6%)
24	CLA	A2	614	-	52,56,73	1.35	8 (15%)	61,92,113	1.46	5 (8%)
25	LUT	9	616	-	42,43,43	1.31	8 (19%)	51,60,60	1.58	11 (21%)
24	CLA	n	603	8	69,73,73	1.17	8 (11%)	82,113,113	1.25	6 (7%)
24	CLA	1	506	21	69,73,73	1.18	9 (13%)	82,113,113	1.28	5 (6%)
24	CLA	B	615	-	69,73,73	1.16	9 (13%)	82,113,113	1.27	5 (6%)
32	SQD	L	101	-	40,42,54	1.65	7 (17%)	50,53,65	1.52	10 (20%)
27	LHG	G	618	24	48,48,48	0.61	1 (2%)	51,54,54	1.29	6 (11%)
29	BCR	BE	601	-	41,41,41	1.21	2 (4%)	56,56,56	1.32	8 (14%)
36	OEX	R	402	20	0,15,15	-	-	-	-	-
30	LMG	BL	101	-	48,48,55	0.74	1 (2%)	56,56,63	1.33	5 (8%)
24	CLA	A6	613	14	53,57,73	1.30	9 (16%)	61,93,113	1.47	6 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CHL	Ba	302	8	57,71,74	3.45	19 (33%)	52,109,114	2.16	15 (28%)
24	CLA	Ba	312	27	64,68,73	1.20	9 (14%)	76,107,113	1.32	6 (7%)
24	CLA	AB	302	-	49,53,73	1.37	9 (18%)	58,89,113	1.41	4 (6%)
29	BCR	BI	101	-	41,41,41	1.20	3 (7%)	56,56,56	1.23	6 (10%)
32	SQD	l	102	-	40,42,54	1.65	7 (17%)	50,53,65	1.40	7 (14%)
25	LUT	BJ	616	-	42,43,43	1.26	7 (16%)	51,60,60	1.56	10 (19%)
24	CLA	Au	610	8	68,72,73	1.15	9 (13%)	80,111,113	1.36	6 (7%)
24	CLA	BF	512	21	69,73,73	1.18	10 (14%)	82,113,113	1.36	7 (8%)
23	CHL	Ba	310	-	57,71,74	3.64	18 (31%)	52,109,114	1.91	11 (21%)
26	NEX	S	616	-	40,46,46	1.22	7 (17%)	50,70,70	1.58	10 (20%)
24	CLA	2	403	-	69,73,73	1.15	8 (11%)	82,113,113	1.29	5 (6%)
25	LUT	5	615	-	42,43,43	1.30	8 (19%)	51,60,60	1.59	12 (23%)
26	NEX	AA	319	-	40,46,46	1.21	5 (12%)	50,70,70	1.62	11 (22%)
34	DGD	a	401	-	60,60,67	0.94	2 (3%)	74,74,81	1.38	6 (8%)
23	CHL	N	608	-	57,71,74	3.39	19 (33%)	52,109,114	1.86	12 (23%)
24	CLA	AA	304	-	59,63,73	1.26	9 (15%)	70,101,113	1.28	6 (8%)
24	CLA	n	610	8	69,73,73	1.13	8 (11%)	82,113,113	1.42	9 (10%)
25	LUT	Au	615	-	42,43,43	1.32	8 (19%)	51,60,60	1.58	11 (21%)
30	LMG	BG	405	-	46,46,55	0.78	1 (2%)	54,54,63	1.35	5 (9%)
24	CLA	G	610	8	68,72,73	1.15	9 (13%)	80,111,113	1.34	6 (7%)
25	LUT	g	615	-	42,43,43	1.30	8 (19%)	51,60,60	1.44	10 (19%)
24	CLA	b	614	-	69,73,73	1.16	9 (13%)	82,113,113	1.30	5 (6%)
24	CLA	y	311	8	64,68,73	1.21	9 (14%)	76,107,113	1.40	7 (9%)
38	PHO	R	408	-	58,69,69	2.05	11 (18%)	55,99,99	1.54	7 (12%)
23	CHL	N	601	8	57,71,74	3.36	19 (33%)	52,109,114	2.17	13 (25%)
29	BCR	4	101	-	41,41,41	1.24	3 (7%)	56,56,56	1.23	5 (8%)
31	PL9	BG	403	-	55,55,55	1.51	7 (12%)	68,69,69	1.51	14 (20%)
30	LMG	Aw	101	-	40,40,55	0.81	0	48,48,63	1.35	7 (14%)
24	CLA	v	601	-	69,73,73	1.18	8 (11%)	82,113,113	1.27	7 (8%)
23	CHL	y	308	-	57,71,74	3.42	19 (33%)	52,109,114	2.20	13 (25%)
24	CLA	s	611	-	53,57,73	1.33	9 (16%)	61,93,113	1.44	5 (8%)
24	CLA	BF	502	21	69,73,73	1.17	8 (11%)	82,113,113	1.28	4 (4%)
24	CLA	BF	507	21	69,73,73	1.17	10 (14%)	82,113,113	1.31	6 (7%)
24	CLA	C	505	-	69,73,73	1.15	9 (13%)	82,113,113	1.27	5 (6%)
24	CLA	7	312	-	49,53,73	1.36	8 (16%)	58,89,113	1.47	4 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CHL	G	608	-	57,71,74	3.41	19 (33%)	52,109,114	1.98	16 (30%)
23	CHL	S	606	-	49,63,74	3.65	19 (38%)	42,99,114	2.76	14 (33%)
23	CHL	S	607	-	40,54,74	3.97	19 (47%)	34,90,114	2.34	10 (29%)
28	XAT	AA	301	-	41,47,47	4.76	27 (65%)	54,74,74	6.74	36 (66%)
24	CLA	AA	314	1	49,53,73	1.36	9 (18%)	58,89,113	1.46	4 (6%)
32	SQD	l	101	-	52,54,54	1.56	8 (15%)	62,65,65	1.31	6 (9%)
24	CLA	BF	514	-	69,73,73	1.14	9 (13%)	82,113,113	1.33	4 (4%)
25	LUT	AA	316	-	42,43,43	1.30	7 (16%)	51,60,60	1.44	11 (21%)
30	LMG	BF	519	-	51,51,55	0.72	1 (1%)	59,59,63	1.34	3 (5%)
33	HEM	BI	102	7,6	50,50,50	1.34	9 (18%)	67,82,82	0.99	1 (1%)
27	LHG	9	618	24	40,40,48	0.65	1 (2%)	43,46,54	1.32	6 (13%)
23	CHL	N	606	8	44,58,74	3.86	19 (43%)	37,94,114	2.15	13 (35%)
23	CHL	AA	310	-	52,66,74	3.59	18 (34%)	46,103,114	2.27	14 (30%)
23	CHL	0	601	2	55,69,74	3.47	20 (36%)	49,106,114	2.13	14 (28%)
24	CLA	9	612	-	49,53,73	1.38	9 (18%)	58,89,113	1.48	4 (6%)
23	CHL	BU	606	-	47,61,74	3.72	19 (40%)	41,98,114	2.10	15 (36%)
23	CHL	BU	607	22	52,66,74	3.50	20 (38%)	46,103,114	2.45	14 (30%)
24	CLA	b	615	-	69,73,73	1.16	9 (13%)	82,113,113	1.31	7 (8%)
27	LHG	1	520	-	48,48,48	0.58	0	51,54,54	1.28	6 (11%)
29	BCR	1	515	-	41,41,41	1.38	4 (9%)	56,56,56	1.30	6 (10%)
27	LHG	L	102	-	48,48,48	0.68	1 (2%)	51,54,54	1.30	7 (13%)
24	CLA	y	314	8	69,73,73	1.18	9 (13%)	82,113,113	1.30	5 (6%)
24	CLA	d	402	-	69,73,73	1.15	8 (11%)	82,113,113	1.27	5 (6%)
24	CLA	r	604	-	52,56,73	1.31	10 (19%)	61,92,113	1.49	5 (8%)
24	CLA	BF	504	21	69,73,73	1.15	8 (11%)	82,113,113	1.32	6 (7%)
38	PHO	a	409	-	58,69,69	2.11	12 (20%)	55,99,99	1.65	8 (14%)
23	CHL	BJ	608	-	57,71,74	3.44	18 (31%)	52,109,114	2.39	14 (26%)
24	CLA	AA	305	-	49,53,73	1.36	9 (18%)	58,89,113	1.39	5 (8%)
24	CLA	Ba	313	-	64,68,73	1.22	9 (14%)	76,107,113	1.33	6 (7%)
27	LHG	BE	624	-	48,48,48	0.68	1 (2%)	51,54,54	1.30	7 (13%)
24	CLA	BU	608	22	62,66,73	1.22	9 (14%)	73,104,113	1.39	5 (6%)
24	CLA	R	405	-	69,73,73	1.16	7 (10%)	82,113,113	1.34	7 (8%)
26	NEX	Y	318	-	40,46,46	1.25	6 (15%)	50,70,70	1.53	9 (18%)
23	CHL	r	605	22	57,71,74	3.17	20 (35%)	52,109,114	2.19	11 (21%)
28	XAT	9	619	-	41,47,47	4.63	23 (56%)	54,74,74	6.61	33 (61%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	CLA	BQ	604	-	54,58,73	1.31	8 (14%)	64,95,113	1.39	5 (7%)
32	SQD	d	406	-	48,50,54	1.60	7 (14%)	58,61,65	1.38	7 (12%)
24	CLA	A6	611	-	53,57,73	1.32	10 (18%)	61,93,113	1.39	5 (8%)
24	CLA	BV	611	-	53,57,73	1.33	9 (16%)	61,93,113	1.42	5 (8%)
27	LHG	5	618	24	40,40,48	0.66	1 (2%)	43,46,54	1.32	6 (13%)
23	CHL	y	310	-	57,71,74	3.61	18 (31%)	52,109,114	1.89	11 (21%)
24	CLA	v	612	4	69,73,73	1.16	8 (11%)	82,113,113	1.33	6 (7%)
29	BCR	v	618	-	41,41,41	1.24	3 (7%)	56,56,56	1.25	5 (8%)
24	CLA	v	614	-	69,73,73	1.16	9 (13%)	82,113,113	1.35	7 (8%)
25	LUT	S	615	-	42,43,43	1.29	7 (16%)	51,60,60	1.72	16 (31%)
24	CLA	B	611	4	69,73,73	1.15	9 (13%)	82,113,113	1.39	7 (8%)
24	CLA	BF	505	-	69,73,73	1.16	9 (13%)	82,113,113	1.24	4 (4%)
34	DGD	1	516	-	56,56,67	0.99	3 (5%)	70,70,81	1.50	10 (14%)
24	CLA	G	604	-	54,58,73	1.31	9 (16%)	64,95,113	1.42	6 (9%)
24	CLA	B	601	-	69,73,73	1.18	8 (11%)	82,113,113	1.27	7 (8%)
23	CHL	BV	605	14	40,54,74	4.11	19 (47%)	34,90,114	2.55	13 (38%)
34	DGD	C	518	-	61,61,67	0.90	2 (3%)	75,75,81	1.39	9 (12%)
24	CLA	c	511	21	69,73,73	1.16	9 (13%)	82,113,113	1.32	5 (6%)
23	CHL	7	310	-	52,66,74	3.59	18 (34%)	46,103,114	2.26	13 (28%)
23	CHL	BB	306	8	42,56,74	3.92	19 (45%)	36,92,114	1.97	10 (27%)
23	CHL	7	308	-	52,66,74	3.52	19 (36%)	46,103,114	2.26	13 (28%)
24	CLA	A2	604	-	54,58,73	1.29	9 (16%)	64,95,113	1.46	6 (9%)
23	CHL	8	306	-	40,54,74	4.10	19 (47%)	34,90,114	2.11	11 (32%)
24	CLA	BU	604	-	52,56,73	1.30	10 (19%)	61,92,113	1.54	6 (9%)
25	LUT	n	616	-	42,43,43	1.28	8 (19%)	51,60,60	1.45	11 (21%)
23	CHL	BJ	606	-	44,58,74	3.98	19 (43%)	37,94,114	2.28	12 (32%)
24	CLA	v	613	4	69,73,73	1.16	9 (13%)	82,113,113	1.32	5 (6%)
23	CHL	0	609	-	52,66,74	3.64	20 (38%)	46,103,114	1.99	12 (26%)
30	LMG	1	501	-	51,51,55	0.74	1 (1%)	59,59,63	1.35	7 (11%)
24	CLA	7	314	1	49,53,73	1.37	10 (20%)	58,89,113	1.45	4 (6%)
24	CLA	y	303	8	69,73,73	1.17	8 (11%)	82,113,113	1.27	4 (4%)
29	BCR	b	619	-	41,41,41	1.18	2 (4%)	56,56,56	1.22	6 (10%)
24	CLA	1	513	21	69,73,73	1.14	9 (13%)	82,113,113	1.36	6 (7%)
24	CLA	A6	610	-	60,64,73	1.24	9 (15%)	71,102,113	1.36	5 (7%)
38	PHO	BD	409	-	58,69,69	2.10	12 (20%)	55,99,99	1.64	8 (14%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	CLA	N	603	8	69,73,73	1.16	9 (13%)	82,113,113	1.29	5 (6%)
38	PHO	a	408	-	58,69,69	2.10	10 (17%)	55,99,99	1.49	7 (12%)
29	BCR	v	622	-	41,41,41	1.19	2 (4%)	56,56,56	1.24	5 (8%)
23	CHL	BQ	601	8	57,71,74	3.53	20 (35%)	52,109,114	2.07	11 (21%)
35	BCT	BD	402	-	3,3,3	1.18	0	2,3,3	4.16	1 (50%)
24	CLA	A	407	-	54,58,73	1.30	9 (16%)	64,95,113	1.48	7 (10%)
27	LHG	BF	521	-	48,48,48	0.62	1 (2%)	51,54,54	1.28	6 (11%)
29	BCR	AB	313	-	41,41,41	1.32	4 (9%)	56,56,56	1.30	6 (10%)
25	LUT	BQ	616	-	42,43,43	1.29	8 (19%)	51,60,60	1.44	10 (19%)
27	LHG	BJ	618	24	48,48,48	0.63	1 (2%)	51,54,54	1.29	6 (11%)
24	CLA	s	612	14	59,63,73	1.28	9 (15%)	70,101,113	1.35	6 (8%)
24	CLA	B	606	-	69,73,73	1.17	9 (13%)	82,113,113	1.29	6 (7%)
24	CLA	A6	602	14	65,69,73	1.19	8 (12%)	77,108,113	1.33	5 (6%)
23	CHL	y	307	-	44,58,74	3.96	19 (43%)	37,94,114	2.09	12 (32%)
27	LHG	w	201	-	48,48,48	0.63	1 (2%)	51,54,54	1.27	6 (11%)
30	LMG	I	101	-	40,40,55	0.81	0	48,48,63	1.32	6 (12%)
25	LUT	N	615	-	42,43,43	1.34	8 (19%)	51,60,60	1.46	10 (19%)
24	CLA	g	613	-	69,73,73	1.19	8 (11%)	82,113,113	1.31	5 (6%)
24	CLA	A6	603	-	49,53,73	1.37	9 (18%)	58,89,113	1.48	4 (6%)
25	LUT	BU	615	-	42,43,43	1.37	5 (11%)	51,60,60	1.47	11 (21%)
25	LUT	s	615	-	42,43,43	1.30	8 (19%)	51,60,60	1.45	11 (21%)
23	CHL	6	609	-	52,66,74	3.65	20 (38%)	46,103,114	2.04	12 (26%)
24	CLA	1	504	21	69,73,73	1.15	9 (13%)	82,113,113	1.31	6 (7%)
24	CLA	B	612	4	69,73,73	1.16	8 (11%)	82,113,113	1.33	6 (7%)
24	CLA	A	410	-	64,68,73	1.20	9 (14%)	76,107,113	1.33	7 (9%)
24	CLA	G	613	-	69,73,73	1.17	8 (11%)	82,113,113	1.30	4 (4%)
24	CLA	BE	614	-	69,73,73	1.16	10 (14%)	82,113,113	1.31	5 (6%)
36	OEX	A	403	20	0,15,15	-	-	-	-	-
23	CHL	A6	601	14	40,54,74	4.03	18 (45%)	34,90,114	2.62	12 (35%)
27	LHG	C	520	-	48,48,48	0.59	0	51,54,54	1.27	6 (11%)
24	CLA	b	607	-	69,73,73	1.16	9 (13%)	82,113,113	1.26	5 (6%)
29	BCR	B	617	-	41,41,41	1.25	2 (4%)	56,56,56	1.35	8 (14%)
23	CHL	BB	309	-	57,71,74	3.41	19 (33%)	52,109,114	1.99	14 (26%)
24	CLA	BB	313	-	64,68,73	1.21	9 (14%)	76,107,113	1.32	4 (5%)
23	CHL	s	601	-	40,54,74	4.14	18 (45%)	34,90,114	2.49	12 (35%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
26	NEX	A2	617	-	40,46,46	1.48	8 (20%)	50,70,70	1.70	10 (20%)
24	CLA	AB	310	-	49,53,73	1.38	8 (16%)	58,89,113	1.52	6 (10%)
24	CLA	A6	609	14	56,61,73	1.29	9 (16%)	65,98,113	1.35	5 (7%)
28	XAT	8	312	-	41,47,47	4.66	22 (53%)	54,74,74	6.78	36 (66%)
24	CLA	BJ	614	8	52,56,73	1.34	7 (13%)	61,92,113	1.44	5 (8%)
23	CHL	G	605	8	40,54,74	4.15	19 (47%)	34,90,114	2.41	11 (32%)
23	CHL	AA	307	1	40,54,74	4.08	19 (47%)	34,90,114	2.10	10 (29%)
24	CLA	BV	610	-	60,64,73	1.25	8 (13%)	71,102,113	1.47	7 (9%)
24	CLA	5	612	-	49,53,73	1.38	9 (18%)	58,89,113	1.47	4 (6%)
24	CLA	a	406	-	69,73,73	1.15	8 (11%)	82,113,113	1.33	6 (7%)
27	LHG	A0	202	-	48,48,48	0.60	0	51,54,54	1.29	6 (11%)
38	PHO	A	408	-	58,69,69	2.10	11 (18%)	55,99,99	1.51	8 (14%)
34	DGD	BD	401	-	60,60,67	0.94	2 (3%)	74,74,81	1.38	6 (8%)
29	BCR	B	618	-	41,41,41	1.23	3 (7%)	56,56,56	1.25	5 (8%)
24	CLA	6	612	-	49,53,73	1.38	8 (16%)	58,89,113	1.49	4 (6%)
24	CLA	v	604	4	69,73,73	1.16	8 (11%)	82,113,113	1.32	6 (7%)
24	CLA	BD	407	-	54,58,73	1.29	9 (16%)	64,95,113	1.47	7 (10%)
34	DGD	C	516	-	56,56,67	0.96	3 (5%)	70,70,81	1.48	9 (12%)
24	CLA	1	503	21	69,73,73	1.17	9 (13%)	82,113,113	1.33	6 (7%)
23	CHL	y	302	8	57,71,74	3.47	19 (33%)	52,109,114	2.15	15 (28%)
24	CLA	BE	613	-	69,73,73	1.15	9 (13%)	82,113,113	1.30	6 (7%)
27	LHG	BF	520	-	48,48,48	0.55	0	51,54,54	1.29	6 (11%)
32	SQD	BO	101	-	52,54,54	1.56	8 (15%)	62,65,65	1.31	6 (9%)
23	CHL	5	609	-	53,67,74	3.60	19 (35%)	47,104,114	2.22	13 (27%)
24	CLA	8	308	-	49,53,73	1.37	11 (22%)	58,89,113	1.76	10 (17%)
29	BCR	BF	515	-	41,41,41	1.34	4 (9%)	56,56,56	1.28	6 (10%)
24	CLA	9	604	-	54,58,73	1.34	10 (18%)	64,95,113	1.50	7 (10%)
27	LHG	B	622	-	45,45,48	0.68	1 (2%)	48,51,54	1.25	4 (8%)
32	SQD	BO	102	-	40,42,54	1.66	7 (17%)	50,53,65	1.40	7 (14%)
28	XAT	BB	301	-	41,47,47	4.72	24 (58%)	54,74,74	6.80	36 (66%)
23	CHL	BQ	609	-	57,71,74	3.53	19 (33%)	52,109,114	1.98	12 (23%)
24	CLA	b	606	4	69,73,73	1.17	9 (13%)	82,113,113	1.25	5 (6%)
24	CLA	BJ	610	8	68,72,73	1.18	7 (10%)	80,111,113	1.27	6 (7%)
24	CLA	S	602	14	65,69,73	1.19	8 (12%)	77,108,113	1.34	5 (6%)
30	LMG	A	412	-	48,48,55	0.75	1 (2%)	56,56,63	1.32	5 (8%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	CLA	BE	615	-	69,73,73	1.16	9 (13%)	82,113,113	1.33	7 (8%)
26	NEX	BQ	617	-	40,46,46	1.24	7 (17%)	50,70,70	1.57	9 (18%)
24	CLA	c	506	-	69,73,73	1.16	9 (13%)	82,113,113	1.36	5 (6%)
28	XAT	5	619	-	41,47,47	4.59	24 (58%)	54,74,74	6.75	35 (64%)
25	LUT	BJ	615	-	42,43,43	1.30	8 (19%)	51,60,60	1.45	10 (19%)
24	CLA	0	603	-	59,63,73	1.25	11 (18%)	70,101,113	1.34	6 (8%)
25	LUT	g	616	-	42,43,43	1.26	7 (16%)	51,60,60	1.51	9 (17%)
24	CLA	Ba	305	-	54,58,73	1.31	9 (16%)	64,95,113	1.40	5 (7%)
24	CLA	5	610	1	60,64,73	1.23	11 (18%)	71,102,113	1.37	7 (9%)
23	CHL	A2	606	8	44,58,74	3.84	19 (43%)	37,94,114	2.18	12 (32%)
23	CHL	g	609	-	52,66,74	3.81	20 (38%)	46,103,114	2.02	12 (26%)
24	CLA	8	310	-	49,53,73	1.40	8 (16%)	58,89,113	1.52	5 (8%)
24	CLA	BF	503	21	69,73,73	1.18	11 (15%)	82,113,113	1.32	6 (7%)
24	CLA	BF	513	-	69,73,73	1.15	9 (13%)	82,113,113	1.33	6 (7%)
25	LUT	A6	614	-	42,43,43	1.34	8 (19%)	51,60,60	1.43	10 (19%)
24	CLA	I	102	-	69,73,73	1.16	8 (11%)	82,113,113	1.37	6 (7%)
24	CLA	Ba	315	-	52,56,73	1.32	9 (17%)	61,92,113	1.42	4 (6%)
29	BCR	Bb	101	-	41,41,41	1.32	4 (9%)	56,56,56	1.35	8 (14%)
24	CLA	B	603	4	69,73,73	1.16	9 (13%)	82,113,113	1.28	4 (4%)
24	CLA	6	610	2	64,68,73	1.21	11 (17%)	76,107,113	1.54	11 (14%)
24	CLA	A6	612	14	59,63,73	1.25	8 (13%)	70,101,113	1.41	6 (8%)
24	CLA	0	613	-	62,66,73	1.25	9 (14%)	73,104,113	1.48	6 (8%)
23	CHL	g	607	-	57,71,74	3.46	19 (33%)	52,109,114	2.21	11 (21%)
23	CHL	AA	309	-	40,54,74	4.10	19 (47%)	34,90,114	2.31	11 (32%)
28	XAT	BQ	619	-	41,47,47	4.69	24 (58%)	54,74,74	6.79	36 (66%)
34	DGD	1	518	-	61,61,67	0.90	2 (3%)	75,75,81	1.39	9 (12%)
24	CLA	Y	312	-	64,68,73	1.19	10 (15%)	76,107,113	1.37	7 (9%)
26	NEX	A6	616	-	40,46,46	1.23	6 (15%)	50,70,70	1.55	9 (18%)
23	CHL	e	601	-	39,53,74	4.11	18 (46%)	33,89,114	2.29	10 (30%)
24	CLA	BQ	602	8	69,73,73	1.17	8 (11%)	82,113,113	1.23	5 (6%)
34	DGD	BD	413	-	61,61,67	0.90	2 (3%)	75,75,81	1.40	8 (10%)
24	CLA	5	603	1	59,63,73	1.26	9 (15%)	70,101,113	1.29	6 (8%)
24	CLA	g	602	8	69,73,73	1.17	7 (10%)	82,113,113	1.27	6 (7%)
24	CLA	6	602	2	64,68,73	1.20	8 (12%)	76,107,113	1.32	6 (7%)
24	CLA	A6	608	-	49,53,73	1.37	8 (16%)	58,89,113	1.39	4 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CHL	Au	606	-	44,58,74	3.86	19 (43%)	37,94,114	2.32	11 (29%)
23	CHL	Au	607	-	57,71,74	3.40	19 (33%)	52,109,114	2.28	16 (30%)
24	CLA	v	602	4	69,73,73	1.14	9 (13%)	82,113,113	1.31	6 (7%)
27	LHG	n	618	24	48,48,48	0.63	1 (2%)	51,54,54	1.30	6 (11%)
32	SQD	BG	406	-	48,50,54	1.60	7 (14%)	58,61,65	1.38	7 (12%)
35	BCT	2	401	-	3,3,3	1.16	0	2,3,3	4.02	1 (50%)
28	XAT	A2	619	-	41,47,47	4.68	23 (56%)	54,74,74	6.77	36 (66%)
27	LHG	b	623	-	45,45,48	0.68	1 (2%)	48,51,54	1.27	4 (8%)
23	CHL	G	606	-	44,58,74	3.88	19 (43%)	37,94,114	2.30	12 (32%)
29	BCR	z	101	-	41,41,41	1.31	4 (9%)	56,56,56	1.29	6 (10%)
24	CLA	7	315	1	49,53,73	1.38	8 (16%)	58,89,113	1.44	4 (6%)
29	BCR	v	619	-	41,41,41	1.20	3 (7%)	56,56,56	1.25	8 (14%)
26	NEX	y	318	-	40,46,46	1.22	6 (15%)	50,70,70	1.54	9 (18%)
24	CLA	c	502	21	69,73,73	1.16	9 (13%)	82,113,113	1.27	4 (4%)
24	CLA	0	604	-	49,53,73	1.37	7 (14%)	58,89,113	1.41	4 (6%)
32	SQD	BD	412	-	52,54,54	1.55	7 (13%)	62,65,65	1.29	6 (9%)
23	CHL	7	302	1	40,54,74	4.23	19 (47%)	34,90,114	2.25	10 (29%)
24	CLA	S	612	14	59,63,73	1.26	8 (13%)	70,101,113	1.39	6 (8%)
27	LHG	c	520	-	48,48,48	0.62	1 (2%)	51,54,54	1.28	6 (11%)
32	SQD	Az	101	-	40,42,54	1.60	7 (17%)	50,53,65	1.71	9 (18%)
29	BCR	c	515	-	41,41,41	1.33	4 (9%)	56,56,56	1.29	6 (10%)
29	BCR	f	101	-	41,41,41	1.19	3 (7%)	56,56,56	1.23	6 (10%)
26	NEX	9	617	-	40,46,46	1.26	6 (15%)	50,70,70	1.67	10 (20%)
23	CHL	AA	302	1	40,54,74	4.25	19 (47%)	34,90,114	2.22	10 (29%)
24	CLA	BU	602	22	61,66,73	1.23	10 (16%)	71,104,113	1.37	6 (8%)
24	CLA	n	614	-	52,56,73	1.36	5 (9%)	61,92,113	1.48	6 (9%)
24	CLA	BE	605	4	69,73,73	1.15	8 (11%)	82,113,113	1.33	6 (7%)
33	HEM	f	102	7,6	50,50,50	1.35	9 (18%)	67,82,82	1.00	1 (1%)
23	CHL	AA	308	-	52,66,74	3.52	19 (36%)	46,103,114	2.35	15 (32%)
23	CHL	y	306	8	42,56,74	4.01	19 (45%)	36,92,114	1.95	8 (22%)
24	CLA	BG	401	5	69,73,73	1.14	11 (15%)	82,113,113	1.34	7 (8%)
36	OEX	BD	403	20	0,15,15	-	-	-	-	-
24	CLA	y	304	-	69,73,73	1.17	7 (10%)	82,113,113	1.25	6 (7%)
24	CLA	R	406	-	54,58,73	1.30	10 (18%)	64,95,113	1.47	7 (10%)
27	LHG	2	406	-	48,48,48	0.67	1 (2%)	51,54,54	1.29	5 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CHL	n	608	-	57,71,74	3.50	19 (33%)	52,109,114	1.77	12 (23%)
24	CLA	BV	603	14	49,53,73	1.39	7 (14%)	58,89,113	1.42	4 (6%)
23	CHL	0	605	2	40,54,74	4.13	19 (47%)	34,90,114	2.05	11 (32%)
24	CLA	s	613	14	53,57,73	1.31	9 (16%)	61,93,113	1.43	5 (8%)
24	CLA	BQ	603	8	69,73,73	1.17	9 (13%)	82,113,113	1.26	6 (7%)
27	LHG	Y	319	-	48,48,48	0.65	1 (2%)	51,54,54	1.29	7 (13%)
24	CLA	7	303	1	65,69,73	1.18	8 (12%)	77,108,113	1.40	6 (7%)
24	CLA	Y	313	-	64,68,73	1.21	10 (15%)	76,107,113	1.31	4 (5%)
26	NEX	N	617	-	40,46,46	1.22	5 (12%)	50,70,70	1.50	8 (16%)
24	CLA	B	609	-	69,73,73	1.14	10 (14%)	82,113,113	1.30	5 (6%)
24	CLA	7	311	1	51,56,73	1.34	10 (19%)	59,92,113	1.40	5 (8%)
24	CLA	A	406	-	69,73,73	1.17	9 (13%)	82,113,113	1.35	7 (8%)
24	CLA	BJ	613	-	69,73,73	1.19	9 (13%)	82,113,113	1.29	5 (6%)
25	LUT	N	616	-	42,43,43	1.33	8 (19%)	51,60,60	1.47	9 (17%)
23	CHL	r	606	-	47,61,74	3.74	19 (40%)	41,98,114	2.09	14 (34%)
24	CLA	N	602	8	69,73,73	1.16	9 (13%)	82,113,113	1.31	5 (6%)
34	DGD	c	516	-	56,56,67	0.98	3 (5%)	70,70,81	1.50	12 (17%)
24	CLA	B	607	-	69,73,73	1.16	9 (13%)	82,113,113	1.32	5 (6%)
24	CLA	G	614	-	52,56,73	1.32	9 (17%)	61,92,113	1.43	6 (9%)
32	SQD	a	412	-	52,54,54	1.55	7 (13%)	62,65,65	1.29	6 (9%)
24	CLA	BB	315	-	52,56,73	1.32	10 (19%)	61,92,113	1.48	6 (9%)
24	CLA	BE	610	-	69,73,73	1.15	9 (13%)	82,113,113	1.31	6 (7%)
27	LHG	D	404	-	48,48,48	0.65	1 (2%)	51,54,54	1.29	5 (9%)
23	CHL	A2	607	-	57,71,74	3.32	19 (33%)	52,109,114	2.30	15 (28%)
24	CLA	v	616	4	69,73,73	1.17	9 (13%)	82,113,113	1.30	6 (7%)
25	LUT	r	615	-	42,43,43	1.37	4 (9%)	51,60,60	1.48	11 (21%)
24	CLA	R	409	-	64,68,73	1.20	8 (12%)	76,107,113	1.36	7 (9%)
23	CHL	9	607	-	54,68,74	3.40	19 (35%)	48,105,114	2.34	13 (27%)
24	CLA	r	608	22	62,66,73	1.22	9 (14%)	73,104,113	1.39	4 (5%)
24	CLA	BE	608	-	69,73,73	1.17	9 (13%)	82,113,113	1.30	6 (7%)
25	LUT	0	616	-	42,43,43	1.35	8 (19%)	51,60,60	1.54	10 (19%)
27	LHG	y	319	24	48,48,48	0.62	1 (2%)	51,54,54	1.31	7 (13%)
23	CHL	AB	304	3	40,54,74	4.11	19 (47%)	34,90,114	2.01	10 (29%)
24	CLA	BF	511	21	69,73,73	1.17	10 (14%)	82,113,113	1.33	5 (6%)
30	LMG	c	501	-	51,51,55	0.73	0	59,59,63	1.34	7 (11%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	CLA	BE	616	-	69,73,73	1.16	9 (13%)	82,113,113	1.29	7 (8%)
27	LHG	BE	623	-	45,45,48	0.70	1 (2%)	48,51,54	1.27	4 (8%)
24	CLA	BF	508	-	69,73,73	1.18	9 (13%)	82,113,113	1.28	5 (6%)
24	CLA	Y	311	8	64,68,73	1.21	10 (15%)	76,107,113	1.37	7 (9%)
29	BCR	BE	619	-	41,41,41	1.18	2 (4%)	56,56,56	1.22	6 (10%)
24	CLA	c	513	-	69,73,73	1.15	9 (13%)	82,113,113	1.31	6 (7%)
24	CLA	B	602	4	69,73,73	1.15	9 (13%)	82,113,113	1.33	7 (8%)
24	CLA	c	512	21	69,73,73	1.18	10 (14%)	82,113,113	1.39	7 (8%)
23	CHL	BJ	607	-	57,71,74	3.46	19 (33%)	52,109,114	2.22	11 (21%)
26	NEX	7	319	-	40,46,46	1.20	5 (12%)	50,70,70	1.62	11 (22%)
25	LUT	BV	615	-	42,43,43	1.30	8 (19%)	51,60,60	1.45	11 (21%)
34	DGD	c	517	-	63,63,67	0.87	2 (3%)	77,77,81	1.40	8 (10%)
30	LMG	2	407	-	46,46,55	0.78	1 (2%)	54,54,63	1.36	5 (9%)
30	LMG	B	624	-	40,40,55	0.84	1 (2%)	48,48,63	1.31	5 (10%)
24	CLA	v	603	4	69,73,73	1.15	8 (11%)	82,113,113	1.29	4 (4%)
24	CLA	C	512	-	69,73,73	1.15	10 (14%)	82,113,113	1.31	6 (7%)
35	BCT	a	402	-	3,3,3	1.16	0	2,3,3	4.18	1 (50%)
24	CLA	8	302	-	49,53,73	1.37	9 (18%)	58,89,113	1.43	4 (6%)
23	CHL	9	605	1	40,54,74	4.14	20 (50%)	34,90,114	1.92	9 (26%)
24	CLA	S	603	-	49,53,73	1.38	9 (18%)	58,89,113	1.47	5 (8%)
28	XAT	y	301	-	41,47,47	4.68	26 (63%)	54,74,74	6.82	36 (66%)
32	SQD	L	103	-	52,54,54	1.55	8 (15%)	62,65,65	1.31	6 (9%)
23	CHL	Ba	306	8	42,56,74	3.99	19 (45%)	36,92,114	1.94	8 (22%)
29	BCR	K	101	-	41,41,41	1.22	3 (7%)	56,56,56	1.35	5 (8%)
24	CLA	b	611	-	69,73,73	1.18	8 (11%)	82,113,113	1.59	11 (13%)
23	CHL	9	606	1	40,54,74	4.03	19 (47%)	34,90,114	2.71	12 (35%)
24	CLA	1	502	21	69,73,73	1.16	9 (13%)	82,113,113	1.26	4 (4%)
23	CHL	A2	608	-	57,71,74	3.38	19 (33%)	52,109,114	1.86	12 (23%)
25	LUT	y	316	-	42,43,43	1.31	8 (19%)	51,60,60	1.38	10 (19%)
24	CLA	0	602	2	64,68,73	1.19	10 (15%)	76,107,113	1.32	5 (6%)
23	CHL	A6	605	14	40,54,74	4.03	19 (47%)	34,90,114	2.74	13 (38%)
25	LUT	G	615	-	42,43,43	1.32	8 (19%)	51,60,60	1.57	11 (21%)
26	NEX	BV	616	-	40,46,46	1.20	6 (15%)	50,70,70	1.53	9 (18%)
23	CHL	s	606	-	49,63,74	3.68	19 (38%)	42,99,114	2.89	13 (30%)
23	CHL	BB	302	8	57,71,74	3.34	20 (35%)	52,109,114	2.46	16 (30%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CHL	AB	305	-	40,54,74	4.07	19 (47%)	34,90,114	2.13	10 (29%)
23	CHL	AB	306	-	40,54,74	4.09	19 (47%)	34,90,114	2.12	9 (26%)
27	LHG	2	405	-	45,45,48	0.70	1 (2%)	48,51,54	1.25	4 (8%)
38	PHO	A	409	-	58,69,69	2.07	11 (18%)	55,99,99	1.55	7 (12%)
30	LMG	1	519	-	51,51,55	0.73	1 (1%)	59,59,63	1.32	4 (6%)
24	CLA	C	507	-	69,73,73	1.16	8 (11%)	82,113,113	1.29	4 (4%)
24	CLA	BJ	612	-	64,68,73	1.23	8 (12%)	76,107,113	1.26	4 (5%)
25	LUT	7	316	-	42,43,43	1.32	7 (16%)	51,60,60	1.49	8 (15%)
27	LHG	b	624	-	48,48,48	0.68	1 (2%)	51,54,54	1.30	7 (13%)
24	CLA	c	507	21	69,73,73	1.17	10 (14%)	82,113,113	1.30	6 (7%)
23	CHL	0	608	2	40,54,74	4.03	19 (47%)	34,90,114	2.24	11 (32%)
24	CLA	B	610	-	69,73,73	1.16	8 (11%)	82,113,113	1.32	5 (6%)
24	CLA	n	604	-	54,58,73	1.32	8 (14%)	64,95,113	1.39	5 (7%)
25	LUT	8	311	-	42,43,43	1.33	5 (11%)	51,60,60	1.32	9 (17%)
24	CLA	b	602	-	69,73,73	1.17	9 (13%)	82,113,113	1.26	6 (7%)
24	CLA	s	608	-	49,53,73	1.40	8 (16%)	58,89,113	1.36	4 (6%)
28	XAT	AB	312	-	41,47,47	4.65	22 (53%)	54,74,74	6.79	36 (66%)
26	NEX	BB	318	-	40,46,46	1.24	5 (12%)	50,70,70	1.62	10 (20%)
29	BCR	h	101	-	41,41,41	1.19	2 (4%)	56,56,56	1.36	9 (16%)
23	CHL	n	601	8	57,71,74	3.53	20 (35%)	52,109,114	2.07	11 (21%)
24	CLA	6	603	-	59,63,73	1.25	10 (16%)	70,101,113	1.33	6 (8%)
23	CHL	5	605	1	40,54,74	4.15	19 (47%)	34,90,114	1.93	8 (23%)
23	CHL	Y	302	8	57,71,74	3.37	19 (33%)	52,109,114	2.42	16 (30%)
24	CLA	c	505	-	69,73,73	1.15	9 (13%)	82,113,113	1.27	4 (4%)
23	CHL	7	306	1	40,54,74	4.30	19 (47%)	34,90,114	1.93	9 (26%)
24	CLA	r	611	22	53,57,73	1.32	10 (18%)	61,93,113	1.40	4 (6%)
29	BCR	BF	516	-	41,41,41	1.40	4 (9%)	56,56,56	1.32	8 (14%)
24	CLA	B	616	4	69,73,73	1.18	9 (13%)	82,113,113	1.30	6 (7%)
26	NEX	n	617	-	40,46,46	1.20	6 (15%)	50,70,70	1.52	9 (18%)
34	DGD	h	102	-	63,63,67	0.89	2 (3%)	77,77,81	1.40	8 (10%)
24	CLA	n	613	-	64,68,73	1.25	9 (14%)	76,107,113	1.33	6 (7%)
24	CLA	1	508	21	69,73,73	1.16	8 (11%)	82,113,113	1.31	5 (6%)
24	CLA	BV	612	14	59,63,73	1.28	8 (13%)	70,101,113	1.36	6 (8%)
23	CHL	9	608	-	40,54,74	3.99	19 (47%)	34,90,114	2.16	12 (35%)
24	CLA	a	410	-	64,68,73	1.20	9 (14%)	76,107,113	1.36	7 (9%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
30	LMG	C	519	-	51,51,55	0.73	1 (1%)	59,59,63	1.33	4 (6%)
24	CLA	C	504	21	69,73,73	1.15	8 (11%)	82,113,113	1.31	6 (7%)
24	CLA	b	612	4	69,73,73	1.16	9 (13%)	82,113,113	1.30	7 (8%)
24	CLA	9	613	1	59,63,73	1.26	8 (13%)	70,101,113	1.39	6 (8%)
23	CHL	Ba	307	-	44,58,74	3.95	19 (43%)	37,94,114	2.09	12 (32%)
24	CLA	b	609	4	69,73,73	1.15	8 (11%)	82,113,113	1.38	6 (7%)
24	CLA	c	504	21	69,73,73	1.16	10 (14%)	82,113,113	1.32	6 (7%)
24	CLA	BE	606	4	69,73,73	1.18	9 (13%)	82,113,113	1.25	4 (4%)
24	CLA	g	604	-	54,58,73	1.34	8 (14%)	64,95,113	1.41	5 (7%)
30	LMG	b	621	-	51,51,55	0.73	1 (1%)	59,59,63	1.39	7 (11%)
25	LUT	Y	317	-	42,43,43	1.34	8 (19%)	51,60,60	1.46	10 (19%)
23	CHL	Ba	309	-	57,71,74	3.54	19 (33%)	52,109,114	1.76	12 (23%)
23	CHL	n	605	8	42,56,74	4.01	20 (47%)	36,92,114	2.36	10 (27%)
24	CLA	BF	506	-	69,73,73	1.16	9 (13%)	82,113,113	1.38	5 (6%)
23	CHL	g	601	8	57,71,74	3.45	18 (31%)	52,109,114	2.43	15 (28%)
26	NEX	r	617	-	40,46,46	1.21	6 (15%)	50,70,70	1.54	9 (18%)
24	CLA	1	509	21	69,73,73	1.16	9 (13%)	82,113,113	1.33	7 (8%)
30	LMG	C	501	-	51,51,55	0.74	1 (1%)	59,59,63	1.35	7 (11%)
24	CLA	v	608	4	69,73,73	1.15	8 (11%)	82,113,113	1.32	5 (6%)
25	LUT	6	616	-	42,43,43	1.33	7 (16%)	51,60,60	1.56	10 (19%)
24	CLA	BV	609	14	59,63,73	1.26	8 (13%)	70,101,113	1.39	6 (8%)
24	CLA	AA	315	1	49,53,73	1.38	8 (16%)	58,89,113	1.44	4 (6%)
24	CLA	Au	604	-	54,58,73	1.30	9 (16%)	64,95,113	1.41	7 (10%)
27	LHG	BG	404	-	48,48,48	0.69	1 (2%)	51,54,54	1.28	6 (11%)
29	BCR	K	102	-	41,41,41	1.28	4 (9%)	56,56,56	1.32	8 (14%)
32	SQD	R	411	-	52,54,54	1.54	7 (13%)	62,65,65	1.29	6 (9%)
23	CHL	0	606	-	40,54,74	3.96	19 (47%)	34,90,114	2.60	10 (29%)
26	NEX	g	617	-	40,46,46	1.20	5 (12%)	50,70,70	1.59	9 (18%)
35	BCT	A	401	-	3,3,3	1.15	0	2,3,3	4.06	1 (50%)
23	CHL	Au	601	8	57,71,74	3.32	19 (33%)	52,109,114	2.41	15 (28%)
34	DGD	A	402	-	60,60,67	0.93	2 (3%)	74,74,81	1.37	7 (9%)
25	LUT	5	616	-	42,43,43	1.30	8 (19%)	51,60,60	1.60	12 (23%)
25	LUT	Au	616	-	42,43,43	1.32	8 (19%)	51,60,60	1.45	9 (17%)
24	CLA	s	602	14	65,69,73	1.22	8 (12%)	77,108,113	1.30	5 (6%)
31	PL9	D	403	-	55,55,55	1.80	10 (18%)	68,69,69	1.46	11 (16%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	CLA	BU	610	27	53,57,73	1.30	10 (18%)	61,93,113	1.42	4 (6%)
24	CLA	Y	314	8	69,73,73	1.16	9 (13%)	82,113,113	1.31	5 (6%)
28	XAT	N	619	-	41,47,47	4.68	23 (56%)	54,74,74	6.77	36 (66%)
29	BCR	H	101	-	41,41,41	1.20	2 (4%)	56,56,56	1.31	9 (16%)
29	BCR	A	411	-	41,41,41	1.30	3 (7%)	56,56,56	1.26	7 (12%)
26	NEX	Au	617	-	40,46,46	1.20	5 (12%)	50,70,70	1.60	9 (18%)
24	CLA	S	608	-	49,53,73	1.36	8 (16%)	58,89,113	1.39	4 (6%)
24	CLA	0	614	2	52,56,73	1.32	9 (17%)	61,92,113	1.37	5 (8%)
24	CLA	BB	312	-	64,68,73	1.20	10 (15%)	76,107,113	1.38	7 (9%)
25	LUT	s	614	-	42,43,43	1.30	8 (19%)	51,60,60	1.39	10 (19%)
23	CHL	BV	606	-	49,63,74	3.68	19 (38%)	42,99,114	2.89	14 (33%)
23	CHL	5	606	1	40,54,74	4.03	19 (47%)	34,90,114	2.85	12 (35%)
24	CLA	8	301	3	45,49,73	1.44	11 (24%)	54,83,113	1.46	4 (7%)
27	LHG	v	621	-	48,48,48	0.64	1 (2%)	51,54,54	1.28	6 (11%)
24	CLA	BB	314	8	69,73,73	1.17	8 (11%)	82,113,113	1.32	6 (7%)
24	CLA	B	614	-	69,73,73	1.16	9 (13%)	82,113,113	1.36	7 (8%)
38	PHO	R	407	-	58,69,69	2.09	11 (18%)	55,99,99	1.51	8 (14%)
27	LHG	A2	618	24	48,48,48	0.64	1 (2%)	51,54,54	1.29	6 (11%)
24	CLA	b	603	4	69,73,73	1.17	9 (13%)	82,113,113	1.29	6 (7%)
23	CHL	9	609	-	53,67,74	3.62	21 (39%)	47,104,114	2.32	14 (29%)
24	CLA	BQ	611	27	64,68,73	1.21	8 (12%)	76,107,113	1.35	5 (6%)
24	CLA	n	611	27	64,68,73	1.21	7 (10%)	76,107,113	1.36	5 (6%)
24	CLA	v	606	-	69,73,73	1.17	9 (13%)	82,113,113	1.31	6 (7%)
24	CLA	y	315	-	52,56,73	1.32	9 (17%)	61,92,113	1.42	4 (6%)
24	CLA	N	614	-	52,56,73	1.35	8 (15%)	61,92,113	1.47	5 (8%)
24	CLA	8	309	-	49,53,73	1.38	9 (18%)	58,89,113	1.40	4 (6%)
24	CLA	BU	614	-	49,53,73	1.40	8 (16%)	58,89,113	1.47	4 (6%)
29	BCR	R	410	-	41,41,41	1.32	3 (7%)	56,56,56	1.26	5 (8%)
23	CHL	N	609	8	57,71,74	3.36	19 (33%)	52,109,114	2.01	12 (23%)
25	LUT	Ba	317	-	42,43,43	1.28	8 (19%)	51,60,60	1.43	11 (21%)
27	LHG	d	404	-	48,48,48	0.67	1 (2%)	51,54,54	1.28	6 (11%)
24	CLA	0	610	2	64,68,73	1.20	9 (14%)	76,107,113	1.46	11 (14%)
24	CLA	S	610	-	60,64,73	1.24	9 (15%)	71,102,113	1.35	5 (7%)
27	LHG	6	617	24	46,46,48	0.68	1 (2%)	49,52,54	1.34	6 (12%)
24	CLA	BF	510	21	69,73,73	1.18	10 (14%)	82,113,113	1.30	6 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
27	LHG	C	521	-	48,48,48	0.62	1 (2%)	51,54,54	1.29	6 (11%)
29	BCR	B	623	-	41,41,41	1.19	2 (4%)	56,56,56	1.23	5 (8%)
30	LMG	BF	501	-	51,51,55	0.74	1 (1%)	59,59,63	1.34	7 (11%)
34	DGD	H	102	-	63,63,67	0.90	2 (3%)	77,77,81	1.38	6 (7%)
25	LUT	0	615	-	42,43,43	1.36	8 (19%)	51,60,60	1.39	10 (19%)
24	CLA	BU	611	22	53,57,73	1.32	10 (18%)	61,93,113	1.39	4 (6%)
29	BCR	F	101	-	41,41,41	1.23	3 (7%)	56,56,56	1.23	5 (8%)
24	CLA	BG	402	-	69,73,73	1.15	8 (11%)	82,113,113	1.27	5 (6%)
24	CLA	AA	311	1	51,56,73	1.35	10 (19%)	59,92,113	1.42	5 (8%)
24	CLA	v	609	4	69,73,73	1.15	10 (14%)	82,113,113	1.31	6 (7%)
23	CHL	r	607	22	52,66,74	3.50	20 (38%)	46,103,114	2.44	14 (30%)
24	CLA	BE	612	4	69,73,73	1.17	9 (13%)	82,113,113	1.31	7 (8%)
24	CLA	g	611	27	64,68,73	1.23	7 (10%)	76,107,113	1.33	7 (9%)
29	BCR	Ay	102	-	41,41,41	1.28	4 (9%)	56,56,56	1.32	8 (14%)
33	HEM	F	102	7	50,50,50	1.36	10 (20%)	67,82,82	1.06	4 (5%)
27	LHG	1	521	-	48,48,48	0.62	1 (2%)	51,54,54	1.29	6 (11%)
24	CLA	A2	602	8	69,73,73	1.17	9 (13%)	82,113,113	1.31	4 (4%)
23	CHL	BH	601	-	39,53,74	4.12	18 (46%)	33,89,114	2.28	11 (33%)
23	CHL	n	606	8	44,58,74	3.92	19 (43%)	37,94,114	2.13	13 (35%)
23	CHL	Au	609	8	49,64,74	3.53	18 (36%)	39,100,114	2.21	11 (28%)
23	CHL	BQ	608	-	57,71,74	3.50	19 (33%)	52,109,114	1.76	12 (23%)
29	BCR	8	313	-	41,41,41	1.29	3 (7%)	56,56,56	1.30	7 (12%)
29	BCR	Ay	101	-	41,41,41	1.19	3 (7%)	56,56,56	1.30	7 (12%)
24	CLA	Au	611	27	64,68,73	1.20	9 (14%)	76,107,113	1.28	5 (6%)
23	CHL	Y	307	-	44,58,74	3.76	19 (43%)	37,94,114	2.66	13 (35%)
23	CHL	G	609	-	49,64,74	3.69	18 (36%)	39,100,114	1.63	7 (17%)
24	CLA	N	604	-	54,58,73	1.29	8 (14%)	64,95,113	1.46	6 (9%)
24	CLA	D	401	5	69,73,73	1.15	9 (13%)	82,113,113	1.31	7 (8%)
24	CLA	b	604	4	69,73,73	1.15	9 (13%)	82,113,113	1.28	5 (6%)
24	CLA	r	614	-	49,53,73	1.40	8 (16%)	58,89,113	1.50	4 (6%)
27	LHG	BB	319	-	48,48,48	0.69	1 (2%)	51,54,54	1.29	6 (11%)
34	DGD	C	517	-	63,63,67	0.89	2 (3%)	77,77,81	1.43	8 (10%)
23	CHL	BV	607	-	40,54,74	4.26	18 (45%)	34,90,114	1.97	10 (29%)
23	CHL	A2	601	8	57,71,74	3.36	19 (33%)	52,109,114	2.17	14 (26%)
24	CLA	v	605	4	69,73,73	1.17	9 (13%)	82,113,113	1.26	5 (6%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CHL	5	607	-	54,68,74	3.43	19 (35%)	48,105,114	2.23	15 (31%)
24	CLA	9	614	1	49,53,73	1.37	8 (16%)	58,89,113	1.53	4 (6%)
25	LUT	7	317	-	42,43,43	1.31	8 (19%)	51,60,60	1.42	9 (17%)
24	CLA	G	611	27	64,68,73	1.22	9 (14%)	76,107,113	1.37	7 (9%)
23	CHL	S	601	14	40,54,74	4.06	18 (45%)	34,90,114	2.60	12 (35%)
23	CHL	A2	609	8	57,71,74	3.35	19 (33%)	52,109,114	2.03	12 (23%)
24	CLA	c	503	21	69,73,73	1.17	10 (14%)	82,113,113	1.31	6 (7%)
24	CLA	7	304	-	59,63,73	1.25	9 (15%)	70,101,113	1.28	6 (8%)
24	CLA	b	617	4	69,73,73	1.15	9 (13%)	82,113,113	1.30	5 (6%)
24	CLA	AB	309	-	49,53,73	1.38	7 (14%)	58,89,113	1.40	5 (8%)
24	CLA	v	610	-	69,73,73	1.15	8 (11%)	82,113,113	1.31	5 (6%)
24	CLA	A2	610	-	69,73,73	1.16	9 (13%)	82,113,113	1.35	9 (10%)
24	CLA	r	603	22	64,68,73	1.21	9 (14%)	76,107,113	1.27	5 (6%)
24	CLA	Au	602	8	69,73,73	1.15	9 (13%)	82,113,113	1.34	7 (8%)
24	CLA	BQ	612	-	64,68,73	1.21	8 (12%)	76,107,113	1.35	7 (9%)
30	LMG	i	101	-	48,48,55	0.74	1 (2%)	56,56,63	1.32	6 (10%)
24	CLA	d	401	5	69,73,73	1.14	10 (14%)	82,113,113	1.32	7 (8%)
23	CHL	Y	309	-	57,71,74	3.41	19 (33%)	52,109,114	1.98	12 (23%)
24	CLA	9	610	1	60,64,73	1.22	10 (16%)	71,102,113	1.36	7 (9%)
24	CLA	BQ	614	-	52,56,73	1.36	6 (11%)	61,92,113	1.49	6 (9%)
28	XAT	Au	619	-	41,47,47	4.74	26 (63%)	54,74,74	6.68	36 (66%)
26	NEX	s	616	-	40,46,46	1.19	6 (15%)	50,70,70	1.53	9 (18%)
24	CLA	BE	611	-	69,73,73	1.17	9 (13%)	82,113,113	1.32	7 (8%)
24	CLA	C	502	21	69,73,73	1.16	9 (13%)	82,113,113	1.26	4 (4%)
23	CHL	Y	306	8	42,56,74	3.93	19 (45%)	36,92,114	1.96	10 (27%)
34	DGD	a	413	-	61,61,67	0.90	2 (3%)	75,75,81	1.40	8 (10%)
24	CLA	a	407	-	54,58,73	1.29	9 (16%)	64,95,113	1.48	7 (10%)
24	CLA	5	614	1	49,53,73	1.37	7 (14%)	58,89,113	1.51	4 (6%)
24	CLA	Y	304	8	69,73,73	1.17	10 (14%)	82,113,113	1.28	5 (6%)
28	XAT	G	619	-	41,47,47	4.73	26 (63%)	54,74,74	6.68	36 (66%)
29	BCR	C	515	-	41,41,41	1.35	4 (9%)	56,56,56	1.29	6 (10%)
24	CLA	R	404	20	69,73,73	1.17	9 (13%)	82,113,113	1.31	7 (8%)
27	LHG	BQ	618	24	48,48,48	0.64	1 (2%)	51,54,54	1.30	6 (11%)
24	CLA	6	614	2	52,56,73	1.31	9 (17%)	61,92,113	1.37	5 (8%)
24	CLA	A2	612	-	64,68,73	1.19	9 (14%)	76,107,113	1.35	4 (5%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
27	LHG	B	621	-	48,48,48	0.62	1 (2%)	51,54,54	1.28	6 (11%)
28	XAT	AA	318	-	41,47,47	4.68	26 (63%)	54,74,74	6.85	36 (66%)
30	LMG	d	405	-	46,46,55	0.77	1 (2%)	54,54,63	1.35	5 (9%)
24	CLA	A6	604	-	54,58,73	1.30	9 (16%)	64,95,113	1.42	5 (7%)
24	CLA	Aw	102	-	69,73,73	1.16	8 (11%)	82,113,113	1.37	6 (7%)
25	LUT	9	615	-	42,43,43	1.30	8 (19%)	51,60,60	1.60	10 (19%)
24	CLA	1	510	21	69,73,73	1.18	9 (13%)	82,113,113	1.31	5 (6%)
24	CLA	s	604	-	54,58,73	1.35	9 (16%)	64,95,113	1.51	7 (10%)
30	LMG	A0	201	-	48,48,55	0.75	2 (4%)	56,56,63	1.33	5 (8%)
23	CHL	BB	307	-	44,58,74	3.73	19 (43%)	37,94,114	2.66	13 (35%)
23	CHL	n	607	-	57,71,74	3.46	19 (33%)	52,109,114	2.11	14 (26%)
24	CLA	AA	312	-	49,53,73	1.36	8 (16%)	58,89,113	1.46	4 (6%)
36	OEX	a	403	20	0,15,15	-	-	-	-	-
24	CLA	C	513	21	69,73,73	1.15	9 (13%)	82,113,113	1.35	5 (6%)
24	CLA	BQ	613	-	64,68,73	1.24	9 (14%)	76,107,113	1.32	6 (7%)
24	CLA	BQ	610	8	69,73,73	1.15	8 (11%)	82,113,113	1.45	7 (8%)
24	CLA	BF	509	21	69,73,73	1.16	9 (13%)	82,113,113	1.32	6 (7%)
24	CLA	y	312	27	64,68,73	1.21	9 (14%)	76,107,113	1.32	6 (7%)
24	CLA	v	611	4	69,73,73	1.16	9 (13%)	82,113,113	1.38	7 (8%)
23	CHL	8	304	-	40,54,74	4.13	19 (47%)	34,90,114	1.99	11 (32%)
23	CHL	Ba	308	-	57,71,74	3.43	19 (33%)	52,109,114	2.20	14 (26%)
24	CLA	Ba	311	8	64,68,73	1.21	9 (14%)	76,107,113	1.35	7 (9%)
25	LUT	y	317	-	42,43,43	1.28	8 (19%)	51,60,60	1.44	10 (19%)
27	LHG	b	622	-	48,48,48	0.63	2 (4%)	51,54,54	1.29	6 (11%)
29	BCR	BN	101	-	41,41,41	1.27	3 (7%)	56,56,56	1.33	6 (10%)
25	LUT	AB	311	-	42,43,43	1.39	5 (11%)	51,60,60	1.53	11 (21%)
25	LUT	S	614	-	42,43,43	1.33	8 (19%)	51,60,60	1.43	10 (19%)
23	CHL	AA	306	1	40,54,74	4.30	19 (47%)	34,90,114	1.93	8 (23%)
24	CLA	Y	315	-	52,56,73	1.32	10 (19%)	61,92,113	1.47	6 (9%)
24	CLA	g	610	8	68,72,73	1.19	8 (11%)	80,111,113	1.27	6 (7%)
24	CLA	g	603	8	69,73,73	1.18	9 (13%)	82,113,113	1.28	6 (7%)
23	CHL	Y	310	8	57,71,74	3.39	19 (33%)	52,109,114	1.97	15 (28%)
23	CHL	G	607	-	57,71,74	3.39	19 (33%)	52,109,114	2.25	16 (30%)
23	CHL	6	606	-	40,54,74	3.98	19 (47%)	34,90,114	2.60	10 (29%)
24	CLA	A2	611	27	64,68,73	1.19	8 (12%)	76,107,113	1.33	6 (7%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	CLA	v	615	-	69,73,73	1.15	8 (11%)	82,113,113	1.28	5 (6%)
24	CLA	BD	405	20	69,73,73	1.17	9 (13%)	82,113,113	1.31	6 (7%)
24	CLA	9	611	27	49,53,73	1.36	9 (18%)	58,89,113	1.42	4 (6%)
25	LUT	A2	615	-	42,43,43	1.34	8 (19%)	51,60,60	1.45	10 (19%)
24	CLA	S	604	-	54,58,73	1.30	9 (16%)	64,95,113	1.43	5 (7%)
24	CLA	Au	603	8	69,73,73	1.15	9 (13%)	82,113,113	1.26	4 (4%)
24	CLA	G	602	8	69,73,73	1.15	9 (13%)	82,113,113	1.33	7 (8%)
23	CHL	5	608	-	40,54,74	4.01	19 (47%)	34,90,114	2.13	11 (32%)
24	CLA	AA	303	1	65,69,73	1.16	9 (13%)	77,108,113	1.41	7 (9%)
24	CLA	C	511	21	69,73,73	1.22	10 (14%)	82,113,113	1.34	10 (12%)
31	PL9	2	404	-	55,55,55	1.68	10 (18%)	68,69,69	1.49	12 (17%)
24	CLA	5	613	1	59,63,73	1.25	9 (15%)	70,101,113	1.39	6 (8%)
24	CLA	BE	607	-	69,73,73	1.16	9 (13%)	82,113,113	1.27	5 (6%)
24	CLA	G	603	8	69,73,73	1.15	8 (11%)	82,113,113	1.30	6 (7%)
23	CHL	g	608	-	57,71,74	3.44	18 (31%)	52,109,114	2.41	14 (26%)
23	CHL	6	608	2	40,54,74	4.04	19 (47%)	34,90,114	2.22	11 (32%)
26	NEX	BB	320	-	40,46,46	1.27	6 (15%)	50,70,70	1.55	10 (20%)
24	CLA	r	609	22	69,73,73	1.15	9 (13%)	82,113,113	1.33	5 (6%)
24	CLA	BJ	611	27	64,68,73	1.22	8 (12%)	76,107,113	1.33	6 (7%)
24	CLA	1	512	-	69,73,73	1.14	9 (13%)	82,113,113	1.33	7 (8%)
27	LHG	0	617	24	46,46,48	0.70	1 (2%)	49,52,54	1.35	6 (12%)
24	CLA	Ba	304	-	69,73,73	1.18	8 (11%)	82,113,113	1.24	6 (7%)
30	LMG	v	623	-	40,40,55	0.85	1 (2%)	48,48,63	1.30	5 (10%)
34	DGD	1	517	-	63,63,67	0.90	2 (3%)	77,77,81	1.44	9 (11%)
23	CHL	y	309	-	57,71,74	3.57	20 (35%)	52,109,114	1.62	14 (26%)
24	CLA	Ba	314	8	69,73,73	1.18	8 (11%)	82,113,113	1.30	5 (6%)
24	CLA	BU	603	22	64,68,73	1.21	10 (15%)	76,107,113	1.28	5 (6%)
25	LUT	A6	615	-	42,43,43	1.30	7 (16%)	51,60,60	1.72	16 (31%)
24	CLA	2	402	5	69,73,73	1.15	9 (13%)	82,113,113	1.31	8 (9%)
30	LMG	v	620	-	51,51,55	0.72	0	59,59,63	1.38	7 (11%)
23	CHL	Au	608	-	57,71,74	3.38	19 (33%)	52,109,114	2.01	16 (30%)
24	CLA	Y	303	8	69,73,73	1.16	11 (15%)	82,113,113	1.32	5 (6%)
24	CLA	B	604	4	69,73,73	1.15	7 (10%)	82,113,113	1.32	6 (7%)
23	CHL	7	307	1	40,54,74	4.09	19 (47%)	34,90,114	2.11	10 (29%)
27	LHG	Ba	319	24	48,48,48	0.63	1 (2%)	51,54,54	1.30	7 (13%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
24	CLA	BU	601	22	53,57,73	1.30	9 (16%)	61,93,113	1.53	6 (9%)
25	LUT	BB	317	-	42,43,43	1.36	8 (19%)	51,60,60	1.45	10 (19%)
28	XAT	Ba	301	-	41,47,47	4.68	26 (63%)	54,74,74	6.82	36 (66%)
24	CLA	AA	313	-	49,53,73	1.36	8 (16%)	58,89,113	1.47	5 (8%)
29	BCR	BD	411	-	41,41,41	1.28	4 (9%)	56,56,56	1.21	6 (10%)
27	LHG	r	618	24	41,41,48	0.75	1 (2%)	44,47,54	1.37	7 (15%)
30	LMG	BE	621	-	51,51,55	0.73	1 (1%)	59,59,63	1.40	8 (13%)
24	CLA	y	313	-	64,68,73	1.22	9 (14%)	76,107,113	1.33	6 (7%)
24	CLA	BB	303	8	69,73,73	1.16	10 (14%)	82,113,113	1.35	5 (6%)
24	CLA	D	402	-	69,73,73	1.15	8 (11%)	82,113,113	1.28	5 (6%)
24	CLA	y	305	-	54,58,73	1.31	9 (16%)	64,95,113	1.41	5 (7%)
23	CHL	BJ	601	8	57,71,74	3.46	18 (31%)	52,109,114	2.43	15 (28%)
33	HEM	4	102	7	50,50,50	1.35	9 (18%)	67,82,82	1.07	4 (5%)
24	CLA	0	611	27	59,63,73	1.23	9 (15%)	70,101,113	1.47	8 (11%)
24	CLA	BV	604	-	54,58,73	1.37	10 (18%)	64,95,113	1.57	8 (12%)
38	PHO	BD	408	-	58,69,69	2.09	11 (18%)	55,99,99	1.50	7 (12%)
24	CLA	c	509	21	69,73,73	1.15	9 (13%)	82,113,113	1.31	6 (7%)
24	CLA	5	604	-	54,58,73	1.33	10 (18%)	64,95,113	1.48	7 (10%)
23	CHL	N	607	-	57,71,74	3.33	19 (33%)	52,109,114	2.26	15 (28%)
24	CLA	a	405	20	69,73,73	1.17	9 (13%)	82,113,113	1.28	6 (7%)
24	CLA	b	616	-	69,73,73	1.16	9 (13%)	82,113,113	1.29	6 (7%)
26	NEX	BJ	617	-	40,46,46	1.20	6 (15%)	50,70,70	1.60	9 (18%)
25	LUT	BQ	615	-	42,43,43	1.31	8 (19%)	51,60,60	1.43	10 (19%)
27	LHG	BE	622	-	48,48,48	0.64	2 (4%)	51,54,54	1.29	6 (11%)
24	CLA	B	605	4	69,73,73	1.17	9 (13%)	82,113,113	1.27	5 (6%)
24	CLA	b	613	4	69,73,73	1.15	9 (13%)	82,113,113	1.29	6 (7%)
27	LHG	W	201	-	48,48,48	0.60	0	51,54,54	1.28	6 (11%)
24	CLA	B	613	4	69,73,73	1.15	9 (13%)	82,113,113	1.31	5 (6%)
29	BCR	BE	620	-	41,41,41	1.21	2 (4%)	56,56,56	1.24	4 (7%)
24	CLA	v	607	-	69,73,73	1.16	8 (11%)	82,113,113	1.34	6 (7%)
24	CLA	9	603	-	59,63,73	1.26	9 (15%)	70,101,113	1.29	6 (8%)
24	CLA	0	612	-	49,53,73	1.37	8 (16%)	58,89,113	1.47	4 (6%)
24	CLA	r	602	22	61,66,73	1.23	10 (16%)	71,104,113	1.38	6 (8%)
32	SQD	D	406	-	48,50,54	1.59	7 (14%)	58,61,65	1.39	7 (12%)
25	LUT	n	615	-	42,43,43	1.31	8 (19%)	51,60,60	1.44	10 (19%)

Mol	Type	Chain	Res	Link	Bond lengths			Bond angles		
					Counts	RMSZ	# Z > 2	Counts	RMSZ	# Z > 2
23	CHL	BB	308	-	57,71,74	3.27	19 (33%)	52,109,114	2.44	15 (28%)
34	DGD	Av	102	-	63,63,67	0.91	2 (3%)	77,77,81	1.38	8 (10%)
23	CHL	7	309	-	40,54,74	4.10	19 (47%)	34,90,114	2.30	11 (32%)
24	CLA	BE	603	4	69,73,73	1.17	9 (13%)	82,113,113	1.30	6 (7%)
23	CHL	BQ	605	8	42,56,74	4.01	20 (47%)	36,92,114	2.36	10 (27%)
23	CHL	g	605	8	40,54,74	4.17	20 (50%)	34,90,114	2.57	10 (29%)
23	CHL	6	605	2	40,54,74	4.15	19 (47%)	34,90,114	2.04	11 (32%)
24	CLA	s	609	14	59,63,73	1.26	8 (13%)	70,101,113	1.38	7 (10%)
24	CLA	BJ	602	8	69,73,73	1.17	7 (10%)	82,113,113	1.27	6 (7%)
28	XAT	g	619	-	41,47,47	4.74	24 (58%)	54,74,74	6.70	36 (66%)
24	CLA	C	508	21	69,73,73	1.15	10 (14%)	82,113,113	1.31	5 (6%)
27	LHG	BY	201	-	48,48,48	0.63	1 (2%)	51,54,54	1.27	6 (11%)
24	CLA	8	303	-	49,53,73	1.35	9 (18%)	58,89,113	1.48	4 (6%)
25	LUT	A2	616	-	42,43,43	1.33	7 (16%)	51,60,60	1.48	9 (17%)
30	LMG	B	620	-	51,51,55	0.72	1 (1%)	59,59,63	1.38	7 (11%)
24	CLA	A2	613	8	64,68,73	1.22	8 (12%)	76,107,113	1.38	6 (7%)
24	CLA	c	508	-	69,73,73	1.17	9 (13%)	82,113,113	1.27	5 (6%)
24	CLA	AB	308	-	49,53,73	1.37	10 (20%)	58,89,113	1.71	11 (18%)
24	CLA	C	503	21	69,73,73	1.16	10 (14%)	82,113,113	1.31	6 (7%)
24	CLA	S	613	14	53,57,73	1.31	9 (16%)	61,93,113	1.46	6 (9%)
23	CHL	Au	605	8	40,54,74	4.16	18 (45%)	34,90,114	2.42	11 (32%)
24	CLA	5	602	1	65,69,73	1.19	9 (13%)	77,108,113	1.30	5 (6%)
25	LUT	AA	317	-	42,43,43	1.31	6 (14%)	51,60,60	1.42	10 (19%)
23	CHL	Y	308	-	57,71,74	3.28	19 (33%)	52,109,114	2.43	15 (28%)
24	CLA	r	610	27	53,57,73	1.30	10 (18%)	61,93,113	1.41	4 (6%)
24	CLA	BU	609	22	69,73,73	1.15	9 (13%)	82,113,113	1.34	5 (6%)
24	CLA	BD	410	-	64,68,73	1.20	8 (12%)	76,107,113	1.37	7 (9%)
28	XAT	Y	301	-	41,47,47	4.71	24 (58%)	54,74,74	6.78	36 (66%)
29	BCR	B	619	-	41,41,41	1.20	2 (4%)	56,56,56	1.19	5 (8%)
32	SQD	A1	101	-	52,54,54	1.54	8 (15%)	62,65,65	1.31	6 (9%)
24	CLA	BB	311	8	64,68,73	1.22	9 (14%)	76,107,113	1.34	6 (7%)
29	BCR	v	617	-	41,41,41	1.25	2 (4%)	56,56,56	1.36	8 (14%)
23	CHL	BJ	609	-	52,66,74	3.81	20 (38%)	46,103,114	2.02	12 (26%)

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
23	CHL	0	607	-	3/3/17/26	10/24/122/137	-
23	CHL	5	601	1	3/3/16/26	11/15/113/137	-
24	CLA	7	305	-	1/1/11/20	5/15/91/115	-
24	CLA	C	506	21	1/1/15/20	17/39/115/115	-
24	CLA	r	601	22	1/1/11/20	8/20/96/115	-
34	DGD	R	401	-	-	25/48/88/95	0/2/2/2
24	CLA	b	605	4	1/1/15/20	18/39/115/115	-
30	LMG	c	518	-	-	23/46/66/70	0/1/1/1
23	CHL	6	601	2	3/3/18/26	15/31/129/137	-
26	NEX	5	617	-	-	17/27/83/83	0/3/3/3
24	CLA	5	611	27	1/1/11/20	8/15/91/115	-
24	CLA	r	612	22	1/1/7/20	0/4/72/115	-
24	CLA	s	603	14	1/1/11/20	6/15/91/115	-
29	BCR	a	411	-	-	4/29/63/63	0/2/2/2
24	CLA	c	514	21	1/1/15/20	16/39/115/115	-
27	LHG	Az	102	-	-	17/53/53/53	-
28	XAT	7	301	-	-	10/31/93/93	0/4/4/4
24	CLA	6	611	27	1/1/13/20	13/27/103/115	-
24	CLA	6	613	-	1/1/13/20	14/31/107/115	-
29	BCR	b	601	-	-	12/29/63/63	0/2/2/2
31	PL9	d	403	-	-	10/53/73/73	0/1/1/1
28	XAT	BJ	619	-	-	12/31/93/93	0/4/4/4
24	CLA	BV	602	14	1/1/14/20	10/35/111/115	-
24	CLA	Au	613	-	1/1/15/20	10/39/115/115	-
24	CLA	A	405	20	1/1/15/20	8/39/115/115	-
29	BCR	b	618	-	-	3/29/63/63	0/2/2/2
24	CLA	6	604	-	1/1/11/20	9/15/91/115	-
24	CLA	BJ	603	8	1/1/15/20	13/39/115/115	-
24	CLA	1	511	21	1/1/15/20	15/39/115/115	-
25	LUT	Y	316	-	-	2/29/67/67	0/2/2/2
25	LUT	6	615	-	-	2/29/67/67	0/2/2/2
23	CHL	BV	601	-	3/3/16/26	5/15/113/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
25	LUT	Ba	316	-	-	2/29/67/67	0/2/2/2
24	CLA	B	608	4	1/1/15/20	13/39/115/115	-
29	BCR	1	514	-	-	2/29/63/63	0/2/2/2
23	CHL	8	305	-	3/3/16/26	7/15/113/137	-
24	CLA	1	507	-	1/1/15/20	18/39/115/115	-
23	CHL	S	605	14	3/3/16/26	8/15/113/137	-
23	CHL	BQ	606	8	3/3/16/26	8/20/118/137	-
23	CHL	BQ	607	-	3/3/19/26	14/33/131/137	-
24	CLA	1	505	-	1/1/15/20	10/39/115/115	-
29	BCR	z	102	-	-	7/29/63/63	0/2/2/2
34	DGD	BF	518	-	-	22/51/91/95	0/2/2/2
24	CLA	BD	406	-	1/1/15/20	6/39/115/115	-
29	BCR	BK	101	-	-	5/29/63/63	0/2/2/2
24	CLA	s	610	-	1/1/13/20	10/29/105/115	-
23	CHL	N	605	8	3/3/16/26	8/18/116/137	-
23	CHL	A2	605	8	3/3/16/26	8/18/116/137	-
28	XAT	7	318	-	-	12/31/93/93	0/4/4/4
23	CHL	BU	605	22	3/3/19/26	22/33/131/137	-
29	BCR	C	514	-	-	2/29/63/63	0/2/2/2
23	CHL	BU	613	22	3/3/15/26	1/10/108/137	-
28	XAT	r	616	-	-	17/31/93/93	0/4/4/4
24	CLA	9	602	1	1/1/14/20	14/35/111/115	-
24	CLA	BV	613	14	1/1/11/20	8/20/96/115	-
24	CLA	N	613	8	1/1/14/20	11/33/109/115	-
23	CHL	G	601	8	3/3/19/26	15/33/131/137	-
24	CLA	b	610	-	1/1/15/20	11/39/115/115	-
24	CLA	C	509	21	1/1/15/20	8/39/115/115	-
25	LUT	BB	316	-	-	2/29/67/67	0/2/2/2
25	LUT	G	616	-	-	1/29/67/67	0/2/2/2
29	BCR	b	620	-	-	4/29/63/63	0/2/2/2
24	CLA	C	510	21	1/1/15/20	17/39/115/115	-
34	DGD	BK	102	-	-	17/51/91/95	0/2/2/2
23	CHL	A6	606	-	3/3/17/26	6/24/122/137	-
23	CHL	A6	607	14	3/3/16/26	10/15/113/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	BE	604	4	1/1/15/20	11/39/115/115	-
24	CLA	AB	303	-	1/1/11/20	6/15/91/115	-
24	CLA	n	612	-	1/1/14/20	5/33/109/115	-
26	NEX	G	617	-	-	19/27/83/83	0/3/3/3
23	CHL	9	601	1	3/3/16/26	11/15/113/137	-
28	XAT	BU	616	-	-	17/31/93/93	0/4/4/4
24	CLA	Ba	303	8	1/1/15/20	15/39/115/115	-
32	SQD	2	408	-	-	23/45/65/69	0/1/1/1
34	DGD	BF	517	-	-	14/44/84/95	0/2/2/2
24	CLA	BE	602	-	1/1/15/20	16/39/115/115	-
24	CLA	BB	304	8	1/1/15/20	12/39/115/115	-
29	BCR	k	101	-	-	9/29/63/63	0/2/2/2
24	CLA	BE	617	4	1/1/15/20	17/39/115/115	-
24	CLA	S	609	14	1/1/12/20	2/21/99/115	-
24	CLA	BJ	604	-	1/1/12/20	8/21/97/115	-
23	CHL	BB	310	-	3/3/19/26	16/33/131/137	-
30	LMG	D	405	-	-	13/41/61/70	0/1/1/1
32	SQD	A	413	-	-	26/49/69/69	0/1/1/1
23	CHL	n	609	-	3/3/19/26	13/33/131/137	-
24	CLA	S	611	-	1/1/11/20	5/20/96/115	-
25	LUT	BV	614	-	-	2/29/67/67	0/2/2/2
24	CLA	N	612	-	1/1/14/20	5/33/109/115	-
23	CHL	r	613	22	3/3/15/26	0/10/108/137	-
24	CLA	BU	612	22	1/1/7/20	0/4/72/115	-
24	CLA	b	608	-	1/1/15/20	18/39/115/115	-
29	BCR	BE	618	-	-	4/29/63/63	0/2/2/2
23	CHL	AB	307	3	3/3/16/26	7/15/113/137	-
24	CLA	g	612	-	1/1/14/20	6/33/109/115	-
24	CLA	BB	305	-	1/1/12/20	10/21/97/115	-
24	CLA	BE	609	4	1/1/15/20	13/39/115/115	-
23	CHL	s	605	14	3/3/16/26	8/15/113/137	-
24	CLA	g	614	8	1/1/11/20	5/19/95/115	-
23	CHL	g	606	-	3/3/16/26	4/20/118/137	-
23	CHL	6	607	-	3/3/17/26	10/24/122/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	LHG	c	519	-	-	24/53/53/53	-
29	BCR	Av	101	-	-	4/29/63/63	0/2/2/2
27	LHG	N	618	24	-	16/53/53/53	-
23	CHL	BJ	605	8	3/3/16/26	5/15/113/137	-
26	NEX	Ba	318	-	-	13/27/83/83	0/3/3/3
24	CLA	Au	612	-	1/1/14/20	11/33/109/115	-
24	CLA	AB	301	3	1/1/9/20	3/9/81/115	-
24	CLA	Au	614	-	1/1/11/20	5/19/95/115	-
24	CLA	BV	608	-	1/1/11/20	7/15/91/115	-
27	LHG	g	618	24	-	18/53/53/53	-
28	XAT	n	619	-	-	19/31/93/93	0/4/4/4
23	CHL	8	307	3	3/3/16/26	7/15/113/137	-
23	CHL	s	607	-	3/3/16/26	6/15/113/137	-
24	CLA	G	612	-	1/1/14/20	11/33/109/115	-
24	CLA	A2	603	8	1/1/15/20	13/39/115/115	-
24	CLA	7	313	-	1/1/11/20	5/15/91/115	-
24	CLA	Y	305	-	1/1/12/20	9/21/97/115	-
24	CLA	N	610	-	1/1/15/20	13/39/115/115	-
24	CLA	n	602	8	1/1/15/20	15/39/115/115	-
24	CLA	N	611	27	1/1/14/20	14/33/109/115	-
27	LHG	Au	618	24	-	17/53/53/53	-
27	LHG	BU	617	24	-	12/46/46/53	-
24	CLA	c	510	21	1/1/15/20	8/39/115/115	-
24	CLA	A2	614	-	1/1/11/20	7/19/95/115	-
25	LUT	9	616	-	-	1/29/67/67	0/2/2/2
24	CLA	n	603	8	1/1/15/20	16/39/115/115	-
24	CLA	1	506	21	1/1/15/20	17/39/115/115	-
24	CLA	B	615	-	1/1/15/20	17/39/115/115	-
32	SQD	L	101	-	-	18/37/57/69	0/1/1/1
27	LHG	G	618	24	-	17/53/53/53	-
29	BCR	BE	601	-	-	12/29/63/63	0/2/2/2
30	LMG	BL	101	-	-	18/43/63/70	0/1/1/1
24	CLA	A6	613	14	1/1/11/20	9/20/96/115	-
23	CHL	Ba	302	8	3/3/19/26	13/33/131/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	Ba	312	27	1/1/14/20	14/33/109/115	-
24	CLA	AB	302	-	1/1/11/20	6/15/91/115	-
29	BCR	BI	101	-	-	9/29/63/63	0/2/2/2
32	SQD	l	102	-	-	18/37/57/69	0/1/1/1
25	LUT	BJ	616	-	-	1/29/67/67	0/2/2/2
24	CLA	Au	610	8	1/1/14/20	20/38/114/115	-
24	CLA	BF	512	21	1/1/15/20	9/39/115/115	-
23	CHL	Ba	310	-	3/3/19/26	22/33/131/137	-
26	NEX	S	616	-	-	15/27/83/83	0/3/3/3
24	CLA	2	403	-	1/1/15/20	10/39/115/115	-
25	LUT	5	615	-	-	3/29/67/67	0/2/2/2
26	NEX	AA	319	-	-	22/27/83/83	0/3/3/3
34	DGD	a	401	-	-	21/48/88/95	0/2/2/2
23	CHL	N	608	-	3/3/19/26	13/33/131/137	-
24	CLA	AA	304	-	1/1/13/20	10/27/103/115	-
24	CLA	n	610	8	1/1/15/20	14/39/115/115	-
25	LUT	Au	615	-	-	0/29/67/67	0/2/2/2
30	LMG	BG	405	-	-	14/41/61/70	0/1/1/1
24	CLA	G	610	8	1/1/14/20	20/38/114/115	-
25	LUT	g	615	-	-	1/29/67/67	0/2/2/2
24	CLA	b	614	-	1/1/15/20	11/39/115/115	-
24	CLA	y	311	8	1/1/14/20	11/33/109/115	-
38	PHO	R	408	-	-	16/37/103/103	0/5/6/6
23	CHL	N	601	8	3/3/19/26	19/33/131/137	-
29	BCR	4	101	-	-	7/29/63/63	0/2/2/2
31	PL9	BG	403	-	-	8/53/73/73	0/1/1/1
30	LMG	Aw	101	-	-	12/35/55/70	0/1/1/1
24	CLA	v	601	-	1/1/15/20	16/39/115/115	-
23	CHL	y	308	-	3/3/19/26	17/33/131/137	-
24	CLA	s	611	-	1/1/11/20	3/20/96/115	-
24	CLA	BF	502	21	1/1/15/20	13/39/115/115	-
24	CLA	BF	507	21	1/1/15/20	18/39/115/115	-
24	CLA	C	505	-	1/1/15/20	9/39/115/115	-
24	CLA	7	312	-	1/1/11/20	9/15/91/115	-
23	CHL	G	608	-	3/3/19/26	22/33/131/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CHL	S	606	-	3/3/17/26	6/24/122/137	-
23	CHL	S	607	-	3/3/16/26	7/15/113/137	-
28	XAT	AA	301	-	-	10/31/93/93	0/4/4/4
24	CLA	AA	314	1	1/1/11/20	6/15/91/115	-
32	SQD	l	101	-	-	21/49/69/69	0/1/1/1
24	CLA	BF	514	-	1/1/15/20	15/39/115/115	-
25	LUT	AA	316	-	-	3/29/67/67	0/2/2/2
30	LMG	BF	519	-	-	22/46/66/70	0/1/1/1
33	HEM	BI	102	7,6	-	3/14/54/54	-
27	LHG	9	618	24	-	18/45/45/53	-
23	CHL	N	606	8	3/3/16/26	6/20/118/137	-
23	CHL	AA	310	-	3/3/18/26	10/27/125/137	-
23	CHL	0	601	2	3/3/18/26	13/31/129/137	-
24	CLA	9	612	-	1/1/11/20	8/15/91/115	-
23	CHL	BU	606	-	3/3/17/26	7/24/122/137	-
23	CHL	BU	607	22	3/3/18/26	15/27/125/137	-
24	CLA	b	615	-	1/1/15/20	17/39/115/115	-
27	LHG	1	520	-	-	24/53/53/53	-
29	BCR	1	515	-	-	3/29/63/63	0/2/2/2
27	LHG	L	102	-	-	17/53/53/53	-
24	CLA	y	314	8	1/1/15/20	12/39/115/115	-
24	CLA	d	402	-	1/1/15/20	12/39/115/115	-
24	CLA	r	604	-	1/1/11/20	9/19/95/115	-
24	CLA	BF	504	21	1/1/15/20	13/39/115/115	-
38	PHO	a	409	-	-	15/37/103/103	0/5/6/6
23	CHL	BJ	608	-	3/3/19/26	20/33/131/137	-
24	CLA	AA	305	-	1/1/11/20	5/15/91/115	-
24	CLA	Ba	313	-	1/1/14/20	12/33/109/115	-
27	LHG	BE	624	-	-	18/53/53/53	-
24	CLA	BU	608	22	1/1/13/20	12/31/107/115	-
24	CLA	R	405	-	1/1/15/20	7/39/115/115	-
26	NEX	Y	318	-	-	12/27/83/83	0/3/3/3
23	CHL	r	605	22	3/3/19/26	23/33/131/137	-
28	XAT	9	619	-	-	16/31/93/93	0/4/4/4

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	BQ	604	-	1/1/12/20	9/21/97/115	-
32	SQD	d	406	-	-	20/45/65/69	0/1/1/1
24	CLA	A6	611	-	1/1/11/20	5/20/96/115	-
24	CLA	BV	611	-	1/1/11/20	4/20/96/115	-
27	LHG	5	618	24	-	18/45/45/53	-
23	CHL	y	310	-	3/3/19/26	22/33/131/137	-
24	CLA	v	612	4	1/1/15/20	13/39/115/115	-
29	BCR	v	618	-	-	7/29/63/63	0/2/2/2
24	CLA	v	614	-	1/1/15/20	19/39/115/115	-
25	LUT	S	615	-	-	0/29/67/67	0/2/2/2
24	CLA	B	611	4	1/1/15/20	10/39/115/115	-
24	CLA	BF	505	-	1/1/15/20	8/39/115/115	-
34	DGD	1	516	-	-	13/44/84/95	0/2/2/2
24	CLA	G	604	-	1/1/12/20	7/21/97/115	-
24	CLA	B	601	-	1/1/15/20	16/39/115/115	-
23	CHL	BV	605	14	3/3/16/26	8/15/113/137	-
34	DGD	C	518	-	-	19/49/89/95	0/2/2/2
24	CLA	c	511	21	1/1/15/20	16/39/115/115	-
23	CHL	7	310	-	3/3/18/26	12/27/125/137	-
23	CHL	BB	306	8	3/3/16/26	8/18/116/137	-
23	CHL	7	308	-	3/3/18/26	12/27/125/137	-
24	CLA	A2	604	-	1/1/12/20	6/21/97/115	-
23	CHL	8	306	-	3/3/16/26	3/15/113/137	-
24	CLA	BU	604	-	1/1/11/20	7/19/95/115	-
25	LUT	n	616	-	-	1/29/67/67	0/2/2/2
23	CHL	BJ	606	-	3/3/16/26	4/20/118/137	-
24	CLA	v	613	4	1/1/15/20	13/39/115/115	-
23	CHL	0	609	-	3/3/18/26	9/27/125/137	-
30	LMG	1	501	-	-	18/46/66/70	0/1/1/1
24	CLA	7	314	1	1/1/11/20	6/15/91/115	-
24	CLA	y	303	8	1/1/15/20	16/39/115/115	-
29	BCR	b	619	-	-	7/29/63/63	0/2/2/2
24	CLA	1	513	21	1/1/15/20	15/39/115/115	-
24	CLA	A6	610	-	1/1/13/20	9/29/105/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
38	PHO	BD	409	-	-	16/37/103/103	0/5/6/6
24	CLA	N	603	8	1/1/15/20	13/39/115/115	-
38	PHO	a	408	-	-	5/37/103/103	0/5/6/6
29	BCR	v	622	-	-	13/29/63/63	0/2/2/2
23	CHL	BQ	601	8	3/3/19/26	18/33/131/137	-
24	CLA	A	407	-	1/1/12/20	7/21/97/115	-
27	LHG	BF	521	-	-	22/53/53/53	-
29	BCR	AB	313	-	-	16/29/63/63	0/2/2/2
25	LUT	BQ	616	-	-	1/29/67/67	0/2/2/2
27	LHG	BJ	618	24	-	18/53/53/53	-
24	CLA	s	612	14	1/1/13/20	11/27/103/115	-
24	CLA	B	606	-	1/1/15/20	15/39/115/115	-
24	CLA	A6	602	14	1/1/14/20	13/35/111/115	-
23	CHL	y	307	-	3/3/16/26	6/20/118/137	-
27	LHG	w	201	-	-	16/53/53/53	-
30	LMG	I	101	-	-	12/35/55/70	0/1/1/1
25	LUT	N	615	-	-	0/29/67/67	0/2/2/2
24	CLA	g	613	-	1/1/15/20	11/39/115/115	-
24	CLA	A6	603	-	1/1/11/20	6/15/91/115	-
25	LUT	BU	615	-	-	3/29/67/67	0/2/2/2
25	LUT	s	615	-	-	1/29/67/67	0/2/2/2
23	CHL	6	609	-	3/3/18/26	11/27/125/137	-
24	CLA	1	504	21	1/1/15/20	14/39/115/115	-
24	CLA	B	612	4	1/1/15/20	12/39/115/115	-
24	CLA	A	410	-	1/1/14/20	8/33/109/115	-
24	CLA	G	613	-	1/1/15/20	10/39/115/115	-
24	CLA	BE	614	-	1/1/15/20	11/39/115/115	-
23	CHL	A6	601	14	3/3/16/26	5/15/113/137	-
27	LHG	C	520	-	-	24/53/53/53	-
24	CLA	b	607	-	1/1/15/20	13/39/115/115	-
29	BCR	B	617	-	-	5/29/63/63	0/2/2/2
23	CHL	BB	309	-	3/3/19/26	14/33/131/137	-
24	CLA	BB	313	-	1/1/14/20	10/33/109/115	-
23	CHL	s	601	-	3/3/16/26	5/15/113/137	-
26	NEX	A2	617	-	-	15/27/83/83	0/3/3/3

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	AB	310	-	1/1/11/20	6/15/91/115	-
24	CLA	A6	609	14	1/1/12/20	2/21/99/115	-
28	XAT	8	312	-	-	16/31/93/93	0/4/4/4
24	CLA	BJ	614	8	1/1/11/20	5/19/95/115	-
23	CHL	G	605	8	3/3/16/26	7/15/113/137	-
23	CHL	AA	307	1	3/3/16/26	5/15/113/137	-
24	CLA	BV	610	-	1/1/13/20	10/29/105/115	-
24	CLA	5	612	-	1/1/11/20	8/15/91/115	-
24	CLA	a	406	-	1/1/15/20	6/39/115/115	-
27	LHG	A0	202	-	-	14/53/53/53	-
38	PHO	A	408	-	-	6/37/103/103	0/5/6/6
34	DGD	BD	401	-	-	21/48/88/95	0/2/2/2
29	BCR	B	618	-	-	7/29/63/63	0/2/2/2
24	CLA	6	612	-	1/1/11/20	6/15/91/115	-
24	CLA	v	604	4	1/1/15/20	13/39/115/115	-
24	CLA	BD	407	-	1/1/12/20	8/21/97/115	-
34	DGD	C	516	-	-	14/44/84/95	0/2/2/2
24	CLA	1	503	21	1/1/15/20	13/39/115/115	-
23	CHL	y	302	8	3/3/19/26	13/33/131/137	-
24	CLA	BE	613	-	1/1/15/20	12/39/115/115	-
27	LHG	BF	520	-	-	25/53/53/53	-
32	SQD	BO	101	-	-	21/49/69/69	0/1/1/1
23	CHL	5	609	-	3/3/18/26	11/29/127/137	-
24	CLA	8	308	-	1/1/11/20	5/15/91/115	-
29	BCR	BF	515	-	-	2/29/63/63	0/2/2/2
24	CLA	9	604	-	1/1/12/20	11/21/97/115	-
27	LHG	B	622	-	-	16/50/50/53	-
32	SQD	BO	102	-	-	19/37/57/69	0/1/1/1
28	XAT	BB	301	-	-	17/31/93/93	0/4/4/4
23	CHL	BQ	609	-	3/3/19/26	13/33/131/137	-
24	CLA	b	606	4	1/1/15/20	13/39/115/115	-
24	CLA	BJ	610	8	1/1/14/20	21/38/114/115	-
24	CLA	S	602	14	1/1/14/20	11/35/111/115	-
30	LMG	A	412	-	-	17/43/63/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	BE	615	-	1/1/15/20	16/39/115/115	-
26	NEX	BQ	617	-	-	17/27/83/83	0/3/3/3
24	CLA	c	506	-	1/1/15/20	13/39/115/115	-
28	XAT	5	619	-	-	15/31/93/93	0/4/4/4
25	LUT	BJ	615	-	-	2/29/67/67	0/2/2/2
24	CLA	0	603	-	1/1/13/20	7/27/103/115	-
25	LUT	g	616	-	-	1/29/67/67	0/2/2/2
24	CLA	Ba	305	-	1/1/12/20	9/21/97/115	-
24	CLA	5	610	1	1/1/13/20	7/29/105/115	-
23	CHL	A2	606	8	3/3/16/26	6/20/118/137	-
23	CHL	g	609	-	3/3/18/26	8/27/125/137	-
24	CLA	8	310	-	1/1/11/20	5/15/91/115	-
24	CLA	BF	503	21	1/1/15/20	14/39/115/115	-
24	CLA	BF	513	-	1/1/15/20	13/39/115/115	-
25	LUT	A6	614	-	-	2/29/67/67	0/2/2/2
24	CLA	I	102	-	1/1/15/20	13/39/115/115	-
24	CLA	Ba	315	-	1/1/11/20	6/19/95/115	-
29	BCR	Bb	101	-	-	7/29/63/63	0/2/2/2
24	CLA	B	603	4	1/1/15/20	11/39/115/115	-
24	CLA	6	610	2	1/1/14/20	9/33/109/115	-
24	CLA	A6	612	14	1/1/13/20	9/27/103/115	-
24	CLA	0	613	-	1/1/13/20	11/31/107/115	-
23	CHL	g	607	-	3/3/19/26	16/33/131/137	-
23	CHL	AA	309	-	3/3/16/26	8/15/113/137	-
28	XAT	BQ	619	-	-	19/31/93/93	0/4/4/4
34	DGD	1	518	-	-	20/49/89/95	0/2/2/2
24	CLA	Y	312	-	1/1/14/20	13/33/109/115	-
26	NEX	A6	616	-	-	13/27/83/83	0/3/3/3
23	CHL	e	601	-	3/3/16/26	2/13/111/137	-
24	CLA	BQ	602	8	1/1/15/20	16/39/115/115	-
34	DGD	BD	413	-	-	25/49/89/95	0/2/2/2
24	CLA	5	603	1	1/1/13/20	10/27/103/115	-
24	CLA	g	602	8	1/1/15/20	15/39/115/115	-
24	CLA	6	602	2	1/1/14/20	18/33/109/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	A6	608	-	1/1/11/20	6/15/91/115	-
23	CHL	Au	606	-	3/3/16/26	6/20/118/137	-
23	CHL	Au	607	-	3/3/19/26	14/33/131/137	-
24	CLA	v	602	4	1/1/15/20	14/39/115/115	-
27	LHG	n	618	24	-	20/53/53/53	-
32	SQD	BG	406	-	-	22/45/65/69	0/1/1/1
28	XAT	A2	619	-	-	18/31/93/93	0/4/4/4
27	LHG	b	623	-	-	15/50/50/53	-
23	CHL	G	606	-	3/3/16/26	6/20/118/137	-
29	BCR	z	101	-	-	2/29/63/63	0/2/2/2
24	CLA	7	315	1	1/1/11/20	3/15/91/115	-
29	BCR	v	619	-	-	7/29/63/63	0/2/2/2
26	NEX	y	318	-	-	13/27/83/83	0/3/3/3
24	CLA	c	502	21	1/1/15/20	13/39/115/115	-
24	CLA	0	604	-	1/1/11/20	7/15/91/115	-
32	SQD	BD	412	-	-	28/49/69/69	0/1/1/1
23	CHL	7	302	1	3/3/16/26	5/15/113/137	-
24	CLA	S	612	14	1/1/13/20	9/27/103/115	-
27	LHG	c	520	-	-	22/53/53/53	-
32	SQD	Az	101	-	-	19/37/57/69	0/1/1/1
29	BCR	c	515	-	-	6/29/63/63	0/2/2/2
29	BCR	f	101	-	-	9/29/63/63	0/2/2/2
26	NEX	9	617	-	-	17/27/83/83	0/3/3/3
23	CHL	AA	302	1	3/3/16/26	4/15/113/137	-
24	CLA	BU	602	22	1/1/13/20	8/27/105/115	-
24	CLA	n	614	-	1/1/11/20	7/19/95/115	-
24	CLA	BE	605	4	1/1/15/20	18/39/115/115	-
33	HEM	f	102	7,6	-	3/14/54/54	-
23	CHL	AA	308	-	3/3/18/26	13/27/125/137	-
23	CHL	y	306	8	3/3/16/26	8/18/116/137	-
24	CLA	BG	401	5	1/1/15/20	16/39/115/115	-
24	CLA	y	304	-	1/1/15/20	11/39/115/115	-
24	CLA	R	406	-	1/1/12/20	7/21/97/115	-
27	LHG	2	406	-	-	16/53/53/53	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CHL	n	608	-	3/3/19/26	13/33/131/137	-
24	CLA	BV	603	14	1/1/11/20	6/15/91/115	-
23	CHL	0	605	2	3/3/16/26	5/15/113/137	-
24	CLA	s	613	14	1/1/11/20	8/20/96/115	-
24	CLA	BQ	603	8	1/1/15/20	15/39/115/115	-
27	LHG	Y	319	-	-	20/53/53/53	-
24	CLA	7	303	1	1/1/14/20	7/35/111/115	-
24	CLA	Y	313	-	1/1/14/20	10/33/109/115	-
26	NEX	N	617	-	-	15/27/83/83	0/3/3/3
24	CLA	B	609	-	1/1/15/20	11/39/115/115	-
24	CLA	7	311	1	1/1/11/20	6/15/93/115	-
24	CLA	A	406	-	1/1/15/20	6/39/115/115	-
24	CLA	BJ	613	-	1/1/15/20	11/39/115/115	-
25	LUT	N	616	-	-	1/29/67/67	0/2/2/2
23	CHL	r	606	-	3/3/17/26	7/24/122/137	-
24	CLA	N	602	8	1/1/15/20	14/39/115/115	-
34	DGD	c	516	-	-	14/44/84/95	0/2/2/2
24	CLA	B	607	-	1/1/15/20	20/39/115/115	-
24	CLA	G	614	-	1/1/11/20	5/19/95/115	-
32	SQD	a	412	-	-	28/49/69/69	0/1/1/1
24	CLA	BB	315	-	1/1/11/20	6/19/95/115	-
24	CLA	BE	610	-	1/1/15/20	12/39/115/115	-
27	LHG	D	404	-	-	14/53/53/53	-
23	CHL	A2	607	-	3/3/19/26	15/33/131/137	-
24	CLA	v	616	4	1/1/15/20	17/39/115/115	-
25	LUT	r	615	-	-	3/29/67/67	0/2/2/2
24	CLA	R	409	-	1/1/14/20	7/33/109/115	-
23	CHL	9	607	-	3/3/18/26	16/30/128/137	-
24	CLA	r	608	22	1/1/13/20	12/31/107/115	-
24	CLA	BE	608	-	1/1/15/20	18/39/115/115	-
25	LUT	0	616	-	-	1/29/67/67	0/2/2/2
27	LHG	y	319	24	-	20/53/53/53	-
23	CHL	AB	304	3	3/3/16/26	8/15/113/137	-
24	CLA	BF	511	21	1/1/15/20	16/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
30	LMG	c	501	-	-	22/46/66/70	0/1/1/1
24	CLA	BE	616	-	1/1/15/20	12/39/115/115	-
27	LHG	BE	623	-	-	15/50/50/53	-
24	CLA	BF	508	-	1/1/15/20	17/39/115/115	-
24	CLA	Y	311	8	1/1/14/20	11/33/109/115	-
29	BCR	BE	619	-	-	7/29/63/63	0/2/2/2
24	CLA	c	513	-	1/1/15/20	13/39/115/115	-
24	CLA	B	602	4	1/1/15/20	14/39/115/115	-
24	CLA	c	512	21	1/1/15/20	8/39/115/115	-
23	CHL	BJ	607	-	3/3/19/26	16/33/131/137	-
26	NEX	7	319	-	-	22/27/83/83	0/3/3/3
25	LUT	BV	615	-	-	1/29/67/67	0/2/2/2
34	DGD	c	517	-	-	22/51/91/95	0/2/2/2
30	LMG	2	407	-	-	13/41/61/70	0/1/1/1
30	LMG	B	624	-	-	17/35/55/70	0/1/1/1
24	CLA	v	603	4	1/1/15/20	11/39/115/115	-
24	CLA	C	512	-	1/1/15/20	10/39/115/115	-
24	CLA	8	302	-	1/1/11/20	6/15/91/115	-
23	CHL	9	605	1	3/3/16/26	7/15/113/137	-
24	CLA	S	603	-	1/1/11/20	6/15/91/115	-
28	XAT	y	301	-	-	15/31/93/93	0/4/4/4
32	SQD	L	103	-	-	18/49/69/69	0/1/1/1
23	CHL	Ba	306	8	3/3/16/26	8/18/116/137	-
29	BCR	K	101	-	-	9/29/63/63	0/2/2/2
24	CLA	b	611	-	1/1/15/20	12/39/115/115	-
23	CHL	9	606	1	3/3/16/26	4/15/113/137	-
24	CLA	1	502	21	1/1/15/20	14/39/115/115	-
23	CHL	A2	608	-	3/3/19/26	13/33/131/137	-
25	LUT	y	316	-	-	2/29/67/67	0/2/2/2
24	CLA	0	602	2	1/1/14/20	16/33/109/115	-
23	CHL	A6	605	14	3/3/16/26	8/15/113/137	-
25	LUT	G	615	-	-	1/29/67/67	0/2/2/2
26	NEX	BV	616	-	-	15/27/83/83	0/3/3/3
23	CHL	s	606	-	3/3/17/26	6/24/122/137	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CHL	BB	302	8	3/3/19/26	17/33/131/137	-
23	CHL	AB	305	-	3/3/16/26	8/15/113/137	-
23	CHL	AB	306	-	3/3/16/26	3/15/113/137	-
27	LHG	2	405	-	-	15/50/50/53	-
38	PHO	A	409	-	-	16/37/103/103	0/5/6/6
30	LMG	1	519	-	-	22/46/66/70	0/1/1/1
24	CLA	C	507	-	1/1/15/20	16/39/115/115	-
24	CLA	BJ	612	-	1/1/14/20	6/33/109/115	-
25	LUT	7	316	-	-	3/29/67/67	0/2/2/2
27	LHG	b	624	-	-	18/53/53/53	-
24	CLA	c	507	21	1/1/15/20	18/39/115/115	-
23	CHL	0	608	2	3/3/16/26	6/15/113/137	-
24	CLA	B	610	-	1/1/15/20	14/39/115/115	-
24	CLA	n	604	-	1/1/12/20	9/21/97/115	-
25	LUT	8	311	-	-	1/29/67/67	0/2/2/2
24	CLA	b	602	-	1/1/15/20	16/39/115/115	-
24	CLA	s	608	-	1/1/11/20	7/15/91/115	-
28	XAT	AB	312	-	-	16/31/93/93	0/4/4/4
26	NEX	BB	318	-	-	10/27/83/83	0/3/3/3
29	BCR	h	101	-	-	5/29/63/63	0/2/2/2
23	CHL	n	601	8	3/3/19/26	19/33/131/137	-
24	CLA	6	603	-	1/1/13/20	7/27/103/115	-
23	CHL	5	605	1	3/3/16/26	6/15/113/137	-
23	CHL	Y	302	8	3/3/19/26	16/33/131/137	-
24	CLA	c	505	-	1/1/15/20	10/39/115/115	-
23	CHL	7	306	1	3/3/16/26	7/15/113/137	-
24	CLA	r	611	22	1/1/11/20	6/20/96/115	-
29	BCR	BF	516	-	-	6/29/63/63	0/2/2/2
24	CLA	B	616	4	1/1/15/20	16/39/115/115	-
26	NEX	n	617	-	-	15/27/83/83	0/3/3/3
34	DGD	h	102	-	-	15/51/91/95	0/2/2/2
24	CLA	n	613	-	1/1/14/20	11/33/109/115	-
24	CLA	1	508	21	1/1/15/20	15/39/115/115	-
24	CLA	BV	612	14	1/1/13/20	10/27/103/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CHL	9	608	-	3/3/16/26	7/15/113/137	-
24	CLA	a	410	-	1/1/14/20	8/33/109/115	-
30	LMG	C	519	-	-	22/46/66/70	0/1/1/1
24	CLA	C	504	21	1/1/15/20	14/39/115/115	-
24	CLA	b	612	4	1/1/15/20	11/39/115/115	-
24	CLA	9	613	1	1/1/13/20	7/27/103/115	-
23	CHL	Ba	307	-	3/3/16/26	6/20/118/137	-
24	CLA	b	609	4	1/1/15/20	13/39/115/115	-
24	CLA	c	504	21	1/1/15/20	17/39/115/115	-
24	CLA	BE	606	4	1/1/15/20	16/39/115/115	-
24	CLA	g	604	-	1/1/12/20	9/21/97/115	-
30	LMG	b	621	-	-	26/46/66/70	0/1/1/1
25	LUT	Y	317	-	-	1/29/67/67	0/2/2/2
23	CHL	Ba	309	-	3/3/19/26	14/33/131/137	-
23	CHL	n	605	8	3/3/16/26	8/18/116/137	-
24	CLA	BF	506	-	1/1/15/20	13/39/115/115	-
23	CHL	g	601	8	3/3/19/26	15/33/131/137	-
26	NEX	r	617	-	-	17/27/83/83	0/3/3/3
24	CLA	1	509	21	1/1/15/20	8/39/115/115	-
30	LMG	C	501	-	-	18/46/66/70	0/1/1/1
24	CLA	v	608	4	1/1/15/20	13/39/115/115	-
25	LUT	6	616	-	-	1/29/67/67	0/2/2/2
24	CLA	BV	609	14	1/1/13/20	8/27/103/115	-
24	CLA	AA	315	1	1/1/11/20	3/15/91/115	-
24	CLA	Au	604	-	1/1/12/20	7/21/97/115	-
27	LHG	BG	404	-	-	16/53/53/53	-
29	BCR	K	102	-	-	6/29/63/63	0/2/2/2
32	SQD	R	411	-	-	26/49/69/69	0/1/1/1
23	CHL	0	606	-	3/3/16/26	8/15/113/137	-
26	NEX	g	617	-	-	17/27/83/83	0/3/3/3
23	CHL	Au	601	8	3/3/19/26	16/33/131/137	-
34	DGD	A	402	-	-	24/48/88/95	0/2/2/2
25	LUT	5	616	-	-	2/29/67/67	0/2/2/2
25	LUT	Au	616	-	-	1/29/67/67	0/2/2/2
24	CLA	s	602	14	1/1/14/20	13/35/111/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
31	PL9	D	403	-	-	5/53/73/73	0/1/1/1
24	CLA	BU	610	27	1/1/11/20	10/20/96/115	-
24	CLA	Y	314	8	1/1/15/20	12/39/115/115	-
28	XAT	N	619	-	-	17/31/93/93	0/4/4/4
29	BCR	H	101	-	-	5/29/63/63	0/2/2/2
29	BCR	A	411	-	-	5/29/63/63	0/2/2/2
26	NEX	Au	617	-	-	19/27/83/83	0/3/3/3
24	CLA	S	608	-	1/1/11/20	6/15/91/115	-
24	CLA	0	614	2	1/1/11/20	11/19/95/115	-
24	CLA	BB	312	-	1/1/14/20	13/33/109/115	-
25	LUT	s	614	-	-	2/29/67/67	0/2/2/2
23	CHL	BV	606	-	3/3/17/26	7/24/122/137	-
23	CHL	5	606	1	3/3/16/26	4/15/113/137	-
24	CLA	8	301	3	1/1/9/20	3/9/81/115	-
27	LHG	v	621	-	-	22/53/53/53	-
24	CLA	BB	314	8	1/1/15/20	12/39/115/115	-
24	CLA	B	614	-	1/1/15/20	20/39/115/115	-
38	PHO	R	407	-	-	6/37/103/103	0/5/6/6
27	LHG	A2	618	24	-	17/53/53/53	-
24	CLA	b	603	4	1/1/15/20	13/39/115/115	-
23	CHL	9	609	-	3/3/18/26	13/29/127/137	-
24	CLA	BQ	611	27	1/1/14/20	13/33/109/115	-
24	CLA	n	611	27	1/1/14/20	13/33/109/115	-
24	CLA	v	606	-	1/1/15/20	15/39/115/115	-
24	CLA	y	315	-	1/1/11/20	6/19/95/115	-
24	CLA	N	614	-	1/1/11/20	7/19/95/115	-
24	CLA	8	309	-	1/1/11/20	5/15/91/115	-
24	CLA	BU	614	-	1/1/11/20	9/15/91/115	-
29	BCR	R	410	-	-	5/29/63/63	0/2/2/2
23	CHL	N	609	8	3/3/19/26	11/33/131/137	-
25	LUT	Ba	317	-	-	1/29/67/67	0/2/2/2
27	LHG	d	404	-	-	16/53/53/53	-
24	CLA	0	610	2	1/1/14/20	10/33/109/115	-
24	CLA	S	610	-	1/1/13/20	10/29/105/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
27	LHG	6	617	24	-	13/51/51/53	-
24	CLA	BF	510	21	1/1/15/20	8/39/115/115	-
27	LHG	C	521	-	-	23/53/53/53	-
29	BCR	B	623	-	-	12/29/63/63	0/2/2/2
30	LMG	BF	501	-	-	22/46/66/70	0/1/1/1
34	DGD	H	102	-	-	15/51/91/95	0/2/2/2
25	LUT	0	615	-	-	2/29/67/67	0/2/2/2
24	CLA	BU	611	22	1/1/11/20	6/20/96/115	-
29	BCR	F	101	-	-	7/29/63/63	0/2/2/2
24	CLA	BG	402	-	1/1/15/20	12/39/115/115	-
24	CLA	AA	311	1	1/1/11/20	6/15/93/115	-
24	CLA	v	609	4	1/1/15/20	11/39/115/115	-
23	CHL	r	607	22	3/3/18/26	15/27/125/137	-
24	CLA	BE	612	4	1/1/15/20	11/39/115/115	-
24	CLA	g	611	27	1/1/14/20	11/33/109/115	-
29	BCR	Ay	102	-	-	6/29/63/63	0/2/2/2
33	HEM	F	102	7	-	5/14/54/54	-
27	LHG	1	521	-	-	23/53/53/53	-
24	CLA	A2	602	8	1/1/15/20	14/39/115/115	-
23	CHL	BH	601	-	3/3/16/26	2/13/111/137	-
23	CHL	n	606	8	3/3/16/26	8/20/118/137	-
23	CHL	Au	609	8	3/3/17/26	8/21/121/137	-
23	CHL	BQ	608	-	3/3/19/26	13/33/131/137	-
29	BCR	8	313	-	-	16/29/63/63	0/2/2/2
29	BCR	Ay	101	-	-	9/29/63/63	0/2/2/2
24	CLA	Au	611	27	1/1/14/20	10/33/109/115	-
23	CHL	Y	307	-	3/3/16/26	7/20/118/137	-
23	CHL	G	609	-	3/3/17/26	8/21/121/137	-
24	CLA	N	604	-	1/1/12/20	6/21/97/115	-
24	CLA	D	401	5	1/1/15/20	16/39/115/115	-
24	CLA	b	604	4	1/1/15/20	11/39/115/115	-
24	CLA	r	614	-	1/1/11/20	9/15/91/115	-
27	LHG	BB	319	-	-	18/53/53/53	-
34	DGD	C	517	-	-	21/51/91/95	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CHL	BV	607	-	3/3/16/26	7/15/113/137	-
23	CHL	A2	601	8	3/3/19/26	19/33/131/137	-
24	CLA	v	605	4	1/1/15/20	20/39/115/115	-
23	CHL	5	607	-	3/3/18/26	16/30/128/137	-
24	CLA	9	614	1	1/1/11/20	6/15/91/115	-
25	LUT	7	317	-	-	1/29/67/67	0/2/2/2
24	CLA	G	611	27	1/1/14/20	10/33/109/115	-
23	CHL	S	601	14	3/3/16/26	5/15/113/137	-
23	CHL	A2	609	8	3/3/19/26	11/33/131/137	-
24	CLA	c	503	21	1/1/15/20	14/39/115/115	-
24	CLA	7	304	-	1/1/13/20	10/27/103/115	-
24	CLA	b	617	4	1/1/15/20	17/39/115/115	-
24	CLA	AB	309	-	1/1/11/20	5/15/91/115	-
24	CLA	v	610	-	1/1/15/20	14/39/115/115	-
24	CLA	A2	610	-	1/1/15/20	13/39/115/115	-
24	CLA	r	603	22	1/1/14/20	8/33/109/115	-
24	CLA	Au	602	8	1/1/15/20	13/39/115/115	-
24	CLA	BQ	612	-	1/1/14/20	5/33/109/115	-
30	LMG	i	101	-	-	18/43/63/70	0/1/1/1
24	CLA	d	401	5	1/1/15/20	16/39/115/115	-
23	CHL	Y	309	-	3/3/19/26	14/33/131/137	-
24	CLA	9	610	1	1/1/13/20	7/29/105/115	-
24	CLA	BQ	614	-	1/1/11/20	7/19/95/115	-
28	XAT	Au	619	-	-	14/31/93/93	0/4/4/4
26	NEX	s	616	-	-	15/27/83/83	0/3/3/3
24	CLA	BE	611	-	1/1/15/20	13/39/115/115	-
24	CLA	C	502	21	1/1/15/20	15/39/115/115	-
23	CHL	Y	306	8	3/3/16/26	8/18/116/137	-
34	DGD	a	413	-	-	25/49/89/95	0/2/2/2
24	CLA	a	407	-	1/1/12/20	8/21/97/115	-
24	CLA	5	614	1	1/1/11/20	6/15/91/115	-
24	CLA	Y	304	8	1/1/15/20	12/39/115/115	-
28	XAT	G	619	-	-	14/31/93/93	0/4/4/4
29	BCR	C	515	-	-	3/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	R	404	20	1/1/15/20	8/39/115/115	-
27	LHG	BQ	618	24	-	20/53/53/53	-
24	CLA	6	614	2	1/1/11/20	11/19/95/115	-
24	CLA	A2	612	-	1/1/14/20	5/33/109/115	-
27	LHG	B	621	-	-	21/53/53/53	-
28	XAT	AA	318	-	-	12/31/93/93	0/4/4/4
30	LMG	d	405	-	-	14/41/61/70	0/1/1/1
24	CLA	A6	604	-	1/1/12/20	8/21/97/115	-
24	CLA	Aw	102	-	1/1/15/20	13/39/115/115	-
25	LUT	9	615	-	-	3/29/67/67	0/2/2/2
24	CLA	1	510	21	1/1/15/20	17/39/115/115	-
24	CLA	s	604	-	1/1/12/20	5/21/97/115	-
30	LMG	A0	201	-	-	17/43/63/70	0/1/1/1
23	CHL	BB	307	-	3/3/16/26	7/20/118/137	-
23	CHL	n	607	-	3/3/19/26	14/33/131/137	-
24	CLA	AA	312	-	1/1/11/20	9/15/91/115	-
24	CLA	C	513	21	1/1/15/20	14/39/115/115	-
24	CLA	BQ	613	-	1/1/14/20	12/33/109/115	-
24	CLA	BQ	610	8	1/1/15/20	14/39/115/115	-
24	CLA	BF	509	21	1/1/15/20	16/39/115/115	-
24	CLA	y	312	27	1/1/14/20	13/33/109/115	-
24	CLA	v	611	4	1/1/15/20	10/39/115/115	-
23	CHL	8	304	-	3/3/16/26	8/15/113/137	-
23	CHL	Ba	308	-	3/3/19/26	17/33/131/137	-
24	CLA	Ba	311	8	1/1/14/20	11/33/109/115	-
25	LUT	y	317	-	-	1/29/67/67	0/2/2/2
27	LHG	b	622	-	-	22/53/53/53	-
29	BCR	BN	101	-	-	9/29/63/63	0/2/2/2
25	LUT	AB	311	-	-	1/29/67/67	0/2/2/2
25	LUT	S	614	-	-	2/29/67/67	0/2/2/2
23	CHL	AA	306	1	3/3/16/26	7/15/113/137	-
24	CLA	Y	315	-	1/1/11/20	6/19/95/115	-
24	CLA	g	610	8	1/1/14/20	20/38/114/115	-
24	CLA	g	603	8	1/1/15/20	13/39/115/115	-

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CHL	Y	310	8	3/3/19/26	17/33/131/137	-
23	CHL	G	607	-	3/3/19/26	14/33/131/137	-
23	CHL	6	606	-	3/3/16/26	7/15/113/137	-
24	CLA	A2	611	27	1/1/14/20	14/33/109/115	-
24	CLA	v	615	-	1/1/15/20	16/39/115/115	-
24	CLA	BD	405	20	1/1/15/20	7/39/115/115	-
24	CLA	9	611	27	1/1/11/20	8/15/91/115	-
25	LUT	A2	615	-	-	1/29/67/67	0/2/2/2
24	CLA	S	604	-	1/1/12/20	8/21/97/115	-
24	CLA	Au	603	8	1/1/15/20	13/39/115/115	-
24	CLA	G	602	8	1/1/15/20	13/39/115/115	-
23	CHL	5	608	-	3/3/16/26	7/15/113/137	-
24	CLA	AA	303	1	1/1/14/20	5/35/111/115	-
24	CLA	C	511	21	1/1/15/20	12/39/115/115	-
31	PL9	2	404	-	-	5/53/73/73	0/1/1/1
24	CLA	5	613	1	1/1/13/20	7/27/103/115	-
24	CLA	BE	607	-	1/1/15/20	13/39/115/115	-
24	CLA	G	603	8	1/1/15/20	13/39/115/115	-
23	CHL	g	608	-	3/3/19/26	21/33/131/137	-
23	CHL	6	608	2	3/3/16/26	6/15/113/137	-
26	NEX	BB	320	-	-	17/27/83/83	0/3/3/3
24	CLA	r	609	22	1/1/15/20	11/39/115/115	-
24	CLA	BJ	611	27	1/1/14/20	11/33/109/115	-
24	CLA	1	512	-	1/1/15/20	10/39/115/115	-
27	LHG	0	617	24	-	12/51/51/53	-
24	CLA	Ba	304	-	1/1/15/20	11/39/115/115	-
30	LMG	v	623	-	-	17/35/55/70	0/1/1/1
34	DGD	1	517	-	-	22/51/91/95	0/2/2/2
23	CHL	y	309	-	3/3/19/26	15/33/131/137	-
24	CLA	Ba	314	8	1/1/15/20	15/39/115/115	-
24	CLA	BU	603	22	1/1/14/20	8/33/109/115	-
25	LUT	A6	615	-	-	1/29/67/67	0/2/2/2
24	CLA	2	402	5	1/1/15/20	16/39/115/115	-
30	LMG	v	620	-	-	19/46/66/70	0/1/1/1

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
23	CHL	Au	608	-	3/3/19/26	22/33/131/137	-
24	CLA	Y	303	8	1/1/15/20	20/39/115/115	-
24	CLA	B	604	4	1/1/15/20	13/39/115/115	-
23	CHL	7	307	1	3/3/16/26	5/15/113/137	-
27	LHG	Ba	319	24	-	20/53/53/53	-
24	CLA	BU	601	22	1/1/11/20	8/20/96/115	-
25	LUT	BB	317	-	-	1/29/67/67	0/2/2/2
28	XAT	Ba	301	-	-	15/31/93/93	0/4/4/4
24	CLA	AA	313	-	1/1/11/20	4/15/91/115	-
29	BCR	BD	411	-	-	5/29/63/63	0/2/2/2
27	LHG	r	618	24	-	12/46/46/53	-
30	LMG	BE	621	-	-	23/46/66/70	0/1/1/1
24	CLA	y	313	-	1/1/14/20	12/33/109/115	-
24	CLA	BB	303	8	1/1/15/20	23/39/115/115	-
24	CLA	D	402	-	1/1/15/20	11/39/115/115	-
24	CLA	y	305	-	1/1/12/20	10/21/97/115	-
23	CHL	BJ	601	8	3/3/19/26	15/33/131/137	-
33	HEM	4	102	7	-	5/14/54/54	-
24	CLA	0	611	27	1/1/13/20	13/27/103/115	-
24	CLA	BV	604	-	1/1/12/20	6/21/97/115	-
38	PHO	BD	408	-	-	6/37/103/103	0/5/6/6
24	CLA	c	509	21	1/1/15/20	16/39/115/115	-
24	CLA	5	604	-	1/1/12/20	11/21/97/115	-
23	CHL	N	607	-	3/3/19/26	13/33/131/137	-
24	CLA	a	405	20	1/1/15/20	8/39/115/115	-
24	CLA	b	616	-	1/1/15/20	12/39/115/115	-
26	NEX	BJ	617	-	-	17/27/83/83	0/3/3/3
25	LUT	BQ	615	-	-	0/29/67/67	0/2/2/2
27	LHG	BE	622	-	-	22/53/53/53	-
24	CLA	B	605	4	1/1/15/20	18/39/115/115	-
24	CLA	b	613	4	1/1/15/20	12/39/115/115	-
27	LHG	W	201	-	-	15/53/53/53	-
24	CLA	B	613	4	1/1/15/20	14/39/115/115	-
29	BCR	BE	620	-	-	5/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
24	CLA	v	607	-	1/1/15/20	20/39/115/115	-
24	CLA	9	603	-	1/1/13/20	7/27/103/115	-
24	CLA	0	612	-	1/1/11/20	6/15/91/115	-
24	CLA	r	602	22	1/1/13/20	8/27/105/115	-
32	SQD	D	406	-	-	21/45/65/69	0/1/1/1
25	LUT	n	615	-	-	0/29/67/67	0/2/2/2
23	CHL	BB	308	-	3/3/19/26	15/33/131/137	-
34	DGD	Av	102	-	-	14/51/91/95	0/2/2/2
23	CHL	7	309	-	3/3/16/26	9/15/113/137	-
24	CLA	BE	603	4	1/1/15/20	15/39/115/115	-
23	CHL	BQ	605	8	3/3/16/26	9/18/116/137	-
23	CHL	g	605	8	3/3/16/26	5/15/113/137	-
23	CHL	6	605	2	3/3/16/26	5/15/113/137	-
24	CLA	s	609	14	1/1/13/20	7/27/103/115	-
24	CLA	BJ	602	8	1/1/15/20	15/39/115/115	-
28	XAT	g	619	-	-	12/31/93/93	0/4/4/4
24	CLA	C	508	21	1/1/15/20	15/39/115/115	-
27	LHG	BY	201	-	-	16/53/53/53	-
24	CLA	8	303	-	1/1/11/20	6/15/91/115	-
25	LUT	A2	616	-	-	1/29/67/67	0/2/2/2
30	LMG	B	620	-	-	19/46/66/70	0/1/1/1
24	CLA	A2	613	8	1/1/14/20	9/33/109/115	-
24	CLA	c	508	-	1/1/15/20	16/39/115/115	-
24	CLA	AB	308	-	1/1/11/20	5/15/91/115	-
24	CLA	C	503	21	1/1/15/20	14/39/115/115	-
24	CLA	S	613	14	1/1/11/20	9/20/96/115	-
23	CHL	Au	605	8	3/3/16/26	7/15/113/137	-
24	CLA	5	602	1	1/1/14/20	16/35/111/115	-
25	LUT	AA	317	-	-	1/29/67/67	0/2/2/2
23	CHL	Y	308	-	3/3/19/26	15/33/131/137	-
24	CLA	r	610	27	1/1/11/20	10/20/96/115	-
24	CLA	BU	609	22	1/1/15/20	11/39/115/115	-
24	CLA	BD	410	-	1/1/14/20	8/33/109/115	-
28	XAT	Y	301	-	-	18/31/93/93	0/4/4/4
29	BCR	B	619	-	-	5/29/63/63	0/2/2/2

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Mol	Type	Chain	Res	Link	Chirals	Torsions	Rings
32	SQD	A1	101	-	-	19/49/69/69	0/1/1/1
24	CLA	BB	311	8	1/1/14/20	10/33/109/115	-
29	BCR	v	617	-	-	5/29/63/63	0/2/2/2
23	CHL	BJ	609	-	3/3/18/26	8/27/125/137	-

The worst 5 of 7349 bond length outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(Å)	Ideal(Å)
23	BJ	609	CHL	C2C-C3C	11.50	1.47	1.36
23	g	609	CHL	C2C-C3C	11.47	1.47	1.36
23	AA	306	CHL	C2C-C3C	11.44	1.47	1.36
23	7	306	CHL	C2C-C3C	11.41	1.47	1.36
23	Ba	310	CHL	C2C-C3C	11.38	1.47	1.36

The worst 5 of 6324 bond angle outliers are listed below:

Mol	Chain	Res	Type	Atoms	Z	Observed(°)	Ideal(°)
28	BB	301	XAT	O24-C25-C24	26.35	138.19	113.49
28	AA	301	XAT	O24-C25-C24	26.28	138.12	113.49
28	N	619	XAT	O24-C25-C24	26.22	138.06	113.49
28	5	619	XAT	O4-C5-C4	26.21	138.06	113.49
28	A2	619	XAT	O24-C25-C24	26.19	138.04	113.49

5 of 778 chirality outliers are listed below:

Mol	Chain	Res	Type	Atom
23	5	601	CHL	NC
23	5	601	CHL	NA
23	5	601	CHL	ND
23	5	605	CHL	NC
23	5	605	CHL	NA

5 of 8461 torsion outliers are listed below:

Mol	Chain	Res	Type	Atoms
23	5	601	CHL	C3A-C2A-CAA-CBA
23	5	601	CHL	C4C-C3C-CAC-CBC
23	5	601	CHL	CBD-CGD-O2D-CED
23	5	605	CHL	CHA-CBD-CGD-O1D
23	5	607	CHL	C1A-C2A-CAA-CBA

There are no ring outliers.

699 monomers are involved in 2718 short contacts:

Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	0	607	CHL	6	0
23	5	601	CHL	5	0
24	7	305	CLA	4	0
24	C	506	CLA	5	0
24	r	601	CLA	4	0
34	R	401	DGD	2	0
24	b	605	CLA	6	0
30	c	518	LMG	4	0
23	6	601	CHL	16	0
26	5	617	NEX	1	0
24	5	611	CLA	2	0
24	r	612	CLA	4	0
24	s	603	CLA	1	0
29	a	411	BCR	3	0
24	c	514	CLA	7	0
27	Az	102	LHG	3	0
28	7	301	XAT	3	0
24	6	611	CLA	5	0
24	6	613	CLA	11	0
29	b	601	BCR	7	0
31	d	403	PL9	3	0
28	BJ	619	XAT	1	0
24	BV	602	CLA	4	0
24	Au	613	CLA	6	0
24	A	405	CLA	6	0
29	b	618	BCR	3	0
24	6	604	CLA	6	0
24	BJ	603	CLA	3	0
24	1	511	CLA	3	0
25	Y	316	LUT	4	0
25	6	615	LUT	8	0
23	BV	601	CHL	3	0
25	Ba	316	LUT	4	0
24	B	608	CLA	5	0
29	1	514	BCR	3	0
23	8	305	CHL	2	0
24	1	507	CLA	4	0
23	S	605	CHL	1	0
23	BQ	606	CHL	7	0
23	BQ	607	CHL	10	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	1	505	CLA	2	0
29	z	102	BCR	3	0
34	BF	518	DGD	4	0
24	BD	406	CLA	8	0
29	BK	101	BCR	8	0
24	s	610	CLA	3	0
23	N	605	CHL	2	0
23	A2	605	CHL	2	0
28	7	318	XAT	1	0
23	BU	605	CHL	17	0
29	C	514	BCR	2	0
23	BU	613	CHL	2	0
28	r	616	XAT	5	0
24	9	602	CLA	7	0
24	N	613	CLA	5	0
23	G	601	CHL	13	0
24	b	610	CLA	12	0
24	C	509	CLA	2	0
25	BB	316	LUT	5	0
25	G	616	LUT	5	0
29	b	620	BCR	3	0
24	C	510	CLA	1	0
34	BK	102	DGD	6	0
23	A6	606	CHL	7	0
23	A6	607	CHL	6	0
24	BE	604	CLA	1	0
24	AB	303	CLA	3	0
24	n	612	CLA	3	0
26	G	617	NEX	1	0
23	9	601	CHL	6	0
28	BU	616	XAT	4	0
24	Ba	303	CLA	2	0
32	2	408	SQD	3	0
24	BE	602	CLA	5	0
24	BB	304	CLA	1	0
29	k	101	BCR	1	0
24	BE	617	CLA	3	0
24	S	609	CLA	4	0
24	BJ	604	CLA	2	0
23	BB	310	CHL	10	0
32	A	413	SQD	8	0
23	n	609	CHL	15	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
25	BV	614	LUT	6	0
24	N	612	CLA	1	0
23	r	613	CHL	3	0
24	BU	612	CLA	4	0
24	b	608	CLA	3	0
29	BE	618	BCR	4	0
23	AB	307	CHL	8	0
24	g	612	CLA	3	0
24	BB	305	CLA	1	0
24	BE	609	CLA	4	0
23	s	605	CHL	5	0
23	g	606	CHL	7	0
23	6	607	CHL	7	0
29	Av	101	BCR	4	0
27	N	618	LHG	5	0
23	BJ	605	CHL	3	0
26	Ba	318	NEX	2	0
24	Au	612	CLA	3	0
24	AB	301	CLA	6	0
24	BV	608	CLA	6	0
27	g	618	LHG	4	0
28	n	619	XAT	2	0
23	8	307	CHL	4	0
23	s	607	CHL	4	0
24	G	612	CLA	3	0
24	A2	603	CLA	3	0
24	7	313	CLA	3	0
24	N	610	CLA	9	0
24	n	602	CLA	5	0
24	N	611	CLA	3	0
27	Au	618	LHG	4	0
27	BU	617	LHG	5	0
24	c	510	CLA	2	0
24	A2	614	CLA	3	0
25	9	616	LUT	10	0
24	n	603	CLA	1	0
24	1	506	CLA	5	0
24	B	615	CLA	4	0
32	L	101	SQD	3	0
27	G	618	LHG	3	0
29	BE	601	BCR	6	0
30	BL	101	LMG	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	Ba	302	CHL	10	0
24	Ba	312	CLA	1	0
24	AB	302	CLA	2	0
29	BI	101	BCR	2	0
32	l	102	SQD	2	0
25	BJ	616	LUT	10	0
24	Au	610	CLA	3	0
24	BF	512	CLA	3	0
23	Ba	310	CHL	12	0
26	S	616	NEX	3	0
24	2	403	CLA	1	0
25	5	615	LUT	6	0
26	AA	319	NEX	4	0
34	a	401	DGD	2	0
23	N	608	CHL	12	0
24	AA	304	CLA	4	0
24	n	610	CLA	10	0
25	Au	615	LUT	7	0
24	G	610	CLA	4	0
25	g	615	LUT	7	0
24	b	614	CLA	2	0
24	y	311	CLA	4	0
23	N	601	CHL	10	0
29	4	101	BCR	3	0
31	BG	403	PL9	2	0
30	Aw	101	LMG	1	0
24	v	601	CLA	5	0
23	y	308	CHL	6	0
24	s	611	CLA	2	0
24	BF	502	CLA	2	0
24	BF	507	CLA	4	0
24	C	505	CLA	3	0
24	7	312	CLA	2	0
23	G	608	CHL	7	0
23	S	606	CHL	7	0
23	S	607	CHL	6	0
28	AA	301	XAT	3	0
24	AA	314	CLA	3	0
32	l	101	SQD	5	0
24	BF	514	CLA	7	0
25	AA	316	LUT	7	0
30	BF	519	LMG	4	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
33	BI	102	HEM	2	0
27	9	618	LHG	3	0
23	N	606	CHL	5	0
23	AA	310	CHL	10	0
23	0	601	CHL	12	0
24	9	612	CLA	2	0
23	BU	606	CHL	12	0
23	BU	607	CHL	12	0
24	b	615	CLA	4	0
27	1	520	LHG	1	0
29	1	515	BCR	4	0
27	L	102	LHG	3	0
24	y	314	CLA	3	0
24	d	402	CLA	1	0
24	r	604	CLA	3	0
24	BF	504	CLA	2	0
23	BJ	608	CHL	7	0
24	AA	305	CLA	4	0
24	Ba	313	CLA	2	0
27	BE	624	LHG	2	0
24	BU	608	CLA	3	0
24	R	405	CLA	6	0
26	Y	318	NEX	1	0
23	r	605	CHL	17	0
28	9	619	XAT	11	0
32	d	406	SQD	3	0
24	BV	611	CLA	2	0
27	5	618	LHG	3	0
23	y	310	CHL	12	0
24	v	612	CLA	4	0
24	v	614	CLA	8	0
25	S	615	LUT	7	0
24	B	611	CLA	5	0
24	BF	505	CLA	2	0
34	1	516	DGD	1	0
24	B	601	CLA	4	0
23	BV	605	CHL	5	0
34	C	518	DGD	1	0
24	c	511	CLA	3	0
23	7	310	CHL	11	0
23	BB	306	CHL	5	0
23	7	308	CHL	6	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	A2	604	CLA	1	0
23	8	306	CHL	3	0
24	BU	604	CLA	3	0
25	n	616	LUT	6	0
23	BJ	606	CHL	6	0
24	v	613	CLA	2	0
23	0	609	CHL	12	0
30	1	501	LMG	2	0
24	7	314	CLA	3	0
24	y	303	CLA	3	0
29	b	619	BCR	3	0
24	1	513	CLA	7	0
24	A6	610	CLA	1	0
38	BD	409	PHO	1	0
24	N	603	CLA	1	0
38	a	408	PHO	4	0
29	v	622	BCR	5	0
23	BQ	601	CHL	11	0
24	A	407	CLA	3	0
27	BF	521	LHG	3	0
29	AB	313	BCR	5	0
25	BQ	616	LUT	6	0
27	BJ	618	LHG	4	0
24	s	612	CLA	1	0
24	B	606	CLA	8	0
24	A6	602	CLA	5	0
23	y	307	CHL	7	0
27	w	201	LHG	1	0
30	I	101	LMG	3	0
25	N	615	LUT	4	0
24	g	613	CLA	5	0
25	BU	615	LUT	10	0
25	s	615	LUT	9	0
23	6	609	CHL	13	0
24	1	504	CLA	2	0
24	B	612	CLA	3	0
24	A	410	CLA	1	0
24	G	613	CLA	6	0
24	BE	614	CLA	2	0
23	A6	601	CHL	2	0
27	C	520	LHG	2	0
24	b	607	CLA	9	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
29	B	617	BCR	6	0
23	BB	309	CHL	7	0
24	BB	313	CLA	2	0
23	s	601	CHL	3	0
26	A2	617	NEX	3	0
24	AB	310	CLA	2	0
24	A6	609	CLA	3	0
28	8	312	XAT	6	0
23	G	605	CHL	1	0
23	AA	307	CHL	2	0
24	BV	610	CLA	2	0
24	5	612	CLA	1	0
24	a	406	CLA	7	0
27	A0	202	LHG	1	0
38	A	408	PHO	6	0
34	BD	401	DGD	2	0
29	B	618	BCR	1	0
24	6	612	CLA	3	0
24	v	604	CLA	6	0
24	BD	407	CLA	3	0
24	1	503	CLA	1	0
23	y	302	CHL	11	0
24	BE	613	CLA	4	0
32	BO	101	SQD	5	0
23	5	609	CHL	15	0
24	8	308	CLA	7	0
29	BF	515	BCR	4	0
24	9	604	CLA	5	0
32	BO	102	SQD	1	0
28	BB	301	XAT	6	0
23	BQ	609	CHL	15	0
24	b	606	CLA	5	0
24	BJ	610	CLA	3	0
24	S	602	CLA	8	0
30	A	412	LMG	1	0
24	BE	615	CLA	4	0
26	BQ	617	NEX	3	0
24	c	506	CLA	3	0
28	5	619	XAT	11	0
25	BJ	615	LUT	7	0
24	0	603	CLA	1	0
25	g	616	LUT	9	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	Ba	305	CLA	2	0
24	5	610	CLA	13	0
23	A2	606	CHL	5	0
23	g	609	CHL	16	0
24	8	310	CLA	2	0
24	BF	513	CLA	3	0
25	A6	614	LUT	2	0
24	I	102	CLA	3	0
29	Bb	101	BCR	3	0
24	B	603	CLA	4	0
24	6	610	CLA	5	0
24	0	613	CLA	10	0
23	g	607	CHL	8	0
23	AA	309	CHL	4	0
28	BQ	619	XAT	5	0
34	1	518	DGD	2	0
24	Y	312	CLA	6	0
26	A6	616	NEX	2	0
24	BQ	602	CLA	6	0
24	5	603	CLA	3	0
24	g	602	CLA	5	0
24	6	602	CLA	12	0
24	A6	608	CLA	2	0
23	Au	606	CHL	2	0
23	Au	607	CHL	10	0
24	v	602	CLA	6	0
27	n	618	LHG	5	0
32	BG	406	SQD	4	0
28	A2	619	XAT	6	0
27	b	623	LHG	2	0
23	G	606	CHL	3	0
29	z	101	BCR	5	0
29	v	619	BCR	6	0
26	y	318	NEX	3	0
24	c	502	CLA	4	0
24	0	604	CLA	2	0
32	BD	412	SQD	6	0
23	7	302	CHL	9	0
24	S	612	CLA	1	0
27	c	520	LHG	3	0
32	Az	101	SQD	3	0
29	c	515	BCR	3	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
29	f	101	BCR	2	0
26	9	617	NEX	1	0
23	AA	302	CHL	11	0
24	BU	602	CLA	12	0
24	n	614	CLA	2	0
24	BE	605	CLA	5	0
33	f	102	HEM	2	0
23	AA	308	CHL	7	0
23	y	306	CHL	3	0
24	BG	401	CLA	7	0
36	BD	403	OEX	1	0
24	y	304	CLA	3	0
24	R	406	CLA	2	0
23	n	608	CHL	10	0
24	BV	603	CLA	1	0
24	BQ	603	CLA	1	0
27	Y	319	LHG	6	0
24	7	303	CLA	8	0
24	Y	313	CLA	1	0
26	N	617	NEX	3	0
24	B	609	CLA	11	0
24	7	311	CLA	4	0
24	A	406	CLA	5	0
24	BJ	613	CLA	6	0
25	N	616	LUT	6	0
23	r	606	CHL	13	0
24	N	602	CLA	2	0
24	B	607	CLA	2	0
32	a	412	SQD	6	0
24	BB	315	CLA	1	0
24	BE	610	CLA	11	0
27	D	404	LHG	3	0
23	A2	607	CHL	11	0
24	v	616	CLA	3	0
25	r	615	LUT	9	0
23	9	607	CHL	8	0
24	r	608	CLA	2	0
24	BE	608	CLA	3	0
25	0	616	LUT	9	0
27	y	319	LHG	5	0
23	AB	304	CHL	3	0
24	BF	511	CLA	5	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
30	c	501	LMG	3	0
24	BE	616	CLA	2	0
27	BE	623	LHG	1	0
24	BF	508	CLA	2	0
24	Y	311	CLA	5	0
24	c	513	CLA	3	0
24	B	602	CLA	6	0
24	c	512	CLA	5	0
23	BJ	607	CHL	10	0
26	7	319	NEX	5	0
25	BV	615	LUT	4	0
34	c	517	DGD	4	0
24	v	603	CLA	3	0
24	C	512	CLA	3	0
24	8	302	CLA	2	0
23	9	605	CHL	2	0
28	y	301	XAT	3	0
32	L	103	SQD	2	0
23	Ba	306	CHL	3	0
29	K	101	BCR	3	0
24	b	611	CLA	6	0
23	9	606	CHL	5	0
24	1	502	CLA	2	0
23	A2	608	CHL	11	0
25	y	316	LUT	5	0
24	0	602	CLA	5	0
23	A6	605	CHL	1	0
25	G	615	LUT	6	0
26	BV	616	NEX	5	0
23	s	606	CHL	11	0
23	BB	302	CHL	14	0
23	AB	305	CHL	2	0
23	AB	306	CHL	3	0
27	2	405	LHG	1	0
38	A	409	PHO	2	0
30	1	519	LMG	3	0
24	C	507	CLA	2	0
24	BJ	612	CLA	3	0
25	7	316	LUT	6	0
27	b	624	LHG	4	0
24	c	507	CLA	4	0
23	0	608	CHL	2	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	B	610	CLA	2	0
25	8	311	LUT	6	0
24	b	602	CLA	4	0
24	s	608	CLA	6	0
28	AB	312	XAT	6	0
26	BB	318	NEX	3	0
29	h	101	BCR	7	0
23	n	601	CHL	12	0
24	6	603	CLA	1	0
23	5	605	CHL	2	0
23	Y	302	CHL	12	0
24	c	505	CLA	5	0
24	r	611	CLA	1	0
29	BF	516	BCR	2	0
24	B	616	CLA	3	0
26	n	617	NEX	3	0
34	h	102	DGD	4	0
24	n	613	CLA	5	0
24	1	508	CLA	7	0
24	BV	612	CLA	1	0
23	9	608	CHL	4	0
24	a	410	CLA	1	0
30	C	519	LMG	3	0
24	C	504	CLA	2	0
24	b	612	CLA	3	0
24	9	613	CLA	7	0
23	Ba	307	CHL	6	0
24	b	609	CLA	5	0
24	c	504	CLA	4	0
24	BE	606	CLA	5	0
24	g	604	CLA	2	0
30	b	621	LMG	1	0
25	Y	317	LUT	5	0
23	Ba	309	CHL	8	0
23	n	605	CHL	2	0
24	BF	506	CLA	3	0
23	g	601	CHL	14	0
26	r	617	NEX	5	0
24	1	509	CLA	1	0
30	C	501	LMG	2	0
24	v	608	CLA	5	0
25	6	616	LUT	9	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	BV	609	CLA	7	0
27	BG	404	LHG	1	0
29	K	102	BCR	2	0
32	R	411	SQD	9	0
23	0	606	CHL	5	0
26	g	617	NEX	1	0
23	Au	601	CHL	14	0
34	A	402	DGD	2	0
25	5	616	LUT	9	0
25	Au	616	LUT	5	0
24	s	602	CLA	6	0
31	D	403	PL9	1	0
24	BU	610	CLA	3	0
24	Y	314	CLA	5	0
28	N	619	XAT	5	0
29	H	101	BCR	5	0
29	A	411	BCR	3	0
26	Au	617	NEX	1	0
24	S	608	CLA	3	0
24	0	614	CLA	4	0
24	BB	312	CLA	3	0
25	s	614	LUT	7	0
23	BV	606	CHL	10	0
23	5	606	CHL	7	0
24	8	301	CLA	6	0
27	v	621	LHG	2	0
24	BB	314	CLA	5	0
24	B	614	CLA	7	0
38	R	407	PHO	7	0
27	A2	618	LHG	3	0
24	b	603	CLA	10	0
23	9	609	CHL	15	0
24	BQ	611	CLA	2	0
24	n	611	CLA	2	0
24	v	606	CLA	9	0
24	N	614	CLA	3	0
24	8	309	CLA	1	0
24	BU	614	CLA	1	0
29	R	410	BCR	1	0
23	N	609	CHL	9	0
25	Ba	317	LUT	3	0
27	d	404	LHG	1	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	0	610	CLA	10	0
24	S	610	CLA	1	0
27	6	617	LHG	5	0
24	BF	510	CLA	3	0
27	C	521	LHG	3	0
29	B	623	BCR	8	0
30	BF	501	LMG	1	0
34	H	102	DGD	6	0
25	0	615	LUT	10	0
29	F	101	BCR	1	0
24	BG	402	CLA	1	0
24	AA	311	CLA	4	0
24	v	609	CLA	12	0
23	r	607	CHL	10	0
24	BE	612	CLA	3	0
24	g	611	CLA	3	0
29	Ay	102	BCR	5	0
33	F	102	HEM	1	0
27	1	521	LHG	3	0
24	A2	602	CLA	2	0
23	n	606	CHL	8	0
23	Au	609	CHL	8	0
23	BQ	608	CHL	9	0
29	8	313	BCR	6	0
29	Ay	101	BCR	3	0
24	Au	611	CLA	3	0
23	Y	307	CHL	5	0
23	G	609	CHL	18	0
24	D	401	CLA	7	0
24	b	604	CLA	1	0
24	r	614	CLA	3	0
27	BB	319	LHG	7	0
34	C	517	DGD	4	0
23	BV	607	CHL	5	0
23	A2	601	CHL	9	0
24	v	605	CLA	9	0
23	5	607	CHL	11	0
24	9	614	CLA	1	0
25	7	317	LUT	7	0
24	G	611	CLA	4	0
23	S	601	CHL	2	0
23	A2	609	CHL	10	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	c	503	CLA	1	0
24	7	304	CLA	5	0
24	b	617	CLA	3	0
24	AB	309	CLA	1	0
24	v	610	CLA	2	0
24	A2	610	CLA	6	0
24	r	603	CLA	1	0
24	Au	602	CLA	6	0
24	BQ	612	CLA	4	0
30	i	101	LMG	2	0
24	d	401	CLA	6	0
23	Y	309	CHL	5	0
24	9	610	CLA	9	0
24	BQ	614	CLA	2	0
28	Au	619	XAT	4	0
26	s	616	NEX	5	0
24	BE	611	CLA	3	0
24	C	502	CLA	3	0
23	Y	306	CHL	6	0
34	a	413	DGD	1	0
24	a	407	CLA	6	0
24	5	614	CLA	1	0
24	Y	304	CLA	2	0
28	G	619	XAT	4	0
29	C	515	BCR	3	0
24	R	404	CLA	5	0
27	BQ	618	LHG	6	0
24	6	614	CLA	4	0
24	A2	612	CLA	1	0
27	B	621	LHG	2	0
28	AA	318	XAT	3	0
24	A6	604	CLA	3	0
24	Aw	102	CLA	3	0
25	9	615	LUT	8	0
24	1	510	CLA	1	0
24	s	604	CLA	6	0
30	A0	201	LMG	1	0
23	BB	307	CHL	4	0
23	n	607	CHL	10	0
24	AA	312	CLA	1	0
36	a	403	OEX	1	0
24	C	513	CLA	6	0

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Mol	Chain	Res	Type	Clashes	Symm-Clashes
24	BQ	613	CLA	4	0
24	BQ	610	CLA	12	0
24	BF	509	CLA	9	0
24	y	312	CLA	1	0
24	v	611	CLA	5	0
23	8	304	CHL	2	0
23	Ba	308	CHL	8	0
24	Ba	311	CLA	4	0
25	y	317	LUT	4	0
29	BN	101	BCR	2	0
25	AB	311	LUT	9	0
25	S	614	LUT	4	0
24	Y	315	CLA	1	0
24	g	610	CLA	2	0
24	g	603	CLA	2	0
23	Y	310	CHL	12	0
23	G	607	CHL	11	0
23	6	606	CHL	7	0
24	A2	611	CLA	3	0
24	v	615	CLA	4	0
24	BD	405	CLA	8	0
24	9	611	CLA	2	0
25	A2	615	LUT	5	0
24	S	604	CLA	3	0
24	G	602	CLA	4	0
23	5	608	CHL	4	0
24	AA	303	CLA	11	0
24	C	511	CLA	5	0
31	2	404	PL9	1	0
24	5	613	CLA	7	0
24	BE	607	CLA	8	0
24	G	603	CLA	1	0
23	g	608	CHL	6	0
23	6	608	CHL	2	0
26	BB	320	NEX	5	0
24	r	609	CLA	6	0
24	BJ	611	CLA	3	0
24	1	512	CLA	2	0
27	0	617	LHG	8	0
24	Ba	304	CLA	3	0
34	1	517	DGD	4	0
23	y	309	CHL	8	0

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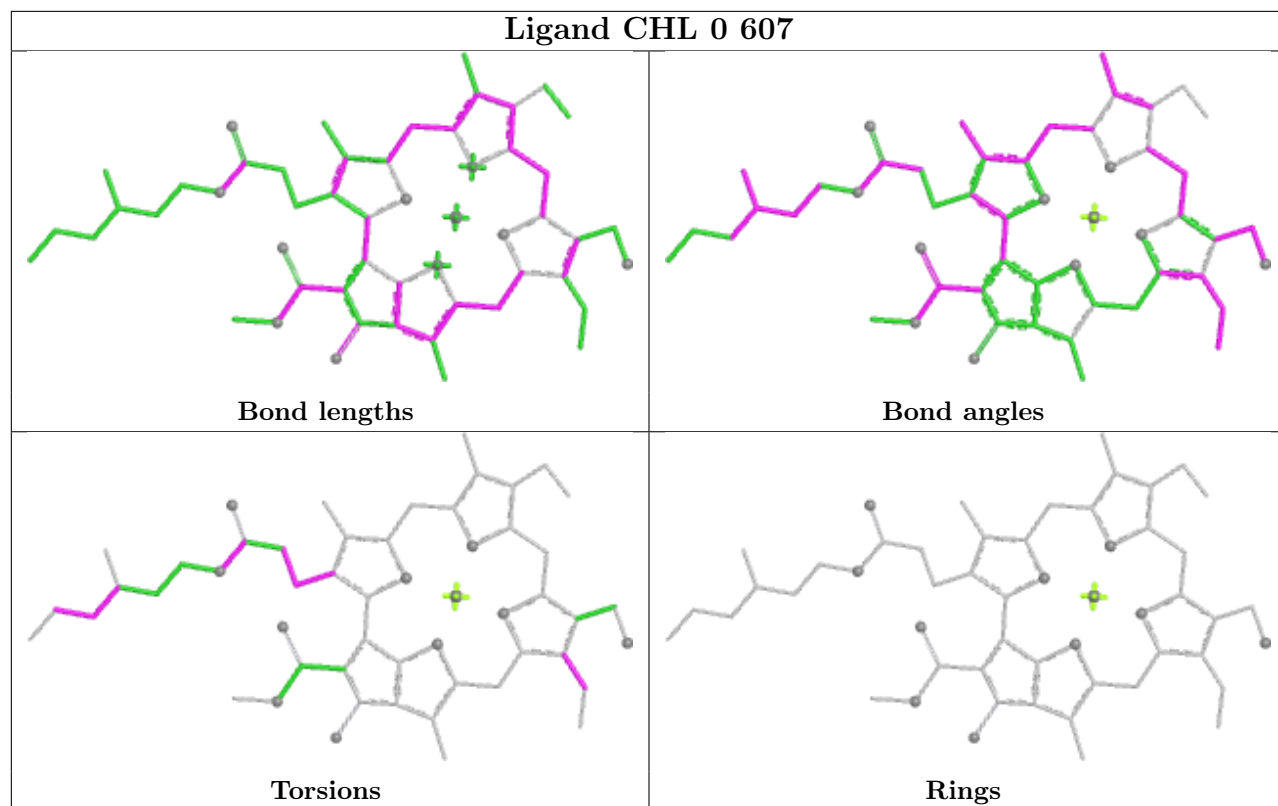
Mol	Chain	Res	Type	Clashes	Symm-Clashes
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24	BU	603	CLA	3	0
25	A6	615	LUT	8	0
24	2	402	CLA	7	0
23	Au	608	CHL	6	0
24	Y	303	CLA	3	0
24	B	604	CLA	6	0
23	7	307	CHL	2	0
27	Ba	319	LHG	4	0
24	BU	601	CLA	3	0
25	BB	317	LUT	6	0
28	Ba	301	XAT	2	0
24	AA	313	CLA	2	0
29	BD	411	BCR	2	0
27	r	618	LHG	6	0
30	BE	621	LMG	1	0
24	y	313	CLA	3	0
24	BB	303	CLA	3	0
24	y	305	CLA	2	0
23	BJ	601	CHL	15	0
33	4	102	HEM	3	0
24	0	611	CLA	6	0
24	BV	604	CLA	6	0
38	BD	408	PHO	5	0
24	c	509	CLA	5	0
24	5	604	CLA	6	0
23	N	607	CHL	8	0
24	a	405	CLA	5	0
24	b	616	CLA	4	0
26	BJ	617	NEX	1	0
25	BQ	615	LUT	5	0
24	B	605	CLA	10	0
24	b	613	CLA	5	0
27	W	201	LHG	1	0
24	B	613	CLA	2	0
29	BE	620	BCR	5	0
24	v	607	CLA	5	0
24	9	603	CLA	4	0
24	0	612	CLA	3	0
24	r	602	CLA	10	0
32	D	406	SQD	1	0
25	n	615	LUT	5	0

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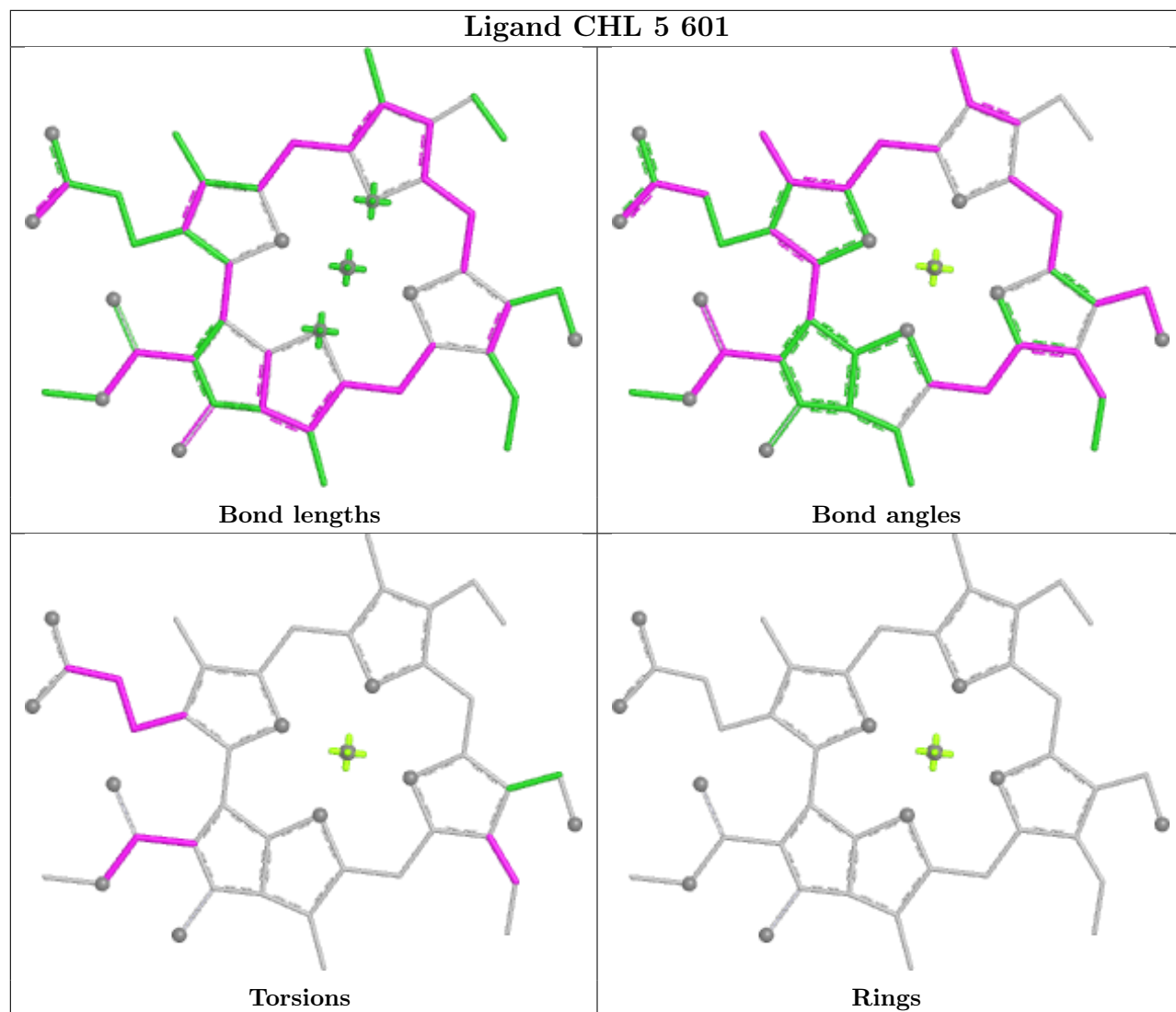
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Mol	Chain	Res	Type	Clashes	Symm-Clashes
23	BB	308	CHL	9	0
34	Av	102	DGD	6	0
23	7	309	CHL	5	0
24	BE	603	CLA	13	0
23	BQ	605	CHL	2	0
23	g	605	CHL	3	0
24	s	609	CLA	4	0
24	BJ	602	CLA	6	0
28	g	619	XAT	1	0
24	C	508	CLA	5	0
27	BY	201	LHG	1	0
24	8	303	CLA	2	0
25	A2	616	LUT	7	0
24	A2	613	CLA	5	0
24	c	508	CLA	5	0
24	AB	308	CLA	11	0
24	C	503	CLA	1	0
24	5	602	CLA	8	0
25	AA	317	LUT	7	0
23	Y	308	CHL	9	0
24	r	610	CLA	3	0
24	BU	609	CLA	5	0
24	BD	410	CLA	1	0
28	Y	301	XAT	5	0
29	B	619	BCR	6	0
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24	BB	311	CLA	3	0
29	v	617	BCR	5	0
23	BJ	609	CHL	15	0

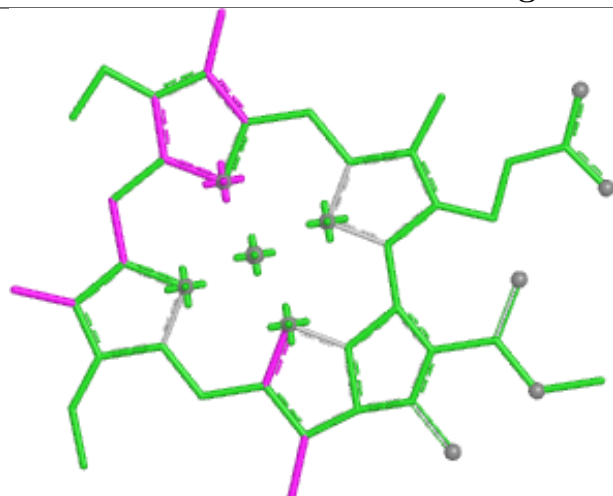
The following is a two-dimensional graphical depiction of Mogul quality analysis of bond lengths, bond angles, torsion angles, and ring geometry for all instances of the Ligand of Interest. In addition, ligands with molecular weight > 250 and outliers as shown on the validation Tables will also be included. For torsion angles, if less than 5% of the Mogul distribution of torsion angles is within 10 degrees of the torsion angle in question, then that torsion angle is considered an outlier. Any bond that is central to one or more torsion angles identified as an outlier by Mogul will be highlighted in the graph. For rings, the root-mean-square deviation (RMSD) between the ring in question and similar rings identified by Mogul is calculated over all ring torsion angles. If the average RMSD is greater than 60 degrees and the minimal RMSD between the ring in question and any Mogul-identified rings is also greater than 60 degrees, then that ring is considered an outlier. The outliers are highlighted in purple. The color gray indicates Mogul did not find sufficient equivalents in the CSD to analyse the geometry.



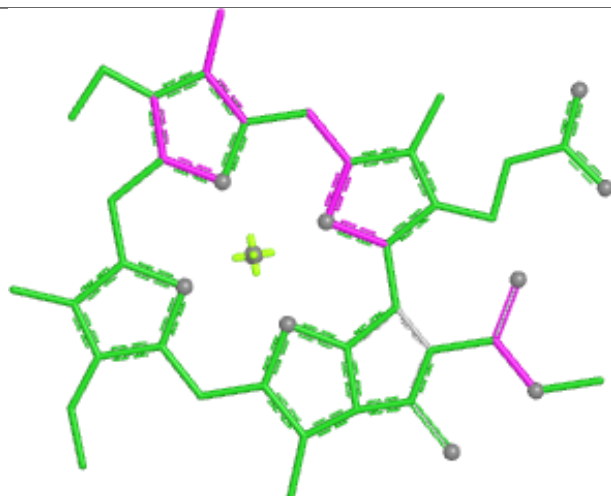
Ligand CHL 5 601



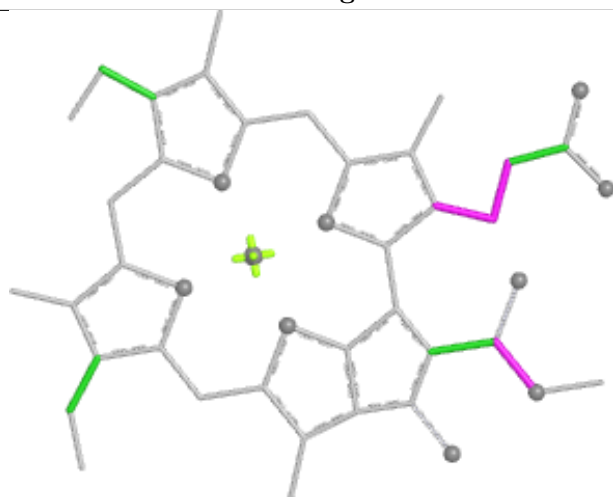
Ligand CLA 7 305



Bond lengths



Bond angles

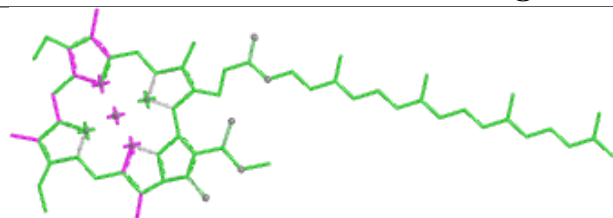


Torsions

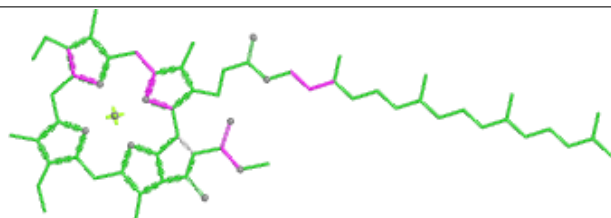


Rings

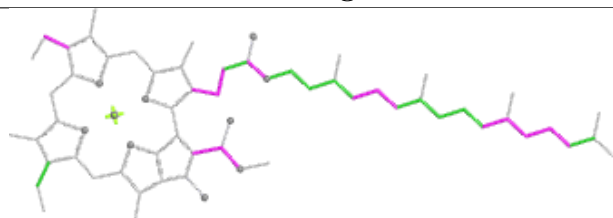
Ligand CLA C 506



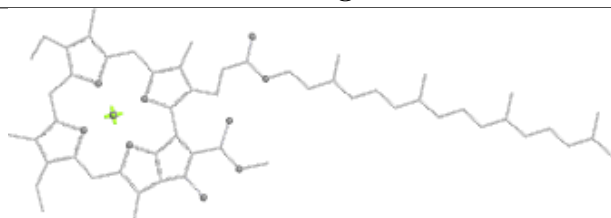
Bond lengths



Bond angles

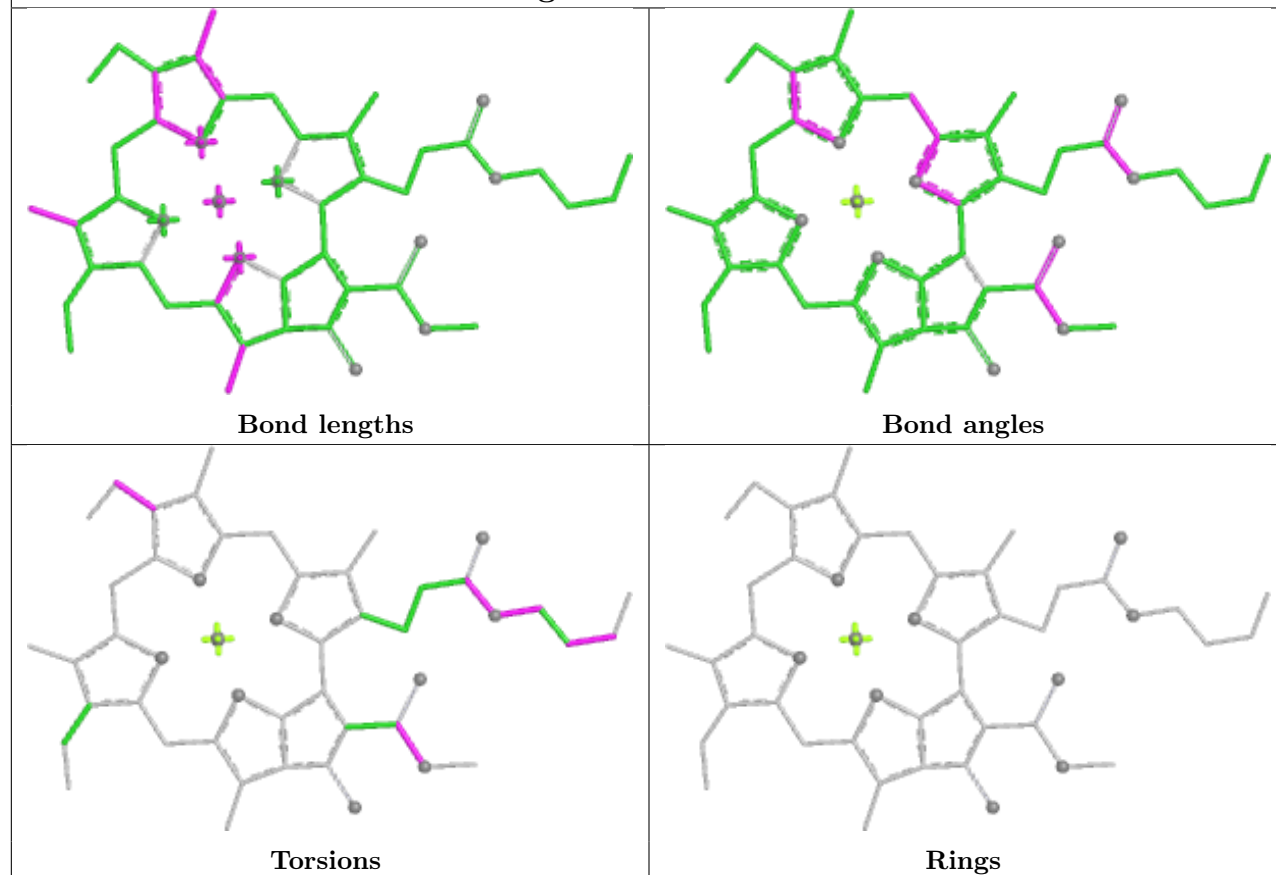


Torsions

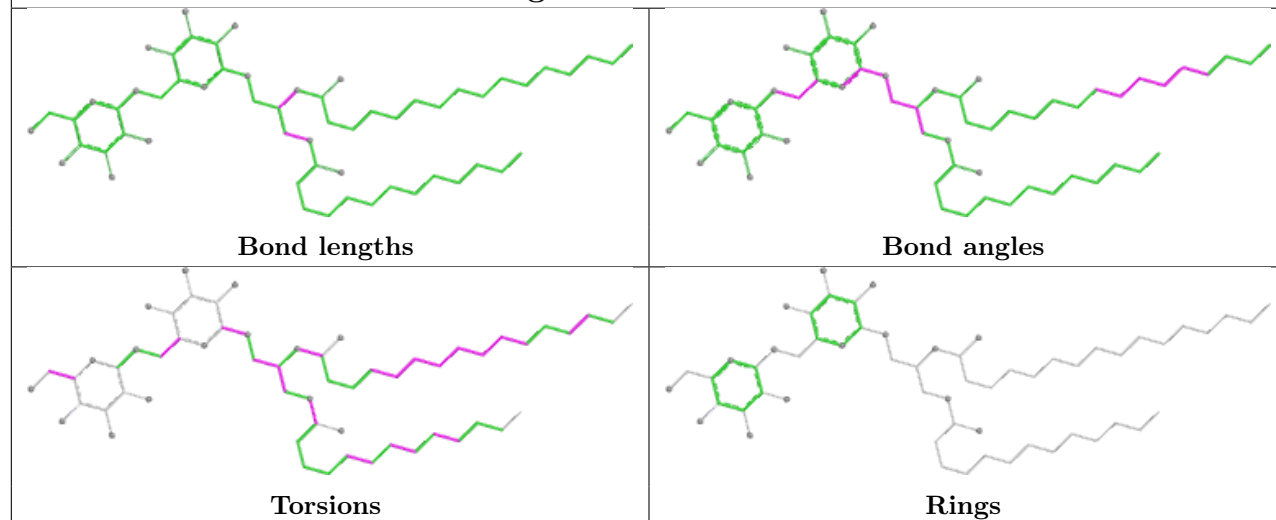


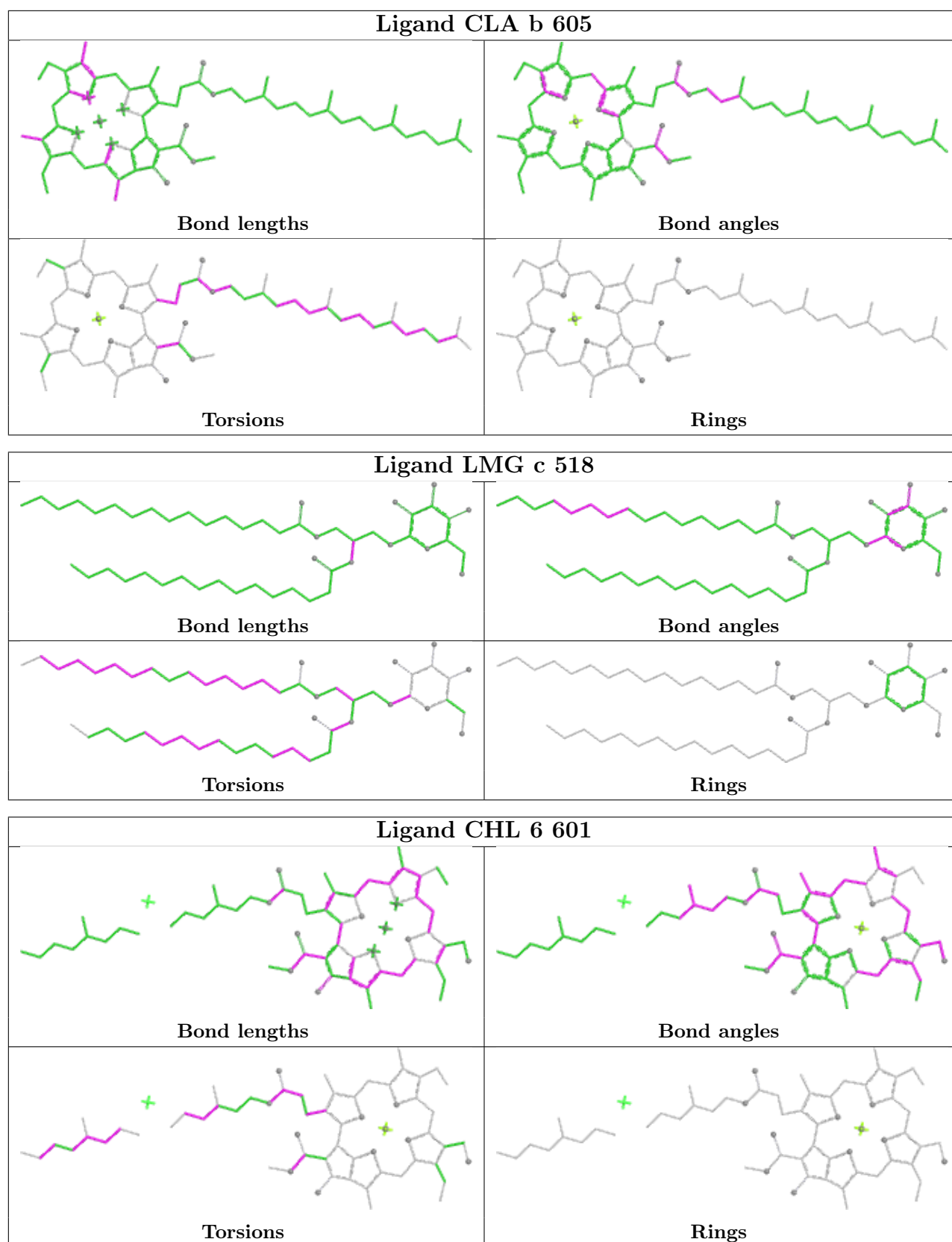
Rings

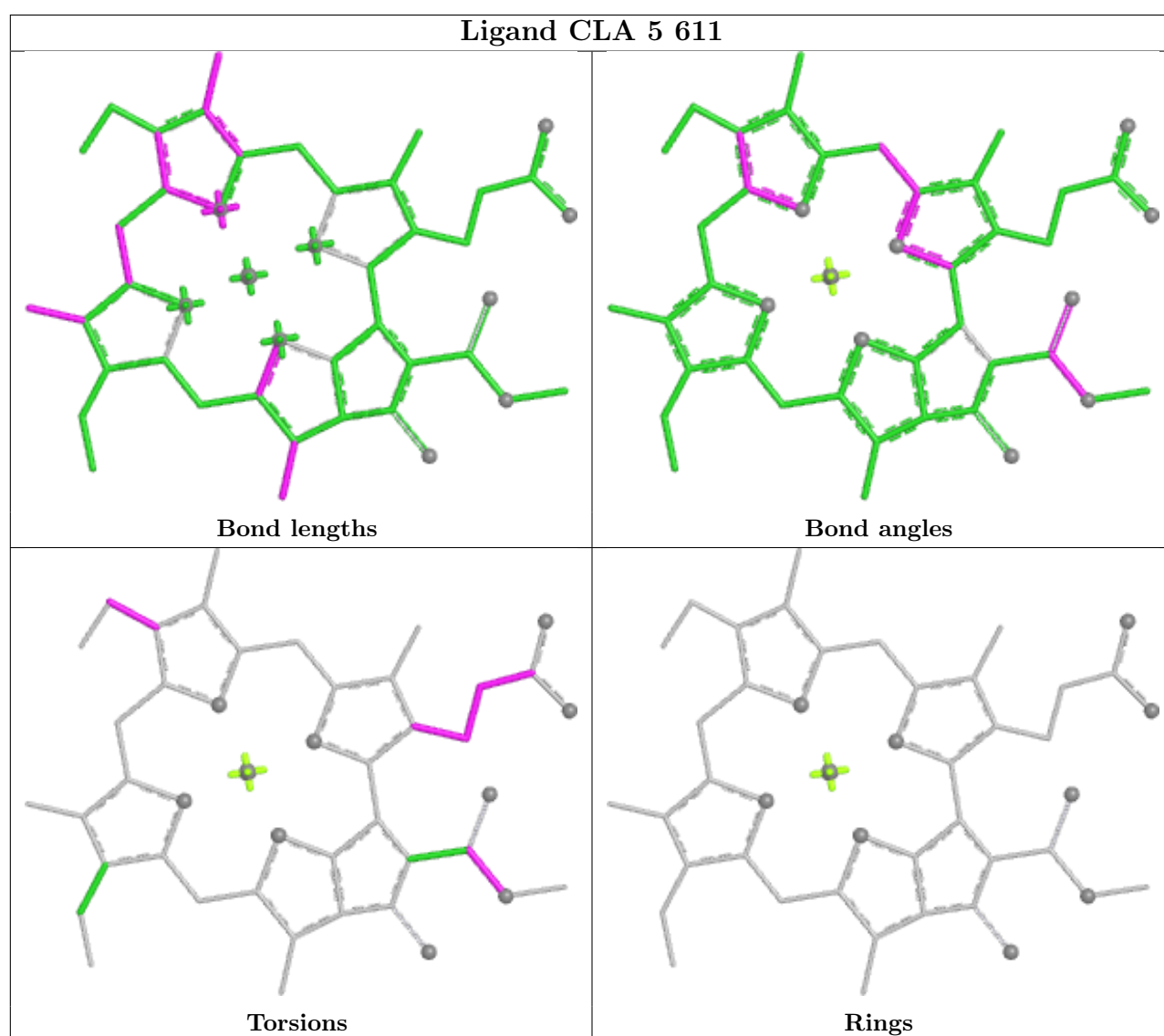
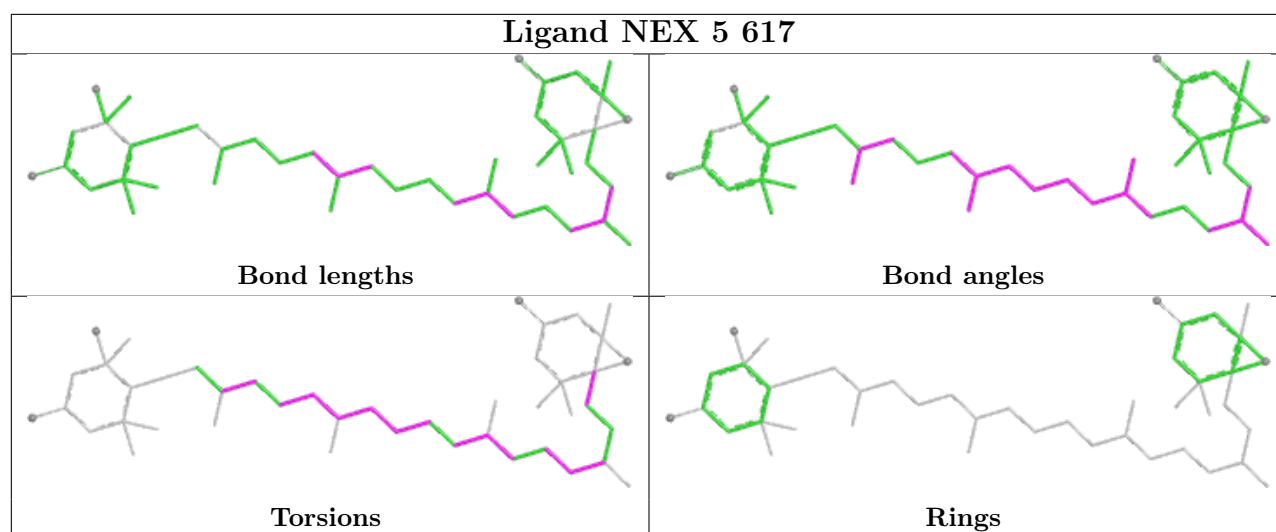
Ligand CLA r 601

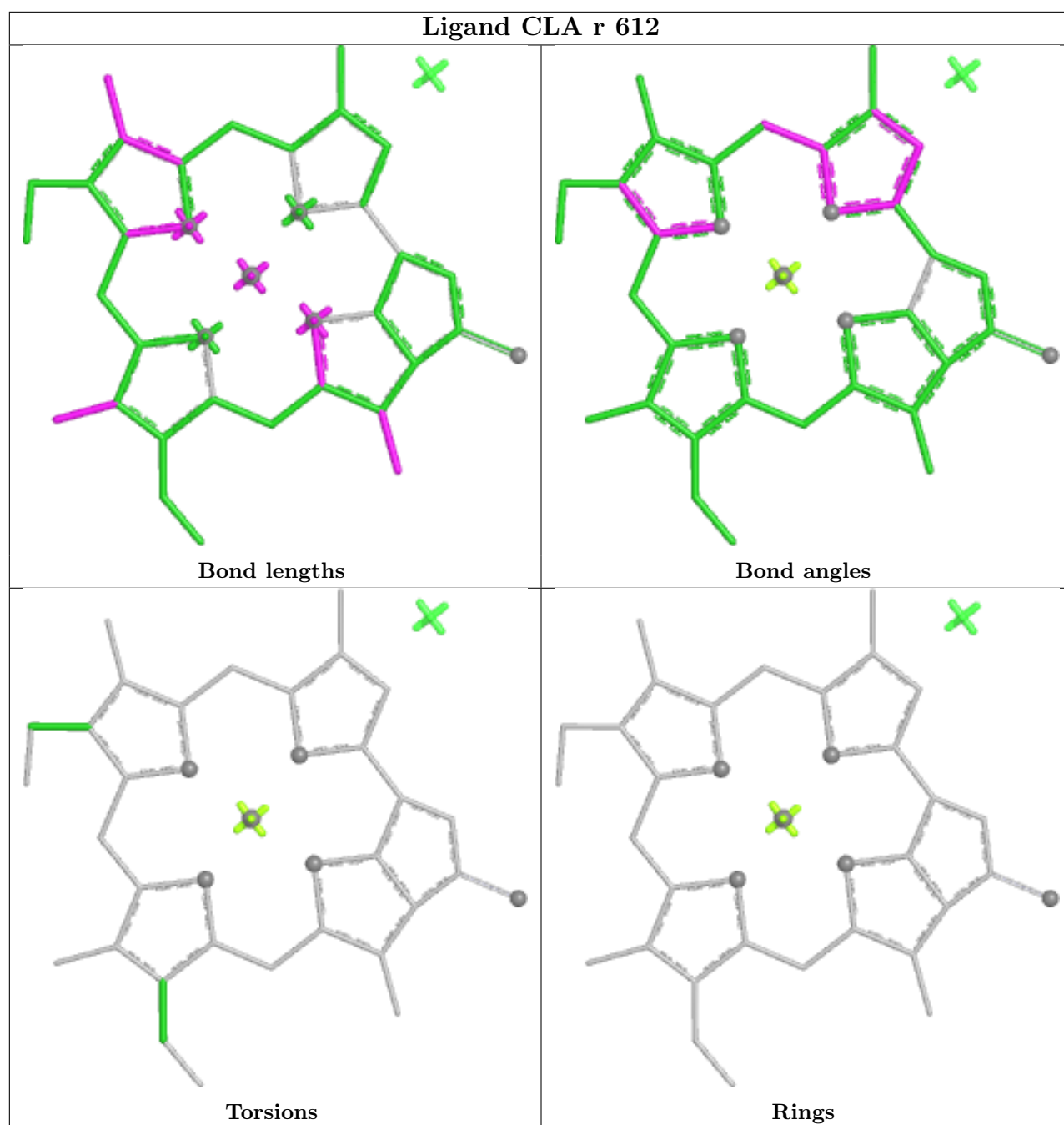


Ligand DGD R 401

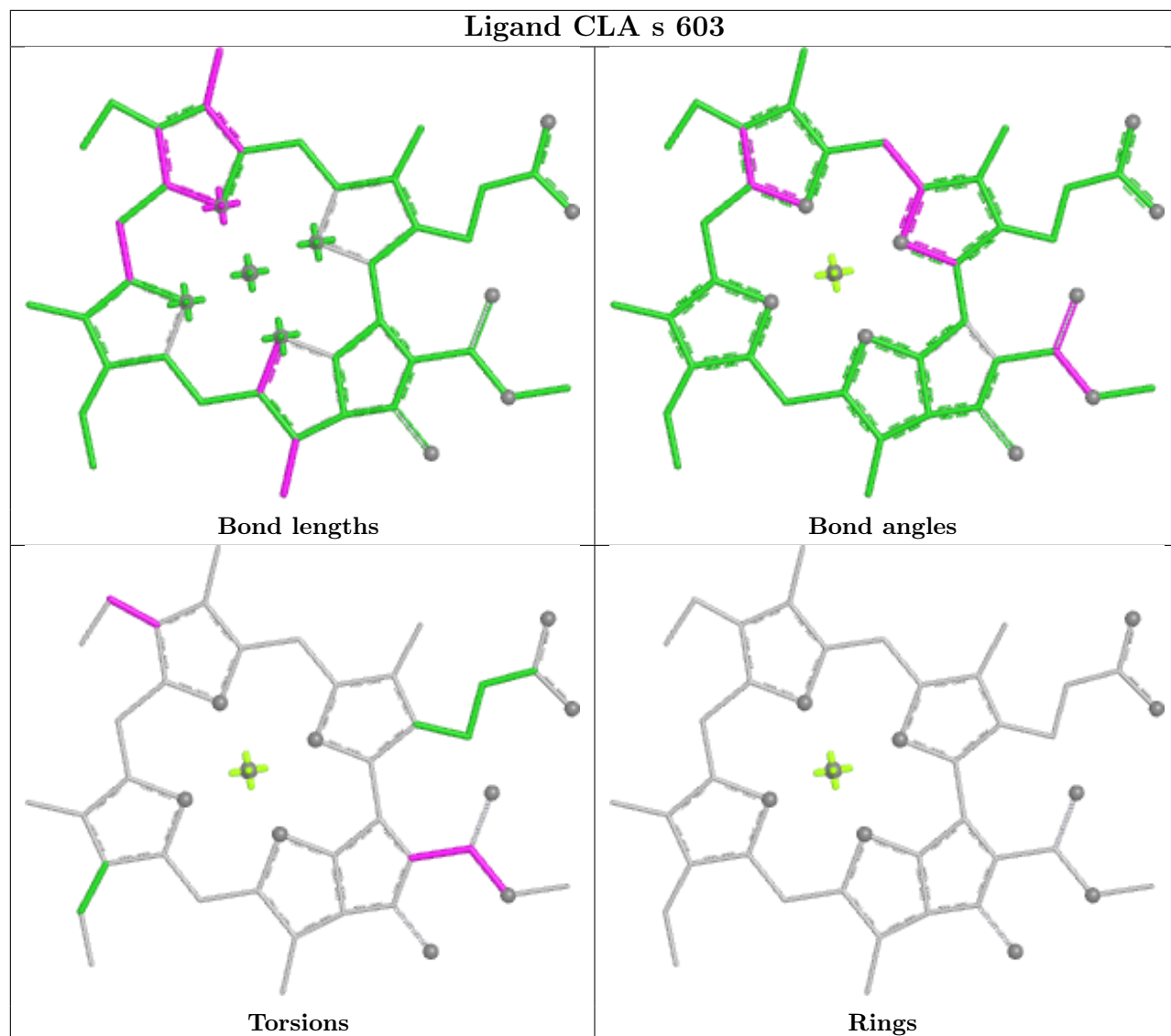




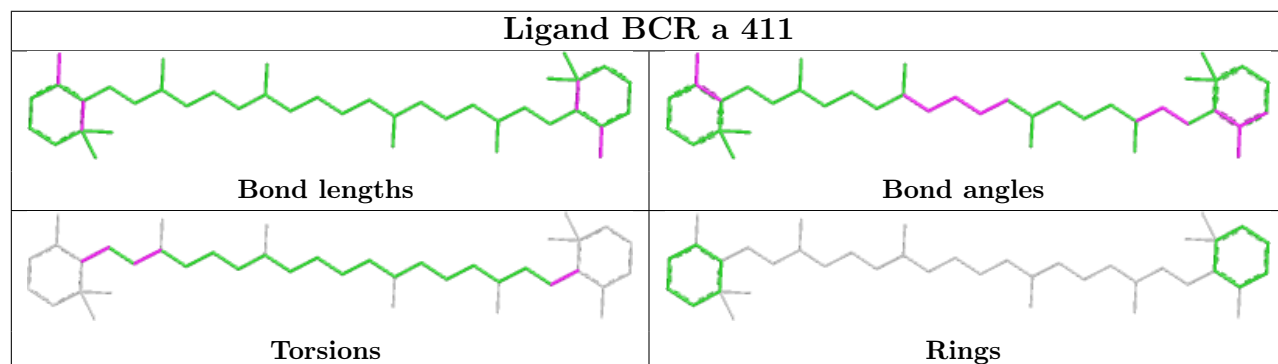


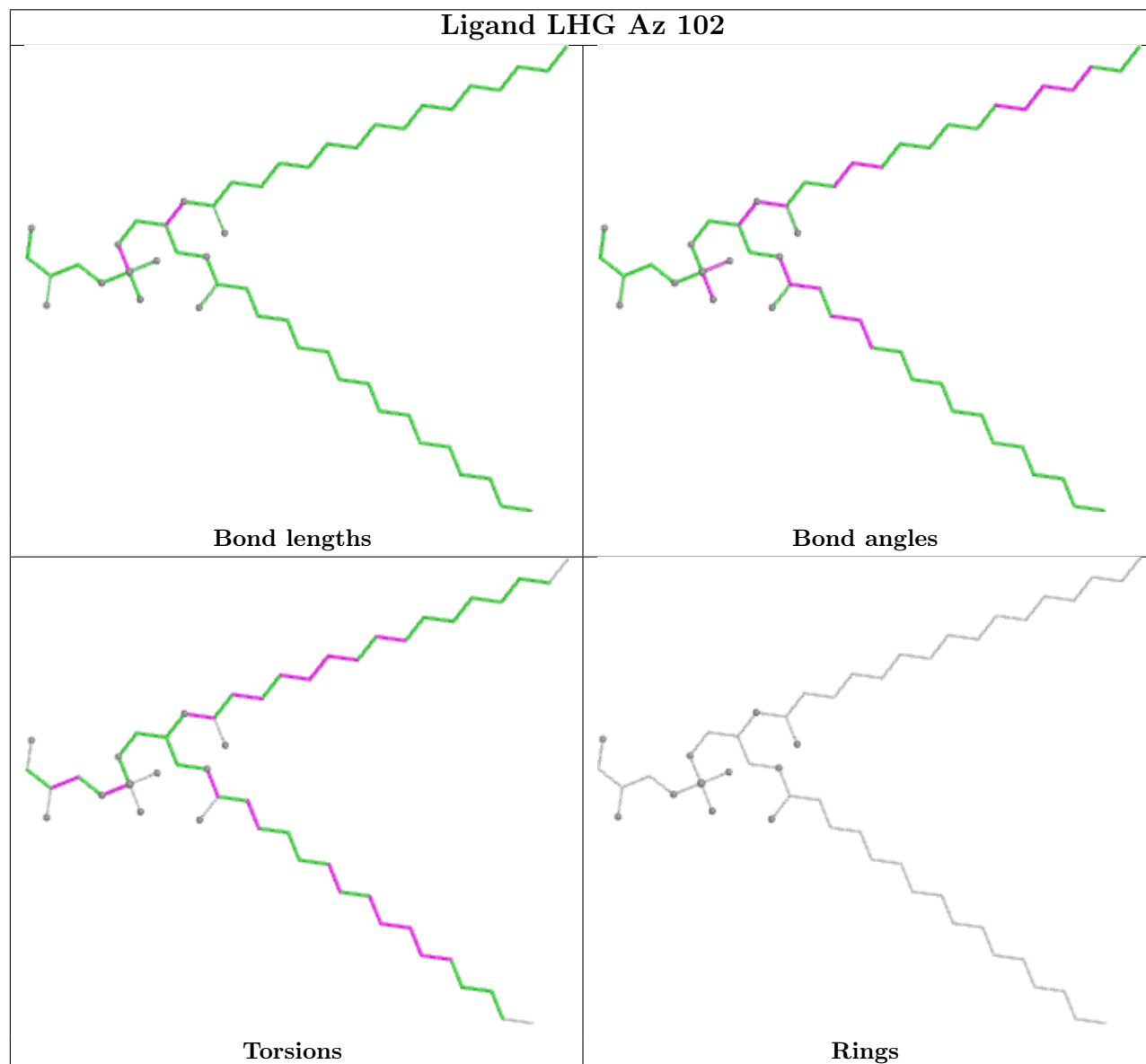
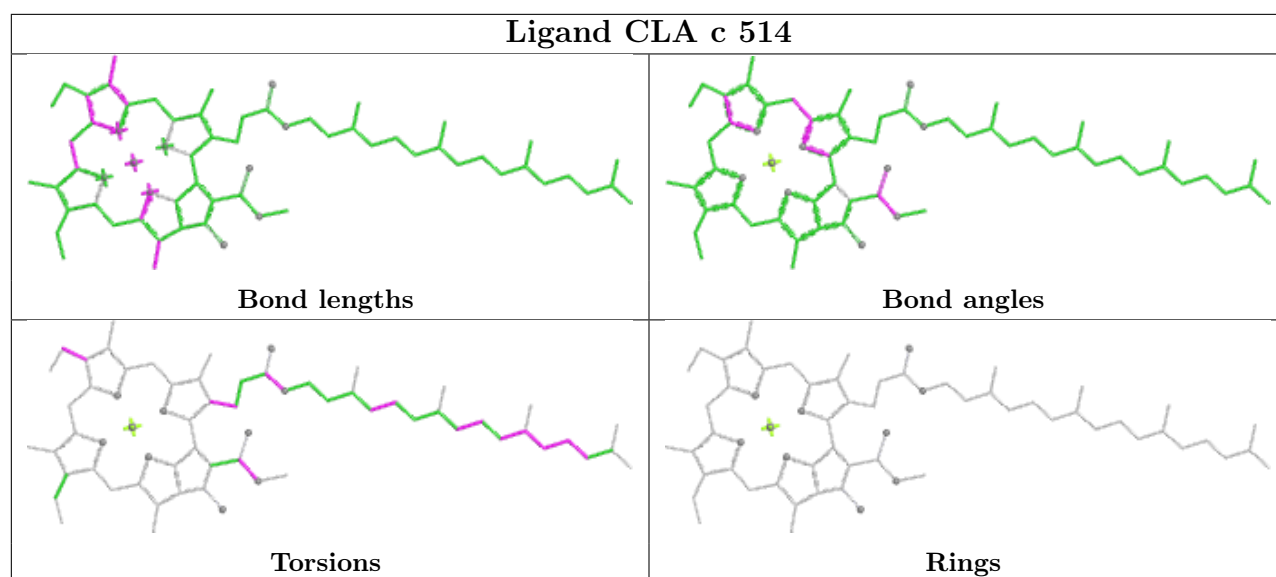


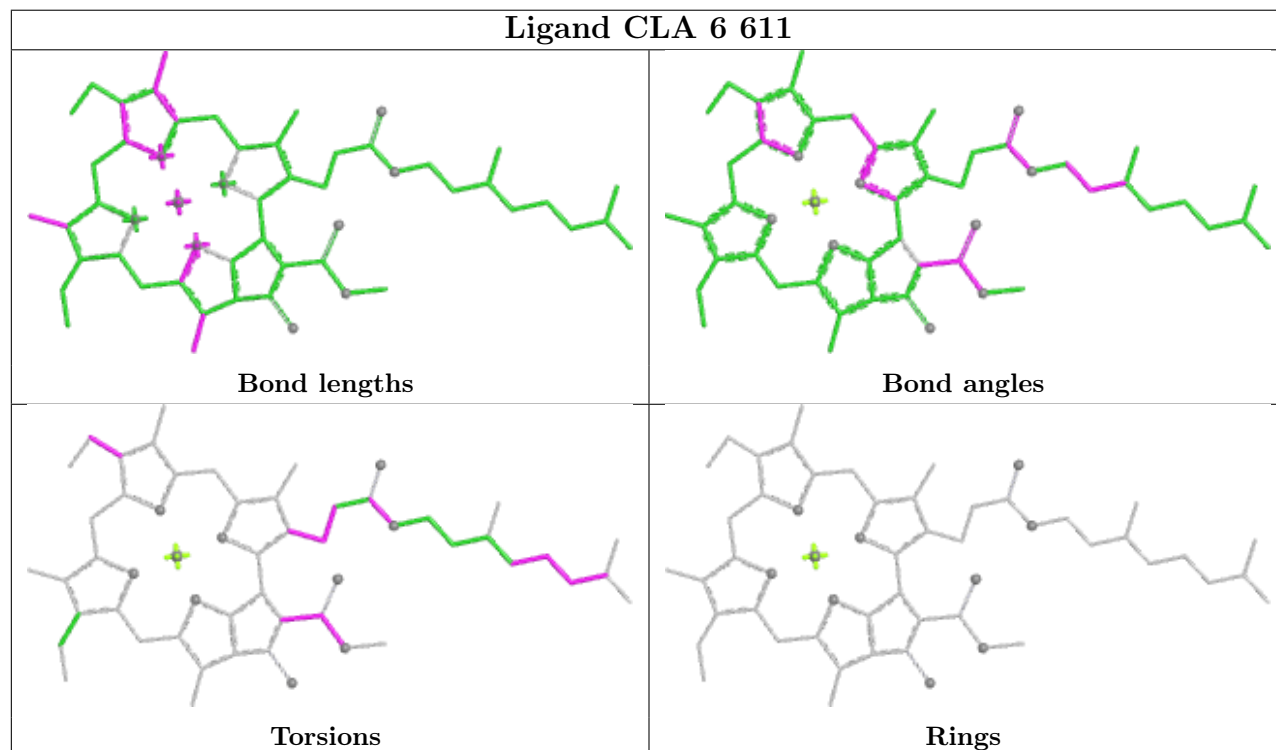
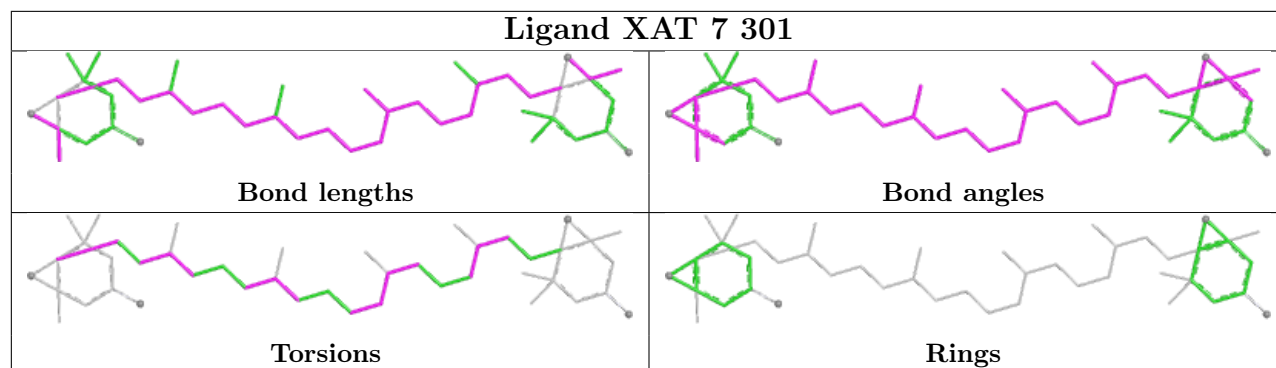
Ligand CLA s 603

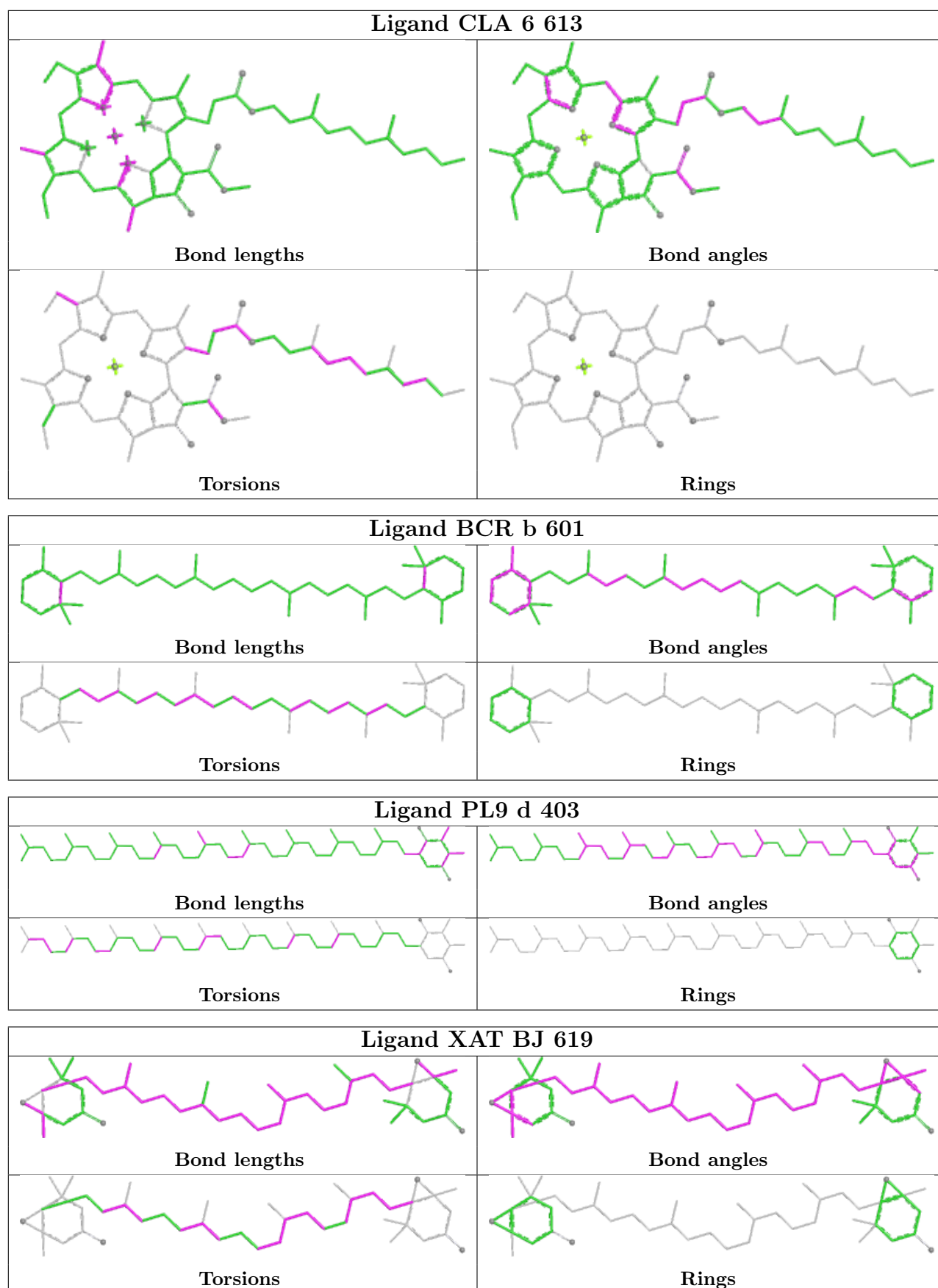


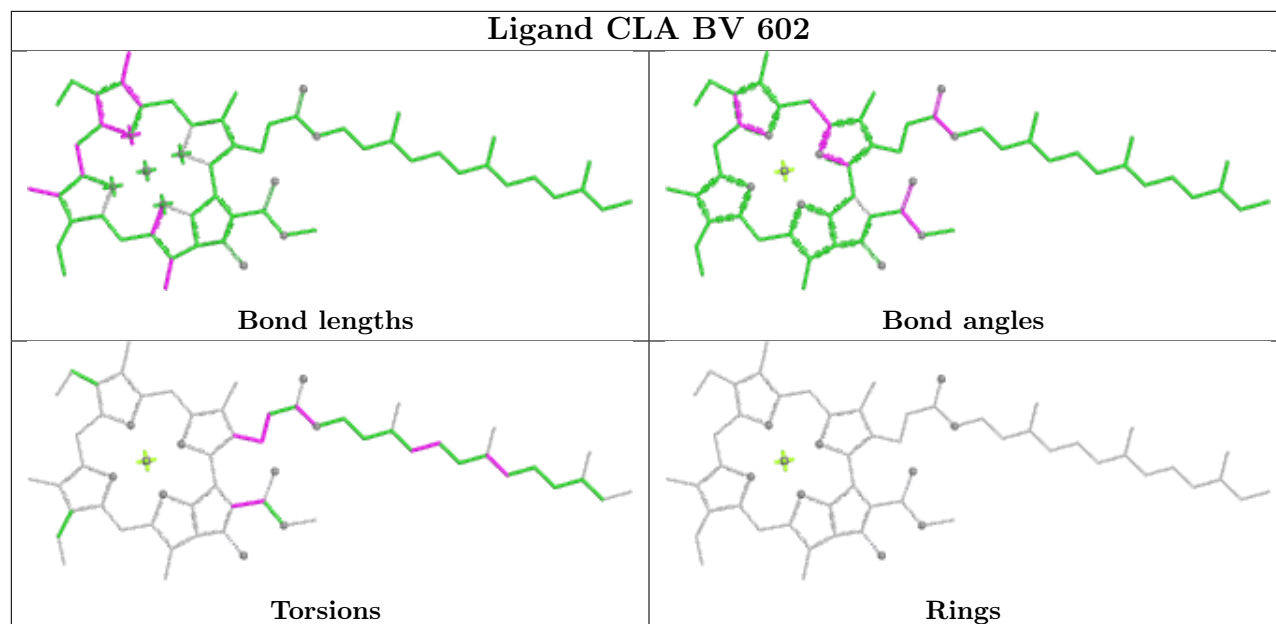
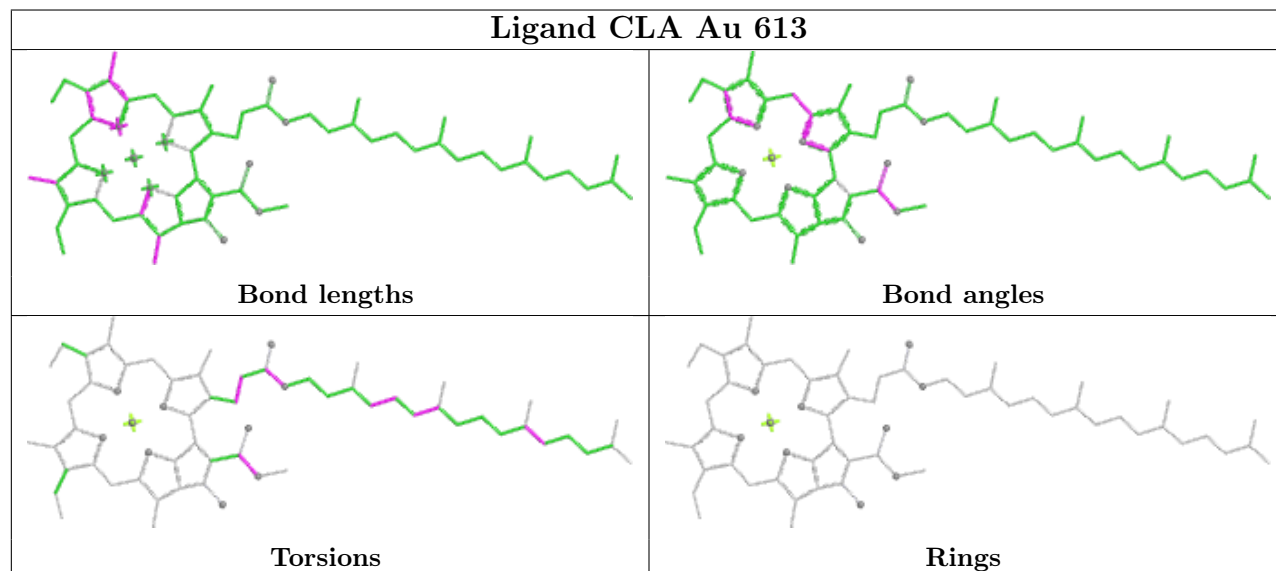
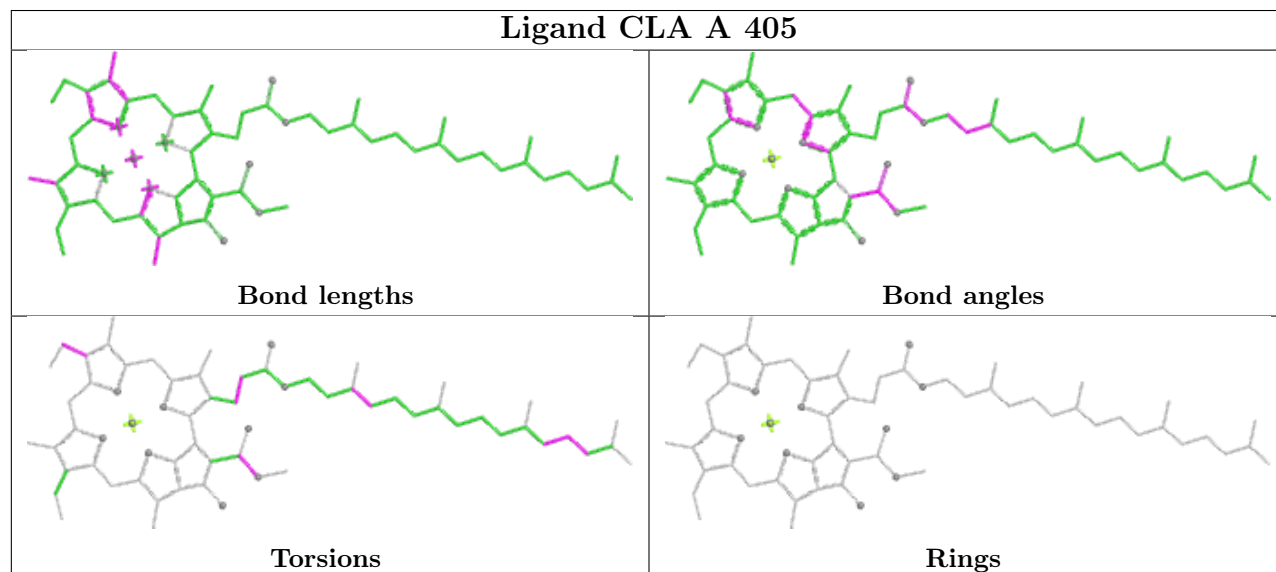
Ligand BCR a 411

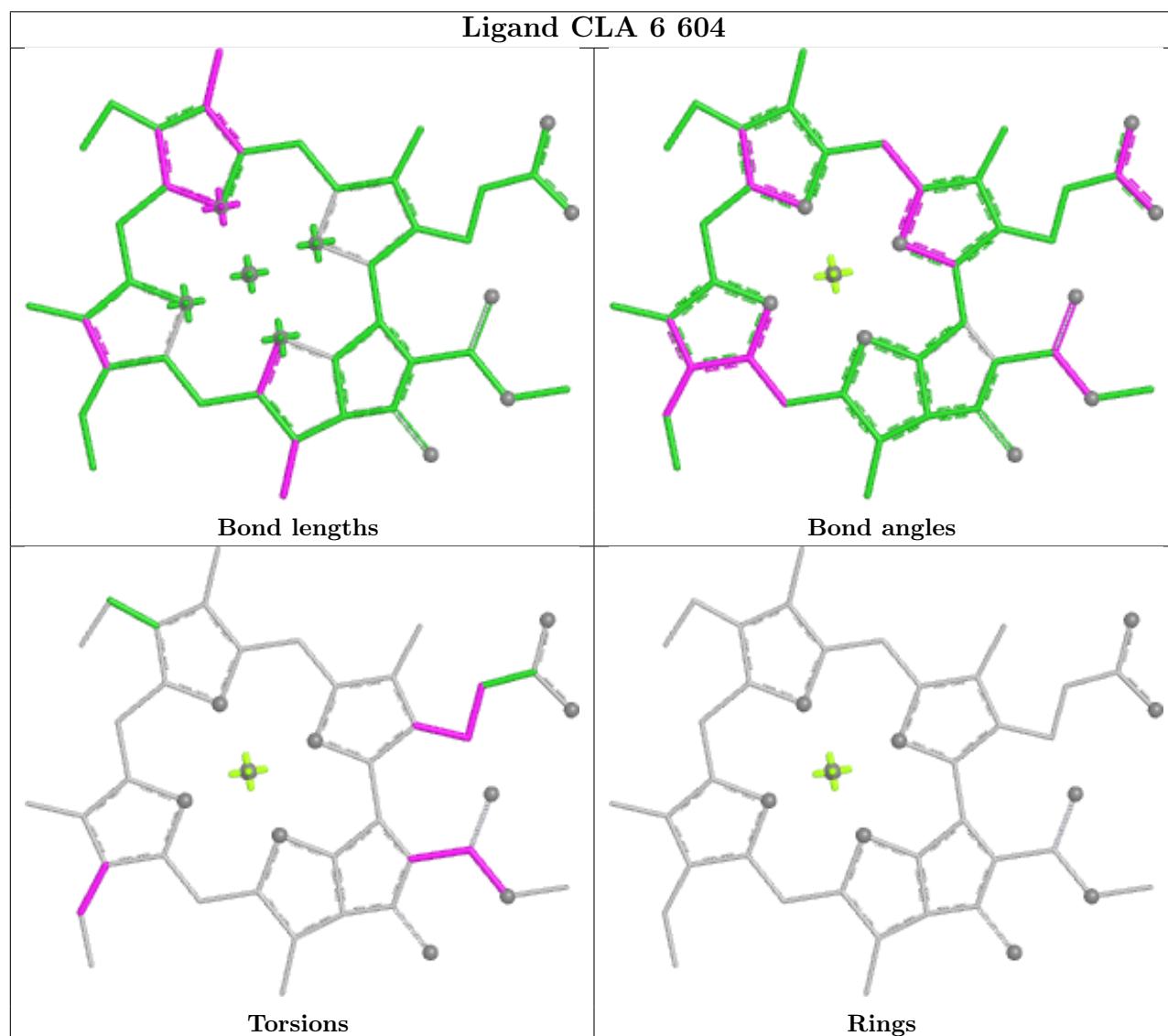
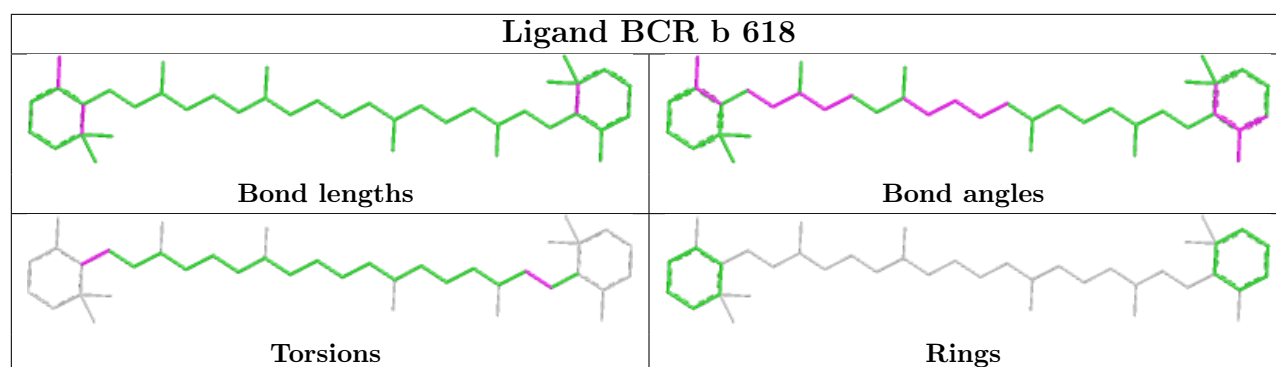


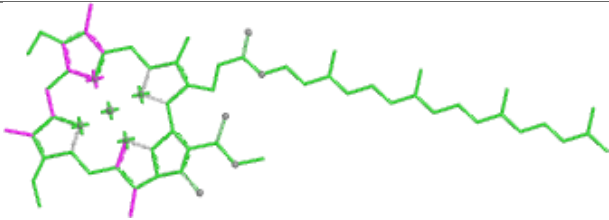
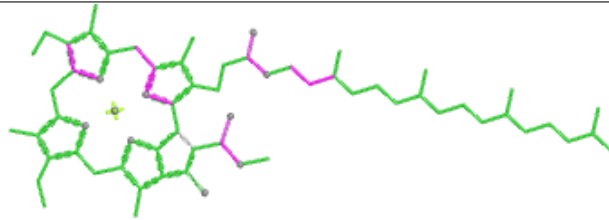
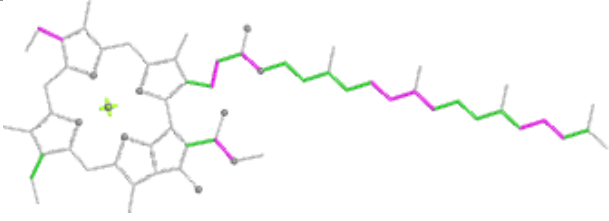
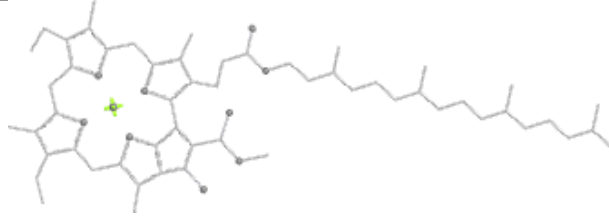


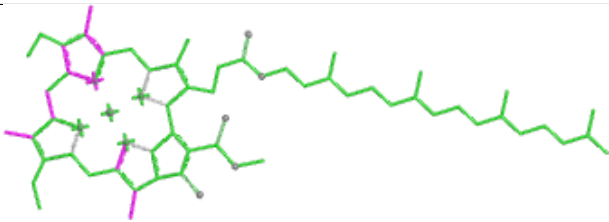
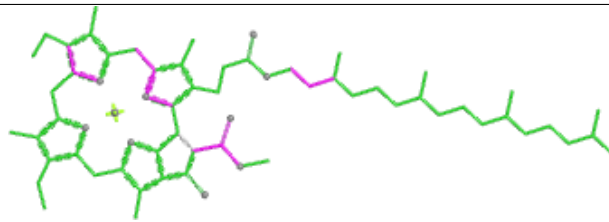
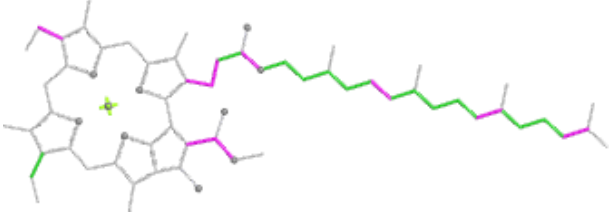
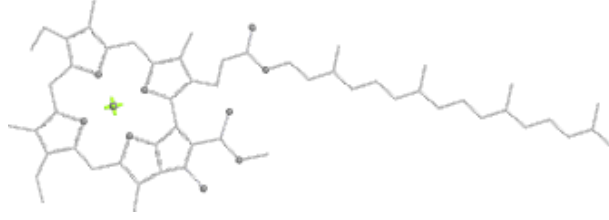


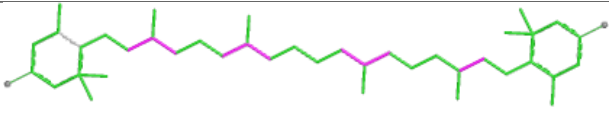
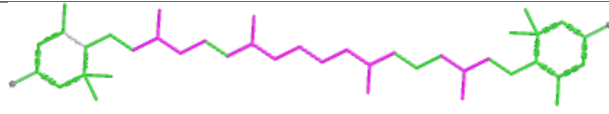
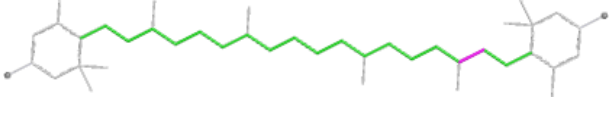
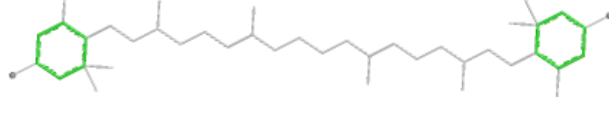


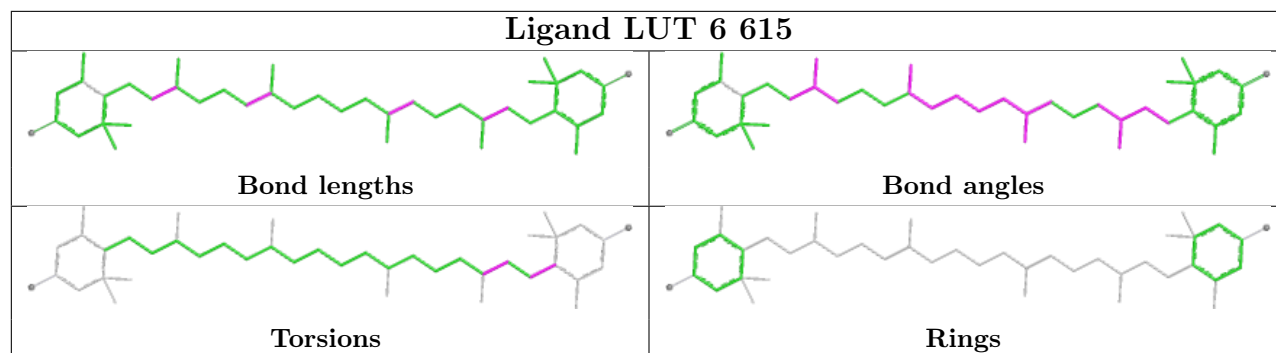
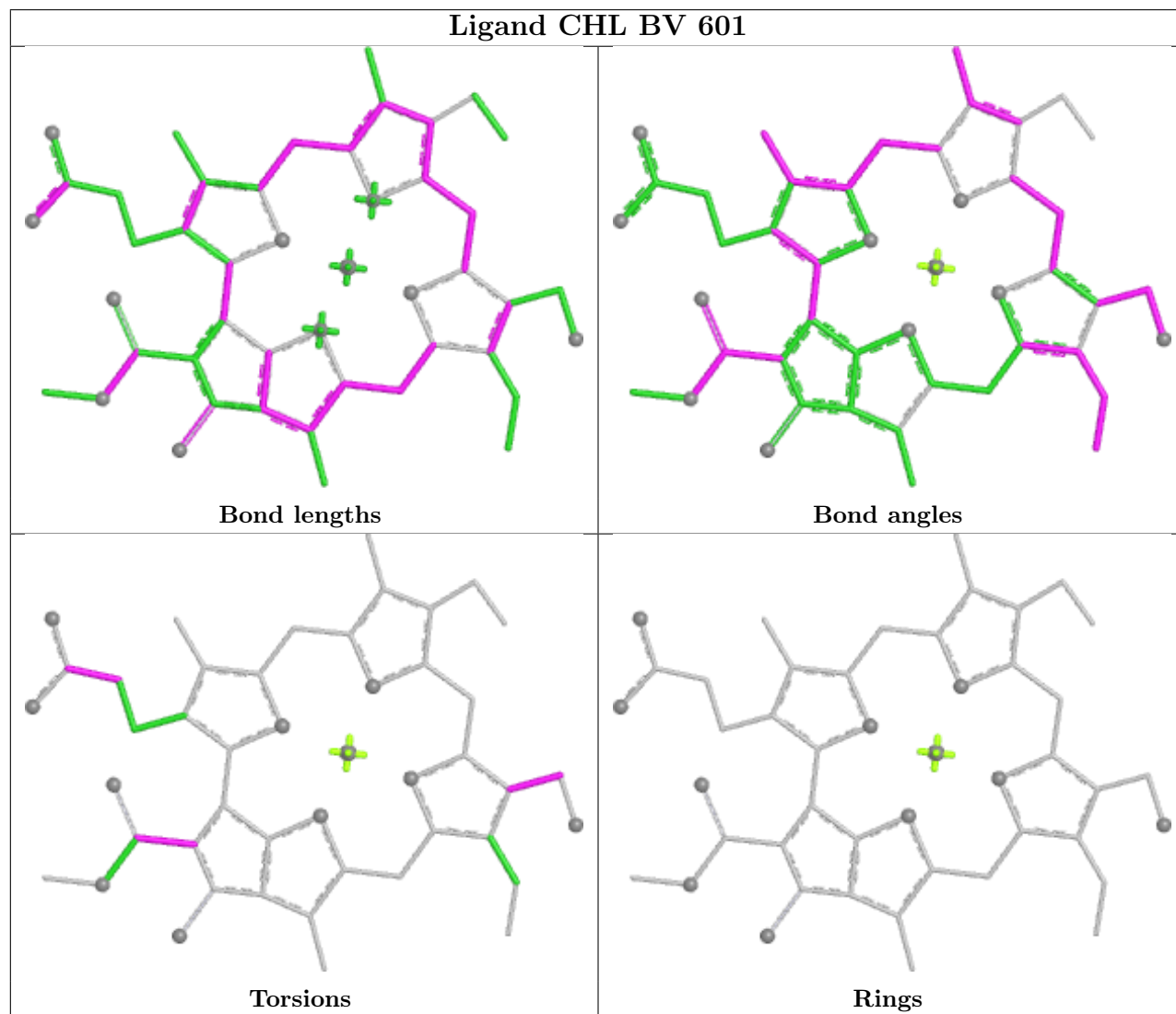
Ligand CLA BV 602**Ligand CLA Au 613****Ligand CLA A 405**

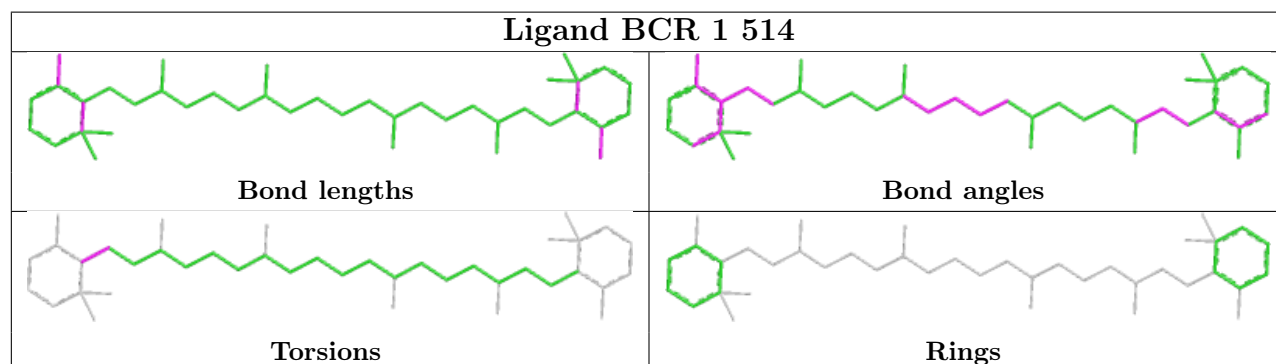
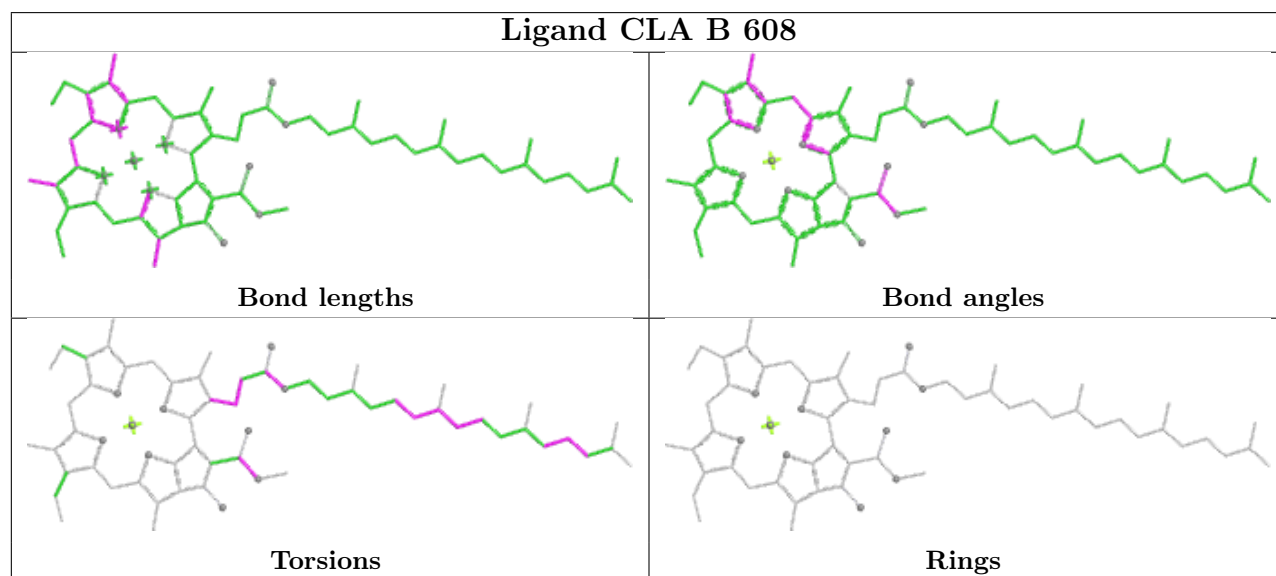
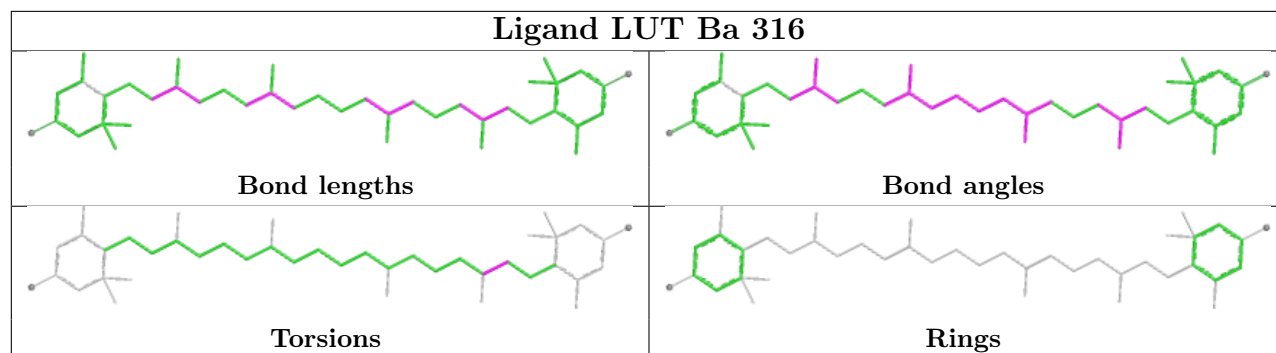


Ligand CLA BJ 603	
	
Bond lengths	Bond angles
	
Torsions	Rings

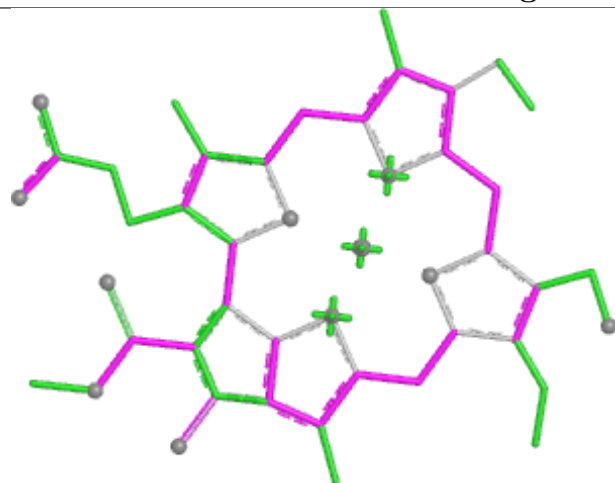
Ligand CLA 1 511	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand LUT Y 316	
	
Bond lengths	Bond angles
	
Torsions	Rings

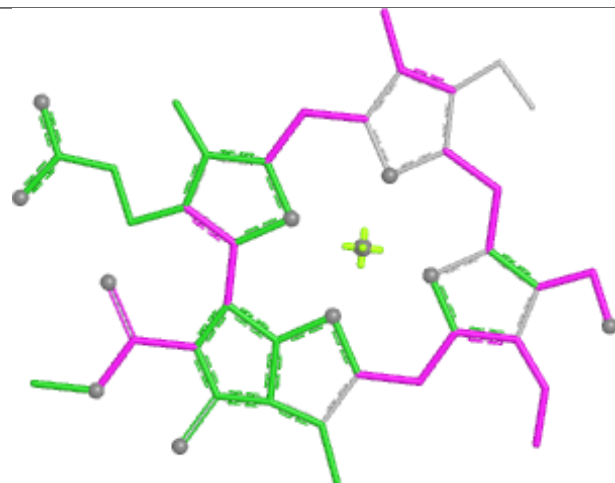
Ligand LUT 6 615**Ligand CHL BV 601**



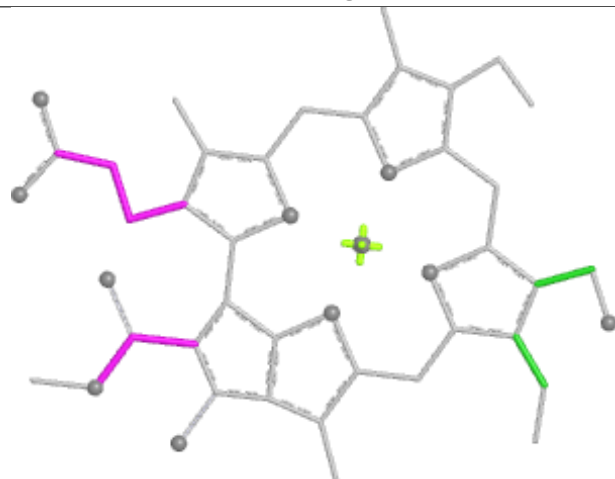
Ligand CHL 8 305



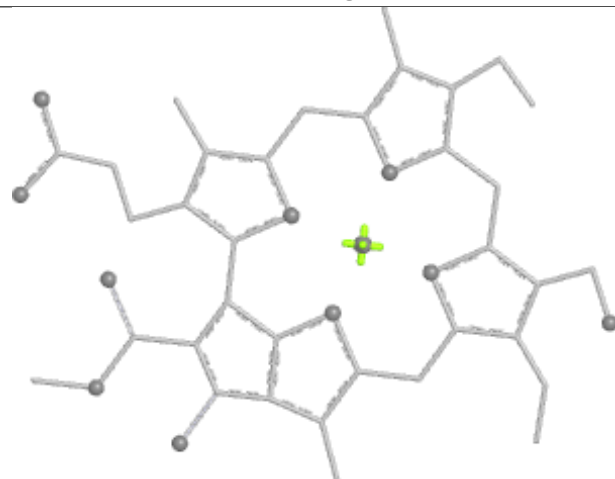
Bond lengths



Bond angles

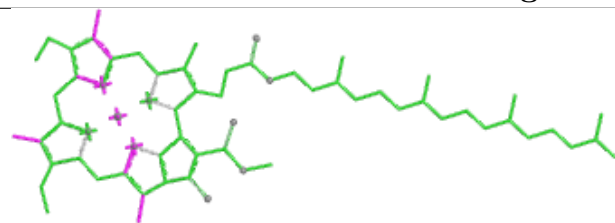


Torsions

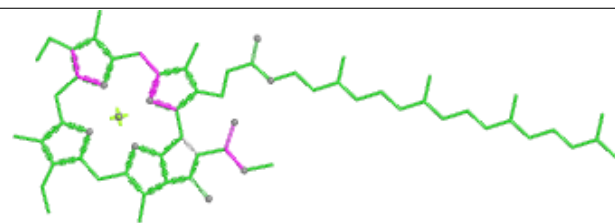


Rings

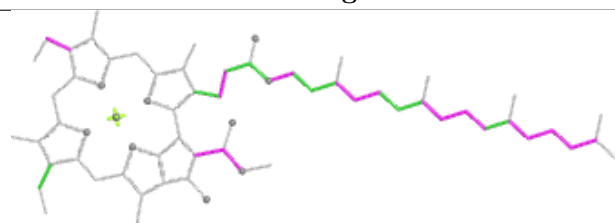
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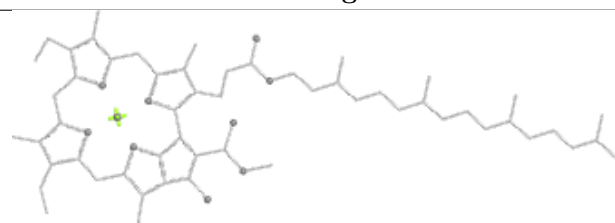
Bond lengths



Bond angles

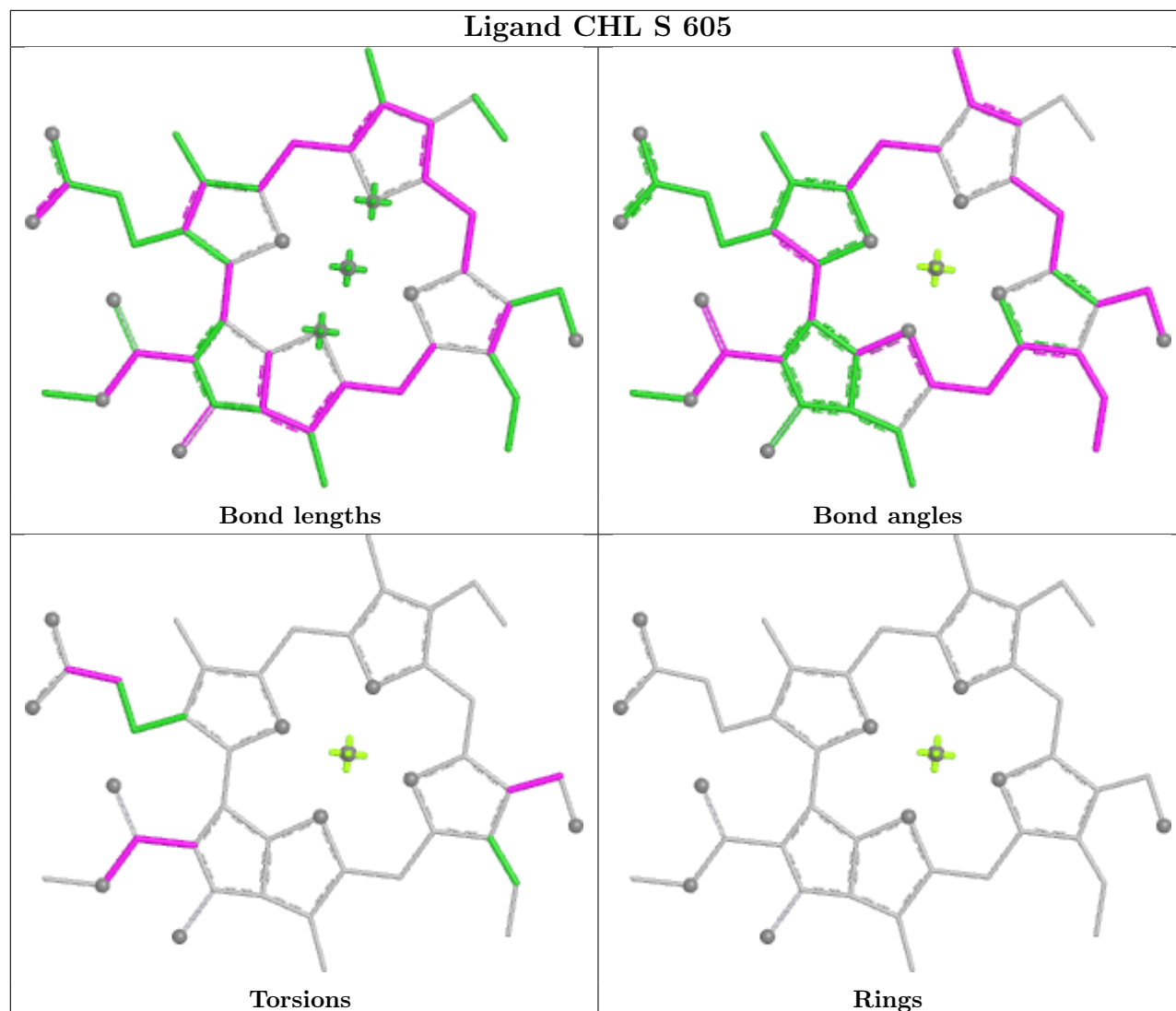


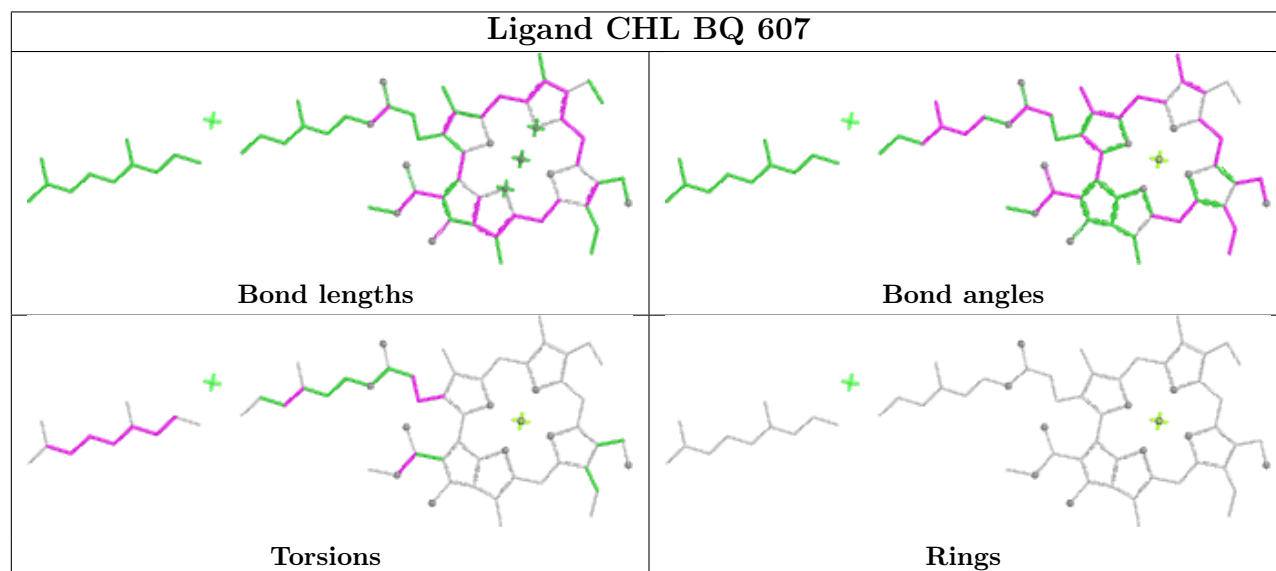
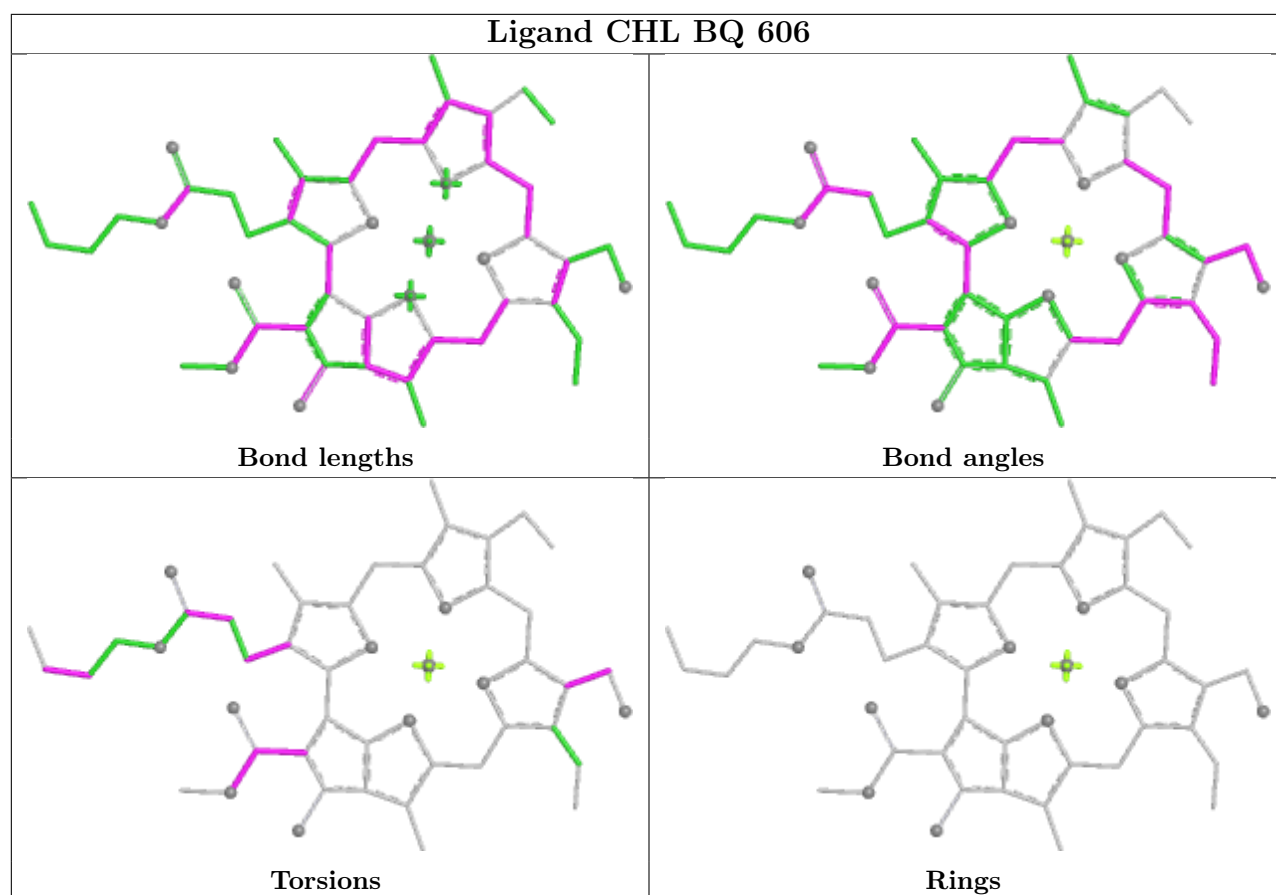
Torsions

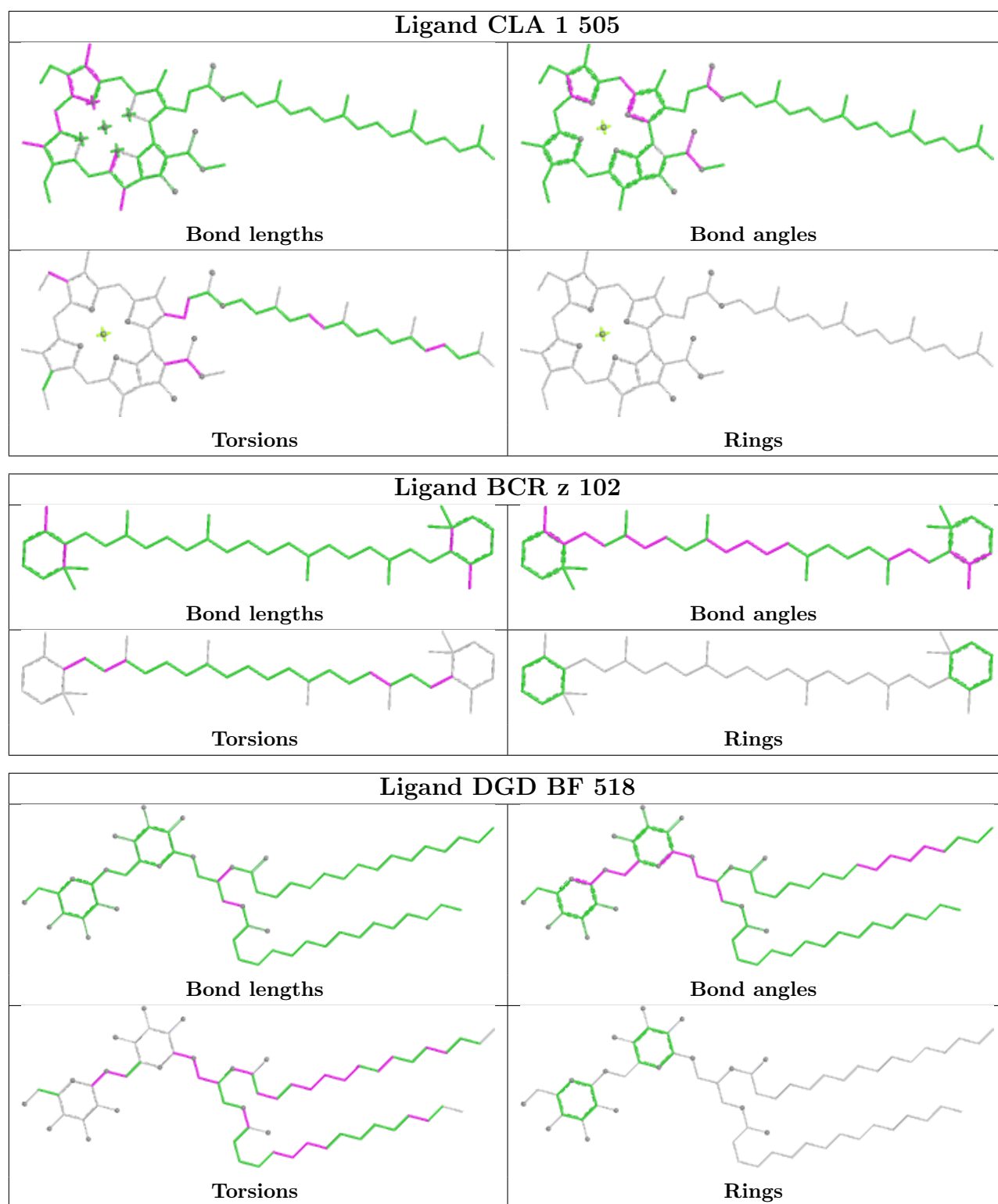


Rings

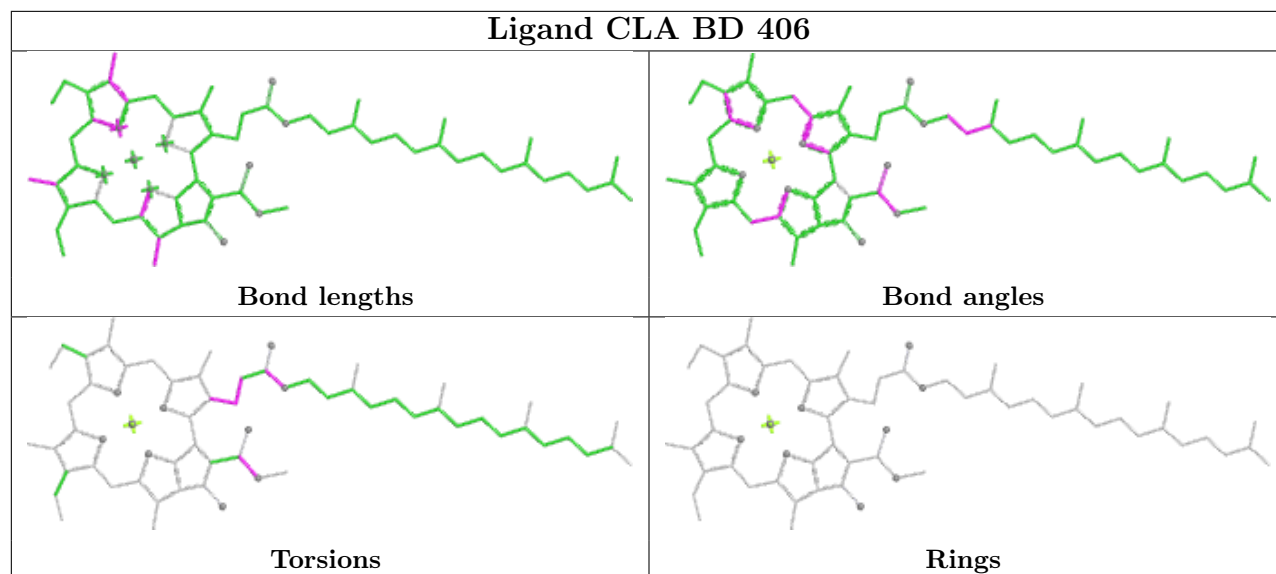
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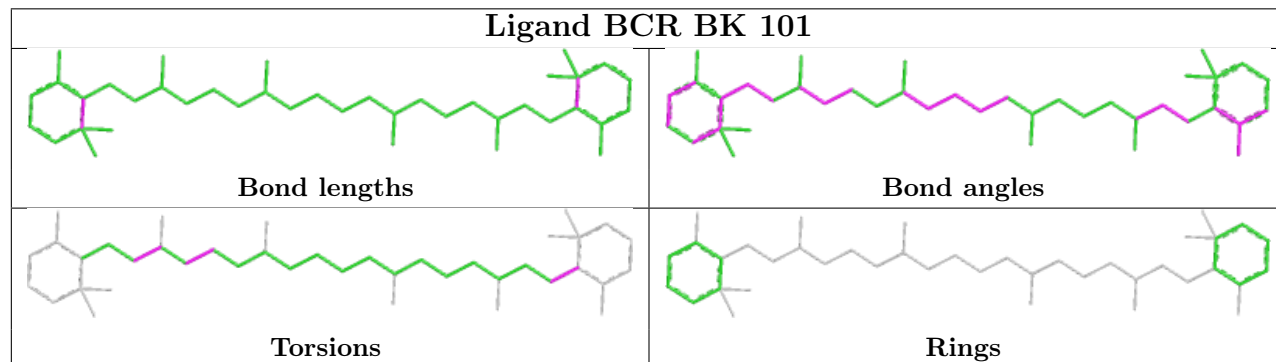




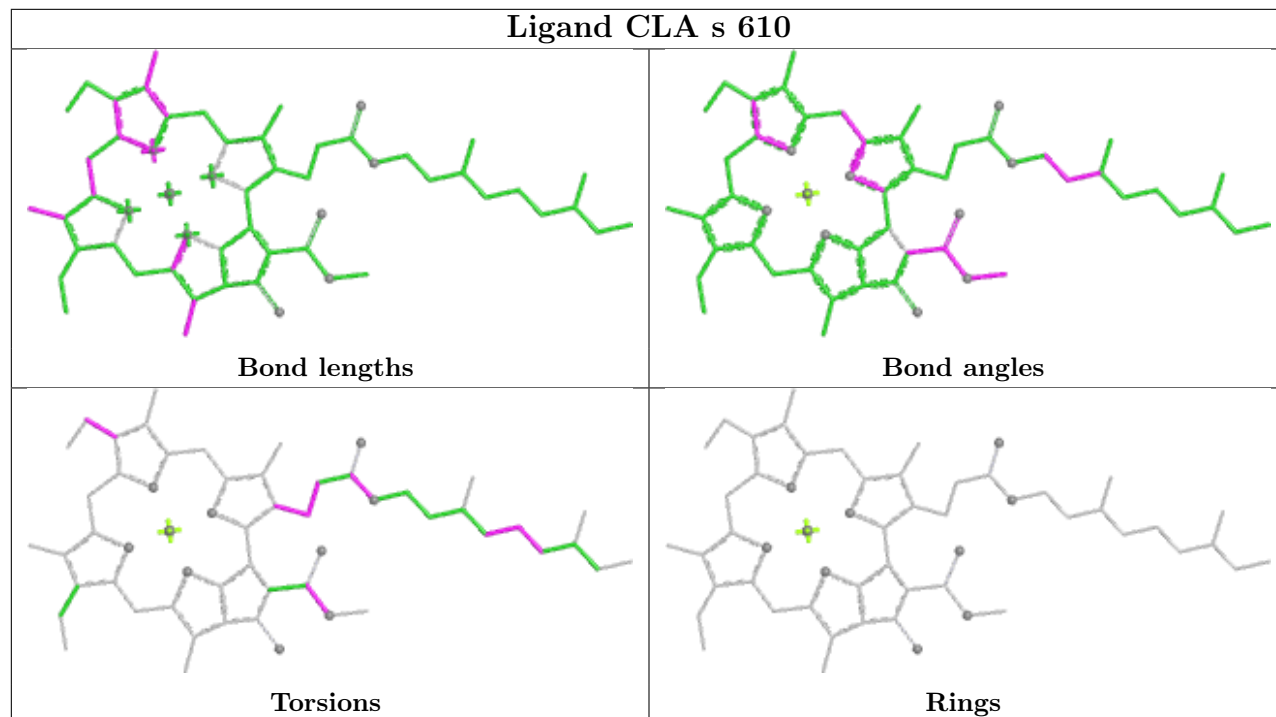
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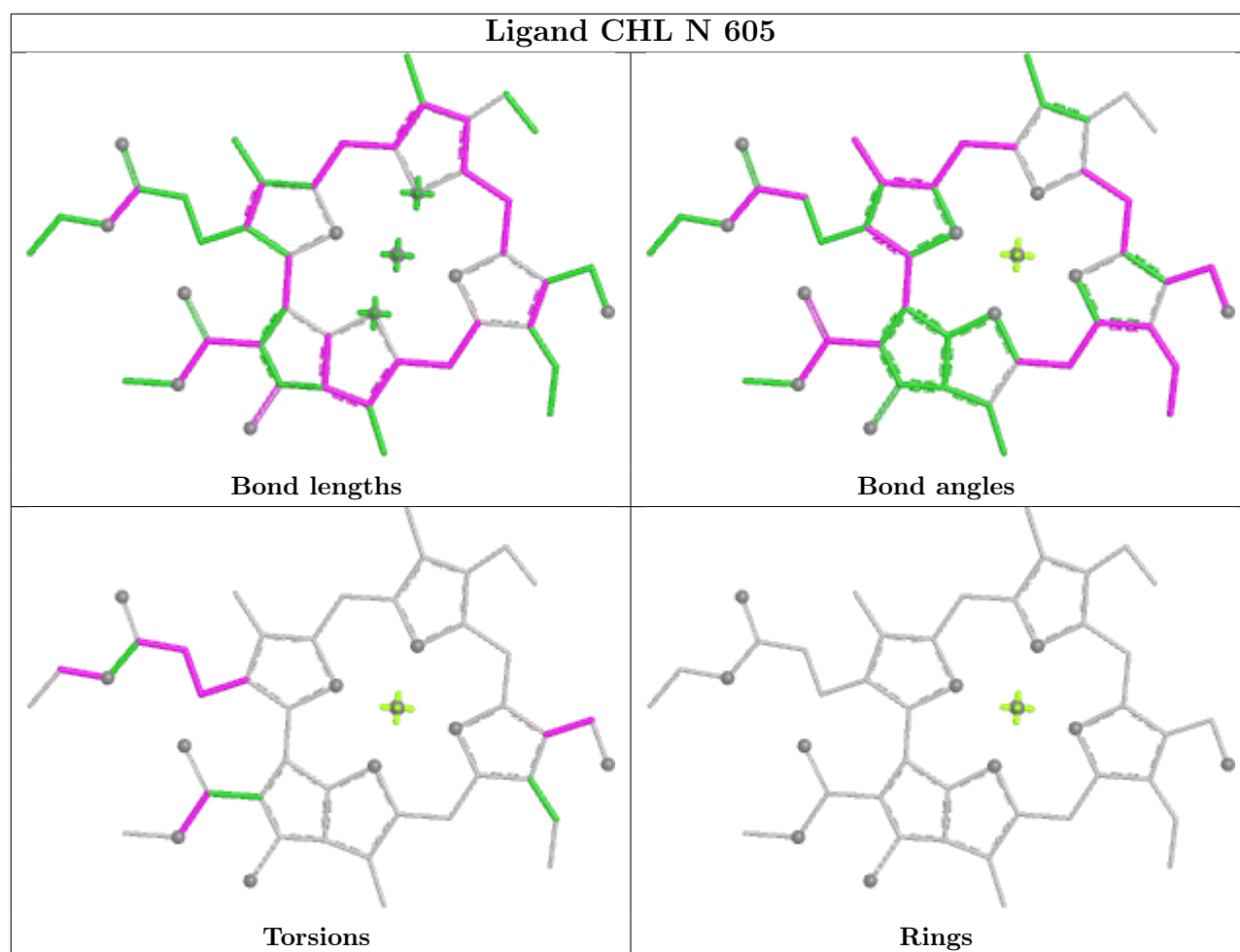


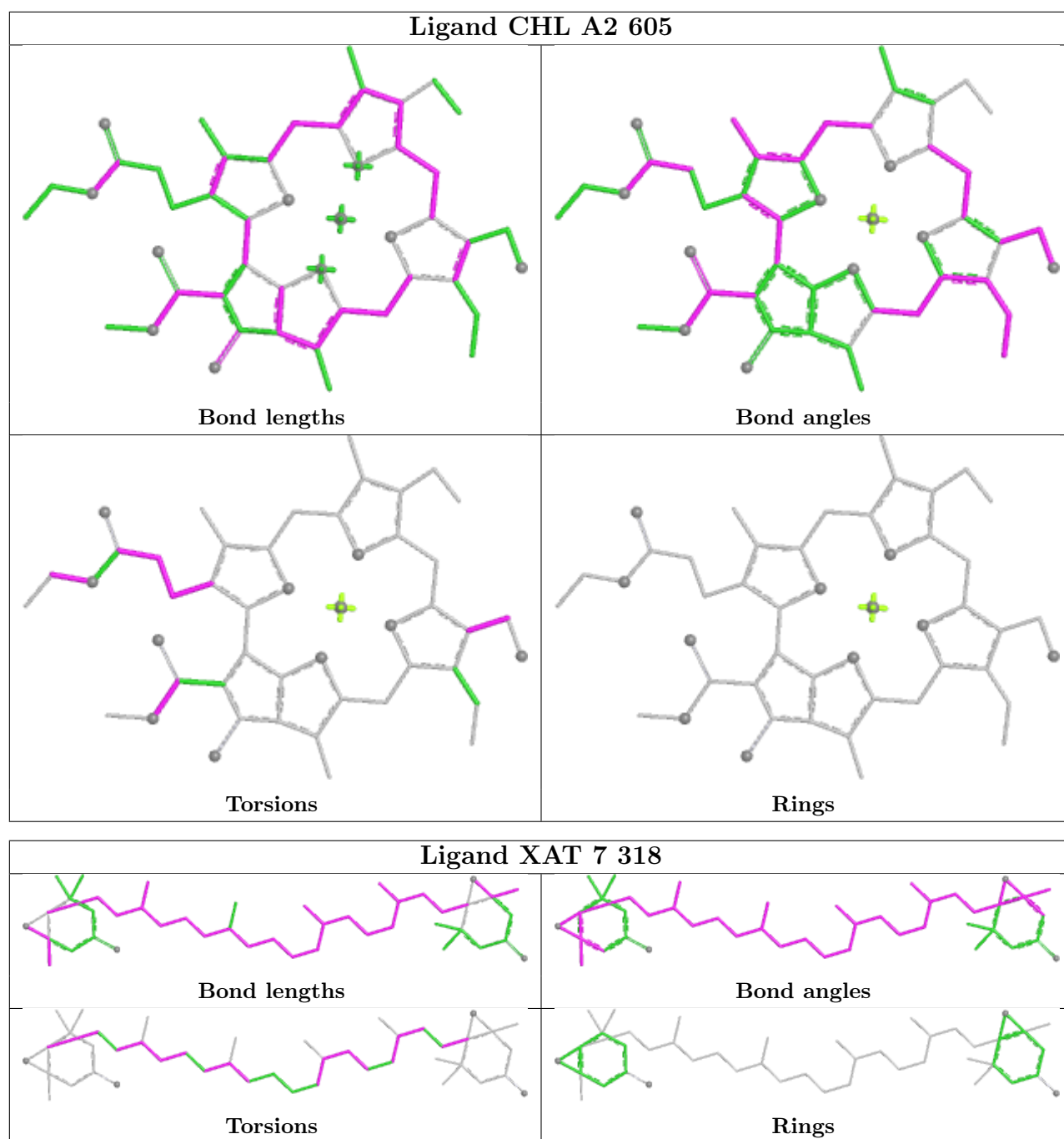
Ligand BCR BK 101

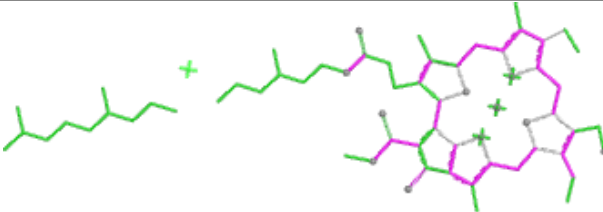
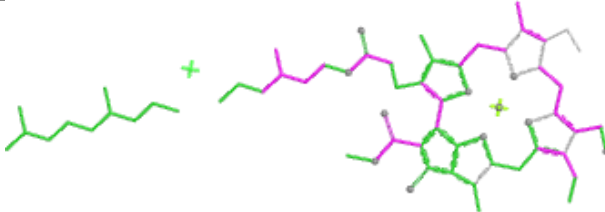
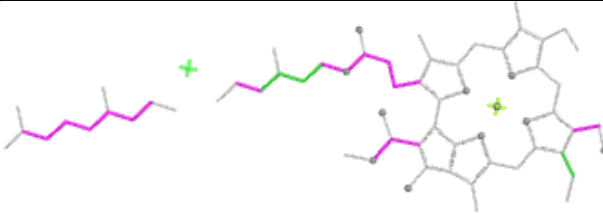
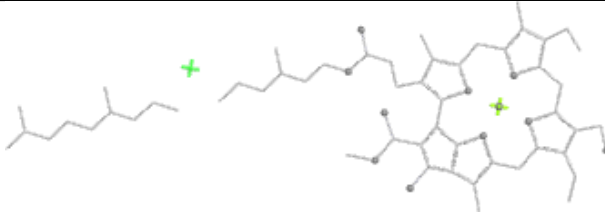


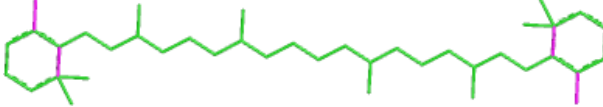
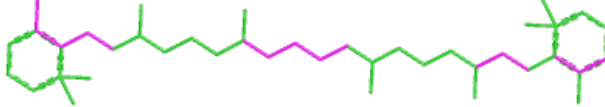
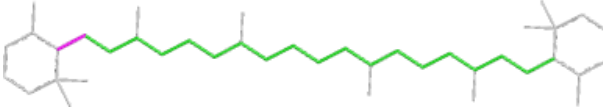
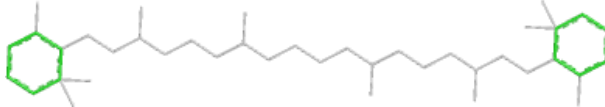
Ligand CLA s 610



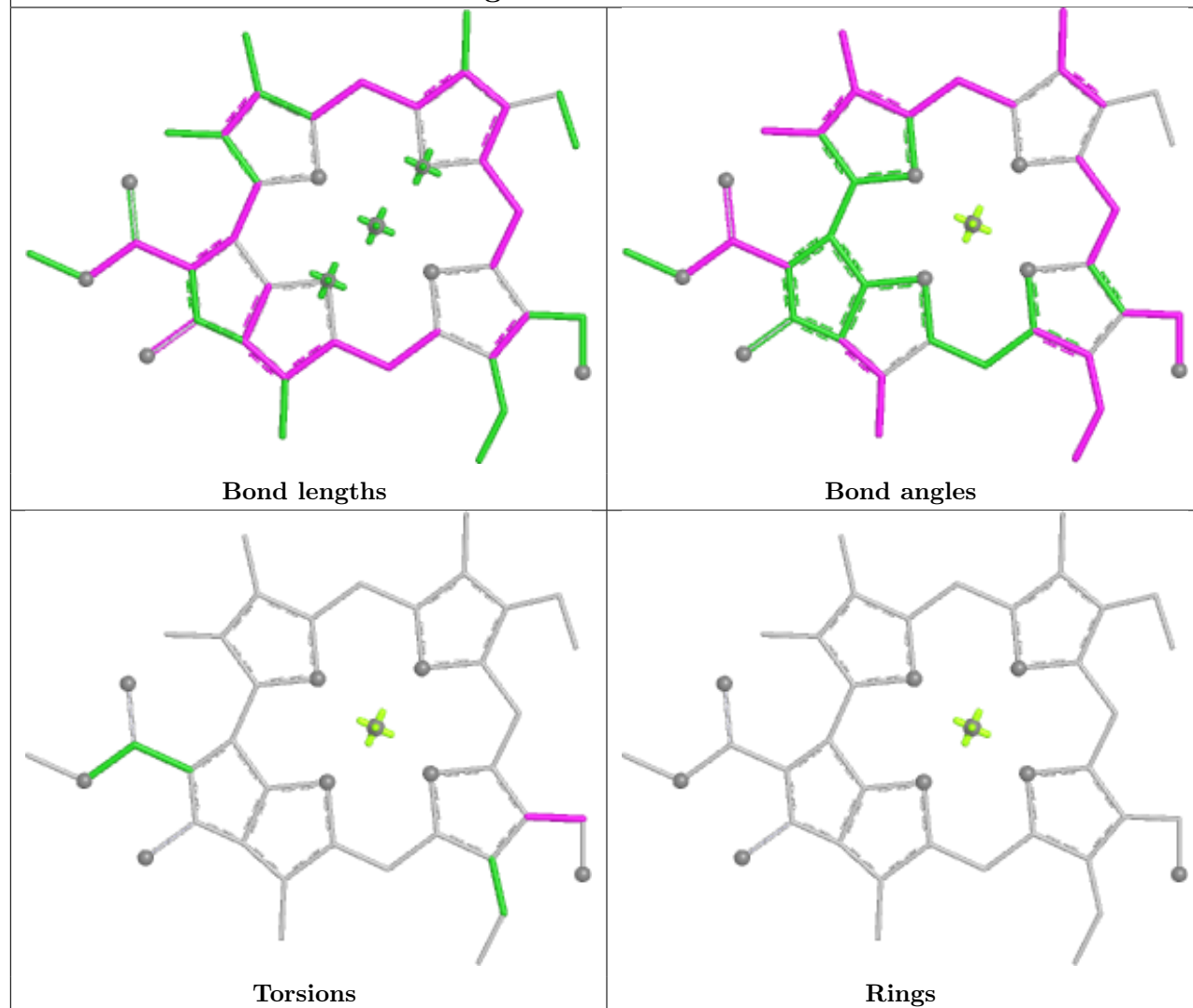




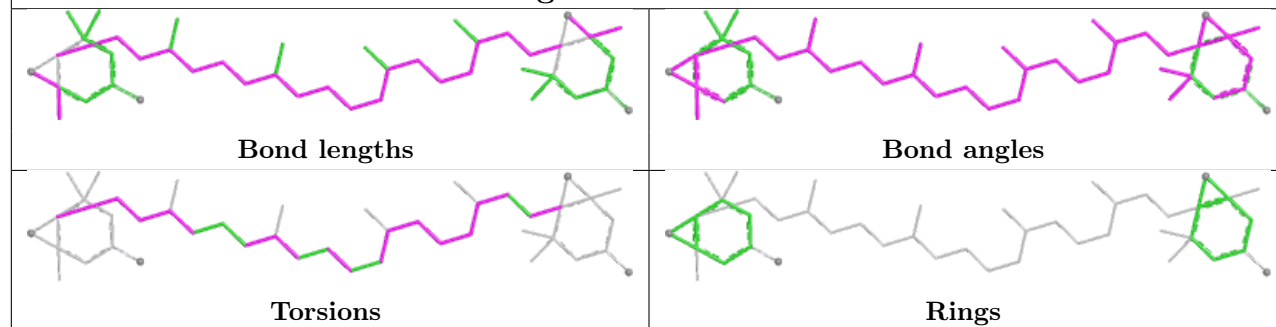
Ligand CHL BU 605	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR C 514	
	
Bond lengths	Bond angles
	
Torsions	Rings

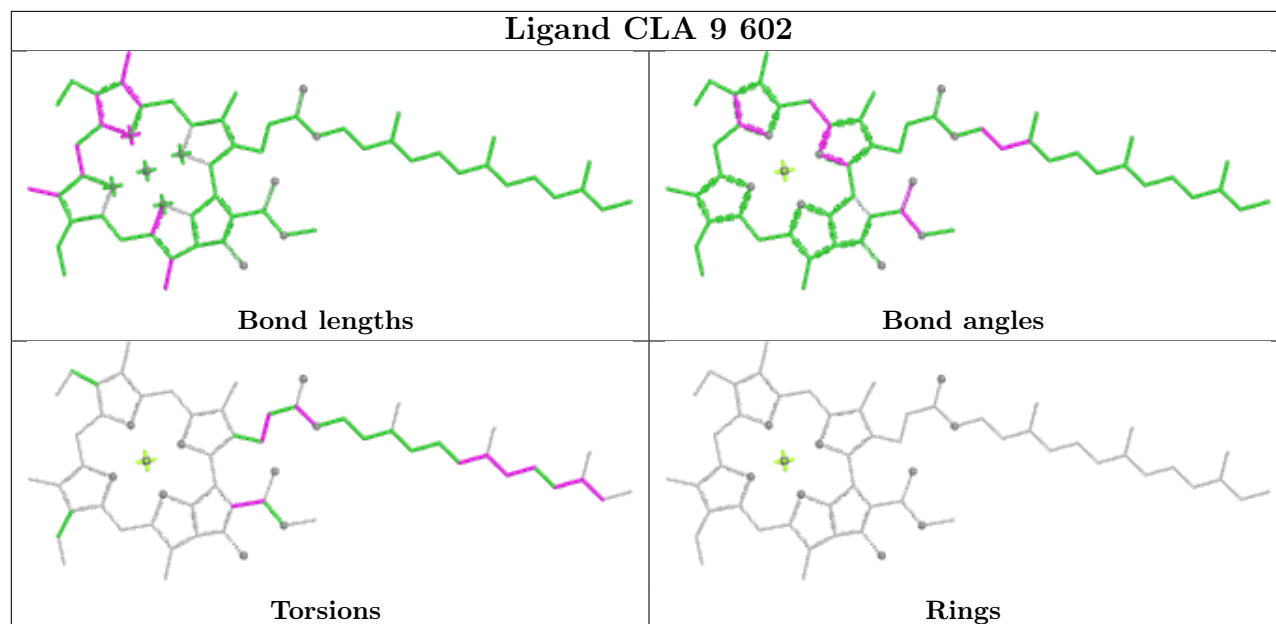
Ligand CHL BU 613



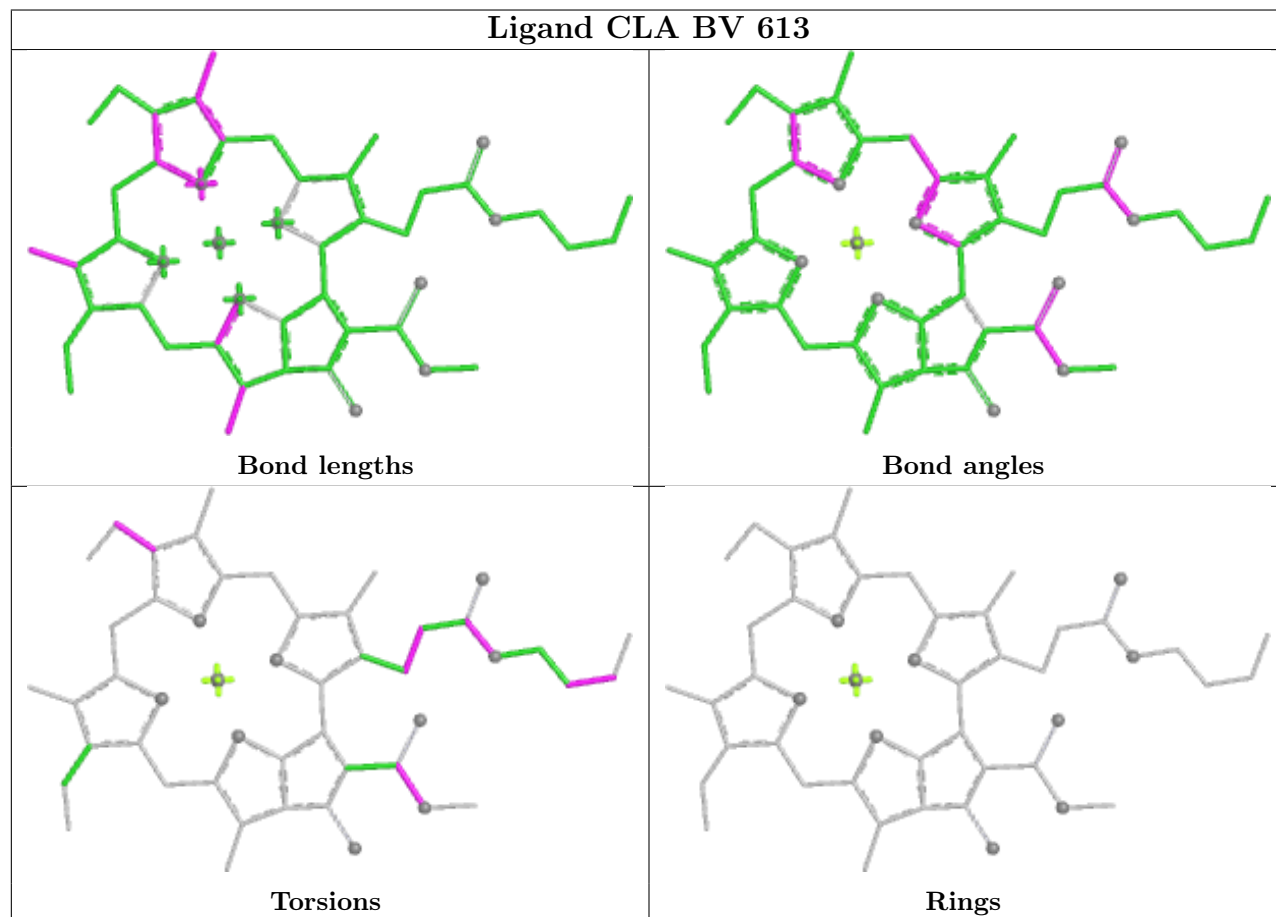
Ligand XAT r 616

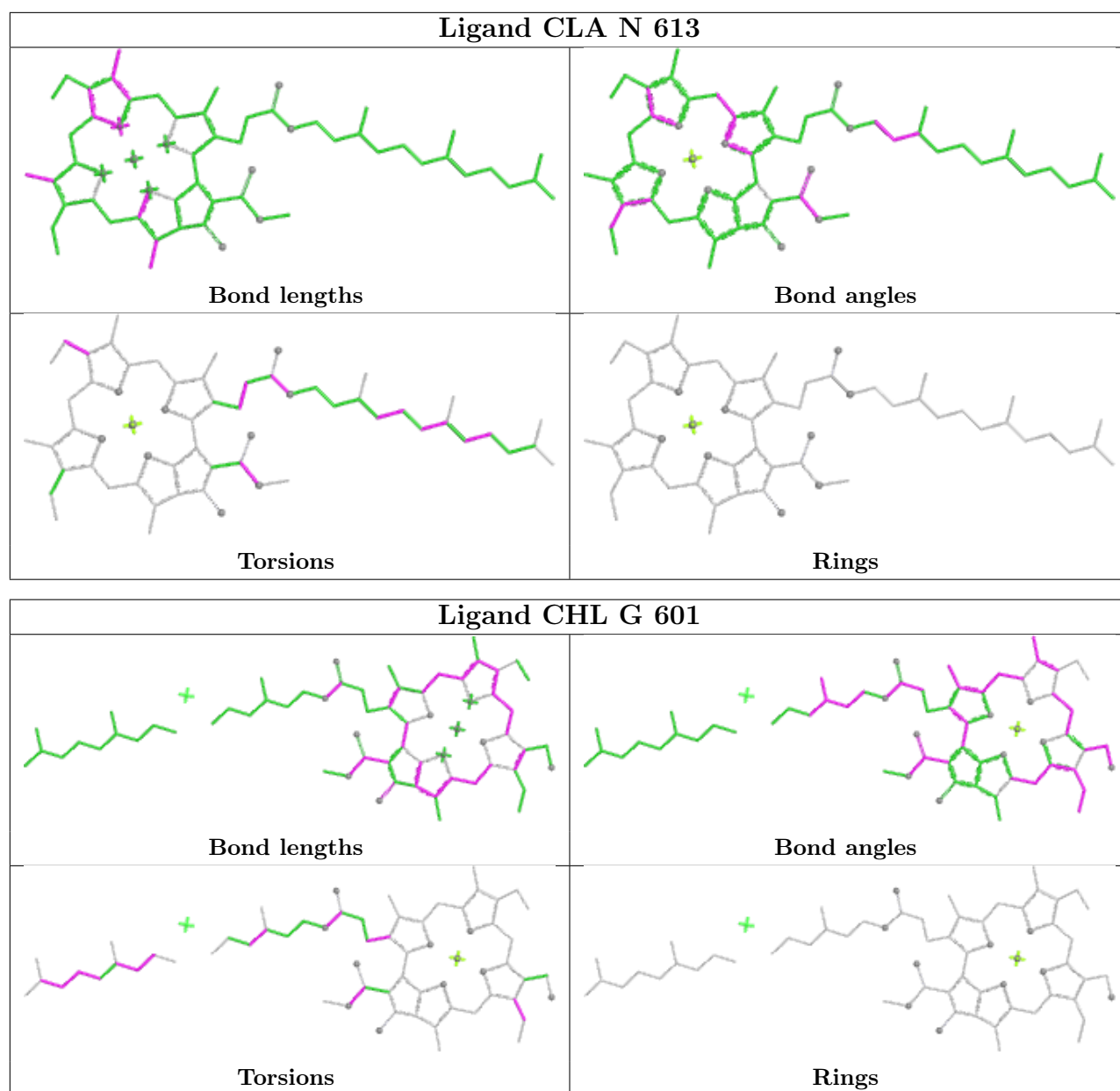


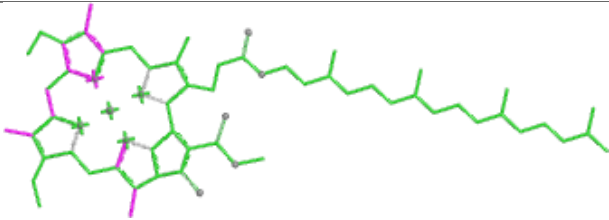
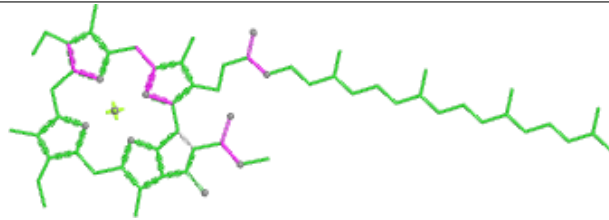
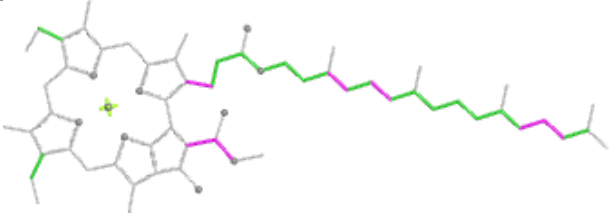
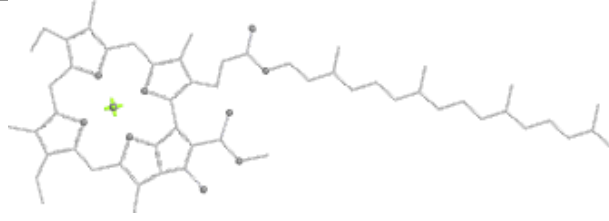
Ligand CLA 9 602

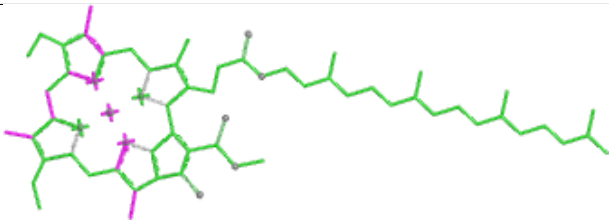
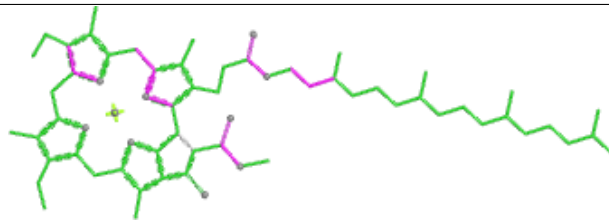
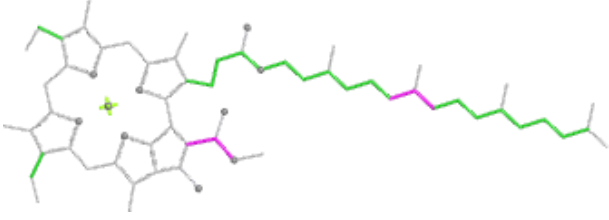
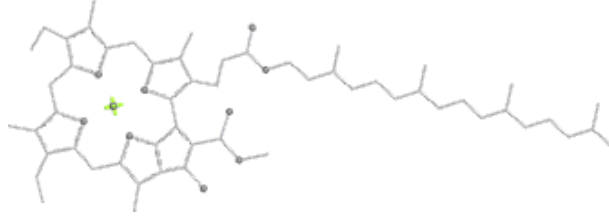


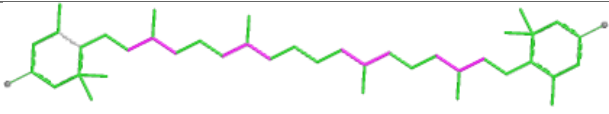
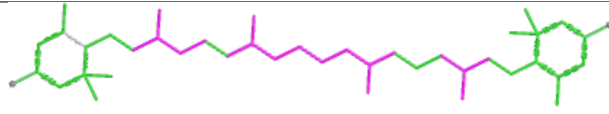
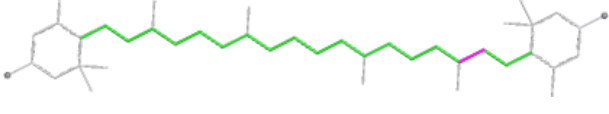
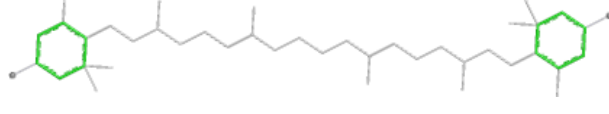
Ligand CLA BV 613

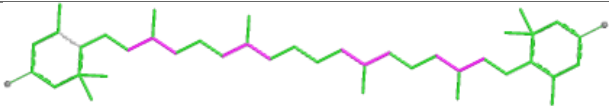
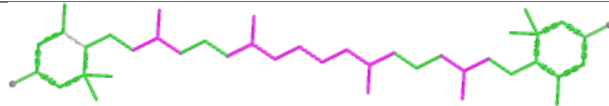

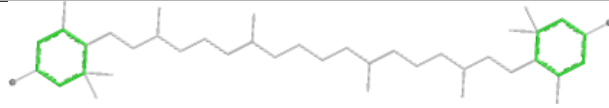



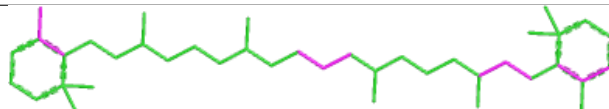
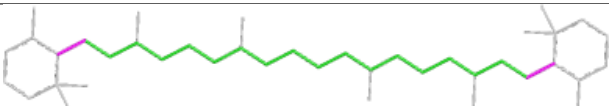
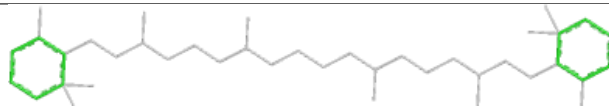


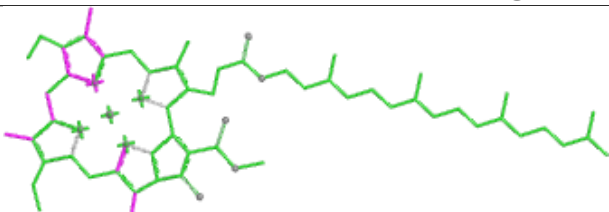
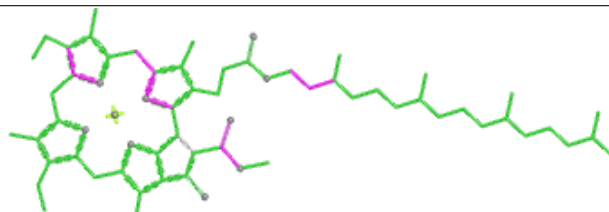
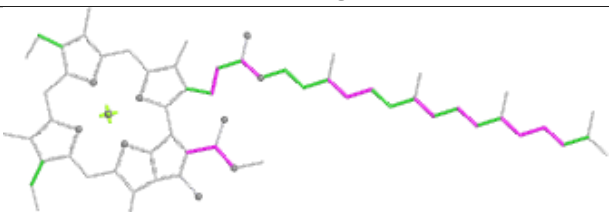
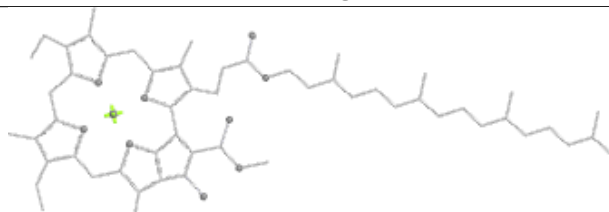
Ligand CLA b 610	
	
Bond lengths	Bond angles
	
Torsions	Rings

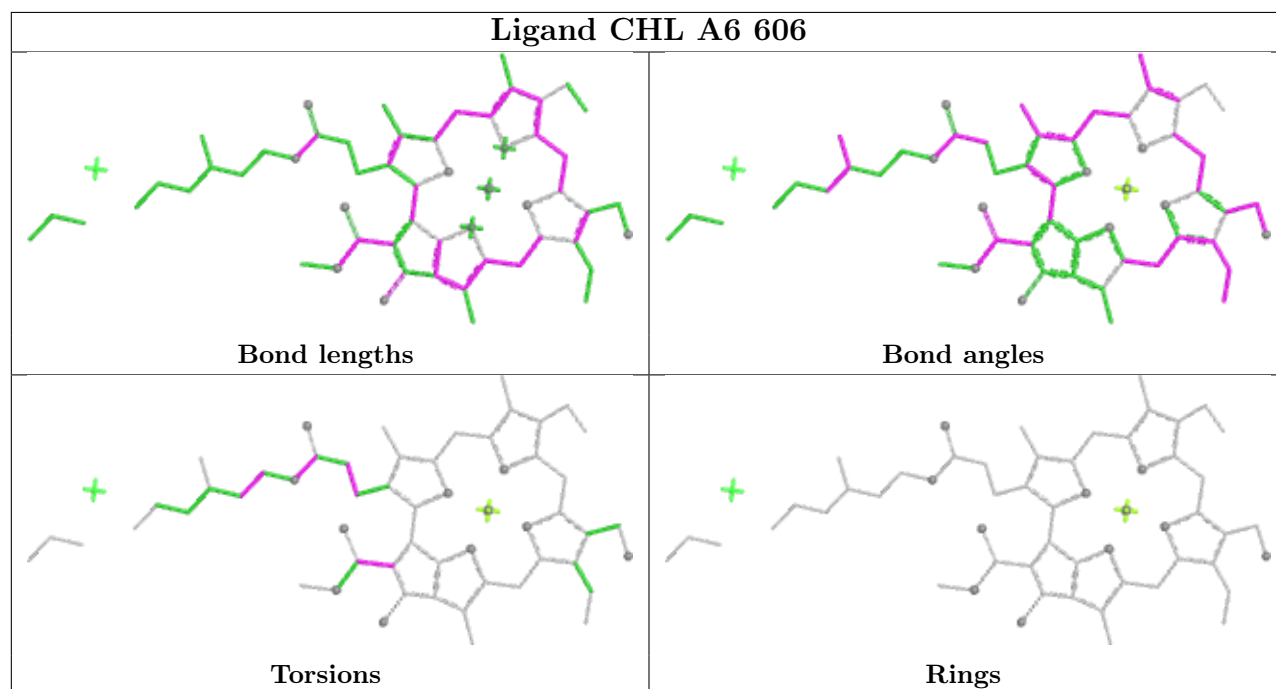
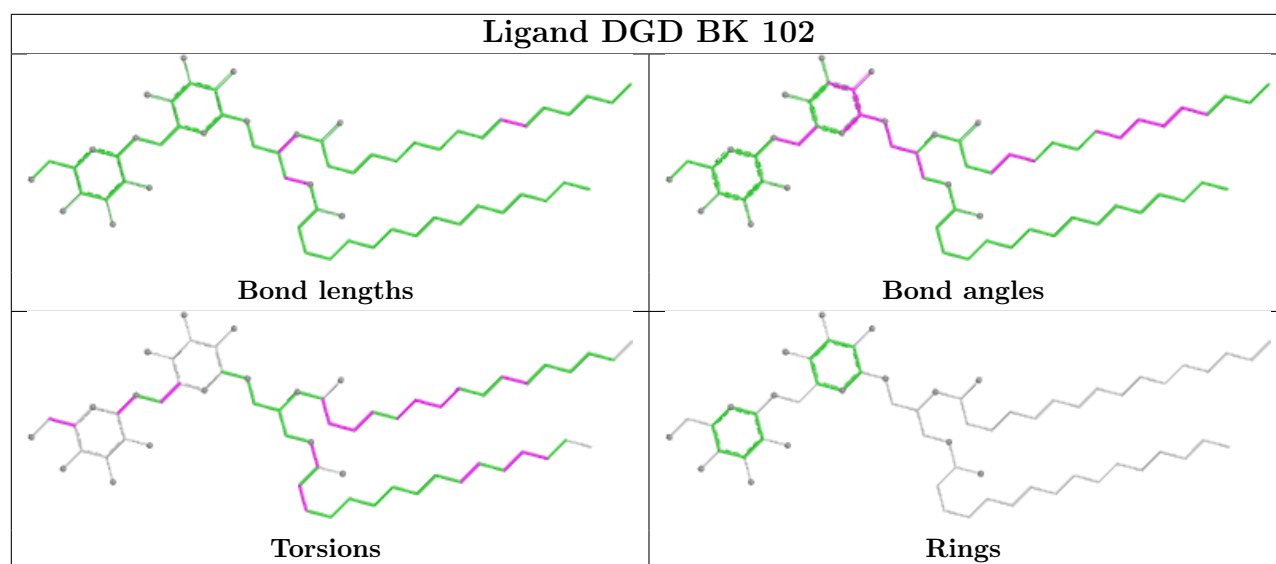
Ligand CLA C 509	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand LUT BB 316	
	
Bond lengths	Bond angles
	
Torsions	Rings

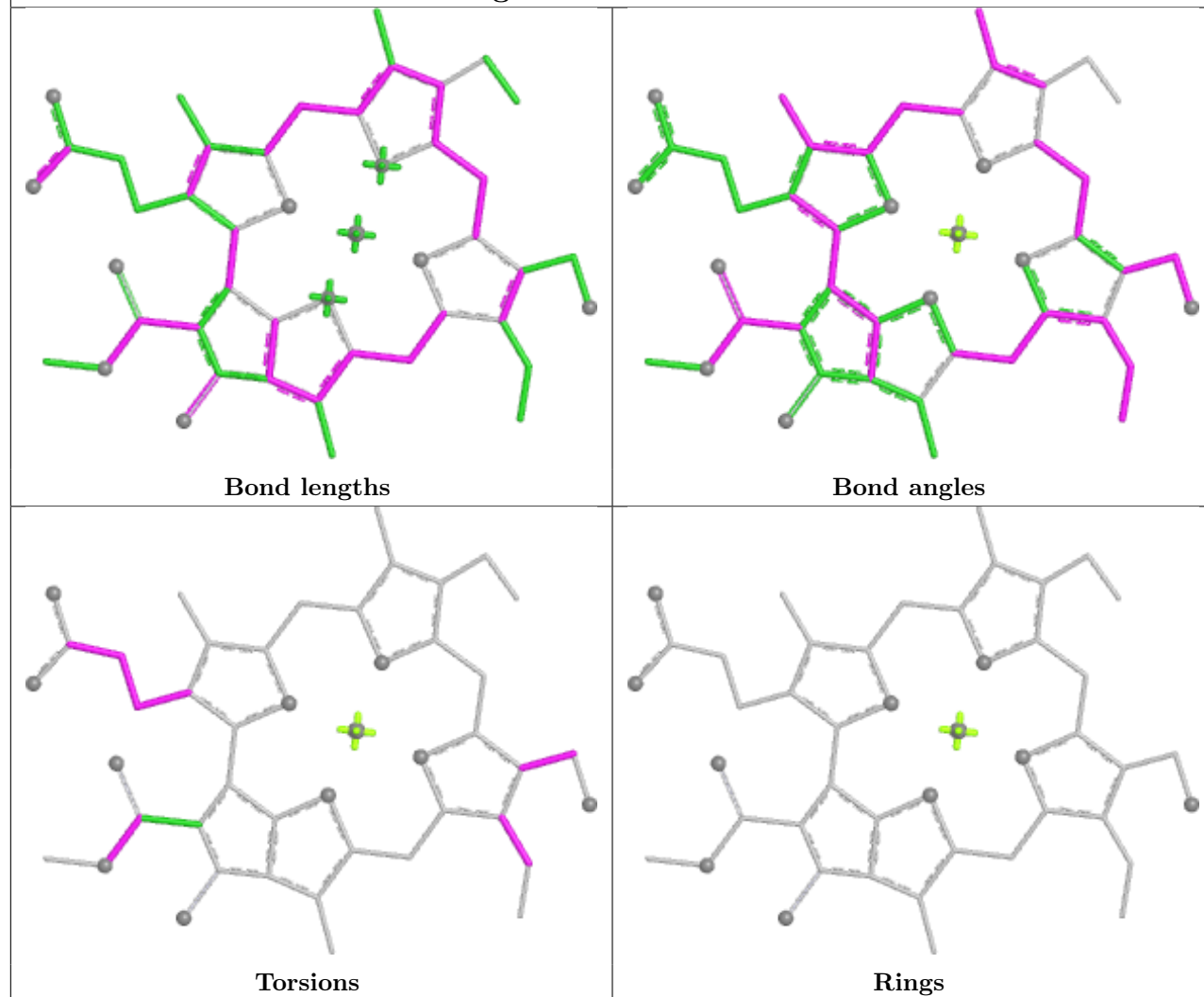
Ligand LUT G 616	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR b 620	
	
Bond lengths	Bond angles
	
Torsions	Rings

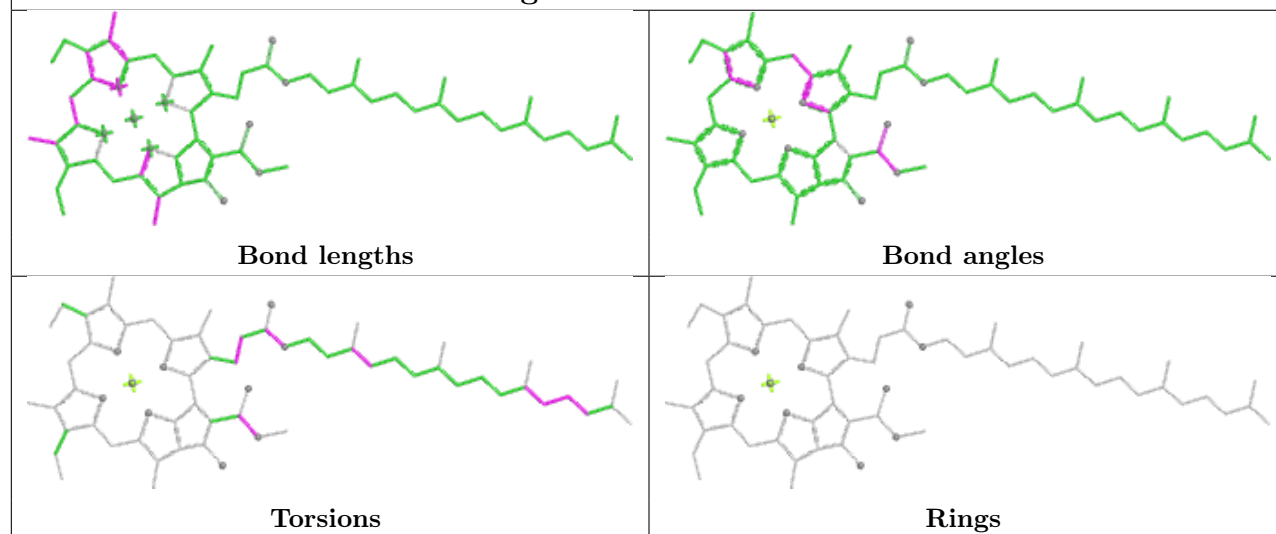
Ligand CLA C 510	
	
Bond lengths	Bond angles
	
Torsions	Rings



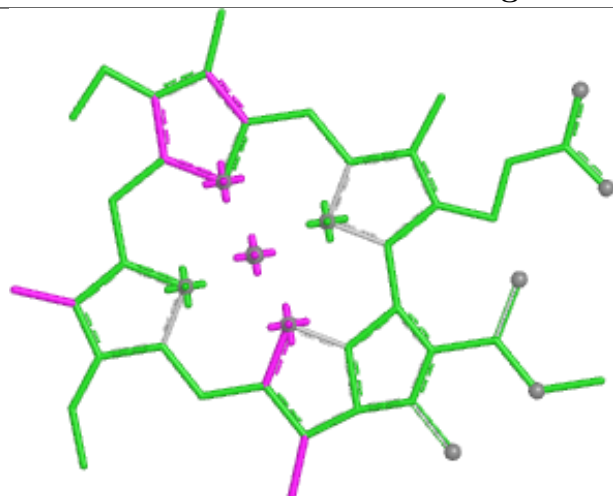
Ligand CHL A6 607



Ligand CLA BE 604



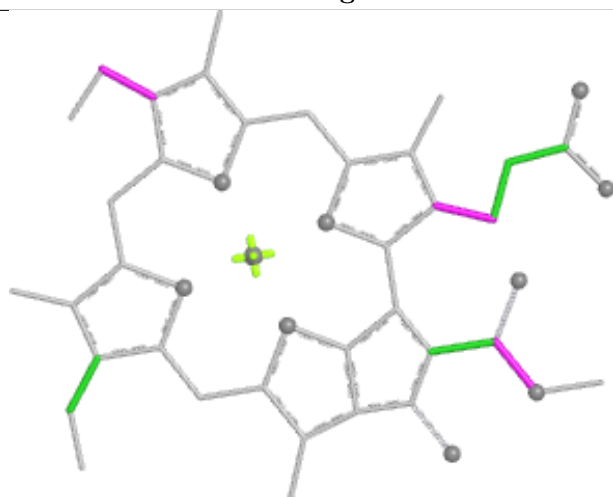
Ligand CLA AB 303



Bond lengths



Bond angles

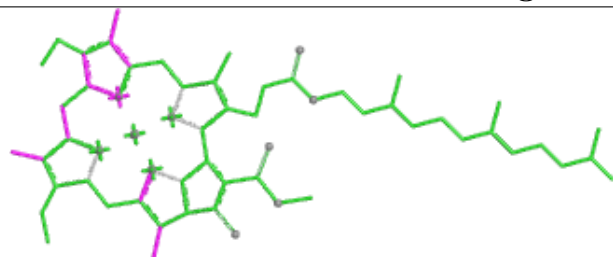


Torsions

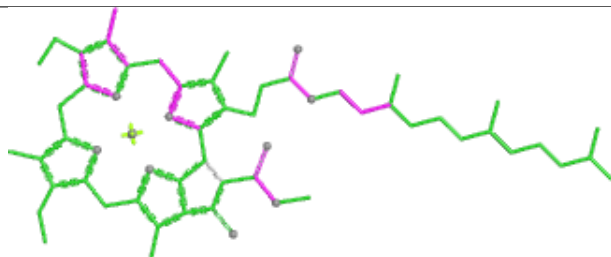


Rings

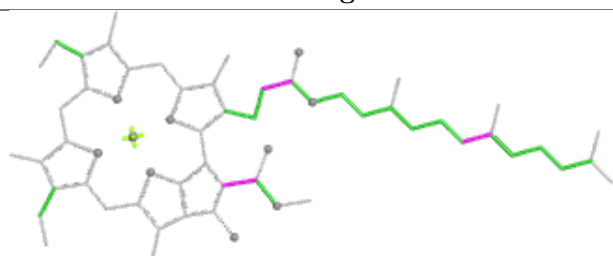
Ligand CLA n 612



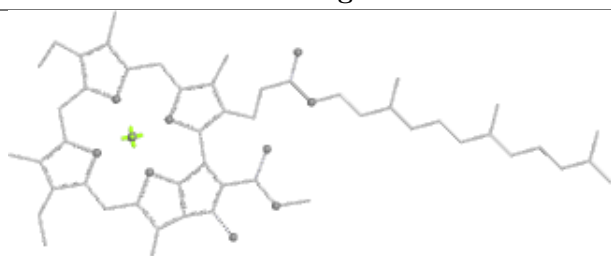
Bond lengths



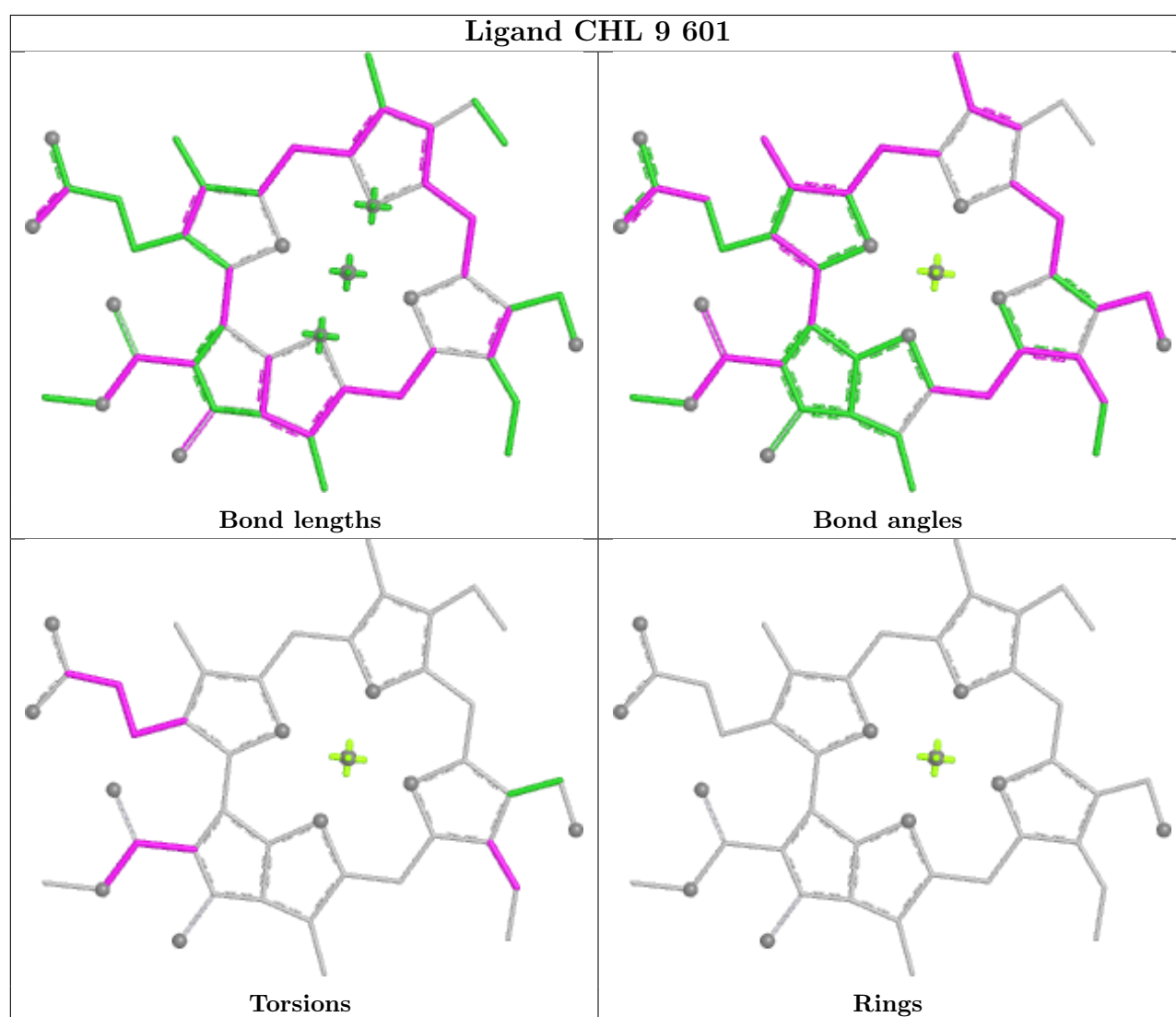
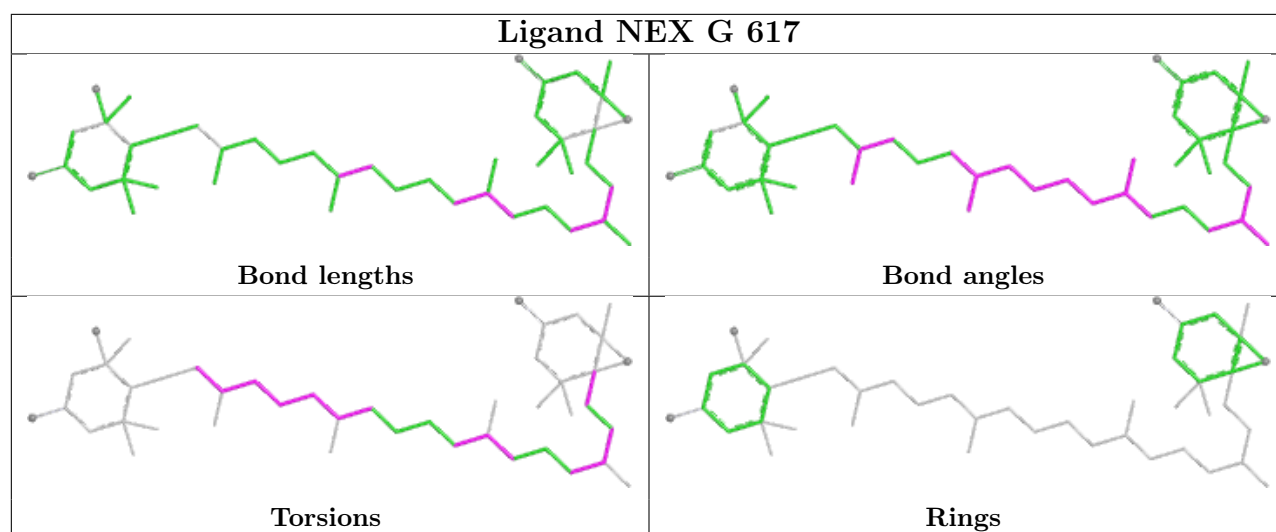
Bond angles

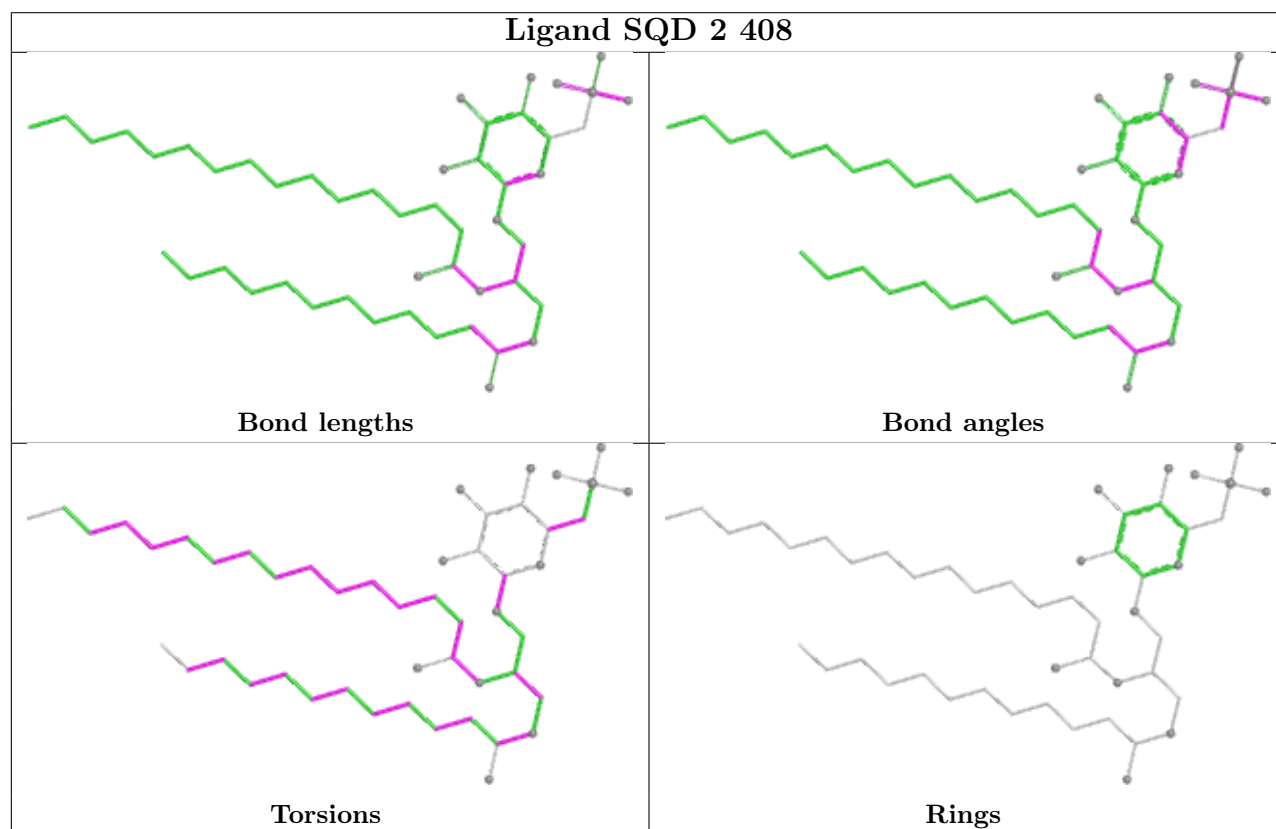
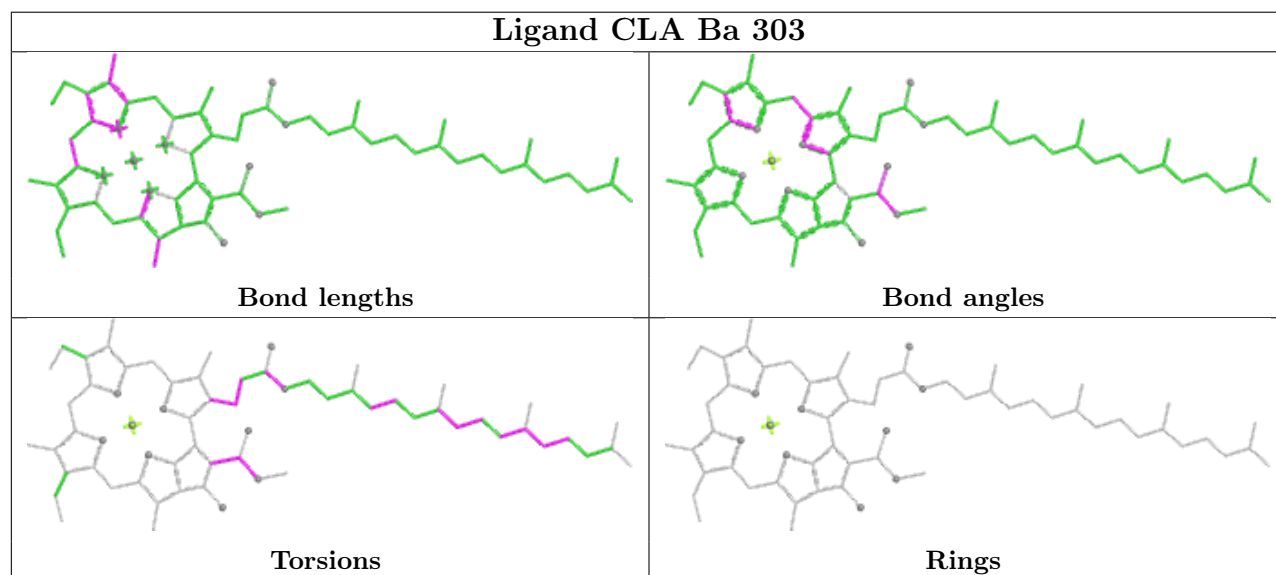
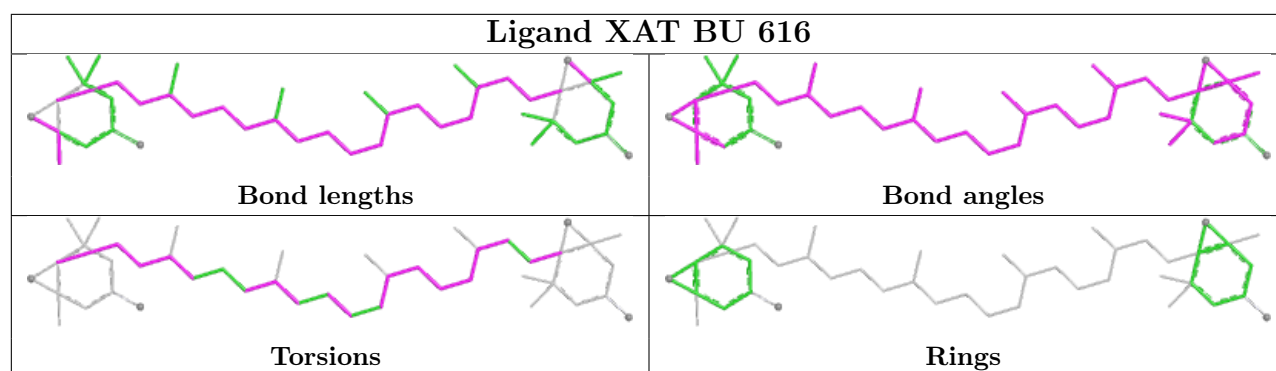


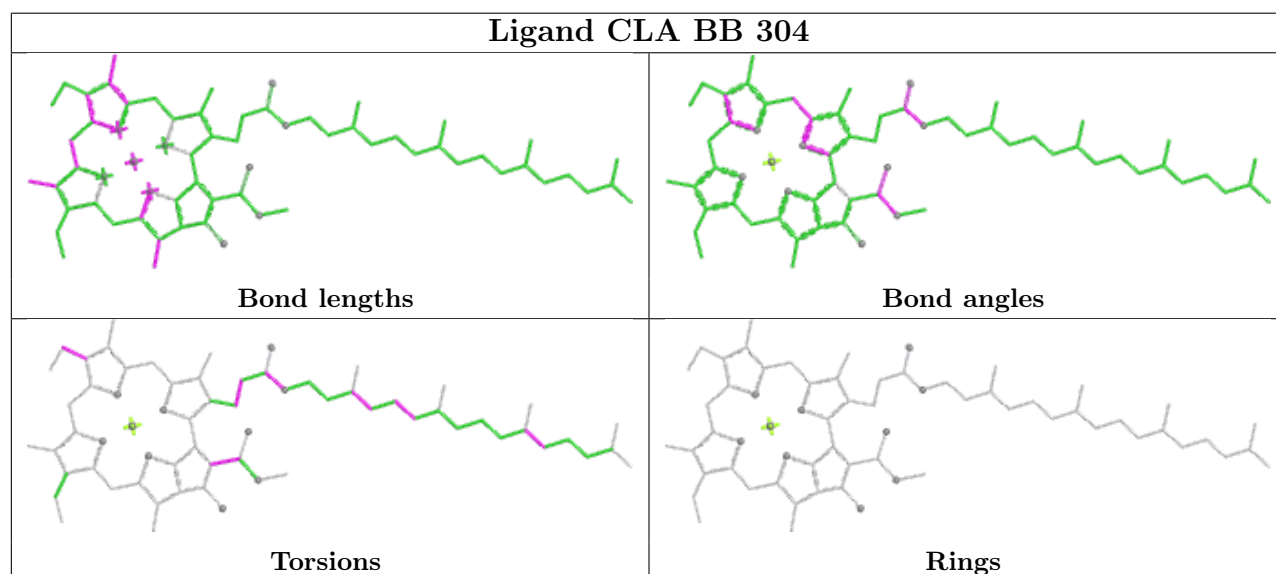
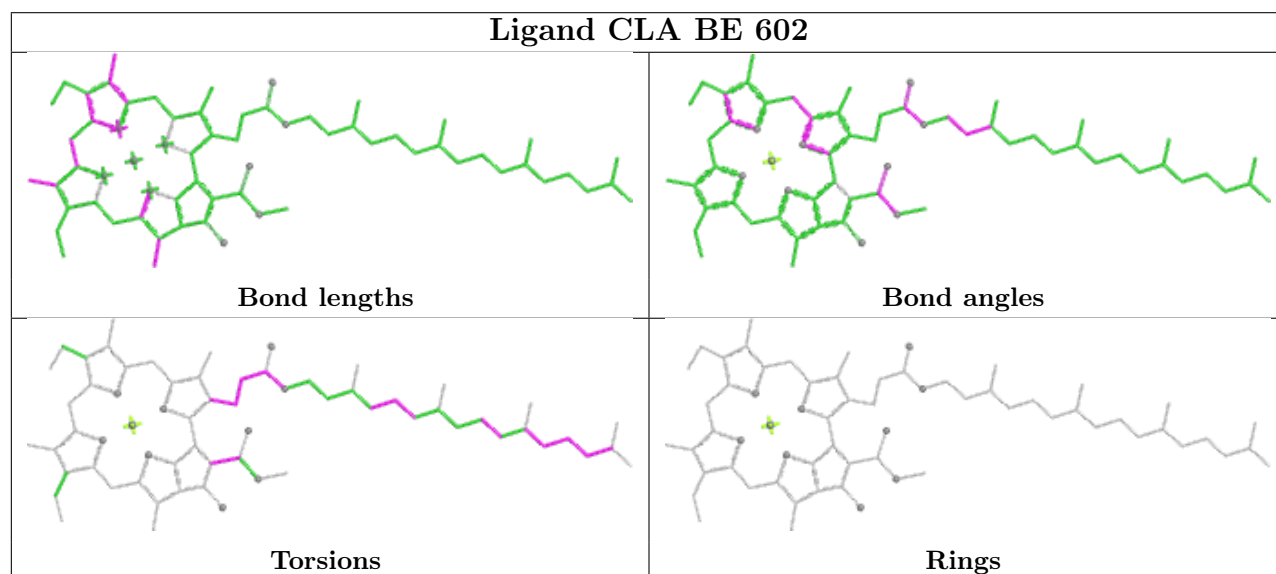
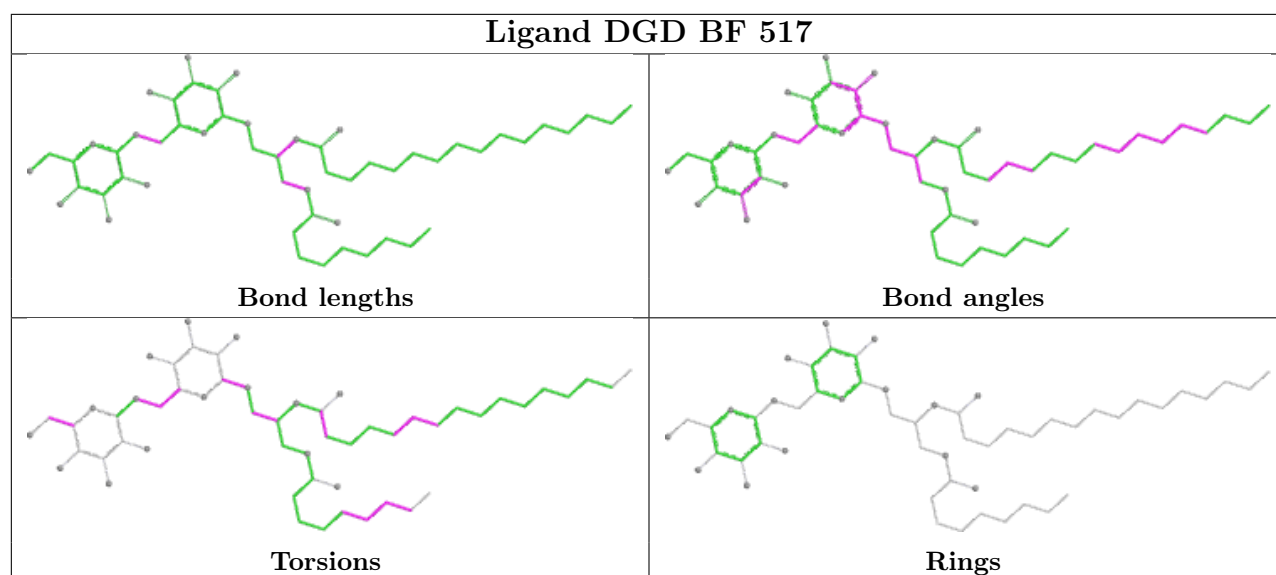
Torsions

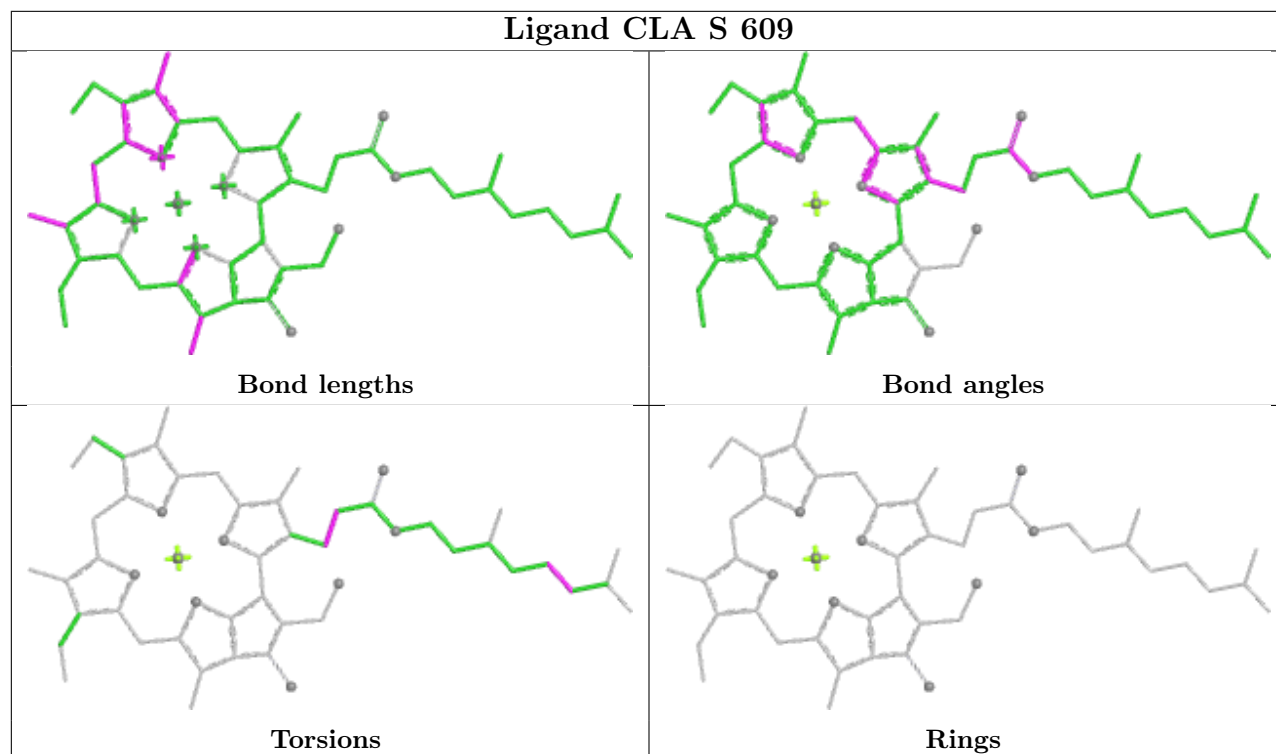
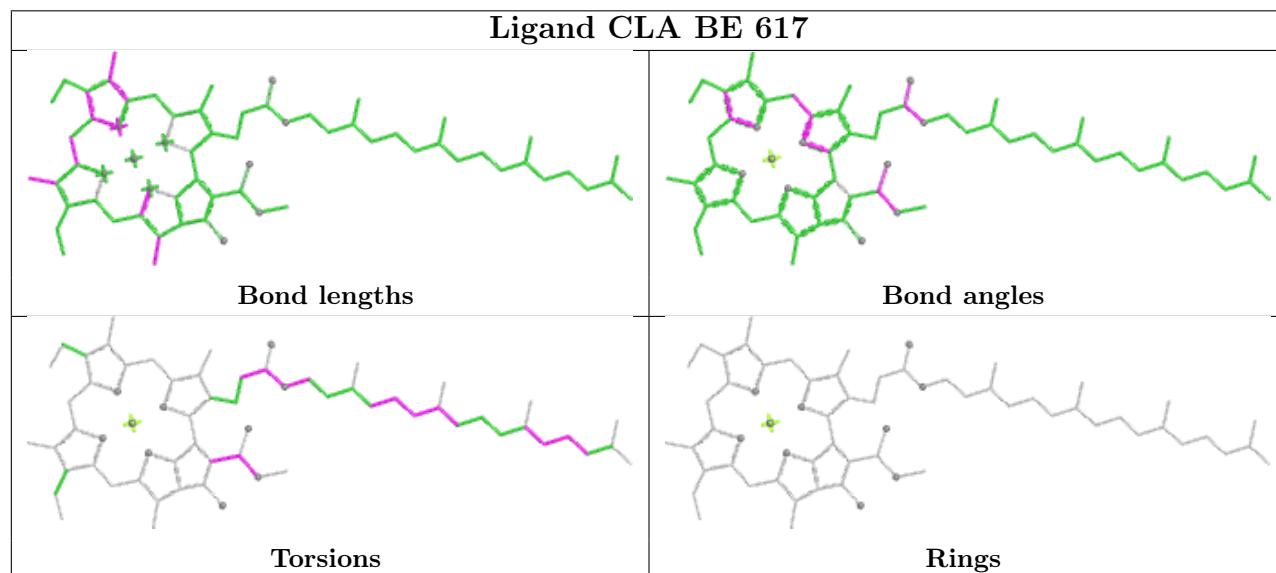
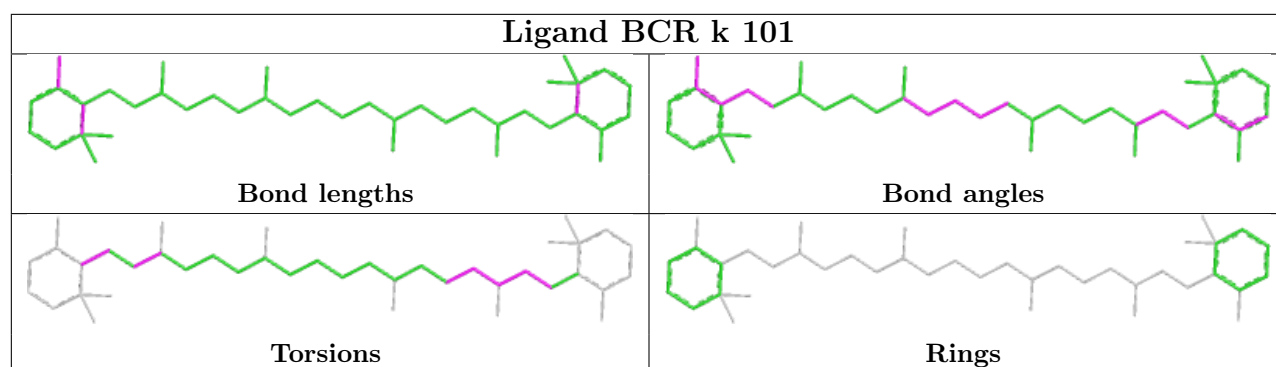


Rings

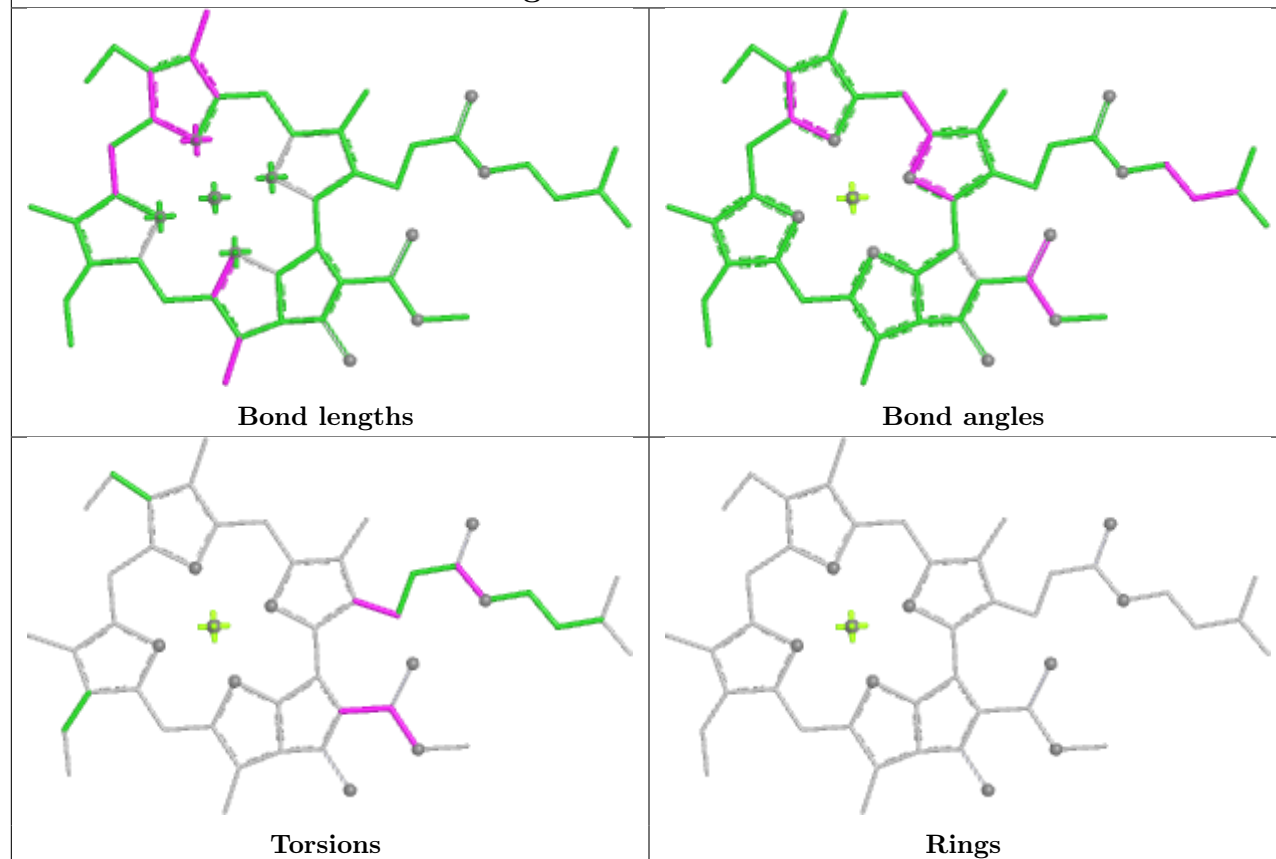




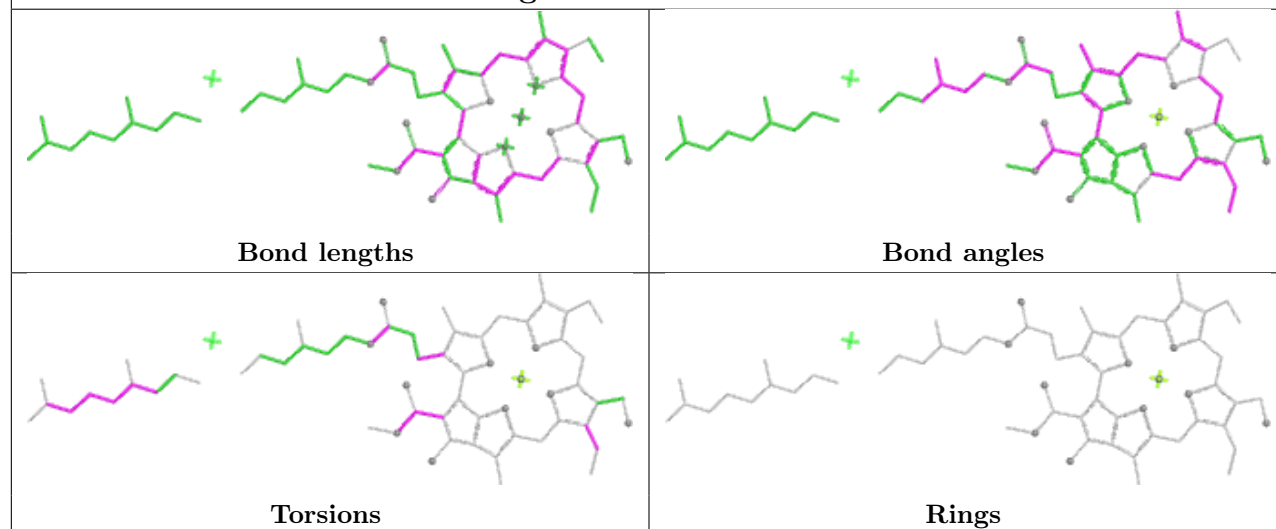


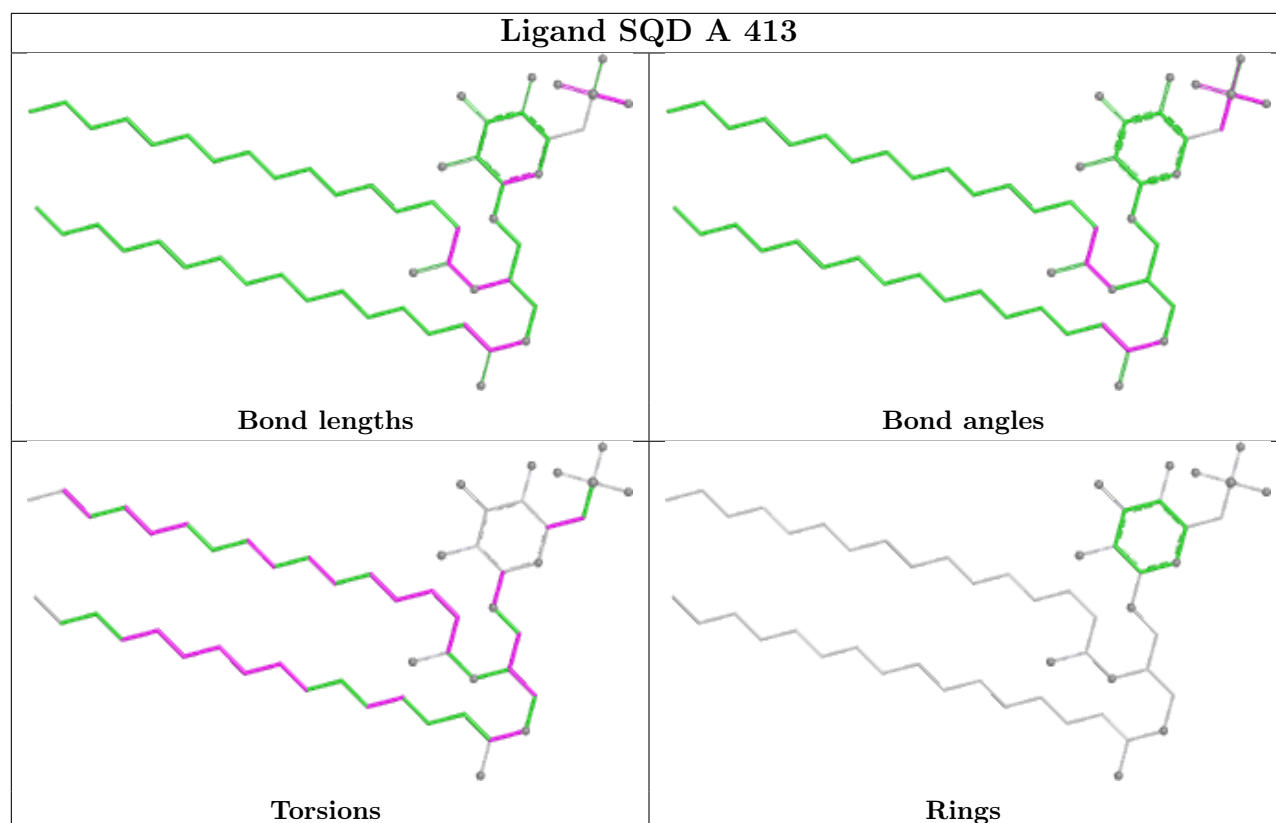
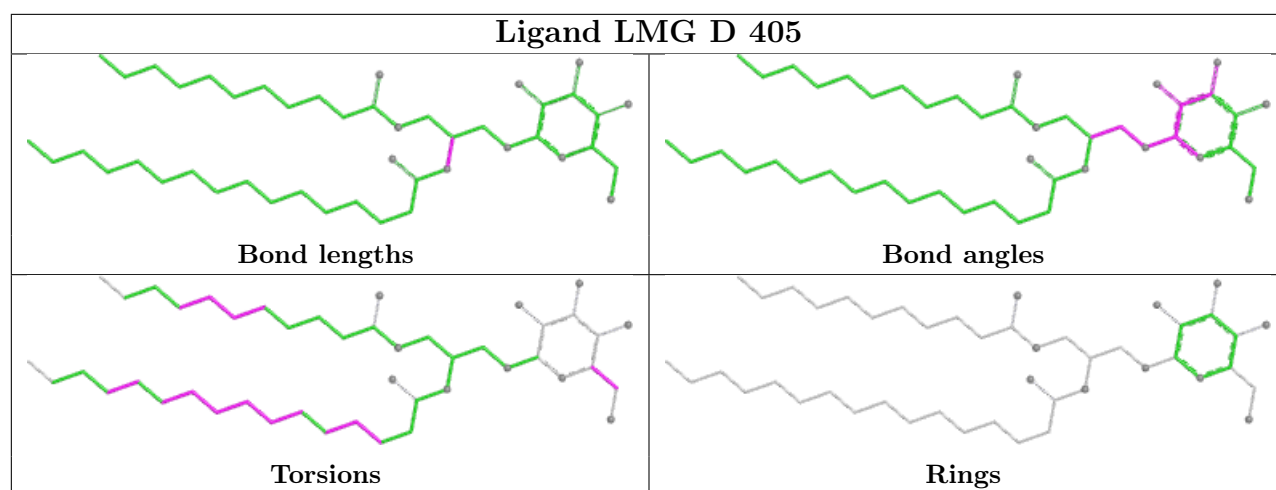


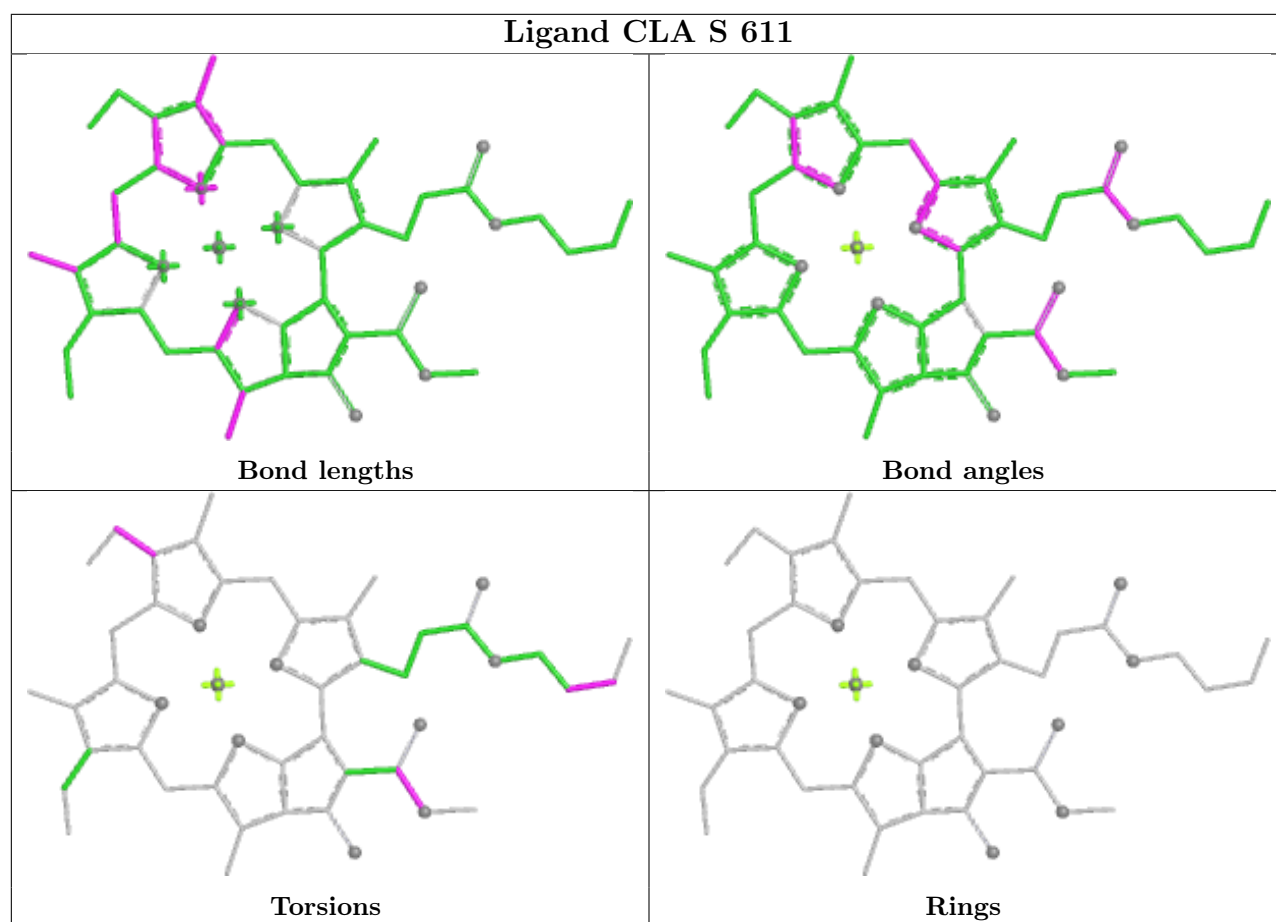
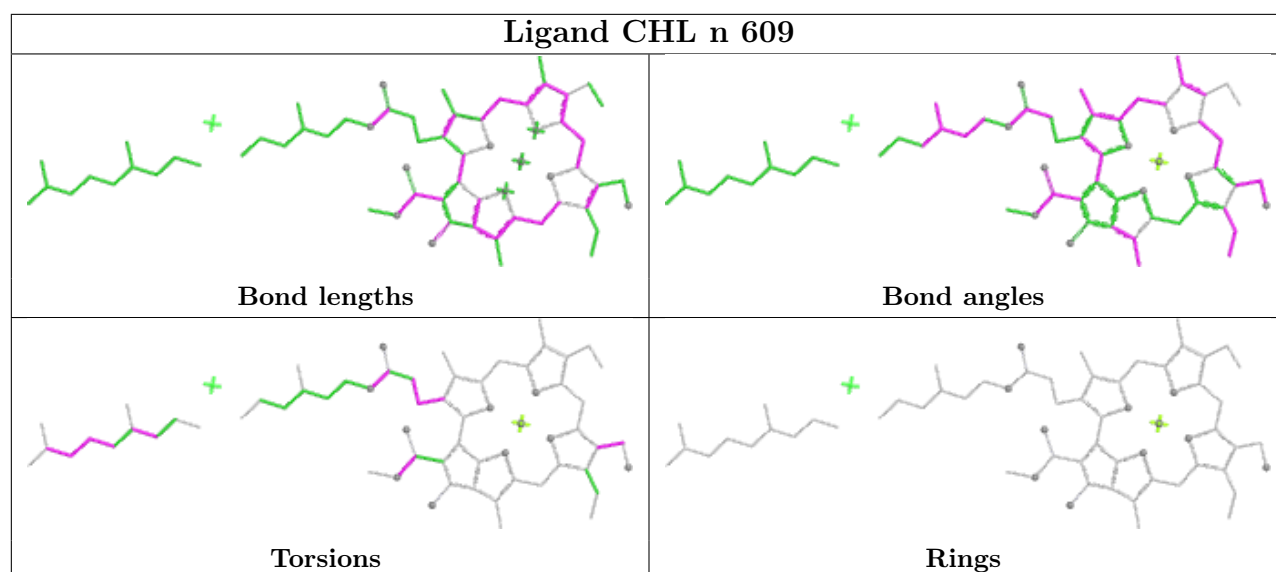
Ligand CLA BJ 604

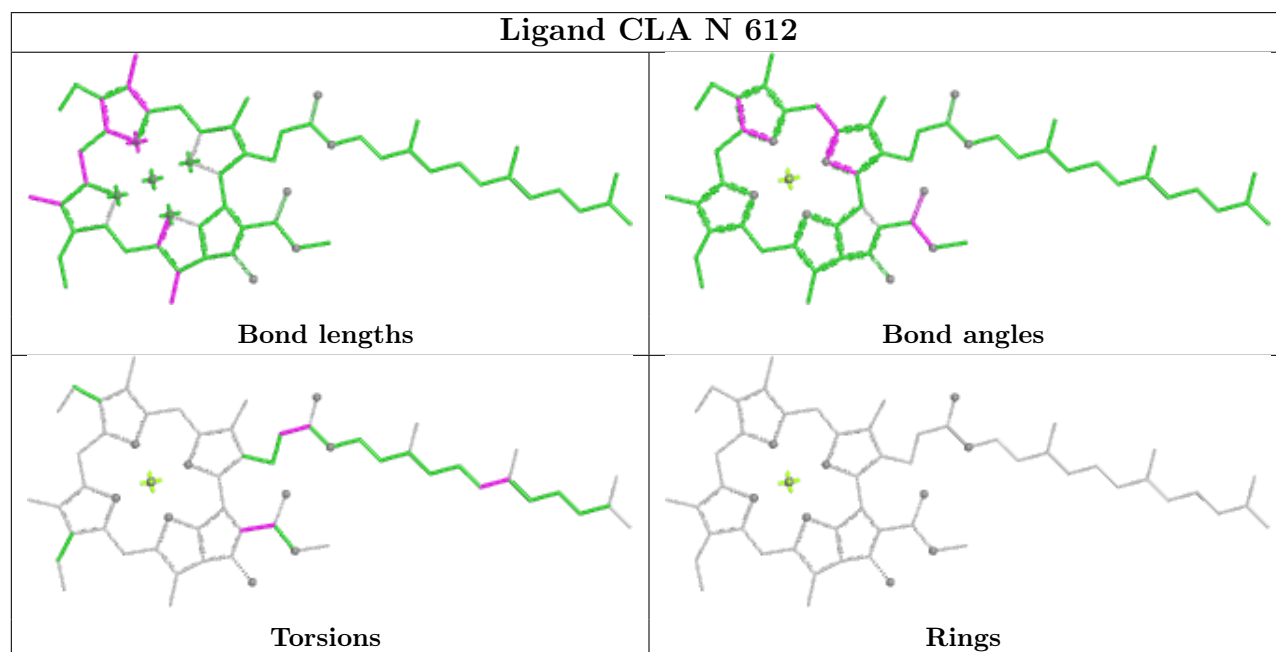
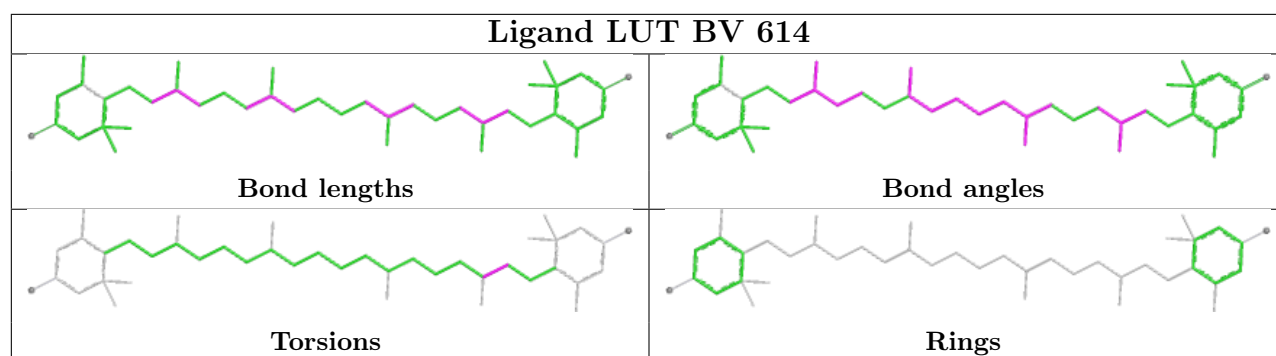


Ligand CHL BB 310

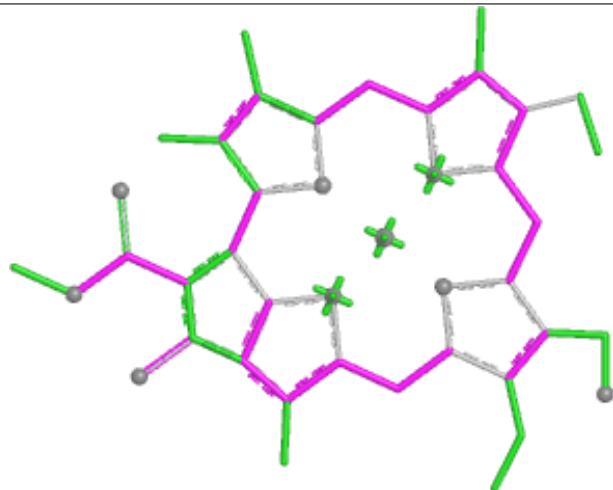




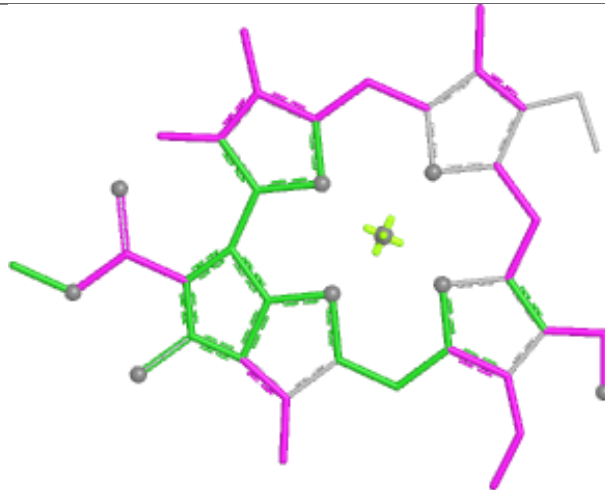




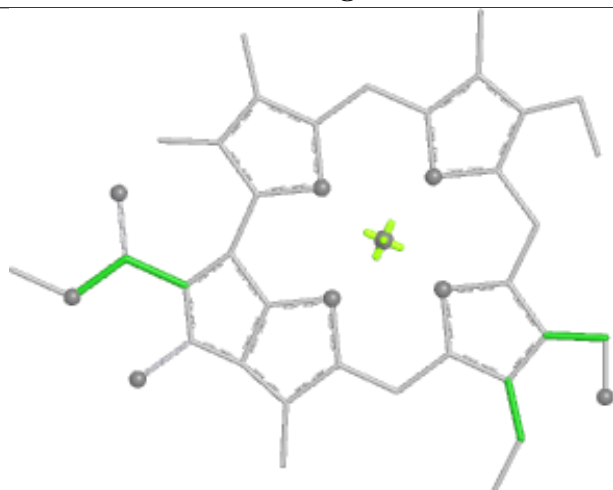
Ligand CHL r 613



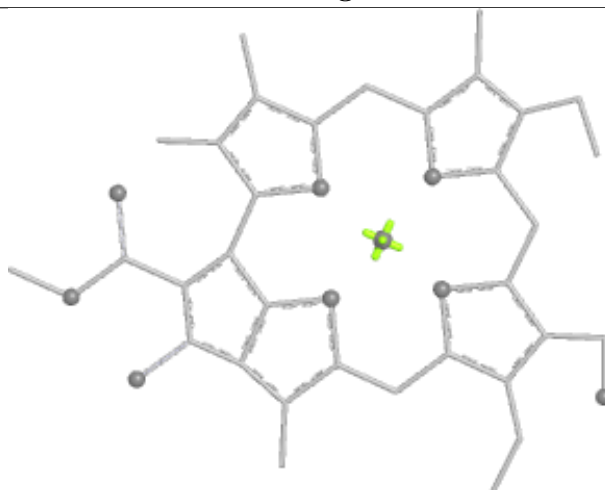
Bond lengths



Bond angles

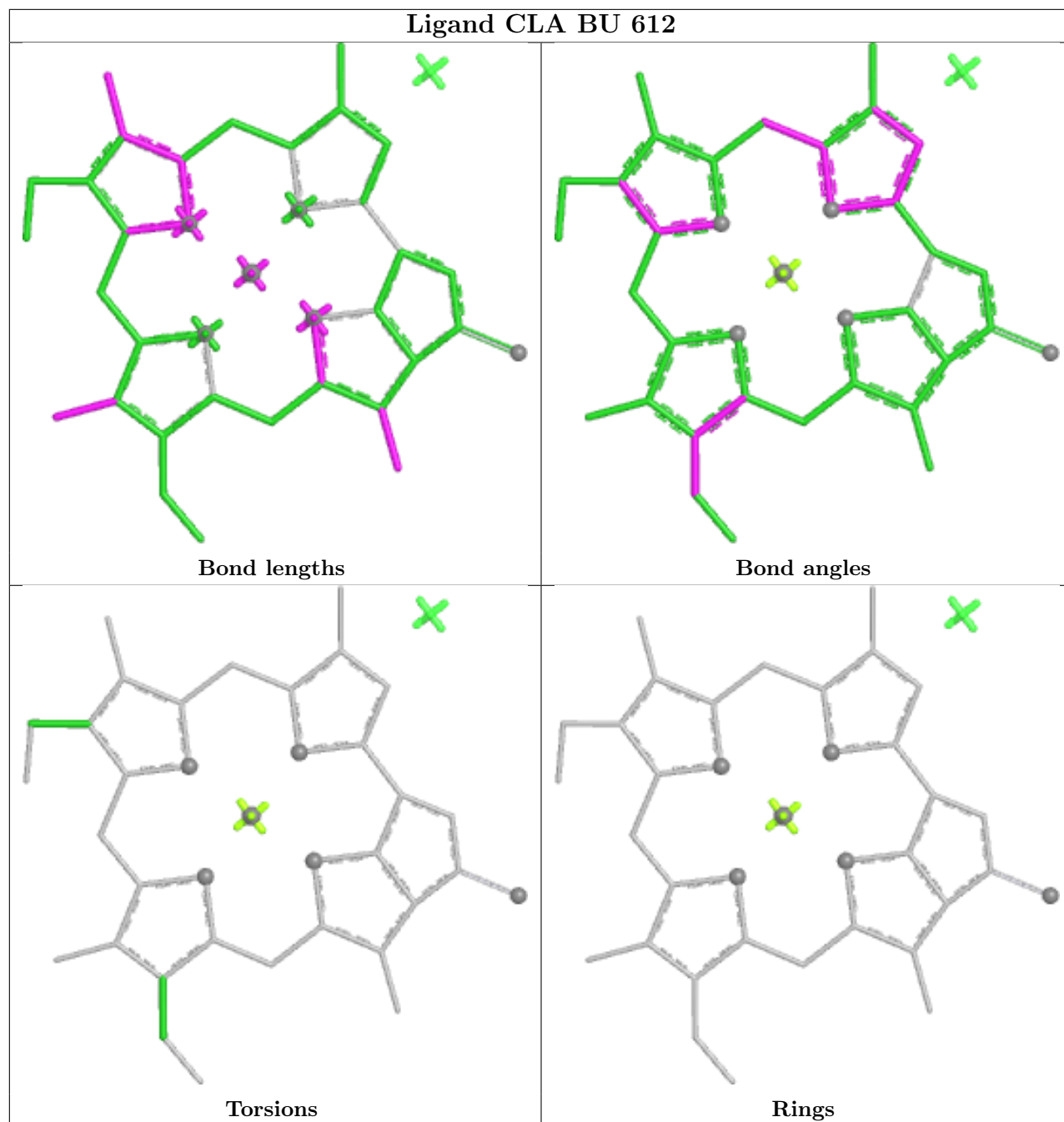


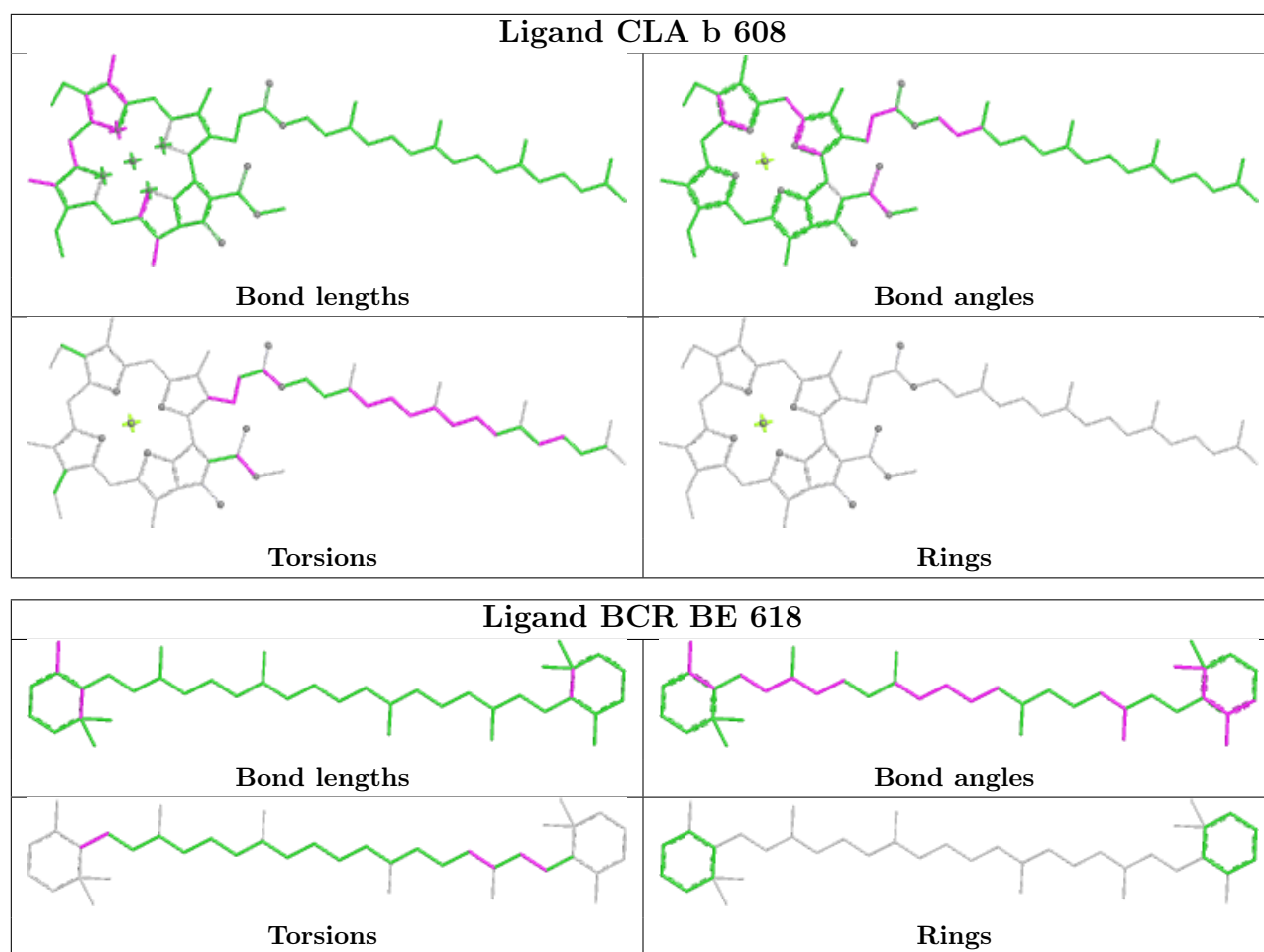
Torsions



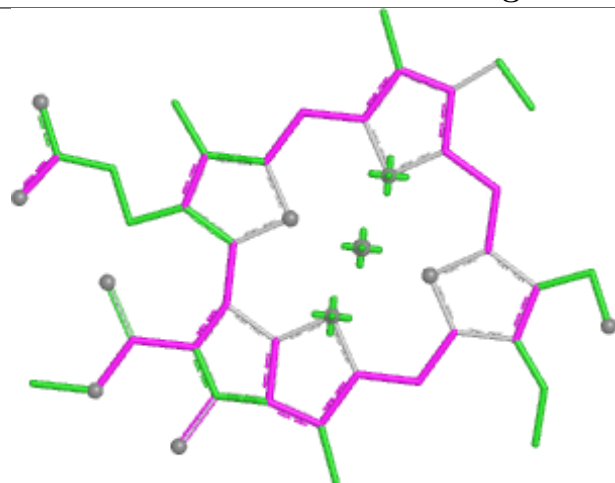
Rings

Ligand CLA BU 612

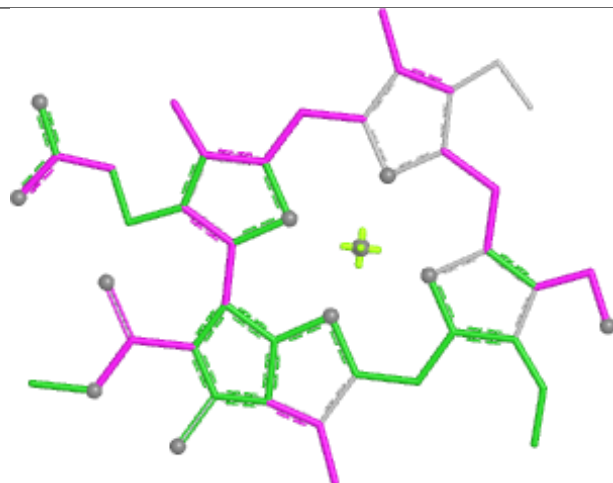




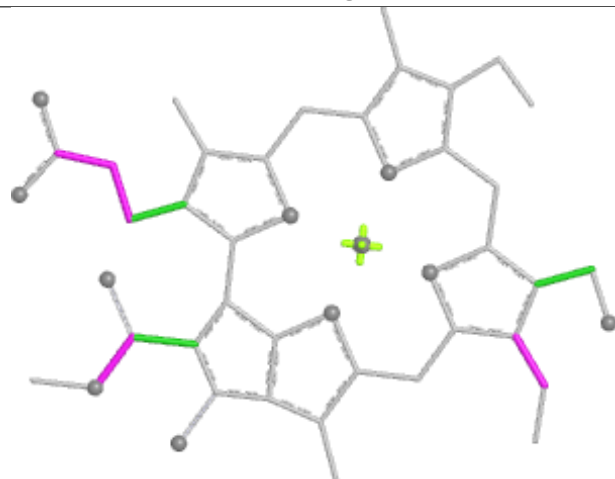
Ligand CHL AB 307



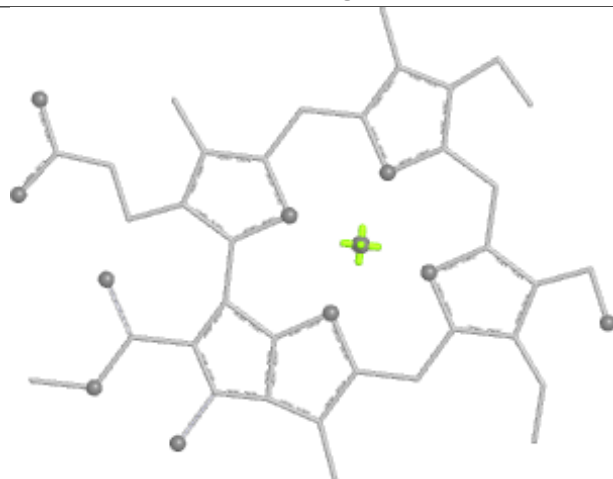
Bond lengths



Bond angles

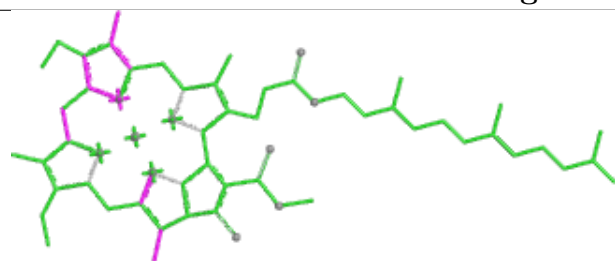


Torsions

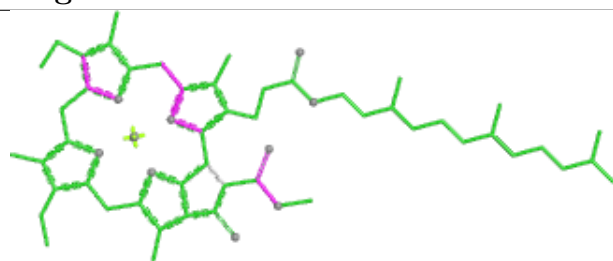


Rings

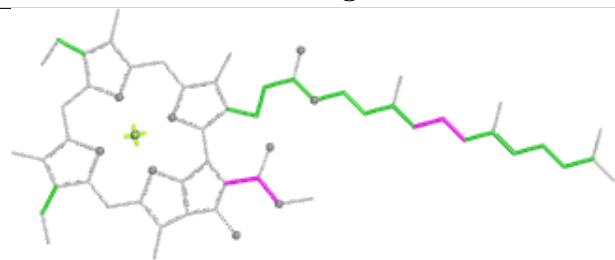
Ligand CLA g 612



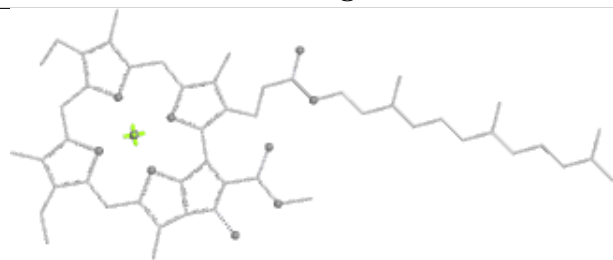
Bond lengths



Bond angles

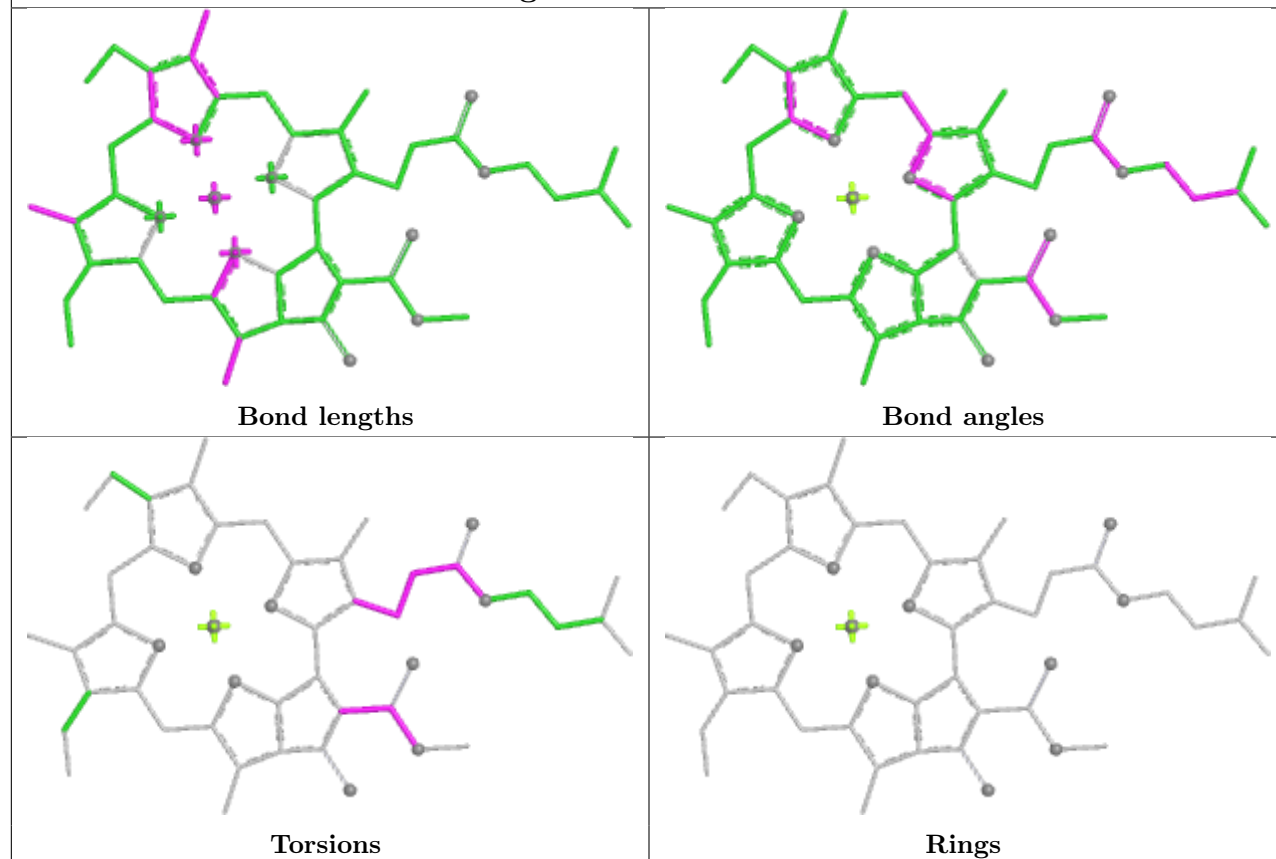


Torsions

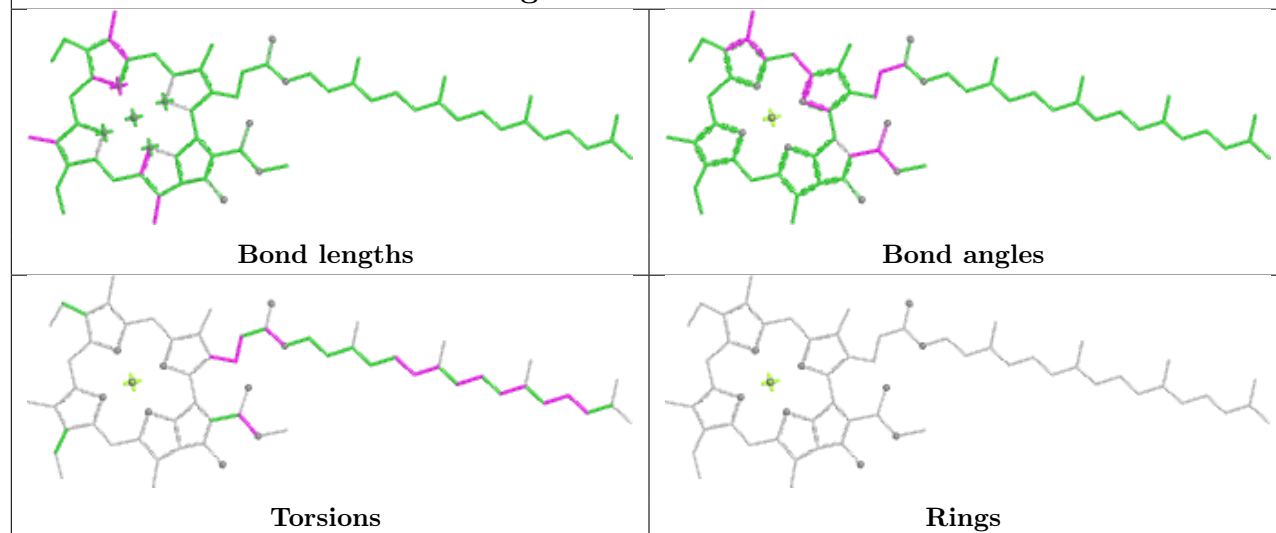


Rings

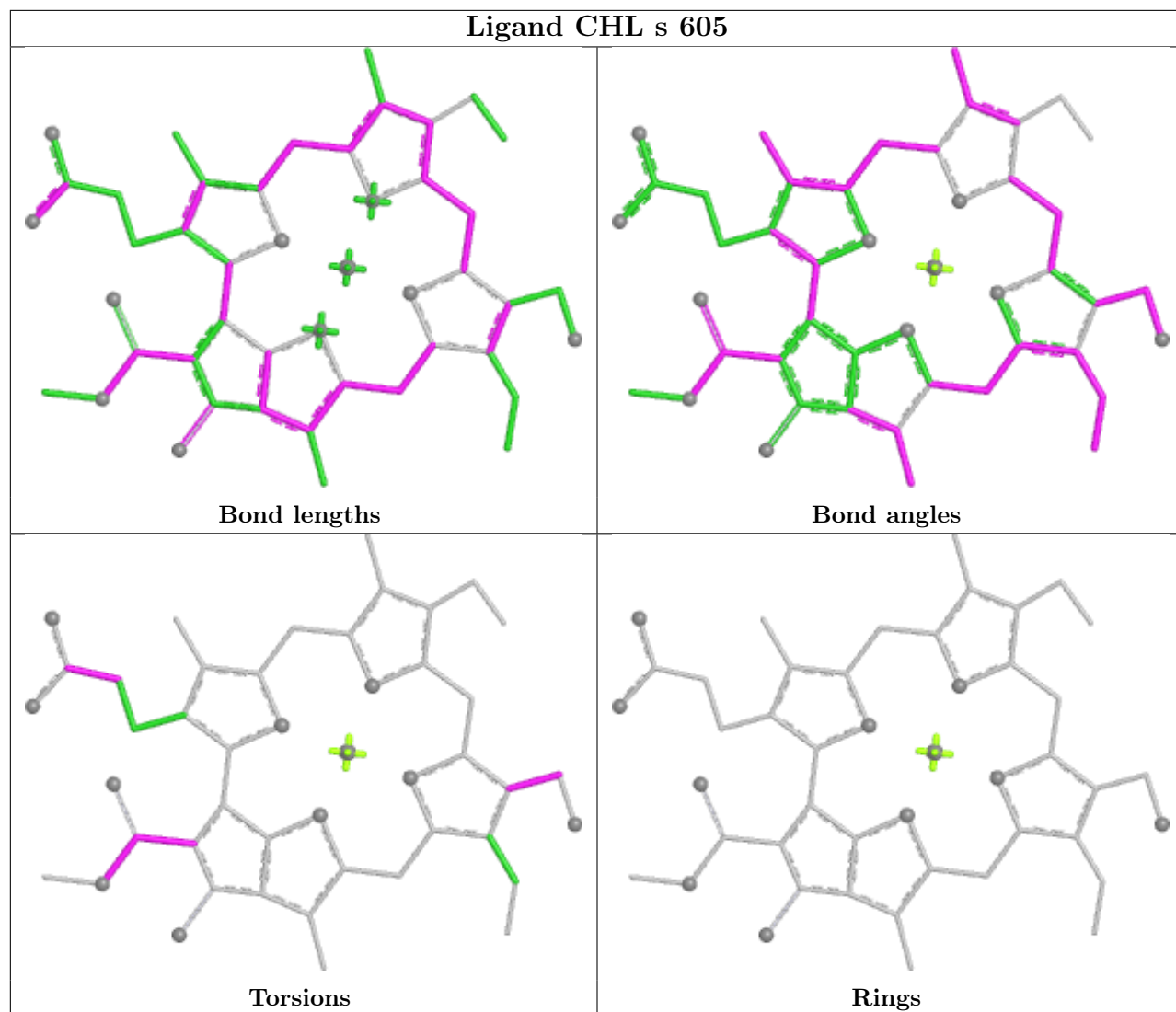
Ligand CLA BB 305

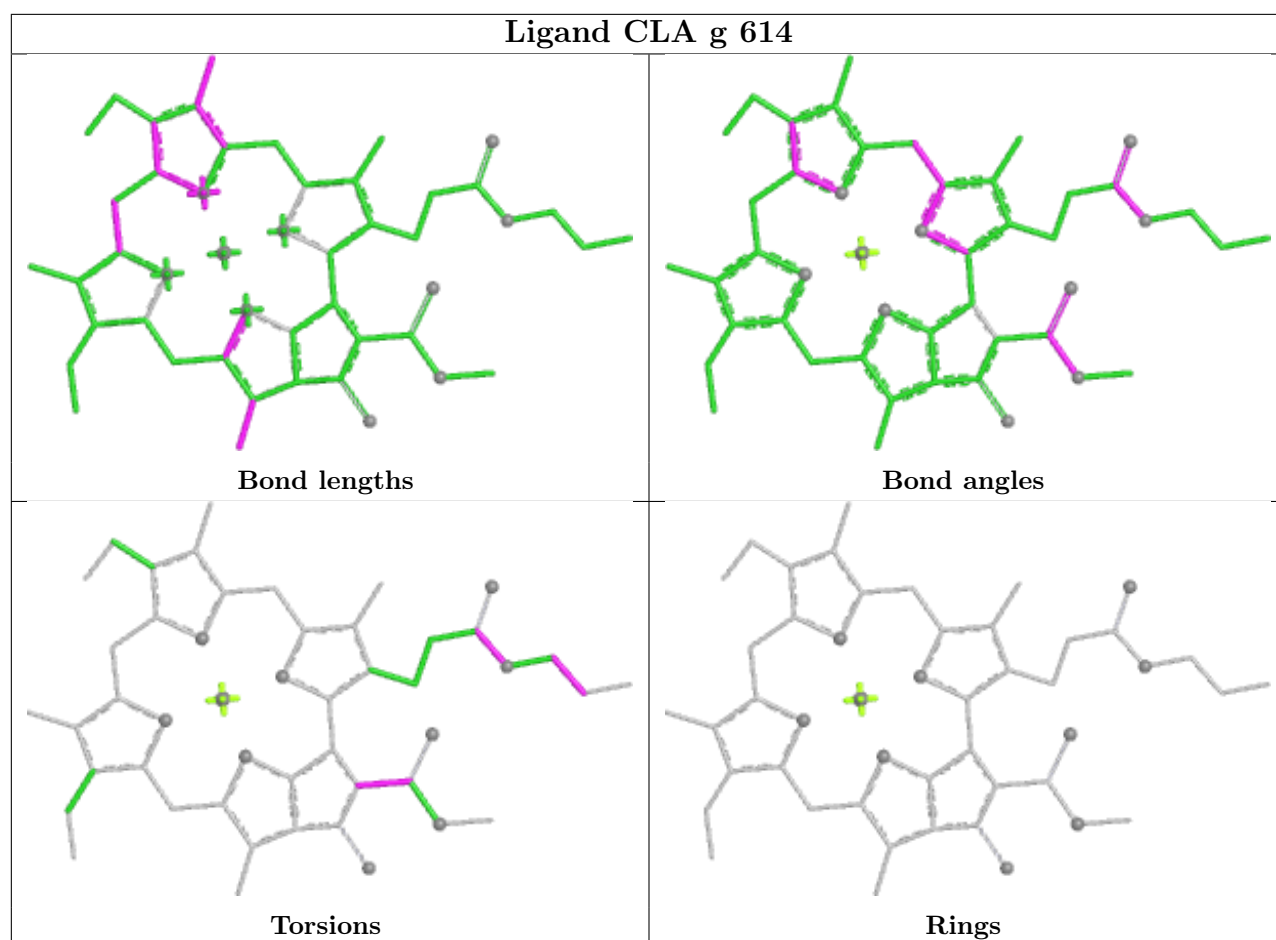


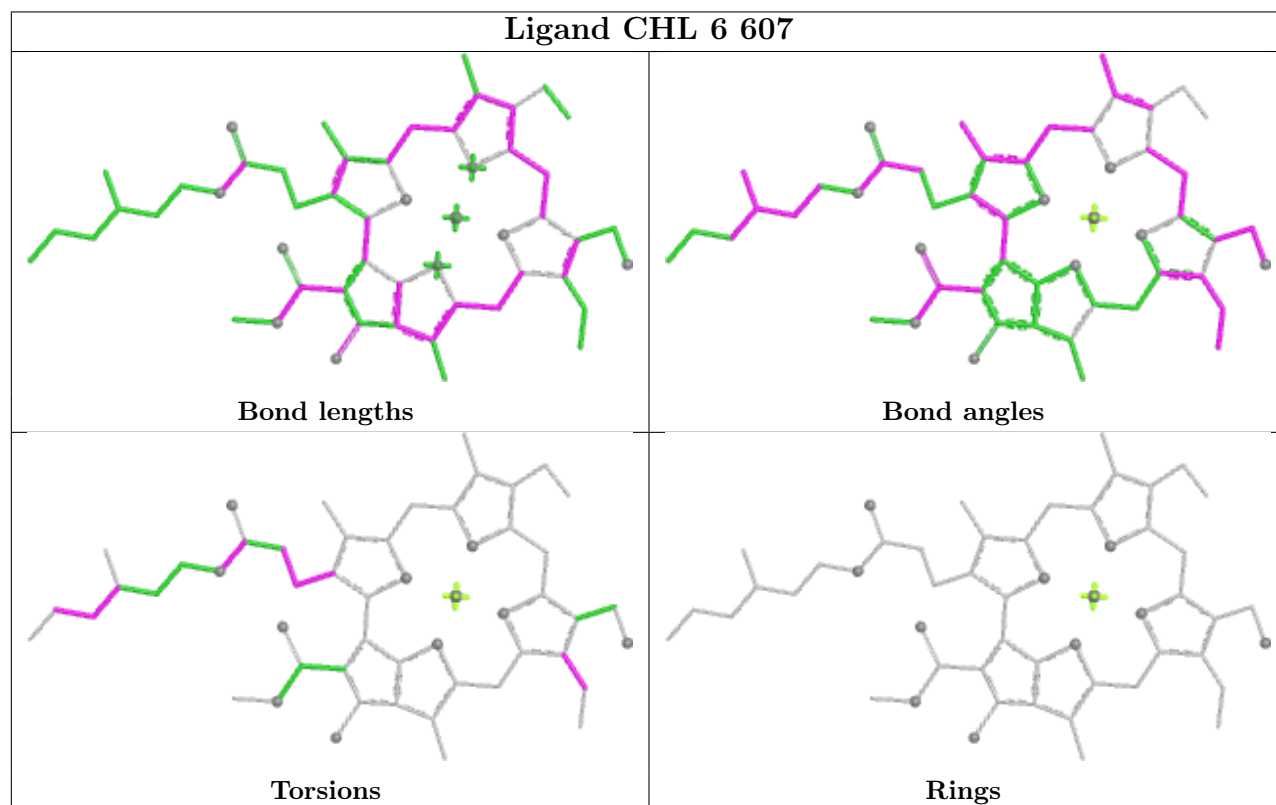
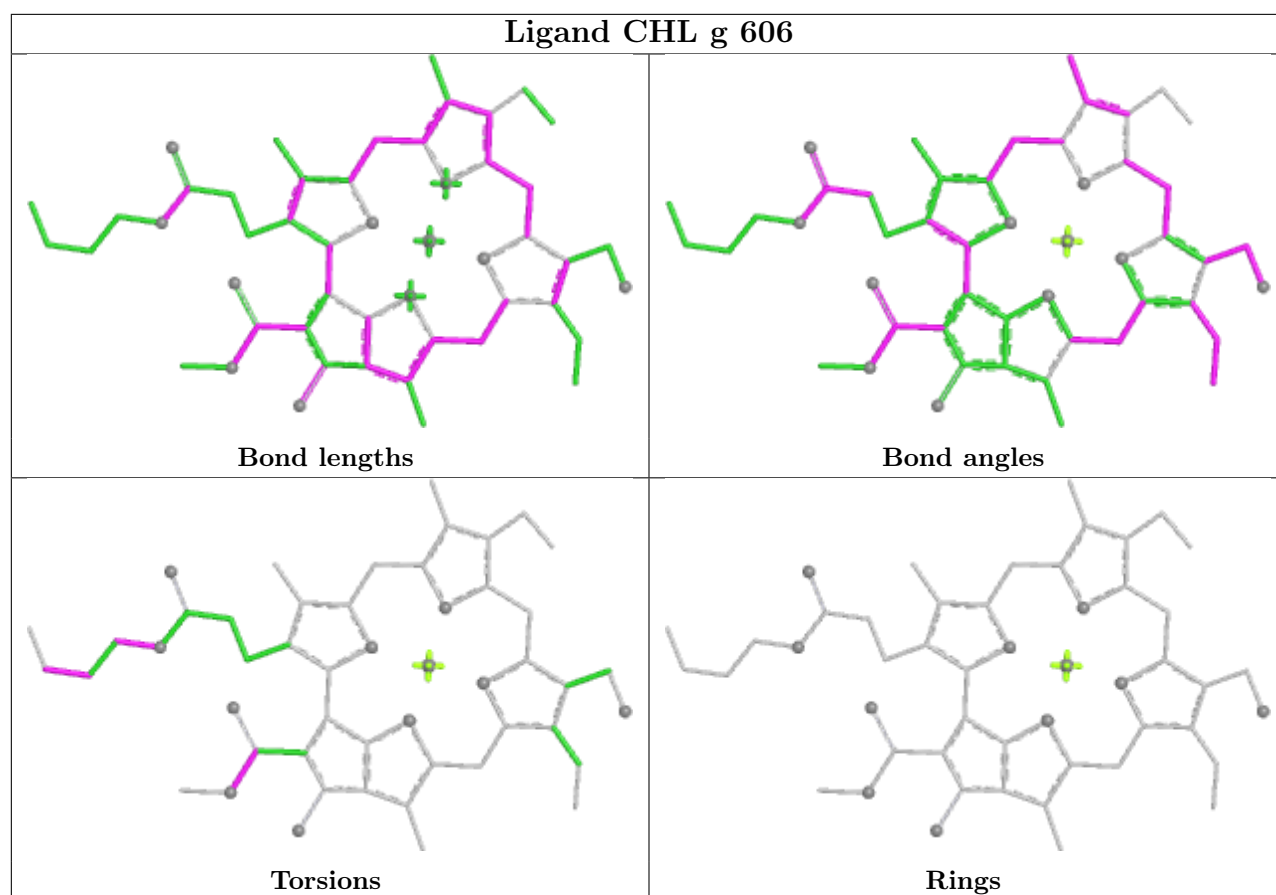
Ligand CLA BE 609

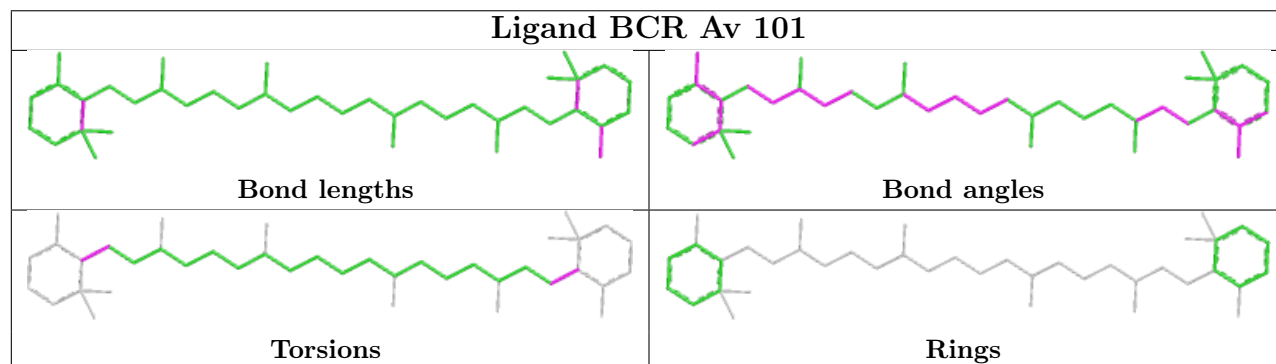
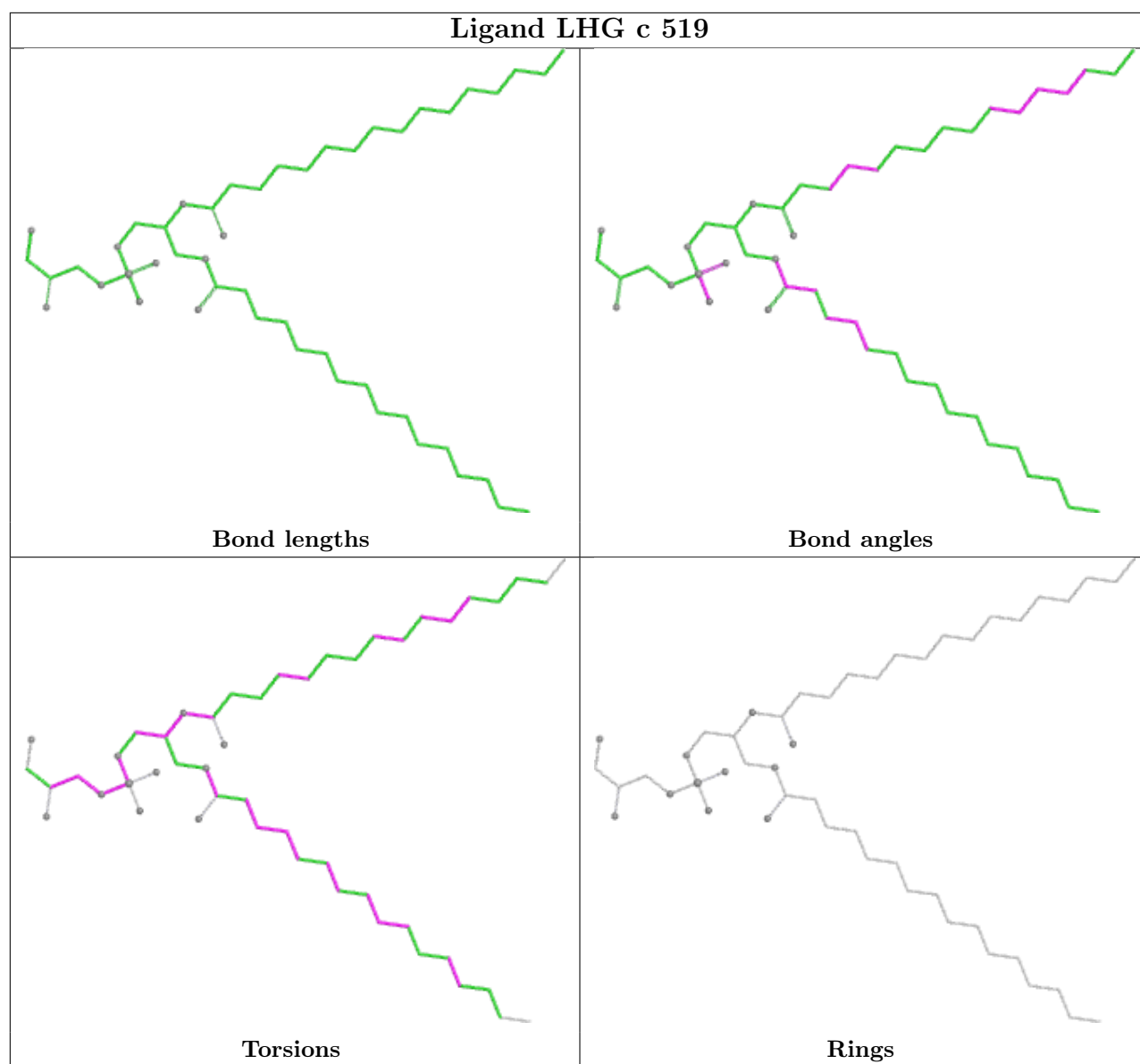


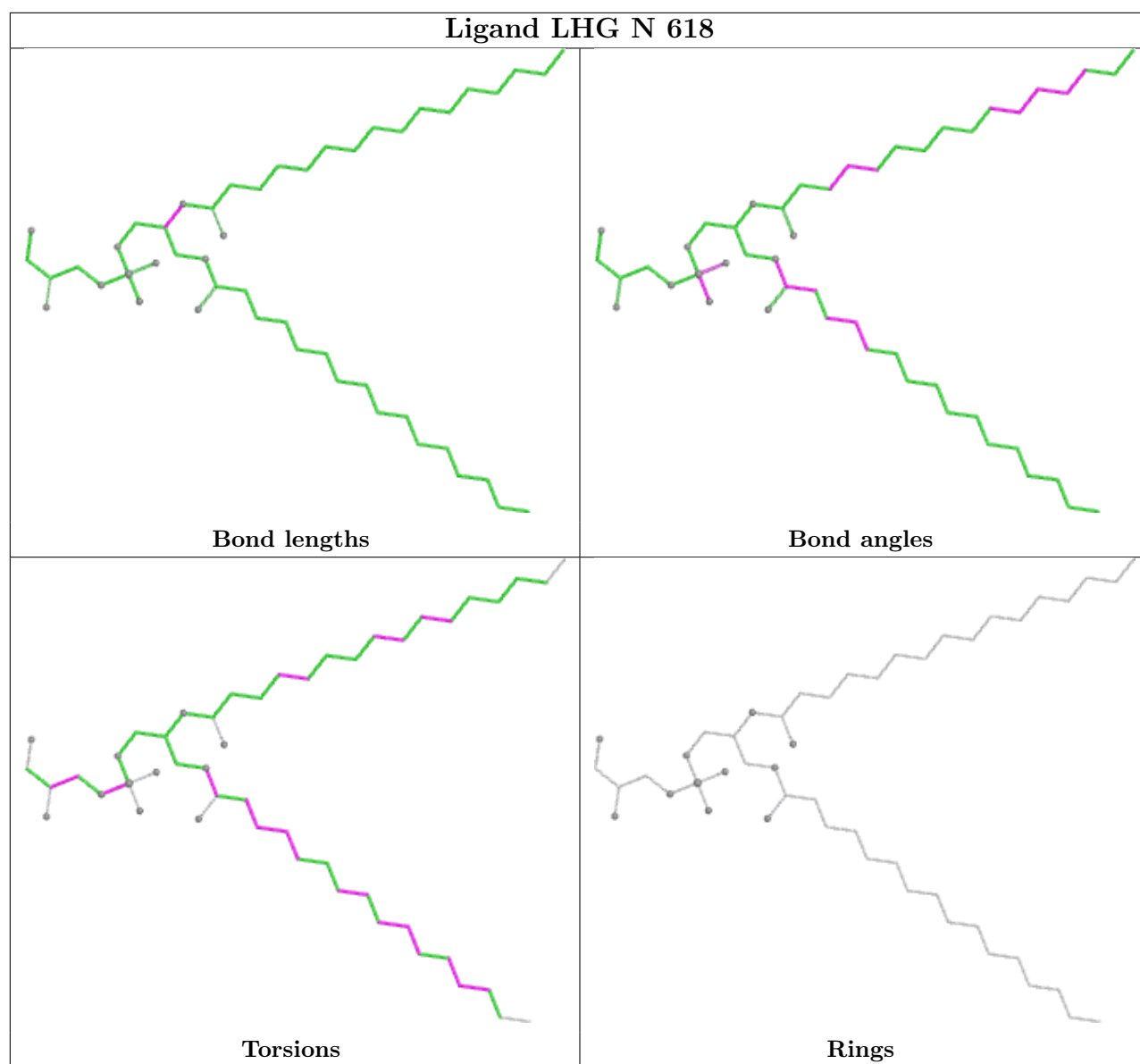
Ligand CHL s 605

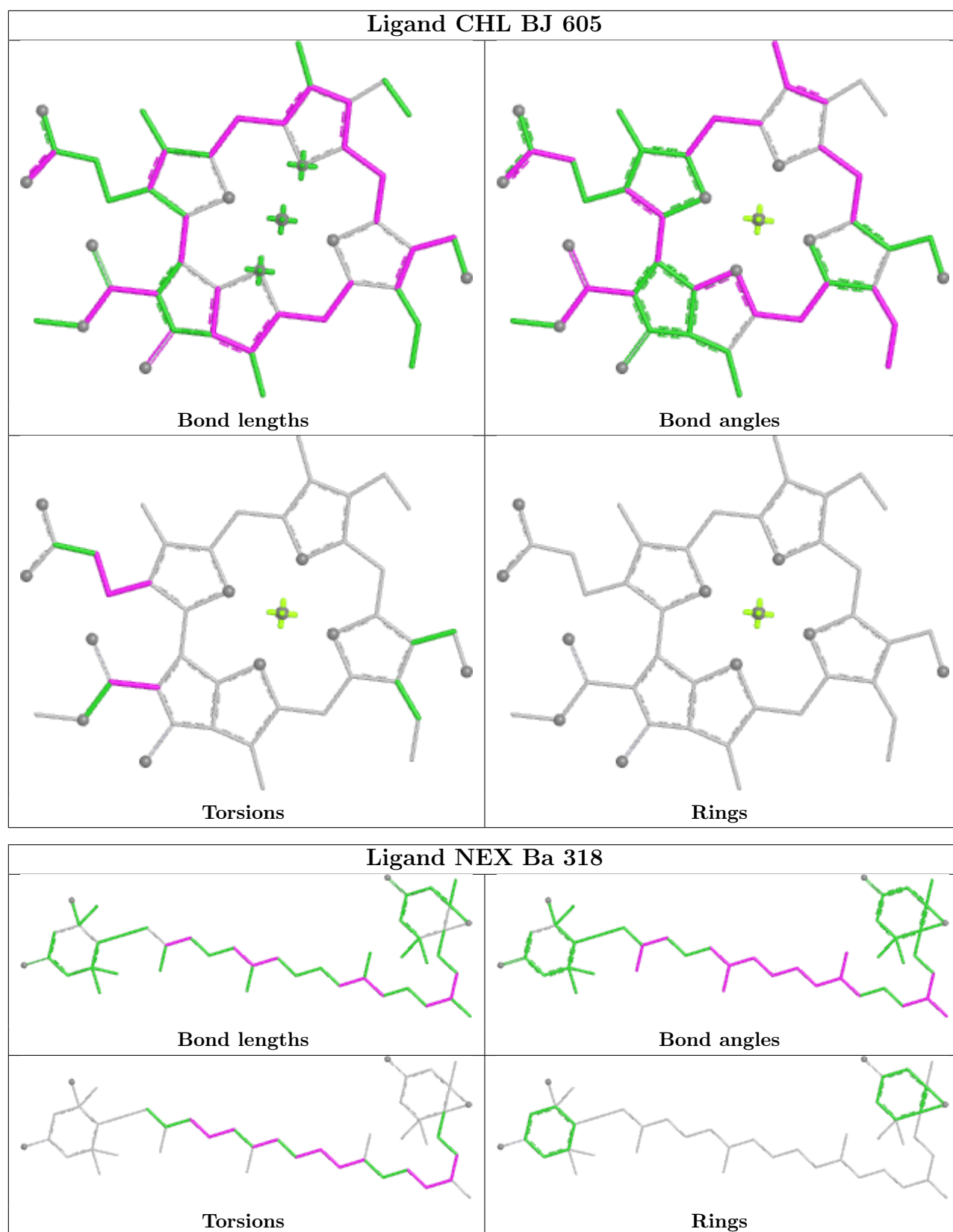


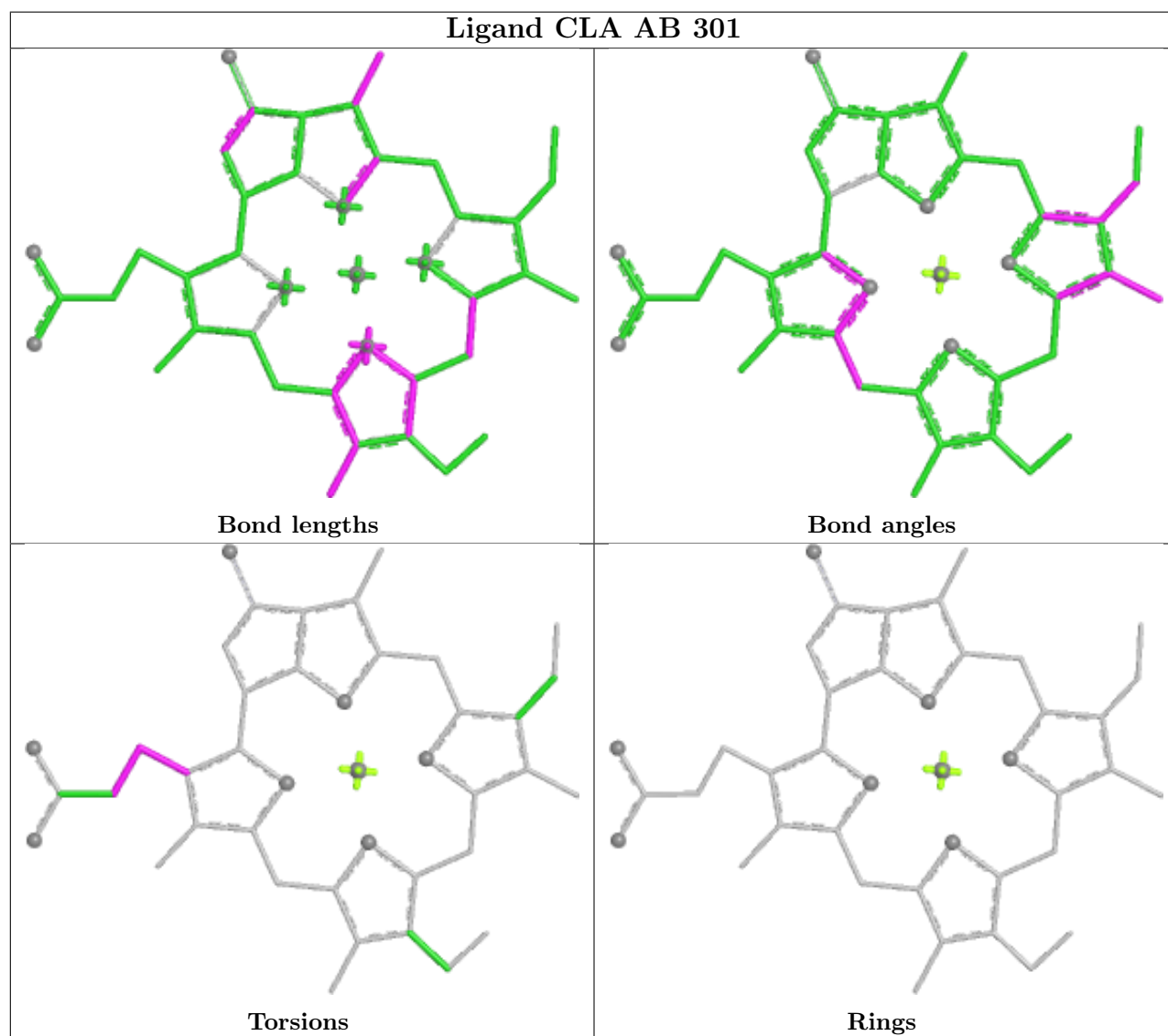
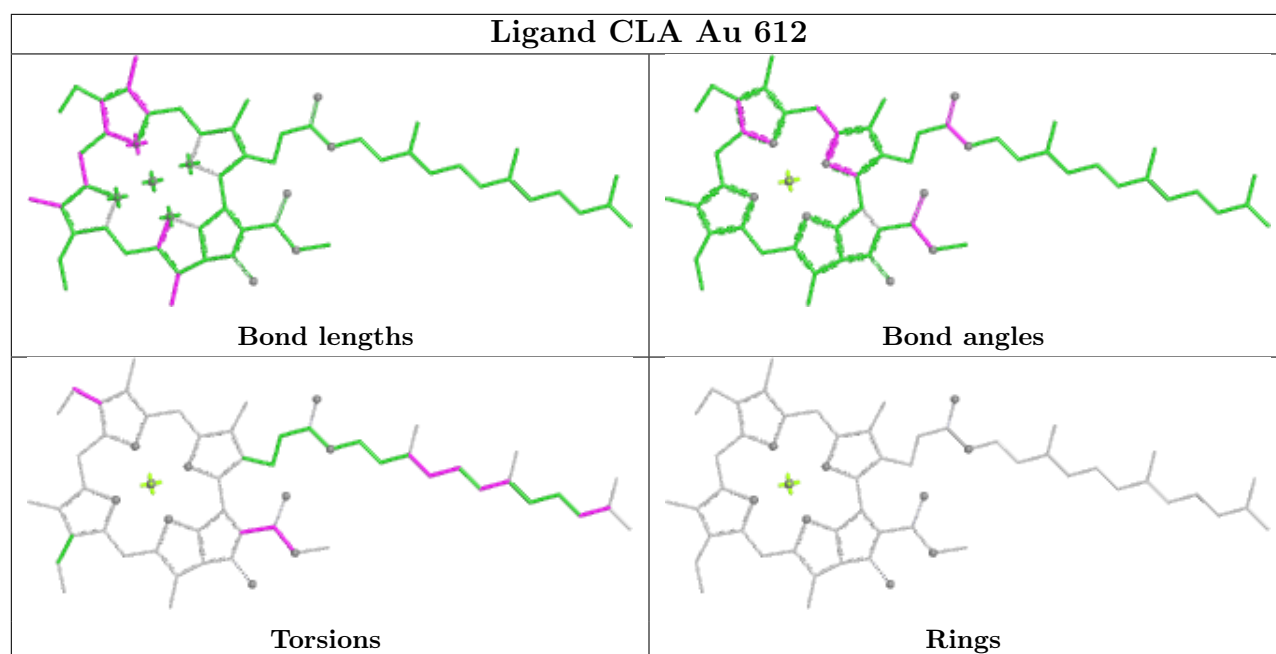


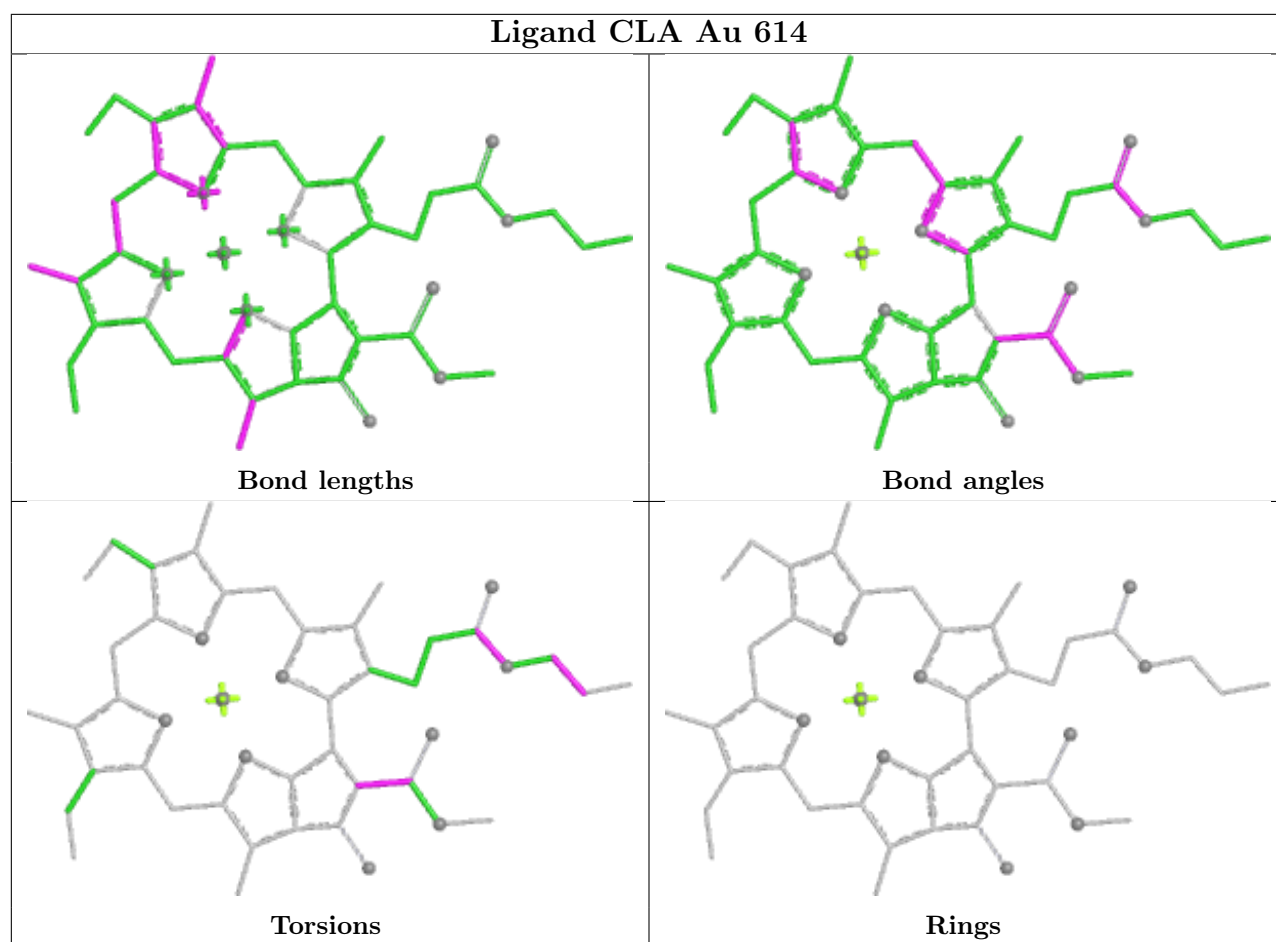




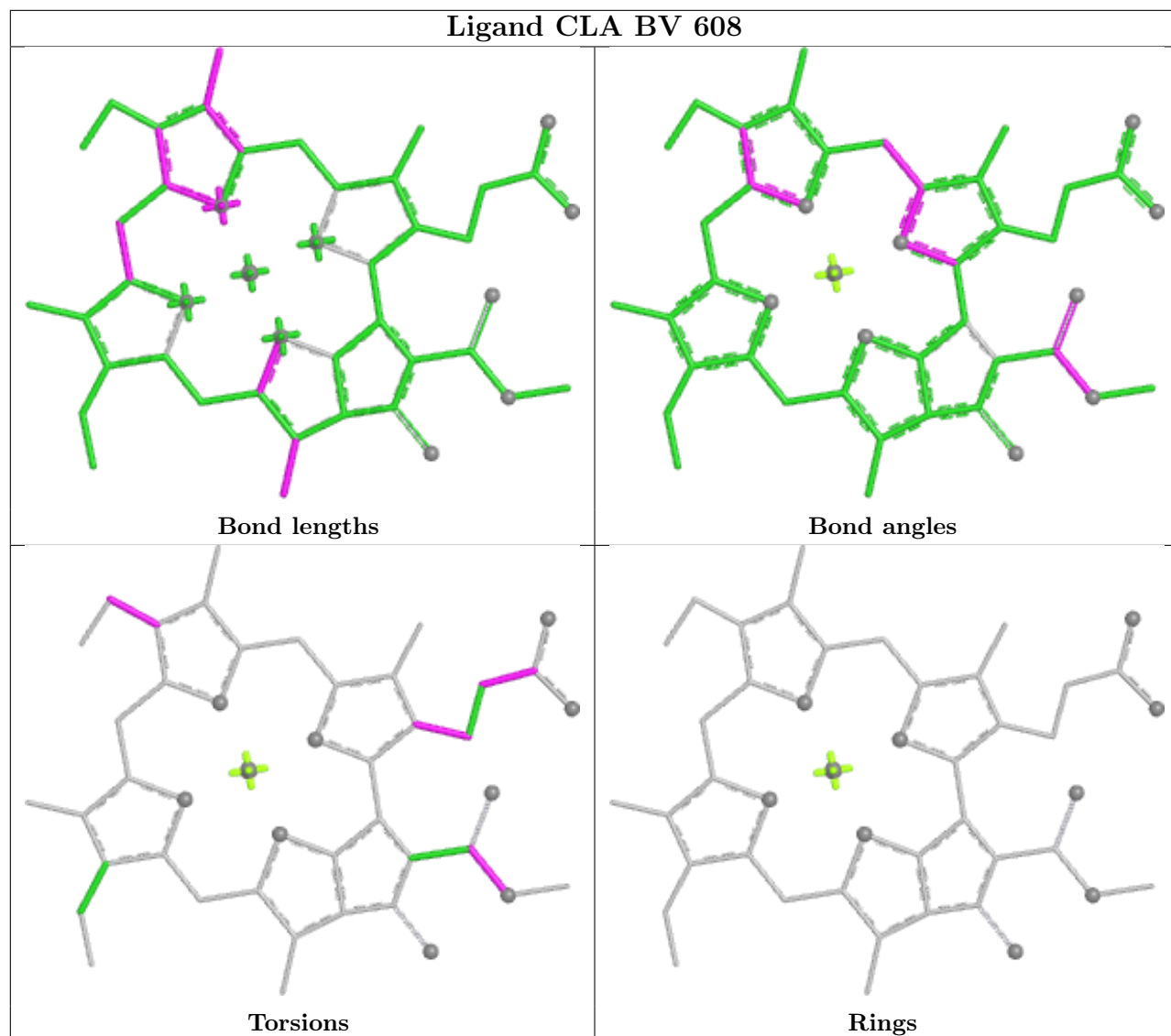


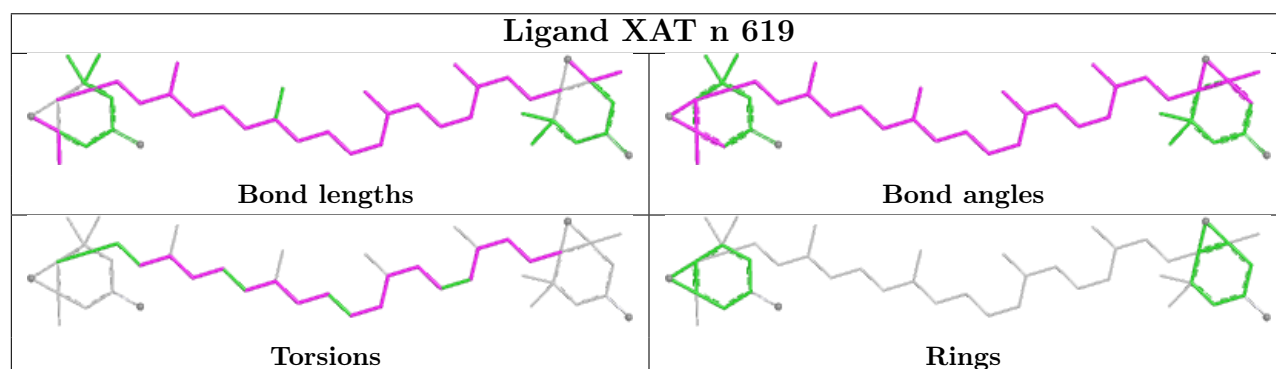
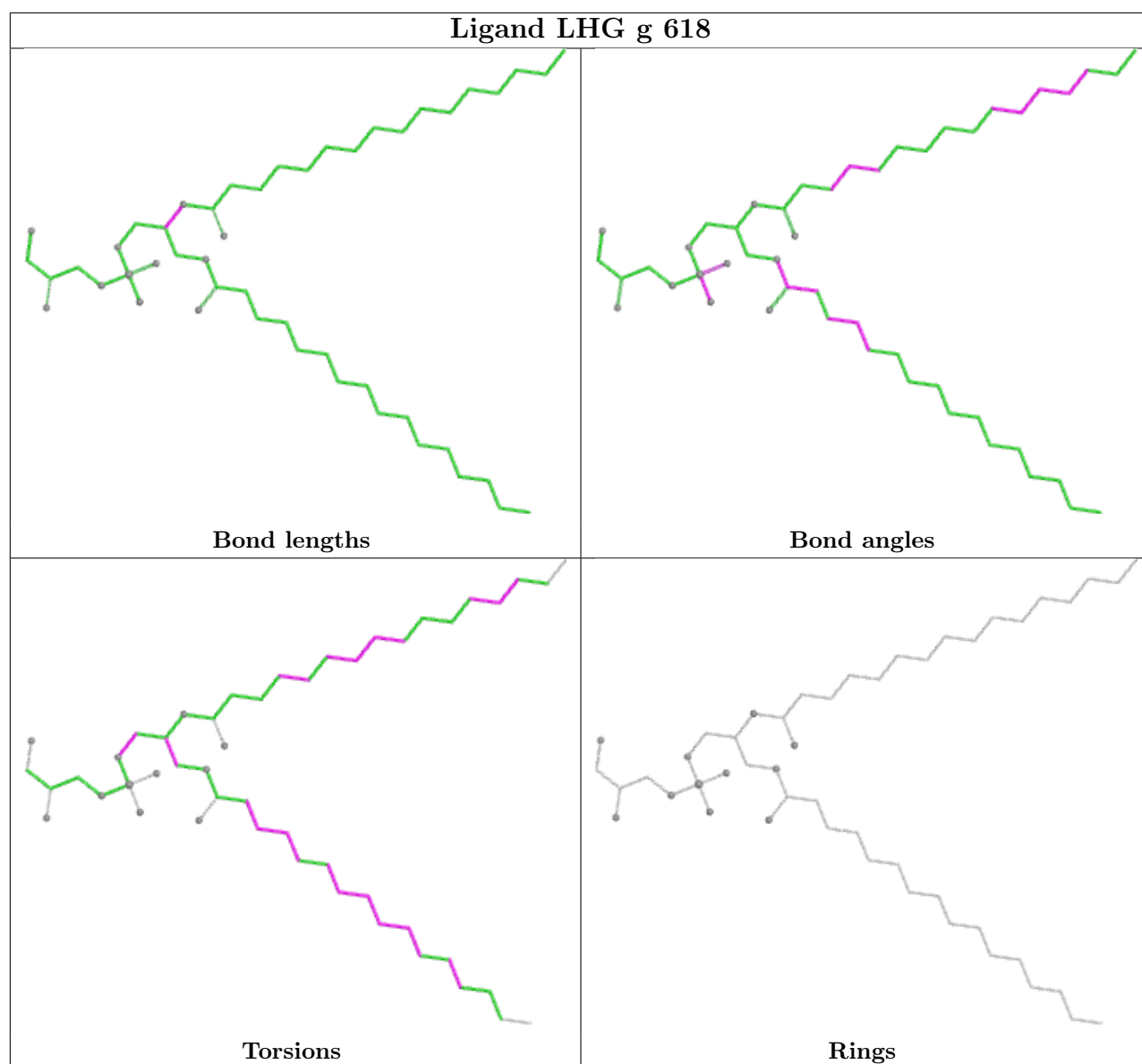




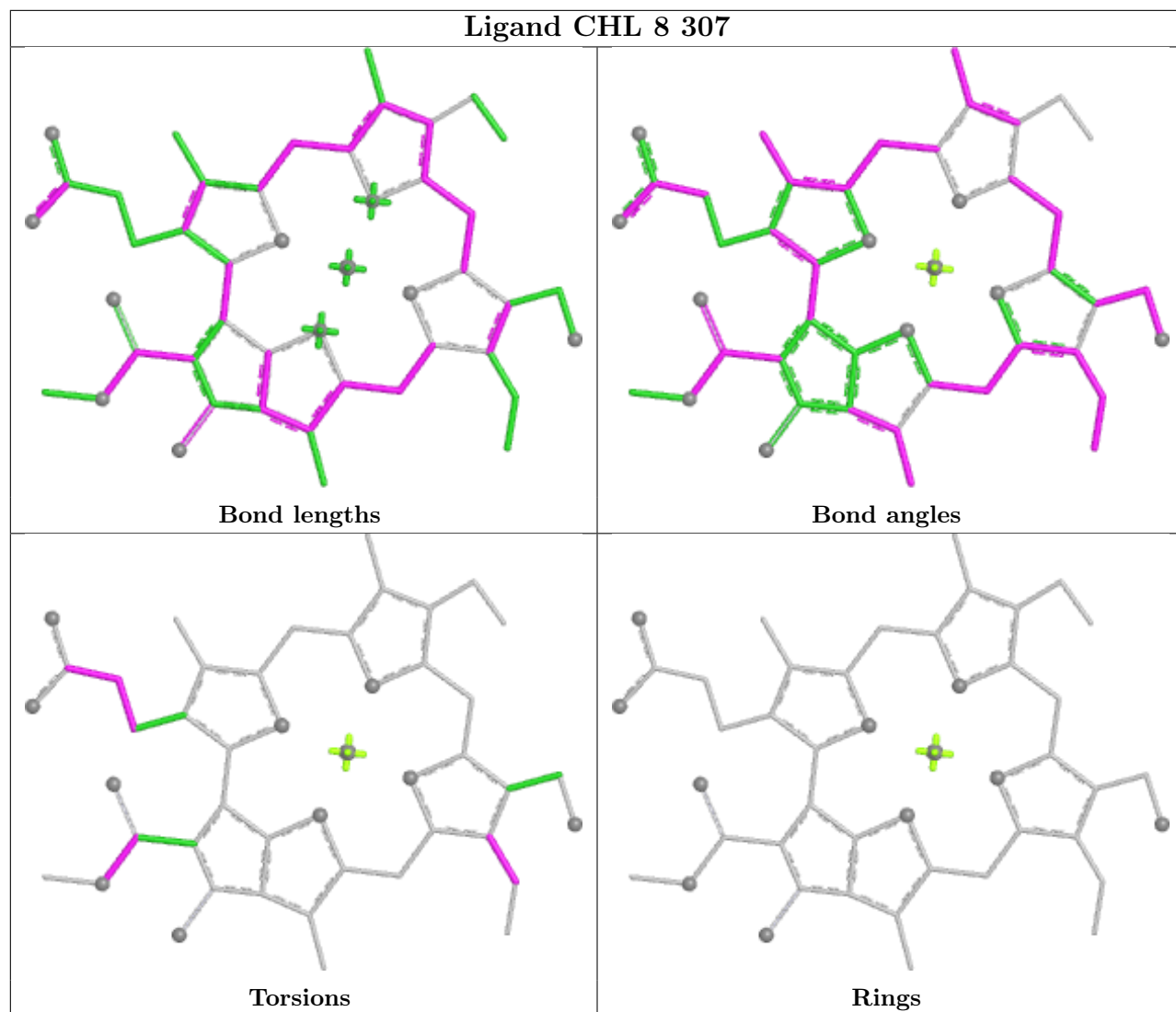


Ligand CLA BV 608

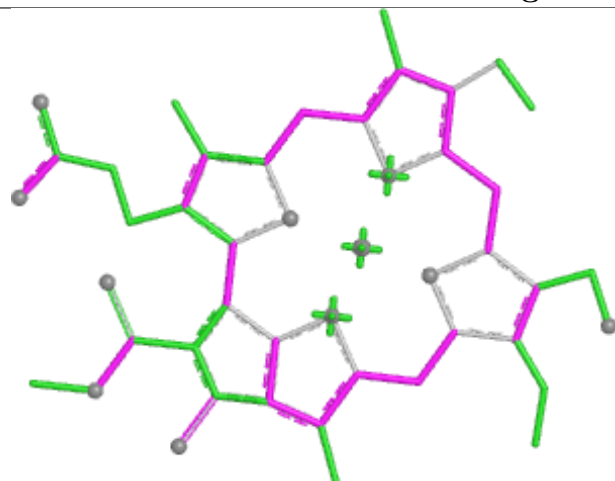




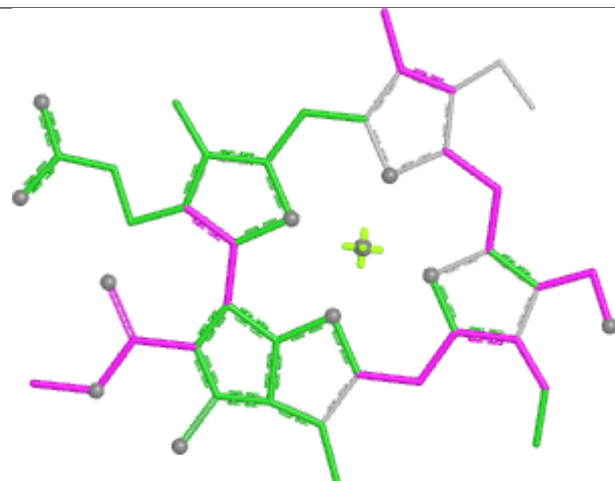
Ligand CHL 8 307



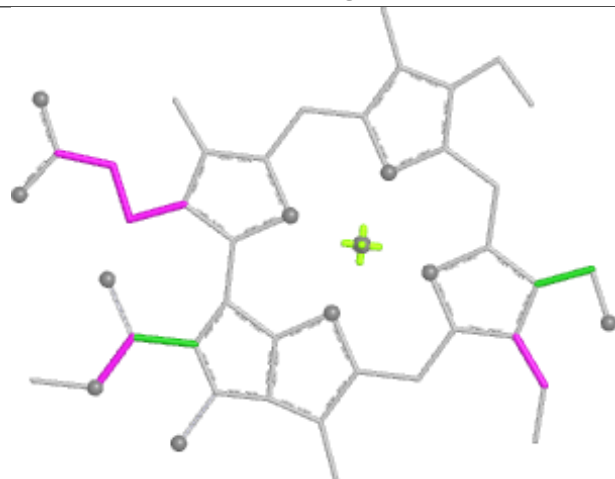
Ligand CHL s 607



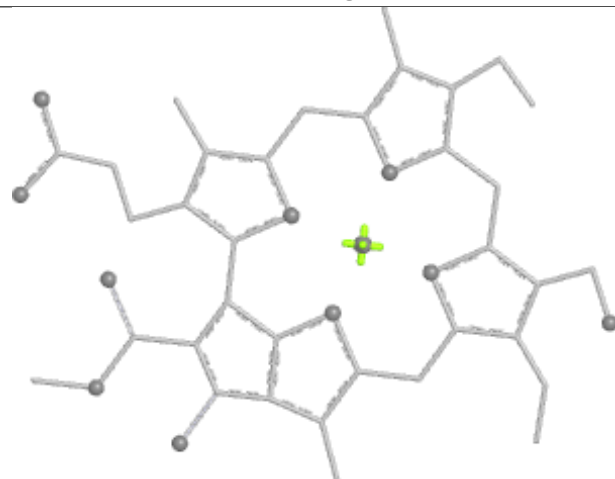
Bond lengths



Bond angles

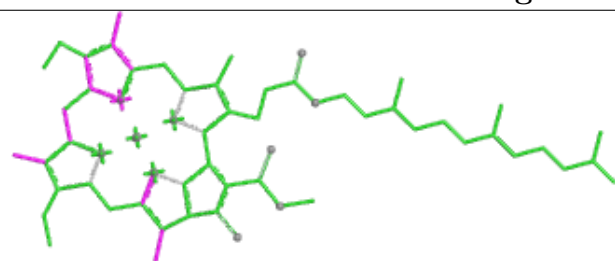


Torsions

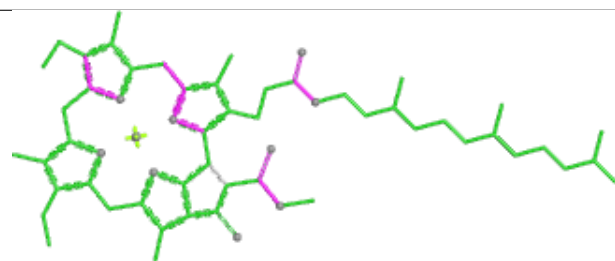


Rings

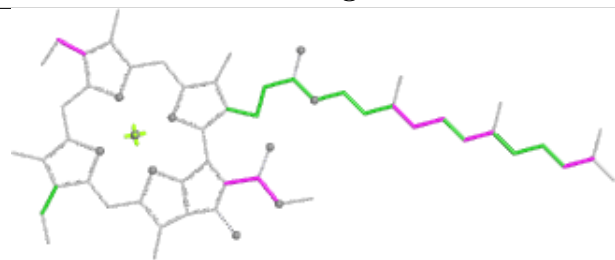
Ligand CLA G 612



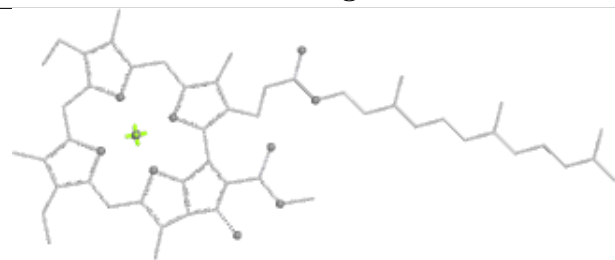
Bond lengths



Bond angles

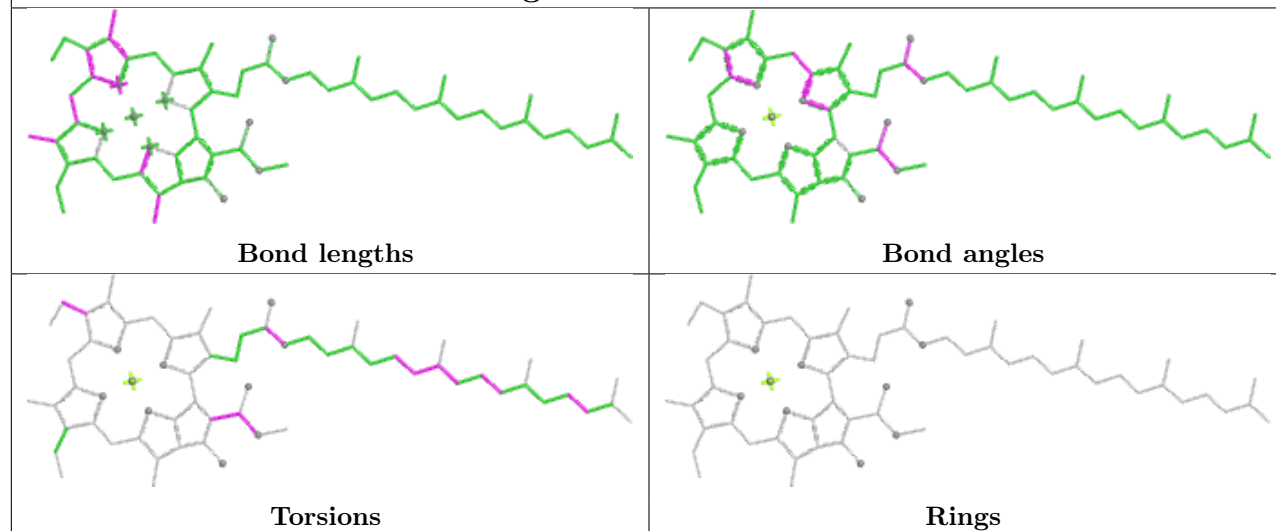


Torsions

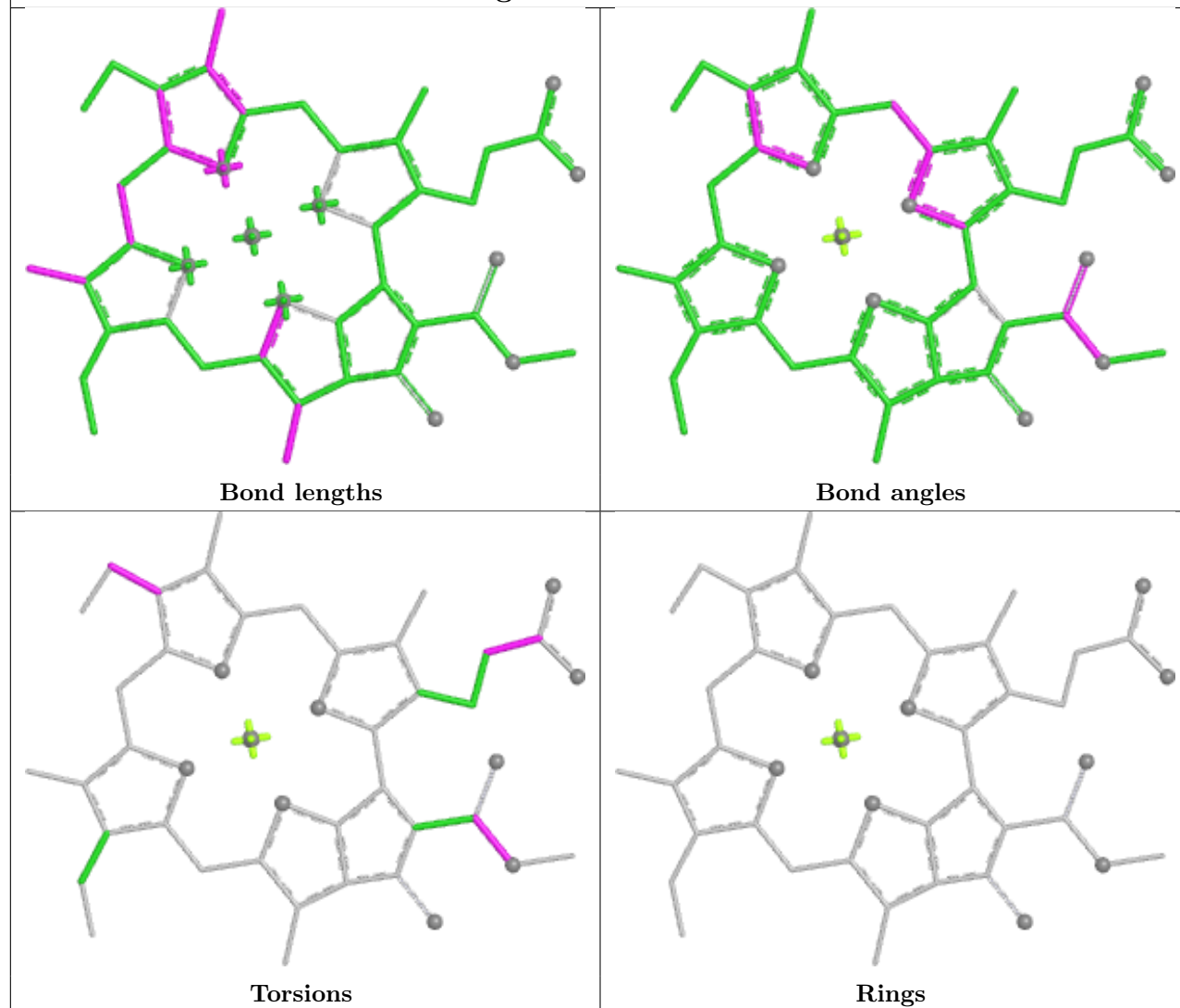


Rings

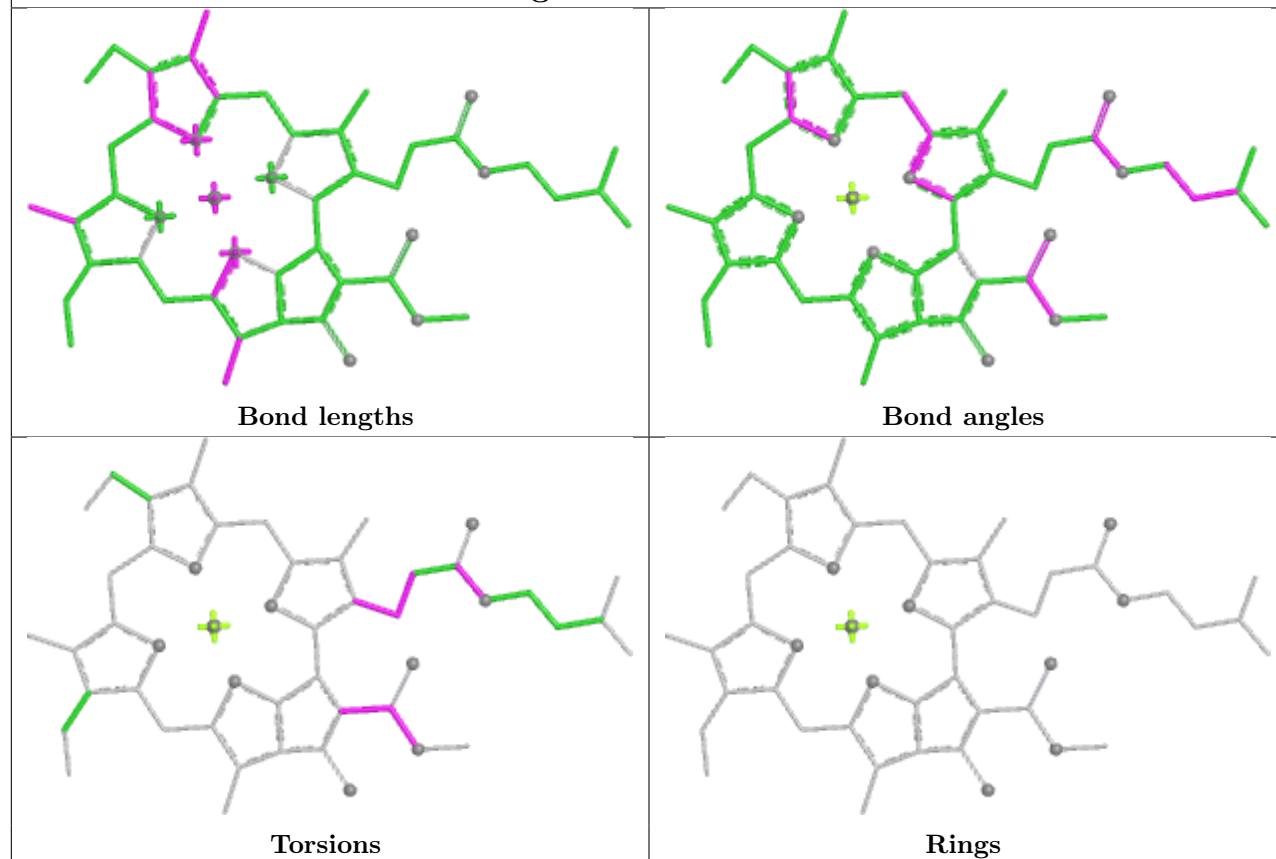
Ligand CLA A2 603



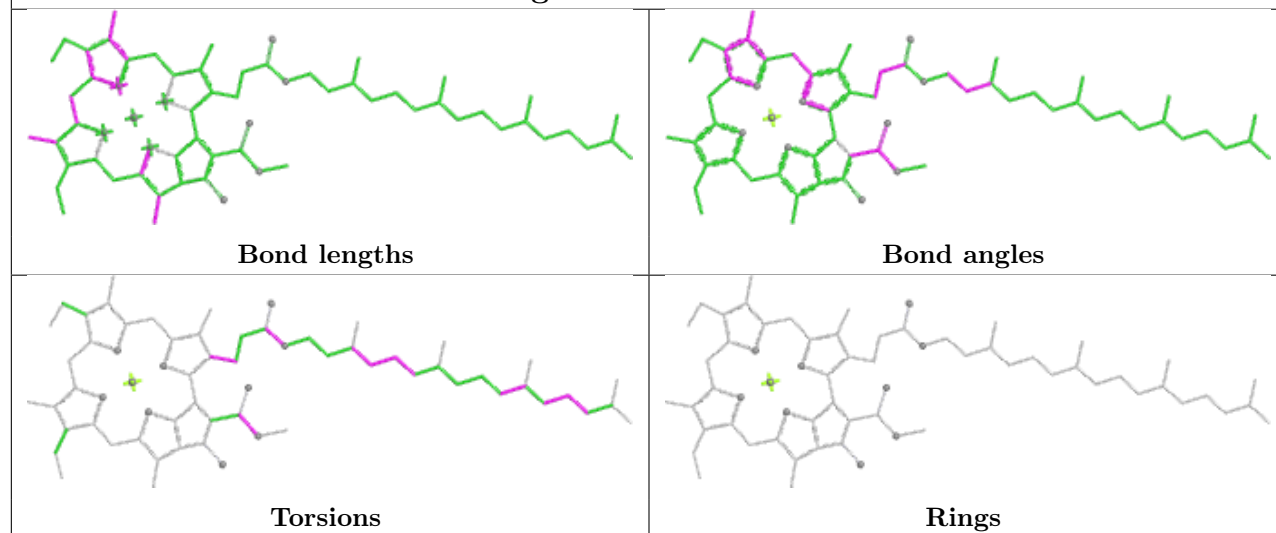
Ligand CLA 7 313

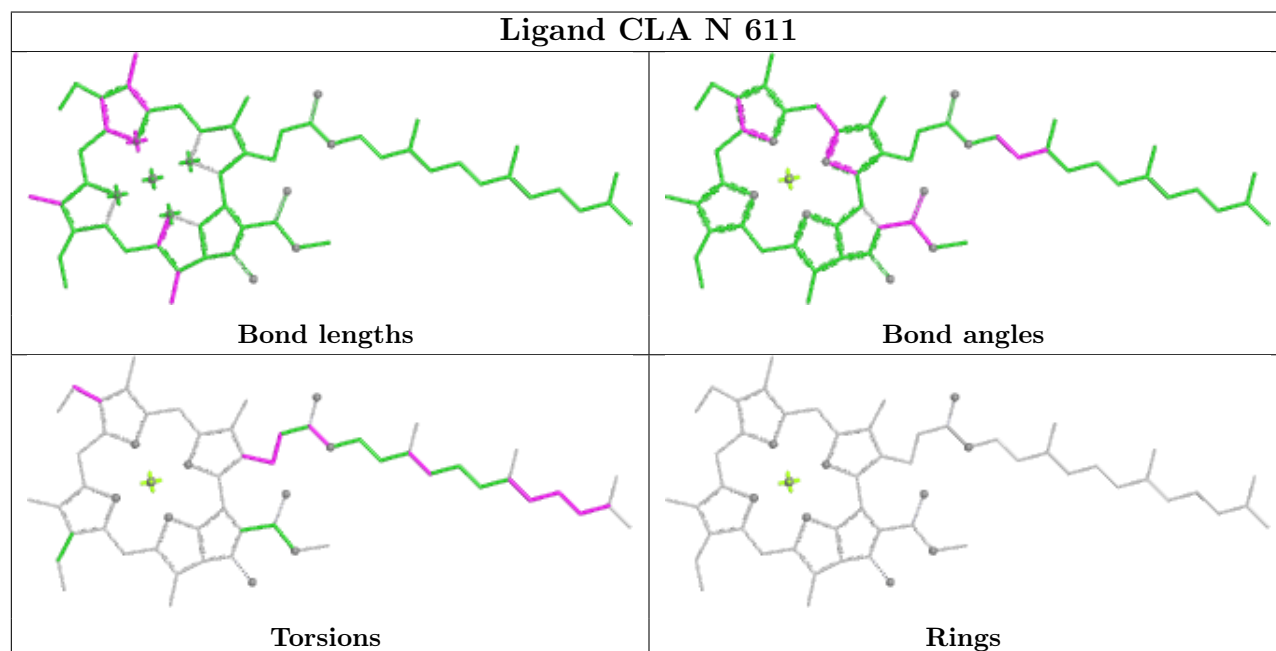
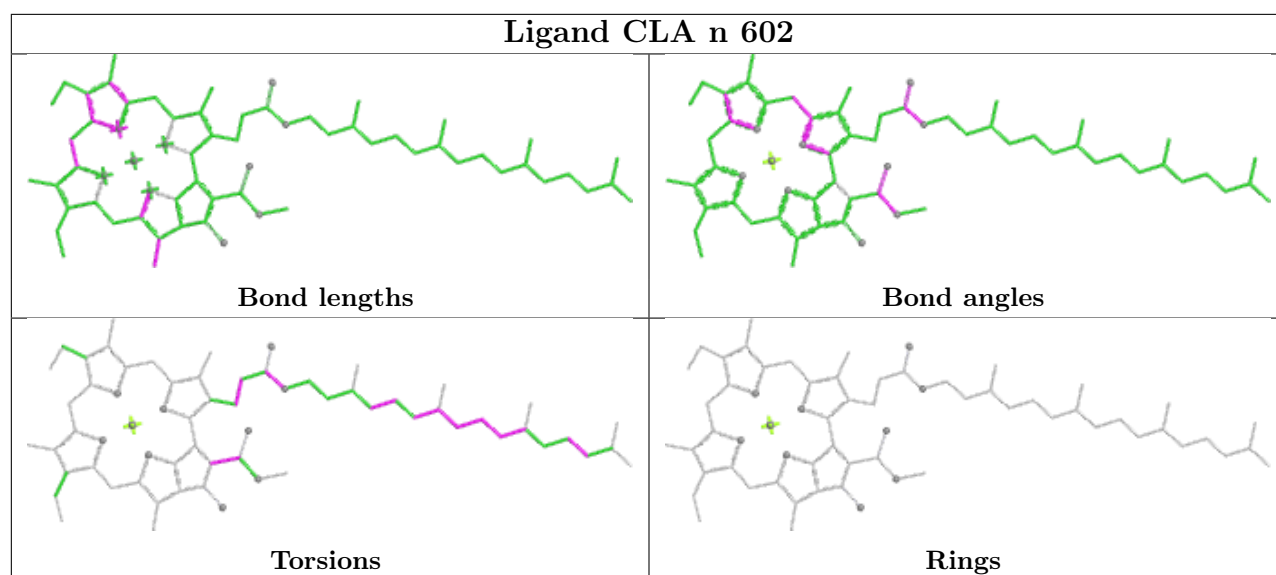


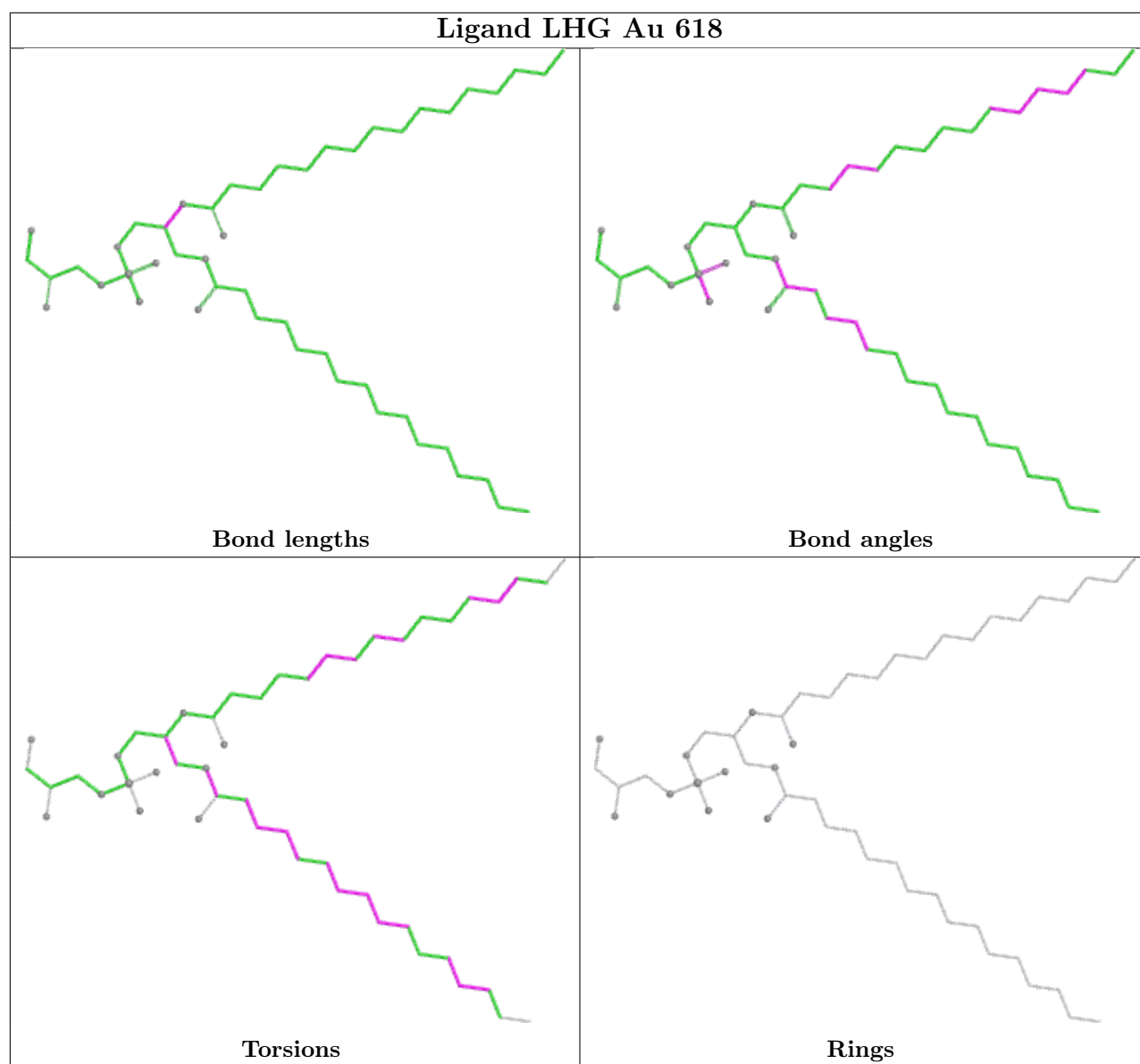
Ligand CLA Y 305

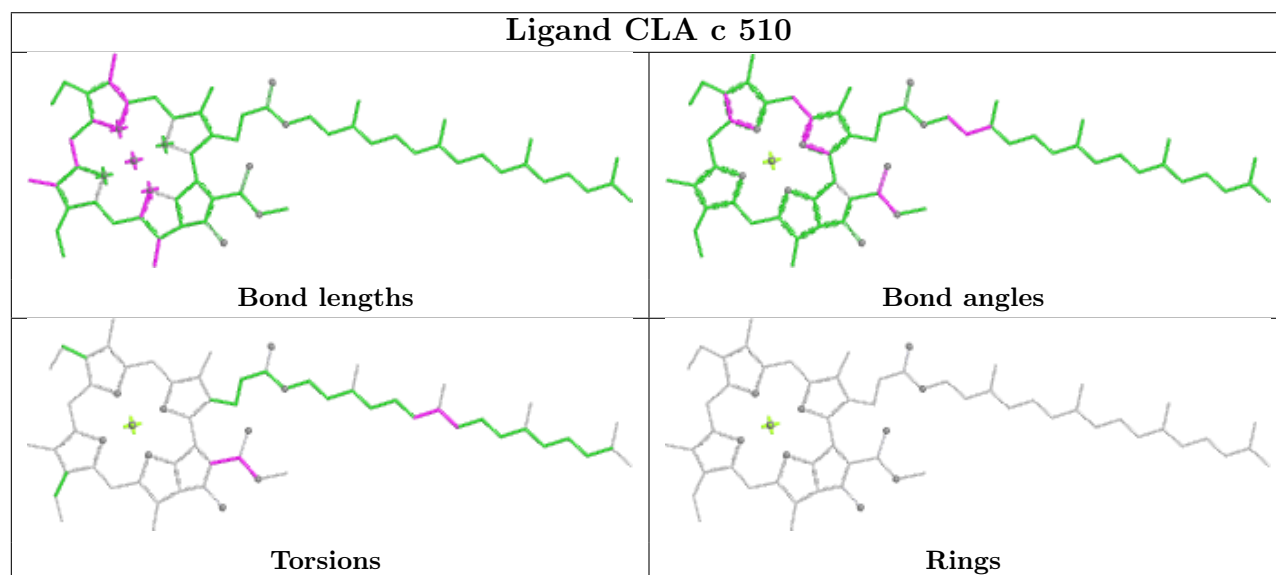
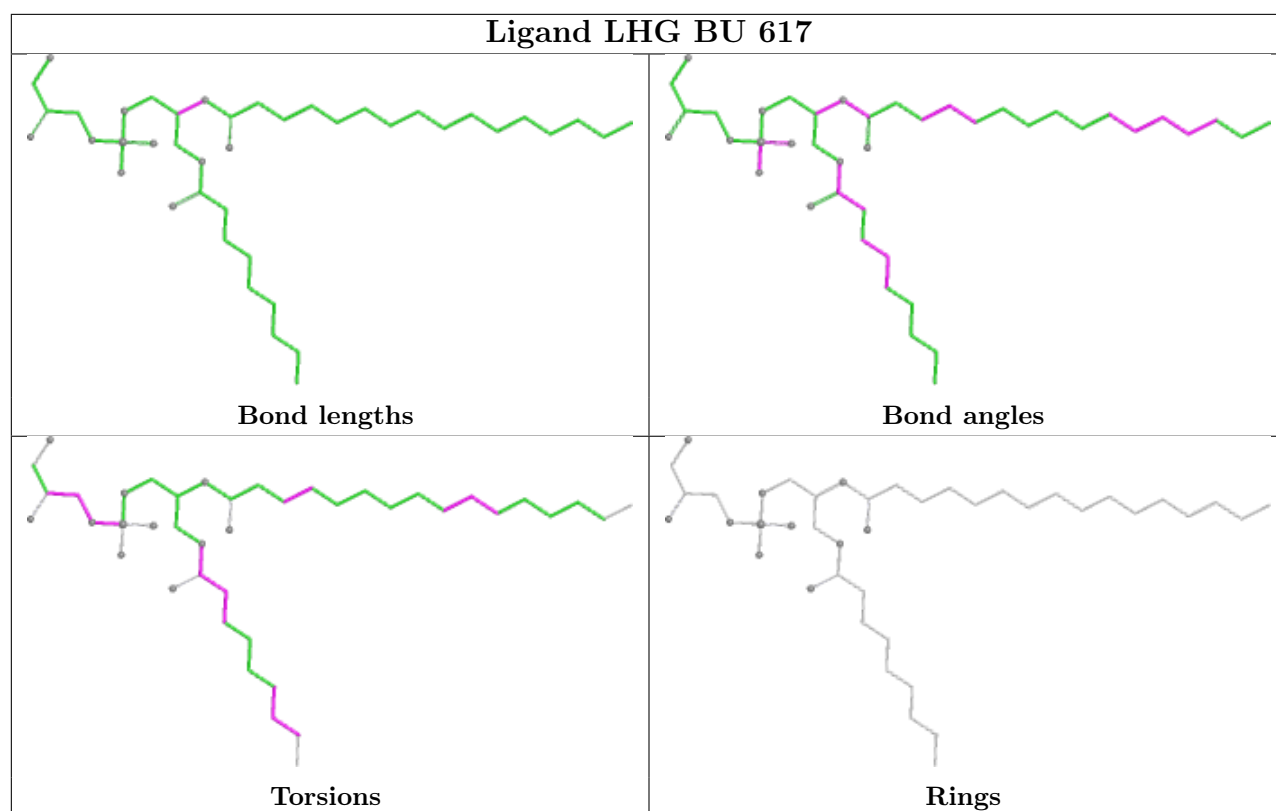


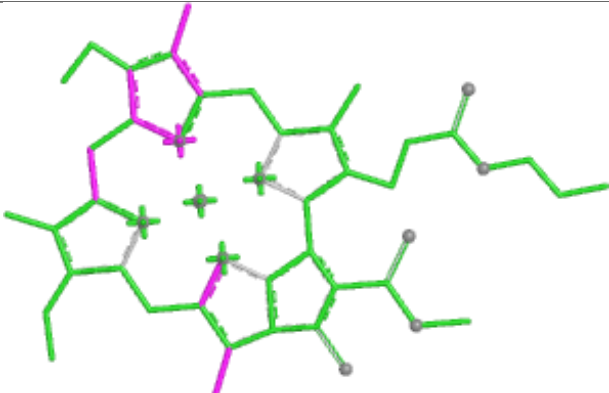
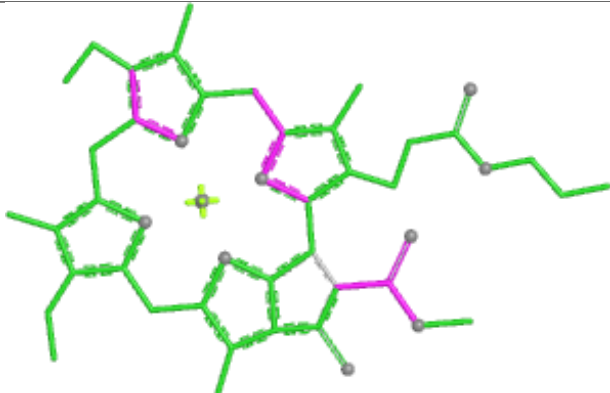
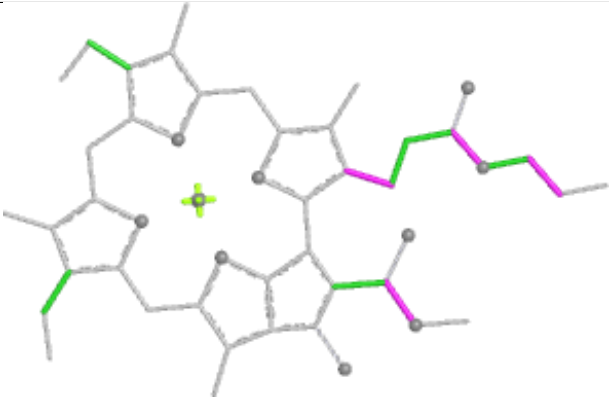
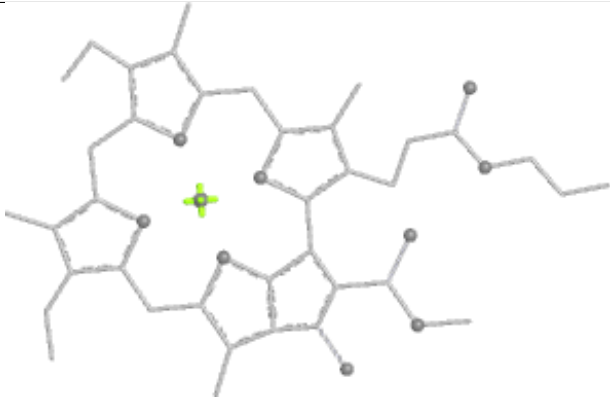
Ligand CLA N 610

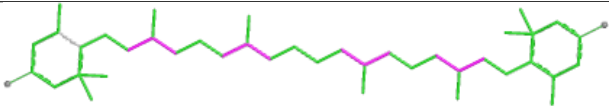
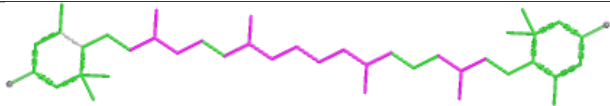




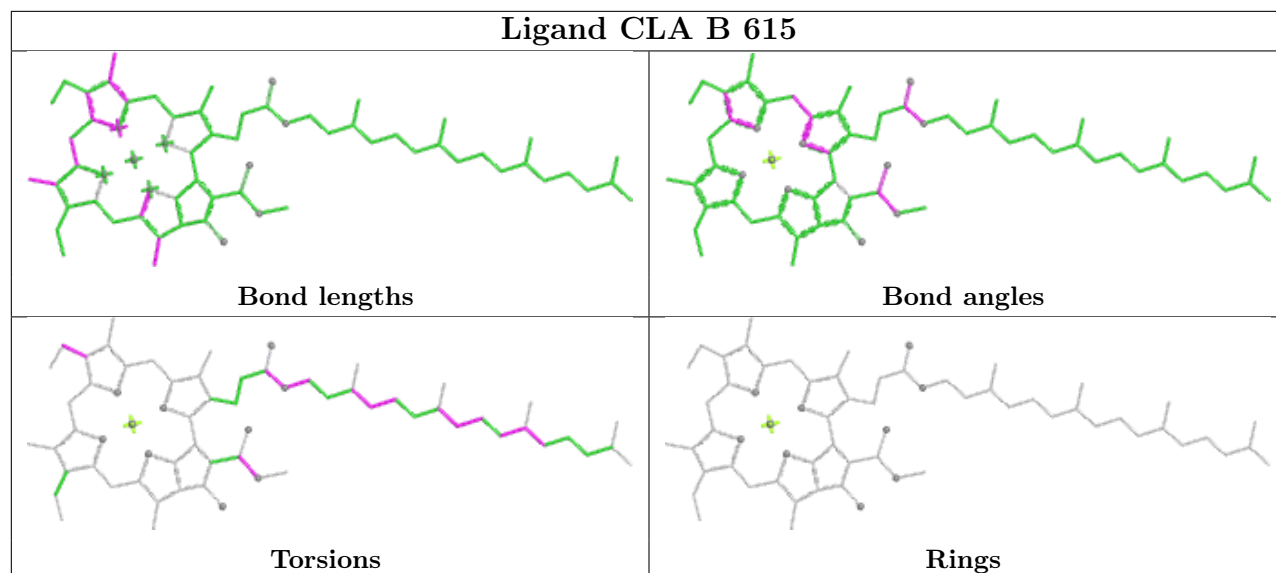
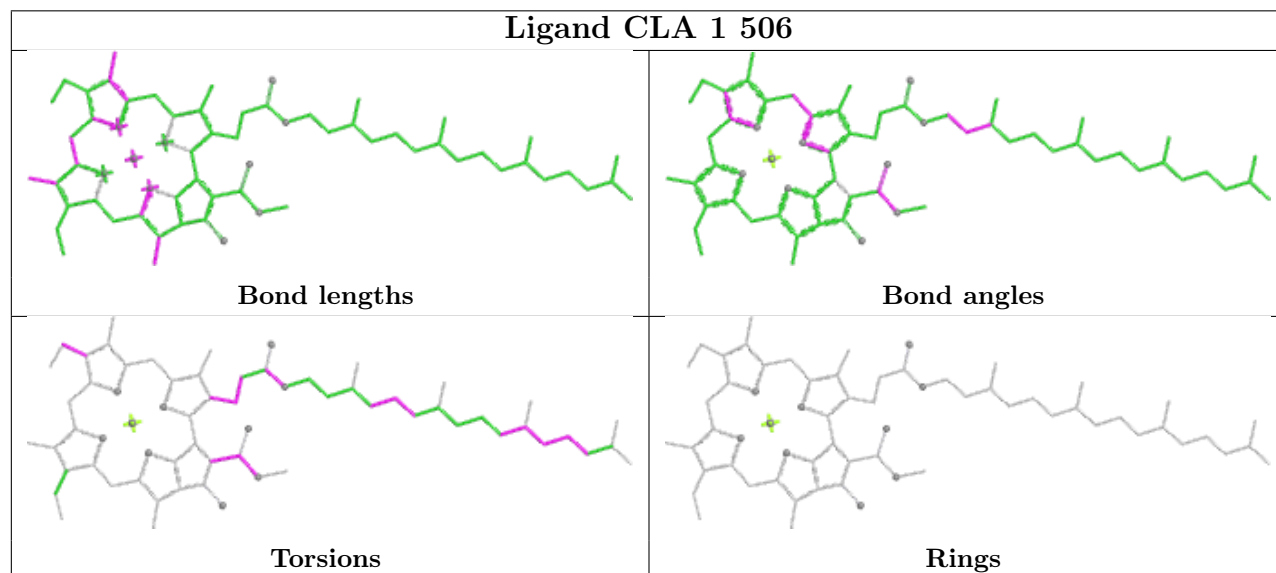
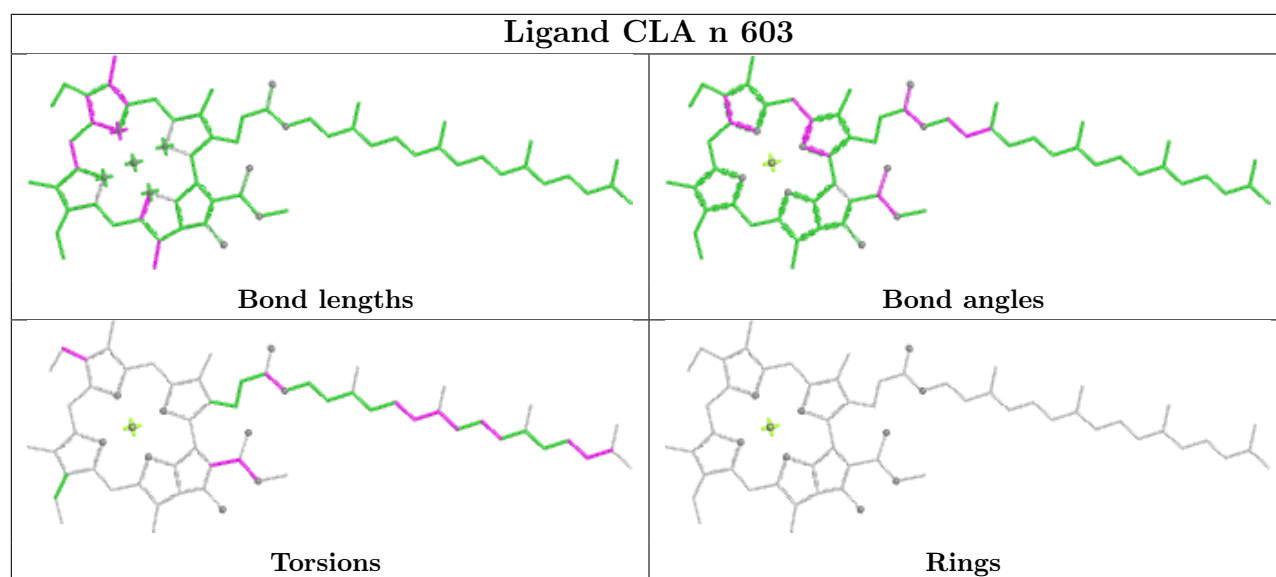


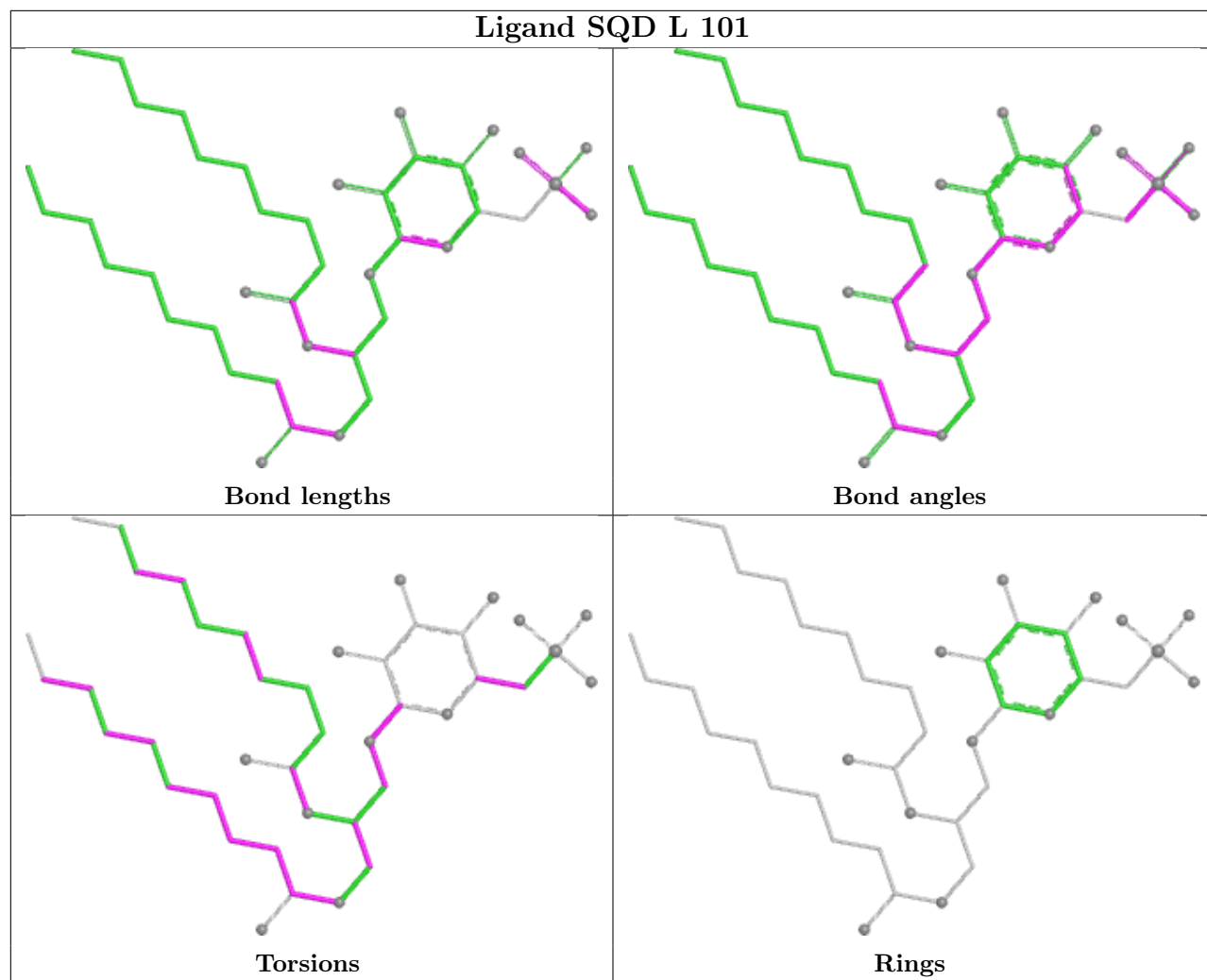


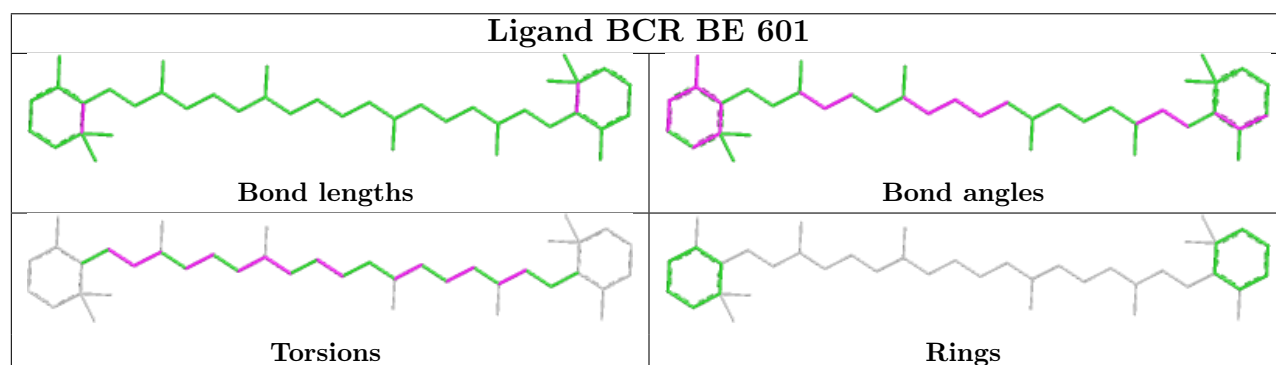
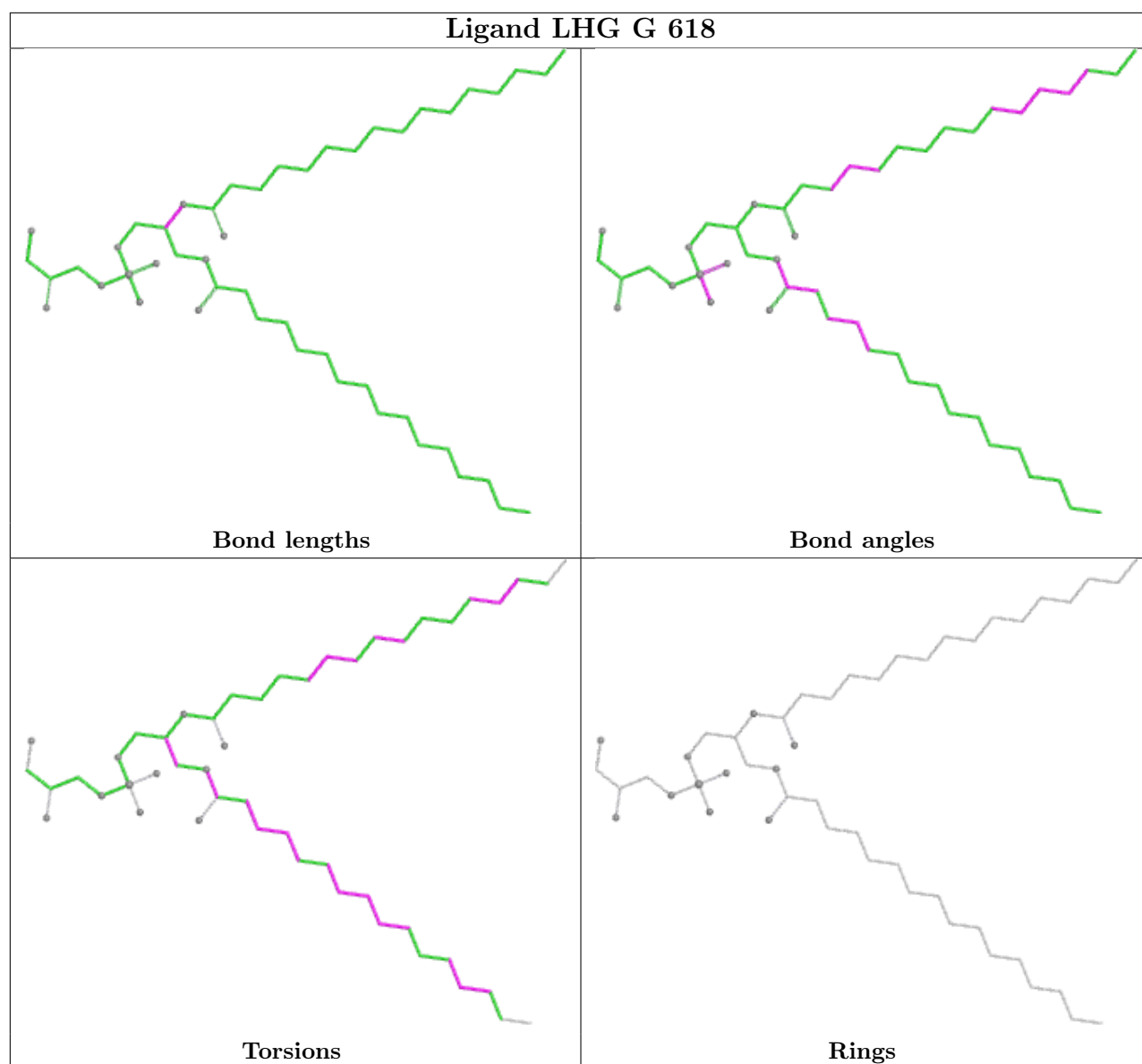


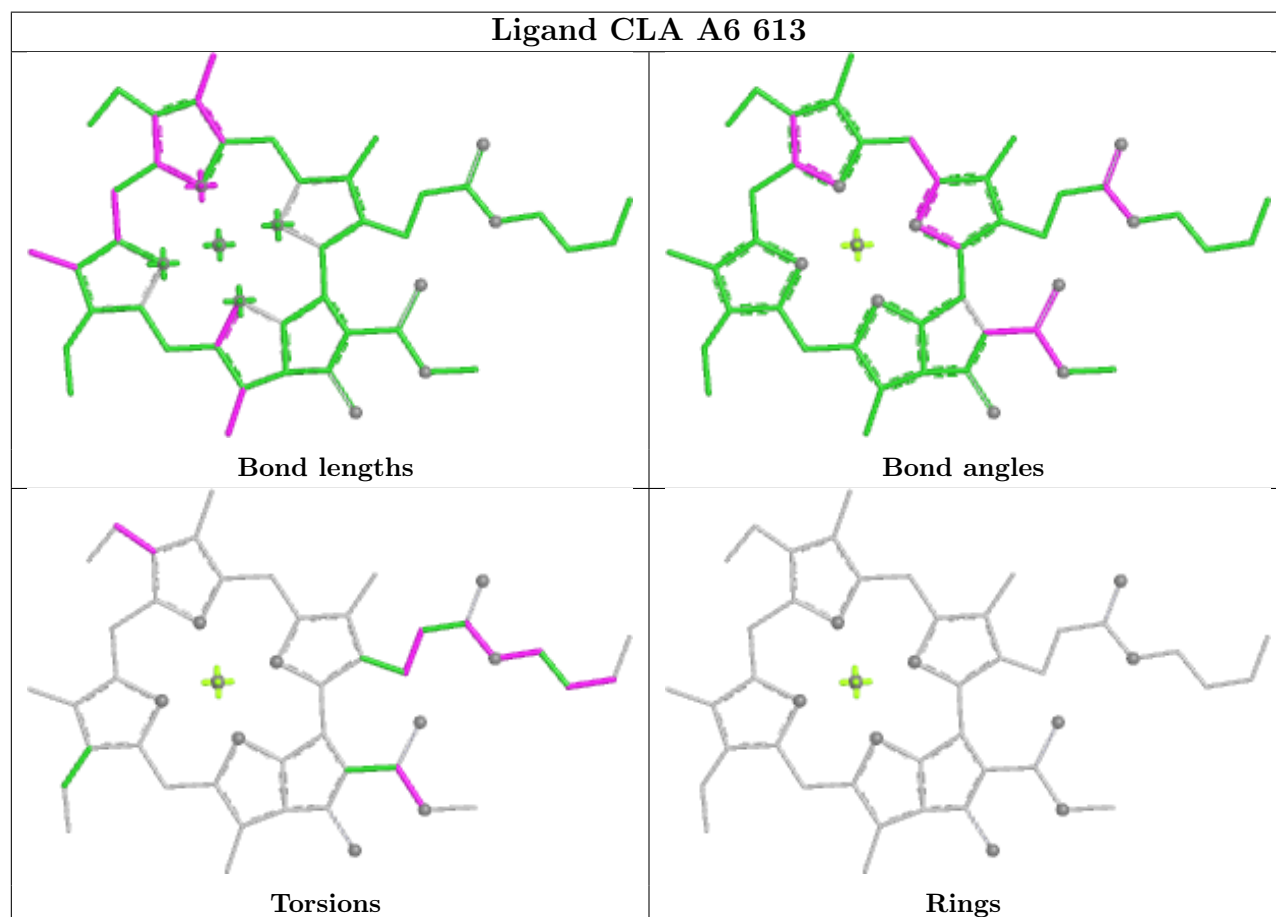
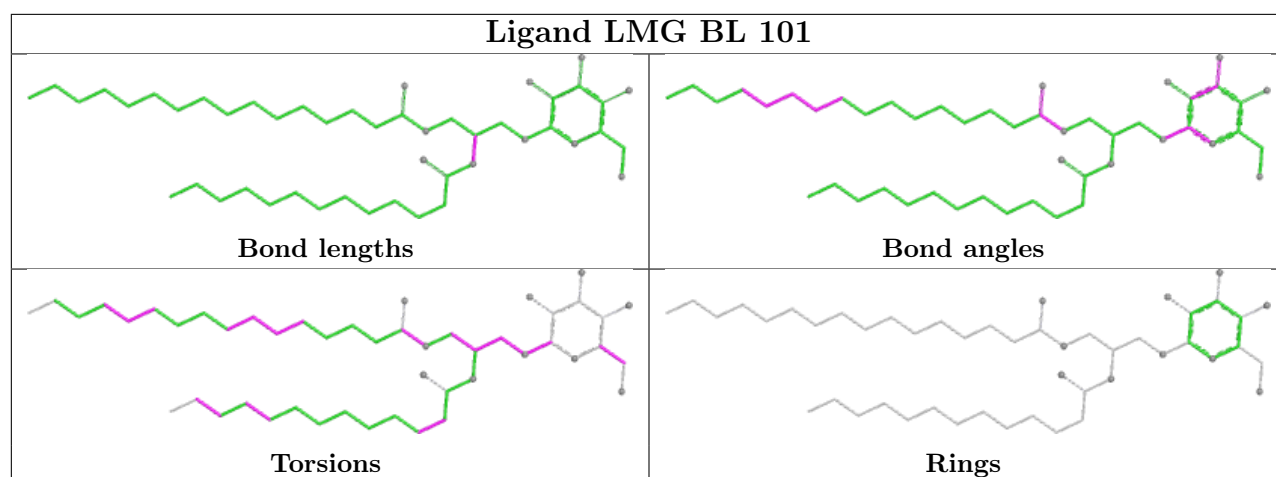
Ligand CLA A2 614	
	
Bond lengths	Bond angles
	
Torsions	Rings

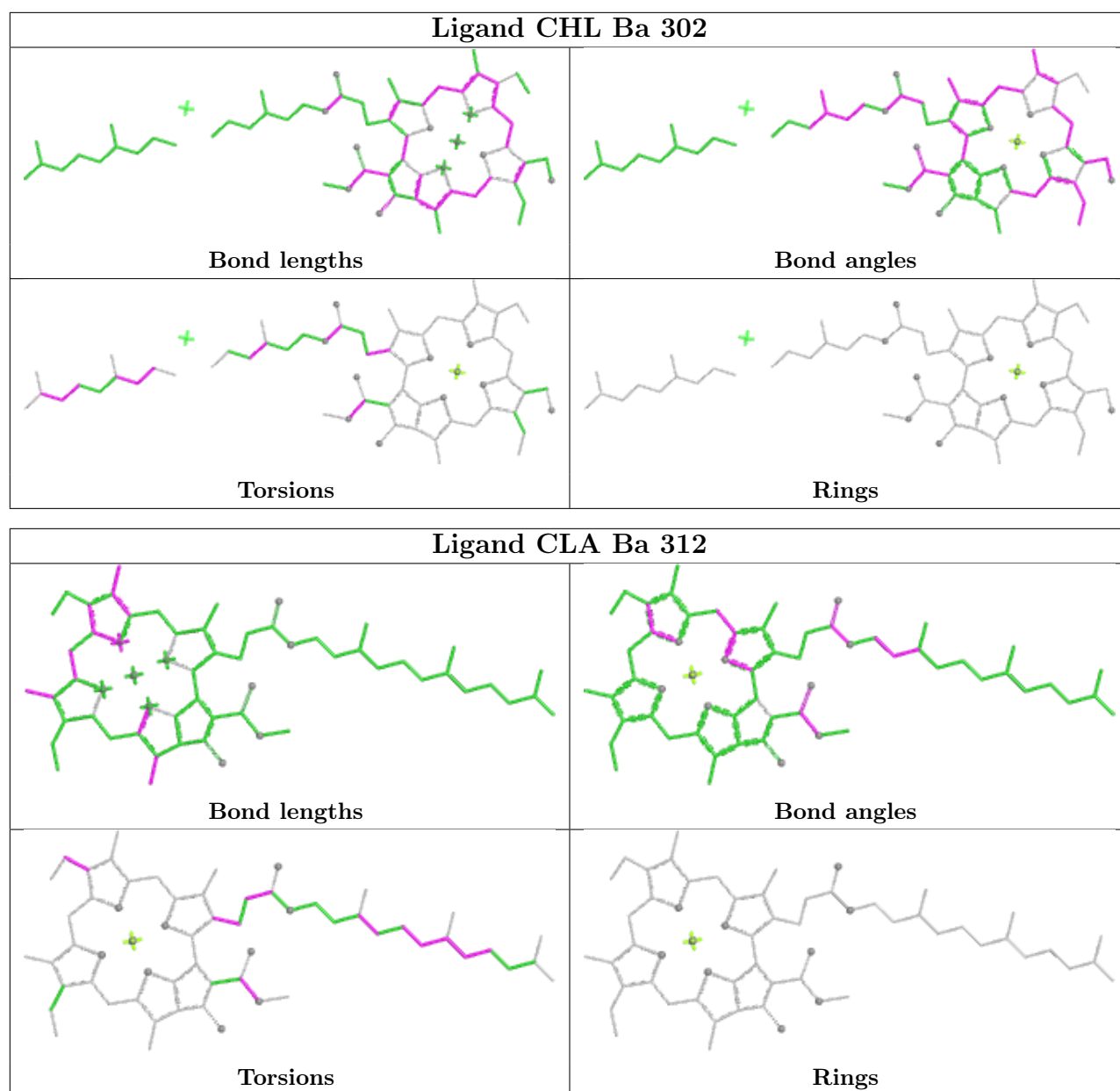
Ligand LUT 9 616	
	
Bond lengths	Bond angles
	
Torsions	Rings



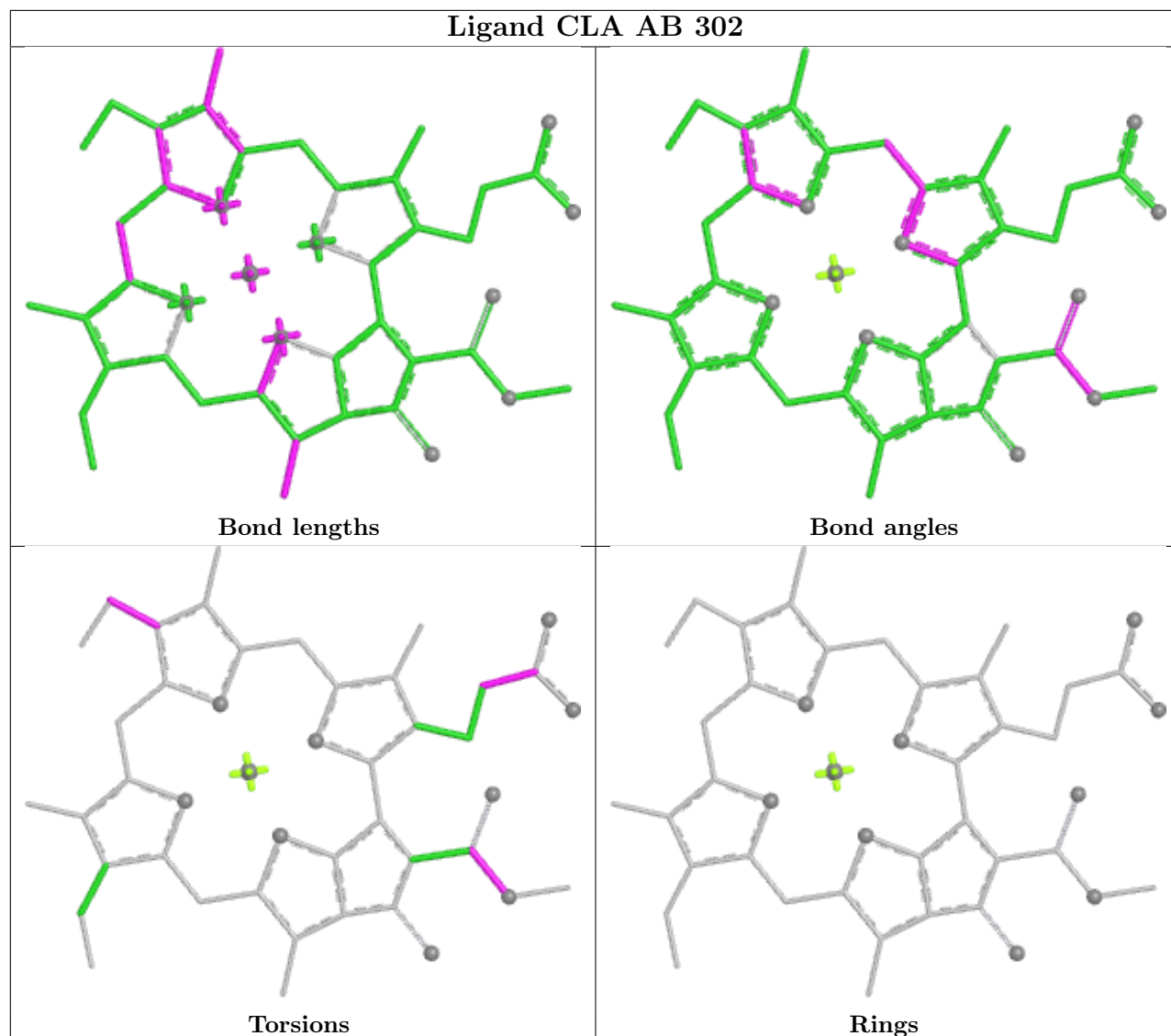




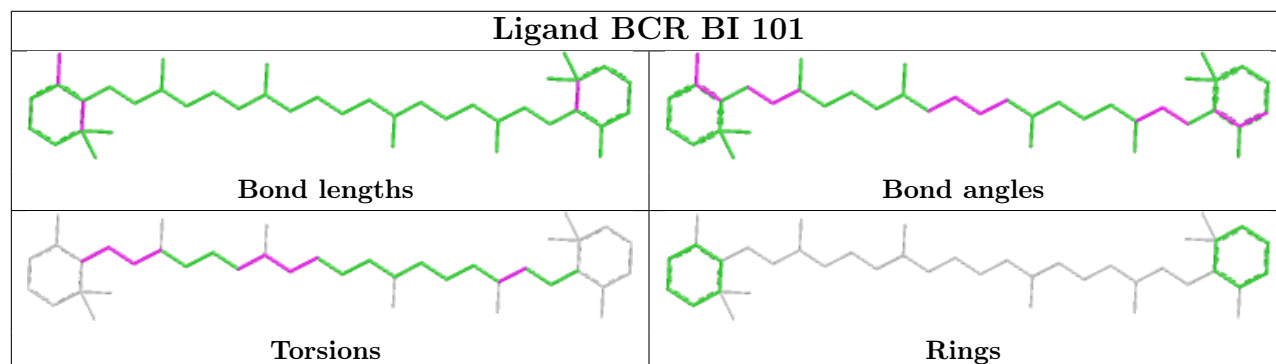




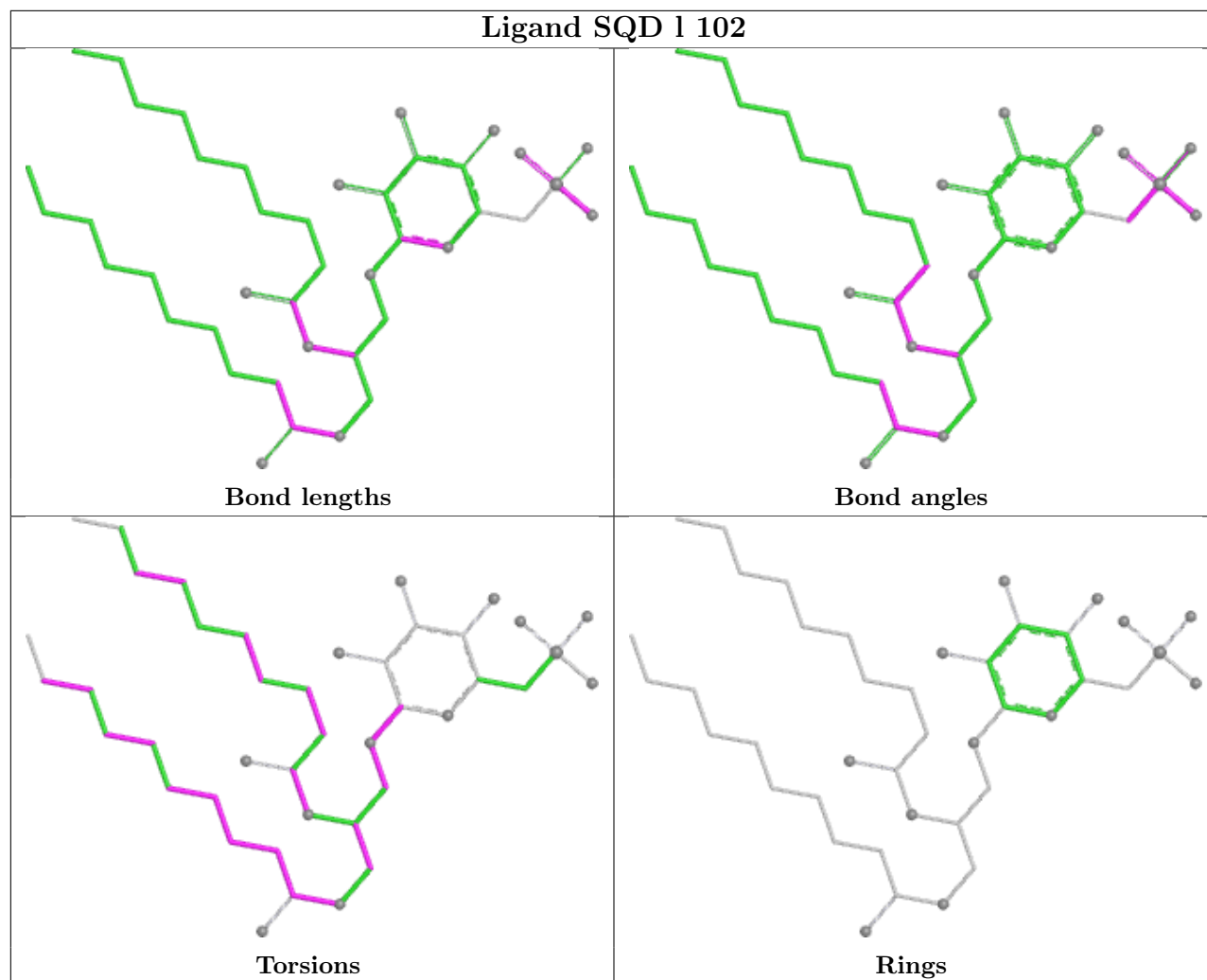
Ligand CLA AB 302



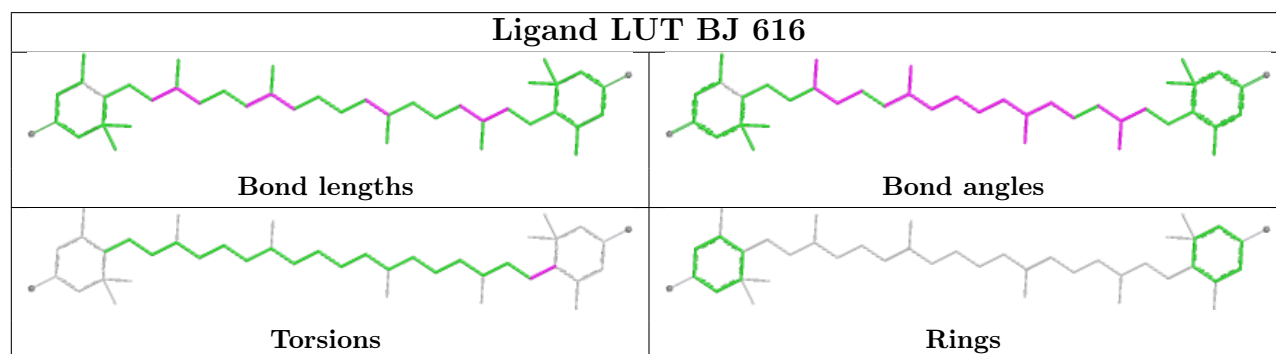
Ligand BCR BI 101

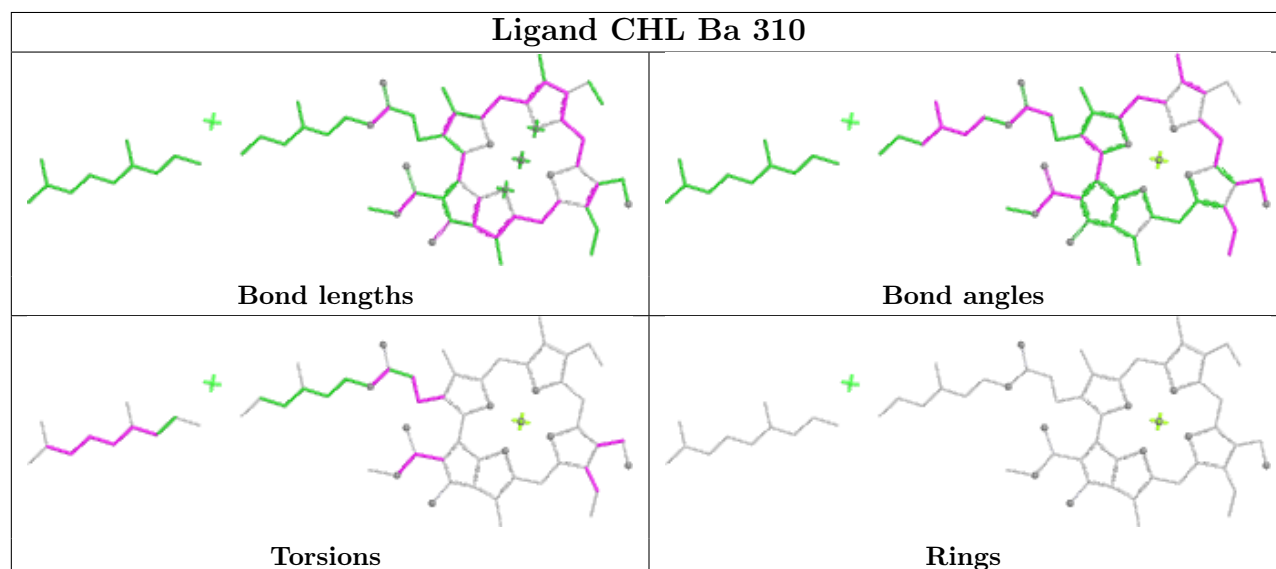
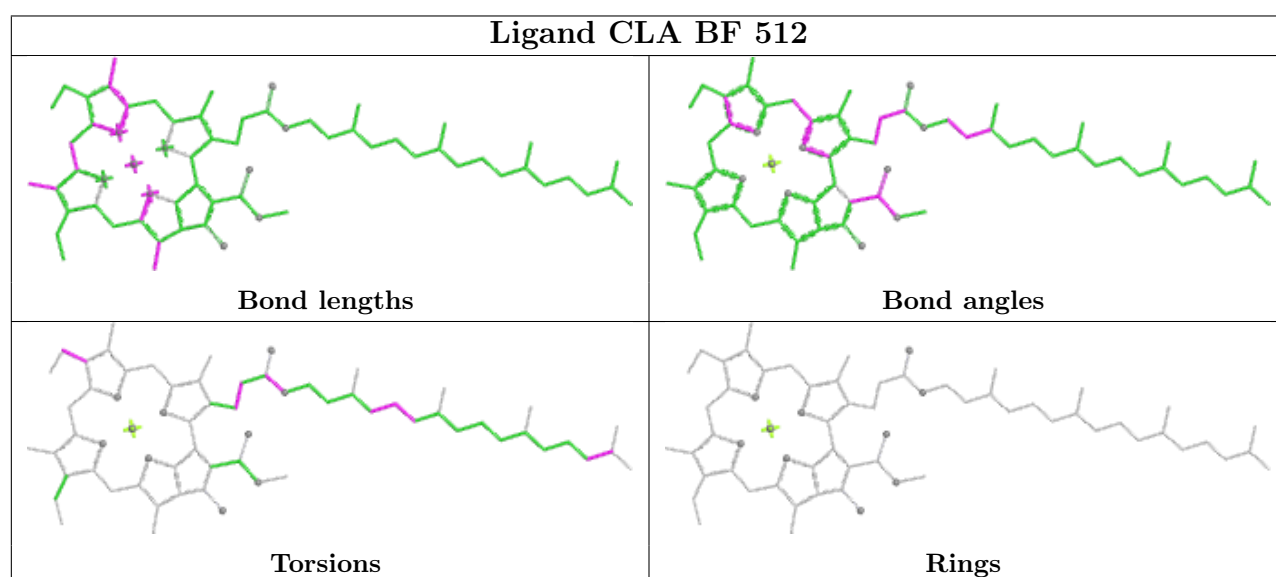
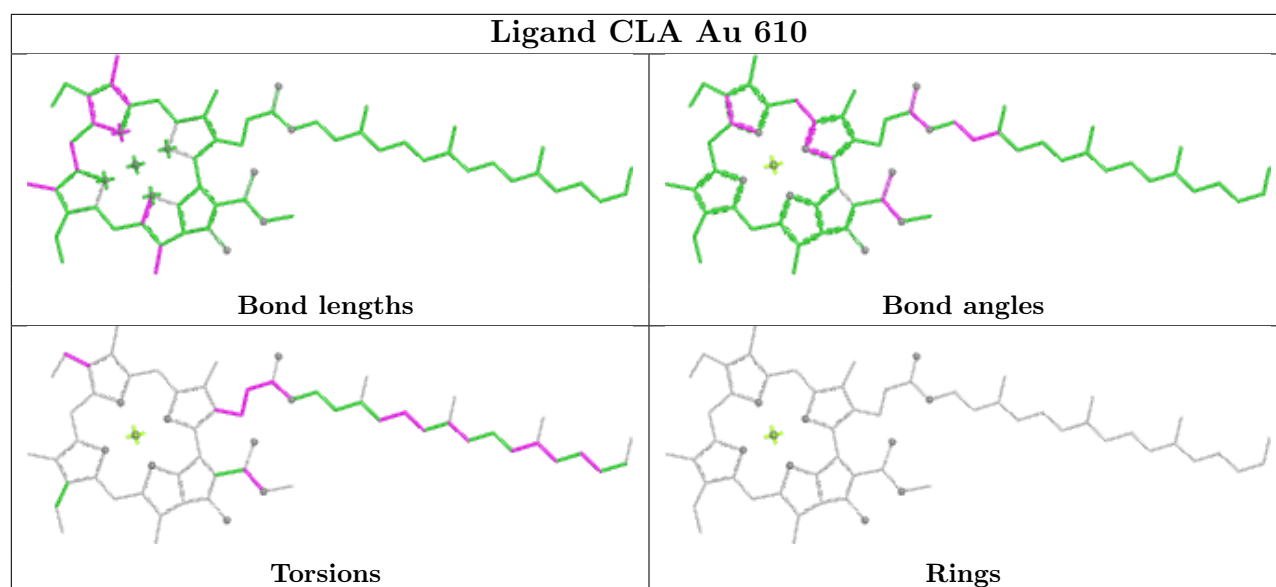


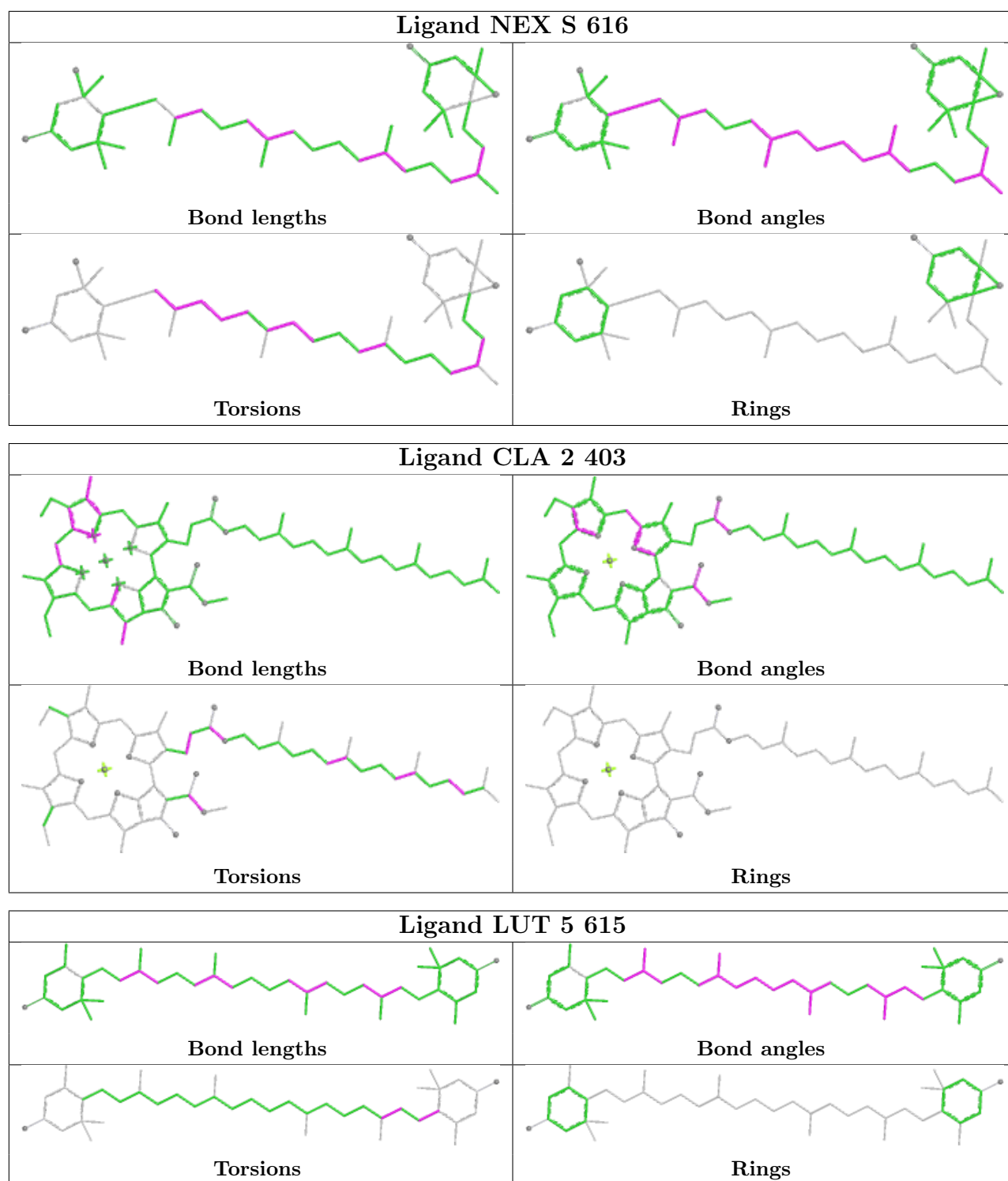
Ligand SQD I 102

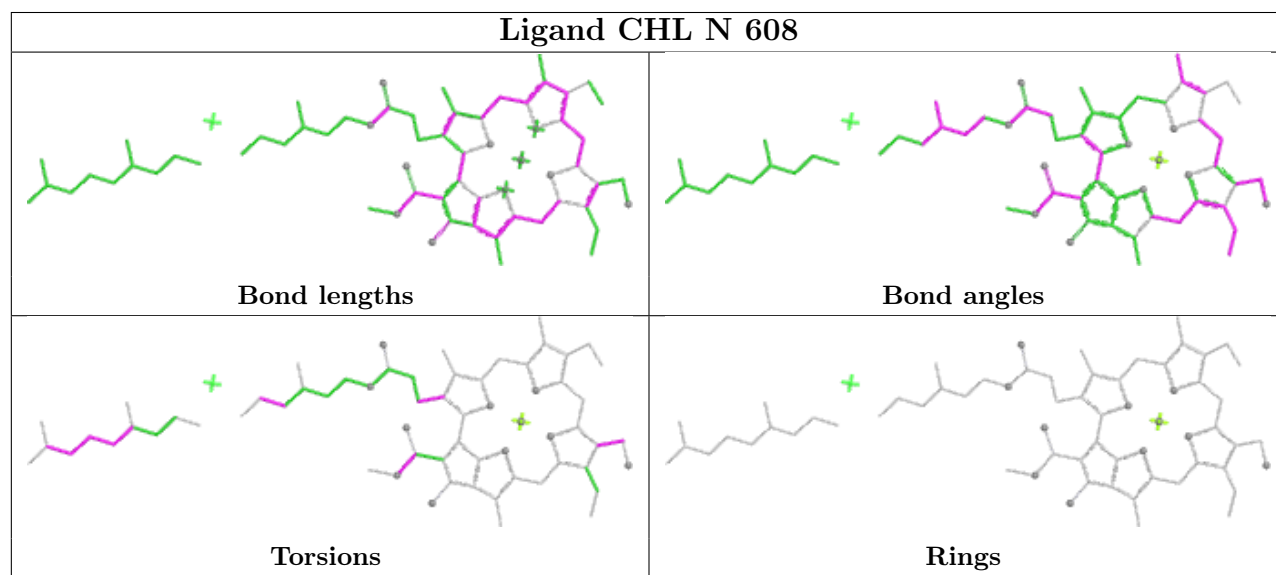
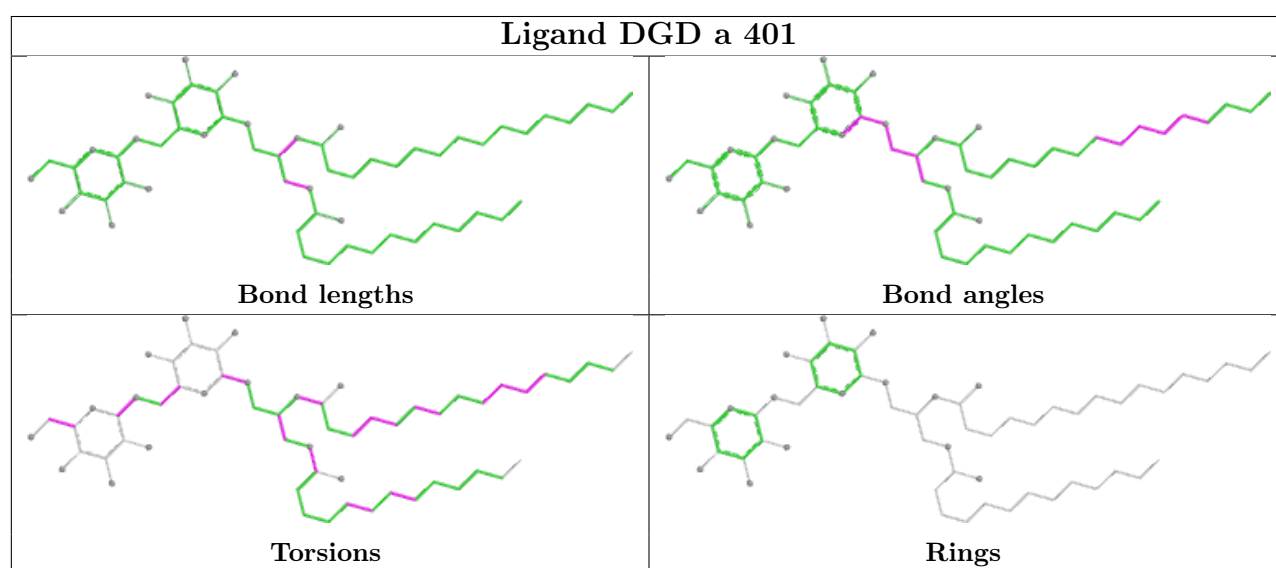
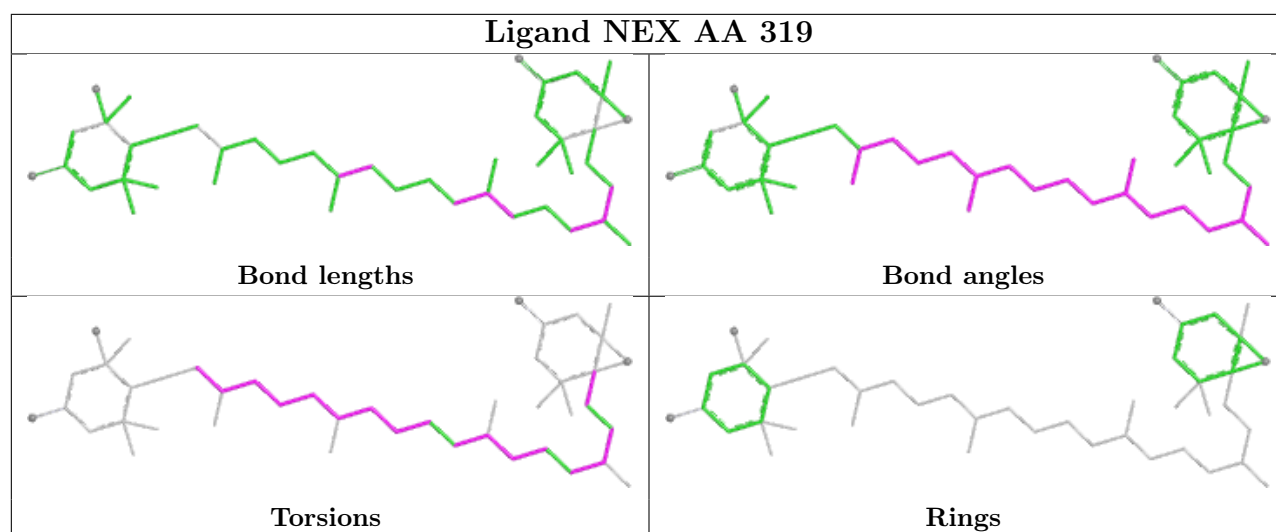


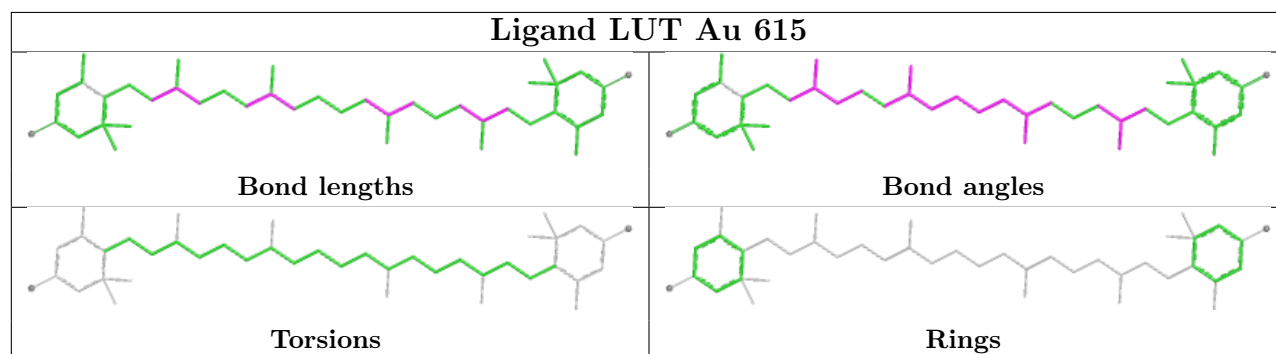
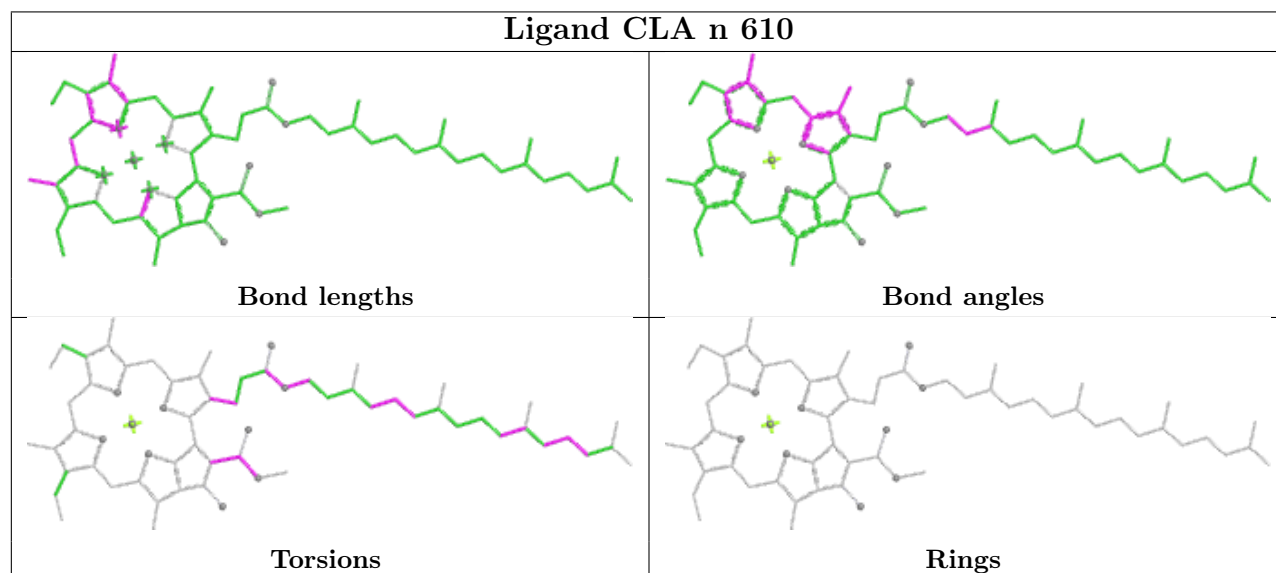
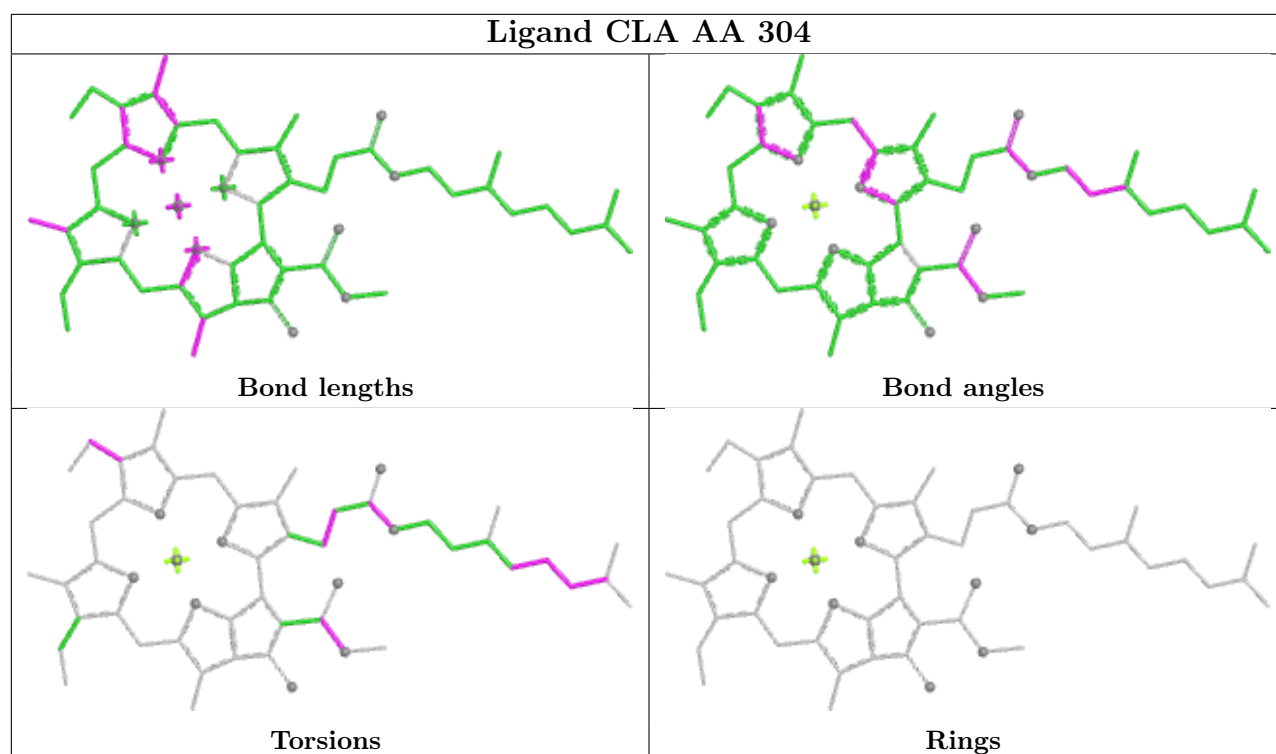
Ligand LUT BJ 616

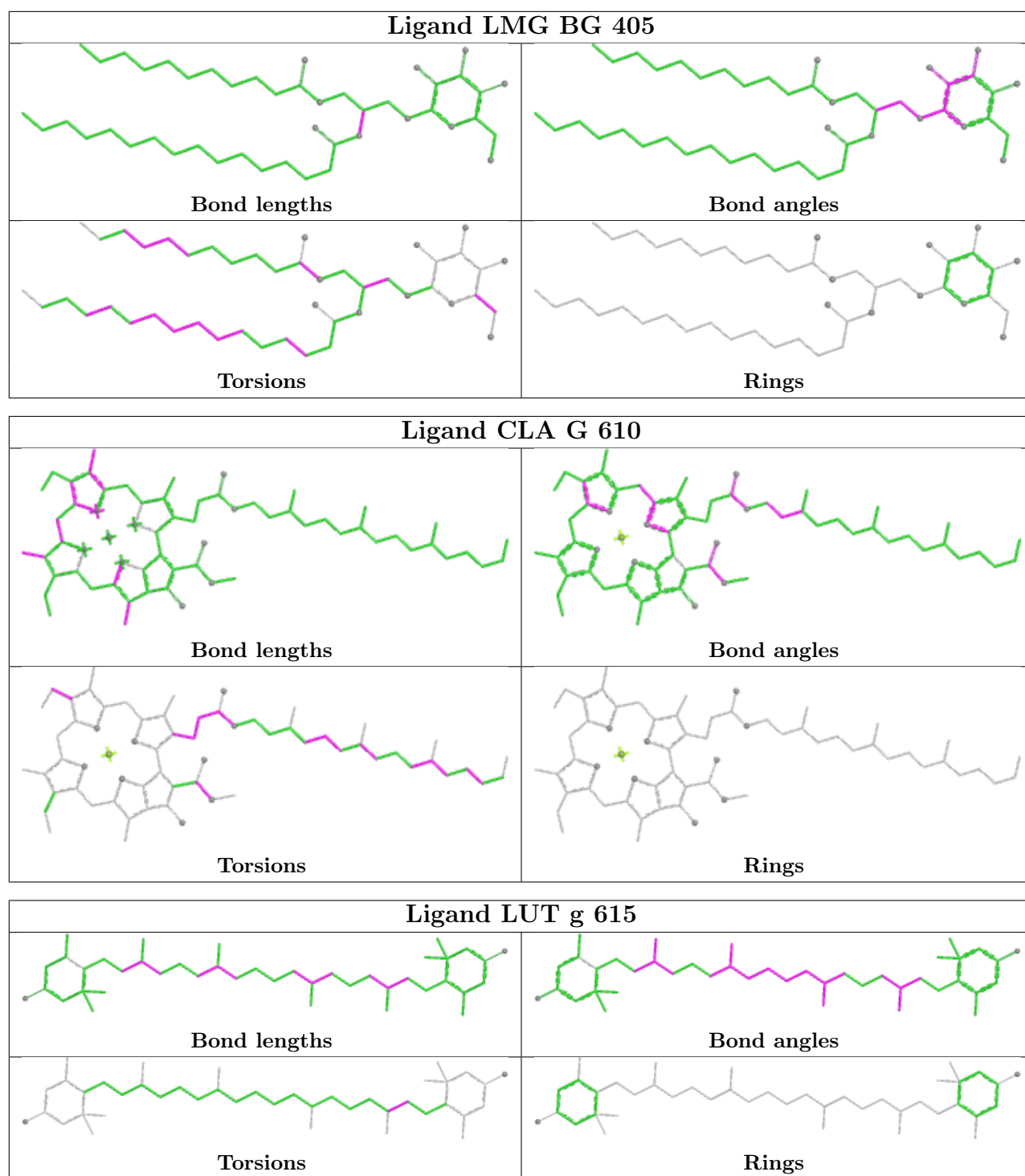


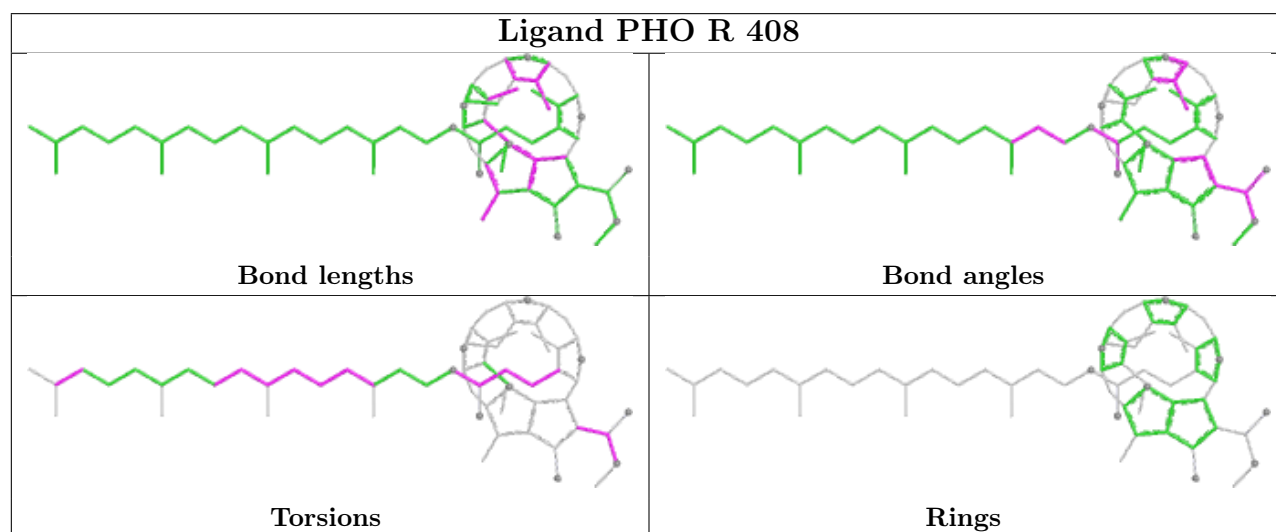
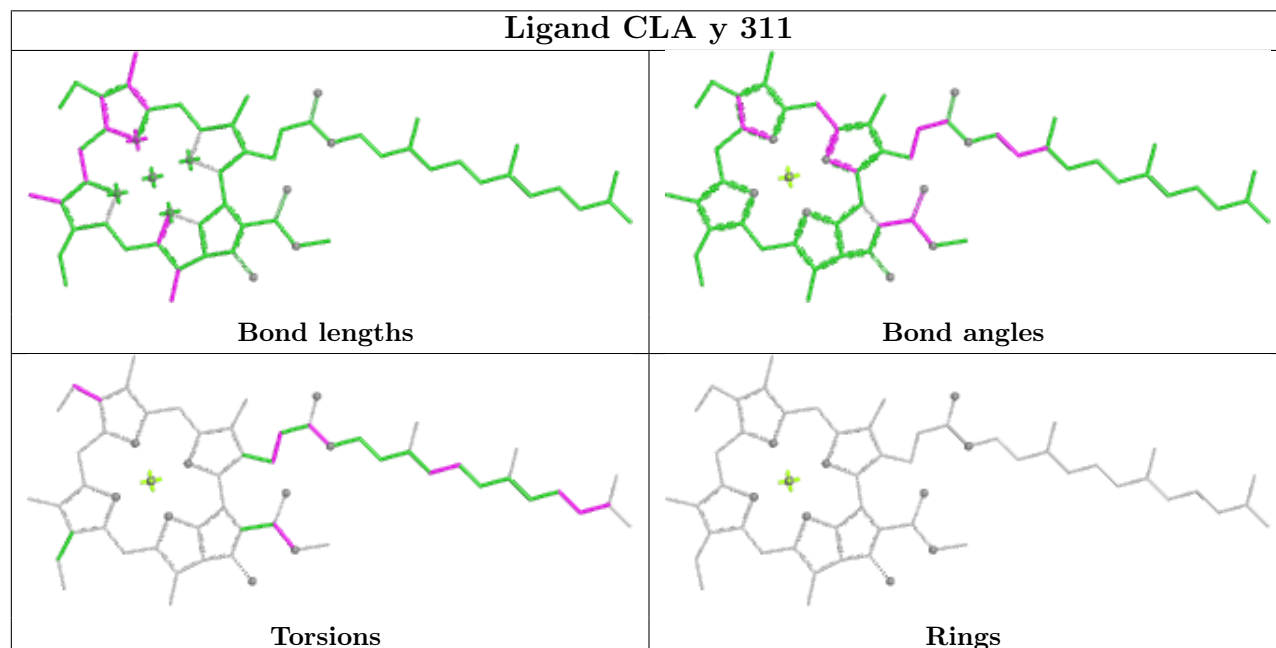
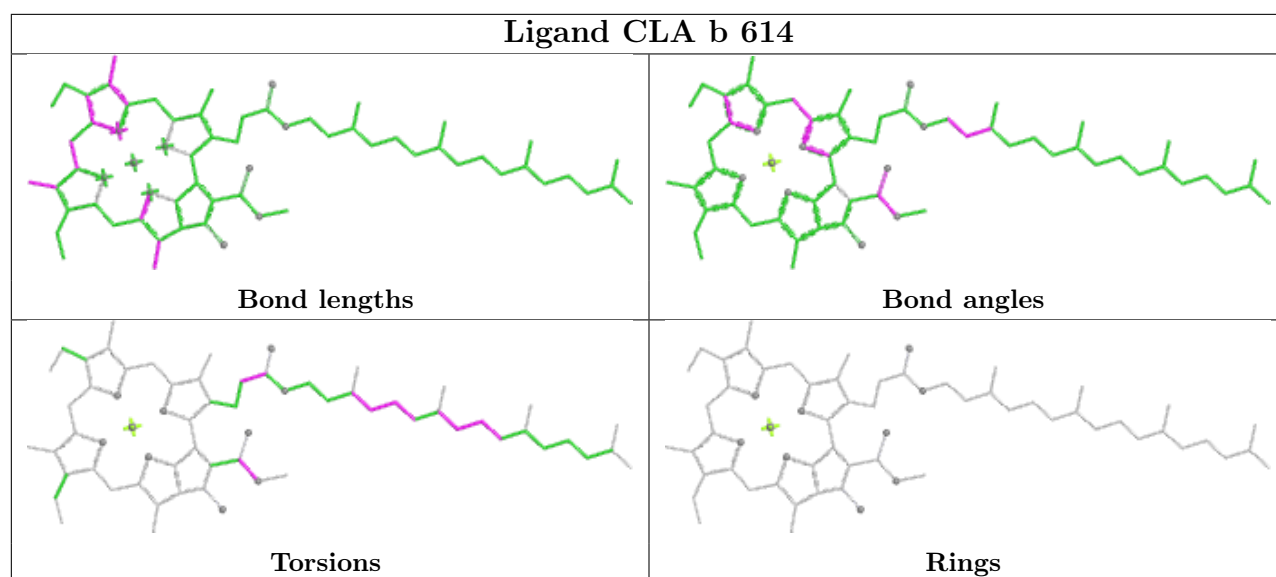


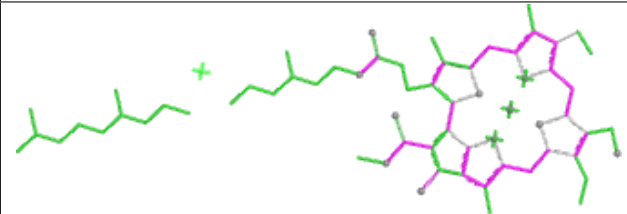
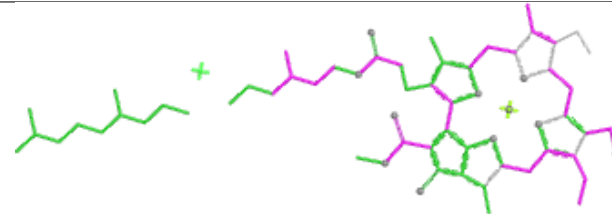
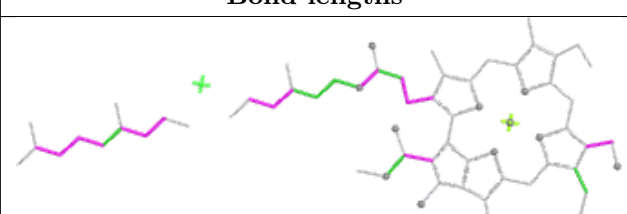
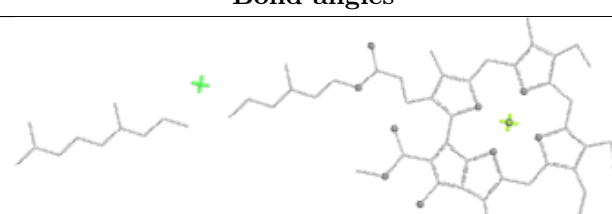


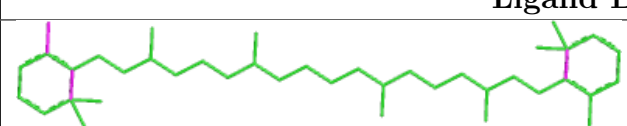
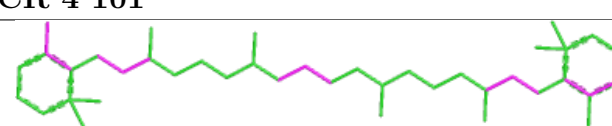
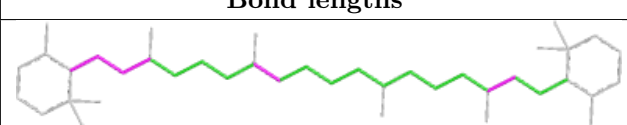
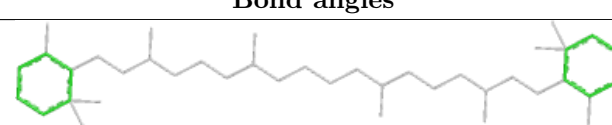





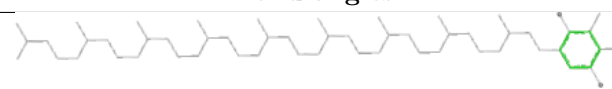


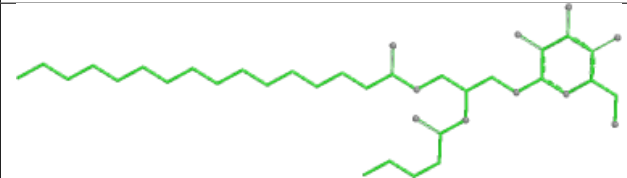
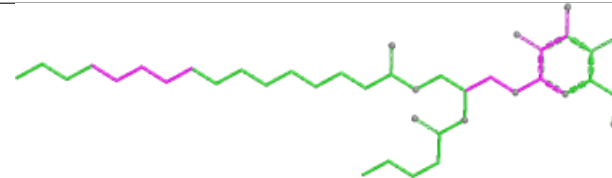

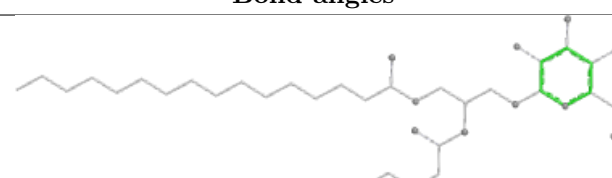


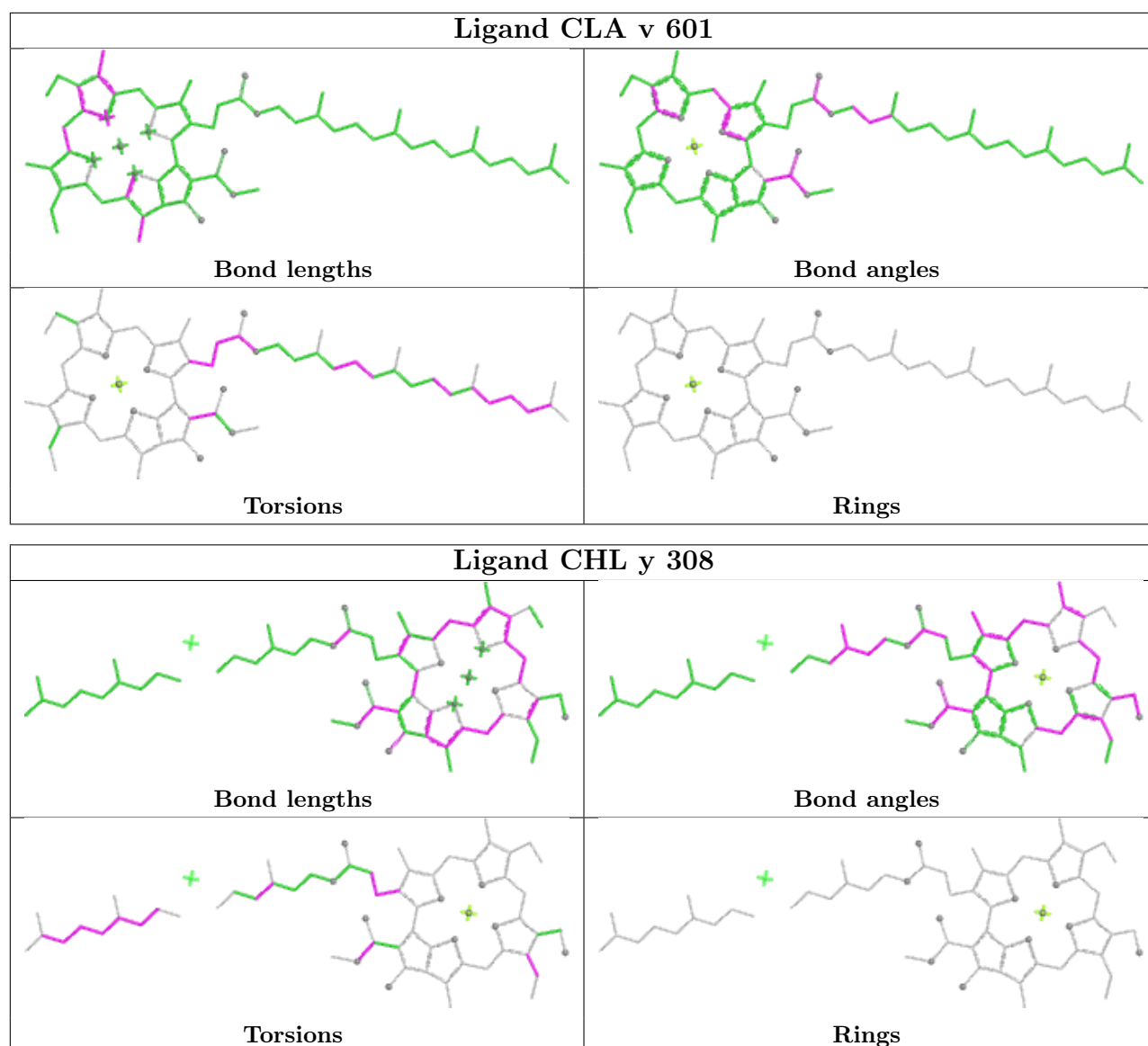


Ligand CHL N 601	
	
Bond lengths	Bond angles
	
Torsions	Rings

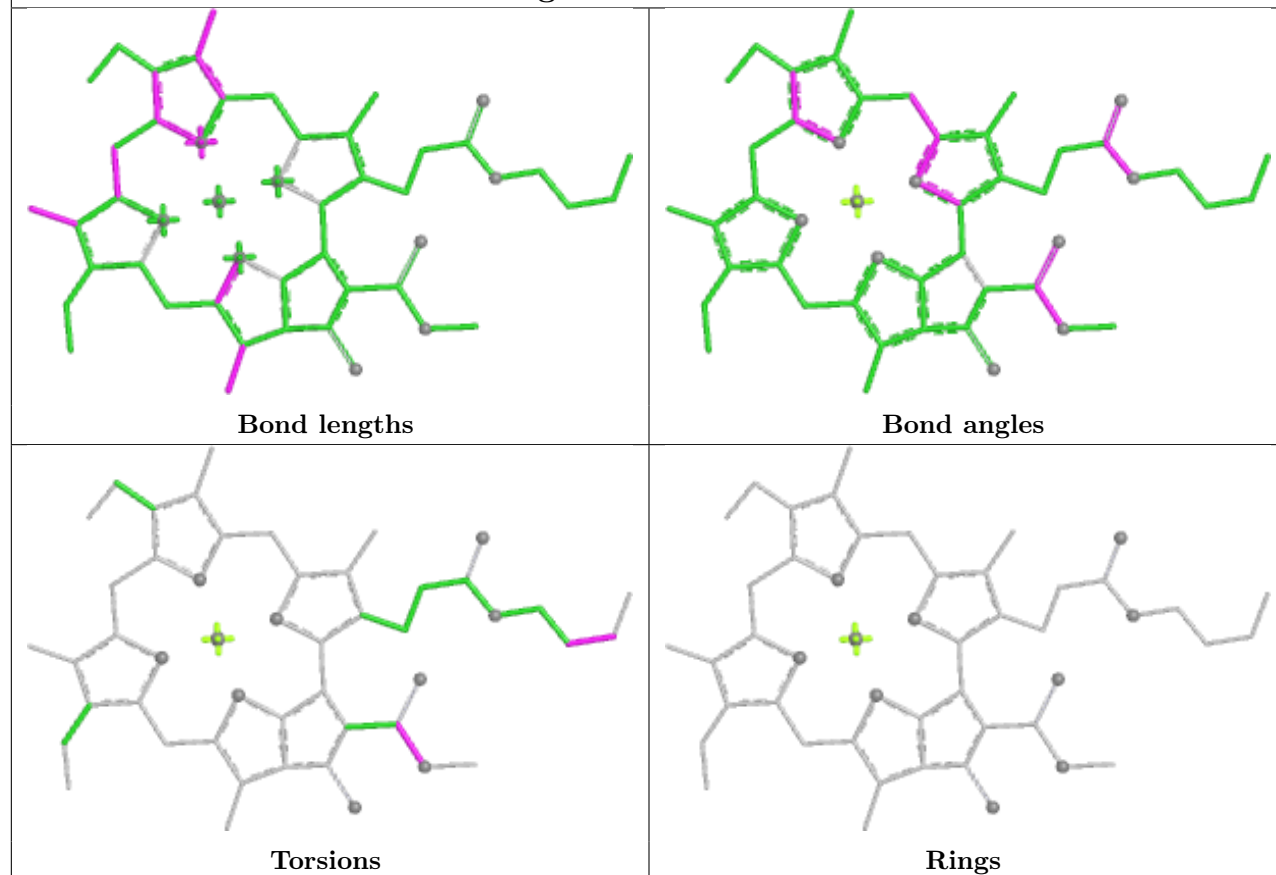
Ligand BCR 4 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand PL9 BG 403	
	
Bond lengths	Bond angles
	
Torsions	Rings

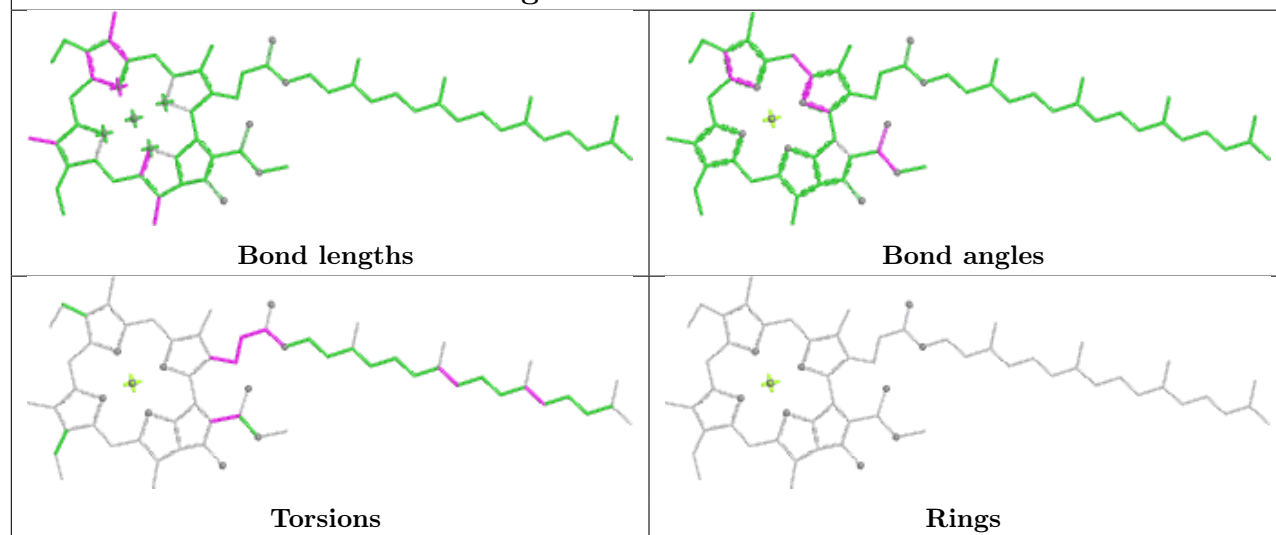
Ligand LMG Aw 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

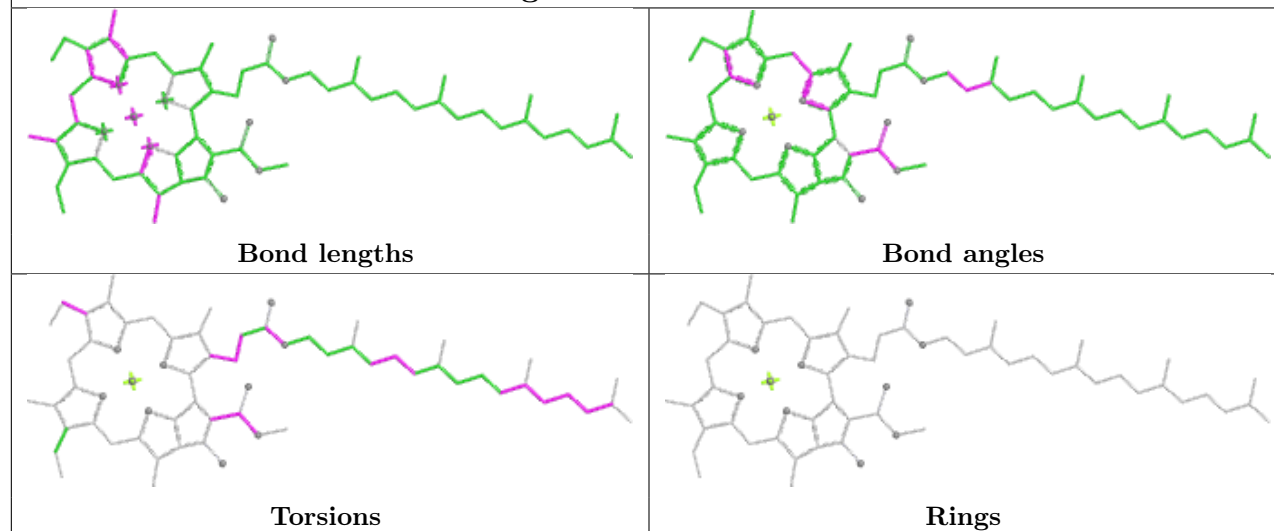
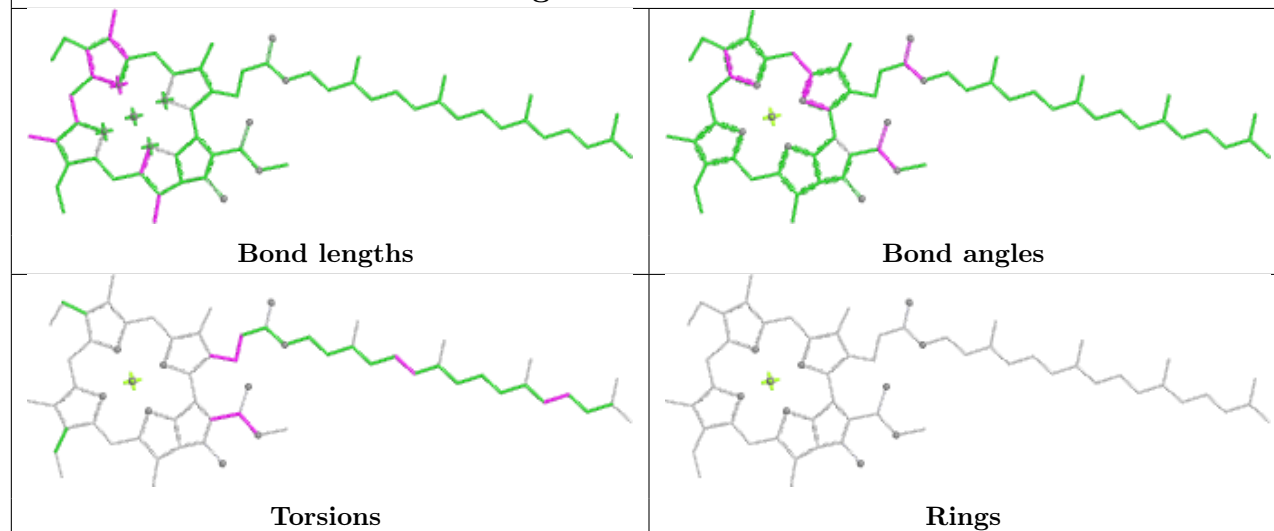


Ligand CLA s 611

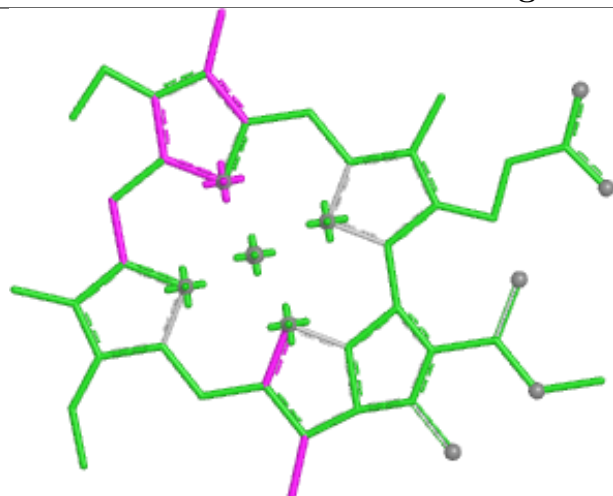


Ligand CLA BF 502

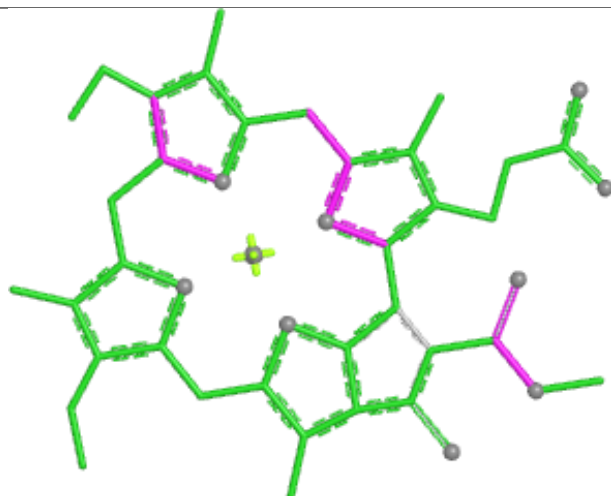


Ligand CLA BF 507**Ligand CLA C 505**

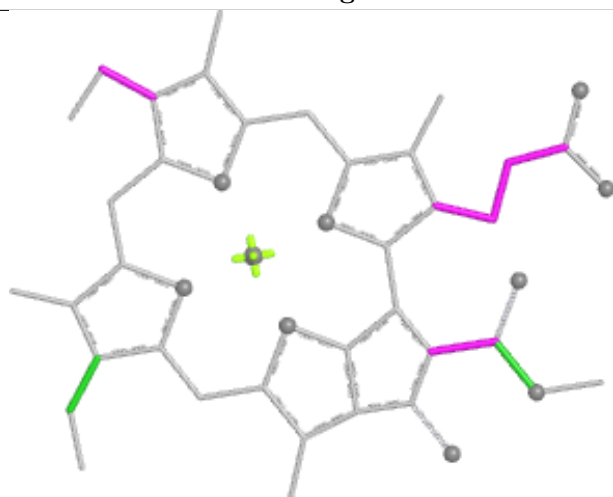
Ligand CLA 7 312



Bond lengths



Bond angles

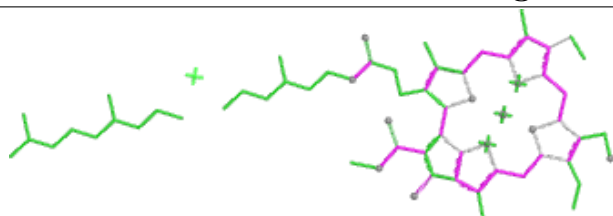


Torsions

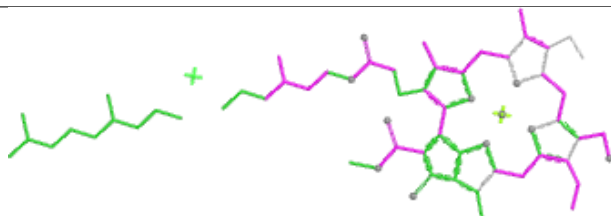


Rings

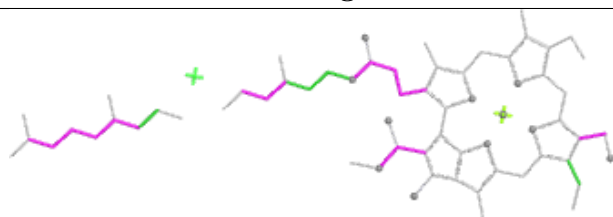
Ligand CHL G 608



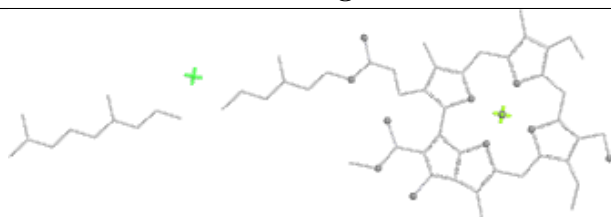
Bond lengths



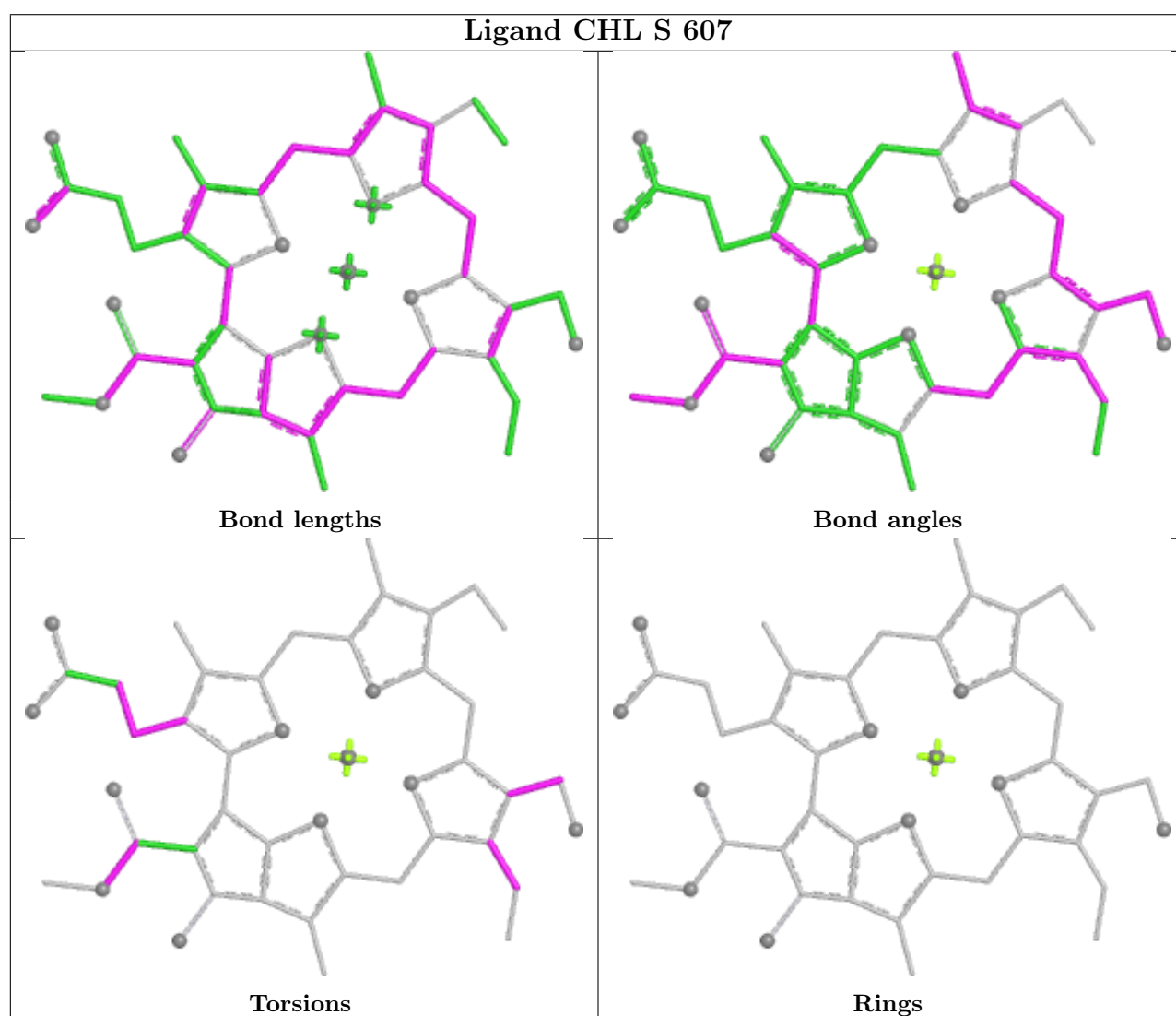
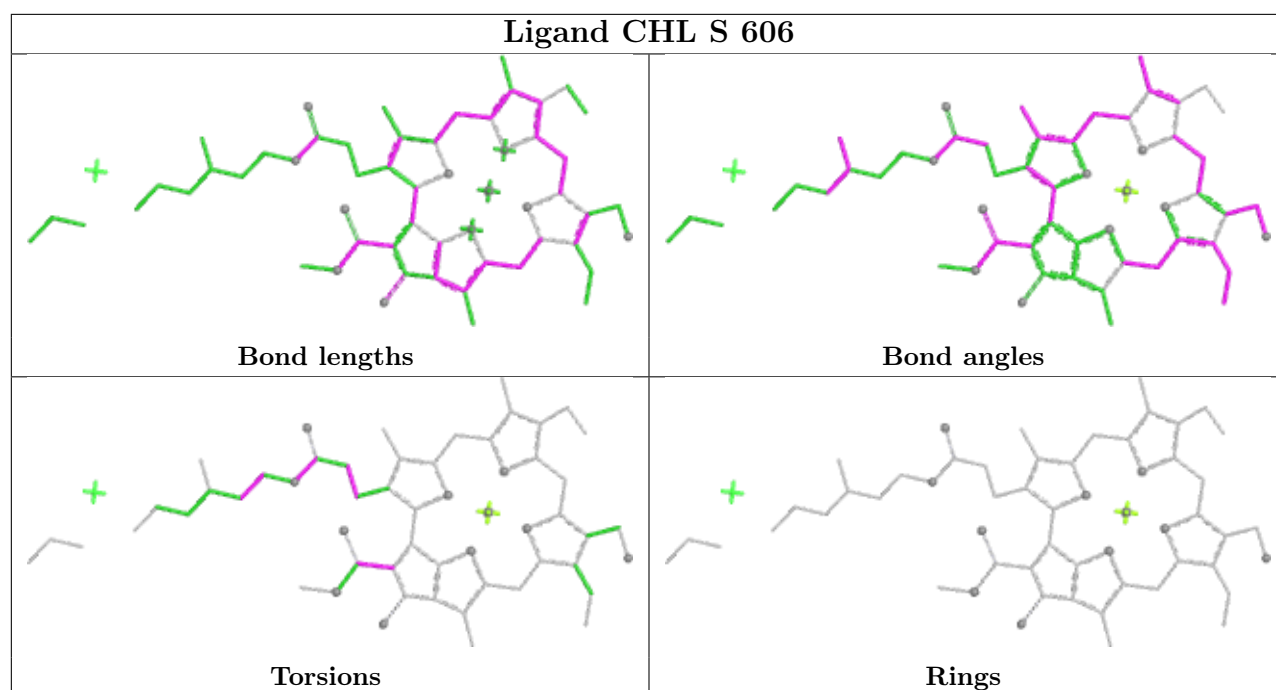
Bond angles



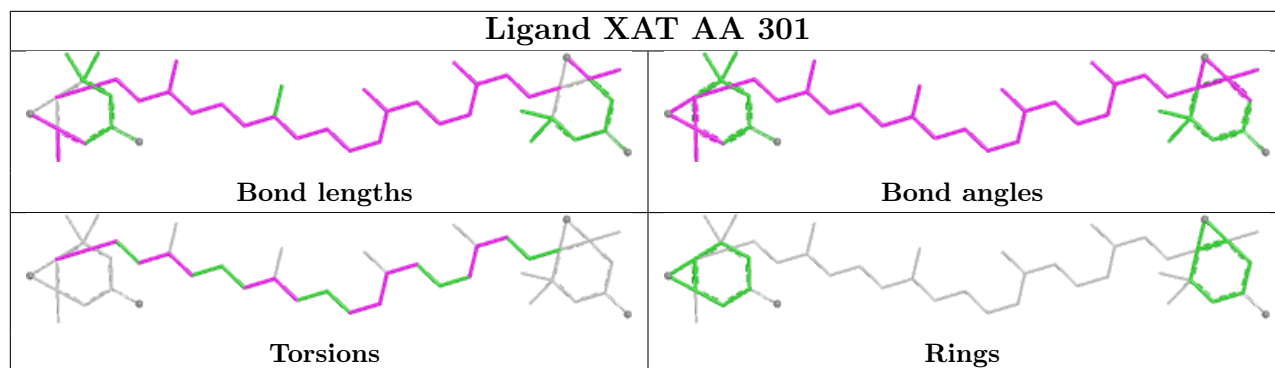
Torsions



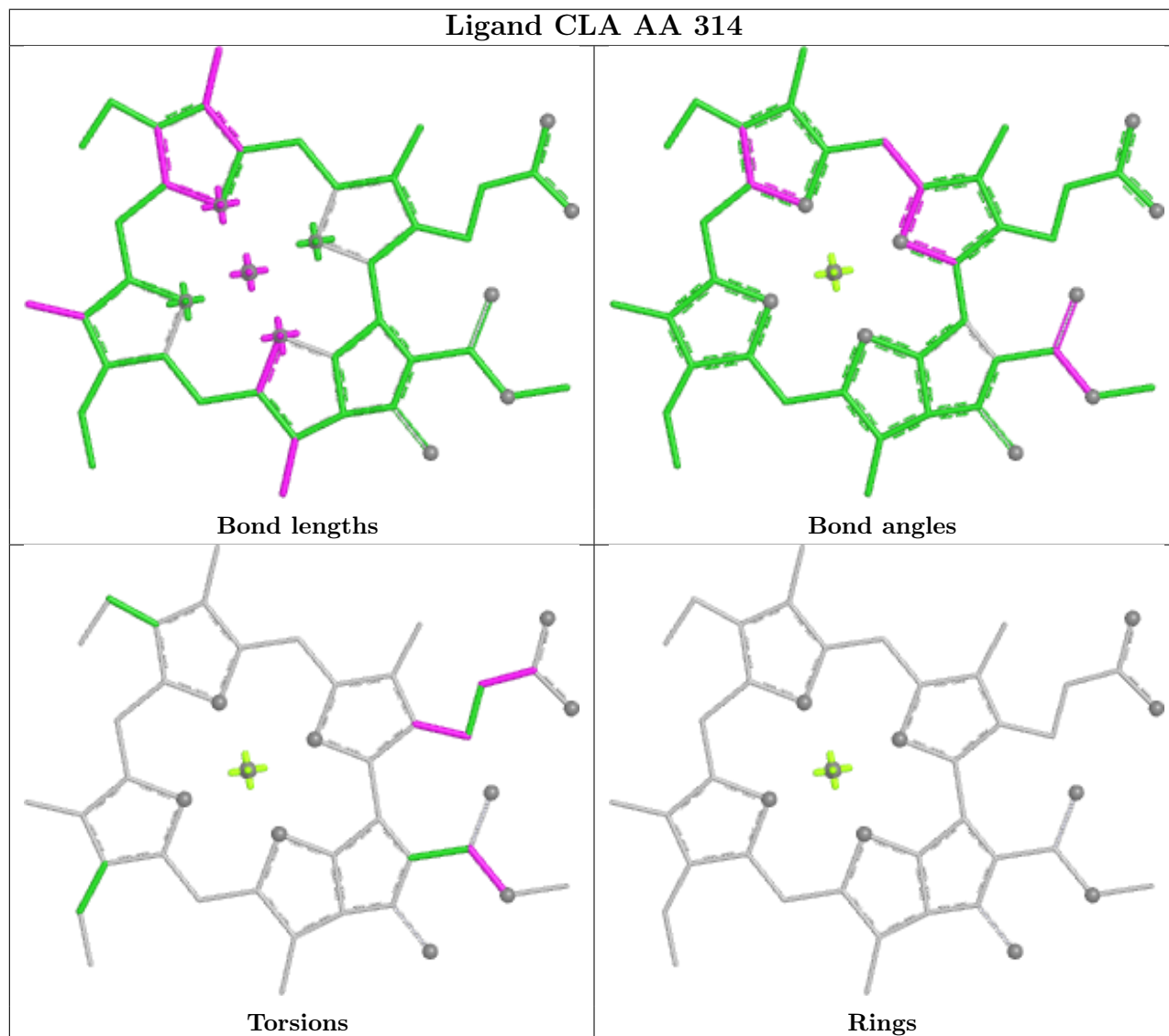
Rings

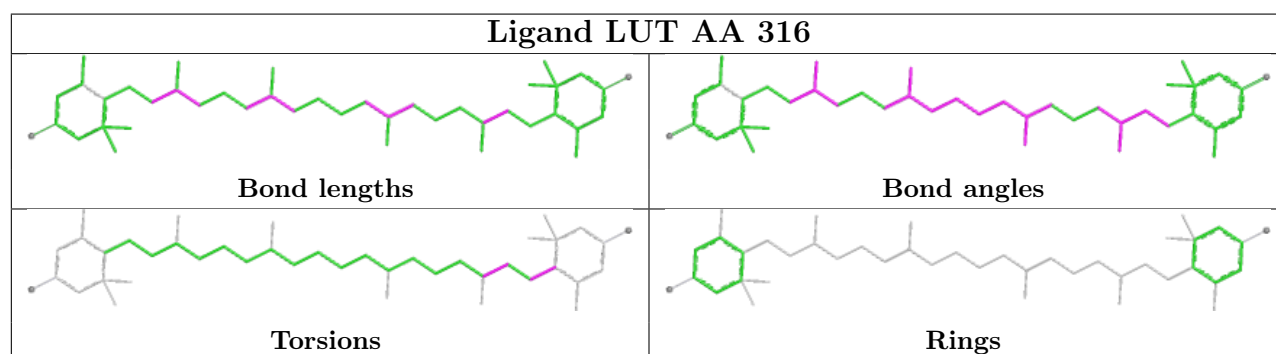
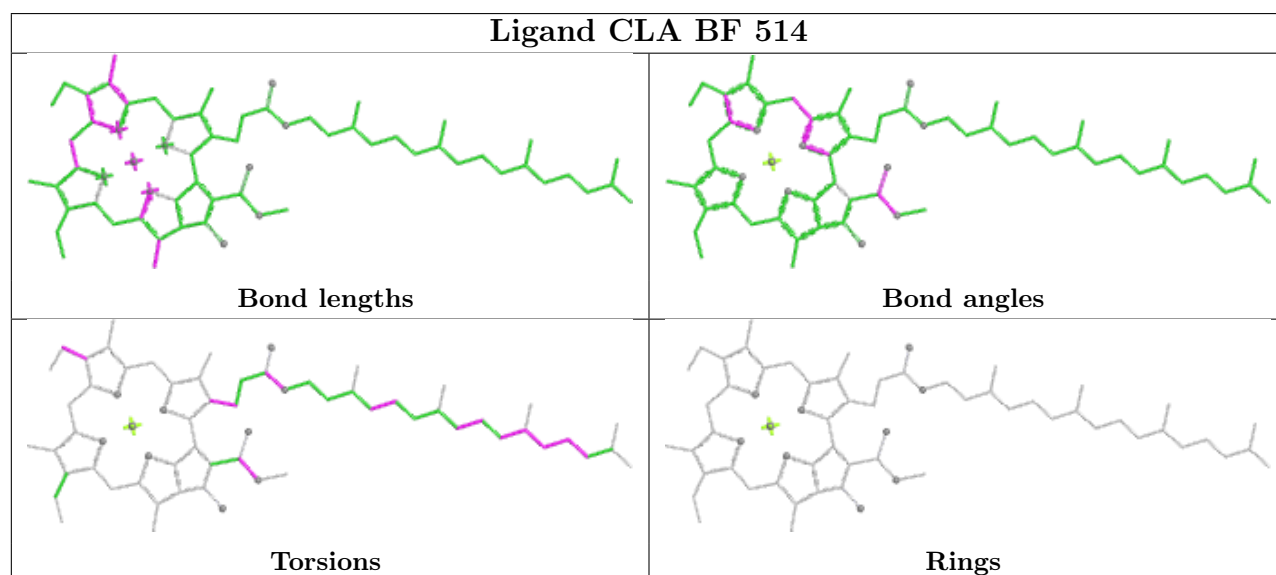
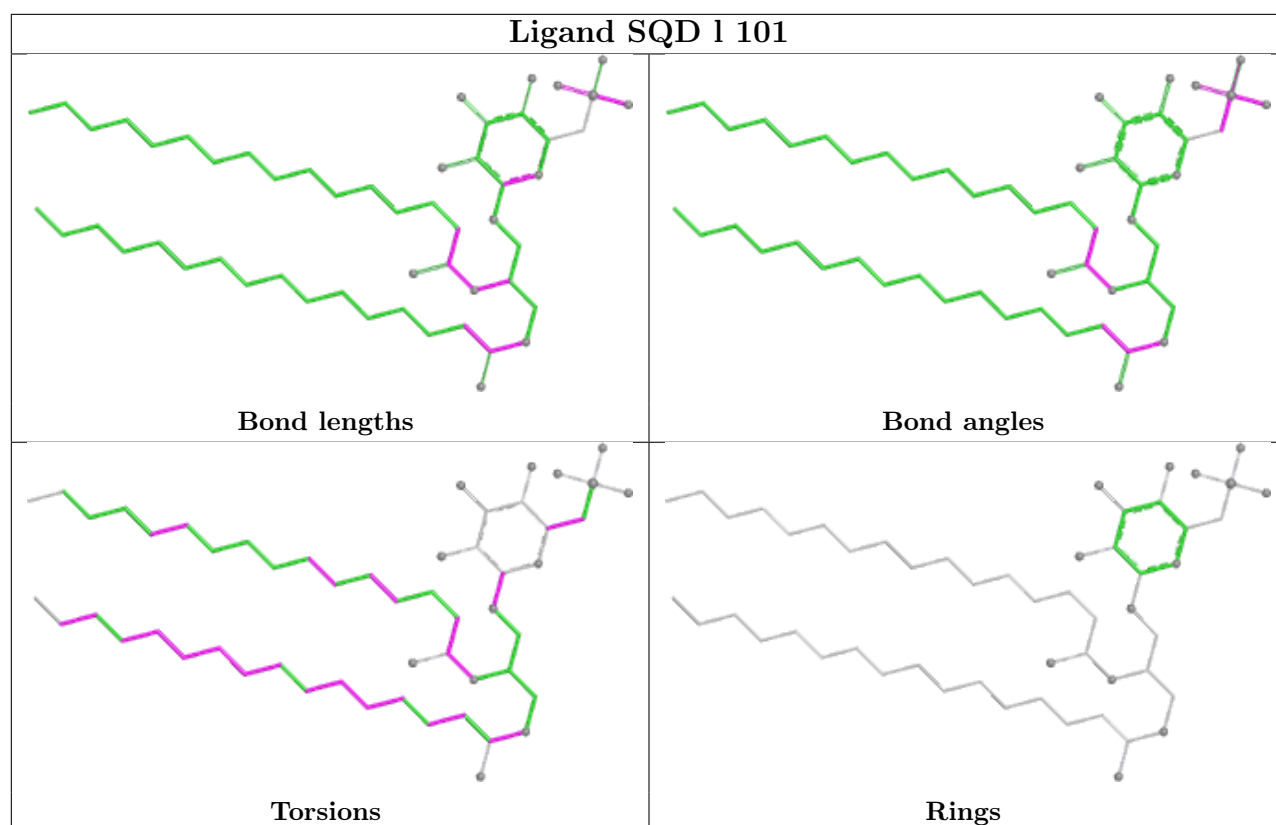


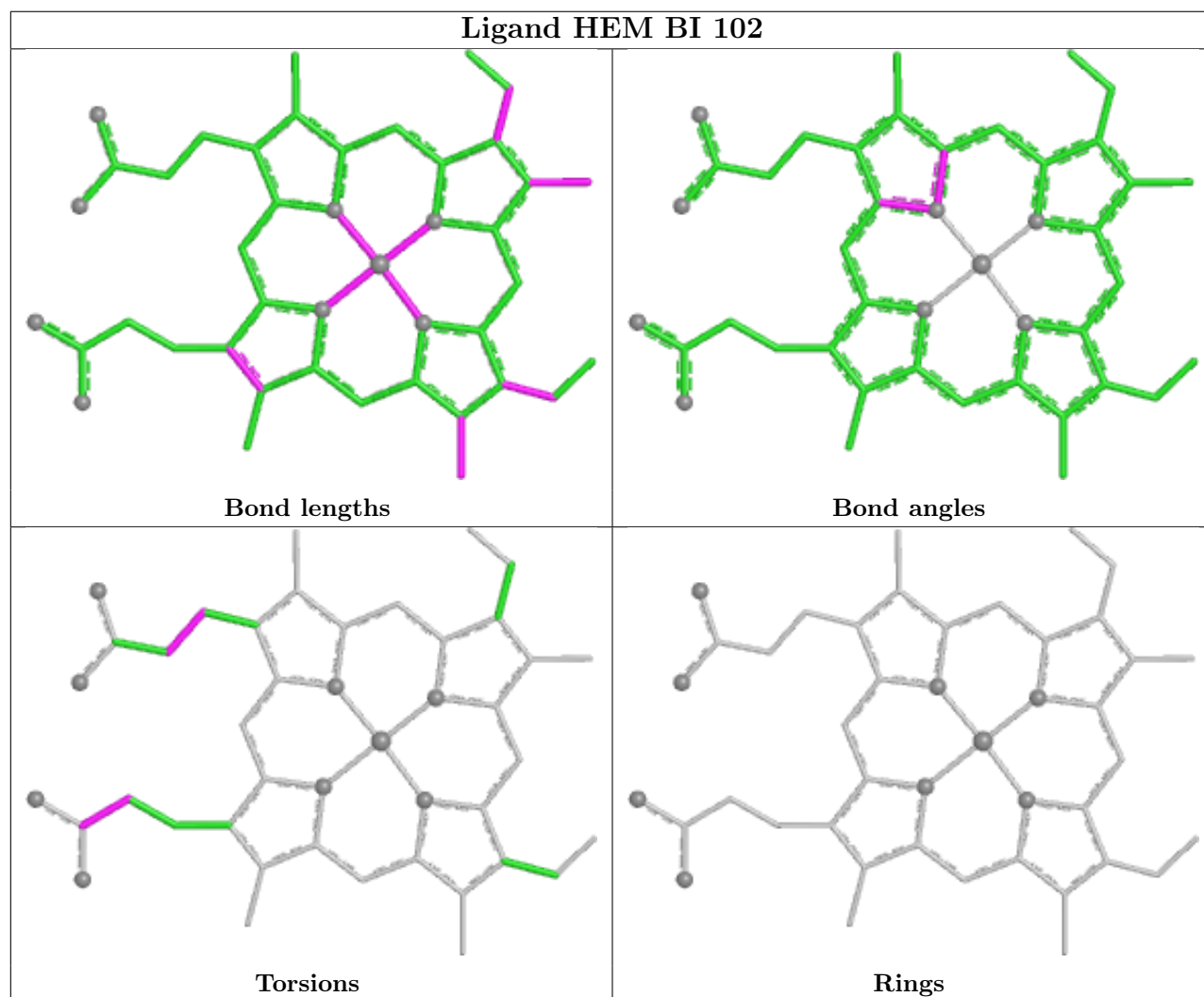
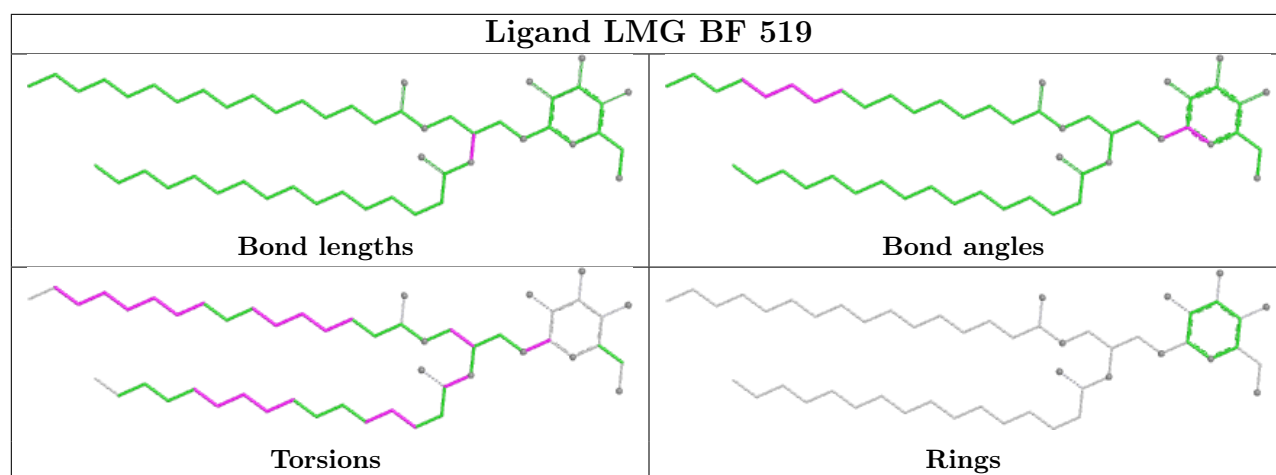
Ligand XAT AA 301

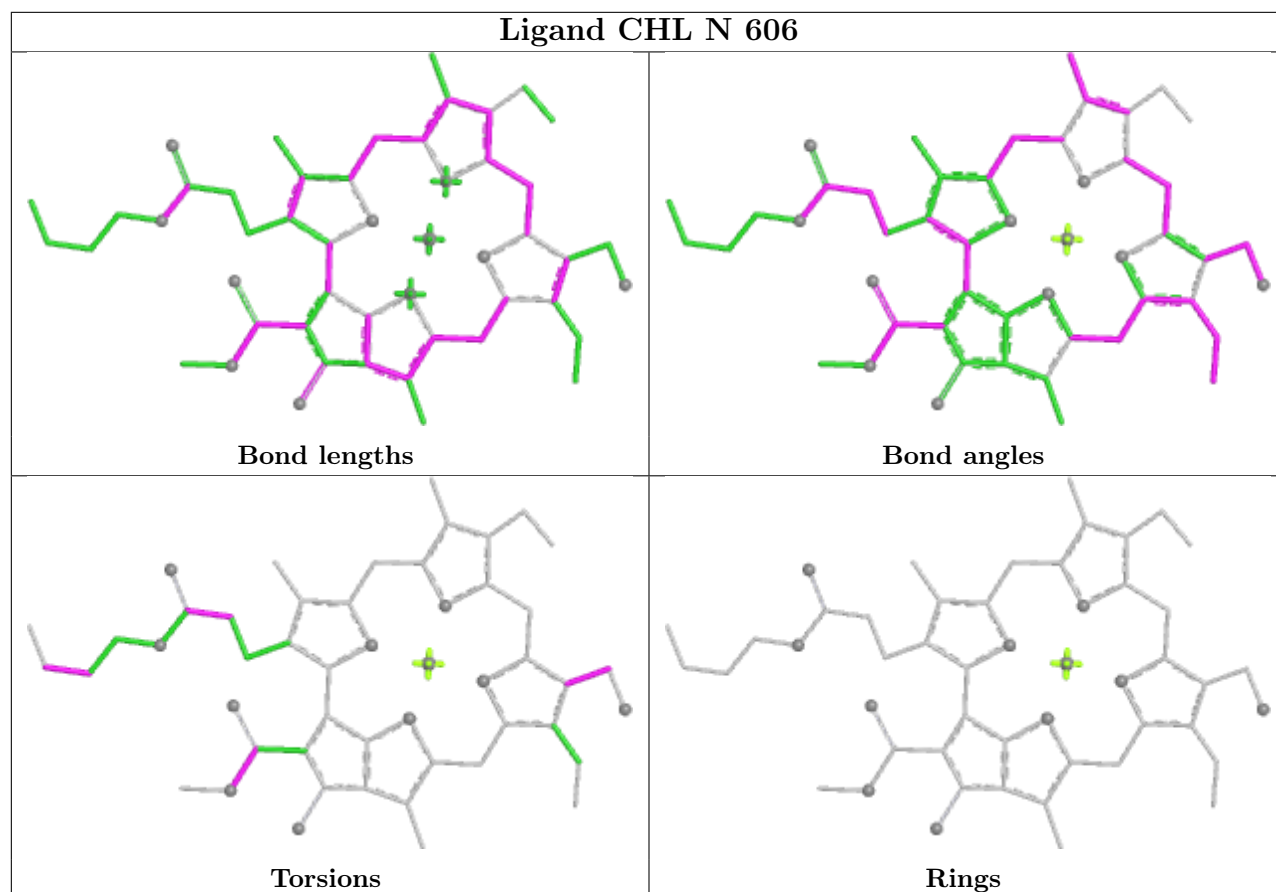
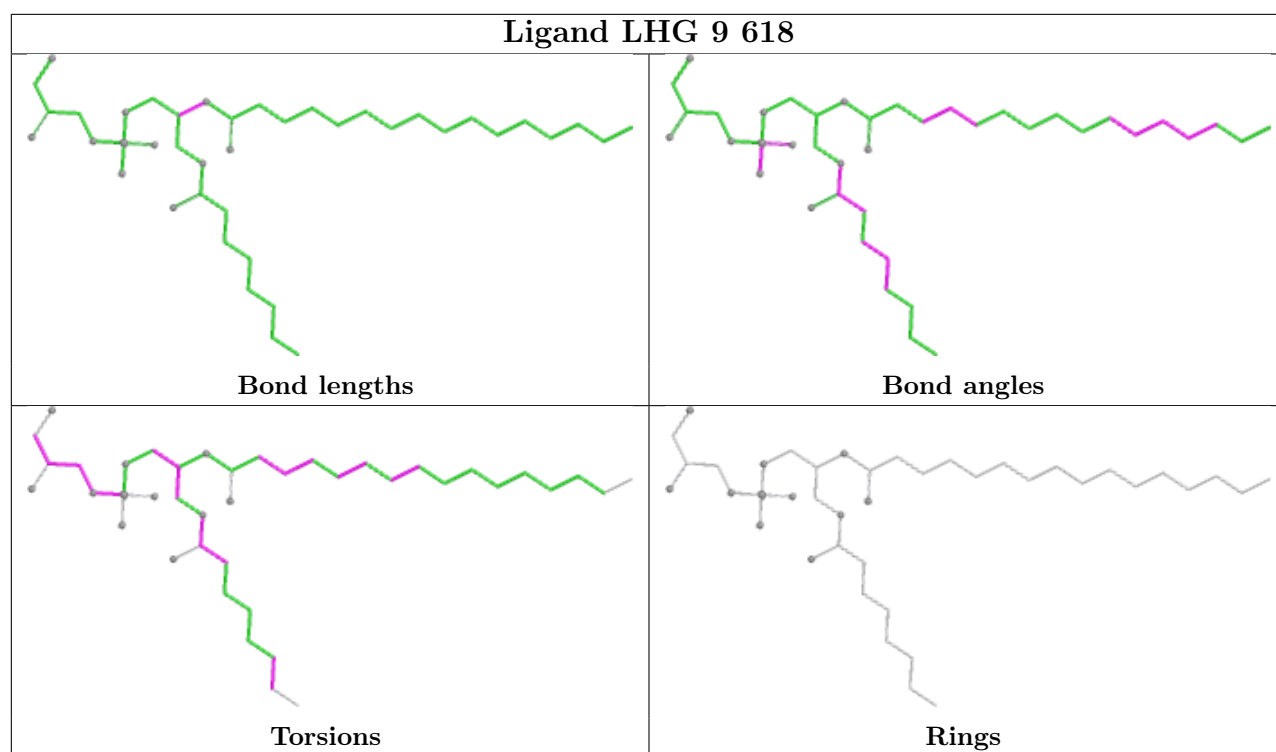


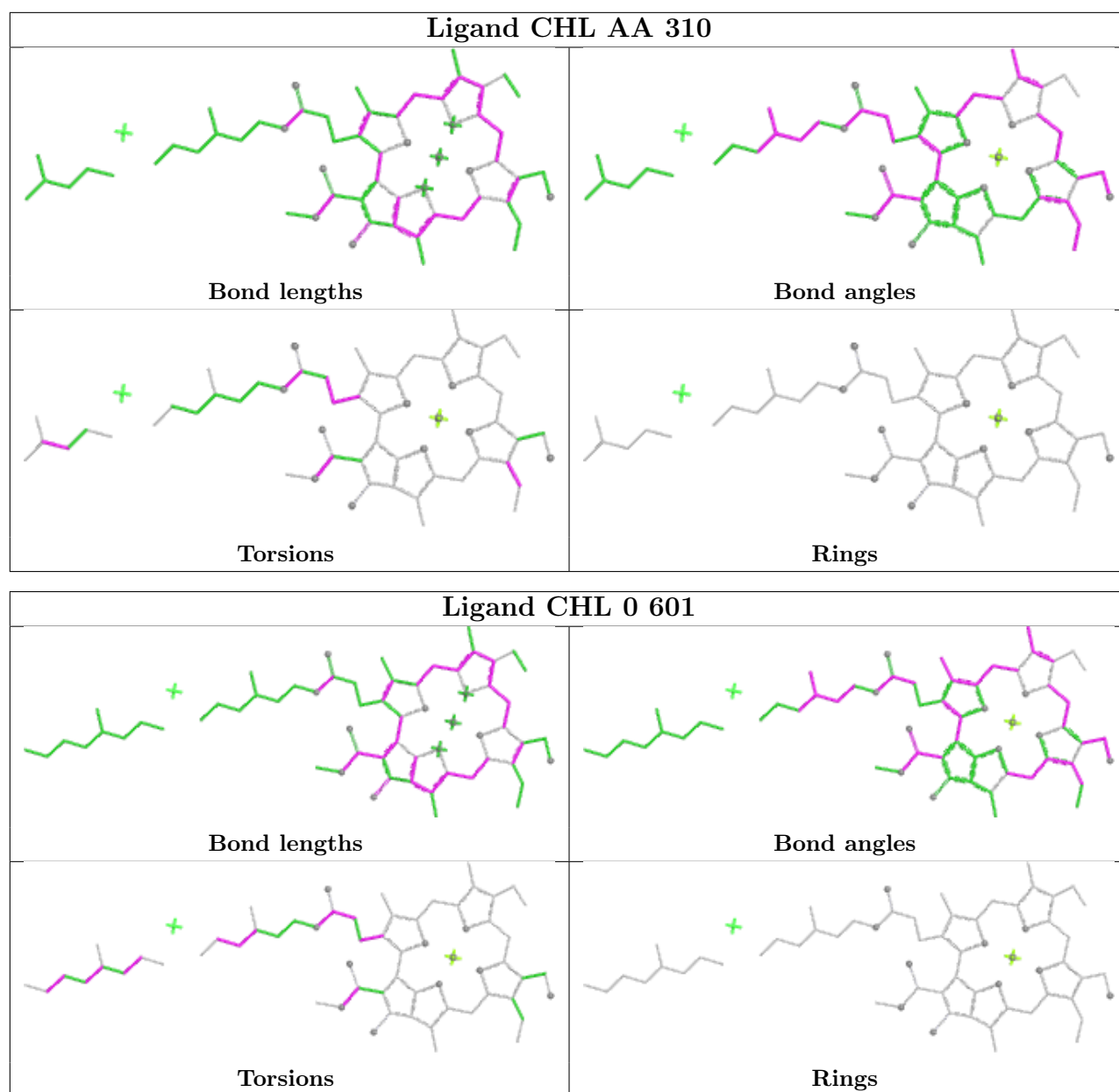
Ligand CLA AA 314



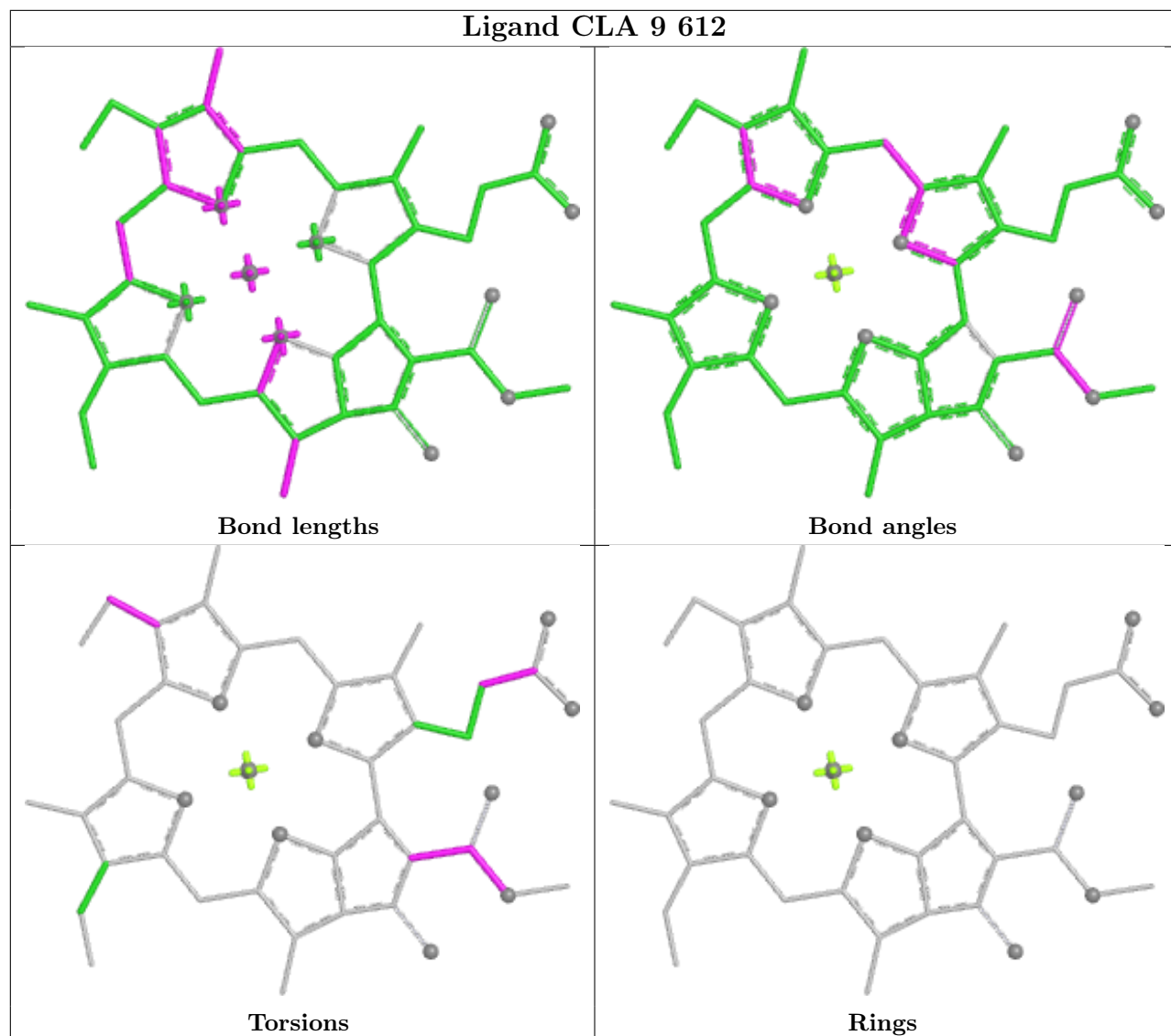


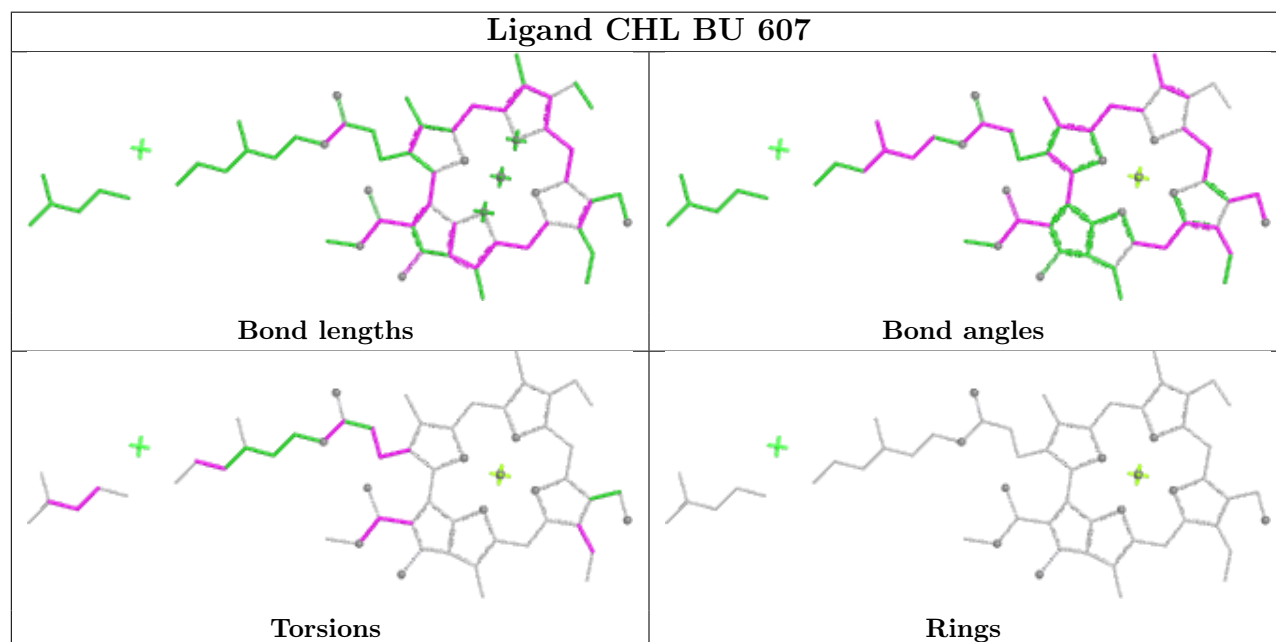
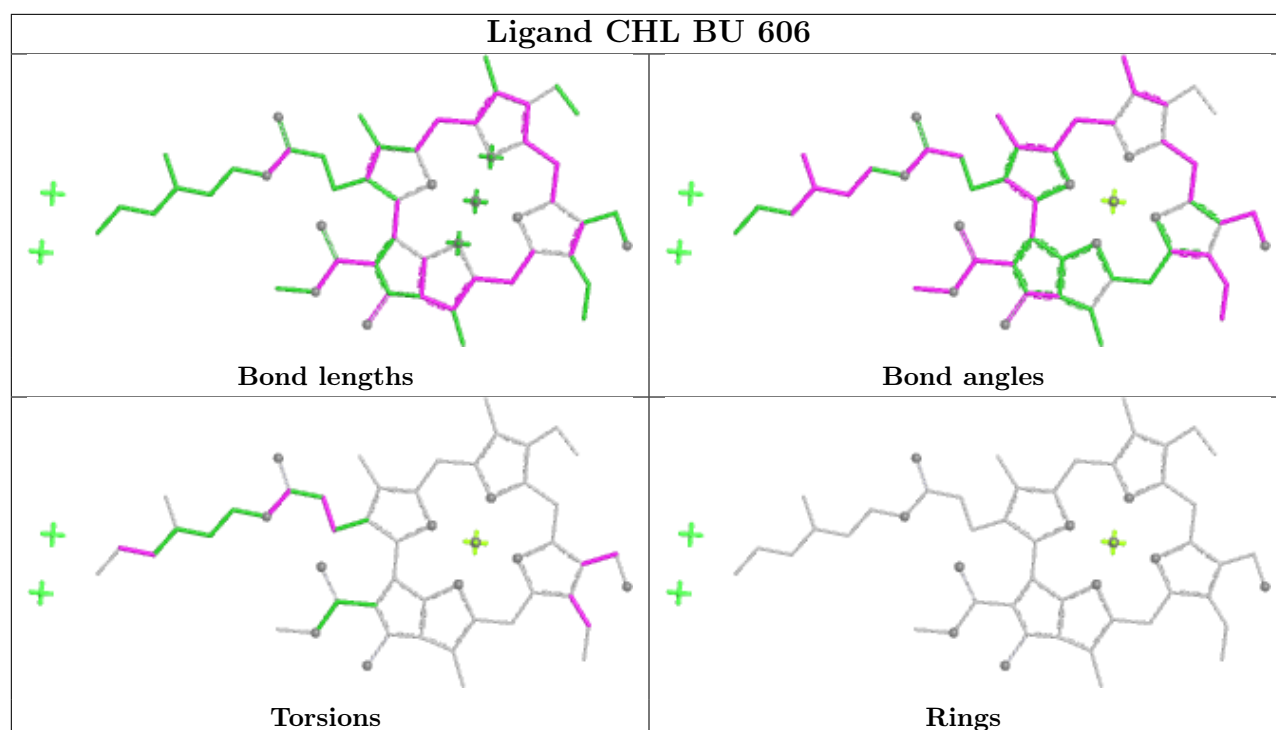


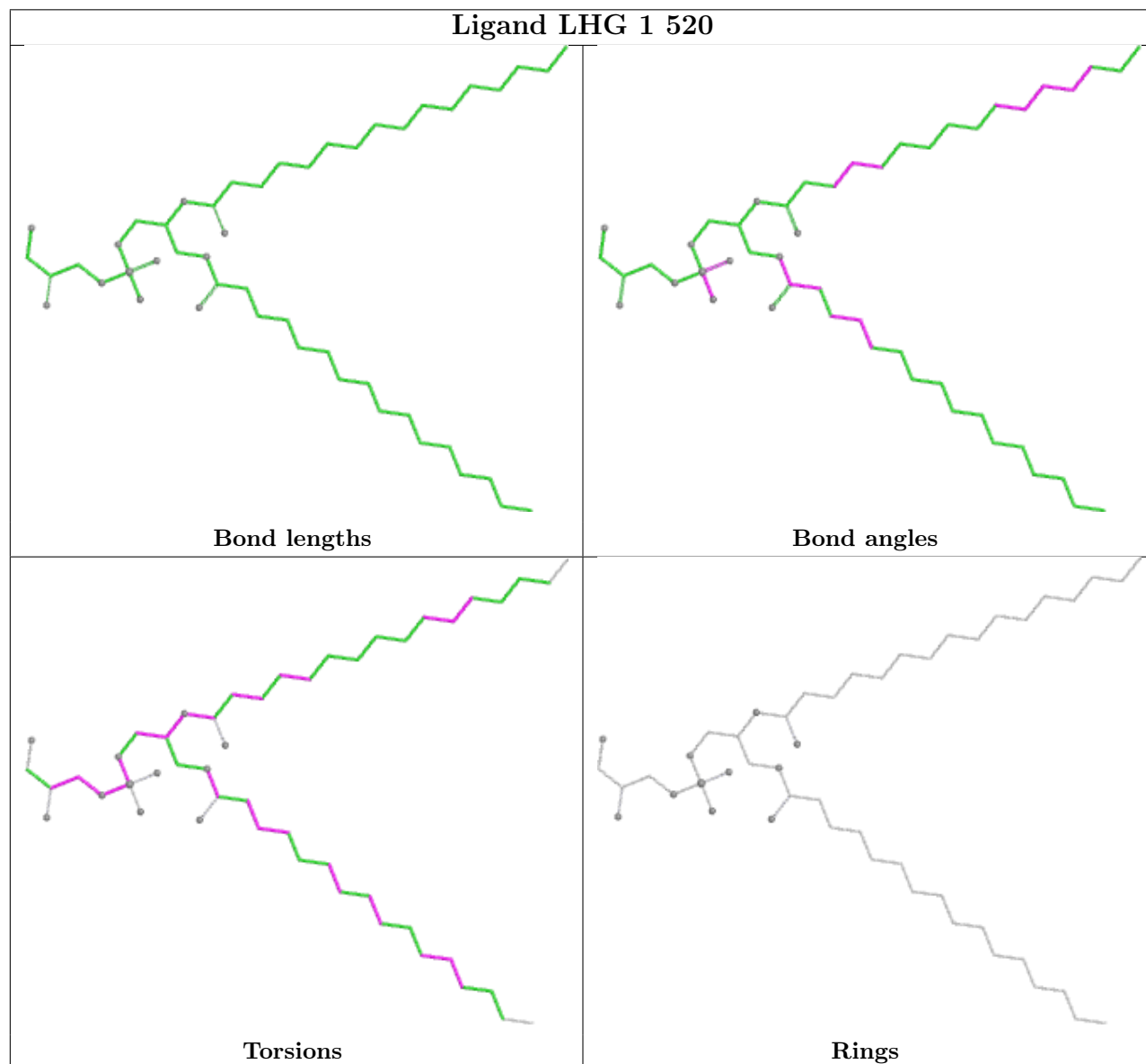
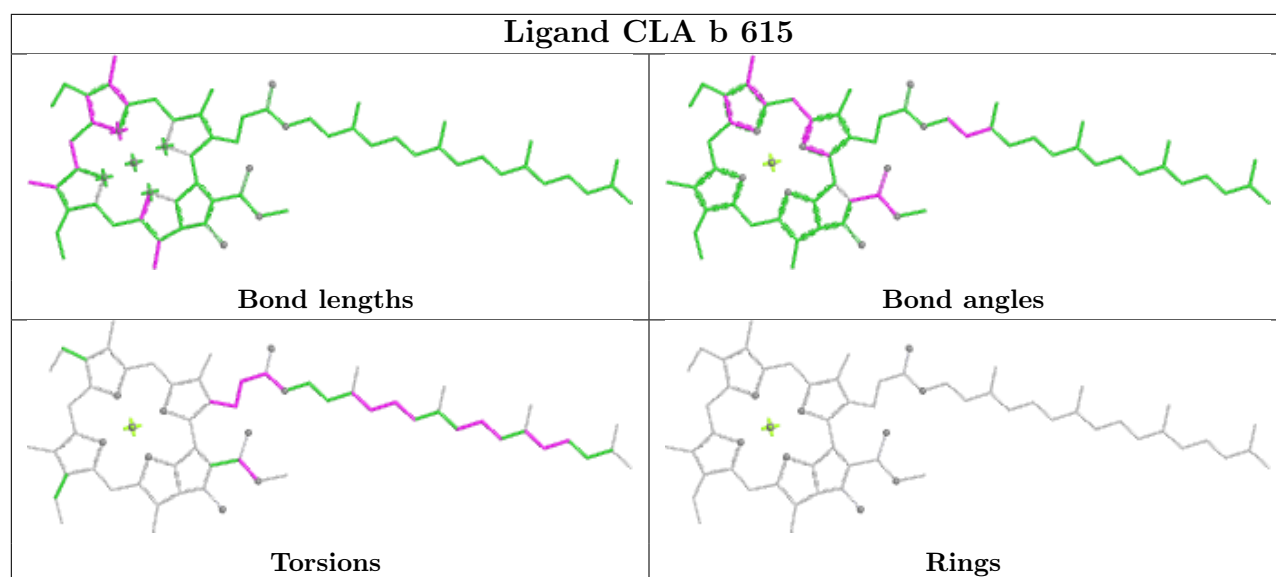


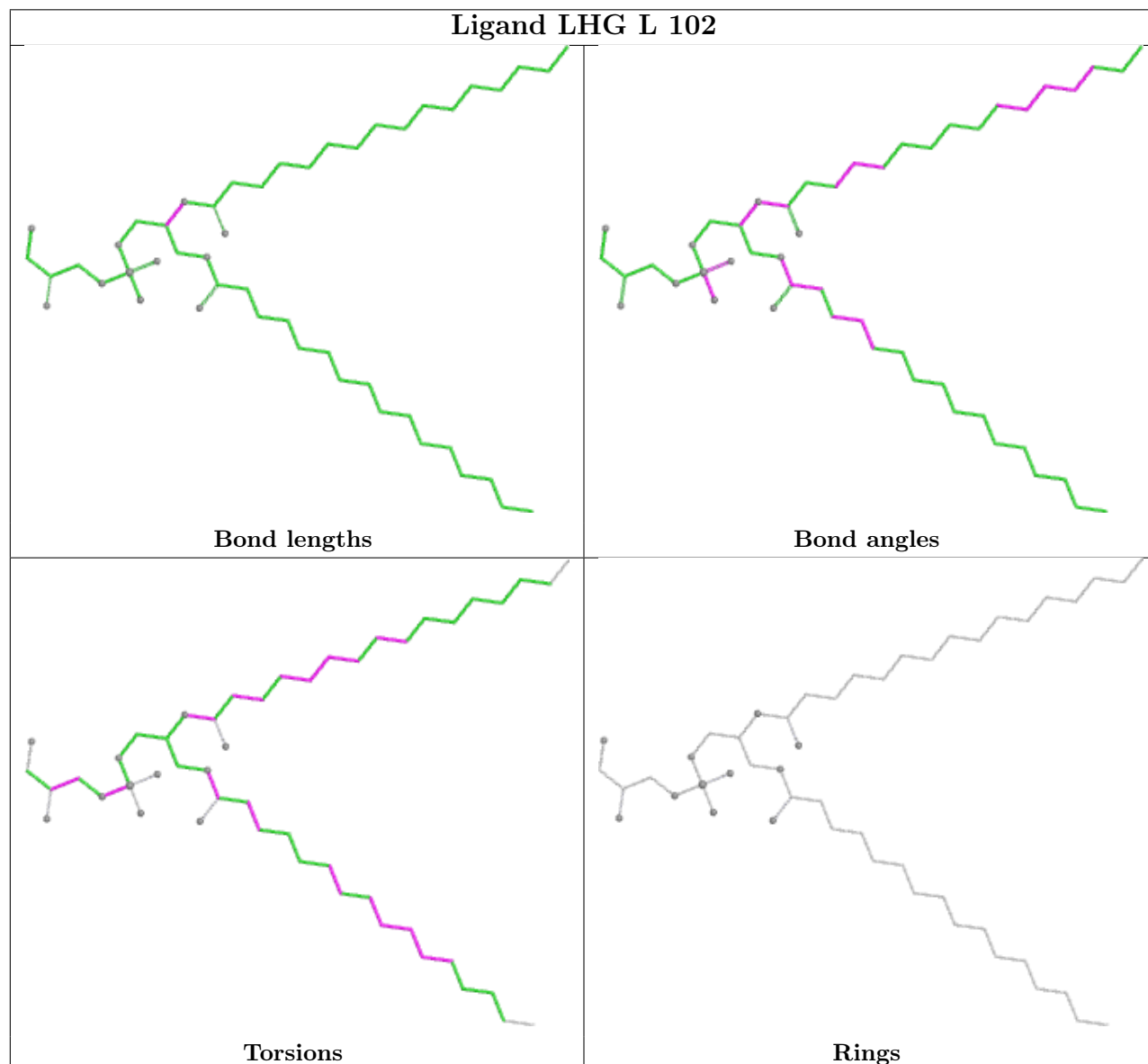
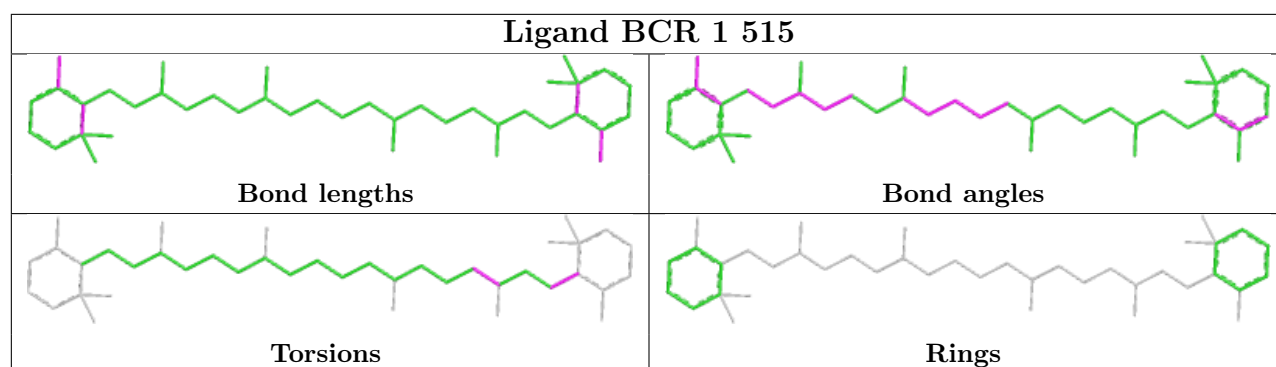


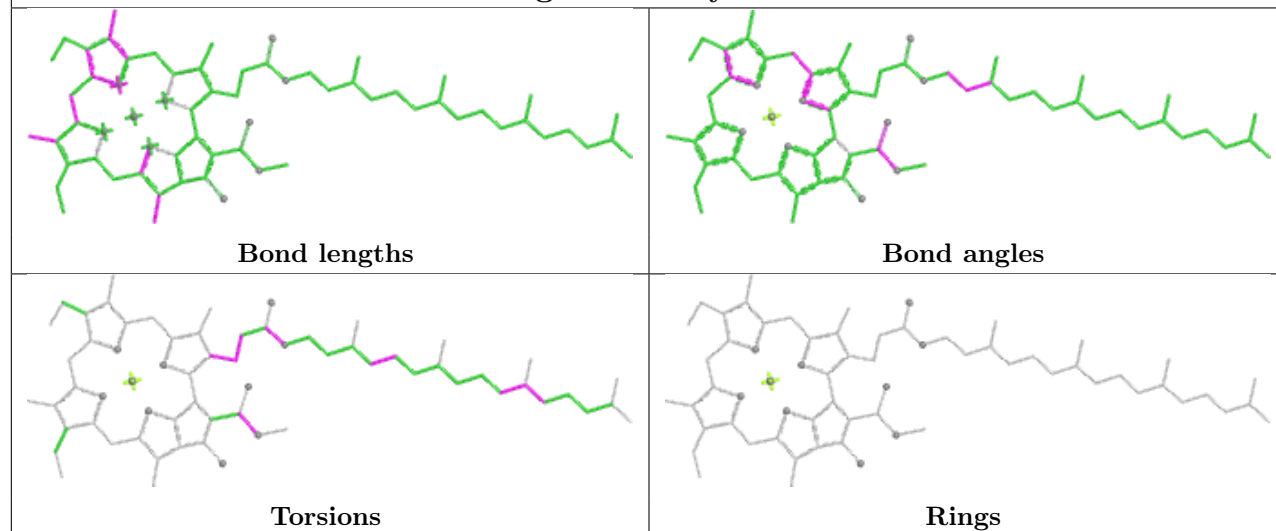
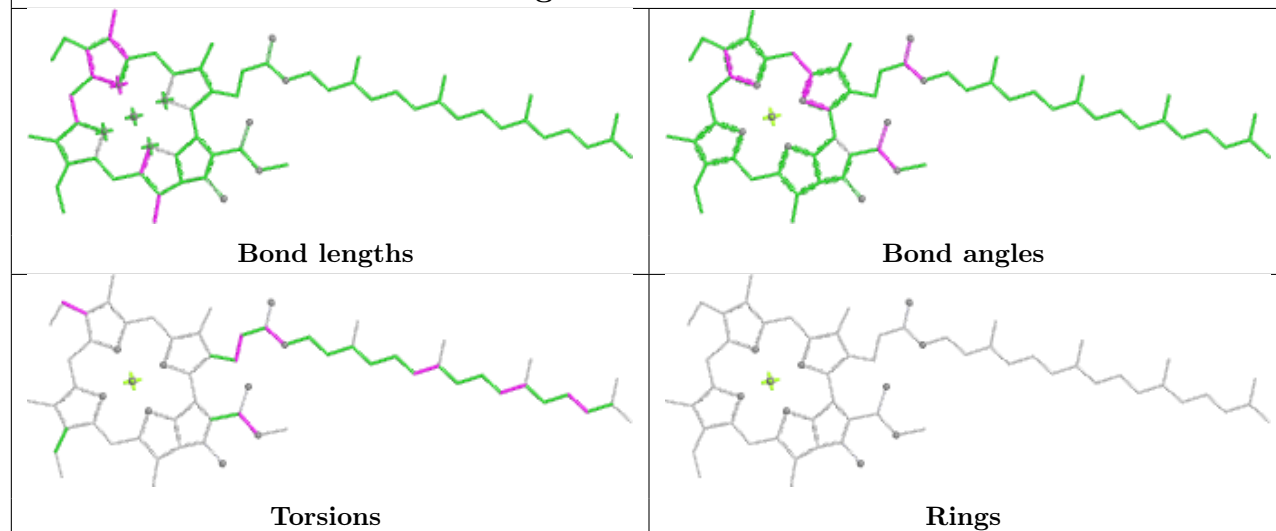
Ligand CLA 9 612



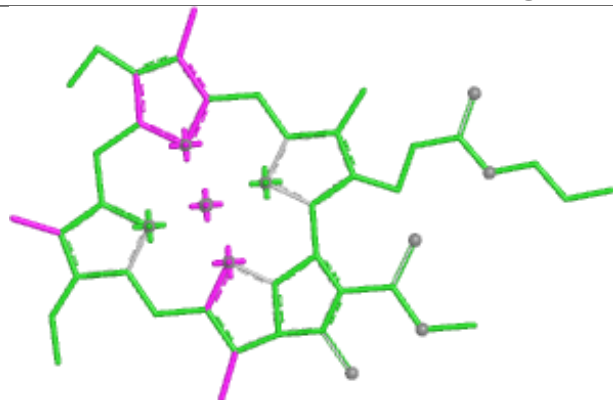




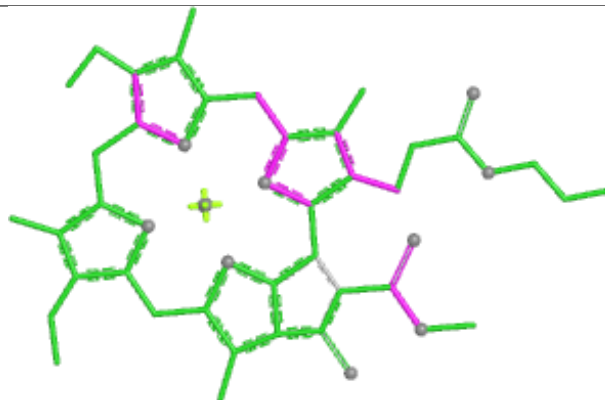


Ligand CLA y 314**Ligand CLA d 402**

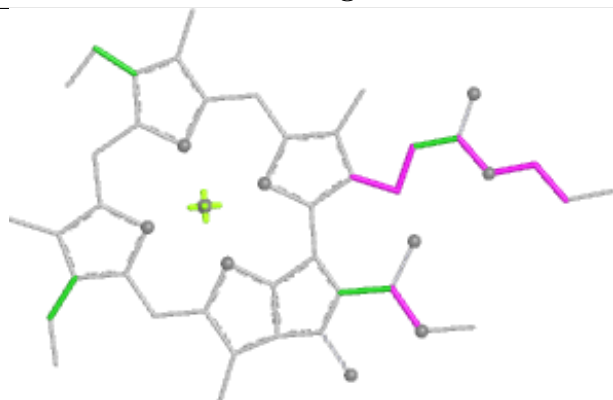
Ligand CLA r 604



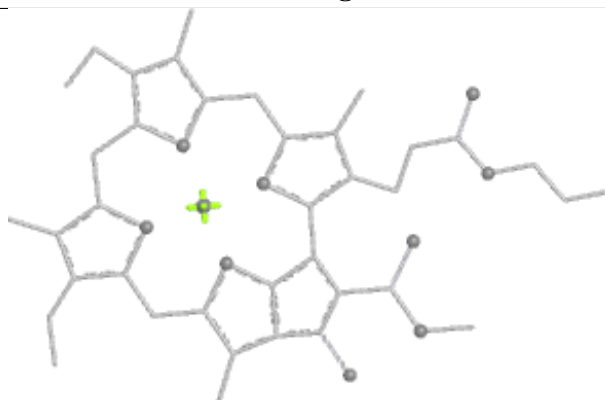
Bond lengths



Bond angles

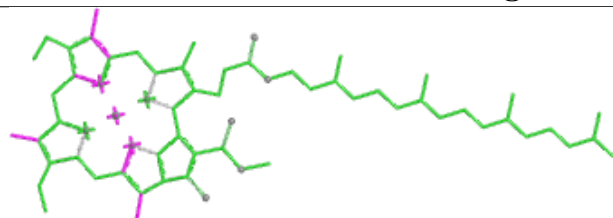


Torsions

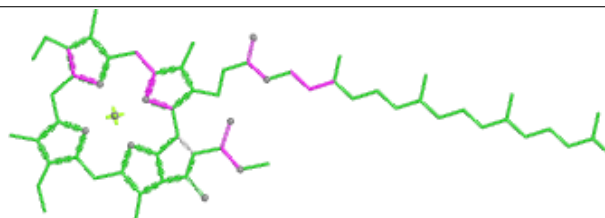


Rings

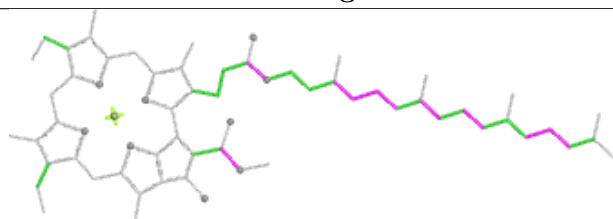
Ligand CLA BF 504



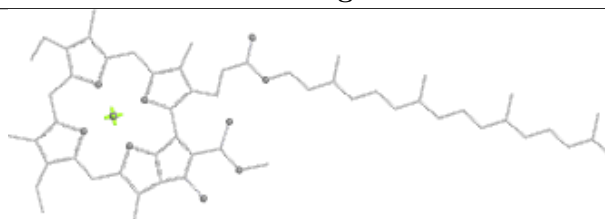
Bond lengths



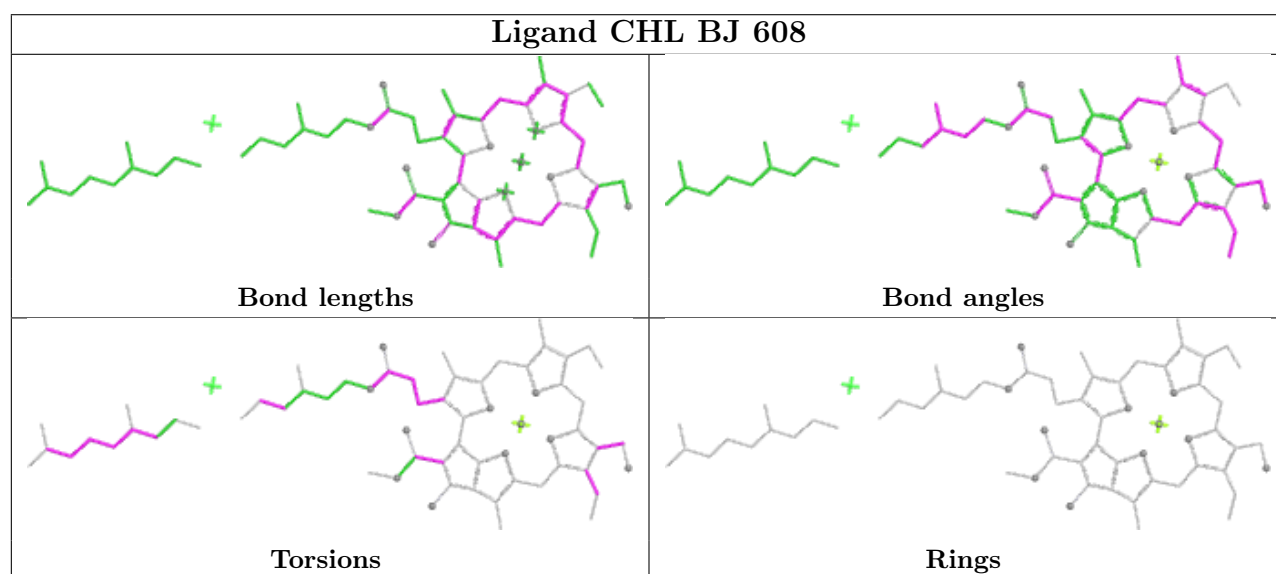
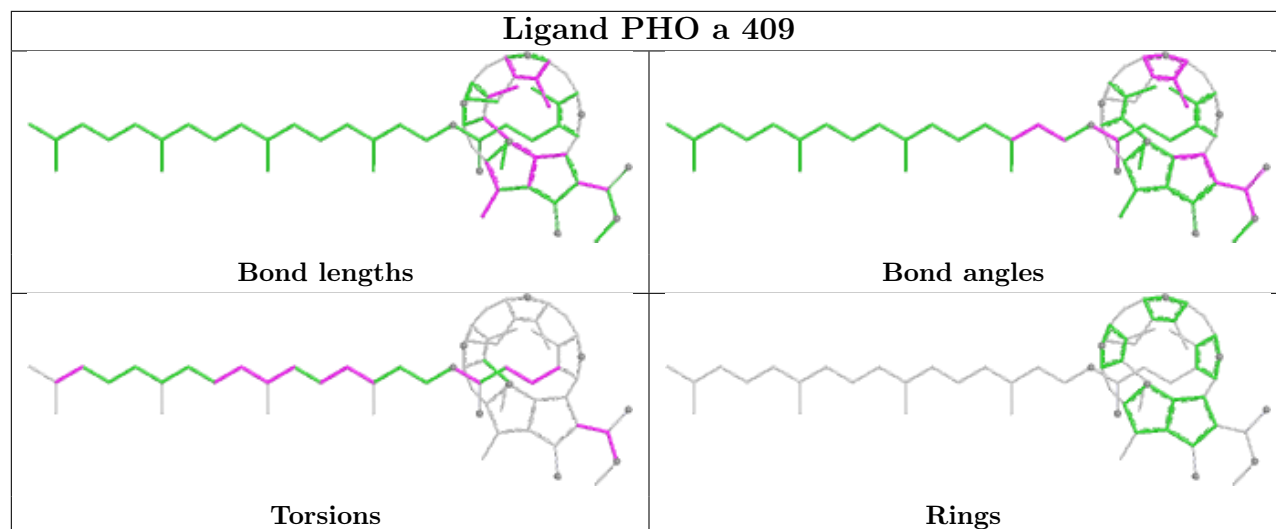
Bond angles



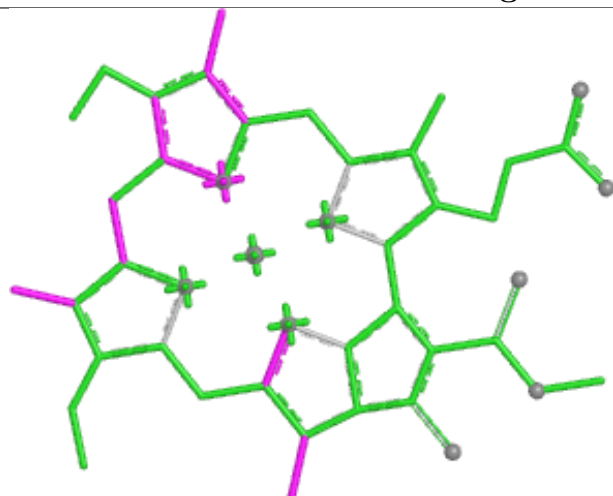
Torsions



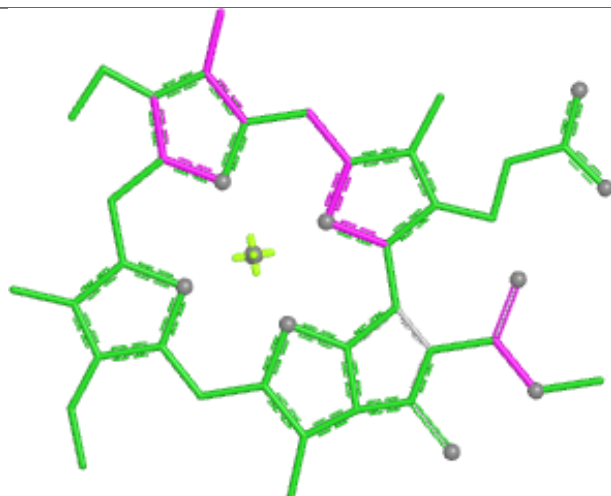
Rings



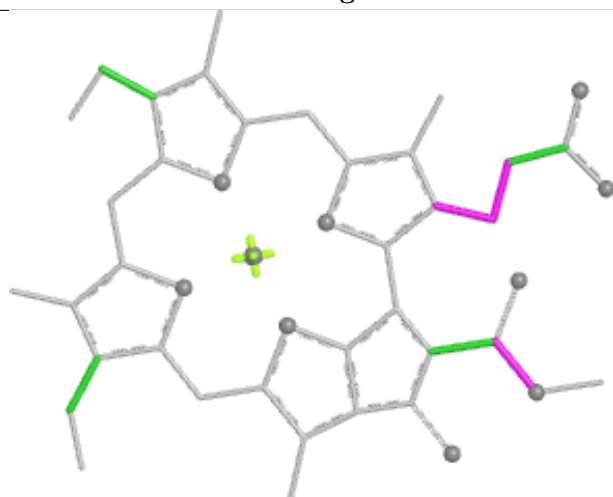
Ligand CLA AA 305



Bond lengths



Bond angles

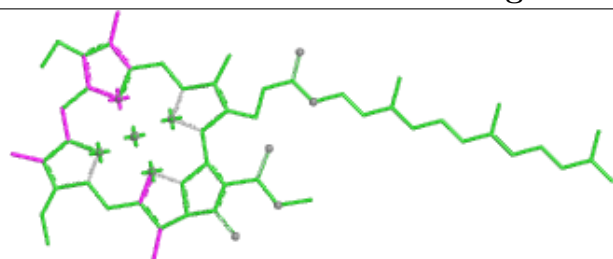


Torsions

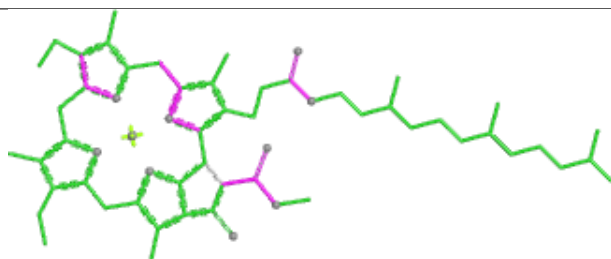


Rings

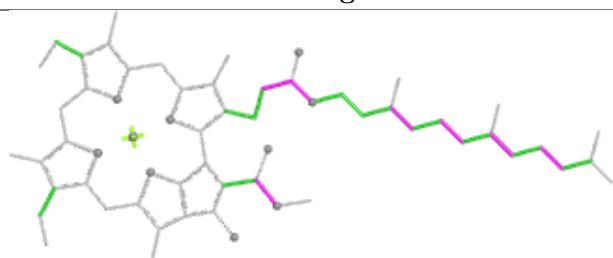
Ligand CLA Ba 313



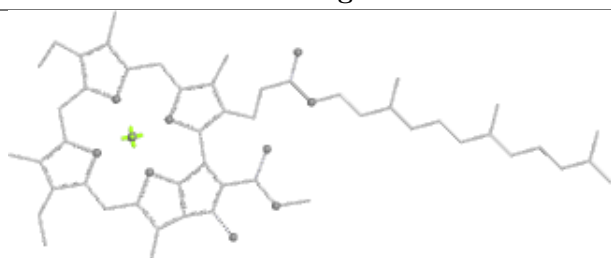
Bond lengths



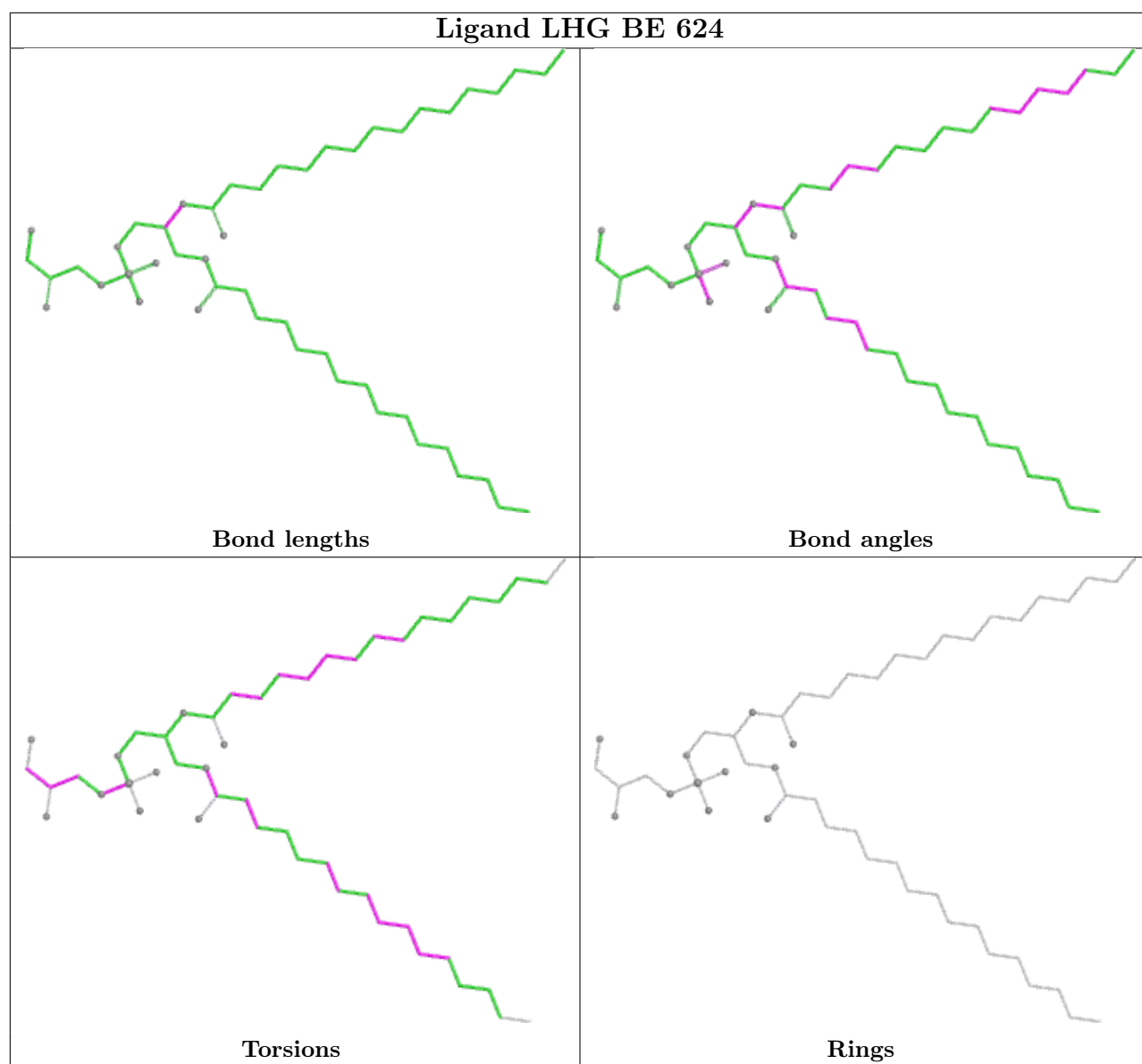
Bond angles



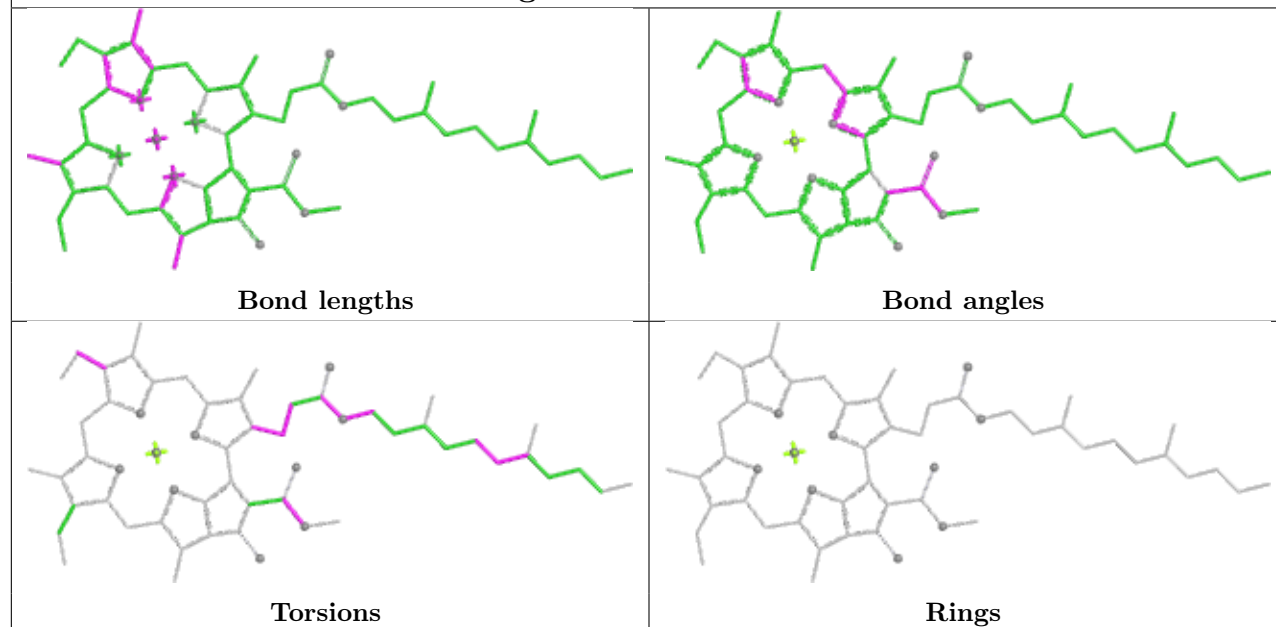
Torsions



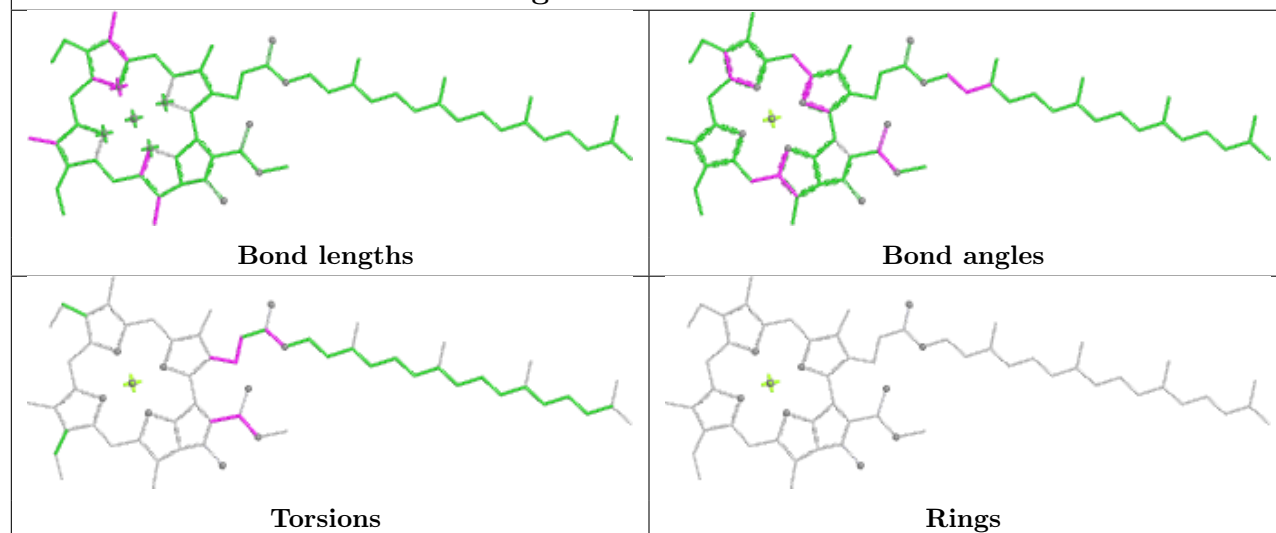
Rings



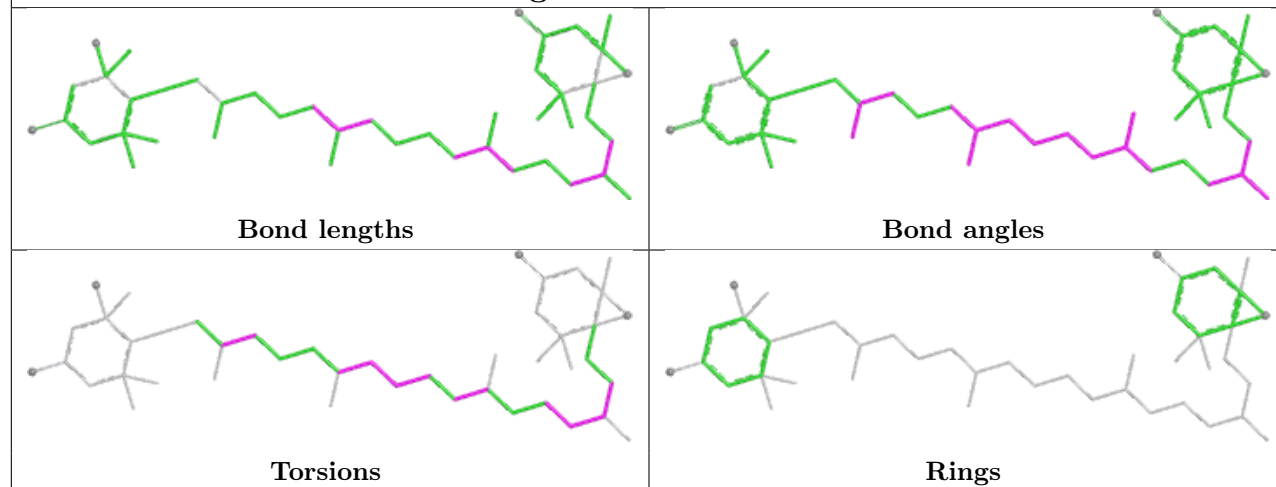
Ligand CLA BU 608

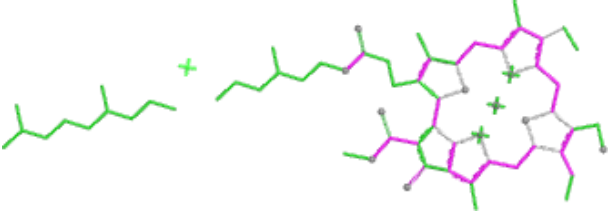
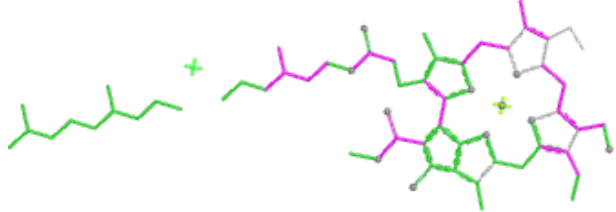
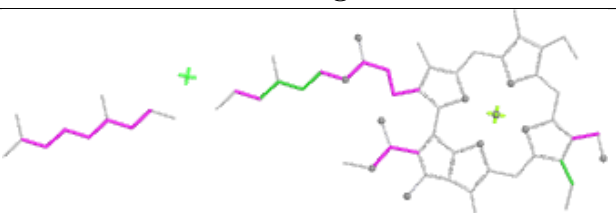
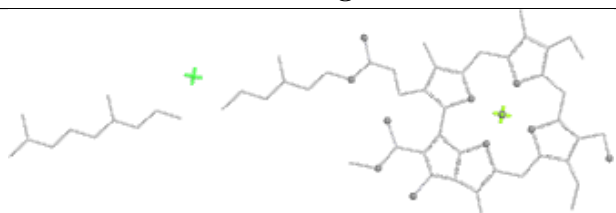
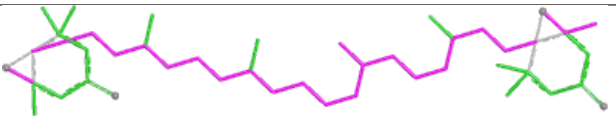
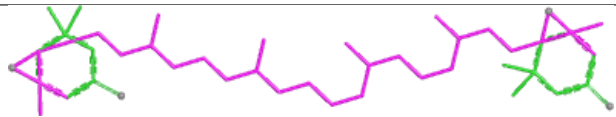
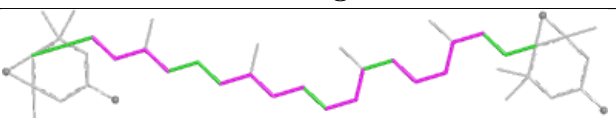
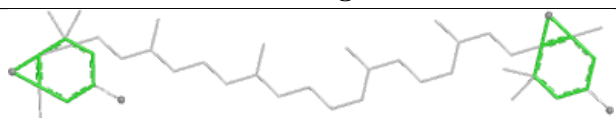


Ligand CLA R 405

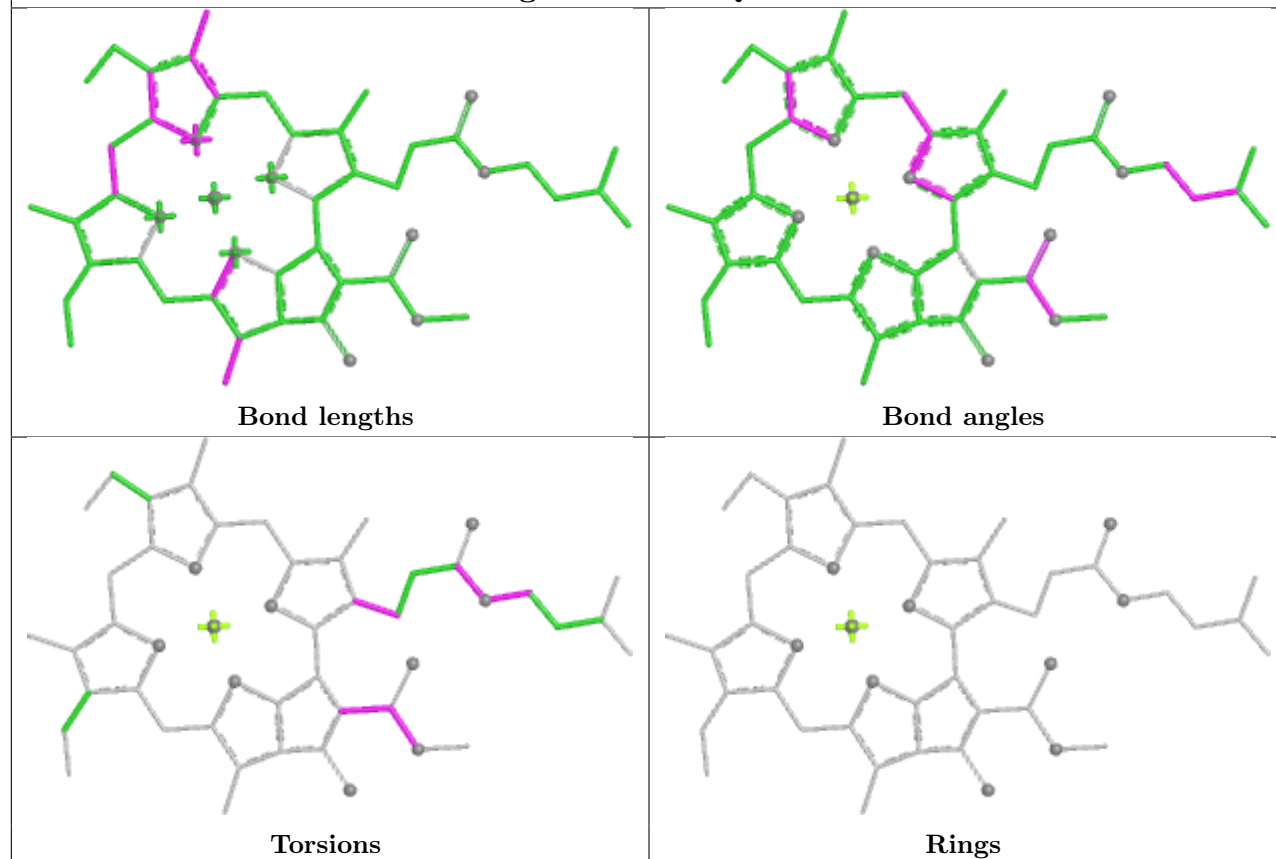


Ligand NEX Y 318

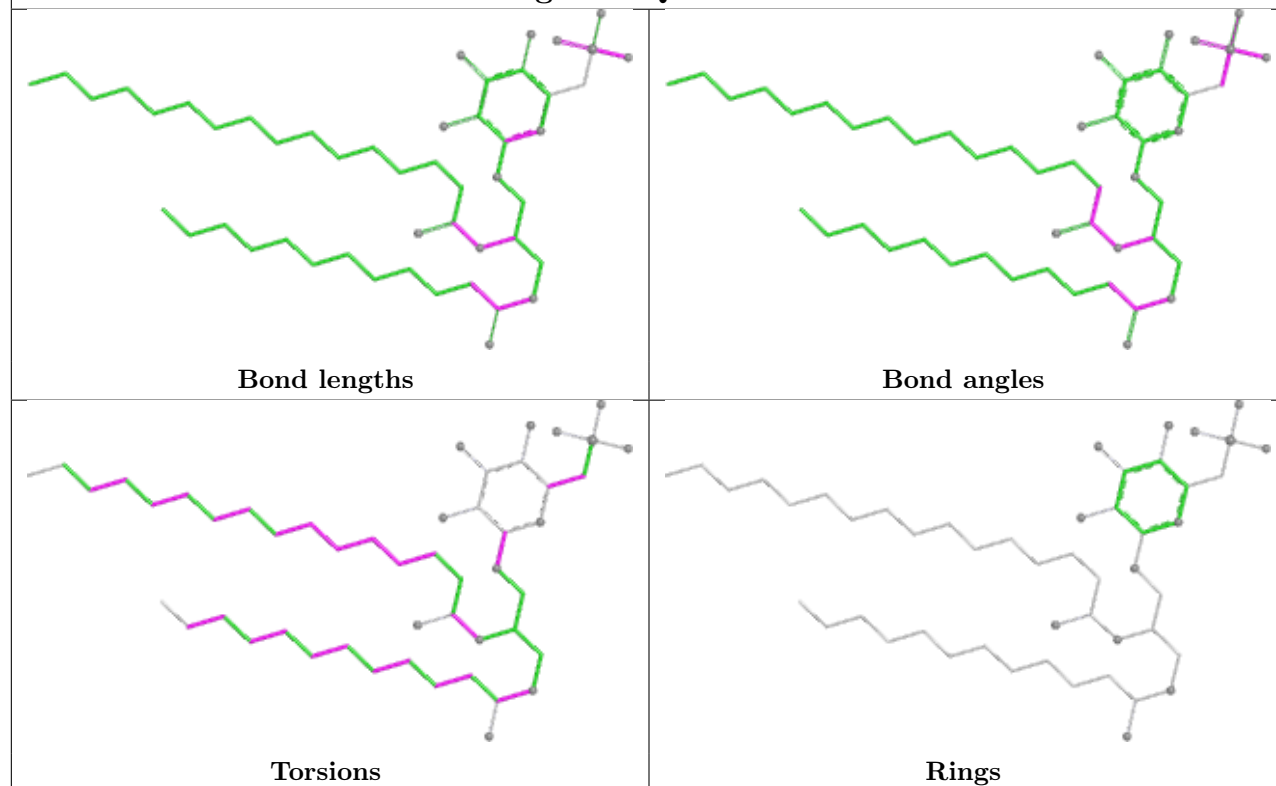


Ligand CHL r 605	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>
Ligand XAT 9 619	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>

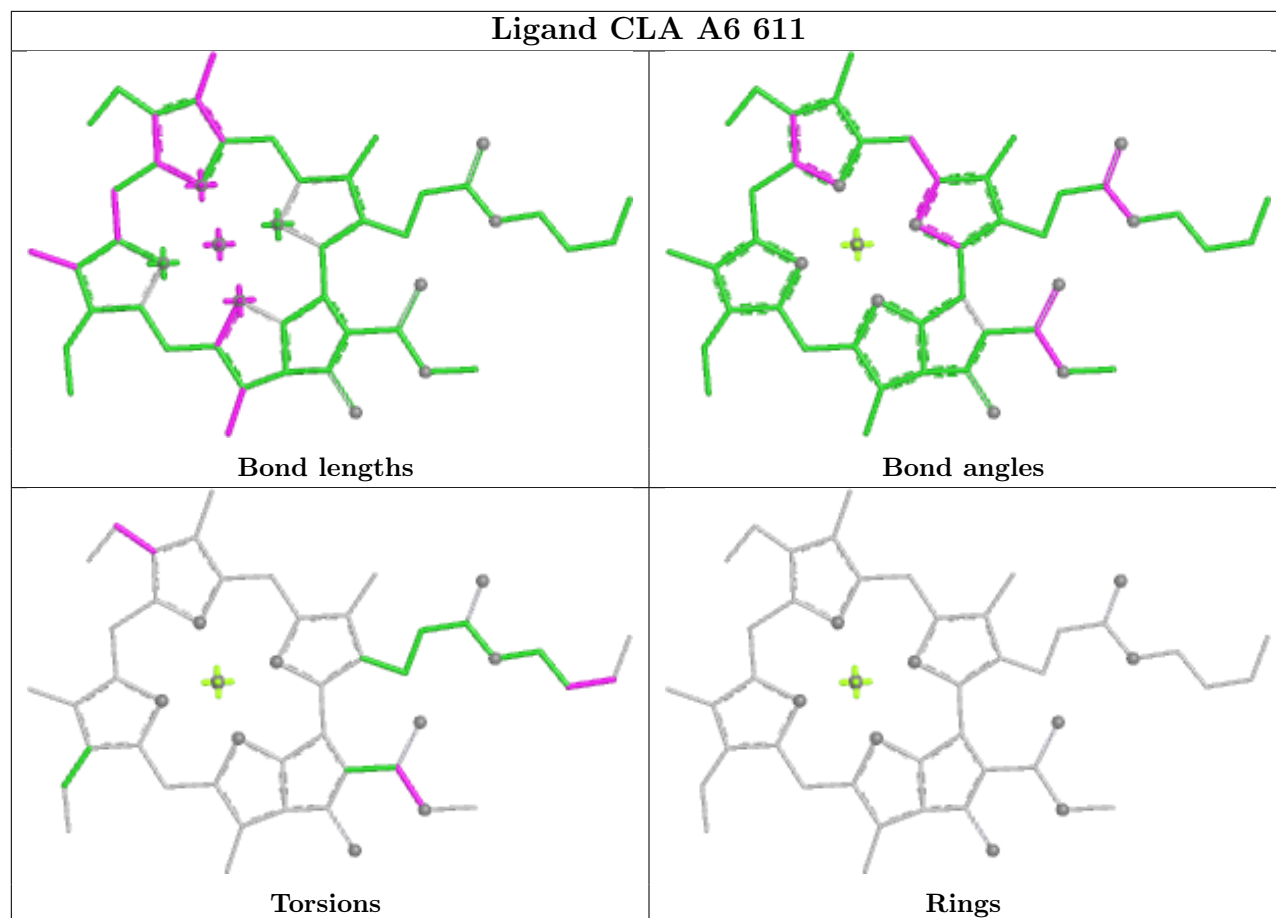
Ligand CLA BQ 604



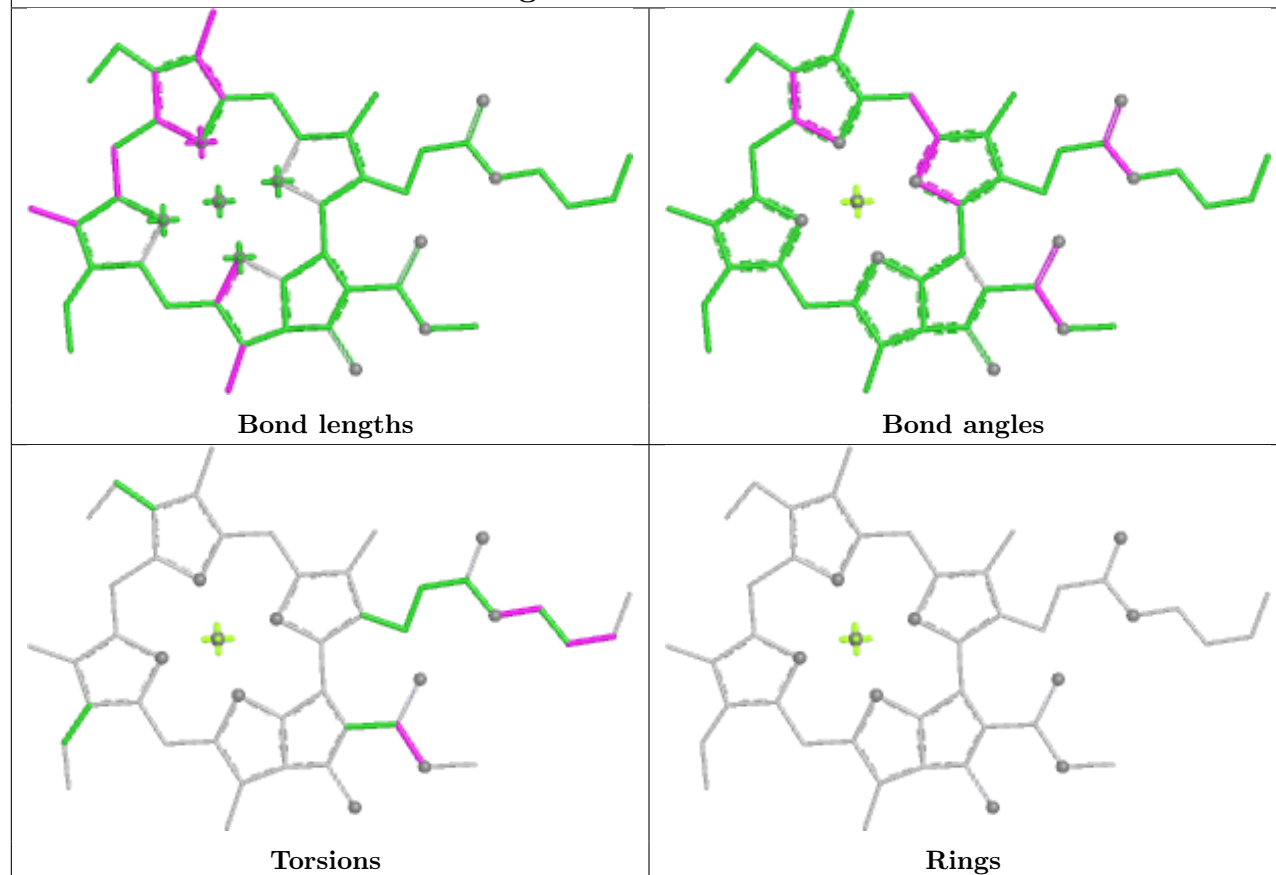
Ligand SQD d 406



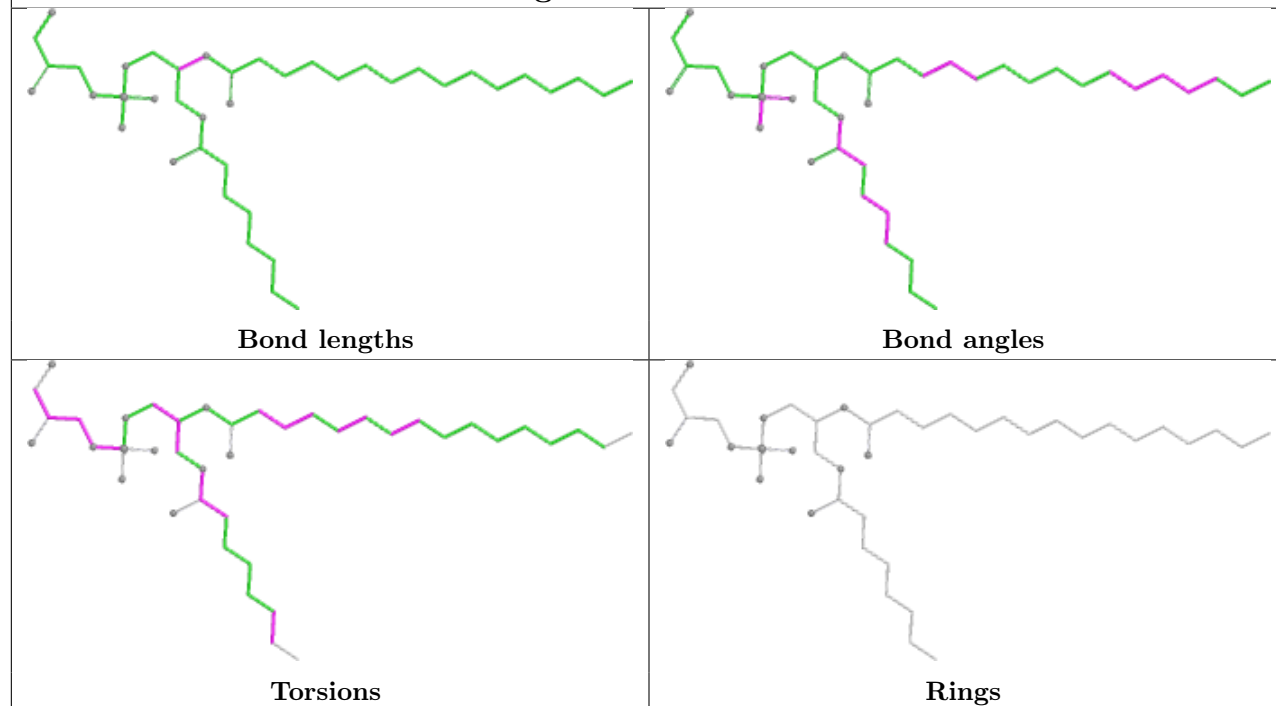
Ligand CLA A6 611

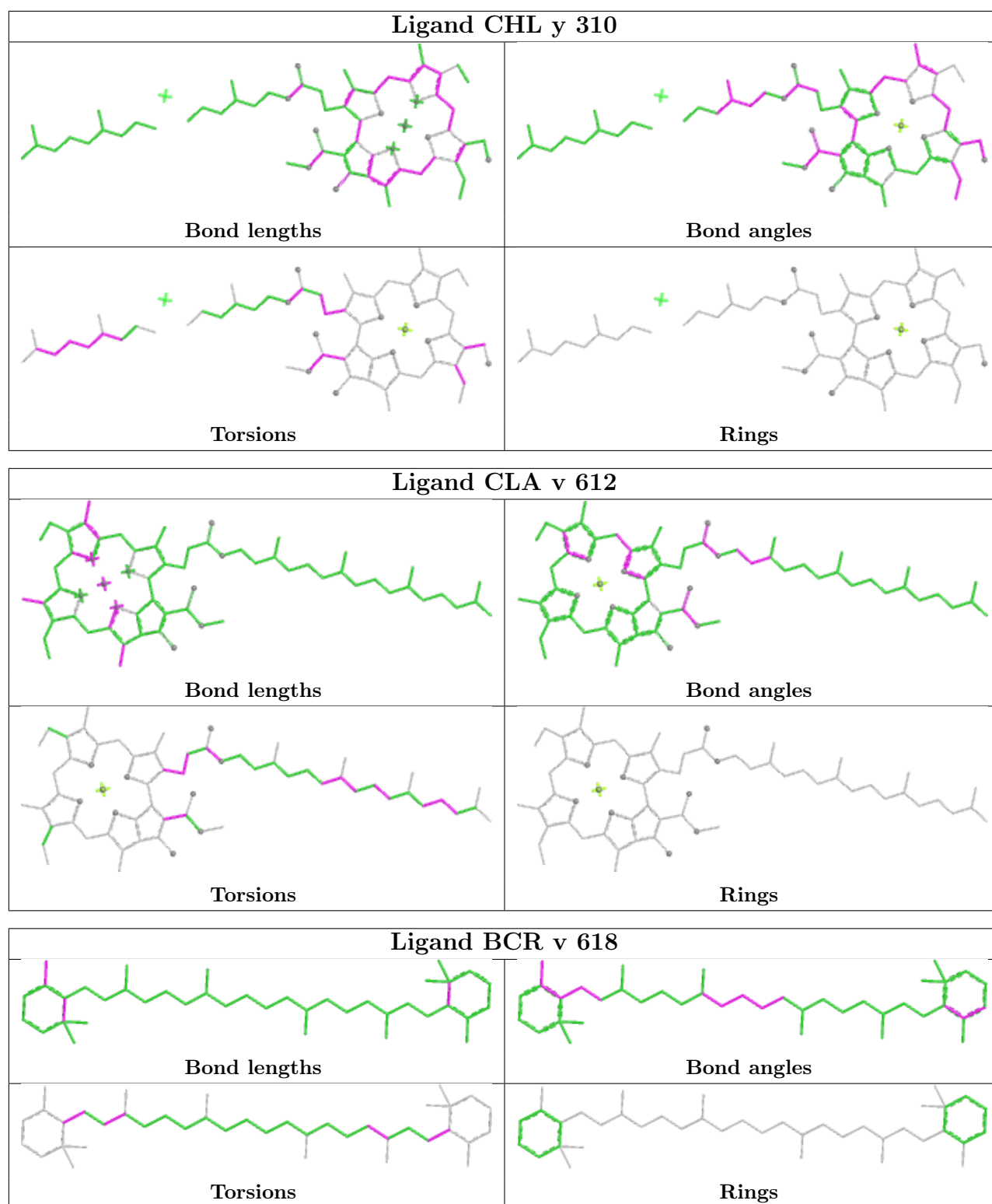


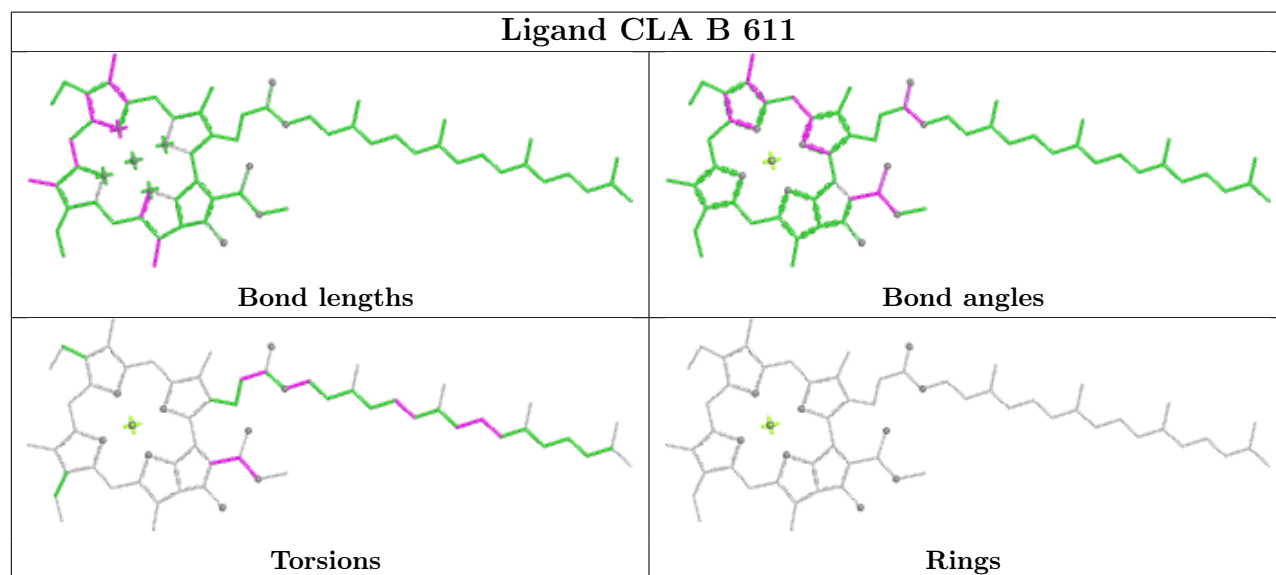
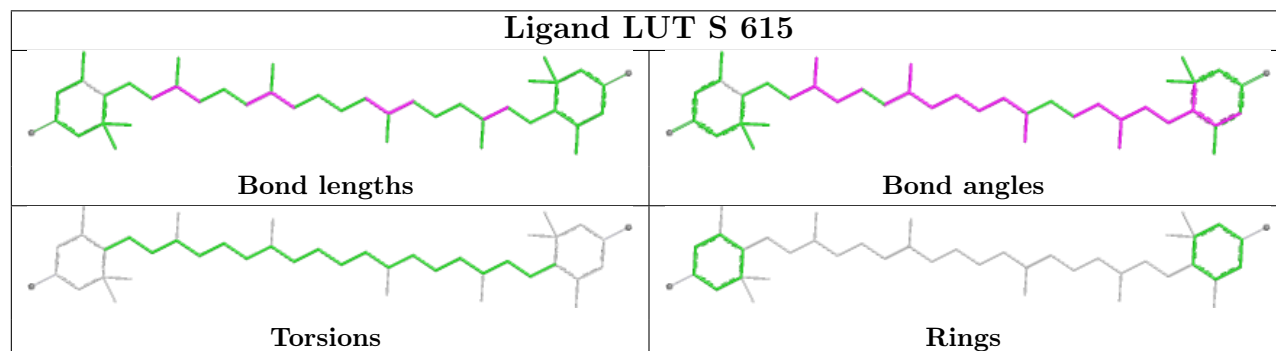
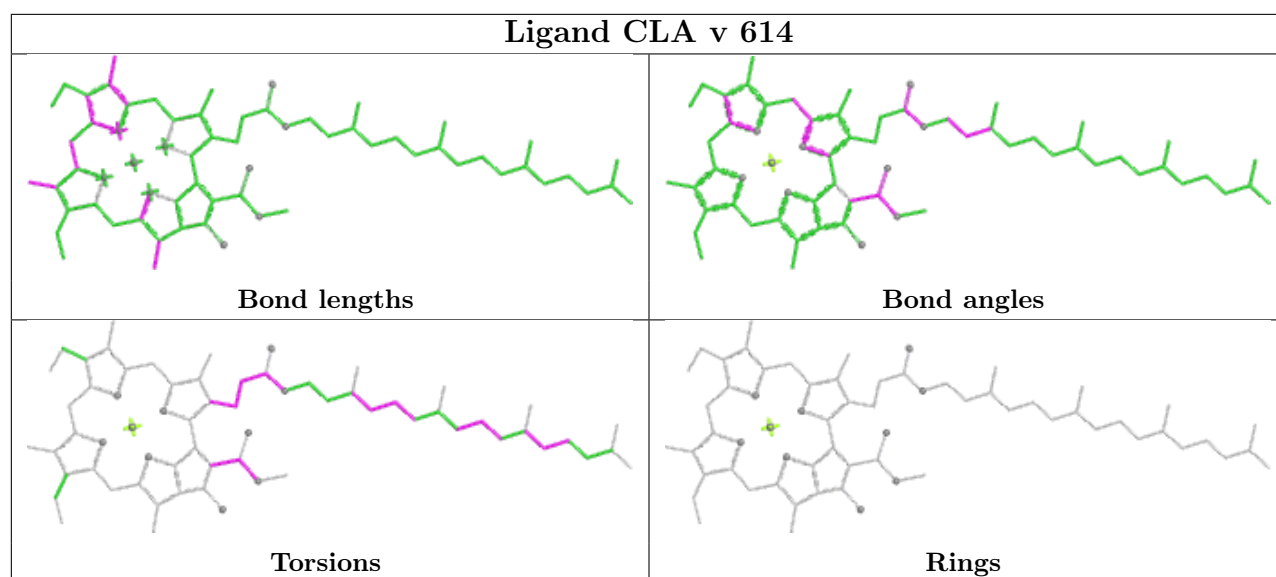
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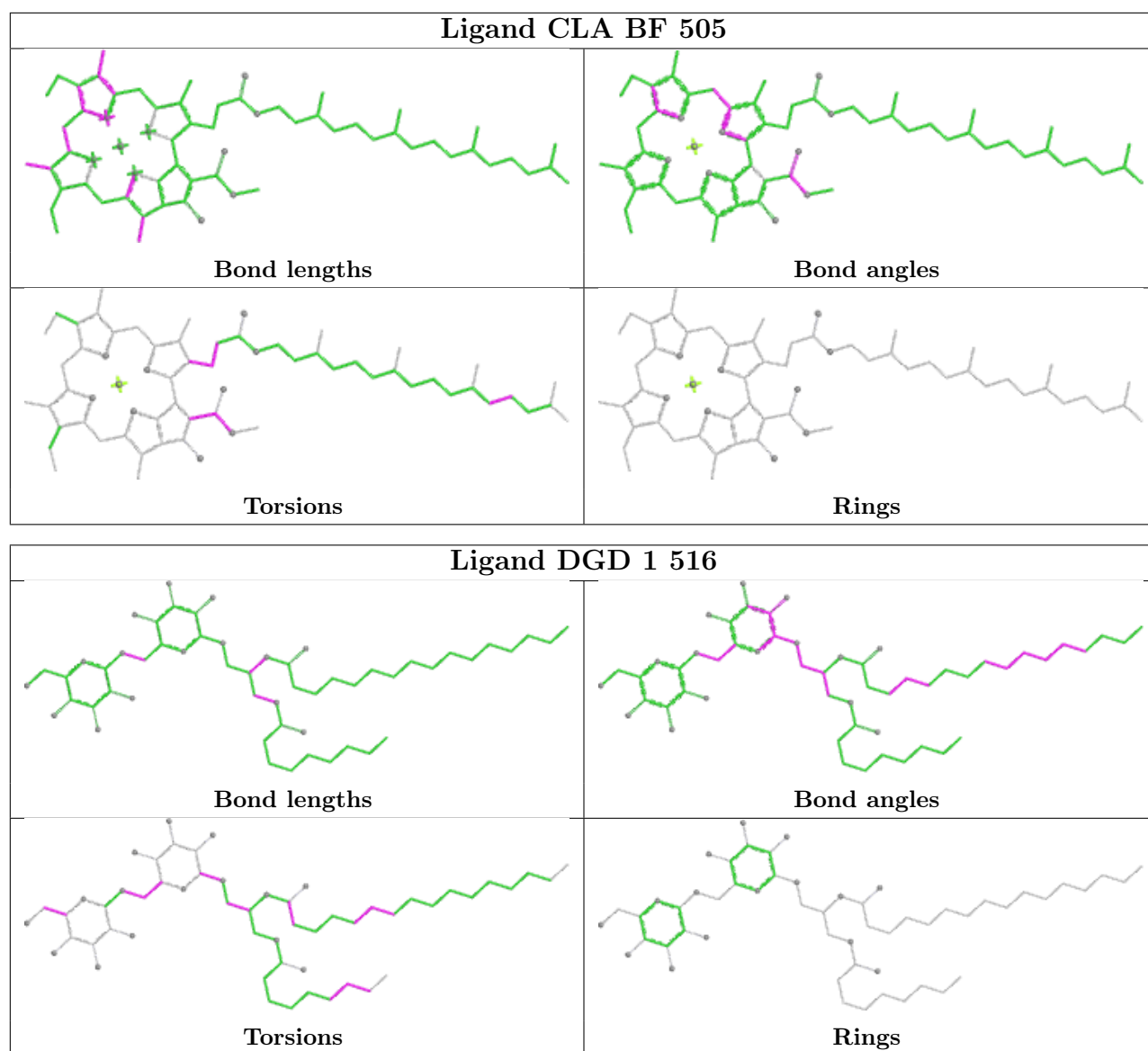


Ligand LHG 5 618

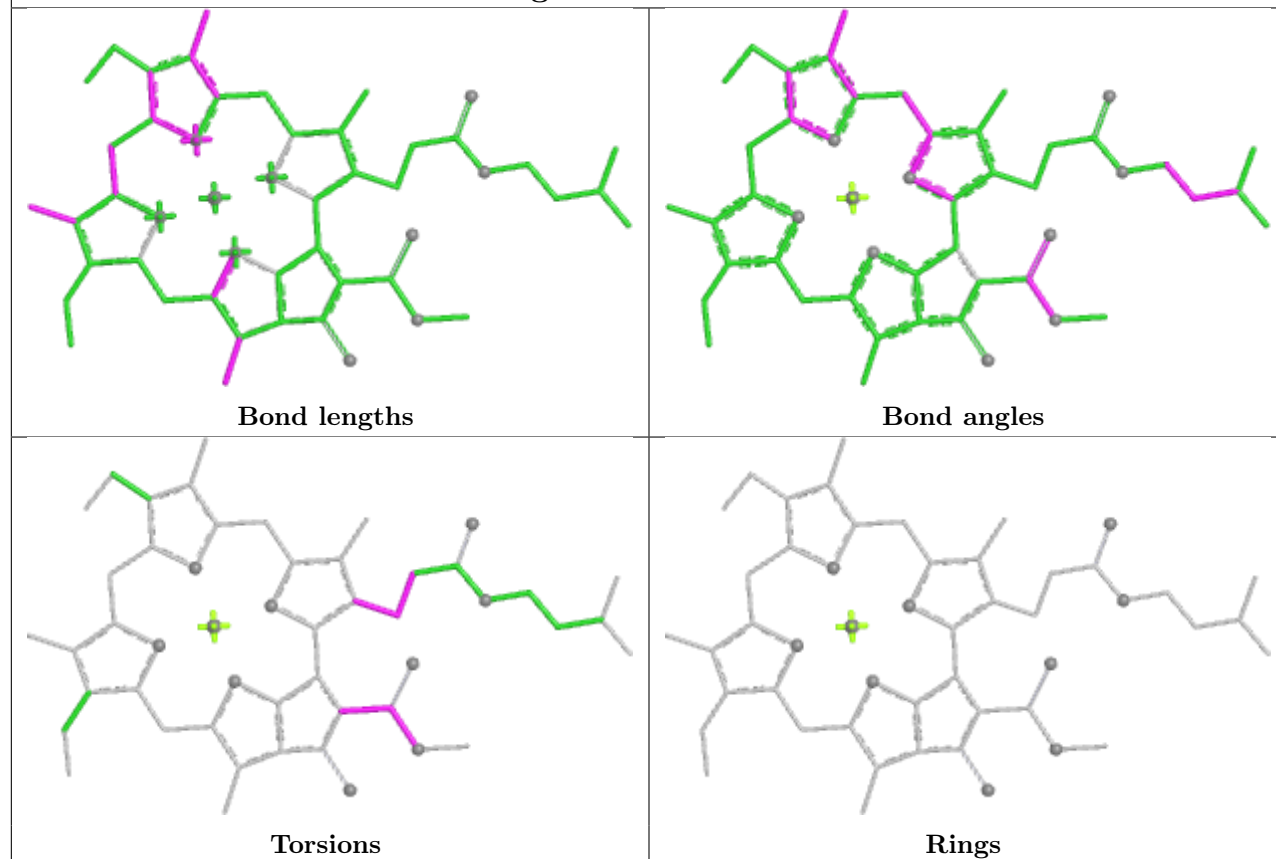




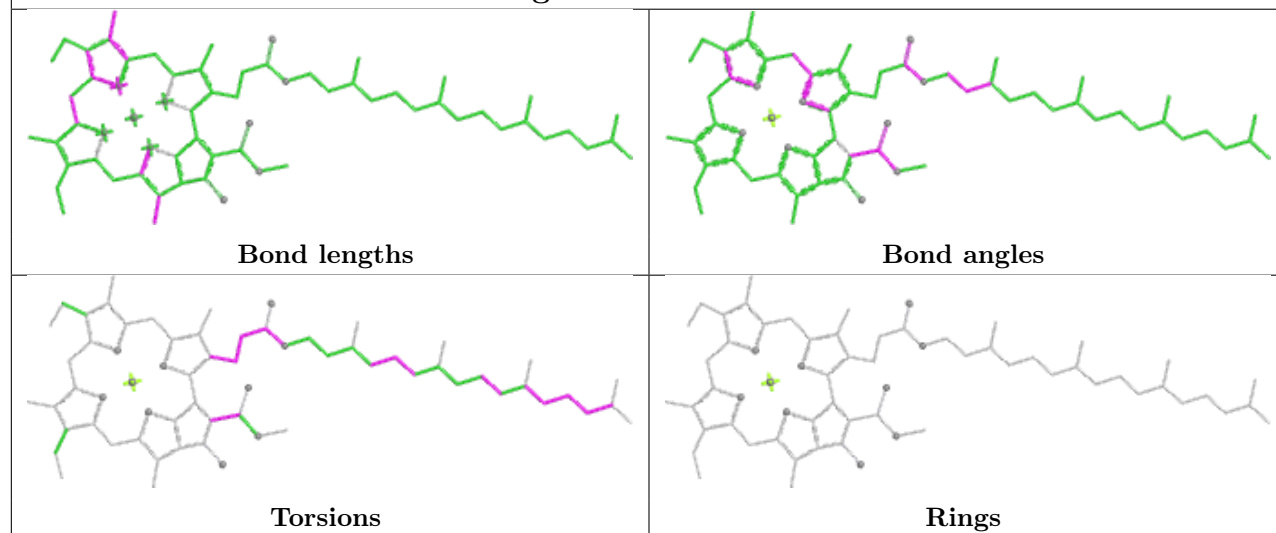




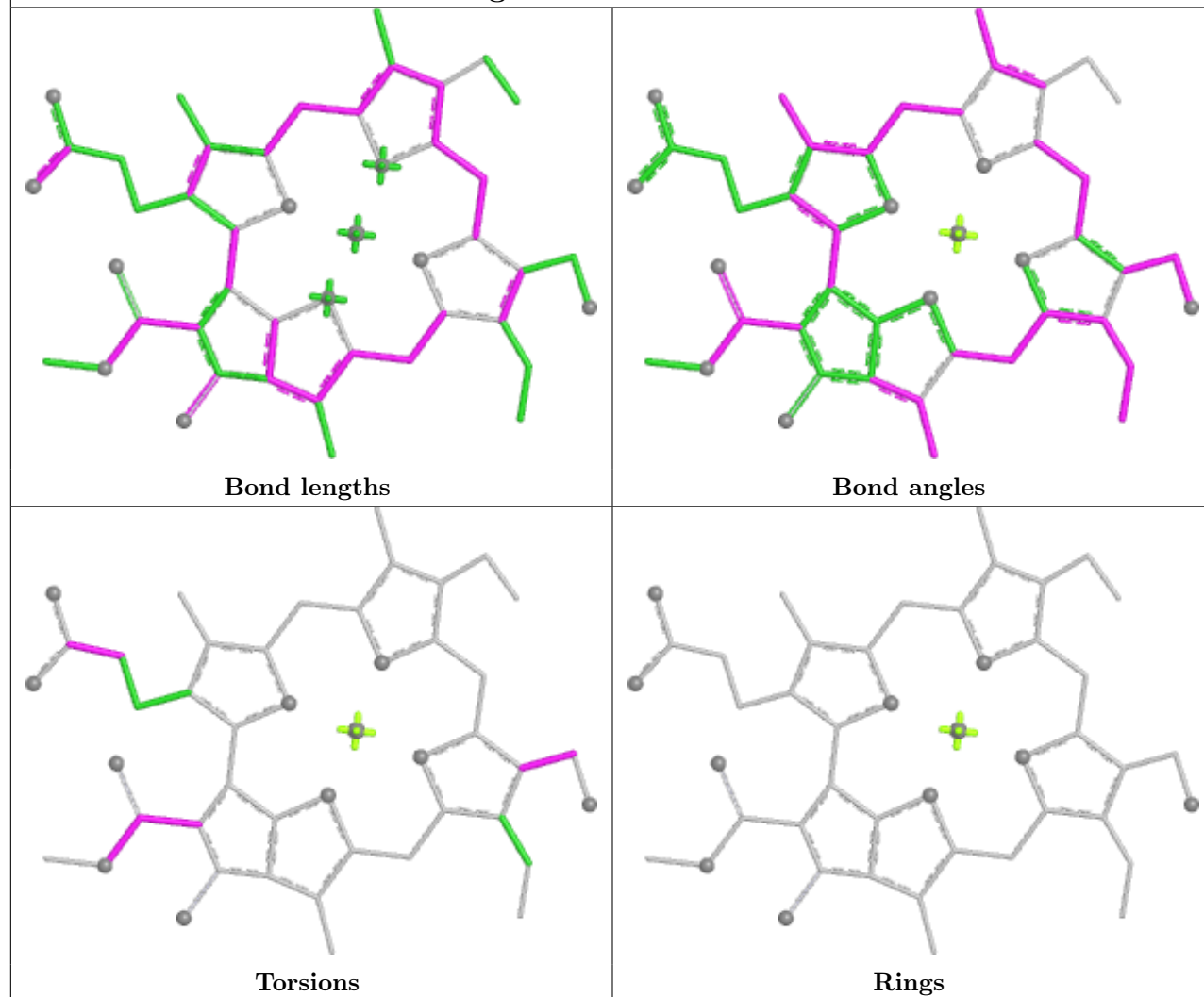
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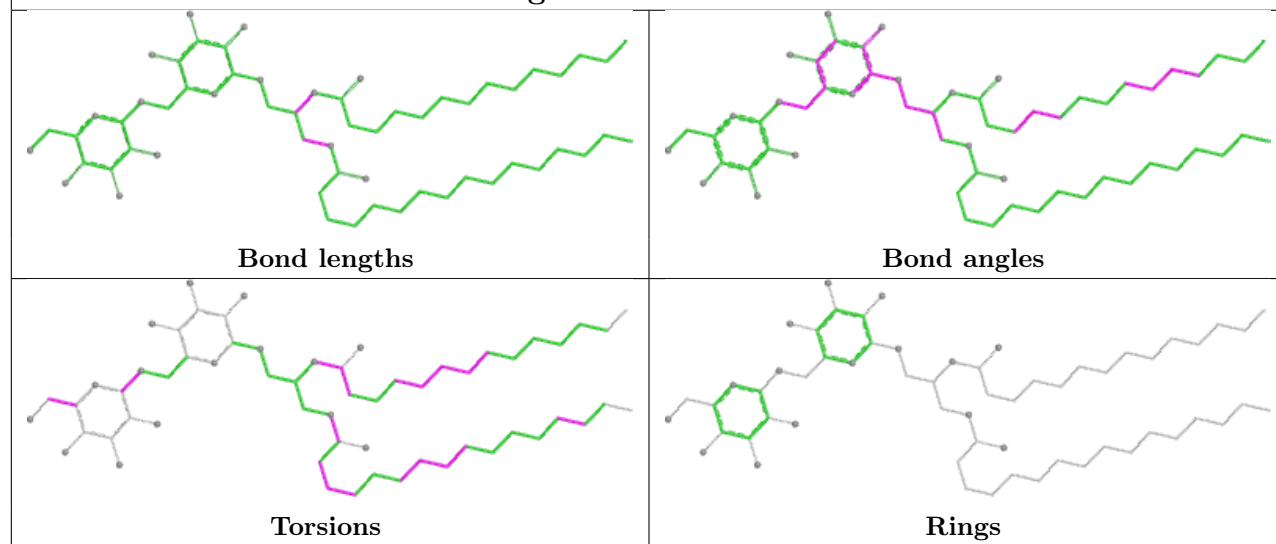
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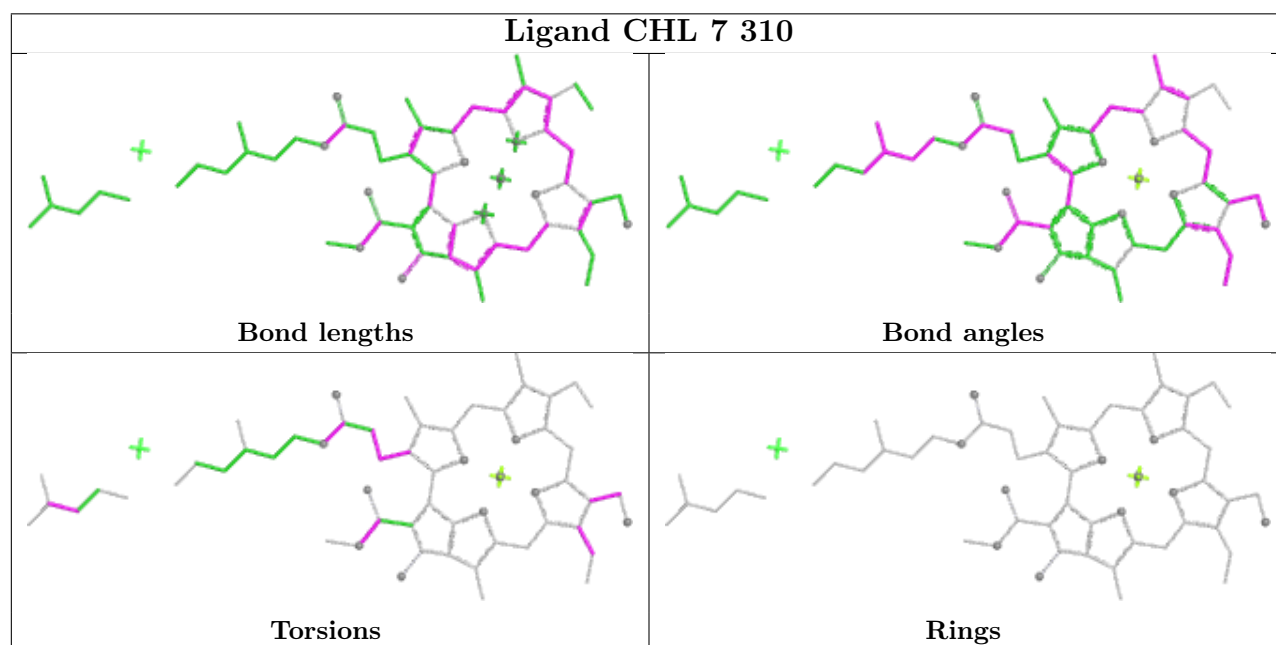
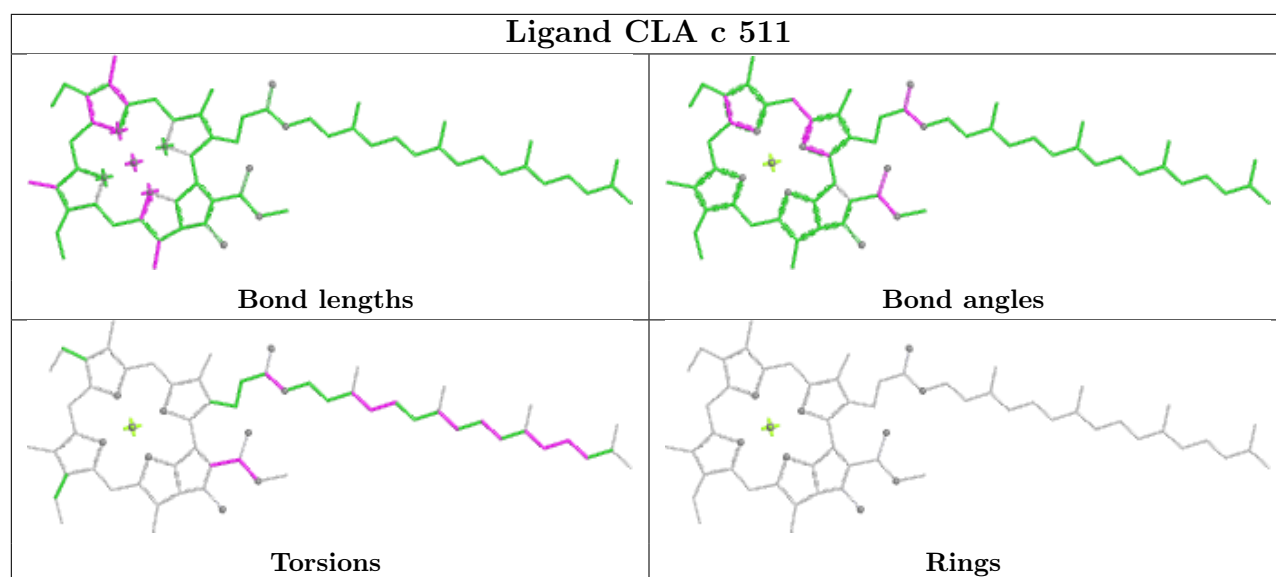


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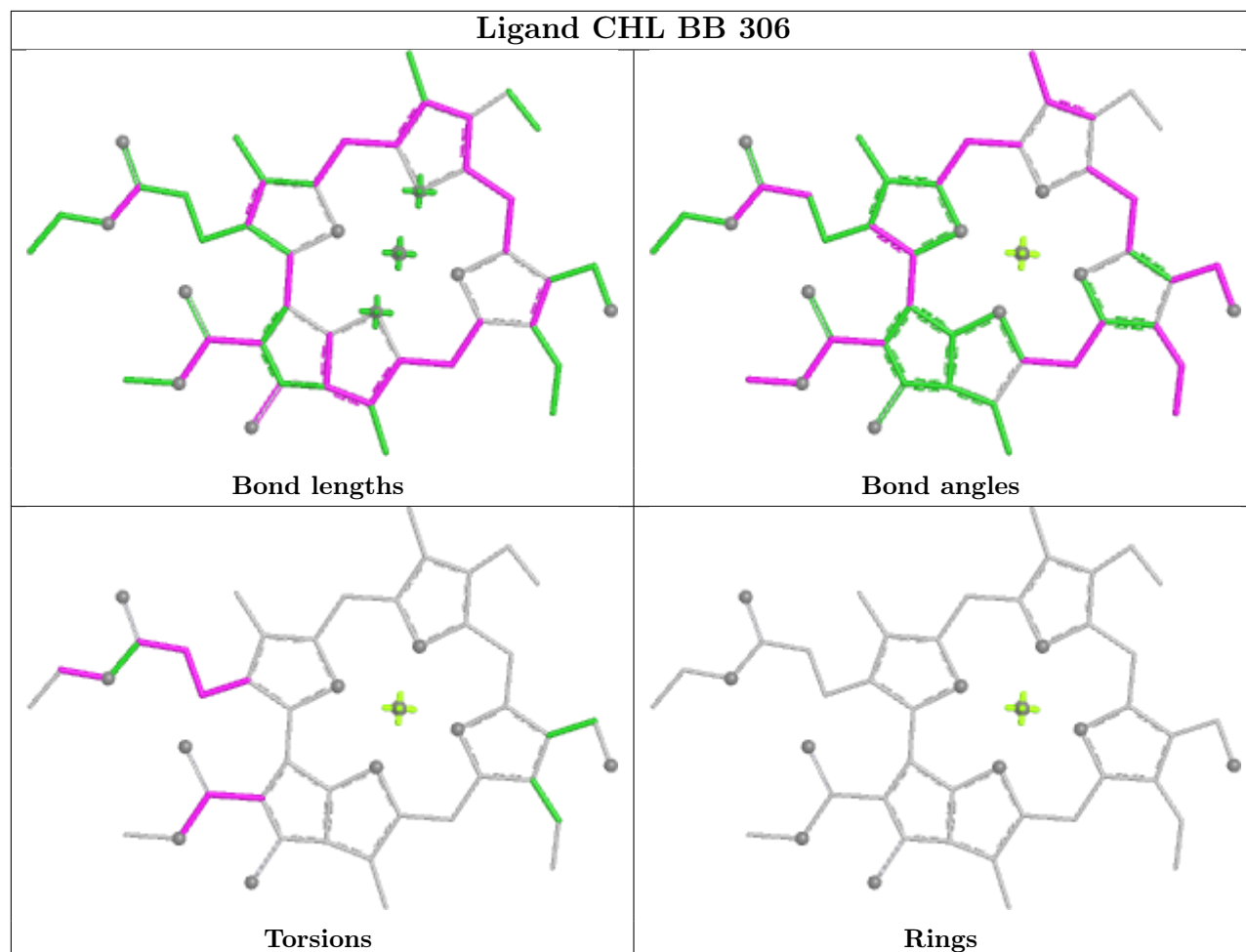


Ligand DGD C 518

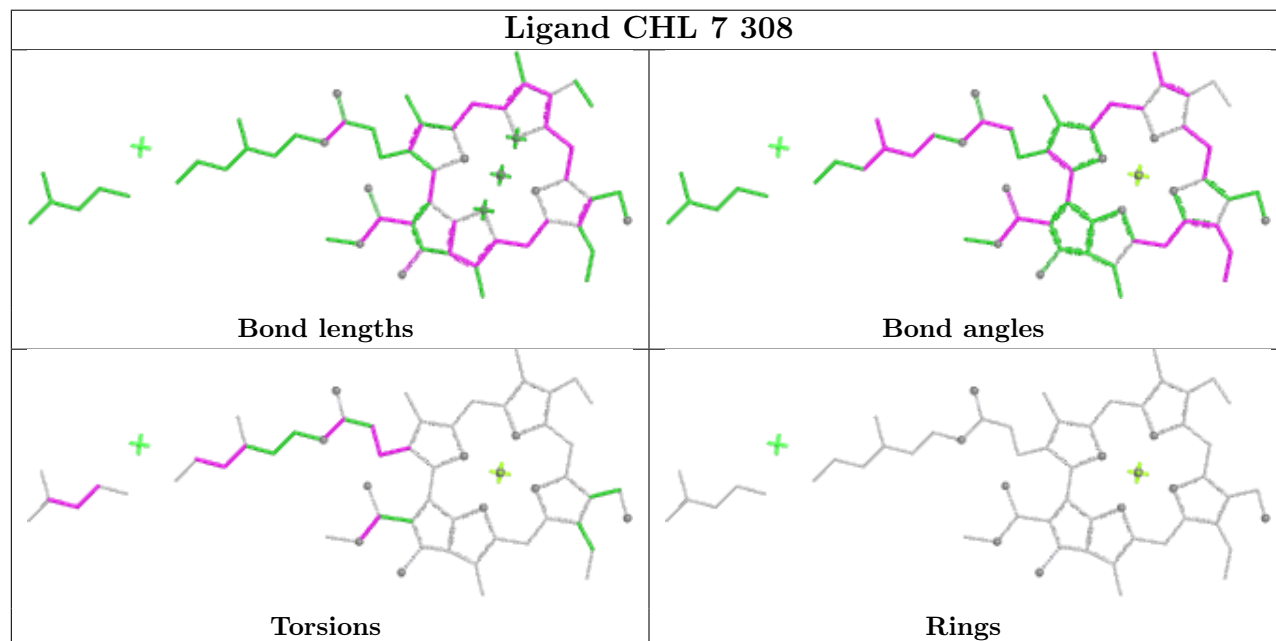




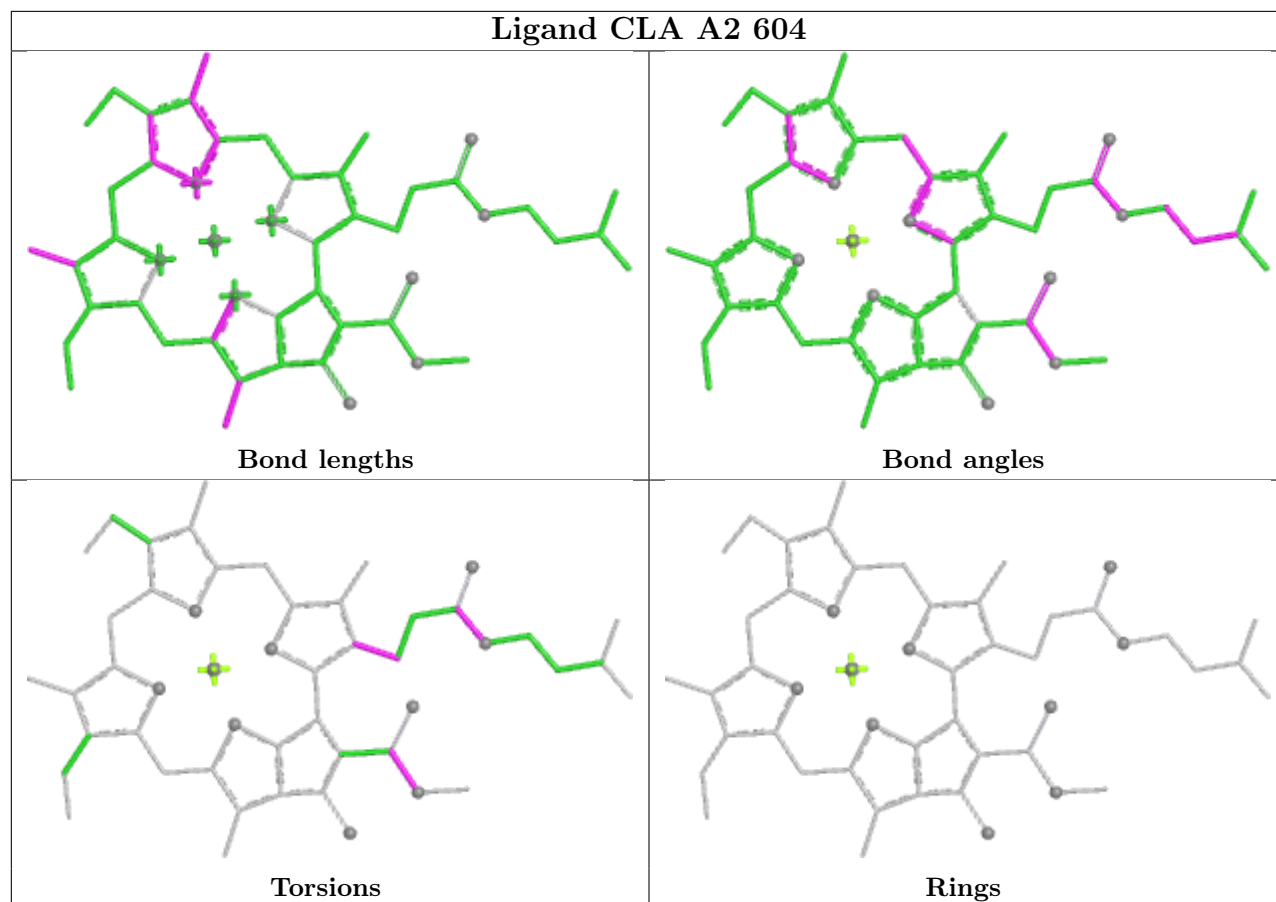
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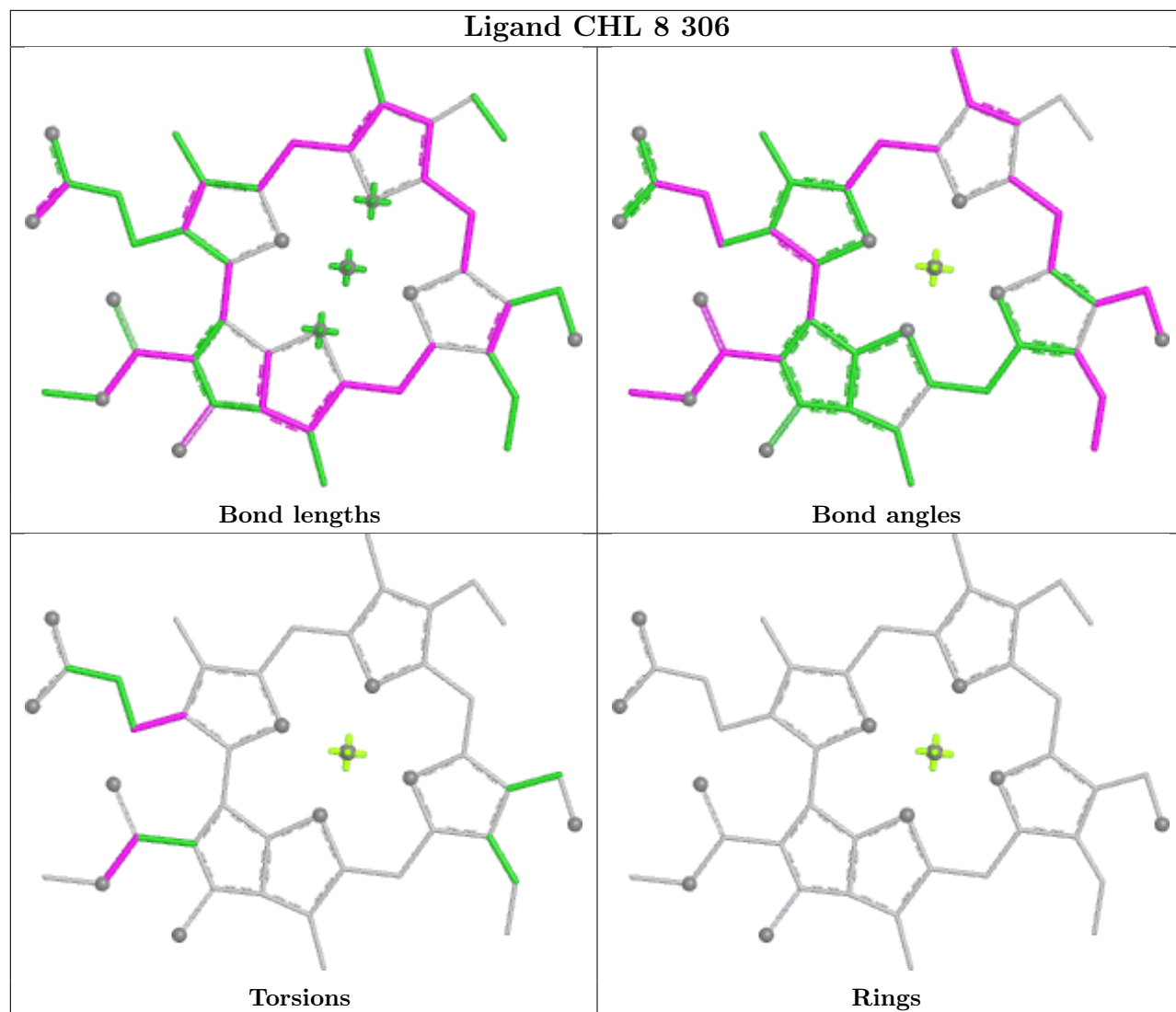
Ligand CHL 7 308

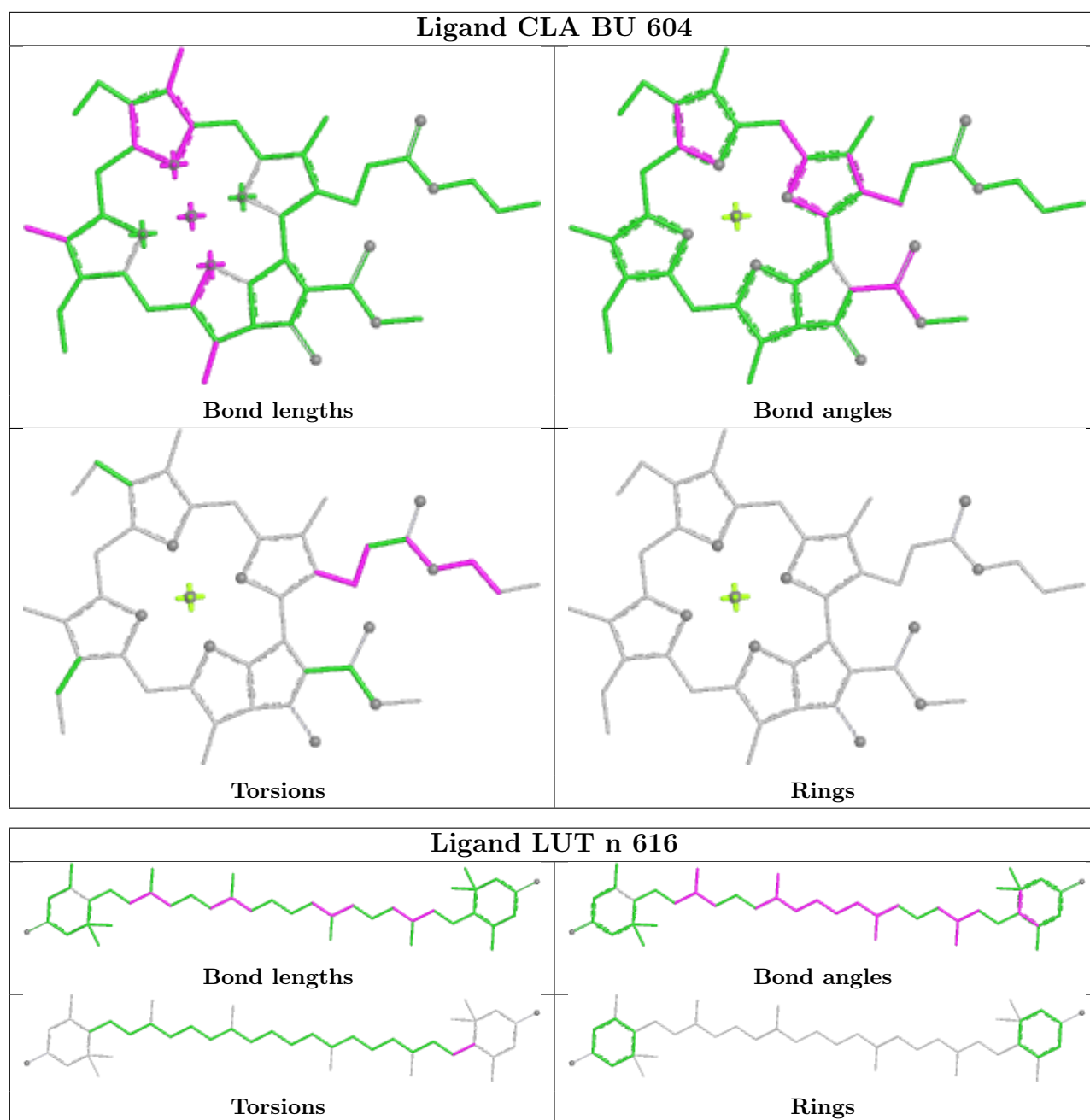


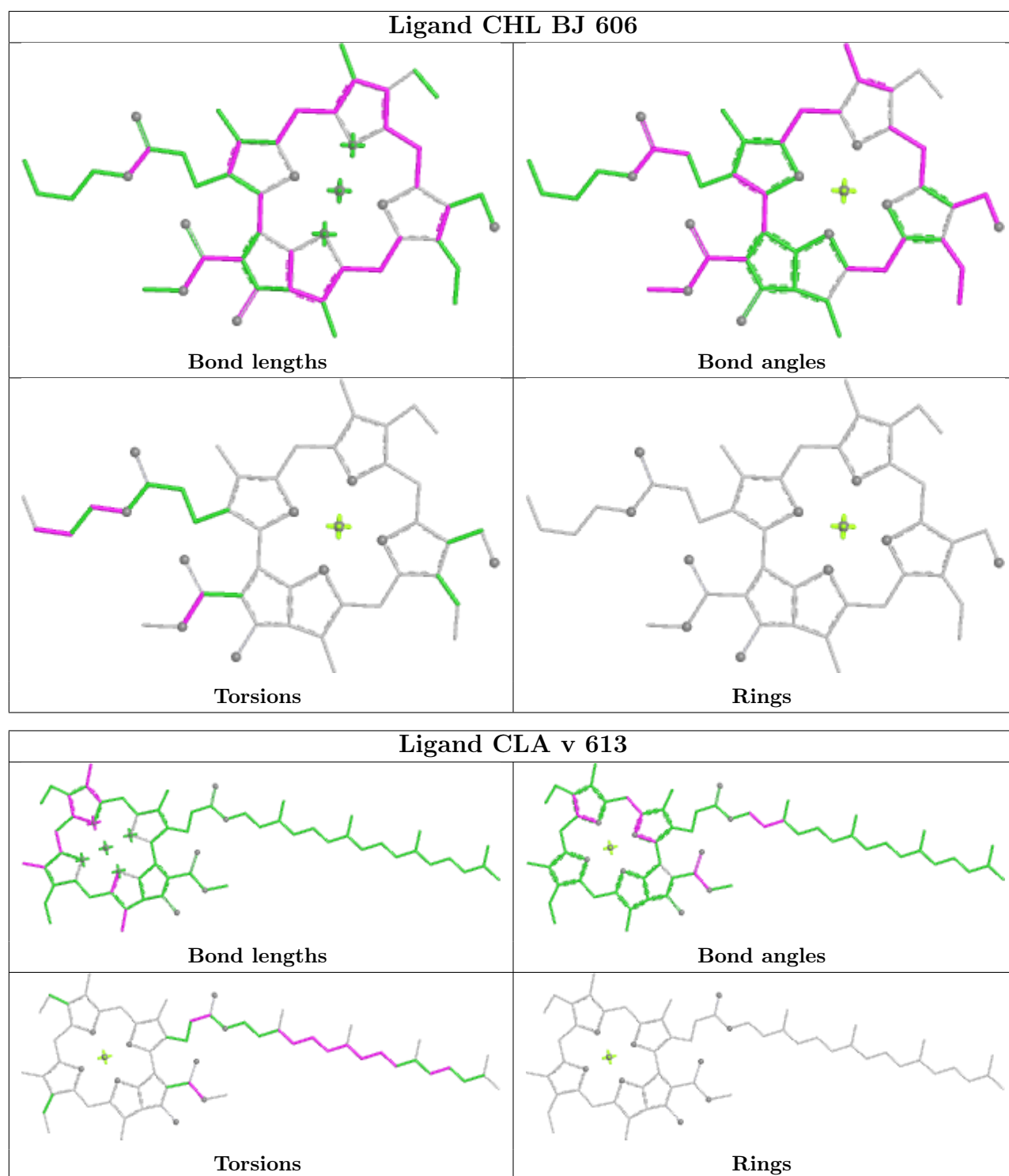
Ligand CLA A2 604

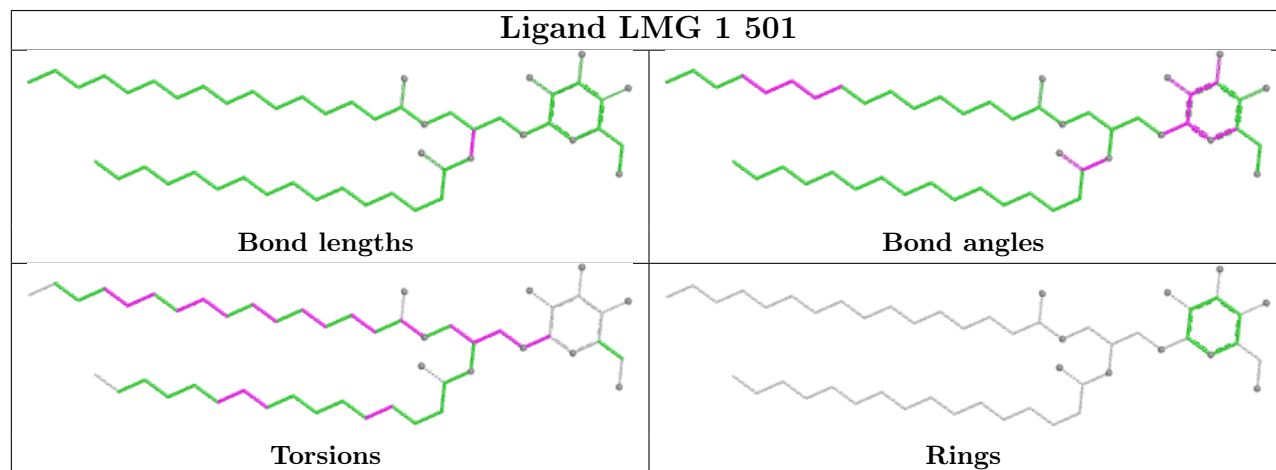
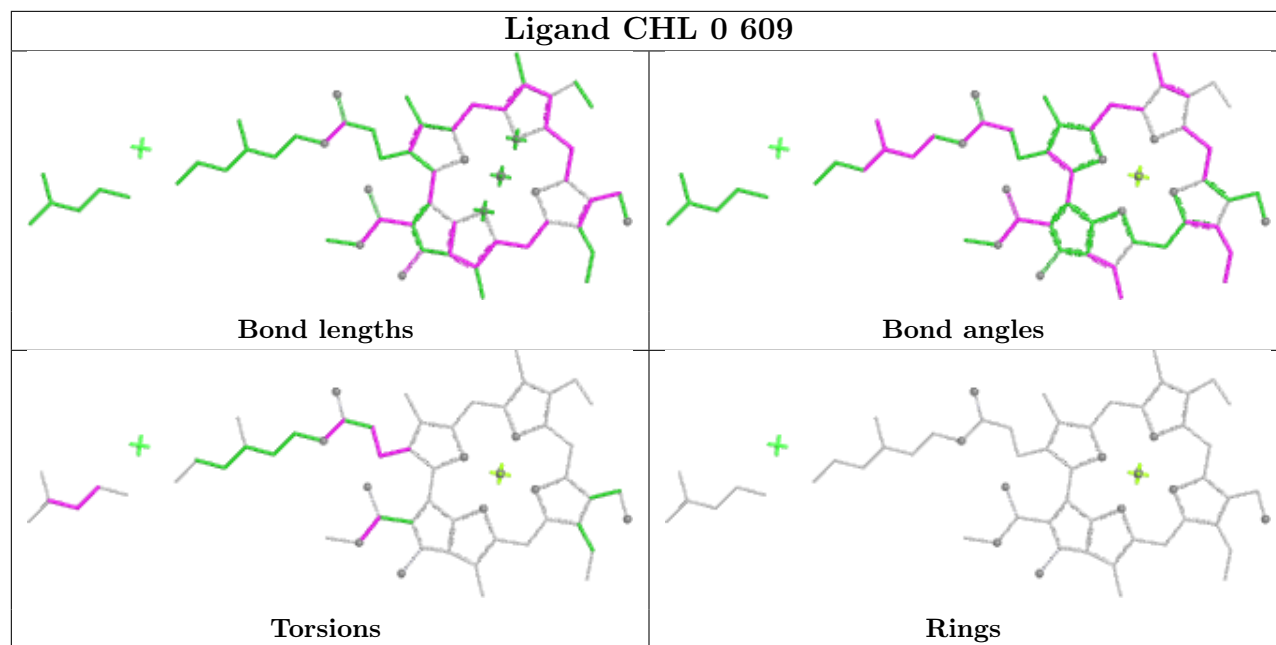


Ligand CHL 8 306

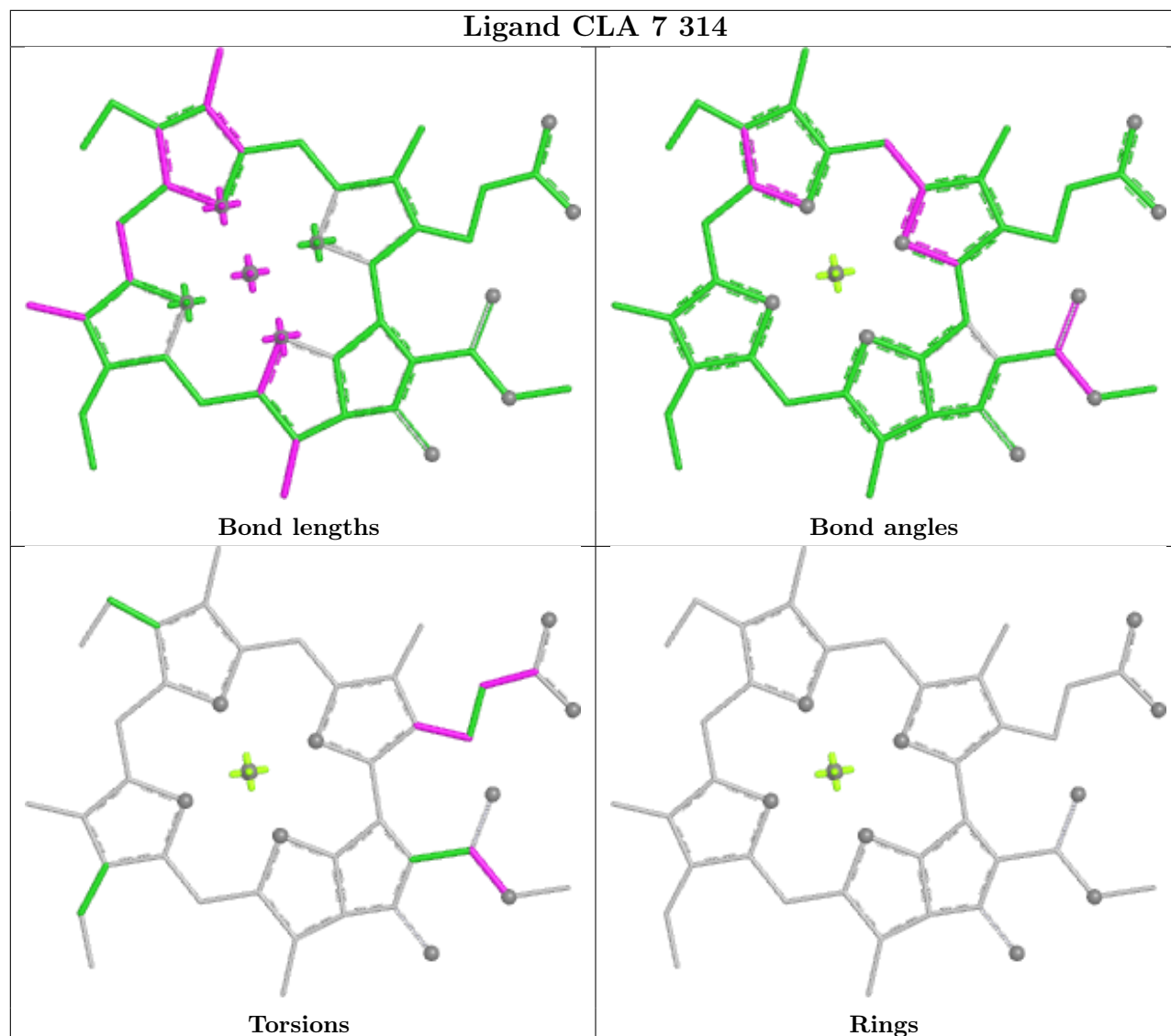




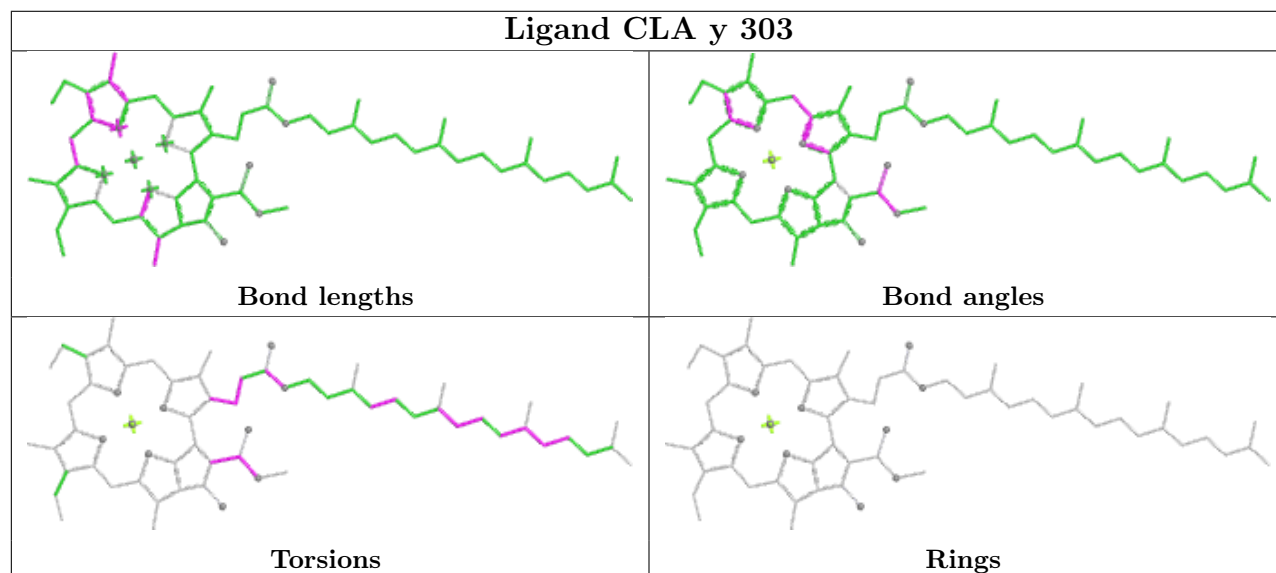


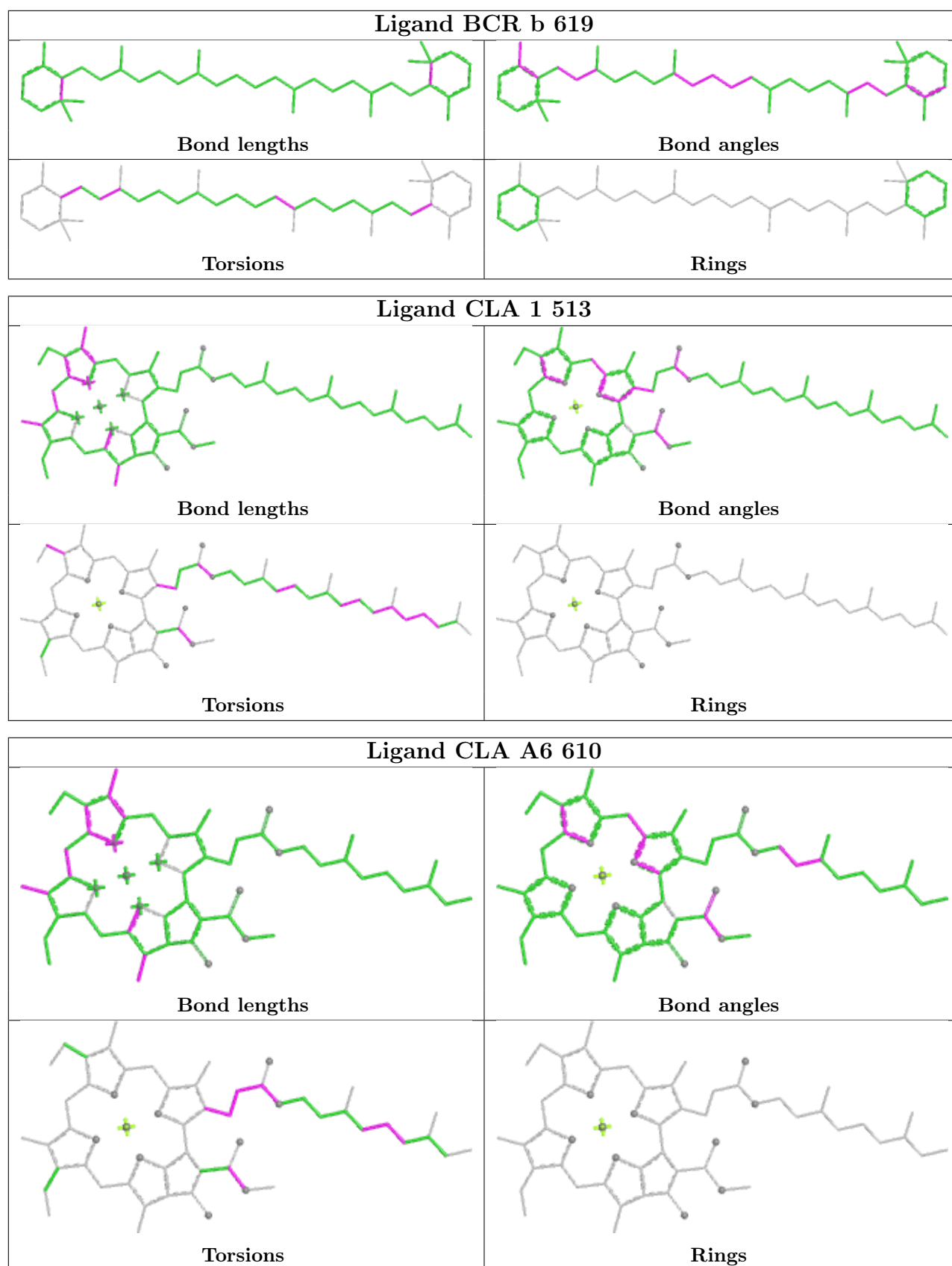


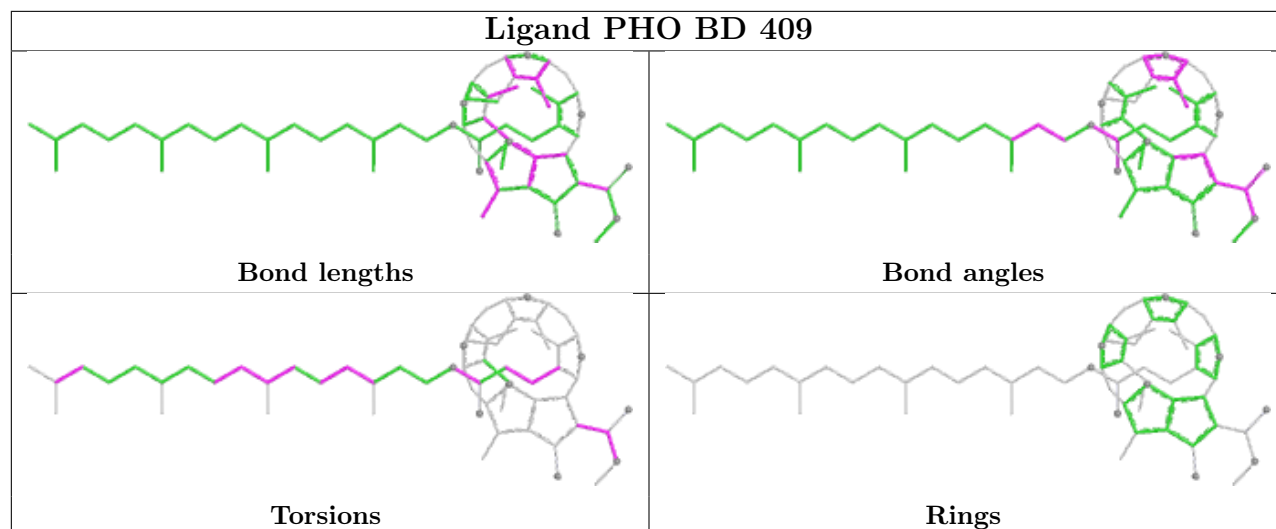
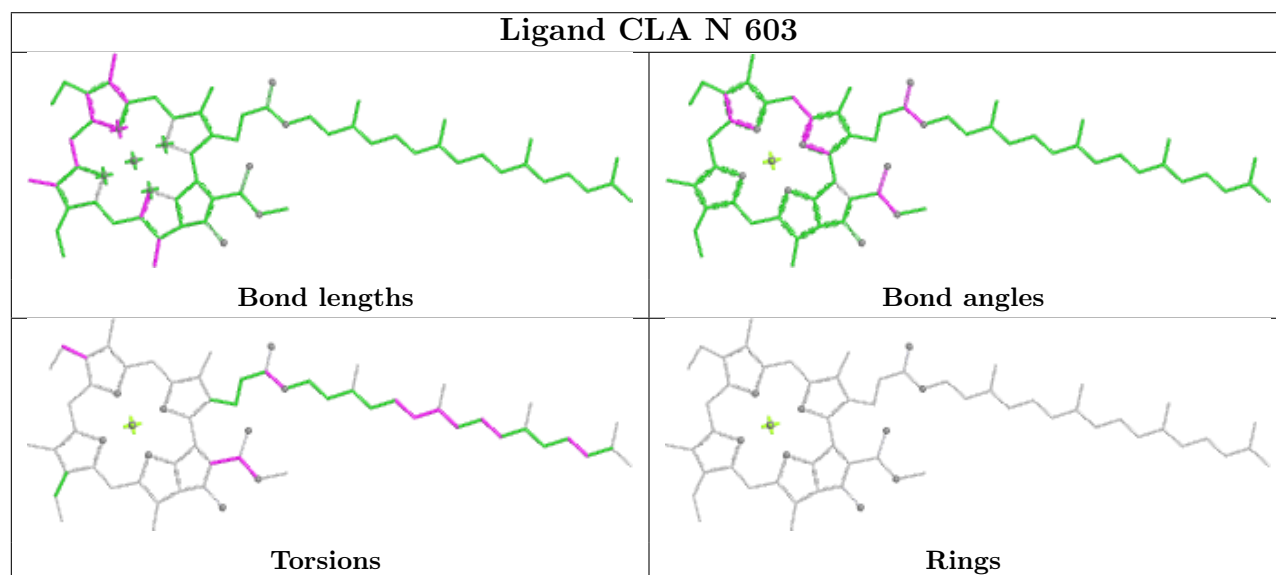
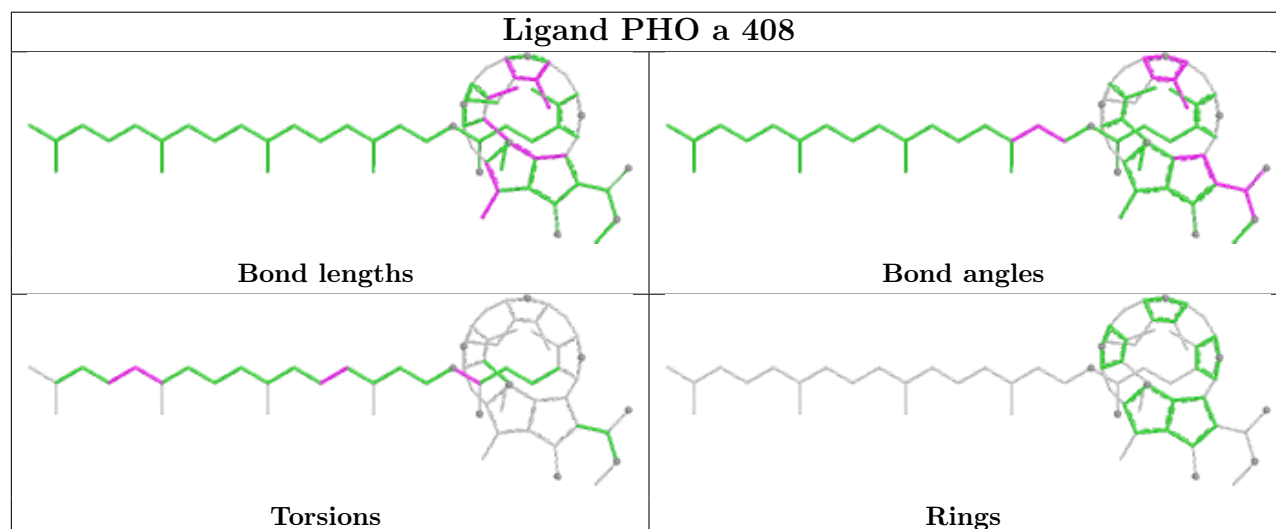
Ligand CLA 7 314

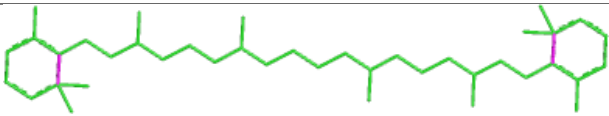
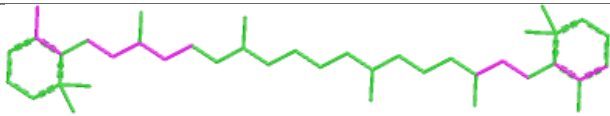
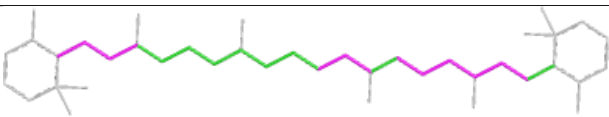
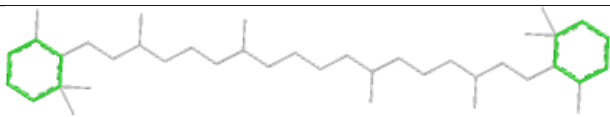


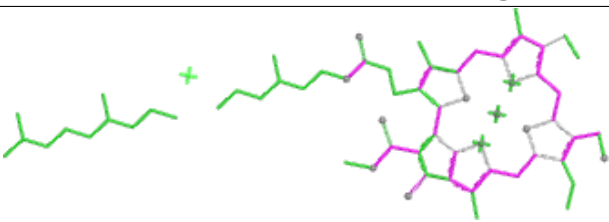
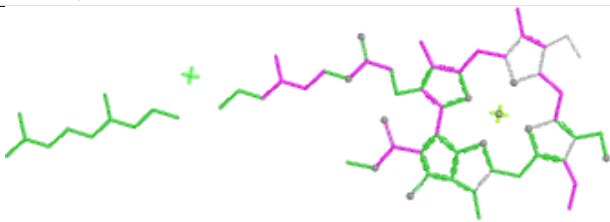
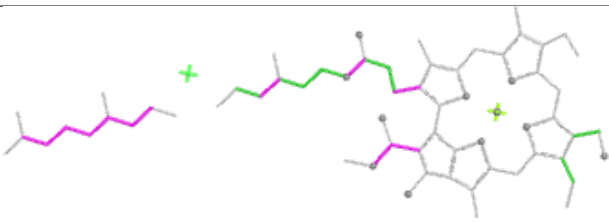
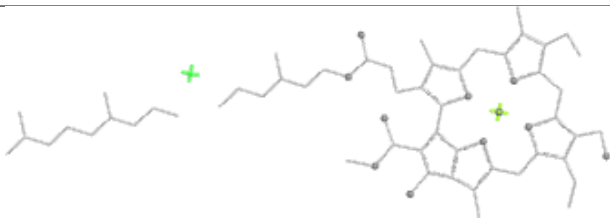
Ligand CLA y 303

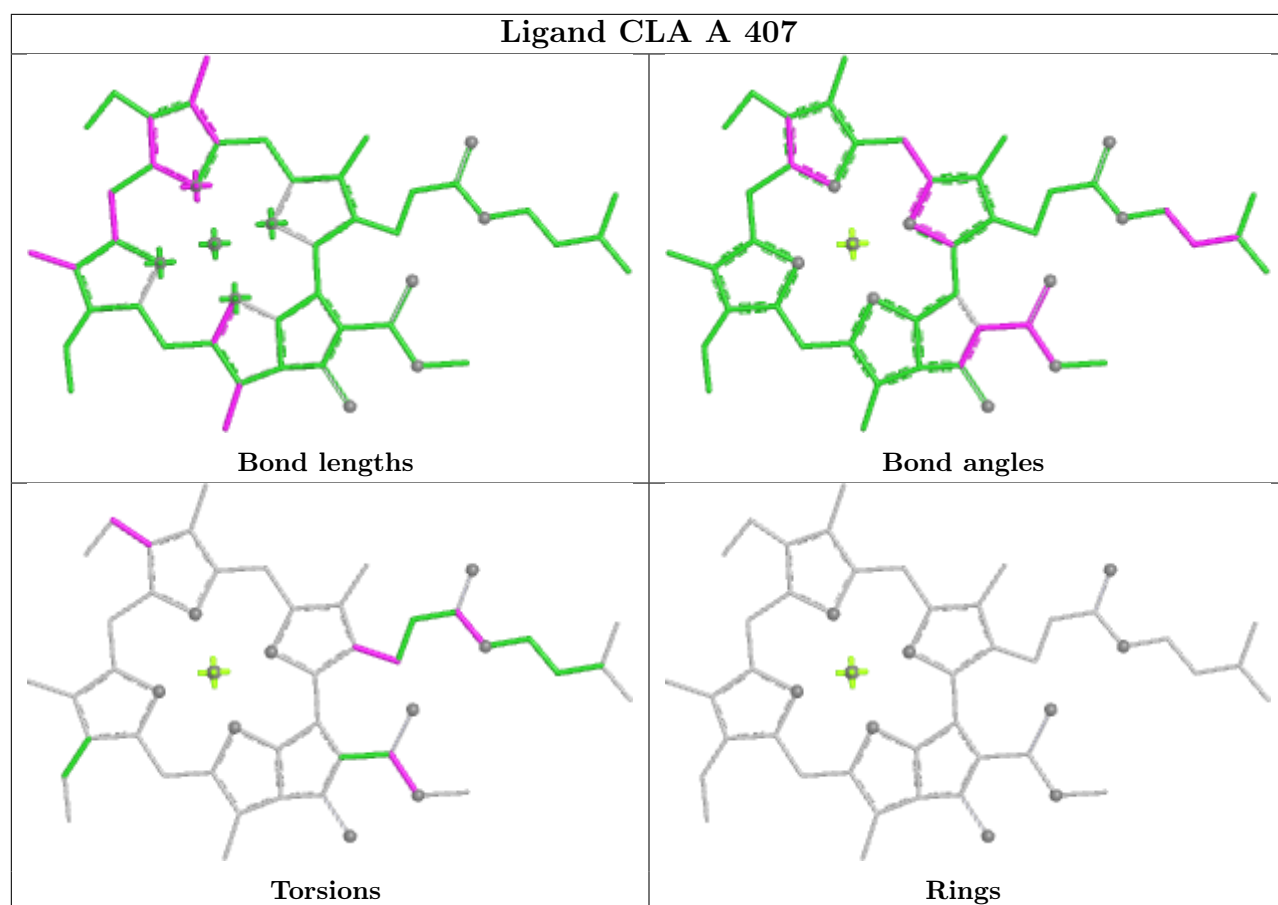




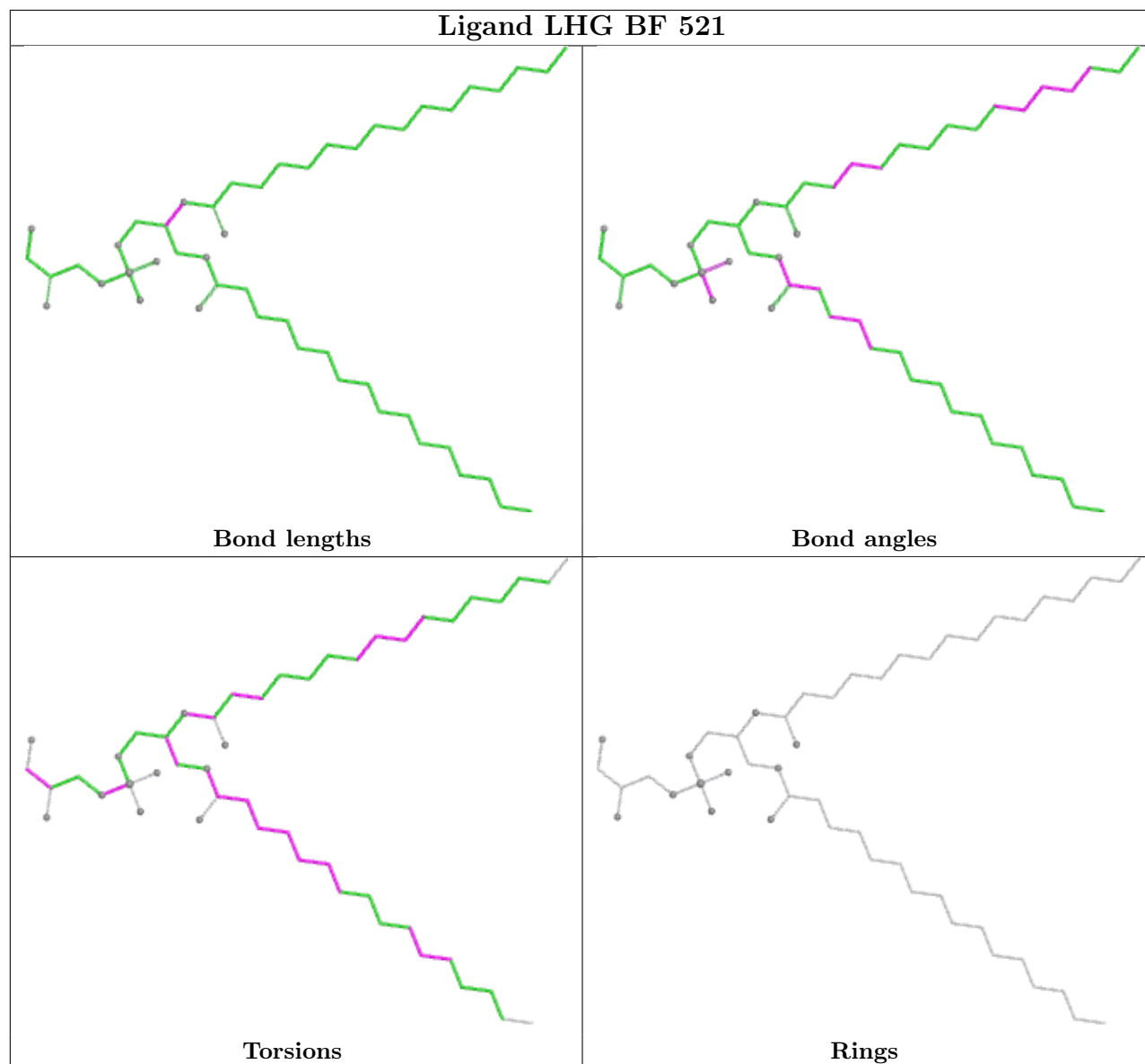
Ligand PHO BD 409**Ligand CLA N 603****Ligand PHO a 408**

Ligand BCR v 622	
	
Bond lengths	Bond angles
	
Torsions	Rings

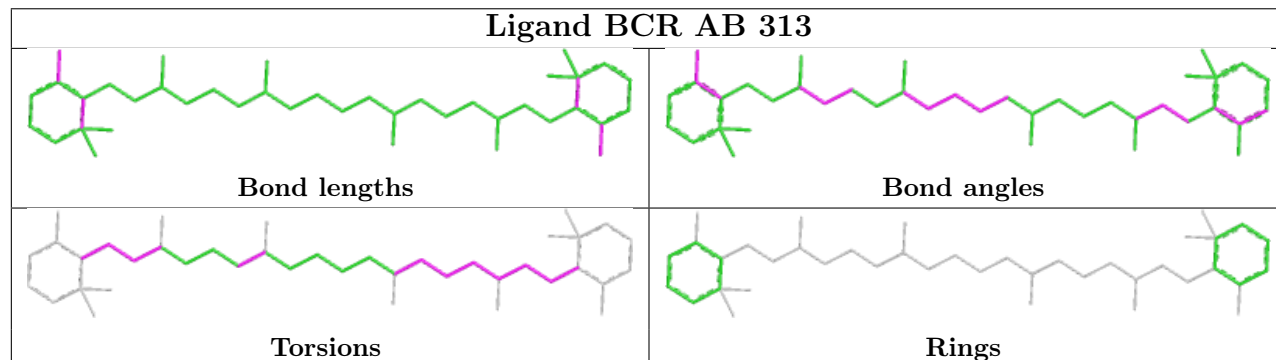
Ligand CHL BQ 601	
	
Bond lengths	Bond angles
	
Torsions	Rings

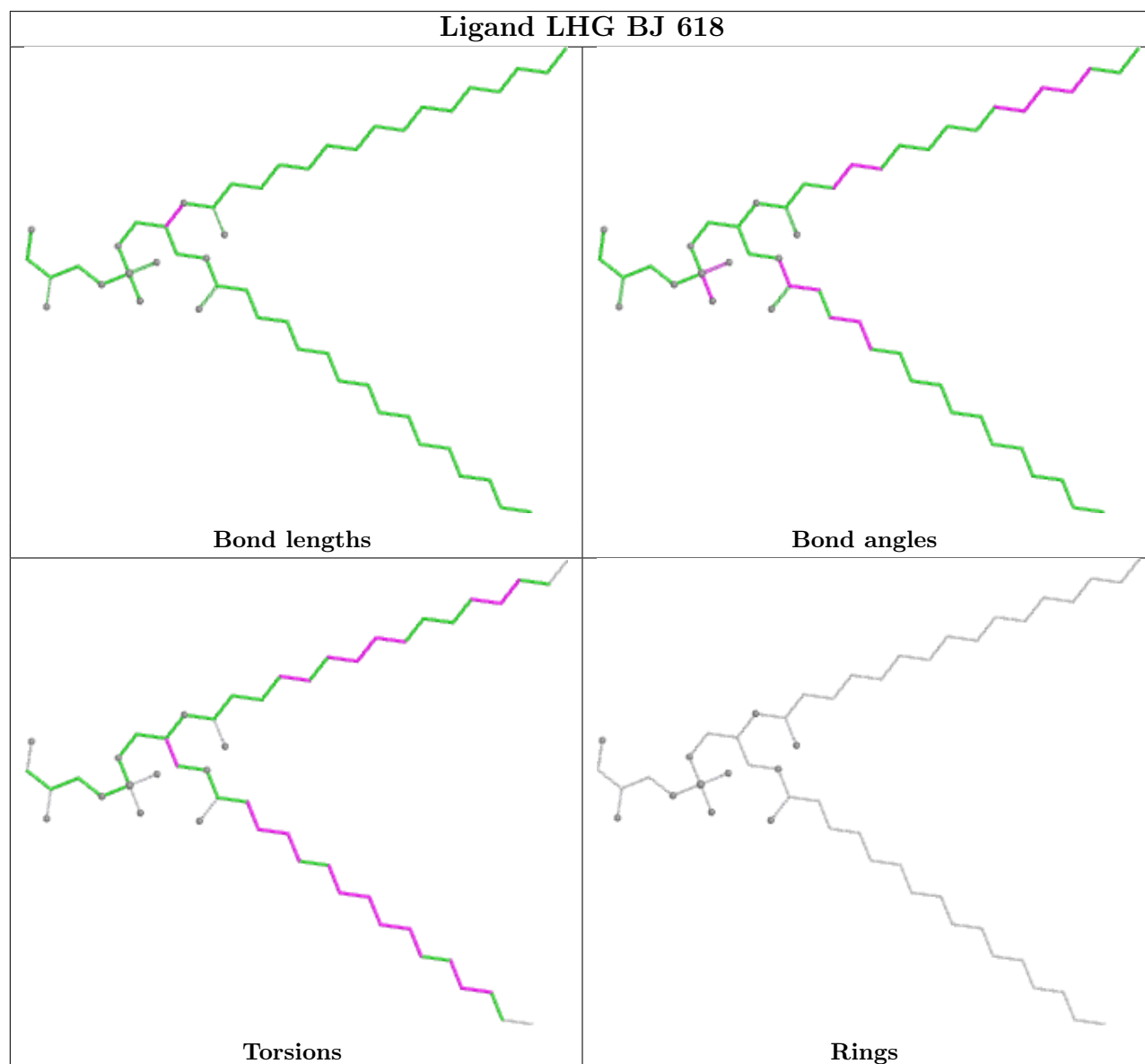
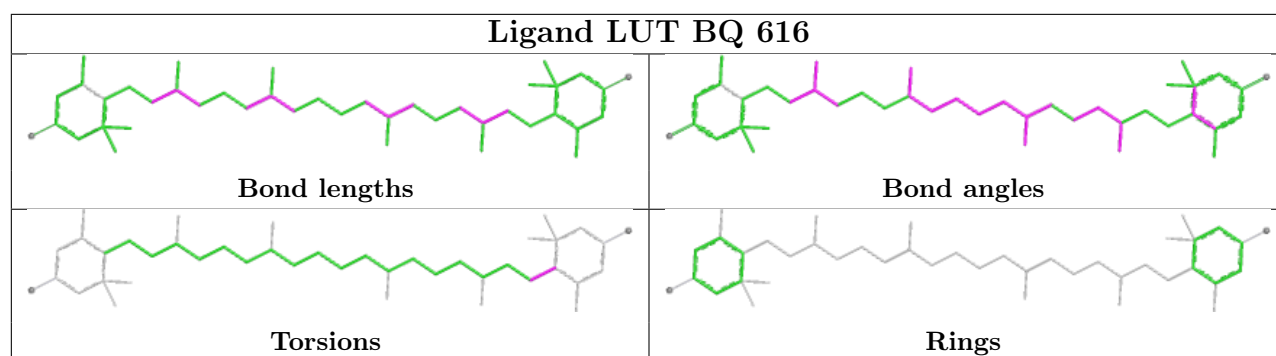


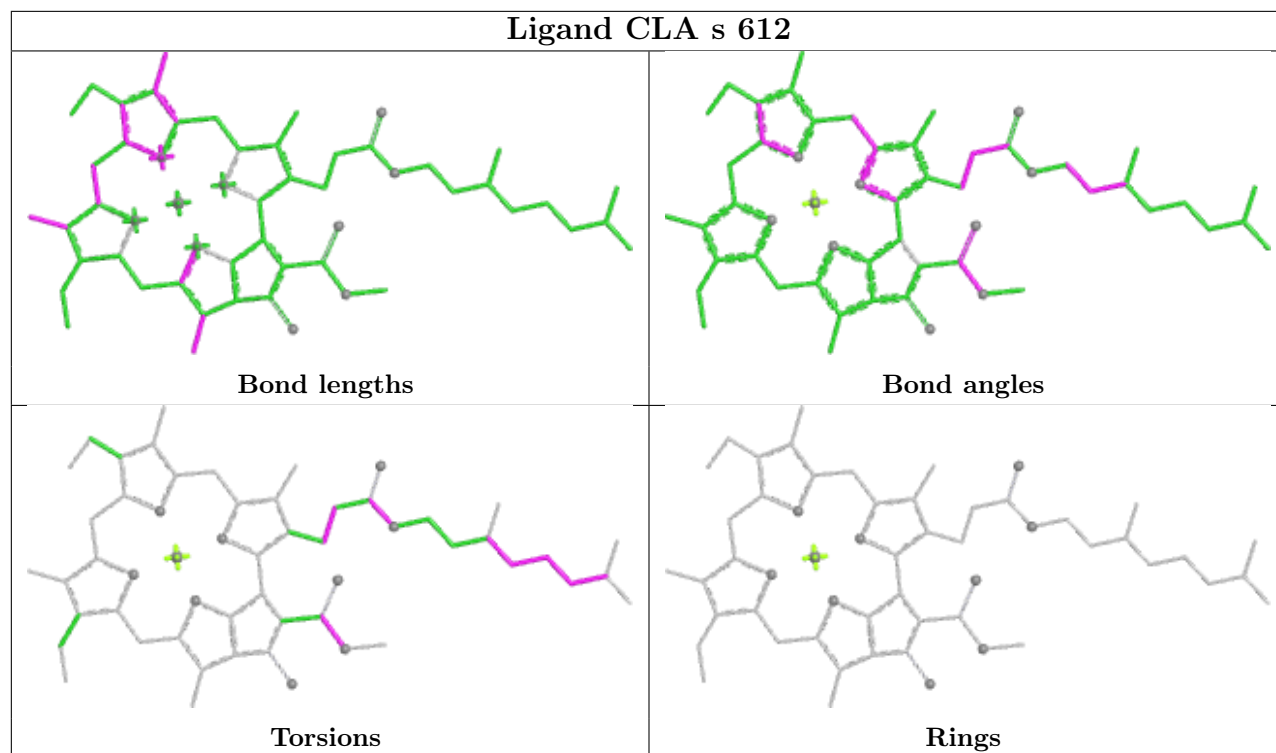
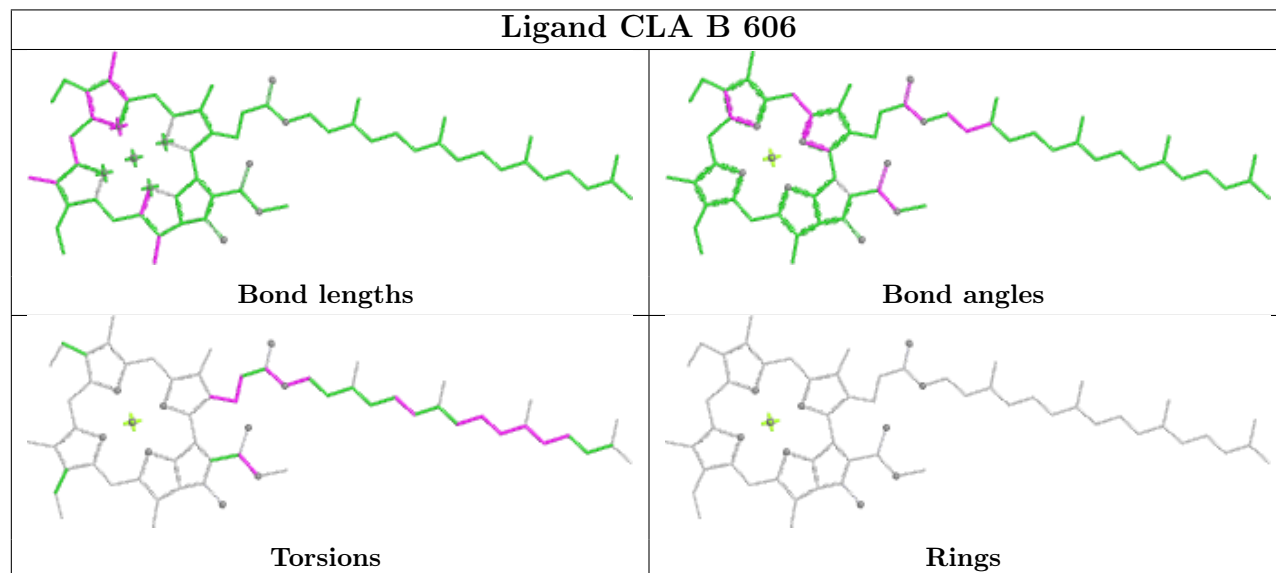
Ligand LHG BF 521



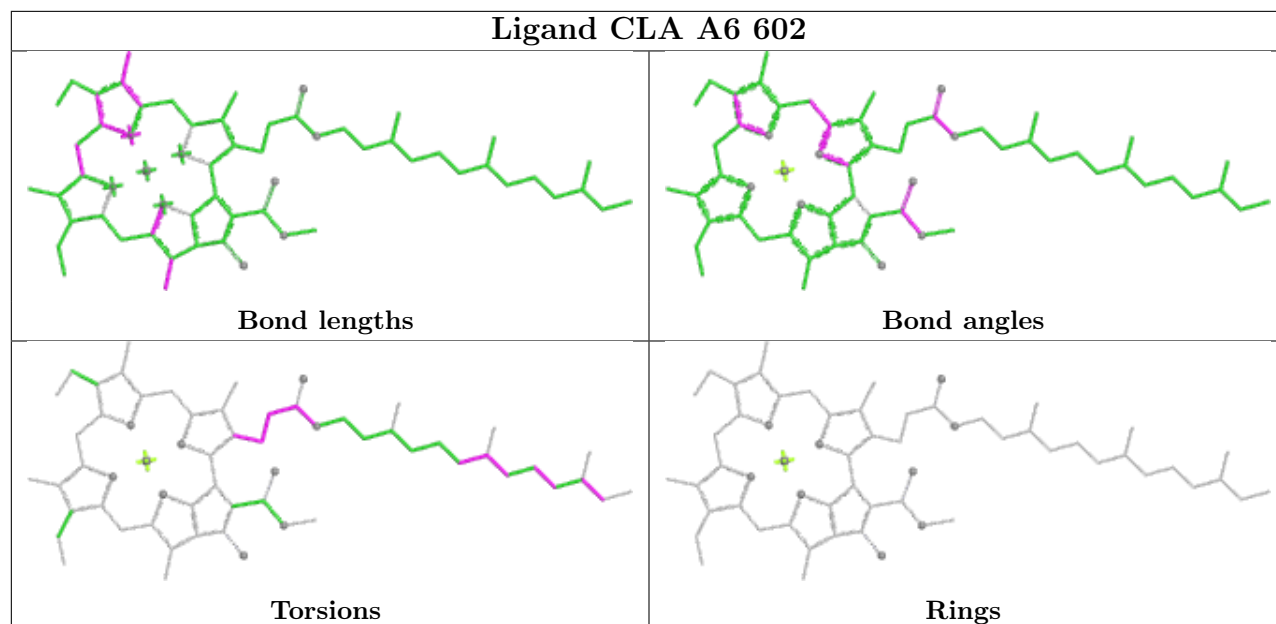
Ligand BCR AB 313



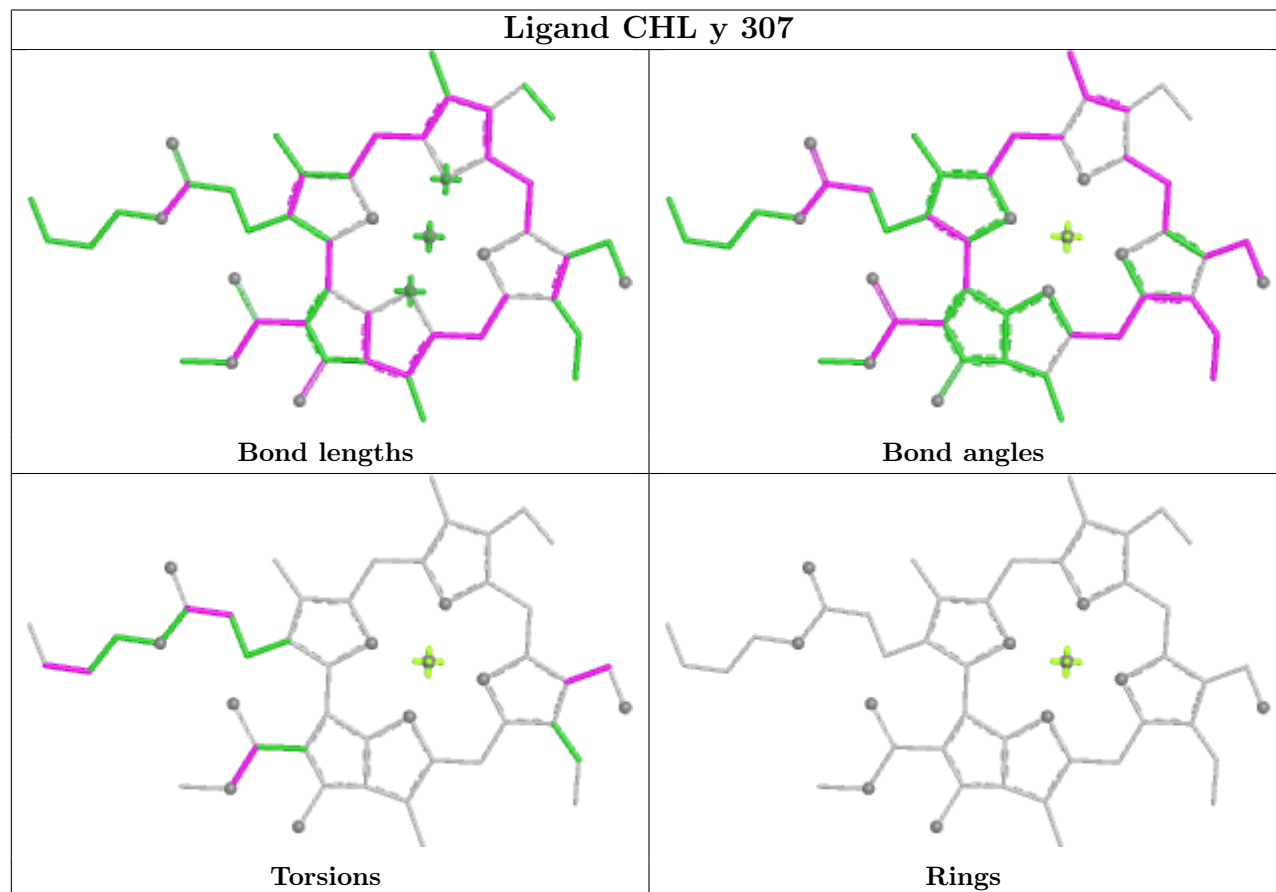


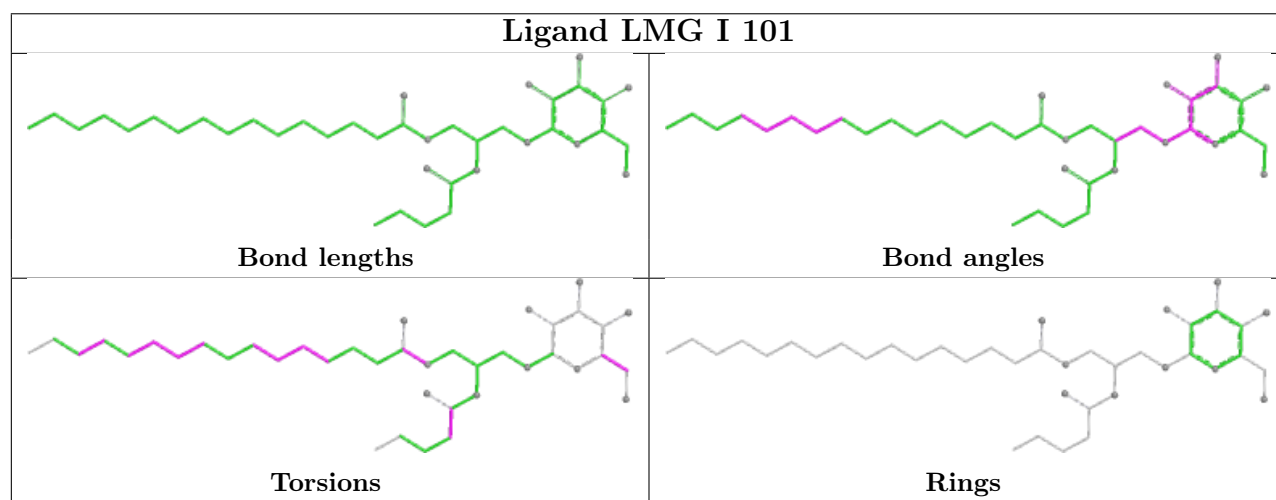
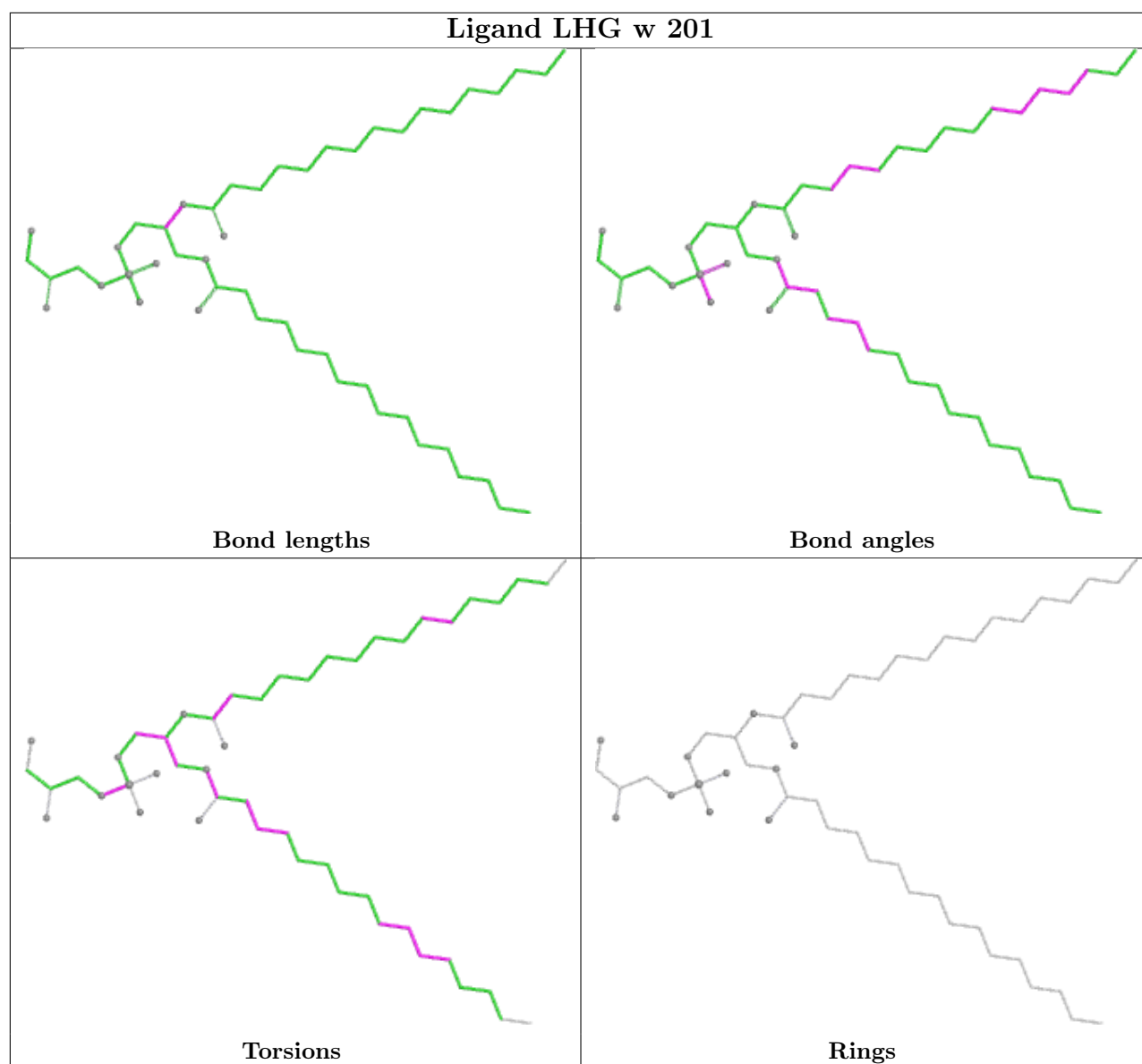
Ligand CLA s 612**Ligand CLA B 606**

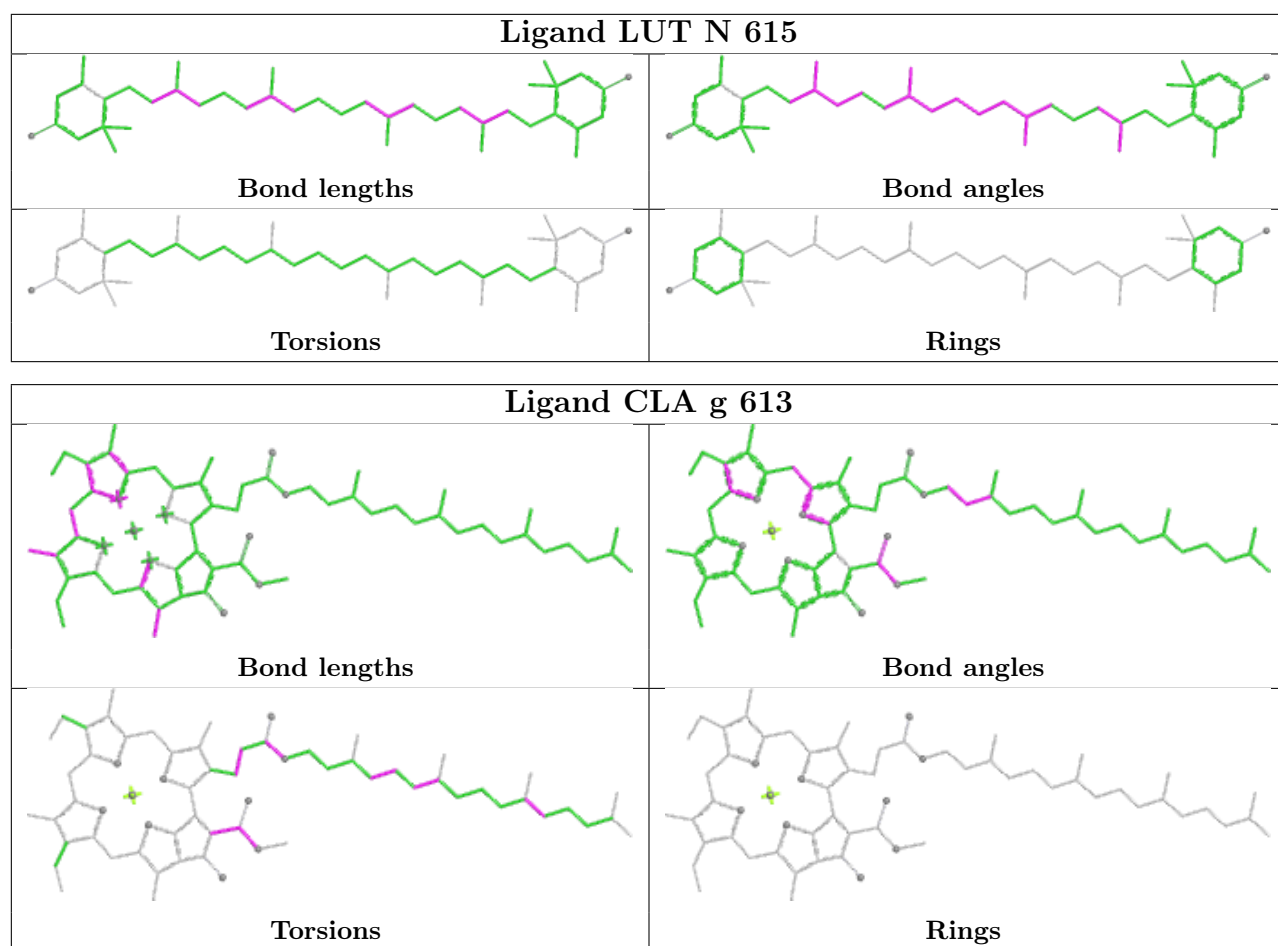
Ligand CLA A6 602



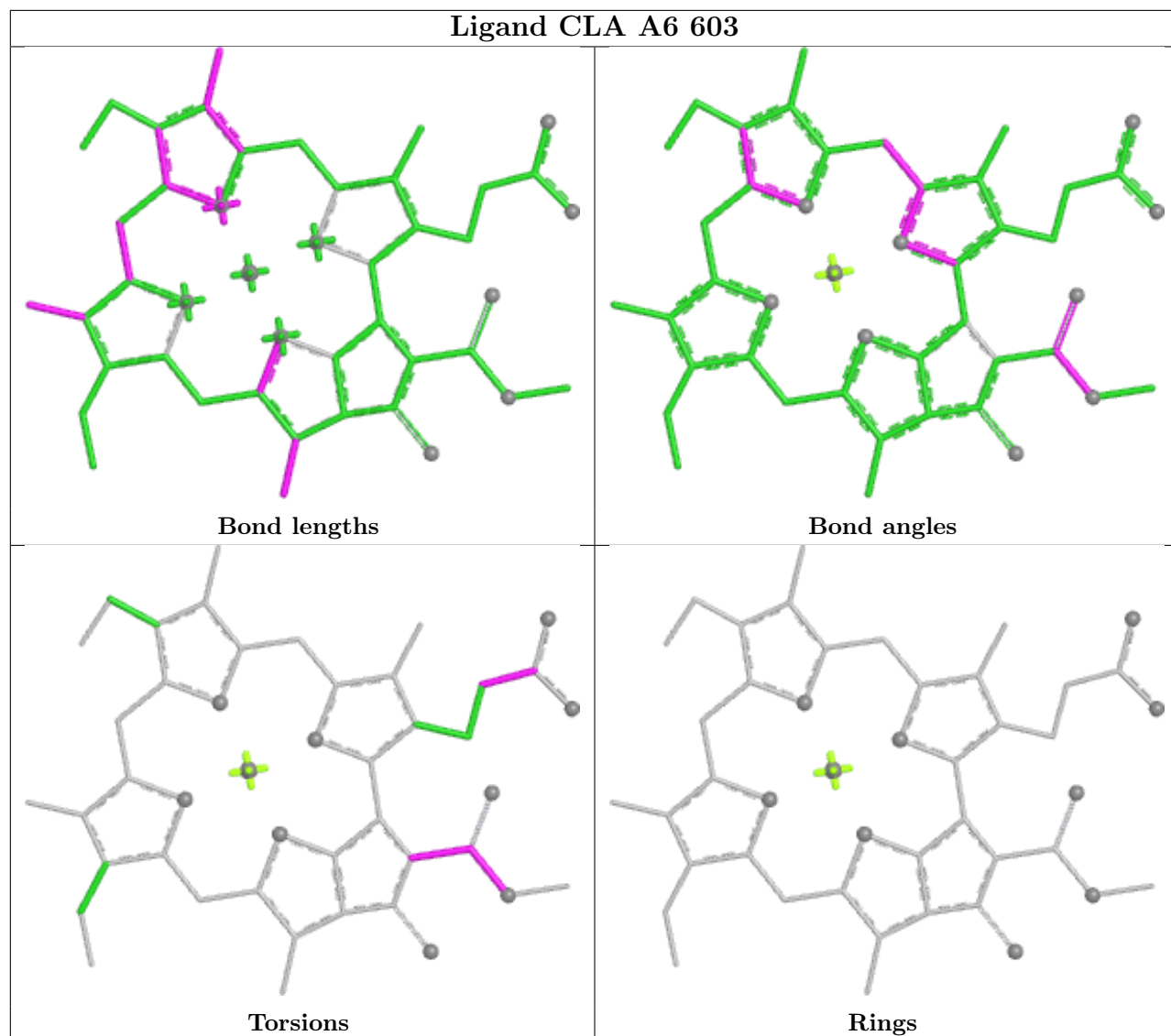
Ligand CHL y 307



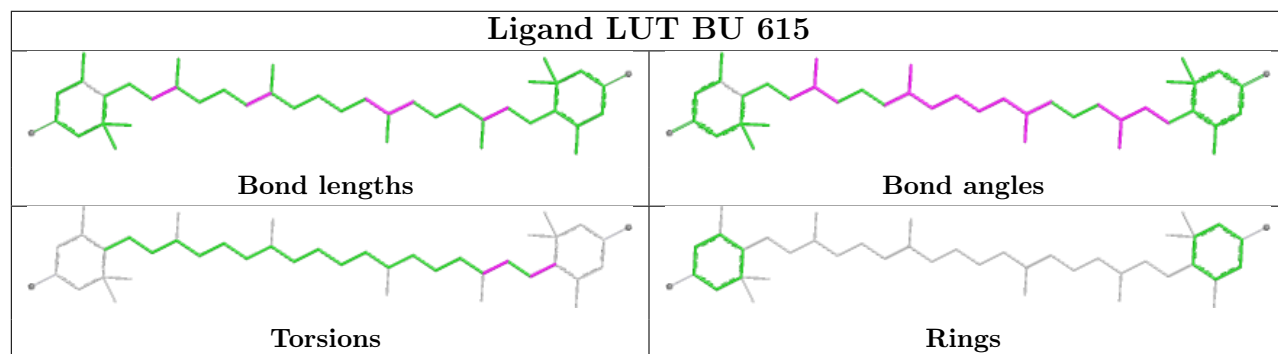


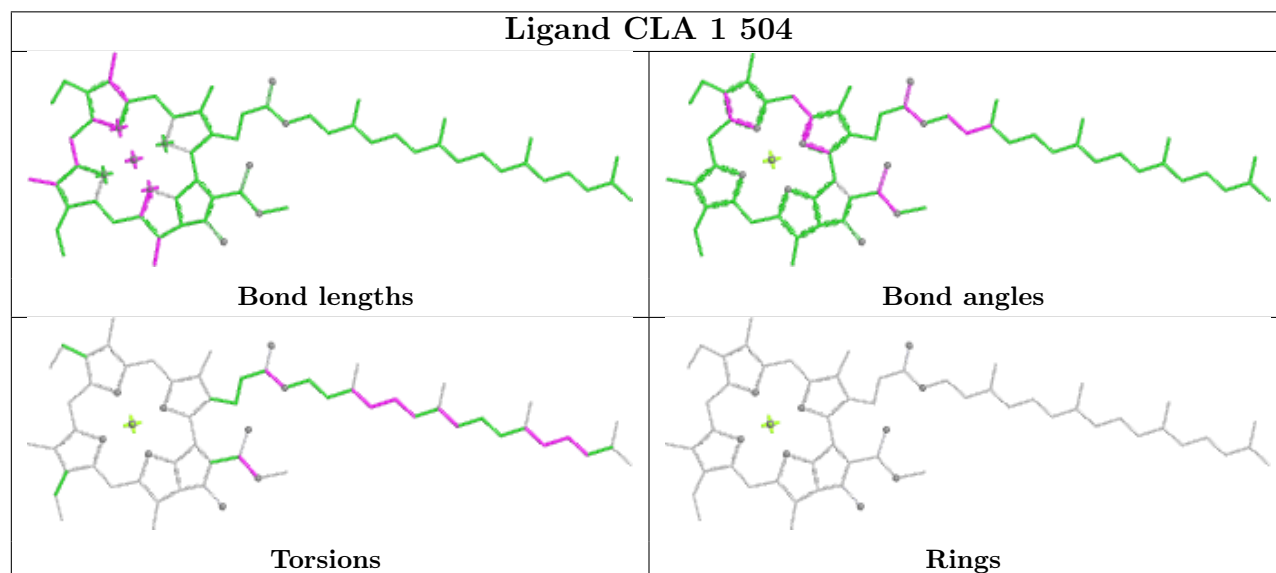
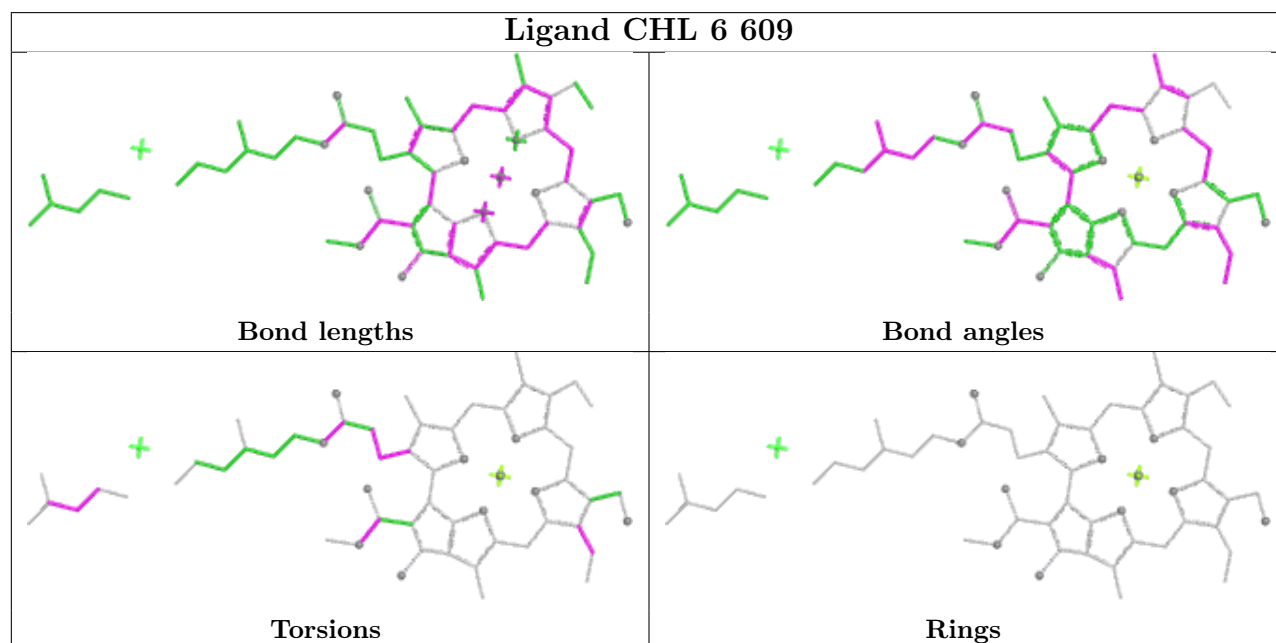
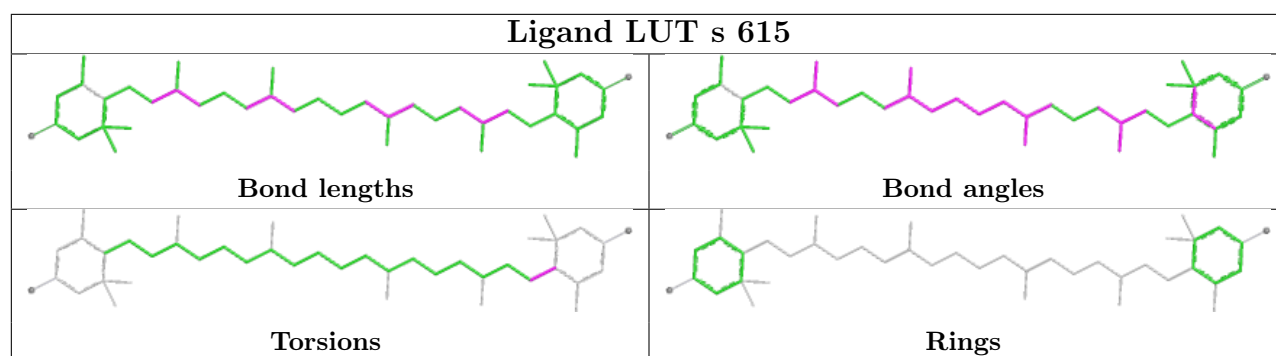


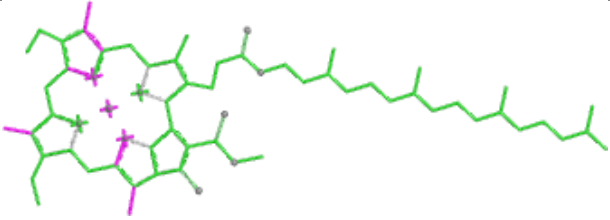
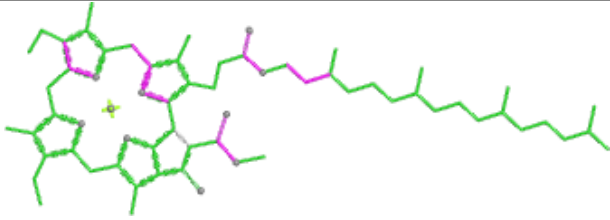
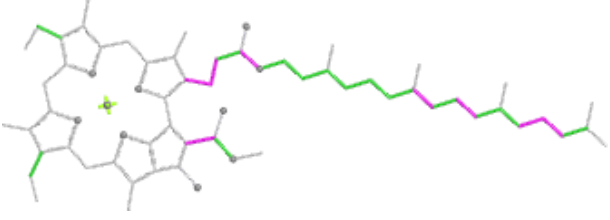
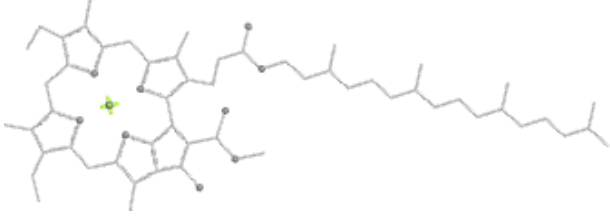
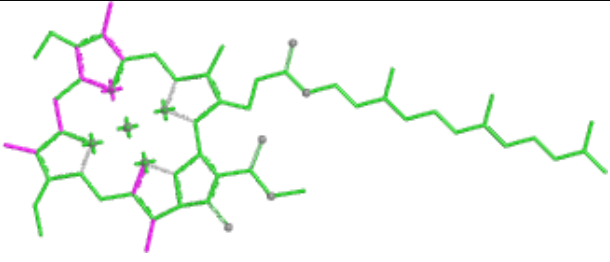
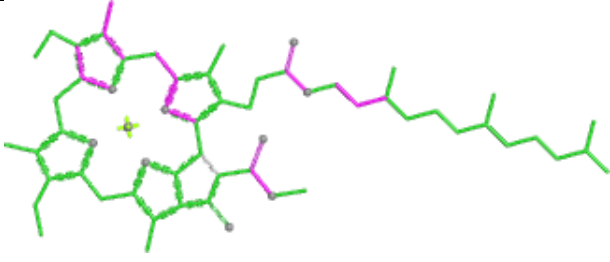
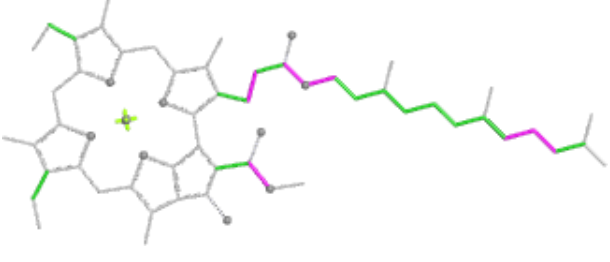
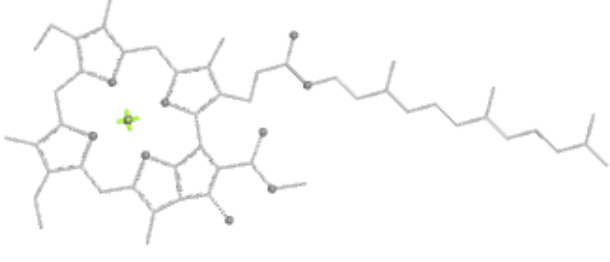
Ligand CLA A6 603

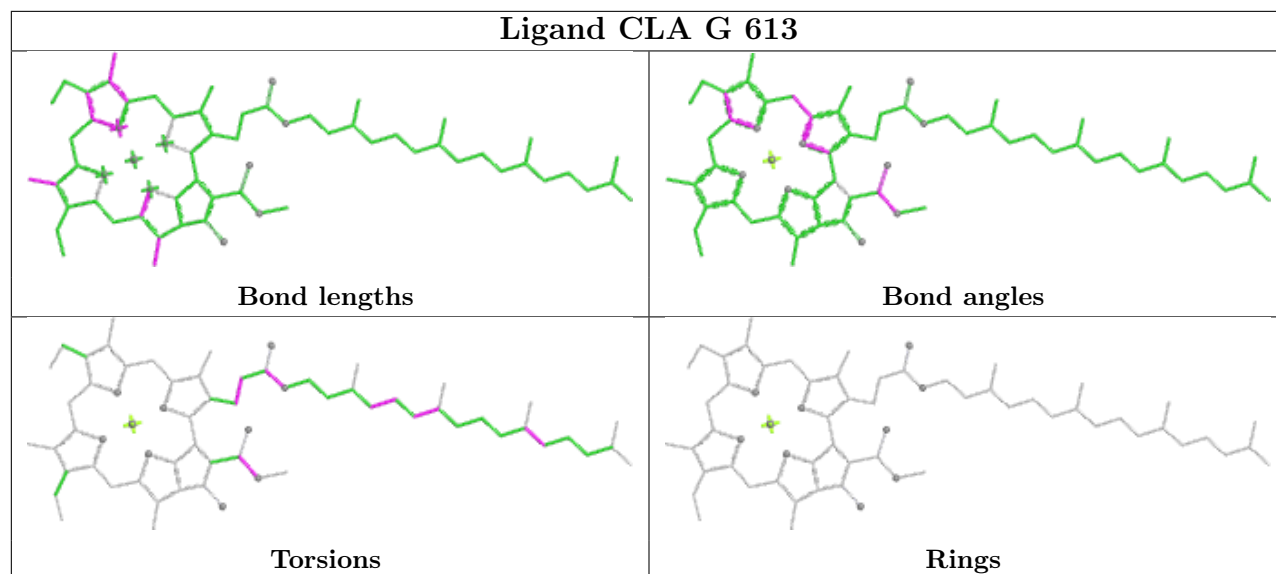
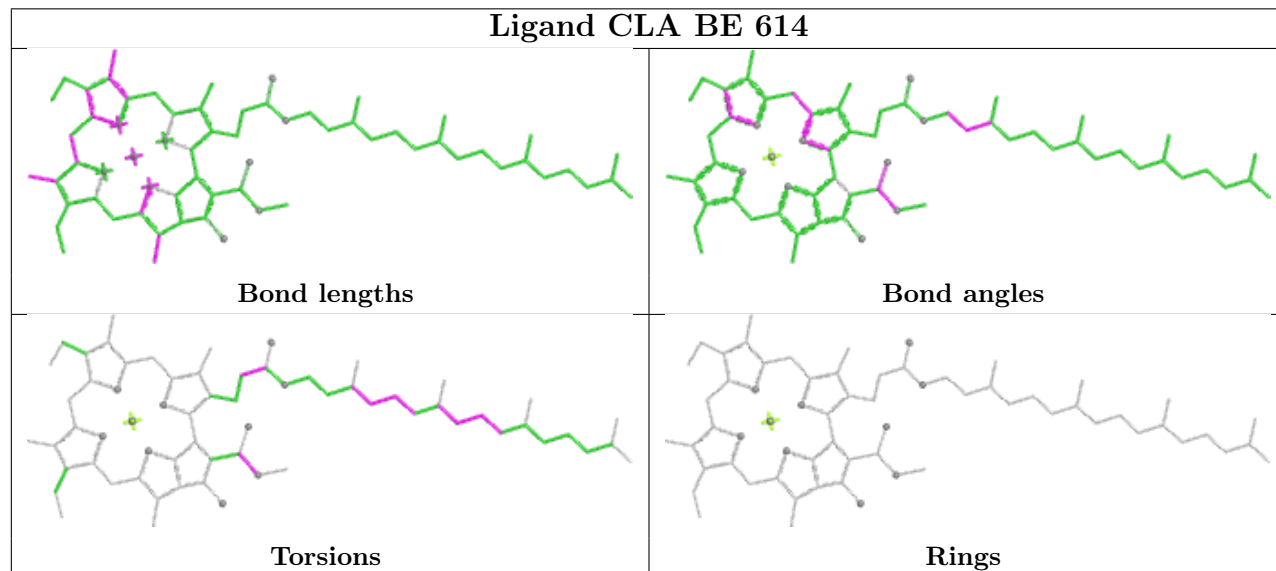


Ligand LUT BU 615

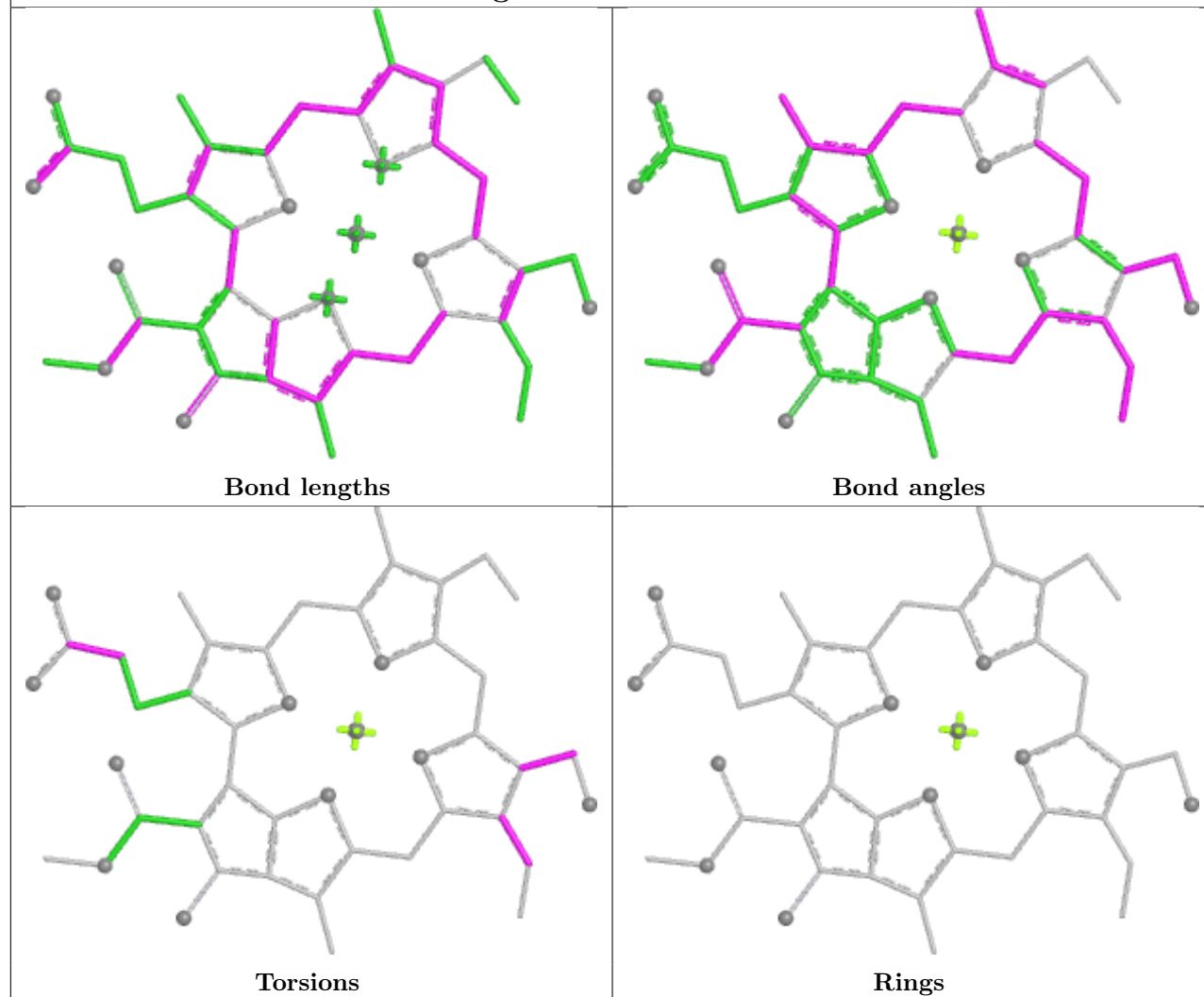


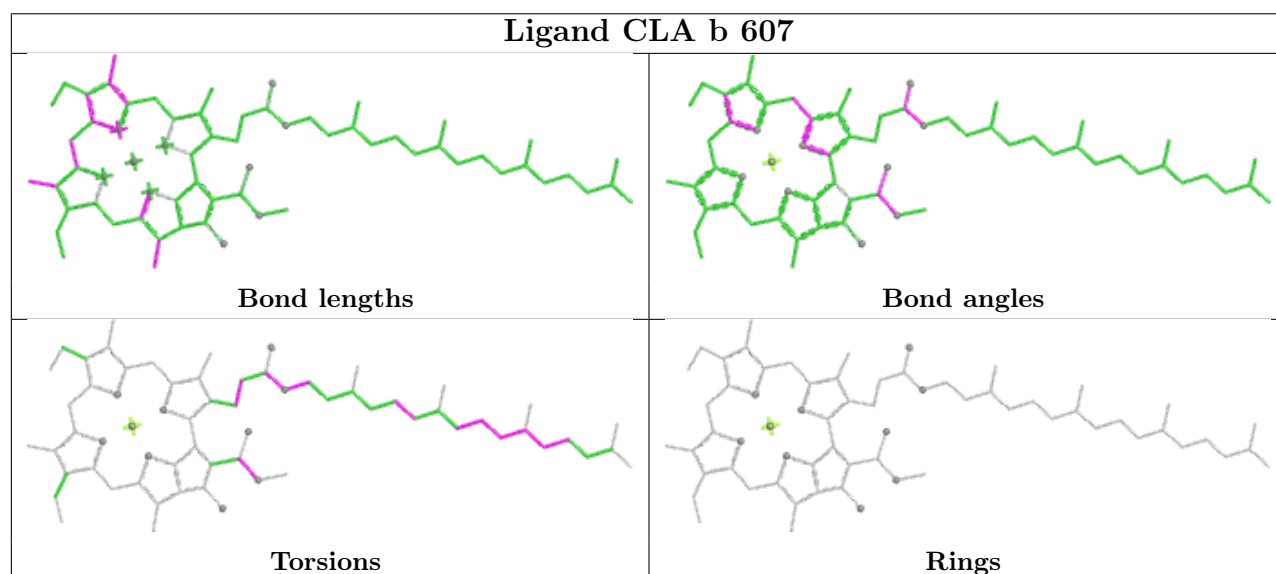
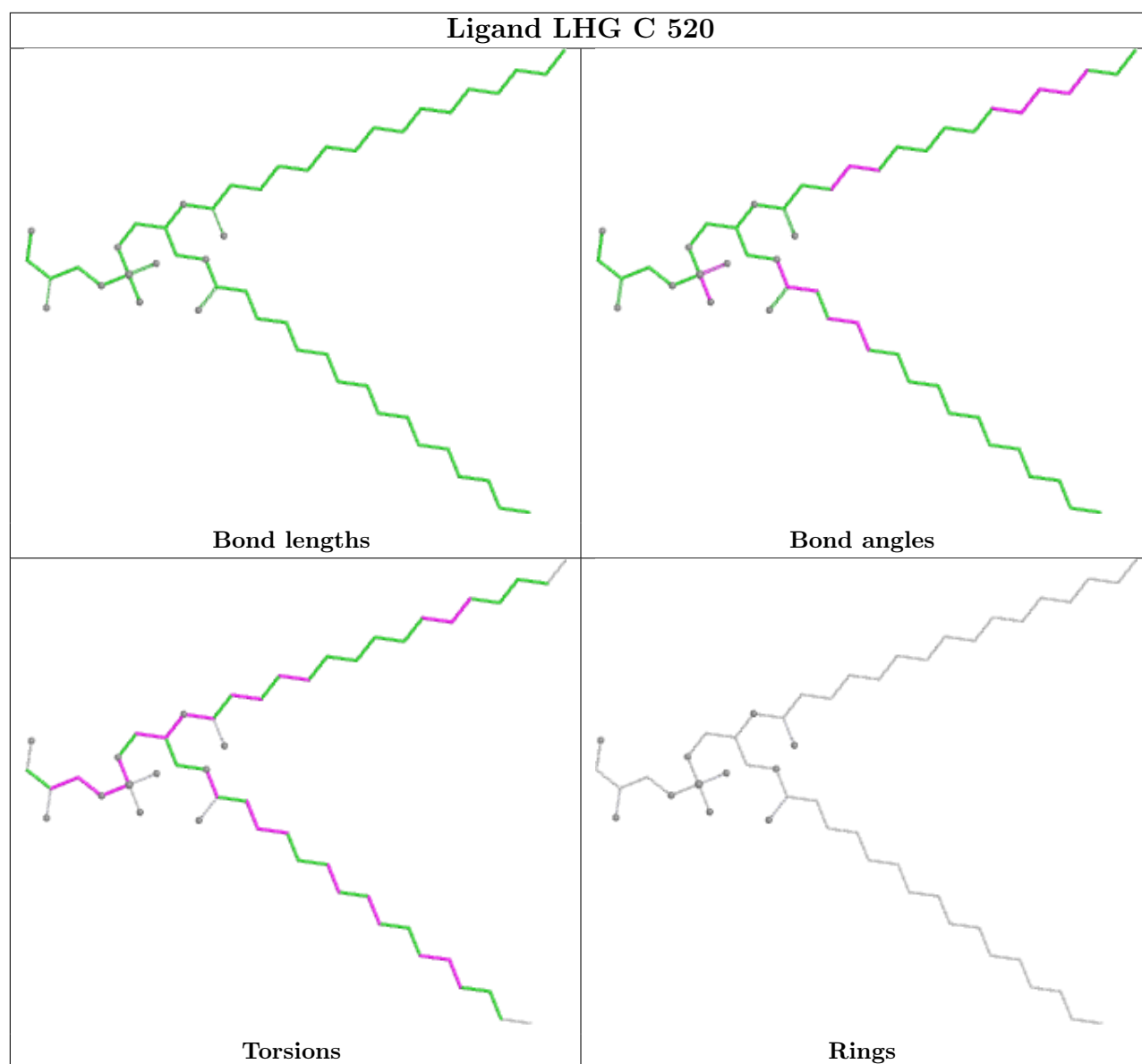


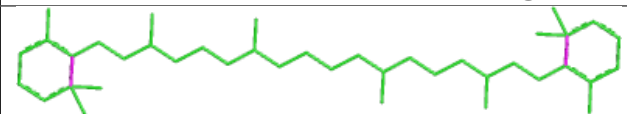
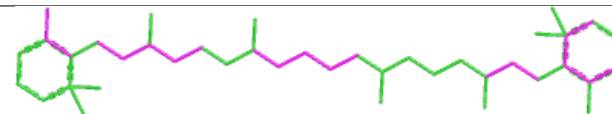
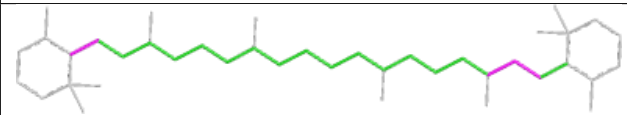
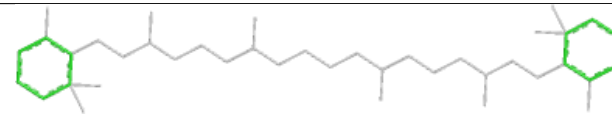
Ligand CLA B 612	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>
Ligand CLA A 410	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>

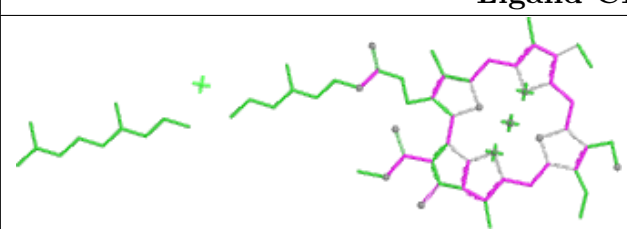
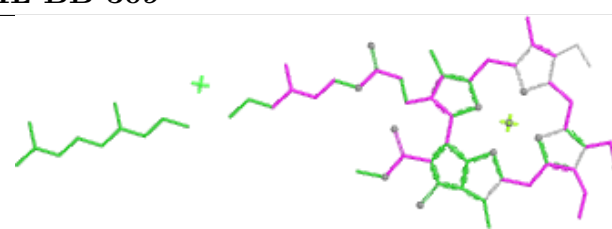
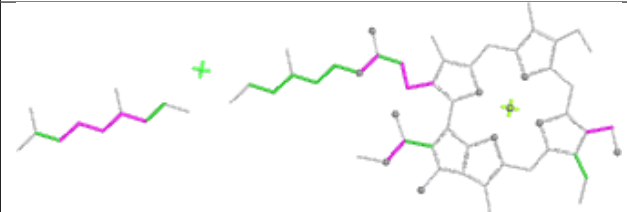
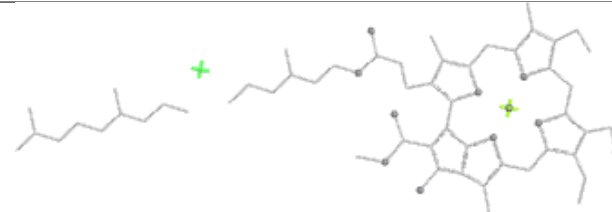
Ligand CLA G 613**Ligand CLA BE 614**

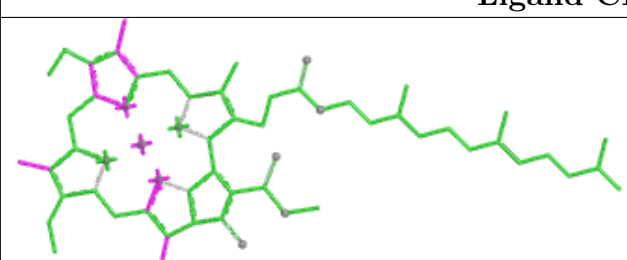
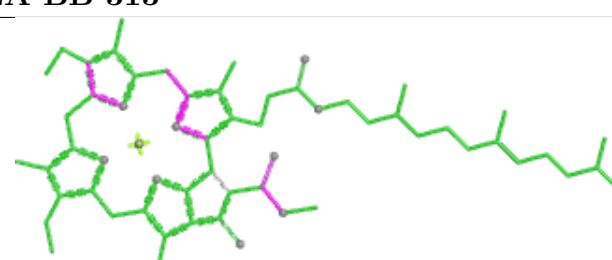
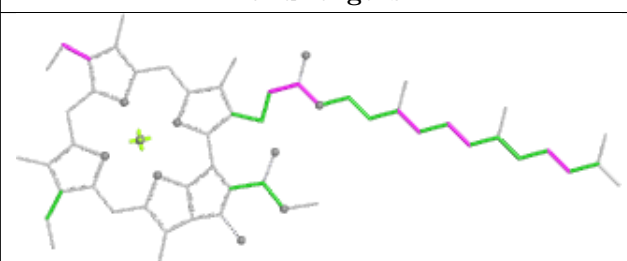
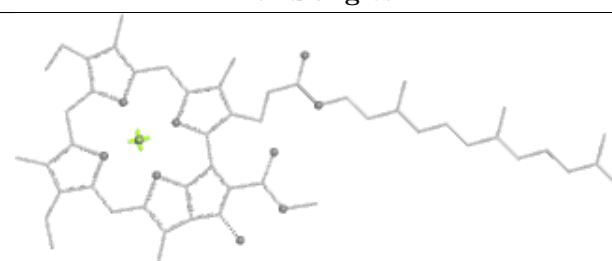
Ligand CHL A6 601



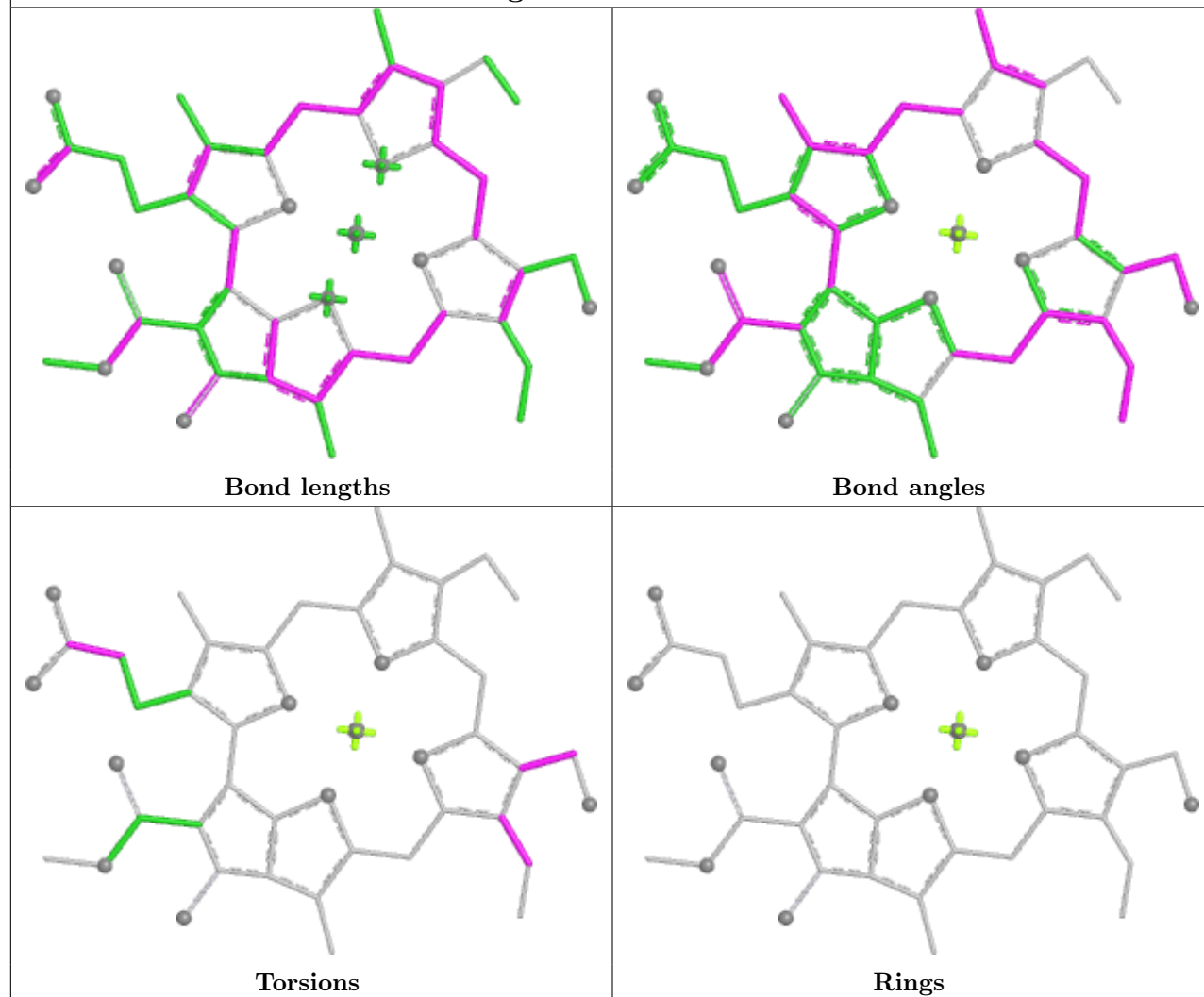


Ligand BCR B 617	
	
Bond lengths	Bond angles
	
Torsions	Rings

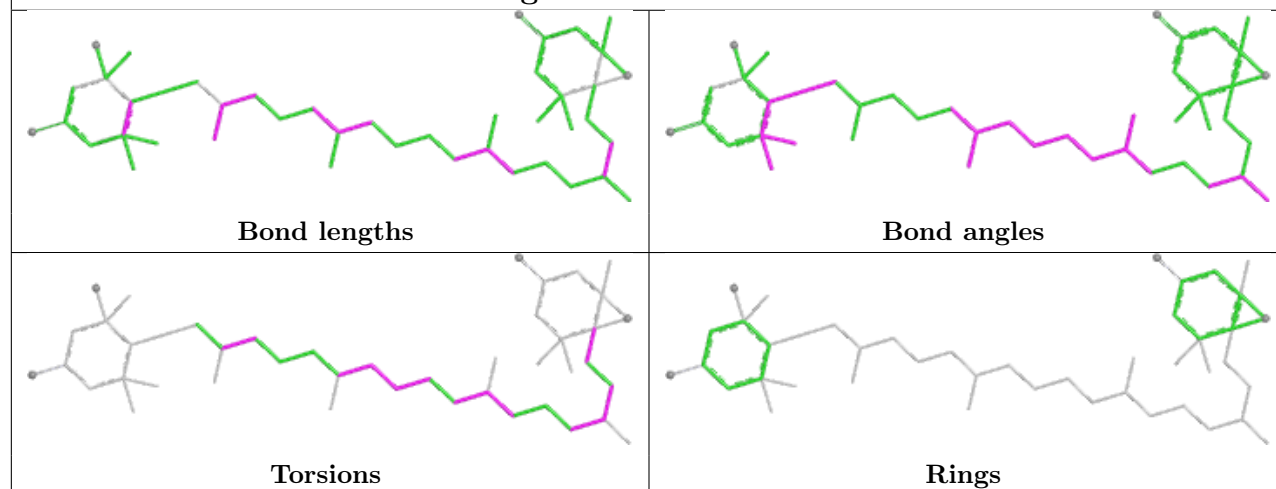
Ligand CHL BB 309	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA BB 313	
	
Bond lengths	Bond angles
	
Torsions	Rings

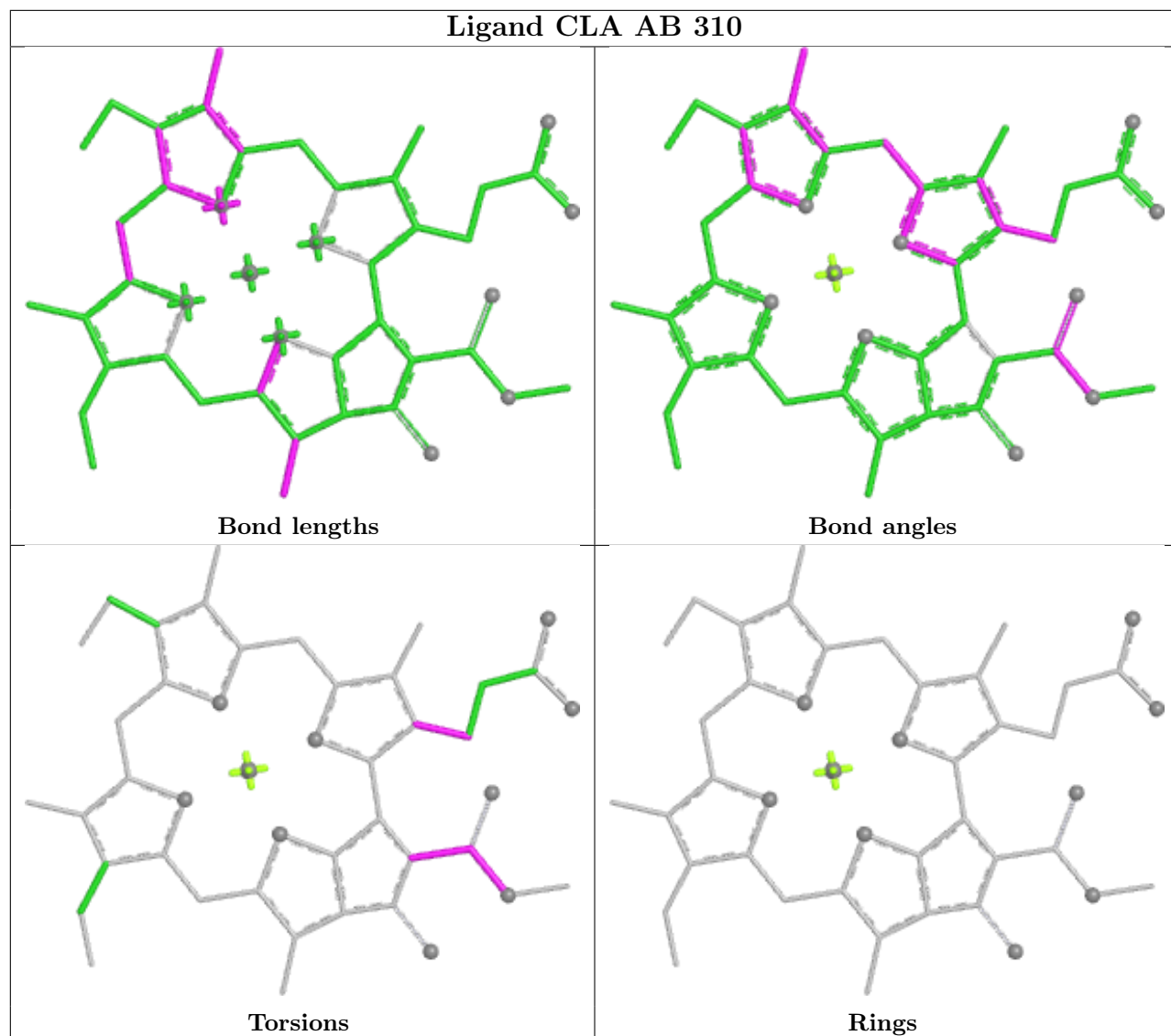
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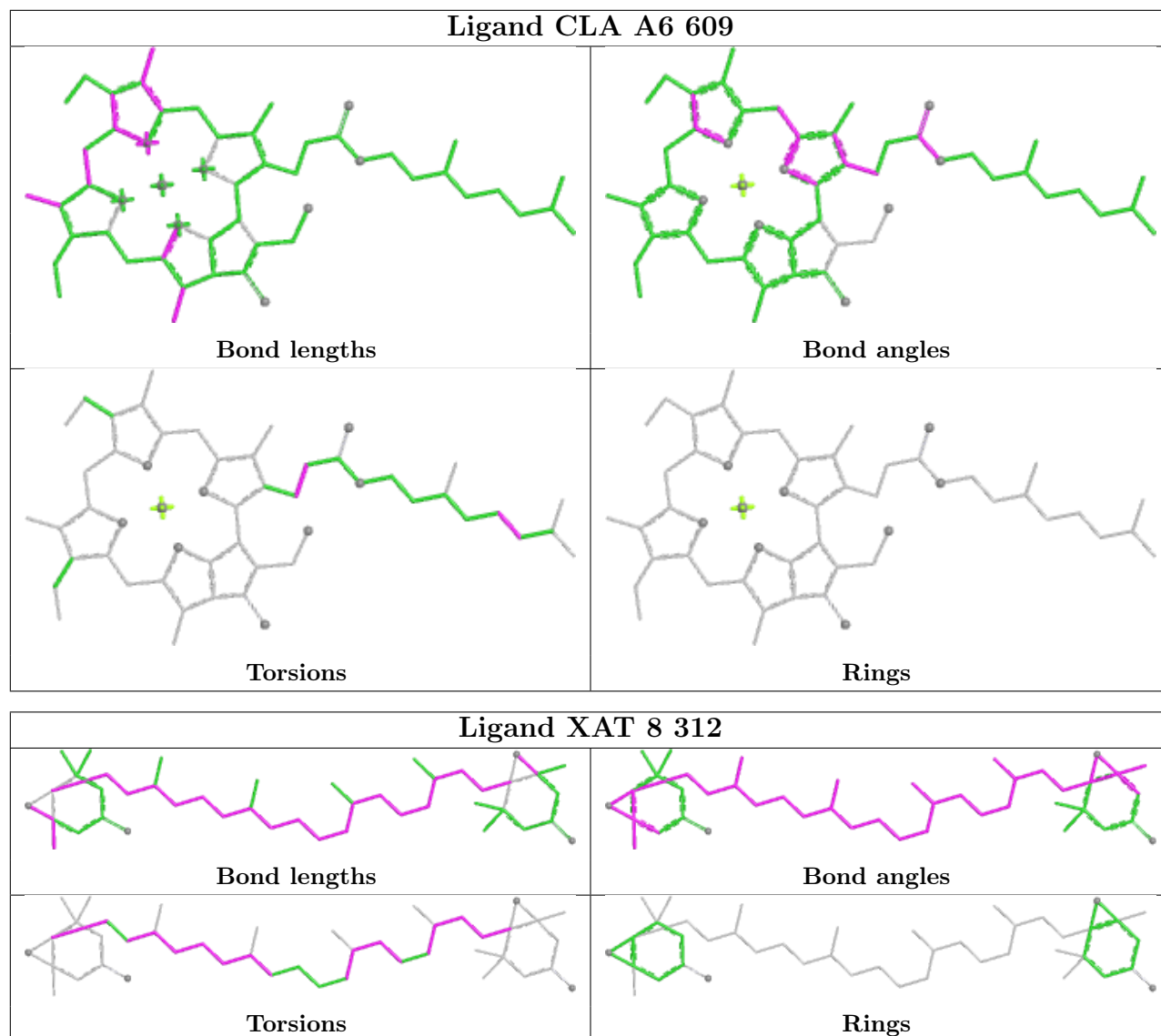


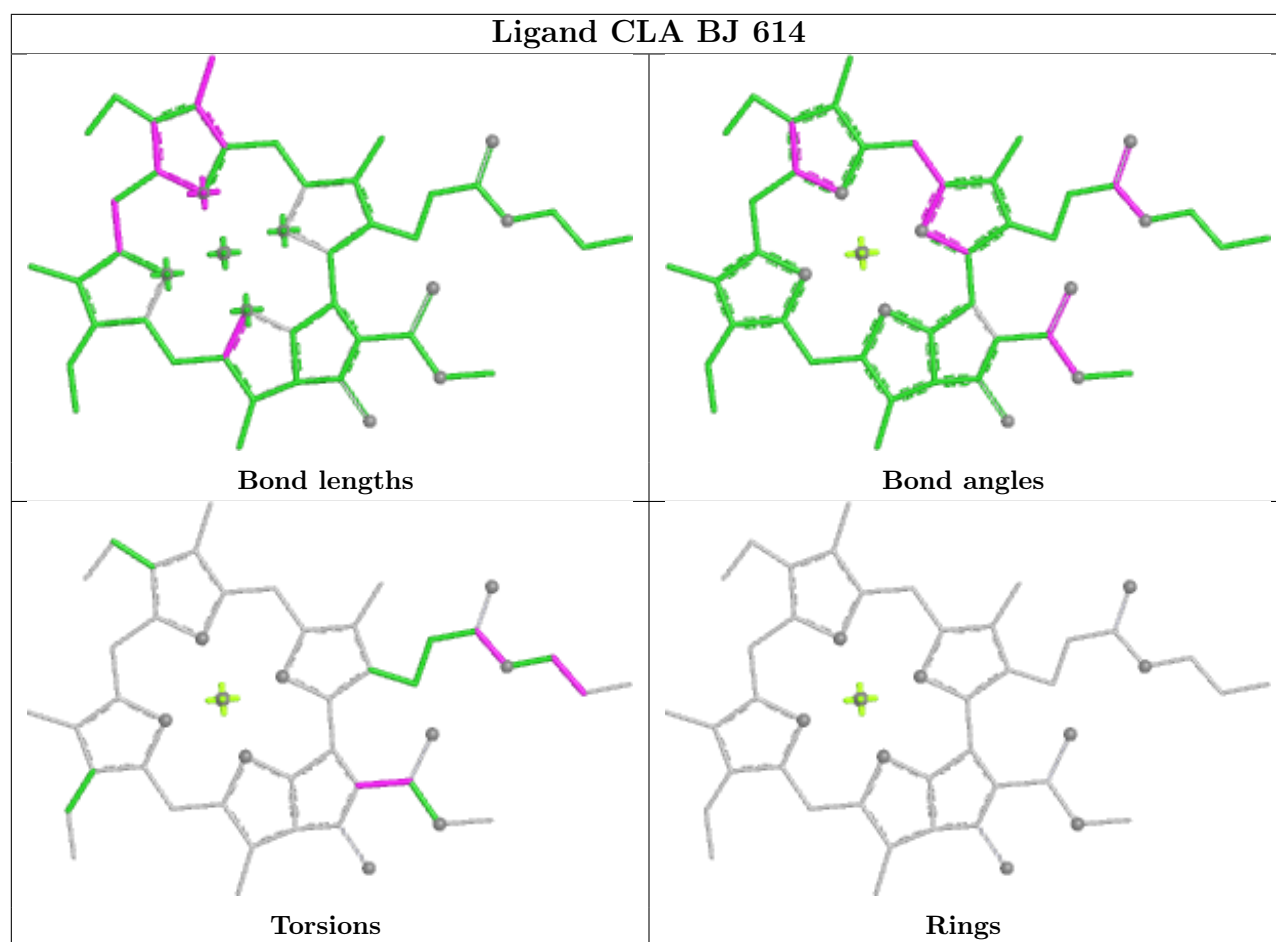
Ligand NEX A2 617

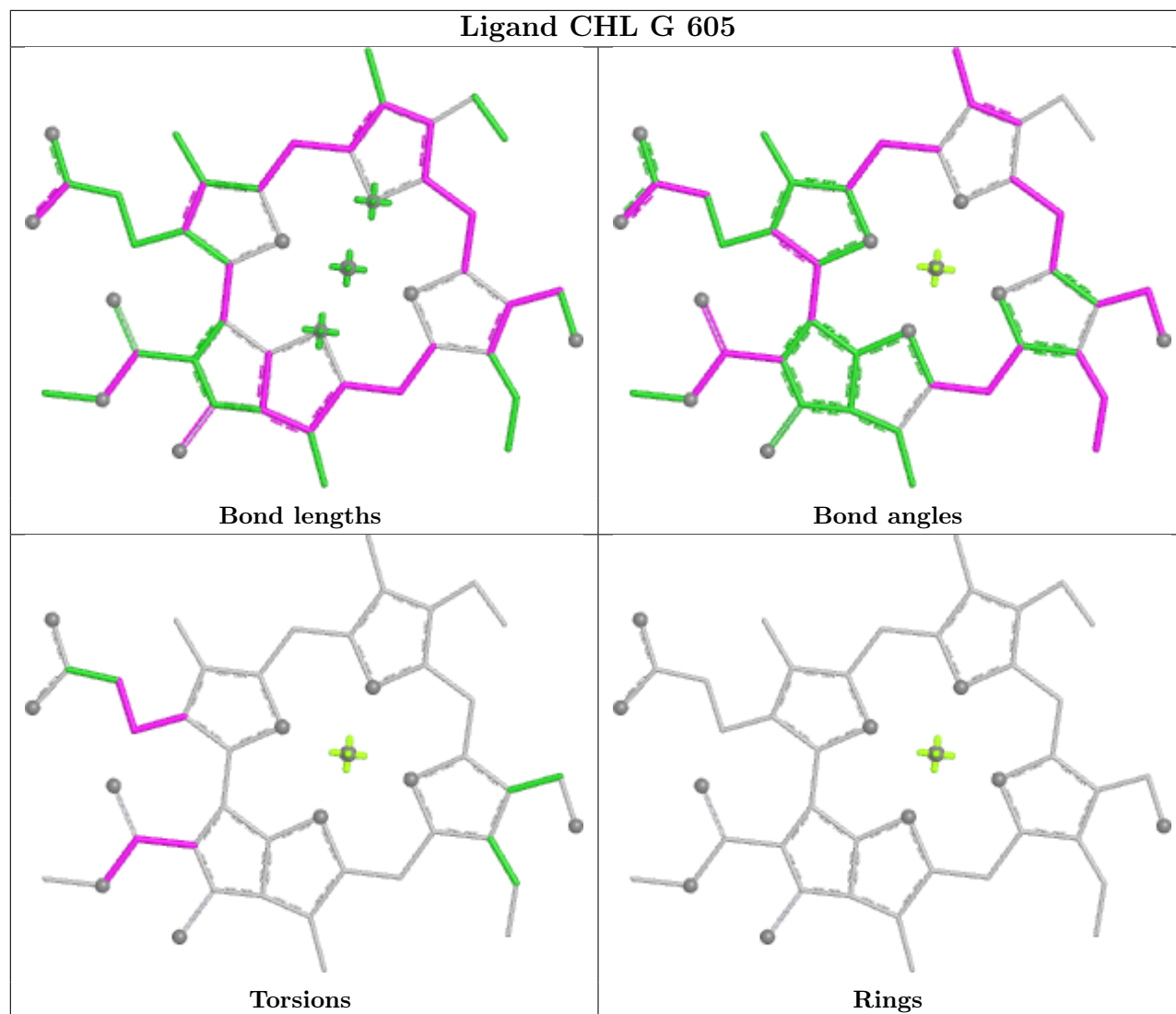


Ligand CLA AB 310

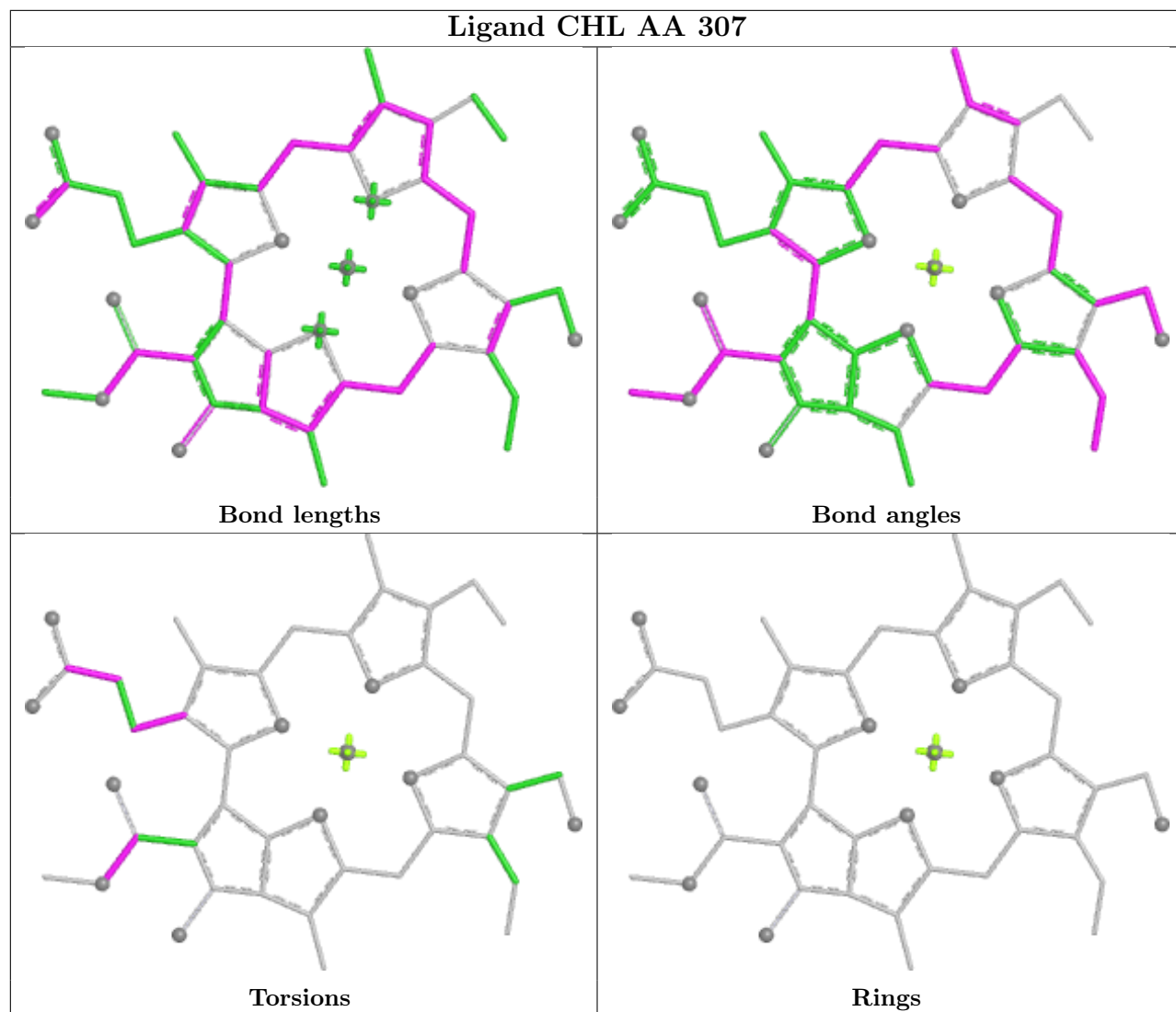


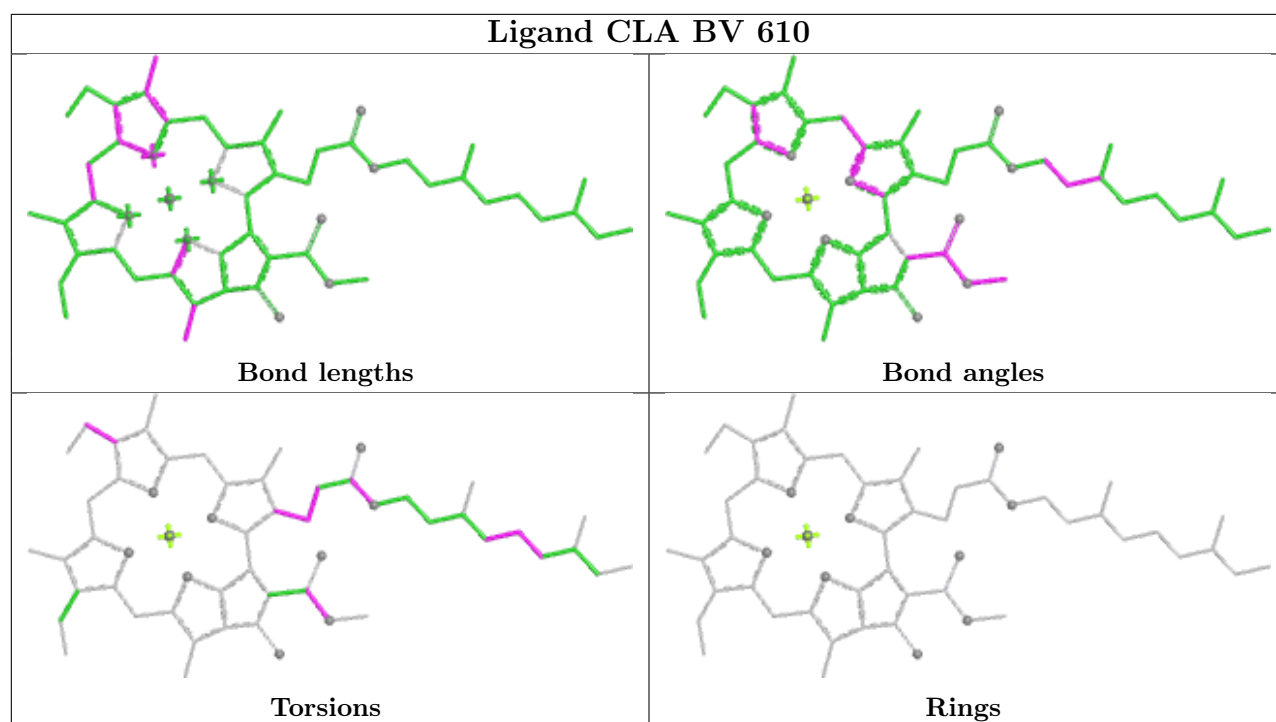




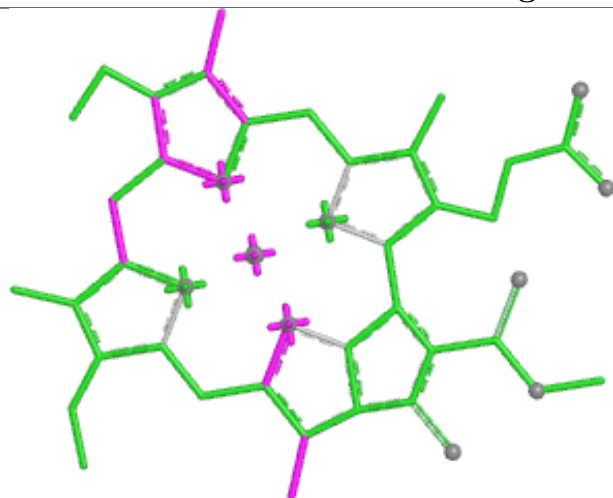


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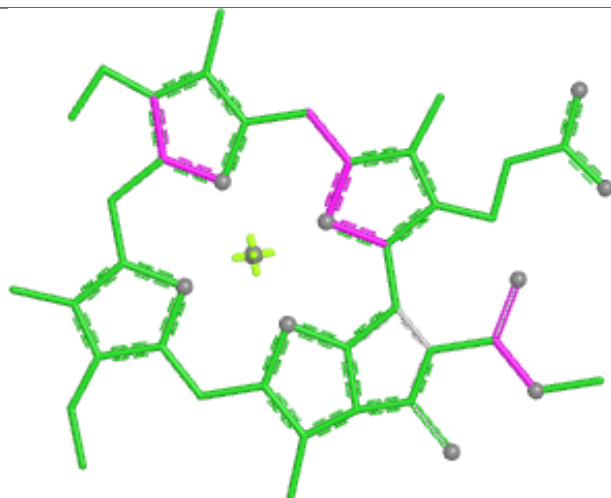




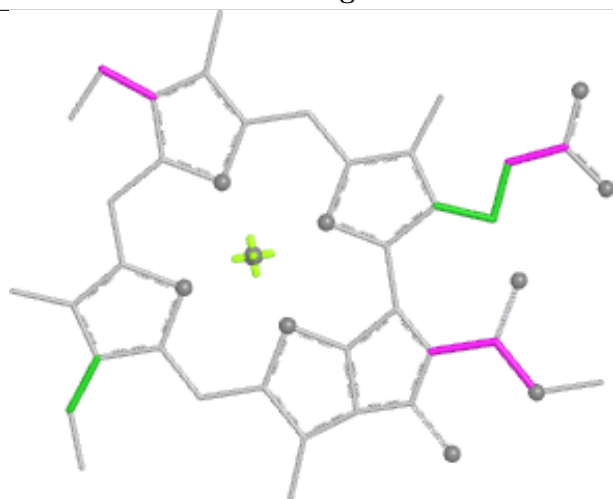
Ligand CLA 5 612



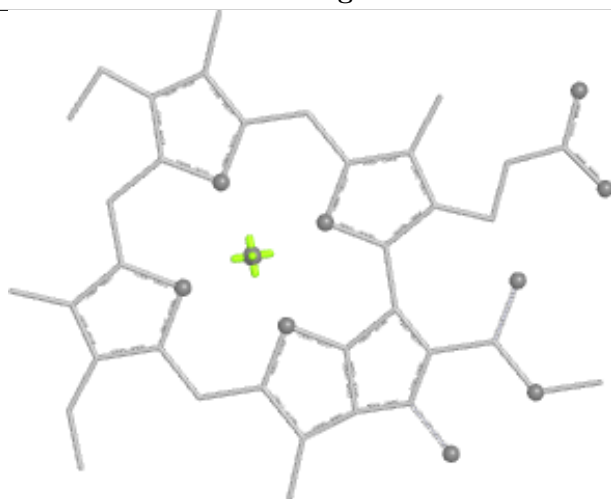
Bond lengths



Bond angles

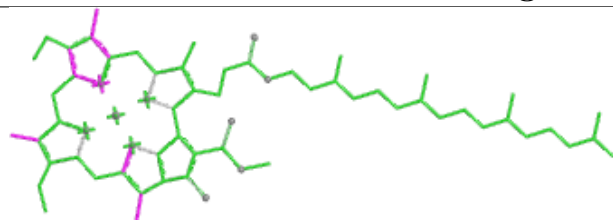


Torsions

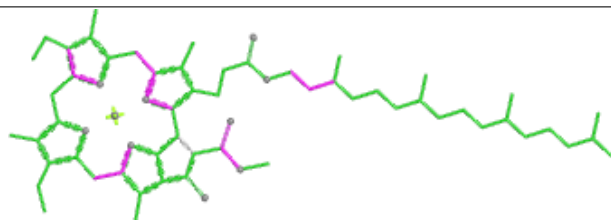


Rings

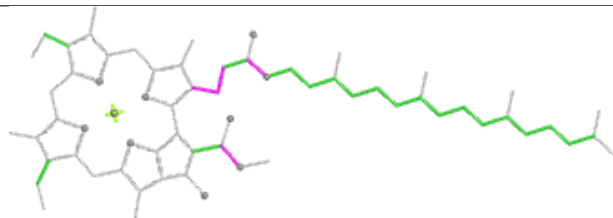
Ligand CLA a 406



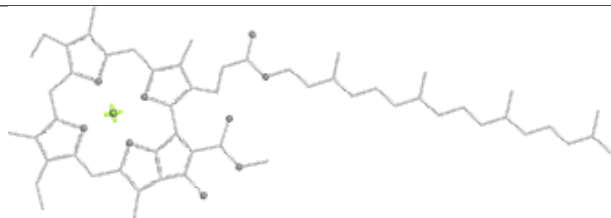
Bond lengths



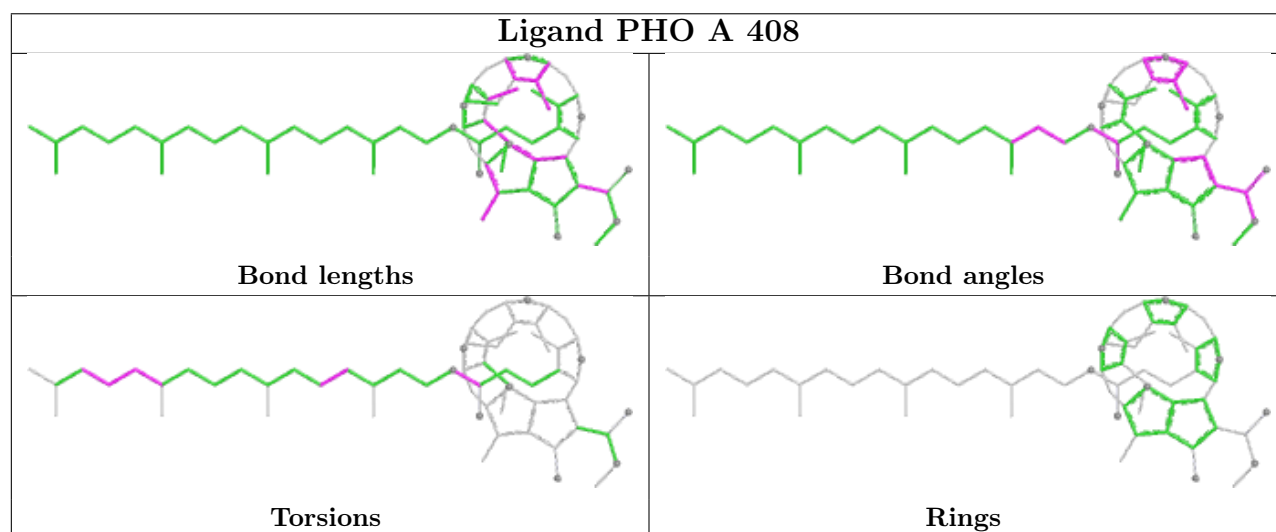
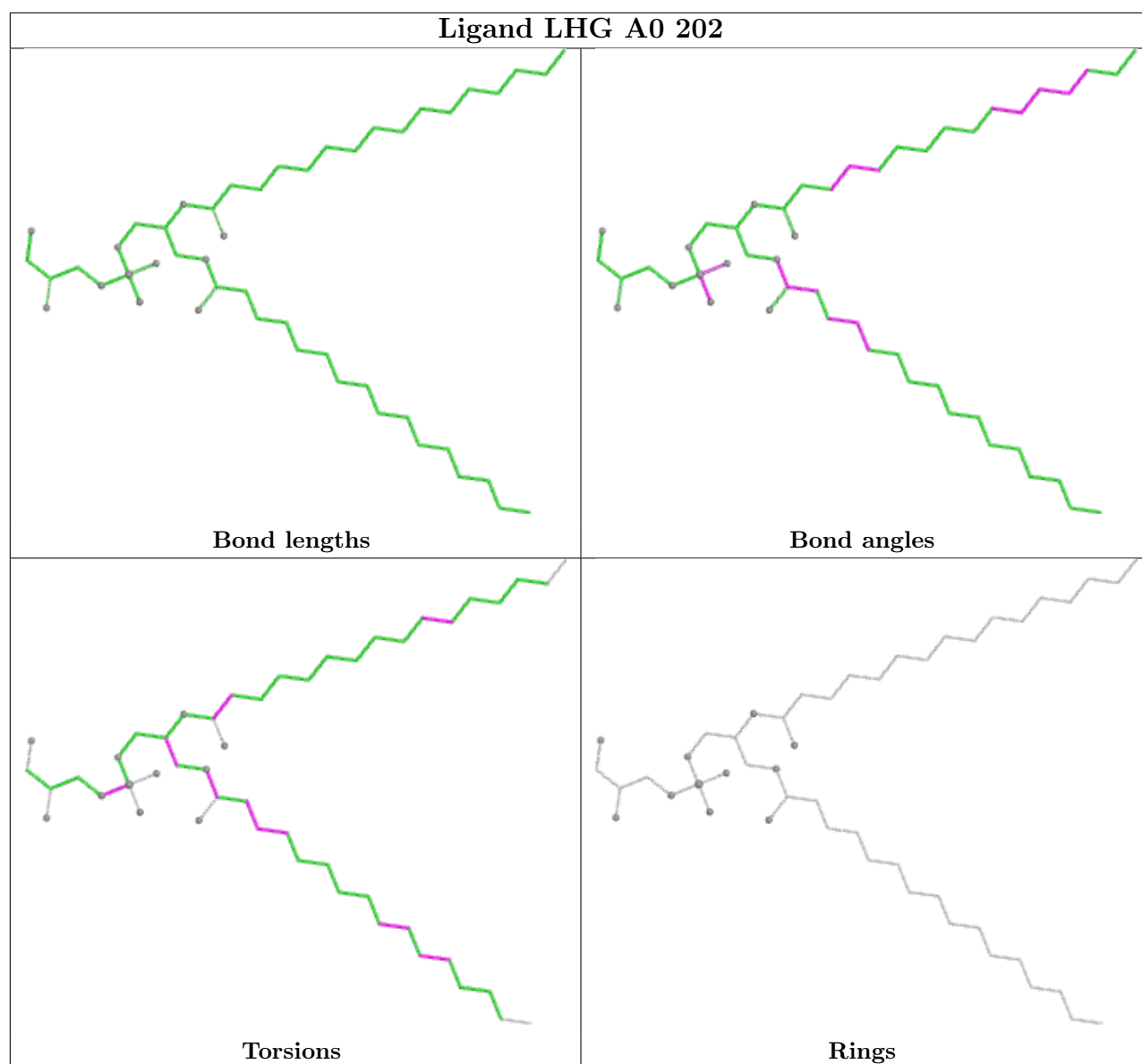
Bond angles

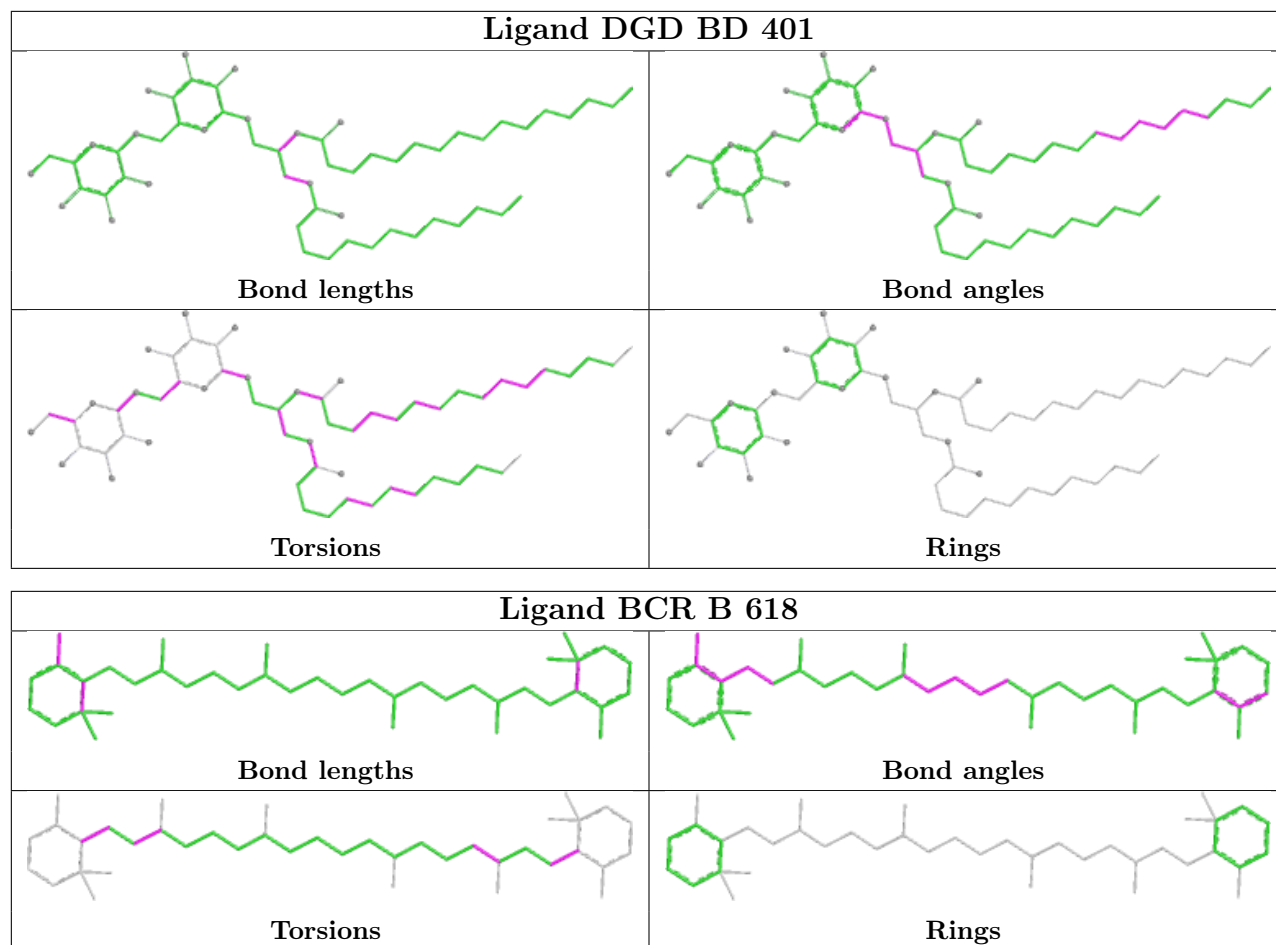


Torsions

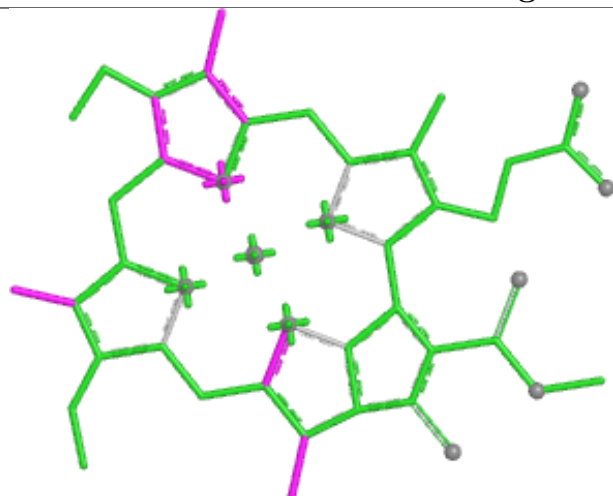


Rings





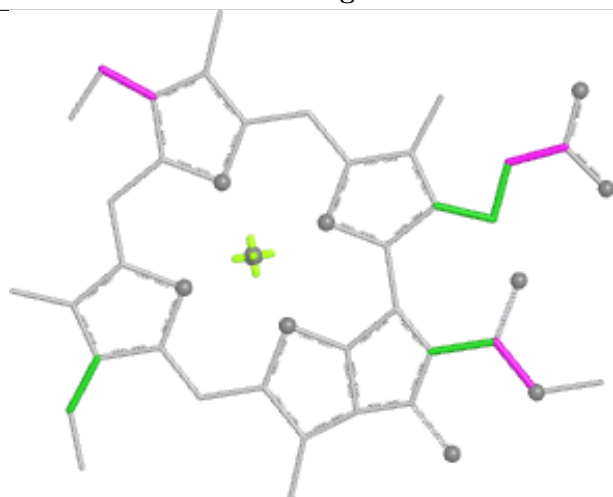
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Bond lengths



Bond angles

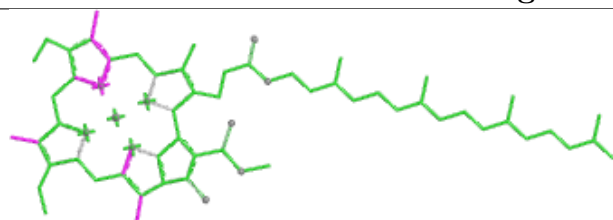


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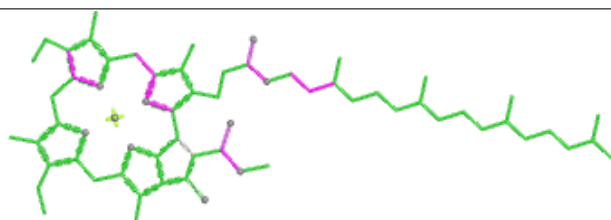


Rings

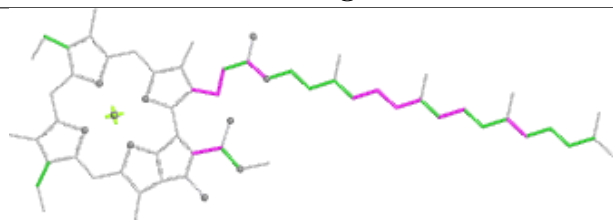
Ligand CLA v 604



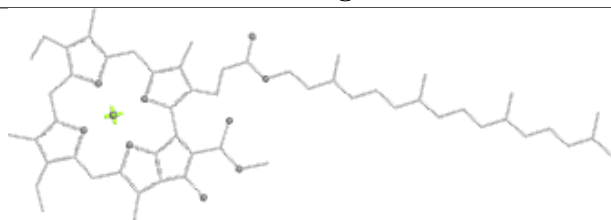
Bond lengths



Bond angles

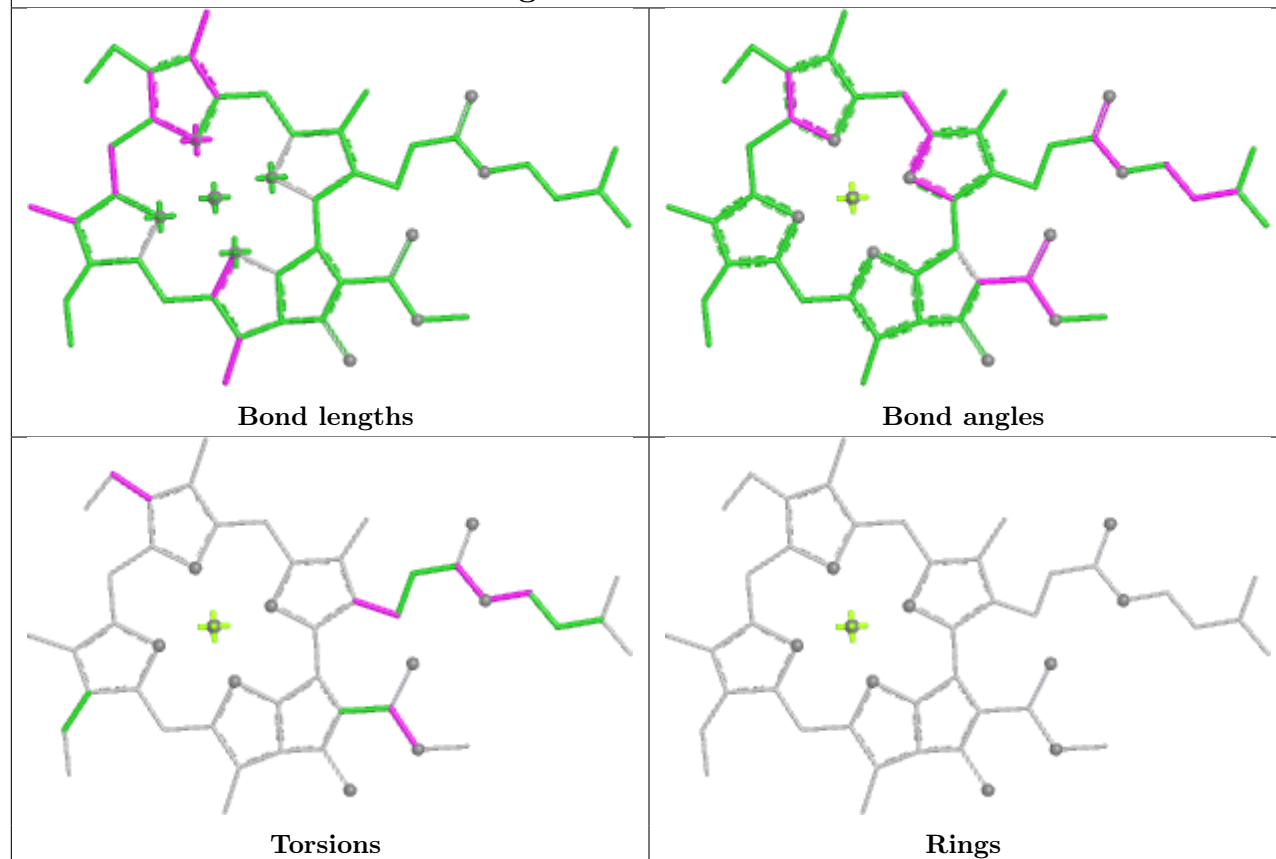


Torsions

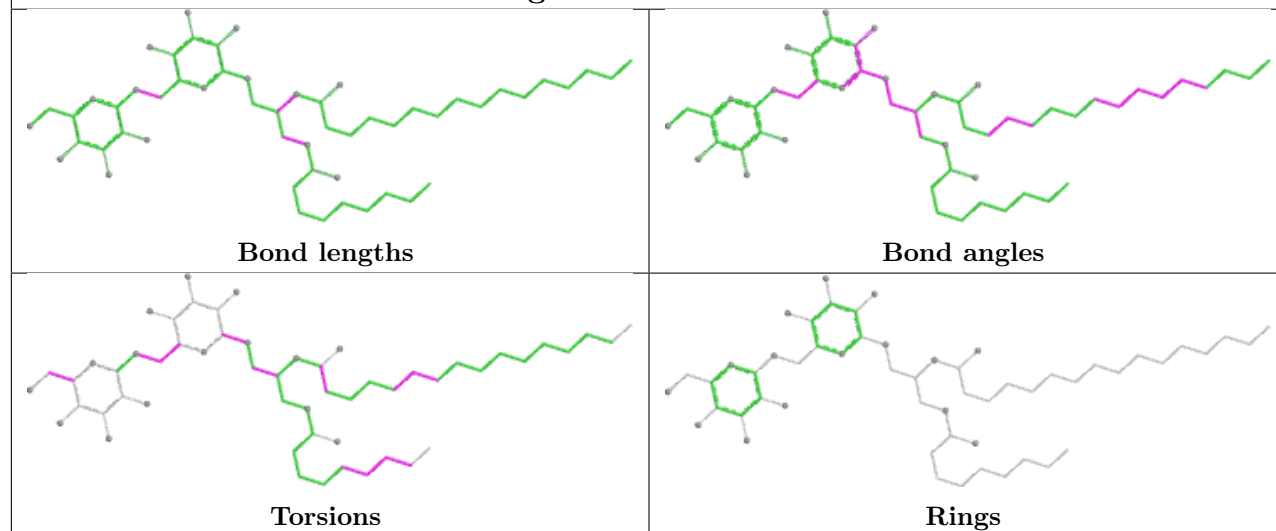


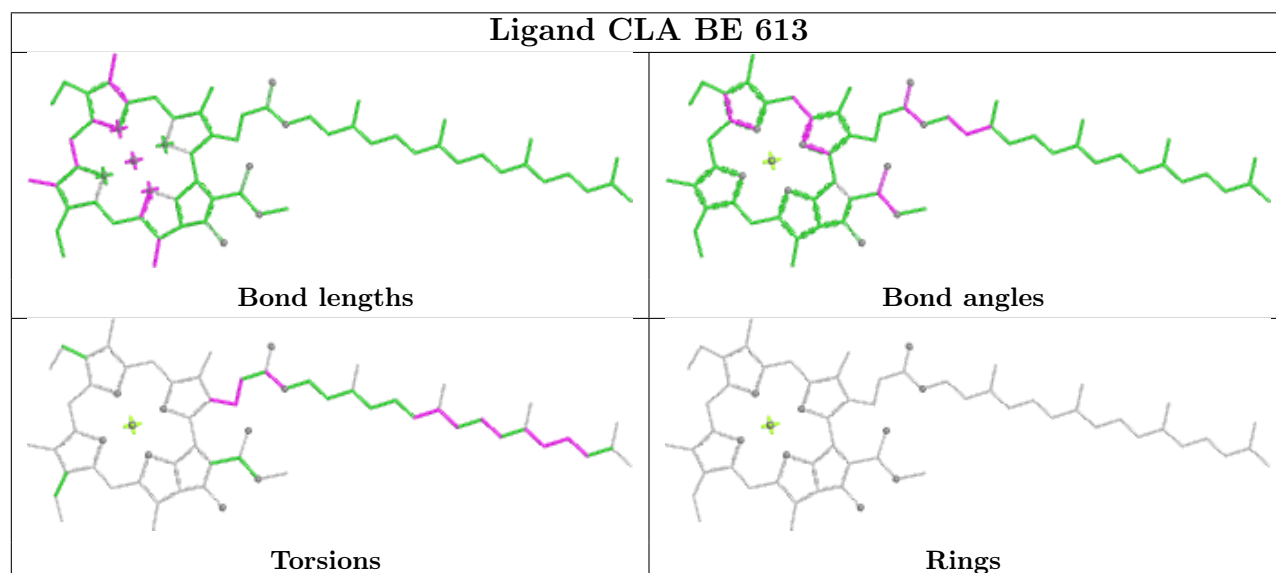
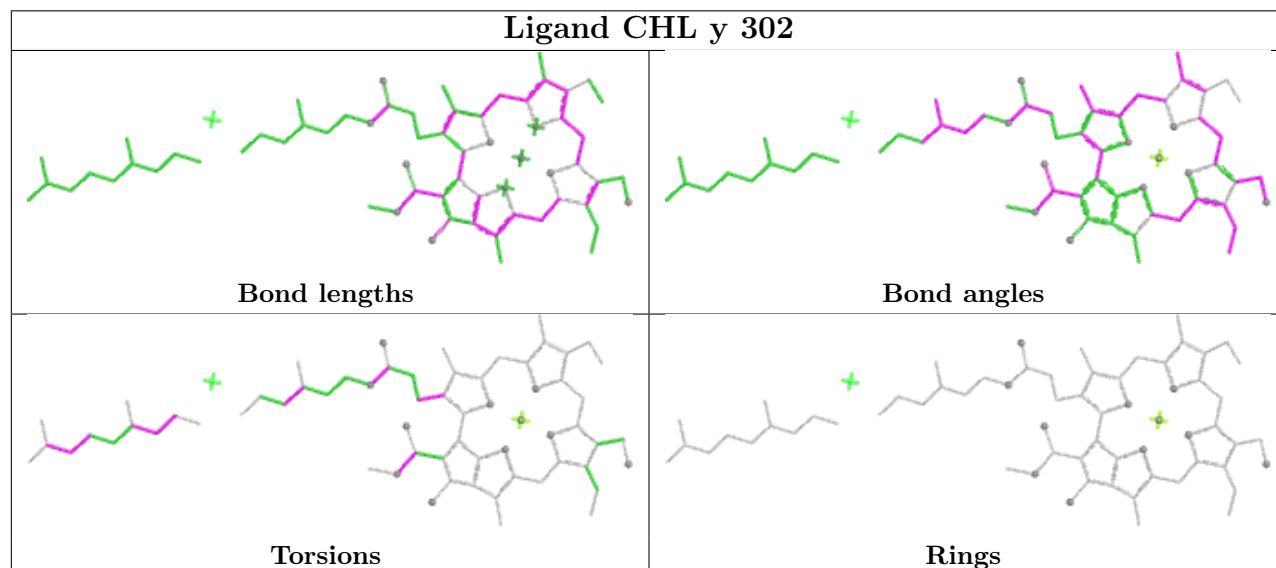
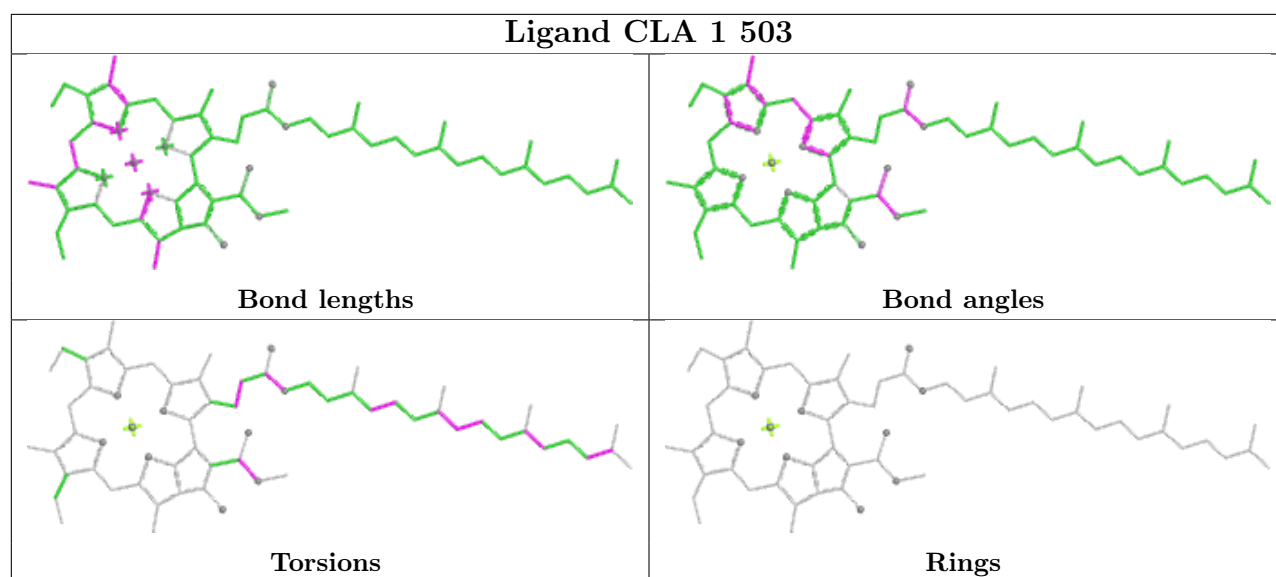
Rings

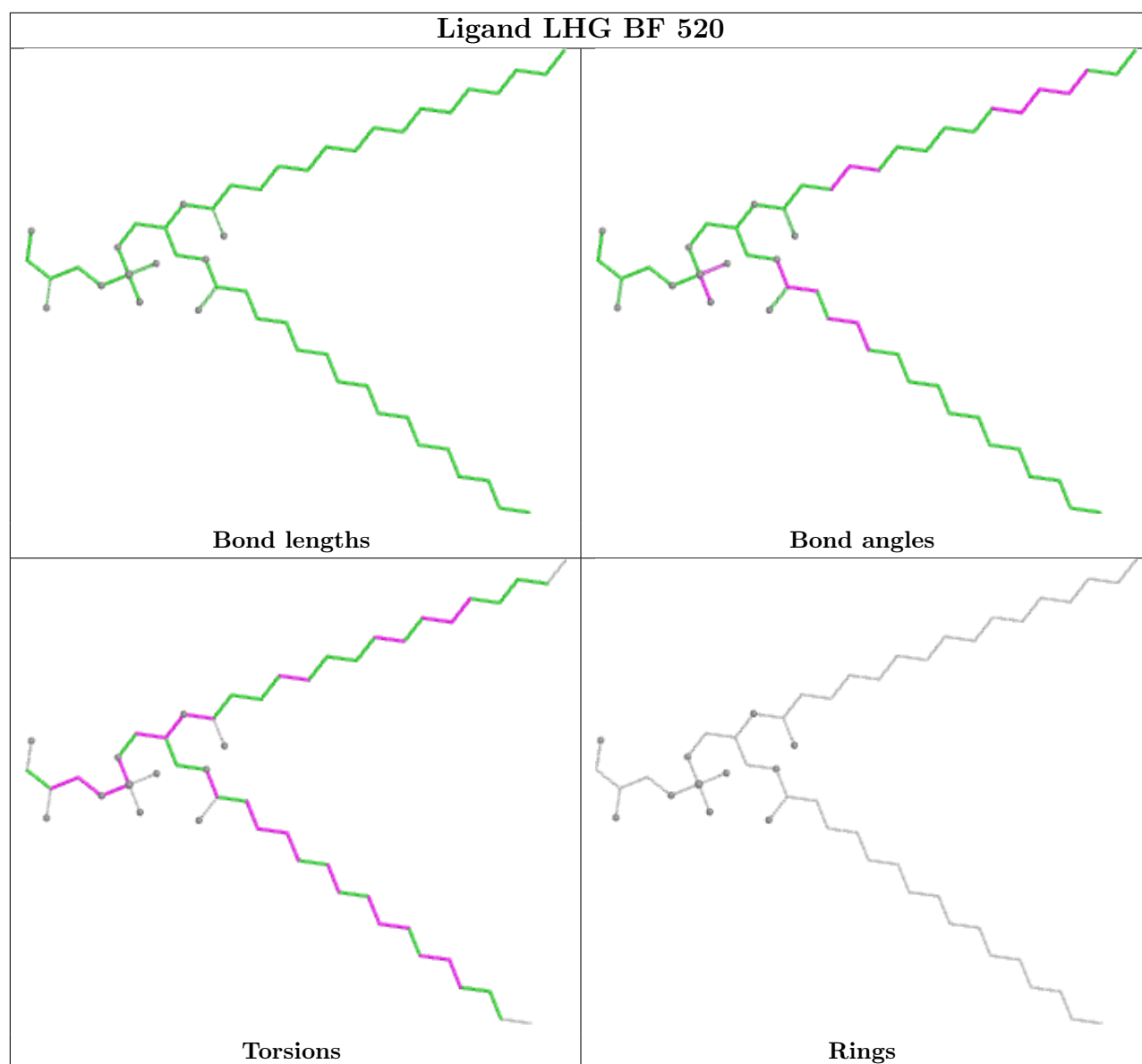
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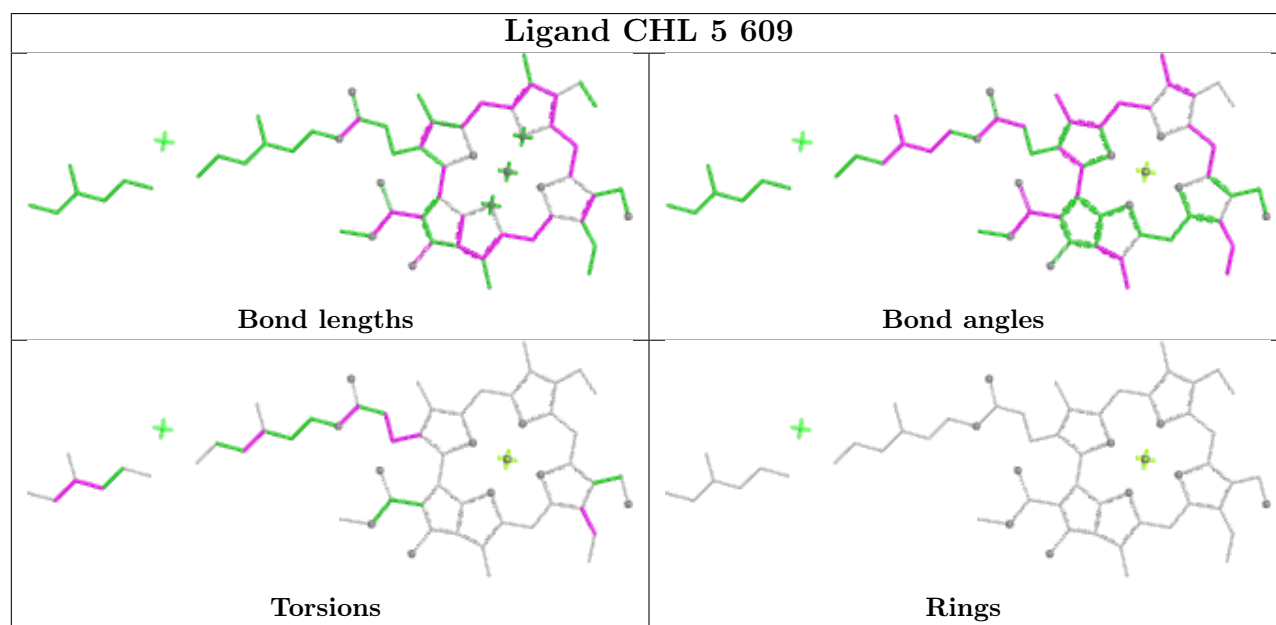
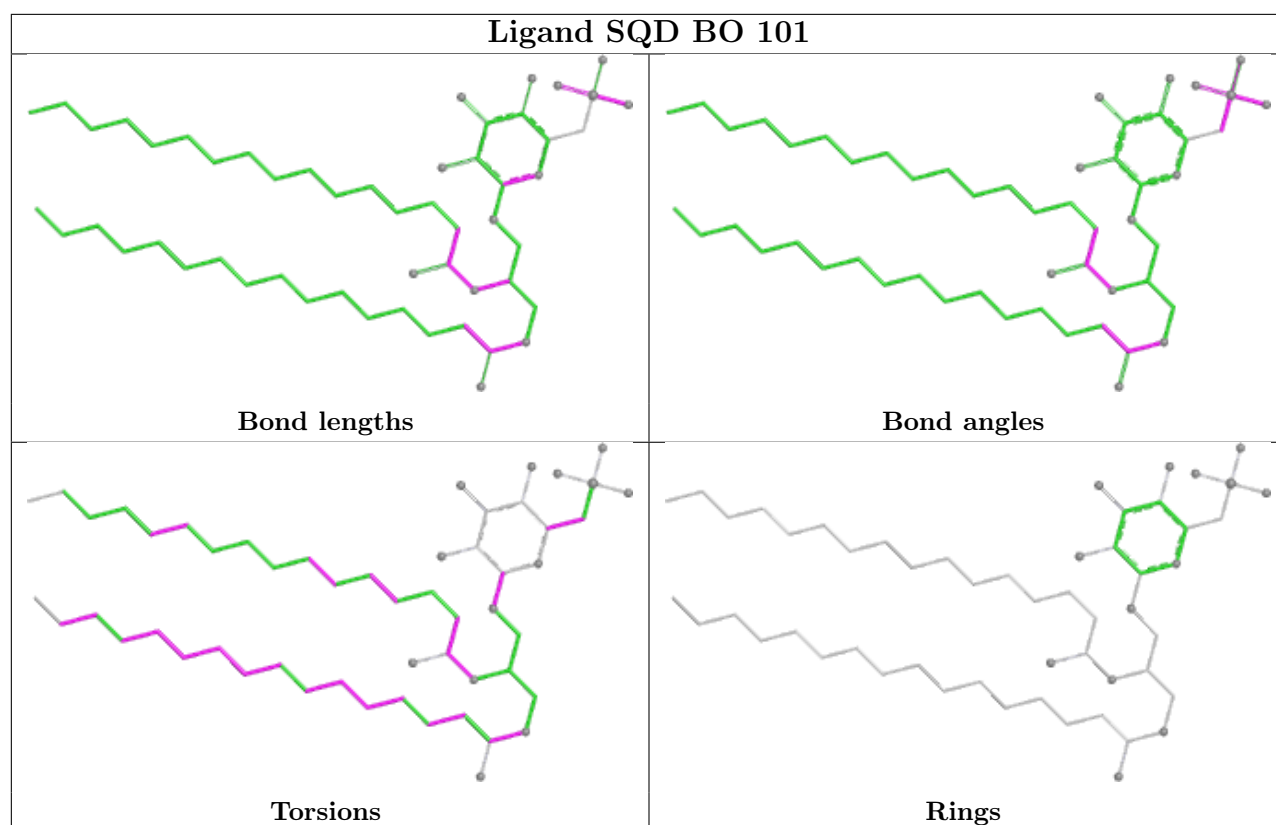


Ligand DGD C 516

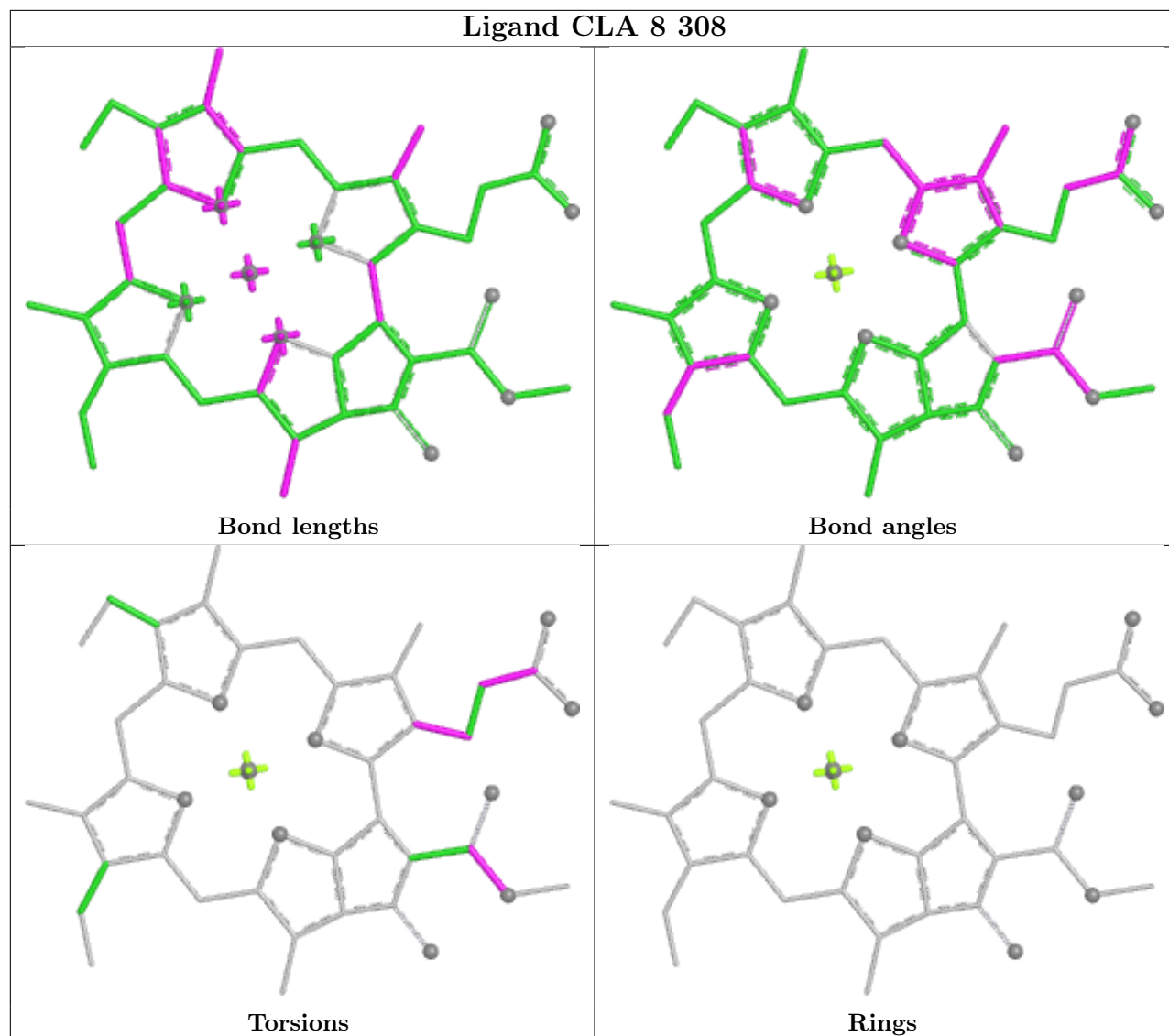




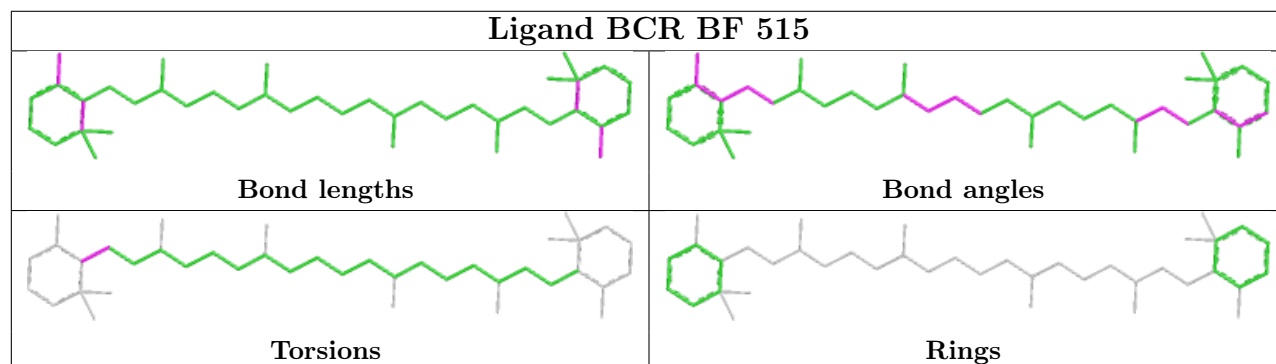


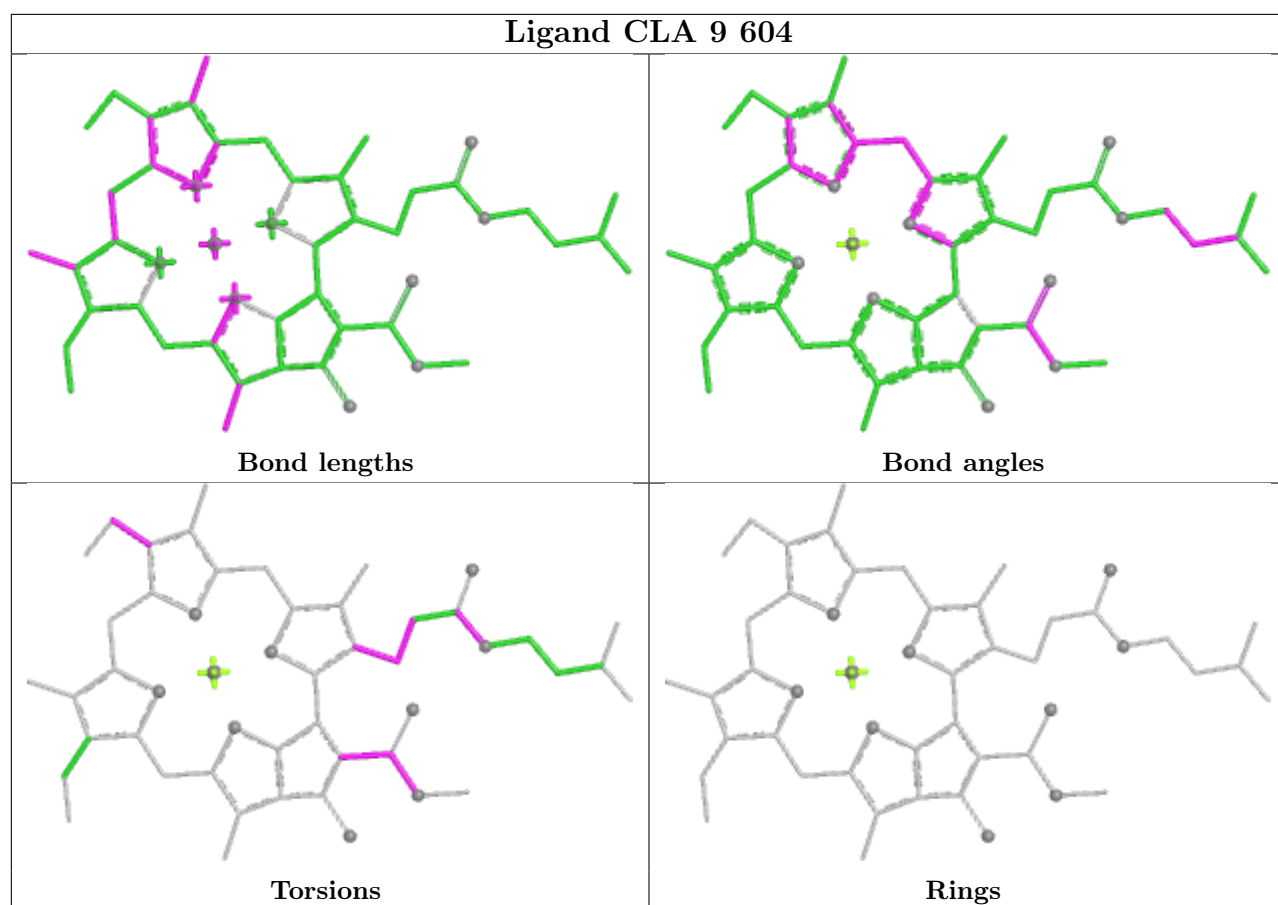


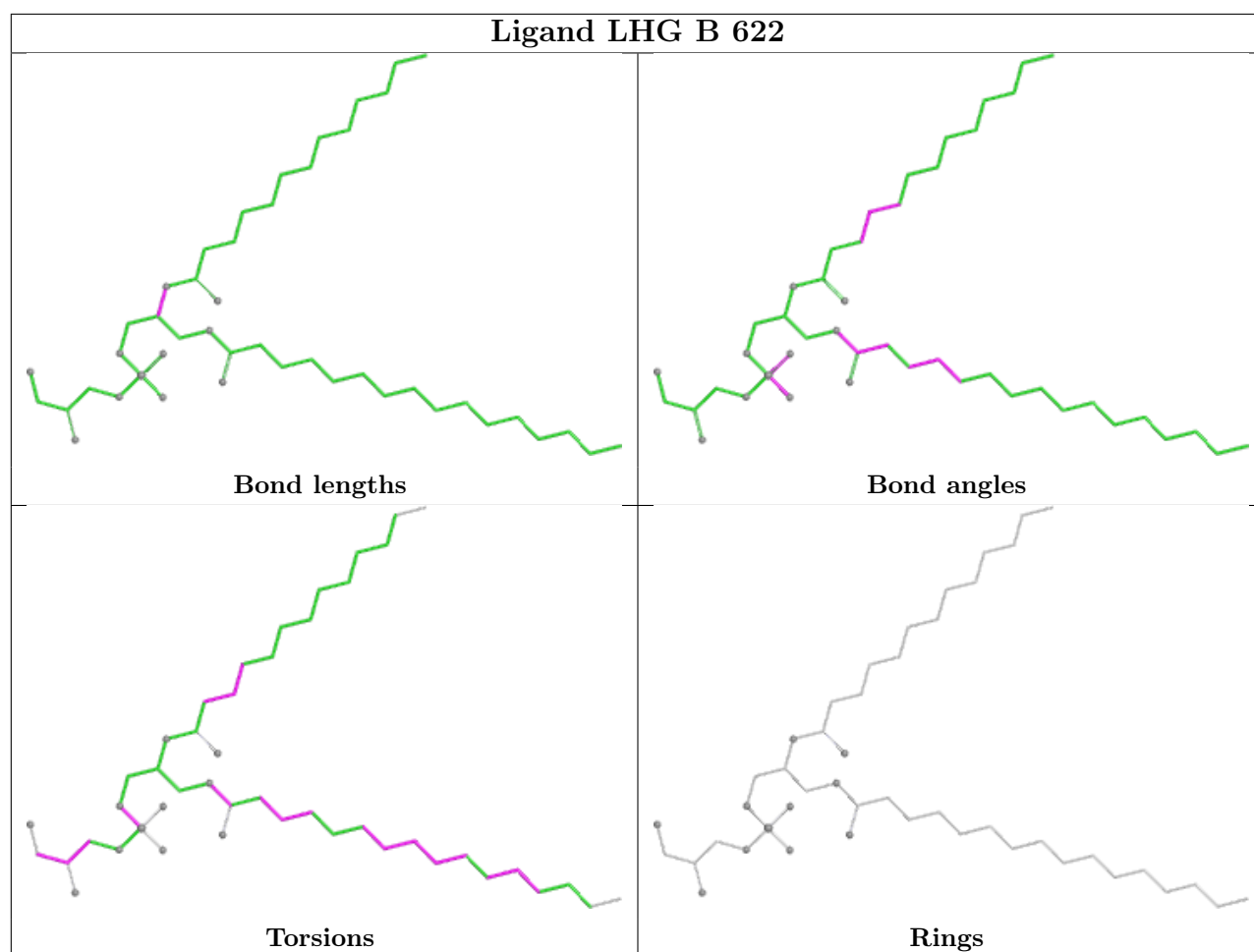
Ligand CLA 8 308

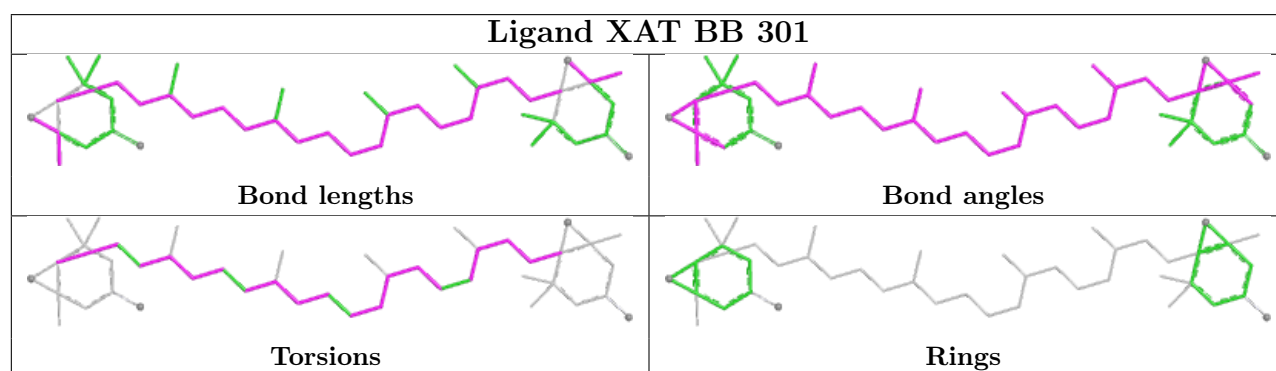
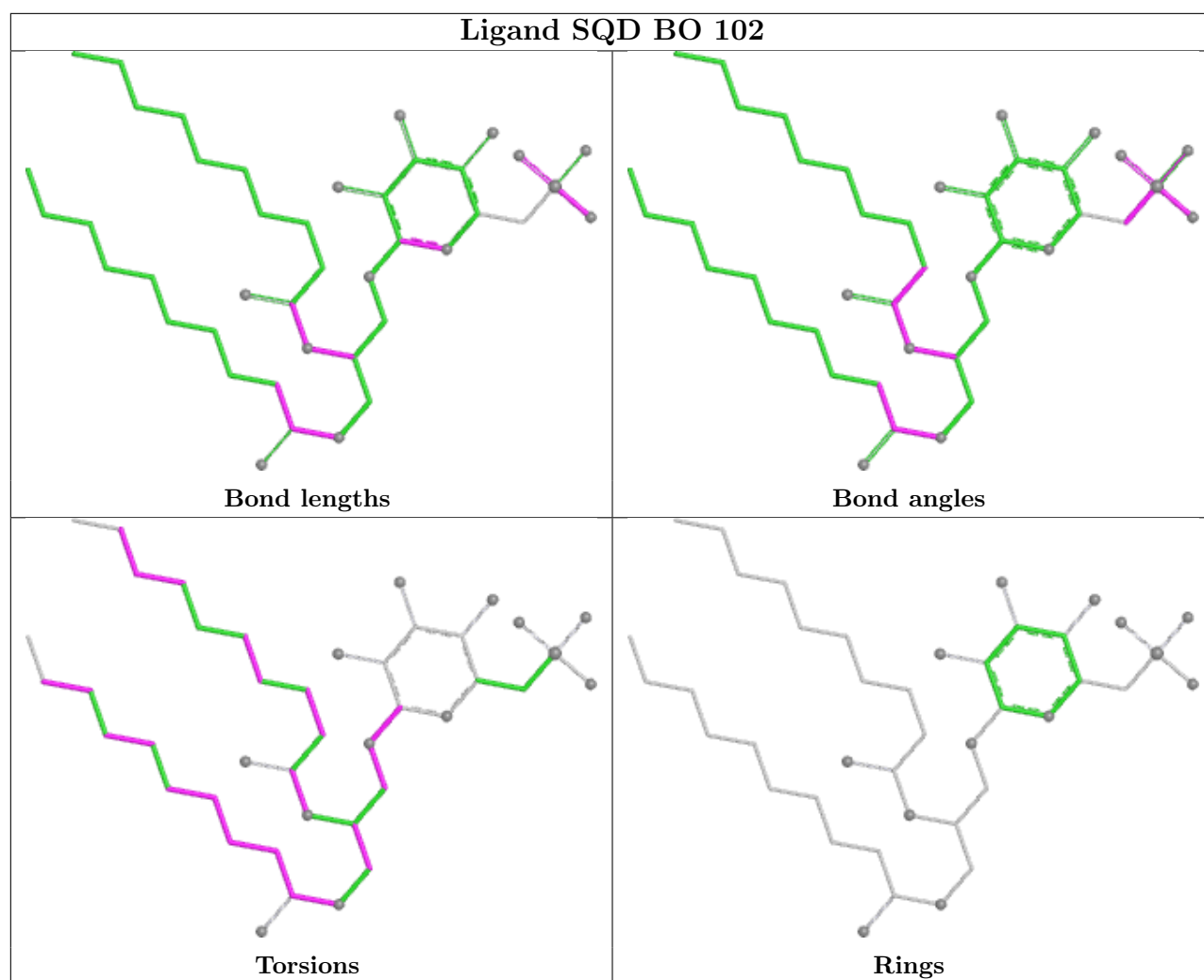


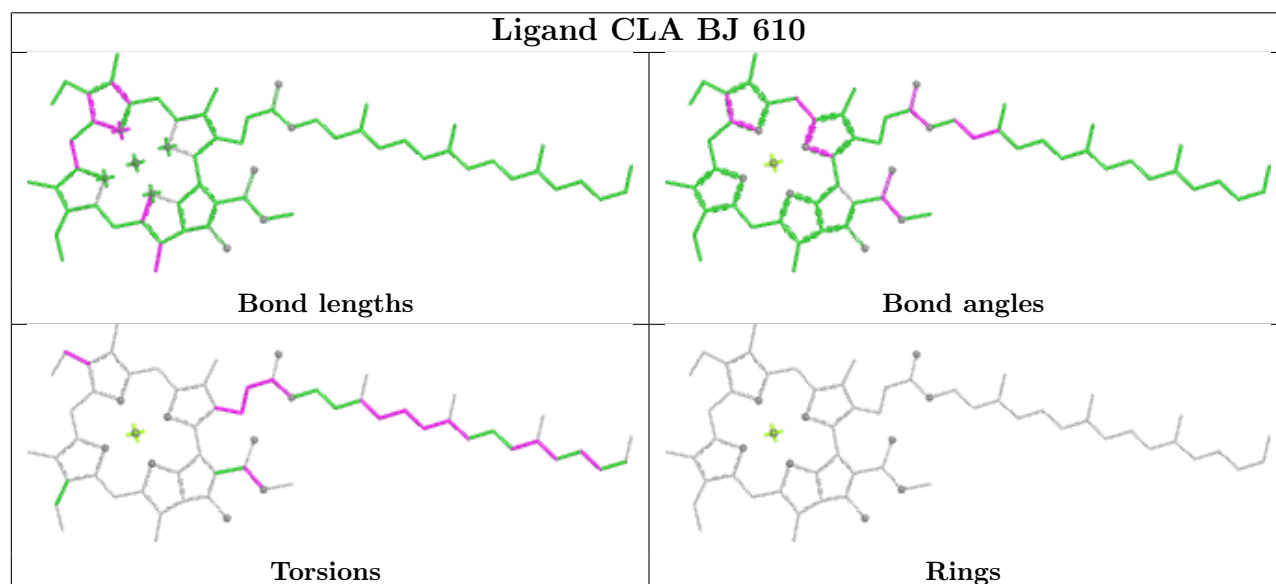
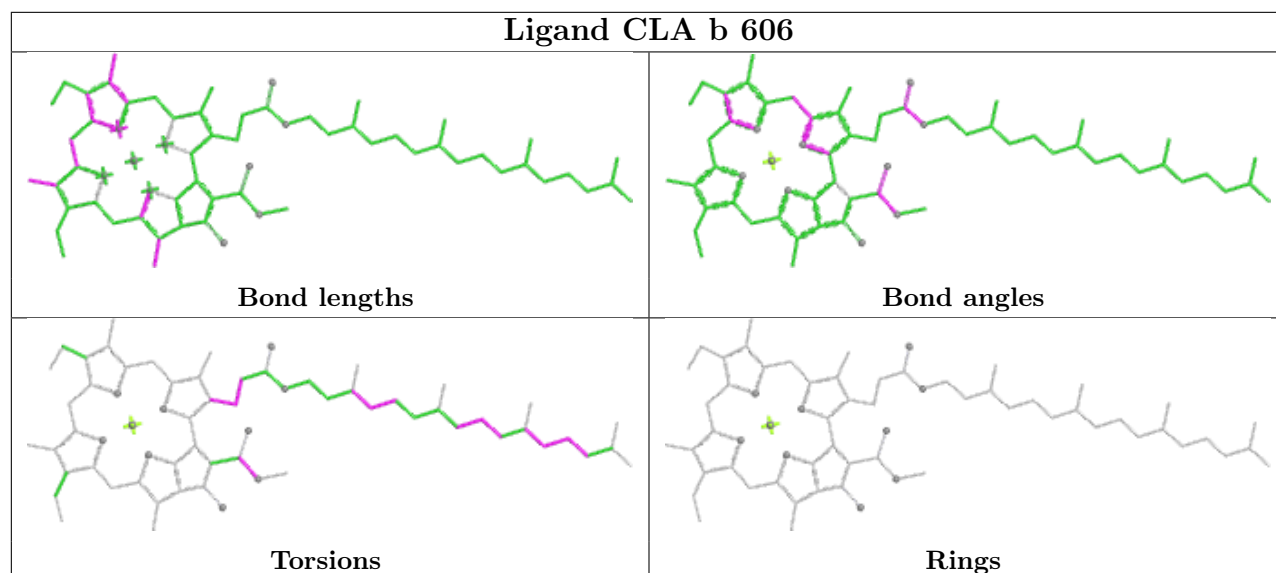
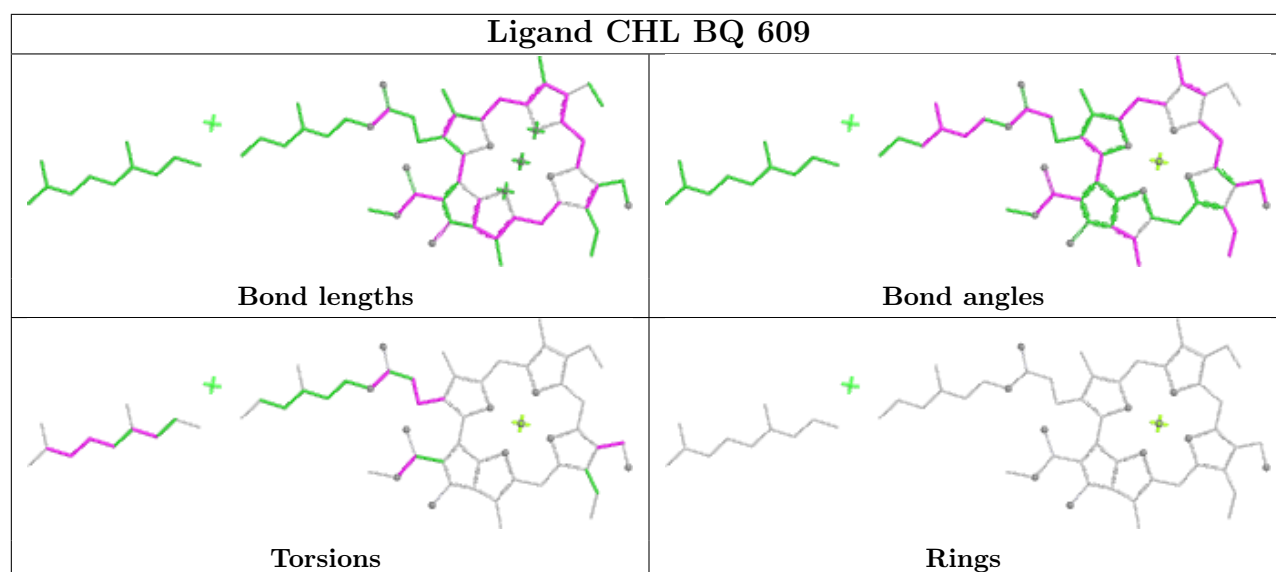
Ligand BCR BF 515

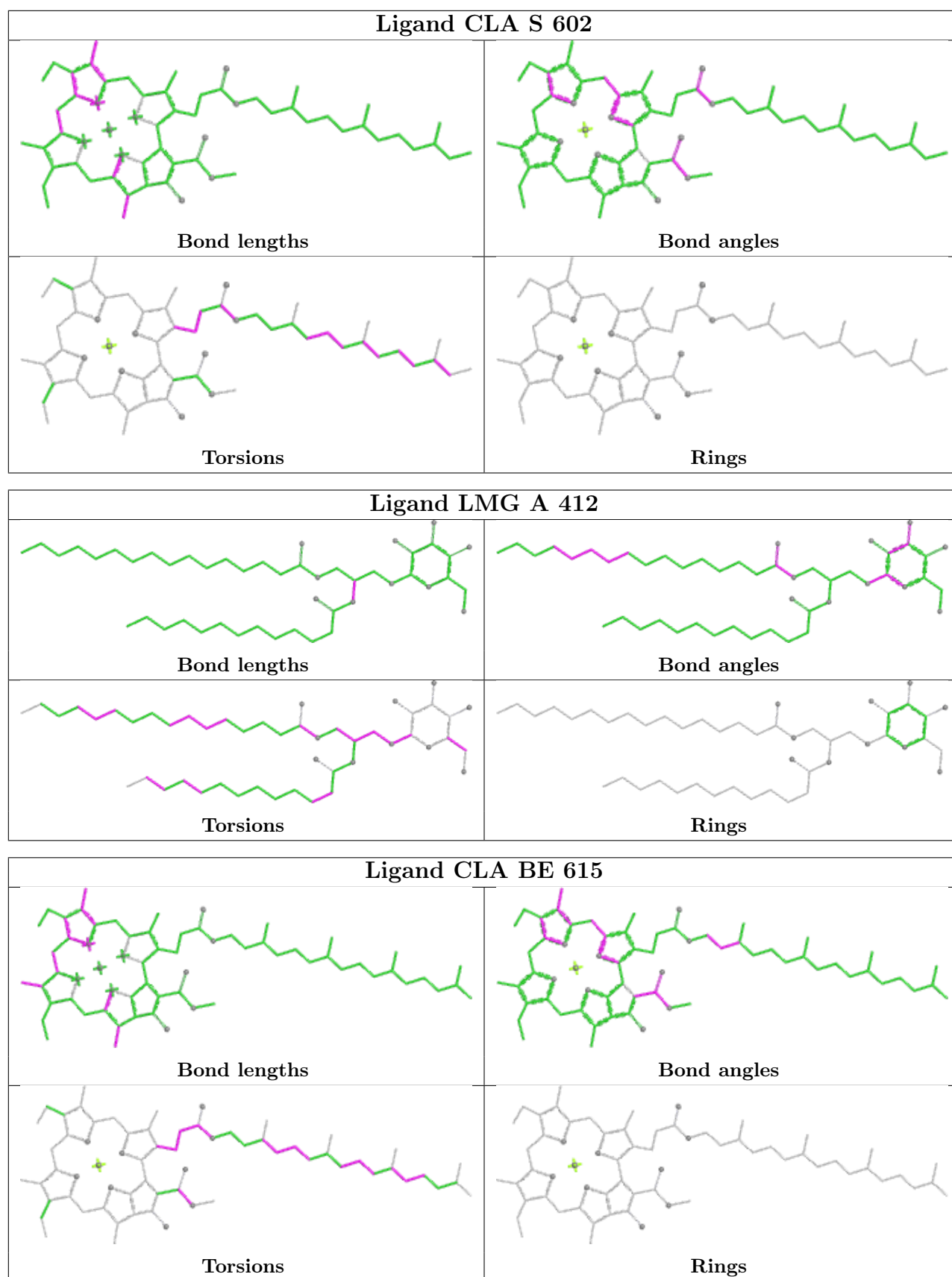




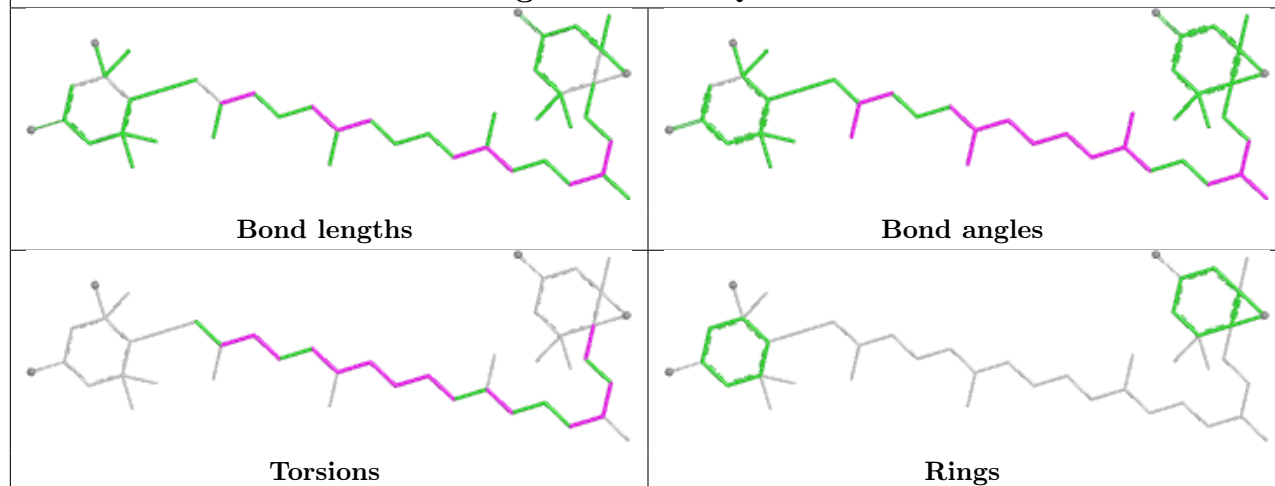




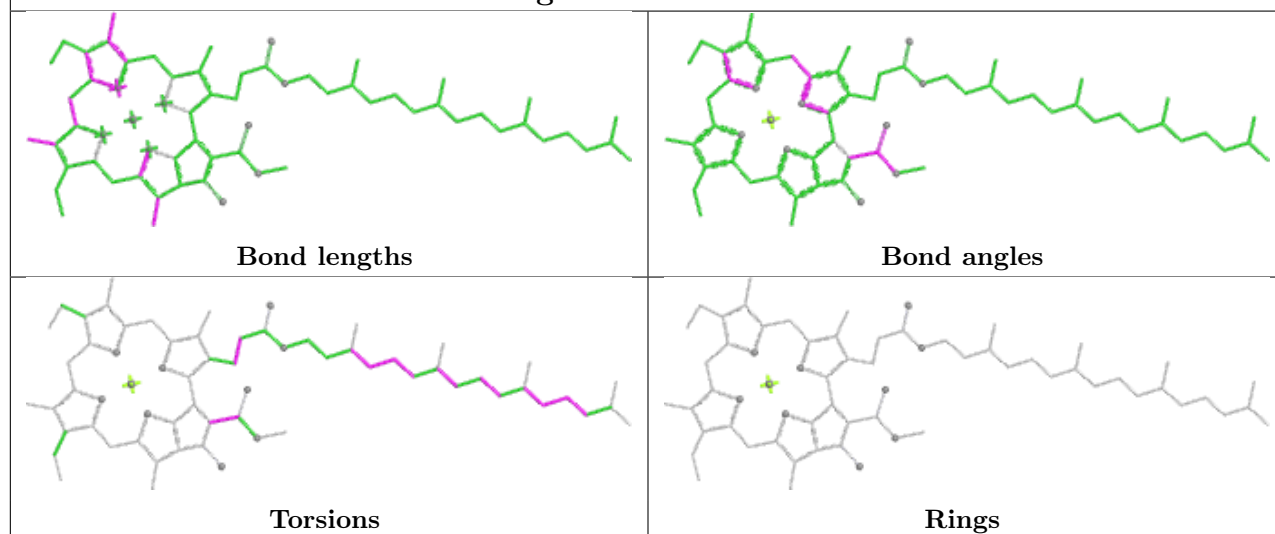




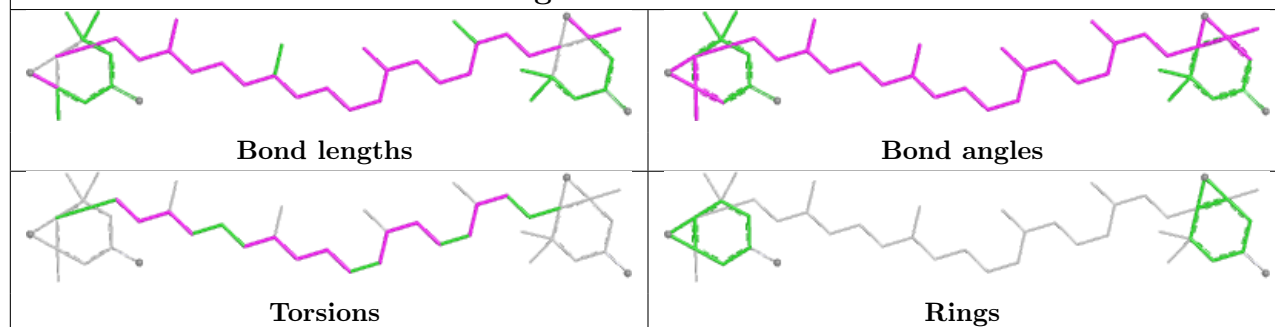
Ligand NEX BQ 617

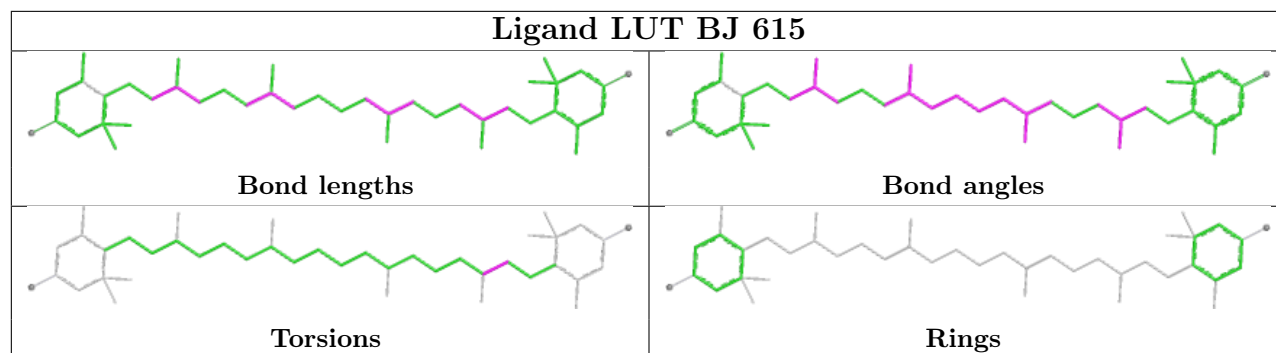
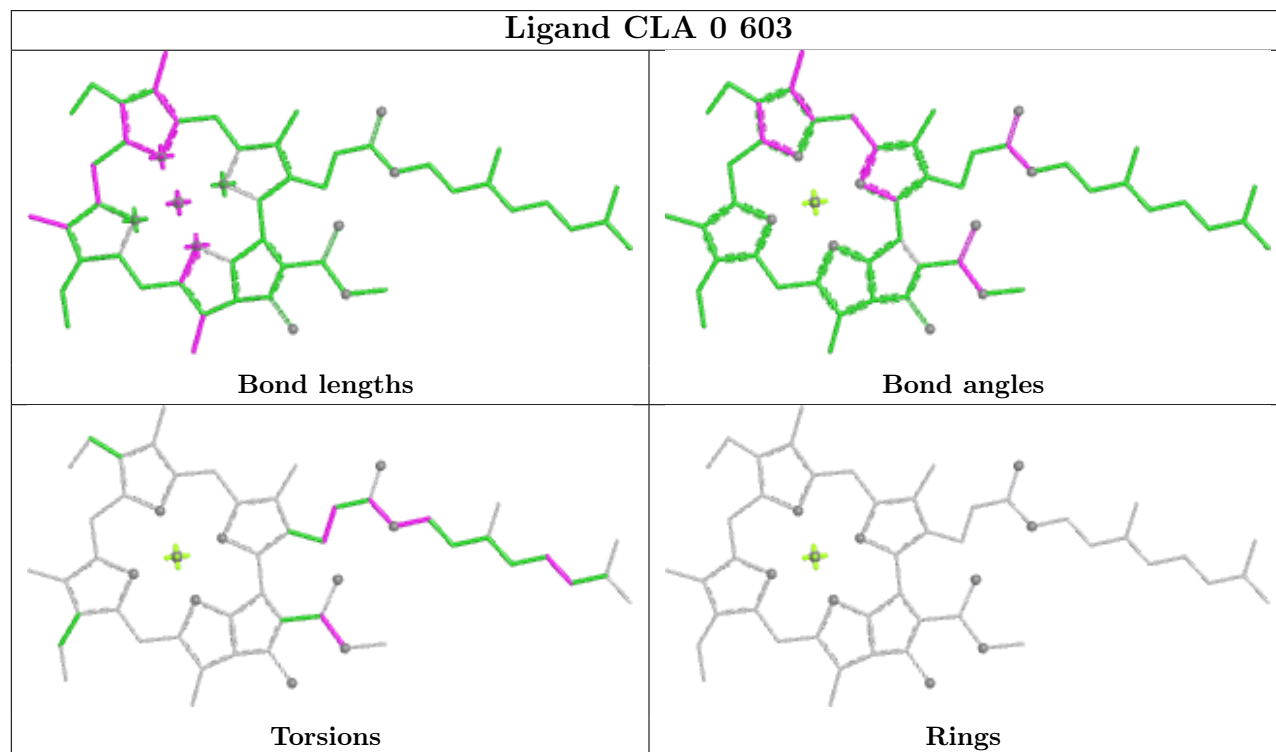
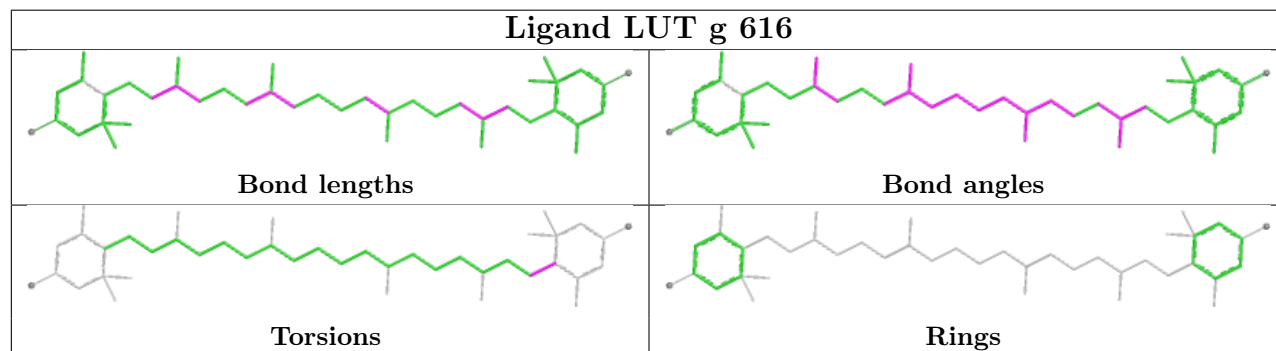


Ligand CLA c 506

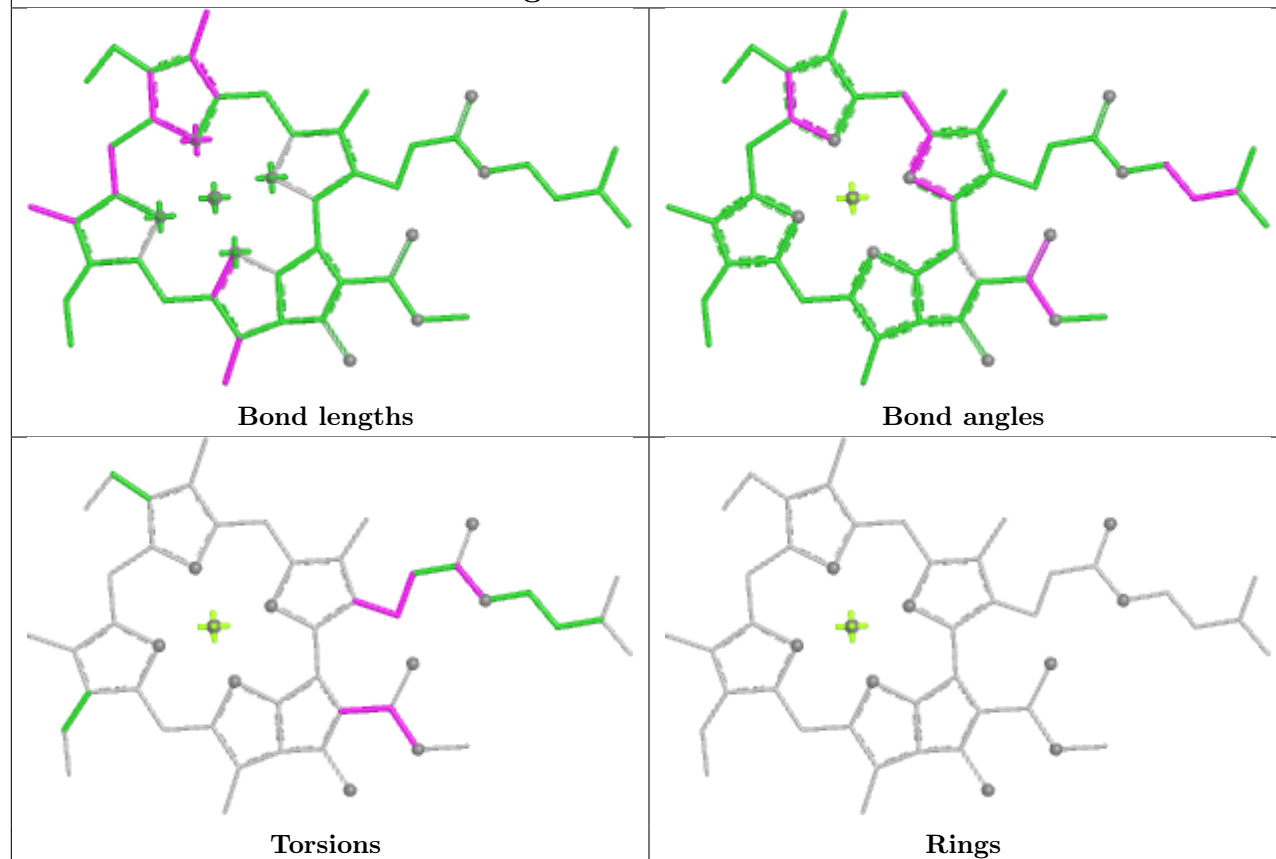


Ligand XAT 5 619

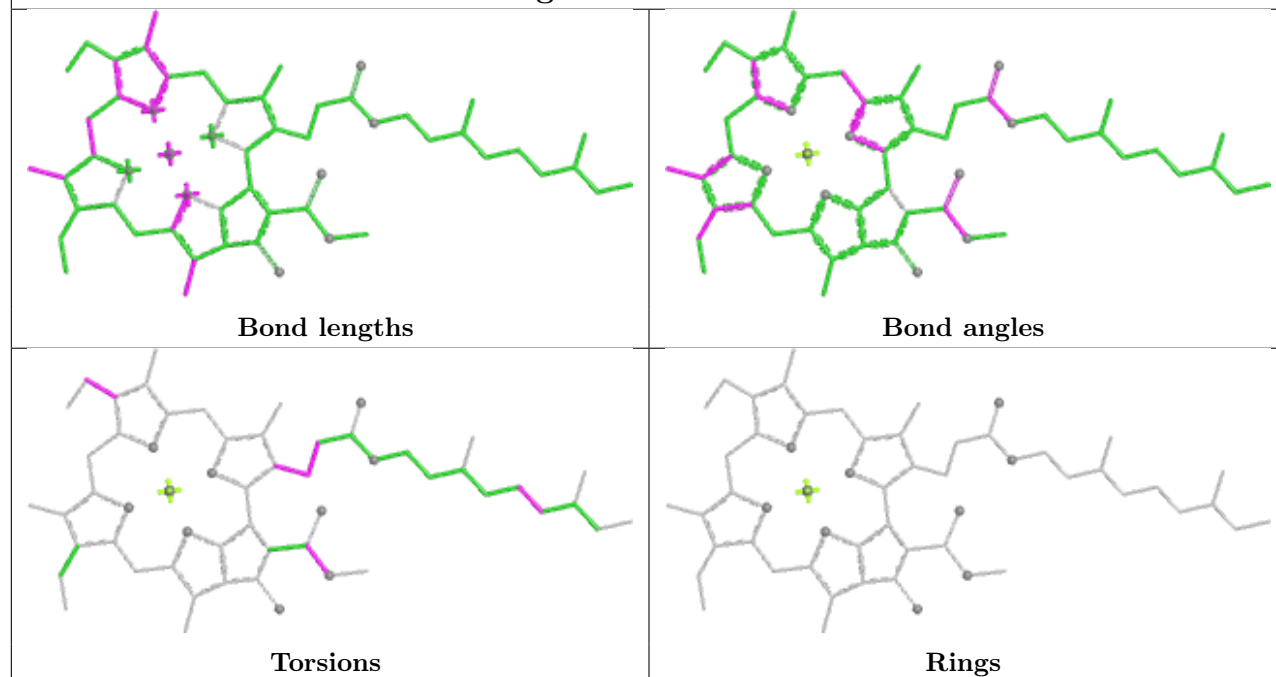


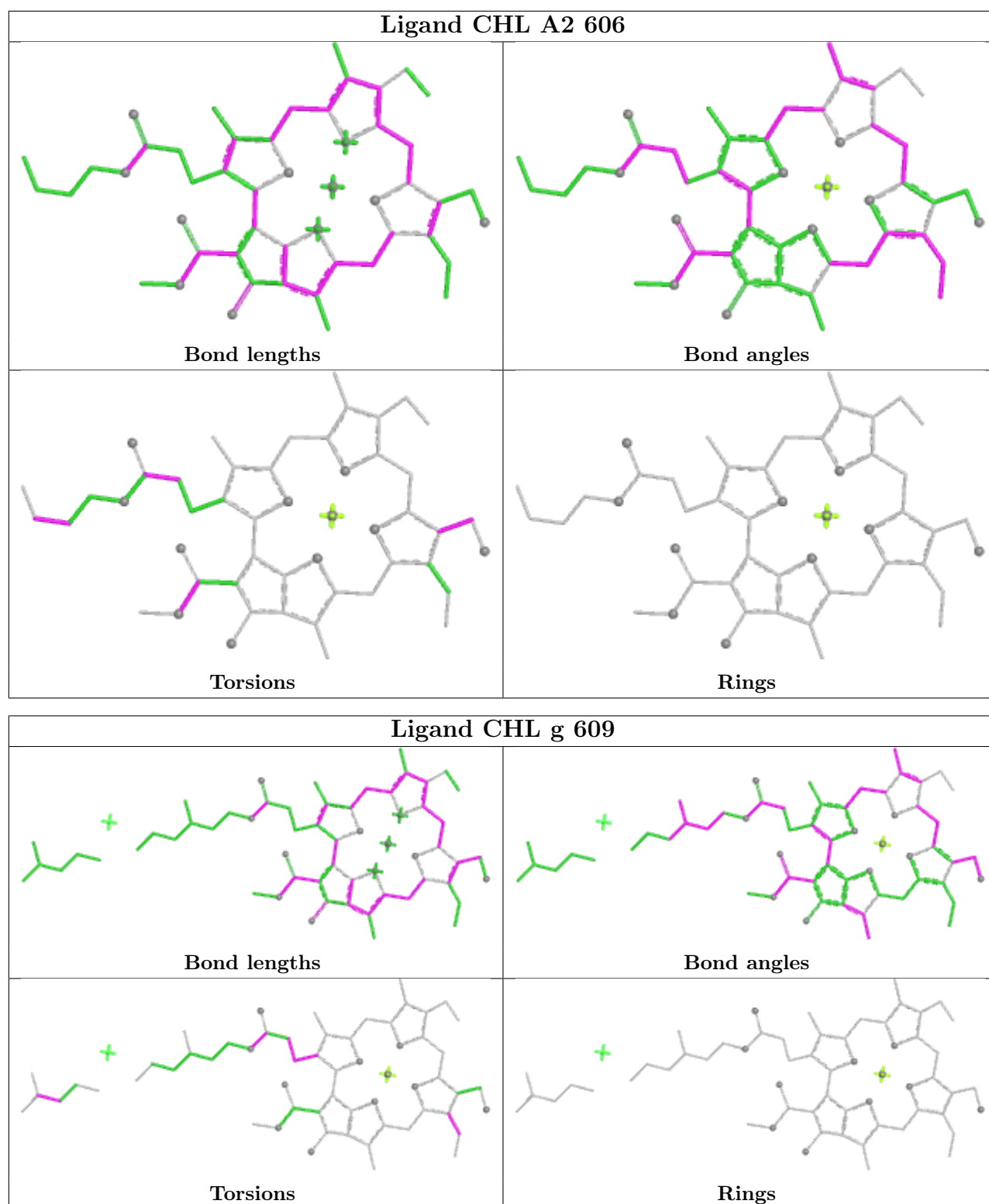
Ligand LUT BJ 615**Ligand CLA 0 603****Ligand LUT g 616**

Ligand CLA Ba 305

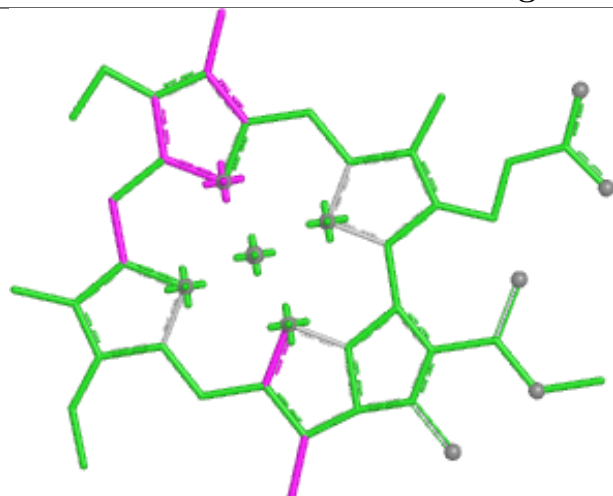


Ligand CLA 5 610

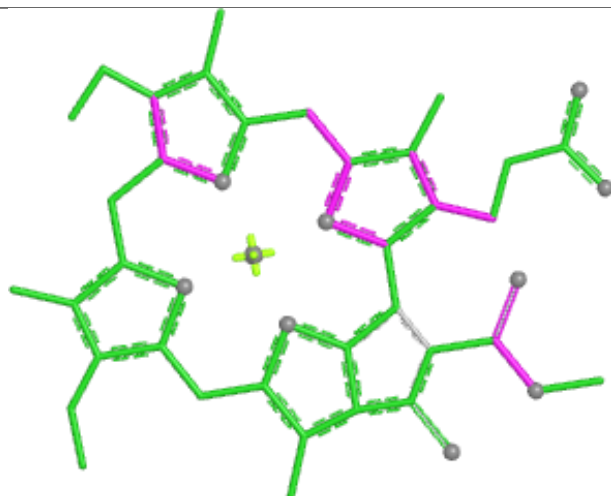




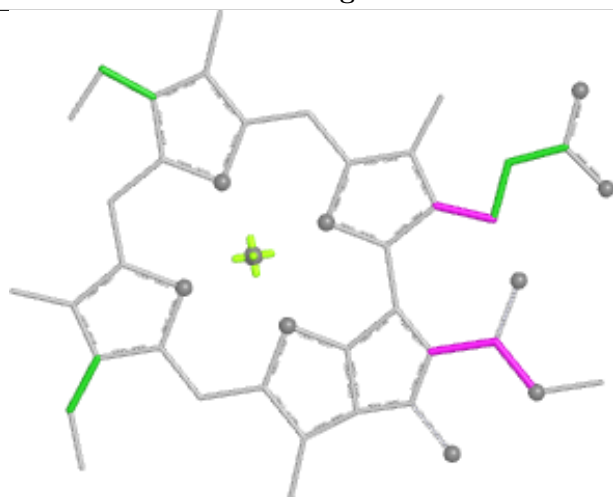
Ligand CLA 8 310



Bond lengths



Bond angles

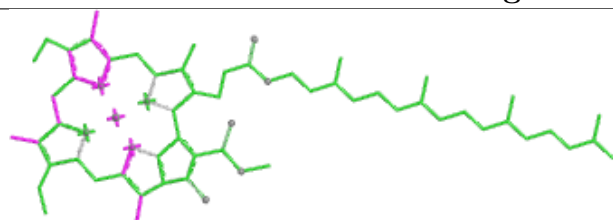


Torsions

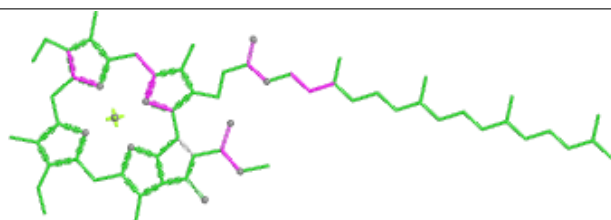


Rings

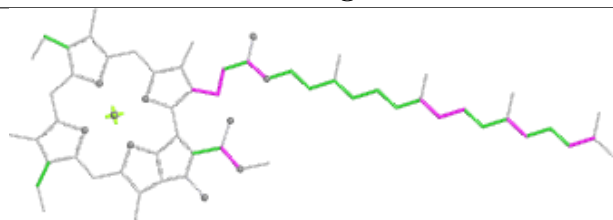
Ligand CLA BF 503



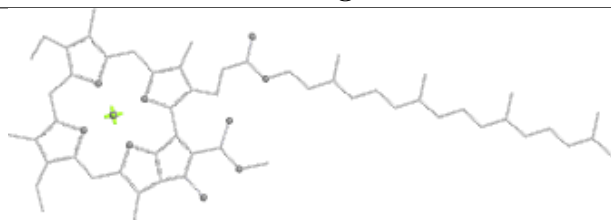
Bond lengths



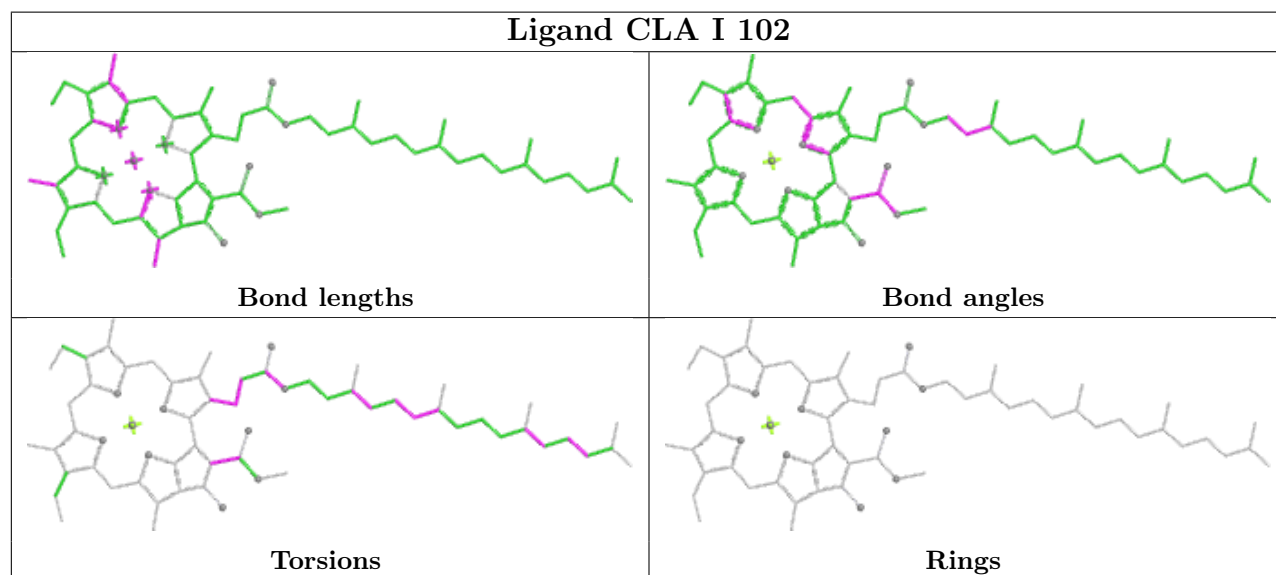
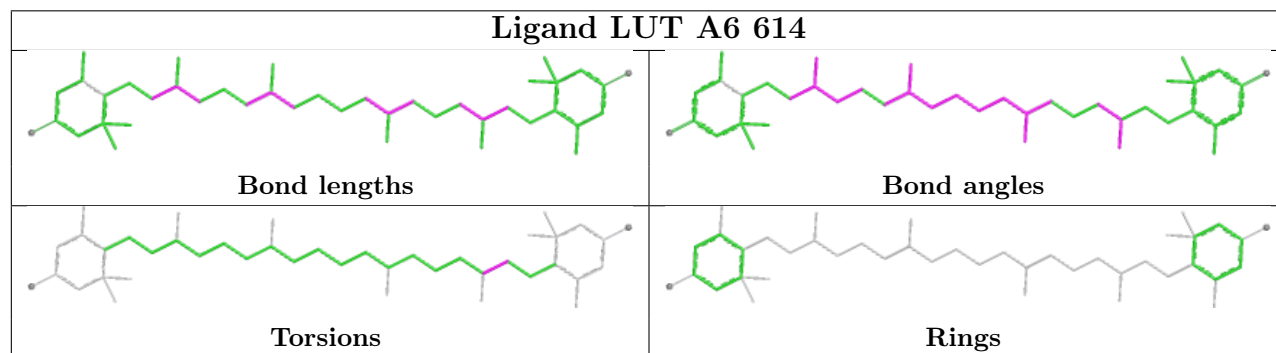
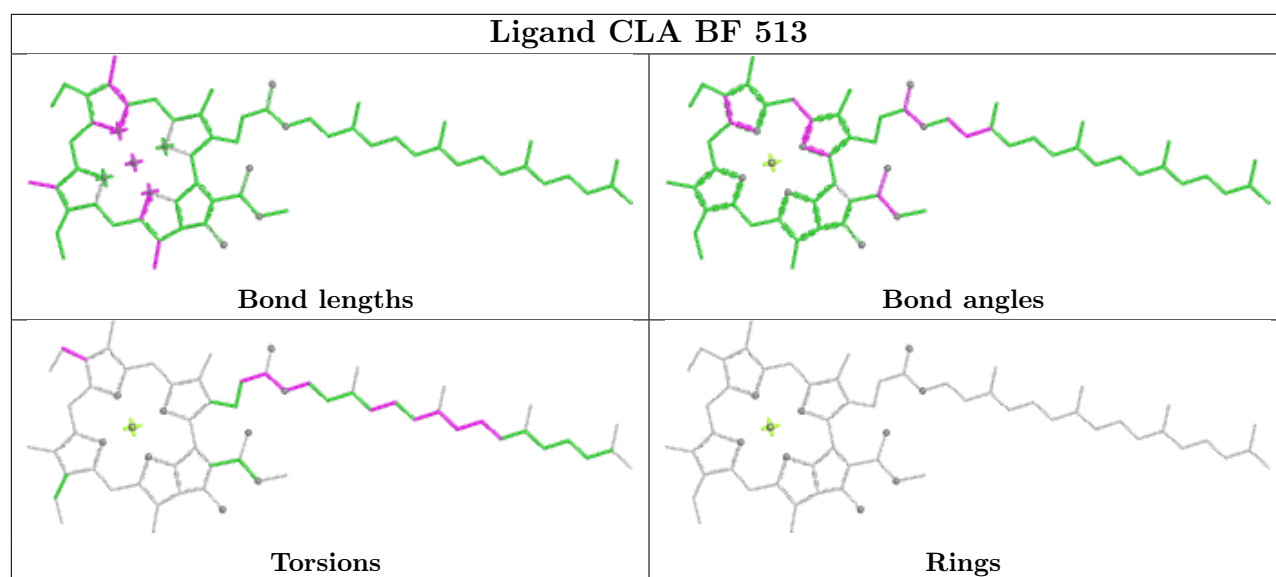
Bond angles

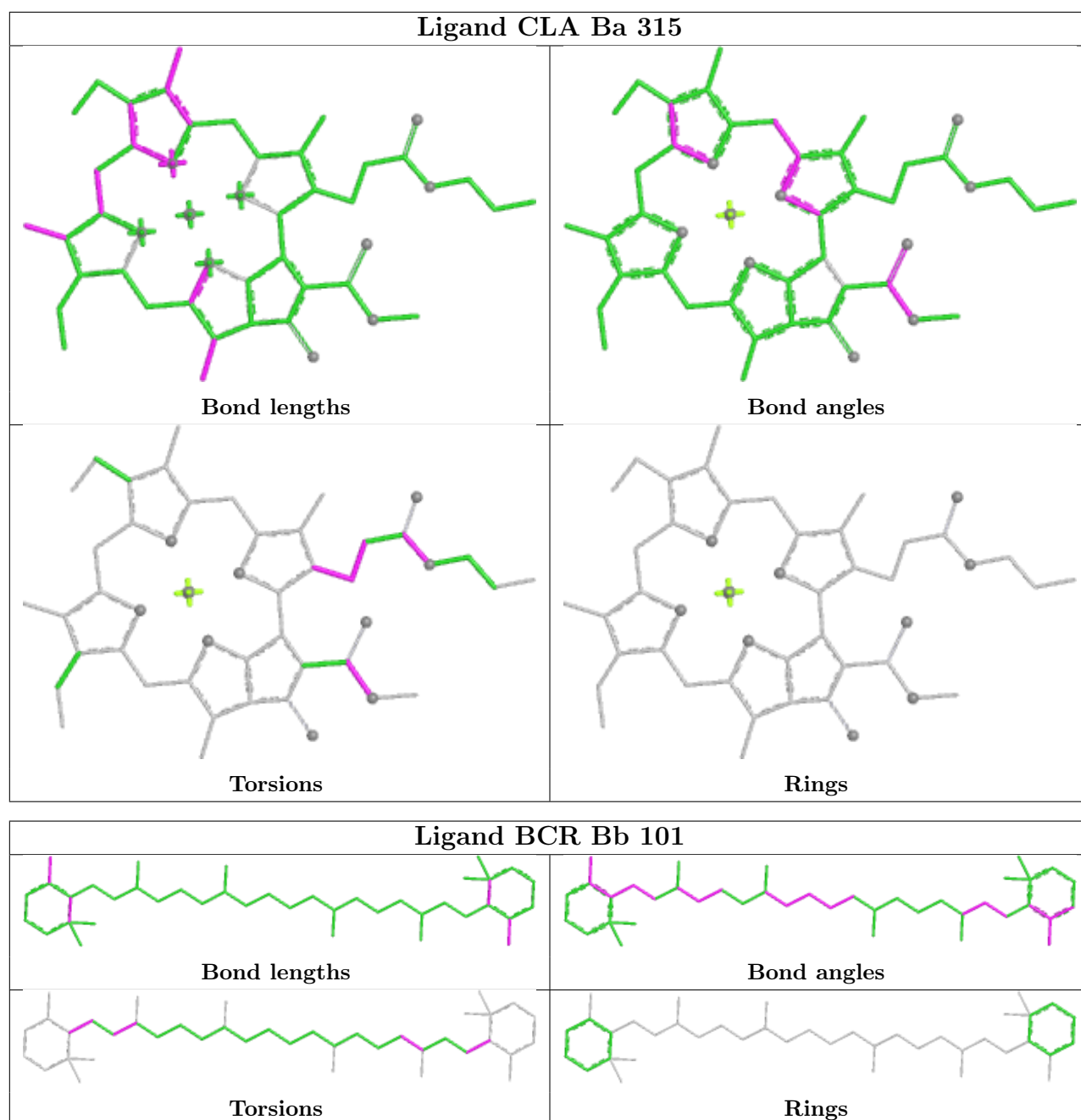


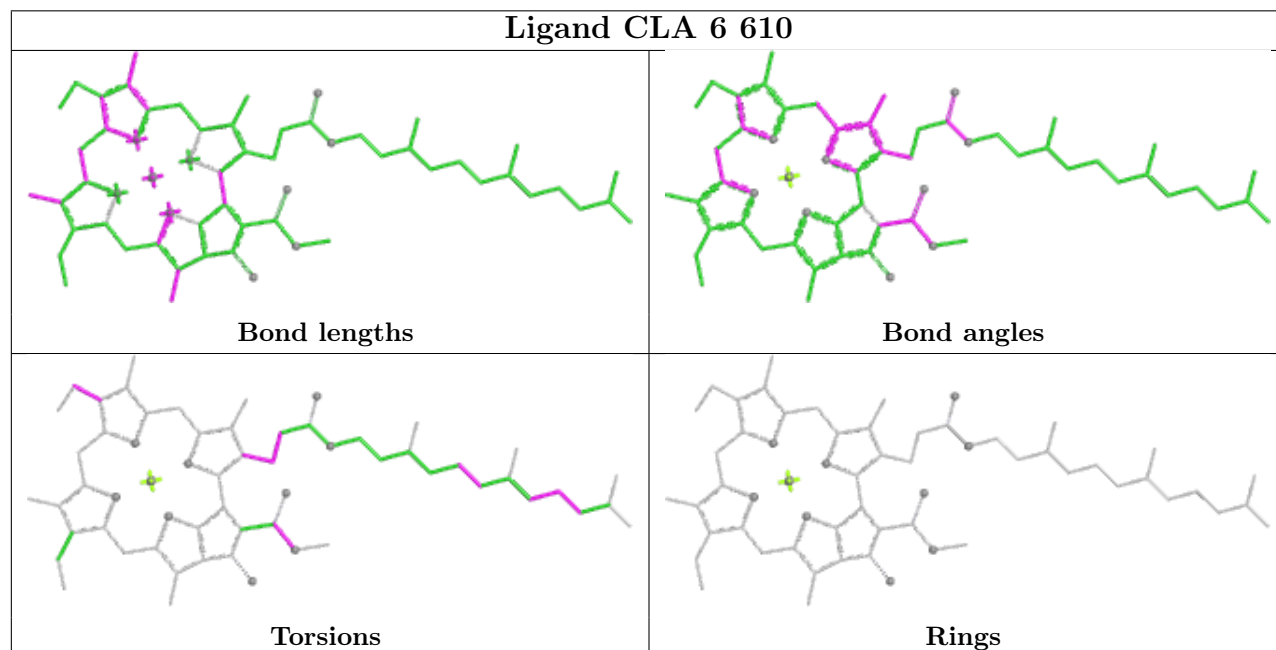
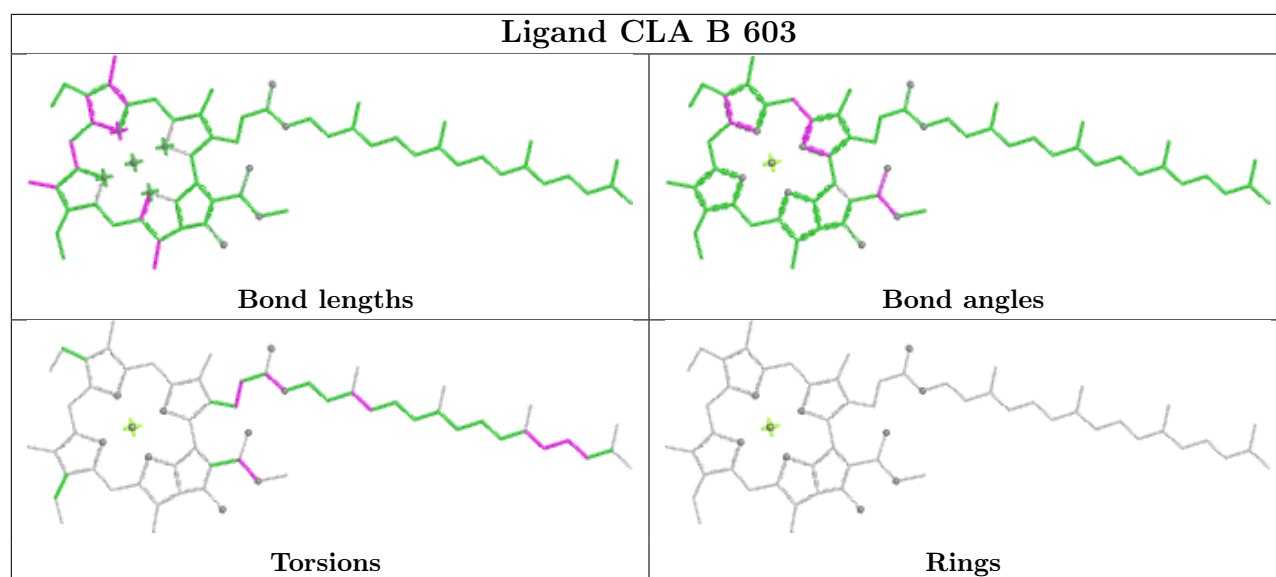
Torsions



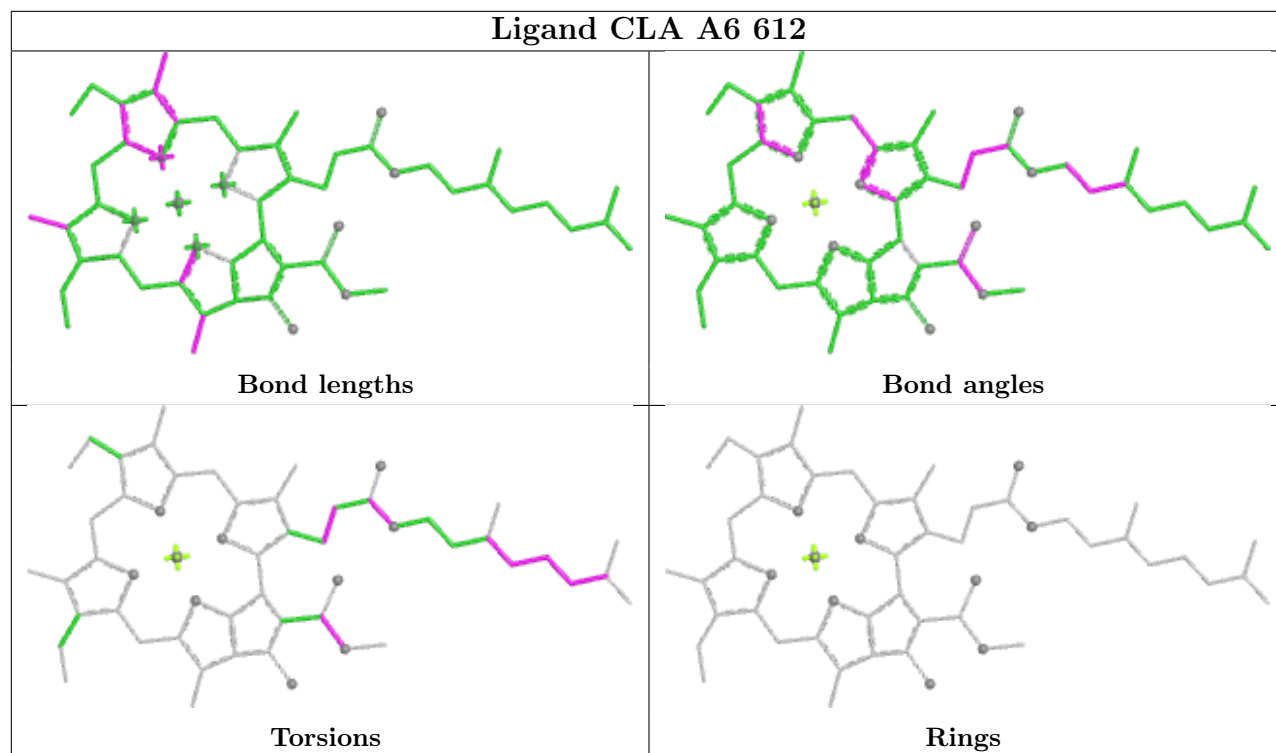
Rings



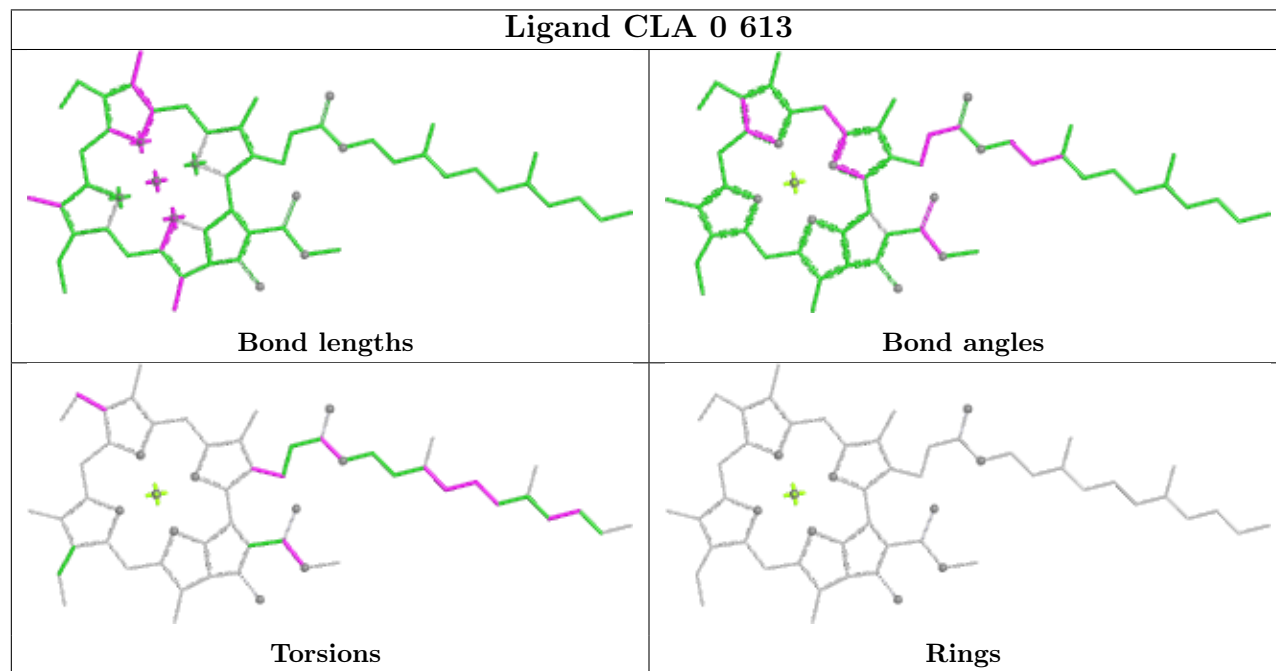


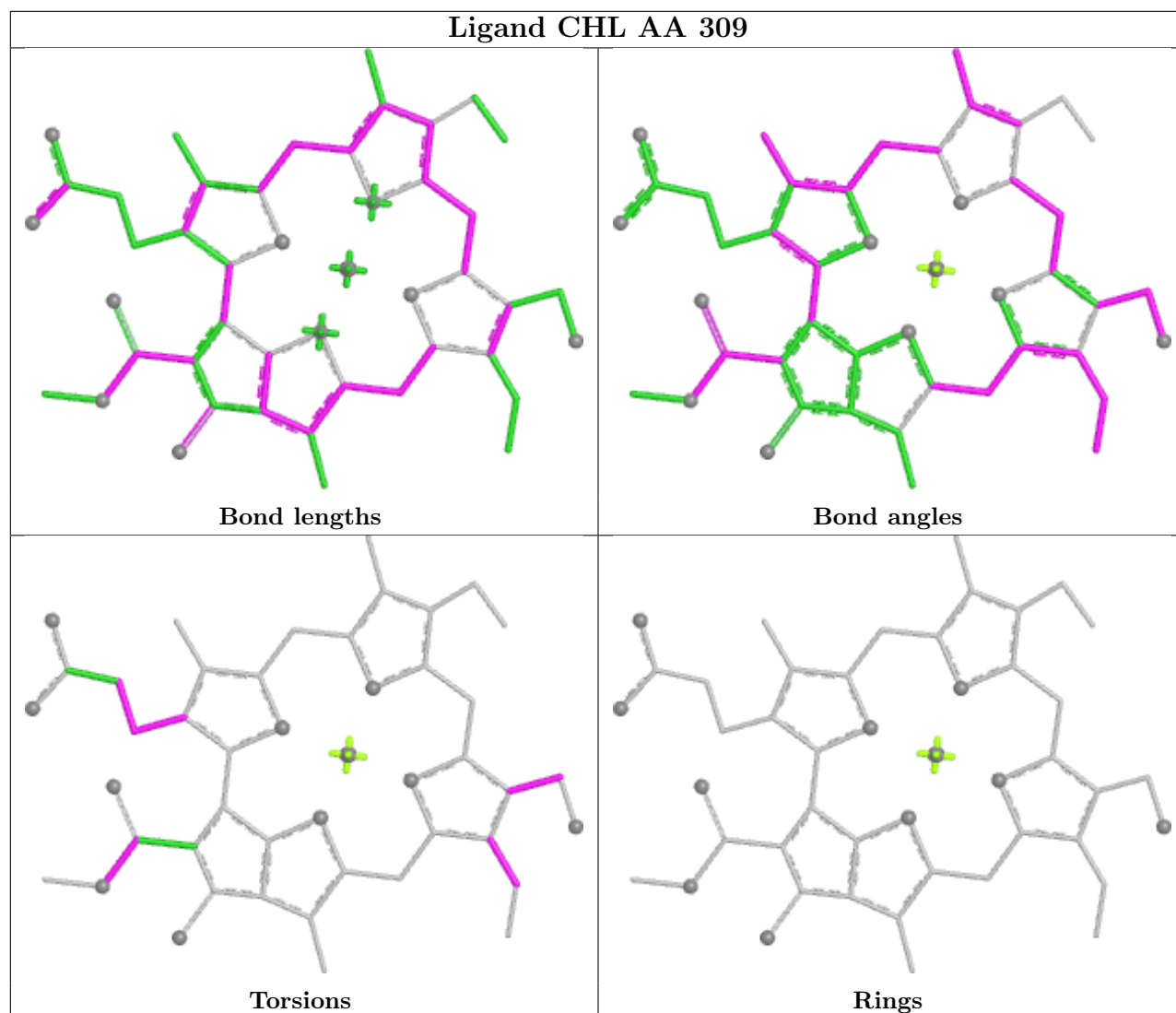
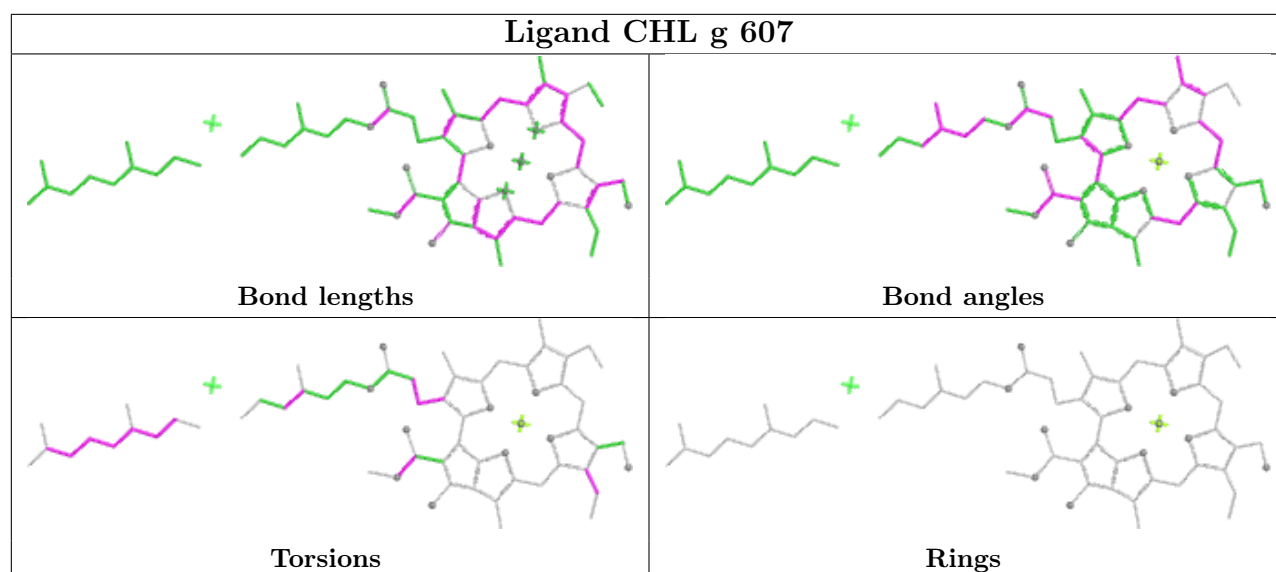


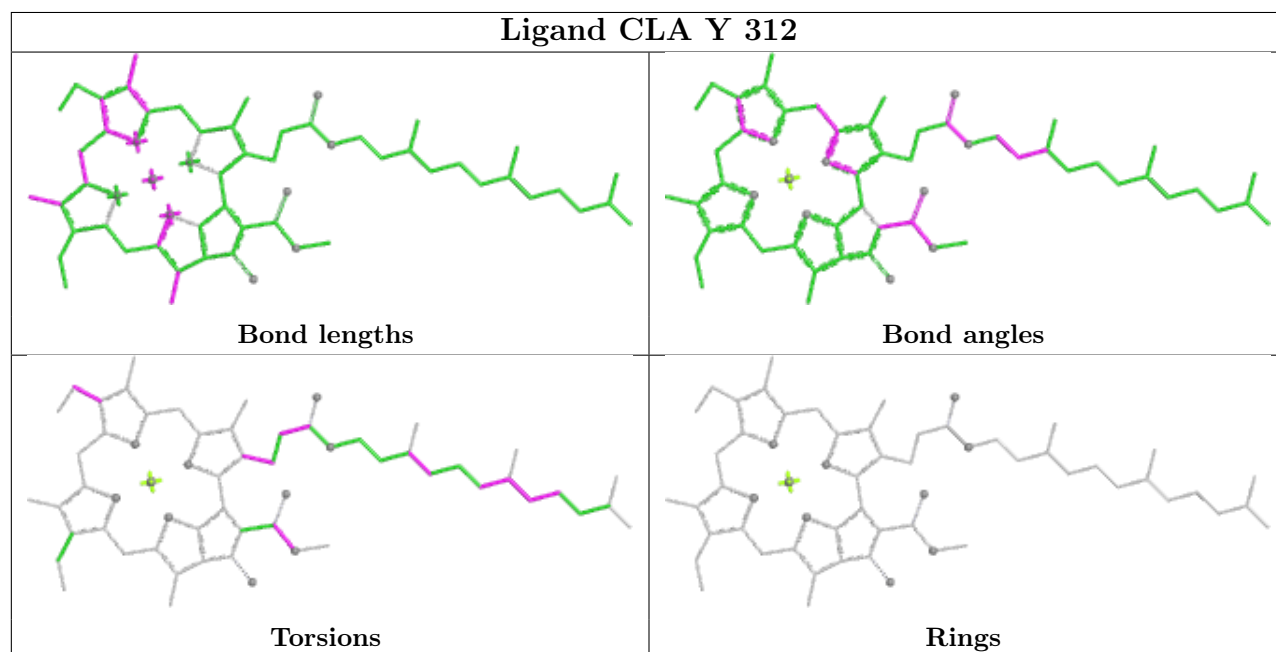
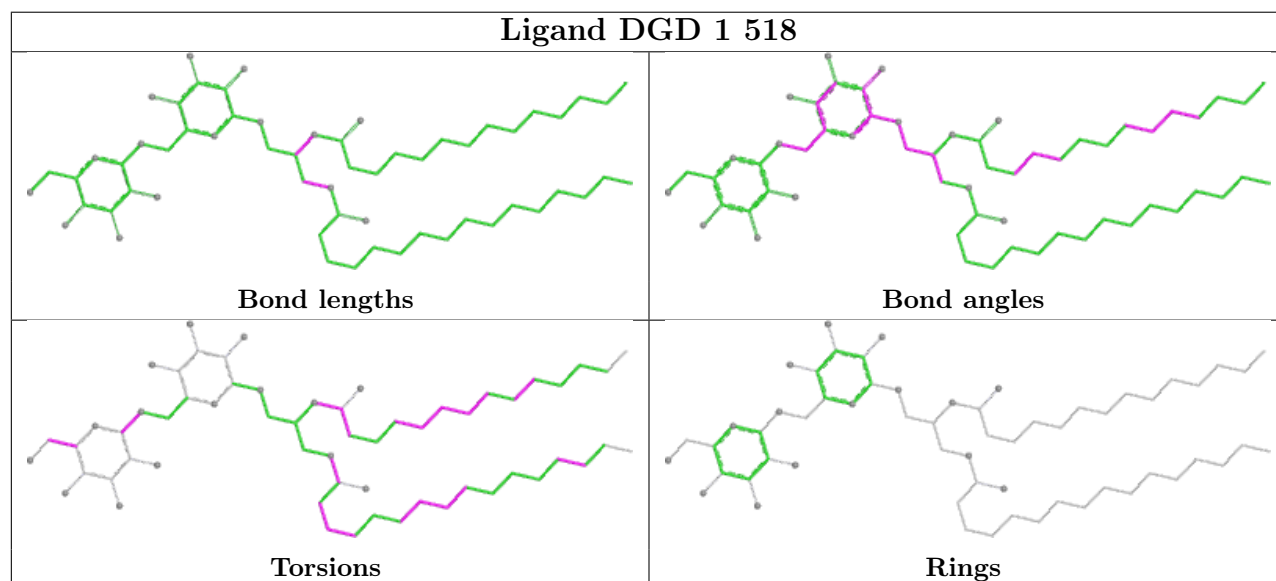
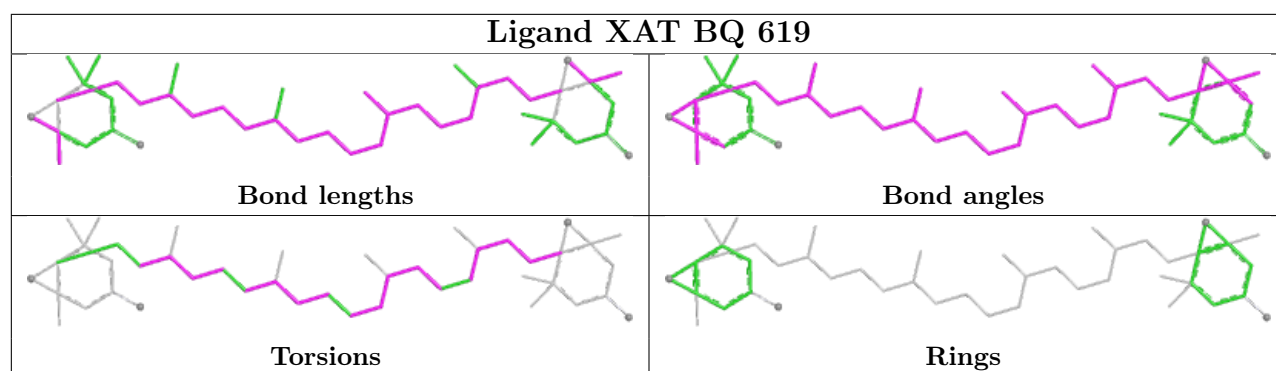
Ligand CLA A6 612

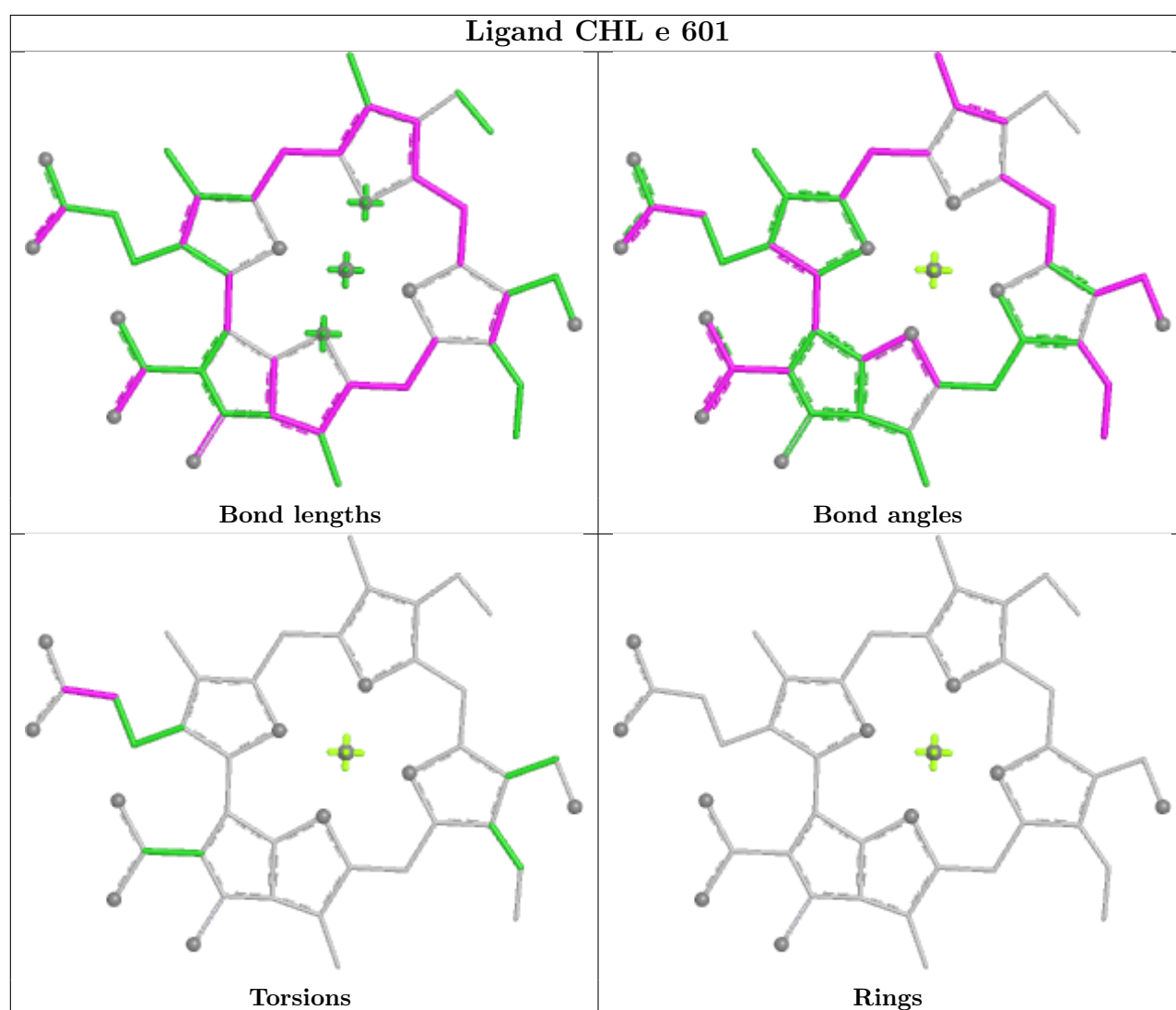
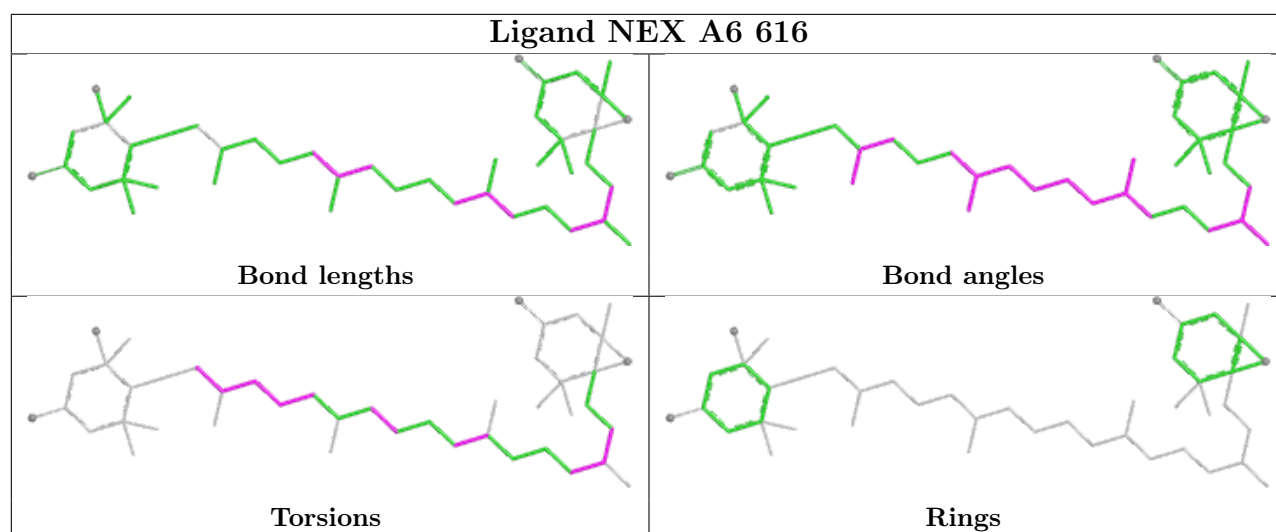


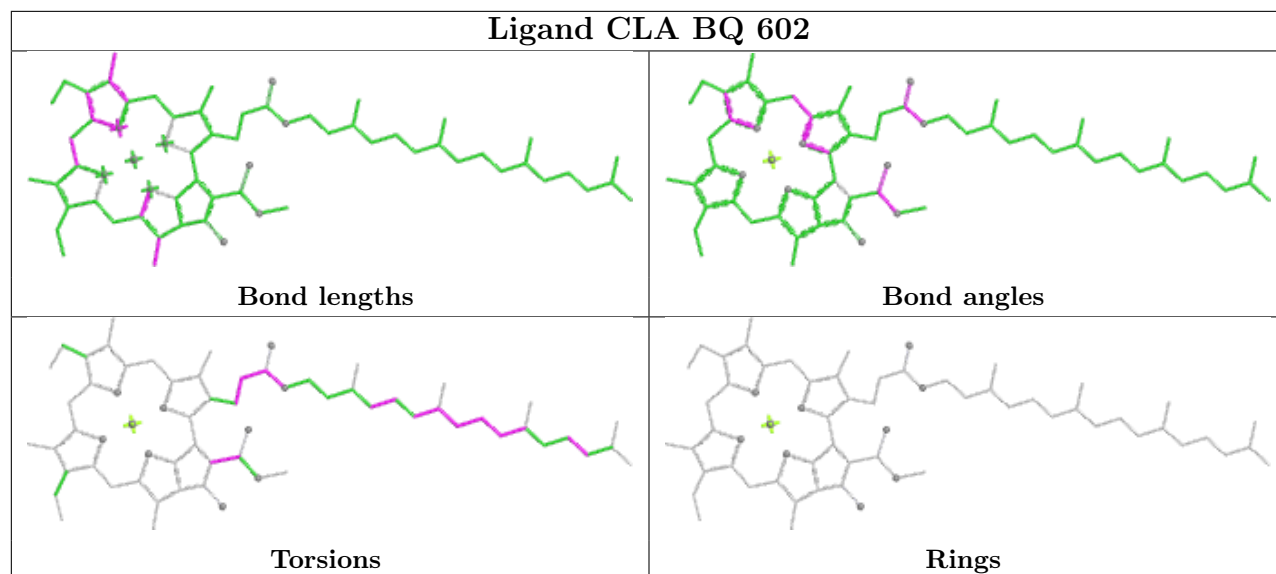
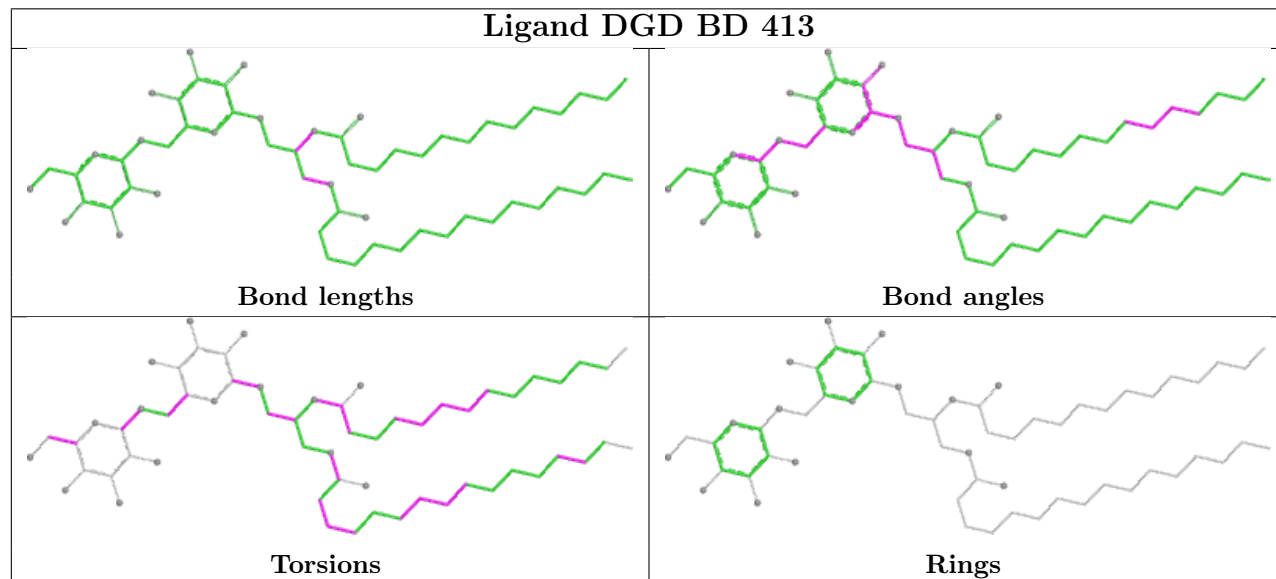
Ligand CLA 0 613

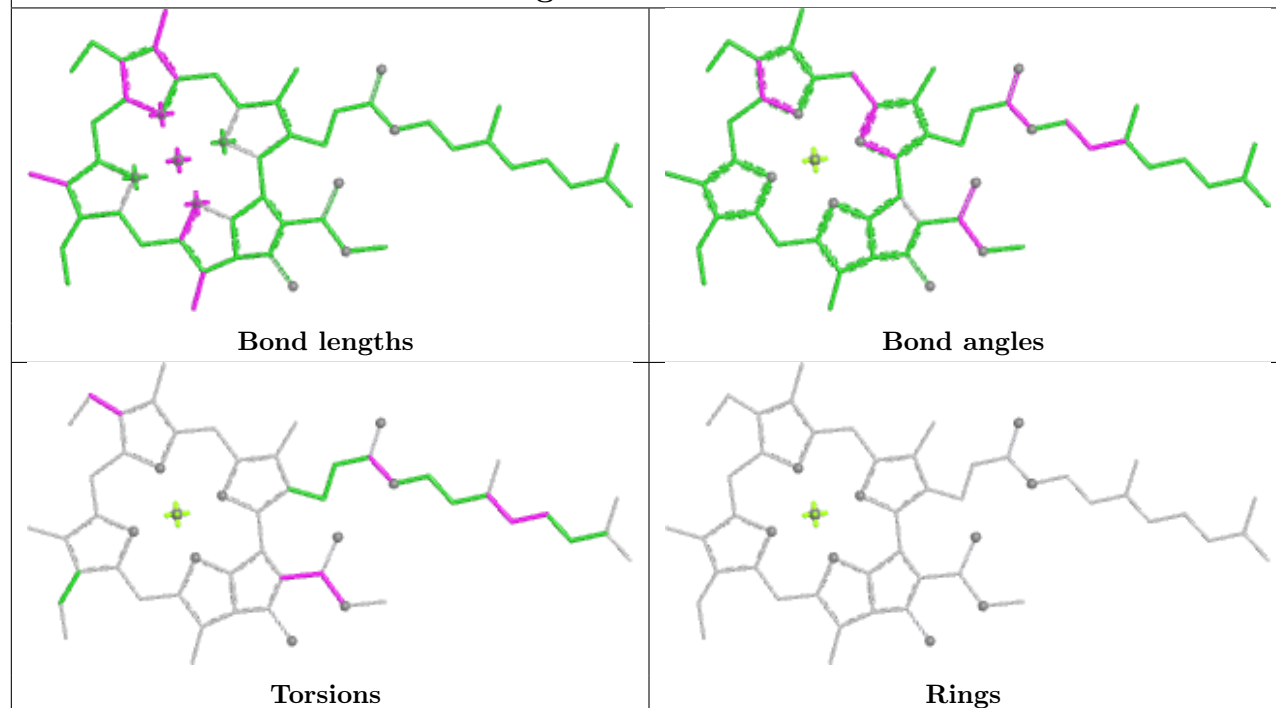
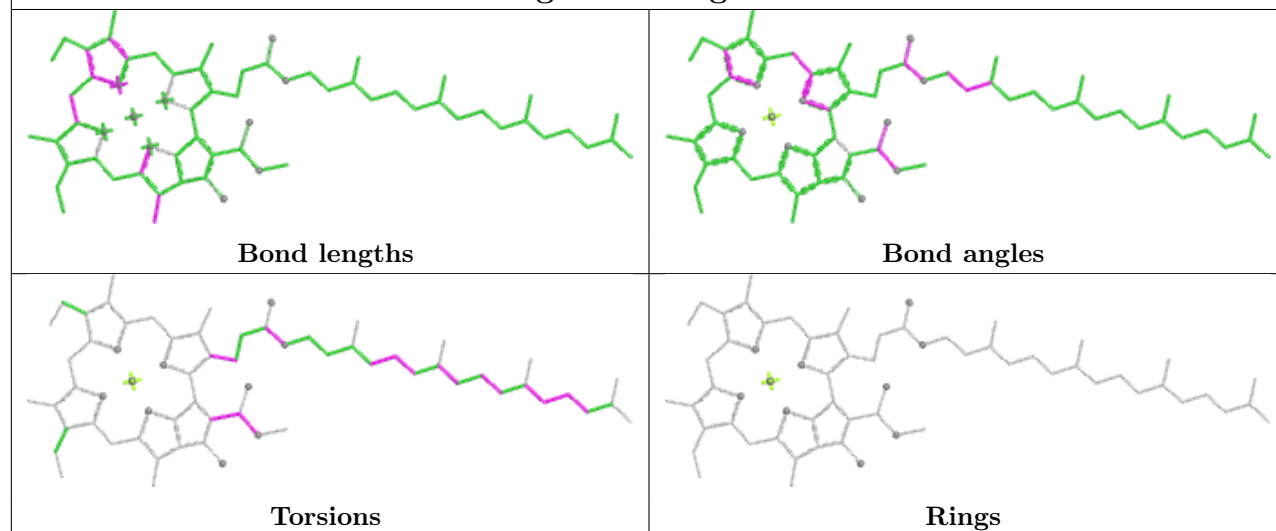




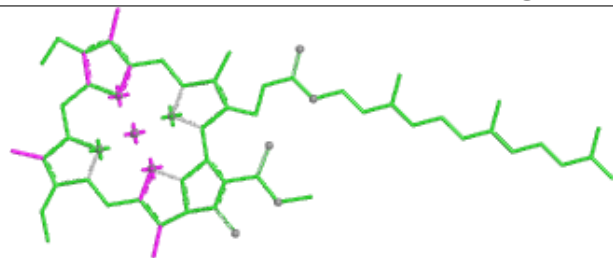




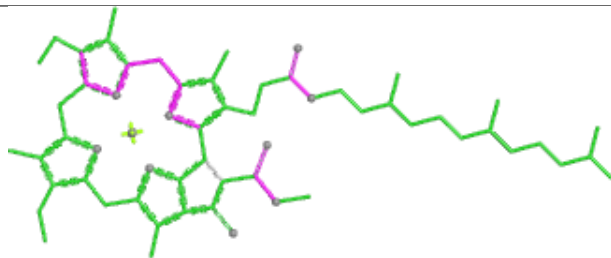
Ligand CLA BQ 602**Ligand DGD BD 413**

Ligand CLA 5 603**Ligand CLA g 602**

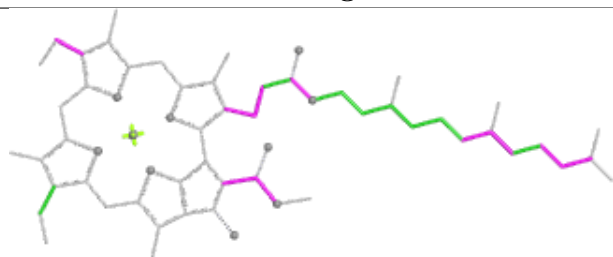
Ligand CLA 6 602



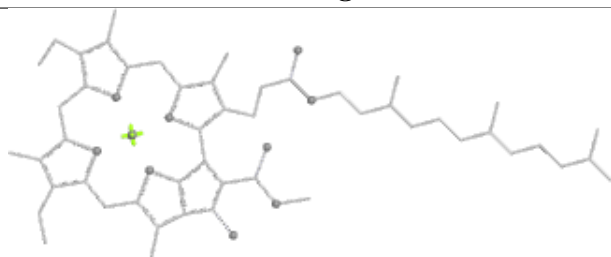
Bond lengths



Bond angles

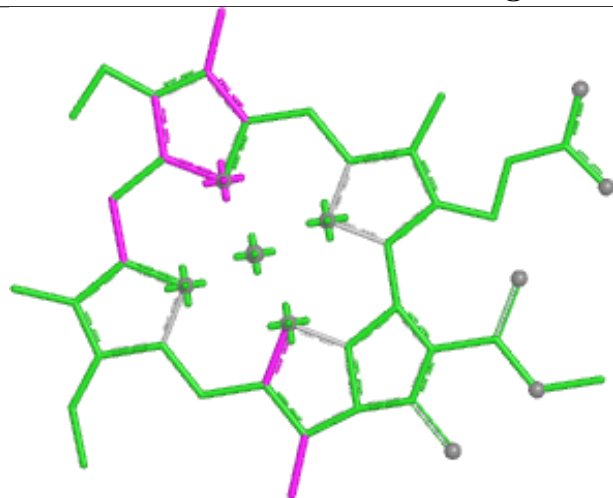


Torsions

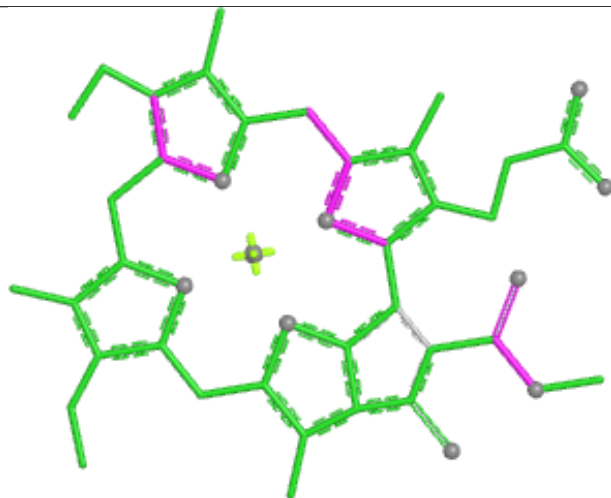


Rings

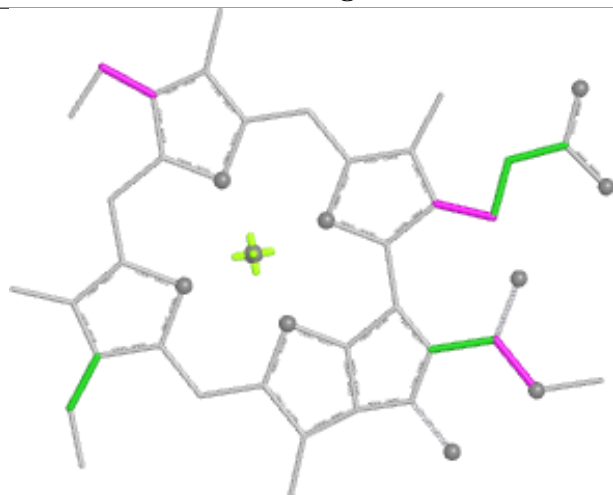
Ligand CLA A6 608



Bond lengths



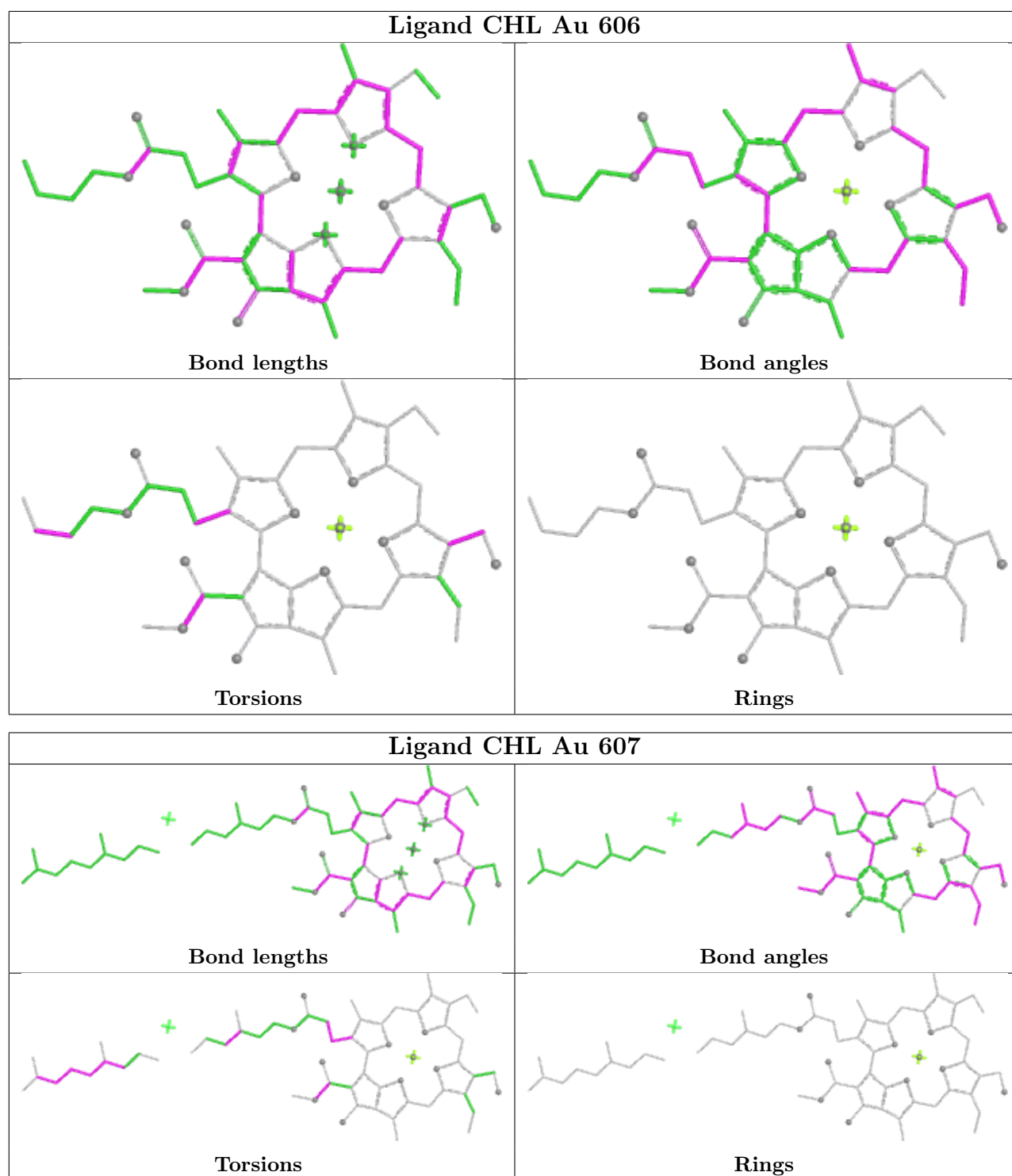
Bond angles

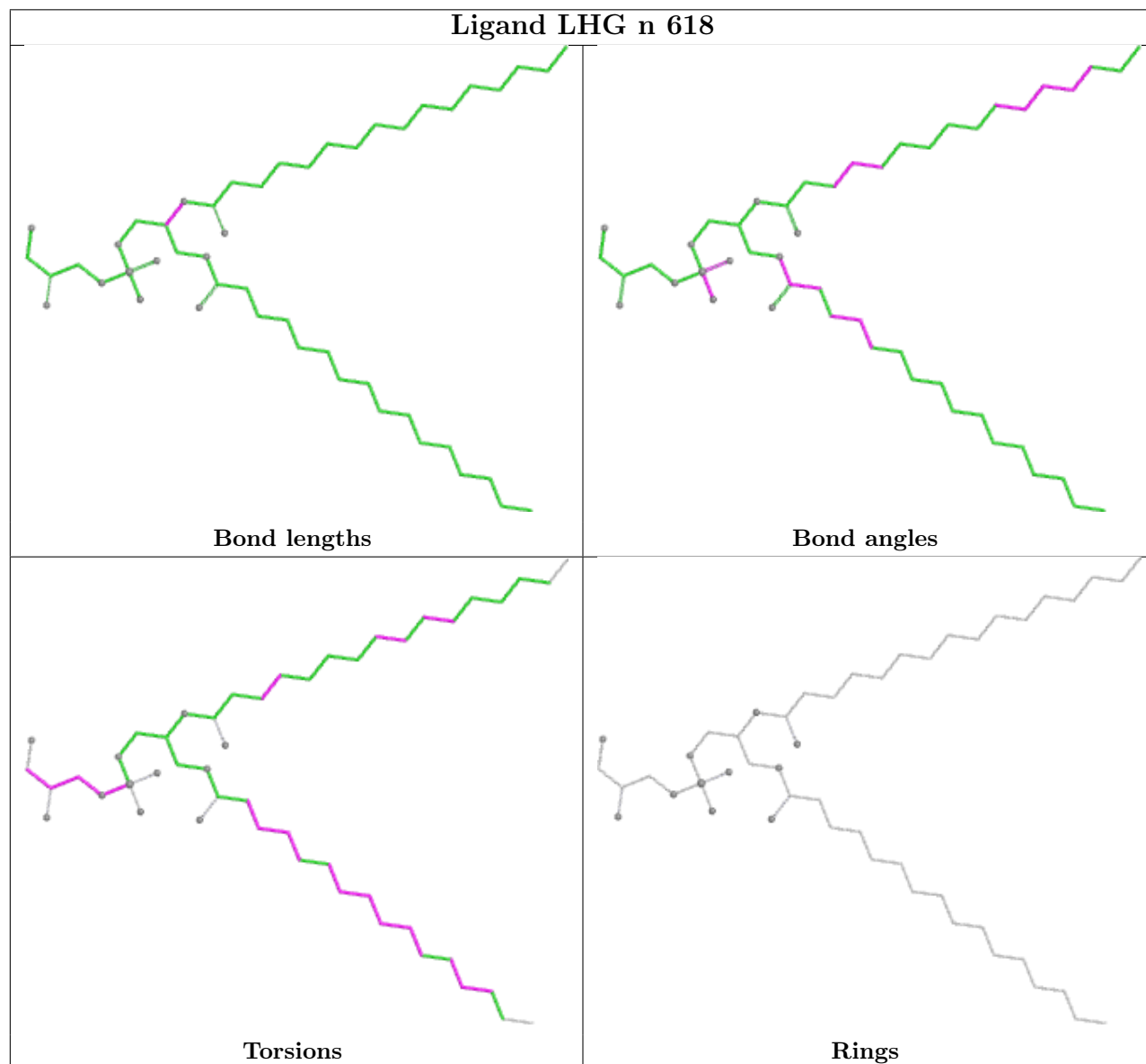
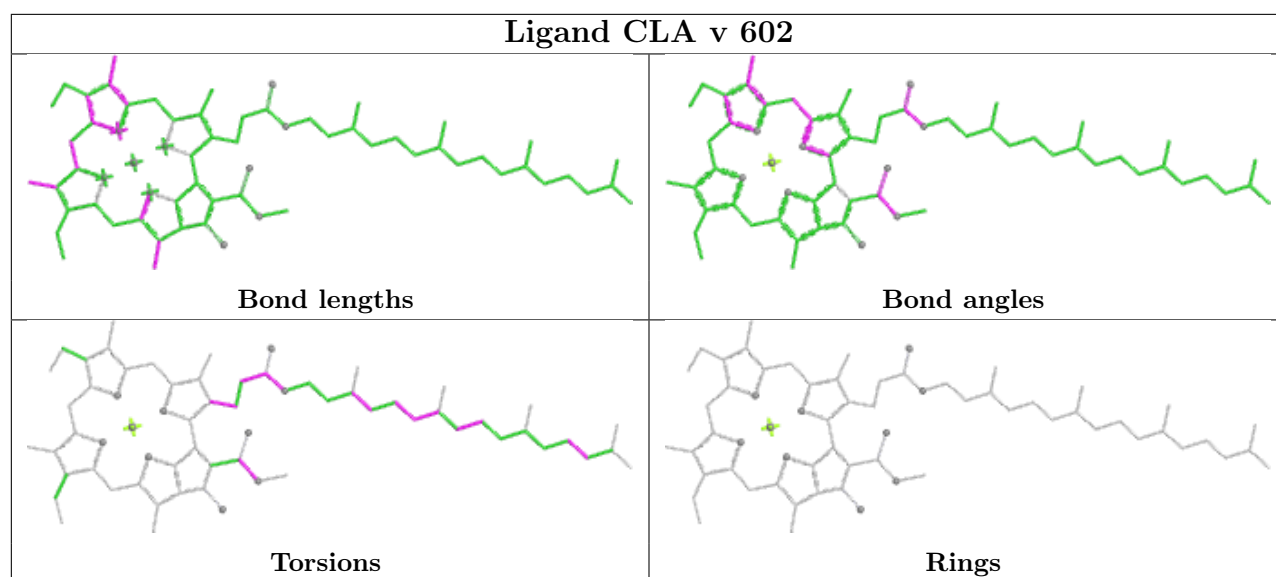


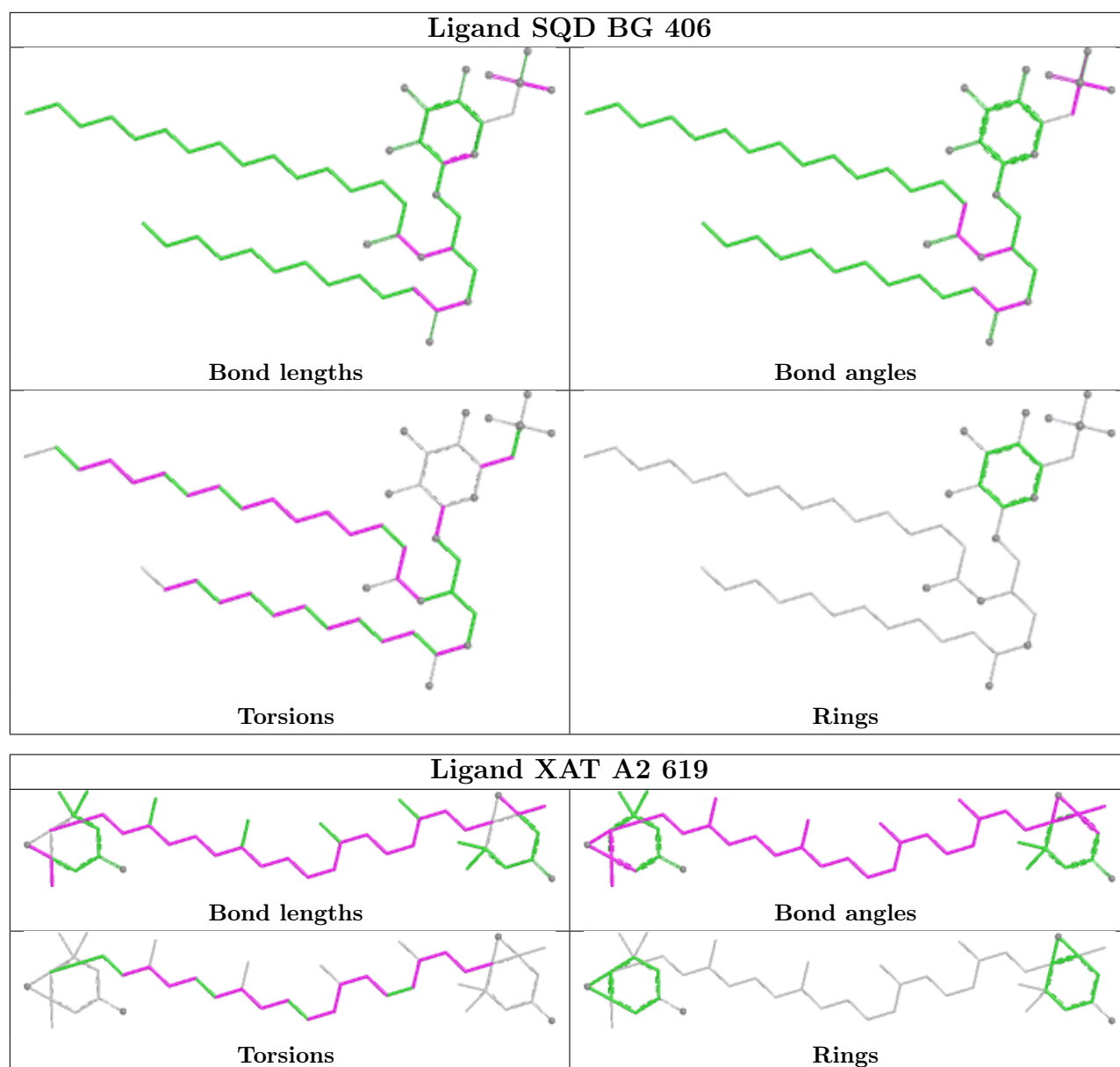
Torsions

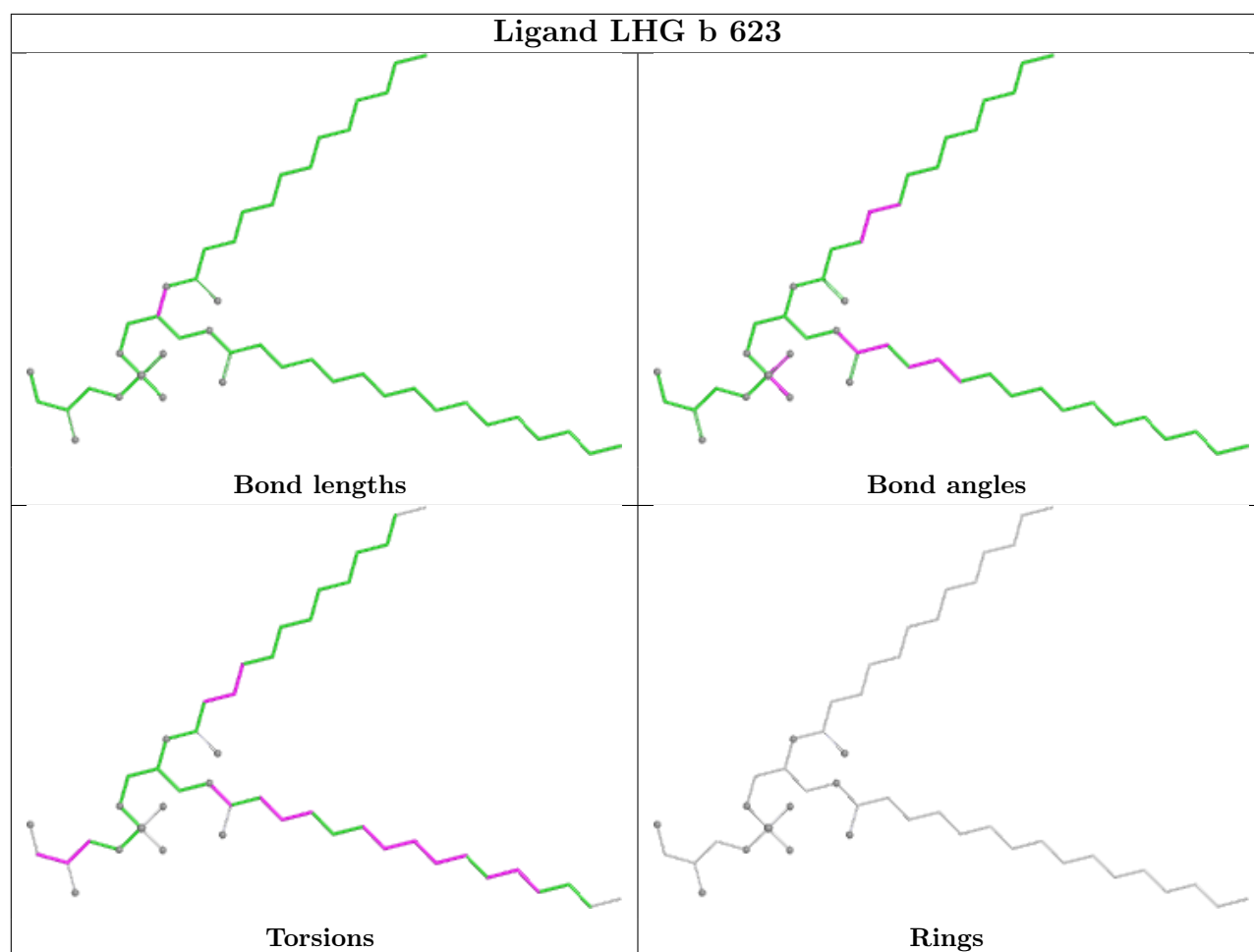


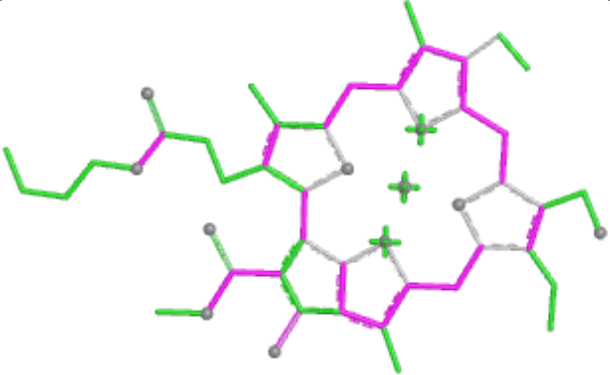
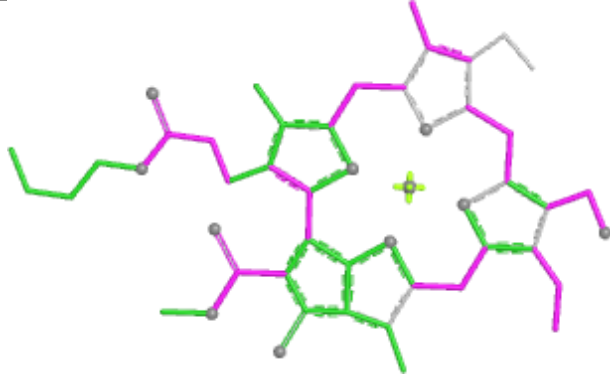
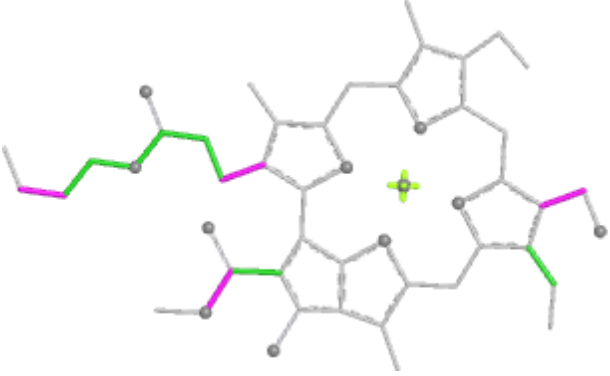
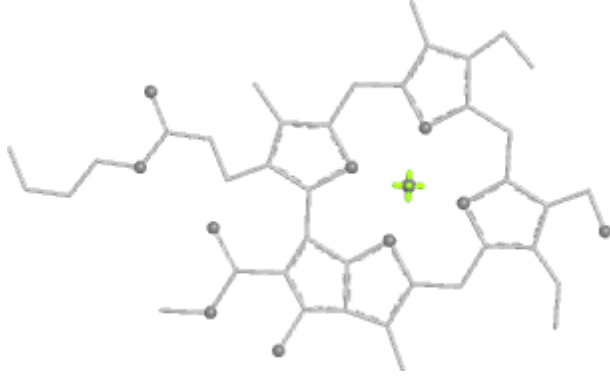
Rings


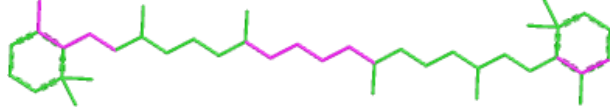
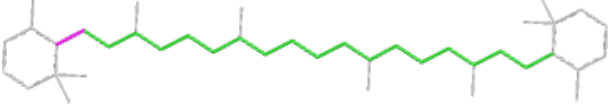
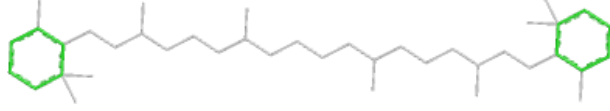




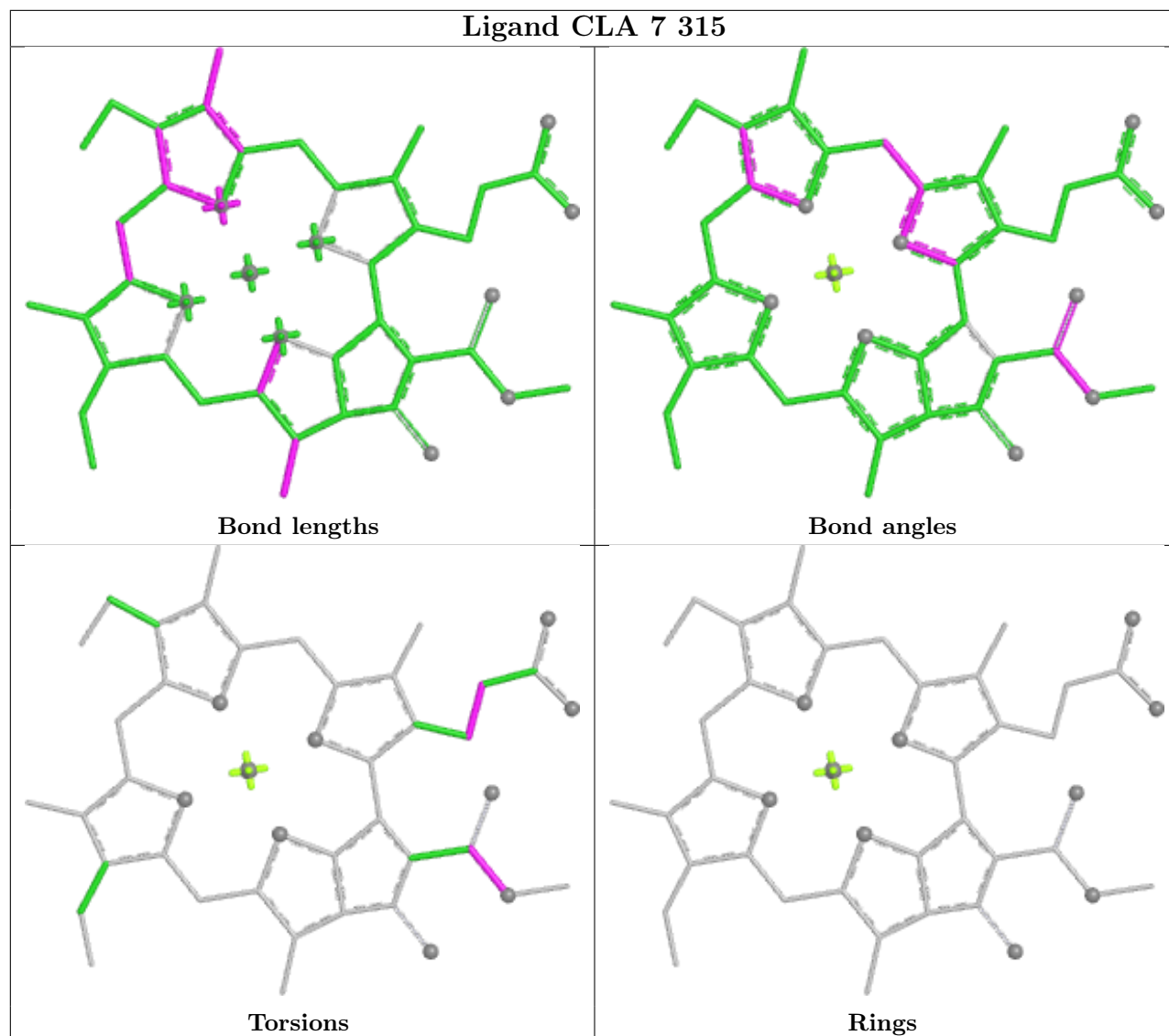




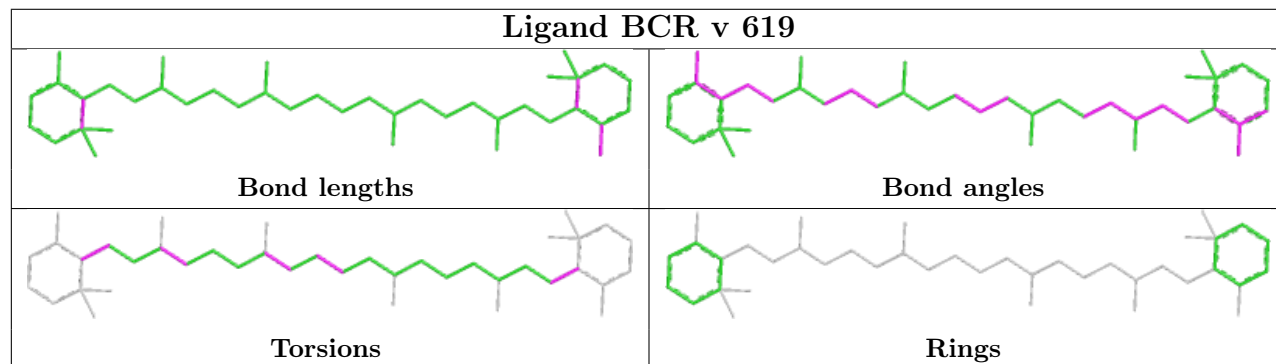
Ligand CHL G 606	
	
Bond lengths	Bond angles
	
Torsions	Rings

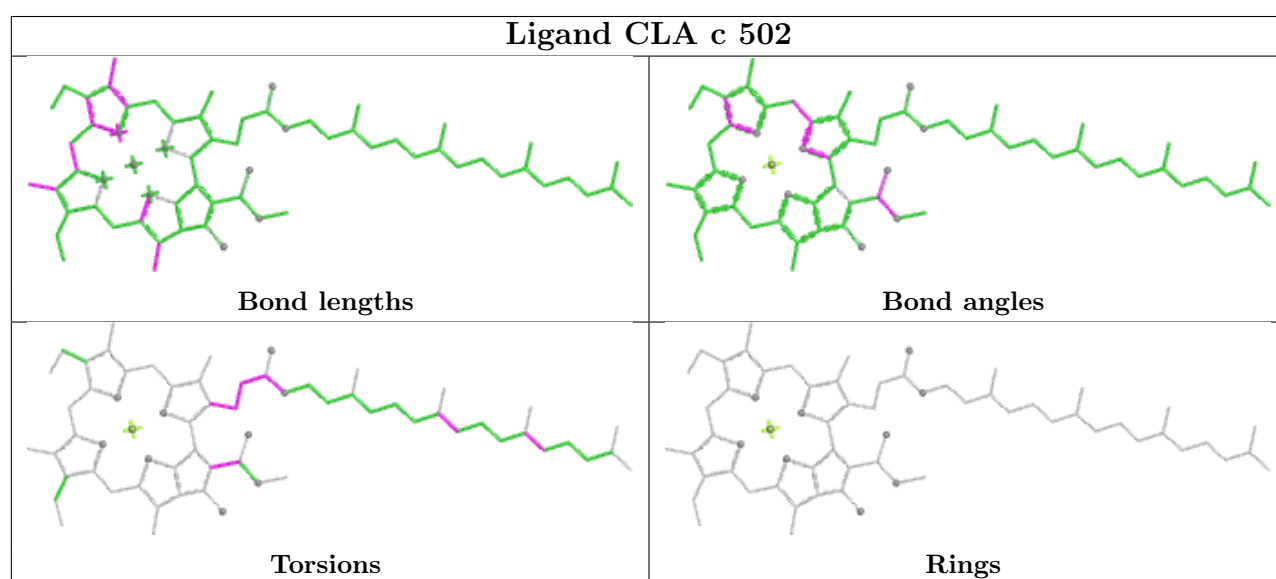
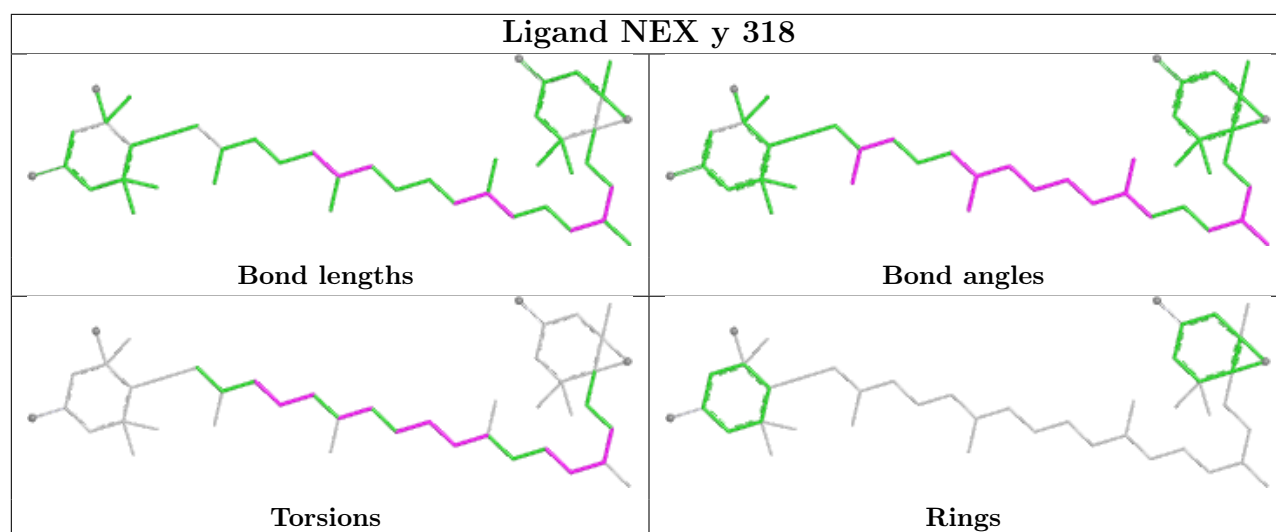
Ligand BCR z 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA 7 315

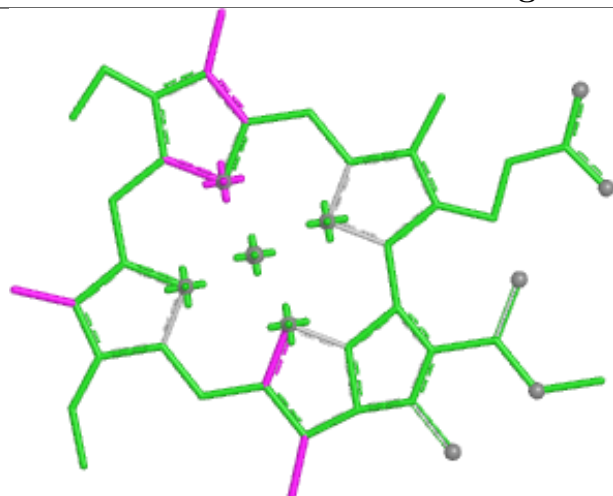


Ligand BCR v 619

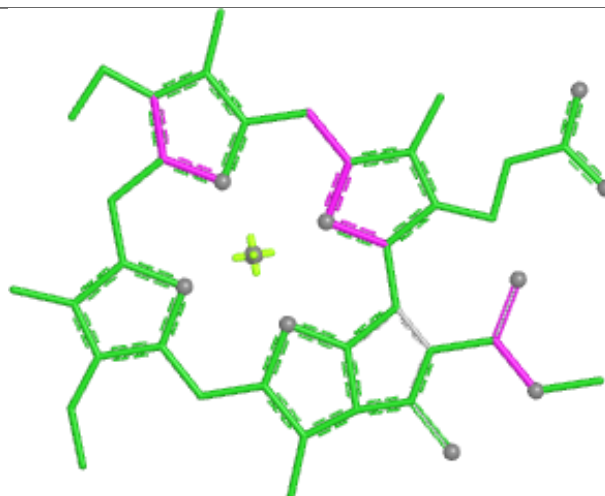




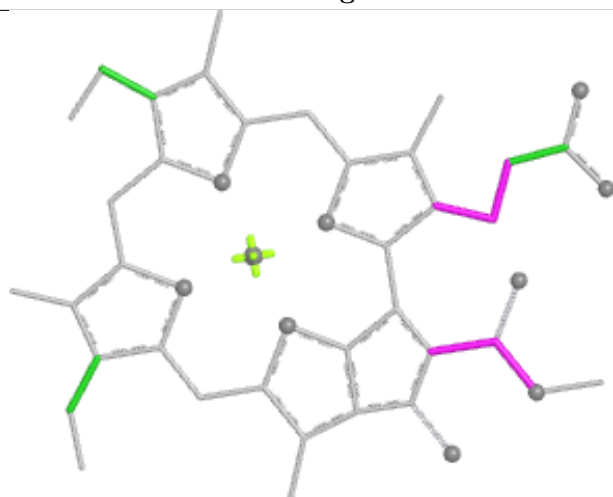
Ligand CLA 0 604



Bond lengths



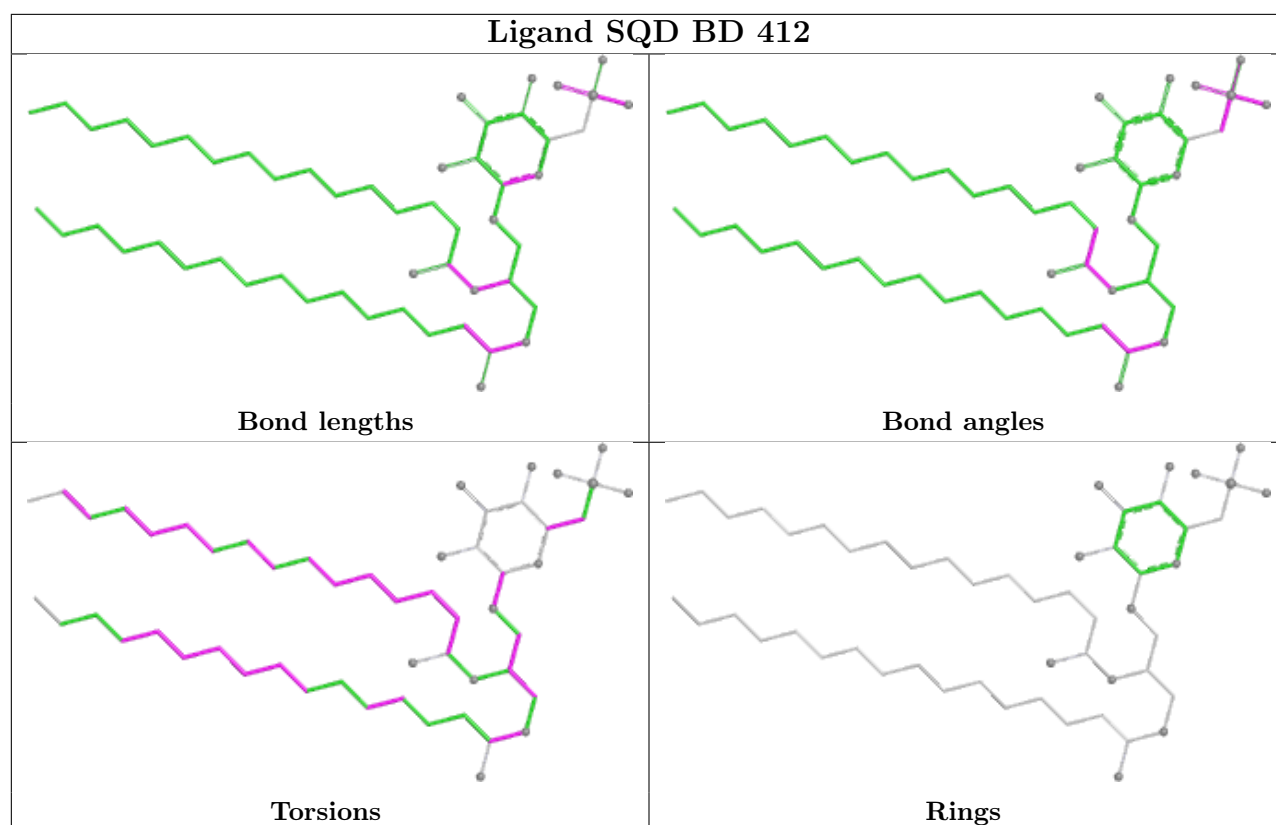
Bond angles



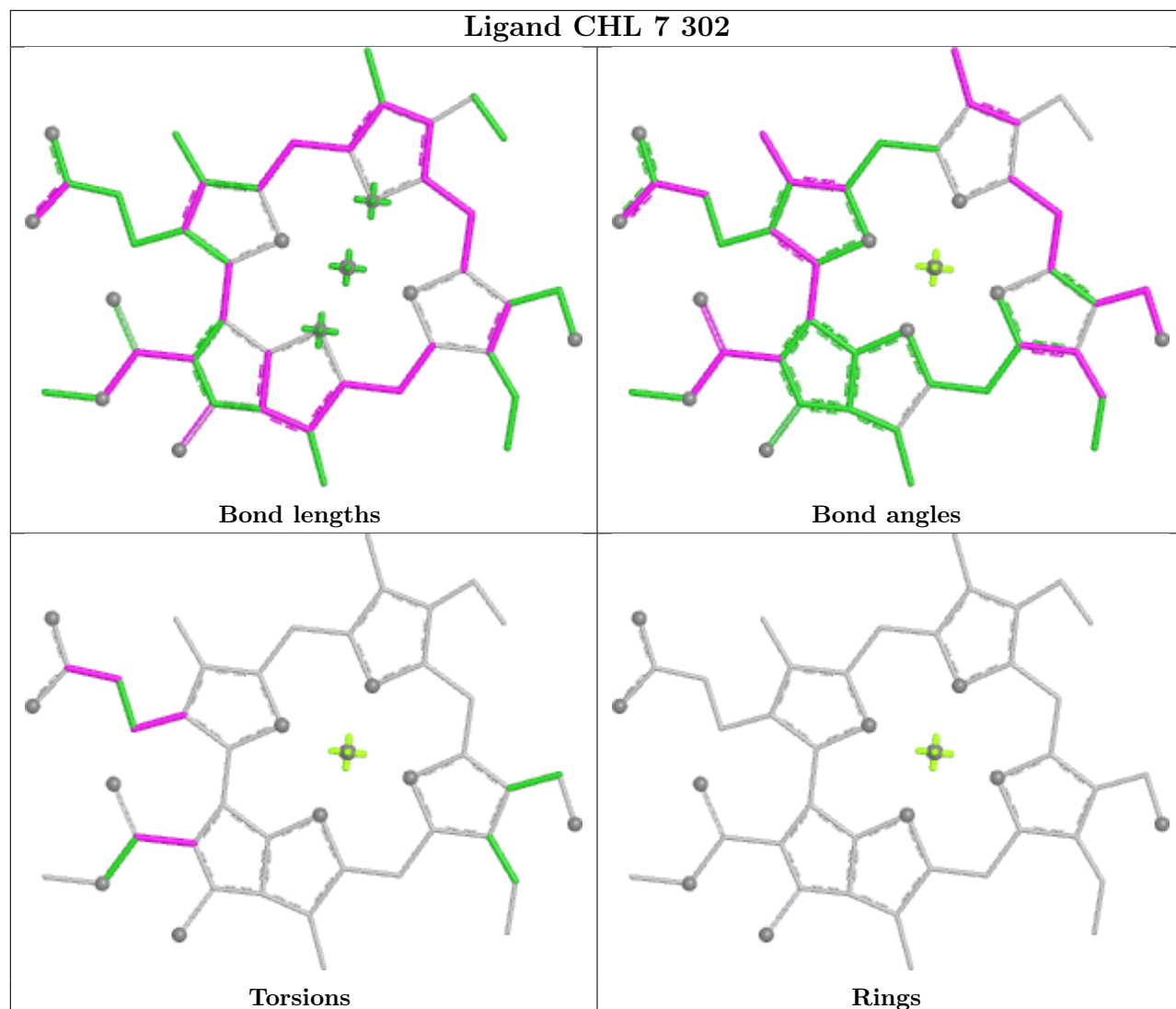
Torsions

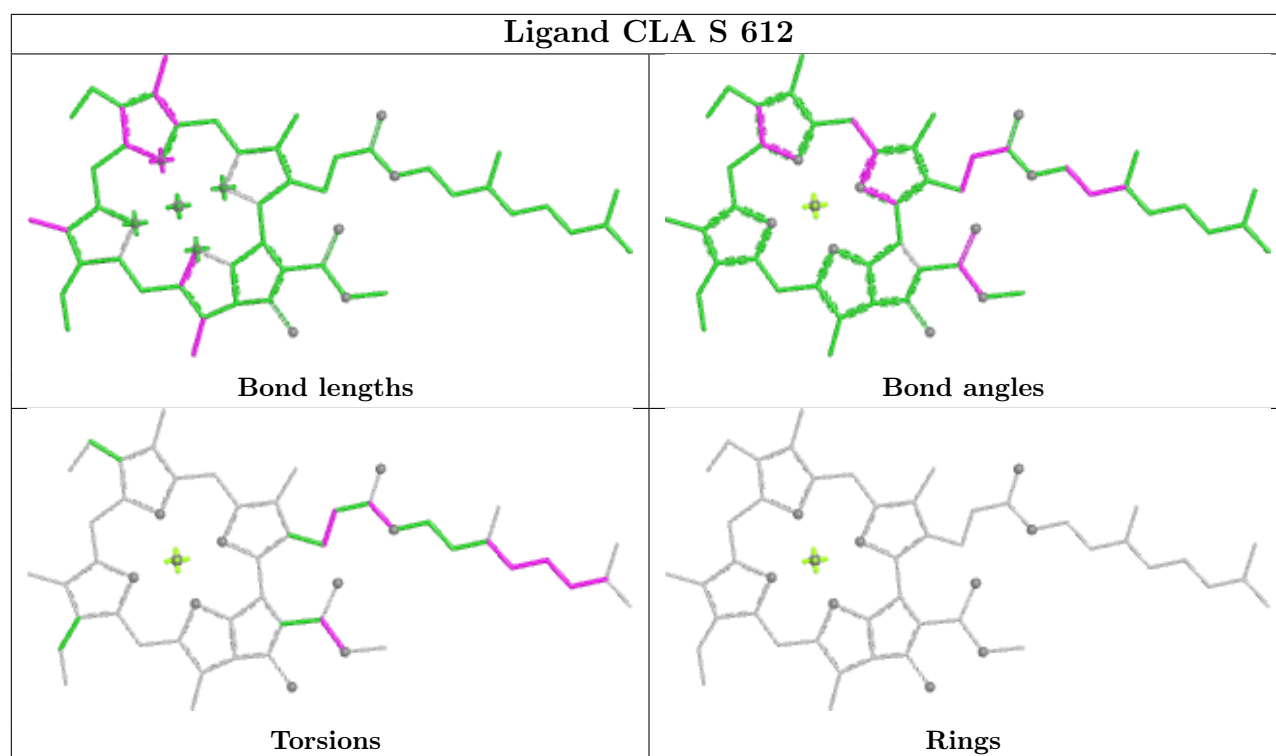


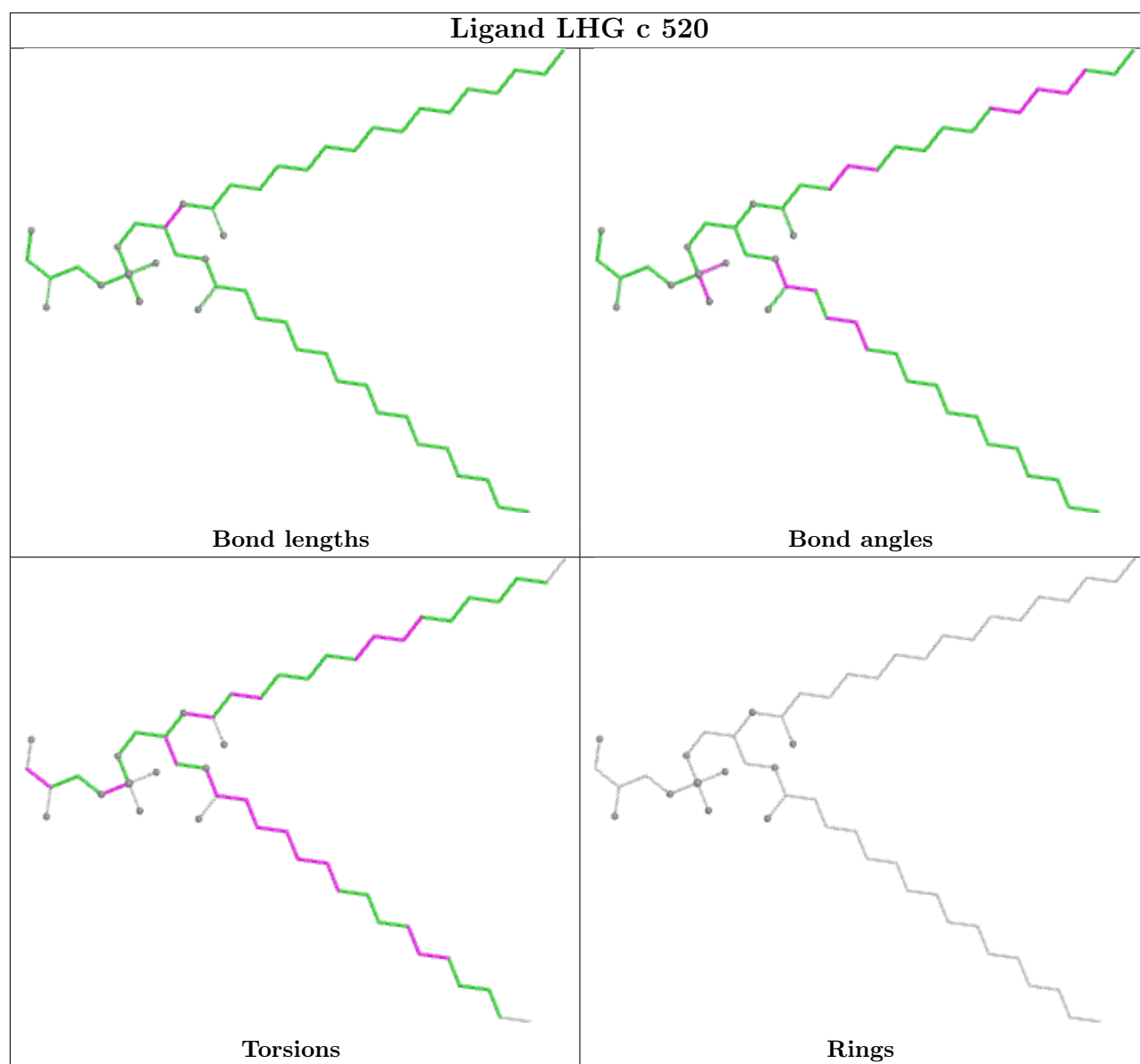
Rings

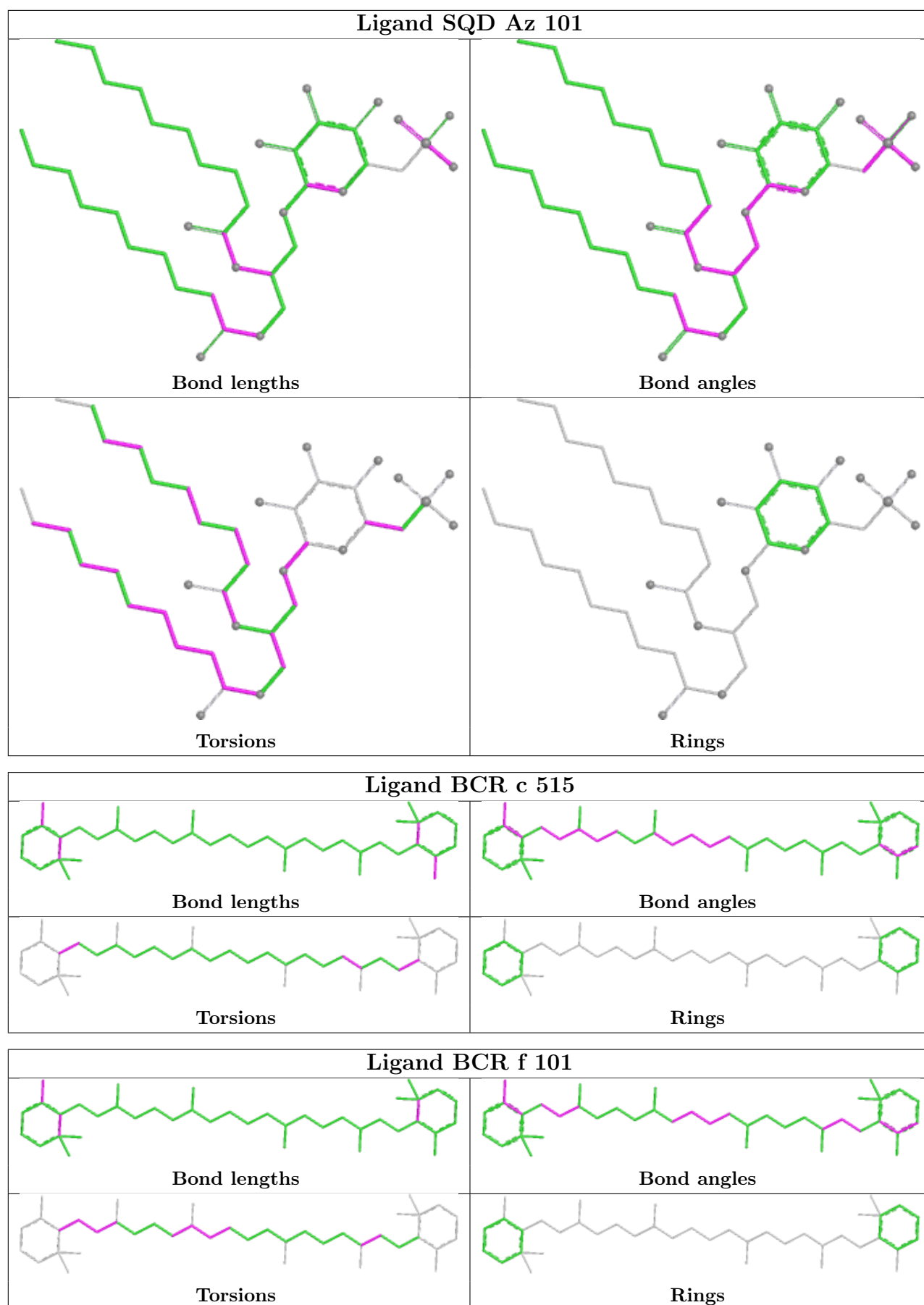


Ligand CHL 7 302

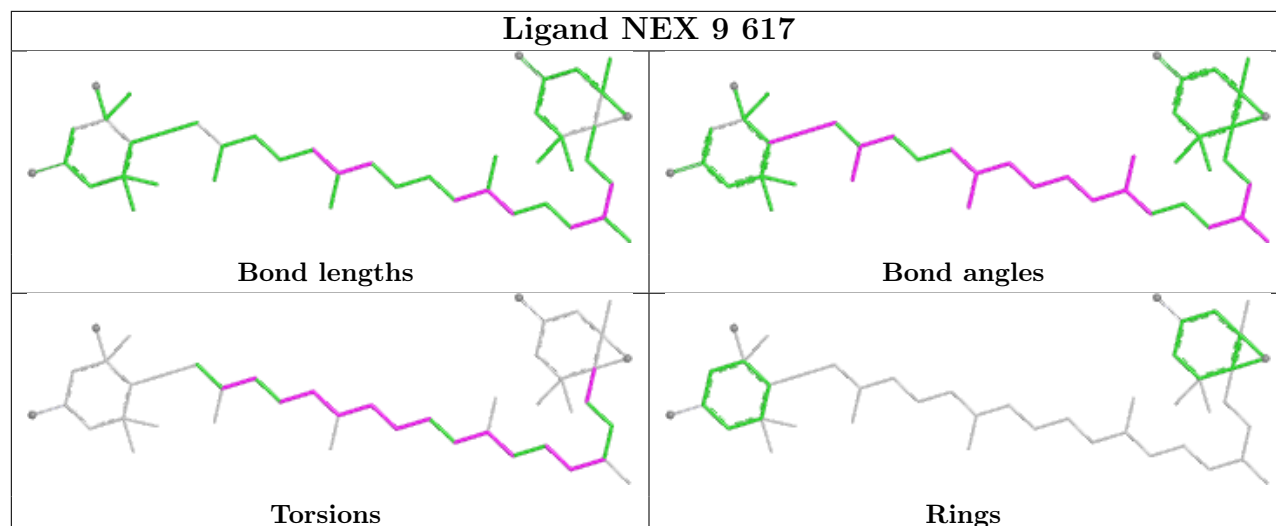




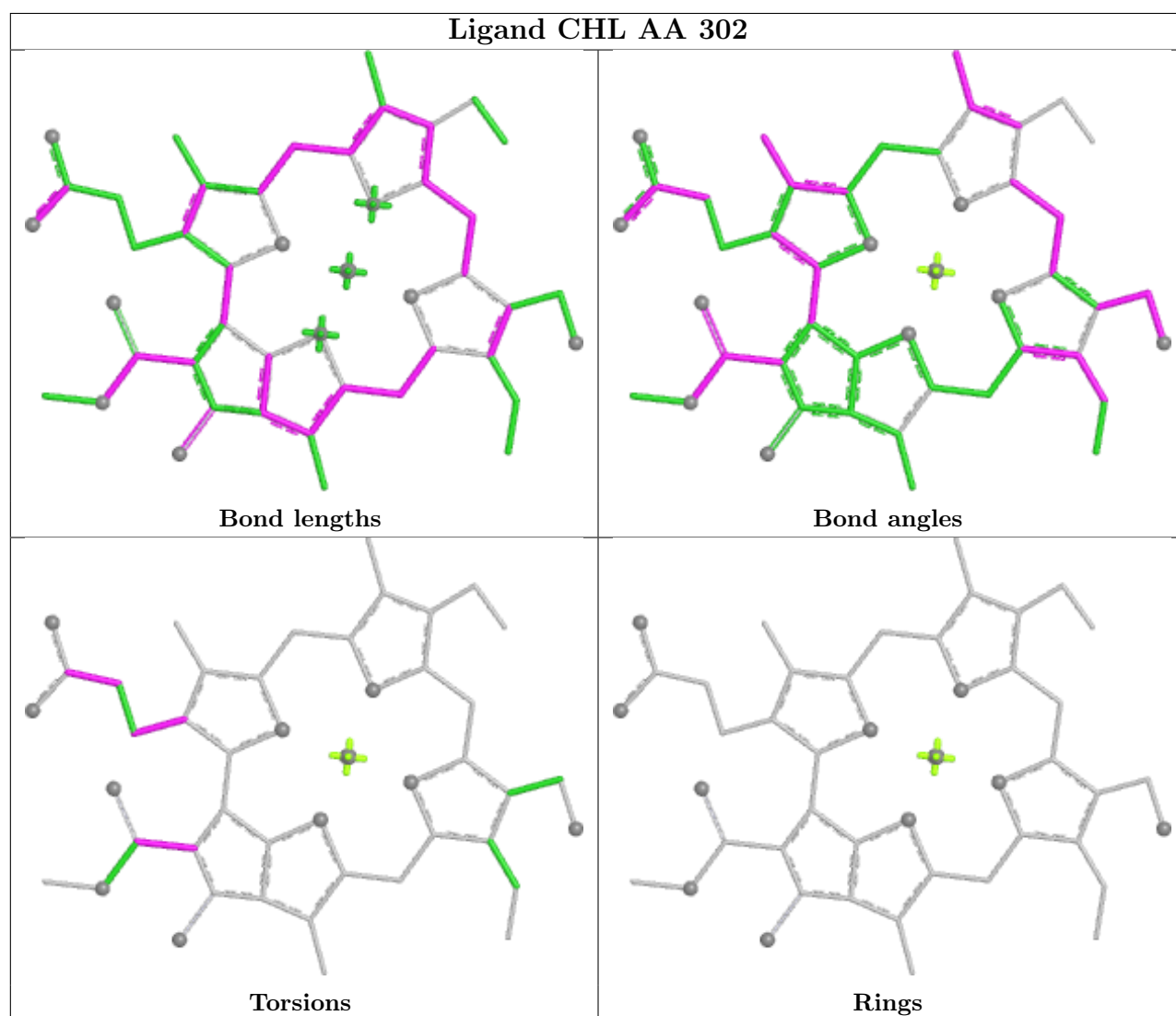




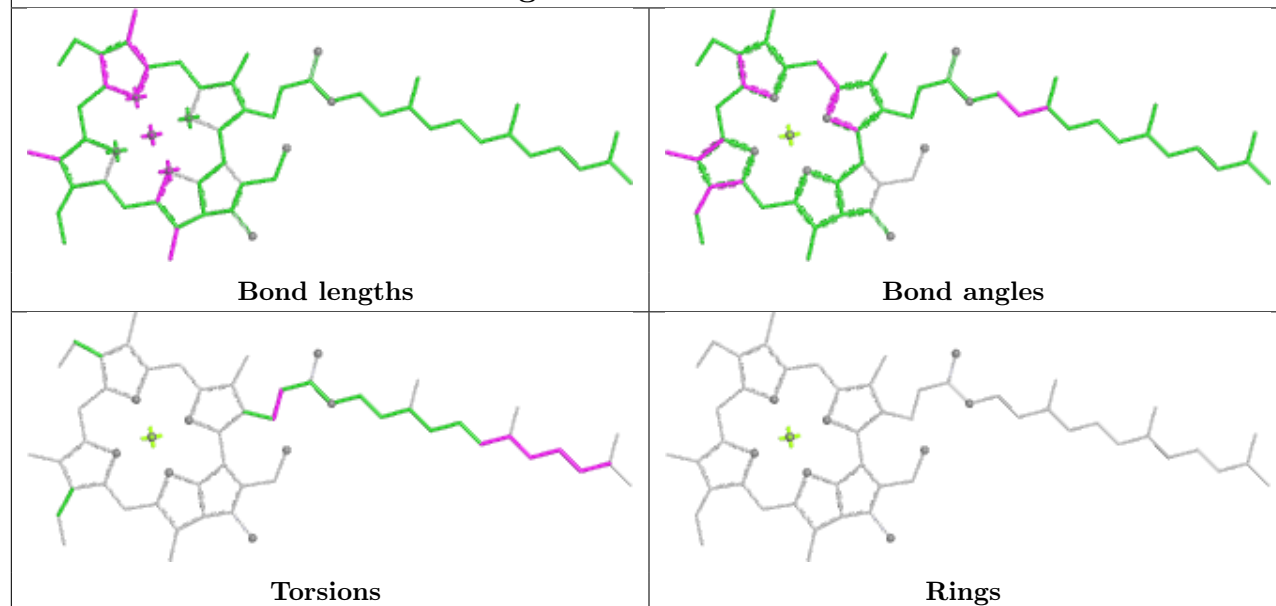
Ligand NEX 9 617



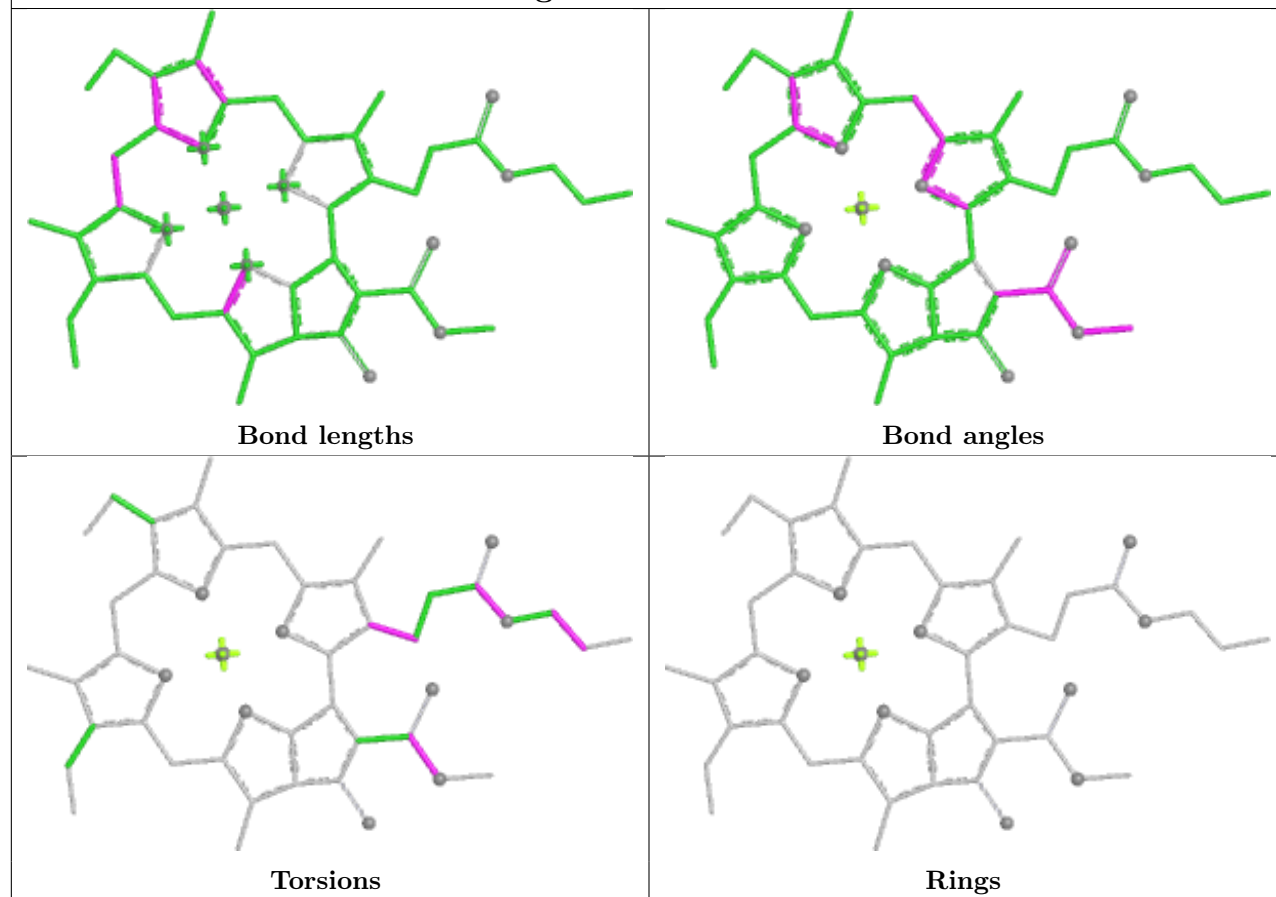
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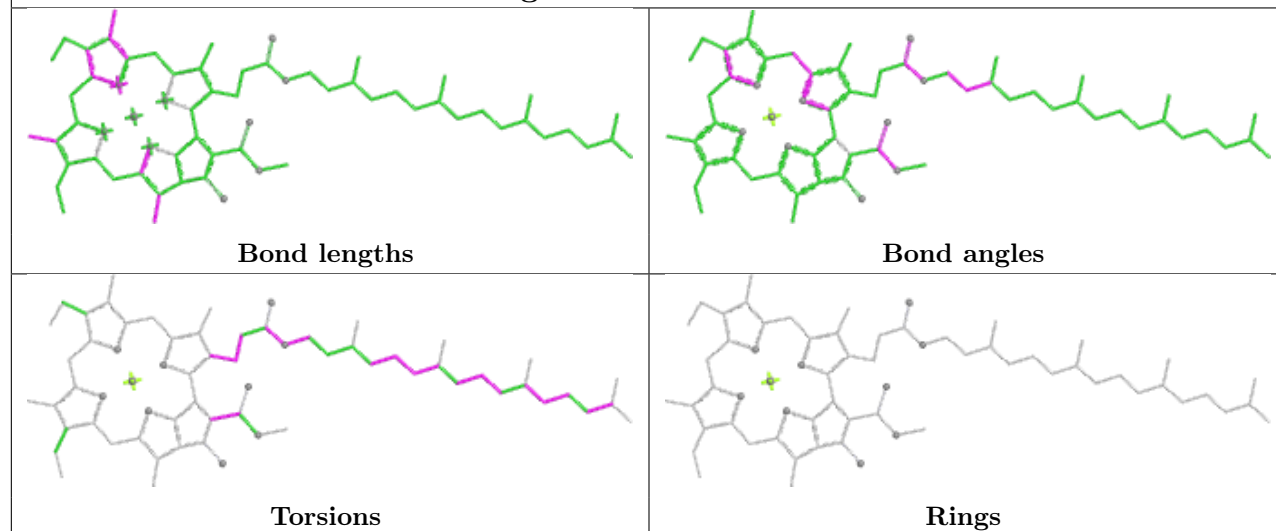
Ligand CLA BU 602



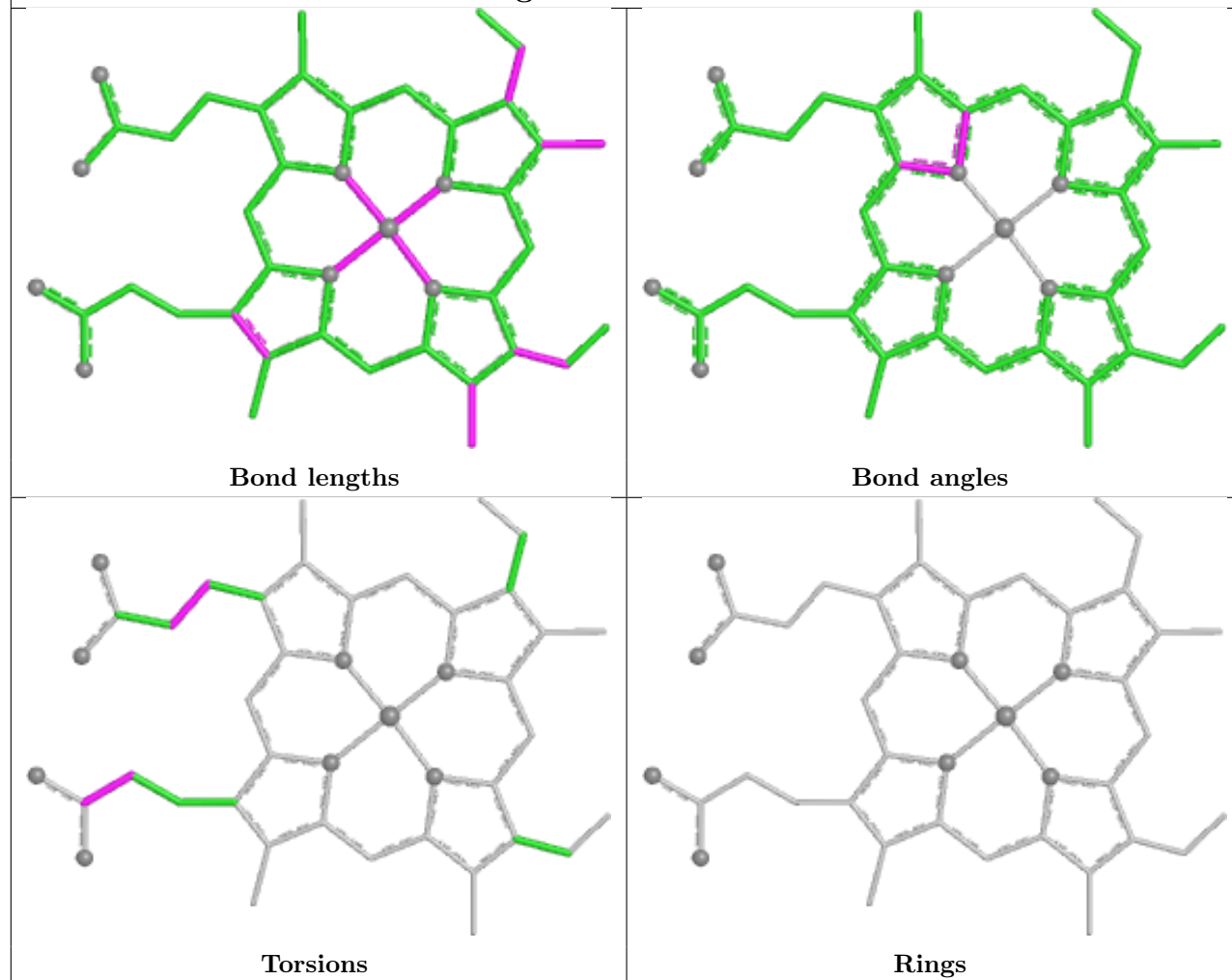
Ligand CLA n 614



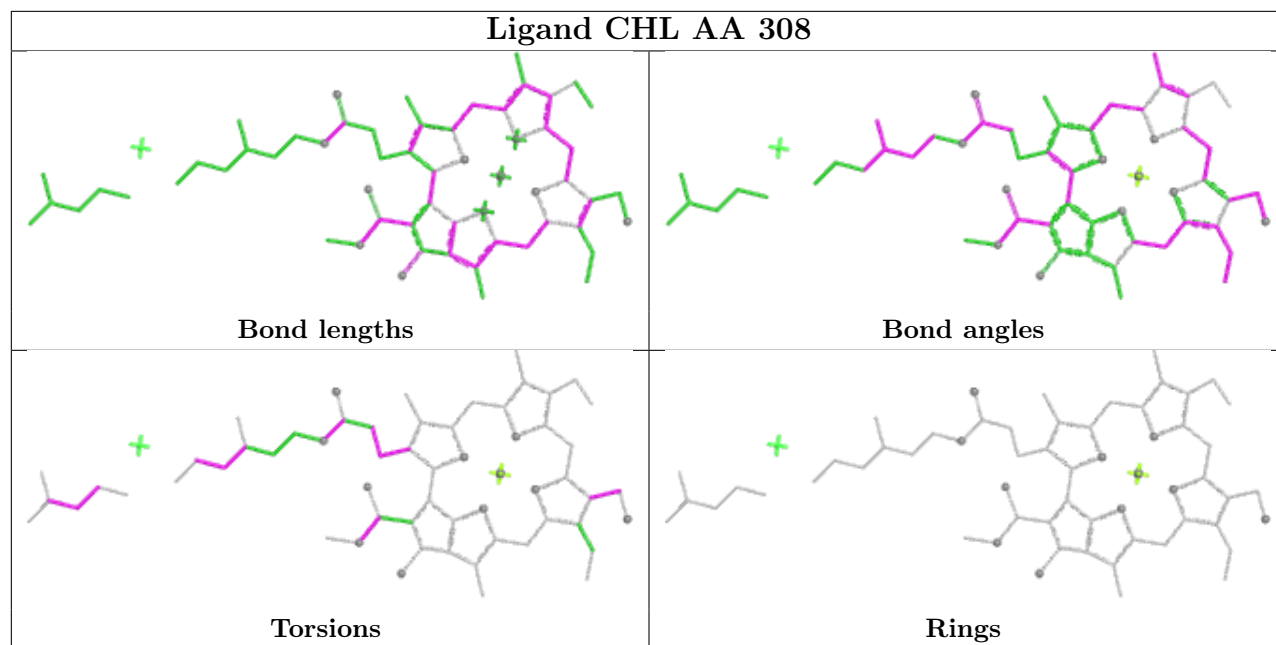
Ligand CLA BE 605



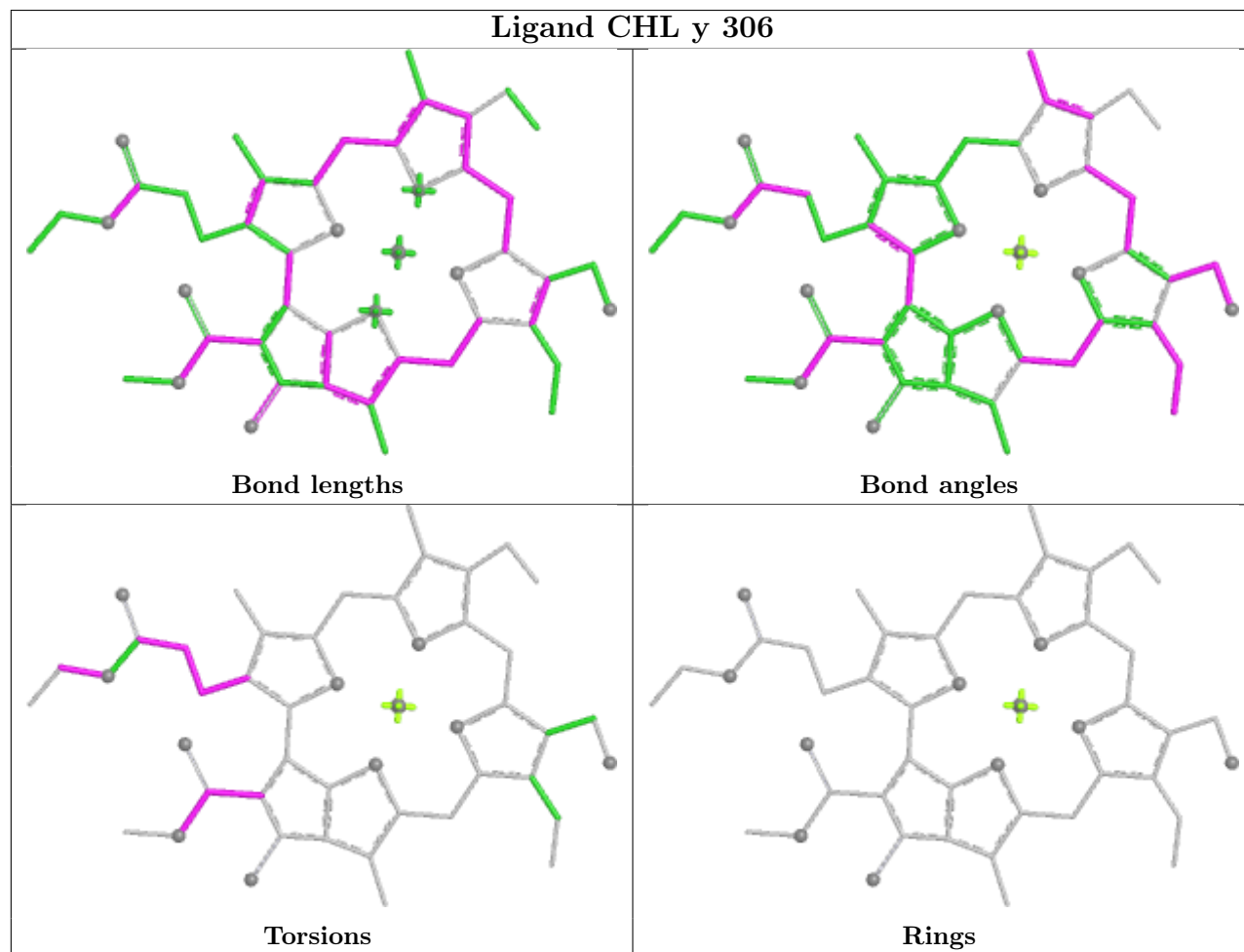
Ligand HEM f 102

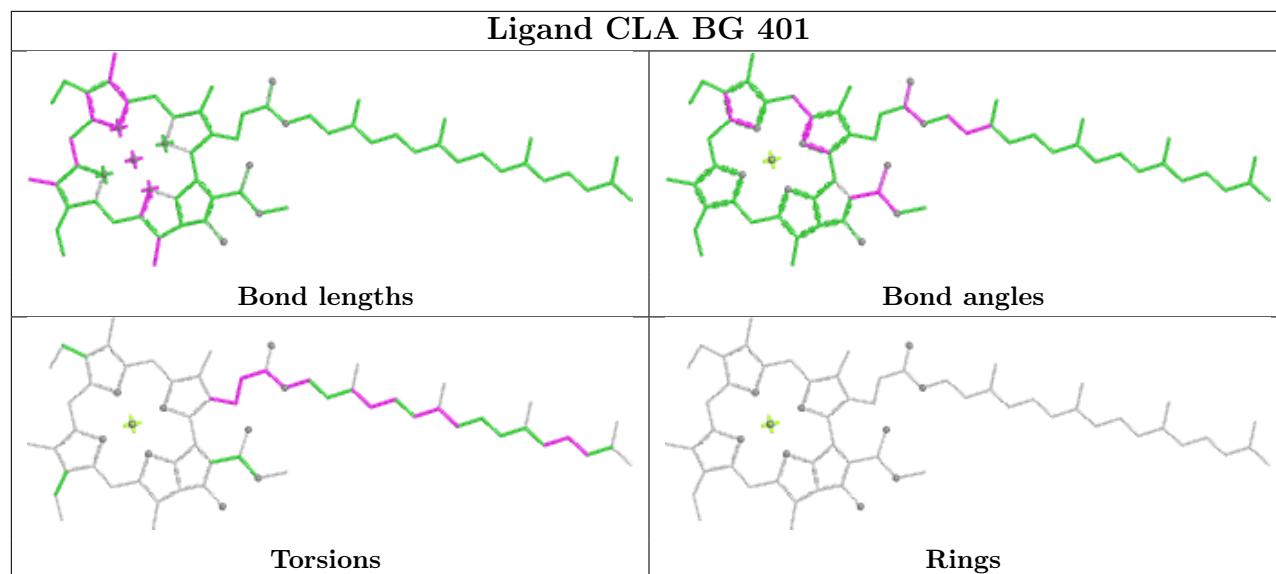
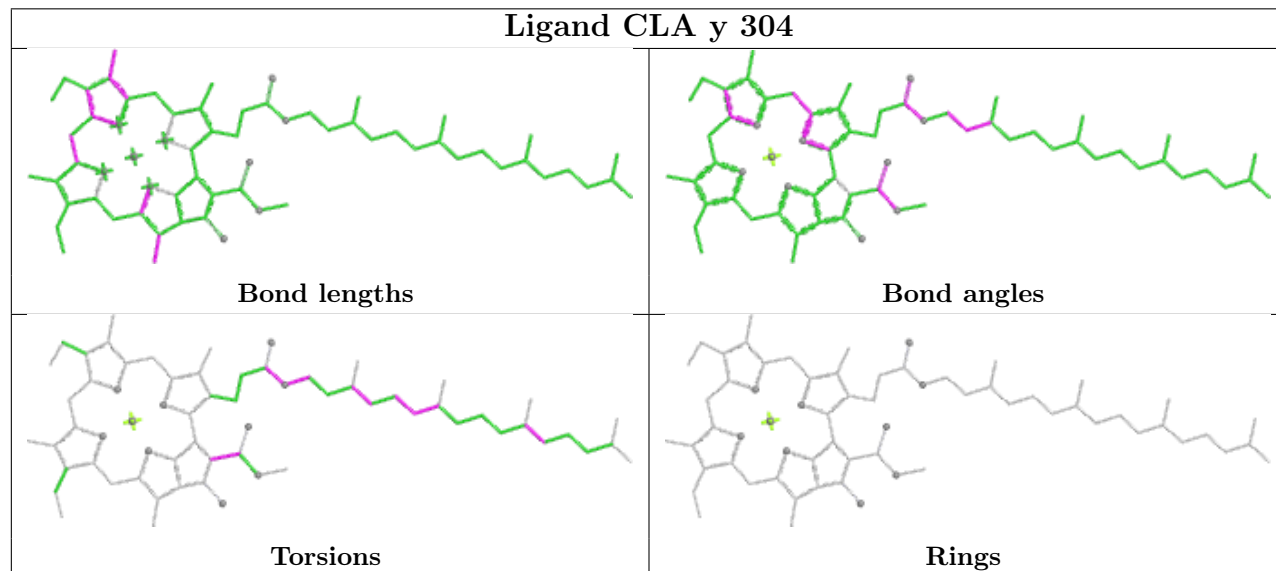


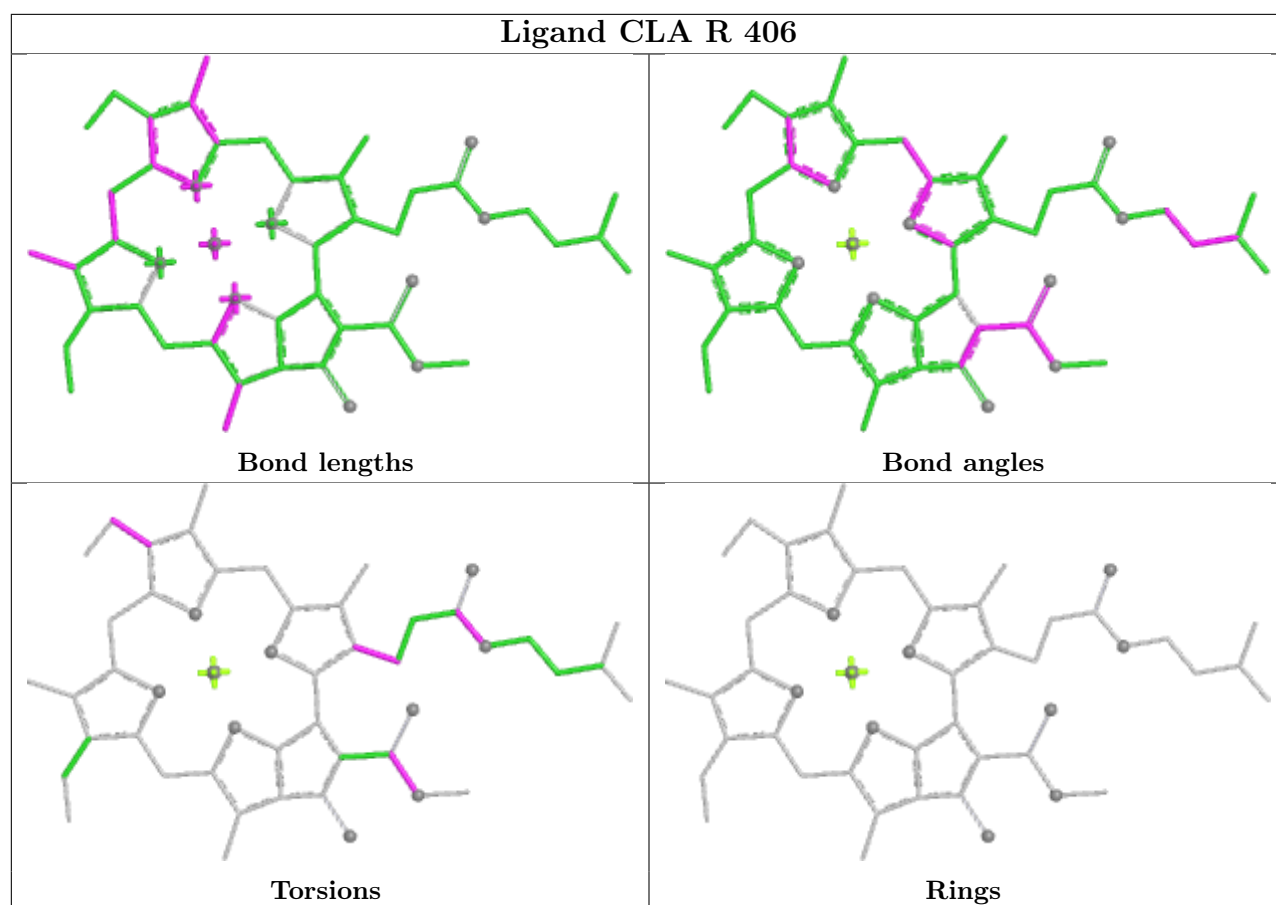
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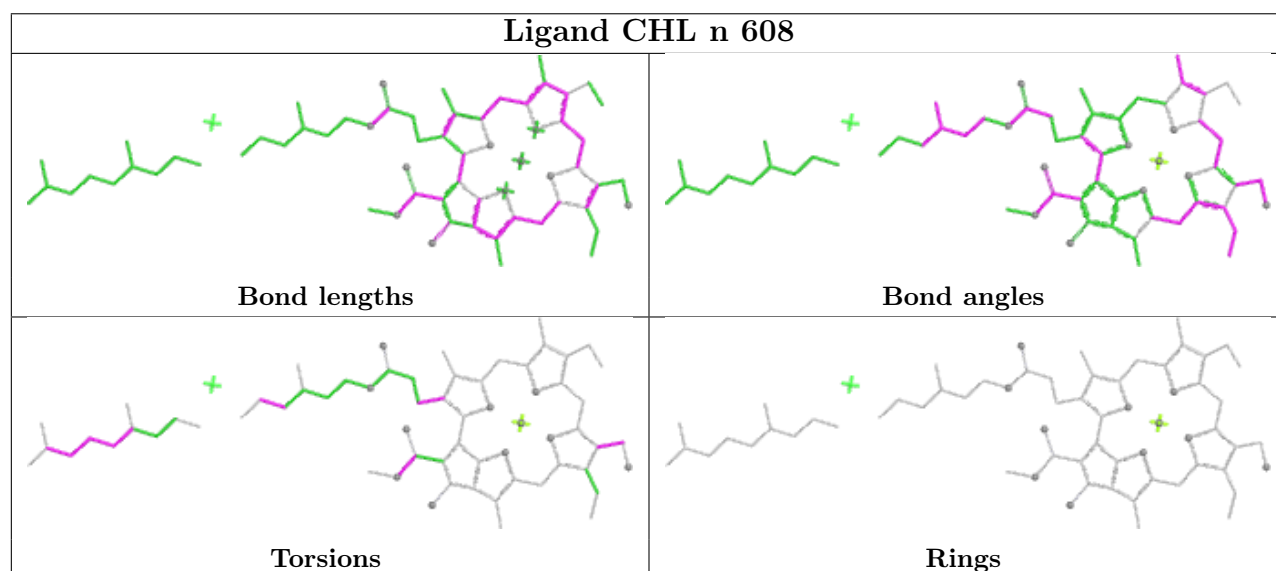
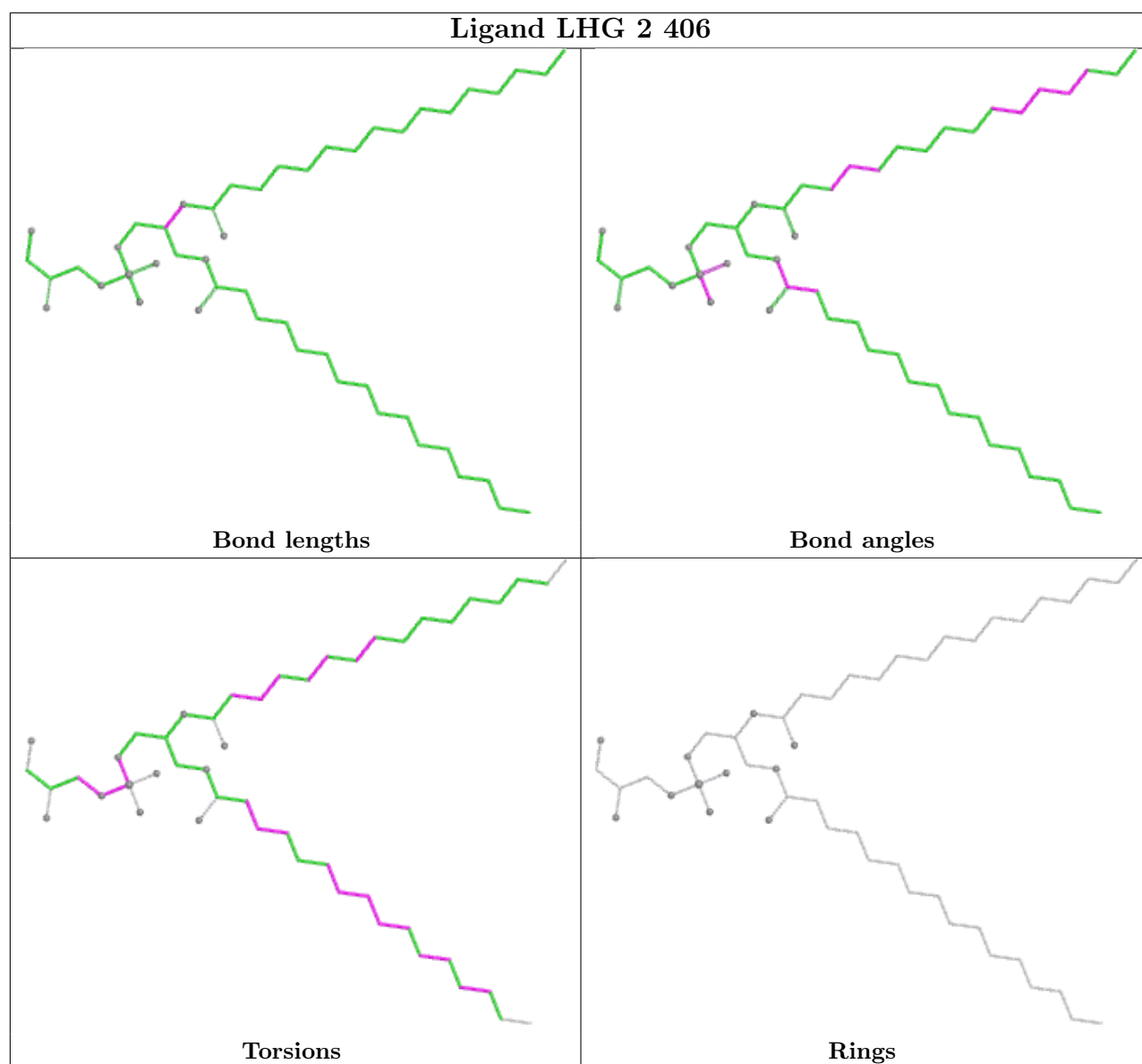


Ligand CHL y 306

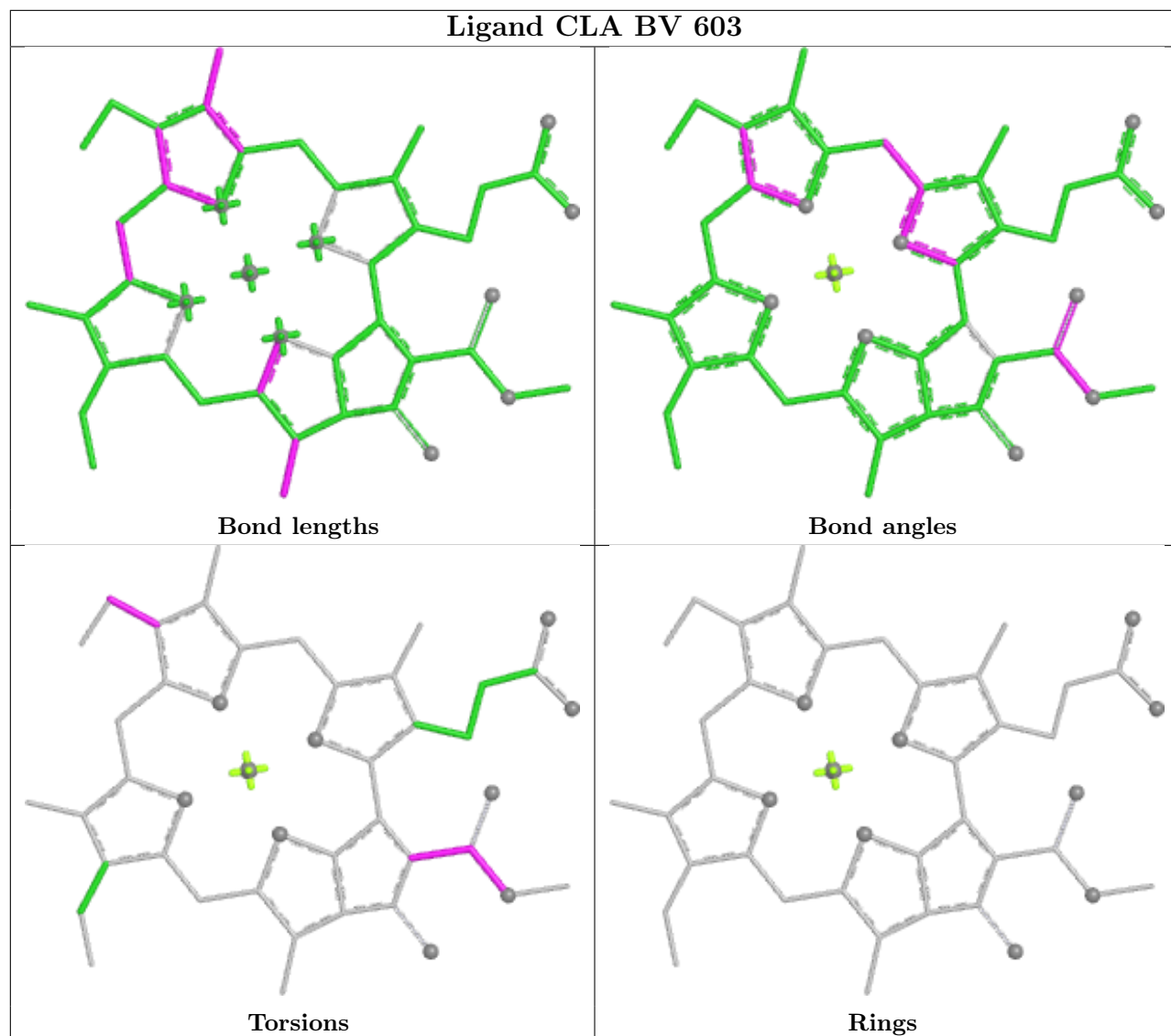


Ligand CLA BG 401**Ligand CLA y 304**

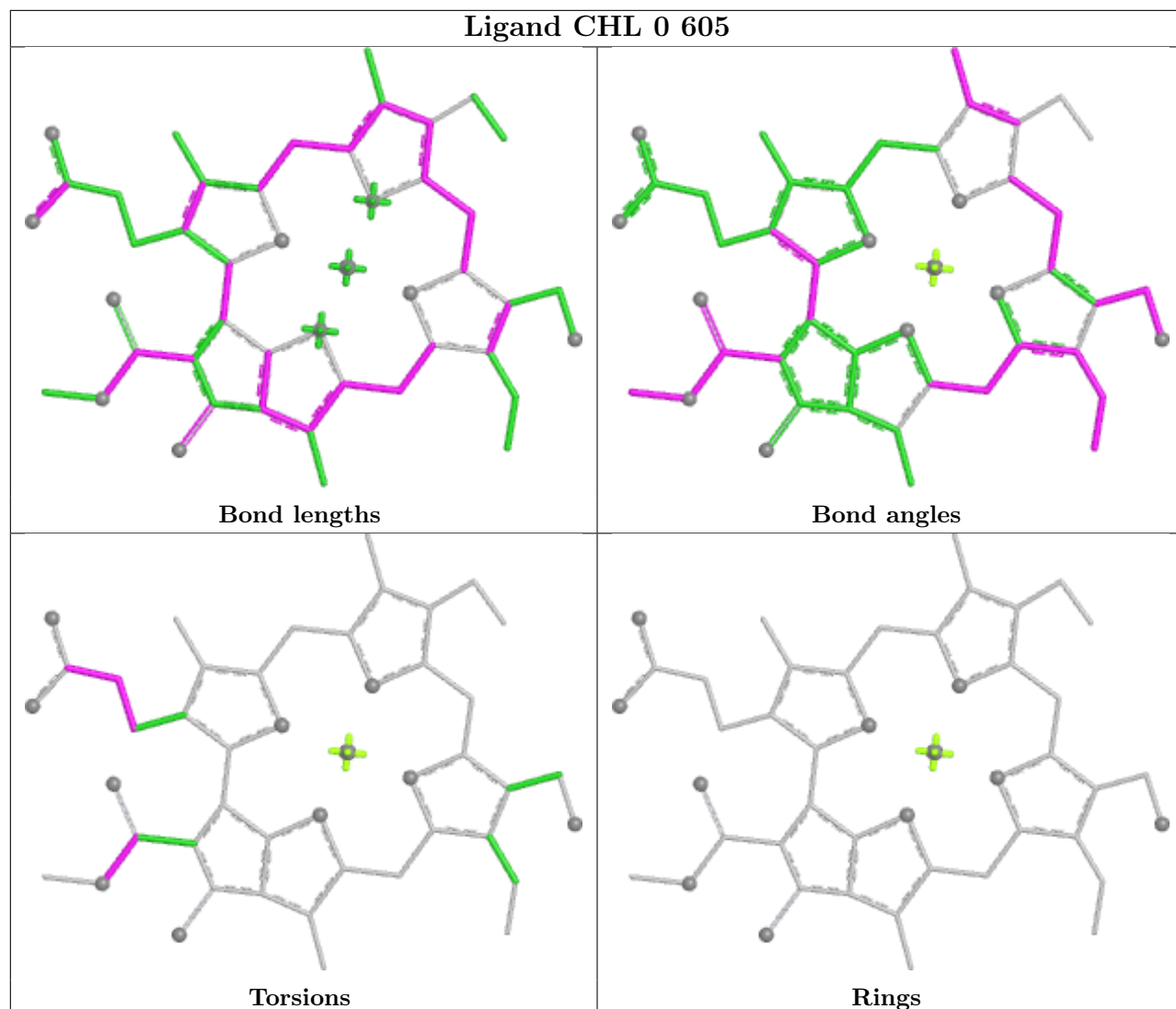




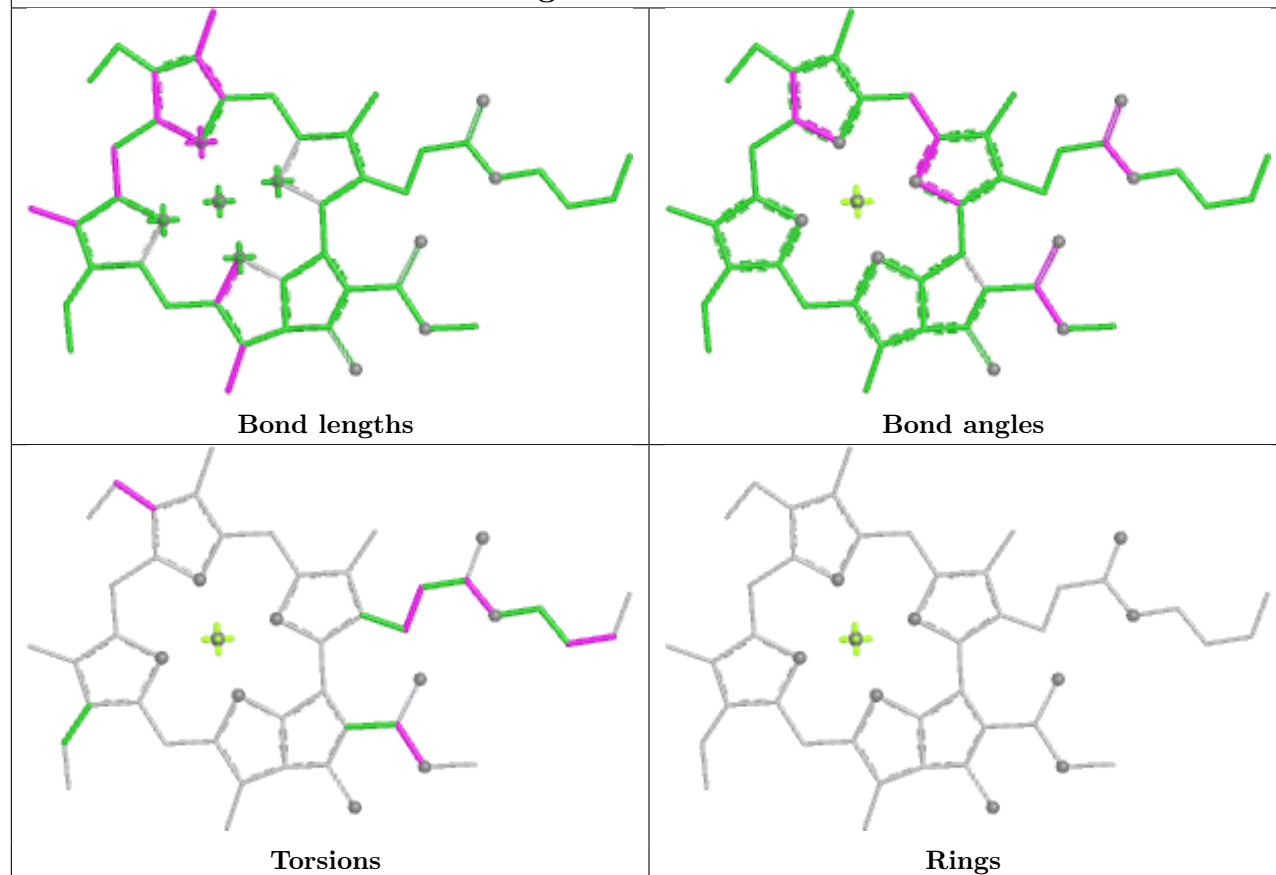
Ligand CLA BV 603



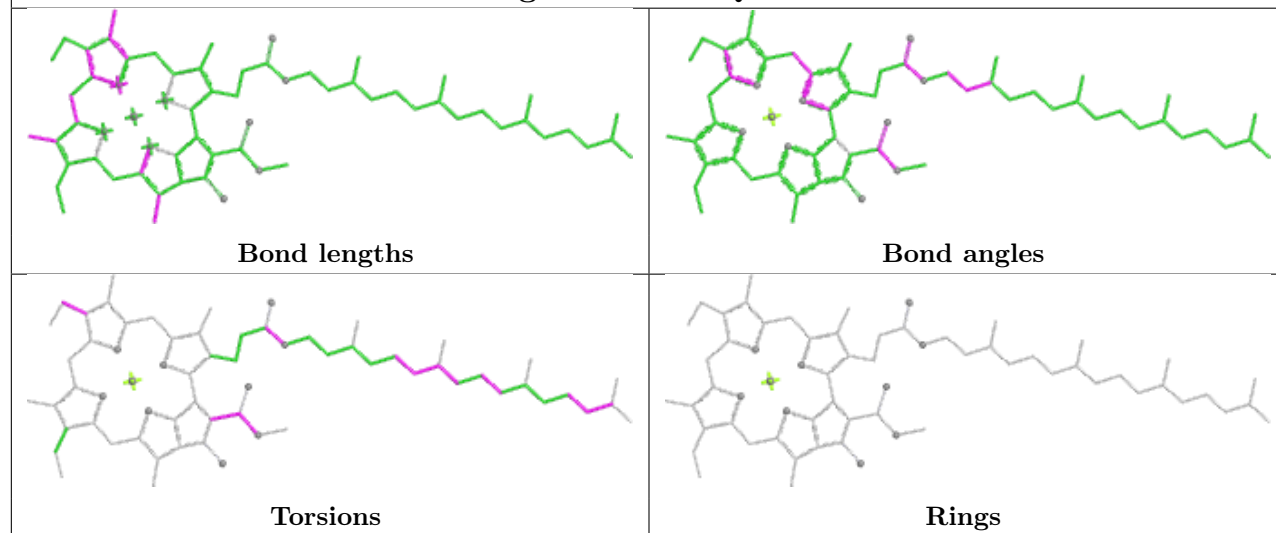
Ligand CHL 0 605

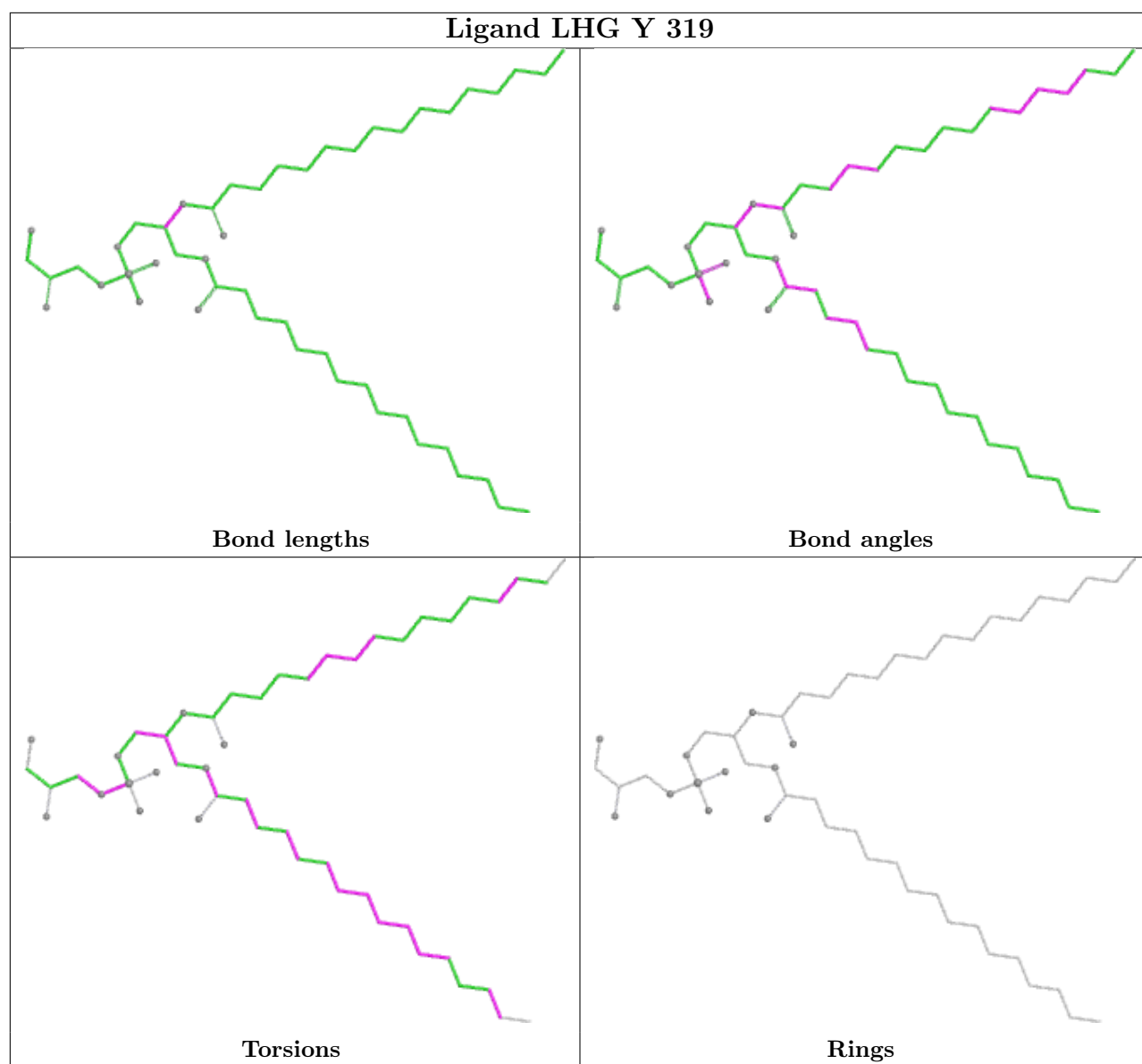


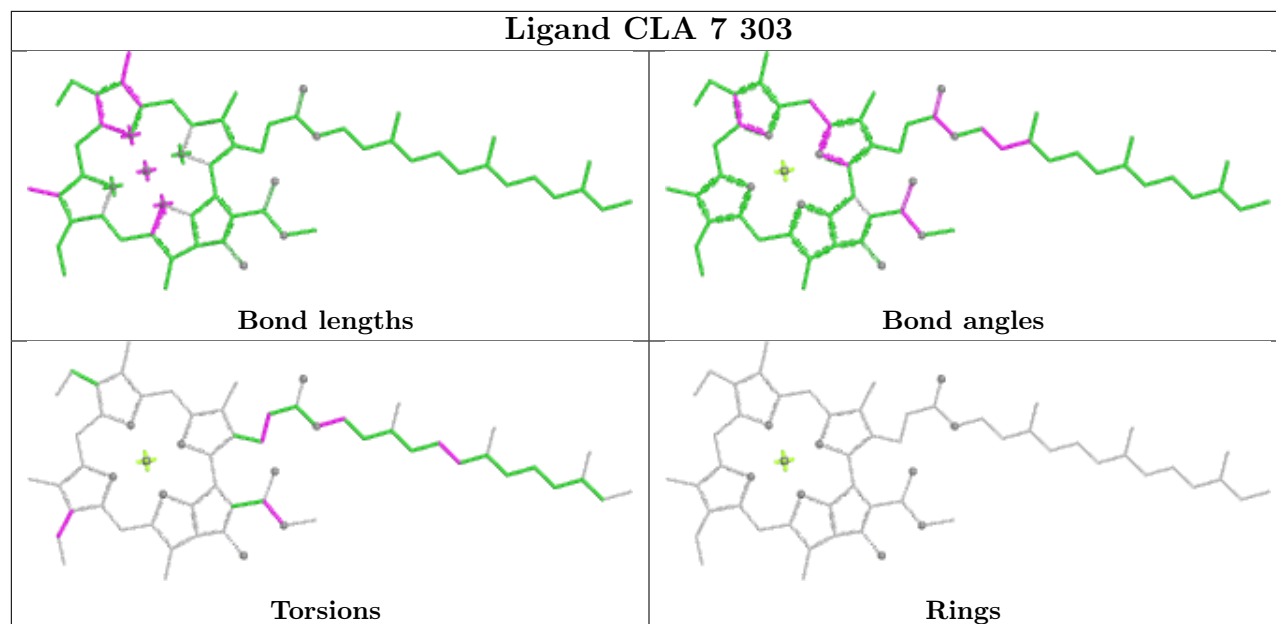
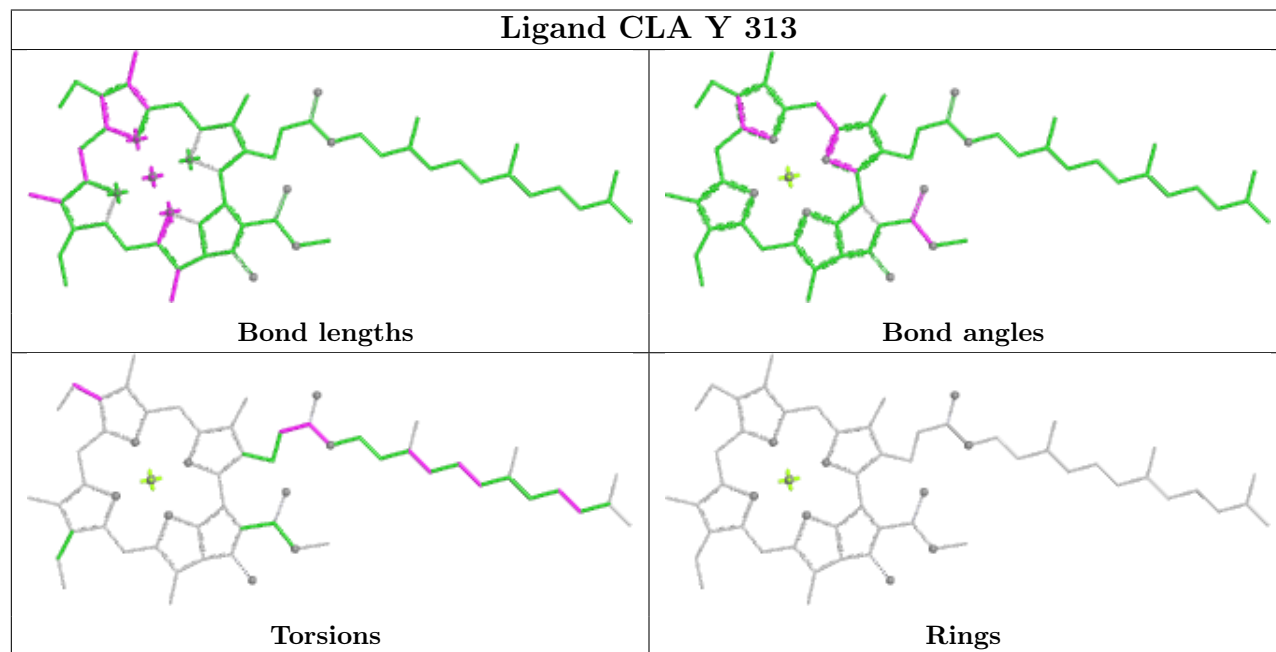
Ligand CLA s 613

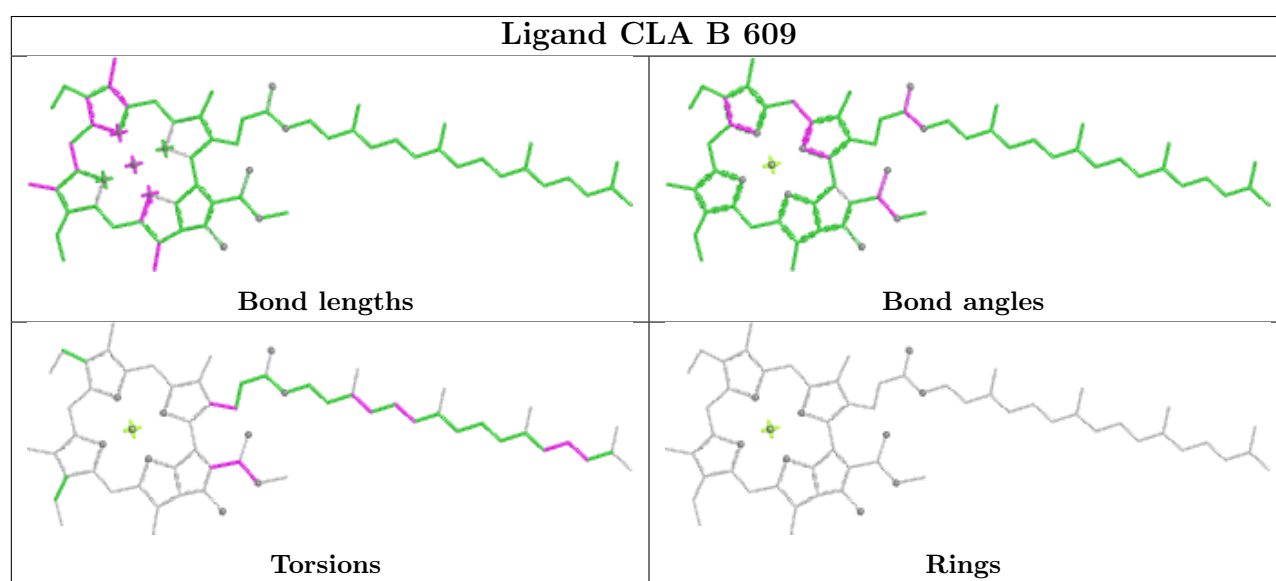
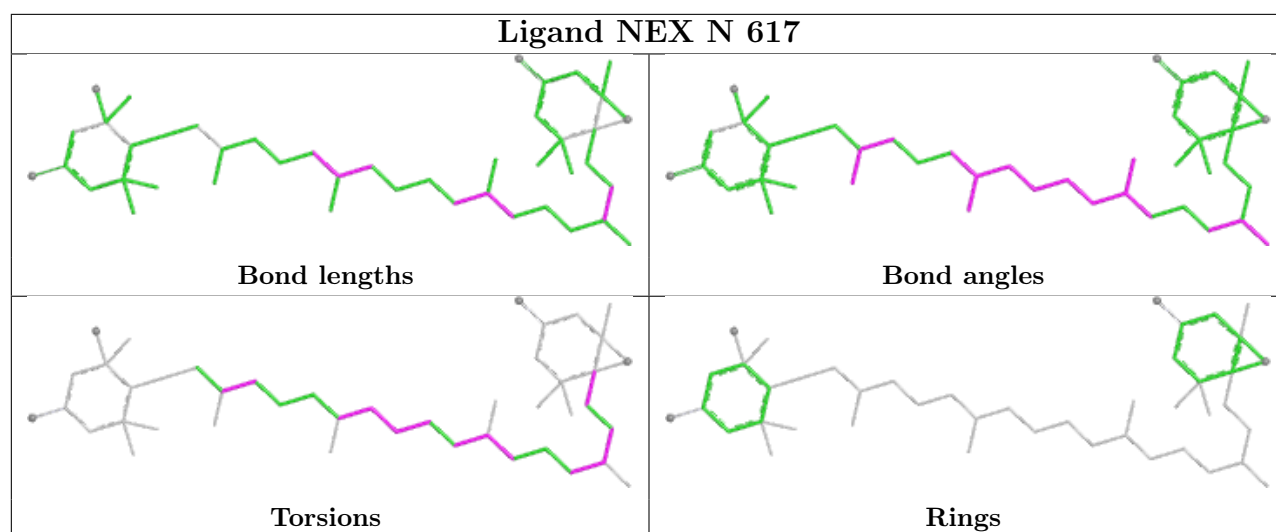


Ligand CLA BQ 603

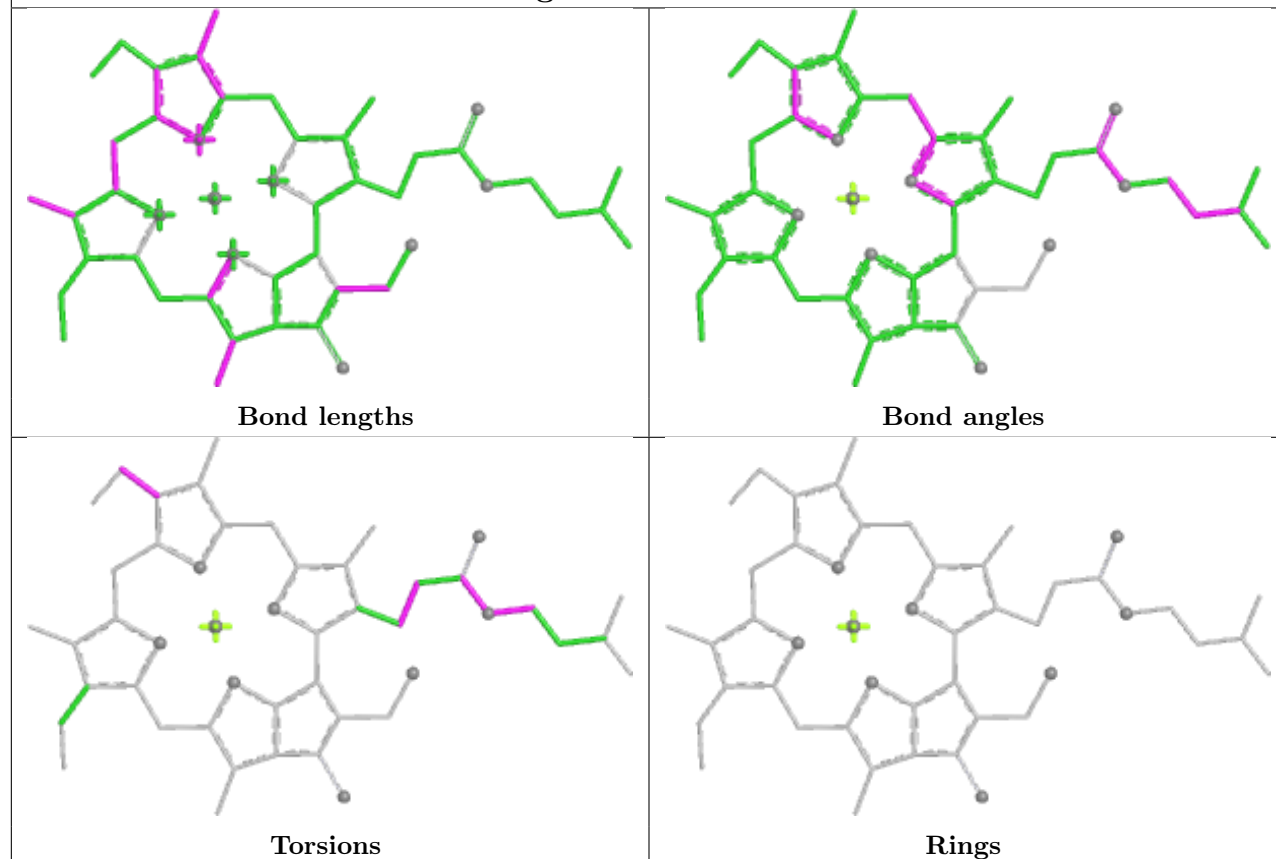




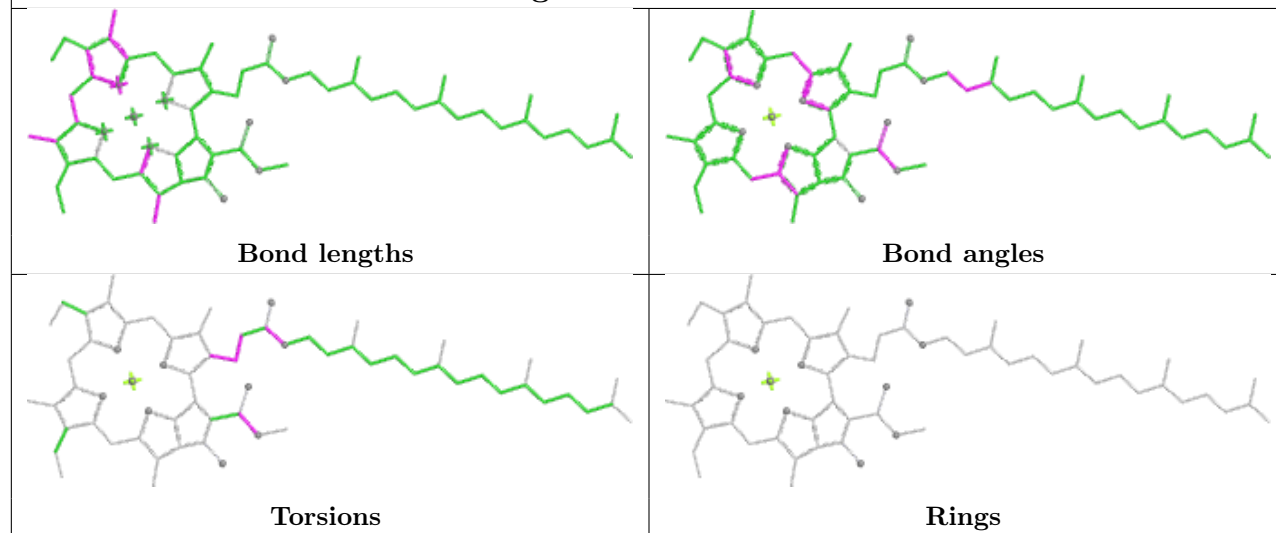
Ligand CLA 7 303**Ligand CLA Y 313**

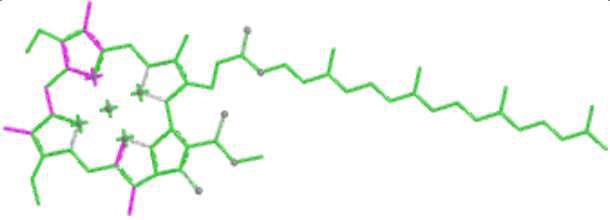
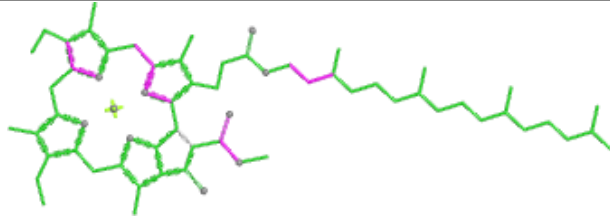
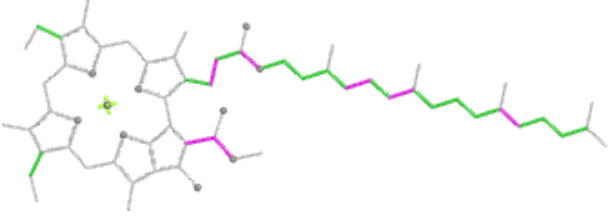
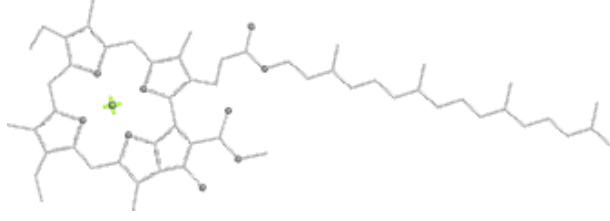
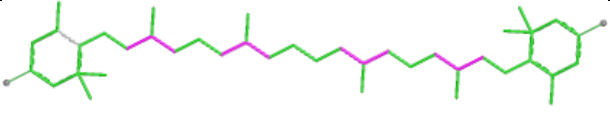
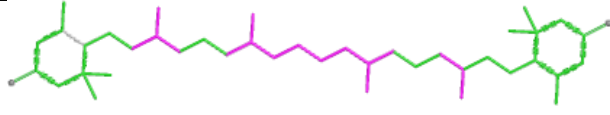
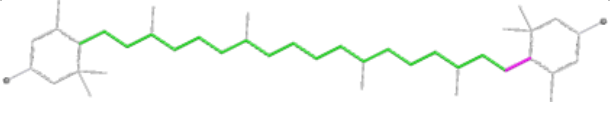
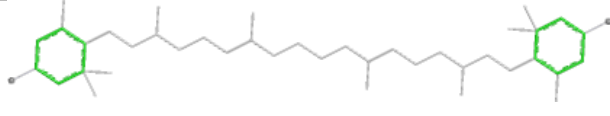
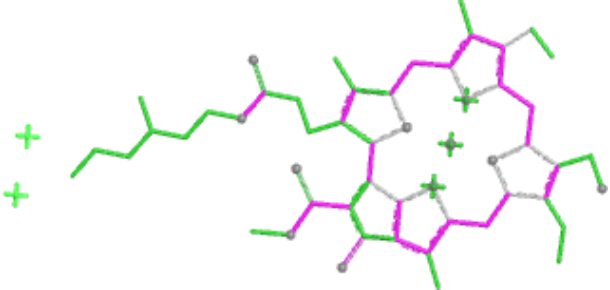
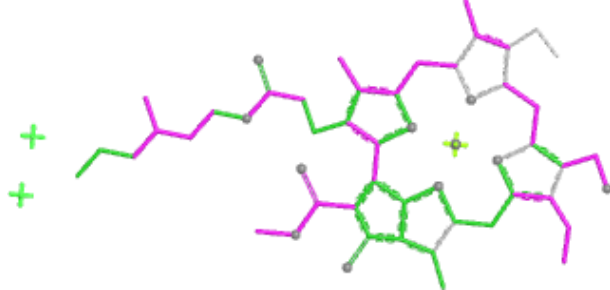
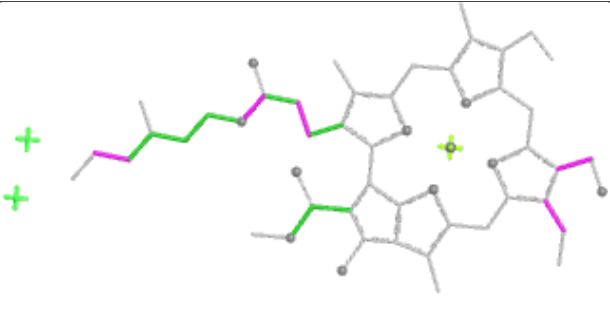
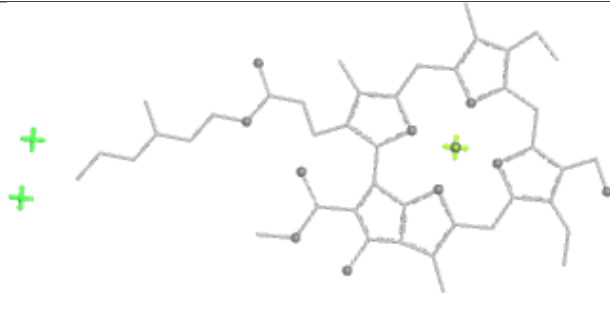


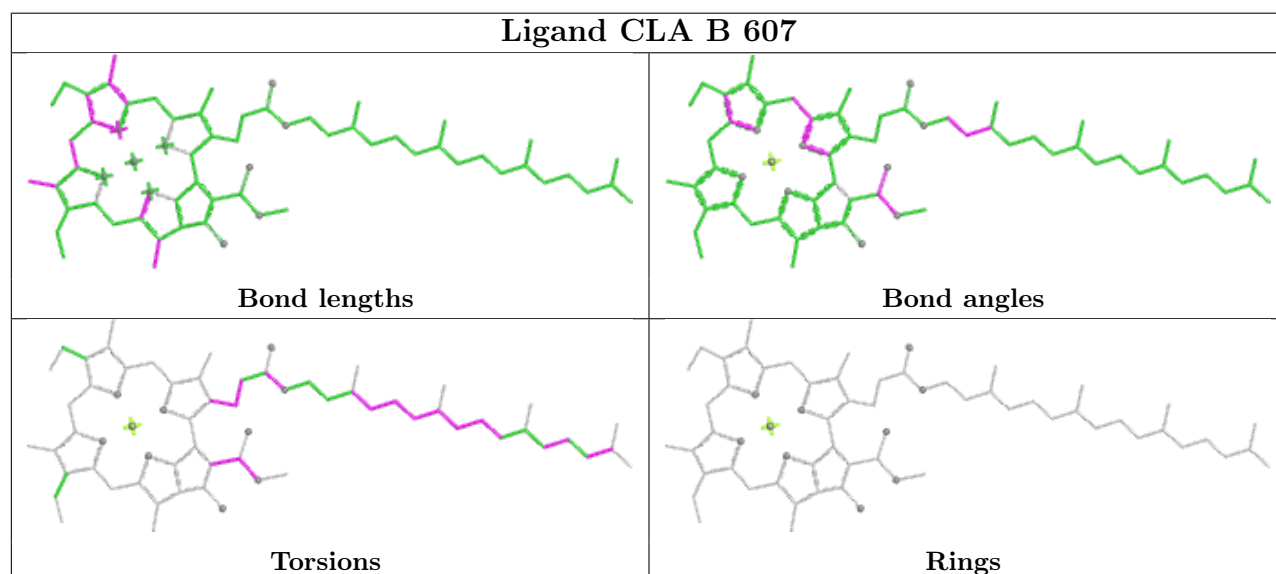
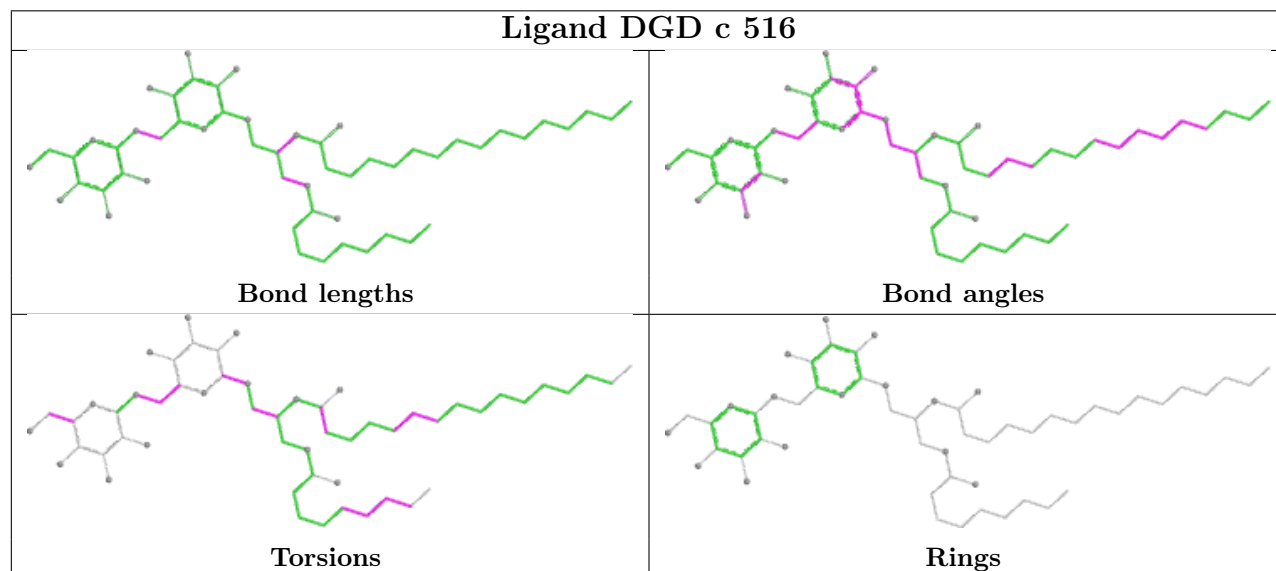
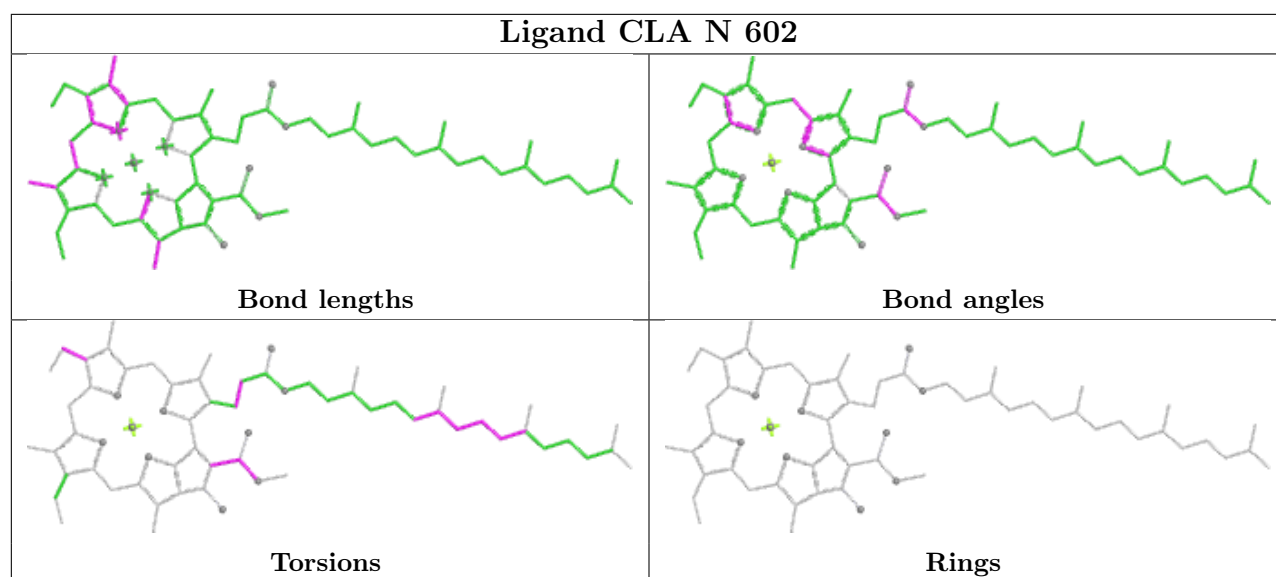
Ligand CLA 7 311



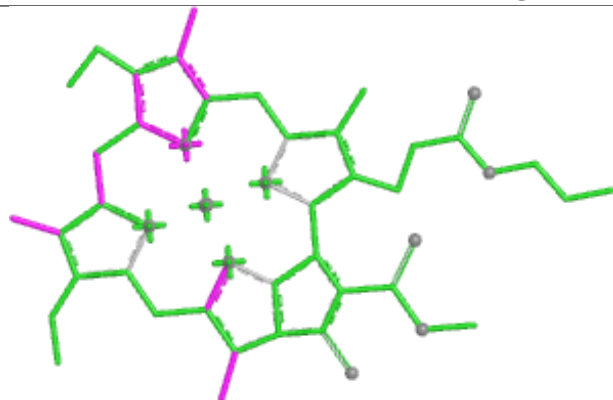
Ligand CLA A 406



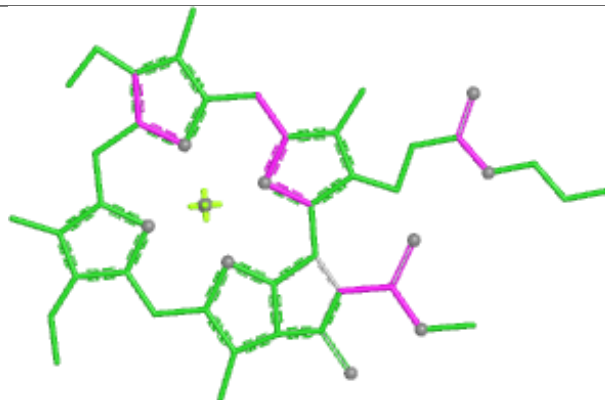
Ligand CLA BJ 613	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>
Ligand LUT N 616	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>
Ligand CHL r 606	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>



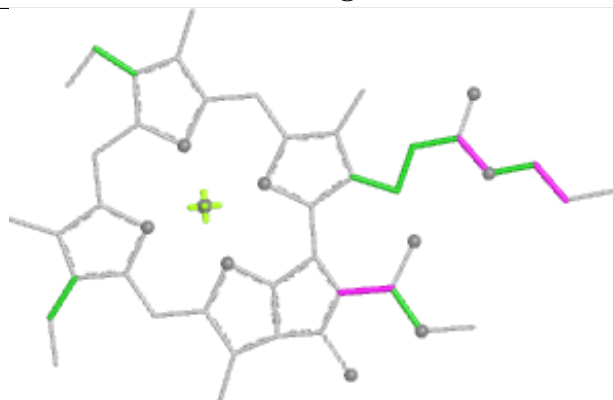
Ligand CLA G 614



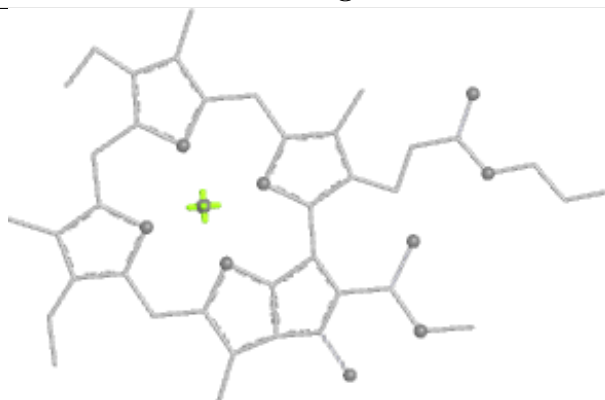
Bond lengths



Bond angles

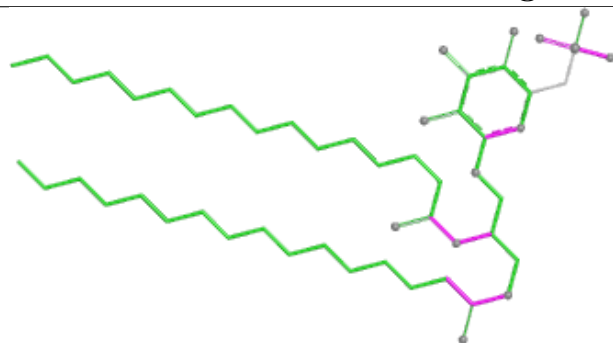


Torsions

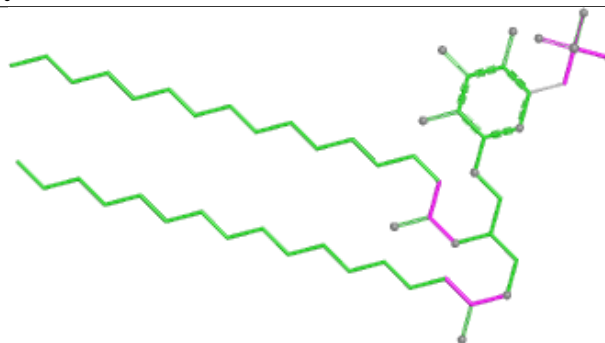


Rings

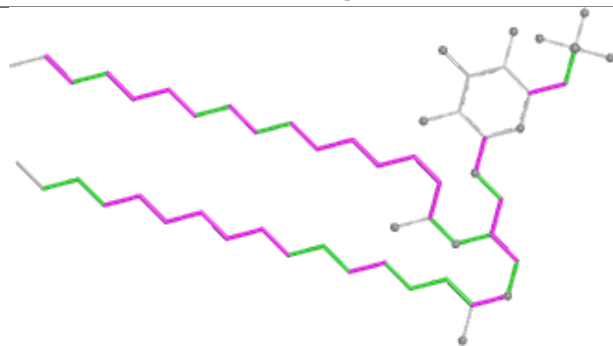
Ligand SQD a 412



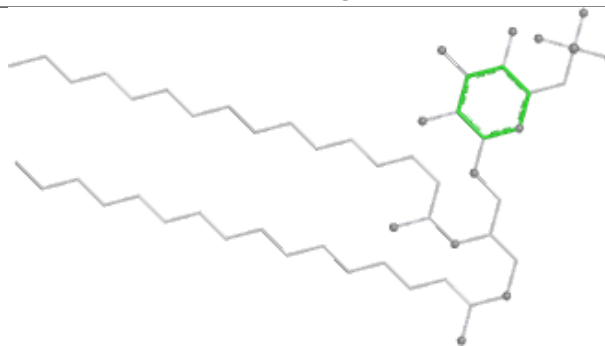
Bond lengths



Bond angles

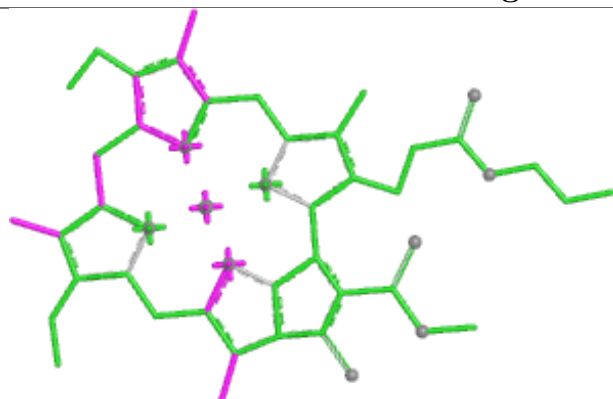


Torsions

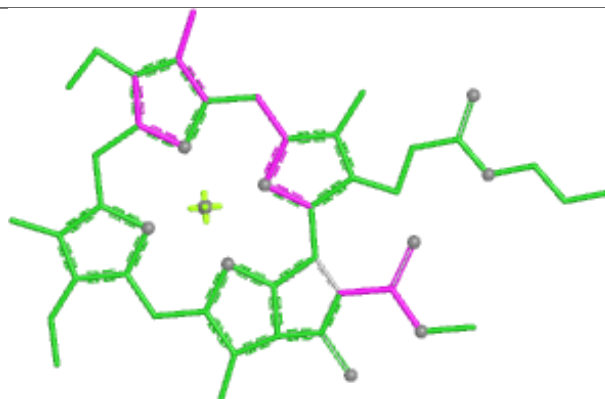


Rings

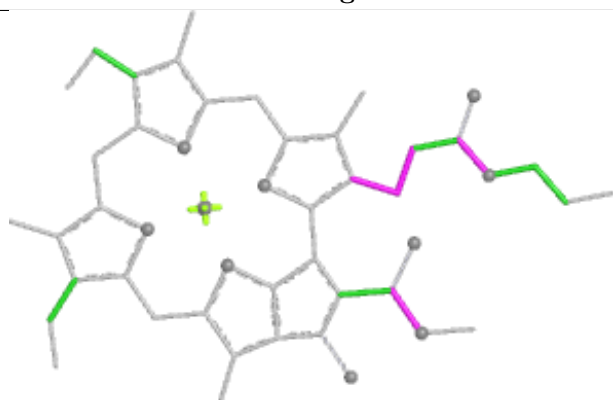
Ligand CLA BB 315



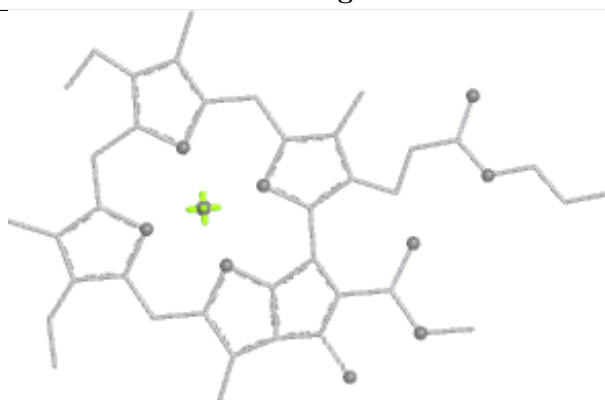
Bond lengths



Bond angles

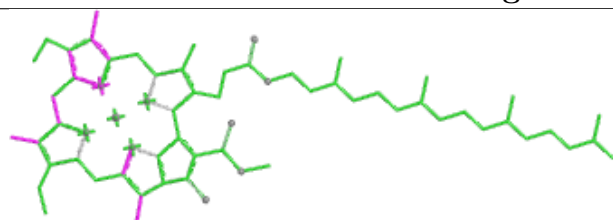


Torsions

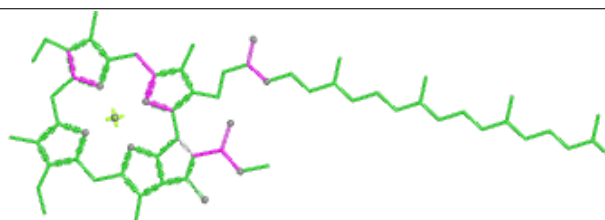


Rings

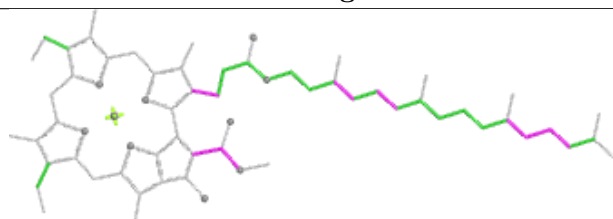
Ligand CLA BE 610



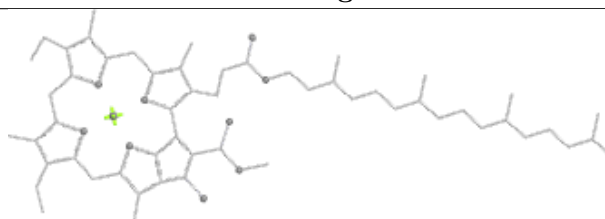
Bond lengths



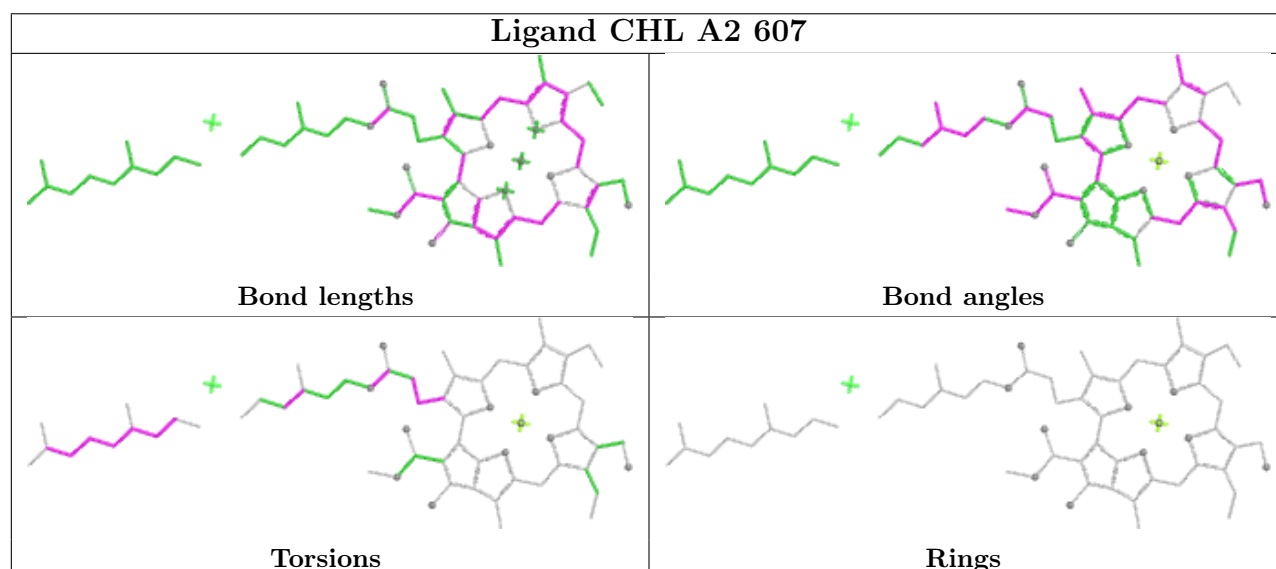
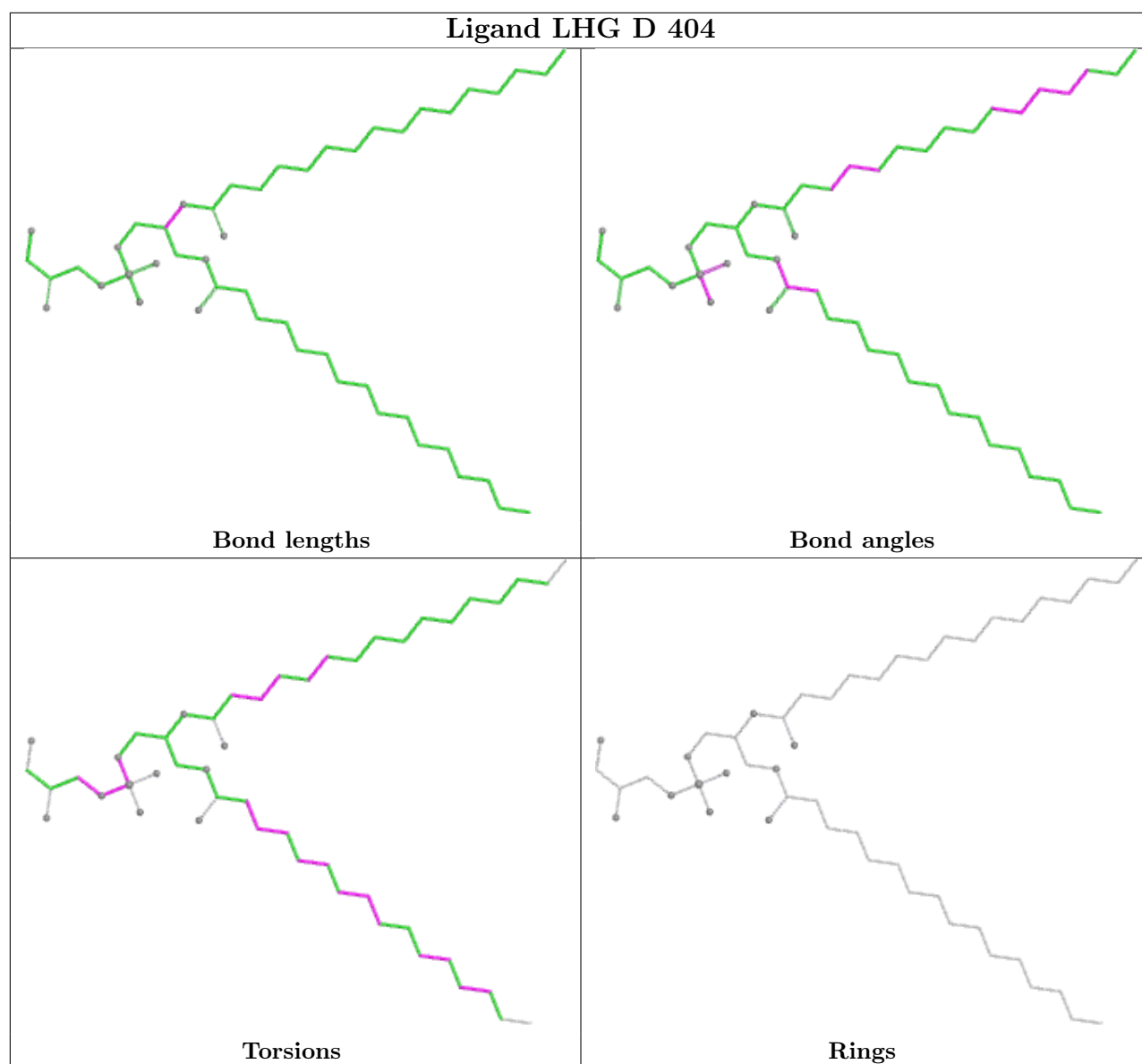
Bond angles

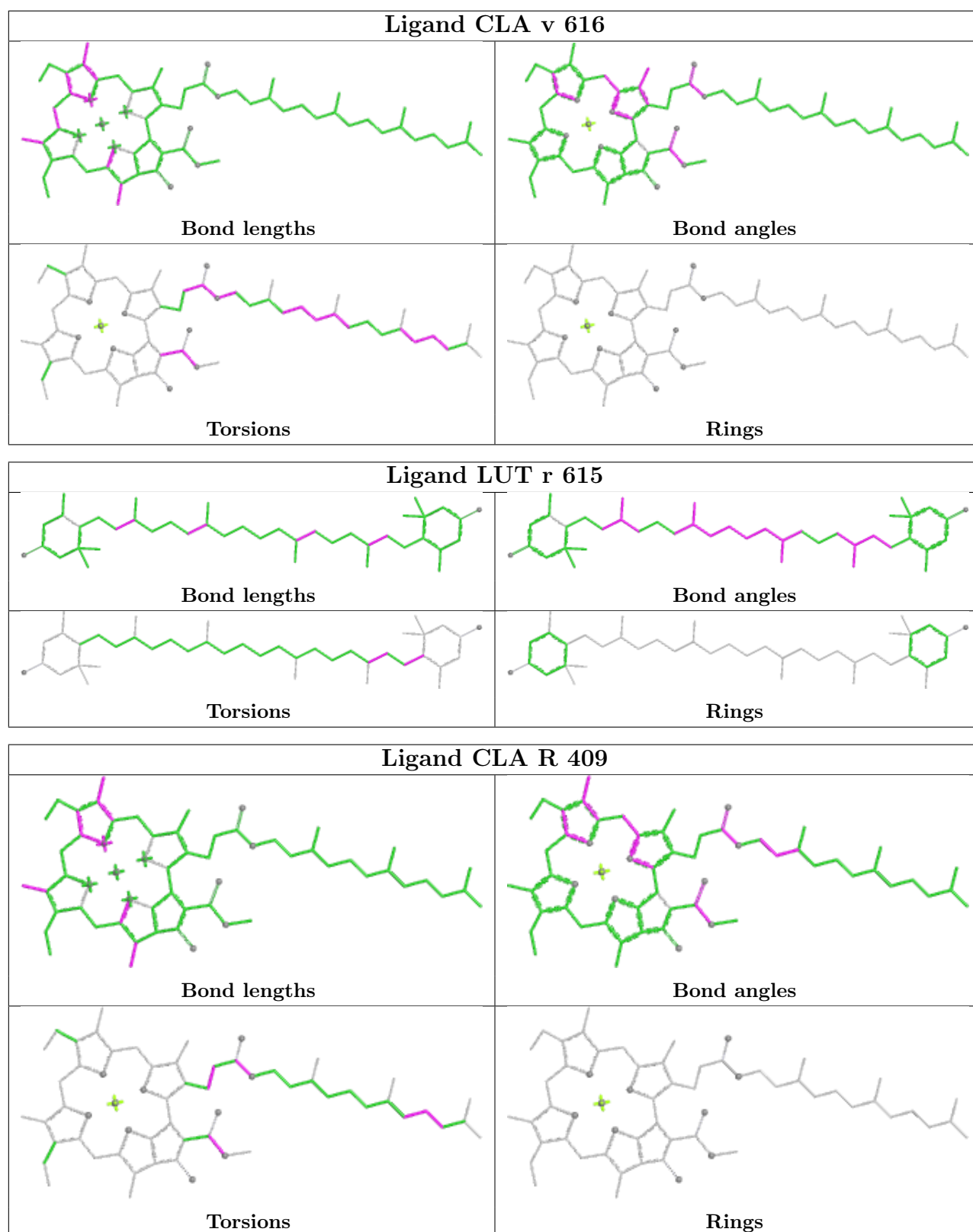


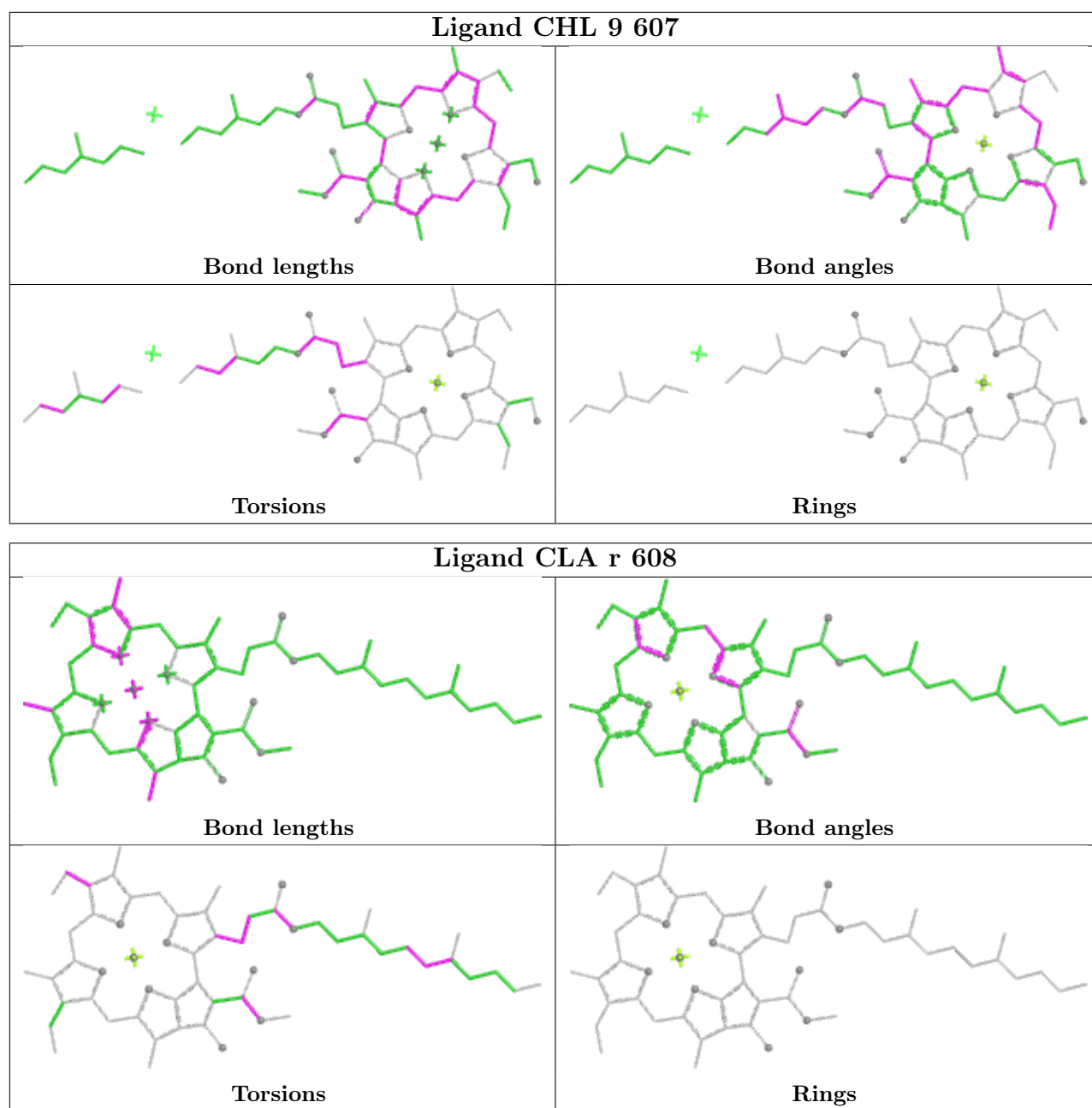
Torsions

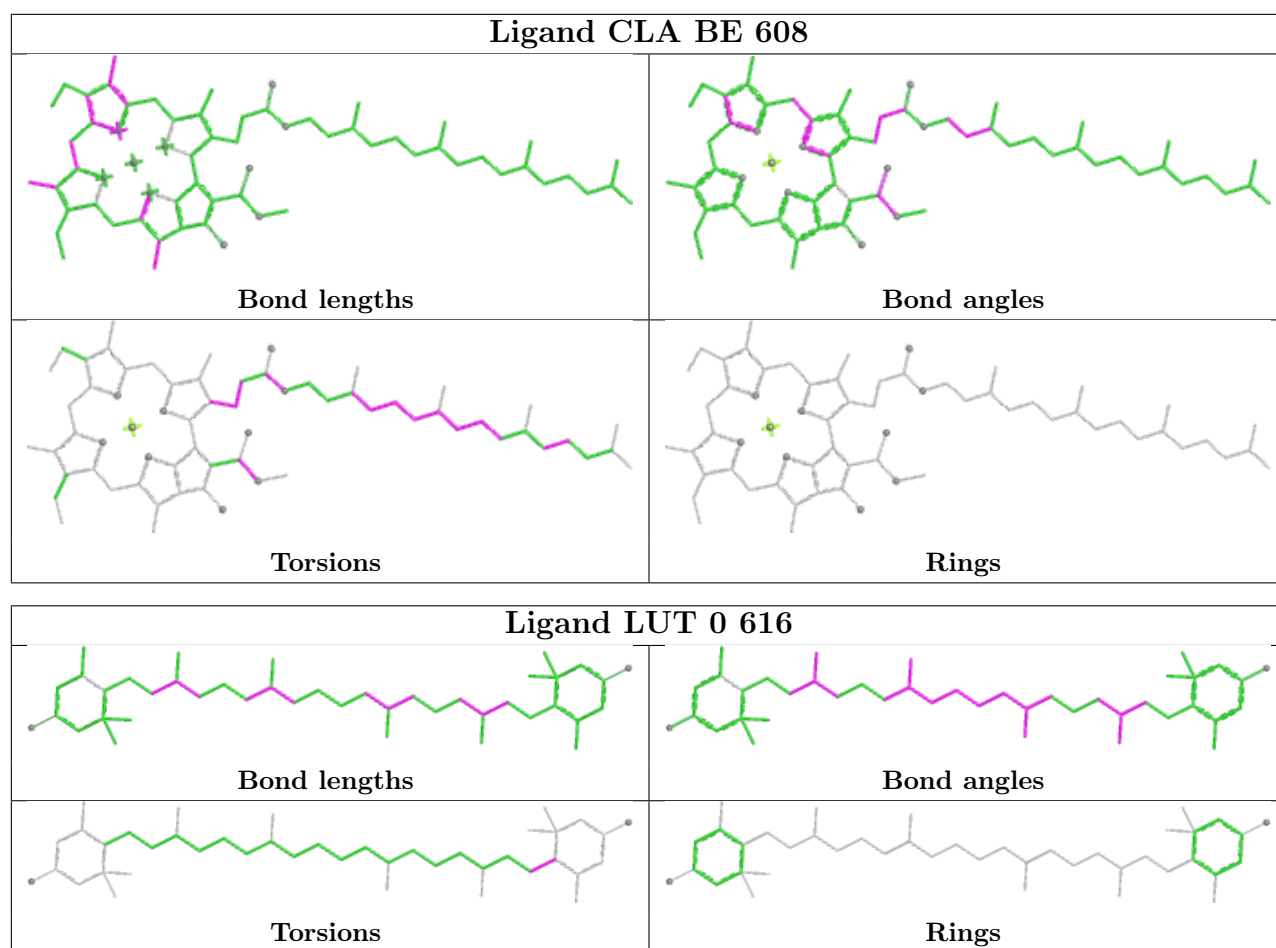


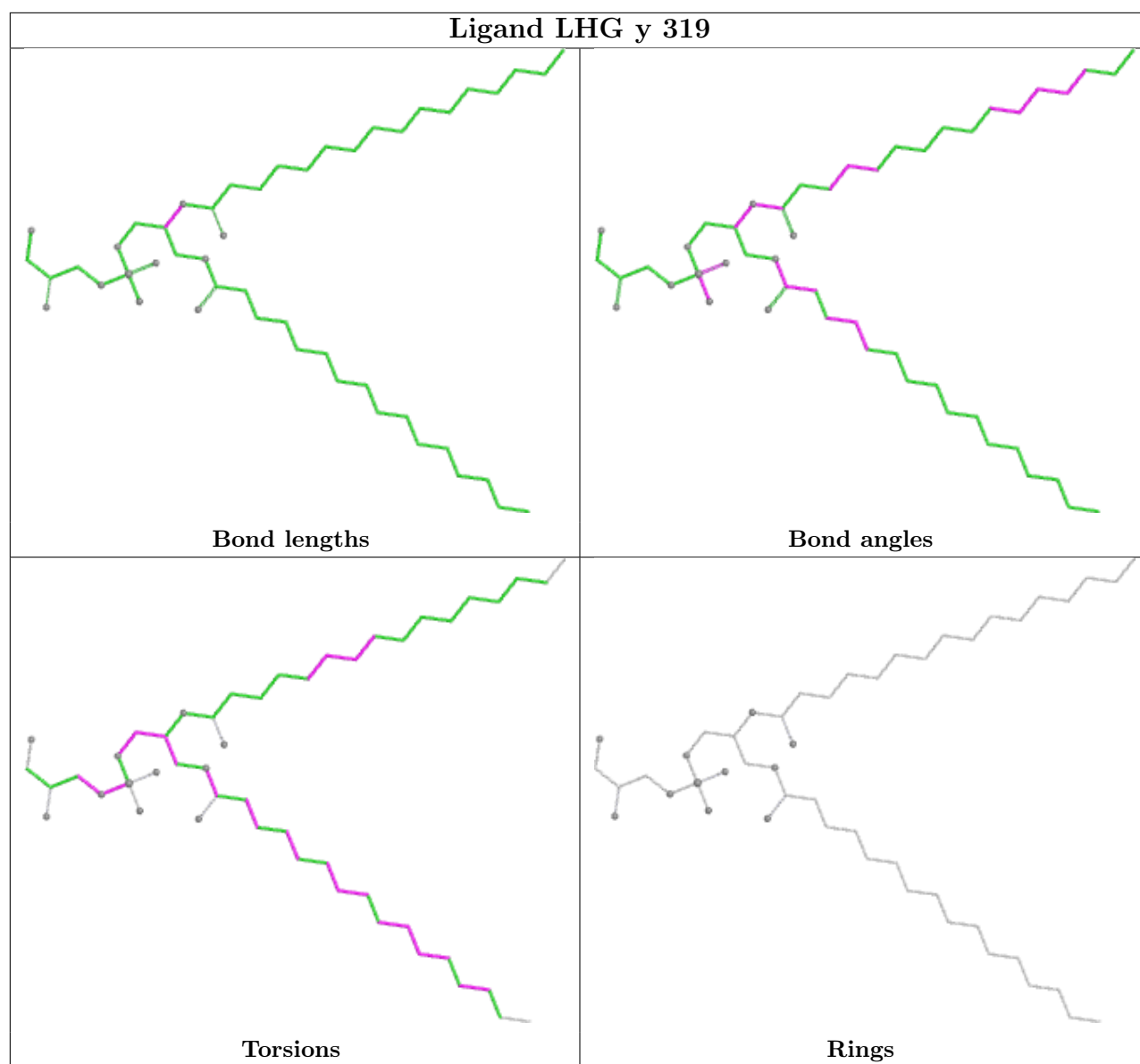
Rings



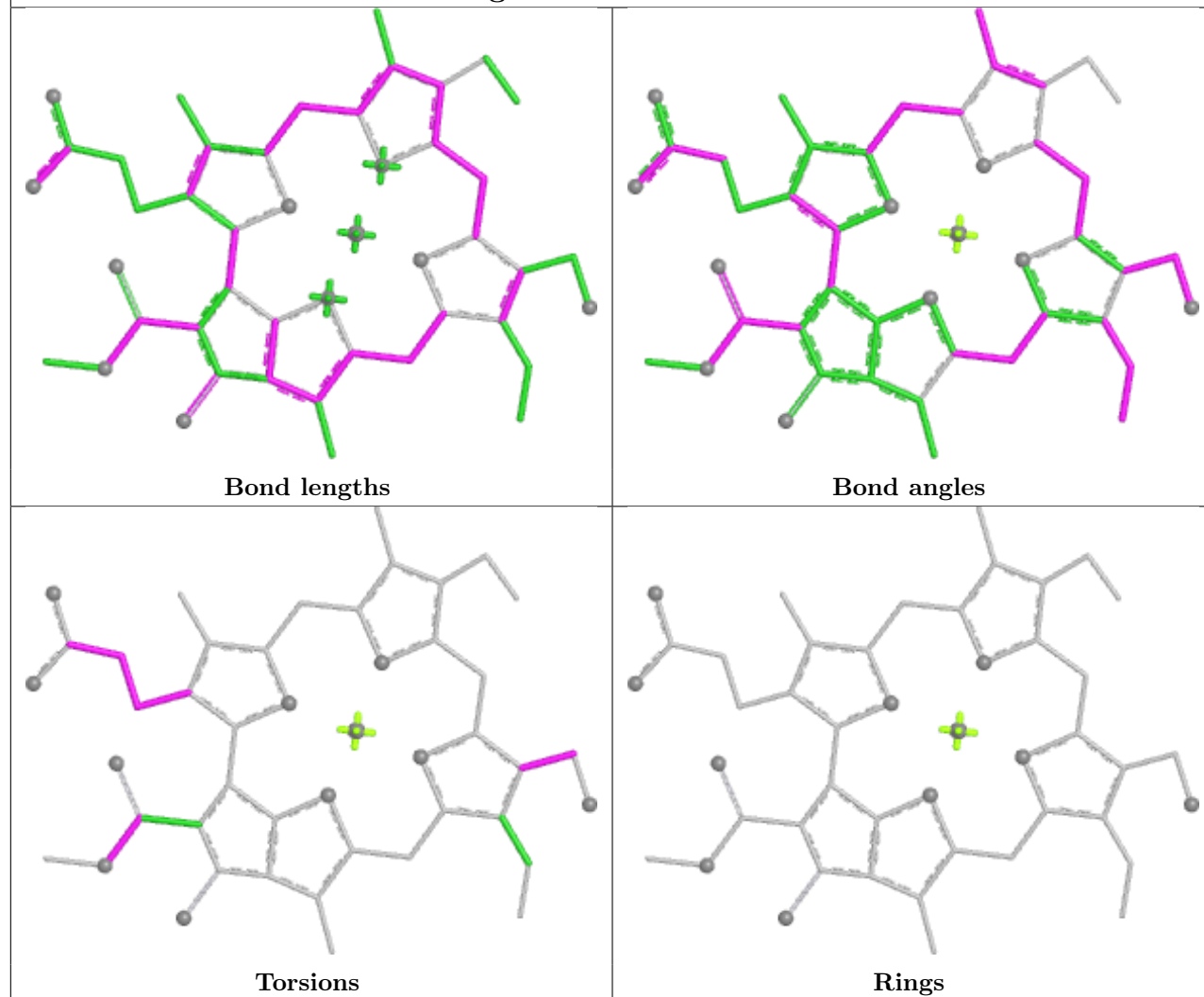




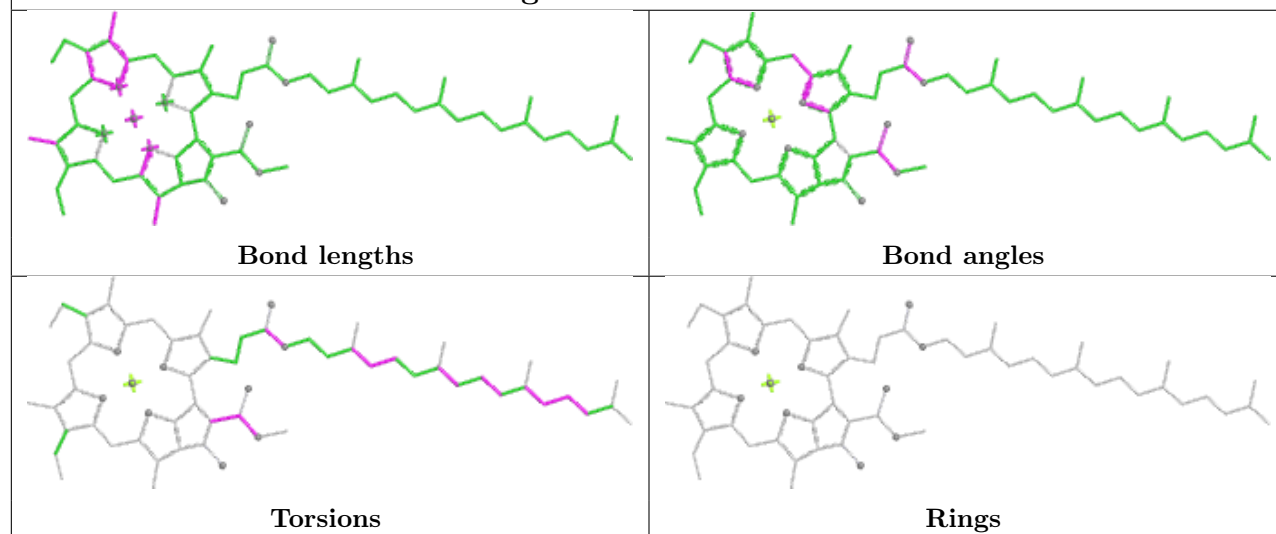


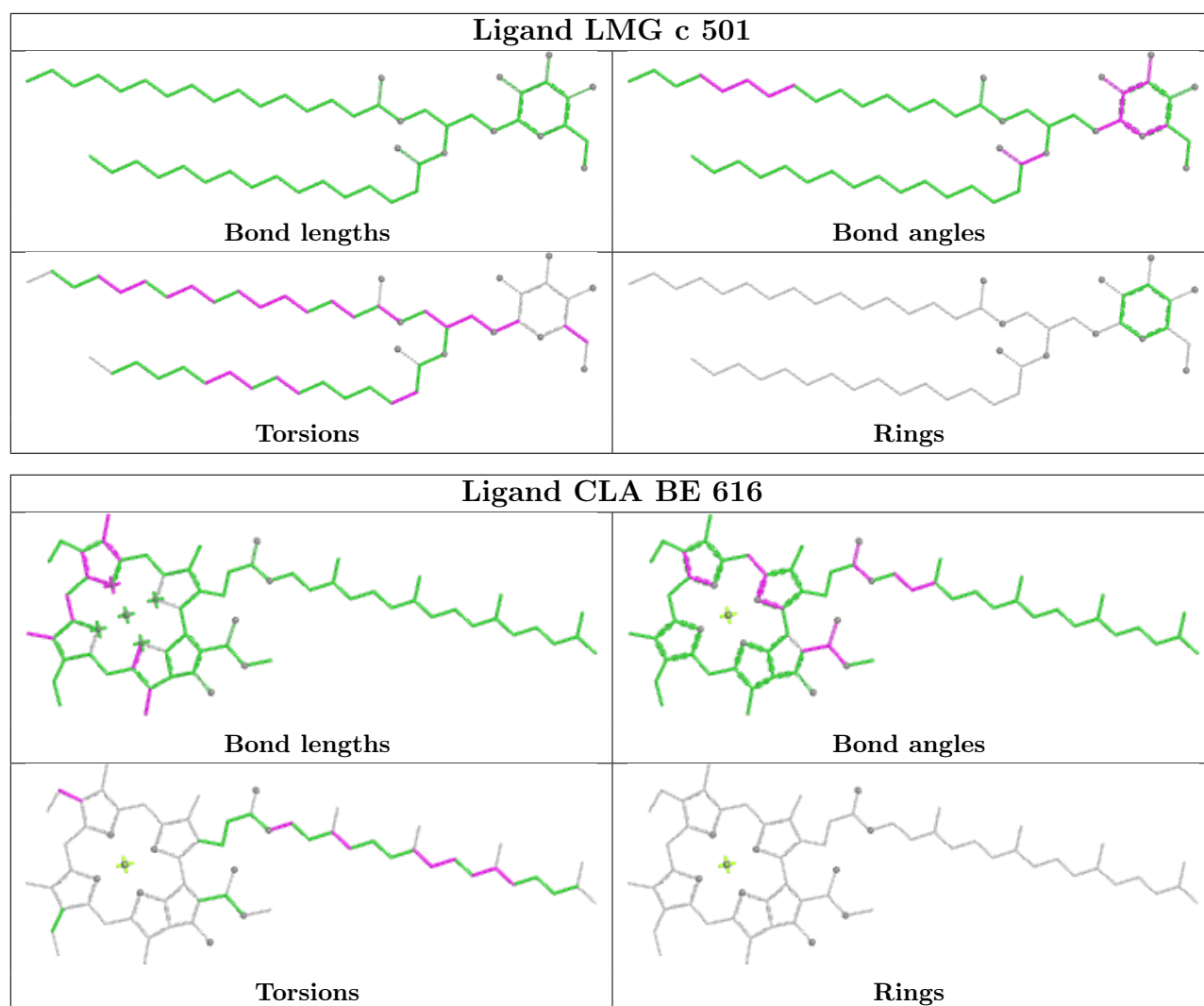


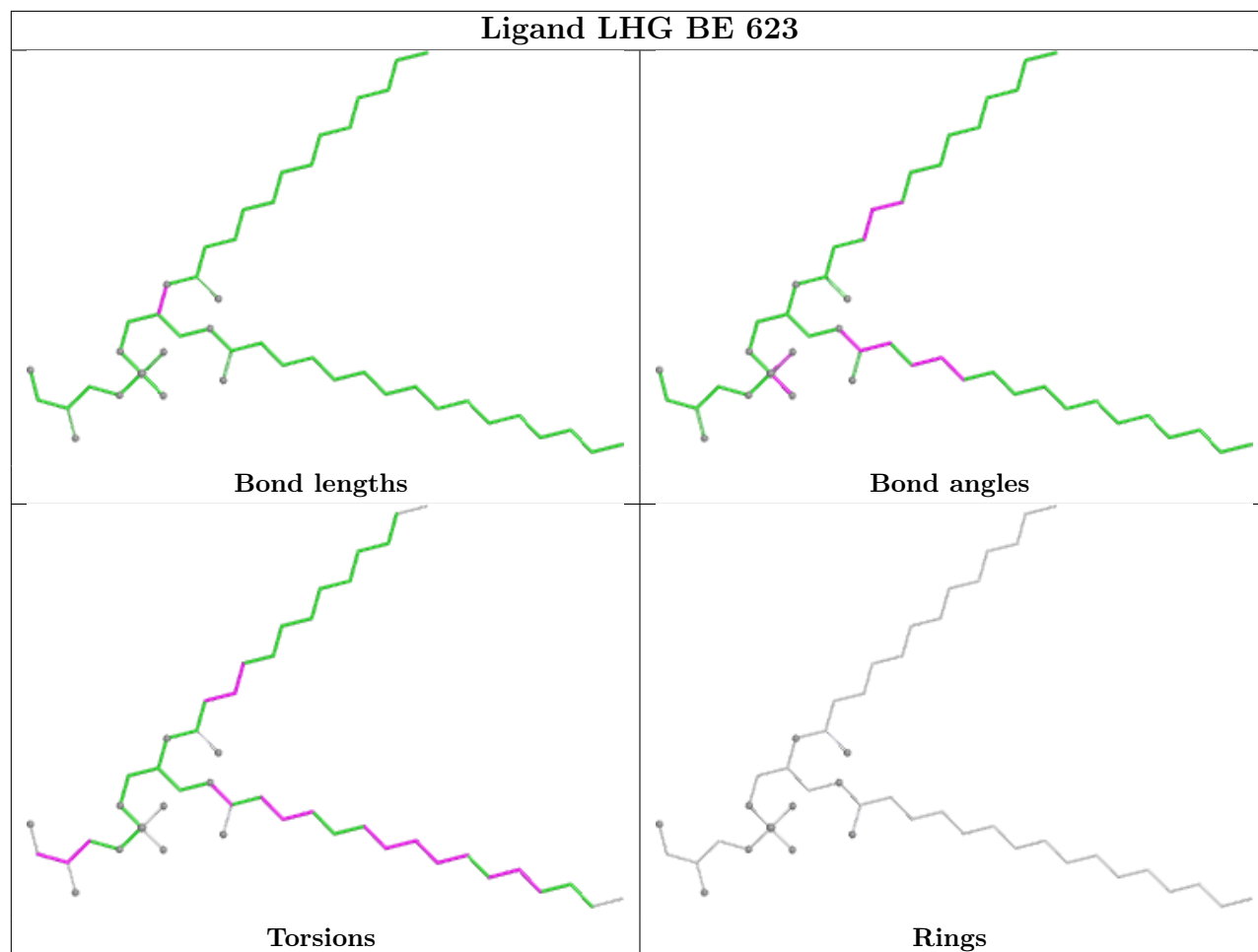
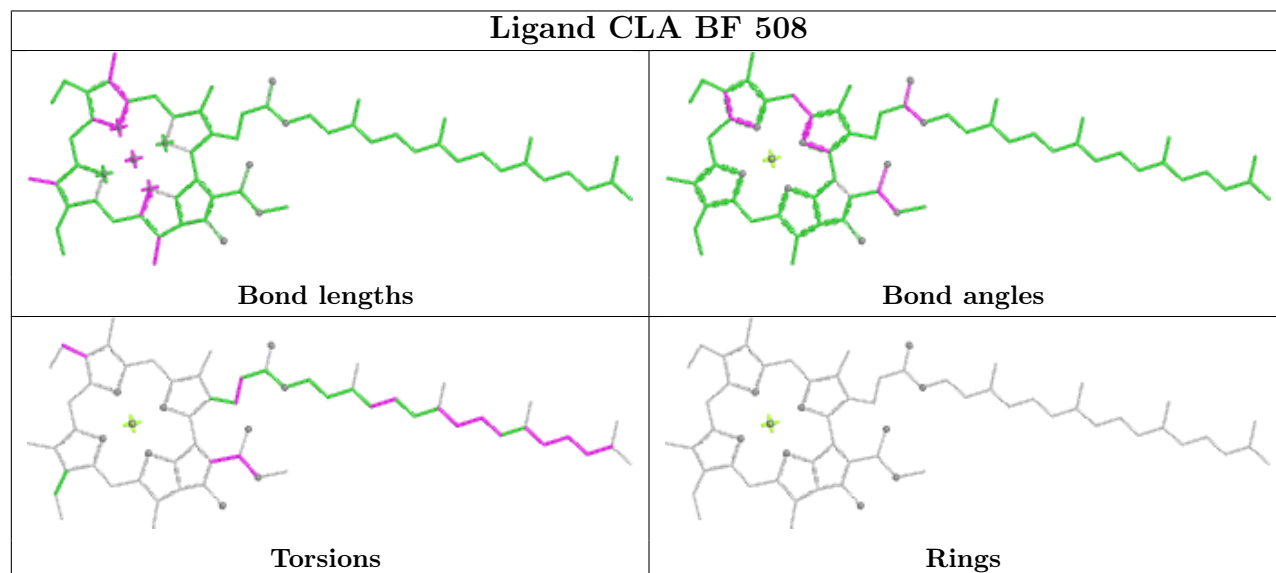
Ligand CHL AB 304



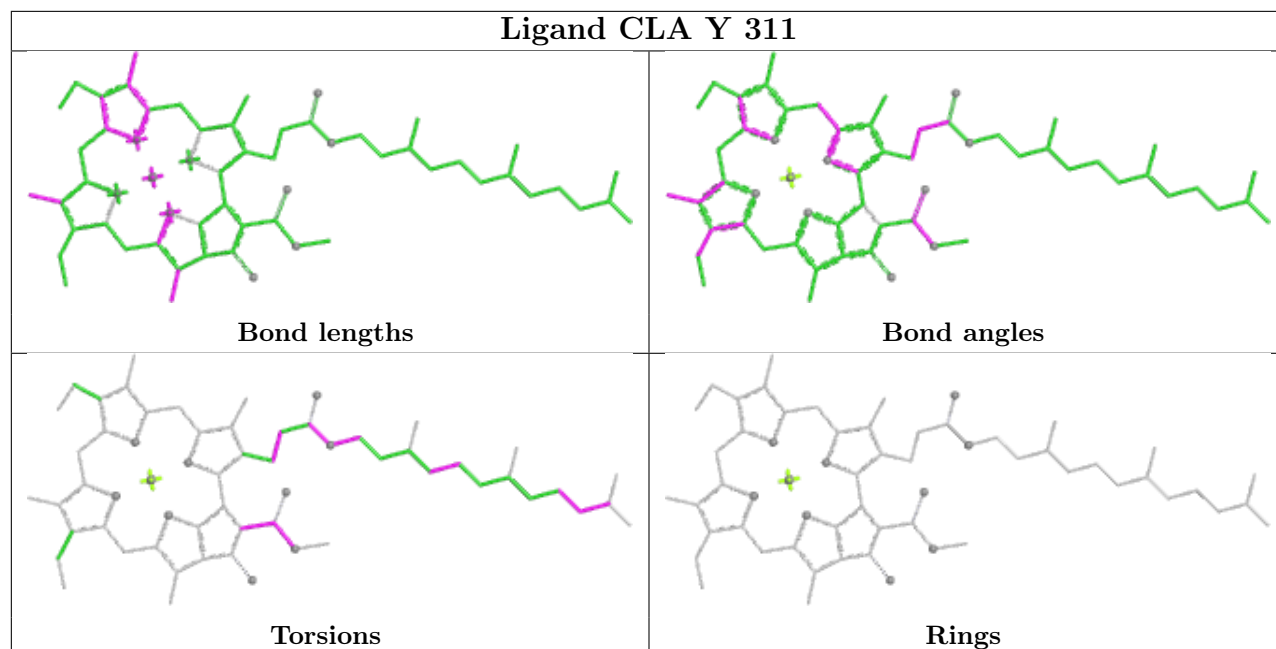
Ligand CLA BF 511



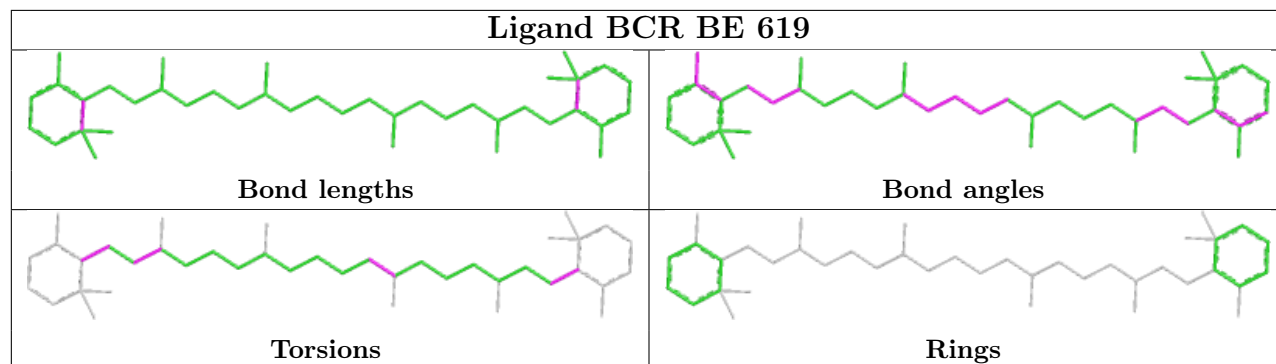


Ligand LHG BE 623**Ligand CLA BF 508**

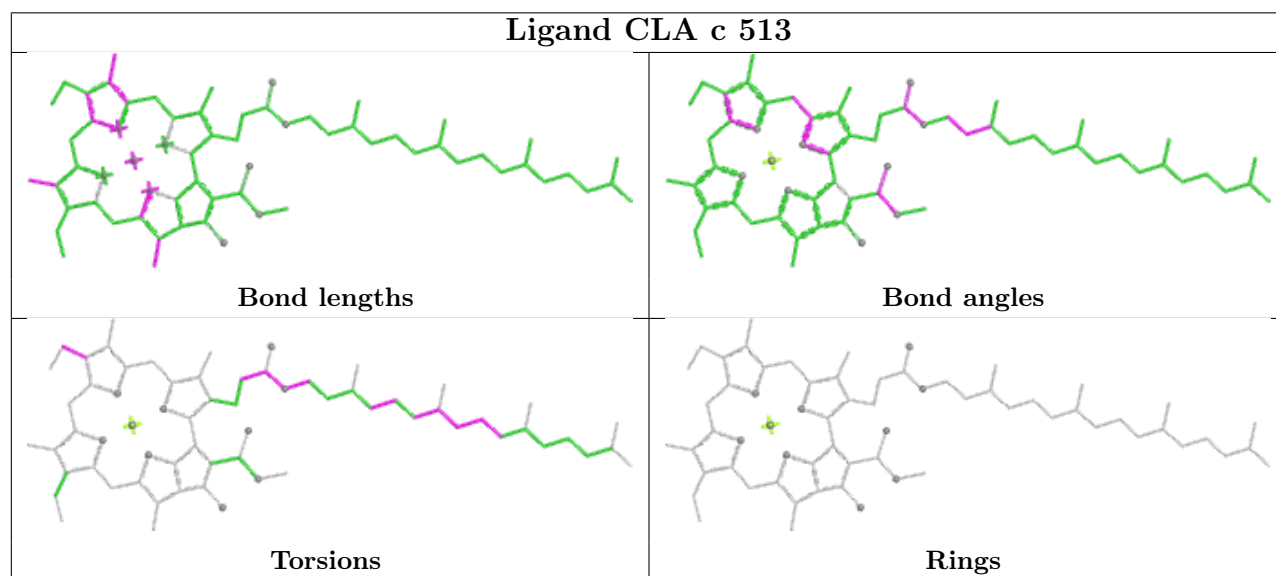
Ligand CLA Y 311

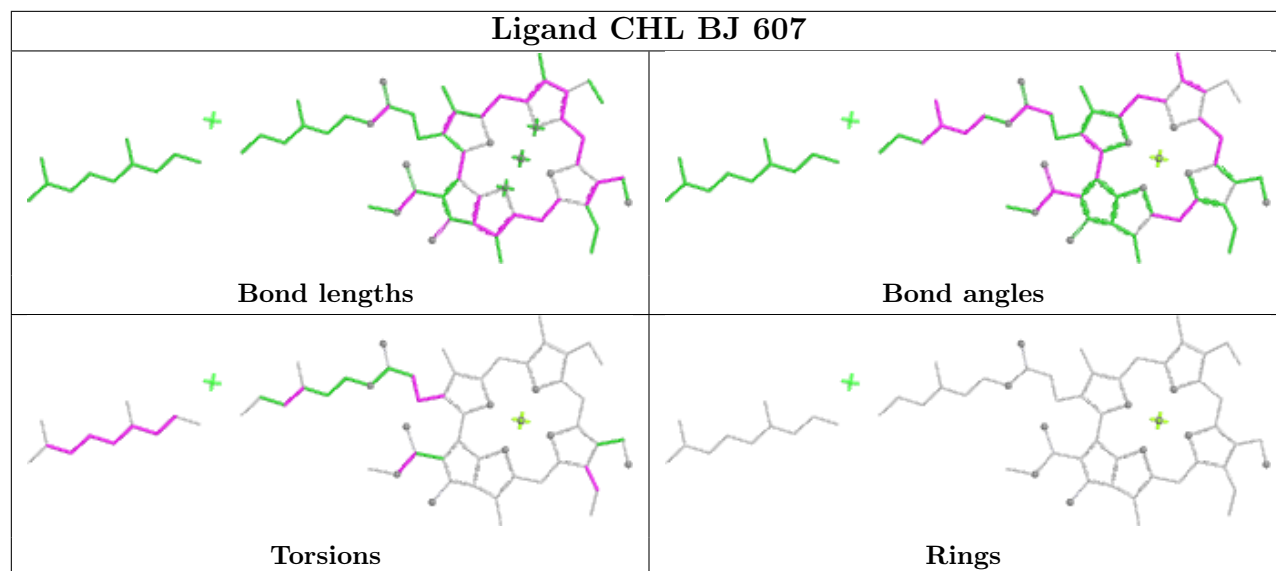
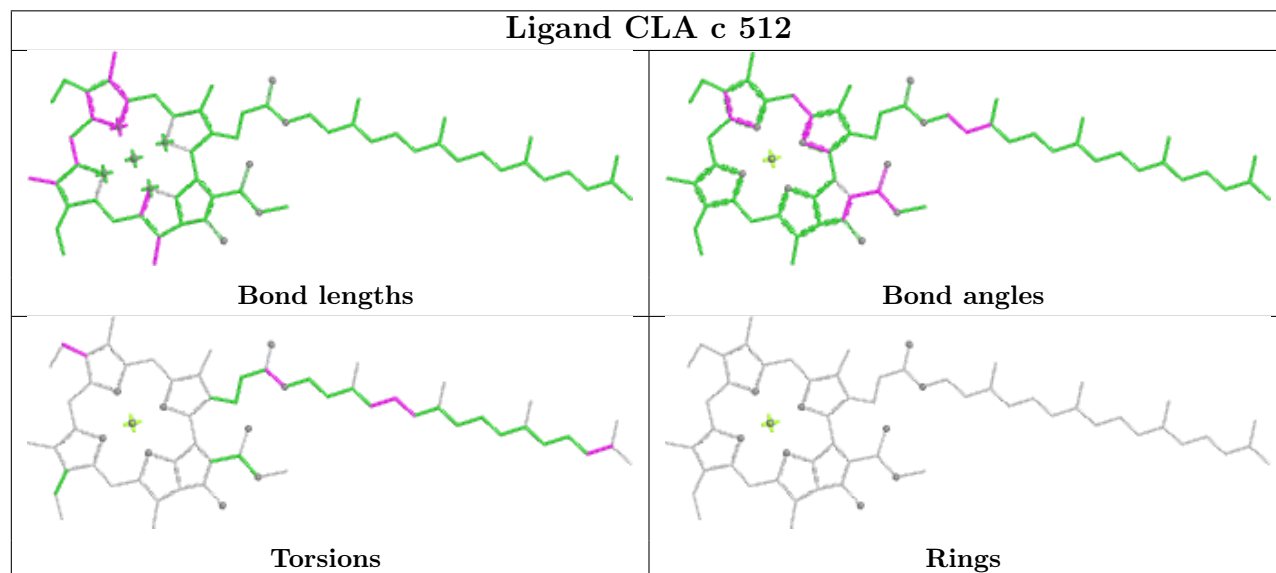
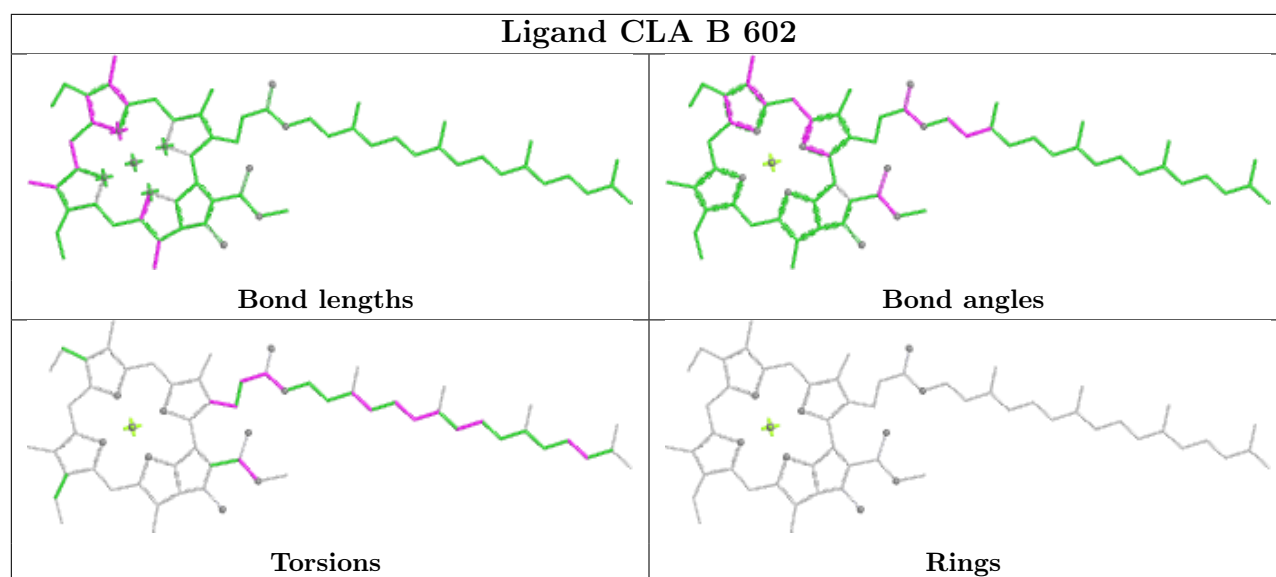


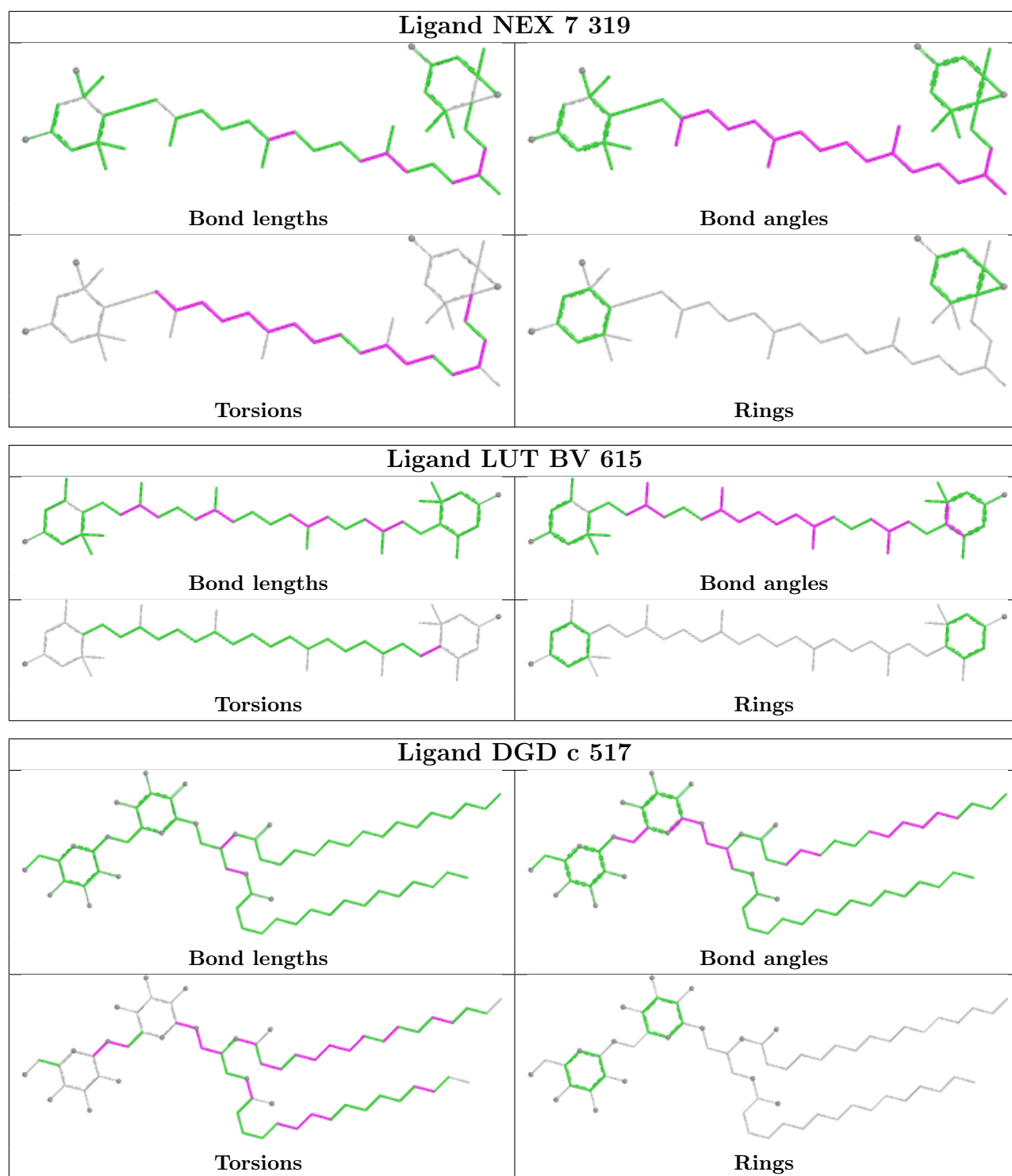
Ligand BCR BE 619

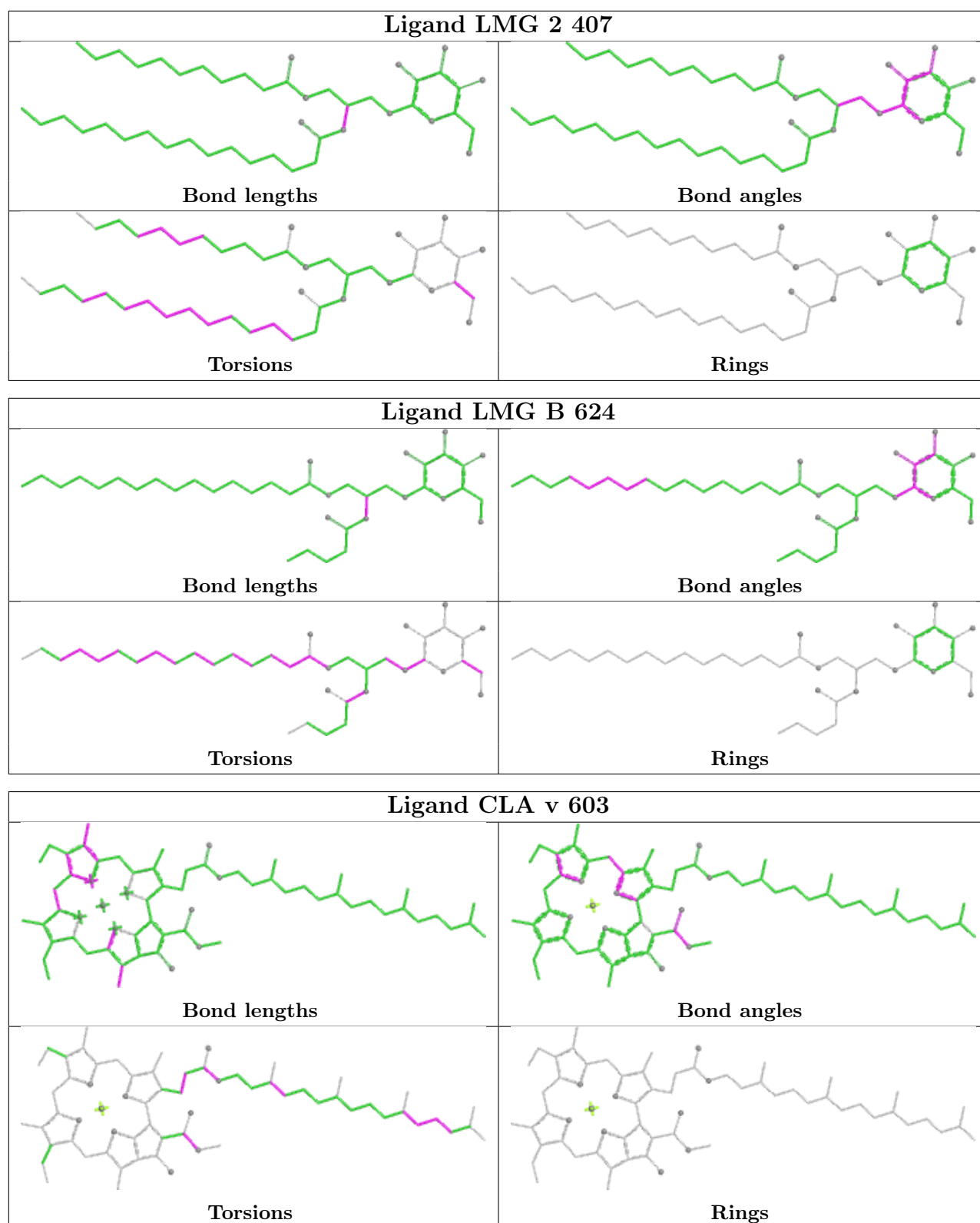


Ligand CLA c 513

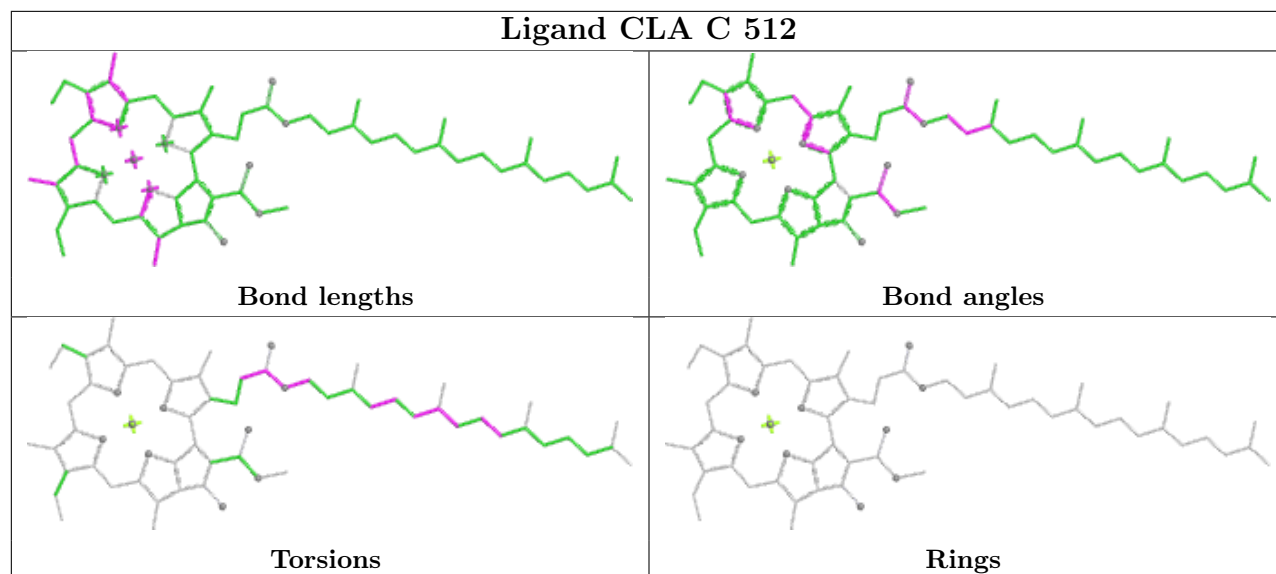




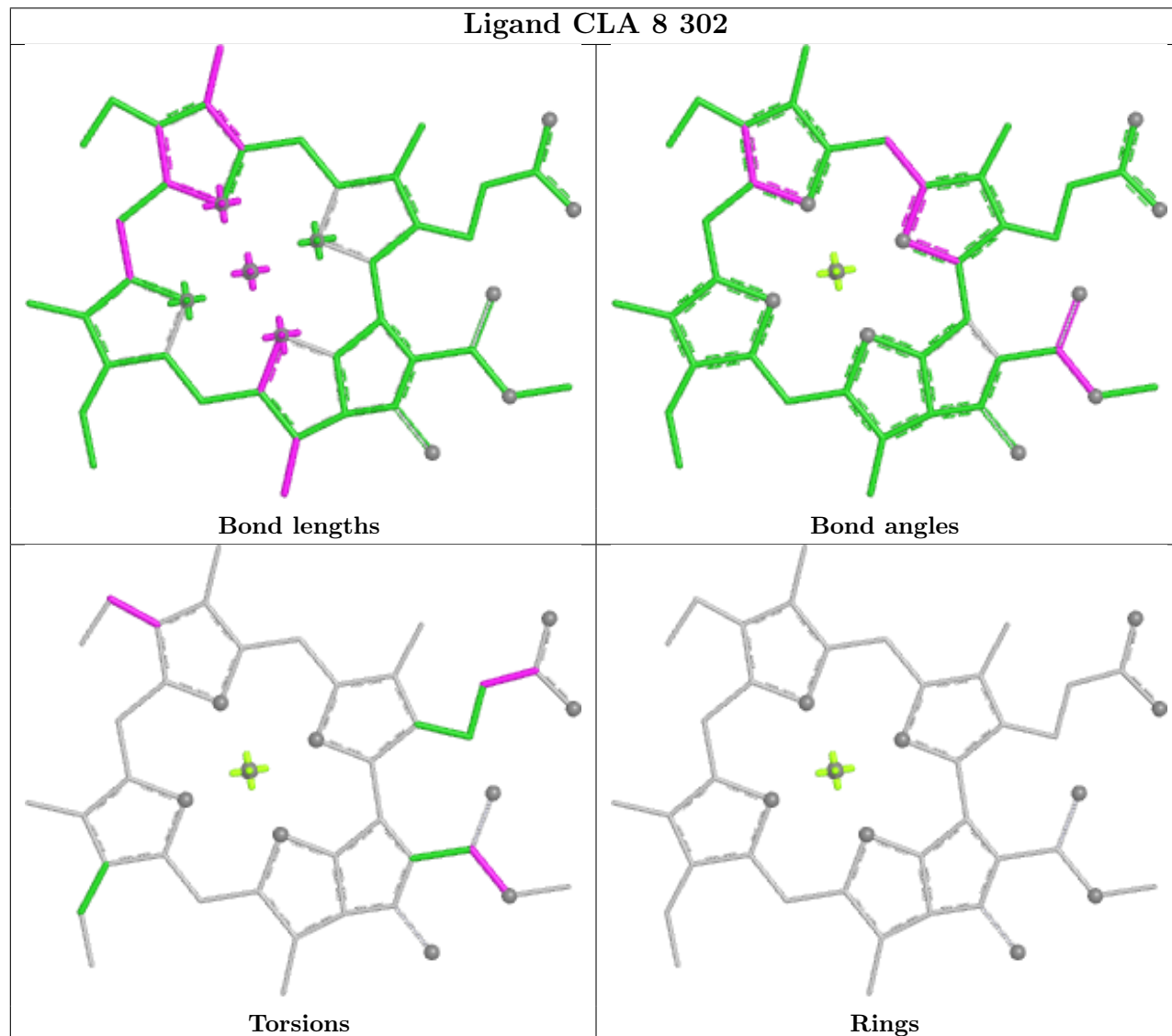




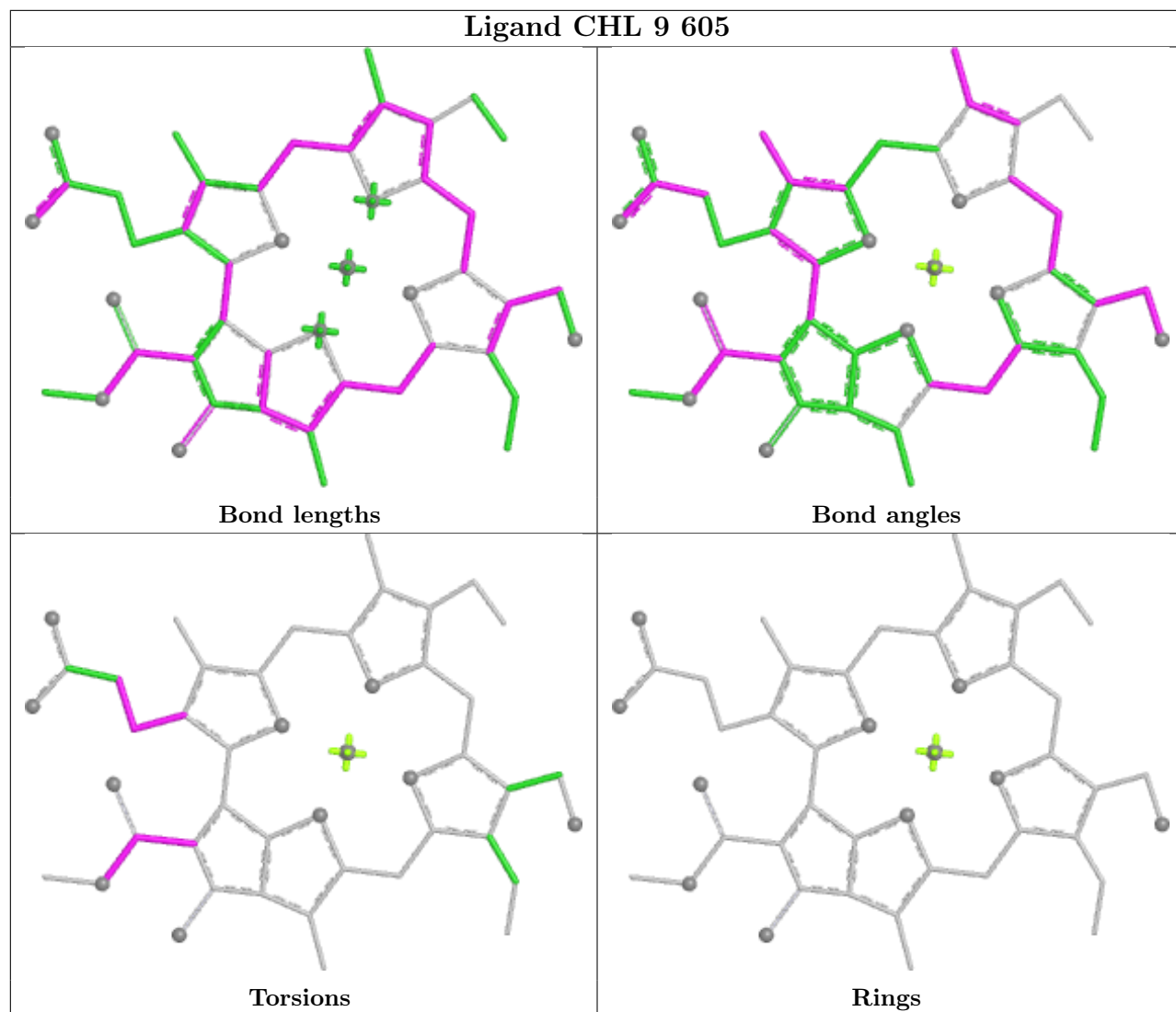
Ligand CLA C 512



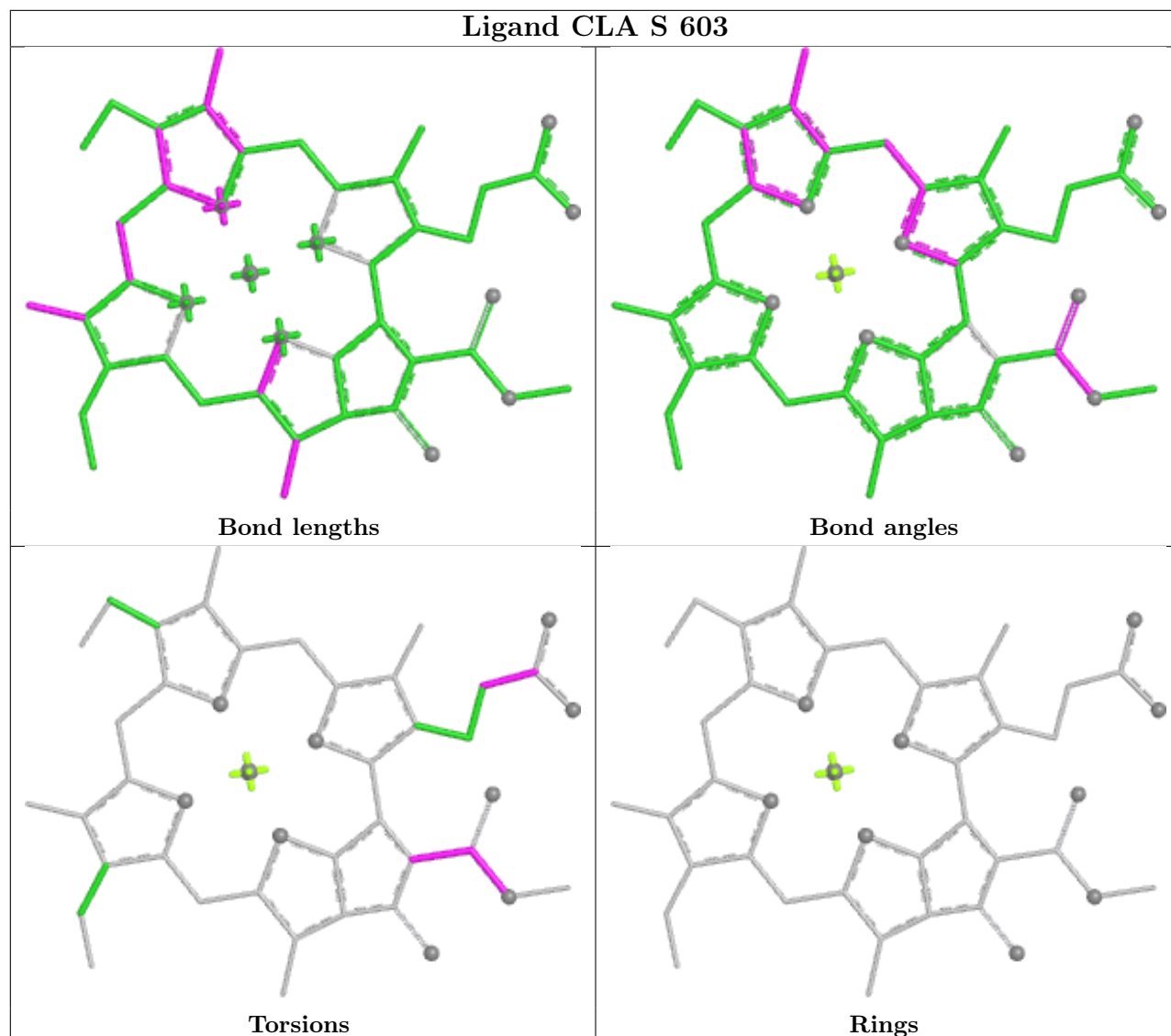
Ligand CLA 8 302



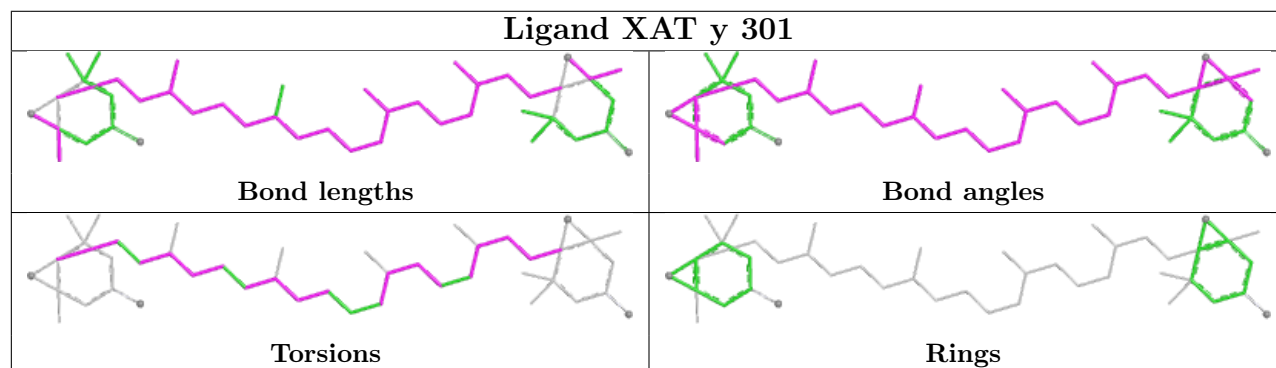
Ligand CHL 9 605

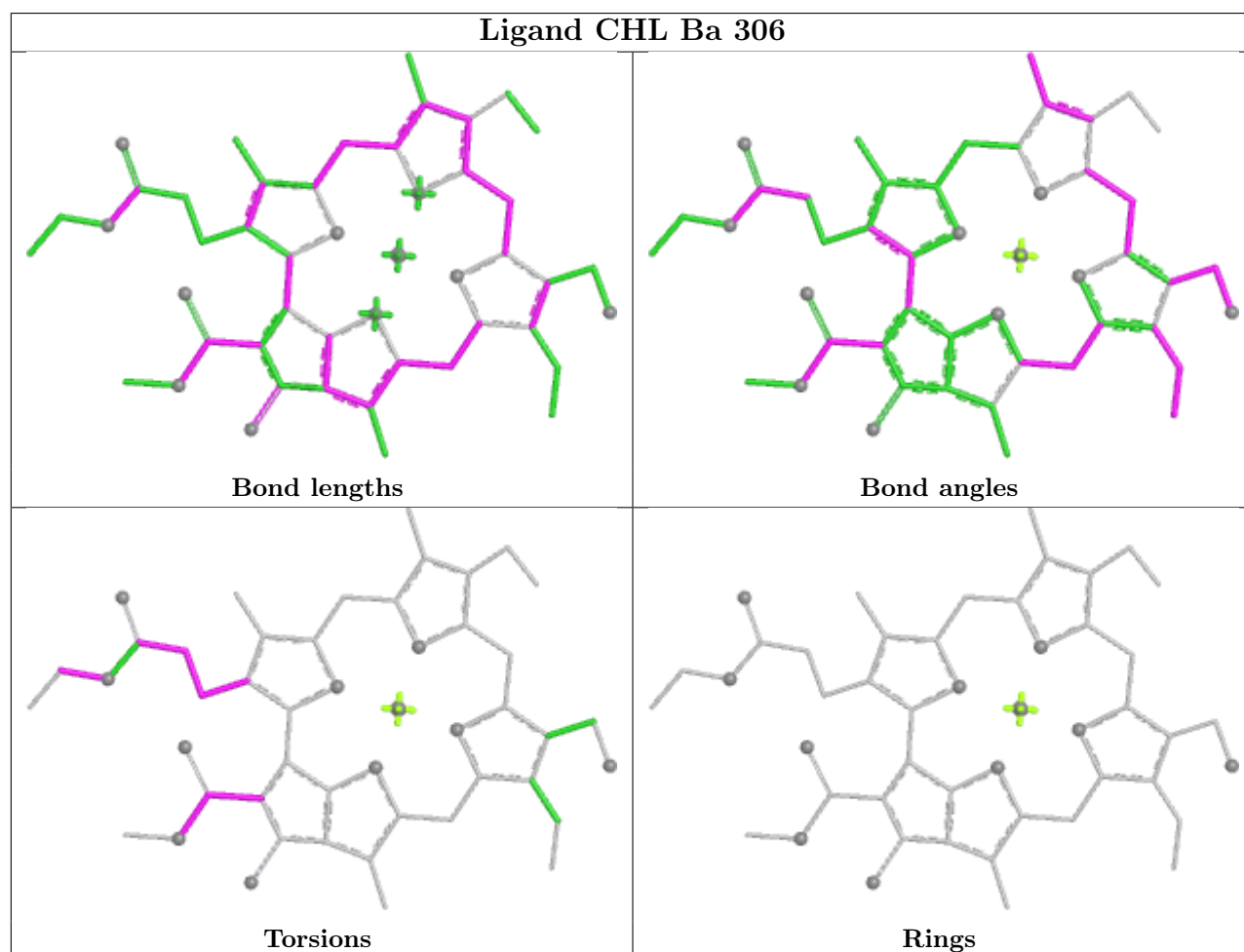
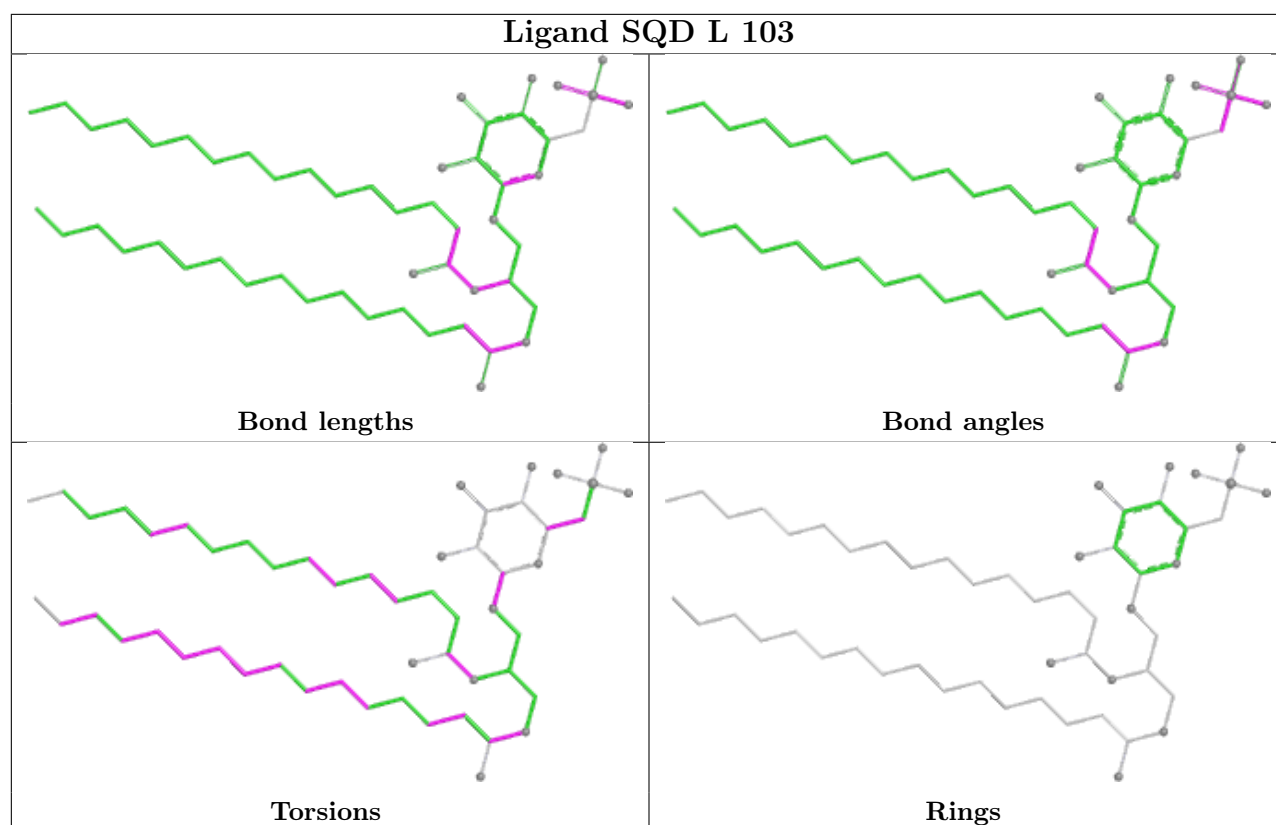


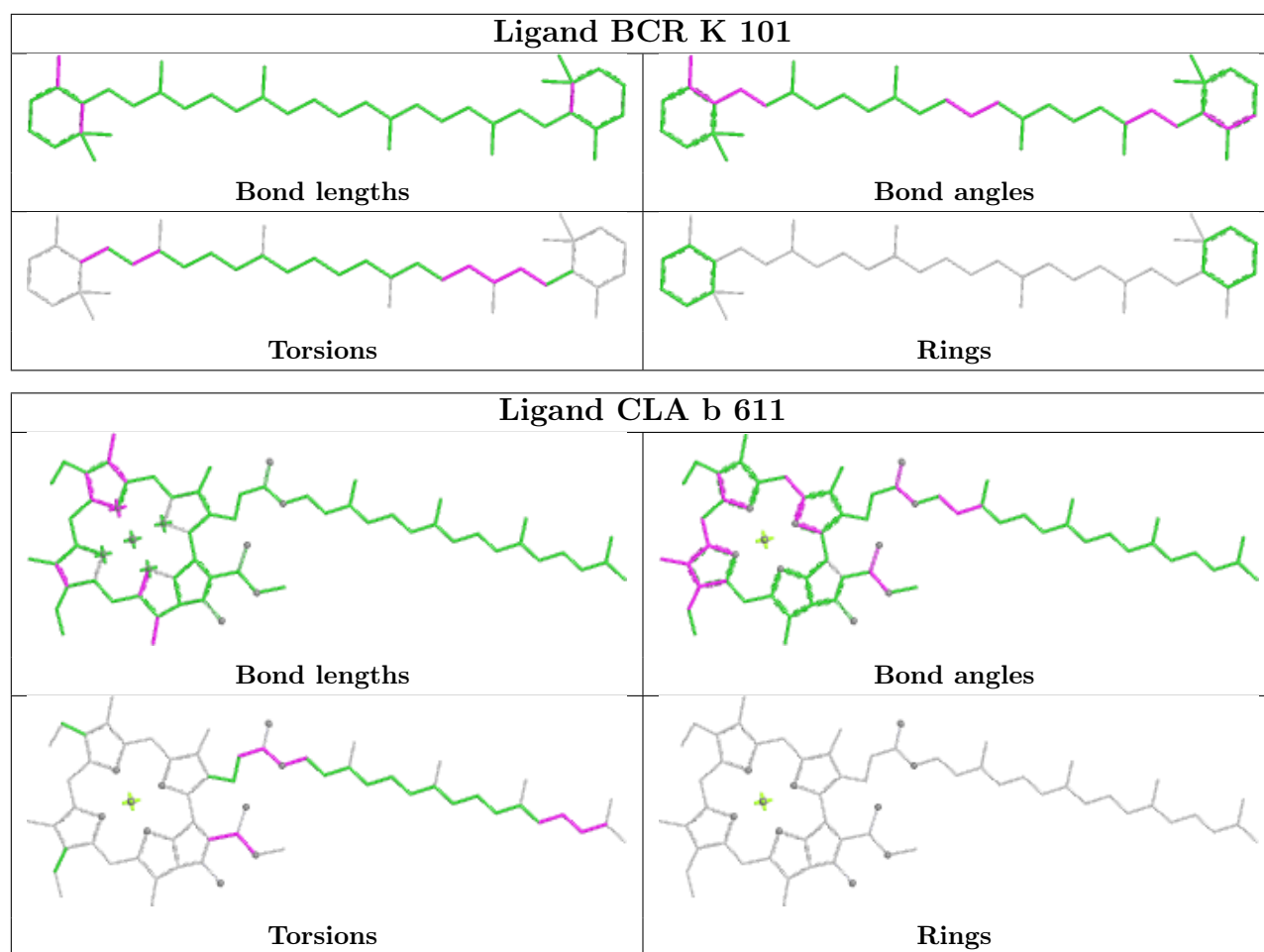
Ligand CLA S 603



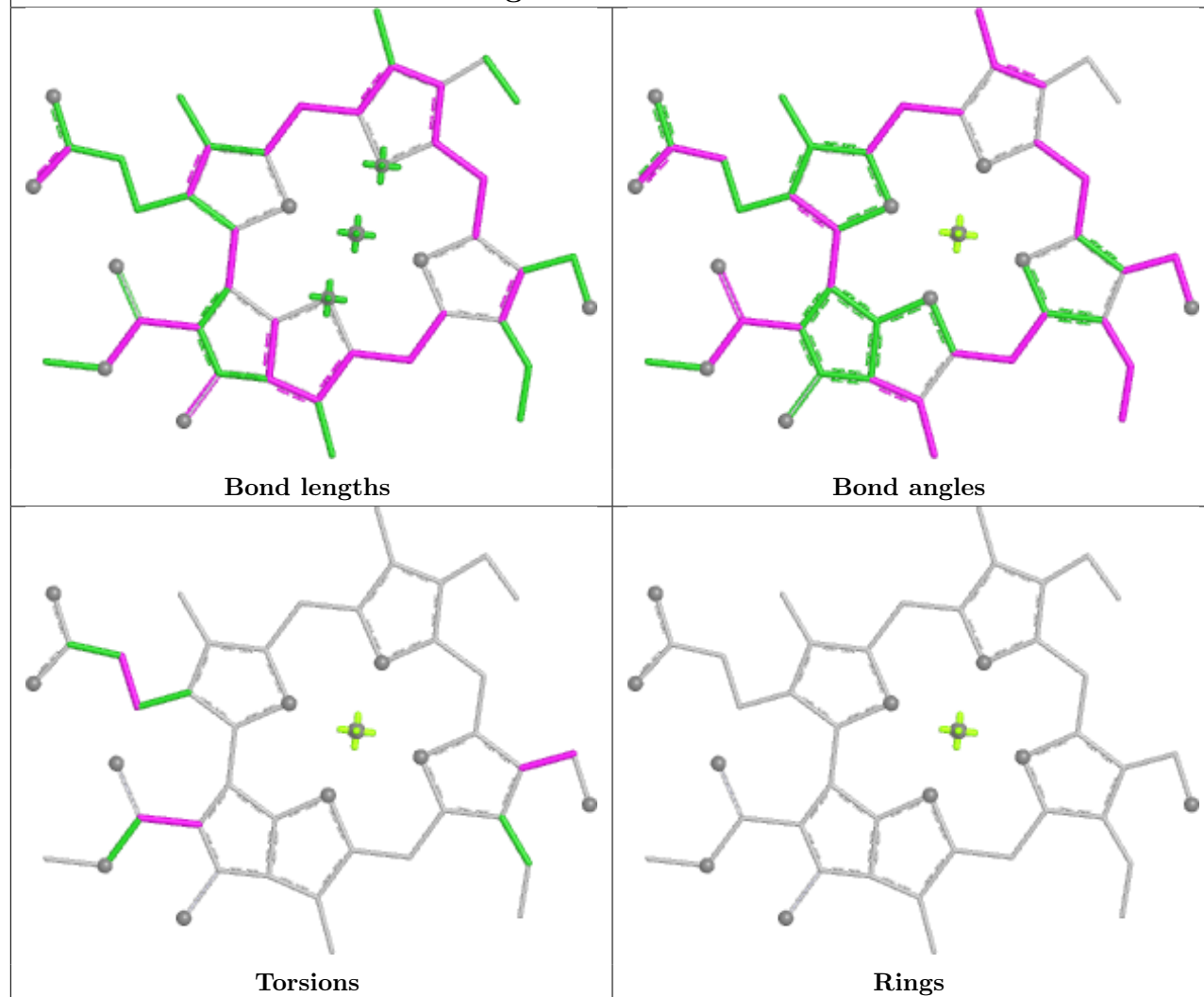
Ligand XAT y 301



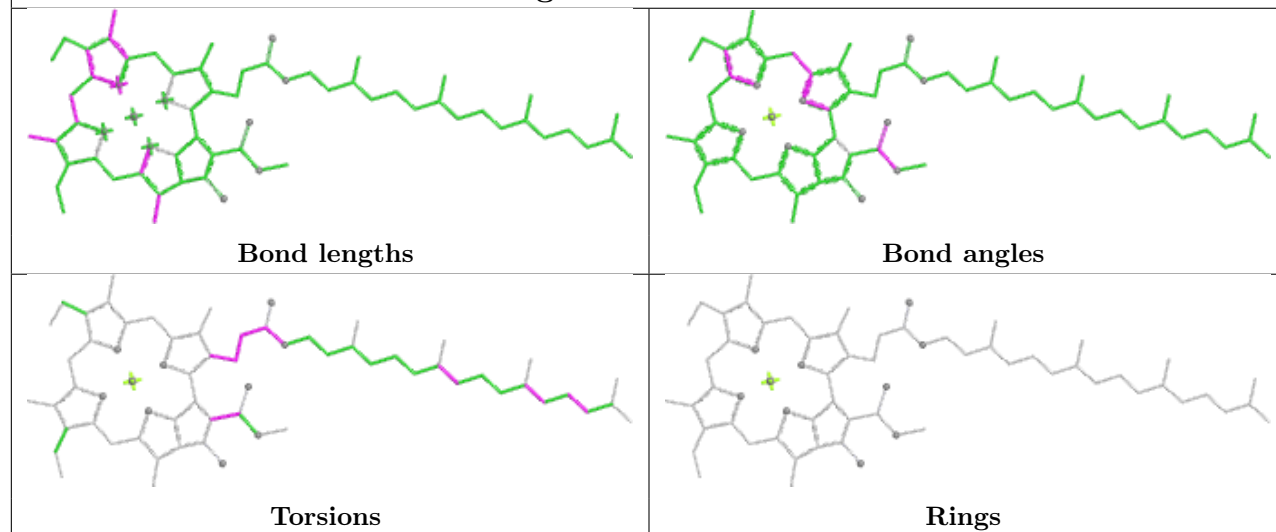


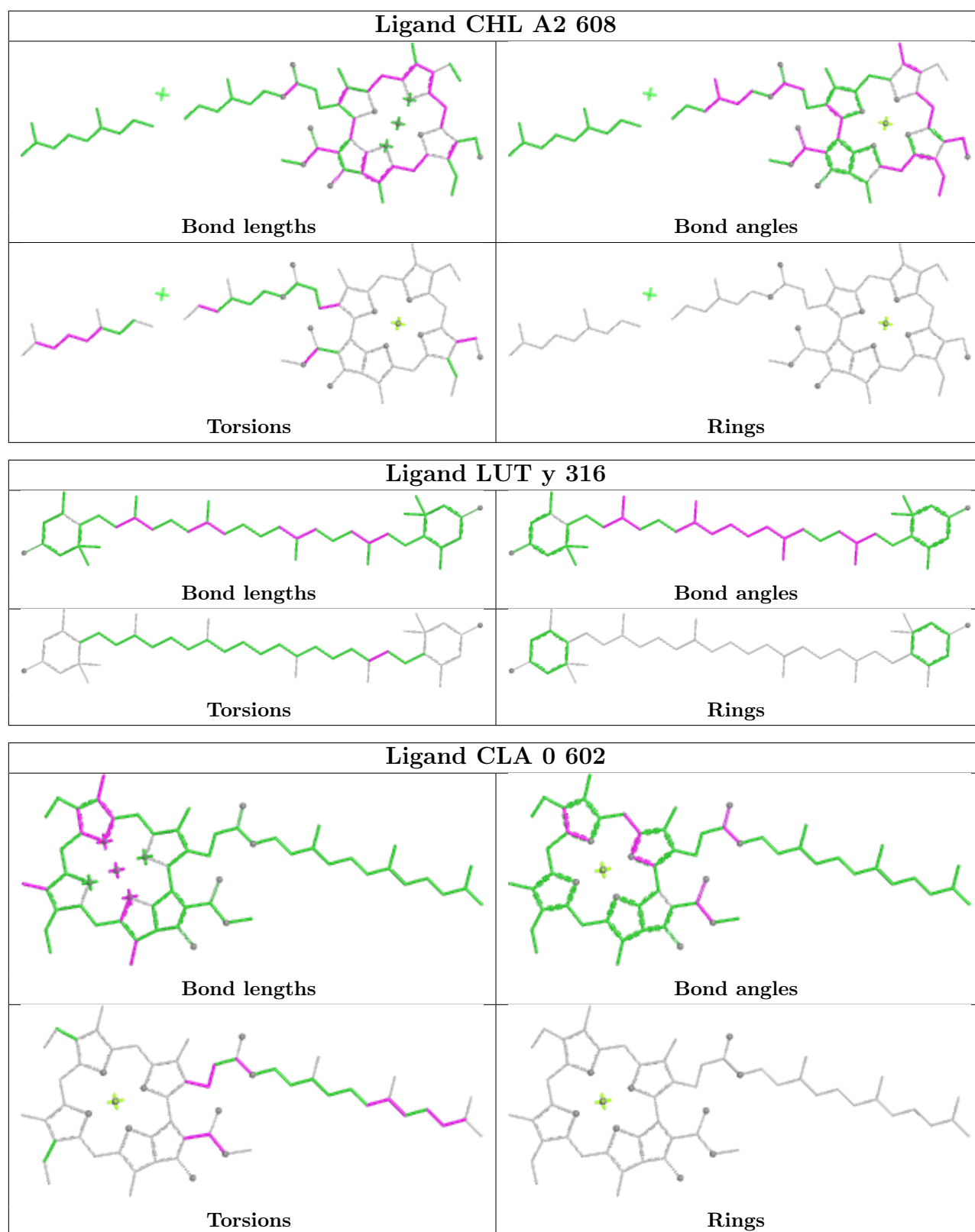


Ligand CHL 9 606

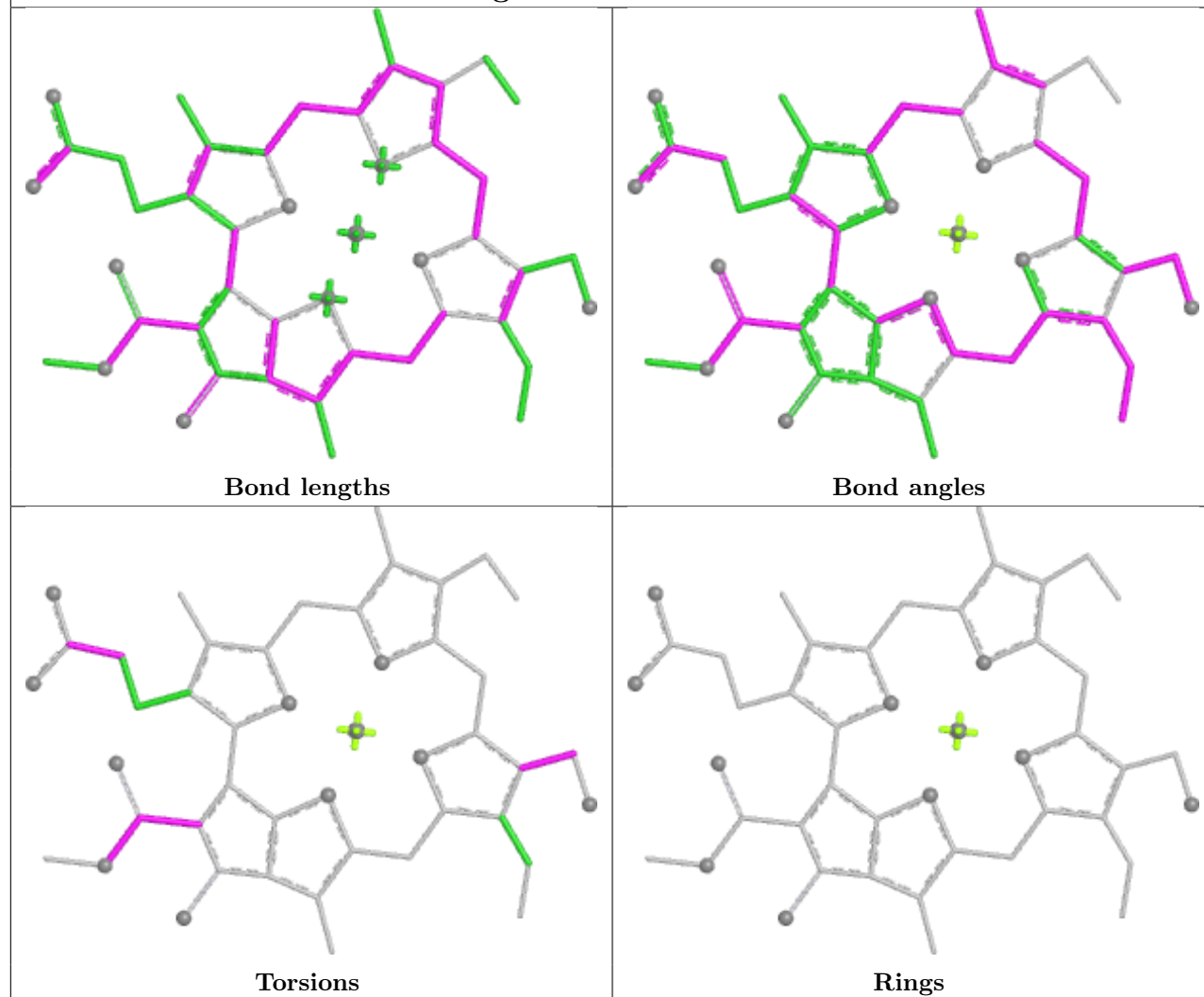


Ligand CLA 1 502

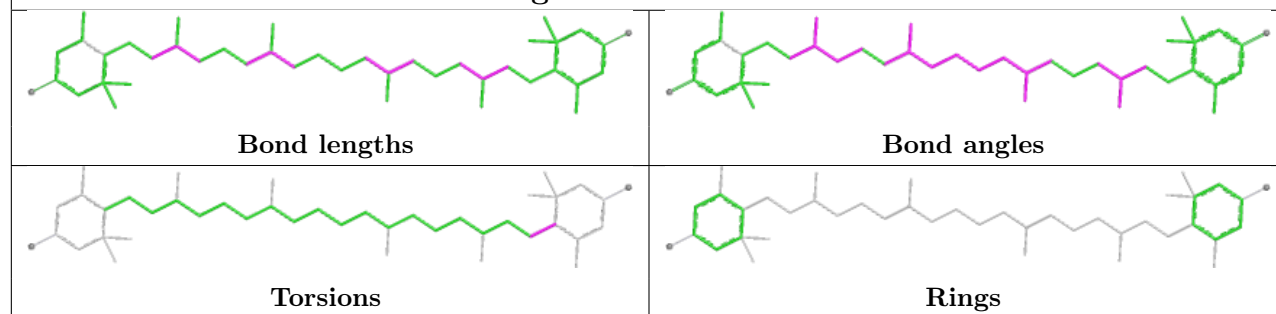


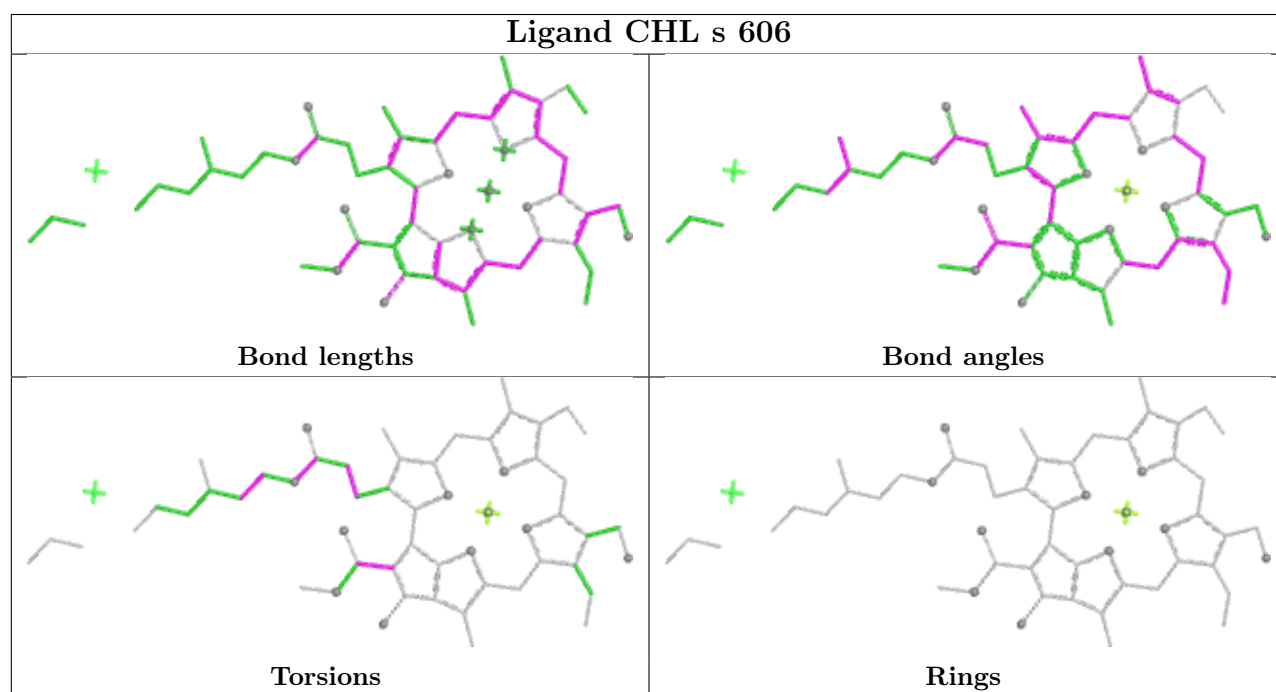
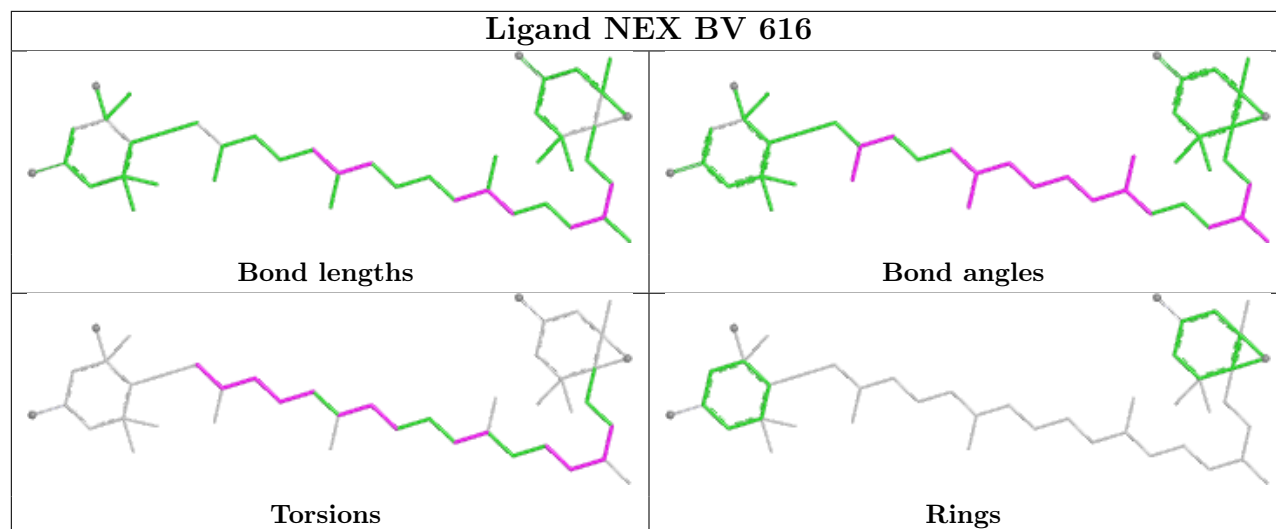


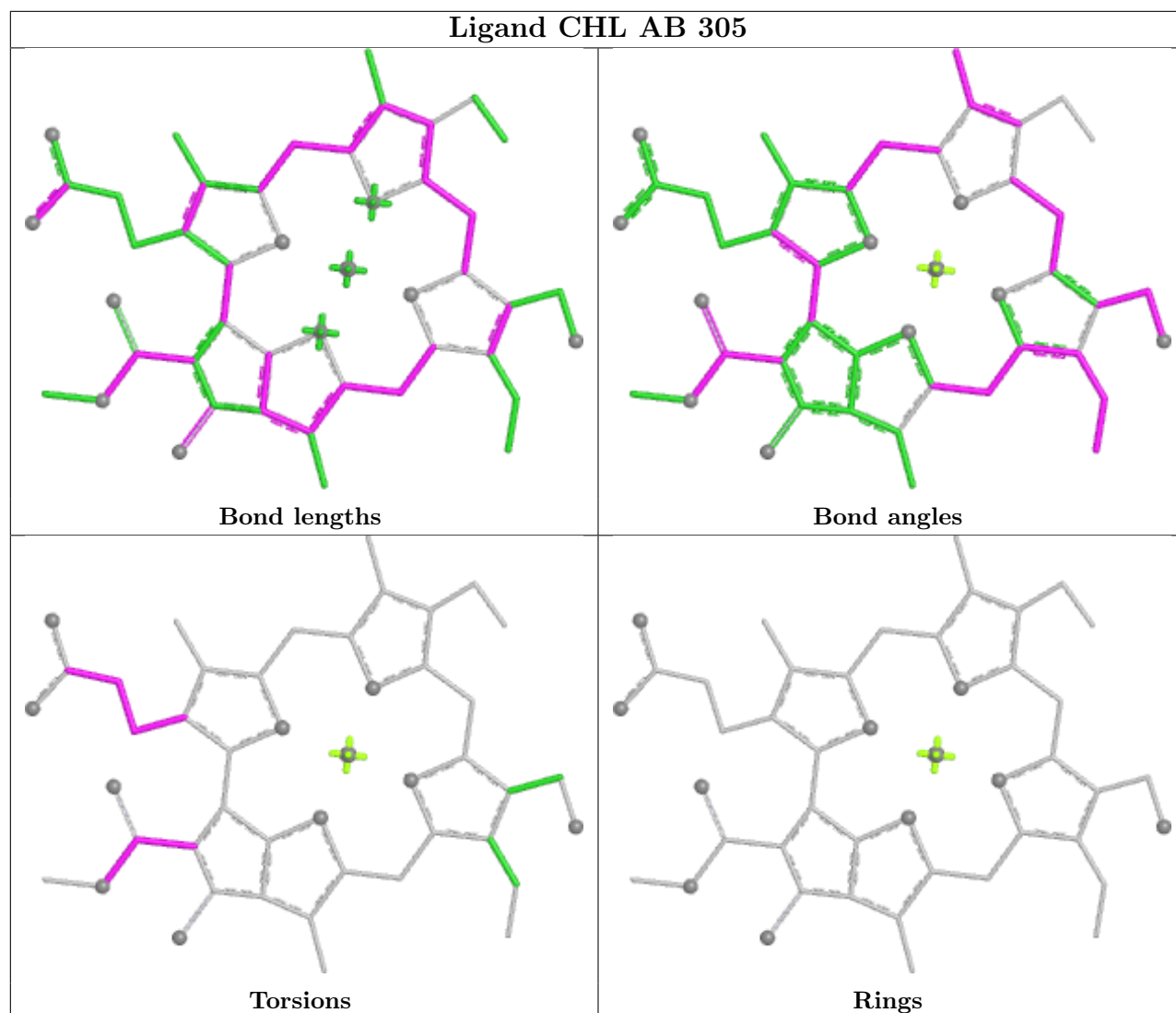
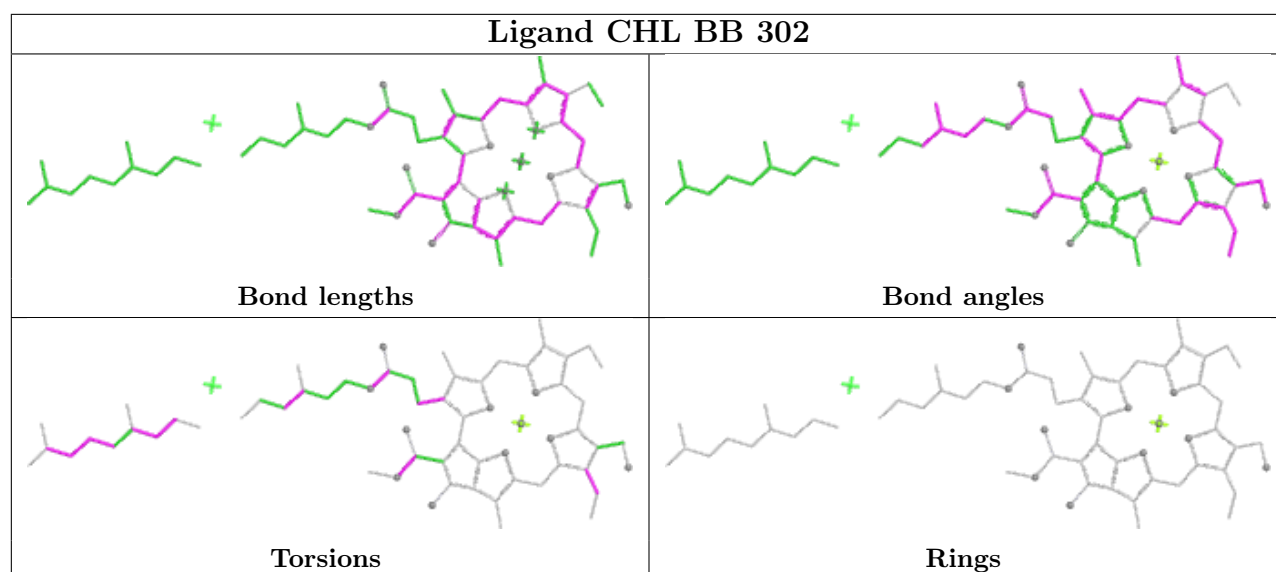
Ligand CHL A6 605



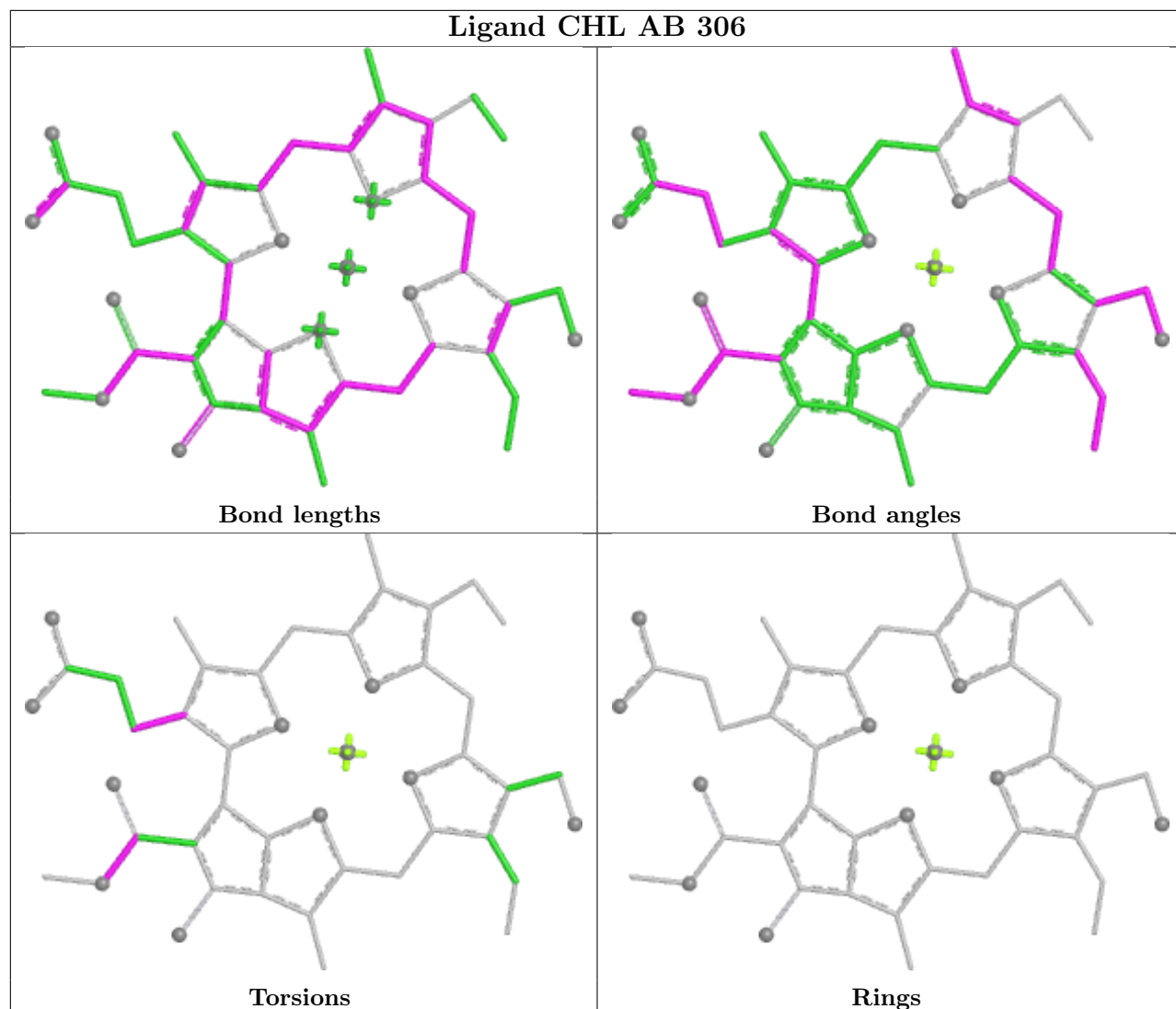
Ligand LUT G 615



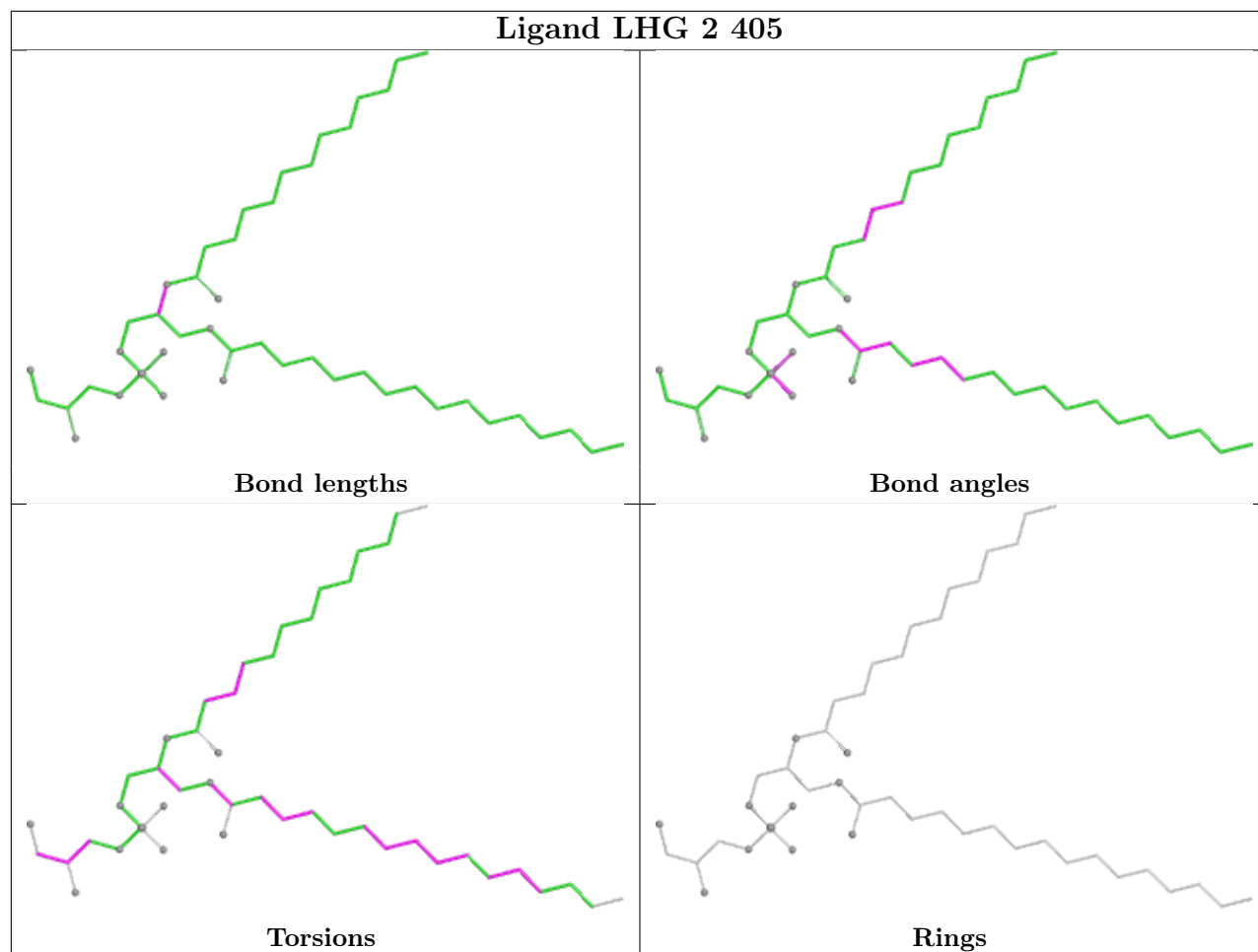




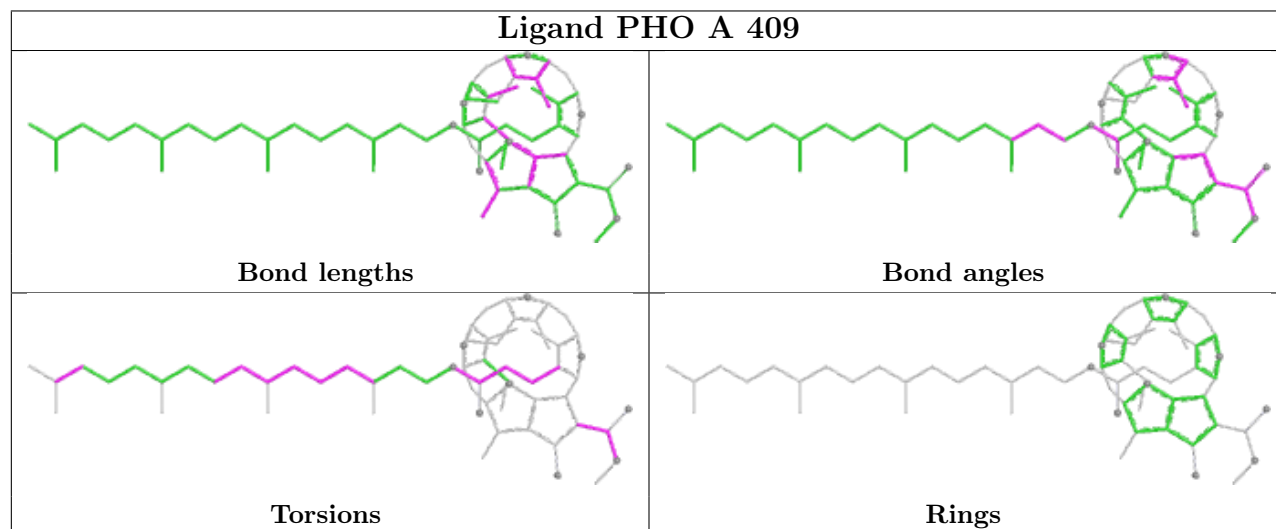
Ligand CHL AB 306

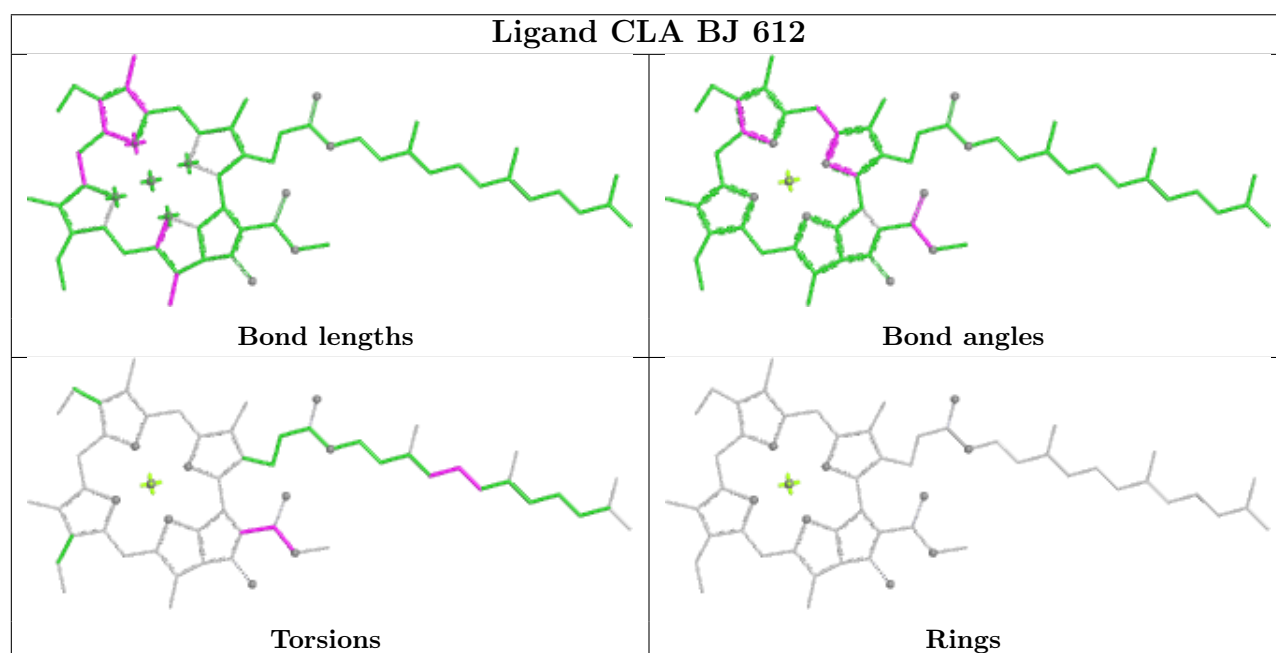
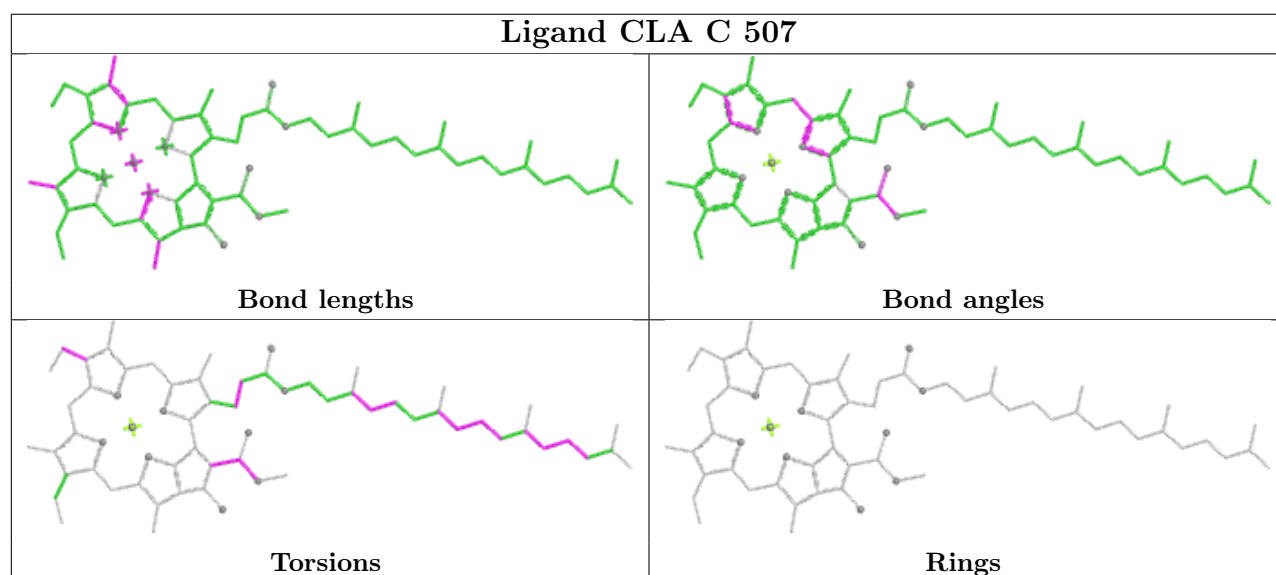
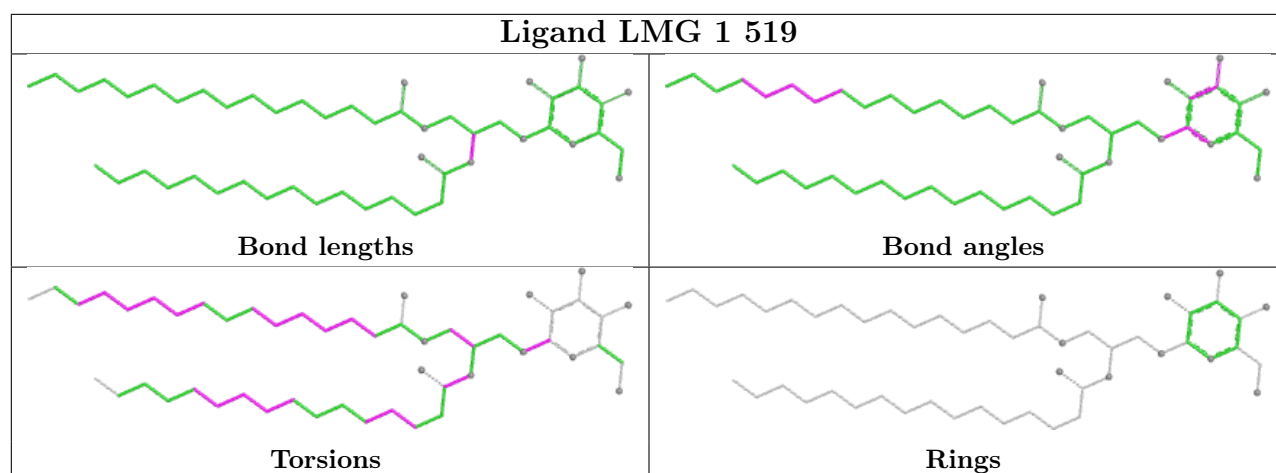


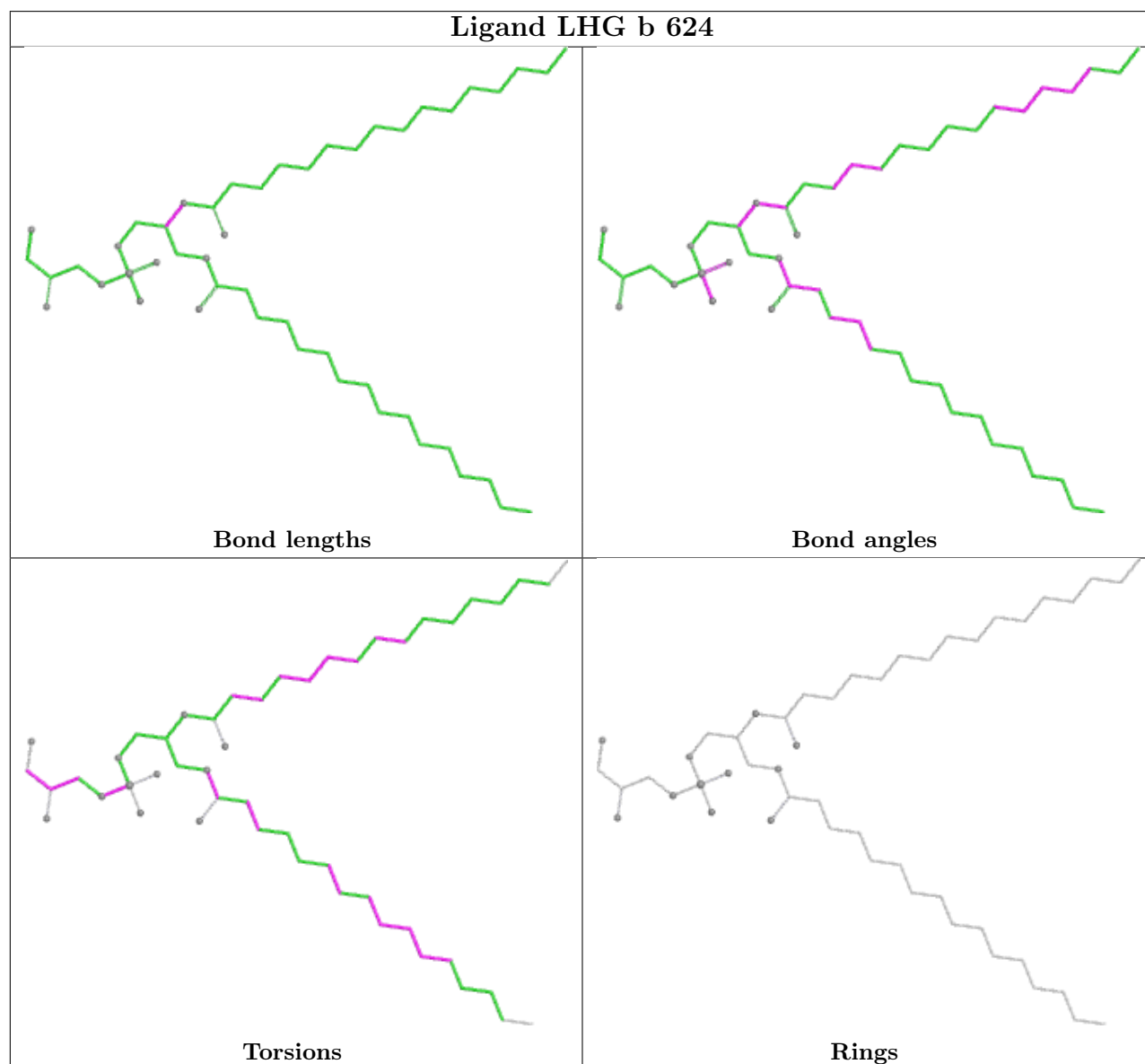
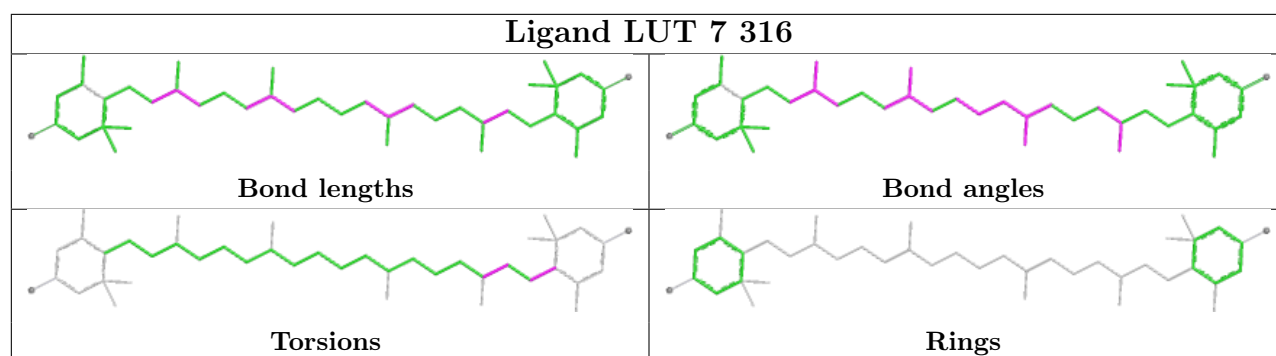
Ligand LHG 2 405



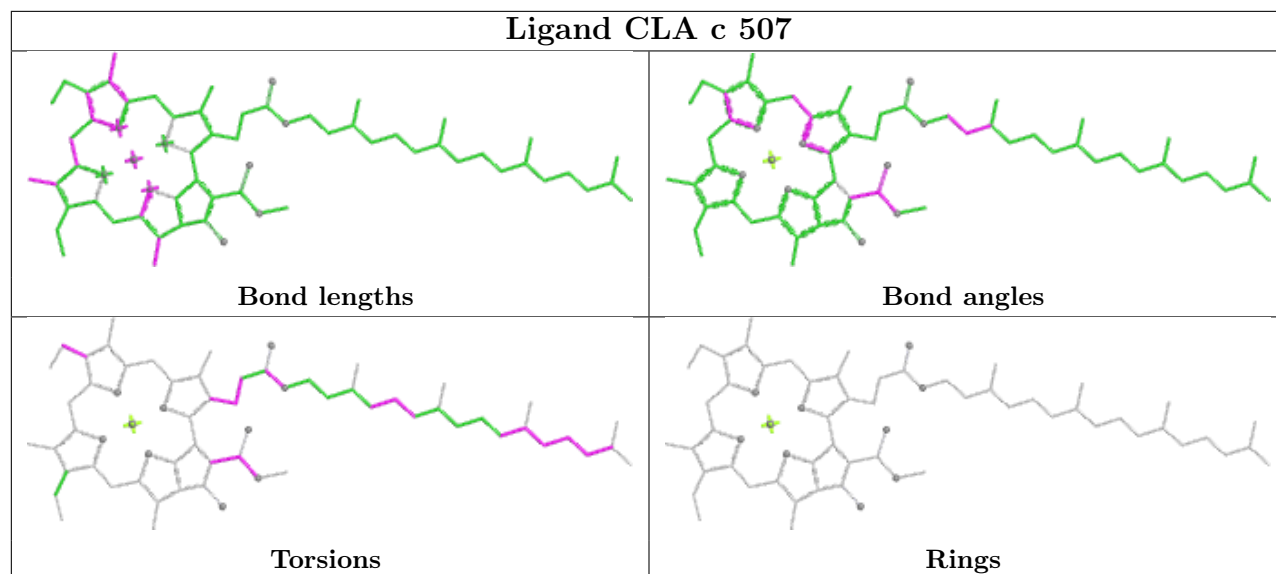
Ligand PHO A 409



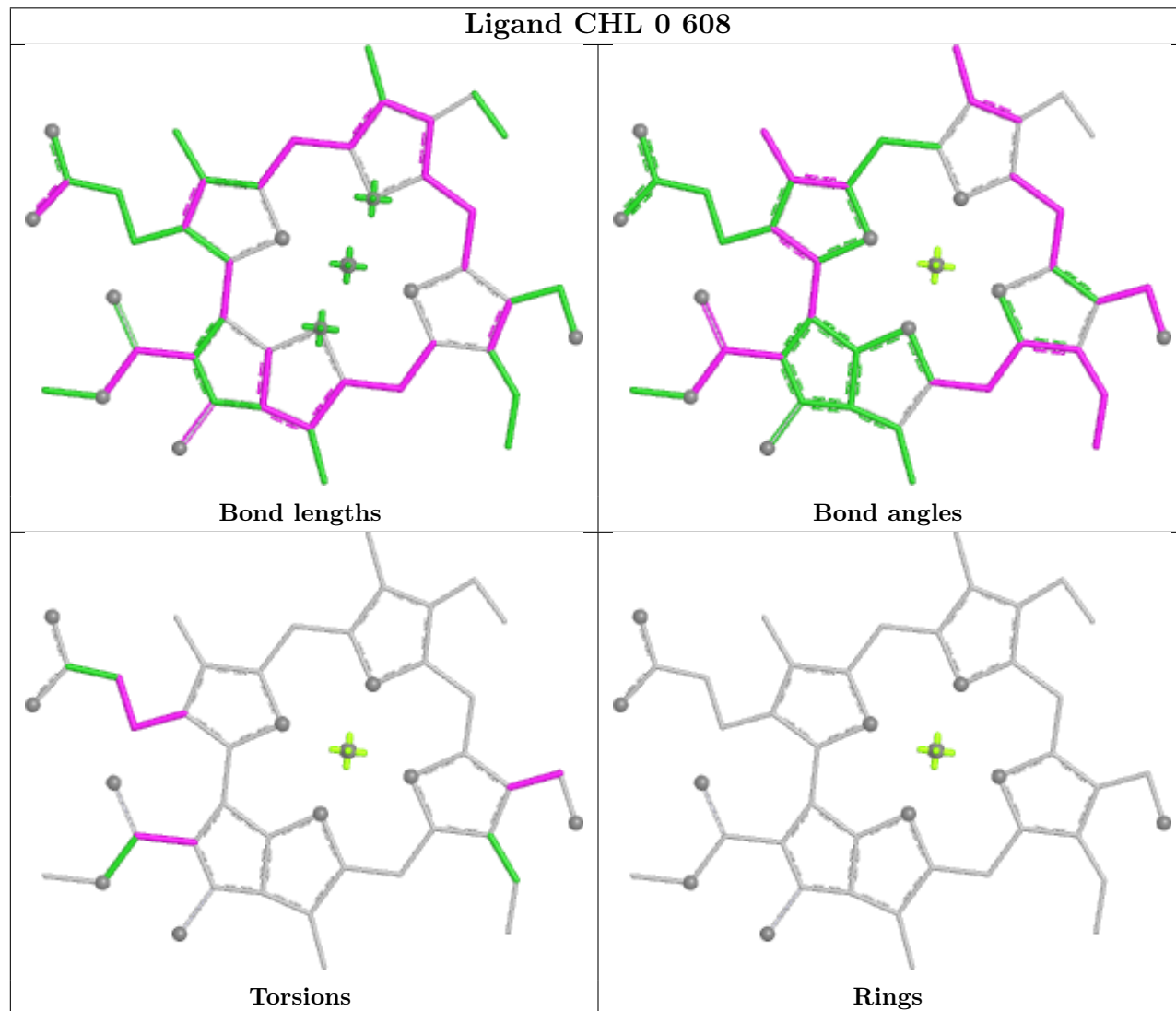


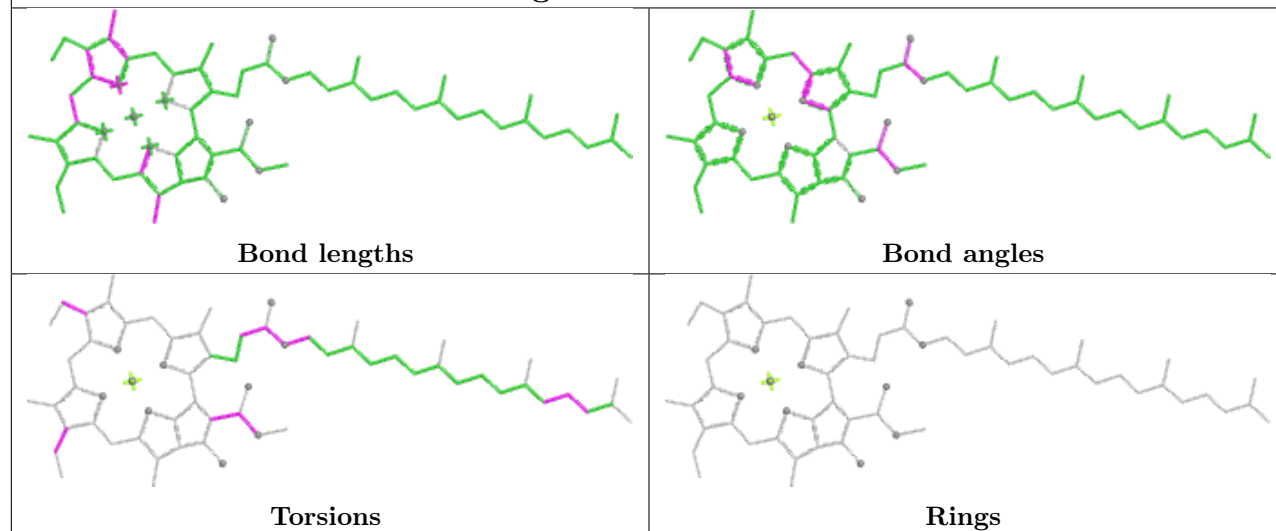
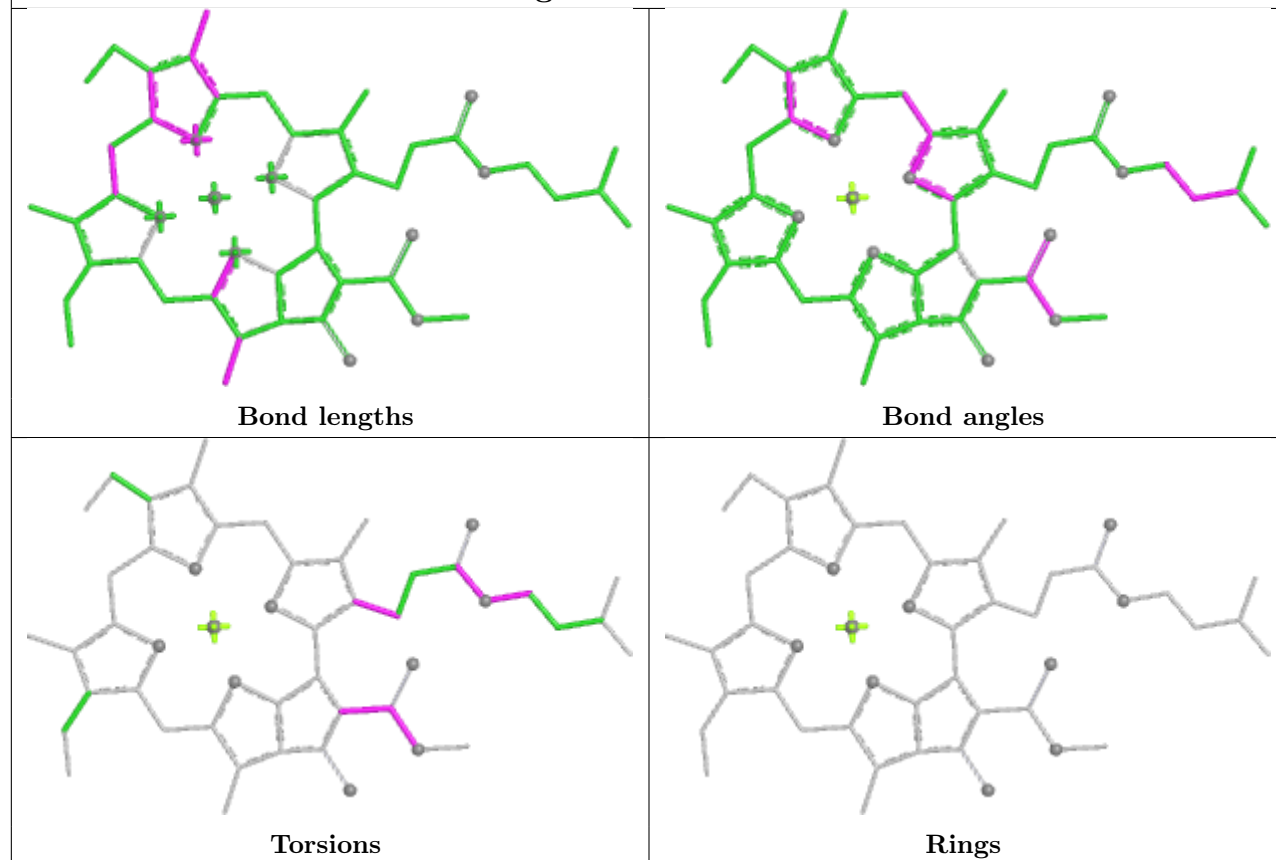


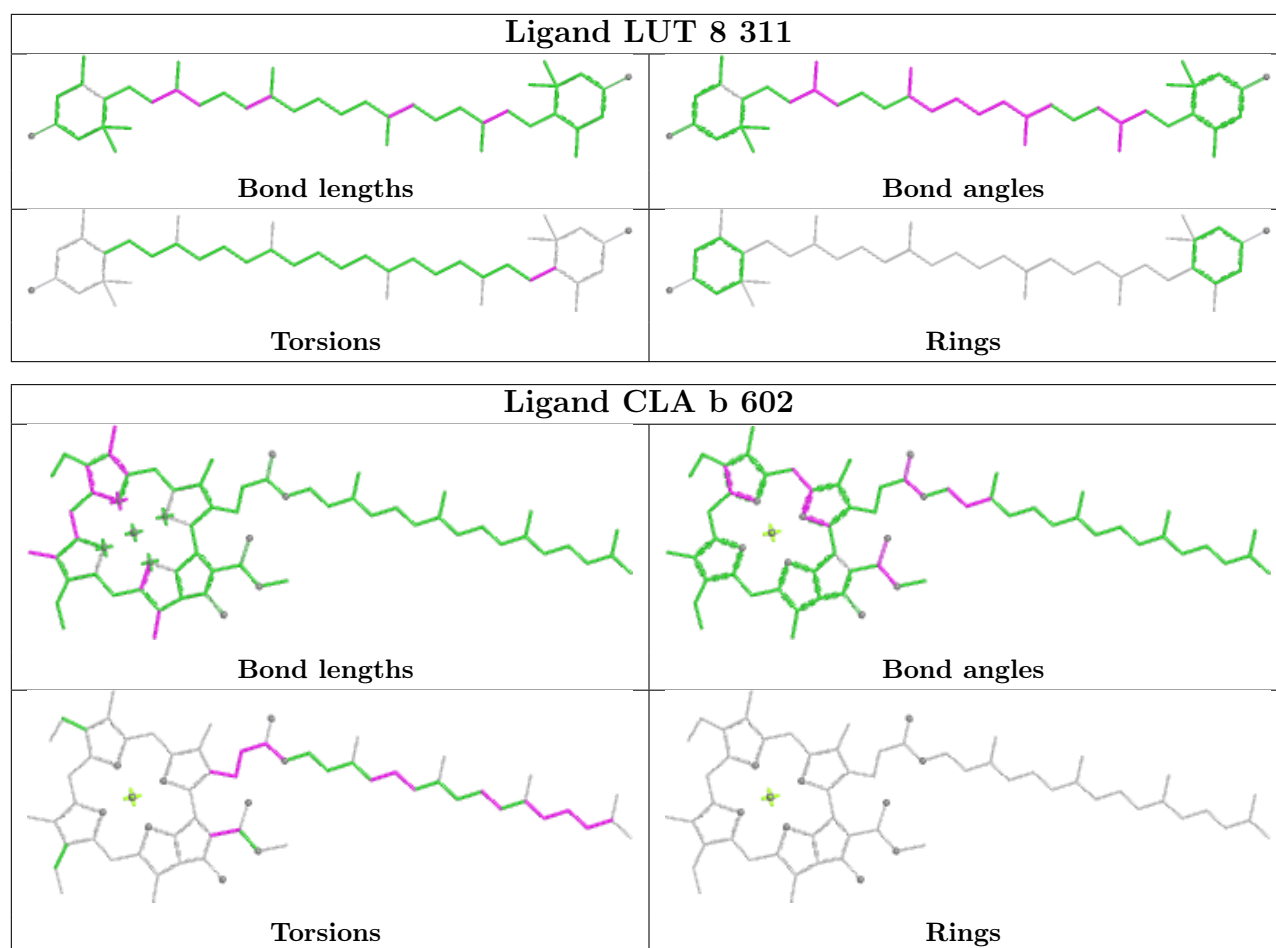
Ligand CLA c 507



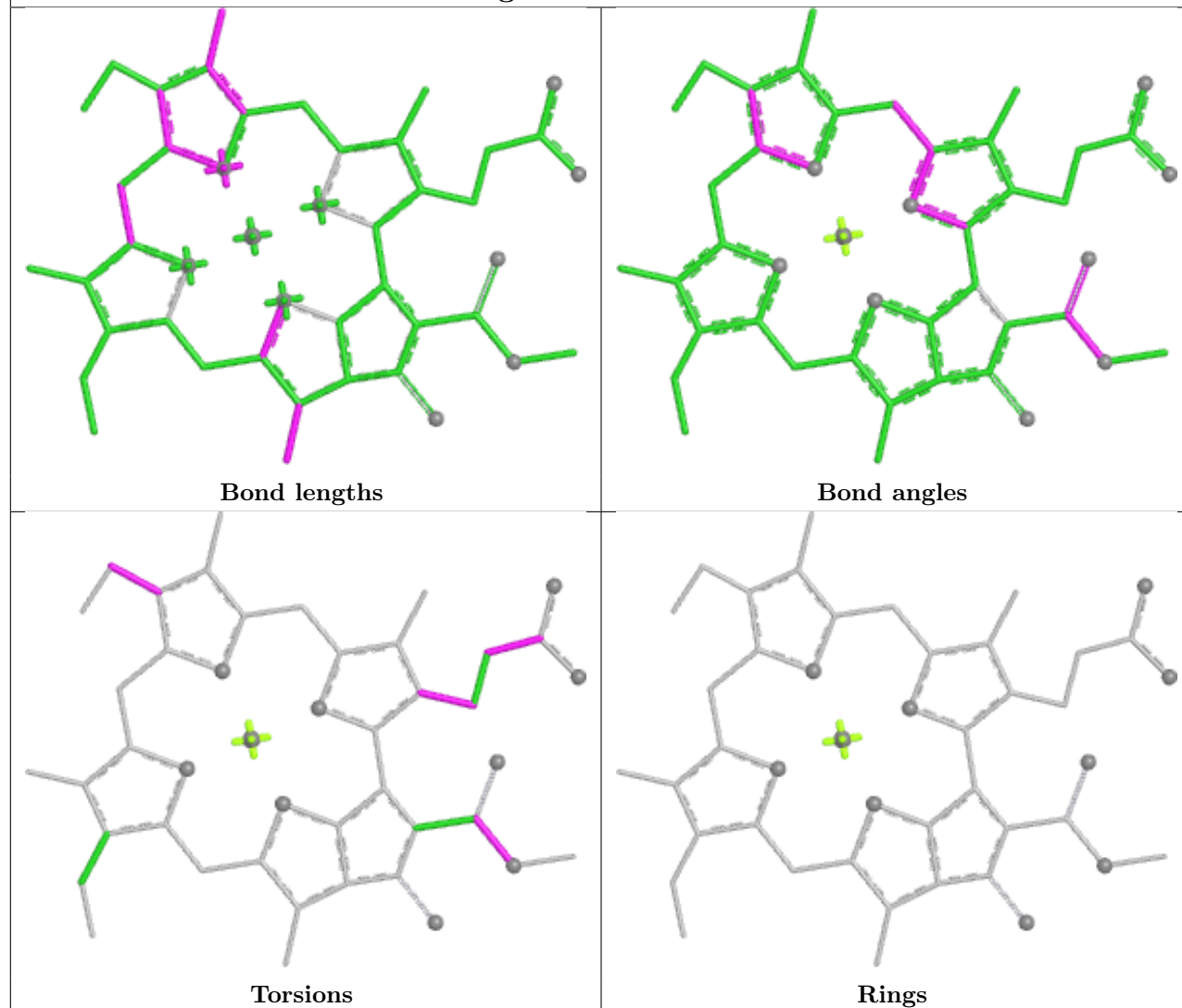
Ligand CHL 0 608



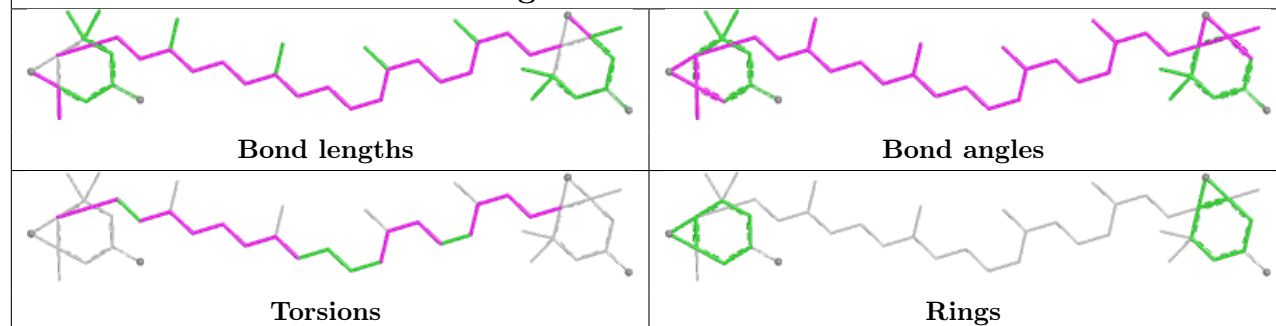
Ligand CLA B 610**Ligand CLA n 604**

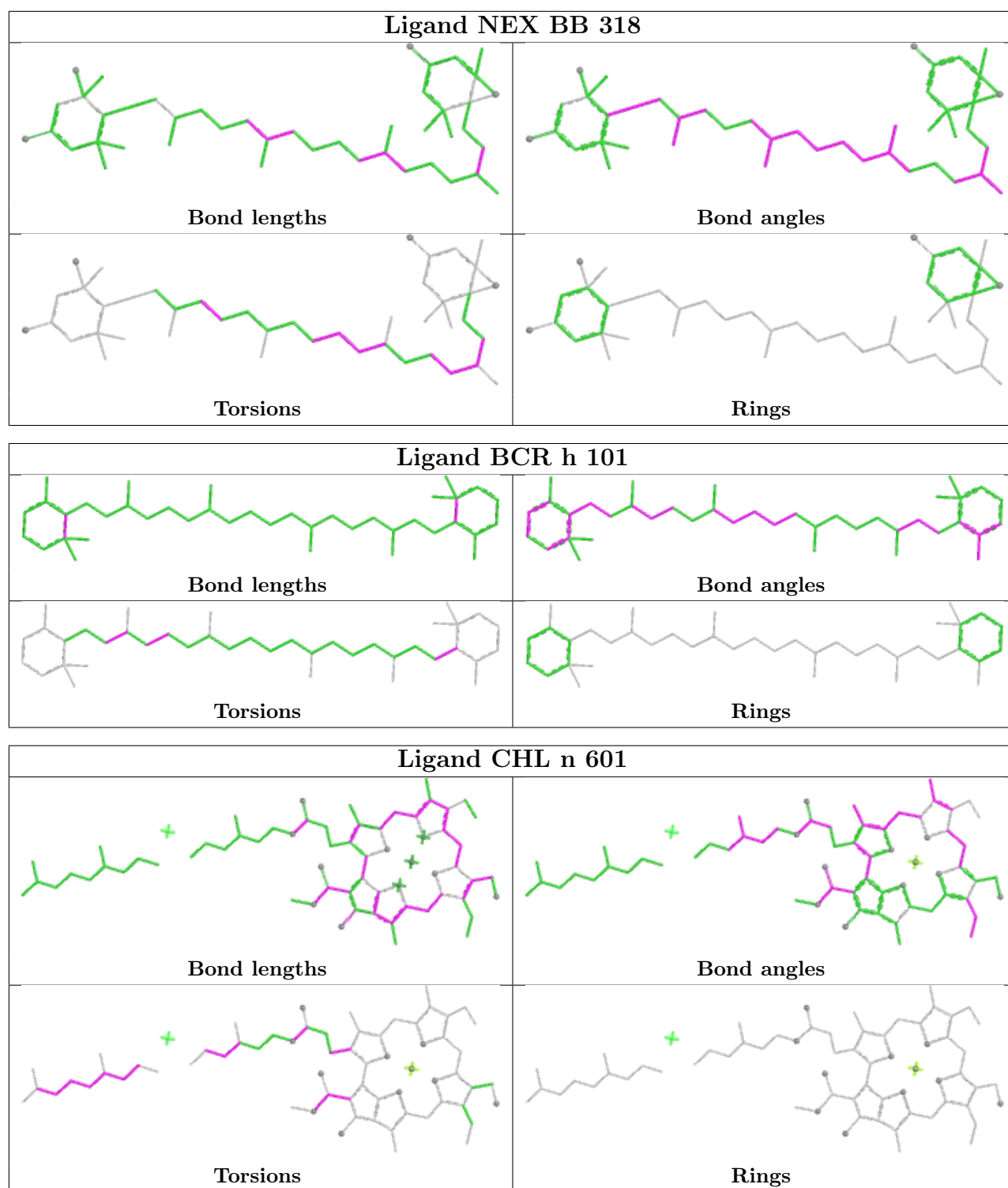


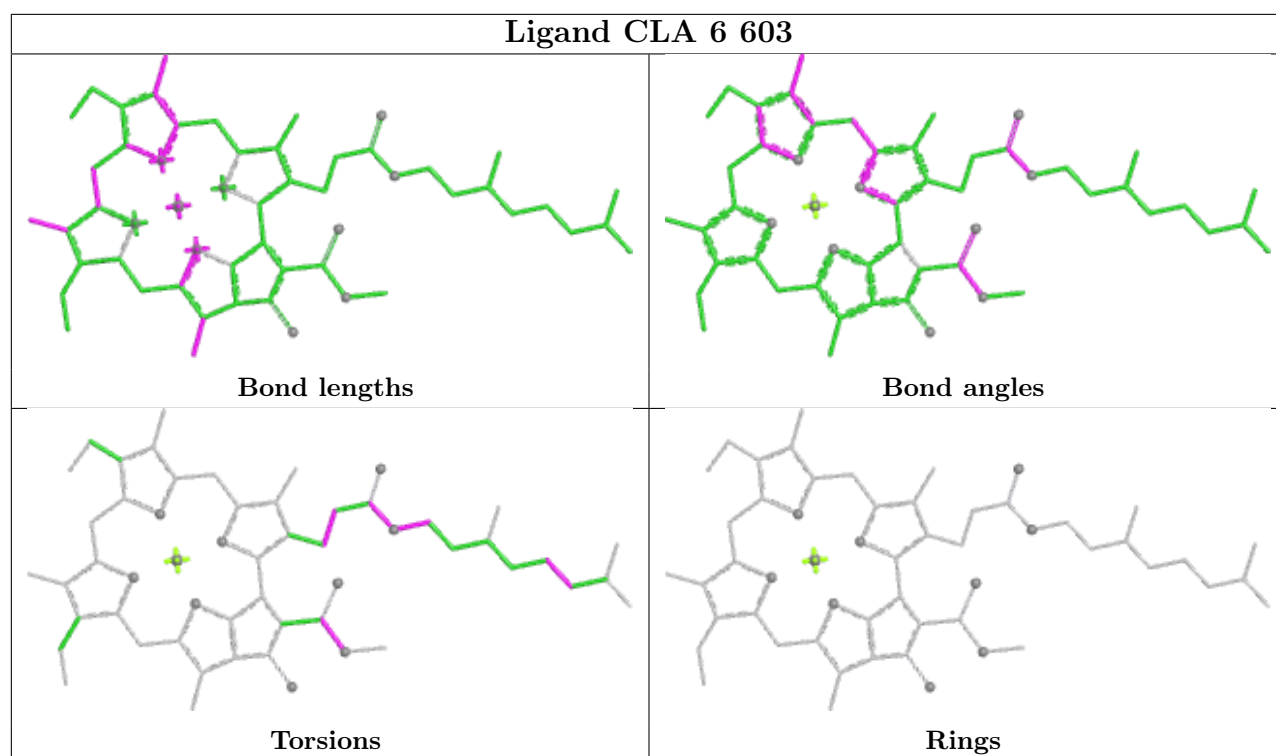
Ligand CLA s 608



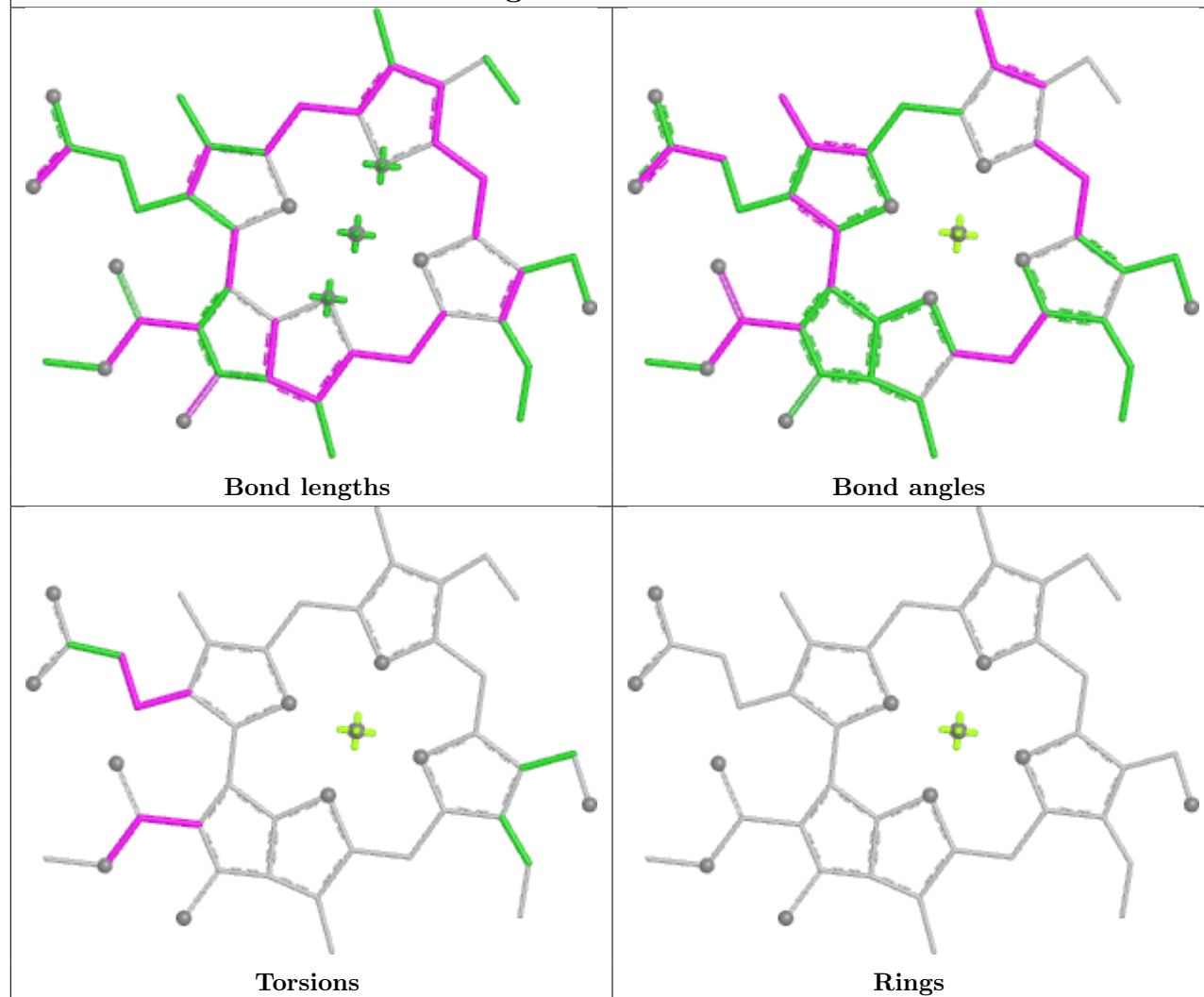
Ligand XAT AB 312



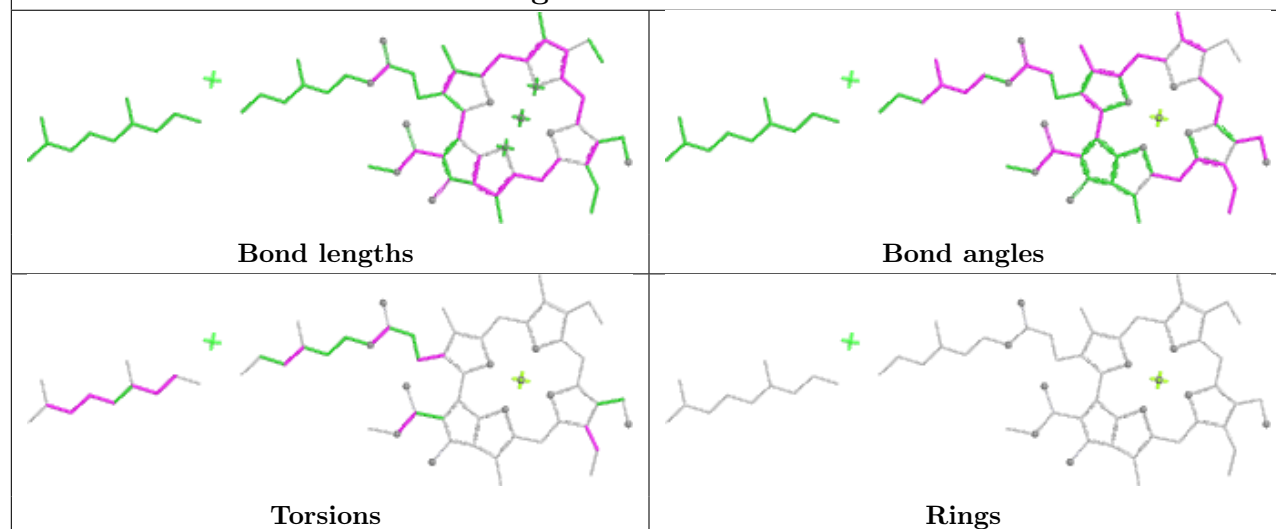




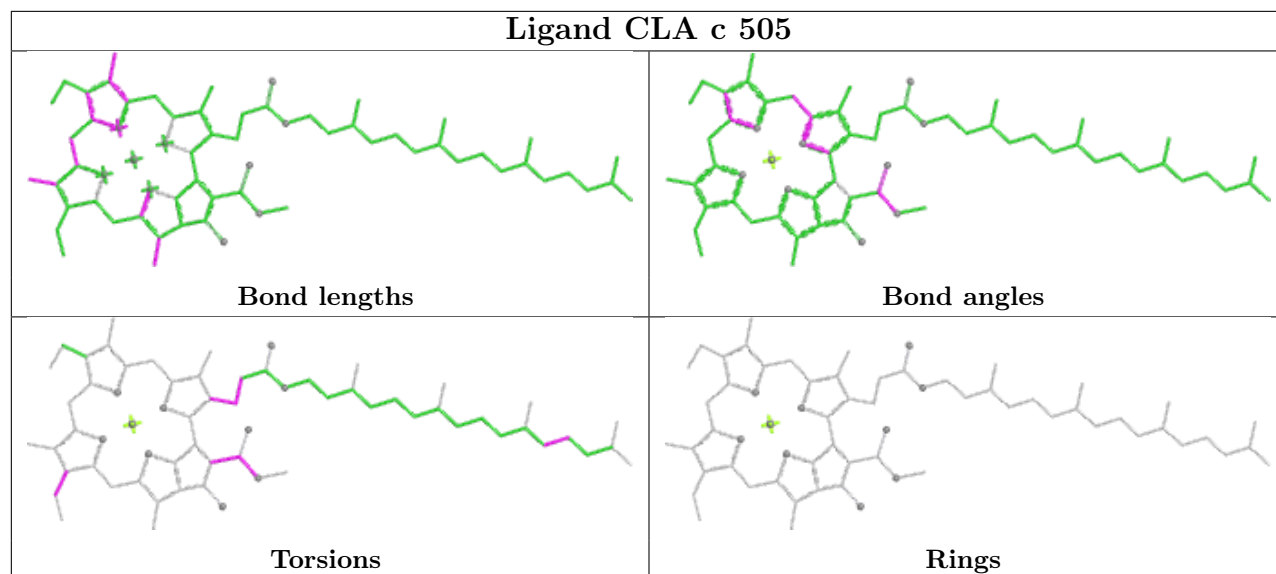
Ligand CHL 5 605



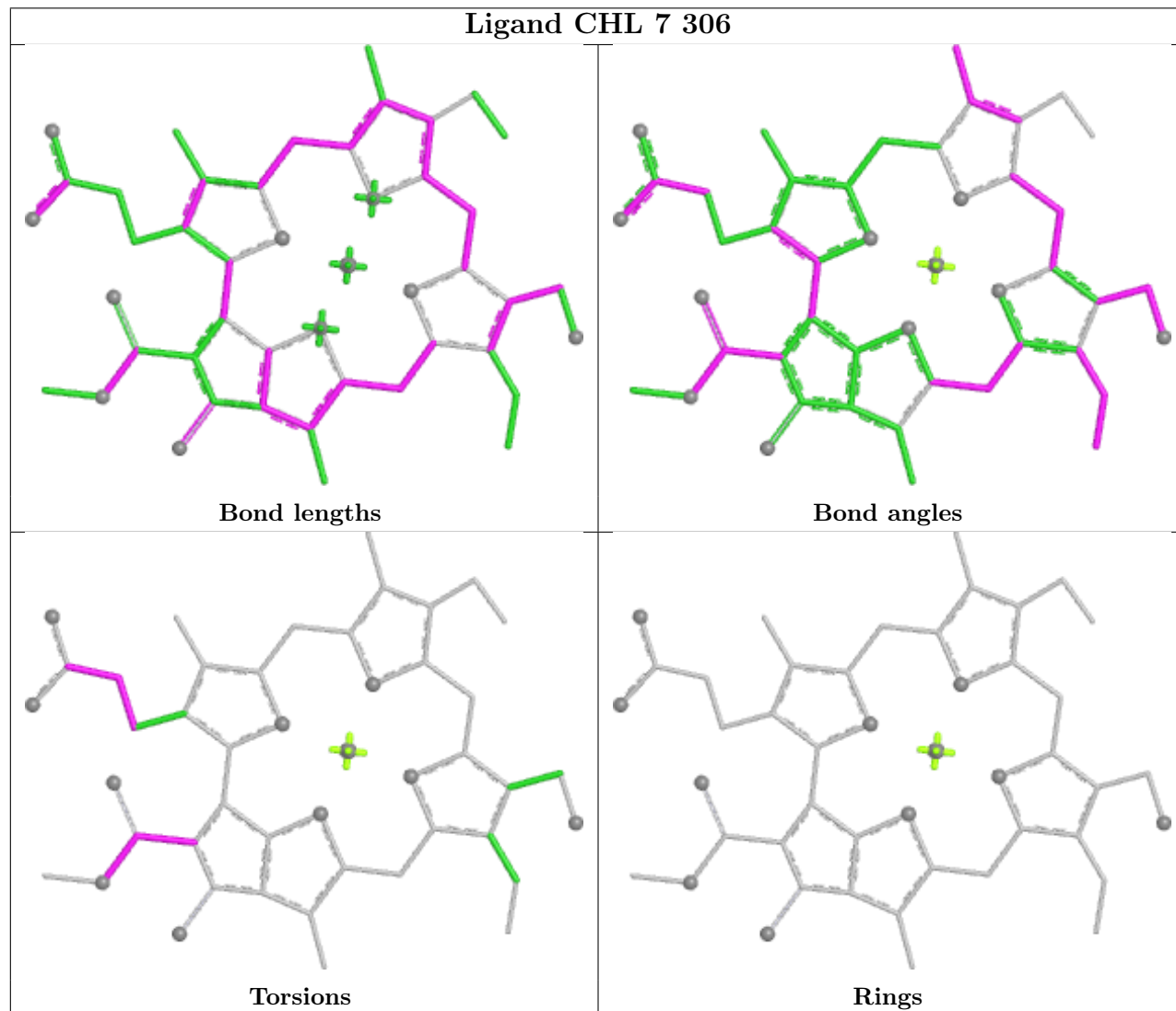
Ligand CHL Y 302



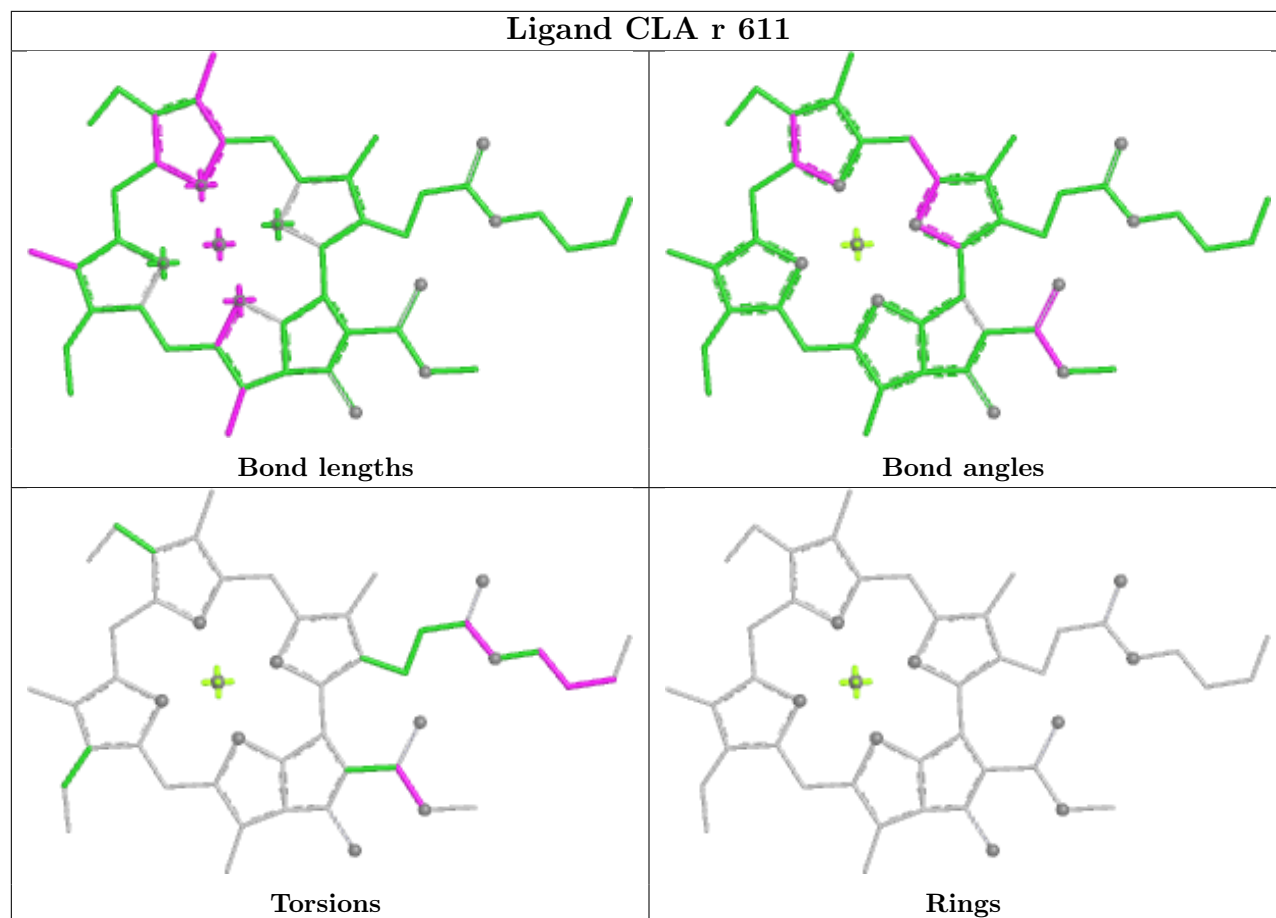
Ligand CLA c 505



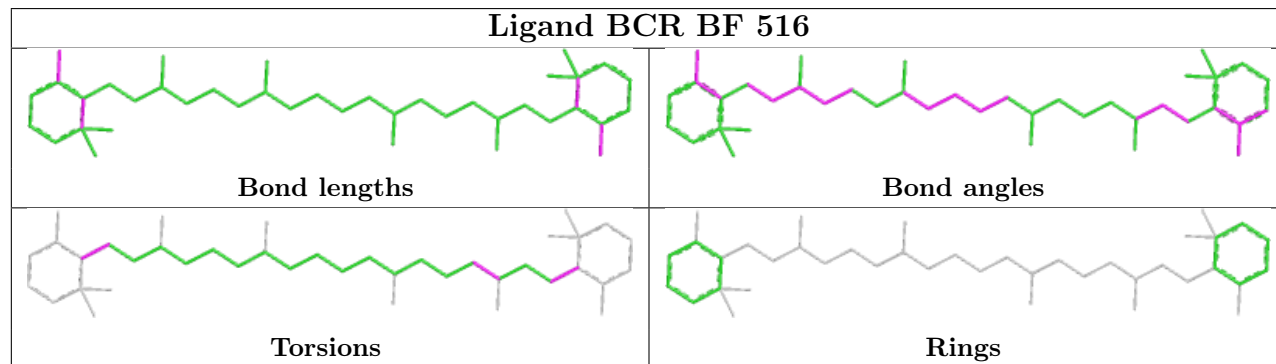
Ligand CHL 7 306

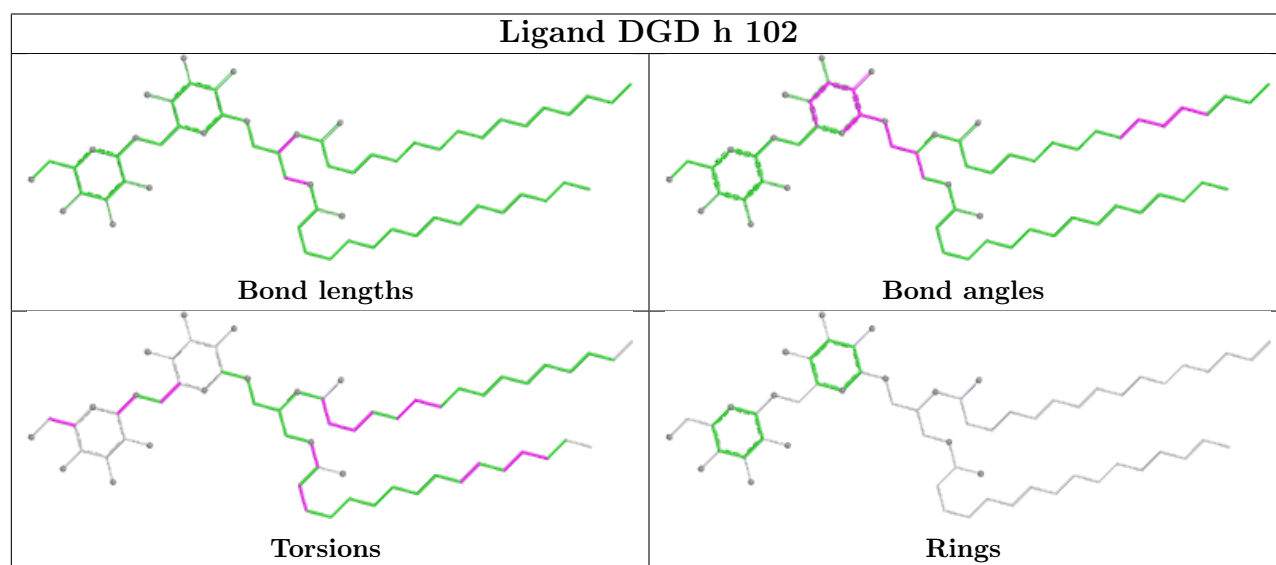
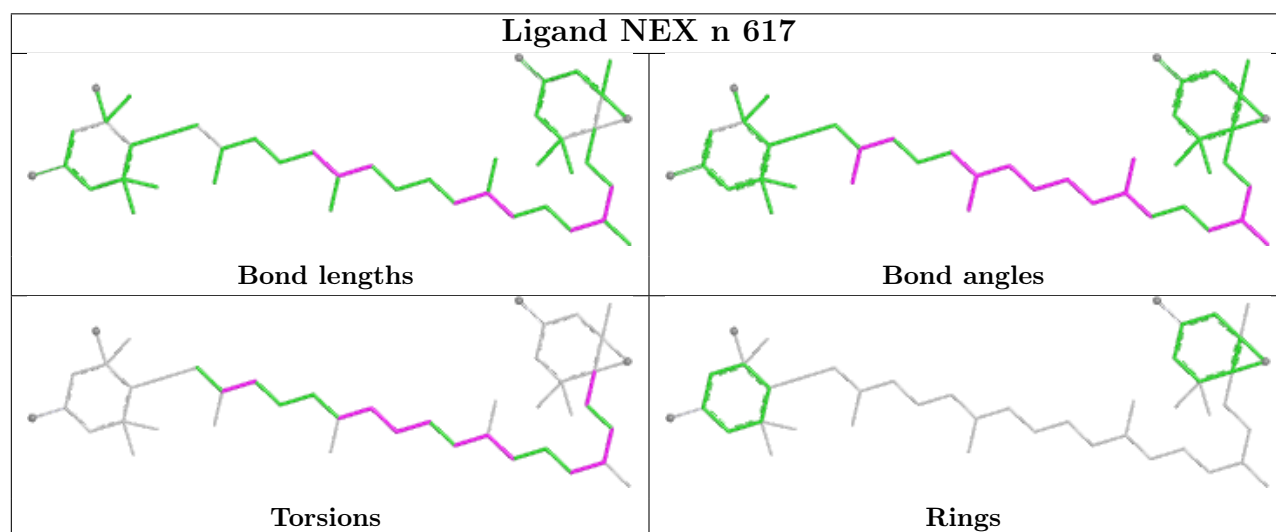
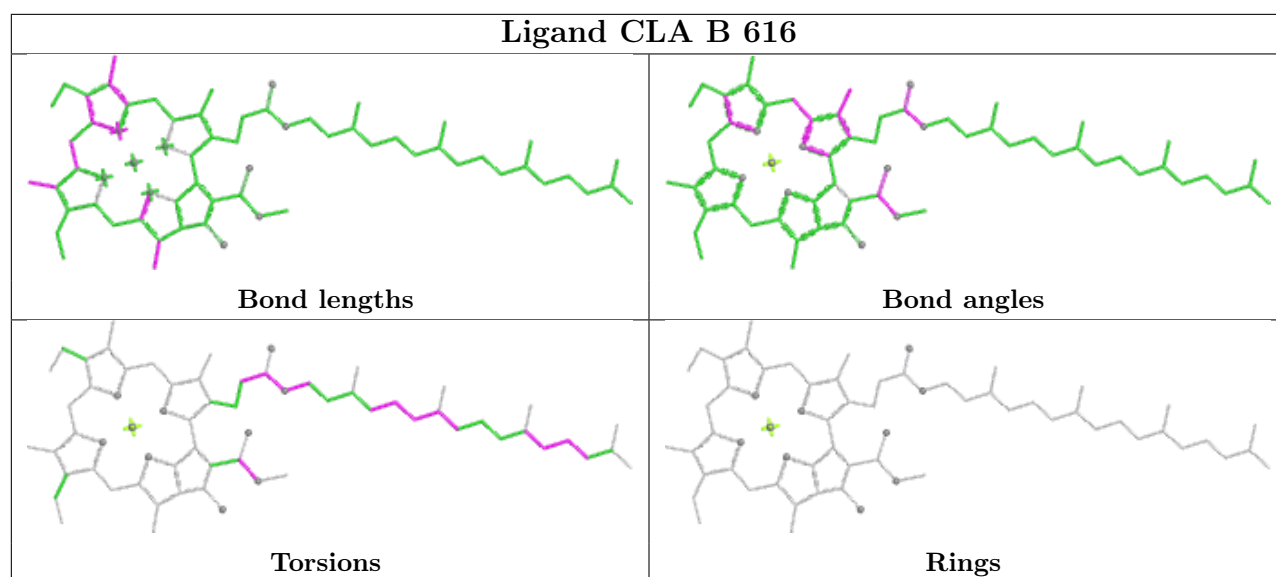


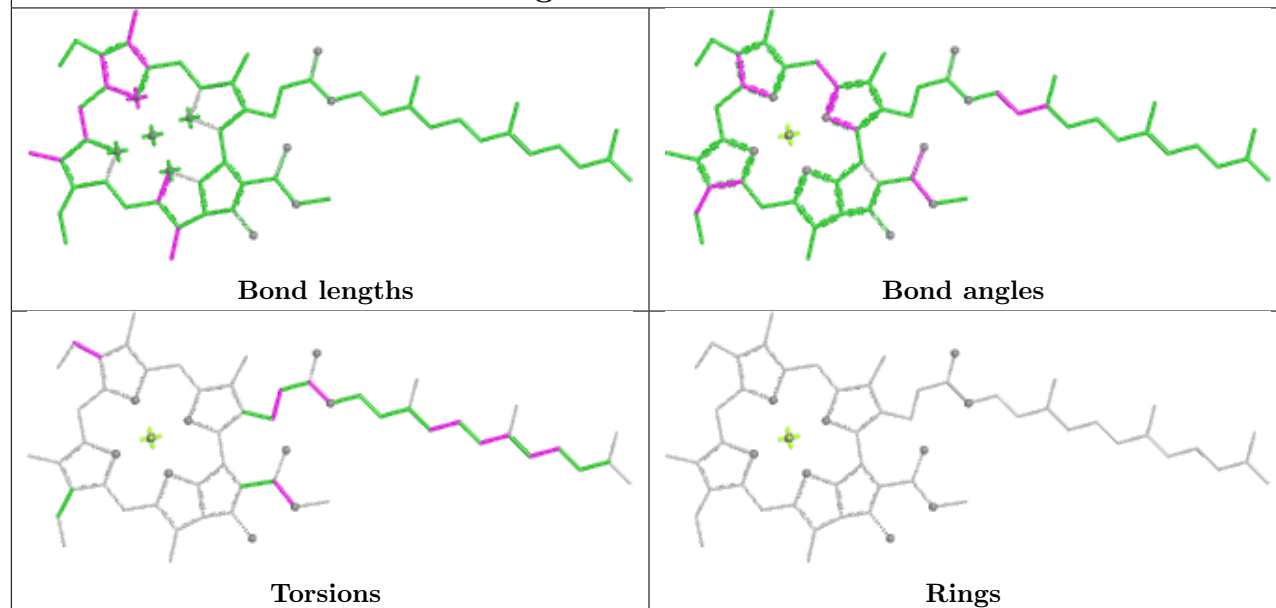
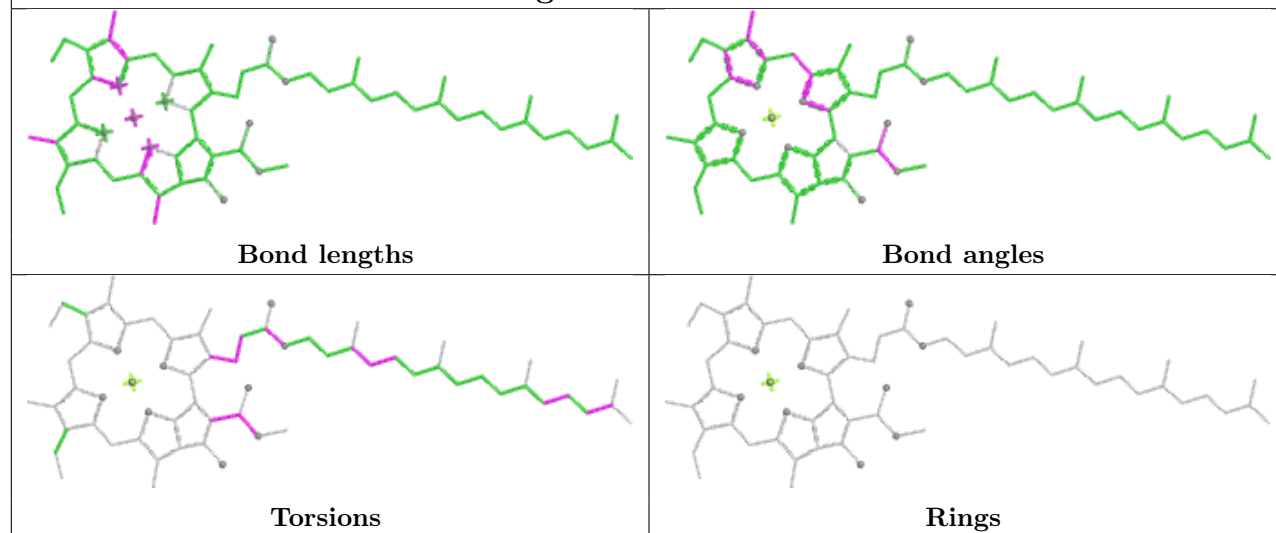
Ligand CLA r 611

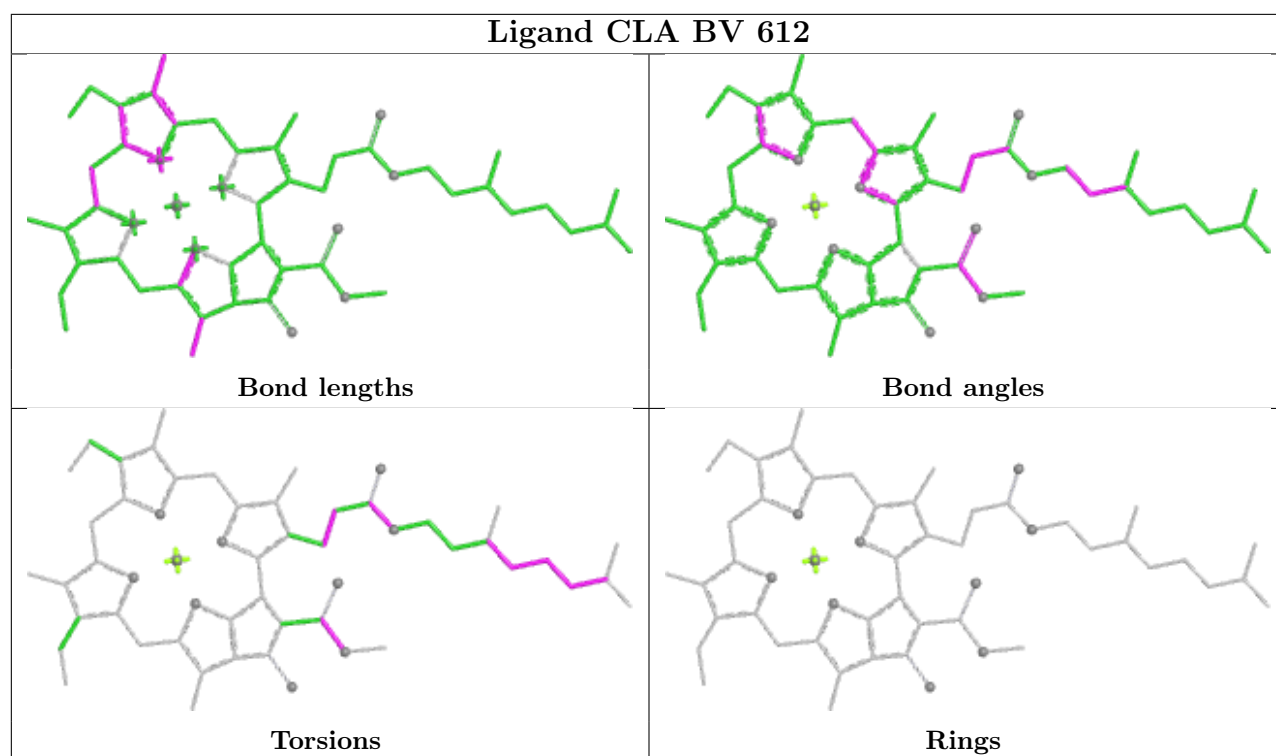


Ligand BCR BF 516

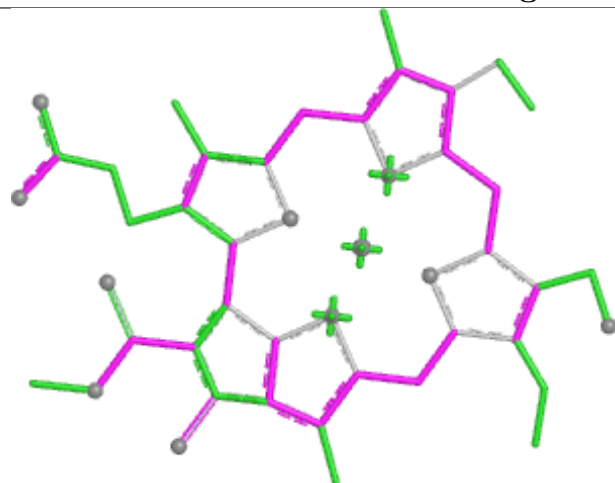




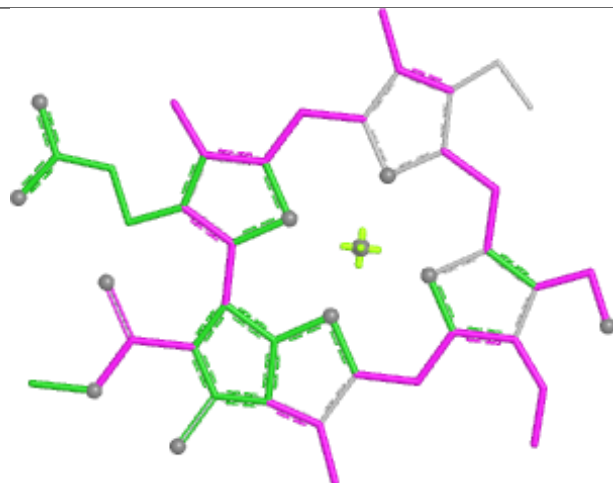
Ligand CLA n 613**Ligand CLA 1 508**



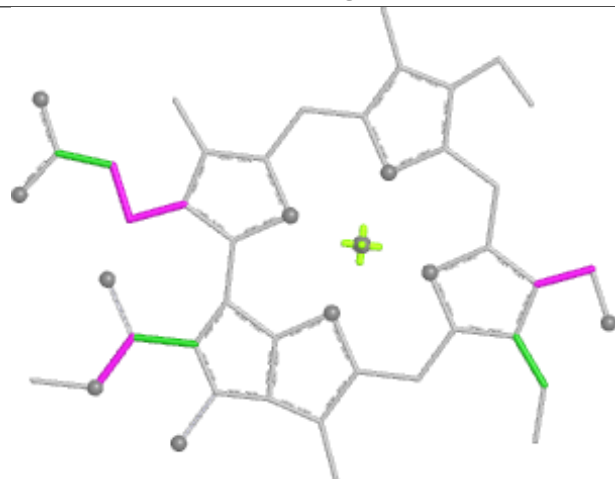
Ligand CHL 9 608



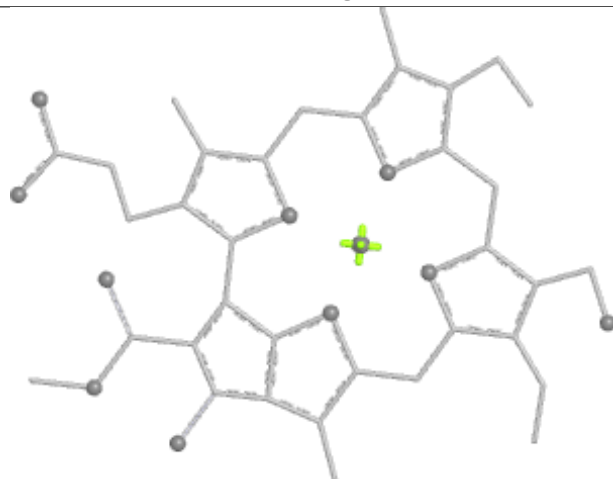
Bond lengths



Bond angles

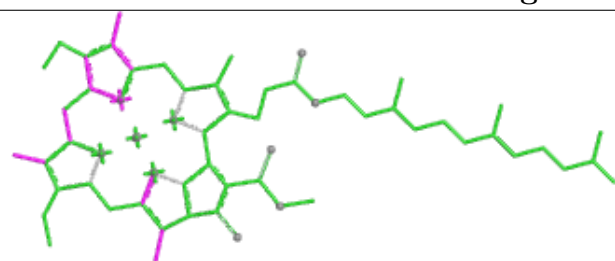


Torsions

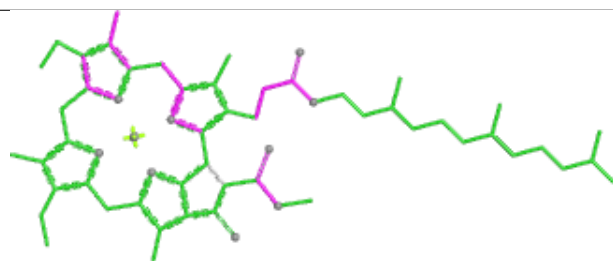


Rings

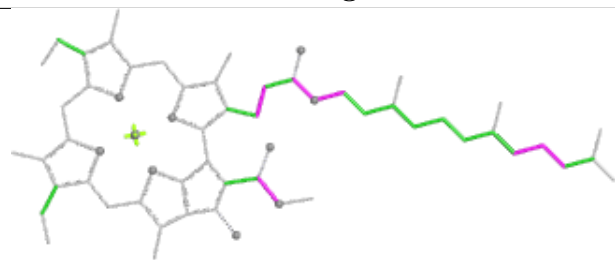
Ligand CLA a 410



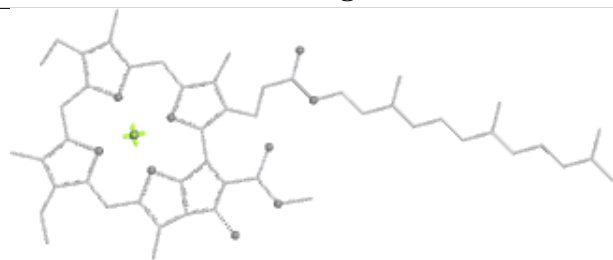
Bond lengths



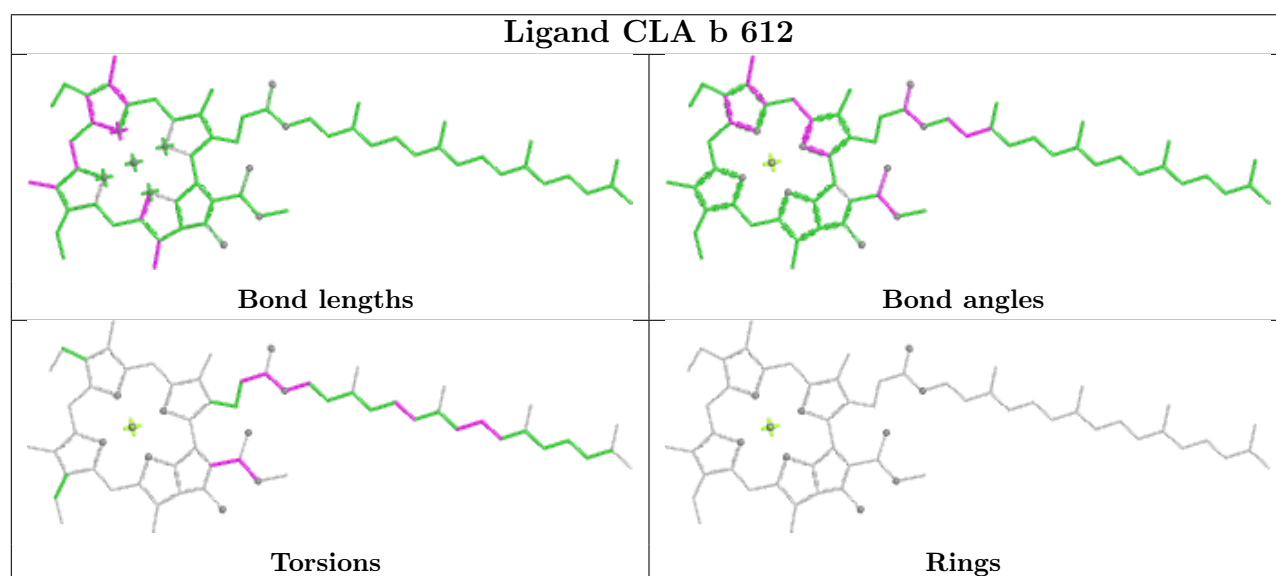
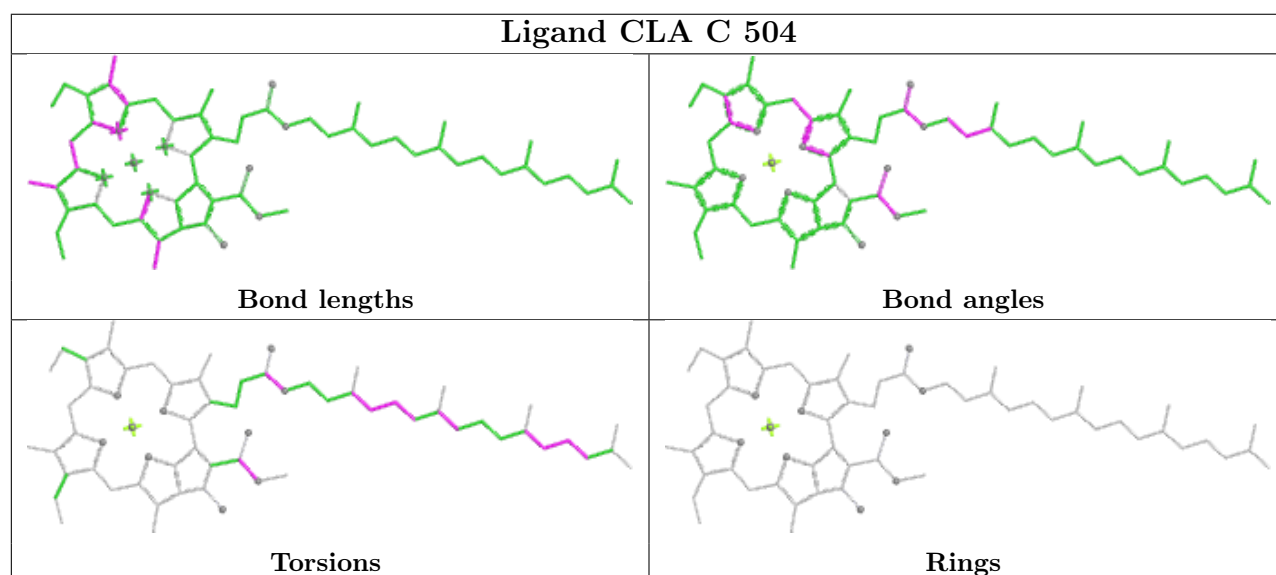
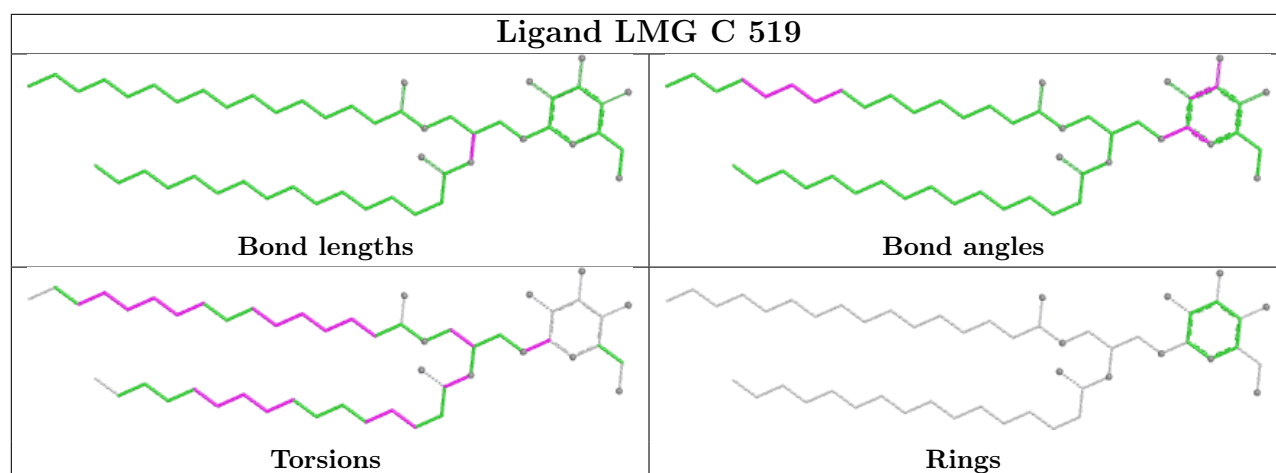
Bond angles



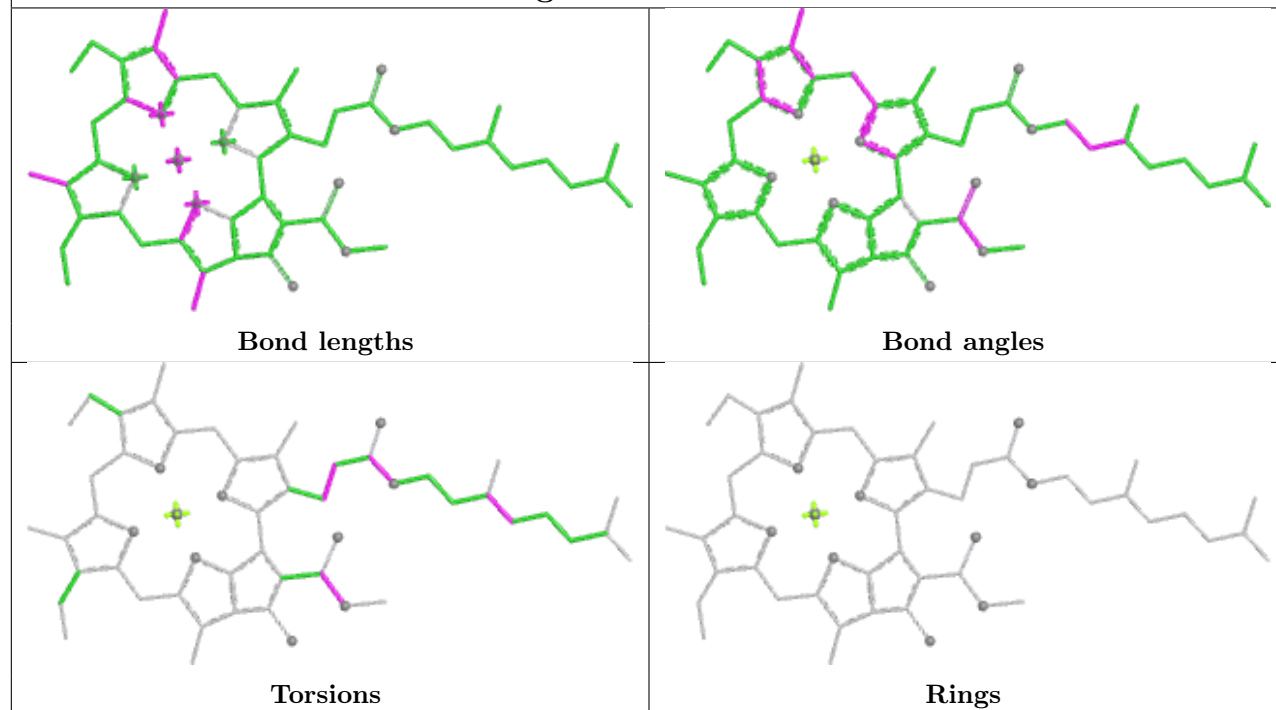
Torsions



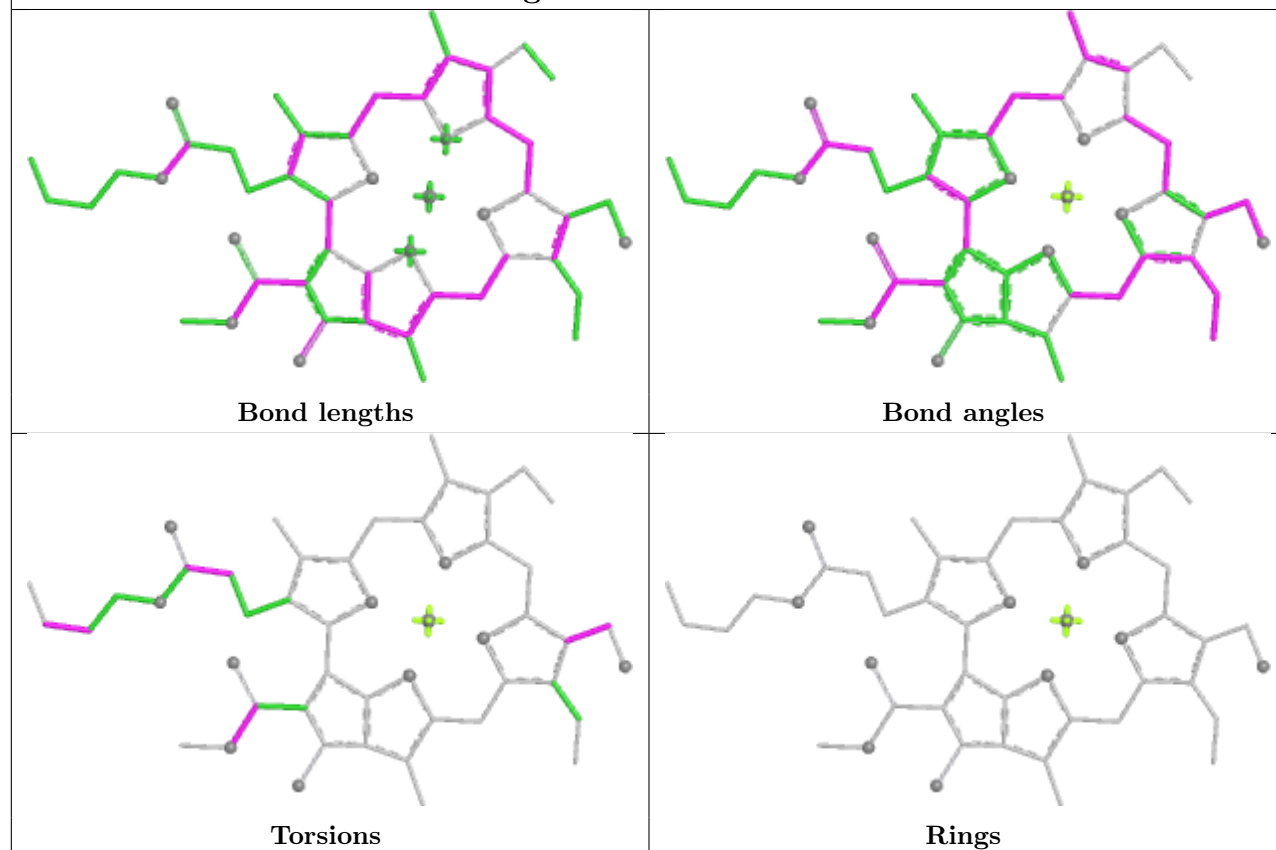
Rings

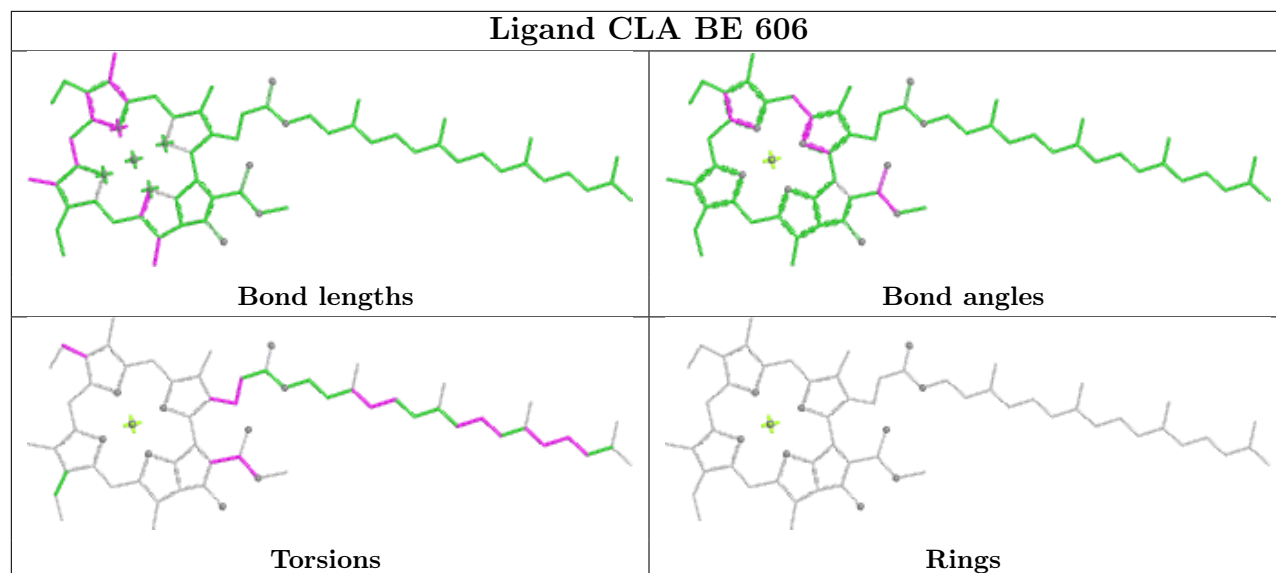
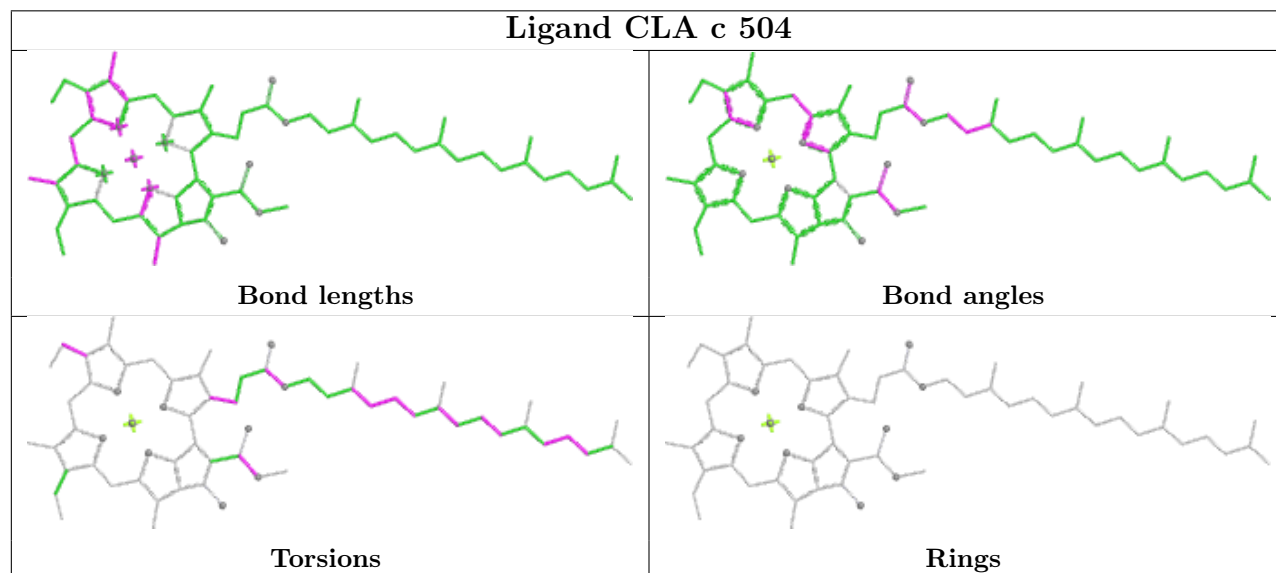
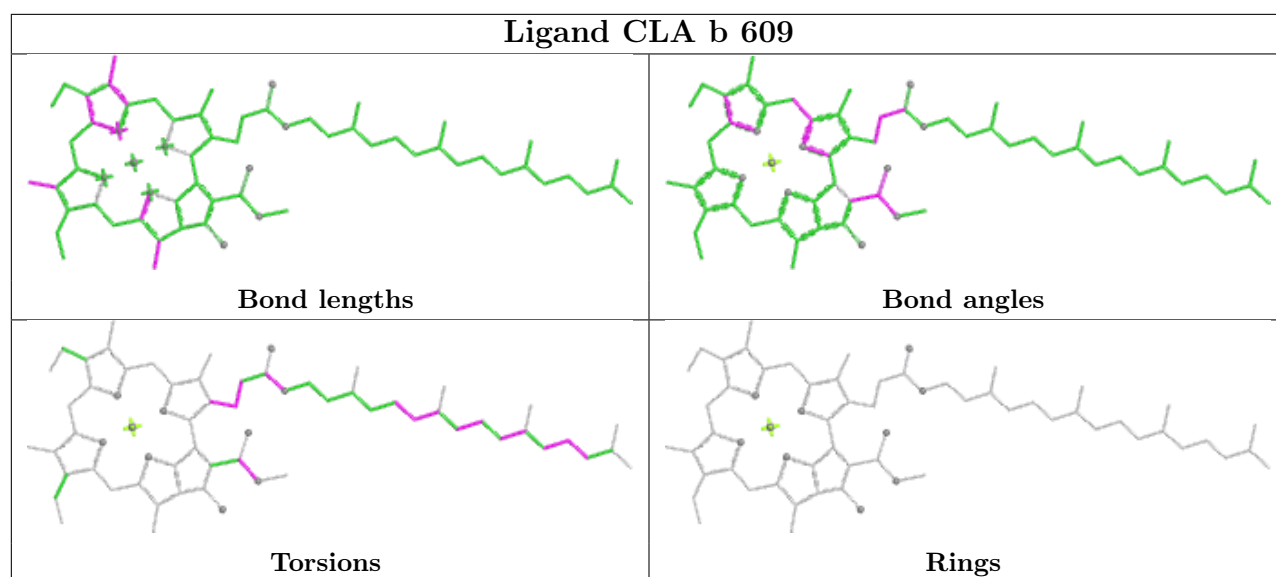


Ligand CLA 9 613

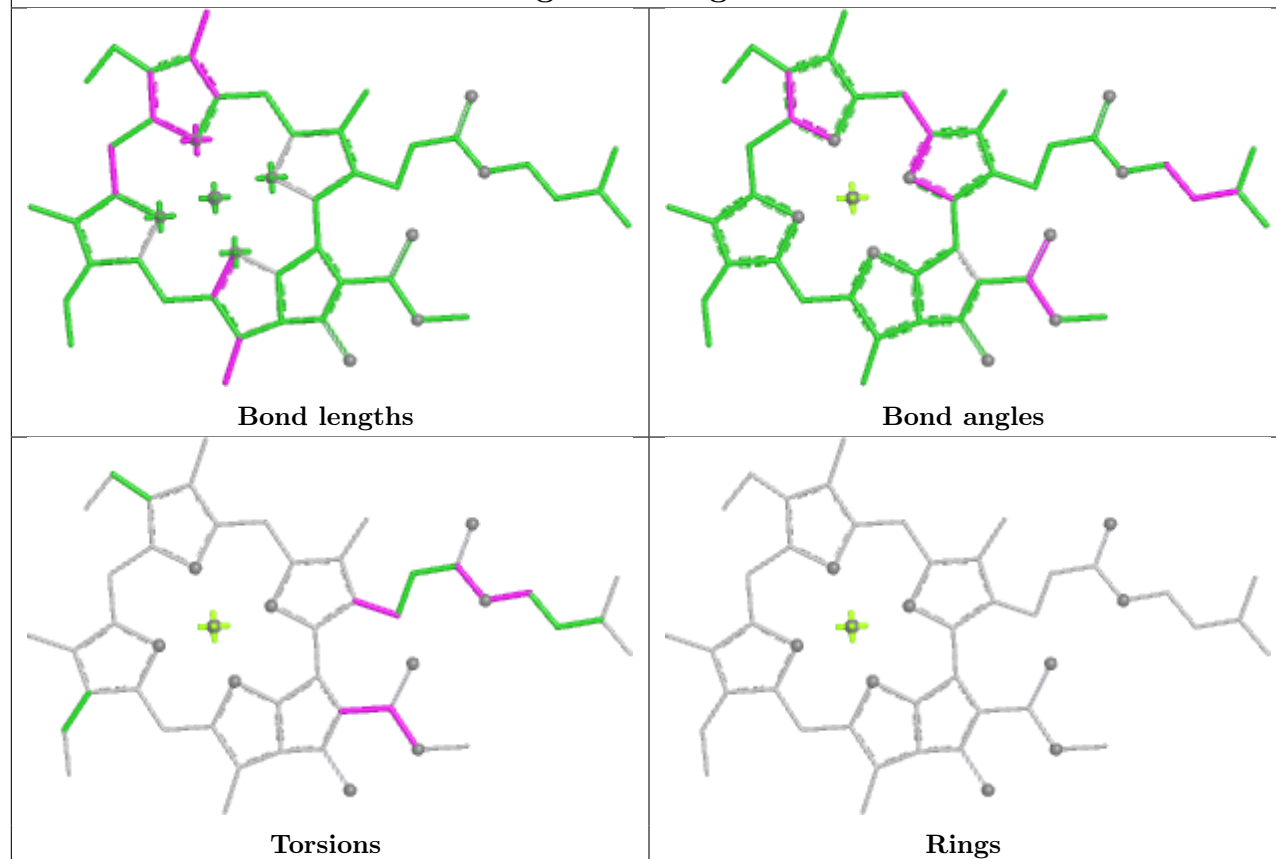


Ligand CHL Ba 307

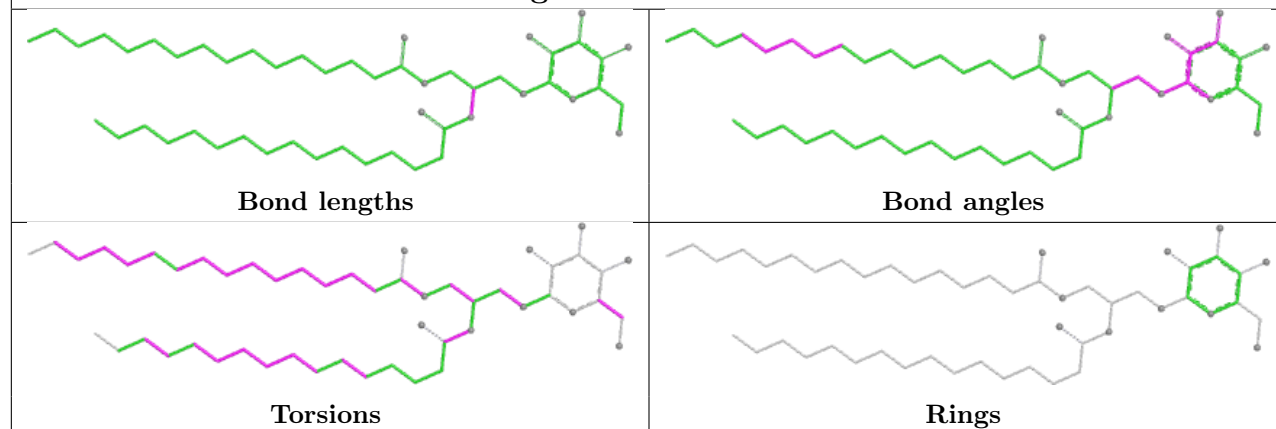




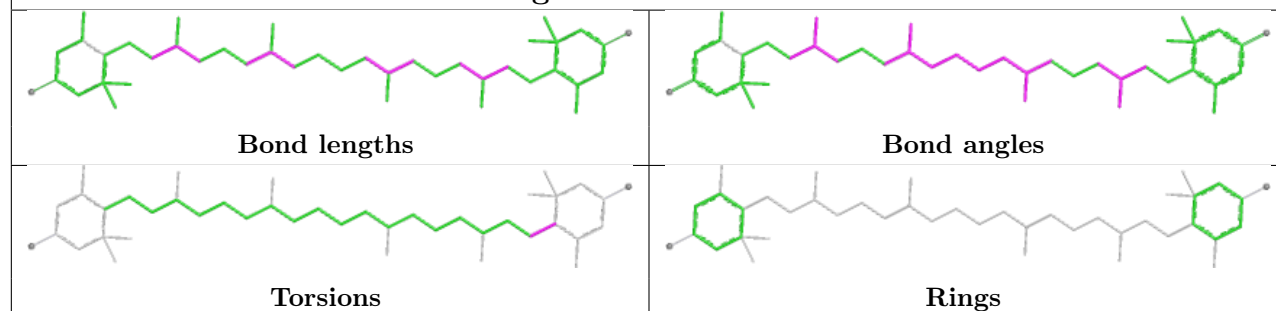
Ligand CLA g 604

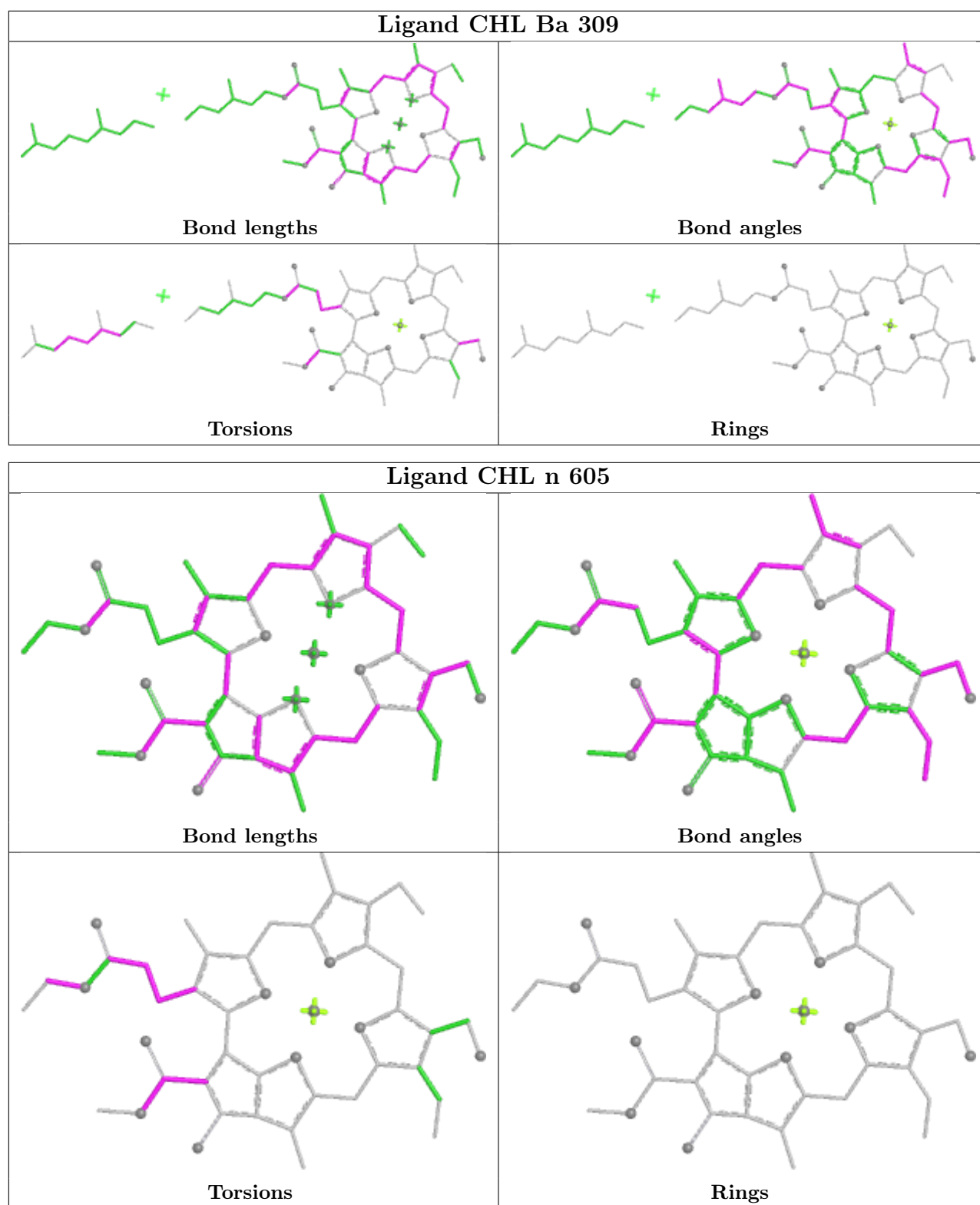


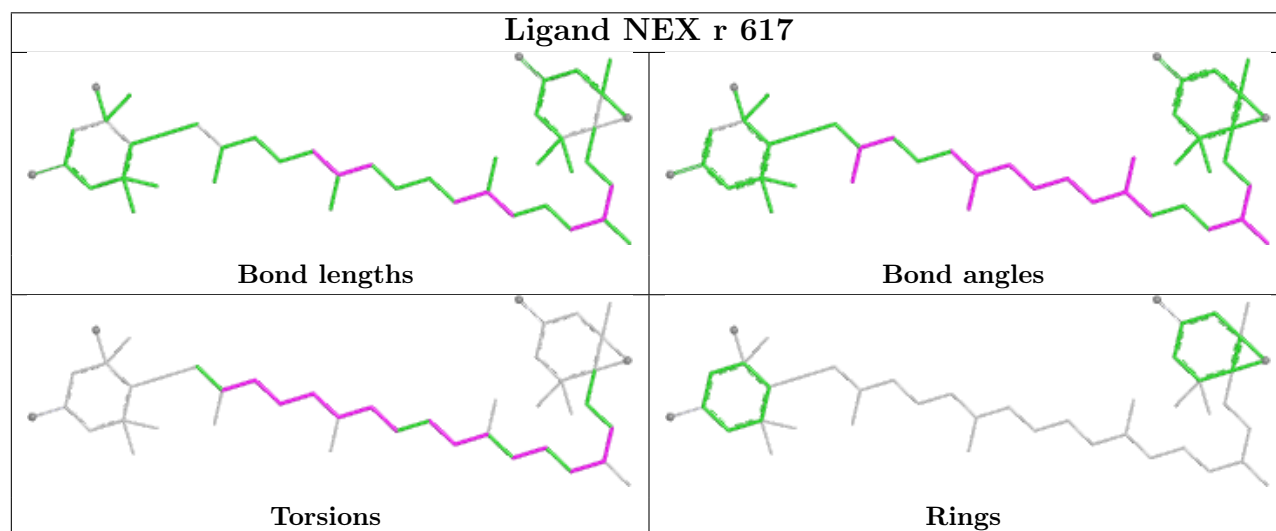
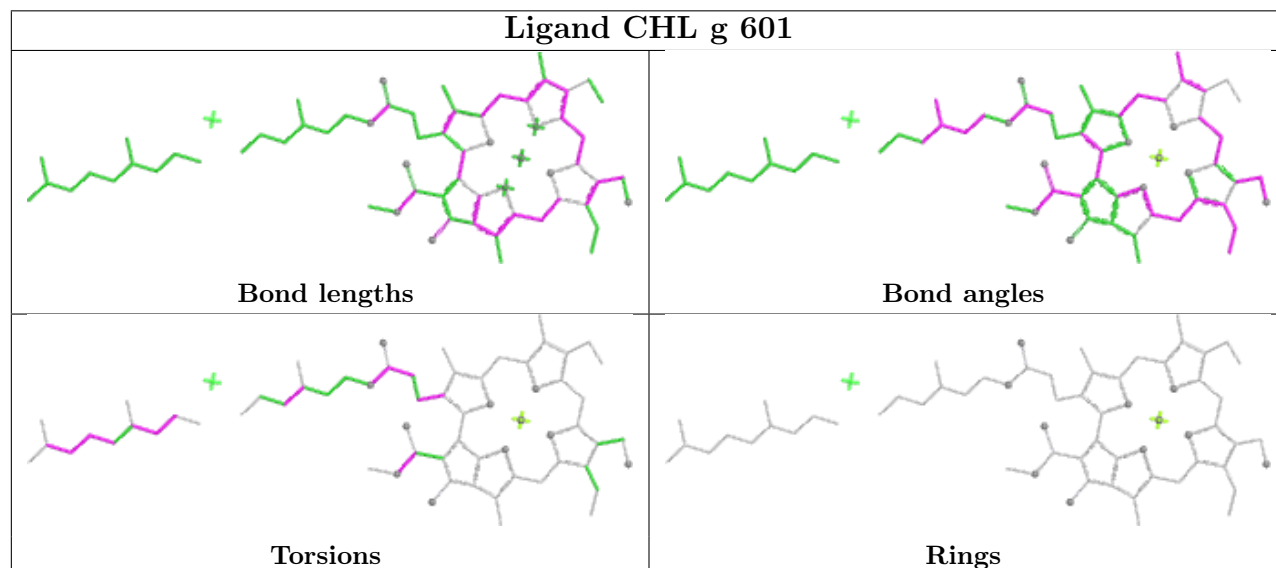
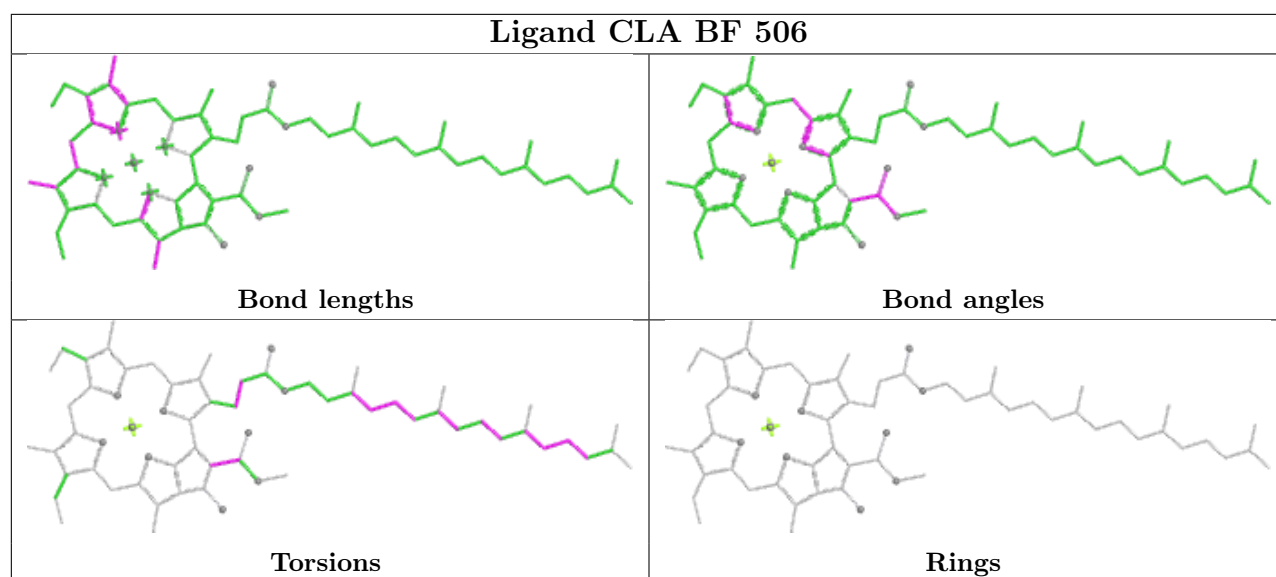
Ligand LMG b 621

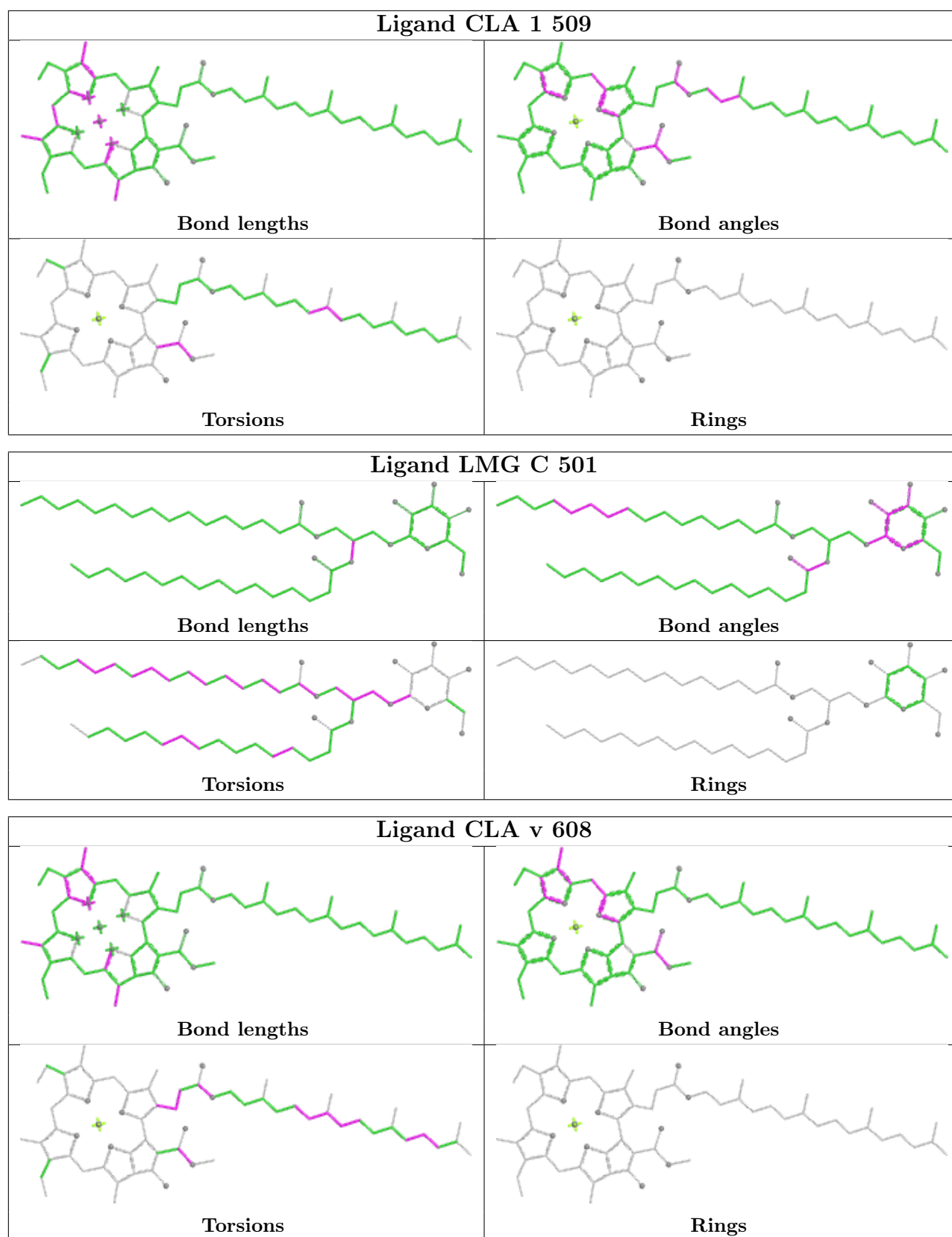


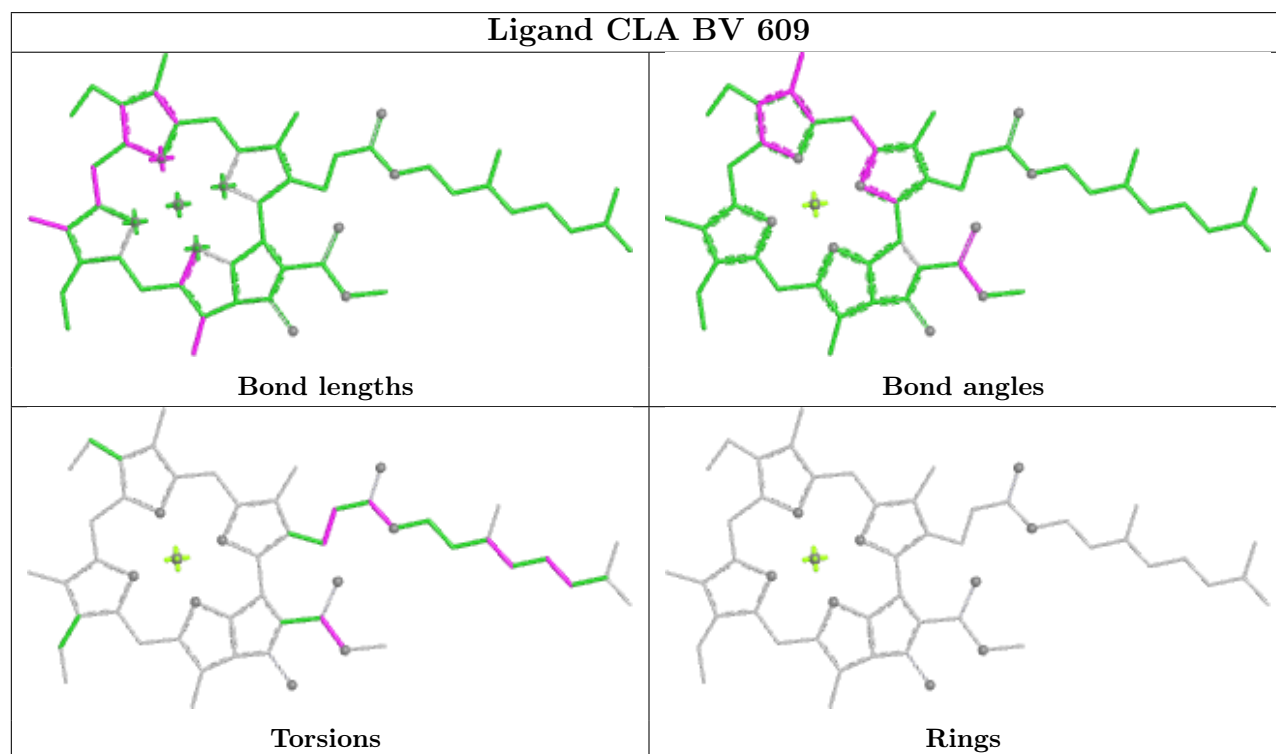
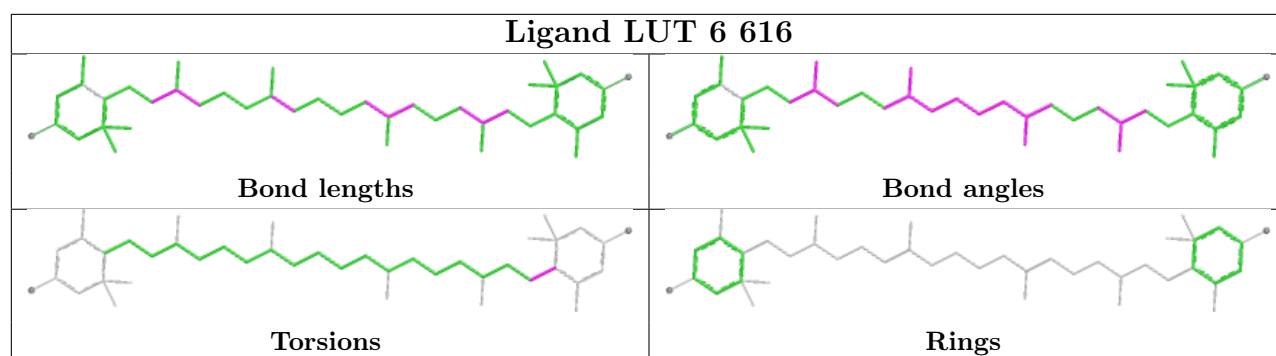
Ligand LUT Y 317



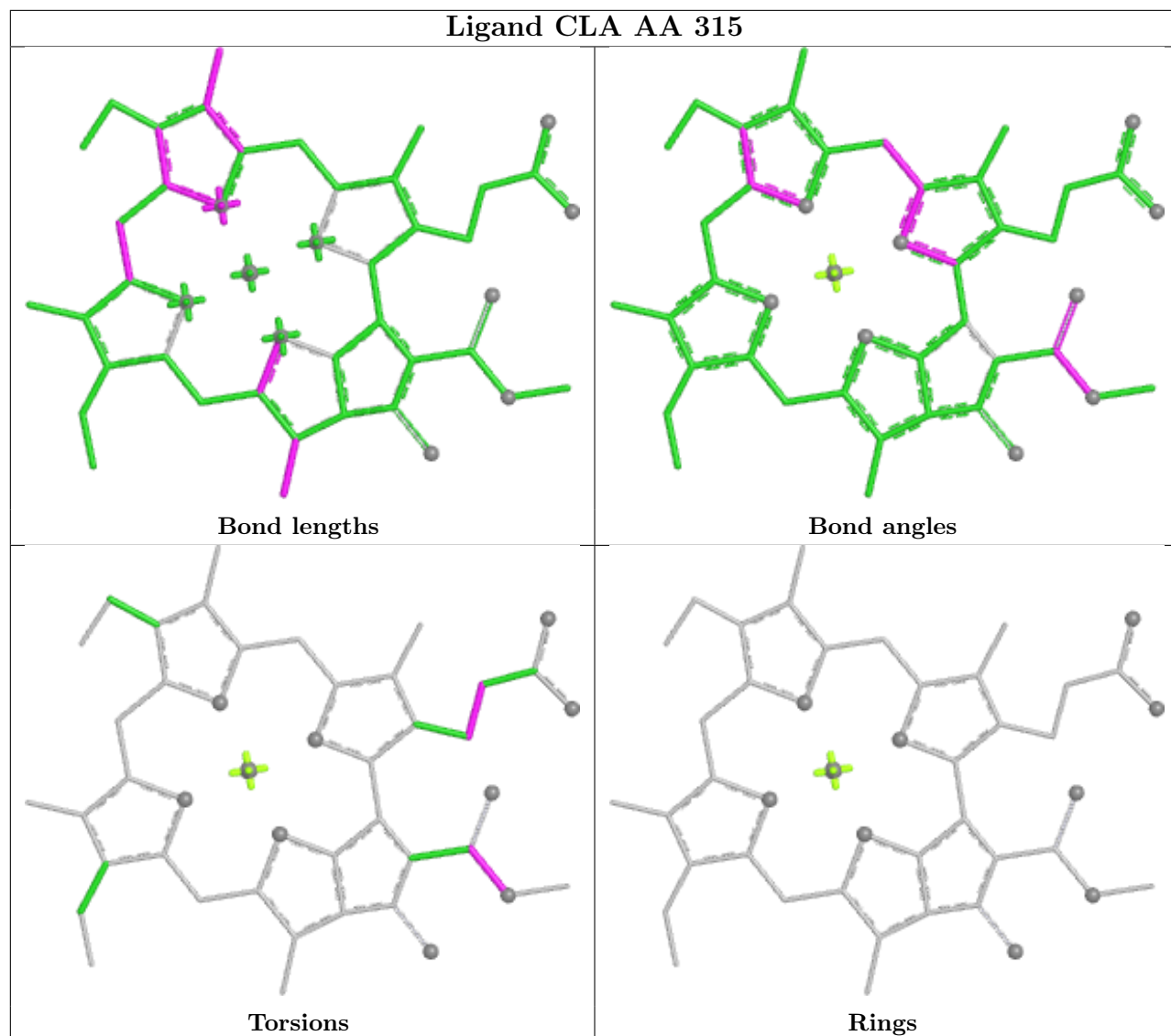


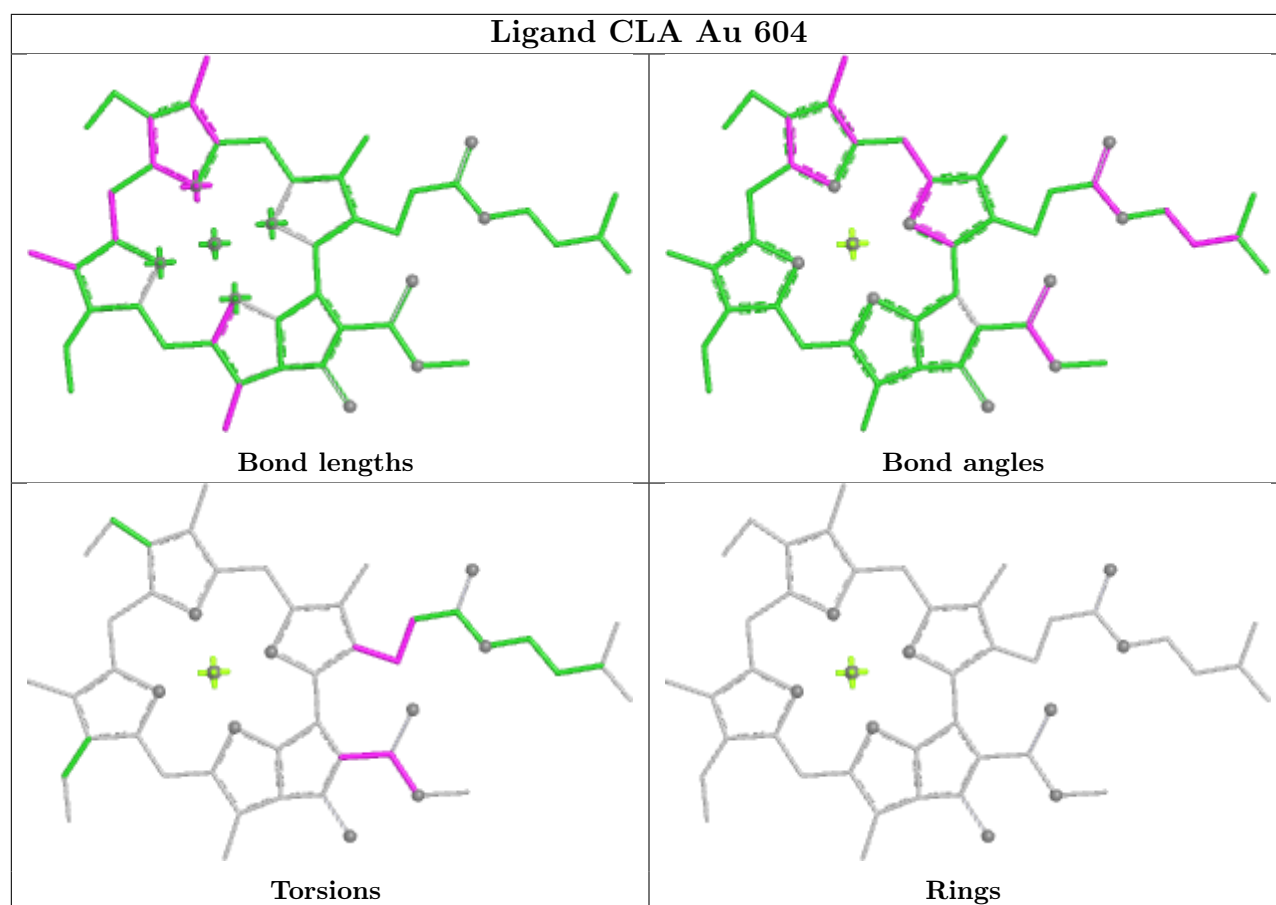




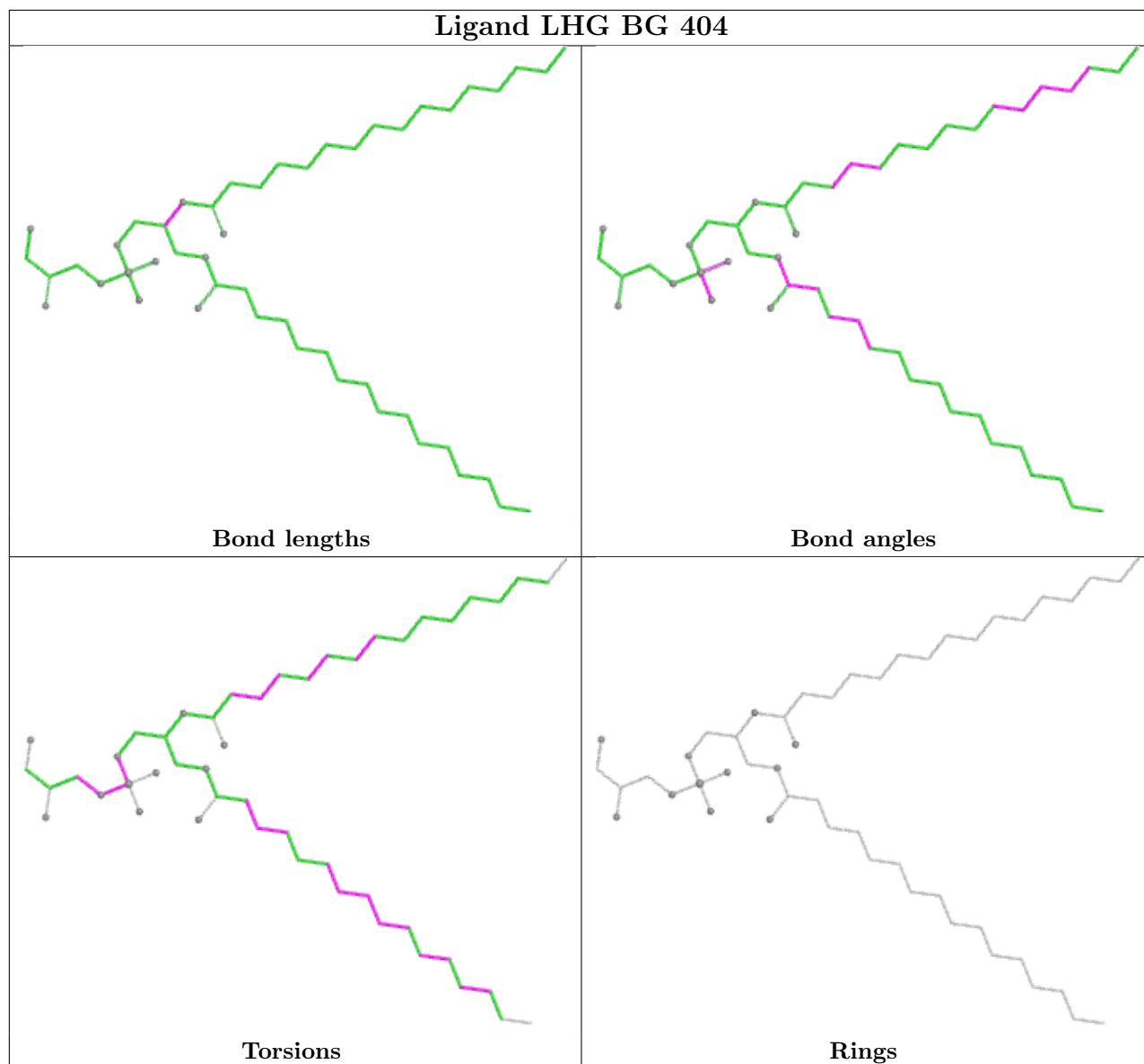


Ligand CLA AA 315

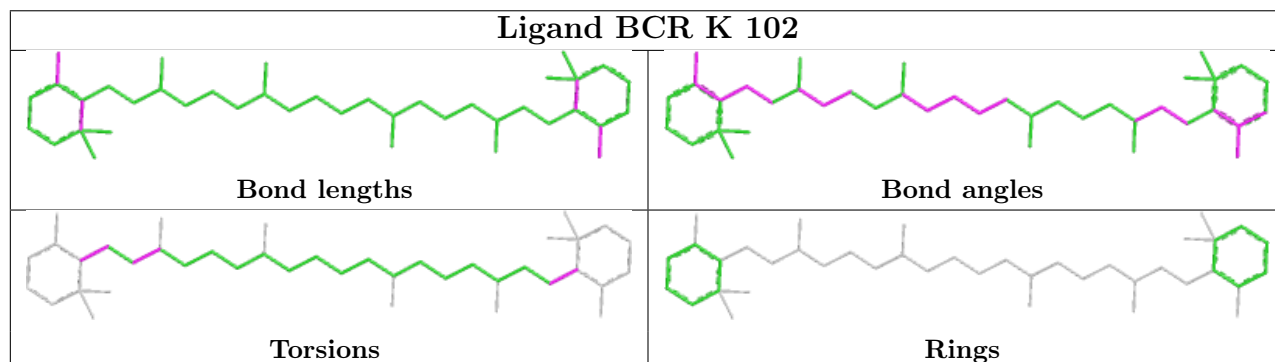


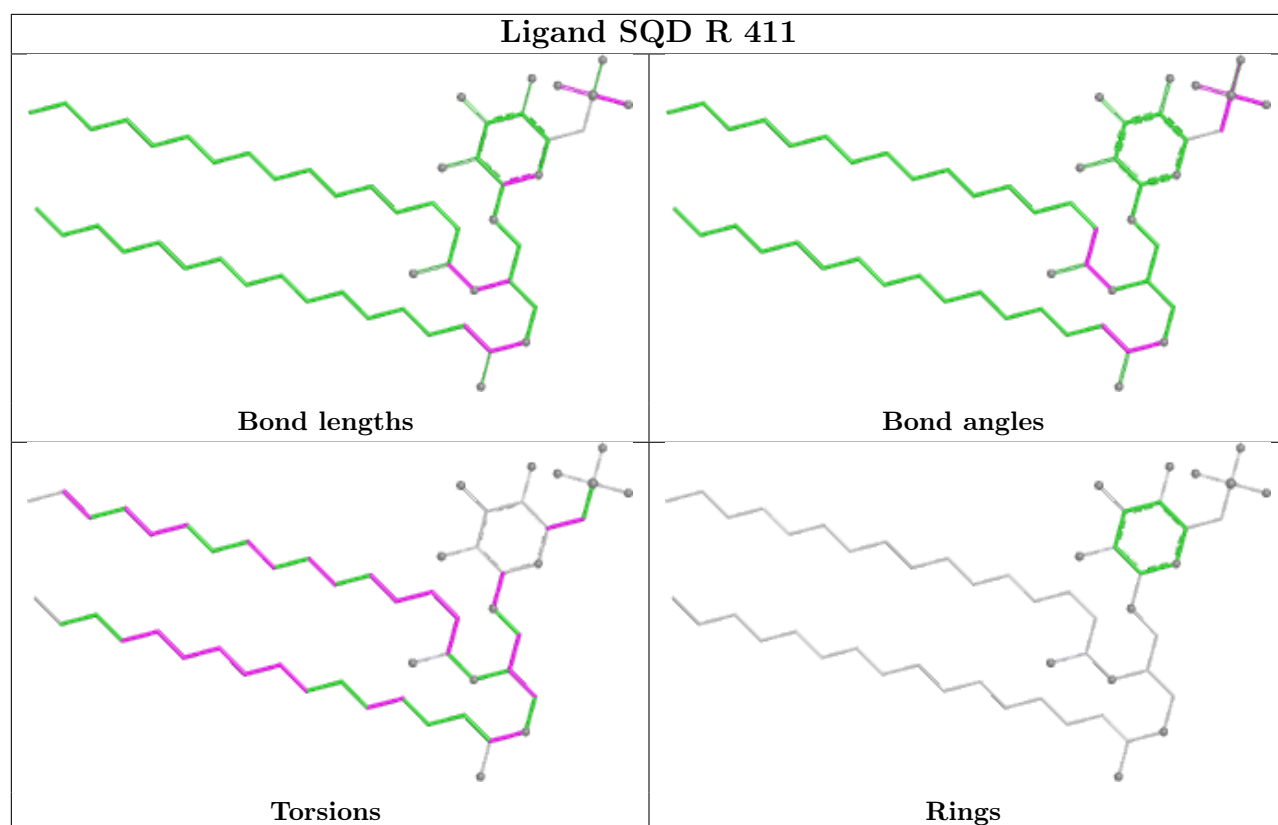


Ligand LHG BG 404

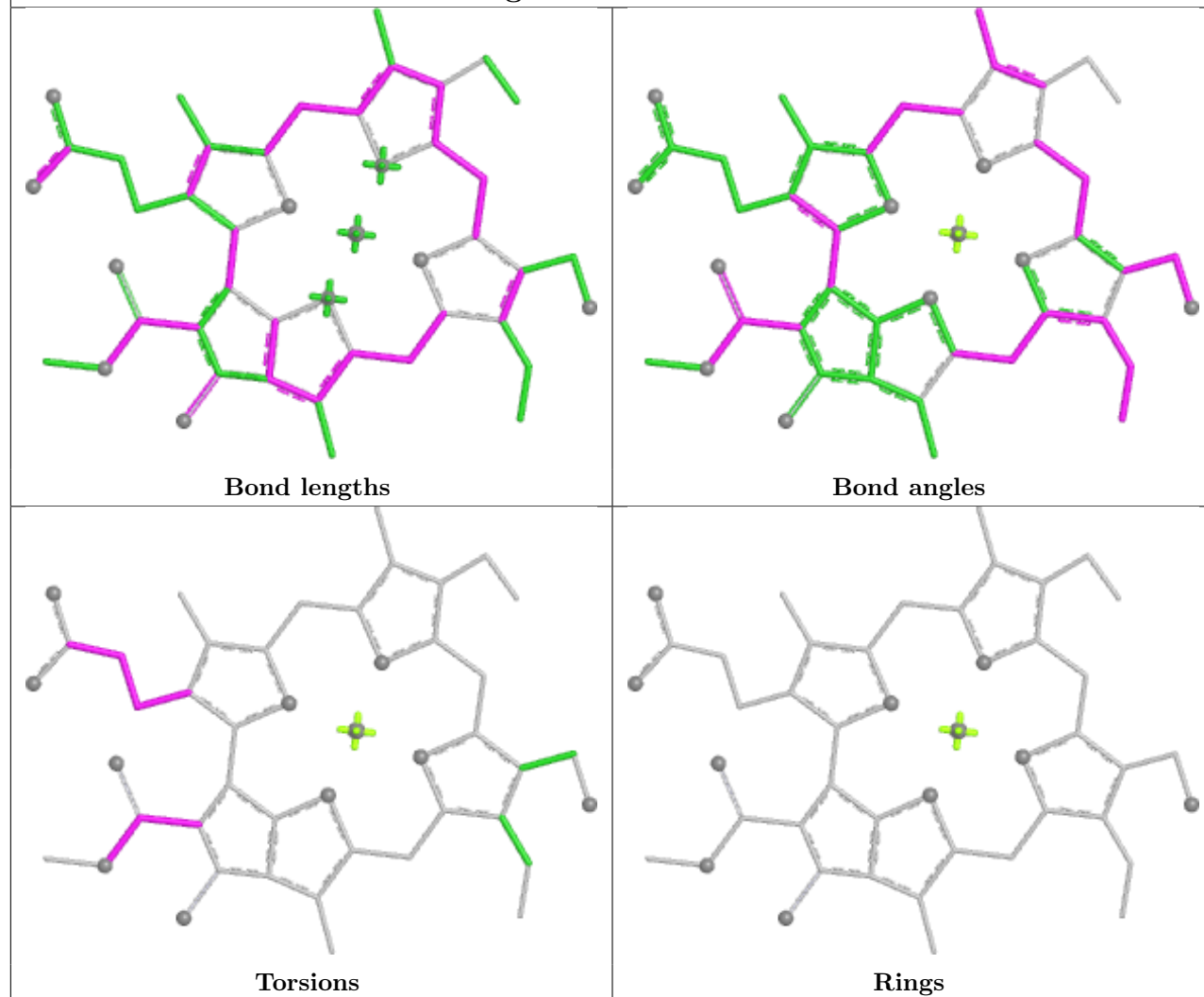


Ligand BCR K 102

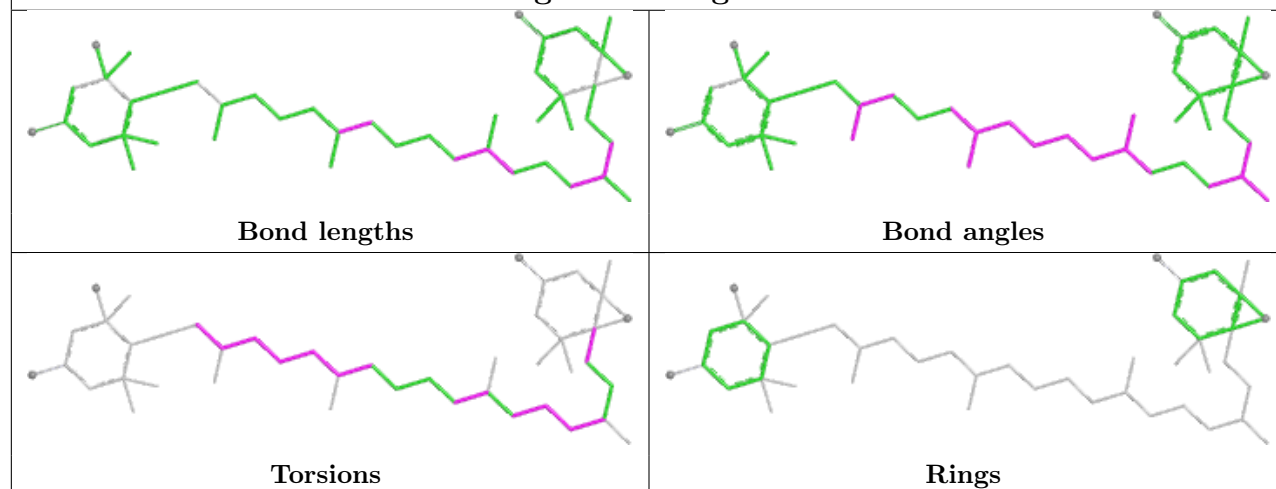


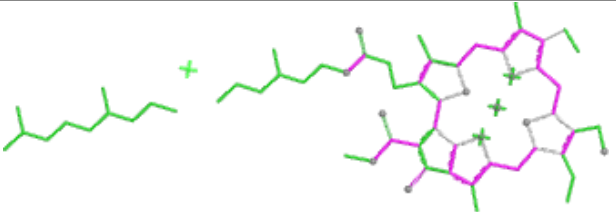
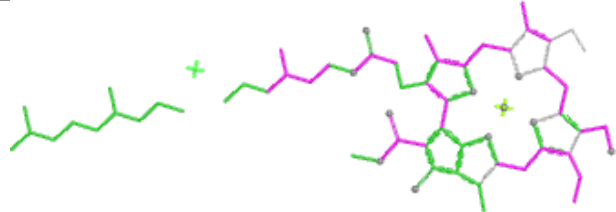
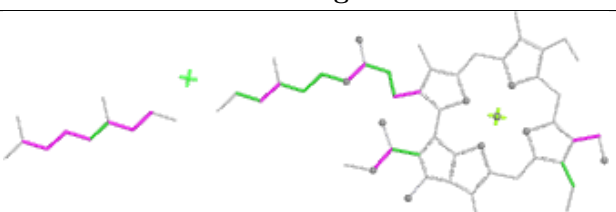
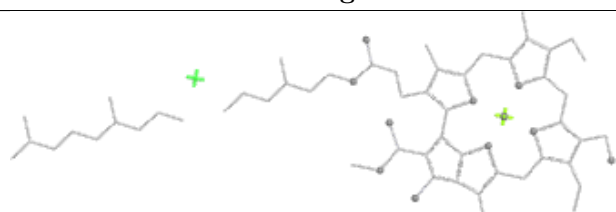


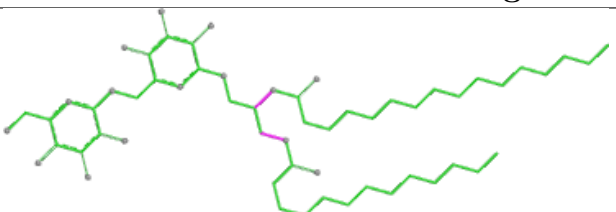
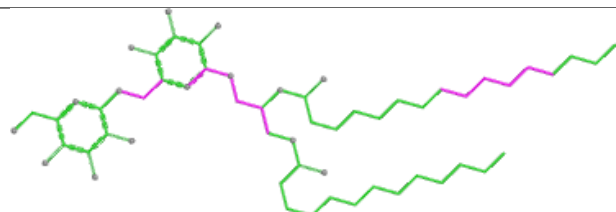
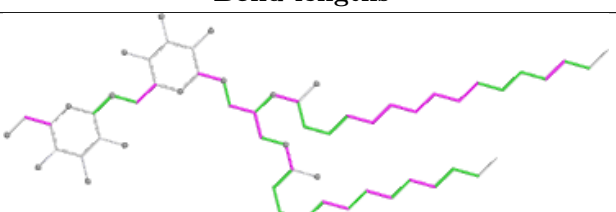
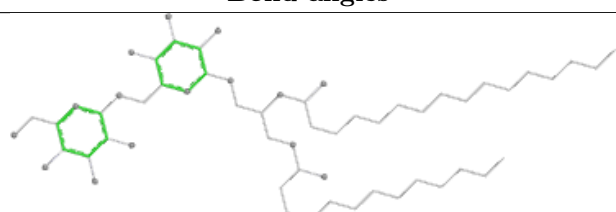
Ligand CHL 0 606

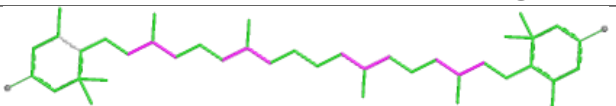
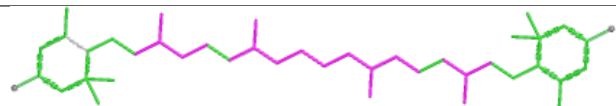

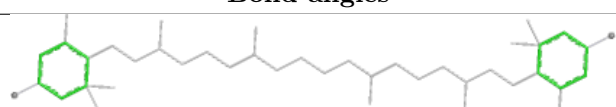


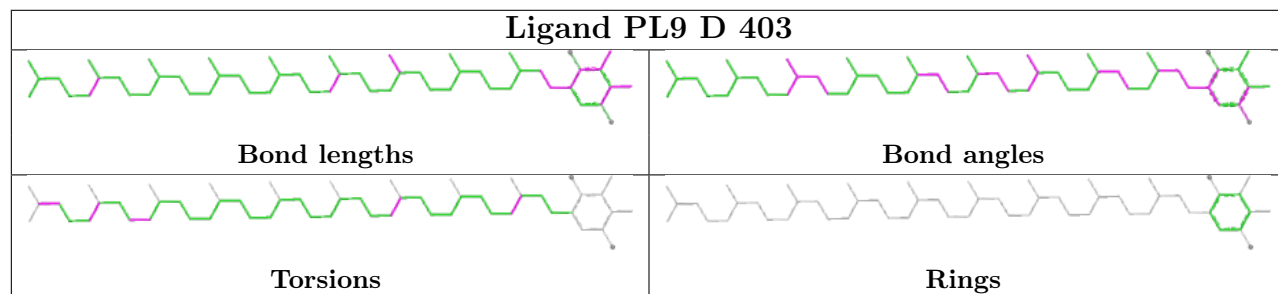
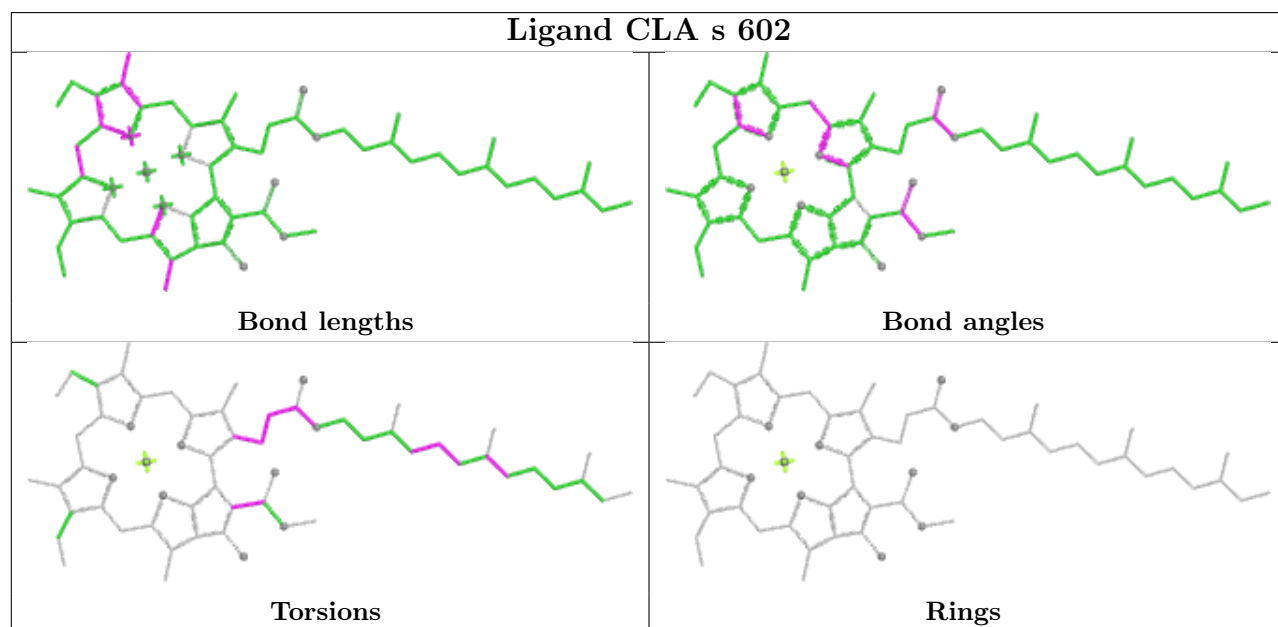
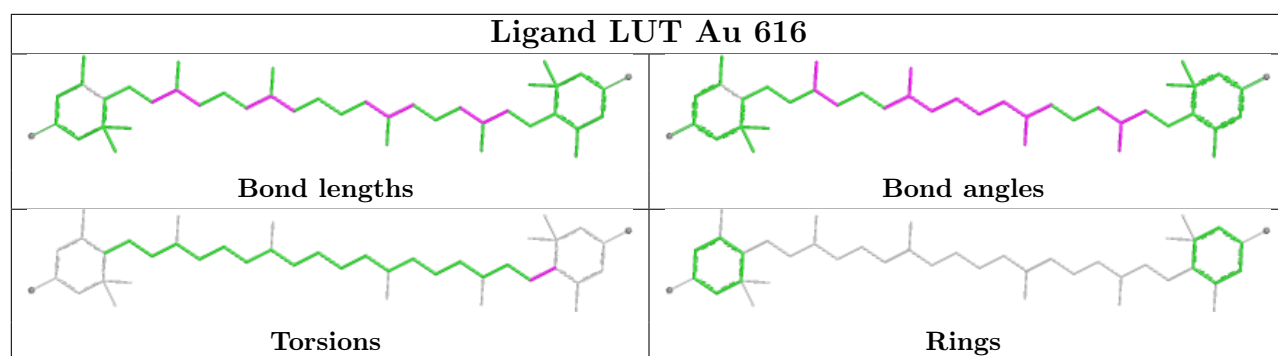
Ligand NEX g 617

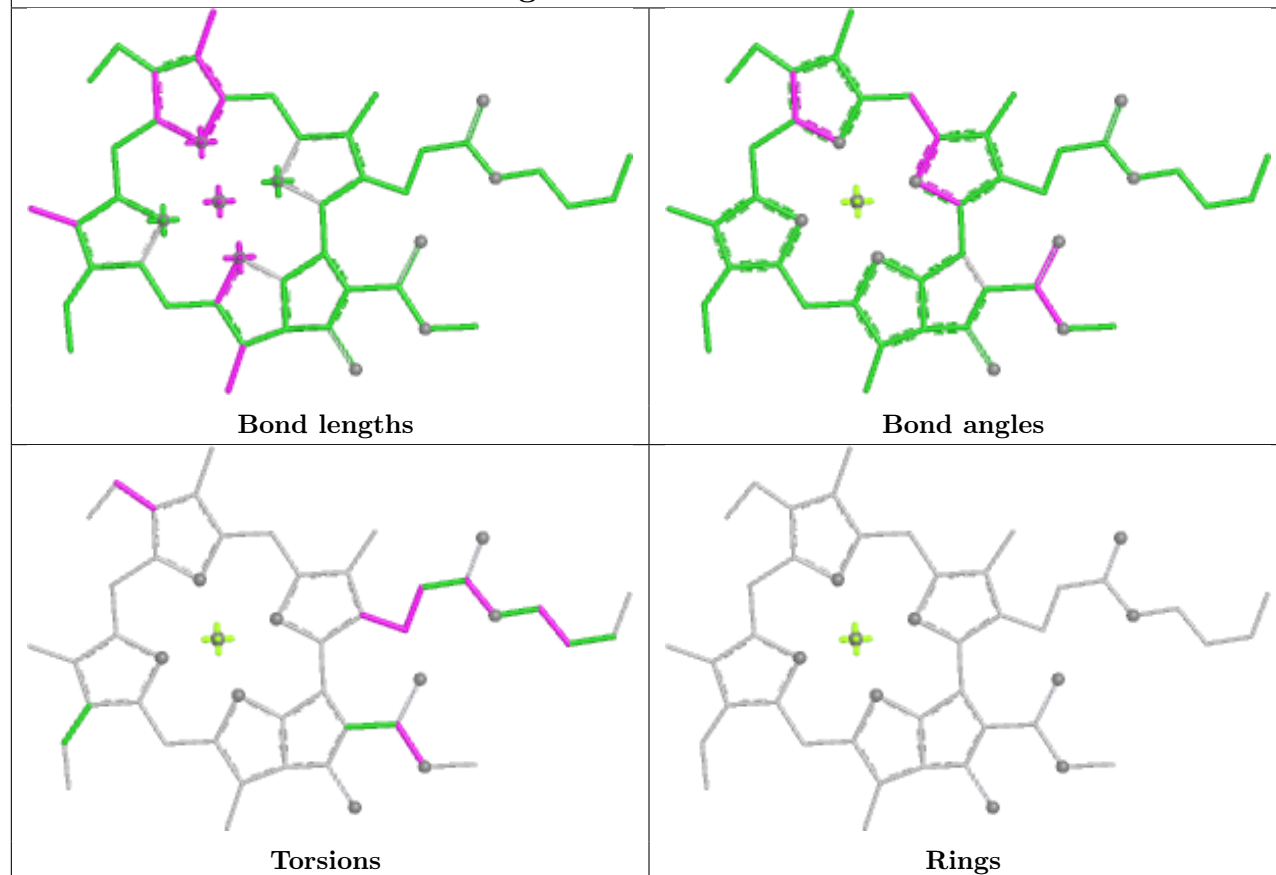
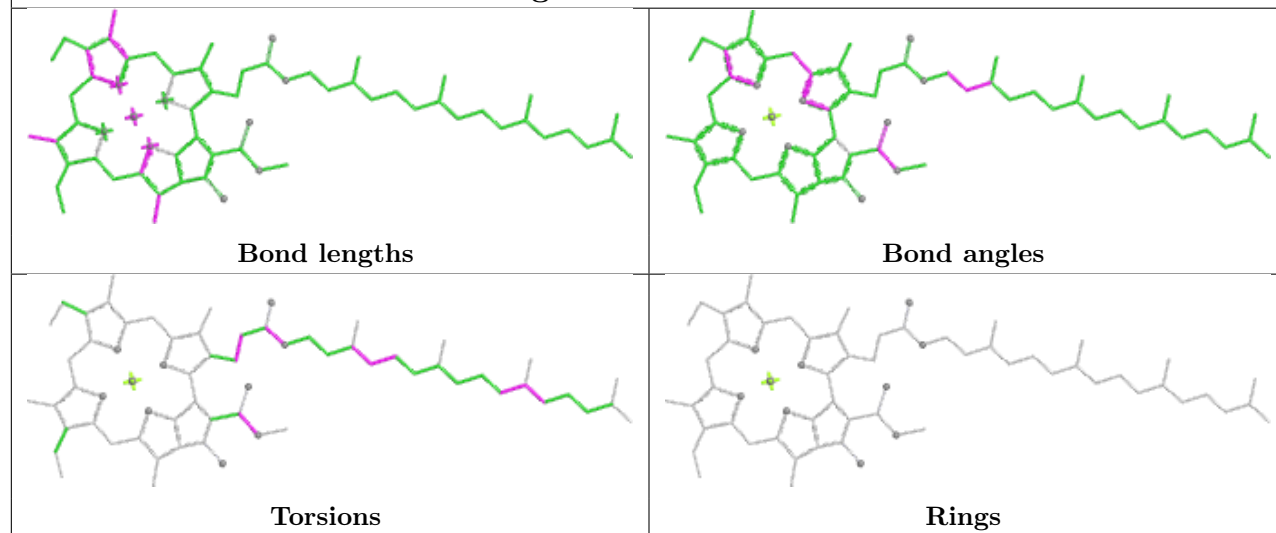


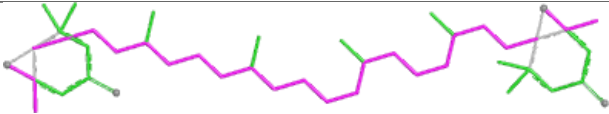
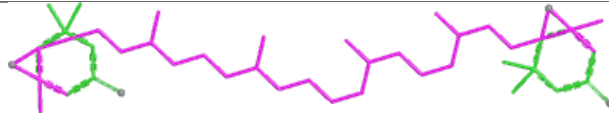
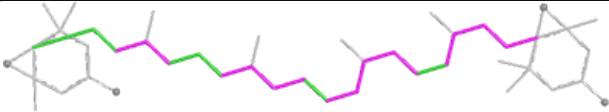
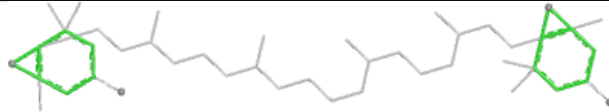
Ligand CHL Au 601	
	
Bond lengths	Bond angles
	
Torsions	Rings

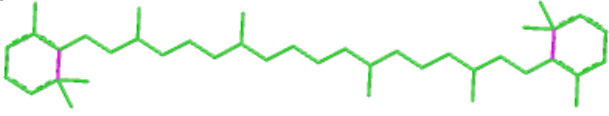
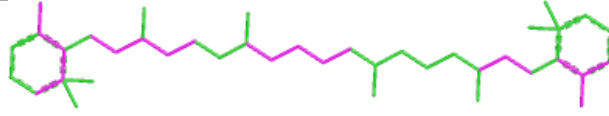
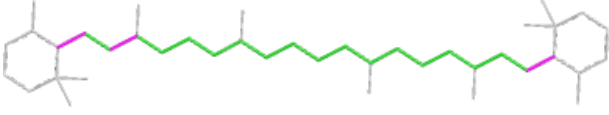
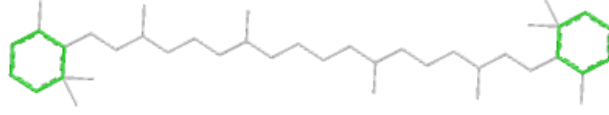
Ligand DGD A 402	
	
Bond lengths	Bond angles
	
Torsions	Rings


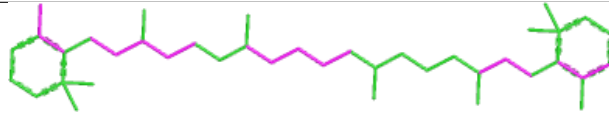
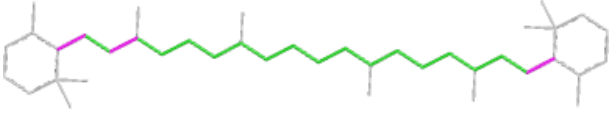
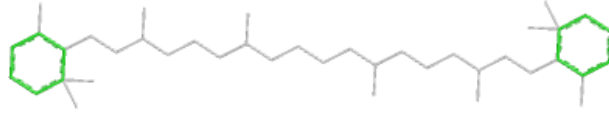
Ligand LUT 5 616	
	
Bond lengths	Bond angles
	
Torsions	Rings

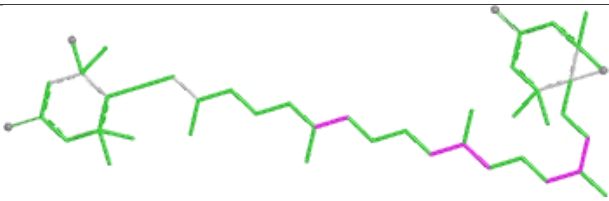
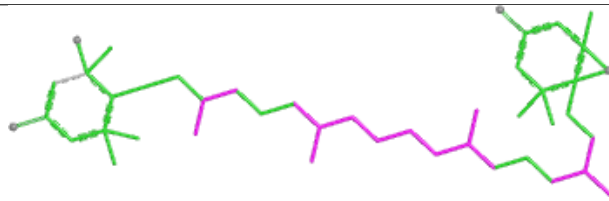
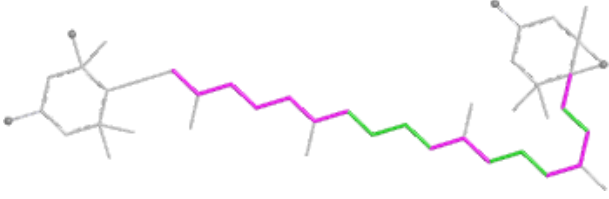



Ligand CLA BU 610**Ligand CLA Y 314**

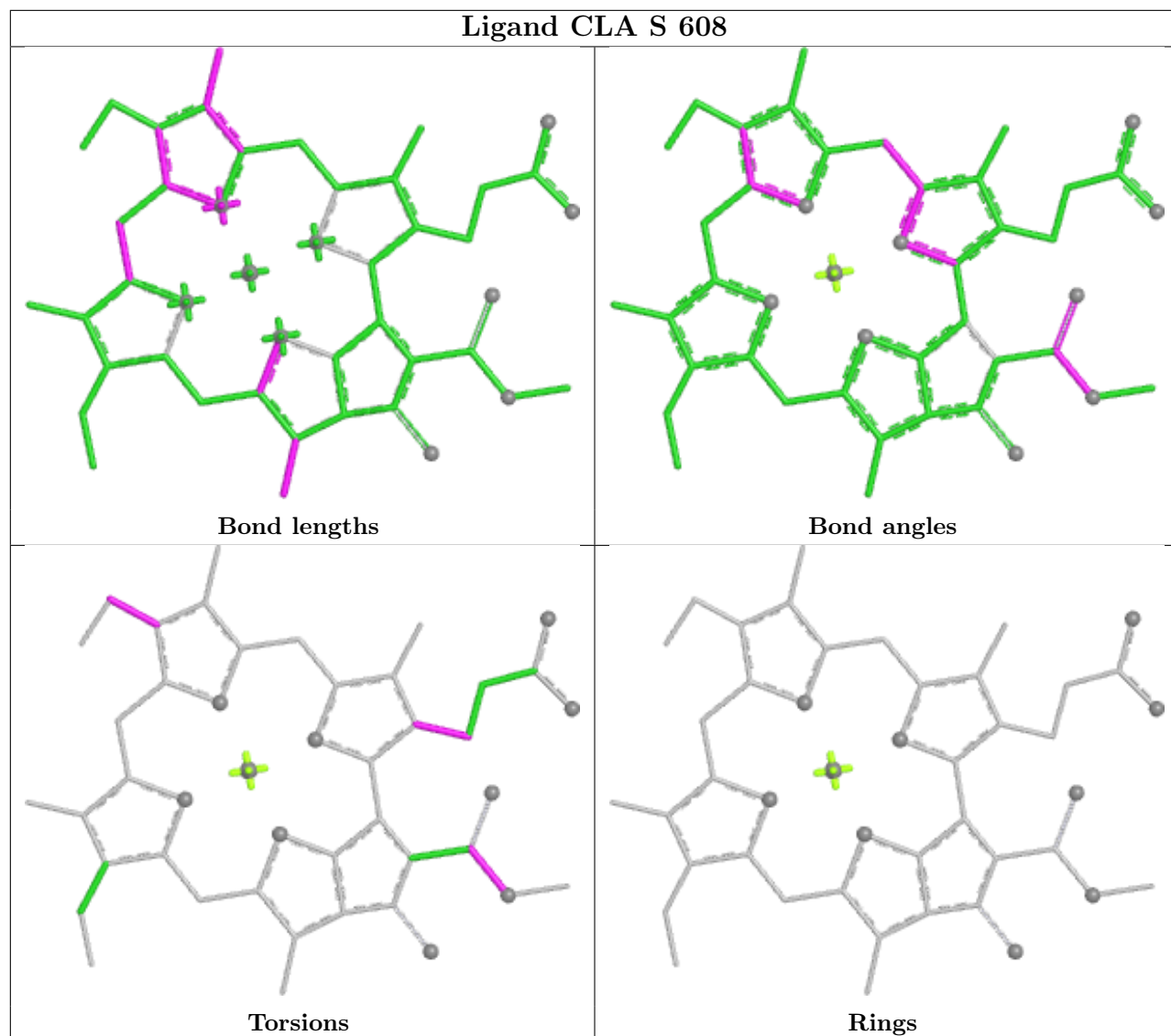
Ligand XAT N 619	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR H 101	
	
Bond lengths	Bond angles
	
Torsions	Rings

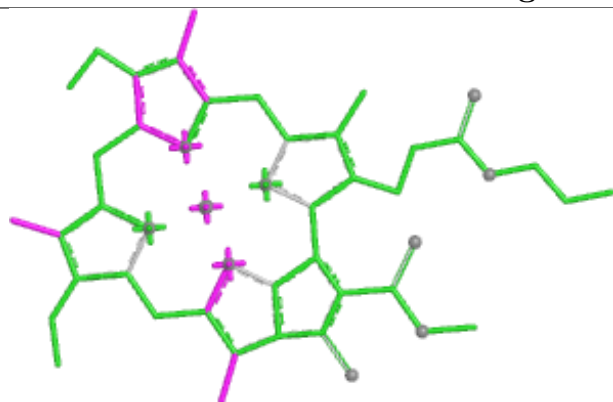
Ligand BCR A 411	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand NEX Au 617	
	
Bond lengths	Bond angles
	
Torsions	Rings

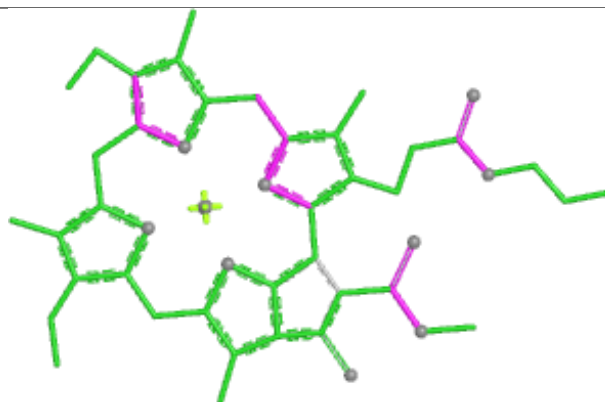
Ligand CLA S 608



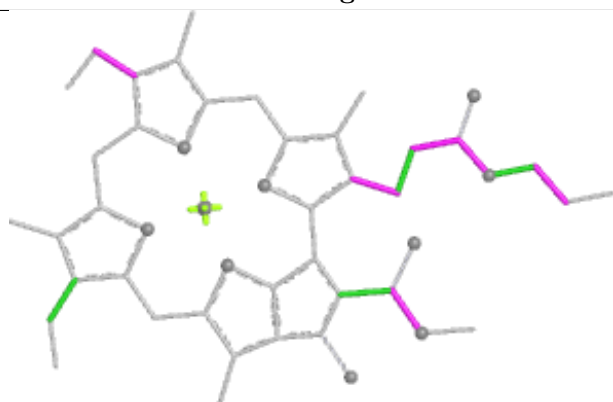
Ligand CLA 0 614



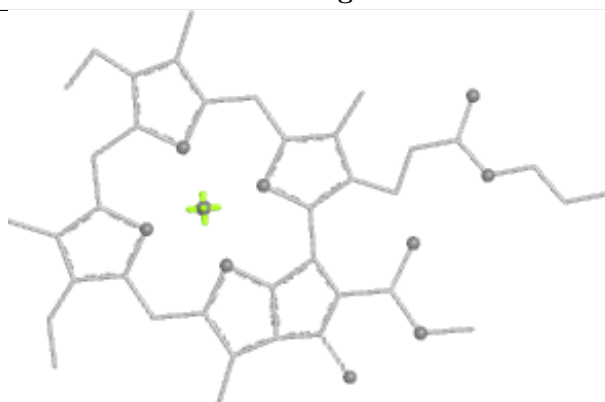
Bond lengths



Bond angles

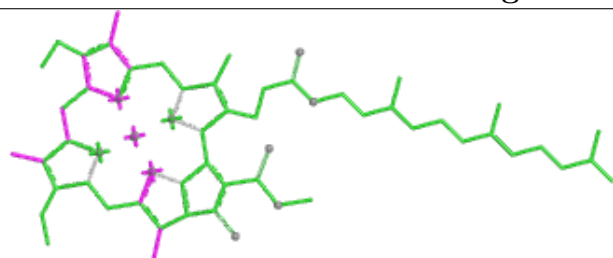


Torsions

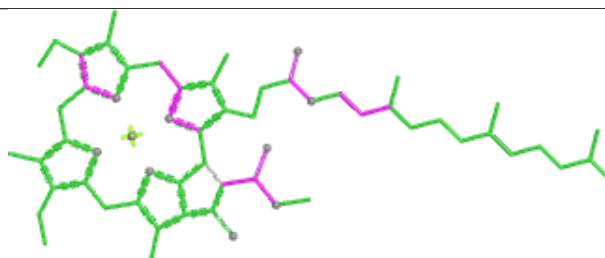


Rings

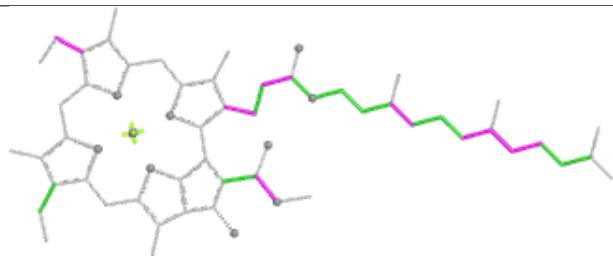
Ligand CLA BB 312



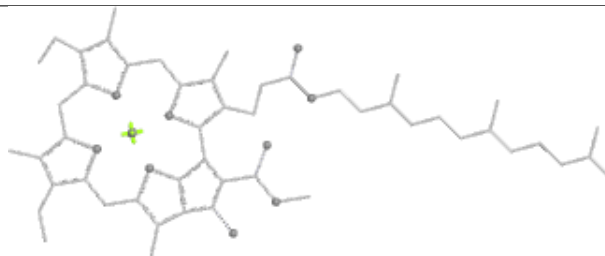
Bond lengths



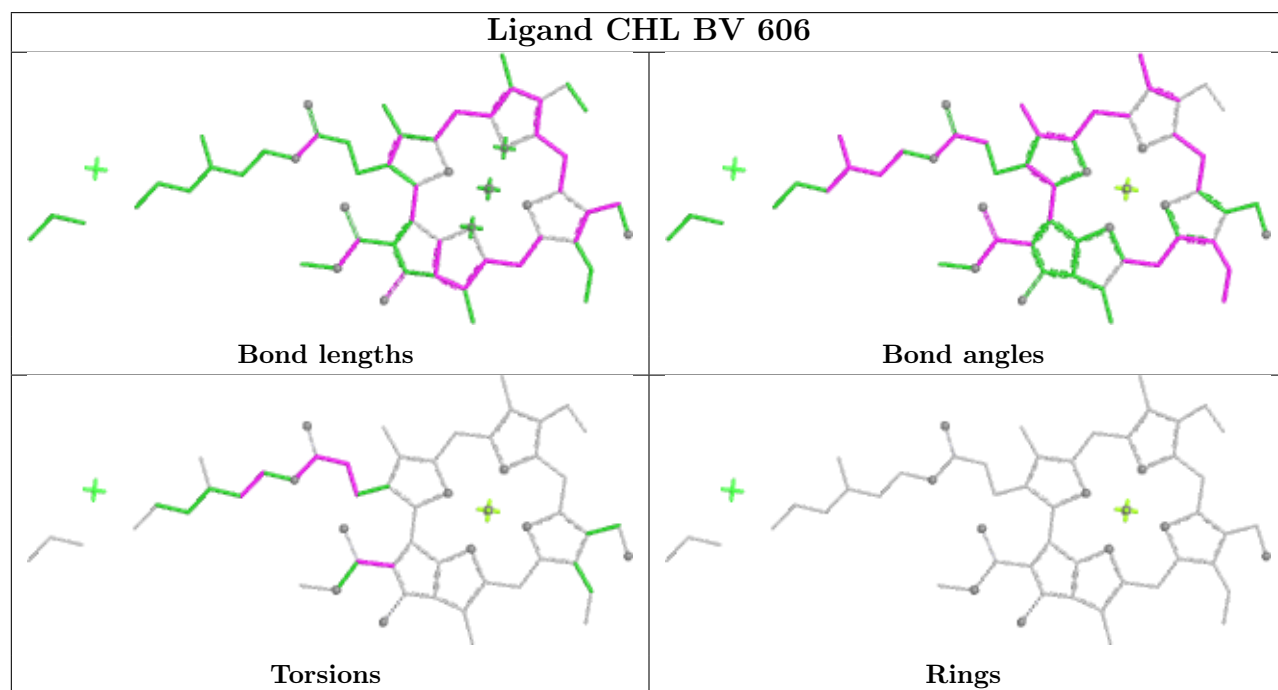
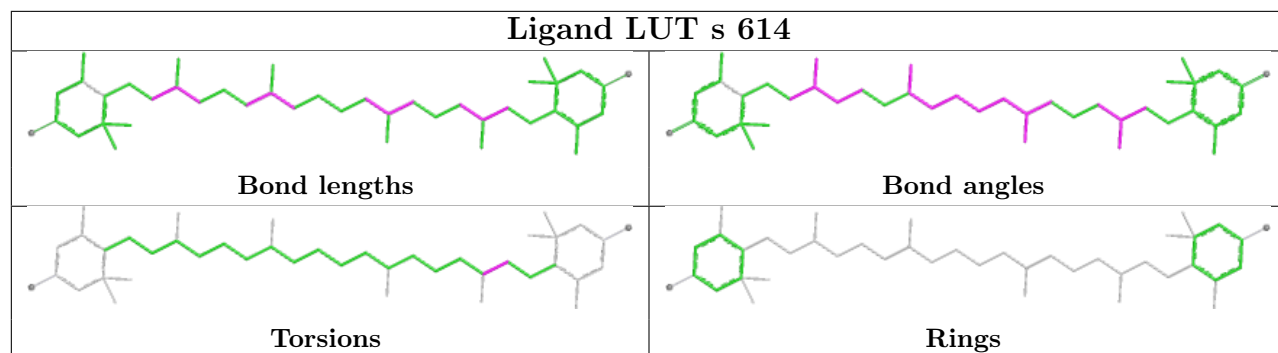
Bond angles



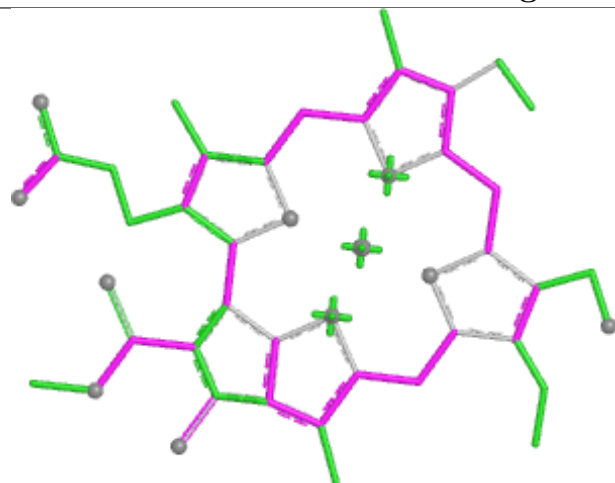
Torsions



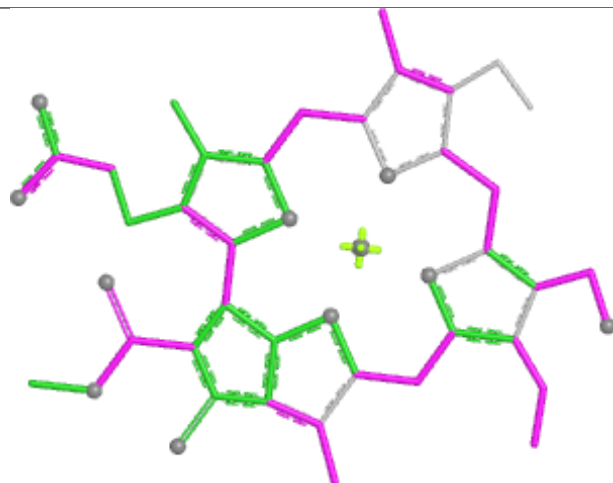
Rings



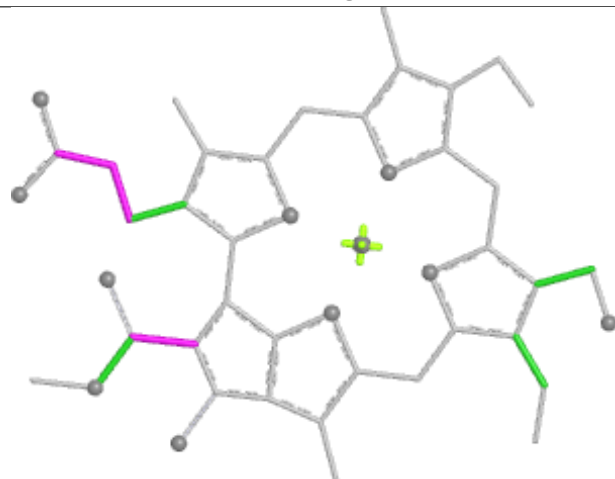
Ligand CHL 5 606



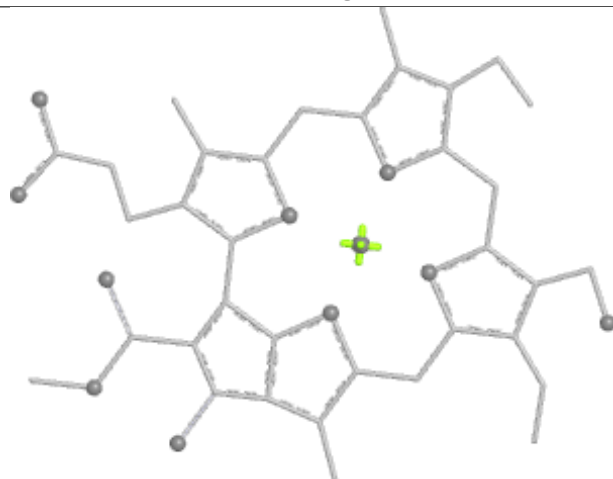
Bond lengths



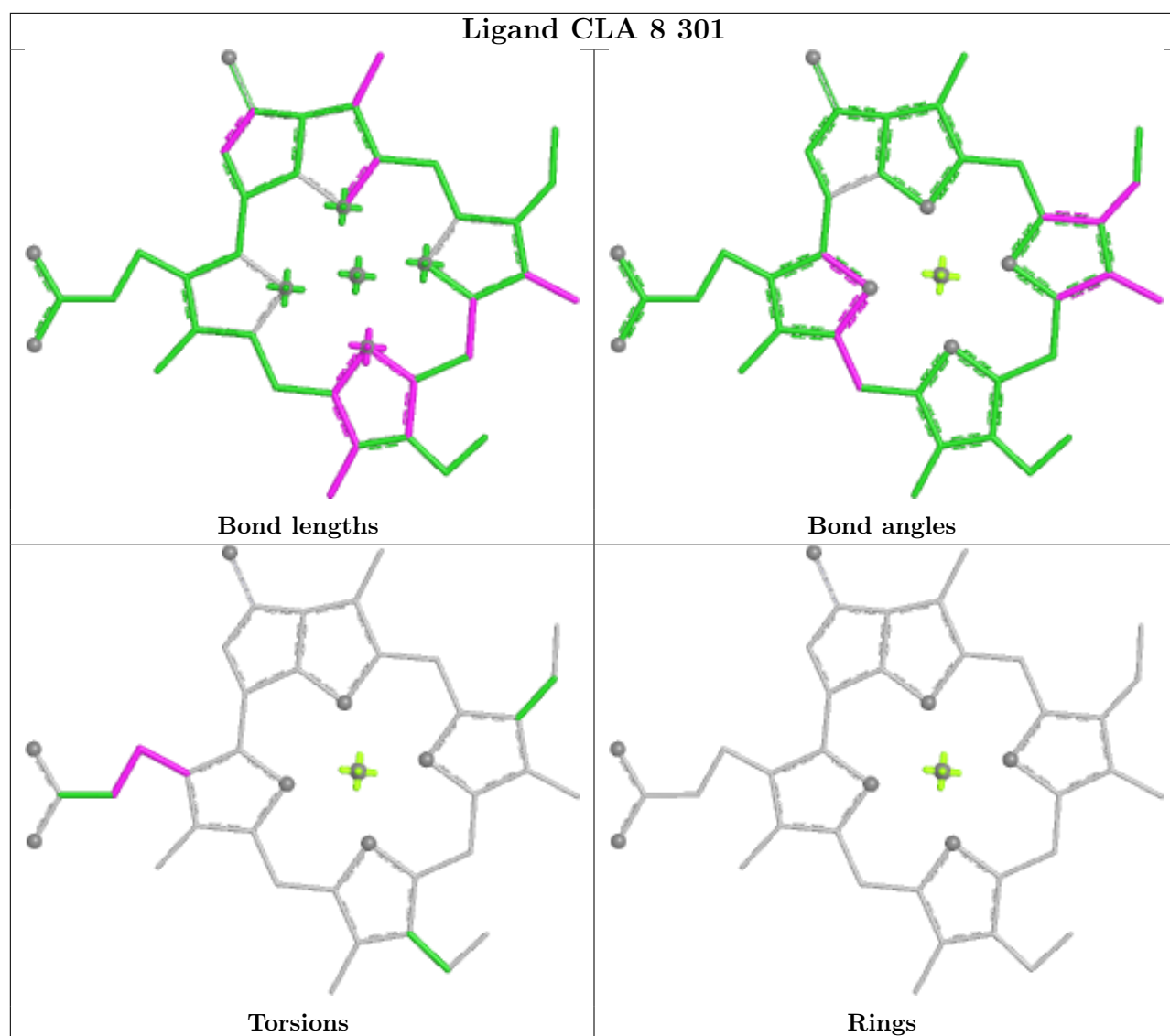
Bond angles

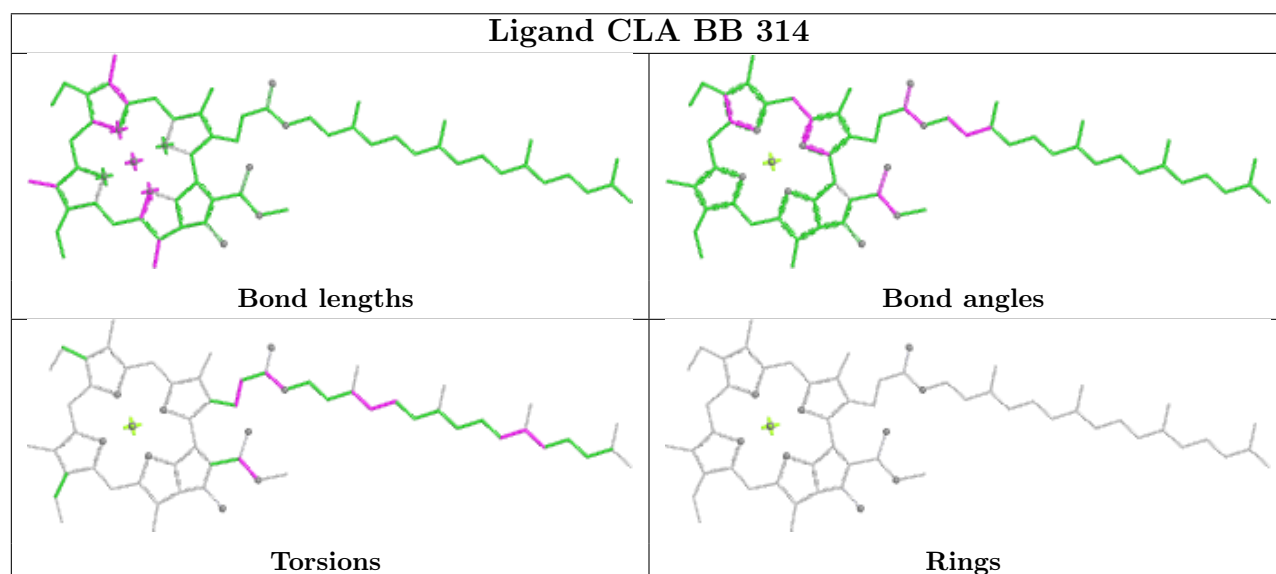
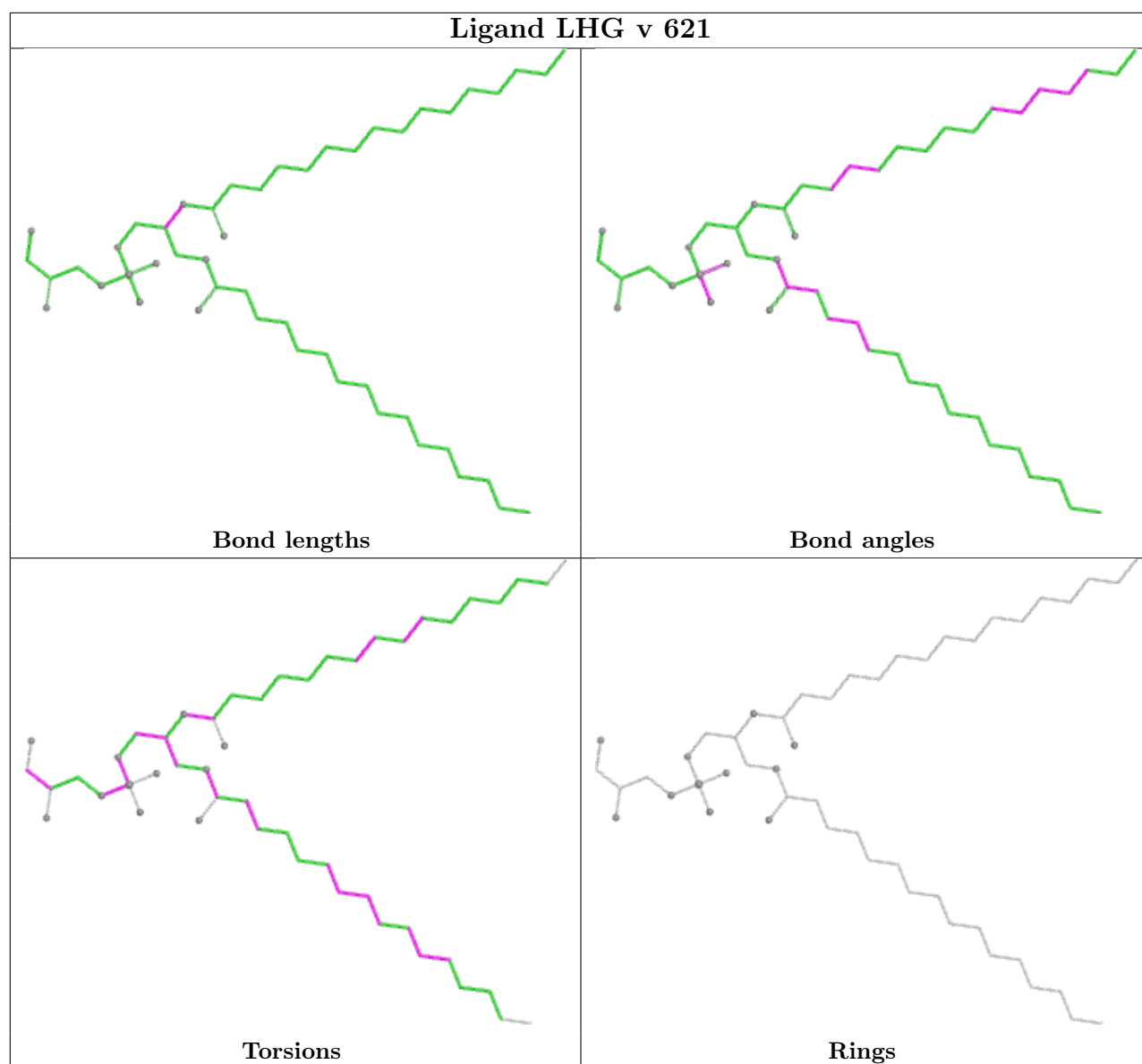


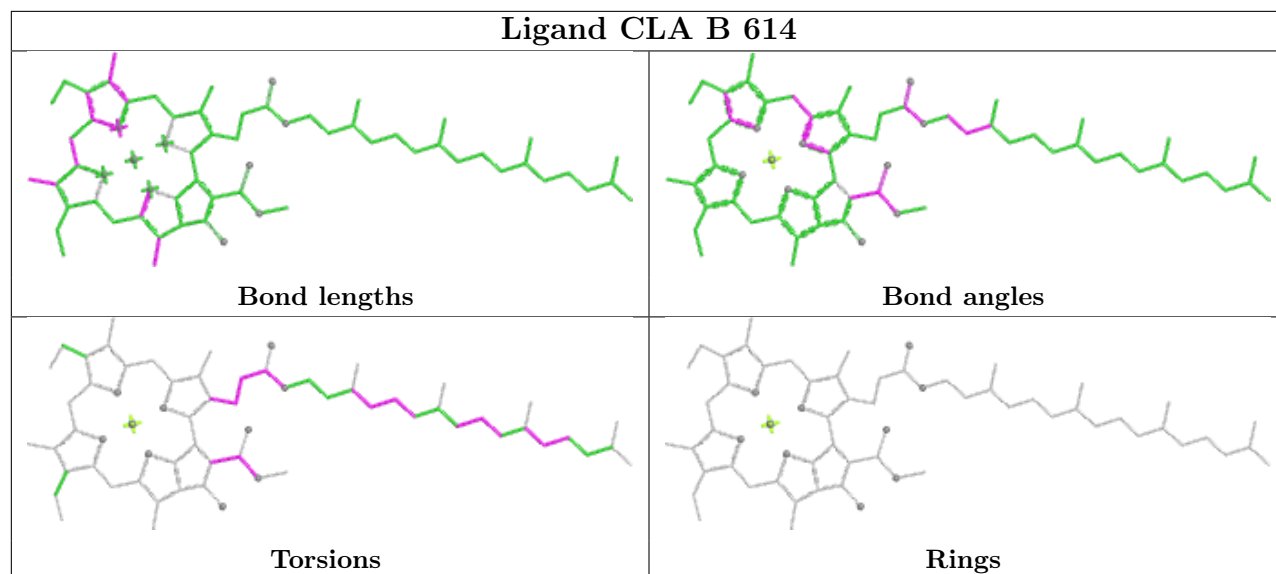
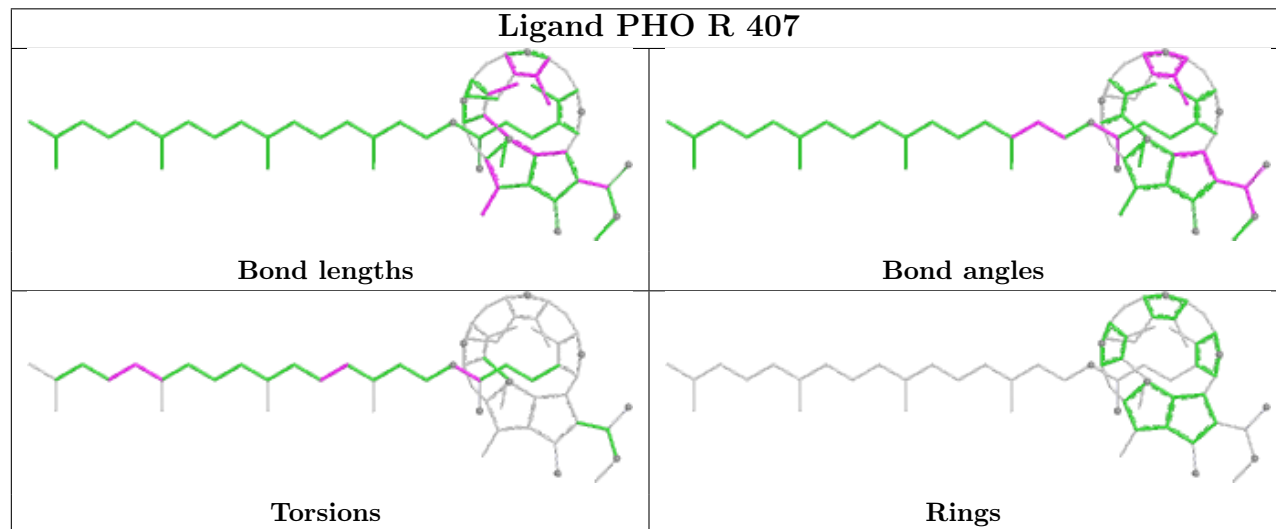
Torsions

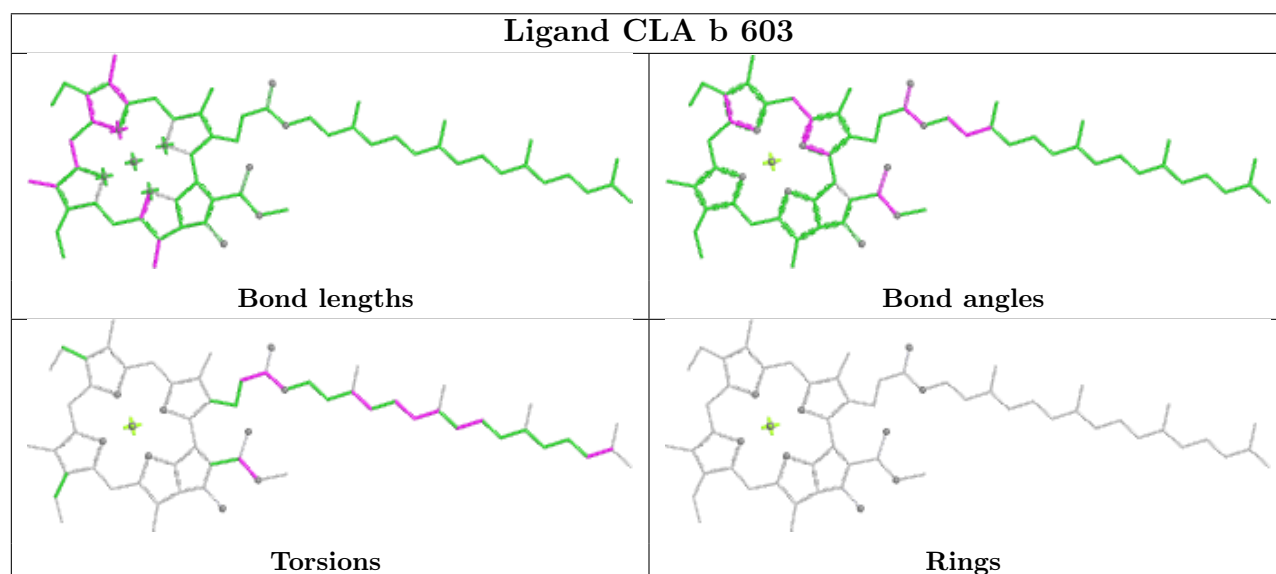
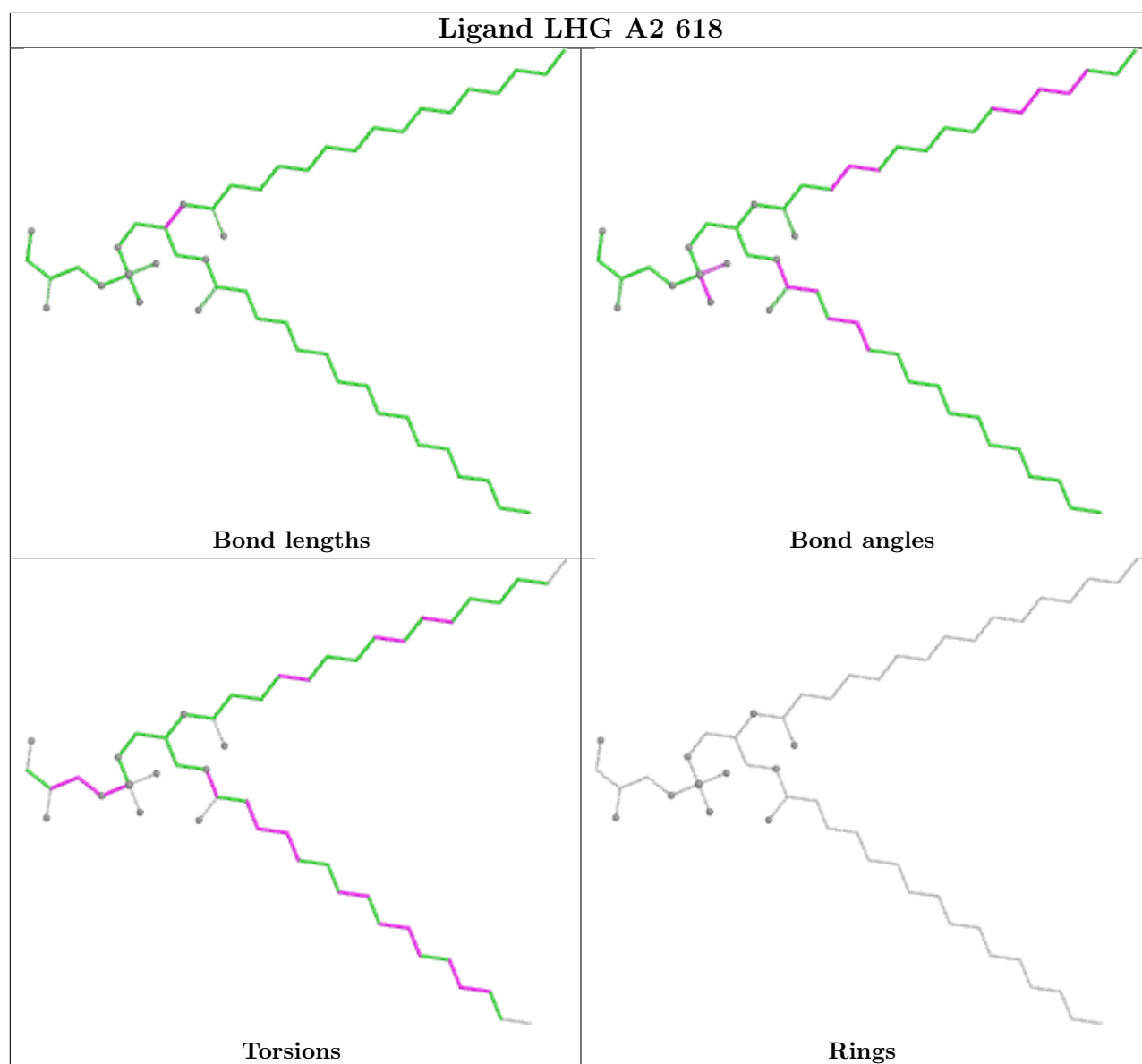


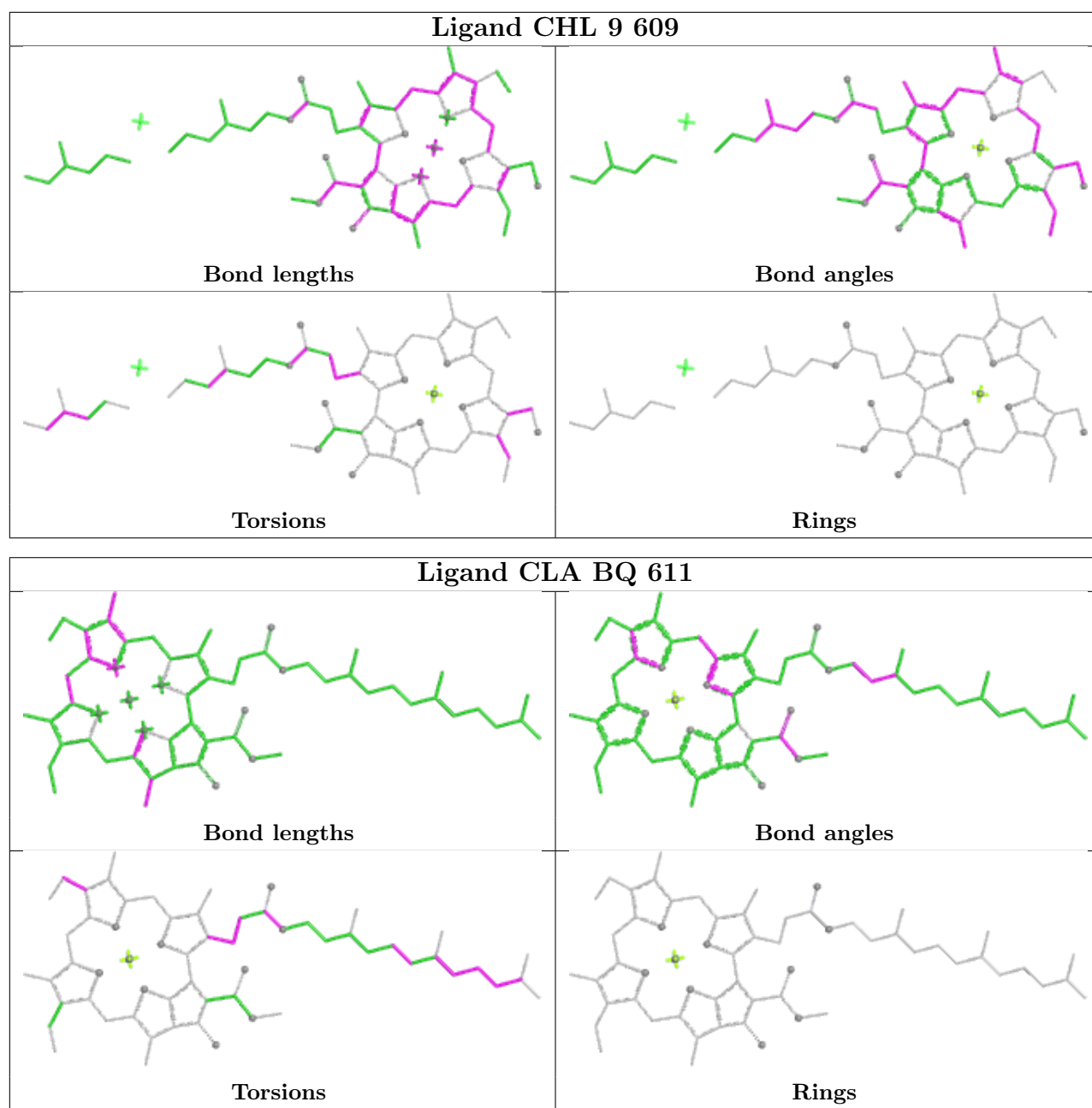
Rings

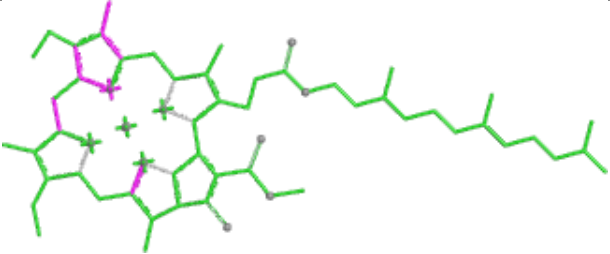
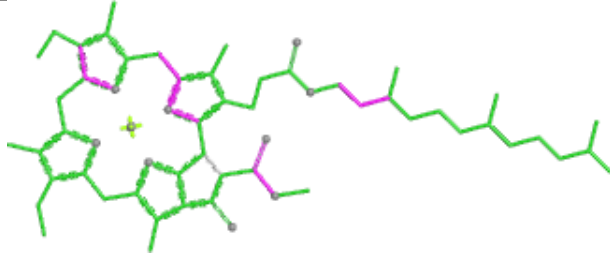
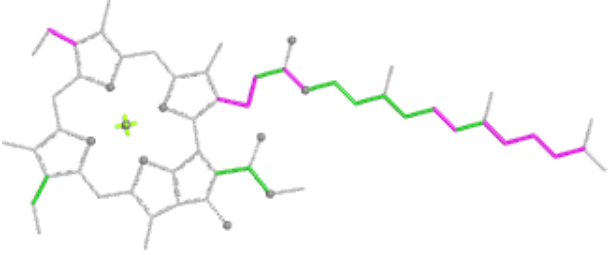
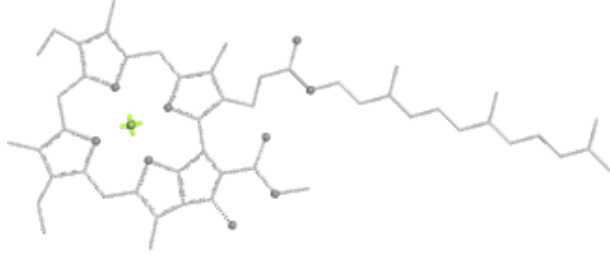
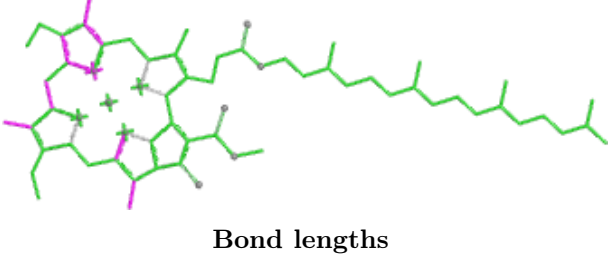
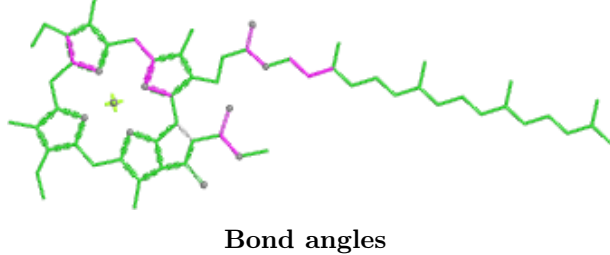
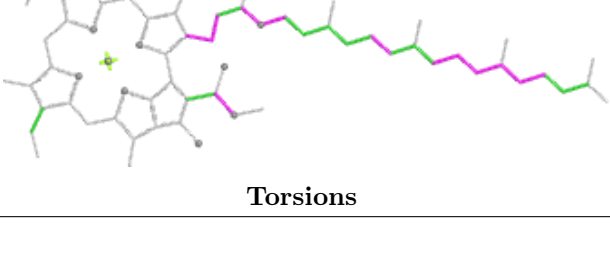
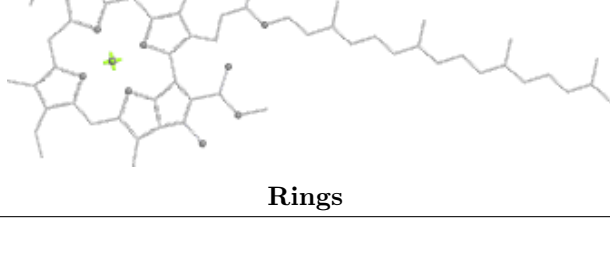




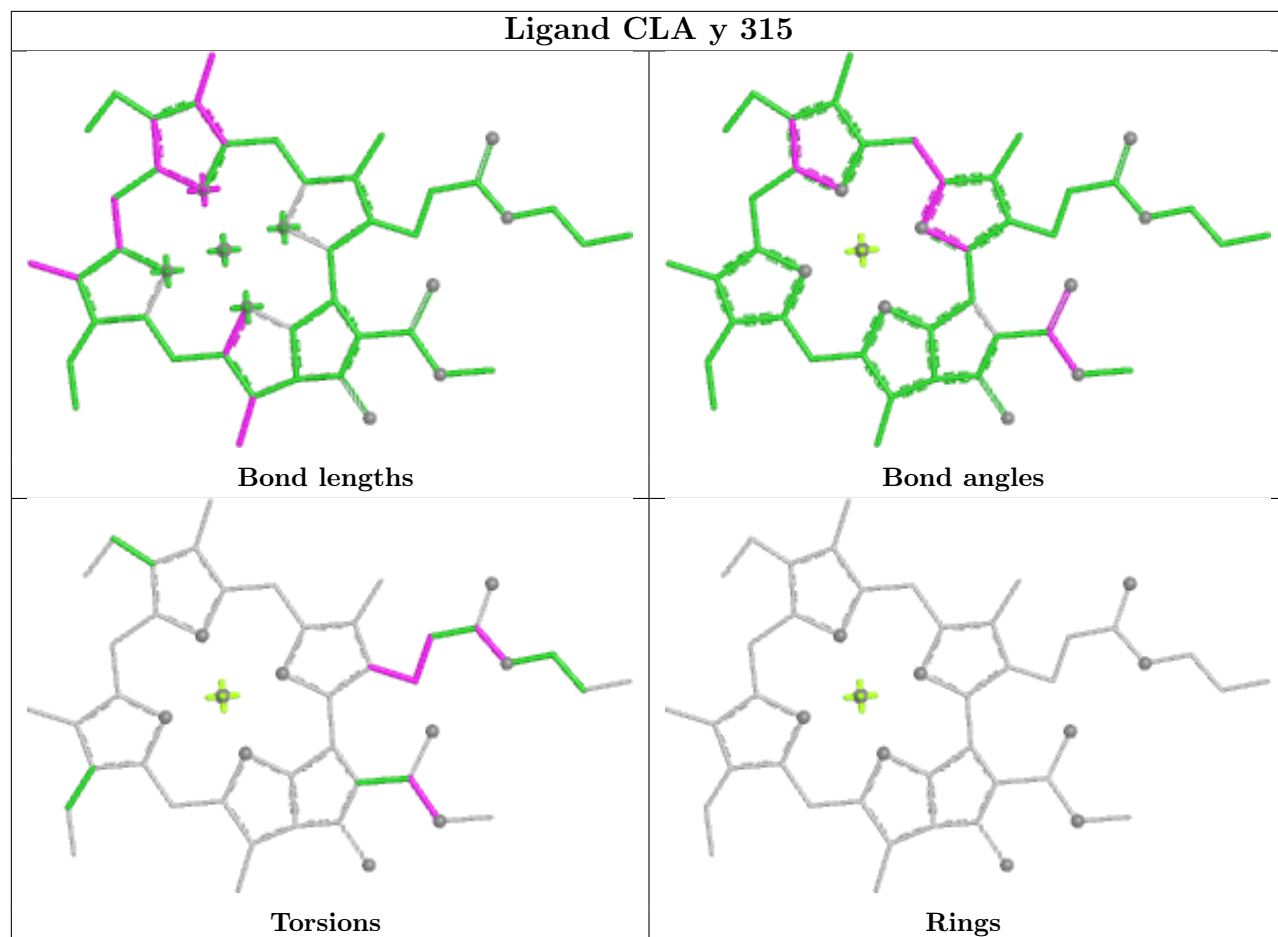
Ligand CLA B 614**Ligand PHO R 407**

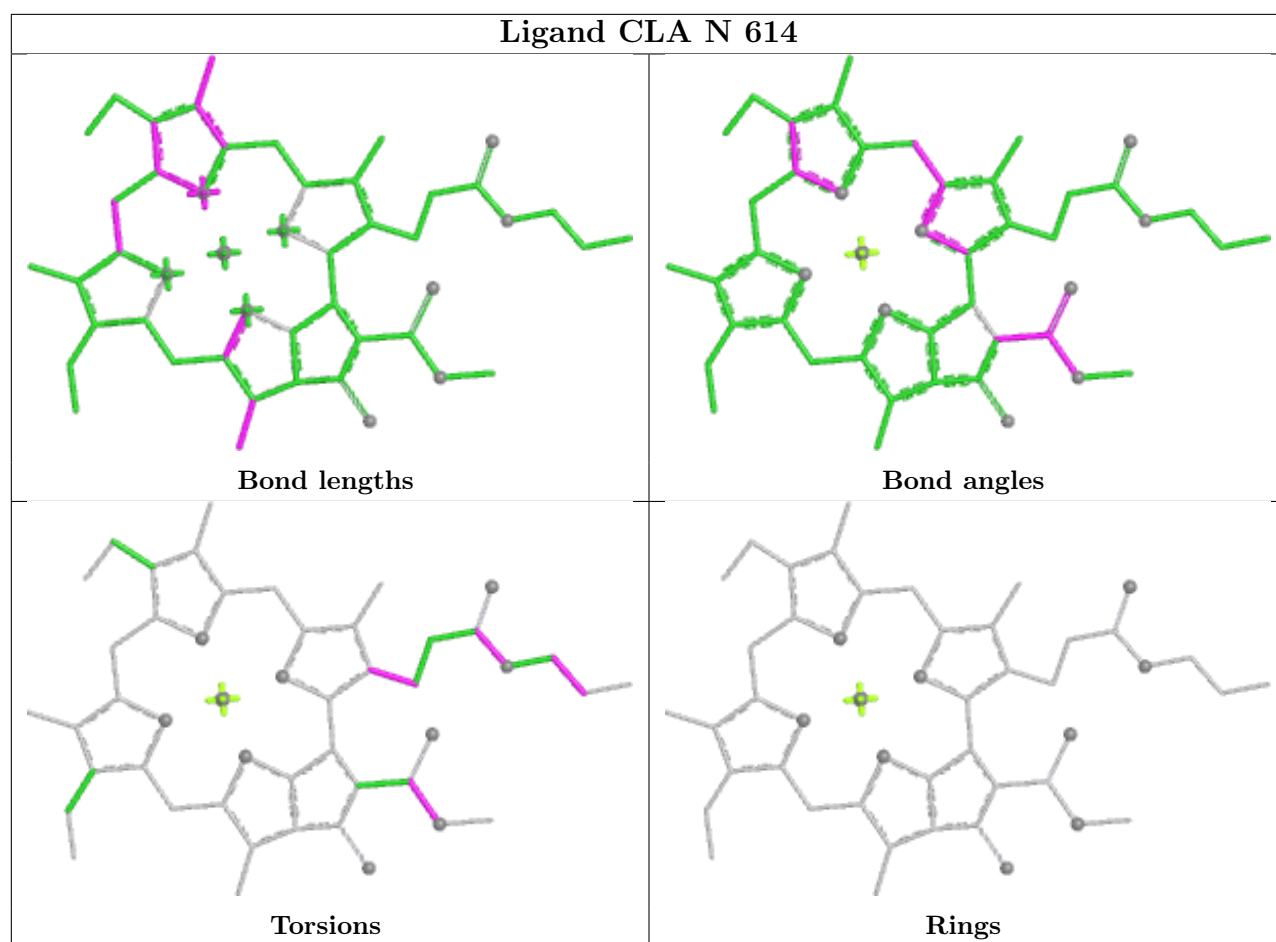




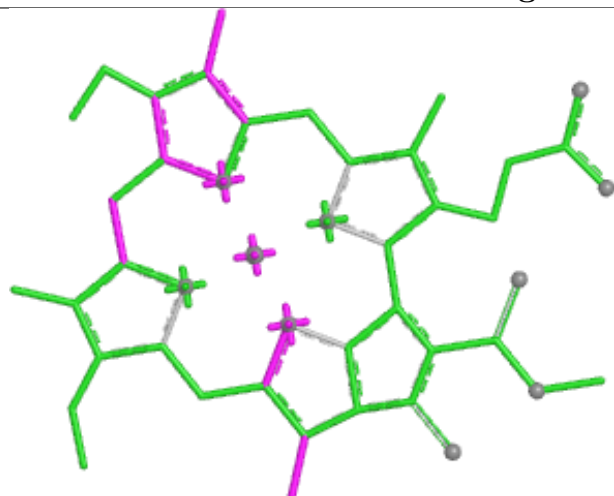
Ligand CLA n 611	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>
Ligand CLA v 606	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>

Ligand CLA y 315

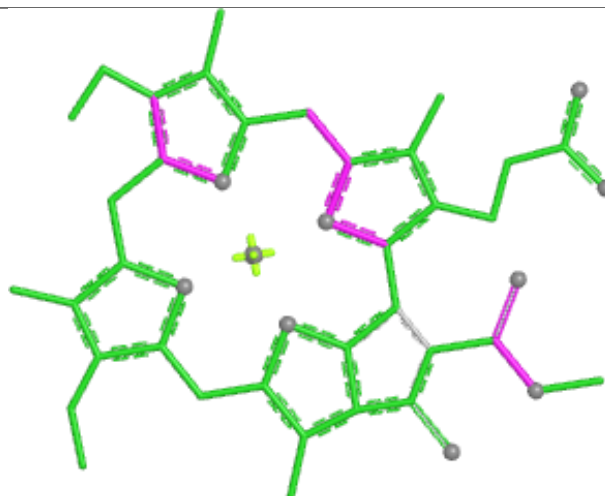




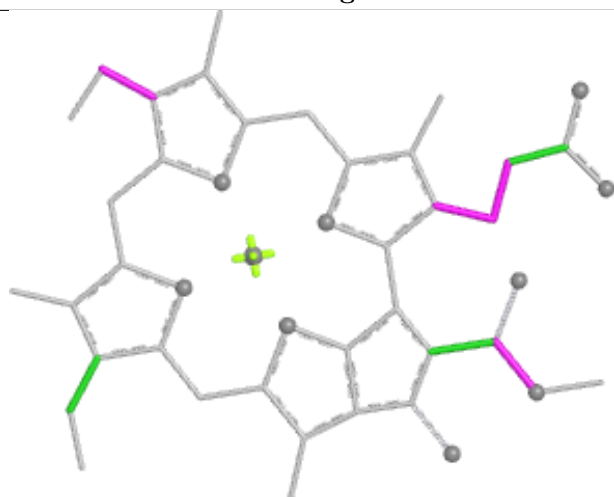
Ligand CLA 8 309



Bond lengths



Bond angles

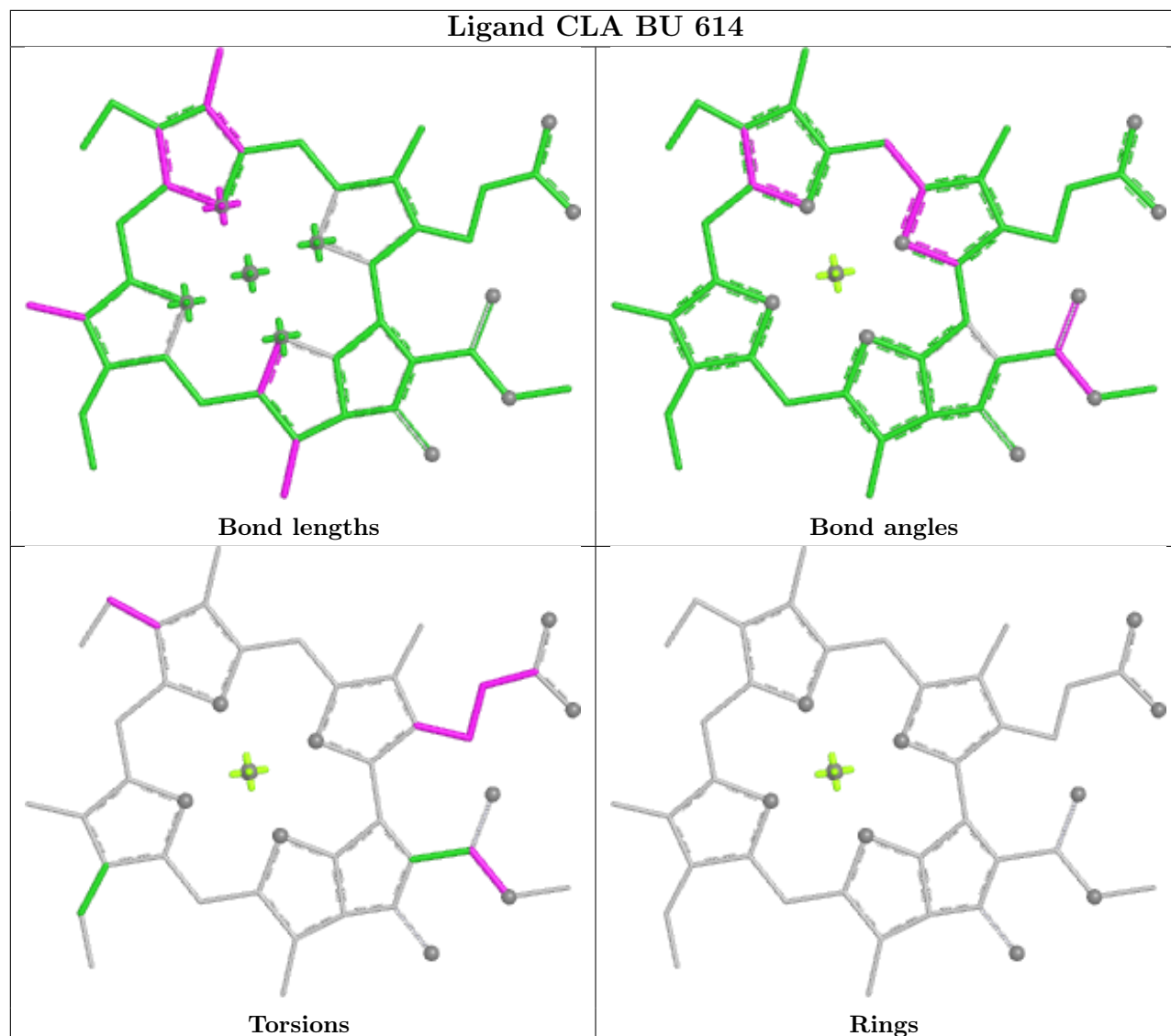


Torsions

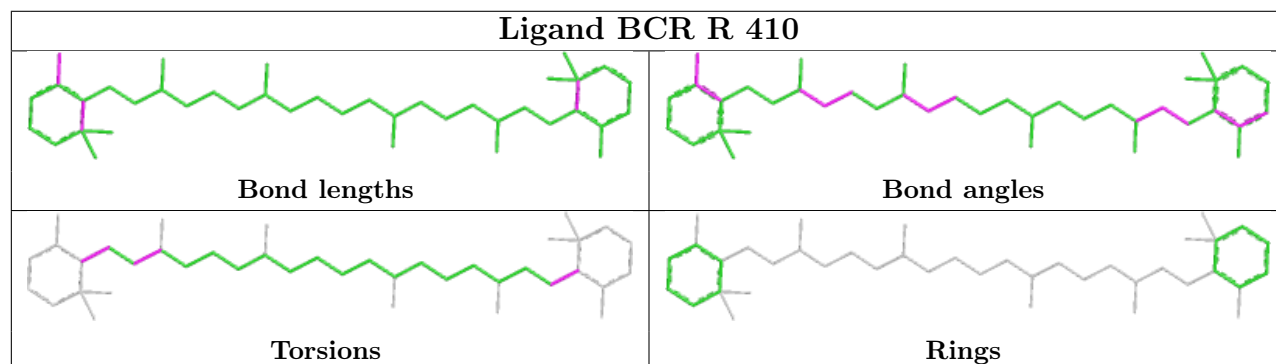


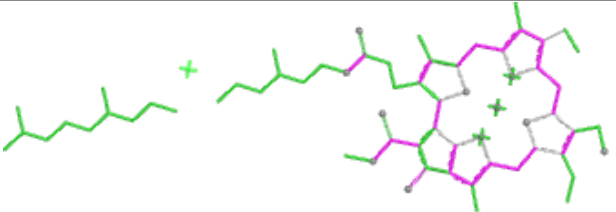
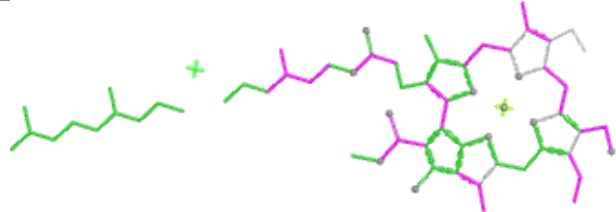
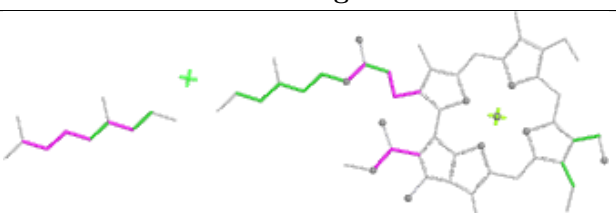
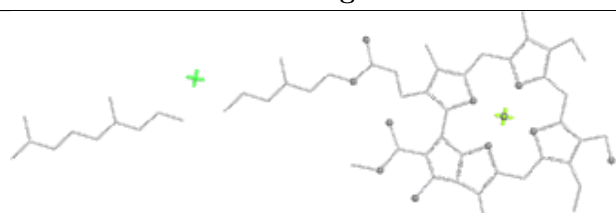
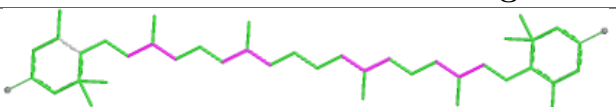
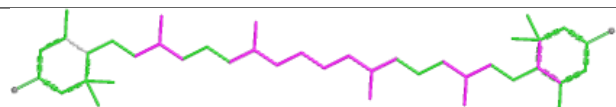

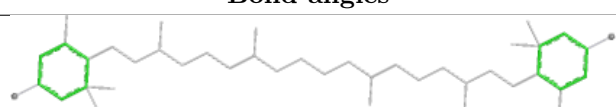
Rings

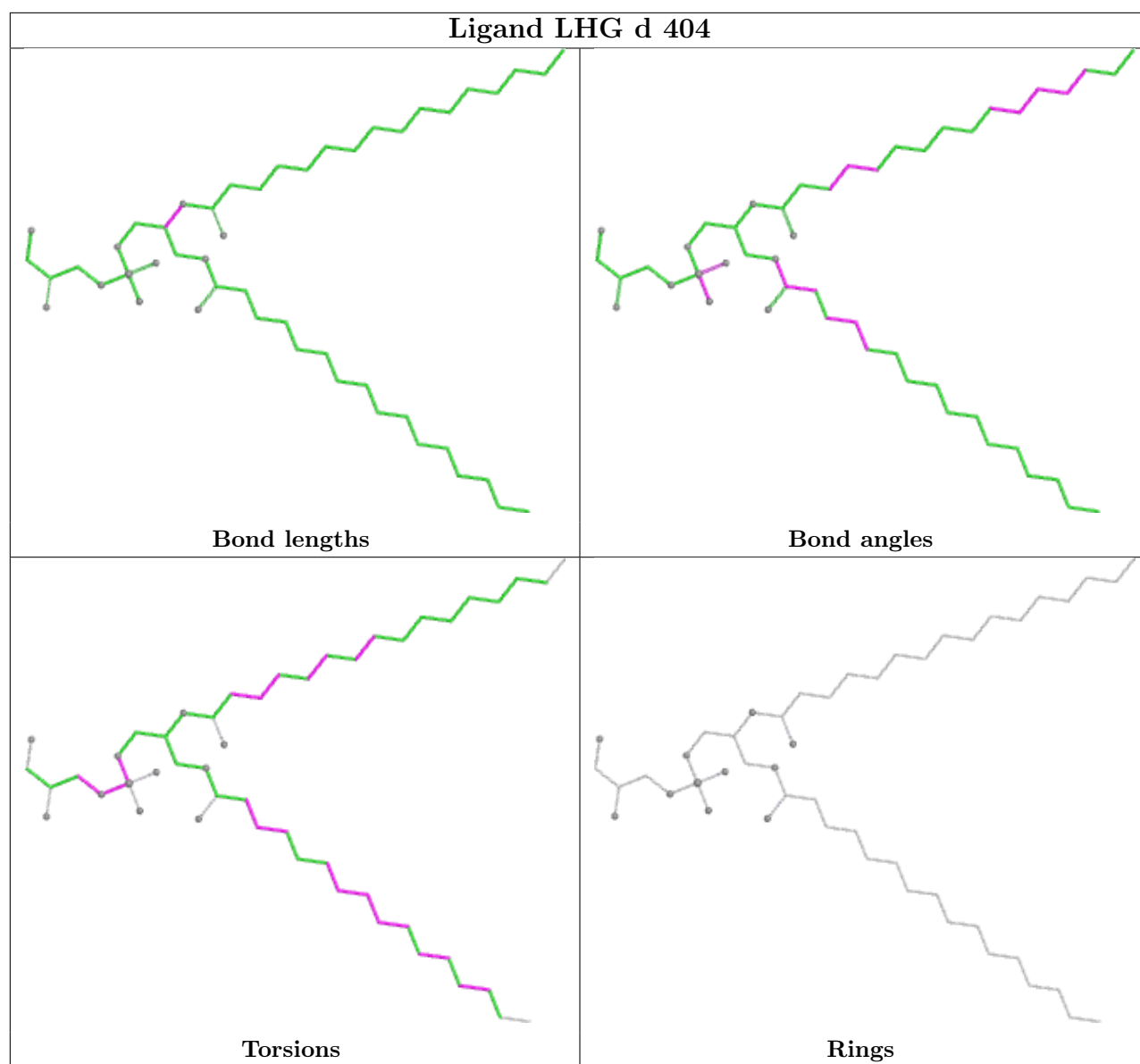
Ligand CLA BU 614

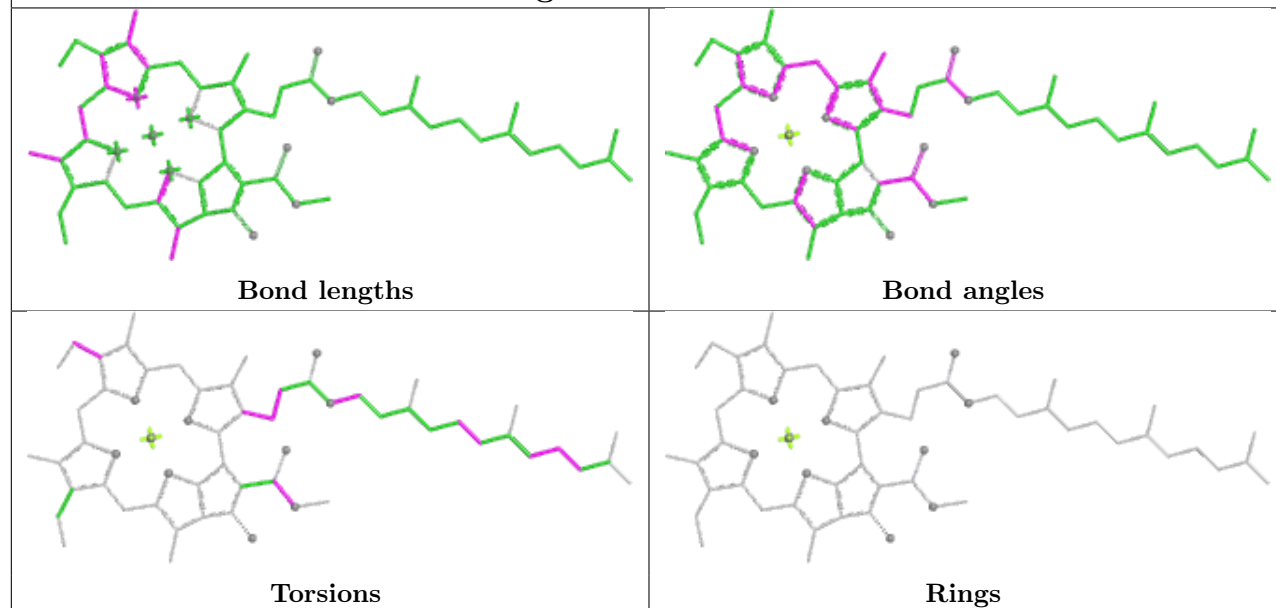
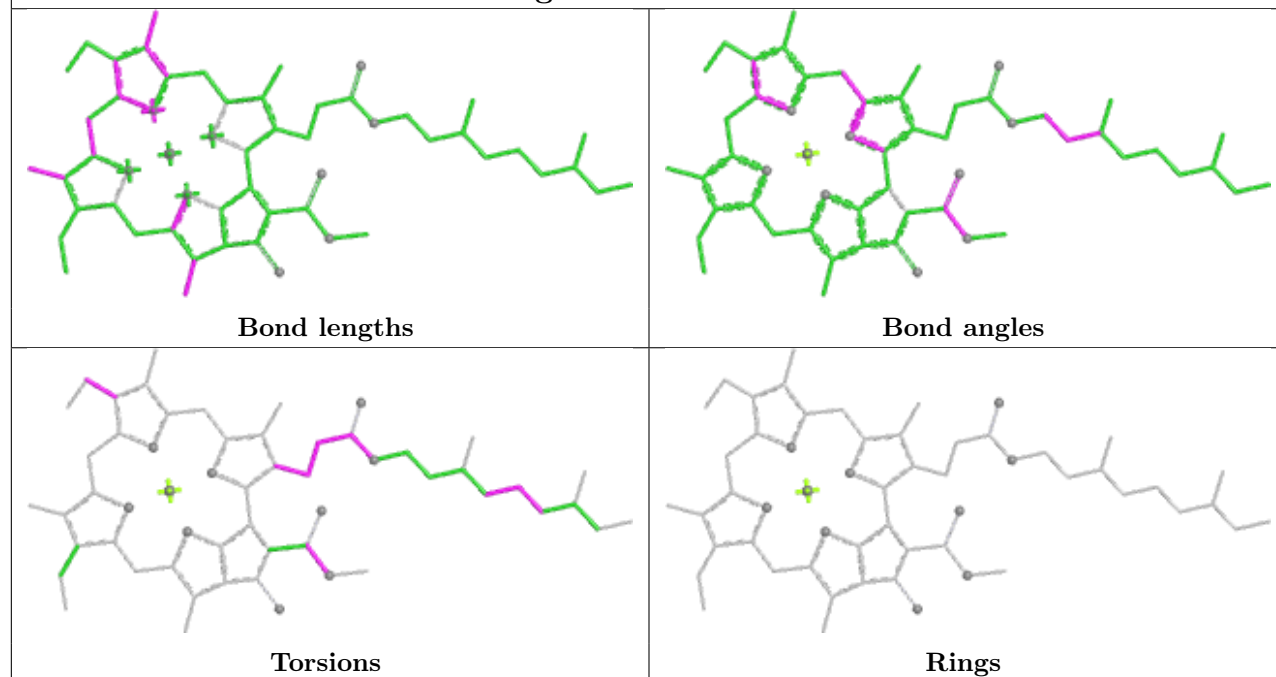


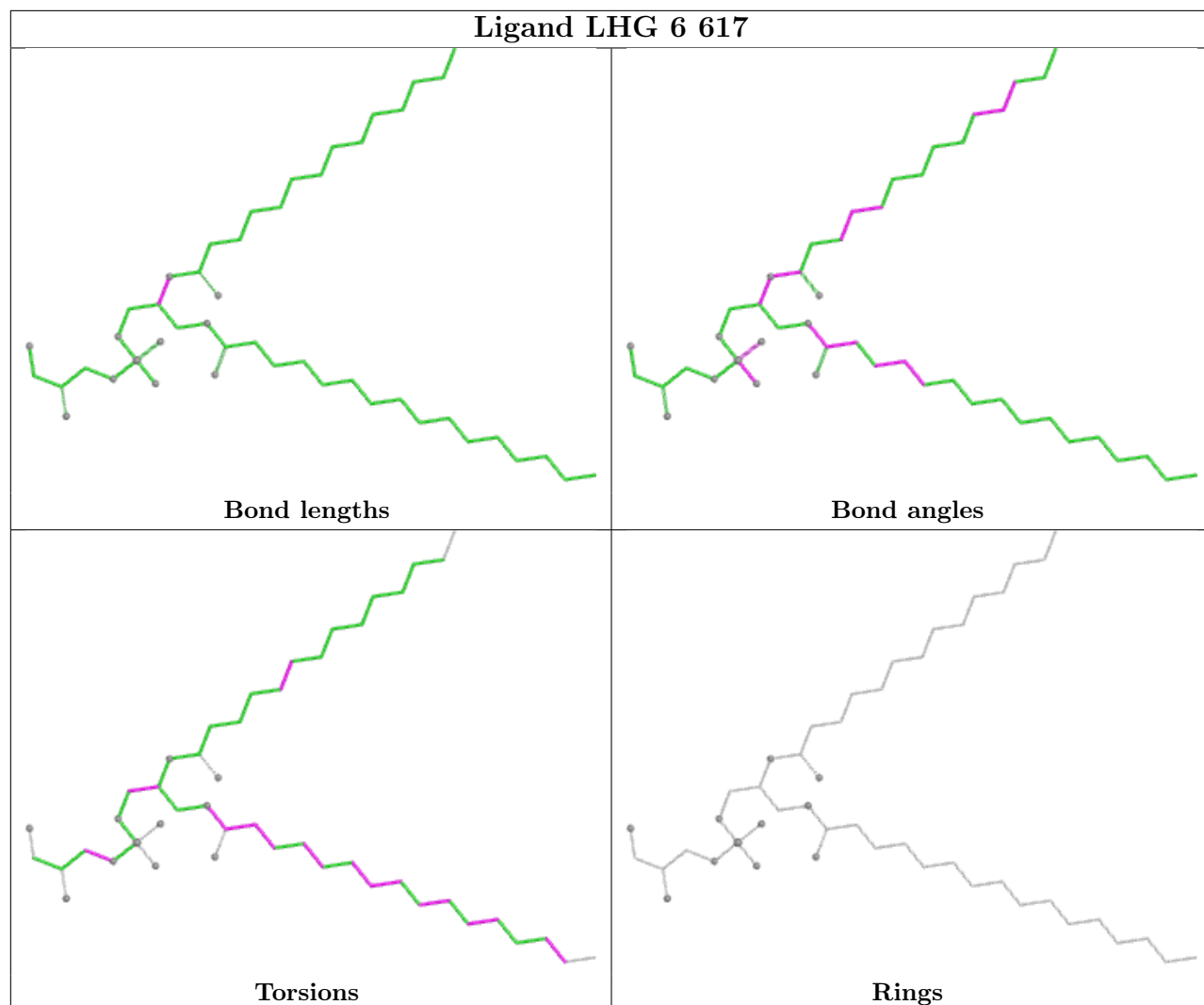
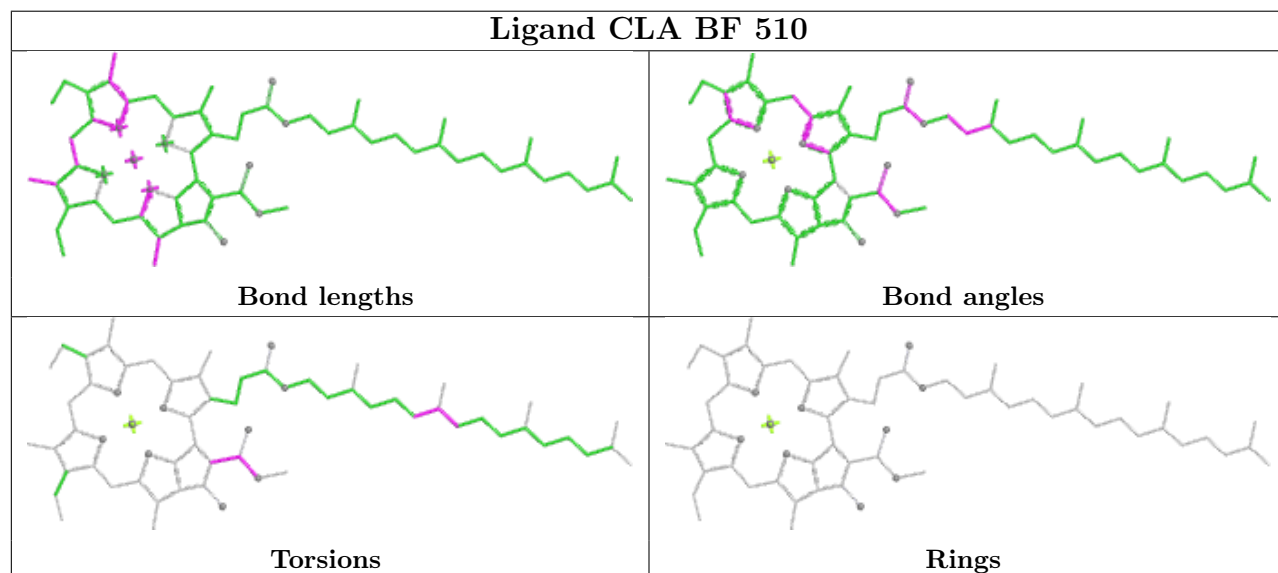
Ligand BCR R 410

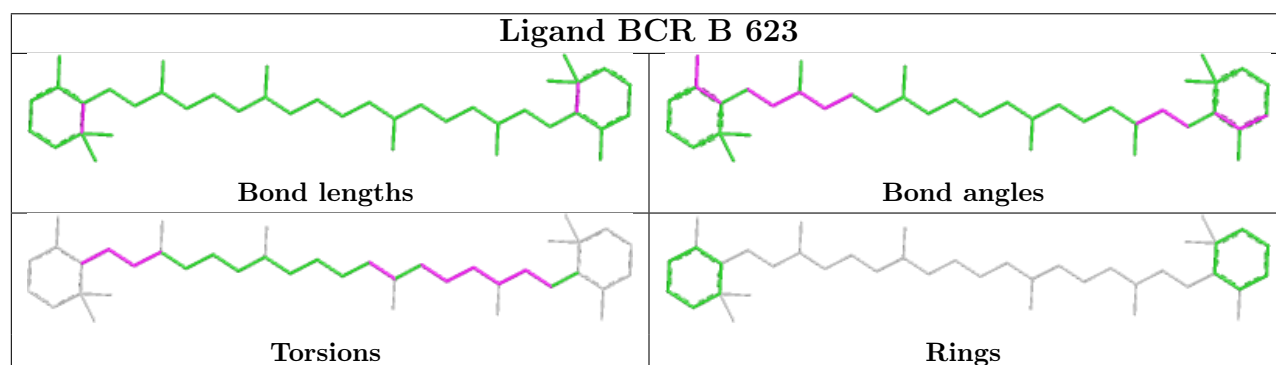
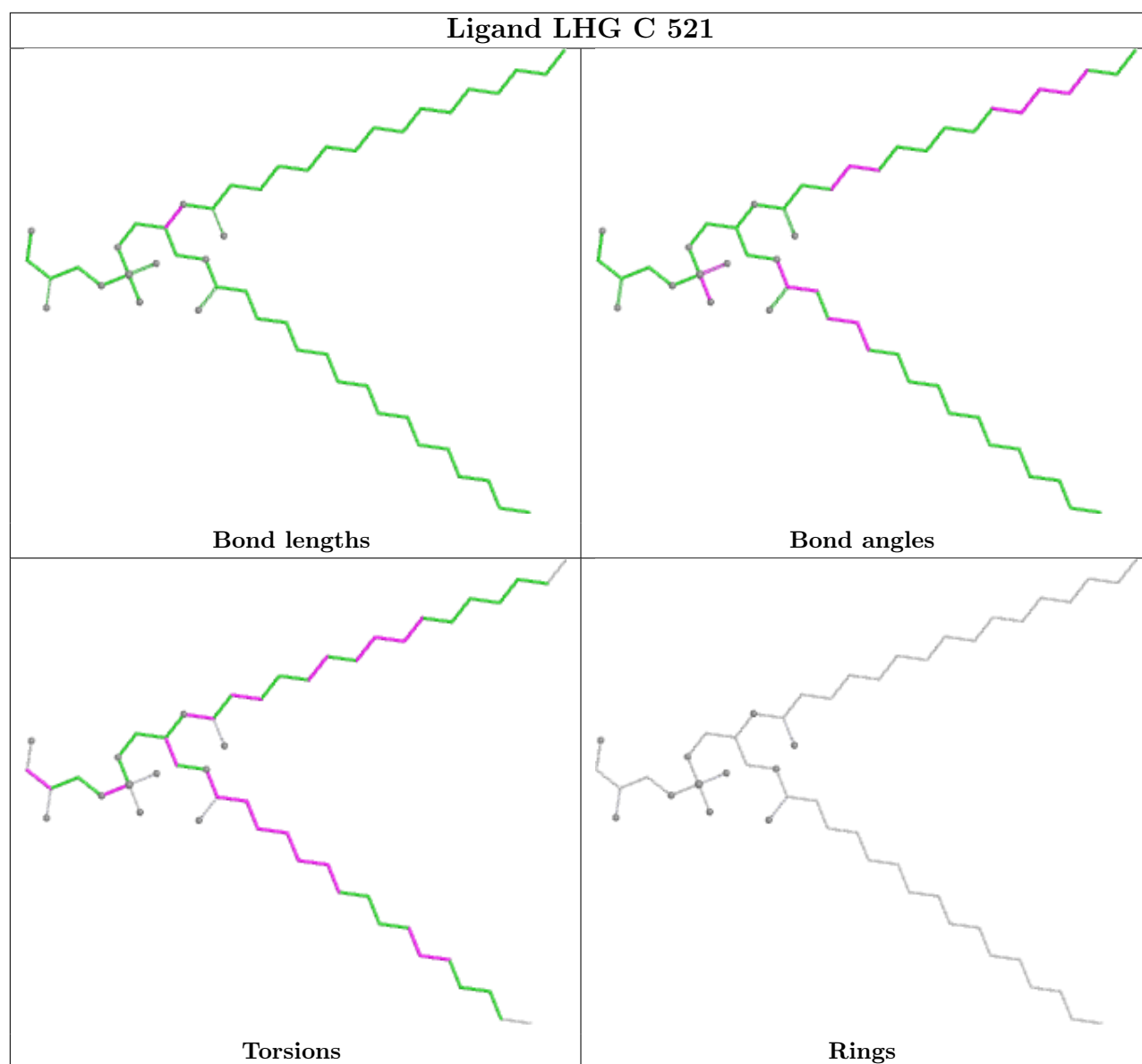


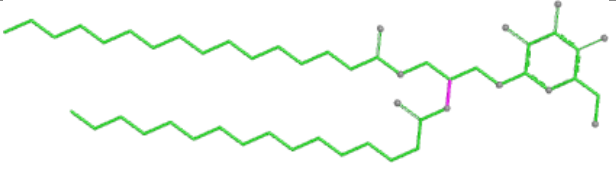
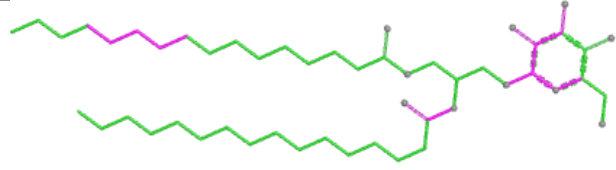
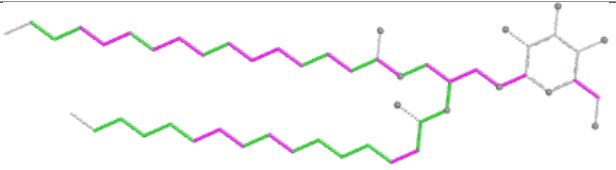
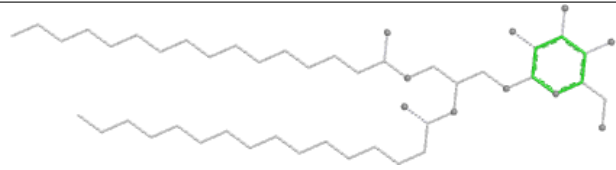
Ligand CHL N 609	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>
Ligand LUT Ba 317	
 <p>Bond lengths</p>	 <p>Bond angles</p>
 <p>Torsions</p>	 <p>Rings</p>

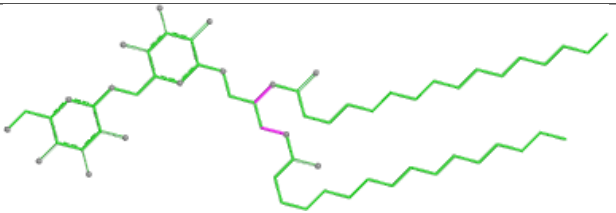
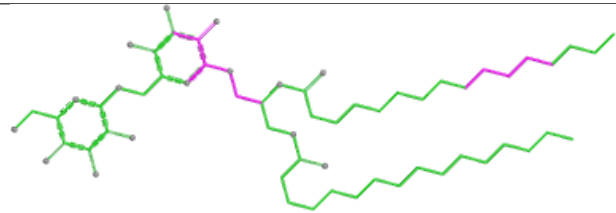
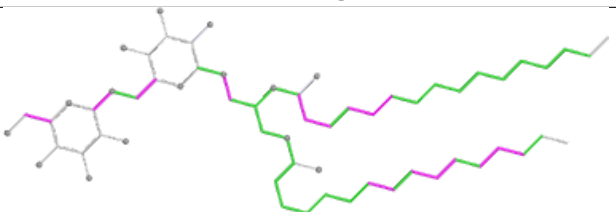
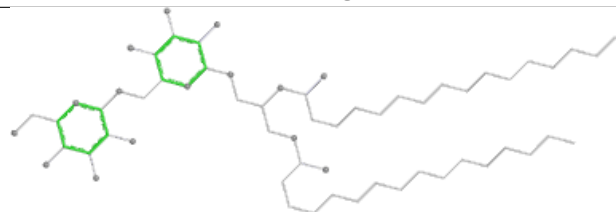


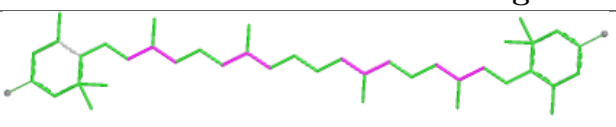
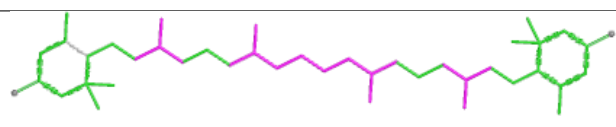
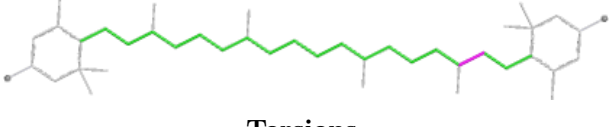
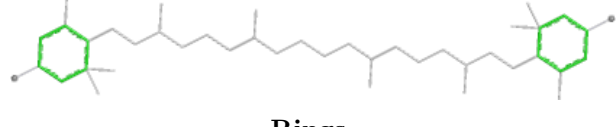
Ligand CLA 0 610**Ligand CLA S 610**

Ligand LHG 6 617**Ligand CLA BF 510**

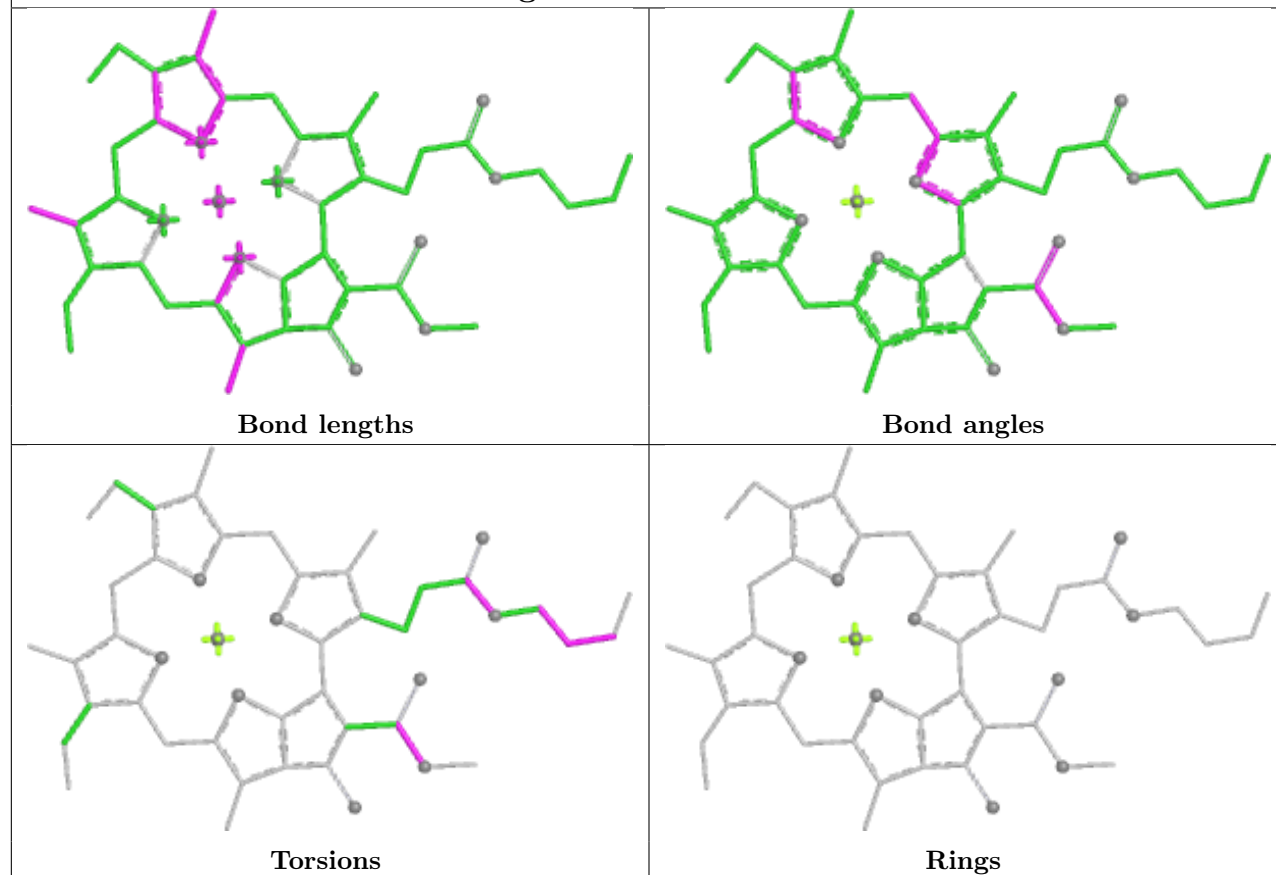


Ligand LMG BF 501	
	
Bond lengths	Bond angles
	
Torsions	Rings

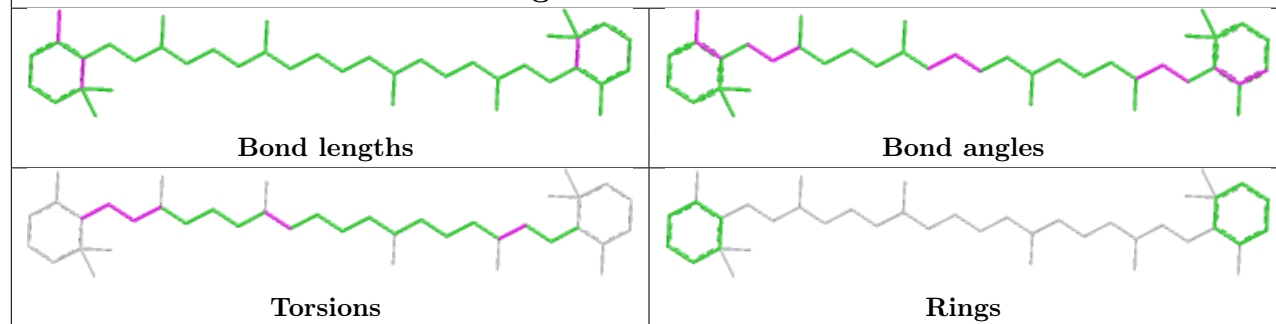
Ligand DGD H 102	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand LUT 0 615	
	
Bond lengths	Bond angles
	
Torsions	Rings

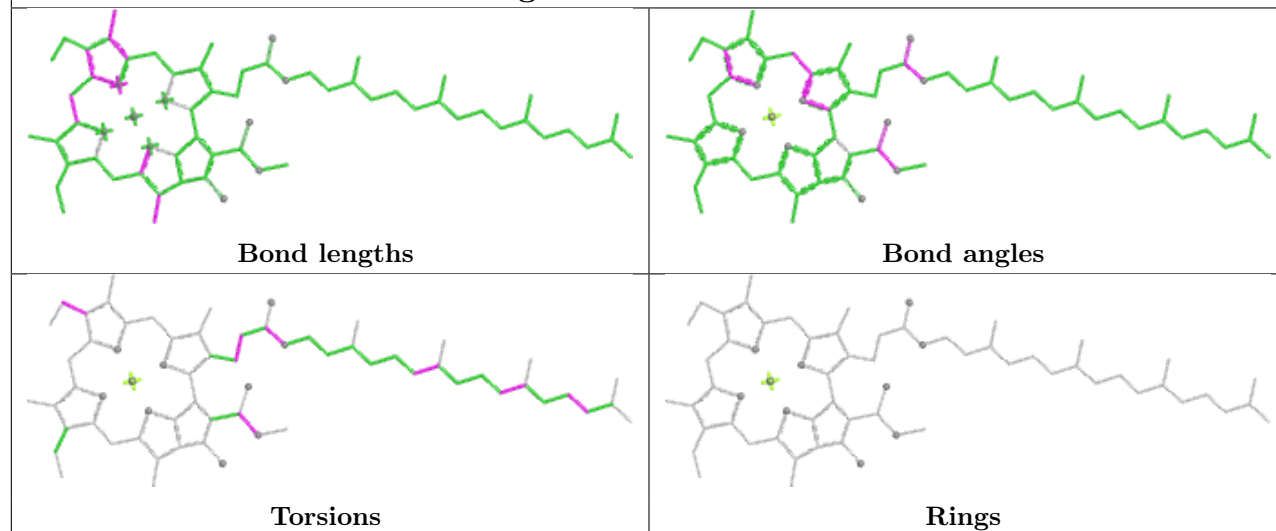
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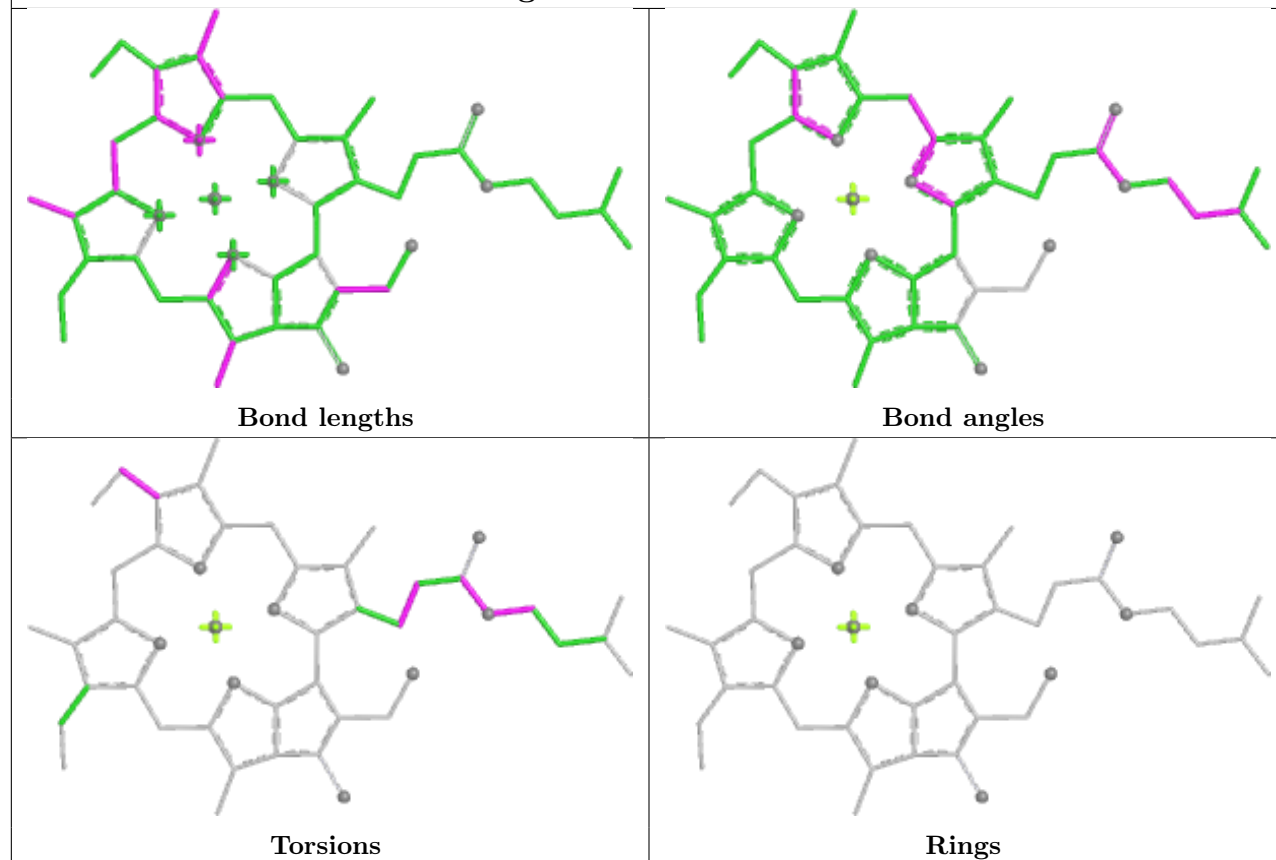
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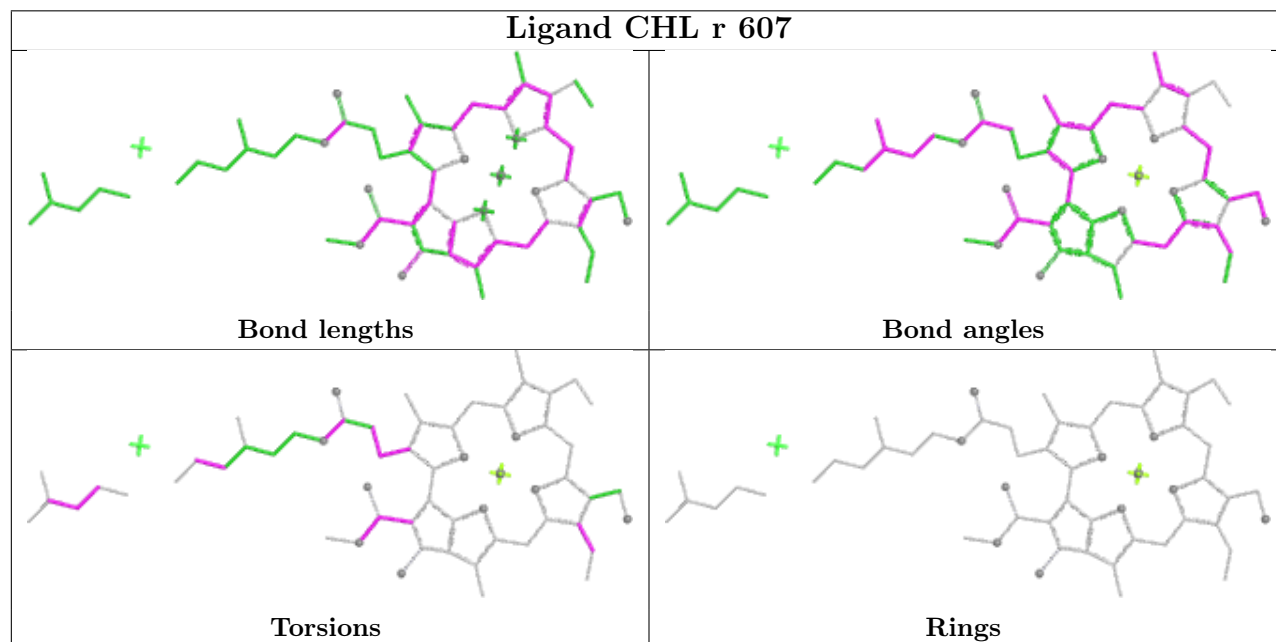
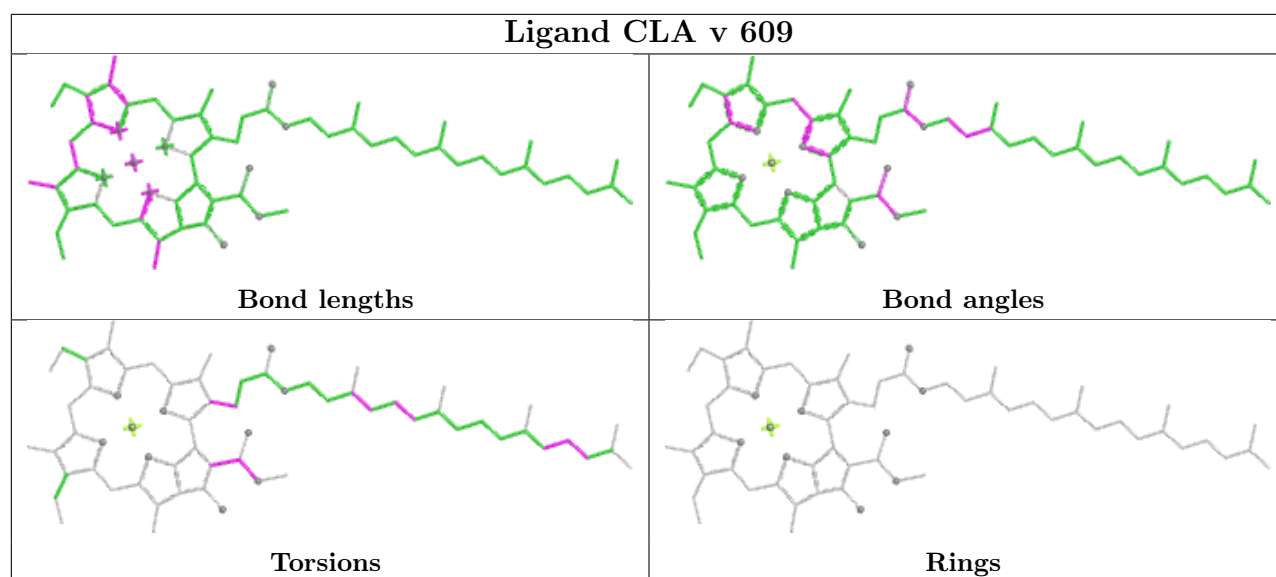


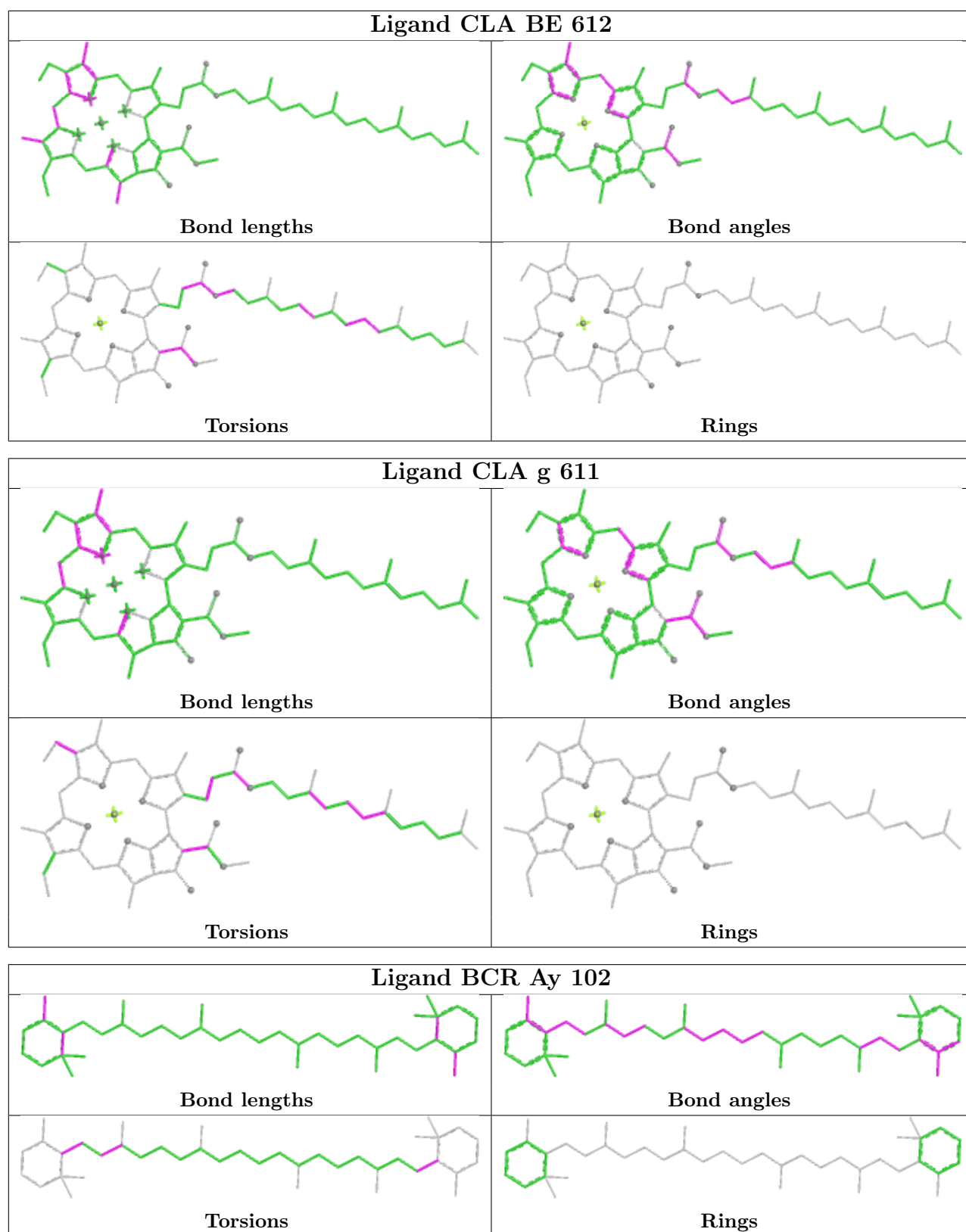
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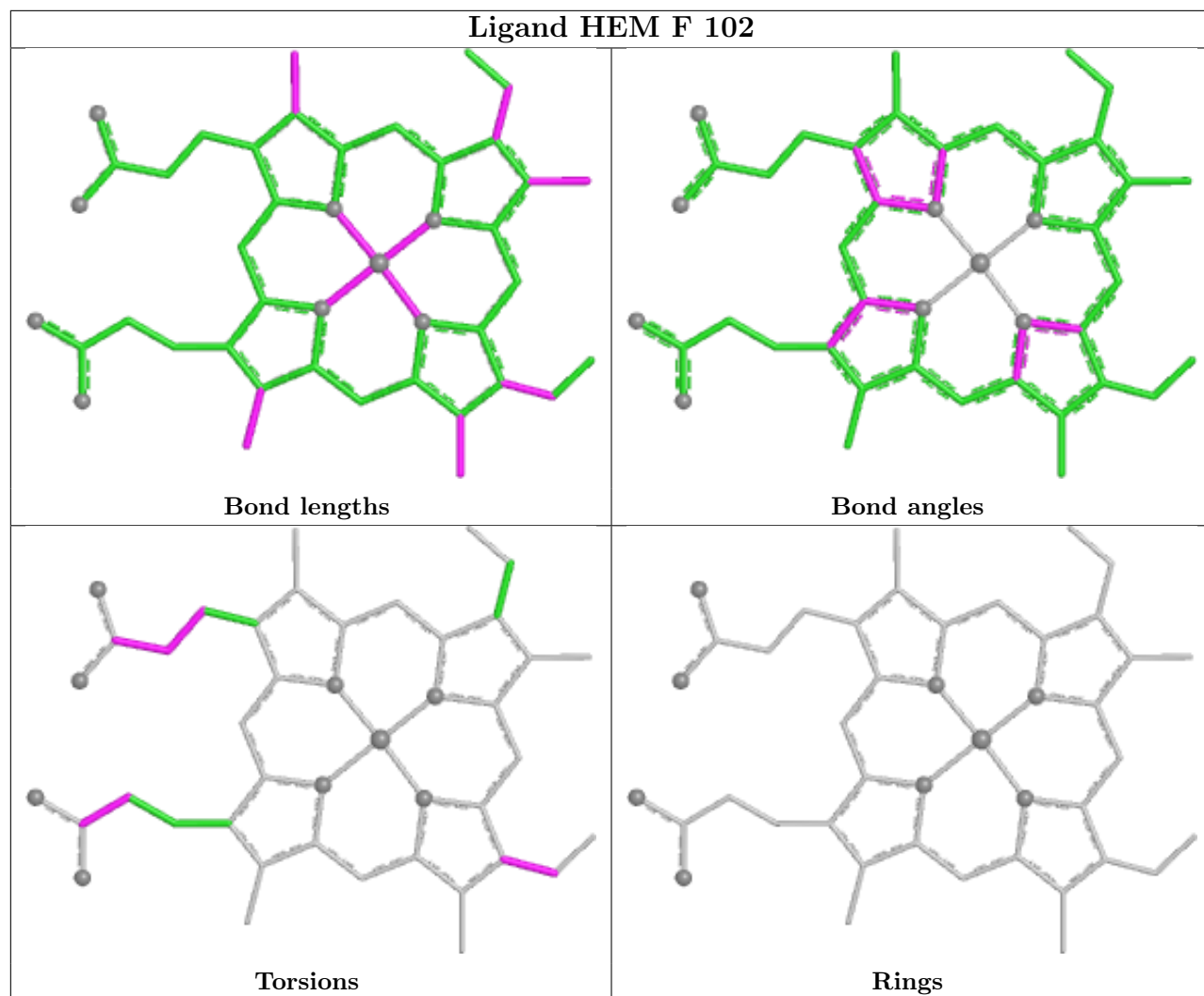


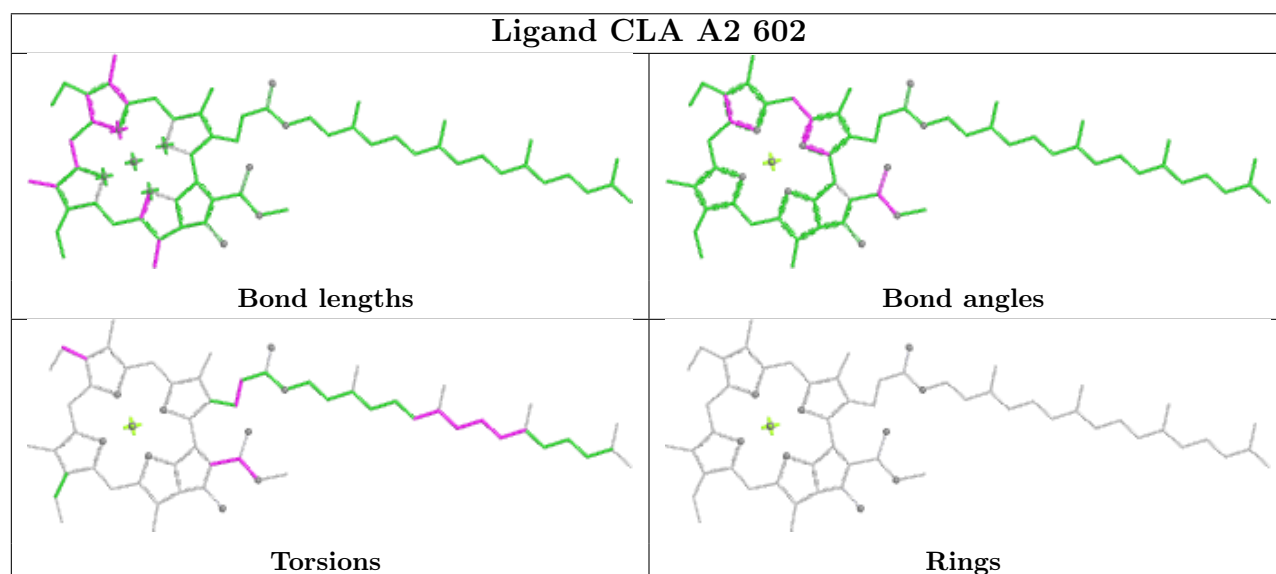
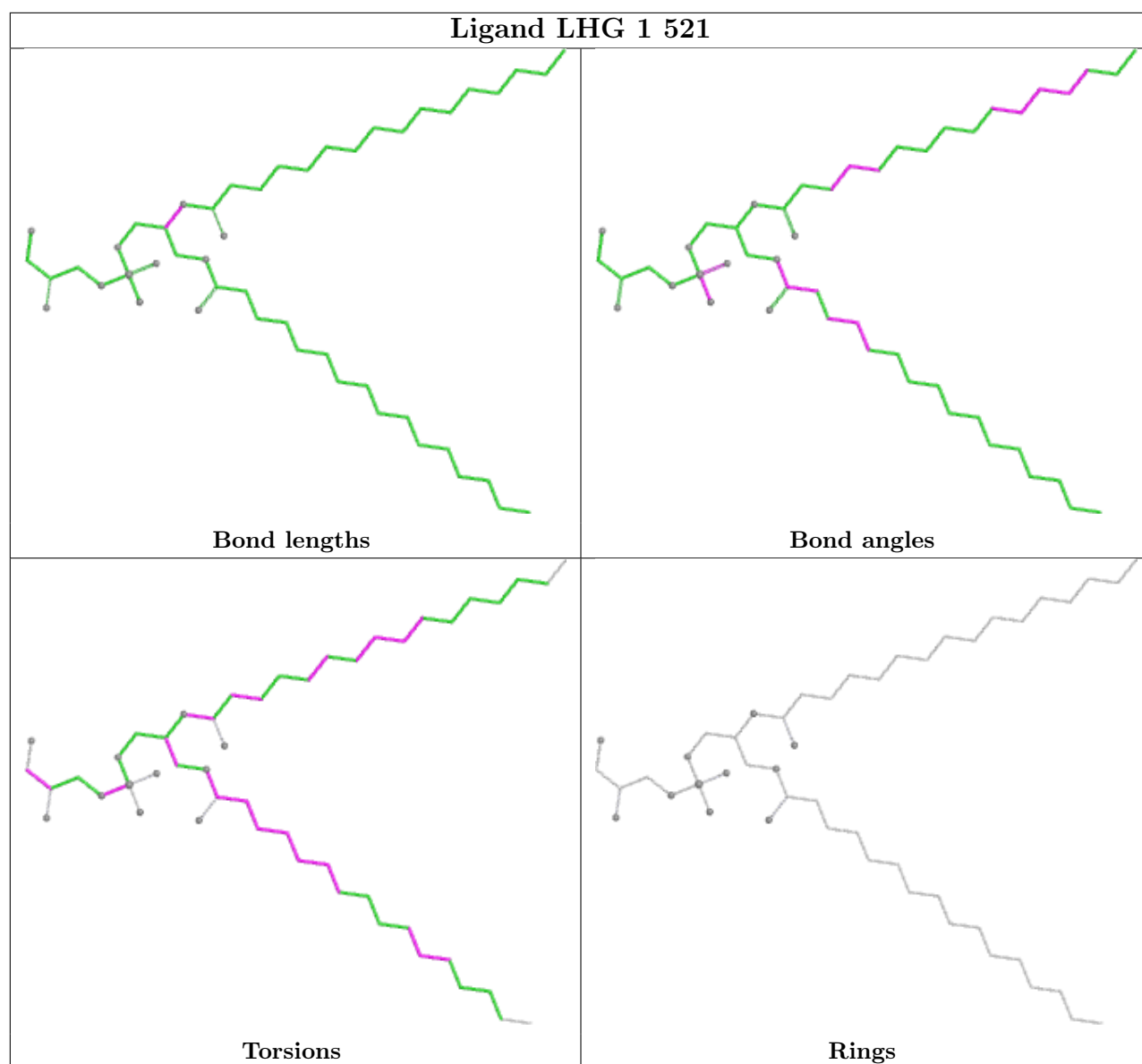
Ligand CLA AA 311



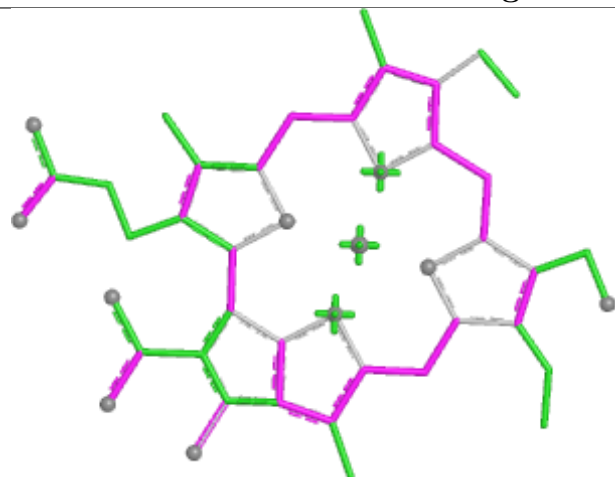




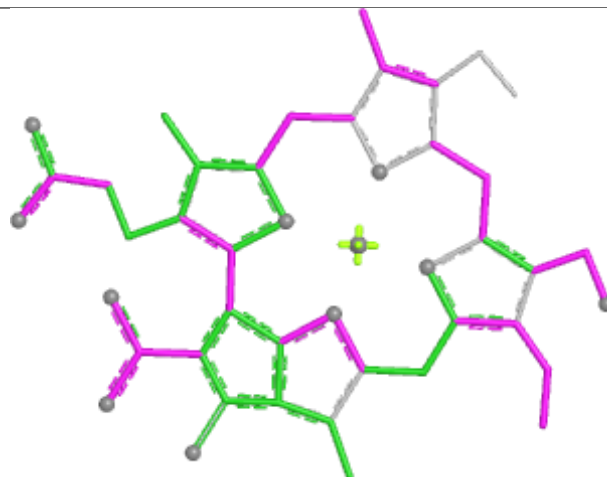




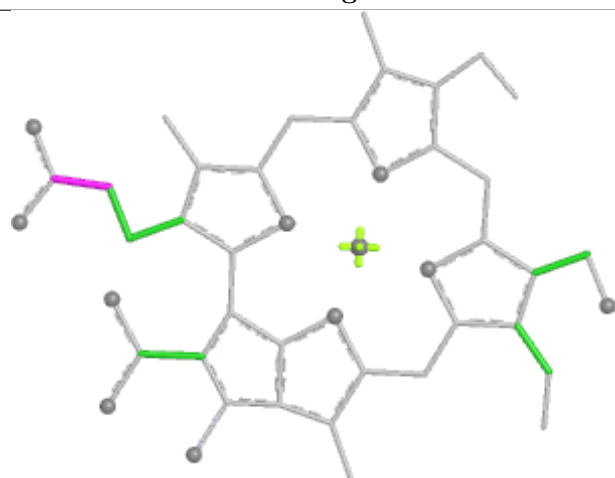
Ligand CHL BH 601



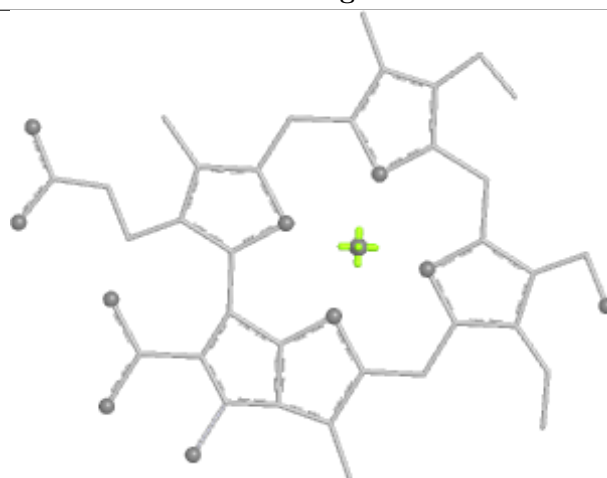
Bond lengths



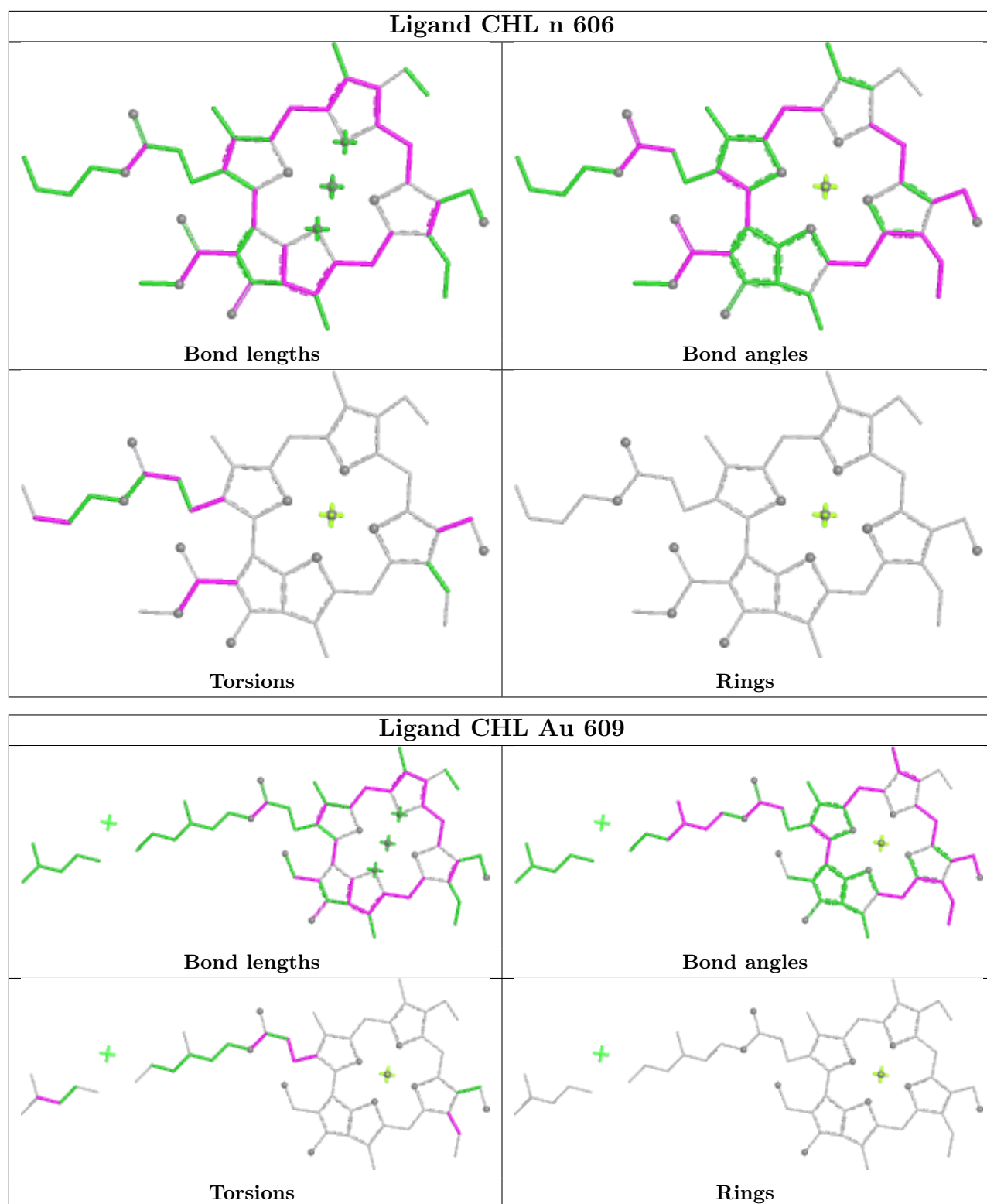
Bond angles

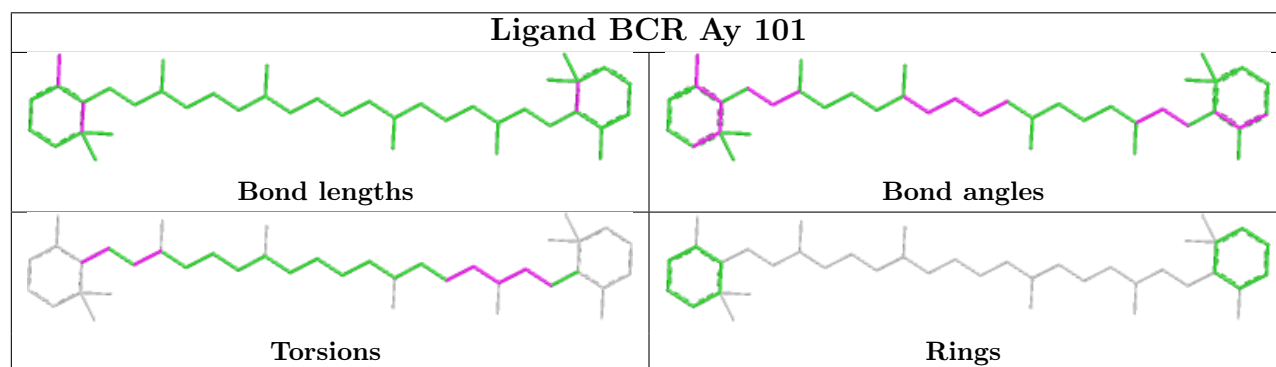
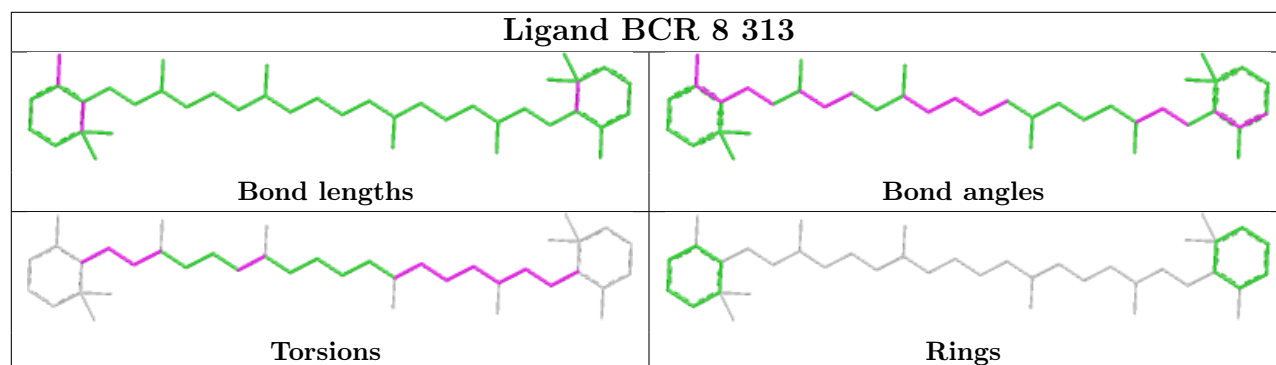
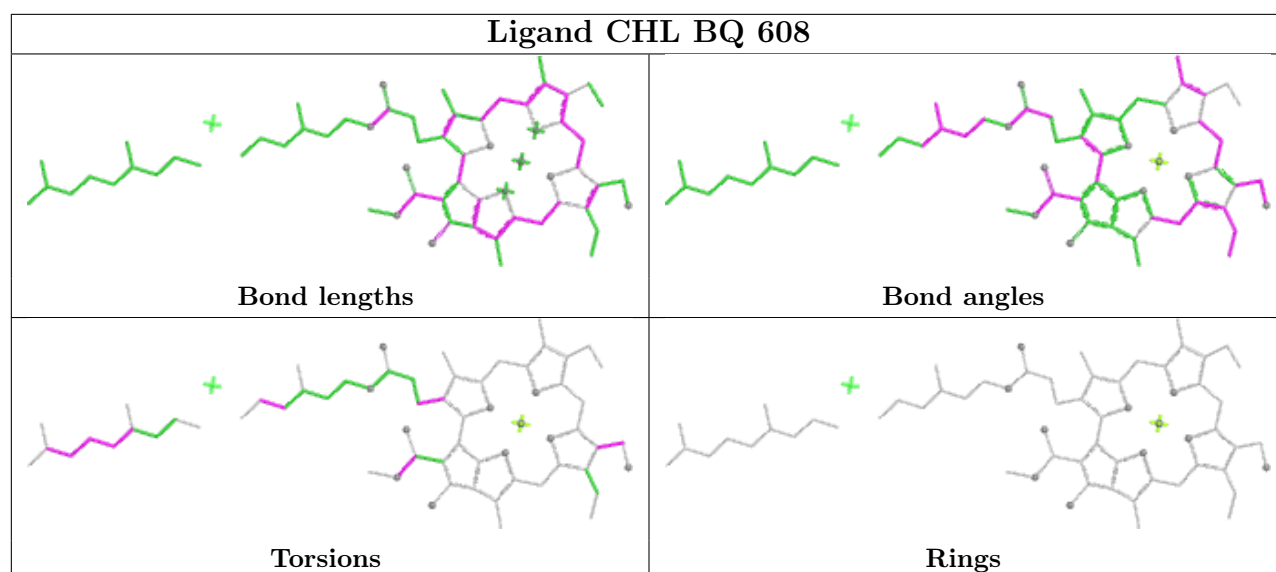


Torsions

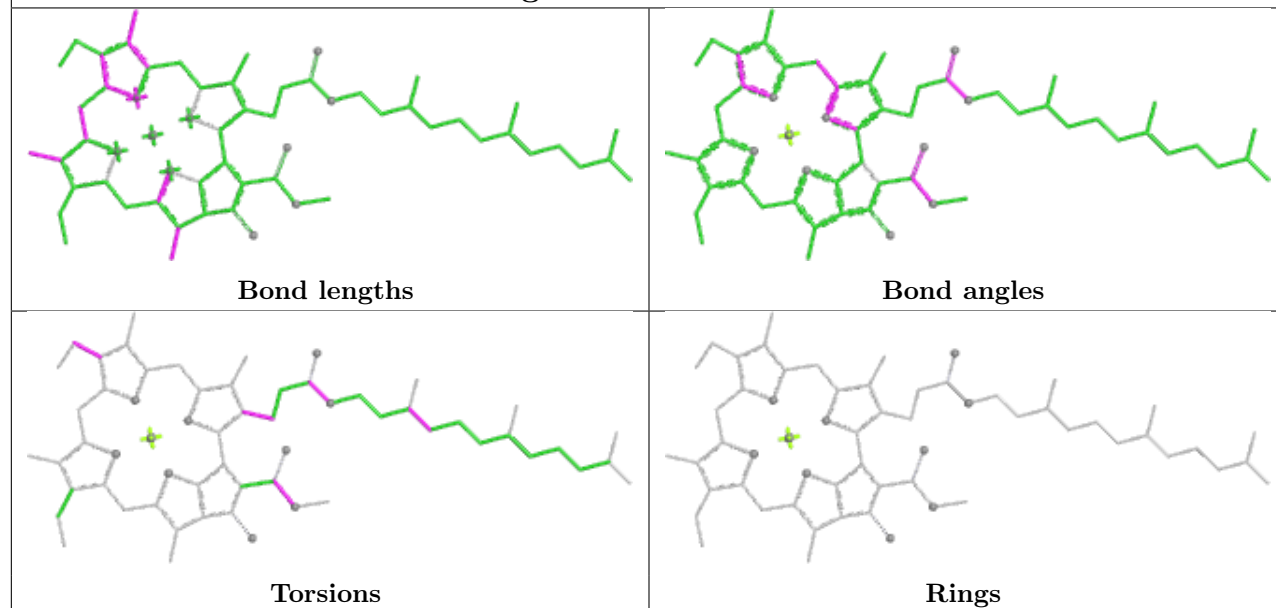


Rings

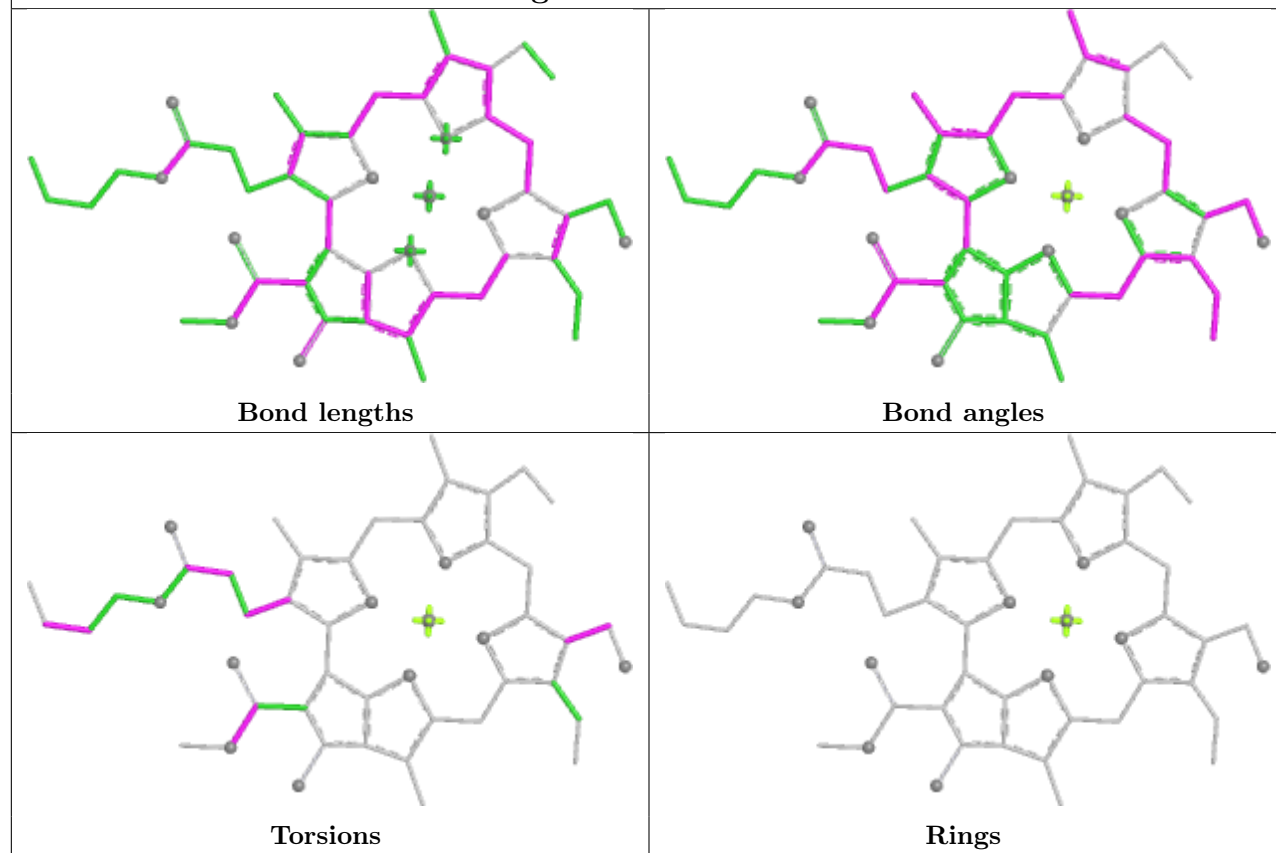


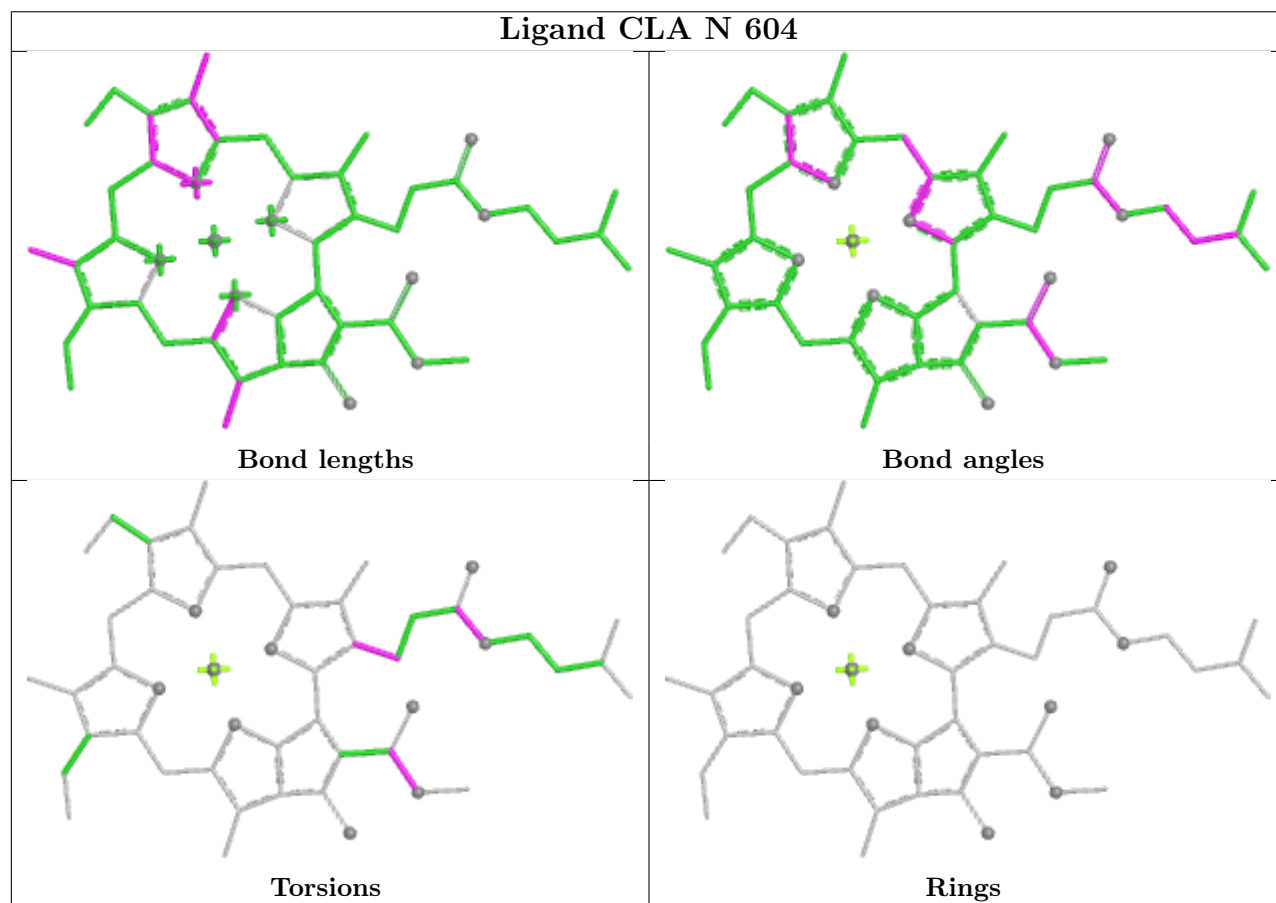
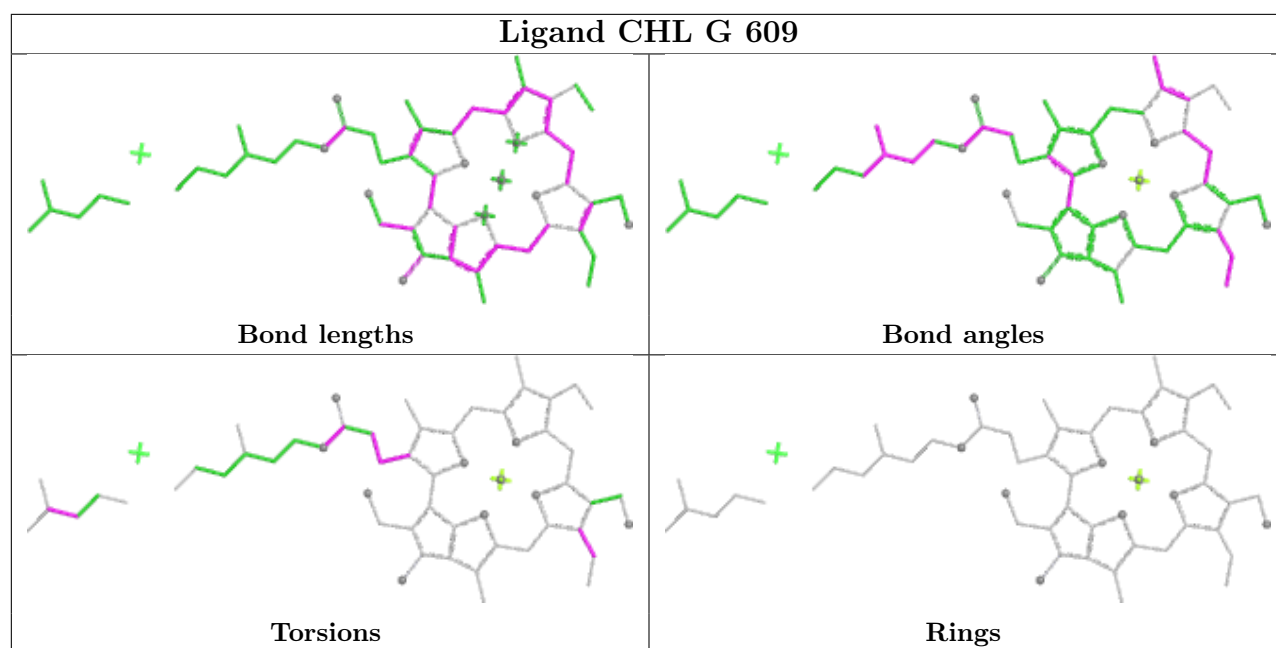


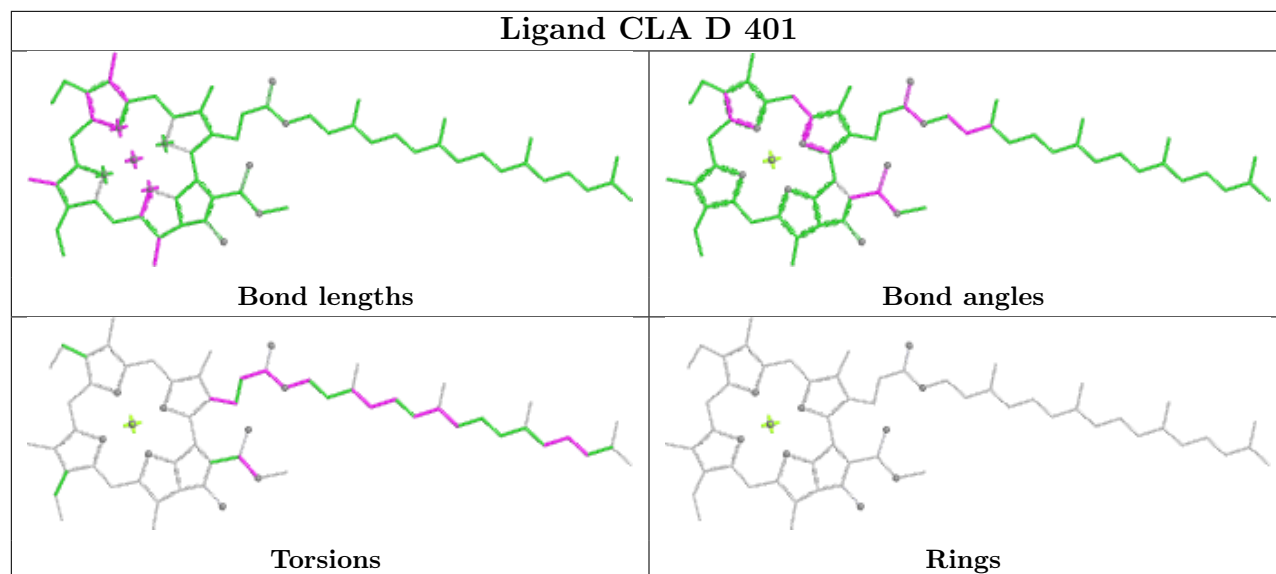
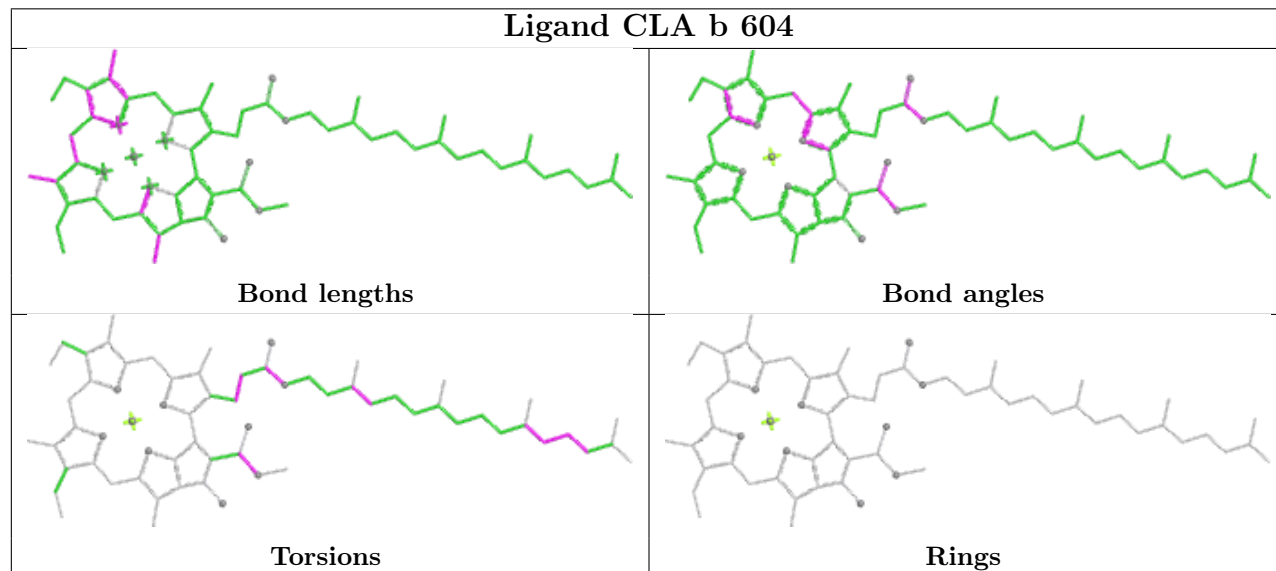
Ligand CLA Au 611



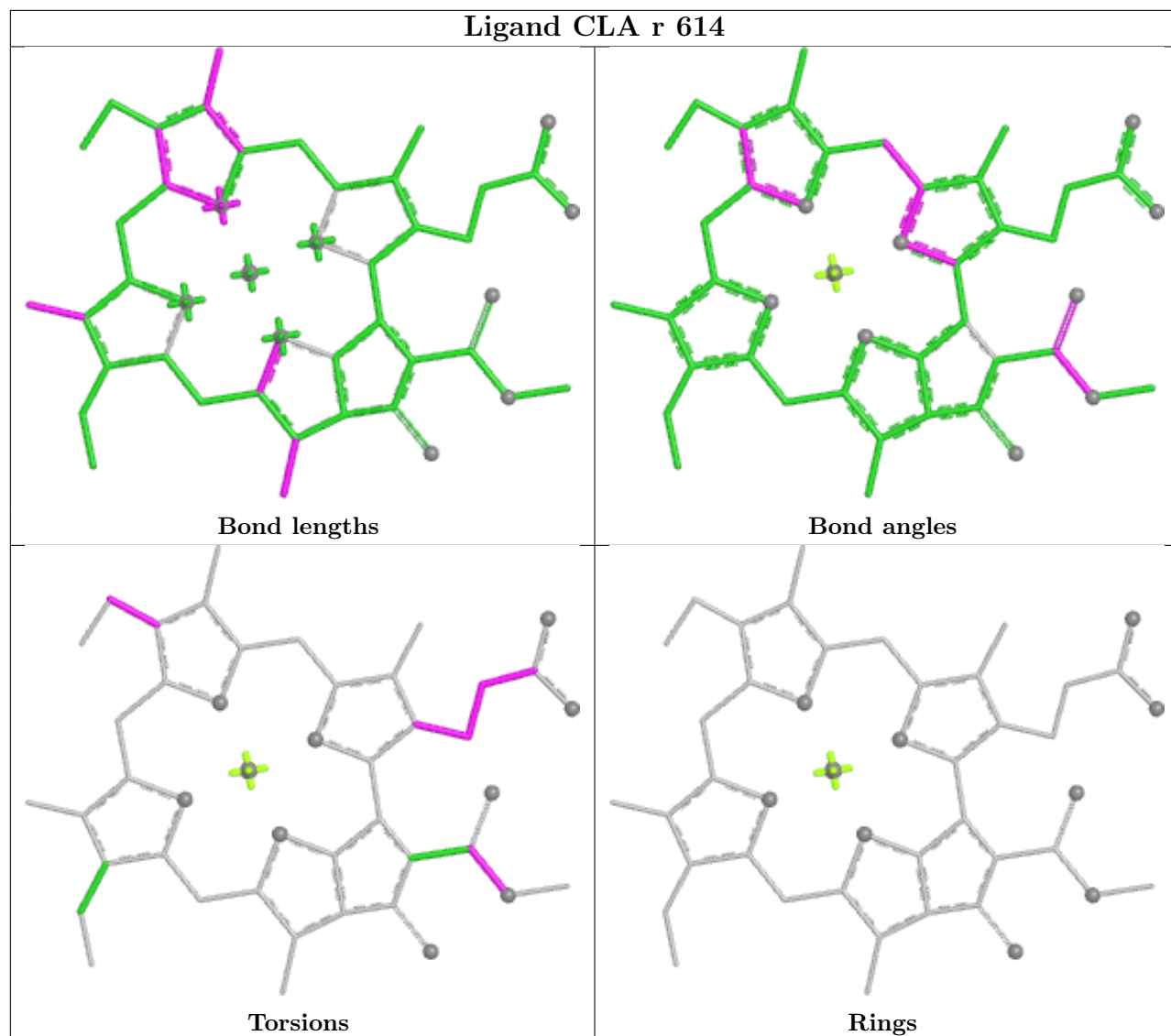
Ligand CHL Y 307

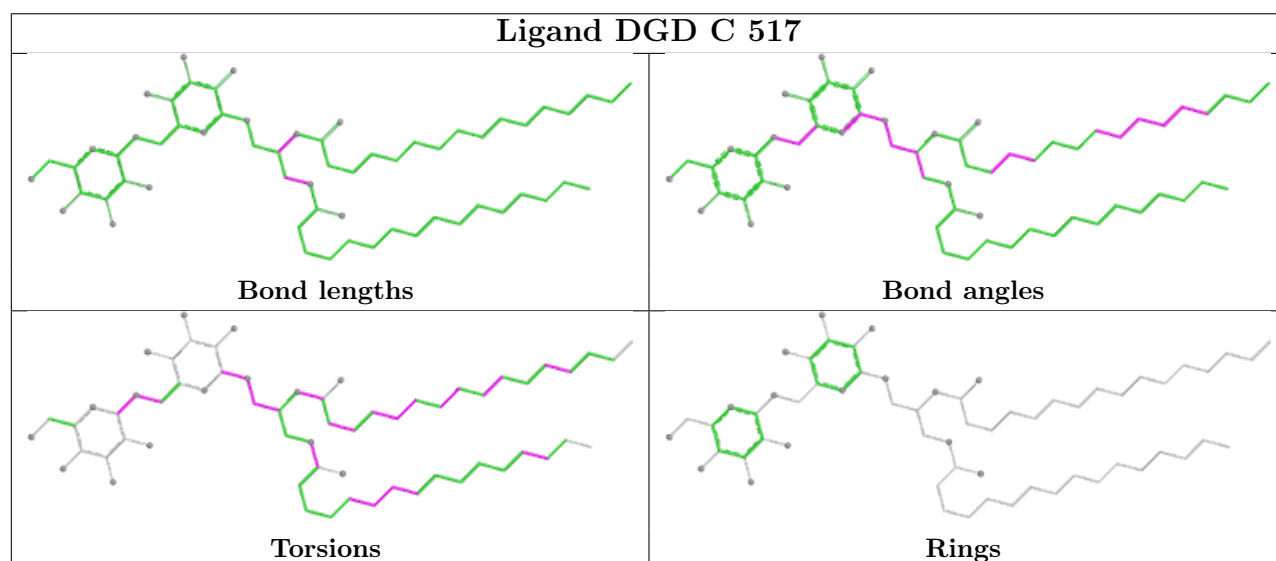
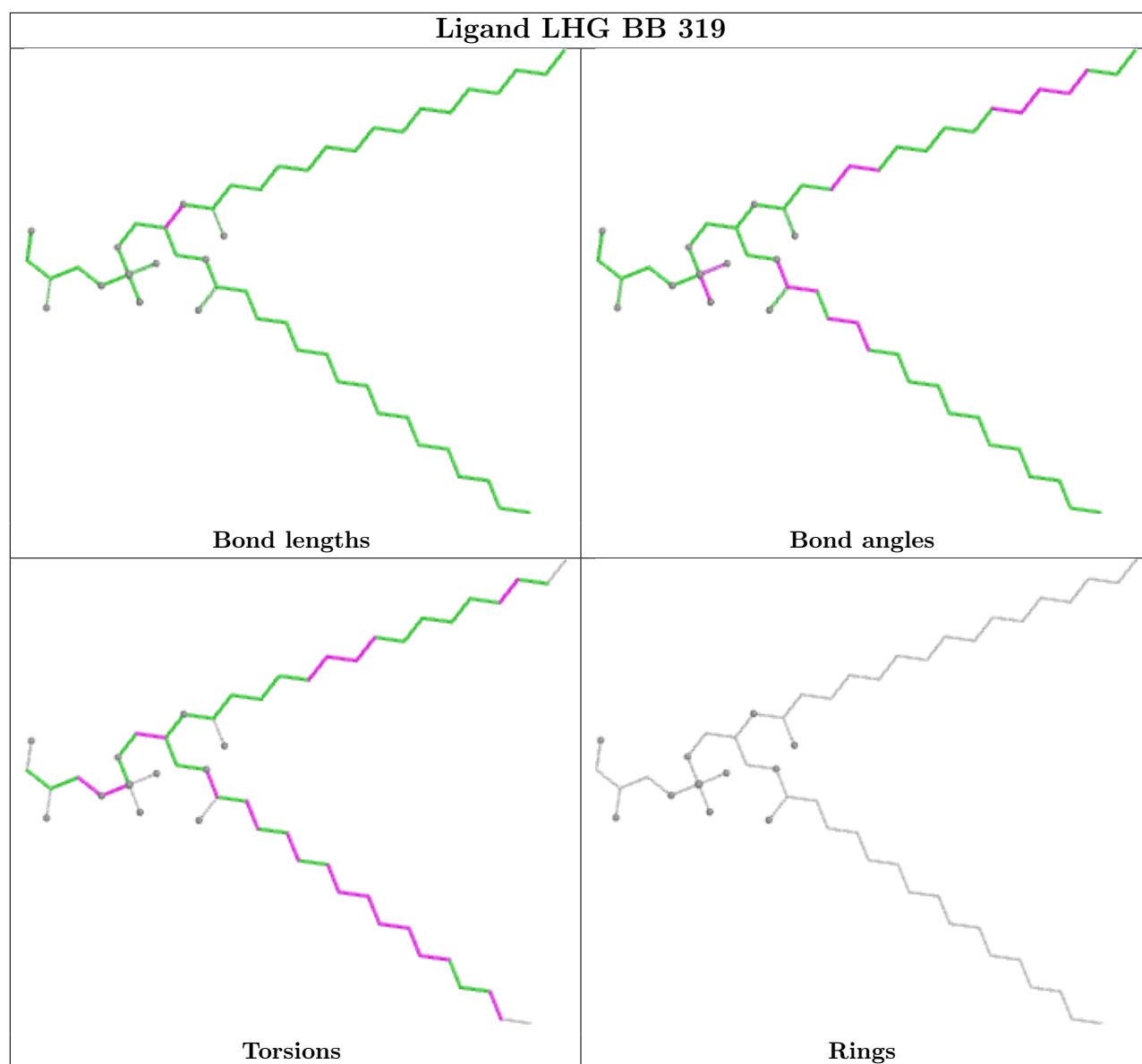




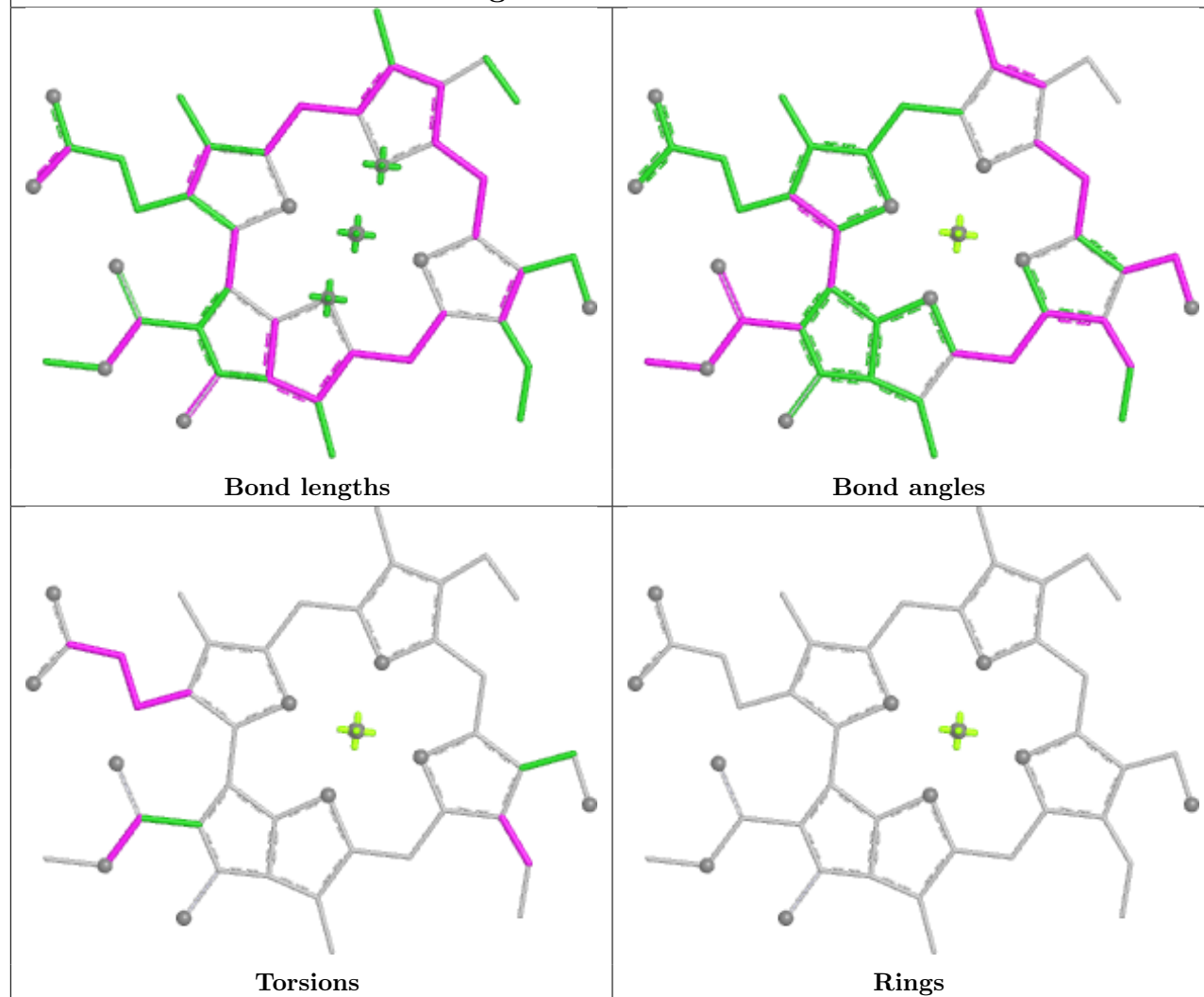
Ligand CLA D 401**Ligand CLA b 604**

Ligand CLA r 614

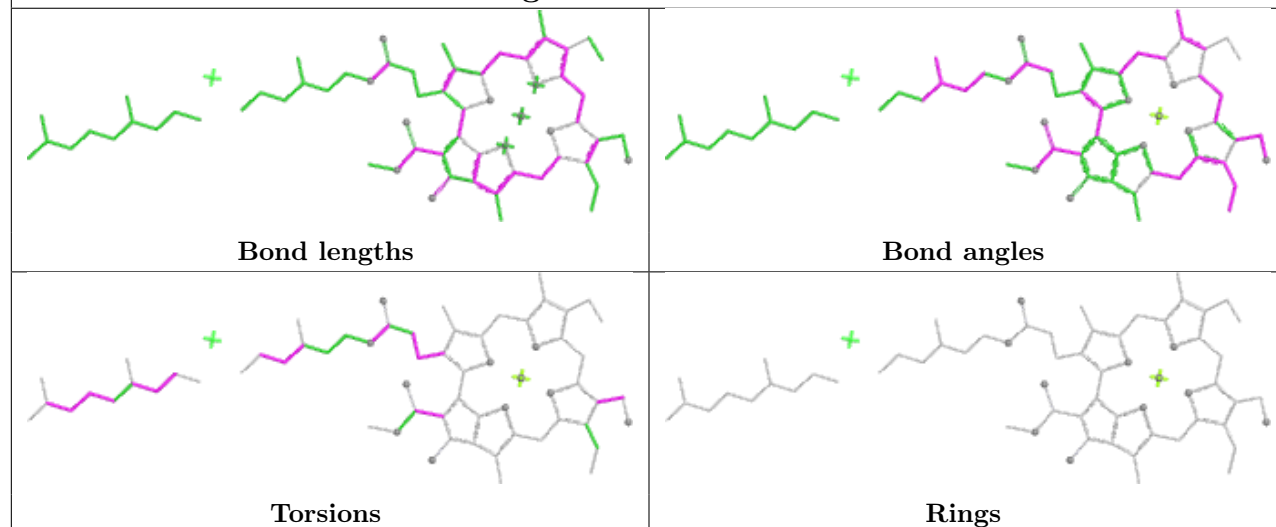


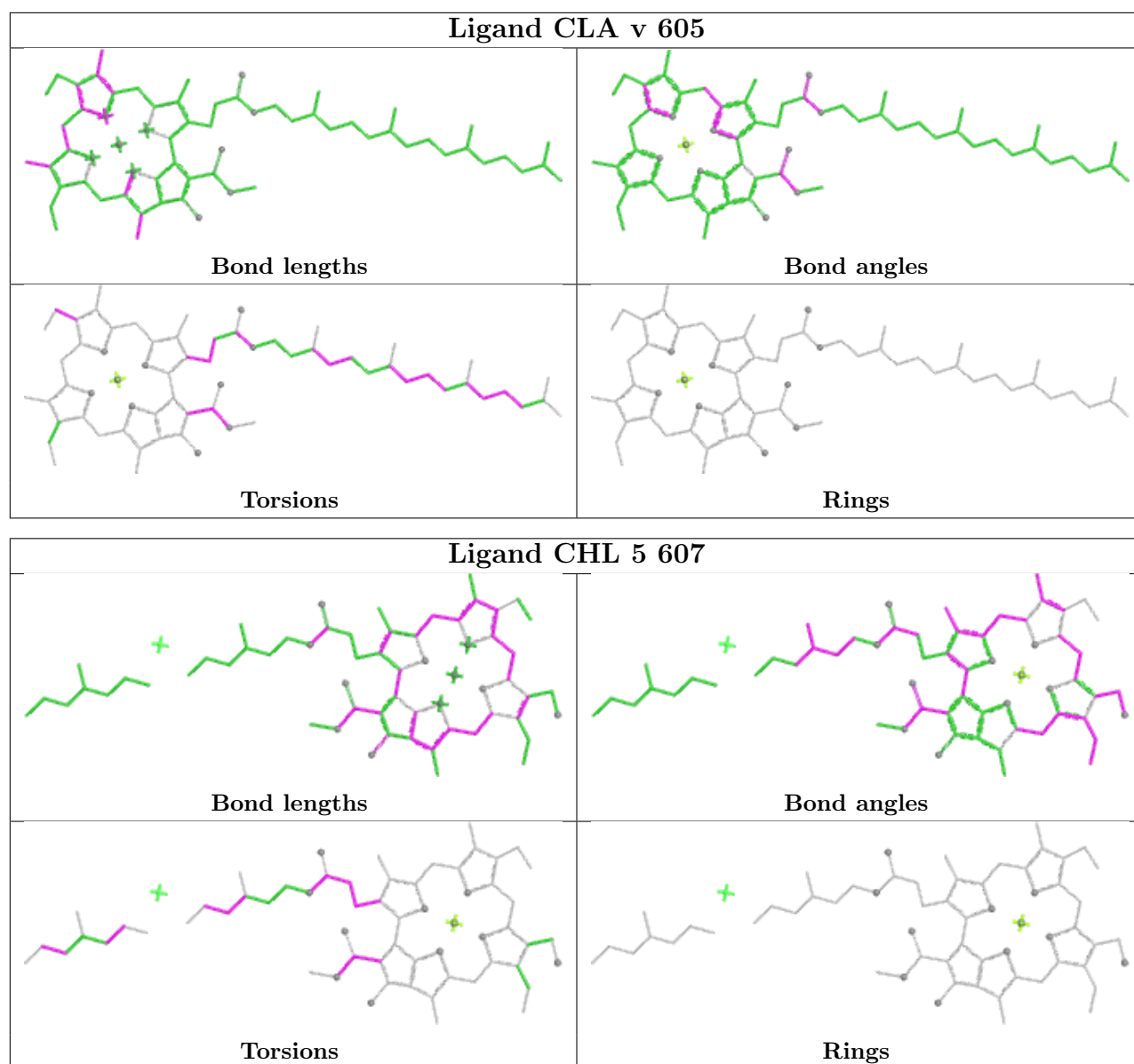


Ligand CHL BV 607

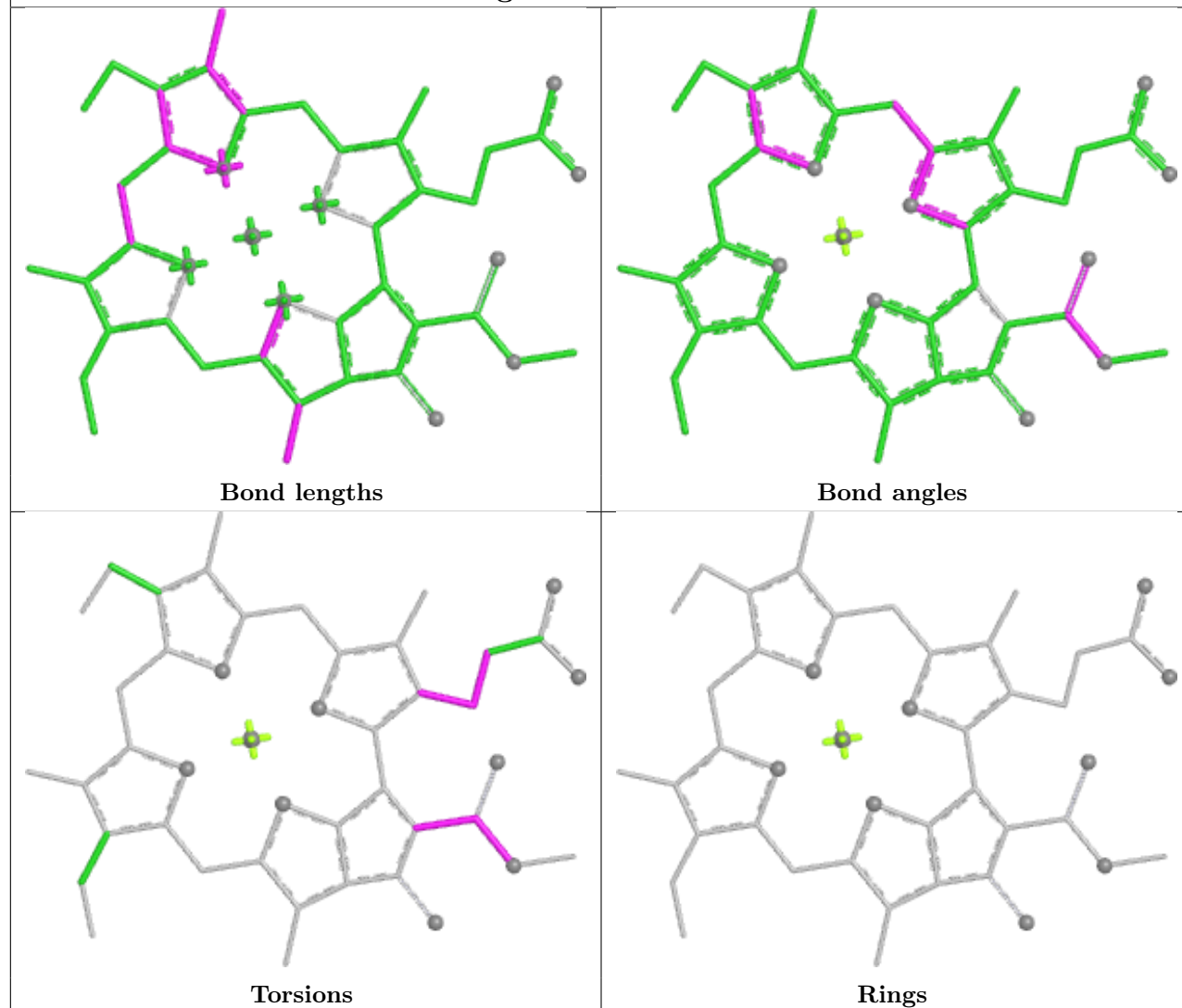


Ligand CHL A2 601

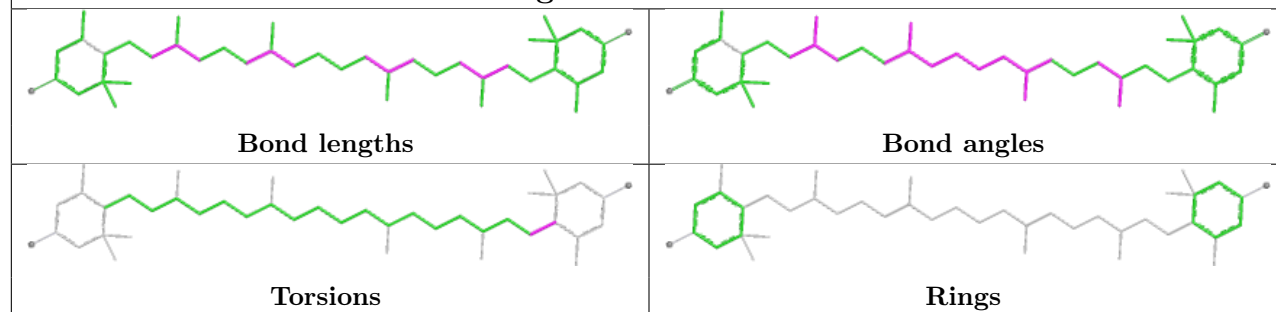




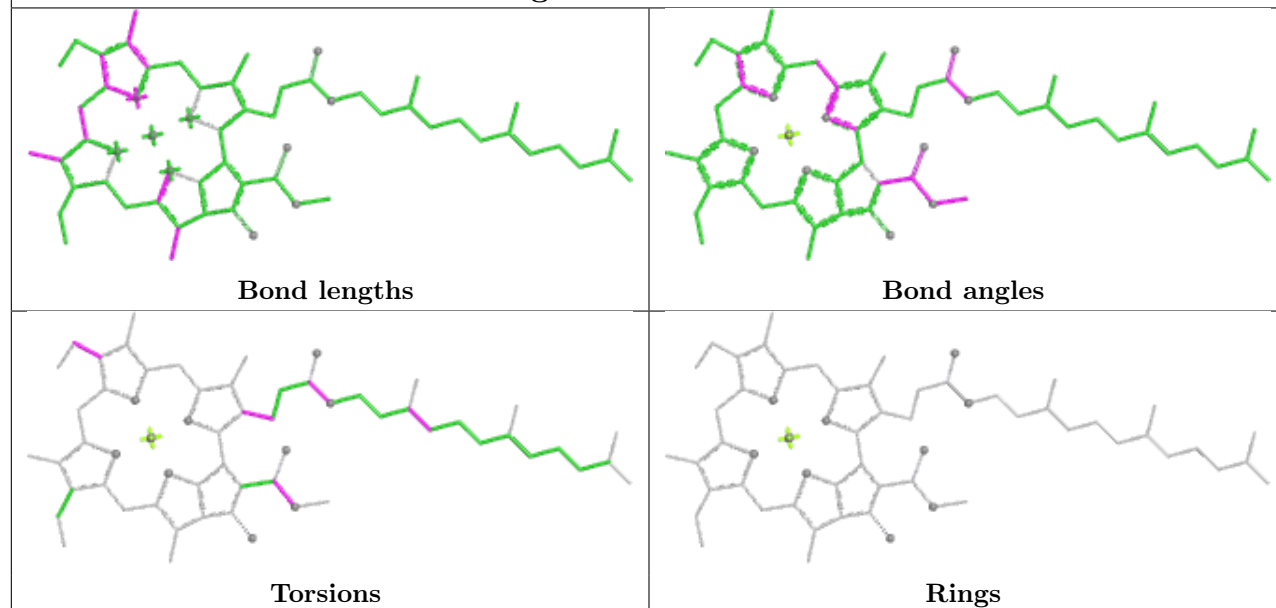
Ligand CLA 9 614



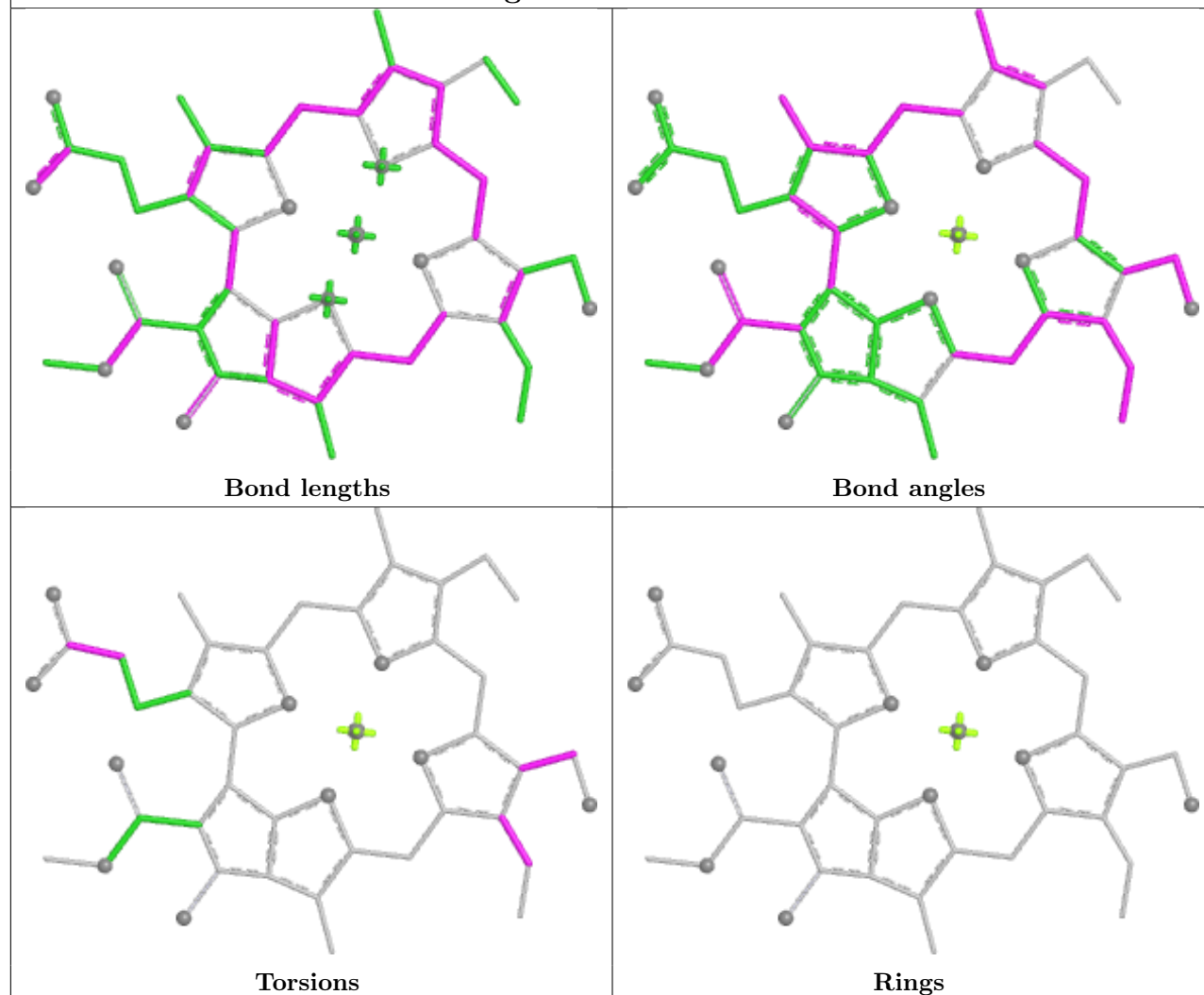
Ligand LUT 7 317

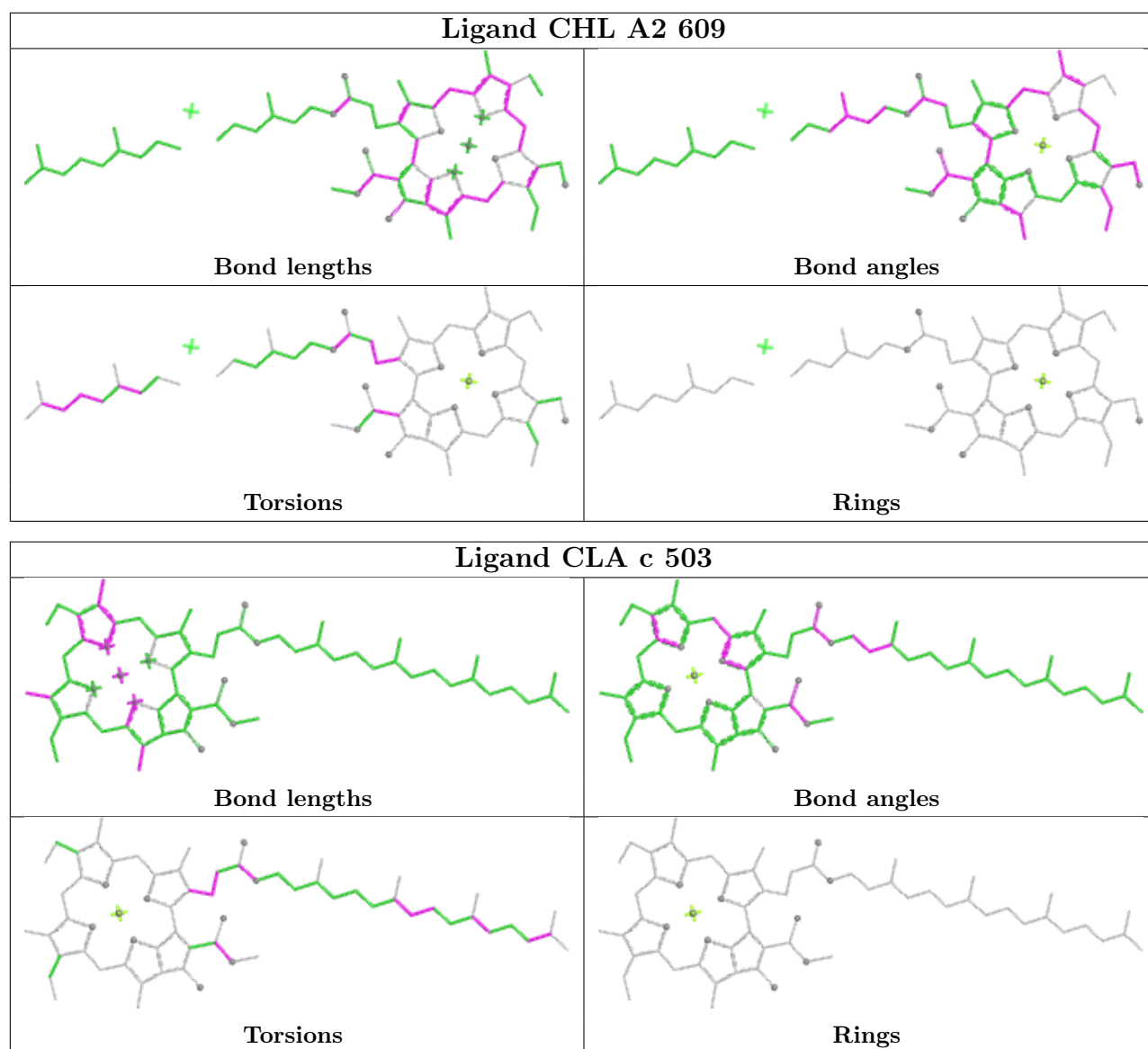


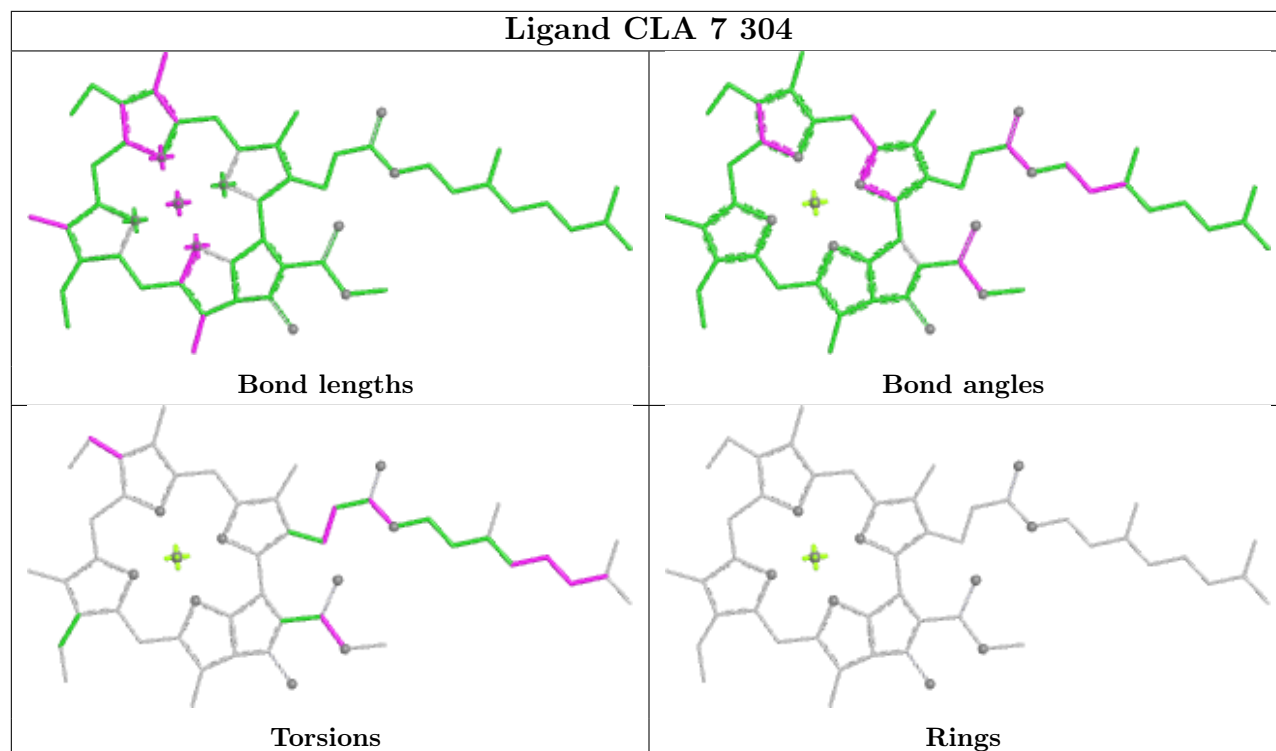
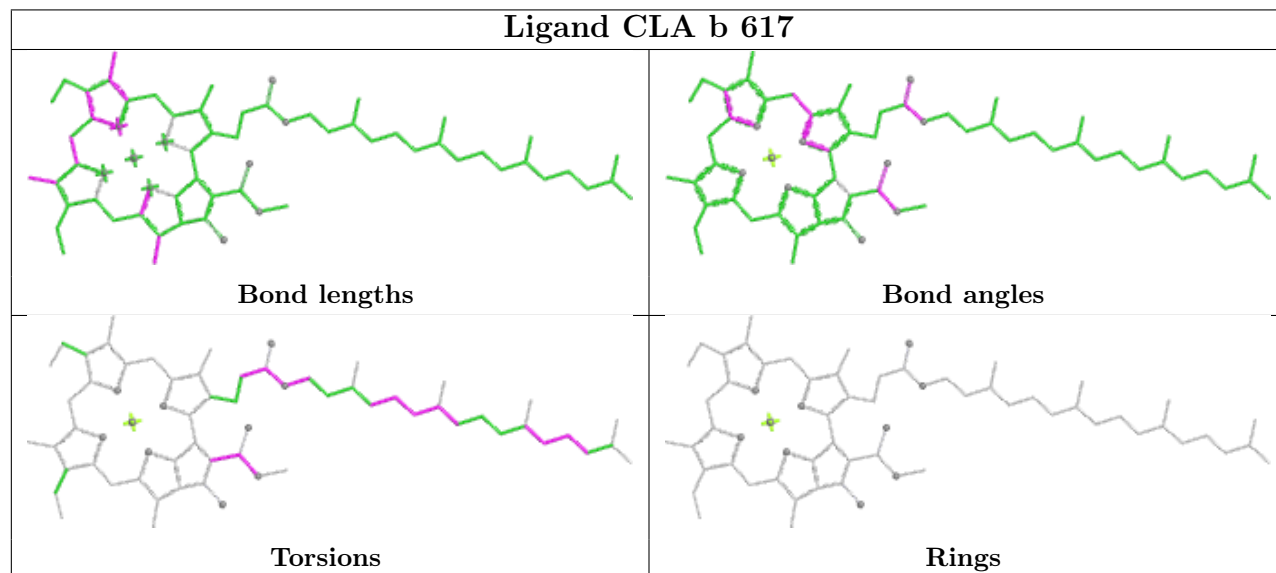
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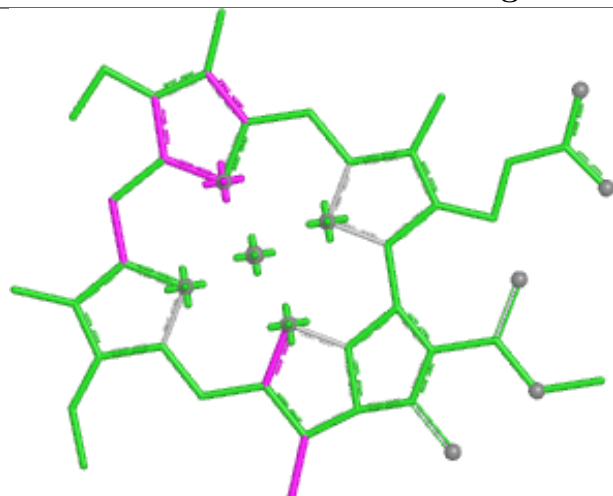
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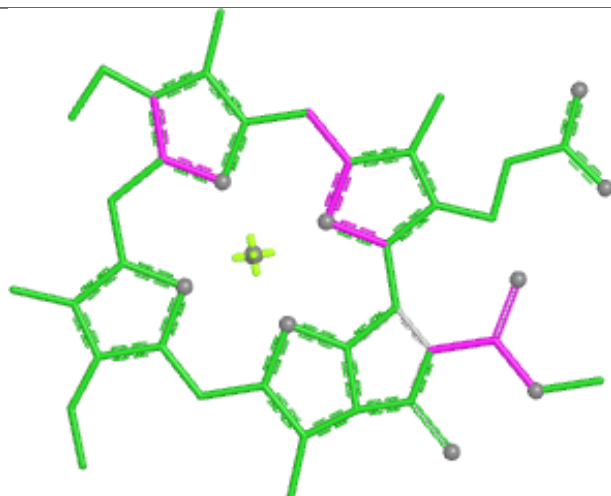


Ligand CLA 7 304**Ligand CLA b 617**

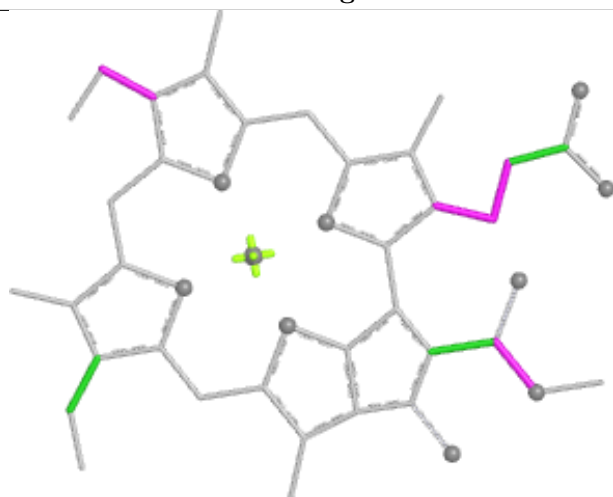
Ligand CLA AB 309



Bond lengths



Bond angles

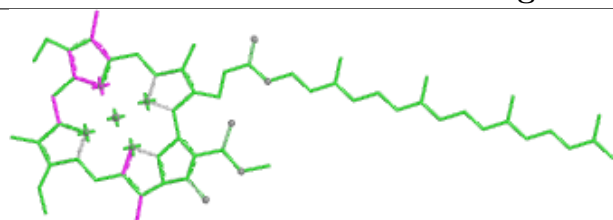


Torsions

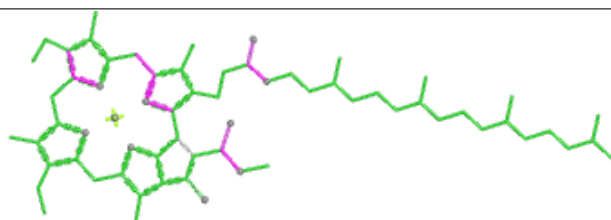


Rings

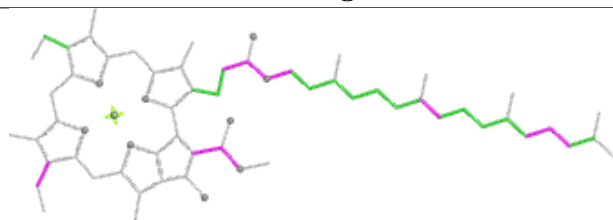
Ligand CLA v 610



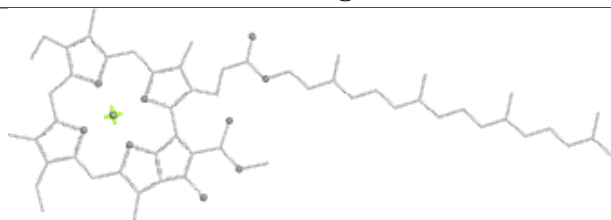
Bond lengths



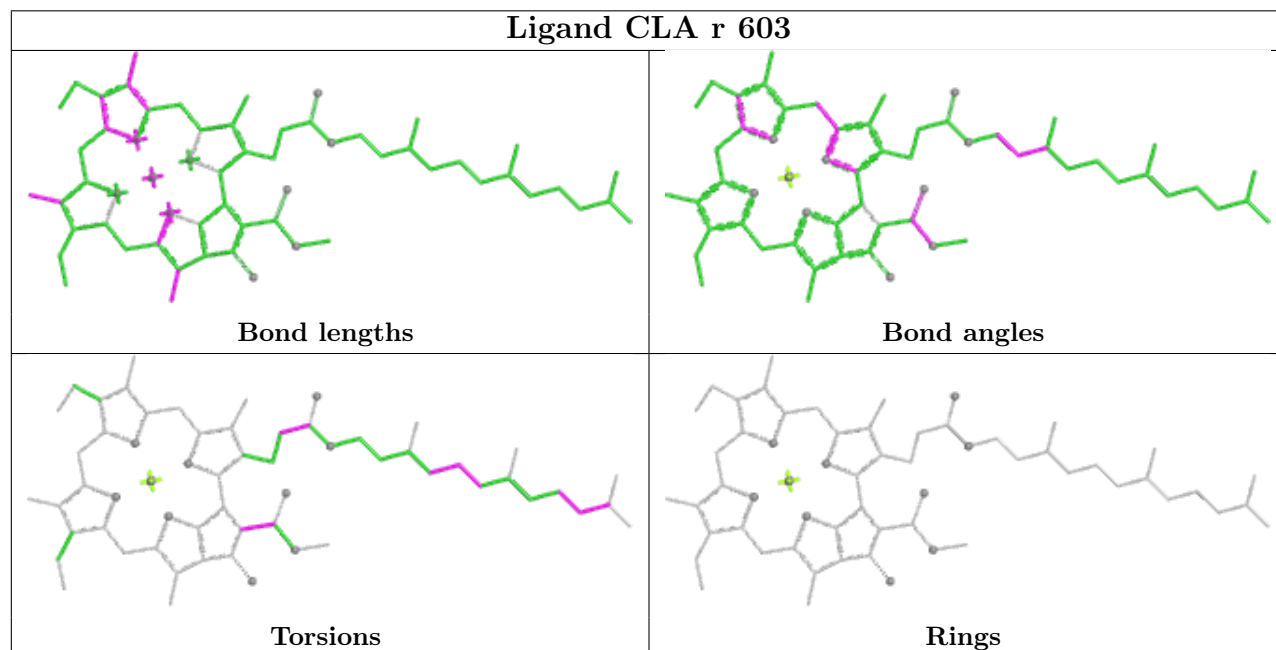
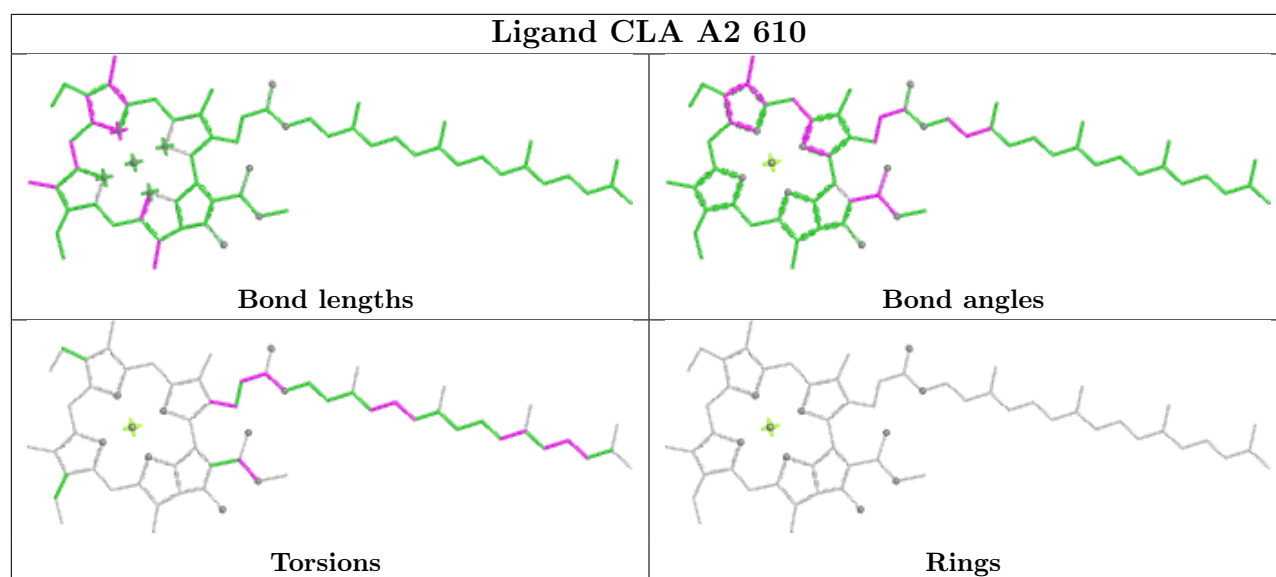
Bond angles

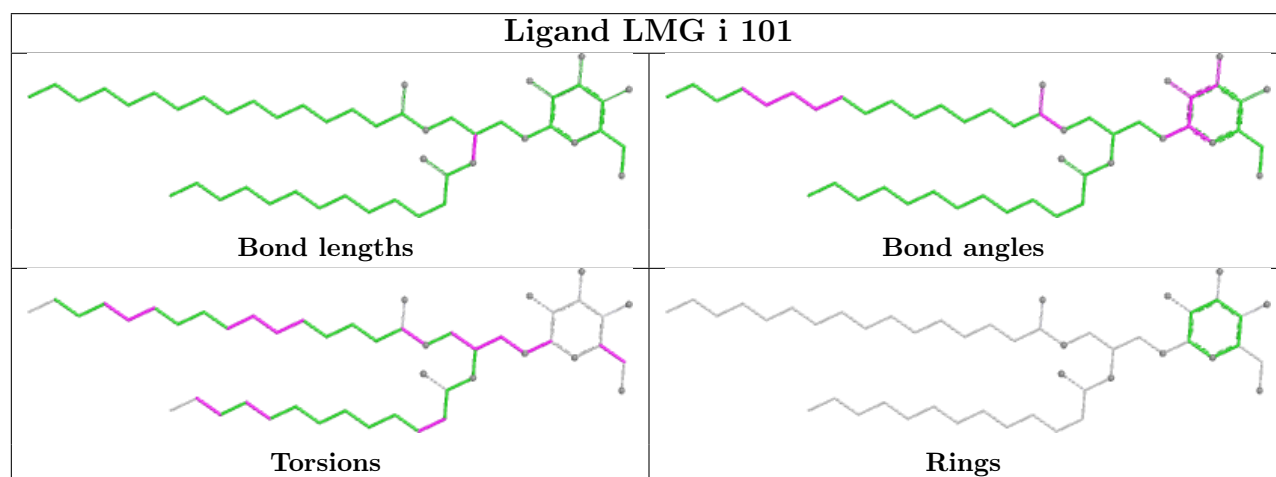
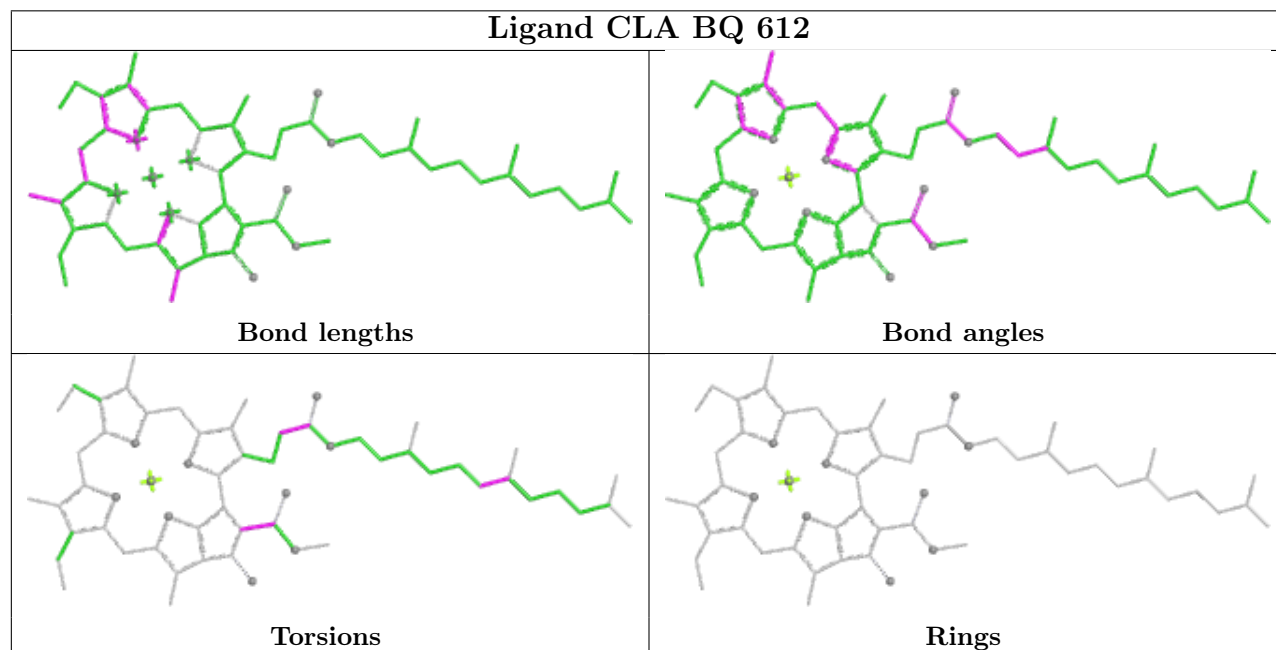
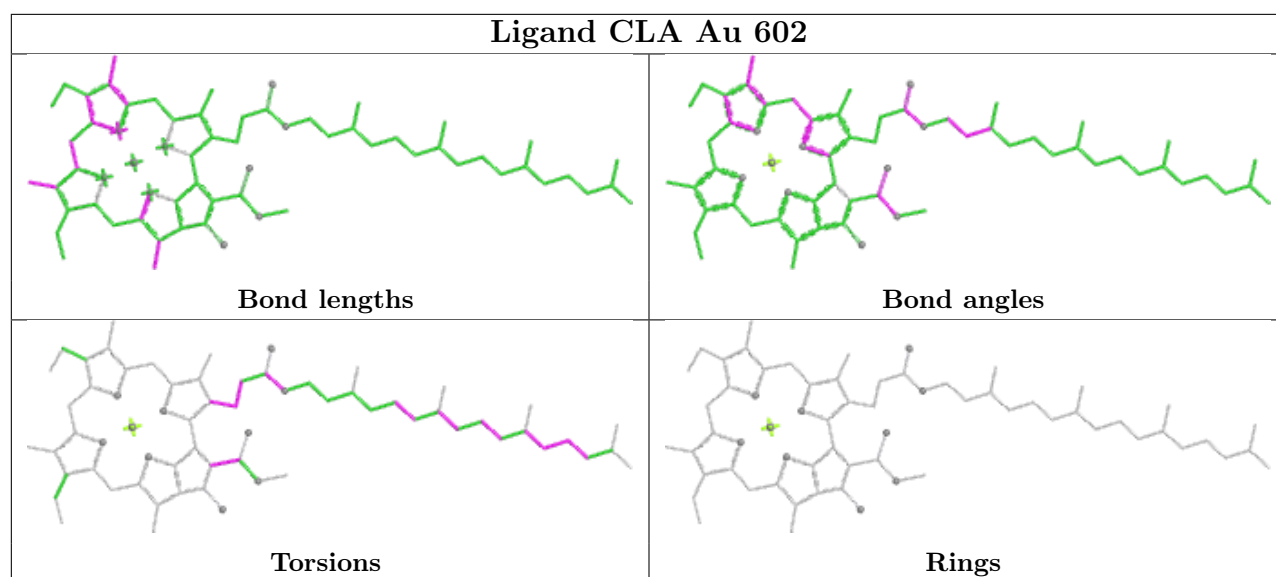


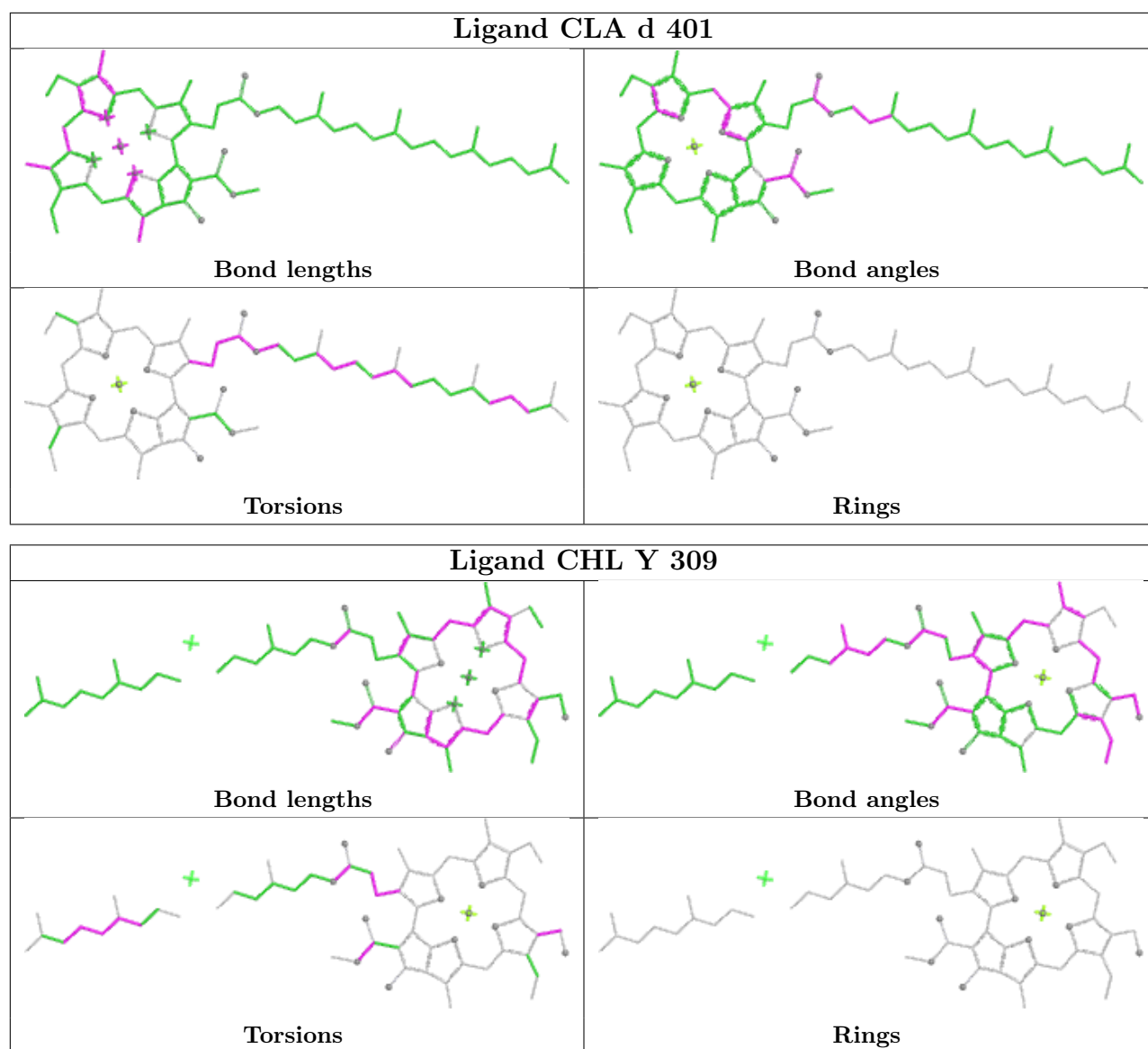
Torsions



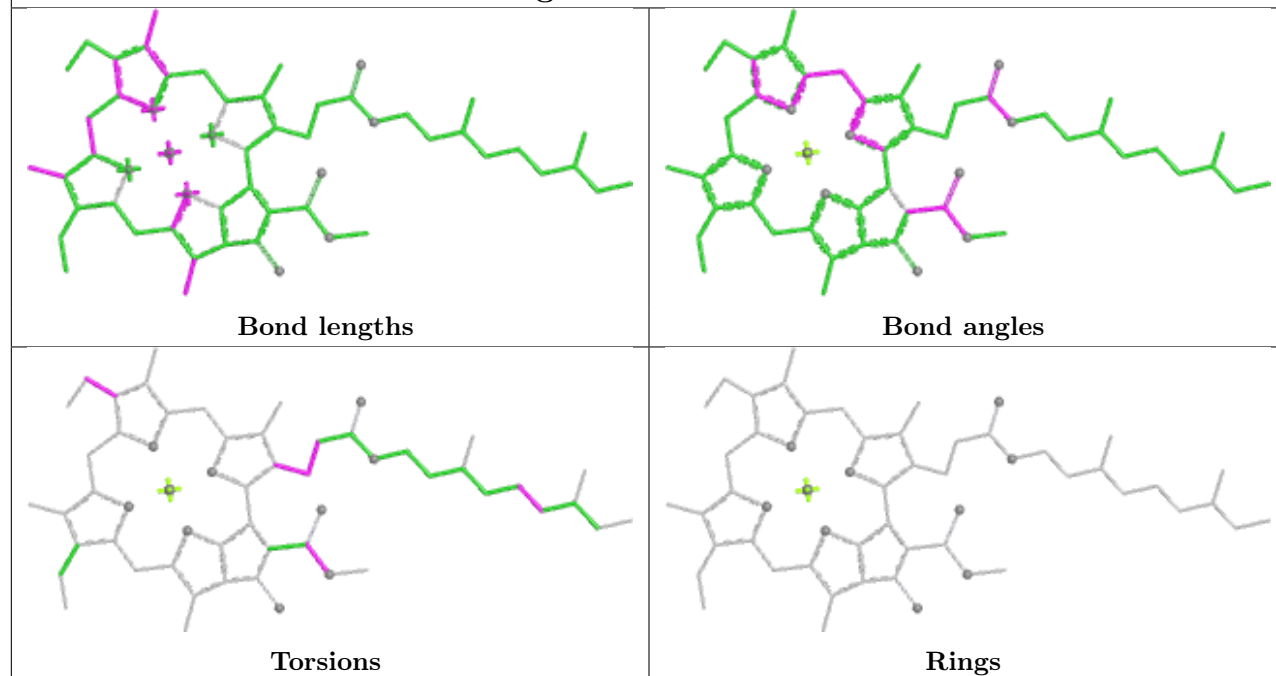
Rings



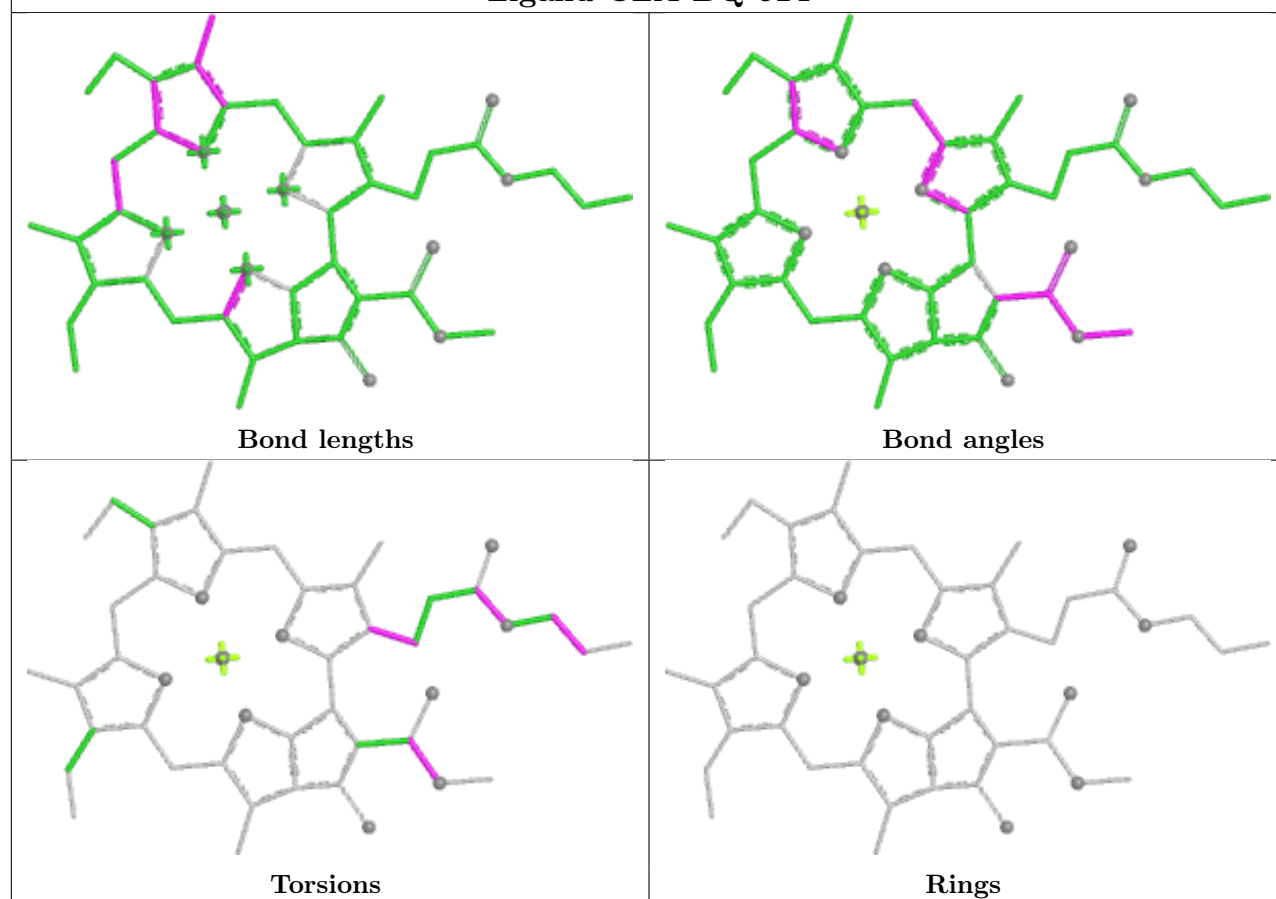


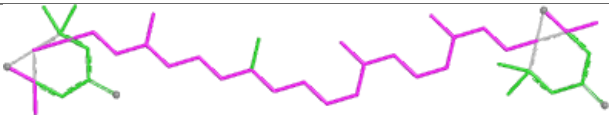
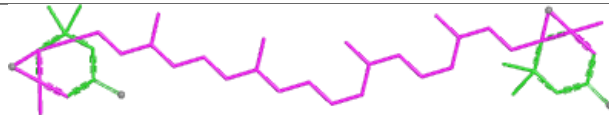
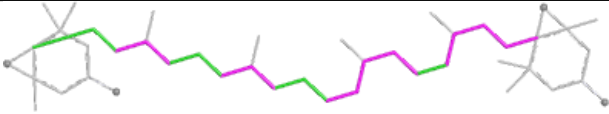
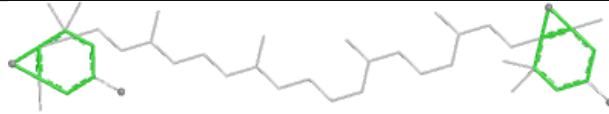




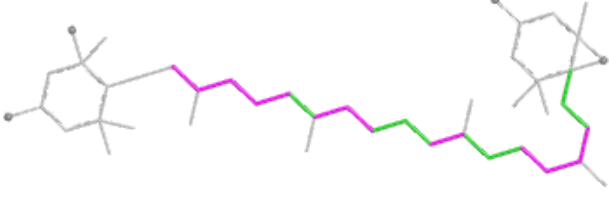
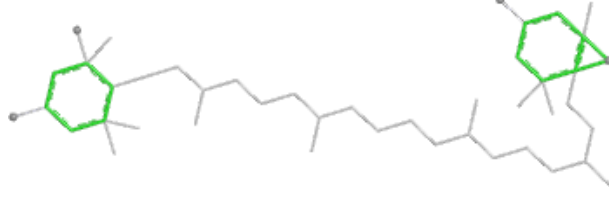
Ligand CLA 9 610

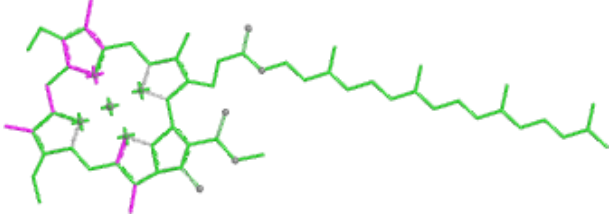
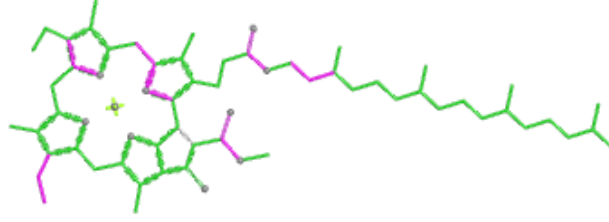
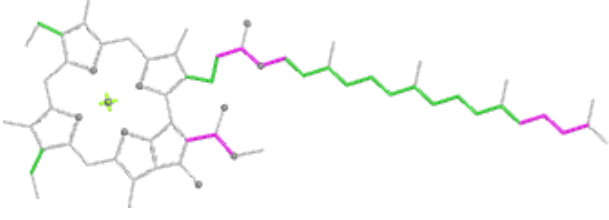
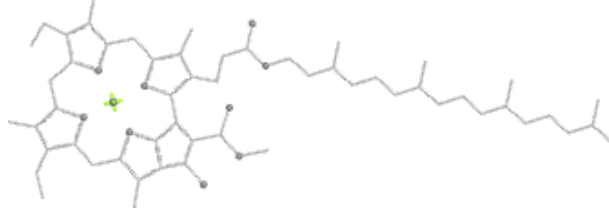


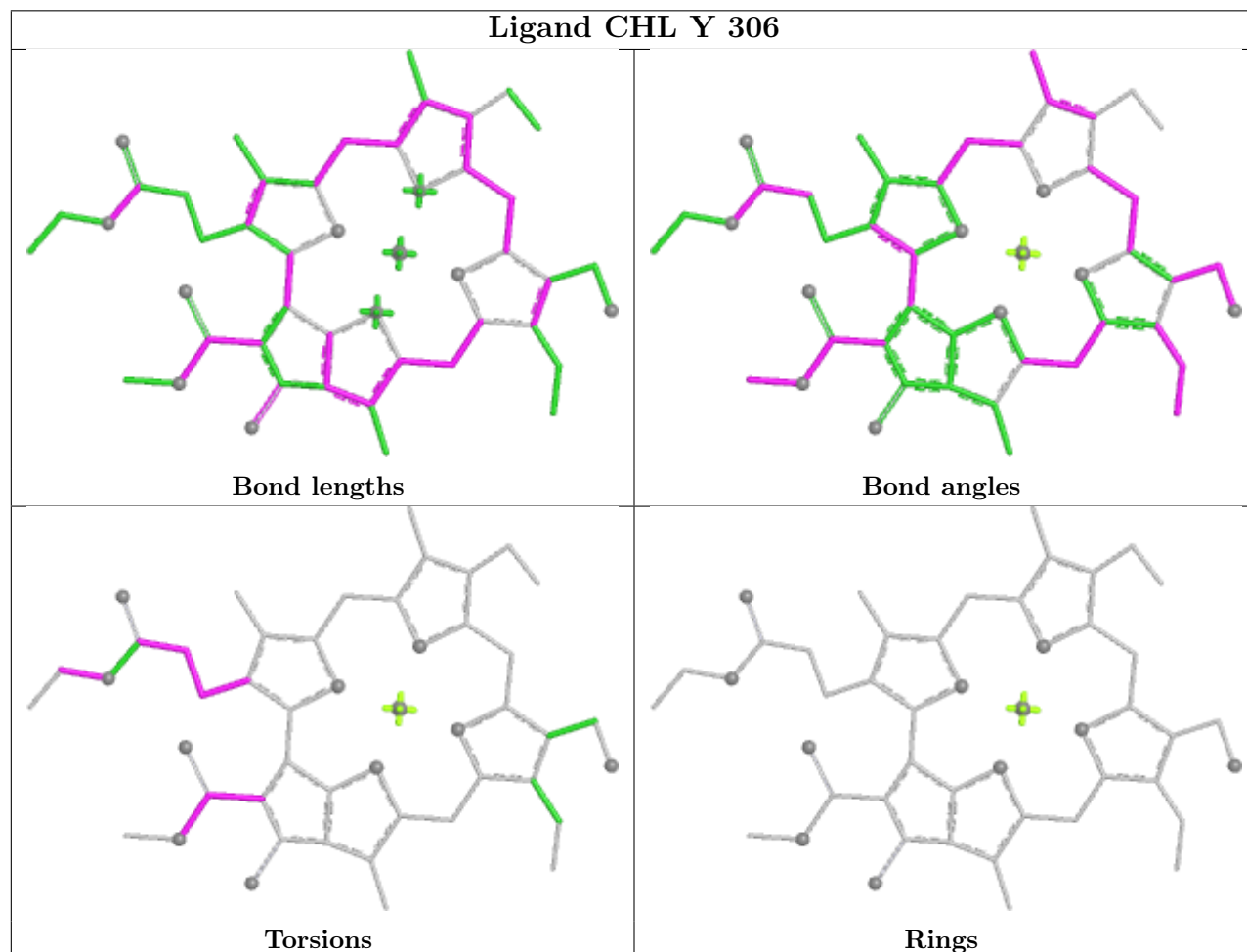
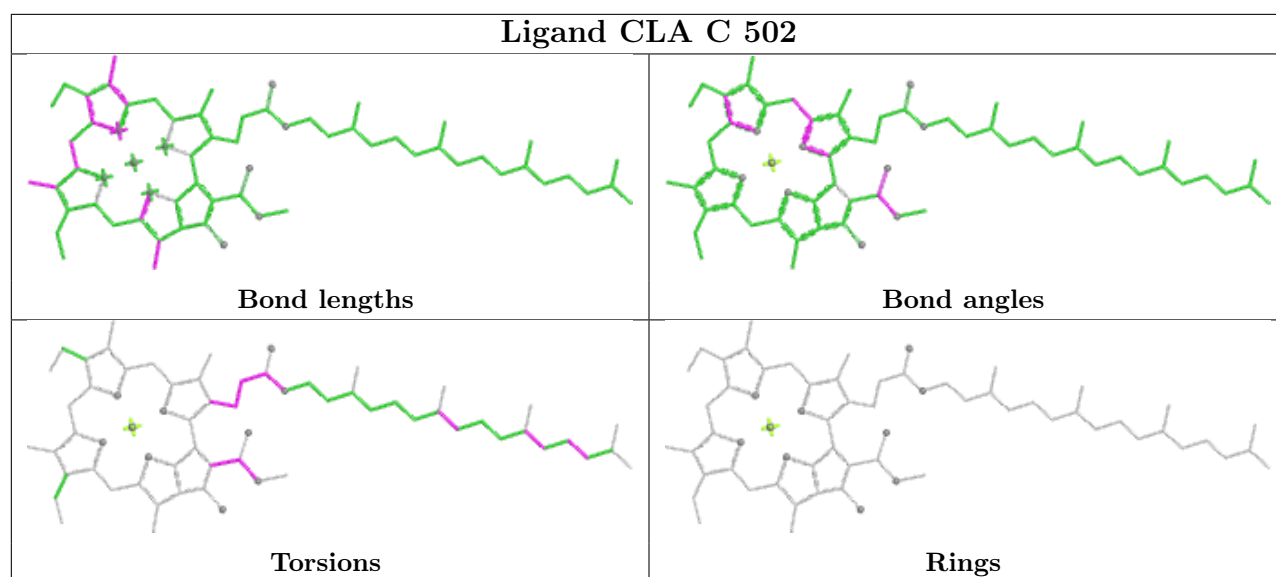
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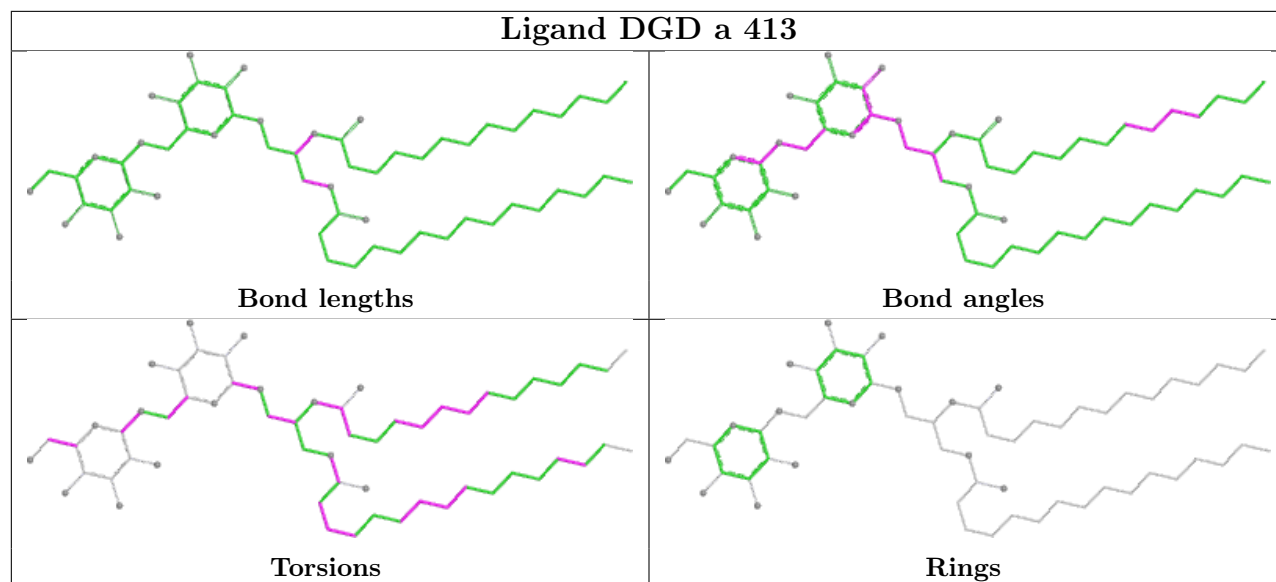
Ligand XAT Au 619	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand NEX s 616	
	
Bond lengths	Bond angles
	
Torsions	Rings

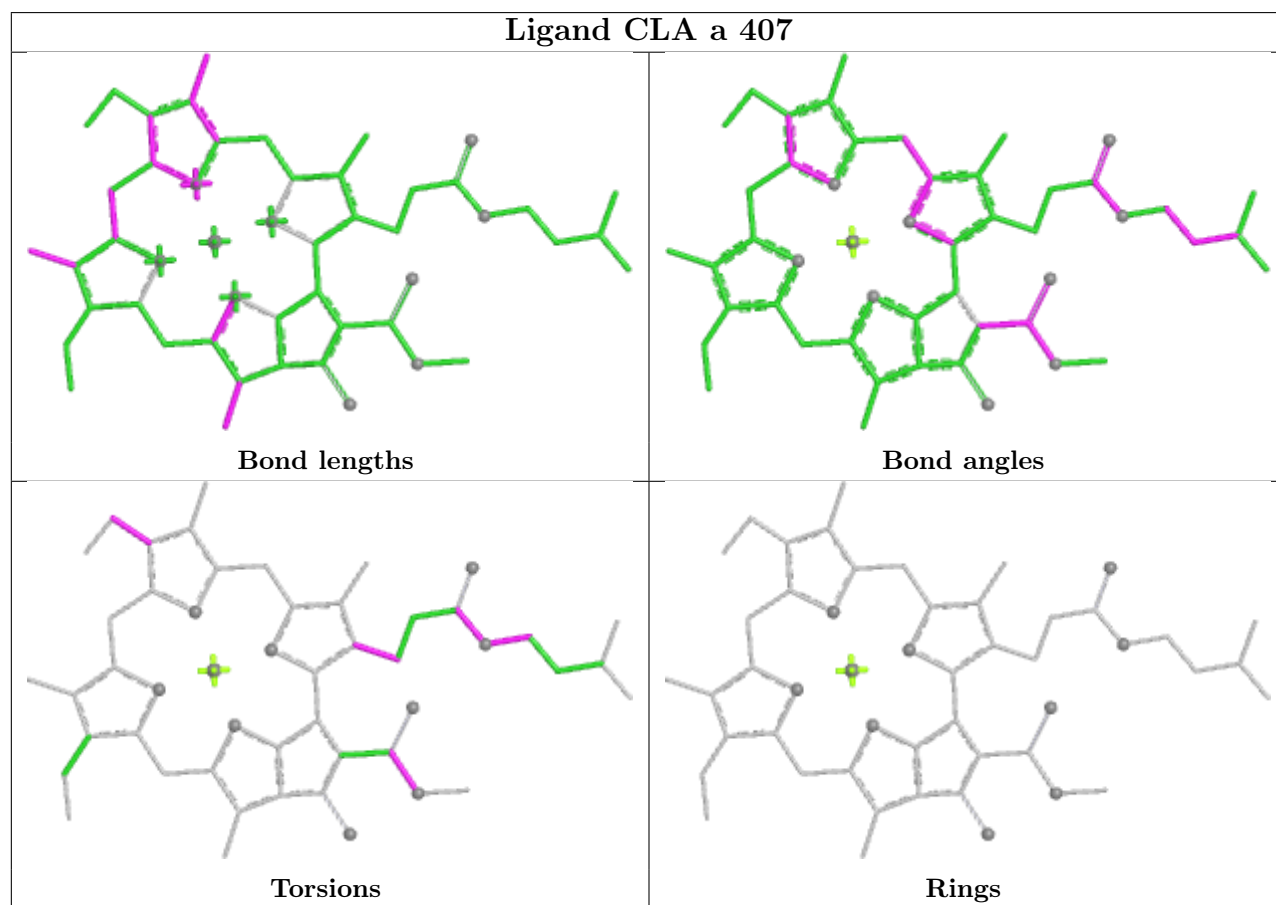
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Bond lengths	Bond angles
	
Torsions	Rings



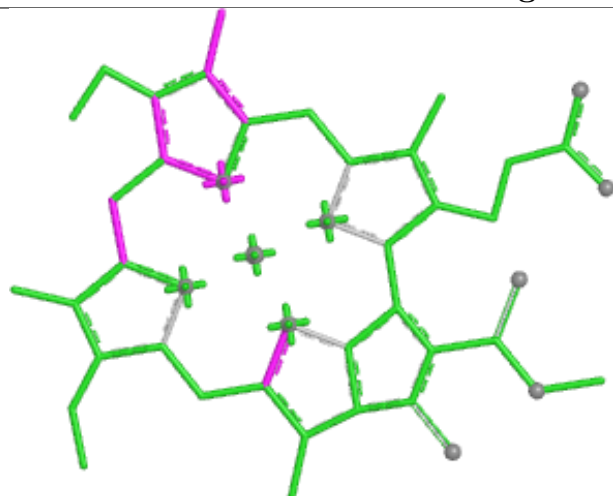
Ligand DGD a 413



Ligand CLA a 407



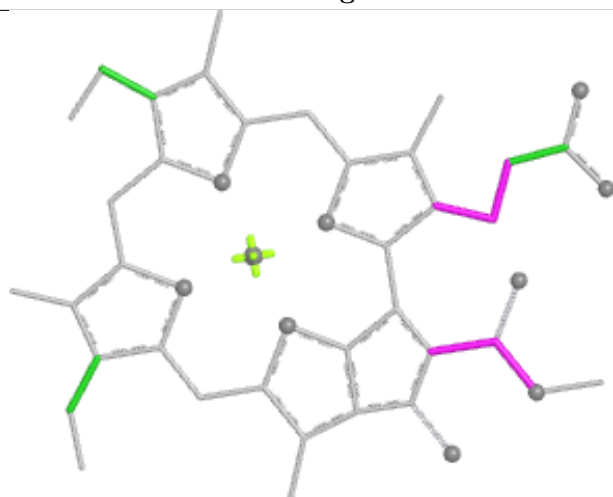
Ligand CLA 5 614



Bond lengths



Bond angles

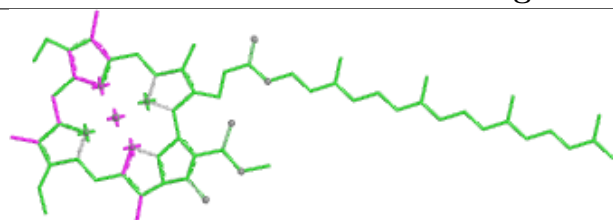


Torsions

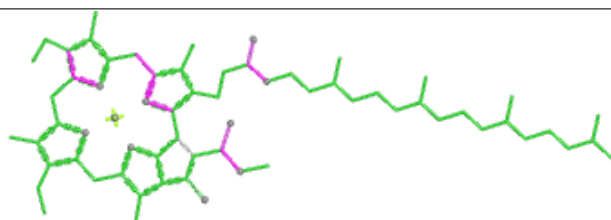


Rings

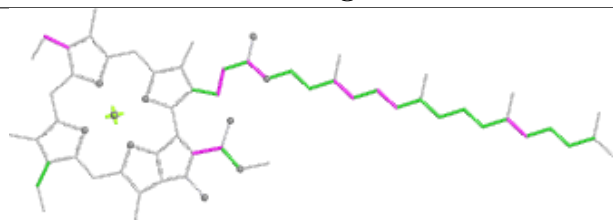
Ligand CLA Y 304



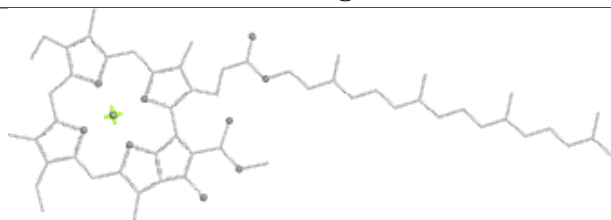
Bond lengths



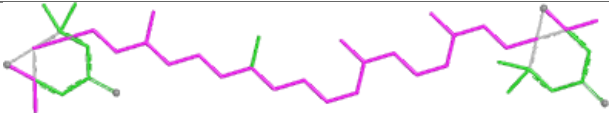
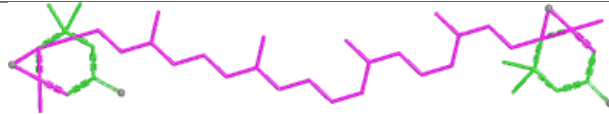
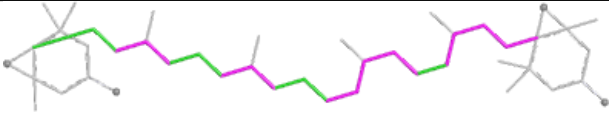
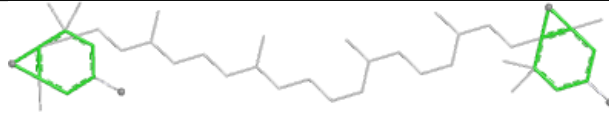
Bond angles

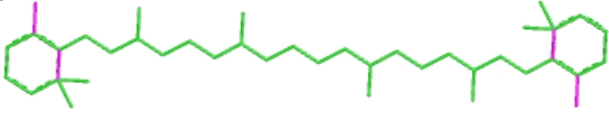
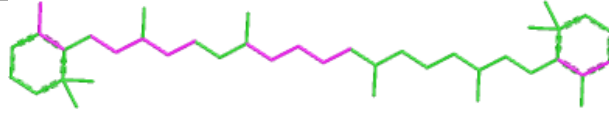
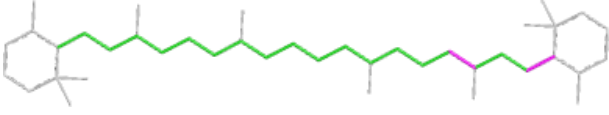
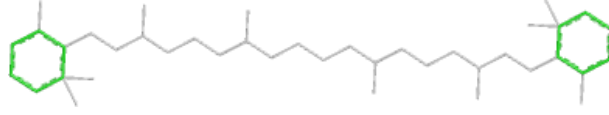


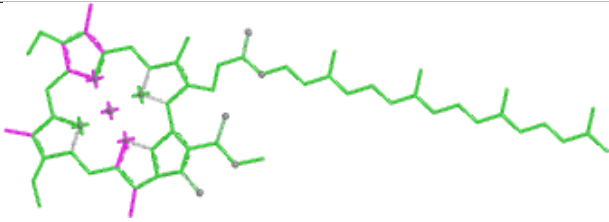
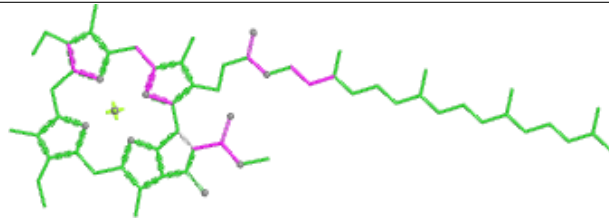
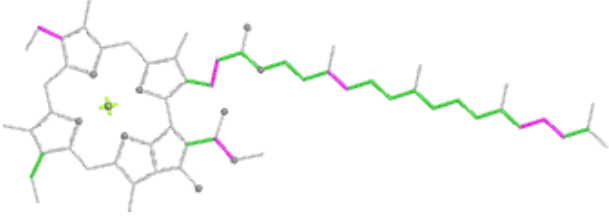
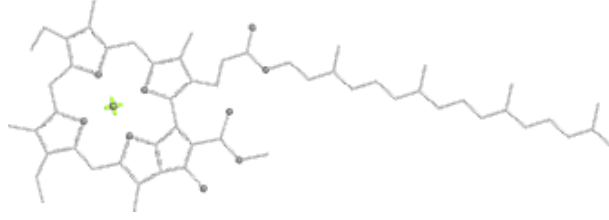
Torsions

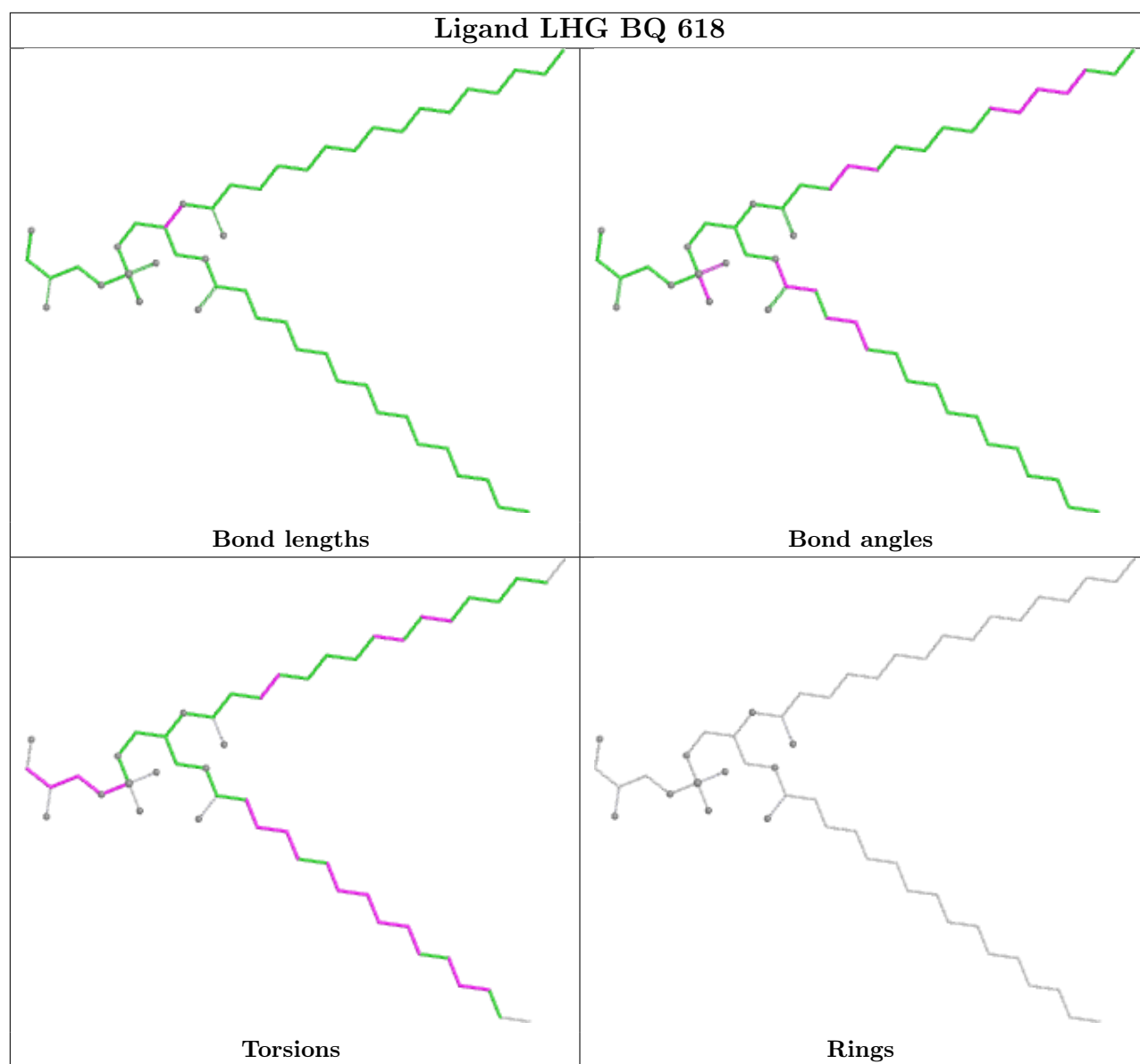


Rings

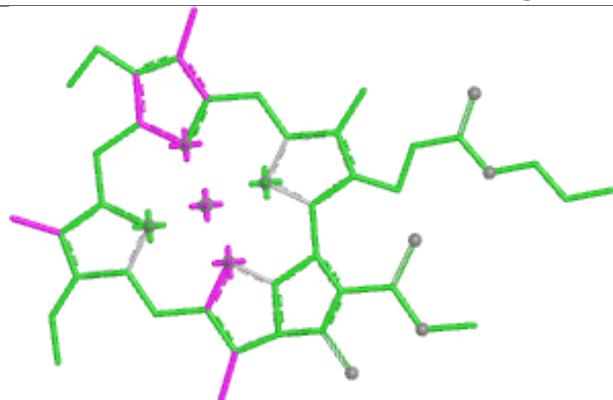
Ligand XAT G 619	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand BCR C 515	
	
Bond lengths	Bond angles
	
Torsions	Rings

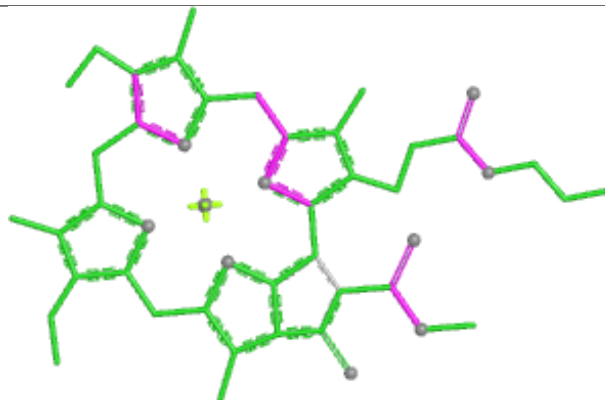
Ligand CLA R 404	
	
Bond lengths	Bond angles
	
Torsions	Rings



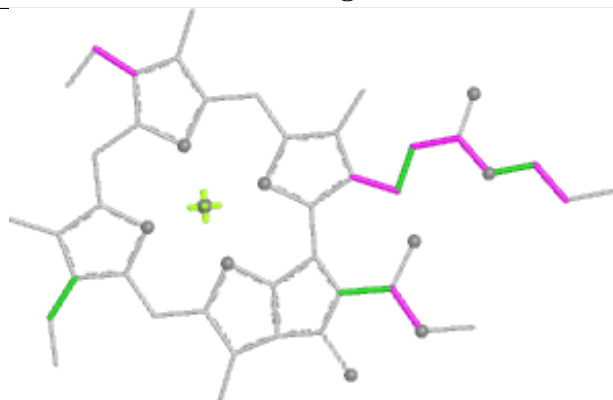
Ligand CLA 6 614



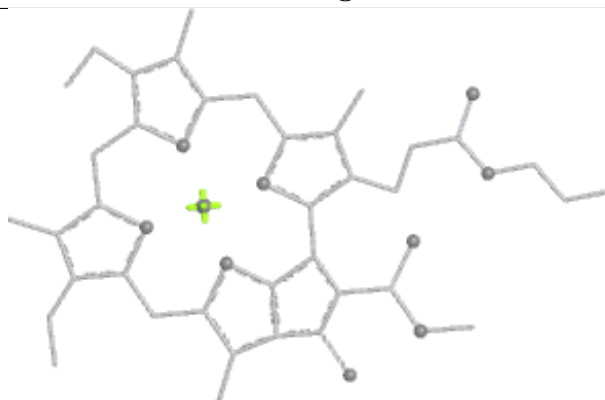
Bond lengths



Bond angles

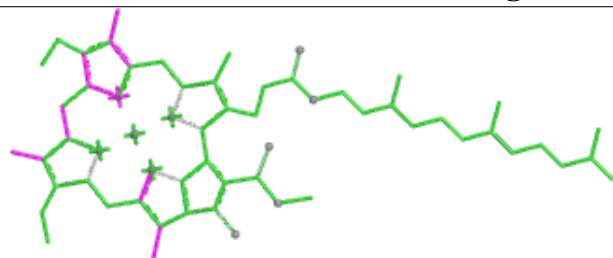


Torsions

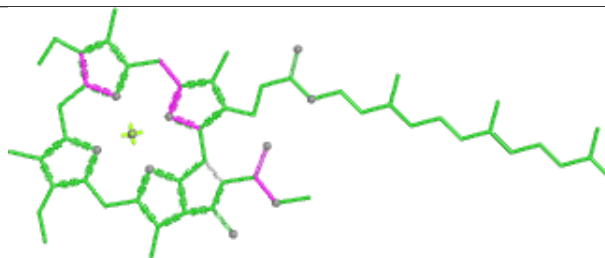


Rings

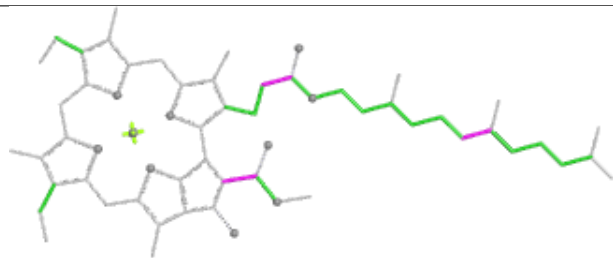
Ligand CLA A2 612



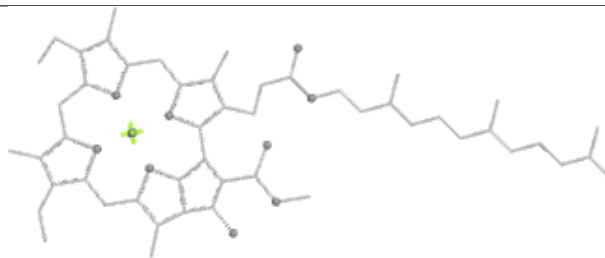
Bond lengths



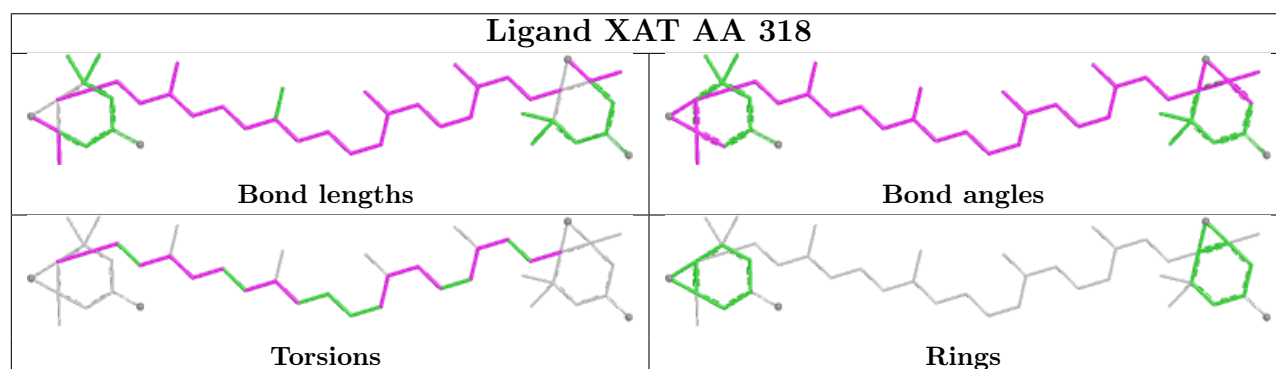
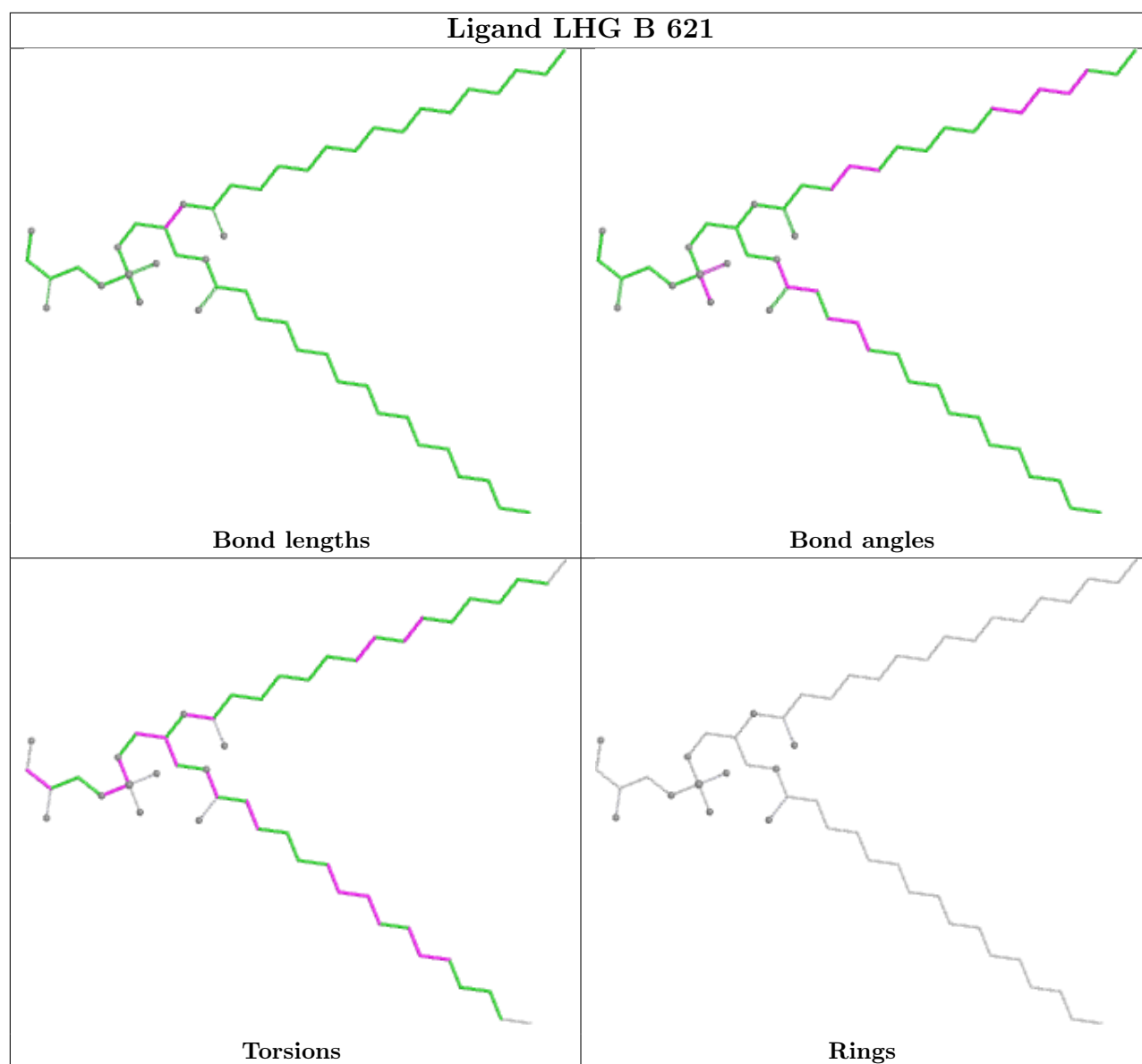
Bond angles

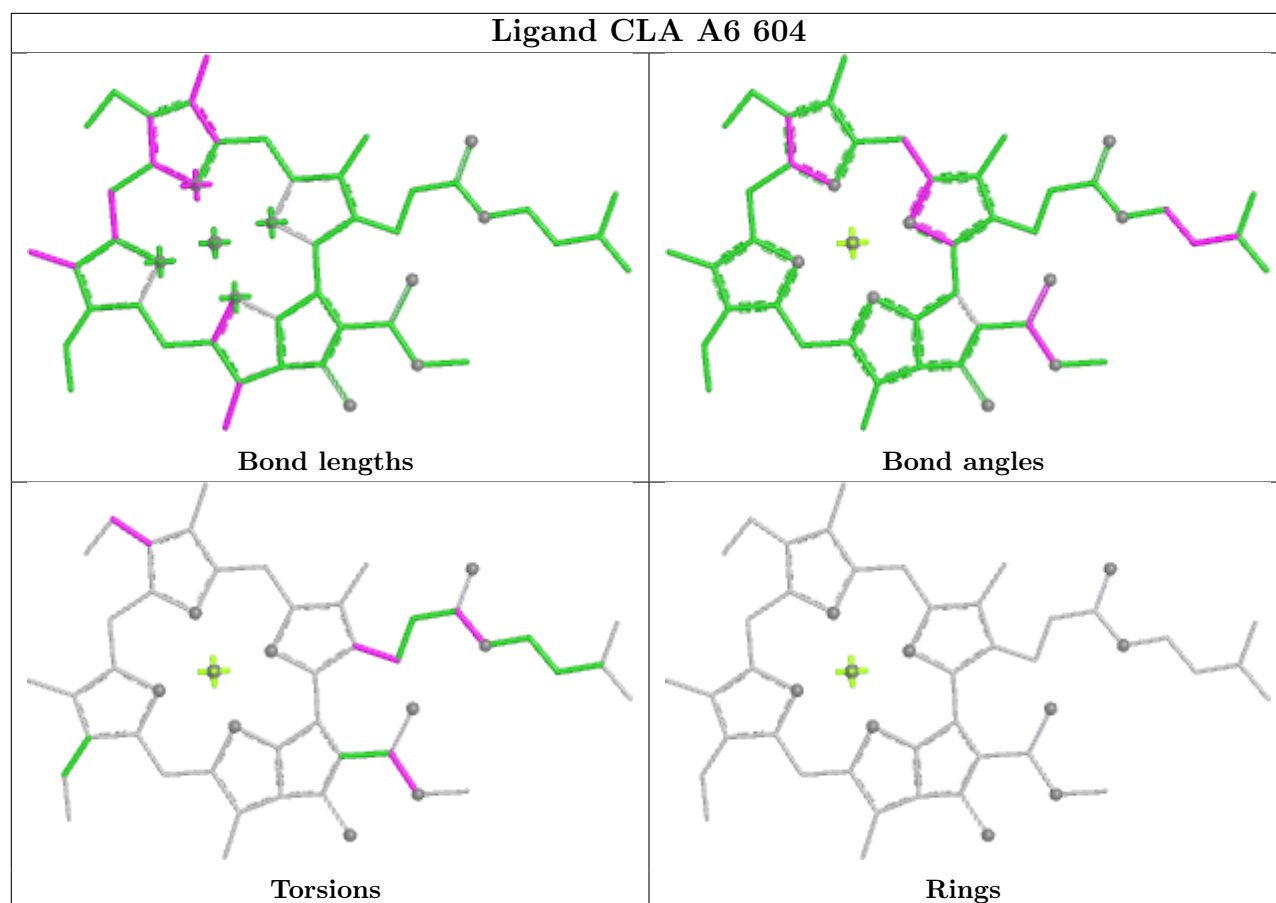
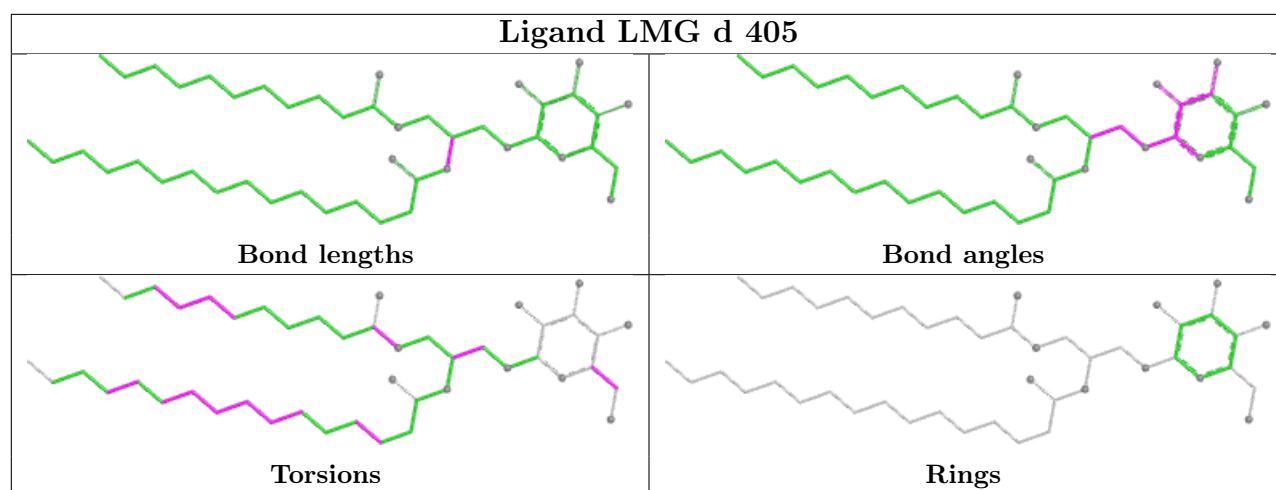


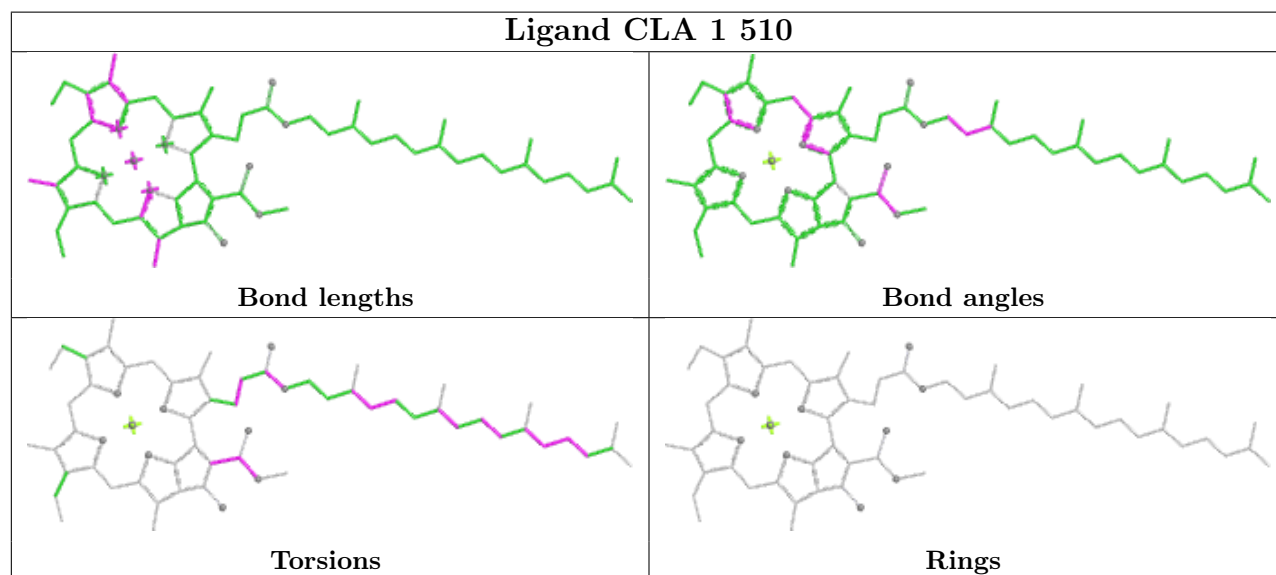
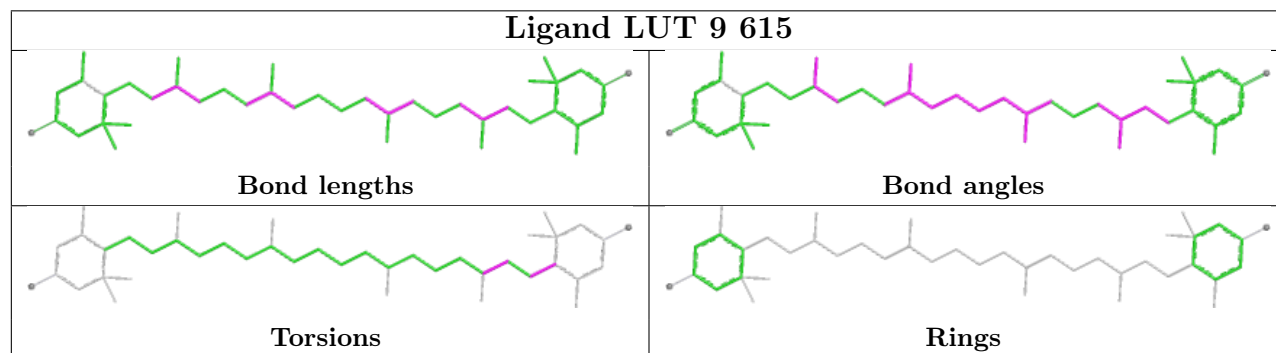
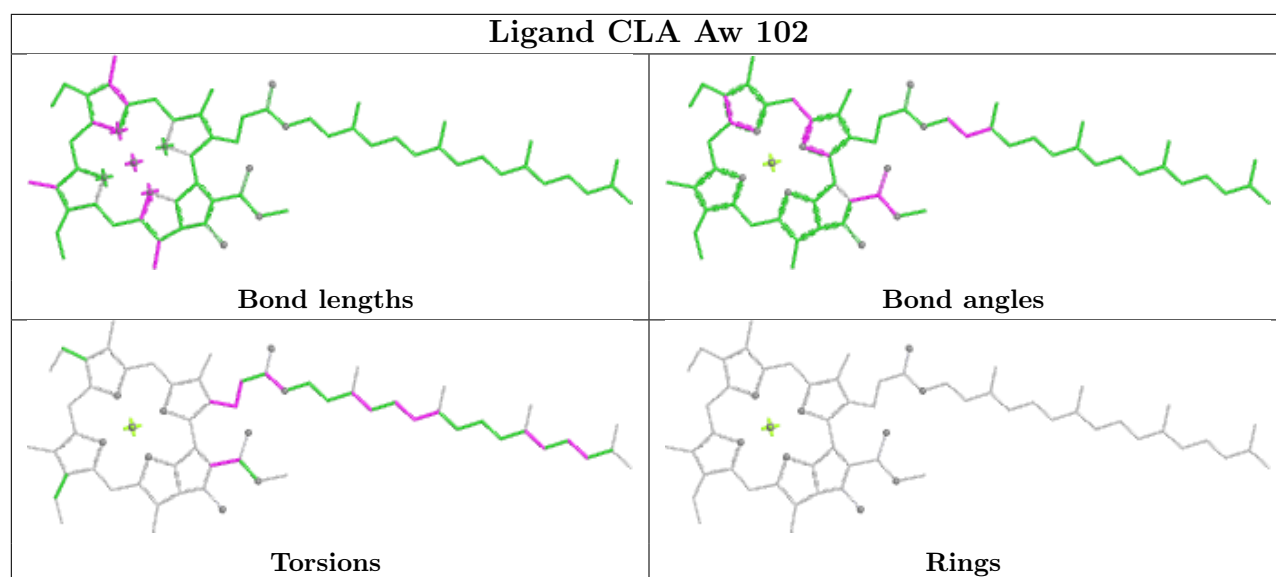
Torsions



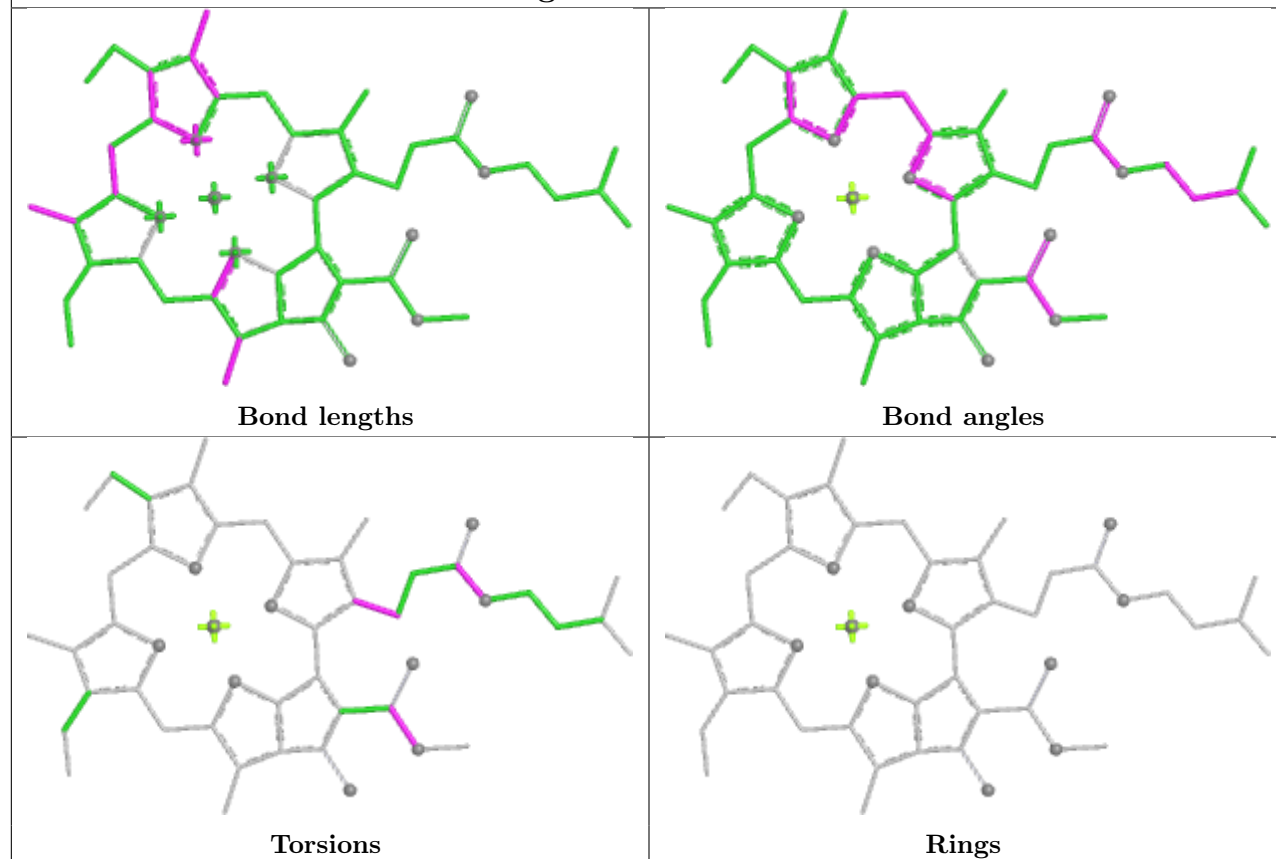
Rings



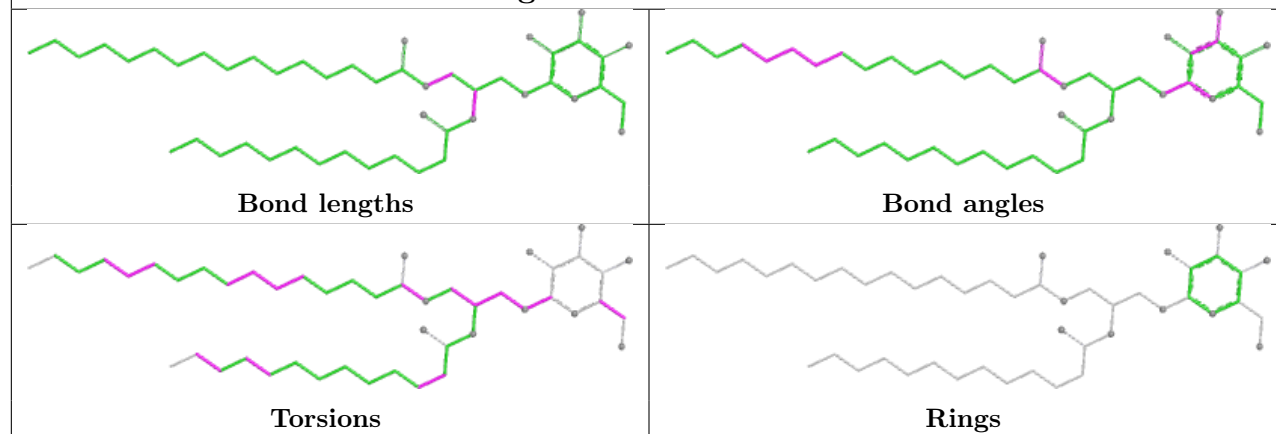


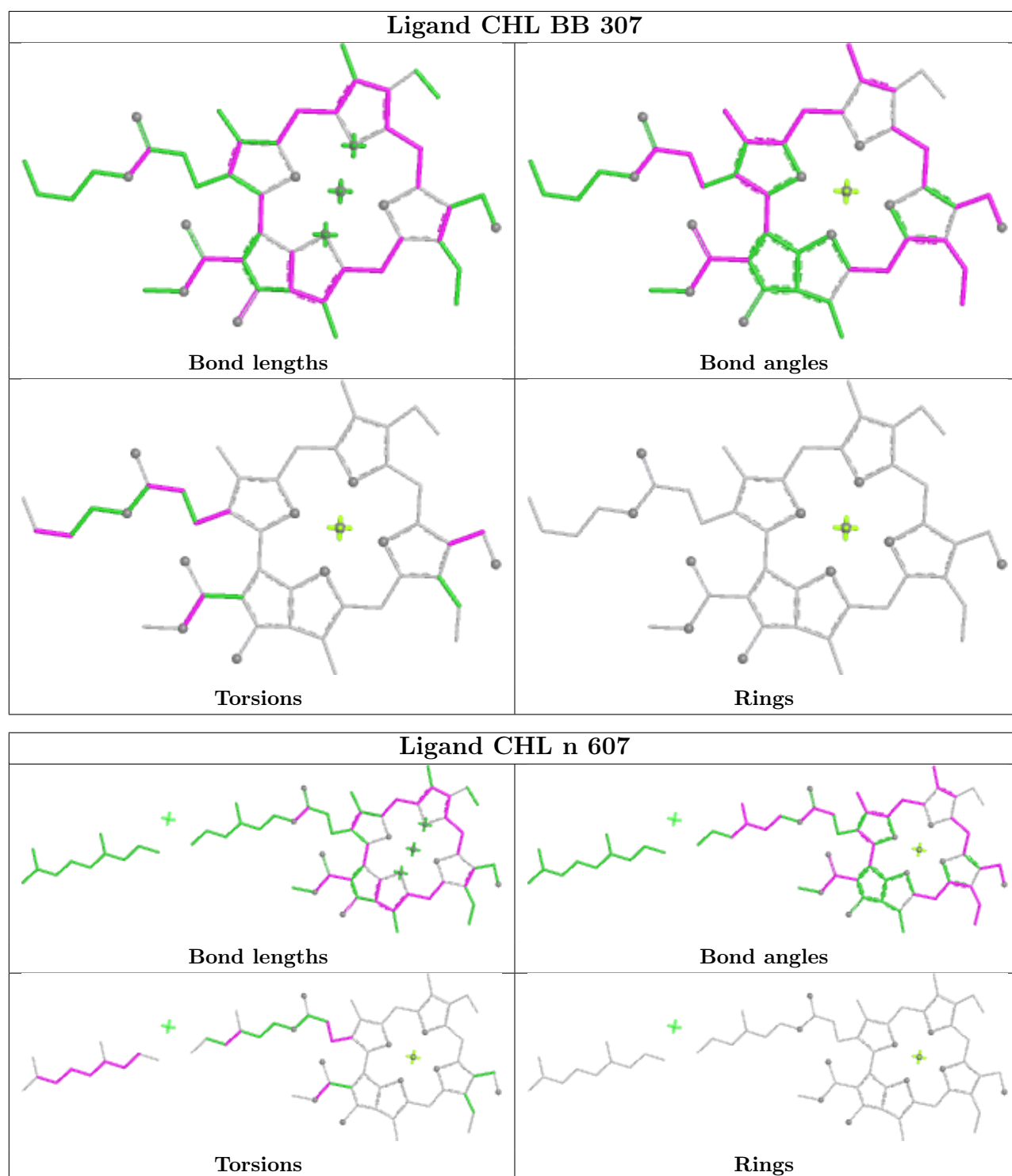


Ligand CLA s 604

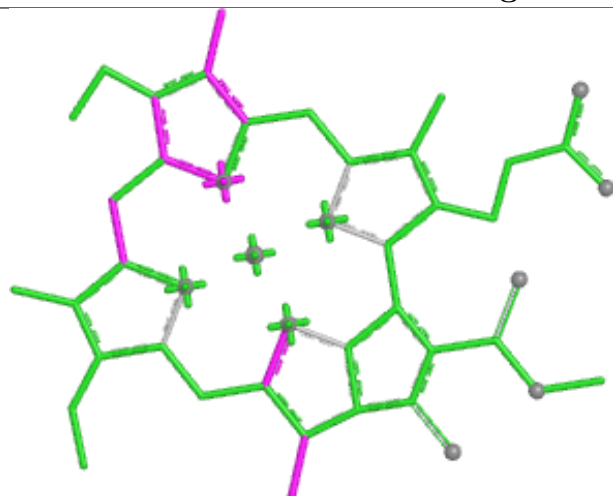


Ligand LMG A0 201





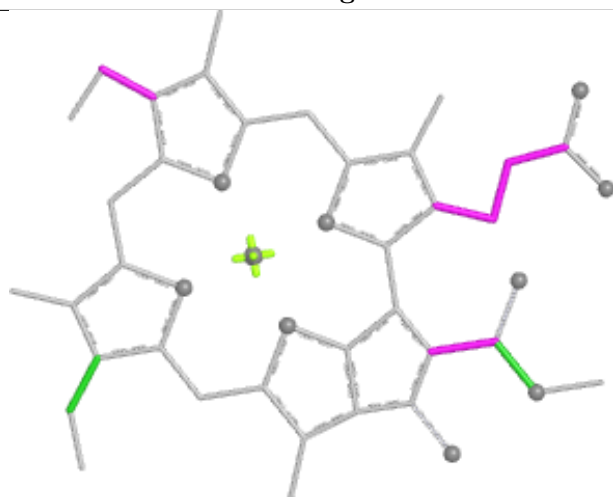
Ligand CLA AA 312



Bond lengths



Bond angles

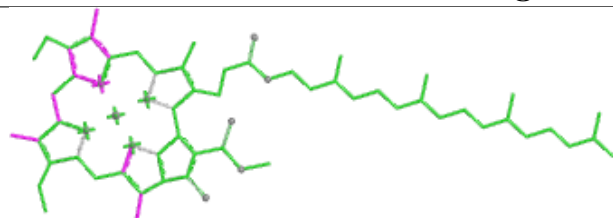


Torsions

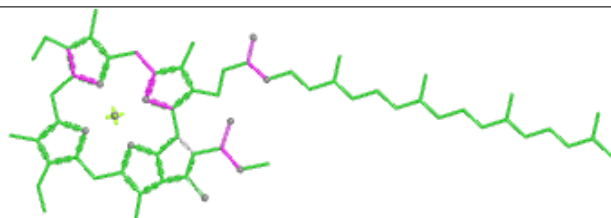


Rings

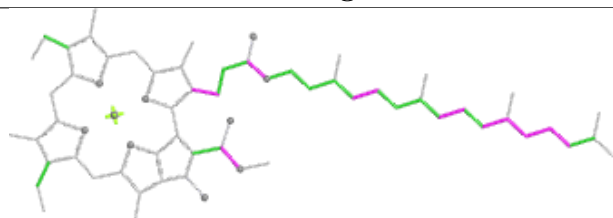
Ligand CLA C 513



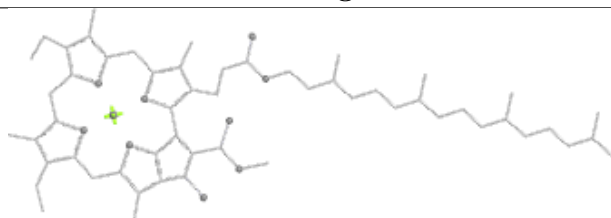
Bond lengths



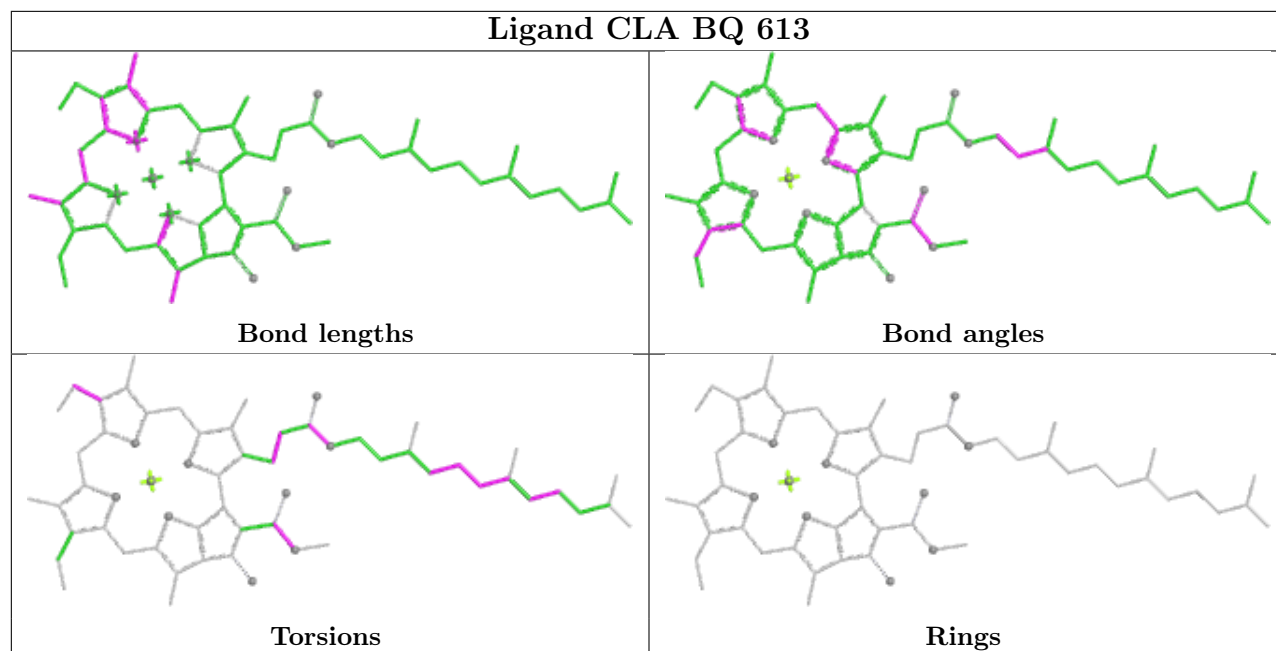
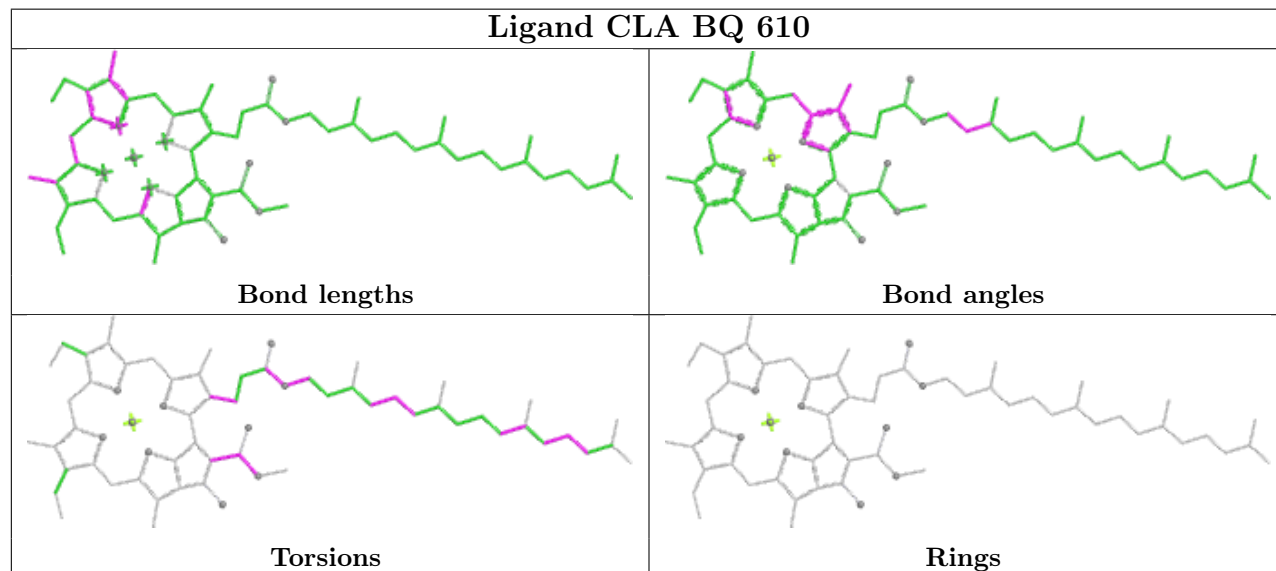
Bond angles

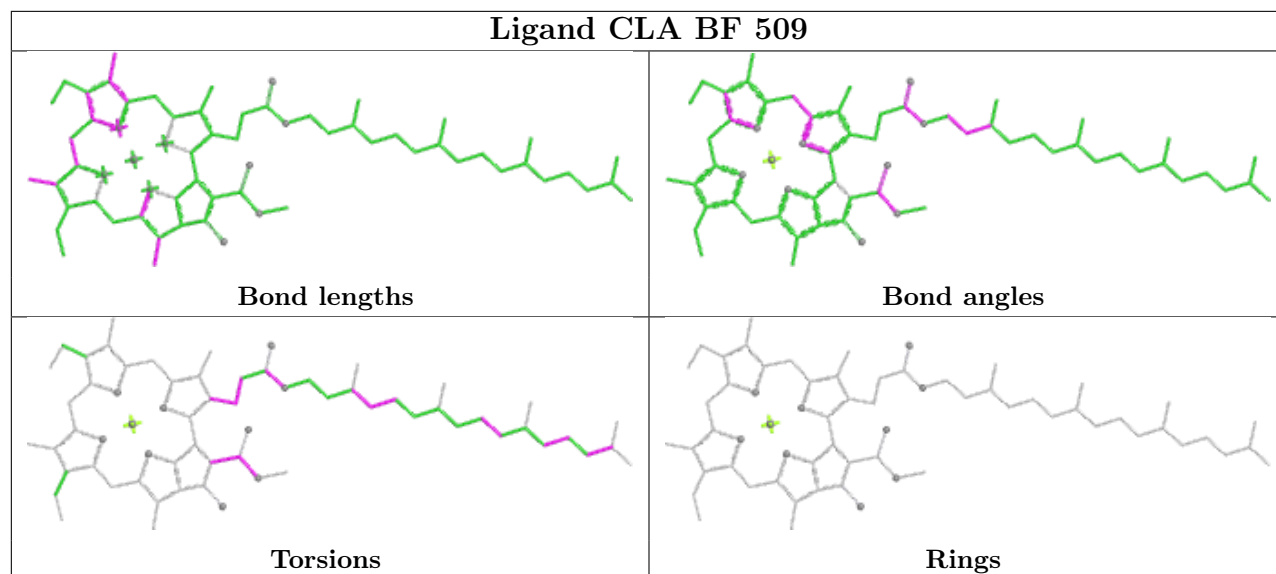
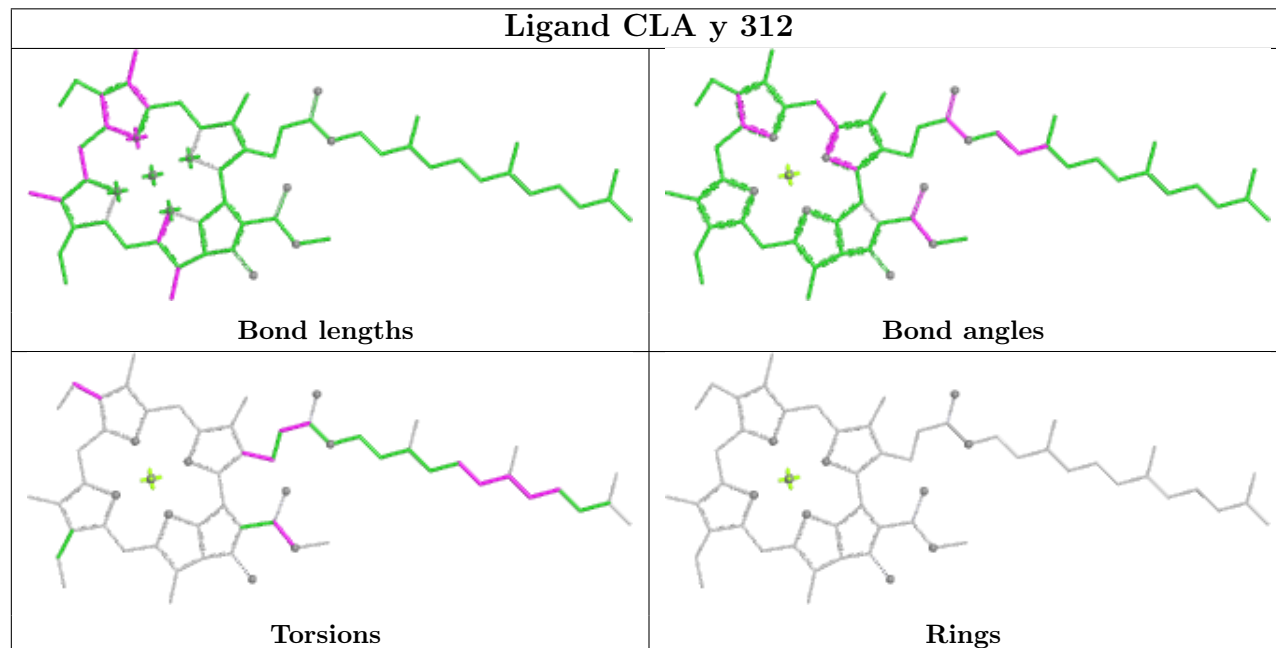


Torsions

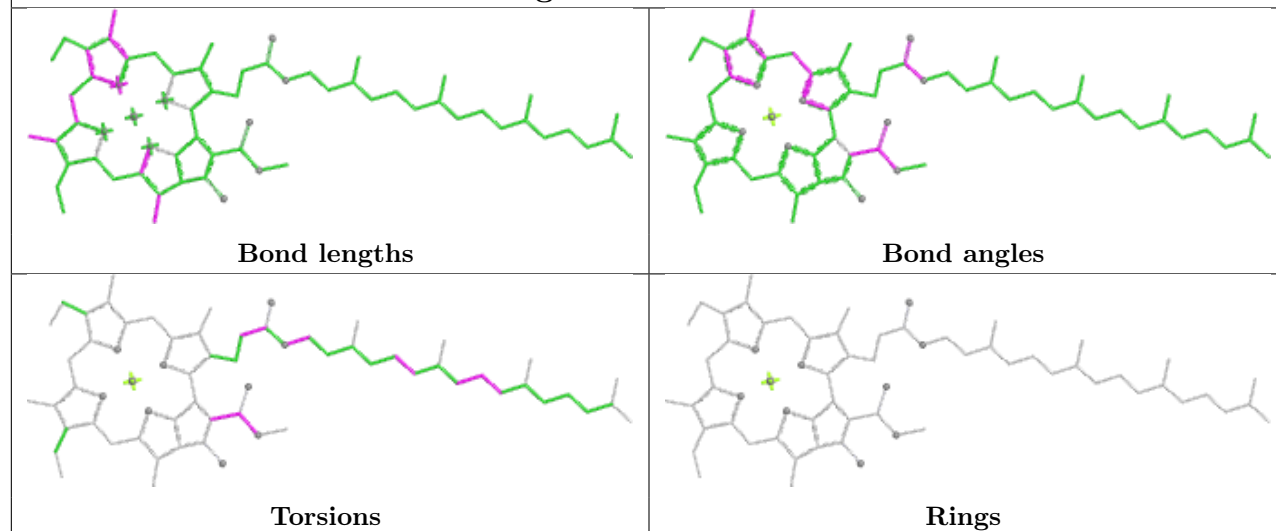


Rings

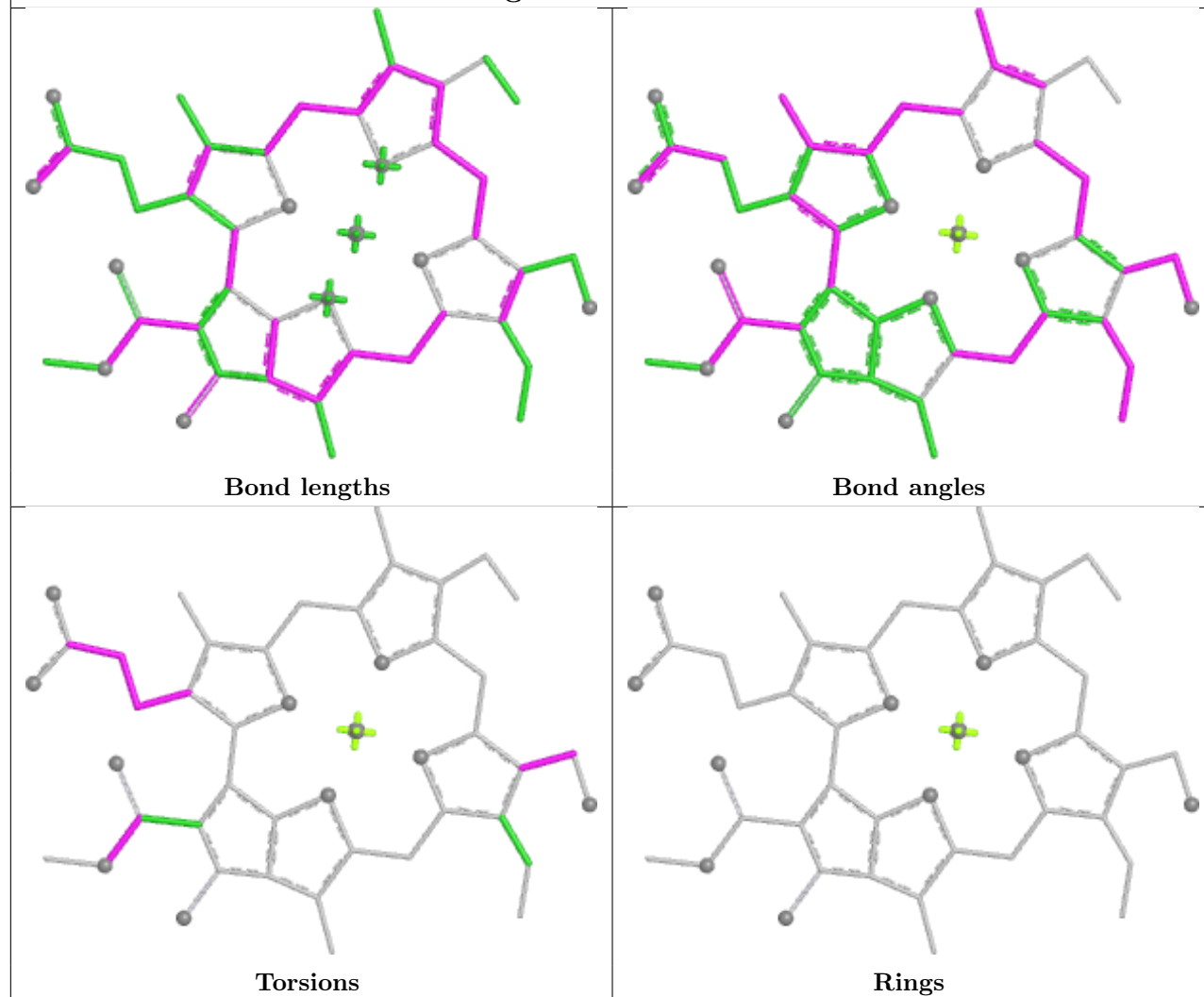
Ligand CLA BQ 613**Ligand CLA BQ 610**

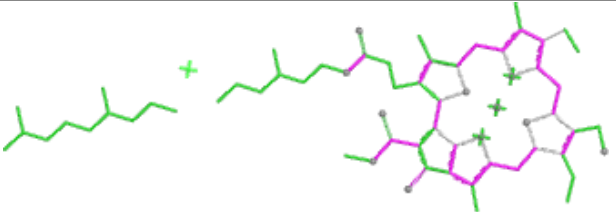
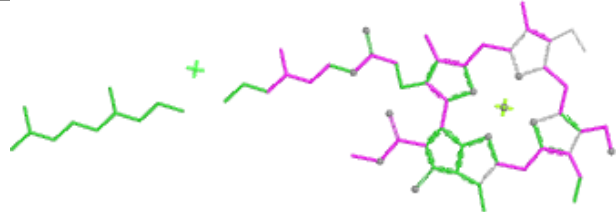
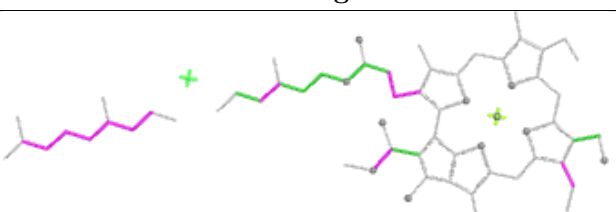
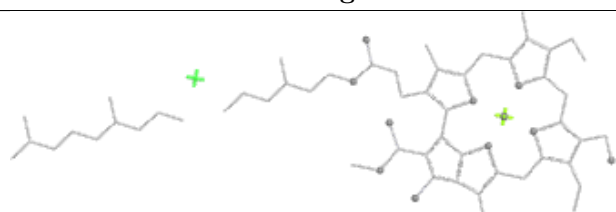
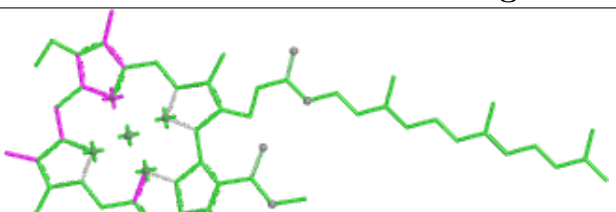
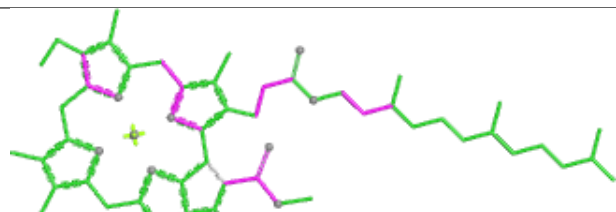
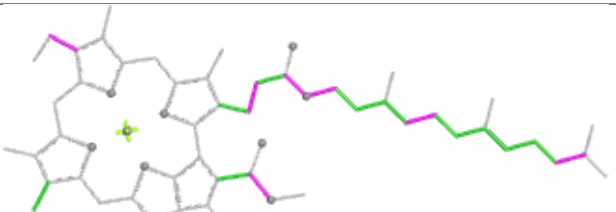
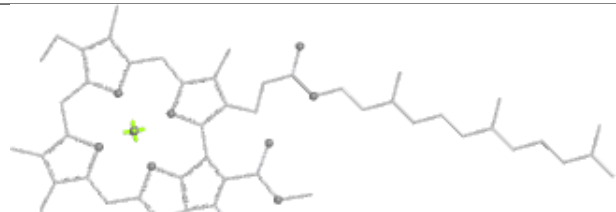
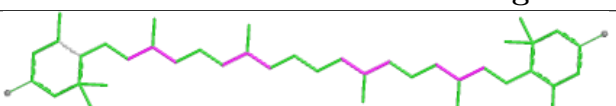
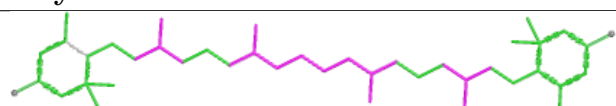
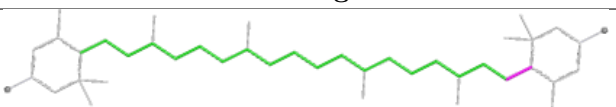
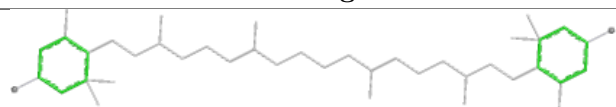
Ligand CLA BF 509**Ligand CLA y 312**

Ligand CLA v 611

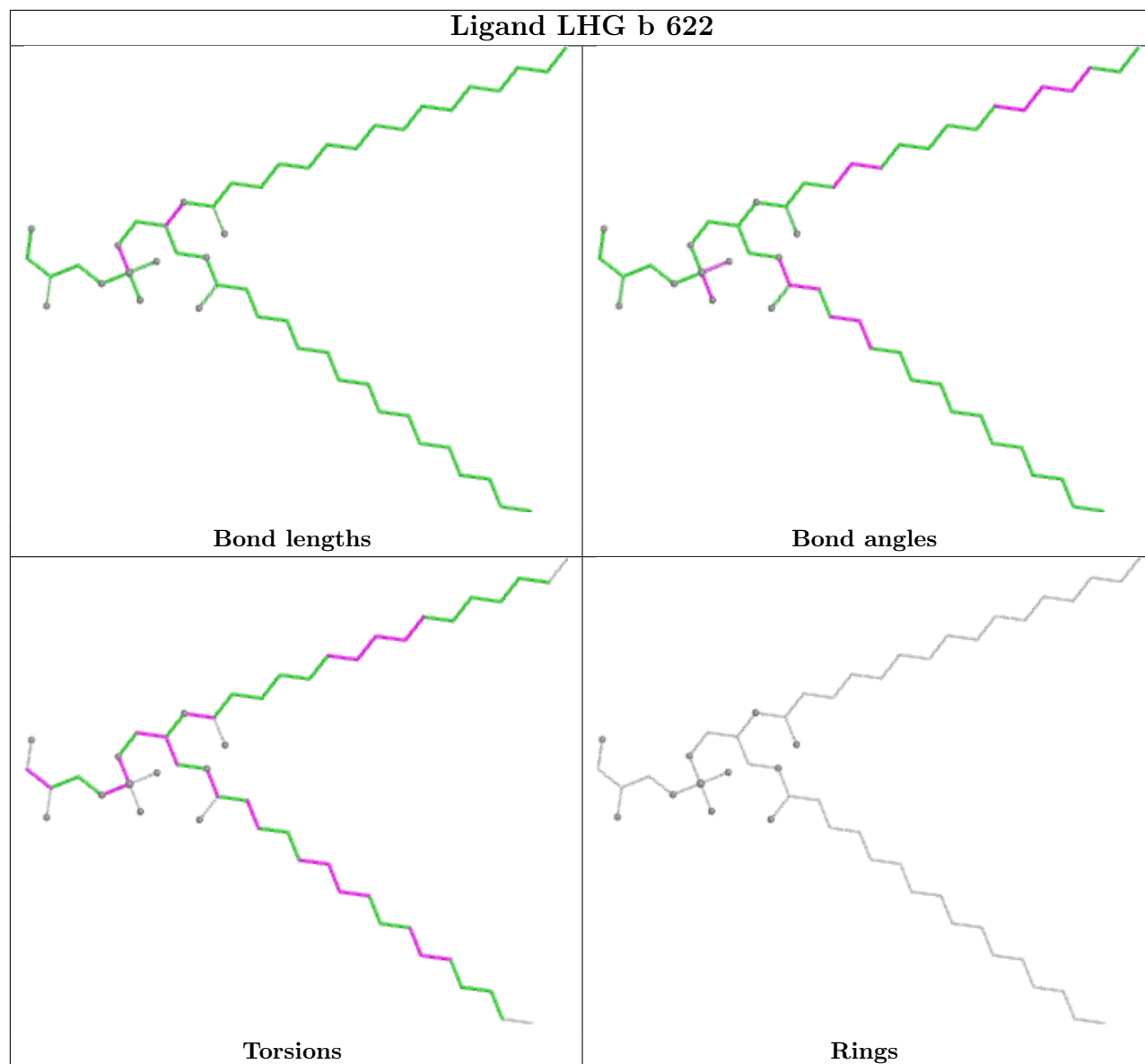


Ligand CHL 8 304

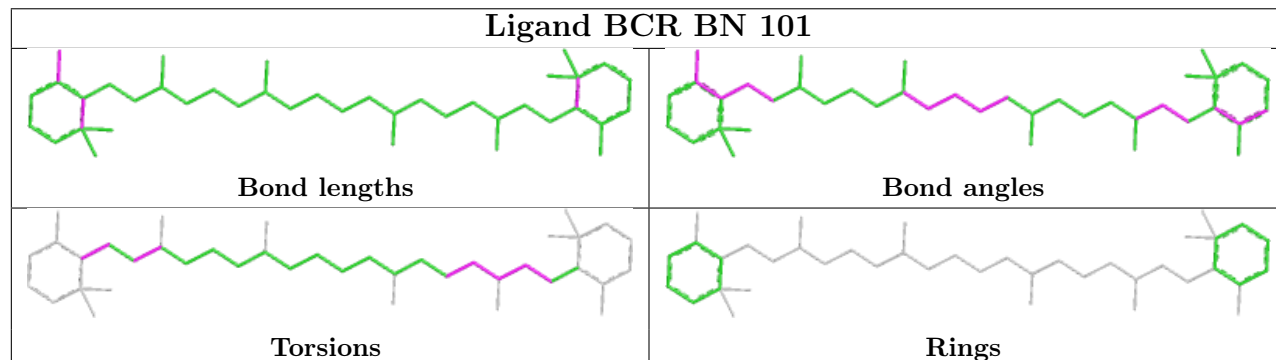


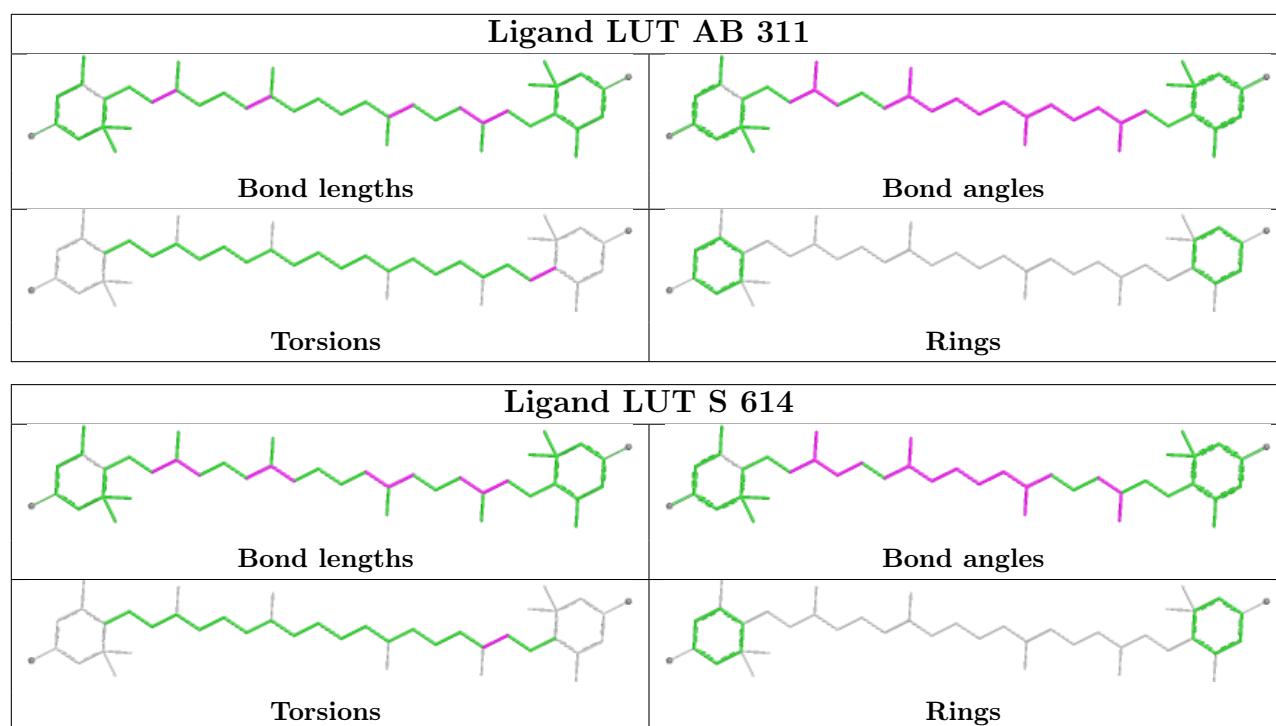
Ligand CHL Ba 308	
	Bond lengths
	Bond angles
	Torsions
	Rings
Ligand CLA Ba 311	
	Bond lengths
	Bond angles
	Torsions
	Rings
Ligand LUT y 317	
	Bond lengths
	Bond angles
	Torsions
	Rings

Ligand LHG b 622

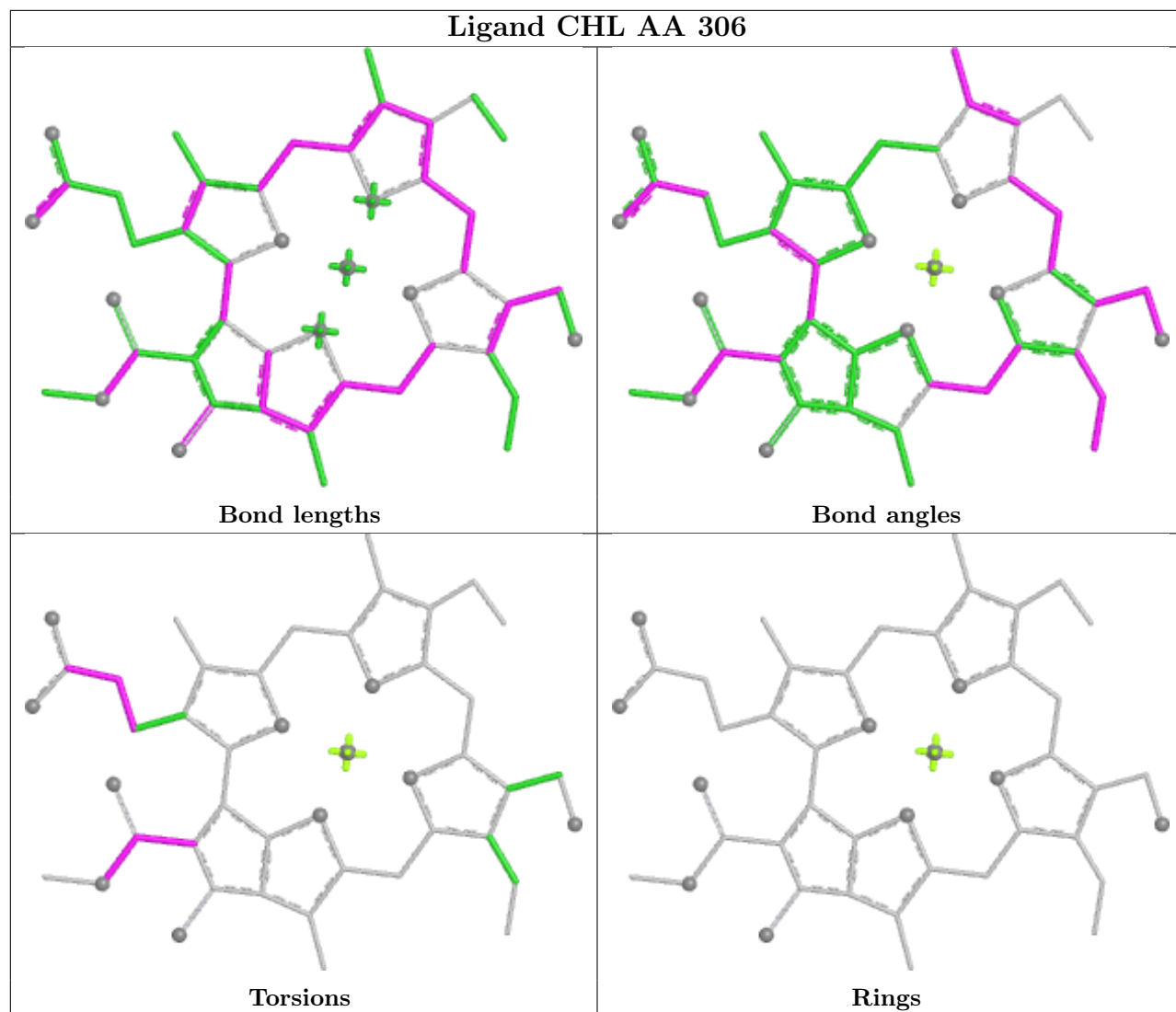


Ligand BCR BN 101

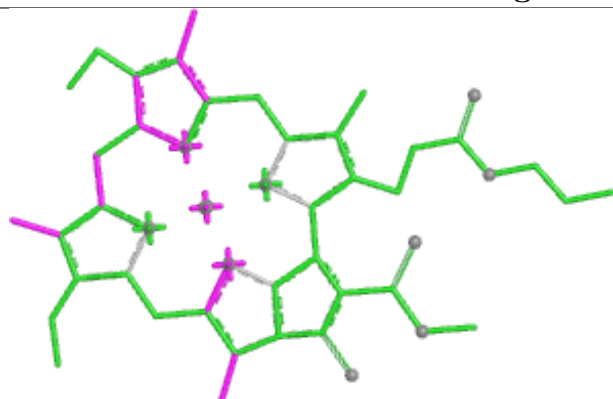




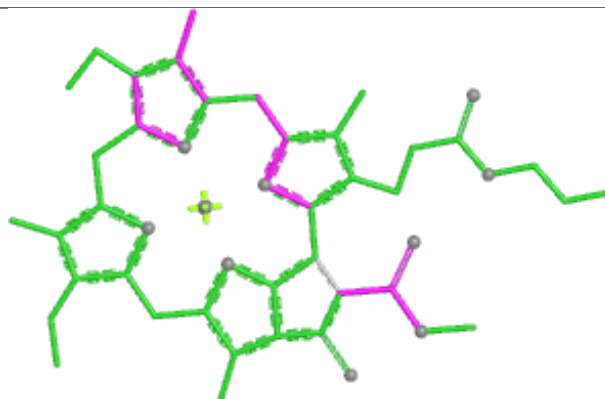
Ligand CHL AA 306



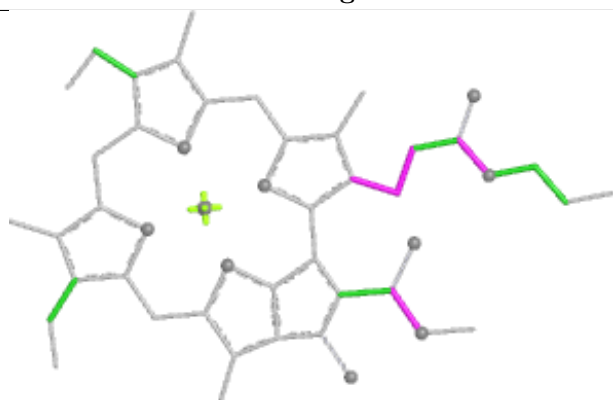
Ligand CLA Y 315



Bond lengths



Bond angles

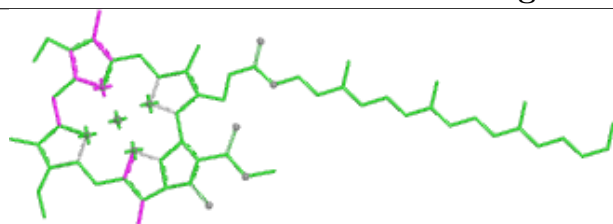


Torsions

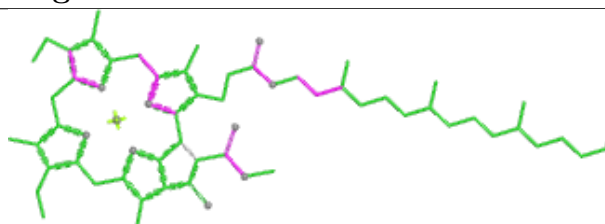


Rings

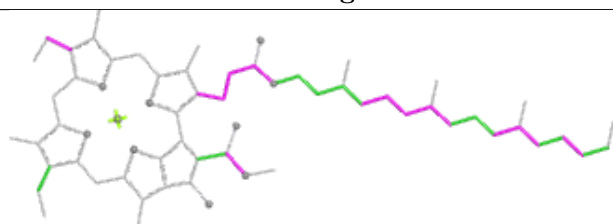
Ligand CLA g 610



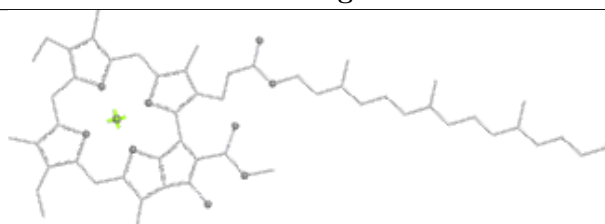
Bond lengths



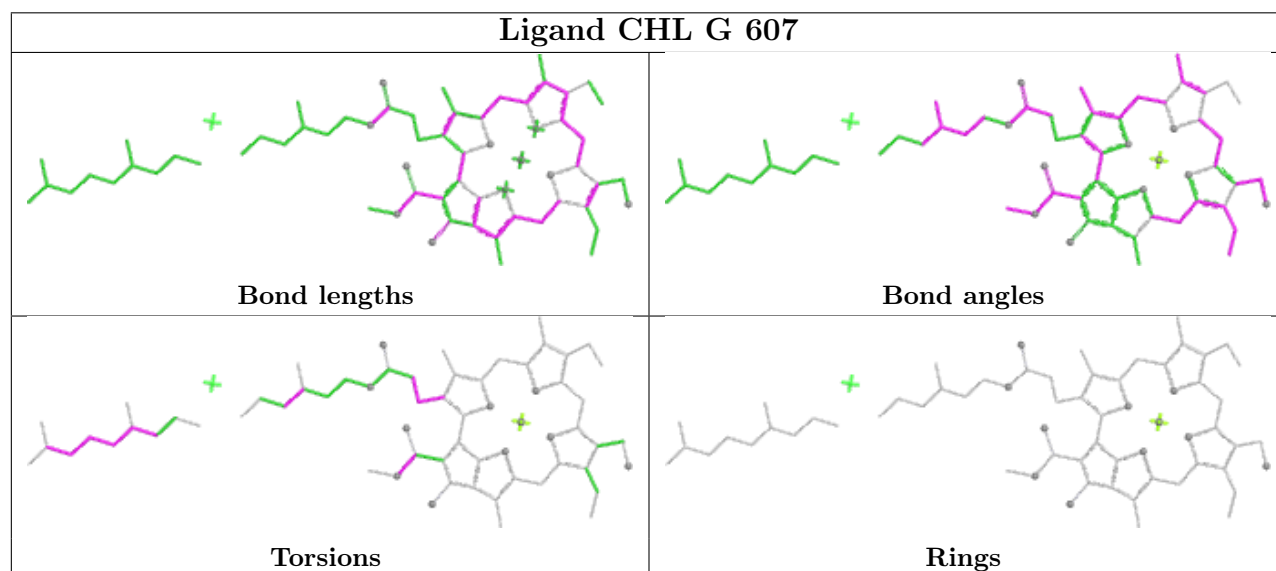
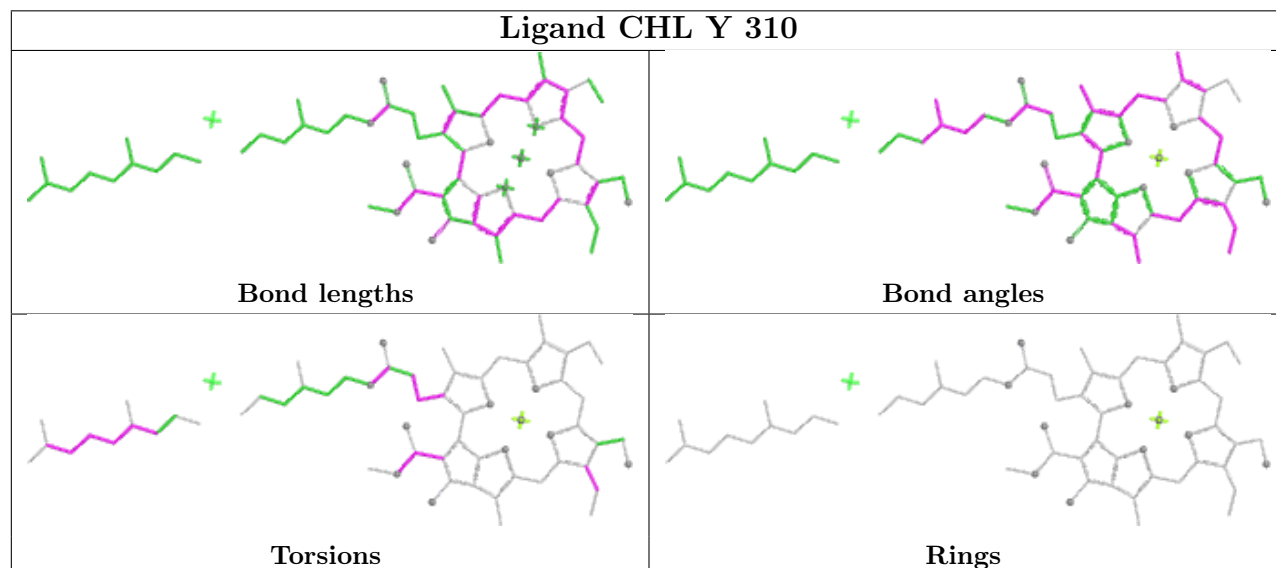
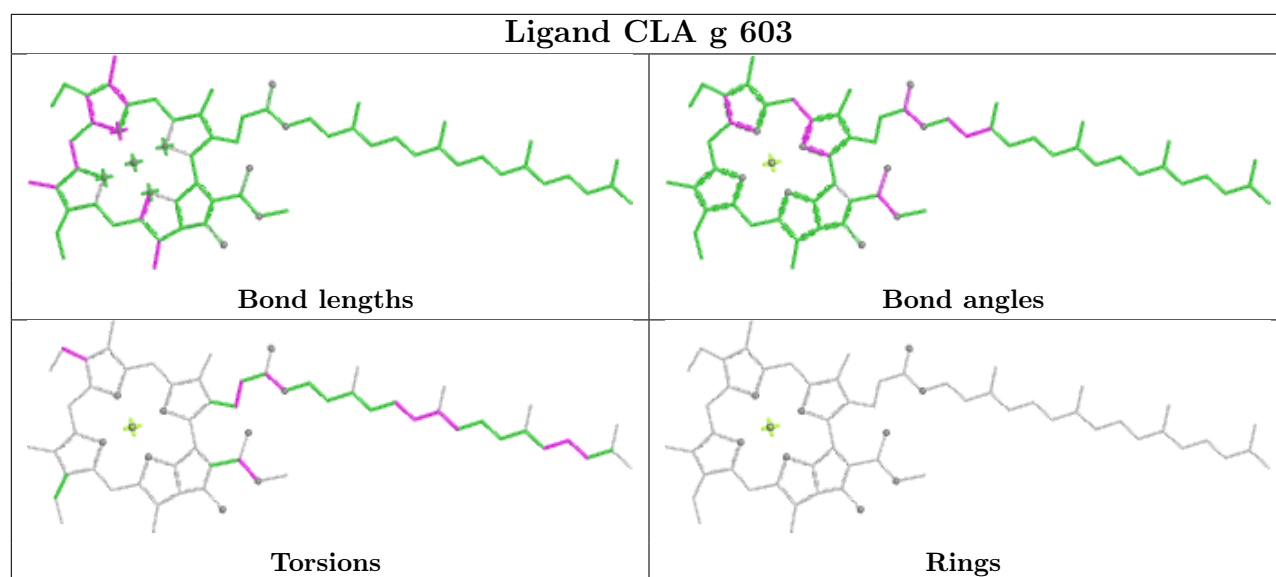
Bond angles



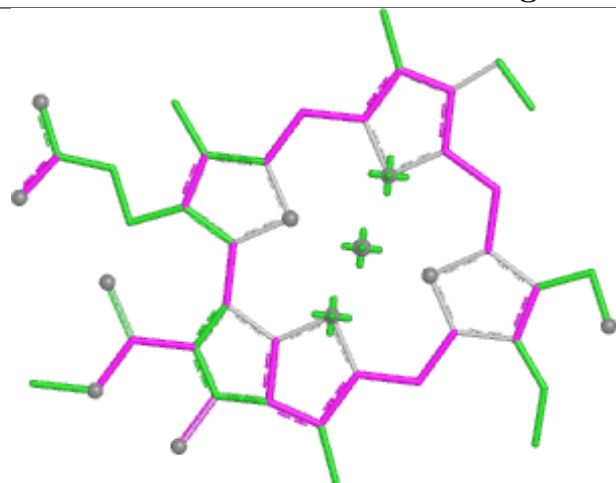
Torsions



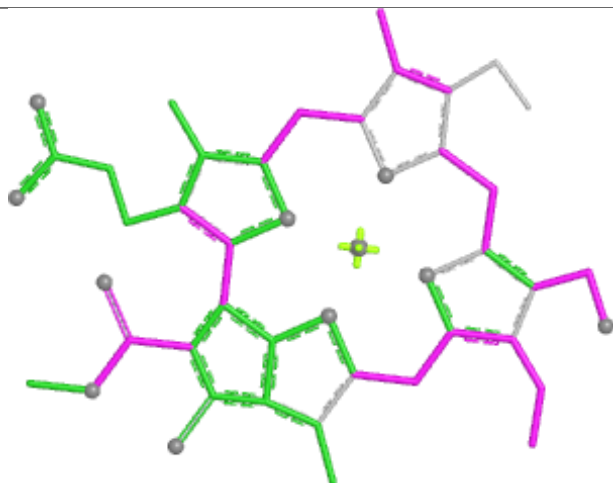
Rings



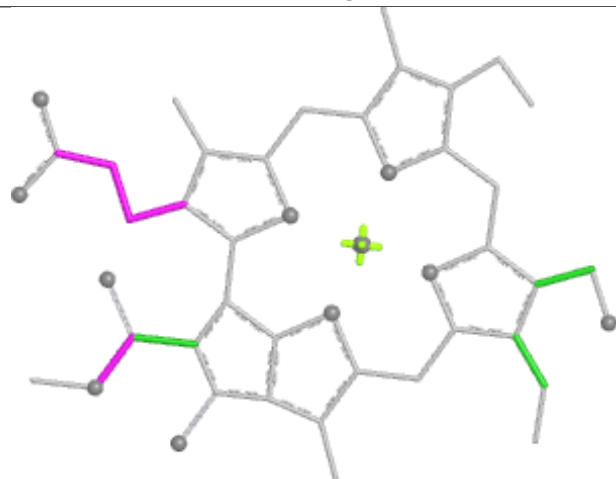
Ligand CHL 6 606



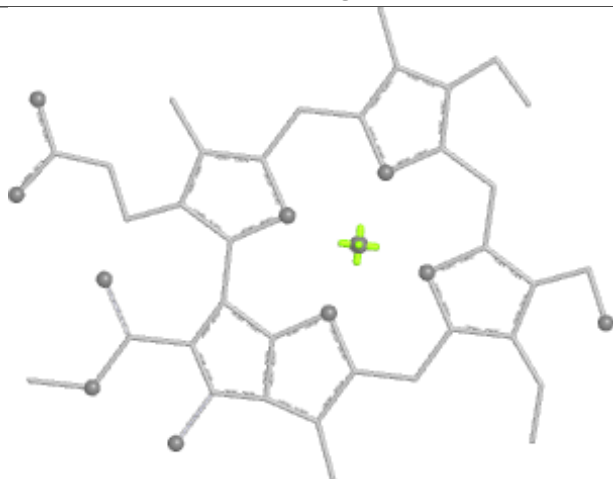
Bond lengths



Bond angles

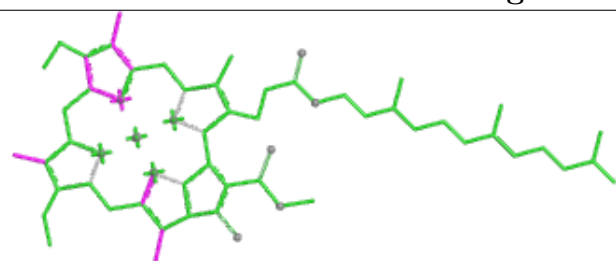


Torsions

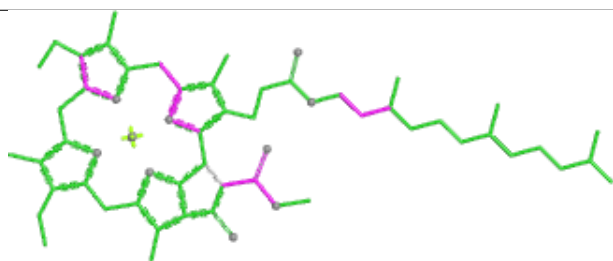


Rings

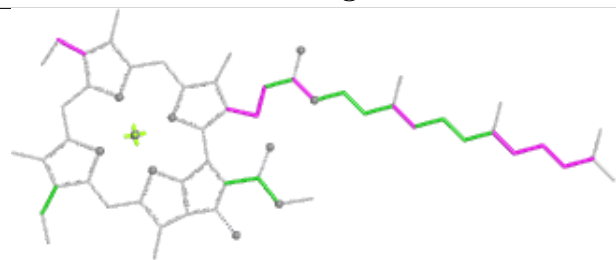
Ligand CLA A2 611



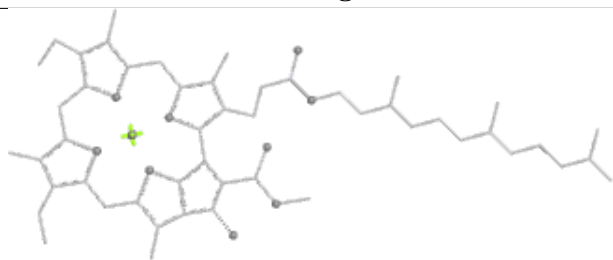
Bond lengths



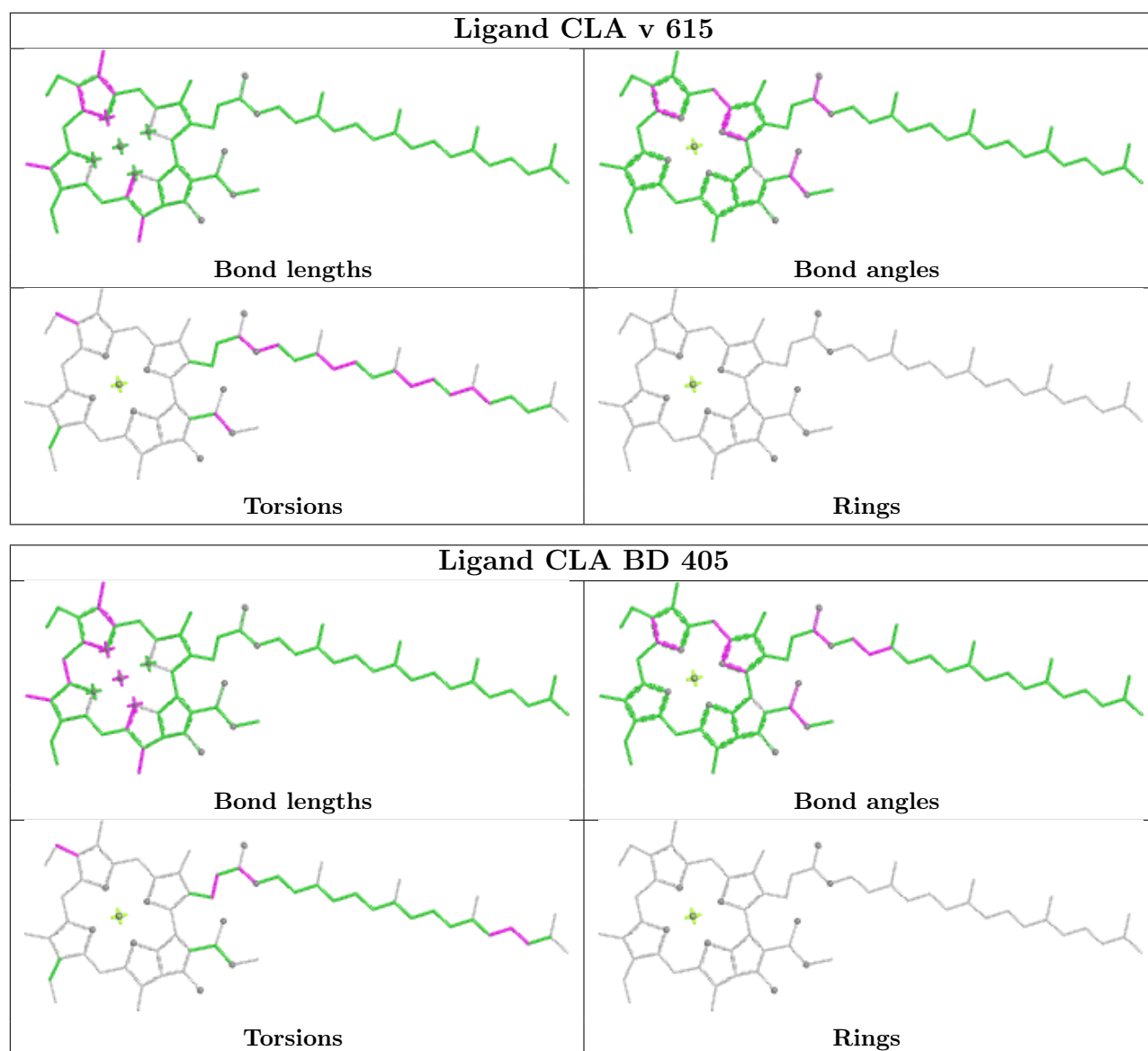
Bond angles



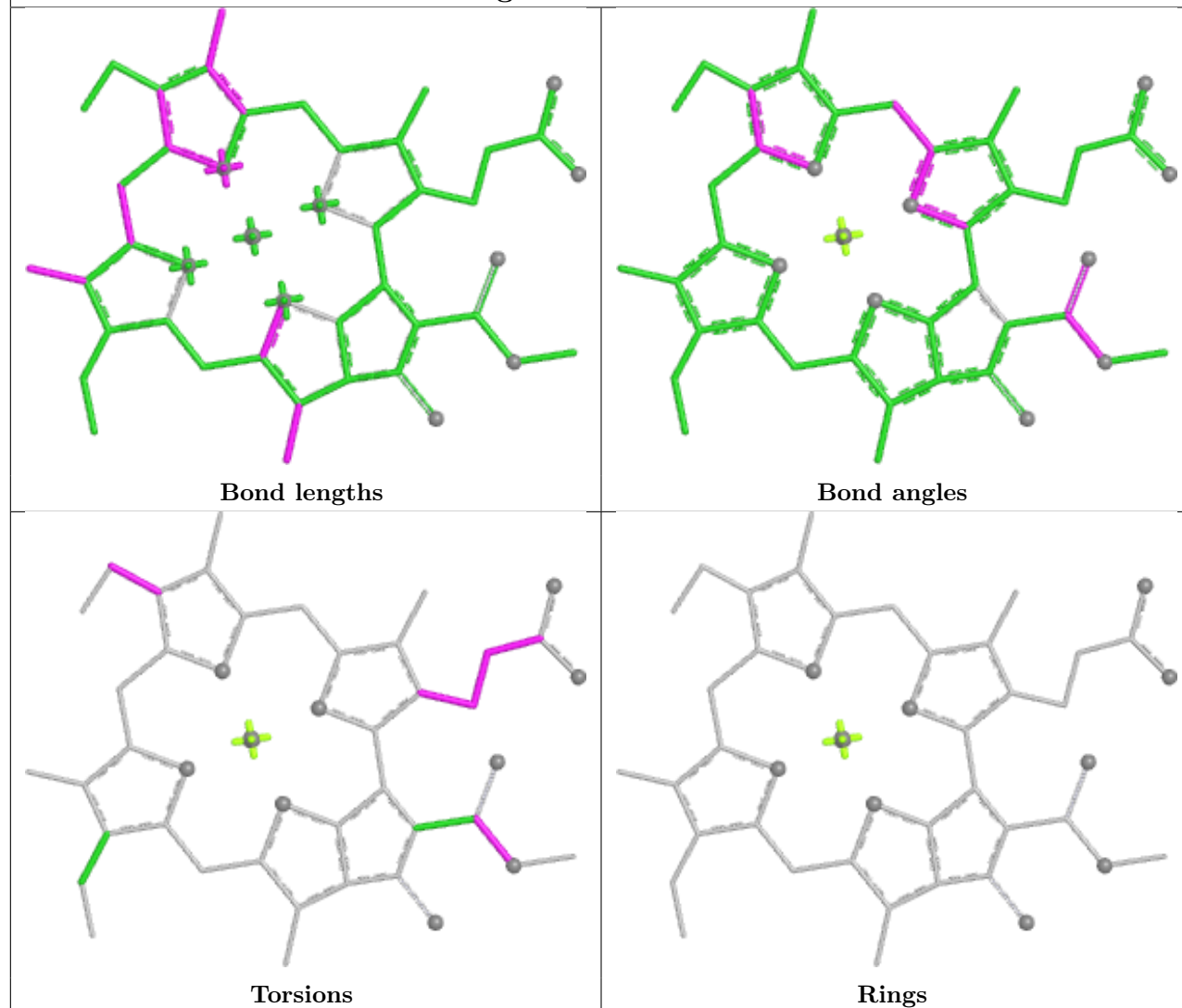
Torsions



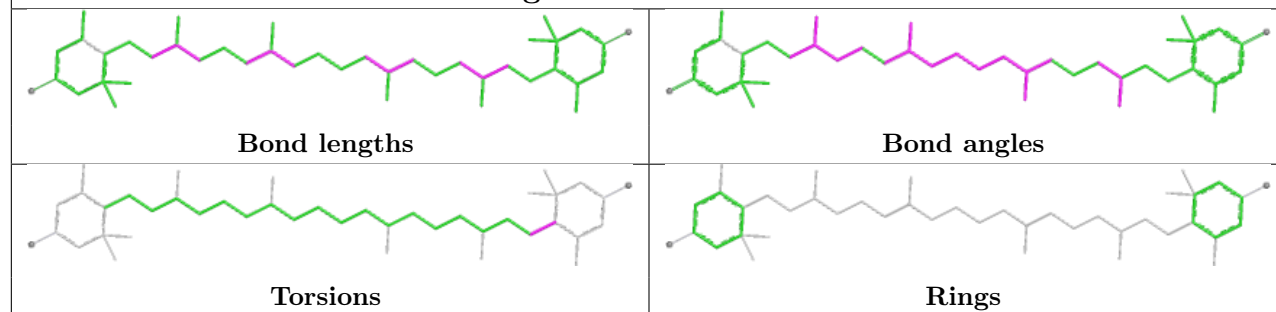
Rings



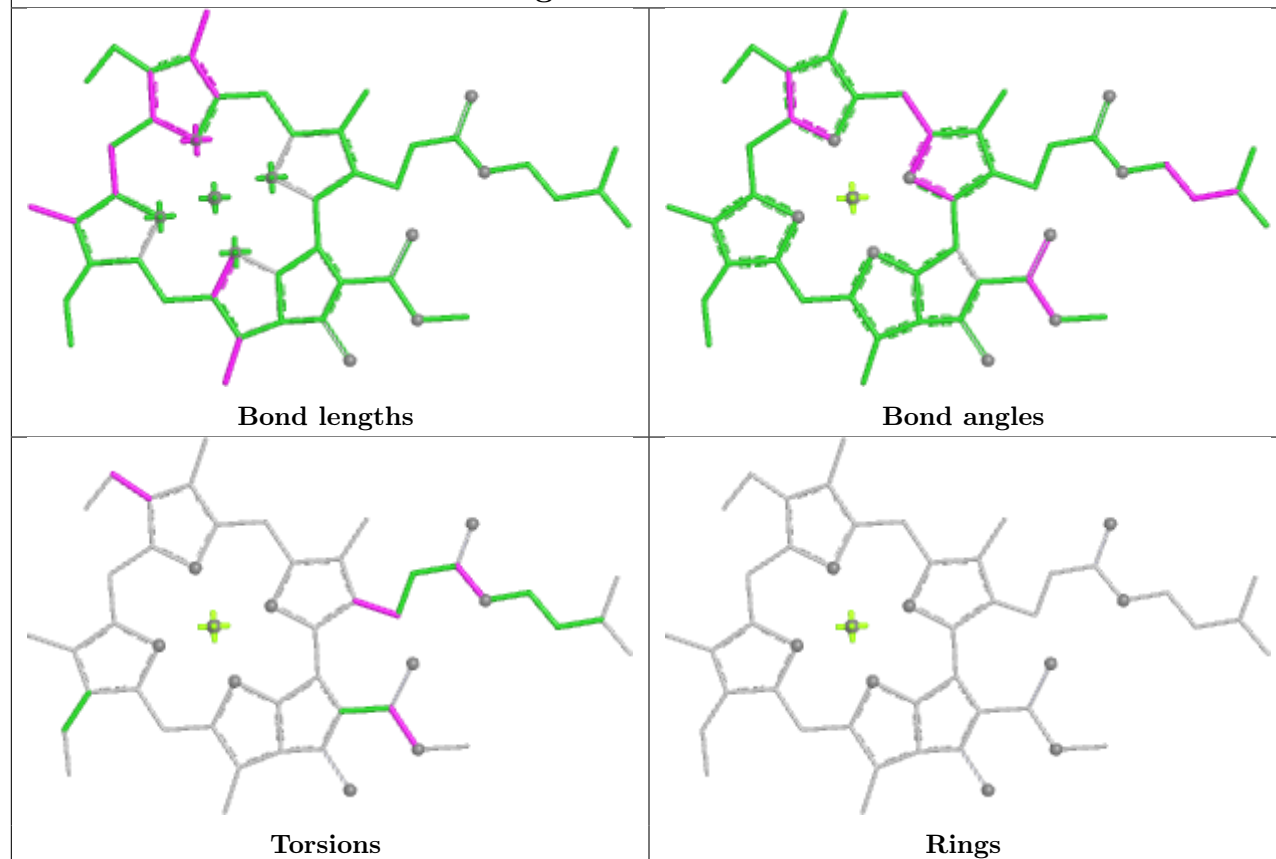
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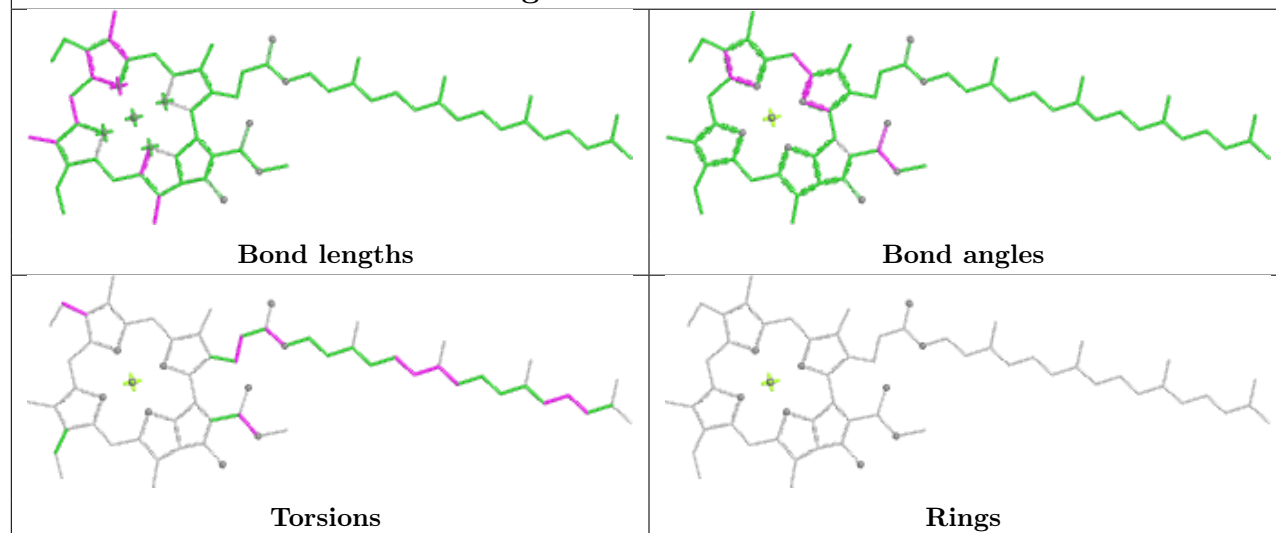
Ligand LUT A2 615

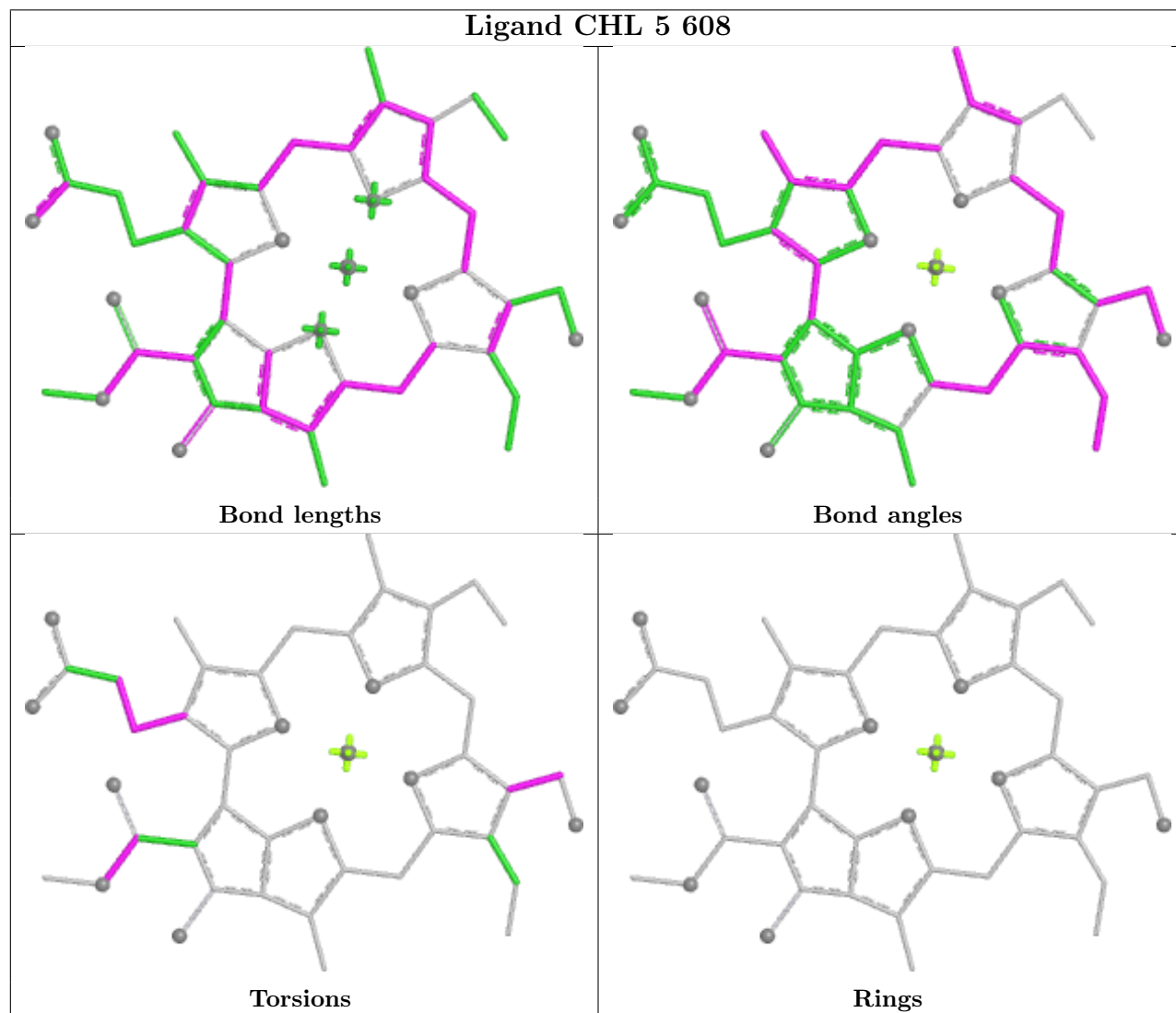
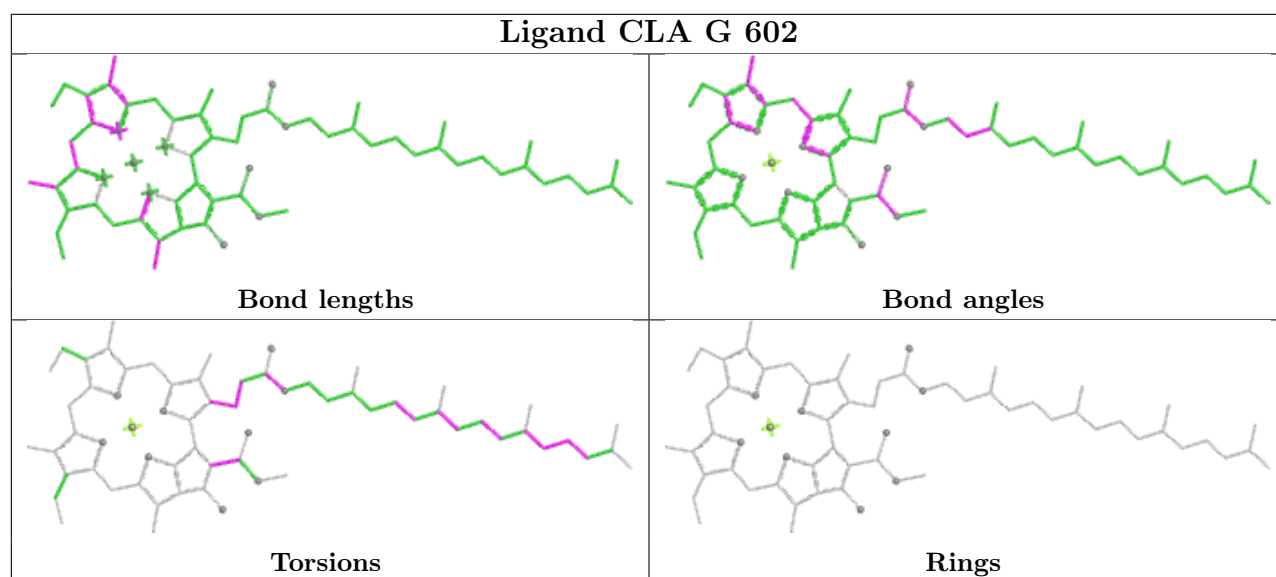


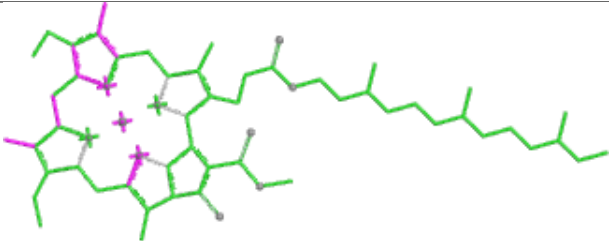
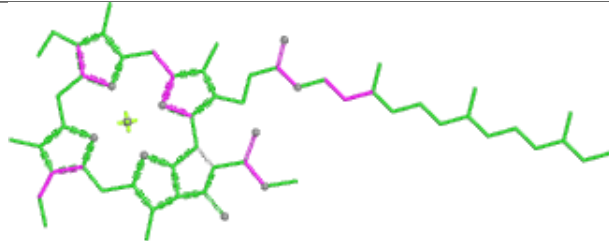
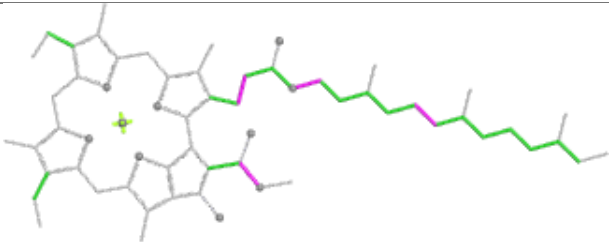
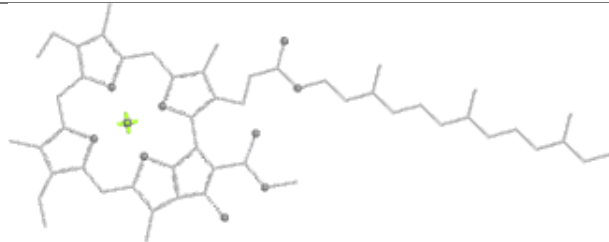
Ligand CLA S 604

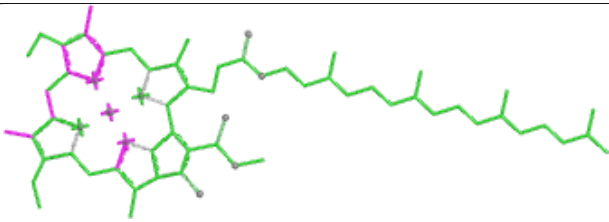
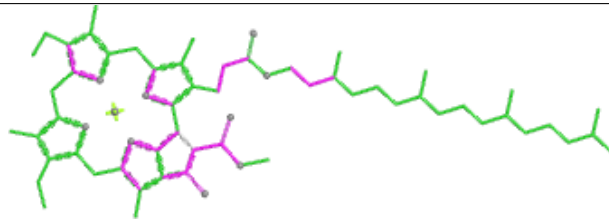
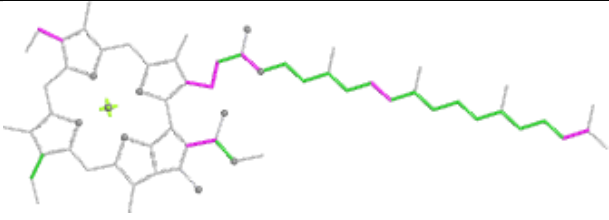
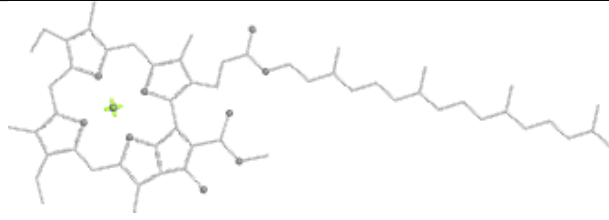


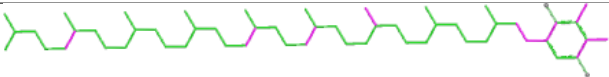
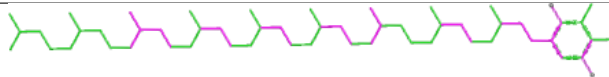

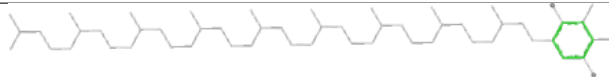
Ligand CLA Au 603

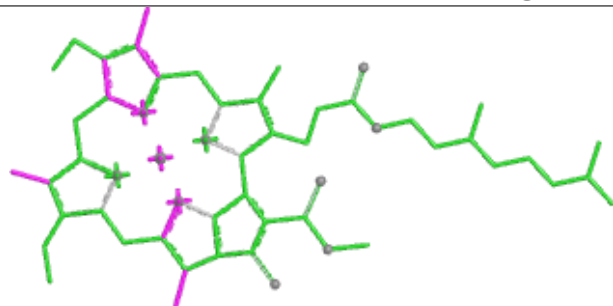




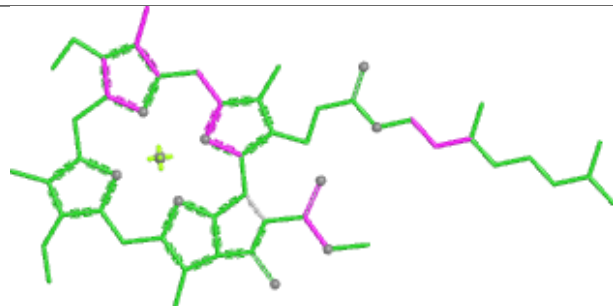
Ligand CLA AA 303	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA C 511	
	
Bond lengths	Bond angles
	
Torsions	Rings

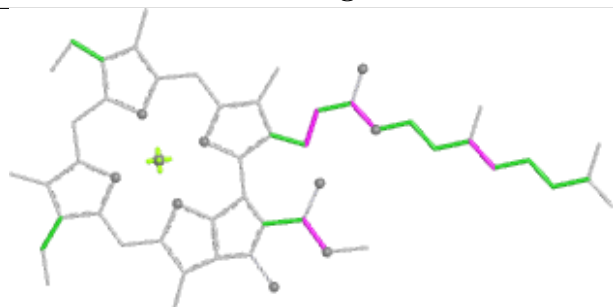
Ligand PL9 2 404	
	
Bond lengths	Bond angles
	
Torsions	Rings

Ligand CLA 5 613

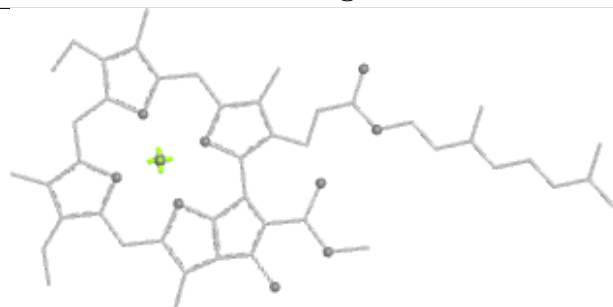
Bond lengths



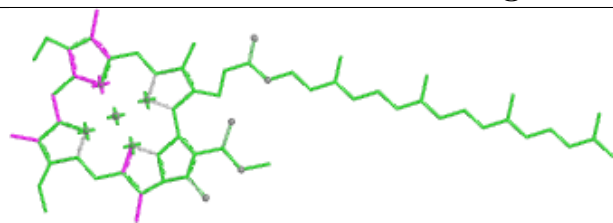
Bond angles



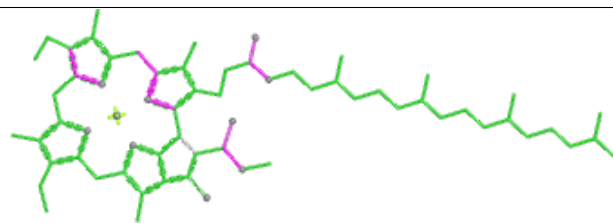
Torsions



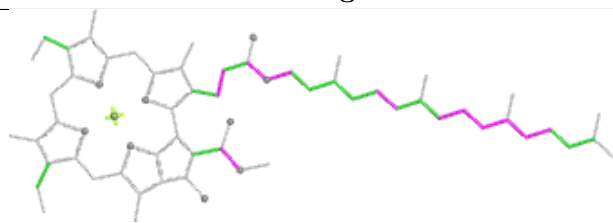
Rings

Ligand CLA BE 607

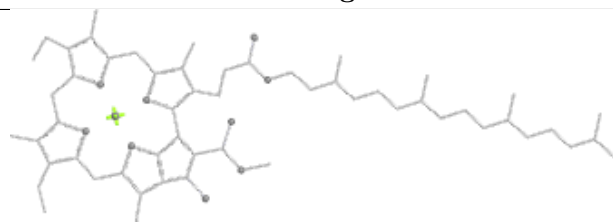
Bond lengths



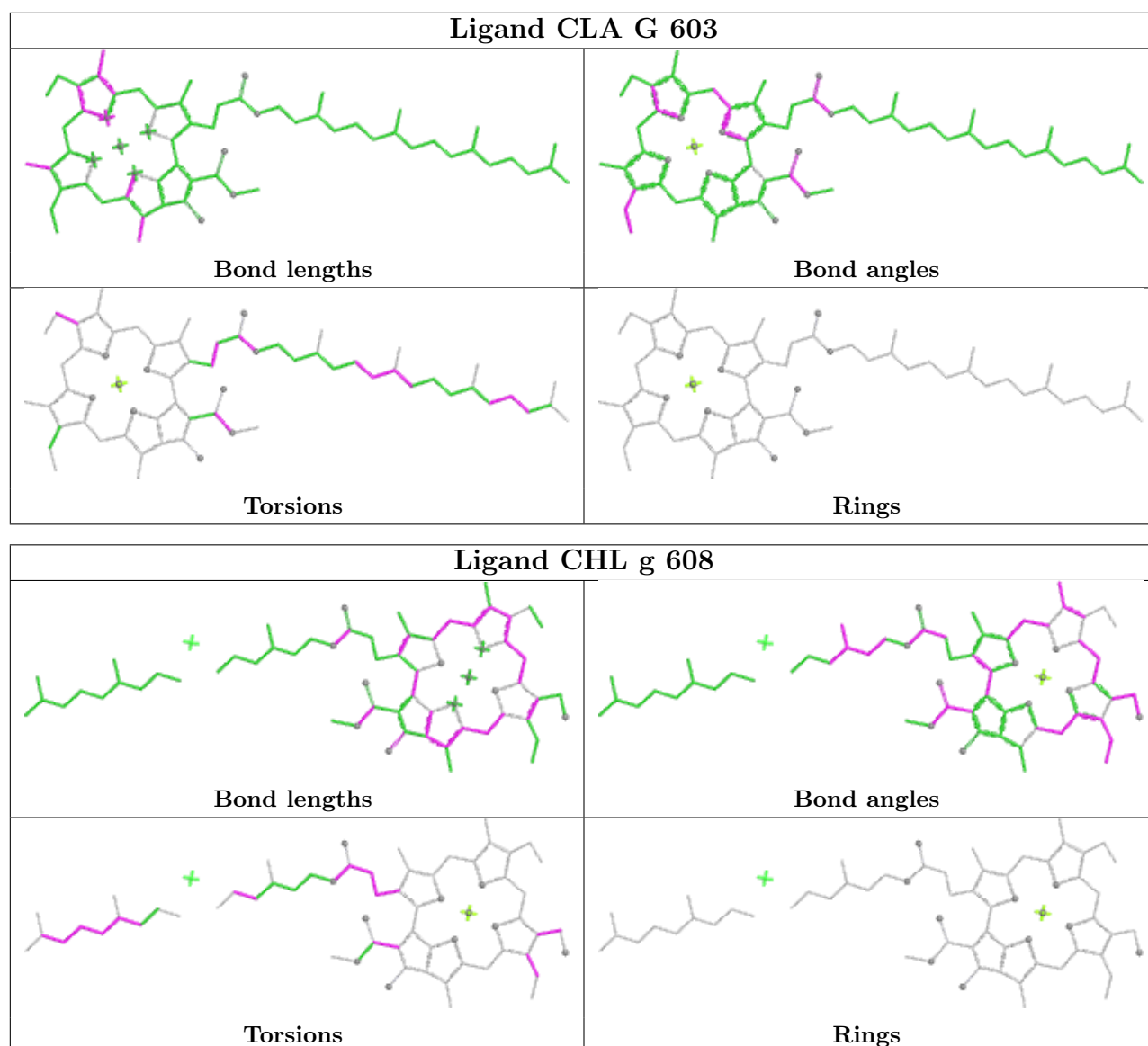
Bond angles



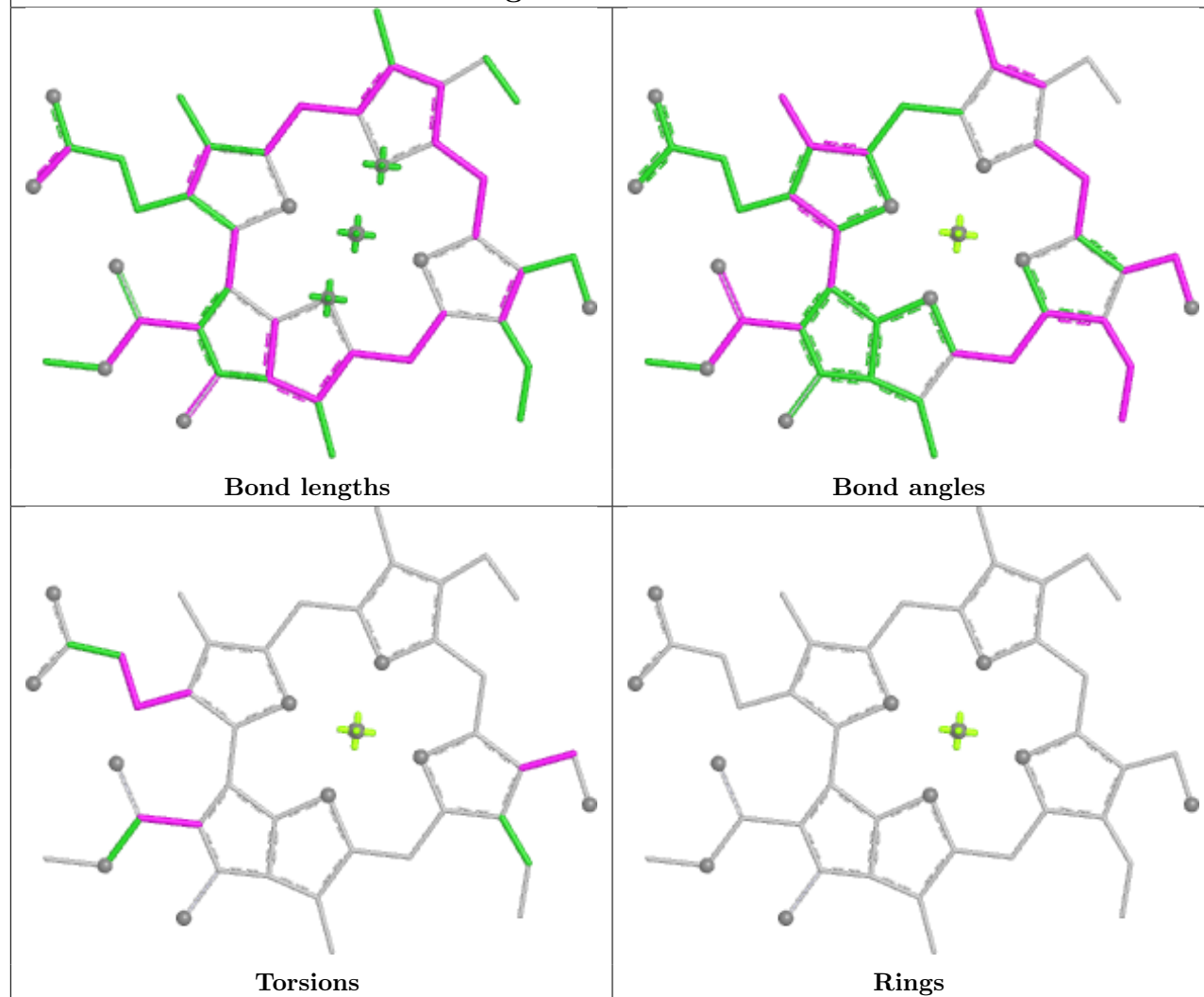
Torsions



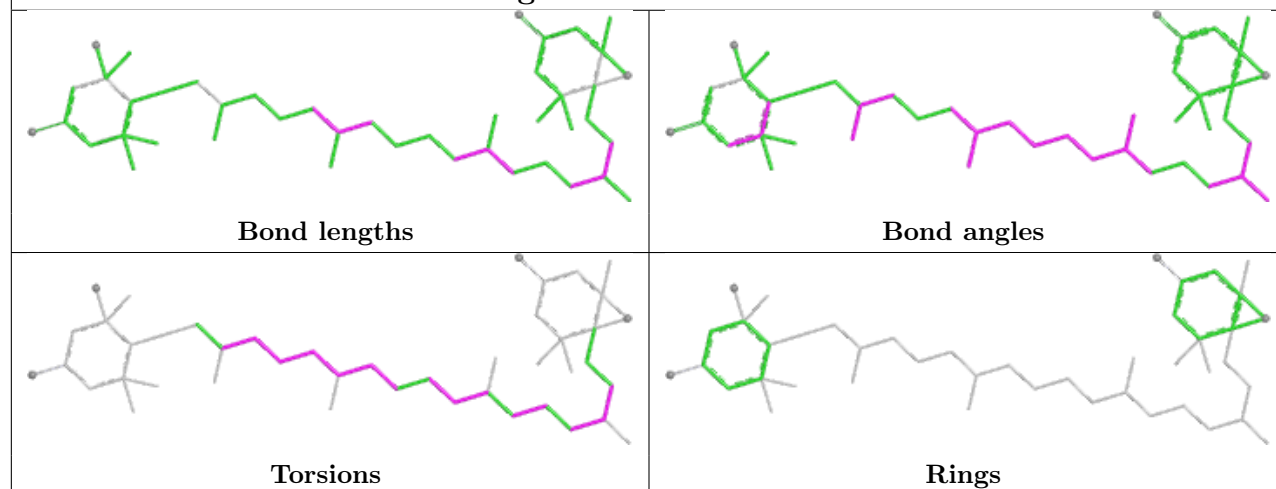
Rings

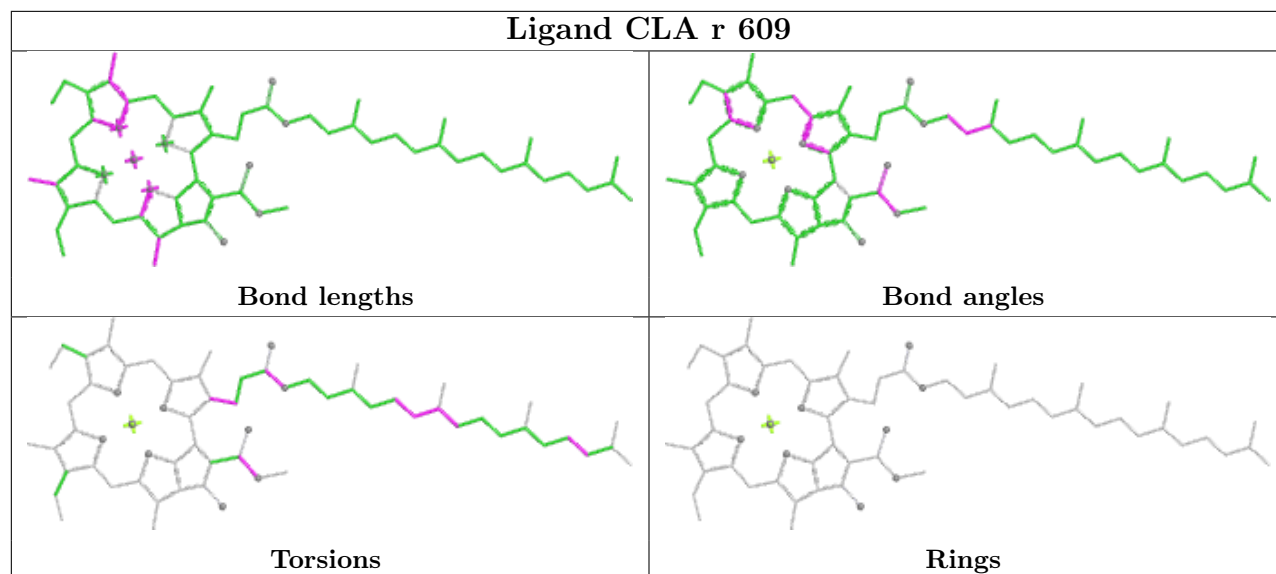
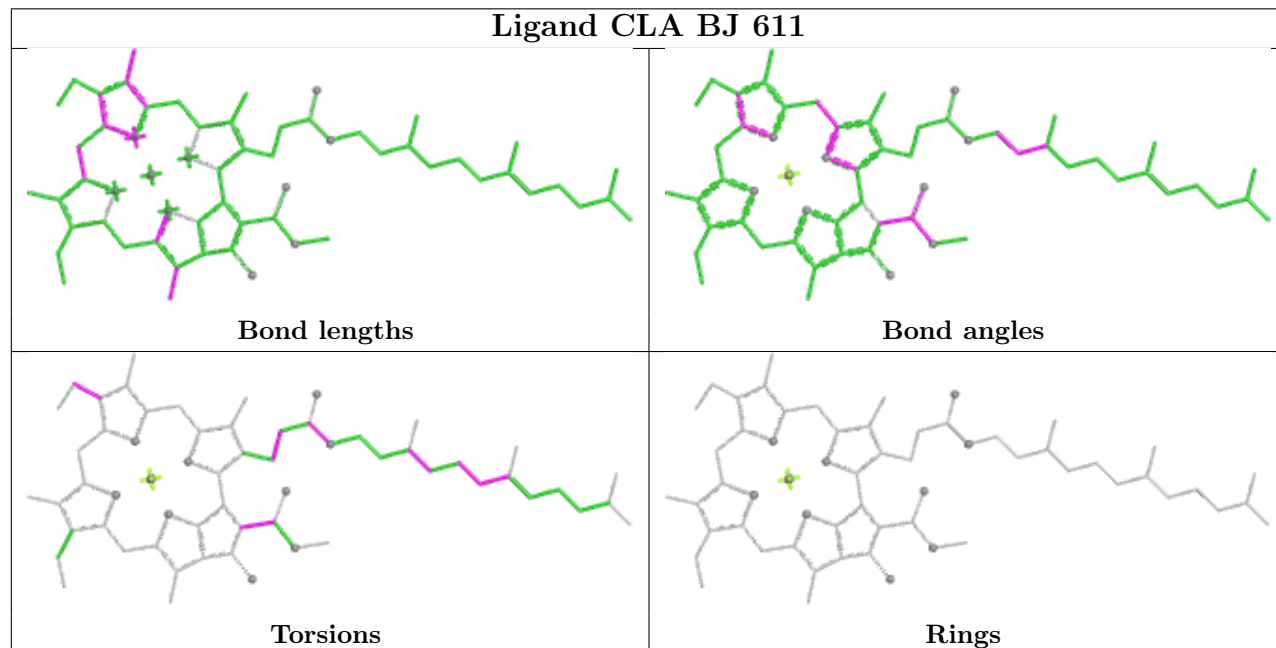


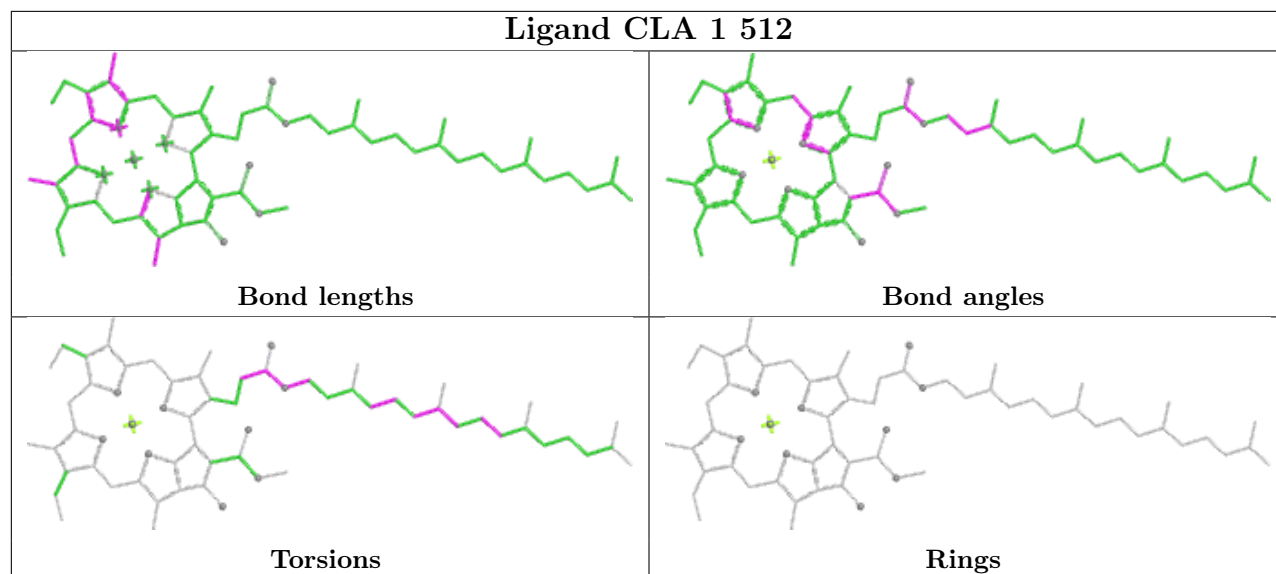
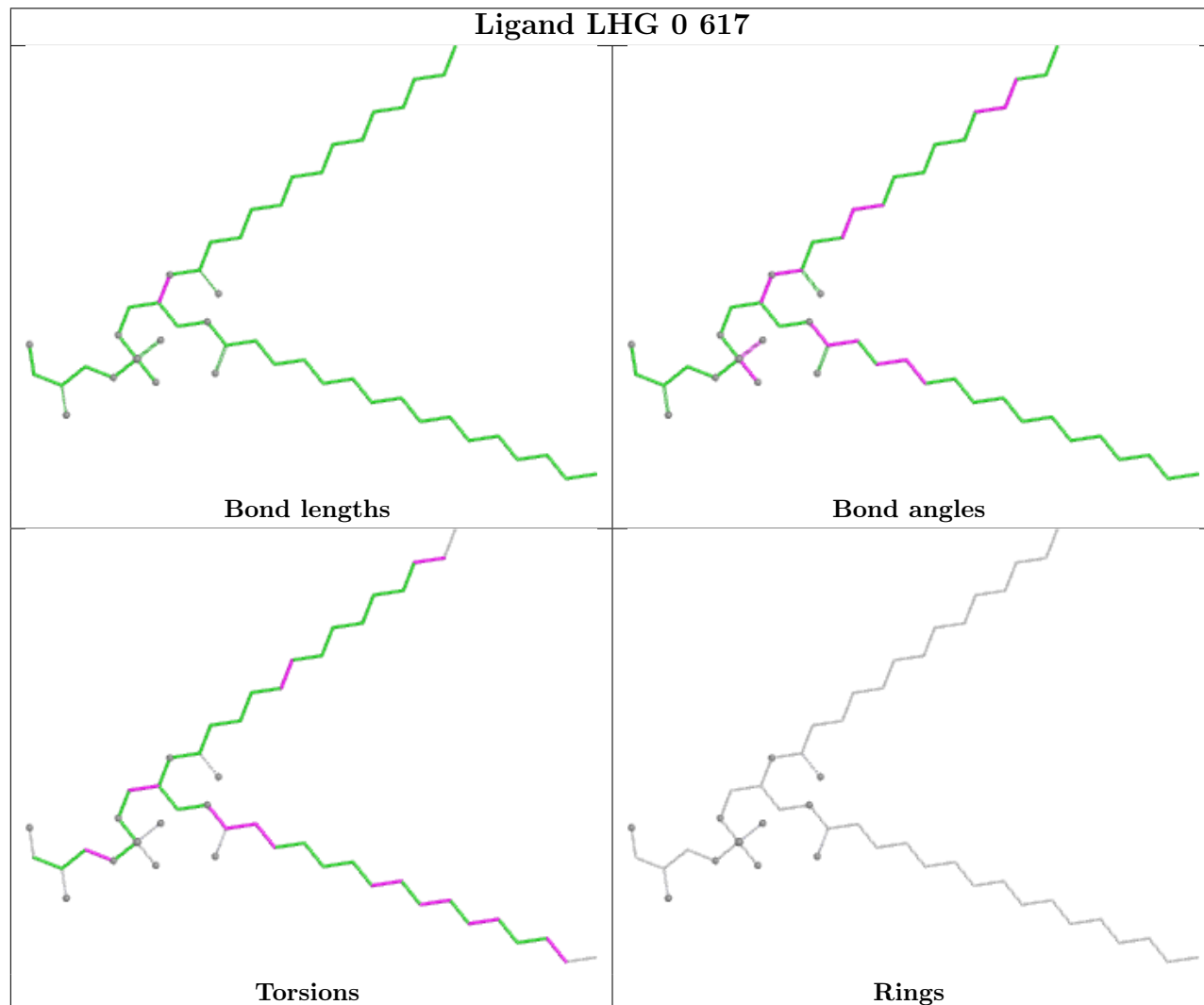
Ligand CHL 6 608

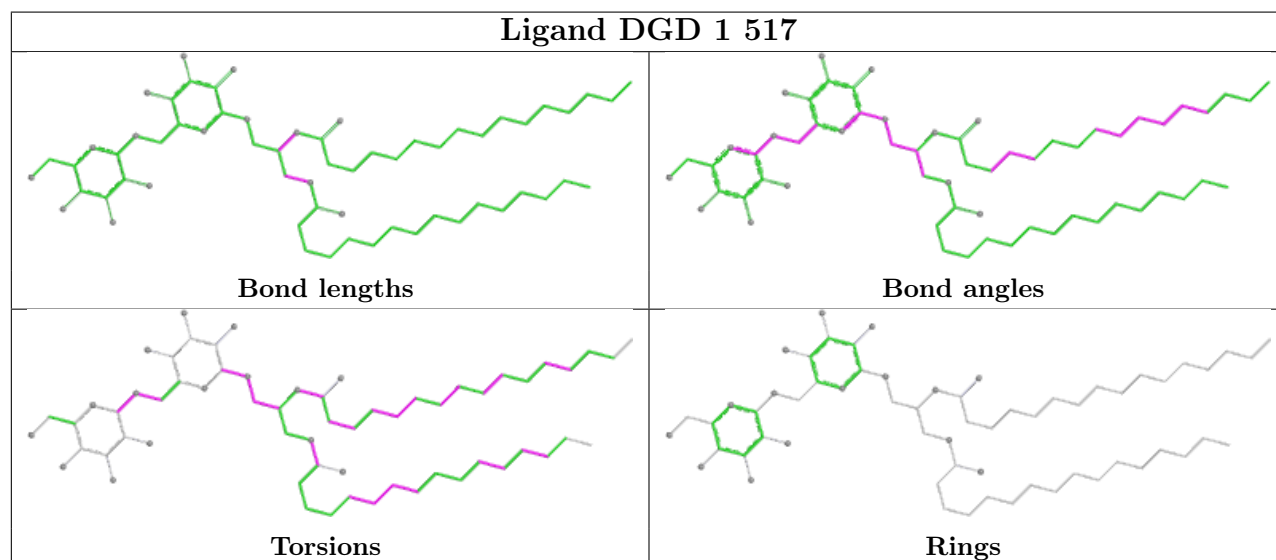
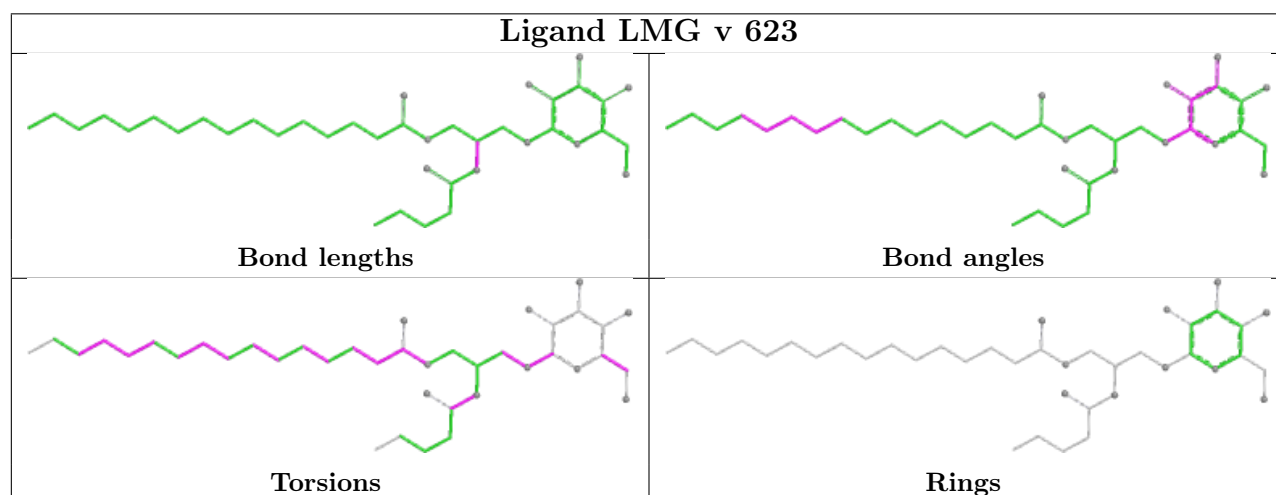
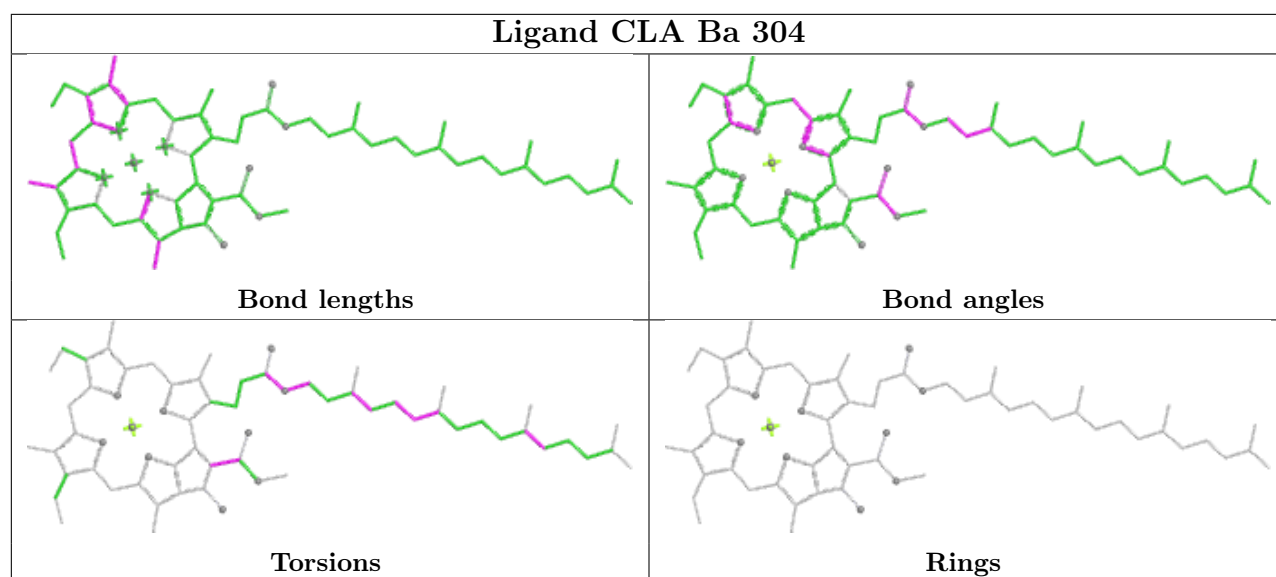


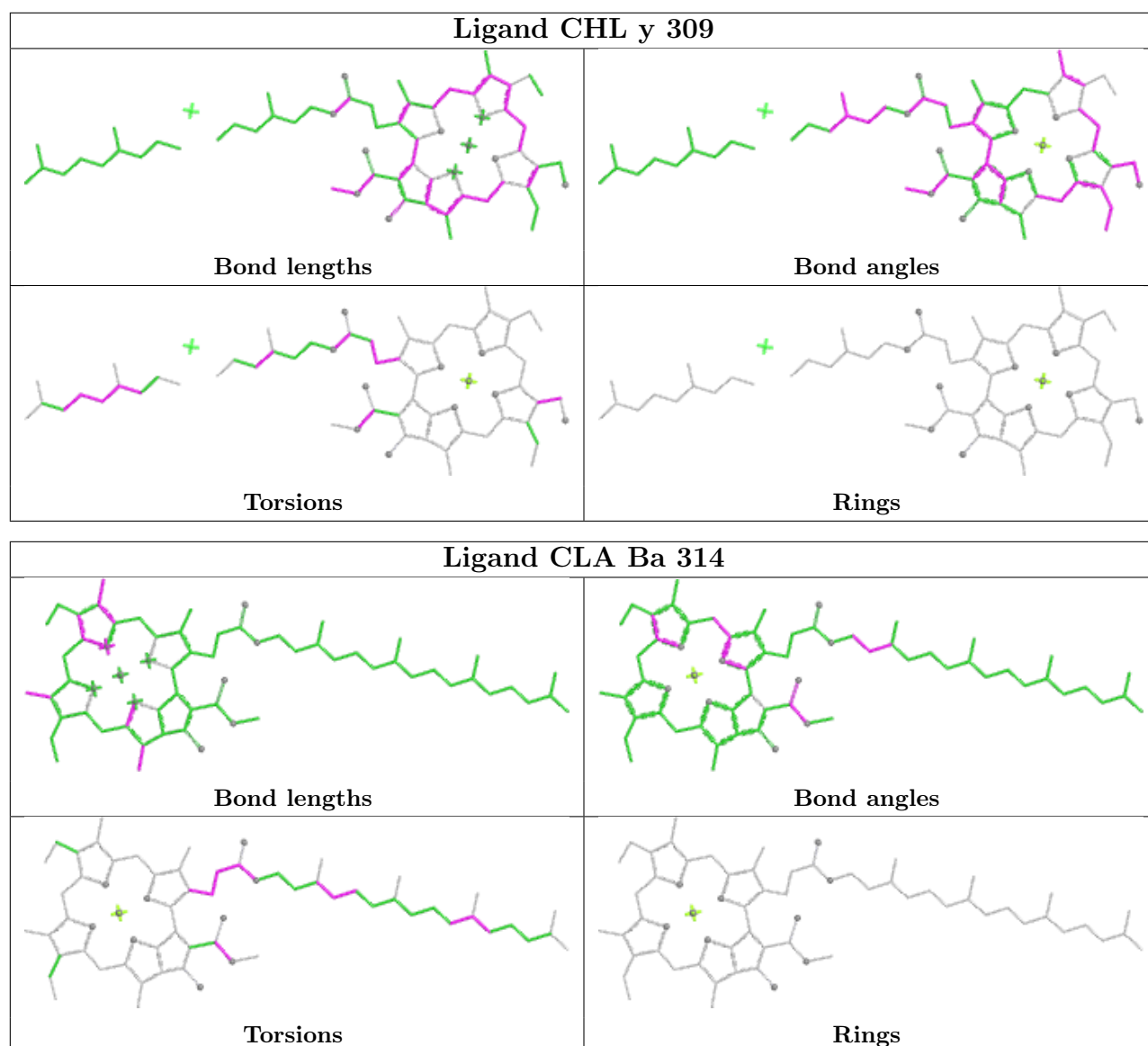
Ligand NEX BB 320

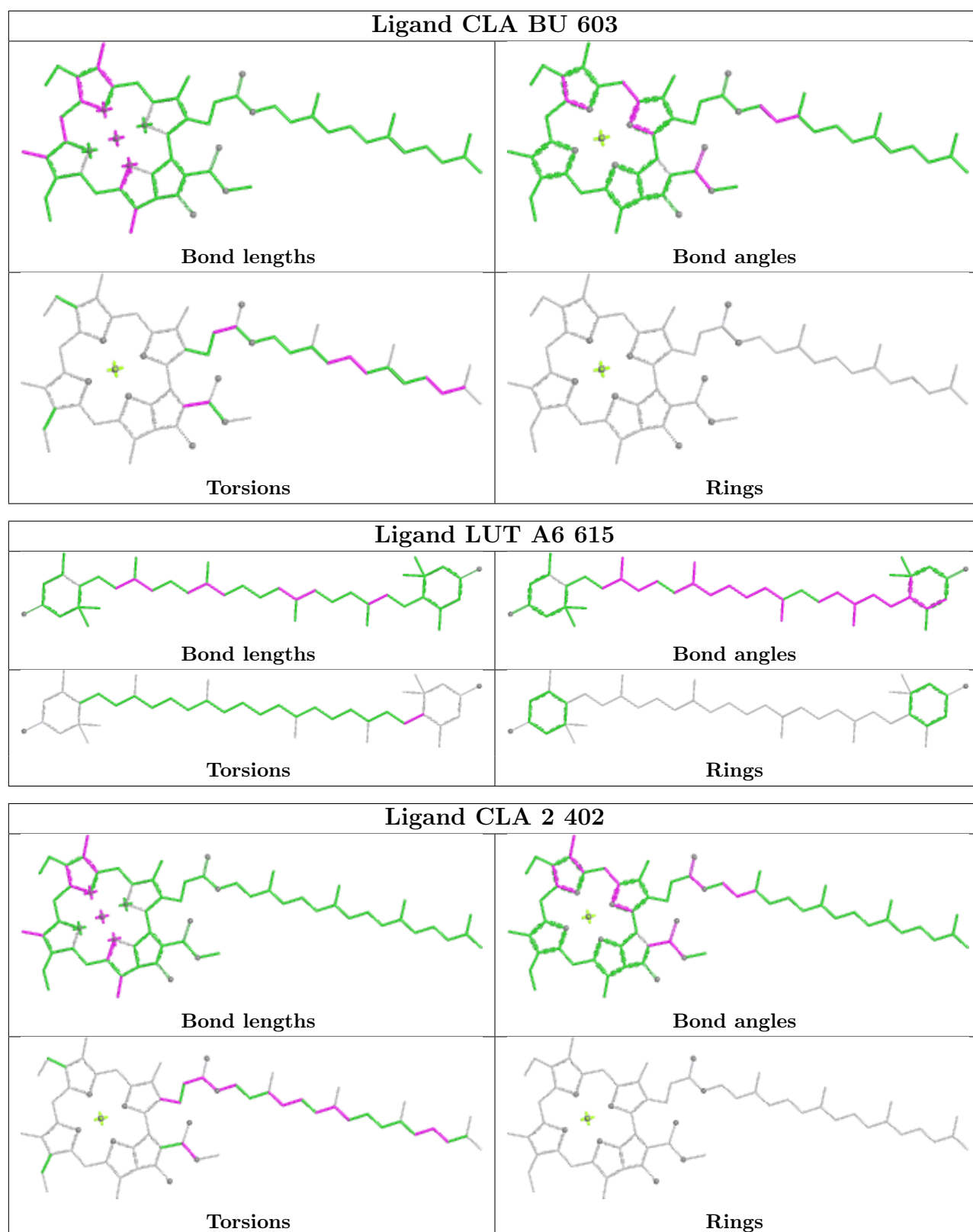


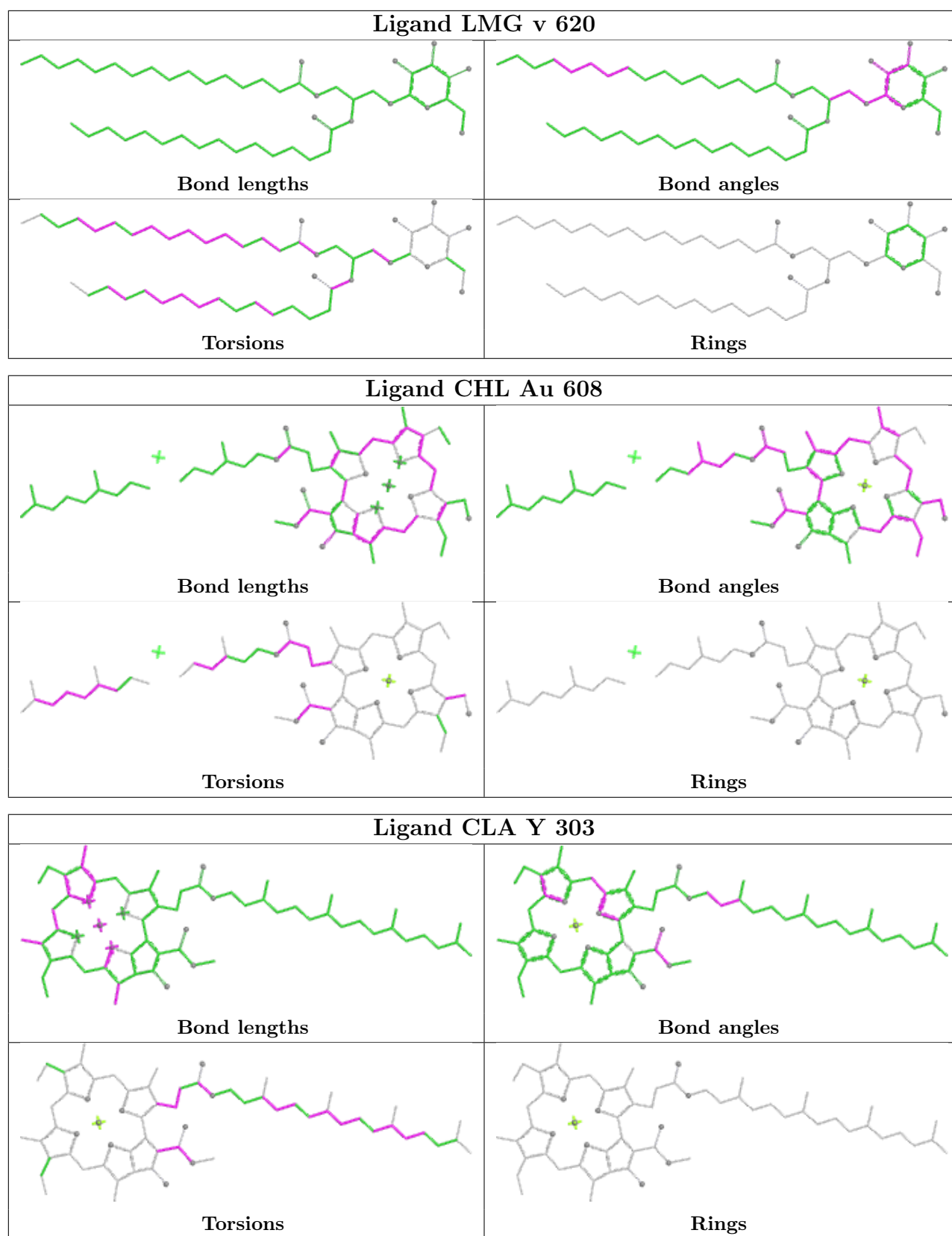
Ligand CLA r 609**Ligand CLA BJ 611**

Ligand CLA 1 512**Ligand LHG 0 617**

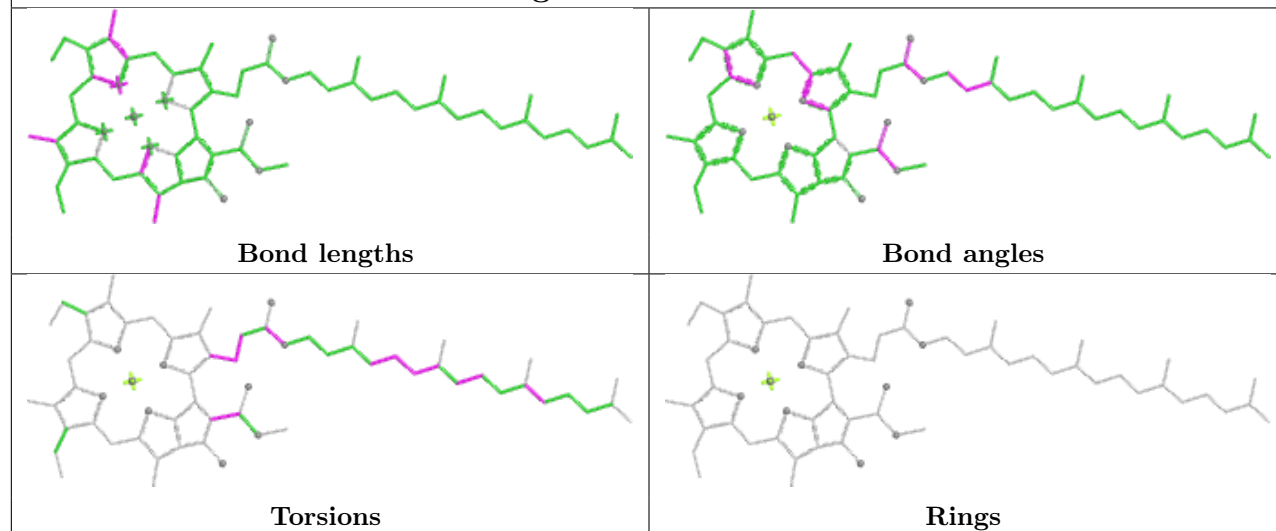




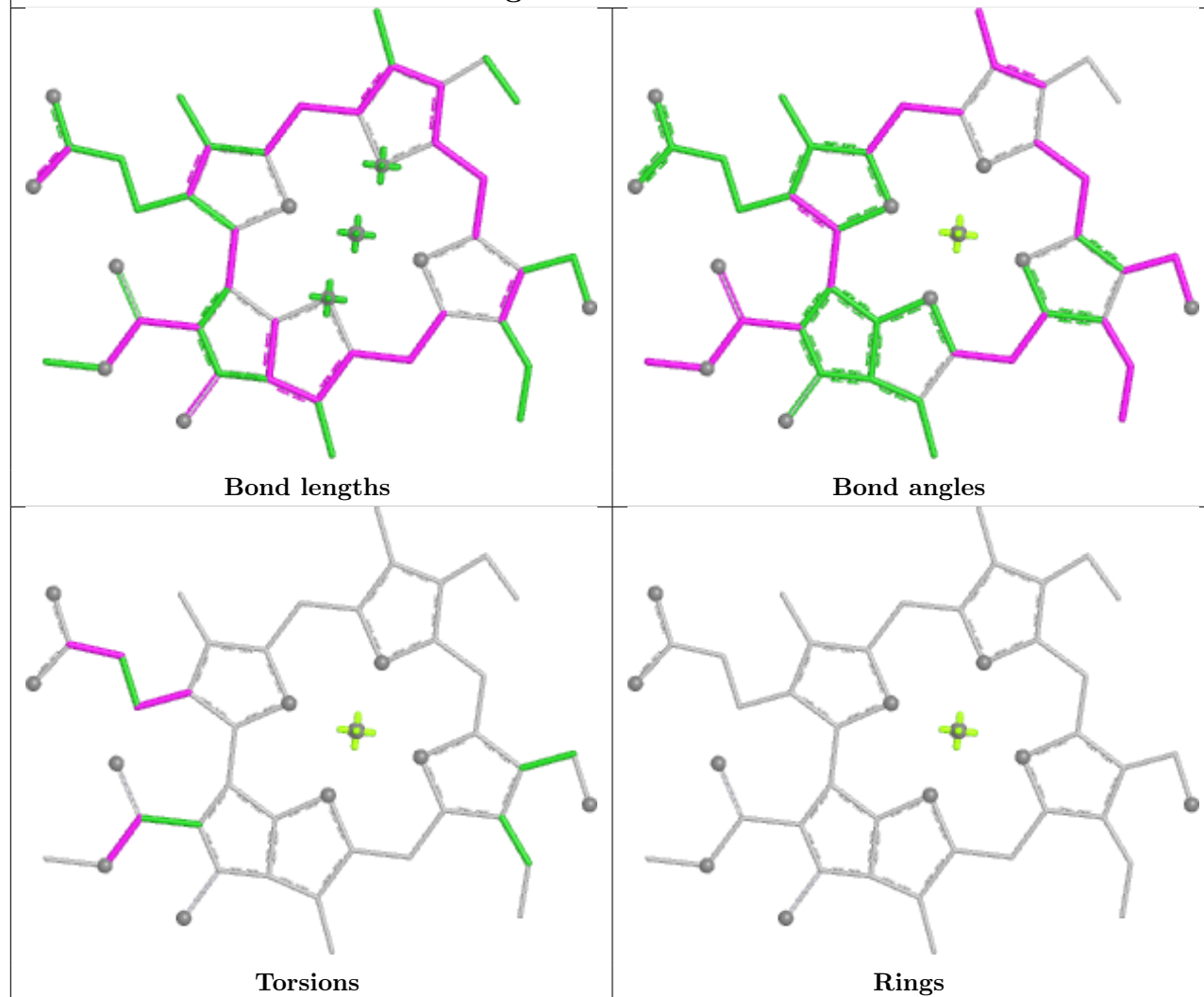


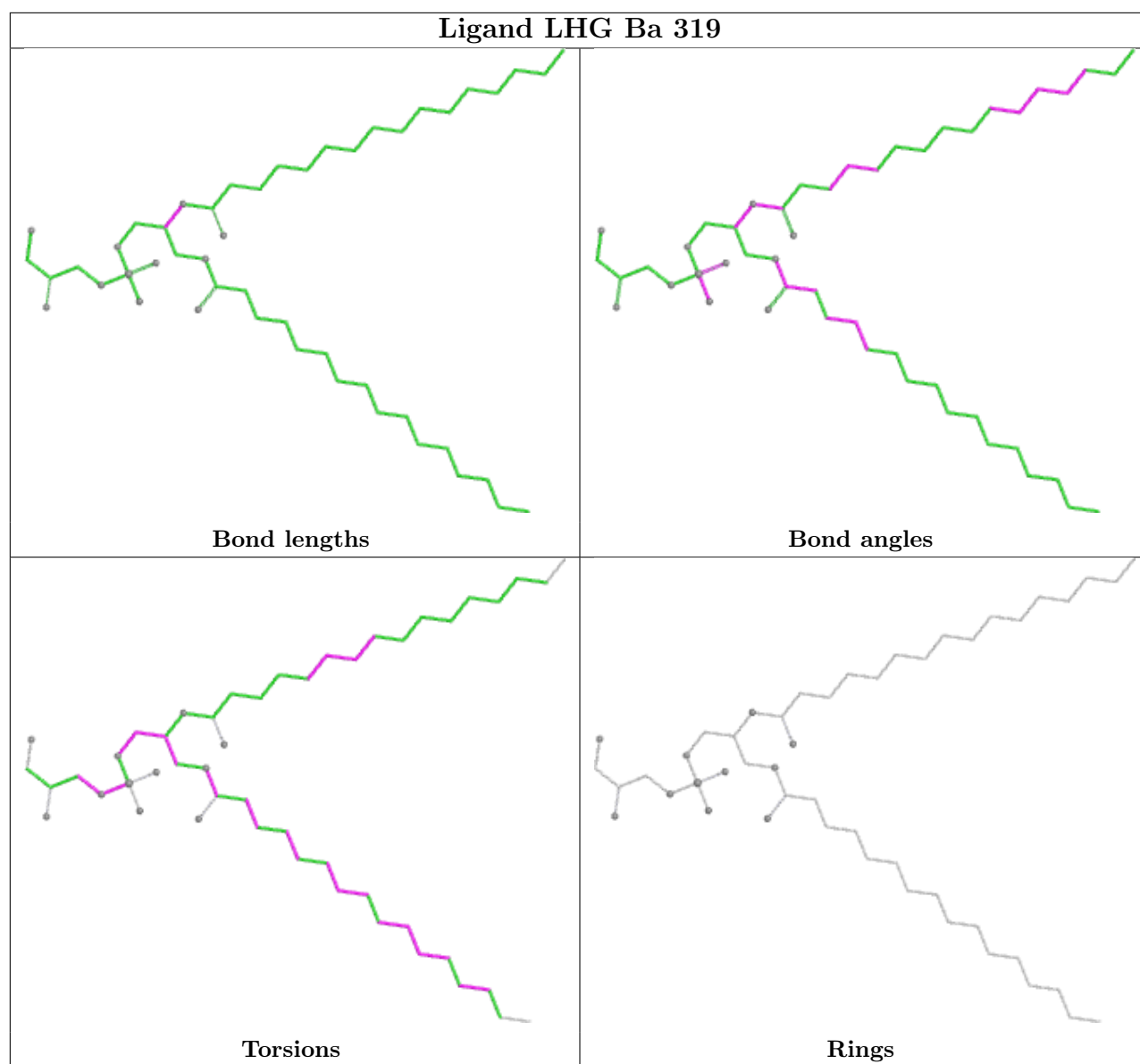


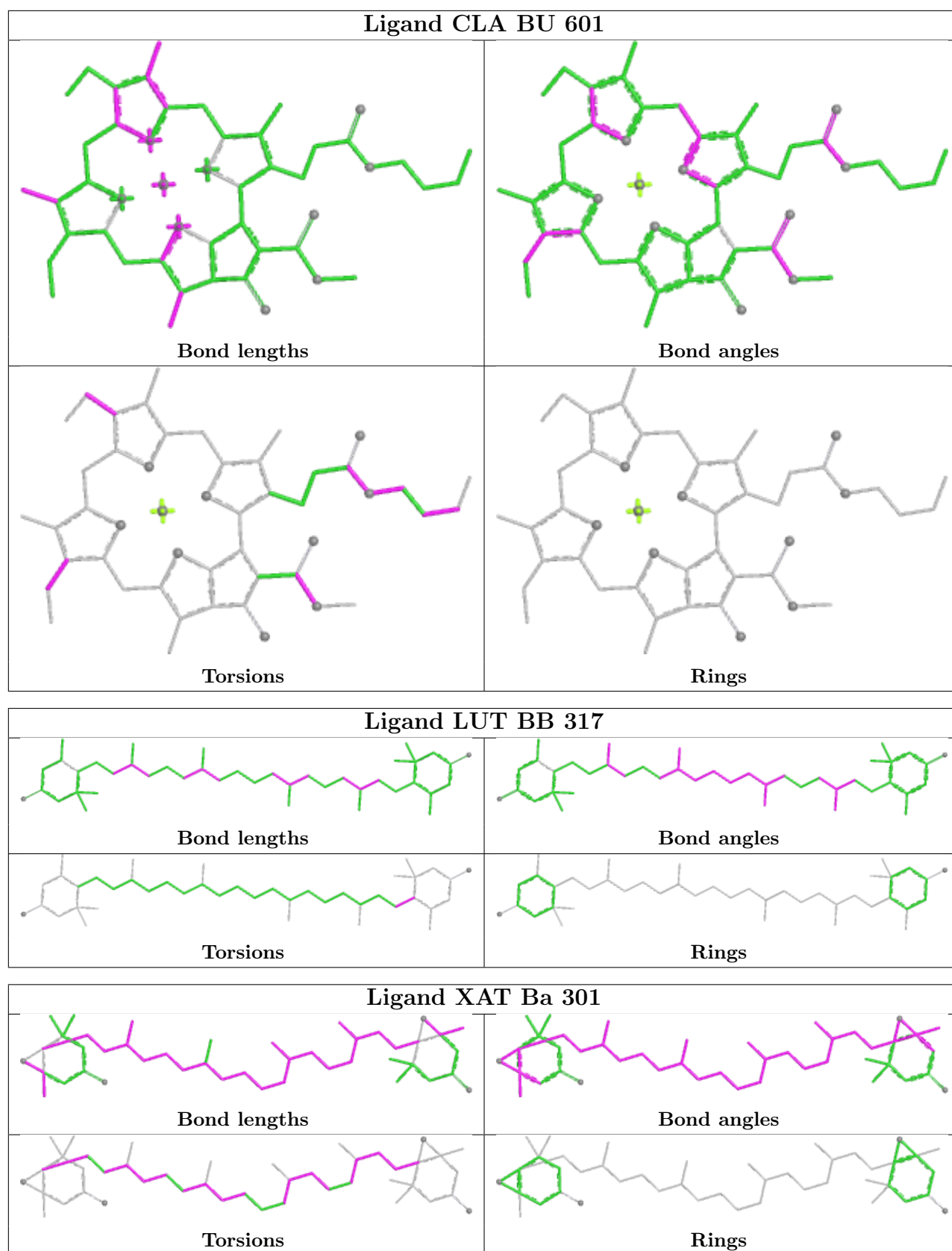
Ligand CLA B 604



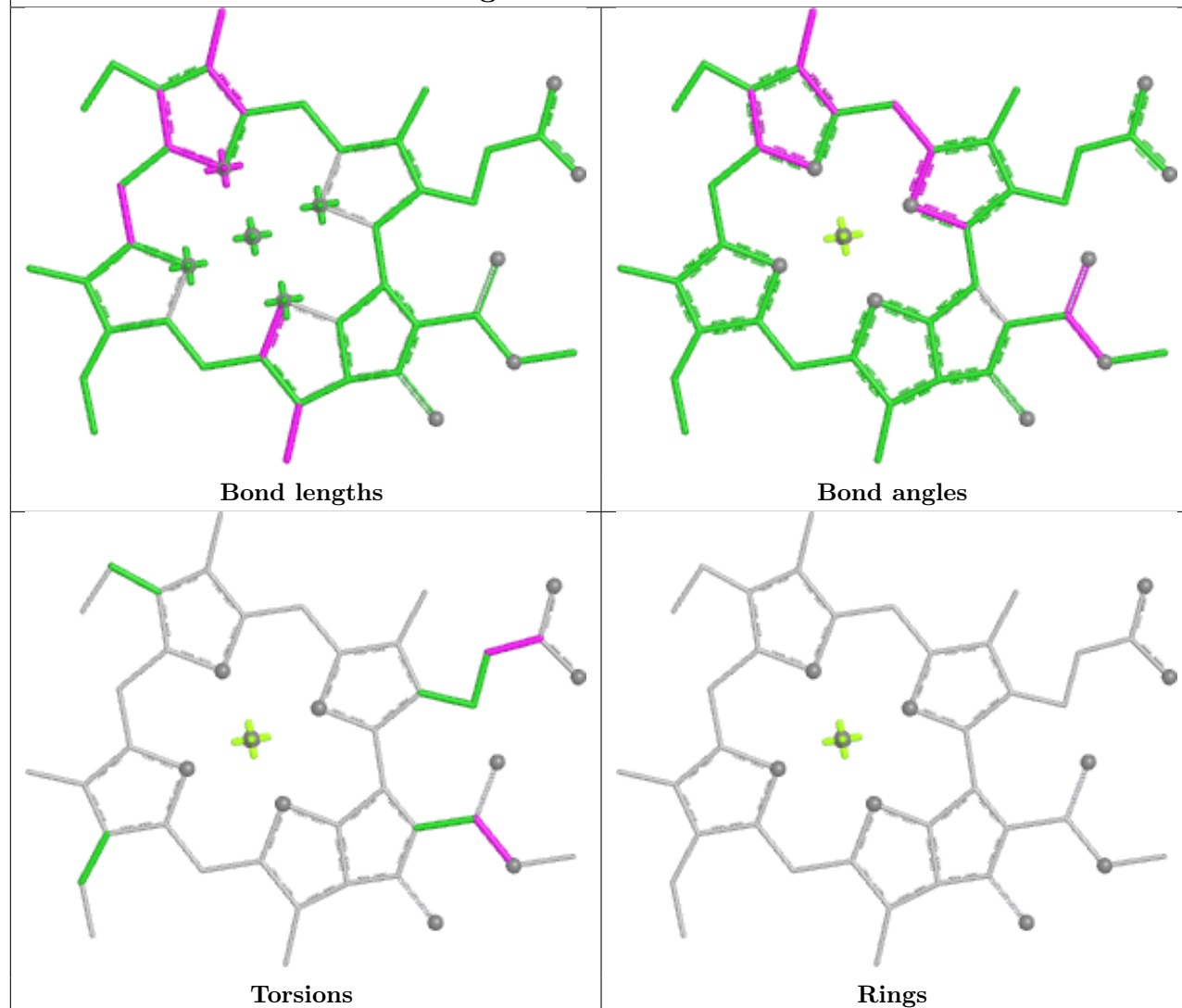
Ligand CHL 7 307



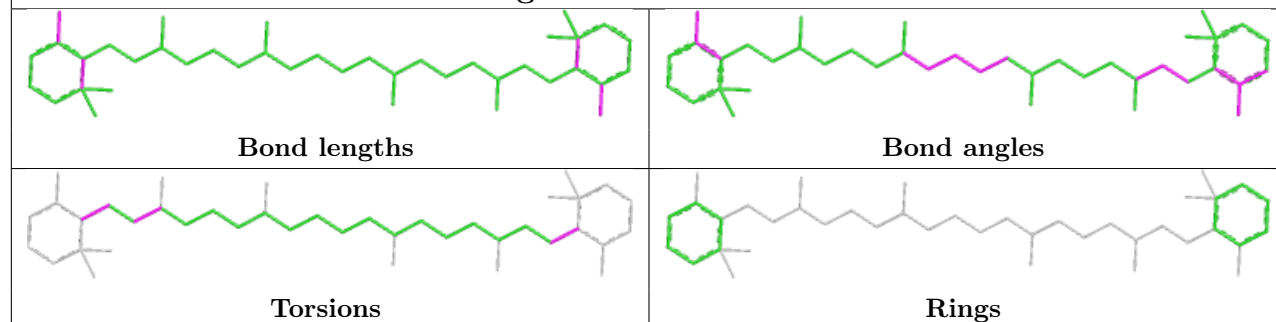


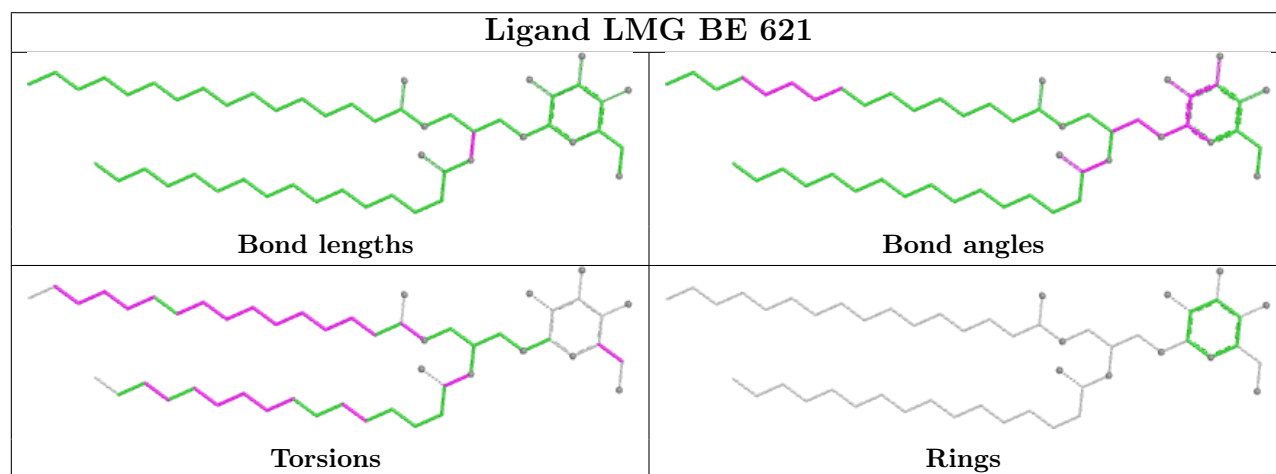
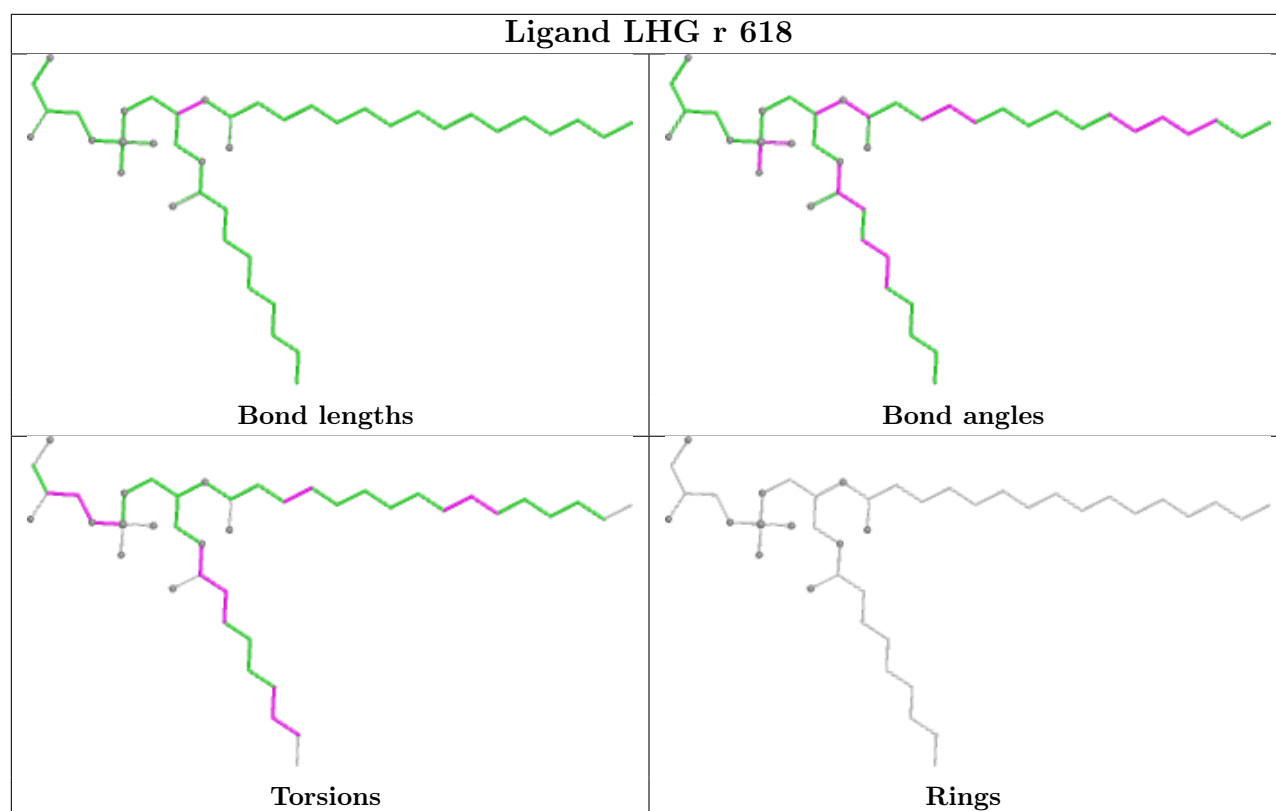


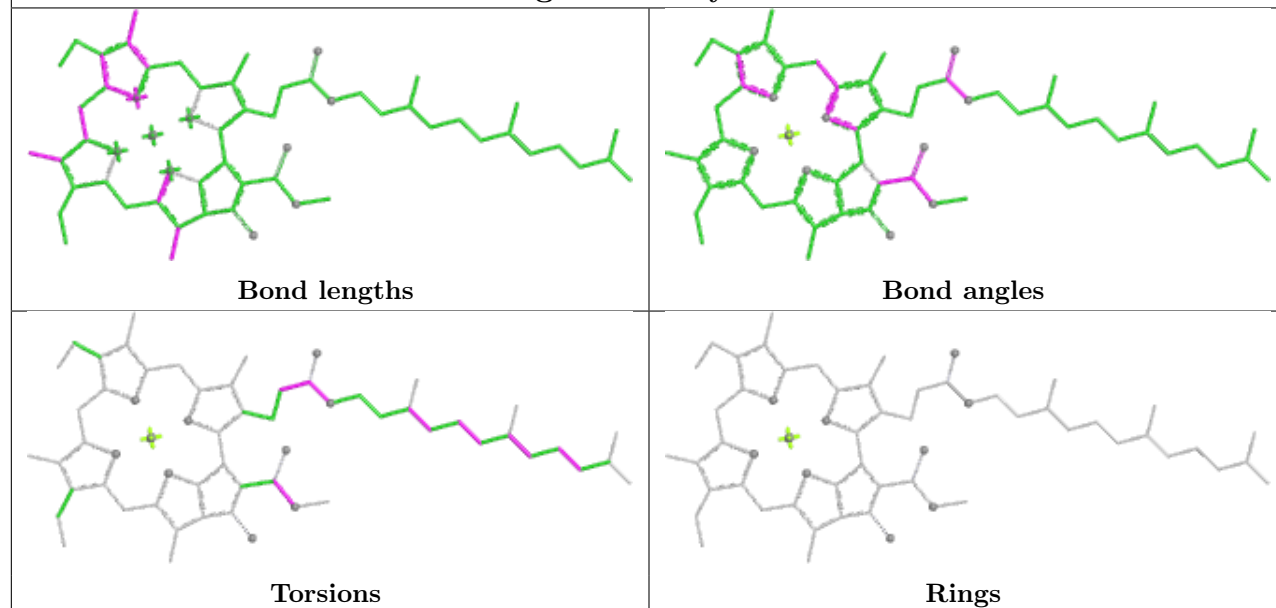
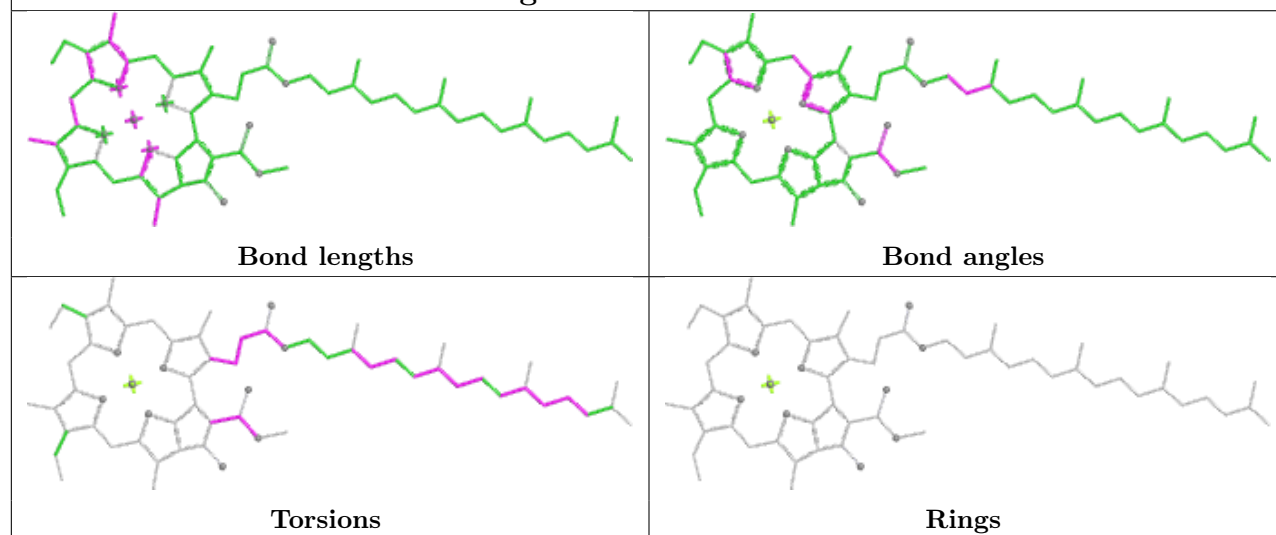
Ligand CLA AA 313

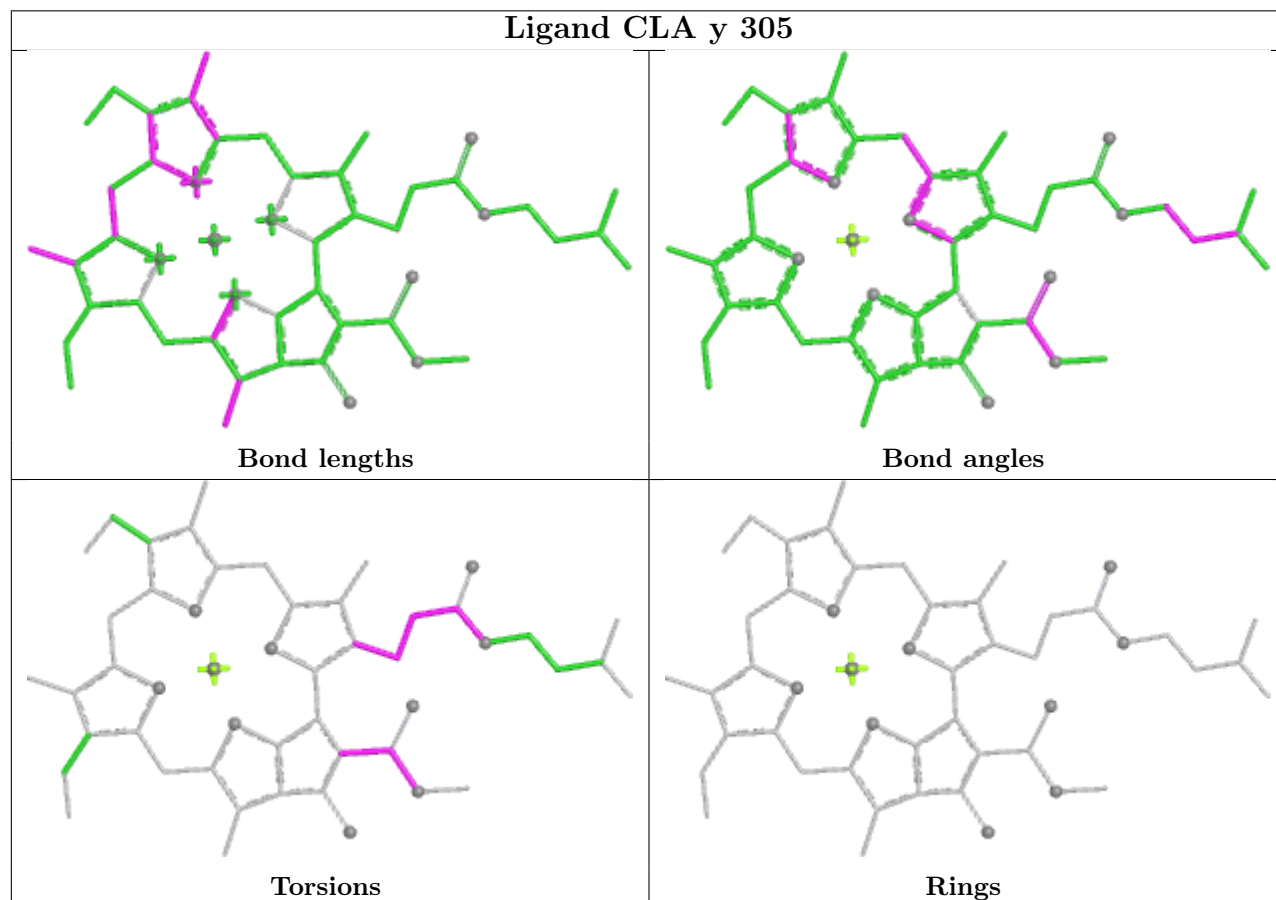
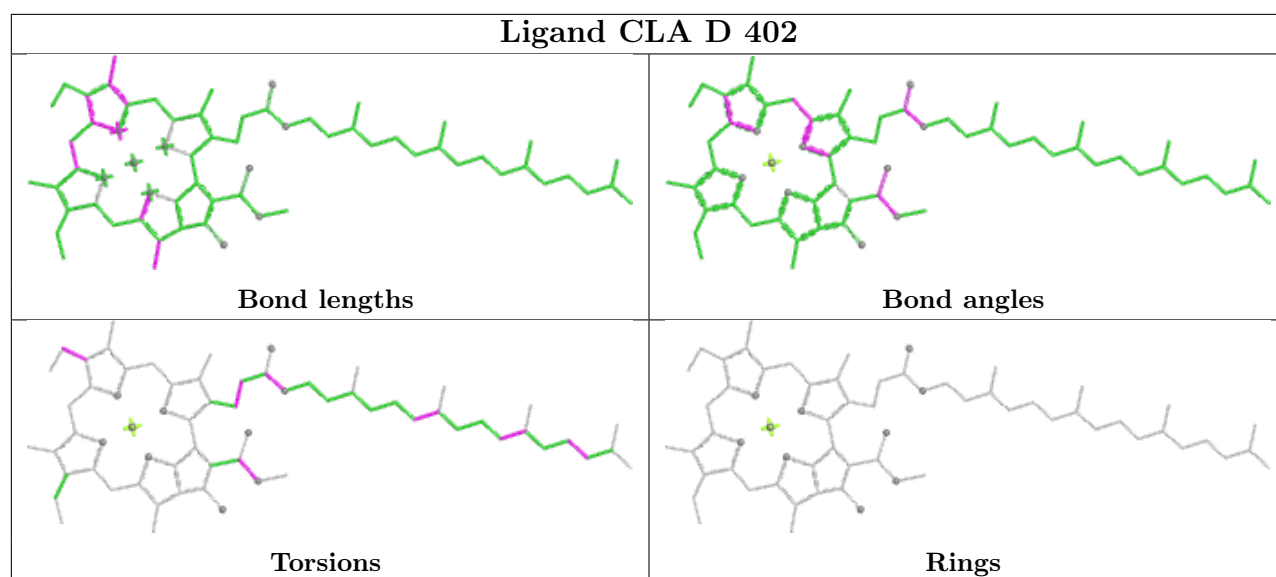


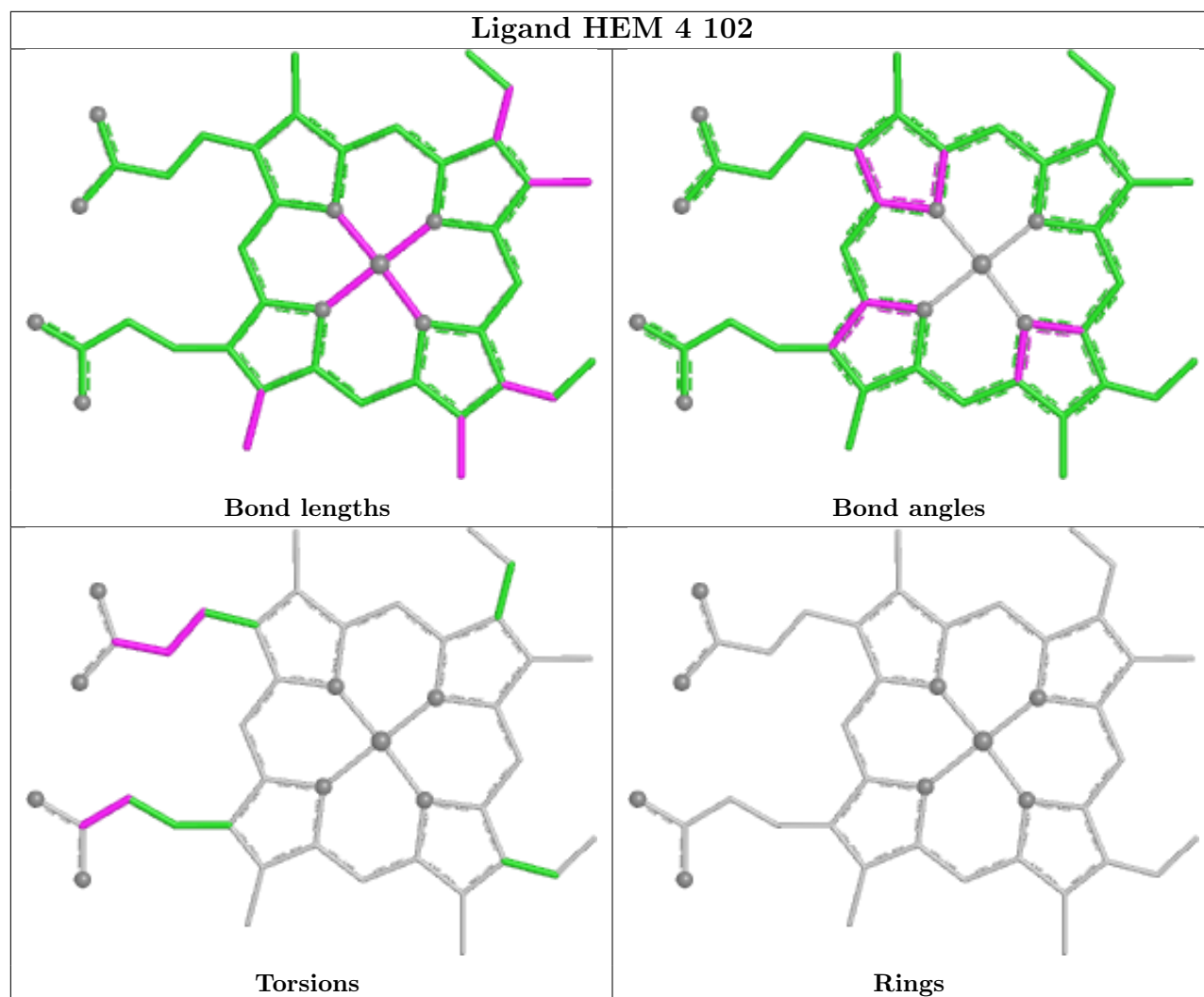
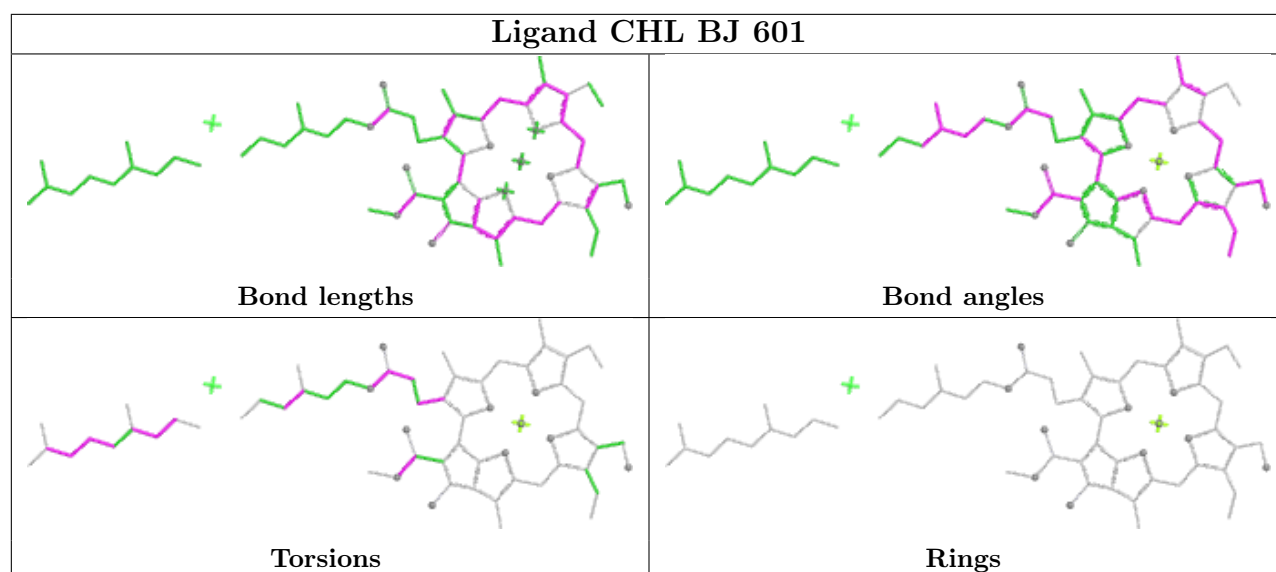
Ligand BCR BD 411



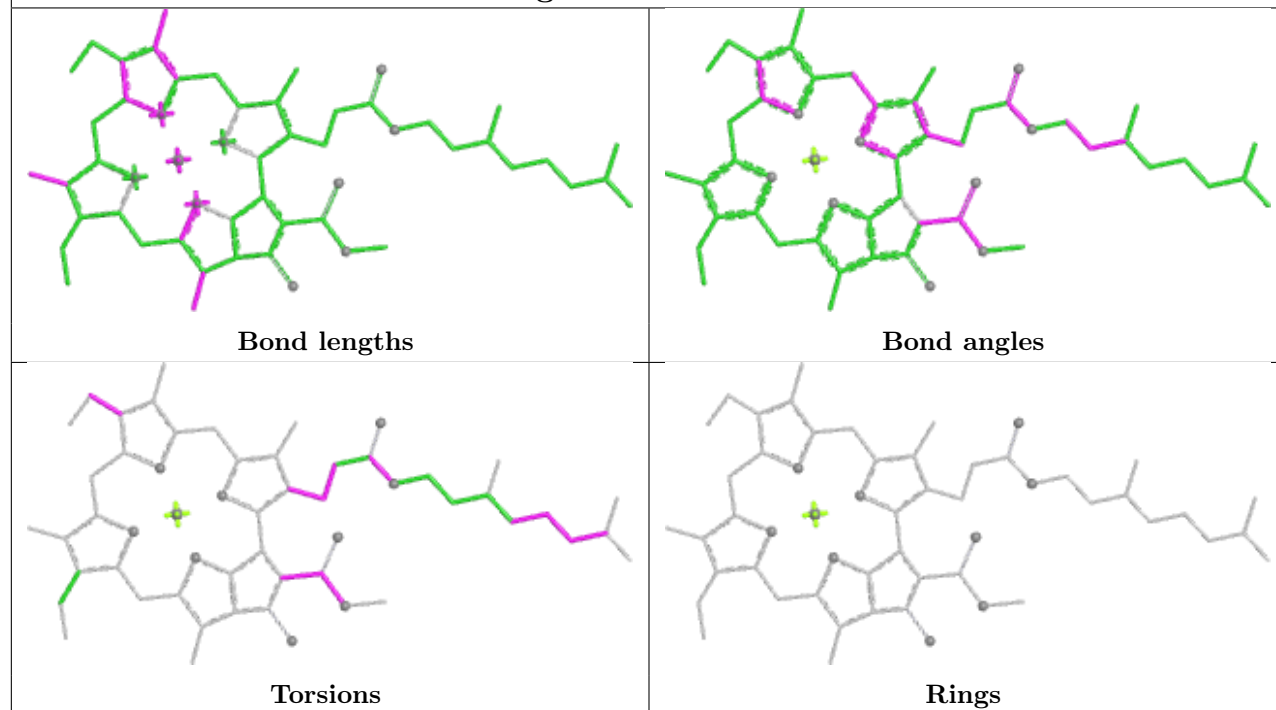


Ligand CLA y 313**Ligand CLA BB 303**

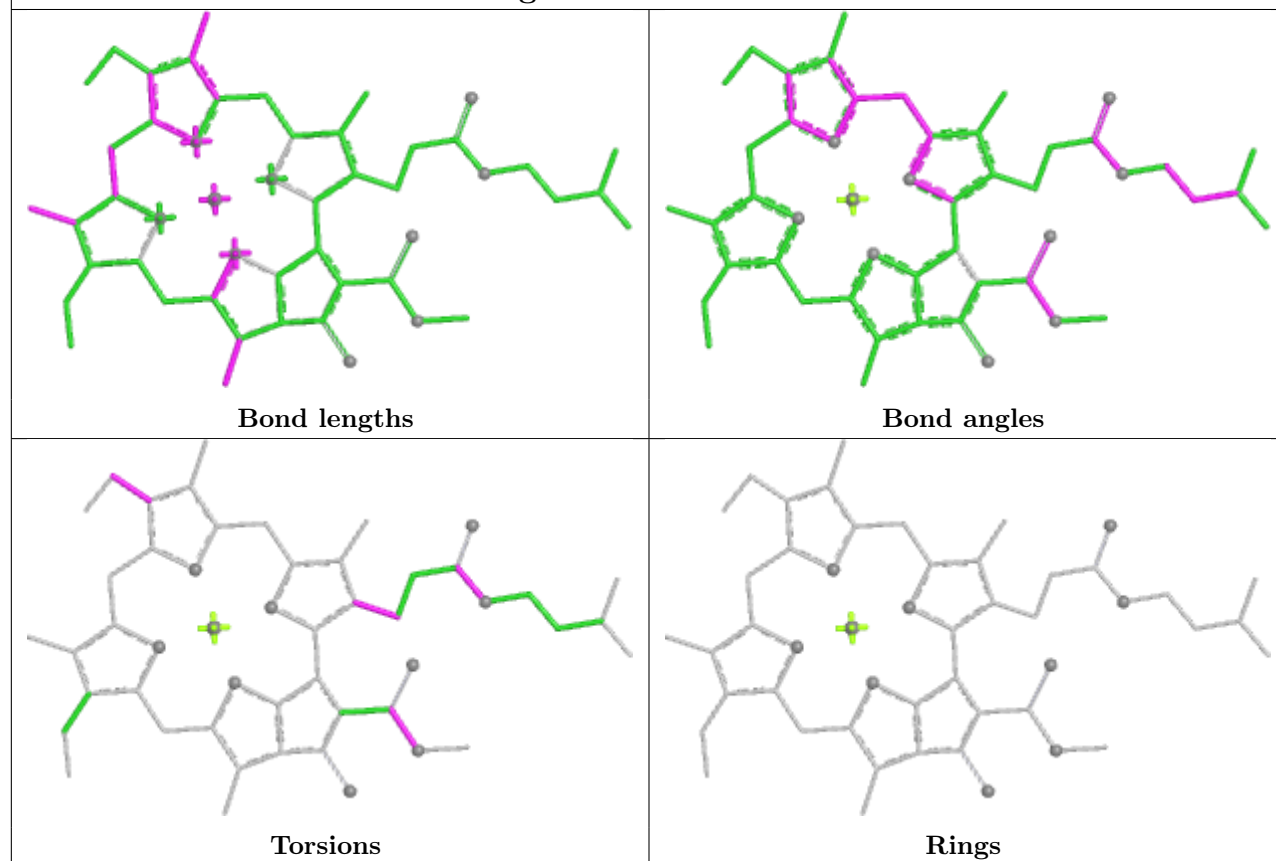


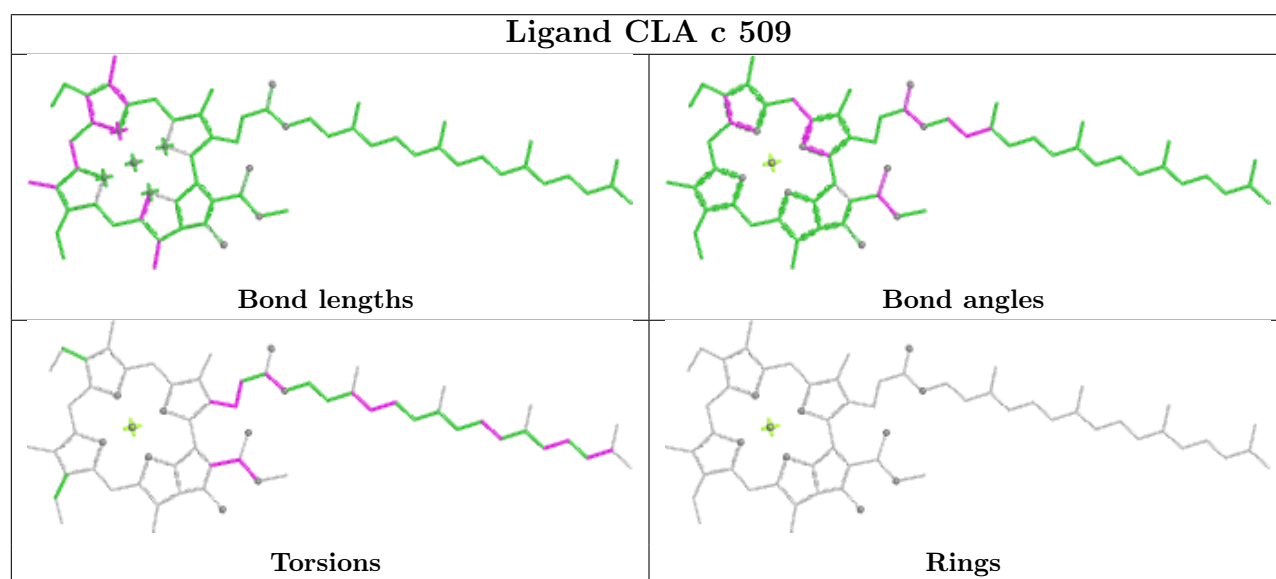
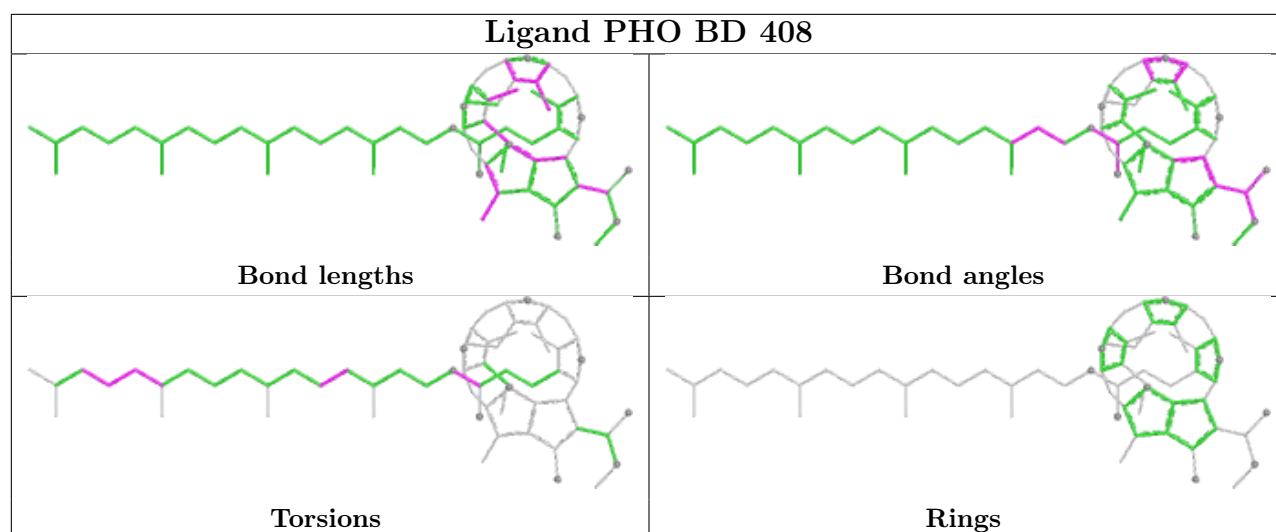


Ligand CLA 0 611

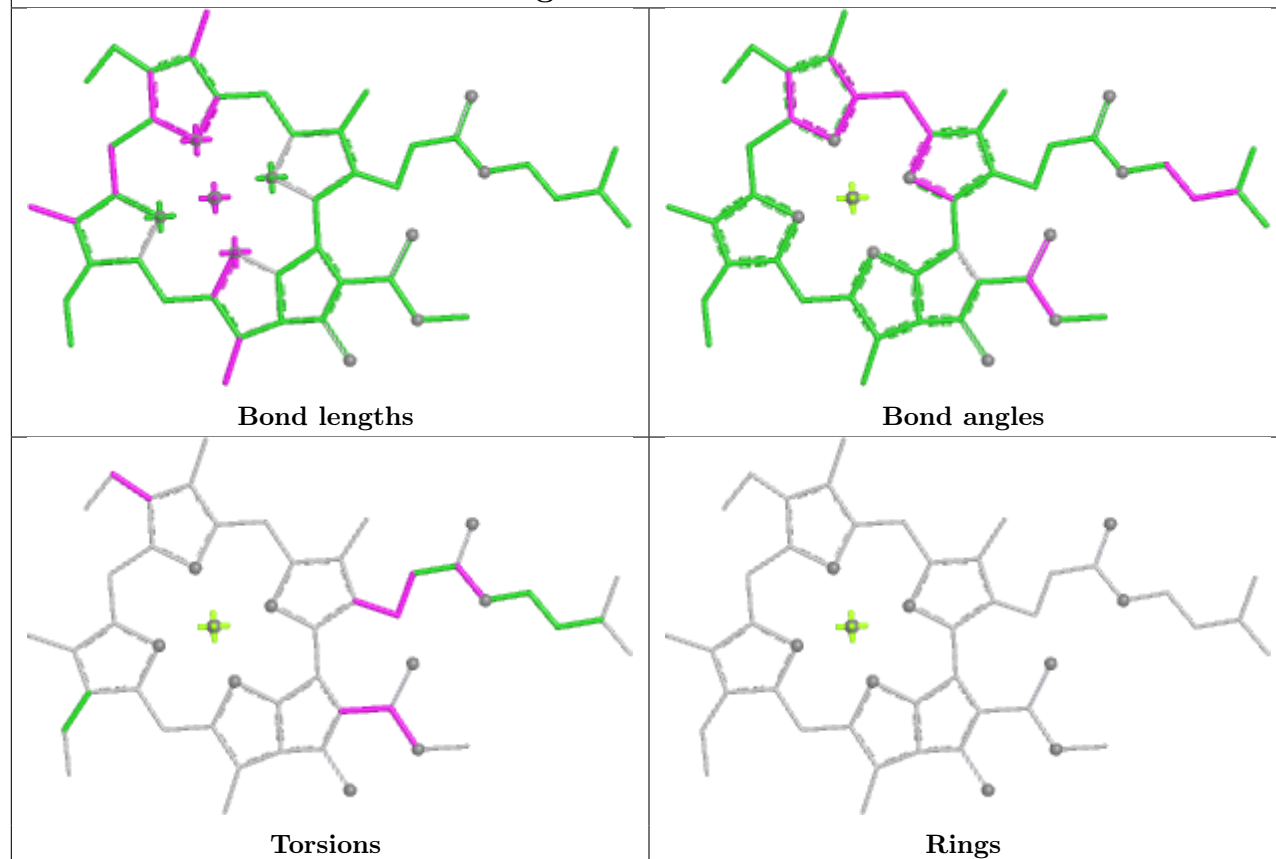


Ligand CLA BV 604

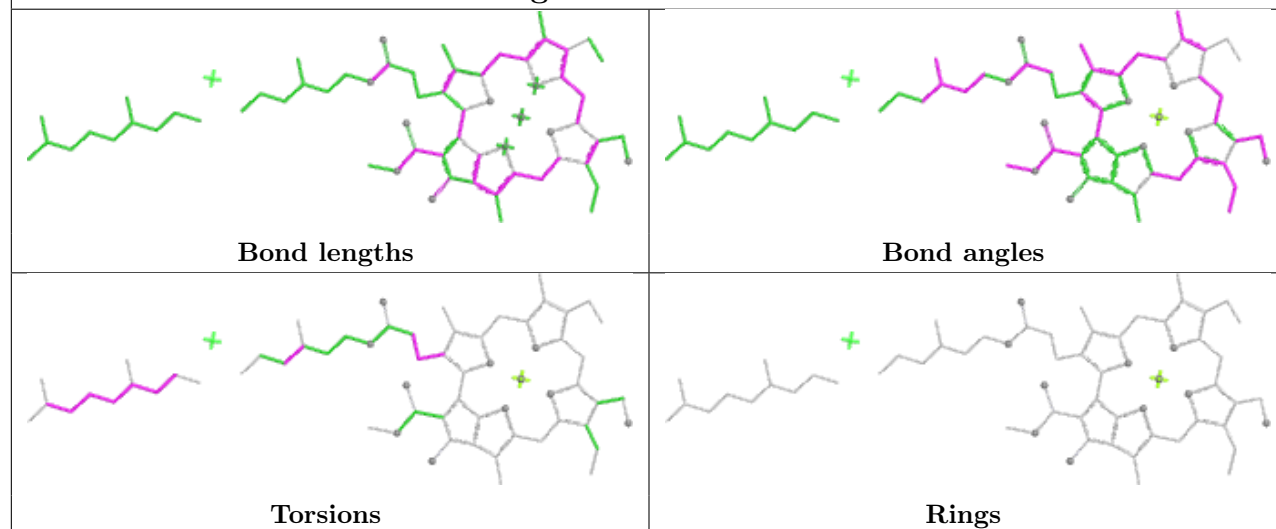


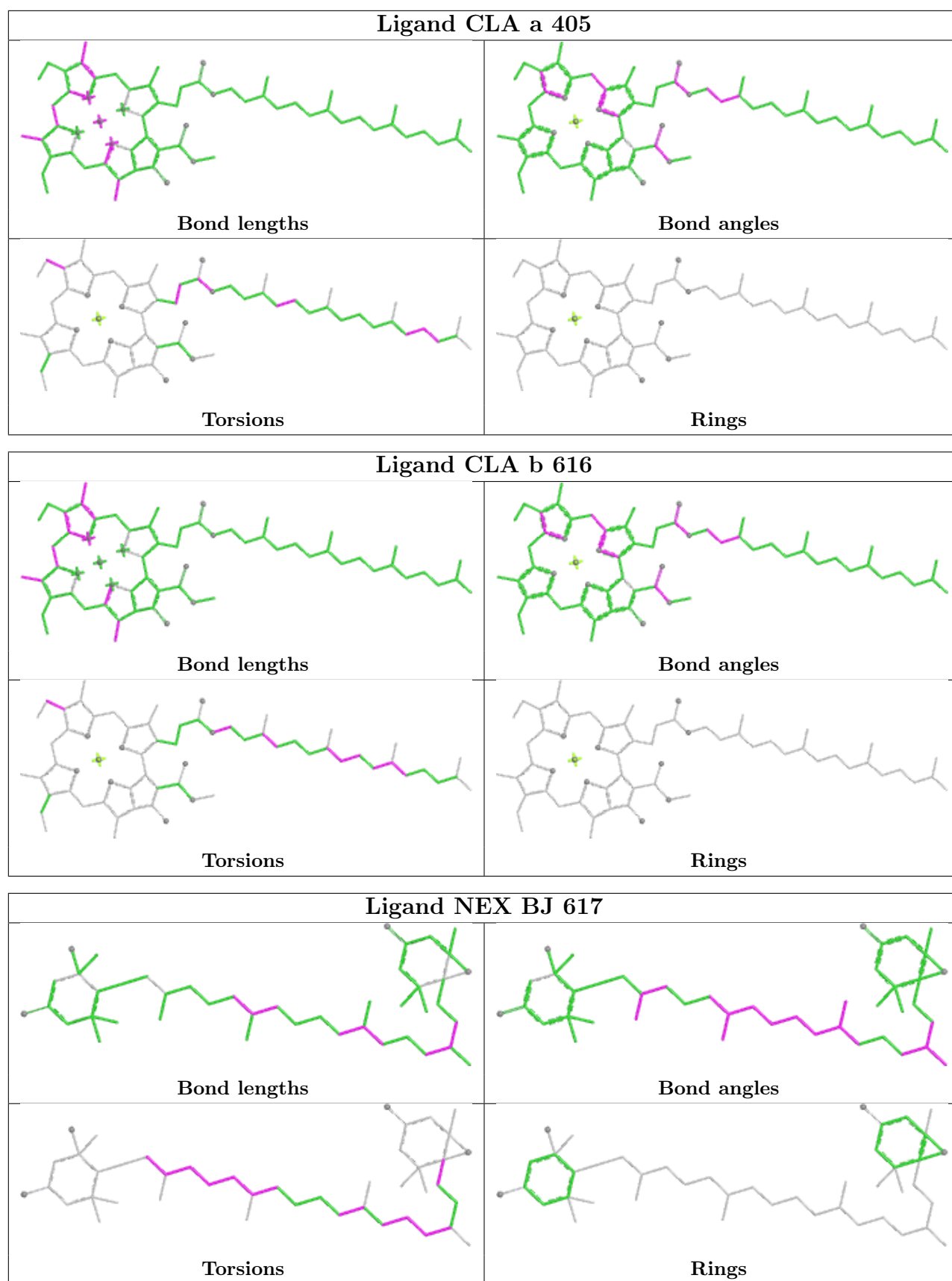


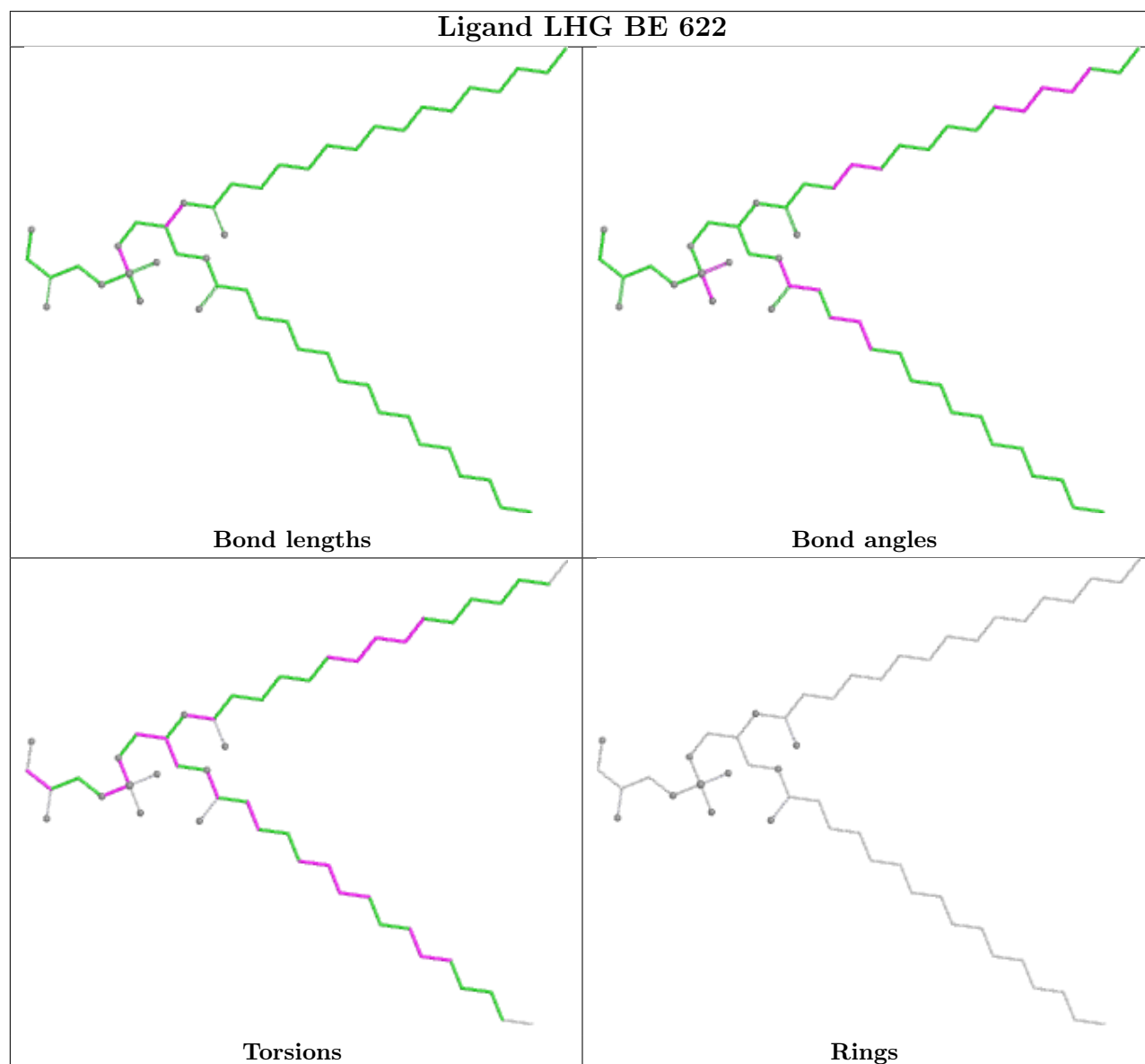
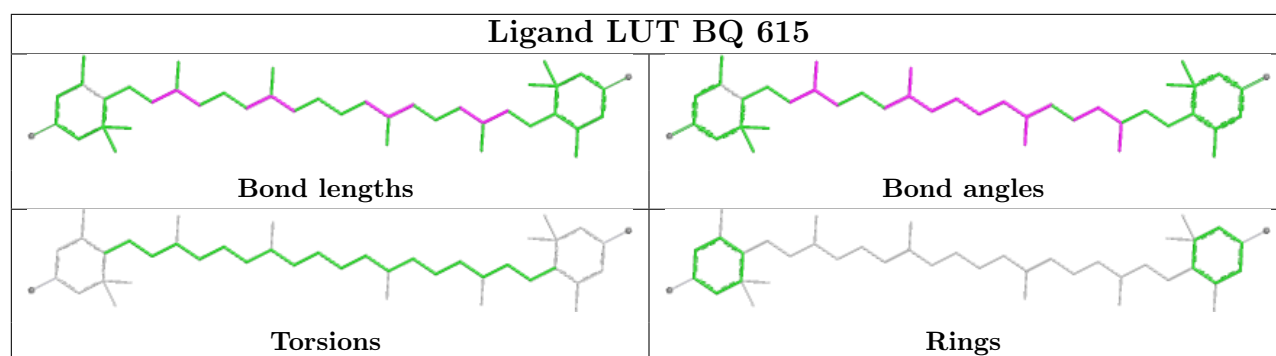
Ligand CLA 5 604

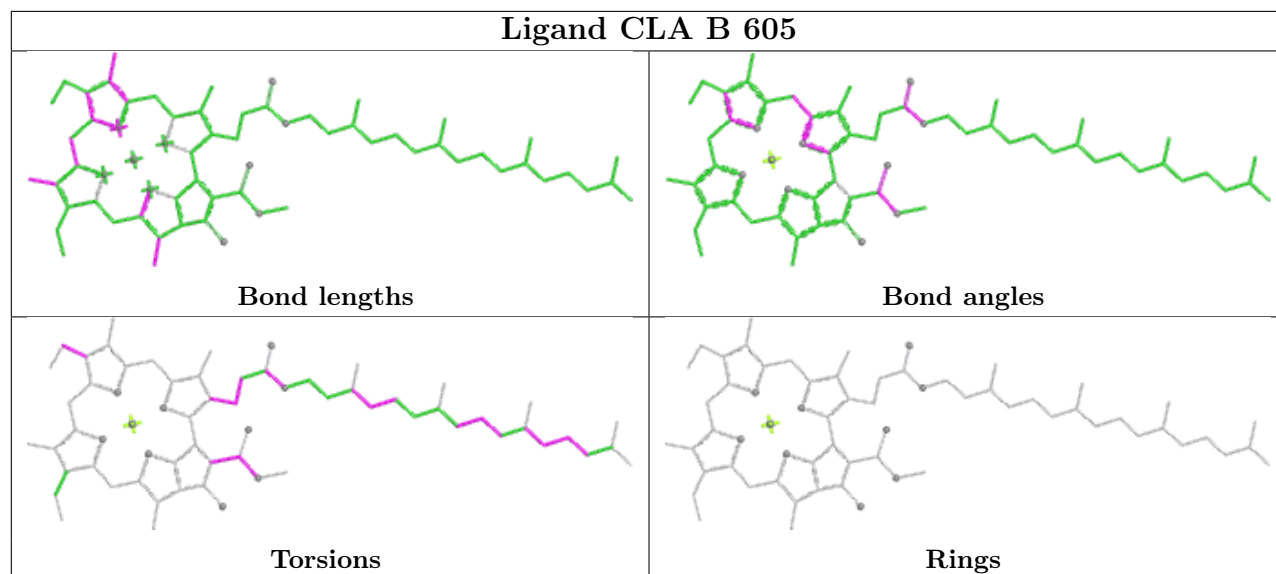
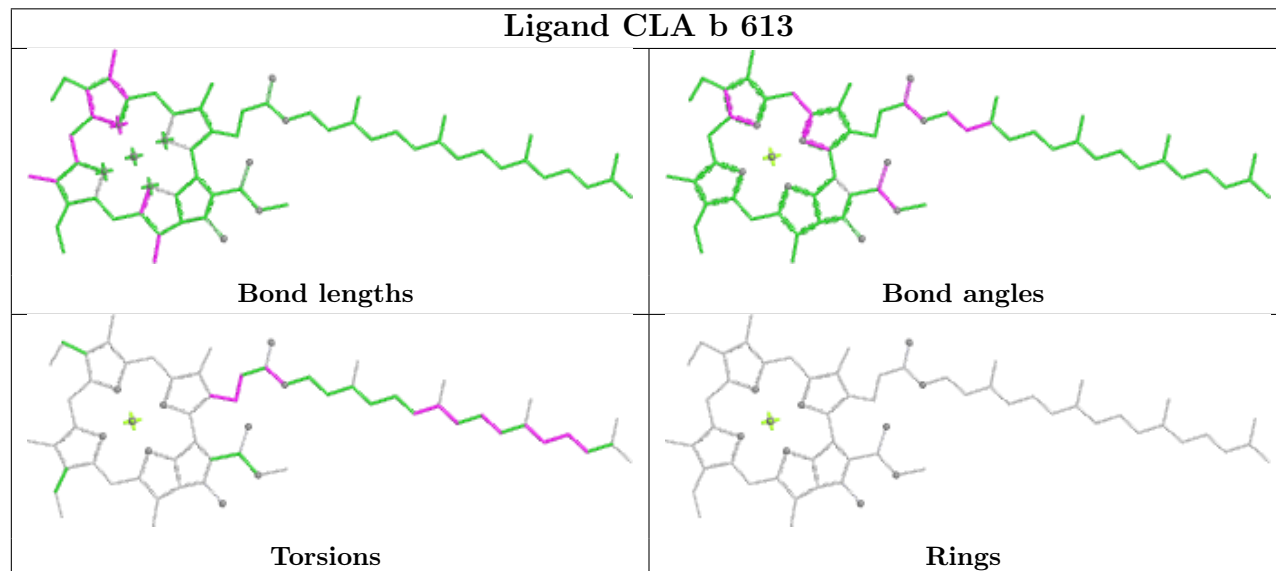


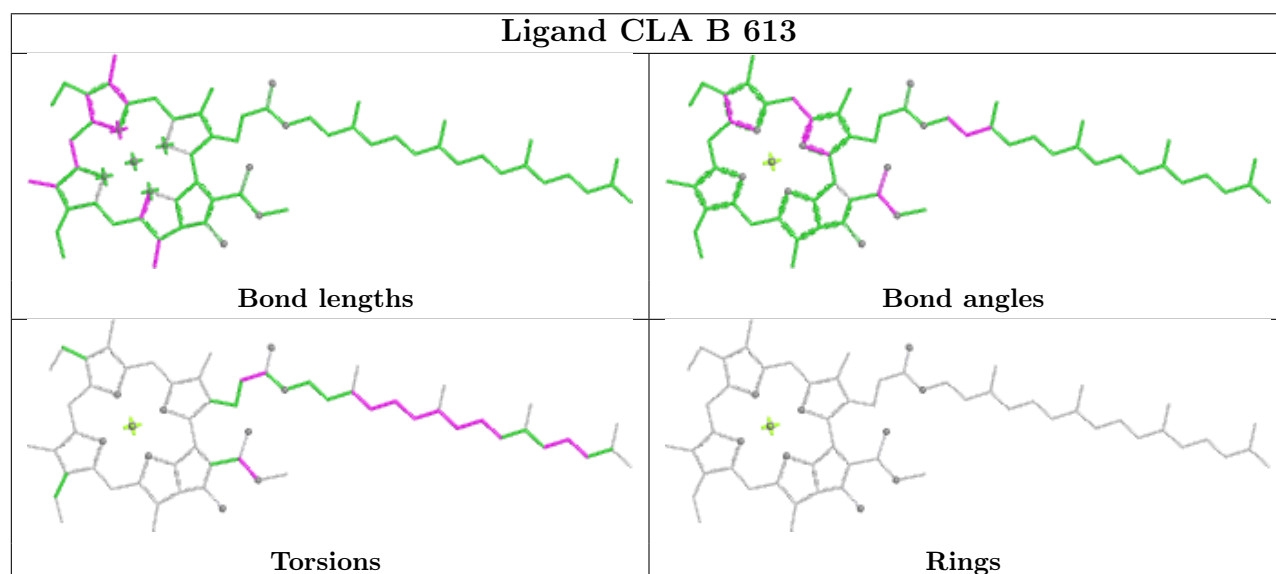
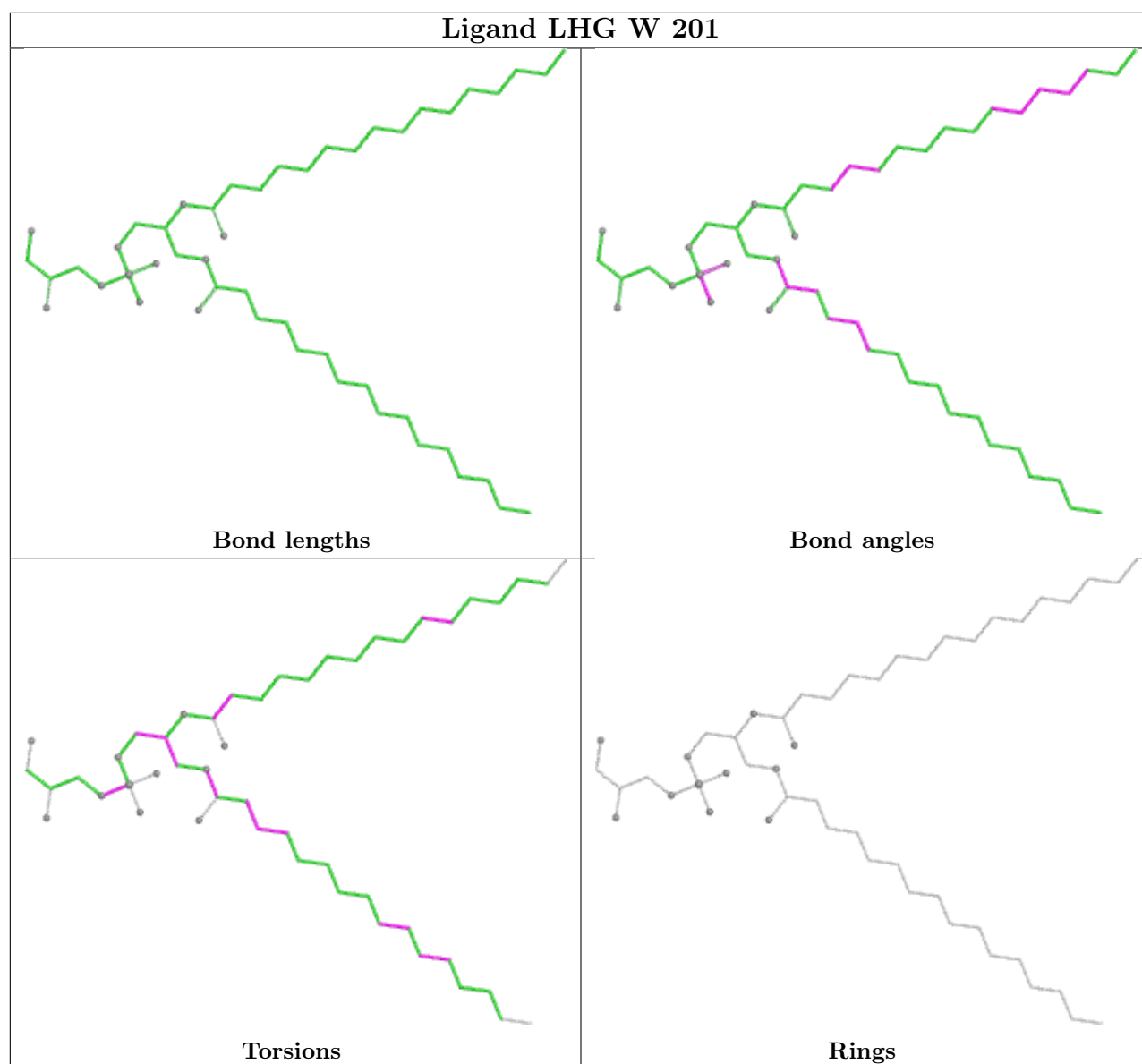
Ligand CHL N 607

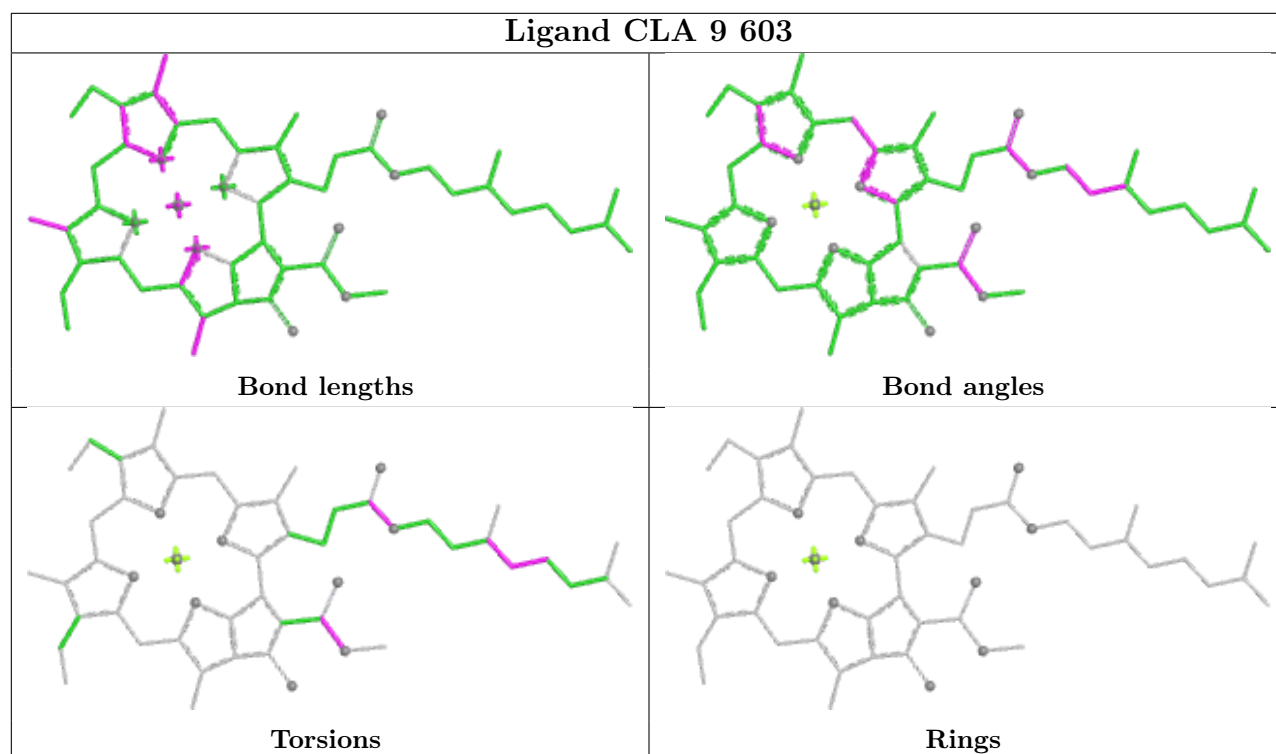
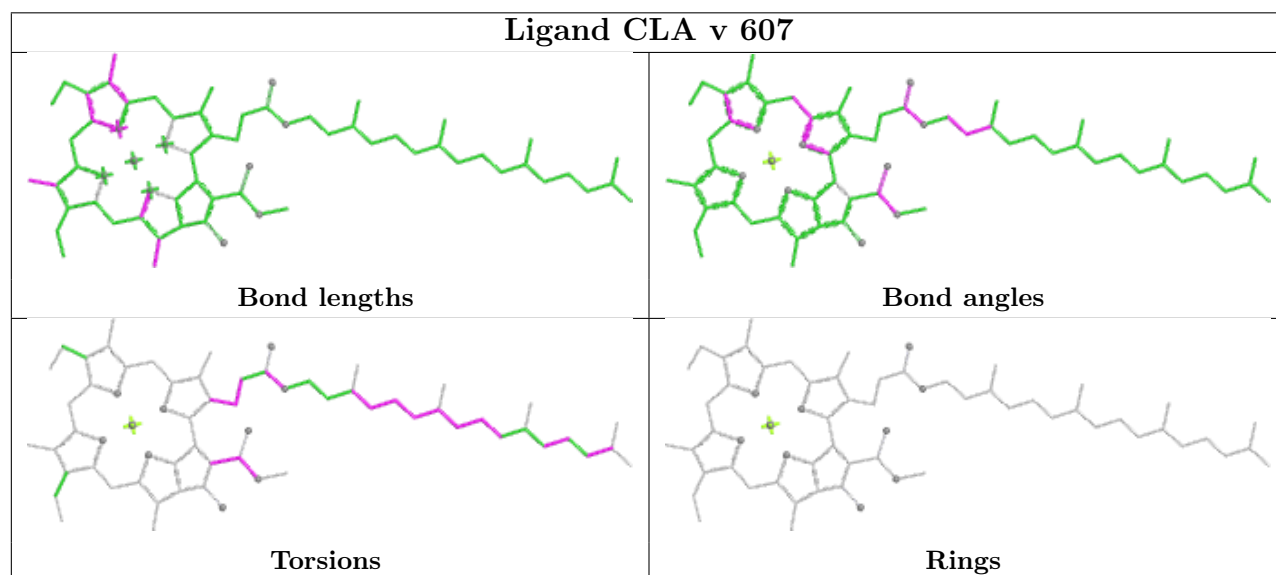
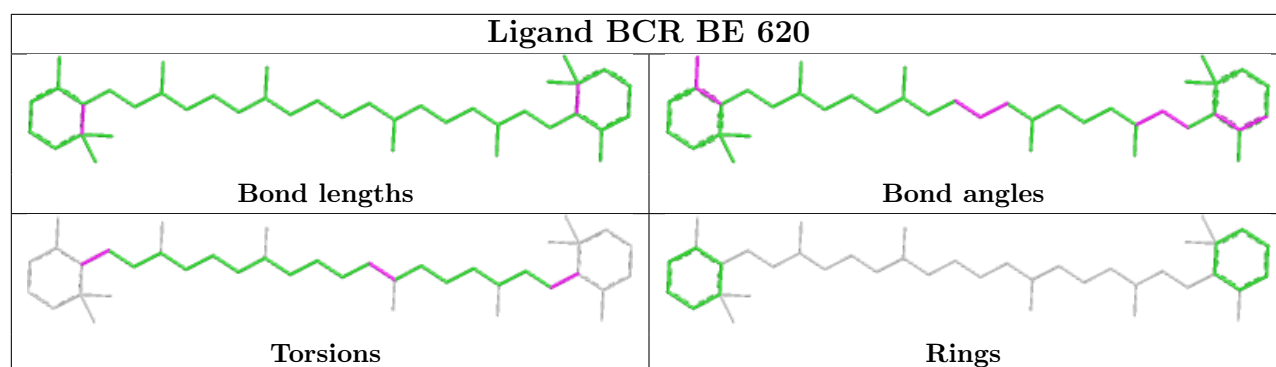




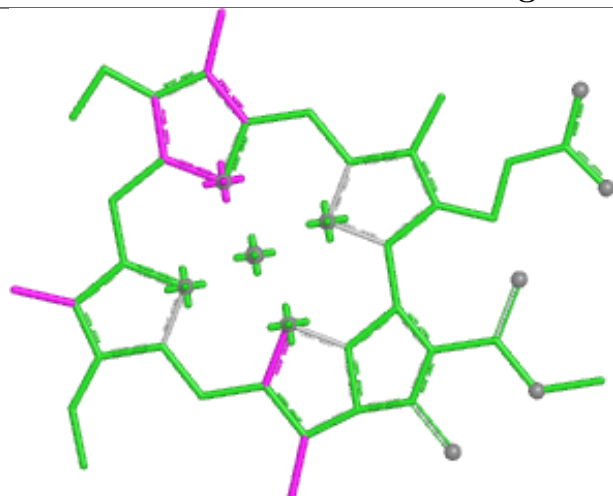


Ligand CLA B 605**Ligand CLA b 613**

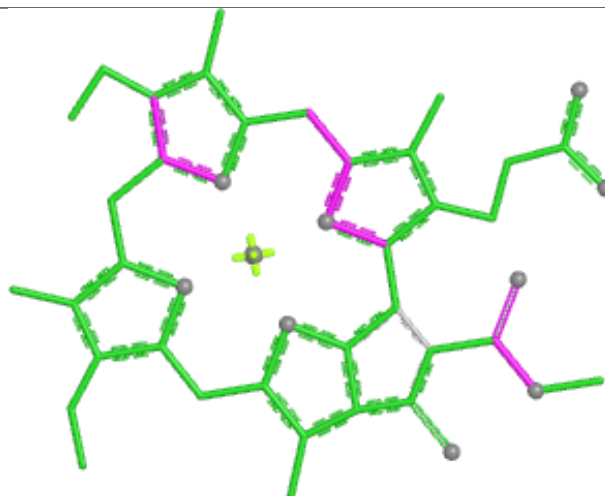




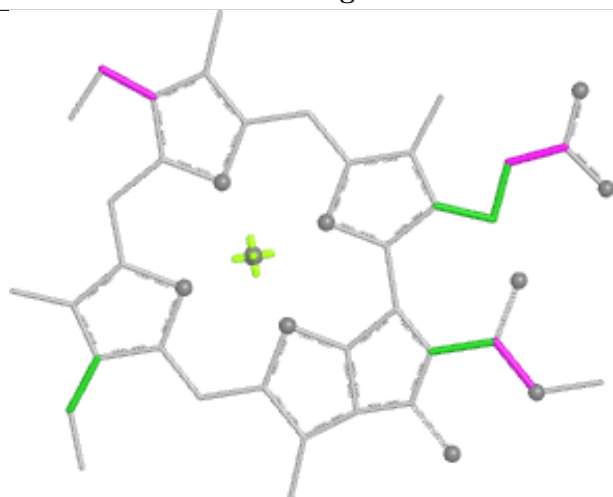
Ligand CLA 0 612



Bond lengths



Bond angles

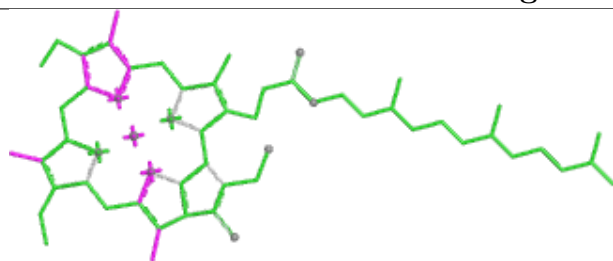


Torsions

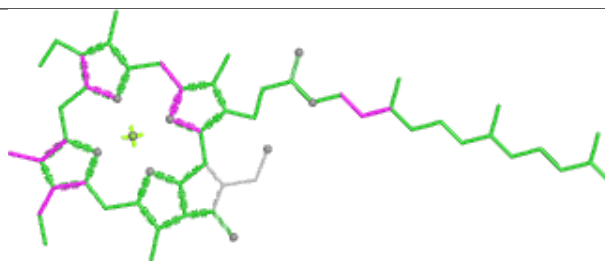


Rings

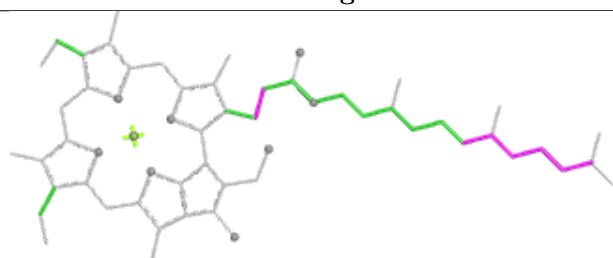
Ligand CLA r 602



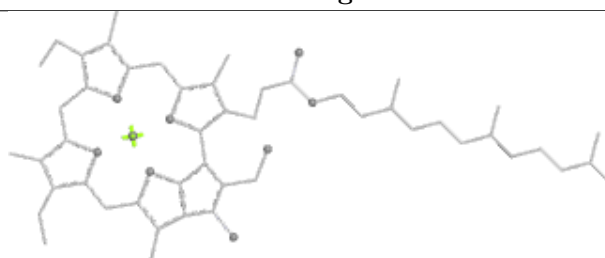
Bond lengths



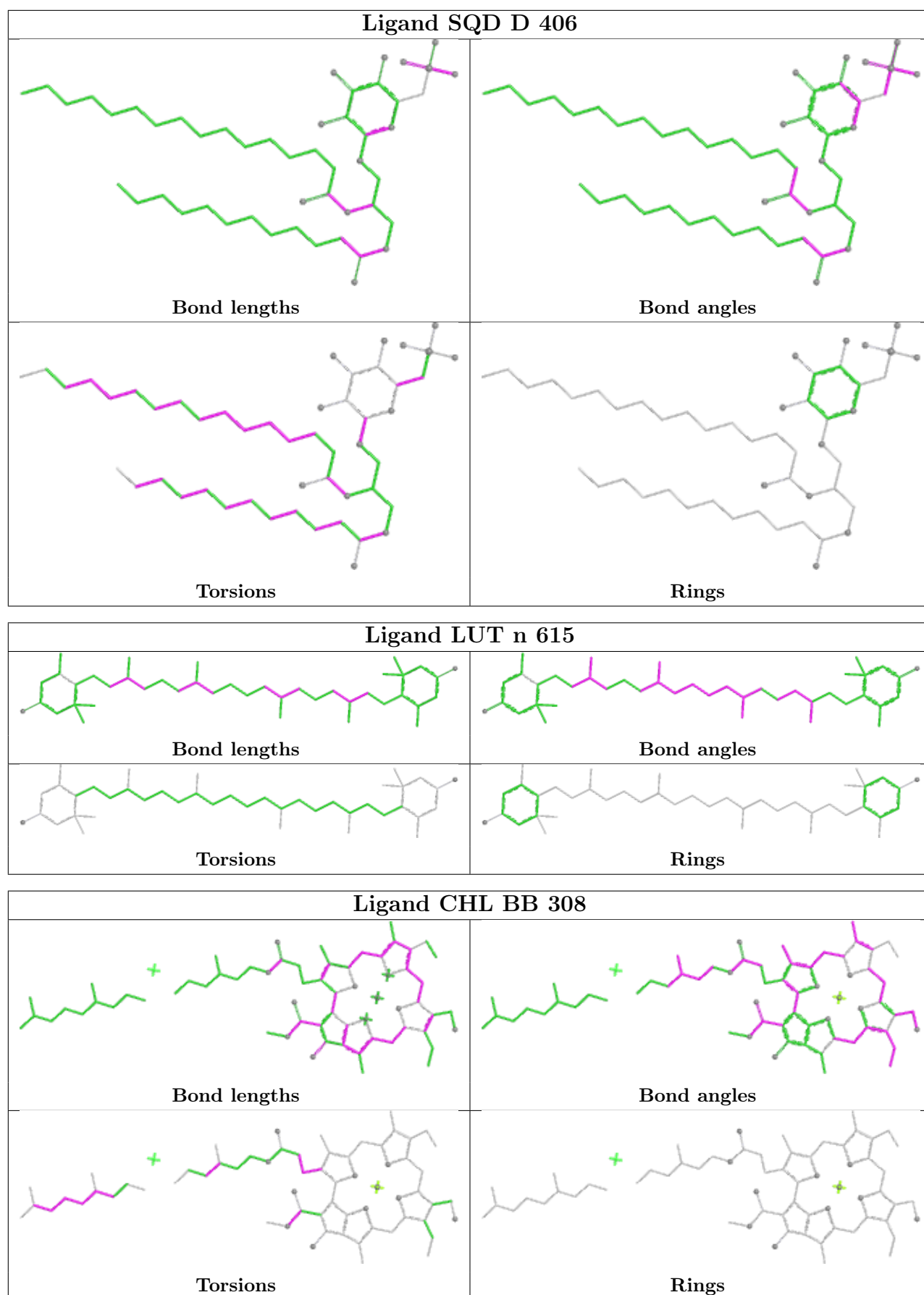
Bond angles

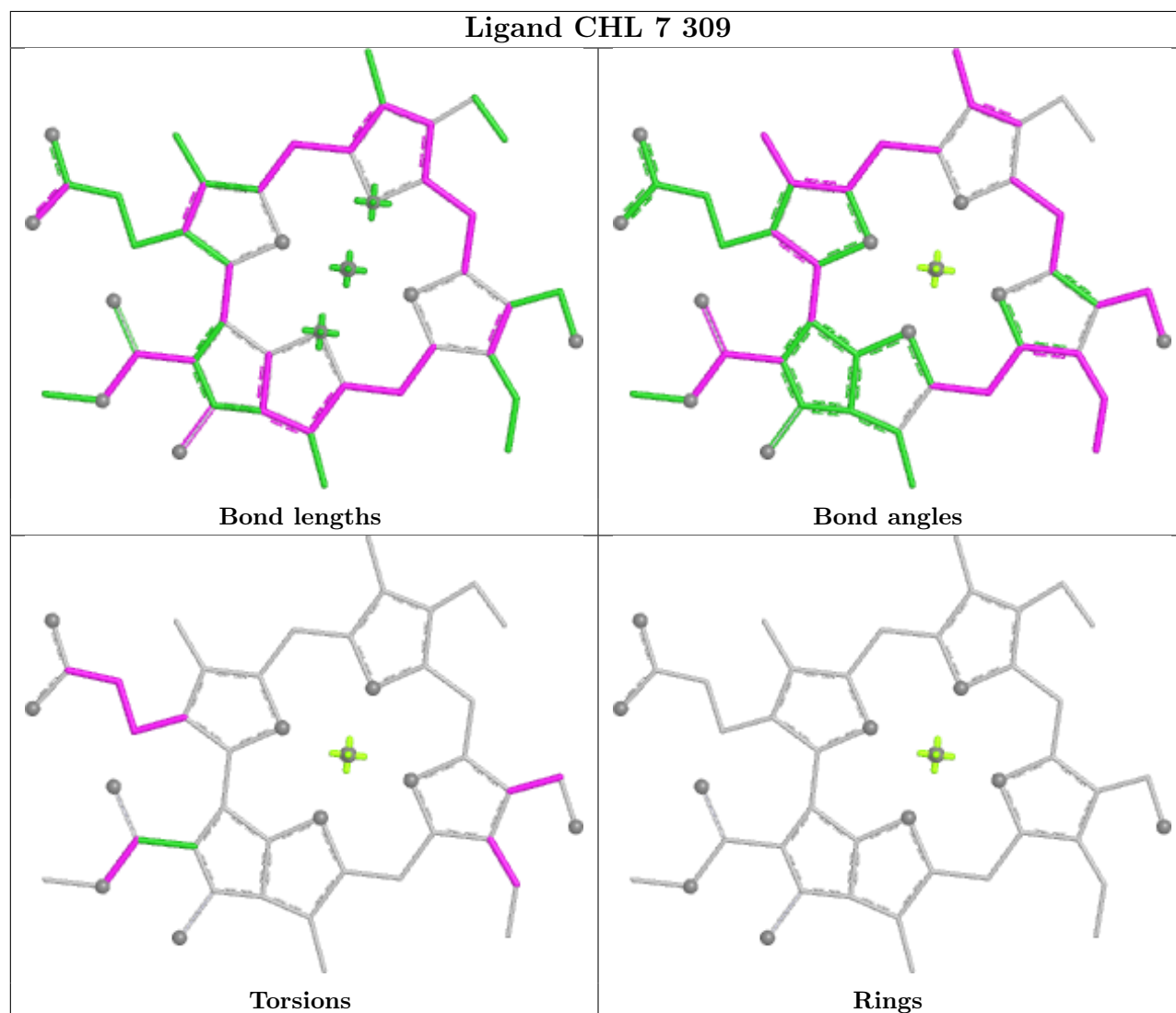
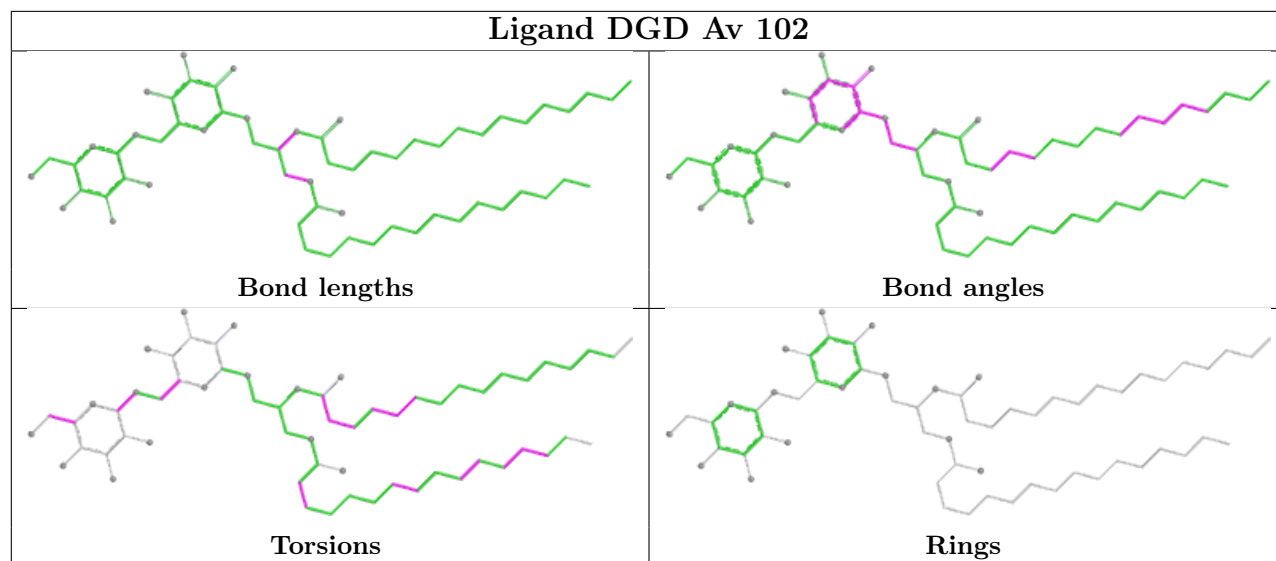


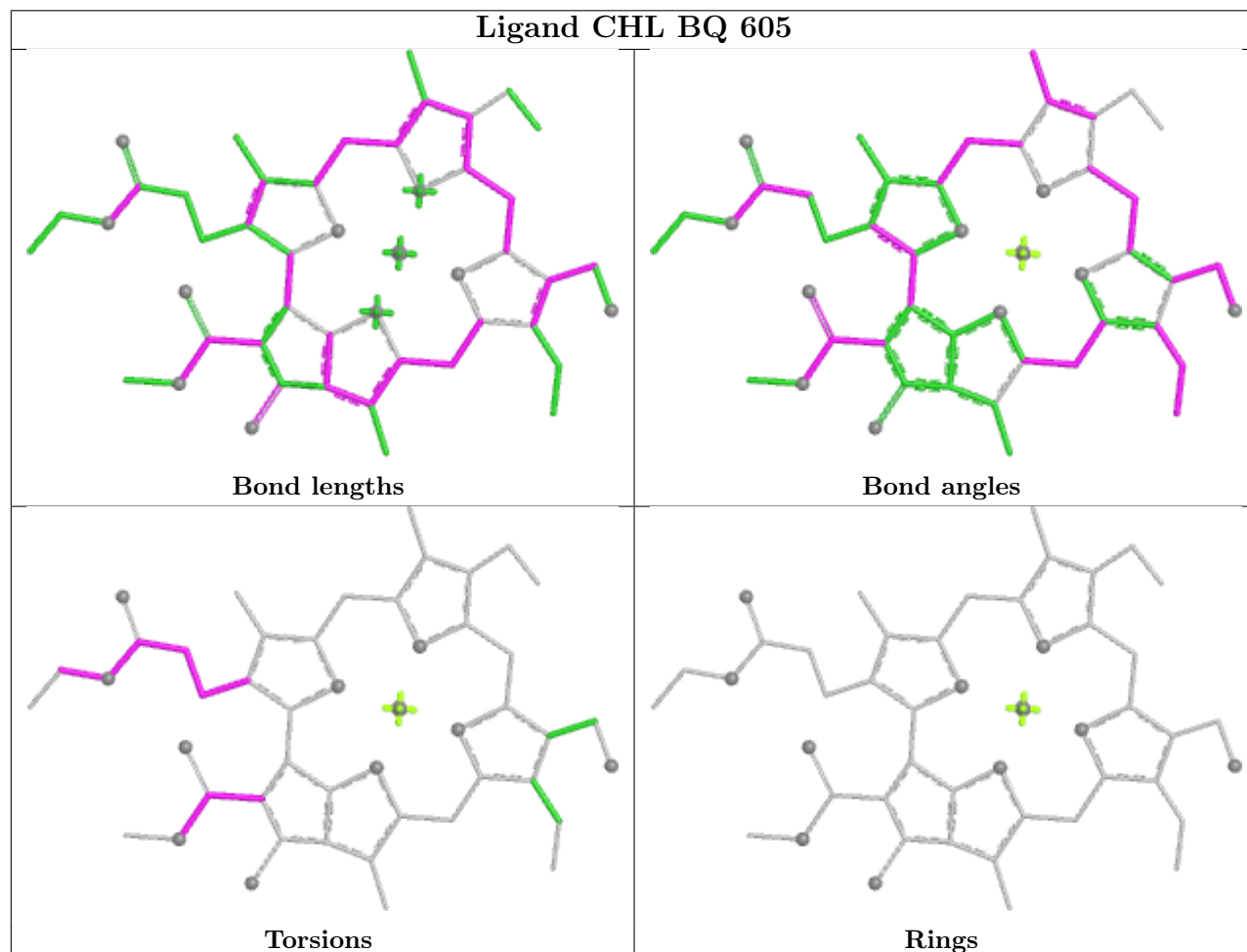
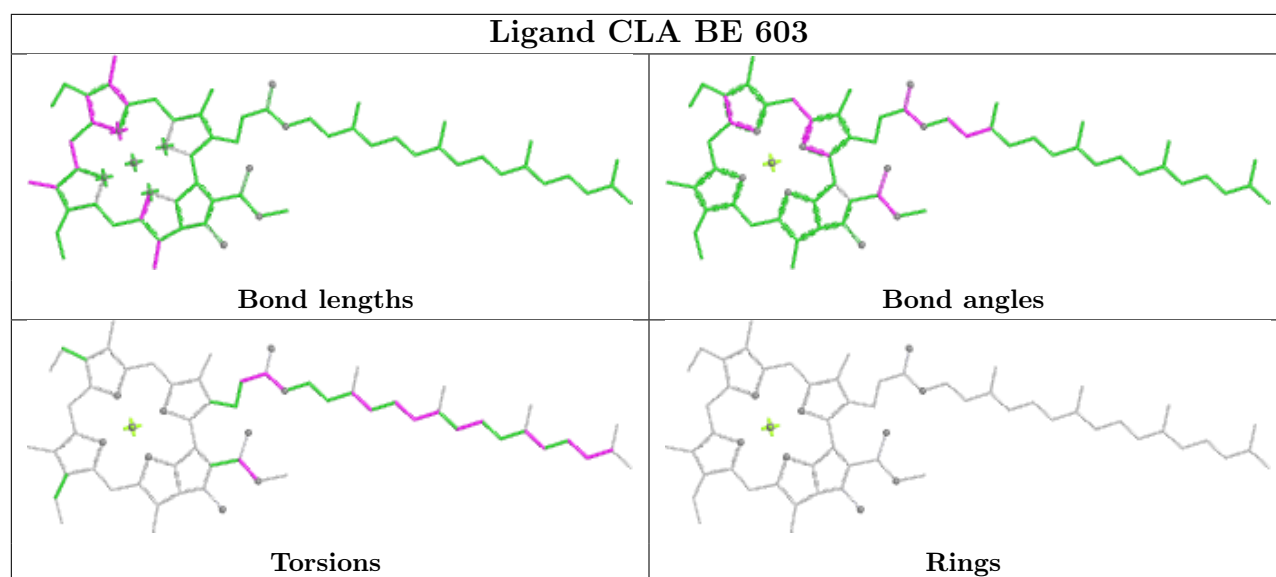
Torsions



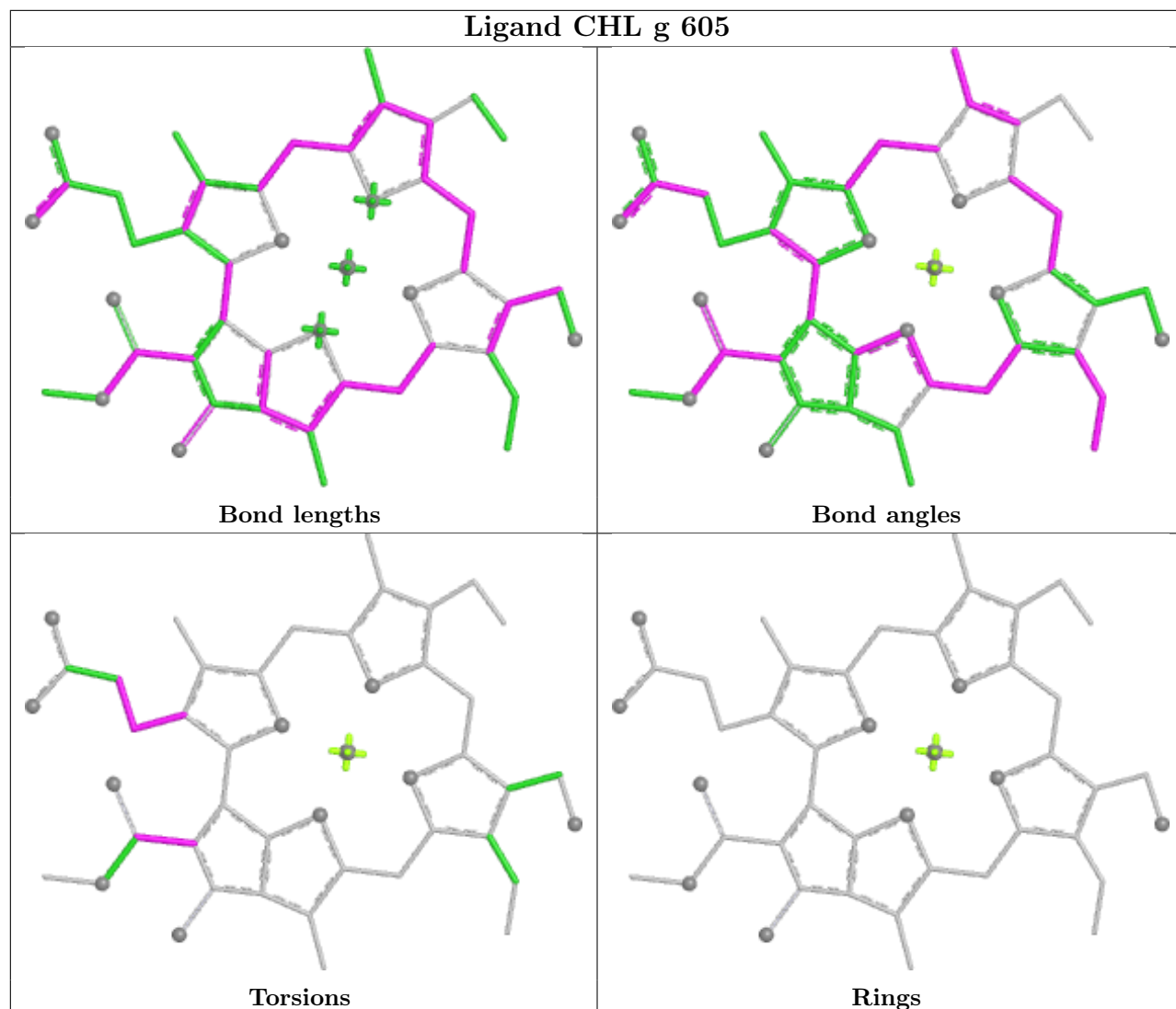
Rings



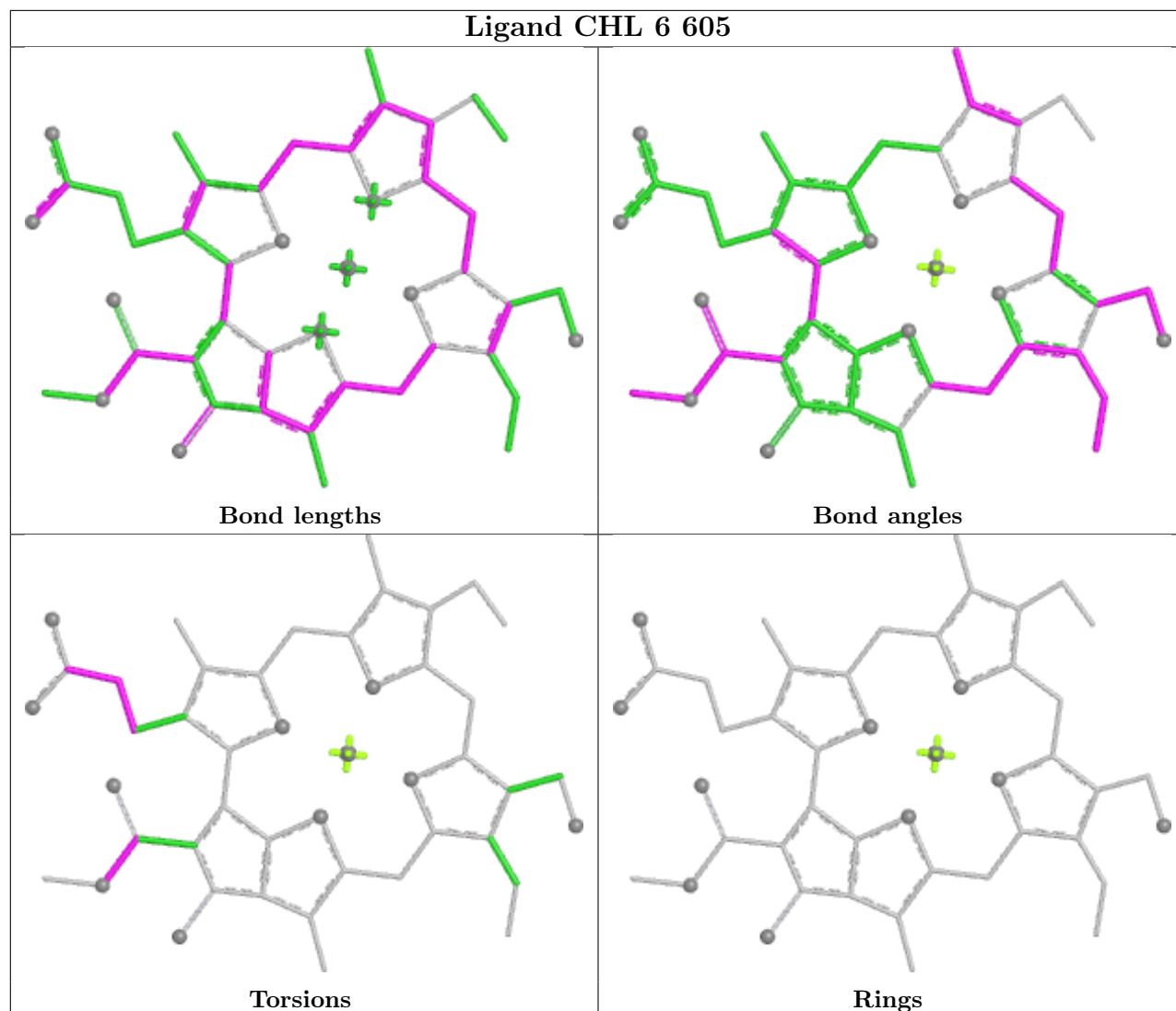


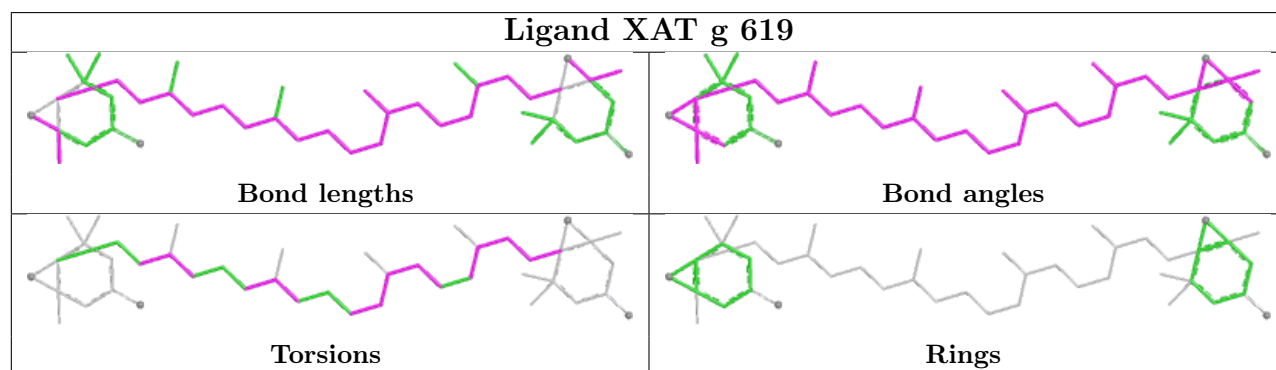
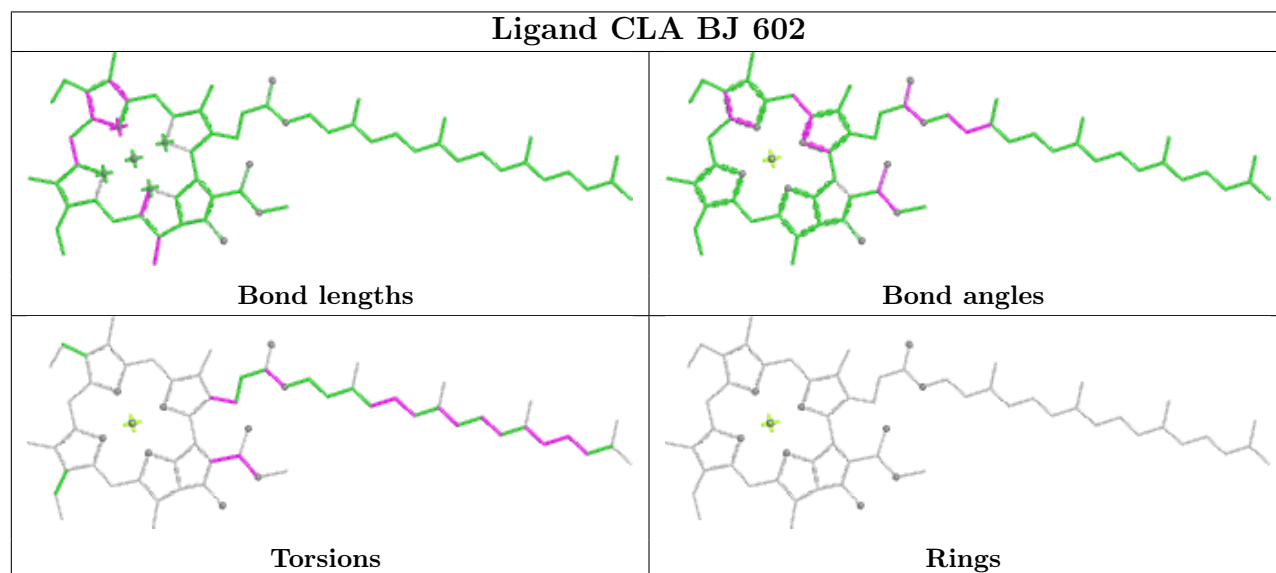
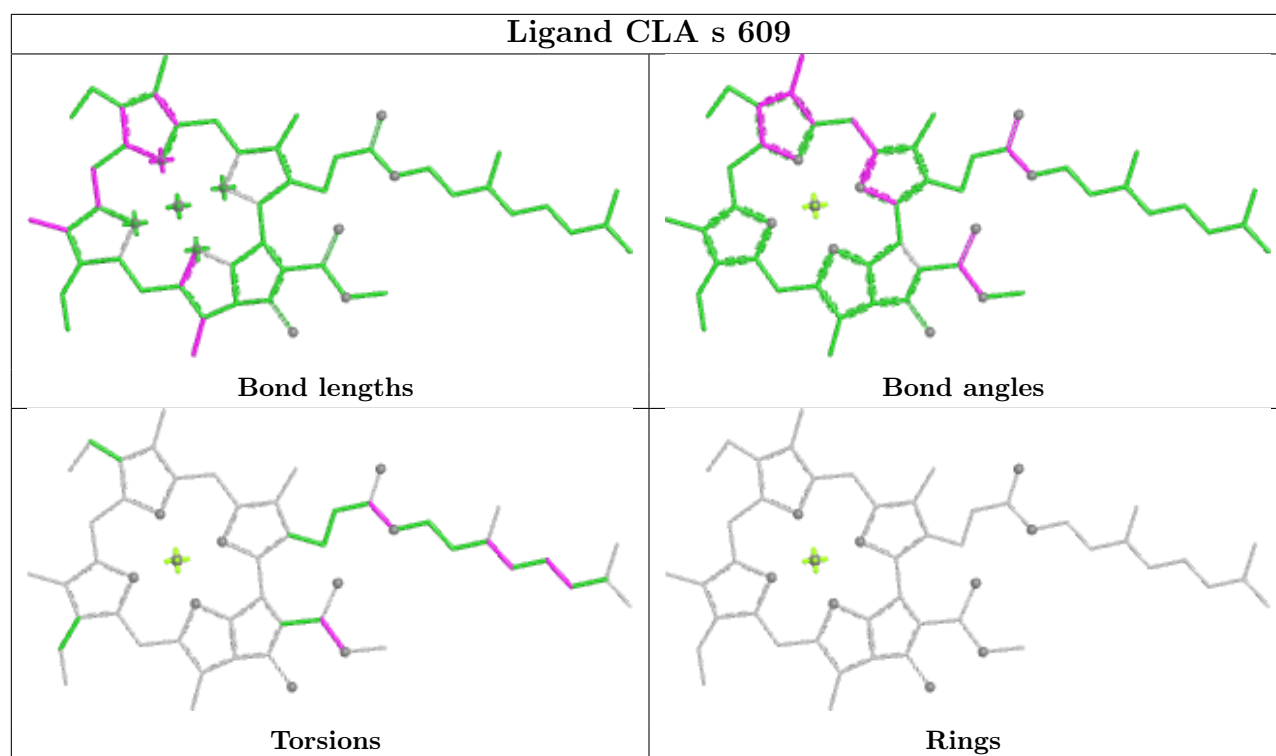


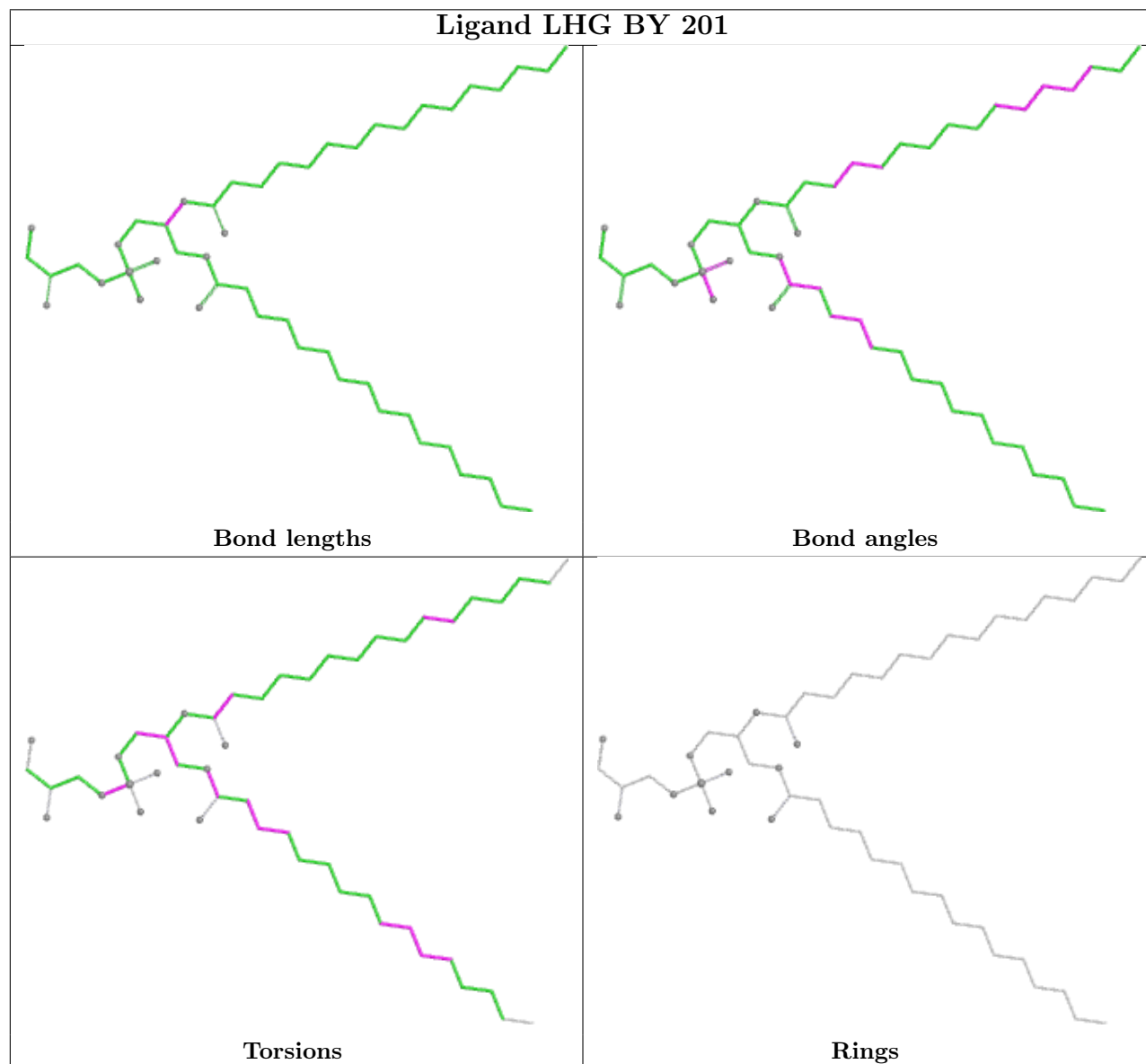
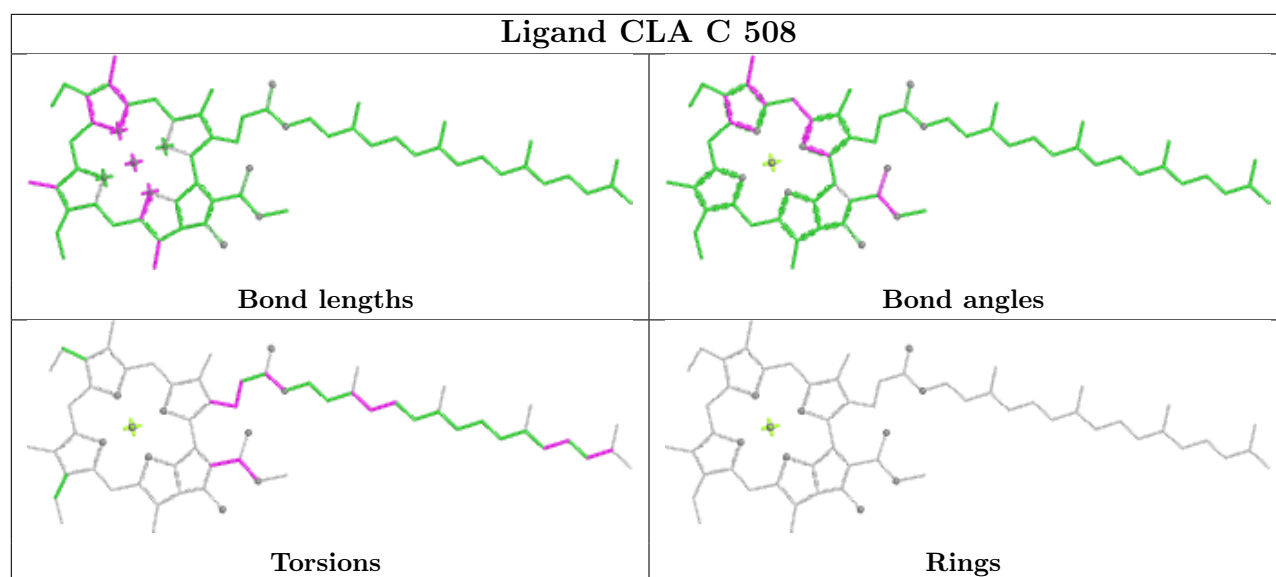
Ligand CHL g 605



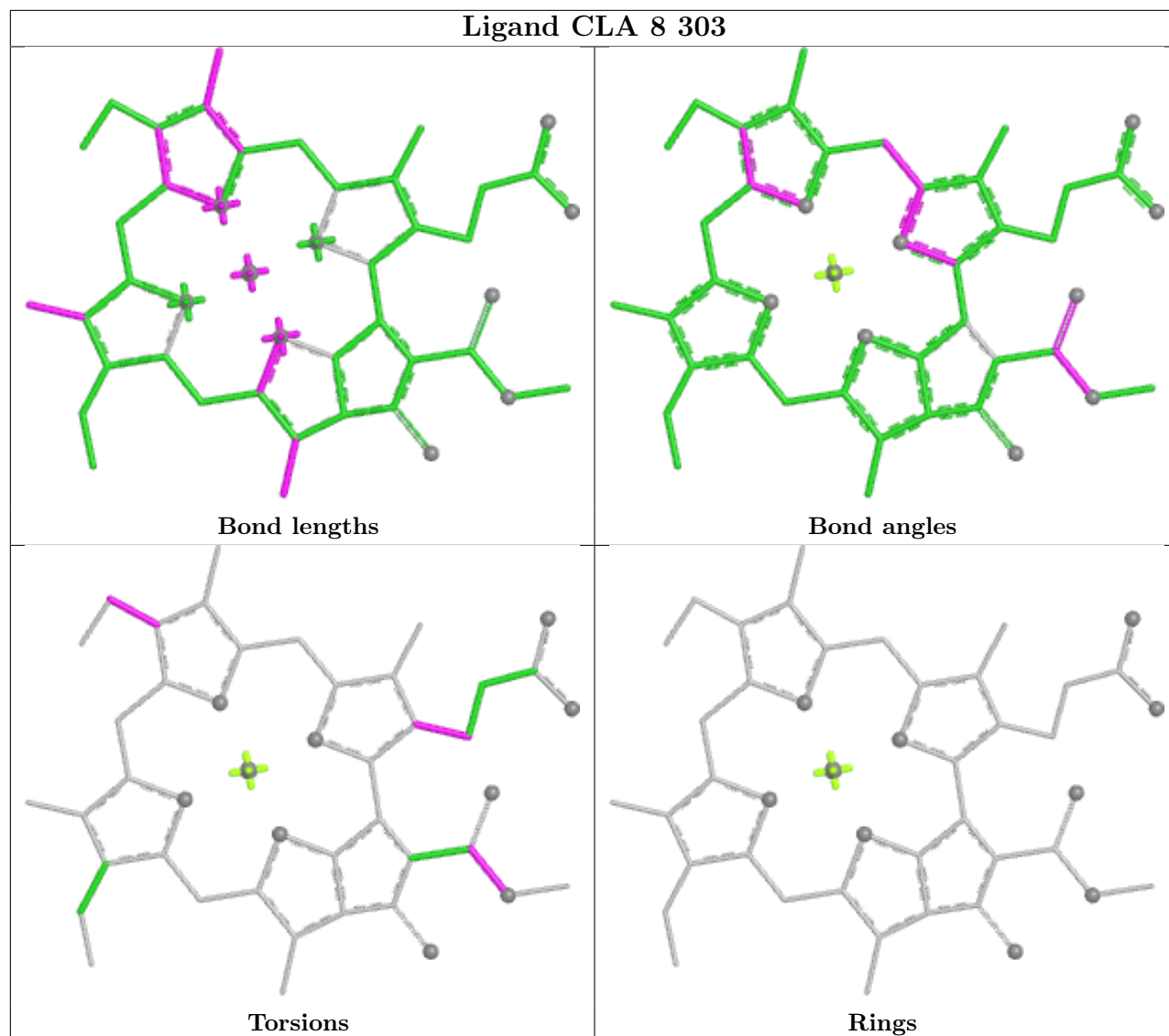
Ligand CHL 6 605



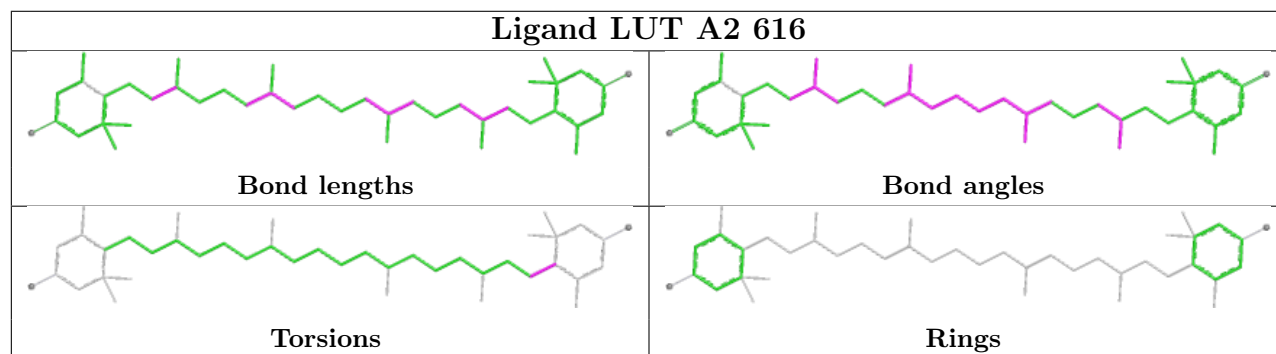


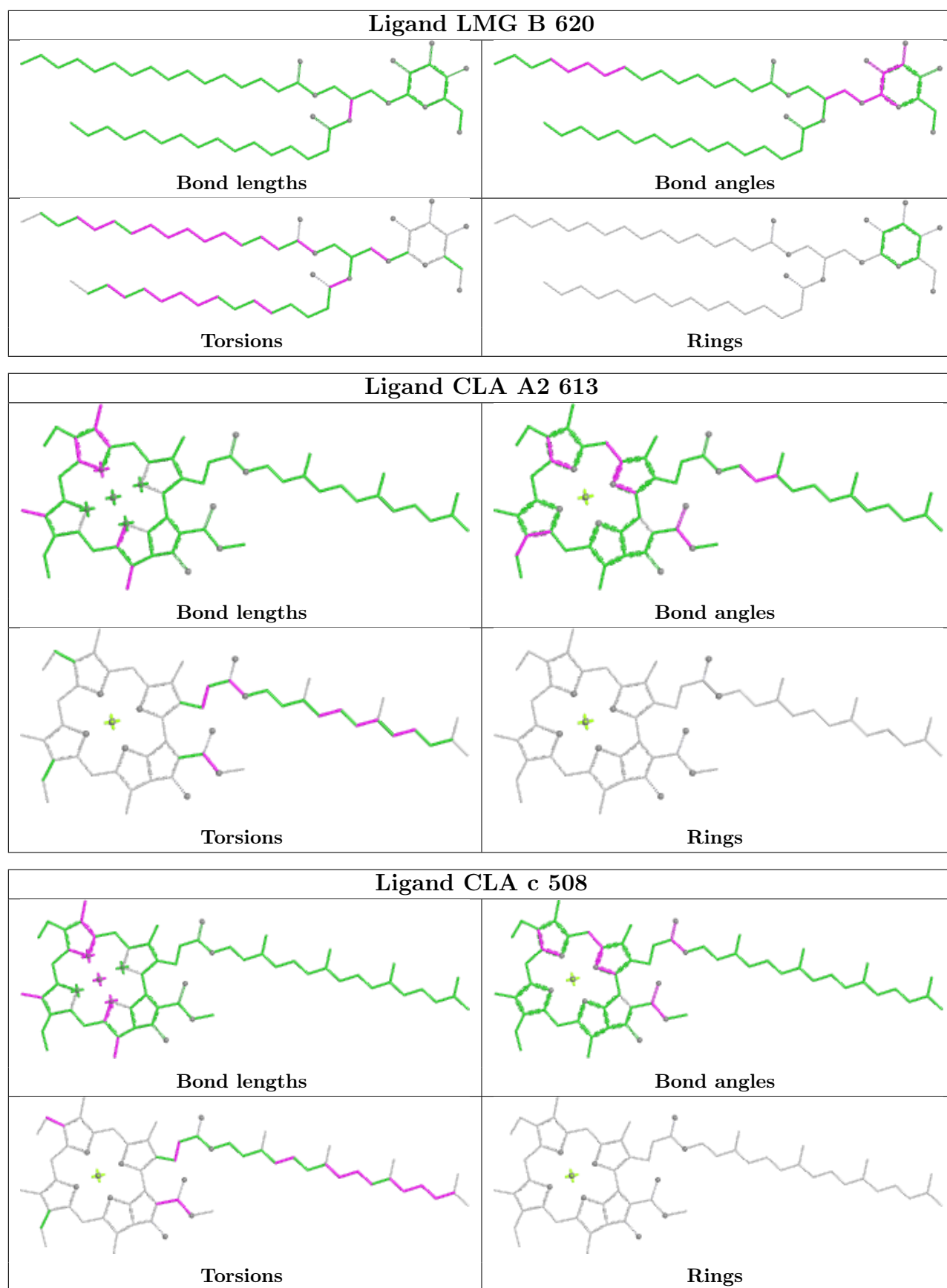


Ligand CLA 8 303

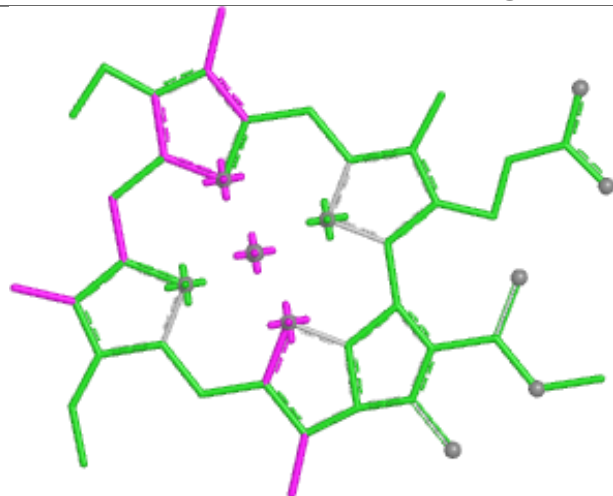


Ligand LUT A2 616

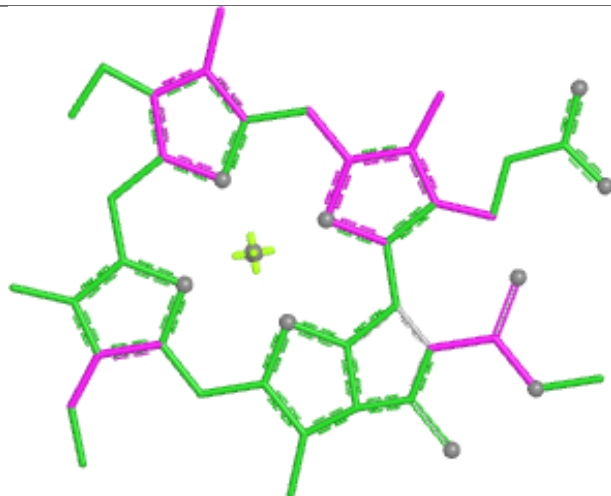




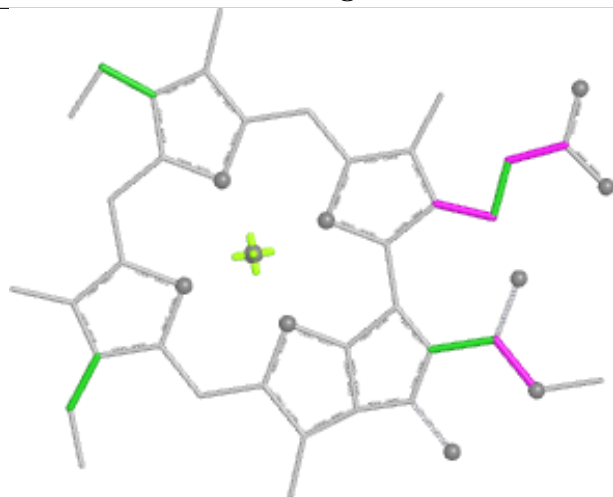
Ligand CLA AB 308



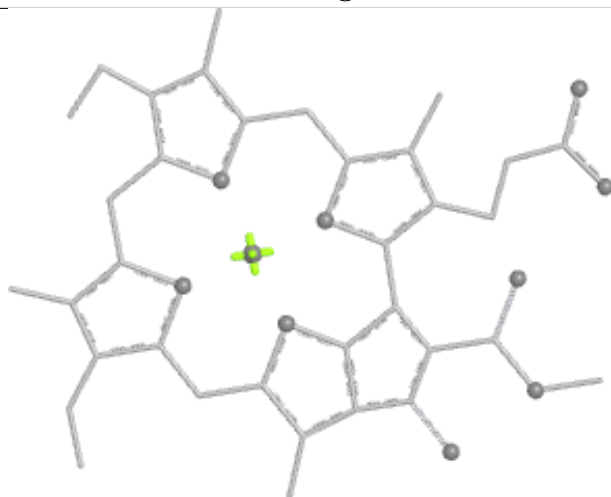
Bond lengths



Bond angles

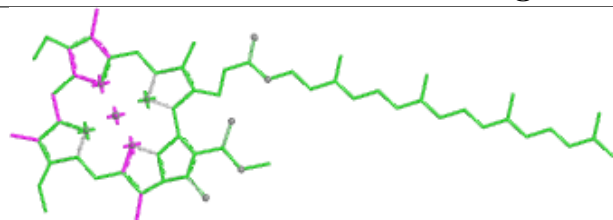


Torsions

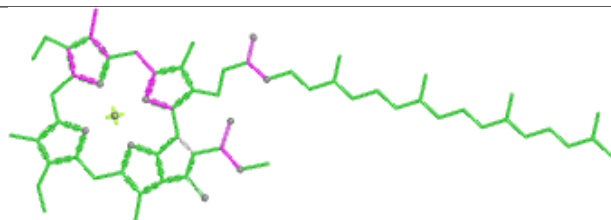


Rings

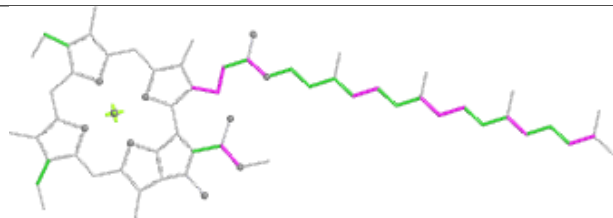
Ligand CLA C 503



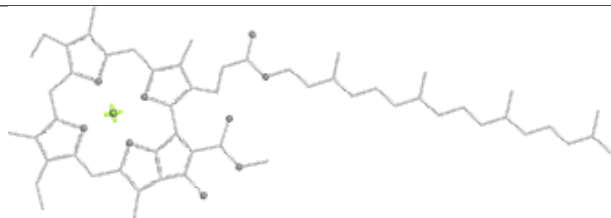
Bond lengths



Bond angles

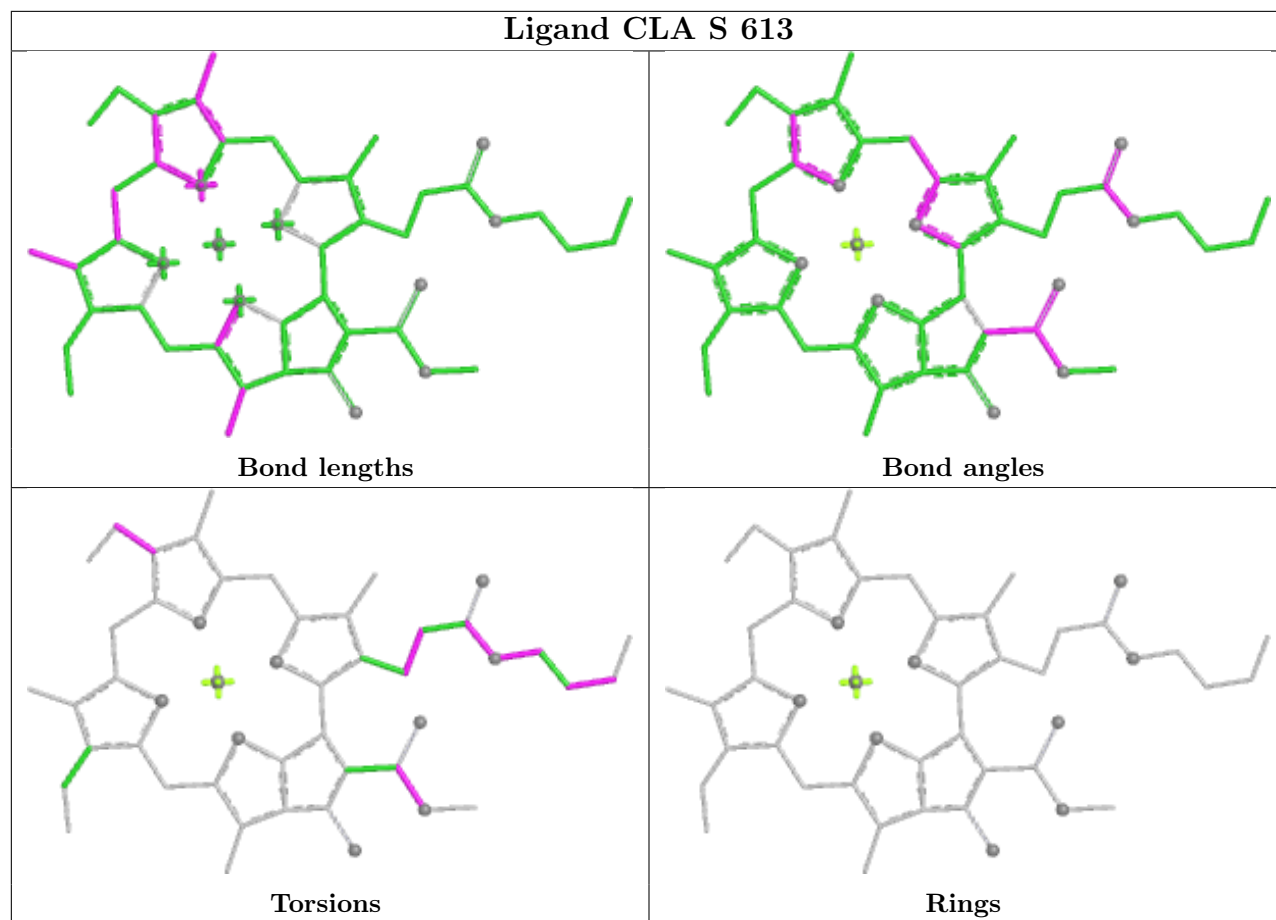


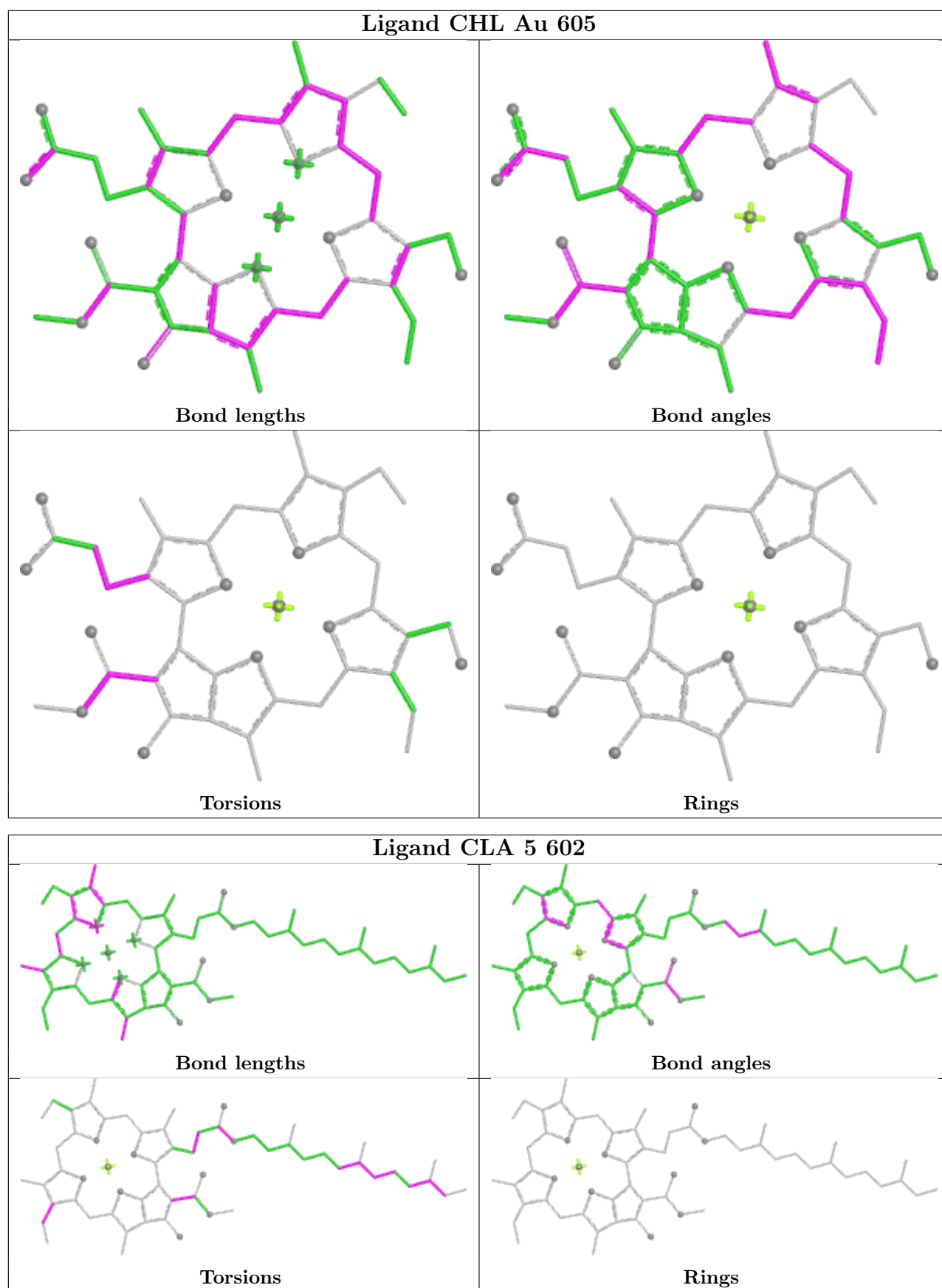
Torsions

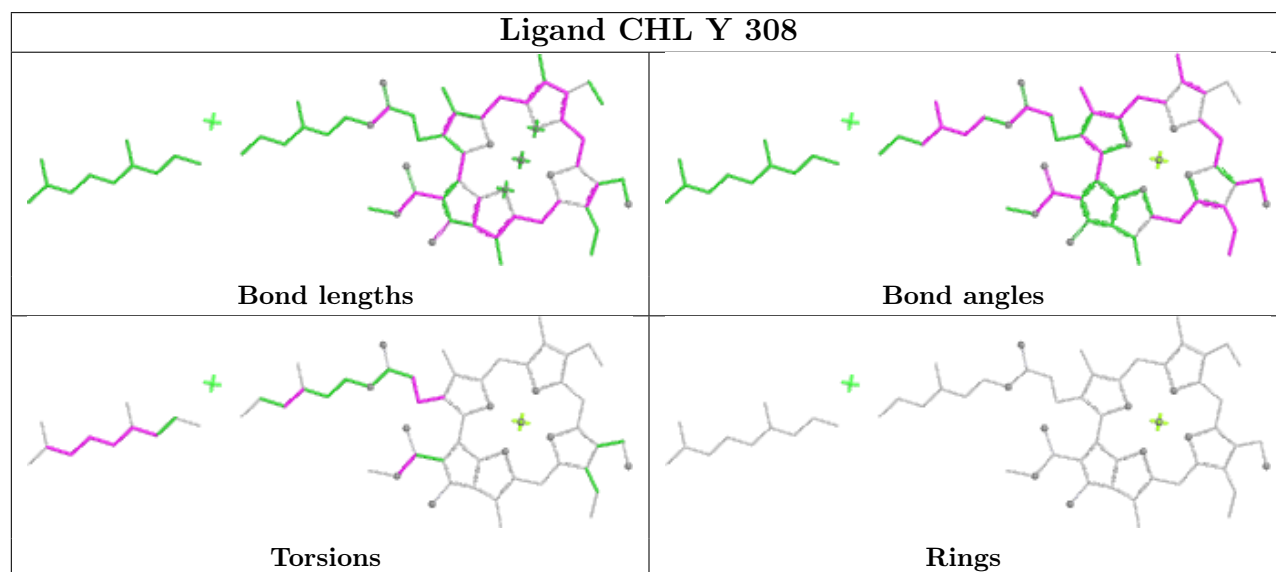
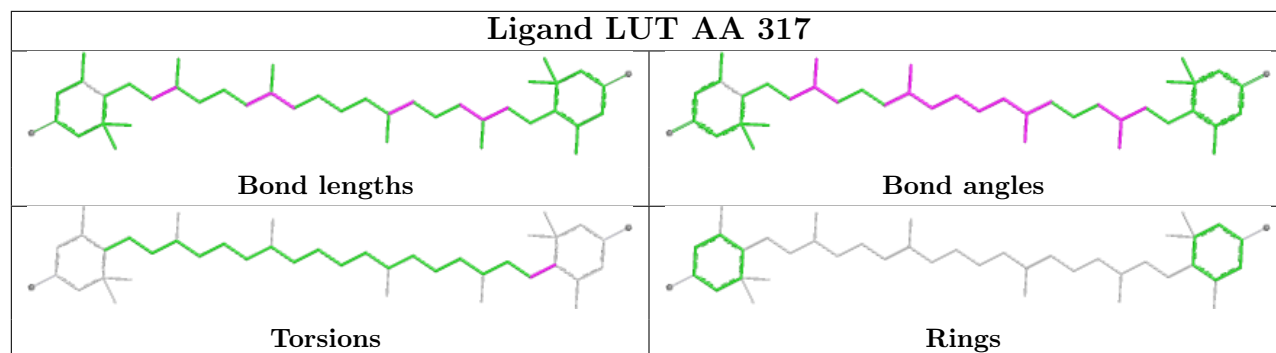


Rings

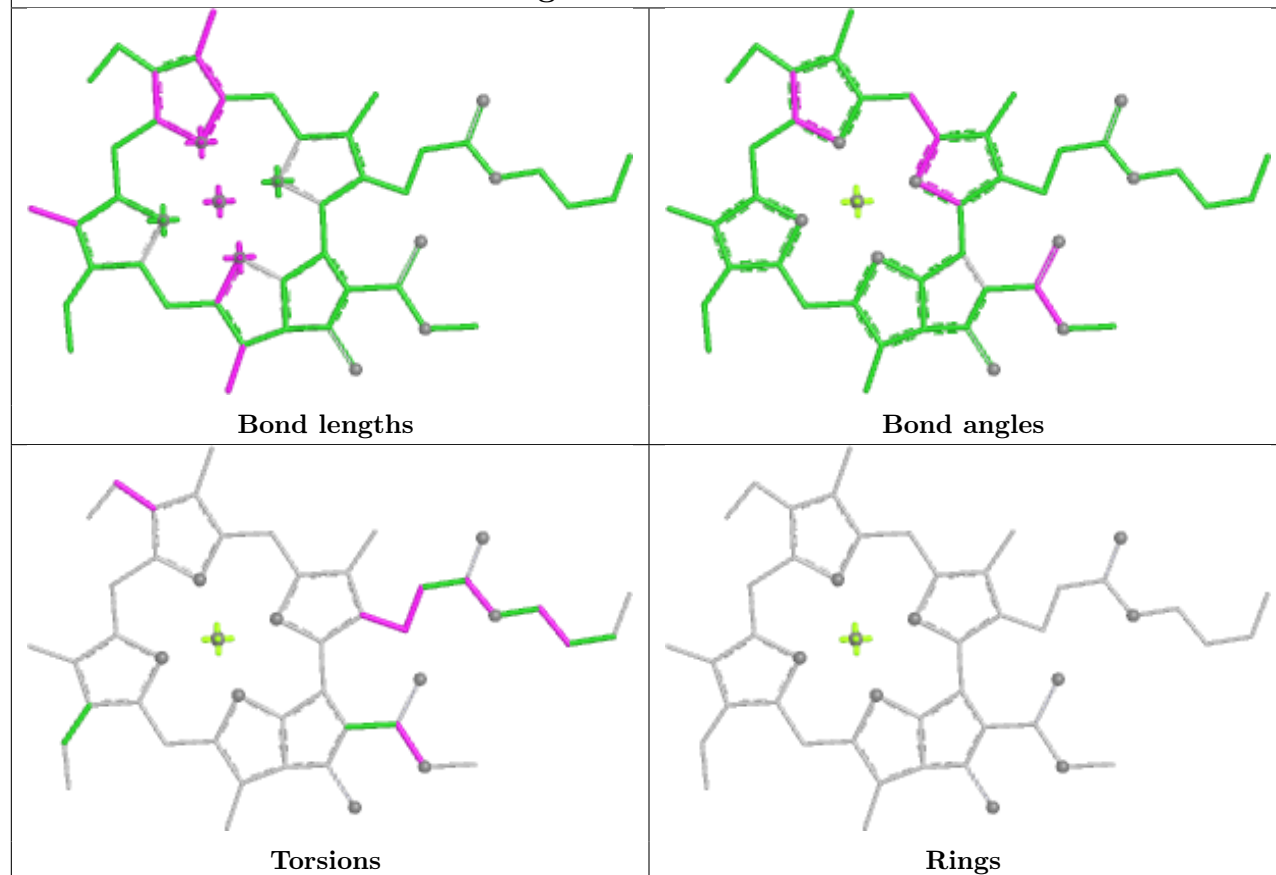
Ligand CLA S 613



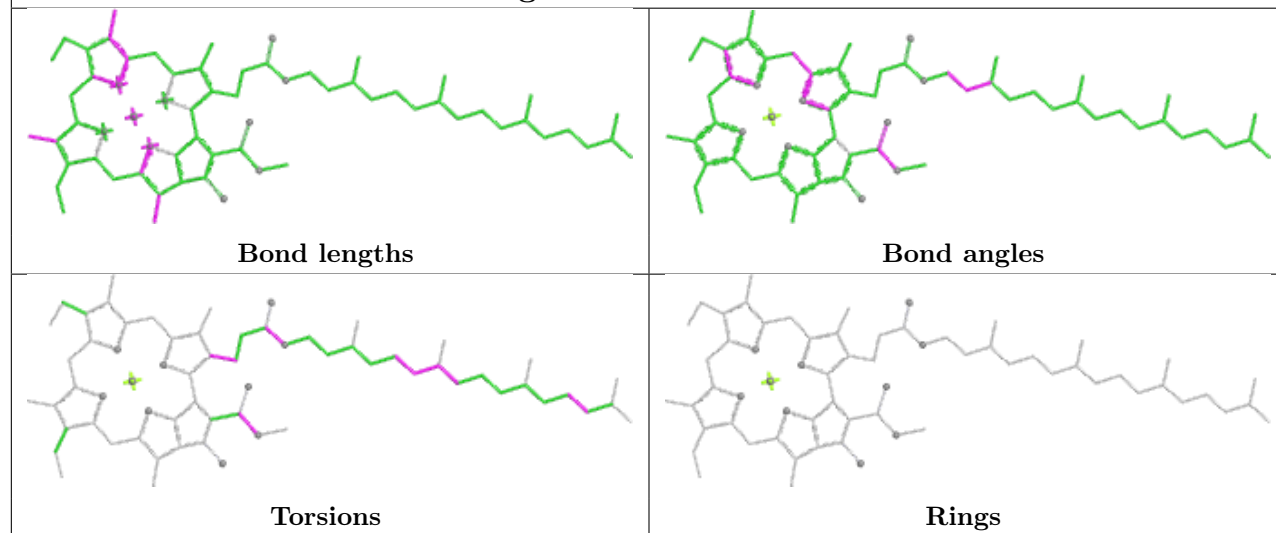


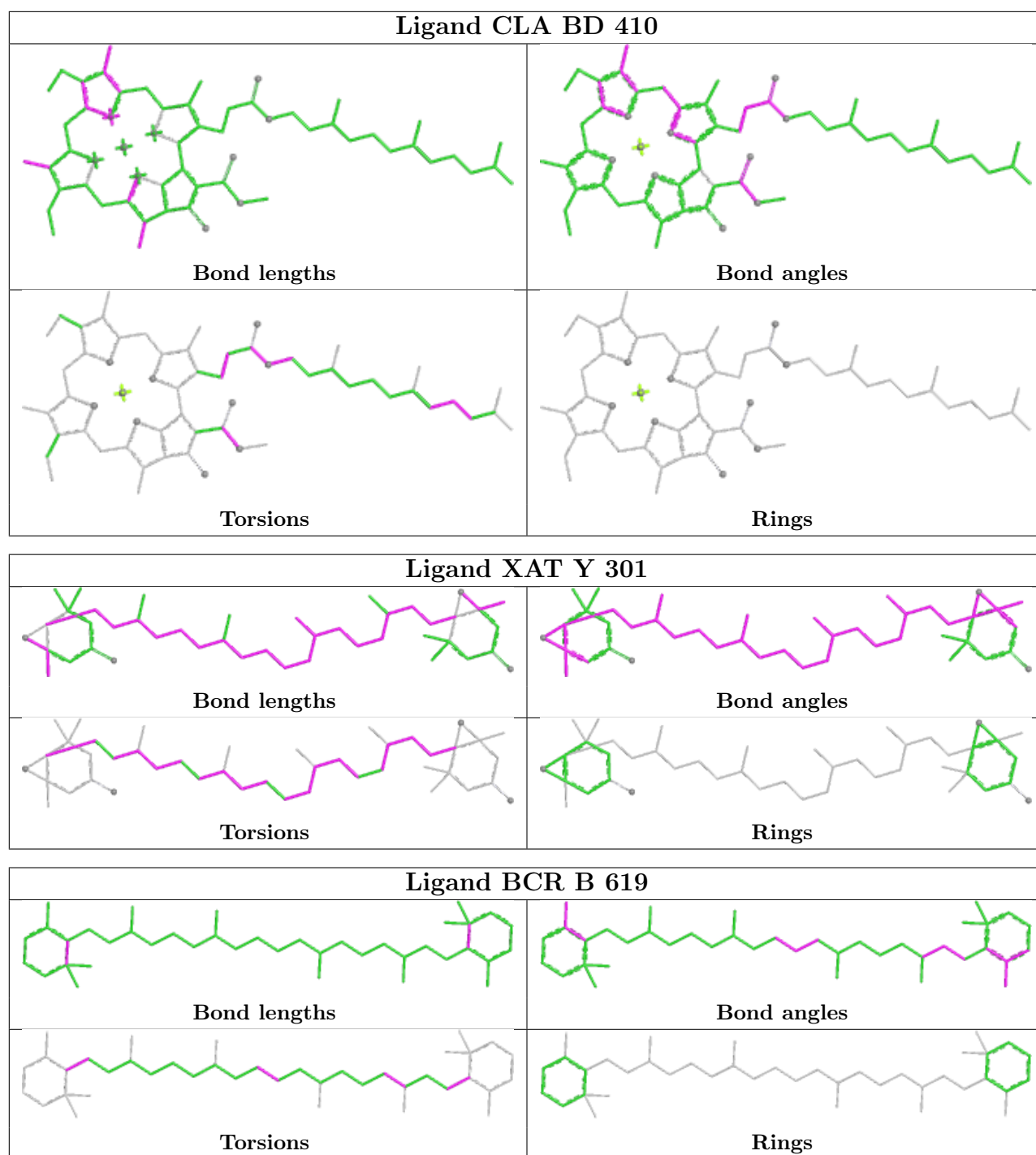


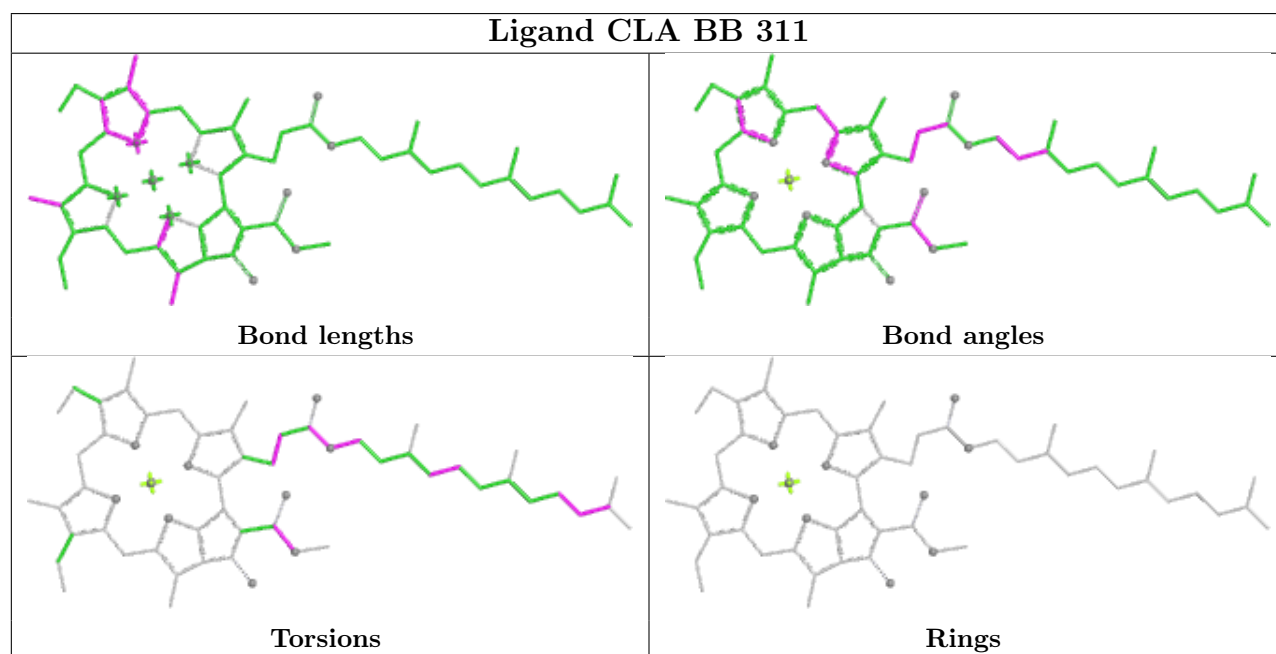
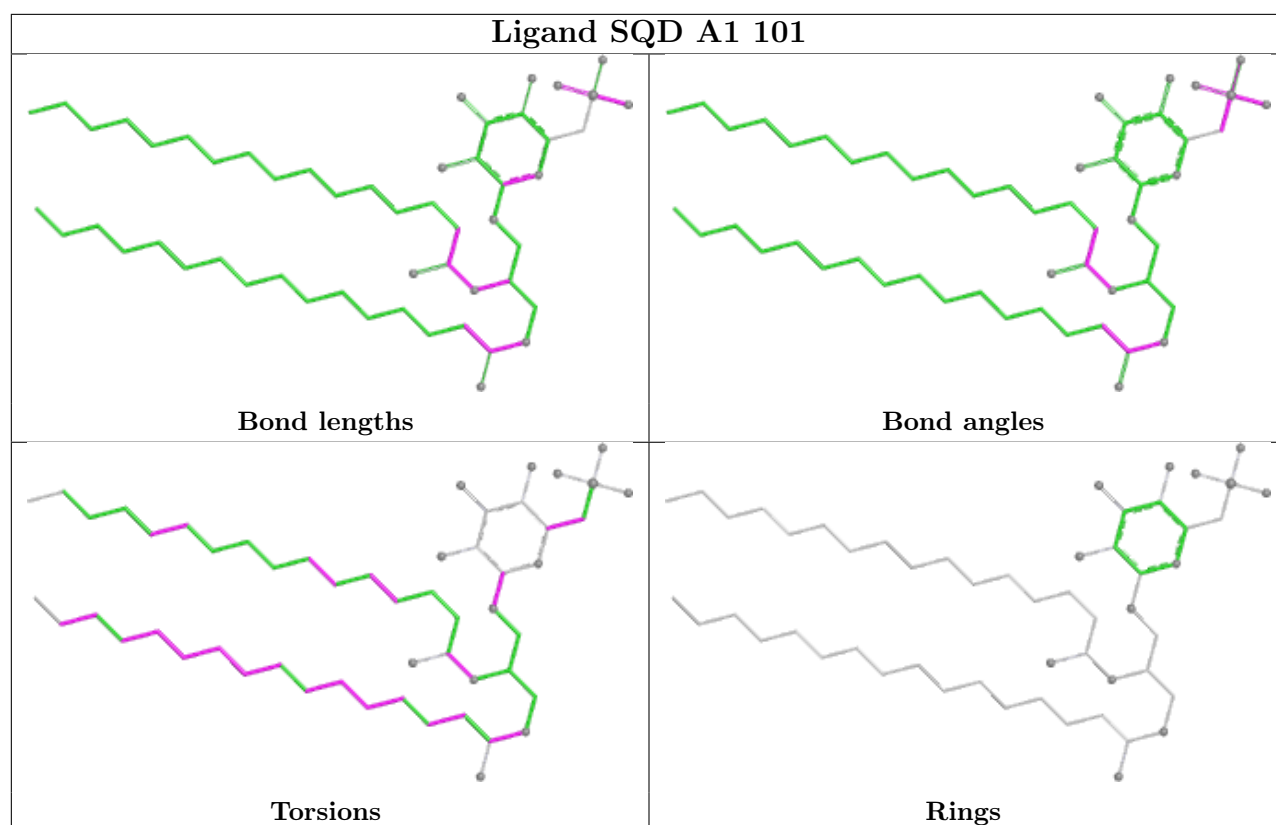
Ligand CLA r 610

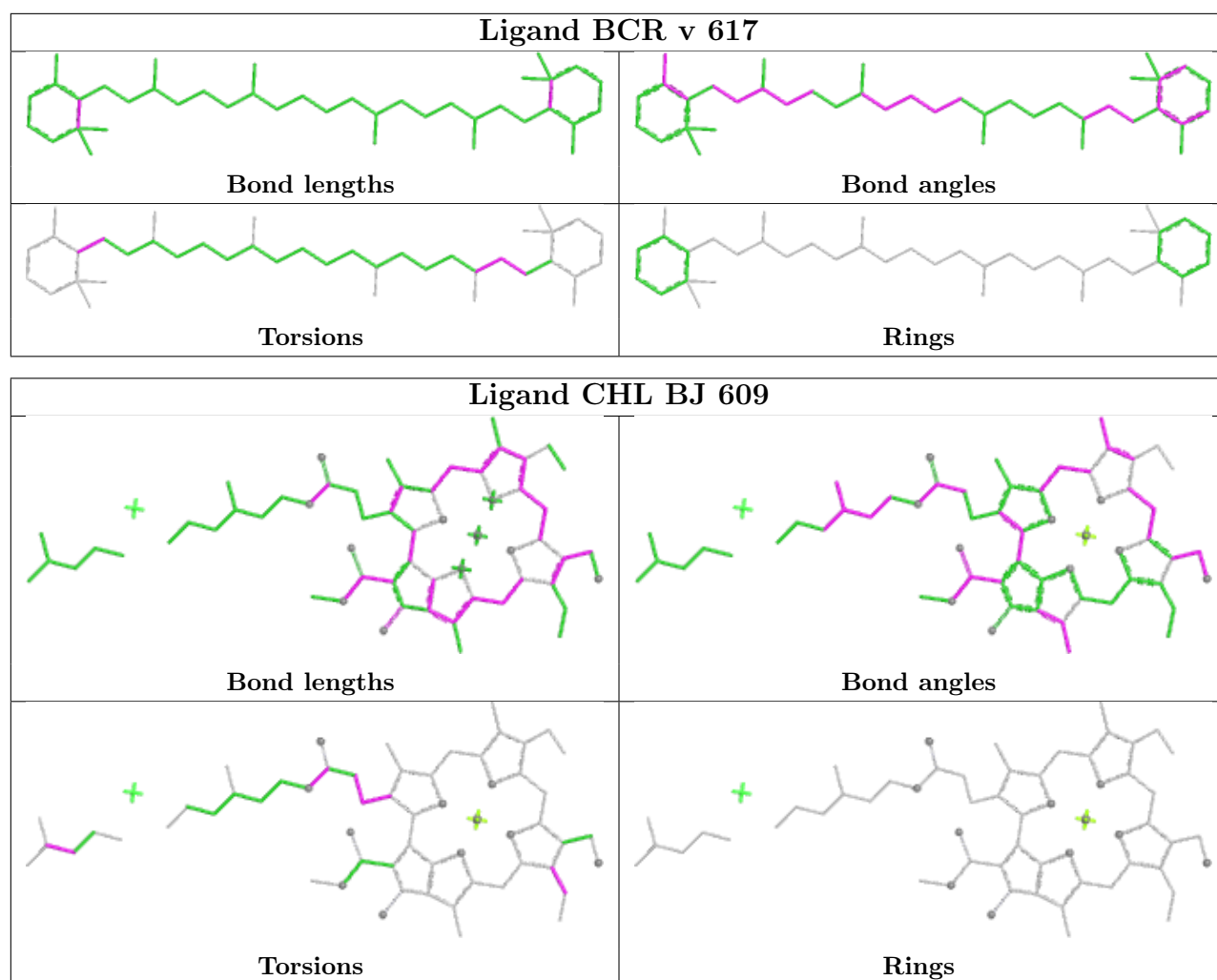


Ligand CLA BU 609









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.

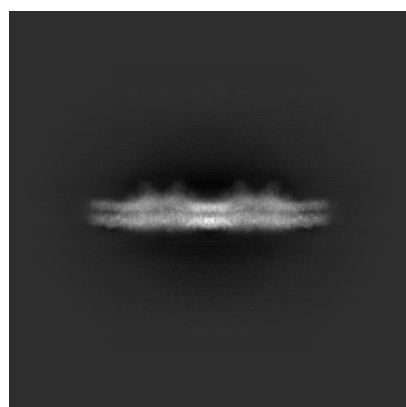
6 Map visualisation [i](#)

This section contains visualisations of the EMDB entry EMD-63017. These allow visual inspection of the internal detail of the map and identification of artifacts.

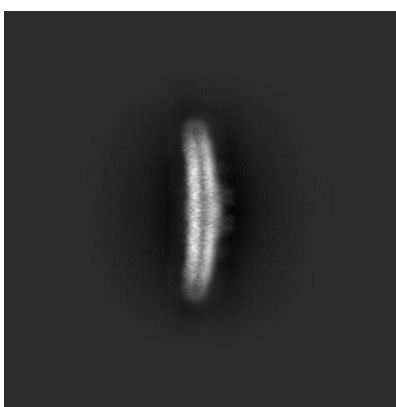
No raw map or half-maps were deposited for this entry and therefore no images, graphs, etc. pertaining to the raw map can be shown.

6.1 Orthogonal projections [i](#)

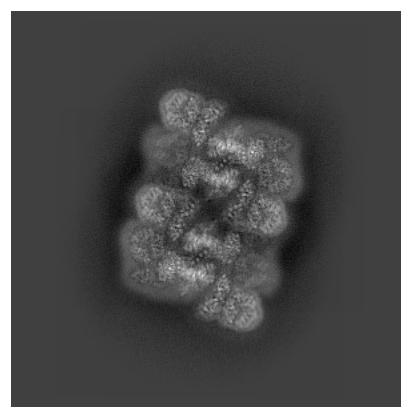
6.1.1 Primary map



X



Y

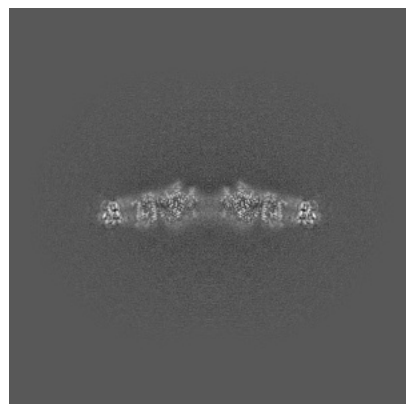


Z

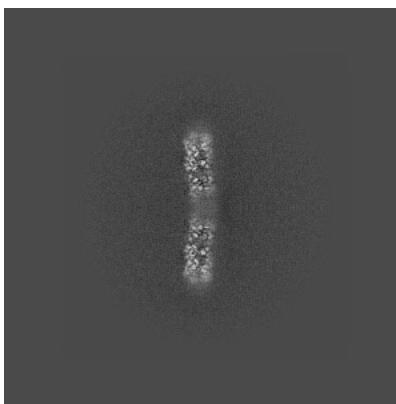
The images above show the map projected in three orthogonal directions.

6.2 Central slices [i](#)

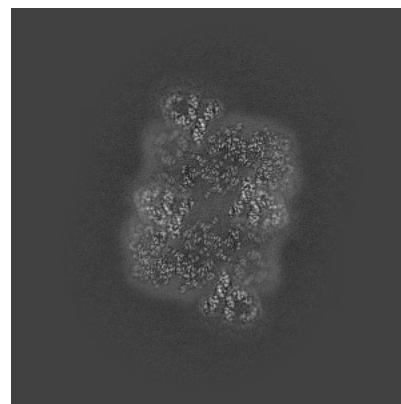
6.2.1 Primary map



X Index: 360



Y Index: 360

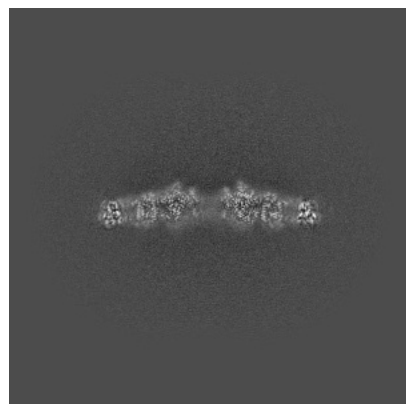


Z Index: 360

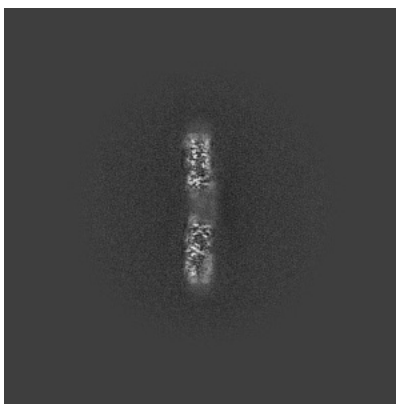
The images above show central slices of the map in three orthogonal directions.

6.3 Largest variance slices [i](#)

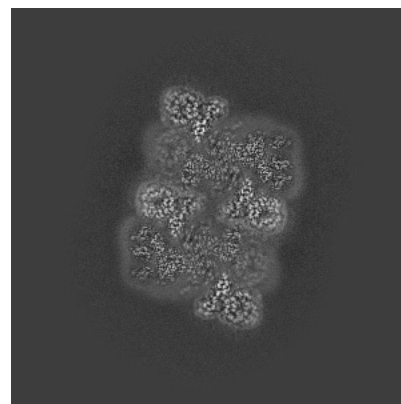
6.3.1 Primary map



X Index: 361



Y Index: 367

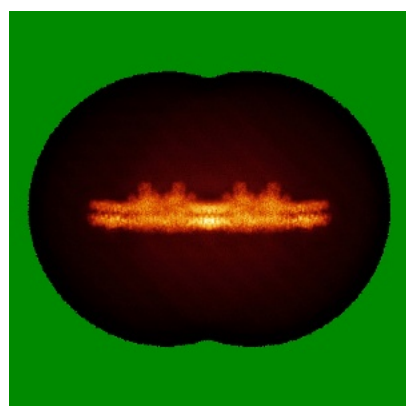


Z Index: 342

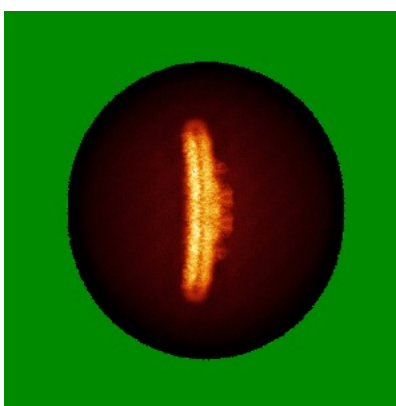
The images above show the largest variance slices of the map in three orthogonal directions.

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

6.4.1 Primary map



X



Y

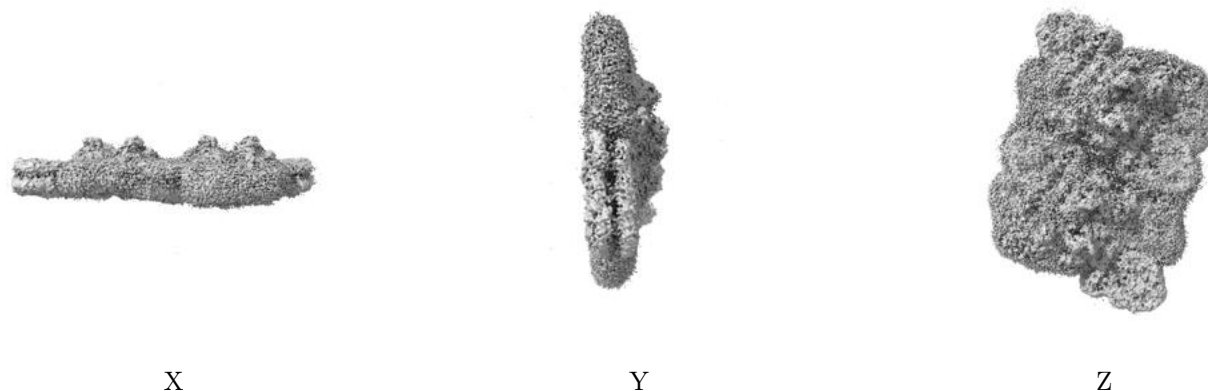


Z

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

6.5 Orthogonal surface views [i](#)

6.5.1 Primary map



The images above show the 3D surface view of the map at the recommended contour level 4.5. These images, in conjunction with the slice images, may facilitate assessment of whether an appropriate contour level has been provided.

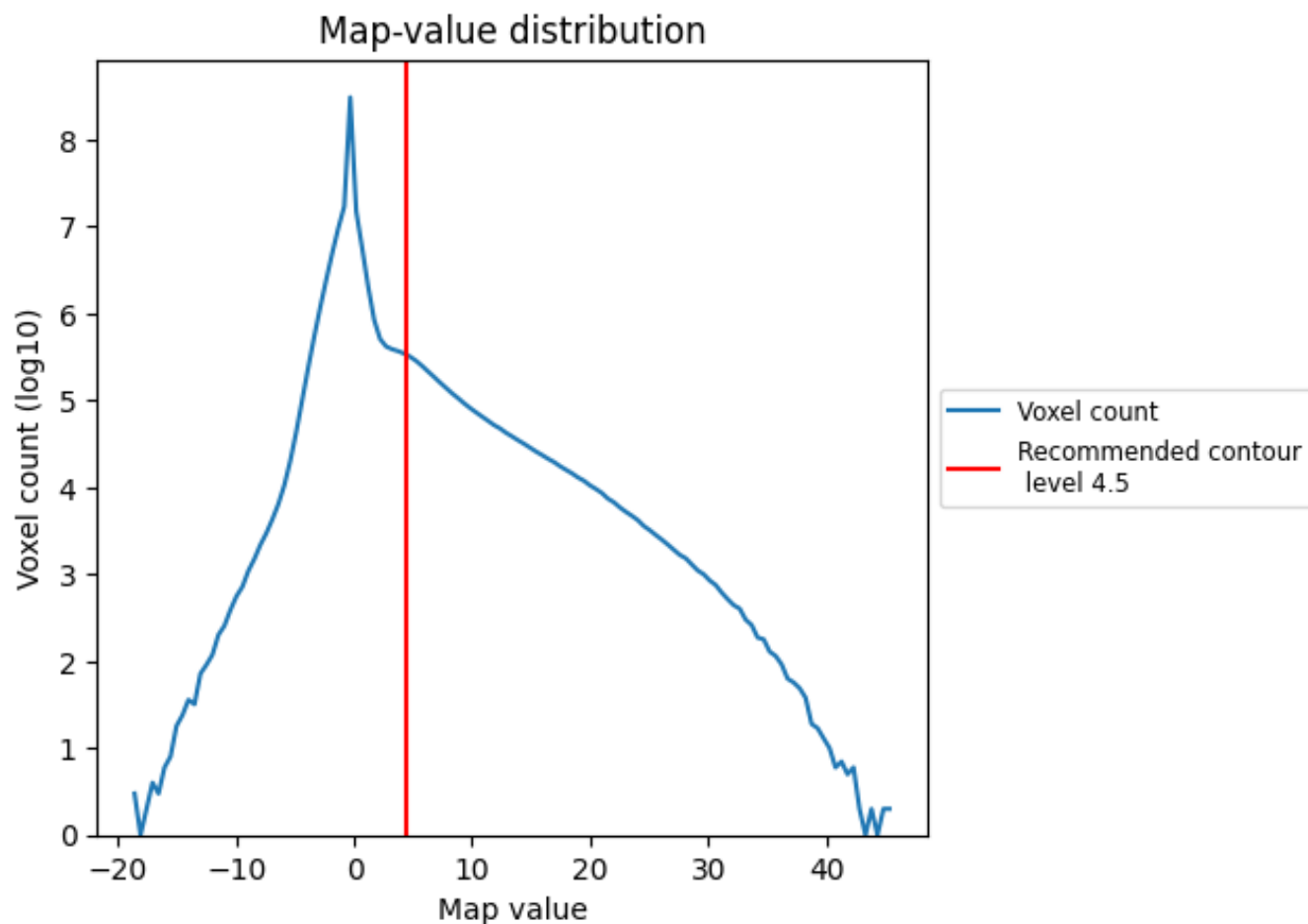
6.6 Mask visualisation [i](#)

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

7 Map analysis [i](#)

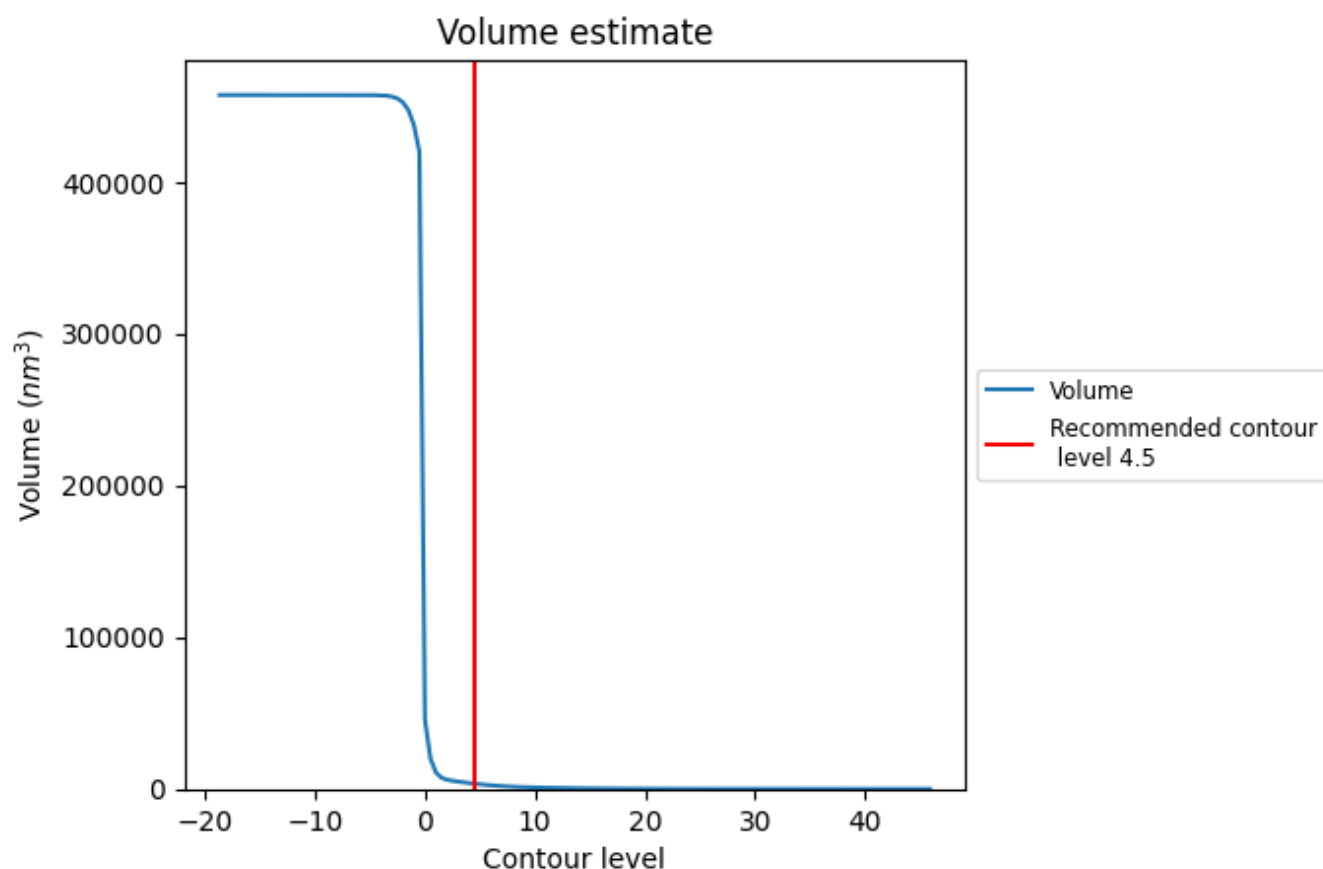
This section contains the results of statistical analysis of the map.

7.1 Map-value distribution [i](#)



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

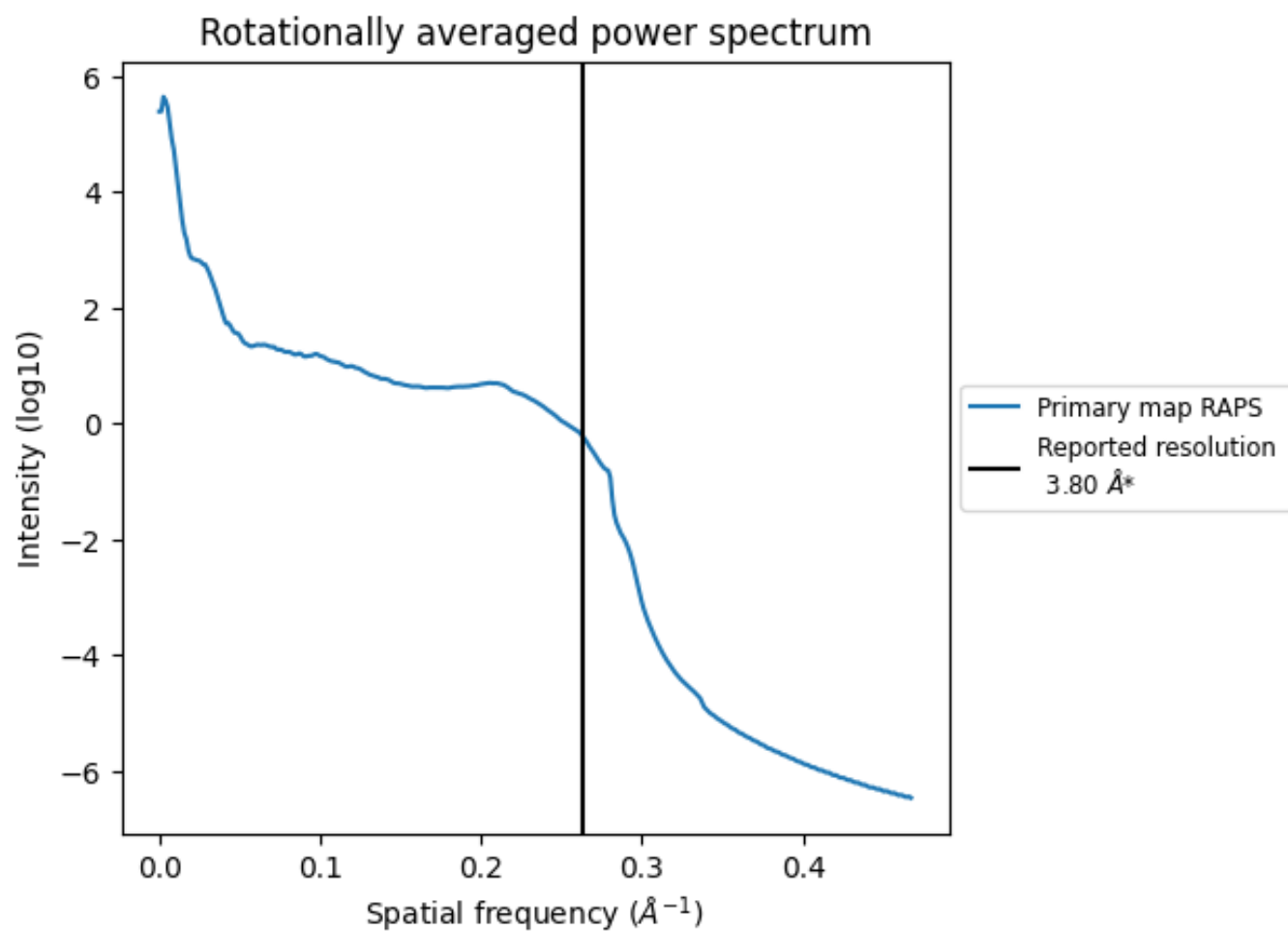
7.2 Volume estimate [i](#)



The volume at the recommended contour level is 3500 nm^3 ; this corresponds to an approximate mass of 3162 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 ⓘ



*Reported resolution corresponds to spatial frequency of 0.263 Å⁻¹

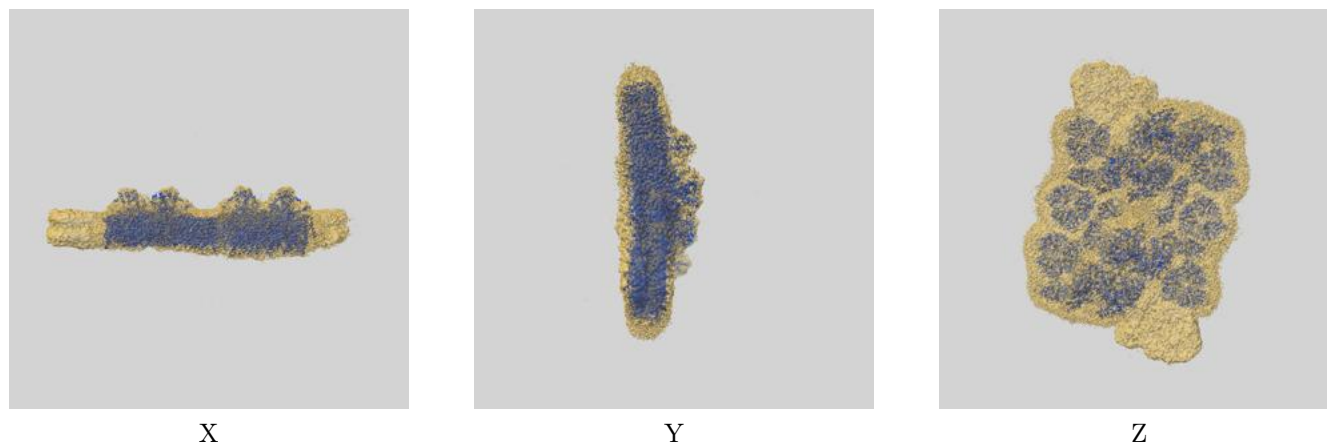
8 Fourier-Shell correlation

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

9 Map-model fit [i](#)

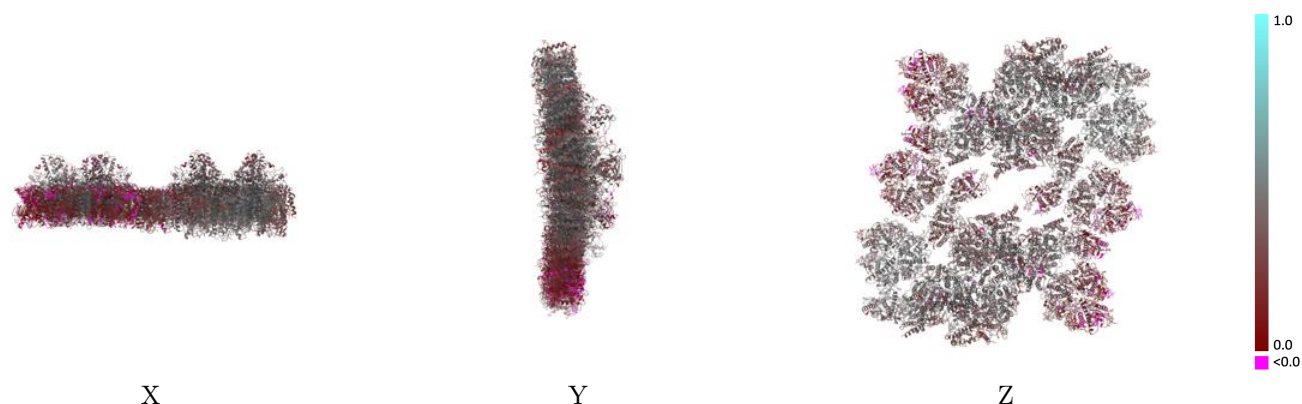
This section contains information regarding the fit between EMDB map EMD-63017 and PDB model 9LE7. Per-residue inclusion information can be found in section [3](#) on page [70](#).

9.1 Map-model overlay [i](#)



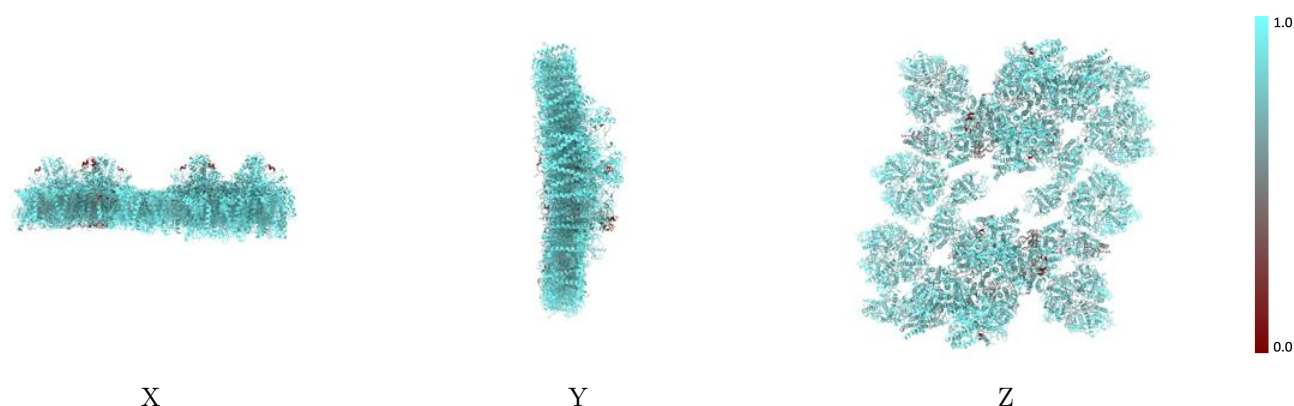
The images above show the 3D surface view of the map at the recommended contour level 4.5 at 50% transparency in yellow overlaid with a ribbon representation of the model coloured in blue. These images allow for the visual assessment of the quality of fit between the atomic model and the map.

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



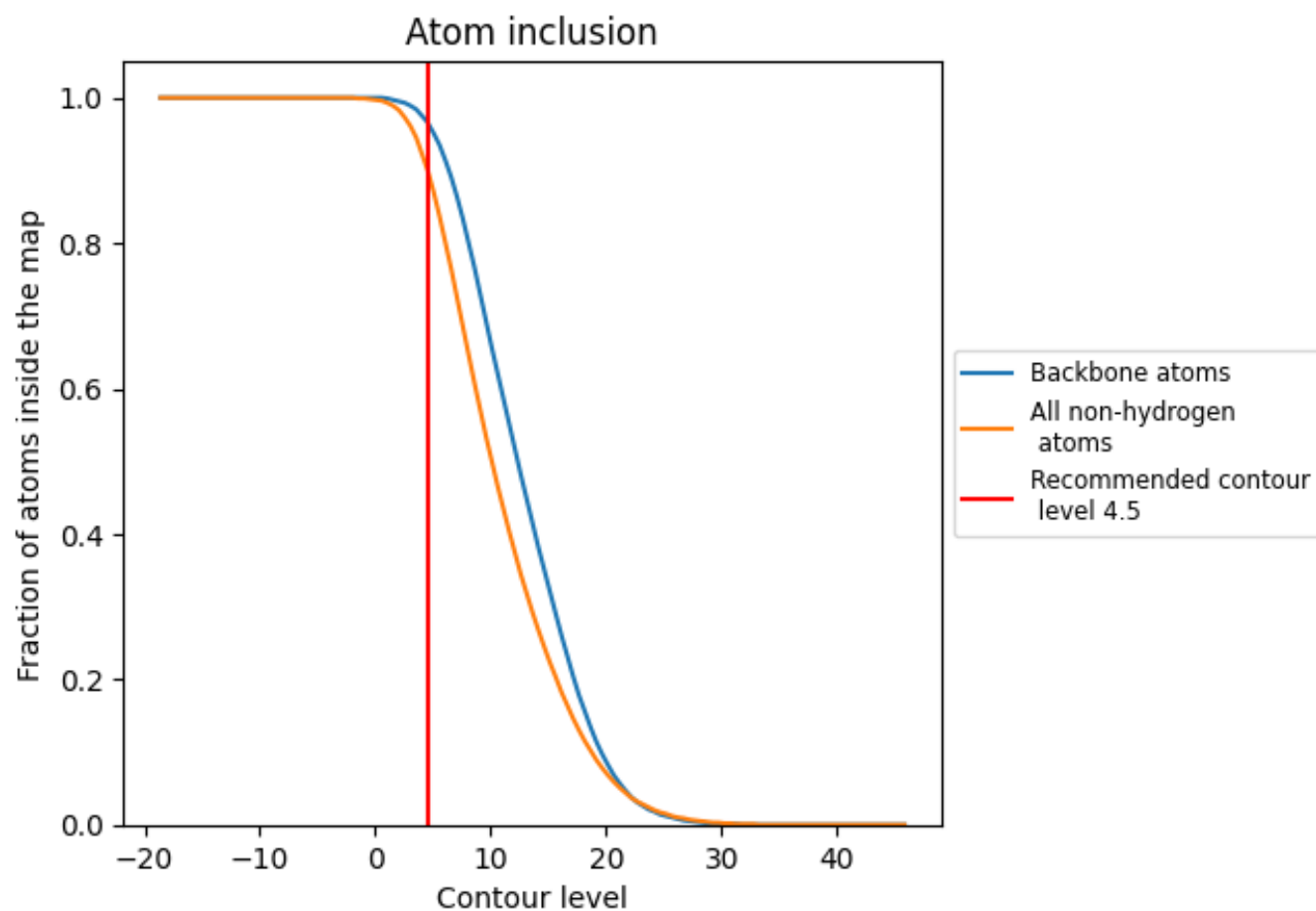
The images above show the model with each residue coloured according to its Q-score. This shows their resolvability in the map with higher Q-score values reflecting better resolvability. Please note: Q-score is calculating the resolvability of atoms, and thus high values are only expected at resolutions 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 (4.5).







































































9.4 Atom inclusion [i](#)



At the recommended contour level, 97% of all backbone atoms, 90% of all non-hydrogen atoms, are inside the map.

9.5 Map-model fit summary ⓘ





















































































The table lists the average atom inclusion at the recommended contour level (4.5) and Q-score for the entire model and for each chain.

Chain	Atom inclusion	Q-score
All	 0.9020	 0.3560
0	 0.9480	 0.3160
1	 0.9370	 0.4360
2	 0.9520	 0.4400
3	 0.9320	 0.3050
4	 0.8930	 0.3100
5	 0.9690	 0.2760
6	 0.9510	 0.3040
7	 0.9720	 0.1710
8	 0.9130	 0.2480
9	 0.9670	 0.2830
A	 0.9210	 0.4230
A0	 0.8670	 0.3990
A1	 0.8980	 0.3770
A2	 0.9450	 0.4500
A6	 0.8890	 0.4040
A7	 0.8350	 0.4330
A8	 0.6400	 0.2120
AA	 0.9690	 0.1720
AB	 0.9110	 0.2560
Au	 0.9410	 0.3990
Av	 0.9380	 0.3490
Aw	 0.9420	 0.4570
Ay	 0.9050	 0.4320
Az	 0.8940	 0.4450
B	 0.9210	 0.4060
BA	 0.8270	 0.2090
BB	 0.9290	 0.4590
BC	 0.8680	 0.3250
BD	 0.9040	 0.4230
BE	 0.9140	 0.3960
BF	 0.8370	 0.4210
BG	 0.9130	 0.4230
BH	 0.9210	 0.2950
BI	 0.8260	 0.3230































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Chain	Atom inclusion	Q-score
BJ	 0.8500	 0.1420
BK	 0.8970	 0.3390
BL	 0.8870	 0.4330
BN	 0.8080	 0.3960
BO	 0.9110	 0.4230
BP	 0.9160	 0.3920
BQ	 0.8550	 0.1890
BU	 0.9390	 0.3370
BV	 0.7600	 0.2290
BW	 0.8640	 0.4060
BX	 0.7990	 0.2080
BY	 0.8310	 0.3500
BZ	 0.7580	 0.2340
Ba	 0.8710	 0.3090
Bb	 0.9200	 0.3420
C	 0.9310	 0.4240
D	 0.9480	 0.4270
E	 0.9320	 0.2950
F	 0.8800	 0.2980
G	 0.9380	 0.3880
H	 0.9210	 0.3270
I	 0.9320	 0.4500
K	 0.8860	 0.4190
L	 0.8960	 0.4270
M	 0.8550	 0.3610
N	 0.9350	 0.4410
R	 0.9280	 0.4320
S	 0.8790	 0.3960
T	 0.8390	 0.4080
U	 0.6450	 0.2100
W	 0.8690	 0.3810
X	 0.8270	 0.2140
Y	 0.9250	 0.4470
Z	 0.8600	 0.3170
a	 0.8980	 0.4140
b	 0.9080	 0.3850
c	 0.8280	 0.4060
d	 0.9010	 0.4090
e	 0.9230	 0.2840
f	 0.8130	 0.3050
g	 0.8530	 0.1340
h	 0.8620	 0.3220

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Chain	Atom inclusion	Q-score
i	 0.8690	 0.4210
k	 0.7780	 0.3800
l	 0.8880	 0.4130
m	 0.9080	 0.3870
n	 0.8570	 0.1790
r	 0.9370	 0.3280
s	 0.7480	 0.2090
t	 0.8520	 0.3960
u	 0.8040	 0.2000
v	 0.9260	 0.4160
w	 0.8310	 0.3380
x	 0.7420	 0.2240
y	 0.8680	 0.2970
z	 0.9120	 0.3420