SMILES	Functional/Basis Set	Transition	Reorganisation Energy/eV	HOMO-LUMO gap
0 C1=CC=CC1	b3lyp/6-311+G(d,p)	First excited	0.2572752	6.598216937
1 C1=CC=C2C=CC2=C1	b3lyp/6-311+G(d,p)	First excited	0.5595376	4.747842672
2 C1CCC2=CC=CCCC1	b3lyp/6-311+G(d,p)	First excited	5.741634	6.192767282
3 C1CC2=CC=C2C=C1	b3lyp/6-311+G(d,p)	First excited	37.2958892	4.958730916
4 C1CC2=C(C=C1)C3=CC=C3C=C2	b3lyp/6-311+G(d,p)	First excited	37.533064	4.098578996
5 C1CCC2=C(C1)C=CC3=CC=CC23	b3lyp/6-311+G(d,p)	First excited	111.2251852	4.646616315
6 C1C=CCC2=CC=C21	b3lyp/6-311+G(d,p)	First excited	27.9542996	5.944327325
7 C1CC2=CC3=CC=CC3C=C2C=C1	b3lyp/6-311+G(d,p)	First excited	4.5231728	4.405523433
8 C1CCC2=CC3=CC=C3C=C2C1	b3lyp/6-311+G(d,p)	First excited	73.11939	4.702943885
9 C1=CC=C2C=C3C=CC3=CC2=C1	b3lyp/6-311+G(d,p)	First excited	0.4320904	3.551630133
10 C1=CC=C2C(=C1)C=CC3=CC=C32	b3lyp/6-311+G(d,p)	First excited	0.2606232	4.68144689
11 C1=CC=C2C(=C1)C=CC3=C2C=CC4=CC=CC43	b3lyp/6-311+G(d,p)	First excited	0.3859996	4.219125437
12 C1=CC=C2C(=C1)C=CC3=CC4=CC=C4C=C32	b3lyp/6-311+G(d,p)	First excited	0.4032356	3.723878208
13 C1=CC=C2C(=C1)C=CC3=CC4=C(C=CC5=CC=C54)C=C32	b3lyp/6-311+G(d,p)	First excited	0.3034404	3.849322698
14 C1=CC=C2C=C3C=C4C=CC3=CC2=C1	b3lyp/6-311+G(d,p)	First excited	0.343666	2.752159605
15 C1=CC=C2C=C3C4=CC=CC4C5=CC=C5C3=CC2=C1	b3lyp/6-311+G(d,p)	First excited	0.3816596	3.849594812
16 C1=CC=C2C(=C1)C=CC3=C2C4=CC=CC=C4C5=CC=C35	b3lyp/6-311+G(d,p)	First excited	0.5098136	4.051503298
17 C1=CC=C2C(=C1)C=CC3=C2C4=CC=C4C=C3	b3lyp/6-311+G(d,p)	First excited	0.2646532	4.171505512
18 C1=CC=C2C(=C1)C=CC3=C2C=CC4=C3C5=CC=CC=C5C=C4	b3lyp/6-311+G(d,p)	First excited	0.2517448	4.209057225
19 C1=CC=C2C(=C1)C=CC3=CC4=C(C=C32)C5=CC=C5C=C4	b3lyp/6-311+G(d,p)	First excited	0.2118664	3.887418639
20 C1CC2=CC=C2C3=CC=CC31	b3lyp/6-311+G(d,p)	First excited	37.2856592	4.88226692
21 C1=CC=C2C(=C1)C=CC3=C2C=CC4=CC5=CC=C5C=C43	b3lyp/6-311+G(d,p)	First excited	0.3758192	3.477615162
22 C1C2=CC=CCCC3=CC4=CC=C4C=C31	b3lyp/6-311+G(d,p)	First excited	0.926714	4.666480627
23 C1CCC2=CC3=C(CCCC3)C=C2C1	b3lyp/6-311+G(d,p)	First excited	74.2574372	5.681465334
24 C1C2=CC=CC2CC3=CC=CC=C31	b3lyp/6-311+G(d,p)	First excited	27.8148988	5.945415781
25 C1=CC=C2C=C3C(=CC2=C1)C=CC4=C3C=CC5=CC6=CC=C6C=C54	b3lyp/6-311+G(d,p)	First excited	0.313906	3.126316166
26 C1CCC2=C(C1)C=CC3=C2CCCC3	b3lyp/6-311+G(d,p)	First excited	116.747984	5.938612934
27 C1=CC=C2C(=C1)C=CC3=C2C=CC4=C3C=CC5=CC=C54	b3lyp/6-311+G(d,p)	First excited	0.2253328	4.206880314
28 C1=CC=C2C=C3C=C4C=C5C=CC5=CC4=CC3=CC2=C1	b3lyp/6-311+G(d,p)	First excited	0.2881016	2.190244479
29 C1CC2=C(C3=CC=C3C=C2)C4=C1C=CC5=CC=C54	b3lyp/6-311+G(d,p)	First excited	37.3873764	3.923881897
30 C1CC2=C(C=CC3=CC=C23)C4=CC=CC41	b3lyp/6-311+G(d,p)	First excited	32.9120676	4.247425279
31 C1=CC=C2C=C3C(=CC2=C1)C=CC4=CC5=CC=C5C=C43	b3lyp/6-311+G(d,p)	First excited	0.2543612	3.748640569
32 C1CCC2=C(C1)C=CC3=C2C=CC4=CC=CC43	b3lyp/6-311+G(d,p)	First excited	5.3047076	4.562261018
33 C1CCC2=C(C1)C=CC3=CC4=C(C=CC5=CC=C54)C=C23	b3lyp/6-311+G(d,p)	First excited	41.6004004	3.710272515
34 C1=CC=C2C=C3C=C4C=C5C=C6C=CC5=CC4=CC3=CC2=C1	b3lyp/6-311+G(d,p)	First excited	0.2518316	1.77962466
35 C1=CC2=C3C(=C1)C=CC4=CC=CC(=C43)C=C2	b3lyp/6-311+G(d,p)	First excited	0.2822488	3.810138302
36 C1=CC=C2C3=C4C(=CC2=C1)C=CC5=C4C(=CC=C5)C=C3	b3lyp/6-311+G(d,p)	First excited	0.3203416	3.348361078
37 C1=CC=C2C(=C1)C3=CC=CC4=C3C5=C(C=CC=C25)C=C4	b3lyp/6-311+G(d,p)	First excited	0.2163552	3.958984585
38 C1=CC=C2C(=C1)C=C3C=CC4=C5C3=C2C6=CC=CCCCCCC4	b3lyp/6-311+G(d,p)	First excited	0.382788	3.381286855
39 C1=CC2=C3C(=C1)C4=CC=CC5=C4C6=C(C=C5)C=CC(=C36)C=C2	b3lyp/6-311+G(d,p)	First excited	0.3386068	3.481968984
40 C1=CC=C2C3=C4C(=CC2=C1)C5=CC=CC5C6=CC=CC(=C64)C=C3	b3lyp/6-311+G(d,p)	First excited	0.3151832	3.51271785
41 C1=CC=C2C3=C4C(=CC2=C1)C=CC5=C4C(=CC6=CC=C56)C=C3	b3lyp/6-311+G(d,p)	First excited	0.2733084	2.877604096
42 C1=CC=C2C3=C4C(=CC2=C1)C=CC5=CC6=CC=C6C(=C54)C=C3	b3lyp/6-311+G(d,p)	First excited	0.2797068	3.224821384
43 C1=CC2=C3C(=C1)C4=CC=CC5=C4C(=CC=C5)C3=CC=C2	b3lyp/6-311+G(d,p)	First excited	0.3224372	2.985089071
44 C1=CC=C2C(=C1)C3=CC=CC=C3C4=CC=CC=C24	b3lyp/6-311+G(d,p)	First excited	0.2690924	4.838728702
45 C1=CC2=C3C(=C1)C=C4C=CC5=C6C4=C3C(=CC6=CC=C5)C=C2	b3lyp/6-311+G(d,p)	First excited	0.2358356	2.867535883

SMILES	Functional/Basis Set	Transition	Reorganisation Energy/eV	HOMO-LUMO gap
46 C1=CC2=C3C4=C1C=CC5=C4C6=C(C=C5)C=CC7=C6C3=C(C=C2)C=C7	b3lyp/6-311+G(d,p)	First excited	0.1260088	4.00089012
47 C1=CC=C2C(=C1)C=C3C4=CC=C4C5=C3C2=CC6=CC=CC=C65	b3lyp/6-311+G(d,p)	First excited	0.6044752	3.241964557
48 C1=CC2=C3C4=C1C=CC5=CC6=C7C8=C(C=CC9=C8C1=C(C=C9)C=C(C3=C1C7=C54)C=C2)C=C6	b3lyp/6-311+G(d,p)	First excited	0.2047364	2.916244264
49 C1=CC=C2C(=C1)C=CC3=C2C=C4C=CC=C5C4=C3C=C5	b3lyp/6-311+G(d,p)	First excited	0.921692	3.238154963
50 C1=CC=C2C=C3C4=C5C(=CC3=CC2=C1)C=CC6=C5C(=CC=C6)C=C4	b3lyp/6-311+G(d,p)	First excited	0.2987532	2.843045635
51 C1=CC=C2C3=C4C(=CC=CC4=CC2=C1)C=C3	b3lyp/6-311+G(d,p)	First excited	0.9005748	3.079512581
52 C1=CC=C2C3=C4C(=CC=C3)C5=CC=C5C6=CC=CC(=C64)C2=C1	b3lyp/6-311+G(d,p)	First excited	0.2169256	4.104837615
53 C1=CC=C2C(=C1)C3=CC=CC=C3C4=C2C5=CC=CC6=C5C4=CC=C6	b3lyp/6-311+G(d,p)	First excited	0.6884604	3.252304884
54 C1=CC=C2C(=C1)C=C3C=C4C=CC=CC4=C5C3=C2C6=CC=CC=C65	b3lyp/6-311+G(d,p)	First excited	0.2828688	2.460997772
55 C1=CC=C2C(=C1)C=C3C=CC=C4C3=C2C5=CC=CC6=C5C4=CC=C6	b3lyp/6-311+G(d,p)	First excited	0.3040356	2.539094451
56 C1=CC=C2C(=C1)C3=CC=CC=C3C4=C2C5=CC=CC=C5C6=CC=CC=C64	b3lyp/6-311+G(d,p)	First excited	0.3879588	3.975583531
57 C1CC2=CC=CC3=C2C4=C(C=CC=C41)C=C3	b3lyp/6-311+G(d,p)	First excited	36.0939448	4.611785741
58 C1=CC=C2C=C3C4=CC=CC5=C4C6=C(C=CC=C6C3=CC2=C1)C=C5	b3lyp/6-311+G(d,p)	First excited	0.2402128	3.86211205
59 C1=CC=C2C3=C4C(=CC2=C1)C5=CC=CC5C6=CC7=CC=CC=CCC-C7C(=C64)C=C3	b3lyp/6-311+G(d,p)	First excited	0.2897012	3.406865558
60 C1=CC2=C3C4=C1C=CC5=C4C6=C(C=C5)C=CC(=C36)C=C2	b3lyp/6-311+G(d,p)	First excited	0.6490036	4.161437299
61 C1CC2=C3C(=CC=C4C3=C(CCC4)C=C2)C1	b3lyp/6-311+G(d,p)	First excited	79.3815016	4.446068399
62 CC1=CC2=C3C(=C1)C=CC4=CC(=C43)C=C2)C	b3lyp/6-311+G(d,p)	First excited	0.3751248	3.789457649
63 CC1=CC2=C3C(=C1)C=CC4=CC=CC(=C43)C=C2	b3lyp/6-311+G(d,p)	First excited	0.385578	3.800070089
64 CC1=C2C=CC3=CC=CC4=C3C2=C(C=C1)C=C4	b3lyp/6-311+G(d,p)	First excited	2.0037904	3.724966663
65 CC1=CC2=CC=CCC=C1/C=C1/C=C1	b3lyp/6-311+G(d,p)	First excited	0.7756076	4.756278202
66 CC1=CC=CC=CC=C12	b3lyp/6-311+G(d,p)	First excited	16.6651288	4.655596073
67 C1=CC2=C3C(=C1)C=CC3=CC=C2	b3lyp/6-311+G(d,p)	First excited	1.0726	3.886602298
68 CC1=C2C=CC3=CC=CCC=CCC=CC=C14)C	b3lyp/6-311+G(d,p)	First excited	5.5073112	3.535575415
69 CC1=CC2=CC=CCC=CCC=CCCCCCCCCCCCCCCCCCCC	b3lyp/6-311+G(d,p)	First excited	16.8443336	4.099939566
70 CC1=CC2=C(C=C1)C=C(C=C2)C	b3lyp/6-311+G(d,p)	First excited	16.6800708	4.746754217
71 CC1=CC2=CC(=C1)C=C(=C2)C	b3lyp/6-311+G(d,p)	First excited	16.9045604	4.665664286
71 CC1-CC2-CC-CC1/C=C(C-C2)C(C)C	b3lyp/6-311+G(d,p)	First excited	70.5567936	4.662671033
72 CC(C)C1-CC2-C(C-C1)C-C(C-C2)C(C)C 73 CC1-C2C-CC3-CC-CC3-CC2-CC4-CC-CC14	b3lyp/6-311+G(d,p)	First excited	1.2319648	3.629726811
74 CC1=C2C(=CC3=CC=CC4=CC+CC+CC42	b3lyp/6-311+G(d,p)	First excited	17.2317592	3.627277787
75 CC1=C2C=C3C=CC4C3=CC=CC=C4C3=CC2=CC=C1	b3lyp/6-311+G(d,p)	First excited	0.403496	3.696938935
75 CC1-C2C-C3C-CC4-CC-CC-C4C3-CC2-CC-C1 76 CC(C)C1=CC2=CC=CC=C2C=C1	7.17	First excited	22.9467208	4.671378677
	b3lyp/6-311+G(d,p)			
77 CC1=CC=C(C2=CC=CC2)C	b3lyp/6-311+G(d,p)	First excited	18.2250612	4.555186058
78 CC1=CC=C(C=C1)S(=0)(=0)0	b3lyp/6-311+G(d,p)	First excited	15.9317184	5.972082939
159 C1=CC=C2C(=C1)C3=C4C2=CC5=CC=C6C5C4=C(C=C6)C=C3	b3lyp/6-311+G(d,p)	First excited	0.6843808	3.31189782
241 C1=CSC2=CC3=CC4=C(C=C3C=C21)C=C5C(=C4)C=CS5	b3lyp/6-311+G(d,p)	First excited	0.2588624	2.73773757
242 C1=CC2=C(C=CC3=C2C=CC4=C3SC=C4)C5=C1C=CS5	b3lyp/6-311+G(d,p)	First excited	0.2206456	4.358447735
243 C1=CC=C2C(=C1)C3=CC4=C(C=C3S2)SC5=CC=CC=C54	b3lyp/6-311+G(d,p)	First excited	0.224874	4.273276096
244 C1=CC=C2C(=C1)C3=CC4=C(C=C3S2)C5=CC=CC5S4	b3lyp/6-311+G(d,p)	First excited	0.2078984	4.002250689
245 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)C5=CC=CC5S4	b3lyp/6-311+G(d,p)	First excited	0.2501948	4.273003982
246 C1=CSC(=C1)C#CC2=CC=C(C=C2)C#CC3=CC=CS3	b3lyp/6-311+G(d,p)	First excited	1.199762	4.406067661
247 C1=CC=C3C(=CC2=C1)C4=C(C5=C3SC=C5)SC=C4	b3lyp/6-311+G(d,p)	First excited	0.3795392	3.515983217
248 C1=CC=C(C(=C1)C#CC2=CC=CS2)C#CC3=CC=CS3	b3lyp/6-311+G(d,p)	First excited	29.1408804	3.606052905
249 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)SC5=CC=C54	b3lyp/6-311+G(d,p)	First excited	0.2084936	4.39681579
250 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C5=C(C=C4)SC=C5	b3lyp/6-311+G(d,p)	First excited	0.3844992	4.103204932
251 C1=CC=C2C(=C1)C3=C(C4=C(C=C3)SC=C4)C5=C2SC=C5	b3lyp/6-311+G(d,p)	First excited	0.5476584	4.23762918
252 C1=CSC2=CC3=CC4=C(C=C5C=CSC5=C4)C=C3C=C21	b3lyp/6-311+G(d,p)	First excited	0.2634876	2.748077897

SMILES	Functional/Basis Set	Transition	Reorganisation Energy/eV	HOMO-LUMO gap
253 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C5=CC=CC5S4	b3lyp/6-311+G(d,p)	First excited	0.2856464	4.022659229
254 C1=CC2=C3C=CSC4=CC=CC(=C34)C5=C2C(=C1)SC=C5	b3lyp/6-311+G(d,p)	First excited	0.301382	2.354601252
255 C1=CC=C2C(=C1)C=C3C=C4C=CC=CC4=C5C3=C2SS5	b3lyp/6-311+G(d,p)	First excited	0.2653352	2.338002306
256 C1=CC2=C(C=CS2)C3=CC4=C(C=C31)C5=C(C=C4)SC=C5	b3lyp/6-311+G(d,p)	First excited	0.39184	3.535303301
257 C1=CC2=C(C=C3C=CSC3=C2)C4=C1C=C5C(=C4)C=CS5	b3lyp/6-311+G(d,p)	First excited	0.2155244	3.8846975
258 C1=CC=C2C(=C1)C=CC3=C2SC4=C3SC5=CC=CC=C54	b3lyp/6-311+G(d,p)	First excited	0.3477456	4.081707937
259 C1=CC=C2C=C3C(=CC2=C1)C4=C(S3)C5=CC=CC=C5S4	b3lyp/6-311+G(d,p)	First excited	0.3264424	3.62891047
260 C1=CC2=CC3=C(C=CC4=C3SC=C4)C=C2C5=C1C=CS5	b3lyp/6-311+G(d,p)	First excited	0.355508	3.502921751
261 C1=CC=C2C(=C1)C=CC3=C2C4=C(S3)C5=CC=CC=C5S4	b3lyp/6-311+G(d,p)	First excited	0.3962172	3.921432872
262 C1=CC2=C(C=CC3=C2C=CS3)C4=C1C5=C(C=C4)SC=C5	b3lyp/6-311+G(d,p)	First excited	0.44206	4.153545997
263 C#CC1=CC(=C(C=C1C2=CC=CS2)C#C)C3=CC=CS3	b3lyp/6-311+G(d,p)	First excited	0.5060688	3.863472619
264 C1=CC=C2C(=C1)C3=C(S2)C=C4C=C5C(=CC4=C3)C=CS5	b3lyp/6-311+G(d,p)	First excited	0.2540636	3.467819063
265 C1=CC2=C(C=CC3=C2C=CC4=C3C=CS4)C5=C1C=CS5	b3lyp/6-311+G(d,p)	First excited	0.4085056	4.245792596
266 C1=CC=C2C(=C1)C=C(S2)C#CC3=CC4=CC=CC+C4S3	b3lyp/6-311+G(d,p)	First excited	0.4005324	3.588909732
267 C1=CC2=CC3=C(C=C2C4=C1C=CS4)C5=C(C=C3)C=CS5	b3lyp/6-311+G(d,p)	First excited	0.35898	3.506187118
268 C1=CC=C2C(=C1)SC3=C(52)C4=CC=CC5=C4C3=CC=C5	b3lyp/6-311+G(d,p)	First excited	1.4241896	3.034885908
269 C#CC1=CC(=C(C=C1C2=CSC=C2)C#C)C3=CSC=C3	b3lyp/6-311+G(d,p)	First excited	4.307264	4.195451531
270 [2H]C1=CC2=C(C=CS2)C3=CC4=C(C=C13)C5=C(C=C4[2H])SC=C5	b3lyp/6-311+G(d,p)	First excited	0.3918276	3.535303301
271 [2H]C#CC1=CC(=C(C=C1C2=CSC=C2)C#C[2H])C3=CSC=C3	b3lyp/6-311+G(d,p)	First excited	2.901972	4.236812839
272 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C=CC5=C4SC=C5	b3lyp/6-311+G(d,p)	First excited	0.3231688	4.101844363
273 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C=CC5=C4C=CS5	b3lyp/6-311+G(d,p)	First excited	0.5110908	4.092592491
274 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)C5=C(C=C4)C=CS5	b3lyp/6-311+G(d,p)	First excited	0.2139248	4.209601452
275 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)C5=C(C=C4)SC=C5	b3lyp/6-311+G(d,p)	First excited	0.4110972	4.240078205
276 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C5=C(C=C4)C=CS5	b3lyp/6-311+G(d,p)	First excited	0.6709888	4.058850372
277 C1=CC=C2C(=C1)C3=C(S2)C=C4C(=C3)C=CC5=C4SC=C5	b3lyp/6-311+G(d,p)	First excited	0.257548	3.852043837
278 C1=CC=C2C(=C1)C3=C(S2)C=C4C(=C3)C=CC5=C4C=CS5	b3lyp/6-311+G(d,p)	First excited	0.2943512	3.906738723
279 C1=CC=C2C(=C1)C3=C4C(=CC=C3)SC5=CC=CC(=C54)S2	b3lyp/6-311+G(d,p)	First excited	1.2734428	4.237357066
280 [2H]C1=C2C(=CC=C1)C3=C4C(=CC=C3)SC5=CC=CC(=C54)S2	b3lyp/6-311+G(d,p)	First excited	1.271496	4.236812839
281 C1=CC=C2C=C3C(=CC2=C1)C4=C(C=CS4)C5=C3SC=C5	b3lyp/6-311+G(d,p)	First excited	0.3602696	3.492037197
282 C1=CC2=C(C3=CSC=C3C=C2)C4=C1C=CC5=CSC=C54	b3lyp/6-311+G(d,p)	First excited	0.2969552	3.737211787
283 C1=CC2=C(C3=C(C=C2)SC=C3)C4=C1C=CC5=C4C=CS5	b3lyp/6-311+G(d,p)	First excited	0.2566552	4.239533977
284 C1=CC2=C3C=CC=C4C3=C(C=CS4)C5=C2C(=C1)SC=C5	b3lyp/6-311+G(d,p)	First excited	0.3761168	3.111622017
285 C1=CC(=CC(=C1)C#CC2=CC=CS2)C#CC3=CC=CS3	b3lyp/6-311+G(d,p)	First excited	2.9436236	3.906194496
286 C1=CC2=CC3=C(C=C2C4=CC5=C(C=CS5)C=C41)SC=C3	b3lyp/6-311+G(d,p)	First excited	0.233678	3.974222961
287 C1=CC=C2C(=C1)C=CC3=C2C=CC4=C3SC5=C4SC=C5	b3lyp/6-311+G(d,p)	First excited	0.2380924	4.255316581
288 C1=CC=C2C3=C4C(=CC=C3)SSC5=CC=CC(=C54)C2=C1	b3lyp/6-311+G(d,p)	First excited	2.3272816	3.91354157
289 C#CC1=C(C=CS1)C2=CC=C(C=C2)C3=C(SC=C3)C#C	b3lyp/6-311+G(d,p)	First excited	5.5001812	4.085789645
290 C1=CC(=CC=C1C#CC2=CSC=C2)C#CC3=CSC=C3	b3lyp/6-311+G(d,p)	First excited	5.5536004	3.712993653
291 C1=CC=C2C(=C1)C=CC3=C2C4=C(C=C54)C5=C3SC=C5	b3lyp/6-311+G(d,p)	First excited	0.2971536	4.096402085
292 C1=CC=C3C=C4C(=CC3=CC2=C1)C5=C(S4)C=CS5	b3lyp/6-311+G(d,p)	First excited	0.2867252	3.038151274
293 C1=CC=C(C=C1)C#CC2=CC3=C(S2)C=CC4=C3C=CS4	b3lyp/6-311+G(d,p)	First excited	1.9651148	4.143477784
294 C1=CC2=C(C=C3C=CSC3=C2)C4=CC5=C(C=CS5)C=C41	b3lyp/6-311+G(d,p)	First excited	0.2294992	4.041707199
295 C1=CC2=C(C=CS2)C3=CC4=C(C=C31)C=C5C=CSC	b3lyp/6-311+G(d,p)	First excited	0.3143772	3.136112265
296 C#CC1=C(C=C1C2=CSC=C2)C3=CSC=C3)C#C	b3lyp/6-311+G(d,p)	First excited	4.2123172	4.253411784
297 C1=CC2=C(C=CS2)C3=CC4=C(C=CC5=C4C=CS5)C=C31	b3lyp/6-311+G(d,p)	First excited	0.3933156	3.569861762
298 C1=CC2=CSC=C2C3=CC4=C(C=CC5=CSC+C54)C=C31	b3lyp/6-311+G(d,p)	First excited	0.2357116	3.740749267
	55,76,0 511.5(0,6)	ot excited	0.2337110	3 10, 13207

SMILES	Functional/Basis Set	Transition	Reorganisation Energy/eV	HOMO-LUMO gap
299 C1=CC2=CC3=CSC=C3C=C2C4=CC5=CSC=C41	b3lyp/6-311+G(d,p)	First excited	0.2930988	3.207133983
300 C1=CC2=CSC=C2C3=CC4=C(C=C31)C5=CSC=C5C=C4	b3lyp/6-311+G(d,p)	First excited	0.3172168	3.672992915
301 C1=CC2=C(C=CC3=C2C=CC4=CSC=C43)C5=CSC=C51	b3lyp/6-311+G(d,p)	First excited	0.2618012	3.861567822
302 C1=CC=C(C=C1)C#CC2=CC3=C(S2)C=C4C=CSC4=C3	b3lyp/6-311+G(d,p)	First excited	2.8269768	3.569589648
303 C1=CC=C2C=C3C(=CC2=C1)C=CC4=C3C5=C(S4)C=CS5	b3lyp/6-311+G(d,p)	First excited	0.3882564	3.38727336
304 C1=CC2=C3C4C1C5=CSC=C5C4=CC=C3C6=CSC=C26	b3lyp/6-311+G(d,p)	First excited	0.551986	2.724403991
305 C1=CC=C2C(=C1)C3=C(S2)C4=CC=CC5=C4C(=CC=C5)S3	b3lyp/6-311+G(d,p)	First excited	0.4743744	3.28087684
422 C1=CC=C2C(=C1)C3=C(S2)C4=CC=CCS3	b3lyp/6-311+G(d,p)	First excited	0.4053932	4.234363814
423 C1=CC2=C(C=CC3=C2SC=C3)C4=C1C=CS4	b3lyp/6-311+G(d,p)	First excited	0.2478636	4.420489696
424 C1=CSC2=CC3=C(C=C21)C=C4C(=C3)C=CS4	b3lyp/6-311+G(d,p)	First excited	0.2754412	3.438430766
425 C1=CC=C2C3=C(C4=C(C2=C1)C=CS4)SC=C3	b3lyp/6-311+G(d,p)	First excited	0.2330828	4.229737878
426 C1=CC2=C3C(=CC=C4C3=C1C=CS4)C=CS2	b3lyp/6-311+G(d,p)	First excited	0.6904072	3.062913636
427 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)SC=C4	b3lyp/6-311+G(d,p)	First excited	0.2710392	4.569608092
428 C1=CC=C2C(=C1)C3=C(C4=C2SC=C4)SC=C3	b3lyp/6-311+G(d,p)	First excited	0.4482848	4.345658383
429 C1=CC=C2C(=C1)C(=S)C3=CC=C3C2=S	b3lyp/6-311+G(d,p)	First excited	0.1986232	2.456916064
430 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3SC=C4	b3lyp/6-311+G(d,p)	First excited	0.3138316	4.492871983
431 C1=CC=C2C(=C1)C=C(S2)C#CC3=CSC=C3	b3lyp/6-311+G(d,p)	First excited	1.6256648	3.961161496
432 C1=CC=C2C(=C1)C3=C(S2)SC4=CC=CC=C43	b3lyp/6-311+G(d,p)	First excited	0.3846852	4.666752741
433 C1=CC=C2C(=C1)C=C(S2)C#CC3=CC=CS3	b3lyp/6-311+G(d,p)	First excited	2.7037456	3.720612841
434 C1=CC2=C(C=CS2)C3=C1C4=C(C=C3)SC=C4	b3lyp/6-311+G(d,p)	First excited	0.460412	4.274092438
435 C1=CSC2=CC3=C(C=C21)C=C4C=CSC4=C3	b3lyp/6-311+G(d,p)	First excited	0.2845304	3.478703618
436 C1=CC2=C3C(=CC=C4C3=C1C=CS4)SC=C2	b3lyp/6-311+G(d,p)	First excited	0.6218724	2.889032878
437 C1=CC2=C(C3=C1C=CC4=C3SC=C4)SC=C2	b3lyp/6-311+G(d,p)	First excited	0.215822	4.584302241
438 C1=CC=C2C(=C1)C=CC3=C2C4=C(S3)SC=C4	b3lyp/6-311+G(d,p)	First excited	0.4627556	4.35735928
439 C1=C/C(=C\2/C=CC3=C2SC=C3)/C4=C1C=CS4	b3lyp/6-311+G(d,p)	First excited	1.088906	2.861549378
440 C1=CSC(=C1)C#C/C=C\C#CC2=CC=CS2	b3lyp/6-311+G(d,p)	First excited	5.5621688	3.231624231
441 C1=CC=C2C(=C1)C3=C(S2)C=C4C=CSC4=C3	b3lyp/6-311+G(d,p)	First excited	0.2171116	4.159804615
442 C#CC1=C(SC2=CC=CC1)C3=CC=CS3	b3lyp/6-311+G(d,p)	First excited	5.9720384	3.870003352
443 C1=CC=C2C(=C1)C(=C3C=CC3=C2[S-])[S-]	b3lyp/6-311+G(d,p)	First excited	0.2025912	2.456371836
444 C1=CC2=C3C(=C1)C4=C(C3=CC=C2)SC=CS4	b3lyp/6-311+G(d,p)	First excited	1.3719856	2.887944422
445 C1=C/C(=C/2\C=CC3=C2SC=C3)/C4=C1C=CS4	b3lyp/6-311+G(d,p)	First excited	0.8028752	2.942367195
446 C1=CC=C2C=C3C(=CC2=C1)C4=C(S3)C=CS4	b3lyp/6-311+G(d,p)	First excited	0.313472	3.797076837
447 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)C=CS4	b3lyp/6-311+G(d,p)	First excited	0.2622724	4.427564656
448 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C=CS4	b3lyp/6-311+G(d,p)	First excited	0.2567668	4.378856275
449 C1=CC2=C(C=CS2)C3=C1C=CC4=C3C=CS4	b3lyp/6-311+G(d,p)	First excited	0.3214328	4.41232628
450 C#CC1=C2C(=CC=C1)SC3=CC=CCSS2	b3lyp/6-311+G(d,p)	First excited	2.4114404	4.507566132
451 C\1=CC2=C(/C1=C/3\C=CC4=C3C=CS4)C=CS2	b3lyp/6-311+G(d,p)	First excited	0.8097448	2.871073363
452 C1=CC=C2C(=C1)C3=CSC=C3C4=CSC=C24	b3lyp/6-311+G(d,p)	First excited	0.3108804	4.489334503
453 C1=CC2=C(C3=C1C=CC4=C3C=CS4)SC=C2	b3lyp/6-311+G(d,p)	First excited	0.2185128	4.305113418
454 C1=C/C(=C\2/C=CC3=C2C=CS3)/C4=C1C=CS4	b3lyp/6-311+G(d,p)	First excited	1.0225784	2.856923442
455 C1=CC=C2C(=C1)C3=CC=CC=C3C2=C([S-])[S-]	b3lyp/6-311+G(d,p)	First excited	0.2403616	2.186706999
456 C\1=CC2=C(/C1=C\3/C=CC4=C3C=CS4)C=CS2	b3lyp/6-311+G(d,p)	First excited	1.2501432	2.890121333
457 C1=C/C(=C/2\C=CC3=C2C=CS3)/C4=C1C=CS4	b3lyp/6-311+G(d,p)	First excited	1.054806	2.858011897
458 C1=CC=C2C(=C1)C3=C(S2)C=CC4=CSC=C43	b3lyp/6-311+G(d,p)	First excited	0.4315944	3.70782349
459 C1=CC=C2C(=C1)C3=C(C=CS3)C4=C2SC=C4	b3lyp/6-311+G(d,p)	First excited	0.2668728	4.421850265
460 C1=CC=C2C(=C1)C3=C(S2)C4=CSC=CC4=C3	b3lyp/6-311+G(d,p)	First excited	0.8989132	3.187269671

SMILES	Functional/Basis Set	Transition	Reorganisation Energy/eV	HOMO-LUMO gap
461 C1=CC=C2C(=C1)C3=CC4=CC=CSC4=C3S2	b3lyp/6-311+G(d,p)	First excited	0.7959808	2.63487853
462 C#CC1=CC2=C(C=C1)SC3=CC=CC=C3S2	b3lyp/6-311+G(d,p)	First excited	2.4903292	4.458041409
463 C1=CC2=C(C=CC3=CSC=C32)C4=CSC=C41	b3lyp/6-311+G(d,p)	First excited	0.370884	3.412307835
464 C1=CC2=CSC=C2C3=C1C=CC4=CSC=C43	b3lyp/6-311+G(d,p)	First excited	0.33604	3.367681162
465 C1=CC2=C(C=C3C=CSC3=C2)C4=C1C=CS4	b3lyp/6-311+G(d,p)	First excited	0.3290712	3.924154011
563 C1=CSC2=CC3=C(C=C21)SC=C3	b3lyp/6-311+G(d,p)	First excited	0.2801036	4.296405774
564 C1=CSC2=CC3=C(C=CS3)C=C21	b3lyp/6-311+G(d,p)	First excited	0.330832	4.48280377
565 C1=CC2=CSC=C2C3=CSC=C31	b3lyp/6-311+G(d,p)	First excited	0.3617204	4.38348221
566 C1=CC=C2C(=C1)C3=C(S2)SC=C3	b3lyp/6-311+G(d,p)	First excited	0.5541932	4.963084737
567 C1=CC2=C(C3=C1C=CS3)SC=C2	b3lyp/6-311+G(d,p)	First excited	0.2497236	4.718182261
568 C1=CC=C2C(=C1)C3=C(S2)C=CS3	b3lyp/6-311+G(d,p)	First excited	0.4020204	4.623758751
569 C1=CC2=C(C=CS2)C3=C1C=CS3	b3lyp/6-311+G(d,p)	First excited	0.2899492	4.879545782
570 C1=CC2=C(C=CS2)C3=C1SC=C3	b3lyp/6-311+G(d,p)	First excited	0.456816	4.601717528
571 C1=CC(=S)C=C2C1=CC(=S)C=C2	b3lyp/6-311+G(d,p)	First excited	0.1983876	1.993506156
572 C1=CC=C2C(=S)C=CC(=S)C2=C1	b3lyp/6-311+G(d,p)	First excited	0.2466484	2.342900356
573 C=C1C2=C(C3=C1C=CS3)SC=C2	b3lyp/6-311+G(d,p)	First excited	20.8524228	3.518976469
574 C1=CSC2=CC3=CSC=C3C=C21	b3lyp/6-311+G(d,p)	First excited	0.3349116	3.294482533
575 C1=CC2=C(C=CS2)C3=CSC=C31	b3lyp/6-311+G(d,p)	First excited	0.4920072	3.918983847
609 C1=CSC2=C1SC=C2	b3lyp/6-311+G(d,p)	First excited	0.623596	5.059957272
610 C1=CSC2=C1C=CS2	b3lyp/6-311+G(d,p)	First excited	0.3141044	5.489625061
611 C1=CC(=S)C=CC1=S	b3lyp/6-311+G(d,p)	First excited	0.2129452	2.16357732
612 [2H]C1=C(SC2=C1C(=C(S2)[2H])[2H])[2H]	b3lyp/6-311+G(d,p)	First excited	0.3141168	5.489352947
613 [2H]C1=C(SC2=C1SC(=C2[2H])[2H])[2H]	b3lyp/6-311+G(d,p)	First excited	0.6236208	5.059957272
614 C1=C2C=S=CC2=CS1	b3lyp/6-311+G(d,p)	First excited	0.4233112	2.993252487
79 C1=CC=CC=C1	b3lyp/6-311+G(d,p)	Cationic	0.2944628	6.598216937
80 C1=CC=C2C=CC2=C1	b3lyp/6-311+G(d,p)	Cationic	0.1813996	4.747842672
81 C1CCC2=CC=CCC1	b3lyp/6-311+G(d,p)	Cationic	36.96502	6.088003445
82 C1CC2=CC=CC=C1	b3lyp/6-311+G(d,p)	Cationic	35.3355732	4.958730916
83 C1CC2=C(C=C1)C3=CC=C3C=C2	b3lyp/6-311+G(d,p)	Cationic	0.231942	4.098578996
84 C1CCC2=C(C1)C=CC3=CC=CC23	b3lyp/6-311+G(d,p)	Cationic	6.2023312	4.646616315
85 C1C=CCC2=CC=CC1	b3lyp/6-311+G(d,p)	Cationic	0.2573992	5.944327325
86 C1CC2=CC3=CC=C3C=C2C=C1	b3lyp/6-311+G(d,p)	Cationic	31.5613852	4.405523433
87 C1CCC2=CC3=CC=C3C=C2C1	b3lyp/6-311+G(d,p)	Cationic	78.3852236	4.593826226
88 C1=CC=C2C=C3C=CC3=CC2=C1	b3lyp/6-311+G(d,p)	Cationic	0.1396364	3.551630133
89 C1=CC=C2C(=C1)C=CC3=CC=C32	b3lyp/6-311+G(d,p)	Cationic	0.2199388	4.68144689
90 C1=CC=C2C(=C1)C=CC3=C2C=CC4=CC=CC43	b3lyp/6-311+G(d,p)	Cationic	0.1686524	4.219125437
91 C1=CC=C2C(=C1)C=CC3=CC4=CC=C4C=C32	b3lyp/6-311+G(d,p)	Cationic	0.1432324	3.723878208
92 C1=CC=C2C(=C1)C=CC3=CC4=C(C=CC5=CC=C54)C=C32	b3lyp/6-311+G(d,p)	Cationic	0.1692848	3.849322698
93 C1=CC=C2C=C3C=C4C=CC3=CC2=C1	b3lyp/6-311+G(d,p)	Cationic	0.1144892	2.751887491
94 C1=CC=C2C=C3C4=CC=CC=C4C5=CC=C5C3=CC2=C1	b3lyp/6-311+G(d,p)	Cationic	0.1272364	3.849594812
95 C1=CC=C2C(=C1)C=CC3=C2C4=CC=CC=C4C5=CC=C35	b3lyp/6-311+G(d,p)	Cationic	0.1880832	4.051503298
96 C1=CC=C2C(=C1)C=CC3=C2C4=CC=CCC=C4C=C3	b3lyp/6-311+G(d,p)	Cationic	0.1616092	4.171505512
97 C1=CC=C2C(=C1)C=CC3=C2C=CC4=C3C5=CC=C5C=C4	b3lyp/6-311+G(d,p)	Cationic	0.2183144	4.208785111
98 C1=CC=C2C(=C1)C=CC3=CC4=C(C=C32)C5=CC=C5C=C4	b3lyp/6-311+G(d,p)	Cationic	0.1326552	3.887418639
99 C1CC2=CC=CC=C2C3=CC=CC=C31	b3lyp/6-311+G(d,p)	Cationic	31.9738588	4.88226692
100 C1=CC=C2C(=C1)C=CC3=C2C=CC4=CC5=CC=C43	b3lyp/6-311+G(d,p)	Cationic	0.12431	3.477615162

SMILES	Functional/Basis Set	Transition	Reorganisation Energy/eV	HOMO-LUMO gap
101 C1C2=CC=CCCC3=CC4=CC=C4C=C31	b3lyp/6-311+G(d,p)	Cationic	29.5613644	4.666480627
102 C1CCC2=CC3=C(CCCC3)C=C2C1	b3lyp/6-311+G(d,p)	Cationic	134.0260448	5.761194696
103 C1C2=CC=CC=C2CC3=CC=CC=C31	b3lyp/6-311+G(d,p)	Cationic	0.477648	5.945687895
104 C1=CC=C2C=C3C(=CC2=C1)C=CC4=C3C=CC5=CC6=CC=C54	b3lyp/6-311+G(d,p)	Cationic	0.0974392	3.126316166
105 C1CCC2=C(C1)C=CC3=C2CCCC3	b3lyp/6-311+G(d,p)	Cationic	94.177814	5.899972766
106 C1=CC=C2C(=C1)C=CC3=C2C=CC4=C3C=CC5=CC=C54	b3lyp/6-311+G(d,p)	Cationic	0.187426	4.206880314
107 C1=CC=C2C=C3C=C4C=C5C=CC4=CC3=CC2=C1	b3lyp/6-311+G(d,p)	Cationic	0.0973648	2.190516593
108 C1CC2=C(C3=CC=C3C=C2)C4=C1C=CC5=CC=C54	b3lyp/6-311+G(d,p)	Cationic	0.2271308	3.923337669
109 C1CC2=C(C=CC3=CC=C23)C4=CC=CC=C41	b3lyp/6-311+G(d,p)	Cationic	0.191766	4.247425279
110 C1=CC=C2C=C3C(=CC2=C1)C=CC4=CC5=CC=C5C=C43	b3lyp/6-311+G(d,p)	Cationic	0.1804572	3.748640569
	b3lyp/6-311+G(d,p)	Cationic	76.3040944	4.562261018
	b3lyp/6-311+G(d,p)	Cationic	4.8524424	3.656938198
113 C1=CC=C2C=C3C=C4C=C5C=C6C=CC5=CC4=CC3=CC2=C1	b3lyp/6-311+G(d,p)	Cationic	0.0842952	1.77962466
114 C1=CC2=C3C(=C1)C=CC4=CC=CC(=C43)C=C2	b3lyp/6-311+G(d,p)	Cationic	0.1531772	3.810410416
115 C1=CC=C2C3=C4C(=CC2=C1)C=CC5=C4C(=CC=C5)C=C3	b3lyp/6-311+G(d,p)	Cationic	0.146072	3.348088964
116 C1=CC=C2C(=C1)C3=CC=CC4=C3C5=C(C=CC=C25)C=C4	b3lyp/6-311+G(d,p)	Cationic	0.1472376	3.958984585
117 C1=CC=C2C(=C1)C=C3C=CC4=C5C3=C2C6=CC=C6C5=CC=C4	b3lyp/6-311+G(d,p)	Cationic	0.15469	3.381286855
118 C1=CC2=C3C(=C1)C4=CC=CC5=C4C6=C(C=C5)C=CC(=C36)C=C2	b3lyp/6-311+G(d,p)	Cationic	0.138012	3.481968984
119 C1=CC=C2C3=C4C(=CC2=C1)C5=CC=C5C6=CC=CC(=C64)C=C3	b3lyp/6-311+G(d,p)	Cationic	0.1386816	3.51271785
120 C1=CC=C2C3=C4C(=CC2=C1)C=CC5=C4C(=CC6=CC=CC56)C=C3	b3lyp/6-311+G(d,p)	Cationic	0.128216	2.877876209
121 C1=CC=C2C3=C4C(=CC2=C1)C=CC5=CC6=CC=C6C(=C54)C=C3	b3lyp/6-311+G(d,p)	Cationic	0.1634692	3.224821384
122 C1=CC2=C3C(=C1)C4=CC=CC5=C4C(=CC=C5)C3=CC=C2	b3lyp/6-311+G(d,p)	Cationic	0.1469276	2.985089071
123 C1=CC=C2C(=C1)C3=CC=CC=C3C4=CC=C24	b3lyp/6-311+G(d,p)	Cationic	0.1850204	4.838728702
124 C1=CC2=C3C(=C1)C=C4C=CC5=C6C4=C3C(=CC6=CC=C5)C=C2	b3lyp/6-311+G(d,p)	Cationic	0.1159772	2.867807996
125 C1=CC=C2C(=C1)C=C3C4=CC=CCC=C4C5=C3C2=CC6=CC=C65	b3lyp/6-311+G(d,p)	Cationic	0.1511932	3.241964557
126 C1=CC2=C3C4=C1C=CC5=CC6=C7C8=C(C=CC9=C8C1=C(C=C9)C=C(C3=C1C7=C54)C=C2)C=C6	b3lyp/6-311+G(d,p)	Cationic	0.0955296	2.91597215
127 C1=CC=C2C(=C1)C=CC3=C2C=C4C=CC=C5C4=C3C=C5	b3lyp/6-311+G(d,p)	Cationic	0.2145572	3.238154963
128 C1=CC=C2C=C3C4=C5C(=CC3=CC2=C1)C=CC6=C5C(=CC=C6)C=C4	b3lyp/6-311+G(d,p)	Cationic	0.1239008	2.843317749
129 C1=CC=C2C3=C4C(=CC=CC4=CC2=C1)C=C3	b3lyp/6-311+G(d,p)	Cationic	0.2170868	3.079784695
130 C1=CC=C2C3=C4C(=CC=C3)C5=CC=C5C6=CC=C64)C2=C1	b3lyp/6-311+G(d,p)	Cationic	0.1369332	4.105109729
131 C1=CC=C2C(=C1)C3=CC=CC3C4=C2C5=CC=CC6=C5C4=CC=C6	b3lyp/6-311+G(d,p)	Cationic	0.2124616	3.252304884
132 C1=CC=C2C(=C1)C=C3C=C4C=CC4=C5C3=C2C6=CC=C65	b3lyp/6-311+G(d,p)	Cationic	0.1005516	2.460997772
133 C1=CC=C2C(=C1)C=C3C=CC=C4C3=C2C5=CC=CC6=C5C4=CC=C6	b3lyp/6-311+G(d,p)	Cationic	0.1473988	2.538822337
134 C1=CC=C2C(=C1)C3=CC=CC=C3C4=C2C5=CC=C5C6=CC=C64	b3lyp/6-311+G(d,p)	Cationic	10.9663988	3.976127758
135 C1CC2=CC3=C2C4=C(C=CC=C41)C=C3	b3lyp/6-311+G(d,p)	Cationic	36.040662	4.611785741
136 C1=CC=C2C=C3C4=CC=CC5=C4C6=C(C=CC=C6C3=CC2=C1)C=C5	b3lyp/6-311+G(d,p)	Cationic	0.1250912	3.86211205
137 C1=CC=C2C3=C4C(=CC2=C1)C5=CC=CC5C6=CC7=CC=CCC(=C64)C=C3	b3lyp/6-311+G(d,p)	Cationic	0.15128	3.406865558
138 C1=CC2=C3C4=C1C=CC5=C4C6=C(C=C5)C=CC(=C36)C=C2	b3lyp/6-311+G(d,p)	Cationic	0.1904764	4.161437299
139 C1CC2=C3C(=CC=C4C3=C(CCC4)C=C2)C1	b3lyp/6-311+G(d,p)	Cationic	71.727428	4.446068399
140 CC1=CC2=C3C(=C1)C=CC4=CC(=C43)C=C2)C	b3lyp/6-311+G(d,p)	Cationic	0.2394316	3.789457649
141 CC1=CC2=C3C(=C1)C=CC4=CC=CC(=C43)C=C2	b3lyp/6-311+G(d,p)	Cationic	0.18321	3.800070089
142 CC1=C2C=CC3=CC=CC4=C3C2=C(C=C1)C=C4	b3lyp/6-311+G(d,p)	Cationic	16.1239432	3.724694549
143 CC1=CC2=CC=CC=C2C=C1	b3lyp/6-311+G(d,p)	Cationic	16.7850492	4.756278202
144 CC1=CC=CC2=CC=C12	b3lyp/6-311+G(d,p)	Cationic	1.3446436	4.655323959
145 C1=CC2=C3C(=C1)C=CC3=CC=C2	b3lyp/6-311+G(d,p)	Cationic	0.4145196	3.886602298
146 CC1=C2C=CC3=CC=CC3C2=C(C4=CC=C14)C	b3lyp/6-311+G(d,p)	Cationic	18.0141248	3.535575415

SMILES	Functional/Basis Set	Transition	Reorganisation Energy/eV	HOMO-LUMO gap
147 CC1=CC2=CC=CCC3=C1C4=CC=C4C=C3	b3lyp/6-311+G(d,p)	Cationic	0.1957588	4.099939566
148 CC1=CC2=C(C=C1)C=C(C=C2)C	b3lyp/6-311+G(d,p)	Cationic	15.9425808	4.746754217
149 CC1=CC2=CC=CC(=C2C=C1)C	b3lyp/6-311+G(d,p)	Cationic	33.1261164	4.665664286
150 CC(C)C1=CC2=C(C=C1)C=C(C=C2)C(C)C	b3lyp/6-311+G(d,p)	Cationic	24.9330148	4.662126806
151 CC1=C2C=CC3=CC=C3C2=CC4=CC=CC14	b3lyp/6-311+G(d,p)	Cationic	16.3096456	3.629454697
152 CC1=C2C(=CC3=CC=CC13)C=CC4=CC=C42	b3lyp/6-311+G(d,p)	Cationic	5.3257504	3.6275499
153 CC1=C2C=C3C=CC4=CC=C4C3=CC2=CC=C1	b3lyp/6-311+G(d,p)	Cationic	1.4968164	3.696938935
154 CC(C)C1=CC2=CC=CC=C1	b3lyp/6-311+G(d,p)	Cationic	22.8050012	4.747842672
155 CC1=CC=C(C2=CC=C12)C	b3lyp/6-311+G(d,p)	Cationic	17.3522376	4.555458171
156 CC1=CC=C(C=C1)S(=0)(=0)0	b3lyp/6-311+G(d,p)	Cationic	0.7946416	5.974531964
157 CC1=CC=C(C=C1)S(=0)(=0)Cl	b3lyp/6-311+G(d,p)	Cationic	62.5300504	5.124720372
158 C1=CC2=CC3=C4C5=C(C=C3)C=C6C=CC7=C8C6=C5C9=C3C4=C2C2=C1C=CC1=CC4=C(C3=C12)C1=C(C=C4)C=C(C8=C19)C=C7	b3lyp/6-311+G(d,p)	Cationic	0.068014	2.520862822
160 C1=CC=C2C(=C1)C3=C4C2=CC5=CC=CC6=C5C4=C(C=C6)C=C3	b3lyp/6-311+G(d,p)	Cationic	0.16213	3.31189782
306 C1=CSC2=CC3=CC4=C(C=C3C=C21)C=C5C(=C4)C=CS5	b3lyp/6-311+G(d,p)	Cationic	0.0945004	2.73773757
307 C1=CC2=C(C=CC3=C2C=CC4=C3SC=C4)C5=C1C=CS5	b3lyp/6-311+G(d,p)	Cationic	0.1961184	4.358447735
308 C1=CC=C2C(=C1)C3=CC4=C(C=C3S2)SC5=CC=CC54	b3lyp/6-311+G(d,p)	Cationic	0.0839604	4.273276096
309 C1=CC=C2C(=C1)C3=CC4=C(C=C3S2)C5=CC=CC=C5S4	b3lyp/6-311+G(d,p)	Cationic	0.1198088	4.002250689
310 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)C5=CC=C5S4	b3lyp/6-311+G(d,p)	Cationic	0.136958	4.272731868
311 C1=CC=C2C=C3C(=CC2=C1)C4=C(C5=C3SC=C5)SC=C4	b3lyp/6-311+G(d,p)	Cationic	0.1440012	3.515983217
312 C1=CC=C(C(=C1)C#CC2=CC=CS2)C#CC3=CC=CS3	b3lyp/6-311+G(d,p)	Cationic	2.7106896	3.604420222
313 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)SC5=CC=C54	b3lyp/6-311+G(d,p)	Cationic	0.1503872	4.397632131
314 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C5=C(C=C4)SC=C5	b3lyp/6-311+G(d,p)	Cationic	0.2009296	4.103204932
315 C1=CC=C2C(=C1)C3=C(C4=C(C=C3)SC=C4)C5=C2SC=C5	b3lyp/6-311+G(d,p)	Cationic	0.2041908	4.228649423
316 C1=CSC2=CC3=CC4=C(C=C5C=CSC5=C4)C=C3C=C21	b3lyp/6-311+G(d,p)	Cationic	0.0941532	2.748077897
317 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C5=CC=C5S4	b3lyp/6-311+G(d,p)	Cationic	0.1780268	4.022659229
318 C1=CC2=C3C=CSC4=CC=C34)C5=C2C(=C1)SC=C5	b3lyp/6-311+G(d,p)	Cationic	0.1854792	2.354329138
319 C1=CC2=CC3=CC4=CC5=CSSC5=CC4=CC3=CC2=C1	b3lyp/6-311+G(d,p)	Cationic	0.2573496	1.373630778
320 C1=CC=C2C(=C1)C=C3C=C4C=CC4=C5C3=C2SS5	b3lyp/6-311+G(d,p)	Cationic	0.1422156	2.338002306
321 C1=CC2=C(C=CS2)C3=CC4=C(C=C31)C5=C(C=C4)SC=C5	b3lyp/6-311+G(d,p)	Cationic	0.1578272	3.535575415
322 C1=CC2=C(C=C3C=CSC3=C2)C4=C1C=C5C(=C4)C=CS5	b3lyp/6-311+G(d,p)	Cationic	0.20522	3.8846975
323 C1=CC=C2C=C3C(=CC2=C1)C4=C(S3)C5=CC=CC5S4	b3lyp/6-311+G(d,p)	Cationic	0.1546156	3.62891047
324 C1=CC2=CC3=C(C=CC4=C3SC=C4)C=C2C5=C1C=CS5	b3lyp/6-311+G(d,p)	Cationic	0.1356436	3.502921751
325 C1=CC=C2C(=C1)C=CC3=C2C4=C(S3)C5=CC=CC5S4	b3lyp/6-311+G(d,p)	Cationic	0.2102916	3.921432872
326 C1=CC2=C(C=CC3=C2C=CS3)C4=C1C5=C(C=C4)SC=C5	b3lyp/6-311+G(d,p)	Cationic	0.210924	4.153001769
327 C#CC1=C(C=C(C=CC2=CC2)C#C)C3=CC=CS3	b3lyp/6-311+G(d,p)	Cationic	0.3881448	3.864288961
328 C1=CC=C2C(=C1)C3=C(S2)C=C4C=C5C(=CC4=C3)C=CS5	b3lyp/6-311+G(d,p)	Cationic	0.093186	3.467819063
329 C1=CC2=C(C=CC3=C2C=CC4=C3C=CS4)C5=C1C=CS5	b3lyp/6-311+G(d,p)	Cationic	0.2012892	4.245248368
330 C1=CC=C2C(=C1)C=C(S2)C#CC3=CC4=CC=CC5	b3lyp/6-311+G(d,p)	Cationic	0.2513728	3.589181846
331 C1=CC2=CC3=C(C=C2C4=C1C=CS4)C5=C(C=C3)C=CS5	b3lyp/6-311+G(d,p)	Cationic	0.136648	3.506187118
332 C1=CC=C2C(=C1)SC3=C(S2)C4=CC=CC5=C4C3=CC=C5	b3lyp/6-311+G(d,p)	Cationic	1.0813048	3.034885908
333 C#CC1=C(C=C(C=C1C2=CSC=C2)C#C)C3=CSC=C3	b3lyp/6-311+G(d,p)	Cationic	4.141166	4.155722907
334 [2H]C1=CC2=C(C=CS2)C3=CC4=C(C=C13)C5=C(C=C4[2H])SC=C5	b3lyp/6-311+G(d,p)	Cationic	0.1578644	3.535575415
335 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C=CC5=C4SC=C5	b3lyp/6-311+G(d,p)	Cationic	0.19344	4.101844363
336 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)C5=C(C=C4)C=CS5	b3lyp/6-311+G(d,p)	Cationic	0.1632088	4.209601452
337 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)C5=C(C=C4)SC=C5	b3lyp/6-311+G(d,p)	Cationic	0.180544	4.240078205
338 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C5=C(C=C4)C=CS5	b3lyp/6-311+G(d,p)	Cationic	0.1807176	4.058850372

SMILES	Functional/Basis Set	Transition	Reorganisation Energy/eV	HOMO-LUMO gap
339 C1=CC=C2C(=C1)C3=C(S2)C=C4C(=C3)C=CC5=C4SC=C5	b3lyp/6-311+G(d,p) Ca	ationic	0.1131128	3.852043837
340 C1=CC=C2C(=C1)C3=C(S2)C=C4C(=C3)C=CC5=C4C=CS5		ationic	0.1368588	3.906738723
341 C1=CC=C2C(=C1)C3=C4C(=CC=C3)SC5=CC=CC(=C54)S2	b3lyp/6-311+G(d,p) Ca	ationic	0.6864516	4.237357066
342 [2H]C1=C2C(=CC=C1)C3=C4C(=CC=C3)SC5=CC=CC(=C54)S2	b3lyp/6-311+G(d,p) Ca	ationic	0.68727	4.237357066
343 C1=CC=C2C=C3C(=CC2=C1)C4=C(C=CS4)C5=C3SC=C5	b3lyp/6-311+G(d,p) Ca	ationic	0.1355692	3.492037197
344 C1=CC2=C(C3=CSC=C3C=C2)C4=C1C=CC5=CSC=C54	b3lyp/6-311+G(d,p) Ca	ationic	0.1836564	3.737483901
345 C1=CC2=C(C3=C(C=C2)SC=C3)C4=C1C=CC5=C4C=CS5	b3lyp/6-311+G(d,p) Ca	ationic	0.2449372	4.239261863
346 C1=CC2=C3C=CC=C4C3=C(C=CS4)C5=C2C(=C1)SC=C5	b3lyp/6-311+G(d,p) Ca	ationic	0.2395184	3.111894131
347 C1=CC(=CC(=C1)C#CC2=CC=CS2)C#CC3=CC=CS3	b3lyp/6-311+G(d,p) Ca	ationic	3.1869488	3.905378154
348 C1=CC2=CC3=C(C=C2C4=CC5=C(C=CS5)C=C41)SC=C3	b3lyp/6-311+G(d,p) Ca	ationic	0.18352	3.974222961
349 C1=CC=C2C(=C1)C=CC3=C2C=CC4=C3SC5=C4SC=C5	b3lyp/6-311+G(d,p) Ca	ationic	0.2312228	4.255316581
350 C1=CC=C2C3=C4C(=CC=C3)SSC5=CC=CC(=C54)C2=C1	b3lyp/6-311+G(d,p) Ca	ationic	0.8475524	3.913813684
351 C#CC1=C(C=CS1)C2=CC=C(C=C2)C3=C(SC=C3)C#C	b3lyp/6-311+G(d,p) Ca	ationic	4.186674	4.092048264
352 C1=CC=C2C(=C1)C=CC3=C2C4=C(C=CS4)C5=C3SC=C5	b3lyp/6-311+G(d,p) Ca	ationic	0.173786	4.096402085
353 C1=CC=C2C=C3C=C4C(=CC3=CC2=C1)C5=C(S4)C=CS5	b3lyp/6-311+G(d,p) Ca	ationic	0.1124184	3.038423388
354 C1=CC=C(C=C1)C#CC2=CC3=C(S2)C=CC4=C3C=CS4	b3lyp/6-311+G(d,p) Ca	ationic	2.923114	3.683333242
355 C#CC1=CC(=C(C=C1C2=CSC=C2)C3=CSC=C3)C#C	b3lyp/6-311+G(d,p) Ca	ationic	0.247256	4.286881789
356 C1=CC2=CSC=C2C3=CC4=C(C=CC5=CSC=C54)C=C31	b3lyp/6-311+G(d,p) Ca	ationic	0.100254	3.740749267
357 C1=CC2=CC3=CSC=C3C=C2C4=CC5=CSC=C41	b3lyp/6-311+G(d,p) Ca	ationic	0.1939112	3.207133983
358 C1=CC2=CSC=C2C3=CC4=C(C=C31)C5=CSC=C5C=C4	b3lyp/6-311+G(d,p) Ca	ationic	0.1596252	3.672992915
359 C1=CC2=C(C=CC3=C2C=CC4=CSC=C43)C5=CSC=C51	b3lyp/6-311+G(d,p) Ca	ationic	0.1988092	3.861567822
360 C1=CC2=C3C4C1C5=CSC=C5C4=CC=C3C6=CSC=C26	b3lyp/6-311+G(d,p) Ca	ationic	69.5200668	2.724403991
361 C1=CC=C2C(=C1)C3=C(S2)C4=CC=CC5=C4C(=CC=C5)S3	b3lyp/6-311+G(d,p) Ca	ationic	0.175088	3.28087684
466 C1=CC=C2C(=C1)C3=C(S2)C4=CC=CC=C4S3	b3lyp/6-311+G(d,p) Ca	ationic	0.2284204	4.234363814
467 C1=CC2=C(C=CC3=C2SC=C3)C4=C1C=CS4	b3lyp/6-311+G(d,p) Ca	ationic	0.2761604	4.420489696
468 C1=CC2=C3C(=C1)SSC4=CC=CC(=C43)C=C2	b3lyp/6-311+G(d,p) Ca	ationic	0.7743924	3.888234981
469 C1=CC=C2C3=C4C(=CC=C3)SSC4=CC2=C1	b3lyp/6-311+G(d,p) Ca	ationic	0.1512924	3.379109944
470 C1=CSC2=CC3=C(C=C21)C=C4C(=C3)C=CS4	b3lyp/6-311+G(d,p) Ca	ationic	0.1002788	3.438430766
471 C1=CC=C2C3=C(C4=C(C2=C1)C=CS4)SC=C3	b3lyp/6-311+G(d,p) Ca	ationic	0.1762164	4.229737878
472 C1=CC2=C3C(=CC=C4C3=C1C=CS4)C=CS2	b3lyp/6-311+G(d,p) Ca	ationic	0.214458	3.062913636
473 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)SC=C4	b3lyp/6-311+G(d,p) Ca	ationic	0.17112	4.569608092
474 C1=CC2=CC3=C4C(=CC=CS4)SC3=C2C=C1	b3lyp/6-311+G(d,p) Ca	ationic	0.3695076	1.617716912
475 C1=CC2=C3C(=C1)C=CC4=C3C(=CSS4)C=C2	b3lyp/6-311+G(d,p) Ca	ationic	0.6092492	2.626715114
476 C1=CC=C2C(=C1)C3=C(C4=C2SC=C4)SC=C3	b3lyp/6-311+G(d,p) Ca	ationic	0.2313716	4.345658383
477 C1=CC=C2C(=C1)C(=S)C3=CC=CC=C3C2=S	b3lyp/6-311+G(d,p) Ca	ationic	0.0263004	2.455827609
478 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3SC=C4	b3lyp/6-311+G(d,p) Ca	ationic	0.213714	4.492871983
479 C1=CC=C2C(=C1)C=C(S2)C#CC3=CSC=C3	b3lyp/6-311+G(d,p) Ca	ationic	0.2726512	3.961161496
480 C1=CC=C2C(=C1)C3=C(S2)SC4=CC=CC=C43	b3lyp/6-311+G(d,p) Ca	ationic	0.1278564	4.666752741
481 C1=CC=C2C(=C1)C=C(S2)C#CC3=CC=CS3	b3lyp/6-311+G(d,p) Ca	ationic	0.450988	3.720884955
482 C1=CC2=C(C=CS2)C3=C1C4=C(C=C3)SC=C4	b3lyp/6-311+G(d,p) Ca	ationic	0.2472064	4.274092438
483 C1=CSC2=CC3=C(C=C21)C=C4C=CSC4=C3	b3lyp/6-311+G(d,p) Ca	ationic	0.096968	3.478703618
484 C1=CC2=C3C(=CC=C4C3=C1C=CS4)SC=C2	b3lyp/6-311+G(d,p) Ca	ationic	0.214334	2.889032878
485 C1=CC2=C(C3=C1C=CC4=C3SC=C4)SC=C2	b3lyp/6-311+G(d,p) Ca	ationic	0.158782	4.584302241
486 C1=CC=C2C(=C1)C=CC3=C2C4=C(S3)SC=C4	b3lyp/6-311+G(d,p) Ca	ationic	0.237522	4.35735928
487 C1=C/C(=C\2/C=CC3=C2SC=C3)/C4=C1C=CS4	b3lyp/6-311+G(d,p) Ca	ationic	0.2830176	2.861549378
488 C1=CC=C2C(=C1)C3=CSC(=C23)C4=CC=CS4	b3lyp/6-311+G(d,p) Ca	ationic	0.6806608	3.845513104

SMILES	Functional/Basis Set	Transition	Reorganisation Energy/eV	HOMO-LUMO gap
489 C1=CSC(=C1)C#C/C=C\C#CC2=CC=CS2	b3lyp/6-311+G(d,p)	Cationic	4.3437696	3.232440572
490 C1=CC=C2C(=C1)C3=C(S2)C=C4C=CSC4=C3	b3lyp/6-311+G(d,p)	Cationic	0.0976004	4.159804615
491 C#CC1=C(SC2=CC=CC1)C3=CC=CS3	b3lyp/6-311+G(d,p)	Cationic	1.6564912	3.750273252
492 C1=CC=C2C(=C1)C(=C3C=CC3=C2[S-])[S-]	b3lyp/6-311+G(d,p)	Cationic	0.0265236	2.456371836
493 C1=CC2=C3C(=C1)C4=C(C3=CC=C2)SC=CS4	b3lyp/6-311+G(d,p)	Cationic	0.8726252	2.887944422
494 C1=C/C(=C/2\C=CC3=C2SC=C3)/C4=C1C=CS4	b3lyp/6-311+G(d,p)	Cationic	0.2726016	2.942367195
495 C1=CC=C2C=C3C(=CC2=C1)C4=C(S3)C=CS4	b3lyp/6-311+G(d,p)	Cationic	0.1434432	3.797348951
496 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)C=CS4	b3lyp/6-311+G(d,p)	Cationic	0.1861984	4.427292542
497 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C=CS4	b3lyp/6-311+G(d,p)	Cationic	0.1531524	4.378856275
498 C#CC1=C2C(=CC=C1)SC3=CC=CC=C3S2	b3lyp/6-311+G(d,p)	Cationic	1.3996624	4.507566132
499 C\1=CC2=C(/C1=C/3\C=CC4=C3C=CS4)C=CS2	b3lyp/6-311+G(d,p)	Cationic	0.286998	2.871073363
500 C1=CC=C2C(=C1)C3=CSC=C3C4=CSC=C24	b3lyp/6-311+G(d,p)	Cationic	0.3566364	4.489334503
501 C1=CC2=C(C3=C1C=CC4=C3C=CS4)SC=C2	b3lyp/6-311+G(d,p)	Cationic	0.2310368	4.305113418
502 C1=C/C(=C\2/C=CC3=C2C=CS3)/C4=C1C=CS4	b3lyp/6-311+G(d,p)	Cationic	0.5224492	2.856923442
503 C1=CC=C2C(=C1)C3=CC=C3C2=C([S-])[S-]	b3lyp/6-311+G(d,p)	Cationic	0.1622292	2.187251226
504 C\1=CC2=C(/C1=C\3/C=CC4=C3C=CS4)C=CS2	b3lyp/6-311+G(d,p)	Cationic	0.4494752	2.88848865
505 C1=C/C(=C/2\C=CC3=C2C=CS3)/C4=C1C=CS4	b3lyp/6-311+G(d,p)	Cationic	0.4985544	2.858011897
506 C1=CC=C2C(=C1)C3=C(S2)C=CC4=CSC=C43	b3lyp/6-311+G(d,p)	Cationic	0.1636428	3.70782349
507 C1=CC=C2C(=C1)C3=C(C=CS3)C4=C2SC=C4	b3lyp/6-311+G(d,p)	Cationic	0.220348	4.421850265
508 C1=CC=C2C(=C1)C3=C(S2)C4=CSC=CC4=C3	b3lyp/6-311+G(d,p)	Cationic	0.3142036	3.187269671
509 C1=CC=C2C(=C1)C3=CC4=CCSC4=C3S2	b3lyp/6-311+G(d,p)	Cationic	0.2507652	2.63487853
510 C#CC1=CC2=C(C=C1)SC3=CC=CC=C3S2	b3lyp/6-311+G(d,p)	Cationic	1.3449164	4.458041409
511 C1=CC2=C(C=CC3=CSC=C32)C4=CSC=C41	b3lyp/6-311+G(d,p)	Cationic	0.125736	3.412307835
512 C1=CC2=CSC=C2C3=C1C=CC4=CSC=C43	b3lyp/6-311+G(d,p)	Cationic	0.1198212	3.367409048
513 C1=CC2=CC3=C4C(=CSS4)C=CC3=C2C=C1	b3lyp/6-311+G(d,p)	Cationic	0.2238944	1.640846591
514 C1=CC2=C(C=C3C=CSC3=C2)C4=C1C=CS4	b3lyp/6-311+G(d,p)	Cationic	0.1290964	3.924154011
576 C1=CSC2=CC3=C(C=C21)SC=C3	b3lyp/6-311+G(d,p)	Cationic	0.1581	4.296405774
577 C1=CC2=C3C(=C1)SSC3=CC=C2	b3lyp/6-311+G(d,p)	Cationic	0.1405292	3.351898558
578 C1=CSC2=CC3=C(C=CS3)C=C21	b3lyp/6-311+G(d,p)	Cationic	0.1030936	4.482531656
579 C1=CC2=CSC=C2C3=CSC=C31	b3lyp/6-311+G(d,p)	Cationic	0.2985796	4.38348221
580 C1=CC=C2C(=C1)C3=C(S2)SC=C3	b3lyp/6-311+G(d,p)	Cationic	0.2392952	4.963084737
581 C1=CC2=C(C3=C1C=CS3)SC=C2	b3lyp/6-311+G(d,p)	Cationic	0.2017356	4.718182261
582 C1=CC=C2C(=C1)C3=C(S2)C=CS3	b3lyp/6-311+G(d,p)	Cationic	0.2550184	4.623758751
583 C1=CC2=C(C=CS2)C3=C1C=CS3	b3lyp/6-311+G(d,p)	Cationic	0.2419488	4.879817895
584 C1=CC2=C(C=CS2)C3=C1SC=C3	b3lyp/6-311+G(d,p)	Cationic	0.2885108	4.601717528
585 C1=CC(=S)C=C2C1=CC(=S)C=C2	b3lyp/6-311+G(d,p)	Cationic	0.03906	1.993506156
586 C1=CC=C2C(=C1)C=CC(=S)C2=S	b3lyp/6-311+G(d,p)	Cationic	0.9801828	2.148338944
587 C1=CC=C2C(=S)C=CC(=S)C2=C1	b3lyp/6-311+G(d,p)	Cationic	0.0795584	2.342900356
588 C=C1C2=C(C3=C1C=CS3)SC=C2	b3lyp/6-311+G(d,p)	Cationic	42.8313112	3.518976469
589 C1=CSC2=CC3=CSC=C3C=C21	b3lyp/6-311+G(d,p)	Cationic	0.1049908	3.294482533
590 C1=CC2=C(C=CS2)C3=CSC=C31	b3lyp/6-311+G(d,p)	Cationic	0.1967136	3.918983847
591 C1=CC2=C3C=CC=C3SSC2=C1	b3lyp/6-311+G(d,p)	Cationic	0.6642184	2.329566777
592 C1=CC=C2C(=C1)C=CC3=C2SS3	b3lyp/6-311+G(d,p)	Cationic	0.2196412	3.431083692
615 C1=CSC2=C1SC=C2	b3lyp/6-311+G(d,p)	Cationic	0.4038928	5.059957272
616 C1=CSC2=C1C=CS2	b3lyp/6-311+G(d,p)	Cationic	0.132494	5.489625061
617 C1=CC(=S)C=CC1=S	b3lyp/6-311+G(d,p)	Cationic	0.0560232	2.16357732

SMILES	Functional/Basis Set	Transition	Reorganisation Energy/eV	HOMO-LUMO gap
618 C1=CC(=S)C(=S)C=C1	b3lyp/6-311+G(d,p)	Cationic	0.7926204	1.789692873
619 [2H]C1=C(SC2=C1C(=C(S2)[2H])[2H])[2H]	b3lyp/6-311+G(d,p)	Cationic	0.1325064	5.489625061
620 [2H]C1=C(SC2=C1SC(=C2[2H])[2H])[2H]	b3lyp/6-311+G(d,p)	Cationic	0.4038308	5.059957272
621 C1=CC2=C(S2)C=C1S	b3lyp/6-311+G(d,p)	Cationic	0.5741696	4.576138825
622 C1=C2C=S=CC2=CS1	b3lyp/6-311+G(d,p)	Cationic	0.060326	2.994068829
623 C1=CC2=CSSC2=C1	b3lyp/6-311+G(d,p)	Cationic	0.4316936	3.39081084
161 C1CCC2=CC3=C(CCCC3)C=C2C1	b3lyp/6-311+G(d,p)	Anionic	184.8776884	5.76146681
162 C1CCC2=C(C1)C=CC3=C2CCCC3	b3lyp/6-311+G(d,p)	Anionic	207.4216572	5.93834082
163 C1CCC2=CC3=CC=C3C=C2C1	b3lyp/6-311+G(d,p)	Anionic	0.2377204	4.593826226
164 C1CCC2=C(C1)C=CC3=C2C=CC4=CC=CC43	b3lyp/6-311+G(d,p)	Anionic	41.600326	4.583758013
165 C1CCC2=CC=C2C1	b3lyp/6-311+G(d,p)	Anionic	75.01411	6.088003445
166 C1CCC2=C(C1)C=CC3=CC=CC3	b3lyp/6-311+G(d,p)	Anionic	106.4849008	4.646616315
167 C1CC2=C3C(=CC=C4C3=C(CCC4)C=C2)C1	b3lyp/6-311+G(d,p)	Anionic	52.9133668	4.449061651
168 C1CC2=CC3=CC=C3C=C2C=C1	b3lyp/6-311+G(d,p)	Anionic	37.0171992	4.405523433
169 C1CC2=CC=CC=C2C=C1	b3lyp/6-311+G(d,p)	Anionic	33.02244	4.958730916
170 C1CC2=C(C=C1)C3=CC=C3C=C2	b3lyp/6-311+G(d,p)	Anionic	37.3657756	4.098578996
171 C1C=CCC2=CC=CC1	b3lyp/6-311+G(d,p)	Anionic	30.8223204	5.944327325
172 CC1=CC=C(C2=CC=CC12)C	b3lyp/6-311+G(d,p)	Anionic	18.6709652	4.555186058
173 CC1=CC2=CC(=C2C=C1)C	b3lyp/6-311+G(d,p)	Anionic	0.3947044	4.665664286
174 CC1=C2C(=CC3=CC=C13)C=CC4=CC=CC42	b3lyp/6-311+G(d,p)	Anionic	18.429314	3.6275499
175 CC1=CC=CC2=CC=CC12	b3lyp/6-311+G(d,p)	Anionic	0.2305904	4.655323959
176 CC1=C2C=CC3=CC=CC4=C3C2=C(C=C1)C=C4	b3lyp/6-311+G(d,p)	Anionic	0.2053936	3.724694549
177 CC(C)C1=CC2=C(C=C1)C=C(C=C2)C(C)C	b3lyp/6-311+G(d,p)	Anionic	90.2407768	4.662671033
178 CC1=CC2=C(C=C1)C=C(C=C2)C	b3lyp/6-311+G(d,p)	Anionic	33.4431348	4.746754217
179 CC1=CC2=C3C(=C1)C=CC4=CC(=CC43)C=C2)C	b3lyp/6-311+G(d,p)	Anionic	16.5499328	3.789457649
180 CC1=CC2=CC=C2C=C1	b3lyp/6-311+G(d,p)	Anionic	0.4182768	4.756278202
181 CC1=CC2=C3C(=C1)C=CC4=CC=CC(=C43)C=C2	b3lyp/6-311+G(d,p)	Anionic	0.3536232	3.800070089
182 CC(C)C1=CC2=CC=CC=C1	b3lyp/6-311+G(d,p)	Anionic	44.6110708	4.747842672
183 C1CC2=CC=CC3=C2C4=C(C=CC=C41)C=C3	b3lyp/6-311+G(d,p)	Anionic	31.7317984	4.611785741
184 C1C2=CC=CCCC3=CC4=CC=C4C=C31	b3lyp/6-311+G(d,p)	Anionic	30.8957532	4.666208513
185 C1CC2=C(C=CC3=CC=CC3)C4=CC=CC41	b3lyp/6-311+G(d,p)	Anionic	36.7601596	4.247425279
186 CC1=CC2=CC=C2C3=C1C4=CC=C4C=C3	b3lyp/6-311+G(d,p)	Anionic	16.8097872	4.099939566
187 CC1=C2C=CC3=CC=CC=C3C2=C(C4=CC=CC=C14)C	b3lyp/6-311+G(d,p)	Anionic	35.9539488	3.535575415
188 CC1=C2C=CC3=CC=C3C2=CC4=CC=CC=C14	b3lyp/6-311+G(d,p)	Anionic	0.2187608	3.629454697
189 C1CCC2=C(C1)C=CC3=CC4=C(C=CC5=CC=C54)C=C23	b3lyp/6-311+G(d,p)	Anionic	36.6384536	3.710272515
190 CC1=C2C=C3C=CC4=CC=CC=C4C3=CC2=CC=C1	b3lyp/6-311+G(d,p)	Anionic	0.1854668	3.696938935
191 C1C2=CC=CCCC3=CC=C31	b3lyp/6-311+G(d,p)	Anionic	30.7856536	5.945687895
192 C1CC2=CC=C2C3=CC=CC31	b3lyp/6-311+G(d,p)	Anionic	37.0302812	4.88226692
193 C1=CC=C2C3=C4C(=CC=CC4=CC2=C1)C=C3	b3lyp/6-311+G(d,p)	Anionic	0.2321032	3.079784695
194 C1=CC2=C3C(=C1)C=CC3=CC=C2	b3lyp/6-311+G(d,p)	Anionic	0.2856712	3.886874411
195 C1=CC=C2C=C3C=CC3=CC2=C1	b3lyp/6-311+G(d,p)	Anionic	0.1962672	3.551630133
196 C1=CC=CC1	b3lyp/6-311+G(d,p)	Anionic	0.0022816	6.598216937
197 C1=CC=C2C(=C1)C=CC3=CC4=CC=C4C=C32	b3lyp/6-311+G(d,p)	Anionic	0.1847848	3.723878208
198 C1=CC=C2C3=C4C(=CC2=C1)C=CC5=C4C(=CC=C5)C=C3	b3lyp/6-311+G(d,p)	Anionic	0.2005452	3.348088964
199 C1=CC=C2C=C3C4=CC=C4C5=CC=C5C3=CC2=C1	b3lyp/6-311+G(d,p)	Anionic	0.163804	3.849594812
200 C1=CC=C2C(=C1)C=CC3=C2C4=CC=CC4C=C3	b3lyp/6-311+G(d,p)	Anionic	0.174902	4.171233398

SMILES	Functional/Basis Set Trans	tion Reorganisation Energy/eV	HOMO-LUMO gap
201 C1=CC=C2C(=C1)C3=CC=CC4=C3C5=C(C=CC=C25)C=C4	b3lyp/6-311+G(d,p) Anionic	0.1972468	
202 C1=CC=C2C(=C1)C=CC3=C2C=C4C=CC=C5C4=C3C=C5	b3lyp/6-311+G(d,p) Anionic	0.2263868	3.238154963
203 C1=CC=C2C(=C1)C=CC3=C2C=CC4=CC=CC43	b3lyp/6-311+G(d,p) Anionic	0.2145572	4.219125437
204 C1=CC2=C3C4=C1C=CC5=C4C6=C(C=C5)C=CC7=C6C3=C(C=C2)C=C7	b3lyp/6-311+G(d,p) Anionic	0.16957	4.001162234
205 C1=CC=C2C3=C4C(=CC2=C1)C5=CC=CC5C6=CC7=CC=CC-C7C(=C64)C=C3	b3lyp/6-311+G(d,p) Anionic	0.200818	3.406865558
206 C1=CC=C2C=C3C=C4C=C5C=C6C=CC5=CC4=CC3=CC2=C1	b3lyp/6-311+G(d,p) Anionic	0.1147248	1.77962466
207 C1=CC=C2C=C3C4=CC=CC5=C4C6=C(C=CC=C6C3=CC2=C1)C=C5	b3lyp/6-311+G(d,p) Anionic	0.162812	3.86211205
208 C1=CC=C2C3=C4C(=CC=C3)C5=CC=CCCCCCC(=C64)C2=C1	b3lyp/6-311+G(d,p) Anionic	0.1752988	4.105109729
209 C1=CC=C2C3=C4C(=CC2=C1)C5=CC=CC5C6=CC=CC(=C64)C=C3	b3lyp/6-311+G(d,p) Anionic	0.1818088	3.51271785
210 C1=CC=C2C(=C1)C=C3C=CC4=C5C3=C2C6=CC=C6C5=CC=C4	b3lyp/6-311+G(d,p) Anionic	0.2059268	3.381286855
211 C1=CC=C2C3=C4C(=CC2=C1)C=CC5=C4C(=CC6=CC=C56)C=C3	b3lyp/6-311+G(d,p) Anionic	0.1660732	2.877876209
212 C1=CC=C2C3=C4C(=CC2=C1)C=CC5=CC6=CC=CC6C(=C54)C=C3	b3lyp/6-311+G(d,p) Anionic	0.225494	3.225093498
213 C1=CC2=C3C4=C1C=CC5=C4C6=C(C=C5)C=CC(=C36)C=C2	b3lyp/6-311+G(d,p) Anionic	0.2176448	4.161437299
214 C1=CC2=C3C(=C1)C=C4C=CC5=C6C4=C3C(=CC6=CC=C5)C=C2	b3lyp/6-311+G(d,p) Anionic	0.1576288	2.867807996
215 C1=CC=C2C(=C1)C=C3C=CC=C4C3=C2C5=CC=CC6=C5C4=CC=C6	b3lyp/6-311+G(d,p) Anionic	0.1600592	2.539094451
216 C1=CC=C2C=C3C(=CC2=C1)C=CC4=C3C=CC5=CC6=CC=C6C=C54	b3lyp/6-311+G(d,p) Anionic	0.1355816	3.126044052
217 C1=CC=C2C(=C1)C3=CC=C3C4=C2C5=CC=C5C6=CC=C64	b3lyp/6-311+G(d,p) Anionic	0.2570272	3.823199768
218 C1=CC2=C3C(=C1)C4=CC=CC5=C4C6=C(C=C5)C=CC(=C36)C=C2	b3lyp/6-311+G(d,p) Anionic	0.175274	3.481968984
219 C1=CC=C2C=C3C4=C5C(=CC3=CC2=C1)C=CC6=C5C(=CC=C6)C=C4	b3lyp/6-311+G(d,p) Anionic	0.165044	2.843045635
220 C1=CC=C2C(=C1)C3=CC=C3C4=C2C5=CC=CC6=C5C4=CC=C6	b3lyp/6-311+G(d,p) Anionic	0.2232744	3.252304884
221 C1=CC=C2C(=C1)C=C3C4=CC=CC=C4C5=C3C2=CC6=CC=CC=C65	b3lyp/6-311+G(d,p) Anionic	0.2053688	3.241964557
222 C1=CC=C2C(=C1)C=C3C=C4C=CCCC4=C5C3=C2C6=CC=CC=C65	b3lyp/6-311+G(d,p) Anionic	0.1808292	2.460997772
223 C1=CC=C2C(=C1)C3=C4C2=CC5=CC=C5C4=C(C=C6)C=C3	b3lyp/6-311+G(d,p) Anionic	0.2246136	3.31189782
224 C1=CC=C2C=CC=CC1	b3lyp/6-311+G(d,p) Anionic	0.2423952	4.747842672
225 C1=CC=C2C(=C1)C=CC3=CC4=C(C=CC5=CC=C54)C=C32	b3lyp/6-311+G(d,p) Anionic	0.1906872	3.849322698
226 C1=CC2=C3C4=C1C=CC5=CC6=C7C8=C(C=CC9=C8C1=C(C=C9)C=C(C3=C1C7=C54)C=C2)C=C6	b3lyp/6-311+G(d,p) Anionic	0.1215572	2.91597215
227 C1=CC=C2C=C3C=C4C=C5C=CC5=CC4=CC3=CC2=C1	b3lyp/6-311+G(d,p) Anionic	0.1355568	2.190516593
228 C1=CC=C2C(=C1)C=CC3=C2C=CC4=C3C5=CC=C5C=C4	b3lyp/6-311+G(d,p) Anionic	0.30752	4.209057225
229 C1CC2=C(C3=CC=CC3C=C2)C4=C1C=CC5=CC=C54	b3lyp/6-311+G(d,p) Anionic	37.411792	3.923881897
230 C1=CC=C2C(=C1)C=CC3=C2C=CC4=CC5=CC=C5CC=C43	b3lyp/6-311+G(d,p) Anionic	0.1695948	3.477615162
231 C1=CC=C2C(=C1)C=CC3=C2C4=CC=C4C5=CC=C35	b3lyp/6-311+G(d,p) Anionic	0.2394192	4.051503298
232 C1=CC=C2C(=C1)C=CC3=CC4=C(C=C32)C5=CC=C5C=C4	b3lyp/6-311+G(d,p) Anionic	0.1694212	3.887418639
233 C1=CC=C2C=C3C(=CC2=C1)C=CC4=CC5=CC=C5CC=C43	b3lyp/6-311+G(d,p) Anionic	0.2502568	3.748640569
234 C1=CC2=C3C(=C1)C4=CC=CC5=C4C(=CC=C5)C3=CC=C2	b3lyp/6-311+G(d,p) Anionic	0.1690244	2.985361185
235 C1=CC=C2C(=C1)C=CC3=CC=C32	b3lyp/6-311+G(d,p) Anionic	0.3118476	4.68144689
236 C1=CC=C2C(=C1)C=CC3=C2C=CC4=C3C=CC5=CC=C54	b3lyp/6-311+G(d,p) Anionic	0.2766688	4.206880314
237 C1=CC2=C3C(=C1)C=CC4=CC=CC(=C43)C=C2	b3lyp/6-311+G(d,p) Anionic	0.213962	3.810138302
238 C1=CC=C2C=C3C=C4C=CC3=CC2=C1	b3lyp/6-311+G(d,p) Anionic	0.1621176	2.751887491
239 C1=CC2=CC3=C4C5=C(C=C3)C=C6C=CC7=C8C6=C5C9=C3C4=C2C2=C1C=CC1=CC4=C(C3=C12)C1=C(C=C4)C=C(C8=C19)C=C7	b3lyp/6-311+G(d,p) Anionic	0.1439392	2.520318594
240 C1=CC=C2C(=C1)C3=CC=CC=C3C4=CC=C24	b3lyp/6-311+G(d,p) Anionic	0.2497732	4.839000816
362 C1=CC2=C(C=CC3=C2C=CC4=C3SC=C4)C5=C1C=CS5	b3lyp/6-311+G(d,p) Anionic	0.2895152	4.358447735
363 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)C5=CC=CCSS4	b3lyp/6-311+G(d,p) Anionic	0.2516456	4.273003982
364 C1=CC=C2C=C3C(=CC2=C1)C4=C(C5=C3SC=C5)SC=C4	b3lyp/6-311+G(d,p) Anionic	0.1844252	3.515983217
365 C1=CC=C(C(=C1)C#CC2=CC=CS2)C#CC3=CC=CS3	b3lyp/6-311+G(d,p) Anionic	1.96416	3.627277787
366 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)SC5=CC=C54	b3lyp/6-311+G(d,p) Anionic	0.2094236	4.397632131
367 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C5=C(C=C4)SC=C5	b3lyp/6-311+G(d,p) Anionic	0.2613176	4.103204932

SMILES	Functional/Basis Set	Transition	Reorganisation Energy/eV	HOMO-LUMO gap
368 C1=CSC2=CC3=CC4=C(C=C5C=CSC5=C4)C=C3C=C21	b3lyp/6-311+G(d,p)	Anionic	0.1624524	2.748077897
369 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C5=CC=CC5S4	b3lyp/6-311+G(d,p)	Anionic	0.2608092	4.022659229
370 C1=CC2=C3C=CSC4=CC=CC(=C34)C5=C2C(=C1)SC=C5	b3lyp/6-311+G(d,p)	Anionic	0.1811888	2.354601252
371 C1=CC2=CC3=CC4=CC5=CSSC5=CC4=CC3=CC2=C1	b3lyp/6-311+G(d,p)	Anionic	0.2593832	1.373358664
372 C1=CC=C2C(=C1)C=C3C=C4C=CC4CC5C3=C2SS5	b3lyp/6-311+G(d,p)	Anionic	0.1471756	2.338002306
373 C1=CC2=C(C=CS2)C3=CC4=C(C=C31)C5=C(C=C4)SC=C5	b3lyp/6-311+G(d,p)	Anionic	0.220224	3.535303301
374 C1=CC2=C(C=C3C=CSC3=C2)C4=C1C=C5C(=C4)C=CS5	b3lyp/6-311+G(d,p)	Anionic	0.2634628	3.8846975
375 C1=CC=C2C(=C1)C=CC3=C2SC4=C3SC5=CC=C54	b3lyp/6-311+G(d,p)	Anionic	0.2340252	4.081707937
376 C1=CC=C2C=C3C(=CC2=C1)C4=C(S3)C5=CC=CC5S4	b3lyp/6-311+G(d,p)	Anionic	0.2249732	3.62891047
377 C1=CC2=CC3=C(C=CC4=C3SC=C4)C=C2C5=C1C=CS5	b3lyp/6-311+G(d,p)	Anionic	0.1605552	3.502921751
378 C1=CC=C2C(=C1)C=CC3=C2C4=C(S3)C5=CC=CC5S4	b3lyp/6-311+G(d,p)	Anionic	0.2499096	3.921432872
379 C1=CC2=C(C=CC3=C2C=CS3)C4=C1C5=C(C=C4)SC=C5	b3lyp/6-311+G(d,p)	Anionic	0.2883248	4.153001769
380 C#CC1=CC(=C(C=C1C2=CC=CS2)C#C)C3=CC=CS3	b3lyp/6-311+G(d,p)	Anionic	1.0342716	3.863744733
381 C1=CC=C2C(=C1)C3=C(S2)C=C4C=C5C(=CC4=C3)C=CS5	b3lyp/6-311+G(d,p)	Anionic	0.1813996	3.467819063
382 C1=CC2=C(C=CC3=C2C=CC4=C3C=CS4)C5=C1C=CS5	b3lyp/6-311+G(d,p)	Anionic	0.2894532	4.245792596
383 C1=CC=C2C(=C1)C=C(S2)C#CC3=CC4=CC=CC4S3	b3lyp/6-311+G(d,p)	Anionic	10.0116236	3.589181846
384 C1=CC2=CC3=C(C=C2C4=C1C=CS4)C5=C(C=C3)C=CS5	b3lyp/6-311+G(d,p)	Anionic	0.1576412	3.506187118
385 C1=CC=C2C(=C1)SC3=C(S2)C4=CC=CC5=C4C3=CC=C5	b3lyp/6-311+G(d,p)	Anionic	0.2880644	3.034885908
386 C#CC1=CC(=C(C=C1C2=CSC=C2)C#C)C3=CSC=C3	b3lyp/6-311+G(d,p)	Anionic	6.0705316	4.195179418
387 [2H]C1=CC2=C(C=CS2)C3=CC4=C(C=C13)C5=C(C=C4[2H])SC=C5	b3lyp/6-311+G(d,p)	Anionic	0.220224	3.535303301
388 [2H]C#CC1=CC(=C(C=C1C2=CSC=C2)C#C[2H])C3=CSC=C3	b3lyp/6-311+G(d,p)	Anionic	5.5174792	4.195179418
389 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C=C4SC=C5	b3lyp/6-311+G(d,p)	Anionic	0.2292636	4.101844363
390 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C=CC5=C4C=CS5	b3lyp/6-311+G(d,p)	Anionic	0.2461896	4.092592491
391 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)C5=C(C=C4)C=CS5	b3lyp/6-311+G(d,p)	Anionic	0.2365052	4.209601452
392 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C5=C(C=C4)C=CS5	b3lyp/6-311+G(d,p)	Anionic	0.2594824	4.058850372
393 C1=CC=C2C(=C1)C3=C(S2)C=C4C(=C3)C=CC5=C4SC=C5	b3lyp/6-311+G(d,p)	Anionic	0.1945808	3.851771723
394 C1=CC=C2C(=C1)C3=C(S2)C=C4C(=C3)C=CC5=C4C=CS5	b3lyp/6-311+G(d,p)	Anionic	0.2008676	3.906738723
395 C1=CC=C2C(=C1)C3=C4C(=CC=C3)SC5=CC=C54)S2	b3lyp/6-311+G(d,p)	Anionic	0.3219536	4.237084952
396 [2H]C1=C2C(=CC=C1)C3=C4C(=CC=C3)SC5=CC=CC(=C54)S2	b3lyp/6-311+G(d,p)	Anionic	0.3220156	4.237084952
397 C1=CC=C2C=C3C(=CC2=C1)C4=C(C=CS4)C5=C3SC=C5	b3lyp/6-311+G(d,p)	Anionic	0.1580504	3.492037197
398 C1=CC2=C(C3=CSC=C3C=C2)C4=C1C=CC5=CSC=C54	b3lyp/6-311+G(d,p)	Anionic	0.2428788	3.737756015
399 C1=CC2=C(C3=C(C=C2)SC=C3)C4=C1C=CC5=C4C=CS5	b3lyp/6-311+G(d,p)	Anionic	0.2768548	4.239533977
400 C1=CC2=C3C=CC=C4C3=C(C=CS4)C5=C2C(=C1)SC=C5	b3lyp/6-311+G(d,p)	Anionic	0.592224	3.111894131
401 C1=CC(=CC)C#CC2=CC=CS2)C#CC3=CC=CS3	b3lyp/6-311+G(d,p)	Anionic	5.83668	3.905378154
402 C1=CC2=CC3=C(C=C2C4=CC5=C(C=CS5)C=C41)SC=C3	b3lyp/6-311+G(d,p)	Anionic	0.2287428	3.974222961
403 C1=CC=C2C(=C1)C=CC3=C2C=CC4=C3SC5=C4SC=C5	b3lyp/6-311+G(d,p)	Anionic	0.2181532	4.255044467
404 C#CC1=C(C=CS1)C2=CC=C(C=C2)C3=C(SC=C3)C#C	b3lyp/6-311+G(d,p)	Anionic	10.7060608	4.084156962
405 C1=CC(=C1)C#CC2=CSC=C2)C#CC3=CSC=C3	b3lyp/6-311+G(d,p)	Anionic	13.6600012	4.190825596
406 C1=CC(=CC=C1C#CC2=CSC=C2)C#CC3=CSC=C3	b3lyp/6-311+G(d,p)	Anionic	0.2336656	3.712993653
407 C1=CC=C2C(=C1)C=CC3=C2C4=C(C=CS4)C5=C3SC=C5	b3lyp/6-311+G(d,p)	Anionic	0.1995904	4.096402085
408 C1=CC=C2C=C3C=C4C(=CC3=CC2=C1)C5=C(S4)C=CS5	b3lyp/6-311+G(d,p)	Anionic	0.1639404	3.038423388
409 C1=CC=C(C=C1)C#CC2=CC3=C(S2)C=CC4=C3C=CS4	b3lyp/6-311+G(d,p)	Anionic	2.548262	3.683605356
410 C1=CC2=C(C=C3C=CSC3=C2)C4=CC5=C(C=CS5)C=C41	b3lyp/6-311+G(d,p)	Anionic	0.2631652	4.041707199
411 C1=CC2=C(C=CS2)C3=CC4=C(C=C31)C=C5C=CSC5=C4	b3lyp/6-311+G(d,p)	Anionic	0.1840656	3.136384379
412 C#CC1=CC(=C(C=C1C2=CSC=C2)C3=CSC=C3)C#C	b3lyp/6-311+G(d,p)	Anionic	0.3195356	4.286609675
413 C1=CC2=C(C=CS2)C3=CC4=C(C=CC5=C4C=CS5)C=C31	b3lyp/6-311+G(d,p)	Anionic	0.2083572	3.569861762

SMILES	Functional/Basis Set Tra	nsition Reorganisation Energy/eV	HOMO-LUMO gap
414 C1=CC2=CSC=C2C3=CC4=C(C=CC5=CSC=C54)C=C31	b3lyp/6-311+G(d,p) Anion		3.740749267
415 C1=CC2=CC3=CSC=C3C=C2C4=CC5=CSC=C41	b3lyp/6-311+G(d,p) Anior	nic 0.182962	3.207133983
416 C1=CC2=CSC=C2C3=CC4=C(C=C31)C5=CSC=C5C=C4	b3lyp/6-311+G(d,p) Anior	nic 0.1811516	3.672992915
417 C1=CC2=C(C=CC3=C2C=CC4=CSC=C43)C5=CSC=C51	b3lyp/6-311+G(d,p) Anior	nic 0.2625204	3.861567822
418 C1=CC=C(C=C1)C#CC2=CC3=C(S2)C=C4C=CSC4=C3	b3lyp/6-311+G(d,p) Anior	nic 0.2927888	3.569589648
419 C1=CC=C2C=C3C(=CC2=C1)C=CC4=C3C5=C(S4)C=CS5	b3lyp/6-311+G(d,p) Anior	nic 0.2006692	3.38727336
420 C1=CC2=C3C4C1C5=CSC=C5C4=CC=C3C6=CSC=C26	b3lyp/6-311+G(d,p) Anior	nic 71.1481124	2.724403991
421 C1=CC=C2C(=C1)C3=C(S2)C4=CC=CC5=C4C(=CC=C5)S3	b3lyp/6-311+G(d,p) Anior	nic 0.269018	3.28087684
515 C1=CC=C2C(=C1)C3=C(S2)C4=CC=CC=C4S3	b3lyp/6-311+G(d,p) Anior	nic 0.2881264	4.234363814
516 C1=CC2=C(C=CC3=C2SC=C3)C4=C1C=CS4	b3lyp/6-311+G(d,p) Anior	nic 0.2149168	4.420217582
517 C1=CC2=C3C(=C1)SSC4=CC=CC(=C43)C=C2	b3lyp/6-311+G(d,p) Anior	nic 0.3128644	3.888234981
518 C1=CC=C2C3=C4C(=CC=C3)SSC4=CC2=C1	b3lyp/6-311+G(d,p) Anior	nic 0.2900608	3.379382058
519 C1=CSC2=CC3=C(C=C21)C=C4C(=C3)C=CS4	b3lyp/6-311+G(d,p) Anior	nic 0.2112836	3.438430766
520 C1=CC=C2C3=C(C4=C(C2=C1)C=CS4)SC=C3	b3lyp/6-311+G(d,p) Anior	nic 0.2485952	4.230009992
521 C1=CC2=C3C(=CC=C4C3=C1C=CS4)C=CS2	b3lyp/6-311+G(d,p) Anior	nic 0.2691544	3.062913636
522 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)SC=C4	b3lyp/6-311+G(d,p) Anior	nic 0.216008	4.569608092
523 C1=CC2=CC3=C4C(=CC=CS4)SC3=C2C=C1	b3lyp/6-311+G(d,p) Anior	nic 0.3686148	1.619349595
524 C1=CC=C2C(=C1)C3=C(C4=C2SC=C4)SC=C3	b3lyp/6-311+G(d,p) Anior	nic 0.2411428	4.345658383
525 C1=CC=C2C(=C1)C(=S)C3=CC=CC=C3C2=S	b3lyp/6-311+G(d,p) Anior	nic 0.2611936	2.456099723
526 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3SC=C4	b3lyp/6-311+G(d,p) Anior	nic 0.273668	4.492871983
527 C1=CC=C2C(=C1)C=C(S2)C#CC3=CSC=C3	b3lyp/6-311+G(d,p) Anior	nic 0.2887464	3.961161496
528 C1=CC=C2C(=C1)C3=C(S2)SC4=CC=CC=C43	b3lyp/6-311+G(d,p) Anior	nic 0.2128708	4.666752741
529 C1=CC=C2C(=C1)C=C(S2)C#CC3=CC=CS3	b3lyp/6-311+G(d,p) Anior	nic 0.2880892	3.721157069
530 C1=CC2=C(C=CS2)C3=C1C4=C(C=C3)SC=C4	b3lyp/6-311+G(d,p) Anior	nic 0.283526	4.274092438
531 C1=CSC2=CC3=C(C=C21)C=C4C=CSC4=C3	b3lyp/6-311+G(d,p) Anior	nic 0.1984124	3.478703618
532 C1=CC2=C3C(=CC=C4C3=C1C=CS4)SC=C2	b3lyp/6-311+G(d,p) Anior	nic 0.273358	2.889032878
533 C1=CC2=C(C3=C1C=CC4=C3SC=C4)SC=C2	b3lyp/6-311+G(d,p) Anior	nic 0.2114076	4.584302241
534 C1=CC=C2C(=C1)C=CC3=C2C4=C(S3)SC=C4	b3lyp/6-311+G(d,p) Anior	nic 0.2485456	4.35735928
535 C1=C/C(=C\2/C=CC3=C2SC=C3)/C4=C1C=CS4	b3lyp/6-311+G(d,p) Anior	nic 0.3368708	2.861549378
536 C1=CC=C2C(=C1)C3=CSC(=C23)C4=CC=CS4	b3lyp/6-311+G(d,p) Anior	nic 0.2708656	3.845513104
537 C1=CSC(=C1)C#C/C=C\C#CC2=CC=CS2	b3lyp/6-311+G(d,p) Anior	nic 3.1184636	3.231624231
538 C1=CC=C2C(=C1)C3=C(S2)C=C4C=CSC4=C3	b3lyp/6-311+G(d,p) Anior	nic 0.2504924	4.159804615
539 C#CC1=C(SC2=CC=CC21)C3=CC=CS3	b3lyp/6-311+G(d,p) Anior	nic 4.0064276	3.751633822
540 C1=CC=C2C(=C1)C(=C3C=CC=CC3=C2[S-])[S-]	b3lyp/6-311+G(d,p) Anior	nic 0.2614044	2.456371836
541 C1=CC2=C3C(=C1)C4=C(C3=CC=C2)SC=CS4	b3lyp/6-311+G(d,p) Anior	nic 0.2793224	2.88848865
542 C1=C/C(=C/2\C=CC3=C2SC=C3)/C4=C1C=CS4	b3lyp/6-311+G(d,p) Anior	nic 0.3430584	2.942367195
543 C1=CC=C2C=C3C(=CC2=C1)C4=C(S3)C=CS4	b3lyp/6-311+G(d,p) Anior	nic 0.2100064	3.797348951
544 C1=CC=C2C(=C1)C3=C(S2)C4=C(C=C3)C=CS4	b3lyp/6-311+G(d,p) Anior	nic 0.2705184	4.427564656
545 C1=CC=C2C(=C1)C3=C(S2)C=CC4=C3C=CS4	b3lyp/6-311+G(d,p) Anior	nic 0.2579944	4.378584161
546 C1=CC2=C(C=CS2)C3=C1C=CC4=C3C=CS4	b3lyp/6-311+G(d,p) Anior	nic 0.2483472	4.41232628
547 C\1=CC2=C(/C1=C/3\C=CC4=C3C=CS4)C=CS2	b3lyp/6-311+G(d,p) Anior	nic 0.414408	2.871073363
548 C1=CC=C2C(=C1)C3=CSC=C3C4=CSC=C24	b3lyp/6-311+G(d,p) Anior	nic 0.1420048	4.489334503
549 C1=CC2=C(C3=C1C=CC4=C3C=CS4)SC=C2	b3lyp/6-311+G(d,p) Anior	nic 0.245644	4.305113418
550 C1=C/C(=C\2/C=CC3=C2C=CS3)/C4=C1C=CS4	b3lyp/6-311+G(d,p) Anior	nic 0.3724836	2.856923442
551 C1=CC=C2C(=C1)C3=CC=CC=C3C2=C([S-])[S-]	b3lyp/6-311+G(d,p) Anior	nic 0.174034	2.188067568
552 C\1=CC2=C(/C1=C\3/C=CC4=C3C=CS4)C=CS2	b3lyp/6-311+G(d,p) Anior	nic 0.5758188	2.889849219
	11(-7)-7		

1.54C C=CCC=CCC CC=CCCCS CC=CCC3 CC=CCS CC=CC3 CC=CC3 CC=CCC3 CC=CC3 C	SMILES	Functional/Basis Set	Transition	Reorganisation Energy/eV	HOMO-LUMO gap
555 C1=CC=CC(E=C1)C3=C(52)C=CC4=CSC=C43 b3lyp/6-311+G(d,p) Anionic 0.25327 3.7078 556 C1=CC=CC(E=C1)C3=C(52)C4=CSC=C44 b3lyp/6-311+G(d,p) Anionic 0.1731908 4.42185 557 C1=CC=CC(E=C1)C3=C(52)C4=CSC=C4C4=C3 b3lyp/6-311+G(d,p) Anionic 0.3232848 3.18726 558 C1=CC=CC(E=C1)C3=CC4=CSC=C4C3S2 b3lyp/6-311+G(d,p) Anionic 0.2778096 2.6348 559 C1=CC=CC4=CC4=CSC=C4C3 b3lyp/6-311+G(d,p) Anionic 0.183828 3.4120 560 C1=CC2=CC4=C3C4=C4C3C4 b3lyp/6-311+G(d,p) Anionic 0.1637792 3.6768 561 C1=CC2=CC3=C4C4=CSS4)C=C3=C4C4=C3 b3lyp/6-311+G(d,p) Anionic 0.1637792 3.6768 562 C1=CC2=C(C1)C3=C5C3=C4C4=C5S4)C=C3=C4 b3lyp/6-311+G(d,p) Anionic 0.1637792 3.6768 562 C1=CC2=CC4=C3S4C=C3=C4C3 b3lyp/6-311+G(d,p) Anionic 0.1637792 3.9215 563 C1=CC2=CC4=C4C3=C5S4C=C3=C4 b3lyp/6-311+G(d,p) Anionic 0.1637792 3.6768 563 C1=CC3=CC4=C4C3=C5S4C=C3=C4 b3lyp/6-311+G(d,p) Anionic 0.292578 4.2854 565 C1=CC3=CC3=C	553 C1=C/C(=C/2\C=CC3=C2C=CS3)/C4=C1C=CS4	b3lyp/6-311+G(d,p)	Anionic	0.3787332	2.858011897
556 C1=CC=C2C[=C1]C3=C(C=CS]C3C=C4C3 b3lyp/6-311+G(d,p) Anionic 0.1731908 4.42185 557 C1=CC=C2C[=C1]C3=C(C3C)C4=CS=CSCC4C3 b3lyp/6-311+G(d,p) Anionic 0.2778096 2.6348 558 C1=CC=C2C(=C1)C3=CC4=CC=CSC4=C3S2 b3lyp/6-311+G(d,p) Anionic 0.2778096 2.6348 559 C1=CC2=CCC=CC3=CCC2C3=CCC+CC3=CC4C3 b3lyp/6-311+G(d,p) Anionic 0.183608 3.41203 560 C1=CC2=CC3=CC4C3=CC4CC=C4C5C4C3 b3lyp/6-311+G(d,p) Anionic 0.1637792 3.36768 561 C1=CC2=CC3=C4C(=CSG)CCC3=CCC-C1 b3lyp/6-311+G(d,p) Anionic 0.2637108 1.6084 562 C1=CC2=C(C4C3=CSC3=C2C)C4=C1CC54 b3lyp/6-311+G(d,p) Anionic 0.2637108 1.6084 562 C1=CC2=C1C4=C3C3=CC3=CC2 b3lyp/6-311+G(d,p) Anionic 0.237108 1.6084 563 C1=CC2=C3C3=CC3CC3 b3lyp/6-311+G(d,p) Anionic 0.234412 3.3189 565 C1=CC3=C4C3=CC3C3=CC3 b3lyp/6-311+G(d,p) Anionic 0.234412 3.35189 565 C1=CC3=C4C3=CC3C3=CC3 b3lyp/6-311+G(d,p) Anionic 0.234612 4.4253 567 C1=CC3C3=CC3=CC3 b3lyp/6-311+G(d,p) Anionic 0.234602 4.9308	554 C1=CC(=C2C=CC(=C3C=CC#S3)C=C2)S#C1	b3lyp/6-311+G(d,p)	Anionic	0.4013012	1.545062511
1557 C1=CC=CZ(=C1)C3=CS2(Z4=CSC-CC4=C3 53 yp/6-311+C(d,p) Anionic 0.328408 3.18726 558 C1=CC=CZ(=C1)C3=CC4=CCSC4C3S2 53 yp/6-311+C(d,p) Anionic 0.278096 2.6348 559 C1=CC=CCC=CS3=CSC=C32(C4=CSC-C21 53 yp/6-311+C(d,p) Anionic 0.1983628 3.41203 560 C1=CC2=CSC=C32C3=C1=CC4=CSC=C43 53 yp/6-311+C(d,p) Anionic 0.1637792 3.36768 561 C1=CC2=CSC=C3=C4C]=CSC=C4C3 53 yp/6-311+C(d,p) Anionic 0.1637792 3.36768 561 C1=CC2=CSC=C4C3=C4C]=CSC=C4C3 53 yp/6-311+C(d,p) Anionic 0.1637792 3.36768 561 C1=C2=CC3=C4C]=CSC=C4C]=C1=CSC=C4=CSC=C4C3 53 yp/6-311+C(d,p) Anionic 0.1977552 3.92415 593 C1=CSC=C3=CC3=C(C2=C1)SC=C3 53 yp/6-311+C(d,p) Anionic 0.2929748 4.29640 594 C1=C2=C3=C(C1)SC=C3=C3=C4C] 53 yp/6-311+C(d,p) Anionic 0.2134412 3.35188 595 C1=CSC=C3=CC3=CC3=CC3=CC3=CC3=C3=C3 53 yp/6-311+C(d,p) Anionic 0.251658 4.48253 595 C1=CSC=C3=C3=C3=C3=C3=C3=C3=C3=C3=C3=C3=C3=C3	555 C1=CC=C2C(=C1)C3=C(S2)C=CC4=CSC=C43	b3lyp/6-311+G(d,p)	Anionic	0.25327	3.70782349
558 C1=CC=CZC CC1C3=CC4=CC5=C3 b3lyp/6-311+G(d,p) Anionic 0.278096 2.6348 559 C1=CC2=CCC=CC3=CC5=C31(2=CC5=C31) b3lyp/6-311+G(d,p) Anionic 0.1637792 3.36788 560 C1=CC2=CCC=CC3=CC4=CC5=C43 b3lyp/6-311+G(d,p) Anionic 0.1637792 3.36788 561 C1=CC2=CC3=CC4C=CC3=CC4CC1 b3lyp/6-311+G(d,p) Anionic 0.2637108 1.64084 562 C1=CC3=CC3=CC4C=C12SC4 b3lyp/6-311+G(d,p) Anionic 0.1937552 3.92415 563 C1=CC2=CC3=CC3=CC3=CC3 b3lyp/6-311+G(d,p) Anionic 0.1937552 3.92415 563 C1=CC2=CC3=CC3=CC3=CC3 b3lyp/6-311+G(d,p) Anionic 0.293748 4.29640 564 C1=CC2=CC3=CC3=CC3=CC3 b3lyp/6-311+G(d,p) Anionic 0.293748 4.29640 565 C1=CC2=CC3=CC3=CC3=CC3 b3lyp/6-311+G(d,p) Anionic 0.243412 3.3189 565 C1=CC2=CC3=CC3=CC3=CC3 b3lyp/6-311+G(d,p) Anionic 0.2487624 4.3834 567 C1=CC3=CC3=CC3=CC3=CC3 b3lyp/6-311+G(d,p) Anionic 0.2487624 4.3834 567 C1=CC3=CC3=CC3=CC3=CC3=CC3 b3lyp/6-311+G(d,p) Anionic 0.2937804 4.62375 568	556 C1=CC=C2C(=C1)C3=C(C=CS3)C4=C2SC=C4		Anionic	0.1731908	4.421850265
559 C1=CC2=C(C=CC3=CC3=CC4=CSC=C43) b3lyp/6-311+G(d,p) Anionic 0.1983628 3.41203 560 C1=CC2=CCSC=CC2=CTC=CC4=CCSC=C43 b3lyp/6-311+G(d,p) Anionic 0.1637792 3.36786 561 C1=CC2=CC3=CC4C(C=C3C4=CC1+CC4C4) b3lyp/6-311+G(d,p) Anionic 0.1637792 3.36786 562 C1=CC2=C(C=C3C4=CC1+CC4C4) b3lyp/6-311+G(d,p) Anionic 0.1977552 3.92415 593 C1=CC2=CC1+CC3C3+CC2-C21SCC-C3 b3lyp/6-311+G(d,p) Anionic 0.2134412 3.35189 594 C1=CC2-CC3+CC3+CC3+CC3+CC2 b3lyp/6-311+G(d,p) Anionic 0.2134412 3.35189 595 C1=CC2-CC3+CC3+CC3+CC3+CC3+CC3+CC3 b3lyp/6-311+G(d,p) Anionic 0.251658 4.48253 596 C1=CC2-CC3+CC3+CC3+CC3+CC3+CC3+CC3+CC3+CC3+CC3	557 C1=CC=C2C(=C1)C3=C(S2)C4=CSC=CC4=C3	b3lyp/6-311+G(d,p)	Anionic	0.3328408	3.187269671
560 C1=CC2=CSC=CC3=C1C=CC4=CSC=C43 b3/yp/6-311+6(d,p) Anionic 0.1637792 3.36768 561 C1=CC2=CC3=CAC(=CSSA)C=CC3=CAC=C1 b3/yp/6-311+6(d,p) Anionic 0.2637108 1.6008 562 C1=CC2=CC3=CC4=CC1SC=CC3 b3/yp/6-311+6(d,p) Anionic 0.1977552 3.92415 593 C1=CSC2=CC3=C(C=C21)SC=C3 b3/yp/6-311+6(d,p) Anionic 0.2919748 4.29640 594 C1=CC2=C3C3=CC2=C2 b3/yp/6-311+6(d,p) Anionic 0.231412 3.35189 595 C1=CSC2=C3=CSC=C3 b3/yp/6-311+6(d,p) Anionic 0.21142 3.35189 595 C1=CC2=CSC=CC3=CSC=C3 b3/yp/6-311+6(d,p) Anionic 0.2487624 4.8323 596 C1=CC2=CSC=CC3=CSC=C3 b3/yp/6-311+6(d,p) Anionic 0.2487624 4.8324 597 C1=CC-C2C(=C1)C3=C(S2)SC=C3 b3/yp/6-311+6(d,p) Anionic 0.2487624 4.8324 598 C1=CC2-C(C1)C3=C(S2)C=C3 b3/yp/6-311+6(d,p) Anionic 0.293088 4.71573 599 C1=CC-C2C(=C1)C3=C(S2)C=C3 b3/yp/6-311+6(d,p) Anionic 0.2993088 4.71573 599 C1=CC-C2C(=C1)C3=C(S2)C=C3 b3/yp/6-311+6(d,p) Anionic 0.2993344 4.62375 600	558 C1=CC=C2C(=C1)C3=CC4=CC=CSC4=C3S2	b3lyp/6-311+G(d,p)	Anionic	0.2778096	2.63487853
561 C1=CC2=CC3=C4C(=CSA)C=CC3=CC3+CC=C1 b3lyp/6-311+G(d,p) Anionic 0.2637108 1.64084 562 C1=CC2=C(C1=CC3=CC3=CC3+C2)C4=C1C=CS4 b3lyp/6-311+G(d,p) Anionic 0.1977552 3.92415 593 C1=CSC2=CC3=C(C3=CC3+C2)C4=C1SC3 b3lyp/6-311+G(d,p) Anionic 0.2134412 3.35189 595 C1=CC2=CC3=CC1=CC53)C=C21 b3lyp/6-311+G(d,p) Anionic 0.2134412 3.35189 595 C1=CC2=CC3=CC3=CC3 b3lyp/6-311+G(d,p) Anionic 0.214412 3.35189 595 C1=CC2=CC3=CC3=CC3 b3lyp/6-311+G(d,p) Anionic 0.214412 3.35189 595 C1=CC2=CC3=CC3=CC3 b3lyp/6-311+G(d,p) Anionic 0.214412 3.35189 597 C1=CC2C(C3=CC3=CC3 b3lyp/6-311+G(d,p) Anionic 0.24564692 4.96308 598 C1=CC2=C(C3=CC3=CC3=CC3) b3lyp/6-311+G(d,p) Anionic 0.293068 4.71573 599 C1=CC2=C(C3=C1C3=CC3) b3lyp/6-311+G(d,p) Anionic 0.293308 4.71573 600 C1=CC3=C(C3=C1C3=CC3) b3lyp/6-311+G(d,p) Anionic 0.3261324 4.87981 601 C1=CC2=C(C3=C1C3=C3C3=CC3 b3lyp/6-311+G(d,p) Anionic 0.3293324 4.8931	559 C1=CC2=C(C=CC3=CSC=C32)C4=CSC=C41	b3lyp/6-311+G(d,p)	Anionic	0.1983628	3.412035721
562 C1=CC2=C(C=C3C=CS3=C2)C4=C1C=CS4 b3lyp/6-311+G(d,p) Anionic 0.1977552 3.92415 593 C1=CSC2=CC3=C(C=C21)SC=C3 b3lyp/6-311+G(d,p) Anionic 0.2929748 4.29640 594 C1=CC2=C3=C(C=C3I)SC=C3 b3lyp/6-311+G(d,p) Anionic 0.2134412 3.35189 595 C1=CSC2=C3=C(C=C3I)C=C3I)C=C3 b3lyp/6-311+G(d,p) Anionic 0.3487624 4.8334 596 C1=CC2=CSC=C2C3=CSC=C3I b3lyp/6-311+G(d,p) Anionic 0.251658 4.4823 597 C1=CC=C2C(=C1)C3=C(S2)SC=C3 b3lyp/6-311+G(d,p) Anionic 0.2564692 4.9384 598 C1=CC2=CC3=CSC=C2C3=CSC=C3I b3lyp/6-311+G(d,p) Anionic 0.293088 4.7573 599 C1=CC=C2C(=C1)C3=C(S2)C3=C3 b3lyp/6-311+G(d,p) Anionic 0.293088 4.7573 599 C1=CC=C2C(=C1)C3=C(S2)C3=C3 b3lyp/6-311+G(d,p) Anionic 0.293088 4.7573 600 C1=CC2=C(C=CS2)C3=C3C3 b3lyp/6-311+G(d,p) Anionic 0.394082 4.60171 601 C1=CC2=C(C1=CS2)C3=C3C3 b3lyp/6-311+G(d,p) Anionic 0.4937808 1.9350 602 C1=CC1=CC2)C2=CC1=CC(C=S)C2C2 b3lyp	560 C1=CC2=CSC=C2C3=C1C=CC4=CSC=C43	b3lyp/6-311+G(d,p)	Anionic	0.1637792	3.367681162
593 C1=CSC2=CG3=C(C=C21)SC=G3 b3lyp/6-311+G(d,p) Anionic 0.2929748 4.29640 594 C1=CC2=CG3=C(C1)SSC3=CC=C2 b3lyp/6-311+G(d,p) Anionic 0.2134412 3.35189 595 C1=CSC2=CG3=CG3=CG2C1 b3lyp/6-311+G(d,p) Anionic 0.2348762 4.8253 596 C1=CC2=CG3=CSC=C31 b3lyp/6-311+G(d,p) Anionic 0.3487624 4.834 597 C1=CC=CG(C=C1)C3=CSC)SC=C3 b3lyp/6-311+G(d,p) Anionic 0.2564692 4.96308 598 C1=CC2=C(C=C1)C3=CSC)SC=C2 b3lyp/6-311+G(d,p) Anionic 0.2930368 4.71573 599 C1=CC2C(C=C1)C3=CSC)C3=CS b3lyp/6-311+G(d,p) Anionic 0.2930368 4.71573 599 C1=CC2C(C=C1)C3=CSC)C3=CS b3lyp/6-311+G(d,p) Anionic 0.2930368 4.71573 600 C1=CC2=C(C=CS2)C3=C1C=CS) b3lyp/6-311+G(d,p) Anionic 0.3203368 4.71573 601 C1=CC2=C(C=CS2)C3=C1C=CS b3lyp/6-311+G(d,p) Anionic 0.3203368 4.71573 602 C1=CC1=S(C=CS)C3=CC1 b3lyp/6-311+G(d,p) Anionic 0.3293788 1.99350 603 C1=CC2=C(1)=CC2(S)C2=CC1 b3lyp/6-311+G(d,p)	561 C1=CC2=CC3=C4C(=CSS4)C=CC3=C2C=C1	b3lyp/6-311+G(d,p)	Anionic	0.2637108	1.640846591
594 C1=CC2=C3C(=C1)SSC3=CC2 b3lyp/6-311+G(d,p) Anionic 0.2134412 3.35189 595 C1=CSC2=CC3=C(C=C3)(C=C3)(C=C3) b3lyp/6-311+G(d,p) Anionic 0.215658 4.8253 596 C1=CC2=CSC=CC3=CSC=C31 b3lyp/6-311+G(d,p) Anionic 0.3487624 4.8343 597 C1=CC=CC(=C1)(C3=C(S2)SC=C3) b3lyp/6-311+G(d,p) Anionic 0.2546692 4.9608 598 C1=CC2=C(S2)C3=CS3 b3lyp/6-311+G(d,p) Anionic 0.2930368 4.71573 599 C1=CC=CC(=C1)C3=C(S2)C=CS3 b3lyp/6-311+G(d,p) Anionic 0.2993368 4.71573 599 C1=CC=CC(=CS2)C3=C1SC=C3 b3lyp/6-311+G(d,p) Anionic 0.2993368 4.71573 599 C1=CC=CC(=CS2)C3=C1SC=C3 b3lyp/6-311+G(d,p) Anionic 0.2993368 4.71573 690 C1=CC3=CC1=CC1SC=CS3 b3lyp/6-311+G(d,p) Anionic 0.32014 4.8794 601 C1=CC2=C(C3)C3=CC3 b3lyp/6-311+G(d,p) Anionic 0.329388 1.9350 602 C1=CC1=CC1=CC1=CC1=CC1=CC1=CC1=CC1=CC1=	562 C1=CC2=C(C=C3C=CSC3=C2)C4=C1C=CS4	b3lyp/6-311+G(d,p)	Anionic	0.1977552	3.924154011
595 C1=CSC2=CC3=C(C=CS3)=CC21 b3lyp/6-311+G(d,p) Anionic 0.251658 4.48253 596 C1=CC2=CC3=CSC=C31 b3lyp/6-311+G(d,p) Anionic 0.3487624 4.3834 597 C1=CC2=CC1(C3=C1C3=CSC=C31) b3lyp/6-311+G(d,p) Anionic 0.2564692 4.96308 598 C1=CC2=C(C3=C1C=CS3)SC=C2 b3lyp/6-311+G(d,p) Anionic 0.2993368 4.71573 599 C1=CC2=C(C=C1)C3=C(S2)C3=C1C=CS3 b3lyp/6-311+G(d,p) Anionic 0.2995344 4.62375 600 C1=CC2=C(C=CS2)C3=C1C=CS3 b3lyp/6-311+G(d,p) Anionic 0.3261324 4.87981 601 C1=CC2=C(C=CS2)C3=C1C=CS3) b3lyp/6-311+G(d,p) Anionic 0.3261324 4.87981 601 C1=CC3+CC2=CC1=CC1=CC2+CC2+CC2+CC1=CC2+CC2+CC2+CC2+CC2+CC2+CC2+CC2+CC2+CC2	593 C1=CSC2=CC3=C(C=C21)SC=C3	b3lyp/6-311+G(d,p)	Anionic	0.2929748	4.296405774
596 C1=CC2=CSC=C23=CSC=C31 b3lyp/6-311+G(d,p) Anionic 0.3487624 4.3834 597 C1=CC=CZC[=C1]C3=C[S2]SC=C3 b3lyp/6-311+G(d,p) Anionic 0.2564692 4.96308 598 C1=CC=CC[G2=CC[S2]SC=C2 b3lyp/6-311+G(d,p) Anionic 0.2930368 4.7153 599 C1=CC=CZ(E-C1)C3=C(S2)C=CS3 b3lyp/6-311+G(d,p) Anionic 0.2995344 4.62375 600 C1=CC2=C(C=CS2)C3=C1C=CS3 b3lyp/6-311+G(d,p) Anionic 0.3261324 4.87981 601 C1=CC2=C(C=CS2)C3=C1SC=C3 b3lyp/6-311+G(d,p) Anionic 0.3090824 4.60171 601 C1=CC2=C(C=CS2)C3=C1SC=C3 b3lyp/6-311+G(d,p) Anionic 0.4947304 2.14833 602 C1=CC(S)C=CC2(C=S)C=C2 b3lyp/6-311+G(d,p) Anionic 0.4947304 2.14833 603 C1=CC=C(C=CS)C3=CC1 b3lyp/6-311+G(d,p) Anionic 0.404756 3.51897 605 C1=CC=C(C=CS)C3=CC1 b3lyp/6-311+G(d,p) Anionic 0.404756 3.51897 606 C1=CC3=CC3=CCSC=C3CCC3 b3lyp/6-311+G(d,p) Anionic 0.2742508 3.91888 608 C1=CC3=CC3=CCC3=CCC3 b3lyp/6-311+G(d,p) <th< td=""><td>594 C1=CC2=C3C(=C1)SSC3=CC=C2</td><td>b3lyp/6-311+G(d,p)</td><td>Anionic</td><td>0.2134412</td><td>3.351898558</td></th<>	594 C1=CC2=C3C(=C1)SSC3=CC=C2	b3lyp/6-311+G(d,p)	Anionic	0.2134412	3.351898558
597 C1=CC=C2C(=C1)C3=C(S2)SC=C3 b3/py/6-311+G(d,p) Anionic 0.2564692 4.96308 598 C1=CC2=C(C3=C1C=CS3)SC=C2 b3/py/6-311+G(d,p) Anionic 0.2930368 4.71573 599 C1=CC=C2C(=C1)C3=C(S2)C3=CS3 b3/py/6-311+G(d,p) Anionic 0.2993344 4.62375 600 C1=CC2=C(C=CS2)C3=C1CCCS3 b3/py/6-311+G(d,p) Anionic 0.3261324 4.87981 601 C1=CC2=C(C=CS2)C3=C1SC=C3 b3/py/6-311+G(d,p) Anionic 0.3090824 4.60171 602 C1=CC(=S)C=C2C1=CC(=S)C=C2 b3/py/6-311+G(d,p) Anionic 0.2937808 1.99350 603 C1=CC=C2C(=S)C=CC1=CC(=S)C=C2 b3/py/6-311+G(d,p) Anionic 0.4457304 2.14833 604 C1=CC=C2C(=S)C=C3=CC=C1 b3/py/6-311+G(d,p) Anionic 0.4447304 2.14833 605 C1=CC2C(=C1)C=CC(=S)C=C2 b3/py/6-311+G(d,p) Anionic 0.4044756 3.51897 605 C1=CC2C(=CS)C=CC3=CC2=C1 b3/py/6-311+G(d,p) Anionic 0.229040 3.9488 607 C1=CC2=C(C=CS)C=CC3=CC21 b3/py/6-311+G(d,p) Anionic 0.4723904 2.32929 628 C1=CC2=C1SC=C2 b3/py/6-311+G(d,p) Anionic 0.362508 5.05995	595 C1=CSC2=CC3=C(C=CS3)C=C21	b3lyp/6-311+G(d,p)	Anionic	0.251658	4.482531656
598 C1=CC2=C(C3=C1C=C3)SC=C2 b3lyp/6-311+G(d,p) Anionic 0.2930368 4.71573 599 C1=CC=C2C(=C1)C3=C(S2)C=CS3 b3lyp/6-311+G(d,p) Anionic 0.2995344 4.62375 600 C1=CC2=C(C=CS2)C3=C1C=CS3 b3lyp/6-311+G(d,p) Anionic 0.3261324 4.87981 601 C1=CC2=C(I=CS2)C3=C1SC=C3 b3lyp/6-311+G(d,p) Anionic 0.3990824 4.60171 602 C1=CC(=S)C=C2C1=CC(=S)C=C2 b3lyp/6-311+G(d,p) Anionic 0.2937808 1.99350 603 C1=CC=C2C(=C1)C=CC(=S)C=C2 b3lyp/6-311+G(d,p) Anionic 0.4457304 2.14833 604 C1=CC=C2C(=S)C=CC(=S)C=CC1 b3lyp/6-311+G(d,p) Anionic 0.4457304 2.14833 604 C1=CC=C2C(=S)C=CC1 b3lyp/6-311+G(d,p) Anionic 0.4447304 2.14833 605 C=C1C2=C(I)=CC(S)C=CC3 b3lyp/6-311+G(d,p) Anionic 0.2290404 3.29486 607 C1=CC2=C(C=CS)C=CC3 b3lyp/6-311+G(d,p) Anionic 0.2742508 3.91898 608 C1=CC2=C1SC=CC3 b3lyp/6-311+G(d,p) Anionic 0.4723904 2.32929 609 C1=CCC=S(C=C1SC=CC3 b3lyp/6-311+G(d,p) <th< td=""><td>596 C1=CC2=CSC=C2C3=CSC=C31</td><td>b3lyp/6-311+G(d,p)</td><td>Anionic</td><td>0.3487624</td><td>4.38348221</td></th<>	596 C1=CC2=CSC=C2C3=CSC=C31	b3lyp/6-311+G(d,p)	Anionic	0.3487624	4.38348221
599 C1=CC=C2C(=C1)C3=C(S2)C=CS3 b3lyp/6-311+G(d,p) Anionic 0.2995344 4.62375 600 C1=CC2=C(C=CS2)C3=C1C=CS3 b3lyp/6-311+G(d,p) Anionic 0.3261324 4.87981 601 C1=CC2=C(C=CS2)C3=C1SC=CS3 b3lyp/6-311+G(d,p) Anionic 0.3090824 4.60171 602 C1=CC(=S)C=CC1=CC(=S)C=CC b3lyp/6-311+G(d,p) Anionic 0.2937808 1.99350 603 C1=CC=C2C(=C1)C=CC(=S)C=S) b3lyp/6-311+G(d,p) Anionic 0.326356 2.34290 604 C1=CC=CC2C(=S)C=CC(=S)C=CC) b3lyp/6-311+G(d,p) Anionic 0.3226356 2.34290 605 C=C1C2=C(C3=CC3=CS)C=C3 b3lyp/6-311+G(d,p) Anionic 0.4044756 3.51897 606 C1=CSC2=CC3=CSC=C3C=C21 b3lyp/6-311+G(d,p) Anionic 0.2290404 3.2948 607 C1=CC2=C(C=CS2)C3=CSC=C31 b3lyp/6-311+G(d,p) Anionic 0.4723904 2.32929 608 C1=CCSC2=CC3=CSC=C3 b3lyp/6-311+G(d,p) Anionic 0.4723904 2.32929 609 C1=CCC=C(C=CS)C=C3 b3lyp/6-311+G(d,p) Anionic 0.3677964 2.32929 609 C2 C1=CC=C3 b3lyp/6-311+G(d,p) Anionic 0.366250 2.05350 610 C1=CC(C3)C=	597 C1=CC=C2C(=C1)C3=C(S2)SC=C3	b3lyp/6-311+G(d,p)	Anionic	0.2564692	4.963084737
600 C1=CC2=C(C=CS2)C3=C1C=CS3 b3lyp/6-311+G(d,p) Anionic 0.3261324 4.87981 601 C1=CC2=C(C=CS2)C3=C1SC=C3 b3lyp/6-311+G(d,p) Anionic 0.3090824 4.60171 602 C1=CCC(=S)C=C2C1=CC(=S)C=C2C b3lyp/6-311+G(d,p) Anionic 0.2937808 1.99350 603 C1=CC=C2C(=C1)C=CC(=S)C=S b3lyp/6-311+G(d,p) Anionic 0.4457304 2.14833 604 C1=CC=C2C(=S)C=CC(=S)C(=S)	598 C1=CC2=C(C3=C1C=CS3)SC=C2	b3lyp/6-311+G(d,p)	Anionic	0.2930368	4.715733236
601 C1=CC2=C(C=CS)C3=C1SC=C3 b3lyp/6-311+G(d,p) Anionic 0.3090824 4.60171 602 C1=CC(=S)C=C2C1=CC(=S)C=C2 b3lyp/6-311+G(d,p) Anionic 0.2937808 1.99350 603 C1=CC=C2C(=C1)C=CC(=S)C2=S b3lyp/6-311+G(d,p) Anionic 0.4457304 2.14833 604 C1=CC=C2C(=S)C=CC(=S)C(=CC(=CS)C=CC(=S)	599 C1=CC=C2C(=C1)C3=C(S2)C=CS3	b3lyp/6-311+G(d,p)	Anionic	0.2995344	4.623758751
602 C1=CC(=S)C=C2C1=CC(=S)C=C2 b3lyp/6-311+6(d,p) Anionic 0.2937808 1.99350 603 C1=CC=C2C(=C1)C=CC(=S)C2=S b3lyp/6-311+6(d,p) Anionic 0.4457304 2.14833 604 C1=CC=C2C(=S)C=CC(=S)C=CC1 b3lyp/6-311+6(d,p) Anionic 0.3226356 2.34290 605 C=C1C2=C(C3=C1C=CS3)SC=C2 b3lyp/6-311+6(d,p) Anionic 0.4044756 3.51897 606 C1=CSC2=CC3=CSC=C3C=C21 b3lyp/6-311+6(d,p) Anionic 0.2290404 3.29448 607 C1=CC2=C(C=CS2)C3=CSC=C31 b3lyp/6-311+6(d,p) Anionic 0.2742508 3.91898 608 C1=CSC2=C3=CCC=C3SSC2=C1 b3lyp/6-311+6(d,p) Anionic 0.4723904 2.32929 624 C1=CSC2=C1SC=C2 b3lyp/6-311+6(d,p) Anionic 0.3677964 5.05995 625 C1=CC(=S)C=C1S b3lyp/6-311+G(d,p) Anionic 0.3362508 2.1635 626 C1=CC(=S)C=S)C=C1 b3lyp/6-311+G(d,p) Anionic 0.2937932 1.78697 627 [2H]C1=C(SC2=C1SC(=C2[2H])[2H])[2H]) b3lyp/6-311+G(d,p) Anionic 0.3682676 5.05995	600 C1=CC2=C(C=CS2)C3=C1C=CS3	b3lyp/6-311+G(d,p)	Anionic	0.3261324	4.879817895
603 C1=CC=C2C(=C1)C=CC(=5)C2=S b3lyp/6-311+G(d,p) Anionic 0.4457304 2.14833 604 C1=CC=C2C(=S)C=CC(=S)C=CC(=S)C=CC1 b3lyp/6-311+G(d,p) Anionic 0.3226356 2.34290 605 C=C1C2=C(C3=C1C=CS3)SC=C2 b3lyp/6-311+G(d,p) Anionic 0.4044756 3.51897 606 C1=CSC2=CC3=CSC=C3C=C21 b3lyp/6-311+G(d,p) Anionic 0.2290404 3.29448 607 C1=CC2=C(C=CS2)C3=CSC=C31 b3lyp/6-311+G(d,p) Anionic 0.4723904 2.32929 624 C1=CSC2=C1SC=C2 b3lyp/6-311+G(d,p) Anionic 0.4723904 2.32929 625 C1=CC(=S)C=CC1=S b3lyp/6-311+G(d,p) Anionic 0.3677964 5.05995 625 C1=CC(=S)C=C1=S b3lyp/6-311+G(d,p) Anionic 0.3362508 2.1635 626 C1=CC(=S)C=C1=S b3lyp/6-311+G(d,p) Anionic 0.2937932 1.78697 627 [2H]C1=C(SC2=C1SC(=C2[2H])[2H])[2H] b3lyp/6-311+G(d,p) Anionic 0.3682676 5.05995	601 C1=CC2=C(C=CS2)C3=C1SC=C3	b3lyp/6-311+G(d,p)	Anionic	0.3090824	4.601717528
604 C1=CC=C2C(=S)C=CC1 b3lyp/6-311+G(d,p) Anionic 0.3226356 2.34290 605 C=C1C2=C(C3=C1C=CS3)SC=C2 b3lyp/6-311+G(d,p) Anionic 0.4044756 3.51897 606 C1=CSC2=CC3=CSC=C3C=C21 b3lyp/6-311+G(d,p) Anionic 0.2290404 3.2948 607 C1=CC2=C(C=CS2)C3=CSC=C31 b3lyp/6-311+G(d,p) Anionic 0.2742508 3.91898 608 C1=CC2=C3C=CC=C3SSC2=C1 b3lyp/6-311+G(d,p) Anionic 0.4723904 2.32929 624 C1=CSC2=C1SC=C2 b3lyp/6-311+G(d,p) Anionic 0.3677964 5.05995 625 C1=CC(=S)C=CC1=S b3lyp/6-311+G(d,p) Anionic 0.3362508 2.1635 626 C1=CC(=S)C(=S)C=C1 b3lyp/6-311+G(d,p) Anionic 0.2937932 1.78697 627 [2H]C1=C(SC2=C1SC(=C2[2H])[2H])[2H]) b3lyp/6-311+G(d,p) Anionic 0.3682676 5.05995	602 C1=CC(=S)C=C2C1=CC(=S)C=C2	b3lyp/6-311+G(d,p)	Anionic	0.2937808	1.993506156
605 C=C1C2=C(C3=C1C=CS3)SC=C2 b3lyp/6-311+G(d,p) Anionic 0.4044756 3.51897 606 C1=CSC2=CC3=CSC=C3C=C21 b3lyp/6-311+G(d,p) Anionic 0.2290404 3.29448 607 C1=CC2=C(C=CS2)C3=CSC=C31 b3lyp/6-311+G(d,p) Anionic 0.2742508 3.91898 608 C1=CC2=C3C=CC=C3SSC2=C1 b3lyp/6-311+G(d,p) Anionic 0.4723904 2.32929 624 C1=CSC2=C1SC=C2 b3lyp/6-311+G(d,p) Anionic 0.3677964 5.05995 625 C1=CC(=S)C=CC1S b3lyp/6-311+G(d,p) Anionic 0.3362508 2.1635 626 C1=CC(=S)C(=S)C=C1 b3lyp/6-311+G(d,p) Anionic 0.2937932 1.78697 627 [2H]C1=C(SC2=C1SC(=C2[2H])[2H])[2H]) b3lyp/6-311+G(d,p) Anionic 0.3682676 5.05995	603 C1=CC=C2C(=C1)C=CC(=S)C2=S	b3lyp/6-311+G(d,p)	Anionic	0.4457304	2.148338944
606 C1=CSC2=CC3=CSC=C3C=C21 b3lyp/6-311+G(d,p) Anionic 0.2290404 3.29448 607 C1=CC2=C(C=CS2)C3=CSC=C31 b3lyp/6-311+G(d,p) Anionic 0.2742508 3.91898 608 C1=CC2=C3C=CC2SSC2=C1 b3lyp/6-311+G(d,p) Anionic 0.4723904 2.32929 624 C1=CSC2=C1SC=C2 b3lyp/6-311+G(d,p) Anionic 0.3677964 5.05995 625 C1=CC(=S)C=CC1=S b3lyp/6-311+G(d,p) Anionic 0.3362508 2.1635 626 C1=CC(=S)C(=S)C=C1 b3lyp/6-311+G(d,p) Anionic 0.2937932 1.78697 627 [2H]C1=C(SC2=C1SC(=C2[2H])[2H])[2H]) b3lyp/6-311+G(d,p) Anionic 0.3682676 5.05995	604 C1=CC=C2C(=S)C=CC(=S)C2=C1	b3lyp/6-311+G(d,p)	Anionic	0.3226356	2.342900356
607 C1=CC2=C(C=CS2)C3=CSC=C31 b3lyp/6-311+G(d,p) Anionic 0.2742508 3.91898 608 C1=CC2=C3C=CC=C3SSC2=C1 b3lyp/6-311+G(d,p) Anionic 0.4723904 2.32929 624 C1=CSC2=C1SC=C2 b3lyp/6-311+G(d,p) Anionic 0.3677964 5.05995 625 C1=CC(=S)C=CC1=S b3lyp/6-311+G(d,p) Anionic 0.3362508 2.1635 626 C1=CC(=S)C=S)C=C1 b3lyp/6-311+G(d,p) Anionic 0.2937932 1.78697 627 [2H]C1=C(SC2=C1SC(=C2[2H])[2H])[2H] b3lyp/6-311+G(d,p) Anionic 0.3682676 5.05995	605 C=C1C2=C(C3=C1C=CS3)SC=C2	b3lyp/6-311+G(d,p)	Anionic	0.4044756	3.518976469
608 C1=CC2=C3C=CCE-G3SSC2=C1 b3lyp/6-311+G(d,p) Anionic 0.4723904 2.32929 624 C1=CSC2=C1SC=C2 b3lyp/6-311+G(d,p) Anionic 0.3677964 5.05995 625 C1=CC(=S)C=CC1=S b3lyp/6-311+G(d,p) Anionic 0.3362508 2.1635 626 C1=CC(=S)C=C1SC(=C2[S)C=C1 b3lyp/6-311+G(d,p) Anionic 0.2937932 1.78697 627 [2H]C1=C(SC2=C1SC(=C2[H])[2H])[2H] b3lyp/6-311+G(d,p) Anionic 0.3682676 5.05995	606 C1=CSC2=CC3=CSC=C3C=C21	b3lyp/6-311+G(d,p)	Anionic	0.2290404	3.294482533
624 C1=CSC2=C1SC=C2 b3lyp/6-311+G(d,p) Anionic 0.3677964 5.05995 625 C1=CC(=S)C=CC1=S b3lyp/6-311+G(d,p) Anionic 0.3362508 2.1635 626 C1=CC(=S)C(=S)C=C1 b3lyp/6-311+G(d,p) Anionic 0.2937932 1.78697 627 [2H]C1=C(SC2=C1SC(=C2[2H])[2H])[2H] b3lyp/6-311+G(d,p) Anionic 0.3682676 5.05995	607 C1=CC2=C(C=CS2)C3=CSC=C31	b3lyp/6-311+G(d,p)	Anionic	0.2742508	3.918983847
625 C1=CC(=S)C=CC1=S b3lyp/6-311+G(d,p) Anionic 0.3362508 2.1635 626 C1=CC(=S)C(=S)C=C1 b3lyp/6-311+G(d,p) Anionic 0.2937932 1.78697 627 [2H]C1=C(SC2=C1SC(=C2[2H])[2H])[2H] b3lyp/6-311+G(d,p) Anionic 0.3682676 5.05995	608 C1=CC2=C3C=CC=C3SSC2=C1	b3lyp/6-311+G(d,p)	Anionic	0.4723904	2.329294663
626 C1=CC(=S)C(=S)C=C1 b3lyp/6-311+G(d,p) Anionic 0.2937932 1.78697 627 [2H]C1=C(SC2=C1SC(=C2[2H])[2H])[2H] b3lyp/6-311+G(d,p) Anionic 0.3682676 5.05995	624 C1=CSC2=C1SC=C2	b3lyp/6-311+G(d,p)	Anionic	0.3677964	5.059957272
627 [2H]C1=C(SC2=C1SC(=C2[2H])[2H])[2H] b3lyp/6-311+G(d,p) Anionic 0.3682676 5.05995	625 C1=CC(=S)C=CC1=S	b3lyp/6-311+G(d,p)	Anionic	0.3362508	2.16357732
	626 C1=CC(=S)C(=S)C=C1	b3lyp/6-311+G(d,p)	Anionic	0.2937932	1.786971735
628 C1=C2C=S=CC2=CS1 b3lyp/6-311+G(d,p) Anionic 0.2594824 2.99325	627 [2H]C1=C(SC2=C1SC(=C2[2H])[2H])[2H]	b3lyp/6-311+G(d,p)	Anionic	0.3682676	5.059957272
	628 C1=C2C=S=CC2=CS1	b3lyp/6-311+G(d,p)	Anionic	0.2594824	2.993252487