ωB2PLYP'/def2-SVP					
Molecule	$\Delta \mathrm{E}(\mathrm{S}_0\text{-}\mathrm{S}_1) \; [\mathrm{eV}]$	$\Delta \mathrm{E}(\mathrm{S}_0\text{-}\mathrm{T}_1^{'}) \; [\mathrm{eV}]$	$\Delta \mathrm{E}(\mathrm{S}_1\text{-}\mathrm{T}_1) \; [\mathrm{eV}]$	$f_{12}(S_0-S_1)$	
S843	2.3250	2.2230	0.1020	0.0020	
S844	2.4850	2.3370	0.1480	0.0036	
S845	2.5460	2.4270	0.1190	0.0021	
S846	2.7080	2.5050	0.2030	0.0106	
S847	2.2020	1.9020	0.3000	0.0037	
S848	2.3700	2.0670	0.3030	0.0009	
S849	2.3120	2.0470	0.2650	0.0046	
S850	2.4850	2.2440	0.2410	0.0020	
S851	2.4500	2.2270	0.2230	0.0041	
S852	2.5280	2.2880	0.2400	0.0059	
S853	2.6790	2.4000	0.2790	0.0034	
S854	2.7750	2.4840	0.2910	0.0133	
S855	2.3190	1.9710	0.3480	0.0061	
S856	2.4060	2.0650	0.3410	0.0001	
S857	2.4850	2.1450	0.3400	0.0059	
S858	2.6010	2.2720	0.3290	0.0009	
S859	2.2650	2.0150	0.2500	0.0003	
S860	2.6360	2.3740	0.2620	0.0037	
S861	2.6200	2.4740	0.1460	0.0035	
S862	2.8080	2.5350	0.2730	0.0091	
S863	2.3440	1.9300	0.4140	0.0031 0.0023	
S864	2.5310	2.1070	0.4240	0.0023 0.0004	
S865	2.3370	1.9740	0.3630	0.004	
S866	2.5370 2.5320	2.2010	0.3310	0.0048 0.0017	
S867	2.7210	2.3550	0.3660	0.0017 0.0096	
S868	2.7210 2.8160	2.3730 2.3730	0.3000 0.4430		
				0.0094	
S869	2.8930	2.5280	0.3650	0.0075	
S870	3.0080	2.5620	0.4460	0.0161	
S871	2.6050	2.1270	0.4780	0.0056	
S872	2.7030	2.1690	0.5340	0.0004	
S873	2.6190	2.1360	0.4830	0.0082	
S874	2.7510	2.2230	0.5280	0.0004	
S875	2.3970	2.1020	0.2950	0.0087	
S876	2.4710	2.2880	0.1830	0.0015	
S877	2.3150	1.8690	0.4460	0.0182	
S878	2.4450	2.0720	0.3730	0.0084	
S879	2.5540	2.0350	0.5190	0.0319	
S880	2.0850	1.8640	0.2210	0.0002	
S881	2.2100	1.8330	0.3770	0.0074	
S882	2.2350	1.9770	0.2580	0.0013	
S883	2.3540	2.0060	0.3480	0.0088	
S884	2.3440	1.8770	0.4670	0.0164	
S885	2.6010	2.1150	0.4860	0.0058	
S886	2.6210	2.0820	0.5390	0.0293	
S887	2.2240	1.9080	0.3160	0.0008	
S888	2.2290	1.8140	0.4150	0.0052	

	ωB2PLYP'/def2-SVP					
Molecule	$\Delta \mathrm{E}(\mathrm{S}_0 ext{-}\mathrm{S}_1) \; [\mathrm{eV}]$	$\Delta \mathrm{E}(\mathrm{S}_0 ext{-}\mathrm{T}_1) \; [\mathrm{eV}]$	$oldsymbol{\Delta} ext{E}(ext{S}_1 ext{-T}_1) ext{ [eV]}$	$f_{12}(S_0-S_1)$		
S889	2.4510	2.0800	0.3710	0.0019		
S890	2.4920	2.0500	0.4420	0.0074		
S891	2.4850	2.2290	0.2560	0.0084		
S892	2.6980	2.4830	0.2150	0.0053		
S893	2.6330	2.4290	0.2040	0.0032		
S894	2.4780	1.8970	0.5810	0.0204		
S895	2.5000	2.1170	0.3830	0.0088		
S896	2.6530	2.0450	0.6080	0.0315		
S897	2.3940	1.8550	0.5390	0.0088		
S898	2.2240	1.9350	0.2890	0.0006		
S899	2.3880	2.0220	0.3660	0.0065		
S900	2.6280	1.9960	0.6320	0.0228		
S901	2.7980	2.2660	0.5320	0.0075		
S902	2.8440	2.1610	0.6830	0.0353		
S903	2.4940	2.0880	0.4060	0.0003		
S904	2.5220	1.9250	0.5970	0.0091		
S905	2.5370	2.1260	0.4110	0.0019		
S906	2.6070	2.0770	0.5300	0.0046		
S907	2.6350	2.2940	0.3410	0.0129		
S908	2.8690	2.6430	0.2260	0.0049		
S909	2.7250	2.5210	0.2040	0.0024		
S910	2.9780	2.4540	0.5240	0.0000		
S911	2.3910	2.0520	0.3390	0.0135		
S912	2.6570	2.3300	0.3270	0.0248		
S913	2.3110	1.8550	0.4560	0.0060		
S914	2.2760	1.8880	0.3880	0.0113		
S915	2.5610	2.1000	0.4610	0.0144		
S916	2.6120	2.2410	0.3710	0.0116		
S917	2.8280	2.4530	0.3750	0.0206		
S918	2.2930	1.9040	0.3890	0.0063		
S919	2.4360	2.1150	0.3210	0.0076		
S920	2.5660	2.0980	0.4680	0.0124		
S921	2.3560	2.0230	0.3330	0.0152		
S922	2.6990	2.2380	0.4610	0.0238		
S923	2.5860	2.1790	0.4070	0.0016		
S924	2.2590	1.9760	0.2830	0.0047		
S925	2.6340	2.1620	0.4720	0.0096		
S926	2.6170	2.2380	0.3790	0.0198		
S927	2.9200	2.4130	0.5070	0.0278		
S928	2.5910	2.2240	0.3670	0.0001		
S929	2.4630	2.1450	0.3180	0.0018		
S930	2.7130	2.1670	0.5460	0.0021		
S931	2.7280	2.6650	0.0630	0.0007		
S932	2.7550	2.7230	0.0320	0.0004		
S933	2.9420	2.8660	0.0760	0.0052		
S934	2.6340	2.2460	0.3880	0.0045		

ωB2PLYP'/def2-SVP					
Molecule	$\Delta \mathrm{E}(\mathrm{S}_0\text{-}\mathrm{S}_1) \; [\mathrm{eV}]$	$\Delta \mathrm{E}(\mathrm{S}_0 ext{-}\mathrm{T}_1) \; [\mathrm{eV}]$	$oldsymbol{\Delta} ext{E}(ext{S}_1 ext{-T}_1) ext{ [eV]}$	$f_{12}(S_0-S_1)$	
S935	2.5170	2.2100	0.3070	0.0098	
S936	2.7150	2.2100 2.4030	0.3070 0.3120	0.0098 0.0063	
S937	2.7150 2.7260	2.4030 2.6170	0.1090	0.0003	
S938	2.8470	2.6940	0.1090 0.1530	0.0018 0.0014	
S939	2.9700	2.8520	0.1180	0.0014 0.0067	
S939 S940	2.6150	2.8320 2.2470	0.3680	0.0007 0.0015	
S940 S941	2.6380	2.2470 2.2780	0.3600	0.0015 0.0099	
S941 S942	2.7800	2.4240	0.3560	0.0099 0.0035	
S942 S943	2.1610	1.8190	0.3420	0.0068	
S943	2.0620	1.7650	0.3420 0.2970	0.0003	
S944 S945	2.3980	2.0000	0.3980	0.0011 0.0095	
S945 S946	2.3980 2.2240	1.7410	0.3980 0.4830	0.0095 0.0187	
S940 S947	2.4730	1.9290	0.4630 0.5440	0.0187 0.0277	
S947 S948	2.8810	2.6390	0.3440 0.2420	0.0277	
S948 S949		2.8820			
S949 S950	3.0530		0.1710	0.0041	
S950 S951	2.8040	$2.3100 \\ 2.1660$	$0.4940 \\ 0.4130$	$0.0034 \\ 0.0100$	
S951 S952	2.5790 2.7910	2.1600 2.2520	0.4130 0.5390	0.0100 0.0061	
S952 S953	3.0020	2.2520 2.6310	0.3590 0.3710	0.0001 0.0032	
S953 S954	3.0750	2.7770	0.3710	0.0032 0.0043	
S955	3.2060	2.9010	0.3050	0.0081	
S956 S957	2.9110	2.3620	0.5490	0.0005	
	2.8180	2.2980	0.5200	0.0123	
S958	2.9890	2.1830	0.8060	0.0030	
S959 S960	2.3260	2.0740	0.2520	$0.0012 \\ 0.0085$	
S960 S961	2.1610	1.7170	$0.4440 \\ 0.3120$	0.0085 0.0004	
S961 S962	2.5770	2.2650	0.3120 0.3750	0.004 0.0046	
S962 S963	2.3310	1.9560	0.3780 0.3080	0.0040 0.0003	
	2.1970	1.8890		0.0003 0.0127	
S964	2.6000	2.1380	0.4620		
S965	2.5060	2.1400	0.3660	0.0158	
S966	2.6950	2.2820	$0.4130 \\ 0.3370$	0.0288	
S967	2.4450	2.1080		0.0088	
S968 S969	$2.2980 \\ 2.4870$	2.0630 2.1980	$0.2350 \\ 0.2890$	$0.0029 \\ 0.0117$	
S909 S970		2.1980 2.0290	0.2890 0.3890	0.0117 0.0187	
	2.4180	2.0290 2.2380			
S971	2.6600		0.4220	0.0316	
S972	2.3180	1.9770	0.3410	0.0097	
S973	2.3980	2.1000	0.2980	0.0020	
S974	2.4880	2.1820	0.3060	0.0117	
S975	2.2610	1.9890	0.2720	0.0053	
S976	2.1940	1.9180	0.2760	0.0002	
S977	2.4740	2.1720	0.3020	0.0086	
S978 S979	2.2660	2.0400	0.2260	$0.0002 \\ 0.0122$	
	2.4440	2.0870	0.3570		
S980	2.4170	2.0560	0.3610	0.0057	

$\omega ext{B2PLYP'/def2-SVP}$					
Molecule	$\Delta \mathrm{E}(\mathrm{S}_0 ext{-}\mathrm{S}_1) \; [\mathrm{eV}]$	$\Delta \mathrm{E}(\mathrm{S}_0 ext{-}\mathrm{T}_1) \; [\mathrm{eV}]$	$\Delta \mathrm{E}(\mathrm{S}_1 ext{-}\mathrm{T}_1) \; [\mathrm{eV}]$	$f_{12}(S_0-S_1)$	
S981	2.6450	2.2810	0.3640	0.0199	
S982	2.7060	2.1870	0.5190	0.0185	
S983	2.8470	2.3090	0.5380	0.0310	
S984	2.6840	2.1850	0.4990	0.0111	
S985	2.6230	2.1470	0.4760	0.0106	
S986	2.6910	2.1290	0.5620	0.0270	
S987	2.9010	2.2860	0.6150	0.0405	
S988	2.6200	2.0890	0.5310	0.0170	
S989	2.5860	2.1960	0.3900	0.0008	
S990	2.6880	2.0990	0.5890	0.0118	
S991	2.4400	2.2290	0.2110	0.0001	
S992	2.2940	1.8920	0.4020	0.0062	
S993	2.6790	2.3820	0.2970	0.0013	
S994	2.4740	2.2080	0.2660	0.0055	
S995	2.5430	2.2700	0.2730	0.0022	
S996	2.4420	2.1370	0.3050	0.0021	
S997	2.7770	2.4040	0.3730	0.0096	
S998	2.5790	2.3330	0.2460	0.0054	
S999	2.6240	2.1970	0.4270	0.0102	
S1000	2.1570	1.6760	0.4810	0.0189	
S1001	2.4750	1.8180	0.6570	0.0261	
S1002	2.4980	1.8720	0.6260	0.0313	
S1003	2.8480	2.5360	0.3120	0.0036	
S1004	2.8770	2.5240	0.3530	0.0132	
S1005	2.2670	1.8910	0.3760	0.0173	
S1006	2.7140	2.1980	0.5160	0.0170	
S1007	2.5730	2.0610	0.5120	0.0283	
S1008	2.5550	2.3250	0.2300	0.0030	
S1009	2.7380	2.4120	0.3260	0.0072	
S1010	2.4180	2.0050	0.4130	0.0044	
S1011	2.4280	1.9550	0.4730	0.0044	
S1012	2.5820	2.0550	0.5270	0.0060	
S1013	2.8130	2.4890	0.3240	0.0043	
S1014	2.9540	2.4720	0.4820	0.0056	
S1015	2.4910	2.1910	0.3000	0.0044	
S1016	2.7140	2.3120	0.4020	0.0014	
S1017	2.6880	2.2000	0.4880	0.0057	
S1018	2.6740	2.5070	0.1670	0.0020	
S1019	2.9190	2.7260	0.1930	0.0069	
S1020	2.5180	2.0340	0.4840	0.0125	
S1020	2.7110	2.3210	0.3900	0.0115	
S1021	2.7480	2.4580	0.2900	0.0010	
S1022	3.0110	2.7170	0.2940	0.0010	
	2.6040	2.0140	0.5900	0.0083	
51024					
S1024 S1025	2.8640	2.3240	0.5400	0.0098	

	$\omega ext{B2PLYP'/def2-SVP}$				
Molecule	$\Delta \mathrm{E}(\mathrm{S}_0 ext{-}\mathrm{S}_1) \; [\mathrm{eV}]$	$\Delta \mathrm{E}(\mathrm{S}_0 ext{-}\mathrm{T}_1) \; [\mathrm{eV}]$	$\Delta \mathrm{E}(\mathrm{S}_1\text{-}\mathrm{T}_1) \; [\mathrm{eV}]$	$f_{12}(S_0-S_1)$	
S1027	2.8150	2.3550	0.4600	0.0139	
S1028	2.9460	2.7020	0.2440	0.0028	
S1029	2.5720	2.0640	0.5080	0.0124	
S1030	2.6460	2.2590	0.3870	0.0135	
S1031	2.9540	2.4530	0.5010	0.0000	
S1032	3.1610	2.7090	0.4520	0.0030	
S1033	2.7760	2.0860	0.6900	0.0097	
S1034	2.8690	2.2200	0.6490	0.0141	
S1035	2.5620	2.3230	0.2390	0.0083	
S1036	2.7690	2.5230	0.2460	0.0022	
S1037	2.7770	2.2060	0.5710	0.0273	
S1038	2.3730	1.9160	0.4570	0.0096	
S1039	2.6010	2.2130	0.3880	0.0140	
S1040	2.8620	2.2850	0.5770	0.0264	
S1041	2.4440	1.8870	0.5570	0.0074	
S1042	2.7740	2.2630	0.5110	0.0135	
S1043	2.5530	2.0370	0.5160	0.0078	
S1044	2.7880	2.4860	0.3020	0.0082	
S1045	2.8280	2.3460	0.4820	0.0000	
S1046	3.0470	2.7060	0.3410	0.0054	
S1047	2.8050	2.1820	0.6230	0.0195	
S1048	2.5180	2.1560	0.3620	0.0114	
S1049	3.0060	2.2850	0.7210	0.0219	
S1050	2.6080	1.8910	0.7170	0.0054	
S1051	2.7450	2.1560	0.5890	0.0111	
S1052	2.4420	1.9040	0.5380	0.0279	
S1053	2.8240	2.5680	0.2560	0.0103	
S1054	2.6990	2.2160	0.4830	0.0120	
S1055	3.0340	2.3750	0.6590	0.0002	
S1056	2.7470	2.2210	0.5260	0.0137	
S1057	3.0130	2.7160	0.2970	0.0158	
S1058	2.5320	2.0970	0.4350	0.0101	
S1059	2.7680	2.2570	0.5110	0.0147	
S1060	2.8240	2.3730	0.4510	0.0031	
S1061	3.1130	2.7520	0.3610	0.0150	
S1062	2.8380	2.1930	0.6450	0.0020	
S1063	2.9200	2.1320	0.7880	0.0003	
S1064	3.1580	3.0370	0.1210	0.0084	
S1065	2.9250	2.4470	0.4780	0.0253	
S1066	3.2090	3.0370	0.1720	0.0057	
S1067	3.0290	2.4490	0.5800	0.0225	
S1068	2.2090	1.8130	0.3960	0.0030	
S1069	2.4570	2.0440	0.4130	0.0120	
S1070	2.1870	1.8700	0.3170	0.0005	
S1070	2.4590	1.8010	0.6580	0.0159	
S1072	2.6660	1.9740	0.6920	0.0343	

	ωB2PLYP'/def2-SVP					
Molecule	$\Delta \mathrm{E}(\mathrm{S}_0\text{-}\mathrm{S}_1) \; [\mathrm{eV}]$	$\Delta \mathrm{E}(\mathrm{S}_0 ext{-}\mathrm{T}_1) \; [\mathrm{eV}]$	$\Delta \mathrm{E}(\mathrm{S}_1\text{-}\mathrm{T}_1) \; [\mathrm{eV}]$	$f_{12}(S_0-S_1)$		
S1073	2.4560	1.9460	0.5100	0.0075		
S1074	2.9060	2.2510	0.6550	0.0273		
S1075	3.3800	3.0770	0.3030	0.0033		
S1076	2.8990	2.1670	0.7320	0.0018		
S1077	2.0590	1.6280	0.4310	0.0075		
S1078	2.4760	2.2650	0.2110	0.0017		
S1079	2.1930	1.8400	0.3530	0.0085		
S1080	2.3110	1.8770	0.4340	0.0002		
S1081	2.6440	2.1190	0.5250	0.0104		
S1082	2.3660	2.1060	0.2600	0.0013		
S1083	2.7090	2.3000	0.4090	0.0203		
S1084	2.7530	2.1310	0.6220	0.0186		
S1085	2.4200	1.9980	0.4220	0.0013		
S1086	2.5990	2.2670	0.3320	0.0097		
S1087	2.3700	2.0410	0.3290	0.0000		
S1088	2.7430	2.2040	0.5390	0.0114		
S1089	2.8800	2.3490	0.5310	0.0255		
S1090	2.7150	2.0910	0.6240	0.0077		
S1091	2.4240	1.8820	0.5420	0.0001		
S1092	2.5370	2.0370	0.5000	0.0202		
S1093	2.7640	2.0600	0.7040	0.0000		
S1094	2.5680	2.1090	0.4590	0.0011		
S1095	2.3220	1.8480	0.4740	0.0061		
S1096	2.6620	2.3870	0.2750	0.0003		
S1097	2.3620	2.0780	0.2840	0.0069		
S1098	2.6670	2.2270	0.4400	0.0019		
S1099	2.9060	2.3260	0.5800	0.0079		
S1100	2.6560	2.0910	0.5650	0.0051		
S1101	2.7390	2.0460	0.6930	0.0408		
S1102	2.5190	2.1340	0.3850	0.0259		
S1103	2.8090	2.2750	0.5340	0.0376		
S1104	2.8150	2.2410	0.5740	0.0113		
S1105	3.1860	2.3330	0.8530	0.0012		
S1106	2.7600	2.2100	0.5500	0.0127		
S1107	2.8860	2.1510	0.7350	0.0013		
S1108	2.4720	2.1330	0.3390	0.0053		
S1109	2.4920	2.1090	0.3830	0.0032		
S1110	2.5440	2.2050	0.3390	0.0003		
S1111	2.4320	1.8440	0.5880	0.0188		
S1112	2.5410	1.9640	0.5770	0.0081		
S1113	2.6380	2.0550	0.5830	0.0110		
S1114	2.6860	2.0520	0.6340	0.0029		
S1111	3.2080	3.0480	0.1600	0.0126		
S1116 S1116	3.4290	3.0020	0.4270	0.0471		
S1117	3.3690	3.0130	0.3560	0.0331		
S1118	3.3000	3.0140	0.2860	0.0214		

Molecule	$\Delta \mathrm{E}(\mathrm{S}_0 ext{-}\mathrm{S}_1) \; [\mathrm{eV}]$	$\Delta \mathrm{E}(\mathrm{S_0} ext{-}\mathrm{T_1}) \; [\mathrm{eV}]$	$oldsymbol{\Delta} ext{E}(ext{S}_1 ext{-T}_1) ext{ [eV]}$	$\mathrm{f_{12}(S_0\text{-}S_1)}$	
S1119	3.2410	3.0130	0.2280	$\frac{112(2021)}{0.0167}$	
S1119 S1120	3.2100	3.0120	0.1980	0.0107 0.0122	
S1120 S1121	3.1900	3.0090	0.1810	0.0122 0.0105	
S1121 S1122	3.1900 3.2270	3.0560	0.1710	0.0103 0.0087	
S1122 S1123					
	3.5060	3.0780	0.4280	0.0393	
S1124	3.4270	3.1200	0.3070	0.0195	
S1125	3.3300	3.0930	0.2370	0.0108	
S1126	3.2780	3.0710	0.2070	0.0133	
S1127	3.2260	3.0720	0.1540	0.0100	
S1128	3.2040	3.0550	0.1490	0.0113	
S1129	3.1120	2.9560	0.1560	0.0095	
S1130	2.9730	2.6330	0.3400	0.0099	
S1131	3.0600	2.8140	0.2460	0.0089	
S1132	3.1500	3.0050	0.1450	0.0078	
S1133	3.0830	2.8070	0.2760	0.0098	
S1134	3.1590	2.9860	0.1730	0.0083	
S1135	3.1660	3.0000	0.1660	0.0085	
S1136	3.4460	2.9910	0.4550	0.0505	
S1137	3.1400	3.0200	0.1200	0.0081	
S1138	3.0320	2.9450	0.0870	0.0017	
S1139	3.0900	2.9990	0.0910	0.0045	
S1140	3.0530	2.9350	0.1180	0.0022	
S1141	3.1340	2.9850	0.1490	0.0071	
S1142	3.5230	3.0700	0.4530	0.0450	
S1143	3.1290	2.8960	0.2330	0.0181	
S1144	2.9290	2.5260	0.4030	0.0237	
S1145	3.0590	2.8100	0.2490	0.0185	
S1146	3.0020	2.6350	0.3670	0.0221	
S1147	3.1170	2.9270	0.1900	0.0147	
S1148	2.9070	2.5970	0.3100	0.0103	
S1149	3.0930	2.5410	0.5520	0.0148	
S1150	3.1980	2.8950	0.3030	0.0141	
S1151	3.1480	2.7410	0.4070	0.0148	
S1152	3.2180	2.9560	0.2620	0.0106	
S1153	3.1870	2.9160	0.2710	0.0101	
S1154	3.4510	2.9890	0.4620	0.0508	
S1155	3.0570	2.9750	0.0820	0.0028	
S1156	3.0830	2.5120	0.5710	0.0029	
S1157	3.1580	2.9980	0.1600	0.0085	
S1158	3.5060	3.0630	0.4430	0.0437	
S1159	2.9630	2.5950	0.3680	0.0221	
S1160	2.9920	2.4750	0.5170	0.0221	
S1161	3.1170	2.9400	0.1770	0.0146	
S1162	2.8740	2.5190	0.3550	0.0123	
S1162 S1163	3.1930	2.9070	0.2860	0.0126	
S1164	3.2730	2.8180	0.4550	0.0130 0.0127	
01104	5.2750	2.0100	0.4000	0.0147	

$\omega ext{B2PLYP'/def2-SVP}$					
Molecule	$\Delta \mathrm{E}(\mathrm{S}_0\text{-}\mathrm{S}_1) \; [\mathrm{eV}]$	$\Delta \mathrm{E}(\mathrm{S}_0\text{-}\mathrm{T}_1) \; [\mathrm{eV}]$	$\Delta \mathrm{E}(\mathrm{S}_1\text{-}\mathrm{T}_1) \; [\mathrm{eV}]$	$f_{12}(S_0\text{-}S_1)$	
S1165	3.2260	3.0720	0.1540	0.0095	
S1166	3.1160	2.9850	0.1310	0.0048	
S1167	3.0810	2.8280	0.2530	0.0145	
S1168	3.2380	3.0920	0.1460	0.0072	