Electronic Supplementary Information (ESI)

Enantiopure, Luminescent, Cyclometallated Ir(III) Complexes with N-Heterocyclic Carbene-Naphthalimide Chromophore: Design, Vibrational Circular Dichroism and TD-DFT Calculations

Antoine Groué,[a] Eve Montier-Sorkine,[a] Yaping Cheng,[a] Marie Noelle Rager,[b] Marion Jean,[c] Nicolas Vanthuyne,[c] Jeanne Crassous [d]* Amalia C. Lopez,[f] Alejandra Saavedra Moncada,[e] Andrea Barbieri, [e] Andrew L. Cooksy,[f] and Hani Amouri,[a]*

[a] Campus Pierre et Marie Curie, CNRS, IPCM (UMR 8232) Sorbonne Université - Faculté des Sciences et Ingénerie 4 place Jussieu, 75252 Paris cedex 05, France.

[b] Chimie ParisTech, PSL University, NMR Facility, 11, rue Pierre et Marie Curie, 75005 Paris, France.

[c] Aix Marseille Univ, CNRS, Centrale Marseille, iSm2, Marseille, France.

[d] Institut des Sciences Chimiques de Rennes UMR 6226 Institut de Physique de Rennes, UMR 6251 CNRS Université de Rennes 1 Campus de Beaulieu, 35042 Rennes, France.

[e] Istituto per la Sintesi Organica e la Fotoreattività (ISOF) Consiglio Nazionale delle Ricerche (CNR) Via Gobetti 101, 40129 Bologna, Italy

[f] Department of Chemistry, San Diego State U., San Diego CA 921821030, USA

TABLE OF CONTENTS

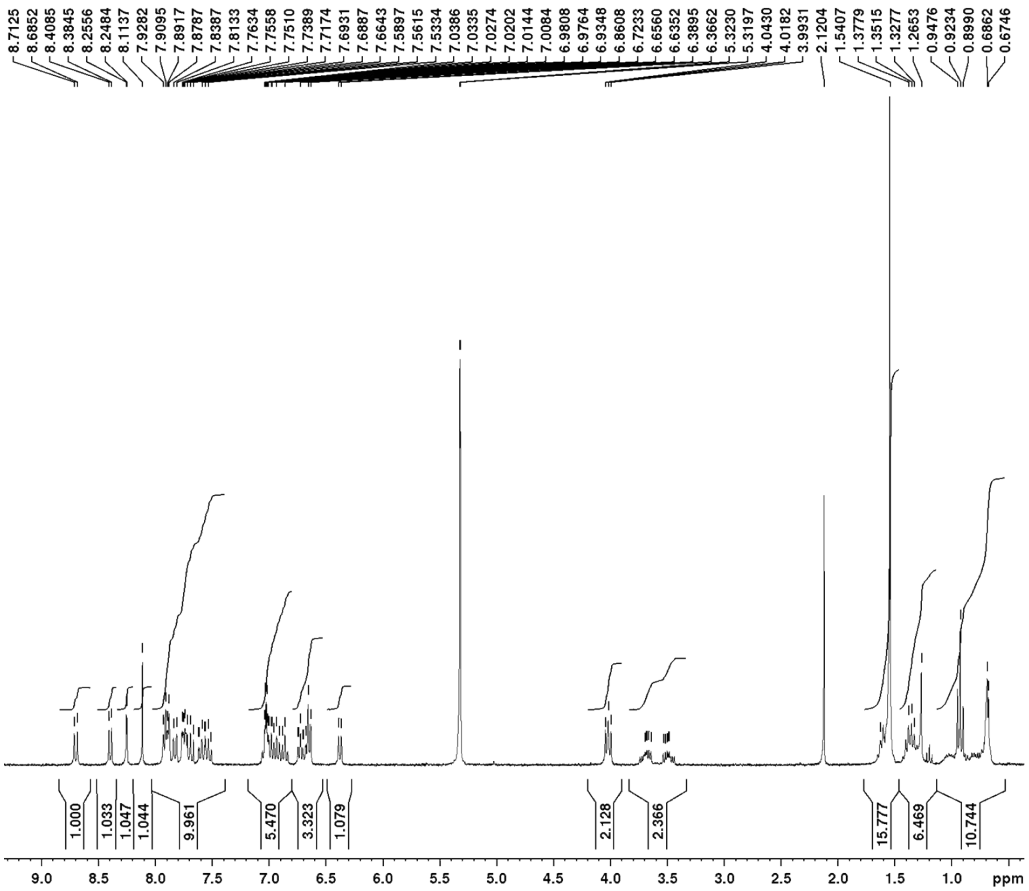


Figure S1. ^{1}H NMR (400 MHz, CD_2Cl_2) of compound *rac*-**2**

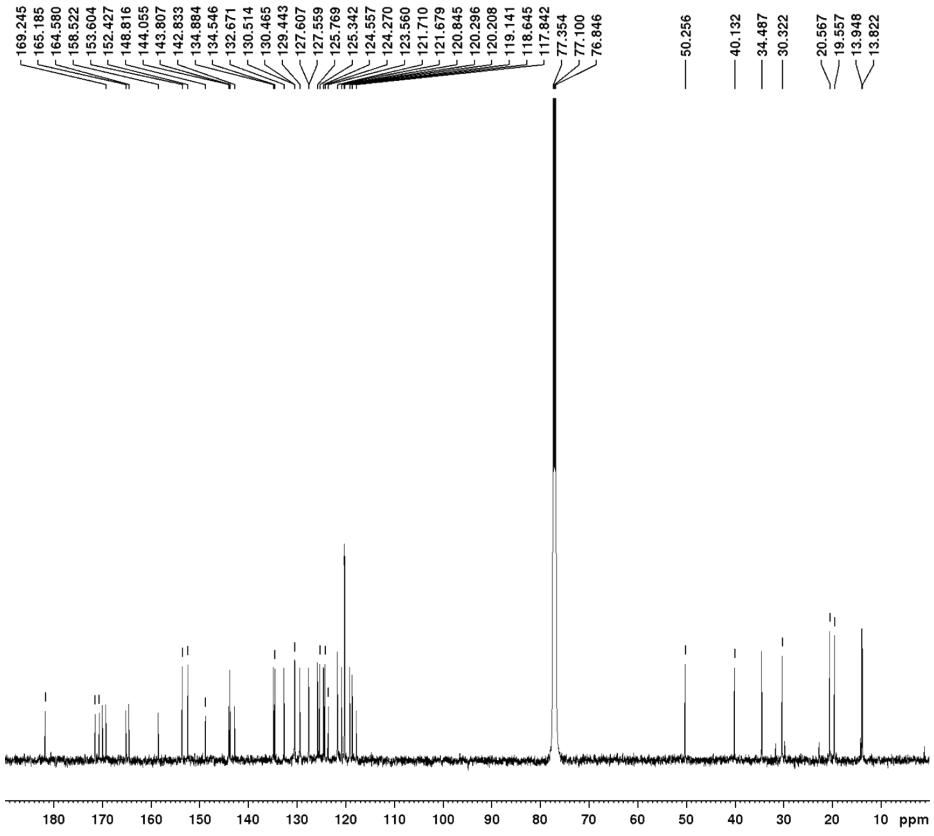


Figure S2. ^{13}C NMR (125 MHz, $CDCl_3$) of compound *rac*-**2**

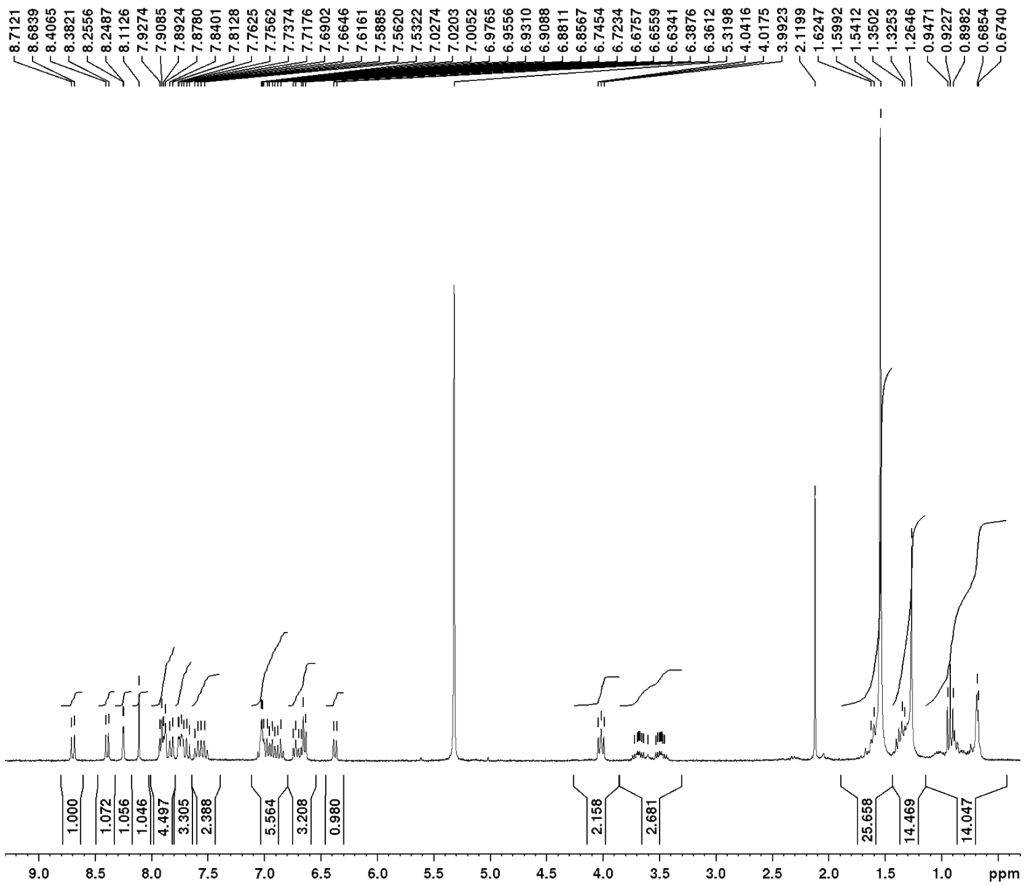


Figure S3. ^{1}H NMR (400 MHz, CD_2Cl_2) of compound *Δ*-**2**

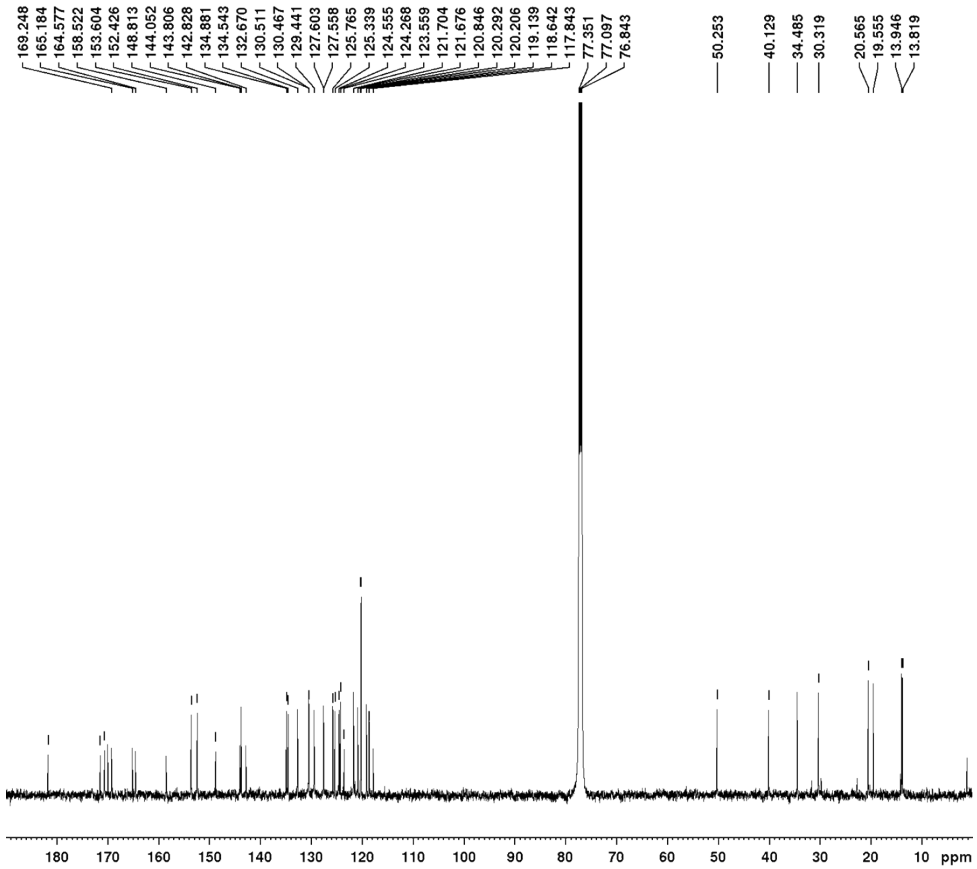


Figure S4. ^{13}C NMR (125 MHz, $CDCl_3$) of compound *Δ*-**2**

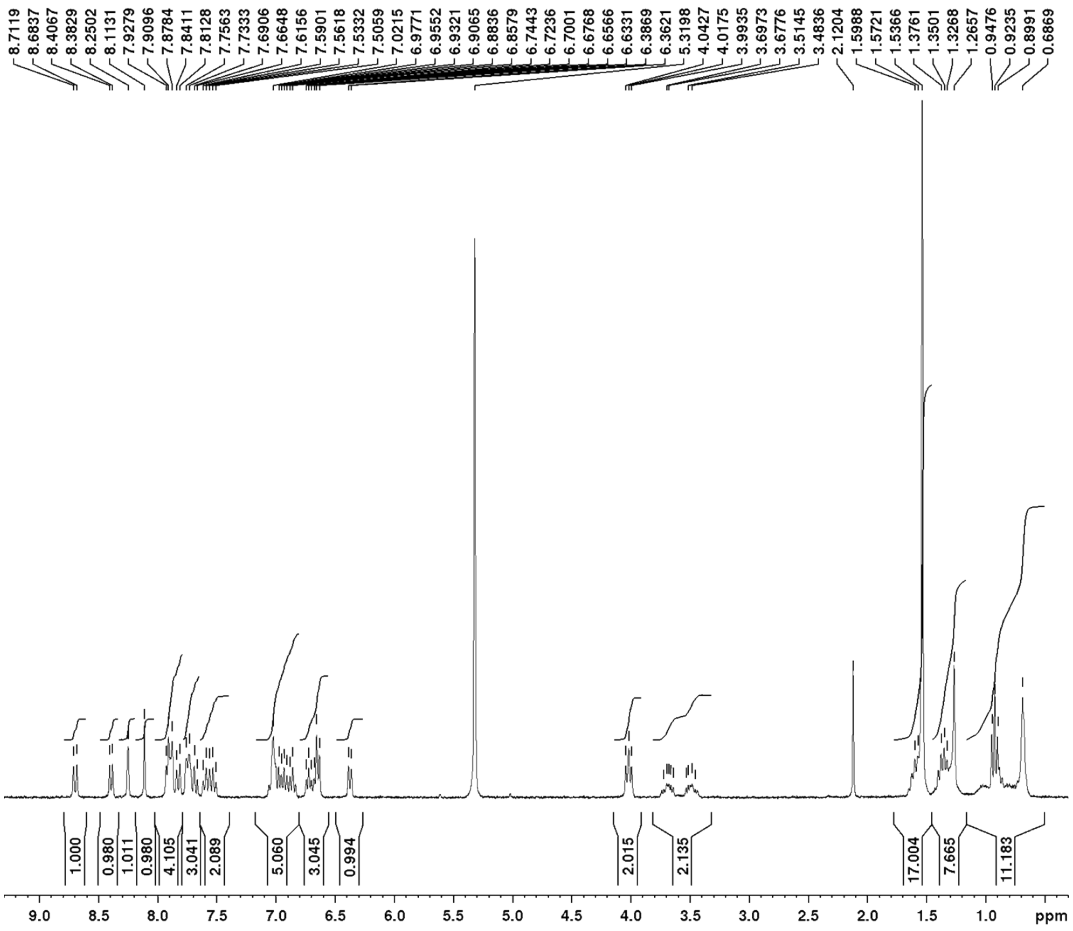


Figure S5. ^{1}H NMR (400 MHz, CD_2Cl_2) of compound *Λ*-**2**

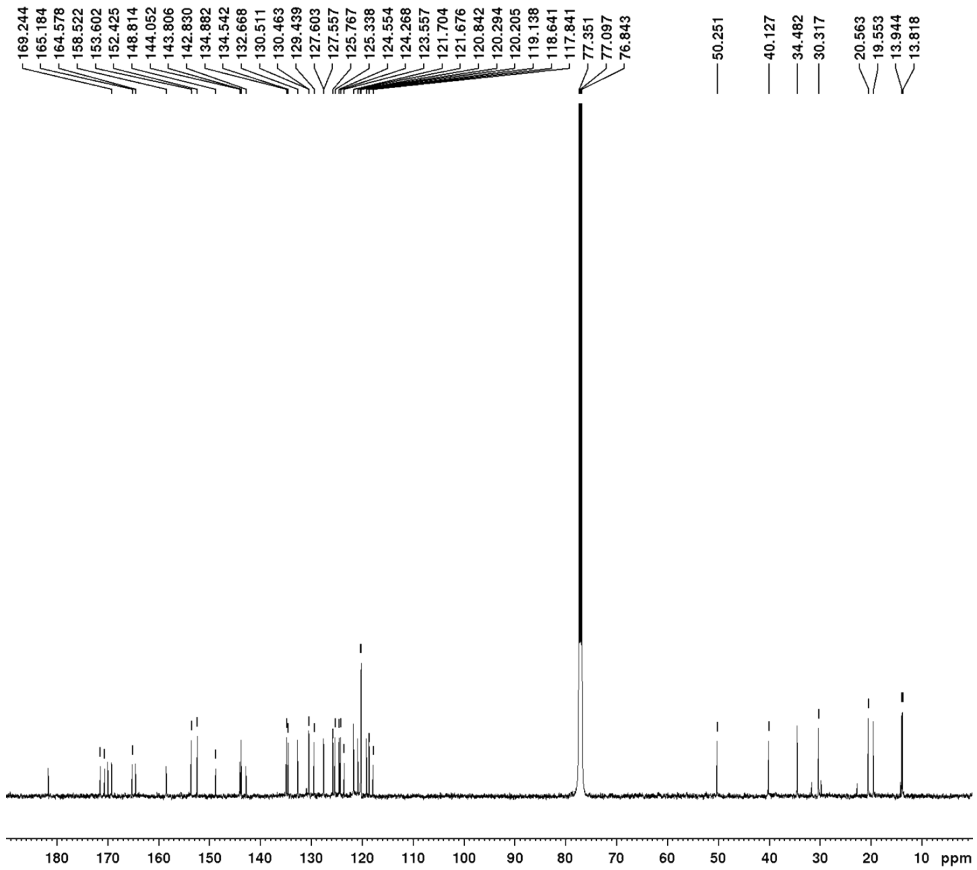


Figure S6. ^{13}C NMR (125 MHz, $CDCl_3$) of compound *Λ*-**2**

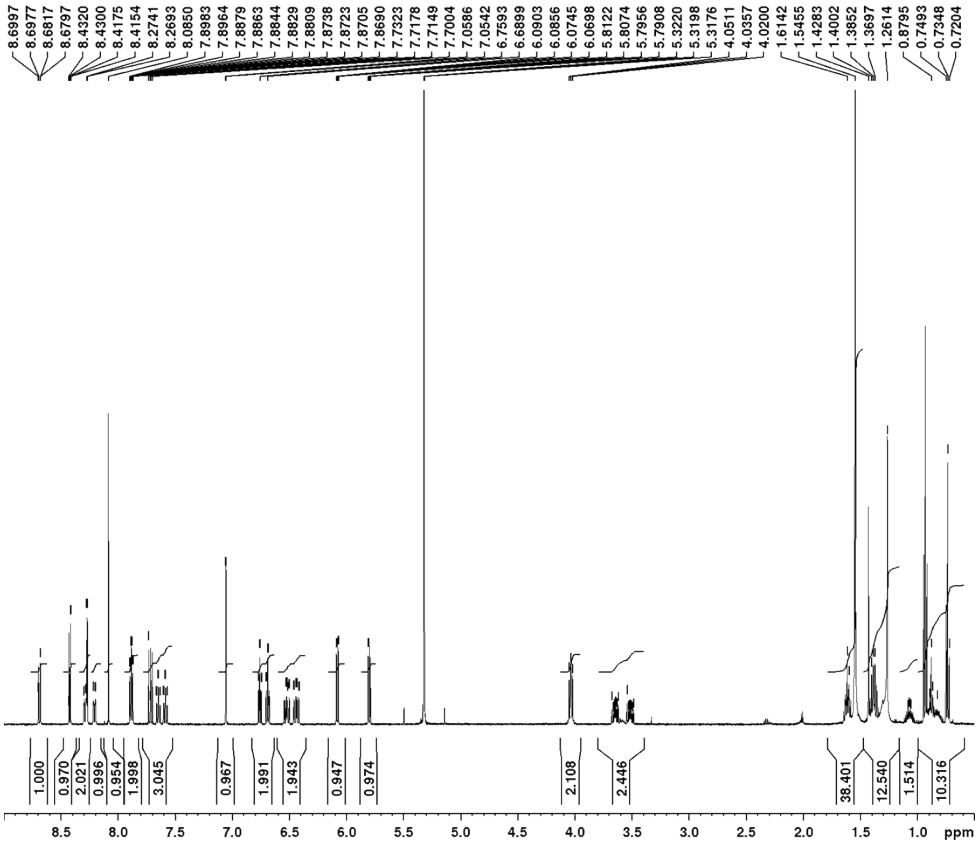


Figure S7. ^{1}H NMR (500 MHz, CD_2Cl_2) of compound *rac*-**3**

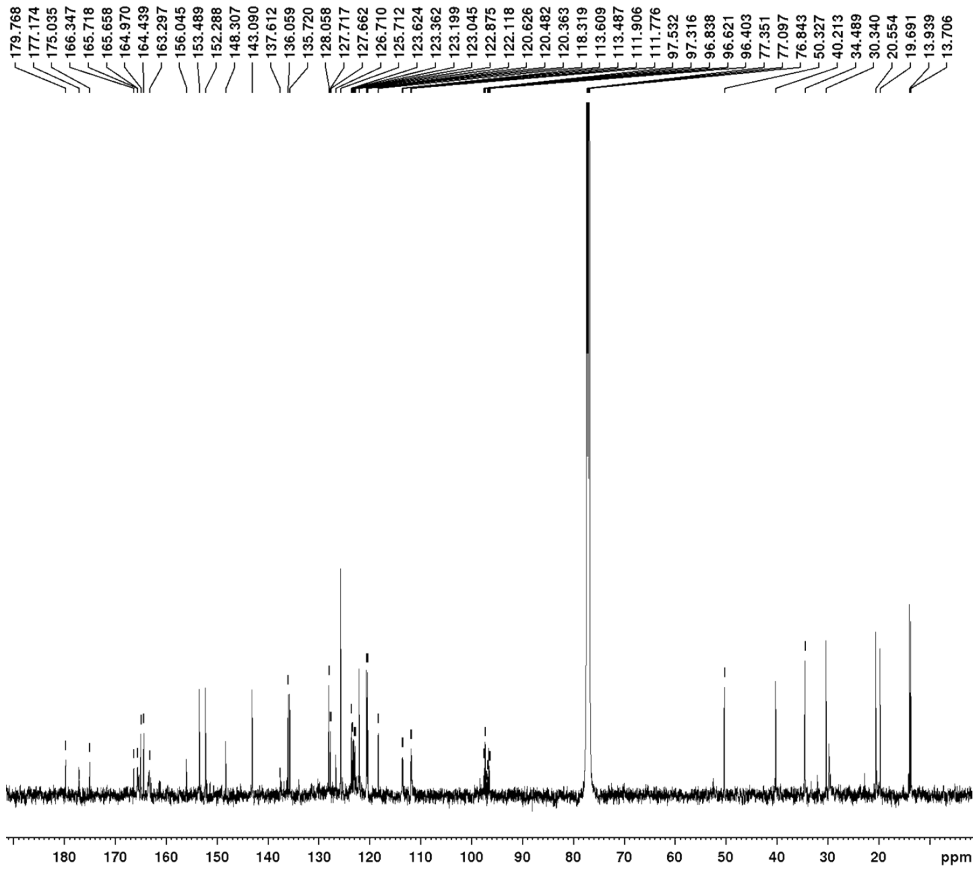


Figure S8. ^{13}C NMR (125 MHz, $CDCl_3$) of compound *rac*-**3**

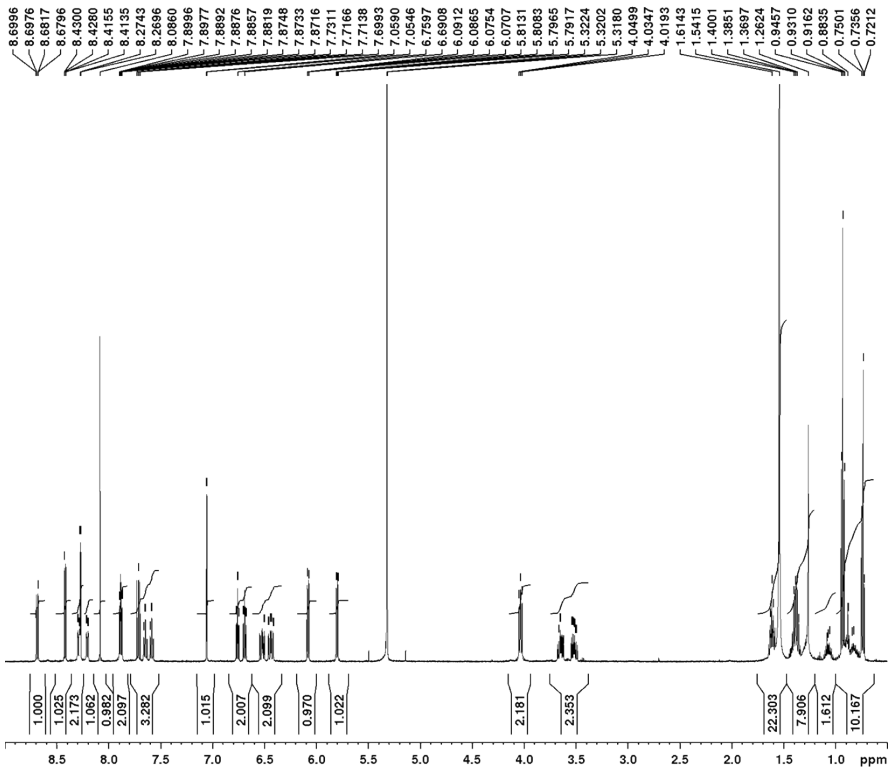


Figure S9. ^{1}H NMR (500 MHz, CD_2Cl_2) of compound *Δ*-**3**

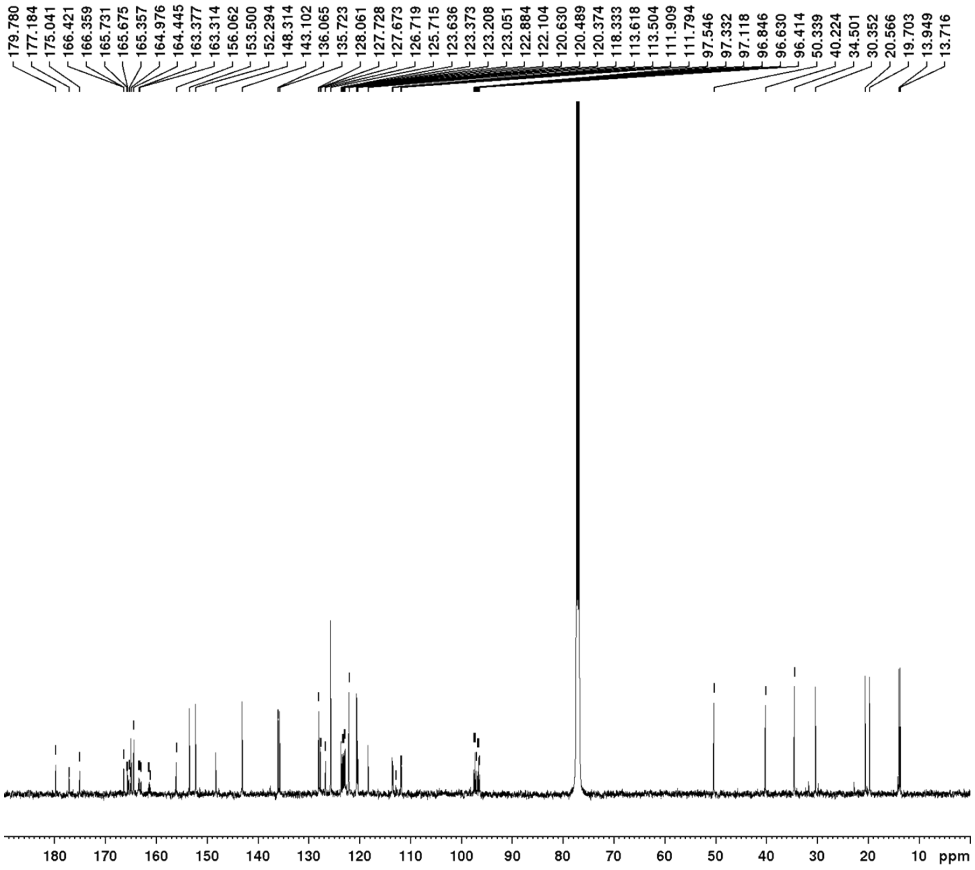


Figure S10. ^{13}C NMR (125 MHz, $CDCl_3$) of compound *Δ*-**3**

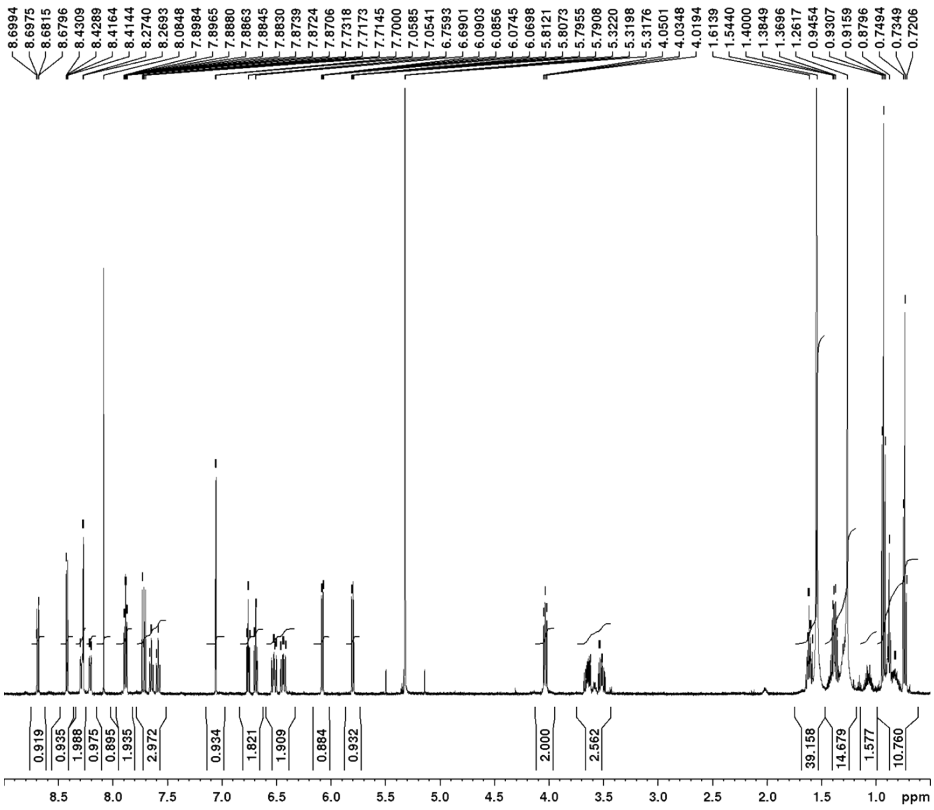


Figure S11. ^{1}H NMR (500 MHz, CD_2Cl_2) of compound *Λ*-**3**

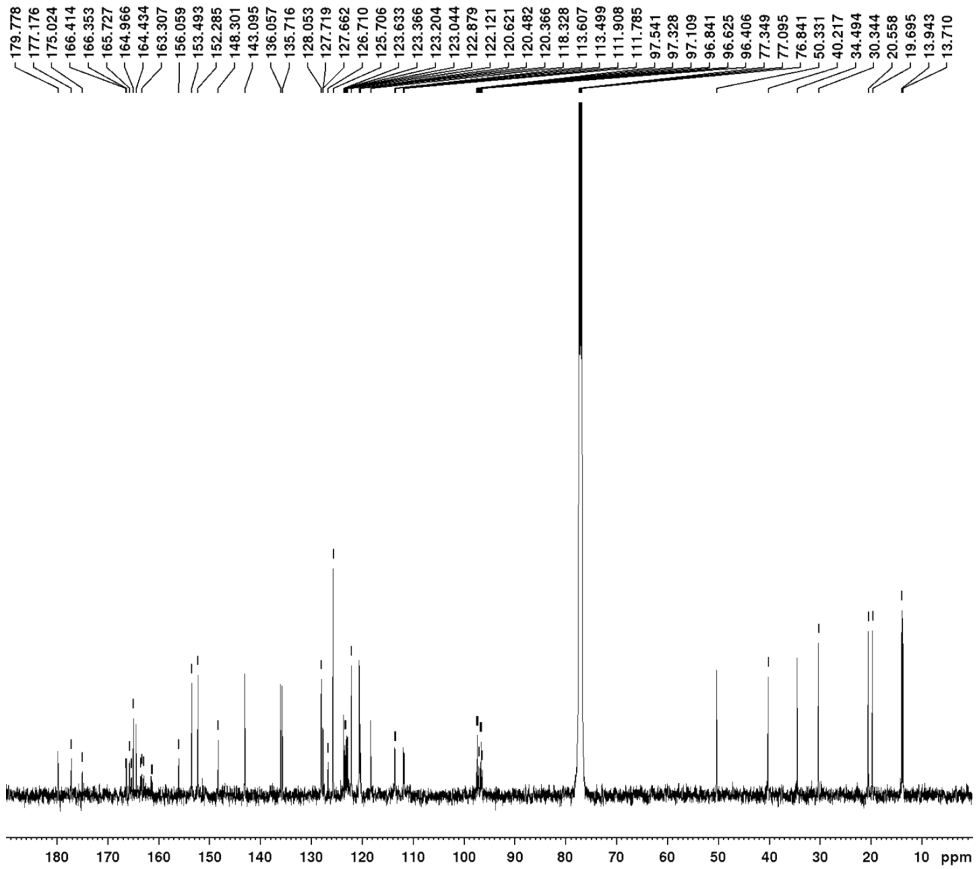


Figure S12. ^{13}C NMR (125 MHz, $CDCl_3$) of compound *Λ*-**3**

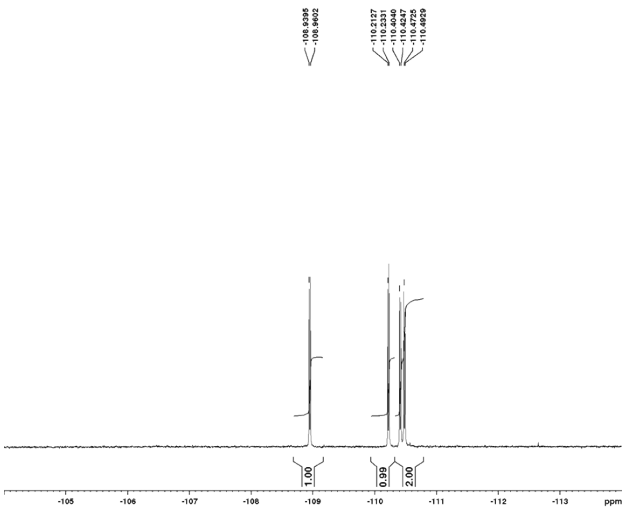


Figure S13. ^{19}F NMR (470 MHz, CD_2Cl_2) of compound *r*□□-**3**

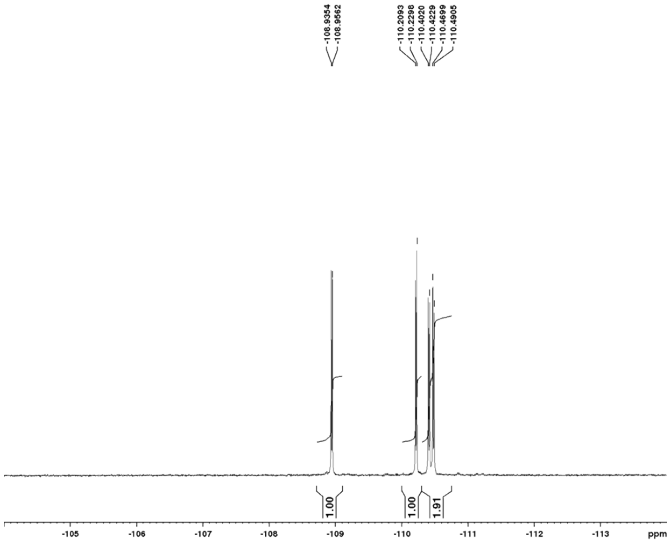


Figure S14. ^{19}F NMR (470 MHz, CD_2Cl_2) of compound *Δ*-**3**

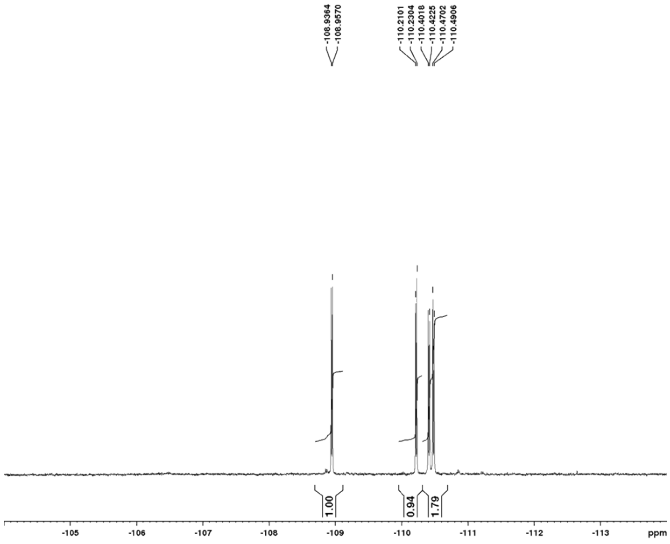
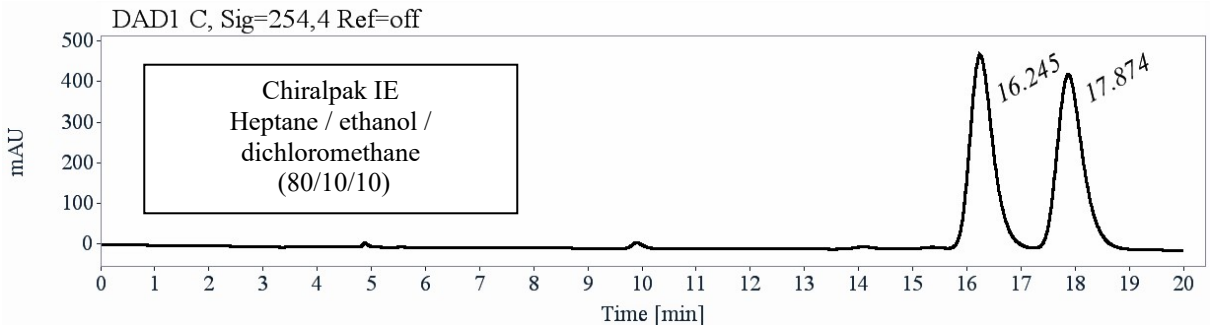


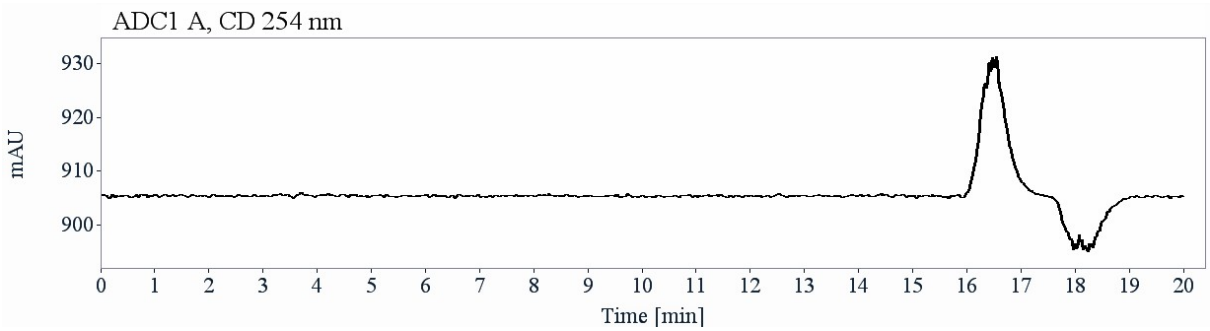
Figure S15. ^{19}F NMR (470 MHz, CD_2Cl_2) of compound *Λ*-**3**

Resolution of the enantiopure compounds. They were separated through chiral column to give desired products *Δ*-**2**, *Λ*-**2** and *Δ*-**3**, *Λ*-**3.**

The compound's mixture **2** is dissolved in dichloromethane, injected on the (250 x 4.6 mm) chiral column, and detected with an UV detector at 254 nm and with circular dichroism detector at 254 nm. The flow-rate is 1 ml/min.

Column	Mobile Phase	t1	k1	t2	k2	α	Rs
Chiralpak IE	Heptane / ethanol / dichloromethane (80/10/10)	16.24(+)	4.51	17.87 (-)	5.06	1.12	1.98





RT [min]	Area	Area%	Capacity Factor	Enantioselectivity	Resolution (USP)
16.24	14370	49.86	4.51		
17.87	14448	50.14	5.06	1.12	1.98
Sum	28818	100.00			

Preparative separation for compound **2**:

• Sample preparation: About 50 mg of compound **2** is dissolved in 9 mL of a mixture of hexane/ethanol/dichloromethane (33/22/45).

• Chromatographic conditions: Chiralpak IE (250 x 10 mm), Hexane / ethanol / dichloromethane (80/10/10) as mobile phase, flow-rate = 5 mL/min, UV detection at 254 nm.

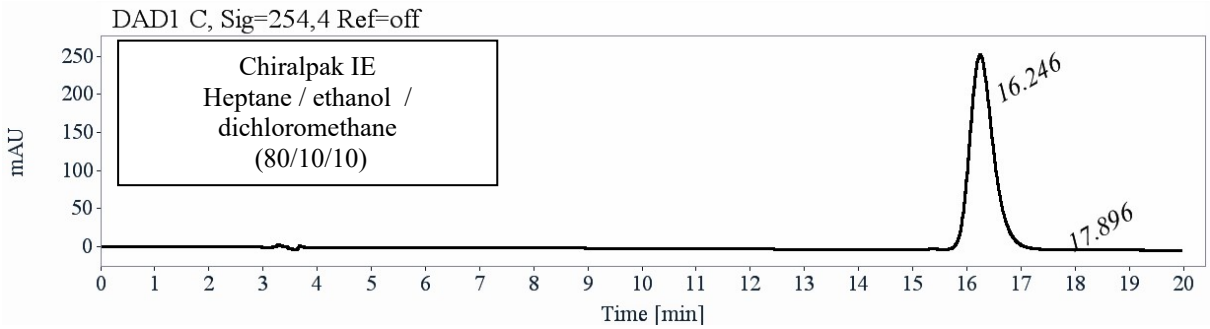
• Injections (stacked): 70 times 130 µL, every 5 minutes.

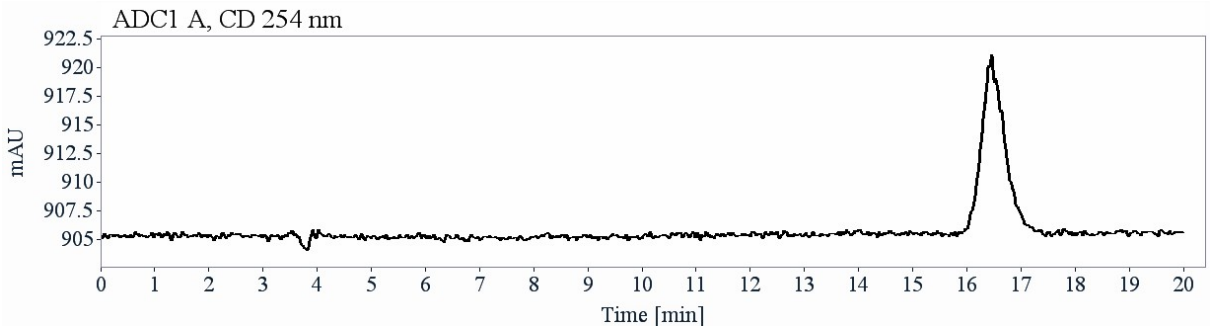
• First fraction: 17.5 mg of the first eluted ((+, CD 254nm)-enantiomer) with ee > 99%

• Second fraction: 16.7 mg of the second eluted ((-, CD 254nm)-enantiomer) with ee > 98%

• Chromatograms of the collected fractions:

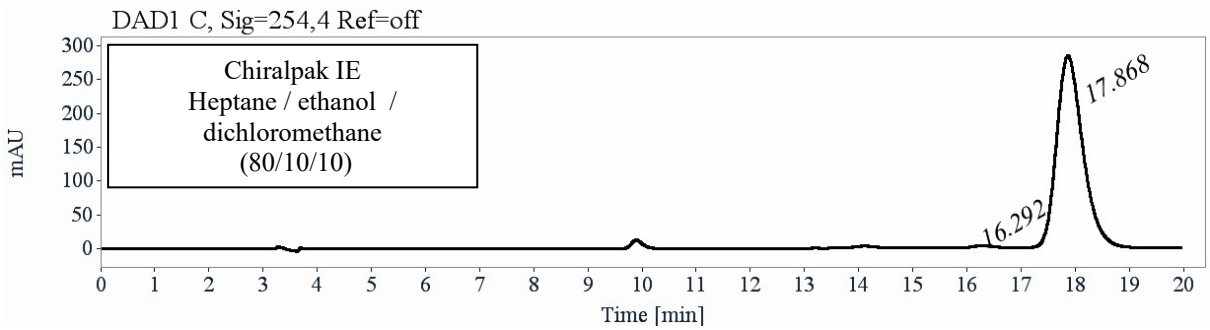
- First eluted enantiomer

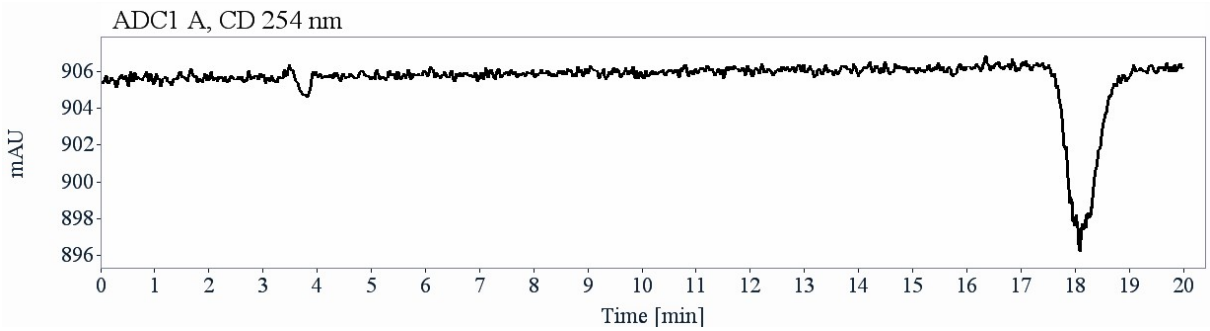




RT [min]	Area	Area%
16.25	7795	99.72
17.90	22	0.28
Sum	7817	100.00

Second eluted enantiomer





RT [min]	Area	Area%
16.29	96	0.99
17.87	9611	99.01
Sum	9707	100.00

Optical rotations

Optical rotations were measured on a Jasco P-2000 polarimeter with a sodium lamp (589 nm), a halogen lamp (578 and 546 nm), in a 10 cm cell, thermostated at 25°C with a Peltier controlled cell holder.

λ (nm)	**Δ-2** first eluted on Chiralpak IE $[\alpha]_{\lambda}^{25}$ (CH_2Cl_2, c =0.0348)	Λ-2 second eluted on Chiralpak IE $[\alpha]_{\lambda}^{25}$ (CH_2Cl_2, c =0.0345)
589	- 568	+ 568
578	- 594	+ 595
546	- 706	+ 708

Electronic Circular Dichroism

ECD and UV spectra were measured on a JASCO J-815 spectrometer equipped with a JASCO Peltier cell holder PTC-423 to maintain the temperature at 25.0 ± 0.2°C. A CD quartz cell of 1 mm of optical pathlength was used. The CD spectrometer was purged with nitrogen before recording each spectrum, which was baseline subtracted.
The baseline was always measured for the same solvent and in the same cell as the samples.
The spectra are presented without smoothing and further data processing.

Δ-2, first eluted on Chiralpak IE: green solid line, concentration = 0.199 mmol.L^{-1} in acetonitrile.
Λ-2, second eluted on Chiralpak IE: red dotted line, concentration = 0.198 mmol.L^{-1} in acetonitrile.
Acquisition parameters: 0.1 nm as intervals, scanning speed 50 nm/min, band width 1 nm, and 3 accumulations per sample.

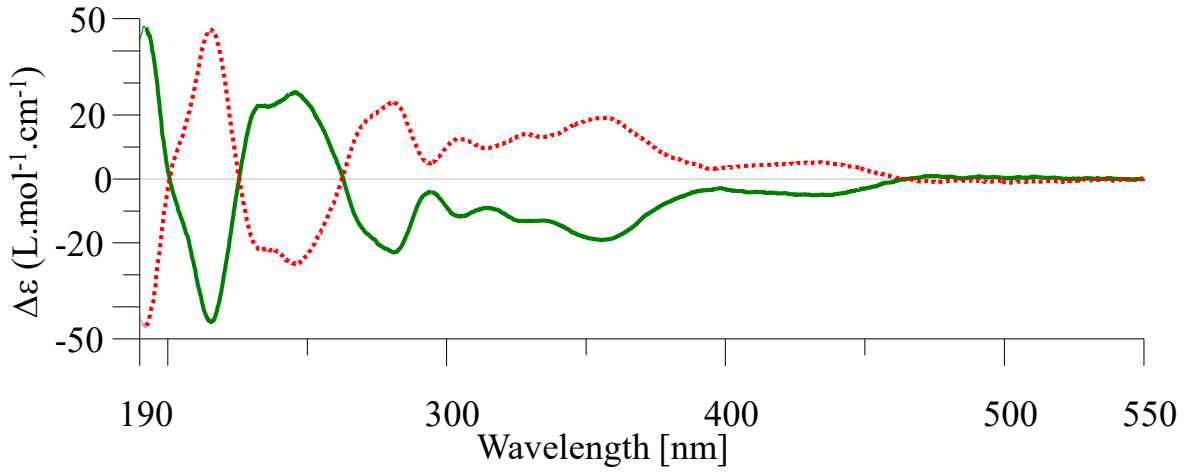


Figure S16. CD spectra of **Λ-2** and **Δ-2** recorded in CH_3CN.

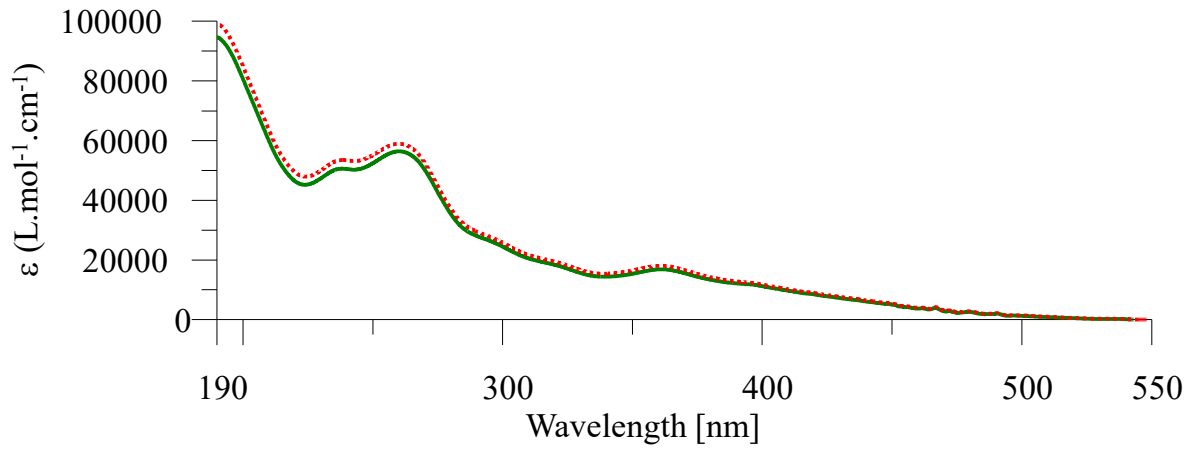
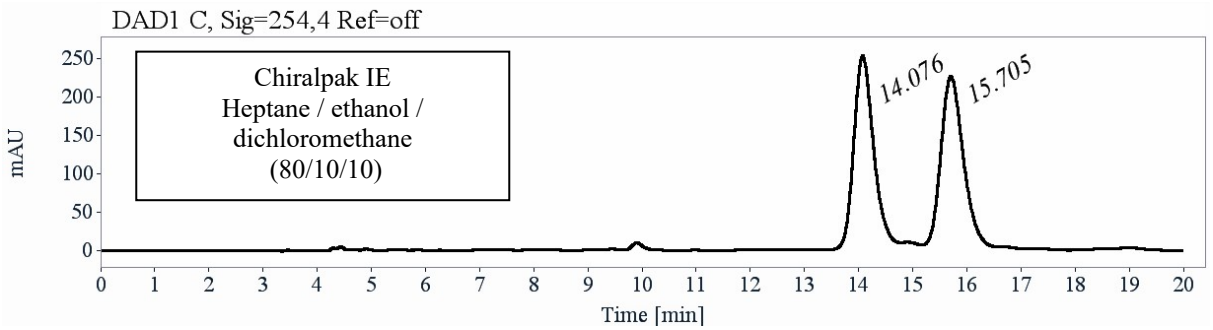


Figure S17. UV-vis of *Λ*-**2** and *Δ*-**2** recorded in CH_3CN.

Column	Mobile Phase	t1	k1	t2	k2	α	Rs
Chiralpak IE	Heptane / ethanol / dichloromethane (80/10/10)	14.08	3.77	15.71	4.32	1.15	2.29



RT [min]	Area	Area%	Capacity Factor	Enantioselectivity	Resolution (USP)
14.08	6542	49.57	3.77		
15.71	6655	50.43	4.32	1.15	2.29
Sum	13198	100.00			

Preparative separation for compound **3**:

• Sample preparation: About 50 mg of compound **3** is dissolved in 9 mL of a mixture of hexane/ethanol/dichloromethane (33/22/45).

• Chromatographic conditions: Chiralpak IE (250 x 10 mm), Hexane / ethanol / dichloromethane (80/10/10) as mobile phase, flow-rate = 5 mL/min, UV detection at 254 nm.

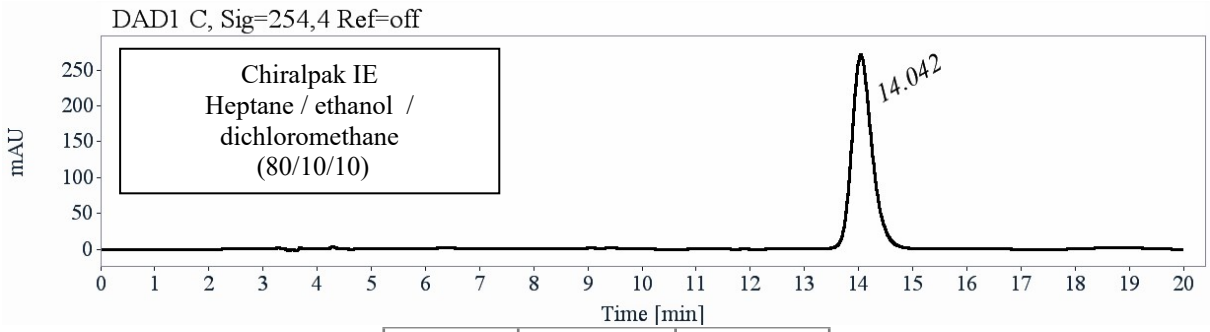
• Injections (stacked): 45 times 200 µL, every 6 minutes.

• First fraction: 15.9 mg of the first eluted with ee > 99.5%

• Second fraction: 16.2 mg of the second eluted with ee > 98.5%

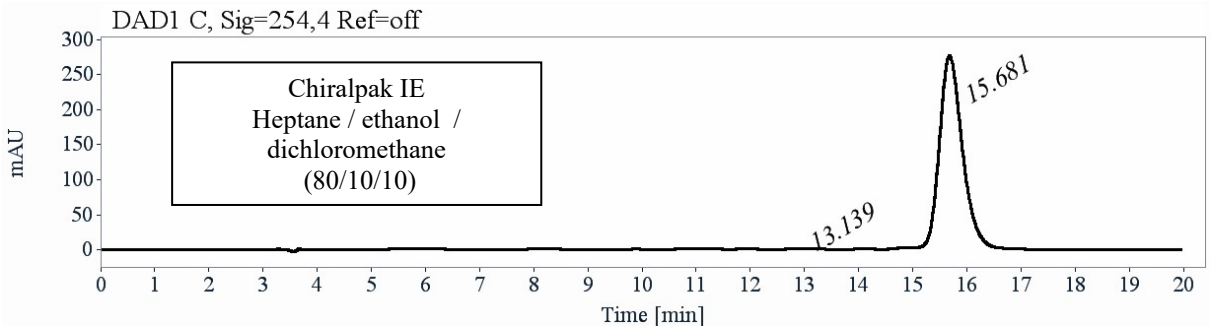
• Chromatograms of the collected fractions:

- First eluted enantiomer



RT [min]	Area	Area%
14.04	7075	100.00
Sum	7075	100.00

Second eluted enantiomer



RT [min]	Area	Area%
13.14	43	0.52
15.68	8230	99.48
Sum	8273	100.00

Optical rotations

Optical rotations were measured on a Jasco P-2000 polarimeter with a sodium lamp (589 nm), a halogen lamp (578 and 546 nm), in a 10 cm cell, thermostated at 25°C with a Peltier controlled cell holder.

λ (nm)	*Δ*-3 first eluted on Chiralpak IE $[\alpha]_\lambda^{25}$ (CH_2Cl_2, c = 0.036)	*Λ*-3 second eluted on Chiralpak IE $[\alpha]_\lambda^{25}$ (CH_2Cl_2, c =0.035)
589	- 370	+ 370
578	- 385	+ 385
546	- 470	+ 470

Electronic Circular Dichroism

ECD and UV spectra were measured on a JASCO J-815 spectrometer equipped with a JASCO Peltier cell holder PTC-423 to maintain the temperature at 25.0 ± 0.2°C. A CD quartz

cell of 1 mm of optical pathlength was used. The CD spectrometer was purged with nitrogen before recording each spectrum, which was baseline subtracted.
The baseline was always measured for the same solvent and in the same cell as the samples.
The spectra are presented without smoothing and further data processing.

Δ-3, first eluted on Chiralpak IE: green solid line, concentration = 0.190 mmol.L^{-1} in acetonitrile.
Λ-3, second eluted on Chiralpak IE: red dotted line, concentration = 0.190 mmol.L^{-1} in acetonitrile.
Acquisition parameters: 0.1 nm as intervals, scanning speed 50 nm/min, band width 1 nm, and 3 accumulations per sample.

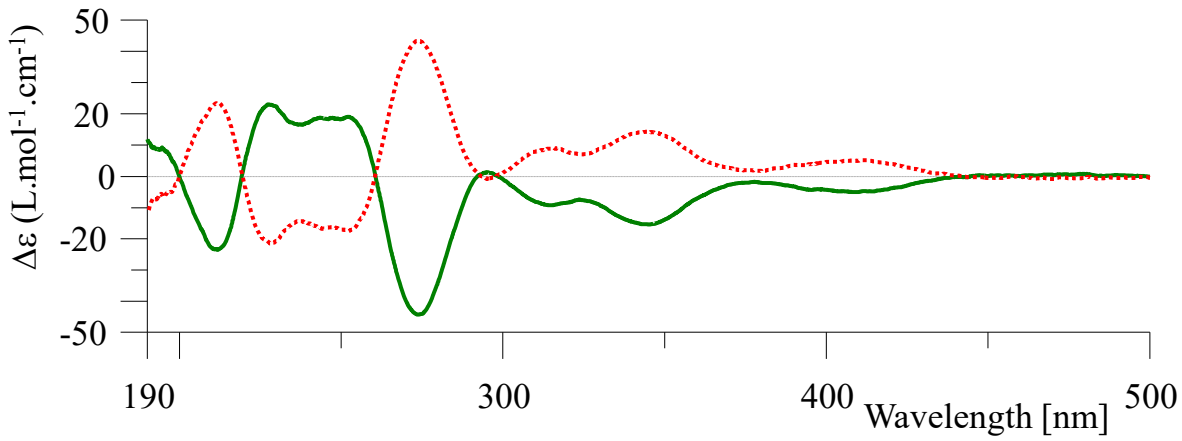


Figure S18. CD spectra of **Λ-3** and **Δ-3** recorded in CH_3CN.

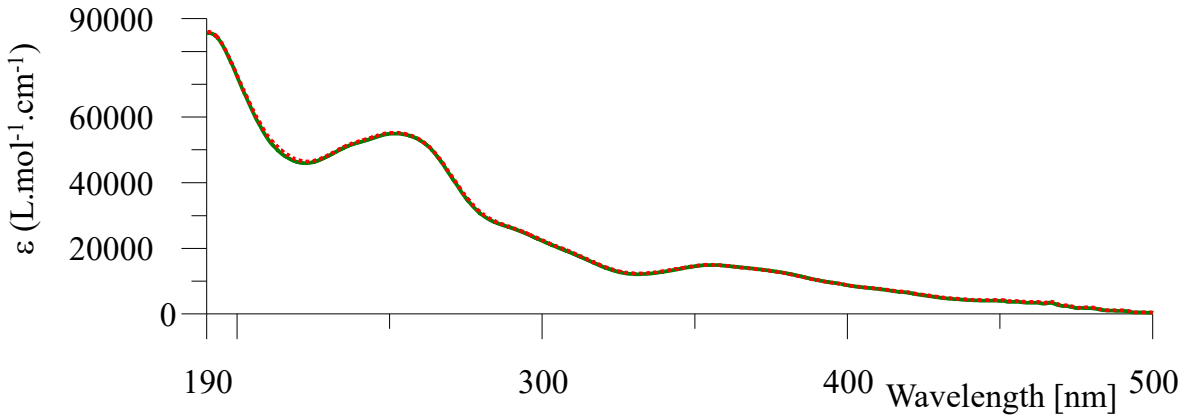


Figure S19. UV-vis of **Λ-3** and **Δ-3** recorded in CH_3CN.

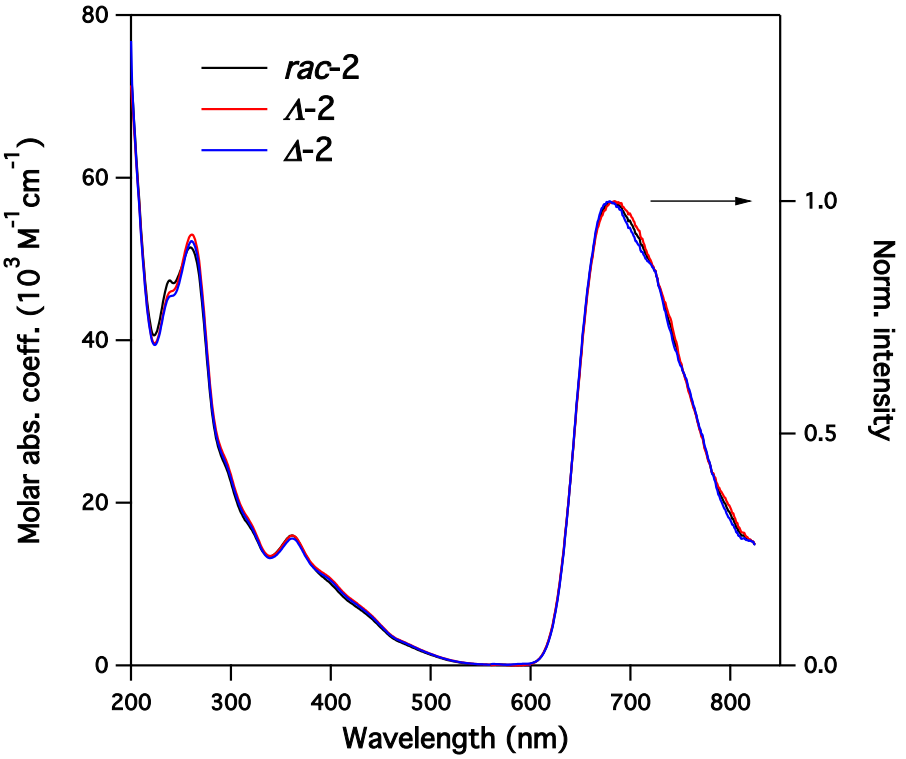


Figure S20. Absorption (left) and normalised emission (right) spectra of the *rac*-**2** and the *Λ*-**2**, *Δ*-**2** enantiomers in CH_3CN solution at room temperature.

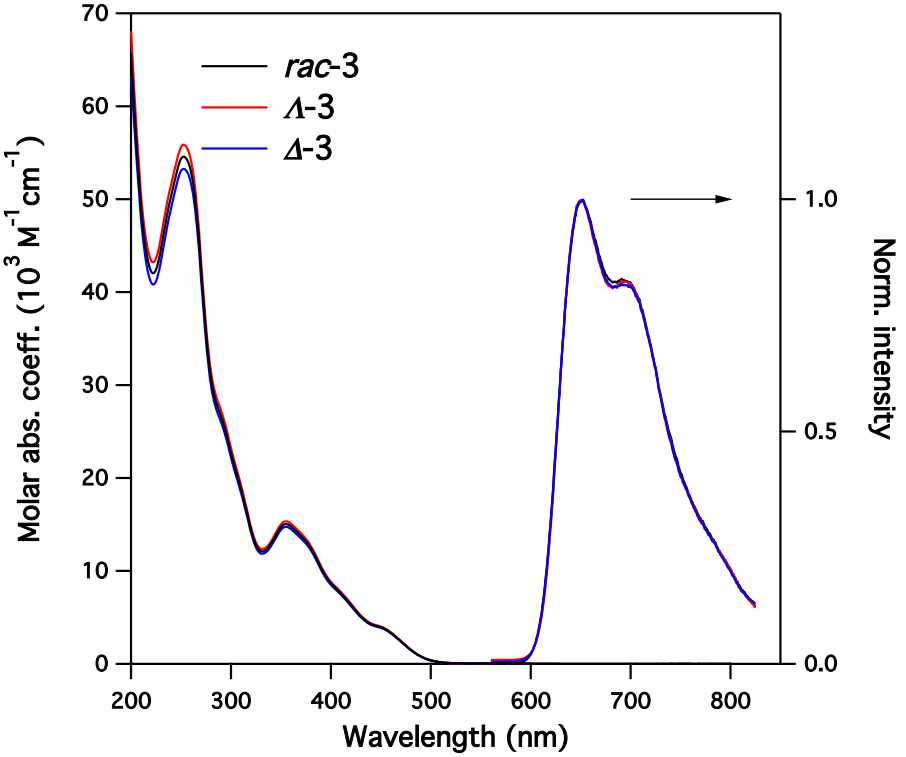


Figure S21. Absorption (left) and normalised emission (right) spectra of the *rac*-**3** and the *Λ*-**3**, *Δ*-**3** enantiomers in CH_3CN solution at room temperature.

Vibrational circular dichroism spectroscopy

IR and VCD spectra of enantiopure complexes Delta and Lambda were recorded on a Jasco FSV-6000 spectrometer in CD_2Cl_2 in a 200 microns cell and at respective concentrations of 0.015 M, and 0.02 M. The half-sum has been used as the baseline.

TD-DFT Calculations

Calculations were carried out using Gaussian 16 Rev B.01 on Linux clusters at SDSU. Orbitals were displayed in GaussView 6.0 to support the assignments of transitions given in the main text.

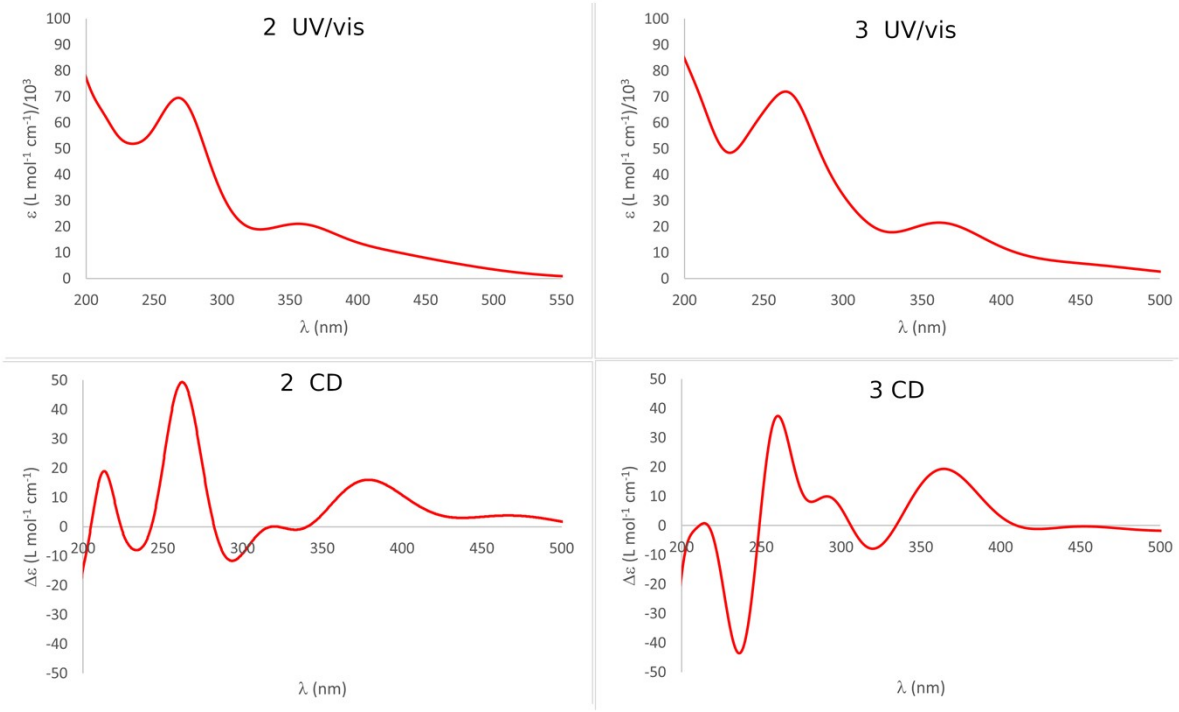


Figure S22. Simulated UV/vis (absorbance) and CD spectra based on TD-B3LYP/cc-pVDZ calculations of *Λ*-**3** and *Λ*-**2** enantiomers in CH_3CN solution.

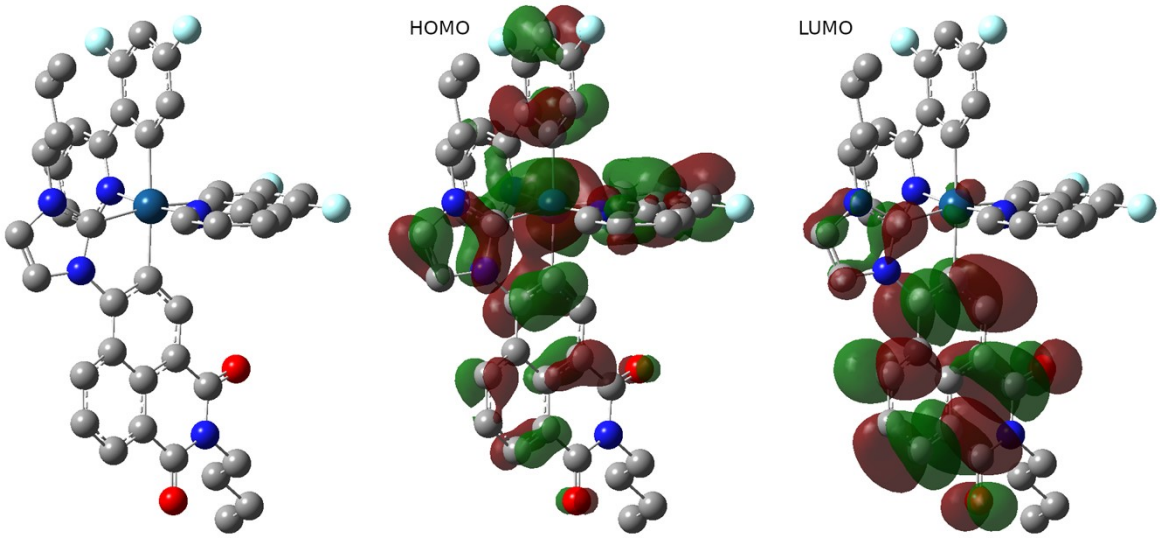


Figure S23. B3LYP/cc-pVDZ HOMO and LUMO surfaces in *Λ*-**3**, illustrating the MLCT nature of the transition.

xyz files for B3LYP/cc-pVDZ optimized geometries:

Compound 2

```
93
compound 2
C                  5.752029    1.704365   -0.321140
C                  4.523755    2.467263    0.012263
C                  3.250381    1.838107   -0.034071
C                  3.158883    0.454060   -0.326017
C                  4.369414   -0.331338   -0.644299
C                  4.643721    3.796404    0.389266
C                  2.059724    2.591728    0.257093
C                  2.241357    3.935708    0.696920
C                  3.495069    4.520345    0.758304
C                  0.808172    1.896566    0.136474
C                  0.707438    0.504675   -0.032961
C                  1.923256   -0.181605   -0.271820
H                  1.904074   -1.259499   -0.439464
H                  5.634293    4.250347    0.420802
H                  3.591059    5.549533    1.108749
N                  5.596475    0.354677   -0.654008
O                  4.340590   -1.534434   -0.897183
O                  6.868726    2.217807   -0.313085
N                 -0.466069    2.543112    0.216206
C                 -0.836060    3.887288    0.147995
C                 -1.590080    1.733268    0.269935
C                 -2.190592    3.920690    0.214888
H                 -0.142433    4.704377    0.016613
H                 -2.871812    4.765298    0.208162
N                 -2.634022    2.604525    0.301244
C                 -0.998079   -1.616165   -2.534194
C                 -1.041727   -1.764387   -3.931780
C                 -1.720022    0.604500   -2.757137
C                 -0.591330   -2.658368   -1.588050
C                 -0.187086   -3.947710   -1.989642
C                  0.202252   -4.886117   -1.036274
C                  0.186338   -4.531457    0.321743
C                 -0.217901   -3.251661    0.716390
C                 -0.620329   -2.272230   -0.217061
H                 -1.978157    1.532176   -2.251272
H                  0.516354   -5.885516   -1.345052
H                 -0.217875   -3.013398    1.783993
Ir                -1.242088   -0.331699    0.114839
C                 -2.392139   -1.026234    2.754245
C                 -0.203706   -0.206671    2.986252
C                 -3.463580   -1.347371    1.805618
C                 -2.469107   -1.196671    4.148047
C                 -0.230692   -0.359962    4.366183
C                 -4.704899   -1.884608    2.204224
C                 -1.391958   -0.865763    4.960489
H                 -3.383266   -1.592854    4.588295
H                  0.644752   -0.085450    4.955068
C                 -4.175492   -1.392288   -0.494620
C                 -5.678960   -2.174144    1.250975
C                 -5.407589   -1.927541   -0.104511
C                 -1.780755    0.507896   -4.140889
C                 -1.433928   -0.706827   -4.742441
C                  6.809122   -0.410716   -0.996578
C                  7.478860   -1.047191    0.224806
H                  7.498964    0.286285   -1.487954
```

H	6.506013	-1.185753	-1.710813
C	8.736823	-1.836990	-0.150641
H	6.755958	-1.715297	0.724437
H	7.740202	-0.253992	0.946688
C	9.420420	-2.480247	1.058107
H	9.449387	-1.165848	-0.664521
H	8.471031	-2.619571	-0.884902
H	10.320891	-3.041016	0.760016
H	9.728315	-1.718296	1.794381
H	8.742725	-3.182904	1.572357
C	-4.056078	2.254969	0.409741
C	-4.828576	2.446476	-0.898107
H	-4.486974	2.887842	1.201564
H	-4.104816	1.211799	0.740483
H	-4.413837	1.770192	-1.665535
H	-4.681900	3.476977	-1.267953
H	-2.092834	1.372609	-4.726762
H	-0.762916	-2.719014	-4.376089
N	-1.345912	-0.419822	-1.958490
N	-1.247023	-0.524974	2.187970
H	0.677160	0.182716	2.479245
H	-1.454487	-0.999713	6.041918
C	-3.163170	-1.077963	0.438415
H	-4.001546	-1.210646	-1.559736
H	-6.640651	-2.591574	1.557161
H	-1.467135	-0.824318	-5.826994
C	-6.326651	2.173479	-0.725212
H	-6.731694	2.847462	0.051604
H	-6.466539	1.145304	-0.346234
C	-7.116983	2.353997	-2.023157
H	-8.189746	2.155698	-1.869277
H	-7.018321	3.381887	-2.411783
H	-6.758360	1.666294	-2.807844
H	1.393574	4.519028	1.044419
H	0.491585	-5.262214	1.076638
H	-4.917201	-2.083467	3.257358
H	-6.166156	-2.155740	-0.859281
H	-0.172859	-4.225898	-3.046064

Compound 3

93

compound 3

C	-6.002745	-1.647300	-0.356266
C	-4.785022	-2.486866	-0.237369
C	-3.506752	-1.883664	-0.091633
C	-3.383525	-0.472297	-0.130002
C	-4.579642	0.385141	-0.267193
C	-4.913946	-3.866517	-0.290755
C	-2.334983	-2.703167	0.059068
C	-2.511027	-4.112527	-0.062952
C	-3.764220	-4.676445	-0.231320
C	-1.088852	-2.018701	0.255130
C	-0.932320	-0.631007	0.104868
C	-2.122690	0.112827	-0.082326
H	-2.068888	1.198504	-0.177038
H	-5.906941	-4.300977	-0.407459
H	-3.857675	-5.759409	-0.329389
N	-5.823663	-0.259811	-0.379602
O	-4.523235	1.613141	-0.287120
O	-7.129984	-2.130170	-0.435283
N	0.128470	-2.685987	0.597356

C	0.372273	-3.949651	1.136886
C	1.297668	-1.946659	0.545003
C	1.706202	-4.016242	1.375826
H	-0.398774	-4.673019	1.358941
H	2.306915	-4.819444	1.789693
N	2.255693	-2.792764	1.005957
C	0.692233	0.981846	-2.724417
C	0.655406	0.909145	-4.129690
C	1.331851	-1.278975	-2.639553
C	0.395082	2.164380	-1.909879
C	-0.000123	3.418368	-2.407410
C	-0.277828	4.504710	-1.589689
C	-0.146057	4.305163	-0.217029
C	0.241165	3.090367	0.334727
C	0.520897	1.989151	-0.495524
H	1.594836	-2.123649	-2.006063
H	-0.583241	5.462341	-2.008812
H	0.318388	3.020520	1.421199
Ir	1.071235	0.085271	0.067127
C	2.439416	1.097612	2.494144
C	0.237876	0.416902	2.971615
C	3.449554	1.203524	1.435298
C	2.605052	1.471971	3.841427
C	0.354461	0.770447	4.309177
C	4.752062	1.707037	1.600634
C	1.565651	1.310299	4.750337
H	3.554591	1.888255	4.162861
H	-0.490905	0.622063	4.981237
C	3.981595	0.804918	-0.905568
C	5.675749	1.771824	0.566843
C	5.254868	1.311658	-0.679925
C	1.311765	-1.399555	-4.022664
C	0.964581	-0.279139	-4.781896
C	-7.025378	0.583877	-0.514326
C	-7.647675	0.953915	0.835204
H	-7.744022	0.022097	-1.123400
H	-6.720966	1.488656	-1.054020
C	-8.894068	1.830713	0.677338
H	-6.895733	1.483799	1.445619
H	-7.910711	0.028567	1.376696
C	-9.530301	2.209878	2.016593
H	-9.636210	1.300936	0.052235
H	-8.626814	2.748481	0.121930
H	-10.423176	2.839616	1.873960
H	-9.839237	1.312645	2.579613
H	-8.822054	2.770801	2.649996
C	3.695183	-2.518900	1.081834
C	4.465953	-3.049926	-0.129727
H	4.065551	-2.985658	2.007368
H	3.819338	-1.434594	1.174502
H	4.092632	-2.547696	-1.039427
H	4.260018	-4.128329	-0.251894
H	1.563506	-2.354853	-4.483370
H	0.384136	1.792677	-4.698964
N	1.035050	-0.130256	-1.993625
9	-0.411788	5.350126	0.605377
9	-0.134539	3.624824	-3.746433
N	1.240069	0.570635	2.078552
H	-0.683845	-0.004962	2.574977
H	1.700821	1.602479	5.793251
C	3.045805	0.733934	0.143931

H	3.733608	0.464842	-1.913141
H	6.677206	2.167475	0.729759
9	6.139583	1.363372	-1.706961
9	5.175472	2.162026	2.812379
H	0.934969	-0.329107	-5.871758
C	5.975786	-2.825237	0.003924
H	6.338592	-3.327360	0.919295
H	6.172045	-1.747145	0.145608
C	6.761763	-3.334627	-1.206300
H	7.843132	-3.165151	-1.081182
H	6.606929	-4.416566	-1.356822
H	6.446849	-2.821753	-2.130952
H	-1.648591	-4.773828	-0.072711

TD-DFT wavelengths, oscillator strengths, and transition populations (300 states) Compound 2

```
 Excitation energies and oscillator strengths:

 Excited State   1:      Singlet-A      2.3758 eV  521.86 nm  f=0.0038  <S**2>=0.000
     189 ->190         0.70162
 This state for optimization and/or second-order correction.
 Total Energy, E(TD-HF/TD-DFT) =  -2267.88071616
 Copying the excited state density for this state as the 1-particle RhoCI density.

 Excited State   2:      Singlet-A      2.6311 eV  471.22 nm  f=0.0655  <S**2>=0.000
     188 ->190         0.69343

 Excited State   3:      Singlet-A      2.9432 eV  421.26 nm  f=0.0726  <S**2>=0.000
     186 ->190        -0.36365
     187 ->190         0.57498
     189 ->191         0.13215

 Excited State   4:      Singlet-A      2.9720 eV  417.18 nm  f=0.0442  <S**2>=0.000
     187 ->190        -0.14084
     189 ->191         0.68109

 Excited State   5:      Singlet-A      2.9894 eV  414.75 nm  f=0.0154  <S**2>=0.000
     184 ->190         0.15177
     185 ->190        -0.10894
     186 ->190         0.55615
     187 ->190         0.36465

 Excited State   6:      Singlet-A      3.0500 eV  406.51 nm  f=0.0025  <S**2>=0.000
     189 ->192         0.69057

 Excited State   7:      Singlet-A      3.2744 eV  378.64 nm  f=0.0510  <S**2>=0.000
     188 ->191         0.68007

 Excited State   8:      Singlet-A      3.2951 eV  376.27 nm  f=0.0809  <S**2>=0.000
     184 ->190        -0.10456
     185 ->190         0.66564
     186 ->190         0.16569

 Excited State   9:      Singlet-A      3.3810 eV  366.71 nm  f=0.0110  <S**2>=0.000
     184 ->190        -0.11864
     187 ->191        -0.15164
     188 ->192         0.64613

 Excited State  10:      Singlet-A      3.4406 eV  360.35 nm  f=0.1409  <S**2>=0.000
     182 ->190        -0.14227
     183 ->190         0.19870
     184 ->190         0.59862
     185 ->190         0.13734
     186 ->190        -0.13335
     188 ->192         0.11130

 Excited State  11:      Singlet-A      3.4756 eV  356.73 nm  f=0.0202  <S**2>=0.000
     189 ->193         0.69302

 Excited State  12:      Singlet-A      3.5831 eV  346.02 nm  f=0.0117  <S**2>=0.000
     183 ->190        -0.19255
     187 ->191         0.54365
     187 ->192         0.13720
     188 ->192         0.10832
```

```
    189 ->194        -0.32814

Excited State  13:      Singlet-A      3.6023 eV  344.18 nm  f=0.0273  <S**2>=0.000
    183 ->190         0.62430
    184 ->190        -0.17691
    187 ->191         0.11333
    189 ->194        -0.19652

Excited State  14:      Singlet-A      3.6269 eV  341.85 nm  f=0.0253  <S**2>=0.000
    187 ->191         0.11215
    187 ->192         0.53598
    189 ->194         0.40544

Excited State  15:      Singlet-A      3.6458 eV  340.07 nm  f=0.0213  <S**2>=0.000
    186 ->191        -0.22704
    187 ->191        -0.33512
    187 ->192         0.39099
    189 ->194        -0.37061

Excited State  16:      Singlet-A      3.6766 eV  337.23 nm  f=0.0129  <S**2>=0.000
    184 ->191         0.11042
    186 ->191         0.55233
    186 ->192        -0.26905
    187 ->191        -0.12938
    189 ->194        -0.19987

Excited State  17:      Singlet-A      3.7164 eV  333.62 nm  f=0.0050  <S**2>=0.000
    182 ->190         0.36697
    184 ->190         0.12478
    186 ->191        -0.10869
    186 ->192        -0.32922
    188 ->193         0.45061

Excited State  18:      Singlet-A      3.7333 eV  332.11 nm  f=0.0076  <S**2>=0.000
    179 ->190        -0.10432
    182 ->190         0.53327
    184 ->190         0.15200
    186 ->191         0.11099
    186 ->192         0.14150
    188 ->193        -0.35148

Excited State  19:      Singlet-A      3.7713 eV  328.76 nm  f=0.0901  <S**2>=0.000
    186 ->191         0.24746
    186 ->192         0.49668
    188 ->193         0.37973

Excited State  20:      Singlet-A      3.8308 eV  323.65 nm  f=0.0014  <S**2>=0.000
    179 ->190         0.63110
    180 ->190         0.13901
    181 ->190        -0.21016
    182 ->190         0.10128

Excited State  21:      Singlet-A      3.8830 eV  319.30 nm  f=0.0113  <S**2>=0.000
    185 ->191        -0.15084
    188 ->194         0.66062

Excited State  22:      Singlet-A      3.9368 eV  314.94 nm  f=0.0078  <S**2>=0.000
    179 ->190         0.19940
    180 ->190        -0.14308
    181 ->190         0.48247
    188 ->196         0.14166
    189 ->195        -0.33769

Excited State  23:      Singlet-A      3.9576 eV  313.28 nm  f=0.0068  <S**2>=0.000
    179 ->190         0.10912
    180 ->190        -0.13725
    181 ->190         0.30439
    189 ->195         0.57121

Excited State  24:      Singlet-A      3.9855 eV  311.09 nm  f=0.0331  <S**2>=0.000
    184 ->191        -0.11438
    185 ->191         0.59465
    187 ->193        -0.23477
    188 ->194         0.15556

Excited State  25:      Singlet-A      4.0441 eV  306.58 nm  f=0.0184  <S**2>=0.000
    183 ->192         0.12153
    184 ->191         0.15698
    185 ->191         0.21028
    185 ->192         0.30201
```

```
    187 ->193         0.53089

Excited State  26:      Singlet-A      4.0548 eV  305.77 nm  f=0.0014  <S**2>=0.000
    180 ->190         0.60417
    181 ->190         0.28488
    188 ->196        -0.12432

Excited State  27:      Singlet-A      4.0703 eV  304.60 nm  f=0.0437  <S**2>=0.000
    185 ->191        -0.10835
    185 ->192         0.55279
    186 ->193         0.12396
    187 ->193        -0.29525
    187 ->194        -0.16360

Excited State  28:      Singlet-A      4.1150 eV  301.30 nm  f=0.0241  <S**2>=0.000
    178 ->190        -0.12121
    184 ->191        -0.14586
    188 ->195         0.60379
    188 ->196         0.10393
    189 ->195         0.13292
    189 ->196        -0.13042

Excited State  29:      Singlet-A      4.1388 eV  299.56 nm  f=0.0596  <S**2>=0.000
    182 ->191        -0.12908
    184 ->191         0.51759
    184 ->192        -0.11811
    185 ->191         0.13245
    185 ->192        -0.16190
    186 ->191        -0.10519
    186 ->193         0.12185
    187 ->193        -0.11933
    187 ->194        -0.27961

Excited State  30:      Singlet-A      4.1520 eV  298.61 nm  f=0.0173  <S**2>=0.000
    178 ->190         0.10248
    184 ->191        -0.14194
    186 ->193         0.39130
    187 ->194        -0.12321
    189 ->196         0.47484

Excited State  31:      Singlet-A      4.1636 eV  297.78 nm  f=0.0272  <S**2>=0.000
    185 ->192        -0.10883
    186 ->193         0.52329
    187 ->194         0.13066
    188 ->195        -0.12359
    189 ->196        -0.36544

Excited State  32:      Singlet-A      4.1798 eV  296.63 nm  f=0.0202  <S**2>=0.000
    183 ->191         0.28168
    184 ->191         0.21217
    184 ->192         0.11235
    186 ->193         0.11096
    187 ->194         0.46451
    188 ->195         0.17217
    189 ->196         0.18199

Excited State  33:      Singlet-A      4.2245 eV  293.49 nm  f=0.0121  <S**2>=0.000
    174 ->190        -0.29455
    177 ->190         0.25762
    178 ->190         0.36080
    184 ->192        -0.16693
    188 ->196        -0.29931
    189 ->196        -0.18117

Excited State  34:      Singlet-A      4.2426 eV  292.23 nm  f=0.0155  <S**2>=0.000
    174 ->190        -0.10358
    178 ->190         0.13164
    182 ->192        -0.10861
    183 ->191        -0.16732
    184 ->191         0.13056
    184 ->192         0.57919
    186 ->192        -0.11197

Excited State  35:      Singlet-A      4.2998 eV  288.35 nm  f=0.0181  <S**2>=0.000
    183 ->191         0.21541
    186 ->194         0.63973

Excited State  36:      Singlet-A      4.3241 eV  286.73 nm  f=0.0854  <S**2>=0.000
    174 ->190        -0.19268
    177 ->190        -0.11417
```

```
    182 ->191         0.19352
    183 ->191         0.32732
    183 ->192         0.24066
    185 ->193         0.30416
    185 ->194         0.14259
    186 ->194        -0.17908
    187 ->194        -0.18932

Excited State  37:      Singlet-A      4.3370 eV  285.88 nm  f=0.0431  <S**2>=0.000
    174 ->190         0.42347
    176 ->190        -0.17305
    177 ->190         0.24187
    180 ->190        -0.10931
    183 ->191         0.16781
    183 ->192         0.10227
    185 ->193         0.13441
    187 ->194        -0.10260
    188 ->196        -0.30918

Excited State  38:      Singlet-A      4.3763 eV  283.31 nm  f=0.1123  <S**2>=0.000
    182 ->192         0.14044
    183 ->191        -0.32276
    183 ->192         0.47341
    184 ->192        -0.13845
    184 ->193        -0.12681
    185 ->193         0.15840
    186 ->194         0.14504
    187 ->194         0.16163

Excited State  39:      Singlet-A      4.3823 eV  282.92 nm  f=0.0442  <S**2>=0.000
    182 ->191         0.56495
    183 ->191        -0.15785
    183 ->192        -0.22257
    184 ->191         0.16273
    187 ->194         0.11238

Excited State  40:      Singlet-A      4.3970 eV  281.98 nm  f=0.0025  <S**2>=0.000
    174 ->190         0.25503
    175 ->190        -0.11613
    177 ->190        -0.39391
    178 ->190         0.45916
    187 ->195         0.14069

Excited State  41:      Singlet-A      4.4343 eV  279.60 nm  f=0.0096  <S**2>=0.000
    182 ->191        -0.14565
    182 ->192         0.52627
    183 ->191        -0.10496
    183 ->192        -0.19115
    184 ->193         0.11602
    185 ->193         0.26423

Excited State  42:      Singlet-A      4.4939 eV  275.89 nm  f=0.1933  <S**2>=0.000
    177 ->190        -0.19532
    178 ->190        -0.12467
    182 ->192        -0.28023
    183 ->192        -0.15026
    185 ->193         0.38209
    185 ->194        -0.12052
    188 ->196        -0.25217

Excited State  43:      Singlet-A      4.5215 eV  274.21 nm  f=0.0319  <S**2>=0.000
    174 ->190        -0.10134
    178 ->190        -0.18357
    182 ->192         0.13612
    185 ->193        -0.19560
    186 ->195        -0.19874
    187 ->195         0.52453
    188 ->196        -0.14580

Excited State  44:      Singlet-A      4.5403 eV  273.08 nm  f=0.2605  <S**2>=0.000
    177 ->190         0.27969
    185 ->193         0.21934
    185 ->194        -0.22596
    185 ->196         0.13654
    186 ->195        -0.11090
    187 ->195         0.29256
    188 ->196         0.31704
    189 ->197        -0.11023

Excited State  45:      Singlet-A      4.5585 eV  271.99 nm  f=0.0168  <S**2>=0.000
```

```
    175 ->190        -0.12996
    176 ->190        -0.20012
    184 ->193        -0.13245
    185 ->195        -0.15020
    186 ->195         0.37249
    187 ->195         0.23427
    189 ->197         0.36574

Excited State  46:      Singlet-A      4.5840 eV  270.47 nm  f=0.0027  <S**2>=0.000
    180 ->191         0.30620
    180 ->192         0.16851
    181 ->191         0.44499
    181 ->192         0.21423
    184 ->193        -0.20706
    185 ->194         0.11285

Excited State  47:      Singlet-A      4.6083 eV  269.05 nm  f=0.0723  <S**2>=0.000
    174 ->190         0.10137
    176 ->190         0.29461
    184 ->193         0.26160
    185 ->194         0.35969
    185 ->195        -0.10323
    186 ->195         0.27042
    187 ->195         0.11234
    189 ->197        -0.15373

Excited State  48:      Singlet-A      4.6136 eV  268.74 nm  f=0.0855  <S**2>=0.000
    176 ->190        -0.23956
    182 ->192        -0.11136
    185 ->194         0.42060
    186 ->195        -0.32078
    189 ->197         0.17669

Excited State  49:      Singlet-A      4.6208 eV  268.32 nm  f=0.0224  <S**2>=0.000
    176 ->190        -0.20169
    180 ->192         0.12655
    181 ->191         0.11414
    181 ->192         0.23295
    182 ->191         0.10213
    183 ->192         0.10188
    184 ->193         0.48271
    185 ->194        -0.14386
    187 ->196         0.10266
    189 ->197         0.10534

Excited State  50:      Singlet-A      4.6353 eV  267.48 nm  f=0.0066  <S**2>=0.000
    174 ->190         0.14655
    176 ->190         0.42337
    185 ->194        -0.11666
    186 ->195        -0.17990
    189 ->197         0.39489
    189 ->208         0.13390

Excited State  51:      Singlet-A      4.6907 eV  264.32 nm  f=0.0514  <S**2>=0.000
    175 ->190        -0.13546
    176 ->190        -0.13573
    185 ->194        -0.12006
    185 ->195        -0.13596
    186 ->196         0.10051
    187 ->196        -0.27844
    188 ->197        -0.16844
    188 ->208        -0.13374
    189 ->197        -0.18670
    189 ->198         0.31411
    189 ->208         0.23857

Excited State  52:      Singlet-A      4.6981 eV  263.90 nm  f=0.0294  <S**2>=0.000
    175 ->190         0.42153
    183 ->195         0.10285
    184 ->195         0.12310
    185 ->195         0.25101
    185 ->196         0.10855
    186 ->195         0.19251
    187 ->196        -0.24218
    188 ->197         0.22225
    189 ->198         0.12824

Excited State  53:      Singlet-A      4.7171 eV  262.84 nm  f=0.0121  <S**2>=0.000
    180 ->192         0.20252
    181 ->191        -0.27385
```

```
    181 ->192         0.32221
    183 ->193        -0.31745
    184 ->193        -0.12445
    184 ->194        -0.31217
    187 ->196        -0.12830

Excited State  54:      Singlet-A      4.7346 eV  261.87 nm  f=0.0369  <S**2>=0.000
    184 ->194        -0.13400
    186 ->196        -0.25910
    187 ->196         0.44920
    188 ->198        -0.10434
    188 ->208        -0.12398
    189 ->198         0.23258
    189 ->200         0.11339
    189 ->208         0.17714

Excited State  55:      Singlet-A      4.7638 eV  260.27 nm  f=0.0015  <S**2>=0.000
    181 ->192         0.14202
    183 ->193         0.57636
    184 ->193        -0.13889
    184 ->194        -0.29003

Excited State  56:      Singlet-A      4.7693 eV  259.96 nm  f=0.0438  <S**2>=0.000
    180 ->191        -0.14488
    180 ->192         0.17127
    181 ->191        -0.16147
    181 ->192         0.29764
    183 ->193         0.10514
    184 ->194         0.39879
    186 ->196        -0.25953

Excited State  57:      Singlet-A      4.7870 eV  259.00 nm  f=0.1899  <S**2>=0.000
    175 ->190         0.10924
    181 ->192         0.10976
    182 ->193         0.11577
    184 ->194         0.19032
    184 ->196         0.13842
    186 ->196         0.47121
    187 ->196         0.24138

Excited State  58:      Singlet-A      4.8303 eV  256.68 nm  f=0.0293  <S**2>=0.000
    175 ->190        -0.14581
    182 ->193        -0.16583
    185 ->195        -0.14733
    186 ->196         0.15626
    187 ->196         0.11896
    188 ->197         0.46180
    188 ->208         0.14739
    189 ->198         0.24407

Excited State  59:      Singlet-A      4.8411 eV  256.11 nm  f=0.0067  <S**2>=0.000
    180 ->192        -0.13507
    181 ->191         0.10968
    182 ->193         0.51942
    183 ->194         0.20052
    188 ->197         0.16583
    189 ->200         0.18462
    189 ->202         0.13556

Excited State  60:      Singlet-A      4.8667 eV  254.76 nm  f=0.0603  <S**2>=0.000
    175 ->190         0.18935
    180 ->191        -0.13290
    185 ->195        -0.11145
    188 ->197        -0.15879
    188 ->198         0.15483
    188 ->208         0.14063
    189 ->198         0.18579
    189 ->200         0.30202
    189 ->201        -0.28568
    189 ->203        -0.21769

Excited State  61:      Singlet-A      4.8821 eV  253.96 nm  f=0.0448  <S**2>=0.000
    175 ->190         0.18255
    180 ->191         0.28979
    180 ->192         0.10145
    181 ->191        -0.18115
    181 ->192        -0.10387
    182 ->193         0.32114
    183 ->194        -0.22146
    185 ->195        -0.15835
```

```
    189 ->198         0.12987
    189 ->200        -0.20695

Excited State  62:      Singlet-A      4.8899 eV  253.55 nm  f=0.0257  <S**2>=0.000
    180 ->191        -0.11705
    183 ->194         0.17131
    185 ->195         0.25621
    188 ->197        -0.14738
    188 ->198         0.30157
    188 ->202         0.11731
    188 ->208         0.23810
    189 ->198         0.15738
    189 ->200        -0.16615
    189 ->201         0.16646
    189 ->203         0.11432

Excited State  63:      Singlet-A      4.8928 eV  253.40 nm  f=0.0801  <S**2>=0.000
    175 ->190        -0.24109
    180 ->191         0.28274
    181 ->191        -0.22334
    185 ->195         0.39833
    189 ->200         0.23932

Excited State  64:      Singlet-A      4.8981 eV  253.13 nm  f=0.0302  <S**2>=0.000
    175 ->190         0.18638
    180 ->191         0.29237
    181 ->191        -0.17416
    182 ->193        -0.20486
    183 ->194         0.33003
    185 ->195        -0.18771
    188 ->198         0.12901
    189 ->198        -0.10753
    189 ->200         0.13213
    189 ->201         0.18161

Excited State  65:      Singlet-A      4.9136 eV  252.33 nm  f=0.0471  <S**2>=0.000
    180 ->191         0.11281
    183 ->194         0.43045
    188 ->198        -0.17008
    189 ->198         0.11521
    189 ->199        -0.11201
    189 ->200        -0.23635
    189 ->201        -0.33251
    189 ->203        -0.11338

Excited State  66:      Singlet-A      4.9406 eV  250.95 nm  f=0.0093  <S**2>=0.000
    180 ->192        -0.10759
    183 ->194        -0.15974
    188 ->198         0.19423
    189 ->199         0.24709
    189 ->200        -0.25878
    189 ->201        -0.20578
    189 ->202         0.43199
    189 ->208         0.14969

Excited State  67:      Singlet-A      4.9426 eV  250.85 nm  f=0.0024  <S**2>=0.000
    180 ->192         0.10634
    188 ->198        -0.11199
    189 ->197         0.12828
    189 ->198         0.11189
    189 ->199         0.58369
    189 ->200        -0.11856
    189 ->202        -0.15702
    189 ->208        -0.11466

Excited State  68:      Singlet-A      4.9839 eV  248.77 nm  f=0.0050  <S**2>=0.000
    180 ->191        -0.10207
    180 ->192         0.42977
    181 ->192        -0.29246
    182 ->194        -0.32468
    184 ->195         0.10001
    189 ->202         0.17121

Excited State  69:      Singlet-A      4.9982 eV  248.06 nm  f=0.0086  <S**2>=0.000
    180 ->192         0.25301
    181 ->192        -0.15512
    182 ->194         0.56684
    189 ->202         0.10278

Excited State  70:      Singlet-A      5.0012 eV  247.91 nm  f=0.0113  <S**2>=0.000
```

```
    175 ->190        -0.11446
    182 ->195        -0.14792
    183 ->195         0.22836
    184 ->195         0.57785
    186 ->195        -0.13566

Excited State  71:      Singlet-A      5.0426 eV  245.87 nm  f=0.0096  <S**2>=0.000
    188 ->197         0.10014
    188 ->198         0.31436
    188 ->202        -0.20635
    188 ->208        -0.12802
    189 ->201        -0.24406
    189 ->202        -0.25595
    189 ->203         0.29458
    189 ->204         0.12861

Excited State  72:      Singlet-A      5.0555 eV  245.25 nm  f=0.0205  <S**2>=0.000
    187 ->198        -0.17543
    187 ->208        -0.21615
    188 ->198        -0.17176
    188 ->202         0.15789
    189 ->200         0.10189
    189 ->201        -0.20728
    189 ->203         0.44393

Excited State  73:      Singlet-A      5.0726 eV  244.42 nm  f=0.0167  <S**2>=0.000
    187 ->197         0.22070
    187 ->198         0.29893
    187 ->208         0.37449
    188 ->198        -0.17809
    188 ->200         0.17047
    188 ->202         0.15433
    189 ->203         0.16320

Excited State  74:      Singlet-A      5.0856 eV  243.80 nm  f=0.1812  <S**2>=0.000
    177 ->190        -0.10859
    185 ->196         0.56212
    186 ->196         0.14705
    188 ->197        -0.10402
    188 ->199        -0.17450
    189 ->198        -0.10181
    189 ->202        -0.10169
    189 ->208         0.10047

Excited State  75:      Singlet-A      5.0971 eV  243.24 nm  f=0.0219  <S**2>=0.000
    181 ->193        -0.13761
    188 ->199         0.15061
    188 ->200         0.39874
    188 ->201        -0.17716
    188 ->202         0.16741
    188 ->203        -0.12076
    189 ->198        -0.17934
    189 ->203        -0.16411
    189 ->204         0.15398
    189 ->208         0.23250

Excited State  76:      Singlet-A      5.1051 eV  242.86 nm  f=0.0023  <S**2>=0.000
    181 ->193         0.18658
    185 ->196        -0.10618
    188 ->201         0.34685
    188 ->203         0.22627
    189 ->198        -0.19376
    189 ->202        -0.15554
    189 ->203        -0.13008
    189 ->204         0.19624
    189 ->208         0.26855

Excited State  77:      Singlet-A      5.1290 eV  241.73 nm  f=0.0096  <S**2>=0.000
    180 ->193         0.27743
    181 ->193         0.54856
    188 ->201        -0.13898
    188 ->203        -0.11512

Excited State  78:      Singlet-A      5.1547 eV  240.53 nm  f=0.0033  <S**2>=0.000
    172 ->190         0.24332
    173 ->190         0.64505

Excited State  79:      Singlet-A      5.1689 eV  239.86 nm  f=0.0073  <S**2>=0.000
    176 ->191         0.42888
    177 ->191         0.23072
```

```
    179 ->191        -0.25799
    183 ->195         0.10101
    184 ->196         0.12958
    188 ->199        -0.22929

Excited State  80:      Singlet-A      5.1740 eV  239.63 nm  f=0.0094  <S**2>=0.000
    176 ->191        -0.16929
    177 ->191         0.28263
    178 ->191        -0.25077
    179 ->191         0.29799
    179 ->192         0.11232
    180 ->191         0.11637
    184 ->196         0.12838
    188 ->199        -0.28688
    188 ->201        -0.14125

Excited State  81:      Singlet-A      5.1840 eV  239.17 nm  f=0.0191  <S**2>=0.000
    173 ->190         0.10845
    177 ->191         0.25880
    178 ->191        -0.17371
    183 ->195         0.38260
    184 ->195        -0.16127
    187 ->197         0.20591
    188 ->199         0.25561
    188 ->201         0.11316

Excited State  82:      Singlet-A      5.1883 eV  238.97 nm  f=0.0128  <S**2>=0.000
    176 ->191        -0.14292
    177 ->191        -0.23269
    178 ->191         0.13223
    183 ->195         0.45536
    184 ->195        -0.19465
    184 ->196         0.15865
    187 ->197        -0.10181
    188 ->199        -0.22366

Excited State  83:      Singlet-A      5.2132 eV  237.83 nm  f=0.0392  <S**2>=0.000
    179 ->191         0.13595
    184 ->196         0.14077
    187 ->197        -0.24197
    188 ->198        -0.10442
    188 ->199         0.33957
    188 ->200        -0.25682
    188 ->201        -0.23798
    188 ->204         0.15080
    188 ->208         0.15426
    189 ->208         0.10051

Excited State  84:      Singlet-A      5.2188 eV  237.57 nm  f=0.0010  <S**2>=0.000
    172 ->190         0.64294
    173 ->190        -0.23803

Excited State  85:      Singlet-A      5.2273 eV  237.19 nm  f=0.0080  <S**2>=0.000
    176 ->192         0.16569
    184 ->196        -0.13346
    186 ->197        -0.18409
    188 ->198        -0.14278
    188 ->200        -0.12666
    188 ->201        -0.13161
    188 ->203        -0.22234
    188 ->208         0.22998
    189 ->204         0.37163

Excited State  86:      Singlet-A      5.2311 eV  237.01 nm  f=0.0057  <S**2>=0.000
    176 ->191         0.24286
    176 ->192        -0.14058
    177 ->191        -0.13384
    177 ->192        -0.21658
    179 ->191         0.38996
    179 ->192         0.22180
    184 ->196        -0.17913

Excited State  87:      Singlet-A      5.2548 eV  235.95 nm  f=0.0162  <S**2>=0.000
    176 ->191         0.25707
    176 ->192         0.22107
    177 ->192         0.44981
    178 ->192        -0.26963
    179 ->191         0.16405
    179 ->192         0.10030
    180 ->192         0.10008
```

```
Excited State  88:      Singlet-A      5.2604 eV  235.69 nm  f=0.0762  <S**2>=0.000
    183 ->195        -0.13750
    184 ->196         0.39595
    185 ->196         0.13780
    186 ->196        -0.10531
    186 ->197         0.11654
    187 ->197         0.11079
    188 ->201         0.12863
    188 ->203        -0.10664
    189 ->204         0.31967
    189 ->208        -0.15586

Excited State  89:      Singlet-A      5.2640 eV  235.53 nm  f=0.0075  <S**2>=0.000
    176 ->192         0.40901
    177 ->192        -0.16881
    178 ->192         0.20332
    179 ->191         0.20308
    179 ->192        -0.20898
    186 ->197         0.14696
    188 ->200         0.10867
    189 ->205         0.15531

Excited State  90:      Singlet-A      5.2778 eV  234.92 nm  f=0.0147  <S**2>=0.000
    180 ->194         0.21435
    181 ->193        -0.10351
    181 ->194         0.49882
    184 ->196         0.11475
    187 ->197         0.18088
    188 ->200        -0.13966
    188 ->202         0.16359
    189 ->204        -0.10553

Excited State  91:      Singlet-A      5.2806 eV  234.79 nm  f=0.0309  <S**2>=0.000
    177 ->191        -0.10053
    180 ->194        -0.16855
    181 ->193         0.11506
    181 ->194        -0.27420
    187 ->197         0.22635
    187 ->198        -0.11064
    188 ->200        -0.25308
    188 ->202         0.34923
    188 ->203        -0.14594
    189 ->204        -0.12097
    189 ->208         0.10722

Excited State  92:      Singlet-A      5.2937 eV  234.21 nm  f=0.0275  <S**2>=0.000
    184 ->196         0.16194
    186 ->197        -0.38294
    188 ->201        -0.17426
    188 ->203         0.40037
    189 ->205        -0.10864

Excited State  93:      Singlet-A      5.2965 eV  234.09 nm  f=0.0284  <S**2>=0.000
    184 ->196        -0.16605
    186 ->197         0.26868
    188 ->200        -0.11323
    188 ->201        -0.22202
    188 ->202         0.21941
    188 ->203         0.28844
    188 ->208        -0.11851
    189 ->204         0.28305
    189 ->208        -0.19966

Excited State  94:      Singlet-A      5.3185 eV  233.12 nm  f=0.0647  <S**2>=0.000
    186 ->197         0.26752
    187 ->197         0.27611
    188 ->200         0.10598
    188 ->202        -0.24778
    188 ->203         0.13097
    188 ->208         0.16908
    189 ->205        -0.26641
    189 ->208         0.10906

Excited State  95:      Singlet-A      5.3280 eV  232.70 nm  f=0.0021  <S**2>=0.000
    180 ->193         0.11942
    182 ->195         0.62398
    184 ->195         0.16761

Excited State  96:      Singlet-A      5.3382 eV  232.26 nm  f=0.0229  <S**2>=0.000
```

```
    179 ->192        -0.12554
    180 ->193         0.52854
    181 ->193        -0.26838
    181 ->194        -0.15599
    182 ->195        -0.16231

Excited State  97:      Singlet-A      5.3436 eV  232.03 nm  f=0.0011  <S**2>=0.000
    176 ->192         0.16251
    177 ->192        -0.11759
    179 ->191        -0.21363
    179 ->192         0.53931
    186 ->200         0.11082
    189 ->205         0.18028

Excited State  98:      Singlet-A      5.3603 eV  231.30 nm  f=0.0303  <S**2>=0.000
    176 ->192        -0.18017
    179 ->192        -0.12634
    180 ->193        -0.16561
    186 ->198        -0.15644
    186 ->199         0.10171
    186 ->200         0.27994
    186 ->202         0.22533
    187 ->200        -0.22272
    187 ->202        -0.20893
    189 ->205         0.22448

Excited State  99:      Singlet-A      5.3703 eV  230.87 nm  f=0.0029  <S**2>=0.000
    177 ->191         0.32130
    178 ->191         0.48402
    178 ->192         0.14450
    187 ->198        -0.12401
    187 ->202         0.15763
    189 ->205         0.12259

Excited State 100:      Singlet-A      5.3810 eV  230.41 nm  f=0.0119  <S**2>=0.000
    176 ->191         0.21118
    177 ->191        -0.19451
    177 ->192        -0.10058
    178 ->191        -0.21593
    183 ->196        -0.10928
    187 ->198        -0.22504
    187 ->200         0.15217
    187 ->201         0.17047
    187 ->202         0.26468
    187 ->203         0.12730
    189 ->205         0.20714
    189 ->207         0.13330

Excited State 101:      Singlet-A      5.4045 eV  229.41 nm  f=0.0054  <S**2>=0.000
    176 ->192         0.19339
    183 ->196         0.28491
    187 ->198        -0.15736
    187 ->199        -0.14891
    187 ->200        -0.30159
    187 ->201         0.30340
    187 ->203         0.24902

Excited State 102:      Singlet-A      5.4118 eV  229.10 nm  f=0.0281  <S**2>=0.000
    183 ->196         0.55283
    184 ->196        -0.12877
    186 ->198        -0.12517
    187 ->200         0.18312
    187 ->201        -0.13404
    187 ->203        -0.11113
    189 ->206        -0.11658

Excited State 103:      Singlet-A      5.4209 eV  228.72 nm  f=0.0136  <S**2>=0.000
    176 ->192        -0.14190
    183 ->196         0.16769
    186 ->198         0.27618
    186 ->201        -0.13537
    186 ->202        -0.16120
    187 ->197         0.15586
    189 ->205         0.25999
    189 ->206         0.25919
    189 ->207        -0.20966

Excited State 104:      Singlet-A      5.4616 eV  227.01 nm  f=0.0503  <S**2>=0.000
    186 ->200         0.21305
    187 ->200         0.13392
```

```
    188 ->204         0.38934
    189 ->205        -0.11901
    189 ->206         0.28831
    189 ->207        -0.19303

Excited State 105:      Singlet-A      5.4658 eV  226.83 nm  f=0.0336  <S**2>=0.000
    179 ->195         0.11091
    180 ->194        -0.11977
    186 ->198         0.36475
    187 ->202        -0.11507
    188 ->204         0.25456
    189 ->206        -0.21961
    189 ->207         0.29885

Excited State 106:      Singlet-A      5.4707 eV  226.63 nm  f=0.0046  <S**2>=0.000
    177 ->191        -0.10088
    177 ->192         0.35003
    178 ->191        -0.14588
    178 ->192         0.50153
    179 ->195         0.12129
    180 ->194        -0.11532

Excited State 107:      Singlet-A      5.4733 eV  226.53 nm  f=0.0184  <S**2>=0.000
    177 ->192         0.13383
    178 ->192         0.20935
    179 ->195        -0.29018
    180 ->194         0.35223
    180 ->195        -0.12470
    181 ->194        -0.16283
    181 ->195         0.22453
    186 ->198         0.15222
    186 ->200         0.11668

Excited State 108:      Singlet-A      5.4838 eV  226.09 nm  f=0.0019  <S**2>=0.000
    174 ->190         0.10313
    179 ->195         0.38025
    179 ->196         0.10312
    180 ->194         0.40914
    181 ->194        -0.19684
    181 ->195        -0.16097

Excited State 109:      Singlet-A      5.4994 eV  225.45 nm  f=0.0075  <S**2>=0.000
    171 ->190         0.24679
    180 ->194         0.16626
    182 ->196        -0.13542
    185 ->197        -0.21175
    186 ->198        -0.22894
    186 ->200        -0.20975
    186 ->201        -0.19124
    188 ->204         0.24076
    189 ->205         0.11842

Excited State 110:      Singlet-A      5.5141 eV  224.85 nm  f=0.0130  <S**2>=0.000
    185 ->197         0.17947
    186 ->198        -0.13849
    187 ->197         0.12118
    187 ->198         0.14907
    187 ->199         0.47673
    187 ->201         0.24613
    187 ->208        -0.10876
    188 ->204         0.18461

Excited State 111:      Singlet-A      5.5174 eV  224.72 nm  f=0.0203  <S**2>=0.000
    182 ->196         0.22701
    185 ->197         0.27971
    186 ->197         0.13028
    186 ->198        -0.13629
    186 ->200        -0.14969
    187 ->198        -0.14944
    187 ->199        -0.16553
    187 ->201        -0.15121
    188 ->204         0.12227
    188 ->205         0.16342
    189 ->206         0.15982
    189 ->207         0.22247

Excited State 112:      Singlet-A      5.5374 eV  223.90 nm  f=0.0087  <S**2>=0.000
    171 ->190         0.11969
    181 ->195        -0.19492
    182 ->196         0.56162
```

```
    184 ->196         0.16602
    185 ->197        -0.11639
    189 ->206        -0.11674

Excited State 113:      Singlet-A      5.5404 eV  223.78 nm  f=0.0523  <S**2>=0.000
    171 ->190         0.11256
    181 ->195        -0.16555
    185 ->197        -0.13864
    187 ->198         0.12560
    187 ->200         0.10825
    187 ->201         0.21069
    187 ->208        -0.11886
    189 ->205        -0.12931
    189 ->206         0.34231
    189 ->207         0.37615

Excited State 114:      Singlet-A      5.5466 eV  223.53 nm  f=0.0027  <S**2>=0.000
    171 ->190         0.22037
    181 ->195         0.31422
    186 ->199         0.10046
    186 ->201         0.15968
    187 ->199        -0.29188
    187 ->200         0.24342
    187 ->201         0.18749
    187 ->208        -0.12783

Excited State 115:      Singlet-A      5.5507 eV  223.37 nm  f=0.0168  <S**2>=0.000
    171 ->190         0.21523
    179 ->195         0.12374
    181 ->195         0.24182
    182 ->196         0.10668
    185 ->197        -0.20351
    186 ->201         0.17903
    187 ->198        -0.12339
    187 ->199         0.20710
    187 ->200        -0.20550
    187 ->201        -0.14182
    187 ->208         0.12603
    188 ->204        -0.17320
    189 ->206         0.16862

Excited State 116:      Singlet-A      5.5613 eV  222.94 nm  f=0.0224  <S**2>=0.000
    179 ->195        -0.18757
    181 ->195        -0.23643
    182 ->196        -0.12155
    186 ->200         0.16415
    186 ->201         0.37975
    186 ->202        -0.11222
    186 ->203         0.18475
    187 ->198        -0.12711
    187 ->208         0.10099
    189 ->205         0.13063

Excited State 117:      Singlet-A      5.5815 eV  222.13 nm  f=0.0205  <S**2>=0.000
    177 ->193        -0.10294
    184 ->197        -0.10043
    186 ->197         0.10048
    186 ->199         0.50283
    186 ->200        -0.22671
    186 ->202         0.11905
    188 ->205        -0.27643

Excited State 118:      Singlet-A      5.5897 eV  221.81 nm  f=0.0203  <S**2>=0.000
    171 ->190         0.25264
    177 ->193         0.28452
    178 ->193        -0.20826
    179 ->195        -0.10426
    186 ->199         0.21370
    187 ->203        -0.10380
    188 ->205         0.32121
    188 ->206         0.10017

Excited State 119:      Singlet-A      5.5973 eV  221.51 nm  f=0.0195  <S**2>=0.000
    177 ->193        -0.14123
    185 ->197         0.10318
    186 ->199        -0.20991
    186 ->200        -0.10140
    186 ->202         0.32995
    186 ->203         0.13608
    186 ->208         0.10797
```

```
    187 ->198         0.14295
    187 ->199        -0.12283
    187 ->200        -0.13605
    187 ->202         0.29150
    187 ->208        -0.11445

Excited State 120:      Singlet-A      5.6101 eV  221.00 nm  f=0.0342  <S**2>=0.000
    171 ->190        -0.21534
    185 ->197        -0.28747
    186 ->200        -0.16275
    186 ->201         0.10838
    186 ->202         0.22708
    186 ->203         0.11168
    187 ->200         0.13918
    187 ->202        -0.20855
    187 ->203         0.10522
    188 ->205         0.33310

Excited State 121:      Singlet-A      5.6197 eV  220.62 nm  f=0.0076  <S**2>=0.000
    171 ->190        -0.13670
    176 ->193        -0.10103
    185 ->197        -0.17759
    186 ->199         0.16549
    186 ->200         0.14258
    186 ->202        -0.28317
    187 ->198         0.17812
    187 ->200        -0.15536
    187 ->201        -0.11230
    187 ->202         0.29904
    187 ->203         0.12255
    187 ->208        -0.16832
    188 ->205         0.17580

Excited State 122:      Singlet-A      5.6296 eV  220.23 nm  f=0.0088  <S**2>=0.000
    173 ->191         0.12111
    176 ->193        -0.34979
    178 ->193        -0.15040
    179 ->193         0.42589
    185 ->198        -0.10773
    187 ->202        -0.10608
    188 ->206        -0.13549
    188 ->207         0.10302

Excited State 123:      Singlet-A      5.6364 eV  219.97 nm  f=0.0399  <S**2>=0.000
    171 ->190        -0.13592
    176 ->193         0.12497
    177 ->193         0.34632
    178 ->193        -0.22020
    180 ->195         0.16168
    186 ->201         0.11273
    186 ->202         0.11217
    187 ->201        -0.10852
    187 ->203         0.23111
    188 ->205        -0.22236

Excited State 124:      Singlet-A      5.6460 eV  219.60 nm  f=0.0001  <S**2>=0.000
    175 ->191         0.60404
    187 ->201         0.10698
    187 ->203        -0.22959

Excited State 125:      Singlet-A      5.6513 eV  219.39 nm  f=0.0036  <S**2>=0.000
    171 ->190         0.12134
    175 ->191         0.29583
    180 ->195        -0.31162
    181 ->195        -0.16247
    185 ->197         0.10645
    187 ->201        -0.17682
    187 ->203         0.37822

Excited State 126:      Singlet-A      5.6643 eV  218.89 nm  f=0.0110  <S**2>=0.000
    175 ->191         0.10085
    179 ->193        -0.13851
    180 ->195         0.46763
    181 ->195         0.18009
    184 ->197         0.12026
    187 ->199         0.11100
    187 ->203         0.19406

Excited State 127:      Singlet-A      5.6749 eV  218.48 nm  f=0.0037  <S**2>=0.000
    173 ->191        -0.13726
```

```
    176 ->193         0.17045
    177 ->193        -0.17738
    178 ->193         0.10934
    179 ->193         0.44443
    179 ->194         0.10226
    179 ->196        -0.12172
    185 ->198         0.16217
    188 ->206         0.20525
    188 ->207        -0.14507

Excited State 128:      Singlet-A      5.6923 eV  217.81 nm  f=0.0171  <S**2>=0.000
    181 ->196         0.10297
    184 ->197        -0.23773
    185 ->198         0.31324
    186 ->199        -0.11479
    186 ->201         0.16669
    186 ->203        -0.26339
    187 ->203        -0.11309
    188 ->206         0.20805
    188 ->207         0.17113

Excited State 129:      Singlet-A      5.7050 eV  217.32 nm  f=0.0102  <S**2>=0.000
    168 ->190         0.10513
    184 ->197        -0.30725
    186 ->201        -0.27011
    186 ->203         0.42622

Excited State 130:      Singlet-A      5.7109 eV  217.10 nm  f=0.0371  <S**2>=0.000
    170 ->190         0.21976
    184 ->197         0.16252
    185 ->198         0.42195
    187 ->203        -0.10517
    188 ->206        -0.28681

Excited State 131:      Singlet-A      5.7194 eV  216.78 nm  f=0.0792  <S**2>=0.000
    172 ->191        -0.11227
    173 ->192        -0.10758
    174 ->191        -0.11259
    176 ->193        -0.15349
    176 ->194         0.11313
    180 ->195        -0.11292
    184 ->197         0.30742
    185 ->200         0.13276
    186 ->203         0.20757
    188 ->205        -0.12776
    188 ->206         0.31468

Excited State 132:      Singlet-A      5.7279 eV  216.46 nm  f=0.0016  <S**2>=0.000
    175 ->192         0.65397
    176 ->193         0.11434
    188 ->207         0.11686

Excited State 133:      Singlet-A      5.7297 eV  216.39 nm  f=0.0175  <S**2>=0.000
    166 ->190        -0.18696
    168 ->190         0.18446
    170 ->190         0.47746
    171 ->190        -0.14667
    176 ->193        -0.17634
    186 ->203        -0.10826
    188 ->206         0.18509
    188 ->207        -0.13499

Excited State 134:      Singlet-A      5.7399 eV  216.00 nm  f=0.0038  <S**2>=0.000
    173 ->191         0.10652
    174 ->191         0.51795
    174 ->192         0.13848
    176 ->193         0.11832
    177 ->194        -0.14792
    178 ->194         0.11679
    185 ->198        -0.11720
    188 ->206         0.11429

Excited State 135:      Singlet-A      5.7435 eV  215.87 nm  f=0.0497  <S**2>=0.000
    166 ->190        -0.10849
    168 ->190         0.10600
    170 ->190         0.13555
    174 ->191        -0.16210
    175 ->192        -0.16087
    176 ->193         0.28427
    184 ->197         0.12047
```

```
    188 ->207         0.45160

Excited State 136:      Singlet-A      5.7493 eV  215.65 nm  f=0.0097  <S**2>=0.000
    169 ->190        -0.10587
    172 ->192        -0.10564
    173 ->191        -0.16742
    174 ->191         0.27780
    177 ->194         0.33407
    178 ->194        -0.22451
    185 ->200         0.15690
    188 ->207         0.18168

Excited State 137:      Singlet-A      5.7675 eV  214.97 nm  f=0.0033  <S**2>=0.000
    160 ->190        -0.12783
    164 ->190        -0.11170
    166 ->190        -0.28588
    168 ->190         0.39367
    169 ->190         0.21335
    170 ->190        -0.30756

Excited State 138:      Singlet-A      5.7746 eV  214.71 nm  f=0.0002  <S**2>=0.000
    166 ->190         0.10840
    168 ->190        -0.11745
    169 ->190         0.59976
    177 ->194         0.12625
    181 ->196        -0.13681

Excited State 139:      Singlet-A      5.7800 eV  214.51 nm  f=0.0028  <S**2>=0.000
    169 ->190        -0.14035
    176 ->194         0.38910
    177 ->194         0.11429
    179 ->194        -0.23101
    181 ->196        -0.20317
    184 ->197        -0.10399
    184 ->200        -0.10988
    188 ->206        -0.17057

Excited State 140:      Singlet-A      5.7884 eV  214.19 nm  f=0.0246  <S**2>=0.000
    169 ->190         0.15541
    170 ->190         0.10904
    178 ->193         0.13696
    180 ->196         0.10080
    181 ->196         0.39190
    184 ->198         0.11272
    185 ->199         0.23208
    187 ->204        -0.11572
    188 ->206        -0.11732
    188 ->207        -0.12913

Excited State 141:      Singlet-A      5.7984 eV  213.83 nm  f=0.0331  <S**2>=0.000
    176 ->194        -0.10365
    177 ->194        -0.21102
    178 ->193         0.12157
    178 ->194         0.13841
    180 ->196        -0.10717
    181 ->196        -0.25937
    185 ->200         0.39280
    185 ->201         0.15138
    185 ->202         0.11886

Excited State 142:      Singlet-A      5.8036 eV  213.63 nm  f=0.0160  <S**2>=0.000
    181 ->196        -0.24247
    183 ->198         0.10766
    183 ->200         0.11457
    184 ->198         0.22054
    185 ->198         0.10767
    185 ->199         0.39828
    185 ->200        -0.23450
    185 ->201        -0.13880
    186 ->208         0.10923

Excited State 143:      Singlet-A      5.8074 eV  213.50 nm  f=0.0131  <S**2>=0.000
    172 ->191        -0.10209
    176 ->193        -0.16494
    177 ->193         0.29982
    178 ->193         0.48710
    181 ->196        -0.11153
    185 ->200        -0.17283

Excited State 144:      Singlet-A      5.8205 eV  213.01 nm  f=0.0235  <S**2>=0.000
```

```
    172 ->191        -0.21936
    173 ->192        -0.16209
    174 ->192        -0.11233
    177 ->193        -0.18361
    178 ->193        -0.10631
    185 ->199         0.11436
    185 ->200        -0.11106
    185 ->201         0.32803
    185 ->203         0.14230
    187 ->204         0.23548
    187 ->206         0.11292

Excited State 145:      Singlet-A      5.8286 eV  212.72 nm  f=0.0306  <S**2>=0.000
    173 ->191         0.30234
    174 ->192        -0.16080
    177 ->194         0.18137
    178 ->194        -0.15502
    179 ->194         0.18352
    186 ->204         0.18328
    187 ->204        -0.14024
    187 ->205        -0.25086
    187 ->207        -0.10130
    188 ->207        -0.10861

Excited State 146:      Singlet-A      5.8359 eV  212.45 nm  f=0.0063  <S**2>=0.000
    173 ->191         0.12659
    179 ->194         0.31642
    186 ->204        -0.21117
    187 ->204         0.39859
    187 ->205        -0.13500

Excited State 147:      Singlet-A      5.8364 eV  212.43 nm  f=0.0306  <S**2>=0.000
    172 ->191        -0.12848
    173 ->192        -0.10502
    174 ->191        -0.11454
    174 ->195         0.14428
    179 ->194         0.30083
    179 ->196         0.16212
    183 ->197        -0.22639
    184 ->198         0.23768
    184 ->199         0.10777
    185 ->199        -0.24660

Excited State 148:      Singlet-A      5.8447 eV  212.13 nm  f=0.0282  <S**2>=0.000
    172 ->191        -0.12497
    173 ->191        -0.18970
    173 ->192        -0.10953
    177 ->194        -0.15279
    179 ->194         0.34571
    183 ->197         0.18977
    184 ->198        -0.18338
    185 ->199         0.21625
    187 ->204        -0.16836
    187 ->205         0.10219

Excited State 149:      Singlet-A      5.8488 eV  211.98 nm  f=0.0108  <S**2>=0.000
    174 ->191        -0.10442
    174 ->192         0.45746
    183 ->197         0.21012
    185 ->199        -0.16887
    185 ->200        -0.12735
    185 ->201         0.11636
    185 ->202         0.13377
    186 ->204         0.22756

Excited State 150:      Singlet-A      5.8518 eV  211.87 nm  f=0.0049  <S**2>=0.000
    174 ->191        -0.16246
    174 ->192         0.36598
    179 ->194        -0.13547
    179 ->196         0.13778
    184 ->198        -0.14606
    184 ->200         0.10013
    185 ->199         0.25044
    185 ->200         0.10028
    185 ->202        -0.14218
    186 ->204        -0.11030

Excited State 151:      Singlet-A      5.8610 eV  211.54 nm  f=0.0211  <S**2>=0.000
    174 ->192        -0.19672
    174 ->195         0.20308
```

```
    177 ->195        -0.11355
    178 ->195        -0.17108
    179 ->195        -0.10507
    179 ->196         0.28460
    180 ->196         0.22673
    183 ->197         0.22209
    185 ->202         0.20492
    187 ->205        -0.10265

Excited State 152:      Singlet-A      5.8701 eV  211.21 nm  f=0.0477  <S**2>=0.000
    185 ->202         0.37691
    186 ->204        -0.31863
    186 ->205         0.10252
    186 ->208        -0.11104
    187 ->204        -0.23171

Excited State 153:      Singlet-A      5.8929 eV  210.40 nm  f=0.0029  <S**2>=0.000
    183 ->197         0.22936
    183 ->198         0.11015
    184 ->198         0.36091
    184 ->201        -0.20254
    185 ->201        -0.15580
    185 ->202        -0.20502
    185 ->203         0.14657
    186 ->204        -0.16020

Excited State 154:      Singlet-A      5.9061 eV  209.92 nm  f=0.0184  <S**2>=0.000
    167 ->190         0.64650
    168 ->190         0.10301
    185 ->202         0.10045

Excited State 155:      Singlet-A      5.9166 eV  209.55 nm  f=0.0503  <S**2>=0.000
    167 ->190         0.15970
    184 ->200        -0.21445
    185 ->200        -0.13072
    185 ->201         0.28767
    185 ->202        -0.27478
    186 ->204        -0.10481
    186 ->205         0.31241
    186 ->207         0.12200
    187 ->204        -0.15340

Excited State 156:      Singlet-A      5.9254 eV  209.24 nm  f=0.0421  <S**2>=0.000
    167 ->190        -0.10816
    174 ->195        -0.11553
    176 ->194        -0.10701
    177 ->194        -0.12802
    177 ->195         0.16480
    178 ->194        -0.14420
    178 ->195         0.22451
    179 ->196         0.34038
    183 ->197        -0.14032
    184 ->198        -0.12775
    185 ->201        -0.13412
    185 ->203         0.15808
    186 ->205         0.14162
    187 ->205        -0.12217

Excited State 157:      Singlet-A      5.9276 eV  209.17 nm  f=0.0010  <S**2>=0.000
    173 ->191         0.10546
    176 ->194         0.16419
    177 ->195         0.25087
    179 ->196         0.27953
    180 ->196        -0.22917
    183 ->197         0.23966
    185 ->201         0.13970
    185 ->203        -0.12942
    186 ->204        -0.12797
    186 ->205        -0.15430
    187 ->205         0.15477

Excited State 158:      Singlet-A      5.9293 eV  209.10 nm  f=0.0024  <S**2>=0.000
    166 ->190         0.30568
    168 ->190         0.27225
    172 ->192         0.10957
    173 ->191        -0.22206
    177 ->195         0.10129
    180 ->196        -0.10906
    185 ->203        -0.25000
    187 ->205        -0.30099
```

```
Excited State 159:      Singlet-A      5.9376 eV  208.81 nm  f=0.0029  <S**2>=0.000
    166 ->190         0.36078
    168 ->190         0.31905
    172 ->192        -0.15274
    173 ->191         0.24946
    185 ->203         0.10279
    187 ->205         0.29184
    187 ->206         0.10793

Excited State 160:      Singlet-A      5.9451 eV  208.55 nm  f=0.0036  <S**2>=0.000
    166 ->190         0.13466
    168 ->190         0.12754
    172 ->192         0.10053
    173 ->191        -0.12006
    173 ->192         0.11327
    176 ->194         0.24110
    184 ->201         0.14817
    184 ->202         0.11874
    185 ->203         0.38126
    186 ->208         0.14113
    187 ->205        -0.12684

Excited State 161:      Singlet-A      5.9515 eV  208.32 nm  f=0.0121  <S**2>=0.000
    166 ->190         0.11995
    174 ->195        -0.18639
    176 ->194         0.11777
    176 ->195         0.10050
    177 ->195        -0.18024
    178 ->195         0.28255
    179 ->196         0.14935
    180 ->196         0.27592
    184 ->198         0.14656
    185 ->201         0.16765
    185 ->203        -0.11519
    186 ->208        -0.10132

Excited State 162:      Singlet-A      5.9612 eV  207.99 nm  f=0.0199  <S**2>=0.000
    172 ->191        -0.29564
    173 ->192         0.34714
    183 ->197         0.11479
    183 ->198         0.13358
    183 ->201        -0.15019
    184 ->199         0.10457
    184 ->200         0.20191
    184 ->201         0.14102
    184 ->202        -0.13651
    186 ->204         0.10927
    186 ->205         0.22036

Excited State 163:      Singlet-A      5.9662 eV  207.81 nm  f=0.0019  <S**2>=0.000
    172 ->191         0.13616
    173 ->192        -0.24701
    176 ->194        -0.10163
    177 ->194        -0.13794
    178 ->194        -0.27122
    180 ->196         0.14004
    182 ->197         0.10032
    183 ->197         0.21125
    184 ->200         0.12775
    184 ->201         0.31021

Excited State 164:      Singlet-A      5.9713 eV  207.63 nm  f=0.0122  <S**2>=0.000
    172 ->191         0.23714
    173 ->192        -0.24594
    177 ->194         0.25308
    178 ->194         0.36226
    183 ->198         0.10316
    183 ->201        -0.10403
    184 ->200         0.17129
    184 ->202        -0.12210
    186 ->205         0.12745

Excited State 165:      Singlet-A      5.9756 eV  207.49 nm  f=0.0051  <S**2>=0.000
    172 ->191        -0.21667
    173 ->192         0.17371
    176 ->194        -0.21348
    177 ->194         0.19228
    178 ->194         0.26224
    184 ->201         0.17241
```

```
    186 ->204        -0.18976
    186 ->205        -0.11063
    186 ->206        -0.11867
    186 ->208         0.22217

Excited State 166:      Singlet-A      5.9845 eV  207.18 nm  f=0.0181  <S**2>=0.000
    182 ->197         0.23530
    183 ->197         0.12661
    183 ->198        -0.36026
    184 ->199         0.36727
    184 ->200        -0.15257
    185 ->203         0.12339

Excited State 167:      Singlet-A      6.0002 eV  206.63 nm  f=0.0263  <S**2>=0.000
    172 ->192        -0.22968
    177 ->195         0.35983
    178 ->195        -0.19965
    180 ->196         0.25997
    181 ->196        -0.10536
    183 ->198        -0.15930
    183 ->200        -0.10724
    184 ->200         0.10489
    184 ->202        -0.11596
    187 ->206        -0.10603

Excited State 168:      Singlet-A      6.0089 eV  206.34 nm  f=0.0279  <S**2>=0.000
    177 ->195         0.19364
    180 ->196         0.13770
    182 ->197        -0.10530
    183 ->198         0.17543
    183 ->200         0.23097
    184 ->199         0.28456
    184 ->202         0.29489
    184 ->203         0.17433
    186 ->205         0.15357

Excited State 169:      Singlet-A      6.0126 eV  206.21 nm  f=0.0092  <S**2>=0.000
    172 ->192         0.41286
    173 ->191        -0.11224
    180 ->196         0.11556
    182 ->198         0.10166
    183 ->201        -0.10158
    184 ->201        -0.13389
    184 ->202        -0.13161
    184 ->203        -0.16535
    186 ->204        -0.11282
    186 ->208         0.21267
    187 ->205         0.19581

Excited State 170:      Singlet-A      6.0182 eV  206.02 nm  f=0.0202  <S**2>=0.000
    172 ->192        -0.25728
    183 ->198         0.16254
    183 ->202        -0.10905
    184 ->198        -0.12876
    184 ->199         0.25371
    184 ->200        -0.10655
    184 ->201        -0.10658
    186 ->204        -0.13889
    186 ->208         0.32231
    187 ->205        -0.15013

Excited State 171:      Singlet-A      6.0258 eV  205.75 nm  f=0.0451  <S**2>=0.000
    177 ->195        -0.13435
    180 ->196        -0.11579
    182 ->197        -0.23481
    183 ->198        -0.25388
    183 ->199         0.10043
    183 ->200         0.13576
    183 ->202         0.14146
    184 ->200         0.26453
    185 ->203        -0.10926
    186 ->205         0.13569
    186 ->207         0.11698
    186 ->208         0.15935

Excited State 172:      Singlet-A      6.0450 eV  205.10 nm  f=0.0143  <S**2>=0.000
    175 ->193         0.15954
    178 ->195         0.10904
    182 ->197         0.33603
    182 ->200         0.11542
```

```
    183 ->200         0.33611
    184 ->199        -0.16829
    184 ->200         0.11153
    184 ->201        -0.10899
    187 ->206        -0.15522
    187 ->207         0.14822

Excited State 173:      Singlet-A      6.0573 eV  204.69 nm  f=0.0290  <S**2>=0.000
    174 ->195         0.25651
    175 ->193         0.31887
    178 ->195         0.24665
    182 ->197        -0.23591
    183 ->200        -0.11374
    187 ->206        -0.19911
    187 ->207         0.14500

Excited State 174:      Singlet-A      6.0634 eV  204.48 nm  f=0.0395  <S**2>=0.000
    172 ->191         0.11252
    173 ->192         0.10949
    174 ->195         0.18484
    176 ->195        -0.10557
    177 ->195         0.10800
    178 ->195         0.19743
    183 ->199        -0.12551
    187 ->206         0.41947
    187 ->207        -0.19945

Excited State 175:      Singlet-A      6.0725 eV  204.17 nm  f=0.0084  <S**2>=0.000
    182 ->197         0.15188
    182 ->200        -0.20964
    183 ->199        -0.14738
    183 ->200        -0.24399
    183 ->203        -0.16322
    184 ->199        -0.17389
    184 ->202         0.34509
    185 ->202         0.10021
    185 ->203        -0.13461
    186 ->205         0.14230
    186 ->206         0.13112
    186 ->207        -0.11907

Excited State 176:      Singlet-A      6.0747 eV  204.10 nm  f=0.0071  <S**2>=0.000
    175 ->193         0.23677
    177 ->196        -0.10504
    178 ->196        -0.28599
    182 ->197         0.11083
    183 ->199         0.38791
    184 ->199        -0.10213
    184 ->202         0.11891
    184 ->203        -0.15092
    187 ->206         0.13364

Excited State 177:      Singlet-A      6.0886 eV  203.63 nm  f=0.0466  <S**2>=0.000
    174 ->195        -0.14299
    175 ->193         0.40014
    177 ->195        -0.10324
    178 ->195        -0.19720
    178 ->196        -0.14046
    183 ->199        -0.31274
    189 ->211         0.11191

Excited State 178:      Singlet-A      6.0925 eV  203.50 nm  f=0.0014  <S**2>=0.000
    175 ->193        -0.14624
    177 ->195         0.12027
    178 ->196        -0.19015
    185 ->204        -0.19622
    186 ->207        -0.14047
    187 ->206         0.25470
    187 ->207         0.42261

Excited State 179:      Singlet-A      6.1003 eV  203.24 nm  f=0.0170  <S**2>=0.000
    175 ->193        -0.14117
    178 ->196        -0.15568
    182 ->197         0.10720
    182 ->200        -0.16646
    183 ->198         0.18521
    183 ->200        -0.17182
    183 ->201         0.11244
    183 ->202         0.12700
    184 ->201        -0.16607
```

```
    185 ->204         0.15994
    186 ->206        -0.18253
    186 ->207         0.15658
    187 ->206        -0.12311
    189 ->211         0.15573

Excited State 180:      Singlet-A      6.1014 eV  203.20 nm  f=0.0157  <S**2>=0.000
    162 ->190        -0.15498
    164 ->190        -0.18283
    165 ->190         0.13970
    177 ->195        -0.10580
    177 ->196         0.17354
    178 ->195        -0.10135
    178 ->196         0.21609
    182 ->197         0.13631
    182 ->198        -0.11350
    183 ->198         0.11686
    183 ->199         0.25563
    184 ->201        -0.15999
    184 ->203         0.15597
    187 ->206         0.11396
    187 ->207         0.16400

Excited State 181:      Singlet-A      6.1087 eV  202.96 nm  f=0.0467  <S**2>=0.000
    162 ->190        -0.15816
    164 ->190        -0.18734
    165 ->190         0.15781
    175 ->195         0.10048
    183 ->201         0.12302
    184 ->201         0.13454
    184 ->203        -0.20818
    185 ->204        -0.11783
    187 ->207        -0.16223
    189 ->210         0.11934
    189 ->211         0.25638
    189 ->213        -0.14126
    189 ->214        -0.14574
    189 ->216         0.15705

Excited State 182:      Singlet-A      6.1212 eV  202.55 nm  f=0.0311  <S**2>=0.000
    177 ->196         0.11619
    178 ->195        -0.11038
    182 ->198         0.19199
    182 ->202        -0.10315
    184 ->200        -0.13850
    184 ->201         0.13962
    184 ->202         0.12427
    184 ->203        -0.27711
    185 ->204         0.31787
    185 ->208         0.13560
    186 ->206        -0.15004
    187 ->207         0.15979

Excited State 183:      Singlet-A      6.1259 eV  202.39 nm  f=0.0225  <S**2>=0.000
    182 ->197         0.10205
    183 ->199        -0.18879
    183 ->201         0.32111
    184 ->203        -0.15133
    185 ->204        -0.29102
    189 ->211        -0.16659
    189 ->214         0.10270
    189 ->216        -0.10420

Excited State 184:      Singlet-A      6.1420 eV  201.86 nm  f=0.0202  <S**2>=0.000
    178 ->196         0.15953
    182 ->200        -0.10420
    182 ->202         0.11821
    183 ->198         0.11217
    183 ->199        -0.10522
    183 ->200         0.12303
    183 ->201        -0.18700
    183 ->202         0.36795
    183 ->203        -0.16933
    184 ->203        -0.18645
    186 ->205        -0.14393
    186 ->207         0.14280

Excited State 185:      Singlet-A      6.1439 eV  201.80 nm  f=0.0005  <S**2>=0.000
    164 ->190         0.19568
    165 ->190        -0.13965
```

```
    174 ->193         0.12124
    175 ->193         0.18976
    177 ->196        -0.15469
    178 ->196         0.39615
    183 ->201         0.13929
    186 ->207        -0.11171
    187 ->206         0.10115

Excited State 186:      Singlet-A      6.1649 eV  201.11 nm  f=0.0304  <S**2>=0.000
    174 ->193         0.17576
    182 ->198         0.36384
    182 ->200        -0.13611
    183 ->199         0.10779
    184 ->203         0.12795
    185 ->205         0.12176
    186 ->205        -0.12396
    186 ->206         0.22558
    186 ->207         0.23990

Excited State 187:      Singlet-A      6.1749 eV  200.79 nm  f=0.0207  <S**2>=0.000
    164 ->190        -0.13762
    174 ->193         0.39451
    174 ->196        -0.12464
    182 ->198        -0.19780
    182 ->201         0.10269
    182 ->203         0.10589
    183 ->202        -0.18781
    184 ->203        -0.12553
    186 ->207         0.19549

Excited State 188:      Singlet-A      6.1766 eV  200.73 nm  f=0.0166  <S**2>=0.000
    174 ->193         0.41554
    174 ->196        -0.11395
    182 ->201        -0.16309
    182 ->203        -0.11768
    183 ->202         0.17781
    185 ->204         0.10089
    186 ->207        -0.27093

Excited State 189:      Singlet-A      6.1824 eV  200.54 nm  f=0.0105  <S**2>=0.000
    165 ->190        -0.13191
    174 ->193         0.15380
    177 ->196         0.15264
    178 ->196        -0.10012
    181 ->197         0.10233
    182 ->200         0.21657
    182 ->201         0.16483
    182 ->202        -0.15244
    183 ->200        -0.12165
    183 ->201        -0.14076
    183 ->202         0.15329
    183 ->203         0.16234
    184 ->200        -0.10183
    184 ->202         0.13153
    184 ->204         0.11420
    185 ->204        -0.19647
    185 ->208        -0.15133

Excited State 190:      Singlet-A      6.1838 eV  200.50 nm  f=0.0024  <S**2>=0.000
    164 ->190         0.33355
    165 ->190         0.56571
    168 ->190         0.11747

Excited State 191:      Singlet-A      6.1913 eV  200.25 nm  f=0.0321  <S**2>=0.000
    168 ->191         0.14424
    170 ->191        -0.12503
    176 ->195        -0.18752
    182 ->198        -0.18918
    182 ->202        -0.10641
    183 ->201         0.22050
    183 ->202         0.14623
    185 ->204         0.17307
    186 ->206         0.32212

Excited State 192:      Singlet-A      6.2033 eV  199.87 nm  f=0.0078  <S**2>=0.000
    162 ->190        -0.17633
    164 ->190         0.18546
    164 ->192        -0.11487
    166 ->191         0.14359
    167 ->191        -0.12852
```

```
    168 ->191         0.32775
    170 ->191        -0.17416
    176 ->195         0.16781
    182 ->200        -0.17082
    183 ->202        -0.15184

Excited State 193:      Singlet-A      6.2071 eV  199.75 nm  f=0.0020  <S**2>=0.000
    162 ->190        -0.27583
    164 ->190         0.29359
    165 ->190        -0.18659
    168 ->191        -0.17777
    168 ->192         0.12378
    176 ->195        -0.22733
    177 ->196         0.20887
    182 ->198        -0.11014

Excited State 194:      Singlet-A      6.2127 eV  199.57 nm  f=0.0061  <S**2>=0.000
    162 ->190        -0.13107
    163 ->190         0.16190
    168 ->191        -0.15381
    168 ->192         0.11488
    174 ->195         0.10540
    175 ->194        -0.12398
    176 ->195         0.43566
    183 ->202         0.11137
    186 ->206         0.18582

Excited State 195:      Singlet-A      6.2184 eV  199.38 nm  f=0.0038  <S**2>=0.000
    163 ->190         0.12817
    173 ->193         0.14742
    175 ->194         0.52955
    177 ->196        -0.12500
    182 ->200         0.14628

Excited State 196:      Singlet-A      6.2261 eV  199.13 nm  f=0.0136  <S**2>=0.000
    163 ->190        -0.18345
    168 ->191        -0.14151
    175 ->194         0.30228
    176 ->195         0.11883
    177 ->196         0.10858
    181 ->197         0.18591
    181 ->198         0.11199
    181 ->201        -0.10470
    182 ->200        -0.21009
    182 ->201         0.10147
    183 ->203         0.13181
    185 ->207         0.10582
    186 ->206         0.13923

Excited State 197:      Singlet-A      6.2300 eV  199.01 nm  f=0.0067  <S**2>=0.000
    156 ->190         0.12266
    163 ->190         0.41707
    174 ->195        -0.10119
    176 ->195        -0.24164
    177 ->196        -0.17387
    182 ->199        -0.14910
    182 ->200        -0.11730
    183 ->203         0.13174
    185 ->205         0.12106

Excited State 198:      Singlet-A      6.2342 eV  198.88 nm  f=0.0150  <S**2>=0.000
    168 ->192        -0.13578
    181 ->197         0.10873
    182 ->198         0.19910
    182 ->199         0.20041
    182 ->200         0.18890
    182 ->202         0.12344
    183 ->201         0.16688
    183 ->202         0.12584
    183 ->203        -0.21462
    185 ->208         0.22147

Excited State 199:      Singlet-A      6.2423 eV  198.62 nm  f=0.0073  <S**2>=0.000
    163 ->190         0.12498
    169 ->191        -0.12645
    173 ->193        -0.23283
    182 ->199         0.49004
    182 ->200        -0.11038
    182 ->201        -0.11712
    183 ->203         0.10021
```

```
    189 ->209        -0.11416

Excited State 200:      Singlet-A      6.2460 eV  198.50 nm  f=0.0075  <S**2>=0.000
    162 ->190         0.16430
    163 ->190         0.22380
    169 ->191         0.10080
    170 ->192         0.11904
    172 ->194         0.12245
    173 ->193         0.31250
    175 ->194        -0.20671
    181 ->197         0.12313
    182 ->198        -0.11259
    182 ->199         0.12100
    182 ->200        -0.11718
    182 ->202        -0.10980
    185 ->205        -0.18405

Excited State 201:      Singlet-A      6.2552 eV  198.21 nm  f=0.0050  <S**2>=0.000
    162 ->190         0.12620
    163 ->190         0.24396
    168 ->192        -0.13911
    169 ->191        -0.12702
    172 ->193         0.11988
    173 ->193        -0.14418
    175 ->194         0.10669
    175 ->195         0.13082
    177 ->196         0.16544
    182 ->199        -0.22138
    182 ->201        -0.14935
    182 ->202         0.13162
    183 ->203         0.14563
    185 ->205        -0.11998

Excited State 202:      Singlet-A      6.2607 eV  198.04 nm  f=0.0063  <S**2>=0.000
    163 ->190         0.12529
    166 ->192         0.12643
    168 ->192         0.20415
    169 ->191         0.14706
    172 ->193        -0.13654
    173 ->193         0.14479
    181 ->197        -0.10965
    181 ->198         0.16295
    182 ->198         0.13616
    184 ->204        -0.17039
    184 ->205         0.10459
    185 ->204         0.12034
    185 ->208        -0.17072

Excited State 203:      Singlet-A      6.2628 eV  197.97 nm  f=0.0094  <S**2>=0.000
    156 ->190         0.11221
    162 ->190        -0.17195
    163 ->190        -0.21888
    166 ->191        -0.10791
    168 ->192        -0.14792
    177 ->196        -0.12170
    181 ->198         0.12214
    182 ->201        -0.22733
    183 ->201        -0.15874
    183 ->203         0.24798
    184 ->204        -0.17042
    184 ->205         0.10686

Excited State 204:      Singlet-A      6.2731 eV  197.64 nm  f=0.0176  <S**2>=0.000
    168 ->191         0.10342
    169 ->192         0.14444
    170 ->191         0.10346
    171 ->191        -0.11693
    172 ->193         0.35015
    173 ->194         0.20106
    175 ->195        -0.12063
    181 ->198         0.12593
    184 ->204         0.15194
    185 ->208        -0.17860

Excited State 205:      Singlet-A      6.2780 eV  197.49 nm  f=0.0126  <S**2>=0.000
    166 ->192        -0.11510
    168 ->192        -0.15913
    175 ->195         0.11317
    181 ->197        -0.10581
    182 ->199         0.11313
```

```
    182 ->202        -0.23843
    183 ->203        -0.15913
    184 ->204        -0.15437
    185 ->204         0.10542
    185 ->205         0.25824
    185 ->208        -0.21557
    189 ->209         0.11274

Excited State 206:      Singlet-A      6.2858 eV  197.25 nm  f=0.0097  <S**2>=0.000
    181 ->197         0.38689
    182 ->199        -0.19006
    182 ->202         0.10835
    183 ->203        -0.15890
    185 ->204         0.10082
    185 ->206         0.11822
    185 ->208        -0.27176

Excited State 207:      Singlet-A      6.2902 eV  197.11 nm  f=0.0071  <S**2>=0.000
    166 ->192        -0.10194
    168 ->192        -0.19281
    169 ->192        -0.11568
    172 ->193        -0.15104
    180 ->197        -0.11425
    181 ->197        -0.28640
    182 ->202         0.10436
    184 ->204         0.31453
    185 ->205        -0.11022
    185 ->208        -0.15038
    189 ->209        -0.10532

Excited State 208:      Singlet-A      6.3058 eV  196.62 nm  f=0.0025  <S**2>=0.000
    180 ->198        -0.11085
    182 ->201         0.31302
    182 ->202         0.21146
    184 ->204        -0.18836
    184 ->208        -0.13280
    185 ->205        -0.25225
    185 ->206        -0.10527
    185 ->208        -0.11852
    189 ->209         0.19206

Excited State 209:      Singlet-A      6.3163 eV  196.29 nm  f=0.0058  <S**2>=0.000
    182 ->201        -0.19453
    185 ->206         0.11369
    189 ->209         0.58710

Excited State 210:      Singlet-A      6.3283 eV  195.92 nm  f=0.1638  <S**2>=0.000
    155 ->190         0.10809
    156 ->190         0.22196
    159 ->190         0.12734
    160 ->190        -0.32127
    162 ->190         0.20456
    166 ->190         0.10933
    175 ->195         0.33161
    175 ->196         0.15414
    184 ->204         0.10159

Excited State 211:      Singlet-A      6.3386 eV  195.60 nm  f=0.0462  <S**2>=0.000
    160 ->190         0.12356
    174 ->193         0.18038
    174 ->194        -0.21568
    174 ->195        -0.14938
    174 ->196         0.38602
    175 ->195         0.14746
    176 ->196        -0.38376

Excited State 212:      Singlet-A      6.3486 eV  195.29 nm  f=0.0990  <S**2>=0.000
    160 ->190         0.10566
    174 ->194         0.54472
    175 ->195         0.20655
    185 ->206        -0.14186

Excited State 213:      Singlet-A      6.3509 eV  195.22 nm  f=0.1360  <S**2>=0.000
    174 ->194         0.30732
    174 ->196         0.16697
    175 ->195        -0.20337
    176 ->196        -0.13812
    180 ->197        -0.21451
    181 ->197        -0.10914
    182 ->202        -0.14709
```

```
    184 ->204        -0.10660
    184 ->205        -0.12049
    185 ->205        -0.11400
    185 ->206         0.19566
    185 ->207         0.14388

Excited State 214:      Singlet-A      6.3715 eV  194.59 nm  f=0.0218  <S**2>=0.000
    160 ->190         0.16224
    174 ->194        -0.11485
    174 ->195        -0.13411
    179 ->197        -0.17730
    181 ->198        -0.10707
    182 ->201        -0.12959
    182 ->203         0.40494
    184 ->208         0.13327
    185 ->206        -0.23426
    185 ->207         0.14069

Excited State 215:      Singlet-A      6.3808 eV  194.31 nm  f=0.0087  <S**2>=0.000
    159 ->190        -0.12068
    160 ->190        -0.14225
    174 ->195         0.14884
    176 ->196        -0.12083
    179 ->197         0.24577
    179 ->199        -0.12850
    180 ->197         0.24775
    182 ->201        -0.12089
    182 ->203         0.22762
    185 ->205        -0.21699

Excited State 216:      Singlet-A      6.3857 eV  194.16 nm  f=0.0486  <S**2>=0.000
    159 ->190         0.10156
    160 ->190         0.25111
    174 ->196        -0.11422
    175 ->195         0.15398
    181 ->198         0.17404
    183 ->203        -0.11738
    183 ->204        -0.22652
    183 ->208        -0.10935
    184 ->204         0.25402
    184 ->208        -0.15828
    185 ->205        -0.19218

Excited State 217:      Singlet-A      6.3906 eV  194.01 nm  f=0.0041  <S**2>=0.000
    156 ->190         0.10412
    159 ->190         0.16459
    160 ->190         0.26868
    180 ->197         0.13248
    182 ->201         0.13369
    182 ->203        -0.16358
    183 ->208         0.12857
    184 ->204        -0.21794
    184 ->208         0.26772
    185 ->206         0.15147

Excited State 218:      Singlet-A      6.4030 eV  193.63 nm  f=0.0142  <S**2>=0.000
    156 ->190         0.14384
    159 ->190         0.26293
    160 ->190         0.16670
    162 ->190         0.12470
    174 ->195         0.16090
    179 ->197         0.28668
    179 ->199        -0.14487
    182 ->203         0.10488
    184 ->208        -0.10903
    185 ->205         0.13599
    185 ->206        -0.13279

Excited State 219:      Singlet-A      6.4148 eV  193.28 nm  f=0.0465  <S**2>=0.000
    174 ->195        -0.10721
    174 ->196         0.30347
    175 ->196         0.22105
    176 ->196         0.22568
    177 ->196         0.18292
    179 ->197        -0.10318
    180 ->197         0.33995
    181 ->197        -0.12571

Excited State 220:      Singlet-A      6.4347 eV  192.68 nm  f=0.0207  <S**2>=0.000
    166 ->191        -0.17952
```

```
    168 ->191         0.13534
    171 ->191        -0.16326
    173 ->193        -0.16207
    174 ->196         0.25502
    176 ->196         0.30333
    179 ->197         0.10523
    180 ->197        -0.14806
    186 ->207        -0.10289

Excited State 221:      Singlet-A      6.4424 eV  192.45 nm  f=0.0194  <S**2>=0.000
    166 ->191         0.15461
    166 ->192        -0.10947
    171 ->191         0.11942
    174 ->196         0.17032
    176 ->196         0.22336
    180 ->197        -0.12008
    181 ->198         0.21390
    181 ->201         0.12178
    182 ->203        -0.11492
    184 ->205        -0.20648
    184 ->208         0.17283
    185 ->206        -0.16536
    185 ->207        -0.10314

Excited State 222:      Singlet-A      6.4537 eV  192.11 nm  f=0.0105  <S**2>=0.000
    166 ->191         0.15825
    166 ->192        -0.12914
    168 ->191        -0.10070
    181 ->198        -0.23154
    181 ->201        -0.12260
    182 ->202        -0.10804
    183 ->204         0.27355
    184 ->208        -0.18240
    185 ->205        -0.11012
    185 ->207        -0.26199
    188 ->211        -0.10814

Excited State 223:      Singlet-A      6.4566 eV  192.03 nm  f=0.0044  <S**2>=0.000
    160 ->190         0.16528
    161 ->190         0.64319
    162 ->190         0.14360

Excited State 224:      Singlet-A      6.4627 eV  191.85 nm  f=0.0458  <S**2>=0.000
    161 ->190        -0.14020
    172 ->194         0.15147
    173 ->193        -0.19304
    175 ->195        -0.10790
    175 ->196         0.22769
    181 ->198         0.26360
    181 ->201         0.10245
    181 ->202         0.11458
    183 ->204         0.25580
    185 ->207        -0.16068

Excited State 225:      Singlet-A      6.4671 eV  191.72 nm  f=0.0348  <S**2>=0.000
    170 ->191        -0.12602
    172 ->193         0.22803
    173 ->194        -0.19889
    175 ->195         0.11376
    175 ->196        -0.14463
    176 ->196         0.10433
    181 ->198         0.13561
    184 ->205         0.22833
    184 ->206         0.10785
    185 ->206         0.26560
    185 ->207         0.17846

Excited State 226:      Singlet-A      6.4688 eV  191.66 nm  f=0.0056  <S**2>=0.000
    171 ->191        -0.20920
    172 ->193        -0.23600
    173 ->194         0.21133
    175 ->195         0.11112
    181 ->198         0.13098
    183 ->204         0.37140
    185 ->206         0.10033
    185 ->207         0.18291

Excited State 227:      Singlet-A      6.4790 eV  191.36 nm  f=0.0182  <S**2>=0.000
    166 ->191        -0.15330
    166 ->192         0.11988
```

```
    170 ->191         0.21916
    171 ->191         0.34248
    171 ->192         0.11001
    172 ->193         0.10452
    172 ->194        -0.21904
    173 ->193         0.19462
    182 ->203         0.12974
    184 ->205        -0.13244
    185 ->207        -0.15673

Excited State 228:      Singlet-A      6.4857 eV  191.17 nm  f=0.0042  <S**2>=0.000
    169 ->191         0.15834
    170 ->191         0.29890
    171 ->191         0.37848
    172 ->194         0.17569
    173 ->193        -0.14443
    182 ->203        -0.13609
    185 ->207         0.22316

Excited State 229:      Singlet-A      6.4927 eV  190.96 nm  f=0.0081  <S**2>=0.000
    169 ->191        -0.18018
    171 ->191         0.13043
    172 ->193        -0.15983
    172 ->194        -0.16235
    173 ->193         0.12918
    173 ->194         0.29368
    180 ->200         0.10671
    181 ->200         0.21606
    181 ->202         0.10744
    184 ->205         0.22143
    188 ->209        -0.13205
    188 ->211        -0.12665

Excited State 230:      Singlet-A      6.5008 eV  190.72 nm  f=0.0034  <S**2>=0.000
    172 ->193        -0.13310
    172 ->194         0.20471
    173 ->193        -0.12771
    173 ->194         0.25209
    184 ->205         0.11171
    184 ->208        -0.10976
    188 ->209         0.26548
    188 ->210         0.10589
    188 ->211         0.22774
    188 ->213        -0.13454
    188 ->214        -0.12915
    188 ->216         0.12473

Excited State 231:      Singlet-A      6.5134 eV  190.35 nm  f=0.0007  <S**2>=0.000
    173 ->194         0.11555
    180 ->200        -0.10570
    181 ->199        -0.13286
    181 ->200        -0.20286
    183 ->204        -0.11653
    189 ->210         0.38055
    189 ->212         0.35199

Excited State 232:      Singlet-A      6.5188 eV  190.19 nm  f=0.0066  <S**2>=0.000
    169 ->191        -0.10024
    173 ->194        -0.12963
    180 ->198        -0.12239
    180 ->200         0.10991
    181 ->200         0.24299
    181 ->201        -0.12737
    182 ->203        -0.11860
    183 ->205        -0.17925
    184 ->207         0.14314
    185 ->206        -0.11692
    185 ->207         0.15293
    188 ->209         0.10053
    189 ->210         0.27717
    189 ->212         0.27807

Excited State 233:      Singlet-A      6.5322 eV  189.81 nm  f=0.0147  <S**2>=0.000
    155 ->190        -0.11279
    156 ->190        -0.28765
    159 ->190         0.44558
    160 ->190        -0.13197
    170 ->191        -0.11006
    171 ->192        -0.10135
    175 ->196        -0.15976
```

```
    178 ->197         0.12396
    180 ->197         0.12475

Excited State 234:      Singlet-A      6.5406 eV  189.56 nm  f=0.0076  <S**2>=0.000
    159 ->190         0.13488
    160 ->191        -0.10055
    160 ->192         0.12861
    164 ->191        -0.10200
    166 ->191         0.21422
    166 ->192        -0.14861
    168 ->192        -0.12882
    169 ->191         0.17137
    170 ->191         0.14564
    171 ->191        -0.10857
    171 ->192         0.35944
    172 ->194        -0.15540
    180 ->198         0.12549
    181 ->200         0.10153

Excited State 235:      Singlet-A      6.5514 eV  189.25 nm  f=0.0109  <S**2>=0.000
    160 ->191         0.13050
    166 ->191        -0.15427
    169 ->191         0.13381
    169 ->192         0.23250
    170 ->191        -0.20220
    171 ->192        -0.13912
    180 ->198         0.28844
    181 ->199         0.12836
    181 ->201         0.11967
    184 ->206        -0.14903
    184 ->208        -0.16629

Excited State 236:      Singlet-A      6.5553 eV  189.14 nm  f=0.0228  <S**2>=0.000
    168 ->192        -0.14231
    169 ->191         0.20716
    169 ->192         0.26730
    170 ->191        -0.10371
    180 ->198        -0.23292
    183 ->208        -0.12202
    184 ->205        -0.17178
    184 ->207         0.13509
    184 ->208         0.14854

Excited State 237:      Singlet-A      6.5581 eV  189.05 nm  f=0.0481  <S**2>=0.000
    169 ->192        -0.15980
    171 ->192        -0.12070
    172 ->194         0.19746
    180 ->198         0.10714
    181 ->199         0.17828
    181 ->201         0.13051
    182 ->202         0.11382
    182 ->204         0.29999
    183 ->206         0.11239
    183 ->208         0.11953
    184 ->205        -0.18541
    184 ->207         0.16336
    188 ->209        -0.15582

Excited State 238:      Singlet-A      6.5635 eV  188.90 nm  f=0.0025  <S**2>=0.000
    171 ->192         0.11807
    180 ->198         0.11013
    181 ->202        -0.10710
    184 ->206        -0.10965
    188 ->209         0.50374
    188 ->211        -0.21203

Excited State 239:      Singlet-A      6.5683 eV  188.76 nm  f=0.0638  <S**2>=0.000
    156 ->190        -0.12090
    159 ->190         0.10806
    180 ->197        -0.10502
    180 ->198        -0.22349
    180 ->200        -0.11538
    181 ->199         0.21047
    181 ->200        -0.13212
    181 ->202        -0.14829
    181 ->203        -0.10034
    181 ->208        -0.12033
    182 ->204         0.22789
    183 ->208         0.18845
    184 ->206        -0.16274
```

```
Excited State 240:      Singlet-A      6.5733 eV  188.62 nm  f=0.0041  <S**2>=0.000
    168 ->192         0.11431
    169 ->191        -0.11847
    170 ->191        -0.12734
    170 ->192         0.41162
    171 ->192         0.41293
    172 ->194         0.11029
    188 ->209        -0.16900

Excited State 241:      Singlet-A      6.5866 eV  188.24 nm  f=0.0079  <S**2>=0.000
    181 ->199         0.42536
    182 ->204        -0.18847
    183 ->205        -0.11337
    183 ->208        -0.15384
    184 ->206         0.30622
    184 ->207        -0.13320

Excited State 242:      Singlet-A      6.5937 eV  188.04 nm  f=0.0064  <S**2>=0.000
    181 ->199        -0.12024
    182 ->204         0.14040
    183 ->205        -0.19859
    183 ->208         0.29761
    184 ->206         0.37595
    184 ->207        -0.12644

Excited State 243:      Singlet-A      6.5991 eV  187.88 nm  f=0.0317  <S**2>=0.000
    156 ->190         0.13070
    158 ->190        -0.19965
    175 ->196        -0.18973
    180 ->198        -0.11820
    181 ->199         0.23983
    181 ->200        -0.12318
    182 ->204        -0.17391
    183 ->204        -0.10681
    183 ->205         0.20068
    183 ->207         0.11066
    183 ->208         0.14787
    184 ->207         0.18609

Excited State 244:      Singlet-A      6.6126 eV  187.50 nm  f=0.0360  <S**2>=0.000
    157 ->190        -0.14689
    158 ->190         0.26726
    181 ->200         0.17247
    182 ->204        -0.21587
    183 ->204        -0.11145
    183 ->205         0.14604
    183 ->208         0.23851
    184 ->205        -0.12526

Excited State 245:      Singlet-A      6.6144 eV  187.45 nm  f=0.0130  <S**2>=0.000
    158 ->190        -0.11404
    160 ->192        -0.11346
    162 ->191        -0.16468
    162 ->192        -0.13296
    164 ->191         0.30415
    164 ->192         0.21550
    168 ->193        -0.11306
    169 ->191         0.13728
    169 ->192         0.14622
    170 ->192        -0.13136
    182 ->204         0.16521

Excited State 246:      Singlet-A      6.6192 eV  187.31 nm  f=0.0025  <S**2>=0.000
    157 ->190        -0.11968
    158 ->190         0.27177
    181 ->200        -0.22800
    181 ->202         0.23343
    181 ->203        -0.15084
    184 ->206         0.14255
    184 ->207         0.26544
    188 ->209         0.10390
    189 ->211         0.10169

Excited State 247:      Singlet-A      6.6272 eV  187.09 nm  f=0.0257  <S**2>=0.000
    157 ->190        -0.29911
    158 ->190         0.33719
    175 ->196        -0.21556
    178 ->197         0.12122
    181 ->199         0.14668
```

```
    181 ->203         0.11154
    182 ->204         0.10652
    183 ->208        -0.11906

Excited State 248:      Singlet-A      6.6304 eV  186.99 nm  f=0.0220  <S**2>=0.000
    166 ->192        -0.10818
    172 ->194        -0.12891
    180 ->202        -0.12245
    181 ->200         0.12948
    181 ->201         0.14036
    181 ->202        -0.17995
    183 ->204         0.10513
    183 ->205         0.29545
    183 ->207         0.13311
    183 ->208        -0.16700
    184 ->206         0.21708
    184 ->207         0.17869

Excited State 249:      Singlet-A      6.6482 eV  186.49 nm  f=0.0389  <S**2>=0.000
    149 ->190        -0.10524
    150 ->190         0.15298
    151 ->190         0.14721
    152 ->190        -0.23273
    157 ->190         0.17410
    166 ->191         0.20981
    166 ->192         0.25024
    168 ->191        -0.10730
    168 ->192        -0.17222
    169 ->191        -0.13515
    169 ->192        -0.10881
    181 ->202        -0.13916

Excited State 250:      Singlet-A      6.6532 eV  186.35 nm  f=0.0010  <S**2>=0.000
    181 ->200         0.11632
    181 ->202        -0.22572
    183 ->208         0.11430
    189 ->211         0.39088
    189 ->212        -0.12897
    189 ->213         0.23110
    189 ->214         0.28530

Excited State 251:      Singlet-A      6.6630 eV  186.08 nm  f=0.0288  <S**2>=0.000
    149 ->190        -0.12274
    150 ->190         0.17130
    151 ->190         0.15919
    152 ->190        -0.26157
    157 ->190         0.27079
    160 ->190        -0.10246
    166 ->191        -0.14831
    166 ->192        -0.22663
    168 ->192         0.16562
    169 ->191         0.11486

Excited State 252:      Singlet-A      6.6718 eV  185.83 nm  f=0.0094  <S**2>=0.000
    151 ->194         0.10063
    164 ->191         0.18634
    166 ->191         0.12212
    166 ->192        -0.12805
    166 ->193         0.22026
    167 ->193        -0.14958
    168 ->193         0.38536
    170 ->193        -0.20102

Excited State 253:      Singlet-A      6.6801 eV  185.60 nm  f=0.0519  <S**2>=0.000
    168 ->193        -0.10864
    170 ->192         0.11342
    180 ->198        -0.11229
    181 ->201         0.28386
    181 ->202        -0.18551
    181 ->203        -0.18230
    182 ->204        -0.18817
    182 ->205        -0.14913
    183 ->205        -0.23351
    189 ->211        -0.11871

Excited State 254:      Singlet-A      6.6826 eV  185.53 nm  f=0.0052  <S**2>=0.000
    175 ->196        -0.14450
    177 ->197         0.14388
    180 ->203        -0.13758
    181 ->201         0.24676
```

```
    181 ->202         0.14114
    181 ->203        -0.24478
    182 ->204        -0.13214
    182 ->208         0.11961
    184 ->207        -0.15165
    189 ->211         0.11149

Excited State 255:      Singlet-A      6.6903 eV  185.32 nm  f=0.1307  <S**2>=0.000
    166 ->192        -0.19488
    169 ->191        -0.13189
    169 ->192         0.16238
    169 ->193         0.14072
    170 ->192        -0.18062
    182 ->205         0.29997
    183 ->206         0.22767
    183 ->207        -0.19828
    184 ->207         0.11882

Excited State 256:      Singlet-A      6.7069 eV  184.86 nm  f=0.0387  <S**2>=0.000
    169 ->192         0.13640
    170 ->191         0.12942
    180 ->199        -0.10081
    180 ->201        -0.19259
    180 ->202        -0.16973
    181 ->203         0.23891
    182 ->205         0.25236
    182 ->207         0.12546
    182 ->208         0.18021
    183 ->206        -0.20201
    183 ->207         0.17610
    184 ->207         0.10857

Excited State 257:      Singlet-A      6.7186 eV  184.54 nm  f=0.0376  <S**2>=0.000
    177 ->197        -0.10610
    180 ->201         0.22679
    180 ->202         0.21960
    181 ->203        -0.23741
    182 ->205         0.28826
    183 ->205         0.11346
    183 ->206        -0.26375
    183 ->207         0.17560

Excited State 258:      Singlet-A      6.7235 eV  184.40 nm  f=0.0312  <S**2>=0.000
    177 ->197         0.23940
    178 ->197        -0.18922
    180 ->199         0.19346
    180 ->200         0.19673
    180 ->202         0.13220
    180 ->203         0.16245
    181 ->199        -0.10360
    181 ->200        -0.12708
    181 ->201        -0.14446
    181 ->202        -0.13792
    182 ->208         0.21791

Excited State 259:      Singlet-A      6.7370 eV  184.03 nm  f=0.0697  <S**2>=0.000
    166 ->191         0.11291
    168 ->194        -0.11706
    177 ->197        -0.28414
    178 ->197         0.14261
    180 ->199         0.41225

Excited State 260:      Singlet-A      6.7387 eV  183.99 nm  f=0.0080  <S**2>=0.000
    160 ->191        -0.15711
    164 ->191        -0.10553
    164 ->192         0.17274
    168 ->194         0.18122
    170 ->191        -0.12031
    180 ->199         0.34671
    181 ->203         0.11081
    182 ->205         0.10697
    182 ->206         0.13609
    182 ->207        -0.10387
    183 ->207         0.14523

Excited State 261:      Singlet-A      6.7471 eV  183.76 nm  f=0.0054  <S**2>=0.000
    164 ->192         0.10007
    173 ->195         0.11758
    177 ->197        -0.24396
    180 ->199        -0.19605
```

```
    180 ->200         0.16357
    182 ->204        -0.10798
    182 ->208         0.29911
    188 ->210         0.20284
    188 ->212         0.17933

Excited State 262:      Singlet-A      6.7537 eV  183.58 nm  f=0.0337  <S**2>=0.000
    160 ->191         0.12236
    164 ->192        -0.11304
    169 ->192        -0.11609
    173 ->195        -0.13477
    180 ->198        -0.11506
    180 ->200         0.30166
    180 ->201        -0.22074
    181 ->200        -0.13545
    182 ->208        -0.15846
    183 ->207         0.14148

Excited State 263:      Singlet-A      6.7558 eV  183.52 nm  f=0.0014  <S**2>=0.000
    172 ->195         0.14107
    173 ->195         0.62954
    183 ->207         0.10904

Excited State 264:      Singlet-A      6.7647 eV  183.28 nm  f=0.0142  <S**2>=0.000
    169 ->192         0.12844
    173 ->195         0.11214
    178 ->197         0.13266
    179 ->198         0.10373
    180 ->200         0.25272
    180 ->201        -0.11099
    181 ->200        -0.14835
    183 ->206        -0.17730
    183 ->207        -0.24909
    188 ->210        -0.22063
    188 ->212        -0.18254

Excited State 265:      Singlet-A      6.7692 eV  183.16 nm  f=0.0461  <S**2>=0.000
    168 ->194         0.10016
    174 ->197        -0.19722
    174 ->199         0.11168
    176 ->197         0.11510
    177 ->197         0.18666
    178 ->197         0.22587
    179 ->198         0.22176
    189 ->215         0.14146

Excited State 266:      Singlet-A      6.7712 eV  183.11 nm  f=0.0315  <S**2>=0.000
    168 ->194         0.10809
    178 ->197        -0.12605
    182 ->208        -0.10611
    183 ->206        -0.18662
    183 ->207        -0.20706
    187 ->211         0.11020
    188 ->210         0.31334
    188 ->212         0.30310

Excited State 267:      Singlet-A      6.7774 eV  182.94 nm  f=0.0081  <S**2>=0.000
    164 ->191         0.17173
    164 ->193        -0.10011
    166 ->194         0.17711
    167 ->194        -0.10738
    168 ->194         0.27775
    170 ->194        -0.12517
    177 ->197        -0.12079
    182 ->206        -0.11732
    182 ->207         0.10519
    183 ->206         0.20594
    183 ->207         0.12224
    189 ->213         0.12313
    189 ->215        -0.20017

Excited State 268:      Singlet-A      6.7818 eV  182.82 nm  f=0.0254  <S**2>=0.000
    174 ->197         0.11687
    178 ->197        -0.11797
    179 ->198         0.16451
    188 ->210        -0.10318
    188 ->212        -0.14127
    189 ->210        -0.18643
    189 ->211         0.14265
    189 ->212         0.17236
```

```
    189 ->213        -0.10838
    189 ->214        -0.20092
    189 ->215         0.35683
    189 ->216        -0.10583

Excited State 269:      Singlet-A      6.7851 eV  182.73 nm  f=0.0170  <S**2>=0.000
    177 ->197        -0.13924
    179 ->198         0.43220
    179 ->200         0.17082
    179 ->203         0.12588
    189 ->213         0.10744
    189 ->215        -0.21126

Excited State 270:      Singlet-A      6.7877 eV  182.66 nm  f=0.0097  <S**2>=0.000
    160 ->191         0.19043
    164 ->191         0.16281
    164 ->192        -0.19151
    169 ->192        -0.12076
    170 ->192        -0.13974
    182 ->206         0.22172
    182 ->207        -0.19869
    182 ->208         0.14475
    183 ->206        -0.16687
    183 ->207        -0.12372

Excited State 271:      Singlet-A      6.7969 eV  182.41 nm  f=0.0064  <S**2>=0.000
    172 ->195        -0.16494
    187 ->211         0.11761
    189 ->210        -0.28839
    189 ->211         0.11785
    189 ->212         0.32781
    189 ->213         0.22958
    189 ->214        -0.18275
    189 ->215        -0.20263

Excited State 272:      Singlet-A      6.7987 eV  182.37 nm  f=0.0215  <S**2>=0.000
    177 ->197        -0.12682
    181 ->203        -0.11665
    182 ->208         0.27547
    187 ->209         0.17364
    187 ->211         0.24247
    187 ->213        -0.14142
    187 ->214        -0.12373
    187 ->216         0.13239
    188 ->210        -0.10033
    189 ->210         0.10350
    189 ->212        -0.10905
    189 ->213        -0.10723
    189 ->215         0.12025

Excited State 273:      Singlet-A      6.8091 eV  182.09 nm  f=0.0139  <S**2>=0.000
    172 ->195         0.61656
    173 ->195        -0.12420
    181 ->204         0.12405
    183 ->206        -0.10096
    183 ->207        -0.10157

Excited State 274:      Singlet-A      6.8168 eV  181.88 nm  f=0.0161  <S**2>=0.000
    172 ->195        -0.11731
    176 ->197         0.11320
    177 ->198         0.22418
    178 ->198        -0.14267
    179 ->198        -0.12078
    180 ->203         0.15205
    180 ->204         0.12252
    181 ->203        -0.13604
    181 ->204         0.37468
    187 ->211        -0.13701

Excited State 275:      Singlet-A      6.8223 eV  181.73 nm  f=0.0029  <S**2>=0.000
    152 ->190         0.11666
    155 ->190        -0.12135
    156 ->190         0.13511
    157 ->190         0.24397
    158 ->190         0.19956
    177 ->198        -0.11849
    180 ->200        -0.14657
    180 ->201        -0.14997
    180 ->202         0.16237
    180 ->204         0.14767
```

```
    181 ->208         0.11322
    182 ->208         0.13175
    187 ->209        -0.13433
    189 ->210        -0.10939
    189 ->212         0.11956
    189 ->214         0.10518
    189 ->216         0.12702

Excited State 276:      Singlet-A      6.8249 eV  181.66 nm  f=0.0562  <S**2>=0.000
    152 ->190         0.11894
    156 ->190         0.10670
    157 ->190         0.24916
    158 ->190         0.19869
    165 ->191        -0.14086
    177 ->198         0.15819
    178 ->198        -0.12812
    180 ->203         0.21978
    181 ->204        -0.10053
    181 ->205        -0.10258
    187 ->209         0.10476
    189 ->214        -0.10448
    189 ->216        -0.11453

Excited State 277:      Singlet-A      6.8319 eV  181.48 nm  f=0.0315  <S**2>=0.000
    165 ->191         0.51360
    165 ->192        -0.10458
    166 ->191         0.11456
    180 ->200        -0.10709
    180 ->201        -0.14903
    180 ->202         0.12884
    180 ->203         0.11149

Excited State 278:      Singlet-A      6.8343 eV  181.41 nm  f=0.0988  <S**2>=0.000
    152 ->190         0.11713
    157 ->190         0.20452
    158 ->190         0.15177
    165 ->191         0.32980
    170 ->192        -0.10782
    172 ->194         0.13495
    180 ->200         0.13200
    180 ->201         0.11881
    180 ->202        -0.22000
    181 ->202         0.11446
    183 ->207         0.14647

Excited State 279:      Singlet-A      6.8413 eV  181.23 nm  f=0.0281  <S**2>=0.000
    155 ->190         0.24667
    157 ->190         0.13233
    176 ->197         0.21500
    180 ->201         0.10448
    180 ->203        -0.17626
    187 ->209         0.11703
    189 ->210        -0.12122
    189 ->212         0.11354
    189 ->213        -0.16902
    189 ->214         0.20302
    189 ->216         0.20553

Excited State 280:      Singlet-A      6.8482 eV  181.05 nm  f=0.0653  <S**2>=0.000
    155 ->190        -0.22569
    157 ->190        -0.10655
    180 ->202        -0.17816
    180 ->203         0.20928
    181 ->204        -0.18279
    189 ->210        -0.11241
    189 ->212         0.12334
    189 ->213        -0.15839
    189 ->214         0.24528
    189 ->216         0.23198

Excited State 281:      Singlet-A      6.8596 eV  180.75 nm  f=0.0536  <S**2>=0.000
    155 ->190         0.35985
    156 ->190        -0.12103
    177 ->198        -0.23286
    180 ->202        -0.19699
    180 ->203         0.27358
    181 ->202         0.10920
    187 ->209        -0.17037

Excited State 282:      Singlet-A      6.8626 eV  180.67 nm  f=0.2083  <S**2>=0.000
```

```
    155 ->190         0.30800
    156 ->190        -0.11146
    169 ->191        -0.12452
    172 ->194         0.15951
    176 ->197        -0.11183
    177 ->198         0.13639
    180 ->201        -0.19346
    180 ->202         0.21362
    182 ->205        -0.13314
    182 ->206         0.10284
    183 ->207         0.11396

Excited State 283:      Singlet-A      6.8718 eV  180.43 nm  f=0.1360  <S**2>=0.000
    171 ->193         0.12576
    176 ->197         0.34155
    178 ->197        -0.13609
    180 ->201        -0.15850
    180 ->203         0.13671
    181 ->204        -0.14278
    182 ->207         0.11452
    186 ->209        -0.10019
    188 ->214         0.11281
    189 ->213         0.19388
    189 ->214        -0.13536

Excited State 284:      Singlet-A      6.8794 eV  180.23 nm  f=0.0507  <S**2>=0.000
    176 ->197        -0.18245
    178 ->197         0.11427
    186 ->209        -0.14081
    188 ->211         0.17494
    188 ->214         0.23939
    189 ->213         0.18182
    189 ->215         0.24402
    189 ->216         0.30473

Excited State 285:      Singlet-A      6.8880 eV  180.00 nm  f=0.0228  <S**2>=0.000
    170 ->193        -0.12468
    180 ->206         0.12839
    181 ->204        -0.11022
    181 ->205         0.12840
    181 ->206         0.15560
    182 ->206        -0.18657
    187 ->209         0.43555
    187 ->211        -0.10756

Excited State 286:      Singlet-A      6.8990 eV  179.71 nm  f=0.0122  <S**2>=0.000
    165 ->192         0.13039
    167 ->191         0.24802
    170 ->193         0.12942
    171 ->193         0.15459
    177 ->198        -0.24222
    180 ->206        -0.10085
    181 ->205        -0.14323
    181 ->206        -0.12640
    187 ->209         0.24063
    188 ->211         0.17723
    188 ->214         0.13186

Excited State 287:      Singlet-A      6.9011 eV  179.66 nm  f=0.0150  <S**2>=0.000
    167 ->191        -0.16543
    174 ->197         0.24446
    174 ->199        -0.10638
    176 ->197         0.24285
    177 ->197         0.12150
    178 ->197         0.13087
    182 ->206         0.26307
    182 ->207         0.18779
    186 ->209         0.10741
    188 ->211         0.13876

Excited State 288:      Singlet-A      6.9061 eV  179.53 nm  f=0.0240  <S**2>=0.000
    162 ->191        -0.11191
    165 ->192         0.15231
    167 ->191         0.46825
    167 ->192         0.12373
    168 ->191         0.12017
    174 ->197         0.15146
    177 ->198         0.15592
    178 ->197         0.14804
```

```
Excited State 289:      Singlet-A      6.9100 eV  179.43 nm  f=0.0236  <S**2>=0.000
    176 ->197        -0.12060
    187 ->209        -0.22487
    188 ->210        -0.12847
    188 ->211         0.31302
    188 ->213         0.25403
    188 ->214         0.12424
    188 ->216        -0.11570
    189 ->213        -0.14290
    189 ->215        -0.14747
    189 ->216        -0.21784

Excited State 290:      Singlet-A      6.9158 eV  179.28 nm  f=0.0306  <S**2>=0.000
    167 ->191        -0.20400
    170 ->193         0.29718
    171 ->193         0.50961

Excited State 291:      Singlet-A      6.9208 eV  179.15 nm  f=0.0500  <S**2>=0.000
    160 ->191         0.23195
    160 ->192        -0.12441
    162 ->192        -0.10427
    164 ->191        -0.13054
    164 ->192         0.21613
    165 ->191        -0.10631
    165 ->192        -0.13969
    171 ->193         0.16654
    176 ->197        -0.17173
    182 ->206         0.10769
    182 ->207         0.29084

Excited State 292:      Singlet-A      6.9262 eV  179.01 nm  f=0.1406  <S**2>=0.000
    154 ->190         0.10348
    171 ->193        -0.13223
    173 ->196         0.11915
    174 ->197        -0.10644
    176 ->197        -0.11087
    177 ->198        -0.13412
    178 ->197        -0.12843
    178 ->198        -0.19841
    180 ->205         0.11167
    181 ->205         0.21502
    182 ->206         0.28568
    182 ->207         0.10488
    186 ->209        -0.12563
    188 ->213         0.14143

Excited State 293:      Singlet-A      6.9275 eV  178.97 nm  f=0.0629  <S**2>=0.000
    160 ->191        -0.15805
    160 ->192         0.12984
    164 ->192        -0.16326
    165 ->191         0.13700
    165 ->192         0.27417
    166 ->192         0.11481
    167 ->191        -0.12315
    170 ->193        -0.12737
    176 ->197        -0.11187
    177 ->198         0.14100
    178 ->198         0.16483
    182 ->207         0.24887

Excited State 294:      Singlet-A      6.9322 eV  178.85 nm  f=0.0140  <S**2>=0.000
    154 ->190        -0.17823
    170 ->193         0.11236
    177 ->198         0.18865
    178 ->198         0.38867
    178 ->203         0.11443
    186 ->209        -0.11505
    188 ->213         0.17436

Excited State 295:      Singlet-A      6.9338 eV  178.81 nm  f=0.0042  <S**2>=0.000
    160 ->191         0.20587
    160 ->192        -0.11457
    162 ->192        -0.11894
    164 ->191        -0.13855
    164 ->192         0.23486
    165 ->192         0.50846
    167 ->191        -0.12263
    171 ->193        -0.10549

Excited State 296:      Singlet-A      6.9402 eV  178.65 nm  f=0.0076  <S**2>=0.000
```

```
    153 ->190         0.12760
    154 ->190         0.52149
    156 ->190         0.15640
    178 ->198         0.17849
    179 ->199        -0.13510

 Excited State 297:      Singlet-A      6.9456 eV  178.51 nm  f=0.0038  <S**2>=0.000
    154 ->190         0.14834
    177 ->198         0.13568
    181 ->204        -0.12862
    181 ->205         0.10120
    186 ->209         0.30412
    188 ->210         0.15455
    188 ->212        -0.18173
    188 ->213        -0.21381
    188 ->214         0.27168

 Excited State 298:      Singlet-A      6.9531 eV  178.32 nm  f=0.0085  <S**2>=0.000
    176 ->197         0.11657
    179 ->197         0.31050
    179 ->199         0.44563
    179 ->200        -0.10674
    179 ->201         0.12260
    182 ->207        -0.11852
    186 ->209         0.10787

 Excited State 299:      Singlet-A      6.9628 eV  178.07 nm  f=0.0263  <S**2>=0.000
    154 ->190        -0.17261
    170 ->193        -0.10362
    173 ->196         0.18889
    176 ->198        -0.14427
    178 ->198         0.13997
    179 ->197        -0.10524
    179 ->199        -0.15913
    180 ->202         0.10160
    180 ->208        -0.15509
    181 ->204         0.16003
    181 ->208        -0.21470
    186 ->209         0.30437
    189 ->216         0.13145

 Excited State 300:      Singlet-A      6.9640 eV  178.04 nm  f=0.0346  <S**2>=0.000
    172 ->196         0.15165
    173 ->196         0.57887
    186 ->209        -0.12955
    188 ->214         0.10022
```

Compound 3

```
 Excitation energies and oscillator strengths:

 Excited State   1:      Singlet-A      2.5875 eV  479.16 nm  f=0.0239  <S**2>=0.000
    205 -> 206        0.69638
 This state for optimization and/or second-order correction.
 Total Energy, E(TD-HF/TD-DFT) =  -2664.84654585
 Copying the excited state density for this state as the 1-particle RhoCI density.

 Excited State   2:      Singlet-A      2.7434 eV  451.94 nm  f=0.0584  <S**2>=0.000
    204 -> 206        0.69057

 Excited State   3:      Singlet-A      3.0447 eV  407.21 nm  f=0.0586  <S**2>=0.000
    202 -> 206       -0.11809
    203 -> 206        0.68740

 Excited State   4:      Singlet-A      3.1188 eV  397.53 nm  f=0.0204  <S**2>=0.000
    204 -> 207       -0.10799
    205 -> 207        0.68718

 Excited State   5:      Singlet-A      3.1872 eV  389.01 nm  f=0.0024  <S**2>=0.000
    205 -> 208        0.69229

 Excited State   6:      Singlet-A      3.2726 eV  378.85 nm  f=0.0154  <S**2>=0.000
    198 -> 206       -0.13600
    199 -> 206       -0.13499
    200 -> 206        0.26785
    202 -> 206        0.59425
    203 -> 206        0.12127

 Excited State   7:      Singlet-A      3.3448 eV  370.67 nm  f=0.0715  <S**2>=0.000
    204 -> 207        0.67303
```

```
    205 -> 207        0.10047

Excited State   8:      Singlet-A      3.3866 eV  366.10 nm  f=0.1711  <S**2>=0.000
    200 -> 206        0.11992
    201 -> 206        0.65253
    202 -> 206       -0.16486

Excited State   9:      Singlet-A      3.4503 eV  359.35 nm  f=0.0101  <S**2>=0.000
    199 -> 206        0.11852
    202 -> 206        0.12273
    203 -> 207        0.15053
    204 -> 208        0.63777

Excited State  10:      Singlet-A      3.5062 eV  353.62 nm  f=0.0530  <S**2>=0.000
    198 -> 206        0.13587
    199 -> 206        0.41383
    200 -> 206       -0.40513
    201 -> 206        0.14106
    202 -> 206        0.27472
    204 -> 208       -0.16273

Excited State  11:      Singlet-A      3.5975 eV  344.64 nm  f=0.0316  <S**2>=0.000
    199 -> 206        0.50925
    200 -> 206        0.44271
    201 -> 206       -0.13448

Excited State  12:      Singlet-A      3.6496 eV  339.72 nm  f=0.0162  <S**2>=0.000
    199 -> 206        0.10143
    203 -> 207        0.58004
    203 -> 208        0.31364
    204 -> 208       -0.13653

Excited State  13:      Singlet-A      3.6896 eV  336.04 nm  f=0.0360  <S**2>=0.000
    203 -> 207       -0.28498
    203 -> 208        0.54661
    205 -> 209       -0.28611

Excited State  14:      Singlet-A      3.7230 eV  333.02 nm  f=0.0453  <S**2>=0.000
    203 -> 208        0.27311
    205 -> 209        0.62348

Excited State  15:      Singlet-A      3.8090 eV  325.50 nm  f=0.0004  <S**2>=0.000
    196 -> 206        0.56429
    198 -> 206       -0.35348
    200 -> 206       -0.12526

Excited State  16:      Singlet-A      3.8473 eV  322.26 nm  f=0.0084  <S**2>=0.000
    202 -> 207       -0.15036
    203 -> 207       -0.11101
    204 -> 209       -0.11177
    205 -> 210        0.65550

Excited State  17:      Singlet-A      3.8765 eV  319.84 nm  f=0.0016  <S**2>=0.000
    202 -> 207        0.10265
    202 -> 208        0.13897
    204 -> 209        0.63595
    205 -> 210        0.12989

Excited State  18:      Singlet-A      3.9078 eV  317.28 nm  f=0.0043  <S**2>=0.000
    195 -> 206        0.10076
    196 -> 206        0.30918
    198 -> 206        0.47913
    200 -> 206        0.12084
    200 -> 207        0.10918
    202 -> 207        0.26295
    202 -> 208       -0.11514
    204 -> 209       -0.13847

Excited State  19:      Singlet-A      3.9135 eV  316.81 nm  f=0.0125  <S**2>=0.000
    196 -> 206       -0.18101
    198 -> 206       -0.27418
    199 -> 207       -0.11822
    200 -> 207        0.18828
    200 -> 208       -0.11263
    202 -> 207        0.46681
    202 -> 208       -0.21400

Excited State  20:      Singlet-A      3.9595 eV  313.13 nm  f=0.0102  <S**2>=0.000
    197 -> 206        0.60620
    202 -> 208       -0.11886
```

```
    204 -> 209        0.12101
    204 -> 212        0.13578
    205 -> 212        0.13988

Excited State  21:      Singlet-A      3.9727 eV  312.09 nm  f=0.0402  <S**2>=0.000
    197 -> 206        0.13591
    200 -> 208        0.18983
    202 -> 207        0.19129
    202 -> 208        0.46806
    204 -> 209       -0.14327
    204 -> 210       -0.34671

Excited State  22:      Singlet-A      4.0164 eV  308.70 nm  f=0.0281  <S**2>=0.000
    199 -> 207       -0.10192
    200 -> 207        0.16934
    201 -> 207        0.11425
    202 -> 207        0.13409
    202 -> 208        0.27179
    204 -> 210        0.54856

Excited State  23:      Singlet-A      4.0366 eV  307.15 nm  f=0.0352  <S**2>=0.000
    201 -> 207        0.64853
    204 -> 210       -0.13649

Excited State  24:      Singlet-A      4.0914 eV  303.03 nm  f=0.0401  <S**2>=0.000
    201 -> 208        0.23405
    204 -> 211        0.17821
    205 -> 211        0.57868

Excited State  25:      Singlet-A      4.1139 eV  301.38 nm  f=0.0590  <S**2>=0.000
    200 -> 207        0.23261
    201 -> 207       -0.10239
    201 -> 208        0.55929
    203 -> 209        0.13061
    205 -> 211       -0.16083

Excited State  26:      Singlet-A      4.1202 eV  300.92 nm  f=0.0524  <S**2>=0.000
    199 -> 207       -0.12675
    200 -> 207        0.38946
    200 -> 208       -0.17556
    201 -> 208       -0.22909
    202 -> 207       -0.15744
    203 -> 209        0.36235
    203 -> 210        0.11251
    204 -> 210       -0.11722
    205 -> 211        0.15642

Excited State  27:      Singlet-A      4.1972 eV  295.40 nm  f=0.0337  <S**2>=0.000
    199 -> 207       -0.17532
    199 -> 208       -0.26014
    200 -> 207       -0.29694
    202 -> 207        0.15382
    203 -> 209        0.42743
    203 -> 210       -0.24529

Excited State  28:      Singlet-A      4.2166 eV  294.04 nm  f=0.0339  <S**2>=0.000
    194 -> 206        0.14925
    199 -> 207       -0.31820
    200 -> 207        0.15733
    200 -> 208        0.41409
    202 -> 207       -0.14708
    203 -> 209       -0.12118
    203 -> 210       -0.26170

Excited State  29:      Singlet-A      4.2188 eV  293.89 nm  f=0.0023  <S**2>=0.000
    190 -> 206       -0.26677
    192 -> 206        0.14228
    194 -> 206        0.42218
    195 -> 206        0.18937
    199 -> 207        0.11557
    200 -> 208       -0.10029
    204 -> 211        0.17923
    204 -> 212       -0.15480
    205 -> 211       -0.17317
    205 -> 212       -0.15536

Excited State  30:      Singlet-A      4.2353 eV  292.74 nm  f=0.0021  <S**2>=0.000
    199 -> 207        0.41562
    199 -> 208       -0.26526
    200 -> 207        0.18812
```

```
    200 -> 208        0.32584
    202 -> 208       -0.20802
    203 -> 209        0.15098

Excited State  31:      Singlet-A      4.2616 eV  290.93 nm  f=0.0278  <S**2>=0.000
    190 -> 206        0.12960
    194 -> 206       -0.17071
    204 -> 211        0.61169
    205 -> 211       -0.14075

Excited State  32:      Singlet-A      4.2928 eV  288.82 nm  f=0.0224  <S**2>=0.000
    190 -> 206       -0.27058
    191 -> 206        0.10196
    194 -> 206       -0.22581
    195 -> 206        0.43959
    197 -> 206       -0.18405
    204 -> 212        0.13177
    205 -> 212        0.24507

Excited State  33:      Singlet-A      4.3329 eV  286.15 nm  f=0.0057  <S**2>=0.000
    190 -> 206        0.24696
    191 -> 206       -0.19711
    192 -> 206       -0.15120
    193 -> 206        0.21904
    195 -> 206        0.41517
    199 -> 208       -0.19582
    205 -> 212       -0.22775

Excited State  34:      Singlet-A      4.3399 eV  285.68 nm  f=0.0398  <S**2>=0.000
    190 -> 206        0.11565
    191 -> 206       -0.10528
    195 -> 206        0.12968
    199 -> 208        0.45680
    200 -> 208        0.21081
    202 -> 209       -0.20078
    203 -> 209        0.27171
    205 -> 212       -0.12509

Excited State  35:      Singlet-A      4.3707 eV  283.67 nm  f=0.1905  <S**2>=0.000
    198 -> 207        0.13144
    199 -> 207       -0.24467
    200 -> 207       -0.12752
    200 -> 208        0.16822
    201 -> 209       -0.11520
    202 -> 208       -0.12546
    202 -> 210       -0.10979
    203 -> 210        0.53798

Excited State  36:      Singlet-A      4.4044 eV  281.50 nm  f=0.0289  <S**2>=0.000
    190 -> 206        0.15503
    191 -> 206       -0.10779
    194 -> 206        0.18982
    204 -> 212       -0.37002
    205 -> 212        0.45618
    205 -> 213        0.10925

Excited State  37:      Singlet-A      4.4336 eV  279.64 nm  f=0.0122  <S**2>=0.000
    198 -> 207        0.55717
    199 -> 208        0.13373
    202 -> 209        0.30880
    203 -> 210       -0.10510

Excited State  38:      Singlet-A      4.4485 eV  278.71 nm  f=0.0028  <S**2>=0.000
    190 -> 206       -0.17334
    191 -> 206        0.17049
    193 -> 206        0.60996
    194 -> 206       -0.13640
    203 -> 211       -0.10347

Excited State  39:      Singlet-A      4.4961 eV  275.76 nm  f=0.0021  <S**2>=0.000
    198 -> 207       -0.30957
    198 -> 208        0.13866
    199 -> 209       -0.12824
    200 -> 209        0.24982
    202 -> 209        0.50043

Excited State  40:      Singlet-A      4.5268 eV  273.89 nm  f=0.0171  <S**2>=0.000
    198 -> 207        0.11074
    198 -> 208        0.62663
    201 -> 209       -0.16734
```

```
    202 -> 210       -0.12783

Excited State  41:      Singlet-A      4.5632 eV  271.70 nm  f=0.1796  <S**2>=0.000
    194 -> 206       -0.17903
    201 -> 209        0.46012
    203 -> 211        0.16264
    204 -> 212       -0.31838
    205 -> 212       -0.10803

Excited State  42:      Singlet-A      4.6030 eV  269.36 nm  f=0.1565  <S**2>=0.000
    194 -> 206       -0.20323
    200 -> 210        0.15412
    201 -> 209       -0.31414
    201 -> 212       -0.11136
    202 -> 210        0.37612
    203 -> 211        0.20169
    204 -> 212       -0.26652

Excited State  43:      Singlet-A      4.6116 eV  268.85 nm  f=0.0636  <S**2>=0.000
    198 -> 208       -0.17097
    200 -> 210       -0.12042
    201 -> 209       -0.13559
    202 -> 210       -0.33759
    203 -> 211        0.49614

Excited State  44:      Singlet-A      4.6223 eV  268.23 nm  f=0.2699  <S**2>=0.000
    193 -> 206        0.12730
    194 -> 206        0.14328
    200 -> 210        0.10466
    201 -> 209        0.22243
    201 -> 210        0.18088
    202 -> 210        0.31111
    203 -> 211        0.32574
    204 -> 212        0.22088

Excited State  45:      Singlet-A      4.6596 eV  266.09 nm  f=0.0450  <S**2>=0.000
    191 -> 206        0.20807
    201 -> 210       -0.17993
    201 -> 211       -0.13641
    203 -> 211        0.13466
    204 -> 212        0.13692
    204 -> 213        0.12165
    205 -> 213        0.41632
    205 -> 216        0.16496
    205 -> 220        0.15698
    205 -> 222       -0.10729

Excited State  46:      Singlet-A      4.6961 eV  264.01 nm  f=0.0617  <S**2>=0.000
    191 -> 206        0.17206
    197 -> 208       -0.13514
    199 -> 208        0.11488
    199 -> 209        0.11132
    200 -> 209       -0.30629
    201 -> 210        0.43496
    201 -> 211       -0.12022
    202 -> 209        0.12566
    205 -> 213        0.10171

Excited State  47:      Singlet-A      4.7052 eV  263.50 nm  f=0.0138  <S**2>=0.000
    199 -> 209       -0.13880
    200 -> 209        0.41838
    201 -> 210        0.42281
    202 -> 209       -0.16673
    202 -> 210       -0.10953
    205 -> 213        0.11743

Excited State  48:      Singlet-A      4.7175 eV  262.82 nm  f=0.0213  <S**2>=0.000
    191 -> 206       -0.26479
    192 -> 206        0.37265
    200 -> 209       -0.21514
    201 -> 211        0.23211
    204 -> 213       -0.11990
    205 -> 213        0.14152
    205 -> 214        0.10820
    205 -> 216        0.18718
    205 -> 220        0.10362
    205 -> 224       -0.11908

Excited State  49:      Singlet-A      4.7521 eV  260.90 nm  f=0.0014  <S**2>=0.000
    190 -> 206        0.28919
```

```
    191 -> 206        0.14680
    192 -> 206        0.47265
    205 -> 214       -0.12961
    205 -> 216       -0.19320
    205 -> 224        0.12916

Excited State  50:      Singlet-A      4.7711 eV  259.86 nm  f=0.0088  <S**2>=0.000
    197 -> 207       -0.34251
    197 -> 208       -0.12158
    199 -> 209        0.46705
    199 -> 210       -0.13027
    200 -> 210        0.21154
    205 -> 214       -0.13087
    205 -> 216        0.10466

Excited State  51:      Singlet-A      4.8019 eV  258.20 nm  f=0.1012  <S**2>=0.000
    190 -> 206       -0.11859
    191 -> 206       -0.11712
    197 -> 208        0.10021
    200 -> 209       -0.11332
    200 -> 210        0.22900
    201 -> 211        0.12818
    203 -> 212        0.27710
    205 -> 213        0.31271
    205 -> 214       -0.20638
    205 -> 216       -0.20159
    205 -> 224        0.10945

Excited State  52:      Singlet-A      4.8061 eV  257.97 nm  f=0.0069  <S**2>=0.000
    190 -> 206        0.11925
    191 -> 206        0.14028
    197 -> 207       -0.25334
    197 -> 208       -0.12918
    199 -> 209       -0.31854
    200 -> 209       -0.14412
    200 -> 210        0.14224
    203 -> 212        0.35230
    205 -> 213       -0.16933

Excited State  53:      Singlet-A      4.8105 eV  257.74 nm  f=0.0336  <S**2>=0.000
    195 -> 207       -0.11003
    197 -> 207        0.20693
    199 -> 209        0.25304
    200 -> 209        0.16872
    200 -> 210       -0.25036
    203 -> 212        0.43996

Excited State  54:      Singlet-A      4.8297 eV  256.71 nm  f=0.0831  <S**2>=0.000
    193 -> 207       -0.15809
    193 -> 208       -0.10807
    195 -> 207       -0.14305
    195 -> 208       -0.13071
    197 -> 207        0.32521
    197 -> 208        0.13891
    200 -> 210        0.33226
    202 -> 210       -0.17914
    204 -> 214        0.10269
    205 -> 213       -0.17129
    205 -> 214       -0.11207
    205 -> 216        0.12610

Excited State  55:      Singlet-A      4.8536 eV  255.45 nm  f=0.0046  <S**2>=0.000
    191 -> 206       -0.11579
    200 -> 211        0.16747
    202 -> 211        0.34379
    204 -> 213        0.44879
    204 -> 216        0.11570
    204 -> 220        0.11053

Excited State  56:      Singlet-A      4.8615 eV  255.03 nm  f=0.0538  <S**2>=0.000
    191 -> 206        0.10042
    193 -> 207       -0.11876
    195 -> 208       -0.11683
    197 -> 207       -0.18359
    197 -> 208        0.25262
    199 -> 210        0.15489
    200 -> 210        0.14150
    205 -> 214        0.44036
    205 -> 215       -0.18018
```

```
Excited State  57:      Singlet-A      4.8810 eV  254.01 nm  f=0.0095  <S**2>=0.000
    193 -> 207        0.23336
    193 -> 208        0.15767
    194 -> 207       -0.16410
    195 -> 207        0.26015
    195 -> 208        0.12563
    197 -> 207        0.16262
    197 -> 208        0.10129
    199 -> 210        0.26827
    200 -> 210        0.16074
    202 -> 211        0.23509
    204 -> 213       -0.14116
    205 -> 215       -0.14383

Excited State  58:      Singlet-A      4.8899 eV  253.55 nm  f=0.0117  <S**2>=0.000
    191 -> 206        0.10560
    193 -> 207       -0.17570
    193 -> 208       -0.11206
    194 -> 207        0.10804
    195 -> 207       -0.14867
    195 -> 208       -0.10426
    197 -> 207       -0.14532
    200 -> 210       -0.13122
    200 -> 211        0.13716
    202 -> 211        0.38472
    204 -> 213       -0.23230
    204 -> 216       -0.11489
    205 -> 214       -0.14028

Excited State  59:      Singlet-A      4.8972 eV  253.17 nm  f=0.0837  <S**2>=0.000
    197 -> 207        0.18671
    197 -> 208       -0.29445
    199 -> 210       -0.26452
    200 -> 210        0.13046
    201 -> 211        0.11761
    202 -> 210       -0.10471
    202 -> 211        0.17557
    204 -> 216       -0.11838
    205 -> 214        0.30500
    205 -> 215        0.12084
    205 -> 216       -0.10477

Excited State  60:      Singlet-A      4.9190 eV  252.05 nm  f=0.0190  <S**2>=0.000
    199 -> 210        0.38980
    200 -> 210        0.15064
    201 -> 211        0.15400
    204 -> 215        0.18653
    205 -> 215        0.40922

Excited State  61:      Singlet-A      4.9320 eV  251.39 nm  f=0.0439  <S**2>=0.000
    190 -> 206        0.12566
    191 -> 206        0.26231
    197 -> 208       -0.13808
    199 -> 211        0.11667
    201 -> 211        0.46048
    202 -> 211       -0.13632
    204 -> 213        0.14566
    205 -> 214       -0.13013
    205 -> 215       -0.18799

Excited State  62:      Singlet-A      4.9370 eV  251.13 nm  f=0.0044  <S**2>=0.000
    191 -> 206        0.10904
    193 -> 207        0.17517
    197 -> 208        0.40069
    199 -> 210       -0.27332
    200 -> 210       -0.10613
    201 -> 211        0.20326
    205 -> 215        0.24952

Excited State  63:      Singlet-A      4.9834 eV  248.79 nm  f=0.0194  <S**2>=0.000
    198 -> 209        0.14379
    204 -> 213       -0.26469
    204 -> 214        0.26210
    204 -> 216        0.33677
    204 -> 220        0.13094
    204 -> 222       -0.12743
    204 -> 224       -0.15929
    205 -> 216       -0.22119

Excited State  64:      Singlet-A      5.0134 eV  247.31 nm  f=0.0360  <S**2>=0.000
```

```
    195 -> 208        0.10482
    198 -> 209        0.44647
    200 -> 212        0.11565
    201 -> 212        0.12475
    202 -> 212        0.16188
    203 -> 213        0.13799
    203 -> 216        0.11942
    203 -> 224       -0.10196
    204 -> 215        0.25810

Excited State  65:      Singlet-A      5.0236 eV  246.80 nm  f=0.1012  <S**2>=0.000
    193 -> 208       -0.20777
    194 -> 208        0.12438
    195 -> 207        0.15612
    195 -> 208       -0.19689
    198 -> 209        0.12883
    204 -> 214        0.44485
    204 -> 216       -0.18612

Excited State  66:      Singlet-A      5.0274 eV  246.62 nm  f=0.0172  <S**2>=0.000
    195 -> 207        0.11277
    195 -> 208       -0.13411
    198 -> 209       -0.16223
    200 -> 212       -0.10446
    202 -> 212       -0.18113
    203 -> 213        0.30846
    203 -> 216        0.23449
    203 -> 220        0.18475
    203 -> 222       -0.18055
    203 -> 224       -0.20136
    204 -> 214        0.11608

Excited State  67:      Singlet-A      5.0351 eV  246.24 nm  f=0.0167  <S**2>=0.000
    193 -> 207       -0.13007
    193 -> 208        0.20811
    194 -> 207        0.10939
    194 -> 208       -0.16244
    195 -> 207       -0.20190
    195 -> 208        0.28820
    198 -> 209       -0.11098
    200 -> 212       -0.13302
    202 -> 212       -0.24416
    204 -> 214        0.31302
    204 -> 216       -0.11106

Excited State  68:      Singlet-A      5.0414 eV  245.93 nm  f=0.0915  <S**2>=0.000
    198 -> 209        0.39731
    198 -> 212        0.11496
    200 -> 212       -0.22425
    201 -> 212       -0.17342
    202 -> 212       -0.37470
    204 -> 214       -0.17589

Excited State  69:      Singlet-A      5.0893 eV  243.62 nm  f=0.0081  <S**2>=0.000
    198 -> 211       -0.12951
    199 -> 211       -0.39384
    200 -> 211        0.44042
    202 -> 211       -0.27865

Excited State  70:      Singlet-A      5.0976 eV  243.22 nm  f=0.0674  <S**2>=0.000
    193 -> 207       -0.29678
    195 -> 207        0.25674
    196 -> 207       -0.24145
    200 -> 211       -0.10088
    203 -> 213       -0.10569
    204 -> 215        0.36152

Excited State  71:      Singlet-A      5.1279 eV  241.78 nm  f=0.0159  <S**2>=0.000
    192 -> 207       -0.12094
    195 -> 208       -0.11429
    196 -> 207        0.19154
    196 -> 208        0.10130
    198 -> 210        0.49742
    203 -> 216       -0.11929
    204 -> 215        0.24270

Excited State  72:      Singlet-A      5.1473 eV  240.87 nm  f=0.0061  <S**2>=0.000
    193 -> 207       -0.13623
    196 -> 207       -0.23328
    196 -> 208       -0.10802
```

```
    198 -> 210        0.34572
    201 -> 212        0.19207
    204 -> 215       -0.24828
    204 -> 216        0.12505
    205 -> 216        0.13108
    205 -> 217       -0.26529

Excited State  73:      Singlet-A      5.1484 eV  240.82 nm  f=0.0750  <S**2>=0.000
    196 -> 207        0.25010
    196 -> 208        0.10470
    198 -> 210       -0.17253
    199 -> 211       -0.21382
    200 -> 211       -0.13079
    201 -> 211        0.11193
    201 -> 212        0.33531
    202 -> 212       -0.21958
    205 -> 215       -0.10783
    205 -> 217       -0.24862

Excited State  74:      Singlet-A      5.1674 eV  239.94 nm  f=0.0156  <S**2>=0.000
    188 -> 206       -0.11898
    189 -> 206        0.23605
    196 -> 207        0.10788
    198 -> 210       -0.11778
    199 -> 211        0.38101
    200 -> 211        0.32513
    201 -> 211       -0.17206
    201 -> 212        0.16010
    205 -> 218        0.19718

Excited State  75:      Singlet-A      5.1743 eV  239.62 nm  f=0.0365  <S**2>=0.000
    188 -> 206        0.10532
    189 -> 206       -0.21169
    193 -> 207       -0.20276
    193 -> 208        0.23077
    195 -> 207        0.14825
    195 -> 208       -0.14151
    196 -> 207        0.13444
    196 -> 208        0.21153
    201 -> 212       -0.14121
    204 -> 216        0.10354
    204 -> 218        0.12076
    205 -> 216        0.24903
    205 -> 217       -0.10659
    205 -> 220       -0.16551
    205 -> 224        0.12286

Excited State  76:      Singlet-A      5.1804 eV  239.33 nm  f=0.0032  <S**2>=0.000
    189 -> 206       -0.15900
    193 -> 207       -0.18685
    193 -> 208       -0.18075
    195 -> 207        0.21685
    195 -> 208        0.22429
    196 -> 207        0.39286
    203 -> 216        0.10143
    204 -> 215       -0.11566
    205 -> 216       -0.12057
    205 -> 218       -0.10039

Excited State  77:      Singlet-A      5.1824 eV  239.24 nm  f=0.0047  <S**2>=0.000
    189 -> 206        0.16861
    196 -> 207        0.10349
    199 -> 211       -0.20849
    200 -> 211       -0.18036
    205 -> 216        0.12015
    205 -> 217        0.35040
    205 -> 218        0.37134

Excited State  78:      Singlet-A      5.1901 eV  238.89 nm  f=0.0112  <S**2>=0.000
    188 -> 206       -0.21092
    189 -> 206        0.47567
    193 -> 207       -0.10711
    199 -> 211       -0.11688
    205 -> 218       -0.34857

Excited State  79:      Singlet-A      5.1985 eV  238.50 nm  f=0.0515  <S**2>=0.000
    189 -> 206        0.13037
    193 -> 208        0.15941
    201 -> 212       -0.18258
    202 -> 212        0.12711
```

```
    204 -> 216       -0.10067
    204 -> 218       -0.14836
    205 -> 216       -0.15353
    205 -> 217       -0.28417
    205 -> 218        0.30136
    205 -> 220        0.20129
    205 -> 222       -0.13358
    205 -> 224       -0.12162

Excited State  80:      Singlet-A      5.2082 eV  238.06 nm  f=0.0372  <S**2>=0.000
    193 -> 207       -0.11998
    193 -> 208        0.31779
    195 -> 208       -0.18526
    196 -> 207       -0.10708
    196 -> 208        0.18583
    201 -> 212        0.20223
    202 -> 212       -0.10088
    204 -> 215       -0.14666
    205 -> 215        0.10005
    205 -> 216       -0.15584
    205 -> 217        0.29168
    205 -> 218       -0.13786
    205 -> 224       -0.10378

Excited State  81:      Singlet-A      5.2344 eV  236.87 nm  f=0.0060  <S**2>=0.000
    190 -> 207        0.10984
    192 -> 207        0.30147
    192 -> 208       -0.14393
    196 -> 208        0.26596
    198 -> 210        0.13883
    203 -> 213       -0.26842
    203 -> 214        0.25692
    203 -> 215        0.20542
    203 -> 216        0.14646

Excited State  82:      Singlet-A      5.2661 eV  235.44 nm  f=0.0012  <S**2>=0.000
    188 -> 206        0.63307
    189 -> 206        0.28847

Excited State  83:      Singlet-A      5.2731 eV  235.13 nm  f=0.0191  <S**2>=0.000
    193 -> 208       -0.22305
    195 -> 208        0.20870
    196 -> 207       -0.19824
    196 -> 208        0.49010
    203 -> 213        0.20051

Excited State  84:      Singlet-A      5.2781 eV  234.90 nm  f=0.0014  <S**2>=0.000
    192 -> 208       -0.11968
    196 -> 208       -0.11318
    203 -> 213        0.11075
    203 -> 214        0.51909
    203 -> 216       -0.15036
    205 -> 219        0.26802

Excited State  85:      Singlet-A      5.2852 eV  234.59 nm  f=0.0163  <S**2>=0.000
    192 -> 207        0.18934
    203 -> 214       -0.22989
    203 -> 215        0.16000
    205 -> 219        0.52110
    205 -> 220       -0.16348

Excited State  86:      Singlet-A      5.2975 eV  234.04 nm  f=0.0182  <S**2>=0.000
    192 -> 207       -0.12915
    198 -> 212       -0.10231
    199 -> 212       -0.25843
    200 -> 212        0.34592
    201 -> 212       -0.11048
    202 -> 212       -0.24800
    203 -> 215       -0.18826
    204 -> 217        0.26737
    204 -> 218        0.11177
    205 -> 219        0.12004

Excited State  87:      Singlet-A      5.3024 eV  233.82 nm  f=0.0106  <S**2>=0.000
    192 -> 207        0.26106
    194 -> 207        0.41579
    194 -> 208        0.13834
    195 -> 207        0.17687
    197 -> 209        0.12016
    203 -> 213        0.19303
```

```
    203 -> 215       -0.12665
    203 -> 216       -0.13858
    205 -> 219       -0.17390

Excited State  88:      Singlet-A      5.3139 eV  233.32 nm  f=0.0058  <S**2>=0.000
    190 -> 207       -0.11444
    192 -> 207       -0.28801
    194 -> 207        0.42764
    194 -> 208        0.14696
    195 -> 207        0.14328
    197 -> 209       -0.12972
    203 -> 213       -0.14079
    203 -> 215        0.15324
    203 -> 216        0.10997
    204 -> 217       -0.14426

Excited State  89:      Singlet-A      5.3235 eV  232.90 nm  f=0.0400  <S**2>=0.000
    200 -> 212       -0.28331
    201 -> 212        0.22672
    202 -> 212        0.13362
    204 -> 217        0.47871
    204 -> 218        0.13578
    204 -> 219       -0.10470

Excited State  90:      Singlet-A      5.3340 eV  232.44 nm  f=0.0183  <S**2>=0.000
    195 -> 209       -0.10087
    197 -> 209        0.61040
    203 -> 213       -0.10751
    203 -> 215       -0.10871
    204 -> 217       -0.12034

Excited State  91:      Singlet-A      5.3451 eV  231.96 nm  f=0.0068  <S**2>=0.000
    190 -> 208        0.12295
    192 -> 208        0.32650
    201 -> 213        0.10145
    202 -> 214       -0.14781
    203 -> 214        0.12052
    204 -> 216       -0.26142
    204 -> 218       -0.12113
    204 -> 219        0.10737
    204 -> 220        0.20506
    204 -> 222       -0.13916
    204 -> 224       -0.10542
    205 -> 216        0.10964
    205 -> 218        0.10923
    205 -> 220       -0.17005
    205 -> 221        0.12830
    205 -> 222        0.11126

Excited State  92:      Singlet-A      5.3501 eV  231.74 nm  f=0.0070  <S**2>=0.000
    192 -> 207        0.12458
    192 -> 208        0.17309
    197 -> 209       -0.13237
    203 -> 215       -0.19858
    204 -> 216        0.11795
    204 -> 217       -0.30175
    204 -> 218        0.36342
    205 -> 220        0.21918
    205 -> 221        0.10261

Excited State  93:      Singlet-A      5.3612 eV  231.26 nm  f=0.0331  <S**2>=0.000
    190 -> 208        0.11257
    192 -> 208        0.30675
    197 -> 209        0.11454
    202 -> 214       -0.12337
    203 -> 213        0.11462
    203 -> 214        0.15020
    203 -> 215        0.30261
    204 -> 216        0.16850
    204 -> 220       -0.21330
    205 -> 219       -0.12264
    205 -> 221        0.11037

Excited State  94:      Singlet-A      5.3689 eV  230.93 nm  f=0.0501  <S**2>=0.000
    203 -> 213        0.14159
    203 -> 215        0.25508
    204 -> 216       -0.19071
    204 -> 218        0.46416
    204 -> 220        0.15901
    205 -> 218        0.17393
```

```
Excited State  95:      Singlet-A      5.4006 eV  229.57 nm  f=0.0128  <S**2>=0.000
    193 -> 208         0.11343
    194 -> 207        -0.17959
    194 -> 208         0.48866
    195 -> 208         0.18879
    199 -> 212        -0.31046
    200 -> 212        -0.18288

Excited State  96:      Singlet-A      5.4072 eV  229.29 nm  f=0.0376  <S**2>=0.000
    194 -> 208         0.35101
    195 -> 208         0.12817
    199 -> 212         0.46927
    200 -> 212         0.25091

Excited State  97:      Singlet-A      5.4236 eV  228.60 nm  f=0.0037  <S**2>=0.000
    196 -> 211         0.12947
    197 -> 210         0.17471
    198 -> 211        -0.10056
    199 -> 212         0.10580
    202 -> 213         0.16989
    204 -> 219         0.52481
    204 -> 220        -0.16287
    205 -> 221         0.12026

Excited State  98:      Singlet-A      5.4342 eV  228.15 nm  f=0.0258  <S**2>=0.000
    196 -> 211        -0.26015
    197 -> 210        -0.10168
    198 -> 211         0.27371
    200 -> 213        -0.14681
    202 -> 213        -0.24921
    202 -> 214         0.10353
    204 -> 219         0.30188
    204 -> 220        -0.10267

Excited State  99:      Singlet-A      5.4457 eV  227.67 nm  f=0.0053  <S**2>=0.000
    192 -> 208        -0.10406
    195 -> 209        -0.12532
    196 -> 211        -0.17714
    197 -> 210         0.43810
    198 -> 211         0.23111
    202 -> 214        -0.11773
    204 -> 219        -0.14475
    205 -> 220        -0.14071
    205 -> 221         0.19459

Excited State 100:      Singlet-A      5.4564 eV  227.23 nm  f=0.0212  <S**2>=0.000
    192 -> 207         0.10949
    196 -> 211        -0.18807
    198 -> 211         0.29297
    202 -> 213         0.23404
    202 -> 215        -0.12409
    205 -> 220         0.26202
    205 -> 221        -0.19508
    205 -> 222         0.14107
    205 -> 223        -0.14636
    205 -> 224         0.13757

Excited State 101:      Singlet-A      5.4716 eV  226.60 nm  f=0.0164  <S**2>=0.000
    192 -> 208         0.22075
    197 -> 210         0.41934
    198 -> 211        -0.14890
    202 -> 213        -0.13508
    205 -> 220         0.15955
    205 -> 221        -0.31097

Excited State 102:      Singlet-A      5.4958 eV  225.60 nm  f=0.0045  <S**2>=0.000
    187 -> 206         0.11611
    193 -> 209         0.33068
    193 -> 210        -0.10470
    194 -> 209        -0.23034
    195 -> 209         0.39686
    201 -> 213        -0.10194
    202 -> 213         0.15266
    205 -> 220        -0.10838

Excited State 103:      Singlet-A      5.5061 eV  225.18 nm  f=0.0034  <S**2>=0.000
    187 -> 206        -0.25860
    196 -> 211         0.28091
    198 -> 211         0.32622
```

```
    201 -> 213        0.26875
    205 -> 221       -0.10388

Excited State 104:      Singlet-A      5.5100 eV  225.02 nm  f=0.0052  <S**2>=0.000
    187 -> 206        0.18391
    192 -> 208        0.19690
    193 -> 209       -0.13778
    194 -> 209        0.10571
    195 -> 209       -0.20065
    197 -> 211        0.10373
    198 -> 211        0.12012
    201 -> 213       -0.19570
    202 -> 213        0.22396
    202 -> 214        0.17422
    204 -> 221        0.11807
    205 -> 220       -0.15909
    205 -> 221       -0.17830
    205 -> 222       -0.18316

Excited State 105:      Singlet-A      5.5309 eV  224.17 nm  f=0.0200  <S**2>=0.000
    187 -> 206        0.27663
    196 -> 209       -0.11342
    196 -> 211        0.31033
    198 -> 211        0.23700
    201 -> 213       -0.25125
    202 -> 214       -0.16388
    205 -> 220        0.10507
    205 -> 222        0.12819

Excited State 106:      Singlet-A      5.5425 eV  223.70 nm  f=0.0105  <S**2>=0.000
    192 -> 207       -0.13138
    195 -> 209        0.12165
    195 -> 210        0.10508
    196 -> 211       -0.12114
    197 -> 211        0.30672
    199 -> 213       -0.11117
    200 -> 213        0.12740
    201 -> 214        0.13577
    202 -> 215        0.18246
    202 -> 216        0.11670
    204 -> 220        0.13582
    204 -> 223       -0.16281
    205 -> 223        0.26190

Excited State 107:      Singlet-A      5.5608 eV  222.96 nm  f=0.0370  <S**2>=0.000
    187 -> 206       -0.16898
    197 -> 211        0.40783
    198 -> 211        0.11782
    200 -> 213       -0.15109
    200 -> 214        0.15874
    201 -> 213       -0.14352
    202 -> 213       -0.10222
    205 -> 221        0.13834
    205 -> 223       -0.23312

Excited State 108:      Singlet-A      5.5781 eV  222.27 nm  f=0.0076  <S**2>=0.000
    187 -> 206        0.23996
    197 -> 211        0.26408
    200 -> 214       -0.15364
    201 -> 213        0.19023
    202 -> 213       -0.24662
    202 -> 214       -0.12278
    202 -> 215       -0.14567
    204 -> 220       -0.22645
    204 -> 221        0.18853

Excited State 109:      Singlet-A      5.5876 eV  221.89 nm  f=0.0208  <S**2>=0.000
    191 -> 207        0.30253
    202 -> 214        0.12175
    202 -> 215        0.18247
    202 -> 216        0.10126
    203 -> 217        0.12797
    204 -> 220       -0.25103
    204 -> 221        0.20940
    204 -> 222       -0.12315
    204 -> 224       -0.14186
    205 -> 221        0.11846
    205 -> 222        0.12277

Excited State 110:      Singlet-A      5.5934 eV  221.66 nm  f=0.0113  <S**2>=0.000
```

```
    187 -> 206        0.27781
    193 -> 209        0.14018
    195 -> 210       -0.15808
    196 -> 209        0.10493
    197 -> 211        0.14998
    200 -> 215        0.16021
    201 -> 213        0.25978
    202 -> 215        0.22912
    204 -> 221       -0.21625
    205 -> 221       -0.15220

Excited State 111:      Singlet-A      5.5986 eV  221.46 nm  f=0.0094  <S**2>=0.000
    190 -> 207        0.16335
    191 -> 207        0.56668
    192 -> 207       -0.10117
    202 -> 215       -0.13348
    203 -> 217       -0.10087
    204 -> 220        0.10774

Excited State 112:      Singlet-A      5.6074 eV  221.11 nm  f=0.0036  <S**2>=0.000
    187 -> 206       -0.12914
    188 -> 208       -0.11822
    189 -> 207        0.16046
    193 -> 209        0.17067
    193 -> 210       -0.14128
    194 -> 210        0.15449
    195 -> 209       -0.14731
    195 -> 210       -0.28627
    201 -> 213       -0.11638
    202 -> 216        0.10081
    204 -> 220       -0.13475
    204 -> 222       -0.11470
    205 -> 223        0.31608

Excited State 113:      Singlet-A      5.6305 eV  220.20 nm  f=0.0495  <S**2>=0.000
    195 -> 210       -0.11763
    198 -> 212       -0.10260
    200 -> 214       -0.11714
    201 -> 214       -0.12884
    201 -> 215        0.17055
    203 -> 216       -0.16445
    203 -> 217        0.34121
    204 -> 220        0.17977
    204 -> 221        0.19461
    204 -> 222        0.17211
    204 -> 224        0.13786
    205 -> 221        0.11768

Excited State 114:      Singlet-A      5.6359 eV  219.99 nm  f=0.0667  <S**2>=0.000
    201 -> 214       -0.10346
    201 -> 215        0.10375
    202 -> 214       -0.12789
    202 -> 215        0.17154
    203 -> 216        0.35803
    203 -> 217       -0.23456
    203 -> 218        0.10981
    203 -> 220       -0.18537
    203 -> 222        0.12812
    203 -> 224        0.12332
    204 -> 221        0.19855
    205 -> 222       -0.10822

Excited State 115:      Singlet-A      5.6388 eV  219.88 nm  f=0.0261  <S**2>=0.000
    187 -> 206       -0.14658
    193 -> 209        0.23609
    193 -> 210        0.10170
    195 -> 210        0.16046
    196 -> 209        0.20497
    200 -> 214       -0.10938
    201 -> 213       -0.17234
    202 -> 214       -0.18150
    202 -> 215        0.12512
    203 -> 217        0.12005
    204 -> 220       -0.10357
    204 -> 222       -0.16521
    205 -> 222       -0.16909
    205 -> 223       -0.13750

Excited State 116:      Singlet-A      5.6593 eV  219.08 nm  f=0.0164  <S**2>=0.000
    191 -> 208       -0.11043
```

```
    193 -> 209        0.16577
    195 -> 210        0.18734
    196 -> 209        0.22198
    198 -> 212        0.21461
    200 -> 213       -0.10272
    201 -> 213        0.13466
    201 -> 216       -0.10546
    202 -> 214        0.11729
    202 -> 215       -0.11060
    203 -> 216        0.13152
    203 -> 217        0.26224
    203 -> 218        0.16496
    203 -> 220       -0.11890
    205 -> 223        0.13392

Excited State 117:      Singlet-A      5.6654 eV  218.85 nm  f=0.0020  <S**2>=0.000
    191 -> 208        0.11677
    202 -> 216       -0.33592
    202 -> 218        0.12279
    203 -> 216       -0.11487
    203 -> 217       -0.14762
    203 -> 218        0.43440
    205 -> 223        0.11021

Excited State 118:      Singlet-A      5.6670 eV  218.78 nm  f=0.0255  <S**2>=0.000
    191 -> 208        0.11797
    196 -> 209        0.29645
    196 -> 212       -0.10078
    198 -> 212        0.28267
    203 -> 216       -0.12943
    203 -> 217       -0.23446
    203 -> 218       -0.24803
    204 -> 221        0.14515
    204 -> 222        0.16279

Excited State 119:      Singlet-A      5.6727 eV  218.56 nm  f=0.0024  <S**2>=0.000
    190 -> 208        0.16353
    191 -> 208        0.61278
    192 -> 208       -0.10872
    203 -> 217        0.11778

Excited State 120:      Singlet-A      5.6759 eV  218.44 nm  f=0.0215  <S**2>=0.000
    188 -> 208        0.10042
    189 -> 207       -0.17911
    190 -> 207       -0.15459
    192 -> 209        0.11801
    193 -> 209        0.14908
    193 -> 210       -0.19236
    195 -> 209       -0.15521
    200 -> 215       -0.10829
    201 -> 214        0.19650
    201 -> 215       -0.16155
    202 -> 214        0.11346
    203 -> 218        0.14080
    204 -> 221        0.14413
    204 -> 223       -0.15658
    205 -> 221        0.10980
    205 -> 223       -0.18109

Excited State 121:      Singlet-A      5.6790 eV  218.32 nm  f=0.0006  <S**2>=0.000
    190 -> 207       -0.36134
    190 -> 208       -0.13560
    191 -> 207        0.13407
    192 -> 207        0.10807
    193 -> 209       -0.15335
    195 -> 210       -0.10197
    198 -> 212        0.41038
    200 -> 212        0.10338
    203 -> 217        0.11205
    205 -> 222       -0.10011

Excited State 122:      Singlet-A      5.6852 eV  218.08 nm  f=0.0059  <S**2>=0.000
    190 -> 207        0.41212
    190 -> 208        0.13501
    191 -> 207       -0.12871
    192 -> 207       -0.14187
    193 -> 209       -0.20683
    195 -> 209        0.12574
    195 -> 210       -0.16135
    198 -> 212        0.20432
```

```
    203 -> 217        0.10828
    205 -> 222       -0.12500
    205 -> 223       -0.13920

Excited State 123:      Singlet-A      5.6940 eV  217.75 nm  f=0.0219  <S**2>=0.000
    190 -> 207       -0.14330
    193 -> 209       -0.13895
    195 -> 209        0.11189
    196 -> 209        0.32044
    196 -> 212       -0.11028
    198 -> 212       -0.13618
    199 -> 213       -0.18167
    200 -> 213        0.20590
    201 -> 214       -0.23259
    202 -> 213       -0.18271
    202 -> 214        0.10578
    205 -> 222        0.11691

Excited State 124:      Singlet-A      5.7101 eV  217.13 nm  f=0.0038  <S**2>=0.000
    193 -> 209       -0.12609
    193 -> 210        0.10002
    195 -> 209        0.11988
    196 -> 209        0.17795
    199 -> 213        0.11386
    200 -> 216        0.11160
    202 -> 215       -0.16097
    202 -> 216        0.33640
    203 -> 218        0.26808
    203 -> 220        0.10423
    205 -> 222       -0.13665

Excited State 125:      Singlet-A      5.7107 eV  217.11 nm  f=0.0310  <S**2>=0.000
    186 -> 206        0.12017
    193 -> 209       -0.14374
    195 -> 209        0.11971
    196 -> 209        0.24429
    198 -> 212       -0.17648
    201 -> 214        0.34608
    202 -> 216       -0.21196
    203 -> 218       -0.20624
    205 -> 224        0.10148

Excited State 126:      Singlet-A      5.7264 eV  216.51 nm  f=0.0789  <S**2>=0.000
    199 -> 214       -0.22514
    199 -> 215        0.12087
    200 -> 214        0.17265
    201 -> 215        0.21096
    202 -> 215       -0.10833
    203 -> 219        0.10784
    204 -> 222       -0.21420
    205 -> 222       -0.18794
    205 -> 223        0.10203
    205 -> 224        0.26452

Excited State 127:      Singlet-A      5.7331 eV  216.26 nm  f=0.0051  <S**2>=0.000
    188 -> 207       -0.12770
    189 -> 208        0.11431
    193 -> 210       -0.17434
    199 -> 213        0.14326
    201 -> 214        0.21960
    201 -> 215        0.35446
    201 -> 216        0.10180
    202 -> 214       -0.12967
    202 -> 215       -0.13370
    203 -> 217        0.12116
    203 -> 219        0.10805
    204 -> 221       -0.15299

Excited State 128:      Singlet-A      5.7346 eV  216.20 nm  f=0.0120  <S**2>=0.000
    186 -> 206       -0.14594
    189 -> 207        0.14525
    193 -> 210        0.23438
    199 -> 213       -0.11799
    200 -> 213        0.22226
    200 -> 214        0.18354
    200 -> 215        0.11821
    201 -> 214        0.18430
    201 -> 216        0.13492
    202 -> 213       -0.10192
    202 -> 216       -0.10773
```

```
    202 -> 217       -0.10710
    203 -> 217        0.11462

Excited State 129:      Singlet-A      5.7460 eV  215.78 nm  f=0.0069  <S**2>=0.000
    186 -> 206        0.29094
    199 -> 214        0.10986
    201 -> 215       -0.22802
    201 -> 216        0.12931
    203 -> 219        0.43951
    204 -> 223        0.10536

Excited State 130:      Singlet-A      5.7671 eV  214.99 nm  f=0.0037  <S**2>=0.000
    185 -> 206        0.10904
    186 -> 206        0.44836
    190 -> 208       -0.10525
    193 -> 210        0.14007
    196 -> 210        0.10851
    199 -> 213       -0.10042
    199 -> 214       -0.10529
    201 -> 215        0.15928
    204 -> 221        0.11882
    205 -> 222        0.12430
    205 -> 224       -0.19766

Excited State 131:      Singlet-A      5.7760 eV  214.65 nm  f=0.0062  <S**2>=0.000
    186 -> 206        0.14079
    190 -> 207       -0.16785
    190 -> 208        0.52785
    191 -> 208       -0.17723
    192 -> 208       -0.18650
    200 -> 214        0.11241

Excited State 132:      Singlet-A      5.7784 eV  214.56 nm  f=0.0281  <S**2>=0.000
    186 -> 206       -0.17859
    190 -> 208        0.22143
    193 -> 210        0.25358
    195 -> 210       -0.16077
    196 -> 210        0.16993
    200 -> 213       -0.14451
    200 -> 214       -0.15043
    201 -> 215        0.10106
    203 -> 219        0.29877
    204 -> 223       -0.16890
    205 -> 223       -0.10960

Excited State 133:      Singlet-A      5.7898 eV  214.14 nm  f=0.0064  <S**2>=0.000
    193 -> 210        0.14576
    199 -> 213        0.30597
    200 -> 213        0.30713
    200 -> 214        0.14134
    201 -> 216       -0.25667
    203 -> 218        0.10297

Excited State 134:      Singlet-A      5.7944 eV  213.97 nm  f=0.0054  <S**2>=0.000
    186 -> 206        0.16396
    193 -> 210        0.12170
    200 -> 214       -0.18888
    201 -> 216        0.31301
    202 -> 214        0.14188
    203 -> 219       -0.27496
    204 -> 221       -0.20171
    204 -> 222        0.15511
    205 -> 221        0.11545
    205 -> 224        0.16867

Excited State 135:      Singlet-A      5.8000 eV  213.77 nm  f=0.0134  <S**2>=0.000
    186 -> 206       -0.12061
    194 -> 209        0.11528
    195 -> 209        0.11844
    199 -> 213        0.30810
    199 -> 214       -0.18378
    201 -> 214       -0.14526
    201 -> 215       -0.12130
    201 -> 216        0.26636
    204 -> 223       -0.21073

Excited State 136:      Singlet-A      5.8102 eV  213.39 nm  f=0.0086  <S**2>=0.000
    190 -> 211        0.12060
    194 -> 209        0.39211
    194 -> 211       -0.15456
```

```
    195 -> 209        0.14251
    196 -> 212       -0.13702
    200 -> 214       -0.15034
    200 -> 215        0.16042
    201 -> 216       -0.17723
    203 -> 219        0.11247

Excited State 137:      Singlet-A      5.8162 eV  213.17 nm  f=0.0076  <S**2>=0.000
    189 -> 207       -0.18693
    192 -> 209        0.10097
    194 -> 209        0.19646
    196 -> 210        0.21302
    200 -> 214        0.11531
    200 -> 215       -0.21803
    200 -> 216        0.10968
    202 -> 217        0.13058
    204 -> 223        0.36446

Excited State 138:      Singlet-A      5.8251 eV  212.85 nm  f=0.0035  <S**2>=0.000
    185 -> 206        0.57213
    186 -> 206       -0.10622
    194 -> 209        0.16419
    196 -> 210       -0.12778
    200 -> 215       -0.12330
    200 -> 216        0.10161

Excited State 139:      Singlet-A      5.8273 eV  212.76 nm  f=0.0080  <S**2>=0.000
    185 -> 206        0.34415
    186 -> 206       -0.13102
    189 -> 207       -0.18276
    194 -> 209       -0.30192
    196 -> 210        0.20128
    200 -> 216       -0.11960
    203 -> 221        0.10568
    204 -> 222        0.11396
    204 -> 223        0.16102

Excited State 140:      Singlet-A      5.8382 eV  212.37 nm  f=0.0015  <S**2>=0.000
    188 -> 207       -0.13923
    189 -> 208        0.10704
    193 -> 210       -0.18845
    195 -> 210        0.18857
    196 -> 210        0.51433
    196 -> 211       -0.10327
    204 -> 222       -0.11077
    204 -> 223       -0.12837

Excited State 141:      Singlet-A      5.8523 eV  211.86 nm  f=0.0192  <S**2>=0.000
    190 -> 211       -0.15748
    194 -> 209        0.20056
    194 -> 211        0.19657
    196 -> 212        0.23608
    200 -> 214       -0.10032
    200 -> 215        0.11953
    200 -> 216       -0.12297
    201 -> 218       -0.11987
    202 -> 217       -0.10530
    204 -> 222       -0.15565
    204 -> 224        0.14101
    205 -> 224       -0.10140

Excited State 142:      Singlet-A      5.8563 eV  211.71 nm  f=0.0154  <S**2>=0.000
    188 -> 207        0.20389
    189 -> 208       -0.13555
    190 -> 211       -0.12551
    193 -> 210       -0.15970
    195 -> 209        0.10587
    195 -> 210        0.12733
    196 -> 210        0.13658
    196 -> 212        0.17456
    199 -> 214        0.23236
    199 -> 215        0.10571
    199 -> 216        0.12564
    200 -> 215        0.12140
    202 -> 217        0.18221
    203 -> 223        0.10153

Excited State 143:      Singlet-A      5.8608 eV  211.55 nm  f=0.0193  <S**2>=0.000
    197 -> 212       -0.11147
    199 -> 213        0.12792
```

```
    199 -> 214       -0.14379
    199 -> 215       -0.11253
    199 -> 216       -0.17682
    200 -> 216        0.18885
    201 -> 216       -0.12713
    201 -> 217        0.10320
    202 -> 215       -0.13158
    202 -> 217       -0.13673
    202 -> 218        0.31438
    203 -> 220       -0.18592
    204 -> 224       -0.21281

Excited State 144:      Singlet-A      5.8624 eV  211.49 nm  f=0.0253  <S**2>=0.000
    192 -> 209        0.11580
    194 -> 211       -0.16879
    195 -> 211        0.17107
    197 -> 212        0.26704
    200 -> 214       -0.15075
    200 -> 216        0.10841
    202 -> 214        0.10690
    202 -> 217        0.13701
    202 -> 218        0.23784
    204 -> 222       -0.16794
    204 -> 223        0.12548
    204 -> 224        0.16186

Excited State 145:      Singlet-A      5.8726 eV  211.12 nm  f=0.0164  <S**2>=0.000
    178 -> 206        0.10309
    181 -> 206       -0.12149
    184 -> 206        0.45984
    195 -> 211       -0.20967
    196 -> 212       -0.13883
    200 -> 215        0.12277
    202 -> 217        0.16880
    204 -> 224        0.12509

Excited State 146:      Singlet-A      5.8775 eV  210.95 nm  f=0.0160  <S**2>=0.000
    184 -> 206        0.39714
    189 -> 207        0.17776
    192 -> 209        0.21187
    194 -> 211       -0.10677
    195 -> 211        0.25948
    197 -> 212        0.11226
    200 -> 215       -0.15357

Excited State 147:      Singlet-A      5.8816 eV  210.80 nm  f=0.0304  <S**2>=0.000
    184 -> 206       -0.10792
    189 -> 207        0.25529
    192 -> 209        0.25888
    193 -> 210       -0.11034
    194 -> 211        0.18758
    195 -> 210        0.11704
    195 -> 211       -0.25835
    197 -> 212       -0.13683
    199 -> 213        0.10371
    201 -> 218       -0.11849
    202 -> 217       -0.10390
    203 -> 221       -0.11164
    204 -> 223        0.11692

Excited State 148:      Singlet-A      5.8912 eV  210.46 nm  f=0.0246  <S**2>=0.000
    184 -> 206        0.14692
    189 -> 207       -0.12141
    192 -> 209       -0.21824
    195 -> 211       -0.16743
    199 -> 214        0.26570
    199 -> 215        0.20507
    199 -> 216       -0.12984
    200 -> 214        0.10007
    200 -> 215       -0.18243
    200 -> 216       -0.10720
    201 -> 218       -0.17872
    202 -> 217       -0.13204
    202 -> 218        0.19955

Excited State 149:      Singlet-A      5.9033 eV  210.03 nm  f=0.0167  <S**2>=0.000
    192 -> 209        0.12828
    199 -> 216        0.20757
    201 -> 217       -0.19533
    201 -> 218        0.24237
```

```
    202 -> 216        0.16122
    202 -> 217       -0.13591
    202 -> 218        0.39756

Excited State 150:      Singlet-A      5.9090 eV  209.82 nm  f=0.0031  <S**2>=0.000
    195 -> 211        0.31678
    196 -> 211       -0.14659
    196 -> 212       -0.31617
    197 -> 212       -0.30370
    201 -> 218       -0.17938
    202 -> 217        0.16512

Excited State 151:      Singlet-A      5.9167 eV  209.55 nm  f=0.0268  <S**2>=0.000
    195 -> 211       -0.13326
    196 -> 212        0.10883
    199 -> 215       -0.14908
    200 -> 216       -0.21677
    200 -> 218        0.12477
    201 -> 218       -0.16495
    202 -> 217        0.39018
    202 -> 218        0.22434
    203 -> 220        0.16421
    204 -> 224       -0.11205

Excited State 152:      Singlet-A      5.9335 eV  208.96 nm  f=0.0370  <S**2>=0.000
    188 -> 207       -0.17401
    188 -> 208        0.21006
    189 -> 207        0.17914
    192 -> 209        0.15518
    199 -> 214        0.16079
    201 -> 217        0.14394
    203 -> 220       -0.24234
    203 -> 221        0.30114
    203 -> 224       -0.11226

Excited State 153:      Singlet-A      5.9339 eV  208.94 nm  f=0.0145  <S**2>=0.000
    188 -> 207        0.32884
    189 -> 208        0.16569
    199 -> 215       -0.27244
    200 -> 215       -0.11797
    201 -> 217        0.21869
    202 -> 217       -0.13017
    202 -> 219       -0.11838
    204 -> 222       -0.10199
    204 -> 224        0.12235

Excited State 154:      Singlet-A      5.9438 eV  208.59 nm  f=0.0219  <S**2>=0.000
    178 -> 206        0.11284
    181 -> 206       -0.13874
    188 -> 208       -0.20499
    189 -> 207       -0.12055
    194 -> 211       -0.10567
    199 -> 215        0.24283
    199 -> 216        0.12234
    201 -> 217        0.33662
    203 -> 221       -0.19614

Excited State 155:      Singlet-A      5.9526 eV  208.28 nm  f=0.0202  <S**2>=0.000
    188 -> 207        0.19856
    188 -> 208       -0.13118
    189 -> 207       -0.10852
    189 -> 208        0.42854
    197 -> 212       -0.10806
    201 -> 217       -0.18035
    203 -> 220       -0.21680
    203 -> 222       -0.15321
    203 -> 224       -0.11490

Excited State 156:      Singlet-A      5.9545 eV  208.22 nm  f=0.0118  <S**2>=0.000
    178 -> 206       -0.24909
    180 -> 206        0.10891
    181 -> 206        0.31869
    182 -> 206       -0.12210
    184 -> 206        0.18223
    189 -> 208       -0.11918
    191 -> 211       -0.13608
    195 -> 211        0.10297
    195 -> 212        0.10110
    196 -> 212        0.18672
    197 -> 212       -0.23709
```

```
    204 -> 224        0.10232

Excited State 157:      Singlet-A      5.9582 eV  208.09 nm  f=0.0088  <S**2>=0.000
    178 -> 206       -0.18213
    181 -> 206        0.18271
    182 -> 206       -0.10815
    191 -> 211        0.13333
    193 -> 211       -0.16799
    194 -> 211        0.13509
    196 -> 212       -0.20408
    197 -> 212        0.20669
    201 -> 217        0.33093
    203 -> 220       -0.11057

Excited State 158:      Singlet-A      5.9640 eV  207.89 nm  f=0.0219  <S**2>=0.000
    188 -> 207        0.15902
    188 -> 208        0.20338
    189 -> 207        0.11428
    189 -> 208        0.19850
    194 -> 210        0.35525
    195 -> 210        0.14315
    199 -> 215        0.20859
    201 -> 217        0.13288
    203 -> 220        0.12357
    203 -> 221        0.16133
    203 -> 222        0.13330

Excited State 159:      Singlet-A      5.9655 eV  207.84 nm  f=0.0230  <S**2>=0.000
    188 -> 207       -0.10616
    188 -> 208       -0.19120
    189 -> 207       -0.12747
    189 -> 208       -0.16510
    192 -> 209        0.10551
    193 -> 210        0.10968
    194 -> 210        0.47700
    195 -> 210        0.18523
    199 -> 215       -0.12148
    203 -> 220       -0.11702

Excited State 160:      Singlet-A      5.9775 eV  207.42 nm  f=0.0560  <S**2>=0.000
    189 -> 207       -0.12235
    192 -> 209        0.24483
    199 -> 214        0.24247
    200 -> 215        0.14024
    200 -> 216        0.18137
    202 -> 221        0.16102
    203 -> 220        0.13873
    203 -> 221       -0.22187
    204 -> 223       -0.10630

Excited State 161:      Singlet-A      5.9979 eV  206.71 nm  f=0.0077  <S**2>=0.000
    199 -> 216        0.10651
    202 -> 219        0.62369

Excited State 162:      Singlet-A      6.0093 eV  206.32 nm  f=0.0025  <S**2>=0.000
    188 -> 208        0.40155
    192 -> 209       -0.10164
    193 -> 211       -0.10082
    194 -> 210        0.10902
    201 -> 219        0.10048
    202 -> 221        0.11398
    203 -> 221       -0.36867
    203 -> 222       -0.17249

Excited State 163:      Singlet-A      6.0191 eV  205.98 nm  f=0.0922  <S**2>=0.000
    182 -> 206       -0.18476
    193 -> 211        0.30660
    194 -> 211        0.25474
    197 -> 212        0.12738
    198 -> 213       -0.13574
    199 -> 216        0.10151
    200 -> 217       -0.10521
    201 -> 218       -0.15650
    201 -> 219        0.20184
    205 -> 225       -0.11121

Excited State 164:      Singlet-A      6.0232 eV  205.85 nm  f=0.0030  <S**2>=0.000
    178 -> 206       -0.10827
    181 -> 206        0.14507
    182 -> 206        0.55357
```

```
    183 -> 206       -0.22886
    192 -> 210       -0.18032

Excited State 165:      Singlet-A      6.0256 eV  205.76 nm  f=0.0445  <S**2>=0.000
    193 -> 211        0.20162
    199 -> 217       -0.13561
    200 -> 216       -0.10266
    200 -> 217        0.10082
    200 -> 218        0.20246
    201 -> 218        0.21032
    201 -> 219        0.21060
    202 -> 216       -0.14279
    202 -> 219       -0.10248
    202 -> 220        0.29263

Excited State 166:      Singlet-A      6.0353 eV  205.43 nm  f=0.0535  <S**2>=0.000
    193 -> 211       -0.32529
    199 -> 216        0.11946
    200 -> 216        0.18727
    200 -> 218        0.16119
    201 -> 218       -0.15693
    201 -> 219        0.40527

Excited State 167:      Singlet-A      6.0433 eV  205.16 nm  f=0.0108  <S**2>=0.000
    182 -> 206        0.13580
    190 -> 210        0.12338
    190 -> 211       -0.11146
    192 -> 210        0.46374
    193 -> 211        0.16264
    194 -> 211       -0.11918
    201 -> 219        0.12853
    205 -> 225       -0.12358

Excited State 168:      Singlet-A      6.0490 eV  204.97 nm  f=0.0147  <S**2>=0.000
    192 -> 210        0.19428
    199 -> 216        0.27675
    200 -> 218       -0.10170
    201 -> 218       -0.20409
    201 -> 219       -0.11252
    202 -> 220        0.27987
    204 -> 225       -0.11142
    205 -> 225        0.23633
    205 -> 227       -0.11346

Excited State 169:      Singlet-A      6.0521 eV  204.86 nm  f=0.0628  <S**2>=0.000
    190 -> 210        0.10154
    190 -> 211        0.20011
    192 -> 210        0.17559
    192 -> 211       -0.12390
    194 -> 211        0.22394
    195 -> 211        0.14597
    195 -> 212        0.13228
    199 -> 216       -0.18383
    200 -> 216       -0.11729
    201 -> 218        0.19651
    201 -> 219        0.16146
    201 -> 220       -0.18089

Excited State 170:      Singlet-A      6.0618 eV  204.53 nm  f=0.0029  <S**2>=0.000
    194 -> 212       -0.11233
    199 -> 216        0.12902
    200 -> 217       -0.14887
    200 -> 218        0.33734
    201 -> 219       -0.26475
    201 -> 220       -0.29239
    201 -> 222        0.12070
    204 -> 224       -0.14855
    205 -> 225       -0.18341

Excited State 171:      Singlet-A      6.0731 eV  204.15 nm  f=0.0079  <S**2>=0.000
    191 -> 209       -0.29535
    194 -> 212        0.18387
    195 -> 212        0.42166
    200 -> 216        0.11295
    200 -> 217        0.14827
    200 -> 218        0.20652
    201 -> 219       -0.10452
    201 -> 220        0.10412

Excited State 172:      Singlet-A      6.0800 eV  203.92 nm  f=0.0319  <S**2>=0.000
```

```
    193 -> 211       -0.19046
    194 -> 211        0.11620
    194 -> 212        0.16001
    198 -> 213       -0.23552
    199 -> 215        0.10543
    199 -> 216       -0.16107
    199 -> 217        0.15031
    200 -> 217       -0.26535
    200 -> 218        0.18062
    201 -> 219       -0.11294
    201 -> 220        0.27532

Excited State 173:      Singlet-A      6.0822 eV  203.85 nm  f=0.0514  <S**2>=0.000
    193 -> 211        0.13897
    198 -> 213        0.13000
    200 -> 217       -0.24428
    200 -> 218        0.20872
    202 -> 220       -0.19546
    203 -> 223        0.11755
    204 -> 225       -0.10942
    205 -> 225        0.31851
    205 -> 227       -0.14774

Excited State 174:      Singlet-A      6.0921 eV  203.52 nm  f=0.0184  <S**2>=0.000
    178 -> 206       -0.10537
    190 -> 211        0.18357
    193 -> 211       -0.14297
    194 -> 212       -0.15084
    195 -> 211        0.10848
    195 -> 212       -0.26374
    198 -> 213        0.15378
    200 -> 217        0.31950
    200 -> 218        0.13439
    201 -> 219       -0.13943
    201 -> 220        0.16585

Excited State 175:      Singlet-A      6.1073 eV  203.01 nm  f=0.0211  <S**2>=0.000
    178 -> 206       -0.14692
    191 -> 209       -0.33064
    194 -> 211       -0.15171
    194 -> 212       -0.22535
    200 -> 217       -0.10142
    200 -> 218       -0.12442
    203 -> 222        0.13526
    203 -> 223        0.36532

Excited State 176:      Singlet-A      6.1165 eV  202.71 nm  f=0.0019  <S**2>=0.000
    178 -> 206        0.19164
    181 -> 206        0.11936
    183 -> 206        0.10813
    194 -> 212        0.29063
    195 -> 212       -0.14436
    200 -> 217        0.21346
    201 -> 220       -0.15850
    203 -> 222        0.11849
    203 -> 223        0.35538

Excited State 177:      Singlet-A      6.1268 eV  202.36 nm  f=0.0134  <S**2>=0.000
    191 -> 209        0.21022
    198 -> 213        0.33816
    200 -> 217       -0.21722
    201 -> 220        0.15048
    202 -> 220        0.18042
    202 -> 221       -0.16348
    202 -> 222       -0.11196
    203 -> 223        0.17924
    205 -> 225       -0.14282

Excited State 178:      Singlet-A      6.1311 eV  202.22 nm  f=0.0085  <S**2>=0.000
    190 -> 209        0.10165
    191 -> 209        0.39163
    195 -> 212        0.25437
    198 -> 213       -0.27984
    203 -> 223        0.22865

Excited State 179:      Singlet-A      6.1509 eV  201.57 nm  f=0.0373  <S**2>=0.000
    199 -> 217        0.54949
    199 -> 218        0.22931
    201 -> 219        0.10198
    202 -> 220        0.10415
```

```
Excited State 180:      Singlet-A      6.1603 eV  201.26 nm  f=0.0010  <S**2>=0.000
    182 -> 206        0.20402
    183 -> 206        0.46563
    190 -> 209       -0.11369
    193 -> 212        0.16869
    194 -> 212       -0.13751
    199 -> 217        0.16462
    199 -> 218       -0.23351

Excited State 181:      Singlet-A      6.1648 eV  201.11 nm  f=0.0056  <S**2>=0.000
    182 -> 206        0.13378
    183 -> 206        0.30050
    198 -> 216        0.11360
    199 -> 217       -0.12810
    199 -> 218        0.41752
    199 -> 219        0.11670
    200 -> 219       -0.18598

Excited State 182:      Singlet-A      6.1747 eV  200.79 nm  f=0.0071  <S**2>=0.000
    178 -> 206       -0.13210
    181 -> 206       -0.12783
    182 -> 206        0.11934
    183 -> 206        0.23633
    190 -> 209        0.36706
    190 -> 212       -0.12386
    191 -> 209       -0.11268
    192 -> 209       -0.11474
    193 -> 212       -0.26965
    198 -> 215       -0.12856
    202 -> 221       -0.14879

Excited State 183:      Singlet-A      6.1819 eV  200.56 nm  f=0.0227  <S**2>=0.000
    197 -> 213       -0.10456
    198 -> 214       -0.25177
    199 -> 218        0.26756
    199 -> 219       -0.12989
    200 -> 219        0.29745
    201 -> 220        0.12643
    202 -> 220       -0.11829
    203 -> 222       -0.22538
    203 -> 224        0.24934

Excited State 184:      Singlet-A      6.1922 eV  200.23 nm  f=0.0061  <S**2>=0.000
    178 -> 206       -0.14845
    181 -> 206       -0.13613
    190 -> 209        0.13371
    193 -> 212       -0.15761
    198 -> 213        0.11889
    198 -> 214        0.19286
    198 -> 215        0.17922
    198 -> 216        0.11114
    200 -> 219        0.32933
    201 -> 221        0.11535
    202 -> 221        0.20789
    203 -> 222        0.11117
    203 -> 224       -0.11393

Excited State 185:      Singlet-A      6.1960 eV  200.10 nm  f=0.0019  <S**2>=0.000
    190 -> 209        0.25187
    191 -> 209       -0.10268
    193 -> 212        0.33985
    199 -> 217       -0.14843
    199 -> 218        0.12191
    200 -> 219        0.21521
    203 -> 222        0.18088
    203 -> 224       -0.17998

Excited State 186:      Singlet-A      6.2014 eV  199.93 nm  f=0.0016  <S**2>=0.000
    178 -> 206        0.13293
    180 -> 206        0.32492
    190 -> 209        0.16110
    193 -> 212        0.14318
    194 -> 212       -0.13601
    198 -> 214        0.10894
    199 -> 219        0.10131
    202 -> 220        0.10851
    202 -> 221        0.12145
    203 -> 222       -0.19527
    203 -> 224        0.17896
```

```
Excited State 187:      Singlet-A      6.2062 eV  199.78 nm  f=0.0472  <S**2>=0.000
    190 -> 209       -0.14377
    198 -> 213       -0.12659
    198 -> 214       -0.10621
    198 -> 215       -0.27271
    199 -> 219        0.22999
    200 -> 218        0.14756
    200 -> 219        0.33224
    202 -> 220        0.15957

Excited State 188:      Singlet-A      6.2151 eV  199.49 nm  f=0.0016  <S**2>=0.000
    180 -> 206        0.55409
    181 -> 206       -0.24841
    190 -> 209       -0.17251
    193 -> 212       -0.14000
    203 -> 222        0.10242

Excited State 189:      Singlet-A      6.2302 eV  199.01 nm  f=0.0291  <S**2>=0.000
    190 -> 210        0.16644
    191 -> 210        0.56547
    192 -> 210       -0.13128
    198 -> 214       -0.13466
    202 -> 221        0.11403
    202 -> 223        0.11625

Excited State 190:      Singlet-A      6.2327 eV  198.92 nm  f=0.0159  <S**2>=0.000
    191 -> 210        0.19799
    198 -> 214        0.36061
    198 -> 215       -0.20405
    198 -> 216       -0.13814
    199 -> 219       -0.15492
    200 -> 219        0.10841
    202 -> 221       -0.19130
    202 -> 223       -0.16300

Excited State 191:      Singlet-A      6.2481 eV  198.44 nm  f=0.0206  <S**2>=0.000
    191 -> 210        0.10187
    197 -> 213       -0.12936
    198 -> 216        0.10747
    199 -> 219        0.17862
    199 -> 220       -0.23685
    200 -> 220        0.35587
    202 -> 220       -0.11714
    202 -> 222        0.13607
    202 -> 223       -0.12783
    202 -> 224        0.13170

Excited State 192:      Singlet-A      6.2578 eV  198.13 nm  f=0.0033  <S**2>=0.000
    181 -> 206       -0.10648
    182 -> 207        0.30310
    183 -> 207       -0.10604
    185 -> 207       -0.19111
    189 -> 209        0.14738
    193 -> 212        0.14322
    197 -> 213        0.13268
    199 -> 219        0.18192
    199 -> 220        0.10898
    200 -> 220        0.10142
    202 -> 222       -0.14511
    202 -> 223        0.10345
    203 -> 222       -0.12403
    203 -> 224        0.11344

Excited State 193:      Singlet-A      6.2598 eV  198.06 nm  f=0.0254  <S**2>=0.000
    178 -> 206        0.12825
    181 -> 206        0.14484
    185 -> 207       -0.13200
    188 -> 210        0.11728
    189 -> 209        0.22381
    193 -> 212       -0.16927
    197 -> 213       -0.10508
    198 -> 215        0.28930
    199 -> 219        0.10466
    201 -> 221       -0.15727
    202 -> 221       -0.16175

Excited State 194:      Singlet-A      6.2661 eV  197.86 nm  f=0.0044  <S**2>=0.000
    169 -> 208       -0.10267
    182 -> 207        0.43434
```

```
    183 -> 207       -0.14990
    186 -> 207       -0.16489
    187 -> 207        0.12122
    189 -> 209       -0.17302
    191 -> 210       -0.10387
    197 -> 213       -0.10426
    199 -> 219       -0.10277
    201 -> 220        0.11417
    202 -> 222        0.14894

Excited State 195:      Singlet-A      6.2709 eV  197.71 nm  f=0.0084  <S**2>=0.000
    181 -> 206        0.12726
    193 -> 212       -0.10978
    197 -> 213       -0.18554
    198 -> 215       -0.18125
    199 -> 219        0.29421
    202 -> 220       -0.15914
    202 -> 221        0.14814
    202 -> 222       -0.23987
    202 -> 224       -0.13894

Excited State 196:      Singlet-A      6.2857 eV  197.25 nm  f=0.0915  <S**2>=0.000
    191 -> 211       -0.25715
    191 -> 212        0.15724
    192 -> 211        0.34278
    197 -> 213       -0.19098
    198 -> 216       -0.16092
    202 -> 222        0.14662
    204 -> 225        0.17622

Excited State 197:      Singlet-A      6.3022 eV  196.73 nm  f=0.0127  <S**2>=0.000
    182 -> 207       -0.16179
    182 -> 208        0.10133
    185 -> 207       -0.11499
    188 -> 209        0.21426
    189 -> 210        0.14302
    191 -> 211       -0.10079
    198 -> 216        0.34694
    198 -> 218       -0.16307
    199 -> 219       -0.21679
    202 -> 223        0.17648

Excited State 198:      Singlet-A      6.3044 eV  196.66 nm  f=0.0000  <S**2>=0.000
    182 -> 207       -0.15336
    186 -> 207       -0.10683
    186 -> 208       -0.10296
    188 -> 209        0.18568
    189 -> 209       -0.11893
    189 -> 210        0.13044
    190 -> 210        0.12183
    191 -> 210       -0.14348
    197 -> 213        0.24322
    198 -> 216       -0.20467
    199 -> 219        0.12231
    201 -> 221       -0.20477
    202 -> 222        0.14922

Excited State 199:      Singlet-A      6.3083 eV  196.54 nm  f=0.0247  <S**2>=0.000
    173 -> 206       -0.11060
    177 -> 206       -0.11839
    182 -> 208       -0.16996
    189 -> 209       -0.12039
    192 -> 211        0.28806
    196 -> 213        0.19603
    196 -> 215        0.10599
    196 -> 217       -0.10653
    197 -> 213        0.19944
    201 -> 221        0.11576
    204 -> 225       -0.19818
    205 -> 225       -0.10296

Excited State 200:      Singlet-A      6.3176 eV  196.25 nm  f=0.0161  <S**2>=0.000
    188 -> 209        0.10043
    192 -> 211       -0.16835
    198 -> 216       -0.11088
    199 -> 220       -0.21334
    200 -> 220       -0.20981
    201 -> 221        0.37572
    201 -> 222       -0.18279
    201 -> 224       -0.10005
```

```
Excited State 201:      Singlet-A      6.3254 eV  196.01 nm  f=0.0047  <S**2>=0.000
    169 -> 207       -0.12039
    182 -> 208        0.47556
    183 -> 208       -0.16917
    185 -> 208       -0.13777
    197 -> 213        0.12559
    200 -> 220        0.16724

Excited State 202:      Singlet-A      6.3298 eV  195.87 nm  f=0.0574  <S**2>=0.000
    189 -> 209       -0.11015
    191 -> 211       -0.13177
    199 -> 219        0.22163
    199 -> 220       -0.18111
    200 -> 220       -0.19474
    200 -> 221       -0.14754
    201 -> 220        0.16128
    201 -> 221       -0.16271
    204 -> 225       -0.21776

Excited State 203:      Singlet-A      6.3391 eV  195.59 nm  f=0.0275  <S**2>=0.000
    182 -> 208        0.13189
    189 -> 209        0.14995
    190 -> 210        0.23448
    190 -> 212       -0.16648
    192 -> 211        0.11944
    192 -> 212        0.13891
    193 -> 213        0.10613
    193 -> 214        0.11598
    195 -> 213        0.12517
    195 -> 214        0.10263
    197 -> 215        0.11221
    199 -> 219        0.10453
    199 -> 220       -0.14169
    200 -> 220       -0.14617
    200 -> 221        0.10210

Excited State 204:      Singlet-A      6.3446 eV  195.42 nm  f=0.0155  <S**2>=0.000
    188 -> 209       -0.11734
    190 -> 210        0.43681
    190 -> 212       -0.13051
    191 -> 210       -0.11065
    193 -> 214       -0.14044
    193 -> 215        0.10668
    195 -> 213       -0.14337
    195 -> 214       -0.12383
    202 -> 222       -0.12465
    202 -> 223       -0.11239

Excited State 205:      Singlet-A      6.3512 eV  195.21 nm  f=0.0119  <S**2>=0.000
    177 -> 206        0.14019
    182 -> 208       -0.10375
    190 -> 211        0.26876
    190 -> 212        0.15967
    191 -> 211        0.12767
    191 -> 212       -0.13283
    192 -> 211        0.22993
    192 -> 212       -0.12535
    199 -> 220       -0.13791
    200 -> 221        0.13443
    204 -> 225        0.17509

Excited State 206:      Singlet-A      6.3552 eV  195.09 nm  f=0.0865  <S**2>=0.000
    190 -> 209        0.10210
    190 -> 210        0.26168
    190 -> 212        0.25114
    191 -> 211        0.15964
    192 -> 212       -0.16947
    196 -> 213        0.19129
    196 -> 215        0.11116
    196 -> 217       -0.11137
    197 -> 213       -0.21314
    199 -> 220        0.10920
    204 -> 225       -0.12755

Excited State 207:      Singlet-A      6.3621 eV  194.88 nm  f=0.1657  <S**2>=0.000
    190 -> 209        0.10050
    190 -> 210        0.14472
    190 -> 212        0.24321
    191 -> 211       -0.23982
```

```
    191 -> 212       -0.17450
    192 -> 212       -0.13449
    193 -> 212       -0.14519
    197 -> 213        0.18359
    201 -> 221       -0.12679
    201 -> 222       -0.14605
    201 -> 224       -0.15306

Excited State 208:      Singlet-A      6.3661 eV  194.76 nm  f=0.1152  <S**2>=0.000
    177 -> 206       -0.10379
    188 -> 209        0.11759
    190 -> 212        0.10331
    191 -> 211       -0.19490
    197 -> 213       -0.11530
    198 -> 216       -0.14039
    199 -> 220        0.17269
    200 -> 221        0.21591
    200 -> 222        0.14274
    200 -> 223       -0.13173
    201 -> 222        0.18093
    204 -> 225       -0.18704

Excited State 209:      Singlet-A      6.3722 eV  194.57 nm  f=0.0205  <S**2>=0.000
    190 -> 211        0.26750
    192 -> 211        0.18198
    196 -> 213       -0.23391
    196 -> 215       -0.11928
    196 -> 217        0.12222
    199 -> 220        0.17780
    201 -> 221        0.19525
    201 -> 222        0.19134
    202 -> 223        0.16367

Excited State 210:      Singlet-A      6.3790 eV  194.36 nm  f=0.0155  <S**2>=0.000
    177 -> 206       -0.17555
    190 -> 211       -0.15129
    190 -> 212        0.11263
    191 -> 211       -0.12516
    192 -> 211       -0.17347
    197 -> 213        0.13805
    201 -> 220        0.10884
    201 -> 221        0.13449
    201 -> 222        0.27410
    202 -> 223        0.19027
    204 -> 225        0.18011
    205 -> 225        0.10517

Excited State 211:      Singlet-A      6.4064 eV  193.53 nm  f=0.0933  <S**2>=0.000
    173 -> 206        0.15613
    174 -> 206        0.10489
    177 -> 206        0.36178
    178 -> 206        0.13517
    179 -> 206       -0.10631
    190 -> 211       -0.16787
    190 -> 212       -0.12375
    191 -> 211       -0.17425
    191 -> 212       -0.13287
    192 -> 212        0.14412
    195 -> 213        0.13460
    201 -> 222        0.17412
    201 -> 224       -0.11409

Excited State 212:      Singlet-A      6.4194 eV  193.14 nm  f=0.0154  <S**2>=0.000
    186 -> 207        0.16080
    187 -> 207        0.47388
    199 -> 221        0.10695
    200 -> 221       -0.14525
    200 -> 222        0.10960
    200 -> 223       -0.12814
    202 -> 222       -0.15860
    202 -> 223       -0.15666

Excited State 213:      Singlet-A      6.4244 eV  192.99 nm  f=0.0202  <S**2>=0.000
    186 -> 207        0.17782
    187 -> 207        0.39042
    188 -> 209       -0.11664
    198 -> 218        0.10746
    199 -> 221       -0.11253
    200 -> 220       -0.12957
    200 -> 221        0.15227
```

```
    200 -> 222       -0.13741
    200 -> 223        0.14858
    200 -> 224       -0.11280
    201 -> 223        0.15112
    202 -> 222        0.15519

Excited State 214:      Singlet-A      6.4359 eV  192.64 nm  f=0.0026  <S**2>=0.000
    177 -> 206        0.10027
    178 -> 206       -0.11374
    179 -> 206        0.65137

Excited State 215:      Singlet-A      6.4388 eV  192.56 nm  f=0.0096  <S**2>=0.000
    179 -> 206       -0.12043
    189 -> 209        0.16002
    198 -> 218        0.14721
    200 -> 221       -0.26637
    200 -> 222        0.13173
    200 -> 224        0.15007
    201 -> 223        0.37075
    202 -> 221        0.21959

Excited State 216:      Singlet-A      6.4530 eV  192.13 nm  f=0.0093  <S**2>=0.000
    191 -> 212       -0.13005
    197 -> 214       -0.15015
    197 -> 215        0.14148
    197 -> 216       -0.15682
    198 -> 216        0.12706
    198 -> 217        0.13388
    198 -> 218        0.46683
    201 -> 222       -0.14018
    201 -> 223       -0.17280

Excited State 217:      Singlet-A      6.4622 eV  191.86 nm  f=0.0034  <S**2>=0.000
    197 -> 214       -0.11940
    198 -> 216       -0.13545
    198 -> 217        0.53786
    198 -> 218       -0.17374
    200 -> 222        0.15331
    201 -> 223        0.10322

Excited State 218:      Singlet-A      6.4679 eV  191.69 nm  f=0.0047  <S**2>=0.000
    187 -> 208        0.12656
    188 -> 209        0.11730
    197 -> 214       -0.10656
    197 -> 215        0.16040
    198 -> 217        0.11005
    199 -> 221        0.24065
    199 -> 222        0.12954
    200 -> 220       -0.11307
    200 -> 222       -0.22629
    200 -> 224       -0.14408
    201 -> 223        0.27391
    202 -> 223       -0.22810

Excited State 219:      Singlet-A      6.4727 eV  191.55 nm  f=0.0280  <S**2>=0.000
    191 -> 212        0.21189
    192 -> 212       -0.13065
    195 -> 214        0.10295
    197 -> 215       -0.15332
    197 -> 216        0.17116
    198 -> 217        0.16438
    198 -> 218        0.26401
    199 -> 220       -0.11056
    199 -> 223        0.11865
    201 -> 222        0.19769
    201 -> 224       -0.13619

Excited State 220:      Singlet-A      6.4819 eV  191.28 nm  f=0.0068  <S**2>=0.000
    195 -> 213        0.21447
    197 -> 214        0.40126
    197 -> 215       -0.14170
    198 -> 217        0.25945
    200 -> 222       -0.15416
    201 -> 223       -0.15614
    201 -> 224        0.14898
    202 -> 224        0.12265

Excited State 221:      Singlet-A      6.4927 eV  190.96 nm  f=0.0129  <S**2>=0.000
    186 -> 207        0.13282
    187 -> 207       -0.10575
```

```
    187 -> 208        0.56406
    199 -> 221       -0.12749
    200 -> 222        0.10955
    202 -> 224       -0.17750

Excited State 222:      Singlet-A      6.4995 eV  190.76 nm  f=0.0234  <S**2>=0.000
    187 -> 208        0.23063
    196 -> 213        0.10677
    197 -> 214       -0.17781
    199 -> 224       -0.11744
    200 -> 221        0.11637
    200 -> 224        0.14730
    202 -> 222       -0.24837
    202 -> 224        0.38903

Excited State 223:      Singlet-A      6.5083 eV  190.50 nm  f=0.0390  <S**2>=0.000
    186 -> 207       -0.32478
    186 -> 208        0.19889
    187 -> 208        0.18148
    188 -> 210       -0.25161
    189 -> 209        0.33624
    192 -> 212       -0.11762
    197 -> 214       -0.12259
    201 -> 224       -0.11024

Excited State 224:      Singlet-A      6.5215 eV  190.12 nm  f=0.0293  <S**2>=0.000
    186 -> 207        0.29770
    186 -> 208       -0.25565
    188 -> 209        0.14534
    189 -> 210       -0.11912
    192 -> 212       -0.14056
    197 -> 215        0.12952
    198 -> 219       -0.11983
    200 -> 221       -0.19087
    200 -> 222       -0.11987
    200 -> 223       -0.12159
    201 -> 223       -0.14654
    201 -> 224       -0.11346
    202 -> 223        0.10634
    202 -> 224        0.12801

Excited State 225:      Singlet-A      6.5300 eV  189.87 nm  f=0.0137  <S**2>=0.000
    173 -> 206       -0.10770
    177 -> 206        0.10912
    185 -> 207       -0.10529
    188 -> 209       -0.16176
    188 -> 210        0.14843
    189 -> 209       -0.12050
    189 -> 210        0.14772
    192 -> 212       -0.20007
    195 -> 213        0.12283
    195 -> 214       -0.12828
    197 -> 215        0.30151
    197 -> 216       -0.11328
    200 -> 223        0.12401
    201 -> 224       -0.18725
    202 -> 224        0.11111

Excited State 226:      Singlet-A      6.5327 eV  189.79 nm  f=0.0064  <S**2>=0.000
    186 -> 207        0.12816
    186 -> 208       -0.23833
    188 -> 209       -0.29261
    188 -> 210       -0.11257
    189 -> 209        0.11861
    189 -> 210        0.42578
    199 -> 221        0.23712

Excited State 227:      Singlet-A      6.5340 eV  189.75 nm  f=0.0032  <S**2>=0.000
    177 -> 206       -0.17917
    185 -> 207       -0.11336
    188 -> 209       -0.11297
    189 -> 210        0.11893
    190 -> 212        0.17471
    192 -> 212        0.30549
    197 -> 215        0.22142
    197 -> 216        0.28211
    199 -> 221       -0.11483
    201 -> 223       -0.10445
    201 -> 224       -0.10847
```

```
Excited State 228:      Singlet-A      6.5373 eV  189.66 nm  f=0.0095  <S**2>=0.000
    190 -> 212       -0.16880
    191 -> 212       -0.12762
    192 -> 212       -0.19761
    197 -> 216        0.44105
    197 -> 218        0.12773
    198 -> 219        0.11001
    203 -> 225        0.13098

Excited State 229:      Singlet-A      6.5422 eV  189.51 nm  f=0.0049  <S**2>=0.000
    167 -> 206       -0.10681
    171 -> 206        0.10138
    173 -> 206       -0.22201
    174 -> 206       -0.16643
    175 -> 206       -0.14284
    177 -> 206        0.31351
    185 -> 207       -0.16689
    186 -> 208        0.10750
    197 -> 216        0.10976
    198 -> 219       -0.23744
    200 -> 223       -0.13359
    201 -> 224        0.11871

Excited State 230:      Singlet-A      6.5441 eV  189.46 nm  f=0.0061  <S**2>=0.000
    173 -> 206       -0.15961
    174 -> 206       -0.11500
    177 -> 206        0.20277
    185 -> 207        0.14644
    188 -> 209        0.12382
    189 -> 210       -0.15138
    190 -> 212        0.21471
    192 -> 212        0.23780
    198 -> 219        0.27922
    200 -> 223        0.16395

Excited State 231:      Singlet-A      6.5568 eV  189.09 nm  f=0.0383  <S**2>=0.000
    185 -> 207       -0.30692
    185 -> 208       -0.25280
    186 -> 208        0.12949
    198 -> 219        0.38765
    198 -> 220        0.11983
    200 -> 222       -0.10382

Excited State 232:      Singlet-A      6.5612 eV  188.97 nm  f=0.0032  <S**2>=0.000
    185 -> 207        0.15154
    185 -> 208        0.16984
    188 -> 210        0.11438
    198 -> 219        0.10640
    199 -> 220        0.23008
    199 -> 222        0.36949
    199 -> 224        0.15589
    201 -> 224       -0.12808
    202 -> 224        0.15397
    203 -> 225        0.15012

Excited State 233:      Singlet-A      6.5640 eV  188.89 nm  f=0.0388  <S**2>=0.000
    186 -> 208        0.18081
    189 -> 210       -0.10960
    193 -> 213       -0.11477
    193 -> 214        0.10681
    195 -> 213       -0.20708
    195 -> 215       -0.11906
    197 -> 214        0.25746
    197 -> 215        0.19627
    198 -> 220       -0.11000
    199 -> 221        0.24280
    200 -> 222        0.10513
    200 -> 223        0.11960
    203 -> 225        0.14414

Excited State 234:      Singlet-A      6.5727 eV  188.64 nm  f=0.0109  <S**2>=0.000
    185 -> 207       -0.13026
    185 -> 208       -0.22735
    188 -> 210       -0.14558
    189 -> 210       -0.10622
    198 -> 219       -0.22222
    199 -> 221        0.11544
    199 -> 222        0.20458
    199 -> 223       -0.13343
    200 -> 222        0.22061
```

```
    200 -> 223        0.26326
    201 -> 224       -0.12140

Excited State 235:      Singlet-A      6.5853 eV  188.27 nm  f=0.0370  <S**2>=0.000
    185 -> 208        0.27431
    188 -> 210        0.29268
    195 -> 214       -0.12270
    197 -> 214       -0.18055
    197 -> 215       -0.11349
    199 -> 221        0.17389
    199 -> 223       -0.19841
    201 -> 223       -0.13699
    202 -> 221        0.11769

Excited State 236:      Singlet-A      6.5957 eV  187.98 nm  f=0.0233  <S**2>=0.000
    175 -> 206        0.49640
    176 -> 206       -0.11782
    181 -> 206        0.11157
    191 -> 212        0.18081
    201 -> 224        0.18036

Excited State 237:      Singlet-A      6.6133 eV  187.48 nm  f=0.0252  <S**2>=0.000
    175 -> 206        0.14243
    176 -> 206       -0.11335
    195 -> 213        0.15065
    197 -> 215       -0.13481
    198 -> 219        0.10414
    198 -> 220       -0.18147
    199 -> 222       -0.11832
    201 -> 224       -0.12969
    203 -> 225        0.11814
    205 -> 225        0.22839
    205 -> 226       -0.17008
    205 -> 227        0.28768
    205 -> 228        0.12173

Excited State 238:      Singlet-A      6.6194 eV  187.30 nm  f=0.0081  <S**2>=0.000
    173 -> 206       -0.11617
    175 -> 206        0.26300
    176 -> 206       -0.17171
    191 -> 212       -0.14183
    195 -> 215        0.11129
    199 -> 221        0.11097
    200 -> 223       -0.16051
    201 -> 224       -0.12088
    205 -> 225       -0.18270
    205 -> 226        0.19256
    205 -> 227       -0.18554
    205 -> 228       -0.12403

Excited State 239:      Singlet-A      6.6288 eV  187.04 nm  f=0.0098  <S**2>=0.000
    185 -> 208        0.11516
    193 -> 215       -0.11518
    195 -> 215       -0.13452
    197 -> 215       -0.10714
    198 -> 219        0.15702
    198 -> 220       -0.16063
    199 -> 221       -0.11712
    199 -> 223        0.11452
    200 -> 223        0.21901
    205 -> 225       -0.15056
    205 -> 226        0.19546
    205 -> 227       -0.13563
    205 -> 228       -0.11213

Excited State 240:      Singlet-A      6.6388 eV  186.76 nm  f=0.0361  <S**2>=0.000
    176 -> 206        0.21446
    190 -> 212        0.11227
    191 -> 212        0.22303
    194 -> 213       -0.16107
    195 -> 213        0.17441
    198 -> 220       -0.19993
    203 -> 225        0.25363
    205 -> 227       -0.10944

Excited State 241:      Singlet-A      6.6578 eV  186.22 nm  f=0.0589  <S**2>=0.000
    167 -> 206        0.11711
    175 -> 206       -0.12638
    176 -> 206       -0.18256
    197 -> 217       -0.10778
```

```
    198 -> 219       -0.14790
    198 -> 220        0.34449
    198 -> 222       -0.11330
    199 -> 222       -0.10999
    200 -> 223        0.12291
    203 -> 225        0.28351

Excited State 242:      Singlet-A      6.6634 eV  186.07 nm  f=0.0337  <S**2>=0.000
    167 -> 206       -0.12671
    168 -> 206        0.10777
    175 -> 206        0.19662
    176 -> 206        0.41446
    186 -> 208        0.10559
    198 -> 220        0.11864
    199 -> 223        0.31948
    200 -> 223        0.11753

Excited State 243:      Singlet-A      6.6683 eV  185.93 nm  f=0.0601  <S**2>=0.000
    176 -> 206       -0.27531
    186 -> 208        0.14044
    193 -> 213        0.15586
    197 -> 217        0.15511
    198 -> 220       -0.14743
    199 -> 222        0.12758
    199 -> 223        0.34967

Excited State 244:      Singlet-A      6.6823 eV  185.54 nm  f=0.0196  <S**2>=0.000
    194 -> 213       -0.11722
    194 -> 215       -0.13241
    195 -> 213       -0.10396
    195 -> 215        0.16131
    195 -> 216       -0.11744
    197 -> 217       -0.26155
    200 -> 222        0.11304
    200 -> 224       -0.16051
    205 -> 226        0.27818
    205 -> 227        0.18436

Excited State 245:      Singlet-A      6.6981 eV  185.10 nm  f=0.0014  <S**2>=0.000
    193 -> 213        0.18121
    195 -> 216        0.11957
    197 -> 217        0.27677
    203 -> 225        0.18915
    205 -> 226        0.31104
    205 -> 227        0.30327

Excited State 246:      Singlet-A      6.6984 eV  185.10 nm  f=0.0277  <S**2>=0.000
    186 -> 208       -0.10771
    191 -> 212       -0.13248
    193 -> 213        0.33421
    195 -> 213       -0.15471
    195 -> 216       -0.13472
    196 -> 213        0.13040
    196 -> 215       -0.10292
    197 -> 217       -0.12668
    203 -> 225        0.15858
    205 -> 226       -0.18258
    205 -> 227       -0.19024

Excited State 247:      Singlet-A      6.7050 eV  184.91 nm  f=0.0034  <S**2>=0.000
    176 -> 206        0.14196
    193 -> 215        0.14633
    195 -> 214        0.12551
    195 -> 215        0.13978
    196 -> 214       -0.11624
    197 -> 217        0.31020
    199 -> 222       -0.11941
    199 -> 224        0.11787
    200 -> 222        0.12962
    200 -> 224       -0.25220
    202 -> 224        0.12167
    205 -> 226       -0.10811
    205 -> 227       -0.14108

Excited State 248:      Singlet-A      6.7140 eV  184.67 nm  f=0.0601  <S**2>=0.000
    185 -> 207       -0.11340
    185 -> 208        0.12981
    186 -> 208       -0.10096
    192 -> 214       -0.10178
    193 -> 214        0.14750
```

```
    193 -> 215        0.17451
    194 -> 214       -0.10680
    195 -> 214        0.17105
    195 -> 215        0.17455
    195 -> 216        0.16123
    197 -> 217       -0.16694
    198 -> 220       -0.10675
    199 -> 224       -0.13426
    200 -> 222       -0.14258
    200 -> 224        0.20064
    202 -> 224       -0.12816

Excited State 249:      Singlet-A      6.7320 eV  184.17 nm  f=0.0011  <S**2>=0.000
    193 -> 213       -0.20676
    194 -> 213       -0.11330
    195 -> 213        0.10358
    196 -> 213        0.20026
    196 -> 214        0.34321
    196 -> 215       -0.29484
    196 -> 216        0.13110
    197 -> 217        0.20539
    197 -> 218       -0.10888

Excited State 250:      Singlet-A      6.7328 eV  184.15 nm  f=0.0491  <S**2>=0.000
    193 -> 213       -0.10842
    193 -> 215       -0.10483
    193 -> 216        0.14919
    194 -> 216       -0.15111
    195 -> 215       -0.16723
    195 -> 216        0.28376
    197 -> 217       -0.13635
    197 -> 218        0.10116
    197 -> 220       -0.10191
    198 -> 220       -0.13627
    199 -> 224        0.14281
    200 -> 224       -0.11317

Excited State 251:      Singlet-A      6.7374 eV  184.02 nm  f=0.1175  <S**2>=0.000
    190 -> 213       -0.16977
    190 -> 215       -0.13110
    190 -> 217        0.12028
    192 -> 213        0.10964
    193 -> 216        0.10342
    194 -> 213        0.30672
    194 -> 215        0.10888
    194 -> 217       -0.10698
    195 -> 213        0.12578
    196 -> 214        0.15857
    196 -> 215       -0.12931
    196 -> 216        0.12321

Excited State 252:      Singlet-A      6.7472 eV  183.76 nm  f=0.0151  <S**2>=0.000
    178 -> 207       -0.17186
    181 -> 207        0.24150
    182 -> 207        0.11731
    183 -> 207        0.35358
    183 -> 208       -0.12006
    184 -> 207       -0.16911
    193 -> 213       -0.10266
    197 -> 218        0.15279
    198 -> 221        0.19975

Excited State 253:      Singlet-A      6.7547 eV  183.55 nm  f=0.0432  <S**2>=0.000
    166 -> 206       -0.12508
    167 -> 206        0.33886
    168 -> 206       -0.16346
    173 -> 206       -0.19044
    176 -> 206        0.13719
    183 -> 207       -0.16682
    188 -> 211        0.10207
    189 -> 211       -0.16308
    194 -> 213       -0.11275
    197 -> 218       -0.10843
    200 -> 224        0.13794

Excited State 254:      Singlet-A      6.7589 eV  183.44 nm  f=0.0163  <S**2>=0.000
    167 -> 206        0.24034
    168 -> 206       -0.12318
    173 -> 206       -0.14715
    176 -> 206        0.13447
```

```
    183 -> 207        0.14290
    193 -> 213        0.19696
    197 -> 217       -0.11566
    197 -> 219       -0.17620
    204 -> 225       -0.13899
    204 -> 226        0.13258
    204 -> 227       -0.21176

Excited State 255:      Singlet-A      6.7666 eV  183.23 nm  f=0.0017  <S**2>=0.000
    183 -> 207        0.26549
    183 -> 208       -0.10250
    189 -> 211        0.22532
    198 -> 221       -0.19858
    198 -> 222       -0.11598
    204 -> 225        0.20199
    204 -> 226       -0.20359
    204 -> 227        0.23400
    204 -> 228        0.12332

Excited State 256:      Singlet-A      6.7709 eV  183.11 nm  f=0.0223  <S**2>=0.000
    167 -> 206        0.10415
    183 -> 207       -0.19384
    188 -> 211       -0.15842
    189 -> 211        0.38726
    197 -> 216       -0.11454
    197 -> 218        0.35166
    197 -> 219        0.13243

Excited State 257:      Singlet-A      6.7771 eV  182.95 nm  f=0.0027  <S**2>=0.000
    178 -> 207       -0.16482
    180 -> 207        0.11328
    181 -> 207        0.29556
    183 -> 207       -0.26357
    184 -> 207       -0.18288
    197 -> 219       -0.19373
    199 -> 222       -0.12425
    199 -> 224        0.18946
    204 -> 225        0.10620
    204 -> 226       -0.11677

Excited State 258:      Singlet-A      6.7822 eV  182.81 nm  f=0.0014  <S**2>=0.000
    169 -> 210        0.10365
    182 -> 207        0.10671
    182 -> 209        0.40242
    183 -> 209       -0.14048
    185 -> 209       -0.11325
    197 -> 218        0.28799
    198 -> 221       -0.14744
    199 -> 222       -0.10445
    199 -> 224        0.13434
    200 -> 224        0.10559

Excited State 259:      Singlet-A      6.7829 eV  182.79 nm  f=0.0048  <S**2>=0.000
    182 -> 209        0.35913
    183 -> 209       -0.12795
    185 -> 209       -0.12680
    188 -> 211       -0.13800
    189 -> 211        0.29951
    197 -> 218       -0.24480
    198 -> 221        0.12573
    200 -> 224       -0.12866

Excited State 260:      Singlet-A      6.7977 eV  182.39 nm  f=0.0030  <S**2>=0.000
    189 -> 211        0.16467
    193 -> 215       -0.12096
    193 -> 216        0.11367
    197 -> 217        0.12324
    197 -> 219        0.21573
    199 -> 222       -0.14852
    199 -> 224        0.28135
    200 -> 224        0.16708
    204 -> 225       -0.10547
    204 -> 226        0.25038

Excited State 261:      Singlet-A      6.8003 eV  182.32 nm  f=0.0203  <S**2>=0.000
    181 -> 207       -0.14128
    184 -> 207        0.15530
    185 -> 208       -0.10170
    188 -> 210        0.11858
    189 -> 211        0.10283
```

```
    193 -> 214        0.11921
    197 -> 219       -0.25732
    198 -> 221        0.29573
    199 -> 222       -0.11260
    199 -> 224        0.19559
    200 -> 224        0.11228

Excited State 262:      Singlet-A      6.8141 eV  181.95 nm  f=0.0447  <S**2>=0.000
    182 -> 209       -0.11789
    189 -> 210       -0.11226
    193 -> 214        0.31585
    193 -> 215        0.14370
    195 -> 214       -0.26841
    195 -> 216       -0.12714
    196 -> 215        0.11797
    197 -> 219       -0.11979
    197 -> 220        0.18248
    198 -> 221       -0.10415
    198 -> 223        0.12298

Excited State 263:      Singlet-A      6.8223 eV  181.73 nm  f=0.0137  <S**2>=0.000
    193 -> 214       -0.20077
    195 -> 214        0.13497
    196 -> 214       -0.17458
    196 -> 216        0.34274
    196 -> 219       -0.10866
    197 -> 218        0.17363
    197 -> 219       -0.20961
    198 -> 221        0.13251
    198 -> 223        0.13967

Excited State 264:      Singlet-A      6.8292 eV  181.55 nm  f=0.0131  <S**2>=0.000
    178 -> 208        0.10929
    181 -> 208       -0.16929
    184 -> 207        0.19850
    184 -> 208        0.12532
    188 -> 211       -0.11545
    193 -> 215        0.11097
    194 -> 213       -0.11032
    196 -> 215        0.10489
    196 -> 216        0.35810
    196 -> 219       -0.10923
    198 -> 222        0.14546
    198 -> 223       -0.12114

Excited State 265:      Singlet-A      6.8309 eV  181.50 nm  f=0.0404  <S**2>=0.000
    174 -> 206        0.10262
    190 -> 213        0.14665
    190 -> 217       -0.10294
    191 -> 213       -0.15667
    192 -> 213       -0.10770
    193 -> 216        0.22175
    194 -> 213        0.21996
    195 -> 213        0.12439
    196 -> 214       -0.11035
    196 -> 216        0.18782
    197 -> 220        0.17000
    204 -> 227       -0.11704

Excited State 266:      Singlet-A      6.8338 eV  181.43 nm  f=0.0296  <S**2>=0.000
    178 -> 208        0.12128
    181 -> 208       -0.21370
    183 -> 208       -0.13447
    184 -> 207        0.27283
    184 -> 208        0.18223
    194 -> 213        0.10239
    197 -> 219       -0.14142
    197 -> 220        0.12020
    204 -> 226        0.23998
    204 -> 227        0.20138
    205 -> 229       -0.11086

Excited State 267:      Singlet-A      6.8364 eV  181.36 nm  f=0.0673  <S**2>=0.000
    178 -> 208       -0.10079
    181 -> 208        0.13301
    184 -> 207       -0.10539
    188 -> 211        0.21270
    189 -> 211        0.15118
    193 -> 215        0.18625
    195 -> 215       -0.17835
```

```
    197 -> 220       -0.10948
    198 -> 221       -0.11156
    198 -> 222        0.17194
    198 -> 224        0.11046
    204 -> 226        0.21375
    204 -> 227        0.21333

Excited State 268:      Singlet-A      6.8406 eV  181.25 nm  f=0.0329  <S**2>=0.000
    188 -> 211        0.48521
    189 -> 211        0.16979
    198 -> 221       -0.14471
    204 -> 226       -0.22078
    204 -> 227       -0.23183

Excited State 269:      Singlet-A      6.8430 eV  181.18 nm  f=0.0129  <S**2>=0.000
    184 -> 207        0.18178
    189 -> 211        0.10055
    193 -> 215        0.20998
    194 -> 213        0.10412
    195 -> 215       -0.16131
    197 -> 219        0.26956
    198 -> 223        0.12001
    204 -> 227       -0.10604
    205 -> 229        0.30174

Excited State 270:      Singlet-A      6.8551 eV  180.86 nm  f=0.0565  <S**2>=0.000
    178 -> 207       -0.13877
    178 -> 208       -0.10395
    181 -> 208        0.12351
    182 -> 210       -0.15019
    184 -> 207        0.21660
    188 -> 211       -0.20312
    193 -> 214       -0.12258
    195 -> 214        0.10072
    196 -> 216       -0.11958
    197 -> 220        0.22702
    198 -> 220        0.12775
    198 -> 221       -0.18102
    198 -> 222        0.16667
    205 -> 229        0.12685

Excited State 271:      Singlet-A      6.8612 eV  180.70 nm  f=0.0151  <S**2>=0.000
    182 -> 210        0.28656
    183 -> 210       -0.10085
    188 -> 211        0.10710
    193 -> 215       -0.14000
    197 -> 219       -0.10088
    198 -> 222        0.15819
    205 -> 229        0.43679

Excited State 272:      Singlet-A      6.8626 eV  180.67 nm  f=0.0046  <S**2>=0.000
    169 -> 209        0.10772
    178 -> 207       -0.11812
    181 -> 207        0.13508
    182 -> 210        0.35778
    183 -> 207        0.11339
    183 -> 208        0.28417
    183 -> 210       -0.12279
    184 -> 207        0.29477
    185 -> 210       -0.12440
    197 -> 220       -0.11102
    205 -> 229       -0.18931

Excited State 273:      Singlet-A      6.8660 eV  180.58 nm  f=0.0598  <S**2>=0.000
    182 -> 208       -0.11555
    182 -> 210        0.23538
    183 -> 208       -0.22836
    193 -> 214       -0.14466
    193 -> 215        0.20718
    194 -> 213       -0.13766
    195 -> 215       -0.13138
    197 -> 220        0.27099
    205 -> 229       -0.10996

Excited State 274:      Singlet-A      6.8693 eV  180.49 nm  f=0.0764  <S**2>=0.000
    182 -> 208        0.17811
    182 -> 210       -0.12840
    183 -> 207        0.12036
    183 -> 208        0.36579
    188 -> 211        0.17454
```

```
    197 -> 220        0.21085
    198 -> 221        0.13638

Excited State 275:      Singlet-A      6.8814 eV  180.17 nm  f=0.0175  <S**2>=0.000
    178 -> 207       -0.11167
    181 -> 207        0.17098
    181 -> 208        0.20550
    183 -> 208       -0.21273
    184 -> 207        0.22285
    184 -> 208       -0.15665
    192 -> 213        0.11639
    198 -> 222       -0.18160
    198 -> 223       -0.11847
    204 -> 226        0.10839
    205 -> 229        0.16864

Excited State 276:      Singlet-A      6.8881 eV  180.00 nm  f=0.3917  <S**2>=0.000
    181 -> 208        0.14646
    183 -> 208       -0.15139
    184 -> 207        0.10848
    184 -> 208       -0.16897
    185 -> 207       -0.11554
    185 -> 208        0.18425
    188 -> 210       -0.20783
    188 -> 211        0.13195
    189 -> 209       -0.11009
    198 -> 221        0.17952
    198 -> 222        0.23313
    198 -> 224        0.10681
    204 -> 226       -0.10445
    205 -> 229       -0.16138

Excited State 277:      Singlet-A      6.8924 eV  179.89 nm  f=0.0151  <S**2>=0.000
    168 -> 206        0.15200
    171 -> 206        0.15917
    173 -> 206       -0.23833
    174 -> 206        0.53371
    176 -> 206       -0.12693

Excited State 278:      Singlet-A      6.9008 eV  179.67 nm  f=0.0439  <S**2>=0.000
    174 -> 206        0.11054
    190 -> 213       -0.12127
    192 -> 213       -0.10998
    193 -> 216        0.29947
    194 -> 216        0.15476
    195 -> 214        0.13520
    195 -> 215       -0.11468
    195 -> 216       -0.24735
    195 -> 218       -0.10758
    197 -> 219       -0.13734
    197 -> 220       -0.20420

Excited State 279:      Singlet-A      6.9078 eV  179.49 nm  f=0.0421  <S**2>=0.000
    187 -> 209        0.10382
    190 -> 213        0.13992
    192 -> 213        0.16400
    193 -> 215       -0.14197
    194 -> 214        0.12954
    194 -> 215       -0.16244
    195 -> 214        0.14500
    195 -> 216        0.10867
    196 -> 213       -0.23908
    196 -> 214        0.34907
    196 -> 215        0.13814
    196 -> 217       -0.19459

Excited State 280:      Singlet-A      6.9106 eV  179.41 nm  f=0.0337  <S**2>=0.000
    187 -> 209        0.18187
    192 -> 213        0.14915
    193 -> 214        0.12836
    194 -> 214        0.26584
    194 -> 215       -0.25050
    194 -> 216        0.13256
    195 -> 215       -0.13040
    195 -> 216        0.16171
    196 -> 213        0.17774
    196 -> 214       -0.18674
    196 -> 215       -0.12203
    196 -> 217        0.12387
    197 -> 220        0.11009
```

```
Excited State 281:      Singlet-A      6.9259 eV  179.02 nm  f=0.0090  <S**2>=0.000
    184 -> 208         0.13335
    187 -> 209         0.21972
    190 -> 213         0.17217
    192 -> 213         0.37716
    194 -> 214        -0.13905
    194 -> 215         0.11602
    195 -> 217         0.14172
    196 -> 214        -0.11597
    197 -> 220        -0.16399

Excited State 282:      Singlet-A      6.9332 eV  178.83 nm  f=0.0970  <S**2>=0.000
    184 -> 208         0.12687
    185 -> 209         0.12384
    186 -> 209         0.21935
    187 -> 209         0.50455
    192 -> 213        -0.18764
    195 -> 217        -0.10699

Excited State 283:      Singlet-A      6.9374 eV  178.72 nm  f=0.0362  <S**2>=0.000
    178 -> 208        -0.20632
    181 -> 208         0.19600
    184 -> 208         0.55835
    187 -> 209        -0.19565

Excited State 284:      Singlet-A      6.9485 eV  178.43 nm  f=0.0162  <S**2>=0.000
    192 -> 213        -0.11900
    193 -> 216        -0.10556
    194 -> 217        -0.12741
    195 -> 217         0.34184
    195 -> 218         0.16095
    196 -> 215        -0.22807
    196 -> 217        -0.32374

Excited State 285:      Singlet-A      6.9585 eV  178.18 nm  f=0.0110  <S**2>=0.000
    169 -> 206        -0.13969
    171 -> 206         0.24268
    172 -> 206         0.20772
    195 -> 217         0.12186
    195 -> 218         0.18748
    196 -> 215         0.25319
    196 -> 217         0.28742
    198 -> 223         0.12135

Excited State 286:      Singlet-A      6.9608 eV  178.12 nm  f=0.0150  <S**2>=0.000
    169 -> 206        -0.13994
    170 -> 206        -0.14131
    171 -> 206         0.35449
    172 -> 206         0.31738
    195 -> 218        -0.15029
    198 -> 223        -0.17736
    205 -> 230        -0.13295

Excited State 287:      Singlet-A      6.9708 eV  177.86 nm  f=0.0373  <S**2>=0.000
    171 -> 206        -0.14632
    172 -> 206        -0.14480
    194 -> 217        -0.13153
    195 -> 217         0.27520
    196 -> 215         0.16919
    196 -> 217         0.14447
    198 -> 223        -0.23348
    205 -> 226        -0.12130
    205 -> 228        -0.18344
    205 -> 230        -0.22239

Excited State 288:      Singlet-A      6.9771 eV  177.70 nm  f=0.0157  <S**2>=0.000
    169 -> 206        -0.20399
    188 -> 212        -0.16386
    189 -> 212         0.43561
    191 -> 213         0.11445
    192 -> 216        -0.10084
    195 -> 217        -0.11311
    195 -> 218         0.10827
    202 -> 225         0.13381
    204 -> 229         0.14386

Excited State 289:      Singlet-A      6.9776 eV  177.69 nm  f=0.0085  <S**2>=0.000
    188 -> 212         0.11081
    189 -> 212        -0.30260
```

```
    194 -> 214        0.13942
    194 -> 216       -0.23859
    194 -> 218       -0.10957
    195 -> 216       -0.12657
    195 -> 217       -0.10702
    204 -> 229        0.31794
    205 -> 230       -0.15813

Excited State 290:      Singlet-A      6.9809 eV  177.60 nm  f=0.0284  <S**2>=0.000
    168 -> 206       -0.13149
    169 -> 206        0.40662
    172 -> 206        0.22134
    186 -> 209        0.11605
    189 -> 212        0.20777
    192 -> 214       -0.19153
    194 -> 216       -0.12539
    205 -> 228       -0.11548

Excited State 291:      Singlet-A      6.9853 eV  177.49 nm  f=0.0112  <S**2>=0.000
    194 -> 214       -0.16441
    194 -> 216        0.34301
    195 -> 216        0.12161
    198 -> 223        0.15412
    204 -> 229        0.20661
    205 -> 226       -0.11286
    205 -> 228       -0.21904
    205 -> 230       -0.25372

Excited State 292:      Singlet-A      6.9885 eV  177.41 nm  f=0.1164  <S**2>=0.000
    179 -> 207        0.11522
    185 -> 209        0.13978
    186 -> 209       -0.17967
    188 -> 212       -0.20785
    189 -> 212        0.22751
    190 -> 214        0.10305
    192 -> 214        0.27049
    195 -> 217        0.13423
    198 -> 223        0.17956
    204 -> 229        0.15301

Excited State 293:      Singlet-A      6.9913 eV  177.34 nm  f=0.0451  <S**2>=0.000
    169 -> 206        0.23754
    170 -> 206        0.12004
    172 -> 206        0.19657
    194 -> 214       -0.10109
    194 -> 216        0.14232
    198 -> 223       -0.16028
    202 -> 225        0.12277
    204 -> 229        0.29160
    205 -> 231       -0.17683
    205 -> 233       -0.10822

Excited State 294:      Singlet-A      7.0016 eV  177.08 nm  f=0.0140  <S**2>=0.000
    169 -> 206        0.12398
    178 -> 207       -0.15014
    192 -> 214        0.12859
    192 -> 215        0.11511
    193 -> 216        0.11933
    193 -> 218        0.16031
    194 -> 216        0.12165
    194 -> 218       -0.12812
    195 -> 217       -0.18628
    195 -> 218        0.36610
    196 -> 218       -0.10974
    204 -> 229       -0.14760

Excited State 295:      Singlet-A      7.0058 eV  176.97 nm  f=0.0121  <S**2>=0.000
    170 -> 206        0.49947
    171 -> 206       -0.10145
    172 -> 206        0.26532
    178 -> 207        0.12232
    191 -> 213        0.11201
    194 -> 214        0.10127

Excited State 296:      Singlet-A      7.0109 eV  176.85 nm  f=0.0363  <S**2>=0.000
    169 -> 206        0.14771
    170 -> 206       -0.15674
    178 -> 207        0.26258
    181 -> 207        0.16461
    186 -> 209       -0.20116
```

```
    191 -> 213        0.13000
    192 -> 214        0.12759
    192 -> 215       -0.21369
    192 -> 216       -0.11707
    194 -> 214       -0.11199
    202 -> 225        0.14214
    204 -> 229       -0.17255

Excited State 297:      Singlet-A      7.0180 eV  176.67 nm  f=0.0441  <S**2>=0.000
    178 -> 207        0.36475
    181 -> 207        0.23651
    187 -> 210        0.18819
    189 -> 212        0.11076
    191 -> 213       -0.18186
    192 -> 215        0.13649
    197 -> 221       -0.13944
    198 -> 223       -0.16173

Excited State 298:      Singlet-A      7.0289 eV  176.39 nm  f=0.0309  <S**2>=0.000
    179 -> 207       -0.12150
    187 -> 211       -0.11951
    193 -> 217        0.12925
    195 -> 218        0.15032
    195 -> 220       -0.14659
    202 -> 225       -0.21886
    204 -> 229        0.21353
    205 -> 228        0.27909
    205 -> 231        0.17722

Excited State 299:      Singlet-A      7.0372 eV  176.18 nm  f=0.0111  <S**2>=0.000
    179 -> 207        0.39620
    190 -> 213        0.14672
    190 -> 215        0.10766
    191 -> 213        0.25402
    192 -> 215        0.15106
    195 -> 219       -0.10072
    197 -> 222       -0.11496
    205 -> 231       -0.12082

Excited State 300:      Singlet-A      7.0377 eV  176.17 nm  f=0.0024  <S**2>=0.000
    168 -> 206       -0.11490
    169 -> 206        0.19377
    170 -> 206        0.25841
    171 -> 206        0.38812
    172 -> 206       -0.32971
    173 -> 206        0.20276
    191 -> 213        0.11368
```