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TD-DFT/TDA EXCITED STATES
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the weight of the individual excitations are printed if larger than 1.0e-02

STATE  1: E=    0.104081 au      2.832 eV     22843.0 cm**-1 <S**2> =    9.547072
   205a -> 212a  :      0.013482 (c=   0.11611288)
   209a -> 212a  :      0.099537 (c=  -0.31549488)
   210a -> 211a  :      0.582352 (c=  -0.76311963)
   210a -> 213a  :      0.138182 (c=   0.37172823)
   205b -> 207b  :      0.014230 (c=  -0.11928856)

STATE  2: E=    0.105900 au      2.882 eV     23242.4 cm**-1 <S**2> =    9.600350
   205a -> 213a  :      0.014695 (c=   0.12122263)
   209a -> 211a  :      0.292572 (c=   0.54089903)
   209a -> 213a  :      0.167606 (c=   0.40939693)
   210a -> 212a  :      0.322574 (c=   0.56795606)
   210a -> 214a  :      0.014193 (c=   0.11913446)
   202b -> 206b  :      0.023028 (c=  -0.15175000)
   204b -> 207b  :      0.010120 (c=   0.10059691)
   205b -> 208b  :      0.015685 (c=   0.12524079)

STATE  3: E=    0.108836 au      2.962 eV     23886.8 cm**-1 <S**2> =    9.555729
   207a -> 213a  :      0.023731 (c=   0.15404751)
   209a -> 211a  :      0.011810 (c=  -0.10867461)
   209a -> 212a  :      0.047900 (c=   0.21886143)
   209a -> 213a  :      0.026663 (c=  -0.16328666)
   209a -> 214a  :      0.016227 (c=   0.12738616)
   209a -> 215a  :      0.068363 (c=  -0.26146375)
   210a -> 211a  :      0.068615 (c=   0.26194393)
   210a -> 212a  :      0.041855 (c=   0.20458541)
   210a -> 213a  :      0.501826 (c=   0.70839690)
   203b -> 206b  :      0.012406 (c=   0.11138379)
   204b -> 206b  :      0.015828 (c=  -0.12580827)

STATE  4: E=    0.109850 au      2.989 eV     24109.3 cm**-1 <S**2> =    9.623078
   208a -> 212a  :      0.015648 (c=  -0.12509143)
   209a -> 211a  :      0.138137 (c=   0.37166775)
   209a -> 212a  :      0.201274 (c=  -0.44863622)
   209a -> 213a  :      0.016864 (c=   0.12986291)
   209a -> 214a  :      0.031266 (c=   0.17682065)
   209a -> 216a  :      0.017618 (c=   0.13273400)
   210a -> 211a  :      0.084002 (c=   0.28983079)
   210a -> 212a  :      0.128870 (c=  -0.35898476)
   210a -> 213a  :      0.046454 (c=   0.21553213)
   210a -> 214a  :      0.020263 (c=  -0.14234694)
   210a -> 215a  :      0.032738 (c=  -0.18093564)
   210a -> 216a  :      0.032500 (c=  -0.18027655)
   203b -> 207b  :      0.010628 (c=  -0.10309058)
   205b -> 206b  :      0.011443 (c=   0.10697129)

STATE  5: E=    0.110403 au      3.004 eV     24230.8 cm**-1 <S**2> =    9.673010
   208a -> 211a  :      0.012300 (c=   0.11090452)
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    208a -> 213a :      0.013988 (c= -0.11827121)
    209a -> 211a :      0.145831 (c=  0.38187861)
    209a -> 212a :      0.267165 (c=  0.51688025)
    209a -> 214a :      0.015331 (c= -0.12381654)
    210a -> 211a :      0.029516 (c= -0.17180077)
    210a -> 212a :      0.106760 (c= -0.32674186)
    210a -> 214a :      0.059731 (c= -0.24439983)
    210a -> 215a :      0.030521 (c= -0.17470300)
    210a -> 216a :      0.051980 (c=  0.22799018)
    201b -> 207b :      0.012374 (c= -0.11123830)
    204b -> 210b :      0.011442 (c= -0.10696799)
    205b -> 207b :      0.011383 (c= -0.10669304)
    205b -> 210b :      0.013024 (c= -0.11412247)

STATE  6:  E=   0.110943 au      3.019 eV    24349.2 cm**-1 <S**2> =   9.778646
    205a -> 211a :      0.012978 (c= -0.11392092)
    207a -> 212a :      0.012720 (c= -0.11278459)
    209a -> 211a :      0.068546 (c=  0.26181220)
    209a -> 212a :      0.039174 (c= -0.19792515)
    209a -> 213a :      0.438332 (c= -0.66206669)
    209a -> 216a :      0.021285 (c=  0.14589530)
    210a -> 212a :      0.080216 (c=  0.28322413)
    210a -> 213a :      0.019909 (c= -0.14109810)
    210a -> 214a :      0.030757 (c= -0.17537710)
    201b -> 206b :      0.029631 (c=  0.17213650)
    202b -> 208b :      0.030538 (c=  0.17475077)
    204b -> 207b :      0.018778 (c=  0.13703300)
    204b -> 209b :      0.018786 (c=  0.13706102)
    205b -> 206b :      0.013430 (c= -0.11588979)

STATE  7:  E=   0.118768 au      3.232 eV    26066.5 cm**-1 <S**2> =   9.377061
    205a -> 216a :      0.012458 (c= -0.11161321)
    209a -> 211a :      0.190575 (c= -0.43654932)
    209a -> 213a :      0.063853 (c=  0.25269082)
    209a -> 216a :      0.025492 (c=  0.15966140)
    210a -> 212a :      0.163835 (c=  0.40476498)
    210a -> 214a :      0.303037 (c= -0.55048815)
    210a -> 215a :      0.092831 (c= -0.30468111)

STATE  8:  E=   0.120141 au      3.269 eV    26367.9 cm**-1 <S**2> =   9.495268
    205a -> 215a :      0.015891 (c=  0.12606132)
    209a -> 212a :      0.078095 (c= -0.27945512)
    209a -> 214a :      0.212815 (c= -0.46131837)
    209a -> 215a :      0.127107 (c=  0.35652131)
    210a -> 211a :      0.128548 (c=  0.35853546)
    210a -> 213a :      0.111020 (c=  0.33319683)
    210a -> 215a :      0.019412 (c=  0.13932699)
    210a -> 216a :      0.100292 (c=  0.31668972)
    202b -> 209b :      0.014346 (c=  0.11977504)
    203b -> 208b :      0.010513 (c= -0.10253055)
    205b -> 211b :      0.011215 (c=  0.10589989)

STATE  9:  E=   0.120886 au      3.289 eV    26531.4 cm**-1 <S**2> =   9.429304
    205a -> 214a :      0.015065 (c= -0.12273828)
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   209a -> 212a  :       0.109119 (c=   0.33033186)
   209a -> 213a  :       0.015931 (c=  -0.12621795)
   209a -> 215a  :       0.216157 (c=   0.46492685)
   210a -> 211a  :       0.011825 (c=  -0.10874092)
   210a -> 212a  :       0.012600 (c=   0.11225015)
   210a -> 213a  :       0.105616 (c=   0.32498574)
   210a -> 216a  :       0.335811 (c=  -0.57949221)
   202b -> 211b  :       0.010088 (c=  -0.10044077)
   205b -> 207b  :       0.012316 (c=   0.11097695)
   205b -> 209b  :       0.010418 (c=  -0.10207072)

STATE 10:  E=   0.125409 au      3.413 eV    27524.2 cm**-1 <S**2> =   9.273796
   207a -> 215a  :       0.011800 (c=  -0.10862894)
   209a -> 211a  :       0.027542 (c=  -0.16595662)
   209a -> 213a  :       0.077054 (c=  -0.27758609)
   209a -> 215a  :       0.017063 (c=   0.13062522)
   209a -> 219a  :       0.015877 (c=   0.12600560)
   210a -> 214a  :       0.249427 (c=   0.49942703)
   210a -> 215a  :       0.457940 (c=  -0.67671248)

STATE 11:  E=   0.127364 au      3.466 eV    27953.3 cm**-1 <S**2> =   9.385511
   208a -> 214a  :       0.012980 (c=  -0.11392925)
   209a -> 211a  :       0.013168 (c=   0.11475115)
   209a -> 212a  :       0.041664 (c=  -0.20411823)
   209a -> 214a  :       0.316488 (c=  -0.56257297)
   209a -> 215a  :       0.176450 (c=  -0.42005993)
   209a -> 216a  :       0.041834 (c=  -0.20453279)
   210a -> 211a  :       0.018683 (c=  -0.13668444)
   210a -> 214a  :       0.014325 (c=  -0.11968518)
   210a -> 215a  :       0.030403 (c=  -0.17436388)
   210a -> 216a  :       0.098631 (c=  -0.31405646)
   210a -> 217a  :       0.015878 (c=   0.12600935)
   210a -> 219a  :       0.013385 (c=   0.11569457)
   204b -> 206b  :       0.012155 (c=  -0.11024787)

STATE 12:  E=   0.128013 au      3.483 eV    28095.6 cm**-1 <S**2> =   9.485720
   207a -> 212a  :       0.011478 (c=  -0.10713620)
   208a -> 216a  :       0.019791 (c=   0.14068164)
   209a -> 211a  :       0.042278 (c=  -0.20561645)
   209a -> 213a  :       0.035374 (c=   0.18808060)
   209a -> 214a  :       0.069865 (c=  -0.26432013)
   209a -> 215a  :       0.021054 (c=  -0.14509828)
   209a -> 216a  :       0.408736 (c=   0.63932498)
   209a -> 217a  :       0.012458 (c=   0.11161747)
   210a -> 212a  :       0.043170 (c=  -0.20777317)
   210a -> 214a  :       0.017853 (c=   0.13361370)
   210a -> 215a  :       0.016736 (c=   0.12936890)
   210a -> 218a  :       0.047031 (c=   0.21686604)
   204b -> 207b  :       0.025588 (c=   0.15996186)

STATE 13:  E=   0.137850 au      3.751 eV    30254.5 cm**-1 <S**2> =   9.751905
   198a -> 212a  :       0.010153 (c=  -0.10076411)
   208a -> 211a  :       0.071246 (c=  -0.26691965)
   208a -> 213a  :       0.015277 (c=   0.12360092)
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    208a -> 216a  :      0.010275 (c=  0.10136634)
    209a -> 214a  :      0.011778 (c=  0.10852700)
    209a -> 219a  :      0.016411 (c=  0.12810369)
    210a -> 212a  :      0.016407 (c= -0.12808816)
    210a -> 214a  :      0.195297 (c= -0.44192441)
    210a -> 215a  :      0.059754 (c= -0.24444641)
    210a -> 216a  :      0.032383 (c=  0.17995381)
    210a -> 218a  :      0.115476 (c=  0.33981815)
    194b -> 207b  :      0.023450 (c= -0.15313276)
    201b -> 206b  :      0.015117 (c= -0.12295018)
    201b -> 207b  :      0.013582 (c=  0.11654007)
    203b -> 207b  :      0.032771 (c=  0.18102719)
    205b -> 207b  :      0.015196 (c=  0.12327030)
    205b -> 208b  :      0.037708 (c=  0.19418644)
    205b -> 210b  :      0.013873 (c=  0.11778414)

STATE 14:  E=   0.138465 au      3.768 eV    30389.5 cm**-1 <S**2> =    9.781963
    197a -> 211a  :      0.013367 (c= -0.11561548)
    198a -> 211a  :      0.010259 (c= -0.10128635)
    207a -> 211a  :      0.023944 (c=  0.15473892)
    208a -> 212a  :      0.062948 (c= -0.25089425)
    209a -> 212a  :      0.056187 (c=  0.23703842)
    209a -> 214a  :      0.153087 (c= -0.39126329)
    209a -> 215a  :      0.051404 (c= -0.22672523)
    209a -> 218a  :      0.019722 (c= -0.14043568)
    210a -> 216a  :      0.045993 (c=  0.21445902)
    210a -> 217a  :      0.079104 (c= -0.28125426)
    210a -> 218a  :      0.027277 (c= -0.16515650)
    210a -> 219a  :      0.029072 (c= -0.17050466)
    194b -> 206b  :      0.014644 (c=  0.12101431)
    194b -> 208b  :      0.015046 (c= -0.12266108)
    201b -> 207b  :      0.050377 (c=  0.22444807)
    202b -> 207b  :      0.013474 (c= -0.11607791)
    204b -> 206b  :      0.019545 (c=  0.13980515)
    204b -> 208b  :      0.013868 (c= -0.11776082)
    205b -> 207b  :      0.018509 (c=  0.13604951)

STATE 15:  E=   0.138715 au      3.775 eV    30444.3 cm**-1 <S**2> =    9.659082
    197a -> 211a  :      0.010981 (c=  0.10478978)
    208a -> 212a  :      0.031563 (c=  0.17765872)
    208a -> 214a  :      0.014351 (c=  0.11979399)
    208a -> 215a  :      0.012276 (c=  0.11079583)
    209a -> 214a  :      0.039586 (c= -0.19896326)
    209a -> 216a  :      0.011025 (c=  0.10499967)
    209a -> 217a  :      0.012918 (c=  0.11365686)
    209a -> 218a  :      0.028252 (c= -0.16808292)
    210a -> 211a  :      0.024504 (c=  0.15653811)
    210a -> 213a  :      0.017672 (c= -0.13293563)
    210a -> 214a  :      0.021909 (c= -0.14801584)
    210a -> 215a  :      0.012374 (c= -0.11123701)
    210a -> 216a  :      0.205820 (c= -0.45367360)
    210a -> 217a  :      0.092227 (c= -0.30368834)
    210a -> 219a  :      0.062093 (c= -0.24918562)
    194b -> 208b  :      0.010610 (c=  0.10300277)
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   203b -> 206b  :      0.027050 (c=  0.16446837)
   203b -> 208b  :      0.010114 (c= -0.10056624)
   205b -> 206b  :      0.016566 (c= -0.12871066)
   205b -> 207b  :      0.050471 (c= -0.22465694)

STATE 16:  E=   0.139609 au      3.799 eV    30640.7 cm**-1 <S**2> =   9.486102
   207a -> 212a  :      0.013024 (c=  0.11412131)
   208a -> 211a  :      0.022050 (c= -0.14849240)
   209a -> 213a  :      0.011476 (c= -0.10712491)
   209a -> 215a  :      0.017148 (c=  0.13095178)
   209a -> 216a  :      0.235798 (c=  0.48559067)
   209a -> 217a  :      0.118846 (c= -0.34474116)
   210a -> 215a  :      0.034911 (c=  0.18684371)
   210a -> 217a  :      0.026327 (c=  0.16225519)
   210a -> 218a  :      0.258089 (c= -0.50802479)

STATE 17:  E=   0.139789 au      3.804 eV    30680.1 cm**-1 <S**2> =   9.672542
   205a -> 213a  :      0.016860 (c=  0.12984527)
   207a -> 214a  :      0.018867 (c=  0.13735877)
   207a -> 215a  :      0.020739 (c= -0.14401151)
   208a -> 213a  :      0.021311 (c= -0.14598413)
   209a -> 211a  :      0.029559 (c= -0.17192774)
   209a -> 213a  :      0.038646 (c= -0.19658527)
   209a -> 216a  :      0.064183 (c= -0.25334440)
   209a -> 217a  :      0.060304 (c= -0.24556789)
   209a -> 219a  :      0.147668 (c=  0.38427612)
   210a -> 214a  :      0.025782 (c= -0.16056811)
   210a -> 215a  :      0.133982 (c=  0.36603530)
   210a -> 218a  :      0.011136 (c=  0.10552637)
   201b -> 208b  :      0.024694 (c= -0.15714344)
   202b -> 206b  :      0.034387 (c= -0.18543622)
   204b -> 207b  :      0.016807 (c=  0.12964151)
   205b -> 206b  :      0.023688 (c=  0.15390946)

STATE 18:  E=   0.139907 au      3.807 eV    30706.1 cm**-1 <S**2> =   9.840150
   196a -> 213a  :      0.023035 (c= -0.15177353)
   197a -> 213a  :      0.023405 (c=  0.15298801)
   207a -> 211a  :      0.026109 (c=  0.16158246)
   207a -> 213a  :      0.084784 (c=  0.29117619)
   209a -> 214a  :      0.069394 (c= -0.26342732)
   209a -> 215a  :      0.226737 (c=  0.47616960)
   209a -> 216a  :      0.015974 (c= -0.12638971)
   209a -> 217a  :      0.010906 (c=  0.10443348)
   209a -> 220a  :      0.016219 (c=  0.12735479)
   210a -> 213a  :      0.012249 (c= -0.11067646)
   210a -> 218a  :      0.012449 (c=  0.11157549)
   192b -> 208b  :      0.010379 (c=  0.10187835)
   194b -> 206b  :      0.030985 (c=  0.17602678)
   194b -> 208b  :      0.020399 (c=  0.14282344)
   203b -> 206b  :      0.020572 (c=  0.14342976)
   203b -> 208b  :      0.024850 (c=  0.15763942)
   204b -> 206b  :      0.046871 (c= -0.21649689)
   204b -> 208b  :      0.032327 (c= -0.17979710)
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STATE 19:  E=   0.144828 au     3.941 eV    31786.0 cm**-1 <S**2> =   9.584921
   189a -> 211a  :      0.010224 (c=  0.10111152)
   205a -> 212a  :      0.034658 (c=  0.18616553)
   207a -> 211a  :      0.041840 (c=  0.20454949)
   208a -> 214a  :      0.014072 (c=  0.11862441)
   209a -> 212a  :      0.018790 (c=  0.13707700)
   209a -> 214a  :      0.012295 (c= -0.11088078)
   209a -> 215a  :      0.014415 (c= -0.12006276)
   209a -> 218a  :      0.021619 (c=  0.14703474)
   210a -> 211a  :      0.015159 (c=  0.12312119)
   210a -> 217a  :      0.442743 (c=  0.66538967)
   210a -> 218a  :      0.027205 (c=  0.16494067)
   210a -> 221a  :      0.011087 (c=  0.10529384)
   202b -> 206b  :      0.012294 (c= -0.11087936)
   202b -> 207b  :      0.026222 (c= -0.16193063)
   204b -> 206b  :      0.023541 (c=  0.15343044)
   204b -> 208b  :      0.023055 (c= -0.15183922)
   205b -> 207b  :      0.025886 (c= -0.16089266)

STATE 20:  E=   0.145906 au     3.970 eV    32022.6 cm**-1 <S**2> =   9.579615
   205a -> 213a  :      0.031036 (c=  0.17617022)
   208a -> 211a  :      0.022428 (c= -0.14976049)
   209a -> 211a  :      0.014214 (c= -0.11922186)
   209a -> 216a  :      0.024807 (c= -0.15750227)
   209a -> 217a  :      0.168261 (c=  0.41019585)
   209a -> 219a  :      0.140468 (c= -0.37479017)
   210a -> 217a  :      0.041044 (c=  0.20259217)
   210a -> 218a  :      0.150292 (c= -0.38767482)
   210a -> 219a  :      0.032384 (c= -0.17995466)
   210a -> 220a  :      0.020416 (c=  0.14288425)
   201b -> 208b  :      0.014190 (c= -0.11912010)
   202b -> 206b  :      0.032754 (c= -0.18098134)
   203b -> 207b  :      0.012557 (c=  0.11205763)
   204b -> 207b  :      0.021205 (c=  0.14562036)
   205b -> 208b  :      0.027871 (c=  0.16694658)

STATE 21:  E=   0.146684 au     3.991 eV    32193.3 cm**-1 <S**2> =   9.293119
   209a -> 217a  :      0.026190 (c= -0.16183295)
   209a -> 219a  :      0.013707 (c=  0.11707867)
   209a -> 220a  :      0.051565 (c=  0.22707957)
   210a -> 217a  :      0.059275 (c=  0.24346394)
   210a -> 218a  :      0.024267 (c=  0.15577768)
   210a -> 219a  :      0.665681 (c= -0.81589292)

STATE 22:  E=   0.148582 au     4.043 eV    32609.9 cm**-1 <S**2> =   9.323307
   209a -> 216a  :      0.015180 (c= -0.12320876)
   209a -> 217a  :      0.133216 (c=  0.36498782)
   209a -> 218a  :      0.180883 (c= -0.42530380)
   209a -> 219a  :      0.303823 (c=  0.55120150)
   209a -> 221a  :      0.019058 (c= -0.13804955)
   210a -> 217a  :      0.094073 (c=  0.30671337)
   210a -> 218a  :      0.038172 (c= -0.19537741)
   210a -> 220a  :      0.010615 (c= -0.10302855)
   210a -> 221a  :      0.020994 (c=  0.14489393)
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STATE 23:  E=   0.149141 au      4.058 eV     32732.7 cm**-1 <S**2> =   9.300261
   209a -> 216a  :      0.012109 (c= -0.11003884)
   209a -> 217a  :      0.013833 (c=  0.11761419)
   209a -> 218a  :      0.526817 (c=  0.72582143)
   209a -> 219a  :      0.152250 (c=  0.39019220)
   209a -> 222a  :      0.014268 (c= -0.11944872)
   210a -> 217a  :      0.011006 (c= -0.10491030)
   210a -> 218a  :      0.056662 (c= -0.23803881)
   210a -> 222a  :      0.054563 (c= -0.23358648)

STATE 24:  E=   0.149533 au      4.069 eV     32818.7 cm**-1 <S**2> =   9.625900
   205a -> 211a  :      0.059826 (c= -0.24459362)
   207a -> 212a  :      0.056718 (c= -0.23815477)
   208a -> 213a  :      0.023589 (c=  0.15358595)
   208a -> 216a  :      0.024069 (c=  0.15514138)
   209a -> 213a  :      0.031707 (c=  0.17806547)
   209a -> 216a  :      0.048638 (c= -0.22054099)
   209a -> 217a  :      0.228009 (c= -0.47750260)
   209a -> 221a  :      0.021574 (c=  0.14687959)
   210a -> 212a  :      0.028820 (c= -0.16976576)
   210a -> 215a  :      0.047668 (c= -0.21833088)
   210a -> 218a  :      0.065560 (c= -0.25604784)
   210a -> 220a  :      0.031205 (c= -0.17665078)
   202b -> 208b  :      0.024430 (c=  0.15630243)
   204b -> 207b  :      0.024620 (c=  0.15690739)
   205b -> 206b  :      0.018417 (c= -0.13570784)
```

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-------------------------------------------------------------------------------
          ABSORPTION SPECTRUM VIA TRANSITION ELECTRIC DIPOLE MOMENTS
-------------------------------------------------------------------------------
State   Energy    Wavelength  fosc        T2        TX        TY        TZ
        (cm-1)      (nm)                (au**2)     (au)      (au)      (au)
-------------------------------------------------------------------------------
   1   22843.0     437.8    0.090156067  1.29932  -0.97610  -0.15999   0.56653
   2   23242.4     430.2    0.066664030  0.94425  -0.52118   0.09589  -0.81451
   3   23886.8     418.6    0.007933201  0.10934  -0.08621  -0.31590   0.04597
   4   24109.3     414.8    0.009789405  0.13367  -0.24637   0.12393   0.24003
   5   24230.8     412.7    0.007334245  0.09965   0.25243  -0.18775  -0.02601
   6   24349.2     410.7    0.006481930  0.08764   0.12863  -0.08768   0.25180
   7   26066.5     383.6    0.009359540  0.11821   0.17119  -0.05179   0.29363
   8   26367.9     379.2    0.008699878  0.10862   0.27080   0.02612  -0.18602
   9   26531.4     376.9    0.018109963  0.22472   0.04251   0.46652   0.07260
  10   27524.2     363.3    0.000083229  0.00100   0.02739   0.01098   0.01118
  11   27953.3     357.7    0.000263888  0.00311  -0.02357  -0.04127  -0.02914
  12   28095.6     355.9    0.000695486  0.00815   0.02306  -0.05073   0.07102
  13   30254.5     330.5    0.031208298  0.33959   0.14475  -0.23423   0.51359
  14   30389.5     329.1    0.034665422  0.37553   0.37168  -0.35647  -0.33214
  15   30444.3     328.5    0.043254026  0.46773   0.58155   0.35922  -0.02215
  16   30640.7     326.4    0.003342492  0.03591   0.07531   0.00016   0.17390
  17   30680.1     325.9    0.022898206  0.24571   0.29227   0.00396   0.40034
  18   30706.1     325.7    0.014880147  0.15954   0.13143   0.32949  -0.18357
  19   31786.0     314.6    0.064801363  0.67116   0.75192   0.06341  -0.31899
  20   32022.6     312.3    0.039793503  0.40910   0.10826  -0.10681   0.62127
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21   32193.3   310.6   0.011986543   0.12258   -0.33855   -0.01580    0.08782
22   32609.9   306.7   0.007705949   0.07780   -0.23640    0.04030   -0.14242
23   32732.7   305.5   0.001805096   0.01815   -0.06453    0.01285   -0.11758
24   32818.7   304.7   0.001363823   0.01368    0.02724   -0.01657    0.11254
```

           ABSORPTION SPECTRUM VIA TRANSITION VELOCITY DIPOLE MOMENTS

State	Energy (cm-1)	Wavelength (nm)	fosc	P2 (au**2)	PX (au)	PY (au)	PZ (au)
1	22843.0	437.8	0.008476076	0.00132	0.02935	0.01325	-0.01691
2	23242.4	430.2	0.002299685	0.00037	0.01154	-0.00238	0.01505
3	23886.8	418.6	0.001000421	0.00016	-0.01107	0.00475	0.00428
4	24109.3	414.8	0.001130921	0.00019	0.00067	-0.00161	0.01354
5	24230.8	412.7	0.000976227	0.00016	0.01007	-0.00125	0.00766
6	24349.2	410.7	0.000708737	0.00012	0.00573	-0.00354	0.00852
7	26066.5	383.6	0.001127818	0.00020	-0.00800	0.00211	-0.01151
8	26367.9	379.2	0.001408856	0.00025	-0.01345	-0.00323	0.00791
9	26531.4	376.9	0.000332636	0.00006	-0.00592	0.00313	0.00394
10	27524.2	363.3	0.000632514	0.00012	0.00390	-0.00149	0.01008
11	27953.3	357.7	0.001533621	0.00029	-0.01529	-0.00185	0.00746
12	28095.6	355.9	0.000271312	0.00005	-0.00500	-0.00068	0.00516
13	30254.5	330.5	0.000679090	0.00014	0.00482	0.00562	-0.00925
14	30389.5	329.1	0.000600785	0.00012	-0.00864	0.00258	0.00659
15	30444.3	328.5	0.006324021	0.00132	-0.03102	-0.01545	0.01071
16	30640.7	326.4	0.000106911	0.00002	0.00460	-0.00099	-0.00053
17	30680.1	325.9	0.004093022	0.00086	-0.01422	0.00213	-0.02552
18	30706.1	325.7	0.000484282	0.00010	0.00603	-0.00781	0.00207
19	31786.0	314.6	0.021473065	0.00466	-0.06247	-0.00482	0.02719
20	32022.6	312.3	0.011846973	0.00259	-0.00769	0.01265	-0.04872
21	32193.3	310.6	0.004677839	0.00103	0.02988	0.00979	-0.00638
22	32609.9	306.7	0.002485504	0.00055	0.01927	0.00626	0.01197
23	32732.7	305.5	0.000568203	0.00013	0.00376	-0.00826	0.00668
24	32818.7	304.7	0.001129059	0.00025	-0.00547	0.00412	-0.01437