

Balan et al., MS 8561, MSA's depository. AM-01-074. Table 3.

omega( 1) = -0.620737 [THz] = -20.705708 [cm-1]				
(	-0.078074	0.000000	0.012959	0.000000 -0.214589 0.000000 )
(	-0.078089	0.000000	0.013810	0.000000 -0.219404 0.000000 )
(	-0.080074	0.000000	0.028607	0.000000 -0.219900 0.000000 )
(	-0.080813	0.000000	0.027683	0.000000 -0.217993 0.000000 )
(	-0.072537	0.000000	0.014238	0.000000 -0.217956 0.000000 )
(	-0.087132	0.000000	0.018167	0.000000 -0.217543 0.000000 )
(	-0.222192	0.000000	0.032832	0.000000 -0.234048 0.000000 )
(	-0.004459	0.000000	0.158679	0.000000 -0.245057 0.000000 )
(	-0.010948	0.000000	-0.084744	0.000000 -0.229222 0.000000 )
(	-0.072071	0.000000	0.028679	0.000000 -0.214260 0.000000 )
(	-0.078542	0.000000	0.014088	0.000000 -0.219328 0.000000 )
(	-0.078658	0.000000	0.011734	0.000000 -0.215713 0.000000 )
(	-0.079895	0.000000	0.005207	0.000000 -0.222962 0.000000 )
(	-0.072358	0.000000	0.029000	0.000000 -0.178061 0.000000 )
(	-0.063323	0.000000	0.026999	0.000000 -0.224149 0.000000 )
(	-0.095759	0.000000	0.031664	0.000000 -0.225038 0.000000 )
(	-0.072763	0.000000	0.000455	0.000000 -0.223764 0.000000 )
omega( 2) = -0.538096 [THz] = -17.949064 [cm-1]				
(	0.055957	0.000000	0.233945	0.000000 0.005635 0.000000 )
(	0.054113	0.000000	0.233677	0.000000 0.006100 0.000000 )
(	0.063265	0.000000	0.230660	0.000000 0.004994 0.000000 )
(	0.060163	0.000000	0.231889	0.000000 0.004891 0.000000 )
(	0.063334	0.000000	0.227402	0.000000 0.005118 0.000000 )
(	0.049875	0.000000	0.233985	0.000000 0.006479 0.000000 )
(	0.038118	0.000000	0.232210	0.000000 0.005296 0.000000 )
(	0.078160	0.000000	0.259693	0.000000 -0.007348 0.000000 )
(	0.076266	0.000000	0.208461	0.000000 0.005602 0.000000 )
(	0.058216	0.000000	0.236202	0.000000 0.005978 0.000000 )
(	0.052701	0.000000	0.235540	0.000000 0.004966 0.000000 )
(	0.055433	0.000000	0.234750	0.000000 0.001796 0.000000 )
(	0.061276	0.000000	0.248717	0.000000 0.017059 0.000000 )
(	0.059301	0.000000	0.235718	0.000000 0.016857 0.000000 )

( 0.059790 0.000000 0.236431 0.000000 0.002859 0.000000 )
( 0.053954 0.000000 0.234990 0.000000 0.001357 0.000000 )
( 0.057351 0.000000 0.237852 0.000000 0.011102 0.000000 )
omega( 3) = -0.108203 [THz] = -3.609297 [cm-1]
( 0.211960 0.000000 -0.048311 0.000000 -0.095327 0.000000 )
( 0.212000 0.000000 -0.048404 0.000000 -0.092824 0.000000 )
( 0.217753 0.000000 -0.047942 0.000000 -0.096844 0.000000 )
( 0.219054 0.000000 -0.048237 0.000000 -0.096688 0.000000 )
( 0.210279 0.000000 -0.036520 0.000000 -0.099195 0.000000 )
( 0.225505 0.000000 -0.046653 0.000000 -0.097467 0.000000 )
( 0.320696 0.000000 -0.051150 0.000000 -0.087830 0.000000 )
( 0.165134 0.000000 -0.139424 0.000000 -0.078181 0.000000 )
( 0.167917 0.000000 0.033294 0.000000 -0.090125 0.000000 )
( 0.210498 0.000000 -0.053561 0.000000 -0.091561 0.000000 )
( 0.207610 0.000000 -0.050239 0.000000 -0.088847 0.000000 )
( 0.211255 0.000000 -0.049359 0.000000 -0.092765 0.000000 )
( 0.204714 0.000000 -0.058928 0.000000 -0.101181 0.000000 )
( 0.211249 0.000000 -0.054308 0.000000 -0.114931 0.000000 )
( 0.200425 0.000000 -0.056628 0.000000 -0.086557 0.000000 )
( 0.224578 0.000000 -0.062871 0.000000 -0.085870 0.000000 )
( 0.207984 0.000000 -0.043695 0.000000 -0.093271 0.000000 )
omega( 4) = 1.312363 [THz] = 43.776021 [cm-1]
( -0.056690 0.000000 0.052802 0.000000 -0.060067 0.000000 )
( -0.056294 0.000000 0.052299 0.000000 -0.044879 0.000000 )
( -0.059257 0.000000 0.010300 0.000000 -0.051471 0.000000 )
( -0.055179 0.000000 0.010625 0.000000 -0.053822 0.000000 )
( -0.074666 0.000000 0.070009 0.000000 -0.058620 0.000000 )
( -0.016733 0.000000 0.040689 0.000000 -0.056488 0.000000 )
( 0.460883 0.000000 -0.006242 0.000000 -0.005471 0.000000 )
( -0.338882 0.000000 -0.473609 0.000000 0.045025 0.000000 )
( -0.320125 0.000000 0.435186 0.000000 -0.015942 0.000000 )
( -0.077016 0.000000 0.004196 0.000000 -0.056371 0.000000 )
( -0.060806 0.000000 0.047909 0.000000 -0.042242 0.000000 )
( -0.055201 0.000000 0.055823 0.000000 -0.052131 0.000000 )
( -0.060489 0.000000 0.055069 0.000000 -0.047985 0.000000 )

( -0.075998 0.000000 0.002713 0.000000 -0.187261 0.000000 )  
( -0.115243 0.000000 0.004499 0.000000 -0.024943 0.000000 )  
( 0.006860 0.000000 -0.016462 0.000000 -0.018020 0.000000 )  
( -0.075374 0.000000 0.091251 0.000000 -0.033651 0.000000 )  
  
omega( 5) = 3.651948 [THz] = 121.816693 [cm-1]  
( 0.129707 0.000000 -0.196322 0.000000 0.014128 0.000000 )  
( 0.142646 0.000000 -0.157147 0.000000 0.026945 0.000000 )  
( -0.159891 0.000000 0.235173 0.000000 -0.039990 0.000000 )  
( -0.161383 0.000000 0.232887 0.000000 0.025139 0.000000 )  
( 0.014400 0.000000 0.030018 0.000000 -0.014404 0.000000 )  
( 0.060251 0.000000 -0.027077 0.000000 -0.010803 0.000000 )  
( -0.174073 0.000000 0.240334 0.000000 -0.027525 0.000000 )  
( -0.173682 0.000000 0.193371 0.000000 0.006010 0.000000 )  
( -0.227026 0.000000 0.324446 0.000000 0.007884 0.000000 )  
( 0.099691 0.000000 -0.141267 0.000000 0.023490 0.000000 )  
( 0.194673 0.000000 -0.203754 0.000000 -0.052179 0.000000 )  
( 0.187466 0.000000 -0.259828 0.000000 0.121678 0.000000 )  
( 0.106401 0.000000 -0.268161 0.000000 -0.041580 0.000000 )  
( 0.062840 0.000000 -0.121214 0.000000 -0.027538 0.000000 )  
( 0.111352 0.000000 -0.171178 0.000000 -0.027752 0.000000 )  
( 0.077887 0.000000 -0.048357 0.000000 0.041919 0.000000 )  
( 0.137525 0.000000 -0.086690 0.000000 0.052342 0.000000 )  
  
omega( 6) = 3.729532 [THz] = 124.404616 [cm-1]  
( -0.184000 0.000000 -0.137621 0.000000 0.049879 0.000000 )  
( -0.207589 0.000000 -0.136846 0.000000 0.036391 0.000000 )  
( 0.232876 0.000000 0.158900 0.000000 -0.002808 0.000000 )  
( 0.213960 0.000000 0.165877 0.000000 -0.038266 0.000000 )  
( -0.033409 0.000000 0.018659 0.000000 -0.025142 0.000000 )  
( 0.001569 0.000000 -0.001306 0.000000 -0.032346 0.000000 )  
( 0.301120 0.000000 0.154139 0.000000 -0.016086 0.000000 )  
( 0.221459 0.000000 0.170631 0.000000 -0.065999 0.000000 )  
( 0.205626 0.000000 0.196074 0.000000 -0.008462 0.000000 )  
( -0.162049 0.000000 -0.121943 0.000000 0.049212 0.000000 )  
( -0.248590 0.000000 -0.142404 0.000000 0.073827 0.000000 )

(	-0.225141	0.000000	-0.126555	0.000000	-0.005894	0.000000	)
(	-0.250217	0.000000	-0.222449	0.000000	-0.003588	0.000000	)
(	-0.147049	0.000000	-0.132078	0.000000	0.008352	0.000000	)
(	-0.074597	0.000000	-0.110392	0.000000	0.019780	0.000000	)
(	-0.195521	0.000000	-0.116508	0.000000	0.002469	0.000000	)
(	-0.045016	0.000000	0.023707	0.000000	0.156762	0.000000	)
omega( 7) = 5.441026 [THz] = 181.494312 [cm-1]							
(	0.012639	0.000000	-0.077686	0.000000	0.000458	0.000000	)
(	-0.057567	0.000000	-0.036209	0.000000	-0.005058	0.000000	)
(	0.058869	0.000000	-0.047275	0.000000	-0.037185	0.000000	)
(	-0.090203	0.000000	0.028603	0.000000	-0.036452	0.000000	)
(	0.224254	0.000000	-0.213198	0.000000	0.000130	0.000000	)
(	-0.333746	0.000000	0.085796	0.000000	-0.001050	0.000000	)
(	0.083636	0.000000	0.000876	0.000000	0.081763	0.000000	)
(	0.005852	0.000000	0.026036	0.000000	-0.355151	0.000000	)
(	-0.047931	0.000000	0.069002	0.000000	0.093586	0.000000	)
(	0.123725	0.000000	0.199752	0.000000	0.125934	0.000000	)
(	-0.138261	0.000000	-0.030265	0.000000	-0.059773	0.000000	)
(	0.075816	0.000000	-0.176474	0.000000	-0.004715	0.000000	)
(	0.123110	0.000000	0.194592	0.000000	0.205684	0.000000	)
(	0.125102	0.000000	0.201696	0.000000	0.516403	0.000000	)
(	-0.049453	0.000000	-0.004986	0.000000	-0.083880	0.000000	)
(	0.048636	0.000000	-0.120237	0.000000	-0.025363	0.000000	)
(	0.034979	0.000000	0.074987	0.000000	0.131214	0.000000	)
omega( 8) = 5.721245 [THz] = 190.841460 [cm-1]							
(	0.009940	0.000000	0.029596	0.000000	0.024965	0.000000	)
(	0.007019	0.000000	0.033049	0.000000	0.012445	0.000000	)
(	-0.036057	0.000000	-0.028280	0.000000	-0.039269	0.000000	)
(	0.004138	0.000000	-0.044886	0.000000	-0.040201	0.000000	)
(	0.012663	0.000000	0.104747	0.000000	-0.041033	0.000000	)
(	0.068787	0.000000	0.071621	0.000000	-0.039151	0.000000	)
(	0.005002	0.000000	-0.034990	0.000000	-0.058402	0.000000	)
(	-0.013541	0.000000	-0.032580	0.000000	0.015054	0.000000	)
(	-0.013925	0.000000	-0.034021	0.000000	-0.064468	0.000000	)
(	0.162096	0.000000	0.307536	0.000000	0.222506	0.000000	)

( -0.120048 0.000000 0.004929 0.000000 0.115205 0.000000 )  
( 0.050460 0.000000 -0.098156 0.000000 0.110624 0.000000 )  
( -0.135679 0.000000 -0.229993 0.000000 -0.184967 0.000000 )  
( 0.162813 0.000000 0.302963 0.000000 0.529240 0.000000 )  
( -0.191371 0.000000 0.035014 0.000000 0.137765 0.000000 )  
( 0.084531 0.000000 -0.133885 0.000000 0.129005 0.000000 )  
( -0.145767 0.000000 -0.257608 0.000000 -0.203516 0.000000 )

$\omega(9) = 6.937132 \text{ [THz]} = 231.399362 \text{ [cm}^{-1}\text{]}$

( -0.070169 0.000000 0.005893 0.000000 0.084835 0.000000 )  
( -0.006037 0.000000 0.070147 0.000000 -0.079453 0.000000 )  
( 0.023725 0.000000 0.027067 0.000000 -0.049377 0.000000 )  
( 0.038277 0.000000 -0.047120 0.000000 0.001287 0.000000 )  
( -0.208260 0.000000 0.265528 0.000000 -0.076302 0.000000 )  
( -0.157117 0.000000 0.001102 0.000000 0.017147 0.000000 )  
( 0.088236 0.000000 -0.007539 0.000000 -0.114835 0.000000 )  
( 0.024700 0.000000 -0.023626 0.000000 0.082429 0.000000 )  
( 0.074475 0.000000 -0.104596 0.000000 -0.006210 0.000000 )  
( -0.137104 0.000000 -0.002187 0.000000 -0.038971 0.000000 )  
( 0.029047 0.000000 0.023986 0.000000 -0.153519 0.000000 )  
( 0.170988 0.000000 -0.364686 0.000000 0.320859 0.000000 )  
( 0.127084 0.000000 0.138943 0.000000 0.054804 0.000000 )  
( -0.169111 0.000000 0.015582 0.000000 -0.265508 0.000000 )  
( 0.182196 0.000000 0.062715 0.000000 -0.205272 0.000000 )  
( 0.066438 0.000000 -0.372998 0.000000 0.304579 0.000000 )  
( 0.044549 0.000000 -0.089433 0.000000 -0.071496 0.000000 )

$\omega(10) = 6.955597 \text{ [THz]} = 232.015283 \text{ [cm}^{-1}\text{]}$

( 0.034894 0.000000 0.028175 0.000000 -0.075178 0.000000 )  
( 0.024582 0.000000 -0.029260 0.000000 0.079363 0.000000 )  
( -0.053953 0.000000 0.022662 0.000000 -0.033415 0.000000 )  
( 0.035752 0.000000 0.020978 0.000000 -0.054143 0.000000 )  
( 0.017743 0.000000 -0.048392 0.000000 -0.022542 0.000000 )  
( 0.266735 0.000000 -0.038288 0.000000 -0.068068 0.000000 )  
( -0.098027 0.000000 0.014012 0.000000 -0.057124 0.000000 )  
( -0.027140 0.000000 -0.012126 0.000000 0.108498 0.000000 )

( -0.013292 0.000000 0.018673 0.000000 -0.135089 0.000000 )  
( 0.043561 0.000000 -0.097945 0.000000 -0.056930 0.000000 )  
( -0.483092 0.000000 -0.037524 0.000000 0.293425 0.000000 )  
( 0.119079 0.000000 -0.185381 0.000000 -0.002206 0.000000 )  
( 0.120690 0.000000 0.298784 0.000000 0.095631 0.000000 )  
( 0.060195 0.000000 -0.108725 0.000000 -0.356877 0.000000 )  
( -0.322995 0.000000 -0.121219 0.000000 0.242162 0.000000 )  
( 0.045346 0.000000 0.047517 0.000000 -0.084128 0.000000 )  
( -0.015995 0.000000 0.145483 0.000000 -0.006769 0.000000 )  
  
omega(11) = 7.726694 [THz] = 257.736474 [cm-1]  
  
( -0.022028 0.000000 0.109792 0.000000 -0.216200 0.000000 )  
( 0.060165 0.000000 0.057142 0.000000 -0.045222 0.000000 )  
( 0.035881 0.000000 -0.012106 0.000000 0.103212 0.000000 )  
( -0.004851 0.000000 0.050320 0.000000 0.121102 0.000000 )  
( 0.009937 0.000000 -0.161899 0.000000 0.101768 0.000000 )  
( -0.174624 0.000000 -0.051153 0.000000 0.123201 0.000000 )  
( 0.044005 0.000000 0.021218 0.000000 0.234099 0.000000 )  
( 0.040073 0.000000 0.048430 0.000000 0.050317 0.000000 )  
( 0.016558 0.000000 0.017360 0.000000 0.169615 0.000000 )  
( 0.057941 0.000000 0.026378 0.000000 -0.273643 0.000000 )  
( -0.146740 0.000000 -0.023760 0.000000 0.007208 0.000000 )  
( 0.107061 0.000000 -0.161075 0.000000 0.080590 0.000000 )  
( -0.081497 0.000000 -0.047280 0.000000 -0.394278 0.000000 )  
( 0.058887 0.000000 0.027502 0.000000 -0.450888 0.000000 )  
( 0.086421 0.000000 -0.069117 0.000000 -0.069121 0.000000 )  
( 0.103053 0.000000 0.021455 0.000000 0.025572 0.000000 )  
( -0.150708 0.000000 0.004107 0.000000 -0.395194 0.000000 )  
  
omega(12) = 8.030733 [THz] = 267.878203 [cm-1]  
  
( -0.068026 0.000000 0.019950 0.000000 -0.340597 0.000000 )  
( -0.100126 0.000000 -0.000848 0.000000 0.379623 0.000000 )  
( -0.021257 0.000000 -0.008855 0.000000 -0.066635 0.000000 )  
( 0.007431 0.000000 0.003752 0.000000 0.017782 0.000000 )  
( -0.035792 0.000000 0.100083 0.000000 -0.077071 0.000000 )  
( -0.015267 0.000000 0.013550 0.000000 0.030090 0.000000 )  
( 0.053549 0.000000 0.009202 0.000000 -0.015954 0.000000 )

( 0.017299 0.000000 -0.002163 0.000000 0.003087 0.000000 )
( 0.020996 0.000000 -0.072901 0.000000 -0.062667 0.000000 )
( 0.161091 0.000000 -0.083869 0.000000 0.086162 0.000000 )
( 0.169339 0.000000 -0.094940 0.000000 -0.131726 0.000000 )
( 0.086807 0.000000 0.014722 0.000000 0.077232 0.000000 )
( -0.168560 0.000000 0.100252 0.000000 0.091508 0.000000 )
( 0.193501 0.000000 -0.103612 0.000000 0.190901 0.000000 )
( 0.131598 0.000000 -0.338170 0.000000 -0.116606 0.000000 )
( 0.317732 0.000000 0.045889 0.000000 0.119206 0.000000 )
( -0.403170 0.000000 0.137475 0.000000 0.055642 0.000000 )
omega(13) = 9.197489 [THz] = 306.797233 [cm-1]
( 0.010665 0.000000 -0.055892 0.000000 0.026138 0.000000 )
( 0.044611 0.000000 0.015985 0.000000 0.019330 0.000000 )
( -0.113162 0.000000 -0.109690 0.000000 0.008220 0.000000 )
( 0.035851 0.000000 0.171978 0.000000 -0.034351 0.000000 )
( -0.251447 0.000000 -0.203731 0.000000 0.019098 0.000000 )
( 0.053156 0.000000 0.304219 0.000000 -0.039646 0.000000 )
( 0.142540 0.000000 -0.001061 0.000000 0.426236 0.000000 )
( -0.021557 0.000000 0.013793 0.000000 -0.058079 0.000000 )
( 0.080276 0.000000 -0.124909 0.000000 -0.446904 0.000000 )
( -0.161788 0.000000 0.054941 0.000000 0.008781 0.000000 )
( 0.091487 0.000000 -0.051542 0.000000 0.001836 0.000000 )
( 0.066553 0.000000 -0.001893 0.000000 0.040886 0.000000 )
( 0.067667 0.000000 -0.024979 0.000000 0.007609 0.000000 )
( -0.293078 0.000000 0.131035 0.000000 -0.063021 0.000000 )
( -0.270263 0.000000 -0.088183 0.000000 0.116268 0.000000 )
( 0.105676 0.000000 0.064870 0.000000 0.029914 0.000000 )
( 0.029717 0.000000 -0.177969 0.000000 -0.069369 0.000000 )
omega(14) = 9.632326 [THz] = 321.301953 [cm-1]
( -0.021202 0.000000 0.150323 0.000000 0.095973 0.000000 )
( -0.047263 0.000000 0.080464 0.000000 0.098244 0.000000 )
( 0.060413 0.000000 -0.053428 0.000000 0.082143 0.000000 )
( -0.027745 0.000000 0.012566 0.000000 -0.137611 0.000000 )
( 0.147938 0.000000 -0.051249 0.000000 0.086276 0.000000 )

(	0.131561	0.000000	0.032106	0.000000	-0.128171	0.000000	)
(	-0.125684	0.000000	-0.052011	0.000000	-0.003312	0.000000	)
(	-0.053275	0.000000	-0.072042	0.000000	-0.290721	0.000000	)
(	0.008248	0.000000	0.058305	0.000000	-0.007560	0.000000	)
(	-0.059079	0.000000	-0.168298	0.000000	-0.050761	0.000000	)
(	0.083883	0.000000	0.097172	0.000000	-0.005266	0.000000	)
(	0.074658	0.000000	-0.109396	0.000000	0.216912	0.000000	)
(	-0.134168	0.000000	-0.087586	0.000000	-0.040632	0.000000	)
(	-0.085091	0.000000	-0.150075	0.000000	-0.454564	0.000000	)
(	-0.125815	0.000000	0.202961	0.000000	0.063352	0.000000	)
(	-0.104615	0.000000	0.139779	0.000000	0.112924	0.000000	)
(	0.101011	0.000000	0.422168	0.000000	0.251110	0.000000	)
omega(15) = 9.833420 [THz] = 328.009775 [cm-1]							
(	-0.102184	0.000000	-0.031461	0.000000	-0.063967	0.000000	)
(	-0.160306	0.000000	-0.016106	0.000000	-0.121152	0.000000	)
(	-0.019960	0.000000	-0.002533	0.000000	0.168232	0.000000	)
(	0.079483	0.000000	-0.002496	0.000000	-0.094798	0.000000	)
(	0.086704	0.000000	-0.143913	0.000000	0.157331	0.000000	)
(	0.198547	0.000000	-0.023132	0.000000	-0.115314	0.000000	)
(	-0.103110	0.000000	-0.042137	0.000000	0.042333	0.000000	)
(	-0.001220	0.000000	0.026816	0.000000	0.302216	0.000000	)
(	-0.001045	0.000000	0.128394	0.000000	-0.043380	0.000000	)
(	0.099248	0.000000	0.167935	0.000000	0.005311	0.000000	)
(	0.118727	0.000000	-0.011812	0.000000	-0.265269	0.000000	)
(	-0.044030	0.000000	-0.156228	0.000000	0.022890	0.000000	)
(	-0.000131	0.000000	0.115413	0.000000	0.042606	0.000000	)
(	0.019080	0.000000	0.210990	0.000000	0.521331	0.000000	)
(	-0.033323	0.000000	0.010031	0.000000	-0.225017	0.000000	)
(	-0.185221	0.000000	-0.025788	0.000000	-0.045927	0.000000	)
(	0.076038	0.000000	0.273442	0.000000	0.134666	0.000000	)
omega(16) = 10.551412 [THz] = 351.959573 [cm-1]							
(	0.049100	0.000000	-0.093545	0.000000	-0.040544	0.000000	)
(	-0.050884	0.000000	-0.008106	0.000000	-0.016606	0.000000	)
(	0.080893	0.000000	0.009645	0.000000	0.012132	0.000000	)
(	-0.007448	0.000000	0.056027	0.000000	0.065382	0.000000	)



( 0.155911 0.000000 0.247594 0.000000 -0.010585 0.000000 )  
( 0.021552 0.000000 0.322706 0.000000 0.048438 0.000000 )  
( -0.167207 0.000000 0.034445 0.000000 0.072743 0.000000 )  
( -0.125024 0.000000 -0.251062 0.000000 0.033348 0.000000 )  
( 0.108744 0.000000 -0.129301 0.000000 0.060495 0.000000 )  
( -0.025186 0.000000 0.038840 0.000000 -0.129403 0.000000 )  
( -0.073743 0.000000 -0.101225 0.000000 -0.041157 0.000000 )  
( -0.023154 0.000000 -0.067808 0.000000 -0.096269 0.000000 )  
( -0.010216 0.000000 -0.072304 0.000000 0.029507 0.000000 )  
( -0.016065 0.000000 0.031156 0.000000 -0.019814 0.000000 )  
( 0.149326 0.000000 -0.134616 0.000000 -0.110133 0.000000 )  
( -0.183608 0.000000 0.329204 0.000000 -0.240335 0.000000 )  
( 0.285360 0.000000 0.379089 0.000000 0.308050 0.000000 )  
  
omega(17) = 10.807855 [THz] = 360.513618 [cm-1]  
( 0.023333 0.000000 -0.051758 0.000000 0.003959 0.000000 )  
( 0.010973 0.000000 0.081574 0.000000 0.017496 0.000000 )  
( -0.007640 0.000000 -0.040428 0.000000 -0.021189 0.000000 )  
( 0.014877 0.000000 -0.024624 0.000000 0.022644 0.000000 )  
( -0.019747 0.000000 -0.031642 0.000000 -0.014012 0.000000 )  
( 0.003574 0.000000 -0.004291 0.000000 0.009622 0.000000 )  
( -0.014187 0.000000 -0.017367 0.000000 -0.000104 0.000000 )  
( 0.045876 0.000000 0.036768 0.000000 0.021198 0.000000 )  
( -0.051163 0.000000 0.055369 0.000000 -0.042197 0.000000 )  
( -0.005530 0.000000 -0.006134 0.000000 0.000317 0.000000 )  
( -0.106548 0.000000 0.026354 0.000000 -0.057487 0.000000 )  
( 0.032127 0.000000 0.040069 0.000000 0.020781 0.000000 )  
( -0.024796 0.000000 -0.064574 0.000000 0.021222 0.000000 )  
( -0.068807 0.000000 0.032026 0.000000 0.011179 0.000000 )  
( 0.688068 0.000000 0.049438 0.000000 -0.308693 0.000000 )  
( 0.170680 0.000000 0.028314 0.000000 0.052669 0.000000 )  
( 0.328713 0.000000 0.369342 0.000000 0.307668 0.000000 )  
  
omega(18) = 11.308570 [THz] = 377.215792 [cm-1]  
( 0.090505 0.000000 0.111992 0.000000 0.010945 0.000000 )  
( -0.088517 0.000000 -0.065778 0.000000 0.008168 0.000000 )

(	0.003285	0.000000	0.002808	0.000000	-0.034285	0.000000	)
(	0.037467	0.000000	-0.018768	0.000000	0.028787	0.000000	)
(	-0.056821	0.000000	-0.065251	0.000000	-0.056116	0.000000	)
(	-0.098787	0.000000	-0.024067	0.000000	0.058467	0.000000	)
(	-0.012405	0.000000	0.012963	0.000000	-0.034763	0.000000	)
(	0.030268	0.000000	-0.003826	0.000000	0.070275	0.000000	)
(	-0.024084	0.000000	0.028024	0.000000	-0.060478	0.000000	)
(	-0.067786	0.000000	0.050820	0.000000	0.016292	0.000000	)
(	0.105602	0.000000	0.060192	0.000000	0.096220	0.000000	)
(	0.107096	0.000000	-0.142924	0.000000	-0.135743	0.000000	)
(	-0.057910	0.000000	-0.038707	0.000000	0.016822	0.000000	)
(	0.054670	0.000000	-0.017134	0.000000	0.016596	0.000000	)
(	0.009767	0.000000	0.193783	0.000000	0.124485	0.000000	)
(	-0.188752	0.000000	0.497526	0.000000	-0.373944	0.000000	)
(	0.131454	0.000000	0.495326	0.000000	0.311556	0.000000	)
omega(19) = 11.957156 [THz] = 398.850440 [cm-1]							
(	0.170839	0.000000	-0.007413	0.000000	-0.031385	0.000000	)
(	0.002018	0.000000	-0.047727	0.000000	0.048155	0.000000	)
(	-0.043840	0.000000	0.083679	0.000000	0.241741	0.000000	)
(	-0.052840	0.000000	-0.009386	0.000000	-0.229152	0.000000	)
(	-0.147932	0.000000	0.099176	0.000000	0.185535	0.000000	)
(	-0.268880	0.000000	-0.002384	0.000000	-0.182740	0.000000	)
(	0.148835	0.000000	-0.067748	0.000000	-0.089722	0.000000	)
(	-0.099369	0.000000	0.059299	0.000000	0.081834	0.000000	)
(	0.145958	0.000000	-0.095842	0.000000	-0.000200	0.000000	)
(	0.083734	0.000000	-0.043126	0.000000	-0.023925	0.000000	)
(	-0.134867	0.000000	-0.017297	0.000000	-0.023210	0.000000	)
(	0.081312	0.000000	0.117229	0.000000	-0.042623	0.000000	)
(	0.030468	0.000000	-0.104852	0.000000	0.022557	0.000000	)
(	0.235405	0.000000	-0.126968	0.000000	-0.002453	0.000000	)
(	-0.204796	0.000000	0.043092	0.000000	-0.002755	0.000000	)
(	0.240908	0.000000	0.062893	0.000000	0.002121	0.000000	)
(	0.344367	0.000000	0.359771	0.000000	0.311079	0.000000	)
omega(20) = 12.152439 [THz] = 405.364422 [cm-1]							
(	-0.068771	0.000000	-0.075434	0.000000	-0.001248	0.000000	)

( 0.109255 0.000000 0.123283 0.000000 0.104168 0.000000 )
( 0.116721 0.000000 0.113024 0.000000 -0.049876 0.000000 )
( 0.124097 0.000000 0.083631 0.000000 -0.025441 0.000000 )
( 0.030556 0.000000 -0.332631 0.000000 0.015182 0.000000 )
( -0.243002 0.000000 -0.058964 0.000000 -0.001052 0.000000 )
( -0.221967 0.000000 0.075570 0.000000 -0.234034 0.000000 )
( -0.115379 0.000000 -0.265384 0.000000 0.156428 0.000000 )
( 0.113807 0.000000 0.014179 0.000000 -0.095573 0.000000 )
( -0.100392 0.000000 0.086513 0.000000 0.077070 0.000000 )
( 0.002828 0.000000 -0.018163 0.000000 -0.020260 0.000000 )
( 0.049553 0.000000 0.121971 0.000000 0.096005 0.000000 )
( 0.042109 0.000000 -0.043986 0.000000 -0.025699 0.000000 )
( -0.247714 0.000000 0.178098 0.000000 -0.229222 0.000000 )
( -0.384750 0.000000 -0.135317 0.000000 0.105935 0.000000 )
( -0.013242 0.000000 0.199543 0.000000 0.062739 0.000000 )
( -0.012678 0.000000 -0.219118 0.000000 -0.120908 0.000000 )
omega(21) = 12.340113 [THz] = 411.624594 [cm-1]
( -0.019846 0.000000 -0.043367 0.000000 -0.124555 0.000000 )
( 0.096925 0.000000 -0.040447 0.000000 0.084553 0.000000 )
( 0.095490 0.000000 -0.113582 0.000000 0.079904 0.000000 )
( 0.073006 0.000000 -0.122244 0.000000 -0.066024 0.000000 )
( -0.212812 0.000000 0.106333 0.000000 0.037324 0.000000 )
( 0.025134 0.000000 0.139183 0.000000 -0.047994 0.000000 )
( -0.162018 0.000000 -0.102838 0.000000 -0.041799 0.000000 )
( 0.120946 0.000000 0.080974 0.000000 -0.103253 0.000000 )
( -0.121955 0.000000 0.272151 0.000000 0.171792 0.000000 )
( -0.278724 0.000000 0.172655 0.000000 -0.022433 0.000000 )
( 0.050224 0.000000 -0.165335 0.000000 0.082983 0.000000 )
( 0.058371 0.000000 0.040420 0.000000 -0.025203 0.000000 )
( 0.134835 0.000000 0.008520 0.000000 -0.029135 0.000000 )
( -0.310006 0.000000 0.186873 0.000000 0.178464 0.000000 )
( -0.396478 0.000000 -0.279275 0.000000 0.224198 0.000000 )
( 0.030474 0.000000 0.098066 0.000000 -0.051158 0.000000 )
( 0.087998 0.000000 0.052257 0.000000 -0.018487 0.000000 )

omega(22) = 13.108240 [THz] = 437.246715 [cm-1]

( 0.069148 0.000000 -0.091273 0.000000 -0.049665 0.000000 )

( -0.094122 0.000000 0.160122 0.000000 0.022042 0.000000 )

( -0.039594 0.000000 0.057995 0.000000 -0.002143 0.000000 )

( -0.081878 0.000000 -0.047838 0.000000 0.036090 0.000000 )

( 0.072584 0.000000 -0.093916 0.000000 0.011474 0.000000 )

( 0.150575 0.000000 0.017199 0.000000 -0.011871 0.000000 )

( 0.143866 0.000000 0.006783 0.000000 -0.069120 0.000000 )

( 0.005051 0.000000 0.081519 0.000000 0.014067 0.000000 )

( 0.010705 0.000000 -0.093134 0.000000 0.132173 0.000000 )

( -0.178804 0.000000 0.039196 0.000000 -0.004161 0.000000 )

( -0.018007 0.000000 0.040465 0.000000 -0.063468 0.000000 )

( 0.138742 0.000000 -0.037722 0.000000 -0.067472 0.000000 )

( -0.006887 0.000000 -0.096515 0.000000 0.067200 0.000000 )

( -0.354659 0.000000 0.144222 0.000000 -0.201153 0.000000 )

( -0.553037 0.000000 0.061390 0.000000 0.104842 0.000000 )

( 0.068191 0.000000 0.208105 0.000000 -0.148572 0.000000 )

( -0.161666 0.000000 -0.381161 0.000000 -0.102490 0.000000 )

omega(23) = 13.587829 [THz] = 453.244207 [cm-1]

( -0.109486 0.000000 0.009680 0.000000 -0.020675 0.000000 )

( 0.106829 0.000000 -0.011846 0.000000 -0.008795 0.000000 )

( -0.007594 0.000000 0.032860 0.000000 -0.010737 0.000000 )

( -0.059030 0.000000 0.001714 0.000000 0.004877 0.000000 )

( -0.026387 0.000000 -0.022077 0.000000 0.001774 0.000000 )

( 0.064140 0.000000 -0.041540 0.000000 -0.013629 0.000000 )

( 0.083093 0.000000 0.012756 0.000000 -0.012038 0.000000 )

( -0.025869 0.000000 0.004184 0.000000 -0.028621 0.000000 )

( 0.037098 0.000000 -0.080850 0.000000 0.046608 0.000000 )

( -0.014422 0.000000 0.026241 0.000000 0.056428 0.000000 )

( 0.001710 0.000000 -0.035972 0.000000 -0.002693 0.000000 )

( -0.013088 0.000000 -0.009786 0.000000 0.022374 0.000000 )

( 0.020860 0.000000 0.016508 0.000000 -0.030653 0.000000 )

( -0.083634 0.000000 0.063591 0.000000 0.217772 0.000000 )

( -0.005426 0.000000 0.010458 0.000000 -0.003000 0.000000 )

( -0.301543 0.000000 0.527288 0.000000 -0.186829 0.000000 )

( 0.283249 0.000000 0.560338 0.000000 0.283897 0.000000 )

omega(24) = 13.742534 [THz] = 458.404632 [cm-1]

( -0.023803 0.000000 -0.068955 0.000000 0.089437 0.000000 )

( -0.009614 0.000000 0.038763 0.000000 0.088081 0.000000 )

( -0.085373 0.000000 -0.011486 0.000000 -0.039103 0.000000 )

( -0.006824 0.000000 -0.084267 0.000000 0.007980 0.000000 )

( 0.169452 0.000000 -0.021613 0.000000 0.018114 0.000000 )

( -0.085544 0.000000 0.105638 0.000000 0.047593 0.000000 )

( 0.124481 0.000000 -0.030919 0.000000 -0.150569 0.000000 )

( 0.060258 0.000000 0.118183 0.000000 0.070373 0.000000 )

( -0.064118 0.000000 0.010433 0.000000 -0.132551 0.000000 )

( 0.073998 0.000000 0.083708 0.000000 -0.364728 0.000000 )

( 0.095298 0.000000 -0.110181 0.000000 0.122080 0.000000 )

( -0.130334 0.000000 0.017443 0.000000 0.131243 0.000000 )

( 0.004599 0.000000 0.017503 0.000000 -0.026806 0.000000 )

( 0.040301 0.000000 0.106325 0.000000 0.084401 0.000000 )

( -0.433367 0.000000 -0.120037 0.000000 0.293149 0.000000 )

( -0.254427 0.000000 0.047887 0.000000 0.103695 0.000000 )

( 0.167169 0.000000 0.397557 0.000000 0.195641 0.000000 )

omega(25) = 13.934824 [THz] = 464.818800 [cm-1]

( 0.016483 0.000000 -0.070087 0.000000 0.009591 0.000000 )

( 0.009843 0.000000 0.064254 0.000000 -0.028751 0.000000 )

( 0.019146 0.000000 -0.032604 0.000000 -0.009075 0.000000 )

( 0.033333 0.000000 -0.010412 0.000000 0.022951 0.000000 )

( -0.061046 0.000000 0.059504 0.000000 -0.016628 0.000000 )

( -0.034811 0.000000 -0.039297 0.000000 0.008726 0.000000 )

( -0.036378 0.000000 -0.007565 0.000000 0.060489 0.000000 )

( 0.029802 0.000000 0.007449 0.000000 -0.013221 0.000000 )

( -0.025346 0.000000 0.050980 0.000000 -0.020508 0.000000 )

( 0.108776 0.000000 -0.066767 0.000000 0.013003 0.000000 )

( -0.035258 0.000000 0.037768 0.000000 -0.064612 0.000000 )

( 0.012044 0.000000 0.008993 0.000000 0.022722 0.000000 )

( -0.031895 0.000000 -0.002152 0.000000 0.017434 0.000000 )

( 0.142658 0.000000 -0.085813 0.000000 0.001687 0.000000 )

(	-0.711886	0.000000	0.102611	0.000000	0.148636	0.000000	)
(	-0.307056	0.000000	0.476634	0.000000	-0.174147	0.000000	)
(	-0.118235	0.000000	0.081460	0.000000	0.036324	0.000000	)
omega(26) = 14.922858 [THz] = 497.776261 [cm-1]							
(	0.073221	0.000000	-0.095039	0.000000	0.023016	0.000000	)
(	-0.158508	0.000000	0.014817	0.000000	0.033603	0.000000	)
(	0.065781	0.000000	0.052910	0.000000	0.001490	0.000000	)
(	-0.015208	0.000000	0.073936	0.000000	0.040268	0.000000	)
(	-0.275325	0.000000	-0.015982	0.000000	-0.016526	0.000000	)
(	0.155364	0.000000	-0.293761	0.000000	0.021218	0.000000	)
(	-0.046467	0.000000	0.049417	0.000000	0.034133	0.000000	)
(	-0.075423	0.000000	-0.127244	0.000000	-0.205221	0.000000	)
(	0.067178	0.000000	-0.049324	0.000000	0.042176	0.000000	)
(	0.094362	0.000000	0.230993	0.000000	-0.241307	0.000000	)
(	0.050591	0.000000	0.015753	0.000000	0.080327	0.000000	)
(	-0.001741	0.000000	0.057931	0.000000	0.058043	0.000000	)
(	0.043977	0.000000	0.024335	0.000000	0.005169	0.000000	)
(	0.082347	0.000000	0.238455	0.000000	0.358167	0.000000	)
(	0.034439	0.000000	0.059482	0.000000	0.088595	0.000000	)
(	0.278575	0.000000	-0.226608	0.000000	0.197561	0.000000	)
(	0.274341	0.000000	0.249092	0.000000	0.172123	0.000000	)
omega(27) = 16.549058 [THz] = 552.020839 [cm-1]							
(	0.110990	0.000000	-0.068354	0.000000	0.047120	0.000000	)
(	0.125007	0.000000	-0.036656	0.000000	-0.050146	0.000000	)
(	0.023213	0.000000	0.033822	0.000000	-0.002976	0.000000	)
(	-0.007849	0.000000	-0.022596	0.000000	0.004605	0.000000	)
(	-0.253300	0.000000	-0.221409	0.000000	-0.007351	0.000000	)
(	0.082406	0.000000	0.296489	0.000000	0.006830	0.000000	)
(	0.006913	0.000000	0.004184	0.000000	-0.162684	0.000000	)
(	-0.005037	0.000000	-0.015793	0.000000	-0.009724	0.000000	)
(	0.017269	0.000000	-0.020666	0.000000	0.175226	0.000000	)
(	0.116295	0.000000	-0.043075	0.000000	-0.033434	0.000000	)
(	0.030853	0.000000	0.053278	0.000000	-0.018996	0.000000	)
(	-0.059081	0.000000	-0.068643	0.000000	0.011334	0.000000	)
(	-0.338124	0.000000	0.169554	0.000000	0.027606	0.000000	)

( 0.007138 0.000000 0.020869 0.000000 0.039137 0.000000 )
( 0.109357 0.000000 0.032198 0.000000 -0.043459 0.000000 )
( 0.062452 0.000000 -0.311289 0.000000 0.104831 0.000000 )
( -0.552409 0.000000 0.291442 0.000000 0.033213 0.000000 )
omega(28) = 16.951877 [THz] = 565.457526 [cm-1]
( 0.067262 0.000000 0.178537 0.000000 0.035508 0.000000 )
( 0.015978 0.000000 0.185561 0.000000 0.011037 0.000000 )
( 0.004122 0.000000 0.000997 0.000000 0.012327 0.000000 )
( 0.002359 0.000000 0.007529 0.000000 0.006900 0.000000 )
( -0.113140 0.000000 -0.045766 0.000000 0.008399 0.000000 )
( 0.017840 0.000000 -0.030641 0.000000 0.006751 0.000000 )
( 0.004271 0.000000 0.002368 0.000000 -0.031642 0.000000 )
( 0.000844 0.000000 -0.003517 0.000000 -0.041444 0.000000 )
( -0.002578 0.000000 0.003155 0.000000 0.004098 0.000000 )
( 0.098578 0.000000 0.015037 0.000000 0.022987 0.000000 )
( -0.011768 0.000000 -0.316399 0.000000 -0.068290 0.000000 )
( -0.185604 0.000000 -0.121463 0.000000 -0.098245 0.000000 )
( 0.050486 0.000000 -0.076998 0.000000 0.118263 0.000000 )
( 0.093016 0.000000 0.018225 0.000000 -0.299374 0.000000 )
( 0.112030 0.000000 -0.560814 0.000000 -0.104124 0.000000 )
( -0.414287 0.000000 -0.060325 0.000000 -0.159393 0.000000 )
( 0.041356 0.000000 -0.267793 0.000000 0.029587 0.000000 )
omega(29) = 17.167040 [THz] = 572.634613 [cm-1]
( -0.210198 0.000000 0.025228 0.000000 0.051440 0.000000 )
( -0.192150 0.000000 0.028473 0.000000 -0.046688 0.000000 )
( 0.020774 0.000000 0.005027 0.000000 -0.012997 0.000000 )
( -0.009367 0.000000 -0.028639 0.000000 0.002141 0.000000 )
( -0.159978 0.000000 -0.120911 0.000000 -0.016214 0.000000 )
( 0.021654 0.000000 0.255779 0.000000 0.014672 0.000000 )
( -0.001935 0.000000 0.003248 0.000000 -0.097297 0.000000 )
( 0.014077 0.000000 0.000458 0.000000 0.004609 0.000000 )
( -0.013128 0.000000 0.007816 0.000000 0.105134 0.000000 )
( 0.265327 0.000000 -0.165328 0.000000 -0.002445 0.000000 )
( 0.030081 0.000000 -0.023103 0.000000 0.111560 0.000000 )

(	0.201796	0.000000	0.093009	0.000000	-0.036282	0.000000	)
(	0.238050	0.000000	-0.094050	0.000000	-0.062743	0.000000	)
(	0.172444	0.000000	-0.113585	0.000000	0.002759	0.000000	)
(	0.226200	0.000000	-0.040198	0.000000	0.050578	0.000000	)
(	0.270093	0.000000	0.381656	0.000000	-0.103738	0.000000	)
(	0.348747	0.000000	-0.293824	0.000000	-0.128209	0.000000	)
omega(30) = 17.444910 [THz] = 581.903437 [cm-1]							
(	-0.030684	0.000000	0.036576	0.000000	-0.020892	0.000000	)
(	0.022833	0.000000	0.030656	0.000000	-0.040892	0.000000	)
(	0.005336	0.000000	-0.002217	0.000000	-0.014446	0.000000	)
(	-0.002175	0.000000	0.009441	0.000000	0.011384	0.000000	)
(	0.010637	0.000000	-0.006172	0.000000	-0.032705	0.000000	)
(	-0.008227	0.000000	-0.000977	0.000000	0.007777	0.000000	)
(	-0.014455	0.000000	0.003294	0.000000	0.021120	0.000000	)
(	0.000109	0.000000	0.000320	0.000000	0.023876	0.000000	)
(	0.004181	0.000000	-0.002458	0.000000	0.011557	0.000000	)
(	-0.004120	0.000000	-0.042123	0.000000	-0.004587	0.000000	)
(	0.006674	0.000000	-0.008110	0.000000	0.013083	0.000000	)
(	0.026782	0.000000	-0.001867	0.000000	-0.033909	0.000000	)
(	-0.019984	0.000000	-0.045081	0.000000	0.048098	0.000000	)
(	-0.018475	0.000000	-0.029787	0.000000	0.276983	0.000000	)
(	-0.451758	0.000000	-0.080134	0.000000	0.156299	0.000000	)
(	0.361064	0.000000	-0.553582	0.000000	0.185390	0.000000	)
(	0.204665	0.000000	0.298307	0.000000	0.259389	0.000000	)
omega(31) = 18.481292 [THz] = 616.473657 [cm-1]							
(	0.121588	0.000000	0.196601	0.000000	0.006962	0.000000	)
(	-0.065892	0.000000	-0.215862	0.000000	-0.039642	0.000000	)
(	0.012628	0.000000	0.004988	0.000000	-0.102838	0.000000	)
(	-0.000247	0.000000	-0.018847	0.000000	0.071629	0.000000	)
(	-0.008689	0.000000	-0.098243	0.000000	-0.026515	0.000000	)
(	0.066967	0.000000	0.064270	0.000000	0.003207	0.000000	)
(	0.007460	0.000000	0.039749	0.000000	-0.017661	0.000000	)
(	0.039096	0.000000	-0.008838	0.000000	0.033321	0.000000	)
(	-0.032346	0.000000	-0.017125	0.000000	0.042653	0.000000	)
(	-0.071962	0.000000	0.033732	0.000000	-0.055388	0.000000	)



( -0.174266 0.000000 -0.097630 0.000000 -0.251567 0.000000 )  
( 0.038024 0.000000 0.217864 0.000000 0.290659 0.000000 )  
( 0.051893 0.000000 -0.084761 0.000000 0.065762 0.000000 )  
( 0.125293 0.000000 -0.076682 0.000000 0.246750 0.000000 )  
( -0.512304 0.000000 -0.158926 0.000000 -0.148014 0.000000 )  
( -0.066250 0.000000 0.363259 0.000000 0.230037 0.000000 )  
( -0.040429 0.000000 0.004449 0.000000 0.087828 0.000000 )  
  
omega(32) = 18.757460 [THz] = 625.685666 [cm-1]  
  
( 0.014117 0.000000 0.022156 0.000000 -0.115421 0.000000 )  
( 0.042668 0.000000 -0.024270 0.000000 0.096753 0.000000 )  
( 0.001051 0.000000 -0.003270 0.000000 -0.011798 0.000000 )  
( 0.006187 0.000000 0.004205 0.000000 0.008826 0.000000 )  
( -0.067412 0.000000 -0.055452 0.000000 -0.011655 0.000000 )  
( 0.013377 0.000000 0.080548 0.000000 0.003927 0.000000 )  
( 0.000716 0.000000 0.002813 0.000000 -0.027223 0.000000 )  
( 0.000792 0.000000 -0.006328 0.000000 0.007450 0.000000 )  
( -0.000079 0.000000 0.000853 0.000000 0.034054 0.000000 )  
( 0.031324 0.000000 -0.019737 0.000000 -0.044270 0.000000 )  
( -0.027914 0.000000 0.297163 0.000000 -0.025746 0.000000 )  
( -0.247372 0.000000 -0.133498 0.000000 0.022372 0.000000 )  
( 0.198410 0.000000 -0.159105 0.000000 0.060754 0.000000 )  
( 0.066558 0.000000 -0.037486 0.000000 0.205015 0.000000 )  
( -0.108329 0.000000 0.488070 0.000000 -0.002352 0.000000 )  
( -0.428888 0.000000 -0.267981 0.000000 0.025119 0.000000 )  
( 0.313928 0.000000 -0.247837 0.000000 0.048373 0.000000 )  
  
omega(33) = 19.088301 [THz] = 636.721404 [cm-1]  
  
( -0.040633 0.000000 0.022186 0.000000 -0.053237 0.000000 )  
( 0.054629 0.000000 0.021526 0.000000 -0.069393 0.000000 )  
( 0.014279 0.000000 -0.008714 0.000000 -0.042371 0.000000 )  
( -0.006407 0.000000 0.015221 0.000000 -0.089894 0.000000 )  
( 0.007309 0.000000 0.004295 0.000000 -0.021900 0.000000 )  
( -0.030346 0.000000 -0.032360 0.000000 -0.061369 0.000000 )  
( -0.010293 0.000000 -0.000441 0.000000 0.081841 0.000000 )  
( -0.003968 0.000000 0.000622 0.000000 0.060475 0.000000 )

(	0.007913	0.000000	0.004526	0.000000	0.056694	0.000000	)
(	0.006229	0.000000	0.012569	0.000000	-0.137320	0.000000	)
(	0.023943	0.000000	0.008252	0.000000	0.131677	0.000000	)
(	0.056956	0.000000	0.015163	0.000000	0.074322	0.000000	)
(	-0.094082	0.000000	-0.093316	0.000000	0.233812	0.000000	)
(	-0.000086	0.000000	0.024215	0.000000	0.392740	0.000000	)
(	0.408768	0.000000	0.007756	0.000000	0.007497	0.000000	)
(	-0.144030	0.000000	0.389134	0.000000	-0.074440	0.000000	)
(	-0.293576	0.000000	-0.502025	0.000000	-0.006761	0.000000	)
omega(34) = 19.751528 [THz] = 658.844436 [cm-1]							
(	0.186465	0.000000	-0.065921	0.000000	-0.132635	0.000000	)
(	-0.148149	0.000000	0.106267	0.000000	-0.116124	0.000000	)
(	0.038534	0.000000	-0.025679	0.000000	-0.099650	0.000000	)
(	-0.052584	0.000000	0.019650	0.000000	-0.090583	0.000000	)
(	0.022774	0.000000	-0.050626	0.000000	-0.087185	0.000000	)
(	-0.045555	0.000000	0.023671	0.000000	-0.083226	0.000000	)
(	-0.002058	0.000000	0.003047	0.000000	0.092918	0.000000	)
(	0.012461	0.000000	0.019721	0.000000	0.118845	0.000000	)
(	0.016598	0.000000	-0.019375	0.000000	0.123466	0.000000	)
(	-0.055605	0.000000	-0.111531	0.000000	0.209722	0.000000	)
(	0.117219	0.000000	-0.078846	0.000000	0.230562	0.000000	)
(	-0.195433	0.000000	0.045867	0.000000	0.252612	0.000000	)
(	0.081336	0.000000	0.090759	0.000000	-0.134022	0.000000	)
(	-0.045565	0.000000	-0.114791	0.000000	-0.066458	0.000000	)
(	0.148151	0.000000	-0.092300	0.000000	0.208044	0.000000	)
(	-0.257443	0.000000	0.024358	0.000000	0.236994	0.000000	)
(	0.268659	0.000000	0.498291	0.000000	0.084839	0.000000	)
omega(35) = 20.268122 [THz] = 676.076275 [cm-1]							
(	0.034831	0.000000	0.009366	0.000000	-0.018288	0.000000	)
(	-0.008881	0.000000	0.038747	0.000000	-0.021887	0.000000	)
(	-0.010747	0.000000	0.008941	0.000000	0.035669	0.000000	)
(	0.017234	0.000000	0.003289	0.000000	0.029366	0.000000	)
(	0.004319	0.000000	0.004875	0.000000	0.063144	0.000000	)
(	-0.000310	0.000000	0.004663	0.000000	0.054526	0.000000	)
(	0.004159	0.000000	0.006829	0.000000	-0.067942	0.000000	)

(	-0.011037	0.000000	-0.019598	0.000000	-0.055061	0.000000	)
(	0.003786	0.000000	0.004628	0.000000	-0.062292	0.000000	)
(	-0.052868	0.000000	-0.092926	0.000000	-0.004189	0.000000	)
(	-0.012599	0.000000	-0.014578	0.000000	0.012555	0.000000	)
(	0.007686	0.000000	-0.013347	0.000000	0.009700	0.000000	)
(	0.008937	0.000000	0.026321	0.000000	-0.043808	0.000000	)
(	-0.042126	0.000000	-0.089925	0.000000	0.937892	0.000000	)
(	0.110710	0.000000	-0.023544	0.000000	-0.021163	0.000000	)
(	-0.091338	0.000000	0.089008	0.000000	-0.034469	0.000000	)
(	-0.085515	0.000000	-0.120537	0.000000	-0.132109	0.000000	)
omega(36) = 22.379759 [THz] = 746.513368 [cm-1]							
(	-0.018684	0.000000	-0.015114	0.000000	-0.165333	0.000000	)
(	-0.009012	0.000000	-0.022650	0.000000	-0.166006	0.000000	)
(	-0.121285	0.000000	0.097636	0.000000	0.070421	0.000000	)
(	0.133278	0.000000	-0.081445	0.000000	0.077128	0.000000	)
(	0.014870	0.000000	0.010318	0.000000	0.134630	0.000000	)
(	0.004091	0.000000	0.026371	0.000000	0.129309	0.000000	)
(	-0.001054	0.000000	0.000179	0.000000	-0.078782	0.000000	)
(	-0.017374	0.000000	-0.032318	0.000000	-0.193322	0.000000	)
(	-0.003416	0.000000	0.000443	0.000000	-0.096411	0.000000	)
(	0.028759	0.000000	0.041584	0.000000	0.081026	0.000000	)
(	0.032223	0.000000	-0.008863	0.000000	0.095806	0.000000	)
(	-0.020063	0.000000	0.035812	0.000000	0.108229	0.000000	)
(	-0.021835	0.000000	-0.057279	0.000000	0.142860	0.000000	)
(	-0.001210	0.000000	0.051240	0.000000	-0.791759	0.000000	)
(	0.040399	0.000000	0.130480	0.000000	0.089912	0.000000	)
(	0.054147	0.000000	0.012821	0.000000	0.114044	0.000000	)
(	0.060168	0.000000	0.103877	0.000000	0.224772	0.000000	)
omega(37) = 23.426909 [THz] = 781.442774 [cm-1]							
(	0.009058	0.000000	0.007326	0.000000	0.104560	0.000000	)
(	-0.003589	0.000000	0.036610	0.000000	0.104121	0.000000	)
(	-0.335376	0.000000	0.182468	0.000000	-0.115003	0.000000	)
(	0.360940	0.000000	-0.116747	0.000000	-0.106298	0.000000	)
(	0.036819	0.000000	-0.032054	0.000000	-0.096730	0.000000	)

( -0.046272 0.000000 0.004591 0.000000 -0.108386 0.000000 )
( -0.048009 0.000000 0.004390 0.000000 0.255509 0.000000 )
( -0.034542 0.000000 -0.066357 0.000000 -0.090284 0.000000 )
( 0.044690 0.000000 -0.039930 0.000000 0.314268 0.000000 )
( -0.026472 0.000000 -0.042257 0.000000 -0.041703 0.000000 )
( -0.018333 0.000000 -0.045959 0.000000 -0.063004 0.000000 )
( -0.014499 0.000000 -0.020415 0.000000 -0.056245 0.000000 )
( 0.051708 0.000000 0.016541 0.000000 -0.099308 0.000000 )
( -0.045878 0.000000 -0.018962 0.000000 0.505967 0.000000 )
( 0.088746 0.000000 0.218764 0.000000 -0.074086 0.000000 )
( 0.094576 0.000000 0.030791 0.000000 -0.054563 0.000000 )
( -0.131946 0.000000 0.273377 0.000000 -0.034972 0.000000 )
omega(38) = 23.794348 [THz] = 793.699308 [cm-1]
( -0.011414 0.000000 -0.020196 0.000000 -0.008150 0.000000 )
( -0.016461 0.000000 -0.000922 0.000000 -0.027739 0.000000 )
( -0.222370 0.000000 -0.355680 0.000000 0.015734 0.000000 )
( 0.143929 0.000000 0.384082 0.000000 0.018839 0.000000 )
( 0.025696 0.000000 0.034772 0.000000 0.021030 0.000000 )
( -0.002150 0.000000 -0.048486 0.000000 0.005551 0.000000 )
( 0.067741 0.000000 -0.010337 0.000000 -0.290307 0.000000 )
( 0.017505 0.000000 -0.004192 0.000000 -0.004115 0.000000 )
( 0.044115 0.000000 -0.041749 0.000000 0.232589 0.000000 )
( -0.034817 0.000000 0.044960 0.000000 0.004862 0.000000 )
( 0.000475 0.000000 0.012375 0.000000 0.009793 0.000000 )
( 0.070526 0.000000 0.037608 0.000000 0.002202 0.000000 )
( 0.013718 0.000000 -0.029429 0.000000 0.025049 0.000000 )
( 0.337124 0.000000 -0.172785 0.000000 -0.182194 0.000000 )
( -0.038823 0.000000 -0.116451 0.000000 0.021572 0.000000 )
( -0.437889 0.000000 -0.115183 0.000000 -0.039082 0.000000 )
( -0.144971 0.000000 0.248756 0.000000 0.092232 0.000000 )
omega(39) = 27.130327 [THz] = 904.976316 [cm-1]
( 0.013653 0.000000 0.015280 0.000000 -0.000785 0.000000 )
( -0.008068 0.000000 -0.020273 0.000000 0.000063 0.000000 )
( -0.005933 0.000000 -0.012771 0.000000 0.008835 0.000000 )
( 0.004845 0.000000 0.012991 0.000000 -0.007263 0.000000 )

( 0.002040 0.000000 0.016591 0.000000 -0.019281 0.000000 )  
( -0.013027 0.000000 -0.010448 0.000000 0.018589 0.000000 )  
( -0.000485 0.000000 -0.005808 0.000000 -0.005897 0.000000 )  
( 0.002327 0.000000 -0.000756 0.000000 0.001340 0.000000 )  
( 0.004436 0.000000 0.004025 0.000000 0.002998 0.000000 )  
( 0.061467 0.000000 -0.034803 0.000000 -0.000760 0.000000 )  
( -0.007261 0.000000 0.002765 0.000000 -0.000104 0.000000 )  
( 0.001316 0.000000 0.008520 0.000000 0.000569 0.000000 )  
( 0.005643 0.000000 -0.004480 0.000000 0.000950 0.000000 )  
( -0.856611 0.000000 0.496075 0.000000 0.004660 0.000000 )  
( -0.018391 0.000000 -0.000559 0.000000 0.004356 0.000000 )  
( -0.081810 0.000000 -0.016142 0.000000 -0.010295 0.000000 )  
( -0.058966 0.000000 0.034728 0.000000 0.003526 0.000000 )  
  
omega(40) = 27.811774 [THz] = 927.707086 [cm-1]  
( -0.001310 0.000000 0.010019 0.000000 -0.001885 0.000000 )  
( 0.006229 0.000000 0.008868 0.000000 0.000860 0.000000 )  
( 0.009454 0.000000 -0.018858 0.000000 -0.000292 0.000000 )  
( -0.002397 0.000000 0.017579 0.000000 0.003345 0.000000 )  
( 0.001746 0.000000 0.002457 0.000000 0.002167 0.000000 )  
( 0.001227 0.000000 0.000454 0.000000 -0.001962 0.000000 )  
( -0.000509 0.000000 0.000571 0.000000 -0.016641 0.000000 )  
( -0.005167 0.000000 0.001560 0.000000 0.010357 0.000000 )  
( -0.005482 0.000000 -0.003402 0.000000 0.000474 0.000000 )  
( 0.000366 0.000000 -0.001693 0.000000 -0.001194 0.000000 )  
( 0.000812 0.000000 -0.082409 0.000000 -0.002968 0.000000 )  
( -0.045360 0.000000 -0.015366 0.000000 -0.002399 0.000000 )  
( 0.016989 0.000000 0.000126 0.000000 0.007254 0.000000 )  
( -0.023398 0.000000 0.012217 0.000000 0.005516 0.000000 )  
( -0.031963 0.000000 0.833476 0.000000 -0.006409 0.000000 )  
( 0.464937 0.000000 0.203753 0.000000 0.047043 0.000000 )  
( -0.176280 0.000000 0.031491 0.000000 -0.025533 0.000000 )  
  
omega(41) = 28.311801 [THz] = 944.386310 [cm-1]  
( 0.011673 0.000000 0.004202 0.000000 0.000391 0.000000 )  
( 0.007406 0.000000 -0.010463 0.000000 -0.000118 0.000000 )

(	-0.019393	0.000000	-0.018470	0.000000	-0.004092	0.000000	)
(	0.010421	0.000000	0.006207	0.000000	0.001320	0.000000	)
(	0.003805	0.000000	0.003949	0.000000	0.001678	0.000000	)
(	-0.004344	0.000000	-0.003749	0.000000	-0.001472	0.000000	)
(	0.000505	0.000000	0.011977	0.000000	-0.010798	0.000000	)
(	0.001482	0.000000	-0.000584	0.000000	-0.003107	0.000000	)
(	0.011314	0.000000	0.009589	0.000000	0.017523	0.000000	)
(	0.004697	0.000000	-0.005499	0.000000	0.001691	0.000000	)
(	0.010042	0.000000	0.012244	0.000000	-0.007329	0.000000	)
(	-0.038202	0.000000	-0.028031	0.000000	0.008784	0.000000	)
(	-0.065443	0.000000	0.044279	0.000000	-0.003034	0.000000	)
(	-0.064280	0.000000	0.034489	0.000000	0.008882	0.000000	)
(	-0.100687	0.000000	-0.136467	0.000000	0.032442	0.000000	)
(	0.379126	0.000000	0.320372	0.000000	-0.000948	0.000000	)
(	0.732256	0.000000	-0.412311	0.000000	-0.034749	0.000000	)
omega(42) = 28.660682 [THz] = 956.023806 [cm-1]							
(	0.000576	0.000000	0.000749	0.000000	0.010108	0.000000	)
(	0.000709	0.000000	0.000568	0.000000	-0.008847	0.000000	)
(	0.003603	0.000000	-0.009958	0.000000	-0.031494	0.000000	)
(	0.003345	0.000000	0.003829	0.000000	0.011580	0.000000	)
(	-0.003426	0.000000	0.014232	0.000000	0.089290	0.000000	)
(	-0.008545	0.000000	-0.006000	0.000000	-0.050077	0.000000	)
(	0.001041	0.000000	0.029331	0.000000	-0.007428	0.000000	)
(	0.020577	0.000000	-0.009322	0.000000	-0.000848	0.000000	)
(	-0.022016	0.000000	-0.015608	0.000000	-0.000154	0.000000	)
(	0.002221	0.000000	-0.000589	0.000000	-0.000696	0.000000	)
(	0.005398	0.000000	0.062774	0.000000	0.005424	0.000000	)
(	-0.064674	0.000000	-0.041909	0.000000	-0.007587	0.000000	)
(	0.049053	0.000000	-0.029395	0.000000	0.002082	0.000000	)
(	-0.052086	0.000000	0.031089	0.000000	-0.006370	0.000000	)
(	0.003343	0.000000	-0.517539	0.000000	0.014248	0.000000	)
(	0.583745	0.000000	0.336068	0.000000	0.023217	0.000000	)
(	-0.436812	0.000000	0.235261	0.000000	0.012049	0.000000	)
omega(43) = 29.381540 [THz] = 980.069206 [cm-1]							
(	0.000544	0.000000	-0.005856	0.000000	0.011093	0.000000	)

( 0.006992 0.000000 0.003287 0.000000 -0.012775 0.000000 )  
( -0.016994 0.000000 0.003441 0.000000 0.117943 0.000000 )  
( -0.012035 0.000000 0.007497 0.000000 -0.127265 0.000000 )  
( 0.027718 0.000000 -0.035002 0.000000 -0.293828 0.000000 )  
( 0.044196 0.000000 -0.004734 0.000000 0.315753 0.000000 )  
( -0.002615 0.000000 -0.095563 0.000000 -0.007925 0.000000 )  
( -0.083344 0.000000 0.049166 0.000000 -0.004356 0.000000 )  
( 0.090448 0.000000 0.054206 0.000000 0.001603 0.000000 )  
( -0.023232 0.000000 0.013661 0.000000 -0.001189 0.000000 )  
( -0.020712 0.000000 0.039069 0.000000 -0.032292 0.000000 )  
( -0.061424 0.000000 -0.010065 0.000000 0.037703 0.000000 )  
( 0.049314 0.000000 -0.028925 0.000000 0.005293 0.000000 )  
( 0.167915 0.000000 -0.096624 0.000000 -0.000955 0.000000 )  
( -0.016444 0.000000 -0.406290 0.000000 -0.029295 0.000000 )  
( 0.473098 0.000000 0.412265 0.000000 0.033503 0.000000 )  
( -0.347610 0.000000 0.131610 0.000000 -0.013762 0.000000 )  
  
omega(44) = 30.494225 [THz] = 1017.184622 [cm-1]  
  
( -0.004607 0.000000 0.001258 0.000000 0.001595 0.000000 )  
( 0.000250 0.000000 0.003188 0.000000 0.003384 0.000000 )  
( -0.143493 0.000000 -0.215574 0.000000 -0.017330 0.000000 )  
( -0.136881 0.000000 -0.241904 0.000000 -0.006552 0.000000 )  
( -0.017122 0.000000 -0.008429 0.000000 0.029477 0.000000 )  
( 0.000126 0.000000 -0.013964 0.000000 0.014932 0.000000 )  
( -0.017675 0.000000 0.585382 0.000000 0.007294 0.000000 )  
( -0.016682 0.000000 -0.059589 0.000000 0.005995 0.000000 )  
( 0.543674 0.000000 0.301605 0.000000 -0.014092 0.000000 )  
( 0.000614 0.000000 0.002781 0.000000 -0.000197 0.000000 )  
( -0.003023 0.000000 -0.011054 0.000000 0.000164 0.000000 )  
( 0.011891 0.000000 0.007745 0.000000 -0.010837 0.000000 )  
( 0.015907 0.000000 -0.011746 0.000000 0.004265 0.000000 )  
( 0.012824 0.000000 -0.006244 0.000000 -0.053859 0.000000 )  
( 0.023873 0.000000 0.134648 0.000000 -0.013162 0.000000 )  
( -0.087587 0.000000 -0.158447 0.000000 0.015760 0.000000 )  
( -0.238473 0.000000 0.084151 0.000000 -0.013142 0.000000 )

omega(45) = 31.080844 [THz] = 1036.752253 [cm-1]

( 0.000809 0.000000 -0.004985 0.000000 -0.002650 0.000000 )

( 0.002579 0.000000 0.000997 0.000000 0.000625 0.000000 )

( 0.194209 0.000000 -0.162910 0.000000 0.096211 0.000000 )

( 0.241309 0.000000 -0.114582 0.000000 -0.052145 0.000000 )

( 0.018734 0.000000 -0.016423 0.000000 -0.079854 0.000000 )

( 0.011880 0.000000 -0.006530 0.000000 0.000905 0.000000 )

( 0.066710 0.000000 0.501305 0.000000 -0.003765 0.000000 )

( -0.511595 0.000000 0.294112 0.000000 -0.007157 0.000000 )

( -0.357919 0.000000 -0.286209 0.000000 0.007789 0.000000 )

( 0.001128 0.000000 -0.000418 0.000000 -0.000073 0.000000 )

( -0.001853 0.000000 0.004578 0.000000 0.002754 0.000000 )

( 0.005713 0.000000 0.008845 0.000000 0.007604 0.000000 )

( -0.004016 0.000000 0.002522 0.000000 -0.004129 0.000000 )

( -0.033550 0.000000 0.019282 0.000000 0.004546 0.000000 )

( 0.035458 0.000000 -0.085782 0.000000 -0.007225 0.000000 )

( -0.088404 0.000000 -0.070022 0.000000 0.015046 0.000000 )

( 0.083125 0.000000 0.012308 0.000000 0.024819 0.000000 )

omega(46) = 31.970181 [THz] = 1066.417552 [cm-1]

( 0.003131 -0.000000 -0.006809 -0.000000 0.012607 -0.000000 )

( -0.009518 -0.000000 -0.003672 -0.000000 0.019703 -0.000000 )

( 0.049680 -0.000000 -0.022157 -0.000000 -0.312370 -0.000000 )

( -0.007074 -0.000000 0.016360 -0.000000 -0.306881 -0.000000 )

( -0.050324 -0.000000 0.048613 -0.000000 0.499209 -0.000000 )

( 0.069965 -0.000000 -0.014996 -0.000000 0.519570 -0.000000 )

( -0.000518 -0.000000 -0.020336 -0.000000 0.055168 -0.000000 )

( -0.059924 -0.000000 0.046733 -0.000000 0.047860 -0.000000 )

( -0.017826 -0.000000 -0.020541 -0.000000 0.055680 -0.000000 )

( 0.001973 -0.000000 0.000040 -0.000000 0.016929 -0.000000 )

( -0.019236 -0.000000 -0.009408 -0.000000 -0.061513 -0.000000 )

( 0.037662 -0.000000 0.000455 -0.000000 -0.060909 -0.000000 )

( -0.021362 -0.000000 -0.000925 -0.000000 -0.025549 -0.000000 )

( -0.003493 -0.000000 0.005857 -0.000000 -0.133692 -0.000000 )

( -0.151970 -0.000000 0.212224 -0.000000 -0.053125 -0.000000 )

( -0.149961 -0.000000 -0.268103 -0.000000 -0.059191 -0.000000 )



( 0.246577 -0.000000 0.031726 -0.000000 0.019953 -0.000000 )

omega(47) = 33.702741 [THz] = 1124.209914 [cm-1]

( 0.003604 0.000000 0.020821 0.000000 0.000497 0.000000 )

( -0.015744 0.000000 -0.013578 0.000000 -0.002560 0.000000 )

( 0.062598 0.000000 -0.042348 0.000000 -0.181132 0.000000 )

( 0.067011 0.000000 -0.030259 0.000000 0.216846 0.000000 )

( -0.000437 0.000000 0.000878 0.000000 0.083013 0.000000 )

( -0.006980 0.000000 0.001471 0.000000 -0.137323 0.000000 )

( 0.003393 0.000000 -0.438053 0.000000 -0.005710 0.000000 )

( -0.590640 0.000000 0.344412 0.000000 -0.003865 0.000000 )

( 0.371924 0.000000 0.213935 0.000000 -0.007612 0.000000 )

( 0.009085 0.000000 -0.005255 0.000000 -0.001735 0.000000 )

( 0.008796 0.000000 0.010184 0.000000 0.018792 0.000000 )

( -0.001287 0.000000 -0.011248 0.000000 -0.007112 0.000000 )

( 0.001292 0.000000 -0.000200 0.000000 0.004713 0.000000 )

( -0.055378 0.000000 0.031964 0.000000 0.009509 0.000000 )

( 0.096896 0.000000 -0.100483 0.000000 -0.008104 0.000000 )

( 0.019615 0.000000 0.046571 0.000000 -0.019564 0.000000 )

( -0.104169 0.000000 -0.001182 0.000000 -0.020414 0.000000 )

omega(48) = 108.477198 [THz] = 3618.433897 [cm-1]

( 0.000448 0.000000 0.000249 0.000000 0.000049 0.000000 )

( -0.000011 0.000000 0.000515 0.000000 0.000052 0.000000 )

( -0.000021 0.000000 0.000201 0.000000 -0.000230 0.000000 )

( 0.000152 0.000000 0.000001 0.000000 -0.000221 0.000000 )

( 0.000159 0.000000 -0.000545 0.000000 0.000068 0.000000 )

( -0.000549 0.000000 -0.000139 0.000000 0.000067 0.000000 )

( -0.000079 0.000000 -0.000006 0.000000 0.000106 0.000000 )

( -0.000043 0.000000 -0.000061 0.000000 0.000080 0.000000 )

( 0.000018 0.000000 -0.000045 0.000000 0.000050 0.000000 )

( 0.030964 0.000000 0.053567 0.000000 -0.000669 0.000000 )

( -0.000424 0.000000 0.000174 0.000000 -0.000991 0.000000 )

( 0.000503 0.000000 -0.000349 0.000000 -0.001260 0.000000 )

( -0.000521 0.000000 -0.001051 0.000000 0.002083 0.000000 )

( -0.499169 0.000000 -0.863202 0.000000 0.006347 0.000000 )

( 0.005053 0.000000 0.000391 0.000000 0.017353 0.000000 )

( -0.004032 0.000000 0.005793 0.000000 0.021657 0.000000 )

( 0.006175 0.000000 0.012733 0.000000 -0.028053 0.000000 )

omega(49) = 109.224510 [THz] = 3643.361701 [cm-1]

( -0.000107 0.000000 -0.000105 0.000000 -0.000330 0.000000 )

( 0.000049 0.000000 -0.000143 0.000000 -0.000367 0.000000 )

( 0.000192 0.000000 0.000960 0.000000 -0.000301 0.000000 )

( -0.000010 0.000000 -0.001004 0.000000 -0.000412 0.000000 )

( -0.000232 0.000000 -0.000007 0.000000 0.000712 0.000000 )

( 0.000038 0.000000 0.000090 0.000000 0.000448 0.000000 )

( -0.000494 0.000000 -0.000293 0.000000 0.001198 0.000000 )

( -0.000032 0.000000 -0.000034 0.000000 -0.000125 0.000000 )

( -0.000168 0.000000 0.000152 0.000000 -0.000280 0.000000 )

( -0.000641 0.000000 -0.001548 0.000000 0.000186 0.000000 )

( 0.002577 0.000000 0.000300 0.000000 0.008391 0.000000 )

( 0.011920 0.000000 -0.014969 0.000000 -0.055746 0.000000 )

( -0.004226 0.000000 -0.008431 0.000000 0.018480 0.000000 )

( 0.013908 0.000000 0.025917 0.000000 -0.001897 0.000000 )

( -0.041229 0.000000 -0.003688 0.000000 -0.129419 0.000000 )

( -0.183985 0.000000 0.242727 0.000000 0.881989 0.000000 )

( 0.069061 0.000000 0.135564 0.000000 -0.287855 0.000000 )

omega(50) = 109.765153 [THz] = 3661.395725 [cm-1]

( -0.000080 -0.000000 0.000022 -0.000000 0.000341 -0.000000 )

( -0.000074 -0.000000 -0.000114 -0.000000 0.000409 -0.000000 )

( 0.000933 -0.000000 -0.000000 -0.000000 0.000418 -0.000000 )

( -0.000952 -0.000000 -0.000183 -0.000000 0.000546 -0.000000 )

( -0.000374 -0.000000 -0.000159 -0.000000 -0.000724 -0.000000 )

( 0.000356 -0.000000 -0.000041 -0.000000 -0.000562 -0.000000 )

( 0.000143 -0.000000 0.000104 -0.000000 -0.000278 -0.000000 )

( 0.000038 -0.000000 0.000252 -0.000000 0.000432 -0.000000 )

( -0.000411 -0.000000 0.000123 -0.000000 -0.001127 -0.000000 )

( -0.000934 -0.000000 -0.001398 -0.000000 -0.000495 -0.000000 )

( -0.009082 -0.000000 -0.000454 -0.000000 -0.029323 -0.000000 )

( -0.002751 -0.000000 0.003722 -0.000000 0.013266 -0.000000 )

( -0.010430 -0.000000 -0.021978 -0.000000 0.047399 -0.000000 )

( 0.016094 -0.000000 0.026219 -0.000000 0.001387 -0.000000 )  
( 0.145548 -0.000000 0.005749 -0.000000 0.459134 -0.000000 )  
( 0.042788 -0.000000 -0.059952 -0.000000 -0.213090 -0.000000 )  
( 0.172361 -0.000000 0.350274 -0.000000 -0.748205 -0.000000 )  
  
omega(51) = 110.461024 [THz] = 3684.607634 [cm-1]  
  
( -0.000067 0.000000 0.000076 0.000000 -0.000978 0.000000 )  
( 0.000028 0.000000 -0.000098 0.000000 -0.001037 0.000000 )  
( 0.000292 0.000000 -0.000373 0.000000 -0.000895 0.000000 )  
( -0.000390 0.000000 0.000250 0.000000 -0.001117 0.000000 )  
( -0.000172 0.000000 0.000163 0.000000 0.001495 0.000000 )  
( 0.000318 0.000000 -0.000061 0.000000 0.001535 0.000000 )  
( -0.000046 0.000000 -0.000168 0.000000 0.000460 0.000000 )  
( -0.000053 0.000000 0.000357 0.000000 0.001126 0.000000 )  
( 0.000216 0.000000 0.000020 0.000000 0.000599 0.000000 )  
( -0.000322 0.000000 -0.000339 0.000000 0.000888 0.000000 )  
( -0.016281 0.000000 -0.000932 0.000000 -0.051559 0.000000 )  
( 0.003493 0.000000 -0.004343 0.000000 -0.015744 0.000000 )  
( 0.005271 0.000000 0.010802 0.000000 -0.023244 0.000000 )  
( 0.004645 0.000000 0.007049 0.000000 -0.004957 0.000000 )  
( 0.258689 0.000000 0.012130 0.000000 0.823242 0.000000 )  
( -0.053350 0.000000 0.069727 0.000000 0.258101 0.000000 )  
( -0.085909 0.000000 -0.172110 0.000000 0.374010 0.000000 )