

Ethylene (C₂H₄)

Z = 16

Molecular Mass : $M_A = 28.05316$

$$\sigma_a(\text{Mb}) = 109.76097 \frac{df}{dE} (\text{eV}^{-1})$$

$$\mu_m = \sigma_a \cdot N_A \cdot M_A^{-1}$$

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m .

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
6.6199E+00	1.0039E-03	1.1019E-01	2.3655E+03	1.8729E+03
6.6863E+00	4.1114E-03	4.5127E-01	9.6873E+03	1.8543E+03
6.7167E+00	2.2947E-03	2.5187E-01	5.4069E+03	1.8459E+03
6.7892E+00	8.9418E-03	9.8146E-01	2.1069E+04	1.8262E+03
6.8243E+00	6.2149E-03	6.8215E-01	1.4644E+04	1.8168E+03
6.8777E+00	1.6400E-02	1.8000E+00	3.8641E+04	1.8027E+03
6.9219E+00	1.5922E-02	1.7476E+00	3.7515E+04	1.7912E+03
6.9744E+00	3.5186E-02	3.8620E+00	8.2906E+04	1.7777E+03
7.0075E+00	2.7728E-02	3.0434E+00	6.5333E+04	1.7693E+03
7.0366E+00	3.7721E-02	4.1403E+00	8.8880E+04	1.7620E+03
7.0787E+00	8.3643E-02	9.1807E+00	1.9708E+05	1.7515E+03
7.0941E+00	2.0194E-01	2.2165E+01	4.7581E+05	1.7477E+03
7.1080E+00	5.3501E-01	5.8724E+01	1.2606E+06	1.7443E+03
7.1337E+00	1.5772E-01	1.7312E+01	3.7163E+05	1.7380E+03
7.1485E+00	1.9582E-01	2.1493E+01	4.6139E+05	1.7344E+03
7.1671E+00	4.1137E-01	4.5152E+01	9.6927E+05	1.7299E+03
7.1783E+00	1.5160E-01	1.6640E+01	3.5721E+05	1.7272E+03
7.1996E+00	1.0674E-01	1.1716E+01	2.5151E+05	1.7221E+03
7.2235E+00	1.2919E-01	1.4180E+01	3.0441E+05	1.7164E+03
7.2450E+00	2.1486E-01	2.3584E+01	5.0626E+05	1.7113E+03
7.2778E+00	5.8053E-01	6.3719E+01	1.3679E+06	1.7036E+03
7.3160E+00	2.5972E-01	2.8508E+01	6.1197E+05	1.6947E+03
7.3320E+00	3.5901E-01	3.9405E+01	8.4591E+05	1.6910E+03
7.3472E+00	5.1478E-01	5.6503E+01	1.2129E+06	1.6875E+03
7.3603E+00	2.4408E-01	2.6791E+01	5.7511E+05	1.6845E+03
7.3796E+00	2.0056E-01	2.2014E+01	4.7256E+05	1.6801E+03
7.4113E+00	2.3456E-01	2.5745E+01	5.5267E+05	1.6729E+03
7.4220E+00	3.3518E-01	3.6790E+01	7.8977E+05	1.6705E+03

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
7.4532E+00	4.5772E-01	5.0240E+01	1.0785E+06	1.6635E+03
7.4802E+00	2.9847E-01	3.2760E+01	7.0326E+05	1.6575E+03
7.4910E+00	4.4927E-01	4.9312E+01	1.0586E+06	1.6551E+03
7.5101E+00	4.6694E-01	5.1252E+01	1.1002E+06	1.6509E+03
7.5425E+00	2.8233E-01	3.0989E+01	6.6523E+05	1.6438E+03
7.5623E+00	2.9453E-01	3.2328E+01	6.9397E+05	1.6395E+03
7.5683E+00	3.4138E-01	3.7470E+01	8.0436E+05	1.6382E+03
7.5952E+00	4.0043E-01	4.3951E+01	9.4350E+05	1.6324E+03
7.6317E+00	3.0810E-01	3.3818E+01	7.2596E+05	1.6246E+03
7.6751E+00	3.9159E-01	4.2982E+01	9.2269E+05	1.6154E+03
7.6928E+00	2.9931E-01	3.2852E+01	7.0524E+05	1.6117E+03
7.7129E+00	2.7418E-01	3.0094E+01	6.4603E+05	1.6075E+03
7.7587E+00	3.3247E-01	3.6492E+01	7.8337E+05	1.5980E+03
7.7968E+00	2.7537E-01	3.0225E+01	6.4883E+05	1.5902E+03
7.3638E+00	2.9847E-01	3.2760E+01	7.0326E+05	1.6837E+03
7.8755E+00	2.3253E-01	2.5523E+01	5.4790E+05	1.5743E+03
7.9188E+00	2.7127E-01	2.9775E+01	6.3918E+05	1.5657E+03
7.9605E+00	2.3050E-01	2.5300E+01	5.4312E+05	1.5575E+03
7.9697E+00	2.4951E-01	2.7387E+01	5.8791E+05	1.5557E+03
7.9990E+00	2.4680E-01	2.7089E+01	5.8151E+05	1.5500E+03
8.0582E+00	2.1620E-01	2.3730E+01	5.0942E+05	1.5386E+03
8.0930E+00	2.2232E-01	2.4402E+01	5.2384E+05	1.5320E+03
8.1237E+00	2.0396E-01	2.2387E+01	4.8058E+05	1.5262E+03
8.1585E+00	2.1280E-01	2.3357E+01	5.0140E+05	1.5197E+03
8.2179E+00	1.8289E-01	2.0074E+01	4.3093E+05	1.5087E+03
8.2656E+00	1.9107E-01	2.0972E+01	4.5021E+05	1.5000E+03
8.2899E+00	1.7891E-01	1.9638E+01	4.2156E+05	1.4956E+03
8.3289E+00	1.8274E-01	2.0057E+01	4.3057E+05	1.4886E+03
8.3858E+00	1.4916E-01	1.6372E+01	3.5145E+05	1.4785E+03
8.4165E+00	1.5298E-01	1.6791E+01	3.6046E+05	1.4731E+03
8.4839E+00	1.2747E-01	1.3991E+01	3.0035E+05	1.4614E+03
8.5394E+00	1.2323E-01	1.3525E+01	2.9035E+05	1.4519E+03
8.5707E+00	9.9553E-02	1.0927E+01	2.3457E+05	1.4466E+03
8.6034E+00	1.2021E-01	1.3194E+01	2.8323E+05	1.4411E+03
8.6424E+00	8.1616E-02	8.9582E+00	1.9230E+05	1.4346E+03
8.6751E+00	1.0418E-01	1.1435E+01	2.4547E+05	1.4292E+03

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
8.7184E+00	6.0734E-02	6.6662E+00	1.4310E+05	1.4221E+03
8.7659E+00	8.7314E-02	9.5837E+00	2.0573E+05	1.4144E+03
8.8120E+00	4.5550E-02	4.9996E+00	1.0733E+05	1.4070E+03
8.8776E+00	6.4711E-02	7.1028E+00	1.5247E+05	1.3966E+03
8.9088E+00	3.2348E-01	3.5505E+01	7.6219E+05	1.3917E+03
8.9326E+00	2.3708E-01	2.6022E+01	5.5862E+05	1.3880E+03
8.9610E+00	3.6731E-01	4.0316E+01	8.6546E+05	1.3836E+03
9.0046E+00	6.3832E-02	7.0062E+00	1.5040E+05	1.3769E+03
9.0400E+00	2.6217E-01	2.8776E+01	6.1774E+05	1.3715E+03
9.0625E+00	2.4772E-01	2.7189E+01	5.8367E+05	1.3681E+03
9.0824E+00	3.0688E-01	3.3684E+01	7.2308E+05	1.3651E+03
9.1071E+00	2.9112E-01	3.1954E+01	6.8595E+05	1.3614E+03
9.1319E+00	3.0688E-01	3.3684E+01	7.2308E+05	1.3577E+03
9.1718E+00	1.1321E-01	1.2426E+01	2.6674E+05	1.3518E+03
9.2401E+00	2.2431E-01	2.4620E+01	5.2852E+05	1.3418E+03
9.2622E+00	1.9834E-01	2.1770E+01	4.6734E+05	1.3386E+03
9.2865E+00	2.0855E-01	2.2891E+01	4.9140E+05	1.3351E+03
9.3193E+00	1.6729E-01	1.8361E+01	3.9416E+05	1.3304E+03
9.3622E+00	1.5237E-01	1.6724E+01	3.5902E+05	1.3243E+03
9.4091E+00	1.6025E-01	1.7589E+01	3.7758E+05	1.3177E+03
9.4414E+00	1.2342E-01	1.3546E+01	2.9080E+05	1.3132E+03
9.4927E+00	1.3451E-01	1.4764E+01	3.1693E+05	1.3061E+03
9.5102E+00	1.6514E-01	1.8126E+01	3.8912E+05	1.3037E+03
9.5394E+00	1.4407E-01	1.5813E+01	3.3946E+05	1.2997E+03
9.5918E+00	1.6105E-01	1.7677E+01	3.7947E+05	1.2926E+03
9.6501E+00	3.4031E-01	3.7352E+01	8.0184E+05	1.2848E+03
9.6825E+00	2.8994E-01	3.1824E+01	6.8316E+05	1.2805E+03
9.7105E+00	3.0229E-01	3.3180E+01	7.1227E+05	1.2768E+03
9.7349E+00	2.6045E-01	2.8587E+01	6.1368E+05	1.2736E+03
9.7549E+00	2.8608E-01	3.1400E+01	6.7406E+05	1.2710E+03
9.7880E+00	2.8780E-01	3.1589E+01	6.7811E+05	1.2667E+03
9.8166E+00	2.7820E-01	3.0535E+01	6.5549E+05	1.2630E+03
9.8588E+00	2.7583E-01	3.0275E+01	6.4991E+05	1.2576E+03
9.8910E+00	2.6133E-01	2.8684E+01	6.1575E+05	1.2535E+03
9.9243E+00	2.6898E-01	2.9523E+01	6.3378E+05	1.2493E+03
9.9346E+00	3.6123E-01	3.9649E+01	8.5113E+05	1.2480E+03

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
9.9682E+00	2.7969E-01	3.0699E+01	6.5901E+05	1.2438E+03
1.0001E+01	3.1598E-01	3.4683E+01	7.4453E+05	1.2397E+03
1.0071E+01	2.4466E-01	2.6854E+01	5.7646E+05	1.2311E+03
1.0102E+01	3.1598E-01	3.4683E+01	7.4453E+05	1.2273E+03
1.0128E+01	2.8351E-01	3.1119E+01	6.6802E+05	1.2242E+03
1.0158E+01	2.9036E-01	3.1870E+01	6.8415E+05	1.2205E+03
1.0229E+01	2.1498E-01	2.3596E+01	5.0654E+05	1.2121E+03
1.0275E+01	2.5663E-01	2.8168E+01	6.0467E+05	1.2067E+03
1.0321E+01	2.0771E-01	2.2799E+01	4.8941E+05	1.2013E+03
1.0349E+01	2.2649E-01	2.4860E+01	5.3366E+05	1.1980E+03
1.0421E+01	1.9956E-01	2.1904E+01	4.7022E+05	1.1897E+03
1.0465E+01	2.1368E-01	2.3453E+01	5.0347E+05	1.1848E+03
1.0513E+01	1.9402E-01	2.1296E+01	4.5715E+05	1.1793E+03
1.0656E+01	1.6657E-01	1.8283E+01	3.9249E+05	1.1635E+03
1.0712E+01	1.5318E-01	1.6813E+01	3.6093E+05	1.1574E+03
1.0818E+01	1.4163E-01	1.5545E+01	3.3371E+05	1.1461E+03
1.0867E+01	1.3860E-01	1.5213E+01	3.2657E+05	1.1409E+03
1.0916E+01	1.3313E-01	1.4612E+01	3.1368E+05	1.1358E+03
1.1005E+01	1.3132E-01	1.4414E+01	3.0943E+05	1.1266E+03
1.1051E+01	1.3255E-01	1.4549E+01	3.1232E+05	1.1219E+03
1.1128E+01	1.6854E-01	1.8499E+01	3.9711E+05	1.1142E+03
1.1153E+01	1.6915E-01	1.8566E+01	3.9856E+05	1.1117E+03
1.1189E+01	1.7769E-01	1.9503E+01	4.1867E+05	1.1081E+03
1.1247E+01	1.8685E-01	2.0509E+01	4.4026E+05	1.1024E+03
1.1278E+01	1.8686E-01	2.0510E+01	4.4028E+05	1.0993E+03
1.1304E+01	1.8198E-01	1.9975E+01	4.2880E+05	1.0968E+03
1.1389E+01	1.8505E-01	2.0312E+01	4.3603E+05	1.0886E+03
1.1444E+01	1.9543E-01	2.1451E+01	4.6049E+05	1.0834E+03
1.1521E+01	2.2714E-01	2.4931E+01	5.3519E+05	1.0762E+03
1.1575E+01	2.6677E-01	2.9281E+01	6.2857E+05	1.0711E+03
1.1592E+01	2.6982E-01	2.9616E+01	6.3576E+05	1.0696E+03
1.1654E+01	3.0336E-01	3.3297E+01	7.1478E+05	1.0639E+03
1.1728E+01	3.8504E-01	4.2263E+01	9.0725E+05	1.0572E+03
1.1784E+01	3.8872E-01	4.2666E+01	9.1591E+05	1.0521E+03
1.1814E+01	3.8811E-01	4.2600E+01	9.1448E+05	1.0495E+03
1.1895E+01	4.1068E-01	4.5076E+01	9.6765E+05	1.0423E+03

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
1.1930E+01	4.1191E-01	4.5211E+01	9.7054E+05	1.0393E+03
1.1990E+01	4.3386E-01	4.7621E+01	1.0223E+06	1.0341E+03
1.2037E+01	4.3326E-01	4.7555E+01	1.0209E+06	1.0300E+03
1.2068E+01	4.2839E-01	4.7021E+01	1.0094E+06	1.0274E+03
1.2189E+01	4.3146E-01	4.7358E+01	1.0166E+06	1.0172E+03
1.2226E+01	4.3696E-01	4.7961E+01	1.0296E+06	1.0141E+03
1.2276E+01	4.3697E-01	4.7962E+01	1.0296E+06	1.0100E+03
1.2345E+01	4.2358E-01	4.6492E+01	9.9804E+05	1.0043E+03
1.2447E+01	4.4493E-01	4.8836E+01	1.0484E+06	9.9611E+02
1.2473E+01	4.4249E-01	4.8569E+01	1.0426E+06	9.9406E+02
1.2511E+01	4.3032E-01	4.7232E+01	1.0139E+06	9.9098E+02
1.2577E+01	4.4313E-01	4.8638E+01	1.0441E+06	9.8584E+02
1.2609E+01	4.3704E-01	4.7970E+01	1.0298E+06	9.8327E+02
1.2649E+01	4.1694E-01	4.5763E+01	9.8240E+05	9.8019E+02
1.2682E+01	4.1695E-01	4.5764E+01	9.8242E+05	9.7762E+02
1.2722E+01	4.2732E-01	4.6903E+01	1.0069E+06	9.7454E+02
1.2783E+01	4.0539E-01	4.4495E+01	9.5518E+05	9.6992E+02
1.2837E+01	3.9625E-01	4.3493E+01	9.3366E+05	9.6581E+02
1.2872E+01	4.0235E-01	4.4163E+01	9.4804E+05	9.6324E+02
1.2920E+01	3.9262E-01	4.3094E+01	9.2509E+05	9.5965E+02
1.2954E+01	3.7921E-01	4.1623E+01	8.9351E+05	9.5708E+02
1.3045E+01	3.7740E-01	4.1424E+01	8.8924E+05	9.5040E+02
1.3109E+01	3.6888E-01	4.0489E+01	8.6917E+05	9.4578E+02
1.3181E+01	3.7986E-01	4.1694E+01	8.9505E+05	9.4065E+02
1.3246E+01	3.8171E-01	4.1896E+01	8.9939E+05	9.3602E+02
1.3326E+01	3.7806E-01	4.1496E+01	8.9080E+05	9.3037E+02
1.3467E+01	3.9394E-01	4.3239E+01	9.2820E+05	9.2062E+02
1.3566E+01	3.9151E-01	4.2972E+01	9.2248E+05	9.1394E+02
1.3658E+01	3.9580E-01	4.3443E+01	9.3259E+05	9.0778E+02
1.3759E+01	4.1592E-01	4.5652E+01	9.8001E+05	9.0110E+02
1.3830E+01	4.1228E-01	4.5252E+01	9.7142E+05	8.9648E+02
1.3958E+01	4.4521E-01	4.8867E+01	1.0490E+06	8.8826E+02
1.4039E+01	4.6230E-01	5.0742E+01	1.0893E+06	8.8313E+02
1.4097E+01	4.8363E-01	5.3084E+01	1.1395E+06	8.7953E+02
1.4163E+01	4.8364E-01	5.3085E+01	1.1396E+06	8.7542E+02
1.4196E+01	4.9706E-01	5.4558E+01	1.1712E+06	8.7337E+02

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
1.4263E+01	5.2450E-01	5.7569E+01	1.2358E+06	8.6926E+02
1.4314E+01	5.2328E-01	5.7436E+01	1.2330E+06	8.6618E+02
1.4425E+01	5.4707E-01	6.0047E+01	1.2890E+06	8.5950E+02
1.4468E+01	5.4403E-01	5.9713E+01	1.2819E+06	8.5693E+02
1.4521E+01	5.5013E-01	6.0383E+01	1.2962E+06	8.5385E+02
1.4573E+01	5.5623E-01	6.1053E+01	1.3106E+06	8.5077E+02
1.4644E+01	5.4162E-01	5.9449E+01	1.2762E+06	8.4666E+02
1.4679E+01	5.4284E-01	5.9583E+01	1.2791E+06	8.4461E+02
1.4724E+01	5.5077E-01	6.0453E+01	1.2977E+06	8.4204E+02
1.4824E+01	5.3921E-01	5.9184E+01	1.2705E+06	8.3639E+02
1.4897E+01	5.4836E-01	6.0189E+01	1.2921E+06	8.3228E+02
1.4999E+01	5.4533E-01	5.9856E+01	1.2849E+06	8.2663E+02
1.5064E+01	5.5204E-01	6.0592E+01	1.3007E+06	8.2304E+02
1.5121E+01	5.4717E-01	6.0058E+01	1.2893E+06	8.1996E+02
1.5159E+01	5.3560E-01	5.8788E+01	1.2620E+06	8.1790E+02
1.5255E+01	5.4354E-01	5.9659E+01	1.2807E+06	8.1277E+02
1.5303E+01	5.3684E-01	5.8924E+01	1.2649E+06	8.1020E+02
1.5322E+01	5.2709E-01	5.7854E+01	1.2420E+06	8.0917E+02
1.5361E+01	5.2893E-01	5.8055E+01	1.2463E+06	8.0712E+02
1.5420E+01	5.3990E-01	5.9260E+01	1.2721E+06	8.0404E+02
1.5509E+01	5.1675E-01	5.6719E+01	1.2176E+06	7.9941E+02
1.5579E+01	5.3322E-01	5.8527E+01	1.2564E+06	7.9582E+02
1.5660E+01	5.1007E-01	5.5986E+01	1.2018E+06	7.9171E+02
1.5732E+01	5.2714E-01	5.7859E+01	1.2421E+06	7.8812E+02
1.5814E+01	5.0765E-01	5.5721E+01	1.1961E+06	7.8401E+02
1.5887E+01	5.1985E-01	5.7059E+01	1.2249E+06	7.8041E+02
1.5960E+01	5.0828E-01	5.5789E+01	1.1976E+06	7.7682E+02
1.6045E+01	5.1804E-01	5.6861E+01	1.2206E+06	7.7271E+02
1.6131E+01	5.1135E-01	5.6126E+01	1.2048E+06	7.6860E+02
1.6196E+01	5.1806E-01	5.6863E+01	1.2207E+06	7.6552E+02
1.6273E+01	5.1624E-01	5.6663E+01	1.2164E+06	7.6192E+02
1.6428E+01	5.2358E-01	5.7468E+01	1.2337E+06	7.5473E+02
1.6608E+01	5.3639E-01	5.8875E+01	1.2639E+06	7.4652E+02
1.6911E+01	5.6324E-01	6.1822E+01	1.3271E+06	7.3316E+02
1.7176E+01	5.7912E-01	6.3565E+01	1.3645E+06	7.2186E+02
1.7299E+01	5.8584E-01	6.4302E+01	1.3804E+06	7.1673E+02

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
1.7386E+01	5.8097E-01	6.3768E+01	1.3689E+06	7.1313E+02
1.7461E+01	5.8038E-01	6.3703E+01	1.3675E+06	7.1005E+02
1.7563E+01	5.7063E-01	6.2633E+01	1.3445E+06	7.0594E+02
1.7640E+01	5.7186E-01	6.2768E+01	1.3474E+06	7.0286E+02
1.7783E+01	5.6334E-01	6.1832E+01	1.3274E+06	6.9721E+02
1.7862E+01	5.5542E-01	6.0964E+01	1.3087E+06	6.9413E+02
1.7941E+01	5.5605E-01	6.1032E+01	1.3102E+06	6.9105E+02
1.8049E+01	5.5057E-01	6.0431E+01	1.2973E+06	6.8694E+02
1.8144E+01	5.3960E-01	5.9227E+01	1.2714E+06	6.8335E+02
1.8226E+01	5.3961E-01	5.9228E+01	1.2714E+06	6.8027E+02
1.8449E+01	5.2623E-01	5.7759E+01	1.2399E+06	6.7205E+02
1.8534E+01	5.2624E-01	5.7760E+01	1.2399E+06	6.6897E+02
1.8619E+01	5.1954E-01	5.7025E+01	1.2242E+06	6.6589E+02
1.8663E+01	5.2259E-01	5.7360E+01	1.2313E+06	6.6434E+02
1.8764E+01	5.1590E-01	5.6625E+01	1.2156E+06	6.6075E+02
1.9212E+01	5.0619E-01	5.5559E+01	1.1927E+06	6.4534E+02
1.9650E+01	4.9648E-01	5.4494E+01	1.1698E+06	6.3096E+02
2.0346E+01	4.7398E-01	5.2024E+01	1.1168E+06	6.0939E+02
2.0873E+01	4.5269E-01	4.9687E+01	1.0666E+06	5.9399E+02
2.1563E+01	4.2470E-01	4.6616E+01	1.0007E+06	5.7498E+02
2.2116E+01	4.1133E-01	4.5148E+01	9.6918E+05	5.6060E+02
2.3023E+01	3.8518E-01	4.2278E+01	9.0758E+05	5.3852E+02
2.3701E+01	3.6328E-01	3.9874E+01	8.5597E+05	5.2311E+02
2.4800E+01	3.2480E-01	3.5650E+01	7.6530E+05	4.9994E+02
2.4900E+01	3.2239E-01	3.5386E+01	7.5963E+05	4.9793E+02
2.5400E+01	3.0716E-01	3.3714E+01	7.2374E+05	4.8813E+02
2.5900E+01	2.8802E-01	3.1613E+01	6.7864E+05	4.7870E+02
2.6400E+01	2.7970E-01	3.0700E+01	6.5904E+05	4.6964E+02
2.6900E+01	2.6497E-01	2.9083E+01	6.2433E+05	4.6091E+02
2.7400E+01	2.5755E-01	2.8269E+01	6.0685E+05	4.5250E+02
2.7900E+01	2.4082E-01	2.6432E+01	5.6742E+05	4.4439E+02
2.8400E+01	2.2548E-01	2.4749E+01	5.3129E+05	4.3656E+02
2.8900E+01	2.2017E-01	2.4166E+01	5.1878E+05	4.2901E+02
2.9400E+01	2.1456E-01	2.3550E+01	5.0555E+05	4.2171E+02
2.9900E+01	1.9792E-01	2.1724E+01	4.6636E+05	4.1466E+02
3.0900E+01	1.8149E-01	1.9920E+01	4.2763E+05	4.0124E+02

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
3.1900E+01	1.6646E-01	1.8270E+01	3.9221E+05	3.8867E+02
3.2900E+01	1.5704E-01	1.7237E+01	3.7001E+05	3.7685E+02
3.3900E+01	1.4271E-01	1.5664E+01	3.3625E+05	3.6574E+02
3.4900E+01	1.3339E-01	1.4641E+01	3.1429E+05	3.5526E+02
3.5900E+01	1.2557E-01	1.3783E+01	2.9587E+05	3.4536E+02
3.6900E+01	1.1805E-01	1.2958E+01	2.7816E+05	3.3600E+02
3.7900E+01	1.1014E-01	1.2089E+01	2.5951E+05	3.2714E+02
3.8900E+01	1.0322E-01	1.1330E+01	2.4321E+05	3.1873E+02
3.9900E+01	9.7609E-02	1.0714E+01	2.2999E+05	3.1074E+02
4.0900E+01	9.2599E-02	1.0164E+01	2.1818E+05	3.0314E+02
4.1900E+01	8.6185E-02	9.4597E+00	2.0307E+05	2.9590E+02
4.2900E+01	8.0773E-02	8.8658E+00	1.9032E+05	2.8901E+02
4.3900E+01	7.6765E-02	8.4258E+00	1.8088E+05	2.8242E+02
4.4900E+01	7.3057E-02	8.0188E+00	1.7214E+05	2.7613E+02
4.5900E+01	6.7846E-02	7.4468E+00	1.5986E+05	2.7012E+02
4.6900E+01	6.5240E-02	7.1608E+00	1.5372E+05	2.6436E+02
4.7900E+01	6.1833E-02	6.7868E+00	1.4569E+05	2.5884E+02
4.8900E+01	5.9227E-02	6.5008E+00	1.3955E+05	2.5355E+02
4.9900E+01	5.5018E-02	6.0388E+00	1.2964E+05	2.4847E+02
5.0900E+01	5.3515E-02	5.8738E+00	1.2609E+05	2.4358E+02
5.1900E+01	5.0909E-02	5.5878E+00	1.1995E+05	2.3889E+02
5.2900E+01	4.8003E-02	5.2689E+00	1.1311E+05	2.3437E+02
5.3900E+01	4.5498E-02	4.9939E+00	1.0720E+05	2.3003E+02
5.4900E+01	4.3894E-02	4.8179E+00	1.0342E+05	2.2584E+02
5.5900E+01	4.1289E-02	4.5319E+00	9.7285E+04	2.2180E+02
5.6900E+01	3.9785E-02	4.3669E+00	9.3743E+04	2.1790E+02
5.7900E+01	3.7380E-02	4.1029E+00	8.8076E+04	2.1414E+02
5.8900E+01	3.5977E-02	3.9489E+00	8.4770E+04	2.1050E+02
5.9900E+01	3.4274E-02	3.7619E+00	8.0756E+04	2.0699E+02
6.0900E+01	3.3372E-02	3.6629E+00	7.8631E+04	2.0359E+02
6.1900E+01	3.1768E-02	3.4869E+00	7.4853E+04	2.0030E+02
6.2900E+01	3.0666E-02	3.3659E+00	7.2256E+04	1.9711E+02
6.3900E+01	2.9363E-02	3.2229E+00	6.9186E+04	1.9403E+02
6.4900E+01	2.8461E-02	3.1239E+00	6.7061E+04	1.9104E+02
6.5900E+01	2.6858E-02	2.9479E+00	6.3283E+04	1.8814E+02
6.6900E+01	2.6457E-02	2.9039E+00	6.2338E+04	1.8533E+02

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
6.7900E+01	2.5254E-02	2.7719E+00	5.9505E+04	1.8260E+02
6.8900E+01	2.3551E-02	2.5849E+00	5.5490E+04	1.7995E+02
6.9900E+01	2.2448E-02	2.4639E+00	5.2893E+04	1.7737E+02
7.0900E+01	2.2148E-02	2.4309E+00	5.2185E+04	1.7487E+02
7.1900E+01	2.1246E-02	2.3319E+00	5.0059E+04	1.7244E+02
7.3900E+01	1.9642E-02	2.1559E+00	4.6281E+04	1.6777E+02
7.5900E+01	1.8239E-02	2.0019E+00	4.2976E+04	1.6335E+02
7.7900E+01	1.6836E-02	1.8479E+00	3.9670E+04	1.5916E+02
7.9900E+01	1.5734E-02	1.7270E+00	3.7072E+04	1.5517E+02
8.0000E+01	1.5528E-02	1.7043E+00	3.6586E+04	1.5498E+02
9.0000E+01	1.2024E-02	1.3198E+00	2.8332E+04	1.3776E+02
1.0000E+02	9.5964E-03	1.0533E+00	2.2611E+04	1.2398E+02
1.2500E+02	5.8833E-03	6.4576E-01	1.3862E+04	9.9187E+01
1.5000E+02	3.8632E-03	4.2403E-01	9.1026E+03	8.2656E+01
1.7500E+02	2.6650E-03	2.9251E-01	6.2793E+03	7.0848E+01
2.0000E+02	1.9114E-03	2.0980E-01	4.5038E+03	6.1992E+01
2.2500E+02	1.4153E-03	1.5534E-01	3.3347E+03	5.5104E+01
2.5000E+02	1.0760E-03	1.1810E-01	2.5352E+03	4.9594E+01
2.7500E+02	8.3647E-04	9.1812E-02	1.9709E+03	4.5085E+01
2.8300E+02	7.7493E-04	8.5057E-02	1.8259E+03	4.3811E+01
2.8359E+02	1.7762E-03	1.9496E-01	4.1852E+03	4.3720E+01
2.8376E+02	2.0593E-03	2.2604E-01	4.8523E+03	4.3693E+01
2.8393E+02	2.7873E-03	3.0594E-01	6.5676E+03	4.3667E+01
2.8400E+02	3.2264E-03	3.5413E-01	7.6020E+03	4.3656E+01
2.8411E+02	4.4027E-03	4.8324E-01	1.0374E+04	4.3640E+01
2.8422E+02	7.2082E-03	7.9118E-01	1.6984E+04	4.3623E+01
2.8428E+02	1.1202E-02	1.2295E+00	2.6394E+04	4.3613E+01
2.8433E+02	1.7121E-02	1.8792E+00	4.0341E+04	4.3606E+01
2.8436E+02	2.4967E-02	2.7404E+00	5.8827E+04	4.3601E+01
2.8442E+02	6.2722E-02	6.8844E+00	1.4779E+05	4.3592E+01
2.8444E+02	9.0411E-02	9.9236E+00	2.1303E+05	4.3589E+01
2.8446E+02	1.0685E-01	1.1728E+01	2.5175E+05	4.3586E+01
2.8447E+02	1.1159E-01	1.2248E+01	2.6292E+05	4.3584E+01
2.8448E+02	1.1395E-01	1.2508E+01	2.6850E+05	4.3583E+01
2.8450E+02	1.1395E-01	1.2507E+01	2.6848E+05	4.3580E+01
2.8453E+02	1.1128E-01	1.2215E+01	2.6221E+05	4.3575E+01

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
2.8455E+02	1.0891E-01	1.1955E+01	2.5663E+05	4.3572E+01
2.8458E+02	1.0891E-01	1.1954E+01	2.5661E+05	4.3567E+01
2.8459E+02	1.1024E-01	1.2100E+01	2.5975E+05	4.3566E+01
2.8461E+02	1.1024E-01	1.2100E+01	2.5975E+05	4.3563E+01
2.8463E+02	1.0802E-01	1.1857E+01	2.5452E+05	4.3560E+01
2.8466E+02	1.0017E-01	1.0995E+01	2.3602E+05	4.3555E+01
2.8470E+02	8.9059E-02	9.7752E+00	2.0984E+05	4.3549E+01
2.8473E+02	8.0172E-02	8.7997E+00	1.8890E+05	4.3544E+01
2.8476E+02	7.4838E-02	8.2143E+00	1.7634E+05	4.3540E+01
2.8480E+02	7.0245E-02	7.7102E+00	1.6551E+05	4.3534E+01
2.8481E+02	6.9800E-02	7.6613E+00	1.6447E+05	4.3532E+01
2.8482E+02	6.9799E-02	7.6612E+00	1.6446E+05	4.3531E+01
2.8485E+02	7.1871E-02	7.8886E+00	1.6934E+05	4.3526E+01
2.8488E+02	7.8976E-02	8.6685E+00	1.8608E+05	4.3522E+01
2.8489E+02	8.1196E-02	8.9121E+00	1.9132E+05	4.3520E+01
2.8491E+02	8.2527E-02	9.0583E+00	1.9445E+05	4.3517E+01
2.8493E+02	8.1934E-02	8.9931E+00	1.9305E+05	4.3514E+01
2.8497E+02	7.5120E-02	8.2452E+00	1.7700E+05	4.3508E+01
2.8503E+02	6.7119E-02	7.3670E+00	1.5815E+05	4.3499E+01
2.8507E+02	6.3859E-02	7.0092E+00	1.5047E+05	4.3493E+01
2.8509E+02	5.8230E-02	6.3914E+00	1.3720E+05	4.3489E+01
2.8515E+02	4.8156E-02	5.2857E+00	1.1347E+05	4.3480E+01
2.8520E+02	3.9268E-02	4.3101E+00	9.2524E+04	4.3473E+01
2.8523E+02	3.5415E-02	3.8872E+00	8.3447E+04	4.3468E+01
2.8527E+02	3.2007E-02	3.5131E+00	7.5415E+04	4.3462E+01
2.8531E+02	2.9783E-02	3.2690E+00	7.0176E+04	4.3456E+01
2.8536E+02	2.7114E-02	2.9760E+00	6.3886E+04	4.3448E+01
2.8542E+02	2.2667E-02	2.4879E+00	5.3408E+04	4.3439E+01
2.8549E+02	1.8220E-02	1.9999E+00	4.2931E+04	4.3429E+01
2.8553E+02	1.6144E-02	1.7720E+00	3.8039E+04	4.3422E+01
2.8559E+02	1.2585E-02	1.3813E+00	2.9653E+04	4.3413E+01
2.8568E+02	8.7289E-03	9.5809E-01	2.0567E+04	4.3400E+01
2.8579E+02	6.0555E-03	6.6466E-01	1.4268E+04	4.3383E+01
2.8590E+02	4.4181E-03	4.8493E-01	1.0410E+04	4.3366E+01
2.8593E+02	3.3795E-03	3.7094E-01	7.9629E+03	4.3362E+01
2.8600E+02	3.2264E-03	3.5413E-01	7.6020E+03	4.3351E+01

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
2.8615E+02	1.7344E-03	1.9037E-01	4.0866E+03	4.3328E+01
2.8630E+02	1.5756E-03	1.7294E-01	3.7124E+03	4.3306E+01
2.8646E+02	1.2677E-03	1.3915E-01	2.9870E+03	4.3281E+01
2.8666E+02	1.4846E-03	1.6296E-01	3.4981E+03	4.3251E+01
2.8683E+02	2.3754E-03	2.6072E-01	5.5969E+03	4.3226E+01
2.8690E+02	3.2661E-03	3.5849E-01	7.6957E+03	4.3215E+01
2.8695E+02	4.7508E-03	5.2145E-01	1.1194E+04	4.3208E+01
2.8700E+02	7.4973E-03	8.2291E-01	1.7665E+04	4.3200E+01
2.8704E+02	1.5663E-02	1.7191E+00	3.6905E+04	4.3194E+01
2.8706E+02	2.2269E-02	2.4443E+00	5.2471E+04	4.3191E+01
2.8709E+02	2.5387E-02	2.7865E+00	5.9818E+04	4.3187E+01
2.8714E+02	1.7444E-02	1.9147E+00	4.1103E+04	4.3179E+01
2.8715E+02	1.5663E-02	1.7191E+00	3.6905E+04	4.3177E+01
2.8717E+02	1.4772E-02	1.6214E+00	3.4806E+04	4.3174E+01
2.8720E+02	1.6479E-02	1.8087E+00	3.8828E+04	4.3170E+01
2.8723E+02	1.8112E-02	1.9880E+00	4.2676E+04	4.3165E+01
2.8725E+02	1.8483E-02	2.0288E+00	4.3551E+04	4.3162E+01
2.8727E+02	1.7963E-02	1.9717E+00	4.2326E+04	4.3159E+01
2.8728E+02	1.6999E-02	1.8658E+00	4.0053E+04	4.3158E+01
2.8732E+02	1.5737E-02	1.7273E+00	3.7080E+04	4.3152E+01
2.8735E+02	1.6108E-02	1.7681E+00	3.7955E+04	4.3147E+01
2.8739E+02	2.0710E-02	2.2732E+00	4.8798E+04	4.3141E+01
2.8741E+02	2.2343E-02	2.4524E+00	5.2646E+04	4.3138E+01
2.8743E+02	2.2862E-02	2.5094E+00	5.3869E+04	4.3135E+01
2.8745E+02	2.2121E-02	2.4280E+00	5.2121E+04	4.3132E+01
2.8748E+02	1.9894E-02	2.1836E+00	4.6875E+04	4.3128E+01
2.8752E+02	1.7666E-02	1.9391E+00	4.1626E+04	4.3122E+01
2.8762E+02	1.7741E-02	1.9472E+00	4.1801E+04	4.3107E+01
2.8766E+02	1.8409E-02	2.0206E+00	4.3376E+04	4.3101E+01
2.8770E+02	2.3457E-02	2.5746E+00	5.5269E+04	4.3095E+01
2.8773E+02	3.4369E-02	3.7724E+00	8.0981E+04	4.3090E+01
2.8775E+02	4.6393E-02	5.0922E+00	1.0931E+05	4.3087E+01
2.8777E+02	5.1293E-02	5.6300E+00	1.2086E+05	4.3084E+01
2.8780E+02	4.7062E-02	5.1656E+00	1.1089E+05	4.3080E+01
2.8783E+02	3.9119E-02	4.2938E+00	9.2174E+04	4.3075E+01
2.8785E+02	3.1771E-02	3.4872E+00	7.4859E+04	4.3073E+01

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
2.8787E+02	2.9543E-02	3.2427E+00	6.9611E+04	4.3070E+01
2.8788E+02	2.8653E-02	3.1450E+00	6.7512E+04	4.3068E+01
2.8790E+02	2.7985E-02	3.0717E+00	6.5939E+04	4.3065E+01
2.8792E+02	2.9840E-02	3.2753E+00	7.0311E+04	4.3062E+01
2.8794E+02	3.1622E-02	3.4709E+00	7.4509E+04	4.3059E+01
2.8797E+02	3.2364E-02	3.5523E+00	7.6257E+04	4.3055E+01
2.8799E+02	3.1622E-02	3.4709E+00	7.4509E+04	4.3052E+01
2.8803E+02	2.7094E-02	2.9738E+00	6.3839E+04	4.3046E+01
2.8806E+02	2.3531E-02	2.5828E+00	5.5444E+04	4.3041E+01
2.8812E+02	2.2566E-02	2.4769E+00	5.3171E+04	4.3032E+01
2.8814E+02	2.2862E-02	2.5094E+00	5.3869E+04	4.3029E+01
2.8817E+02	2.1675E-02	2.3791E+00	5.1071E+04	4.3025E+01
2.8819E+02	2.0264E-02	2.2242E+00	4.7747E+04	4.3022E+01
2.8823E+02	1.9820E-02	2.1754E+00	4.6700E+04	4.3016E+01
2.8827E+02	2.5387E-02	2.7865E+00	5.9818E+04	4.3010E+01
2.8829E+02	2.8579E-02	3.1368E+00	6.7337E+04	4.3007E+01
2.8831E+02	2.9915E-02	3.2835E+00	7.0486E+04	4.3004E+01
2.8834E+02	2.7391E-02	3.0065E+00	6.4539E+04	4.2999E+01
2.8837E+02	2.1082E-02	2.3139E+00	4.9673E+04	4.2995E+01
2.8840E+02	1.6257E-02	1.7844E+00	3.8305E+04	4.2990E+01
2.8842E+02	1.4401E-02	1.5806E+00	3.3931E+04	4.2987E+01
2.8845E+02	1.3732E-02	1.5073E+00	3.2356E+04	4.2983E+01
2.8847E+02	1.4326E-02	1.5725E+00	3.3756E+04	4.2980E+01
2.8851E+02	1.4624E-02	1.6051E+00	3.4456E+04	4.2974E+01
2.8856E+02	1.2693E-02	1.3932E+00	2.9908E+04	4.2967E+01
2.8857E+02	1.0615E-02	1.1651E+00	2.5011E+04	4.2965E+01
2.8862E+02	8.7592E-03	9.6141E-01	2.0639E+04	4.2958E+01
2.8866E+02	8.9818E-03	9.8585E-01	2.1163E+04	4.2952E+01
2.8868E+02	9.9465E-03	1.0917E+00	2.3436E+04	4.2949E+01
2.8870E+02	1.0541E-02	1.1570E+00	2.4836E+04	4.2946E+01
2.8873E+02	1.0689E-02	1.1733E+00	2.5186E+04	4.2941E+01
2.8879E+02	8.3880E-03	9.2068E-01	1.9764E+04	4.2932E+01
2.8883E+02	7.8684E-03	8.6365E-01	1.8540E+04	4.2926E+01
2.8887E+02	8.6849E-03	9.5326E-01	2.0464E+04	4.2920E+01
2.8891E+02	1.1134E-02	1.2221E+00	2.6234E+04	4.2914E+01
2.8896E+02	1.7147E-02	1.8821E+00	4.0403E+04	4.2907E+01

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
2.8900E+02	2.5758E-02	2.8272E+00	6.0691E+04	4.2901E+01
2.8901E+02	2.7465E-02	3.0146E+00	6.4714E+04	4.2900E+01
2.8906E+02	2.2641E-02	2.4850E+00	5.3346E+04	4.2892E+01
2.8909E+02	1.9671E-02	2.1591E+00	4.6349E+04	4.2888E+01
2.8911E+02	1.8112E-02	1.9880E+00	4.2676E+04	4.2885E+01
2.8914E+02	2.0487E-02	2.2487E+00	4.8273E+04	4.2880E+01
2.8918E+02	2.6722E-02	2.9331E+00	6.2964E+04	4.2874E+01
2.8920E+02	2.9098E-02	3.1939E+00	6.8563E+04	4.2871E+01
2.8922E+02	2.9915E-02	3.2835E+00	7.0486E+04	4.2868E+01
2.8927E+02	2.7762E-02	3.0472E+00	6.5414E+04	4.2861E+01
2.8928E+02	2.8356E-02	3.1123E+00	6.6812E+04	4.2860E+01
2.8932E+02	3.1845E-02	3.4953E+00	7.5034E+04	4.2854E+01
2.8933E+02	3.2438E-02	3.5605E+00	7.6432E+04	4.2852E+01
2.8936E+02	3.1399E-02	3.4464E+00	7.3984E+04	4.2848E+01
2.8939E+02	2.7614E-02	3.0309E+00	6.5064E+04	4.2843E+01
2.8944E+02	2.3605E-02	2.5909E+00	5.5619E+04	4.2836E+01
2.8947E+02	2.2789E-02	2.5014E+00	5.3696E+04	4.2831E+01
2.8949E+02	2.3531E-02	2.5828E+00	5.5444E+04	4.2828E+01
2.8953E+02	2.3902E-02	2.6236E+00	5.6319E+04	4.2823E+01
2.8955E+02	2.3160E-02	2.5420E+00	5.4569E+04	4.2820E+01
2.8959E+02	2.0487E-02	2.2487E+00	4.8273E+04	4.2814E+01
2.8962E+02	1.9448E-02	2.1347E+00	4.5824E+04	4.2809E+01
2.8965E+02	1.9968E-02	2.1917E+00	4.7050E+04	4.2805E+01
2.8969E+02	2.4124E-02	2.6479E+00	5.6842E+04	4.2799E+01
2.8972E+02	2.4941E-02	2.7376E+00	5.8768E+04	4.2794E+01
2.8975E+02	2.4867E-02	2.7294E+00	5.8593E+04	4.2790E+01
2.8977E+02	2.3680E-02	2.5991E+00	5.5794E+04	4.2787E+01
2.8981E+02	2.2937E-02	2.5176E+00	5.4044E+04	4.2781E+01
2.8984E+02	2.2937E-02	2.5176E+00	5.4044E+04	4.2777E+01
2.8988E+02	2.3754E-02	2.6072E+00	5.5969E+04	4.2771E+01
2.8993E+02	2.3308E-02	2.5583E+00	5.4919E+04	4.2763E+01
2.8998E+02	2.1453E-02	2.3547E+00	5.0548E+04	4.2756E+01
2.9000E+02	2.0562E-02	2.2569E+00	4.8448E+04	4.2753E+01
2.9003E+02	2.0117E-02	2.2080E+00	4.7400E+04	4.2749E+01
2.9005E+02	2.0710E-02	2.2732E+00	4.8798E+04	4.2746E+01
2.9007E+02	2.2121E-02	2.4280E+00	5.2121E+04	4.2743E+01

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
2.9010E+02	2.3308E-02	2.5583E+00	5.4919E+04	4.2738E+01
2.9016E+02	2.3457E-02	2.5746E+00	5.5269E+04	4.2730E+01
2.9020E+02	2.2715E-02	2.4932E+00	5.3521E+04	4.2724E+01
2.9024E+02	2.2862E-02	2.5094E+00	5.3869E+04	4.2718E+01
2.9028E+02	2.3234E-02	2.5502E+00	5.4744E+04	4.2712E+01
2.9033E+02	2.2715E-02	2.4932E+00	5.3521E+04	4.2705E+01
2.9036E+02	2.2715E-02	2.4932E+00	5.3521E+04	4.2700E+01
2.9039E+02	2.2121E-02	2.4280E+00	5.2121E+04	4.2696E+01
2.9045E+02	2.2269E-02	2.4443E+00	5.2471E+04	4.2687E+01
2.9046E+02	2.2789E-02	2.5014E+00	5.3696E+04	4.2685E+01
2.9048E+02	2.2492E-02	2.4687E+00	5.2996E+04	4.2683E+01
2.9057E+02	2.2715E-02	2.4932E+00	5.3521E+04	4.2669E+01
2.9060E+02	2.2195E-02	2.4361E+00	5.2296E+04	4.2665E+01
2.9065E+02	2.2121E-02	2.4280E+00	5.2121E+04	4.2658E+01
2.9068E+02	2.2566E-02	2.4769E+00	5.3171E+04	4.2653E+01
2.9085E+02	2.2418E-02	2.4606E+00	5.2821E+04	4.2628E+01
2.9109E+02	2.2418E-02	2.4606E+00	5.2821E+04	4.2593E+01
2.9129E+02	2.2641E-02	2.4850E+00	5.3346E+04	4.2564E+01
2.9196E+02	2.6051E-02	2.8594E+00	6.1382E+04	4.2466E+01
2.9241E+02	2.6658E-02	2.9261E+00	6.2813E+04	4.2401E+01
2.9303E+02	2.5668E-02	2.8174E+00	6.0480E+04	4.2311E+01
2.9320E+02	2.5187E-02	2.7645E+00	5.9346E+04	4.2287E+01
2.9354E+02	2.4679E-02	2.7088E+00	5.8150E+04	4.2238E+01
2.9382E+02	2.4654E-02	2.7060E+00	5.8090E+04	4.2197E+01
2.9426E+02	2.4856E-02	2.7282E+00	5.8566E+04	4.2134E+01
2.9468E+02	2.5413E-02	2.7893E+00	5.9878E+04	4.2074E+01
2.9509E+02	2.5589E-02	2.8087E+00	6.0294E+04	4.2016E+01
2.9574E+02	2.5056E-02	2.7502E+00	5.9038E+04	4.1923E+01
2.9605E+02	2.4726E-02	2.7140E+00	5.8260E+04	4.1879E+01
2.9677E+02	2.5790E-02	2.8307E+00	6.0766E+04	4.1778E+01
2.9712E+02	2.5966E-02	2.8501E+00	6.1183E+04	4.1729E+01
2.9736E+02	2.5992E-02	2.8529E+00	6.1242E+04	4.1695E+01
2.9774E+02	2.5738E-02	2.8250E+00	6.0644E+04	4.1642E+01
2.9856E+02	2.5635E-02	2.8138E+00	6.0403E+04	4.1527E+01
2.9932E+02	2.5254E-02	2.7719E+00	5.9503E+04	4.1422E+01
2.9983E+02	2.5202E-02	2.7662E+00	5.9381E+04	4.1351E+01

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV^{-1})	σ_a (Mb)	μ_m ($\text{cm}^2 \text{g}^{-1}$)	λ (\AA)
3.0090E+02	2.4922E-02	2.7354E+00	5.8721E+04	4.1204E+01
3.0142E+02	2.4719E-02	2.7131E+00	5.8243E+04	4.1133E+01
3.0176E+02	2.4540E-02	2.6935E+00	5.7822E+04	4.1087E+01
3.0293E+02	2.3626E-02	2.5932E+00	5.5668E+04	4.0928E+01
3.0406E+02	2.2636E-02	2.4845E+00	5.3335E+04	4.0776E+01
3.0578E+02	2.1873E-02	2.4008E+00	5.1538E+04	4.0547E+01
3.0864E+02	2.0196E-02	2.2167E+00	4.7586E+04	4.0171E+01
3.1101E+02	1.9204E-02	2.1078E+00	4.5248E+04	3.9865E+01
3.1307E+02	1.8415E-02	2.0212E+00	4.3389E+04	3.9603E+01
3.1593E+02	1.7549E-02	1.9262E+00	4.1349E+04	3.9244E+01
3.1981E+02	1.6479E-02	1.8087E+00	3.8828E+04	3.8768E+01
3.2480E+02	1.5356E-02	1.6855E+00	3.6182E+04	3.8172E+01
3.1741E+02	1.7167E-02	1.8843E+00	4.0449E+04	3.9061E+01
3.2232E+02	1.5892E-02	1.7443E+00	3.7445E+04	3.8466E+01
3.2735E+02	1.4845E-02	1.6294E+00	3.4979E+04	3.7875E+01
3.2975E+02	1.4309E-02	1.5706E+00	3.3716E+04	3.7599E+01
3.3237E+02	1.3899E-02	1.5256E+00	3.2750E+04	3.7303E+01
3.3491E+02	1.3465E-02	1.4779E+00	3.1727E+04	3.7020E+01
3.3742E+02	1.3081E-02	1.4358E+00	3.0823E+04	3.6745E+01
3.4000E+02	1.2748E-02	1.3992E+00	3.0036E+04	3.6466E+01
3.5000E+02	1.1842E-02	1.2998E+00	2.7903E+04	3.5424E+01
4.0000E+02	8.6627E-03	9.5083E-01	2.0411E+04	3.0996E+01
4.5000E+02	6.5061E-03	7.1412E-01	1.5330E+04	2.7552E+01
5.0000E+02	5.0032E-03	5.4915E-01	1.1789E+04	2.4797E+01
6.0000E+02	3.1400E-03	3.4465E-01	7.3986E+03	2.0664E+01
7.0000E+02	2.1002E-03	2.3051E-01	4.9484E+03	1.7712E+01
8.0000E+02	1.4758E-03	1.6198E-01	3.4772E+03	1.5498E+01
9.0000E+02	1.0784E-03	1.1837E-01	2.5410E+03	1.3776E+01
1.0000E+03	8.1341E-04	8.9281E-02	1.9166E+03	1.2398E+01
1.2500E+03	4.4655E-04	4.9013E-02	1.0522E+03	9.9187E+00
1.5000E+03	2.7341E-04	3.0009E-02	6.4421E+02	8.2656E+00
1.7500E+03	1.6276E-04	1.7865E-02	3.8351E+02	7.0848E+00
2.0000E+03	1.0998E-04	1.2072E-02	2.5914E+02	6.1992E+00
2.2500E+03	7.7620E-05	8.5196E-03	1.8289E+02	5.5104E+00
2.5000E+03	5.6716E-05	6.2253E-03	1.3364E+02	4.9594E+00
2.7500E+03	4.2633E-05	4.6795E-03	1.0045E+02	4.5085E+00

Table I. Oscillator-strength density, df/dE , photoabsorption cross section, σ_a , and mass absorption coefficient, μ_m . (Continued)

Energy (eV)	f_n (eV ⁻¹)	σ_a (Mb)	μ_m (cm ² g ⁻¹)	λ (Å)
3.0000E+03	3.2810E-05	3.6013E-03	7.7309E+01	4.1328E+00
3.5000E+03	2.0567E-05	2.2575E-03	4.8461E+01	3.5424E+00
4.0000E+03	1.3679E-05	1.5014E-03	3.2230E+01	3.0996E+00
4.5000E+03	9.5203E-06	1.0450E-03	2.2432E+01	2.7552E+00
5.0000E+03	6.8686E-06	7.5390E-04	1.6184E+01	2.4797E+00
6.0000E+03	3.8820E-06	4.2609E-04	9.1469E+00	2.0664E+00
7.0000E+03	2.3809E-06	2.6133E-04	5.6100E+00	1.7712E+00
8.0000E+03	1.5502E-06	1.7015E-04	3.6526E+00	1.5498E+00
9.0000E+03	1.0562E-06	1.1593E-04	2.4886E+00	1.3776E+00
1.0000E+04	7.1196E-07	7.8145E-05	1.6775E+00	1.2398E+00
1.2500E+04	3.4476E-07	3.7842E-05	8.1234E-01	9.9187E-01
1.5000E+04	1.9065E-07	2.0925E-05	4.4920E-01	8.2656E-01
1.7500E+04	1.1552E-07	1.2679E-05	2.7219E-01	7.0848E-01
2.0000E+04	7.4855E-08	8.2162E-06	1.7638E-01	6.1992E-01
2.2500E+04	5.1050E-08	5.6033E-06	1.2029E-01	5.5104E-01
2.5000E+04	3.6250E-08	3.9788E-06	8.5413E-02	4.9594E-01
2.7500E+04	2.6541E-08	2.9132E-06	6.2537E-02	4.5085E-01
3.0000E+04	1.9904E-08	2.1847E-06	4.6898E-02	4.1328E-01
3.5000E+04	1.1947E-08	1.3114E-06	2.8151E-02	3.5424E-01
4.0000E+04	7.6783E-09	8.4278E-07	1.8092E-02	3.0996E-01
4.5000E+04	5.1988E-09	5.7063E-07	1.2250E-02	2.7552E-01
5.0000E+04	3.6680E-09	4.0260E-07	8.6426E-03	2.4797E-01
6.0000E+04	2.0059E-09	2.2017E-07	4.7264E-03	2.0664E-01
7.0000E+04	1.2040E-09	1.3215E-07	2.8369E-03	1.7712E-01
8.0000E+04	7.7412E-10	8.4968E-08	1.8240E-03	1.5498E-01
9.0000E+04	5.2476E-10	5.7598E-08	1.2365E-03	1.3776E-01
1.0000E+05	3.7080E-10	4.0699E-08	8.7369E-04	1.2398E-01

When photon energy, E , is higher than 10^5 eV, the photoabsorption cross section of each atom, σ_a , in Mb is given by

$$\sigma_a = 680 (Z_c - 0.3)^6 \left(\frac{Ry}{E} \right)^4 \frac{\exp[-4\chi \arctan(\chi^{-1})]}{1 - \exp(-2\pi\chi)}.$$

Here Z_c denotes the atomic number of constituent atoms and E is photon energy in eV.

The quantity χ is given by

$$\chi = \sqrt{\frac{E_K}{E - E_K}},$$

where $E_K = 13.6$ and 291.1 eV for hydrogen and carbon atoms, respectively.

