

Buckminsterfullerene (C₆₀)

Z = 360

Molecular Mass : $M_A = 720.642$

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

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

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)
3.0000E+00	6.5128E-02	7.1485E+00	5.9737E+03	4.1328E+03
3.1062E+00	8.1250E-02	8.9181E+00	7.4526E+03	3.9915E+03
3.2464E+00	1.4608E-01	1.6034E+01	1.3399E+04	3.8191E+03
3.3943E+00	2.4351E-01	2.6728E+01	2.2335E+04	3.6527E+03
3.5043E+00	3.3560E-01	3.6836E+01	3.0783E+04	3.5381E+03
3.5725E+00	4.2782E-01	4.6958E+01	3.9241E+04	3.4705E+03
3.6521E+00	6.1238E-01	6.7216E+01	5.6170E+04	3.3949E+03
3.7052E+00	7.4814E-01	8.2117E+01	6.8622E+04	3.3462E+03
3.7469E+00	7.9691E-01	8.7470E+01	7.3095E+04	3.3090E+03
3.7924E+00	7.8595E-01	8.6266E+01	7.2090E+04	3.2693E+03
3.8569E+00	6.9335E-01	7.6103E+01	6.3596E+04	3.2146E+03
3.9100E+00	6.2256E-01	6.8332E+01	5.7103E+04	3.1710E+03
3.9858E+00	5.7887E-01	6.3537E+01	5.3096E+04	3.1106E+03
4.0427E+00	5.6784E-01	6.2327E+01	5.2084E+04	3.0669E+03
4.1450E+00	6.1104E-01	6.7069E+01	5.6047E+04	2.9912E+03
4.2322E+00	6.8690E-01	7.5395E+01	6.3005E+04	2.9295E+03
4.3043E+00	7.8452E-01	8.6110E+01	7.1959E+04	2.8805E+03
4.3649E+00	8.9303E-01	9.8020E+01	8.1912E+04	2.8405E+03
4.4218E+00	1.0668E+00	1.1710E+02	9.7852E+04	2.8039E+03
4.5052E+00	1.3981E+00	1.5346E+02	1.2824E+05	2.7520E+03
4.5772E+00	1.7240E+00	1.8923E+02	1.5814E+05	2.7087E+03
4.6493E+00	2.1042E+00	2.3096E+02	1.9301E+05	2.6667E+03
4.7137E+00	2.4139E+00	2.6495E+02	2.2141E+05	2.6303E+03
4.7820E+00	2.6963E+00	2.9595E+02	2.4731E+05	2.5927E+03
4.8464E+00	2.9353E+00	3.2218E+02	2.6923E+05	2.5583E+03
4.8881E+00	3.0112E+00	3.3051E+02	2.7620E+05	2.5364E+03
4.9374E+00	2.9078E+00	3.1917E+02	2.6672E+05	2.5111E+03
4.9678E+00	2.7393E+00	3.0067E+02	2.5126E+05	2.4958E+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)
4.9905E+00	2.5110E+00	2.7561E+02	2.3032E+05	2.4844E+03
5.0246E+00	2.2283E+00	2.4458E+02	2.0438E+05	2.4675E+03
5.0663E+00	2.0380E+00	2.2369E+02	1.8693E+05	2.4472E+03
5.1081E+00	1.9183E+00	2.1055E+02	1.7595E+05	2.4272E+03
5.1498E+00	1.8638E+00	2.0457E+02	1.7095E+05	2.4076E+03
5.2028E+00	1.8637E+00	2.0456E+02	1.7094E+05	2.3830E+03
5.3014E+00	1.9558E+00	2.1467E+02	1.7939E+05	2.3387E+03
5.4076E+00	2.0859E+00	2.2895E+02	1.9133E+05	2.2928E+03
5.5251E+00	2.2758E+00	2.4980E+02	2.0875E+05	2.2440E+03
5.6085E+00	2.5147E+00	2.7602E+02	2.3066E+05	2.2106E+03
5.6881E+00	2.8243E+00	3.0999E+02	2.5905E+05	2.1797E+03
5.7791E+00	3.2643E+00	3.5829E+02	2.9941E+05	2.1454E+03
5.8512E+00	3.5684E+00	3.9167E+02	3.2731E+05	2.1190E+03
5.9118E+00	3.8291E+00	4.2029E+02	3.5122E+05	2.0972E+03
5.9763E+00	3.9213E+00	4.3041E+02	3.5968E+05	2.0746E+03
6.0218E+00	3.9430E+00	4.3279E+02	3.6166E+05	2.0589E+03
6.0825E+00	3.9374E+00	4.3217E+02	3.6115E+05	2.0384E+03
6.1355E+00	3.8612E+00	4.2381E+02	3.5416E+05	2.0208E+03
6.2114E+00	3.6761E+00	4.0350E+02	3.3719E+05	1.9961E+03
6.2531E+00	3.5510E+00	3.8977E+02	3.2571E+05	1.9828E+03
6.3327E+00	3.2139E+00	3.5276E+02	2.9478E+05	1.9578E+03
6.4009E+00	2.8930E+00	3.1754E+02	2.6536E+05	1.9370E+03
6.4464E+00	2.5831E+00	2.8353E+02	2.3693E+05	1.9233E+03
6.4995E+00	2.3112E+00	2.5368E+02	2.1199E+05	1.9076E+03
6.5716E+00	1.9034E+00	2.0892E+02	1.7459E+05	1.8867E+03
6.6436E+00	1.6043E+00	1.7609E+02	1.4715E+05	1.8662E+03
6.6853E+00	1.0419E+00	1.1437E+02	9.5571E+04	1.8546E+03
6.8470E+00	8.8277E-01	9.6893E+01	8.0970E+04	1.8108E+03
7.1009E+00	7.7109E-01	8.4635E+01	7.0726E+04	1.7460E+03
7.3549E+00	7.3884E-01	8.1095E+01	6.7768E+04	1.6857E+03
7.6000E+00	7.6000E-01	8.3418E+01	6.9709E+04	1.6314E+03
7.6781E+00	9.1304E-01	1.0022E+02	8.3747E+04	1.6148E+03
7.7743E+00	1.0501E+00	1.1526E+02	9.6317E+04	1.5948E+03
7.8544E+00	1.1282E+00	1.2383E+02	1.0348E+05	1.5785E+03
7.9507E+00	1.1171E+00	1.2261E+02	1.0246E+05	1.5594E+03
8.0791E+00	9.7210E-01	1.0670E+02	8.9164E+04	1.5346E+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)
8.1594E+00	8.8289E-01	9.6907E+01	8.0981E+04	1.5195E+03
8.3198E+00	7.9369E-01	8.7116E+01	7.2800E+04	1.4902E+03
8.5284E+00	7.7145E-01	8.4676E+01	7.0760E+04	1.4538E+03
8.6727E+00	7.8265E-01	8.5904E+01	7.1787E+04	1.4296E+03
8.8811E+00	1.0393E+00	1.1407E+02	9.5327E+04	1.3960E+03
9.0573E+00	1.3628E+00	1.4959E+02	1.2500E+05	1.3689E+03
9.1534E+00	1.5859E+00	1.7407E+02	1.4547E+05	1.3545E+03
9.2976E+00	1.7868E+00	1.9612E+02	1.6389E+05	1.3335E+03
9.4419E+00	1.9542E+00	2.1449E+02	1.7925E+05	1.3131E+03
9.6183E+00	2.0770E+00	2.2797E+02	1.9050E+05	1.2890E+03
9.8588E+00	2.1886E+00	2.4023E+02	2.0075E+05	1.2576E+03
1.0035E+01	2.2555E+00	2.4757E+02	2.0689E+05	1.2355E+03
1.0324E+01	2.3226E+00	2.5493E+02	2.1304E+05	1.2009E+03
1.0677E+01	2.3338E+00	2.5616E+02	2.1407E+05	1.1612E+03
1.1030E+01	2.3452E+00	2.5741E+02	2.1511E+05	1.1241E+03
1.1238E+01	2.4344E+00	2.6720E+02	2.2329E+05	1.1033E+03
1.1462E+01	2.7357E+00	3.0028E+02	2.5093E+05	1.0817E+03
1.1735E+01	3.0369E+00	3.3334E+02	2.7856E+05	1.0565E+03
1.1959E+01	3.2935E+00	3.6150E+02	3.0209E+05	1.0367E+03
1.2072E+01	3.4275E+00	3.7621E+02	3.1438E+05	1.0270E+03
1.2168E+01	3.5836E+00	3.9334E+02	3.2870E+05	1.0189E+03
1.2264E+01	3.7845E+00	4.1539E+02	3.4713E+05	1.0110E+03
1.2424E+01	3.9630E+00	4.3498E+02	3.6350E+05	9.9794E+02
1.2584E+01	4.1416E+00	4.5458E+02	3.7988E+05	9.8525E+02
1.2777E+01	4.2643E+00	4.6806E+02	3.9114E+05	9.7037E+02
1.2953E+01	4.3648E+00	4.7908E+02	4.0035E+05	9.5719E+02
1.3354E+01	4.5323E+00	4.9747E+02	4.1571E+05	9.2844E+02
1.3867E+01	4.7444E+00	5.2075E+02	4.3517E+05	8.9410E+02
1.4364E+01	4.9342E+00	5.4158E+02	4.5258E+05	8.6316E+02
1.4990E+01	5.1463E+00	5.6486E+02	4.7204E+05	8.2711E+02
1.5407E+01	5.3361E+00	5.8570E+02	4.8945E+05	8.0473E+02
1.5695E+01	5.5704E+00	6.1141E+02	5.1094E+05	7.8996E+02
1.5872E+01	5.7936E+00	6.3591E+02	5.3141E+05	7.8115E+02
1.6080E+01	6.2845E+00	6.8979E+02	5.7643E+05	7.7105E+02
1.6256E+01	6.7641E+00	7.4244E+02	6.2043E+05	7.6270E+02
1.6384E+01	7.0765E+00	7.7673E+02	6.4908E+05	7.5674E+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)
1.6624E+01	7.5005E+00	8.2326E+02	6.8797E+05	7.4581E+02
1.6897E+01	7.8575E+00	8.6245E+02	7.2072E+05	7.3376E+02
1.7153E+01	8.0807E+00	8.8695E+02	7.4119E+05	7.2281E+02
1.7490E+01	8.2370E+00	9.0410E+02	7.5552E+05	7.0889E+02
1.7955E+01	8.3711E+00	9.1882E+02	7.6783E+05	6.9053E+02
1.8388E+01	8.6500E+00	9.4943E+02	7.9341E+05	6.7427E+02
1.8869E+01	8.9960E+00	9.8741E+02	8.2514E+05	6.5708E+02
1.9494E+01	9.5540E+00	1.0487E+03	8.7633E+05	6.3601E+02
2.0023E+01	1.0023E+01	1.1001E+03	9.1930E+05	6.1921E+02
2.0584E+01	1.0503E+01	1.1528E+03	9.6333E+05	6.0233E+02
2.1113E+01	1.0860E+01	1.1920E+03	9.9609E+05	5.8724E+02
2.1514E+01	1.1083E+01	1.2165E+03	1.0166E+06	5.7630E+02
2.1739E+01	1.1172E+01	1.2263E+03	1.0247E+06	5.7033E+02
2.1979E+01	1.1195E+01	1.2287E+03	1.0268E+06	5.6410E+02
2.2172E+01	1.1061E+01	1.2140E+03	1.0145E+06	5.5919E+02
2.2397E+01	1.0849E+01	1.1908E+03	9.9509E+05	5.5357E+02
2.2734E+01	1.0403E+01	1.1418E+03	9.5418E+05	5.4537E+02
2.3183E+01	9.7225E+00	1.0672E+03	8.9178E+05	5.3481E+02
2.3633E+01	9.1202E+00	1.0010E+03	8.3654E+05	5.2462E+02
2.4018E+01	8.6407E+00	9.4841E+02	7.9256E+05	5.1621E+02
2.4548E+01	8.1054E+00	8.8966E+02	7.4345E+05	5.0507E+02
2.5094E+01	7.6148E+00	8.3581E+02	6.9845E+05	4.9408E+02
2.5639E+01	7.1465E+00	7.8441E+02	6.5550E+05	4.8358E+02
2.6056E+01	6.8008E+00	7.4647E+02	6.2379E+05	4.7584E+02
2.6538E+01	6.4329E+00	7.0608E+02	5.9004E+05	4.6719E+02
2.6731E+01	6.2990E+00	6.9139E+02	5.7777E+05	4.6382E+02
2.7533E+01	6.0204E+00	6.6081E+02	5.5221E+05	4.5031E+02
2.8415E+01	5.7753E+00	6.3390E+02	5.2973E+05	4.3633E+02
2.9394E+01	5.5079E+00	6.0455E+02	5.0520E+05	4.2180E+02
3.0308E+01	5.2627E+00	5.7764E+02	4.8271E+05	4.0908E+02
3.1367E+01	4.9953E+00	5.4829E+02	4.5818E+05	3.9527E+02
3.2009E+01	4.8282E+00	5.2995E+02	4.4286E+05	3.8734E+02
3.2731E+01	4.5496E+00	4.9937E+02	4.1730E+05	3.7880E+02
3.3677E+01	4.1930E+00	4.6022E+02	3.8459E+05	3.6816E+02
3.4351E+01	3.9477E+00	4.3331E+02	3.6210E+05	3.6093E+02
3.5009E+01	3.6913E+00	4.0516E+02	3.3858E+05	3.5415E+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)
3.5779E+01	3.4016E+00	3.7336E+02	3.1201E+05	3.4653E+02
3.6662E+01	3.0894E+00	3.3910E+02	2.8337E+05	3.3818E+02
3.7544E+01	2.7551E+00	3.0241E+02	2.5271E+05	3.3024E+02
3.8362E+01	2.4654E+00	2.7061E+02	2.2614E+05	3.2320E+02
3.9229E+01	2.1422E+00	2.3513E+02	1.9649E+05	3.1605E+02
3.9838E+01	1.8970E+00	2.0821E+02	1.7400E+05	3.1122E+02
4.0800E+01	1.5402E+00	1.6906E+02	1.4127E+05	3.0388E+02
4.5000E+01	1.2804E+00	1.4054E+02	1.1744E+05	2.7552E+02
5.0000E+01	1.1043E+00	1.2120E+02	1.0129E+05	2.4797E+02
6.0000E+01	7.9019E-01	8.6732E+01	7.2479E+04	2.0664E+02
7.0000E+01	5.7542E-01	6.3158E+01	5.2779E+04	1.7712E+02
8.0000E+01	4.3341E-01	4.7571E+01	3.9753E+04	1.5498E+02
9.0000E+01	3.3715E-01	3.7006E+01	3.0924E+04	1.3776E+02
1.0000E+02	2.6962E-01	2.9593E+01	2.4730E+04	1.2398E+02
1.2500E+02	1.6818E-01	1.8459E+01	1.5426E+04	9.9187E+01
1.5000E+02	1.1196E-01	1.2289E+01	1.0269E+04	8.2656E+01
1.7500E+02	7.9574E-02	8.7341E+00	7.2988E+03	7.0848E+01
2.0000E+02	5.6231E-02	6.1719E+00	5.1577E+03	6.1992E+01
2.2500E+02	4.0365E-02	4.4305E+00	3.7024E+03	5.5104E+01
2.5000E+02	2.9605E-02	3.2494E+00	2.7154E+03	4.9594E+01
2.7500E+02	2.2190E-02	2.4356E+00	2.0353E+03	4.5085E+01
2.8000E+02	2.1463E-02	2.3558E+00	1.9687E+03	4.4280E+01
2.8109E+02	2.7814E-02	3.0529E+00	2.5512E+03	4.4108E+01
2.8177E+02	3.6096E-02	3.9619E+00	3.3108E+03	4.4002E+01
2.8246E+02	4.6242E-02	5.0756E+00	4.2415E+03	4.3894E+01
2.8296E+02	6.3879E-02	7.0115E+00	5.8592E+03	4.3817E+01
2.8322E+02	8.1557E-02	8.9518E+00	7.4807E+03	4.3777E+01
2.8339E+02	1.0857E-01	1.1917E+01	9.9585E+03	4.3750E+01
2.8355E+02	1.6078E-01	1.7647E+01	1.4747E+04	4.3726E+01
2.8367E+02	5.1887E-01	5.6952E+01	4.7592E+04	4.3707E+01
2.8383E+02	9.1706E-01	1.0066E+02	8.4116E+04	4.3683E+01
2.8400E+02	1.3629E+00	1.4959E+02	1.2501E+05	4.3656E+01
2.8426E+02	1.0923E+00	1.1989E+02	1.0019E+05	4.3616E+01
2.8446E+02	6.9500E-01	7.6284E+01	6.3748E+04	4.3586E+01
2.8459E+02	4.8048E-01	5.2738E+01	4.4071E+04	4.3566E+01
2.8489E+02	1.8293E-01	2.0079E+01	1.6779E+04	4.3520E+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)
2.8494E+02	5.3824E-01	5.9078E+01	4.9369E+04	4.3512E+01
2.8507E+02	8.2547E-01	9.0604E+01	7.5714E+04	4.3493E+01
2.8519E+02	9.8861E-01	1.0851E+02	9.0679E+04	4.3474E+01
2.8529E+02	1.0036E+00	1.1015E+02	9.2052E+04	4.3459E+01
2.8555E+02	9.6528E-01	1.0595E+02	8.8539E+04	4.3419E+01
2.8567E+02	8.6640E-01	9.5097E+01	7.9469E+04	4.3401E+01
2.8580E+02	9.8016E-01	1.0758E+02	8.9904E+04	4.3381E+01
2.8598E+02	1.0034E+00	1.1013E+02	9.2035E+04	4.3354E+01
2.8605E+02	9.8852E-01	1.0850E+02	9.0670E+04	4.3344E+01
2.8626E+02	6.7792E-01	7.4409E+01	6.2181E+04	4.3312E+01
2.8641E+02	4.0092E-01	4.4005E+01	3.6774E+04	4.3289E+01
2.8643E+02	3.5988E-01	3.9500E+01	3.3009E+04	4.3286E+01
2.8661E+02	3.3187E-01	3.6426E+01	3.0440E+04	4.3259E+01
2.8679E+02	3.4677E-01	3.8062E+01	3.1807E+04	4.3232E+01
2.8714E+02	5.2203E-01	5.7299E+01	4.7882E+04	4.3179E+01
2.8745E+02	6.9078E-01	7.5821E+01	6.3361E+04	4.3132E+01
2.8763E+02	7.0754E-01	7.7661E+01	6.4898E+04	4.3105E+01
2.8788E+02	6.8512E-01	7.5200E+01	6.2841E+04	4.3068E+01
2.8841E+02	5.9270E-01	6.5055E+01	5.4364E+04	4.2989E+01
2.8892E+02	4.9563E-01	5.4401E+01	4.5461E+04	4.2913E+01
2.8922E+02	4.6854E-01	5.1427E+01	4.2976E+04	4.2868E+01
2.8952E+02	4.6848E-01	5.1421E+01	4.2971E+04	4.2824E+01
2.8983E+02	4.9921E-01	5.4794E+01	4.5789E+04	4.2778E+01
2.9006E+02	5.5140E-01	6.0522E+01	5.0576E+04	4.2744E+01
2.9031E+02	6.9498E-01	7.6281E+01	6.3746E+04	4.2708E+01
2.9064E+02	8.6373E-01	9.4803E+01	7.9224E+04	4.2659E+01
2.9069E+02	8.1802E-01	8.9786E+01	7.5031E+04	4.2652E+01
2.9087E+02	7.9187E-01	8.6917E+01	7.2633E+04	4.2625E+01
2.9117E+02	7.7131E-01	8.4660E+01	7.0747E+04	4.2581E+01
2.9145E+02	7.7127E-01	8.4655E+01	7.0743E+04	4.2540E+01
2.9186E+02	7.8985E-01	8.6695E+01	7.2448E+04	4.2481E+01
2.9211E+02	8.1686E-01	8.9659E+01	7.4925E+04	4.2444E+01
2.9231E+02	8.4946E-01	9.3238E+01	7.7915E+04	4.2415E+01
2.9267E+02	8.6619E-01	9.5074E+01	7.9450E+04	4.2363E+01
2.9294E+02	8.5029E-01	9.3328E+01	7.7991E+04	4.2324E+01
2.9317E+02	7.9616E-01	8.7388E+01	7.3027E+04	4.2291E+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)
2.9332E+02	7.5697E-01	8.3086E+01	6.9432E+04	4.2269E+01
2.9345E+02	7.3270E-01	8.0422E+01	6.7206E+04	4.2251E+01
2.9370E+02	7.1774E-01	7.8780E+01	6.5833E+04	4.2215E+01
2.9398E+02	7.4381E-01	8.1641E+01	6.8225E+04	4.2174E+01
2.9441E+02	8.2767E-01	9.0846E+01	7.5917E+04	4.2113E+01
2.9479E+02	9.3203E-01	1.0230E+02	8.5488E+04	4.2058E+01
2.9492E+02	9.5067E-01	1.0435E+02	8.7199E+04	4.2040E+01
2.9517E+02	9.5811E-01	1.0516E+02	8.7881E+04	4.2004E+01
2.9550E+02	9.4874E-01	1.0414E+02	8.7022E+04	4.1957E+01
2.9571E+02	9.4029E-01	1.0321E+02	8.6247E+04	4.1928E+01
2.9583E+02	9.2165E-01	1.0116E+02	8.4536E+04	4.1911E+01
2.9611E+02	9.2808E-01	1.0187E+02	8.5126E+04	4.1871E+01
2.9669E+02	9.7373E-01	1.0688E+02	8.9314E+04	4.1789E+01
2.9697E+02	9.9330E-01	1.0903E+02	9.1108E+04	4.1750E+01
2.9730E+02	1.0044E+00	1.1025E+02	9.2128E+04	4.1703E+01
2.9804E+02	9.8843E-01	1.0849E+02	9.0662E+04	4.1600E+01
2.9857E+02	9.9761E-01	1.0950E+02	9.1504E+04	4.1526E+01
2.9905E+02	1.0237E+00	1.1236E+02	9.3897E+04	4.1459E+01
2.9933E+02	1.0423E+00	1.1440E+02	9.5599E+04	4.1421E+01
2.9976E+02	1.0488E+00	1.1512E+02	9.6198E+04	4.1361E+01
3.0016E+02	1.0459E+00	1.1480E+02	9.5936E+04	4.1306E+01
3.0103E+02	9.9256E-01	1.0894E+02	9.1041E+04	4.1187E+01
3.0224E+02	9.1592E-01	1.0053E+02	8.4011E+04	4.1022E+01
3.0356E+02	8.3271E-01	9.1399E+01	7.6378E+04	4.0843E+01
3.0503E+02	7.4853E-01	8.2160E+01	6.8658E+04	4.0647E+01
3.0650E+02	6.7182E-01	7.3740E+01	6.1621E+04	4.0452E+01
3.0746E+02	6.3063E-01	6.9218E+01	5.7843E+04	4.0325E+01
3.0873E+02	5.8659E-01	6.4385E+01	5.3804E+04	4.0159E+01
3.0997E+02	5.5002E-01	6.0371E+01	5.0450E+04	3.9999E+01
3.1134E+02	5.2182E-01	5.7275E+01	4.7863E+04	3.9823E+01
3.1258E+02	4.9923E-01	5.4796E+01	4.5791E+04	3.9665E+01
3.1405E+02	4.8314E-01	5.3029E+01	4.4315E+04	3.9479E+01
3.1557E+02	4.6797E-01	5.1365E+01	4.2924E+04	3.9289E+01
3.1696E+02	4.5748E-01	5.0213E+01	4.1961E+04	3.9117E+01
3.1861E+02	4.4695E-01	4.9058E+01	4.0996E+04	3.8914E+01
3.2000E+02	4.3367E-01	4.7600E+01	3.9778E+04	3.8745E+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)
3.5000E+02	3.5478E-01	3.8941E+01	3.2541E+04	3.5424E+01
4.0000E+02	2.5953E-01	2.8486E+01	2.3805E+04	3.0996E+01
4.5000E+02	1.9491E-01	2.1394E+01	1.7878E+04	2.7552E+01
5.0000E+02	1.4988E-01	1.6451E+01	1.3748E+04	2.4797E+01
6.0000E+02	9.4061E-02	1.0324E+01	8.6276E+03	2.0664E+01
7.0000E+02	6.2909E-02	6.9050E+00	5.7702E+03	1.7712E+01
8.0000E+02	4.4205E-02	4.8520E+00	4.0546E+03	1.5498E+01
9.0000E+02	3.2302E-02	3.5455E+00	2.9629E+03	1.3776E+01
1.0000E+03	2.4365E-02	2.6743E+00	2.2348E+03	1.2398E+01
1.2500E+03	1.3377E-02	1.4682E+00	1.2270E+03	9.9187E+00
1.5000E+03	8.1908E-03	8.9903E-01	7.5129E+02	8.2656E+00
1.7500E+03	4.8811E-03	5.3575E-01	4.4771E+02	7.0848E+00
2.0000E+03	3.2982E-03	3.6202E-01	3.0252E+02	6.1992E+00
2.2500E+03	2.3278E-03	2.5550E-01	2.1351E+02	5.5104E+00
2.5000E+03	1.7009E-03	1.8669E-01	1.5601E+02	4.9594E+00
2.7500E+03	1.2786E-03	1.4034E-01	1.1727E+02	4.5085E+00
3.0000E+03	9.8398E-04	1.0800E-01	9.0254E+01	4.1328E+00
3.5000E+03	6.1682E-04	6.7703E-02	5.6577E+01	3.5424E+00
4.0000E+03	4.1025E-04	4.5029E-02	3.7629E+01	3.0996E+00
4.5000E+03	2.8554E-04	3.1341E-02	2.6191E+01	2.7552E+00
5.0000E+03	2.0602E-04	2.2613E-02	1.8897E+01	2.4797E+00
6.0000E+03	1.1645E-04	1.2782E-02	1.0682E+01	2.0664E+00
7.0000E+03	7.1436E-05	7.8409E-03	6.5524E+00	1.7712E+00
8.0000E+03	4.6519E-05	5.1060E-03	4.2669E+00	1.5498E+00
9.0000E+03	3.1702E-05	3.4796E-03	2.9078E+00	1.3776E+00
1.0000E+04	2.1353E-05	2.3437E-03	1.9586E+00	1.2398E+00
1.2500E+04	1.0341E-05	1.1350E-03	9.4849E-01	9.9187E-01
1.5000E+04	5.7181E-06	6.2762E-04	5.2448E-01	8.2656E-01
1.7500E+04	3.4649E-06	3.8031E-04	3.1782E-01	7.0848E-01
2.0000E+04	2.2452E-06	2.4644E-04	2.0594E-01	6.1992E-01
2.2500E+04	1.5312E-06	1.6807E-04	1.4045E-01	5.5104E-01
2.5000E+04	1.0873E-06	1.1934E-04	9.9730E-02	4.9594E-01
2.7500E+04	7.9609E-07	8.7380E-05	7.3020E-02	4.5085E-01
3.0000E+04	5.9701E-07	6.5528E-05	5.4760E-02	4.1328E-01
3.5000E+04	3.5836E-07	3.9334E-05	3.2870E-02	3.5424E-01
4.0000E+04	2.3031E-07	2.5279E-05	2.1125E-02	3.0996E-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)
4.5000E+04	1.5594E-07	1.7116E-05	1.4303E-02	2.7552E-01
5.0000E+04	1.1002E-07	1.2076E-05	1.0091E-02	2.4797E-01
6.0000E+04	6.0167E-08	6.6040E-06	5.5187E-03	2.0664E-01
7.0000E+04	3.6114E-08	3.9639E-06	3.3125E-03	1.7712E-01
8.0000E+04	2.3220E-08	2.5486E-06	2.1298E-03	1.5498E-01
9.0000E+04	1.5740E-08	1.7277E-06	1.4437E-03	1.3776E-01
1.0000E+05	1.1122E-08	1.2208E-06	1.0202E-03	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 $E_K = 290.1$ eV.

