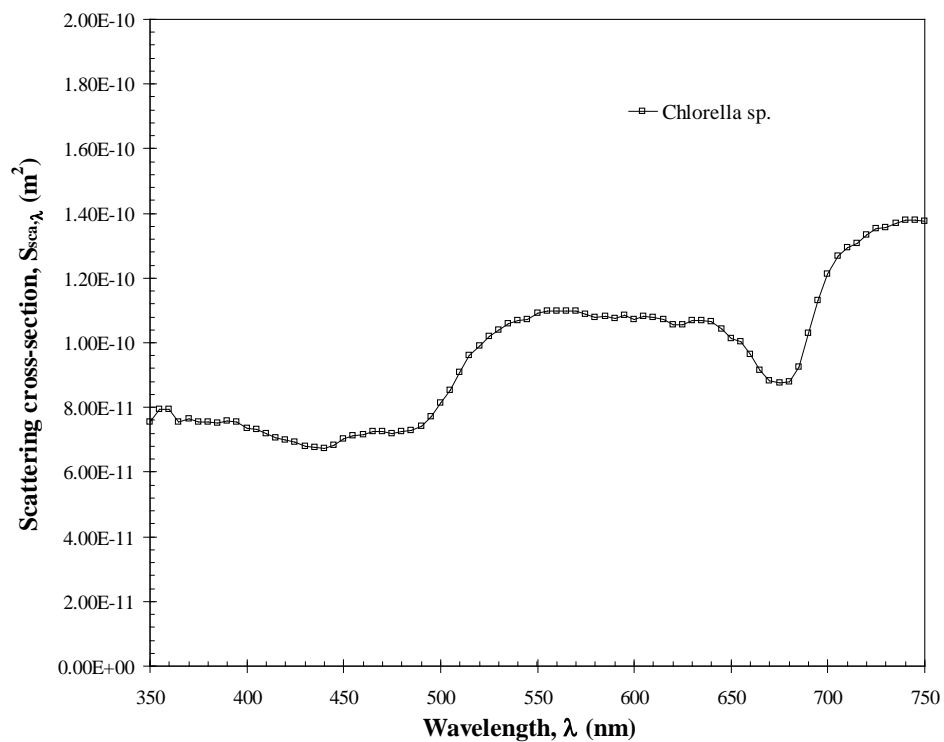
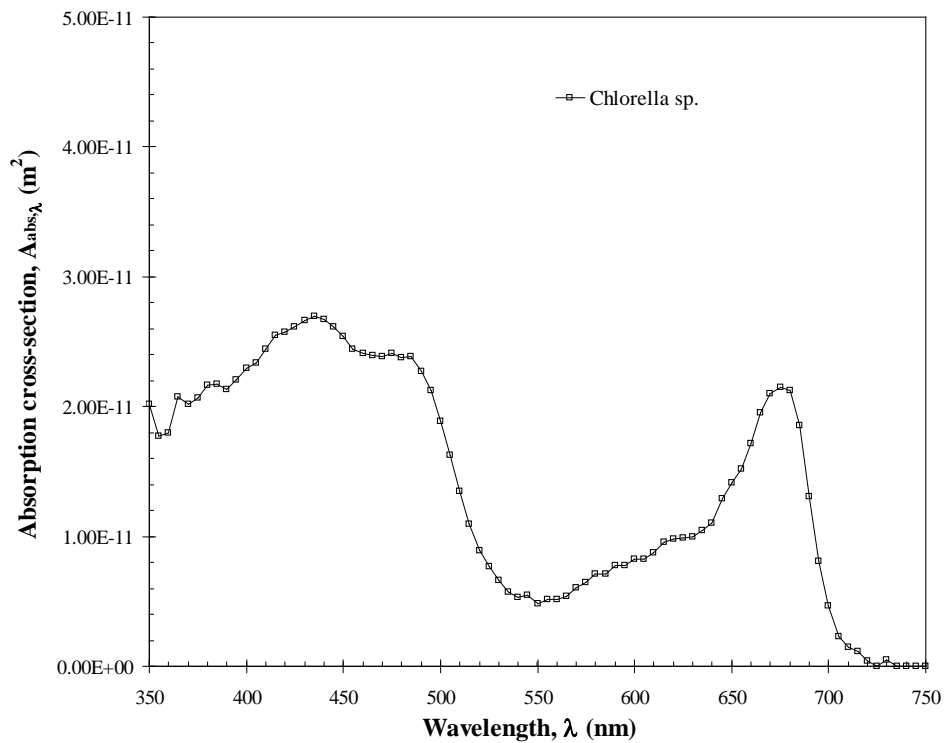
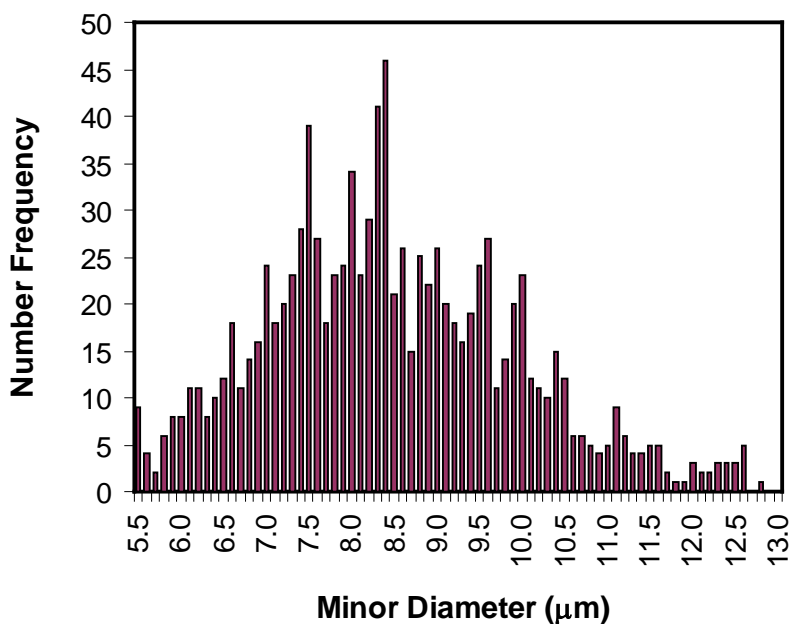
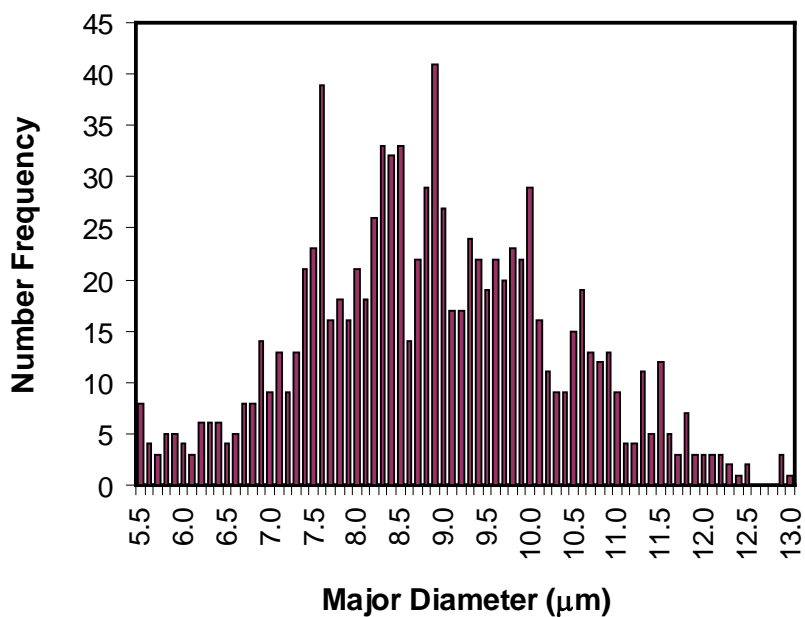


Absorption and scattering coefficients of *Chlorella* sp.

Source: H. Berberoglu, Pedro S. Gomez and L. Pilon, *Radiation characteristics of Botryococcus braunii, Chlorococcum littorale and Chlorella sp. used for CO₂ fixation and biofuel production*, Journal of Quantitative Spectroscopy & Radiative Transfer, vol. 110, pp. 1879-1893, 2009. <http://dx.doi.org/10.1016/j.jqsrt.2009.04.005>





Summary for <i>Chlorella</i> sp.				
	Major Diameter (µm)	Minor Diameter (µm)	Circularity	Feret (µm)
Average	12.0	9.5	0.86	12.8
Stdev	4.9	2.9	0.14	5.3

Chlorophyll Concentrations			
Stats	Chl a (g/kg)	Chl b (g/kg)	Chl tot (g/kg)
Average	19.21 ± 0.72	28.93 ± 2.37	48.14 ± 2.95

λ (nm)	$A_{\text{abs},\lambda}$ (m ²)	$S_{\text{sca},\lambda}$ (m ²)	$E_{\text{ext},\lambda}$ (m ²)	albedo
350	2.01E-11	7.55E-11	9.56E-11	0.789
355	1.77E-11	7.94E-11	9.72E-11	0.817
360	1.80E-11	7.93E-11	9.73E-11	0.815
365	2.07E-11	7.54E-11	9.62E-11	0.784
370	2.02E-11	7.66E-11	9.68E-11	0.792
375	2.06E-11	7.56E-11	9.62E-11	0.786
380	2.16E-11	7.55E-11	9.72E-11	0.777
385	2.17E-11	7.53E-11	9.70E-11	0.776
390	2.13E-11	7.60E-11	9.73E-11	0.781
395	2.21E-11	7.55E-11	9.76E-11	0.774
400	2.30E-11	7.35E-11	9.64E-11	0.762
405	2.34E-11	7.31E-11	9.65E-11	0.758
410	2.44E-11	7.20E-11	9.64E-11	0.746
415	2.55E-11	7.05E-11	9.60E-11	0.735
420	2.57E-11	6.99E-11	9.56E-11	0.731
425	2.61E-11	6.93E-11	9.54E-11	0.726
430	2.67E-11	6.79E-11	9.46E-11	0.718
435	2.70E-11	6.77E-11	9.47E-11	0.715
440	2.67E-11	6.74E-11	9.42E-11	0.716
445	2.62E-11	6.84E-11	9.46E-11	0.723
450	2.54E-11	7.02E-11	9.57E-11	0.734
455	2.44E-11	7.13E-11	9.57E-11	0.745
460	2.41E-11	7.17E-11	9.58E-11	0.749
465	2.39E-11	7.26E-11	9.65E-11	0.752
470	2.38E-11	7.24E-11	9.63E-11	0.752
475	2.41E-11	7.18E-11	9.58E-11	0.749
480	2.38E-11	7.26E-11	9.64E-11	0.753
485	2.38E-11	7.28E-11	9.66E-11	0.753
490	2.27E-11	7.42E-11	9.69E-11	0.766
495	2.12E-11	7.71E-11	9.83E-11	0.784

λ (nm)	$A_{\text{abs},\lambda}$ (m ²)	$S_{\text{sca},\lambda}$ (m ²)	$E_{\text{ext},\lambda}$ (m ²)	albedo
500	1.89E-11	8.14E-11	1.00E-10	0.812
505	1.63E-11	8.54E-11	1.02E-10	0.840
510	1.35E-11	9.09E-11	1.04E-10	0.871
515	1.09E-11	9.60E-11	1.07E-10	0.898
520	8.87E-12	9.91E-11	1.08E-10	0.918
525	7.64E-12	1.02E-10	1.09E-10	0.930
530	6.58E-12	1.04E-10	1.11E-10	0.940
535	5.71E-12	1.06E-10	1.12E-10	0.949
540	5.32E-12	1.07E-10	1.12E-10	0.953
545	5.44E-12	1.07E-10	1.12E-10	0.952
550	4.82E-12	1.09E-10	1.14E-10	0.958
555	5.14E-12	1.10E-10	1.15E-10	0.955
560	5.16E-12	1.10E-10	1.15E-10	0.955
565	5.43E-12	1.10E-10	1.15E-10	0.953
570	6.06E-12	1.10E-10	1.16E-10	0.948
575	6.48E-12	1.09E-10	1.15E-10	0.944
580	7.12E-12	1.08E-10	1.15E-10	0.938
585	7.15E-12	1.08E-10	1.15E-10	0.938
590	7.72E-12	1.08E-10	1.15E-10	0.933
595	7.80E-12	1.09E-10	1.16E-10	0.933
600	8.27E-12	1.07E-10	1.15E-10	0.928
605	8.24E-12	1.08E-10	1.16E-10	0.929
610	8.75E-12	1.08E-10	1.17E-10	0.925
615	9.53E-12	1.07E-10	1.17E-10	0.918
620	9.81E-12	1.06E-10	1.15E-10	0.915
625	9.91E-12	1.06E-10	1.16E-10	0.914
630	9.98E-12	1.07E-10	1.17E-10	0.915
635	1.04E-11	1.07E-10	1.17E-10	0.911
640	1.10E-11	1.07E-10	1.18E-10	0.906
645	1.29E-11	1.04E-10	1.17E-10	0.890

λ (nm)	$A_{\text{abs},\lambda}$ (m ²)	$S_{\text{sca},\lambda}$ (m ²)	$E_{\text{ext},\lambda}$ (m ²)	albedo
650	1.41E-11	1.01E-10	1.16E-10	0.878
655	1.52E-11	1.00E-10	1.15E-10	0.869
660	1.72E-11	9.63E-11	1.13E-10	0.849
665	1.96E-11	9.16E-11	1.11E-10	0.824
670	2.10E-11	8.83E-11	1.09E-10	0.808
675	2.15E-11	8.76E-11	1.09E-10	0.803
680	2.13E-11	8.80E-11	1.09E-10	0.805
685	1.85E-11	9.24E-11	1.11E-10	0.833
690	1.30E-11	1.03E-10	1.16E-10	0.888
695	8.11E-12	1.13E-10	1.21E-10	0.933
700	4.68E-12	1.21E-10	1.26E-10	0.963
705	2.27E-12	1.27E-10	1.29E-10	0.982
710	1.51E-12	1.29E-10	1.31E-10	0.988
715	1.12E-12	1.31E-10	1.32E-10	0.992
720	4.09E-13	1.33E-10	1.34E-10	0.997
725	3.34E-14	1.35E-10	1.35E-10	1.000
730	4.54E-13	1.36E-10	1.36E-10	0.997
735	0.00	1.37E-10	1.36E-10	1.000
740	0.00	1.38E-10	1.38E-10	1.000
745	3.53E-14	1.38E-10	1.38E-10	1.000
750	0.00	1.37E-10	1.37E-10	1.000

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