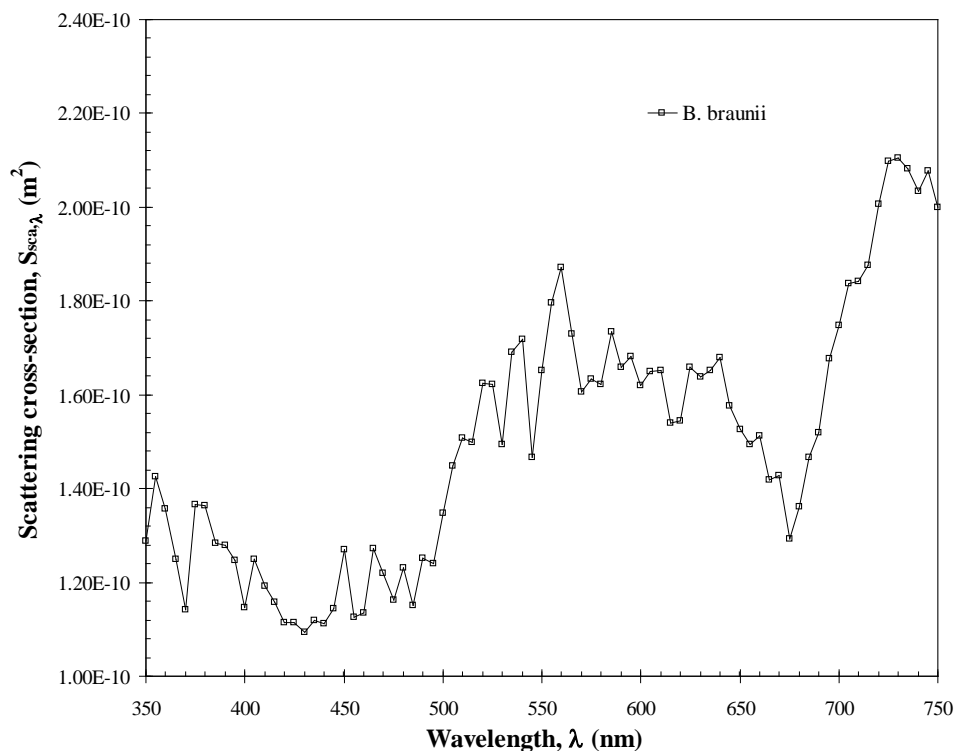
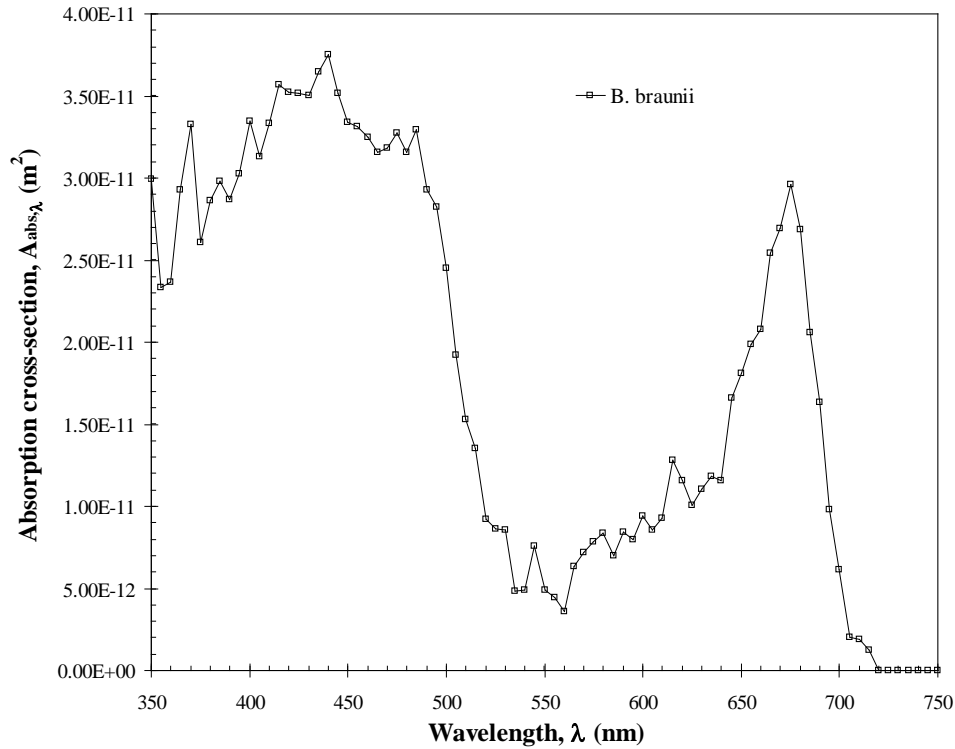
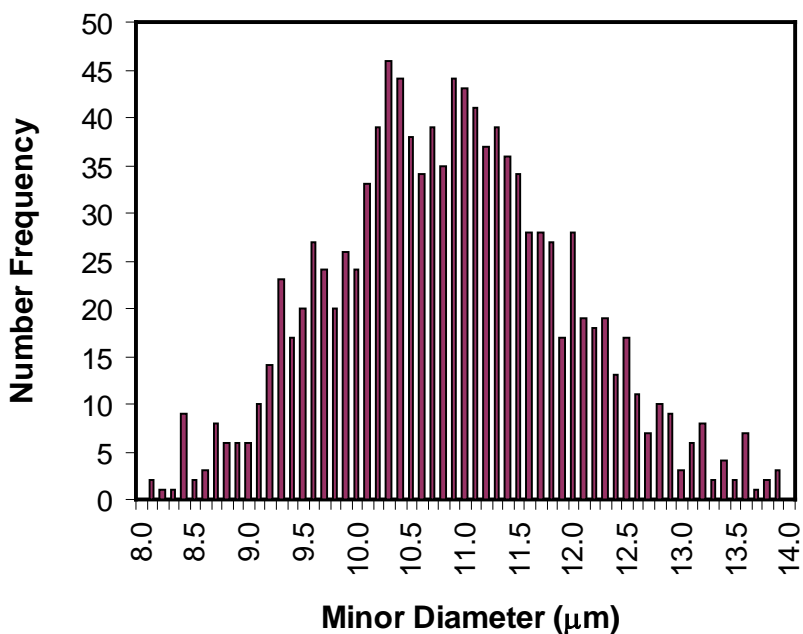
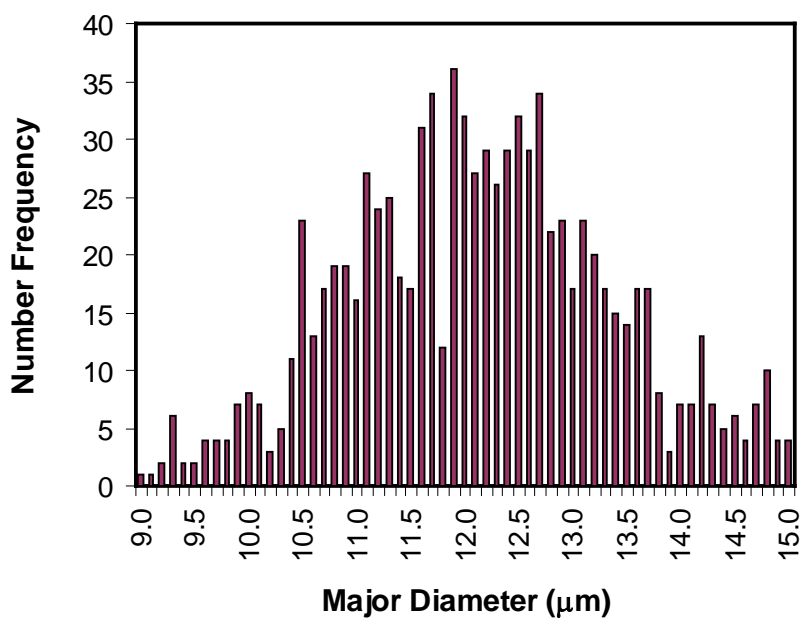


Absorption and scattering coefficients of *Botryococcus braunii*

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>Botryococcus braunii</i>				
	Major Diameter (μm)	Minor Diameter (μm)	Circularity	Feret (μm)
Average	13.3	10.3	0.85	14.1
Stdev	4.3	2.5	0.13	4.4

Chlorophyll Concentrations			
Stats	Chl a (g/kg)	Chl b (g/kg)	Chl tot (g/kg)
Average	183.99 ± 16.35	135.05 ± 10.81	319.04 ± 24.01

λ (nm)	$A_{abs,\lambda}$ (m ²)	$S_{sca,\lambda}$ (m ²)	$E_{ext,\lambda}$ (m ²)	albedo	λ (nm)	$A_{abs,\lambda}$ (m ²)	$S_{sca,\lambda}$ (m ²)	$E_{ext,\lambda}$ (m ²)	albedo	λ (nm)	$A_{abs,\lambda}$ (m ²)	$S_{sca,\lambda}$ (m ²)	$E_{ext,\lambda}$ (m ²)	albedo
350	2.99E-11	1.29E-10	1.59E-10	0.812	500	2.45E-11	1.35E-10	1.59E-10	0.846	650	1.81E-11	1.53E-10	1.71E-10	0.894
355	2.33E-11	1.42E-10	1.66E-10	0.859	505	1.92E-11	1.45E-10	1.64E-10	0.883	655	1.99E-11	1.49E-10	1.69E-10	0.883
360	2.37E-11	1.36E-10	1.59E-10	0.852	510	1.53E-11	1.51E-10	1.66E-10	0.908	660	2.08E-11	1.51E-10	1.72E-10	0.879
365	2.93E-11	1.25E-10	1.54E-10	0.810	515	1.36E-11	1.50E-10	1.63E-10	0.917	665	2.55E-11	1.42E-10	1.67E-10	0.848
370	3.33E-11	1.14E-10	1.48E-10	0.774	520	9.23E-12	1.62E-10	1.72E-10	0.946	670	2.69E-11	1.43E-10	1.70E-10	0.841
375	2.61E-11	1.37E-10	1.63E-10	0.840	525	8.65E-12	1.62E-10	1.71E-10	0.949	675	2.96E-11	1.29E-10	1.59E-10	0.814
380	2.86E-11	1.36E-10	1.65E-10	0.826	530	8.57E-12	1.49E-10	1.58E-10	0.946	680	2.69E-11	1.36E-10	1.63E-10	0.835
385	2.98E-11	1.28E-10	1.58E-10	0.812	535	4.83E-12	1.69E-10	1.74E-10	0.972	685	2.06E-11	1.47E-10	1.67E-10	0.877
390	2.87E-11	1.28E-10	1.57E-10	0.817	540	4.91E-12	1.72E-10	1.77E-10	0.972	690	1.64E-11	1.52E-10	1.68E-10	0.903
395	3.03E-11	1.25E-10	1.55E-10	0.805	545	7.61E-12	1.47E-10	1.54E-10	0.951	695	9.83E-12	1.68E-10	1.77E-10	0.945
400	3.35E-11	1.15E-10	1.48E-10	0.774	550	4.93E-12	1.65E-10	1.70E-10	0.971	700	6.16E-12	1.75E-10	1.81E-10	0.966
405	3.13E-11	1.25E-10	1.56E-10	0.800	555	4.46E-12	1.80E-10	1.84E-10	0.976	705	2.06E-12	1.84E-10	1.86E-10	0.989
410	3.33E-11	1.19E-10	1.53E-10	0.782	560	3.57E-12	1.87E-10	1.91E-10	0.981	710	1.91E-12	1.84E-10	1.86E-10	0.990
415	3.57E-11	1.16E-10	1.52E-10	0.765	565	6.35E-12	1.73E-10	1.79E-10	0.965	715	1.26E-12	1.88E-10	1.89E-10	0.993
420	3.52E-11	1.11E-10	1.47E-10	0.760	570	7.18E-12	1.61E-10	1.68E-10	0.957	720	0.00	2.01E-10	1.98E-10	1.000
425	3.51E-11	1.11E-10	1.46E-10	0.760	575	7.87E-12	1.63E-10	1.71E-10	0.954	725	0.00	2.10E-10	2.04E-10	1.000
430	3.50E-11	1.09E-10	1.44E-10	0.757	580	8.37E-12	1.62E-10	1.71E-10	0.951	730	0.00	2.11E-10	2.07E-10	1.000
435	3.65E-11	1.12E-10	1.48E-10	0.754	585	6.99E-12	1.73E-10	1.80E-10	0.961	735	0.00	2.08E-10	2.04E-10	1.000
440	3.75E-11	1.11E-10	1.49E-10	0.748	590	8.44E-12	1.66E-10	1.74E-10	0.952	740	0.00	2.03E-10	2.00E-10	1.000
445	3.52E-11	1.14E-10	1.50E-10	0.765	595	7.99E-12	1.68E-10	1.76E-10	0.955	745	0.00	2.08E-10	2.06E-10	1.000
450	3.34E-11	1.27E-10	1.60E-10	0.792	600	9.44E-12	1.62E-10	1.72E-10	0.945	750	0.00	2.00E-10	2.00E-10	1.000
455	3.31E-11	1.13E-10	1.46E-10	0.773	605	8.58E-12	1.65E-10	1.73E-10	0.951					
460	3.25E-11	1.14E-10	1.46E-10	0.778	610	9.26E-12	1.65E-10	1.75E-10	0.947					
465	3.16E-11	1.27E-10	1.59E-10	0.801	615	1.28E-11	1.54E-10	1.67E-10	0.923					
470	3.18E-11	1.22E-10	1.54E-10	0.793	620	1.15E-11	1.54E-10	1.66E-10	0.930					
475	3.27E-11	1.16E-10	1.49E-10	0.780	625	1.01E-11	1.66E-10	1.76E-10	0.943					
480	3.15E-11	1.23E-10	1.55E-10	0.796	630	1.11E-11	1.64E-10	1.75E-10	0.937					
485	3.30E-11	1.15E-10	1.48E-10	0.777	635	1.18E-11	1.65E-10	1.77E-10	0.933					
490	2.93E-11	1.25E-10	1.55E-10	0.810	640	1.16E-11	1.68E-10	1.80E-10	0.936					
495	2.82E-11	1.24E-10	1.52E-10	0.815	645	1.66E-11	1.58E-10	1.74E-10	0.905					

Laurent Pilon – UCLA
www.seas.ucla.edu/~pilon/