Emmanuel S Boss

List of Publications by Year in Descending Order

194 papers	15,651 citations	60 h-index	122 g-index
221 ext. papers	20,321 ext. citations	7.2 avg, IF	6.47 L-index

#	Paper	IF	Citations
194	Australian fire nourishes ocean phytoplankton bloom. *Science of the Total Environment*, **2022**, 807, 150775	10.2	1
193	Oyster Aquaculture Site Selection Using High-Resolution Remote Sensing: A Case Study in the Gulf of Maine, United States. *Frontiers in Marine Science*, **2022**, 9,	4.5	1
192	Seasonal mixed layer depth shapes phytoplankton physiology, viral production, and accumulation in the North Atlantic. *Nature Communications*, **2021**, 12, 6634	17.4	2
191	Phytoplankton biodiversity and the inverted paradox. *ISME Communications*, **2021**, 1,		1
190	Deep maxima of phytoplankton biomass, primary production and bacterial production in the Mediterranean Sea. *Biogeosciences*, **2021**, 18, 1749-1767	4.6	10
189	Phytoplankton community structuring and succession in a competition-neutral resource landscape. *ISME Communications*, **2021**, 1,		6
188	Chlorophyll-Based Model to Estimate Underwater Photosynthetically Available Radiation for Modeling, In-Situ, and Remote-Sensing Applications. *Geophysical Research Letters*, **2021**, 48, e2020GL092189	4.8	2
187	Using High-Resolution Remote Sensing to Characterize Suspended Particulate Organic Matter as Bivalve Food for Aquaculture Site Selection. *Journal of Shellfish Research*, **2021**, 40,	1	2
186	Thoughts on the evolution and ecological niche of diatoms. *Ecological Monographs*, **2021**, 91, e01457	9	12
185	Relationships between optical backscattering, particulate organic carbon, and phytoplankton carbon in the oligotrophic South China Sea basin. *Optics Express*, **2021**, 29, 15159-15176	3.3	1
184	Particulate Backscattering in the Global Ocean: A Comparison of Independent Assessments. *Geophysical Research Letters*, **2021**, 48, e2020GL090909	4.9	4
183	Predictability of Seawater DMS During the North Atlantic Aerosol and Marine Ecosystem Study (NAAMES). *Frontiers in Marine Science*, **2021**, 7,	4.5	3
182	An operational overview of the EXport Processes in the Ocean from RemoTe Sensing (EXPORTS) Northeast Pacific field deployment. *Elementa*, **2021**, 9,	3.6	6
181	A limited effect of sub-tropical typhoons on phytoplankton dynamics. *Biogeosciences*, **2021**, 18, 849-859	4.6	9
180	In Situ Estimates of Net Primary Production in the Western North Atlantic With Argo Profiling Floats. *Journal of Geophysical Research G: Biogeosciences*, **2021**, 126, e2020JG006116	3.7	4
179	Seasonal bias in global ocean color observations. *Applied Optics*, **2021**, 60, 6978-6988	1.7	4
178	Diel cycle of sea spray aerosol concentration. *Nature Communications*, **2021**, 12, 5476	17.4	2

177	Deriving the angular response function for backscattering sensors. *Applied Optics*, **2021**, 60, 8676-8687	1.7	0
176	Monitoring ocean biogeochemistry with autonomous platforms. *Nature Reviews Earth & Environment*, **2020**, 1, 315-326	30.2	47
175	Robust algorithm for estimating total suspended solids (TSS) in inland and nearshore coastal waters. *Remote Sensing of Environment*, **2020**, 246, 111768	13.2	47
174	Detecting Mesopelagic Organisms Using Biogeochemical-Argo Floats. *Geophysical Research Letters*, **2020**, 47, e2019GL086088	4.9	10
173	Small phytoplankton dominate western North Atlantic biomass. *ISME Journal*, **2020**, 14, 1663-1674	11.9	32
172	Phytoplankton Growth and Productivity in the Western North Atlantic: Observations of Regional Variability From the NAAMES Field Campaigns. *Frontiers in Marine Science*, **2020**, 7,	4.5	19
171	Phytoplankton Phenology in the North Atlantic: Insights From Profiling Float Measurements. *Frontiers in Marine Science*, **2020**, 7,	4.5	9
170	Information content of absorption spectra and implications for ocean color inversion. *Applied Optics*, **2020**, 59, 3971-3984	1.7	9
169	Chlorophyll absorption and phytoplankton size information inferred from hyperspectral particulate beam attenuation. *Applied Optics*, **2020**, 59, 6765-6773	1.7	1
168	A global compilation of in situ aquatic high spectral resolution inherent and apparent optical property data for remote sensing applications. *Earth System Science Data*, **2020**, 12, 1123-1139	10.5	6
167	Tara Pacific Expedition: Atmospheric Measurements of Marine Aerosols across the Atlantic and Pacific Oceans: Overview and Preliminary Results. *Bulletin of the American Meteorological Society*, **2020**, 101, E536-E554	6.1	5
166	Shifts in Phytoplankton Community Structure Across an Anticyclonic Eddy Revealed From High Spectral Resolution Lidar Scattering Measurements. *Frontiers in Marine Science*, **2020**, 7,	4.5	5
165	An Algorithm to Estimate Suspended Particulate Matter Concentrations and Associated Uncertainties from Remote Sensing Reflectance in Coastal Environments. *Remote Sensing*, **2020**, 12, 2172	5	11
164	Seasonal modulation of phytoplankton biomass in the Southern Ocean. *Nature Communications*, **2020**, 11, 5364	17.4	18
163	Evaluation of Ocean Color Remote Sensing Algorithms for Diffuse Attenuation Coefficients and Optical Depths with Data Collected on BGC-Argo Floats. *Remote Sensing*, **2020**, 12, 2367	5	4
162	Evaluation of diagnostic pigments to estimate phytoplankton size classes. *Limnology and Oceanography: Methods*, **2020**, 18, 570-584	2.6	16
161	Airborne microplastic particles detected in the remote marine atmosphere. *Communications Earth & Environment*, **2020**, 1,	6.1	43
160	A BGC-Argo Guide: Planning, Deployment, Data Handling and Usage. *Frontiers in Marine Science*, **2019**, 6,	4.5	34

159	Factors driving the seasonal and hourly variability of sea-spray aerosol number in the North Atlantic. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 20309-20314	11.5	22
158	The Tara Pacific expedition-A pan-ecosystemic approach of the "-omics" complexity of coral reef holobionts across the Pacific Ocean. *PLoS Biology*, **2019**, 17, e3000483	9.7	17
157	Temporal and Vertical Variations of Particulate and Dissolved Optical Properties in the South China Sea. *Journal of Geophysical Research: Oceans*, **2019**, 124, 3779-3795	3.3	13
156	Globally Consistent Quantitative Observations of Planktonic Ecosystems. *Frontiers in Marine Science*, **2019**, 6,	4.5	88
155	The Plankton, Aerosol, Cloud, Ocean Ecosystem Mission: Status, Science, Advances. *Bulletin of the American Meteorological Society*, **2019**, 100, 1775-1794	6.1	84
154	Marine DNA Viral Macro- and Microdiversity from Pole to Pole. *Cell*, **2019**, 177, 1109-1123.e14	56.2	256
153	Community-Level Responses to Iron Availability in Open Ocean Plankton Ecosystems. *Global Biogeochemical Cycles*, **2019**, 33, 391-419	5.9	42
152	The North Atlantic Aerosol and Marine Ecosystem Study (NAAMES): Science Motive and Mission Overview. *Frontiers in Marine Science*, **2019**, 6,	4.5	58
151	Inversion of inherent optical properties in optically complex waters using sentinel-3A/OLCI images: A case study using China's three largest freshwater lakes. *Remote Sensing of Environment*, **2019**, 225, 328-346	13.2	36
150	On the Future of Argo: A Global, Full-Depth, Multi-Disciplinary Array. *Frontiers in Marine Science*, **2019**, 6,	4.5	116
149	Going Beyond Standard Ocean Color Observations: Lidar and Polarimetry. *Frontiers in Marine Science*, **2019**, 6,	4.5	41
148	Atmospheric Correction of Satellite Ocean-Color Imagery During the PACE Era. *Frontiers in Earth Science*, **2019**, 7,	3.5	52
147	Modeling Atmosphere-Ocean Radiative Transfer: A PACE Mission Perspective. *Frontiers in Earth Science*, **2019**, 7,	3.5	20
146	Retrieving Aerosol Characteristics From the PACE Mission, Part 2: Multi-Angle and Polarimetry. *Frontiers in Environmental Science*, **2019**, 7,	4.8	19
145	A Review of Protocols for Fiducial Reference Measurements of Downwelling Irradiance for the Validation of Satellite Remote Sensing Data over Water. *Remote Sensing*, **2019**, 11, 1742	5	21
144	The Global Ocean Ship-Based Hydrographic Investigations Program (GO-SHIP): A Platform for Integrated Multidisciplinary Ocean Science. *Frontiers in Marine Science*, **2019**, 6,	4.5	27
143	Retrieving Aerosol Characteristics From the PACE Mission, Part 1: Ocean Color Instrument. *Frontiers in Earth Science*, **2019**, 7,	3.5	14
142	Southern Ocean Phytoplankton Blooms Observed by Biogeochemical Floats. *Journal of Geophysical Research: Oceans*, **2019**, 124, 7328-7343	3.3	7

141	Global Trends in Marine Plankton Diversity across Kingdoms of Life. *Cell*, **2019**, 179, 1084-1097.e21	56.2	108
140	Algorithm to derive inherent optical properties from remote sensing reflectance in turbid and eutrophic lakes. *Applied Optics*, **2019**, 58, 8549-8564	1.7	5
139	Evaluating satellite estimates of particulate backscatter in the global open ocean using autonomous profiling floats. *Optics Express*, **2019**, 27, 30191-30203	3.3	16
138	Retrieval of Phytoplankton Pigments from Underway Spectrophotometry in the Fram Strait. *Remote Sensing*, **2019**, 11, 318	5	6
137	A Review of Protocols for Fiducial Reference Measurements of WaterLeaving Radiance for Validation of Satellite Remote-Sensing Data over Water. *Remote Sensing*, **2019**, 11, 2198	5	34
136	Global satellite-observed daily vertical migrations of ocean animals. *Nature*, **2019**, 576, 257-261	50.4	38
135	Expanding Tara Oceans Protocols for Underway, Ecosystemic Sampling of the Ocean-Atmosphere Interface During Tara Pacific Expedition (2016–2018). *Frontiers in Marine Science*, **2019**, 6,	4.5	18
134	Southern Ocean Biogeochemical Float Deployment Strategy, With Example From the Greenwich Meridian Line (GO-SHIP A12). *Journal of Geophysical Research: Oceans*, **2019**, 124, 403-431	3.3	13
133	Satellite sensor requirements for monitoring essential biodiversity variables of coastal ecosystems **2018**, 28, 749-760		69
132	Toward deeper development of Biogeochemical-Argo floats. *Atmospheric and Oceanic Science Letters*, **2018**, 11, 287-290	1.4	3
131	Light color acclimation is a key process in the global ocean distribution of. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, E2010-E2019	11.5	51
130	Single-cell genomics of multiple uncultured stramenopiles reveals underestimated functional diversity across oceans. *Nature Communications*, **2018**, 9, 310	17.4	55
129	A global ocean atlas of eukaryotic genes. *Nature Communications*, **2018**, 9, 373	17.4	168
128	An overview of approaches and challenges for retrieving marine inherent optical properties from ocean color remote sensing. *Progress in Oceanography*, **2018**, 160, 186-212	3.8	151
127	Coccolithovirus facilitation of carbon export in the North Atlantic. *Nature Microbiology*, **2018**, 3, 537-547	26.6	63
126	Validation of the particle size distribution obtained with the laser in-situ scattering and transmission (LISST) meter in flow-through mode. *Optics Express*, **2018**, 26, 11125-11136	3.3	12
125	Satellite Radiation Products for Ocean Biology and Biogeochemistry: Needs, State-of-the-Art, Gaps, Development Priorities, and Opportunities. *Frontiers in Marine Science*, **2018**, 5,	4.5	17
124	The HydroColor App: Above Water Measurements of Remote Sensing Reflectance and Turbidity Using a Smartphone Camera. *Sensors*, **2018**, 18,	3.8	46

123	Variability of Suspended Particle Properties Using Optical Measurements Within the Columbia River Estuary. *Journal of Geophysical Research: Oceans*, **2018**, 123, 6296-6311	3.3	15
122	Harnessing remote sensing to address critical science questions on ocean-atmosphere interactions. *Elementa*, **2018**, 6,	3.6	11
121	Student's tutorial on bloom hypotheses in the context of phytoplankton annual cycles. *Global Change Biology*, **2018**, 24, 55-77	11.4	72
120	ProVal: A New Autonomous Profiling Float for High Quality Radiometric Measurements. *Frontiers in Marine Science*, **2018**, 5,	4.5	19
119	Advantages and Limitations to the Use of Optical Measurements to Study Sediment Properties. *Applied Sciences (Switzerland)*, **2018**, 8, 2692	2.6	5
118	The open-ocean missing backscattering is in the structural complexity of particles. *Nature Communications*, **2018**, 9, 5439	17.4	39
117	Radiative Transfer Modeling of Phytoplankton Fluorescence Quenching Processes. *Remote Sensing*, **2018**, 10, 1309	5	10
116	Improved correction for non-photochemical quenching of in situ chlorophyll fluorescence based on a synchronous irradiance profile. *Optics Express*, **2018**, 26, 24734-24751	3.3	32
115	Assessment of Export Efficiency Equations in the Southern Ocean Applied to Satellite-Based Net Primary Production. *Journal of Geophysical Research: Oceans*, **2018**, 123, 2945-2964	3.3	16
114	Dispersion/dilution enhances phytoplankton blooms in low-nutrient waters. *Nature Communications*, **2017**, 8, 14868	17.4	18
113	Annual boom–bust cycles of polar phytoplankton biomass revealed by space-based lidar. *Nature Geoscience*, **2017**, 10, 118-122	18.3	86
112	Analytical solution of the nitracline with the evolution of subsurface chlorophyll maximum in stratified water columns. *Biogeosciences*, **2017**, 14, 2371-2386	4.6	10
111	Particulate concentration and seasonal dynamics in the mesopelagic ocean based on the backscattering coefficient measured with Biogeochemical-Argo floats. *Geophysical Research Letters* , **2017**, 44, 6933-6939	4.9	18
110	Viral to metazoan marine plankton nucleotide sequences from the Tara Oceans expedition. *Scientific Data*, **2017**, 4, 170093	8.2	89
109	Recommendations for obtaining unbiased chlorophyll estimates from in situ chlorophyll fluorometers: A global analysis of WET Labs ECO sensors. *Limnology and Oceanography: Methods*, **2017**, 15, 572-585	2.6	113
108	Biogeochemical sensor performance in the SOCCOM profiling float array. *Journal of Geophysical Research: Oceans*, **2017**, 122, 6416-6436	3.3	120
107	Evaluation of Optical Proxies for Suspended Particulate Mass in Stratified Waters. *Journal of Atmospheric and Oceanic Technology*, **2017**, 34, 2203-2212	2	6
106	Pan-Arctic optical characteristics of colored dissolved organic matter: Tracing dissolved organic carbon in changing Arctic waters using satellite ocean color data. *Remote Sensing of Environment*, **2017**, 200, 89-101	13.2	24

105	Estimation of Phytoplankton Accessory Pigments From Hyperspectral Reflectance Spectra: Toward a Global Algorithm. *Journal of Geophysical Research: Oceans*, **2017**, 122, 9725-9743	3.3	36
104	Correction of profiles of in-situ chlorophyll fluorometry for the contribution of fluorescence originating from non-algal matter. *Limnology and Oceanography: Methods*, **2017**, 15, 80-93	2.6	31
103	Revisiting Ocean Color algorithms for chlorophyll a and particulate organic carbon in the Southern Ocean using biogeochemical floats. *Journal of Geophysical Research: Oceans*, **2017**, 122, 6583-6593	3.3	55
102	Vector radiative transfer model for coupled atmosphere and ocean systems including inelastic sources in ocean waters. *Optics Express*, **2017**, 25, A223-A239	3.3	21
101	Simplified model of spectral absorption by non-algal particles and dissolved organic materials in aquatic environments. *Optics Express*, **2017**, 25, 25486-25491	3.3	4
100	Determination of the absorption coefficient of chromophoric dissolved organic matter from underway spectrophotometry. *Optics Express*, **2017**, 25, A1079-A1095	3.3	8
99	Oyster Aquaculture Site Selection Using Landsat 8-Derived Sea Surface Temperature, Turbidity, and Chlorophyll a. *Frontiers in Marine Science*, **2017**, 4,	4.5	36
98	Two databases derived from BGC-Argo float measurements for marine biogeochemical and bio-optical applications. *Earth System Science Data*, **2017**, 9, 861-880	10.5	28
97	The Elongated, the Squat and the Spherical: Selective Pressures for Phytoplankton Shape **2016**, 25-34		16
96	Validation of Ocean Color Remote Sensing Reflectance Using Autonomous Floats. *Journal of Atmospheric and Oceanic Technology*, **2016**, 33, 2331-2352	2	16
95	Plankton networks driving carbon export in the oligotrophic ocean. *Nature*, **2016**, 532, 465-470	50.4	392
94	Revaluating ocean warming impacts on global phytoplankton. *Nature Climate Change*, **2016**, 6, 323-330	21.4	156
93	Prediction of the Export and Fate of Global Ocean Net Primary Production: The EXPORTS Science Plan. *Frontiers in Marine Science*, **2016**, 3,	4.5	99
92	Underway spectrophotometry along the Atlantic Meridional Transect reveals high performance in satellite chlorophyll retrievals. *Remote Sensing of Environment*, **2016**, 183, 82-97	13.2	47
91	Optical techniques for remote and in-situ characterization of particles pertinent to GEOTRACES. *Progress in Oceanography*, **2015**, 133, 43-54	3.8	33
90	Regional ocean-colour chlorophyll algorithms for the Red Sea. *Remote Sensing of Environment*, **2015**, 165, 64-85	13.2	55
89	Spectral attenuation and backscattering as indicators of average particle size. *Applied Optics*, **2015**, 54, 7264-77	0.2	70
88	Contribution of Raman scattering to polarized radiation field in ocean waters. *Optics Express*, **2015**, 23, 23582-96	3.3	12

87	Ocean plankton. Determinants of community structure in the global plankton interactome. *Science*, **2015**, 348, 1262073	33.3	496
86	Ocean plankton. Patterns and ecological drivers of ocean viral communities. *Science*, **2015**, 348, 1261498	33.3	421
85	Ocean plankton. Structure and function of the global ocean microbiome. *Science*, **2015**, 348, 1261359	33.3	1261
84	Ocean plankton. Eukaryotic plankton diversity in the sunlit ocean. *Science*, **2015**, 348, 1261605	33.3	990
83	Ocean plankton. Environmental characteristics of Agulhas rings affect interocean plankton transport. *Science*, **2015**, 348, 1261447	33.3	100
82	Resurrecting the ecological underpinnings of ocean plankton blooms. *Annual Review of Marine Science*, **2014**, 6, 167-94	15.4	235
81	Decoupling physical from biological processes to assess the impact of viruses on a mesoscale algal bloom. *Current Biology*, **2014**, 24, 2041-6	6.3	79
80	Aerial Imaging of Fluorescent Dye in the Near Shore. *Journal of Atmospheric and Oceanic Technology*, **2014**, 31, 1410-1421	2	26
79	Significance of scattering by oceanic particles at angles around 120 degree. *Optics Express*, **2014**, 22, 31329-36	3.3	23
78	Decomposition of in situ particulate absorption spectra. *Methods in Oceanography*, **2013**, 7, 110-124		46
77	Regional to global assessments of phytoplankton dynamics from the SeaWiFS mission. *Remote Sensing of Environment*, **2013**, 135, 77-91	13.2	201
76	Inherent optical properties of suspended particulates in four temperate lakes: application of in situ spectroscopy. *Hydrobiologia*, **2013**, 713, 127-148	2.4	8
75	The characteristics of particulate absorption, scattering and attenuation coefficients in the surface ocean; Contribution of the Tara Oceans expedition. *Methods in Oceanography*, **2013**, 7, 52-62		58
74	Underway sampling of marine inherent optical properties on the Tara Oceans expedition as a novel resource for ocean color satellite data product validation. *Methods in Oceanography*, **2013**, 7, 40-51		27
73	Optical properties of the Dead Sea. *Journal of Geophysical Research: Oceans*, **2013**, 118, 1821-1829	3.3	12
72	Generalized ocean color inversion model for retrieving marine inherent optical properties. *Applied Optics*, **2013**, 52, 2019-37	1.7	263
71	Remote identification of the invasive tunicate Didemnum vexillum using reflectance spectroscopy. *Applied Optics*, **2013**, 52, 1758-63	1.7	1
70	Influence of Raman scattering on ocean color inversion models. *Applied Optics*, **2013**, 52, 5552-61	1.7	45

69	Method for estimating mean particle size from high-frequency fluctuations in beam attenuation or scattering measurements. *Applied Optics*, **2013**, 52, 6710-25	1.7	28
68	Retrieving marine inherent optical properties from satellites using temperature and salinity-dependent backscattering by seawater. *Optics Express*, **2013**, 21, 32611-22	3.3	24
67	In situ measurements of phytoplankton fluorescence using low cost electronics. *Sensors*, **2013**, 13, 7872-88	3.8	58
66	Annual cycles of ecological disturbance and recovery underlying the subarctic Atlantic spring plankton bloom. *Global Biogeochemical Cycles*, **2013**, 27, 526-540	5.9	97
65	Optical backscattering is correlated with phytoplankton carbon across the Atlantic Ocean. *Geophysical Research Letters*, **2013**, 40, 1154-1158	4.9	51
64	Autonomous, high-resolution observations of particle flux in the oligotrophic ocean. *Biogeosciences* , **2013**, 10, 5517-5531	4.6	26
63	Plankton and particle size and packaging: from determining optical properties to driving the biological pump. *Annual Review of Marine Science*, **2012**, 4, 263-90	15.4	73
62	Rate and apparent quantum yield of photodissolution of sedimentary organic matter. *Limnology and Oceanography*, **2012**, 57, 1743-1756	4.8	20
61	Mercury Dynamics in a San Francisco Estuary Tidal Wetland: Assessing Dynamics Using In Situ Measurements. *Estuaries and Coasts*, **2012**, 35, 1036-1048	2.8	17
60	An Evaluation of Acoustic Doppler Velocimeters as Sensors to Obtain the Concentration of Suspended Mass in Water. *Journal of Atmospheric and Oceanic Technology*, **2012**, 29, 755-761	2	5
59	Improved irradiances for use in ocean heating, primary production, and photo-oxidation calculations. *Applied Optics*, **2012**, 51, 6549-60	1.7	51
58	Role of iron and organic carbon in mass-specific light absorption by particulate matter from Louisiana coastal waters. *Limnology and Oceanography*, **2012**, 57, 97-112	4.8	40
57	Observations of the sensitivity of beam attenuation to particle size in a coastal bottom boundary layer. *Journal of Geophysical Research*, **2011**, 116,		54
56	Bio-optical observations of the 2004 Labrador Sea phytoplankton bloom. *Journal of Geophysical Research*, **2011**, 116,		12
55	A holistic approach to marine eco-systems biology. *PLoS Biology*, **2011**, 9, e1001177	9.7	265
54	Evaluation of a compact sensor for backscattering and absorption. *Applied Optics*, **2011**, 50, 3758-72	0.2	1
53	Effects of particle aggregation and disaggregation on their inherent optical properties. *Optics Express*, **2011**, 19, 7945-59	3.3	47
52	Inferring phytoplankton carbon and eco-physiological rates from diel cycles of spectral particulate beam-attenuation coefficient. *Biogeosciences*, **2011**, 8, 3423-3439	4.6	33

51	Editorial Note "Effects of water discharge and sediment load on evolution of modern Yellow River Delta, China, over the period from 1976 to 2009" published in Biogeosciences, 8, 2427–2435, 2011. *Biogeosciences*, **2011**, 8, 2867-2867	4.6	2
50	The underwater photic environment of Cape Maclear, Lake Malawi: comparison between rock- and sand-bottom habitats and implications for cichlid fish vision. *Journal of Experimental Biology*, **2011**, 214, 487-500	3	24
49	Methyl mercury dynamics in a tidal wetland quantified using in situ optical measurements. *Limnology and Oceanography*, **2011**, 56, 1355-1371	4.8	34
48	Underway and Moored Methods for Improving Accuracy in Measurement of Spectral Particulate Absorption and Attenuation. *Journal of Atmospheric and Oceanic Technology*, **2010**, 27, 1733-1746	2	64
47	In situ evaluation of the initiation of the North Atlantic phytoplankton bloom. *Geophysical Research Letters*, **2010**, 37, n/a-n/a	4.9	124
46	Spectral backscattering properties of marine phytoplankton cultures. *Optics Express*, **2010**, 18, 15073-93	3.3	114
45	Coherence of particulate beam attenuation and backscattering coefficients in diverse open ocean environments. *Optics Express*, **2010**, 18, 15419-25	3.3	59
44	Hyperspectral portable beam transmissometer for the ultraviolet-visible spectrum. *Limnology and Oceanography: Methods*, **2010**, 8, 527-538	2.6	3
43	Estimating the maritime component of aerosol optical depth and its dependency on surface wind speed using satellite data. *Atmospheric Chemistry and Physics*, **2010**, 10, 6711-6720	6.8	27
42	Significant contribution of large particles to optical backscattering in the open ocean. *Biogeosciences*, **2009**, 6, 947-967	4.6	133
41	Satellite-detected fluorescence reveals global physiology of ocean phytoplankton. *Biogeosciences*, **2009**, 6, 779-794	4.6	204
40	Regulation of phytoplankton carbon to chlorophyll ratio by light, nutrients and temperature in the Equatorial Pacific Ocean: a basin-scale model. *Biogeosciences*, **2009**, 6, 391-404	4.6	69
39	Turbulence-plankton interactions: a new cartoon. *Marine Ecology*, **2009**, 30, 133-150	1.4	54
38	Acceptance angle effects on the beam attenuation in the ocean. *Optics Express*, **2009**, 17, 1535-50	3.3	88
37	Effect of particulate aggregation in aquatic environments on the beam attenuation and its utility as a proxy for particulate mass. *Optics Express*, **2009**, 17, 9408-20	3.3	83
36	High-frequency in situ optical measurements during a storm event: Assessing relationships between dissolved organic matter, sediment concentrations, and hydrologic processes. *Journal of Geophysical Research*, **2009**, 114,		121
35	Quantifying fluxes and characterizing compositional changes of dissolved organic matter in aquatic systems in situ using combined acoustic and optical measurements. *Limnology and Oceanography: Methods*, **2009**, 7, 119-131	2.6	78
34	Comparison of inherent optical properties as a surrogate for particulate matter concentration in coastal waters. *Limnology and Oceanography: Methods*, **2009**, 7, 803-810	2.6	68

33	Observing Biogeochemical Cycles at Global Scales with Profiling Floats and Gliders: Prospects for a Global Array. *Oceanography*, **2009**, 22, 216-225	2.3	144
32	Carbon-based primary productivity modeling with vertically resolved photoacclimation. *Global Biogeochemical Cycles*, **2008**, 22, n/a-n/a	5.9	401
31	Assessing contribution of DOC from sediments to a drinking-water reservoir using optical profiling. *Lake and Reservoir Management*, **2008**, 24, 381-391	1.3	19
30	Observations of pigment and particle distributions in the western North Atlantic from an autonomous float and ocean color satellite. *Limnology and Oceanography*, **2008**, 53, 2112-2122	4.8	92
29	The value of adding optics to ecosystem models: a case study. *Biogeosciences*, **2007**, 4, 817-835	4.6	40
28	Measurements of spectral optical properties and their relation to biogeochemical variables and processes in Crater Lake, Crater Lake National Park, OR. *Hydrobiologia*, **2007**, 574, 149-159	2.4	65
27	Seasonal nutrient and plankton dynamics in a physical-biological model of Crater Lake. *Hydrobiologia*, **2007**, 574, 265-280	2.4	7
26	LISST-100 measurements of phytoplankton size distribution: evaluation of the effects of cell shape. *Limnology and Oceanography: Methods*, **2007**, 5, 396-406	2.6	69
25	Spectral variability of the particulate backscattering ratio. *Optics Express*, **2007**, 15, 7019-31	3.3	113
24	Beam attenuation and chlorophyll concentration as alternative optical indices of phytoplankton biomass. *Journal of Marine Research*, **2006**, 64, 431-451	1.5	137
23	Calibrated near-forward volume scattering function obtained from the LISST particle sizer. *Optics Express*, **2006**, 14, 3602-15	3.3	43
22	Photodissolution of particulate organic matter from sediments. *Limnology and Oceanography*, **2006**, 51, 1064-1071	4.8	87
21	Climate-driven trends in contemporary ocean productivity. *Nature*, **2006**, 444, 752-5	50.4	1502
20	Uncertainties of inherent optical properties obtained from semianalytical inversions of ocean color. *Applied Optics*, **2005**, 44, 4074-85	1.7	80
19	Theoretical derivation of the depth average of remotely sensed optical parameters. *Optics Express*, **2005**, 13, 9052-61	3.3	50
18	A comparison of hydrographically and optically derived mixed layer depths. *Journal of Geophysical Research*, **2005**, 110,		16
17	Carbon-based ocean productivity and phytoplankton physiology from space. *Global Biogeochemical Cycles*, **2005**, 19,	5.9	671
16	The New Age of Hyperspectral Oceanography. *Oceanography*, **2004**, 17, 16-23	2.3	36

15	The role of seawater constituents in light backscattering in the ocean. *Progress in Oceanography*, **2004**, 61, 27-56	3.8	269
14	Modeling the spectral shape of absorption by chromophoric dissolved organic matter. *Marine Chemistry*, **2004**, 89, 69-88	3.7	356
13	Why Should We Measure the Optical Backscattering Coefficient?. *Oceanography*, **2004**, 17, 44-49	2.3	22
12	Subsurface maxima of phytoplankton and chlorophyll: Steady-state solutions from a simple model. *Limnology and Oceanography*, **2003**, 48, 1521-1534	4.8	185
11	The influence of bottom morphology on reflectance: Theory and two-dimensional geometry model. *Limnology and Oceanography*, **2003**, 48, 374-379	4.8	16
10	The beam attenuation to chlorophyll ratio: an optical index of phytoplankton physiology in the surface ocean?. *Deep-Sea Research Part I: Oceanographic Research Papers*, **2003**, 50, 1537-1549	2.5	83
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