Emmanuel S Boss

List of Publications by Year
in descending order

202 papers	23,716 citations	10389 72 h-index	9345 143 g-index
222 all docs	222 docs citations	222 times ranked	18794 citing authors

#	Article	IF	Citations
1	Structure and function of the global ocean microbiome. Science, 2015, 348, 1261359.	12.6	2,137
2	Climate-driven trends in contemporary ocean productivity. Nature, 2006, 444, 752-755.	27.8	1,873
3	Eukaryotic plankton diversity in the sunlit ocean. Science, 2015, 348, 1261605.	12.6	1,551
4	Carbon-based ocean productivity and phytoplankton physiology from space. Global Biogeochemical Cycles, 2005, 19, .	4.9	872
5	Determinants of community structure in the global plankton interactome. Science, 2015, 348, 1262073.	12.6	842
6	Plankton networks driving carbon export in the oligotrophic ocean. Nature, 2016, 532, 465-470.	27.8	670
7	Patterns and ecological drivers of ocean viral communities. Science, 2015, 348, 1261498.	12.6	617
8	Marine DNA Viral Macro- and Microdiversity from Pole to Pole. Cell, 2019, 177, 1109-1123.e14.	28.9	541
9	Carbonâ€based primary productivity modeling with vertically resolved photoacclimation. Global Biogeochemical Cycles, 2008, 22, .	4.9	535
10	Modeling the spectral shape of absorption by chromophoric dissolved organic matter. Marine Chemistry, 2004, 89, 69-88.	2.3	413
11	The role of seawater constituents in light backscattering in the ocean. Progress in Oceanography, 2004, 61, 27-56.	3.2	368
12	Generalized ocean color inversion model for retrieving marine inherent optical properties. Applied Optics, 2013, 52, 2019.	1.8	366
13	A Holistic Approach to Marine Eco-Systems Biology. PLoS Biology, 2011, 9, e1001177.	5.6	353
14	Resurrecting the Ecological Underpinnings of Ocean Plankton Blooms. Annual Review of Marine Science, 2014, 6, 167-194.	11.6	328
15	A global ocean atlas of eukaryotic genes. Nature Communications, 2018, 9, 373.	12.8	297
16	Satellite-detected fluorescence reveals global physiology of ocean phytoplankton. Biogeosciences, 2009, 6, 779-794.	3.3	280
17	Global Trends in Marine Plankton Diversity across Kingdoms of Life. Cell, 2019, 179, 1084-1097.e21.	28.9	271
18	An overview of approaches and challenges for retrieving marine inherent optical properties from ocean color remote sensing. Progress in Oceanography, 2018, 160, 186-212.	3.2	257

#	Article	IF	Citations
19	Regional to global assessments of phytoplankton dynamics from the SeaWiFS mission. Remote Sensing of Environment, 2013, 135, 77-91.	11.0	254
20	Revaluating ocean warming impacts on globalÂphytoplankton. Nature Climate Change, 2016, 6, 323-330.	18.8	240
21	On the Future of Argo: A Global, Full-Depth, Multi-Disciplinary Array. Frontiers in Marine Science, 2019, 6, .	2.5	235
22	Globally Consistent Quantitative Observations of Planktonic Ecosystems. Frontiers in Marine Science, 2019, 6, .	2.5	234
23	Shape of the particulate beam attenuation spectrum and its inversion to obtain the shape of the particulate size distribution. Applied Optics, 2001, 40, 4885.	2.1	233
24	Subsurface maxima of phytoplankton and chlorophyll: Steadyâ€state solutions from a simple model. Limnology and Oceanography, 2003, 48, 1521-1534.	3.1	228
25	The Plankton, Aerosol, Cloud, Ocean Ecosystem Mission: Status, Science, Advances. Bulletin of the American Meteorological Society, 2019, 100, 1775-1794.	3.3	199
26	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.	2.0	191
27	Biogeochemical sensor performance in the SOCCOM profiling float array. Journal of Geophysical Research: Oceans, 2017, 122, 6416-6436.	2.6	190
28	Prediction of the Export and Fate of Global Ocean Net Primary Production: The EXPORTS Science Plan. Frontiers in Marine Science, 2016, 3, .	2.5	179
29	Characteristics, distribution and persistence of thin layers over a 48 hour period. Marine Ecology - Progress Series, 2003, 261, 1-19.	1.9	171
30	Observing Biogeochemical Cycles at Global Scales with Profiling Floats and Gliders: Prospects for a Global Array. Oceanography, 2009, 22, 216-225.	1.0	171
31	Beam attenuation and chlorophyll concentration as alternative optical indices of phytoplankton biomass. Journal of Marine Research, 2006, 64, 431-451.	0.3	166
32	Significant contribution of large particles to optical backscattering in the open ocean. Biogeosciences, 2009, 6, 947-967.	3.3	158
33	Environmental characteristics of Agulhas rings affect interocean plankton transport. Science, 2015, 348, 1261447.	12.6	158
34	In situ evaluation of the initiation of the North Atlantic phytoplankton bloom. Geophysical Research Letters, 2010, 37, .	4.0	150
35	Annual boomâ€"bust cycles of polar phytoplankton biomass revealed by space-based lidar. Nature Geoscience, 2017, 10, 118-122.	12.9	150
36	Highâ€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, .	3.3	149

#	Article	IF	Citations
37	Viral to metazoan marine plankton nucleotide sequences from the Tara Oceans expedition. Scientific Data, 2017, 4, 170093.	5.3	147
38	Spectral particulate attenuation and particle size distribution in the bottom boundary layer of a continental shelf. Journal of Geophysical Research, 2001, 106, 9509-9516.	3.3	133
39	Spectral backscattering properties of marine phytoplankton cultures. Optics Express, 2010, 18, 15073.	3.4	131
40	Airborne microplastic particles detected in the remote marine atmosphere. Communications Earth & Environment, 2020, 1, .	6.8	131
41	Student's tutorial on bloom hypotheses in the context of phytoplankton annual cycles. Global Change Biology, 2018, 24, 55-77.	9.5	130
42	Spectral variability of the particulate backscattering ratio. Optics Express, 2007, 15, 7019.	3.4	126
43	Robust algorithm for estimating total suspended solids (TSS) in inland and nearshore coastal waters. Remote Sensing of Environment, 2020, 246, 111768.	11.0	122
44	Annual cycles of ecological disturbance and recovery underlying the subarctic Atlantic spring plankton bloom. Global Biogeochemical Cycles, 2013, 27, 526-540.	4.9	119
45	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.	3.1	116
46	Satellite sensor requirements for monitoring essential biodiversity variables of coastal ecosystems. Ecological Applications, 2018, 28, 749-760.	3.8	116
47	Coccolithovirus facilitation of carbon export in the North Atlantic. Nature Microbiology, 2018, 3, 537-547.	13.3	114
48	Monitoring ocean biogeochemistry with autonomous platforms. Nature Reviews Earth & Environment, 2020, 1, 315-326.	29.7	114
49	Plankton and Particle Size and Packaging: From Determining Optical Properties to Driving the Biological Pump. Annual Review of Marine Science, 2012, 4, 263-290.	11.6	113
50	The North Atlantic Aerosol and Marine Ecosystem Study (NAAMES): Science Motive and Mission Overview. Frontiers in Marine Science, 2019, 6, .	2.5	111
51	Global satellite-observed daily vertical migrations of ocean animals. Nature, 2019, 576, 257-261.	27.8	111
52	Decoupling Physical from Biological Processes to Assess the Impact of Viruses on a Mesoscale Algal Bloom. Current Biology, 2014, 24, 2041-2046.	3.9	110
53	Photodissolution of particulate organic matter from sediments. Limnology and Oceanography, 2006, 51, 1064-1071.	3.1	107
54	Acceptance angle effects on the beam attenuation in the ocean. Optics Express, 2009, 17, 1535.	3.4	106

#	Article	IF	Citations
55	Spatial and temporal variability of absorption by dissolved material at a continental shelf. Journal of Geophysical Research, 2001, 106, 9499-9507.	3.3	103
56	Single-cell genomics of multiple uncultured stramenopiles reveals underestimated functional diversity across oceans. Nature Communications, 2018, 9, 310.	12.8	101
57	Improved irradiances for use in ocean heating, primary production, and photo-oxidation calculations. Applied Optics, 2012, 51, 6549.	1.8	100
58	Uncertainties of inherent optical properties obtained from semianalytical inversions of ocean color. Applied Optics, 2005, 44, 4074.	2.1	98
59	Atmospheric Correction of Satellite Ocean-Color Imagery During the PACE Era. Frontiers in Earth Science, 2019, 7, .	1.8	98
60	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.	1.4	95
61	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.	3.4	95
62	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.	2.0	94
63	Comparison of inherent optical properties as a surrogate for particulate matter concentration in coastal waters. Limnology and Oceanography: Methods, 2009, 7, 803-810.	2.0	91
64	Light color acclimation is a key process in the global ocean distribution of <i>Synechococcus cyanobacteria</i>. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E2010-E2019.	7.1	91
65	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.	1.3	90
66	A BGC-Argo Guide: Planning, Deployment, Data Handling and Usage. Frontiers in Marine Science, 2019, 6, .	2.5	86
67	Spectral attenuation and backscattering as indicators of average particle size. Applied Optics, 2015, 54, 7264.	2.1	85
68	Decomposition of in situ particulate absorption spectra. Methods in Oceanography, 2013, 7, 110-124.	1.6	82
69	LISSTâ€100 measurements of phytoplankton size distribution: evaluation of the effects of cell shape. Limnology and Oceanography: Methods, 2007, 5, 396-406.	2.0	80
70	Going Beyond Standard Ocean Color Observations: Lidar and Polarimetry. Frontiers in Marine Science, 2019, 6, .	2.5	80
71	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.	3.3	78
72	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.	2.0	76

#	Article	IF	Citations
73	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.	1.6	76
74	Communityâ€Level Responses to Iron Availability in Open Ocean Plankton Ecosystems. Global Biogeochemical Cycles, 2019, 33, 391-419.	4.9	76
75	Observations of the sensitivity of beam attenuation to particle size in a coastal bottom boundary layer. Journal of Geophysical Research, 2011, 116, .	3.3	75
76	Small phytoplankton dominate western North Atlantic biomass. ISME Journal, 2020, 14, 1663-1674.	9.8	74
77	Motion of dinoflagellates in a simple shear flow. Limnology and Oceanography, 2000, 45, 1594-1602.	3.1	73
78	In situ Measurements of Phytoplankton Fluorescence Using Low Cost Electronics. Sensors, 2013, 13, 7872-7883.	3.8	73
79	Revisiting <scp>O</scp>cean <scp>C</scp>olor algorithms for chlorophyll <i>a</i> and particulate organic carbon in the <scp>S</scp>outhern <scp>O</scp>cean using biogeochemical floats. Journal of Geophysical Research: Oceans, 2017, 122, 6583-6593.	2.6	73
80	The HydroColor App: Above Water Measurements of Remote Sensing Reflectance and Turbidity Using a Smartphone Camera. Sensors, 2018, 18, 256.	3.8	71
81	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.	11.0	68
82	Coherence of particulate beam attenuation and backscattering coefficients in diverse open ocean environments. Optics Express, 2010, 18, 15419.	3.4	67
83	Regional ocean-colour chlorophyll algorithms for the Red Sea. Remote Sensing of Environment, 2015, 165, 64-85.	11.0	67
84	Optical backscattering is correlated with phytoplankton carbon across the Atlantic Ocean. Geophysical Research Letters, 2013, 40, 1154-1158.	4.0	66
85	The open-ocean missing backscattering is in the structural complexity of particles. Nature Communications, 2018, 9, 5439.	12.8	66
86	Turbulenceâ€plankton interactions: a new cartoon. Marine Ecology, 2009, 30, 133-150.	1.1	65
87	Underway spectrophotometry along the Atlantic Meridional Transect reveals high performance in satellite chlorophyll retrievals. Remote Sensing of Environment, 2016, 183, 82-97.	11.0	63
88	Estimation of Phytoplankton Accessory Pigments From Hyperspectral Reflectance Spectra: Toward a Global Algorithm. Journal of Geophysical Research: Oceans, 2017, 122, 9725-9743.	2.6	63
89	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.	4.0	61
90	The Global Ocean Ship-Based Hydrographic Investigations Program (GO-SHIP): A Platform for Integrated Multidisciplinary Ocean Science. Frontiers in Marine Science, 2019, 6, .	2.5	60

#	Article	IF	Citations
91	The value of adding optics to ecosystem models: a case study. Biogeosciences, 2007, 4, 817-835.	3.3	58
92	Oyster Aquaculture Site Selection Using Landsat 8-Derived Sea Surface Temperature, Turbidity, and Chlorophyll a. Frontiers in Marine Science, 2017, 4, .	2.5	58
93	Effects of particle aggregation and disaggregation on their inherent optical properties. Optics Express, 2011, 19, 7945.	3.4	56
94	Theoretical derivation of the depth average of remotely sensed optical parameters. Optics Express, 2005, 13, 9052.	3.4	55
95	Influence of Raman scattering on ocean color inversion models. Applied Optics, 2013, 52, 5552.	1.8	54
96	Role of iron and organic carbon in massâ€specific light absorption by particulate matter from Louisiana coastal waters. Limnology and Oceanography, 2012, 57, 97-112.	3.1	52
97	Calibrated near-forward volume scattering function obtained from the LISST particle sizer. Optics Express, 2006, 14, 3602.	3.4	51
98	Seasonal modulation of phytoplankton biomass in the Southern Ocean. Nature Communications, 2020, 11, 5364.	12.8	51
99	Optical techniques for remote and in-situ characterization of particles pertinent to GEOTRACES. Progress in Oceanography, 2015, 133, 43-54.	3.2	50
100	Improved correction for non-photochemical quenching of in situ chlorophyll fluorescence based on a synchronous irradiance profile. Optics Express, 2018, 26, 24734.	3.4	50
101	Thoughts on the evolution and ecological niche of diatoms. Ecological Monographs, 2021, 91, e01457.	5.4	50
102	The Tara Pacific expeditionâ€"A pan-ecosystemic approach of the â€œ-omicsâ€• complexity of coral reef holobionts across the Pacific Ocean. PLoS Biology, 2019, 17, e3000483.	5.6	48
103	Stability of a potential vorticity front: from quasi-geostrophy to shallow water. Journal of Fluid Mechanics, 1996, 315, 65-84.	3.4	47
104	The New Age of Hyperspectral Oceanography. Oceanography, 2004, 17, 16-23.	1.0	47
105	Correction of profiles of inâ€situ chlorophyll fluorometry for the contribution of fluorescence originating from nonâ€algal matter. Limnology and Oceanography: Methods, 2017, 15, 80-93.	2.0	44
106	Methyl mercury dynamics in a tidal wetland quantified using in situ optical measurements. Limnology and Oceanography, 2011, 56, 1355-1371.	3.1	43
107	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.	7.1	43
108	Evaluating satellite estimates of particulate backscatter in the global open ocean using autonomous profiling floats. Optics Express, 2019, 27, 30191.	3.4	43

#	Article	IF	Citations
109	Expanding Tara Oceans Protocols for Underway, Ecosystemic Sampling of the Ocean-Atmosphere Interface During Tara Pacific Expedition (2016â€"2018). Frontiers in Marine Science, 2019, 6, .	2.5	42
110	Two databases derived from BGC-Argo float measurements for marine biogeochemical and bio-optical applications. Earth System Science Data, 2017, 9, 861-880.	9.9	42
111	Method for estimating mean particle size from high-frequency fluctuations in beam attenuation or scattering measurements. Applied Optics, 2013, 52, 6710.	1.8	41
112	Phytoplankton Growth and Productivity in the Western North Atlantic: Observations of Regional Variability From the NAAMES Field Campaigns. Frontiers in Marine Science, 2020, 7, .	2.5	41
113	Inferring phytoplankton carbon and eco-physiological rates from diel cycles of spectral particulate beam-attenuation coefficient. Biogeosciences, 2011, 8, 3423-3439.	3.3	40
114	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.	11.0	39
115	Evaluation of diagnostic pigments to estimate phytoplankton size classes. Limnology and Oceanography: Methods, 2020, 18, 570-584.	2.0	38
116	Modeling Atmosphere-Ocean Radiative Transfer: A PACE Mission Perspective. Frontiers in Earth Science, 2019, 7, .	1.8	37
117	Retrieving Aerosol Characteristics From the PACE Mission, Part 2: Multi-Angle and Polarimetry. Frontiers in Environmental Science, 2019, 7, .	3.3	37
118	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.	4.0	37
119	Assessment of Export Efficiency Equations in the Southern Ocean Applied to Satelliteâ€Based Net Primary Production. Journal of Geophysical Research: Oceans, 2018, 123, 2945-2964.	2.6	35
120	Retrieving marine inherent optical properties from satellites using temperature and salinity-dependent backscattering by seawater. Optics Express, 2013, 21, 32611.	3.4	32
121	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.	4.9	31
122	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.	1.6	31
123	Autonomous, high-resolution observations of particle flux in the oligotrophic ocean. Biogeosciences, 2013, 10, 5517-5531.	3.3	31
124	Retrieving Aerosol Characteristics From the PACE Mission, Part 1: Ocean Color Instrument. Frontiers in Earth Science, 2019, 7, .	1.8	31
125	Particulate Backscattering in the Global Ocean: A Comparison of Independent Assessments. Geophysical Research Letters, 2021, 48, e2020GL090909.	4.0	31
126	Aerial Imaging of Fluorescent Dye in the Near Shore. Journal of Atmospheric and Oceanic Technology, 2014, 31, 1410-1421.	1.3	30

#	Article	IF	Citations
127	Satellite Radiation Products for Ocean Biology and Biogeochemistry: Needs, State-of-the-Art, Gaps, Development Priorities, and Opportunities. Frontiers in Marine Science, 2018, 5, .	2.5	30
128	Deep maxima of phytoplankton biomass, primary production and bacterial production in the Mediterranean Sea. Biogeosciences, 2021, 18, 1749-1767.	3.3	30
129	Seasonal bias in global ocean color observations. Applied Optics, 2021, 60, 6978.	1.8	30
130	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.	1.7	29
131	Significance of scattering by oceanic particles at angles around 120 degree. Optics Express, 2014, 22, 31329.	3.4	29
132	ProVal: A New Autonomous Profiling Float for High Quality Radiometric Measurements. Frontiers in Marine Science, 2018, 5, .	2.5	29
133	A limited effect of sub-tropical typhoons on phytoplankton dynamics. Biogeosciences, 2021, 18, 849-859.	3.3	29
134	Dispersion/dilution enhances phytoplankton blooms in low-nutrient waters. Nature Communications, 2017, 8, 14868.	12.8	28
135	An operational overview of the EXport Processes in the Ocean from RemoTe Sensing (EXPORTS) Northeast Pacific field deployment. Elementa, 2021, 9, .	3.2	28
136	Why Should We Measure the Optical Backscattering Coefficient?. Oceanography, 2004, 17, 44-49.	1.0	28
137	Particulate concentration and seasonal dynamics in the mesopelagic ocean based on the backscattering coefficient measured with Biogeochemicalâ€Argo floats. Geophysical Research Letters, 2017, 44, 6933-6939.	4.0	27
138	The influence of bottom morphology on reflectance: Theory and two-dimensional geometry model. Limnology and Oceanography, 2003, 48, 374-379.	3.1	25
139	Mercury Dynamics in a San Francisco Estuary Tidal Wetland: Assessing Dynamics Using In Situ Measurements. Estuaries and Coasts, 2012, 35, 1036-1048.	2.2	25
140	Vector radiative transfer model for coupled atmosphere and ocean systems including inelastic sources in ocean waters. Optics Express, 2017, 25, A223.	3.4	25
141	Southern Ocean Biogeochemical Float Deployment Strategy, With Example From the Greenwich Meridian Line (GOâ€SHIP A12). Journal of Geophysical Research: Oceans, 2019, 124, 403-431.	2.6	25
142	Phytoplankton community structuring and succession in a competition-neutral resource landscape. ISME Communications, 2021, 1, .	4.2	24
143	Assessing contribution of DOC from sediments to a drinking-water reservoir using optical profiling. Lake and Reservoir Management, 2008, 24, 381-391.	1.3	23
144	Validation of Ocean Color Remote Sensing Reflectance Using Autonomous Floats. Journal of Atmospheric and Oceanic Technology, 2016, 33, 2331-2352.	1.3	23

#	Article	IF	Citations
145	Rate and apparent quantum yield of photodissolution of sedimentary organic matter. Limnology and Oceanography, 2012, 57, 1743-1756.	3.1	22
146	The Elongated, the Squat and the Spherical: Selective Pressures for Phytoplankton Shape. , 2016, , 25-34.		22
147	Southern Ocean Phytoplankton Blooms Observed by Biogeochemical Floats. Journal of Geophysical Research: Oceans, 2019, 124, 7328-7343.	2.6	21
148	Temporal and Vertical Variations of Particulate and Dissolved Optical Properties in the South China Sea. Journal of Geophysical Research: Oceans, 2019, 124, 3779-3795.	2.6	21
149	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.	3.4	20
150	Detecting Mesopelagic Organisms Using Biogeochemicalâ€Argo Floats. Geophysical Research Letters, 2020, 47, e2019GL086088.	4.0	20
151	A comparison of hydrographically and optically derived mixed layer depths. Journal of Geophysical Research, 2005, 110, .	3.3	19
152	An Algorithm to Estimate Suspended Particulate Matter Concentrations and Associated Uncertainties from Remote Sensing Reflectance in Coastal Environments. Remote Sensing, 2020, 12, 2172.	4.0	19
153	Phytoplankton Phenology in the North Atlantic: Insights From Profiling Float Measurements. Frontiers in Marine Science, 2020, 7, .	2.5	19
154	Information content of absorption spectra and implications for ocean color inversion. Applied Optics, 2020, 59, 3971.	1.8	19
155	Seasonal mixed layer depth shapes phytoplankton physiology, viral production, and accumulation in the North Atlantic. Nature Communications, 2021, 12, 6634.	12.8	19
156	Variability of Suspended Particle Properties Using Optical Measurements Within the Columbia River Estuary. Journal of Geophysical Research: Oceans, 2018, 123, 6296-6311.	2.6	18
157	Harnessing remote sensing to address critical science questions on ocean-atmosphere interactions. Elementa, 2018, 6, .	3.2	18
158	Retrieval of Phytoplankton Pigments from Underway Spectrophotometry in the Fram Strait. Remote Sensing, 2019, 11, 318.	4.0	16
159	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.	4.0	16
160	Determination of the absorption coefficient of chromophoric dissolved organic matter from underway spectrophotometry. Optics Express, 2017, 25, A1079.	3.4	15
161	Shifts in Phytoplankton Community Structure Across an Anticyclonic Eddy Revealed From High Spectral Resolution Lidar Scattering Measurements. Frontiers in Marine Science, 2020, 7, .	2.5	15
162	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.	3.0	15

#	Article	IF	Citations
163	Bioâ€optical observations of the 2004 Labrador Sea phytoplankton bloom. Journal of Geophysical Research, 2011, 116, .	3.3	14
164	Contribution of Raman scattering to polarized radiation field in ocean waters. Optics Express, 2015, 23, 23582.	3.4	14
165	Analytical solution of the nitracline with the evolution of subsurface chlorophyll maximum in stratified water columns. Biogeosciences, 2017, 14, 2371-2386.	3.3	14
166	Advantages and Limitations to the Use of Optical Measurements to Study Sediment Properties. Applied Sciences (Switzerland), 2018, 8, 2692.	2.5	14
167	Phytoplankton biodiversity and the inverted paradox. ISME Communications, 2021, 1, .	4.2	14
168	Optical properties of the Dead Sea. Journal of Geophysical Research: Oceans, 2013, 118, 1821-1829.	2.6	13
169	Radiative Transfer Modeling of Phytoplankton Fluorescence Quenching Processes. Remote Sensing, 2018, 10, 1309.	4.0	12
170	Chlorophyllâ€Based Model to Estimate Underwater Photosynthetically Available Radiation for Modeling, Inâ€Situ , and Remoteâ€Sensing Applications. Geophysical Research Letters, 2021, 48, e2020GL092189.	4.0	12
171	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.	9.9	12
172	Predictability of Seawater DMS During the North Atlantic Aerosol and Marine Ecosystem Study (NAAMES). Frontiers in Marine Science, 2021, 7, .	2.5	11
173	Australian fire nourishes ocean phytoplankton bloom. Science of the Total Environment, 2022, 807, 150775.	8.0	11
174	Phytoplankton size distributions in the western North Atlantic and their seasonal variability. Limnology and Oceanography, 2022, 67, 1865-1878.	3.1	11
175	Evaluation of Optical Proxies for Suspended Particulate Mass in Stratified Waters. Journal of Atmospheric and Oceanic Technology, 2017, 34, 2203-2212.	1.3	10
176	Simplified model of spectral absorption by non-algal particles and dissolved organic materials in aquatic environments. Optics Express, 2017, 25, 25486.	3.4	10
177	Inherent optical properties of suspended particulates in four temperate lakes: application of in situ spectroscopy. Hydrobiologia, 2013, 713, 127-148.	2.0	9
178	Tara Pacific Expeditionâ€™s 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.	3.3	9
179	Relationships between optical backscattering, particulate organic carbon, and phytoplankton carbon in the oligotrophic South China Sea basin. Optics Express, 2021, 29, 15159.	3.4	9
180	Bio-GO-SHIP: The Time Is Right to Establish Global Repeat Sections of Ocean Biology. Frontiers in Marine Science, 2022, 8, .	2.5	9

#	Article	IF	Citations
181	Seasonal nutrient and plankton dynamics in a physical-biological model of Crater Lake. Hydrobiologia, 2007, 574, 265-280.	2.0	7
182	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.	1.3	7
183	Deriving the angular response function for backscattering sensors. Applied Optics, 2021, 60, 8676.	1.8	7
184	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, .	2.5	6
185	Using High-Resolution Remote Sensing to Characterize Suspended Particulate Organic Matter as Bivalve Food for Aquaculture Site Selection. Journal of Shellfish Research, 2021, 40, .	0.9	5
186	Diel cycle of sea spray aerosol concentration. Nature Communications, 2021, 12, 5476.	12.8	5
187	Algorithm to derive inherent optical properties from remote sensing reflectance in turbid and eutrophic lakes. Applied Optics, 2019, 58, 8549.	1.8	5
188	Inlinino: A Modular Software Data Logger for Oceanography. Oceanography, 2020, 33, 80-84.	1.0	5
189	Toward deeper development of Biogeochemical-Argo floats. Atmospheric and Oceanic Science Letters, 2018, 11, 287-290.	1.3	4
190	Correction of Biogeochemical-Argo Radiometry for Sensor Temperature-Dependence and Drift: Protocols for a Delayed-Mode Quality Control. Sensors, 2021, 21, 6217.	3.8	4
191	Chlorophyll absorption and phytoplankton size information inferred from hyperspectral particulate beam attenuation. Applied Optics, 2020, 59, 6765.	1.8	4
192	Hyperspectral portable beam transmissometer for the ultraviolet-visible spectrum. Limnology and Oceanography: Methods, 2010, 8, 527-538.	2.0	3
193	Teaching Physical Concepts in Oceanography: An Inquiry-Based Approach. Oceanography, 2009, , .	1.0	3
194	Alignment of optical backscatter measurements from the EXPORTS Northeast Pacific Field Deployment. Elementa, 2022, 10, .	3.2	3
195	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, 2427â€“2435, 2011. Biogeosciences, 2011, 8, 2867-2867.	3.3	2
196	Engineering Literacy for Undergraduates in Marine Science: A Case for Hands On. Oceanography, 2012, 25, 219-221.	1.0	2
197	Evaluation of a compact sensor for backscattering and absorption. Applied Optics, 2011, 50, 3758.	2.1	1
198	Remote identification of the invasive tunicate Didemnum vexillum using reflectance spectroscopy. Applied Optics, 2013, 52, 1758.	1.8	1

#	Article	IF	Citations
199	Advice for Young Scientists on Fruitful Membership in the Scientific Community. Oceanography, 2018, 31, .	1.0	1
200	pySAS: Autonomous Solar Tracking System for Surface Water Radiometric Measurements. Oceanography, 2022, , .	1.0	1
201	Diffusion at Workâ€"An Interactive Simulation. Oceanography, 2007, 20, 127-131.	1.0	0
202	Marine Aerosols: Measurements by the Tara Pacific Expedition. Bulletin of the American Meteorological Society, 2020, 101, 499-504.	3.3	0