Hans W Paerl

List of Publications by Citations

222 papers	27,034 citations	73 h-index	162 g-index
226 ext. papers	32,028 ext. citations	6.2 avg, IF	7.64 L-index

#	Paper	IF	Citations
222	Ecology. Controlling eutrophication: nitrogen and phosphorus. *Science*, **2009**, 323, 1014-5	33.3	2331
221	Climate. Blooms like it hot. *Science*, **2008**, 320, 57-8	33.3	1705
220	Climate change: links to global expansion of harmful cyanobacteria. *Water Research*, **2012**, 46, 1349-63	12.5	994
219	Trichodesmium, a Globally Significant Marine Cyanobacterium. *Science*, **1997**, 276, 1221-1229	33.3	965
218	Climate change: a catalyst for global expansion of harmful cyanobacterial blooms. *Environmental Microbiology Reports*, **2009**, 1, 27-37	3.7	935
217	Harmful cyanobacterial blooms: causes, consequences, and controls. *Microbial Ecology*, **2013**, 65, 995-1010	4.4	862
216	Cyanobacterial blooms. *Nature Reviews Microbiology*, **2018**, 16, 471-483	22.2	838
215	Controlling harmful cyanobacterial blooms in a hyper-eutrophic lake (Lake Taihu, China): the need for a dual nutrient (N & P) management strategy. *Water Research*, **2011**, 45, 1973-83	12.5	693
214	Controlling harmful cyanobacterial blooms in a world experiencing anthropogenic and climatic-induced change. *Science of the Total Environment*, **2011**, 409, 1739-45	10.2	673
213	Nitrogen and phosphorus inputs control phytoplankton growth in eutrophic Lake Taihu, China. *Limnology and Oceanography*, **2010**, 55, 420-432	4.8	658
212	A drinking water crisis in Lake Taihu, China: linkage to climatic variability and lake management. *Environmental Management*, **2010**, 45, 105-12	3.1	622
211	Harmful freshwater algal blooms, with an emphasis on cyanobacteria. *Scientific World Journal, The*, **2001**, 1, 76-113	2.2	590
210	Coastal eutrophication and harmful algal blooms: Importance of atmospheric deposition and groundwater as "new" nitrogen and other nutrient sources. *Limnology and Oceanography*, **1997**, 42, 1154-1165	4.8	551
209	Nuisance phytoplankton blooms in coastal, estuarine, and inland waters. *Limnology and Oceanography*, **1988**, 33, 823-843	4.8	550
208	A review of the global ecology, genomics, and biogeography of the toxic cyanobacterium, Microcystis spp. *Harmful Algae*, **2016**, 54, 4-20	5.3	512
207	Allied attack: climate change and eutrophication. *Inland Waters*, **2011**, 1, 101-105	2.4	405
206	Rationale for control of anthropogenic nitrogen and phosphorus to reduce eutrophication of inland waters. *Environmental Science & Technology*, **2011**, 45, 10300-5	10.3	350

205	Ecosystem responses to internal and watershed organic matter loading:consequences for hypoxia in the eutrophying Neuse River Estuary, North Carolina, USA. *Marine Ecology - Progress Series*, **1998**, 166, 17-25	2.6	350
204	Mitigating cyanobacterial harmful algal blooms in aquatic ecosystems impacted by climate change and anthropogenic nutrients. *Harmful Algae*, **2016**, 54, 213-222	5.3	318
203	Controlling Eutrophication along the Freshwater-Marine Continuum: Dual Nutrient (N and P) Reductions are Essential. *Estuaries and Coasts*, **2009**, 32, 593-601	2.8	316
202	A Mini-review of Microbial Consortia: Their Roles in Aquatic Production and Biogeochemical Cycling. *Microbial Ecology*, **1996**, 31, 225-47	4.4	311
201	It Takes Two to Tango: When and Where Dual Nutrient (N & P) Reductions Are Needed to Protect Lakes and Downstream Ecosystems. *Environmental Science & Technology*, **2016**, 50, 10805-10813	10.3	309
200	Perennial Antarctic lake ice: an oasis for life in a polar desert. *Science*, **1998**, 280, 2095-8	33.3	304
199	How rising CO and global warming may stimulate harmful cyanobacterial blooms. *Harmful Algae*, **2016**, 54, 145-159	5.3	277
198	Anthropogenic and climatic influences on the eutrophication of large estuarine ecosystems. *Limnology and Oceanography*, **2006**, 51, 448-462	4.8	229
197	Atmospheric deposition of nitrogen: Implications for nutrient over-enrichment of coastal waters. *Estuaries and Coasts*, **2002**, 25, 677-693		213
196	Ecosystem impacts of three sequential hurricanes (Dennis, Floyd, and Irene) on the United States' largest lagoonal estuary, Pamlico Sound, NC. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 5655-60	11.5	212
195	Cyanobacterial-bacterial mat consortia: examining the functional unit of microbial survival and growth in extreme environments. *Environmental Microbiology*, **2000**, 2, 11-26	5.2	208
194	Regulation of estuarine primary production by watershed rainfall and river flow. *Marine Ecology - Progress Series*, **1993**, 93, 199-203	2.6	193
193	Nutrients, eutrophication and harmful algal blooms along the freshwater to marine continuum. *Wiley Interdisciplinary Reviews: Water*, **2019**, 6, e1373	5.7	170
192	Coastal eutrophication in relation to atmospheric nitrogen deposition: Current perspectives. *Ophelia*, **1995**, 41, 237-259		165
191	Microalgal Pigment Assessments Using High-Performance Liquid Chromatography: A Synopsis of Organismal and Ecological Applications. *Canadian Journal of Fisheries and Aquatic Sciences*, **1993**, 50, 2513-2527	2.4	164
190	Evolving Paradigms and Challenges in Estuarine and Coastal Eutrophication Dynamics in a Culturally and Climatically Stressed World. *Estuaries and Coasts*, **2014**, 37, 243-258	2.8	162
189	Global solutions to regional problems: Collecting global expertise to address the problem of harmful cyanobacterial blooms. A Lake Erie case study. *Harmful Algae*, **2016**, 54, 223-238	5.3	160
188	Enhancement of marine primary production by nitrogen-enriched acid rain. *Nature*, **1985**, 315, 747-749	50.4	157

187	Salinity effects on growth, photosynthetic parameters, and nitrogenase activity in estuarine planktonic cyanobacteria. *Microbial Ecology*, **2002**, 43, 432-442	4.4	154
186	Throwing fuel on the fire: synergistic effects of excessive nitrogen inputs and global warming on harmful algal blooms. *Environmental Science & Technology*, **2010**, 44, 7756-8	10.3	143
185	Mitigating harmful cyanobacterial blooms in a human- and climatically-impacted world. *Life*, **2014**, 4, 988-1012	3	142
184	Solving problems resulting from solutions: evolution of a dual nutrient management strategy for the eutrophying Neuse River Estuary, North Carolina. *Environmental Science & Technology*, **2004**, 38, 3068-73	10.3	139
183	Environmental science. Blooms bite the hand that feeds them. *Science*, **2013**, 342, 433-4	33.3	138
182	Phytoplankton Photopigments as Indicators of Estuarine and Coastal Eutrophication. *BioScience*, **2003**, 53, 953	5.7	138
181	Blue-green algal scums: An explanation for their occurrence during freshwater blooms1. *Limnology and Oceanography*, **1982**, 27, 212-217	4.8	132
180	Mitigating the Expansion of Harmful Algal Blooms Across the Freshwater-to-Marine Continuum. *Environmental Science & Technology*, **2018**, 52, 5519-5529	10.3	130
179	Climate Change Impacts on Harmful Algal Blooms in U.S. Freshwaters: A Screening-Level Assessment. *Environmental Science & Technology*, **2017**, 51, 8933-8943	10.3	126
178	Carotenoid enhancement and its role in maintaining blue-green algal (Microcystis aeruginosa) surface blooms1. *Limnology and Oceanography*, **1983**, 28, 847-857	4.8	125
177	Seasonal and hydrological control of phytoplankton nutrient limitation in the lower Neuse River Estuary, North Carolina. *Marine Ecology - Progress Series*, **1991**, 75, 133-142	2.6	124
176	Physiological Ecology and Regulation of N2 Fixation in Natural Waters. *Advances in Microbial Ecology*, **1990**, 305-344		119
175	The relationships between nutrients, cyanobacterial toxins and the microbial community in Taihu (Lake Tai), China. *Harmful Algae*, **2011**, 10, 207-215	5.3	112
174	Phytoplankton Community Indicators of Short- and Long-term Ecological Change in the Anthropogenically and Climatically Impacted Neuse River Estuary, North Carolina, USA. *Estuaries and Coasts*, **2010**, 33, 485-497	2.8	110
173	Water quality and phytoplankton as indicators of hurricane impacts on a large estuarine ecosystem. *Estuaries and Coasts*, **2003**, 26, 1329-1343		110
172	Why Lake Taihu continues to be plagued with cyanobacterial blooms through 10 years (2007–2017) efforts. *Science Bulletin*, **2019**, 64, 354-356	10.6	110
171	Temperature Effects Explain Continental Scale Distribution of Cyanobacterial Toxins. *Toxins*, **2018**, 10,	4.9	109
170	Nutrient and other environmental controls of harmful cyanobacterial blooms along the freshwater-marine continuum. *Advances in Experimental Medicine and Biology*, **2008**, 619, 217-37	3.6	108

169	Bioavailability of atmospheric organic nitrogen deposition to coastal phytoplankton. *Limnology and Oceanography*, **1997**, 42, 1819-1823	4.8	103
168	Future HAB science: Directions and challenges in a changing climate. *Harmful Algae*, **2020**, 91, 101632	5.3	100
167	N2-Fixing Microbial Consortia Associated with the Ice Cover of Lake Bonney, Antarctica. *Microbial Ecology*, **1998**, 36, 231-238	4.4	98
166	Flow scintillation counting of 14C-labeled microalgal photosynthetic pigments. *Journal of Plankton Research*, **1996**, 18, 1867-1880	2.2	95
165	Algal blooms: noteworthy nitrogen. *Science*, **2014**, 346, 175	33.3	94
164	Estimating the spatial extent of bottom-water hypoxia and habitat degradation in a shallow estuary. *Marine Ecology - Progress Series*, **2002**, 230, 103-112	2.6	92
163	Nutrient limitation dynamics examined on a multi-annual scale in Lake Taihu, China: implications for controlling eutrophication and harmful algal blooms. *Journal of Freshwater Ecology*, **2015**, 30, 5-24	1.4	91
162	The role of tropical cyclones in stimulating cyanobacterial (Microcystis spp.) blooms in hypertrophic Lake Taihu, China. *Harmful Algae*, **2014**, 39, 310-321	5.3	90
161	Bacterially mediated precipitation in marine stromatolites. *Environmental Microbiology*, **2001**, 3, 123-30	5.2	90
160	Physiological ecology of toxic aquatic cyanobacteria. *Phycologia*, **1996**, 35, 160-167	2.7	89
159	Allelopathic interactions of linoleic acid and nitric oxide increase the competitive ability of Microcystis aeruginosa. *ISME Journal*, **2017**, 11, 1865-1876	11.9	88
158	Mitigating harmful cyanobacterial blooms: strategies for control of nitrogen and phosphorus loads. *Aquatic Ecology*, **2016**, 50, 351-366	1.9	87
157	Impacts of inorganic nutrient enrichment on phytoplankton community structure and function in Pamlico Sound, NC, USA. *Estuarine, Coastal and Shelf Science*, **2004**, 61, 197-209	2.9	86
156	Mitigating Toxic Planktonic Cyanobacterial Blooms in Aquatic Ecosystems Facing Increasing Anthropogenic and Climatic Pressures. *Toxins*, **2018**, 10,	4.9	84
155	Controlling cyanobacterial blooms in hypertrophic Lake Taihu, China: will nitrogen reductions cause replacement of non-N2 fixing by N2 fixing taxa?. *PLoS ONE*, **2014**, 9, e113123	3.7	82
154	The impact of flooding on aquatic ecosystem services. *Biogeochemistry*, **2018**, 141, 439-461	3.8	79
153	Long-term nutrient trends and harmful cyanobacterial bloom potential in hypertrophic Lake Taihu, China. *Hydrobiologia*, **2017**, 787, 229-242	2.4	75
152	The persistence of cyanobacterial (Microcystis spp.) blooms throughout winter in Lake Taihu, China. *Limnology and Oceanography*, **2016**, 61, 711-722	4.8	75

151	Application of photopigment biomarkers for quantifying microalgal community composition and in situ growth rates. *Organic Geochemistry*, **2001**, 32, 585-595	3.1	74
150	RESPONSES OF THE PHYTOPLANKTON COMMUNITY GROWTH RATE TO NUTRIENT PULSES IN VARIABLE ESTUARINE ENVIRONMENTS. *Journal of Phycology*, **1999**, 35, 1455-1463	3	73
149	Ecophysiological and trophic implications of light-stimulated amino Acid utilization in marine picoplankton. *Applied and Environmental Microbiology*, **1991**, 57, 473-9	4.8	73
148	Duelling 'CyanoHABs': unravelling the environmental drivers controlling dominance and succession among diazotrophic and non-N2 -fixing harmful cyanobacteria. *Environmental Microbiology*, **2016**, 18, 316-24	5.2	72
147	PHYTOPLANKTON INDICATORS OF ECOLOGICAL CHANGE IN THE EUTROPHYING PAMLICO SOUND SYSTEM, NORTH CAROLINA **2007**, 17, S88-S101		72
146	Coastal marine eutrophication: Control of both nitrogen and phosphorus is necessary. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, E103; author reply E104	11.5	70
145	Ecological response to hurricane events in the Pamlico Sound system, North Carolina, and implications for assessment and management in a regime of increased frequency. *Estuaries and Coasts*, **2006**, 29, 1033-1045	2.8	70
144	Non-monotonic Responses of Phytoplankton Biomass Accumulation to Hydrologic Variability: A Comparison of Two Coastal Plain North Carolina Estuaries. *Estuaries and Coasts*, **2012**, 35, 1376-1392	2.8	68
143	Long-term temporal and spatial trends in phytoplankton biomass and class-level taxonomic composition in the hydrologically variable Neuse-Pamlico estuarine continuum, North Carolina, U.S.A.. *Limnology and Oceanography*, **2006**, 51, 1410-1420	4.8	68
142	Diel interactions of oxygenic photosynthesis and n(2) fixation (acetylene reduction) in a marine microbial mat community. *Applied and Environmental Microbiology*, **1987**, 53, 2353-62	4.8	68
141	Environmental controls of phytoplankton bloom dynamics in the Neuse River Estuary, North Carolina, U.S.A.. *Canadian Journal of Fisheries and Aquatic Sciences*, **1997**, 54, 2491-2501	2.4	67
140	Small-scale shear effects on heterocystous cyanobacteria. *Limnology and Oceanography*, **2002**, 47, 108-119	4.8	67
139	Climatically-modulated decline in wind speed may strongly affect eutrophication in shallow lakes. *Science of the Total Environment*, **2018**, 645, 1361-1370	10.2	65
138	Effects of variable irradiance on phytoplankton productivity in shallow estuaries. *Limnology and Oceanography*, **1992**, 37, 54-62	4.8	64
137	Predicting Sources of Dissolved Organic Nitrogen to an Estuary from an Agro-Urban Coastal Watershed. *Environmental Science & Technology*, **2016**, 50, 8473-84	10.3	63
136	Facultative diazotrophy increases Cylindrospermopsis raciborskii competitiveness under fluctuating nitrogen availability. *FEMS Microbiology Ecology*, **2012**, 79, 800-11	4.3	63
135	Control of nitrogen fixation by oxygen depletion in surface-associated microzones. *Nature*, **1988**, 332, 260-262	50.4	63
134	SIGNIFICANCE OF BACTERIAL-ANABAENA (CYANOPHYCEAE) ASSOCIATIONS WITH RESPECT TO N2 FIXATION IN FRESHWATER1, 2. *Journal of Phycology*, **1978**, 14, 254-260	3	62

133	Growth response of Microcystis spp. to iron enrichment in different regions of Lake Taihu, China. *Hydrobiologia*, **2013**, 700, 187-202	2.4	61
132	Two decades of tropical cyclone impacts on North Carolina estuarine carbon, nutrient and phytoplankton dynamics: implications for biogeochemical cycling and water quality in a stormier world. *Biogeochemistry*, **2018**, 141, 307-332	3.8	60
131	Microbial Phototrophic, Heterotrophic, and Diazotrophic Activities Associated with Aggregates in the Permanent Ice Cover of Lake Bonney, Antarctica. *Microbial Ecology*, **1998**, 36, 221-230	4.4	60
130	Identification of the sources of energy for nitrogen fixation and physiological characterization of nitrogen-fixing members of a marine microbial mat community. *Applied and Environmental Microbiology*, **1993**, 59, 1495-503	4.8	59
129	Perspective: Advancing the research agenda for improving understanding of cyanobacteria in a future of global change. *Harmful Algae*, **2020**, 91, 101601	5.3	59
128	Effects of nutrients, temperature and their interactions on spring phytoplankton community succession in Lake Taihu, China. *PLoS ONE*, **2014**, 9, e113960	3.7	58
127	Health Effects of Toxic Cyanobacteria in U.S. Drinking and Recreational Waters: Our Current Understanding and Proposed Direction. *Current Environmental Health Reports*, **2015**, 2, 75-84	6.5	57
126	Environmental Factors Contributing to the Development and Demise of a Toxic Dinoflagellate (Karlodinium veneficum) Bloom in a Shallow, Eutrophic, Lagoonal Estuary. *Estuaries and Coasts*, **2008**, 31, 402-418	2.8	57
125	Rainfall stimulation of primary production in western Atlantic Ocean waters:roles of different nitrogen sources and co-limiting nutrients. *Marine Ecology - Progress Series*, **1999**, 176, 205-214	2.6	57
124	Picophytoplankton: A major contributor to planktonic biomass and primary production in a eutrophic, river-dominated estuary. *Estuarine, Coastal and Shelf Science*, **2010**, 90, 45-54	2.9	56
123	Salinity control of benthic microbial mat community production in a Bahamian hypersaline lagoon. *Journal of Experimental Marine Biology and Ecology*, **1995**, 187, 223-237	2.1	56
122	Effects of climatic variability on phytoplankton community structure and bloom development in the eutrophic, microtidal, New River Estuary, North Carolina, USA. *Estuarine, Coastal and Shelf Science*, **2013**, 117, 70-82	2.9	55
121	Phytoplankton uptake of ammonium, nitrate and urea in the Neuse River Estuary, NC, USA. *Hydrobiologia*, **2005**, 533, 123-134	2.4	55
120	Distribution of Nitrogen-Fixing Microorganisms along the Neuse River Estuary, North Carolina. *Microbial Ecology*, **2001**, 41, 114-123	4.4	55
119	Adaptation to High-Intensity, Low-Wavelength Light among Surface Blooms of the Cyanobacterium Microcystis aeruginosa. *Applied and Environmental Microbiology*, **1985**, 49, 1046-52	4.8	55
118	Extreme Weather Events and Climate Variability Provide a Lens to How Shallow Lakes May Respond to Climate Change. *Water (Switzerland)*, **2016**, 8, 229	3	55
117	Estuarine Phytoplankton Responses to Hurricanes and Tropical Storms with Different Characteristics (Trajectory, Rainfall, Winds). *Estuaries and Coasts*, **2008**, 31, 419-429	2.8	53
116	Climate Change at a Crossroad for Control of Harmful Algal Blooms. *Environmental Science & Technology*, **2015**, 49, 12605-6	10.3	52

115	Hydrologic Variability and Its Control of Phytoplankton Community Structure and Function in Two Shallow, Coastal, Lagoonal Ecosystems: The Neuse and New River Estuaries, North Carolina, USA. *Estuaries and Coasts*, **2014**, 37, 31-45	2.8	51
114	Severe droughts reduce estuarine primary productivity with cascading effects on higher trophic levels. *Limnology and Oceanography*, **2011**, 56, 627-638	4.8	49
113	Molecular insights into a dinoflagellate bloom. *ISME Journal*, **2017**, 11, 439-452	11.9	48
112	Mitigating eutrophication and toxic cyanobacterial blooms in large lakes: The evolution of a dual nutrient (N and P) reduction paradigm. *Hydrobiologia*, **2020**, 847, 4359-4375	2.4	48
111	Evidence for the Importance of Atmospheric Nitrogen Deposition to Eutrophic Lake Dianchi, China. *Environmental Science & Technology*, **2017**, 51, 6699-6708	10.3	47
110	Recent increase in catastrophic tropical cyclone flooding in coastal North Carolina, USA: Long-term observations suggest a regime shift. *Scientific Reports*, **2019**, 9, 10620	4.9	47
109	Phylogenetic inference of colony isolates comprising seasonal Microcystis blooms in Lake Taihu, China. *Microbial Ecology*, **2011**, 62, 907-18	4.4	47
108	Denitrification rates measured along a salinity gradient in the eutrophic Neuse River estuary, North Carolina, USA. *Estuaries and Coasts*, **2005**, 28, 608-619		45
107	Seasonal nitrate cycling as evidence for complete vertical mixing in Lake Tahoe, California-Nevada1. *Limnology and Oceanography*, **1975**, 20, 1-8	4.8	44
106	Modeling blue-green algal blooms in the lower neuse river. *Water Research*, **1988**, 22, 895-905	12.5	43
105	Microbial organic carbon recovery in aquatic ecosystems1. *Limnology and Oceanography*, **1978**, 23, 927-935	4.8	43
104	Co-occurrence of dinoflagellate and cyanobacterial harmful algal blooms in southwest Florida coastal waters: dual nutrient (N and P) input controls. *Marine Ecology - Progress Series*, **2008**, 371, 143-153	2.6	41
103	Disturbance and recovery of microbial community structure and function following Hurricane Frances. *Environmental Microbiology*, **2007**, 9, 576-83	5.2	41
102	Microscale characterization of dissolved organic matter production and uptake in marine microbial mat communities. *Limnology and Oceanography*, **1993**, 38, 1150-61	4.8	41
101	Genetic variance in the composition of two functional groups (diazotrophs and cyanobacteria) from a hypersaline microbial mat. *Applied and Environmental Microbiology*, **2006**, 72, 1207-17	4.8	40
100	Diazotrophy in Modern Marine Bahamian Stromatolites. *Microbial Ecology*, **2001**, 41, 36-44	4.4	40
99	Contemporaneous nitrogen fixation and denitrification in intertidal microbial mats: rapid response to runoff events. *Marine Ecology - Progress Series*, **1993**, 94, 267-274	2.6	40
98	Mitigating a global expansion of toxic cyanobacterial blooms: confounding effects and challenges posed by climate change. *Marine and Freshwater Research*, **2020**, 71, 579	2.2	40

97	Seasonal Gene Expression and the Ecophysiological Implications of Toxic Microcystis aeruginosa Blooms in Lake Taihu. *Environmental Science & Technology*, **2018**, 52, 11049-11059	10.3	40
96	Shifting states, shifting services: Linking regime shifts to changes in ecosystem services of shallow lakes. *Freshwater Biology*, **2021**, 66, 1-12	3.1	39
95	Toxic Cyanobacteria: A Growing Threat to Water and Air Quality. *Environmental Science & Technology*, **2021**, 55, 44-64	10.3	38
94	Formation of Low-Molecular-Weight Dissolved Organic Nitrogen in Predenitrification Biological Nutrient Removal Systems and Its Impact on Eutrophication in Coastal Waters. *Environmental Science & Technology*, **2017**, 51, 3776-3783	10.3	37
93	Composition of inorganic and organic nutrient sources influences phytoplankton community structure in the New River Estuary, North Carolina. *Aquatic Ecology*, **2012**, 46, 269-282	1.9	37
92	Air-water CO2 fluxes in the microtidal Neuse River Estuary, North Carolina. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		36
91	Dilution bioassays: Their application to assessments of nutrient limitation in. *Hydrobiologia*, **1987**, 146, 265-273	2.4	36
90	Nitrogen transformations differentially affect nutrient-limited primary production in lakes of varying trophic state. *Limnology and Oceanography Letters*, **2019**, 4, 96-104	7.9	35
89	Scaling up: the next challenge in environmental microbiology. *Environmental Microbiology*, **2003**, 5, 1025-38	5.2	35
88	Spatiotemporal variability of wet atmospheric nitrogen deposition to the Neuse River Estuary, North Carolina. *Journal of Environmental Quality*, **2001**, 30, 1508-15	3.4	35
87	Variable climatic conditions dominate recent phytoplankton dynamics in Chesapeake Bay. *Scientific Reports*, **2016**, 6, 23773	4.9	35
86	Controlling harmful cyanobacterial blooms in a climatically more extreme world: management options and research needs. *Journal of Plankton Research*, **2017**, 39, 763-771	2.2	34
85	Carbon budget of a shallow, lagoonal estuary: Transformations and source-sink dynamics along the river-estuary-ocean continuum. *Limnology and Oceanography*, **2017**, 62, S29-S45	4.8	34
84	Seasonal nitrogen fixation dynamics in a marine microbial mat: Potential roles of cyanobacteria and microheterotrophs. *Limnology and Oceanography*, **1996**, 41, 419-427	4.8	33
83	Ubiquity of heterotrophic diazotrophs in marine microbial mats. *Aquatic Microbial Ecology*, **1999**, 19, 29-36	1.1	33
82	Immunofluorescence detection and characterization of N2-fixing microorganisms from aquatic environments. *Limnology and Oceanography*, **1990**, 35, 59-71	4.8	32
81	Physiological adaptations in response to environmental stress during an n(2)-fixing anabaena bloom. *Applied and Environmental Microbiology*, **1980**, 40, 587-95	4.8	32
80	Nitrogenase activity and nifH expression in a marine intertidal microbial mat. *Microbial Ecology*, **2005**, 49, 315-24	4.4	31

79	Long-term trends, current status, and transitions of water quality in Chesapeake Bay. *Scientific Reports*, **2019**, 9, 6709	4.9	30
78	Harmful Algal Blooms **2015**, 873-920		30
77	Mitigating the global expansion of harmful cyanobacterial blooms: Moving targets in a human- and climatically-altered world. *Harmful Algae*, **2020**, 96, 101845	5.3	30
76	Hypersaline cyanobacterial mats as indicators of elevated tropical hurricane activity and associated climate change. *Ambio*, **2003**, 32, 87-90	6.5	30
75	Sustained viability of aphotic phytoplankton in Lake Tahoe (California-Nevada). *Limnology and Oceanography*, **1977**, 22, 84-91	4.8	30
74	Water quality trends in the Three Gorges Reservoir region before and after impoundment (1992–2016). *Ecohydrology and Hydrobiology*, **2019**, 19, 317-327	2.8	30
73	Localized Tetrazolium Reduction in Relation to N(2) Fixation, CO(2) Fixation, and H(2) Uptake in Aquatic Filamentous Cyanobacteria. *Applied and Environmental Microbiology*, **1982**, 43, 218-26	4.8	28
72	Evaluation of progress in achieving TMDL mandated nitrogen reductions in the Neuse River basin, North Carolina. *Environmental Management*, **2012**, 49, 253-66	3.1	27
71	CHLOROPHYLL A VERSUS ADENOSINE TRIPHOSPHATE AS ALGAL BIOMASS INDICATORS IN LAKES1. *Journal of Phycology*, **1976**, 12, 242-246	3	27
70	The Relation Between Adenosine Triphosphate and Microbial Biomass in Diverse Aquatic Ecosystems. *International Review of Hydrobiology*, **1976**, 61, 659-664		27
69	Precipitation as a driver of phytoplankton ecology in coastal waters: A climatic perspective. *Estuarine, Coastal and Shelf Science*, **2015**, 162, 119-129	2.9	26
68	The global interactome. *Limnology and Oceanography*, **2020**, 65, S194-S207	4.8	26
67	Extensive CO2 emissions from shallow coastal waters during passage of Hurricane Irene (August 2011) over the Mid-Atlantic Coast of the U.S.A. *Limnology and Oceanography*, **2014**, 59, 1651-1665	4.8	25
66	Evaluation of nutrient limitation of C02 and N2 fixation in marine microbial mats. *Marine Ecology - Progress Series*, **1993**, 101, 297-306	2.6	25
65	Green algal over cyanobacterial dominance promoted with nitrogen and phosphorus additions in a mesocosm study at Lake Taihu, China. *Environmental Science and Pollution Research*, **2015**, 22, 5041-9	5.1	24
64	Molecular Ecological Aspects of Nitrogen Fixation in the Marine Environment481-525		24
63	Nuisance phytoplankton blooms in coastal, estuarine, and inland waters1. *Limnology and Oceanography*, **1988**, 33, 823-843	4.8	24
62	Mississippi River diversions and phytoplankton dynamics in deltaic Gulf of Mexico estuaries: A review. *Estuarine, Coastal and Shelf Science*, **2019**, 221, 39-52	2.9	24

61	Pseudomonas aeruginosa Chemotaxis Associated with Blooms of N(2)-Fixing Blue-Green Algae (Cyanobacteria). *Applied and Environmental Microbiology*, **1983**, 45, 557-62	4.8	23
60	Lingering Carbon Cycle Effects of Hurricane Matthew in North Carolina's Coastal Waters. *Geophysical Research Letters*, **2019**, 46, 2654-2661	4.9	21
59	CO2 limited conditions favor cyanobacteria in a hypereutrophic lake: An empirical and theoretical stable isotope study. *Limnology and Oceanography*, **2018**, 63, 1643-1659	4.8	20
58	Determining the potential for the proliferation of the harmful cyanobacterium Cylindrospermopsis raciborskii in Currituck Sound, North Carolina. *Harmful Algae*, **2011**, 11, 1-9	5.3	18
57	Nitrogen and Marine Eutrophication **2008**, 529-567		18
56	Why does N-limitation persist in the world's marine waters?. *Marine Chemistry*, **2018**, 206, 1-6	3.7	18
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