

Hans W Paerl

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8239598/publications.pdf>

Version: 2024-02-01

222
papers

37,460
citations

4383

86
h-index

3031

188
g-index

227
all docs

227
docs citations

227
times ranked

21641
citing authors

#	ARTICLE	IF	CITATIONS
1	Controlling Eutrophication: Nitrogen and Phosphorus. <i>Science</i> , 2009, 323, 1014-1015.	6.0	2,998
2	Blooms Like It Hot. <i>Science</i> , 2008, 320, 57-58.	6.0	2,217
3	Cyanobacterial blooms. <i>Nature Reviews Microbiology</i> , 2018, 16, 471-483.	13.6	1,671
4	Climate change: Links to global expansion of harmful cyanobacteria. <i>Water Research</i> , 2012, 46, 1349-1363.	5.3	1,252
5	Harmful Cyanobacterial Blooms: Causes, Consequences, and Controls. <i>Microbial Ecology</i> , 2013, 65, 995-1010.	1.4	1,237
6	Climate change: a catalyst for global expansion of harmful cyanobacterial blooms. <i>Environmental Microbiology Reports</i> , 2009, 1, 27-37.	1.0	1,204
7	Trichodesmium, a Globally Significant Marine Cyanobacterium. <i>Science</i> , 1997, 276, 1221-1229.	6.0	1,195
8	Controlling harmful cyanobacterial blooms in a world experiencing anthropogenic and climatic-induced change. <i>Science of the Total Environment</i> , 2011, 409, 1739-1745.	3.9	856
9	Controlling harmful cyanobacterial blooms in a hyper-eutrophic lake (Lake Taihu, China): The need for a dual nutrient (N & P) management strategy. <i>Water Research</i> , 2011, 45, 1973-1983.	5.3	841
10	Nitrogen and phosphorus inputs control phytoplankton growth in eutrophic Lake Taihu, China. <i>Limnology and Oceanography</i> , 2010, 55, 420-432.	1.6	823
11	A Drinking Water Crisis in Lake Taihu, China: Linkage to Climatic Variability and Lake Management. <i>Environmental Management</i> , 2010, 45, 105-112.	1.2	778
12	A review of the global ecology, genomics, and biogeography of the toxic cyanobacterium, <i>Microcystis</i> spp.. <i>Harmful Algae</i> , 2016, 54, 4-20.	2.2	776
13	Harmful Freshwater Algal Blooms, With an Emphasis on Cyanobacteria. <i>Scientific World Journal</i> , The, 2001, 1, 76-113.	0.8	769
14	Coastal eutrophication and harmful algal blooms: Importance of atmospheric deposition and groundwater as a new nitrogen and other nutrient sources. <i>Limnology and Oceanography</i> , 1997, 42, 1154-1165.	1.6	674
15	Nuisance phytoplankton blooms in coastal, estuarine, and inland waters. <i>Limnology and Oceanography</i> , 1988, 33, 823-843.	1.6	608
16	Allied attack: climate change and eutrophication. <i>Inland Waters</i> , 2011, 1, 101-105.	1.1	548
17	It Takes Two to Tango: When and Where Dual Nutrient (N & P) Reductions Are Needed to Protect Lakes and Downstream Ecosystems. <i>Environmental Science & Technology</i> , 2016, 50, 10805-10813.	4.6	483
18	Nutrients, eutrophication and harmful algal blooms along the freshwater to marine continuum. <i>Wiley Interdisciplinary Reviews: Water</i> , 2019, 6, e1373.	2.8	465

#	ARTICLE	IF	CITATIONS
19	Mitigating cyanobacterial harmful algal blooms in aquatic ecosystems impacted by climate change and anthropogenic nutrients. <i>Harmful Algae</i> , 2016, 54, 213-222.	2.2	453
20	Ecosystem responses to internal and watershed organic matter loading: consequences for hypoxia in the eutrophying Neuse River Estuary, North Carolina, USA. <i>Marine Ecology - Progress Series</i> , 1998, 166, 17-25.	0.9	447
21	How rising CO ₂ and global warming may stimulate harmful cyanobacterial blooms. <i>Harmful Algae</i> , 2016, 54, 145-159.	2.2	439
22	Rationale for Control of Anthropogenic Nitrogen and Phosphorus to Reduce Eutrophication of Inland Waters. <i>Environmental Science & Technology</i> , 2011, 45, 10300-10305.	4.6	429
23	Controlling Eutrophication along the Freshwater-Marine Continuum: Dual Nutrient (N and P) Reductions are Essential. <i>Estuaries and Coasts</i> , 2009, 32, 593-601.	1.0	394
24	A mini-review of microbial consortia: Their roles in aquatic production and biogeochemical cycling. <i>Microbial Ecology</i> , 1996, 31, 225-47.	1.4	389
25	Perennial Antarctic Lake Ice: An Oasis for Life in a Polar Desert. <i>Science</i> , 1998, 280, 2095-2098.	6.0	358
26	Anthropogenic and climatic influences on the eutrophication of large estuarine ecosystems. <i>Limnology and Oceanography</i> , 2006, 51, 448-462.	1.6	277
27	Ecosystem impacts of three sequential hurricanes (Dennis, Floyd, and Irene) on the United States' largest lagoonal estuary, Pamlico Sound, NC. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2001, 98, 5655-5660.	3.3	267
28	Atmospheric deposition of nitrogen: Implications for nutrient over-enrichment of coastal waters. <i>Estuaries and Coasts</i> , 2002, 25, 677-693.	1.7	254
29	Cyanobacterial-bacterial mat consortia: examining the functional unit of microbial survival and growth in extreme environments. <i>Environmental Microbiology</i> , 2000, 2, 11-26.	1.8	253
30	Mitigating the Expansion of Harmful Algal Blooms Across the Freshwater-to-Marine Continuum. <i>Environmental Science & Technology</i> , 2018, 52, 5519-5529.	4.6	246
31	Why Lake Taihu continues to be plagued with cyanobacterial blooms through 10+ years (2007-2017) efforts. <i>Science Bulletin</i> , 2019, 64, 354-356.	4.3	243
32	Global solutions to regional problems: Collecting global expertise to address the problem of harmful cyanobacterial blooms. A Lake Erie case study. <i>Harmful Algae</i> , 2016, 54, 223-238.	2.2	231
33	Regulation of estuarine primary production by watershed rainfall and river flow. <i>Marine Ecology - Progress Series</i> , 1993, 93, 199-203.	0.9	229
34	Evolving Paradigms and Challenges in Estuarine and Coastal Eutrophication Dynamics in a Culturally and Climatically Stressed World. <i>Estuaries and Coasts</i> , 2014, 37, 243-258.	1.0	223
35	Future HAB science: Directions and challenges in a changing climate. <i>Harmful Algae</i> , 2020, 91, 101632.	2.2	223
36	Climate Change Impacts on Harmful Algal Blooms in U.S. Freshwaters: A Screening-Level Assessment. <i>Environmental Science & Technology</i> , 2017, 51, 8933-8943.	4.6	220

#	ARTICLE	IF	CITATIONS
37	Nuisance phytoplankton blooms in coastal, estuarine, and inland waters ¹ . <i>Limnology and Oceanography</i> , 1988, 33, 823-843.	1.6	202
38	Mitigating Harmful Cyanobacterial Blooms in a Human- and Climatically-Impacted World. <i>Life</i> , 2014, 4, 988-1012.	1.1	197
39	Microalgal Pigment Assessments Using High-Performance Liquid Chromatography: A Synopsis of Organismal and Ecological Applications. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 1993, 50, 2513-2527.	0.7	196
40	Blooms Bite the Hand That Feeds Them. <i>Science</i> , 2013, 342, 433-434.	6.0	195
41	Salinity Effects on Growth, Photosynthetic Parameters, and Nitrogenase Activity in Estuarine Planktonic Cyanobacteria. <i>Microbial Ecology</i> , 2002, 43, 432-442.	1.4	194
42	Throwing Fuel on the Fire: Synergistic Effects of Excessive Nitrogen Inputs and Global Warming on Harmful Algal Blooms. <i>Environmental Science & Technology</i> , 2010, 44, 7756-7758.	4.6	194
43	Coastal eutrophication in relation to atmospheric nitrogen deposition: Current perspectives. <i>Ophelia</i> , 1995, 41, 237-259.	0.3	179
44	Enhancement of marine primary production by nitrogen-enriched acid rain. <i>Nature</i> , 1985, 315, 747-749.	13.7	175
45	Physiological Ecology and Regulation of N ₂ Fixation in Natural Waters. <i>Advances in Microbial Ecology</i> , 1990, , 305-344.	0.1	169
46	Seasonal and hydrological control of phytoplankton nutrient limitation in the lower Neuse River Estuary, North Carolina. <i>Marine Ecology - Progress Series</i> , 1991, 75, 133-142.	0.9	167
47	Phytoplankton Photopigments as Indicators of Estuarine and Coastal Eutrophication. <i>BioScience</i> , 2003, 53, 953.	2.2	166
48	Blue-green algal scums: An explanation for their occurrence during freshwater blooms ¹ . <i>Limnology and Oceanography</i> , 1982, 27, 212-217.	1.6	164
49	Solving Problems Resulting from Solutions: Evolution of a Dual Nutrient Management Strategy for the Eutrophying Neuse River Estuary, North Carolina. <i>Environmental Science & Technology</i> , 2004, 38, 3068-3073.	4.6	162
50	Temperature Effects Explain Continental Scale Distribution of Cyanobacterial Toxins. <i>Toxins</i> , 2018, 10, 156.	1.5	159
51	The relationships between nutrients, cyanobacterial toxins and the microbial community in Taihu (Lake Tai), China. <i>Harmful Algae</i> , 2011, 10, 207-215.	2.2	157
52	Carotenoid enhancement and its role in maintaining blue-green algal (<i>Microcystis aeruginosa</i>) surface blooms ¹ . <i>Limnology and Oceanography</i> , 1983, 28, 847-857.	1.6	155
53	Phytoplankton Community Indicators of Short- and Long-term Ecological Change in the Anthropogenically and Climatically Impacted Neuse River Estuary, North Carolina, USA. <i>Estuaries and Coasts</i> , 2010, 33, 485-497.	1.0	154
54	Nutrient and other environmental controls of harmful cyanobacterial blooms along the freshwater-marine continuum. <i>Advances in Experimental Medicine and Biology</i> , 2008, 619, 217-237.	0.8	150

#	ARTICLE	IF	CITATIONS
55	Perspective: Advancing the research agenda for improving understanding of cyanobacteria in a future of global change. <i>Harmful Algae</i> , 2020, 91, 101601.	2.2	149
56	Toxic Cyanobacteria: A Growing Threat to Water and Air Quality. <i>Environmental Science & Technology</i> , 2021, 55, 44-64.	4.6	146
57	The impact of flooding on aquatic ecosystem services. <i>Biogeochemistry</i> , 2018, 141, 439-461.	1.7	142
58	Water quality and phytoplankton as indicators of hurricane impacts on a large estuarine ecosystem. <i>Estuaries and Coasts</i> , 2003, 26, 1329-1343.	1.7	139
59	Algal blooms: Noteworthy nitrogen. <i>Science</i> , 2014, 346, 175-175.	6.0	138
60	Mitigating Toxic Planktonic Cyanobacterial Blooms in Aquatic Ecosystems Facing Increasing Anthropogenic and Climatic Pressures. <i>Toxins</i> , 2018, 10, 76.	1.5	132
61	Bioavailability of atmospheric organic nitrogen deposition to coastal phytoplankton. <i>Limnology and Oceanography</i> , 1997, 42, 1819-1823.	1.6	126
62	Shifting states, shifting services: Linking regime shifts to changes in ecosystem services of shallow lakes. <i>Freshwater Biology</i> , 2021, 66, 1-12.	1.2	123
63	Long-term nutrient trends and harmful cyanobacterial bloom potential in hypertrophic Lake Taihu, China. <i>Hydrobiologia</i> , 2017, 787, 229-242.	1.0	122
64	Nutrient limitation dynamics examined on a multi-annual scale in Lake Taihu, China: implications for controlling eutrophication and harmful algal blooms. <i>Journal of Freshwater Ecology</i> , 2015, 30, 5-24.	0.5	120
65	Mitigating harmful cyanobacterial blooms: strategies for control of nitrogen and phosphorus loads. <i>Aquatic Ecology</i> , 2016, 50, 351-366.	0.7	120
66	Physiological ecology of toxic aquatic cyanobacteria. <i>Phycologia</i> , 1996, 35, 160-167.	0.6	118
67	The role of tropical cyclones in stimulating cyanobacterial (<i>Microcystis</i> spp.) blooms in hypertrophic Lake Taihu, China. <i>Harmful Algae</i> , 2014, 39, 310-321.	2.2	118
68	Duelling "CyanoHABs": unravelling the environmental drivers controlling dominance and succession among diazotrophic and non-fixing harmful cyanobacteria. <i>Environmental Microbiology</i> , 2016, 18, 316-324.	1.8	117
69	N ₂ -Fixing Microbial Consortia Associated with the Ice Cover of Lake Bonney, Antarctica. <i>Microbial Ecology</i> , 1998, 36, 231-238.	1.4	116
70	Allelopathic interactions of linoleic acid and nitric oxide increase the competitive ability of <i>Microcystis aeruginosa</i> . <i>ISME Journal</i> , 2017, 11, 1865-1876.	4.4	115
71	Estimating the spatial extent of bottom-water hypoxia and habitat degradation in a shallow estuary. <i>Marine Ecology - Progress Series</i> , 2002, 230, 103-112.	0.9	115
72	The persistence of cyanobacterial (<i>Microcystis</i> spp.) blooms throughout winter in Lake Taihu, China. <i>Limnology and Oceanography</i> , 2016, 61, 711-722.	1.6	114

#	ARTICLE	IF	CITATIONS
73	Flow scintillation counting of ¹⁴ C-labeled microalgal photosynthetic pigments. <i>Journal of Plankton Research</i> , 1996, 18, 1867-1880.	0.8	112
74	Climatically-modulated decline in wind speed may strongly affect eutrophication in shallow lakes. <i>Science of the Total Environment</i> , 2018, 645, 1361-1370.	3.9	109
75	Bacterially mediated precipitation in marine stromatolites. <i>Environmental Microbiology</i> , 2001, 3, 123-130.	1.8	108
76	Impacts of inorganic nutrient enrichment on phytoplankton community structure and function in Pamlico Sound, NC, USA. <i>Estuarine, Coastal and Shelf Science</i> , 2004, 61, 197-209.	0.9	108
77	Predicting Sources of Dissolved Organic Nitrogen to an Estuary from an Agro-Urban Coastal Watershed. <i>Environmental Science & Technology</i> , 2016, 50, 8473-8484.	4.6	107
78	Effects of variable irradiance on phytoplankton productivity in shallow estuaries. <i>Limnology and Oceanography</i> , 1992, 37, 54-62.	1.6	103
79	Controlling Cyanobacterial Blooms in Hypertrophic Lake Taihu, China: Will Nitrogen Reductions Cause Replacement of Non-N ₂ Fixing by N ₂ Fixing Taxa?. <i>PLoS ONE</i> , 2014, 9, e113123.	1.1	102
80	Mitigating eutrophication and toxic cyanobacterial blooms in large lakes: The evolution of a dual nutrient (N and P) reduction paradigm. <i>Hydrobiologia</i> , 2020, 847, 4359-4375.	1.0	100
81	Diel Interactions of Oxygenic Photosynthesis and N ₂ Fixation (Acetylene Reduction) in a Marine Microbial Mat Community. <i>Applied and Environmental Microbiology</i> , 1987, 53, 2353-2362.	1.4	99
82	Ecophysiological and Trophic Implications of Light-Stimulated Amino Acid Utilization in Marine Picoplankton. <i>Applied and Environmental Microbiology</i> , 1991, 57, 473-479.	1.4	99
83	Small-scale shear effects on heterocystous cyanobacteria. <i>Limnology and Oceanography</i> , 2002, 47, 108-119.	1.6	98
84	Two decades of tropical cyclone impacts on North Carolina's estuarine carbon, nutrient and phytoplankton dynamics: implications for biogeochemical cycling and water quality in a stormier world. <i>Biogeochemistry</i> , 2018, 141, 307-332.	1.7	98
85	PHYTOPLANKTON INDICATORS OF ECOLOGICAL CHANGE IN THE EUTROPHYING PAMLICO SOUND SYSTEM, NORTH CAROLINA. <i>Ecological Applications</i> , 2007, 17, S88.	1.8	95
86	Ecological response to hurricane events in the Pamlico Sound system, North Carolina, and implications for assessment and management in a regime of increased frequency. <i>Estuaries and Coasts</i> , 2006, 29, 1033-1045.	1.0	94
87	RESPONSES OF THE PHYTOPLANKTON COMMUNITY GROWTH RATE TO NUTRIENT PULSES IN VARIABLE ESTUARINE ENVIRONMENTS. <i>Journal of Phycology</i> , 1999, 35, 1455-1463.	1.0	93
88	Mitigating the global expansion of harmful cyanobacterial blooms: Moving targets in a human- and climatically-altered world. <i>Harmful Algae</i> , 2020, 96, 101845.	2.2	92
89	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.. <i>Limnology and Oceanography</i> , 2006, 51, 1410-1420.	1.6	91
90	Non-monotonic Responses of Phytoplankton Biomass Accumulation to Hydrologic Variability: A Comparison of Two Coastal Plain North Carolina Estuaries. <i>Estuaries and Coasts</i> , 2012, 35, 1376-1392.	1.0	90

#	ARTICLE	IF	CITATIONS
91	Recent increase in catastrophic tropical cyclone flooding in coastal North Carolina, USA: Long-term observations suggest a regime shift. <i>Scientific Reports</i> , 2019, 9, 10620.	1.6	89
92	Identification of the Sources of Energy for Nitrogen Fixation and Physiological Characterization of Nitrogen-Fixing Members of a Marine Microbial Mat Community. <i>Applied and Environmental Microbiology</i> , 1993, 59, 1495-1503.	1.4	87
93	Application of photopigment biomarkers for quantifying microalgal community composition and in situ growth rates. <i>Organic Geochemistry</i> , 2001, 32, 585-595.	0.9	86
94	Coastal marine eutrophication: Control of both nitrogen and phosphorus is necessary. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, E103; author reply E104.	3.3	86
95	Contributions of external nutrient loading and internal cycling to cyanobacterial bloom dynamics in Lake Taihu, China: Implications for nutrient management. <i>Limnology and Oceanography</i> , 2021, 66, 1492-1509.	1.6	86
96	Environmental controls of phytoplankton bloom dynamics in the Neuse River Estuary, North Carolina, U.S.A.. <i>Canadian Journal of Fisheries and Aquatic Sciences</i> , 1997, 54, 2491-2501.	0.7	82
97	Estuarine Phytoplankton Responses to Hurricanes and Tropical Storms with Different Characteristics (Trajectory, Rainfall, Winds). <i>Estuaries and Coasts</i> , 2008, 31, 419-429.	1.0	80
98	Evidence for the Importance of Atmospheric Nitrogen Deposition to Eutrophic Lake Dianchi, China. <i>Environmental Science & Technology</i> , 2017, 51, 6699-6708.	4.6	80
99	Seasonal Gene Expression and the Ecophysiological Implications of Toxic <i>Microcystis aeruginosa</i> Blooms in Lake Taihu. <i>Environmental Science & Technology</i> , 2018, 52, 11049-11059.	4.6	79
100	Effects of Nutrients, Temperature and Their Interactions on Spring Phytoplankton Community Succession in Lake Taihu, China. <i>PLoS ONE</i> , 2014, 9, e113960.	1.1	76
101	Rainfall stimulation of primary production in western Atlantic Ocean waters: roles of different nitrogen sources and co-limiting nutrients. <i>Marine Ecology - Progress Series</i> , 1999, 176, 205-214.	0.9	76
102	SIGNIFICANCE OF BACTERIAL-ANABAENA (CYANOPHYCEAE) ASSOCIATIONS WITH RESPECT TO N ₂ FIXATION IN FRESHWATER ^{1, 2} . <i>Journal of Phycology</i> , 1978, 14, 254-260.	1.0	75
103	Microbial Phototrophic, Heterotrophic, and Diazotrophic Activities Associated with Aggregates in the Permanent Ice Cover of Lake Bonney, Antarctica. <i>Microbial Ecology</i> , 1998, 36, 221-230.	1.4	75
104	Health Effects of Toxic Cyanobacteria in U.S. Drinking and Recreational Waters: Our Current Understanding and Proposed Direction. <i>Current Environmental Health Reports</i> , 2015, 2, 75-84.	3.2	75
105	Climate Change at a Crossroad for Control of Harmful Algal Blooms. <i>Environmental Science & Technology</i> , 2015, 49, 12605-12606.	4.6	75
106	Facultative diazotrophy increases <i>Cylindrospermopsis raciborskii</i> competitiveness under fluctuating nitrogen availability. <i>FEMS Microbiology Ecology</i> , 2012, 79, 800-811.	1.3	73
107	Extreme Weather Events and Climate Variability Provide a Lens to How Shallow Lakes May Respond to Climate Change. <i>Water (Switzerland)</i> , 2016, 8, 229.	1.2	73
108	Effects of climatic variability on phytoplankton community structure and bloom development in the eutrophic, microtidal, New River Estuary, North Carolina, USA. <i>Estuarine, Coastal and Shelf Science</i> , 2013, 117, 70-82.	0.9	72

#	ARTICLE	IF	CITATIONS
109	Adaptation to High-Intensity, Low-Wavelength Light among Surface Blooms of the Cyanobacterium <i>Microcystis aeruginosa</i> . Applied and Environmental Microbiology, 1985, 49, 1046-1052.	1.4	72
110	Control of nitrogen fixation by oxygen depletion in surface-associated microzones. Nature, 1988, 332, 260-262.	13.7	70
111	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.	0.9	69
112	Growth response of <i>Microcystis</i> spp. to iron enrichment in different regions of Lake Taihu, China. Hydrobiologia, 2013, 700, 187-202.	1.0	69
113	Molecular insights into a dinoflagellate bloom. ISME Journal, 2017, 11, 439-452.	4.4	69
114	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.	1.0	67
115	Phytoplankton uptake of ammonium, nitrate and urea in the Neuse River Estuary, NC, USA. Hydrobiologia, 2005, 533, 123-134.	1.0	66
116	Environmental Factors Contributing to the Development and Demise of a Toxic Dinoflagellate (<i>Karlodinium veneficum</i>) Bloom in a Shallow, Eutrophic, Lagoonal Estuary. Estuaries and Coasts, 2008, 31, 402-418.	1.0	65
117	Severe droughts reduce estuarine primary productivity with cascading effects on higher trophic levels. Limnology and Oceanography, 2011, 56, 627-638.	1.6	65
118	Distribution of nitrogen-fixing microorganisms along the Neuse River Estuary, North Carolina. Microbial Ecology, 2001, 41, 114-123.	1.4	64
119	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.	4.6	64
120	Seasonal nitrate cycling as evidence for complete vertical mixing in Lake Tahoe, California-Nevada. Limnology and Oceanography, 1975, 20, 1-8.	1.6	63
121	Mitigating a global expansion of toxic cyanobacterial blooms: confounding effects and challenges posed by climate change. Marine and Freshwater Research, 2020, 71, 579.	0.7	63
122	The global <i>Microcystis</i> interactome. Limnology and Oceanography, 2020, 65, S194-S207.	1.6	63
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.	0.7	62
124	Harmful Algal Blooms. , 2015, , 873-920.		62
125	Water quality trends in the Three Gorges Reservoir region before and after impoundment (1992-2016). Ecohydrology and Hydrobiology, 2019, 19, 317-327.	1.0	58
126	Seasonal nitrogen fixation dynamics in a marine microbial mat: Potential roles of cyanobacteria and microheterotrophs. Limnology and Oceanography, 1996, 41, 419-427.	1.6	57

#	ARTICLE	IF	CITATIONS
127	Phylogenetic Inference of Colony Isolates Comprising Seasonal Microcystis Blooms in Lake Taihu, China. <i>Microbial Ecology</i> , 2011, 62, 907-918.	1.4	57
128	Disturbance and recovery of microbial community structure and function following Hurricane Frances. <i>Environmental Microbiology</i> , 2007, 9, 576-583.	1.8	54
129	Long-term trends, current status, and transitions of water quality in Chesapeake Bay. <i>Scientific Reports</i> , 2019, 9, 6709.	1.6	54
130	Modeling blue-green algal blooms in the lower neuse river. <i>Water Research</i> , 1988, 22, 895-905.	5.3	53
131	Microbial organic carbon recovery in aquatic ecosystems1. <i>Limnology and Oceanography</i> , 1978, 23, 927-935.	1.6	52
132	Mississippi River diversions and phytoplankton dynamics in deltaic Gulf of Mexico estuaries: A review. <i>Estuarine, Coastal and Shelf Science</i> , 2019, 221, 39-52.	0.9	52
133	Denitrification rates measured along a salinity gradient in the eutrophic Neuse River estuary, North Carolina, USA. <i>Estuaries and Coasts</i> , 2005, 28, 608-619.	1.7	51
134	Composition of inorganic and organic nutrient sources influences phytoplankton community structure in the New River Estuary, North Carolina. <i>Aquatic Ecology</i> , 2012, 46, 269-282.	0.7	51
135	Nitrogen transformations differentially affect nutrient-limited primary production in lakes of varying trophic state. <i>Limnology and Oceanography Letters</i> , 2019, 4, 96-104.	1.6	51
136	Global divergent trends of algal blooms detected by satellite during 1982-2018. <i>Global Change Biology</i> , 2022, 28, 2327-2340.	4.2	51
137	Microscale characterization of dissolved organic matter production and uptake in marine microbial mat communities. <i>Limnology and Oceanography</i> , 1993, 38, 1150-1161.	1.6	50
138	Controlling harmful cyanobacterial blooms in a climatically more extreme world: management options and research needs. <i>Journal of Plankton Research</i> , 2017, 39, 763-771.	0.8	50
139	Co-occurrence of dinoflagellate and cyanobacterial harmful algal blooms in southwest Florida coastal waters: dual nutrient (N and P) input controls. <i>Marine Ecology - Progress Series</i> , 2008, 371, 143-153.	0.9	49
140	Contemporaneous nitrogen fixation and denitrification in intertidal microbial mats: rapid response to runoff events. <i>Marine Ecology - Progress Series</i> , 1993, 94, 267-274.	0.9	49
141	Genetic Variance in the Composition of Two Functional Groups (Diazotrophs and Cyanobacteria) from a Hypersaline Microbial Mat. <i>Applied and Environmental Microbiology</i> , 2006, 72, 1207-1217.	1.4	48
142	Dilution bioassays: Their application to assessments of nutrient limitation in. <i>Hydrobiologia</i> , 1987, 146, 265-273.	1.0	47
143	Precipitation as a driver of phytoplankton ecology in coastal waters: A climatic perspective. <i>Estuarine, Coastal and Shelf Science</i> , 2015, 162, 119-129.	0.9	47
144	Immunofluorescence detection and characterization of N ₂ -fixing microorganisms from aquatic environments. <i>Limnology and Oceanography</i> , 1990, 35, 59-71.	1.6	46

#	ARTICLE	IF	CITATIONS
145	Variable climatic conditions dominate recent phytoplankton dynamics in Chesapeake Bay. <i>Scientific Reports</i> , 2016, 6, 23773.	1.6	46
146	Physiological Adaptations in Response to Environmental Stress During an N ₂ -Fixing <i>Anabaena</i> Bloom. <i>Applied and Environmental Microbiology</i> , 1980, 40, 587-595.	1.4	46
147	Sustained viability of aphotic phytoplankton in Lake Tahoe (California-Nevada). <i>Limnology and Oceanography</i> , 1977, 22, 84-91.	1.6	44
148	Air-water CO ₂ fluxes in the microtidal Neuse River Estuary, North Carolina. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	44
149	Carbon budget of a shallow, lagoonal estuary: Transformations and source-sink dynamics along the river-estuary-ocean continuum. <i>Limnology and Oceanography</i> , 2017, 62, S29.	1.6	43
150	Ubiquity of heterotrophic diazotrophs in marine microbial mats. <i>Aquatic Microbial Ecology</i> , 1999, 19, 29-36.	0.9	43
151	Diazotrophy in Modern Marine Bahamian Stromatolites. <i>Microbial Ecology</i> , 2001, 41, 36-44.	1.4	42
152	Lingering Carbon Cycle Effects of Hurricane Matthew in North Carolina's Coastal Waters. <i>Geophysical Research Letters</i> , 2019, 46, 2654-2661.	1.5	41
153	Feedback between climate change and eutrophication: revisiting the allied attack concept and how to strike back. <i>Inland Waters</i> , 2022, 12, 187-204.	1.1	41
154	Spatiotemporal Variability of Wet Atmospheric Nitrogen Deposition to the Neuse River Estuary, North Carolina. <i>Journal of Environmental Quality</i> , 2001, 30, 1508-1515.	1.0	40
155	Localized Tetrazolium Reduction in Relation to N ₂ Fixation, CO ₂ Fixation, and H ₂ Uptake in Aquatic Filamentous Cyanobacteria. <i>Applied and Environmental Microbiology</i> , 1982, 43, 218-226.	1.4	39
156	Nitrogenase Activity and nifH Expression in a Marine Intertidal Microbial Mat. <i>Microbial Ecology</i> , 2005, 49, 315-324.	1.4	38
157	Green algal over cyanobacterial dominance promoted with nitrogen and phosphorus additions in a mesocosm study at Lake Taihu, China. <i>Environmental Science and Pollution Research</i> , 2015, 22, 5041-5049.	2.7	37
158	Scaling up: the next challenge in environmental microbiology. <i>Environmental Microbiology</i> , 2003, 5, 1025-1038.	1.8	36
159	Hypersaline Cyanobacterial Mats as Indicators of Elevated Tropical Hurricane Activity and Associated Climate Change. <i>Ambio</i> , 2003, 32, 87-90.	2.8	36
160	Extensive CO ₂ emissions from shallow coastal waters during passage of Hurricane Irene (August 2011) over the Mid-Atlantic Coast of the U.S.A. <i>Limnology and Oceanography</i> , 2014, 59, 1651-1665.	1.6	36
161	Climate exerts a greater modulating effect on the phytoplankton community after 2007 in eutrophic Lake Taihu, China: Evidence from 25 years of recordings. <i>Ecological Indicators</i> , 2019, 105, 82-91.	2.6	36
162	Recent increases of rainfall and flooding from tropical cyclones (TCs) in North Carolina (USA): implications for organic matter and nutrient cycling in coastal watersheds. <i>Biogeochemistry</i> , 2020, 150, 197-216.	1.7	34

#	ARTICLE	IF	CITATIONS
163	CHLOROPHYLL <i>a</i> VERSUS ADENOSINE TRIPHOSPHATE AS ALGAL BIOMASS INDICATORS IN LAKES. <i>Journal of Phycology</i> , 1976, 12, 242-246.	1.0	33
164	Evaluation of nutrient limitation of CO ₂ and N ₂ fixation in marine microbial mats. <i>Marine Ecology - Progress Series</i> , 1993, 101, 297-306.	0.9	33
165	The Relation Between Adenosine Triphosphate and Microbial Biomass in Diverse Aquatic Ecosystems. <i>International Review of Hydrobiology</i> , 1976, 61, 659-664.	0.6	32
166	Evaluation of Progress in Achieving TMDL Mandated Nitrogen Reductions in the Neuse River Basin, North Carolina. <i>Environmental Management</i> , 2012, 49, 253-266.	1.2	31
167	CO ₂ limited conditions favor cyanobacteria in a hypereutrophic lake: An empirical and theoretical stable isotope study. <i>Limnology and Oceanography</i> , 2018, 63, 1643-1659.	1.6	30
168	Extreme weather event may induce <i>Microcystis</i> blooms in the Qiantang River, Southeast China. <i>Environmental Science and Pollution Research</i> , 2018, 25, 22273-22284.	2.7	30
169	Why does N-limitation persist in the world's marine waters?. <i>Marine Chemistry</i> , 2018, 206, 1-6.	0.9	29
170	Picophytoplankton dynamics in a large temperate estuary and impacts of extreme storm events. <i>Scientific Reports</i> , 2020, 10, 22026.	1.6	29
171	The cyanobacterial nitrogen fixation paradox in natural waters. <i>F1000Research</i> , 2017, 6, 244.	0.8	29
172	Using alkaline phosphatase activity as a supplemental index to optimize predicting algal blooms in phosphorus-deficient lakes: A case study of Lake Taihu, China. <i>Ecological Indicators</i> , 2019, 103, 698-712.	2.6	28
173	<i>Pseudomonas aeruginosa</i> Chemotaxis Associated with Blooms of N ₂ -Fixing Blue-Green Algae (Cyanobacteria). <i>Applied and Environmental Microbiology</i> , 1983, 45, 557-562.	1.4	28
174	Environmental controls of harmful cyanobacterial blooms in Chinese inland waters. <i>Harmful Algae</i> , 2021, 110, 102127.	2.2	28
175	Effects of Nitrogen Availability and Form on Phytoplankton Growth in a Eutrophied Estuary (Neuse) Tj ETQq1 1 0.784314 rgBTJ/Overl 1.1 27	1.1	27
176	Nutrient addition bioassay and phytoplankton community structure monitored during autumn in Xiangxi Bay of Three Gorges Reservoir, China. <i>Chemosphere</i> , 2020, 247, 125960.	4.2	27
177	Nitrogen and Marine Eutrophication. , 2008, , 529-567.		26
178	Cyanobacteria in eutrophic waters benefit from rising atmospheric CO ₂ concentrations. <i>Science of the Total Environment</i> , 2019, 691, 1144-1154.	3.9	26
179	Evaluating the phytoplankton, nitrate, and ammonium interactions during summer bloom in tributary of a subtropical reservoir. <i>Journal of Environmental Management</i> , 2020, 271, 110971.	3.8	24
180	Extreme weather events modulate processing and export of dissolved organic carbon in the Neuse River Estuary, NC. <i>Estuarine, Coastal and Shelf Science</i> , 2019, 219, 189-200.	0.9	23

#	ARTICLE	IF	CITATIONS
181	Spatial and temporal distribution characteristics of different forms of inorganic nitrogen in three types of rivers around Lake Taihu, China. <i>Environmental Science and Pollution Research</i> , 2019, 26, 6898-6910.	2.7	22
182	Interactions between nitrogen dynamics and the phytoplankton community in Lake George, Florida, USA. <i>Lake and Reservoir Management</i> , 2009, 25, 1-14.	0.4	21
183	Determining the potential for the proliferation of the harmful cyanobacterium <i>Cylindrospermopsis raciborskii</i> in Currituck Sound, North Carolina. <i>Harmful Algae</i> , 2011, 11, 1-9.	2.2	21
184	Watershed-Scale Drivers of Air-Water CO ₂ Exchanges in Two Lagoonal North Carolina (USA) Estuaries. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2018, 123, 271-287.	1.3	21
185	Effects of salinity and light on organic carbon and nitrogen uptake in a hypersaline microbial mat. <i>FEMS Microbiology Ecology</i> , 2007, 62, 345-353.	1.3	20
186	Stimulation of Phytoplankton Production by Anthropogenic Dissolved Organic Nitrogen in a Coastal Plain Estuary. <i>Environmental Science & Technology</i> , 2017, 51, 13104-13112.	4.6	20
187	Structure and function of anthropogenically altered microbial communities in coastal waters. <i>Current Opinion in Microbiology</i> , 1998, 1, 296-302.	2.3	19
188	Vertical spatio-temporal patterns of phytoplankton due to migration behaviors in two shallow, microtidal estuaries: Influence on phytoplankton function and structure. <i>Estuarine, Coastal and Shelf Science</i> , 2015, 162, 7-21.	0.9	19
189	Phytoplankton composition in a eutrophic estuary: Comparison of multiple taxonomic approaches and influence of environmental factors. <i>Environmental Microbiology</i> , 2020, 22, 4718-4731.	1.8	19
190	Roles of Nutrient Limitation on Western Lake Erie CyanoHAB Toxin Production. <i>Toxins</i> , 2021, 13, 47.	1.5	19
191	Temperature, organic matter, and the control of bacterioplankton in the Neuse River and Pamlico Sound estuarine system. <i>Aquatic Microbial Ecology</i> , 2010, 60, 139-149.	0.9	18
192	Elevated organic carbon pulses persist in estuarine environment after major storm events. <i>Limnology and Oceanography Letters</i> , 2021, 6, 43-50.	1.6	17
193	Determination of N ₂ fixation potential in the marine environment: application of the polymerase chain reaction. <i>Marine Ecology - Progress Series</i> , 1993, 95, 305-309.	0.9	17
194	Etiologies, observations and reporting of estuarine finfish lesions. <i>Marine Environmental Research</i> , 2000, 50, 473-477.	1.1	16
195	Responses of Estuarine Phytoplankton Communities to Nitrogen Form and Mixing Using Microcosm Bioassays. <i>Estuaries and Coasts</i> , 2001, 24, 828.	1.7	16
196	<i>Marine Plankton.</i> , 2012, , 127-153.		16
197	Nitrate depletion during spring bloom intensifies phytoplankton iron demand in Yangtze River tributary, China. <i>Environmental Pollution</i> , 2020, 264, 114626.	3.7	16
198	FerryMon: Ferry-Based Monitoring and Assessment of Human and Climatically Driven Environmental Change in the Albemarle-Pamlico Sound System. <i>Environmental Science & Technology</i> , 2009, 43, 7609-7613.	4.6	15

#	ARTICLE	IF	CITATIONS
199	Use of Geospatial, Hydrologic, and Geochemical Modeling to Determine the Influence of Wetland-Derived Organic Matter in Coastal Waters in Response to Extreme Weather Events. <i>Frontiers in Marine Science</i> , 2020, 7, .	1.2	14
200	Ecological stoichiometry of functional traits in a colonial harmful cyanobacterium. <i>Limnology and Oceanography</i> , 2021, 66, 2051-2062.	1.6	13
201	Exploring How Cyanobacterial Traits Affect Nutrient Loading Thresholds in Shallow Lakes: A Modelling Approach. <i>Water (Switzerland)</i> , 2020, 12, 2467.	1.2	12
202	Cyanophycin accumulated under nitrogen-fluctuating and high-nitrogen conditions facilitates the persistent dominance and blooms of <i>Raphidiopsis raciborskii</i> in tropical waters. <i>Water Research</i> , 2022, 214, 118215.	5.3	12
203	Primary Producers. , 2011, , 23-42.		11
204	Eukaryotic phytoplankton community spatiotemporal dynamics as identified through gene expression within a eutrophic estuary. <i>Environmental Microbiology</i> , 2018, 20, 1095-1111.	1.8	11
205	In situ H ₂ production and utilization by natural populations of N ₂ -fixing blue-green algae. <i>Canadian Journal of Botany</i> , 1982, 60, 2542-2546.	1.2	10
206	Environmental Dynamics, Community Structure and Function in a Hypersaline Microbial Mat. <i>Cellular Origin and Life in Extreme Habitats</i> , 2010, , 421-442.	0.3	9
207	Storm and floods increase the duration and extent of phosphorus limitation on algal blooms in a tributary of the Three Gorges Reservoir, China. <i>Journal of Hydrology</i> , 2022, 607, 127562.	2.3	9
208	Seasonal to Inter-Annual Variability of Primary Production in Chesapeake Bay: Prospects to Reverse Eutrophication and Change Trophic Classification. <i>Scientific Reports</i> , 2020, 10, 2019.	1.6	8
209	Longitudinal and depth variation of bacterioplankton productivity and related factors in a temperate estuary. <i>Estuarine, Coastal and Shelf Science</i> , 2011, 95, 207-215.	0.9	7
210	Nitrogen fixation does not axiomatically lead to phosphorus limitation in aquatic ecosystems. <i>Oikos</i> , 2019, 128, 563-570.	1.2	7
211	Consortial N ₂ fixation: a strategy for meeting nitrogen requirements of marine and terrestrial cyanobacterial mats. <i>FEMS Microbiology Ecology</i> , 1996, 21, 149-156.	1.3	6
212	SCOR Working Group 137: "Global Patterns of Phytoplankton Dynamics in Coastal Ecosystems" An introduction to the special issue of <i>Estuarine, Coastal and Shelf Science</i> . <i>Estuarine, Coastal and Shelf Science</i> , 2015, 162, 1-3.	0.9	5
213	Effects of Ferrous Iron and Hydrogen Sulfide on Nitrate Reduction in the Sediments of an Estuary Experiencing Hypoxia. <i>Estuaries and Coasts</i> , 2021, 44, 1-12.	1.0	5
214	Riverine Discharge and Phytoplankton Biomass Control Dissolved and Particulate Organic Matter Dynamics over Spatial and Temporal Scales in the Neuse River Estuary, North Carolina. <i>Estuaries and Coasts</i> , 2022, 45, 96-113.	1.0	4
215	Simulating algal dynamics within a Bayesian framework to evaluate controls on estuary productivity. <i>Ecological Modelling</i> , 2021, 447, 109497.	1.2	4
216	Ecosystem Capacity for Microbial Biodegradation of Munitions Compounds and Phenanthrene in Three Coastal Waterways in North Carolina, United States. <i>ACS Omega</i> , 2020, 5, 7326-7341.	1.6	3

#	ARTICLE	IF	CITATIONS
217	Tackling Harmful Cyanobacterial Blooms with Chinese Colleagues: We're All in the Same Boat. Journal of Phycology, 2020, 56, 1398-1403.	1.0	2
218	Corrigendum to: The global <i>Microcystis</i> interactome. Limnology and Oceanography, 2021, 66, 2496-2497.	1.6	2
219	Nutrients in precipitation and the phytoplankton responses to enrichment in surface waters of the Albemarle Peninsula, NC, USA after the establishment of a large-scale chicken egg farm. Hydrobiologia, 2011, 671, 181-191.	1.0	1
220	Ecosystem-based management for military training, biodiversity, carbon storage and climate resiliency on a complex coastal land/water-scape. Journal of Environmental Management, 2021, 280, 111755.	3.8	1
221	Karl E. Havens: Leader and Collaborator in Coupling Aquatic Science and Management. Limnology and Oceanography Bulletin, 2019, 28, 94-95.	0.2	0
222	Impacts of Nitrogen Deposition on China's Lake Ecosystems: Taking Lake Dianchi as an Example. , 2020, , 263-293.		0