

# Jonathan P Zehr

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5120190/publications.pdf>

Version: 2024-02-01

243  
papers

20,159  
citations

9786

73  
h-index

12946

131  
g-index

261  
all docs

261  
docs citations

261  
times ranked

10032  
citing authors

#	ARTICLE	IF	CITATIONS
1	Trichodesmium, a Globally Significant Marine Cyanobacterium. <i>Science</i> , 1997, 276, 1221-1229.	12.6	1,195
2	Nitrogenase gene diversity and microbial community structure: a cross-system comparison. <i>Environmental Microbiology</i> , 2003, 5, 539-554.	3.8	844
3	Unicellular cyanobacteria fix N <sub>2</sub> in the subtropical North Pacific Ocean. <i>Nature</i> , 2001, 412, 635-638.	27.8	678
4	High rates of N <sub>2</sub> fixation by unicellular diazotrophs in the oligotrophic Pacific Ocean. <i>Nature</i> , 2004, 430, 1027-1031.	27.8	511
5	Unicellular Cyanobacterium Symbiotic with a Single-Celled Eukaryotic Alga. <i>Science</i> , 2012, 337, 1546-1550.	12.6	460
6	Use of degenerate oligonucleotides for amplification of the nifH gene from the marine cyanobacterium <i>Trichodesmium thiebautii</i> . <i>Applied and Environmental Microbiology</i> , 1989, 55, 2522-2526.	3.1	458
7	Effects of Growth Irradiance and Nitrogen Limitation on Photosynthetic Energy Conversion in Photosystem II. <i>Plant Physiology</i> , 1988, 88, 923-929.	4.8	444
8	Nitrogen fixation by marine cyanobacteria. <i>Trends in Microbiology</i> , 2011, 19, 162-173.	7.7	421
9	Nitrogen Cycling in the Ocean: New Perspectives on Processes and Paradigms. <i>Applied and Environmental Microbiology</i> , 2002, 68, 1015-1024.	3.1	416
10	Unicellular Cyanobacterial Distributions Broaden the Oceanic N <sub>2</sub> Fixation Domain. <i>Science</i> , 2010, 327, 1512-1514.	12.6	394
11	New Nitrogen-Fixing Microorganisms Detected in Oligotrophic Oceans by Amplification of Nitrogenase ( <i>nifH</i> ) Genes. <i>Applied and Environmental Microbiology</i> , 1998, 64, 3444-3450.	3.1	355
12	Nitrogen fixation and transfer in open ocean diatom-cyanobacterial symbioses. <i>ISME Journal</i> , 2011, 5, 1484-1493.	9.8	337
13	Globally Distributed Uncultivated Oceanic N <sub>2</sub> -Fixing Cyanobacteria Lack Oxygenic Photosystem II. <i>Science</i> , 2008, 322, 1110-1112.	12.6	323
14	Database of diazotrophs in global ocean: abundance, biomass and nitrogen fixation rates. <i>Earth System Science Data</i> , 2012, 4, 47-73.	9.9	315
15	Nitrogen Cycle of the Open Ocean: From Genes to Ecosystems. <i>Annual Review of Marine Science</i> , 2011, 3, 197-225.	11.6	313
16	Metabolic streamlining in an open-ocean nitrogen-fixing cyanobacterium. <i>Nature</i> , 2010, 464, 90-94.	27.8	309
17	Comparative day/night metatranscriptomic analysis of microbial communities in the North Pacific subtropical gyre. <i>Environmental Microbiology</i> , 2009, 11, 1358-1375.	3.8	285
18	Temporal Patterns of Nitrogenase Gene ( <i>nifH</i> ) Expression in the Oligotrophic North Pacific Ocean. <i>Applied and Environmental Microbiology</i> , 2005, 71, 5362-5370.	3.1	264

#	ARTICLE	IF	CITATIONS
19	GROWTH AND NITROGEN FIXATION OF THE DIAZOTROPHIC FILAMENTOUS NONHETEROCYSTOUS CYANOBACTERIUM TRICHODESMIUM SP. IMS 101 IN DEFINED MEDIA: EVIDENCE FOR A CIRCADIAN RHYTHM1. <i>Journal of Phycology</i> , 1996, 32, 916-923.	2.3	258
20	Vertical distributions of nitrogen-fixing phylotypes at Stn Aloha in the oligotrophic North Pacific Ocean. <i>Aquatic Microbial Ecology</i> , 2005, 38, 3-14.	1.8	247
21	Expression of nifH Genes in Natural Microbial Assemblages in Lake George, New York, Detected by Reverse Transcriptase PCR. <i>Applied and Environmental Microbiology</i> , 2000, 66, 3119-3124.	3.1	235
22	Changing perspectives in marine nitrogen fixation. <i>Science</i> , 2020, 368, .	12.6	223
23	Influence of the Amazon River plume on distributions of free-living and symbiotic cyanobacteria in the western tropical north Atlantic Ocean. <i>Limnology and Oceanography</i> , 2007, 52, 517-532.	3.1	200
24	Physical forcing of nitrogen fixation and diazotroph community structure in the North Pacific subtropical gyre. <i>Global Biogeochemical Cycles</i> , 2009, 23, .	4.9	200
25	Bacterial diversity in Adirondack mountain lakes as revealed by 16S rRNA gene sequences. <i>Applied and Environmental Microbiology</i> , 1997, 63, 2957-2960.	3.1	188
26	Nearly Identical 16S rRNA Sequences Recovered from Lakes in North America and Europe Indicate the Existence of Clades of Globally Distributed Freshwater Bacteria. <i>Systematic and Applied Microbiology</i> , 1998, 21, 546-556.	2.8	187
27	Diversity of heterotrophic nitrogen fixation genes in a marine cyanobacterial mat. <i>Applied and Environmental Microbiology</i> , 1995, 61, 2527-2532.	3.1	185
28	Diversity and abundance of diazotrophic microorganisms in the South China Sea during intermonsoon. <i>ISME Journal</i> , 2008, 2, 954-967.	9.8	176
29	Regional distributions of nitrogen-fixing bacteria in the Pacific Ocean. <i>Limnology and Oceanography</i> , 2008, 53, 63-77.	3.1	154
30	Nitrogen fixation: Nitrogenase genes and gene expression. <i>Methods in Microbiology</i> , 2001, 30, 271-286.	0.8	147
31	Contrasts between marine and freshwater bacterial community composition: Analyses of communities in Lake George and six other Adirondack lakes. <i>Limnology and Oceanography</i> , 1998, 43, 368-374.	3.1	143
32	Global distribution patterns of distinct clades of the photosynthetic picoeukaryote <i>Ostreococcus</i> . <i>ISME Journal</i> , 2011, 5, 1095-1107.	9.8	142
33	Nitrogen fixation in an anticyclonic eddy in the oligotrophic North Pacific Ocean. <i>ISME Journal</i> , 2008, 2, 663-676.	9.8	137
34	Basis for Diel Variation in Nitrogenase Activity in the Marine Planktonic Cyanobacterium <i>Trichodesmium thiebautii</i> . <i>Applied and Environmental Microbiology</i> , 1990, 56, 3532-3536.	3.1	133
35	Nitrogen fixation by unicellular diazotrophic cyanobacteria in the temperate oligotrophic North Pacific Ocean. <i>Limnology and Oceanography</i> , 2007, 52, 1317-1327.	3.1	129
36	Characterization of diatom-cyanobacteria symbioses on the basis of nifH, hetR and 16S rRNA sequences. <i>Environmental Microbiology</i> , 2006, 8, 1913-1925.	3.8	128

#	ARTICLE	IF	CITATIONS
37	New perspectives on nitrogen-fixing microorganisms in tropical and subtropical oceans. Trends in Microbiology, 2000, 8, 68-73.	7.7	127
38	Experiments linking nitrogenase gene expression to nitrogen fixation in the North Pacific subtropical gyre. Limnology and Oceanography, 2007, 52, 169-183.	3.1	127
39	Abundance and distribution of major groups of diazotrophic cyanobacteria and their potential contribution to N <sub>2</sub> fixation in the tropical Atlantic Ocean. Environmental Microbiology, 2010, 12, 3272-3289.	3.8	126
40	Nitrogen fixation within the water column associated with two hypoxic basins in the Southern California Bight. Aquatic Microbial Ecology, 2011, 63, 193-205.	1.8	126
41	Coordinated regulation of growth, activity and transcription in natural populations of the unicellular nitrogen-fixing cyanobacterium Crocosphaera. Nature Microbiology, 2017, 2, 17118.	13.3	122
42	Nutrient limitation of primary productivity in the Southeast Pacific (BIOSOPE cruise). Biogeosciences, 2008, 5, 215-225.	3.3	118
43	Genetic diversity of the unicellular nitrogen-fixing cyanobacteria <i>UCYN-A</i> and its prymnesiophyte host. Environmental Microbiology, 2014, 16, 3238-3249.	3.8	118
44	Reduction of Selenate to Selenide by Sulfate-Respiring Bacteria: Experiments with Cell Suspensions and Estuarine Sediments. Applied and Environmental Microbiology, 1987, 53, 1365-1369.	3.1	118
45	Symbiotic unicellular cyanobacteria fix nitrogen in the Arctic Ocean. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 13371-13375.	7.1	117
46	Circadian Rhythm of Nitrogenase Gene Expression in the Diazotrophic Filamentous Nonheterocystous Cyanobacterium <i>Trichodesmium</i> sp. Strain IMS 101. Journal of Bacteriology, 1998, 180, 3598-3605.	2.2	115
47	<i>nifH</i> pyrosequencing reveals the potential for location-specific soil chemistry to influence N <sub>2</sub> -fixing community dynamics. Environmental Microbiology, 2014, 16, 3211-3223.	3.8	112
48	Nitrogen fixation and nitrogenase ( <i>nifH</i> ) expression in tropical waters of the eastern North Atlantic. ISME Journal, 2011, 5, 1201-1212.	9.8	111
49	Diversity and Detection of Nitrate Assimilation Genes in Marine Bacteria. Applied and Environmental Microbiology, 2001, 67, 5343-5348.	3.1	110
50	Temporal variability of nitrogen fixation and particulate nitrogen export at Station ALOHA. Limnology and Oceanography, 2017, 62, 200-216.	3.1	110
51	Rates of dinitrogen fixation and the abundance of diazotrophs in North American coastal waters between Cape Hatteras and Georges Bank. Limnology and Oceanography, 2012, 57, 1067-1083.	3.1	106
52	Problems and promises of assaying the genetic potential for nitrogen fixation in the marine environment. Microbial Ecology, 1996, 32, 263-81.	2.8	103
53	Microbial community gene expression within colonies of the diazotroph, <i>Trichodesmium</i> , from the Southwest Pacific Ocean. ISME Journal, 2009, 3, 1286-1300.	9.8	103
54	Aphotic N <sub>2</sub> Fixation in the Eastern Tropical South Pacific Ocean. PLoS ONE, 2013, 8, e81265.	2.5	101

#	ARTICLE	IF	CITATIONS
55	Development and Testing of a DNA Macroarray To Assess Nitrogenase (nifH) Gene Diversity. Applied and Environmental Microbiology, 2004, 70, 1455-1465.	3.1	99
56	The paradox of marine heterotrophic nitrogen fixation: abundances of heterotrophic diazotrophs do not account for nitrogen fixation rates in the eastern tropical South Pacific. Environmental Microbiology, 2014, 16, 3095-3114.	3.8	99
57	Diversity and activity of nitrogen-fixing communities across ocean basins. Limnology and Oceanography, 2017, 62, 1895-1909.	3.1	97
58	Genomic deletions disrupt nitrogen metabolism pathways of a cyanobacterial diatom symbiont. Nature Communications, 2013, 4, 1767.	12.8	96
59	Detection and expression of the phosphonate transporter gene <i>phnD</i> in marine and freshwater picocyanobacteria. Environmental Microbiology, 2009, 11, 1314-1324.	3.8	95
60	Homologous regions of the Salmonella enteritidis virulence plasmid and the chromosome of Salmonella typhi encode thiol: disulphide oxidoreductases belonging to the DsbA thioredoxin family. Microbiology (United Kingdom), 1997, 143, 1443-1450.	1.8	94
61	Gamma-proteobacterial diazotrophs and <i>nifH</i> gene expression in surface waters of the South Pacific Ocean. ISME Journal, 2014, 8, 1962-1973.	9.8	93
62	Distribution and activity of diazotrophs in the Eastern Equatorial Atlantic. Environmental Microbiology, 2009, 11, 741-750.	3.8	92
63	Genome-wide analysis of diel gene expression in the unicellular N <sub>2</sub> -fixing cyanobacterium <i>Crocospaera watsonii</i> WH 8501. ISME Journal, 2010, 4, 621-632.	9.8	91
64	Modification of the Fe Protein of Nitrogenase in Natural Populations of <i>Trichodesmium thiebautii</i> . Applied and Environmental Microbiology, 1993, 59, 669-676.	3.1	91
65	Determination of Nitrogen-Fixing Phylotypes in <i>Lyngbya</i> sp. and <i>Microcoleus chthonoplastes</i> Cyanobacterial Mats from Guerrero Negro, Baja California, Mexico. Applied and Environmental Microbiology, 2004, 70, 2119-2128.	3.1	89
66	Comparative genomics reveals surprising divergence of two closely related strains of uncultivated UCYN-A cyanobacteria. ISME Journal, 2014, 8, 2530-2542.	9.8	87
67	New insights into the ecology of the globally significant uncultured nitrogen-fixing symbiont UCYN-A. Aquatic Microbial Ecology, 2016, 77, 125-138.	1.8	85
68	Molecular evidence for zooplankton-associated nitrogen-fixing anaerobes based on amplification of the nifH gene. FEMS Microbiology Ecology, 1999, 28, 273-279.	2.7	83
69	Seasonality of N <sub>2</sub> fixation and <i>nifH</i> gene diversity in the Gulf of Aqaba (Red Sea). Limnology and Oceanography, 2009, 54, 219-233.	3.1	83
70	Unusual marine unicellular symbiosis with the nitrogen-fixing cyanobacterium UCYN-A. Nature Microbiology, 2017, 2, 16214.	13.3	83
71	Fingerprinting Diazotroph Communities in the Chesapeake Bay by Using a DNA Macroarray. Applied and Environmental Microbiology, 2004, 70, 1767-1776.	3.1	82
72	Diverse diazotrophs are present on sinking particles in the North Pacific Subtropical Gyre. ISME Journal, 2019, 13, 170-182.	9.8	81

#	ARTICLE	IF	CITATIONS
73	Underwater Application of Quantitative PCR on an Ocean Mooring. PLoS ONE, 2011, 6, e22522.	2.5	80
74	Analogous nutrient limitations in unicellular diazotrophs and <i>Prochlorococcus</i> in the South Pacific Ocean. ISME Journal, 2012, 6, 733-744.	9.8	78
75	Regulation of nitrogen-fixation by different nitrogen sources in the marine non-heterocystous cyanobacterium <i>Trichodesmium</i> sp. NIBB1067. Archives of Microbiology, 1991, 156, 335-337.	2.2	77
76	Cyanobacterial symbionts diverged in the late Cretaceous towards lineage-specific nitrogen fixation factories in single-celled phytoplankton. Nature Communications, 2016, 7, 11071.	12.8	72
77	GROWTH AND CARBON CONTENT OF THREE DIFFERENT-SIZED DIAZOTROPHIC CYANOBACTERIA OBSERVED IN THE SUBTROPICAL NORTH PACIFIC. Journal of Phycology, 2008, 44, 1212-1220.	2.3	71
78	Nitrogen fixation in the South Atlantic Gyre and the Benguela Upwelling System. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	71
79	Low genomic diversity in tropical oceanic N <sub>2</sub> -fixing cyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 17807-17812.	7.1	70
80	Ecogenomic sensor reveals controls on N <sub>2</sub> -fixing microorganisms in the North Pacific Ocean. ISME Journal, 2014, 8, 1175-1185.	9.8	70
81	Genetic engineering of multispecies microbial cell factories as an alternative for bioenergy production. Trends in Biotechnology, 2013, 31, 521-529.	9.3	69
82	Spatial and Temporal Distribution of Two Diazotrophic Bacteria in the Chesapeake Bay. Applied and Environmental Microbiology, 2004, 70, 2186-2192.	3.1	67
83	<i>In situ</i> transcriptomic analysis of the globally important keystone N <sub>2</sub> -fixing taxon <i>Crocospaera watsonii</i> . ISME Journal, 2009, 3, 618-631.	9.8	67
84	Nitrogenase genes in PCR and RT-PCR reagents: implications for studies of diversity of functional genes. BioTechniques, 2003, 35, 996-1005.	1.8	66
85	Distinct ecological niches of marine symbiotic N <sub>2</sub> -fixing cyanobacterium <i>Candidatus Atelocyanobacterium thalassa</i> sublineages. Journal of Phycology, 2017, 53, 451-461.	2.3	66
86	Distribution of nitrogen-fixing microorganisms along the Neuse River Estuary, North Carolina. Microbial Ecology, 2001, 41, 114-123.	2.8	64
87	Nitrogenase gene expression in the Chesapeake Bay Estuary. Environmental Microbiology, 2007, 9, 1591-1596.	3.8	64
88	What's New in the Nitrogen Cycle?. Oceanography, 2007, 20, 101-109.	1.0	63
89	Diazotroph community succession during the VAHINE mesocosm experiment (New Caledonia lagoon). Biogeosciences, 2015, 12, 7435-7452.	3.3	63
90	Short-term exposures to chronically toxic copper concentrations induce HSP70 proteins in midge larvae ( <i>Chironomus tentans</i> ). Science of the Total Environment, 2003, 312, 267-272.	8.0	59

#	ARTICLE	IF	CITATIONS
91	Nitrogenase (nifH) gene expression in diazotrophic cyanobacteria in the Tropical North Atlantic in response to nutrient amendments. <i>Frontiers in Microbiology</i> , 2012, 3, 386.	3.5	59
92	Formation of Methane and Carbon Dioxide from Dimethylselenide in Anoxic Sediments and by a Methanogenic Bacterium. <i>Applied and Environmental Microbiology</i> , 1986, 52, 1031-1036.	3.1	59
93	Unusual marine cyanobacteria/haptophyte symbiosis relies on N <sub>2</sub> fixation even in N-rich environments. <i>ISME Journal</i> , 2020, 14, 2395-2406.	9.8	58
94	Misannotations of rRNA can now generate 90% false positive protein matches in metatranscriptomic studies. <i>Nucleic Acids Research</i> , 2011, 39, 8792-8802.	14.5	57
95	Regulation of nitrogenase activity in relation to the light-dark regime in the filamentous non-heterocystous cyanobacterium <i>Trichodesmium</i> sp. NIBB 1067. <i>Journal of General Microbiology</i> , 1992, 138, 2679-2685.	2.3	55
96	Comparison of diazotroph community structure in <i>Lyngbya</i> sp. and <i>Microcoleus chthonoplastes</i> dominated microbial mats from Guerrero Negro, Baja, Mexico. <i>FEMS Microbiology Ecology</i> , 2004, 47, 305-308.	2.7	55
97	ARBitrator: a software pipeline for on-demand retrieval of auto-curated <i>nifH</i> sequences from GenBank. <i>Bioinformatics</i> , 2014, 30, 2883-2890.	4.1	55
98	Nitrogen-Fixing Phylotypes of Chesapeake Bay and Neuse River Estuary Sediments. <i>Microbial Ecology</i> , 2002, 44, 336-343.	2.8	54
99	ISOLATION OF CALOTHRIX RHIZOSOLENIAE (CYANOBACTERIA) STRAIN SC01 FROM CHAETOCEROS (BACILLARIOPHYTA) SPP. DIATOMS OF THE SUBTROPICAL NORTH PACIFIC OCEAN1. <i>Journal of Phycology</i> , 2010, 46, 1028-1037.	2.3	53
100	Characteristics of diazotrophs in surface to abyssopelagic waters of the Sargasso Sea. <i>Aquatic Microbial Ecology</i> , 2007, 46, 15-30.	1.8	52
101	<i>Vibrio</i> diversity and dynamics in the Monterey Bay upwelling region. <i>Frontiers in Microbiology</i> , 2014, 5, 48.	3.5	51
102	Spatial-temporal variability in diazotroph assemblages in Chesapeake Bay using an oligonucleotide nifH microarray. <i>Environmental Microbiology</i> , 2007, 9, 1823-1835.	3.8	50
103	Diversity, Genomics, and Distribution of Phytoplankton-Cyanobacterium Single-Cell Symbiotic Associations. <i>Annual Review of Microbiology</i> , 2019, 73, 435-456.	7.3	49
104	Temporal Variability in Nitrogenase Gene Expression in Natural Populations of the Marine Cyanobacterium <i>Trichodesmium thiebautii</i> . <i>Applied and Environmental Microbiology</i> , 1996, 62, 1073-1075.	3.1	49
105	Distribution of diazotrophic microorganisms and nifH gene expression in the Mekong River plume during intermonsoon. <i>Marine Ecology - Progress Series</i> , 2011, 424, 39-52.	1.9	49
106	Title is missing!, 1999, 401, 77-96.		48
107	Vertical Distribution of Nitrogen-Fixing Phylotypes in a Meromictic, Hypersaline Lake. <i>Microbial Ecology</i> , 2004, 47, 30-40.	2.8	48
108	Cellular interactions: lessons from the nitrogen-fixing cyanobacteria. <i>Journal of Phycology</i> , 2013, 49, 1024-1035.	2.3	47

#	ARTICLE	IF	CITATIONS
109	Application of a nifH oligonucleotide microarray for profiling diversity of N <sub>2</sub> -fixing microorganisms in marine microbial mats. <i>Environmental Microbiology</i> , 2006, 8, 1721-1735.	3.8	46
110	Diazotrophic bacterioplankton in a coral reef lagoon: phylogeny, diel nitrogenase expression and response to phosphate enrichment. <i>ISME Journal</i> , 2007, 1, 78-91.	9.8	46
111	Phylogenetic diversity of cyanobacterial <i>narB</i> genes from various marine habitats. <i>Environmental Microbiology</i> , 2008, 10, 3377-3387.	3.8	46
112	Metagenomic potential of microbial assemblages in the surface waters of the central Pacific Ocean tracks variability in oceanic habitat. <i>Limnology and Oceanography</i> , 2009, 54, 1981-1994.	3.1	46
113	Seasonal <i>Synechococcus</i> and <i>Thaumarchaeal</i> population dynamics examined with high resolution with remote <i>in situ</i> instrumentation. <i>ISME Journal</i> , 2012, 6, 513-523.	9.8	46
114	Detection and characterization of cyanobacterial nifH genes. <i>Applied and Environmental Microbiology</i> , 1994, 60, 880-887.	3.1	46
115	Differential Distributions of <i>Synechococcus</i> Subgroups Across the California Current System. <i>Frontiers in Microbiology</i> , 2011, 2, 59.	3.5	45
116	Unicellular cyanobacteria with a new mode of life: the lack of photosynthetic oxygen evolution allows nitrogen fixation to proceed. <i>Archives of Microbiology</i> , 2010, 192, 783-790.	2.2	44
117	Whole genome comparison of six <i>Scoprocococcus watsonii</i> strains with differing phenotypes. <i>Journal of Phycology</i> , 2013, 49, 786-801.	2.3	44
118	Microbiological, molecular biological and stable isotopic evidence for nitrogen fixation in the open waters of Lake Michigan. <i>Environmental Microbiology</i> , 2001, 3, 205-219.	3.8	42
119	An emergent community ecosystem model applied to the California Current System. <i>Journal of Marine Systems</i> , 2010, 83, 221-241.	2.1	42
120	Quantitative Analysis of nifH Genes and Transcripts from Aquatic Environments. <i>Methods in Enzymology</i> , 2005, 397, 380-394.	1.0	41
121	Spatial patterns and light-driven variation of microbial population gene expression in surface waters of the oligotrophic open ocean. <i>Environmental Microbiology</i> , 2010, 12, 1940-1956.	3.8	41
122	Latitudinal constraints on the abundance and activity of the cyanobacterium UCYN-6 and other marine diazotrophs in the North Pacific. <i>Limnology and Oceanography</i> , 2020, 65, 1858-1875.	3.1	40
123	Diazotroph Diversity in the Sea Ice, Melt Ponds, and Surface Waters of the Eurasian Basin of the Central Arctic Ocean. <i>Frontiers in Microbiology</i> , 2016, 7, 1884.	3.5	39
124	Differential effects of nitrate, ammonium, and urea as N sources for microbial communities in the North Pacific Ocean. <i>Limnology and Oceanography</i> , 2017, 62, 2550-2574.	3.1	39
125	What's in a name? The case of cyanobacteria. <i>Journal of Phycology</i> , 2020, 56, 1-5.	2.3	39
126	Modeled contributions of three types of diazotrophs to nitrogen fixation at Station ALOHA. <i>ISME Journal</i> , 2007, 1, 606-619.	9.8	38



#	ARTICLE	IF	CITATIONS
127	Single-taxon field measurements of bacterial gene regulation controlling DMSP fate. ISME Journal, 2015, 9, 1677-1686.	9.8	37
128	Application of multivariate statistics in detecting temporal and spatial patterns of water chemistry in Lake George, New York. Ecological Modelling, 1996, 91, 183-192.	2.5	35
129	The Nitrogen Cycle in the North Pacific Trades Biome. , 2008, , 705-769.		35
130	KÅ«lauea lava fuels phytoplankton bloom in the North Pacific Ocean. Science, 2019, 365, 1040-1044.	12.6	35
131	Intriguing size distribution of the uncultured and globally widespread marine non-cyanobacterial diazotroph Gamma-A. ISME Journal, 2021, 15, 124-128.	9.8	35
132	Hydrogen production by Trichodesmium erythraeum Cyanotheca sp. and Crocosphaera watsonii. Aquatic Microbial Ecology, 2010, 59, 197-206.	1.8	35
133	Rapid annotation of <i>nifH</i> gene sequences using classification and regression trees facilitates environmental functional gene analysis. Environmental Microbiology Reports, 2016, 8, 905-916.	2.4	34
134	GENOTYPIC RELATIONSHIPS IN TRICHODESMIUM (CYANOPHYCEAE) BASED ON <i>nifH</i> SEQUENCE COMPARISONS1. Journal of Phycology, 1993, 29, 806-810.	2.3	33
135	Expression of photosynthesis genes in relation to nitrogen fixation in the diazotrophic filamentous nonheterocystous cyanobacterium Trichodesmium sp. IMS 101. Plant Molecular Biology, 1999, 41, 89-104.	3.9	33
136	Photosynthesis in the Open Ocean. Science, 2009, 326, 945-946.	12.6	33
137	How microbes survive in the open ocean. Science, 2017, 357, 646-647.	12.6	33
138	Two Strains of Crocosphaera watsonii with Highly Conserved Genomes are Distinguished by Strain-Specific Features. Frontiers in Microbiology, 2011, 2, 261.	3.5	32
139	Antiserum to Nitrogenase Generated from an Amplified DNA Fragment from Natural Populations of <i>Trichodesmium</i> spp. Applied and Environmental Microbiology, 1990, 56, 3527-3531.	3.1	32
140	Hopanoid lipids may facilitate aerobic nitrogen fixation in the ocean. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18269-18271.	7.1	31
141	The Transcriptional Cycle Is Suited to Daytime N <sub>2</sub> Fixation in the Unicellular Cyanobacterium <i>Candidatus</i> Atelocyanobacterium thalassa (UCYN-A). MBio, 2019, 10, .	4.1	31
142	UCYN-A3, a newly characterized open ocean sublineage of the symbiotic N <sub>2</sub> -fixing cyanobacterium <i>Candidatus</i> Atelocyanobacterium thalassa. Environmental Microbiology, 2019, 21, 111-124.	3.8	31
143	Effects of inorganic nitrogen on taxa-specific cyanobacterial growth and <i>nifH</i> expression in a subtropical estuary. Limnology and Oceanography, 2008, 53, 2519-2532.	3.1	30
144	Title is missing!. , 1999, 401, 255-264.		29

#	ARTICLE	IF	CITATIONS
145	A microarray for assessing transcription from pelagic marine microbial taxa. ISME Journal, 2014, 8, 1476-1491.	9.8	29
146	Periodic and coordinated gene expression between a diazotroph and its diatom host. ISME Journal, 2019, 13, 118-131.	9.8	29
147	Seasonal change in the abundance of <i>Synechococcus</i> and multiple distinct phlotypes in Monterey Bay determined by <i>rbcL</i> and <i>narB</i> quantitative PCR. Environmental Microbiology, 2012, 14, 580-593.	3.8	28
148	Arrangement of nitrogenase structural genes in an aerobic filamentous nonheterocystous cyanobacterium. Journal of Bacteriology, 1991, 173, 7055-7058.	2.2	27
149	Unexpected presence of the nitrogen-fixing symbiotic cyanobacterium UCYN-A in Monterey Bay, California. Journal of Phycology, 2020, 56, 1521-1533.	2.3	27
150	PATHWAY OF AMMONIUM ASSIMILATION IN A MARINE DIATOM DETERMINED WITH THE RADIOTRACER <sup>13</sup> N <sup>1</sup> . Journal of Phycology, 1988, 24, 588-591.	2.3	26
151	Identification of Associations between Bacterioplankton and Photosynthetic Picoeukaryotes in Coastal Waters. Frontiers in Microbiology, 2016, 7, 339.	3.5	26
152	Overlooked and widespread pennate diatom-diazotroph symbioses in the sea. Nature Communications, 2022, 13, 799.	12.8	26
153	Cyanobacterial assimilatory nitrate reductase gene diversity in coastal and oligotrophic marine environments. Environmental Microbiology, 2006, 8, 2083-2095.	3.8	25
154	WATERSHED CLASSIFICATION BY DISCRIMINANT ANALYSES OF LAKEWATER-CHEMISTRY AND TERRESTRIAL CHARACTERISTICS. , 1998, 8, 497-507.		24
155	Structural analysis of the Trichodesmium nitrogenase iron protein: implications for aerobic nitrogen fixation activity. FEMS Microbiology Letters, 2006, 153, 303-309.	1.8	24
156	Diel cycling of DNA staining and <i>nifH</i> gene regulation in the unicellular cyanobacterium <i>Crocospaera watsonii</i> strain WH 8501 (Cyanophyta). Environmental Microbiology, 2010, 12, 1001-1010.	3.8	24
157	Metatranscriptomics of N <sub>2</sub> -fixing cyanobacteria in the Amazon River plume. ISME Journal, 2015, 9, 1557-1569.	9.8	24
158	Coupling between ammonium uptake and incorporation in a marine diatom: Experiments with the short-lived radioisotope <sup>13</sup> N. Limnology and Oceanography, 1988, 33, 518-527.	3.1	23
159	In Situ Diazotroph Population Dynamics Under Different Resource Ratios in the North Pacific Subtropical Gyre. Frontiers in Microbiology, 2018, 9, 1616.	3.5	23
160	Distributions and Abundances of Sublineages of the N <sub>2</sub> -Fixing Cyanobacterium Candidatus <i>Atelocyanobacterium thalassa</i> (UCYN-A) in the New Caledonian Coral Lagoon. Frontiers in Microbiology, 2018, 9, 554.	3.5	23
161	Diversity of bacterial communities in Adirondack lakes: do species assemblages reflect lake water chemistry?. , 1999, , 77-96.		23
162	PATHWAY OF AMMONIUM ASSIMILATION IN A MARINE DIATOM DETERMINED WITH THE RADIOTRACER <sup>13</sup> N. Journal of Phycology, 1988, 24, 588-591.	2.3	23

#	ARTICLE	IF	CITATIONS
163	Hydrogen Cycling by the Unicellular Marine Diazotroph <i>Crocospaera watsonii</i> Strain WH8501. Applied and Environmental Microbiology, 2010, 76, 6797-6803.	3.1	22
164	Modeled phytoplankton diversity and productivity in the California Current System. Ecological Modelling, 2013, 264, 37-47.	2.5	22
165	Short-term variability in euphotic zone biogeochemistry and primary productivity at Station ALOHA: A case study of summer 2012. Global Biogeochemical Cycles, 2015, 29, 1145-1164.	4.9	22
166	NITROGEN FIXATION, HYDROGEN CYCLING, AND ELECTRON TRANSPORT KINETICS IN <i>TRICHODESMIUM ERYTHRAEUM</i> (CYANOBACTERIA) STRAIN IMS101 <sup>1</sup> . Journal of Phycology, 2012, 48, 595-606.	2.3	21
167	How single cells work together. Science, 2015, 349, 1163-1164.	12.6	21
168	Complex marine microbial communities partition metabolism of scarce resources over the diel cycle. Nature Ecology and Evolution, 2022, 6, 218-229.	7.8	21
169	Cloning and transcriptional analysis of the nifUHDK genes of Trichodesmium sp. IMS101 reveals stable nifD, nifDK and nifK transcripts. Microbiology (United Kingdom), 1998, 144, 3359-3368.	1.8	20
170	Non-cyanobacterial <i>nifH</i> phylotypes in the North Pacific subtropical Gyre detected by flow cytometry cell sorting. Environmental Microbiology Reports, 2013, 5, 705-715.	2.4	20
171	Trichodesmium: Establishment of Culture and Characteristics of N <sub>2</sub> -Fixation. , 1992, , 307-318.		19
172	Heterotrophic mineralization of amino acid nitrogen in subalpine Castle Lake, California. Marine Chemistry, 1985, 16, 343-350.	2.3	18
173	Biological and oceanographic insights from larval labrid (Pisces: Labridae) identification using mtDNA sequences. Marine Biology, 1994, 118, 17-24.	1.5	18
174	Nitrogen fixation in the marine environment: relating genetic potential to nitrogenase activity. Journal of Experimental Marine Biology and Ecology, 1996, 203, 61-73.	1.5	18
175	Measurements of nitrogen fixation in the oligotrophic North Pacific Subtropical Gyre using a free-drifting submersible incubation device. Journal of Plankton Research, 2015, 37, 727-739.	1.8	18
176	Temporal variability of diazotroph community composition in the upwelling region off NW Iberia. Scientific Reports, 2019, 9, 3737.	3.3	18
177	Diel variability in transcription of the structural gene for glutamine synthetase ( <i>glnA</i> ) in natural populations of the marine diazotrophic cyanobacterium <i>Trichodesmium thiebautii</i> . FEMS Microbiology Ecology, 1996, 21, 187-196.	2.7	17
178	Use of the high-affinity phosphate transporter gene, <i>pstS</i> , as an indicator for phosphorus stress in the marine diazotroph <i>Crocospaera watsonii</i> (Chroococcales, Cyanobacteria). Journal of Phycology, 2019, 55, 752-761.	2.3	17
179	Effects of nutrient enrichment on surface microbial community gene expression in the oligotrophic North Pacific Subtropical Gyre. ISME Journal, 2019, 13, 374-387.	9.8	17
180	UCYN-A/haptophyte symbioses dominate N <sub>2</sub> fixation in the Southern California Current System. ISME Communications, 2021, 1, .	4.2	17

#	ARTICLE	IF	CITATIONS
181	Determination of N <sub>2</sub> fixation potential in the marine environment: application of the polymerase chain reaction. <i>Marine Ecology - Progress Series</i> , 1993, 95, 305-309.	1.9	17
182	Modelling the vertical distribution of <i>Prochlorococcus</i> and <i>Synechococcus</i> in the North Pacific Subtropical Ocean. <i>Environmental Microbiology</i> , 2007, 9, 2588-2602.	3.8	16
183	Ocean acidification impacts on nitrogen fixation in the coastal western Mediterranean Sea. <i>Estuarine, Coastal and Shelf Science</i> , 2017, 186, 45-57.	2.1	16
184	Unique modification of adenine in genomic DNA of the marine cyanobacterium <i>Trichodesmium</i> sp. strain NIBB 1067. <i>Journal of Bacteriology</i> , 1991, 173, 7059-7062.	2.2	15
185	Molecular ecology of aquatic communities: reflections and future directions. , 1999, 401, 1-7.		15
186	Molecular markers define progressing stages of phosphorus limitation in the nitrogen-fixing cyanobacterium, <i>Crocosphaera</i> . <i>Journal of Phycology</i> , 2016, 52, 274-282.	2.3	15
187	Light and depth dependency of nitrogen fixation by the non-photosynthetic, symbiotic cyanobacterium UCYN-A. <i>Environmental Microbiology</i> , 2021, 23, 4518-4531.	3.8	14
188	Dynamics of dissolved organic nitrogen in subalpine Castle Lake, California. <i>Hydrobiologia</i> , 1988, 157, 33-45.	2.0	13
189	New twist on nitrogen cycling in oceanic oxygen minimum zones. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 4575-4576.	7.1	13
190	Trends in Free-access Genomic Data Accelerate Advances in Cyanobacteria Taxonomy. <i>Journal of Phycology</i> , 2021, 57, 1392-1402.	2.3	13
191	Surveying DNA Elements within Functional Genes of Heterocyst-Forming Cyanobacteria. <i>PLoS ONE</i> , 2016, 11, e0156034.	2.5	13
192	Rapid incorporation of <sup>13</sup> N <sub>2</sub> by NH <sub>4</sub> <sup>-</sup> limited phytoplankton. <i>Marine Ecology - Progress Series</i> , 1989, 51, 237-241.	1.9	13
193	Measuring N <sub>2</sub> Fixation in the Field. , 2007, , 193-205.		12
194	Dissolved hydrogen and nitrogen fixation in the oligotrophic North Pacific Subtropical Gyre. <i>Environmental Microbiology Reports</i> , 2013, 5, 697-704.	2.4	12
195	Two subpopulations of <i>Crocosphaera watsonii</i> have distinct distributions in the North Pacific Subtropical Gyre. <i>Environmental Microbiology</i> , 2016, 18, 514-524.	3.8	12
196	Nitrogen Fixation in the Marine Environment: Genetic Potential and Nitrogenase Expression. , 1998, , 285-301.		12
197	Nitrogen Fixation in the Sea: Why Only <i>Trichodesmium</i> ?. , 1995, , 335-364.		11
198	Determinants of Summer Nitrate Concentration in a Set of Adirondack Lakes, New York. <i>Water, Air, and Soil Pollution</i> , 1999, 111, 19-28.	2.4	11

#	ARTICLE	IF	CITATIONS
199	Gamma4: a genetically versatile Gammaproteobacterial <i>nifH</i> phylotype that is widely distributed in the North Pacific Ocean. <i>Environmental Microbiology</i> , 2021, 23, 4246-4259.	3.8	11
200	ORGANIZATION OF THE <i>nif</i> GENES OF THE NONHETEROCYSTOUS CYANOBACTERIUM <i>TRICHODESMIUM</i> SP. IMS101. <i>Journal of Phycology</i> , 2000, 36, 693-701.	2.3	10
201	DIVERSITY, DISTRIBUTION AND BIOGEOCHEMICAL SIGNIFICANCE OF NITROGEN-FIXING MICROORGANISMS IN ANOXIC AND SUBOXIC OCEAN ENVIRONMENTS. , 2006, , 337-369.		9
202	EFFECT OF EDTA ADDITIONS ON NATURAL <i>TRICHODESMIUM</i> SPP. (CYANOPHYTA) POPULATIONS. <i>Journal of Phycology</i> , 2006, 42, 900-904.	2.3	9
203	Molecular biology techniques and applications for ocean sensing. <i>Ocean Science</i> , 2009, 5, 101-113.	3.4	9
204	Microbes in Earth's aqueous environments. <i>Frontiers in Microbiology</i> , 2010, 1, 4.	3.5	9
205	Modeled diversity effects on microbial ecosystem functions of primary production, nutrient uptake, and remineralization. <i>Ecology</i> , 2014, 95, 153-163.	3.2	9
206	Elucidation of trophic interactions in an unusual single-cell nitrogen-fixing symbiosis using metabolic modeling. <i>PLoS Computational Biology</i> , 2021, 17, e1008983.	3.2	9
207	Title is missing!. <i>Water, Air, and Soil Pollution</i> , 1999, 112, 407-427.	2.4	8
208	Characterization of cyanobacterial <i>glnA</i> gene diversity and gene expression in marine environments. <i>FEMS Microbiology Ecology</i> , 2006, 55, 391-402.	2.7	8
209	VARIATION IN THE ABUNDANCE OF <i>SYNECHOCOCCUS</i> SP. CC9311 <i>NARB</i> MRNA RELATIVE TO CHANGES IN LIGHT, NITROGEN GROWTH CONDITIONS AND NITRATE ASSIMILATION <sup>1</sup> . <i>Journal of Phycology</i> , 2012, 48, 1028-1039.	2.3	8
210	Molecular Biology of Nitrogen Fixation in Natural Populations of Marine Cyanobacteria. , 1992, , 249-264.		8
211	Cell sorting reveals few novel prokaryote and photosynthetic picoeukaryote associations in the oligotrophic ocean. <i>Environmental Microbiology</i> , 2021, 23, 1469-1480.	3.8	7
212	Molecular ecology of aquatic communities: reflections and future directions. , 1999, , 1-8.		7
213	RESEARCH: Are Recent Watershed Disturbances Associated with Temporal and Spatial Changes in Water Quality of Lake George, New York, USA?. <i>Environmental Management</i> , 1997, 21, 725-732.	2.7	6
214	Molecular Approaches to the Nitrogen Cycle. , 2008, , 1303-1344.		6
215	Marine Microorganisms, Biogeochemical Cycles, and Global Climate Change. <i>Microbe Magazine</i> , 2011, 6, 169-175.	0.4	6
216	Genetic Diversity Affects the Daily Transcriptional Oscillations of Marine Microbial Populations. <i>PLoS ONE</i> , 2016, 11, e0146706.	2.5	6

#	ARTICLE	IF	CITATIONS
217	Crystal ball “ 2009. Environmental Microbiology Reports, 2009, 1, 3-26.	2.4	5
218	Critical Role of Light in the Growth and Activity of the Marine N <sub>2</sub> -Fixing UCYN-A Symbiosis. Frontiers in Microbiology, 2021, 12, 666739.	3.5	5
219	Nitrogen Fixation in the Marine Cyanobacterium Trichodesmium. , 1999, , 485-500.		5
220	Diel variability in transcription of the structural gene for glutamine synthetase (glnA) in natural populations of the marine diazotrophic cyanobacterium Trichodesmium thiebautii. FEMS Microbiology Ecology, 1996, 21, 187-196.	2.7	5
221	Interactions with Partners Are Key for Oceanic Nitrogen-Fixing Cyanobacteria. Microbe Magazine, 2013, 8, 117-122.	0.4	5
222	Dissolved hydrogen and nitrogen fixation in the oligotrophic North Pacific Subtropical Gyre. Environmental Microbiology Reports, 2013, 5, 697-704.	2.4	5
223	Environmental Engineering Forum. Journal of Environmental Engineering, ASCE, 1999, 125, 5-6.	1.4	4
224	Coupling FACS and Genomic Methods for the Characterization of Uncultivated Symbionts. Methods in Enzymology, 2013, 531, 45-60.	1.0	4
225	New Nitrogen-Fixing Microorganisms from the Oceans: Biological Aspects and Global Implications. , 2005, , 361-365.		4
226	Molecular Approaches to Studies of the Activities of Marine Organisms. , 1998, , 91-111.		4
227	A correction to: biological and oceanographic insights from larval labrid (Pisces: Labridae) identification using mtDNA sequences. Marine Biology, 1998, 130, 589-592.	1.5	3
228	Phytoplankton transcriptomic and physiological responses to fixed nitrogen in the California current system. PLoS ONE, 2020, 15, e0231771.	2.5	3
229	Nickel superoxide dismutase protects nitrogen fixation in <i>Trichodesmium</i> . Limnology and Oceanography Letters, 0, , .	3.9	3
230	Biogeography of N <sub>2</sub> Fixation in the Surface Ocean. , 2021, , 117-141.		1
231	Factors Controlling N <sub>2</sub> Fixation. , 2021, , 95-115.		1
232	N <sub>2</sub> Fixation in Ocean Basins. , 2021, , 143-156.		1
233	Fundamentals of N <sub>2</sub> Fixation. , 2021, , 9-29.		1
234	Ocean Gyres, Metagenomics of. , 2014, , 1-20.		1

#	ARTICLE	IF	CITATIONS
235	Structural analysis of the Trichodesmium nitrogenase iron protein: implications for aerobic nitrogen fixation activity. FEMS Microbiology Letters, 1997, 153, 303-309.	1.8	1
236	Preface to special section. Microbial Ecology, 1996, 32, 229-30.	2.8	0
237	LETTER FROM THE EDITORS. Journal of Phycology, 2012, 48, 839-839.	2.3	0
238	Nitrogen Fixation in the Marine Environment. , 2021, , 1-7.		0
239	Measurements of Organism Abundances and Activities. , 2021, , 63-93.		0
240	Microorganisms and Habitats. , 2021, , 43-61.		0
241	History of Research on Marine N2 Fixation. , 2021, , 31-41.		0
242	Marine N2 Fixation, Global Change and the Future. , 2021, , 157-170.		0
243	Omics-Enabled Microbial Sensors on Ocean Platforms. Springer Protocols, 2012, , 1-32.	0.3	0