Brian Palenik

List of Publications by Year
in descending order

101 papers	11,256 citations	38742 50 h-index	39675 94 g-index
101 all docs	101 docs citations	101 times ranked	10479 citing authors

#	Article	IF	Citations
1	The Genome of the Diatom Thalassiosira Pseudonana: Ecology, Evolution, and Metabolism. Science, 2004, 306, 79-86.	12.6	1,862
2	The Marine Microbial Eukaryote Transcriptome Sequencing Project (MMETSP): Illuminating the Functional Diversity of Eukaryotic Life in the Oceans through Transcriptome Sequencing. PLoS Biology, 2014, 12, e1001889.	5.6	885
3	The genome of a motile marine Synechococcus. Nature, 2003, 424, 1037-1042.	27.8	611
4	The tiny eukaryote Ostreococcus provides genomic insights into the paradox of plankton speciation. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 7705-7710.	7.1	563
5	Assessing the dynamics and ecology of marine picophytoplankton: The importance of the eukaryotic component. Limnology and Oceanography, 2004, 49, 168-179.	3.1	469
6	Preparation and Chemistry of the Artificial Algal Culture Medium Aquil. Biological Oceanography, 1989, 6, 443-461.	0.0	461
7	Bringing the ocean into the laboratory to probe the chemical complexity of sea spray aerosol. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7550-7555.	7.1	439
8	Prochlorococcus marinus nov. gen. nov. sp.: an oxyphototrophic marine prokaryote containing divinyl chlorophyll a and b. Archives of Microbiology, 1992, 157, 297-300.	2.2	402
9	Unravelling the genomic mosaic of a ubiquitous genus of marine cyanobacteria. Genome Biology, 2008, 9, R90.	9.6	288
10	Multiple evolutionary origins of prochlorophytes, the chlorophyllb-containing prokaryotes. Nature, 1992, 355, 265-267.	27.8	263
11	Genome sequence of <i>Synechococcus</i> CC9311: Insights into adaptation to a coastal environment. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13555-13559.	7.1	230
12	Modern proteomes contain putative imprints of ancient shifts in trace metal geochemistry. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 17822-17827.	7.1	215
13	Chromatic Adaptation in Marine Synechococcus Strains. Applied and Environmental Microbiology, 2001, 67, 991-994.	3.1	174
14	Niche adaptation in ocean cyanobacteria. Nature, 1998, 396, 226-228.	27.8	170
15	Amino acid utilization by marine phytoplankton: A novel mechanism. Limnology and Oceanography, 1990, 35, 260-269.	3.1	156
16	Temporal variation of <i>Synechococcus</i> clades at a coastal Pacific Ocean monitoring site. ISME Journal, 2009, 3, 903-915.	9.8	142
17	Broad-host-range vector system for synthetic biology and biotechnology in cyanobacteria. Nucleic Acids Research, 2014, 42, e136-e136.	14.5	141
18	Phosphate Stress in Cultures and Field Populations of the Dinoflagellate <i>Prorocentrum minimum</i> Detected by a Single-Cell Alkaline Phosphatase Assay. Applied and Environmental Microbiology, 1999, 65, 3205-3212.	3.1	138

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19	Microarray analysis of phosphate regulation in the marine cyanobacterium <i>Synechococcus</i> sp. WH8102. ISME Journal, 2009, 3, 835-849.	9.8	131
20	The marine cyanobacterium Synechococcus sp. WH7805 requires urease (urea amiohydrolase, EC 3.5.1.5) to utilize urea as a nitrogen source: molecular-genetic and biochemical analysis of the enzyme. Microbiology (United Kingdom), 1999, 145, 447-459.	1.8	118
21	Hydrogen peroxide production by a marine phytoplankter1. Limnology and Oceanography, 1987, 32, 1365-1369.	3.1	113
22	TRACE METAL REDUCTION BY PHYTOPLANKTON: THE ROLE OF PLASMALEMMA REDOX ENZYMES. Journal of Phycology, 1987, 23, 237-244.	2.3	111
23	Genomes and gene expression across light and productivity gradients in eastern subtropical Pacific microbial communities. ISME Journal, 2015, 9, 1076-1092.	9.8	108
24	Diversity, function and evolution of genes coding for putative Niâ€containing superoxide dismutases. Environmental Microbiology, 2008, 10, 1831-1843.	3.8	101
25	Comparison of cell-surface L-amino acid oxidases from several marine phytoplankton. Marine Ecology - Progress Series, 1990, 59, 195-201.	1.9	100
26	Ni Uptake and Limitation in Marine <i>Synechococcus</i> Strains. Applied and Environmental Microbiology, 2008, 74, 23-31.	3.1	92
27	Transcriptomic and microRNAomic profiling reveals multi-faceted mechanisms to cope with phosphate stress in a dinoflagellate. ISME Journal, 2017, 11, 2209-2218.	9.8	88
28	Coastal <i>Synechococcus</i> metagenome reveals major roles for horizontal gene transfer and plasmids in population diversity. Environmental Microbiology, 2009, 11, 349-359.	3.8	86
29	Genome of the halotolerant green alga <scp><i>P</i></scp><i>icochlorum</i> sp. reveals strategies for thriving under fluctuating environmental conditions. Environmental Microbiology, 2015, 17, 412-426.	3.8	85
30	Swimming Marine<i>Synechococcus</i>Strains with Widely Different Photosynthetic Pigment Ratios Form a Monophyletic Group. Applied and Environmental Microbiology, 1999, 65, 5247-5251.	3.1	84
31	Amine Oxidases of Marine Phytoplankton. Applied and Environmental Microbiology, 1991, 57, 2440-2443.	3.1	83
32	Characterization of ectoenzyme activity and phosphate-regulated proteins in the coccolithophorid Emiliania huxleyi. Journal of Plankton Research, 2003, 25, 1215-1225.	1.8	76
33	Vitamin B1 ecophysiology of marine picoeukaryotic algae: Strainâ€specific differences and a new role for bacteria in vitamin cycling. Limnology and Oceanography, 2015, 60, 215-228.	3.1	76
34	Variability in Protist Grazing and Growth on Different Marine Synechococcus Isolates. Applied and Environmental Microbiology, 2011, 77, 3074-3084.	3.1	71
35	Comparison of the Seasonal Variations of Synechococcus Assemblage Structures in Estuarine Waters and Coastal Waters of Hong Kong. Applied and Environmental Microbiology, 2015, 81, 7644-7655.	3.1	69
36	Use of plankton-derived vitamin B1 precursors, especially thiazole-related precursor, by key marine picoeukaryotic phytoplankton. ISME Journal, 2017, 11, 753-765.	9.8	69

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37	Potential effects of UV-B on the chemical environment of marine organisms: A review. Environmental Pollution, 1991, 70, 117-130.	7.5	67
38	Merging Biological Self-Assembly with Synthetic Chemical Tailoring: The Potential for 3-D Genetically Engineered Micro/Nano-Devices (3-D GEMS). International Journal of Applied Ceramic Technology, 2005, 2, 317-326.	2.1	67
39	The unexpected extremophile: Tolerance to fluctuating salinity in the green alga Picochlorum. Algal Research, 2016, 16, 465-472.	4.6	67
40	Gene Expression Induced by Copper Stress in the Diatom Thalassiosira pseudonana. Eukaryotic Cell, 2006, 5, 1157-1168.	3.4	65
41	Coastal Strains of Marine <i>Synechococcus</i> Species Exhibit Increased Tolerance to Copper Shock and a Distinctive Transcriptional Response Relative to Those of Open-Ocean Strains. Applied and Environmental Microbiology, 2009, 75, 5047-5057.	3.1	65
42	The use of amides and other organic nitrogen sources by the phytoplankton <i>Emiliania huxleyi</i>. Limnology and Oceanography, 1997, 42, 1544-1551.	3.1	64
43	Computational inference and experimental validation of the nitrogen assimilation regulatory network in cyanobacterium Synechococcus sp. WH 8102. Nucleic Acids Research, 2006, 34, 1050-1065.	14.5	64
44	Dark production of H2O2 in the Sargasso Sea. Limnology and Oceanography, 1988, 33, 1606-1611.	3.1	64
45	Structure of Compositionally Simple Lipopolysaccharide from Marine <i>Synechococcus</i>. Journal of Bacteriology, 2009, 191, 5499-5509.	2.2	62
46	Detection and phylogenetic analysis of coastal bioaerosols using culture dependent and independent techniques. Biogeosciences, 2011, 8, 301-309.	3.3	60
47	Operon prediction by comparative genomics: an application to the Synechococcus sp. WH8102 genome. Nucleic Acids Research, 2004, 32, 2147-2157.	14.5	59
48	The green ribbon: Multiscale physical control of phytoplankton productivity and community structure over a narrow continental shelf. Limnology and Oceanography, 2011, 56, 611-626.	3.1	58
49	THE IDENTIFICATION AND PURIFICATION OF A CELL-SURFACE ALKALINE PHOSPHATASE FROM THE DINOFLAGELLATE PROROCENTRUM MINIMUM (DINOPHYCEAE)1. Journal of Phycology, 1997, 33, 602-612.	2.3	56
50	Genomic island genes in a coastal marine <i>Synechococcus</i> strain confer enhanced tolerance to copper and oxidative stress. ISME Journal, 2013, 7, 1139-1149.	9.8	56
51	Nickel utilization in phytoplankton assemblages from contrasting oceanic regimes. Deep-Sea Research Part I: Oceanographic Research Papers, 2010, 57, 553-566.	1.4	55
52	A STRESS-INDUCED PROTEIN ASSOCIATED WITH THE GIRDLE BAND REGION OF THE DIATOM THALASSIOSIRA PSEUDONANA (BACILLARIOPHYTA)1. Journal of Phycology, 2005, 41, 577-589.	2.3	53
53	Effect of organic compounds on cloud condensation nuclei (CCN) activity of sea spray aerosol produced by bubble bursting. Atmospheric Environment, 2011, 45, 7462-7469.	4.1	50
54	CYANOBACTERIAL EVOLUTION AND PROCHLOROPHYTE DIVERSITY AS SEEN IN DNA-DEPENDENT RNA POLYMERASE GENE SEQUENCES1. Journal of Phycology, 1996, 32, 638-646.	2.3	47

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55	Analysis of two marine metagenomes reveals the diversity of plasmids in oceanic environments. Environmental Microbiology, 2012, 14, 453-466.	3.8	45
56	Role of a Microcin-Câ€"like biosynthetic gene cluster in allelopathic interactions in marine <i>Synechococcus</i>. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 12030-12035.	7.1	45
57	PtrA is required for coordinate regulation of gene expression during phosphate stress in a marine <i>Synechococcus</i>. ISME Journal, 2010, 4, 908-921.	9.8	42
58	Wholeâ€genome microarray analyses of <i>Synechococcus</i>â€"<i>Vibrio</i> interactions. Environmental Microbiology, 2009, 11, 2698-2709.	3.8	41
59	A SINGLE-CELL IMMUNOASSAY FOR PHOSPHATE STRESS IN THE DINOFLAGELLATE PROROCENTRUM MINIMUM (DINOPHYCEAE). Journal of Phycology, 2001, 37, 400-410.	2.3	40
60	A <i>Synechococcus</i> serotype is found preferentially in surface marine waters. Limnology and Oceanography, 2003, 48, 1744-1755.	3.1	36
61	The genomics of symbiosis: Hosts keep the baby and the bath water. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 11996-11997.	7.1	35
62	Phycoerythrin-containing picoplankton in the Southern California Bight. Deep-Sea Research Part II: Topical Studies in Oceanography, 2003, 50, 2405-2422.	1.4	35
63	CHARACTERIZATION OF A FUNCTIONAL VANADIUM-DEPENDENT BROMOPEROXIDASE IN THE MARINE CYANOBACTERIUM SYNECHOCOCCUS SP. CC93111. Journal of Phycology, 2011, 47, 792-801.	2.3	31
64	Exposure to bloom-like concentrations of two marine Synechococcus cyanobacteria (strains CC9311) Tj ETQq0 0 0 rgBT /Overlock 10 Tf		30
65	Dynamics of marine bacterial and phytoplankton populations using multiplex liquid bead array technology. Environmental Microbiology, 2010, 12, 975-989.	3.8	28
66	Microalgal assemblages in a poikilohaline pond. Journal of Phycology, 2014, 50, 303-309.	2.3	28
67	Diversity and genome dynamics of marine cyanophages using metagenomic analyses. Environmental Microbiology Reports, 2014, 6, 583-594.	2.4	26
68	Molecular Mechanisms by Which Marine Phytoplankton Respond to Their Dynamic Chemical Environment. Annual Review of Marine Science, 2015, 7, 325-340.	11.6	26
69	Temporal and spatial distributions of marine Synechococcus in the Southern California Bight assessed by hybridization to bead-arrays. Marine Ecology - Progress Series, 2011, 426, 133-147.	1.9	26
70	Impact of DNA damaging agents on genome-wide transcriptional profiles in two marine Synechococcus species. Frontiers in Microbiology, 2013, 4, 232.	3.5	25
71	Immersed in situ microcosms: A tool for the assessment of pollution impact on phytoplankton. Journal of Experimental Marine Biology and Ecology, 2007, 341, 274-281.	1.5	23
72	Genetic Identification of a High-Affinity Ni Transporter and the Transcriptional Response to Ni Deprivation in Synechococcus sp. Strain WH8102. Applied and Environmental Microbiology, 2012, 78, 7822-7832.	3.1	23

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73	Fine spatial structure of genetically distinct picocyanobacterial populations across environmental gradients in the Costa Rica Dome. Limnology and Oceanography, 2014, 59, 705-723.	3.1	23
74	Characterization of Picochlorum sp. use of wastewater generated from hydrothermal liquefaction as a nitrogen source. Algal Research, 2016, 13, 311-317.	4.6	22
75	Reaction of O ₂ with a diiron protein generates a mixed-valent Fe ²⁺ /Fe ³⁺ center and peroxide. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 2058-2067.	7.1	22
76	Polymerase evolution and organism evolution. Current Opinion in Genetics and Development, 1992, 2, 931-936.	3.3	21
77	Halomethane production by vanadiumâ€dependent bromoperoxidase in marine <i>Synechococcus</i>. Limnology and Oceanography, 2015, 60, 1823-1835.	3.1	20
78	A method for the measurement of choline and hydrogen peroxide in seawater. Marine Chemistry, 1990, 30, 409-421.	2.3	19
79	Learning to Read the Oceans. Advances in Marine Biology, 2011, 60, 1-39.	1.4	19
80	Temporal dynamics of eukaryotic microbial diversity at a coastal Pacific site. ISME Journal, 2018, 12, 2278-2291.	9.8	19
81	Synthesis and Use of Fluorescent Molecular Probes for Measuring Cell-Surface Enzymatic Oxidation of Amino Acids and Amines in Seawater. Analytical Biochemistry, 1993, 211, 210-218.	2.4	16
82	Computational inference of regulatory pathways in microbes: an application to phosphorus assimilation pathways in Synechococcus sp. WH8102. Genome Informatics, 2003, 14, 3-13.	0.4	16
83	Selection in Coastal Synechococcus (Cyanobacteria) Populations Evaluated from Environmental Metagenomes. PLoS ONE, 2011, 6, e24249.	2.5	15
84	MOLECULAR CHARACTERIZATION OF A PHOSPHATE-REGULATED CELL-SURFACE PROTEIN FROM THE COCCOLITHOPHORID,EMILIANIA HUXLEYI(PRYMNESIOPHYCEAE). Journal of Phycology, 2006, 42, 814-821.	2.3	14
85	Computational prediction of the osmoregulation network in Synechococcus sp. WH8102. BMC Genomics, 2010, 11, 291.	2.8	14
86	Ingestion of the unicellular cyanobacterium Synechococcus by the mixotrophic red tide ciliate Mesodinium rubrum. Algae, 2015, 30, 281-290.	2.3	13
87	Feeding and grazing impact by the bloom-forming euglenophyte Eutreptiella eupharyngea on marine eubacteria and cyanobacteria. Harmful Algae, 2018, 73, 98-109.	4.8	10
88	Spatial and temporal variations in Synechococcus microdiversity in the Southern California coastal ecosystem. Environmental Microbiology, 2021, 23, 252-266.	3.8	10
89	Relating sinking and suspended microbial communities in the California Current Ecosystem: digestion resistance and the contributions of phytoplankton taxa to export. Environmental Microbiology, 2021, 23, 6734-6748.	3.8	8
90	Molecular Markers of Phytoplankton Physiological Status and Their Application at the Level of Individual Cells. , 1998, , 187-205.		8

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91	Characterization of a Modular, Cell-Surface Protein and Identification of a New Gene Family in the Diatom Thalassiosira pseudonana. Protist, 2008, 159, 195-207.	1.5	7
92	Copper toxicity response influences mesotrophic <scp><i>S</i></scp><i>ynechococcus</i> community structure. Environmental Microbiology, 2017, 19, 756-769.	3.8	6
93	Screening and characterization of polyhydroxyalkanoate granules, and phylogenetic analysis of polyhydroxyalkanoate synthase gene <i>PhaC</i> in cyanobacteria. Journal of Phycology, 2021, 57, 754-765.	2.3	6
94	Statistical Analysis of Microarray Data with Replicated Spots: A Case Study with<i>Synechococcus</i>WH8102. Comparative and Functional Genomics, 2009, 2009, 1-11.	2.0	5
95	Prochlorophyte Evolution and the Origin of Chloroplasts: Morphological and Molecular Evidence. , 1992, , 123-139.		5
96	Recent Functional Genomics Studies in Marine Synechococcus. Advances in Photosynthesis and Respiration, 2012, , 103-118.	1.0	2
97	MOLECULAR CHARACTERIZATION AND ANTIBODY DETECTION OF A NITROGENâ€REGULATED CELLâ€SURFACE PROTEIN OF THE COCCOLITHOPHORE <i>EMILIANIA HUXLEYI</i> (PRYMNESIOPHYCEAE)¹. Journal of Phycology, 2009, 45, 650-659.	2.3	1
98	Growth and grazing of the chlorarachniophyte <i>Bigelowiella natans</i> (Chlorarachniophyceae) on the marine cyanobacterium <i>Synechococcus</i>. Phycologia, 2021, 60, 375-383.	1.4	1
99	Understanding microbial genomic structures and applications to biological pathway inference. , 0, , .		0
100	A Deg-protease family protein in marine Synechococcus is involved in outer membrane protein organization. Frontiers in Marine Science, 2014, 1, .	2.5	0
101	Vitamin B12 auxotrophy of the red tide dinoflagellate Heterocapsa rotundata and the effects of feeding on Synechococcus and vitamin B12 availability upon phagotrophic activity. Phycologia, 0, , 1-8.	1.4	0