FrÃ©dÃ©ric Partensky

List of Publications by Year
in descending order

115 papers	13,162 citations	31976 53 h-index	23533 111 g-index
118 all docs	118 docs citations	118 times ranked	9087 citing authors

#	Article	IF	Citations
1	Crystal structure and molecular mechanism of an E/F type bilin lyase-isomerase. Structure, 2022, 30, 564-574.e3.	3.3	4
2	Marine Cyanobacteria. The Microbiomes of Humans, Animals, Plants, and the Environment, 2022, , 103-157.	0.6	1
3	Diversity and Evolution of Pigment Types in Marine<i>Synechococcus</i>Cyanobacteria. Genome Biology and Evolution, 2022, 14, .	2.5	15
4	Comparative Thermophysiology of Marine Synechococcus CRD1 Strains Isolated From Different Thermal Niches in Iron-Depleted Areas. Frontiers in Microbiology, 2022, 13, .	3.5	7
5	Vibrational modes of water predict spectral niches for photosynthesis in lakes and oceans. Nature Ecology and Evolution, 2021, 5, 55-66.	7.8	35
6	Cyanorak v2.1: a scalable information system dedicated to the visualization and expert curation of marine and brackish picocyanobacteria genomes. Nucleic Acids Research, 2021, 49, D667-D676.	14.5	38
7	Molecular bases of an alternative dual-enzyme system for light color acclimation of marine<i>Synechococcus</i>cyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	16
8	MpeV is a lyase isomerase that ligates a doubly linked phycourobilin on the Î2-subunit of phycoerythrin I and II in marine Synechococcus. Journal of Biological Chemistry, 2021, 296, 100031.	3.4	9
9	Unveiling membrane thermoregulation strategies in marine picocyanobacteria. New Phytologist, 2020, 225, 2396-2410.	7.3	20
10	Synergic Effects of Temperature and Irradiance on the Physiology of the Marine Synechococcus Strain WH7803. Frontiers in Microbiology, 2020, 11, 1707.	3.5	18
11	Evolutionary Mechanisms of Long-Term Genome Diversification Associated With Niche Partitioning in Marine Picocyanobacteria. Frontiers in Microbiology, 2020, 11, 567431.	3.5	37
12	Chromatic Acclimation in Cyanobacteria: A Diverse and Widespread Process for Optimizing Photosynthesis. Annual Review of Microbiology, 2019, 73, 407-433.	7.3	72
13	Interplay between differentially expressed enzymes contributes to light color acclimation in marine <i>Synechococcus</i>. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 6457-6462.	7.1	25
14	Light color acclimation is a key process in the global ocean distribution of <i>Synechococcus cyanobacteria</i>. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E2010-E2019.	7.1	91
15	Thermoacclimation and genome adaptation of the membrane lipidome in marine <i>Synechococcus</i>. Environmental Microbiology, 2018, 20, 612-631.	3.8	39
16	Comparison of photosynthetic performances of marine picocyanobacteria with different configurations of the oxygen-evolving complex. Photosynthesis Research, 2018, 138, 57-71.	2.9	4
17	A novel species of the marine cyanobacterium Acaryochloris with a unique pigment content and lifestyle. Scientific Reports, 2018, 8, 9142.	3.3	28
18	Phylogeography and pigment type diversity of <i>Synechococcus</i> cyanobacteria in surface waters of the northwestern pacific ocean. Environmental Microbiology, 2017, 19, 142-158.	3.8	40

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19	Adaptive thermostability of light-harvesting complexes in marine picocyanobacteria. ISME Journal, 2017, 11, 112-124.	9.8	34
20	Adaptation to Blue Light in Marine Synechococcus Requires MpeU, an Enzyme with Similarity to Phycoerythrobilin Lyase Isomerases. Frontiers in Microbiology, 2017, 8, 243.	3.5	25
21	Responses of the picoprasinophyte Micromonas commoda to light and ultraviolet stress. PLoS ONE, 2017, 12, e0172135.	2.5	15
22	Self-regulating genomic island encoding tandem regulators confers chromatic acclimation to marine <i>Synechococcus</i>. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 6077-6082.	7.1	37
23	Phototrophic Microorganisms: The Basis of the Marine Food Web. , 2016, , 57-97.		4
24	Delineating ecologically significant taxonomic units from global patterns of marine picocyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E3365-74.	7.1	159
25	WiseScaffolder: an algorithm for the semi-automatic scaffolding of Next Generation Sequencing data. BMC Bioinformatics, 2015, 16, 281.	2.6	10
26	Development of a targeted metagenomic approach to study a genomic region involved in light harvesting in marine<i>Synechococcus</i>. FEMS Microbiology Ecology, 2014, 88, 231-249.	2.7	21
27	Genome structure and metabolic features in the red seaweed <i>Chondrus crispus</i> shed light on evolution of the Archaeplastida. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 5247-5252.	7.1	307
28	Ecological and evolutionary genomics of marine photosynthetic organisms. Molecular Ecology, 2013, 22, 867-907.	3.9	29
29	A Gene Island with Two Possible Configurations Is Involved in Chromatic Acclimation in Marine Synechococcus. PLoS ONE, 2013, 8, e84459.	2.5	46
30	CyanoLyase: a database of phycobilin lyase sequences, motifs and functions. Nucleic Acids Research, 2012, 41, D396-D401.	14.5	32
31	Phycoerythrin-specific bilin lyaseâ€“isomerase controls blue-green chromatic acclimation in marine <i>Synechococcus</i>. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20136-20141.	7.1	64
32	Prochlorococcus and Synechococcus have Evolved Different Adaptive Mechanisms to Cope with Light and UV Stress. Frontiers in Microbiology, 2012, 3, 285.	3.5	100
33	Multiâ€locus sequence analysis, taxonomic resolution and biogeography of marine <i>Synechococcus</i>. Environmental Microbiology, 2012, 14, 372-386.	3.8	123
34	Arms race in a drop of sea water. Nature, 2011, 474, 582-583.	27.8	8
35	Complex microbiome underlying secondary and primary metabolism in the tunicate- <i>Prochloron</i> symbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E1423-32.	7.1	146
36	Is the distribution of <i>Prochlorococcus</i> and <i>Synechococcus</i> ecotypes in the Mediterranean Sea affected by global warming?. Biogeosciences, 2011, 8, 2785-2804.	3.3	92

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37	Ultraviolet stress delays chromosome replication in light/dark synchronized cells of the marine cyanobacterium Prochlorococcus marinus PCC9511. BMC Microbiology, 2010, 10, 204.	3.3	28
38	Microbial community genomics in eastern Mediterranean Sea surface waters. ISME Journal, 2010, 4, 78-87.	9.8	66
39	<i>Prochlorococcus</i>: Advantages and Limits of Minimalism. Annual Review of Marine Science, 2010, 2, 305-331.	11.6	260
40	Ecological Genomics of Marine Picocyanobacteria. Microbiology and Molecular Biology Reviews, 2009, 73, 249-299.	6.6	642
41	Phycourobilin in Trichromatic Phycocyanin from Oceanic Cyanobacteria Is Formed Post-translationally by a Phycoerythrobilin Lyase-Isomerase. Journal of Biological Chemistry, 2009, 284, 9290-9298.	3.4	79
42	Photosystem I gene cassettes are present in marine virus genomes. Nature, 2009, 461, 258-262.	27.8	195
43	Unravelling the genomic mosaic of a ubiquitous genus of marine cyanobacteria. Genome Biology, 2008, 9, R90.	9.6	288
44	Genome Streamlining Results in Loss of Robustness of the Circadian Clock in the Marine Cyanobacterium <i>Prochlorococcus marinus</i> PCC 9511. Journal of Biological Rhythms, 2008, 23, 187-199.	2.6	101
45	Contrasting photoacclimation costs in ecotypes of the marine eukaryotic picoplankter <i>Ostreococcus</i>. Limnology and Oceanography, 2008, 53, 255-265.	3.1	83
46	Diversity and evolution of phycobilisomes in marine Synechococcus spp.: a comparative genomics study. Genome Biology, 2007, 8, R259.	9.6	257
47	High vertical and low horizontal diversity of Prochlorococcus ecotypes in the Mediterranean Sea in summer. FEMS Microbiology Ecology, 2007, 60, 189-206.	2.7	67
48	UV-induced phycobilisome dismantling in the marine picocyanobacterium Synechococcus sp. WH8102. Photosynthesis Research, 2007, 92, 75-86.	2.9	51
49	Genome analysis of the smallest free-living eukaryote Ostreococcus tauri unveils many unique features. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 11647-11652.	7.1	809
50	The cyanobacterial genome core and the origin of photosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 13126-13131.	7.1	277
51	Biochemical Bases of Type IV Chromatic Adaptation in Marine Synechococcus spp. Journal of Bacteriology, 2006, 188, 3345-3356.	2.2	107
52	Diel variations in the photosynthetic parameters of Prochlorococcus strain PCC 9511: Combined effects of light and cell cycle. Limnology and Oceanography, 2005, 50, 850-863.	3.1	67
53	Two Novel Phycoerythrin-Associated Linker Proteins in the Marine Cyanobacterium Synechococcus sp. Strain WH8102. Journal of Bacteriology, 2005, 187, 1685-1694.	2.2	55
54	New Insights into the Nature and Phylogeny of Prasinophyte Antenna Proteins: Ostreococcus tauri, a Case Study. Molecular Biology and Evolution, 2005, 22, 2217-2230.	8.9	69

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55	Accelerated evolution associated with genome reduction in a free-living prokaryote. Genome Biology, 2005, 6, R14.	9.6	319
56	Photophysiology of the marine cyanobacterium Synechococcus sp. WH8102, a new model organism. Aquatic Microbial Ecology, 2004, 35, 17-29.	1.8	99
57	The Roscoff Culture Collection (RCC): a collection dedicated to marine picoplankton. Nova Hedwigia, 2004, 79, 49-70.	0.4	71
58	Origin and evolution of transmembrane Chl-binding proteins: hydrophobic cluster analysis suggests a common one-helix ancestor for prokaryotic (Pcb) and eukaryotic (LHC) antenna protein superfamilies. FEMS Microbiology Letters, 2003, 222, 59-68.	1.8	16
59	Low-light-adapted Prochlorococcus species possess specific antennae for each photosystem. Nature, 2003, 424, 1051-1054.	27.8	166
60	The genome of a motile marine Synechococcus. Nature, 2003, 424, 1037-1042.	27.8	611
61	The Photosynthetic Apparatus of Chlorophyll b- and d-Containing Oxyphotobacteria. Advances in Photosynthesis and Respiration, 2003, , 29-62.	1.0	30
62	Genome sequence of the cyanobacterium <i>Prochlorococcus marinus</i> SS120, a nearly minimal oxyphototrophic genome. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 10020-10025.	7.1	442
63	Clade-Specific 16S Ribosomal DNA Oligonucleotides Reveal the Predominance of a Single Marine Synechococcus Clade throughout a Stratified Water Column in the Red Sea. Applied and Environmental Microbiology, 2003, 69, 2430-2443.	3.1	293
64	Diel variations in <i>Prochlorococcus</i> optical properties. Limnology and Oceanography, 2002, 47, 1637-1647.	3.1	75
65	NITROGEN STRESS RESPONSE OFPROCHLOROCOCCUSSTRAIN PCC 9511 (OXYPHOTOBACTERIA) INVOLVES CONTRASTING REGULATION OFntcAANDamt11. Journal of Phycology, 2002, 38, 1113-1124.	2.3	37
66	Synchronized expression of ftsZ in natural Prochlorococcus populations of the Red Sea. Environmental Microbiology, 2002, 4, 644-653.	3.8	32
67	Genotyping of axenic and non-axenic isolates of the genus Prochlorococcus and the OMF-â€˜Synechococcusâ€™ clade by size, sequence analysis or RFLP of the Internal Transcribed Spacer of the ribosomal operon The GenBank accession numbers for the ITS amplicon sequences reported in this paper are AF387607 (PCC 9511T), AF387610 (PCC 6307), AF387608 (PCC 7001) and AF387609 (PCC 7941).. Microbiology (United Kingdom), 2002, 148, 453-465.	1.8	29
68	Nitrogen deprivation strongly affects Photosystem II but not phycoerythrin level in the divinyl-chlorophyll b -containing cyanobacterium Prochlorococcus marinus. Biochimica Et Biophysica Acta - Bioenergetics, 2001, 1503, 341-349.	1.0	37
69	DIEL PATTERNS OF GROWTH AND DIVISION IN MARINE PICOPLANKTON IN CULTURE. Journal of Phycology, 2001, 37, 357.	2.3	109
70	Differential expression of antenna and core genes in Prochlorococcus PCC 9511 (Oxyphotobacteria) grown under a modulated light-dark cycle. Environmental Microbiology, 2001, 3, 168-175.	3.8	33
71	An axenic cyclostat of Prochlorococcus PCC 9511 with a simulator of natural light regimes. Journal of Applied Phycology, 2001, 13, 135-142.	2.8	23
72	Expression and phylogeny of the multiple antenna genes of the low-light-adapted strain Prochlorococcus marinus SS120 (Oxyphotobacteria). Plant Molecular Biology, 2001, 46, 683-693.	3.9	35

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73	Antenna ring around photosystem I. Nature, 2001, 413, 590-590.	27.8	118
74	Cell Cycle Regulation by Light in Prochlorococcus Strains. Applied and Environmental Microbiology, 2001, 67, 782-790.	3.1	73
75	Diel Expression of Cell Cycle-Related Genes in Synchronized Cultures of Prochlorococcus sp. Strain PCC 9511. Journal of Bacteriology, 2001, 183, 915-920.	2.2	56
76	In Vivo Regulation of Glutamine Synthetase Activity in the Marine Chlorophyll b -Containing Cyanobacterium Prochlorococcus sp. Strain PCC 9511 (Oxyphotobacteria). Applied and Environmental Microbiology, 2001, 67, 2202-2207.	3.1	47
77	Rapid evolutionary divergence of Photosystem I core subunits PsaA and PsaB in the marine prokaryote Prochlorococcus. Photosynthesis Research, 2000, 65, 131-139.	2.9	14
78	Multiplication of antenna genes as a major adaptation to low light in a marine prokaryote. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 4098-4101.	7.1	82
79	Prochlorococcus marinus Chisholm et al. 1992 subsp. pastoris subsp. nov. strain PCC 9511, the first axenic chlorophyll a2/b2-containing cyanobacterium (Oxyphotobacteria).. International Journal of Systematic and Evolutionary Microbiology, 2000, 50, 1833-1847.	1.7	184
80	DNA/RNA Analysis of Phytoplankton by Flow Cytometry. Current Protocols in Cytometry, 2000, 11, Unit 11.12.	3.7	38
81	<i>Prochlorococcus</i> , a Marine Photosynthetic Prokaryote of Global Significance. Microbiology and Molecular Biology Reviews, 1999, 63, 106-127.	6.6	1,218
82	Phycoerythrins of the oxyphotobacterium Prochlorococcus marinus are associated to the thylakoid membrane and are encoded by a single large gene cluster. Plant Molecular Biology, 1999, 40, 507-521.	3.9	55
83	Enumeration of Phytoplankton, Bacteria, and Viruses in Marine Samples. Current Protocols in Cytometry, 1999, 10, Unit 11.11.	3.7	203
84	A small and compact genome in the marine cyanobacterium Prochlorococcus marinus CCMP 1375: lack of an intron in the gene for tRNA(Leu)UAA and a single copy of the rRNA operon. FEMS Microbiology Letters, 1999, 181, 261-266.	1.8	3
85	Diversity and Abundance of Bolidophyceae (Heterokonta) in Two Oceanic Regions. Applied and Environmental Microbiology, 1999, 65, 4528-4536.	3.1	72
86	Divinyl chlorophyll a-specific absorption coefficients and absorption efficiency factors for Prochlorococcus marinus:kinetics of photoacclimation. Marine Ecology - Progress Series, 1999, 188, 21-32.	1.9	30
87	Title is missing!. Photosynthesis Research, 1998, 56, 131-141.	2.9	30
88	Title is missing!. Photosynthesis Research, 1998, 57, 183-191.	2.9	7
89	Le petit peuple du grand large. Biofutur, 1998, 1998, 22-23.	0.0	2
90	Expression of thepsbAGene in the Marine OxyphotobacteriaProchlorococcusspp. Archives of Biochemistry and Biophysics, 1998, 359, 17-23.	3.0	29

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91	<title>Photoacclimation strategy of Prochlorococcus sp. and consequences on large scale variations of photosynthetic parameters</title>. , 1997, , .		2
92	Title is missing!. Photosynthesis Research, 1997, 51, 209-222.	2.9	56
93	Enumeration and Cell Cycle Analysis of Natural Populations of Marine Picoplankton by Flow Cytometry Using the Nucleic Acid Stain SYBR Green I. Applied and Environmental Microbiology, 1997, 63, 186-193.	3.1	937
94	High degree of genetic variation inProchlorococcus(Prochlorophyta) revealed by RFLP analysis. European Journal of Phycology, 1996, 31, 1-9.	2.0	55
95	Vertical structure of picophytoplankton at different trophic sites of the tropical northeastern Atlantic Ocean. Deep-Sea Research Part I: Oceanographic Research Papers, 1996, 43, 1191-1213.	1.4	194
96	Coexistence of phycoerythrin and a chlorophyll a/b antenna in a marine prokaryote.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 11126-11130.	7.1	159
97	Independent evolution of the prochlorophyte and green plant chlorophyll a/b light-harvesting proteins. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 15244-15248.	7.1	223
98	Application of the novel nucleic acid dyes YOYO-1, YO-PRO-1, and PicoGreen for flow cytometric analysis of marine prokaryotes. Applied and Environmental Microbiology, 1996, 62, 1649-1655.	3.1	160
99	Effect of phosphorus starvation on the cell cycle of the photosynthetic prokaryote Prochlorococcus spp.. Marine Ecology - Progress Series, 1996, 132, 265-274.	1.9	51
100	IMMUNOLOGICAL AND ULTRASTRUCTURAL CHARACTERIZATION OF THE PHOTOSYNTHETIC COMPLEXES OF THE PROCHLOROPHYTE PROCHLOROCOCCUS (OXYCHLOROBACTERIA)1. Journal of Phycology, 1995, 31, 934-941.	2.3	29
101	Characterization of the single psbA gene of Prochlorococcus marinus CCMP 1375 (Prochlorophyta). Plant Molecular Biology, 1995, 27, 1189-1196.	3.9	43
102	The Major Light-Harvesting Antenna of Prochlorococcus Marinus is Similar to CP43â€², A CHL Binding Protein Induced by Iron Limitation in Cyanobacteria. , 1995, , 171-174.		6
103	CHARACTERIZATION OF OCEANIC PHOTOSYNTHETIC PICOEUKARYOTES BY FLOW CYTOMETRY1. Journal of Phycology, 1994, 30, 922-935.	2.3	103
104	Pyrococcus abyssi sp. nov., a new hyperthermophilic archaeon isolated from a deep-sea hydrothermal vent. Archives of Microbiology, 1993, 160, 338.	2.2	226
105	<I>Prochlorococcus</I> and <I>Synechococcus</I>: A comparative study of their optical properties in relation to their size and pigmentation. Journal of Marine Research, 1993, 51, 617-649.	0.3	276
106	Sub-micron particles in northwest Atlantic shelf water. Deep-sea Research Part A, Oceanographic Research Papers, 1992, 39, 1-7.	1.5	52
107	Cell cycle distributions of prochlorophytes in the north western Mediterranean Sea. Deep-sea Research Part A, Oceanographic Research Papers, 1992, 39, 727-742.	1.5	71
108	FLOW CYTOMETRY AND MICROSCOPY OF GAMETOGENESIS IN NITZSCHIA PUNGENS, A TOXIC, BLOOM-FORMING, MARINE DIATOM1. Journal of Phycology, 1991, 27, 21-26.	2.3	22

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109	GROWTH AND CELL CYCLE OF TWO CLOSELY RELATED RED TIDE-FORMING DINOFLAGELLATES: GYMNODINIUM NAGASAKIENSE AND G. CF. NAGASAKIENSE1. Journal of Phycology, 1991, 27, 733-742.	2.3	14
110	Winter presence of prochlorophytes in surface waters of the northwestern Mediterranean Sea. Limnology and Oceanography, 1990, 35, 1156-1164.	3.1	165
111	Variability in the growth characteristics of Gymnodinium cf. nagasakiense (Dinophyceae) and its consequences for the determination of in situ growth rates. Journal of Experimental Marine Biology and Ecology, 1990, 142, 169-182.	1.5	8
112	CELL SIZE DIFFERENTIATION IN THE BLOOM-FORMING DINOFLAGELLATE GYMNODINIUM CF. NAGASAKIENSE1. Journal of Phycology, 1989, 25, 741-750.	2.3	26
113	A simple method to preserve oceanic phytoplankton for flow cytometric analyses. Cytometry, 1989, 10, 629-635.	1.8	247
114	Does The Fish-Killing Dinoflagellate Gymnodinium CF. Nagasakiense Produce Cytotoxins?. Journal of the Marine Biological Association of the United Kingdom, 1989, 69, 501-509.	0.8	14
115	MORPHOLOGICAL AND NUCLEAR ANALYSIS OF THE BLOOM-FORMING DINOFLAGELLATES GYRODINIUM CF. AUREOLUM AND GYMNODINIUM NAGASAKIENSE. Journal of Phycology, 1988, 24, 408-415.	2.3	49