Emilio MaraÃ±Ã³n

List of Publications by Year
in descending order

112 papers	7,674 citations	66234 42 h-index	58464 82 g-index
144 all docs	144 docs citations	144 times ranked	6743 citing authors

#	Article	IF	Citations
1	Processes and patterns of oceanic nutrient limitation. Nature Geoscience, 2013, 6, 701-710.	5.4	1,627
2	Cell Size as a Key Determinant of Phytoplankton Metabolism and Community Structure. Annual Review of Marine Science, 2015, 7, 241-264.	5.1	358
3	Database of diazotrophs in global ocean: abundance, biomass and nitrogen fixation rates. Earth System Science Data, 2012, 4, 47-73.	3.7	315
4	Unimodal size scaling of phytoplankton growth and the size dependence of nutrient uptake and use. Ecology Letters, 2013, 16, 371-379.	3.0	297
5	Patterns of phytoplankton size structure and productivity in contrasting open-ocean environments. Marine Ecology - Progress Series, 2001, 216, 43-56.	0.9	224
6	Basin-scale variability of phytoplankton biomass, production and growth in the Atlantic Ocean. Deep-Sea Research Part I: Oceanographic Research Papers, 2000, 47, 825-857.	0.6	193
7	Temperature, resources, and phytoplankton size structure in the ocean. Limnology and Oceanography, 2012, 57, 1266-1278.	1.6	170
8	Photoacclimation and nutrient-based model of light-saturated photosynthesis for quantifying oceanic primary production. Marine Ecology - Progress Series, 2002, 228, 103-117.	0.9	148
9	Phytoplankton size structure and primary production in a highly dynamic coastal ecosystem (RÃa de) Tj ETQq1 1 0.784314 rgBT /Ove 67, 251-266.	0.9	138
10	Large-scale latitudinal distribution of Trichodesmium spp. in the Atlantic Ocean. Journal of Plankton Research, 2003, 25, 405-416.	0.8	137
11	High variability of primary production in oligotrophic waters of the Atlantic Ocean: uncoupling from phytoplankton biomass and size structure. Marine Ecology - Progress Series, 2003, 257, 1-11.	0.9	136
12	Degree of oligotrophy controls the response of microbial plankton to Saharan dust. Limnology and Oceanography, 2010, 55, 2339-2352.	1.6	134
13	Significance and mechanisms of photosynthetic production of dissolved organic carbonin a coastal eutrophic ecosystem. Limnology and Oceanography, 2004, 49, 1652-1666.	1.6	125
14	Nutrient limitation suppresses the temperature dependence of phytoplankton metabolic rates. ISME Journal, 2018, 12, 1836-1845.	4.4	122
15	Scaling of phytoplankton photosynthesis and cell size in the ocean. Limnology and Oceanography, 2007, 52, 2190-2198.	1.6	114
16	The significance of the episodic nature of atmospheric deposition to Low Nutrient Low Chlorophyll regions. Global Biogeochemical Cycles, 2014, 28, 1179-1198.	1.9	106
17	Large-sized phytoplankton sustain higher carbon-specific photosynthesis than smaller cells in a coastal eutrophic ecosystem. Marine Ecology - Progress Series, 2005, 297, 51-60.	0.9	98
18	Vertical distribution of phytoplankton biomass, production and growth in the Atlantic subtropical gyres. Deep-Sea Research Part I: Oceanographic Research Papers, 2006, 53, 1616-1634.	0.6	95

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19	Resource Supply Overrides Temperature as a Controlling Factor of Marine Phytoplankton Growth. PLoS ONE, 2014, 9, e99312.	1.1	93
20	Dissolved and particulate primary production along a longitudinal gradient in the Mediterranean Sea. Biogeosciences, 2011, 8, 815-825.	1.3	89
21	Phytoplankton growth rates in the Atlantic subtropical gyres. Limnology and Oceanography, 2005, 50, 299-310.	1.6	84
22	Decrease in the Autotrophic-to-Heterotrophic Biomass Ratio of Picoplankton in Oligotrophic Marine Waters Due to Bottle Enclosure. Applied and Environmental Microbiology, 2011, 77, 5739-5746.	1.4	84
23	Isometric size-scaling of metabolic rate and the size abundance distribution of phytoplankton. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 1815-1823.	1.2	78
24	Photosynthetic parameters of phytoplankton from 50Â°N to 50Â°S in the Atlantic Ocean. Marine Ecology - Progress Series, 1999, 176, 191-203.	0.9	75
25	Latitudinal distribution of <i>Trichodesmium</i> spp. and N₂ fixation in the Atlantic Ocean. Biogeosciences, 2010, 7, 3167-3176.	1.3	74
26	Primary Production, an Index of Climate Change in the Ocean: Satellite-Based Estimates over Two Decades. Remote Sensing, 2020, 12, 826.	1.8	71
27	Maximum photosynthetic efficiency of size-fractionated phytoplankton assessed by ¹⁴ C uptake and fast repetition rate fluorometry. Limnology and Oceanography, 2005, 50, 1438-1446.	1.6	70
28	Variability of chlorophyll and primary production in the Eastern North Atlantic Subtropical Gyre: potential factors affecting phytoplankton activity. Deep-Sea Research Part I: Oceanographic Research Papers, 2005, 52, 569-588.	0.6	70
29	Conventional sampling methods severely underestimate phytoplankton species richness. Journal of Plankton Research, 2014, 36, 334-343.	0.8	65
30	Photosynthesis and respiration in marine phytoplankton: Relationship with cell size, taxonomic affiliation, and growth phase. Journal of Experimental Marine Biology and Ecology, 2014, 457, 151-159.	0.7	63
31	Phytoplankton biomass and production in shelf waters off NW Spain: spatial and seasonal variability in relation to upwelling. Hydrobiologia, 1996, 341, 225-234.	1.0	57
32	Inter-specific scaling of phytoplankton production and cell size in the field. Journal of Plankton Research, 2007, 30, 157-163.	0.8	57
33	Importance of N₂ fixation vs. nitrate eddy diffusion along a latitudinal transect in the Atlantic Ocean. Limnology and Oceanography, 2011, 56, 999-1007.	1.6	56
34	Continuity in the photosynthetic production of dissolved organic carbon from eutrophic to oligotrophic waters. Marine Ecology - Progress Series, 2005, 299, 7-17.	0.9	56
35	Review of the Main Ecological Features Affecting Benthic Dinoflagellate Blooms. Cryptogamie, Algologie, 2012, 33, 171-179.	0.3	54
36	Invariant scaling of phytoplankton abundance and cell size in contrasting marine environments. Ecology Letters, 2006, 9, 1210-1215.	3.0	53

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37	Seasonal and interannual variability of chlorophyll a and primary production in the Equatorial Atlantic: in situ and remote sensing observations. Journal of Plankton Research, 2004, 27, 189-197.	0.8	52
38	General patterns in the size scaling of phytoplankton abundance in coastal waters during a 10-year time series. Journal of Plankton Research, 2010, 32, 1-14.	0.8	50
39	Sampling the limits of species richness in marine phytoplankton communities. Journal of Plankton Research, 2014, 36, 1135-1139.	0.8	49
40	Isotopic composition of suspended particulate nitrogen (Î´15Nsus) in surface waters of the Atlantic Ocean from 50Â°N to 50Â°S. Global Biogeochemical Cycles, 2002, 16, 7-1-7-9.	1.9	48
41	The Size Dependence of Phytoplankton Growth Rates: A Trade-Off between Nutrient Uptake and Metabolism. American Naturalist, 2017, 189, 170-177.	1.0	46
42	Surface distribution of dissolved trace metals in the oligotrophic ocean and their influence on phytoplankton biomass and productivity. Global Biogeochemical Cycles, 2015, 29, 1763-1781.	1.9	44
43	Factors controlling the community structure of picoplankton in contrasting marine environments. Biogeosciences, 2018, 15, 6199-6220.	1.3	44
44	Potential causes for the unequal contribution of picophytoplankton to total biomass and productivity in oligotrophic waters. Marine Ecology - Progress Series, 2003, 254, 101-109.	0.9	44
45	Exudation of organic carbon by marine phytoplankton: dependence on taxon and cell size. Marine Ecology - Progress Series, 2013, 477, 53-60.	0.9	43
46	Resource supply alone explains the variability of marine phytoplankton size structure. Limnology and Oceanography, 2015, 60, 1848-1854.	1.6	43
47	Role of internal waves on mixing, nutrient supply and phytoplankton community structure during spring and neap tides in the upwelling ecosystem of RÃa de Vigo (NW Iberian Peninsula). Limnology and Oceanography, 2017, 62, 1014-1030.	1.6	43
48	Reconciling models of primary production and photoacclimation [Invited]. Applied Optics, 2020, 59, C100.	0.9	43
49	Differential responses of phytoplankton and heterotrophic bacteria to organic and inorganic nutrient additions in coastal waters off the NW Iberian Peninsula. Marine Ecology - Progress Series, 2010, 416, 17-33.	0.9	43
50	High rates of lipid biosynthesis in cultured, mesocosm and coastal populations of the cocco-lithophore Emiliama huxleyi. Marine Ecology - Progress Series, 1994, 114, 13-22.	0.9	43
51	Importance of salt fingering for new nitrogen supply in the oligotrophic ocean. Nature Communications, 2015, 6, 8002.	5.8	42
52	Nutrient supply controls picoplankton community structure during three contrasting seasons in the northwestern Mediterranean Sea. Marine Ecology - Progress Series, 2016, 543, 1-19.	0.9	41
53	Large-scale variability of planktonic net community metabolism in the Atlantic Ocean: importance of temporal changes in oligotrophic subtropical waters. Marine Ecology - Progress Series, 2002, 233, 21-30.	0.9	41
54	Photosynthetic electron turnover in the tropical and subtropical Atlantic Ocean. Deep-Sea Research Part II: Topical Studies in Oceanography, 2006, 53, 1573-1592.	0.6	40

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55	The hydrography and biology of a bloom of the coccolithophorid Emiliania huxleyi in the northern North Sea. Journal of Sea Research, 1998, 39, 255-266.	0.6	39
56	Phytoplankton size diversity and ecosystem function relationships across oceanic regions. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20180621.	1.2	38
57	Latitudinal distribution of microbial plankton abundance, production, and respiration in the Equatorial Atlantic in autumn 2000. Deep-Sea Research Part I: Oceanographic Research Papers, 2005, 52, 861-880.	0.6	37
58	Photosynthate allocation in a temperate sea over an annual cycle: the relationship between protein synthesis and phytoplankton physiological state. Journal of Sea Research, 2003, 50, 285-299.	0.6	34
59	Primary production, calcification and macromolecular synthesis in a bloom of the coccolithophore Emiliania huxleyi in the North Sea. Marine Ecology - Progress Series, 1997, 157, 61-77.	0.9	33
60	Biological N2 Fixation in the Upwelling Region off NW Iberia: Magnitude, Relevance, and Players. Frontiers in Marine Science, 2017, 4, .	1.2	31
61	Patterns of carbon and nitrogen uptake during blooms of Emiliania huxleyi in two Norwegian fjords. Journal of Plankton Research, 1996, 18, 2349-2366.	0.8	30
62	Deep maxima of phytoplankton biomass, primary production and bacterial production in the Mediterranean Sea. Biogeosciences, 2021, 18, 1749-1767.	1.3	30
63	Response of heterotrophic and autotrophic microbial plankton to inorganic and organic inputs along a latitudinal transect in the Atlantic Ocean. Biogeosciences, 2010, 7, 1701-1713.	1.3	29
64	Oceanâ€“Atmosphere Interactions of Particles. Springer Earth System Sciences, 2014, , 171-246.	0.1	29
65	Marine Primary Productivity Is Driven by a Selection Effect. Frontiers in Marine Science, 2016, 3, .	1.2	28
66	Planktonic carbon budget in the eastern subtropical North Atlantic. Aquatic Microbial Ecology, 2007, 48, 261-275.	0.9	28
67	Species richness in marine phytoplankton communities is not correlated to ecosystem productivity. Marine Ecology - Progress Series, 2013, 488, 1-9.	0.9	28
68	Resource levels, allometric scaling of population abundance, and marine phytoplankton diversity. Limnology and Oceanography, 2008, 53, 312-318.	1.6	26
69	Effect of environmental forcing on the biomass, production and growth rate of size-fractionated phytoplankton in the central Atlantic Ocean. Journal of Marine Systems, 2011, 88, 203-213.	0.9	25
70	Intracellular carbon partitioning in the coccolithophorid Emiliania huxleyi. Journal of Marine Systems, 1996, 9, 57-66.	0.9	23
71	Size dependence of coastal phytoplankton photosynthesis under vertical mixing conditions. Journal of Plankton Research, 2005, 27, 473-483.	0.8	23
72	Phytoplankton carbon and chlorophyll distributions in the equatorial Pacific and Atlantic: A basin-scale comparative study. Journal of Marine Systems, 2013, 109-110, 138-148.	0.9	23

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73	Characterizing the surface microlayer in the Mediterranean Sea: trace metal concentrations and microbial plankton abundance. Biogeosciences, 2020, 17, 2349-2364.	1.3	23
74	Community N2 fixation and Trichodesmium spp. abundance along longitudinal gradients in the eastern subtropical North Atlantic. ICES Journal of Marine Science, 2013, 70, 223-231.	1.2	22
75	Marine nanoâ€•and microphytoplankton diversity: redrawing global patterns from samplingâ€standardized data. Global Ecology and Biogeography, 2015, 24, 527-538.	2.7	21
76	Phytoplankton carbon incorporation patterns and biochemical composition of particulate matter in the eastern North Atlantic subtropical region. Journal of Plankton Research, 1994, 16, 1627-1644.	0.8	20
77	Patterns of macromolecular synthesis by natural phytoplankton assemblages under changing upwelling regimes: in situ observations and microcosm experiments. Journal of Experimental Marine Biology and Ecology, 1995, 188, 1-28.	0.7	20
78	Optimality-basedTrichodesmiumdiazotrophy in the North Atlantic subtropical gyre. Journal of Plankton Research, 2016, 38, 946-963.	0.8	20
79	Coccolithophore calcification is independent of carbonate chemistry in the tropical ocean. Limnology and Oceanography, 2016, 61, 1345-1357.	1.6	19
80	Intercomparison of Ocean Color Algorithms for Picophytoplankton Carbon in the Ocean. Frontiers in Marine Science, 2017, 4, .	1.2	19
81	Particulate and dissolved primary production by contrasting phytoplankton assemblages during mesocosm experiments in the Ria de Vigo (NW Spain). Journal of Plankton Research, 2010, 32, 1231-1240.	0.8	18
82	Temporal variability of diazotroph community composition in the upwelling region off NW Iberia. Scientific Reports, 2019, 9, 3737.	1.6	18
83	A global compilation of coccolithophore calcification rates. Earth System Science Data, 2018, 10, 1859-1876.	3.7	18
84	Distinct patterns in the size-scaling of abundance and metabolism in coastal and open-ocean phytoplankton communities. Marine Ecology - Progress Series, 2014, 515, 61-71.	0.9	17
85	The role of mixing in controlling resource availability and phytoplankton community composition. Progress in Oceanography, 2019, 178, 102181.	1.5	17
86	Size-fractionated phytoplankton biomass and production in the tropical Atlantic. Scientia Marina, 2010, 75, 379-389.	0.3	17
87	Phytoplankton Size Structure. , 2009, , 445-452.		16
88	Generalized size scaling of metabolic rates based on single-cell measurements with freshwater phytoplankton. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 17323-17329.	3.3	16
89	Changes in phytoplankton ecophysiology across a coastal upwelling front. Journal of Plankton Research, 1995, 17, 1999-2008.	0.8	15
90	Effects of the diatom-Emiliana huxleyi succession on photosynthesis, calcification and carbon metabolism by size-fractioned phytoplankton. Hydrobiologia, 1996, 317, 189-199.	1.0	15

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91	Effects of Temperature and Nutrient Supply on Resource Allocation, Photosynthetic Strategy, and Metabolic Rates of Synechococcus sp.. Journal of Phycology, 2020, 56, 818-829.	1.0	15
92	Impact of dust addition on the metabolism of Mediterranean plankton communities and carbon export under present and future conditions of pH and temperature. Biogeosciences, 2021, 18, 5423-5446.	1.3	14
93	Multi-model remote sensing assessment of primary production in the subtropical gyres. Journal of Marine Systems, 2019, 196, 97-106.	0.9	13
94	Large-scale meridional and zonal variability in the nitrogen isotopic composition of plankton in the Atlantic Ocean. Journal of Plankton Research, 2014, 36, 1060-1073.	0.8	11
95	Influence of atmospheric deposition on biogeochemical cycles in an oligotrophic ocean system. Biogeosciences, 2021, 18, 5699-5717.	1.3	11
96	Response of marine diatom communities to Late Quaternary abrupt climate changes. Journal of Plankton Research, 2013, 35, 12-21.	0.8	10
97	Temperature Fluctuation Attenuates the Effects of Warming in Estuarine Microbial Plankton Communities. Frontiers in Marine Science, 2021, 8, .	1.2	9
98	Effect of temperature on the unimodal size scaling of phytoplankton growth. Scientific Reports, 2021, 11, 953.	1.6	8
99	Intermediate-size cell dominance in the phytoplankton community of an eutrophic, estuarine ecosystem (Guadalhorce River, Southern Spain). Hydrobiologia, 2020, 847, 2241-2254.	1.0	7
100	Regional differences in modelled net production and shallow remineralization in the North Atlantic subtropical gyre. Biogeosciences, 2012, 9, 2831-2846.	1.3	6
101	Differential response of microbial plankton to nutrient inputs in oligotrophic versus mesotrophic waters of the North Atlantic. Marine Biology Research, 2013, 9, 358-370.	0.3	6
102	Mesopelagic respiration near the ESTOC (European Station for Time-Series in the Ocean, 15.5Â°W, 29.1Â°N) site inferred from a tracer conservation model. Deep-Sea Research Part I: Oceanographic Research Papers, 2016, 115, 63-73.	0.6	6
103	Magnitude of nitrate turbulent diffusion in contrasting marine environments. Scientific Reports, 2021, 11, 18804.	1.6	5
104	Impact of dust addition on the microbial food web under present and future conditions of pH and temperature. Biogeosciences, 2022, 19, 1303-1319.	1.3	5
105	Phytoplankton Size Structure. , 2019, , 599-605.		4
106	Temperature fluctuations in a warmer environment: impacts on microbial plankton. Faculty Reviews, 2021, 10, 9.	1.7	4
107	Inter-specific scaling of phytoplankton production and cell size in the field. Journal of Plankton Research, 2009, 31, 929-929.	0.8	3
108	Quantifying the overestimation of planktonic N2 fixation due to contamination of 15N2 gas stocks. Journal of Plankton Research, 2019, 41, 567-570.	0.8	3

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109	Grazing Pressure Is Independent of Prey Size in a Generalist Herbivorous Protist: Insights from Experimental Temperature Gradients. Microbial Ecology, 2021, 81, 553-562.	1.4	3
110	Geographical and Seasonal Thermal Sensitivity of Grazing Pressure by Microzooplankton in Contrasting Marine Ecosystems. Frontiers in Microbiology, 2021, 12, 679863.	1.5	3
111	A Pseudoâ€Lagrangian Transformation to Study a Chlorophyllâ€a Patch in the RÃa de Vigo (NW Iberian) Tj ETQq1 1 0.784314 rgBT /Ove	1.0	0
112	Spatial and temporal patterns of physical environment and phytoplankton at Paraje Natural of the Guadalhorce River mouth (MÃ¡laga). Ecosistemas, 2020, 29, .	0.2	0