Alessandro Tagliabue

List of Publications by Year
in descending order

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118	7,619	61984 43	58581 82
papers	citations	h-index	g-index

135	135	135	6882
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Earth, Wind, Fire, and Pollution: Aerosol Nutrient Sources and Impacts on Ocean Biogeochemistry. Annual Review of Marine Science, 2022, 14, 303-330.	11.6	48
2	Oceanographic and biogeochemical drivers cause divergent trends in the nitrogen isoscape in a changing Arctic Ocean. Ambio, 2022, 51, 383-397.	5.5	5
3	Evidence that Pacific tuna mercury levels are driven by marine methylmercury production and anthropogenic inputs. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	25
4	Timing and magnitude of climateâ€driven range shifts in transboundary fish stocks challenge their management. Global Change Biology, 2022, 28, 2312-2326.	9.5	30
5	Multiâ€decadal environmental change in the Barents Sea recorded by seal teeth. Global Change Biology, 2022, 28, 3054-3065.	9.5	5
6	Constraining the Contribution of Hydrothermal Iron to Southern Ocean Export Production Using Deep Ocean Iron Observations. Frontiers in Marine Science, 2022, 9, .	2.5	2
7	Examining the Interaction Between Freeâ€Living Bacteria and Iron in the Global Ocean. Global Biogeochemical Cycles, 2022, 36, .	4.9	3
8	Major processes of the dissolved cobalt cycle in the North and equatorial Pacific Ocean. Biogeosciences, 2022, 19, 2365-2395.	3.3	9
9	Data-Driven Modeling of Dissolved Iron in the Global Ocean. Frontiers in Marine Science, 2022, 9, .	2.5	6
10	The role of zinc in the adaptive evolution of polar phytoplankton. Nature Ecology and Evolution, 2022, 6, 965-978.	7.8	14
11	Surface Ocean Biogeochemistry Regulates the Impact of Anthropogenic Aerosol Fe Deposition on the Cycling of Iron and Iron Isotopes in the North Pacific. Geophysical Research Letters, 2022, 49, .	4.0	6
12	Arctic seals as tracers of environmental and ecological change. Limnology and Oceanography Letters, 2021, 6, 24-32.	3.9	14
13	Resource Colimitation Drives Competition Between Phytoplankton and Bacteria in the Southern Ocean. Geophysical Research Letters, 2021, 48, e2020GL088369.	4.0	9
14	Iron colloids dominate sedimentary supply to the ocean interior. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	44
15	Variability in iron (II) oxidation kinetics across diverse hydrothermal sites on the northern Mid Atlantic Ridge. Geochimica Et Cosmochimica Acta, 2021, 297, 143-157.	3.9	13
16	Global Ocean Sediment Composition and Burial Flux in the Deep Sea. Global Biogeochemical Cycles, 2021, 35, e2020GB006769.	4.9	46
17	Biogeochemical feedbacks associated with the response of micronutrient recycling by zooplankton to climate change. Global Change Biology, 2021, 27, 4758-4770.	9.5	13
18	Cellular costs underpin micronutrient limitation in phytoplankton. Science Advances, 2021, 7, .	10.3	17

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19	Probing the Bioavailability of Dissolved Iron to Marine Eukaryotic Phytoplankton Using In Situ Single Cell Iron Quotas. Global Biogeochemical Cycles, 2021, 35, e2021GB006979.	4.9	9
20	Constraints on the Cycling of Iron Isotopes From a Global Ocean Model. Global Biogeochemical Cycles, 2021, 35, e2021GB006968.	4.9	13
21	An Arctic Strait of Two Halves: The Changing Dynamics of Nutrient Uptake and Limitation Across the Fram Strait. Global Biogeochemical Cycles, 2021, 35, e2021GB006961.	4.9	15
22	Compound climate risks threaten aquatic food system benefits. Nature Food, 2021, 2, 673-682.	14.0	48
23	Taxonomic and nutrient controls on phytoplankton iron quotas in the ocean. Limnology and Oceanography Letters, 2021, 6, 96-106.	3.9	22
24	The Regional Importance of Oxygen Demand and Supply for Historical Ocean Oxygen Trends. Geophysical Research Letters, 2021, 48, .	4.0	15
25	Impact of intensifying nitrogen limitation on ocean net primary production is fingerprinted by nitrogen isotopes. Nature Communications, 2021, 12, 6214.	12.8	14
26	WTO must ban harmful fisheries subsidies. Science, 2021, 374, 544-544.	12.6	45
27	Persistent Uncertainties in Ocean Net Primary Production Climate Change Projections at Regional Scales Raise Challenges for Assessing Impacts on Ecosystem Services. Frontiers in Climate, 2021, 3, .	2.8	46
28	Dissolved iron in the Bermuda region of the subtropical North Atlantic Ocean: Seasonal dynamics, mesoscale variability, and physicochemical speciation. Marine Chemistry, 2020, 219, 103748.	2.3	7
29	Quantifying the Impact of Climate Change on Marine Diazotrophy: Insights From Earth System Models. Frontiers in Marine Science, 2020, 7, .	2.5	24
30	Tracking Improvement in Simulated Marine Biogeochemistry Between CMIP5 and CMIP6. Current Climate Change Reports, 2020, 6, 95-119.	8.6	155
31	Resource Availability and Entrainment Are Driven by Offsets Between Nutriclines and Winter Mixedâ€Layer Depth. Global Biogeochemical Cycles, 2020, 34, e2019GB006497.	4.9	10
32	Minimal cobalt metabolism in the marine cyanobacterium <i>Prochlorococcus</i>. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15740-15747.	7.1	25
33	Heme b distributions through the Atlantic Ocean: evidence for â€œanemicâ€•phytoplankton populations. Scientific Reports, 2020, 10, 4551.	3.3	7
34	Prey Stoichiometry Drives Iron Recycling by Zooplankton in the Global Ocean. Frontiers in Marine Science, 2020, 7, .	2.5	13
35	Twenty-first century ocean warming, acidification, deoxygenation, and upper-ocean nutrient and primary production decline from CMIP6 model projections. Biogeosciences, 2020, 17, 3439-3470.	3.3	348
36	²³⁰Th Normalization: New Insights on an Essential Tool for Quantifying Sedimentary Fluxes in the Modern and Quaternary Ocean. Paleoceanography and Paleoclimatology, 2020, 35, e2019PA003820.	2.9	56

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37	An iron cycle cascade governs the response of equatorial Pacific ecosystems to climate change. Global Change Biology, 2020, 26, 6168-6179.	9.5	25
38	Elevated sources of cobalt in the Arctic Ocean. Biogeosciences, 2020, 17, 4745-4767.	3.3	17
39	The Importance of Bottom-Up Approaches to International Cooperation in Ocean Science: The Iron Story. Oceanography, 2020, 33, 11-15.	1.0	4
40	Developing Autonomous Observing Systems for Micronutrient Trace Metals. Frontiers in Marine Science, 2019, 6, .	2.5	19
41	Impact of Inorganic Particles of Sedimentary Origin on Global Dissolved Iron and Phytoplankton Distribution. Journal of Geophysical Research: Oceans, 2019, 124, 8626-8646.	2.6	8
42	The interplay between regeneration and scavenging fluxes drives ocean iron cycling. Nature Communications, 2019, 10, 4960.	12.8	41
43	Resupply of mesopelagic dissolved iron controlled by particulate iron composition. Nature Geoscience, 2019, 12, 995-1000.	12.9	29
44	Hydrothermal vents trigger massive phytoplankton blooms in the Southern Ocean. Nature Communications, 2019, 10, 2451.	12.8	79
45	Diurnal variability in alkaline phosphatase activity and the potential role of zooplankton. Limnology and Oceanography Letters, 2019, 4, 71-78.	3.9	3
46	Seasonal Depletion of the Dissolved Iron Reservoirs in the Subâ€Antarctic Zone of the Southern Atlantic Ocean. Geophysical Research Letters, 2019, 46, 4386-4395.	4.0	21
47	Communityâ€Level Responses to Iron Availability in Open Ocean Plankton Ecosystems. Global Biogeochemical Cycles, 2019, 33, 391-419.	4.9	76
48	Nonmonotonic Response of Primary Production and Export to Changes in Mixedâ€Layer Depth in the Southern Ocean. Geophysical Research Letters, 2019, 46, 3368-3377.	4.0	24
49	Iron Distribution in the Subtropical North Atlantic: The Pivotal Role of Colloidal Iron. Global Biogeochemical Cycles, 2019, 33, 1532-1547.	4.9	18
50	Insights Into the Major Processes Driving the Global Distribution of Copper in the Ocean From a Global Model. Global Biogeochemical Cycles, 2019, 33, 1594-1610.	4.9	30
51	Elemental Distribution: Overview. , 2019, , 122-127.		4
52	Iron Biogeochemistry in the High Latitude North Atlantic Ocean. Scientific Reports, 2018, 8, 1283.	3.3	47
53	Biogeochemical cycling of Fe and Fe stable isotopes in the Eastern Tropical South Pacific. Marine Chemistry, 2018, 201, 66-76.	2.3	42
54	Oceanic Micronutrients: Trace Metals that are Essential for Marine Life. Elements, 2018, 14, 385-390.	0.5	35

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55	The Role of External Inputs and Internal Cycling in Shaping the Global Ocean Cobalt Distribution: Insights From the First Cobalt Biogeochemical Model. Global Biogeochemical Cycles, 2018, 32, 594-616.	4.9	40
56	GEOTRACES DATA PRODUCTS: STANDARDISING AND LINKING OCEAN TRACE ELEMENT AND ISOTOPE DATA AT A GLOBAL SCALE. Elements, 2018, 14, 436-437.	0.5	3
57	The GEOTRACES Intermediate Data Product 2017. Chemical Geology, 2018, 493, 210-223.	3.3	257
58	Biological uptake and reversible scavenging of zinc in the global ocean. Science, 2018, 361, 72-76.	12.6	112
59	The integral role of iron in ocean biogeochemistry. Nature, 2017, 543, 51-59.	27.8	482
60	Biotic and abiotic retention, recycling and remineralization of metals in the ocean. Nature Geoscience, 2017, 10, 167-173.	12.9	98
61	Nutrient co-limitation at the boundary of an oceanic gyre. Nature, 2017, 551, 242-246.	27.8	169
62	Manganese in the west Atlantic Ocean in the context of the first global ocean circulation model of manganese. Biogeosciences, 2017, 14, 1123-1152.	3.3	75
63	Biogeochemical protocols and diagnostics for the CMIP6 Ocean Model Intercomparison Project (OMIP). Geoscientific Model Development, 2017, 10, 2169-2199.	3.6	137
64	Volcanic ash as an oceanic iron source and sink. Geophysical Research Letters, 2016, 43, 2732-2740.	4.0	18
65	Quantifying trace element and isotope fluxes at the oceanâ€“sediment boundary: a review. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20160246.	3.4	69
66	How well do global ocean biogeochemistry models simulate dissolved iron distributions?. Global Biogeochemical Cycles, 2016, 30, 149-174.	4.9	230
67	Decadal trends in airâ€sea CO₂ exchange in the Ross Sea (Antarctica). Geophysical Research Letters, 2016, 43, 5271-5278.	4.0	8
68	Hydrothermal impacts on trace element and isotope ocean biogeochemistry. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20160035.	3.4	59
69	Impact of hydrothermalism on the ocean iron cycle. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2016, 374, 20150291.	3.4	35
70	Effects of light and phosphorus on summer DMS dynamics in subtropical waters using a global ocean biogeochemical model. Environmental Chemistry, 2016, 13, 379.	1.5	8
71	Dust fluxes and iron fertilization in Holocene and Last Glacial Maximum climates. Geophysical Research Letters, 2015, 42, 6014-6023.	4.0	83
72	Onset, intensification, and decline of phytoplankton blooms in the Southern Ocean. ICES Journal of Marine Science, 2015, 72, 1971-1984.	2.5	39

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73	Projections of oceanic N₂O emissions in the 21st century using the IPSL Earth system model. Biogeosciences, 2015, 12, 4133-4148.	3.3	48
74	PISCES-v2: an ocean biogeochemical model for carbon and ecosystem studies. Geoscientific Model Development, 2015, 8, 2465-2513.	3.6	422
75	Characterization of distinct bloom phenology regimes in the Southern Ocean. ICES Journal of Marine Science, 2015, 72, 1985-1998.	2.5	33
76	Modelling the role of marine particle on large scale 231Pa, 230Th, Iron and Aluminium distributions. Progress in Oceanography, 2015, 133, 66-72.	3.2	12
77	Using the L* concept to explore controls on the relationship between paired ligand and dissolved iron concentrations in the ocean. Marine Chemistry, 2015, 173, 52-66.	2.3	20
78	Modeling organic iron-binding ligands in a three-dimensional biogeochemical ocean model. Marine Chemistry, 2015, 173, 67-77.	2.3	70
79	Basin-scale transport of hydrothermal dissolved metals across the South Pacific Ocean. Nature, 2015, 523, 200-203.	27.8	397
80	On the effects of circulation, sediment resuspension and biological incorporation by diatoms in an ocean model of aluminium*. Biogeosciences, 2014, 11, 3757-3779.	3.3	29
81	Phytoplankton plasticity drives large variability in carbon fixation efficiency. Geophysical Research Letters, 2014, 41, 8994-9000.	4.0	13
82	Surface-water iron supplies in the Southern Ocean sustained by deep winter mixing. Nature Geoscience, 2014, 7, 314-320.	12.9	223
83	A ventilationâ€based framework to explain the regenerationâ€scavenging balance of iron in the ocean. Geophysical Research Letters, 2014, 41, 7227-7236.	4.0	23
84	More to hydrothermal iron input than meets the eye. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 16641-16642.	7.1	11
85	The impact of different external sources of iron on the global carbon cycle. Geophysical Research Letters, 2014, 41, 920-926.	4.0	149
86	Slow-spreading submarine ridges in the South Atlantic as a significant oceanic iron source. Nature Geoscience, 2013, 6, 775-779.	12.9	140
87	Aluminium in an ocean general circulation model compared with the West Atlantic Geotraces cruises. Journal of Marine Systems, 2013, 126, 3-23.	2.1	48
88	Phytoplankton growth formulation in marine ecosystem models: Should we take into account photo-acclimation and variable stoichiometry in oligotrophic areas?. Journal of Marine Systems, 2013, 125, 29-40.	2.1	38
89	Taxon-specific response of marine nitrogen fixers to elevated carbon dioxide concentrations. Nature Geoscience, 2013, 6, 790-795.	12.9	126
90	Biology and airâ€“sea gas exchange controls on the distribution of carbon isotope ratios (Î´¹³C) in the ocean. Biogeosciences, 2013, 10, 5793-5816.	3.3	130

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91	Southern Ocean Seasonal Cycle Experiment 2012: Seasonal scale climate and carbon cycle links. South African Journal of Science, 2012, 108, .	0.7	24
92	Drivers of nonâ€Redfield nutrient utilization in the Atlantic sector of the Southern Ocean. Geophysical Research Letters, 2012, 39, .	4.0	5
93	DMS dynamics in the most oligotrophic subtropical zones of the global ocean. Biogeochemistry, 2012, 110, 215-241.	3.5	19
94	Large inert carbon pool in the terrestrial biosphere during the Last Glacial Maximum. Nature Geoscience, 2012, 5, 74-79.	12.9	145
95	Analysis of the Global Ocean Sampling (GOS) Project for Trends in Iron Uptake by Surface Ocean Microbes. PLoS ONE, 2012, 7, e30931.	2.5	79
96	A global compilation of dissolved iron measurements: focus on distributions and processes in the Southern Ocean. Biogeosciences, 2012, 9, 2333-2349.	3.3	165
97	Marine productivity response to Heinrich events: a model-data comparison. Climate of the Past, 2012, 8, 1581-1598.	3.4	27
98	Iron bioavailability in the Southern Ocean. Oceanography and Marine Biology, 2012, , 1-64.	1.0	13
99	Improving the parameters of a global ocean biogeochemical model via variational assimilation of in situ data at five time series stations. Journal of Geophysical Research, 2011, 116, .	3.3	20
100	The response of phytoplankton biomass to transient mixing events in the Southern Ocean. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	47
101	The response of marine carbon and nutrient cycles to ocean acidification: Large uncertainties related to phytoplankton physiological assumptions. Global Biogeochemical Cycles, 2011, 25, n/a-n/a.	4.9	53
102	Towards accounting for dissolved iron speciation in global ocean models. Biogeosciences, 2011, 8, 3025-3039.	3.3	46
103	Impact of episodic vertical fluxes on sea surface pCO ₂. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 2009-2025.	3.4	26
104	Large-scale shifts in phytoplankton groups in the Equatorial Pacific during ENSO cycles. Biogeosciences, 2011, 8, 539-550.	3.3	38
105	Hydrothermal contribution to the oceanic dissolved iron inventory. Nature Geoscience, 2010, 3, 252-256.	12.9	353
106	Physical speciation of iron in the Atlantic sector of the Southern Ocean along a transect from the subtropical domain to the Weddell Sea Gyre. Journal of Geophysical Research, 2010, 115, .	3.3	55
107	A multiâ€decadal delay in the onset of corrosive â€˜acidifiedâ€™ waters in the Ross Sea of Antarctica due to strong airâ€sea CO₂ disequilibrium. Geophysical Research Letters, 2010, 37, .	4.0	48
108	Impact of enhanced vertical mixing on marine biogeochemistry: lessons for geo-engineering and natural variability. Biogeosciences, 2009, 6, 901-912.	3.3	29

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109	Quantifying the roles of ocean circulation and biogeochemistry in governing ocean carbon-13 and atmospheric carbon dioxide at the last glacial maximum. Climate of the Past, 2009, 5, 695-706.	3.4	91
110	Influence of light and temperature on the marine iron cycle: From theoretical to global modeling. Global Biogeochemical Cycles, 2009, 23, .	4.9	40
111	Stratospheric ozone depletion reduces ocean carbon uptake and enhances ocean acidification. Geophysical Research Letters, 2009, 36, .	4.0	108
112	Evaluating the importance of atmospheric and sedimentary iron sources to Southern Ocean biogeochemistry. Geophysical Research Letters, 2009, 36, .	4.0	112
113	Towards understanding global variability in ocean carbonâ€13. Global Biogeochemical Cycles, 2008, 22, .	4.9	117
114	Ocean biogeochemistry exhibits contrasting responses to a large scale reduction in dust deposition. Biogeosciences, 2008, 5, 11-24.	3.3	49
115	Processes governing the supply of iron to phytoplankton in stratified seas. Journal of Geophysical Research, 2006, 111, .	3.3	49
116	Iron in the Ross Sea: 2. Impact of discrete iron addition strategies. Journal of Geophysical Research, 2005, 110, .	3.3	15
117	Iron in the Ross Sea: 1. Impact on CO2 fluxes via variation in phytoplankton functional group and non-Redfield stoichiometry. Journal of Geophysical Research, 2005, 110, .	3.3	59
118	Anomalously low zooplankton abundance in the Ross Sea: An alternative explanation. Limnology and Oceanography, 2003, 48, 686-699.	3.1	50