Eric D Galbraith

List of Publications by Year
in descending order

100 papers	8,973 citations	53660 45 h-index	45213 90 g-index
118 all docs	118 docs citations	118 times ranked	10386 citing authors

#	Article	IF	Citations
1	Processes and patterns of oceanic nutrient limitation. Nature Geoscience, 2013, 6, 701-710.	5.4	1,627
2	Assessing the impacts of 1.5â€Â°C global warming â€“ simulation protocol of the Inter-Sectoral Impact Model Intercomparison Project (ISIMIP2b). Geoscientific Model Development, 2017, 10, 4321-4345.	1.3	410
3	Global ensemble projections reveal trophic amplification of ocean biomass declines with climate change. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 12907-12912.	3.3	357
4	Future changes in climate, ocean circulation, ecosystems, and biogeochemical cycling simulated for a businessâ€asâ€usual CO₂ emission scenario until year 4000 AD. Global Biogeochemical Cycles, 2008, 22, .	1.9	327
5	A review of nitrogen isotopic alteration in marine sediments. Paleoceanography, 2012, 27, .	3.0	240
6	How well do global ocean biogeochemistry models simulate dissolved iron distributions?. Global Biogeochemical Cycles, 2016, 30, 149-174.	1.9	230
7	Cessation of deep convection in the open Southern Ocean under anthropogenic climate change. Nature Climate Change, 2014, 4, 278-282.	8.1	215
8	Intensification of open-ocean oxygen depletion by vertically migrating animals. Nature Geoscience, 2013, 6, 545-548.	5.4	209
9	Carbon dioxide release from the North Pacific abyss during the last deglaciation. Nature, 2007, 449, 890-893.	13.7	201
10	Simulating the global distribution of nitrogen isotopes in the ocean. Global Biogeochemical Cycles, 2010, 24, .	1.9	186
11	Dataâ€based estimates of suboxia, denitrification, and N₂O production in the ocean and their sensitivities to dissolved O₂. Global Biogeochemical Cycles, 2012, 26, .	1.9	183
12	Large climate-driven changes of oceanic oxygen concentrations during the last deglaciation. Nature Geoscience, 2012, 5, 151-156.	5.4	182
13	Glacial greenhouse-gas fluctuations controlled by ocean circulation changes. Nature, 2008, 456, 373-376.	13.7	179
14	Covariation of deep Southern Ocean oxygenation and atmospheric CO2 through the last ice age. Nature, 2016, 530, 207-210.	13.7	173
15	A simple nutrient-dependence mechanism for predicting the stoichiometry of marine ecosystems. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8199-8204.	3.3	170
16	Linked sustainability challenges and trade-offs among fisheries, aquaculture and agriculture. Nature Ecology and Evolution, 2017, 1, 1240-1249.	3.4	161
17	Regional impacts of iron-light colimitation in a global biogeochemical model. Biogeosciences, 2010, 7, 1043-1064.	1.3	152
18	Twentyâ€firstâ€century climate change impacts on marine animal biomass and ecosystem structure across ocean basins. Global Change Biology, 2019, 25, 459-472.	4.2	151

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19	Subarctic Pacific evidence for a glacial deepening of the oceanic respired carbon pool. Earth and Planetary Science Letters, 2009, 277, 156-165.	1.8	129
20	Nitrogen isotopes in bulk marine sediment: linking seafloor observations with subseafloor records. Biogeosciences, 2013, 10, 101-118.	1.3	127
21	A protocol for the intercomparison of marine fishery and ecosystem models: Fish-MIP v1.0. Geoscientific Model Development, 2018, 11, 1421-1442.	1.3	116
22	Diel vertical migration: Ecological controls and impacts on the biological pump in a oneâ€dimensional ocean model. Global Biogeochemical Cycles, 2013, 27, 478-491.	1.9	113
23	Large fluctuations of dissolved oxygen in the Indian and Pacific oceans during Dansgaardâ€Oeschger oscillations caused by variations of North Atlantic Deep Water subduction. Paleoceanography, 2007, 22, .	3.0	104
24	Next-generation ensemble projections reveal higher climate risks for marine ecosystems. Nature Climate Change, 2021, 11, 973-981.	8.1	96
25	Linking scaling laws across eukaryotes. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 21616-21622.	3.3	95
26	Role of Mesoscale Eddies in Cross-Frontal Transport of Heat and Biogeochemical Tracers in the Southern Ocean. Journal of Physical Oceanography, 2015, 45, 3057-3081.	0.7	94
27	Climate Variability and Radiocarbon in the CM2Mc Earth System Model. Journal of Climate, 2011, 24, 4230-4254.	1.2	88
28	The acceleration of oceanic denitrification during deglacial warming. Nature Geoscience, 2013, 6, 579-584.	5.4	84
29	Global pulses of organic carbon burial in deep-sea sediments during glacial maxima. Nature Communications, 2016, 7, 10796.	5.8	84
30	Glacial-interglacial modulation of the marine nitrogen cycle by high-latitude O2supply to the global thermocline. Paleoceanography, 2004, 19, n/a-n/a.	3.0	83
31	Consistent relationship between global climate and surface nitrate utilization in the western subarctic Pacific throughout the last 500 ka. Paleoceanography, 2008, 23, .	3.0	78
32	Glacial expansion of oxygen-depleted seawater in the eastern tropical Pacific. Nature, 2018, 562, 410-413.	13.7	78
33	Enhanced weathering and CO2 drawdown caused by latest Eocene strengthening of the Atlantic meridional overturning circulation. Nature Geoscience, 2017, 10, 213-216.	5.4	69
34	Rapid coastal deoxygenation due to ocean circulation shift in the northwest Atlantic. Nature Climate Change, 2018, 8, 868-872.	8.1	69
35	A pervasive link between Antarctic ice core and subarctic Pacific sediment records over the past 800kyrs. Quaternary Science Reviews, 2010, 29, 206-212.	1.4	68
36	The impact of atmospheric pCO₂ on carbon isotope ratios of the atmosphere and ocean. Global Biogeochemical Cycles, 2015, 29, 307-324.	1.9	67

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37	Calibration of the carbon isotope composition (Î´¹³C) of benthic foraminifera. Paleoceanography, 2017, 32, 512-530.	3.0	63
38	Metabolic impacts of climate change on marine ecosystems: Implications for fish communities and fisheries. Global Ecology and Biogeography, 2019, 28, 158-169.	2.7	62
39	Response of a comprehensive climate model to a broad range of external forcings: relevance for deep ocean ventilation and the development of late Cenozoic ice ages. Climate Dynamics, 2019, 52, 653-679.	1.7	61
40	Deglacial weakening of the oceanic soft tissue pump: global constraints from sedimentary nitrogen isotopes and oxygenation proxies. Quaternary Science Reviews, 2015, 109, 38-48.	1.4	59
41	A coupled human-Earth model perspective on long-term trends in the global marine fishery. Nature Communications, 2017, 8, 14884.	5.8	59
42	Hemispherically asymmetric trade wind changes as signatures of past ITCZ shifts. Quaternary Science Reviews, 2018, 180, 214-228.	1.4	58
43	Enhancement of anammox by the excretion of diel vertical migrators. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 15653-15658.	3.3	57
44	Estimating global biomass and biogeochemical cycling of marine fish with and without fishing. Science Advances, 2021, 7, eabd7554.	4.7	54
45	Biogeochemical Role of Subsurface Coherent Eddies in the Ocean: Tracer Cannonballs, Hypoxic Storms, and Microbial Stewpots?. Global Biogeochemical Cycles, 2018, 32, 226-249.	1.9	53
46	Denitrification under glacial and interglacial conditions: A physical approach. Paleoceanography, 2005, 20, n/a-n/a.	3.0	51
47	Complex functionality with minimal computation: Promise and pitfalls of reducedâ€tracer ocean biogeochemistry models. Journal of Advances in Modeling Earth Systems, 2015, 7, 2012-2028.	1.3	49
48	Hosed vs. unhosed: interruptions of the Atlantic Meridional Overturning Circulation in a global coupled model, with and without freshwater forcing. Climate of the Past, 2016, 12, 1663-1679.	1.3	48
49	Preformed and regenerated phosphate in ocean general circulation models: can right total concentrations be wrong?. Biogeosciences, 2012, 9, 1797-1807.	1.3	47
50	Direct ventilation of the North Pacific did not reach the deep ocean during the last deglaciation. Geophysical Research Letters, 2013, 40, 199-203.	1.5	46
51	Response of the Ocean Natural Carbon Storage to Projected Twenty-First-Century Climate Change. Journal of Climate, 2014, 27, 2033-2053.	1.2	46
52	A novel estimate of ocean oxygen utilisation points to a reduced rate of respiration in the ocean interior. Biogeosciences, 2013, 10, 7723-7738.	1.3	43
53	Ocean (De)oxygenation Across the Last Deglaciation: Insights for the Future. Oceanography, 2014, 27, 26-35.	0.5	43
54	The ecological module of BOATS-1.0: aÂbioenergetically constrained model of marine upper trophic levels suitable for studies of fisheries and ocean biogeochemistry. Geoscientific Model Development, 2016, 9, 1545-1565.	1.3	43

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55	Western U.S. lake expansions during Heinrich stadials linked to Pacific Hadley circulation. Science Advances, 2018, 4, eaav0118.	4.7	42
56	Disentangling diverse responses to climate change among global marine ecosystem models. Progress in Oceanography, 2021, 198, 102659.	1.5	42
57	Impact of Weddell Sea deep convection on natural and anthropogenic carbon in a climate model. Geophysical Research Letters, 2014, 41, 7262-7269.	1.5	39
58	Carbon burial in deep-sea sediment and implications for oceanic inventories of carbon and alkalinity over the last glacial cycle. Climate of the Past, 2018, 14, 1819-1850.	1.3	39
59	Interhemispheric gradient of atmospheric radiocarbon reveals natural variability of Southern Ocean winds. Climate of the Past, 2011, 7, 1123-1138.	1.3	37
60	Seasonal variability in global industrial fishing effort. PLoS ONE, 2019, 14, e0216819.	1.1	37
61	Climate change impacts on marine ecosystems through the lens of the size spectrum. Emerging Topics in Life Sciences, 2019, 3, 233-243.	1.1	37
62	A lower limit to atmospheric CO2 concentrations over the past 800,000 years. Nature Geoscience, 2017, 10, 295-298.	5.4	36
63	The global ocean size spectrum from bacteria to whales. Science Advances, 2021, 7, eabh3732.	4.7	36
64	The Biological Pump During the Last Glacial Maximum. Annual Review of Marine Science, 2020, 12, 559-586.	5.1	34
65	Coupled climate impacts of the Drake Passage and the Panama Seaway. Climate Dynamics, 2014, 43, 37-52.	1.7	33
66	North Atlantic ventilation of â€œsouthernâ€sourcedâ€•deep water in the glacial ocean. Paleoceanography, 2012, 27, .	3.0	32
67	The Deep Ocean Buoyancy Budget and Its Temporal Variability. Journal of Climate, 2014, 27, 551-573.	1.2	29
68	Smaller fish species in a warm and oxygen-poor Humboldt Current system. Science, 2022, 375, 101-104.	6.0	29
69	Nitrogen in Past Marine Environments. , 2008, , 1497-1535.		28
70	Formulation, General Features and Global Calibration of a Bioenergetically-Constrained Fishery Model. PLoS ONE, 2017, 12, e0169763.	1.1	26
71	The devil's in the disequilibrium: multi-component analysis of dissolved carbon and oxygen changes under a broad range of forcings in a general circulation model. Biogeosciences, 2018, 15, 3761-3777.	1.3	26
72	Upwelling in the Ocean Basins North of the ACC: 1. On the Upwelling Exposed by the Surface Distribution of Î”¹⁴C. Journal of Geophysical Research: Oceans, 2019, 124, 2591-2608.	1.0	25

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73	A dual-track transition to global carbon pricing. Climate Policy, 2020, 20, 1057-1069.	2.6	25
74	A midâ€Holocene transition in the nitrogen dynamics of the western equatorial Pacific: Evidence of a deepening thermocline?. Geophysical Research Letters, 2008, 35, .	1.5	23
75	Destabilization of glacial climate by the radiative impact of Atlantic Meridional Overturning Circulation disruptions. Geophysical Research Letters, 2016, 43, 8214-8221.	1.5	23
76	Growth Limitation of Marine Fish by Low Iron Availability in the Open Ocean. Frontiers in Marine Science, 2019, 6, .	1.2	22
77	Global hunter-gatherer population densities constrained by influence of seasonality on diet composition. Nature Ecology and Evolution, 2021, 5, 1536-1545.	3.4	21
78	Feasible future global scenarios for human life evaluations. Nature Communications, 2019, 10, 161.	5.8	20
79	Differing marine animal biomass shifts under 21st century climate change between Canadaâ€™s three oceans. Facets, 2020, 5, 105-122.	1.1	20
80	Assessing the Role of Highâ€Frequency Winds and Sea Ice Loss on Arctic Phytoplankton Blooms in an Iceâ€Oceanâ€Biogeochemical Model. Journal of Geophysical Research G: Biogeosciences, 2019, 124, 2728-2750.	1.3	19
81	Roles of the Ocean Mesoscale in the Horizontal Supply of Mass, Heat, Carbon, and Nutrients to the Northern Hemisphere Subtropical Gyres. Journal of Geophysical Research: Oceans, 2018, 123, 7016-7036.	1.0	18
82	Marine wild-capture fisheries after nuclear war. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 29748-29758.	3.3	18
83	Stable Carbon Isotopes Suggest Large Terrestrial Carbon Inputs to the Global Ocean. Global Biogeochemical Cycles, 2021, 35, e2020GB006684.	1.9	18
84	Calcium carbonate production response to future ocean warming and acidification. Biogeosciences, 2012, 9, 2351-2364.	1.3	17
85	Exploring future scenarios for the global supply chain of tuna. Deep-Sea Research Part II: Topical Studies in Oceanography, 2017, 140, 251-267.	0.6	16
86	Happy without money: Minimally monetized societies can exhibit high subjective well-being. PLoS ONE, 2021, 16, e0244569.	1.1	16
87	Marine phytoplankton resilience may moderate oligotrophic ecosystem responses and biogeochemical feedbacks to climate change. Limnology and Oceanography, 2022, 67, .	1.6	15
88	Correction to â€œFuture changes in climate, ocean circulation, ecosystems, and biogeochemical cycling simulated for a businessâ€asâ€usual CO₂ emission scenario until year 4000 ADâ€• Global Biogeochemical Cycles, 2009, 23, .	1.9	14
89	Upwelling in the Ocean Basins North of the ACC: 2. How Cool Subantarctic Water Reaches the Surface in the Tropics. Journal of Geophysical Research: Oceans, 2019, 124, 2609-2625.	1.0	14
90	Links between fish abundance and ocean biogeochemistry as recorded in marine sediments. PLoS ONE, 2018, 13, e0199420.	1.1	11

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91	Regulation strength and technology creep play key roles in global long-term projections of wild capture fisheries. ICES Journal of Marine Science, 2020, 77, 2518-2528.	1.2	11
92	The fecal iron pump: Global impact of animals on the iron stoichiometry of marine sinking particles. Limnology and Oceanography, 2021, 66, 201-213.	1.6	10
93	Global nutrient cycling by commercially targeted marine fish. Biogeosciences, 2022, 19, 2537-2555.	1.3	8
94	Bioenergetic influence on the historical development and decline of industrial fisheries. ICES Journal of Marine Science, 2020, 77, 1854-1863.	1.2	5
95	Happy just because. A cross-cultural study on subjective wellbeing in three Indigenous societies. PLoS ONE, 2021, 16, e0251551.	1.1	4
96	A hemispheric asymmetry in poleward ocean heat transport across climates: Implications for overturning and polar warming. Earth and Planetary Science Letters, 2021, 568, 117033.	1.8	3
97	Does catching more fish increase the subjective well-being of fishers? Insights from Bangladesh. Ambio, 2022, 51, 1673-1686.	2.8	3
98	When the dust settles. Nature Geoscience, 2013, 6, 423-424.	5.4	2
99	Earth system economics: a biophysical approach to the human component of the Earth system. Earth System Dynamics, 2021, 12, 671-687.	2.7	2
100	Interdisciplinary applications of human time use with generalized lexicons. PLoS ONE, 2022, 17, e0270583.	1.1	0