

# Chris Langdon

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3852930/publications.pdf>

Version: 2024-02-01

92  
papers

9,471  
citations

50276

46  
h-index

49909

87  
g-index

95  
all docs

95  
docs citations

95  
times ranked

7498  
citing authors

#	ARTICLE	IF	CITATIONS
1	Geochemical Consequences of Increased Atmospheric Carbon Dioxide on Coral Reefs. <i>Science</i> , 1999, 284, 118-120.	12.6	1,170
2	Losers and winners in coral reefs acclimatized to elevated carbon dioxide concentrations. <i>Nature Climate Change</i> , 2011, 1, 165-169.	18.8	856
3	Effect of calcium carbonate saturation state on the calcification rate of an experimental coral reef. <i>Global Biogeochemical Cycles</i> , 2000, 14, 639-654.	4.9	496
4	Effect of elevated pCO <sub>2</sub> on photosynthesis and calcification of corals and interactions with seasonal change in temperature/irradiance and nutrient enrichment. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	488
5	The Pacific oyster, <i>Crassostrea gigas</i> , shows negative correlation to naturally elevated carbon dioxide levels: Implications for near-term ocean acidification effects. <i>Limnology and Oceanography</i> , 2012, 57, 698-710.	3.1	424
6	Elevated consumption of carbon relative to nitrogen in the surface ocean. <i>Nature</i> , 1993, 363, 248-250.	27.8	323
7	Relationships between lorica volume, carbon, nitrogen, and ATP content of tintinnids In Narragansett Bay. <i>Journal of Plankton Research</i> , 1984, 6, 859-868.	1.8	299
8	Poorly cemented coral reefs of the eastern tropical Pacific: Possible insights into reef development in a high-CO <sub>2</sub> world. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 10450-10455.	7.1	265
9	Vulnerability and adaptation of US shellfisheries to ocean acidification. <i>Nature Climate Change</i> , 2015, 5, 207-214.	18.8	265
10	Ocean acidification compromises recruitment success of the threatened Caribbean coral <i>Acropora palmata</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 20400-20404.	7.1	234
11	A comparison of four methods for determining planktonic community production <sup>1</sup> . <i>Limnology and Oceanography</i> , 1987, 32, 1085-1098.	3.1	221
12	Effect of elevated CO <sub>2</sub> on the community metabolism of an experimental coral reef. <i>Global Biogeochemical Cycles</i> , 2003, 17, .	4.9	189
13	On the causes of interspecific differences in the growth-irradiance relationship for phytoplankton. II. A general review. <i>Journal of Plankton Research</i> , 1988, 10, 1291-1312.	1.8	186
14	Changes in Ocean Heat, Carbon Content, and Ventilation: A Review of the First Decade of GO-SHIP Global Repeat Hydrography. <i>Annual Review of Marine Science</i> , 2016, 8, 185-215.	11.6	183
15	Dependence of calcification on light and carbonate ion concentration for the hermatypic coral <i>Porites compressa</i> . <i>Marine Ecology - Progress Series</i> , 2001, 220, 153-162.	1.9	180
16	Ocean acidification impacts multiple early life history processes of the Caribbean coral <i>Porites astreoides</i> . <i>Global Change Biology</i> , 2011, 17, 2478-2487.	9.5	178
17	Effects of elevated pCO <sub>2</sub> on dissolution of coral carbonates by microbial euendoliths. <i>Global Biogeochemical Cycles</i> , 2009, 23, .	4.9	160
18	Coral reefs and changing seawater carbonate chemistry. <i>Coastal and Estuarine Studies</i> , 2006, , 73-110.	0.4	129

#	ARTICLE	IF	CITATIONS
19	Changing the way we think about global change research: scaling up in experimental ecosystem science. <i>Global Change Biology</i> , 2004, 10, 393-407.	9.5	126
20	Effect of aragonite saturation state on settlement and post-settlement growth of <i>Porites astreoides</i> larvae. <i>Coral Reefs</i> , 2008, 27, 485-490.	2.2	123
21	Dynamics of seawater carbonate chemistry, production, and calcification of a coral reef flat, central Great Barrier Reef. <i>Biogeosciences</i> , 2013, 10, 6747-6758.	3.3	118
22	On the causes of interspecific differences in the growth-irradiance relationship for phytoplankton. Part I. A comparative study of the growth-irradiance relationship of three marine phytoplankton species: <i>Skeletonema costatum</i> , <i>Olisthodiscus luteus</i> and <i>Gonyaulax tamarensis</i> . <i>Journal of Plankton Research</i> , 1987, 9, 459-482.	1.8	113
23	Gas transfer experiment on Georges Bank using two volatile deliberate tracers. <i>Journal of Geophysical Research</i> , 1993, 98, 20237-20248.	3.3	110
24	Seasonal variability of bio-optical and physical properties in the Arabian Sea: October 1994–October 1995. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 1998, 45, 2001-2025.	1.4	109
25	Threatened Caribbean Coral Is Able to Mitigate the Adverse Effects of Ocean Acidification on Calcification by Increasing Feeding Rate. <i>PLoS ONE</i> , 2015, 10, e0123394.	2.5	99
26	Ocean acidification along the Gulf Coast and East Coast of the USA. <i>Continental Shelf Research</i> , 2015, 98, 54-71.	1.8	96
27	Taking the metabolic pulse of the world's coral reefs. <i>PLoS ONE</i> , 2018, 13, e0190872.	2.5	96
28	Differential effects of copper on three species of scleractinian corals and their algal symbionts ( <i>Symbiodinium</i> spp.). <i>Aquatic Toxicology</i> , 2010, 97, 125-133.	4.0	95
29	ENDOLITHIC MICROFLORA ARE MAJOR PRIMARY PRODUCERS IN DEAD CARBONATE SUBSTRATES OF HAWAIIAN CORAL REEFS <sup>1</sup> . <i>Journal of Phycology</i> , 2006, 42, 292-303.	2.3	86
30	Rates of respiration in the light measured in marine phytoplankton using an <sup>18</sup> O isotope-labelling technique. <i>Journal of Experimental Marine Biology and Ecology</i> , 1989, 129, 95-120.	1.5	83
31	Dynamics of carbonate chemistry, production, and calcification of the Florida Reef Tract (2009–2010): Evidence for seasonal dissolution. <i>Global Biogeochemical Cycles</i> , 2016, 30, 661-688.	4.9	79
32	Controls on surface water carbonate chemistry along North American ocean margins. <i>Nature Communications</i> , 2020, 11, 2691.	12.8	77
33	Decadal changes in Pacific carbon. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	76
34	Coral Reefs and People in a High-CO <sub>2</sub> World: Where Can Science Make a Difference to People?. <i>PLoS ONE</i> , 2016, 11, e0164699.	2.5	64
35	Species-specific responses to climate change and community composition determine future calcification rates of Florida Keys reefs. <i>Global Change Biology</i> , 2017, 23, 1023-1035.	9.5	61
36	Dissolved oxygen monitoring system using a pulsed electrode: design, performance, and evolution. <i>Deep-sea Research Part A, Oceanographic Research Papers</i> , 1984, 31, 1357-1367.	1.5	60

#	ARTICLE	IF	CITATIONS
37	Primary production, water column changes, and the demise of a <i>Phaeocystis</i> bloom at the Marine Light-Mixed Layers site (59°N, 21°W) in the northeast Atlantic Ocean. <i>Journal of Geophysical Research</i> , 1995, 100, 6633.	3.3	60
38	Climate variability in the North Pacific thermocline diagnosed from oxygen measurements: An update based on the U.S. CLIVAR/CO <sub>2</sub> Repeat Hydrography cruises. <i>Global Biogeochemical Cycles</i> , 2008, 22, .	4.9	60
39	Concurrent high resolution bio-optical and physical time series observations in the Sargasso Sea during the spring of 1987. <i>Journal of Geophysical Research</i> , 1991, 96, 8643-8663.	3.3	58
40	Seasonal variability of bio-optical and physical properties in the Sargasso Sea. <i>Journal of Geophysical Research</i> , 1993, 98, 865-898.	3.3	58
41	Summer plankton production and nutrient consumption patterns in the Mertz Glacier Region of East Antarctica. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 2003, 50, 1393-1414.	1.4	57
42	Particulate matter production and consumption in deep mixed layers: observations in a warm-core ring. <i>Deep-sea Research Part A, Oceanographic Research Papers</i> , 1986, 33, 1813-1841.	1.5	56
43	Short-term and seasonal pH, CO <sub>2</sub> and saturation state variability in a coral reef ecosystem. <i>Global Biogeochemical Cycles</i> , 2012, 26, .	4.9	56
44	Diurnal variation in surface pCO <sub>2</sub> and O <sub>2</sub> at 60°N, 20°W in the North Atlantic. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 1993, 40, 409-422.	1.4	55
45	Inorganic carbon dynamics during northern California coastal upwelling. <i>Continental Shelf Research</i> , 2011, 31, 1180-1192.	1.8	55
46	Multiple Stressors and Ecological Complexity Require a New Approach to Coral Reef Research. <i>Frontiers in Marine Science</i> , 2016, 3, .	2.5	49
47	Distribution and composition of biogenic particulate matter in a Gulf Stream warm-core ring. <i>Deep-sea Research Part A, Oceanographic Research Papers</i> , 1985, 32, 1347-1369.	1.5	48
48	Juvenile growth of the tropical sea urchin <i>Lytechinus variegatus</i> exposed to near-future ocean acidification scenarios. <i>Journal of Experimental Marine Biology and Ecology</i> , 2012, 426-427, 12-17.	1.5	46
49	The relationship between heterotrophic feeding and inorganic nutrient availability in the scleractinian coral <i>Solenastrea reniformis</i> under a short-term temperature increase. <i>Limnology and Oceanography</i> , 2016, 61, 89-102.	3.1	46
50	Seasonal variations in the phytoplankton biomass and productivity of a warm-core Gulf Stream ring. <i>Deep-sea Research Part A, Oceanographic Research Papers</i> , 1985, 32, 1287-1300.	1.5	44
51	Responses of the tropical gorgonian coral <i>Eunicea fusca</i> to ocean acidification conditions. <i>Coral Reefs</i> , 2015, 34, 451-460.	2.2	41
52	Effects of elevated p CO <sub>2</sub> on epilithic and endolithic metabolism of reef carbonates. <i>Global Change Biology</i> , 2006, 12, 2200-2208.	9.5	40
53	Increased temperature mitigates the effects of ocean acidification in calcified green algae ( <i>Halimeda</i> ) Tj ETQq1 1 0.784314 rgBT /Over	2.2	39
54	Estimation of seasonal primary production from moored optical sensors in the Sargasso Sea. <i>Journal of Geophysical Research</i> , 1992, 97, 7399-7412.	3.3	38

#	ARTICLE	IF	CITATIONS
55	Factors controlling the rate of CaCO <sub>3</sub> precipitation on Great Bahama Bank. <i>Global Biogeochemical Cycles</i> , 2001, 15, 589-596.	4.9	38
56	Productivity of a coral reef using boundary layer and enclosure methods. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	37
57	Comment on "Modern"age buildup of CO <sub>2</sub> and its effects on seawater acidity and salinity" by Hugo A. Lo'iciga. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	36
58	Multiple driving factors explain spatial and temporal variability in coral calcification rates on the Bermuda platform. <i>Coral Reefs</i> , 2014, 33, 979-997.	2.2	34
59	The Biosphere 2 coral reef biome. <i>Ecological Engineering</i> , 1999, 13, 147-172.	3.6	33
60	Present and future changes in seawater chemistry due to ocean acidification. <i>Geophysical Monograph Series</i> , 2009, , 175-188.	0.1	32
61	Short-term changes in the biology of a Gulf Stream warm-core ring: Phytoplankton biomass and productivity1. <i>Limnology and Oceanography</i> , 1987, 32, 919-928.	3.1	31
62	Monsoonal differences in phytoplankton biomass and production in the Indonesian Seas: tracing vertical mixing using temperature. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 1997, 44, 581-592.	1.4	30
63	Responses of calcifying algae ( <i>Halimeda</i> spp.) to ocean acidification: implications for herbivores. <i>Marine Ecology - Progress Series</i> , 2014, 514, 43-56.	1.9	29
64	A multi-tracer model approach to estimate reef water residence times. <i>Limnology and Oceanography: Methods</i> , 2012, 10, 1078-1095.	2.0	28
65	Moored instruments weather Arabian Sea monsoons, yield data. <i>Eos</i> , 1997, 78, 117.	0.1	27
66	Production-respiration relationships at different timescales within the Biosphere 2 coral reef biome. <i>Limnology and Oceanography</i> , 2001, 46, 1653-1660.	3.1	27
67	Comment on "Coral reef calcification and climate change: The effect of ocean warming" Geophysical Research Letters, 2005, 32, .	4.0	27
68	Stress-tolerant corals of Florida Bay are vulnerable to ocean acidification. <i>Coral Reefs</i> , 2013, 32, 671-683.	2.2	27
69	Measurements of net and gross O <sub>2</sub> production, dark O <sub>2</sub> respiration, and <sup>14</sup> C assimilation at the Marine Light-Mixed Layers site (59A°N, 21A°W) in the northeast Atlantic Ocean. <i>Journal of Geophysical Research</i> , 1995, 100, 6645.	3.3	26
70	Diel bio-optical variability observed from moored sensors in the Arabian Sea. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , 1999, 46, 1813-1831.	1.4	26
71	Water column dynamics of dissolved inorganic carbon (DIC), nitrogen and O <sub>2</sub> on Georges Bank during April, 1990. <i>Continental Shelf Research</i> , 1994, 14, 765-789.	1.8	19
72	Two threatened Caribbean coral species have contrasting responses to combined temperature and acidification stress. <i>Limnology and Oceanography</i> , 2018, 63, 2450-2464.	3.1	17

#	ARTICLE	IF	CITATIONS
73	Coastal Ocean Data Analysis Product in North America (CODAP-NA) – an internally consistent data product for discrete inorganic carbon, oxygen, and nutrients on the North American ocean margins. <i>Earth System Science Data</i> , 2021, 13, 2777-2799.	9.9	14
74	Seasonal Variations of Carbonate Chemistry at Two Western Atlantic Coral Reefs. <i>Journal of Geophysical Research: Oceans</i> , 2020, 125, e2020JC016108.	2.6	12
75	Diel variations of bio-optical properties in the Sargasso Sea. , 1990, 1302, 214.		11
76	Environmental controls on daytime net community calcification on a Red Sea reef flat. <i>Coral Reefs</i> , 2016, 35, 697-711.	2.2	11
77	Preconditioning to high CO <sub>2</sub> exacerbates the response of the Caribbean branching coral <i>Porites porites</i> to high temperature stress. <i>Marine Ecology - Progress Series</i> , 2016, 546, 75-84.	1.9	9
78	Impacts of Stony Coral Tissue Loss Disease (SCTLD) on Coral Community Structure at an Inshore Patch Reef of the Upper Florida Keys Using Photomosaics. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	8
79	Comparative diel oxygen cycles preceding and during a <i>Karenia</i> bloom in Sarasota Bay, Florida, USA. <i>Harmful Algae</i> , 2014, 38, 95-100.	4.8	7
80	The Integrated Coral Observing Network: Sensor Solutions for Sensitive Sites. , 2007, , .		6
81	Ocean Acidification's Effects on Marine Ecosystems and Biogeochemistry: Ocean Carbon and Biogeochemistry Scoping Workshop on Ocean Acidification Research; La Jolla, California, 9â€“11 October 2007. <i>Eos</i> , 2008, 89, 143.	0.1	6
82	Cytoplasmic and shell fine structure of <i>Tetrapetalon elegans</i> (Polycystinea) and comparisons to <i>Hexacantium</i> spp. with implications for phylogeny and taxonomy of the Spumellarida. <i>Marine Micropaleontology</i> , 1998, 33, 299-307.	1.2	5
83	In-situ measurement of metabolic status in three coral species from the Florida Reef Tract. <i>Regional Studies in Marine Science</i> , 2015, 2, 145-153.	0.7	5
84	Time series observations of bio-optical properties in the upper layer of the Sargasso Sea. , 1990, 1302, 202.		4
85	Source location and food availability determine the growth response of <i>Orbicella faveolata</i> to climate change stressors. <i>Regional Studies in Marine Science</i> , 2017, 10, 107-115.	0.7	4
86	O <sub>2</sub> -MAVS: An instrument for measuring oxygen flux. , 2009, , .		4
87	Algal chemical ecology in a changing ocean. <i>Planta Medica</i> , 2014, 80, .	1.3	2
88	Net ecosystem dissolution and respiration dominate metabolic rates at two western Atlantic reef sites. <i>Limnology and Oceanography</i> , 2022, 67, 527-539.	3.1	2
89	Coral reef pH altered in situ. <i>Nature Ecology and Evolution</i> , 2019, 3, 1380-1381.	7.8	1
90	Description of conversion of an EG&G VMCM into a MVMS (multi-variable moored sensor). , 0, , .		0

#	ARTICLE	IF	CITATIONS
91	Respiratory Rate and Effects of Heat Stress in <i>Physarum polycephalum</i> during Transformation from Sclerotium to Plasmodium. <i>Archiv für Protistenkunde</i> , 1996, 147, 93-99.	0.8	0
92	Response from Chris Langdon, Biosphere 2 Center. <i>BioScience</i> , 2002, 52, 463.	4.9	0