AndrÃ©a G Grottoli

List of Publications by Year
in descending order

61 papers	4,837 citations	117453 34 h-index	118652 62 g-index
72 all docs	72 docs citations	72 times ranked	2906 citing authors

#	Article	IF	Citations
1	Heterotrophic plasticity and resilience in bleached corals. Nature, 2006, 440, 1186-1189.	13.7	763
2	The cumulative impact of annual coral bleaching can turn some coral species winners into losers. Global Change Biology, 2014, 20, 3823-3833.	4.2	352
3	Energy reserves and metabolism as indicators of coral recovery from bleaching. Limnology and Oceanography, 2007, 52, 1874-1882.	1.6	267
4	Lipids and stable carbon isotopes in two species of Hawaiian corals, Porites compressa and Montipora verrucosa, following a bleaching event. Marine Biology, 2004, 145, 621.	0.7	236
5	Energetics approach to predicting mortality risk from environmental stress: a case study of coral bleaching. Functional Ecology, 2009, 23, 539-550.	1.7	223
6	A review of modern coral Î´18O and Î”14C proxy records. Earth-Science Reviews, 2007, 81, 67-91.	4.0	163
7	Considerations for maximizing the adaptive potential of restored coral populations in the western Atlantic. Ecological Applications, 2019, 29, e01978.	1.8	163
8	Coral physiology and microbiome dynamics under combined warming and ocean acidification. PLoS ONE, 2018, 13, e0191156.	1.1	158
9	The importance of zooplankton to the daily metabolic carbon requirements of healthy and bleached corals at two depths. Journal of Experimental Marine Biology and Ecology, 2008, 367, 180-188.	0.7	153
10	Effect of light and zooplankton on skeletal Î´13 C values in the eastern Pacific corals Pavona clavus and Pavona gigantea. Coral Reefs, 1999, 18, 29-41.	0.9	147
11	Coral Energy Reserves and Calcification in a High-CO2 World at Two Temperatures. PLoS ONE, 2013, 8, e75049.	1.1	137
12	Heterotrophic Compensation: A Possible Mechanism for Resilience of Coral Reefs to Global Warming or a Sign of Prolonged Stress?. PLoS ONE, 2013, 8, e81172.	1.1	119
13	Microelectrode characterization of coral daytime interior pH and carbonate chemistry. Nature Communications, 2016, 7, 11144.	5.8	115
14	Calcification rate and the stable carbon, oxygen, and nitrogen isotopes in the skeleton, host tissue, and zooxanthellae of bleached and recovering Hawaiian corals. Geochimica Et Cosmochimica Acta, 2006, 70, 2781-2789.	1.6	107
15	Annual coral bleaching and the long-term recovery capacity of coral. Proceedings of the Royal Society B: Biological Sciences, 2015, 282, 20151887.	1.2	100
16	Thirty years of coral heat-stress experiments: a review of methods. Coral Reefs, 2020, 39, 885-902.	0.9	96
17	Physiological and Biogeochemical Traits of Bleaching and Recovery in the Mounding Species of Coral Porites lobata: Implications for Resilience in Mounding Corals. PLoS ONE, 2013, 8, e63267.	1.1	85
18	Effect of naturally changing zooplankton concentrations on feeding rates of two coral species in the Eastern Pacific. Journal of Experimental Marine Biology and Ecology, 2006, 331, 99-107.	0.7	84

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19	Can heterotrophic uptake of dissolved organic carbon and zooplankton mitigate carbon budget deficits in annually bleached corals?. Coral Reefs, 2016, 35, 495-506.	0.9	75
20	Physiological response to elevated temperature and pCO2 varies across four Pacific coral species: Understanding the unique host+symbiont response. Scientific Reports, 2015, 5, 18371.	1.6	72
21	Lipid class composition of bleached and recovering Porites compressa Dana, 1846 and Montipora capitata Dana, 1846 corals from Hawaii. Journal of Experimental Marine Biology and Ecology, 2008, 358, 136-143.	0.7	69
22	Increasing comparability among coral bleaching experiments. Ecological Applications, 2021, 31, e02262.	1.8	68
23	Variability of stable isotopes and maximum linear extension in reef-coral skeletons at Kaneohe Bay, Hawaii. Marine Biology, 1999, 135, 437-449.	0.7	61
24	Photoautotrophic and heterotrophic carbon in bleached and non-bleached coral lipid acquisition and storage. Journal of Experimental Marine Biology and Ecology, 2014, 461, 469-478.	0.7	60
25	Partitioning of nitrogen sources to algal endosymbionts of corals with long-term 15N-labelling and a mixing model. Ecological Modelling, 2015, 309-310, 163-169.	1.2	59
26	Physiological and Biogeochemical Responses of Super-Corals to Thermal Stress from the Northern Gulf of Aqaba, Red Sea. Frontiers in Marine Science, 2017, 4, .	1.2	57
27	Multi-colony calibrations of coral Ba/Ca with a contemporaneous in situ seawater barium record. Geochimica Et Cosmochimica Acta, 2016, 179, 203-216.	1.6	55
28	Coral skeleton P/Ca proxy for seawater phosphate: Multi-colony calibration with a contemporaneous seawater phosphate record. Geochimica Et Cosmochimica Acta, 2010, 74, 1282-1293.	1.6	52
29	Skeletal P/Ca tracks upwelling in Gulf of PanamÃ¡ coral: Evidence for a new seawater phosphate proxy. Geophysical Research Letters, 2008, 35, .	1.5	45
30	Molecular tools for coral reef restoration: Beyond biomarker discovery. Conservation Letters, 2020, 13, e12687.	2.8	44
31	Coralâ€bleaching responses to climate change across biological scales. Global Change Biology, 2022, 28, 4229-4250.	4.2	44
32	A multiproxy record of terrestrial inputs to the coastal ocean using minor and trace elements (Ba/Ca,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf Puerto Rico. Paleoceanography, 2012, 27, .	3.0	39
33	Carbon isotope biogeochemistry of tropical small mountainous river, estuarine, and coastal systems of Puerto Rico. Biogeochemistry, 2013, 112, 589-612.	1.7	38
34	Bleached Porites compressa and Montipora capitata corals catabolize Î´13C-enriched lipids. Coral Reefs, 2011, 30, 687.	0.9	37
35	Upwelling, species, and depth effects on coral skeletal cadmium-to-calcium ratios (Cd/Ca). Geochimica Et Cosmochimica Acta, 2008, 72, 4537-4550.	1.6	36
36	Long-term recovery of Caribbean corals from bleaching. Journal of Experimental Marine Biology and Ecology, 2018, 506, 124-134.	0.7	32

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37	Recent shoaling of the nutricline and thermocline in the western tropical Pacific. Geophysical Research Letters, 2010, 37, .	1.5	31
38	Coral skeletal carbon isotopes (Î´13C and Î”14C) record the delivery of terrestrial carbon to the coastal waters of Puerto Rico. Coral Reefs, 2011, 30, 791.	0.9	30
39	Kinetic and metabolic isotope effects in coral skeletal carbon isotopes: A re-evaluation using experimental coral bleaching as a case study. Geochimica Et Cosmochimica Acta, 2014, 146, 164-178.	1.6	30
40	Long-term changes in the chlorophyll fluorescence of bleached and recovering corals from Hawaii. Journal of Experimental Biology, 2008, 211, 2502-2509.	0.8	28
41	Decadal Timescale Shift in the 14C Record of a Central Equatorial Pacific Coral. Radiocarbon, 2003, 45, 91-99.	0.8	24
42	Isotopic approaches to estimating the contribution of heterotrophic sources to Hawaiian corals. Limnology and Oceanography, 2021, 66, 2393-2407.	1.6	21
43	Short-Term Coral Bleaching Is Not Recorded by Skeletal Boron Isotopes. PLoS ONE, 2014, 9, e112011.	1.1	17
44	Growth rates, stable oxygen isotopes (<i>Î´</i>¹⁸O), and strontium (Sr/Ca) composition in two species of Pacific sclerosponges (<i>Acanthocheatetes wellsi</i> and <i>Astrosclera) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 462 Td (of Geophysical Research, 2010, 115, .	3.3	15
45	High resolution coral Cd measurements using LA-ICP-MS and ID-ICP-MS: Calibration and interpretation. Chemical Geology, 2013, 356, 151-159.	1.4	14
46	High-temperature acclimation strategies within the thermally tolerant endosymbiont Symbiodinium trenchii and its coral host, Turbinaria reniformis, differ with changing pCO 2 and nutrients. Marine Biology, 2016, 163, 1.	0.7	14
47	Coral calcification under environmental change: a direct comparison of the alkalinity anomaly and buoyant weight techniques. Coral Reefs, 2017, 36, 13-25.	0.9	14
48	The Effects of Temperature, Light, and Feeding on the Physiology of Pocillopora damicornis, Stylophora pistillata, and Turbinaria reniformis Corals. Water (Switzerland), 2021, 13, 2048.	1.2	14
49	Moderate nutrient concentrations are not detrimental to corals under future ocean conditions. Marine Biology, 2021, 168, 1.	0.7	12
50	Influence of land use and lithology on sources and ages of nutritional resources for stream macroinvertebrates: a multi-isotopic approach. Aquatic Sciences, 2017, 79, 925-939.	0.6	11
51	Quantitative interpretation of vertical profiles of calcium and pH in the coral coelenteron. Marine Chemistry, 2018, 204, 62-69.	0.9	11
52	Cadmium measurements in coral skeleton using isotope dilution-inductively coupled plasma-mass spectrometry. Geochemistry, Geophysics, Geosystems, 2006, 7, n/a-n/a.	1.0	10
53	Stable oxygen isotope records of corals and a sclerosponge in the Western Pacific warm pool. Coral Reefs, 2010, 29, 413-418.	0.9	10
54	Physiological acclimatization in Hawaiian corals following a 22-month shift in baseline seawater temperature and pH. Scientific Reports, 2022, 12, 3712.	1.6	9

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55	Environmental gradients drive physiological variation in Hawaiian corals. Coral Reefs, 2021, 40, 1505-1523.	0.9	8
56	Natural Variability in Caribbean Coral Physiology and Implications for Coral Bleaching Resilience. Frontiers in Marine Science, 2022, 8, .	1.2	8
57	A review of coral bleaching specimen collection, preservation, and laboratory processing methods. PeerJ, 2021, 9, e11763.	0.9	6
58	Lipid class composition of annually bleached Caribbean corals. Marine Biology, 2020, 167, 1.	0.7	5
59	Effects of agricultural and tillage practices on isotopic signatures and fluxes of organic and inorganic carbon in headwater streams. Aquatic Sciences, 2020, 82, 1.	0.6	5
60	Effect of species, provenance, and coral physiology on the composition of Hawaiian coral-associated microbial communities. Coral Reefs, 2021, 40, 1537-1548.	0.9	4
61	Natural Variability of Skeletal Elemental Phosphorus (P/Ca), Lead (Pb/Ca), and Barium (Ba/Ca) in the Western Pacific Sclerosponges <i>Acanthoceatetes wellsi</i> and <i>Astrosclera welleyana</i>. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009245.	1.0	1