William Leggat

List of Publications by Year in Descending Order

73 papers	3,599 citations	30 h-index	59 g-index
77 ext. papers	4,681 ext. citations	5.9 avg, IF	5.42 L-index

#	Paper	IF	Citations
73	Experiment Degree Heating Week (eDHW) as a novel metric to reconcile and validate past and future global coral bleaching studies. *Journal of Environmental Management*, **2022**, 301, 113919	7.9	2
72	Will daytime community calcification reflect reef accretion on future, degraded coral reefs?. *Biogeosciences*, **2022**, 19, 891-906	4.6	
71	Proteome metabolome and transcriptome data for three Symbiodiniaceae under ambient and heat stress conditions.. *Scientific Data*, **2022**, 9, 153	8.2	1
70	High flow conditions mediate damaging impacts of sub-lethal thermal stress on corals' endosymbiotic algae **2021**, 9, coab046		1
69	Experimental evolution of the coral algal endosymbiont, Cladocopium goreaui: lessons learnt across a decade of stress experiments to enhance coral heat tolerance. *Restoration Ecology*, **2021**, 29, e13342	3.1	2
68	Light Capture, Skeletal Morphology, and the Biomass of Corals' Boring Endoliths. *MSphere*, **2021**, 6,	5	3
67	Multiple techniques point to oxygenic phototrophs dominating the Isopora palifera skeletal microbiome. *Coral Reefs*, **2021**, 40, 275-282	4.2	7
66	Rebuilding relationships on coral reefs: Coral bleaching knowledge-sharing to aid adaptation planning for reef users: Bleaching emergence on reefs demonstrates the need to consider reef scale and accessibility when preparing for, and responding to, coral bleaching. *BioEssays*, **2021**, 43, e2100048	4.1	1
65	The Meta-Organism Response of the Environmental Generalist Pocillopora damicornis Exposed to Differential Accumulation of Heat Stress. *Frontiers in Marine Science*, **2021**, 8,	4.5	1
64	Complementary sampling methods for coral histology, metabolomics and microbiome. *Methods in Ecology and Evolution*, **2020**, 11, 1012-1020	7.7	5
63	Understanding decay in marine calcifiers: Micro-CT analysis of skeletal structures provides insight into the impacts of a changing climate in marine ecosystems. *Methods in Ecology and Evolution*, **2020**, 11, 1021-1041	7.7	4
62	Unlocking the black-box of inorganic carbon-uptake and utilization strategies among coral endosymbionts (Symbiodiniaceae). *Limnology and Oceanography*, **2020**, 65, 1747-1763	4.8	11
61	Revealing changes in the microbiome of Symbiodiniaceae under thermal stress. *Environmental Microbiology*, **2020**, 22, 1294-1309	5.2	14
60	Diverse symbiont bleaching responses are evident from 2-degree heating week bleaching conditions as thermal stress intensifies in coral. *Marine and Freshwater Research*, **2020**, 71, 1149	2.2	4
59	Coral Disease Causes, Consequences, and Risk within Coral Restoration. *Trends in Microbiology*, **2020**, 28, 793-807	12.4	13
58	The Mesophotic Coral Microbial Biosphere. *Coral Reefs of the World*, **2019**, 493-505	2.1	1
57	Seeking Resistance in Coral Reef Ecosystems:The Interplay of Biophysical Factors and Bleaching Resistance under a Changing Climate: The Interplay of a Reef's Biophysical Factors Can Mitigate the Coral Bleaching Response. *BioEssays*, **2019**, 41, e1800226	4.1	11

56	Resolving coral photoacclimation dynamics through coupled photophysiological and metabolomic profiling. *Journal of Experimental Biology*, **2019**, 222,	3	8
55	A place for taxonomic profiling in the study of the coral prokaryotic microbiome. *FEMS Microbiology Letters*, **2019**, 366,	2.9	5
54	Rapid Coral Decay Is Associated with Marine Heatwave Mortality Events on Reefs. *Current Biology*, **2019**, 29, 2723-2730.e4	6.3	61
53	Marine Heatwave Hotspots in Coral Reef Environments: Physical Drivers, Ecophysiological Outcomes, and Impact Upon Structural Complexity. *Frontiers in Marine Science*, **2019**, 6,	4.5	32
52	Rethinking the Coral Microbiome: Simplicity Exists within a Diverse Microbial Biosphere. *MBio*, **2018**, 9,	7.8	54
51	A Comparative Analysis of Microbial DNA Preparation Methods for Use With Massive and Branching Coral Growth Forms. *Frontiers in Microbiology*, **2018**, 9, 2146	5.7	7
50	Symbiosis and microbiome flexibility in calcifying benthic foraminifera of the Great Barrier Reef. *Microbiome*, **2017**, 5, 38	16.6	23
49	Symbiotic Dinoflagellate Functional Diversity Mediates Coral Survival under Ecological Crisis. *Trends in Ecology and Evolution*, **2017**, 32, 735-745	10.9	86
48	Photoacclimatory and photoprotective responses to cold versus heat stress in high latitude reef corals. *Journal of Phycology*, **2017**, 53, 308-321	3	8
47	Transcriptomic Analysis of Thermally Stressed Reveals Differential Expression of Stress and Metabolism Genes. *Frontiers in Plant Science*, **2017**, 8, 271	6.2	58
46	Exposure to elevated sea-surface temperatures below the bleaching threshold impairs coral recovery and regeneration following injury. *PeerJ*, **2017**, 5, e3719	3.1	16
45	Integral Light-Harvesting Complex Expression In Symbiodinium Within The Coral Acropora aspera Under Thermal Stress. *Scientific Reports*, **2016**, 6, 25081	4.9	9
44	Climate change disables coral bleaching protection on the Great Barrier Reef. *Science*, **2016**, 352, 338-42	33.3	265
43	The Microbial Signature Provides Insight into the Mechanistic Basis of Coral Success across Reef Habitats. *MBio*, **2016**, 7,	7.8	93
42	Molecular processes of transgenerational acclimation to a warming ocean. *Nature Climate Change*, **2015**, 5, 1074-1078	21.4	76
41	Elevated seawater temperatures have a limited impact on the coral immune response following physical damage. *Hydrobiologia*, **2015**, 759, 201-214	2.4	22
40	The coral core microbiome identifies rare bacterial taxa as ubiquitous endosymbionts. *ISME Journal*, **2015**, 9, 2261-74	11.9	312
39	Differential coral bleaching-Contrasting the activity and response of enzymatic antioxidants in symbiotic partners under thermal stress. *Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology*, **2015**, 190, 15-25	2.6	66

38	The coral immune response facilitates protection against microbes during tissue regeneration. *Molecular Ecology*, **2015**, 24, 3390-404	5.7	46
37	The ReFuGe 2020 Consortium□sing □mics□approaches to explore the adaptability and resilience of coral holobionts to environmental change. *Frontiers in Marine Science*, **2015**, 2,	4.5	14
36	Transcriptomic characterization of the enzymatic antioxidants FeSOD, MnSOD, APX and KatG in the dinoflagellate genus Symbiodinium. *BMC Evolutionary Biology*, **2015**, 15, 48	3	41
35	In situ hybridisation detects pro-apoptotic gene expression of a Bcl-2 family member in white syndrome-affected coral. *Diseases of Aquatic Organisms*, **2015**, 117, 155-63	1.7	6
34	Antioxidant plasticity and thermal sensitivity in four types of Symbiodinium sp. *Journal of Phycology* , **2014**, 50, 1035-47	3	55
33	Near-future reductions in pH will have no consistent ecological effects on the early life-history stages of reef corals. *Marine Ecology - Progress Series*, **2013**, 486, 143-151	2.6	23
32	The combined effects of temperature and CO2 lead to altered gene expression in Acropora aspera. *Coral Reefs*, **2013**, 32, 895-907	4.2	28
31	Extraction protocol for nontargeted NMR and LC-MS metabolomics-based analysis of hard coral and their algal symbionts. *Methods in Molecular Biology*, **2013**, 1055, 129-47	1.4	15
30	New-old hemoglobin-like proteins of symbiotic dinoflagellates. *Ecology and Evolution*, **2013**, 3, 822-34	2.8	8
29	Temperature affects the early life history stages of corals more than near future ocean acidification. *Marine Ecology - Progress Series*, **2013**, 475, 85-92	2.6	54
28	Hyperdiversity of genes encoding integral light-harvesting proteins in the dinoflagellate Symbiodinium sp. *PLoS ONE*, **2012**, 7, e47456	3.7	26
27	Differential responses of the coral host and their algal symbiont to thermal stress. *PLoS ONE*, **2011**, 6, e26687	3.7	96
26	Recent progress in Symbiodinium transcriptomics. *Journal of Experimental Marine Biology and Ecology*, **2011**, 408, 120-125	2.1	27
25	Defining the tipping point: a complex cellular life/death balance in corals in response to stress. *Scientific Reports*, **2011**, 1, 160	4.9	25
24	Analysis of evolutionarily conserved innate immune components in coral links immunity and symbiosis. *Developmental and Comparative Immunology*, **2010**, 34, 1219-29	3.2	80
23	Symbiodinium-invertebrate symbioses and the role of metabolomics. *Marine Drugs*, **2010**, 8, 2546-68	6	83
22	Photoreactivation is the main repair pathway for UV-induced DNA damage in coral planulae. *Journal of Experimental Biology*, **2009**, 212, 2760-6	3	28
21	Evolutionary analysis of orthologous cDNA sequences from cultured and symbiotic dinoflagellate symbionts of reef-building corals (Dinophyceae: Symbiodinium). *Comparative Biochemistry and Physiology Part D: Genomics and Proteomics*, **2009**, 4, 67-74	2	31

20	Imaging the fluorescence of marine invertebrates and their associated flora. *Journal of Microscopy*, **2008**, 232, 197-9	1.9	5
19	Metabolic interactions between algal symbionts and invertebrate hosts. *Plant, Cell and Environment* , **2008**, 31, 679-94	8.4	367
18	Early cellular changes are indicators of pre-bleaching thermal stress in the coral host. *Journal of Experimental Marine Biology and Ecology*, **2008**, 364, 63-71	2.1	82
17	An ancient and variable mannose-binding lectin from the coral Acropora millepora binds both pathogens and symbionts. *Developmental and Comparative Immunology*, **2008**, 32, 1582-92	3.2	134
16	The effect of thermal history on the susceptibility of reef-building corals to thermal stress. *Journal of Experimental Biology*, **2008**, 211, 1050-6	3	197
15	Light-responsive cryptochromes from a simple multicellular animal, the coral Acropora millepora. *Science*, **2007**, 318, 467-70	33.3	193
14	The hologenome theory disregards the coral holobiont. *Nature Reviews Microbiology*, **2007**, 5, 826-826	22.2	15
13	Analysis of an EST library from the dinoflagellate (Symbiodinium sp.) symbiont of reef-building corals1. *Journal of Phycology*, **2007**, 43, 1010-1021	3	99
12	Increased prevalence of ubiquitous ascomycetes in an acropoid coral (Acropora formosa) exhibiting symptoms of Brown Band syndrome and skeletal eroding band disease. *Applied and Environmental Microbiology*, **2007**, 73, 2755-7	4.8	35
11	Fidelity and flexibility in coral symbioses. *Marine Ecology - Progress Series*, **2007**, 347, 307-309	2.6	62
10	Aerial exposure influences bleaching patterns. *Coral Reefs*, **2006**, 25, 452-452	4.2	12
9	A novel carbonic anhydrase from the giant clam Tridacna gigas contains two carbonic anhydrase domains. *FEBS Journal*, **2005**, 272, 3297-305	5.7	19
8	The effect of temperature on the size and population density of dinoflagellates in larvae of the reef coral Porites astreoides. *Invertebrate Biology*, **2005**, 124, 185-193	1	26
7	The impact of bleaching on the metabolic contribution of dinoflagellate symbionts to their giant clam host. *Plant, Cell and Environment*, **2003**, 26, 1951-1961	8.4	42
6	Dinoflagellate symbioses: strategies and adaptations for the acquisition and fixation of inorganic carbon. *Functional Plant Biology*, **2002**, 29, 309-322	2.7	62
5	Meeting the photosynthetic demand for inorganic carbon in an alga-invertebrate association: preferential use of CO2 by symbionts in the giant clam Tridacna gigas. *Proceedings of the Royal Society B: Biological Sciences*, **2000**, 267, 523-9	4.4	18
4	Evidence for an inorganic carbon-concentrating mechanism in the symbiotic dinoflagellate Symbiodinium sp. *Plant Physiology*, **1999**, 121, 1247-56	6.6	103
3	Ammonium, but not nitrate, stimulates an increase in glutamine concentration in the haemolymph of Tridacna gigas. *Marine Biology*, **1999**, 133, 45-53	2.5	16

2	The diversity and coevolution of Rubisco, plastids, pyrenoids, and chloroplast-based CO2-concentrating mechanisms in algae. *Canadian Journal of Botany*, **1998**, 76, 1052-1071		141
1	Thylakoid fatty acid composition and response to short-term cold and heat stress in high-latitude Symbiodiniaceae. *Coral Reefs*,1	4.2	0