

# Ruth D Gates

## List of Publications by Year in descending order

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Version: 2024-02-01

123  
papers

11,480  
citations

38742

50  
h-index

31849

101  
g-index

136  
all docs

136  
docs citations

136  
times ranked

9999  
citing authors

#	ARTICLE	IF	CITATIONS
1	From polyps to pixels: understanding coral reef resilience to local and global change across scales. <i>Landscape Ecology</i> , 2023, 38, 737-752.	4.2	10
2	Temperature-mediated acquisition of rare heterologous symbionts promotes survival of coral larvae under ocean warming. <i>Global Change Biology</i> , 2022, 28, 2006-2025.	9.5	12
3	Ecosystem-scale mapping of coral species and thermal tolerance. <i>Frontiers in Ecology and the Environment</i> , 2022, 20, 285-291.	4.0	11
4	Scale dependence of coral reef oases and their environmental correlates. <i>Ecological Applications</i> , 2022, 32, e2651.	3.8	7
5	Intrapopulation adaptive variance supports thermal tolerance in a reef-building coral. <i>Communications Biology</i> , 2022, 5, 486.	4.4	18
6	The metabolic significance of symbiont community composition in the coral-algal symbiosis. , 2022, , 211-229.		0
7	Tissue fusion and enhanced genotypic diversity support the survival of <i>Pocillopora acuta</i> coral recruits under thermal stress. <i>Coral Reefs</i> , 2021, 40, 447-458.	2.2	16
8	Amino acid $^{13}\text{C}$ and $^{15}\text{N}$ analyses reveal distinct species-specific patterns of trophic plasticity in a marine symbiosis. <i>Limnology and Oceanography</i> , 2021, 66, 2033-2050.	3.1	16
9	Shifting baselines: Physiological legacies contribute to the response of reef corals to frequent heatwaves. <i>Functional Ecology</i> , 2021, 35, 1366-1378.	3.6	25
10	Coral bleaching response is unaltered following acclimatization to reefs with distinct environmental conditions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	35
11	Feeding and thermal conditioning enhance coral temperature tolerance in juvenile <i>Pocillopora acuta</i> . <i>Royal Society Open Science</i> , 2021, 8, 210644.	2.4	13
12	Preconditioning improves bleaching tolerance in the reef-building coral <i>Pocillopora acuta</i> through modulations in the programmed cell death pathways. <i>Molecular Ecology</i> , 2021, 30, 3560-3574.	3.9	26
13	Variation in Coral Thermotolerance Across a Pollution Gradient Erodes as Coral Symbionts Shift to More Heat-Tolerant Genera. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	6
14	Divergent symbiont communities determine the physiology and nutrition of a reef coral across a light-availability gradient. <i>ISME Journal</i> , 2020, 14, 945-958.	9.8	50
15	How do we overcome abrupt degradation of marine ecosystems and meet the challenge of heat waves and climate extremes?. <i>Global Change Biology</i> , 2020, 26, 343-354.	9.5	34
16	High light alongside elevated $\text{PCO}_2$ alleviates thermal depression of photosynthesis in a hard coral ( <i>Pocillopora acuta</i> ). <i>Journal of Experimental Biology</i> , 2020, 223, .	1.7	3
17	Metabolite pools of the reef building coral <i>Montipora capitata</i> are unaffected by Symbiodiniaceae community composition. <i>Coral Reefs</i> , 2020, 39, 1727-1737.	2.2	19
18	Environmentally-induced parental or developmental conditioning influences coral offspring ecological performance. <i>Scientific Reports</i> , 2020, 10, 13664.	3.3	36

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19	Dynamic symbioses reveal pathways to coral survival through prolonged heatwaves. <i>Nature Communications</i> , 2020, 11, 6097.	12.8	67
20	Coral Bleaching Susceptibility Is Predictive of Subsequent Mortality Within but Not Between Coral Species. <i>Frontiers in Ecology and Evolution</i> , 2020, 8, .	2.2	33
21	Coral community resilience to successive years of bleaching in Kaneohe Bay, Hawai'i. <i>Coral Reefs</i> , 2020, 39, 757-769.	2.2	54
22	Increased diversity and concordant shifts in community structure of coral-associated Symbiodiniaceae and bacteria subjected to chronic human disturbance. <i>Molecular Ecology</i> , 2020, 29, 2477-2491.	3.9	26
23	Chronic disturbance modulates symbiont (Symbiodiniaceae) beta diversity on a coral reef. <i>Scientific Reports</i> , 2020, 10, 4492.	3.3	13
24	Symbiont transmission and reproductive mode influence responses of three Hawaiian coral larvae to elevated temperature and nutrients. <i>Coral Reefs</i> , 2020, 39, 419-431.	2.2	11
25	Spatial variation in the biochemical and isotopic composition of corals during bleaching and recovery. <i>Limnology and Oceanography</i> , 2019, 64, 2011-2028.	3.1	52
26	Ecophysiology of mesophotic reef-building corals in Hawai'i is influenced by symbiont-host associations, photoacclimatization, trophic plasticity, and adaptation. <i>Limnology and Oceanography</i> , 2019, 64, 1980-1995.	3.1	15
27	Effects of bleaching-associated mass coral mortality on reef structural complexity across a gradient of local disturbance. <i>Scientific Reports</i> , 2019, 9, 2512.	3.3	65
28	Genome analysis of the rice coral <i>Montipora capitata</i> . <i>Scientific Reports</i> , 2019, 9, 2571.	3.3	53
29	Coral bleaching from a single cell perspective. <i>ISME Journal</i> , 2018, 12, 1558-1567.	9.8	107
30	The effects of environmental history and thermal stress on coral physiology and immunity. <i>Marine Biology</i> , 2018, 165, 1.	1.5	23
31	High-frequency temperature variability mirrors fixed differences in thermal limits of the massive coral <i>Porites lobata</i> (Dana, 1846). <i>Journal of Experimental Biology</i> , 2018, 221, .	1.7	36
32	Ocean Solutions to Address Climate Change and Its Effects on Marine Ecosystems. <i>Frontiers in Marine Science</i> , 2018, 5, .	2.5	248
33	Risk-sensitive planning for conserving coral reefs under rapid climate change. <i>Conservation Letters</i> , 2018, 11, e12587.	5.7	151
34	Short-Term Thermal Acclimation Modifies the Metabolic Condition of the Coral Holobiont. <i>Frontiers in Marine Science</i> , 2018, 5, .	2.5	33
35	A framework for identifying and characterising coral reef oases against a backdrop of degradation. <i>Journal of Applied Ecology</i> , 2018, 55, 2865-2875.	4.0	58
36	Shifting paradigms in restoration of the world's coral reefs. <i>Global Change Biology</i> , 2017, 23, 3437-3448.	9.5	351

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37	Embracing Complexity in Coral-Algal Symbioses. , 2017, , 467-492.		2
38	Correspondence of coral holobiont metabolome with symbiotic bacteria, archaea and <i>Symbiodinium</i> communities. Environmental Microbiology Reports, 2017, 9, 310-315.	2.4	47
39	Defining the Core Microbiome in Corals' Microbial Soup. Trends in Microbiology, 2017, 25, 125-140.	7.7	281
40	Discovery of SCORs: Anciently derived, highly conserved gene-associated repeats in stony corals. Genomics, 2017, 109, 383-390.	2.9	3
41	The Vulnerability and Resilience of Reef-Building Corals. Current Biology, 2017, 27, R528-R540.	3.9	156
42	Effects of Temperature and $pCO_2$ on Population Regulation of <i>Symbiodinium</i> spp. in a Tropical Reef Coral. Biological Bulletin, 2017, 232, 123-139.	1.8	22
43	Capacity shortfalls hinder the performance of marine protected areas globally. Nature, 2017, 543, 665-669.	27.8	630
44	A dynamic bioenergetic model for coral- <i>Symbiodinium</i> symbioses and coral bleaching as an alternate stable state. Journal of Theoretical Biology, 2017, 431, 49-62.	1.7	63
45	Intra-colony disease progression induces fragmentation of coral fluorescent pigments. Scientific Reports, 2017, 7, 14596.	3.3	7
46	Who's there? First morphological and DNA barcoding catalogue of the shallow Hawaiianian sponge fauna. PLoS ONE, 2017, 12, e0189357.	2.5	15
47	Divergent evolutionary histories of DNA markers in a Hawaiian population of the coral <i>Montipora capitata</i> . PeerJ, 2017, 5, e3319.	2.0	3
48	Using high-throughput sequencing of ITS2 to describe <i>Symbiodinium</i> metacommunities in St. John, US Virgin Islands. PeerJ, 2017, 5, e3472.	2.0	88
49	The Coral Trait Database, a curated database of trait information for coral species from the global oceans. Scientific Data, 2016, 3, 160017.	5.3	189
50	Metabolomic signatures of increases in temperature and ocean acidification from the reef-building coral, <i>Pocillopora damicornis</i> . Metabolomics, 2016, 12, 1.	3.0	62
51	Temporal and spatial expression patterns of biomineralization proteins during early development in the stony coral <i>Pocillopora damicornis</i> . Proceedings of the Royal Society B: Biological Sciences, 2016, 283, 20160322.	2.6	53
52	Improving the ecological relevance of toxicity tests on scleractinian corals: Influence of season, life stage, and seawater temperature. Environmental Pollution, 2016, 213, 240-253.	7.5	39
53	Data for spatial analysis of growth anomaly lesions on <i>Montipora capitata</i> coral colonies using 3D reconstruction techniques. Data in Brief, 2016, 9, 460-462.	1.0	4
54	Investigating the spatial distribution of growth anomalies affecting <i>Montipora capitata</i> corals in a 3-dimensional framework. Journal of Invertebrate Pathology, 2016, 140, 51-57.	3.2	8

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55	Ocean acidification influences host <scp>DNA</scp> methylation and phenotypic plasticity in environmentally susceptible corals. <i>Evolutionary Applications</i> , 2016, 9, 1165-1178.	3.1	196
56	Corals' microbial sentinels. <i>Science</i> , 2016, 352, 1518-1519.	12.6	71
57	Comparative genomics explains the evolutionary success of reef-forming corals. <i>ELife</i> , 2016, 5, .	6.0	169
58	Geographic structure and host specificity shape the community composition of symbiotic dinoflagellates in corals from the Northwestern Hawaiian Islands. <i>Coral Reefs</i> , 2015, 34, 1075-1086.	2.2	20
59	Variability of Symbiodinium Communities in Waters, Sediments, and Corals of Thermally Distinct Reef Pools in American Samoa. <i>PLoS ONE</i> , 2015, 10, e0145099.	2.5	81
60	Species-specific differences in thermal tolerance may define susceptibility to intracellular acidosis in reef corals. <i>Marine Biology</i> , 2015, 162, 717-723.	1.5	39
61	Building coral reef resilience through assisted evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 2307-2313.	7.1	709
62	The coral core microbiome identifies rare bacterial taxa as ubiquitous endosymbionts. <i>ISME Journal</i> , 2015, 9, 2261-2274.	9.8	548
63	Preconditioning in the reef-building coral <i>Pocillopora damicornis</i> and the potential for trans-generational acclimatization in coral larvae under future climate change conditions. <i>Journal of Experimental Biology</i> , 2015, 218, 2365-2372.	1.7	199
64	Multi-gene analysis of <i>Symbiodinium</i> dinoflagellates: a perspective on rarity, symbiosis, and evolution. <i>PeerJ</i> , 2014, 2, e394.	2.0	127
65	The Early Expansion and Evolutionary Dynamics of POU Class Genes. <i>Molecular Biology and Evolution</i> , 2014, 31, 3136-3147.	8.9	58
66	The Marine Microbial Eukaryote Transcriptome Sequencing Project (MMETSP): Illuminating the Functional Diversity of Eukaryotic Life in the Oceans through Transcriptome Sequencing. <i>PLoS Biology</i> , 2014, 12, e1001889.	5.6	885
67	Application of 1H-NMR Metabolomic Profiling for Reef-Building Corals. <i>PLoS ONE</i> , 2014, 9, e111274.	2.5	38
68	Intracellular pH and its response to CO2-driven seawater acidification in symbiotic <i>versus</i> non-symbiotic coral cells. <i>Journal of Experimental Biology</i> , 2014, 217, 1963-9.	1.7	59
69	Evaluating the causal basis of ecological success within the scleractinia: an integral projection model approach. <i>Marine Biology</i> , 2014, 161, 2719-2734.	1.5	48
70	Sedimentation and the Reproductive Biology of the Hawaiian Reef-Building Coral <i>Montipora capitata</i>. <i>Biological Bulletin</i> , 2014, 226, 8-18.	1.8	17
71	Persistence and Change in Community Composition of Reef Corals through Present, Past, and Future Climates. <i>PLoS ONE</i> , 2014, 9, e107525.	2.5	75
72	Are all eggs created equal? A case study from the Hawaiian reef-building coral <i>Montipora capitata</i> . <i>Coral Reefs</i> , 2013, 32, 137-152.	2.2	37

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73	Diversity in skeletal architecture influences biological heterogeneity and Symbiodinium habitat in corals. <i>Zoology</i> , 2013, 116, 262-269.	1.2	36
74	Assessing fertilization success of the coral <i>Montipora capitata</i> under copper exposure: Does the night of spawning matter?. <i>Marine Pollution Bulletin</i> , 2013, 66, 221-224.	5.0	25
75	Symbiotic specificity, association patterns, and function determine community responses to global changes: defining critical research areas for coral-Symbiodinium symbioses. <i>Global Change Biology</i> , 2013, 19, 3306-3316.	9.5	66
76	The distribution of the thermally tolerant symbiont lineage (Symbiodinium clade D) in corals from Hawaii: correlations with host and the history of ocean thermal stress. <i>Ecology and Evolution</i> , 2013, 3, 1317-1329.	1.9	95
77	Endosymbiotic flexibility associates with environmental sensitivity in scleractinian corals. <i>Proceedings of the Royal Society B: Biological Sciences</i> , 2012, 279, 4352-4361.	2.6	177
78	Photophysiological Consequences of Vertical Stratification of Symbiodinium in Tissue of the Coral <i>Porites lutea</i> . <i>Biological Bulletin</i> , 2012, 223, 226-235.	1.8	11
79	Molecular Delineation of Species in the Coral Holobiont. <i>Advances in Marine Biology</i> , 2012, 63, 1-65.	1.4	58
80	Phenotypic plasticity of the coral <i>Porites rus</i> : Acclimatization responses to a turbid environment. <i>Journal of Experimental Marine Biology and Ecology</i> , 2012, 434-435, 71-80.	1.5	20
81	Identifying and Characterizing Alternative Molecular Markers for the Symbiotic and Free-Living Dinoflagellate Genus Symbiodinium. <i>PLoS ONE</i> , 2012, 7, e29816.	2.5	84
82	Transmission Mode Predicts Specificity and Interaction Patterns in Coral-Symbiodinium Networks. <i>PLoS ONE</i> , 2012, 7, e44970.	2.5	72
83	GeoSymbio: a hybrid, cloud-based web application of global geospatial bioinformatics and ecoinformatics for Symbiodinium-host symbioses. <i>Molecular Ecology Resources</i> , 2012, 12, 369-373.	4.8	168
84	Cultivating endosymbionts: Host environmental mimics support the survival of Symbiodinium C15 ex hospite. <i>Journal of Experimental Marine Biology and Ecology</i> , 2012, 413, 169-176.	1.5	52
85	From Parent to Gamete: Vertical Transmission of Symbiodinium (Dinophyceae) ITS2 Sequence Assemblages in the Reef Building Coral <i>Montipora capitata</i> . <i>PLoS ONE</i> , 2012, 7, e38440.	2.5	100
86	Clade D Symbiodinium in Scleractinian Corals: A "Nugget" of Hope, a Selfish Opportunist, an Ominous Sign, or All of the Above?. <i>Journal of Marine Biology</i> , 2011, 2011, 1-9.	1.0	189
87	The Effect of a Sublethal Temperature Elevation on the Structure of Bacterial Communities Associated with the Coral <i>Porites compressa</i> . <i>Journal of Marine Biology</i> , 2011, 2011, 1-9.	1.0	12
88	Variation in Symbiodinium ITS2 Sequence Assemblages among Coral Colonies. <i>PLoS ONE</i> , 2011, 6, e15854.	2.5	101
89	The nature and taxonomic composition of coral symbiomes as drivers of performance limits in scleractinian corals. <i>Journal of Experimental Marine Biology and Ecology</i> , 2011, 408, 94-101.	1.5	59
90	Ecotoxicological approach for assessing the contamination of a Hawaiian coral reef ecosystem (Honolua Bay, Maui) by metals and a metalloid. <i>Marine Environmental Research</i> , 2011, 71, 149-161.	2.5	12

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91	Azooxanthellate? Most Hawaiian black corals contain <i>Symbiodinium</i> . Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 1323-1328.	2.6	39
92	Skeletal eroding band in Hawaiian corals. Coral Reefs, 2010, 29, 469-469.	2.2	11
93	The effects of substratum type on the growth, mortality, and photophysiology of juvenile corals in St. John, US Virgin Islands. Journal of Experimental Marine Biology and Ecology, 2010, 384, 18-29.	1.5	10
94	Evaluating the temporal stability of stress-activated protein kinase and cytoskeleton gene expression in the Pacific reef corals <i>Pocillopora damicornis</i> and <i>Seriatopora hystrix</i> . Journal of Experimental Marine Biology and Ecology, 2010, 395, 215-222.	1.5	37
95	A new <i>Symbiodinium</i> clade (Dinophyceae) from soritid foraminifera in Hawaii. Molecular Phylogenetics and Evolution, 2010, 56, 492-497.	2.7	420
96	COMPARISON OF ENDOSYMBIOTIC AND FREE-LIVING SYMBIODINIUM (DINOPHYCEAE) DIVERSITY IN A HAWAIIAN REEF ENVIRONMENT. Journal of Phycology, 2010, 46, 53-65.	2.3	91
97	Photoacclimatization by the coral <i>Montastraea cavernosa</i> in the mesophotic zone: light, food, and genetics. Ecology, 2010, 91, 990-1003.	3.2	227
98	The Effect of Ocean Acidification on Calcifying Organisms in Marine Ecosystems: An Organism-to-Ecosystem Perspective. Annual Review of Ecology, Evolution, and Systematics, 2010, 41, 127-147.	8.3	434
99	The future of coral reefs: a microbial perspective. Trends in Ecology and Evolution, 2010, 25, 233-240.	8.7	242
100	Betaines and Dimethylsulfoniopropionate as Major Osmolytes in Cnidaria with Endosymbiotic Dinoflagellates. Physiological and Biochemical Zoology, 2010, 83, 167-173.	1.5	37
101	Assessment of metals and a metalloid in sediments from Hawaiian coral reef ecosystems. Marine Pollution Bulletin, 2009, 58, 1759-1765.	5.0	9
102	Coral-virus interactions: A double-edged sword?. Symbiosis, 2009, 47, 1-8.	2.3	70
103	Generalist dinoflagellate endosymbionts and host genotype diversity detected from mesophotic (67-100 m depths) coral <i>Leptoseris</i> . BMC Ecology, 2009, 9, 21.	3.0	29
104	Gene expression normalization in a dual-compartment system: a real-time quantitative polymerase chain reaction protocol for symbiotic anthozoans. Molecular Ecology Resources, 2009, 9, 462-470.	4.8	34
105	Vectored introductions of marine endosymbiotic dinoflagellates into Hawaii. Biological Invasions, 2008, 10, 579-583.	2.4	23
106	Functional diversity in coral-dinoflagellate symbiosis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 9256-9261.	7.1	268
107	Diversity in populations of free-living <i>Symbiodinium</i> from a Caribbean and Pacific reef. Limnology and Oceanography, 2008, 53, 1853-1861.	3.1	77
108	Recognizing diversity in coral symbiotic dinoflagellate communities. Molecular Ecology, 2007, 16, 1127-1134.	3.9	109

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109	Osmoregulation in anthozoanâ€“dinoflagellate symbiosis. <i>Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology</i> , 2007, 147, 1-10.	1.8	108
110	Are infectious diseases really killing corals? Alternative interpretations of the experimental and ecological data. <i>Journal of Experimental Marine Biology and Ecology</i> , 2007, 346, 36-44.	1.5	253
111	Conservation genetics and the resilience of reef-building corals. <i>Molecular Ecology</i> , 2006, 15, 3863-3883.	3.9	203
112	Ultraviolet radiation effects on the behavior and recruitment of larvae from the reef coral <i>Porites astreoides</i> . <i>Marine Biology</i> , 2006, 148, 503-512.	1.5	80
113	The effect of temperature on the size and population density of dinoflagellates in larvae of the reef coral <i>Porites astreoides</i> . <i>Invertebrate Biology</i> , 2005, 124, 185-193.	0.9	30
114	sine oculis in basal Metazoa. <i>Development Genes and Evolution</i> , 2004, 214, 342-51.	0.9	54
115	Gene Fishing: The Use of a Simple Protocol to Isolate Multiple Homeodomain Classes from Diverse Invertebrate Taxa. <i>Journal of Molecular Evolution</i> , 2003, 56, 509-516.	1.8	12
116	Developmental Genes and the Reconstruction of Metazoan Evolutionâ€“Implications of Evolutionary Loss, Limits on Inference of Ancestry and Type 2 Errors. <i>Integrative and Comparative Biology</i> , 2003, 43, 11-18.	2.0	16
117	Has Coral Bleaching Delayed Our Understanding of Fundamental Aspects of Coralâ€“Dinoflagellate Symbioses?. <i>BioScience</i> , 2003, 53, 976.	4.9	29
118	Determining the Spatial and Temporal Patterns of Developmental Gene Expression in Vertebrates and Invertebrates Using in situ Hybridization Techniques. , 2002, , 365-394.		0
119	The isolation of a Distal-less gene fragment from two molluscs. <i>Development Genes and Evolution</i> , 2001, 211, 506-508.	0.9	3
120	Molluscan engrailed expression, serial organization, and shell evolution. <i>Evolution &amp; Development</i> , 2000, 2, 340-347.	2.0	93
121	The influence of an anthozoan â€œhost factorâ€•on the physiology of a symbiotic dinoflagellate. <i>Journal of Experimental Marine Biology and Ecology</i> , 1999, 232, 241-259.	1.5	32
122	The Physiological Mechanisms of Acclimatization in Tropical Reef Corals. <i>American Zoologist</i> , 1999, 39, 30-43.	0.7	247
123	Nitric oxide production rather than oxidative stress and cell death is associated with the onset of coral bleaching in <i>Pocillopora acuta</i> . <i>PeerJ</i> , 0, 10, e13321.	2.0	3