Michael P Lesser

List of Publications by Year
in descending order

111 papers	9,845 citations	50276 46 h-index	38395 95 g-index
115 all docs	115 docs citations	115 times ranked	7381 citing authors

#	Article	IF	Citations
1	OXIDATIVE STRESS IN MARINE ENVIRONMENTS: Biochemistry and Physiological Ecology. Annual Review of Physiology, 2006, 68, 253-278.	13.1	1,441
2	Elevated temperatures and ultraviolet radiation cause oxidative stress and inhibit photosynthesis in ymbiotic dinoflagellates. Limnology and Oceanography, 1996, 41, 271-283.	3.1	511
3	Discovery of Symbiotic Nitrogen-Fixing Cyanobacteria in Corals. Science, 2004, 305, 997-1000.	12.6	413
4	Ecology of mesophotic coral reefs. Journal of Experimental Marine Biology and Ecology, 2009, 375, 1-8.	1.5	410
5	Exposure to solar radiation increases damage to both host tissues and algal symbionts of corals during thermal stress. Coral Reefs, 2004, 23, 367-377.	2.2	374
6	Photosynthesis and photoprotection in symbiotic corals. Limnology and Oceanography, 2001, 46, 75-85.	3.1	253
7	Are infectious diseases really killing corals? Alternative interpretations of the experimental and ecological data. Journal of Experimental Marine Biology and Ecology, 2007, 346, 36-44.	1.5	253
8	Effects of morphology and water motion on carbon delivery and productivity in the reef coral, Pocillopora damicornis (Linnaeus): Diffusion barriers, inorganic carbon limitation, and biochemical plasticity. Journal of Experimental Marine Biology and Ecology, 1994, 178, 153-179.	1.5	236
9	Photoacclimatization by the coral Montastraea cavernosa in the mesophotic zone: light, food, and genetics. Ecology, 2010, 91, 990-1003.	3.2	227
10	Effects of ultraviolet radiation on corals and other coral reef organisms. Global Change Biology, 1996, 2, 527-545.	9.5	219
11	Phase shift to algal dominated communities at mesophotic depths associated with lionfish (Pterois) Tj ETQq1 1 0.784314 rgBT /Overl	2.4	216
12	Experimental biology of coral reef ecosystems. Journal of Experimental Marine Biology and Ecology, 2004, 300, 217-252.	1.5	203
13	Coral Bleaching: Causes and Mechanisms. , 2011, , 405-419.		198
14	Nitrogen fixation and nitrogen transformations in marine symbioses. Trends in Microbiology, 2010, 18, 455-463.	7.7	183
15	CARBON UPTAKE IN A MARINE DIATOM DURING ACUTE EXPOSURE TO ULTRAVIOLET B RADIATION: RELATIVE IMPORTANCE OF DAMAGE AND REPAIR1. Journal of Phycology, 1994, 30, 183-192.	2.3	181
16	Comparative genomics explains the evolutionary success of reef-forming corals. ELife, 2016, 5, .	6.0	169
17	Theme section on mesophotic coral ecosystems: advances in knowledge and future perspectives. Coral Reefs, 2016, 35, 1-9.	2.2	162
18	Benthicâ€“pelagic coupling on coral reefs: Feeding and growth of Caribbean sponges. Journal of Experimental Marine Biology and Ecology, 2006, 328, 277-288.	1.5	157

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19	Impact of fouling organisms on mussel rope culture: interspecific competition for food among suspension-feeding invertebrates. Journal of Experimental Marine Biology and Ecology, 1992, 165, 91-102.	1.5	155
20	Quenching of superoxide radicals by green fluorescent protein. Biochimica Et Biophysica Acta - General Subjects, 2006, 1760, 1690-1695.	2.4	145
21	The endosymbiotic dinoflagellates (Symbiodinium sp.) of corals are parasites and mutualists. Coral Reefs, 2013, 32, 603-611.	2.2	138
22	Bathymetry, water optical properties, and benthic classification of coral reefs using hyperspectral remote sensing imagery. Coral Reefs, 2007, 26, 819-829.	2.2	118
23	Effects of solar ultraviolet radiation on coral reef organisms. Photochemical and Photobiological Sciences, 2009, 8, 1276-1294.	2.9	105
24	Transcriptional activity of the giant barrel sponge, Xestospongia muta Holobiont: molecular evidence for metabolic interchange. Frontiers in Microbiology, 2015, 6, 364.	3.5	105
25	Exposure to ultraviolet radiation causes apoptosis in developing sea urchin embryos. Journal of Experimental Biology, 2003, 206, 4097-4103.	1.7	98
26	Genetic Structure in the Coral, Montastraea cavernosa: Assessing Genetic Differentiation among and within Mesophotic Reefs. PLoS ONE, 2013, 8, e65845.	2.5	96
27	Nitrogen Biogeochemistry in the Caribbean Sponge, Xestospongia muta: A Source or Sink of Dissolved Inorganic Nitrogen?. PLoS ONE, 2013, 8, e72961.	2.5	94
28	The distribution of mycosporine-like amino acids (MAAs) and the phylogenetic identity of symbiotic dinoflagellates in cnidarian hosts from the Mexican Caribbean. Journal of Experimental Marine Biology and Ecology, 2006, 337, 131-146.	1.5	93
29	Greenâ€fluorescent proteins in Caribbean corals. Limnology and Oceanography, 2003, 48, 402-411.	3.1	91
30	Climate change stressors destabilize the microbiome of the Caribbean barrel sponge, Xestospongia muta. Journal of Experimental Marine Biology and Ecology, 2016, 475, 11-18.	1.5	87
31	Expression of homologues for p53 and p73 in the softshell clam (Mya arenaria), a naturally-occurring model for human cancer. Oncogene, 2001, 20, 748-758.	5.9	86
32	Seasonal temperature compensation in the horse mussel, Modiolus modiolus: metabolic enzymes, oxidative stress and heat shock proteins. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2004, 137, 495-504.	1.8	85
33	Nutrient Fluxes and Ecological Functions of Coral Reef Sponges in a Changing Ocean. , 2017, , 373-410.		82
34	Solving cryptogenic histories using host and parasite molecular genetics: the resolution of Littorina littorea's North American origin. Molecular Ecology, 2008, 17, 3684-3696.	3.9	79
35	Nutritive Phagocyte Incubation Chambers Provide a Structural and Nutritive Microenvironment for Germ Cells of Strongylocentrotus droebachiensis, the Green Sea Urchin. Biological Bulletin, 2005, 209, 31-48.	1.8	77
36	Biodiversity and Functional Ecology of Mesophotic Coral Reefs. Annual Review of Ecology, Evolution, and Systematics, 2018, 49, 49-71.	8.3	74

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37	Ecology of Caribbean Sponges: Are Top-Down or Bottom-Up Processes More Important?. PLoS ONE, 2013, 8, e79799.	2.5	71
38	Physiological response of the blue mussel Mytilus edulis to differences in food and temperature in the Gulf of Maine. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2010, 156, 541-551.	1.8	68
39	Large-scale invasion of western Atlantic mesophotic reefs by lionfish potentially undermines culling-based management. Biological Invasions, 2017, 19, 939-954.	2.4	67
40	Sea urchin tube feet are photosensory organs that express a rhabdomeric-like opsin and PAX6. Proceedings of the Royal Society B: Biological Sciences, 2011, 278, 3371-3379.	2.6	64
41	Allelopathy in the tropical alga <scp>L</scp>obophora variegata (<scp>P</scp>haeophyceae): mechanistic basis for a phase shift on mesophotic coral reefs?. Journal of Phycology, 2014, 50, 493-505.	2.3	63
42	Coral reef bleaching and global climate change: Can corals survive the next century?. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 5259-5260.	7.1	62
43	Using energetic budgets to assess the effects of environmental stress on corals: are we measuring the right things?. Coral Reefs, 2013, 32, 25-33.	2.2	62
44	Diazotroph diversity and nitrogen fixation in the coral Stylophora pistillata from the Great Barrier Reef. ISME Journal, 2018, 12, 813-824.	9.8	61
45	DNA photorepair in echinoid embryos: effects of temperature on repair rate in Antarctic and non-Antarctic species. Journal of Experimental Biology, 2006, 209, 5017-5028.	1.7	60
46	Survivorship, development, and DNA damage in echinoderm embryos and larvae exposed to ultraviolet radiation (290â€“400 nm). Journal of Experimental Marine Biology and Ecology, 2003, 292, 75-91.	1.5	58
47	Chlorophyll Fluorescence in Reef Building Corals. , 2010, , 209-222.		53
48	UV-absorbing compounds in the coral Pocillopora damicornis : Interactive effects of UV radiation, photosynthetically active radiation, and water flow. Limnology and Oceanography, 1997, 42, 1468-1473.	3.1	52
49	Environmental drivers of microbial community shifts in the giant barrel sponge, <scp>X</scp>estospongia muta, over a shallow to mesophotic depth gradient. Environmental Microbiology, 2016, 18, 2025-2038.	3.8	52
50	Global community breaks at 60 m on mesophotic coral reefs. Global Ecology and Biogeography, 2019, 28, 1403-1416.	5.8	52
51	Evaluating the causal basis of ecological success within the scleractinia: an integral projection model approach. Marine Biology, 2014, 161, 2719-2734.	1.5	48
52	Photoadaption and defenses against oxygen toxicity in zooxanthellae from natural populations of symbiotic cnidarians. Journal of Experimental Marine Biology and Ecology, 1989, 134, 129-141.	1.5	47
53	Symbiotic prokaryotic communities from different populations of the giant barrel sponge, Xestospongia muta. MicrobiologyOpen, 2013, 2, 938-952.	3.0	45
54	Transmission of ultraviolet radiation through the Antarctic annual sea ice and its biological effects on sea urchin embryos. Limnology and Oceanography, 2004, 49, 1957-1963.	3.1	44

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55	Photoadaptation and Protection against Active Forms of Oxygen in the Symbiotic Procaryote Prochloron sp. and Its Ascidian Host. Applied and Environmental Microbiology, 1990, 56, 1530-1535.	3.1	44
56	EFFECTS OF ULTRAVIOLET RADIATION ON PHOTOSYNTHESIS IN THE SUBTROPICAL MARINE DIATOM, CHAETOCEROS GRACILIS (BACILLARIOPHYCEAE)1. Journal of Phycology, 1997, 33, 960-968.	2.3	41
57	Highâ€resolution determination of coral reef bottom cover from multispectral fluorescence laser line scan imagery. Limnology and Oceanography, 2003, 48, 522-534.	3.1	41
58	Effects of ultraviolet radiation on productivity and nitrogen fixation in the Cyanobacterium, Anabaena sp. (Newtonâ€™s strain). Hydrobiologia, 2008, 598, 1-9.	2.0	41
59	Mass Culture and Characterization of Tumor Cells From a Naturally Occurring Invertebrate Cancer Model: Applications for Human and Animal Disease and Environmental Health. Biological Bulletin, 2009, 216, 23-39.	1.8	40
60	The effects of short-term exposures to ultraviolet radiation in the Hawaiian Coral Montipora verrucosa. Journal of Experimental Marine Biology and Ecology, 2007, 340, 194-203.	1.5	39
61	Climate change stressors cause metabolic depression in the blue mussel,Mytilus edulis, from the Gulf of Maine. Limnology and Oceanography, 2016, 61, 1705-1717.	3.1	37
62	Exposure to Ultraviolet Radiation (290â€“400 nm) Causes Oxidative Stress, DNA Damage, and Expression ofp53/p73 in Laboratory Experiments on Embryos of the Spotted Salamander,Ambystoma maculatum. Physiological and Biochemical Zoology, 2001, 74, 733-741.	1.5	36
63	To what extent do mesophotic coral ecosystems and shallow reefs share species of conservation interest? A systematic review. Environmental Evidence, 2018, 7, .	2.7	36
64	Effects of ultraviolet radiation on primary productivity in a high altitude tropical lake. Hydrobiologia, 1998, 385, 23-32.	2.0	34
65	Will coral reef sponges be winners in the Anthropocene?. Global Change Biology, 2020, 26, 3202-3211.	9.5	34
66	Culture-dependent and culture-independent analyses reveal no prokaryotic community shifts or recovery ofSerratia marcescensinAcropora palmatawith white pox disease. FEMS Microbiology Ecology, 2014, 88, 457-467.	2.7	33
67	Variability in chemical defense across a shallow to mesophotic depth gradient in the Caribbean sponge Plakortis angulospiculatus. Coral Reefs, 2016, 35, 11-22.	2.2	32
68	Effects of visible and ultraviolet radiation on the ultrastructure of zooxanthellae (Symbiodinium sp.) in culture and in situ. Cell and Tissue Research, 1990, 261, 501-508.	2.9	31
69	Diazotrophic diversity in the Caribbean coral, Montastraea cavernosa. Archives of Microbiology, 2013, 195, 853-859.	2.2	31
70	Depthâ€dependent Effects of Ultraviolet Radiation on Survivorship, Oxidative Stress and DNA Damage in Sea Urchin (Strongylocentrotus droebachiensis) Embryos from the Gulf of Maine. Photochemistry and Photobiology, 2010, 86, 382-388.	2.5	29
71	Fast repetition rate (FRR) fluorometry: variability of chlorophyll a fluorescence yields in colonies of the corals, Montastraea faveolata (w.) and Diploria labyrinthiformes (h.) recovering from bleaching. Journal of Experimental Marine Biology and Ecology, 2000, 252, 75-84.	1.5	28
72	Long-term changes in the chlorophyll fluorescence of bleached and recovering corals from Hawaii. Journal of Experimental Biology, 2008, 211, 2502-2509.	1.7	28

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73	Ecology of the hagfish, Myxine glutinosa L. in the Gulf of Maine I. Metabolic rates and energetics. Journal of Experimental Marine Biology and Ecology, 1997, 208, 215-225.	1.5	27
74	Sponge density increases with depth throughout the Caribbean. Ecosphere, 2018, 9, e02525.	2.2	27
75	Biological weighting functions for DNA damage in sea urchin embryos exposed to ultraviolet radiation. Journal of Experimental Marine Biology and Ecology, 2006, 328, 10-21.	1.5	26
76	Stereological analysis of nutritive phagocytes and gametogenic cells during the annual reproductive cycle of the green sea urchin, Strongylocentrotus droebachiensis. Invertebrate Biology, 2007, 126, 202-209.	0.9	26
77	EFFECTS OF UV RADIATION ON A CHLOROPHYTE ALGA (SCENEDESMUS SP.) ISOLATED FROM THE FUMAROLE FIELDS OF MT. EREBUS, ANTARCTICA¹. Journal of Phycology, 2002, 38, 473-481.	2.3	25
78	Variation in sunscreen compounds (mycosporineâ€like amino acids) for marine species along a gradient of ultraviolet radiation transmission within doubtful sound, New Zealand. New Zealand Journal of Marine and Freshwater Research, 2004, 38, 775-793.	2.0	24
79	Phylogenetic signature of light and thermal stress for the endosymbiotic dinoflagellates of corals (Family Symbiodiniaceae). Limnology and Oceanography, 2019, 64, 1852-1863.	3.1	24
80	Depthâ€dependent detritus production in the sponge, Halisarca caerulea. Limnology and Oceanography, 2020, 65, 1200-1216.	3.1	24
81	Photobiology of natural populations of zooxanthellae from the sea anemoneAiptasia pallida: Assessment of the host's role in protection against ultraviolet radiation. Cytometry, 1989, 10, 653-658.	1.8	23
82	Irradiance-induced variability in light scatter from marine phytoplankton in culture. Journal of Plankton Research, 1993, 15, 737-759.	1.8	23
83	Ecology of the hagfish, Myxine glutinosa L., in the gulf of Maine: II. Potential impact on benthic communities and commercial fisheries. Journal of Experimental Marine Biology and Ecology, 1997, 214, 97-106.	1.5	22
84	Gorgonians Are Foundation Species on Sponge-Dominated Mesophotic Coral Reefs in the Caribbean. Frontiers in Marine Science, 2021, 8, .	2.5	21
85	Cophylogeny and convergence shape holobiont evolution in spongeâ€“microbe symbioses. Nature Ecology and Evolution, 2022, 6, 750-762.	7.8	21
86	Eutrophication on Coral Reefs: What Is the Evidence for Phase Shifts, Nutrient Limitation and Coral Bleaching. BioScience, 2021, 71, 1216-1233.	4.9	18
87	Trophic Ecology of the Tropical Pacific Sponge Mycale grandis Inferred from Amino Acid Compound-Specific Isotopic Analyses. Microbial Ecology, 2020, 79, 495-510.	2.8	17
88	Interactions between stressors on coral reefs: analytical approaches, re-analysis of old data, and different conclusions. Coral Reefs, 2010, 29, 615-619.	2.2	16
89	To what extent do mesophotic coral ecosystems and shallow reefs share species of conservation interest?. Environmental Evidence, 2016, 5, .	2.7	16
90	Comparative Genomics of Color Morphs In the Coral Montastraea cavernosa. Scientific Reports, 2017, 7, 16039.	3.3	16

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91	Description of a Novel Symbiotic Bacterium from the Brittle Star, Amphipholis squamata. Applied and Environmental Microbiology, 1990, 56, 2436-2440.	3.1	16
92	Trait-Based Comparison of Coral and Sponge Microbiomes. Scientific Reports, 2020, 10, 2340.	3.3	15
93	A member of the Roseobacter clade, Octadecabacter sp., is the dominant symbiont in the brittle star Amphipholis squamata. FEMS Microbiology Ecology, 2018, 94, .	2.7	12
94	Trophic ecology of Caribbean sponges in the mesophotic zone. Limnology and Oceanography, 2021, 66, 1113-1124.	3.1	12
95	The annual gametogenic cycle of the sea anemone Metridium senile from the Gulf of Maine. Journal of Experimental Marine Biology and Ecology, 2010, 390, 58-64.	1.5	10
96	The Bahamas and Cayman Islands. Coral Reefs of the World, 2019, , 47-56.	0.7	10
97	Trophodynamics of the sclerosponge Ceratoporella nicholsoni along a shallow to mesophotic depth gradient. Coral Reefs, 2020, 39, 1829-1839.	2.2	9
98	Incident light and morphology determine coral productivity along a shallow to mesophotic depth gradient. Ecology and Evolution, 2021, 11, 13445-13454.	1.9	9
99	N2 fixation, and the relative contribution of fixed N, in corals from CuraÃ§ao and Hawaii. Coral Reefs, 2019, 38, 1145-1158.	2.2	8
100	Sponge density increases with depth throughout the Caribbean: Reply. Ecosphere, 2019, 10, e02690.	2.2	7
101	The Genome of the Softshell Clam Mya arenaria and the Evolution of Apoptosis. Genome Biology and Evolution, 2020, 12, 1681-1693.	2.5	7
102	Growth and feeding in the sponge Agelas tubulata from shallow to mesophotic depths on Grand Cayman Island. Ecosphere, 2021, 12, e03764.	2.2	7
103	Transcriptomic Resources for the Rocky Intertidal Blue MusselMytilus edulisfrom the Gulf of Maine. Journal of Shellfish Research, 2016, 35, 435-465.	0.9	6
104	Biochemical variability in sponges across the Caribbean basin. Invertebrate Biology, 2021, 140, e12341.	0.9	4
105	EFFECTS OF UV RADIATION ON A CHLOROPHYTE ALGA (SCENEDESMUS SP.) ISOLATED FROM THE FUMAROLE FIELDS OF MT. EREBUS, ANTARCTICA1. Journal of Phycology, 2002, 38, 473-481.	2.3	4
106	Fluorescent epibiotic microbial community on the carapace of a Bahamian ostracod. Archives of Microbiology, 2013, 195, 595-604.	2.2	3
107	Aposematic coloration does not deter corallivory by fish on the coral Montastraea cavernosa. Coral Reefs, 2016, 35, 883-887.	2.2	3
108	Gametogenesis in regular sea urchins: Structural, functional, and molecular/genomic biology. Developments in Aquaculture and Fisheries Science, 2020, 43, 29-50.	1.3	3

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109	Effects of Thermal Stress and Ocean Acidification on the Expression of the Retrotransposon Steamer in the Softshell Mya arenaria. Journal of Shellfish Research, 2019, 38, 535.	0.9	3
110	Allelopathy-mediated competition in microbial mats from Antarctic lakes. FEMS Microbiology Ecology, 2017, 93, .	2.7	2
111	A New â€œBusiness as Usualâ€•Climate Scenario and the Stress Response of the Caribbean Coral Montastraea cavernosa. Frontiers in Marine Science, 2020, 7, .	2.5	1