

# David F Gruber

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

2,389  
citations

279798

23  
h-index

214800

47  
g-index

56  
all docs

56  
docs citations

56  
times ranked

3001  
citing authors

#	ARTICLE	IF	CITATIONS
1	Soft Robotic Grippers for Biological Sampling on Deep Reefs. <i>Soft Robotics</i> , 2016, 3, 23-33.	8.0	624
2	Ultragentle manipulation of delicate structures using a soft robotic gripper. <i>Science Robotics</i> , 2019, 4, .	17.6	186
3	Comparative genomics explains the evolutionary success of reef-forming corals. <i>ELife</i> , 2016, 5, .	6.0	169
4	The Covert World of Fish Biofluorescence: A Phylogenetically Widespread and Phenotypically Variable Phenomenon. <i>PLoS ONE</i> , 2014, 9, e83259.	2.5	135
5	A Modular Soft Robotic Wrist for Underwater Manipulation. <i>Soft Robotics</i> , 2018, 5, 399-409.	8.0	98
6	A Dexterous, Glove-Based Teleoperable Low-Power Soft Robotic Arm for Delicate Deep-Sea Biological Exploration. <i>Scientific Reports</i> , 2018, 8, 14779.	3.3	98
7	Dynamics and Characterization of Refractory Dissolved Organic Matter Produced by a Pure Bacterial Culture in an Experimental Predator-Prey System. <i>Applied and Environmental Microbiology</i> , 2006, 72, 4184-4191.	3.1	85
8	Changes in scleractinian coral <i>Seriatopora hystrix</i> morphology and its endocellular Symbiodinium characteristics along a bathymetric gradient from shallow to mesophotic reef. <i>Coral Reefs</i> , 2011, 30, 1089-1100.	2.2	64
9	Rotary-actuated folding polyhedrons for midwater investigation of delicate marine organisms. <i>Science Robotics</i> , 2018, 3, .	17.6	59
10	Shipboard design and fabrication of custom 3D-printed soft robotic manipulators for the investigation of delicate deep-sea organisms. <i>PLoS ONE</i> , 2018, 13, e0200386.	2.5	58
11	Deep Machine Learning Techniques for the Detection and Classification of Sperm Whale Bioacoustics. <i>Scientific Reports</i> , 2019, 9, 12588.	3.3	57
12	Glowing Worms: Biological, Chemical, and Functional Diversity of Bioluminescent Annelids. <i>Integrative and Comparative Biology</i> , 2017, 57, 18-32.	2.0	51
13	Seasonal Mesophotic Coral Bleaching of <i>Stylophora pistillata</i> in the Northern Red Sea. <i>PLoS ONE</i> , 2014, 9, e84968.	2.5	51
14	Novel Adaptive Photosynthetic Characteristics of Mesophotic Symbiotic Microalgae within the Reef-Building Coral, <i>Stylophora pistillata</i> . <i>Frontiers in Marine Science</i> , 2016, 3, .	2.5	48
15	Epigenome: Biosensor of Cumulative Exposure to Chemical and Nonchemical Stressors Related to Environmental Justice. <i>American Journal of Public Health</i> , 2014, 104, 1816-1821.	2.7	40
16	A new bright green-emitting fluorescent protein "engineered monomeric and dimeric forms. <i>FEBS Journal</i> , 2010, 277, 1967-1978.	4.7	39
17	The Correlation between Rates of Cancer and Autism: An Exploratory Ecological Investigation. <i>PLoS ONE</i> , 2010, 5, e9372.	2.5	36
18	Patterns of Fluorescent Protein Expression in Scleractinian Corals. <i>Biological Bulletin</i> , 2008, 215, 143-154.	1.8	35

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19	Biofluorescence in Catsharks (Scyliorhinidae): Fundamental Description and Relevance for Elasmobranch Visual Ecology. <i>Scientific Reports</i> , 2016, 6, 24751.	3.3	35
20	First Observation of Fluorescence in Marine Turtles. <i>American Museum Novitates</i> , 2015, 3845, 1-8.	0.6	32
21	Adaptive Evolution of Eel Fluorescent Proteins from Fatty Acid Binding Proteins Produces Bright Fluorescence in the Marine Environment. <i>PLoS ONE</i> , 2015, 10, e0140972.	2.5	31
22	Dynamic Regulation of Fluorescent Proteins from a Single Species of Coral. <i>Marine Biotechnology</i> , 2007, 9, 733-746.	2.4	27
23	Bright Green Biofluorescence in Sharks Derives from Bromo-Kynurenine Metabolism. <i>IScience</i> , 2019, 19, 1291-1336.	4.1	27
24	Transcriptome sequencing and annotation of the polychaete <i>Hermodice carunculata</i> (Annelida). <i>Journal of Experimental Marine Biology and Ecology</i> , 2019, 475, 1-10.	2.8	23
25	Transcriptome deep-sequencing and clustering of expressed isoforms from <i>Favia</i> corals. <i>BMC Genomics</i> , 2013, 14, 546.	2.8	22
26	Photoacclimation mechanisms of corallimorpharians on coral reefs: Photosynthetic parameters of zooxanthellae and host cellular responses to variation in irradiance. <i>Journal of Experimental Marine Biology and Ecology</i> , 2010, 394, 53-62.	1.5	21
27	Evolutionary Traits that Enable Scleractinian Corals to Survive Mass Extinction Events. <i>Scientific Reports</i> , 2020, 10, 3903.	3.3	21
28	Observations of in situ deep-sea marine bioluminescence with a high-speed, high-resolution sCMOS camera. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2016, 111, 102-109.	1.4	20
29	Bioluminescent flashes drive nighttime schooling behavior and synchronized swimming dynamics in flashlight fish. <i>PLoS ONE</i> , 2019, 14, e0219852.	2.5	20
30	Advances and future outlooks in soft robotics for minimally invasive marine biology. <i>Science Robotics</i> , 2022, 7, eabm6807.	17.6	19
31	Strict regulation of gene expression from a high-copy plasmid utilizing a dual vector system. <i>Protein Expression and Purification</i> , 2008, 60, 53-57.	1.3	17
32	Growth Phase and Elemental Stoichiometry of Bacterial Prey Influences Ciliate Grazing Selectivity. <i>Journal of Eukaryotic Microbiology</i> , 2009, 56, 466-471.	1.7	17
33	A New Mesophotic Clingfish (Teleostei: Gobiesocidae) from the Bahamas. <i>Copeia</i> , 2012, 2012, 251-256.	1.3	16
34	A putative chordate luciferase from a cosmopolitan tunicate indicates convergent bioluminescence evolution across phyla. <i>Scientific Reports</i> , 2020, 10, 17724.	3.3	16
35	Selection, drift, and constraint in cypridinid luciferases and the diversification of bioluminescent signals in sea fireflies. <i>Molecular Ecology</i> , 2021, 30, 1864-1879.	3.9	14
36	Ultra-gentle soft robotic fingers induce minimal transcriptomic response in a fragile marine animal. <i>Current Biology</i> , 2020, 30, R157-R158.	3.9	9

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37	Luciferin production and luciferase transcription in the bioluminescent copepod <i>Metridia lucens</i> . PeerJ, 2018, 6, e5506.	2.0	8
38	Novel Internal Regions of Fluorescent Proteins Undergo Divergent Evolutionary Patterns. Molecular Biology and Evolution, 2009, 26, 2841-2848.	8.9	7
39	Distribution of the Lamellibrachia spp. (Siboglinidae, Annelida) and their trophosome endosymbiont phlotypes in the Mediterranean Sea. Marine Biology, 2014, 161, 1229-1239.	1.5	7
40	Toward understanding the communication in sperm whales. IScience, 2022, 25, 104393.	4.1	7
41	First Report of Biofluorescence in Arctic Snailfishes and Rare Occurrence of Multiple Fluorescent Colors in a Single Species. American Museum Novitates, 2021, 2020, .	0.6	5
42	Symbiotic transition of algae-coral triggered by paleoclimatic events?. Trends in Ecology and Evolution, 2012, 27, 194-195.	8.7	4
43	A novel fish sampling system for ROVs. Deep-Sea Research Part I: Oceanographic Research Papers, 2021, 167, 103428.	1.4	4
44	In situ Observations of the Meso-Bathypelagic Scyphozoan, <i>Deepstaria enigmatica</i> (Semaestomeae: Ulmaridae). American Museum Novitates, 2018, 3900, 1-14.	0.6	3
45	Disrupting Fluorescence by Mutagenesis in a Green Fluorescent Fatty Acid Binding Protein from a Marine Eel. Protein Journal, 2020, 39, 145-151.	1.6	3
46	Discovery and Characterization of a Bilirubin Inducible Green Fluorescent Protein From the Moray Eel <i>Gymnothorax zonipectis</i> . Frontiers in Marine Science, 2021, 8, .	2.5	3
47	Three's company. Nature Medicine, 2009, 15, 232-235.	30.7	2
48	First Evidence of Bioluminescence on a "Black Smoker" Hydrothermal Chimney. Oceanography, 2016, 29, .	1.0	2
49	Preliminary studies find DNA erosion in mental disorders. Nature Medicine, 2008, 14, 1295-1295.	30.7	0
50	Characterization of New and Improved Fluorescent Proteins and their Applications. Biophysical Journal, 2010, 98, 603a.	0.5	0
51	Description of a New Species of Rariphotic Parapercis (Perciformes: Pinguipedidae) from the Solomon Islands. American Museum Novitates, 2021, 2021, .	0.6	0