

# Peter R Girguis

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

100  
papers

4,531  
citations

38  
h-index

65  
g-index

112  
ext. papers

5,630  
ext. citations

8.3  
avg, IF

5.53  
L-index

#	Paper	IF	Citations
100	Evidence for Horizontal and Vertical Transmission of Mtr-Mediated Extracellular Electron Transfer among the .. <i>MBio</i> , <b>2022</b> , e0290421	7.8	2
99	Multiple carbon incorporation strategies support microbial survival in cold seafloor crustal fluids. <i>Science Advances</i> , <b>2021</b> , 7,	14.3	6
98	Interactions Between Iron Sulfide Minerals and Organic Carbon: Implications for Biosignature Preservation and Detection. <i>Astrobiology</i> , <b>2021</b> , 21, 587-604	3.7	2
97	Sulfur bacteria promote dissolution of authigenic carbonates at marine methane seeps. <i>ISME Journal</i> , <b>2021</b> , 15, 2043-2056	11.9	1
96	Spatially resolved correlative microscopy and microbial identification reveal dynamic depth- and mineral-dependent anabolic activity in salt marsh sediment. <i>Environmental Microbiology</i> , <b>2021</b> , 23, 4756-4777	5.2	1
95	Cooccurring Activities of Two Autotrophic Pathways in Symbionts of the Hydrothermal Vent Tubeworm. <i>Applied and Environmental Microbiology</i> , <b>2021</b> , 87, e0079421	4.8	0
94	Roadmap for naming uncultivated Archaea and Bacteria. <i>Nature Microbiology</i> , <b>2020</b> , 5, 987-994	26.6	64
93	Genetic tool development in marine protists: emerging model organisms for experimental cell biology. <i>Nature Methods</i> , <b>2020</b> , 17, 481-494	21.6	39
92	Vortex fluidics-mediated DNA rescue from formalin-fixed museum specimens. <i>PLoS ONE</i> , <b>2020</b> , 15, e0225807	3.7	5
91	Physiological dynamics of chemosynthetic symbionts in hydrothermal vent snails. <i>ISME Journal</i> , <b>2020</b> , 14, 2568-2579	11.9	8
90	Vortex fluidics-mediated DNA rescue from formalin-fixed museum specimens <b>2020</b> , 15, e0225807		
89	Vortex fluidics-mediated DNA rescue from formalin-fixed museum specimens <b>2020</b> , 15, e0225807		
88	Synergistic substrate cofeeding stimulates reductive metabolism. <i>Nature Metabolism</i> , <b>2019</b> , 1, 643-651	14.6	35
87	Methane-Linked Mechanisms of Electron Uptake from Cathodes by <i>Methanosarcina barkeri</i> . <i>MBio</i> , <b>2019</b> , 10,	7.8	32
86	Authigenic metastable iron sulfide minerals preserve microbial organic carbon in anoxic environments. <i>Chemical Geology</i> , <b>2019</b> , 530, 119343	4.2	14
85	The Bacterial Symbionts of Closely Related Hydrothermal Vent Snails With Distinct Geochemical Habitats Show Broad Similarity in Chemoautotrophic Gene Content. <i>Frontiers in Microbiology</i> , <b>2019</b> , 10, 1818	5.7	10
84	Hydrothermal Energy Transfer and Organic Carbon Production at the Deep Seafloor. <i>Frontiers in Marine Science</i> , <b>2019</b> , 5,	4.5	13

83	Hydrogen Does Not Appear To Be a Major Electron Donor for Symbiosis with the Deep-Sea Hydrothermal Vent Tubeworm Riftia pachyptila. <i>Applied and Environmental Microbiology</i> , <b>2019</b> , 86,	4.8	4
82	Nitrogen Cycling of Active Bacteria within Oligotrophic Sediment of the Mid-Atlantic Ridge Flank. <i>Geomicrobiology Journal</i> , <b>2018</b> , 35, 468-483	2.5	19
81	Harnessing a methane-fueled, sediment-free mixed microbial community for utilization of distributed sources of natural gas. <i>Biotechnology and Bioengineering</i> , <b>2018</b> , 115, 1450-1464	4.9	3
80	Microbial decomposition of marine dissolved organic matter in cool oceanic crust. <i>Nature Geoscience</i> , <b>2018</b> , 11, 334-339	18.3	49
79	In situ carbon isotopic exploration of an active submarine volcano. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , <b>2018</b> , 150, 57-66	2.3	9
78	Sulfate-reducing bacteria influence the nucleation and growth of mackinawite and greigite. <i>Geochimica Et Cosmochimica Acta</i> , <b>2018</b> , 220, 367-384	5.5	69
77	Proteome Evolution of Deep-Sea Hydrothermal Vent Alvinellid Polychaetes Supports the Ancestry of Thermophily and Subsequent Adaptation to Cold in Some Lineages. <i>Genome Biology and Evolution</i> , <b>2017</b> , 9, 279-296	3.9	26
76	Opinion: Telepresence is a potentially transformative tool for field science. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 4841-4844	11.5	7
75	Niche partitioning of diverse sulfur-oxidizing bacteria at hydrothermal vents. <i>ISME Journal</i> , <b>2017</b> , 11, 1545-1558	11.9	81
74	Geochemically distinct carbon isotope distributions in <i>Allochromatium vinosum</i> DSM 180 grown photoautotrophically and photoheterotrophically. <i>Geobiology</i> , <b>2017</b> , 15, 324-339	4.3	9
73	Iron Sulfide Formation on Iron Substrates by Electrochemical Reaction in Anoxic Conditions. <i>Crystal Growth and Design</i> , <b>2017</b> , 17, 6332-6340	3.5	2
72	Toward establishing model organisms for marine protists: Successful transfection protocols for <i>Parabodo caudatus</i> (Kinetoplastida: Excavata). <i>Environmental Microbiology</i> , <b>2017</b> , 19, 3487-3499	5.2	8
71	Co-registered Geochemistry and Metatranscriptomics Reveal Unexpected Distributions of Microbial Activity within a Hydrothermal Vent Field. <i>Frontiers in Microbiology</i> , <b>2017</b> , 8, 1042	5.7	15
70	Microbial response to oil enrichment in Gulf of Mexico sediment measured using a novel long-term benthic lander system. <i>Elementa</i> , <b>2017</b> , 5,	3.6	10
69	Microbial ecology: Here, there and everywhere. <i>Nature Microbiology</i> , <b>2016</b> , 1, 16123	26.6	8
68	Heterotrophic Proteobacteria in the vicinity of diffuse hydrothermal venting. <i>Environmental Microbiology</i> , <b>2016</b> , 18, 4348-4368	5.2	26
67	Patterns of sulfur isotope fractionation during microbial sulfate reduction. <i>Geobiology</i> , <b>2016</b> , 14, 91-101	4.3	96
66	NC10 bacteria in marine oxygen minimum zones. <i>ISME Journal</i> , <b>2016</b> , 10, 2067-71	11.9	77

65	Nanoporous microscale microbial incubators. <i>Lab on A Chip</i> , <b>2016</b> , 16, 480-8	7.2	21
64	What Do We Really Know about the Role of Microorganisms in Iron Sulfide Mineral Formation?. <i>Frontiers in Earth Science</i> , <b>2016</b> , 4,	3.5	36
63	Metatranscriptional Response of Chemoautotrophic <i>Ifremeria nautilei</i> Endosymbionts to Differing Sulfur Regimes. <i>Frontiers in Microbiology</i> , <b>2016</b> , 7, 1074	5.7	7
62	A distinct and active bacterial community in cold oxygenated fluids circulating beneath the western flank of the Mid-Atlantic ridge. <i>Scientific Reports</i> , <b>2016</b> , 6, 22541	4.9	46
61	Independent Benthic Microbial Fuel Cells Powering Sensors and Acoustic Communications with the MARS Underwater Observatory. <i>Journal of Atmospheric and Oceanic Technology</i> , <b>2016</b> , 33, 607-617	2	21
60	Enhancing the response of microbial fuel cell based toxicity sensors to Cu(II) with the applying of flow-through electrodes and controlled anode potentials. <i>Bioresource Technology</i> , <b>2015</b> , 190, 367-72	11	92
59	The Ecological Physiology of Earth's Second Oxygen Revolution. <i>Annual Review of Ecology, Evolution, and Systematics</i> , <b>2015</b> , 46, 215-235	13.5	76
58	Baleen whales host a unique gut microbiome with similarities to both carnivores and herbivores. <i>Nature Communications</i> , <b>2015</b> , 6, 8285	17.4	124
57	Carbon fixation by basalt-hosted microbial communities. <i>Frontiers in Microbiology</i> , <b>2015</b> , 6, 904	5.7	29
56	Ubiquitous Presence and Novel Diversity of Anaerobic Alkane Degraders in Cold Marine Sediments. <i>Frontiers in Microbiology</i> , <b>2015</b> , 6, 1414	5.7	26
55	Key Factors Influencing Rates of Heterotrophic Sulfate Reduction in Active Seafloor Hydrothermal Massive Sulfide Deposits. <i>Frontiers in Microbiology</i> , <b>2015</b> , 6, 1449	5.7	12
54	The uptake and excretion of partially oxidized sulfur expands the repertoire of energy resources metabolized by hydrothermal vent symbioses. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>2015</b> , 282, 20142811	4.4	26
53	Biological capacitance studies of anodes in microbial fuel cells using electrochemical impedance spectroscopy. <i>Bioprocess and Biosystems Engineering</i> , <b>2015</b> , 38, 1325-33	3.7	24
52	Characterizing the plasticity of nitrogen metabolism by the host and symbionts of the hydrothermal vent chemoautotrophic symbioses <i>Ridgeia piscesae</i> . <i>Molecular Ecology</i> , <b>2014</b> , 23, 1544-57	5.7	14
51	Intracellular Oceanospirillales inhabit the gills of the hydrothermal vent snail <i>Alviniconcha</i> with chemosynthetic, $\beta$ Proteobacterial symbionts. <i>Environmental Microbiology Reports</i> , <b>2014</b> , 6, 656-64	3.7	20
50	Autonomous application of quantitative PCR in the deep sea: in situ surveys of aerobic methanotrophs using the deep-sea environmental sample processor. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 9339-46	10.3	31
49	Characterizing microbial community and geochemical dynamics at hydrothermal vents using osmotically driven continuous fluid samplers. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 4399-407	10.3	23
48	Redox effects on the microbial degradation of refractory organic matter in marine sediments. <i>Geochimica Et Cosmochimica Acta</i> , <b>2013</b> , 121, 582-598	5.5	35

47	Assessing the influence of physical, geochemical and biological factors on anaerobic microbial primary productivity within hydrothermal vent chimneys. <i>Geobiology</i> , <b>2013</b> , 11, 279-93	4.3	15
46	In situ chemistry and microbial community compositions in five deep-sea hydrothermal fluid samples from Irina II in the Logatchev field. <i>Environmental Microbiology</i> , <b>2013</b> , 15, 1551-60	5.2	36
45	Characterizing the distribution of methane sources and cycling in the deep sea via in situ stable isotope analysis. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 1478-86	10.3	29
44	Geomicrobiological linkages between short-chain alkane consumption and sulfate reduction rates in seep sediments. <i>Frontiers in Microbiology</i> , <b>2013</b> , 4, 386	5.7	23
43	Anaerobic oxidation of short-chain alkanes in hydrothermal sediments: potential influences on sulfur cycling and microbial diversity. <i>Frontiers in Microbiology</i> , <b>2013</b> , 4, 110	5.7	33
42	Characterizing the distribution and rates of microbial sulfate reduction at Middle Valley hydrothermal vents. <i>ISME Journal</i> , <b>2013</b> , 7, 1391-401	11.9	55
41	Metatranscriptomics reveal differences in in situ energy and nitrogen metabolism among hydrothermal vent snail symbionts. <i>ISME Journal</i> , <b>2013</b> , 7, 1556-67	11.9	53
40	Respiration control of multicellularity in <i>Bacillus subtilis</i> by a complex of the cytochrome chain with a membrane-embedded histidine kinase. <i>Genes and Development</i> , <b>2013</b> , 27, 887-99	12.6	95
39	Oxygen, ecology, and the Cambrian radiation of animals. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 13446-51	11.5	217
38	Low temperature geomicrobiology follows host rock composition along a geochemical gradient in lau basin. <i>Frontiers in Microbiology</i> , <b>2013</b> , 4, 61	5.7	32
37	Anaerobic methane oxidation in metalliferous hydrothermal sediments: influence on carbon flux and decoupling from sulfate reduction. <i>Environmental Microbiology</i> , <b>2012</b> , 14, 2726-40	5.2	82
36	Evidence for the role of endosymbionts in regional-scale habitat partitioning by hydrothermal vent symbioses. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, E3241-50	11.5	70
35	Duty cycling influences current generation in multi-anode environmental microbial fuel cells. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 5222-9	10.3	43
34	On the Potential for Bioenergy and Biofuels from Hydrothermal Vent Microbes. <i>Oceanography</i> , <b>2012</b> , 25, 213-217	2.3	13
33	Links from Mantle to Microbe at the Lau Integrated Study Site: Insights from a Back-Arc Spreading Center. <i>Oceanography</i> , <b>2012</b> , 25, 62-77	2.3	23
32	Exploring the limit of metazoan thermal tolerance via comparative proteomics: thermally induced changes in protein abundance by two hydrothermal vent polychaetes. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>2012</b> , 279, 3347-56	4.4	49
31	Expression and putative function of innate immunity genes under in situ conditions in the symbiotic hydrothermal vent tubeworm <i>Ridgeia piscesae</i> . <i>PLoS ONE</i> , <b>2012</b> , 7, e38267	3.7	14
30	Thermodynamics and kinetics of sulfide oxidation by oxygen: a look at inorganically controlled reactions and biologically mediated processes in the environment. <i>Frontiers in Microbiology</i> , <b>2011</b> , 2, 62	5.7	135

29	Hydrogen is an energy source for hydrothermal vent symbioses. <i>Nature</i> , <b>2011</b> , 476, 176-80	50.4	175
28	Influence of subsurface biosphere on geochemical fluxes from diffuse hydrothermal fluids. <i>Nature Geoscience</i> , <b>2011</b> , 4, 461-468	18.3	77
27	Sulfide Oxidation across Diffuse Flow Zones of Hydrothermal Vents. <i>Aquatic Geochemistry</i> , <b>2011</b> , 17, 583-601	1.7	30
26	Metabolic and practical considerations on microbial electrosynthesis. <i>Current Opinion in Biotechnology</i> , <b>2011</b> , 22, 371-7	11.4	166
25	Benthic microbial fuel cell as direct power source for an acoustic modem and seawater oxygen/temperature sensor system. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 5047-53	10.3	84
24	Measuring isotope fractionation by autotrophic microorganisms and enzymes. <i>Methods in Enzymology</i> , <b>2011</b> , 494, 281-99	1.7	3
23	The metabolic demands of endosymbiotic chemoautotrophic metabolism on host physiological capacities. <i>Journal of Experimental Biology</i> , <b>2011</b> , 214, 312-25	3	64
22	Linking hydrothermal geochemistry to organismal physiology: physiological versatility in Riftia pachyptila from sedimented and basalt-hosted vents. <i>PLoS ONE</i> , <b>2011</b> , 6, e21692	3.7	23
21	Benthic microbial fuel cells: long-term power sources for wireless marine sensor networks <b>2010</b> ,		9
20	New constraints on methane fluxes and rates of anaerobic methane oxidation in a Gulf of Mexico brine pool via in situ mass spectrometry. <i>Deep-Sea Research Part II: Topical Studies in Oceanography</i> , <b>2010</b> , 57, 2022-2029	2.3	48
19	Harnessing energy from marine productivity using bioelectrochemical systems. <i>Current Opinion in Biotechnology</i> , <b>2010</b> , 21, 252-8	11.4	24
18	Thiotaurine and hypotaurine contents in hydrothermal-vent polychaetes without thiotrophic endosymbionts: correlation With sulfide exposure. <i>Journal of Experimental Zoology</i> , <b>2009</b> , 311, 439-47		16
17	Quantitative population dynamics of microbial communities in plankton-fed microbial fuel cells. <i>ISME Journal</i> , <b>2009</b> , 3, 635-46	11.9	48
16	Influence of substrate on electron transfer mechanisms in chambered benthic microbial fuel cells. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 8671-7	10.3	48
15	Comparative genomics of vesicomyid clam ( <i>Bivalvia</i> : Mollusca) chemosynthetic symbionts. <i>BMC Genomics</i> , <b>2008</b> , 9, 585	4.5	31
14	Sustainable energy from deep ocean cold seeps. <i>Energy and Environmental Science</i> , <b>2008</b> , 1, 584	35.4	63
13	Coupling metabolite flux to transcriptomics: insights into the molecular mechanisms underlying primary productivity by the hydrothermal vent tubeworm <i>Ridgeia piscesae</i> . <i>Biological Bulletin</i> , <b>2008</b> , 214, 255-65	1.5	21
12	Substrate degradation kinetics, microbial diversity, and current efficiency of microbial fuel cells supplied with marine plankton. <i>Applied and Environmental Microbiology</i> , <b>2007</b> , 73, 7029-40	4.8	60

11	Microbiology. A proteomic snapshot of life at a vent. <i>Science</i> , <b>2007</b> , 315, 198-9	33.3	6
10	Metabolite uptake, stoichiometry and chemoautotrophic function of the hydrothermal vent tubeworm <i>Riftia pachyptila</i> : responses to environmental variations in substrate concentrations and temperature. <i>Journal of Experimental Biology</i> , <b>2006</b> , 209, 3516-28	3	67
9	Thermal preference and tolerance of alvinellids. <i>Science</i> , <b>2006</b> , 312, 231	33.3	76
8	Microbial fuel cell energy from an ocean cold seep. <i>Geobiology</i> , <b>2006</b> , 4, 123-136	4.3	229
7	Growth and population dynamics of anaerobic methane-oxidizing archaea and sulfate-reducing bacteria in a continuous-flow bioreactor. <i>Applied and Environmental Microbiology</i> , <b>2005</b> , 71, 3725-33	4.8	148
6	On the Edge of a Deep Biosphere: Real Animals in Extreme Environments. <i>Geophysical Monograph Series</i> , <b>2004</b> , 41-49	1.1	1
5	Identification of methyl coenzyme M reductase A (mcrA) genes associated with methane-oxidizing archaea. <i>Applied and Environmental Microbiology</i> , <b>2003</b> , 69, 5483-91	4.8	287
4	Growth and methane oxidation rates of anaerobic methanotrophic archaea in a continuous-flow bioreactor. <i>Applied and Environmental Microbiology</i> , <b>2003</b> , 69, 5472-82	4.8	112
3	A paradox resolved: sulfide acquisition by roots of seep tubeworms sustains net chemoautotrophy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2001</b> , 98, 13408-13	11.5	105
2	Fate of nitrate acquired by the tubeworm <i>Riftia pachyptila</i> . <i>Applied and Environmental Microbiology</i> , <b>2000</b> , 66, 2783-90	4.8	54
1	Physiological Functioning of Carbonic Anhydrase in the Hydrothermal Vent Tubeworm <i>Riftia Pachyptila</i> . <i>Biological Bulletin</i> , <b>1999</b> , 196, 257-264	1.5	22