

# Jeff Bowman

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6612153/publications.pdf>

Version: 2024-02-01

52  
papers

1,796  
citations

304743

22  
h-index

289244

40  
g-index

54  
all docs

54  
docs citations

54  
times ranked

2654  
citing authors

#	ARTICLE	IF	CITATIONS
1	Gut microbiome in Parkinson's disease: New insights from meta-analysis. <i>Parkinsonism and Related Disorders</i> , 2022, 94, 1-9.	2.2	55
2	Modeling polar marine ecosystem functions guided by bacterial physiological and taxonomic traits. <i>Biogeosciences</i> , 2022, 19, 117-136.	3.3	1
3	Machine Learning Predicts Biogeochemistry from Microbial Community Structure in a Complex Model System. <i>Microbiology Spectrum</i> , 2022, 10, e0190921.	3.0	7
4	Extremophile enzyme optimization for low temperature and high salinity are fundamentally incompatible. <i>Extremophiles</i> , 2022, 26, 5.	2.3	3
5	Leveraging Earth Hydrosphere Science in the Search for Life on Ocean Worlds. <i>Oceanography</i> , 2022, , .	1.0	0
6	Annual cycle observations of aerosols capable of ice formation in central Arctic clouds. <i>Nature Communications</i> , 2022, 13, .	12.8	19
7	Gut Microbial Ecosystem in Parkinson Disease: New Clinicobiological Insights from Multi-omics. <i>Annals of Neurology</i> , 2021, 89, 546-559.	5.3	99
8	Whole Community Metatranscriptomes and Lipidomes Reveal Diverse Responses Among Antarctic Phytoplankton to Changing Ice Conditions. <i>Frontiers in Marine Science</i> , 2021, 8, .	2.5	4
9	Current state of athallassohaline deep-sea hypersaline anoxic basin research—recommendations for future work and relevance to astrobiology. <i>Environmental Microbiology</i> , 2021, 23, 3360-3369.	3.8	10
10	Salty Environments: The importance of evaporites and brine environments as habitats and preservers of biosignatures. , 2021, 53, .		3
11	Microbial diversity and activity in Southern California salterns and bitterns: analogues for remnant ocean worlds. <i>Environmental Microbiology</i> , 2021, 23, 3825-3839.	3.8	12
12	Sensitivity of the mangrove-estuarine microbial community to aquaculture effluent. <i>IScience</i> , 2021, 24, 102204.	4.1	12
13	Diversity in action: Solutions for a more diverse and inclusive decade of planetary science and astrobiology. , 2021, 53, .		0
14	Low diversity of a key phytoplankton group along the West Antarctic Peninsula. <i>Limnology and Oceanography</i> , 2021, 66, 2470-2480.	3.1	13
15	Recurrent microbial community types driven by nearshore and seasonal processes in coastal Southern California. <i>Environmental Microbiology</i> , 2021, 23, 3225-3239.	3.8	9
16	Making Sense of a Scent-Sensing Metaphor for Microbes and Environmental Predictions. <i>MSystems</i> , 2021, 6, e0099321.	3.8	1
17	Detection of Sulfate-Reducing Bacteria as an Indicator for Successful Mitigation of Sulfide Production. <i>Applied and Environmental Microbiology</i> , 2021, 87, e0174821.	3.1	3
18	Multi-Year Seasonal Trends in Sea Ice, Chlorophyll Concentration, and Marine Aerosol Optical Depth in the Bellingshausen Sea. <i>Journal of Geophysical Research D: Atmospheres</i> , 2021, 126, e2021JD034737.	3.3	9

#	ARTICLE	IF	CITATIONS
19	Climate change impacts on sea-ice ecosystems and associated ecosystem services. <i>Elementa</i> , 2021, 9, .	3.2	26
20	The Development and Deployment of a Programmable Water Sampling System Using an Autonomous Surface Vehicle. , 2021, , .		1
21	From microbial community structure to metabolic inference using paprica. <i>STAR Protocols</i> , 2021, 2, 101005.	1.2	4
22	Introducing the Mangrove Microbiome Initiative: Identifying Microbial Research Priorities and Approaches To Better Understand, Protect, and Rehabilitate Mangrove Ecosystems. <i>MSystems</i> , 2020, 5, .	3.8	40
23	The future of Arctic sea-ice biogeochemistry and ice-associated ecosystems. <i>Nature Climate Change</i> , 2020, 10, 983-992.	18.8	96
24	Using empirical dynamic modeling to assess relationships between atmospheric trace gases and eukaryotic phytoplankton populations in coastal Southern California. <i>Marine Chemistry</i> , 2020, 227, 103896.	2.3	2
25	Understanding Microbial Community Dynamics in Up-Flow Bioreactors to Improve Mitigation Strategies for Oil Souring. <i>Frontiers in Microbiology</i> , 2020, 11, 585943.	3.5	5
26	Editorial: Sea Ice: Bridging Spatial-Temporal Scales and Disciplines. <i>Frontiers in Earth Science</i> , 2020, 8, .	1.8	0
27	Extracellular superoxide production by key microbes in the global ocean. <i>Limnology and Oceanography</i> , 2019, 64, 2679-2693.	3.1	32
28	Ecosystem Service Supply in the Antarctic Peninsula Region: Evaluating an Expert-Based Assessment Approach and a Novel Seascape Data Model. <i>Frontiers in Environmental Science</i> , 2019, 7, .	3.3	8
29	The NASA Roadmap to Ocean Worlds. <i>Astrobiology</i> , 2019, 19, 1-27.	3.0	209
30	Impacts of <i>Zostera</i> eelgrasses on microbial community structure in San Diego coastal waters. <i>Elementa</i> , 2019, 7, .	3.2	8
31	Recurrent seascape units identify key ecological processes along the western Antarctic Peninsula. <i>Global Change Biology</i> , 2018, 24, 3065-3078.	9.5	13
32	Identification of Microbial Dark Matter in Antarctic Environments. <i>Frontiers in Microbiology</i> , 2018, 9, 3165.	3.5	26
33	The molecular products and biogeochemical significance of lipid photooxidation in West Antarctic surface waters. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 232, 244-264.	3.9	11
34	Wind-driven distribution of bacteria in coastal Antarctica: evidence from the Ross Sea region. <i>Polar Biology</i> , 2017, 40, 25-35.	1.2	10
35	Bacterial community segmentation facilitates the prediction of ecosystem function along the coast of the western Antarctic Peninsula. <i>ISME Journal</i> , 2017, 11, 1460-1471.	9.8	53
36	Denitrification potential of the eastern oyster microbiome using a 16S rRNA gene based metabolic inference approach. <i>PLoS ONE</i> , 2017, 12, e0185071.	2.5	76

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37	The Astrobiology Primer v2.0. <i>Astrobiology</i> , 2016, 16, 561-653.	3.0	133
38	Microbial Community Dynamics in Two Polar Extremes: The Lakes of the McMurdo Dry Valleys and the West Antarctic Peninsula Marine Ecosystem. <i>BioScience</i> , 2016, 66, 829-847.	4.9	31
39	Methods for biogeochemical studies of sea ice: The state of the art, caveats, and recommendations. <i>Elementa</i> , 2015, 3, .	3.2	77
40	The relationship between sea ice bacterial community structure and biogeochemistry: A synthesis of current knowledge and known unknowns. <i>Elementa</i> , 2015, 3, .	3.2	26
41	Microbial Communities Can Be Described by Metabolic Structure: A General Framework and Application to a Seasonally Variable, Depth-Stratified Microbial Community from the Coastal West Antarctic Peninsula. <i>PLoS ONE</i> , 2015, 10, e0135868.	2.5	146
42	Frost flowers on young Arctic sea ice: The climatic, chemical, and microbial significance of an emerging ice type. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 11,593-11,612.	3.3	45
43	Alkane hydroxylase genes in psychrophile genomes and the potential for cold active catalysis. <i>BMC Genomics</i> , 2014, 15, 1120.	2.8	25
44	The genetic potential for key biogeochemical processes in Arctic frost flowers and young sea ice revealed by metagenomic analysis. <i>FEMS Microbiology Ecology</i> , 2014, 89, 376-387.	2.7	25
45	Bacterial diversity in snow on North Pole ice floes. <i>Extremophiles</i> , 2014, 18, 945-951.	2.3	26
46	Selective occurrence of <i>Rhizobiales</i> in frost flowers on the surface of young sea ice near Barrow, Alaska and distribution in the polar marine rare biosphere. <i>Environmental Microbiology Reports</i> , 2013, 5, 575-582.	2.4	14
47	Did life originate from a global chemical reactor?. <i>Geobiology</i> , 2013, 11, 101-126.	2.4	99
48	Wide Distribution of Closely Related, Antibiotic-Producing <i>Arthrobacter</i> Strains throughout the Arctic Ocean. <i>Applied and Environmental Microbiology</i> , 2012, 78, 2039-2042.	3.1	33
49	Microbial community structure of Arctic multiyear sea ice and surface seawater by 454 sequencing of the 16S RNA gene. <i>ISME Journal</i> , 2012, 6, 11-20.	9.8	175
50	Elevated bacterial abundance and exopolymers in saline frost flowers and implications for atmospheric chemistry and microbial dispersal. <i>Geophysical Research Letters</i> , 2010, 37, .	4.0	45
51	Chemical and physical properties of some saline lakes in Alberta and Saskatchewan. <i>Saline Systems</i> , 2008, 4, 3.	2.0	11
52	The Bioburden and Ionic Composition of Hypersaline Lake Ices: Novel Habitats on Earth and Their Astrobiological Implications. <i>Astrobiology</i> , 0, .	3.0	5