Jeff Bowman

List of Publications by Year
in descending order

52	1,796	304743	289244
papers	citations	22 h-index	40 g-index

54	54	54	2654
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The NASA Roadmap to Ocean Worlds. Astrobiology, 2019, 19, 1-27.	3.0	209
2	Microbial community structure of Arctic multiyear sea ice and surface seawater by 454 sequencing of the 16S RNA gene. ISME Journal, 2012, 6, 11-20.	9.8	175
3	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. PLoS ONE, 2015, 10, e0135868.	2.5	146
4	The Astrobiology Primer v2.0. Astrobiology, 2016, 16, 561-653.	3.0	133
5	Did life originate from a global chemical reactor?. Geobiology, 2013, 11, 101-126.	2.4	99
6	Gut Microbial Ecosystem in Parkinson Disease: New Clinicobiological Insights from Multiâ€Omics. Annals of Neurology, 2021, 89, 546-559.	5.3	99
7	The future of Arctic sea-ice biogeochemistry and ice-associated ecosystems. Nature Climate Change, 2020, 10, 983-992.	18.8	96
8	Methods for biogeochemical studies of sea ice: The state of the art, caveats, and recommendations. Elementa, 2015, 3, .	3.2	77
9	Denitrification potential of the eastern oyster microbiome using a 16S rRNA gene based metabolic inference approach. PLoS ONE, 2017, 12, e0185071.	2.5	76
10	Gut microbiome in Parkinson's disease: New insights from meta-analysis. Parkinsonism and Related Disorders, 2022, 94, 1-9.	2.2	55
11	Bacterial community segmentation facilitates the prediction of ecosystem function along the coast of the western Antarctic Peninsula. ISME Journal, 2017, 11, 1460-1471.	9.8	53
12	Elevated bacterial abundance and exopolymers in saline frost flowers and implications for atmospheric chemistry and microbial dispersal. Geophysical Research Letters, 2010, 37, .	4.0	45
13	Frost flowers on young Arctic sea ice: The climatic, chemical, and microbial significance of an emerging ice type. Journal of Geophysical Research D: Atmospheres, 2014, 119, 11,593-11,612.	3.3	45
14	Introducing the Mangrove Microbiome Initiative: Identifying Microbial Research Priorities and Approaches To Better Understand, Protect, and Rehabilitate Mangrove Ecosystems. MSystems, 2020, 5, .	3.8	40
15	Wide Distribution of Closely Related, Antibiotic-Producing Arthrobacter Strains throughout the Arctic Ocean. Applied and Environmental Microbiology, 2012, 78, 2039-2042.	3.1	33
16	Extracellular superoxide production by key microbes in the global ocean. Limnology and Oceanography, 2019, 64, 2679-2693.	3.1	32
17	Microbial Community Dynamics in Two Polar Extremes: The Lakes of the McMurdo Dry Valleys and the West Antarctic Peninsula Marine Ecosystem. BioScience, 2016, 66, 829-847.	4.9	31
18	Bacterial diversity in snow on North Pole ice floes. Extremophiles, 2014, 18, 945-951.	2.3	26

#	Article	IF	Citations
19	Identification of Microbial Dark Matter in Antarctic Environments. Frontiers in Microbiology, 2018, 9, 3165.	3.5	26
20	The relationship between sea ice bacterial community structure and biogeochemistry: A synthesis of current knowledge and known unknowns. Elementa, 2015, 3, .	3.2	26
21	Climate change impacts on sea-ice ecosystems and associated ecosystem services. Elementa, 2021, 9, .	3.2	26
22	Alkane hydroxylase genes in psychrophile genomes and the potential for cold active catalysis. BMC Genomics, 2014, 15, 1120.	2.8	25
23	The genetic potential for key biogeochemical processes in Arctic frost flowers and young sea ice revealed by metagenomic analysis. FEMS Microbiology Ecology, 2014, 89, 376-387.	2.7	25
24	Annual cycle observations of aerosols capable of ice formation in central Arctic clouds. Nature Communications, 2022, 13, .	12.8	19
25	Selective occurrence of <scp>R</scp>hizobiales in frost flowers on the surface of young sea ice near <scp>B</scp>arrow, <scp>A</scp>laska and distribution in the polar marine rare biosphere. Environmental Microbiology Reports, 2013, 5, 575-582.	2.4	14
26	Recurrent seascape units identify key ecological processes along the western Antarctic Peninsula. Global Change Biology, 2018, 24, 3065-3078.	9.5	13
27	Low diversity of a key phytoplankton group along the West Antarctic Peninsula. Limnology and Oceanography, 2021, 66, 2470-2480.	3.1	13
28	Microbial diversity and activity in Southern California salterns and bitterns: analogues for remnant ocean worlds. Environmental Microbiology, 2021, 23, 3825-3839.	3.8	12
29	Sensitivity of the mangrove-estuarine microbial community to aquaculture effluent. IScience, 2021, 24, 102204.	4.1	12
30	Chemical and physical properties of some saline lakes in Alberta and Saskatchewan. Saline Systems, 2008, 4, 3.	2.0	11
31	The molecular products and biogeochemical significance of lipid photooxidation in West Antarctic surface waters. Geochimica Et Cosmochimica Acta, 2018, 232, 244-264.	3.9	11
32	Wind-driven distribution of bacteria in coastal Antarctica: evidence from the Ross Sea region. Polar Biology, 2017, 40, 25-35.	1.2	10
33	Current state of athalassohaline deepâ€sea hypersaline anoxic basin researchâ€"recommendations for future work and relevance to astrobiology. Environmental Microbiology, 2021, 23, 3360-3369.	3.8	10
34	Recurrent microbial community types driven by nearshore and seasonal processes in coastal Southern California. Environmental Microbiology, 2021, 23, 3225-3239.	3.8	9
35	Multiâ€Year Seasonal Trends in Sea Ice, Chlorophyll Concentration, and Marine Aerosol Optical Depth in the Bellingshausen Sea. Journal of Geophysical Research D: Atmospheres, 2021, 126, e2021JD034737.	3.3	9
36	Ecosystem Service Supply in the Antarctic Peninsula Region: Evaluating an Expert-Based Assessment Approach and a Novel Seascape Data Model. Frontiers in Environmental Science, 2019, 7, .	3.3	8

#	Article	IF	Citations
37	Impacts of Zostera eelgrasses on microbial community structure in San Diego coastal waters. Elementa, 2019, 7, .	3.2	8
38	Machine Learning Predicts Biogeochemistry from Microbial Community Structure in a Complex Model System. Microbiology Spectrum, 2022, 10, e0190921.	3.0	7
39	Understanding Microbial Community Dynamics in Up-Flow Bioreactors to Improve Mitigation Strategies for Oil Souring. Frontiers in Microbiology, 2020, 11, 585943.	3.5	5
40	The Bioburden and Ionic Composition of Hypersaline Lake Ices: Novel Habitats on Earth and Their Astrobiological Implications. Astrobiology, 0, , .	3.0	5
41	Whole Community Metatranscriptomes and Lipidomes Reveal Diverse Responses Among Antarctic Phytoplankton to Changing Ice Conditions. Frontiers in Marine Science, 2021, 8, .	2.5	4
42	From microbial community structure to metabolic inference using paprica. STAR Protocols, 2021, 2, 101005.	1.2	4
43	Salty Environments: The importance of evaporites and brine environments as habitats and preservers of biosignatures. , 2021, 53, .		3
44	Detection of Sulfate-Reducing Bacteria as an Indicator for Successful Mitigation of Sulfide Production. Applied and Environmental Microbiology, 2021, 87, e0174821.	3.1	3
45	Extremophile enzyme optimization for low temperature and high salinity are fundamentally incompatible. Extremophiles, 2022, 26, 5.	2.3	3
46	Using empirical dynamic modeling to assess relationships between atmospheric trace gases and eukaryotic phytoplankton populations in coastal Southern California. Marine Chemistry, 2020, 227, 103896.	2.3	2
47	Making Sense of a Scent-Sensing Metaphor for Microbes and Environmental Predictions. MSystems, 2021, 6, e0099321.	3.8	1
48	Modeling polar marine ecosystem functions guided by bacterial physiological and taxonomic traits. Biogeosciences, 2022, 19, 117-136.	3.3	1
49	The Development and Deployment of a Programmable Water Sampling System Using an Autonomous Surface Vehicle. , 2021, , .		1
50	Editorial: Sea Ice: Bridging Spatial-Temporal Scales and Disciplines. Frontiers in Earth Science, 2020, 8, .	1.8	0
51	Diversity in action: Solutions for a more diverse and inclusive decade of planetary science and astrobiology. , 2021, 53, .		0
52	Leveraging Earth Hydrosphere Science in the Search for Life on Ocean Worlds. Oceanography, 2022, , .	1.0	0