Brendan P Burns

List of Publications by Year
in descending order

80	4,425	94433	110387
papers	citations	37 h-index	64 g-index

84	84	84	4863
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Advances in on-line drinking water quality monitoring and early warning systems. Water Research, 2011, 45, 741-747.	11.3	286
2	Diversity within cyanobacterial mat communities in variable salinity meltwater ponds of McMurdo Ice Shelf, Antarctica. Environmental Microbiology, 2005, 7, 519-529.	3.8	252
3	Identification and Characterization of Helicobacter pylori Genes Essential for Gastric Colonization. Journal of Experimental Medicine, 2003, 197, 813-822.	8.5	246
4	Microbial diversity of extant stromatolites in the hypersaline marine environment of Shark Bay, Australia. Environmental Microbiology, 2004, 6, 1096-1101.	3.8	225
5	Bacterial, archaeal and eukaryotic diversity of smooth and pustular microbial mat communities in the hypersaline lagoon of Shark Bay. Geobiology, 2009, 7, 82-96.	2.4	164
6	Microgravity Induces Pelvic Bone Loss through Osteoclastic Activity, Osteocytic Osteolysis, and Osteoblastic Cell Cycle Inhibition by CDKN1a/p21. PLoS ONE, 2013, 8, e61372.	2.5	148
7	Unravelling core microbial metabolisms in the hypersaline microbial mats of Shark Bay using high-throughput metagenomics. ISME Journal, 2016, 10, 183-196.	9.8	147
8	Phylogeography of the invasive cyanobacterium Cylindrospermopsis raciborskii. Molecular Ecology, 2002, 12, 133-140.	3.9	138
9	Detection and sequencing of the microcystin LR-degrading gene,mlrA, from new bacteria isolated from Japanese lakes. FEMS Microbiology Letters, 2003, 229, 271-276.	1.8	137
10	Niche differentiation of bacterial communities at a millimeter scale in Shark Bay microbial mats. Scientific Reports, 2015, 5, 15607.	3.3	137
11	Carotenoid Analysis of Halophilic Archaea by Resonance Raman Spectroscopy. Astrobiology, 2007, 7, 631-643.	3.0	132
12	Determining the specific microbial populations and their spatial distribution within the stromatolite ecosystem of Shark Bay. ISME Journal, 2009, 3, 383-396.	9.8	125
13	Bioastronautics: The Influence of Microgravity on Astronaut Health. Astrobiology, 2010, 10, 463-473.	3.0	115
14	Microgravity Reduces the Differentiation and Regenerative Potential of Embryonic Stem Cells. Stem Cells and Development, 2015, 24, 2605-2621.	2.1	94
15	Disentangling the drivers of functional complexity at the metagenomic level in Shark Bay microbial mat microbiomes. ISME Journal, 2018, 12, 2619-2639.	9.8	94
16	Dynamics of archaea at fine spatial scales in Shark Bay mat microbiomes. Scientific Reports, 2017, 7, 46160.	3.3	87
17	Quorum Sensing in Extreme Environments. Life, 2013, 3, 131-148.	2.4	80
18	Halococcus hamelinensis sp. nov., a novel halophilic archaeon isolated from stromatolites in Shark Bay, Australia. International Journal of Systematic and Evolutionary Microbiology, 2006, 56, 1323-1329.	1.7	73

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19	Mechanical unloading of bone in microgravity reduces mesenchymal and hematopoietic stem cell-mediated tissue regeneration. Stem Cell Research, 2014, 13, 181-201.	0.7	68
20	Microbial Diversity of Browning Peninsula, Eastern Antarctica Revealed Using Molecular and Cultivation Methods. Frontiers in Microbiology, 2017, 8, 591.	3.5	66
21	Asgard archaea: Diversity, function, and evolutionary implications in a range of microbiomes. AIMS Microbiology, 2019, 5, 48-61.	2.2	65
22	Interactions between intracellular Na+ levels and saxitoxin production in Cylindrospermopsis raciborskii T3. Microbiology (United Kingdom), 2004, 150, 455-461.	1.8	61
23	Molecular Identification of Cyanobacteria Associated with Stromatolites from Distinct Geographical Locations. Astrobiology, 2002, 2, 271-280.	3.0	59
24	Lipid biomarkers in Hamelin Pool microbial mats and stromatolites. Organic Geochemistry, 2010, 41, 1207-1218.	1.8	57
25	Optimized Rapid Amplification of cDNA Ends (RACE) for Mapping Bacterial mRNA Transcripts. BioTechniques, 2000, 28, 448-456.	1.8	56
26	Lipid biomarker analysis of cyanobacteria-dominated microbial mats in meltwater ponds on the McMurdo Ice Shelf, Antarctica. Organic Geochemistry, 2009, 40, 258-269.	1.8	52
27	The Entner-Doudoroff Pathway in Helicobacter pylori. Archives of Biochemistry and Biophysics, 1994, 312, 349-356.	3.0	51
28	Novel homologs of the multiple resistance regulator marA in antibiotic-contaminated environments. Water Research, 2008, 42, 4271-4280.	11.3	50
29	Untapped Resources: Biotechnological Potential of Peptides and Secondary Metabolites in Archaea. Archaea, 2015, 2015, 1-7.	2.3	50
30	Host specificity and phylogeography of the prochlorophyte Prochloron sp., an obligate symbiont in didemnid ascidians. Environmental Microbiology, 2007, 9, 890-899.	3.8	49
31	Haloferax elongans sp. nov. and Haloferax mucosum sp. nov., isolated from microbial mats from Hamelin Pool, Shark Bay, Australia. International Journal of Systematic and Evolutionary Microbiology, 2008, 58, 798-802.	1.7	46
32	Osmoadaptive Strategies of the ArchaeonHalococcus hamelinensisIsolated from a Hypersaline Stromatolite Environment. Astrobiology, 2011, 11, 529-536.	3.0	46
33	Lysis efficiency of standard DNA extraction methods for Halococcus spp. in an organic rich environment. Extremophiles, 2008, 12, 301-308.	2.3	43
34	Molecular Ecology of Hypersaline Microbial Mats: Current Insights and New Directions. Microorganisms, 2016, 4, 6.	3.6	43
35	Global Protein-Level Responses of Halobacterium salinarum NRC-1 to Prolonged Changes in External Sodium Chloride Concentrations. Journal of Proteome Research, 2009, 8, 2218-2225.	3.7	42
36	Discovery of an Abundance of Biosynthetic Gene Clusters in Shark Bay Microbial Mats. Frontiers in Microbiology, 2020, 11, 1950.	3.5	39

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37	Genetic potential for secondary metabolite production in stromatolite communities. FEMS Microbiology Letters, 2005, 243, 293-301.	1.8	38
38	Analysis of intergenic spacer region length polymorphisms to investigate the halophilic archaeal diversity of stromatolites and microbial mats. Extremophiles, 2007, 11, 203-210.	2.3	38
39	Modern analogues and the early history of microbial life. Precambrian Research, 2009, 173, 10-18.	2.7	38
40	A review of analytical methods for assessing the public health risk from microcystin in the aquatic environment. Journal of Water Supply: Research and Technology - AQUA, 2005, 54, 509-518.	1.4	36
41	Microbial dark matter filling the niche in hypersaline microbial mats. Microbiome, 2020, 8, 135.	11.1	35
42	Extremophilic adaptations and biotechnological applications in diverse environments. AIMS Microbiology, 2016, 2, 251-261.	2.2	34
43	Identification of an Na + -Dependent Transporter Associated with Saxitoxin-Producing Strains of the Cyanobacterium Anabaena circinalis. Applied and Environmental Microbiology, 2004, 70, 4711-4719.	3.1	33
44	Investigations into the taxonomy, toxicity and ecology of benthic cyanobacterial accumulations in Myall Lake, Australia. Marine and Freshwater Research, 2005, 56, 45.	1.3	33
45	Characterisation of glucose transport inHelicobacter pylori. Biochimica Et Biophysica Acta - General Subjects, 1995, 1244, 269-276.	2.4	32
46	Viral Communities of Shark Bay Modern Stromatolites. Frontiers in Microbiology, 2018, 9, 1223.	3.5	32
47	New Approaches to Detect Biosynthetic Gene Clusters in the Environment. Medicines (Basel,) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.4	30
48	Identification and regulation of novel compatible solutes from hypersaline stromatolite-associated cyanobacteria. Archives of Microbiology, 2010, 192, 1031-1038.	2.2	29
49	Bioinformatic, phylogenetic and chemical analysis of the UVâ€absorbing compounds scytonemin and mycosporineâ€like amino acids from the microbial mat communities of Shark Bay, Australia. Environmental Microbiology, 2019, 21, 702-715.	3.8	27
50	Between a Rock and a Soft Place: The Role of Viruses in Lithification of Modern Microbial Mats. Trends in Microbiology, 2021, 29, 204-213.	7.7	26
51	Modern arsenotrophic microbial mats provide an analogue for life in the anoxic Archean. Communications Earth & Environment, 2020, 1, .	6.8	24
52	Genome Sequence of the Halophilic Archaeon Halococcus hamelinensis. Journal of Bacteriology, 2012, 194, 2100-2101.	2.2	23
53	Adaptation, Ecology, and Evolution of the Halophilic Stromatolite ArchaeonHalococcus hamelinensisInferred through Genome Analyses. Archaea, 2015, 2015, 1-11.	2.3	23
54	Detection and characterization of N -acyl- l -homoserine lactones using GFP-based biosensors in conjunction with thin-layer chromatography. Journal of Microbiological Methods, 2015, 118, 164-167.	1.6	20

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55	Functional Gene Expression in Shark Bay Hypersaline Microbial Mats: Adaptive Responses. Frontiers in Microbiology, 2020, 11, 560336.	3.5	20
56	Molecular assessment of UVC radiation-induced DNA damage repair in the stromatolitic halophilic archaeon, Halococcus hamelinensis. Journal of Photochemistry and Photobiology B: Biology, 2011, 102, 140-145.	3.8	18
57	Correlation of bio-optical properties with photosynthetic pigment and microorganism distribution in microbial mats from Hamelin Pool, Australia. FEMS Microbiology Ecology, 2019, 95, .	2.7	18
58	The Vulnerability of Microbial Ecosystems in A Changing Climate: Potential Impact in Shark Bay. Life, 2019, 9, 71.	2.4	16
59	Comparative gene expression of PSP-toxin producing and non-toxic Anabaena circinalis strains. Environment International, 2006, 32, 743-748.	10.0	15
60	On the Response of Halophilic Archaea to Space Conditions. Life, 2014, 4, 66-76.	2.4	15
61	The Helicobacter pylori pyrB Gene Encoding Aspartate Carbamoyltransferase Is Essential for Bacterial Survival. Archives of Biochemistry and Biophysics, 2000, 380, 78-84.	3.0	14
62	In SituProperties ofHelicobacter pyloriAspartate Carbamoyltransferase. Archives of Biochemistry and Biophysics, 1997, 347, 119-125.	3.0	13
63	Molecular Detection of Genes Responsible for Cyanobacterial Toxin Production in the Genera <I>Microcystis, <I>Nodularia, and <I>Cylindrospermopsis. , 2004, 268, 213-222.		13
64	A Novel Mechanism for Resistance to the Antimetabolite N -Phosphonoacetyl- <scp>l</scp> -Aspartate by Helicobacter pylori. Journal of Bacteriology, 1998, 180, 5574-5579.	2.2	13
65	Isolation of novel quorum-sensing active bacteria from microbial mats in Shark Bay Australia. FEMS Microbiology Ecology, 2019, 95, .	2.7	12
66	Methods for the measurement of a bacterial enzyme activity in cell lysates and extracts. Biological Procedures Online, 1998, 1, 17-26.	2.9	11
67	Quorum Sensing in Archaea: Recent Advances and Emerging Directions. , 2017, , 119-132.		11
68	Communication within East Antarctic Soil Bacteria. Applied and Environmental Microbiology, 2019, 86, .	3.1	11
69	Archaea join the conversation: detection of AHL-like activity across a range of archaeal isolates. FEMS Microbiology Letters, 2020, 367, .	1.8	11
70	Absence of detectable levels of the cyanobacterial toxin (microcystin-LR) carry-over into milk. Toxicon, 2002, 40, 1173-1180.	1.6	10
71	Genome-resolved metagenomics provides insights into the functional complexity of microbial mats in Blue Holes, Shark Bay. FEMS Microbiology Ecology, 2022, 98, .	2.7	10
72	Use of ion-channel modulating agents to study cyanobacterial Na+-K+ fluxes. Biological Procedures Online, 2004, 6, 137-143.	2.9	9

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73	Eukarya the chimera: eukaryotes, a secondary innovation of the two domains of life?. Trends in Microbiology, 2021, , .	7.7	6
74	Characterization of Arginine Transport in Helicobacter pylori. Helicobacter, 2003, 8, 245-251.	3.5	3
75	A Cyanobacteria Enriched Layer of Shark Bay Stromatolites Reveals a New Acaryochloris Strain Living in Near Infrared Light. Microorganisms, 2022, 10, 1035.	3.6	1
76	Stromatolites as a Resource for Novel Natural Products. Origins of Life and Evolution of Biospheres, 2007, 36, 623-624.	1.9	0
77	Session 18. Functional Complexity of Modern Stromatolites and Microbial Mats. Astrobiology, 2008, 8, 378-383.	3.0	0
78	Adsorption and Biodegradation Characteristics of Musty Odorous Compounds, 2-Methylisoborneol and Geosmin. Japanese Journal of Water Treatment Biology, 2006, 42, 85-91.	0.1	0
79	Molecular Approaches to Studying Living Stromatolites. Lecture Notes in Earth Sciences, 2011, , 91-100.	0.5	0
80	Metabolite Transport. , 0, , 207-217.		0