Brendan P Burns

List of Publications by Year
in descending order

80 papers	4,425 citations	94433 37 h-index	110387 64 g-index
84 all docs	84 docs citations	84 times ranked	4863 citing authors

#	Article	IF	Citations
1	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
2	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
3	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
4	Eukarya the chimera: eukaryotes, a secondary innovation of the two domains of life?. Trends in Microbiology, 2021, , .	7.7	6
5	Discovery of an Abundance of Biosynthetic Gene Clusters in Shark Bay Microbial Mats. Frontiers in Microbiology, 2020, 11, 1950.	3.5	39
6	Functional Gene Expression in Shark Bay Hypersaline Microbial Mats: Adaptive Responses. Frontiers in Microbiology, 2020, 11, 560336.	3.5	20
7	Archaea join the conversation: detection of AHL-like activity across a range of archaeal isolates. FEMS Microbiology Letters, 2020, 367, .	1.8	11
8	Modern arsenotrophic microbial mats provide an analogue for life in the anoxic Archean. Communications Earth & Environment, 2020, 1, .	6.8	24
9	Microbial dark matter filling the niche in hypersaline microbial mats. Microbiome, 2020, 8, 135.	11.1	35
10	Communication within East Antarctic Soil Bacteria. Applied and Environmental Microbiology, 2019, 86, .	3.1	11
11	The Vulnerability of Microbial Ecosystems in A Changing Climate: Potential Impact in Shark Bay. Life, 2019, 9, 71.	2.4	16
12	New Approaches to Detect Biosynthetic Gene Clusters in the Environment. Medicines (Basel,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302	1.4	30
13	Isolation of novel quorum-sensing active bacteria from microbial mats in Shark Bay Australia. FEMS Microbiology Ecology, 2019, 95, .	2.7	12
14	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
15	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
16	Asgard archaea: Diversity, function, and evolutionary implications in a range of microbiomes. AIMS Microbiology, 2019, 5, 48-61.	2.2	65
17	Viral Communities of Shark Bay Modern Stromatolites. Frontiers in Microbiology, 2018, 9, 1223.	3.5	32
18	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

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19	Quorum Sensing in Archaea: Recent Advances and Emerging Directions. , 2017, , 119-132.		11
20	Dynamics of archaea at fine spatial scales in Shark Bay mat microbiomes. Scientific Reports, 2017, 7, 46160.	3.3	87
21	Microbial Diversity of Browning Peninsula, Eastern Antarctica Revealed Using Molecular and Cultivation Methods. Frontiers in Microbiology, 2017, 8, 591.	3.5	66
22	Molecular Ecology of Hypersaline Microbial Mats: Current Insights and New Directions. Microorganisms, 2016, 4, 6.	3.6	43
23	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
24	Extremophilic adaptations and biotechnological applications in diverse environments. AIMS Microbiology, 2016, 2, 251-261.	2.2	34
25	Niche differentiation of bacterial communities at a millimeter scale in Shark Bay microbial mats. Scientific Reports, 2015, 5, 15607.	3.3	137
26	Untapped Resources: Biotechnological Potential of Peptides and Secondary Metabolites in Archaea. Archaea, 2015, 2015, 1-7.	2.3	50
27	Adaptation, Ecology, and Evolution of the Halophilic Stromatolite Archaeon<i>Halococcus hamelinensis</i>Inferred through Genome Analyses. Archaea, 2015, 2015, 1-11.	2.3	23
28	Microgravity Reduces the Differentiation and Regenerative Potential of Embryonic Stem Cells. Stem Cells and Development, 2015, 24, 2605-2621.	2.1	94
29	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
30	On the Response of Halophilic Archaea to Space Conditions. Life, 2014, 4, 66-76.	2.4	15
31	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
32	Quorum Sensing in Extreme Environments. Life, 2013, 3, 131-148.	2.4	80
33	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
34	Genome Sequence of the Halophilic Archaeon Halococcus hamelinensis. Journal of Bacteriology, 2012, 194, 2100-2101.	2.2	23
35	Advances in on-line drinking water quality monitoring and early warning systems. Water Research, 2011, 45, 741-747.	11.3	286
36	Osmoadaptive Strategies of the Archaeon<i>Halococcus hamelinensis</i>Isolated from a Hypersaline Stromatolite Environment. Astrobiology, 2011, 11, 529-536.	3.0	46

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37	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
38	Molecular Approaches to Studying Living Stromatolites. Lecture Notes in Earth Sciences, 2011, , 91-100.	0.5	0
39	Identification and regulation of novel compatible solutes from hypersaline stromatolite-associated cyanobacteria. Archives of Microbiology, 2010, 192, 1031-1038.	2.2	29
40	Bioastronautics: The Influence of Microgravity on Astronaut Health. Astrobiology, 2010, 10, 463-473.	3.0	115
41	Lipid biomarkers in Hamelin Pool microbial mats and stromatolites. Organic Geochemistry, 2010, 41, 1207-1218.	1.8	57
42	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
43	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
44	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
45	Modern analogues and the early history of microbial life. Precambrian Research, 2009, 173, 10-18.	2.7	38
46	Global Protein-Level Responses of <i>Halobacterium salinarum</i> NRC-1 to Prolonged Changes in External Sodium Chloride Concentrations. Journal of Proteome Research, 2009, 8, 2218-2225.	3.7	42
47	Lysis efficiency of standard DNA extraction methods for Halococcus spp. in an organic rich environment. Extremophiles, 2008, 12, 301-308.	2.3	43
48	Novel homologs of the multiple resistance regulator marA in antibiotic-contaminated environments. Water Research, 2008, 42, 4271-4280.	11.3	50
49	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
50	Session 18. Functional Complexity of Modern Stromatolites and Microbial Mats. Astrobiology, 2008, 8, 378-383.	3.0	0
51	Carotenoid Analysis of Halophilic Archaea by Resonance Raman Spectroscopy. Astrobiology, 2007, 7, 631-643.	3.0	132
52	Host specificity and phylogeography of the prochlorophyte Prochloron sp., an obligate symbiont in didemnid ascidians. Environmental Microbiology, 2007, 9, 890-899.	3.8	49
53	Stromatolites as a Resource for Novel Natural Products. Origins of Life and Evolution of Biospheres, 2007, 36, 623-624.	1.9	0
54	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

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55	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
56	Comparative gene expression of PSP-toxin producing and non-toxic Anabaena circinalis strains. Environment International, 2006, 32, 743-748.	10.0	15
57	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
58	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
59	Genetic potential for secondary metabolite production in stromatolite communities. FEMS Microbiology Letters, 2005, 243, 293-301.	1.8	38
60	Diversity within cyanobacterial mat communities in variable salinity meltwater ponds of McMurdo Ice Shelf, Antarctica. Environmental Microbiology, 2005, 7, 519-529.	3.8	252
61	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
62	Interactions between intracellular Na+ levels and saxitoxin production in Cylindrospermopsis raciborskii T3. Microbiology (United Kingdom), 2004, 150, 455-461.	1.8	61
63	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
64	Microbial diversity of extant stromatolites in the hypersaline marine environment of Shark Bay, Australia. Environmental Microbiology, 2004, 6, 1096-1101.	3.8	225
65	Use of ion-channel modulating agents to study cyanobacterial Na+-K+ fluxes. Biological Procedures Online, 2004, 6, 137-143.	2.9	9
66	Molecular Detection of Genes Responsible for Cyanobacterial Toxin Production in the Genera <I>Microcystis</i>, <I>Nodularia</i>, and <I>Cylindrospermopsis</i>. , 2004, 268, 213-222.		13
67	Characterization of Arginine Transport in Helicobacter pylori. Helicobacter, 2003, 8, 245-251.	3.5	3
68	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
69	Identification and Characterization of <i>Helicobacter pylori</i> Genes Essential for Gastric Colonization. Journal of Experimental Medicine, 2003, 197, 813-822.	8.5	246
70	Molecular Identification of Cyanobacteria Associated with Stromatolites from Distinct Geographical Locations. Astrobiology, 2002, 2, 271-280.	3.0	59
71	Absence of detectable levels of the cyanobacterial toxin (microcystin-LR) carry-over into milk. Toxicon, 2002, 40, 1173-1180.	1.6	10
72	Phylogeography of the invasive cyanobacterium Cylindrospermopsis raciborskii. Molecular Ecology, 2002, 12, 133-140.	3.9	138

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73	Optimized Rapid Amplification of cDNA Ends (RACE) for Mapping Bacterial mRNA Transcripts. BioTechniques, 2000, 28, 448-456.	1.8	56
74	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
75	Methods for the measurement of a bacterial enzyme activity in cell lysates and extracts. Biological Procedures Online, 1998, 1, 17-26.	2.9	11
76	A Novel Mechanism for Resistance to the Antimetabolite N -Phosphonoacetyl- <scp>l</scp> -Aspartate by <i>Helicobacter pylori</i>. Journal of Bacteriology, 1998, 180, 5574-5579.	2.2	13
77	In SituProperties ofHelicobacter pyloriAspartate Carbamoyltransferase. Archives of Biochemistry and Biophysics, 1997, 347, 119-125.	3.0	13
78	Characterisation of glucose transport inHelicobacter pylori. Biochimica Et Biophysica Acta - General Subjects, 1995, 1244, 269-276.	2.4	32
79	The Entner-Doudoroff Pathway in Helicobacter pylori. Archives of Biochemistry and Biophysics, 1994, 312, 349-356.	3.0	51
80	Metabolite Transport. , 0, , 207-217.		0