Vernon R Phoenix

List of Publications by Year
in descending order

51 papers	5,000 citations	147801 31 h-index	175258 52 g-index
53 all docs	53 docs citations	53 times ranked	5193 citing authors

#	Article	IF	Citations
1	Atmospheric transport and deposition of microplastics in a remote mountain catchment. Nature Geoscience, 2019, 12, 339-344.	12.9	1,193
2	Characterization of Metalâ"Cyanobacteria Sorption Reactions:Â A Combined Macroscopic and Infrared Spectroscopic Investigation. Environmental Science & Technology, 2004, 38, 775-782.	10.0	347
3	Microbial-silica interactions in Icelandic hot spring sinter: possible analogues for some Precambrian siliceous stromatolites. Sedimentology, 2001, 48, 415-433.	3.1	237
4	Kinetics of calcite precipitation induced by ureolytic bacteria at 10 to 20Â°C in artificial groundwater. Geochimica Et Cosmochimica Acta, 2004, 68, 1701-1710.	3.9	226
5	Examination of the ocean as a source for atmospheric microplastics. PLoS ONE, 2020, 15, e0232746.	2.5	198
6	A Field and Modeling Study of Fractured Rock Permeability Reduction Using Microbially Induced Calcite Precipitation. Environmental Science & Technology, 2013, 47, 13637-13643.	10.0	178
7	Molecular characterization of cyanobacterial silicification using synchrotron infrared micro-spectroscopy. Geochimica Et Cosmochimica Acta, 2004, 68, 729-741.	3.9	156
8	Microscopy and elemental analysis characterisation of microplastics in sediment of a freshwater urban river in Scotland, UK. Environmental Science and Pollution Research, 2019, 26, 12491-12504.	5.3	154
9	Comparison of rates of ureolysis between Sporosarcina pasteurii and an indigenous groundwater community under conditions required to precipitate large volumes of calcite. Geochimica Et Cosmochimica Acta, 2011, 75, 3290-3301.	3.9	152
10	The effect of cyanobacteria on silica precipitation at neutral pH: implications for bacterial silicification in geothermal hot springs. Chemical Geology, 2003, 199, 83-90.	3.3	150
11	Cyanobacterial viability during hydrothermal biomineralisation. Chemical Geology, 2000, 169, 329-338.	3.3	142
12	The Microbial Role in Hot Spring Silicification. Ambio, 2004, 33, 552-558.	5.5	131
13	The dynamics of cyanobacterial silicification: an infrared micro-spectroscopic investigation. Geochimica Et Cosmochimica Acta, 2004, 68, 743-757.	3.9	124
14	Characterization and Implications of the Cell Surface Reactivity of Calothrix sp. Strain KC97. Applied and Environmental Microbiology, 2002, 68, 4827-4834.	3.1	121
15	Ocean acidification impacts mussel control on biomineralisation. Scientific Reports, 2014, 4, 6218.	3.3	119
16	Chilean high-altitude hot-spring sinters: a model system for UV screening mechanisms by early Precambrian cyanobacteria. Geobiology, 2006, 4, 15-28.	2.4	112
17	Microbially mediated plugging of porous media and the impact of differing injection strategies. Ecological Engineering, 2012, 42, 270-278.	3.6	109
18	Role of biomineralization as an ultraviolet shield: Implications for Archean life. Geology, 2001, 29, 823.	4.4	103

#	Article	IF	Citations
19	Micro- and Nanoplastic Pollution of Freshwater and Wastewater Treatment Systems. Springer Science Reviews, 2017, 5, 19-30.	1.3	102
20	Controls on the rate of ureolysis and the morphology of carbonate precipitated by S. Pasteurii biofilms and limits due to bacterial encapsulation. Ecological Engineering, 2012, 41, 32-40.	3.6	94
21	Ocean acidification reduces the crystallographic control in juvenile mussel shells. Journal of Structural Biology, 2014, 188, 39-45.	2.8	81
22	Ocean acidification alters the material properties of Mytilus edulis shells. Journal of the Royal Society Interface, 2015, 12, 20141227.	3.4	79
23	Erosion of biofilm-bound fluvial sediments. Nature Geoscience, 2013, 6, 770-774.	12.9	65
24	Experimental study of iron and silica immobilization by bacteria in mixed Fe-Si systems: implications for microbial silicification in hot springs. Canadian Journal of Earth Sciences, 2003, 40, 1669-1678.	1.3	59
25	Biomineral shell formation under ocean acidification: a shift from order to chaos. Scientific Reports, 2016, 6, 21076.	3.3	56
26	Ocean acidification and temperature increase impact mussel shell shape and thickness: problematic for protection?. Ecology and Evolution, 2015, 5, 4875-4884.	1.9	55
27	Benefits of bacterial biomineralization. Geobiology, 2008, 6, 303-308.	2.4	54
28	Microscale Analysis of Fractured Rock Sealed With Microbially Induced CaCO₃ Precipitation: Influence on Hydraulic and Mechanical Performance. Water Resources Research, 2018, 54, 8295-8308.	4.2	42
29	Transport of Sporosarcina pasteurii in sandstone and its significance for subsurface engineering technologies. Applied Geochemistry, 2014, 42, 38-44.	3.0	40
30	Bacterial S-layer preservation and rare arsenicâ€“antimonyâ€“sulphide bioimmobilization in siliceous sediments from Champagne Pool hot spring, Waiotapu, New Zealand. Journal of the Geological Society, 2005, 162, 323-331.	2.1	35
31	Magnetic Resonance Imaging of Structure, Diffusivity, and Copper Immobilization in a Phototrophic Biofilm. Applied and Environmental Microbiology, 2008, 74, 4934-4943.	3.1	35
32	Monitoring bacterially induced calcite precipitation in porous media using magnetic resonance imaging and flow measurements. Journal of Contaminant Hydrology, 2013, 152, 35-43.	3.3	26
33	Bacterial biomineralization: Where to from here?. Geobiology, 2008, 6, 298-302.	2.4	20
34	Biosilicification: the role of cyanobacteria in silica sinter deposition. , 0, , 131-150.		18
35	Application of Paramagnetically Tagged Molecules for Magnetic Resonance Imaging of Biofilm Mass Transport Processes. Applied and Environmental Microbiology, 2010, 76, 4027-4036.	3.1	16
36	Investigation of Nanoparticle Transport Inside Coarse-Grained Geological Media Using Magnetic Resonance Imaging. Environmental Science & Technology, 2012, 46, 360-366.	10.0	15

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37	Treatment of heavy metals by iron oxide coated and natural gravel media in Sustainable urban Drainage Systems. Water Science and Technology, 2013, 68, 674-680.	2.5	15
38	Optically Trapped Bacteria Pairs Reveal Discrete Motile Response to Control Aggregation upon Cellâ€“Cell Approach. Current Microbiology, 2014, 69, 669-674.	2.2	15
39	Nanoparticle transport in saturated porous medium using magnetic resonance imaging. Chemical Engineering Journal, 2015, 266, 156-162.	12.7	14
40	Influence of Lipopolysaccharide on the Surface Proton-Binding Behavior of Shewanella spp.. Current Microbiology, 2007, 55, 152-157.	2.2	13
41	Magnetic Resonance Imaging of Mass Transport and Structure Inside a Phototrophic Biofilm. Current Microbiology, 2013, 66, 456-461.	2.2	12
42	Impact of growth environment and physiological state on metal immobilization byPseudomonas aeruginosaPAO1. Canadian Journal of Microbiology, 2010, 56, 527-538.	1.7	11
43	Influence of biofilms on heavy metal immobilization in sustainable urban drainage systems (SuDS). Environmental Technology (United Kingdom), 2015, 36, 2803-2814.	2.2	10
44	Magnetic resonance imaging (MRI) of heavy-metal transport and fate in an artificial biofilm. Mineralogical Magazine, 2008, 72, 483-486.	1.4	9
45	Accurate phase-shift velocimetry in rock. Journal of Magnetic Resonance, 2016, 267, 43-53.	2.1	9
46	Reduction of Environmental Impacts Due to Using Permeable Pavements to Harvest Stormwater. Water (Switzerland), 2020, 12, 2840.	2.7	9
47	Characterization of nanoparticle transport through quartz and dolomite gravels by magnetic resonance imaging. International Journal of Environmental Science and Technology, 2015, 12, 3373-3384.	3.5	7
48	The Microbial Role in Hot Spring Silicification. Ambio, 2004, 33, 552.	5.5	7
49	Immobilization of nanoparticles by occlusion into microbial calcite. Chemical Geology, 2017, 453, 72-79.	3.3	4
50	The effect of displacement distribution asymmetry on the accuracy of phase-shift velocimetry in porous media. Microporous and Mesoporous Materials, 2018, 269, 130-133.	4.4	3
51	Metagenomic Sequencing Unravels Gene Fragments with Phylogenetic Signatures of O2-Tolerant NiFe Membrane-Bound Hydrogenases in Lacustrine Sediment. Current Microbiology, 2015, 71, 296-302.	2.2	1