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	Reduction of Environmental Impacts Due to Using Permeable Pavements to Harvest Stormwater. Water (Switzerland), 2020, 12, 2840.	2.7	9
2	Examination of the ocean as a source for atmospheric microplastics. PLoS ONE, 2020, 15, e0232746.	2.5	198
3	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
4	Atmospheric transport and deposition of microplastics in a remote mountain catchment. Nature Geoscience, 2019, 12, 339-344.	12.9	1,193
5	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
6	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
7	Immobilization of nanoparticles by occlusion into microbial calcite. Chemical Geology, 2017, 453, 72-79.	3.3	4
8	Micro- and Nanoplastic Pollution of Freshwater and Wastewater Treatment Systems. Springer Science Reviews, 2017, 5, 19-30.	1.3	102
9	Accurate phase-shift velocimetry in rock. Journal of Magnetic Resonance, 2016, 267, 43-53.	2.1	9
10	Biomineral shell formation under ocean acidification: a shift from order to chaos. Scientific Reports, 2016, 6, 21076.	3.3	56
11	Influence of biofilms on heavy metal immobilization in sustainable urban drainage systems (SuDS). Environmental Technology (United Kingdom), 2015, 36, 2803-2814.	2.2	10
12	Ocean acidification and temperature increase impact mussel shell shape and thickness: problematic for protection?. Ecology and Evolution, 2015, 5, 4875-4884.	1.9	55
13	Nanoparticle transport in saturated porous medium using magnetic resonance imaging. Chemical Engineering Journal, 2015, 266, 156-162.	12.7	14
14	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
15	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
16	Ocean acidification alters the material properties of Mytilus edulis shells. Journal of the Royal Society Interface, 2015, 12, 20141227.	3.4	79
17	Optically Trapped Bacteria Pairs Reveal Discrete Motile Response to Control Aggregation upon Cellâ€“Cell Approach. Current Microbiology, 2014, 69, 669-674.	2.2	15
18	Transport of Sporosarcina pasteurii in sandstone and its significance for subsurface engineering technologies. Applied Geochemistry, 2014, 42, 38-44.	3.0	40

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19	Ocean acidification reduces the crystallographic control in juvenile mussel shells. Journal of Structural Biology, 2014, 188, 39-45.	2.8	81
20	Ocean acidification impacts mussel control on biomineralisation. Scientific Reports, 2014, 4, 6218.	3.3	119
21	Magnetic Resonance Imaging of Mass Transport and Structure Inside a Phototrophic Biofilm. Current Microbiology, 2013, 66, 456-461.	2.2	12
22	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
23	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
24	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
25	Erosion of biofilm-bound fluvial sediments. Nature Geoscience, 2013, 6, 770-774.	12.9	65
26	Investigation of Nanoparticle Transport Inside Coarse-Grained Geological Media Using Magnetic Resonance Imaging. Environmental Science & Technology, 2012, 46, 360-366.	10.0	15
27	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
28	Microbially mediated plugging of porous media and the impact of differing injection strategies. Ecological Engineering, 2012, 42, 270-278.	3.6	109
29	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
30	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
31	Impact of growth environment and physiological state on metal immobilization byPseudomonas aeruginosaPAO1. Canadian Journal of Microbiology, 2010, 56, 527-538.	1.7	11
32	Benefits of bacterial biomineralization. Geobiology, 2008, 6, 303-308.	2.4	54
33	Bacterial biomineralization: Where to from here?. Geobiology, 2008, 6, 298-302.	2.4	20
34	Magnetic Resonance Imaging of Structure, Diffusivity, and Copper Immobilization in a Phototrophic Biofilm. Applied and Environmental Microbiology, 2008, 74, 4934-4943.	3.1	35
35	Magnetic resonance imaging (MRI) of heavy-metal transport and fate in an artificial biofilm. Mineralogical Magazine, 2008, 72, 483-486.	1.4	9
36	Influence of Lipopolysaccharide on the Surface Proton-Binding Behavior of Shewanella spp.. Current Microbiology, 2007, 55, 152-157.	2.2	13

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37	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
38	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
39	The Microbial Role in Hot Spring Silicification. Ambio, 2004, 33, 552-558.	5.5	131
40	Characterization of Metalâ˜Cyanobacteria Sorption Reactions:Â A Combined Macroscopic and Infrared Spectroscopic Investigation. Environmental Science & Technology, 2004, 38, 775-782.	10.0	347
41	The dynamics of cyanobacterial silicification: an infrared micro-spectroscopic investigation. Geochimica Et Cosmochimica Acta, 2004, 68, 743-757.	3.9	124
42	Molecular characterization of cyanobacterial silicification using synchrotron infrared micro-spectroscopy. Geochimica Et Cosmochimica Acta, 2004, 68, 729-741.	3.9	156
43	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
44	The Microbial Role in Hot Spring Silicification. Ambio, 2004, 33, 552.	5.5	7
45	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
46	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
47	Characterization and Implications of the Cell Surface Reactivity of Calothrix sp. Strain KC97. Applied and Environmental Microbiology, 2002, 68, 4827-4834.	3.1	121
48	Microbial-silica interactions in Icelandic hot spring sinter: possible analogues for some Precambrian siliceous stromatolites. Sedimentology, 2001, 48, 415-433.	3.1	237
49	Role of biomineralization as an ultraviolet shield: Implications for Archean life. Geology, 2001, 29, 823.	4.4	103
50	Cyanobacterial viability during hydrothermal biomineralisation. Chemical Geology, 2000, 169, 329-338.	3.3	142
51	Biosilicification: the role of cyanobacteria in silica sinter deposition. , 0, , 131-150.		18