Gordon G Southam

List of Publications by Year in descending order

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227 papers

12,308 citations

28274 55 h-index 101 g-index

234 all docs

234 docs citations

234 times ranked

10485 citing authors

#	Article	IF	CITATIONS
1	Strategising the bioremediation of Brazilian iron ore mines. Critical Reviews in Environmental Science and Technology, 2022, 52, 2749-2771.	12.8	7
2	Evaluation of operating conditions on sulfate reduction from acidic wastewater in a fixed-bed bioreactor. Minerals Engineering, 2022, 177, 107370.	4.3	6
3	Preservation of Terrestrial Microorganisms and Organics Within Alteration Products of Chondritic Meteorites from the Nullarbor Plain, Australia. Astrobiology, 2022, 22, 399-415.	3.0	2
4	Predicted CO2 water rock reactions in naturally altered CO2 storage reservoir sandstones, with interbedded cemented and coaly mudstone seals. International Journal of Coal Geology, 2022, 253, 103966.	5 . 0	19
5	Review on metal extraction technologies suitable for critical metal recovery from mining and processing wastes. Minerals Engineering, 2022, 182, 107537.	4.3	38
6	Role of the substrate on Ni inhibition in biological sulfate reduction. Journal of Environmental Management, 2022, 316, 115216.	7.8	0
7	Enhanced metal recovery by efficient agglomeration of precipitates in an up-flow fixed-bed bioreactor. Chemical Engineering Journal, 2021, 416, 127662.	12.7	7
8	Nickel complexation as an innovative approach for nickel-cobalt selective recovery using sulfate-reducing bacteria. Journal of Hazardous Materials, 2021, 402, 123506.	12.4	16
9	Titanium mobility preserved in association with microfossils in an iron-rich duricrust capping an iron ore deposit. Chemical Geology, 2021, 559, 119955.	3.3	2
10	Carbon accounting of mined landscapes, and deployment of a geochemical treatment system for enhanced weathering at Woodsreef Chrysotile Mine, NSW, Australia. Journal of Geochemical Exploration, 2021, 220, 106655.	3.2	5
11	Toward Closing a Loophole: Recovering Rare Earth Elements from Uranium Metallurgical Process Tailings. Jom, 2021, 73, 39-53.	1.9	16
12	Biogeochemical formation of metalliferous laminations in surficial environments. Mineralogical Magazine, 2021, 85, 49-67.	1.4	2
13	Rhizosphere Drives Biotite-Like Mineral Weathering and Secondary Fe–Si Mineral Formation in Fe Ore Tailings. ACS Earth and Space Chemistry, 2021, 5, 618-631.	2.7	16
14	Alluvial gold in the Bétaré Oya drainage system, east Cameroon. Journal of Sedimentary Environments, 2021, 6, 201-212.	1.5	7
15	Textures and mineralogy of residual supergene copper silicates in oxidised overburden. Minerals Engineering, 2021, 163, 106775.	4.3	0
16	Acidophilic Iron- and Sulfur-Oxidizing Bacteria, <i>Acidithiobacillus ferrooxidans</i> , Drives Alkaline pH Neutralization and Mineral Weathering in Fe Ore Tailings. Environmental Science & Eamp; Technology, 2021, 55, 8020-8034.	10.0	24
17	Bioaugmentation with Acidithiobacillus species accelerates mineral weathering and formation of secondary mineral cements for hardpan development in sulfidic Pb-Zn tailings. Journal of Hazardous Materials, 2021, 411, 124988.	12.4	13
18	Ferrugination of biocrusts grown on crushed ferricrete: Potential for slope stabilisation. Ore Geology Reviews, 2021, 135, 104239.	2.7	3

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19	Biologically facilitated precipitation of metals in low-Fe waters at the sulphidic Mount Chalmers mine, Queensland, Australia. Ore Geology Reviews, 2021, 136, 104238.	2.7	4
20	Chemodiversity of Dissolved Organic Matter and Its Molecular Changes Driven by Rhizosphere Activities in Fe Ore Tailings Undergoing Eco-Engineered Pedogenesis. Environmental Science & Emp; Technology, 2021, 55, 13045-13060.	10.0	11
21	Rhizosphere modifications of iron-rich minerals and forms of heavy metals encapsulated in sulfidic tailings hardpan. Journal of Hazardous Materials, 2020, 384, 121444.	12.4	18
22	Biogeochemical cycling of iron oxides in the rhizosphere of plants grown on ferruginous duricrust (canga). Science of the Total Environment, 2020, 713, 136637.	8.0	16
23	Eukaryotic Colonization of Micrometer-Scale Cracks in Rocks: A "Microfluidics―Experiment Using Naturally Weathered Meteorites from the Nullarbor Plain, Australia. Astrobiology, 2020, 20, 364-374.	3.0	1
24	Biogeochemical cycling of iron: Implications for biocementation and slope stabilisation. Science of the Total Environment, 2020, 707, 136128.	8.0	20
25	A widely distributed hydrogenase oxidises atmospheric H2 during bacterial growth. ISME Journal, 2020, 14, 2649-2658.	9.8	41
26	The influence of metal mobility on resource potential in circumneutral pH iron-rich copper mine waste rocks. Journal of Geochemical Exploration, 2020, 219, 106632.	3.2	7
27	Biocement stabilization of an experimental-scale artificial slope and the reformation of iron-rich crusts. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18347-18354.	7.1	10
28	Accelerating microbial iron cycling promotes reâ€ementation of surface crusts in iron ore regions. Microbial Biotechnology, 2020, 13, 1960-1971.	4.2	10
29	A Column Leaching Model of Low-Grade Chalcopyrite Ore: Mineral Preferences and Chemical Reactivity. Minerals (Basel, Switzerland), 2020, 10, 1132.	2.0	1
30	Evaluation of Dispersed Alkaline Substrate and Diffusive Exchange System Technologies for the Passive Treatment of Copper Mining Acid Drainage. Water (Switzerland), 2020, 12, 854.	2.7	8
31	Biosignatures Associated with Freshwater Microbialites. Life, 2020, 10, 66.	2.4	1
32	Experimental simulations of bacterially-mediated magnetite oxidation and observations on ferricrete formation at the Salobo IOCG mine, Brazil. Applied Geochemistry, 2020, 118, 104628.	3.0	3
33	Characterisation of iron oxide encrusted microbial fossils. Scientific Reports, 2020, 10, 9889.	3.3	11
34	Biochemical synthesis of palladium nanoparticles: The influence of chemical fixatives used in electron microscopy on nanoparticle formation and catalytic performance. Journal of Hazardous Materials, 2020, 398, 122945.	12.4	24
35	Accelerating Mineral Carbonation in Ultramafic Mine Tailings via Direct CO2 Reaction and Heap Leaching with Potential for Base Metal Enrichment and Recovery. Economic Geology, 2020, 115, 303-323.	3.8	45
36	Contribution of bacterially-induced oxidation of Fe-silicates in iron-rich ore to laterite formation, Salobo IOCG mine, Brazil. Chemical Geology, 2020, 539, 119499.	3.3	8

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37	Microbial weathering signatures in lateritic ferruginous duricrusts. Earth and Planetary Science Letters, 2020, 538, 116209.	4.4	17
38	Geochemical and mineralogical changes in magnetite Fe-ore tailings induced by biomass organic matter amendment. Science of the Total Environment, 2020, 724, 138196.	8.0	22
39	Anaerobic methane oxidation coupled to manganese reduction by members of the <i>Methanoperedenaceae</i> . ISME Journal, 2020, 14, 1030-1041.	9.8	203
40	The role of aluminium in the preservation of microbial biosignatures. Geoscience Frontiers, 2019, 10, 1125-1138.	8.4	18
41	Deciphering Biosignatures in Planetary Contexts. Astrobiology, 2019, 19, 1075-1102.	3.0	66
42	Applications of Scanning Electron Microscopy in Geomicrobiology. , 2019, , 148-165.		5
43	Applications of Transmission Electron Microscopy in Geomicrobiology. , 2019, , 166-186.		0
44	Bacterially-mediated supergene alteration and redistribution of copper in mineralised rocks at the Salobo IOCG deposit, Brazil. Ore Geology Reviews, 2019, 115, 103210.	2.7	5
45	Organic Matter Amendment and Plant Colonization Drive Mineral Weathering, Organic Carbon Sequestration, and Water-Stable Aggregation in Magnetite Fe Ore Tailings. Environmental Science & Technology, 2019, 53, 13720-13731.	10.0	48
46	The influence of biologically produced sulfide-containing solutions on nickel and cobalt precipitation reactions and particle settling properties. Hydrometallurgy, 2019, 189, 105142.	4.3	11
47	Changes in microbial community structure and increased metal bioavailability in a metal-contaminated soil and in the rhizosphere of corn (Zea mays). Rhizosphere, 2019, 11, 100169.	3.0	10
48	Organic Matter Preservation and Incipient Mineralization of Microtubules in 120 Ma Basaltic Glass. Frontiers in Earth Science, 2019, 7, .	1.8	1
49	Zinc and lead encapsulated in amorphous ferric cements within hardpans in situ formed from sulfidic Cu-Pb-Zn tailings. Environmental Pollution, 2019, 252, 1106-1116.	7.5	11
50	Deficiencies of secondary Fe (oxy)hydroxides associated with phyllosilicates and organic carbon limit the formation of water-stable aggregates in Fe-ore tailings. Chemical Geology, 2019, 523, 73-87.	3.3	19
51	Bacterial influence on storage and mobilisation of metals in iron-rich mine tailings from the Salobo mine, Brazil. Science of the Total Environment, 2019, 680, 91-104.	8.0	18
52	Phosphate treatment alleviated acute phytotoxicity of heavy metals inÂsulfidic Pb-Zn mine tailings. Environmental Pollution, 2019, 250, 676-685.	7.5	21
53	The biogeochemical reactivity of phosphate during bioleaching of bornite-chalcocite ore. Applied Geochemistry, 2019, 104, 193-201.	3.0	3
54	Biogeochemical processes in canga ecosystems: Armoring of iron ore against erosion and importance in iron duricrust restoration in Brazil. Ore Geology Reviews, 2019, 107, 573-586.	2.7	36

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55	Carbon Sequestration in Biogenic Magnesite and Other Magnesium Carbonate Minerals. Environmental Science & Environmental Scien	10.0	32
56	Accelerating Bauxite Residue Remediation with Microbial Biotechnology. Minerals, Metals and Materials Series, 2019, , 69-77.	0.4	2
57	Small but mighty: microorganisms offer inspiration for mine remediation and waste stabilisation. Microbiology Australia, 2019, , .	0.4	3
58	Goethite Reduction by a Neutrophilic Member of the Alphaproteobacterial Genus Telmatospirillum. Frontiers in Microbiology, 2019, 10, 2938.	3.5	25
59	Geochemical and mineralogical constraints in iron ore tailings limit soil formation for direct phytostabilization. Science of the Total Environment, 2019, 651, 192-202.	8.0	44
60	Performance of a sulfidogenic bioreactor inoculated with indigenous acidic communities for treating an extremely acidic mine water. Minerals Engineering, 2019, 131, 370-375.	4.3	24
61	Biogenic Methane Cycling in a Laboratory Model of an Abandoned Bituminous Coal Mine. Geomicrobiology Journal, 2018, 35, 491-502.	2.0	3
62	Fate of transition metals during passive carbonation of ultramafic mine tailings via air capture with potential for metal resource recovery. International Journal of Greenhouse Gas Control, 2018, 71, 155-167.	4.6	37
63	Microbial Diversity in Actively Forming Iron Oxides from Weathered Banded Iron Formation Systems. Microbes and Environments, 2018, 33, 385-393.	1.6	28
64	A Spectral Comparison of Jarosites Using Techniques Relevant to the Robotic Exploration of Biosignatures on Mars. Life, 2018, 8, 61.	2.4	14
65	Hydrotalcites and hydrated Mg-carbonates as carbon sinks in serpentinite mineral wastes from the Woodsreef chrysotile mine, New South Wales, Australia: Controls on carbonate mineralogy and efficiency of CO2 air capture in mine tailings. International Journal of Greenhouse Gas Control, 2018, 79. 38-60.	4.6	42
66	Advanced biofilm staining techniques for TEM and SEM in geomicrobiology: Implications for visualizing EPS architecture, mineral nucleation, and microfossil generation. Chemical Geology, 2018, 498, 115-127.	3.3	41
67	Immobilisation of Platinum by Cupriavidus metallidurans. Minerals (Basel, Switzerland), 2018, 8, 10.	2.0	11
68	The effect of gram-positive (<i>Desulfosporosinus orientis</i>) and gram-negative (<i>Desulfovibrio) Tj ETQq0 0 C of Microbiology, 2018, 64, 629-637.</i>) rgBT /Ov 1.7	erlock 10 Tf 27
69	Bioleaching of waste material from the Salobo mine, Brazil: Recovery of refractory copper from Cu hosted in silicate minerals. Chemical Geology, 2018, 498, 72-82.	3.3	23
70	Synthesis of Copper Sulfide Nanoparticles Using Biogenic H2S Produced by a Low-pH Sulfidogenic Bioreactor. Minerals (Basel, Switzerland), 2018, 8, 35.	2.0	19
71	Potential for offsetting diamond mine carbon emissions through mineral carbonation of processed kimberlite: an assessment of De Beers mine sites in South Africa and Canada. Mineralogy and Petrology, 2018, 112, 755-765.	1.1	47
72	Microstructural characteristics of naturally formed hardpan capping sulfidic copper-lead-zinc tailings. Environmental Pollution, 2018, 242, 1500-1509.	7.5	20

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73	Secondary gold structures: Relics of past biogeochemical transformations and implications for colloidal gold dispersion in subtropical environments. Chemical Geology, 2017, 450, 154-164.	3.3	50
74	Field-based accounting of CO ₂ sequestration in ultramafic mine wastes using portable X-ray diffraction. American Mineralogist, 2017, 102, 1302-1310.	1.9	19
75	Building biogenic beachrock: Visualizing microbially-mediated carbonate cement precipitation using XFM and a strontium tracer. Chemical Geology, 2017, 465, 21-34.	3.3	17
76	The effect of bituminous coal on methanogenic mixed cultures and pure cultures of Methanococcus and Methanosarcina. Fuel, 2017, 205, 60-70.	6.4	9
77	Actively forming Kuroko-type volcanic-hosted massive sulfide (VHMS) mineralization at Iheya North, Okinawa Trough, Japan. Ore Geology Reviews, 2017, 84, 20-41.	2.7	43
78	Analysis of the Potential for Negative CO2 Emission Mine Sites through Bacteria-mediated Carbon Mineralisation: Evidence from Australia. Energy Procedia, 2017, 114, 6124-6132.	1.8	4
79	Evaluation of meteorites as habitats for terrestrial microorganisms: Results from the Nullarbor Plain, Australia, a Mars analogue site. Geochimica Et Cosmochimica Acta, 2017, 215, 1-16.	3.9	10
80	Biogeochemical Cycling of Silver in Acidic, Weathering Environments. Minerals (Basel, Switzerland), 2017, 7, 218.	2.0	22
81	Experimental Deployment of Microbial Mineral Carbonation at an Asbestos Mine: Potential Applications to Carbon Storage and Tailings Stabilization. Minerals (Basel, Switzerland), 2017, 7, 191.	2.0	31
82	Microbial Populations of Stony Meteorites: Substrate Controls on First Colonizers. Frontiers in Microbiology, 2017, 8, 1227.	3.5	22
83	An Economic Analysis of the Worldwide Potential for CO2 Sequestration Through Bacteria-Mediated Carbon Mineralisation at Nickel Mine Sites. SSRN Electronic Journal, 2017, , .	0.4	1
84	Evidence of biogeochemical processes in iron duricrust formation. Journal of South American Earth Sciences, 2016, 71, 131-142.	1.4	39
85	Modern lacustrine microbialites: Towards a synthesis of aqueous and carbonate geochemistry and mineralogy. Earth-Science Reviews, 2016, 162, 338-363.	9.1	80
86	Nesquehonite sequesters transition metals and CO2 during accelerated carbon mineralisation. International Journal of Greenhouse Gas Control, 2016, 55, 73-81.	4.6	24
87	Microbial Diversity of Impact-Generated Habitats. Astrobiology, 2016, 16, 775-786.	3.0	7
88	Proteomic responses to gold(<scp>iii</scp>)-toxicity in the bacterium Cupriavidus metallidurans CH34. Metallomics, 2016, 8, 1204-1216.	2.4	42
89	Beachrock formation via microbial dissolution and re-precipitation of carbonate minerals. Marine Geology, 2016, 382, 122-135.	2.1	19
90	The influence of hydrogeological disturbance and mining on coal seam microbial communities. Geobiology, 2016, 14, 163-175.	2.4	21

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91	Floating Gold Grains and Nanophase Particles Produced from the Biogeochemical Weathering of a Gold-Bearing Ore. Economic Geology, 2016, 111, 1485-1494.	3.8	31
92	Microscopic characterization of the bacterial cell envelope of Planococcus halocryophilus Or1 during subzero growth at â~'15°C. Polar Biology, 2016, 39, 701-712.	1.2	36
93	Biological role in the transformation of platinum-group mineralÂgrains. Nature Geoscience, 2016, 9, 294-298.	12.9	46
94	Microbially Accelerated Carbonate Mineral Precipitation as a Strategy for in Situ Carbon Sequestration and Rehabilitation of Asbestos Mine Sites. Environmental Science & Envi	10.0	50
95	Metagenomic analysis reveals that modern microbialites and polar microbial mats have similar taxonomic and functional potential. Frontiers in Microbiology, 2015, 6, 966.	3.5	62
96	The in-vitro "growth―of gold grains. Geology, 2015, 43, 79-82.	4.4	31
97	The immobilization of gold from gold (III) chloride by a halophilic sulphate-reducing bacterial consortium. Geological Society Special Publication, 2015, 393, 249-263.	1.3	17
98	Structural and Chemical Characterization of Placer Gold Grains: Implications for Bacterial Contributions to Grain Formation. Geomicrobiology Journal, 2015, 32, 158-169.	2.0	25
99	Geology, Life, and Habitability., 2015, , 473-486.		8
100	Surface transformations of platinum grains from Fifield, New South Wales, Australia. American Mineralogist, 2015, 100, 1236-1243.	1.9	14
101	Production of magnesium-rich solutions by acid leaching of chrysotile: A precursor to field-scale deployment of microbially enabled carbonate mineral precipitation. Chemical Geology, 2015, 413, 119-131.	3.3	33
102	The Geomicrobiology of Supergene Metal Deposits. Elements, 2015, 11, 337-342.	0.5	23
103	Caves in caves: evolution of post-depositional macroholes in stalagmites. International Journal of Speleology, 2014, 43, 323-334.	1.0	11
104	Acidic Microenvironments in Waste Rock Characterized by Neutral Drainage: Bacteria–Mineral Interactions at Sulfide Surfaces. Minerals (Basel, Switzerland), 2014, 4, 170-190.	2.0	47
105	Strategizing Carbon-Neutral Mines: A Case for Pilot Projects. Minerals (Basel, Switzerland), 2014, 4, 399-436.	2.0	58
106	A depositional model for hydromagnesite–magnesite playas near Atlin, British Columbia, Canada. Sedimentology, 2014, 61, 1701-1733.	3.1	50
107	Waveguide evanescent field scattering microscopy: bacterial biofilms and their sterilization response via UV irradiation. Journal of Biophotonics, 2014, 7, 542-551.	2.3	6
108	Offsetting of CO2 emissions by air capture in mine tailings at the Mount Keith Nickel Mine, Western Australia: Rates, controls and prospects for carbon neutral mining. International Journal of Greenhouse Gas Control, 2014, 25, 121-140.	4.6	113

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109	Platinum in Earth surface environments. Earth-Science Reviews, 2014, 131, 1-21.	9.1	80
110	Infrared Spectroscopic Biosignatures from Hidden Cave, New Mexico: Possible Applications for Remote Life Detection. Geomicrobiology Journal, 2014, 31, 929-941.	2.0	11
111	Bioconversion of coal: new insights from a core flooding study. RSC Advances, 2014, 4, 22779.	3.6	40
112	A Greenhouse-Scale Photosynthetic Microbial Bioreactor for Carbon Sequestration in Magnesium Carbonate Minerals. Environmental Science & Environmental	10.0	46
113	In situ recovery of uranium — the microbial influence. Hydrometallurgy, 2014, 150, 236-244.	4.3	39
114	Impact-Generated Endolithic Habitat Within Crystalline Rocks of the Haughton Impact Structure, Devon Island, Canada. Astrobiology, 2014, 14, 522-533.	3.0	13
115	The effect of iron-oxidising bacteria on the stability of gold (I) thiosulphate complex. Chemical Geology, 2014, 376, 52-60.	3.3	20
116	Geobiological Cycling of Gold: From Fundamental Process Understanding to Exploration Solutions. Minerals (Basel, Switzerland), 2013, 3, 367-394.	2.0	54
117	Impact-generated hydrothermal systems on Earth and Mars. Icarus, 2013, 224, 347-363.	2.5	219
118	Gold biomineralization by a metallophore from a gold-associated microbe. Nature Chemical Biology, 2013, 9, 241-243.	8.0	212
119	Microstructure variability in freshwater microbialites, Pavilion Lake, Canada. Palaeogeography, Palaeoecology, 2013, 392, 62-70.	2.3	20
120	Carbon sequestration via carbonic anhydrase facilitated magnesium carbonate precipitation. International Journal of Greenhouse Gas Control, 2013, 16, 145-155.	4.6	80
121	Biomineralization of Gold in Biofilms of <i>Cupriavidus metallidurans</i> . Environmental Science & Environmental & Env	10.0	70
122	<i>Shewanella oneidensis</i> MR-1 Bacterial Nanowires Exhibit p-Type, Tunable Electronic Behavior. Nano Letters, 2013, 13, 2407-2411.	9.1	103
123	Bacterial growth at Ⱂ15 °C; molecular insights from the permafrost bacterium <i>Planococcus halocryophilus</i> Or1. ISME Journal, 2013, 7, 1211-1226.	9.8	286
124	Carbon Mineralization: From Natural Analogues to Engineered Systems. Reviews in Mineralogy and Geochemistry, 2013, 77, 305-360.	4.8	174
125	9. Carbon Mineralization: From Natural Analogues to Engineered Systems. , 2013, , 305-360.		8
126	Mobile hydrocarbon microspheres from >2â€billionâ€yearâ€old carbonâ€bearing seams in the South African deep subsurface. Geobiology, 2012, 10, 496-505.	2.4	5

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127	Structural and biological control of the Cenozoic epithermal uranium concentrations from the Sierra Peña Blanca, Mexico. Mineralium Deposita, 2012, 47, 859-874.	4.1	15
128	Carbonate precipitation under bulk acidic conditions as a potential biosignature for searching life on Mars. Earth and Planetary Science Letters, 2012, 351-352, 13-26.	4.4	23
129	Supergene gold transformation: Biogenic secondary and nano-particulate gold from arid Australia. Chemical Geology, 2012, 320-321, 17-31.	3.3	79
130	The effects of meteorite impacts on the availability of bioessential elements for endolithic organisms. Meteoritics and Planetary Science, 2012, 47, 1681-1691.	1.6	8
131	Minerals as Substrates for Life: The Prokaryotic View. Elements, 2012, 8, 101-106.	0.5	39
132	IODP Expedition 331: Strong and Expansive Subseafloor Hydrothermal Activities in the Okinawa Trough. Scientific Drilling, 2012, , .	0.6	17
133	Subarctic Weathering of Mineral Wastes Provides a Sink for Atmospheric CO ₂ . Environmental Science & Environmental S	10.0	69
134	Biosynthesis of Gold Nanoparticles: A Review., 2011,, 37-74.		16
135	Bacterial nanowires: conductive as silicon, soft as polymer. Soft Matter, 2011, 7, 6617.	2.7	40
136	Characterizing the effect of carbon steel exposure in sulfide containing solutions to microbially induced corrosion. Corrosion Science, 2011, 53, 955-960.	6.6	165
137	Implications of in situ calcification for photosynthesis in a ~3.3Ga-old microbial biofilm from the Barberton greenstone belt, South Africa. Earth and Planetary Science Letters, 2011, 310, 468-479.	4.4	7 5
138	Microbially Mediated Mineral Carbonation: Roles of Phototrophy and Heterotrophy. Environmental Science & Environmental Science	10.0	84
139	Electrical Transport along Bacterial Nanowires. Biophysical Journal, 2011, 100, 132a.	0.5	4
140	Modern carbonate microbialites from an asbestos open pit pond, Yukon, Canada. Geobiology, 2011, 9, 180-195.	2.4	40
141	The preservation and degradation of filamentous bacteria and biomolecules within iron oxide deposits at Rio Tinto, Spain. Geobiology, 2011, 9, 233-249.	2.4	64
142	Erratum to Implications of a 3.472–3.333-Gyr-old subaerial microbial mat from the Barberton greenstone belt, South Africa for the UV environmental conditions on the early Earth. Philosophical Transactions of the Royal Society B: Biological Sciences, 2011, 366, 464-464.	4.0	0
143	Multi-technique investigation reveals new mineral, chemical, and textural heterogeneity in the Tagish Lake C2 chondrite. Planetary and Space Science, 2010, 58, 1347-1364.	1.7	15
144	Characterization of halophiles in natural MgSO4 salts and laboratory enrichment samples: Astrobiological implications for Mars. Planetary and Space Science, 2010, 58, 599-615.	1.7	34

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145	Nanoparticle factories: Biofilms hold the key to gold dispersion and nugget formation. Geology, 2010, 38, 843-846.	4.4	137
146	Electrical transport along bacterial nanowires from <i>Shewanella oneidensis</i> MR-1. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18127-18131.	7.1	566
147	Photosynthetic isotope biosignatures in laminated micro-stromatolitic and non-laminated nodules associated with modern, freshwater microbialites in Pavilion Lake, B.C Chemical Geology, 2010, 274, 56-67.	3.3	48
148	Bioleaching of Ultramafic Tailings by <i>Acidithiobacillus</i> spp. for CO ₂ Sequestration. Environmental Science &	10.0	70
149	Carbon Dioxide Fixation within Mine Wastes of Ultramafic-Hosted Ore Deposits: Examples from the Clinton Creek and Cassiar Chrysotile Deposits, Canada. Economic Geology, 2009, 104, 95-112.	3.8	201
150	Sulfur Isotope Enrichment during Maintenance Metabolism in the Thermophilic Sulfate-Reducing Bacterium <i>Desulfotomaculum putei</i> . Applied and Environmental Microbiology, 2009, 75, 5621-5630.	3.1	37
151	Microbial Architecture of Environmental Sulfur Processes: A Novel Syntrophic Sulfur-Metabolizing Consortia. Environmental Science & Environmental Scie	10.0	32
152	Mechanisms of gold biomineralization in the bacterium <i>Cupriavidus metallidurans</i> . Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 17757-17762.	7.1	283
153	Effect of the cyanide-producing bacterium Chromobacterium violaceum on ultraflat Au surfaces. Chemical Geology, 2009, 265, 313-320.	3.3	48
154	The hydromagnesite playas of Atlin, British Columbia, Canada: A biogeochemical model for CO2 sequestration. Chemical Geology, 2009, 260, 286-300.	3.3	114
155	The Biogeochemistry of Gold. Elements, 2009, 5, 303-307.	0.5	106
156	Environmental Genomics Reveals a Single-Species Ecosystem Deep Within Earth. Science, 2008, 322, 275-278.	12.6	474
157	Stars of the terrestrial deep subsurface: A novel  starâ€shaped' bacterial morphotype from a South African platinum mine. Geobiology, 2008, 6, 325-330.	2.4	27
158	A highâ€resolution chemical and structural study of framboidal pyrite formed within a lowâ€temperature bacterial biofilm. Geobiology, 2008, 6, 471-480.	2.4	143
159	Investigating intra-bone isotopic variations in bioapatite using IR-laser ablation and micromilling: Implications for identifying diagenesis?. Palaeogeography, Palaeoclimatology, Palaeoecology, 2008, 266, 190-199.	2.3	21
160	The Deposition of Elemental Gold from Gold(I)-Thiosulfate Complexes Mediated by Sulfate-Reducing Bacterial Conditions. Economic Geology, 2007, 102, 109-126.	3.8	47
161	Geology, Life and Habitability. , 2007, , 421-437.		4
162	Synthesis of Palladium Nanoparticles by Reaction of Filamentous Cyanobacterial Biomass with a Palladium(II) Chloride Complex. Langmuir, 2007, 23, 8982-8987.	3.5	120

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163	Mineralogical, Chemical and Biological Characterization of an Anaerobic Biofilm Collected from a Borehole in a Deep Gold Mine in South Africa. Geomicrobiology Journal, 2007, 24, 491-504.	2.0	35
164	Biosynthesis of Silver Nanoparticles by Filamentous Cyanobacteria from a Silver(I) Nitrate Complex. Langmuir, 2007, 23, 2694-2699.	3.5	366
165	Precipitation of gold by the reaction of aqueous gold(III) chloride with cyanobacteria at 25–80â€,°Câ€,—â€,Studied by X-ray absorption spectroscopy. Canadian Journal of Chemistry, 2007, 85, 651	6 5 9.	27
166	Biologically induced mineralization of dypingite by cyanobacteria from an alkaline wetland near Atlin, British Columbia, Canada. Geochemical Transactions, 2007, 8, 13.	0.7	119
167	The geomicrobiology of gold. ISME Journal, 2007, 1, 567-584.	9.8	212
168	The Geology and Habitability of Terrestrial Planets: Fundamental Requirements for Life. Space Science Reviews, 2007, 129, 7-34.	8.1	17
169	The Geology and Habitability of Terrestrial Planets: Fundamental Requirements for Life. Space Sciences Series of ISSI, 2007, , 7-34.	0.0	O
170	Bioaccumulation of Gold by Filamentous Cyanobacteria Between 25 and 200°C. Geomicrobiology Journal, 2006, 23, 591-597.	2.0	28
171	Structural and Chemical Characterization of a Natural Fracture Surface from 2.8 Kilometers Below Land Surface: Biofilms in the Deep Subsurface. Geomicrobiology Journal, 2006, 23, 443-452.	2.0	49
172	Mechanisms of Gold Bioaccumulation by Filamentous Cyanobacteria from Gold(III)â^'Chloride Complex. Environmental Science & Env	10.0	288
173	Morphology of Gold Nanoparticles Synthesized by Filamentous Cyanobacteria from Gold(I)â^Thiosulfate and Gold(III)â^Chloride Complexes. Langmuir, 2006, 22, 2780-2787.	3.5	324
174	Synthesis of Platinum Nanoparticles by Reaction of Filamentous Cyanobacteria with Platinum(IV)â°'Chloride Complex. Langmuir, 2006, 22, 7318-7323.	3.5	153
175	The early record of life. Geophysical Monograph Series, 2006, , 283-304.	0.1	31
176	The Role of Bacteria in the Supergene Environment of the Morenci Porphyry Copper Deposit, Greenlee County, Arizona. Economic Geology, 2006, 101, 59-70.	3.8	59
177	Bioaccumulation of gold by sulfate-reducing bacteria cultured in the presence of gold(I)-thiosulfate complex. Geochimica Et Cosmochimica Acta, 2006, 70, 3646-3661.	3.9	177
178	Implications of a 3.472–3.333 Gyr-old subaerial microbial mat from the Barberton greenstone belt, South Africa for the UV environmental conditions on the early Earth. Philosophical Transactions of the Royal Society B: Biological Sciences, 2006, 361, 1857-1876.	4.0	163
179	The Origin and Age of Biogeochemical Trends in Deep Fracture Water of the Witwatersrand Basin, South Africa. Geomicrobiology Journal, 2006, 23, 369-414.	2.0	88
180	Desert Potholes: Ephemeral Aquatic Microsystems. Aquatic Geochemistry, 2005, 11, 279-302.	1.3	27

#	Article	lF	Citations
181	The Geomicrobiology of Ore Deposits. Economic Geology, 2005, 100, 1067-1084.	3.8	144
182	Desulfotomaculum and Methanobacterium spp. Dominate a 4- to 5-Kilometer-Deep Fault. Applied and Environmental Microbiology, 2005, 71, 8773-8783.	3.1	172
183	Nocturnal Production of Endospores in Natural Populations of Epulopiscium-Like Surgeonfish Symbionts. Journal of Bacteriology, 2005, 187, 7460-7470.	2.2	45
184	The effect of thiosulfate-oxidizing bacteria on the stability of the gold-thiosulfate complex. Geochimica Et Cosmochimica Acta, 2005, 69, 3759-3772.	3.9	83
185	Scanning force microscopy studies of the colonization and growth of A. ferrooxidans on the surface of pyrite minerals. Scanning, 2005, 27, 136-140.	1.5	17
186	Microbiologically Influenced Corrosion Capability of Bacteria Isolated from Yucca Mountain. Corrosion, 2004, 60, 64-74.	1.1	29
187	MORPHOLOGICAL AND CHEMICAL STUDY OF PLACER GOLD FROM THE SAN LUIS RANGE, ARGENTINA. Canadian Mineralogist, 2004, 42, 169-182.	1.0	18
188	Effect of Rock Surfaces on the Corrosion Capability of Yucca Mountain Bacteria. Corrosion, 2004, 60, 75-83.	1.1	4
189	A critical stage in the formation of acid mine drainage: Colonization of pyrite by Acidithiobacillus ferrooxidans under pH-neutral conditions. Geobiology, 2003, 1, 81-90.	2.4	104
190	Temporal Shifts in the Geochemistry and Microbial Community Structure of an Ultradeep Mine Borehole Following Isolation. Geomicrobiology Journal, 2003, 20, 517-548.	2.0	96
191	Could bacteria have formed the Precambrian banded iron formations?. Geology, 2002, 30, 1079.	4.4	444
192	Structural characterization of the hydrocarbon degrading bacteria–oil interface: implications for bioremediation. International Biodeterioration and Biodegradation, 2001, 47, 197-201.	3.9	30
193	Pyrite discs in coal: Evidence for fossilized bacterial colonies. Geology, 2001, 29, 47.	4.4	31
194	Immobilization of free ionic gold and L-asparagine-complexed ionic gold by Sporosarcina ureae: The importance of organo-gold complexes in gold mobility. Mining, Metallurgy and Exploration, 2000, 17, 129-132.	0.8	1
195	The role of "blebbing―in overcoming the hydrophobic barrier during biooxidation of elemental sulfur by Thiobacillus thiooxidans. Chemical Geology, 2000, 169, 425-433.	3.3	53
196	Efficiency of a Subsurface Constructed Wetland System Using Native Southwestern U.S. Plants. Journal of Environmental Quality, 1999, 28, 225-231.	2.0	12
197	A structural comparison of bacterial microfossils vs. 'nanobacteria' and nanofossils. Earth-Science Reviews, 1999, 48, 251-264.	9.1	54
198	Relative contributions of abiotic and biological factors in Fe(II) oxidation in mine drainage. Applied Geochemistry, 1999, 14, $511-530$.	3.0	146

#	Article	IF	CITATIONS
199	The impact of sediment fecal coliform reservoirs on seasonal water quality in Oak Creek, ARIZONA. Water Research, 1999, 33, 2163-2171.	11.3	157
200	Low temperature anaerobic bacterial diagenesis of ferrous monosulfide to pyrite. Geochimica Et Cosmochimica Acta, 1999, 63, 2019-2023.	3.9	136
201	Quantification of sulfur and phosphorus within secondary gold rims on Yukon placer gold. Geology, 1998, 26, 339.	4.4	10
202	The occurrence of sulfur and phosphorus within bacterially derived crystalline and pseudocrystalline octahedral gold formed in vitro. Geochimica Et Cosmochimica Acta, 1996, 60, 4369-4376.	3.9	132
203	Biogeochemical phenomena induced by bacteria within sulfidic mine tailings. Journal of Industrial Microbiology, 1995, 14, 178-185.	0.9	65
204	Tip-induced displacement and imaging of a multilayered bacterial structure by scanning tunneling microscopy. Ultramicroscopy, 1994, 55, 113-119.	1.9	7
205	Nickel sulfide, iron-nickel sulfide and iron sulfide precipitation by a newly isolated Desulfotomaculum species and its relation to nickel resistance. FEMS Microbiology Ecology, 1994, 14, 121-132.	2.7	93
206	The in vitro formation of placer gold by bacteria. Geochimica Et Cosmochimica Acta, 1994, 58, 4527-4530.	3.9	173
207	The Organization of the Paracrystalline Multilayered Spacer-Plugs of Methanospirillum hungatei. Journal of Structural Biology, 1994, 112, 160-171.	2.8	18
208	Characterization of the cell wall of the sheathed methanogen Methanospirillum hungatei GP1 as an S layer. Journal of Bacteriology, 1993, 175, 7550-7560.	2.2	40
209	Transmission electron microscopy, scanning tunneling microscopy, and atomic force microscopy of the cell envelope layers of the archaeobacterium Methanospirillum hungatei GP1. Journal of Bacteriology, 1993, 175, 1946-1955.	2.2	42
210	Paracrystalline Layers of Methanospirillum hungatei GP1., 1993, , 129-142.		1
211	Examination of Lipopolysaccharide (O-Antigen) Populations of <i>Thiobacillus ferrooxidans</i> from Two Mine Tailings. Applied and Environmental Microbiology, 1993, 59, 1283-1288.	3.1	42
212	Investigation of Lattice Surface Layers by Scanning Probe Microscopy., 1993,, 243-256.		0
213	Detection of growth sites in and protomer pools for the sheath of Methanospirillum hungatei GP1 by use of constituent organosulfur and immunogold labeling. Journal of Bacteriology, 1992, 174, 6460-6470.	2.2	11
214	Characterization of novel, phenol-soluble polypeptides which confer rigidity to the sheath of Methanospirillum hungatei GP1. Journal of Bacteriology, 1992, 174, 935-946.	2.2	23
215	AFM and STM studies of the interaction of antibodies with the S-layer sheath of the archaeobacterium Methanospirillum hungatei. Ultramicroscopy, 1992, 42-44, 1214-1221.	1.9	11
216	Enumeration of Thiobacilli within pH-Neutral and Acidic Mine Tailings and Their Role in the Development of Secondary Mineral Soil. Applied and Environmental Microbiology, 1992, 58, 1904-1912.	3.1	117

#	Article	IF	CITATIONS
217	Dissolution and immunochemical analysis of the sheath of the archaeobacterium Methanospirillum hungatei GP1. Journal of Bacteriology, 1991, 173, 6213-6222.	2.2	19
218	Scanning tunneling microscope imaging of hoops from the cell sheath of the bacteria methanospirillum hungatei and atomic force microscope imaging of complete sheathes. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1991, 9, 1242.	1.6	12
219	High-resolution topography of the S-layer sheath of the archaebacterium Methanospirillum hungatei provided by scanning tunneling microscopy. Journal of Bacteriology, 1990, 172, 6589-6595.	2.2	41
220	Isolation, characterization, and cellular insertion of the flagella from two strains of the archaebacterium Methanospirillum hungatei. Journal of Bacteriology, 1990, 172, 3221-3228.	2.2	74
221	The imaging of a complete biological structure with the scanning tunneling microscope. Ultramicroscopy, 1989, 27, 427-432.	1.9	11
222	An enzyme-linked immunosorbent assay for plant cadmium-binding peptide. Plant Science, 1988, 57, 37-43.	3.6	12
223	Survival and Growth of Yersinia enterocolitica in Egg Washwater. Journal of Food Protection, 1987, 50, 103-107.	1.7	24
224	Production and characterization of monoclonal antibodies against serotype strains of Pseudomonas aeruginosa. Infection and Immunity, 1987, 55, 1051-1057.	2.2	111
225	Bacterial Surface-Mediated Mineral Formation. , 0, , 257-276.		25
226	Laboratory-Based Bacterial Weathering of the Merensky Reef and Its Impact on Platinum Group Mineral Migration. Economic Geology, $0, , .$	3.8	0
227	Cation Exchange in Smectites as a New Approach to Mineral Carbonation. Frontiers in Climate, 0, 4, .	2.8	9