Liane G Benning

List of Publications by Year
in descending order

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190	12,143	22099	31759
papers	citations	59 h-index	101 g-index

206	206	206	13115
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The kinetics and mechanisms of amorphous calcium carbonate (ACC) crystallization to calcite, viavaterite.. Nanoscale, 2011, 3, 265-271.	2.8	742
2	Reaction pathways in the Feâ€“S system below 100Â°C. Chemical Geology, 2000, 167, 25-51.	1.4	360
3	Characterization of Metalâ^'Cyanobacteria Sorption Reactions:Â A Combined Macroscopic and Infrared Spectroscopic Investigation. Environmental Science & Technology, 2004, 38, 775-782.	4.6	347
4	Mechanistic Insights into the Crystallization of Amorphous Calcium Carbonate (ACC). Crystal Growth and Design, 2012, 12, 3806-3814.	1.4	325
5	Hydrosulphide complexing of Au (I) in hydrothermal solutions from 150â€“400Â°C and 500â€“1500 bar. Geochimica Et Cosmochimica Acta, 1996, 60, 1849-1871.	1.6	300
6	The Role and Implications of Bassanite as a Stable Precursor Phase to Gypsum Precipitation. Science, 2012, 336, 69-72.	6.0	294
7	Impacts on iron solubility in the mineral dust by processes in the source region and the atmosphere: A review. Aeolian Research, 2012, 5, 21-42.	1.1	228
8	Contributions from glacially derived sediment to the global iron (oxyhydr)oxide cycle: Implications for iron delivery to the oceans. Geochimica Et Cosmochimica Acta, 2006, 70, 2765-2780.	1.6	216
9	Greigite: a true intermediate on the polysulfide pathway to pyrite. Geochemical Transactions, 2007, 8, 1.	1.8	215
10	The microbiome of glaciers and ice sheets. Npj Biofilms and Microbiomes, 2017, 3, 10.	2.9	215
11	Ice sheets as a significant source of highly reactive nanoparticulate iron to the oceans. Nature Communications, 2014, 5, 3929.	5.8	208
12	Bioavailable iron in the Southern Ocean: the significance of the iceberg conveyor belt. Geochemical Transactions, 2008, 9, 7.	1.8	194
13	Plant-driven fungal weathering: Early stages of mineral alteration at the nanometer scale. Geology, 2009, 37, 615-618.	2.0	180
14	Crystallization of CaCO‹sub›3‹/sub› in Waterâ€“Alcohol Mixtures: Spherulitic Growth, Polymorph Stabilization, and Morphology Change. Crystal Growth and Design, 2012, 12, 842-853.	1.4	176
15	The biogeography of red snow microbiomes and their role in melting arctic glaciers. Nature Communications, 2016, 7, 11968.	5.8	171
16	The role of pH and Mg on the stability and crystallization of amorphous calcium carbonate. Journal of Alloys and Compounds, 2012, 536, S477-S479.	2.8	166
17	Green rust formation controls nutrient availability in a ferruginous water column. Geology, 2012, 40, 599-602.	2.0	159
18	Molecular characterization of cyanobacterial silicification using synchrotron infrared micro-spectroscopy. Geochimica Et Cosmochimica Acta, 2004, 68, 729-741.	1.6	156

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19	The rate of ferrihydrite transformation to goethite via the Fe(II) pathway. American Mineralogist, 2006, 91, 92-96.	0.9	156
20	The effect of cyanobacteria on silica precipitation at neutral pH: implications for bacterial silicification in geothermal hot springs. Chemical Geology, 2003, 199, 83-90.	1.4	150
21	Formation of Iron Nanoparticles and Increase in Iron Reactivity in Mineral Dust during Simulated Cloud Processing. Environmental Science & Technology, 2009, 43, 6592-6596.	4.6	140
22	Quantification of initial steps of nucleation and growth of silica nanoparticles: An in-situ SAXS and DLS study. Geochimica Et Cosmochimica Acta, 2009, 73, 5377-5393.	1.6	135
23	Formation of calcium sulfate through the aggregation of sub-3â€‰nanometre primary species. Nature Communications, 2016, 7, 11177.	5.8	134
24	The dynamics of cyanobacterial silicification: an infrared micro-spectroscopic investigation. Geochimica Et Cosmochimica Acta, 2004, 68, 743-757.	1.6	124
25	Iron dissolution kinetics of mineral dust at low pH during simulated atmospheric processing. Atmospheric Chemistry and Physics, 2011, 11, 995-1007.	1.9	122
26	Ice sheets as a missing source of silica to the polar oceans. Nature Communications, 2017, 8, 14198.	5.8	122
27	Experimental studies on New Zealand hot spring sinters: rates of growth and textural development. Canadian Journal of Earth Sciences, 2003, 40, 1643-1667.	0.6	121
28	The role of Mg in the crystallization of monohydrocalcite. Geochimica Et Cosmochimica Acta, 2014, 127, 204-220.	1.6	121
29	Microbial primary production on an Arctic glacier is insignificant in comparison with allochthonous organic carbon input. Environmental Microbiology, 2008, 10, 2172-2178.	1.8	119
30	Elucidating Mechanisms of Diffusionâ€Based Calcium Carbonate Synthesis Leads to Controlled Mesocrystal Formation. Advanced Functional Materials, 2013, 23, 1965-1973.	7.8	114
31	A route for the direct crystallization of dolomite. American Mineralogist, 2015, 100, 1172-1181.	0.9	113
32	Tree-mycorrhiza symbiosis accelerate mineral weathering: Evidences from nanometer-scale elemental fluxes at the hyphaâ€“mineral interface. Geochimica Et Cosmochimica Acta, 2011, 75, 6988-7005.	1.6	110
33	Variations of algal communities cause darkening of a Greenland glacier. FEMS Microbiology Ecology, 2014, 89, 402-414.	1.3	108
34	The determination of labile Fe in ferrihydrite by ascorbic acid extraction: Methodology, dissolution kinetics and loss of solubility with age and de-watering. Chemical Geology, 2010, 278, 70-79.	1.4	98
35	Quantifying water diffusion in high-viscosity and glassy aqueous solutions using a Raman isotope tracer method. Atmospheric Chemistry and Physics, 2014, 14, 3817-3830.	1.9	97
36	Plantâ€driven weathering of apatite â€“ the role of an ectomycorrhizal fungus. Geobiology, 2012, 10, 445-456.	1.1	96

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37	The role of SO4 in the switch from calcite to aragonite seas. Geology, 2011, 39, 331-334.	2.0	95
38	A highly reactive precursor in the ironÂsulfide system. Nature Communications, 2018, 9, 3125.	5.8	95
39	Influence of chemical weathering and aging of iron oxides on the potential iron solubility of Saharan dust during simulated atmospheric processing. Global Biogeochemical Cycles, 2011, 25, n/a-n/a.	1.9	90
40	Structural properties and transformations of precipitated FeS. Chemical Geology, 2012, 294-295, 249-258.	1.4	90
41	Microbial diversity on Icelandic glaciers and ice caps. Frontiers in Microbiology, 2015, 6, 307.	1.5	88
42	The effect of pH, grain size, and organic ligands on biotite weathering rates. Geochimica Et Cosmochimica Acta, 2015, 164, 127-145.	1.6	86
43	Linking microbial diversity and functionality of arctic glacial surface habitats. Environmental Microbiology, 2017, 19, 551-565.	1.8	84
44	Xyloglucan is released by plants and promotes soil particle aggregation. New Phytologist, 2018, 217, 1128-1136.	3.5	79
45	Glacier algae accelerate melt rates on the south-western Greenland Ice Sheet. Cryosphere, 2020, 14, 309-330.	1.5	78
46	How to make â€˜stableâ€™ ACC: protocol and preliminary structural characterization. Mineralogical Magazine, 2008, 72, 283-286.	0.6	77
47	The kinetics and mechanisms of schwertmannite transformation to goethite and hematite under alkaline conditions. American Mineralogist, 2008, 93, 1326-1337.	0.9	75
48	The potential science and engineering value of samples delivered to Earth by Mars sample return. Meteoritics and Planetary Science, 2019, 54, S3.	0.7	73
49	Oxalate secretion by ectomycorrhizal Paxillus involutus is mineral-specific and controls calcium weathering from minerals. Scientific Reports, 2015, 5, 12187.	1.6	72
50	Impact of atmospheric deposition on N and P geochemistry in the southeastern Levantine basin. Deep-Sea Research Part II: Topical Studies in Oceanography, 2005, 52, 3041-3053.	0.6	69
51	Graphite in the martian meteorite Allan Hills 84001. American Mineralogist, 2012, 97, 1256-1259.	0.9	68
52	Atmospheric Processing Outside Clouds Increases Soluble Iron in Mineral Dust. Environmental Science & Technology, 2015, 49, 1472-1477.	4.6	68
53	Understanding the nature of atmospheric acid processing of mineral dusts in supplying bioavailable phosphorus to the oceans. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14639-14644.	3.3	68
54	Formation of Green Rust Sulfate: A Combined in Situ Time-Resolved X-ray Scattering and Electrochemical Study. Langmuir, 2010, 26, 6593-6603.	1.6	66

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55	Inâ€situ grown silica sinters in Icelandic geothermal areas. Geobiology, 2008, 6, 481-502.	1.1	65
56	Potentially bioavailable iron delivery by iceberg-hosted sediments and atmospheric dust to the polar oceans. Biogeosciences, 2016, 13, 3887-3900.	1.3	65
57	Aerobiology Over Antarctica â€“ A New Initiative for Atmospheric Ecology. Frontiers in Microbiology, 2016, 7, 16.	1.5	65
58	Molecular identification of fungi microfossils in a Neoproterozoic shale rock. Science Advances, 2020, 6, eaax7599.	4.7	65
59	Bacterial diversity in five Icelandic geothermal waters: temperature and sinter growth rate effects. Extremophiles, 2011, 15, 473-485.	0.9	64
60	Green rust as a precursor for magnetite: an in situ synchrotron based study. Mineralogical Magazine, 2008, 72, 201-204.	0.6	63
61	Composition and implications of diverse lipids in New Zealand Geothermal sinters. Geobiology, 2006, 4, 71-92.	1.1	61
62	Organic synthesis on Mars by electrochemical reduction of CO ₂. Science Advances, 2018, 4, eaat5118.	4.7	61
63	Cadmium tolerance and adsorption by the marine brown alga Fucus vesiculosus from the Irish Sea and the Bothnian Sea. Bioresource Technology, 2009, 100, 1727-1733.	4.8	60
64	The Effects of Inorganic Additives on the Nucleation and Growth Kinetics of Calcium Sulfate Dihydrate Crystals. Crystal Growth and Design, 2017, 17, 582-589.	1.4	60
65	Integrated â€˜Omicsâ€™, Targeted Metabolite and Single-cell Analyses of Arctic Snow Algae Functionality and Adaptability. Frontiers in Microbiology, 2015, 6, 1323.	1.5	59
66	The effect and role of environmental conditions on magnetosome synthesis. Frontiers in Microbiology, 2014, 5, 49.	1.5	58
67	Lipid biomolecules in silica sinters: indicators of microbial biodiversity. Environmental Microbiology, 2005, 7, 66-77.	1.8	56
68	Precipitation of Iron and Aluminum Phosphates Directly from Aqueous Solution as a Function of Temperature from 50 to 200 Â°C. Crystal Growth and Design, 2009, 9, 5197-5205.	1.4	55
69	Carboxylic acids: effective inhibitors for calcium sulfate precipitation?. Mineralogical Magazine, 2014, 78, 1465-1472.	0.6	55
70	Quantitative evaluation of general corrosion of Type 304 stainless steel in subcritical and supercritical aqueous solutions via electrochemical noise analysis. Corrosion Science, 2002, 44, 841-860.	3.0	53
71	Biolabile ferrous iron bearing nanoparticles in glacial sediments. Earth and Planetary Science Letters, 2018, 493, 92-101.	1.8	53
72	Speciation, phase association and potential bioavailability of phosphorus on a Svalbard glacier. Biogeochemistry, 2008, 90, 1-13.	1.7	52

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73	Structural Fe(II) Oxidation in Biotite by an Ectomycorrhizal Fungi Drives Mechanical Forcing. Environmental Science & Technology, 2016, 50, 5589-5596.	4.6	52
74	Partitioning of Pb(II) during goethite and hematite crystallization: Implications for Pb transport in natural systems. Applied Geochemistry, 2013, 39, 119-128.	1.4	51
75	Biological impact on Greenland's albedo. Nature Geoscience, 2014, 7, 691-691.	5.4	51
76	In situ and time resolved nucleation and growth of silica nanoparticles forming under simulated geothermal conditions. Geochimica Et Cosmochimica Acta, 2013, 114, 156-168.	1.6	50
77	Adsorption and Reduction of Arsenate during the Fe²⁺-Induced Transformation of Ferrihydrite. ACS Earth and Space Chemistry, 2019, 3, 884-894.	1.2	50
78	Mineral phosphorus drives glacier algal blooms on the Greenland Ice Sheet. Nature Communications, 2021, 12, 570.	5.8	50
79	Adsorption studies of Mo and Vonto ferrihydrite. Mineralogical Magazine, 2008, 72, 385-388.	0.6	49
80	Progress on yttria-stabilized zirconia sensors for hydrothermal pH measurements. Chemical Geology, 2003, 198, 141-162.	1.4	47
81	Raman spectroscopic and scanning electron microscopic analysis of a novel biological colonisation of volcanic rocks. Icarus, 2006, 184, 158-169.	1.1	47
82	Crystallization of Hematite (Î±-Fe₂O₃) under Alkaline Condition: The Effects of Pb. Crystal Growth and Design, 2010, 10, 1544-1551.	1.4	47
83	Schwertmannite in wet, acid, and oxic microenvironments beneath polar and polythermal glaciers. Geology, 2009, 37, 431-434.	2.0	46
84	Calibration of the oxygen and clumped isotope thermometers for (proto-)dolomite based on synthetic and natural carbonates. Chemical Geology, 2019, 525, 1-17.	1.4	45
85	Minor effect of physical size sorting on iron solubility of transported mineral dust. Atmospheric Chemistry and Physics, 2011, 11, 8459-8469.	1.9	44
86	Enhanced magnetic coercivity of Î±-Fe2O3 obtained from carbonated 2-line ferrihydrite. Journal of Nanoparticle Research, 2014, 16, 1.	0.8	43
87	Not just fractal surfaces, but surface fractal aggregates: Derivation of the expression for the structure factor and its applications. Journal of Chemical Physics, 2016, 145, 211908.	1.2	43
88	In situ time-resolved X-ray diffraction of iron sulfides during hydrothermal pyrite growth. Chemical Geology, 2000, 167, 53-63.	1.4	41
89	The fungalâ€“mineral interface: challenges and considerations of micro-analytical developments. Fungal Biology Reviews, 2009, 23, 122-131.	1.9	41
90	Control of Crystal Nucleation and Growth by Additives. Elements, 2013, 9, 203-209.	0.5	40

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91	The interfacial reactivity of arsenic species with green rust sulfate (GRSO4). Science of the Total Environment, 2019, 648, 1161-1170.	3.9	40
92	The diversity of ice algal communities on the Greenland Ice Sheet as revealed by oligotyping. Microbial Genomics, 2018, 4, .	1.0	39
93	The direct precipitation of rhabdophane (REEPO4Â·nH2O) nano-rods from acidic aqueous solutions at 5â€“100ÂÂ°C. Journal of Nanoparticle Research, 2011, 13, 4049-4062.	0.8	38
94	Effect of Mo and V on the Hydrothermal Crystallization of Hematite from Ferrihydrite: An in Situ Energy Dispersive X-ray Diffraction and X-ray Absorption Spectroscopy Study. Crystal Growth and Design, 2015, 15, 4768-4780.	1.4	38
95	The efficient long-term inhibition of forsterite dissolution by common soil bacteria and fungi at Earth surface conditions. Geochimica Et Cosmochimica Acta, 2015, 168, 222-235.	1.6	38
96	Formation of diagenetic siderite in modern ferruginous sediments. Geology, 2019, 47, 540-544.	2.0	37
97	Biomineralisation by earthworms â€“ an investigation into the stability and distribution of amorphous calcium carbonate. Geochemical Transactions, 2015, 16, 4.	1.8	36
98	The role of amorphous precursors in the crystallization of La and Nd carbonates. Nanoscale, 2015, 7, 12166-12179.	2.8	36
99	Microbial dynamics in a High Arctic glacier forefield: a combined field, laboratory, and modelling approach. Biogeosciences, 2016, 13, 5677-5696.	1.3	36
100	Metagenomic insights into diazotrophic communities across Arctic glacier forefields. FEMS Microbiology Ecology, 2018, 94, .	1.3	36
101	Calcium Sulfate Precipitation Throughout Its Phase Diagram. , 2017, , 227-256.		36
102	Biotite surface chemistry as a function of aqueous fluid composition. Geochimica Et Cosmochimica Acta, 2014, 128, 58-70.	1.6	35
103	Effectiveness of Green Additives vs Poly(acrylic acid) in Inhibiting Calcium Sulfate Dihydrate Crystallization. Industrial & Engineering Chemistry Research, 2019, 58, 1561-1569.	1.8	35
104	Nanoparticulate bioavailable iron minerals in icebergs and glaciers. Mineralogical Magazine, 2008, 72, 345-348.	0.6	33
105	Particle-Mediated Nucleation Pathways Are Imprinted in the Internal Structure of Calcium Sulfate Single Crystals. Crystal Growth and Design, 2019, 19, 3714-3721.	1.4	33
106	Organic synthesis associated with serpentinization and carbonation on early Mars. Science, 2022, 375, 172-177.	6.0	32
107	Understanding amorphous silica scaling under well-constrained conditions inside geothermal pipelines. Geothermics, 2018, 76, 231-241.	1.5	31
108	Structural transformation of sulfidized zerovalent iron and its impact on long-term reactivity. Environmental Science: Nano, 2019, 6, 3422-3430.	2.2	31

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109	Solubility and stability of zeolites in aqueous solution: II. Calcic clinoptilolite and mordenite. American Mineralogist, 2000, 85, 495-508.	0.9	30
110	Neutron and X-ray diffraction and empirical potential structure refinement modelling of magnesium stabilised amorphous calcium carbonate. Journal of Non-Crystalline Solids, 2014, 401, 154-158.	1.5	30
111	An aliphatic hexene-covalent triazine framework for selective acetylene/methane and ethylene/methane separation. Journal of Materials Chemistry A, 2019, 7, 13188-13196.	5.2	30
112	Biological albedo reduction on ice sheets, glaciers, and snowfields. Earth-Science Reviews, 2021, 220, 103728.	4.0	30
113	ACC and Vaterite as Intermediates in the Solution-Based Crystallization of CaCO3. , 2017, , 93-111.		30
114	Reaction path modelling in the Asâ€“S system: a case study for geothermal As transport. Applied Geochemistry, 2003, 18, 1325-1345.	1.4	29
115	Nucleation, Growth, and Aggregation of Mineral Phases: Mechanisms and Kinetic Controls. , 2008, , 259-333.		29
116	Evolution of fluid chemistry during travertine formation in the Troll thermal springs, Svalbard, Norway. Geofluids, 2005, 5, 140-150.	0.3	28
117	Controlled biomineralization of magnetite (Fe₃O₄) by Magnetospirillum gryphiswaldense. Mineralogical Magazine, 2008, 72, 333-336.	0.6	28
118	Cell division in magnetotactic bacteria splits magnetosome chain in half. Journal of Basic Microbiology, 2010, 50, 392-396.	1.8	28
119	The Structure of CaSO₄ Nanorods: The Precursor of Gypsum. Journal of Physical Chemistry C, 2019, 123, 23151-23158.	1.5	28
120	A template-free and low temperature method for the synthesis of mesoporous magnesium phosphate with uniform pore structure and high surface area. Nanoscale, 2019, 11, 6939-6951.	2.8	28
121	Nucleation Pathway of Calcium Sulfate Hemihydrate (Bassanite) from Solution: Implications for Calcium Sulfates on Mars. Journal of Physical Chemistry C, 2020, 124, 8411-8422.	1.5	28
122	How allogenic factors affect succession in glacier forefields. Earth-Science Reviews, 2021, 218, 103642.	4.0	28
123	The Terrestrial Plastisphere: Diversity and Polymer-Colonizing Potential of Plastic-Associated Microbial Communities in Soil. Microorganisms, 2021, 9, 1876.	1.6	28
124	Amorphous dysprosium carbonate: characterization, stability, and crystallization pathways. Journal of Nanoparticle Research, 2013, 15, 1.	0.8	27
125	Bacterially mediated removal of phosphorus and cycling of nitrate and sulfate in the waste stream of a â€œzero-dischargeâ€•recirculating mariculture system. Water Research, 2014, 56, 109-121.	5.3	27
126	Physicochemical and Additive Controls on the Multistep Precipitation Pathway of Gypsum. Minerals (Basel, Switzerland), 2017, 7, 140.	0.8	27

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127	Raman and SEM analysis of a biocolonised hot spring travertine terrace in Svalbard, Norway. Geochemical Transactions, 2007, 8, 8.	1.8	26
128	Direct Visualization of Arsenic Binding on Green Rust Sulfate. Environmental Science & Technology, 2020, 54, 3297-3305.	4.6	26
129	Calibration and application of silica-water triple oxygen isotope thermometry to geothermal systems in Iceland and Chile. Geochimica Et Cosmochimica Acta, 2018, 234, 84-97.	1.6	25
130	Report of the workshop for life detection in samples from Mars. Life Sciences in Space Research, 2014, 2, 1-5.	1.2	24
131	â€œOn demandâ€•triggered crystallization of CaCO‹sub›3‹/sub›from solute precursor species stabilized by the water-in-oil microemulsion. Physical Chemistry Chemical Physics, 2018, 20, 13825-13835.	1.3	24
132	Arsenic removal from natural groundwater using â€˜green rustâ€™: Solid phase stability and contaminant fate. Journal of Hazardous Materials, 2021, 401, 123327.	6.5	23
133	Transformation of ferrihydrite to hematite: an‹i›in situ‹/i›investigation on the kinetics and mechanisms. Mineralogical Magazine, 2008, 72, 217-220.	0.6	22
134	What controls selenium release during shale weathering?. Applied Geochemistry, 2011, 26, S222-S226.	1.4	22
135	Metal Sequestration through Coupled Dissolutionâ€“Precipitation at the Bruciteâ€“Water Interface. Minerals (Basel, Switzerland), 2018, 8, 346.	0.8	21
136	The Effect of Atmospheric Acid Processing on the Global Deposition of Bioavailable Phosphorus From Dust. Global Biogeochemical Cycles, 2018, 32, 1367-1385.	1.9	21
137	The Biodiversity and Geochemistry of Cryoconite Holes in Queen Maud Land, East Antarctica. Microorganisms, 2019, 7, 160.	1.6	21
138	Experimental and simulation results of the adsorption of Mo and V onto ferrihydrite. Scientific Reports, 2019, 9, 1365.	1.6	21
139	An experimental study of hydroxylbastnasite solubility in aqueous solutions at 25 Â°C. Chemical Geology, 2016, 430, 70-77.	1.4	20
140	Sulfidation extent of nanoscale zerovalent iron controls selectivity and reactivity with mixed chlorinated hydrocarbons in natural groundwater. Journal of Hazardous Materials, 2022, 431, 128534.	6.5	20
141	Nanoparticle Assembly Leads to Mackinawite Formation. Crystal Growth and Design, 2018, 18, 6757-6764.	1.4	19
142	Evaluating amplicon high-throughput sequencing data of microalgae living in melting snow: improvements and limitations. Fottea, 2019, 19, 115-131.	0.4	19
143	Biosilicification: the role of cyanobacteria in silica sinter deposition. , 0, , 131-150.		18
144	Iron Uptake Kinetics and Magnetosome Formation by‹i›Magnetospirillum gryphiswaldense‹/i›as a Function of pH, Temperature and Dissolved Iron Availability. Geomicrobiology Journal, 2011, 28, 590-600.	1.0	18

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145	Microstructural and chemical variation in silica-rich precipitates at the HellisheiÃ°i geothermal power plant. Mineralogical Magazine, 2014, 78, 1381-1389.	0.6	18
146	A Field-Based Cleaning Protocol for Sampling Devices Used in Life-Detection Studies. Astrobiology, 2009, 9, 455-465.	1.5	17
147	Analytical Transmission Electron Microscopy. Reviews in Mineralogy and Geochemistry, 2014, 78, 219-269.	2.2	17
148	Reaction pathways and textural aspects of the replacement of anhydrite by calcite at 25 Â°C. American Mineralogist, 2017, 102, 1270-1278.	0.9	16
149	Mechanism of Saponite Crystallization from a Rapidly Formed Amorphous Intermediate. Crystal Growth and Design, 2020, 20, 3365-3373.	1.4	16
150	Selenium Speciation in Framboidal and Euhedral Pyrites in Shales. Environmental Science & Technology, 2014, 48, 8972-8979.	4.6	15
151	Products of Hexavalent Chromium Reduction by Green Rust Sodium Sulfate and Associated Reaction Mechanisms. Soil Systems, 2018, 2, 58.	1.0	15
152	Time since deglaciation and geomorphological disturbances determine the patterns of geochemical, mineralogical and microbial successions in an Icelandic foreland. Geoderma, 2020, 379, 114578.	2.3	15
153	Formation of hydroxysulphate and hydroxycarbonate green rusts in the presence of zinc using time-resolved in situ small and wide angle X-ray scattering. Mineralogical Magazine, 2008, 72, 159-162.	0.6	14
154	The role of REE³⁺ in the crystallization of lanthanites. Mineralogical Magazine, 2014, 78, 1373-1380.	0.6	14
155	Beam-induced oxidation of mixed-valent Fe (oxyhydr)oxides (green rust) monitored by STEM-EELS. Micron, 2019, 122, 46-52.	1.1	14
156	SAXS in Inorganic and Bioinspired Research. Methods in Enzymology, 2013, 532, 95-127.	0.4	12
157	Mechanism of silicaâ€“lysozyme composite formation unravelled by in situ fast SAXS. Beilstein Journal of Nanotechnology, 2019, 10, 182-197.	1.5	12
158	Sample acquisition and caching using detachable scoops for mars sample return. , 2009, , .		11
159	Linkages between geochemistry and microbiology in a proglacial terrain in the High Arctic. Annals of Glaciology, 2018, 59, 95-110.	2.8	11
160	Formation of Silica-Lysozyme Composites Through Co-Precipitation and Adsorption. Frontiers in Materials, 2018, 5, .	1.2	11
161	Investigating the Effectiveness of Phosphonate Additives in Hindering the Calcium Sulfate Dihydrate Scale Formation. Industrial & Engineering Chemistry Research, 2020, 59, 14970-14980.	1.8	11
162	Seasonality of Glacial Snow and Ice Microbial Communities. Frontiers in Microbiology, 2022, 13, .	1.5	11

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163	Spectrophotometric determination of low-level concentrations of Se in aqueous solutions. Mineralogical Magazine, 2008, 72, 451-454.	0.6	10
164	Calcite crystal growth orientation: implications for trace metal uptake into coccoliths. Mineralogical Magazine, 2008, 72, 269-272.	0.6	10
165	Raman spectroscopic analysis of arctic nodules: relevance to the astrobiological exploration of Mars. Analytical and Bioanalytical Chemistry, 2011, 401, 2927-2933.	1.9	10
166	The effect of heating on the morphology of crystalline neodymium hydroxycarbonate, NdCO₃OH. Mineralogical Magazine, 2014, 78, 1391-1397.	0.6	10
167	Epitactic Overgrowths of Calcite (CaCO₃) on Anhydrite (CaSO₄) Cleavage Surfaces. Crystal Growth and Design, 2018, 18, 1666-1675.	1.4	10
168	Struvite Crystallisation and the Effect of Co2+ Ions. Minerals (Basel, Switzerland), 2019, 9, 503.	0.8	10
169	Silica and Alumina Nanophases: Natural Processes and Industrial Applications. , 2017, , 293-316.		10
170	Impact of the Diamond Light Source on research in Earth and environmental sciences: current work and future perspectives. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20130151.	1.6	9
171	How Short-Lived Ikaite Affects Calcite Crystallization. Crystal Growth and Design, 2017, 17, 6224-6230.	1.4	9
172	Effects of metal cation substitution on hexavalent chromium reduction by green rust. Geochemical Transactions, 2020, 21, 2.	1.8	9
173	In situ Determination of the Stability of Iron Monosulphides and Kinetics of Pyrite Formation. Mineralogical Magazine, 1998, 62A, 151-152.	0.6	9
174	Intercalation of aromatic sulfonates in â€˜green rustâ€™ via ion exchange. Energy Procedia, 2018, 146, 179-187.	1.8	8
175	Hydrosulphide Complexes of Gold (I) at High Pressures and Temperatures: Equilibrium and Kinetic Problems. Mineralogical Magazine, 1994, 58A, 75-76.	0.6	8
176	Comments on â€˜Influence of measurement uncertainties on fractional solubility of iron in mineral aerosols over the oceansâ€™ Aeolian Research 22, 85â€“92. Aeolian Research, 2017, 25, 123-125.	1.1	7
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