FranÃ§ois Guyot

List of Publications by Year
in descending order

257 papers	13,679 citations	17440 63 h-index	32842 100 g-index
264 all docs	264 docs citations	264 times ranked	11739 citing authors

#	Article	IF	Citations
1	Iron Partitioning in Earth's Mantle: Toward a Deep Lower Mantle Discontinuity. Science, 2003, 300, 789-791.	12.6	483
2	The chemical composition of the Earth: Enstatite chondrite models. Earth and Planetary Science Letters, 2010, 293, 259-268.	4.4	363
3	Electronic Transitions in Perovskite: Possible Nonconvecting Layers in the Lower Mantle. Science, 2004, 305, 383-386.	12.6	354
4	Chains of Magnetosomes Extracted from AMB-1 Magnetotactic Bacteria for Application in Alternative Magnetic Field Cancer Therapy. ACS Nano, 2011, 5, 6279-6296.	14.6	268
5	Iron biomineralization by anaerobic neutrophilic iron-oxidizing bacteria. Geochimica Et Cosmochimica Acta, 2009, 73, 696-711.	3.9	255
6	Influence of amorphous silica layer formation on the dissolution rate of olivine at 90Â°C and elevated pCO2. Chemical Geology, 2011, 284, 193-209.	3.3	251
7	Carbonation of Ca-bearing silicates, the case of wollastonite: Experimental investigations and kinetic modeling. Chemical Geology, 2009, 265, 63-78.	3.3	225
8	Effect of light elements on the sound velocities in solid iron: Implications for the composition of Earth's core. Earth and Planetary Science Letters, 2007, 254, 233-238.	4.4	222
9	Pressure-Induced Landau-Type Transition in Stishovite. , 1998, 282, 720-724.		213
10	Nanoscale detection of organic signatures in carbonate microbialites. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 9440-9445.	7.1	212
11	Thermal equation of state of CaSiO3perovskite. Journal of Geophysical Research, 1996, 101, 661-672.	3.3	177
12	High-pressure behaviour of serpentine minerals: a Raman spectroscopic study. Physics and Chemistry of Minerals, 2004, 31, 269-277.	0.8	176
13	Zn isotopic fractionation caused by sorption on goethite and 2-Lines ferrihydrite. Geochimica Et Cosmochimica Acta, 2008, 72, 4886-4900.	3.9	165
14	Experimental evidence for carbonate stability in the Earth's lower mantle. Earth and Planetary Science Letters, 1993, 118, 31-41.	4.4	158
15	Highâ€temperature thermodynamic properties of forsterite. Journal of Geophysical Research, 1991, 96, 11805-11816.	3.3	155
16	XANES Evidence for Oxidation of Cr(III) to Cr(VI) by Mn-Oxides in a Lateritic Regolith Developed on Serpentinized Ultramafic Rocks of New Caledonia. Environmental Science & Technology, 2009, 43, 7384-7390.	10.0	154
17	Density measurements of liquid Fe-S alloys at high-pressure. Geophysical Research Letters, 2000, 27, 811-814.	4.0	152
18	Extracellular Iron Biomineralization by Photoautotrophic Iron-Oxidizing Bacteria. Applied and Environmental Microbiology, 2009, 75, 5586-5591.	3.1	152

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19	Sound Velocities in Iron to 110 Gigapascals. Science, 2001, 291, 468-471.	12.6	151
20	Nucleation of calcium carbonate on bacterial nanoglobules. Geology, 2006, 34, 1017.	4.4	151
21	Experimental and numerical modeling of bacterially induced pH increase and calcite precipitation in saline aquifers. Chemical Geology, 2009, 265, 44-53.	3.3	142
22	Bacterial diversity and carbonate precipitation in the giant microbialites from the highly alkaline Lake Van, Turkey. Extremophiles, 2005, 9, 263-274.	2.3	137
23	Exceptional preservation of fossil plant spores in high-pressure metamorphic rocks. Earth and Planetary Science Letters, 2007, 262, 257-272.	4.4	136
24	Transformation of vivianite by anaerobic nitrateâ€reducing ironâ€oxidizing bacteria. Geobiology, 2009, 7, 373-384.	2.4	133
25	Multidisciplinary Evidences that Synechocystis PCC6803 Exopolysaccharides Operate in Cell Sedimentation and Protection against Salt and Metal Stresses. PLoS ONE, 2013, 8, e55564.	2.5	133
26	New host for carbon in the deep Earth. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 5184-5187.	7.1	118
27	Mechanism of wollastonite carbonation deduced from micro- to nanometer length scale observations. American Mineralogist, 2009, 94, 1707-1726.	1.9	117
28	Arsenite sorption at the magnetiteâ€“water interface during aqueous precipitation of magnetite: EXAFS evidence for a new arsenite surface complex. Geochimica Et Cosmochimica Acta, 2008, 72, 2573-2586.	3.9	113
29	Preparation of chains of magnetosomes, isolated from Magnetospirillum magneticum strain AMB-1 magnetotactic bacteria, yielding efficient treatment of tumors using magnetic hyperthermia. International Journal of Pharmaceutics, 2012, 434, 444-452.	5.2	111
30	Structural refinements of magnesite at very high pressure. American Mineralogist, 2002, 87, 1261-1265.	1.9	107
31	Extended X-ray Absorption Fine Structure Analysis of Arsenite and Arsenate Adsorption on Maghemite. Environmental Science & Technology, 2008, 42, 2361-2366.	10.0	107
32	Electron microscopy of (Mg, Fe)SiO₃ Perovskite: Evidence for structural phase transitions and implications for the lower mantle. Journal of Geophysical Research, 1992, 97, 12327-12347.	3.3	102
33	The Earth's core composition from high pressure density measurements of liquid iron alloys. Earth and Planetary Science Letters, 2013, 373, 169-178.	4.4	99
34	Evidence for Different Surface Speciation of Arsenite and Arsenate on Green Rust: An EXAFS and XANES Study. Environmental Science & Technology, 2010, 44, 109-115.	10.0	98
35	Alteration of submarine basaltic glass from the Ontong Java Plateau: A STXM and TEM study. Earth and Planetary Science Letters, 2007, 260, 187-200.	4.4	97
36	New insigths on the metabolic diversity among the epibiotic microbial communitiy of the hydrothermal shrimp Rimicaris exoculata. Journal of Experimental Marine Biology and Ecology, 2008, 359, 131-140.	1.5	97

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37	Biologically controlled precipitation of calcium phosphate by Ramlibacter tataouinensis. Earth and Planetary Science Letters, 2004, 228, 439-449.	4.4	93
38	Enhanced antitumor efficacy of biocompatible magnetosomes for the magnetic hyperthermia treatment of glioblastoma. Theranostics, 2017, 7, 4618-4631.	10.0	93
39	Highâ€pressure and highâ€temperature reactions between silicates and liquid iron alloys, in the diamond anvil cell, studied by analytical electron microscopy. Journal of Geophysical Research, 1992, 97, 4477-4487.	3.3	89
40	Use of bacterial magnetosomes in the magnetic hyperthermia treatment of tumours: A review. International Journal of Hyperthermia, 2013, 29, 801-809.	2.5	89
41	Twinning in MgSiO3 Perovskite. Science, 1990, 248, 468-471.	12.6	88
42	Arsenite sequestration at the surface of nano-Fe(OH)2, ferrous-carbonate hydroxide, and green-rust after bioreduction of arsenic-sorbed lepidocrocite by Shewanella putrefaciens. Geochimica Et Cosmochimica Acta, 2009, 73, 1359-1381.	3.9	88
43	Nanobacteria-like calcite single crystals at the surface of the Tataouine meteorite. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 7438-7442.	7.1	87
44	Cr(VI) detoxification by Desulfovibrio vulgaris strain Hildenborough: microbeâ€“metal interactions studies. Applied Microbiology and Biotechnology, 2006, 71, 892-897.	3.6	86
45	Contrasting isotopic signatures between anthropogenic and geogenic Zn and evidence for post-depositional fractionation processes in smelter-impacted soils from Northern France. Geochimica Et Cosmochimica Acta, 2011, 75, 2295-2308.	3.9	86
46	Ab initioequation of state of iron up to 1500 GPa. Physical Review B, 2013, 87, .	3.2	84
47	High-pressure, high-temperature Raman spectroscopy of Ca2GeO4 (olivine form): some insights on anharmonicity. Physics of the Earth and Planetary Interiors, 1989, 58, 141-154.	1.9	83
48	Phase changes and thermodynamic properties of CaTiO3. Spectroscopic data, vibrational modelling and some insights on the properties of MgSiO3 perovskite. Physics and Chemistry of Minerals, 1993, 20, 159-170.	0.8	80
49	Reduced gas seepages in ophiolitic complexes: Evidences for multiple origins of the H2-CH4-N2 gas mixtures. Geochimica Et Cosmochimica Acta, 2018, 223, 437-461.	3.9	80
50	Thermal equation of state of iron and Fe 0.91 Si 0.09. Physics and Chemistry of Minerals, 1999, 26, 206-211.	0.8	78
51	Comparison of carbon, nitrogen and water budgets on Venus and the Earth. Earth and Planetary Science Letters, 2000, 181, 33-40.	4.4	78
52	X-ray microanalysis of high-pressure/high-temperature phases synthesized from natural olivine in a diamond-anvil cell. Earth and Planetary Science Letters, 1988, 90, 52-64.	4.4	76
53	TEM study of a silicate-carbonate-microbe interface prepared by focused ion beam milling. Geochimica Et Cosmochimica Acta, 2005, 69, 1413-1422.	3.9	75
54	Comparison of the raman microprobe spectra of (Mg, Fe)2SiO4 and Mg2GeO4 with olivine and spinel structures. Physics and Chemistry of Minerals, 1986, 13, 91-95.	0.8	74

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55	Microstructures and iron partitioning in (Mg,Fe)SiO3perovskite-(Mg,Fe)O magnesiowÃ¼stite assemblages: An analytical transmission electron microscopy study. Journal of Geophysical Research, 1997, 102, 5265-5280.	3.3	72
56	Enhanced Olivine Carbonation within a Basalt as Compared to Single-Phase Experiments: Reevaluating the Potential of CO₂ Mineral Sequestration. Environmental Science & Technology, 2014, 48, 5512-5519.	10.0	70
57	Structural changes in liquid Fe at high pressures and high temperatures from Synchrotron X-ray Diffraction. Europhysics Letters, 2000, 52, 151-157.	2.0	69
58	Development of non-pyrogenic magnetosome minerals coated with poly-l-lysine leading to full disappearance of intracranial U87-Luc glioblastoma in 100% of treated mice using magnetic hyperthermia. Biomaterials, 2017, 141, 210-222.	11.4	69
59	Experimental investigation of the stability of Feâ€rich carbonates in the lower mantle. Journal of Geophysical Research, 2012, 117, .	3.3	68
60	Raman spectroscopic properties and Raman identification of CaSâ€MgSâ€MnSâ€FeSâ€Cr₂FeS₄ sulfides in meteorites and reduced sulfurâ€rich systems. Meteoritics and Planetary Science, 2013, 48, 1415-1426.	1.6	68
61	First-principles calculation of the infrared spectrum of lizardite. American Mineralogist, 2002, 87, 1286-1290.	1.9	66
62	Lizardite serpentine dissolution kinetics as a function of pH and temperature, including effects of elevated pCO2. Chemical Geology, 2013, 351, 245-256.	3.3	66
63	Ex situ mineral carbonation for CO2 mitigation: Evaluation of mining waste resources, aqueous carbonation processability and life cycle assessment (Carmex project). Minerals Engineering, 2014, 59, 52-63.	4.3	66
64	Description of new shockâ€induced phases in the Shergotty, Zagami, Nakhla and Chassigny meteorites. Meteoritics and Planetary Science, 2001, 36, 1297-1305.	1.6	65
65	Physical properties of liquid Fe alloys at high pressure and their bearings on the nature of metallic planetary cores. Journal of Geophysical Research, 2002, 107, ECV 4-1-ECV 4-9.	3.3	65
66	Formation of CO2, H2 and condensed carbon from siderite dissolution in the 200â€“300Â°C range and at 50MPa. Geochimica Et Cosmochimica Acta, 2015, 154, 201-211.	3.9	65
67	Solving Controversies on the Iron Phase Diagram Under High Pressure. Geophysical Research Letters, 2018, 45, 11,074.	4.0	65
68	High-temperature heat capacity and phase transitions of CaTiO3 perovskite. Physics and Chemistry of Minerals, 1993, 20, 141.	0.8	64
69	Experimental approach of CO2 biomineralization in deep saline aquifers. Chemical Geology, 2009, 265, 54-62.	3.3	64
70	Biomineralized Î±-Fe₂O₃: texture and electrochemical reaction with Li. Energy and Environmental Science, 2014, 7, 451-460.	30.8	62
71	Exopolysaccharides protect Synechocystis against the deleterious effects of Titanium dioxide nanoparticles in natural and artificial waters. Journal of Colloid and Interface Science, 2013, 405, 35-43.	9.4	61
72	The melting curve of iron at extreme pressures: Implications for planetary cores. High Energy Density Physics, 2011, 7, 141-144.	1.5	59

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73	Electron microscopy of high-pressure phases synthesized from natural olivine in diamond anvil cell. Physics and Chemistry of Minerals, 1989, 16, 320.	0.8	58
74	Comprehensive analysis of direct aqueous mineral carbonation using dissolution enhancing organic additives. International Journal of Greenhouse Gas Control, 2012, 9, 334-346.	4.6	57
75	Interaction between Escherichia coli and TiO2 nanoparticles in natural and artificial waters. Colloids and Surfaces B: Biointerfaces, 2013, 102, 158-164.	5.0	57
76	One-step electric-field driven methane and formaldehyde synthesis from liquid methanol. Chemical Science, 2017, 8, 2329-2336.	7.4	56
77	High-temperature properties of geikielite (MgTiO3-ilmenite) from high-temperature high-pressure Raman spectroscopy ? Some implications for MgSiO3-ilmenite. Physics and Chemistry of Minerals, 1994, 21, 441.	0.8	55
78	Quasi-harmonic computations of thermodynamic parameters of olivines at high-pressure and high-temperature. A comparison with experiment data. Physics of the Earth and Planetary Interiors, 1996, 98, 17-29.	1.9	55
79	A thermodynamic model for MgSiO3-perovskite derived from pressure, temperature and volume dependence of the Raman mode frequencies. Physics of the Earth and Planetary Interiors, 2000, 117, 361-384.	1.9	55
80	Formation of single domain magnetite by green rust oxidation promoted by microbial anaerobic nitrate-dependent iron oxidation. Geochimica Et Cosmochimica Acta, 2014, 139, 327-343.	3.9	55
81	Absolute equation of state measurements of iron using laser driven shocks. Physics of Plasmas, 2002, 9, 2466-2469.	1.9	54
82	Progress in warm dense matter study with applications to planetology. Physica Scripta, 2014, T161, 014060.	2.5	54
83	Magnetotactic bacteria as a new model for P sequestration in the ferruginous Lake Pavin. Geochemical Perspectives Letters, 0, , 35-41.	5.0	54
84	Experimental study and TEM characterization of dusty olivines in chondrites: Evidence for formation by in situ reduction. Meteoritics and Planetary Science, 2003, 38, 81-94.	1.6	53
85	Mass-dependent and -independent signature of Fe isotopes in magnetotactic bacteria. Science, 2016, 352, 705-708.	12.6	53
86	pH-dependent control of feldspar dissolution rate by altered surface layers. Chemical Geology, 2016, 442, 148-159.	3.3	53
87	TEM-EELS study of natural ferrihydrite from geologicalâ€“biological interactions in hydrothermal systems. Earth and Planetary Science Letters, 2004, 222, 947-957.	4.4	52
88	CO2 geological storage: The environmental mineralogy perspective. Comptes Rendus - Geoscience, 2011, 343, 246-259.	1.2	52
89	Preservation of Archaeal Surface Layer Structure During Mineralization. Scientific Reports, 2016, 6, 26152.	3.3	52
90	Intracellular amorphous Ca-carbonate and magnetite biomineralization by a magnetotactic bacterium affiliated to the Alphaproteobacteria. ISME Journal, 2021, 15, 1-18.	9.8	52

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91	Pressure-induced structural modifications and amorphization in olivine compounds. Chemical Geology, 1992, 96, 411-420.	3.3	51
92	X-ray absorption spectroscopy of iron at multimegabar pressures in laser shock experiments. Physical Review B, 2015, 92, .	3.2	51
93	Bacteria in the Tatahouine meteorite: nanometric-scale life in rocks. Earth and Planetary Science Letters, 2000, 175, 161-167.	4.4	50
94	Chains of magnetosomes with controlled endotoxin release and partial tumor occupation induce full destruction of intracranial U87-Luc glioma in mice under the application of an alternating magnetic field. Journal of Controlled Release, 2017, 262, 259-272.	9.9	50
95	Effects of Mg-Fe (super 2+) substitution in calcite-structure carbonates; thermoelastic properties. American Mineralogist, 1998, 83, 280-287.	1.9	49
96	Transmission electron microscopy study of magnetites in a freshwater population of magnetotactic bacteria. American Mineralogist, 2007, 92, 621-630.	1.9	49
97	Chemical signature of magnetotactic bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 1699-1703.	7.1	49
98	Dissolution kinetics of diopside as a function of solution saturation state: Macroscopic measurements and implications for modeling of geological storage of CO2. Geochimica Et Cosmochimica Acta, 2010, 74, 2615-2633.	3.9	48
99	Decaying shock studies of phase transitions in MgOâ€SiO₂ systems: Implications for the superâ€Earths' interiors. Geophysical Research Letters, 2016, 43, 9475-9483.	4.0	48
100	Shock recovery experiments on dolomite and thermodynamical calculations of impact induced decarbonation. Journal of Geophysical Research, 1995, 100, 15465-15476.	3.3	47
101	X-ray diffraction study of magnesite at high pressure and high temperature. Physics and Chemistry of Minerals, 1997, 24, 122-130.	0.8	47
102	The deleterious effect of secondary phases on olivine carbonation yield: Insight from time-resolved aqueous-fluid sampling and FIB-TEM characterization. Chemical Geology, 2013, 357, 186-202.	3.3	47
103	Hotâ€pressing and characterization of polycrystals of Î²â€Mg₂SiO₄, for acoustic velocity measurements. Geophysical Research Letters, 1990, 17, 1331-1334.	4.0	46
104	Biocompatible coated magnetosome minerals with various organization and cellular interaction properties induce cytotoxicity towards RG-2 and GL-261 glioma cells in the presence of an alternating magnetic field. Journal of Nanobiotechnology, 2017, 15, 74.	9.1	46
105	P-V-T measurements of iron suicide (Îµ-FeSi) Implications for silicate-metal interactions in the early Earth. European Journal of Mineralogy, 1997, 9, 277-286.	1.3	46
106	An olivine to beta phase transformation mechanism Mg₂SiO₄. Geophysical Research Letters, 1991, 18, 89-92.	4.0	45
107	Synchrotron-based speciation of chromium in an Oxisol from New Caledonia: Importance of secondary Fe-oxyhydroxides. American Mineralogist, 2009, 94, 710-719.	1.9	45
108	The Breakdown of Olivine to Perovskite and Magnesiowustite. Science, 1997, 275, 510-513.	12.6	43

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109	Application of inelastic X-ray scattering to the measurements of acoustic wave velocities in geophysical materials at very high pressure. Physics of the Earth and Planetary Interiors, 2004, 143-144, 5-18.	1.9	43
110	Equation of state of Al-bearing perovskite to lower mantle pressure conditions. Geophysical Research Letters, 2001, 28, 3789-3792.	4.0	41
111	Mineralogical and isotopic properties of inorganic nanocrystalline magnetites. Geochimica Et Cosmochimica Acta, 2004, 68, 4395-4403.	3.9	41
112	Si in the core? New high-pressure and high-temperature experimental data. Geochimica Et Cosmochimica Acta, 2004, 68, 4201-4211.	3.9	41
113	Fayalite (Fe2SiO4) dissolution kinetics determined by X-ray absorption spectroscopy. Chemical Geology, 2010, 275, 161-175.	3.3	40
114	Calcium-Phosphate Biomineralization Induced by Alkaline Phosphatase Activity in Escherichia coli: Localization, Kinetics, and Potential Signatures in the Fossil Record. Frontiers in Earth Science, 0, 3, .	1.8	40
115	Development of an attrition-leaching hybrid process for direct aqueous mineral carbonation. Chemical Engineering Journal, 2015, 262, 716-726.	12.7	40
116	Mechanisms of Pyrite Formation Promoted by Sulfate-Reducing Bacteria in Pure Culture. Frontiers in Earth Science, 2020, 8, .	1.8	40
117	Rapid pyritization in the presence of a sulfur/sulfate-reducing bacterial consortium. Scientific Reports, 2020, 10, 8264.	3.3	40
118	Microscopic anharmonicity and equation of state of MgSiO3-perovskite. Geophysical Research Letters, 1996, 23, 3043-3046.	4.0	39
119	The influence on Fe content on Raman spectra and unit cell parameters of magnesiteâ€“siderite solid solutions. Physics and Chemistry of Minerals, 2012, 39, 239-246.	0.8	39
120	Strong electric fields at a prototypical oxide/water interface probed by ab initio molecular dynamics: MgO(001). Physical Chemistry Chemical Physics, 2015, 17, 20382-20390.	2.8	39
121	Biomineralization of tellurium and selenium-tellurium nanoparticles by the white-rot fungus Phanerochaete chrysosporium. International Biodeterioration and Biodegradation, 2017, 124, 258-266.	3.9	39
122	Carbon isotope fractionation during calcium carbonate precipitation induced by ureolytic bacteria. Geochimica Et Cosmochimica Acta, 2012, 98, 107-124.	3.9	37
123	Natural H₂ in <scp>K</scp>ansas: Deep or shallow origin?. Geochemistry, Geophysics, Geosystems, 2017, 18, 1841-1865.	2.5	37
124	Experimental study of the bcc-fcc phase transformations in the Fe-rich system Fe-Si at high pressures. Physics and Chemistry of Minerals, 1999, 26, 419-424.	0.8	36
125	Bioalteration of synthetic Fe(III)-, Fe(II)-bearing basaltic glasses and Fe-free glass in the presence of the heterotrophic bacteria strain Pseudomonas aeruginosa: Impact of siderophores. Geochimica Et Cosmochimica Acta, 2016, 188, 147-162.	3.9	36
126	Biocompatible and stable magnetosome minerals coated with poly-<scp>l</scp>-lysine, citric acid, oleic acid, and carboxy-methyl-dextran for application in the magnetic hyperthermia treatment of tumors. Journal of Materials Chemistry B, 2017, 5, 7644-7660.	5.8	36

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127	Anharmonic properties of Mg2SiO4-forsterite measured from the volume dependence of the Raman spectrum. European Journal of Mineralogy, 1997, 9, 255-262.	1.3	36
128	Eutectoid phase transformation of olivine and spinel into perovskite and rock salt structures. Nature, 1986, 321, 603-605.	27.8	35
129	Microbial diversity on the Tatahouine meteorite. Meteoritics and Planetary Science, 2006, 41, 1249-1265.	1.6	35
130	A Method for Producing Highly Pure Magnetosomes in Large Quantity for Medical Applications Using Magnetospirillum gryphiswaldense MSR-1 Magnetotactic Bacteria Amplified in Minimal Growth Media. Frontiers in Bioengineering and Biotechnology, 2020, 8, 16.	4.1	35
131	Multiple Ionic-Plasmon Resonances in Naturally Occurring Multiwall Nanotubes: Infrared Spectra of Chrysotile Asbestos. Physical Review Letters, 2002, 89, 177401.	7.8	34
132	Experimental Colonization and Alteration of Orthopyroxene by the Pleomorphic BacteriaRamlibacter tataouinensis. Geomicrobiology Journal, 2004, 21, 341-349.	2.0	34
133	Metallization of Warm Dense<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>SiO</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> by XANES Spectroscopy. Physical Review Letters, 2014, 113, 116404.	7.8	34
134	XAS Study of Arsenic Coordination in Euglena gracilis Exposed to Arsenite. Environmental Science & Technology, 2008, 42, 5342-5347.	10.0	33
135	Sulfur vesicles from Thermococcales: A possible role in sulfur detoxifying mechanisms. Biochimie, 2015, 118, 356-364.	2.6	33
136	Dynamic X-ray diffraction observation of shocked solid iron up to 170 GPa. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 7745-7749.	7.1	33
137	Key Role of Alphaproteobacteria and Cyanobacteria in the Formation of Stromatolites of Lake Dziani Dzaha (Mayotte, Western Indian Ocean). Frontiers in Microbiology, 2018, 9, 796.	3.5	33
138	Morphology of nanomagnetite crystals: Implications for formation conditions. American Mineralogist, 2005, 90, 1793-1800.	1.9	32
139	High-temperature Raman spectroscopic and X-ray diffraction study of beta -Mg₂SiO₄; insights into its high-temperature thermodynamic properties and the beta - to alpha -phase-transition mechanism and kinetics. American Mineralogist, 1996, 81, 585-594.	1.9	31
140	Metalâ€“silicate interaction in quenched shock-induced melt of the Tenham L6-chondrite. Earth and Planetary Science Letters, 2000, 179, 477-487.	4.4	31
141	An X-ray absorption study of the dissolution of siderite at 300Âbar between 50ÂÂ°C and 100ÂÂ°C. Chemical Geology, 2009, 259, 8-16.	3.3	30
142	Mineralogical evolution of Feâ€“Si-rich layers at the olivine-water interface during carbonation reactions. American Mineralogist, 2015, 100, 2655-2669.	1.9	30
143	Kinetics of the iron<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>Î±</mml:mi><mml:mo>â^'</mml:mo><mml:mi>ε</mml:mi></mml:mrow></mml:math> transition at high-strain rates: Experiment and model. Physical Review B, 2016, 93, .	3.2	30
144	Time-dependent feldspar dissolution rates resulting from surface passivation: Experimental evidence and geochemical implications. Earth and Planetary Science Letters, 2018, 498, 226-236.	4.4	30

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145	Fluorescence in situ hybridisation coupled to ultra small immunogold detection to identify prokaryotic cells using transmission and scanning electron microscopy. Journal of Microbiological Methods, 2005, 63, 20-28.	1.6	29
146	Iron uptake and magnetite biomineralization in the magnetotactic bacterium Magnetospirillum magneticum strain AMB-1: An iron isotope study. Geochimica Et Cosmochimica Acta, 2018, 232, 225-243.	3.9	29
147	Bayesian analysis of Enceladusâ€™s plume data to assess methanogenesis. Nature Astronomy, 2021, 5, 805-814.	10.1	29
148	Zinc-iron sulphide mineralization in tubes of hydrothermal vent worms. European Journal of Mineralogy, 2001, 13, 653-658.	1.3	28
149	Stable Mn-magnetite derived from Mn-siderite by heating in air. Journal of Geophysical Research, 2003, 108, .	3.3	28
150	Mineralogical gradients associated with alvinellids at deep-sea hydrothermal vents. Deep-Sea Research Part I: Oceanographic Research Papers, 2003, 50, 269-280.	1.4	28
151	Thermodynamic constraints on the formation of condensed carbon from serpentinization fluids. Geochimica Et Cosmochimica Acta, 2016, 189, 391-403.	3.9	28
152	Speciation of Arsenic in Euglena gracilis Cells Exposed to As(V). Environmental Science & Technology, 2009, 43, 3315-3321.	10.0	27
153	Mineral and Bacterial Diversities of Desert Sand Grains from South-East Morocco. Geomicrobiology Journal, 2010, 27, 76-92.	2.0	27
154	The effect of iron-chelating agents on Magnetospirillum magneticum strain AMB-1: stimulated growth and magnetosome production and improved magnetosome heating properties. Applied Microbiology and Biotechnology, 2012, 96, 663-670.	3.6	27
155	Evaluation on chemical stability of lead blast furnace (LBF) and imperial smelting furnace (ISF) slags. Journal of Environmental Management, 2016, 180, 310-323.	7.8	27
156	Dynamics of altered surface layer formation on dissolving silicates. Geochimica Et Cosmochimica Acta, 2017, 209, 51-69.	3.9	27
157	Electron-irradiation-induced phase transformation and fractional volatilization in (Mg,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 and Mechanical Properties, 2001, 81, 2823-2840.	0.6	26
158	Diamond formation in metalâ€“carbonate interactions. Earth and Planetary Science Letters, 2005, 229, 205-216.	4.4	26
159	Highly CO2-supersaturated melts in the Pannonian lithospheric mantle â€“ A transient carbon reservoir?. Lithos, 2017, 286-287, 519-533.	1.4	26
160	In situ high-pressure and high-temperature X-ray microtomographic imaging during large deformation: A new technique for studying mechanical behavior of multiphase composites. , 2011, 7, 40-53.		25
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