## FranÃ\sois Guyot

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/9394234/publications.pdf

Version: 2024-02-01

257 papers

13,679 citations

63 h-index 100 g-index

264 all docs

264 docs citations

264 times ranked 11739 citing authors

#	Article	IF	Citations
1	Theoretical Considerations on the Characteristic Timescales of Hydrogen Generation by Serpentinization Reactions on Enceladus. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	10
2	Towards a dynamic compression facility at the ESRF. Journal of Synchrotron Radiation, 2022, 29, 167-179.	2.4	6
3	Precipitation of greigite and pyrite induced by Thermococcales: an advantage to live in Fe―and S―ich environments?. Environmental Microbiology, 2022, 24, 626-642.	3.8	3
4	Defining Local Chemical Conditions in Magnetosomes of Magnetotactic Bacteria. Journal of Physical Chemistry B, 2022, 126, 2677-2687.	2.6	2
5	Intracellular amorphous Ca-carbonate and magnetite biomineralization by a magnetotactic bacterium affiliated to the Alphaproteobacteria. ISME Journal, 2021, 15, 1-18.	9.8	52
6	Aqueous alteration and bioalteration of a synthetic enstatite chondrite. Meteoritics and Planetary Science, 2021, 56, 601-618.	1.6	0
7	Bayesian analysis of Enceladus's plume data to assess methanogenesis. Nature Astronomy, 2021, 5, 805-814.	10.1	29
8	A carbonaceous chondrite and cometary origin for icy moons of Jupiter and Saturn. Earth and Planetary Science Letters, 2020, 530, 115920.	4.4	25
9	Mechanisms of Pyrite Formation Promoted by Sulfate-Reducing Bacteria in Pure Culture. Frontiers in Earth Science, 2020, 8, .	1.8	40
10	Direct Observation of Shockâ€Induced Disordering of Enstatite Below the Melting Temperature. Geophysical Research Letters, 2020, 47, e2020GL088887.	4.0	9
11	Symbiotic cooperation between freshwater rock-boring bivalves and microorganisms promotes silicate bioerosion. Scientific Reports, 2020, 10, 13385.	3.3	5
12	Melting properties by X-ray absorption spectroscopy: common signatures in binary Fe–C, Fe–O, Fe–S and Fe–Si systems. Scientific Reports, 2020, 10, 11663.	3.3	13
13	Engineering <i>E. coli</i> for Magnetic Control and the Spatial Localization of Functions. ACS Synthetic Biology, 2020, 9, 3030-3041.	3.8	20
14	Microbially Induced Mineralization of Layered Mn Oxides Electroactive in Li Batteries. Frontiers in Microbiology, 2020, 11, 2031.	3 <b>.</b> 5	6
15	Rapid pyritization in the presence of a sulfur/sulfate-reducing bacterial consortium. Scientific Reports, 2020, 10, 8264.	3.3	40
16	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
17	In situ monitoring of exopolymer-dependent Mn mineralization on bacterial surfaces. Science Advances, 2020, 6, eaaz3125.	10.3	14
18	Early Diagenesis of Lacustrine Carbonates in Volcanic Settings: The Role of Magmatic CO <sub>2</sub> (Lake Dziani Dzaha, Mayotte, Indian Ocean). ACS Earth and Space Chemistry, 2020, 4, 363-378.	2.7	18

#	Article	IF	CITATIONS
19	Formic Acid Synthesis in a Water–Mineral System: Major Role of the Interface. Journal of Physical Chemistry C, 2020, 124, 5125-5131.	3.1	11
20	The Dissolution Anisotropy of Pyroxenes: Experimental Validation of a Stochastic Dissolution Model Based on Enstatite Dissolution. Journal of Physical Chemistry C, 2020, 124, 3122-3140.	3.1	10
21	Formation of magnesiumâ€smectite during lacustrine carbonates early diagenesis: Study case of the volcanic crater lake Dziani Dzaha (Mayotte – Indian Ocean). Sedimentology, 2019, 66, 983-1001.	3.1	20
22	X-ray absorption near edge spectroscopy study of warm dense MgO. Physics of Plasmas, 2019, 26, 112703.	1.9	3
23	Ferrous Iron Under Oxygenâ€Rich Conditions in the Deep Mantle. Geophysical Research Letters, 2019, 46, 1348-1356.	4.0	22
24	Direct and indirect impact of the bacterial strain Pseudomonas aeruginosa on the dissolution of synthetic Fe(III)- and Fe(II)-bearing basaltic glasses. Chemical Geology, 2019, 523, 9-18.	3.3	14
25	Physical properties of MgO at deep planetary conditions. Physical Review B, 2019, 99, .	3.2	19
26	The fate of planetary cores in giant and ice-giant planets. Astronomy and Astrophysics, 2019, 631, L4.	5.1	10
27	Biodegraded magnetosomes with reduced size and heating power maintain a persistent activity against intracranial U87-Luc mouse GBM tumors. Journal of Nanobiotechnology, 2019, 17, 126.	9.1	17
28	Experimental assessment of occurrences and stability of lead-bearing minerals in bacterial biofilms. Chemical Geology, 2019, 505, 23-35.	3.3	9
29	Biocompatible Coated Magnetosome Minerals for Application in the Magnetic Hyperthermia Treatment of Tumors. Biophysical Journal, 2018, 114, 361a.	0.5	0
30	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
31	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
32	A Fluorescent Nanoprobe for the Detection of in Situ Temperature Changes during Hyperthermia Treatment of Tumors. Biophysical Journal, 2018, 114, 361a.	0.5	1
33	CO2-induced destabilization of pyrite-structured FeO2Hx in the lower mantle. National Science Review, 2018, 5, 870-877.	9.5	15
34	Early stages of bacterial community adaptation to silicate aging. Geology, 2018, 46, 555-558.	4.4	15
35	Solving Controversies on the Iron Phase Diagram Under High Pressure. Geophysical Research Letters, 2018, 45, 11,074.	4.0	65
36	Magnetic-field induced rotation of magnetosome chains in silicified magnetotactic bacteria. Scientific Reports, 2018, 8, 7699.	3.3	19

#	Article	IF	Citations
37	Fluorescent magnetosomes for controlled and repetitive drug release under the application of an alternating magnetic field under conditions of limited temperature increase (<2.5 °C). Nanoscale, 2018, 10, 10918-10933.	5.6	24
38	Mineralizations and transition metal mobility driven by organic carbon during low-temperature serpentinization. Lithos, 2018, 323, 262-276.	1.4	9
39	Greigite nanocrystals produced by hyperthermophilic archaea of Thermococcales order. PLoS ONE, 2018, 13, e0201549.	2.5	19
40	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
41	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
42	Synthesis of RNA Nucleotides in Plausible Prebiotic Conditions from ab Initio Computer Simulations. Journal of Physical Chemistry Letters, 2018, 9, 4981-4987.	4.6	22
43	Dynamics of altered surface layer formation on dissolving silicates. Geochimica Et Cosmochimica Acta, 2017, 209, 51-69.	3.9	27
44	Hydrogen production by hydrothermal oxidation of FeO under acidic conditions. International Journal of Hydrogen Energy, 2017, 42, 795-806.	7.1	21
45	One-step electric-field driven methane and formaldehyde synthesis from liquid methanol. Chemical Science, 2017, 8, 2329-2336.	7.4	56
46	Slab-derived metasomatism in the Carpathian-Pannonian mantle revealed by investigations of mantle xenoliths from the Bakony-Balaton Highland Volcanic Field. Lithos, 2017, 286-287, 534-552.	1.4	8
47	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
48	Natural H <sub>2</sub> in <scp>K</scp> ansas: Deep or shallow origin?. Geochemistry, Geophysics, Geosystems, 2017, 18, 1841-1865.	2.5	37
49	Highly CO2-supersaturated melts in the Pannonian lithospheric mantle – A transient carbon reservoir?. Lithos, 2017, 286-287, 519-533.	1.4	26
50	Nanoprobe Synthesized by Magnetotactic Bacteria, Detecting Fluorescence Variations under Dissociation of Rhodamine B from Magnetosomes following Temperature, pH Changes, or the Application of Radiation. ACS Applied Materials & Distribution of Radiation. ACS Applied Materials & Distribution of Radiation.	8.0	15
51	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
52	Programmed Self-Assembly of a Biochemical and Magnetic Scaffold to Trigger and Manipulate Microtubule Structures. Scientific Reports, 2017, 7, 11344.	3.3	11
53	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
54	Novel electrochemical route to cleaner fuel dimethyl ether. Scientific Reports, 2017, 7, 6901.	3.3	22

#	Article	IF	CITATIONS
55	Experimental maturation of Archaea encrusted by Fe-phosphates. Scientific Reports, 2017, 7, 16984.	3.3	15
56	Measurement of iron characteristics under ramp compression. Chinese Physics B, 2017, 26, 115205.	1.4	4
57	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
58	Disequilibrium $\hat{1}$ 180 values in microbial carbonates as a tracer of metabolic production of dissolved inorganic carbon. Geochimica Et Cosmochimica Acta, 2017, 199, 112-129.	3.9	14
59	Enhanced antitumor efficacy of biocompatible magnetosomes for the magnetic hyperthermia treatment of glioblastoma. Theranostics, 2017, 7, 4618-4631.	10.0	93
60	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
61	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
62	Contribution of siderite–water interaction for the unconventional generation of hydrocarbon gases in the Solimões basin, north-west Brazil. Marine and Petroleum Geology, 2016, 71, 168-182.	3.3	21
63	Mass-dependent and -independent signature of Fe isotopes in magnetotactic bacteria. Science, 2016, 352, 705-708.	12.6	53
64	pH-dependent control of feldspar dissolution rate by altered surface layers. Chemical Geology, 2016, 442, 148-159.	3.3	53
65	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
66	Iron Phosphate/Bacteria Composites as Precursors for Textured Electrode Materials with Enhanced Electrochemical Properties. Journal of the Electrochemical Society, 2016, 163, A2139-A2148.	2.9	13
67	Decaying shock studies of phase transitions in MgOâ€SiO <sub>2</sub> systems: Implications for the superâ€Earths' interiors. Geophysical Research Letters, 2016, 43, 9475-9483.	4.0	48
68	High-pressure structural changes in liquid silica. Physical Review E, 2016, 94, 031201.	2.1	16
69	Kinetics of the iron <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>α</mml:mi><mml:mo>â^'<td>no<b>3.2</b>mml:</td><td>:mi<b>3 6</b>&gt;</td></mml:mo></mml:mrow></mml:math>	no <b>3.2</b> mml:	:mi <b>3 6</b> >
70	Preservation of Archaeal Surface Layer Structure During Mineralization. Scientific Reports, 2016, 6, 26152.	3.3	52
71	Thermodynamic constraints on the formation of condensed carbon from serpentinization fluids. Geochimica Et Cosmochimica Acta, 2016, 189, 391-403.	3.9	28
72	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

#	Article	IF	CITATIONS
73	Melting and metallization of silica in the cores of gas giants, ice giants, and super Earths. Physical Review B, 2015, 92, .	3.2	18
74	X-ray absorption spectroscopy of iron at multimegabar pressures in laser shock experiments. Physical Review B, 2015, 92, .	3.2	51
75	Mineralogical evolution of Fe–Si-rich layers at the olivine-water interface during carbonation reactions. American Mineralogist, 2015, 100, 2655-2669.	1.9	30
76	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
77	Reply to Bada and Cleaves: Ab initio free-energy landscape of Miller-like prebiotic reactions. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E343-4.	7.1	6
78	Probing iron at Super-Earth core conditions. Physics of Plasmas, 2015, 22, .	1.9	9
79	Impact of iron chelators on short-term dissolution of basaltic glass. Geochimica Et Cosmochimica Acta, 2015, 162, 83-98.	3.9	20
80	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
81	Formation of CO2, H2 and condensed carbon from siderite dissolution in the 200–300°C range and at 50MPa. Geochimica Et Cosmochimica Acta, 2015, 154, 201-211.	3.9	65
82	Sulfur vesicles from Thermococcales: A possible role in sulfur detoxifying mechanisms. Biochimie, 2015, 118, 356-364.	2.6	33
83	Development of an attrition-leaching hybrid process for direct aqueous mineral carbonation. Chemical Engineering Journal, 2015, 262, 716-726.	12.7	40
84	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
85	<i>Ab initio</i> calculation of x-ray absorption of iron up to 3 Mbar and 8000 K. Physical Review B, 2014, 89, .	3.2	13
86	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
87	Correlating biological methods to assess Escherichia coli bacteria viability in silica gels. Analytical Methods, 2014, 6, 2429.	2.7	8
88	Effect of cyanobacteria Synechococcus PCC 7942 on carbonation kinetics of olivine at 20°C. Minerals Engineering, 2014, 59, 2-11.	4.3	24
89	Biomineralized α-Fe <sub>2</sub> O <sub>3</sub> : texture and electrochemical reaction with Li. Energy and Environmental Science, 2014, 7, 451-460.	30.8	62

Metallization of Warm Dense<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"
display="inline"><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:mrow><mml:

#	Article	IF	Citations
91	Characterization of laser-driven ultrafast shockless compression using gold targets. Journal of Applied Physics, 2014, 116, 043521.	2.5	0
92	Progress in warm dense matter study with applications to planetology. Physica Scripta, 2014, T161, 014060.	2.5	54
93	Enhanced Olivine Carbonation within a Basalt as Compared to Single-Phase Experiments: Reevaluating the Potential of CO <sub>2</sub> Mineral Sequestration. Environmental Science & Environmental Scienc	10.0	70
94	Raman spectroscopic properties and Raman identification of CaSâ€MgSâ€MnSâ€FeSâ€Cr <sub>2</sub> FeS <sub>4</sub> sulfides in meteorites and reduced sulfurâ€rich systems. Meteoritics and Planetary Science, 2013, 48, 1415-1426.	1.6	68
95	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
96	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
97	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
98	Influence of exopolysaccharides on the electrophoretic properties of the model cyanobacterium Synechocystis. Colloids and Surfaces B: Biointerfaces, 2013, 110, 171-177.	5.0	9
99	Use of bacterial magnetosomes in the magnetic hyperthermia treatment of tumours: A review. International Journal of Hyperthermia, 2013, 29, 801-809.	2.5	89
100	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
101	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
102	<i>Ab initio</i> equation of state of iron up to 1500 GPa. Physical Review B, 2013, 87, .	3.2	84
103	Direct laser-driven ramp compression studies of iron: A first step toward the reproduction of planetary core conditions. High Energy Density Physics, 2013, 9, 243-246.	1.5	21
104	Interaction between Escherichia coli and TiO2 nanoparticles in natural and artificial waters. Colloids and Surfaces B: Biointerfaces, 2013, 102, 158-164.	5.0	57
105	Carbon isotope fractionation during calcium carbonate precipitation induced by ureaseâ€eatalysed hydrolysis of urea. Chemical Geology, 2012, 330-331, 39-50.	3.3	13
106	Experimental investigation of the stability of Fe $\hat{a}$ -rich carbonates in the lower mantle. Journal of Geophysical Research, 2012, 117, .	3.3	68
107	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
108	Carbon isotope fractionation during calcium carbonate precipitation induced by ureolytic bacteria. Geochimica Et Cosmochimica Acta, 2012, 98, 107-124.	3.9	37

#	Article	IF	Citations
109	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
110	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
111	The influence on Fe content on Raman spectra and unit cell parameters of magnesite–siderite solid solutions. Physics and Chemistry of Minerals, 2012, 39, 239-246.	0.8	39
112	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
113	Influence of amorphous silica layer formation on the dissolution rate of olivine at 90°C and elevated pCO2. Chemical Geology, 2011, 284, 193-209.	3.3	251
114	In-situ monitoring of the formation of carbon compounds during the dissolution of iron(II) carbonate (siderite). Chemical Geology, 2011, 290, 145-155.	3.3	22
115	CO2 geological storage: The environmental mineralogy perspective. Comptes Rendus - Geoscience, 2011, 343, 246-259.	1.2	52
116	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
117	Understanding the chemistry of direct aqueous carbonation with additives through geochemical modelling. Energy Procedia, 2011, 4, 3809-3816.	1.8	4
118	The melting curve of iron at extreme pressures: Implications for planetary cores. High Energy Density Physics, 2011, 7, 141-144.	1.5	59
119	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
120	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
121	Simulating earth core using high energy lasers. High Energy Density Physics, 2010, 6, 210-214.	1.5	7
122	High-power laser shock-induced dynamic fragmentation of iron foils. Physical Review B, 2010, 82, .	3.2	14
123	Mineral and Bacterial Diversities of Desert Sand Grains from South-East Morocco. Geomicrobiology Journal, 2010, 27, 76-92.	2.0	27
124	The chemical composition of the Earth: Enstatite chondrite models. Earth and Planetary Science Letters, 2010, 293, 259-268.	4.4	363
125	Fayalite (Fe2SiO4) dissolution kinetics determined by X-ray absorption spectroscopy. Chemical Geology, 2010, 275, 161-175.	3.3	40
126	Evidence for Different Surface Speciation of Arsenite and Arsenate on Green Rust: An EXAFS and XANES Study. Environmental Science & Eamp; Technology, 2010, 44, 109-115.	10.0	98

#	Article	IF	Citations
127	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
128	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
129	Mechanism of wollastonite carbonation deduced from micro- to nanometer length scale observations. American Mineralogist, 2009, 94, 1707-1726.	1.9	117
130	Extracellular Iron Biomineralization by Photoautotrophic Iron-Oxidizing Bacteria. Applied and Environmental Microbiology, 2009, 75, 5586-5591.	3.1	152
131	Transformation of vivianite by anaerobic nitrateâ€reducing ironâ€oxidizing bacteria. Geobiology, 2009, 7, 373-384.	2.4	133
132	Speciation of Arsenic in <i>Euglena gracilis</i> Cells Exposed to As(V). Environmental Science & Exposed to Ex	10.0	27
133	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 & E	10.0	154
134	An X-ray absorption study of the dissolution of siderite at 300Âbar between 50°C and 100°C. Chemical Geology, 2009, 259, 8-16.	3.3	30
135	Experimental approach of CO2 biomineralization in deep saline aquifers. Chemical Geology, 2009, 265, 54-62.	3.3	64
136	Carbonation of Ca-bearing silicates, the case of wollastonite: Experimental investigations and kinetic modeling. Chemical Geology, 2009, 265, 63-78.	3.3	225
137	Experimental and numerical modeling of bacterially induced pH increase and calcite precipitation in saline aquifers. Chemical Geology, 2009, 265, 44-53.	3.3	142
138	Iron biomineralization by anaerobic neutrophilic iron-oxidizing bacteria. Geochimica Et Cosmochimica Acta, 2009, 73, 696-711.	3.9	255
139	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
140	Crystal ball – 2009. Environmental Microbiology Reports, 2009, 1, 3-26.	2.4	5
141	<i>Archaeoglobus fulgidus</i> and <i>Thermotoga elfii</i> , Thermophilic Isolates from Deep Geothermal Water of the Paris Basin. Geomicrobiology Journal, 2009, 26, 119-130.	2.0	23
142	STUDY OF IRON UNDER HIGH PRESSURE CONDITIONS USING ISENTROPIC COMPRESSION., 2009,,.		2
143	MICROSTRUCTURAL INVESTIGATION OF LASER-SHOCKED IRON FOILS., 2009,,.		0
144	DYNAMIC FRAGMENTATION AS A POSSIBLE DIAGNOSTIC FOR HIGH PRESSURE MELTING IN LASER SHOCK-LOADED IRON. , 2009, , .		2

#	Article	IF	CITATIONS
145	The Earth's Lower Mantle and Core. Elements, 2008, 4, 177-182.	0.5	19
146	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
147	Extended X-ray Absorption Fine Structure Analysis of Arsenite and Arsenate Adsorption on Maghemite. Environmental Science & En	10.0	107
148	Arsenite sorption at the magnetite–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
149	Zn isotopic fractionation caused by sorption on goethite and 2-Lines ferrihydrite. Geochimica Et Cosmochimica Acta, 2008, 72, 4886-4900.	3.9	165
150	XAS Study of Arsenic Coordination in Euglena gracilis Exposed to Arsenite. Environmental Science & Env	10.0	33
151	Synchrotron X-ray studies of heavy metal mineral-microbe interactions. Mineralogical Magazine, 2008, 72, 169-173.	1.4	2
152	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
153	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
154	Exceptional preservation of fossil plant spores in high-pressure metamorphic rocks. Earth and Planetary Science Letters, 2007, 262, 257-272.	4.4	136
155	Transmission electron microscopy study of magnetites in a freshwater population of magnetotactic bacteria. American Mineralogist, 2007, 92, 621-630.	1.9	49
156	Microbial diversity on the Tatahouine meteorite. Meteoritics and Planetary Science, 2006, 41, 1249-1265.	1.6	35
157	Nucleation of calcium carbonate on bacterial nanoglobules. Geology, 2006, 34, 1017.	4.4	151
158	Magnetite-like nanocrystals formed by laser-driven shocks in siderite. Earth and Planetary Science Letters, 2006, 243, 820-827.	4.4	22
159	Cr(VI) detoxification by Desulfovibrio vulgaris strain Hildenborough: microbe–metal interactions studies. Applied Microbiology and Biotechnology, 2006, 71, 892-897.	3.6	86
160	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
161	Bacterial diversity and carbonate precipitation in the giant microbialites from the highly alkaline Lake Van, Turkey. Extremophiles, 2005, 9, 263-274.	2.3	137
162	Morphology of nanomagnetite crystals: Implications for formation conditions. American Mineralogist, 2005, 90, 1793-1800.	1.9	32

#	Article	IF	Citations
163	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
164	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
165	Diamond formation in metal–carbonate interactions. Earth and Planetary Science Letters, 2005, 229, 205-216.	4.4	26
166	Thermochemical state of the lower mantle: New insights from mineral physics. Geophysical Monograph Series, 2005, , 241-260.	0.1	15
167	Experimental Study of Laser Shock-Released States of Iron into a LiF Window. AIP Conference Proceedings, 2004, , .	0.4	0
168	Generation of a double shock driven by laser. Physical Review E, 2004, 70, 045401.	2.1	13
169	Electronic Transitions in Perovskite: Possible Nonconvecting Layers in the Lower Mantle. Science, 2004, 305, 383-386.	12.6	354
170	High-pressure behaviour of serpentine minerals: a Raman spectroscopic study. Physics and Chemistry of Minerals, 2004, 31, 269-277.	0.8	176
171	Experimental Colonization and Alteration of Orthopyroxene by the Pleomorphic BacteriaRamlibacter tataouinensis. Geomicrobiology Journal, 2004, 21, 341-349.	2.0	34
172	Mineralogical and isotopic properties of inorganic nanocrystalline magnetites. Geochimica Et Cosmochimica Acta, 2004, 68, 4395-4403.	3.9	41
173	Si in the core? New high-pressure and high-temperature experimental data. Geochimica Et Cosmochimica Acta, 2004, 68, 4201-4211.	3.9	41
174	TEM-EELS study of natural ferrihydrite from geological–biological interactions in hydrothermal systems. Earth and Planetary Science Letters, 2004, 222, 947-957.	4.4	52
175	Biologically controlled precipitation of calcium phosphate by Ramlibacter tataouinensis. Earth and Planetary Science Letters, 2004, 228, 439-449.	4.4	93
176	The behaviour of sulphur in metal–silicate core segregation experiments under reducing conditions. Physics of the Earth and Planetary Interiors, 2004, 143-144, 433-443.	1.9	22
177	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
178	Pyroxene microstructure in the Northwest Africa 856 martian meteorite. Meteoritics and Planetary Science, 2004, 39, 711-722.	1.6	16
179	Stable Mn-magnetite derived from Mn-siderite by heating in air. Journal of Geophysical Research, 2003, 108, .	3.3	28
180	Iron Partitioning in Earth's Mantle: Toward a Deep Lower Mantle Discontinuity. Science, 2003, 300, 789-791.	12.6	483

#	Article	IF	Citations
181	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
182	Destabilization of olivine by 30-keV electron irradiation: a possible mechanism of space weathering affecting interplanetary dust particles and planetary surfaces. Geochimica Et Cosmochimica Acta, 2003, 67, 1901-1910.	3.9	10
183	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
184	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
185	Multiple Ionic-Plasmon Resonances in Naturally Occurring Multiwall Nanotubes: Infrared Spectra of Chrysotile Asbestos. Physical Review Letters, 2002, 89, 177401.	7.8	34
186	Determination of Phonon Dispersion Curves at Gigapascal Pressures by Inelastic X-ray Scattering. High Pressure Research, 2002, 22, 73-77.	1.2	5
187	Structural refinements of magnesite at very high pressure. American Mineralogist, 2002, 87, 1261-1265.	1.9	107
188	First-principles calculation of the infrared spectrum of lizardite. American Mineralogist, 2002, 87, 1286-1290.	1.9	66
189	Study of the (010) olivine surface by Rutherford backscattering spectrometry in channeling geometry. American Mineralogist, 2002, 87, 327-332.	1.9	10
190	Cristobalite inclusions in the Tatahouine achondrite: Implications for shock conditions. American Mineralogist, 2002, 87, 1250-1256.	1.9	15
191	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
192	Absolute equation of state measurements of iron using laser driven shocks. Physics of Plasmas, 2002, 9, 2466-2469.	1.9	54
193	Experimental Study of Highly Compressed Iron Using Laser Driven Shocks. AIP Conference Proceedings, 2002, , .	0.4	0
194	Sound Velocities in Iron to 110 Gigapascals. Science, 2001, 291, 468-471.	12.6	151
195	Equation of state of Al-bearing perovskite to lower mantle pressure conditions. Geophysical Research Letters, 2001, 28, 3789-3792.	4.0	41
196	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
197	An experimental study of the external reduction of olivine single crystals. American Mineralogist, 2001, 86, 47-54.	1.9	11
198	Zinc-iron sulphide mineralization in tubes of hydrothermal vent worms. European Journal of Mineralogy, 2001, 13, 653-658.	1.3	28

#	Article	IF	CITATIONS
199	Electron-irradiation-induced phase transformation and fractional volatilization in (Mg,) Tj ETQq $1\ 1\ 0.784314\ rgBT$ and Mechanical Properties, 2001, $81, 2823-2840$ .	/Overlock 0.6	10 Tf 50 74 26
200	Electron energy-loss spectroscopy of silicate perovskite-magnesiowýstite high-pressure assemblages. American Mineralogist, 2000, 85, 1452-1458.	1.9	15
201	An improved thermodynamic model of metal-olivine-pyroxene stability domains. Contributions To Mineralogy and Petrology, 2000, 140, 73-83.	3.1	14
202	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
203	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
204	Metal–silicate interaction in quenched shock-induced melt of the Tenham L6-chondrite. Earth and Planetary Science Letters, 2000, 179, 477-487.	4.4	31
205	Comparison of carbon, nitrogen and water budgets on Venus and the Earth. Earth and Planetary Science Letters, 2000, 181, 33-40.	4.4	78
206	Bacteria in the Tatahouine meteorite: nanometric-scale life in rocks. Earth and Planetary Science Letters, 2000, 175, 161-167.	4.4	50
207	Experimental study of chemical coupling between reduction and volatilization in olivine single crystals. Geochimica Et Cosmochimica Acta, 2000, 64, 3237-3249.	3.9	11
208	Density measurements of liquid Fe-S alloys at high-pressure. Geophysical Research Letters, 2000, 27, 811-814.	4.0	152
209	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
210	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
211	Multi-parameter observation of environmental asbestos pollution at the Institut de Physique du Globe de Paris (Jussieu Campus, France). Annals of Occupational Hygiene, 1999, 43, 527-541.	1.9	3
212	Teleseismic travel time residuals in North America and anelasticity of the asthenosphere. Physics of the Earth and Planetary Interiors, 1999, 116, 93-103.	1.9	21
213	High pressure equilibrium of nickel and cobalt between metal and mantle minerals. Geochimica Et Cosmochimica Acta, 1999, 63, 1819-1824.	3.9	2
214	Thermodynamic Properties of Minerals at High Pressures and Temperatures from Vibrational Spectroscopic Data., 1999,, 71-92.		6
215	The electrical conductivity of olivine under highly reducing conditions. Physics and Chemistry of Minerals, 1998, 26, 164-170.	0.8	4
216	Thermal parameters of the Earth's lower mantle. Physics of the Earth and Planetary Interiors, 1998, 107, 261-267.	1.9	4

#	Article	IF	Citations
217	Pressure-Induced Landau-Type Transition in Stishovite. , 1998, 282, 720-724.		213
218	Effects of Mg-Fe (super 2+) substitution in calcite-structure carbonates; thermoelastic properties. American Mineralogist, 1998, 83, 280-287.	1.9	49
219	The Breakdown of Olivine to Perovskite and Magnesiowustite. Science, 1997, 275, 510-513.	12.6	43
220	Partitioning of nickel, cobalt and manganese between silicate perovskite and periclase: a test of crystal field theory at high pressure. Earth and Planetary Science Letters, 1997, 146, 499-509.	4.4	20
221	Microstructures and iron partitioning in (Mg,Fe)SiO3perovskite-(Mg,Fe)O magnesiowýstite assemblages: An analytical transmission electron microscopy study. Journal of Geophysical Research, 1997, 102, 5265-5280.	3.3	72
222	Thermal Evolution of BaZrO3and SrZrO3Perovskites from 4 K to 773 K: an EXAFS Study at Zr-K Edge. European Physical Journal Special Topics, 1997, 7, C2-1065-C2-1067.	0.2	0
223	X-ray diffraction study of magnesite at high pressure and high temperature. Physics and Chemistry of Minerals, 1997, 24, 122-130.	0.8	47
224	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
225	P-V-T measurements of iron suicide ( $\hat{l}\mu$ -FeSi) Implications for silicate-metal interactions in the early Earth. European Journal of Mineralogy, 1997, 9, 277-286.	1.3	46
226	Thermal equation of state of CaSiO3perovskite. Journal of Geophysical Research, 1996, 101, 661-672.	3.3	177
227	Microscopic anharmonicity and equation of state of MgSiO3-perovskite. Geophysical Research Letters, 1996, 23, 3043-3046.	4.0	39
228	High-pressure behaviour of germanate olivines studied by X-ray diffraction and X-ray absorption spectroscopy. Physics and Chemistry of Minerals, 1996, 23, 173.	0.8	13
229	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
230	An analytical electron microscopy (AEM) investigation of opaque inclusions in some type 6 ordinary chondrites. Meteoritics and Planetary Science, 1996, 31, 767-776.	1.6	21
231	Exploring the core-mantle boundary. Physics World, 1996, 9, 27-32.	0.0	0
232	High-temperature Raman spectroscopic and X-ray diffraction study of beta -Mg <sub>2</sub> SiO <sub>4</sub> ; 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
233	Shock recovery experiments on dolomite and thermodynamical calculations of impact induced decarbonation. Journal of Geophysical Research, 1995, 100, 15465-15476.	3.3	47
234	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

#	Article	IF	CITATIONS
235	Pressure-induced structural modifications in Mg2GeO4-olivine: A Raman spectroscopic study. Physics and Chemistry of Minerals, 1994, 20, 556-562.	0.8	22
236	Earth's innermost secrets. Nature, 1994, 369, 360-361.	27.8	3
237	High-temperature heat capacity and phase transitions of CaTiO3 perovskite. Physics and Chemistry of Minerals, 1993, 20, 141.	0.8	64
238	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
239	Impact-induced phase transformations at 50–60 GPa in continental crust: an EPMA and ATEM study. Earth and Planetary Science Letters, 1993, 119, 207-223.	4.4	20
240	Experimental evidence for carbonate stability in the Earth's lower mantle. Earth and Planetary Science Letters, 1993, 118, 31-41.	4.4	158
241	High pressure structural study of MnGeO3 ilmenite. Zeitschrift Fur Kristallographie - Crystalline Materials, 1993, 204, .	0.8	2
242	High-pressure stability of carbonates: quenching of calcite-II, high-pressure polymorph of CaCO3. European Journal of Mineralogy, 1993, 5, 503-510.	1.3	17
243	Electron microscopy of (Mg, Fe)SiO <sub>3</sub> Perovskite: Evidence for structural phase transitions and implications for the lower mantle. Journal of Geophysical Research, 1992, 97, 12327-12347.	3.3	102
244	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
245	Pressure-induced structural modifications and amorphization in olivine compounds. Chemical Geology, 1992, 96, 411-420.	3.3	51
246	An olivine to beta phase transformation mechanism Mg <sub>2</sub> SiO <sub>4</sub> . Geophysical Research Letters, 1991, 18, 89-92.	4.0	45
247	Highâ€temperature thermodynamic properties of forsterite. Journal of Geophysical Research, 1991, 96, 11805-11816.	3.3	155
248	Structure of high-pressure MnGeO3 ilmenite. Acta Crystallographica Section C: Crystal Structure Communications, 1991, 47, 1794-1796.	0.4	1
249	Twinning in MgSiO3 Perovskite. Science, 1990, 248, 468-471.	12.6	88
250	Hotâ€pressing and characterization of polycrystals of βâ€Mg <sub>2</sub> SiO <sub>4</sub> , for acoustic velocity measurements. Geophysical Research Letters, 1990, 17, 1331-1334.	4.0	46
251	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
252	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

#	Article	IF	CITATIONS
253	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
254	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
255	Eutectoid phase transformation of olivine and spinel into perovskite and rock salt structures. Nature, 1986, 321, 603-605.	27.8	35
256	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
257	Magnetotactic bacteria as a new model for P sequestration in the ferruginous Lake Pavin. Geochemical Perspectives Letters, 0, , 35-41.	5.0	54