

# João Brugger

## List of Publications by Year in descending order

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202  
papers

8,137  
citations

36303

51  
h-index

64796

79  
g-index

212  
all docs

212  
docs citations

212  
times ranked

5702  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrothermal transport, deposition, and fractionation of the REE: Experimental data and thermodynamic calculations. <i>Chemical Geology</i> , 2016, 439, 13-42.	3.3	306
2	Mechanisms of gold biomineralization in the bacterium <i>Cupriavidus metallidurans</i> . <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 17757-17762.	7.1	283
3	Introducing BASE: the Biomes of Australian Soil Environments soil microbial diversity database. <i>GigaScience</i> , 2016, 5, 21.	6.4	204
4	Mechanism and kinetics of pseudomorphic mineral replacement reactions: A case study of the replacement of pentlandite by violarite. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 1945-1969.	3.9	193
5	A review of the coordination chemistry of hydrothermal systems, or do coordination changes make ore deposits?. <i>Chemical Geology</i> , 2016, 447, 219-253.	3.3	177
6	A spectrophotometric study of aqueous Au(III) halide-hydroxide complexes at 25-80°C. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 3359-3380.	3.9	173
7	Inhomogeneous distribution of REE in scheelite and dynamics of Archean hydrothermal systems (Mt. Tj ETQq1 1 0.784314 rgBT /Over Petrology, 2000, 139, 251-264.	3.1	140
8	Modeling of gold scavenging by bismuth melts coexisting with hydrothermal fluids. <i>Geology</i> , 2008, 36, 815.	4.4	139
9	Nanoparticle factories: Biofilms hold the key to gold dispersion and nugget formation. <i>Geology</i> , 2010, 38, 843-846.	4.4	137
10	Bi-melt formation and gold scavenging from hydrothermal fluids: An experimental study. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 5423-5443.	3.9	137
11	Oxidation state of europium in scheelite: Tracking fluid-rock interaction in gold deposits. <i>Chemical Geology</i> , 2008, 257, 26-33.	3.3	133
12	Contrasting regimes of Cu, Zn and Pb transport in ore-forming hydrothermal fluids. <i>Chemical Geology</i> , 2015, 395, 154-164.	3.3	121
13	Speciation and thermodynamic properties for cobalt chloride complexes in hydrothermal fluids at 35-440°C and 600bar: An in-situ XAS study. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 1227-1248.	3.9	119
14	Speciation of aqueous tellurium(IV) in hydrothermal solutions and vapors, and the role of oxidized tellurium species in Te transport and gold deposition. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 120, 298-325.	3.9	117
15	Textural and compositional complexities resulting from coupled dissolution-precipitation reactions in geomaterials. <i>Earth-Science Reviews</i> , 2015, 150, 628-651.	9.1	115
16	Determination of the oxidation state of Cu in substituted Cu-In-Fe-bearing sphalerite via XANES spectroscopy. <i>American Mineralogist</i> , 2012, 97, 476-479.	1.9	114
17	In-situ X-ray absorption study of Iron(II) speciation in brines up to supercritical conditions. <i>Chemical Geology</i> , 2009, 264, 295-310.	3.3	107
18	"Invisible gold" in bismuth chalcogenides. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 1970-1999.	3.9	106

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19	UV-Vis spectrophotometric and XAFS studies of ferric chloride complexes in hyper-saline LiCl solutions at 25 and 90°C. <i>Chemical Geology</i> , 2006, 231, 326-349.	3.3	105
20	Fate of gold and base metals during metamorphic devolatilization of a pelite. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 171, 338-352.	3.9	97
21	Complexation of metal ions in brines: application of electronic spectroscopy in the study of the Cu(II)-LiCl-H <sub>2</sub> O system between 25 and 90°C. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 2691-2708.	3.9	92
22	Distribution and Substitution Mechanism of Ge in a Ge-(Fe)-Bearing Sphalerite. <i>Minerals (Basel)</i> , 2019, 9, 107-120.	2.0	90
23	Origins of Nd-Sr-Pb isotopic variations in single scheelite grains from Archaean gold deposits, Western Australia. <i>Chemical Geology</i> , 2002, 182, 203-225.	3.3	87
24	Zinc complexation in chloride-rich hydrothermal fluids (25-600°C): A thermodynamic model derived from ab initio molecular dynamics. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 150, 265-284.	3.9	85
25	Arsenic evolution as a tool for understanding formation of pyritic gold ores. <i>Geology</i> , 2019, 47, 335-338.	4.4	83
26	Influence of geogenic factors on microbial communities in metallogenic Australian soils. <i>ISME Journal</i> , 2012, 6, 2107-2118.	9.8	79
27	Ab initio molecular dynamics simulation and free energy exploration of copper(I) complexation by chloride and bisulfide in hydrothermal fluids. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 102, 45-64.	3.9	79
28	An experimental study of copper(I)-chloride and copper(I)-acetate complexing in hydrothermal solutions between 50°C and 250°C and vapor-saturated pressure. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 2937-2948.	3.9	71
29	Replacement of pyrrhotite by pyrite and marcasite under hydrothermal conditions up to 220°C: An experimental study of reaction textures and mechanisms. <i>American Mineralogist</i> , 2011, 96, 1878-1893.	1.9	71
30	Kinetics and Mechanism of Hydrolysis of a Model Phosphate Diester by [Cu(Me <sub>3</sub> tacn)(OH <sub>2</sub> ) <sub>2</sub> ] <sup>2+</sup> (Me <sub>3</sub> tacn = 1,4,7-Trimethyl-1,4,7-triazacyclononane). <i>Inorganic Chemistry</i> , 2005, 44, 941-950.	4.0	70
31	Bismuth speciation in hydrothermal fluids: An X-ray absorption spectroscopy and solubility study. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 101, 156-172.	3.9	70
32	Enrichment of germanium and associated arsenic and tungsten in coal and roll-front uranium deposits. <i>Chemical Geology</i> , 2017, 463, 29-49.	3.3	70
33	An experimental study of the mechanism of the replacement of magnetite by pyrite up to 300°C. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 5610-5630.	3.9	69
34	Speciation of nickel (II) chloride complexes in hydrothermal fluids: In situ XAS study. <i>Chemical Geology</i> , 2012, 334, 345-363.	3.3	69
35	Metal complexation and ion hydration in low density hydrothermal fluids: Ab initio molecular dynamics simulation of Cu(I) and Au(I) in chloride solutions (25-1000°C, 1-5000bar). <i>Geochimica Et Cosmochimica Acta</i> , 2014, 131, 196-212.	3.9	69
36	Synthesis, Structure, and DNA Cleavage Properties of Copper(II) Complexes of 1,4,7-Triazacyclononane Ligands Featuring Pairs of Guanidine Pendants. <i>Inorganic Chemistry</i> , 2011, 50, 621-635.	4.0	65

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37	Gold transport in hydrothermal fluids: Competition among the $\text{Cl}^-$ , $\text{Br}^-$ , $\text{HS}^-$ and $\text{NH}_3(\text{aq})$ ligands. <i>Chemical Geology</i> , 2014, 376, 11-19.	3.3	65
38	Mechanism and kinetics of a mineral transformation under hydrothermal conditions: Calaverite to metallic gold. <i>American Mineralogist</i> , 2009, 94, 1541-1555.	1.9	64
39	Three-Dimensional Ordered Arrays of Zeolite Nanocrystals with Uniform Size and Orientation by a Pseudomorphic Coupled Dissolution-Reprecipitation Replacement Route. <i>Crystal Growth and Design</i> , 2009, 9, 4902-4906.	3.0	64
40	Novel Route To Synthesize Complex Metal Sulfides: Hydrothermal Coupled Dissolution-Reprecipitation Replacement Reactions. <i>Chemistry of Materials</i> , 2008, 20, 2809-2817.	6.7	63
41	A spectrophotometric study of aqueous copper(I)-chloride complexes in LiCl solutions between 100 $^{\circ}\text{C}$ and 250 $^{\circ}\text{C}$ . <i>Geochimica Et Cosmochimica Acta</i> , 2002, 66, 3615-3633.	3.9	62
42	An active amagmatic hydrothermal system: The Paralana hot springs, Northern Flinders Ranges, South Australia. <i>Chemical Geology</i> , 2005, 222, 35-64.	3.3	62
43	Formation of As(II)-pyrite during experimental replacement of magnetite under hydrothermal conditions. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 100, 1-10.	3.9	60
44	Probing ore deposits formation: New insights and challenges from synchrotron and neutron studies. <i>Radiation Physics and Chemistry</i> , 2010, 79, 151-161.	2.8	58
45	Transformation of pentlandite to violarite under mild hydrothermal conditions. <i>American Mineralogist</i> , 2006, 91, 706-709.	1.9	56
46	Speciation mapping of environmental samples using XANES imaging. <i>Environmental Chemistry</i> , 2014, 11, 341.	1.5	55
47	Palladium complexation in chloride- and bisulfide-rich fluids: Insights from ab initio molecular dynamics simulations and X-ray absorption spectroscopy. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 161, 128-145.	3.9	55
48	Phosphodiester Cleavage Properties of Copper(II) Complexes of 1,4,7-Triazacyclononane Ligands Bearing Single Alkyl Guanidine Pendants. <i>Inorganic Chemistry</i> , 2012, 51, 939-953.	4.0	54
49	Geobiological Cycling of Gold: From Fundamental Process Understanding to Exploration Solutions. <i>Minerals (Basel, Switzerland)</i> , 2013, 3, 367-394.	2.0	54
50	An XAS study of molybdenum speciation in hydrothermal chloride solutions from 25 $^{\circ}\text{C}$ –385 $^{\circ}\text{C}$ and 600bar. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 92, 292-307.	3.9	53
51	Analysis of Gold(I/III)-Complexes by HPLC-ICP-MS Demonstrates Gold(III) Stability in Surface Waters. <i>Environmental Science &amp; Technology</i> , 2014, 48, 5737-5744.	10.0	53
52	Love is in the Earth: A review of tellurium (bio)geochemistry in surface environments. <i>Earth-Science Reviews</i> , 2020, 204, 103150.	9.1	53
53	Mechanism and kinetics of hydrothermal replacement of magnetite by hematite. <i>Geoscience Frontiers</i> , 2019, 10, 29-41.	8.4	51
54	NANO- TO MICRON-SCALE PARTICULATE GOLD HOSTED BY MAGNETITE: A PRODUCT OF GOLD SCAVENGING BY BISMUTH MELTS. <i>Economic Geology</i> , 2017, 112, 993-1010.	3.8	50

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55	Deriving formation constants for aqueous metal complexes from XANES spectra: Zn <sup>2+</sup> and Fe <sup>2+</sup> chloride complexes in hypersaline solutions. <i>American Mineralogist</i> , 2007, 92, 761-770.	1.9	49
56	Dissolution-precipitation vs. solid-state diffusion: Mechanism of mineral transformations in sylvanite, (AuAg) <sub>2</sub> Te <sub>4</sub> , under hydrothermal conditions. <i>American Mineralogist</i> , 2013, 98, 19-32.	1.9	49
57	Effect of the cyanide-producing bacterium <i>Chromobacterium violaceum</i> on ultraflat Au surfaces. <i>Chemical Geology</i> , 2009, 265, 313-320.	3.3	48
58	Biological role in the transformation of platinum-group mineral grains. <i>Nature Geoscience</i> , 2016, 9, 294-298.	12.9	46
59	Characterisation of a rare earth element- and zirconium-bearing ion-adsorption clay deposit in Madagascar. <i>Chemical Geology</i> , 2019, 522, 93-107.	3.3	46
60	The role of fluorine in hydrothermal mobilization and transportation of Fe, U and REE and the formation of IOCG deposits. <i>Chemical Geology</i> , 2019, 504, 158-176.	3.3	46
61	The replacement of chalcopyrite by bornite under hydrothermal conditions. <i>American Mineralogist</i> , 2014, 99, 2389-2397.	1.9	44
62	Evidence of sub-arc mantle oxidation by sulphur and carbon. <i>Geochemical Perspectives Letters</i> , 2017, , 124-132.	5.0	44
63	The solubility of nantokite (CuCl(s)) and Cu speciation in low-density fluids near the critical isochore: An in-situ XAS study. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 4094-4106.	3.9	43
64	Revisiting the hydrothermal geochemistry of europium(II/III) in light of new in-situ XAS spectroscopy results. <i>Chemical Geology</i> , 2017, 459, 61-74.	3.3	43
65	Spriggite, Pb <sub>3</sub> [(UO <sub>2</sub> ) <sub>6</sub> O <sub>8</sub> (OH) <sub>2</sub> ](H <sub>2</sub> O) <sub>3</sub> , a new mineral with P <sub>2</sub> -U <sub>3</sub> O <sub>8</sub> type sheets: Description and crystal structure. <i>American Mineralogist</i> , 2004, 89, 339-347.	1.9	42
66	Proteomic responses to gold(III)-toxicity in the bacterium <i>Cupriavidus metallidurans</i> CH34. <i>Metallomics</i> , 2016, 8, 1204-1216.	2.4	42
67	Arsenic speciation in fluid inclusions using micro-beam X-ray absorption spectroscopy. <i>American Mineralogist</i> , 2010, 95, 921-932.	1.9	41
68	Fluids in geological processes – The present state and future outlook. <i>Journal of Geochemical Exploration</i> , 2010, 106, 1-7.	3.2	40
69	Can biological toxicity drive the contrasting behavior of platinum and gold in surface environments?. <i>Chemical Geology</i> , 2013, 343, 99-110.	3.3	40
70	Complexation of gold in S <sup>2-</sup> -rich hydrothermal fluids: Evidence from ab-initio molecular dynamics simulations. <i>Chemical Geology</i> , 2013, 347, 34-42.	3.3	40
71	Characterization of uranium redox state in organic-rich Eocene sediments. <i>Chemosphere</i> , 2018, 194, 602-613.	8.2	40
72	Experimental study of the formation of chalcopyrite and bornite via the sulfidation of hematite: Mineral replacements with a large volume increase. <i>American Mineralogist</i> , 2014, 99, 343-354.	1.9	39

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73	In situ recovery of uranium – the microbial influence. <i>Hydrometallurgy</i> , 2014, 150, 236-244.	4.3	39
74	Large S isotope and trace element fractionations in pyrite of uranium roll front systems result from internally-driven biogeochemical cycle. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 282, 113-132.	3.9	39
75	Arsenic in hydrothermal apatite: Oxidation state, mechanism of uptake, and comparison between experiments and nature. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 196, 144-159.	3.9	38
76	BeerOz, a set of Matlab routines for the quantitative interpretation of spectrophotometric measurements of metal speciation in solution. <i>Computers and Geosciences</i> , 2007, 33, 248-261.	4.2	37
77	The aqueous chemistry of polonium (Po) in environmental and anthropogenic processes. <i>Journal of Hazardous Materials</i> , 2019, 380, 120725.	12.4	37
78	The role of Te(IV) and Bi(III) chloride complexes in hydrothermal mass transfer: An X-ray absorption spectroscopic study. <i>Chemical Geology</i> , 2016, 425, 37-51.	3.3	35
79	Carbonate complexation enhances hydrothermal transport of rare earth elements in alkaline fluids. <i>Nature Communications</i> , 2022, 13, 1456.	12.8	35
80	Hydrothermal evolution and ore genesis of the Beiya giant Au polymetallic deposit, western Yunnan, China: Evidence from fluid inclusions and H <sub>2</sub> O–S–Pb isotopes. <i>Ore Geology Reviews</i> , 2017, 90, 847-862.	2.7	34
81	Forming sulfate- and REE-rich fluids in the presence of quartz. <i>Geology</i> , 2020, 48, 145-148.	4.4	34
82	Copper(i) speciation in mixed thiosulfate-chloride and ammonia-chloride solutions: XAS and UV-Visible spectroscopic studies. <i>RSC Advances</i> , 2011, 1, 1554.	3.6	33
83	Speciation and thermodynamic properties of manganese(II) chloride complexes in hydrothermal fluids: In situ XAS study. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 129, 77-95.	3.9	33
84	Synergistic Toxicity of Copper and Gold Compounds in <i>Cupriavidus metallidurans</i> . <i>Applied and Environmental Microbiology</i> , 2017, 83, .	3.1	33
85	Uranium Transport in F-Cl-Bearing Fluids and Hydrothermal Upgrading of U-Cu Ores in IOCG Deposits. <i>Geofluids</i> , 2018, 2018, 1-22.	0.7	33
86	Ore Petrography Using Megapixel X-Ray Imaging: Rapid Insights into Element Distribution and Mobilization in Complex Pt and U-Ge-Cu Ores. <i>Economic Geology</i> , 2016, 111, 487-501.	3.8	32
87	Paulscherrite from the Number 2 Workings, Mount Painter Inlier, Northern Flinders Ranges, South Australia: "Dehydrated schoepite" is a mineral after all. <i>American Mineralogist</i> , 2011, 96, 229-240.	1.9	30
88	The future of biotechnology for gold exploration and processing. <i>Minerals Engineering</i> , 2012, 32, 45-53.	4.3	30
89	The dissociation mechanism and thermodynamic properties of HCl(aq) in hydrothermal fluids (to) Tj ETQq1 1 0.784314 rgBT /Overload 226, 84-106.	3.9	29
90	Distribution and speciation of gold in biogenic and abiogenic calcium carbonates – Implications for the formation of gold anomalous calcrete. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 1942-1956.	3.9	28

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91	Speciation and thermodynamic properties of zinc in sulfur-rich hydrothermal fluids: Insights from ab initio molecular dynamics simulations and X-ray absorption spectroscopy. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 179, 32-52.	3.9	27
92	The role of Pb(II) complexes in hydrothermal mass transfer: An X-ray absorption spectroscopic study. <i>Chemical Geology</i> , 2018, 502, 88-106.	3.3	27
93	Scheelite-powellite and paraniite-(Y) from the Fe-Mn deposit at Faniel, Eastern Swiss Alps. <i>American Mineralogist</i> , 1998, 83, 1100-1110.	1.9	26
94	A Novel Route for the Synthesis of Mesoporous and Low-Thermal Stability Materials by Coupled Dissolution-Reprecipitation Reactions: Mimicking Hydrothermal Mineral Formation. <i>Chimia</i> , 2010, 64, 693.	0.6	26
95	Exsolution of chalcopyrite from bornite-digenite solid solution: an example of a fluid-driven back-replacement reaction. <i>Mineralium Deposita</i> , 2018, 53, 903-908.	4.1	26
96	Xocolatlite, $\text{Ca}_2\text{Mn}_{24}\text{Te}_{20}\cdot 12\text{H}_2\text{O}$ , a new tellurate related to kuranakhite: Description and measurement of Te oxidation state by XANES spectroscopy. <i>American Mineralogist</i> , 2008, 93, 1911-1920.	1.9	25
97	Quantitative Cathodoluminescence Mapping with Application to a Kalgoorlie Scheelite. <i>Microscopy and Microanalysis</i> , 2009, 15, 222-230.	0.4	25
98	Structure and Thermal Stability of Bi(III) Oxy-Clusters in Aqueous Solutions. <i>Journal of Solution Chemistry</i> , 2014, 43, 314-325.	1.2	25
99	The crystal structure of vergasovaite $\text{Cu}_3\text{O}[(\text{Mo},\text{S})\text{O}_4\text{SO}_4]_9$ and its relation to synthetic $\text{Cu}_3\text{O}[\text{MoO}_4]_2$ . <i>European Journal of Mineralogy</i> , 1999, 11, 101-110.	1.3	25
100	Genesis and Preservation of a Uranium-Rich Paleozoic Epithermal System with a Surface Expression (Northern Flinders Ranges, South Australia): Radiogenic Heat Driving Regional Hydrothermal Circulation over Geological Timescales. <i>Astrobiology</i> , 2011, 11, 499-508.	3.0	24
101	XAS evidence for the stability of polytellurides in hydrothermal fluids up to 599 ÅC, 800 bar. <i>American Mineralogist</i> , 2012, 97, 1519-1522.	1.9	24
102	An XAS study of speciation and thermodynamic properties of aqueous zinc bromide complexes at 25-150 ÅC. <i>Chemical Geology</i> , 2012, 298-299, 57-69.	3.3	24
103	Pseudojohannite from Jachymov, Musonoi, and La Creusaz: A new member of the zippeite-group. <i>American Mineralogist</i> , 2006, 91, 929-936.	1.9	23
104	Applying the Midas touch: Differing toxicity of mobile gold and platinum complexes drives biomineralization in the bacterium <i>Cupriavidus metallidurans</i> . <i>Chemical Geology</i> , 2016, 438, 103-111.	3.3	23
105	Fluid-Enhanced Coarsening of Mineral Microstructures in Hydrothermally Synthesized Bornite-Digenite Solid Solution. <i>ACS Earth and Space Chemistry</i> , 2017, 1, 465-474.	2.7	23
106	Crude oils as ore fluids: An experimental in-situ XAS study of gold partitioning between brine and organic fluid from 25 to 250 ÅC. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 244, 352-365.	3.9	23
107	Understanding the mechanism and kinetics of pentlandite oxidation in extractive pyrometallurgy of nickel. <i>Minerals Engineering</i> , 2012, 27-28, 11-19.	4.3	22
108	Uranium scavenging during mineral replacement reactions. <i>American Mineralogist</i> , 2015, 100, 1728-1735.	1.9	22



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109	Colloidal gold in sulphur and citrate-bearing hydrothermal fluids: An experimental study. <i>Ore Geology Reviews</i> , 2019, 114, 103142.	2.7	22
110	The role of pyrrhotite (Fe <sub>7</sub> S <sub>8</sub> ) and the sample texture in the hydrothermal transformation of pentlandite ((Fe,Ni) <sub>9</sub> S <sub>8</sub> ) to violarite ((Ni,Fe) <sub>3</sub> S <sub>4</sub> ). <i>Reaction Kinetics and Catalysis Letters</i> , 2007, 92, 257-266.	0.6	21
111	A novel pre-treatment of calaverite by hydrothermal mineral replacement reactions. <i>Minerals Engineering</i> , 2010, 23, 451-453.	4.3	21
112	Oxidation state and coordination environment of Pb in U-bearing minerals. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 265, 109-131.	3.9	21
113	Description, crystal structure, and paragenesis of krettnichite, PbMn <sub>3+2</sub> (VO <sub>4</sub> ) <sub>2</sub> (OH) <sub>2</sub> , the Mn <sup>3+</sup> analogue of mounanaite. <i>European Journal of Mineralogy</i> , 2001, 13, 145-158.	1.3	20
114	Cleusonite, (Pb,Sr)(U <sub>4+</sub> ,U <sub>6+</sub> )(Fe <sub>2+</sub> ,Zn) <sub>2</sub> (Ti,Fe <sub>2+</sub> ,Fe <sub>3+</sub> ) <sub>18</sub> (O,OH) <sub>38</sub> , a new mineral species of the crichtonite group from the western Swiss Alps. <i>European Journal of Mineralogy</i> , 2006, 17, 933-942.	1.3	20
115	Microporous gold: Comparison of textures from Nature and experiments. <i>American Mineralogist</i> , 2014, 99, 1171-1174.	1.9	20
116	Recrystallization of Manganite (̂ <sup>3</sup> -MnOOH) and Implications for Trace Element Cycling. <i>Environmental Science &amp; Technology</i> , 2018, 52, 1311-1319.	10.0	19
117	Trace element catalyses mineral replacement reactions and facilitates ore formation. <i>Nature Communications</i> , 2021, 12, 1388.	12.8	19
118	Characterization of porosity in sulfide ore minerals: A USANS/SANS study. <i>American Mineralogist</i> , 2014, 99, 2398-2404.	1.9	18
119	Effect of manganese oxide minerals and complexes on gold mobilization and speciation. <i>Chemical Geology</i> , 2015, 407-408, 10-20.	3.3	18
120	Uranyl speciation in sulfate-bearing hydrothermal solutions up to 250â€°C. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 267, 75-91.	3.9	18
121	Effect of physical and biogeochemical factors on placer gold transformation in mountainous landscapes of Switzerland. <i>Gondwana Research</i> , 2019, 66, 77-92.	6.0	18
122	Yttrium complexation and hydration in chloride-rich hydrothermal fluids: A combined ab initio molecular dynamics and in situ X-ray absorption spectroscopy study. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 281, 168-189.	3.9	18
123	A new mode of mineral replacement reactions involving the synergy between fluid-induced solid-state diffusion and dissolution-reprecipitation: A case study of the replacement of bornite by copper sulfides. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 330, 165-190.	3.9	18
124	A LA-ICP-MS sulphide calibration standard based on a chalcogenide glass. <i>Mineralogical Magazine</i> , 2011, 75, 279-287.	1.4	17
125	Crystal structure of pseudojohannite, with a revised formula, Cu <sub>3</sub> (OH) <sub>2</sub> [(UO <sub>2</sub> ) <sub>4</sub> O <sub>4</sub> (SO <sub>4</sub> ) <sub>2</sub> ](H <sub>2</sub> O) <sub>12</sub> . <i>American Mineralogist</i> , 2012, 97, 1796-1803.	1.9	17
126	Gold solubility in alkaline and ammonia-rich hydrothermal fluids: Insights from ab initio molecular dynamics simulations. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 291, 62-78.	3.9	17



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127	Mineralogy and crystal structure of bouazzerite from Bou Azzer, Anti-Atlas, Morocco: Bi-As-Fe nanoclusters containing Fe <sup>3+</sup> in trigonal prismatic coordination. <i>American Mineralogist</i> , 2007, 92, 1630-1639.	1.9	16
128	Protracted fluid-rock interaction in the Mesoarchean and implication for gold mineralization: Example from the Warrawoona syncline (Pilbara, Western Australia). <i>Earth and Planetary Science Letters</i> , 2008, 272, 639-655.	4.4	16
129	REE-, Sr-, Ca-aluminum-phosphate-sulfate minerals of the alunite supergroup and their role as hosts for radionuclides. <i>American Mineralogist</i> , 2019, 104, 1806-1819.	1.9	16
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