

# Sam M Webb

## List of Publications by Citations

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140  
papers

8,655  
citations

48  
h-index

91  
g-index

146  
ext. papers

9,795  
ext. citations

7.7  
avg, IF

6.17  
L-index

#	Paper	IF	Citations
140	BIOGENIC MANGANESE OXIDES: Properties and Mechanisms of Formation. <i>Annual Review of Earth and Planetary Sciences</i> , <b>2004</b> , 32, 287-328	15.3	881
139	SIXPack a Graphical User Interface for XAS Analysis Using IFEFFIT. <i>Physica Scripta</i> , <b>2005</b> , 1011	2.6	755
138	In situ X-ray absorption spectroscopy investigation of a bifunctional manganese oxide catalyst with high activity for electrochemical water oxidation and oxygen reduction. <i>Journal of the American Chemical Society</i> , <b>2013</b> , 135, 8525-34	16.4	419
137	A bacterium that can grow by using arsenic instead of phosphorus. <i>Science</i> , <b>2011</b> , 332, 1163-6	33.3	331
136	Evidence for the presence of Mn(III) intermediates in the bacterial oxidation of Mn(II). <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2005</b> , 102, 5558-63	11.5	236
135	Structural characterization of biogenic Mn oxides produced in seawater by the marine bacillus sp. strain SG-1. <i>American Mineralogist</i> , <b>2005</b> , 90, 1342-1357	2.9	214
134	Biotic and abiotic products of Mn(II) oxidation by spores of the marine Bacillus sp. strain SG-1. <i>American Mineralogist</i> , <b>2005</b> , 90, 143-154	2.9	196
133	Enhanced exopolymer production and chromium stabilization in Pseudomonas putida unsaturated biofilms. <i>Applied and Environmental Microbiology</i> , <b>2006</b> , 72, 1988-96	4.8	167
132	Weathering of the Rio Blanco quartz diorite, Luquillo Mountains, Puerto Rico: Coupling oxidation, dissolution, and fracturing. <i>Geochimica Et Cosmochimica Acta</i> , <b>2008</b> , 72, 4488-4507	5.5	164
131	Photoreduction of iron oxyhydroxides in the presence of important atmospheric organic compounds. <i>Environmental Science &amp; Technology</i> , <b>1993</b> , 27, 2056-2062	10.3	162
130	Zinc sorption to biogenic hexagonal-birnessite particles within a hydrated bacterial biofilm. <i>Geochimica Et Cosmochimica Acta</i> , <b>2006</b> , 70, 27-43	5.5	155
129	XAS speciation of arsenic in a hyper-accumulating fern. <i>Environmental Science &amp; Technology</i> , <b>2003</b> , 37, 754-60	10.3	155
128	Manganese-oxidizing photosynthesis before the rise of cyanobacteria. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 11238-43	11.5	150
127	Coupled biotic-abiotic Mn(II) oxidation pathway mediates the formation and structural evolution of biogenic Mn oxides. <i>Geochimica Et Cosmochimica Acta</i> , <b>2011</b> , 75, 6048-6063	5.5	146
126	Uranium biomineralization as a result of bacterial phosphatase activity: insights from bacterial isolates from a contaminated subsurface. <i>Environmental Science &amp; Technology</i> , <b>2007</b> , 41, 5701-7	10.3	143
125	Uranium redox transition pathways in acetate-amended sediments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 4506-4511	11.5	138
124	Arsenic localization, speciation, and co-occurrence with iron on rice ( <i>Oryza sativa</i> L.) roots having variable Fe coatings. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 8108-13	10.3	137

123	Effects of soluble cadmium salts versus CdSe quantum dots on the growth of planktonic <i>Pseudomonas aeruginosa</i> . <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 2589-94	10.3	136
122	Site specific X-ray anomalous dispersion of the geometrically frustrated kagomí magnet, herbertsmithite, ZnCu <sub>3</sub> (OH) <sub>6</sub> Cl <sub>2</sub> . <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 16185-90	16.4	133
121	Mn(II) oxidation by an ascomycete fungus is linked to superoxide production during asexual reproduction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 12621-5	11.5	132
120	Diversity of Mn oxides produced by Mn(II)-oxidizing fungi. <i>Geochimica Et Cosmochimica Acta</i> , <b>2011</b> , 75, 2762-2776	5.5	131
119	Trace metals as biomarkers for eumelanin pigment in the fossil record. <i>Science</i> , <b>2011</b> , 333, 1622-6	33.3	129
118	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. <i>Environmental Science &amp; Technology</i> , <b>2009</b> , 43, 7384-90	10.3	121
117	Structure of biogenic uraninite produced by <i>Shewanella oneidensis</i> strain MR-1. <i>Environmental Science &amp; Technology</i> , <b>2008</b> , 42, 7898-904	10.3	111
116	Manganese mineralogy and diagenesis in the sedimentary rock record. <i>Geochimica Et Cosmochimica Acta</i> , <b>2016</b> , 173, 210-231	5.5	106
115	Uranium speciation and stability after reductive immobilization in aquifer sediments. <i>Geochimica Et Cosmochimica Acta</i> , <b>2011</b> , 75, 6497-6510	5.5	95
114	Structural characterization of terrestrial microbial Mn oxides from Pinal Creek, AZ. <i>Geochimica Et Cosmochimica Acta</i> , <b>2009</b> , 73, 889-910	5.5	93
113	Efficient xylem transport and phloem remobilization of Zn in the hyperaccumulator plant species <i>Sedum alfredii</i> . <i>New Phytologist</i> , <b>2013</b> , 198, 721-731	9.8	89
112	Microbiological reduction of Sb(V) in anoxic freshwater sediments. <i>Environmental Science &amp; Technology</i> , <b>2014</b> , 48, 218-26	10.3	83
111	Speciation Matters: Bioavailability of Silver and Silver Sulfide Nanoparticles to Alfalfa ( <i>Medicago sativa</i> ). <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 8451-60	10.3	81
110	The MicroAnalysis Toolkit: X-ray Fluorescence Image Processing Software <b>2011</b> ,		81
109	Spatial imaging and speciation of lead in the accumulator plant <i>Sedum alfredii</i> by microscopically focused synchrotron X-ray investigation. <i>Environmental Science &amp; Technology</i> , <b>2010</b> , 44, 5920-6	10.3	77
108	A seafloor microbial biome hosted within incipient ferromanganese crusts. <i>Nature Geoscience</i> , <b>2009</b> , 2, 872-876	18.3	74
107	Determination of uranyl incorporation into biogenic manganese oxides using x-ray absorption spectroscopy and scattering. <i>Environmental Science &amp; Technology</i> , <b>2006</b> , 40, 771-7	10.3	73
106	Enzymatic microbial Mn(II) oxidation and Mn biooxide production in the Guaymas Basin deep-sea hydrothermal plume. <i>Geochimica Et Cosmochimica Acta</i> , <b>2009</b> , 73, 6517-6530	5.5	72

105	Nonreductive Biomineralization of Uranium(VI) Phosphate Via Microbial Phosphatase Activity in Anaerobic Conditions. <i>Geomicrobiology Journal</i> , <b>2009</b> , 26, 431-441	2.5	68
104	Pathogenic implications of distinct patterns of iron and zinc in chronic MS lesions. <i>Acta Neuropathologica</i> , <b>2017</b> , 134, 45-64	14.3	67
103	Relating structure and composition with accessibility of a single catalyst particle using correlative 3-dimensional micro-spectroscopy. <i>Nature Communications</i> , <b>2016</b> , 7, 12634	17.4	61
102	Neoproterozoic carbonate-associated sulfate records positive $\delta^{34}\text{S}$ anomalies. <i>Science</i> , <b>2014</b> , 346, 739-41	33.3	61
101	Defining the distribution of arsenic species and plant nutrients in rice ( <i>Oryza sativa</i> L.) from the root to the grain. <i>Geochimica Et Cosmochimica Acta</i> , <b>2011</b> , 75, 6655-6671	5.5	61
100	Tracing copper-thiomolybdate complexes in a prospective treatment for Wilson's disease. <i>Biochemistry</i> , <b>2009</b> , 48, 891-7	3.2	61
99	Mercury localization and speciation in plants grown hydroponically or in a natural environment. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 3082-90	10.3	60
98	Microscale imaging and identification of Fe speciation and distribution during fluid-mineral reactions under highly reducing conditions. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 4468-74	10.3	57
97	Zinc and lead sequestration in an impacted wetland system. <i>Journal of Environmental Management</i> , <b>2003</b> , 8, 103-112		57
96	Characterization of manganese oxide precipitates from Appalachian coal mine drainage treatment systems. <i>Applied Geochemistry</i> , <b>2010</b> , 25, 389-399	3.5	56
95	The effect of pH and natural microbial phosphatase activity on the speciation of uranium in subsurface soils. <i>Geochimica Et Cosmochimica Acta</i> , <b>2011</b> , 75, 5648-5663	5.5	53
94	Chromium(III) oxidation by biogenic manganese oxides with varying structural ripening. <i>Environmental Sciences: Processes and Impacts</i> , <b>2014</b> , 16, 2127-36	4.3	51
93	Zinc Speciation in a Contaminated Aquatic Environment: Characterization of Environmental Particles by Analytical Electron Microscopy. <i>Environmental Science &amp; Technology</i> , <b>2000</b> , 34, 1926-1933	10.3	49
92	Structural Influences of Sodium and Calcium Ions on the Biogenic Manganese Oxides Produced by the Marine <i>Bacillus</i> Sp., Strain SG-1. <i>Geomicrobiology Journal</i> , <b>2005</b> , 22, 181-193	2.5	48
91	Real-Time Manganese Phase Dynamics during Biological and Abiotic Manganese Oxide Reduction. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 4248-58	10.3	46
90	The role of anaerobic respiration in the immobilization of uranium through biomineralization of phosphate minerals. <i>Geochimica Et Cosmochimica Acta</i> , <b>2013</b> , 106, 344-363	5.5	46
89	Synchrotron X-ray analyses demonstrate phosphate-bound gadolinium in skin in nephrogenic systemic fibrosis. <i>British Journal of Dermatology</i> , <b>2010</b> , 163, 1077-81	4	46
88	Indirect oxidation of Co(II) in the presence of the marine Mn(II)-oxidizing bacterium <i>Bacillus</i> sp. strain SG-1. <i>Applied and Environmental Microbiology</i> , <b>2007</b> , 73, 6905-9	4.8	43

87	Quantifying Cr(VI) Production and Export from Serpentine Soil of the California Coast Range. <i>Environmental Science &amp; Technology</i> , <b>2017</b> , 51, 141-149	10.3	42
86	Geochemical weathering increases lead bioaccessibility in semi-arid mine tailings. <i>Environmental Science &amp; Technology</i> , <b>2012</b> , 46, 5834-41	10.3	42
85	Organic carbon burial during OAE2 driven by changes in the locus of organic matter sulfurization. <i>Nature Communications</i> , <b>2018</b> , 9, 3409	17.4	41
84	Sedimentary iron-phosphorus cycling under contrasting redox conditions in a eutrophic estuary. <i>Chemical Geology</i> , <b>2015</b> , 392, 19-31	4.2	40
83	Arsenic and chromium speciation in an urban contaminated soil. <i>Chemosphere</i> , <b>2012</b> , 88, 1196-201	8.4	40
82	Mineral density volume gradients in normal and diseased human tissues. <i>PLoS ONE</i> , <b>2015</b> , 10, e0121611	3.7	39
81	High rates of sulfate reduction in a low-sulfate hot spring microbial mat are driven by a low level of diversity of sulfate-respiring microorganisms. <i>Applied and Environmental Microbiology</i> , <b>2007</b> , 73, 5218-26	4.8	38
80	Determination of photochemically available iron in ambient aerosols. <i>Journal of Geophysical Research</i> , <b>1996</b> , 101, 14441-14449		37
79	Multiscale Speciation of U and Pu at Chernobyl, Hanford, Los Alamos, McGuire AFB, Mayak, and Rocky Flats. <i>Environmental Science &amp; Technology</i> , <b>2015</b> , 49, 6474-84	10.3	36
78	Spatial imaging of Zn and other elements in Huanglongbing-affected grapefruit by synchrotron-based micro X-ray fluorescence investigation. <i>Journal of Experimental Botany</i> , <b>2014</b> , 65, 953-64	7	36
77	Uranium(VI) interactions with mackinawite in the presence and absence of bicarbonate and oxygen. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 7357-64	10.3	36
76	(Micro)spectroscopic analyses of particle size dependence on arsenic distribution and speciation in mine wastes. <i>Environmental Science &amp; Technology</i> , <b>2013</b> , 47, 8164-71	10.3	32
75	The chemical, mechanical, and hydrological evolution of weathering granitoid. <i>Journal of Geophysical Research F: Earth Surface</i> , <b>2016</b> , 121, 1410-1435	3.8	31
74	Leaf metallome preserved over 50 million years. <i>Metallomics</i> , <b>2014</b> , 6, 774-82	4.5	31
73	Discontinuities in the human bone-PDL-cementum complex. <i>Biomaterials</i> , <b>2011</b> , 32, 7106-17	15.6	31
72	Melanin concentration gradients in modern and fossil feathers. <i>PLoS ONE</i> , <b>2013</b> , 8, e59451	3.7	30
71	Distributed microbially- and chemically-mediated redox processes controlling arsenic dynamics within Mn-/Fe-oxide constructed aggregates. <i>Geochimica Et Cosmochimica Acta</i> , <b>2013</b> , 104, 29-41	5.5	28
70	The plastic nature of the human bone-periodontal ligament-tooth fibrous joint. <i>Bone</i> , <b>2013</b> , 57, 455-67	4.7	27

69	Quick X-ray absorption spectroscopy for determining metal speciation in environmental samples. <i>Journal of Synchrotron Radiation</i> , <b>2001</b> , 8, 928-30	2.4	26
68	From lapis lazuli to ultramarine blue: investigating Cennino Cennini's recipe using sulfur K-edge XANES. <i>Pure and Applied Chemistry</i> , <b>2018</b> , 90, 463-475	2.1	24
67	Redox Fluctuations and Organic Complexation Govern Uranium Redistribution from U(IV)-Phosphate Minerals in a Mining-Polluted Wetland Soil, Brittany, France. <i>Environmental Science &amp; Technology</i> , <b>2018</b> , 52, 13099-13109	10.3	24
66	The Interaction of Bromide Ions with Graphitic Materials. <i>Advanced Materials</i> , <b>2009</b> , 21, 102-106	24	22
65	Sulfur K-edge XANES of lazurite: Toward determining the provenance of lapis lazuli. <i>Microchemical Journal</i> , <b>2016</b> , 125, 299-307	4.8	21
64	Response to Comments on "A Bacterium That Can Grow Using Arsenic Instead of Phosphorus". <i>Science</i> , <b>2011</b> , 332, 1149-1149	33.3	21
63	Dopant site selectivity in BaCe <sub>0.85</sub> Mo <sub>0.15</sub> O <sub>3-<math>\delta</math></sub> by extended x-ray absorption fine structure. <i>Journal of Applied Physics</i> , <b>2005</b> , 97, 054101	2.5	21
62	Biogenesis of zinc storage granules in. <i>Journal of Experimental Biology</i> , <b>2018</b> , 221,	3	20
61	Cold crucible induction melter test for crystalline ceramic waste form fabrication: A feasibility assessment. <i>Journal of Nuclear Materials</i> , <b>2017</b> , 486, 283-297	3.3	18
60	Microbial sulfate reduction and organic sulfur formation in sinking marine particles. <i>Science</i> , <b>2021</b> , 371, 178-181	33.3	18
59	EXAFS, XANES and In-Situ SRXRD Characterization of Biogenic Manganese Oxides Produced in Sea Water. <i>Physica Scripta</i> , <b>2005</b> , 888	2.6	17
58	Changes in zinc speciation with mine tailings acidification in a semiarid weathering environment. <i>Environmental Science &amp; Technology</i> , <b>2011</b> , 45, 7166-72	10.3	16
57	A new synchrotron rapid-scanning X-ray fluorescence (SRS-XRF) imaging station at SSRL beamline 6-2. <i>Journal of Synchrotron Radiation</i> , <b>2018</b> , 25, 1565-1573	2.4	16
56	Depositional and diagenetic constraints on the abundance and spatial variability of carbonate-associated sulfate. <i>Chemical Geology</i> , <b>2019</b> , 523, 59-72	4.2	15
55	Insights Into the Mineralogy and Surface Chemistry of Extracellular Biogenic S Globules Produced by. <i>Frontiers in Microbiology</i> , <b>2019</b> , 10, 271	5.7	15
54	Biomineralization of U(VI) phosphate promoted by microbially-mediated phytate hydrolysis in contaminated soils. <i>Geochimica Et Cosmochimica Acta</i> , <b>2017</b> , 197, 27-42	5.5	15
53	Micro x-ray absorption spectroscopic analysis of arsenic localization and biotransformation in <i>Chironomus riparius</i> Meigen (Diptera: Chironomidae) and <i>Culex tarsalis</i> Coquillett (Culicidae). <i>Environmental Pollution</i> , <b>2013</b> , 180, 78-83	9.3	15
52	Tissue-specific geometry and chemistry of modern and fossilized melanosomes reveal internal anatomy of extinct vertebrates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2019</b> , 116, 17880-17889	11.5	14

51	Efficient phloem remobilization of Zn protects apple trees during the early stages of Zn deficiency. <i>Plant, Cell and Environment</i> , <b>2019</b> , 42, 3167-3181	8.4	13
50	Brine film thicknesses on mica surfaces under geologic CO2 sequestration conditions and controlled capillary pressures. <i>Water Resources Research</i> , <b>2013</b> , 49, 5071-5076	5.4	13
49	XAS study of a metal-induced phase transition by a microbial surfactant. <i>Langmuir</i> , <b>2008</b> , 24, 4999-5002	4	13
48	An EXAFS study of zinc coordination in microbial cells. <i>Journal of Synchrotron Radiation</i> , <b>2001</b> , 8, 943-5	2.4	13
47	Imaging of stroke: a comparison between X-ray fluorescence and magnetic resonance imaging methods. <i>Magnetic Resonance Imaging</i> , <b>2012</b> , 30, 1416-23	3.3	12
46	Strain-guided mineralization in the bone-PDL-cementum complex of a rat periodontium. <i>Bone Reports</i> , <b>2015</b> , 3, 20-31	2.6	10
45	Sulfur isotope fractionation between aqueous and carbonate-associated sulfate in abiotic calcite and aragonite. <i>Geochimica Et Cosmochimica Acta</i> , <b>2020</b> , 280, 317-339	5.5	10
44	Fate of cobalt and nickel in mackinawite during diagenetic pyrite formation. <i>American Mineralogist</i> , <b>2019</b> , 104, 917-928	2.9	10
43	Reexamination of 2.5-Ga "whiff" of oxygen interval points to anoxic ocean before GOE.. <i>Science Advances</i> , <b>2022</b> , 8, eabj7190	14.3	10
42	Deletion of Phytochelatin Synthase Modulates the Metal Accumulation Pattern of Cadmium Exposed <i>C. elegans</i> . <i>International Journal of Molecular Sciences</i> , <b>2016</b> , 17, 257	6.3	10
41	Synchrotron X-ray absorption spectroscopy of melanosomes in vertebrates and cephalopods: implications for the affinity of. <i>Proceedings of the Royal Society B: Biological Sciences</i> , <b>2019</b> , 286, 20191649	4.4	9
40	Zinc Speciation in Contaminated Sediments: Quantitative Determination of Zinc Coordination by X-ray Absorption Spectroscopy. <i>Aquatic Geochemistry</i> , <b>2015</b> , 21, 295-312	1.7	9
39	Chemical and Isotopic Evidence for Organic Matter Sulfurization in Redox Gradients Around Mangrove Roots. <i>Frontiers in Earth Science</i> , <b>2019</b> , 7,	3.5	9
38	Microbial- and thiosulfate-mediated dissolution of mercury sulfide minerals and transformation to gaseous mercury. <i>Frontiers in Microbiology</i> , <b>2015</b> , 6, 596	5.7	9
37	Sample preparation with sucrose cryoprotection dramatically alters Zn distribution in the rodent hippocampus, as revealed by elemental mapping. <i>Journal of Analytical Atomic Spectrometry</i> , <b>2020</b> , 35, 2498-2508	3.7	9
36	Iron Heterogeneity in Early Active Multiple Sclerosis Lesions. <i>Annals of Neurology</i> , <b>2021</b> , 89, 498-510	9.4	9
35	Insights into the Interconnection of the Electrodes and Electrolyte Species in Lithium Sulfur Batteries Using Spatially Resolved Operando X-ray Absorption Spectroscopy and X-ray Fluorescence Mapping. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 5303-5316	3.8	8
34	Reply to Jones and Crowe: Correcting mistaken views of sedimentary geology, Mn-oxidation rates, and molecular clocks. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, E4119-20	11.5	8

33	Periphyton and abiotic factors influencing arsenic speciation in aquatic environments. <i>Environmental Toxicology and Chemistry</i> , <b>2018</b> , 37, 903-913	3.8	7
32	Copper Speciation in Variably Toxic Sediments at the Ely Copper Mine, Vermont, United States. <i>Environmental Science &amp; Technology</i> , <b>2016</b> , 50, 1126-36	10.3	7
31	Elastic discontinuity due to ectopic calcification in a human fibrous joint. <i>Acta Biomaterialia</i> , <b>2013</b> , 9, 4787-95	10.8	7
30	Evidence for the Root-Uptake of Arsenite at Lateral Root Junctions and Root Apices in Rice ( <i>Oryza sativa</i> L.) <b>2017</b> , 1, 3		7
29	Comparison of EXAFS foil spectra from around the world. <i>Journal of Physics: Conference Series</i> , <b>2009</b> , 190, 012032	0.3	7
28	Coupled X-ray Fluorescence and X-ray Absorption Spectroscopy for Microscale Imaging and Identification of Sulfur Species within Tissues and Skeletons of Scleractinian Corals. <i>Analytical Chemistry</i> , <b>2018</b> , 90, 12559-12566	7.8	7
27	Seasonal Zinc Storage and a Strategy for Its Use in Buds of Fruit Trees. <i>Plant Physiology</i> , <b>2020</b> , 183, 12006-12 6		6
26	The source of sulfate in brachiopod calcite: Insights from EXRF imaging and XANES spectroscopy. <i>Chemical Geology</i> , <b>2019</b> , 529, 119328	4.2	6
25	Brachiopod B4SCAS microanalyses indicate a dynamic, climate-influenced Permo-Carboniferous sulfur cycle. <i>Earth and Planetary Science Letters</i> , <b>2020</b> , 546, 116428	5.3	6
24	Arsenolipids in Cultured Strain ML and Their Occurrence in Biota and Sediment from Mono Lake, California. <i>Life</i> , <b>2020</b> , 10,	3	6
23	Fe-bearing phases in modern lacustrine microbialites from Mexico. <i>Geochimica Et Cosmochimica Acta</i> , <b>2019</b> , 253, 201-230	5.5	5
22	Nutrient and pollutant metals within earthworm residues are immobilized in soil during decomposition. <i>Soil Biology and Biochemistry</i> , <b>2016</b> , 101, 217-225	7.5	5
21	The narwhal ( <i>Monodon monoceros</i> ) cementum-dentin junction: a functionally graded biointerphase. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , <b>2014</b> , 228, 754-67	1.7	5
20	Iron mineralogy and redox conditions during deposition of the mid-Proterozoic Appekunny Formation, Belt Supergroup, Glacier National Park. <i>Special Paper of the Geological Society of America</i> , <b>2016</b> , 221-242		5
19	An ecophysiological explanation for manganese enrichment in rock varnish. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	5
18	Mid-Proterozoic Ferruginous Conditions Reflect Postdepositional Processes. <i>Geophysical Research Letters</i> , <b>2019</b> , 46, 3114-3123	4.9	4
17	Hierarchical biota-level and taxonomic controls on the chemistry of fossil melanosomes revealed using synchrotron X-ray fluorescence. <i>Scientific Reports</i> , <b>2020</b> , 10, 8970	4.9	4
16	Imaging translocation and transformation of bioavailable selenium by <i>Stanleya pinnata</i> with X-ray microscopy. <i>Analytical and Bioanalytical Chemistry</i> , <b>2012</b> , 404, 1277-85	4.4	4



15	Fate of Neptunium in an Anaerobic, Ethanogenic Microcosm. <i>Materials Research Society Symposia Proceedings</i> , <b>1999</b> , 556, 1141		4
14	Reinforcement Learning for Adaptive Illumination with X-rays <b>2020</b> ,		4
13	Changing chemistry of particulate manganese in the near- and far-field hydrothermal plumes from 15°S East Pacific Rise and its influence on metal scavenging. <i>Geochimica Et Cosmochimica Acta</i> , <b>2021</b> , 300, 95-118	5.5	4
12	Rapid, Concurrent Formation of Organic Sulfur and Iron Sulfides During Experimental Sulfurization of Sinking Marine Particles. <i>Global Biogeochemical Cycles</i> , <b>2021</b> , 35, e2021GB007062	5.9	4
11	Robust framework and software implementation for fast speciation mapping. <i>Journal of Synchrotron Radiation</i> , <b>2020</b> , 27, 1049-1058	2.4	3
10	Deposition of sulfate aerosols with positive $\delta^{34}\text{S}$ in the Neoproterozoic. <i>Geochimica Et Cosmochimica Acta</i> , <b>2020</b> , 285, 1-20	5.5	3
9	Constraints on Precipitation of the Ferrous Arsenite Solid $\text{HFe}(\text{AsO})$ . <i>Journal of Environmental Quality</i> , <b>2014</b> , 43, 947-54	3.4	3
8	Photons, Folios, and Fossils: The X-ray Imaging and Spectroscopy Program of Ancient Materials at SSRL. <i>Synchrotron Radiation News</i> , <b>2019</b> , 32, 22-28	0.6	3
7	Molecular genetic and biochemical characterization of a putative family of zinc metalloproteins in <i>Caenorhabditis elegans</i> . <i>Metallomics</i> , <b>2018</b> , 10, 1814-1823	4.5	2
6	Manganese oxides in Martian meteorites Northwest Africa (NWA) 7034 and 7533. <i>Icarus</i> , <b>2021</b> , 364, 1144-1151	3.7	2
5	Investigation of the effect of taurine supplementation on muscle taurine content in the mdx mouse model of Duchenne muscular dystrophy using chemically specific synchrotron imaging. <i>Analyst, The</i> , <b>2020</b> , 145, 7242-7251	5	1
4	Organic sulfur fluxes and geomorphic control of sulfur isotope ratios in rivers. <i>Earth and Planetary Science Letters</i> , <b>2021</b> , 562, 116838	5.3	1
3	X-ray Fluorescence Spectroscopy of Picrolite Raw Material on Cyprus. <i>Heritage</i> , <b>2022</b> , 5, 664-677	1.6	1
2	Synchrotron x-ray fluorescence analysis reveals diagenetic alteration of fossil melanosome trace metal chemistry. <i>Palaeontology</i> , <b>2021</b> , 64, 63-73	2.9	0
1	Electrochemically induced metal- vs. ligand-based redox changes in mackinawite: identification of a Fe- and polysulfide-containing intermediate. <i>Dalton Transactions</i> , <b>2021</b> , 50, 11763-11774	4.3	0