Edwin A Schauble

List of Publications by Year
in descending order

38 papers	5,072 citations	159585 30 h-index	315739 38 g-index
38 all docs	38 docs citations	38 times ranked	3880 citing authors

#	Article	IF	Citations
1	13Câ€“18O bonds in carbonate minerals: A new kind of paleothermometer. Geochimica Et Cosmochimica Acta, 2006, 70, 1439-1456.	3.9	707
2	Role of nuclear volume in driving equilibrium stable isotope fractionation of mercury, thallium, and other very heavy elements. Geochimica Et Cosmochimica Acta, 2007, 71, 2170-2189.	3.9	405
3	Preferential formation of 13Câ€“18O bonds in carbonate minerals, estimated using first-principles lattice dynamics. Geochimica Et Cosmochimica Acta, 2006, 70, 2510-2529.	3.9	395
4	18O13C16O in Earthâ€™s atmosphere. Geochimica Et Cosmochimica Acta, 2004, 68, 4767-4777.	3.9	291
5	Equilibrium thermodynamics of multiply substituted isotopologues of molecular gases. Geochimica Et Cosmochimica Acta, 2004, 68, 4779-4797.	3.9	279
6	Silicon in the Earthâ€™s core. Nature, 2007, 447, 1102-1106.	27.8	278
7	First-principles estimates of equilibrium magnesium isotope fractionation in silicate, oxide, carbonate and hexaaquamagnesium(2+) crystals. Geochimica Et Cosmochimica Acta, 2011, 75, 844-869.	3.9	225
8	Mass Fractionation Laws, Mass-Independent Effects, and Isotopic Anomalies. Annual Review of Earth and Planetary Sciences, 2016, 44, 709-783.	11.0	190
9	Theoretical estimates of equilibrium chromium-isotope fractionations. Chemical Geology, 2004, 205, 99-114.	3.3	165
10	High-temperature equilibrium isotope fractionation of non-traditional stable isotopes: Experiments, theory, and applications. Chemical Geology, 2015, 395, 176-195.	3.3	163
11	Theoretical estimates of equilibrium chlorine-isotope fractionations. Geochimica Et Cosmochimica Acta, 2003, 67, 3267-3281.	3.9	143
12	Body temperatures of modern and extinct vertebrates from ¹³ C- ¹⁸ O bond abundances in bioapatite. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10377-10382.	7.1	138
13	Estimation of nuclear volume dependent fractionation of mercury isotopes in equilibrium liquidâ€“vapor evaporation experiments. Chemical Geology, 2013, 336, 5-12.	3.3	138
14	Theoretical constraints on the effects of pH, salinity, and temperature on clumped isotope signatures of dissolved inorganic carbon species and precipitating carbonate minerals. Geochimica Et Cosmochimica Acta, 2014, 125, 610-652.	3.9	123
15	Experimentally determined Si isotope fractionation between silicate and Fe metal and implications for Earth's core formation. Earth and Planetary Science Letters, 2009, 288, 228-234.	4.4	115
16	Beyond temperature: Clumped isotope signatures in dissolved inorganic carbon species and the influence of solution chemistry on carbonate mineral composition. Geochimica Et Cosmochimica Acta, 2015, 166, 344-371.	3.9	104
17	Frontiers of stable isotope geoscience. Chemical Geology, 2014, 372, 119-143.	3.3	99
18	A Stable Isotope Study of Anorogenic Magmatism in East Central Asia. Journal of Petrology, 1996, 37, 1063-1095.	2.8	97

#	Article	IF	Citations
19	Modeling the effects of bond environment on equilibrium iron isotope fractionation in ferric aquo-chloro complexes. Geochimica Et Cosmochimica Acta, 2008, 72, 1939-1958.	3.9	97
20	Isotopic Evidence of Cr Partitioning into Earthâ€™s Core. Science, 2011, 331, 1417-1420.	12.6	92
21	Metalâ€“silicate silicon isotope fractionation in enstatite meteorites and constraints on Earth's core formation. Earth and Planetary Science Letters, 2010, 295, 487-496.	4.4	90
22	Silicon isotope fractionation in silicate minerals: Insights from first-principles models of phyllosilicates, albite and pyrope. Geochimica Et Cosmochimica Acta, 2014, 134, 137-154.	3.9	85
23	Calculation of equilibrium stable isotope partition function ratios for aqueous zinc complexes and metallic zinc. Geochimica Et Cosmochimica Acta, 2011, 75, 769-783.	3.9	83
24	Equilibrium Fractionation of Non-traditional Isotopes: a Molecular Modeling Perspective. Reviews in Mineralogy and Geochemistry, 2017, 82, 27-63.	4.8	71
25	Effects of changing solution chemistry on Fe3+/Fe2+ isotope fractionation in aqueous Feâ€“Cl solutions. Geochimica Et Cosmochimica Acta, 2010, 74, 6669-6689.	3.9	66
26	Polymerization of aqueous silica in H2Oâ€“K2O solutions at 25â€“200Â°C and 1bar to 20kbar. Chemical Geology, 2011, 283, 161-170.	3.3	59
27	Kinetic and equilibrium Ca isotope effects in high-T rocks and minerals. Earth and Planetary Science Letters, 2019, 517, 71-82.	4.4	59
28	Characterization of calcium isotopes in natural and synthetic barite. Geochimica Et Cosmochimica Acta, 2008, 72, 5641-5658.	3.9	57
29	Experimental studies of equilibrium iron isotope fractionation in ferric aquoâ€“chloro complexes. Geochimica Et Cosmochimica Acta, 2009, 73, 2366-2381.	3.9	51
30	Stable strontium isotope fractionation in synthetic barite. Geochimica Et Cosmochimica Acta, 2014, 147, 58-75.	3.9	43
31	Extreme enrichment in atmospheric ¹⁵ N ¹⁵ N. Science Advances, 2017, 3, eaao6741.	10.3	31
32	Modeling nuclear volume isotope effects in crystals. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 17714-17719.	7.1	29
33	Theoretical modeling of rhenium isotope fractionation, natural variations across a black shale weathering profile, and potential as a paleoredox proxy. Earth and Planetary Science Letters, 2015, 430, 339-348.	4.4	25
34	Mass Dependence of Equilibrium Oxygen Isotope Fractionation in Carbonate, Nitrate, Oxide, Perchlorate, Phosphate, Silicate, and Sulfate Minerals. Reviews in Mineralogy and Geochemistry, 2021, 86, 137-178.	4.8	23
35	A model for ¹²CH₂D₂ and ¹³CH₃D as complementary tracers for the budget of atmospheric CH₄. Global Biogeochemical Cycles, 2017, 31, 1387-1407.	4.9	19
36	Theoretical constraints on the effects of added cations on clumped, oxygen, and carbon isotope signatures of dissolved inorganic carbon species and minerals. Geochimica Et Cosmochimica Acta, 2020, 269, 496-539.	3.9	17

#	Article	IF	Citations
37	Stable Te isotope fractionation in tellurium-bearing minerals from precious metal hydrothermal ore deposits. Geochimica Et Cosmochimica Acta, 2017, 202, 215-230.	3.9	15
38	Spectroscopic and X-ray diffraction investigation of the behavior of hanksite and tychite at high pressures, and a model for the compressibility of sulfate minerals. American Mineralogist, 2013, 98, 1543-1549.	1.9	5