

Merlin Meheut

List of Publications by Year in descending order

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Version: 2024-02-01

25
papers

1,208
citations

430874

18
h-index

580821

25
g-index

26
all docs

26
docs citations

26
times ranked

1085
citing authors

#	ARTICLE	IF	CITATIONS
1	Equilibrium isotopic fractionation in the kaolinite, quartz, water system: Prediction from first-principles density-functional theory. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 3170-3181.	3.9	180
2	Iron isotope fractionation between pyrite (FeS ₂), hematite (Fe ₂ O ₃) and siderite (FeCO ₃): A first-principles density functional theory study. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 6565-6578.	3.9	173
3	Structural control over equilibrium silicon and oxygen isotopic fractionation: A first-principles density-functional theory study. <i>Chemical Geology</i> , 2009, 258, 28-37.	3.3	128
4	Silicon isotope fractionation in silicate minerals: Insights from first-principles models of phyllosilicates, albite and pyrope. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 134, 137-154.	3.9	85
5	Silicon isotope variations in the inner solar system: Implications for planetary formation, differentiation and composition. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 121, 67-83.	3.9	80
6	Anharmonicity of inner-OH stretching modes in hydrous phyllosilicates: assessment from first-principles frozen-phonon calculations. <i>Physics and Chemistry of Minerals</i> , 2007, 34, 621-625.	0.8	62
7	Fractionation of silicon isotopes in liquids: The importance of configurational disorder. <i>Chemical Geology</i> , 2015, 396, 239-254.	3.3	58
8	First-principles calculation of H/D isotopic fractionation between hydrous minerals and water. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 3874-3882.	3.9	55
9	Combining Metal Stable Isotope Fractionation Theory with Experiments. <i>Elements</i> , 2009, 5, 369-374.	0.5	47
10	First-principles investigation of equilibrium isotopic fractionation of O- and Si-isotopes between refractory solids and gases in the solar nebula. <i>Earth and Planetary Science Letters</i> , 2012, 319-320, 118-127.	4.4	39
11	Efficient Calculation of Free Energy Differences Associated with Isotopic Substitution Using Path-Integral Molecular Dynamics. <i>Journal of Chemical Theory and Computation</i> , 2014, 10, 1440-1453.	5.3	39
12	Drivers of zirconium isotope fractionation in Zr-bearing phases and melts: The roles of vibrational, nuclear field shift and diffusive effects. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 292, 217-234.	3.9	38
13	Importance of a Fully Anharmonic Treatment of Equilibrium Isotope Fractionation Properties of Dissolved Ionic Species As Evidenced by Li ⁺ (aq). <i>Accounts of Chemical Research</i> , 2017, 50, 1597-1605.	15.6	31
14	Zn isotope fractionation in a pristine larch forest on permafrost-dominated soils in Central Siberia. <i>Geochemical Transactions</i> , 2015, 16, 3.	0.7	30
15	Zn isotope fractionation during interaction with phototrophic biofilm. <i>Chemical Geology</i> , 2014, 390, 46-60.	3.3	29
16	Small changes in Cu redox state and speciation generate large isotope fractionation during adsorption and incorporation of Cu by a phototrophic biofilm. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 220, 1-18.	3.9	28
17	Comment on "New data on equilibrium iron isotope fractionation among sulfides: Constraints on mechanisms of sulfide formation in hydrothermal and igneous systems" by V.B. Polyakov and D.M. Soutanov. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 87, 356-359.	3.9	21
18	Infrared spectroscopic study of the synthetic Mg-Ni talc series. <i>Physics and Chemistry of Minerals</i> , 2018, 45, 843-854.	0.8	20

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19	The Extent, Nature, and Origin of K and Rb Depletions and Isotopic Fractionations in Earth, the Moon, and Other Planetary Bodies. <i>Planetary Science Journal</i> , 2022, 3, 29.	3.6	16
20	Coupling DGT passive samplers and multi-collector ICP-MS: A new tool to measure Pb and Zn isotopes composition in dilute aqueous solutions. <i>Chemical Geology</i> , 2017, 450, 122-134.	3.3	15
21	Nickel isotope fractionation during metal-silicate differentiation of planetesimals: Experimental petrology and ab initio calculations. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 269, 238-256.	3.9	15
22	Copper isotope fractionation during excretion from a phototrophic biofilm. <i>Chemical Geology</i> , 2019, 513, 88-100.	3.3	7
23	Extreme silicon isotope fractionation due to Si organic complexation: Implications for silica biomineralization. <i>Earth and Planetary Science Letters</i> , 2020, 541, 116287.	4.4	6
24	Oxygen isotope fractionation during smithsonite formation from aqueous solutions. <i>Chemical Geology</i> , 2018, 495, 76-89.	3.3	5
25	Elemental and Isotopic Variations of Copper and Zinc Associated with the Diel Activity of Phototrophic Biofilm. <i>Environmental Science & Technology</i> , 2020, 54, 6741-6750.	10.0	1