

Nathalie Vigier

List of Publications by Year in descending order

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74

papers

3,447

citations

126907

33

h-index

138484

58

g-index

76

all docs

76

docs citations

76

times ranked

2380

citing authors

#	ARTICLE	IF	CITATIONS
1	Quantifying Li isotope fractionation during smectite formation and implications for the Li cycle. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 780-792.	3.9	266
2	Behaviour of lithium and its isotopes during weathering in the Mackenzie Basin, Canada. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 3897-3912.	3.9	204
3	Accurate and High-Precision Measurement of Lithium Isotopes in Two Reference Materials by MC-ICP-MS. <i>Geostandards and Geoanalytical Research</i> , 2004, 28, 153-159.	1.9	157
4	The relationship between riverine lithium isotope composition and silicate weathering rates in Iceland. <i>Earth and Planetary Science Letters</i> , 2009, 287, 434-441.	4.4	150
5	Lithium isotope systematics in a forested granitic catchment (Strengbach, Vosges Mountains, France). <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 4612-4628.	3.9	145
6	Erosion timescales derived from U-decay series measurements in rivers. <i>Earth and Planetary Science Letters</i> , 2001, 193, 549-563.	4.4	144
7	Experimental determination of magnesium isotope fractionation during higher plant growth. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 2523-2537.	3.9	143
8	Magnesium isotope systematics of the lithologically varied Moselle river basin, France. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 5070-5089.	3.9	138
9	Hf and Nd isotopes in marine sediments: Constraints on global silicate weathering. <i>Earth and Planetary Science Letters</i> , 2009, 277, 318-326.	4.4	112
10	Effects of biogeochemical processes on magnesium isotope variations in a forested catchment in the Vosges Mountains (France). <i>Geochimica Et Cosmochimica Acta</i> , 2012, 87, 341-355.	3.9	102
11	Processes controlling the stable isotope compositions of Li, B, Mg and Ca in plants, soils and waters: A review. <i>Comptes Rendus - Geoscience</i> , 2012, 344, 704-722.	1.2	98
12	Magnesium Isotope Compositions of Natural Reference Materials. <i>Geostandards and Geoanalytical Research</i> , 2009, 33, 95-109.	3.1	89
13	Experimental determination of the role of diffusion on Li isotope fractionation during basaltic glass weathering. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 3452-3468.	3.9	74
14	Mg isotope fractionation during calcite precipitation: An experimental study. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 91, 75-91.	3.9	73
15	The control of weathering processes on riverine and seawater hafnium isotope ratios. <i>Geology</i> , 2006, 34, 433.	4.4	72
16	Mobility of U-series nuclides during basalt weathering: An example from the Deccan Traps (India). <i>Chemical Geology</i> , 2005, 219, 69-91.	3.3	71
17	Determination of thorium and uranium isotope ratios in low-concentration geological materials using a fixed multi-collector-ICP-MS. <i>Journal of Analytical Atomic Spectrometry</i> , 2001, 16, 612-615.	3.0	66
18	Variation of lithium isotope geochemistry during basalt weathering and secondary mineral transformations in Hawaii. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 145, 103-115.	3.9	64

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19	Effect of environmental conditions and skeletal ultrastructure on the Li isotopic composition of scleractinian corals. <i>Earth and Planetary Science Letters</i> , 2009, 286, 63-70.	4.4	61
20	U-decay series and trace element systematics in the 1978 eruption of Ardoukoba, Asal rift: timescale of magma crystallization. <i>Earth and Planetary Science Letters</i> , 1999, 174, 81-98.	4.4	59
21	A Reflection on Mg, Cd, Ca, Li and Si Isotopic Measurements and Related Reference Materials. <i>Geostandards and Geoanalytical Research</i> , 2004, 28, 139-148.	1.9	59
22	Experimental investigation of Mg isotope fractionation during mineral dissolution and clay formation. <i>Chemical Geology</i> , 2016, 445, 135-145.	3.3	59
23	The impact of anthropogenic inputs on lithium content in river and tap water. <i>Nature Communications</i> , 2019, 10, 5371.	12.8	57
24	Lithium isotopes in foraminifera shells as a novel proxy for the ocean dissolved inorganic carbon (DIC). <i>Comptes Rendus - Geoscience</i> , 2015, 347, 43-51.	1.2	54
25	A new approach for modeling Cenozoic oceanic lithium isotope paleo-variations: the key role of climate. <i>Climate of the Past</i> , 2015, 11, 635-645.	3.4	52
26	Potential Orthopyroxene, Clinopyroxene and Olivine Reference Materials for <i>In Situ</i> Lithium Isotope Determination. <i>Geostandards and Geoanalytical Research</i> , 2015, 39, 357-369.	3.1	51
27	Impact of climate change and human activity on soil landscapes over the past 12,300 years. <i>Scientific Reports</i> , 2018, 8, 247.	3.3	51
28	Three Secondary Reference Materials for Lithium Isotope Measurements: Li ⁷ -N, Li ⁶ -N and LiCl-N Solutions. <i>Geostandards and Geoanalytical Research</i> , 2007, 31, 7-12.	1.9	43
29	The stable calcium isotopic composition of rivers draining basaltic catchments in Iceland. <i>Earth and Planetary Science Letters</i> , 2013, 374, 173-184.	4.4	43
30	Rapid response of silicate weathering rates to climate change in the Himalaya. <i>Geochemical Perspectives Letters</i> , 0, , 10-19.	5.0	43
31	Partitioning of lithium between smectite and solution: An experimental approach. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 85, 314-325.	3.9	41
32	Distinguishing silicate and carbonatite mantle metasomatism by using lithium and its isotopes. <i>Chemical Geology</i> , 2014, 381, 67-77.	3.3	38
33	In situ measurements of calcium isotopes by ion microprobe in carbonates and application to foraminifera. <i>Chemical Geology</i> , 2007, 244, 679-690.	3.3	35
34	The influence of weathering process on riverine osmium isotopes in a basaltic terrain. <i>Earth and Planetary Science Letters</i> , 2006, 243, 732-748.	4.4	34
35	Abrupt response of chemical weathering to Late Quaternary hydroclimate changes in northeast Africa. <i>Scientific Reports</i> , 2017, 7, 44231.	3.3	34
36	Variability in magnesium, carbon and oxygen isotope compositions of brachiopod shells: Implications for paleoceanographic studies. <i>Chemical Geology</i> , 2016, 423, 49-60.	3.3	33

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37	Lithium isotopes in hydrothermally altered basalts from Hengill (SW Iceland). <i>Earth and Planetary Science Letters</i> , 2015, 411, 62-71.	4.4	32
38	Large-scale survey of lithium concentrations in marine organisms. <i>Science of the Total Environment</i> , 2021, 751, 141453.	8.0	30
39	Natural variations of lithium isotopes in a mammalian model. <i>Metallomics</i> , 2014, 6, 582.	2.4	29
40	Lithium Isotope Composition of Marine Biogenic Carbonates and Related Reference Materials. <i>Geostandards and Geoanalytical Research</i> , 2018, 42, 403-415.	3.1	28
41	Lithium Isotopes as Tracers in Marine and Terrestrial Environments. <i>Advances in Isotope Geochemistry</i> , 2012, , 41-59.	1.4	27
42	Bioaccumulation of Lithium Isotopes in Mussel Soft Tissues and Implications for Coastal Environments. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 1407-1417.	2.7	27
43	Enhanced dissolution of basaltic glass in brackish waters: Impact on biogeochemical cycles. <i>Earth and Planetary Science Letters</i> , 2015, 417, 1-8.	4.4	25
44	In situ measurements of Li isotopes in foraminifera. <i>Geochemistry, Geophysics, Geosystems</i> , 2007, 8, n/a-n/a.	2.5	23
45	A new method for analysis of osmium isotopes and concentrations in surface and subsurface water samples. <i>Chemical Geology</i> , 2009, 258, 136-144.	3.3	23
46	Modelling the riverine $\delta^7\text{Li}$ variability throughout the Amazon Basin. <i>Chemical Geology</i> , 2020, 532, 119336.	3.3	19
47	Dissolved osmium in Bengal plain groundwater: Implications for the marine Os budget. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 3432-3448.	3.9	16
48	Lithium elemental and isotopic variations in rock-melt interaction. <i>Chemie Der Erde</i> , 2014, 74, 705-713.	2.0	16
49	Rare earth element and neodymium isotope tracing of sedimentary rock weathering. <i>Chemical Geology</i> , 2020, 553, 119794.	3.3	16
50	Clay Li and Nd isotopes response to hydroclimate changes in the Changjiang (Yangtze) basin over the past 14,000 years. <i>Earth and Planetary Science Letters</i> , 2021, 561, 116793.	4.4	15
51	Variations of Mg isotope geochemistry in soils over a Hawaiian 4 Myr chronosequence. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 292, 94-114.	3.9	14
52	“Non-traditional” stable isotopes applied to the study of trace metal contaminants in anthropized marine environments. <i>Marine Pollution Bulletin</i> , 2022, 175, 113398.	5.0	14
53	Progressive Evolution of the Changjiang (Yangtze River) Sediment Weathering Intensity Since the Three Gorges Dam Operation. <i>Journal of Geophysical Research F: Earth Surface</i> , 2019, 124, 2402-2416.	2.8	13
54	Magnesium Isotope Fractionation During Arid Pedogenesis on the Island of Hawaii (USA). <i>Procedia Earth and Planetary Science</i> , 2014, 10, 243-248.	0.6	10

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55	Increased Mg release rates and related Mg isotopic signatures during bacteria-phlogopite interactions. Chemical Geology, 2019, 506, 17-28.	3.3	10
56	Co-variations of climate and silicate weathering in the Nile Basin during the Late Pleistocene. Quaternary Science Reviews, 2021, 264, 107012.	3.0	10
57	Chemical erosion rates in the upper Blue Nile Basin and related atmospheric CO2 consumption. Chemical Geology, 2019, 518, 19-31.	3.3	7
58	Lithium isotopic composition of reference materials of biological origin TORT-2, DORM-2, TORT-3, DORM-4, SRM-1400 and ERM-CE278k. Journal of Analytical Atomic Spectrometry, 2021, 36, 1381-1388.	3.0	6
59	Origins of ^{210}Pb – ^{226}Ra disequilibria in basalts: New insights from the 1978 Asal Rift eruption. Geochemistry, Geophysics, Geosystems, 2012, 13, .	2.5	5
60	Decoupling of dissolved and particulate Li isotopes during estuarine processes. Geochemical Perspectives Letters, 0, , 40-44.	5.0	5
61	Constraining Rates of Chemical and Physical Erosion Using U-Series Radionuclides. Advances in Isotope Geochemistry, 2012, , 553-571.	1.4	4
62	Lithium Behaviour and Isotope Fractionation During Fluid–Rock Interactions in Variscan Oceanic Suture Zones: Limousin Ophiolite and Ile de Groix High-pressure Terrane (France). Journal of Petrology, 2019, 60, 1963-1990.	2.8	4
63	Behavior of osmium at the freshwater-saltwater interface based on Ganga derived sediments from the estuarine zone. Geochemistry, Geophysics, Geosystems, 2011, 12, n/a-n/a.	2.5	2
64	Investigating Li Isotope Composition of Nile Deltaic Sediments as Paleotracer of Continental Alteration. Procedia Earth and Planetary Science, 2015, 13, 261-264.	0.6	2
65	Carbon stable isotope ratio as a revealer of incomplete decarbonation for particulate organic carbon measurement in river plumes. Geo-Marine Letters, 2021, 41, 1.	1.1	0
66	Novel Application of Lithium and its Isotopes in Marine Ecotoxicology. , 2020, , .		0
67	PROBING CONTINENTAL WEATHERING AT GLOBAL SCALE USING LI, MG AND SI ISOTOPES IN FLUVIAL SEDIMENTS. , 2021, , .		0
68	Biological fractionations of lithium isotopes. , 2021, , .		0
69	Lithium isotope geochemistry in the Barton Peninsula, King George Island, Antarctica. , 2021, , .		0
70	Lithium Isotope Composition of Scleratinian Corals is Sensitive to Internal pH Regulation. , 2020, , .		0
71	Lithium isotopes in marine food webs. , 2021, , .		0
72	Lithium isotopic composition of biological reference materials and automated Li separation using PrepFAST MCTM. , 2021, , .		0

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73	REE and Nd isotopes in sedimentary Fe oxides as proxies for shale weathering. , 2021, , .		0
74	Exploring the role of environmental and ecological parameters on lithium isotope composition of marine carbonates. , 2021, , .		0