Frederic Moynier

List of Publications by Year in descending order

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231 papers 9,982 citations 53 h-index 49909 87 g-index

239 all docs 239 docs citations

times ranked

239

4695 citing authors

#	Article	IF	CITATIONS
1	26Al–26Mg and 207Pb–206Pb systematics of Allende CAIs: Canonical solar initial 26Al/27Al ratio reinstated. Earth and Planetary Science Letters, 2008, 272, 353-364.	4.4	347
2	Geochemistry of CI chondrites: Major and trace elements, and Cu and Zn Isotopes. Geochimica Et Cosmochimica Acta, 2012, 83, 79-92.	3.9	301
3	The Isotope Geochemistry of Zinc and Copper. Reviews in Mineralogy and Geochemistry, 2017, 82, 543-600.	4.8	272
4	Zinc isotopic evidence for the origin of the Moon. Nature, 2012, 490, 376-379.	27.8	242
5	Zinc isotope fractionation during magmatic differentiation and the isotopic composition of the bulk Earth. Earth and Planetary Science Letters, 2013, 369-370, 34-42.	4.4	216
6	Density functional theory estimation of isotope fractionation of Fe, Ni, Cu, and Zn among species relevant to geochemical and biological environments. Geochimica Et Cosmochimica Acta, 2014, 140, 553-576.	3.9	211
7	Iron, zinc, magnesium and uranium isotopic fractionation during continental crust differentiation: The tale from migmatites, granitoids, and pegmatites. Geochimica Et Cosmochimica Acta, 2012, 97, 247-265.	3.9	203
8	Isotopic composition of zinc, copper, and iron in lunar samples. Geochimica Et Cosmochimica Acta, 2006, 70, 6103-6117.	3.9	174
9	Early formation of planetary building blocks inferred from Pb isotopic ages of chondrules. Science Advances, 2017, 3, e1700407.	10.3	174
10	Pb–Pb dating constraints on the accretion and cooling history of chondrites. Geochimica Et Cosmochimica Acta, 2007, 71, 1583-1604.	3.9	148
11	Isotopic and elemental abundances of copper and zinc in lunar samples, Zagami, Pele's hairs, and a terrestrial basalt. Geochimica Et Cosmochimica Acta, 2009, 73, 5884-5904.	3.9	142
12	Copper isotope fractionation between aqueous compounds relevant to low temperature geochemistry and biology. Geochimica Et Cosmochimica Acta, 2013, 110, 29-44.	3.9	140
13	Copper isotope evidence for large-scale sulphide fractionation during Earth's differentiation. Geochemical Perspectives Letters, 2015, , 53-64.	5.0	134
14	The origin of Zn isotope fractionation in sulfides. Geochimica Et Cosmochimica Acta, 2011, 75, 7632-7643.	3.9	131
15	Rubidium isotopic composition of the Earth, meteorites, and the Moon: Evidence for the origin of volatile loss during planetary accretion. Earth and Planetary Science Letters, 2017, 473, 62-70.	4.4	130
16	The nature of Earth's building blocks as revealed by calcium isotopes. Earth and Planetary Science Letters, 2014, 394, 135-145.	4.4	129
17	Extensive volatile loss during formation and differentiation of the Moon. Nature Communications, 2015, 6, 7617.	12.8	125
18	Isotopic fractionation and transport mechanisms of Zn in plants. Chemical Geology, 2009, 267, 125-130.	3.3	124

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19	Zinc isotope composition of the Earth and its behaviour during planetary accretion. Chemical Geology, 2018, 477, 73-84.	3.3	122
20	Comparative stable isotope geochemistry of Ni, Cu, Zn, and Fe in chondrites and iron meteorites. Geochimica Et Cosmochimica Acta, 2007, 71, 4365-4379.	3.9	114
21	Transmission infrared spectra (2–25μm) of carbonaceous chondrites (CI, CM, CV–CK, CR, C2) Tj ETQq1 1 C).784314 i 2.5	rgBT/Overlo
22	Evidence for extremely rapid magma ocean crystallization and crust formation on Mars. Nature, 2018, 558, 586-589.	27.8	111
23	Sr stable isotope composition of Earth, the Moon, Mars, Vesta and meteorites. Earth and Planetary Science Letters, 2010, 300, 359-366.	4.4	110
24	Evaporation of moderately volatile elements from silicate melts: experiments and theory. Geochimica Et Cosmochimica Acta, 2019, 260, 204-231.	3.9	102
25	Asteroidal impacts and the origin of terrestrial and lunar volatiles. Icarus, 2013, 222, 44-52.	2.5	99
26	Samples returned from the asteroid Ryugu are similar to Ivuna-type carbonaceous meteorites. Science, 2023, 379, .	12.6	97
27	Silicon isotopic variation in enstatite meteorites: Clues to their origin and Earth-forming material. Earth and Planetary Science Letters, 2013, 361, 487-496.	4.4	95
28	Evaporative fractionation of volatile stable isotopes and their bearing on the origin of the Moon. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130259.	3.4	94
29	Isotopic Evidence of Cr Partitioning into Earth's Core. Science, 2011, 331, 1417-1420.	12.6	92
30	The nuclear field shift effect in chemical exchange reactions. Chemical Geology, 2009, 267, 139-156.	3.3	91
31	Early Archean serpentine mud volcanoes at Isua, Greenland, as a niche for early life. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 17639-17643.	7.1	90
32	CALCIUM ISOTOPE COMPOSITION OF METEORITES, EARTH, AND MARS. Astrophysical Journal, 2009, 702, 707-715.	4.5	86
33	Silicon isotopes in angrites and volatile loss in planetesimals. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17029-17032.	7.1	86
34	Pb, Hf and Nd isotope compositions of the two Réunion volcanoes (Indian Ocean): A tale of two small-scale mantle "blobs�. Earth and Planetary Science Letters, 2008, 265, 748-765.	4.4	85
35	Nature of volatile depletion and genetic relationships in enstatite chondrites and aubrites inferred from Zn isotopes. Geochimica Et Cosmochimica Acta, 2011, 75, 297-307.	3.9	85
36	Isotopic fractionation of zinc in tektites. Earth and Planetary Science Letters, 2009, 277, 482-489.	4.4	83

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37	PLANETARY-SCALE STRONTIUM ISOTOPIC HETEROGENEITY AND THE AGE OF VOLATILE DEPLETION OF EARLY SOLAR SYSTEM MATERIALS. Astrophysical Journal, 2012, 758, 45.	4.5	83
38	Gallium isotopic evidence for extensive volatile loss from the Moon during its formation. Science Advances, 2017, 3, e1700571.	10.3	74
39	The potential science and engineering value of samples delivered to Earth by Mars sample return. Meteoritics and Planetary Science, 2019, 54, S3.	1.6	73
40	The origin of volatile element depletion in early solar system material: Clues from Zn isotopes in chondrules. Earth and Planetary Science Letters, 2017, 468, 62-71.	4.4	71
41	Experimental and Theoretical Investigation of Isotope Fractionation of Zinc between Aqua, Chloro, and Macrocyclic Complexes. Journal of Physical Chemistry A, 2010, 114, 2543-2552.	2.5	70
42	Nuclear field vs. nucleosynthetic effects as cause of isotopic anomalies in the early Solar System. Earth and Planetary Science Letters, 2006, 247, 1-9.	4.4	69
43	40Ar/39Ar age of the Lonar crater and consequence for the geochronology of planetary impacts. Geology, 2011, 39, 671-674.	4.4	67
44	Volatile element loss during planetary magma ocean phases. Icarus, 2018, 300, 249-260.	2.5	67
45	Isotopic fractionation of Cu in tektites. Geochimica Et Cosmochimica Acta, 2010, 74, 799-807.	3.9	66
46	Heterogeneous distribution of natural zinc isotopes in mice. Metallomics, 2013, 5, 693.	2.4	65
47	Theoretical and experimental investigation of nickel isotopic fractionation in species relevant to modern and ancient oceans. Geochimica Et Cosmochimica Acta, 2011, 75, 469-482.	3.9	64
48	Titanium isotopes as a tracer for the plume or island arc affinity of felsic rocks. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1132-1135.	7.1	64
49	Volatile loss following cooling and accretion of the Moon revealed by chromium isotopes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10920-10925.	7.1	63
50	Chromium isotopic homogeneity between the Moon, the Earth, and enstatite chondrites. Earth and Planetary Science Letters, 2018, 481, 1-8.	4.4	62
51	Bodily variability of zinc natural isotope abundances in sheep. Rapid Communications in Mass Spectrometry, 2010, 24, 605-612.	1.5	61
52	Iron isotope fractionation in planetary crusts. Geochimica Et Cosmochimica Acta, 2012, 89, 31-45.	3.9	60
53	Photometry of meteorites. Icarus, 2012, 218, 364-377.	2.5	58
54	An oceanic subduction origin for Archaean granitoids revealed by silicon isotopes. Nature Geoscience, 2019, 12, 774-778.	12.9	55

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55	High-precision zirconium stable isotope measurements of geological reference materials as measured by double-spike MC-ICPMS. Chemical Geology, 2018, 493, 544-552.	3.3	53
56	Zinc isotopes in HEDs: Clues to the formation of 4-Vesta, and the unique composition of Pecora Escarpment 82502. Geochimica Et Cosmochimica Acta, 2012, 86, 76-87.	3.9	50
57	Redox state during core formation on asteroid 4-Vesta. Earth and Planetary Science Letters, 2013, 373, 75-82.	4.4	50
58	Isotopic fractionation of zirconium during magmatic differentiation and the stable isotope composition of the silicate Earth. Geochimica Et Cosmochimica Acta, 2019, 250, 311-323.	3.9	50
59	Potassium isotopic composition of various samples using a dual-path collision cell-capable multiple-collector inductively coupled plasma mass spectrometer, Nu instruments Sapphire. Chemical Geology, 2021, 571, 120144.	3.3	49
60	Massâ€Independent Isotope Fractionation of Molybdenum and Ruthenium and the Origin of Isotopic Anomalies in Murchison. Astrophysical Journal, 2006, 647, 1506-1516.	4.5	48
61	Calcium isotopic evidence for the mantle sources of carbonatites. Science Advances, 2020, 6, eaba3269.	10.3	48
62	Early Solar System irradiation quantified by linked vanadium and beryllium isotope variations in meteorites. Nature Astronomy, 2017, 1 , .	10.1	47
63	The early formation of the IVA iron meteorite parent body. Earth and Planetary Science Letters, 2010, 296, 469-480.	4.4	46
64	Volatilization induced by impacts recorded in Zn isotope composition of ureilites. Chemical Geology, 2010, 276, 374-379.	3.3	46
65	Dating the First Stage of Planet Formation. Astrophysical Journal, 2007, 671, L181-L183.	4.5	45
66	Elemental partitioning and isotopic fractionation of Zn between metal and silicate and geochemical estimation of the S content of the Earth's core. Geochimica Et Cosmochimica Acta, 2017, 196, 252-270.	3.9	45
67	Early stages of core segregation recorded by Fe isotopes in an asteroidal mantle. Earth and Planetary Science Letters, 2015, 419, 93-100.	4.4	44
68	Testing the chondrule-rich accretion model for planetary embryos using calcium isotopes. Earth and Planetary Science Letters, 2017, 469, 75-83.	4.4	44
69	Determination of Zr isotopic ratios in zircons using laser-ablation multiple-collector inductively coupled-plasma mass-spectrometry. Journal of Analytical Atomic Spectrometry, 2019, 34, 1800-1809.	3.0	43
70	Tin isotopic fractionation during igneous differentiation and Earth's mantle composition. Geochemical Perspectives Letters, 0, , 24-28.	5.0	43
71	Europium isotopic variations in Allende CAIs and the nature of mass-dependent fractionation in the solar nebula. Geochimica Et Cosmochimica Acta, 2006, 70, 4287-4294.	3.9	41
72	A SEARCH FOR ⁷⁰ Zn ANOMALIES IN METEORITES. Astrophysical Journal, 2009, 700, L92-L95.	4.5	41

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73	Chemical and isotopic kinship of iron in the Earth and Moon deduced from the lunar Mg-Suite. Earth and Planetary Science Letters, 2017, 471, 125-135.	4.4	41
74	Late-stage magmatic outgassing from a volatile-depleted Moon. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9547-9551.	7.1	41
75	Martian magmatism from plume metasomatized mantle. Nature Communications, 2018, 9, 4799.	12.8	41
76	Ca ISOTOPE EFFECTS IN ORGUEIL LEACHATES AND THE IMPLICATIONS FOR THE CARRIER PHASES OF sup-54 /sup> Cr ANOMALIES. Astrophysical Journal Letters, 2010, 718, L7-L13.	8.3	40
77	Calcium isotope fractionation between aqueous compounds relevant to low-temperature geochemistry, biology and medicine. Scientific Reports, 2017, 7, 44255.	3.3	40
78	NIR spectral trends of HED meteorites: Can we discriminate between the magmatic evolution, mechanical mixing and observation geometry effects?. lcarus, 2011, 216, 560-571.	2.5	39
79	The gallium isotopic composition of the bulk silicate Earth. Chemical Geology, 2017, 448, 164-172.	3.3	39
80	Evaporative fractionation of zinc during the first nuclear detonation. Science Advances, 2017, 3, e1602668.	10.3	38
81	Tin stable isotope analysis of geological materials by double-spike MC-ICPMS. Chemical Geology, 2017, 457, 61-67.	3.3	38
82	Coupled ¹⁸² W- ¹⁴² Nd constraint for early Earth differentiation. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10810-10814.	7.1	36
83	Nuclear field shift in natural environments. Comptes Rendus - Geoscience, 2013, 345, 150-159.	1.2	36
84	Chondritic Mn/Na ratio and limited post-nebular volatile loss of the Earth. Earth and Planetary Science Letters, 2018, 485, 130-139.	4.4	36
85	Tin and zinc stable isotope characterisation of chondrites and implications for early Solar System evolution. Chemical Geology, 2019, 511, 81-90.	3.3	36
86	Ab initio calculations of the Fe(II) and Fe(III) isotopic effects in citrates, nicotianamine, and phytosiderophore, and new Fe isotopic measurements in higher plants. Comptes Rendus - Geoscience, 2013, 345, 230-240.	1.2	35
87	Serum and brain natural copper stable isotopes in a mouse model of Alzheimer's disease. Scientific Reports, 2019, 9, 11894.	3.3	35
88	Bridging the depleted MORB mantle and the continental crust using titanium isotopes. Geochemical Perspectives Letters, 0, , 11-15.	5.0	35
89	High-precision sulfur isotope composition of enstatite meteorites and implications of the formation and evolution of their parent bodies. Geochimica Et Cosmochimica Acta, 2016, 172, 393-409.	3.9	34
90	Significant Zr isotope variations in single zircon grains recording magma evolution history. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 21125-21131.	7.1	34

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91	Timing and Origin of the Angrite Parent Body Inferred from Cr Isotopes. Astrophysical Journal Letters, 2019, 877, L13.	8.3	33
92	The internal structure and geodynamics of Mars inferred from a 4.2-Gyr zircon record. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30973-30979.	7.1	33
93	Chromium isotopic insights into the origin of chondrite parent bodies and the early terrestrial volatile depletion. Geochimica Et Cosmochimica Acta, 2021, 301, 158-186.	3.9	33
94	The Mercury Isotopic Composition of Earth's Mantle and the Use of Mass Independently Fractionated Hg to Test for Recycled Crust. Geophysical Research Letters, 2021, 48, e2021GL094301.	4.0	33
95	Toward Consistent Chronology in the Early Solar System: High-Resolution [FORMULA][F][SUP]53[/SUP][/F][/FORMULA]Cr Chronometry for Chondrules. Astrophysical Journal, 2007, 662, L43-L46.	4.5	32
96	Silicon isotopes reveal recycled altered oceanic crust in the mantle sources of Ocean Island Basalts. Geochimica Et Cosmochimica Acta, 2016, 189, 282-295.	3.9	32
97	Calcium isotope evidence for early Archaean carbonates and subduction of oceanic crust. Nature Communications, 2021, 12, 2534.	12.8	30
98	Mass-independent isotopic fractionation of tin in chemical exchange reaction using a crown ether. Analytica Chimica Acta, 2009, 632, 234-239.	5.4	29
99	Chromium Isotopic Constraints on the Origin of the Ureilite Parent Body. Astrophysical Journal, 2020, 888, 126.	4.5	28
100	Distribution of Zn isotopes during Alzheimer's disease. Geochemical Perspectives Letters, 2017, , 142-150.	5.0	28
101	Mass-Dependent and Mass-Independent Isotope Effects of Zinc in a Redox Reaction. Journal of Physical Chemistry A, 2009, 113, 12225-12232.	2.5	27
102	Chromium Isotopic Evidence for an Early Formation of Chondrules from the Ornans CO Chondrite. Astrophysical Journal, 2019, 873, 82.	4.5	27
103	The zirconium stable isotope compositions of 22 geological reference materials, 4 zircons and 3 standard solutions. Chemical Geology, 2020, 555, 119791.	3.3	27
104	Dating and Tracing the Origin of Enstatite Chondrite Chondrules with Cr Isotopes. Astrophysical Journal Letters, 2020, 894, L26.	8.3	27
105	Zinc isotope anomalies in primitive meteorites identify the outer solar system as an important source of Earth's volatile inventory. Icarus, 2022, 386, 115172.	2.5	27
106	THE ELUSIVE ⁶⁰ Fe IN THE SOLAR NEBULA. Astrophysical Journal, 2011, 741, 71.	4.5	26
107	The iron isotope composition of enstatite meteorites: Implications for their origin and the metal/sulfide Fe isotopic fractionation factor. Geochimica Et Cosmochimica Acta, 2014, 142, 149-165.	3.9	26
108	The stable strontium isotopic composition of ocean island basalts, mid-ocean ridge basalts, and komatiites. Chemical Geology, 2018, 483, 595-602.	3.3	26

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109	Chondritic mercury isotopic composition of Earth and evidence for evaporative equilibrium degassing during the formation of eucrites. Earth and Planetary Science Letters, 2020, 551, 116544.	4.4	26
110	Early oxidation of the martian crust triggered by impacts. Science Advances, 2020, 6, .	10.3	26
111	Gallium isotopic evidence for the fate of moderately volatile elements in planetary bodies and refractory inclusions. Earth and Planetary Science Letters, 2017, 479, 330-339.	4.4	25
112	Examining the homeostatic distribution of metals and Zn isotopes in Göttingen minipigs. Metallomics, 2018, 10, 1264-1281.	2.4	25
113	Tracking the volatile and magmatic history of Vesta from chromium stable isotope variations in eucrite and diogenite meteorites. Geochimica Et Cosmochimica Acta, 2019, 266, 598-610.	3.9	25
114	An experimentally-determined general formalism for evaporation and isotope fractionation of Cu and Zn from silicate melts between 1300 and 1500†°C and 1†bar. Geochimica Et Cosmochimica Acta, 2020, 288 316-340.	,3.9	25
115	Isotope Fractionation of Iron(III) in Chemical Exchange Reactions Using Solvent Extraction with Crown Ether. Journal of Physical Chemistry A, 2006, 110, 11108-11112.	2.5	24
116	Theoretical isotopic fractionation of magnesium between chlorophylls. Scientific Reports, 2017, 7, 6973.	3.3	24
117	A history of violence: Insights into post-accretionary heating in carbonaceous chondrites from volatile element abundances, Zn isotopes and water contents. Geochimica Et Cosmochimica Acta, 2018, 220, 19-35.	3.9	24
118	Calcium isotope compositions of mantle pyroxenites. Geochimica Et Cosmochimica Acta, 2020, 270, 144-159.	3.9	24
119	Late accretion history of the terrestrial planets inferred from platinum stable isotopes. Geochemical Perspectives Letters, 2017, , 94-104.	5.0	24
120	Nuclear field shift effect in the isotope exchange reaction of cadmium using a crown ether. Chemical Geology, 2009, 267, 157-163.	3.3	23
121	Chromium isotope evidence in ejecta deposits for the nature of Paleoproterozoic impactors. Earth and Planetary Science Letters, 2017, 460, 105-111.	4.4	23
122	Some things special about NEAs: Geometric and environmental effects on the optical signatures of hydration. Icarus, 2019, 333, 415-428.	2.5	23
123	Mare basalt meteorites, magnesian-suite rocks and KREEP reveal loss of zinc during and after lunar formation. Earth and Planetary Science Letters, 2020, 531, 115998.	4.4	23
124	Tidal pull of the Earth strips the proto-Moon of its volatiles. Icarus, 2021, 364, 114451.	2.5	23
125	Si ISOTOPE HOMOGENEITY OF THE SOLAR NEBULA. Astrophysical Journal, 2013, 779, 123.	4.5	22
126	Constraining compositional proxies for Earth's accretion and core formation through high pressure and high temperature Zn and S metal-silicate partitioning. Geochimica Et Cosmochimica Acta, 2018, 235, 21-40.	3.9	22

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127	Timing of thermal metamorphism in CM chondrites: Implications for Ryugu and Bennu future sample return. Icarus, 2020, 339, 113593.	2.5	22
128	Compositional and pressure controls on calcium and magnesium isotope fractionation in magmatic systems. Geochimica Et Cosmochimica Acta, 2020, 290, 257-270.	3.9	22
129	Laboratory technology and cosmochemistry. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19135-19141.	7.1	21
130	Lack of resolvable titanium stable isotopic variations in bulk chondrites. Geochimica Et Cosmochimica Acta, 2018, 239, 409-419.	3.9	21
131	Isotope fractionation of Si in protonation/deprotonation reaction of silicic acid: A new pH proxy. Geochimica Et Cosmochimica Acta, 2015, 168, 193-205.	3.9	20
132	In Situ Analysis of Non-Traditional Isotopes by SIMS and LA–MC–ICP–MS: Key Aspects and the Example of Mg Isotopes in Olivines and Silicate Glasses. Reviews in Mineralogy and Geochemistry, 2017, 82, 127-163.	4.8	20
133	Implications for behavior of volatile elements during impactsâ€"Zinc and copper systematics in sediments from the Ries impact structure and central European tektites. Meteoritics and Planetary Science, 2017, 52, 2178-2192.	1.6	20
134	The Cu isotopic composition of iron meteorites. Meteoritics and Planetary Science, 2012, 47, 268-276.	1.6	19
135	Barium isotope cosmochemistry and geochemistry. Science Bulletin, 2018, 63, 385-394.	9.0	19
136	Volatile element evolution of chondrules through time. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 8547-8552.	7.1	19
137	Planetesimal formation in an evolving protoplanetary disk with a dead zone. Astronomy and Astrophysics, 2019, 627, A50.	5.1	19
138	A unifying model for the accretion of chondrules and matrix. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 18860-18866.	7.1	19
139	Ultraviolet-photon fingerprints on chondritic large organic molecules. Geochemical Journal, 2019, 53, 21-32.	1.0	19
140	Isotopic fractionation of Cu in plants. Chemical Geology, 2011, , .	3.3	18
141	An iron isotope perspective on the origin of the nanophase metallic iron in lunar regolith. Earth and Planetary Science Letters, 2012, 337-338, 17-24.	4.4	18
142	Homogeneous distribution of Fe isotopes in the early solar nebula. Meteoritics and Planetary Science, 2013, 48, 354-364.	1.6	18
143	Iron isotope fractionation during sulfide-rich felsic partial melting in early planetesimals. Earth and Planetary Science Letters, 2014, 392, 124-132.	4.4	18
144	Zinc isotope analyses of singularly small samples (<5†ng Zn): Investigating chondrule-matrix complementarity in Leoville. Geochimica Et Cosmochimica Acta, 2019, 261, 248-268.	3.9	18

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145	Zirconium isotopic composition of the upper continental crust through time. Earth and Planetary Science Letters, 2021, 572, 117086.	4.4	18
146	Barium stable isotope composition of the Earth, meteorites, and calcium–aluminum-rich inclusions. Chemical Geology, 2015, 413, 1-6.	3.3	17
147	Zhamanshin astrobleme provides evidence for carbonaceous chondrite and post-impact exchange between ejecta and Earth's atmosphere. Nature Communications, 2017, 8, 227.	12.8	17
148	Alteration of synthetic basaltic glass in silica saturated conditions: Analogy with nuclear glass. Applied Geochemistry, 2018, 97, 19-31.	3.0	17
149	Tracing the formation and differentiation of the Earth by non-traditional stable isotopes. Science China Earth Sciences, 2019, 62, 1702-1715.	5.2	17
150	Investigating magmatic processes in the early Solar System using the Cl isotopic systematics of eucrites. Geochimica Et Cosmochimica Acta, 2019, 266, 582-597.	3.9	17
151	Evolution of the Ca isotopic composition of the mantle. Geochimica Et Cosmochimica Acta, 2019, 258, 195-206.	3.9	17
152	Isotope metallomics approaches for medical research. Cellular and Molecular Life Sciences, 2020, 77, 3293-3309.	5.4	17
153	Half-life and initial Solar System abundance of ¹⁴⁶ Sm determined from the oldest andesitic meteorite. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2120933119.	7.1	17
154	Nuclear field shift effect as a possible cause of Te isotopic anomalies in the early solar system—An alternative explanation of Fehr et al. (2006 and 2009). Meteoritics and Planetary Science, 2009, 44, 1735-1742.	1.6	16
155	Nuclear field shift effect in isotope fractionation of thallium. Journal of Radioanalytical and Nuclear Chemistry, 2013, 296, 261-265.	1.5	16
156	Chromium isotope anomaly in an impactite sample from the El'gygytgyn structure, Russia: Evidence for a ureilite projectile? Meteoritics and Planetary Science, 2013, 48, 1339-1350.	1.6	16
157	Silicon isotope systematics of acidic weathering of fresh basalts, Kilauea Volcano, Hawai'i. Geochimica Et Cosmochimica Acta, 2015, 169, 63-81.	3.9	16
158	Copper and zinc isotopic excursions in the human brain affected by Alzheimer's disease. Alzheimer's and Dementia: Diagnosis, Assessment and Disease Monitoring, 2020, 12, e12112.	2.4	16
159	Potassium isotopic composition of seven widely available biological standards using collision cell (CC)-MC-ICP-MS. Journal of Analytical Atomic Spectrometry, 2021, 36, 2444-2448.	3.0	16
160	Tracing the origin and core formation of the enstatite achondrite parent bodies using Cr isotopes. Geochimica Et Cosmochimica Acta, 2021, 308, 256-272.	3.9	16
161	Zinc isotopic composition of iron meteorites: Absence of isotopic anomalies and origin of the volatile element depletion. Meteoritics and Planetary Science, 2013, 48, 2441-2450.	1.6	15
162	Tracing metal–silicate segregation and late veneer in the Earth and the ureilite parent body with palladium stable isotopes. Geochimica Et Cosmochimica Acta, 2017, 216, 28-41.	3.9	15

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163	Volatile loss under a diffusion-limited regime in tektites: Evidence from tin stable isotopes. Chemical Geology, 2019, 528, 119279.	3.3	15
164	Volatile distributions in and on the Moon revealed by Cu and Fe isotopes in the †Rusty Rock†M66095. Geochimica Et Cosmochimica Acta, 2019, 266, 131-143.	3.9	15
165	Platinum group element mobilization in the mantle enhanced by recycled sedimentary carbonate. Earth and Planetary Science Letters, 2020, 541, 116262.	4.4	15
166	Mass-independent and mass-dependent Cr isotopic composition of the Rumuruti (R) chondrites: Implications for their origin and planet formation. Geochimica Et Cosmochimica Acta, 2021, 293, 598-609.	3.9	15
167	Zirconium isotopic composition of the mantle through time. Geochemical Perspectives Letters, 0, 15, 40-43.	5.0	15
168	A tungsten isotope approach to search for meteoritic components in terrestrial impact rocks. Earth and Planetary Science Letters, 2009, 286, 35-40.	4.4	14
169	⁵⁸ Fe AND ⁵⁴ Cr IN EARLY SOLAR SYSTEM MATERIALS. Astrophysical Journal Letters, 2011, 739, L58.	8.3	14
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