Frederic Moynier

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/9250630/publications.pdf

Version: 2024-02-01

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	Samples returned from the asteroid Ryugu are similar to Ivuna-type carbonaceous meteorites. Science, 2023, 379, .	12.6	97
2	Stable isotope geochemistry of silicon in granitoid zircon. Geochimica Et Cosmochimica Acta, 2022, 316, 273-294.	3.9	11
3	A 187Re-187Os, 87Rb-87Sr, highly siderophile and incompatible trace element study of some carbonaceous, ordinary and enstatite chondrite meteorites. Geochimica Et Cosmochimica Acta, 2022, 318, 19-54.	3.9	8
4	Calcium isotope measurements using a collision cell (CC)-MC-ICP-MS. Chemical Geology, 2022, 590, 120688.	3.3	14
5	Metal compositions of carbonaceous chondrites. Geochimica Et Cosmochimica Acta, 2022, 321, 52-77.	3.9	5
6	Determination of the zirconium isotopic composition of the new isotopic standard NRC ZIRC-1 using MC-ICP-MS. Journal of Analytical Atomic Spectrometry, 2022, 37, 656-662.	3.0	6
7	Copper mobilization in the lower continental crust beneath cratonic margins, a Cu isotope perspective. Geochimica Et Cosmochimica Acta, 2022, 322, 43-57.	3.9	11
8	The absence of an effect of nickel on iron isotope fractionation during core formation. Geochimica Et Cosmochimica Acta, 2022, 327, 186-199.	3.9	1
9	Baseline distribution of stable copper isotope compositions of the brain and other organs in mice. Metallomics, 2022, 14, .	2.4	6
10	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
11	Decoupled Zn-Sr-Nd isotopic composition of continental intraplate basalts caused by two-stage melting process. Geochimica Et Cosmochimica Acta, 2022, 326, 234-252.	3.9	13
12	Stable zirconium isotopic fractionation during alkaline magma differentiation: Implications for the differentiation of continental crust. Geochimica Et Cosmochimica Acta, 2022, 326, 41-55.	3.9	12
13	Nickel and Chromium Stable Isotopic Composition of Ureilites: Implications for the Earth's Core Formation and Differentiation of the Ureilite Parent Body. Geophysical Research Letters, 2022, 49, .	4.0	8
14	Copper isotope composition of hemocyanin. Journal of Trace Elements in Medicine and Biology, 2022, 71, 126967.	3.0	2
15	Barium stable isotopic composition of chondrites and its implication for the Earth. Chemical Geology, 2022, 604, 120923.	3.3	3
16	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
17	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
18	A condensation origin for the mass-dependent silicon isotopic variations in Allende components: implications for complementarity. Earth and Planetary Science Letters, 2021, 554, 116678.	4.4	5

#	Article	IF	Citations
19	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
20	Earth's volatile accretion as told by Cd, Bi, Sb and Tl core–mantle distribution. Geochimica Et Cosmochimica Acta, 2021, 306, 263-280.	3.9	8
21	Study on the Isotope fractionation of Zinc in Complexation with Macrocyclic Polyethers. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2021, 647, 599-605.	1.2	1
22	Hybrid Accretion of Carbonaceous Chondrites by Radial Transport across the Jupiter Barrier. Astrophysical Journal, 2021, 910, 70.	4.5	12
23	Conditions and extent of volatile loss from the Moon during formation of the Procellarum basin. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	12
24	Simultaneous determination of mass-dependent Mg isotopic variations and radiogenic 26Mg by laser ablation-MC-ICP-MS and implications for the formation of chondrules. Geochimica Et Cosmochimica Acta, 2021, 299, 163-183.	3.9	5
25	Citation for the 2020 EAG Houtermans Award to Kun Wang. Geochimica Et Cosmochimica Acta, 2021, 298, 248.	3.9	0
26	Impact glasses from Belize represent tektites from the Pleistocene Pantasma impact crater in Nicaragua. Communications Earth & Environment, 2021, 2, 94.	6.8	14
27	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
28	Calcium isotope evidence for early Archaean carbonates and subduction of oceanic crust. Nature Communications, 2021, 12, 2534.	12.8	30
29	Analytical protocols for Phobos regolith samples returned by the Martian Moons eXploration (MMX) mission. Earth, Planets and Space, 2021, 73, 120.	2.5	8
30	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
31	Tracing Earth's Volatile Delivery With Tin. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022026.	3.4	7
32	Tidal pull of the Earth strips the proto-Moon of its volatiles. Icarus, 2021, 364, 114451.	2.5	23
33	Citation for the 2021 F.G. Houtermans Award to Paolo Sossi. Geochimica Et Cosmochimica Acta, 2021, 314, 406-406.	3.9	0
34	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
35	A Review on the Elemental and Isotopic Geochemistry of Gallium. Global Biogeochemical Cycles, 2021, 35, e2021GB007033.	4.9	12
36	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

#	Article	IF	CITATIONS
37	Zirconium isotopic composition of the upper continental crust through time. Earth and Planetary Science Letters, 2021, 572, 117086.	4.4	18
38	Deciphering the origin of a basanite-alkali basalt-tholeiite suite using Zn isotopes. Chemical Geology, 2021, 585, 120585.	3.3	6
39	Iron Isotopic Composition of Biological Standards Relevant to Medical and Biological Applications. Frontiers in Medicine, 2021, 8, 696367.	2.6	7
40	MIRS: an imaging spectrometer for the MMX mission. Earth, Planets and Space, 2021, 73, .	2.5	13
41	Chromium Stable Isotope Panorama of Chondrites and Implications for Earth Early Accretion. Astrophysical Journal, 2021, 923, 94.	4.5	10
42	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
43	Timing of thermal metamorphism in CM chondrites: Implications for Ryugu and Bennu future sample return. Icarus, 2020, 339, 113593.	2.5	22
44	Calcium isotope compositions of mantle pyroxenites. Geochimica Et Cosmochimica Acta, 2020, 270, 144-159.	3.9	24
45	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.	8,3.9	25
46	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
47	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
48	The zirconium stable isotope compositions of 22 geological reference materials, 4 zircons and 3 standard solutions. Chemical Geology, 2020, 555, 119791.	3.3	27
49	Compositional and pressure controls on calcium and magnesium isotope fractionation in magmatic systems. Geochimica Et Cosmochimica Acta, 2020, 290, 257-270.	3.9	22
50	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
51	Early oxidation of the martian crust triggered by impacts. Science Advances, 2020, 6, .	10.3	26
52	Longitudinal biometal accumulation and Ca isotope composition of the GA¶ttingen minipig brain. Metallomics, 2020, 12, 1585-1598.	2.4	4
53	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
54	Mineralogy, chemistry, and composition of organic compounds in the fresh carbonaceous chondrite Mukundpura: CM1 or CM2?. Meteoritics and Planetary Science, 2020, 55, 1681-1696.	1.6	10

#	Article	IF	Citations
55	Metal-silicate silicon isotopic fractionation and the composition of the bulk Earth. Earth and Planetary Science Letters, 2020, 549, 116468.	4.4	11
56	Dating and Tracing the Origin of Enstatite Chondrite Chondrules with Cr Isotopes. Astrophysical Journal Letters, 2020, 894, L26.	8.3	27
57	Calcium isotopic evidence for the mantle sources of carbonatites. Science Advances, 2020, 6, eaba3269.	10.3	48
58	Silicon isotope measurement in zircon by laser ablation multiple collector inductively coupled plasma mass spectrometry. Journal of Analytical Atomic Spectrometry, 2020, 35, 1597-1606.	3.0	8
59	Isotope metallomics approaches for medical research. Cellular and Molecular Life Sciences, 2020, 77, 3293-3309.	5.4	17
60	Zinc isotopic composition of the lower continental crust estimated from lower crustal xenoliths and granulite terrains. Geochimica Et Cosmochimica Acta, 2020, 276, 92-108.	3.9	12
61	Chromium Isotopic Constraints on the Origin of the Ureilite Parent Body. Astrophysical Journal, 2020, 888, 126.	4.5	28
62	Platinum group element mobilization in the mantle enhanced by recycled sedimentary carbonate. Earth and Planetary Science Letters, 2020, 541, 116262.	4.4	15
63	Iron isotopes and the redox evolution of Ediacaran sediments. Comptes Rendus - Geoscience, 2020, 352, 579-588.	1.2	0
64	Evidence for Transient Atmospheres during Eruptive Outgassing on the Moon. Planetary Science Journal, 2020, $1,67$.	3.6	11
65	Serum and brain natural copper stable isotopes in a mouse model of Alzheimer's disease. Scientific Reports, 2019, 9, 11894.	3.3	35
66	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
67	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
68	Experimentally determined Si isotope fractionation between zircon and quartz. Geochimica Et Cosmochimica Acta, 2019, 260, 257-274.	3.9	12
69	Planetesimal formation in an evolving protoplanetary disk with a dead zone. Astronomy and Astrophysics, 2019, 627, A50.	5.1	19
70	Some things special about NEAs: Geometric and environmental effects on the optical signatures of hydration. Icarus, 2019, 333, 415-428.	2.5	23
71	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
72	Volatile loss under a diffusion-limited regime in tektites: Evidence from tin stable isotopes. Chemical Geology, 2019, 528, 119279.	3.3	15

#	Article	IF	CITATIONS
73	Tracing the formation and differentiation of the Earth by non-traditional stable isotopes. Science China Earth Sciences, 2019, 62, 1702-1715.	5.2	17
74	Reply to Comment by Jennings et al. on "Investigating Earth's Formation History Through Copper and Sulfur Metalâ€Silicate Partitioning During Coreâ€Mantle Differentiation― Journal of Geophysical Research: Solid Earth, 2019, 124, 12845-12853.	3.4	0
75	An oceanic subduction origin for Archaean granitoids revealed by silicon isotopes. Nature Geoscience, 2019, 12, 774-778.	12.9	55
76	Timing and Origin of the Angrite Parent Body Inferred from Cr Isotopes. Astrophysical Journal Letters, 2019, 877, L13.	8.3	33
77	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
78	Evaporation of moderately volatile elements from silicate melts: experiments and theory. Geochimica Et Cosmochimica Acta, 2019, 260, 204-231.	3.9	102
79	Identification of a meteoritic component using chromium isotopic composition of impact rocks from the Lonar impact structure, India. Meteoritics and Planetary Science, 2019, 54, 2592-2599.	1.6	10
80	Evolution of the Ca isotopic composition of the mantle. Geochimica Et Cosmochimica Acta, 2019, 258, 195-206.	3.9	17
81	Unusual neon isotopic composition in Neoproterozoic sedimentary rocks: Fluorine bearing mineral contribution or trace of an impact event?. Chemical Geology, 2019, 520, 52-59.	3.3	0
82	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
83	The potential science and engineering value of samples delivered to Earth by Mars sample return. Meteoritics and Planetary Science, 2019, 54, 667-671.	1.6	11
84	Chromium Isotopic Evidence for an Early Formation of Chondrules from the Ornans CO Chondrite. Astrophysical Journal, 2019, 873, 82.	4.5	27
85	Pantasma: Evidence for a Pleistocene circa 14Âkm diameter impact crater in Nicaragua. Meteoritics and Planetary Science, 2019, 54, 880-901.	1.6	13
86	Tin and zinc stable isotope characterisation of chondrites and implications for early Solar System evolution. Chemical Geology, 2019, 511, 81-90.	3.3	36
87	Volatile distributions in and on the Moon revealed by Cu and Fe isotopes in the †Rusty Rock†66095. Geochimica Et Cosmochimica Acta, 2019, 266, 131-143.	3.9	15
88	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
89	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
90	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

#	Article	IF	CITATIONS
91	Ultraviolet-photon fingerprints on chondritic large organic molecules. Geochemical Journal, 2019, 53, 21-32.	1.0	19
92	Late Eocene impact ejecta in Italy: Attempts to constrain the impactor composition from isotopic analyses of spinel-rich samples., 2019,, 347-354.		0
93	Barium isotope cosmochemistry and geochemistry. Science Bulletin, 2018, 63, 385-394.	9.0	19
94	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
95	The stable strontium isotopic composition of ocean island basalts, mid-ocean ridge basalts, and komatiites. Chemical Geology, 2018, 483, 595-602.	3.3	26
96	Chromium isotopic homogeneity between the Moon, the Earth, and enstatite chondrites. Earth and Planetary Science Letters, 2018, 481, 1-8.	4.4	62
97	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
98	Volatile element loss during planetary magma ocean phases. Icarus, 2018, 300, 249-260.	2.5	67
99	Zinc isotope composition of the Earth and its behaviour during planetary accretion. Chemical Geology, 2018, 477, 73-84.	3.3	122
100	Martian magmatism from plume metasomatized mantle. Nature Communications, 2018, 9, 4799.	12.8	41
101	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
102	Investigating Earth's Formation History Through Copper and Sulfur Metalâ€Silicate Partitioning During Coreâ€Mantle Differentiation. Journal of Geophysical Research: Solid Earth, 2018, 123, 8349-8363.	3.4	14
103	Lack of resolvable titanium stable isotopic variations in bulk chondrites. Geochimica Et Cosmochimica Acta, 2018, 239, 409-419.	3.9	21
104	Evidence for extremely rapid magma ocean crystallization and crust formation on Mars. Nature, 2018, 558, 586-589.	27.8	111
105	Insight into hydrothermal and subduction processes from copper and nitrogen isotopes in oceanic metagabbros. Earth and Planetary Science Letters, 2018, 498, 54-64.	4.4	12
106	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
107	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
108	Alteration of synthetic basaltic glass in silica saturated conditions: Analogy with nuclear glass. Applied Geochemistry, 2018, 97, 19-31.	3.0	17

#	Article	IF	Citations
109	Examining the homeostatic distribution of metals and Zn isotopes in Göttingen minipigs. Metallomics, 2018, 10, 1264-1281.	2.4	25
110	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
111	Evaluating the robustness of a consensus 238U/235U value for U-Pb geochronology. Geochimica Et Cosmochimica Acta, 2018, 237, 171-183.	3.9	14
112	Zinc Isotopes. Encyclopedia of Earth Sciences Series, 2018, , 1524-1527.	0.1	0
113	The Isotope Geochemistry of Zinc and Copper. Reviews in Mineralogy and Geochemistry, 2017, 82, 543-600.	4.8	272
114	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
115	Evaporative fractionation of zinc during the first nuclear detonation. Science Advances, 2017, 3, e1602668.	10.3	38
116	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
117	5 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. , 2017, , .		3
118	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
119	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
120	Tin stable isotope analysis of geological materials by double-spike MC-ICPMS. Chemical Geology, 2017, 457, 61-67.	3.3	38
121	Early Solar System irradiation quantified by linked vanadium and beryllium isotope variations in meteorites. Nature Astronomy, 2017, 1 , .	10.1	47
122	Chromium isotope evidence in ejecta deposits for the nature of Paleoproterozoic impactors. Earth and Planetary Science Letters, 2017, 460, 105-111.	4.4	23
123	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
124	Gallium isotopic evidence for extensive volatile loss from the Moon during its formation. Science Advances, 2017, 3, e1700571.	10.3	74
125	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
126	Early formation of planetary building blocks inferred from Pb isotopic ages of chondrules. Science Advances, 2017, 3, e1700407.	10.3	174

#	Article	IF	Citations
127	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
128	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
129	Theoretical isotopic fractionation of magnesium between chlorophylls. Scientific Reports, 2017, 7, 6973.	3.3	24
130	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
131	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
132	The gallium isotopic composition of the bulk silicate Earth. Chemical Geology, 2017, 448, 164-172.	3.3	39
133	13 The Isotope Geochemistry of Zinc and Copper. , 2017, , 543-600.		9
134	Testing the chondrule-rich accretion model for planetary embryos using calcium isotopes. Earth and Planetary Science Letters, 2017, 469, 75-83.	4.4	44
135	Calcium isotope fractionation between aqueous compounds relevant to low-temperature geochemistry, biology and medicine. Scientific Reports, 2017, 7, 44255.	3.3	40
136	Late accretion history of the terrestrial planets inferred from platinum stable isotopes. Geochemical Perspectives Letters, 2017, , 94-104.	5.0	24
137	Distribution of Zn isotopes during Alzheimer's disease. Geochemical Perspectives Letters, 2017, , 142-150.	5.0	28
138	Cosmogenic effects on Cu isotopes in IVB iron meteorites. Geochimica Et Cosmochimica Acta, 2016, 182, 145-154.	3.9	14
139	Zinc Isotopes. Encyclopedia of Earth Sciences Series, 2016, , 1-4.	0.1	0
140	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
141	Estimation of the extraterrestrial 3 He and 20 Ne fluxes on Earth from He and Ne systematics in marine sediments. Earth and Planetary Science Letters, 2016, 436, 10-18.	4.4	4
142	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
143	High Precision Zinc Isotopic Measurements Applied to Mouse Organs. Journal of Visualized Experiments, 2015, , e52479.	0.3	11
144	2015 Nier Prize for Pierre Beck. Meteoritics and Planetary Science, 2015, 50, 1493-1494.	1.6	0

#	Article	IF	Citations
145	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
146	Silicon isotope systematics of acidic weathering of fresh basalts, Kilauea Volcano, Hawai'i. Geochimica Et Cosmochimica Acta, 2015, 169, 63-81.	3.9	16
147	Extensive volatile loss during formation and differentiation of the Moon. Nature Communications, 2015, 6, 7617.	12.8	125
148	Barium stable isotope composition of the Earth, meteorites, and calcium–aluminum-rich inclusions. Chemical Geology, 2015, 413, 1-6.	3.3	17
149	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
150	Copper isotope evidence for large-scale sulphide fractionation during Earth's differentiation. Geochemical Perspectives Letters, 2015, , 53-64.	5.0	134
151	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
152	2014 Nier Prize for James Day. Meteoritics and Planetary Science, 2014, 49, 1982-1983.	1.6	0
153	Lithium systematics in howardite–eucrite–diogenite meteorites: Implications for crust–mantle evolution of planetary embryos. Geochimica Et Cosmochimica Acta, 2014, 125, 131-145.	3.9	13
154	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
155	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
156	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
157	Iron isotope fractionation during sulfide-rich felsic partial melting in early planetesimals. Earth and Planetary Science Letters, 2014, 392, 124-132.	4.4	18
158	The nature of Earth's building blocks as revealed by calcium isotopes. Earth and Planetary Science Letters, 2014, 394, 135-145.	4.4	129
159	Transmission infrared spectra (2–25μm) of carbonaceous chondrites (CI, CM, CV–CK, CR, C2) Tj ETQq1 1 C).784314 ı 2.5	rgBT_/Overlo
160	Nuclear field shift effect in isotope fractionation of thallium. Journal of Radioanalytical and Nuclear Chemistry, 2013, 296, 261-265.	1.5	16
161	Si ISOTOPE HOMOGENEITY OF THE SOLAR NEBULA. Astrophysical Journal, 2013, 779, 123.	4.5	22
162	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

#	Article	IF	Citations
163	Heterogeneous distribution of natural zinc isotopes in mice. Metallomics, 2013, 5, 693.	2.4	65
164	Asteroidal impacts and the origin of terrestrial and lunar volatiles. Icarus, 2013, 222, 44-52.	2.5	99
165	Copper isotope fractionation between aqueous compounds relevant to low temperature geochemistry and biology. Geochimica Et Cosmochimica Acta, 2013, 110, 29-44.	3.9	140
166	Nuclear field shift in natural environments. Comptes Rendus - Geoscience, 2013, 345, 150-159.	1.2	36
167	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
168	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
169	Homogeneous distribution of Fe isotopes in the early solar nebula. Meteoritics and Planetary Science, 2013, 48, 354-364.	1.6	18
170	Redox state during core formation on asteroid 4-Vesta. Earth and Planetary Science Letters, 2013, 373, 75-82.	4.4	50
171	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
172	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
173	The Cu isotopic composition of iron meteorites. Meteoritics and Planetary Science, 2012, 47, 268-276.	1.6	19
174	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
175	Geochemistry of CI chondrites: Major and trace elements, and Cu and Zn Isotopes. Geochimica Et Cosmochimica Acta, 2012, 83, 79-92.	3.9	301
176	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
177	Iron isotope fractionation in planetary crusts. Geochimica Et Cosmochimica Acta, 2012, 89, 31-45.	3.9	60
178	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
179	PLANETARY-SCALE STRONTIUM ISOTOPIC HETEROGENEITY AND THE AGE OF VOLATILE DEPLETION OF EARLY SOLAR SYSTEM MATERIALS. Astrophysical Journal, 2012, 758, 45.	4.5	83
180	Zinc isotopic evidence for the origin of the Moon. Nature, 2012, 490, 376-379.	27.8	242

#	Article	IF	Citations
181	Photometry of meteorites. Icarus, 2012, 218, 364-377.	2.5	58
182	40Ar/39Ar age of the Lonar crater and consequence for the geochronology of planetary impacts. Geology, 2011, 39, 671-674.	4.4	67
183	Isotopic fractionation of Cu in plants. Chemical Geology, 2011, , .	3.3	18
184	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
185	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
186	The origin of Zn isotope fractionation in sulfides. Geochimica Et Cosmochimica Acta, 2011, 75, 7632-7643.	3.9	131
187	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
188	Laboratory technology and cosmochemistry. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19135-19141.	7.1	21
189	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
190	Isotopic Evidence of Cr Partitioning into Earth's Core. Science, 2011, 331, 1417-1420.	12.6	92
191	⁵⁸ Fe AND ⁵⁴ Cr IN EARLY SOLAR SYSTEM MATERIALS. Astrophysical Journal Letters, 2011, 739, L58.	8.3	14
192	THE ELUSIVE ⁶⁰ Fe IN THE SOLAR NEBULA. Astrophysical Journal, 2011, 741, 71.	4.5	26
193	Nuclear field shift effect of lead in ligand exchange reaction using a \hat{A} crown ether. Proceedings in Radiochemistry, 2011, 1, 387-392.	0.2	13
194	Isotope fractionation of palladium in chemical exchange reaction. Proceedings in Radiochemistry, 2011, 1, 339-344.	0.2	5
195	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
196	Bodily variability of zinc natural isotope abundances in sheep. Rapid Communications in Mass Spectrometry, 2010, 24, 605-612.	1.5	61
197	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
198	Isotopic fractionation of Cu in tektites. Geochimica Et Cosmochimica Acta, 2010, 74, 799-807.	3.9	66

#	Article	IF	Citations
199	The early formation of the IVA iron meteorite parent body. Earth and Planetary Science Letters, 2010, 296, 469-480.	4.4	46
200	Sr stable isotope composition of Earth, the Moon, Mars, Vesta and meteorites. Earth and Planetary Science Letters, 2010, 300, 359-366.	4.4	110
201	Volatilization induced by impacts recorded in Zn isotope composition of ureilites. Chemical Geology, 2010, 276, 374-379.	3.3	46
202	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
203	Mass-independent isotopic fractionation of tin in chemical exchange reaction using a crown ether. Analytica Chimica Acta, 2009, 632, 234-239.	5.4	29
204	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
205	Isotopic fractionation of zinc in tektites. Earth and Planetary Science Letters, 2009, 277, 482-489.	4.4	83
206	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
207	Nuclear field shift effect in the isotope exchange reaction of cadmium using a crown ether. Chemical Geology, 2009, 267, 157-163.	3.3	23
208	The nuclear field shift effect in chemical exchange reactions. Chemical Geology, 2009, 267, 139-156.	3.3	91
209	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
210	Isotopic fractionation and transport mechanisms of Zn in plants. Chemical Geology, 2009, 267, 125-130.	3.3	124
211	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
212	CALCIUM ISOTOPE COMPOSITION OF METEORITES, EARTH, AND MARS. Astrophysical Journal, 2009, 702, 707-715.	4.5	86
213	A SEARCH FOR ⁷⁰ Zn ANOMALIES IN METEORITES. Astrophysical Journal, 2009, 700, L92-L95.	4.5	41
214	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
215	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
216	Isotope Separation of Te in Chemical Exchange System with Dyclohexano-18-crown-6. Journal of Nuclear Science and Technology, 2008, 45, 10-14.	1.3	11

#	Article	IF	CITATIONS
217	Mass-Independent Isotope Fractionation in the Chemical Exchange Reaction of Chromium (III) Using a Crown Ether. Journal of Nuclear Science and Technology, 2008, 45, 6-9.	1.3	9
218	Dating the First Stage of Planet Formation. Astrophysical Journal, 2007, 671, L181-L183.	4.5	45
219	Toward Consistent Chronology in the Early Solar System: High-Resolution [FORMULA][F][SUP]53[/SUP][/F][/FORMULA]Mn-[FORMULA][F][SUP]53[/SUP][/F][/FORMULA]Cr Chronometry for Chondrules. Astrophysical Journal, 2007, 662, L43-L46.	4.5	32
220	Pb–Pb dating constraints on the accretion and cooling history of chondrites. Geochimica Et Cosmochimica Acta, 2007, 71, 1583-1604.	3.9	148
221	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
222	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
223	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
224	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
225	Isotopic composition of zinc, copper, and iron in lunar samples. Geochimica Et Cosmochimica Acta, 2006, 70, 6103-6117.	3.9	174
226	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
227	Stable Isotope Evidence for the Differentiation and Evolution of Planetesimals. , 0, , 246-266.		2
228	Tin isotopic fractionation during igneous differentiation and Earth's mantle composition. Geochemical Perspectives Letters, 0, , 24-28.	5.0	43
229	Bridging the depleted MORB mantle and the continental crust using titanium isotopes. Geochemical Perspectives Letters, 0 , 0 , 11 - 15 .	5.0	35
230	Moderately volatile element behaviour at high temperature determined from nuclear detonation. Geochemical Perspectives Letters, 0, , 54-60.	5.0	12
231	Zirconium isotopic composition of the mantle through time. Geochemical Perspectives Letters, 0, 15, 40-43.	5.0	15