

The tungsten isotopic composition of the Earth's mantle

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Citation Report

#	ARTICLE	IF	CITATIONS
2	Earth's patchy late veneer. <i>Nature</i> , 2011, 477, 168-169.	13.7	8
3	Let sleeping DNA lie. <i>Nature</i> , 2011, 477, 169-170.	13.7	2
4	Brown dwarfs and free-floating planets. , 0, , 209-216.		0
5	Formation and evolution. , 0, , 217-254.		3
6	Geoneutrinos. <i>Advances in High Energy Physics</i> , 2012, 2012, 1-34.	0.5	10
7	Nanoporous Gold. <i>RSC Nanoscience and Nanotechnology</i> , 2012, , .	0.2	65
8	A search for thermal excursions from ancient extraterrestrial impacts using Hadean zircon Ti-U-Th-Pb depth profiles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 13486-13492.	3.3	40
9	¹⁸² W Evidence for Long-Term Preservation of Early Mantle Differentiation Products. <i>Science</i> , 2012, 335, 1065-1069.	6.0	211
10	Probing the Mantle Past. <i>Science</i> , 2012, 335, 1051-1052.	6.0	0
11	Nanoporous Gold as a Platform for a Building Block Catalyst. <i>ACS Catalysis</i> , 2012, 2, 2199-2215.	5.5	108
12	Hf-W chronometry of core formation in planetesimals inferred from weakly irradiated iron meteorites. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 99, 287-304.	1.6	75
13	Chapter 1. Introduction to Nanoporous Gold. <i>RSC Nanoscience and Nanotechnology</i> , 2012, , 1-10.	0.2	8
14	Solar Wind and Solar System Matter After Mission Genesis. , 2012, , .		2
15	Two Different Sources of Water for the Early Solar Nebula. <i>Origins of Life and Evolution of Biospheres</i> , 2012, 42, 81-92.	0.8	1
16	Distal Impact Ejecta Layers. <i>Impact Studies</i> , 2013, , .	0.2	53
17	Dynamical and collisional constraints on a stochastic late veneer on the terrestrial planets. <i>Icarus</i> , 2013, 226, 671-681.	1.1	59
18	Deep earth recycling in the Hadean and constraints on surface tectonics. <i>Numerische Mathematik</i> , 2013, 313, 912-932.	0.7	30
19	The Itsaq Gneiss Complex of Greenland: Episodic 3900 to 3660 Ma juvenile crust formation and recycling in the 3660 to 3600 Ma Isukasian orogeny. <i>Numerische Mathematik</i> , 2013, 313, 877-911.	0.7	68

#	ARTICLE	IF	CITATIONS
20	Early mantle dynamics inferred from ^{142}Nd variations in Archean rocks from southwest Greenland. <i>Earth and Planetary Science Letters</i> , 2013, 377-378, 324-335.	1.8	65
21	Neutron capture on Pt isotopes in iron meteorites and the Hf- ^{187}W chronology of core formation in planetesimals. <i>Earth and Planetary Science Letters</i> , 2013, 361, 162-172.	1.8	99
22	Late delivery of chondritic hydrogen into the lunar mantle: Insights from mare basalts. <i>Earth and Planetary Science Letters</i> , 2013, 361, 480-486.	1.8	67
23	Secular changes in sedimentation systems and sequence stratigraphy. <i>Gondwana Research</i> , 2013, 24, 468-489.	3.0	99
24	Stagnant-lid tectonics in early Earth revealed by ^{142}Nd variations in late Archean rocks. <i>Earth and Planetary Science Letters</i> , 2013, 373, 83-92.	1.8	167
25	The abundance, distribution, and isotopic composition of Hydrogen in the Moon as revealed by basaltic lunar samples: Implications for the volatile inventory of the Moon. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 122, 58-74.	1.6	127
26	Rare Earth Elements: What and Where They Are. Springer Theses, 2013, , 11-39.	0.0	23
27	On the formation and evolution of asteroid belts and their potential significance for life. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2012, 428, L11-L15.	1.2	58
29	CHAPTER 3. Application of Radiogenic Isotopes in Geosciences: Overview and Perspectives. <i>RSC Detection Science</i> , 2014, , 49-93.	0.0	0
30	On the origin and composition of Theia: Constraints from new models of the Giant Impact. <i>Icarus</i> , 2014, 242, 316-328.	1.1	49
31	Short-Lived Radionuclides and Early Solar System Chronology. , 2014, , 361-395.		28
32	The Geochemistry and Cosmochemistry of Impacts. , 2014, , 73-118.		47
33	Component geochronology in the polyphase ca. 3920 Ma Acasta Gneiss. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 133, 68-96.	1.6	75
34	Highly siderophile elements in Earth's mantle as a clock for the Moon-forming impact. <i>Nature</i> , 2014, 508, 84-87.	13.7	191
35	Constraining the process of Eoarchean TTG formation in the Itsaq Gneiss Complex, southern West Greenland. <i>Earth and Planetary Science Letters</i> , 2014, 388, 374-386.	1.8	84
36	Alpha-decay of ^{184}Os revealed by radiogenic ^{180}W in meteorites: Half life determination and viability as geochronometer. <i>Earth and Planetary Science Letters</i> , 2014, 391, 69-76.	1.8	19
37	The role of detrital zircons in Hadean crustal research. <i>Lithos</i> , 2014, 190-191, 313-327.	0.6	51
38	Effects of magma ocean crystallization and overturn on the development of ^{142}Nd and ^{182}W isotopic heterogeneities in the primordial mantle. <i>Earth and Planetary Science Letters</i> , 2014, 408, 319-330.	1.8	29

#	ARTICLE	IF	CITATIONS
39	How Did Early Earth Become Our Modern World?. Annual Review of Earth and Planetary Sciences, 2014, 42, 151-178.	4.6	82
40	Siderophile element constraints on the origin of the Moon. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130258.	1.6	15
41	Nucleosynthetic W isotope anomalies and the Hf-W chronometry of Ca-Al-rich inclusions. Earth and Planetary Science Letters, 2014, 403, 317-327.	1.8	111
42	Chemical Separation of Mo and W from Terrestrial and Extraterrestrial Samples via Anion Exchange Chromatography. Analytical Chemistry, 2014, 86, 4856-4863.	3.2	23
43	New approaches to the Moon's isotopic crisis. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2014, 372, 20130168.	1.6	33
44	The evolution of Hadean-Eoarchaeon geodynamics. Earth and Planetary Science Letters, 2014, 406, 49-58.	1.8	120
45	^{60}Fe - ^{60}Ni chronology of core formation in Mars. Earth and Planetary Science Letters, 2014, 390, 264-274.	1.8	98
46	The Origin and Earliest History of the Earth. , 2014, , 149-211.		12
47	Identification of the giant impactor Theia in lunar rocks. Science, 2014, 344, 1146-1150.	6.0	156
48	Carbonado: Physical and chemical properties, a critical evaluation of proposed origins, and a revised genetic model. Earth-Science Reviews, 2014, 130, 49-72.	4.0	20
49	Protracted core formation and rapid accretion of protoplanets. Science, 2014, 344, 1150-1154.	6.0	224
50	Cosmogenic ^{180}W variations in meteorites and re-assessment of a possible ^{184}Os - ^{180}W decay system. Geochimica Et Cosmochimica Acta, 2014, 140, 160-176.	1.6	16
51	New insights into the Hadean mantle revealed by ^{182}W and highly siderophile element abundances of supracrustal rocks from the Nuvvuagittuq Greenstone Belt, Quebec, Canada. Chemical Geology, 2014, 383, 63-75.	1.4	67
55	High-Precision Mass-Dependent Molybdenum Isotope Variations in Magmatic Rocks Determined by Double-Spike MC-ICP-MS. Geostandards and Geoanalytical Research, 2015, , n/a-n/a.	1.7	9
56	Planetary differentiation revealed by the Hf-W systematics of ureilites. Earth and Planetary Science Letters, 2015, 430, 316-325.	1.8	42
57	Revisiting the deflection dilemma. Astronomy and Geophysics, 2015, 56, 5.15-5.18.	0.1	1
58	The effect of oxygen as a light element in metallic liquids on partitioning behavior. Meteoritics and Planetary Science, 2015, 50, 530-546.	0.7	11
59	Tungsten isotopes in bulk meteorites and their inclusions—Implications for processing of presolar components in the solar protoplanetary disk. Meteoritics and Planetary Science, 2015, 50, 1643-1660.	0.7	7

#	ARTICLE	IF	CITATIONS
60	The circular economy. , 0, , 240-278.		1
62	The evolving nature of terrestrial crust from the Hadean, through the Archaean, into the Proterozoic. <i>Precambrian Research</i> , 2015, 258, 48-82.	1.2	198
63	Correlated cosmogenic W and Os isotopic variations in Carbo and implications for Hf ^ε -W chronology. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 153, 91-104.	1.6	22
64	Sm ^ε -Nd systematics of lunar ferroan anorthositic suite rocks: Constraints on lunar crust formation. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 148, 203-218.	1.6	36
65	Tungsten isotope composition of the Acasta Gneiss Complex. <i>Earth and Planetary Science Letters</i> , 2015, 419, 168-177.	1.8	80
66	Melting and mixing states of the Earth's mantle after the Moon-forming impact. <i>Earth and Planetary Science Letters</i> , 2015, 427, 286-295.	1.8	140
67	In search of late-stage planetary building blocks. <i>Chemical Geology</i> , 2015, 411, 125-142.	1.4	61
68	Possible Biosphere-Lithosphere Interactions Preserved in Igneous Zircon and Implications for Hadean Earth. <i>Astrobiology</i> , 2015, 15, 575-586.	1.5	11
69	Connections between the bulk composition, geodynamics and habitability of Earth. <i>Nature Geoscience</i> , 2015, 8, 587-593.	5.4	54
70	Hf ^ε -W chronology of the eucrite parent body. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 156, 106-121.	1.6	51
71	A protracted timeline for lunar bombardment from mineral chemistry, Ti thermometry and U ^ε -Pb geochronology of Apollo 14 melt breccia zircons. <i>Contributions To Mineralogy and Petrology</i> , 2015, 169, 1.	1.2	61
72	Lunar tungsten isotopic evidence for the late veneer. <i>Nature</i> , 2015, 520, 534-537.	13.7	139
73	The inner solar system cratering record and the evolution of impactor populations. <i>Research in Astronomy and Astrophysics</i> , 2015, 15, 407-434.	0.7	58
74	Determination of mass-dependent variations in tungsten stable isotope compositions of geological reference materials by double-spike and MC-ICPMS. <i>Journal of Analytical Atomic Spectrometry</i> , 2015, 30, 2334-2342.	1.6	26
75	Extinct isotope heterogeneities in the mantles of Earth and Mars: Implications for mantle stirring rates. <i>Meteoritics and Planetary Science</i> , 2015, 50, 555-567.	0.7	10
76	Formation timescales of CV chondrites from component specific Hf ^ε -W systematics. <i>Earth and Planetary Science Letters</i> , 2015, 432, 472-482.	1.8	37
77	The petrogenesis of ultramafic rocks in the > 3.7 Ga Isua supracrustal belt, southern West Greenland: Geochemical evidence for two distinct magmatic cumulate trends. <i>Gondwana Research</i> , 2015, 28, 565-580.	3.0	57
78	Adsorption of Gold on Granular Activated Carbons and New Sources of Renewable and Eco-Friendly Activated Carbons. , 2016, , 95-142.		2

#	ARTICLE	IF	CITATIONS
79	Early mantle heterogeneities in the R�union hotspot source inferred from highly siderophile elements in cumulate xenoliths. <i>Earth and Planetary Science Letters</i> , 2016, 448, 150-160.	1.8	26
80	High-precision measurement of W isotopes in Fe�Ni alloy and the effects from the nuclear field shift. <i>Journal of Analytical Atomic Spectrometry</i> , 2016, 31, 1400-1405.	1.6	36
81	The oxidation state and mass of the Moon-forming impactor. <i>Earth and Planetary Science Letters</i> , 2016, 442, 186-193.	1.8	34
82	Preservation of Earth-forming events in the tungsten isotopic composition of modern flood basalts. <i>Science</i> , 2016, 352, 809-812.	6.0	130
83	Identifying remnants of early Earth. <i>Science</i> , 2016, 352, 768-769.	6.0	1
84	Late veneer and late accretion to the terrestrial planets. <i>Earth and Planetary Science Letters</i> , 2016, 455, 85-93.	1.8	57
85	Aluminous gneiss derived by weathering of basaltic source rocks in the Neoproterozoic Stor�, Supracrustal Belt, southern West Greenland. <i>Chemical Geology</i> , 2016, 441, 63-80.	1.4	17
86	The coupled ¹⁸² W� ¹⁴² Nd record of early terrestrial mantle differentiation. <i>Geochemistry, Geophysics, Geosystems</i> , 2016, 17, 2168-2193.	1.0	87
87	Petrological Evidence from Komatiites for an Early Earth Carbon and Water Cycle. <i>Journal of Petrology</i> , 2016, 57, 2271-2288.	1.1	22
88	Widespread tungsten isotope anomalies and W mobility in crustal and mantle rocks of the Eoarchean Saglek Block, northern Labrador, Canada: Implications for early Earth processes and W recycling. <i>Earth and Planetary Science Letters</i> , 2016, 448, 13-23.	1.8	51
89	High-Precision Tungsten Isotopic Analysis by Multicollection Negative Thermal Ionization Mass Spectrometry Based on Simultaneous Measurement of W and ¹⁸ O/ ¹⁶ O Isotope Ratios for Accurate Fractionation Correction. <i>Analytical Chemistry</i> , 2016, 88, 1542-1546.	3.2	18
90	Geochemistry and Nd isotopic characteristics of Earth's Hadean mantle and primitive crust. <i>Earth and Planetary Science Letters</i> , 2016, 442, 194-205.	1.8	51
91	Lithophile and siderophile element systematics of Earth's mantle at the Archean�Proterozoic boundary: Evidence from 2.4 Ga komatiites. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 180, 227-255.	1.6	73
92	Highly siderophile element abundances in Eoarchean komatiite and basalt protoliths. <i>Contributions To Mineralogy and Petrology</i> , 2016, 171, 1.	1.2	9
93	Early Earth differentiation investigated through ¹⁴² Nd, ¹⁸² W, and highly siderophile element abundances in samples from Isua, Greenland. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 175, 319-336.	1.6	84
94	High-precision analysis of ¹⁸² W/ ¹⁸⁴ W and ¹⁸³ W/ ¹⁸⁴ W by negative thermal ionization mass spectrometry: Per-integration oxide corrections using measured ¹⁸ O/ ¹⁶ O. <i>International Journal of Mass Spectrometry</i> , 2017, 414, 80-86.	0.7	45
95	What Hf isotopes in zircon tell us about crust�mantle evolution. <i>Lithos</i> , 2017, 274-275, 304-327.	0.6	78
96	Chemical stratification in the post-magma ocean Earth inferred from coupled ^{146,147} Sm� ^{142,143} Nd systematics in ultramafic rocks of the Saglek block (3.25�3.9 Ga; northern Labrador, Canada). <i>Earth and Planetary Science Letters</i> , 2017, 463, 136-150.	1.8	43

#	ARTICLE	IF	CITATIONS
98	A colossal impact enriched Mars' mantle with noble metals. <i>Geophysical Research Letters</i> , 2017, 44, 5978-5985.	1.5	26
99	Tungsten Isotopes in Planets. <i>Annual Review of Earth and Planetary Sciences</i> , 2017, 45, 389-417.	4.6	78
100	Origin and Evolution of Water in the Moon's Interior. <i>Annual Review of Earth and Planetary Sciences</i> , 2017, 45, 89-111.	4.6	29
101	$^{142}\text{Nd}/^{144}\text{Nd}$ inferences on the nature and origin of the source of high $^3\text{He}/^4\text{He}$ magmas. <i>Earth and Planetary Science Letters</i> , 2017, 472, 62-68.	1.8	17
102	Age of Jupiter inferred from the distinct genetics and formation times of meteorites. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 6712-6716.	3.3	439
103	Tungsten-182 heterogeneity in modern ocean island basalts. <i>Science</i> , 2017, 356, 66-69.	6.0	171
104	Molybdenum isotope variations in magmatic rocks. <i>Chemical Geology</i> , 2017, 449, 253-268.	1.4	110
105	^{186}Os – ^{187}Os and highly siderophile element abundance systematics of the mantle revealed by abyssal peridotites and Os-rich alloys. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 200, 232-254.	1.6	104
106	The terrestrial late veneer from core disruption of a lunar-sized impactor. <i>Earth and Planetary Science Letters</i> , 2017, 480, 25-32.	1.8	95
107	Mantle geochemistry: Insights from ocean island basalts. <i>Science China Earth Sciences</i> , 2017, 60, 1976-2000.	2.3	15
108	Differentiation of the early silicate Earth as recorded by ^{142}Nd - ^{143}Nd in 3.8–3.0 Ga rocks from the Anshan Complex, North China Craton. <i>Precambrian Research</i> , 2017, 301, 86-101.	1.2	14
109	Rhenium-osmium isotopes and highly siderophile elements in ultramafic rocks from the Eoarchean Saglek Block, northern Labrador, Canada: implications for Archean mantle evolution. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 216, 286-311.	1.6	20
110	The early differentiation of Mars inferred from Hf – W chronometry. <i>Earth and Planetary Science Letters</i> , 2017, 474, 345-354.	1.8	69
111	High Precision Tungsten Isotope Measurements by MC–ICPMS. <i>Acta Geologica Sinica</i> , 2017, 91, 273-274.	0.8	0
112	Water in the Earth's Interior: Distribution and Origin. <i>Space Science Reviews</i> , 2017, 212, 743-810.	3.7	139
113	Long-term preservation of early formed mantle heterogeneity by mobile lid convection: Importance of grain size evolution. <i>Earth and Planetary Science Letters</i> , 2017, 475, 94-105.	1.8	18
114	Tungsten isotopes and the origin of the Moon. <i>Earth and Planetary Science Letters</i> , 2017, 475, 15-24.	1.8	56
115	Origin of the Earth: A proposal of new model called ABEL. <i>Geoscience Frontiers</i> , 2017, 8, 253-274.	4.3	50

#	ARTICLE	IF	CITATIONS
116	Highly siderophile element and ^{182}W evidence for a partial late veneer in the source of 3.8 Ga rocks from Isua, Greenland. <i>Earth and Planetary Science Letters</i> , 2017, 458, 394-404.	1.8	60
117	Expectation from Geochemistry to High-Pressure and High-Temperature Experiments to Elucidate Earth's Geochemical Evolution. <i>Review of High Pressure Science and Technology/Koatsuryoku No Kagaku To Gijutsu</i> , 2017, 27, 246-255.	0.1	0
119	An improved extraction chromatographic purification of tungsten from a silicate matrix for high precision isotopic measurements using MC-ICPMS. <i>Journal of Analytical Atomic Spectrometry</i> , 2018, 33, 569-577.	1.6	21
120	Inefficient volatile loss from the Moon-forming disk: Reconciling the giant impact hypothesis and a wet Moon. <i>Earth and Planetary Science Letters</i> , 2018, 487, 117-126.	1.8	47
121	Tracking Hadean processes in modern basalts with $^{142}\text{Neodymium}$. <i>Earth and Planetary Science Letters</i> , 2018, 484, 184-191.	1.8	39
122	A reconnaissance view of tungsten reservoirs in some crustal and mantle rocks: Implications for interpreting W isotopic compositions and crust-mantle W cycling. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 223, 300-318.	1.6	16
123	Asteroid impacts on terrestrial planets: the effects of super-Earths and the role of the $1/26$ resonance. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 473, 295-305.	1.6	37
124	Evidence of Enriched, Hadean Mantle Reservoir from 4.2-4.0 Ga zircon xenocrysts from Paleoproterozoic TTGs of the Singhbhum Craton, Eastern India. <i>Scientific Reports</i> , 2018, 8, 7069.	1.6	113
125	^{182}W and HSE constraints from 2.7 Ga komatiites on the heterogeneous nature of the Archean mantle. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 228, 1-26.	1.6	48
126	No ^{182}W excess in the Ontong Java Plateau source. <i>Chemical Geology</i> , 2018, 485, 24-31.	1.4	35
127	Hf-W chronology of CR chondrites: Implications for the timescales of chondrule formation and the distribution of ^{26}Al in the solar nebula. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 222, 284-304.	1.6	106
128	Heterogeneous delivery of silicate and metal to the Earth by large planetesimals. <i>Nature Geoscience</i> , 2018, 11, 77-81.	5.4	67
129	ABEL Model of the Two-step Formation of the Earth and the Significance of ABEL Bombardment to Produce a Habitable Planet. <i>Journal of Geography (Chigaku Zasshi)</i> , 2018, 127, 647-682.	0.1	2
132	Radial velocities. , 0 , 17-80.		0
133	Astrometry. , 0 , 81-102.		0
134	Timing. , 0 , 103-118.		0
135	Microlensing. , 0 , 119-152.		0
137	Host stars. , 0 , 373-428.		0

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138	Brown dwarfs and free-floating planets. , 0, , 429-448.		0
139	Formation and evolution. , 0, , 449-558.		0
140	Interiors and atmospheres. , 0, , 559-648.		0
141	The solar system. , 0, , 649-700.		0
149	Tungsten-182 in the upper continental crust: Evidence from glacial diamictites. <i>Chemical Geology</i> , 2018, 494, 144-152.	1.4	40
150	Mineral-Organic Interactions in Prebiotic Synthesis. <i>Nucleic Acids and Molecular Biology</i> , 2018, , 31-83.	0.2	5
151	Ferromanganese Crusts and Nodules: Rocks That Grow. <i>Encyclopedia of Earth Sciences Series</i> , 2018, , 477-483.	0.1	3
152	Tantalum. <i>Encyclopedia of Earth Sciences Series</i> , 2018, , 1419-1421.	0.1	1
153	Variable distribution of s-process Hf and W isotope carriers in chondritic meteorites â€œ Evidence from 174Hf and 180W. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 239, 346-362.	1.6	7
154	Transits. , 0, , 153-328.		0
155	Moonfalls: collisions between the Earth and its past moons. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 479, 1711-1721.	1.6	6
156	Early Moon formation inferred from hafniumâ€™tungsten systematics. <i>Nature Geoscience</i> , 2019, 12, 696-700.	5.4	70
157	Temporal evolution of primordial tungsten-182 and 3He/4He signatures in the Iceland mantle plume. <i>Chemical Geology</i> , 2019, 525, 245-259.	1.4	50
158	Age and origin of IIE iron meteorites inferred from Hf-W chronology. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 262, 92-103.	1.6	22
159	The nature of Earthâ€™s first crust. <i>Chemical Geology</i> , 2019, 530, 119321.	1.4	40
160	A unified model for hydrogen in the Earth and Moon: No one expects the Theia contribution. <i>Chemie Der Erde</i> , 2019, 79, 125546.	0.8	10
161	Lack of late-accreted material as the origin of 182W excesses in the Archean mantle: Evidence from the Pilbara Craton, Western Australia. <i>Earth and Planetary Science Letters</i> , 2019, 528, 115841.	1.8	31
162	Origin and Early Differentiation of Carbon and Associated Life-Essential Volatile Elements on Earth. , 2019, , 4-39.		20

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163	Hf-W chronology of ordinary chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 258, 290-309.	1.6	33
164	Uniform ^{182}W isotope compositions in Eoarchean rocks from the Isua region, SW Greenland: The role of early silicate differentiation and missing late veneer. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 257, 284-310.	1.6	46
165	Chemical Separation of Tungsten and Other Trace Elements for $\langle\text{scp}\rangle\text{TIMS}\langle/\text{scp}\rangle$ Isotope Ratio Measurements Using Organic Acids. <i>Geostandards and Geoanalytical Research</i> , 2019, 43, 245-259.	1.7	16
166	Tungsten isotopes in mantle plumes: Heads it's positive, tails it's negative. <i>Earth and Planetary Science Letters</i> , 2019, 506, 255-267.	1.8	24
167	Siderophile element constraints on the thermal history of the H chondrite parent body. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 245, 556-576.	1.6	12
168	Origin of the Earth and the Late Heavy Bombardment. , 2019, , 27-47.		5
169	The Acasta Gneiss Complex. , 2019, , 329-347.		8
170	The 3.9-3.6 Ga Itsaq Gneiss Complex of Greenland. , 2019, , 375-399.		9
171	Grain boundary diffusion of W in lower mantle phase with implications for isotopic heterogeneity in oceanic island basalts by core-mantle interactions. <i>Earth and Planetary Science Letters</i> , 2020, 530, 115887.	1.8	16
172	Tungsten isotopic constraints on homogenization of the Archean silicate Earth: Implications for the transition of tectonic regimes. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 278, 51-64.	1.6	21
173	Anomalous ^{182}W in high $^3\text{He}/^4\text{He}$ ocean island basalts: Fingerprints of Earth's core?. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 271, 194-211.	1.6	87
174	Multi-element isotope study of natrocarbonatites (1993 lava flows) from Oldoinyo Lengai volcano, Tanzania: Implications for core-mantle interactions. <i>Journal of African Earth Sciences</i> , 2020, 162, 103725.	0.9	0
175	The tungsten-182 record of kimberlites above the African superplume: Exploring links to the core-mantle boundary. <i>Earth and Planetary Science Letters</i> , 2020, 547, 116473.	1.8	40
176	Ancient helium and tungsten isotopic signatures preserved in mantle domains least modified by crustal recycling. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 30993-31001.	3.3	41
177	Astronomical context of Solar System formation from molybdenum isotopes in meteorite inclusions. <i>Science</i> , 2020, 370, 837-840.	6.0	27
178	Ultra-depleted ^{205}Ga komatiites of Finnish Lapland: Products of grainy late accretion or core-mantle interaction?. <i>Chemical Geology</i> , 2020, 554, 119801.	1.4	31
179	A Chromatographic Method for Separation of Tungsten (W) from Silicate Samples for High-Precision Isotope Analysis Using Negative Thermal Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2020, 92, 11987-11993.	3.2	5
180	Mantle Evolution of Asia Inferred from Pb Isotopic Signatures of Sources for Late Phanerozoic Volcanic Rocks. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 739.	0.8	2

#	ARTICLE	IF	CITATIONS
181	Geochemical Constraints on the Origin of the Moon and Preservation of Ancient Terrestrial Heterogeneities. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	16
182	Hf-W chronology of a macrochondrule from the L5/6 chondrite Northwest Africa 8192. <i>Meteoritics and Planetary Science</i> , 2020, 55, 2241-2255.	0.7	2
183	Tungsten Isotope Composition of Archean Crustal Reservoirs and Implications for Terrestrial ^{182}W Evolution. <i>Geochemistry, Geophysics, Geosystems</i> , 2020, 21, e2020GC009155.	1.0	20
184	Hadean Earth. , 2020, , .		21
185	Ruthenium isotope vestige of Earth's pre-late-veener mantle preserved in Archean rocks. <i>Nature</i> , 2020, 579, 240-244.	13.7	67
186	Source of gold in Neoproterozoic orogenic-type deposits in the North Atlantic Craton, Greenland: Insights for a proto-source of gold in sub-seafloor hydrothermal arsenopyrite in the Mesoarchean. <i>Precambrian Research</i> , 2020, 343, 105717.	1.2	6
187	How to produce isotope anomalies in mantle by using extremely small isotope fractionations: A process-driven amplification effect?. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 291, 19-49.	1.6	4
188	A compositionally heterogeneous martian mantle due to late accretion. <i>Science Advances</i> , 2020, 6, eaay2338.	4.7	24
189	Sulfur isotope characterization of primordial and recycled sources feeding the Samoan mantle plume. <i>Earth and Planetary Science Letters</i> , 2020, 534, 116073.	1.8	20
190	Continuous-Flow Extraction of Adjacent Metals—A Disruptive Economic Window for In-Situ Resource Utilization of Asteroids?. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 3368-3388.	7.2	13
191	Kontinuierliche Extraktion benachbarter Metalle im Durchstrombetrieb – ein disruptiver ökonomischer Ansatz zur In-situ-Rohstoffgewinnung auf Asteroiden?. <i>Angewandte Chemie</i> , 2021, 133, 3408-3431.	1.6	0
192	The Hadean Eon: Hot, Cold, or Just Right?. , 2021, , 206-210.		0
193	Combined Lithophile-Siderophile Isotopic Constraints on Hadean Processes Preserved in Ocean Island Basalt Sources. <i>Geochemistry, Geophysics, Geosystems</i> , 2021, 22, e2020GC009479.	1.0	15
194	Iron isotopes trace primordial magma ocean cumulates melting in Earth's upper mantle. <i>Science Advances</i> , 2021, 7, .	4.7	6
195	Reconciling metal-silicate partitioning and late accretion in the Earth. <i>Nature Communications</i> , 2021, 12, 2913.	5.8	17
196	Mantle plumes and their role in Earth processes. <i>Nature Reviews Earth & Environment</i> , 2021, 2, 382-401.	12.2	78
197	Tungsten-182 evidence for an ancient kimberlite source. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	21
199	Accretion and differentiation of early planetary bodies as recorded in the composition of the silicate Earth. <i>Icarus</i> , 2021, 365, 114497.	1.1	10

#	ARTICLE	IF	CITATIONS
200	No 182W evidence for early Moon formation. <i>Nature Geoscience</i> , 2021, 14, 714-715.	5.4	8
201	Water in the Earth's Interior: Distribution and Origin. <i>Space Sciences Series of ISSI</i> , 2017, , 83-150.	0.0	2
203	Convective isolation of Hadean mantle reservoirs through Archean time. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	25
204	High-Precision Mass-Dependent Molybdenum Isotope Variations in Magmatic Rocks Determined by Double-Spike MC-ICP-MS. <i>Geostandards and Geoanalytical Research</i> , 2016, , n/a-n/a.	1.7	9
205	High-precision tungsten isotopic measurement by negative thermal ionization mass spectrometry (NTIMS). <i>Acta Petrologica Sinica</i> , 2019, 35, 606-616.	0.3	1
206	A Little Big History of Iberian Gold. <i>Journal of Big History</i> , 2017, 1, 40-58.	0.4	3
207	GENERAL Pb-ISOTOPE SYSTEMATICS OF SOURCES FOR VOLCANIC ROCKS OF THE LATEST GEODYNAMIC STAGE IN ASIA. <i>Geodinamika I Tektonofizika</i> , 2019, 10, 507-539.	0.3	2
208	Siderophile Elements in Tracing Planetary Formation and Evolution. <i>Geochemical Perspectives</i> , 2016, 5, 1-145.	3.8	39
209	Effective global mixing of the highly siderophile elements into Earth's mantle inferred from oceanic abyssal peridotites. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 316, 347-362.	1.6	20
210	Collisional mixing between inner and outer solar system planetesimals inferred from the Nedagolla iron meteorite. <i>Meteoritics and Planetary Science</i> , 2022, 57, 261-276.	0.7	3
211	Three enigmas of highly siderophile elements in Earth's mantle. <i>Gansekai Kobutsu Kagaku</i> , 2012, 41, 203-210.	0.1	0
212	Shaped Metal Earth-Delivery Systems. , 2013, , 507-537.		0
213	Formation and Evolution of the Earth. <i>Encyclopedia of Earth Sciences Series</i> , 2018, , 1-18.	0.1	0
214	Tungsten Isotopes. <i>Encyclopedia of Earth Sciences Series</i> , 2018, , 1-5.	0.1	0
215	Formation and Evolution of the Earth. <i>Encyclopedia of Earth Sciences Series</i> , 2018, , 498-513.	0.1	0
216	Tungsten Isotopes. <i>Encyclopedia of Earth Sciences Series</i> , 2018, , 1458-1462.	0.1	0
217	Minerales espaciales: cosas de nadie en beneficio de todos. <i>Derecho PUCP</i> , 2019, , 89-131.	0.0	1
218	Radionuclide Produced Isotopic Variations in Mantle Rocks. , 2020, , 39-58.		0

#	ARTICLE	IF	CITATIONS
219	Improved method for highly precise and accurate $^{182}\text{W}/^{184}\text{W}$ isotope measurements by multiple collector inductively coupled plasma mass spectrometry and application for terrestrial samples. <i>Geochemical Journal</i> , 2020, 54, 117-127.	0.5	5
220	Nuclear Power and Associated Environmental Issues in the Transition of Exploration and Mining on Earth to the Development of Off-world Natural Resources in the 21st Century. , 0, , 163-213.		3
221	Fractal dimension algorithm for automatic detection of gold mineralization. , 2022, , 251-275.		0
222	Early global mantle chemical and isotope heterogeneity revealed by the komatiite-basalt record: The Western Australia connection. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 320, 238-278.	1.6	13
223	Fifty years of the Eoarchean and the case for evolving uniformitarianism. <i>Precambrian Research</i> , 2021, 367, 106442.	1.2	31
224	No mantle residues in the Isua Supracrustal Belt. <i>Earth and Planetary Science Letters</i> , 2022, 579, 117348.	1.8	15
225	Stable tungsten isotope systematics on the Earth's surface. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 322, 227-243.	1.6	7
226	The komatiite testimony to ancient mantle heterogeneity. <i>Chemical Geology</i> , 2022, 594, 120776.	1.4	13
227	Tungsten and molybdenum isotopic evidence for an impact origin of pallasites. <i>Earth and Planetary Science Letters</i> , 2022, 584, 117440.	1.8	7
228	Upper mantle control on the W isotope record of shallow level plume and intraplate volcanic settings. <i>Earth and Planetary Science Letters</i> , 2022, 585, 117507.	1.8	6
229	Long-term preservation of Hadean protocrust in Earth's mantle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, e2120241119.	3.3	17
230	^{182}W anomalies in mantle: a brief review. <i>Acta Geochimica</i> , 0, , 1.	0.7	1
231	Earth's geodynamic evolution constrained by ^{182}W in Archean seawater. <i>Nature Communications</i> , 2022, 13, 2701.	5.8	6
232	Tungsten Isotopic Constraints on the Nature of Earth's Accreting Materials. <i>Acta Geologica Sinica</i> , 2022, 96, 1213-1220.	0.8	0
233	A Review of the Lunar ^{182}Hf - ^{182}W Isotope System Research. <i>Minerals (Basel, Switzerland)</i> , 2022, 12, 759.	0.8	2
234	Origin of the analytical ^{183}W effect and its implications for tungsten isotope analyses. <i>Journal of Analytical Atomic Spectrometry</i> , 2022, 37, 2005-2021.	1.6	9
235	Tungsten isotopic fractionation at the Mariana arc and constraints on the redox conditions of subduction zone fluids. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 334, 135-154.	1.6	1
236	Open-system ^{182}W / ^{142}Nd isotope evolution of the Earth. <i>Chemical Geology</i> , 2022, 611, 121104.	1.4	1

#	ARTICLE	IF	CITATIONS
237	Controls on Pt/Pd ratios in Bushveld magmas and cumulates: a review complemented by new W isotope data. <i>Mineralium Deposita</i> , 0, , .	1.7	0
238	Dissipation of Tungsten-182 Anomalies in the Archean Upper Mantle: Evidence from the Black Hills, South Dakota, USA. <i>Chemical Geology</i> , 2023, 617, 121255.	1.4	4
239	The accretion of planet Earth. <i>Nature Reviews Earth & Environment</i> , 2023, 4, 19-35.	12.2	4
240	Stable W Isotope Measurements of Geological Reference Materials and Tungsten Ore Minerals by ⁸⁶ W/ ¹⁸² W Double Spike MC-ICP-MS. <i>Geostandards and Geoanalytical Research</i> , 2023, 47, 169-183.	1.7	1
241	Long-term core-mantle interaction explains W-He isotope heterogeneities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2023, 120, .	3.3	6
242	Anatomy of rocky planets formed by rapid pebble accretion. II. Differentiation by accretion energy and thermal blanketing. <i>Astronomy and Astrophysics</i> , 0, , .	2.1	6
243	Origin of ¹⁸² W Anomalies in Ocean Island Basalts. <i>Geochemistry, Geophysics, Geosystems</i> , 2023, 24, .	1.0	2