

Bernard Marty

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1406626/publications.pdf>

Version: 2024-02-01

202
papers

17,832
citations

11651

70
h-index

14208

128
g-index

205
all docs

205
docs citations

205
times ranked

9255
citing authors

#	ARTICLE	IF	CITATIONS
1	Pebbles and sand on asteroid (162173) Ryugu: In situ observation and particles returned to Earth. <i>Science</i> , 2022, 375, 1011-1016.	12.6	78
2	Meteoritic noble gas constraints on the origin of terrestrial volatiles. <i>Icarus</i> , 2022, 381, 115020.	2.5	9
3	Planning Implications Related to Sterilization-Sensitive Science Investigations Associated with Mars Sample Return (MSR). <i>Astrobiology</i> , 2022, 22, S-112-S-164.	3.0	7
4	Final Report of the Mars Sample Return Science Planning Group 2 (MSPG2). <i>Astrobiology</i> , 2022, 22, S-5-S-26.	3.0	15
5	Rationale and Proposed Design for a Mars Sample Return (MSR) Science Program. <i>Astrobiology</i> , 2022, 22, S-27-S-56.	3.0	14
6	The Scientific Importance of Returning Airfall Dust as a Part of Mars Sample Return (MSR). <i>Astrobiology</i> , 2022, 22, S-176-S-185.	3.0	5
7	Science and Curation Considerations for the Design of a Mars Sample Return (MSR) Sample Receiving Facility (SRF). <i>Astrobiology</i> , 2022, 22, S-217-S-237.	3.0	7
8	Scientific Value of Including an Atmospheric Sample as Part of Mars Sample Return (MSR). <i>Astrobiology</i> , 2022, 22, S-165-S-175.	3.0	7
9	Preliminary Planning for Mars Sample Return (MSR) Curation Activities in a Sample Receiving Facility (SRF). <i>Astrobiology</i> , 2022, 22, S-57-S-80.	3.0	16
10	High precision noble gas measurements of hydrothermal quartz reveal variable loss rate of Xe from the Archean atmosphere. <i>Earth and Planetary Science Letters</i> , 2022, 588, 117577.	4.4	4
11	A very early origin of isotopically distinct nitrogen in inner Solar System protoplanets. <i>Nature Astronomy</i> , 2021, 5, 356-364.	10.1	34
12	A 4,565-My-old andesite from an extinct chondritic protoplanet. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	29
13	Possible discontinuous evolution of atmospheric xenon suggested by Archean barites. <i>Chemical Geology</i> , 2021, 581, 120405.	3.3	4
14	Time-Sensitive Aspects of Mars Sample Return (MSR) Science. <i>Astrobiology</i> , 2021, , .	3.0	10
15	Xenon isotopes in Archean and Proterozoic insoluble organic matter: A robust indicator of syngeneity?. <i>Precambrian Research</i> , 2020, 336, 105505.	2.7	5
16	Noble gas variations in ureilites and their implications for ureilite parent body formation. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 270, 325-337.	3.9	15
17	An evaluation of the C/N ratio of the mantle from natural CO ₂ -rich gas analysis: Geochemical and cosmochemical implications. <i>Earth and Planetary Science Letters</i> , 2020, 551, 116574.	4.4	38
18	The NC-CC Isotope Dichotomy: Implications for the Chemical and Isotopic Evolution of the Early Solar System. <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	27

#	ARTICLE	IF	CITATIONS
19	Tracing the Origins of the Ice Giants Through Noble Gas Isotopic Composition. <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	13
20	Future Missions Related to the Determination of the Elemental and Isotopic Composition of Earth, Moon and the Terrestrial Planets. <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	8
21	Nitrogen Atmospheres of the Icy Bodies in the Solar System. <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	11
22	Archean to Paleoproterozoic seawater halogen ratios recorded by fluid inclusions in chert and hydrothermal quartz. <i>American Mineralogist</i> , 2020, 105, 1317-1325.	1.9	8
23	Earth's water may have been inherited from material similar to enstatite chondrite meteorites. <i>Science</i> , 2020, 369, 1110-1113.	12.6	164
24	Identification of chondritic krypton and xenon in Yellowstone gases and the timing of terrestrial volatile accretion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 13997-14004.	7.1	35
25	Loss and Fractionation of Noble Gas Isotopes and Moderately Volatile Elements from Planetary Embryos and Early Venus, Earth and Mars. <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	34
26	Perspectives on Atmospheric Evolution from Noble Gas and Nitrogen Isotopes on Earth, Mars & Venus. <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	37
27	Is the Faint Young Sun Problem for Earth Solved?. <i>Space Science Reviews</i> , 2020, 216, 1.	8.1	30
28	The origin and fate of volatile elements on Earth revisited in light of noble gas data obtained from comet 67P/Churyumov-Gerasimenko. <i>Scientific Reports</i> , 2020, 10, 5796.	3.3	24
29	Hydrothermal ¹⁵ N/ ¹⁵ N abundances constrain the origins of mantle nitrogen. <i>Nature</i> , 2020, 580, 367-371.	27.8	50
30	Novel insights into the degassing history of Earth's mantle from high precision noble gas analysis of magmatic gas. <i>Earth and Planetary Science Letters</i> , 2019, 525, 115766.	4.4	23
31	Potassium isotope systematics of oceanic basalts. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 259, 144-154.	3.9	54
32	Geochemical evidence for high volatile fluxes from the mantle at the end of the Archaean. <i>Nature</i> , 2019, 575, 485-488.	27.8	20
33	Primordial heavy noble gases in the pristine Paris carbonaceous chondrite. <i>Meteoritics and Planetary Science</i> , 2019, 54, 395-414.	1.6	15
34	Coulomb explosion of multiply ionized xenon in water ice. <i>Geochemical Journal</i> , 2019, 53, 69-81.	1.0	2
35	Archean kerogen as a new tracer of atmospheric evolution: Implications for dating the widespread nature of early life. <i>Science Advances</i> , 2018, 4, eaar2091.	10.3	20
36	Salinity of the Archaean oceans from analysis of fluid inclusions in quartz. <i>Comptes Rendus - Geoscience</i> , 2018, 350, 154-163.	1.2	47

#	ARTICLE	IF	CITATIONS
37	Evolution of atmospheric xenon and other noble gases inferred from Archean to Paleoproterozoic rocks. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 232, 82-100.	3.9	81
38	Origin and significance of cosmogenic signatures in vesicles of lunar basalt 15016. <i>Meteoritics and Planetary Science</i> , 2018, 53, 1238-1251.	1.6	5
39	Scientific rationale for Uranus and Neptune in situ explorations. <i>Planetary and Space Science</i> , 2018, 155, 12-40.	1.7	69
40	A new all-metal induction furnace for noble gas extraction. <i>Chemical Geology</i> , 2018, 480, 86-92.	3.3	11
41	iMARS <i>Phase 2</i>. <i>Astrobiology</i> , 2018, 18, S-1-S-131.	3.0	18
42	High-temperature Ionization-induced Synthesis of Biologically Relevant Molecules in the Protosolar Nebula. <i>Astrophysical Journal</i> , 2018, 859, 142.	4.5	12
43	Krypton isotopes and noble gas abundances in the coma of comet 67P/Churyumov-Gerasimenko. <i>Science Advances</i> , 2018, 4, eaar6297.	10.3	52
44	The origin and degassing history of the Earth's atmosphere revealed by Archean xenon. <i>Nature Communications</i> , 2017, 8, 15455.	12.8	51
45	Xenon isotopes in 67P/Churyumov-Gerasimenko show that comets contributed to Earth's atmosphere. <i>Science</i> , 2017, 356, 1069-1072.	12.6	161
46	Impact of Radiogenic Heating on the Formation Conditions of Comet 67P/Churyumov-Gerasimenko. <i>Astrophysical Journal Letters</i> , 2017, 839, L4.	8.3	19
47	Processes of noble gas elemental and isotopic fractionations in plasma-produced organic solids: Cosmochemical implications. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 217, 219-230.	3.9	13
48	Stepwise heating of lunar anorthosites 60025, 60215, 65315 possibly reveals an indigenous noble gas component on the Moon. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 218, 114-131.	3.9	19
49	Halogens as tracers of protosolar nebula material in comet 67P/Churyumov-Gerasimenko. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 472, 1336-1345.	4.4	44
50	New measurement of the Boltzmann constant <i>k</i> by acoustic thermometry of helium-4 gas. <i>Metrologia</i> , 2017, 54, 856-873.	1.2	59
51	Cometary Isotopic Measurements. , 2017, , 47-83.		0
52	Constraints from Comets on the Formation and Volatile Acquisition of the Planets and Satellites. , 2017, , 297-342.		0
53	Chondritic xenon in the Earth's mantle. <i>Nature</i> , 2016, 533, 82-85.	27.8	75
54	Mercury (Hg) in meteorites: Variations in abundance, thermal release profile, mass-dependent and mass-independent isotopic fractionation. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 182, 55-72.	3.9	26

#	ARTICLE	IF	CITATIONS
55	Prebiotic chemicalsâ€”amino acid and phosphorusâ€”in the coma of comet 67P/Churyumov-Gerasimenko. <i>Science Advances</i> , 2016, 2, e1600285.	10.3	393
56	The presence of clathrates in comet 67P/Churyumov-Gerasimenko. <i>Science Advances</i> , 2016, 2, e1501781.	10.3	38
57	Origins of volatile elements (H, C, N, noble gases) on Earth and Mars in light of recent results from the ROSETTA cometary mission. <i>Earth and Planetary Science Letters</i> , 2016, 441, 91-102.	4.4	143
58	A PROTOSOLAR NEBULA ORIGIN FOR THE ICES AGGLOMERATED BY COMET 67P/CHURYUMOVâ€”GERASIMENKO. <i>Astrophysical Journal Letters</i> , 2016, 819, L33.	8.3	43
59	Nitrogen isotope fractionation during terrestrial core-mantle separation. <i>Geochemical Perspectives Letters</i> , 2016, , 138-147.	5.0	49
60	Detection of argon in the coma of comet 67P/Churyumov-Gerasimenko. <i>Science Advances</i> , 2015, 1, e1500377.	10.3	87
61	Cometary Isotopic Measurements. <i>Space Science Reviews</i> , 2015, 197, 47-83.	8.1	112
62	A comprehensive study of noble gases and nitrogen in â€œHypatiaâ€”, a diamond-rich pebble from SW Egypt. <i>Earth and Planetary Science Letters</i> , 2015, 432, 243-253.	4.4	8
63	Evidence for an early nitrogen isotopic evolution in the solar nebula from volatile analyses of a CAI from the CV3 chondrite NWA 8616. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 153, 183-201.	3.9	12
64	Time variability and heterogeneity in the coma of 67P/Churyumov-Gerasimenko. <i>Science</i> , 2015, 347, aaa0276.	12.6	222
65	Nitrogen isotope variations in the Solar System. <i>Nature Geoscience</i> , 2015, 8, 515-522.	12.9	147
66	Synthesis of refractory organic matter in the ionized gas phase of the solar nebula. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 7129-7134.	7.1	43
67	Molecular nitrogen in comet 67P/Churyumov-Gerasimenko indicates a low formation temperature. <i>Science</i> , 2015, 348, 232-235.	12.6	195
68	Abundant molecular oxygen in the coma of comet 67P/Churyumovâ€”Gerasimenko. <i>Nature</i> , 2015, 526, 678-681.	27.8	260
69	Constraints from Comets on the Formation and Volatile Acquisition of the Planets and Satellites. <i>Space Science Reviews</i> , 2015, 197, 297-342.	8.1	25
70	Indigenous nitrogen in the Moon: Constraints from coupled nitrogenâ€”noble gas analyses of mare basalts. <i>Earth and Planetary Science Letters</i> , 2015, 431, 195-205.	4.4	29
71	67P/Churyumov-Gerasimenko, a Jupiter family comet with a high D/H ratio. <i>Science</i> , 2015, 347, 1261952.	12.6	403
72	Scientific rationale for Saturnâ€™s in situ exploration. <i>Planetary and Space Science</i> , 2014, 104, 29-47.	1.7	49

#	ARTICLE	IF	CITATIONS
73	Evolution of volatile species in the earth's mantle: A view from xenology. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 136, 229-246.	3.9	13
74	The Paris meteorite, the least altered CM chondrite so far. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 124, 190-222.	3.9	163
75	New evidence for chondritic lunar water from combined D/H and noble gas analyses of single Apollo 17 volcanic glasses. <i>Icarus</i> , 2014, 229, 109-120.	2.5	59
76	Coupled noble gas-hydrocarbon evolution of the early Earth atmosphere upon solar UV irradiation. <i>Earth and Planetary Science Letters</i> , 2014, 385, 40-48.	4.4	35
77	Nitrogen isotopic fractionation during abiotic synthesis of organic solid particles. <i>Earth and Planetary Science Letters</i> , 2014, 393, 2-13.	4.4	26
78	The iodine-plutonium-xenon age of the Moon-Earth system revisited. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2014, 372, 20130260.	3.4	44
79	Effects of atmospheric entry heating on the noble gas and nitrogen content of micrometeorites. <i>Earth and Planetary Science Letters</i> , 2013, 377-378, 1-12.	4.4	18
80	Nitrogen solubility in molten metal and silicate at high pressure and temperature. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 121, 15-28.	3.9	107
81	Experimental determination of the xenon isotopic fractionation during adsorption. <i>Geophysical Research Letters</i> , 2013, 40, 4165-4170.	4.0	19
82	Iron isotopic systematics of oceanic basalts. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 107, 12-26.	3.9	182
83	Nitrogen Isotopic Composition and Density of the Archean Atmosphere. <i>Science</i> , 2013, 342, 101-104.	12.6	156
84	Trace elements in the gas emissions from the Erta Ale volcano, Afar, Ethiopia. <i>Chemical Geology</i> , 2013, 357, 95-116.	3.3	89
85	Asteroidal impacts and the origin of terrestrial and lunar volatiles. <i>Icarus</i> , 2013, 222, 44-52.	2.5	99
86	Reply to comment on "Chondritic-like xenon trapped in Archean rocks: A possible signature of the ancient atmosphere" by Pujol, M., Marty, B., Burgess, R., <i>Earth and Planetary Science Letters</i> 308 (2011) 298-306 by Pepin, R.O.. <i>Earth and Planetary Science Letters</i> , 2013, 371-372, 296-298.	4.4	3
87	Nitrogen Isotopes and Mantle Geodynamics: The Emergence of Life and the Atmosphere-Crust-Mantle Connection. <i>Elements</i> , 2013, 9, 359-366.	0.5	152
88	Mechanisms of magma degassing at mid-oceanic ridges and the local volatile composition (4He - ^{40}Ar - ^{13}C - ^{14}C - $^{12}\text{CO}_2$) of the mantle by laser ablation analysis of individual MORB vesicles. <i>Earth and Planetary Science Letters</i> , 2013, 361, 183-194.	4.4	21
89	Argon isotopic composition of Archean atmosphere probes early Earth geodynamics. <i>Nature</i> , 2013, 498, 87-90.	27.8	103
90	Primordial Origins of Earth's Carbon. <i>Reviews in Mineralogy and Geochemistry</i> , 2013, 75, 149-181.	4.8	69

#	ARTICLE	IF	CITATIONS
91	Sulfur degassing at Erta Ale (Ethiopia) and Masaya (Nicaragua) volcanoes: Implications for degassing processes and oxygen fugacities of basaltic systems. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 4076-4108.	2.5	100
92	6. Primordial Origins of Earth's Carbon. , 2013, , 149-182.		1
93	The origins and concentrations of water, carbon, nitrogen and noble gases on Earth. <i>Earth and Planetary Science Letters</i> , 2012, 313-314, 56-66.	4.4	745
94	Tissint Martian Meteorite: A Fresh Look at the Interior, Surface, and Atmosphere of Mars. <i>Science</i> , 2012, 338, 785-788.	12.6	100
95	MarcoPolo-R near earth asteroid sample return mission. <i>Experimental Astronomy</i> , 2012, 33, 645-684.	3.7	72
96	Constraints on the flux of meteoritic and cometary water on the Moon from volatile element (Nâ€“Ar) analyses of single lunar soil grains, Luna 24 core. <i>Icarus</i> , 2012, 218, 220-229.	2.5	33
97	The evolution of Venus: Present state of knowledge and future exploration. <i>Planetary and Space Science</i> , 2012, 63-64, 15-23.	1.7	47
98	Adsorption of xenon ions onto defects in organic surfaces: Implications for the origin and the nature of organics in primitive meteorites. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 6255-6266.	3.9	34
99	Chondritic-like xenon trapped in Archean rocks: A possible signature of the ancient atmosphere. <i>Earth and Planetary Science Letters</i> , 2011, 308, 298-306.	4.4	96
100	A ¹⁵ N-Poor Isotopic Composition for the Solar System As Shown by Genesis Solar Wind Samples. <i>Science</i> , 2011, 332, 1533-1536.	12.6	255
101	Nitrogen isotopes in the recent solar wind from the analysis of Genesis targets: Evidence for large scale isotope heterogeneity in the early solar system. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 340-355.	3.9	94
102	Magnesium isotopic composition of the Earth and chondrites. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 4150-4166.	3.9	381
103	Chronology and shock history of the Bencubbin meteorite: A nitrogen, noble gas, and Arâ€“Ar investigation of silicates, metal and fluid inclusions. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 6636-6653.	3.9	17
104	Kronos: exploring the depths of Saturn with probes and remote sensing through an international mission. <i>Experimental Astronomy</i> , 2009, 23, 947-976.	3.7	10
105	TandEM: Titan and Enceladus mission. <i>Experimental Astronomy</i> , 2009, 23, 893-946.	3.7	77
106	Upper-mantle volatile chemistry at Oldoinyo Lengai volcano and the origin of carbonatites. <i>Nature</i> , 2009, 459, 77-80.	27.8	129
107	Laser Ablation (193 nm), Purification and Determination of Very Low Concentrations of Solar Wind Nitrogen Implanted in Targets from the GENESIS Spacecraft. <i>Geostandards and Geoanalytical Research</i> , 2009, 33, 183-194.	3.1	6
108	Helium isotopic signature of modern and fossil fluids associated with the Corinth rift fault zone (Greece): Implication for fault connectivity in the lower crust. <i>Chemical Geology</i> , 2009, 266, 67-75.	3.3	34

#	ARTICLE	IF	CITATIONS
109	Xenon isotope constraints on the thermal evolution of the early Earth. <i>Chemical Geology</i> , 2009, 266, 4-9.	3.3	28
110	Nitrogen in peridotite xenoliths: Lithophile behavior and magmatic isotope fractionation. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 4843-4861.	3.9	60
111	Xenon in Archean barite: Weak decay of ^{130}Ba , mass-dependent isotopic fractionation and implication for barite formation. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 6834-6846.	3.9	86
112	Leftovers from core formation. <i>Nature Geoscience</i> , 2008, 1, 290-291.	12.9	4
113	Helium and Neon Abundances and Compositions in Cometary Matter. <i>Science</i> , 2008, 319, 75-78.	12.6	56
114	Timing of East African Rift development in southern Ethiopia: Implication for mantle plume activity and evolution of topography. <i>Geology</i> , 2008, 36, 167.	4.4	146
115	Carbonaceous cherts of the Barberton Greenstone Belt, South Africa: Isotopic, chemical and structural characteristics of individual microstructures. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 655-669.	3.9	92
116	Mantle upwellings and convective instabilities revealed by seismic tomography and helium isotope geochemistry beneath eastern Africa. <i>Geophysical Research Letters</i> , 2007, 34, .	4.0	44
117	Noble gas signature of the Late Heavy Bombardment in the Earth's atmosphere. <i>EEarth</i> , 2007, 2, 43-49.	0.8	29
118	Comet 81P/Wild 2 Under a Microscope. <i>Science</i> , 2006, 314, 1711-1716.	12.6	848
119	Noble gases in the Martian meteorite Northwest Africa 2737: A new chassignite signature. <i>Meteoritics and Planetary Science</i> , 2006, 41, 739-748.	1.6	12
120	Fast chemical and isotopic exchange of nitrogen during reaction with hot molybdenum. <i>Geochemistry, Geophysics, Geosystems</i> , 2006, 7, n/a-n/a.	2.5	13
121	Building of a Habitable Planet. , 2006, , 97-151.		1
122	Cosmogenic ^3He production rates revisited from evidences of grain size dependent release of matrix-sited helium. <i>Earth and Planetary Science Letters</i> , 2006, 247, 222-234.	4.4	56
123	How many mantle plumes in Africa? The geochemical point of view. <i>Chemical Geology</i> , 2006, 226, 100-114.	3.3	189
124	Sub-lithospheric source for Quaternary alkaline Tepi shield, southwest Ethiopia. <i>Geochemical Journal</i> , 2006, 40, 47-56.	1.0	5
125	18. Water in the Early Earth. , 2006, , 421-450.		4
126	Water in the Early Earth. <i>Reviews in Mineralogy and Geochemistry</i> , 2006, 62, 421-450.	4.8	75

#	ARTICLE	IF	CITATIONS
127	Isotopic Compositions of Cometary Matter Returned by Stardust. <i>Science</i> , 2006, 314, 1724-1728.	12.6	343
128	3. Solar System Formation and Early Evolution: the First 100 Million Years. <i>Earth, Moon and Planets</i> , 2006, 98, 39-95.	0.6	64
129	4. Building of a Habitable Planet. <i>Earth, Moon and Planets</i> , 2006, 98, 97-151.	0.6	30
130	PLANETARY SCIENCE: The Primordial Porridge. <i>Science</i> , 2006, 312, 706-707.	12.6	2
131	Neon isotopes constrain convection and volatile origin in the Earth's mantle. <i>Nature</i> , 2005, 433, 33-38.	27.8	145
132	Volatile abundances in the sub-arc mantle: insights from volcanic and hydrothermal gas discharges. <i>Journal of Volcanology and Geothermal Research</i> , 2005, 140, 205-216.	2.1	65
133	Nitrogen and noble gases in micrometeorites. <i>Meteoritics and Planetary Science</i> , 2005, 40, 881-894.	1.6	25
134	Petrology, geochemistry, and cosmic-ray exposure age of Iherzolitic shergottite Northwest Africa 1950. <i>Meteoritics and Planetary Science</i> , 2005, 40, 1175-1184.	1.6	52
135	Nitrogen isotopic composition of ammoniated phyllosilicates: case studies from Precambrian metamorphosed sedimentary rocks. <i>Chemical Geology</i> , 2005, 216, 37-58.	3.3	86
136	Interlayer trapping of noble gases in insoluble organic matter of primitive meteorites. <i>Earth and Planetary Science Letters</i> , 2005, 236, 569-578.	4.4	25
137	Geochemical constraints on mantle dynamics in the Hadean. <i>Earth and Planetary Science Letters</i> , 2005, 238, 17-30.	4.4	45
138	High $^3\text{He}/^4\text{He}$ ratios in peridotite xenoliths from SW Japan revisited: Evidence for cosmogenic ^3He released by vacuum crushing. <i>Geochemistry, Geophysics, Geosystems</i> , 2005, 6, n/a-n/a.	2.5	49
139	Clues from Fe Isotope Variations on the Origin of Early Archean BIFs from Greenland. <i>Science</i> , 2004, 306, 2077-2080.	12.6	254
140	Osmium, sulphur, and helium isotopic results from the giant Neoproterozoic epithermal Imiter silver deposit, Morocco: evidence for a mantle source. <i>Chemical Geology</i> , 2004, 207, 59-79.	3.3	64
141	A determination of the neon isotopic composition of the deep mantle. <i>Earth and Planetary Science Letters</i> , 2004, 225, 77-88.	4.4	116
142	The cosmic molybdenum-ruthenium isotope correlation. <i>Earth and Planetary Science Letters</i> , 2004, 226, 465-475.	4.4	159
143	Protosolar Carbon Isotopic Composition: Implications for the Origin of Meteoritic Organics. <i>Astrophysical Journal</i> , 2004, 600, 480-484.	4.5	52
144	Nitrogen Isotopic Analyses at the Sub-Picomole Level Using an Ultralow Blank Laser Extraction Technique. , 2004, , 361-374.		10

#	ARTICLE	IF	CITATIONS
145	Title is missing!. Space Science Reviews, 2003, 106, 175-196.	8.1	35
146	Geochemical evidence for efficient aquifer isolation over geological timeframes. Nature, 2003, 425, 55-58.	27.8	63
147	Nitrogen isotopic composition of macromolecular organic matter in interplanetary dust particles. Geochimica Et Cosmochimica Acta, 2003, 67, 3773-3783.	3.9	68
148	Nitrogen solubility in basaltic melt. Part I. Effect of oxygen fugacity. Geochimica Et Cosmochimica Acta, 2003, 67, 4123-4135.	3.9	153
149	The nitrogen record of crust-mantle interaction and mantle convection from Archean to Present. Earth and Planetary Science Letters, 2003, 206, 397-410.	4.4	201
150	Volatiles (nitrogen, noble gases) in recently discovered SNC meteorites, extinct radioactivities and evolution. Earth and Planetary Science Letters, 2003, 214, 27-42.	4.4	28
151	Stability of the Upper Nile drainage network (Ethiopia) deduced from (U-Th)/He thermochronometry: implications for uplift and erosion of the Afar plume dome. Earth and Planetary Science Letters, 2003, 215, 73-88.	4.4	208
152	Nitrogen isotopic compositions of the present mantle and the Archean biosphere. Reply to comment by Pierre Cartigny and Magali Ader. Earth and Planetary Science Letters, 2003, 216, 433-439.	4.4	16
153	Nitrogen Isotopes on the Moon: Archives of the Solar and Planetary Contributions to the Inner Solar System. Space Sciences Series of ISSI, 2003, , 175-196.	0.0	1
154	Molybdenum Evidence for Inherited Planetary Scale Isotope Heterogeneity of the Protosolar Nebula. Astrophysical Journal, 2002, 565, 640-644.	4.5	186
155	Molybdenum Nucleosynthetic Dichotomy Revealed in Primitive Meteorites. Astrophysical Journal, 2002, 569, L139-L142.	4.5	98
156	Formation and early evolution of the atmosphere. Geological Society Special Publication, 2002, 199, 213-229.	1.3	9
157	Inference on the nature and the mass of Earth's late veneer from noble metals and gases. Journal of Geophysical Research, 2002, 107, 12-1-12-7.	3.3	52
158	Tracing Fluid Origin, Transport and Interaction in the Crust. Reviews in Mineralogy and Geochemistry, 2002, 47, 539-614.	4.8	244
159	Noble Gases and Volatile Recycling at Subduction Zones. Reviews in Mineralogy and Geochemistry, 2002, 47, 319-370.	4.8	389
160	Source, genesis, and timing of giant ignimbrite deposits associated with Ethiopian continental flood basalts. Geochimica Et Cosmochimica Acta, 2002, 66, 1429-1448.	3.9	148
161	Oxygen isotopes in single micrometer-sized quartz grains: tracing the source of Saharan dust over long-distance atmospheric transport. Geochimica Et Cosmochimica Acta, 2002, 66, 3351-3365.	3.9	43
162	Signatures of early differentiation of Mars. Earth and Planetary Science Letters, 2002, 196, 251-263.	4.4	42

#	ARTICLE	IF	CITATIONS
163	Analyses of nitrogen and argon in single lunar grains: towards a quantification of the asteroidal contribution to planetary surfaces. <i>Earth and Planetary Science Letters</i> , 2002, 202, 201-216.	4.4	43
164	Inference on terrestrial genesis from molybdenum isotope systematics. <i>Geophysical Research Letters</i> , 2002, 29, 8-1-8-3.	4.0	39
165	9. Noble Gases and Volatile Recycling at Subduction Zones. , 2002, , 319-370.		85
166	Helium trapped in historical slags: a search for temporal variation of the He isotopic composition of air. <i>Earth and Planetary Science Letters</i> , 2001, 194, 165-175.	4.4	13
167	The isotopic composition of solar nitrogen and the heterogeneity of the solar system. <i>AIP Conference Proceedings</i> , 2001, , .	0.4	0
168	CO ₂ -Laser Extraction-Static Mass Spectrometry Analysis of Ultra-Low Concentrations of Nitrogen in Silicates. <i>Geostandards and Geoanalytical Research</i> , 2000, 24, 255-260.	3.1	29
169	Solar Wind Record on the Moon: Deciphering Presolar from Planetary Nitrogen. <i>Science</i> , 2000, 290, 1142-1145.	12.6	164
170	Heavy Nitrogen in Carbonatites of the Kola Peninsula: A Possible Signature of the Deep Mantle. <i>Science</i> , 1999, 286, 2488-2490.	12.6	97
171	Evidence for a predominantly non-solar origin of nitrogen in the lunar regolith revealed by single grain analyses. <i>Earth and Planetary Science Letters</i> , 1999, 167, 47-60.	4.4	61
172	Isotopic and trace element signatures of Ethiopian flood basalts: evidence for plume-lithosphere interactions. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 2263-2279.	3.9	249
173	Volatiles (He, C, N, Ar) in mid-ocean ridge basalts: assesment of shallow-level fractionation and characterization of source composition. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 3619-3633.	3.9	316
174	Comparative Studies of Solar, Q-Gases and Terrestrial Noble Gases, and Implications on the Evolution of the Solar Nebula. <i>Geochimica Et Cosmochimica Acta</i> , 1998, 62, 301-314.	3.9	56
175	CO ₂ fluxes from mid-ocean ridges, arcs and plumes. <i>Chemical Geology</i> , 1998, 145, 233-248.	3.3	376
176	The evolution of terrestrial volatiles: a view from helium, neon, argon and nitrogen isotope modelling. <i>Chemical Geology</i> , 1998, 147, 27-52.	3.3	150
177	Plume-derived rare gases in 380 Ma carbonatites from the Kola region (Russia) and the argon isotopic composition in the deep mantle. <i>Earth and Planetary Science Letters</i> , 1998, 164, 179-192.	4.4	107
178	Nitrogen recycling in subduction zones. <i>Geophysical Research Letters</i> , 1998, 25, 2289-2292.	4.0	76
179	Nitrogen and argon isotopes in oceanic basalts. <i>Earth and Planetary Science Letters</i> , 1997, 152, 101-112.	4.4	170
180	Helium isotopic variations in Ethiopian plume lavas: nature of magmatic sources and limit on lower mantle contribution. <i>Earth and Planetary Science Letters</i> , 1996, 144, 223-237.	4.4	185

#	ARTICLE	IF	CITATIONS
181	Helium Isotopic Evidence for a Lower Mantle Component in Depleted Archean Komatiite. <i>Science</i> , 1996, 273, 93-95.	12.6	37
182	Nitrogen content of the mantle inferred from N ² –Ar correlation in oceanic basalts. <i>Nature</i> , 1995, 377, 326-329.	27.8	172
183	Origin of carbon in fumarolic gas from island arcs. <i>Chemical Geology</i> , 1995, 119, 265-274.	3.3	526
184	Nitrogen, helium and argon in basalt: a static mass spectrometry study. <i>Chemical Geology</i> , 1995, 120, 183-195.	3.3	43
185	The ⁴⁰ Ar/ ³⁶ Ar ratio of the undepleted mantle; A reevaluation. <i>Geophysical Research Letters</i> , 1995, 22, 1937-1940.	4.0	58
186	Noble gases in crude oils from the Paris Basin, France: Implications for the origin of fluids and constraints on oil-water-gas interactions. <i>Geochimica Et Cosmochimica Acta</i> , 1995, 59, 3389-3404.	3.9	100
187	Primitive Boron Isotope Composition of the Mantle. <i>Science</i> , 1995, 269, 383-386.	12.6	164
188	He, Ar, O, Sr and Nd isotope constraints on the origin and evolution of Mount Etna magmatism. <i>Earth and Planetary Science Letters</i> , 1994, 126, 23-39.	4.4	129
189	Constraints on rare gas partition coefficients from analysis of olivine-glass from a picritic mid-ocean ridge basalt. <i>Chemical Geology</i> , 1993, 106, 1-7.	3.3	68
190	Helium isotope fluxes and groundwater ages in the Dogger Aquifer, Paris Basin. <i>Water Resources Research</i> , 1993, 29, 1025-1035.	4.2	93
191	He, Ar, Sr, Nd and Pb isotopes in volcanic rocks from Afar: Evidence for a primitive mantle component and constraints on magmatic sources.. <i>Geochemical Journal</i> , 1993, 27, 219-228.	1.0	56
192	Helium isotopes in Alpine regions. <i>Tectonophysics</i> , 1992, 206, 71-78.	2.2	66
193	Noble gases in submarine glasses from mid-oceanic ridges and Loihi seamount: Constraints on the early history of the Earth. <i>Geochimica Et Cosmochimica Acta</i> , 1992, 56, 1301-1316.	3.9	186
194	Continuous monitoring of distal gas emanations at Vulcano, southern Italy. <i>Bulletin of Volcanology</i> , 1992, 54, 147-155.	3.0	49
195	Gas geochemistry of geothermal fluids, the Hengill area, southwest rift zone of Iceland. <i>Chemical Geology</i> , 1991, 91, 207-225.	3.3	61
196	Volatile fluxes from volcanoes. <i>Terra Nova</i> , 1991, 3, 17-27.	2.1	47
197	Neon and xenon isotopes in MORB: implications for the earth-atmosphere evolution. <i>Earth and Planetary Science Letters</i> , 1989, 94, 45-56.	4.4	122
198	Helium isotopes and CO ₂ in volcanic gases of Japan. <i>Chemical Geology</i> , 1989, 76, 25-40.	3.3	217

#	ARTICLE	IF	CITATIONS
199	C3He in volatile fluxes from the solid Earth: implications for carbon geodynamics. <i>Earth and Planetary Science Letters</i> , 1987, 83, 16-26.	4.4	501
200	Noble gas distribution in oceanic basalt glasses. <i>Geochimica Et Cosmochimica Acta</i> , 1986, 50, 1093-1097.	3.9	60
201	Two noble gas components in a Mid-Atlantic Ridge basalt. <i>Nature</i> , 1983, 302, 238-240.	27.8	45
202	Noble gases and nitrogen in Tissint reveal the composition of the Mars atmosphere. <i>Geochemical Perspectives Letters</i> , 0, , 11-16.	5.0	12