Manuel A Moreira

List of Publications by Year
in descending order

83 papers	4,543 citations	94433 37 h-index	102487 66 g-index
83 all docs	83 docs citations	83 times ranked	2901 citing authors

#	Article	IF	Citations
1	Rare Gas Systematics in Popping Rock: Isotopic and Elemental Compositions in the Upper Mantle. Science, 1998, 279, 1178-1181.	12.6	366
2	The chemical composition of the Earth: Enstatite chondrite models. Earth and Planetary Science Letters, 2010, 293, 259-268.	4.4	363
3	Helium signature of the subcontinental lithospheric mantle. Earth and Planetary Science Letters, 2002, 199, 39-47.	4.4	260
4	Non-chondritic sulphur isotope composition of the terrestrial mantle. Nature, 2013, 501, 208-211.	27.8	195
5	The nature of Earth's building blocks as revealed by calcium isotopes. Earth and Planetary Science Letters, 2014, 394, 135-145.	4.4	129
6	Helium and lead isotope geochemistry of the Azores Archipelago. Earth and Planetary Science Letters, 1999, 169, 189-205.	4.4	127
7	He, Ne and Ar composition of the European lithospheric mantle. Chemical Geology, 2005, 217, 97-112.	3.3	124
8	Pb-Sr-He isotope and trace element geochemistry of the Cape Verde Archipelago. Geochimica Et Cosmochimica Acta, 2003, 67, 3717-3733.	3.9	123
9	Rare gas systematics on the southernmost Mid-Atlantic Ridge: Constraints on the lower mantle and the Dupal source. Journal of Geophysical Research, 2000, 105, 5973-5996.	3.3	118
10	Solar neon in the Icelandic mantle: new evidence for an undegassed lower mantle. Earth and Planetary Science Letters, 2001, 185, 15-23.	4.4	115
11	A primitive plume neon component in MORB: The Shona ridge-anomaly, South Atlantic (51â€“52Â°S). Earth and Planetary Science Letters, 1995, 133, 367-377.	4.4	113
12	Noble gas constraints on the origin and evolution of Earthâ€™s volatiles. Geochemical Perspectives, 2013, 2, 229-403.	4.5	109
13	4He/Â³He dispersion and mantle convection. Geophysical Research Letters, 1995, 22, 2325-2328.	4.0	108
14	Primitive neon from the center of the GalÃ¡pagos hotspot. Earth and Planetary Science Letters, 2009, 286, 23-34.	4.4	107
15	Noble gas constraints on degassing processes. Earth and Planetary Science Letters, 2000, 176, 375-386.	4.4	106
16	Sulfur isotope budget (32S, 33S, 34S and 36S) in Pacificâ€“Antarctic ridge basalts: A record of mantle source heterogeneity and hydrothermal sulfide assimilation. Geochimica Et Cosmochimica Acta, 2014, 133, 47-67.	3.9	95
17	Is the â€˜Azores Hotspotâ€™ a Wetspot? Insights from the Geochemistry of Fluid and Melt Inclusions in Olivine of Pico Basalts. Journal of Petrology, 2014, 55, 377-393.	2.8	93
18	Os isotope systematics in Fogo Island: Evidence for lower continental crust fragments under the Cape Verde Southern Islands. Chemical Geology, 2005, 219, 93-113.	3.3	83

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19	Argon-Lead Isotopic Correlation in Mid-Atlantic Ridge Basalts. Science, 1999, 283, 666-668.	12.6	74
20	Heliumâ€“neon systematics and the structure of the mantle. Chemical Geology, 1998, 147, 53-59.	3.3	70
21	Subducted oceanic lithosphere and the origin of the â€˜high Î¼â€™ basalt helium isotopic signature. Earth and Planetary Science Letters, 2001, 189, 49-57.	4.4	69
22	The 2014â€“15 eruption and the short-term geochemical evolution of the Fogo volcano (Cape Verde): Evidence for small-scale mantle heterogeneity. Lithos, 2017, 288-289, 91-107.	1.4	68
23	Atmospheric 38Ar/36Ar in the mantle: Implications for the nature of the terrestrial parent bodies. Earth and Planetary Science Letters, 2009, 287, 551-558.	4.4	62
24	Vesiculation and vesicle loss in mid-ocean ridge basalt glasses: He, Ne, Ar elemental fractionation and pressure influence. Geochimica Et Cosmochimica Acta, 2002, 66, 1449-1458.	3.9	60
25	Rare gas systematics on Mid Atlantic Ridge (37â€“40Â°N). Earth and Planetary Science Letters, 2002, 198, 401-416.	4.4	60
26	Correlated helium, neon, and melt production on the super-fast spreading East Pacific Rise near 17Â°S. Earth and Planetary Science Letters, 2005, 232, 125-142.	4.4	59
27	Crystallization of a basal magma ocean recorded by Helium and Neon. Earth and Planetary Science Letters, 2011, 308, 193-199.	4.4	58
28	Rare gas systematics in Red Sea Ridge basalts. Geophysical Research Letters, 1996, 23, 2453-2456.	4.0	57
29	Primitive neon isotopes in Terceira Island (Azores archipelago). Earth and Planetary Science Letters, 2005, 233, 429-440.	4.4	57
30	The Syabruâ€Bensi hydrothermal system in central Nepal: 1. Characterization of carbon dioxide and radon fluxes. Journal of Geophysical Research: Solid Earth, 2014, 119, 4017-4055.	3.4	45
31	He and Ne isotopes in oceanic crust: implications for noble gas recycling in the mantle. Earth and Planetary Science Letters, 2003, 216, 635-643.	4.4	43
32	Geochemical portray of the Pacific Ridge: New isotopic data and statistical techniques. Earth and Planetary Science Letters, 2011, 302, 154-162.	4.4	43
33	Quaternary extrusive calciocarbonatite volcanism on Brava Island (Cape Verde): A nephelinite-carbonatite immiscibility product. Journal of African Earth Sciences, 2010, 56, 59-74.	2.0	42
34	He, Ne and Ar systematics in single vesicles: Mantle isotopic ratios and origin of the air component in basaltic glasses. Earth and Planetary Science Letters, 2008, 274, 142-150.	4.4	41
35	Noble gas and carbon isotopic signatures of Cape Verde oceanic carbonatites: Implications for carbon provenance. Earth and Planetary Science Letters, 2010, 291, 70-83.	4.4	41
36	Geochemical constraints on depth of origin of oceanic carbonatites: The Cape Verde case. Geochimica Et Cosmochimica Acta, 2010, 74, 7261-7282.	3.9	40

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37	THREE-DIMENSIONAL LAGRANGIAN TURBULENT DIFFUSION OF DUST GRAINS IN A PROTOPLANETARY DISK: METHOD AND FIRST APPLICATIONS. Astrophysical Journal, 2011, 737, 33.	4.5	38
38	Geochemical heterogeneities within the Crozet hotspot. Earth and Planetary Science Letters, 2013, 376, 126-136.	4.4	37
39	Geochemical temporal evolution of Brava Island magmatism: Constraints on the variability of Cape Verde mantle sources and on carbonatiteâ€"silicate magma link. Chemical Geology, 2012, 334, 44-61.	3.3	34
40	The origin of the neon isotopes in chondrites and on Earth. Earth and Planetary Science Letters, 2016, 433, 249-256.	4.4	33
41	Rare gas systematics and the origin of oceanic islands: the key role of entrainment at the 670 km boundary layer. Earth and Planetary Science Letters, 2004, 228, 85-92.	4.4	32
42	Volatiles in the atmosphere of Mars: The effects of volcanism and escape constrained by isotopic data. Earth and Planetary Science Letters, 2011, 303, 299-309.	4.4	32
43	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
44	Neon isotopic composition of the mantle constrained by single vesicle analyses. Earth and Planetary Science Letters, 2016, 449, 145-154.	4.4	31
45	Evidence for a mantle component shown by rare gases, C and N isotopes in polycrystalline diamonds from Orapa (Botswana). Earth and Planetary Science Letters, 2005, 240, 559-572.	4.4	30
46	Helium and neon isotopes in SÃ£o Miguel island basalts, Azores Archipelago: New constraints on the â€œlow 3Heâ€• hotspot origin. Chemical Geology, 2012, 322-323, 91-98.	3.3	30
47	Carbon and helium isotopes in thermal springs of La SoufriÃ¨re volcano (Guadeloupe, Lesser Antilles): Implications for volcanological monitoring. Chemical Geology, 2013, 359, 70-80.	3.3	27
48	Onset of volatile recycling into the mantle determined by xenon anomalies. Geochemical Perspectives Letters, 0, , 21-25.	5.0	27
49	Noble gas isotopes in hydrothermal volcanic fluids of La SoufriÃ¨re volcano, Guadeloupe, Lesser Antilles arc. Chemical Geology, 2012, 304-305, 158-165.	3.3	26
50	The stable strontium isotopic composition of ocean island basalts, mid-ocean ridge basalts, and komatiites. Chemical Geology, 2018, 483, 595-602.	3.3	26
51	Cosmogenic helium and neon in 11 Myr old ultramafic xenoliths: Consequences for mantle signatures in old samples. Geochemistry, Geophysics, Geosystems, 2005, 6, n/a-n/a.	2.5	23
52	Solar wind implantation supplied light volatiles during the frst stage of Earth accretion. Geochemical Perspectives Letters, 2017, , 151-159.	5.0	23
53	The present-day atmosphere of Mars: Where does it come from?. Earth and Planetary Science Letters, 2009, 277, 384-393.	4.4	22
54	Constraints on the noble gas composition of the deep mantle by bubble-by-bubble analysis of a volcanic glass sample from Iceland. Chemical Geology, 2015, 417, 173-183.	3.3	20

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55	Origin of Light Noble Gases (He, Ne, and Ar) on Earth: A Review. Geochemistry, Geophysics, Geosystems, 2018, 19, 979-996.	2.5	20
56	The xenon isotopic signature of the mantle beneath Massif Central. Geochemical Perspectives Letters, 0, , 28-32.	5.0	20
57	Rare gas systematics on Lucky Strike basalts (37Â°N, North Atlantic): Evidence for efficient homogenization in a long-lived magma chamber system?. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	18
58	Primary and secondary processes constraining the noble gas isotopic signatures of carbonatites and silicate rocks from Brava Island: evidence for a lower mantle origin of the Cape Verde plume. Contributions To Mineralogy and Petrology, 2012, 163, 995-1009.	3.1	18
59	Helium isotopes on the Pacificâ€Antarctic ridge (52.5Â°â€“41.5Â°S). Geophysical Research Letters, 2008, 35, .	4.0	17
60	Geochemical systematics of Pb isotopes, fluorine, and sulfur in melt inclusions from SÃ£o Miguel, Azores. Chemical Geology, 2017, 458, 22-37.	3.3	17
61	The origin of rare gases on Earth: The noble gas â€˜subduction barrierâ€™ revisited. Comptes Rendus - Geoscience, 2007, 339, 937-945.	1.2	16
62	Helium isotope systematics in the vicinity of the Azores triple junction: Constraints on the Azores geodynamics. Chemical Geology, 2014, 372, 62-71.	3.3	14
63	Primordial atmosphere incorporation in planetary embryos and the origin of Neon in terrestrial planets. Icarus, 2017, 293, 199-205.	2.5	14
64	Noble gas systematics in new popping rocks from the Mid-Atlantic Ridge (14Â°N): Evidence for small-scale upper mantle heterogeneities. Earth and Planetary Science Letters, 2019, 519, 70-82.	4.4	13
65	Magma degassing process during Plinian eruptions. Journal of Volcanology and Geothermal Research, 2010, 192, 142-150.	2.1	12
66	Constraints on the DUPAL anomaly from helium isotope systematics in the Southwest Indian mid-ocean ridge basalts. Chemical Geology, 2015, 417, 163-172.	3.3	12
67	Helium isotopes on the Macdonald seamount (Austral chain): constraints on the origin of the superswell. Comptes Rendus - Geoscience, 2004, 336, 983-990.	1.2	11
68	Primitive neon and helium isotopic compositions of high-MgO basalts from the Kerguelen Archipelago, Indian Ocean. Earth and Planetary Science Letters, 2006, 241, 65-79.	4.4	11
69	Kronos: exploring the depths of Saturn with probes and remote sensing through an international mission. Experimental Astronomy, 2009, 23, 947-976.	3.7	10
70	Effective radium-226 concentration in meteorites. Geochimica Et Cosmochimica Acta, 2017, 208, 198-219.	3.9	10
71	A â€œhigh 4 He/ 3 Heâ€•mantle material detected under the East Pacific Rise (15Â°4â€²N). Geophysical Research Letters, 2015, 42, 1375-1383.	4.0	9
72	The origin of continental carbonates in Andean salars: A multi-tracer geochemical approach in Laguna Pastos Grandes (Bolivia). Geochimica Et Cosmochimica Acta, 2020, 279, 220-237.	3.9	9

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73	The 1998â€“2001 submarine lava balloon eruption at the Serreta ridge (Azores archipelago): Constraints from volcanic facies architecture, isotope geochemistry and magnetic data. Journal of Volcanology and Geothermal Research, 2017, 329, 13-29.	2.1	8
74	Xenon Isotopes Identify Large-scale Nucleosynthetic Heterogeneities across the Solar System. Astrophysical Journal, 2020, 889, 68.	4.5	8
75	Rare gases in lavas from the ultraslow spreading Lena Trough, Arctic Ocean. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	7
76	Atmospheric noble gases in Mid-Ocean Ridge Basalts: Identification of atmospheric contamination processes. Geochimica Et Cosmochimica Acta, 2018, 222, 253-268.	3.9	7
77	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
78	Noble Gas Constraints on the Origin of the Azores Hotspot. Active Volcanoes of the World, 2018, , 281-299.	1.4	4
79	Re-interpretation of the existence of a primitive plume under Australia based on neon isotope fractionation during step heating. Terra Nova, 2003, 15, 36-39.	2.1	3
80	Constraints on the origin of the 129Xe on Earth using the tellurium double beta decay. Earth and Planetary Science Letters, 2007, 264, 114-122.	4.4	3
81	The isotopic (He, Ne, Sr, Nd, Hf, Pb) signature in the Indian Mantle over 8.8ÂMa. Chemical Geology, 2020, 550, 119741.	3.3	2
82	Reply to: â€œRecycledâ€•volatiles in mantle derived diamondsâ€"Evidence from nitrogen and noble gas isotopic data. Earth and Planetary Science Letters, 2006, 252, 220-222.	4.4	0
83	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