Igor S Puchtel

List of Publications by Year
in descending order

57 papers	4,030 citations	87888 38 h-index	161849 54 g-index
57 all docs	57 docs citations	57 times ranked	2666 citing authors

#	Article	IF	Citations
1	The komatiite testimony to ancient mantle heterogeneity. Chemical Geology, 2022, 594, 120776.	3.3	13
2	High-precision Pb and Hf isotope and highly siderophile element abundance systematics of high-MgO Icelandic lavas. Chemical Geology, 2021, 582, 120436.	3.3	4
3	Ultra-depleted 2.05Â Ga komatiites of Finnish Lapland: Products of grainy late accretion or core-mantle interaction?. Chemical Geology, 2020, 554, 119801.	3.3	31
4	Contrasting platinum-group mineral assemblages of the Kondyor massif (Russia): Implications for the sources of HSE in zoned-type ultramafic massifs. Lithos, 2020, 376-377, 105800.	1.4	3
5	Sulfideâ€dominated partial melting pathways in brachinites. Meteoritics and Planetary Science, 2020, 55, 2021-2043.	1.6	7
6	The Î´53Cr isotope composition of komatiite flows and implications for the composition of the bulk silicate Earth. Chemical Geology, 2020, 551, 119761.	3.3	14
7	Mantle data imply a decline of oxidizable volcanic gases could have triggered the Great Oxidation. Nature Communications, 2020, 11, 2774.	12.8	36
8	Transition metals in komatiitic olivine: Proxies for mantle composition, redox conditions, and sulfide mineralization potential. American Mineralogist, 2019, 104, 1143-1155.	1.9	10
9	An oceanic subduction origin for Archaean granitoids revealed by silicon isotopes. Nature Geoscience, 2019, 12, 774-778.	12.9	55
10	Characteristics of the lithospheric mantle beneath northeastern Borborema Province, Brazil: Reâ€“Os and HSE constraints on peridotite xenoliths. Journal of South American Earth Sciences, 2019, 96, 102371.	1.4	2
11	Secular mantle oxidation across the Archean-Proterozoic boundary: Evidence from V partitioning in komatiites and picrites. Geochimica Et Cosmochimica Acta, 2019, 250, 49-75.	3.9	88
12	Evolution of the Ca isotopic composition of the mantle. Geochimica Et Cosmochimica Acta, 2019, 258, 195-206.	3.9	17
13	Vanadium isotope composition of the Bulk Silicate Earth: Constraints from peridotites and komatiites. Geochimica Et Cosmochimica Acta, 2019, 259, 288-301.	3.9	13
14	182W and HSE constraints from 2.7â€‰Ga komatiites on the heterogeneous nature of the Archean mantle. Geochimica Et Cosmochimica Acta, 2018, 228, 1-26.	3.9	48
15	The stable strontium isotopic composition of ocean island basalts, mid-ocean ridge basalts, and komatiites. Chemical Geology, 2018, 483, 595-602.	3.3	26
16	Redox state of the Archean mantle: Evidence from V partitioning in 3.5â€“2.4â€‰Ga komatiites. Geochimica Et Cosmochimica Acta, 2018, 222, 447-466.	3.9	53
17	Platinum Group Elements. Encyclopedia of Earth Sciences Series, 2018, , 1236-1239.	0.1	0
18	Titanium stable isotopic variations in chondrites, achondrites and lunar rocks. Geochimica Et Cosmochimica Acta, 2017, 213, 534-552.	3.9	46

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19	The gallium isotopic composition of the bulk silicate Earth. Chemical Geology, 2017, 448, 164-172.	3.3	39
20	High-precision determination of the oxidation state of komatiite lavas using vanadium liquid-mineral partitioning. Chemical Geology, 2016, 433, 36-45.	3.3	20
21	Platinum Group Elements. Encyclopedia of Earth Sciences Series, 2016, , 1-5.	0.1	1
22	Platinum-group element abundances and Reâ€“Os isotopic systematics of the upper continental crust through time: Evidence from glacial diamictites. Geochimica Et Cosmochimica Acta, 2016, 191, 1-16.	3.9	61
23	The coupled ¹⁸²Wâ€‹¹⁴²Nd record of early terrestrial mantle differentiation. Geochemistry, Geophysics, Geosystems, 2016, 17, 2168-2193.	2.5	87
24	When was the Earthâ€™s conveyor belt set in motion?. American Mineralogist, 2015, 100, 2369-2370.	1.9	1
25	In search of late-stage planetary building blocks. Chemical Geology, 2015, 411, 125-142.	3.3	61
26	Komatiites constrain molybdenum isotope composition of the Earth's mantle. Earth and Planetary Science Letters, 2015, 421, 129-138.	4.4	79
27	Tungsten isotopic evidence for disproportional late accretion to the Earth and Moon. Nature, 2015, 520, 530-533.	27.8	127
28	CHAPTER 3. Application of Radiogenic Isotopes in Geosciences: Overview and Perspectives. RSC Detection Science, 2014, , 49-93.	0.0	0
29	Insights into early Earth from the Ptâ€“Reâ€“Os isotope and highly siderophile element abundance systematics of Barberton komatiites. Geochimica Et Cosmochimica Acta, 2014, 125, 394-413.	3.9	77
30	Characterization of the dominant impactor signature for Apollo 17 impact melt rocks. Geochimica Et Cosmochimica Acta, 2014, 131, 62-80.	3.9	29
31	New insights into the Hadean mantle revealed by 182W and highly siderophile element abundances of supracrustal rocks from the Nuvvuagittuq Greenstone Belt, Quebec, Canada. Chemical Geology, 2014, 383, 63-75.	3.3	67
32	Highly siderophile element geochemistry of peridotites and pyroxenites from HornÃ-Bory, Bohemian Massif: Implications for HSE behaviour in subduction-related upper mantle. Geochimica Et Cosmochimica Acta, 2013, 100, 158-175.	3.9	38
33	Extreme persistence of cratonic lithosphere in the southwest Pacific: Paleoproterozoic Os isotopic signatures in Zealandia. Geology, 2013, 41, 231-234.	4.4	51
34	Radar-Enabled Recovery of the Sutterâ€™s Mill Meteorite, a Carbonaceous Chondrite Regolith Breccia. Science, 2012, 338, 1583-1587.	12.6	191
35	¹⁸² W Evidence for Long-Term Preservation of Early Mantle Differentiation Products. Science, 2012, 335, 1065-1069.	12.6	211
36	Reâ€“Os isotope and highly siderophile element systematics of the ParanÃ¡ continental flood basalts (Brazil). Earth and Planetary Science Letters, 2012, 337-338, 164-173.	4.4	72

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37	Evolution of the martian mantle inferred from the 187Reâ€“187Os isotope and highly siderophile element abundance systematics of shergottite meteorites. Geochimica Et Cosmochimica Acta, 2012, 76, 206-235.	3.9	117
38	Petrology and geochemistry of Yamato 984028: a cumulate lherzolitic shergottite with affinities to Y 000027, Y 000047, and Y 000097. Polar Science, 2011, 4, 497-514.	1.2	15
39	Highly siderophile element systematics of the 3.3Ga Weltevreden komatiites, South Africa: Implications for early Earth history. Earth and Planetary Science Letters, 2011, 311, 253-263.	4.4	51
40	Osmium isotope and highly siderophile element systematics of the lunar crust. Earth and Planetary Science Letters, 2010, 289, 595-605.	4.4	95
41	Depleted mantle sources through time: Evidence from Luâ€“Hf and Smâ€“Nd isotope systematics of Archean komatiites. Earth and Planetary Science Letters, 2010, 297, 598-606.	4.4	161
42	Temporal Evolution of the Lithospheric Mantle beneath the Eastern North China Craton. Journal of Petrology, 2009, 50, 1857-1898.	2.8	237
43	Reâ€“Os isotope systematics and HSE abundances of the 3.5ÂGa Schapenburg komatiites, South Africa: Hydrous melting or prolonged survival of primordial heterogeneities in the mantle?. Chemical Geology, 2009, 262, 355-369.	3.3	55
44	Effects of melt percolation on highly siderophile elements and Os isotopes in subcontinental lithospheric mantle: A study of the upper mantle profile beneath Central Europe. Geochimica Et Cosmochimica Acta, 2009, 73, 2400-2414.	3.9	67
45	Recycling deep cratonic lithosphere and generation of intraplate magmatism in the North China Craton. Earth and Planetary Science Letters, 2008, 270, 41-53.	4.4	412
46	Osmium isotope and highly siderophile element systematics of lunar impact melt breccias: Implications for the late accretion history of the Moon and Earth. Geochimica Et Cosmochimica Acta, 2008, 72, 3022-3042.	3.9	102
47	Osâ€“Pbâ€“Nd isotope and highly siderophile and lithophile trace element systematics of komatiitic rocks from the Volotsk suite, SE Baltic Shield. Precambrian Research, 2007, 158, 119-137.	2.7	60
48	Reâ€“Os evidence for the age and origin of peridotites from the Dabieâ€“Sulu ultrahigh pressure metamorphic belt, China. Chemical Geology, 2007, 236, 323-338.	3.3	49
49	Highly siderophile element geochemistry of 187Os-enriched 2.8 Ga Kostomuksha komatiites, Baltic Shield. Geochimica Et Cosmochimica Acta, 2005, 69, 1607-1618.	3.9	73
50	Re-Os isotopic systematics and platinum group element composition of the Tagish Lake carbonaceous chondrite. Geochimica Et Cosmochimica Acta, 2005, 69, 1619-1631.	3.9	64
51	Evidence for the early differentiation of the core from Ptâ€“Reâ€“Os isotope systematics of 2.8-Ga komatiites. Earth and Planetary Science Letters, 2005, 237, 118-134.	4.4	74
52	Platinum group element geochemistry of komatiites from the Alexo and Pyke Hill areas, Ontario, Canada 1 1Associate editor: R. J. Walker. Geochimica Et Cosmochimica Acta, 2004, 68, 1361-1383.	3.9	166
53	Precise Ptâ€“Reâ€“Os isotope systematics of the mantle from 2.7-Ga komatiites. Earth and Planetary Science Letters, 2004, 224, 157-174.	4.4	61
54	186Osâ€“187Os systematics of Gorgona Island komatiites: implications for early growth of the inner core. Earth and Planetary Science Letters, 2003, 206, 411-426.	4.4	123

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55	Platinum group element fractionation in a komatiitic basalt lava lake. Geochimica Et Cosmochimica Acta, 2001, 65, 2979-2993.	3.9	187
56	187 Os-enriched domain in an Archean mantle plume: evidence from 2.8 Ga komatiites of the Kostomuksha greenstone belt, NW Baltic Shield. Earth and Planetary Science Letters, 2001, 186, 513-526.	4.4	45
57	Platinum group elements in Kostomuksha komatiites and basalts: implications for oceanic crust recycling and core-mantle interaction. Geochimica Et Cosmochimica Acta, 2000, 64, 4227-4242.	3.9	138