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	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
2	Temporal Evolution of the Lithospheric Mantle beneath the Eastern North China Craton. Journal of Petrology, 2009, 50, 1857-1898.	2.8	237
3	¹⁸² W Evidence for Long-Term Preservation of Early Mantle Differentiation Products. Science, 2012, 335, 1065-1069.	12.6	211
4	Radar-Enabled Recovery of the Sutterâ€™s Mill Meteorite, a Carbonaceous Chondrite Regolith Breccia. Science, 2012, 338, 1583-1587.	12.6	191
5	Platinum group element fractionation in a komatiitic basalt lava lake. Geochimica Et Cosmochimica Acta, 2001, 65, 2979-2993.	3.9	187
6	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
7	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
8	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
9	Tungsten isotopic evidence for disproportional late accretion to the Earth and Moon. Nature, 2015, 520, 530-533.	27.8	127
10	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
11	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
12	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
13	Osmium isotope and highly siderophile element systematics of the lunar crust. Earth and Planetary Science Letters, 2010, 289, 595-605.	4.4	95
14	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
15	The coupled ¹⁸²Wâ€¹⁴²Nd record of early terrestrial mantle differentiation. Geochemistry, Geophysics, Geosystems, 2016, 17, 2168-2193.	2.5	87
16	Komatiites constrain molybdenum isotope composition of the Earth's mantle. Earth and Planetary Science Letters, 2015, 421, 129-138.	4.4	79
17	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
18	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

#	Article	IF	Citations
19	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
20	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
21	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
22	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
23	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
24	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
25	In search of late-stage planetary building blocks. Chemical Geology, 2015, 411, 125-142.	3.3	61
26	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
27	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
28	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
29	An oceanic subduction origin for Archaean granitoids revealed by silicon isotopes. Nature Geoscience, 2019, 12, 774-778.	12.9	55
30	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
31	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
32	Extreme persistence of cratonic lithosphere in the southwest Pacific: Paleoproterozoic Os isotopic signatures in Zealandia. Geology, 2013, 41, 231-234.	4.4	51
33	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
34	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
35	Titanium stable isotopic variations in chondrites, achondrites and lunar rocks. Geochimica Et Cosmochimica Acta, 2017, 213, 534-552.	3.9	46
36	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

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37	The gallium isotopic composition of the bulk silicate Earth. Chemical Geology, 2017, 448, 164-172.	3.3	39
38	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
39	Mantle data imply a decline of oxidizable volcanic gases could have triggered the Great Oxidation. Nature Communications, 2020, 11, 2774.	12.8	36
40	Ultra-depleted 2.05ÂGa komatiites of Finnish Lapland: Products of grainy late accretion or core-mantle interaction?. Chemical Geology, 2020, 554, 119801.	3.3	31
41	Characterization of the dominant impactor signature for Apollo 17 impact melt rocks. Geochimica Et Cosmochimica Acta, 2014, 131, 62-80.	3.9	29
42	The stable strontium isotopic composition of ocean island basalts, mid-ocean ridge basalts, and komatiites. Chemical Geology, 2018, 483, 595-602.	3.3	26
43	High-precision determination of the oxidation state of komatiite lavas using vanadium liquid-mineral partitioning. Chemical Geology, 2016, 433, 36-45.	3.3	20
44	Evolution of the Ca isotopic composition of the mantle. Geochimica Et Cosmochimica Acta, 2019, 258, 195-206.	3.9	17
45	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
46	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
47	Vanadium isotope composition of the Bulk Silicate Earth: Constraints from peridotites and komatiites. Geochimica Et Cosmochimica Acta, 2019, 259, 288-301.	3.9	13
48	The komatiite testimony to ancient mantle heterogeneity. Chemical Geology, 2022, 594, 120776.	3.3	13
49	Transition metals in komatiitic olivine: Proxies for mantle composition, redox conditions, and sulfide mineralization potential. American Mineralogist, 2019, 104, 1143-1155.	1.9	10
50	Sulfideâ€dominated partial melting pathways in brachinites. Meteoritics and Planetary Science, 2020, 55, 2021-2043.	1.6	7
51	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
52	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
53	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
54	When was the Earthâ€™s conveyor belt set in motion?. American Mineralogist, 2015, 100, 2369-2370.	1.9	1

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55	Platinum Group Elements. Encyclopedia of Earth Sciences Series, 2016, , 1-5.	0.1	1
56	CHAPTER 3. Application of Radiogenic Isotopes in Geosciences: Overview and Perspectives. RSC Detection Science, 2014, , 49-93.	0.0	0
57	Platinum Group Elements. Encyclopedia of Earth Sciences Series, 2018, , 1236-1239.	0.1	0