

Jean-Pierre Lorand

List of Publications by Year in descending order

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82
papers

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53794
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3360
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#	ARTICLE	IF	CITATIONS
1	Osmium isotopic compositions of mantle xenoliths: a global perspective. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 1311-1323.	3.9	594
2	Highly siderophile element composition of the Earth's primitive upper mantle: Constraints from new data on peridotite massifs and xenoliths. <i>Geochimica Et Cosmochimica Acta</i> , 2006, 70, 4528-4550.	3.9	506
3	Longevity of sub-continental mantle lithosphere from osmium isotope systematics in orogenic peridotite massifs. <i>Nature</i> , 1995, 376, 159-162.	27.8	316
4	Origin and age of the earliest Martian crust from meteorite NWA7533. <i>Nature</i> , 2013, 503, 513-516.	27.8	269
5	Platinum-group element abundances in the upper mantle: new constraints from in situ and whole-rock analyses of Massif Central xenoliths (France). <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 2789-2806.	3.9	246
6	Residual platinum-group minerals from highly depleted harzburgites of the Lherz massif (France) and their role in HSE fractionation of the mantle. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 3082-3097.	3.9	228
7	New insights into the Re-Os systematics of sub-continental lithospheric mantle from in situ analysis of sulphides. <i>Earth and Planetary Science Letters</i> , 2002, 203, 651-663.	4.4	212
8	Sulfide petrology and highly siderophile element geochemistry of abyssal peridotites: a coupled study of samples from the Kane Fracture Zone (45°W 23°20'N, MARK area, Atlantic Ocean). <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 1553-1570.	3.9	209
9	Sulphur isotope composition of orogenic spinel lherzolite massifs from Ariège (North-Eastern France) Tj ETQq1 1 0.784314 _{3.9} / Overlock 10 T		
10	In situ Os isotopes in abyssal peridotites bridge the isotopic gap between MORBs and their source mantle. <i>Nature</i> , 2005, 436, 1005-1008.	27.8	190
11	Fractionation of Platinum-group Elements and Gold in the Upper Mantle: a Detailed Study in Pyrenean Orogenic Lherzolites. <i>Journal of Petrology</i> , 1999, 40, 957-981.	2.8	174
12	The Paris meteorite, the least altered CM chondrite so far. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 124, 190-222.	3.9	163
13	Platinum-group element systematics in Mid-Oceanic Ridge basaltic glasses from the Pacific, Atlantic, and Indian Oceans. <i>Geochimica Et Cosmochimica Acta</i> , 2005, 69, 2613-2627.	3.9	162
14	Platinum-group element systematics and petrogenetic processing of the continental upper mantle: A review. <i>Lithos</i> , 2013, 164-167, 2-21.	1.4	144
15	Platinum-group element micronuggets and refertilization process in Lherz orogenic peridotite (northeastern Pyrenees, France). <i>Earth and Planetary Science Letters</i> , 2010, 289, 298-310.	4.4	142
16	A multi-technique study of platinum group element systematic in some Ligurian ophiolitic peridotites, Italy. <i>Chemical Geology</i> , 2004, 208, 175-194.	3.3	136
17	Chalcophile and Siderophile Elements in Mantle Rocks: Trace Elements Controlled By Trace Minerals. <i>Reviews in Mineralogy and Geochemistry</i> , 2016, 81, 441-488.	4.8	129
18	Sulfur and selenium systematics of the subcontinental lithospheric mantle: Inferences from the Massif Central xenolith suite (France). <i>Geochimica Et Cosmochimica Acta</i> , 2003, 67, 4137-4151.	3.9	127

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19	Re-Os and S systematics of spinel peridotite xenoliths from east central China: Evidence for contrasting effects of melt percolation. <i>Earth and Planetary Science Letters</i> , 2005, 239, 286-308.	4.4	127
20	Pyrrhotite and the remanent magnetization of SNC meteorites: a changing perspective on Martian magnetism. <i>Earth and Planetary Science Letters</i> , 2001, 190, 1-12.	4.4	125
21	Volatile-rich Metasomatism in Montferrier Xenoliths (Southern France): Implications for the Abundances of Chalcophile and Highly Siderophile Elements in the Subcontinental Mantle. <i>Journal of Petrology</i> , 2011, 52, 2009-2045.	2.8	107
22	Clinopyroxene microtextures reveal incompletely extracted melts in abyssal peridotites. <i>Geology</i> , 2001, 29, 155.	4.4	105
23	Platinum-Group Elements: A New Set of Key Tracers for the Earth's Interior. <i>Elements</i> , 2008, 4, 247-252.	0.5	103
24	Abundance and distribution of platinum-group elements in orogenic lherzolites; a case study in a Fontete Rouge lherzolite (French Pyrénées). <i>Chemical Geology</i> , 2008, 248, 174-194.	3.3	101
25	Platinum-group elements and melt percolation processes in Sidamo spinel peridotite xenoliths, Ethiopia, East African Rift. <i>Chemical Geology</i> , 2003, 196, 57-75.	3.3	96
26	Platinum-group elements and the multistage metasomatic history of Kerguelen lithospheric mantle (South Indian Ocean). <i>Chemical Geology</i> , 2004, 208, 195-215.	3.3	95
27	Petrogenetic evolution of orogenic lherzolite massifs in the central and western Pyrenees. <i>Tectonophysics</i> , 1998, 292, 145-167.	2.2	92
28	Primitive basaltic melts included in podiform chromites from the Oman Ophiolite. <i>Earth and Planetary Science Letters</i> , 1997, 146, 489-497.	4.4	83
29	Matching Martian crustal magnetization and magnetic properties of Martian meteorites. <i>Meteoritics and Planetary Science</i> , 2005, 40, 529-540.	1.6	80
30	Petrogenesis of base metal sulphide assemblages of some peridotites from the Kaapvaal craton (South Africa). <i>Tectonophysics</i> , 1998, 31, 107-125.	3.1	75
31	Evidence for Modal Metasomatism in the Orogenic Spinel Lherzolite Body from Caussou (Northeastern Pyrenees, France). <i>Journal of Petrology</i> , 1989, 30, 199-228.	2.8	74
32	Reliability of Os model ages in pervasively metasomatized continental mantle lithosphere: a case study of Sidamo spinel peridotite xenoliths (East African Rift, Ethiopia). <i>Chemical Geology</i> , 2004, 208, 119-140.	3.3	74
33	Selenium and tellurium systematics of the Earth's mantle from high precision analyses of ultra-depleted orogenic peridotites. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 86, 354-366.	3.9	73
34	Analysis of platinum group elements and gold in geological materials using NiS fire assay and Te coprecipitation; the NiS dissolution step revisited. <i>Chemical Geology</i> , 2002, 185, 179-190.	3.3	69
35	Sulfide mineralogy and redox conditions in some shergottites. <i>Meteoritics and Planetary Science</i> , 2005, 40, 1257-1272.	1.6	68
36	An integrated petrological, geochemical and Re-Os isotope study of peridotite xenoliths from the Argyle lamproite, Western Australia and implications for cratonic diamond occurrences. <i>Lithos</i> , 2009, 112, 1096-1108.	1.4	65

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37	Asthenospheric metasomatism beneath the mid-ocean ridge: Evidence from depleted abyssal peridotites. <i>Geology</i> , 2004, 32, 301.	4.4	63
38	Determination of selenium and tellurium concentrations in Pyrenean peridotites (Ariege, France): New insight into S/Se/Te systematics of the upper mantle samples. <i>Chemical Geology</i> , 2010, 278, 120-130.	3.3	63
39	Highly siderophile element geochemistry of the Earth's mantle: new data for the Lanzo (Italy) and Ronda (Spain) orogenic peridotite bodies. <i>Lithos</i> , 2000, 53, 149-164.	1.4	57
40	Platinum-group elements, S, Se and Cu in highly depleted abyssal peridotites from the Mid-Atlantic Ocean Ridge (ODP Hole 1274A): Influence of hydrothermal and magmatic processes. <i>Contributions To Mineralogy and Petrology</i> , 2013, 166, 1521-1538.	3.1	57
41	In-situ geochemistry of sulfides in highly metasomatized mantle xenoliths from Kerguelen, southern Indian Ocean. <i>Lithos</i> , 2012, 154, 296-314.	1.4	52
42	Record of the ancient martian hydrosphere and atmosphere preserved in zircon from a Martian meteorite. <i>Nature Geoscience</i> , 2014, 7, 638-642.	12.9	49
43	Platinum-group element signature of the primitive mantle rejuvenated by melt-rock reactions: evidence from Sumail peridotites (Oman Ophiolite). <i>Terra Nova</i> , 2009, 21, 35-40.	2.1	48
44	A non-primitive origin of near-chondritic Sr/Se/Te ratios in mantle peridotites; implications for the Earth's late accretionary history. <i>Earth and Planetary Science Letters</i> , 2014, 385, 110-121.	4.4	48
45	Regolith breccia Northwest Africa 7533: Mineralogy and petrology with implications for early Mars. <i>Meteoritics and Planetary Science</i> , 2017, 52, 89-124.	1.6	43
46	Selenium isotopes as tracers of a late volatile contribution to Earth from the outer Solar System. <i>Nature Geoscience</i> , 2019, 12, 779-782.	12.9	42
47	Petrogenesis of the amphibole-rich veins from the Lherz orogenic lherzolite massif (Eastern Pyrenees,) Tj ETQq1 1 0.784314 rgBT /Overlithospheric mantle. <i>Contributions To Mineralogy and Petrology</i> , 2001, 140, 383-403.	3.1	37
48	Zr-rich accessory minerals (titanite, perrierite, zirconolite, baddeleyite) record strong oxidation associated with magma mixing in the south Peruvian potassic province. <i>Lithos</i> , 2008, 104, 54-70.	1.4	37
49	Petrology of an unusual orthopyroxene-bearing minette suite from southeastern Peru, Eastern Andean Cordillera: Al-rich lamproites contaminated by peraluminous granites. <i>Journal of Volcanology and Geothermal Research</i> , 1997, 75, 59-87.	2.1	33
50	Nickeliferous pyrite tracks pervasive hydrothermal alteration in Martian regolith breccia: A study in <sc>NWA</sc> 7533. <i>Meteoritics and Planetary Science</i> , 2015, 50, 2099-2120.	1.6	32
51	Petrology and Thermal History of Highly Deformed Mantle Xenoliths from the Montferrier Basanites, Languedoc, Southern France: A Comparison with Ultramafic Complexes from the North Pyrenean Zone. <i>Journal of Petrology</i> , 1987, 28, 887-919.	2.8	30
52	The geological record of base metal sulfides in the cratonic mantle: A microscale $^{187}\text{Os}/^{188}\text{Os}$ study of peridotite xenoliths from Somerset Island, Rae Craton (Canada). <i>Geochimica Et Cosmochimica Acta</i> , 2017, 216, 264-285.	3.9	30
53	Opaque minerals, magnetic properties, and paleomagnetism of the Tissint Martian meteorite. <i>Meteoritics and Planetary Science</i> , 2013, 48, 1919-1936.	1.6	29
54	Petrogenesis of a zirconolite-bearing Mediterranean-type lamproite from the Peruvian Altiplano (Andean Cordillera). <i>Lithos</i> , 2003, 69, 15-35.	1.4	28

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55	Earth-like Habitable Environments in the Subsurface of Mars. <i>Astrobiology</i> , 2021, 21, 741-756.	3.0	27
56	Sulfide petrology of four nakhlites: Northwest Africa 817, Northwest Africa 998, Nakhla, and Governador Valadares. <i>Meteoritics and Planetary Science</i> , 2011, 46, 769-784.	1.6	26
57	Pyrite tracks assimilation of crustal sulfur in Pyrenean peridotites. <i>Mineralogy and Petrology</i> , 2011, 101, 115-128.	1.1	24
58	Mineralogical control of selenium, tellurium and highly siderophile elements in the Earthâ€™s mantle: Evidence from mineral separates of ultra-depleted mantle residues. <i>Chemical Geology</i> , 2015, 396, 16-24.	3.3	21
59	Determination of Total Sulfur Contents in the International Rock Reference Material SY-2 and Other Mafic and Ultramafic Rocks Using an Improved Scheme of Combustion/Iodometric Titration. <i>Geostandards and Geoanalytical Research</i> , 2005, 29, 123-130.	1.9	20
60	Metalâ€saturated sulfide assemblages in NWA 2737: Evidence for impactâ€related sulfur devolatilization in Martian meteorites. <i>Meteoritics and Planetary Science</i> , 2012, 47, 1830-1841.	1.6	20
61	Chalcophile-siderophile element systematics of hydrothermal pyrite from martian regolith breccia NWA 7533. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 241, 134-149.	3.9	20
62	Petrogenesis of Feâ€Ti oxides in amphibole-rich veins from the Lherz orogenic peridotite (Northeastern Tj ETQq0 0 0 rgBT /Overlock 10		
63	Melt inclusions in augite from the nakhlite meteorites: A reassessment of nakhlite parental melt and implications for petrogenesis. <i>Meteoritics and Planetary Science</i> , 2012, 47, 330-344.	1.6	18
64	Surface vitrification caused by natural fires in Late Pleistocene wetlands of the Atacama Desert. <i>Earth and Planetary Science Letters</i> , 2017, 469, 15-26.	4.4	17
65	Destructive and non-destructive microanalysis of biocarbonates applied to anomalous otoliths of archaeological and modern sciaenids (Teleostei) from Peru and Chile. <i>Comptes Rendus - Biologies</i> , 2005, 328, 243-252.	0.2	16
66	HRTEM-AEM-HAADF-STEM study of platinum-group elements within a mantle-derived Cr spinel (Lherz; Tj ETQq0 0 0 rgBT /Overlock 10 T		
67	Novodneprite (AuPb3), anyuite [Au(Pb, Sb)2] and gold micro- and nano-inclusions within plastically deformed mantle-derived olivine from the Lherz peridotite (Pyrenees, France): a HRTEMâ€AEMâ€EELS study. <i>Physics and Chemistry of Minerals</i> , 2015, 42, 143-150.	0.8	15
68	Nanoscale variations in 187 Os isotopic composition and HSE systematics in a Bultfontein peridotite. <i>Earth and Planetary Science Letters</i> , 2016, 447, 60-71.	4.4	15
69	The role of sulfides in the fractionation of highly siderophile and chalcophile elements during the formation of martian shergottite meteorites. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 210, 1-24.	3.9	15
70	Understanding Reâ€Os systematics and model ages in metamorphosed Archean ultramafic rocks: A single mineral to whole-rock investigation. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 167, 205-240.	3.9	14
71	Northwest Africa 8694, a ferroan chassignite: Bridging the gap between nakhlites and chassignites. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 282, 201-226.	3.9	14
72	First occurrence of diopside sanidine phlogopite lamproite in the Andean Cordillera: the Huacancha and Morojarja dikes, southern Peru. <i>Canadian Journal of Earth Sciences</i> , 1997, 34, 1118-1127.	1.3	13

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73	Exsolution and shock microstructures of igneous pyroxene clasts in the Northwest Africa 7533 Martian meteorite. <i>Meteoritics and Planetary Science</i> , 2016, 51, 932-945.	1.6	13
74	Petrogenesis of martian sulfides in the Chassigny meteorite. <i>American Mineralogist</i> , 2018, 103, 872-885.	1.9	9
75	The sulfur budget and sulfur isotopic composition of Martian regolith breccia NWA 7533. <i>Meteoritics and Planetary Science</i> , 2020, 55, 2097-2116.	1.6	8
76	Trinepheline and fabriesite: two new mineral species from the jadeite deposit of Tawmaw (Myanmar). <i>European Journal of Mineralogy</i> , 2014, 26, 257-265.	1.3	7
77	Genesis of a florencite-bearing kaolin deposit on ordovician schists at Saint-Aubin-des-Châteaux, Armorican Massif, France. <i>Ore Geology Reviews</i> , 2020, 120, 103445.	2.7	7
78	Caleta el Cobre 022 Martian meteorite: Increasing nakhlite diversity. <i>Meteoritics and Planetary Science</i> , 2020, 55, 1539-1563.	1.6	7
79	Chalcophile-siderophile element systematics and regional-scale magmatic percolation in the Ronda peridotite massif (Spain). <i>Lithos</i> , 2021, 380-381, 105901.	1.4	3
80	Reply to comment by S. Arai on "Primitive basaltic melts included in podiform chromites from the Oman ophiolite" by P. Schiano et al.. <i>Earth and Planetary Science Letters</i> , 1998, 156, 121-123.	4.4	1
81	SULPHIDE PETROLOGY AND CONTRIBUTION OF SUBDUCTED SULPHUR IN DIAMONDIFEROUS GARNET-BEARING PYROXENITES FROM BENI BOUSERA (NORTHERN MOROCCO). <i>Journal of Petrology</i> , 0, .	2.8	1
82	Widespread glasses generated by cometary fireballs during the late Pleistocene in the Atacama Desert, Chile: COMMENT. <i>Geology</i> , 2022, 50, e550-e550.	4.4	1