

# Petrus J Le Roux

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5234268/publications.pdf>

Version: 2024-02-01

89  
papers

2,857  
citations

236925

25  
h-index

189892

50  
g-index

91  
all docs

91  
docs citations

91  
times ranked

3075  
citing authors

#	ARTICLE	IF	CITATIONS
1	A long in situ section of the lower ocean crust: results of ODP Leg 176 drilling at the Southwest Indian Ridge. <i>Earth and Planetary Science Letters</i> , 2000, 179, 31-51.	4.4	456
2	Lithium isotopes in global mid-ocean ridge basalts. <i>Geochimica Et Cosmochimica Acta</i> , 2008, 72, 1626-1637.	3.9	189
3	Strontium isotope evidence for landscape use by early hominins. <i>Nature</i> , 2011, 474, 76-78.	27.8	175
4	The effects of variable sources, processes and contaminants on the composition of northern EPR MORB ( $8\text{‰}^{10}\text{N}$ and $12\text{‰}^{14}\text{N}$ ): Evidence from volatiles ( $\text{H}_2\text{O}$ , $\text{CO}_2$ , S) and halogens (F, Cl). <i>Earth and Planetary Science Letters</i> , 2006, 251, 209-231.	4.4	151
5	Mantle heterogeneity beneath the southern Mid-Atlantic Ridge: trace element evidence for contamination of ambient asthenospheric mantle. <i>Earth and Planetary Science Letters</i> , 2002, 203, 479-498.	4.4	112
6	Strontium isotope ratios ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) of tooth enamel: a comparison of solution and laser ablation multicollector inductively coupled plasma mass spectrometry methods. <i>Rapid Communications in Mass Spectrometry</i> , 2008, 22, 3187-3194.	1.5	110
7	Strontium isotope investigation of ungulate movement patterns on the Pleistocene Paleo-Agulhas Plain of the Greater Cape Floristic Region, South Africa. <i>Quaternary Science Reviews</i> , 2016, 141, 65-84.	3.0	82
8	In situ, multiple-multiplier, laser ablation ICP-MS measurement of boron isotopic composition ( $^{11}\text{B}$ ) at the nanogram level. <i>Chemical Geology</i> , 2004, 203, 123-138.	3.3	76
9	The oxygen isotope composition of Karoo and Etendeka picrites: High $^{18}\text{O}$ mantle or crustal contamination?. <i>Contributions To Mineralogy and Petrology</i> , 2015, 170, 1.	3.1	73
10	Paleolithic to Bronze Age Siberians Reveal Connections with First Americans and across Eurasia. <i>Cell</i> , 2020, 181, 1232-1245.e20.	28.9	71
11	Light Stable Isotopic Compositions of Enriched Mantle Sources: Resolving the Dehydration Paradox. <i>Geochemistry, Geophysics, Geosystems</i> , 2017, 18, 3801-3839.	2.5	70
12	Strontium isotope ratios in fossil teeth from South Africa: assessing laser ablation MC-ICP-MS analysis and the extent of diagenesis. <i>Journal of Archaeological Science</i> , 2010, 37, 1437-1446.	2.4	65
13	Peridotitic Lithosphere Metasomatized by Volatile-bearing Melts, and its Association with Intraplate Alkaline HIMU-like Magmatism. <i>Journal of Petrology</i> , 2016, 57, 2053-2078.	2.8	56
14	Origin and evolution of the $\sim 1.9$ Ga Richtersveld Magmatic Arc, SW Africa. <i>Precambrian Research</i> , 2017, 292, 417-451.	2.7	53
15	Earliest Evidence for the Ivory Trade in Southern Africa: Isotopic and ZooMS Analysis of Seventh to Tenth Century ad Ivory from KwaZulu-Natal. <i>African Archaeological Review</i> , 2016, 33, 411-435.	1.4	51
16	Geochemical and isotopic constraints on the tectonic and crustal evolution of the Shackleton Range, East Antarctica, and correlation with other Gondwana crustal segments. <i>Precambrian Research</i> , 2010, 180, 85-112.	2.7	49
17	Selenium and tellurium systematics in MORBs from the southern Mid-Atlantic Ridge ( $47\text{‰}^{50}\text{S}$ ). <i>Geochimica Et Cosmochimica Acta</i> , 2014, 144, 379-402.	3.9	47
18	Crystallization processes beneath the southern Mid-Atlantic Ridge ( $40\text{‰}^{55}\text{S}$ ), evidence for high-pressure initiation of crystallization. <i>Contributions To Mineralogy and Petrology</i> , 2002, 142, 582-602.	3.1	46

#	ARTICLE	IF	CITATIONS
19	Magmatic effects of the Cobb hot spot on the Juan de Fuca Ridge. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	45
20	MORB melting processes beneath the southern Mid-Atlantic Ridge (40°–55°S): a role for mantle plume-derived pyroxenite. <i>Contributions To Mineralogy and Petrology</i> , 2002, 144, 206-229.	3.1	40
21	Implications of the distribution, age and origins of the granites of the Mesoproterozoic Spektakel Suite for the timing of the Namaqua Orogeny in the Bushmanland Subprovince of the Namaqua-Natal Metamorphic Province, South Africa. <i>Precambrian Research</i> , 2018, 312, 68-98.	2.7	40
22	Strontium isotope analyses of large herbivore habitat use in the Cape Fynbos region of South Africa. <i>Oecologia</i> , 2010, 164, 567-578.	2.0	39
23	Diffusion-zoned pyroxenes in an isotopically heterogeneous mantle lithosphere beneath the Dunedin Volcanic Group, New Zealand, and their implications for intraplate alkaline magma sources. <i>Lithosphere</i> , 2017, 9, 463-475.	1.4	30
24	Lithium isotope analysis of natural and synthetic glass by laser ablation MC-ICP-MS. <i>Journal of Analytical Atomic Spectrometry</i> , 2010, 25, 1033.	3.0	29
25	The Anita Peridotite, New Zealand: Ultra-depletion and Subtle Enrichment in Sub-arc Mantle. <i>Journal of Petrology</i> , 2016, 57, 717-750.	2.8	28
26	Sr- and Nd- isotope variations along the Pleistocene San Pedro "Linzor volcanic chain, N. Chile: Tracking the influence of the upper crustal Altiplano-Puna Magma Body. <i>Journal of Volcanology and Geothermal Research</i> , 2017, 341, 172-186.	2.1	27
27	Strontium isotope analysis of curved tooth enamel surfaces by laser-ablation multi-collector ICP-MS. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2014, 416, 142-149.	2.3	26
28	In Situ <sup>87</sup> Sr/ <sup>86</sup> Sr of Scheelite and Calcite Reveals Proximal and Distal Fluid-Rock Interaction During Orogenic W-Au Mineralization, Otago Schist, New Zealand. <i>Economic Geology</i> , 2018, 113, 1571-1586.	3.8	26
29	Magmatic differentiation at La Poruña scoria cone, Central Andes, northern Chile: Evidence for assimilation during turbulent ascent processes, and genetic links with mafic eruptions at adjacent San Pedro volcano. <i>Lithos</i> , 2019, 338-339, 128-140.	1.4	24
30	The Dunedin Volcanic Group and a revised model for Zealandia's alkaline intraplate volcanism. <i>New Zealand Journal of Geology, and Geophysics</i> , 2020, 63, 510-529.	1.8	24
31	Linking the mafic volcanism with the magmatic stages during the last 1 Ma in the main volcanic arc of the Altiplano-Puna Volcanic Complex (Central Andes). <i>Journal of South American Earth Sciences</i> , 2019, 95, 102295.	1.4	23
32	The Keimoes Suite redefined: The geochronological and geochemical characteristics of the ferroan granites of the eastern Namaqua Sector, Mesoproterozoic Namaqua-Natal Metamorphic Province, southern Africa. <i>Journal of African Earth Sciences</i> , 2017, 134, 737-765.	2.0	22
33	Late Neolithic-Chalcolithic socio-economical dynamics in Northern Iberia. A multi-isotope study on diet and provenance from Santimami and Pico Ramos archaeological sites (Basque Country, Spain). <i>Quaternary International</i> , 2018, 481, 14-27.	1.5	21
34	The upper crustal magma plumbing system of the Pleistocene Apacheta-Aguilucho Volcanic Complex area (Altiplano-Puna, northern Chile) as inferred from the erupted lavas and their enclaves. <i>Journal of Volcanology and Geothermal Research</i> , 2019, 373, 179-198.	2.1	21
35	Multi-isotopic and morphometric evidence for the migration of farmers leading up to the Inka conquest of the southern Andes. <i>Scientific Reports</i> , 2020, 10, 21171.	3.3	19
36	Multi-tissue and multi-isotope ( <sup>13</sup> C, <sup>15</sup> N, <sup>18</sup> O and Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 e03349.	3.2	17

#	ARTICLE	IF	CITATIONS
37	Territorial mobility and subsistence strategies during the Ebro Basin Late Neolithic-Chalcolithic: A multi-isotope approach from San Juan cave (Loarre, Spain). <i>Quaternary International</i> , 2018, 481, 28-41.	1.5	16
38	Low- $\delta^{18}\text{O}$ zircon xenocrysts in alkaline basalts; a window into the complex carbonatite-metasomatic history of the Zealandia lithospheric mantle. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 254, 21-39.	3.9	16
39	Petrological, geochemical and isotopic data of Neoproterozoic rock units from Uruguay and South Africa: Correlation of basement terranes across the South Atlantic. <i>Gondwana Research</i> , 2020, 80, 12-32.	6.0	16
40	Environmental and ecological implications of strontium isotope ratios in mid-Pleistocene fossil teeth from Elandsfontein, South Africa. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2018, 490, 84-94.	2.3	15
41	Dating agpaitic rocks: A multi-system (U/Pb, Sm/Nd, Rb/Sr and $^{40}\text{Ar}/^{39}\text{Ar}$ ) isotopic study of layered nepheline syenites from the Ilímaussaq complex, Greenland. <i>Lithos</i> , 2019, 324-325, 74-88.	1.4	15
42	Petrogenesis of peralkaline granite dykes of the Straumsvola complex, western Dronning Maud Land, Antarctica. <i>Contributions To Mineralogy and Petrology</i> , 2018, 173, 1.	3.1	14
43	Geological evolution of Paniri volcano, Central Andes, northern Chile. <i>Journal of South American Earth Sciences</i> , 2018, 84, 184-200.	1.4	14
44	Constraining the sub-arc, parental magma composition for the giant Altiplano-Puna Volcanic Complex, northern Chile. <i>Scientific Reports</i> , 2020, 10, 6864.	3.3	14
45	Sunda arc mantle source $\delta^{18}\text{O}$ value revealed by intracrystal isotope analysis. <i>Nature Communications</i> , 2021, 12, 3930.	12.8	14
46	Crustal versus mantle origin of carbonate xenoliths from Kimberley region kimberlites using C-O-Sr-Nd-Pb isotopes and trace element abundances. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 266, 258-273.	3.9	13
47	Re-evaluating Scythian lifeways: Isotopic analysis of diet and mobility in Iron Age Ukraine. <i>PLoS ONE</i> , 2021, 16, e0245996.	2.5	13
48	Element and Sr- $^{18}\text{O}$ isotope redistribution across a plate boundary-scale crustal serpentinite mélange shear zone, and implications for the slab-mantle interface. <i>Earth and Planetary Science Letters</i> , 2019, 522, 198-209.	4.4	12
49	The geochemistry and geochronology of the upper granulite facies Kliprand dome: Comparison of the southern and northern parts of the Bushmanland Domain of the Namaqua Metamorphic Province, southern Africa and clues to its evolution. <i>Precambrian Research</i> , 2019, 330, 58-100.	2.7	12
50	Petrogenesis of the diamondiferous Pipe-8 ultramafic intrusion from the Wajrakarur kimberlite field of Southern India and its relation to the worldwide Mesoproterozoic (~1.1 Ga) magmatism of kimberlite and related rocks. <i>Geoscience Frontiers</i> , 2020, 11, 793-805.	8.4	12
51	Natural Clinopyroxene Reference Materials for in situ Sr Isotopic Analysis via LA-MC-ICP-MS. <i>Frontiers in Chemistry</i> , 2020, 8, 594316.	3.6	12
52	The great escape: Petrogenesis of low-silica volcanism of Pliocene to Quaternary age associated with the Altiplano-Puna Volcanic Complex of northern Chile ( $21^{\circ}10'\text{S}$ - $22^{\circ}50'\text{S}$ ). <i>Lithos</i> , 2019, 346-347, 105162.	1.4	11
53	The ups & downs of Iron Age animal management on the Oxfordshire Ridgeway, south-central England: A multi-isotope approach. <i>Journal of Archaeological Science</i> , 2019, 101, 199-212.	2.4	11
54	From texts to teeth: A multi-isotope study of sheep and goat herding practices in the Late Bronze Age (Mycenaean) polity of Knossos, Crete. <i>Journal of Archaeological Science: Reports</i> , 2019, 23, 36-56.	0.5	10

#	ARTICLE	IF	CITATIONS
55	Spatial variation in bioavailable strontium isotope ratios ( $^{87}\text{Sr}/^{86}\text{Sr}$ ) in Kenya and northern Tanzania: Implications for ecology, paleoanthropology, and archaeology. <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2020, 560, 109957.	2.3	10
56	Geology, geochemistry and $\text{Sr}^{87}/\text{Nd}^{143}$ constraints of selected metavolcanic rocks from the eastern boundary of the Saharan Metacraton, southern Sudan: A possible revision of the eastern boundary. <i>Precambrian Research</i> , 2016, 281, 566-584.	2.7	9
57	The 1.8 Ga Gladkop Suite: The youngest Palaeoproterozoic domain in the Namaqua-Natal Metamorphic Province, South Africa. <i>Precambrian Research</i> , 2020, 350, 105941.	2.7	9
58	The geology and geochemistry of the Espungabera Formation of central Mozambique and its tectonic setting on the eastern margin of the Kalahari Craton. <i>Journal of African Earth Sciences</i> , 2015, 101, 96-112.	2.0	8
59	Enamel isotopic data from the domesticated animals at Kotada Bhadli, Gujarat, reveals specialized animal husbandry during the Indus Civilization. <i>Journal of Archaeological Science: Reports</i> , 2018, 21, 183-199.	0.5	8
60	Heading for the hills? A multi-isotope study of sheep management in first-millennium BC Italy. <i>Journal of Archaeological Science: Reports</i> , 2020, 29, 102036.	0.5	8
61	The role of crustal contamination in the petrogenesis of nepheline syenite to granite magmas in the Ditrăfu Complex, Romania: evidence from O-, Nd-, Sr- and Pb-isotopes. <i>Contributions To Mineralogy and Petrology</i> , 2020, 175, 1.	3.1	8
62	Eruptive history of La Poruña scoria cone, Central Andes, Northern Chile. <i>Bulletin of Volcanology</i> , 2020, 82, 1.	3.0	8
63	Peritectic assemblage entrainment as the main compositional driver in the I-type Vredenburg Granite, north-western Pan-African Saldania Belt, South Africa: A whole-rock chemical perspective. <i>Lithos</i> , 2020, 364-365, 105522.	1.4	8
64	Intraplate volcanism on the Zealandia Eocene-Early Oligocene continental shelf: the Waiareka-Deborah Volcanic Field, North Otago. <i>New Zealand Journal of Geology, and Geophysics</i> , 2020, 63, 450-468.	1.8	7
65	Saline groundwater in the Buffels River catchment, Namaqualand, South Africa: A new look at an old problem. <i>Science of the Total Environment</i> , 2021, 762, 143140.	8.0	7
66	Human mobility at Tell Atchana (Alalakh), Hatay, Turkey during the 2nd millennium BC: Integration of isotopic and genomic evidence. <i>PLoS ONE</i> , 2021, 16, e0241883.	2.5	7
67	Petrogenesis of lamprophyres synchronous to kimberlites from the Wajrakarur kimberlite field: Implications for contrasting lithospheric mantle sources and geodynamic evolution of the eastern Dharwar Craton of southern India. <i>Geological Journal</i> , 2019, 54, 2994-3016.	1.3	6
68	The life-history of a late Mesolithic woman in Iberia: A sequential multi-isotope approach. <i>Quaternary International</i> , 2020, 566-567, 233-244.	1.5	6
69	Pyrometamorphosed Otago Schist xenoliths cause minor contamination of Dunedin Volcanic Group basanite. <i>New Zealand Journal of Geology, and Geophysics</i> , 2020, 63, 530-546.	1.8	6
70	The geology and geochemistry of the Straumnsnutane Formation, Straumnsnutane, western Dronning Maud Land, Antarctica and its tectonic setting on the western margin of the Kalahari Craton: additional evidence linking it to the Umkondo Large Igneous Province. <i>Geological Society Special Publication</i> , 2017, 457, 61-85.	1.3	5
71	Anthropic resource exploitation and use of the territory at the onset of social complexity in the Neolithic-Chalcolithic Western Pyrenees: a multi-isotope approach. <i>Archaeological and Anthropological Sciences</i> , 2019, 11, 3665-3680.	1.8	5
72	The Mount Cameroon southwest flank eruptions: Geochemical constraints on the subsurface magma plumbing system. <i>Journal of Volcanology and Geothermal Research</i> , 2019, 384, 179-188.	2.1	5

#	ARTICLE	IF	CITATIONS
73	Upper crustal differentiation processes and their role in <sup>238</sup> U- <sup>230</sup> Th disequilibria at the San Pedro-Linzor volcanic chain (Central Andes). <i>Journal of South American Earth Sciences</i> , 2020, 102, 102672.	1.4	5
74	Evolution of the Azufre volcano (northern Chile): Implications for the Cerro Pabellón Geothermal Field as inferred from long lasting eruptive activity. <i>Journal of Volcanology and Geothermal Research</i> , 2022, 423, 107472.	2.1	5
75	Petrogenesis of amphibole megacrysts in lamprophyric intraplate magmatism in southern New Zealand. <i>New Zealand Journal of Geology, and Geophysics</i> , 2020, 63, 489-509.	1.8	4
76	Interdisciplinary Analysis of the Lehi Horse: Implications for Early Historic Horse Cultures of the North American West. <i>American Antiquity</i> , 0, , 1-21.	1.1	4
77	Bioavailable Strontium, Human Paleogeography, and Migrations in the Southern Andes: A Machine Learning and GIS Approach. <i>Frontiers in Ecology and Evolution</i> , 2021, 9, .	2.2	4
78	Physical and chemical evolution of the largest monogenetic lava field in the Central Andes: El Negrillar Volcanic Field, Chile. <i>Journal of Volcanology and Geothermal Research</i> , 2022, 426, 107541.	2.1	4
79	Distinct scheelite REE geochemistry and <sup>87</sup> Sr/ <sup>86</sup> Sr isotopes in proximally- and distally-sourced metamorphogenic hydrothermal systems, Otago Schist, New Zealand. <i>Ore Geology Reviews</i> , 2022, 144, 104800.	2.7	4
80	Human mobility in Byzantine Cyprus: A case study from the Hill of Agios Georgios, Nicosia. <i>Quaternary International</i> , 2021, , .	1.5	4
81	Investigating Cattle Procurement at Great Zimbabwe Using <sup>87</sup> Sr/ <sup>86</sup> Sr. <i>Journal of African Archaeology</i> , 2021, 19, 146-158.	0.6	3
82	The genesis and age of the Grunehogna Granite and Rb-Sr and Sm-Nd chemistry of the Annandagstoppane Granite, Ahlmanryggen, Dronning Maud Land, Antarctica. <i>Polar Science</i> , 2021, 30, 100717.	1.2	3
83	The role of ostrich in shaping the landscape use patterns of humans and hyenas on the southern coast of South Africa during the late Pleistocene. , 2018, , 333-346.		3
84	Population movements of the Huron-Wendat viewed through strontium isotope analysis. <i>Journal of Archaeological Science: Reports</i> , 2020, 33, 102466.	0.5	2
85	Sea, sickness and cautionary tales: a multi-isotope study from a post-mediaeval hospital at the city-port of Gibraltar (AD 1462-1704). <i>Archaeological and Anthropological Sciences</i> , 2020, 12, 1.	1.8	2
86	Scale of human mobility in northwestern Patagonia: An approach based on regional geology and strontium isotopes in human remains. <i>Geoarchaeology - an International Journal</i> , 2022, 37, 227-241.	1.5	2
87	An investigation into the <sup>87</sup> Sr/ <sup>86</sup> Sr radiogenic isotope geochemistry of the manganese ore of the Kalahari Manganese Field with a view on hydrothermal fluid flow and related rare earth element enrichments. <i>South African Journal of Geology</i> , 2019, 122, 237-248.	1.2	1
88	Lead and strontium isotopes as palaeodietary indicators in the Western Cape of South Africa. <i>South African Journal of Science</i> , 2020, 116, .	0.7	1
89	Structural Controls on Shallow Cenozoic Fluid Flow in the Otago Schist, New Zealand. <i>Geofluids</i> , 2020, 2020, 1-25.	0.7	1