Stephen F Foley

List of Publications by Year
in descending order

118 papers	9,962 citations	38742 50 h-index	34986 98 g-index
120 all docs	120 docs citations	120 times ranked	5726 citing authors

#	Article	IF	Citations
1	Mantle rocks in East Antarctica. Geological Society Memoir, 2023, 56, 17-32.	1.7	8
2	Gold endowment of the metasomatized lithospheric mantle for giant gold deposits: Insights from lamprophyre dykes. Geochimica Et Cosmochimica Acta, 2022, 316, 21-40.	3.9	23
3	Origin of low-MgO primitive intraplate alkaline basalts from partial melting of carbonate-bearing eclogite sources. Geochimica Et Cosmochimica Acta, 2022, 324, 240-261.	3.9	13
4	Melting of hydrous pyroxenites with alkali amphiboles in the continental mantle: 1. Melting relations and major element compositions of melts. Geoscience Frontiers, 2022, 13, 101380.	8.4	20
5	Thermochemical structure and evolution of cratonic lithosphere in central and southern Africa. Nature Geoscience, 2022, 15, 405-410.	12.9	12
6	Ancient continental blocks soldered from below. Nature, 2021, 592, 692-693.	27.8	1
7	Petrogenesis of Proterozoic alkaline ultramafic rocks in the Yilgarn Craton, Western Australia. Gondwana Research, 2021, 93, 197-217.	6.0	13
8	Transformation from oxidized to reduced alkaline magmas in the northern North China Craton. Lithos, 2021, 390-391, 106104.	1.4	2
9	Clarifying source assemblages and metasomatic agents for basaltic rocks in eastern Australia using olivine phenocryst compositions. Lithos, 2021, 390-391, 106122.	1.4	5
10	Origin of potassic postcollisional volcanic rocks in young, shallow, blueschist-rich lithosphere. Science Advances, 2021, 7, .	10.3	7
11	Massive carbon storage in convergent margins initiated by subduction of limestone. Nature Communications, 2021, 12, 4463.	12.8	21
12	Sediment-Peridotite Reaction Controls Fore-Arc Metasomatism and Arc Magma Geochemical Signatures. Geosciences (Switzerland), 2021, 11, 372.	2.2	12
13	Reconstruction of primary alkaline magma composition from mineral archives: Decipher mantle metasomatism by carbonated sediment. Chemical Geology, 2021, 577, 120279.	3.3	5
14	Experimental investigation of the composition of incipient melts in upper mantle peridotites in the presence of CO2 and H2O. Lithos, 2021, 396-397, 106224.	1.4	24
15	Pyroxenite in the mantle source of basanites at the Youkou maar, Adamawa Volcanic Massif (Cameroon Volcanic Line, West Africa). Chemical Geology, 2021, 583, 120478.	3.3	5
16	Dynamic Metasomatism Experiments Investigating the Interaction between Migrating Potassic Melt and Garnet Peridotite. Geosciences (Switzerland), 2021, 11, 432.	2.2	4
17	Variation in mantle lithology and composition beneath the Ngao Bilta volcano, Adamawa Massif, Cameroon volcanic line, West-central Africa. Geoscience Frontiers, 2020, 11, 665-677.	8.4	6
18	Calcium isotopic compositions of oceanic crust at various spreading rates. Geochimica Et Cosmochimica Acta, 2020, 278, 272-288.	3.9	37

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19	Generation of continental intraplate alkali basalts and implications for deep carbon cycle. Earth-Science Reviews, 2020, 201, 103073.	9.1	30
20	Two-Stage Origin of K-Enrichment in Ultrapotassic Magmatism Simulated by Melting of Experimentally Metasomatized Mantle. Minerals (Basel, Switzerland), 2020, 10, 41.	2.0	23
21	Subduction-related petrogenesis of Late Archean calc-alkaline lamprophyres in the Yilgarn Craton (Western Australia). Precambrian Research, 2020, 338, 105550.	2.7	29
22	Metasomatized lithospheric mantle for Mesozoic giant gold deposits in the North China craton. Geology, 2020, 48, 169-173.	4.4	85
23	The Role of Blueschist Stored in Shallow Lithosphere in the Generation of Postcollisional Orogenic Magmas. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019910.	3.4	2
24	Bushveld superplume drove Proterozoic magmatism and metallogenesis in Australia. Scientific Reports, 2020, 10, 19729.	3.3	18
25	Compositional and pressure controls on calcium and magnesium isotope fractionation in magmatic systems. Geochimica Et Cosmochimica Acta, 2020, 290, 257-270.	3.9	22
26	Displaced cratonic mantle concentrates deep carbon during continental rifting. Nature, 2020, 582, 67-72.	27.8	50
27	Early cretaceous lamprophyre dyke swarms in Jiaodong Peninsula, eastern North China Craton, and implications for mantle metasomatism related to subduction. Lithos, 2020, 368-369, 105593.	1.4	16
28	Kimberlite genesis from a common carbonate-rich primary melt modified by lithospheric mantle assimilation. Science Advances, 2020, 6, eaaz0424.	10.3	72
29	Rutile records for the cooling history of the Trans-North China orogen from assembly to break-up of the Columbia supercontinent. Precambrian Research, 2020, 346, 105763.	2.7	10
30	Platinum group element mobilization in the mantle enhanced by recycled sedimentary carbonate. Earth and Planetary Science Letters, 2020, 541, 116262.	4.4	15
31	Experimental interaction of granitic melt and peridotite at 1.5â€¯GPa: Implications for the origin of post-collisional K-rich magmatism in continental subduction zones. Lithos, 2019, 350-351, 105241.	1.4	10
32	Early continental crust generated by reworking of basalts variably silicified by seawater. Nature Geoscience, 2019, 12, 769-773.	12.9	45
33	Evidence for a Carbonatite-Influenced Source Assemblage for Intraplate Basalts from the Buckland Volcanic Province, Queensland, Australia. Minerals (Basel, Switzerland), 2019, 9, 546.	2.0	16
34	Calcium isotope fractionation during magmatic processes in the upper mantle. Geochimica Et Cosmochimica Acta, 2019, 249, 121-137.	3.9	58
35	Lithospheric transformation of the northern North China Craton by changing subduction style of the Paleo-Asian oceanic plate: Constraints from peridotite and pyroxenite xenoliths in the Yangyuan basalts. Lithos, 2019, 328-329, 58-68.	1.4	15
36	Melting of sediments in the deep mantle produces saline fluid inclusions in diamonds. Science Advances, 2019, 5, eaau2620.	10.3	16

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37	Geochemical characteristics of lawsonite blueschists in tectonic mÃ©lange from the TavÅŸanlÄ± Zone, Turkey: Potential constraints on the origin of Mediterranean potassium-rich magmatism. American Mineralogist, 2019, 104, 724-743.	1.9	11
38	An experimental study of the role of partial melts of sediments versus mantle melts in the sources of potassic magmatism. Journal of Asian Earth Sciences, 2019, 177, 76-88.	2.3	46
39	Thermal-chemical conditions of the North China Mesozoic lithospheric mantle and implication for the lithospheric thinning of cratons. Earth and Planetary Science Letters, 2019, 516, 1-11.	4.4	42
40	Kimberlites from Source to Surface: Insights from Experiments. Elements, 2019, 15, 393-398.	0.5	28
41	Hybridization Melting Between Continentâ€Derived Sediment and Depleted Peridotite in Subduction Zones. Journal of Geophysical Research: Solid Earth, 2018, 123, 3414-3429.	3.4	14
42	Petrology of spinel lherzolite xenoliths from Youkou volcano, Adamawa Massif, Cameroon Volcanic Line: mineralogical and geochemical fingerprints of sub-rift mantle processes. Contributions To Mineralogy and Petrology, 2018, 173, 1.	3.1	6
43	Insights into the petrogenesis of the West Kimberley lamproites from trace elements in olivine. Mineralogy and Petrology, 2018, 112, 519-537.	1.1	28
44	Calcium isotope evidence for subduction-enriched lithospheric mantle under the northern North China Craton. Geochimica Et Cosmochimica Acta, 2018, 238, 55-67.	3.9	39
45	Primary Melt Compositions in the Earth's Mantle. , 2018, , 3-42.		16
46	Characterisation of chromites, chromite hosted inclusions of silicates and metal alloys in chromitites from the Indo-Myanmar ophiolite belt of Northeastern India. Ore Geology Reviews, 2017, 90, 260-273.	2.7	11
47	Potassium-rich magmatism from a phlogopite-free source. Geology, 2017, 45, 467-470.	4.4	50
48	Trace elements in olivine of ultramafic lamprophyres controlled by phlogopite-rich mineral assemblages in the mantle source. Lithos, 2017, 292-293, 81-95.	1.4	41
49	Carbonated sediment recycling and its contribution to lithospheric refertilization under the northern North China Craton. Chemical Geology, 2017, 466, 641-653.	3.3	41
50	An essential role for continental rifts and lithosphere in the deep carbon cycle. Nature Geoscience, 2017, 10, 897-902.	12.9	150
51	Melting and dynamic metasomatism of mixed harzburgite + glimmerite mantle source: Implications for the genesis of orogenic potassic magmas. Chemical Geology, 2017, 455, 182-191.	3.3	52
52	Constraints on the sources of post-collisional K-rich magmatism: The roles of continental clastic sediments and terrigenous blueschists. Chemical Geology, 2017, 455, 192-207.	3.3	29
53	Low Ni olivine in silica-undersaturated ultrapotassic igneous rocks as evidence for carbonate metasomatism in the mantle. Earth and Planetary Science Letters, 2016, 444, 64-74.	4.4	86
54	Paleo-Asian oceanic slab under the North China craton revealed by carbonatites derived from subducted limestones. Geology, 2016, 44, 1039-1042.	4.4	67

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55	The Geochemical Complexity of Kimberlite Rocks and their Olivine Populations: a Comment on Cordier<i>et al.</i>(<i>Journal of Petrology</i>, 56, 1775â€“1796, 2015). Journal of Petrology, 2016, 57, 921-926.	2.8	16
56	First direct evidence of sedimentary carbonate recycling in subduction-related xenoliths. Scientific Reports, 2015, 5, 11547.	3.3	57
57	The olivine macrocryst problem: New insights from minor and trace element compositions of olivine from Lac de Gras kimberlites, Canada. Lithos, 2015, 220-223, 238-252.	1.4	104
58	Ancient Plate Tectonics. , 2014, , 1-12.		0
59	Terpenoid composition and chemotaxonomic aspects of Miocene amber from the Koroglu Mountains, Turkey. Journal of Analytical and Applied Pyrolysis, 2014, 105, 100-107.	5.5	21
60	Metamorphism and melting of picritic crust in the early Earth. Lithos, 2014, 189, 173-184.	1.4	30
61	Anatectic amphibole and restitic garnet in Variscan migmatite from NE Sardinia, Italy: insights into partial melting from mineral trace elements. European Journal of Mineralogy, 2014, 26, 381-395.	1.3	20
62	Enhanced Role of Transition Metal Ion Catalysis During In-Cloud Oxidation of SO ₂. Science, 2013, 340, 727-730.	12.6	286
63	Petrological characterization of the mantle source of Mediterranean lamproites: Indications from major and trace elements of phlogopite. Chemical Geology, 2013, 353, 267-279.	3.3	62
64	The Palaeoanthropocene â€“ The beginnings of anthropogenic environmental change. Anthropocene, 2013, 3, 83-88.	3.3	178
65	Recycling plus: A new recipe for the formation of Alpineâ€“Himalayan orogenic mantle lithosphere. Earth and Planetary Science Letters, 2013, 362, 187-197.	4.4	133
66	Minor and trace elements in olivines as probes into early igneous and mantle melting processes. Earth and Planetary Science Letters, 2013, 363, 181-191.	4.4	254
67	Molecular composition and chemotaxonomic aspects of Eocene amber from the Ameki Formation, Nigeria. Organic Geochemistry, 2012, 51, 55-62.	1.8	27
68	Non-explosive, dome-forming eruptions at Mt. Taranaki, New Zealand. Geomorphology, 2012, 136, 15-30.	2.6	51
69	Trace element variations in olivine phenocrysts from Ugandan potassic rocks as clues to the chemical characteristics of parental magmas. Contributions To Mineralogy and Petrology, 2011, 162, 1-20.	3.1	67
70	Mineral and trace element composition of the Lokpanta oil shales in the Lower Benue Trough, Nigeria. Fuel, 2011, 90, 2843-2849.	6.4	14
71	A Reappraisal of Redox Melting in the Earthâ€™s Mantle as a Function of Tectonic Setting and Time. Journal of Petrology, 2011, 52, 1363-1391.	2.8	242
72	Trace element partitioning in the granulite facies. Contributions To Mineralogy and Petrology, 2010, 159, 493-519.	3.1	51

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73	Continuous cratonic crust between the Congo and Tanzania blocks in western Uganda. International Journal of Earth Sciences, 2010, 99, 1559-1573.	1.8	68
74	Xenoliths from the sub-volcanic lithosphere of Mt Taranaki, New Zealand. Journal of Volcanology and Geothermal Research, 2010, 190, 192-202.	2.1	20
75	Structural characterization of Nigerian coals by X-ray diffraction, Raman and FTIR spectroscopy. Energy, 2010, 35, 5347-5353.	8.8	418
76	Sulfur isotope ratio measurements of individual sulfate particles by NanoSIMS. International Journal of Mass Spectrometry, 2008, 272, 63-77.	1.5	46
77	Laser-ablation ICP-MS analysis of siliceous rock glasses fused on an iridium strip heater using MgO dilution. Mikrochimica Acta, 2008, 160, 153-163.	5.0	62
78	Rejuvenation and erosion of the cratonic lithosphere. Nature Geoscience, 2008, 1, 503-510.	12.9	305
79	Î´³⁰Si and Î´²⁹Si Determinations on USGS BHVOâ€1 and BHVOâ€2 Reference Materials with a New Configuration on a Nu Plasma Multiâ€Collector ICPâ€MS. Geostandards and Geoanalytical Research, 2008, 32, 193-202.	1.9	101
80	Between carbonatite and lamproiteâ€"Diamondiferous Torngat ultramafic lamprophyres formed by carbonate-fluxed melting of cratonic MARID-type metasomes. Geochimica Et Cosmochimica Acta, 2008, 72, 3258-3286.	3.9	221
81	Contrasting types of metasomatism in dunite, wehrlite and websterite xenoliths from Kimberley, South Africa. Geochimica Et Cosmochimica Acta, 2008, 72, 5722-5756.	3.9	78
82	Fe-rich Dunite Xenoliths from South African Kimberlites: Cumulates from Karoo Flood Basalts. Journal of Petrology, 2007, 48, 1387-1409.	2.8	41
83	Craton reactivation on the Labrador Sea margins: 40Ar/39Ar age and Srâ€"Ndâ€"Hfâ€"Pb isotope constraints from alkaline and carbonatite intrusives. Earth and Planetary Science Letters, 2007, 256, 433-454.	4.4	234
84	11. Trace-Element Partitioning Between Amphibole and Silicate Melt. , 2007, , 417-452.		32
85	Genesis of Ultramafic Lamprophyres and Carbonatites at Aillik Bay, Labrador: a Consequence of Incipient Lithospheric Thinning beneath the North Atlantic Craton. Journal of Petrology, 2006, 47, 1261-1315.	2.8	289
86	Tertiary Ultrapotassic Volcanism in Serbia: Constraints on Petrogenesis and Mantle Source Characteristics. Journal of Petrology, 2005, 46, 1443-1487.	2.8	145
87	Integrating Ultramafic Lamprophyres into the IUGS Classification of Igneous Rocks: Rationale and Implications. Journal of Petrology, 2005, 46, 1893-1900.	2.8	173
88	Low-pressure fractionation of the Nyiragongo volcanic rocks, Virunga Province, D.R. Congo. Journal of Volcanology and Geothermal Research, 2004, 136, 269-295.	2.1	71
89	Trace element partitioning in lamproitic magmasâ€"the Gaussberg olivine leucitite. Lithos, 2004, 75, 19-38.	1.4	63
90	Torngat ultramafic lamprophyres and their relation to the North Atlantic Alkaline Province. Lithos, 2004, 76, 491-518.	1.4	93

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91	Evolution of the Archaean crust by delamination and shallow subduction. Nature, 2003, 421, 249-252.	27.8	200
92	Trace-element partitioning between synthetic potassic-richterites and silicate melts, and contrasts with the partitioning behaviour of pargasites and kaersutites. European Journal of Mineralogy, 2003, 15, 329-340.	1.3	26
93	Partial melting in Archean subduction zones: constraints from experimentally determined trace element partition coefficients between eclogitic minerals and tonalitic melts under upper mantle conditions. Precambrian Research, 2002, 113, 323-340.	2.7	133
94	The effect of crystal orientation on the wetting behaviour of silicate melts on the surfaces of spinel peridotite minerals. Contributions To Mineralogy and Petrology, 2002, 143, 254-262.	3.1	21
95	Growth of early continental crust controlled by melting of amphibolite in subduction zones. Nature, 2002, 417, 837-840.	27.8	885
96	Magmatic modification and metasomatism of the subcontinental mantle beneath the Vitim volcanic field (East Siberia): evidence from trace element data on pyroxenite and peridotite xenoliths from Miocene picrobasalt. Lithos, 2000, 54, 83-114.	1.4	62
97	Phase relations and fractionation sequences in potassic magma series modelled in the system CaMgSi 2 O 6 -KAlSiO 4 -Mg 2 SiO 4 -SiO 2 -F 2 O â^'1 at 1 bar to 18 kbar. Contributions To Mineralogy and Petrology, 2000, 138, 186-197.	3.1	48
98	Rutile/melt partition coefficients for trace elements and an assessment of the influence of rutile on the trace element characteristics of subduction zone magmas. Geochimica Et Cosmochimica Acta, 2000, 64, 933-938.	3.9	514
99	Partitioning of rare earth elements, Y, Th, U, and Pb between pargasite, kaersutite, and basanite to trachyte melts: Implications for percolated and veined mantle. Geochemistry, Geophysics, Geosystems, 2000, 1, n/a-n/a.	2.5	63
100	Trace element compositions of minerals in garnet and spinel peridotite xenoliths from the Vitim volcanic field, Transbaikalia, eastern Siberia. Lithos, 1999, 48, 263-285.	1.4	80
101	Evidence for Archean ocean crust with low high field strength element signature from diamondiferous eclogite xenoliths. Lithos, 1999, 48, 317-336.	1.4	108
102	Trace element compositions of minerals in garnet and spinel periodotite xenoliths from the Vitim volcanic field, Transbaikalia, eastern Siberia. Developments in Geotectonics, 1999, 24, 263-285.	0.3	6
103	Evidence for Archean ocean crust with low high field strength element signature from diamondiferous eclogite xenoliths. Developments in Geotectonics, 1999, 24, 317-336.	0.3	2
104	Trace element partition coefficients for clinopyroxene and phlogopite in an alkaline lamprophyre from Newfoundland by LAM-ICP-MS. Geochimica Et Cosmochimica Acta, 1996, 60, 629-638.	3.9	231
105	High-pressure synthesis of priderite and members of the lindsleyite-mathiasite and hawthorneite-yimengite series. Contributions To Mineralogy and Petrology, 1994, 117, 164-174.	3.1	28
106	Experimentally determined partitioning of high field strength- and selected transition elements between spinel and basaltic melt. Chemical Geology, 1994, 117, 193-218.	3.3	172
107	An experimental study of olivine lamproite: First results from the diamond stability field. Geochimica Et Cosmochimica Acta, 1993, 57, 483-489.	3.9	95
108	Potassic and ultrapotassic magmas and their origin. Lithos, 1992, 28, 181-185.	1.4	141

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109	Petrological characterization of the source components of potassic magmas: geochemical and experimental constraints. Lithos, 1992, 28, 187-204.	1.4	254
110	Vein-plus-wall-rock melting mechanisms in the lithosphere and the origin of potassic alkaline magmas. Lithos, 1992, 28, 435-453.	1.4	600
111	High-pressure stability of the fluor- and hydroxy-endmembers of pargasite and K-richterite. Geochimica Et Cosmochimica Acta, 1991, 55, 2689-2694.	3.9	130
112	A review and assessment of experiments on Kimberlites, Lamproites and Lamprophyres as a guide to their Origin. Journal of Earth System Science, 1990, 99, 57-80.	1.3	10
113	Parallels in the origin of the geochemical signatures of island arc volcanics and continental potassic igneous rocks: The role of residual titanates. Chemical Geology, 1990, 85, 1-18.	3.3	204
114	Experimental constraints on phlogopite chemistry in lamproites: 2. Effect of pressure-temperature variations. European Journal of Mineralogy, 1990, 2, 327-342.	1.3	41
115	Experimental constraints on phlogopite chemistry in lamproites: 1. The effect of water activity and oxygen fugacity. European Journal of Mineralogy, 1989, 1, 411-426.	1.3	89
116	The role of fluorine and oxygen fugacity in the genesis of the ultrapotassic rocks. Contributions To Mineralogy and Petrology, 1986, 94, 183-192.	3.1	83
117	The effect of fluorine on phase relationships in the system $KAlSiO_4$-Mg_2SiO_4-SiO_2 at 28 kbar and the solution mechanism of fluorine in silicate melts. Contributions To Mineralogy and Petrology, 1986, 93, 46-55.	3.1	83
118	Liquid immiscibility and melt segregation in alkaline lamprophyres from Labrador. Lithos, 1984, 17, 127-137.	1.4	69