Trevor J Falloon

List of Publications by Year
in descending order

57	4,272	136740	161609
papers	citations	32 h-index	54 g-index

58	58	58	2609
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Anhydrous Partial Melting of a Fertile and Depleted Peridotite from 2 to 30 kb and Application to Basalt Petrogenesis. Journal of Petrology, 1988, 29, 1257-1282.	1.1	335
2	Melting of Refractory Mantle at 1middle dot5, 2 and 2middle dot5 GPa under Anhydrous and H2O-undersaturated Conditions: Implications for the Petrogenesis of High-Ca Boninites and the Influence of Subduction Components on Mantle Melting. Journal of Petrology, 2000, 41, 257-283.	1.1	326
3	The origin of island arc high-alumina basalts. Contributions To Mineralogy and Petrology, 1987, 97, 417-430.	1.2	235
4	Anhydrous partial melting of MORB pyrolite and other peridotite compositions at 10 kbar: Implications for the origin of primitive MORB glasses. Mineralogy and Petrology, 1987, 37, 181-219.	0.4	200
5	The solidus of carbonated, fertile peridotite. Earth and Planetary Science Letters, 1989, 94, 364-370.	1.8	179
6	H2O Abundance in Depleted to Moderately Enriched Mid-ocean Ridge Magmas; Part I: Incompatible Behaviour, Implications for Mantle Storage, and Origin of Regional Variations. Journal of Petrology, 2000, 41, 1329-1364.	1.1	167
7	The petrogenesis of high-calcium boninite lavas dredged from the northern Tonga ridge. Earth and Planetary Science Letters, 1991, 102, 375-394.	1.8	162
8	Primary magmas and mantle temperatures. European Journal of Mineralogy, 2001, 13, 437-451.	0.4	144
9	Melt Inclusions in Olivine Phenocrysts: Using Diffusive Re-equilibration to Determine the Cooling History of a Crystal, with Implications for the Origin of Olivine-phyric Volcanic Rocks. Journal of Petrology, 2002, 43, 1651-1671.	1.1	136
10	Experimental Study of the Influence of Water on Melting and Phase Assemblages in the Upper Mantle. Journal of Petrology, 2014, 55, 2067-2096.	1.1	135
11	The H2O content of basalt glasses from Southwest Pacific back-arc basins. Earth and Planetary Science Letters, 1993, 117, 347-362.	1.8	132
12	Primitive layered gabbros from fast-spreading lower oceanic crust. Nature, 2014, 505, 204-207.	13.7	125
13	Solidus of carbonated fertile peridotite under fluid-saturated conditions. Geology, 1990, 18, 195.	2.0	121
14	Experimental tests of low degree peridotite partial melt compositions: implications for the nature of anhydrous near-solidus peridotite melts at 1 GPa. Earth and Planetary Science Letters, 1997, 152, 149-162.	1.8	119
15	Calcic melt inclusions in primitive olivine at 43Â°N MAR: evidence for meltâ€“rock reaction/melting involving clinopyroxene-rich lithologies during MORB generation. Earth and Planetary Science Letters, 1998, 160, 115-132.	1.8	113
16	Middle and Late Ordovician magmatic evolution of the Macquarie Arc, Lachlan Orogen, New South Wales. Australian Journal of Earth Sciences, 2007, 54, 181-214.	0.4	105
17	Multiple mantle plume components involved in the petrogenesis of subductionâ€related lavas from the northern termination of the Tonga Arc and northern Lau Basin: Evidence from the geochemistry of arc and backarc submarine volcanics. Geochemistry, Geophysics, Geosystems, 2007, 8, .	1.0	105
18	Glasses in mantle xenoliths from western Victoria, Australia, and their relevance to mantle processes. Earth and Planetary Science Letters, 1997, 148, 433-446.	1.8	96

#	Article	IF	Citations
19	Petrology and geochemistry of back-arc basin basalts from Lau Basin spreading ridges at 15ï¿½, 18ï¿½ and 19ï¿½S. Mineralogy and Petrology, 1992, 47, 1-35.	0.4	93
20	Crustal origin for coupled 'ultra-depleted' and 'plagioclase' signatures in MORB olivine-hosted melt inclusions: evidence from the Siqueiros Transform Fault, East Pacific Rise. Contributions To Mineralogy and Petrology, 2003, 144, 619-637.	1.2	86
21	Basalts erupted along the Tongan fore arc during subduction initiation: Evidence from geochronology of dredged rocks from the Tonga fore arc and trench. Geochemistry, Geophysics, Geosystems, 2012, 13, .	1.0	85
22	North Tongan high-Ca boninite petrogenesis: The role of samoan plume and subduction zone-transform fault transition. Journal of Geodynamics, 1995, 20, 219-241.	0.7	78
23	The Composition of Near-solidus Partial Melts of Fertile Peridotite at 1 and 1Â·5 GPa: Implications for the Petrogenesis of MORB. Journal of Petrology, 2008, 49, 591-613.	1.1	78
24	The application of olivine geothermometry to infer crystallization temperatures of parental liquids: Implications for the temperature of MORB magmas. Chemical Geology, 2007, 241, 207-233.	1.4	77
25	Noble gases in submarine pillow basalt glasses from the Lau Basin: Detection of a solar component in backarc basin basalts. Earth and Planetary Science Letters, 1993, 120, 135-148.	1.8	57
26	Forearc Peridotites from Tonga Record Heterogeneous Oxidation of the Mantle following Subduction Initiation. Journal of Petrology, 2017, 58, 1755-1780.	1.1	57
27	High-Mg adakites from Kadavu Island Group, Fiji, southwest Pacific: Evidence for the mantle origin of adakite parental melts. Geology, 2008, 36, 499.	2.0	55
28	Glass inclusions in magnesian olivine phenocrysts from Tonga: evidence for highly refractory parental magmas in the Tongan arc. Earth and Planetary Science Letters, 1986, 81, 95-103.	1.8	49
29	Subduction initiation terranes exposed at the front of a 2 Ma volcanically-active subduction zone. Earth and Planetary Science Letters, 2019, 508, 30-40.	1.8	49
30	Pyrolite: A Ringwood Concept and Its Current Expression. , 0, , 311-378.		43
31	Mantle dynamics and mantle melting beneath Niuafoâ€™ou Island and the northern Lau back-arc basin. Contributions To Mineralogy and Petrology, 2008, 156, 103-118.	1.2	39
32	Dredged igneous rocks from the northern termination of the Tofua magmatic arc, Tonga and adjacent Lau Basin. Australian Journal of Earth Sciences, 1987, 34, 487-506.	0.4	38
33	In situ location and Uâ€Pb dating of small zircon grains in igneous rocks using laser ablationâ€“inductively coupled plasmaâ€“quadrupole mass spectrometry. Geochemistry, Geophysics, Geosystems, 2011, 12, .	1.0	37
34	Primary magmas at mid-ocean ridges, â€œhotspots,â€•and other intraplate settings: Constraints on mantle potential temperature. , 2005, , .		36
35	Partial Melting of Lower Oceanic Crust Gabbro: Constraints From Poikilitic Clinopyroxene Primocrysts. Frontiers in Earth Science, 2018, 6, .	0.8	33
36	The mantle origins of Karoo picrites. Earth and Planetary Science Letters, 1991, 107, 256-271.	1.8	32

#	Article	IF	Citations
37	Propagation of backâ€arc extension into the arc lithosphere in the southern <scp>N</scp>ew <scp>H</scp>ebrides volcanic arc. Geochemistry, Geophysics, Geosystems, 2015, 16, 3142-3159.	1.0	31
38	Mantle-derived magmas: intraplate, hot-spots and mid-ocean ridges. Science Bulletin, 2015, 60, 1873-1900.	4.3	29
39	Quests for low-degree mantle melts. Nature, 1996, 381, 285-285.	13.7	28
40	Cretaceous fore-arc basalts from the Tonga arc: Geochemistry and implications for the tectonic history of the SW Pacific. Tectonophysics, 2014, 630, 21-32.	0.9	28
41	The Tasmantid Seamounts: shallow melting and contamination of an EM1 mantle plume. Earth and Planetary Science Letters, 1991, 107, 448-462.	1.8	23
42	An Experimental Study of Liquid Compositions in Equilibrium with Plagioclase + Spinel Lherzolite at Low Pressures (0{middle dot}75 GPa). Journal of Petrology, 2010, 51, 2349-2376.	1.1	23
43	SW Pacific arc and backarc lavas and the role of slab-bend serpentinites in the global halogen cycle. Earth and Planetary Science Letters, 2020, 530, 115921.	1.8	22
44	Melting of plagioclase+spinel lherzolite at low pressures (0.5GPa): An experimental approach to the evolution of basaltic melt during mantle refertilisation at shallow depths. Lithos, 2013, 172-173, 61-80.	0.6	20
45	Whole-rock geochemistry of the Hili Manu peridotite, East Timor: implications for the origin of Timor ophiolites â^—. Australian Journal of Earth Sciences, 2006, 53, 637-649.	0.4	17
46	Westward migration of oceanic ridges and related asymmetric upper mantle differentiation. Lithos, 2017, 268-271, 163-173.	0.6	15
47	Early Cretaceous mantle upwelling and melting of juvenile lower crust in the Middle-Lower Yangtze River Metallogenic Belt: Example from Tongshankou Cu-(Mo W) ore deposit. Gondwana Research, 2020, 83, 183-200.	3.0	15
48	Crystallization temperatures of tholeiite parental liquids: Implications for the existence of thermally driven mantle plumes. , 2007, , 235-260.		14
49	Magmagenesis within the Hunter Ridge Rift Zone resolved from olivine-hosted melt inclusions and geochemical modelling with insights from geodynamic models. Australian Journal of Earth Sciences, 2012, 59, 913-931.	0.4	11
50	Widespread Neogene volcanism on Central Kerguelen Plateau, Southern Indian Ocean. Australian Journal of Earth Sciences, 2016, 63, 379-392.	0.4	10
51	Pyrite trace element geochemistry of mafic granulite xenoliths from Xikeer: implications for the source of Cu in the sediment-hosted mineralization in the northwestern Tarim Basin (Northwest) Tj ETQq1 1 0.784314 rgBT /Overlock 1	1.74	
52	A review of the petrology of harzburgites at Hess Deep and Garrett Deep: implications for mantle processes beneath segments of the East Pacific Rise. Geological Society Special Publication, 1996, 118, 143-156.	0.8	5
53	Revisiting the Australianâ€Antarctic Oceanâ€Continent Transition Zone Using Petrological and Geophysical Characterization of Exhumed Subcontinental Mantle. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009040.	1.0	5
54	The Paleozoic-Mesozoic magmatic evolution of the Eastern Tianshan, NW China: Constraints from geochronology and geochemistry of the Sanchakou intrusive complex. Gondwana Research, 2022, 103, 1-22.	3.0	5

#	Article	IF	Citations
55	Petrogenesis of Lava from Christmas Island, Northeast Indian Ocean: Implications for the Nature of Recycled Components in Non-Plume Intraplate Settings. Geosciences (Switzerland), 2022, 12, 118.	1.0	3
56	Subduction-related magmatism at the southern tip of the North Fiji backarc basin. ASEG Extended Abstracts, 2006, 2006, 1-8.	0.1	2
57	Get out your arc umbrellas. Nature, 1993, 365, 298-299.	13.7	1