

# Trevor J Falloon

## List of Publications by Citations

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56  
papers

3,517  
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32  
h-index

58  
g-index

58  
ext. papers

3,816  
ext. citations

6.1  
avg, IF

5.07  
L-index

#	Paper	IF	Citations
56	Anhydrous Partial Melting of a Fertile and Depleted Peridotite from 2 to 30 kb and Application to Basalt Petrogenesis. <i>Journal of Petrology</i> , <b>1988</b> , 29, 1257-1282	3.9	306
55	Melting of Refractory Mantle at 1.5, 2 and 2.5 GPa under Anhydrous and H <sub>2</sub> O-undersaturated Conditions: Implications for the Petrogenesis of High-Ca Boninites and the Influence of Subduction Components on Mantle Melting. <i>Journal of Petrology</i> , <b>2000</b> , 41, 257-283	3.9	270
54	The origin of island arc high-alumina basalts. <i>Contributions To Mineralogy and Petrology</i> , <b>1987</b> , 97, 417-430	5	210
53	Anhydrous partial melting of MORB pyrolite and other peridotite compositions at 10 kbar: Implications for the origin of primitive MORB glasses. <i>Mineralogy and Petrology</i> , <b>1987</b> , 37, 181-219	1.6	169
52	The solidus of carbonated, fertile peridotite. <i>Earth and Planetary Science Letters</i> , <b>1989</b> , 94, 364-370	5.3	158
51	H <sub>2</sub> O Abundance in Depleted to Moderately Enriched Mid-ocean Ridge Magmas; Part I: Incompatible Behaviour, Implications for Mantle Storage, and Origin of Regional Variations. <i>Journal of Petrology</i> , <b>2000</b> , 41, 1329-1364	3.9	149
50	The petrogenesis of high-calcium boninite lavas dredged from the northern Tonga ridge. <i>Earth and Planetary Science Letters</i> , <b>1991</b> , 102, 375-394	5.3	141
49	Primary magmas and mantle temperatures. <i>European Journal of Mineralogy</i> , <b>2001</b> , 13, 437-451	2.2	125
48	The H <sub>2</sub> O content of basalt glasses from Southwest Pacific back-arc basins. <i>Earth and Planetary Science Letters</i> , <b>1993</b> , 117, 347-362	5.3	113
47	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. <i>Journal of Petrology</i> , <b>2002</b> , 43, 1651-1671	3.9	112
46	Experimental tests of low degree peridotite partial melt compositions: implications for the nature of anhydrous near-solidus peridotite melts at 1 GPa. <i>Earth and Planetary Science Letters</i> , <b>1997</b> , 152, 149-162	5.3	110
45	Calcic melt inclusions in primitive olivine at 43°N MAR: evidence for melt-rock reaction/melting involving clinopyroxene-rich lithologies during MORB generation. <i>Earth and Planetary Science Letters</i> , <b>1998</b> , 160, 115-132	5.3	102
44	Experimental Study of the Influence of Water on Melting and Phase Assemblages in the Upper Mantle. <i>Journal of Petrology</i> , <b>2014</b> , 55, 2067-2096	3.9	96
43	Solidus of carbonated fertile peridotite under fluid-saturated conditions. <i>Geology</i> , <b>1990</b> , 18, 195	5	92
42	Glasses in mantle xenoliths from western Victoria, Australia, and their relevance to mantle processes. <i>Earth and Planetary Science Letters</i> , <b>1997</b> , 148, 433-446	5.3	88
41	Middle and Late Ordovician magmatic evolution of the Macquarie Arc, Lachlan Orogen, New South Wales. <i>Australian Journal of Earth Sciences</i> , <b>2007</b> , 54, 181-214	1.4	88
40	Primitive layered gabbros from fast-spreading lower oceanic crust. <i>Nature</i> , <b>2014</b> , 505, 204-7	50.4	85

39	Crustal origin for coupled 'ultra-depleted' and 'plagioclase' signatures in MORB olivine-hosted melt inclusions: evidence from the Siqueiros Transform Fault, East Pacific Rise. <i>Contributions To Mineralogy and Petrology</i> , <b>2003</b> , 144, 619-637	3.5	79
38	Petrology and geochemistry of back-arc basin basalts from Lau Basin spreading ridges at 15° and 19°S. <i>Mineralogy and Petrology</i> , <b>1992</b> , 47, 1-35	1.6	77
37	Multiple mantle plume components involved in the petrogenesis of subduction-related lavas from the northern termination of the Tonga Arc and northern Lau Basin: Evidence from the geochemistry of arc and backarc submarine volcanics. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2007</b> , 8, n/a-n/a	3.6	76
36	Basalts erupted along the Tonga fore arc during subduction initiation: Evidence from geochronology of dredged rocks from the Tonga fore arc and trench. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2012</b> , 13,	3.6	68
35	The Composition of Near-solidus Partial Melts of Fertile Peridotite at 1 and 15 GPa: Implications for the Petrogenesis of MORB. <i>Journal of Petrology</i> , <b>2008</b> , 49, 591-613	3.9	67
34	North Tongan high-Ca boninite petrogenesis: The role of samoan plume and subduction zone-transform fault transition. <i>Journal of Geodynamics</i> , <b>1995</b> , 20, 219-241	2.2	67
33	The application of olivine geothermometry to infer crystallization temperatures of parental liquids: Implications for the temperature of MORB magmas. <i>Chemical Geology</i> , <b>2007</b> , 241, 207-233	4.2	60
32	Noble gases in submarine pillow basalt glasses from the Lau Basin: Detection of a solar component in backarc basin basalts. <i>Earth and Planetary Science Letters</i> , <b>1993</b> , 120, 135-148	5.3	54
31	High-Mg adakites from Kadavu Island Group, Fiji, southwest Pacific: Evidence for the mantle origin of adakite parental melts. <i>Geology</i> , <b>2008</b> , 36, 499	5	45
30	Glass inclusions in magnesian olivine phenocrysts from Tonga: evidence for highly refractory parental magmas in the Tongan arc. <i>Earth and Planetary Science Letters</i> , <b>1986</b> , 81, 95-103	5.3	43
29	Forearc Peridotites from Tonga Record Heterogeneous Oxidation of the Mantle following Subduction Initiation. <i>Journal of Petrology</i> , <b>2017</b> , 58, 1755-1780	3.9	39
28	Dredged igneous rocks from the northern termination of the Tofua magmatic arc, Tonga and adjacent Lau Basin. <i>Australian Journal of Earth Sciences</i> , <b>1987</b> , 34, 487-506	1.4	36
27	Subduction initiation terranes exposed at the front of a 2 Ma volcanically-active subduction zone. <i>Earth and Planetary Science Letters</i> , <b>2019</b> , 508, 30-40	5.3	35
26	Mantle dynamics and mantle melting beneath Niuafoʻu Island and the northern Lau back-arc basin. <i>Contributions To Mineralogy and Petrology</i> , <b>2008</b> , 156, 103-118	3.5	33
25	In situ location and U-Pb dating of small zircon grains in igneous rocks using laser ablation-inductively coupled plasma-quadrupole mass spectrometry. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2011</b> , 12, n/a-n/a	3.6	32
24	The mantle origins of Karoo picrites. <i>Earth and Planetary Science Letters</i> , <b>1991</b> , 107, 256-271	5.3	30
23	Propagation of back-arc extension into the arc lithosphere in the southern New Hebrides volcanic arc. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2015</b> , 16, 3142-3159	3.6	24
22	Primary magmas at mid-ocean ridges, hotspots, and other intraplate settings: Constraints on mantle potential temperature <b>2005</b> ,		24

21	Mantle-derived magmas: intraplate, hot-spots and mid-ocean ridges. <i>Science Bulletin</i> , <b>2015</b> , 60, 1873-1900.6	20
20	Cretaceous fore-arc basalts from the Tonga arc: Geochemistry and implications for the tectonic history of the SW Pacific. <i>Tectonophysics</i> , <b>2014</b> , 630, 21-32	3.1 19
19	An Experimental Study of Liquid Compositions in Equilibrium with Plagioclase + Spinel Lherzolite at Low Pressures (0{middle dot}75 GPa). <i>Journal of Petrology</i> , <b>2010</b> , 51, 2349-2376	3.9 19
18	Quests for low-degree mantle melts. <i>Nature</i> , <b>1996</b> , 381, 285-285	50.4 19
17	Whole-rock geochemistry of the Hili Manu peridotite, East Timor: implications for the origin of Timor ophiolites *View all notes. <i>Australian Journal of Earth Sciences</i> , <b>2006</b> , 53, 637-649	1.4 17
16	The Tasmantid Seamounts: shallow melting and contamination of an EM1 mantle plume. <i>Earth and Planetary Science Letters</i> , <b>1991</b> , 107, 448-462	5.3 17
15	Partial Melting of Lower Oceanic Crust Gabbro: Constraints From Poikilitic Clinopyroxene Primocrysts. <i>Frontiers in Earth Science</i> , <b>2018</b> , 6,	3.5 14
14	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. <i>Lithos</i> , <b>2013</b> , 172-173, 61-80	2.9 14
13	Crystallization temperatures of tholeiite parental liquids: Implications for the existence of thermally driven mantle plumes <b>2007</b> , 235-260	12
12	SW Pacific arc and backarc lavas and the role of slab-bend serpentinites in the global halogen cycle. <i>Earth and Planetary Science Letters</i> , <b>2020</b> , 530, 115921	5.3 12
11	Westward migration of oceanic ridges and related asymmetric upper mantle differentiation. <i>Lithos</i> , <b>2017</b> , 268-271, 163-173	2.9 11
10	Magmagenesis within the Hunter Ridge Rift Zone resolved from olivine-hosted melt inclusions and geochemical modelling with insights from geodynamic models. <i>Australian Journal of Earth Sciences</i> , <b>2012</b> , 59, 913-931	1.4 10
9	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. <i>Gondwana Research</i> , <b>2020</b> , 83, 183-200	5.1 8
8	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 China). <i>Mineralium Deposita</i> , <b>2011</b> , 46, 1001-1006	4.8 5
7	Widespread Neogene volcanism on Central Kerguelen Plateau, Southern Indian Ocean. <i>Australian Journal of Earth Sciences</i> , <b>2016</b> , 63, 379-392	1.4 5
6	A review of the petrology of harzburgites at Hess Deep and Garrett Deep: implications for mantle processes beneath segments of the East Pacific Rise. <i>Geological Society Special Publication</i> , <b>1996</b> , 118, 143-156	1.7 4
5	Revisiting the Australian-Antarctic Ocean-Continent Transition Zone Using Petrological and Geophysical Characterization of Exhumed Subcontinental Mantle. <i>Geochemistry, Geophysics, Geosystems</i> , <b>2020</b> , 21, e2020GC009040	3.6 3
4	Pyrolite: A Ringwood Concept and Its Current Expression311-378	3

3	Subduction-related magmatism at the southern tip of the North Fiji backarc basin. <i>ASEG Extended Abstracts</i> , <b>2006</b> , 2006, 1-8	0.2	1
2	The Paleozoic-Mesozoic magmatic evolution of the Eastern Tianshan, NW China: Constraints from geochronology and geochemistry of the Sanchakou intrusive complex. <i>Gondwana Research</i> , <b>2022</b> , 103, 1-22	5.1	0
1	Petrogenesis of Lava from Christmas Island, Northeast Indian Ocean: Implications for the Nature of Recycled Components in Non-Plume Intraplate Settings. <i>Geosciences (Switzerland)</i> , <b>2022</b> , 12, 118	2.7	0