Frances M Deegan

List of Publications by Year
in descending order

44 papers	1,062 citations	361413 20 h-index	414414 32 g-index
49 all docs	49 docs citations	49 times ranked	1127 citing authors

#	Article	IF	Citations
1	Magmaâ€“Carbonate Interaction Processes and Associated CO2 Release at Merapi Volcano, Indonesia: Insights from Experimental Petrology. Journal of Petrology, 2010, 51, 1027-1051.	2.8	150
2	Crustal CO₂ liberation during the 2006 eruption and earthquake events at Merapi volcano, Indonesia. Geophysical Research Letters, 2012, 39, .	4.0	95
3	Hydrothermal alteration of andesitic lava domes can lead to explosive volcanic behaviour. Nature Communications, 2019, 10, 5063.	12.8	76
4	Magmatic differentiation processes at Merapi Volcano: inclusion petrology and oxygen isotopes. Journal of Volcanology and Geothermal Research, 2013, 261, 38-49.	2.1	49
5	An Integrative Research Framework to Unravel the Interplay of Natural Hazards and Vulnerabilities. Earth's Future, 2018, 6, 305-310.	6.3	48
6	The 2021 eruption of the Cumbre Vieja volcanic ridge on La Palma, Canary Islands. Geology Today, 2022, 38, 94-107.	0.9	46
7	Magmatic water contents determined through clinopyroxene: Examples from the <scp>W</scp>estern <scp>C</scp>anary <scp>I</scp>slands, <scp>S</scp>pain. Geochemistry, Geophysics, Geosystems, 2015, 16, 2127-2146.	2.5	45
8	Nannofossils in 2011 El Hierro eruptive products reinstate plume model for Canary Islands. Scientific Reports, 2015, 5, 7945.	3.3	37
9	Magma reservoir dynamics at Toba caldera, Indonesia, recorded by oxygen isotope zoning in quartz. Scientific Reports, 2017, 7, 40624.	3.3	36
10	Dykes and structures of the NE rift of Tenerife, Canary Islands: a record of stabilisation and destabilisation of ocean island rift zones. Bulletin of Volcanology, 2012, 74, 963-980.	3.0	35
11	The 2011â€“2012 submarine eruption off El Hierro, Canary Islands: New lessons in oceanic island growth and volcanic crisis management. Earth-Science Reviews, 2015, 150, 168-200.	9.1	31
12	The thermal properties of porous andesite. Journal of Volcanology and Geothermal Research, 2020, 398, 106901.	2.1	29
13	Ancient oral tradition describes volcanoâ€“earthquake interaction at merapi volcano, indonesia. Geografiska Annaler, Series A: Physical Geography, 2015, 97, 137-166.	1.5	28
14	Volatile dilution during magma injections and implications for volcano explosivity. Geology, 2016, 44, 1027-1030.	4.4	28
15	Crustal CO2 contribution to subduction zone degassing recorded through calc-silicate xenoliths in arc lavas. Scientific Reports, 2019, 9, 8803.	3.3	28
16	Pyroxene standards for SIMS oxygen isotope analysis and their application to Merapi volcano, Sunda arc, Indonesia. Chemical Geology, 2016, 447, 1-10.	3.3	27
17	Multi-level magma plumbing at Agung and Batur volcanoes increases risk of hazardous eruptions. Scientific Reports, 2018, 8, 10547.	3.3	24
18	Magma plumbing for the 2014â€“2015 Holuhraun eruption, Iceland. Geochemistry, Geophysics, Geosystems, 2016, 17, 2953-2968.	2.5	22

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19	Magmatic and Metasomatic Effects of Magmaâ€“Carbonate Interaction Recorded in Calc-silicate Xenoliths from Merapi Volcano (Indonesia). Journal of Petrology, 2020, 61, .	2.8	22
20	Fast and furious: crustal CO₂ release at Merapi volcano, Indonesia. Geology Today, 2011, 27, 63-64.	0.9	20
21	Hidden mechanical weaknesses within lava domes provided by buried high-porosity hydrothermal alteration zones. Scientific Reports, 2022, 12, 3202.	3.3	19
22	Boron isotope fractionation in magma via crustal carbonate dissolution. Scientific Reports, 2016, 6, 30774.	3.3	17
23	The tensile strength of volcanic rocks: Experiments and models. Journal of Volcanology and Geothermal Research, 2021, 418, 107348.	2.1	16
24	Diverse mantle components with invariant oxygen isotopes in the 2021 Fagradalsfjall eruption, Iceland. Nature Communications, 2022, 13, .	12.8	15
25	Constraining the sub-arc, parental magma composition for the giant Altiplano-Puna Volcanic Complex, northern Chile. Scientific Reports, 2020, 10, 6864.	3.3	14
26	Sunda arc mantle source Î´18O value revealed by intracrystal isotope analysis. Nature Communications, 2021, 12, 3930.	12.8	14
27	The tensile strength of hydrothermally altered volcanic rocks. Journal of Volcanology and Geothermal Research, 2022, 428, 107576.	2.1	13
28	Geochemical Systematics of High Arctic Large Igneous Province Continental Tholeiites from Canadaâ€”Evidence for Progressive Crustal Contamination in the Plumbing System. Journal of Petrology, 2021, 62, .	2.8	12
29	The great escape: Petrogenesis of low-silica volcanism of Pliocene to Quaternary age associated with the Altiplano-Puna Volcanic Complex of northern Chile (21Â°10â€²-22Â°50â€²S). Lithos, 2019, 346-347, 105162.	1.4	11
30	Crustal volatile release at Merapi volcano; the 2006 earthquake and eruption events. Geology Today, 2013, 29, 96-101.	0.9	10
31	Nannofossils: the smoking gun for the Canarian hotspot. Geology Today, 2015, 31, 137-145.	0.9	9
32	High Arctic Large Igneous Province Alkaline Rocks in Canada: Evidence for Multiple Mantle Components. Journal of Petrology, 2021, 62, .	2.8	9
33	Exceptionally high whole-rock Î´¹⁸O values in intra-caldera rhyolites from Northeast Iceland. Mineralogical Magazine, 2018, 82, 1147-1168.	1.4	6
34	Volcanic particles in agriculture and gardening. Geology Today, 2017, 33, 148-154.	0.9	5
35	A message from the â€˜underground forge of the godsâ€™: history and current eruptions at Mt Etna. Geology Today, 2021, 37, 141-149.	0.9	4
36	Forensic Probe of Baliâ€™s Great Volcano. Eos, 2019, 100, .	0.1	4

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37	The stiff upper LIP: investigating the High Arctic Large Igneous Province. Geology Today, 2016, 32, 92-98.	0.9	3
38	Ancient oral tradition in Central Java warns of volcanoâ€“earthquake interaction. Geology Today, 2021, 37, 100-109.	0.9	3
39	Pre-Teide Volcanic Activity on the Northeast Volcanic Rift Zone. Active Volcanoes of the World, 2013, , 75-92.	1.4	2
40	Magmatic Differentiation in the Teideâ€“Pico Viejo Succession: Isotope Analysis as a Key to Deciphering the Origin of Phonolite Magma. Active Volcanoes of the World, 2013, , 173-190.	1.4	0
41	Magma Mixing in the 1100 AD MontaÃ±a Reventada Composite Lava Flow: Interaction of Rift Zone and Central Complex Magmatism. Active Volcanoes of the World, 2013, , 191-211.	1.4	0
42	Sacred ground; the MaipÃ©s necropolis of northâ€west Gran Canaria. Geology Today, 2019, 35, 55-62.	0.9	0
43	Correction to: Geochemical Systematics of High Arctic Large Igneous Province Continental Tholeiites from Canadaâ€”Evidence for Progressive Crustal Contamination in the Plumbing System. Journal of Petrology, 2022, 63, .	2.8	0
44	Correction to: High Arctic Large Igneous Province Alkaline Rocks in Canada: Evidence for Multiple Mantle Components. Journal of Petrology, 2022, 63, .	2.8	0