

Thomas Shea

List of Publications by Year in descending order

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Version: 2024-02-01

43
papers

1,773
citations

304602

22
h-index

289141

40
g-index

46
all docs

46
docs citations

46
times ranked

1391
citing authors

#	ARTICLE	IF	CITATIONS
1	Textural studies of vesicles in volcanic rocks: An integrated methodology. <i>Journal of Volcanology and Geothermal Research</i> , 2010, 190, 271-289.	0.8	252
2	Kinetics of cooling- and decompression-induced crystallization in hydrous mafic-intermediate magmas. <i>Journal of Volcanology and Geothermal Research</i> , 2013, 260, 127-145.	0.8	140
3	Structural analysis and analogue modeling of the kinematics and dynamics of rockslide avalanches. , 2008, 4, 657.		111
4	Diffusion chronometry and the timescales of magmatic processes. <i>Nature Reviews Earth & Environment</i> , 2020, 1, 201-214.	12.2	100
5	Cracking the olivine zoning code: Distinguishing between crystal growth and diffusion. <i>Geology</i> , 2015, 43, 935-938.	2.0	97
6	Accuracy of timescales retrieved from diffusion modeling in olivine: A 3D perspective. <i>American Mineralogist</i> , 2015, 100, 2026-2042.	0.9	86
7	Bubble nucleation in magmas: A dominantly heterogeneous process?. <i>Journal of Volcanology and Geothermal Research</i> , 2017, 343, 155-170.	0.8	83
8	The tangled tale of K�lauea's 2018 eruption as told by geochemical monitoring. <i>Science</i> , 2019, 366, .	6.0	81
9	Emplacement mechanisms of contrasting debris avalanches at Volc�n Mombacho (Nicaragua), provided by structural and facies analysis. <i>Bulletin of Volcanology</i> , 2008, 70, 899-921.	1.1	79
10	Transitions between fall phases and pyroclastic density currents during the AD 79 eruption at Vesuvius: building a transient conduit model from the textural and volatile record. <i>Bulletin of Volcanology</i> , 2012, 74, 2363-2381.	1.1	60
11	Column collapse and generation of pyroclastic density currents during the A.D. 79 eruption of Vesuvius: The role of pyroclast density. <i>Geology</i> , 2011, 39, 695-698.	2.0	57
12	Leucite crystals: Surviving witnesses of magmatic processes preceding the 79AD eruption at Vesuvius, Italy. <i>Earth and Planetary Science Letters</i> , 2009, 281, 88-98.	1.8	53
13	Discriminating secondary from magmatic water in rhyolitic matrix-glass of volcanic pyroclasts using thermogravimetric analysis. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 148, 457-476.	1.6	46
14	Timescales of mixing and storage for Keanak�eo'i Tephra magmas (1500-1820 C.E.), K�lauea Volcano, Hawaii. <i>Contributions To Mineralogy and Petrology</i> , 2017, 172, 1.	1.2	46
15	Phosphorus and aluminum zoning in olivine: contrasting behavior of two nominally incompatible trace elements. <i>Contributions To Mineralogy and Petrology</i> , 2019, 174, 1.	1.2	37
16	Conduit- to Localized-scale Degassing during Plinian Eruptions: Insights from Major Element and Volatile (Cl and H2O) Analyses within Vesuvius AD 79 Pumice. <i>Journal of Petrology</i> , 2014, 55, 315-344.	1.1	35
17	Forming Olivine Phenocrysts in Basalt: A 3D Characterization of Growth Rates in Laboratory Experiments. <i>Frontiers in Earth Science</i> , 2019, 7, .	0.8	35
18	Linking experimental and natural vesicle textures in Vesuvius 79AD white pumice. <i>Journal of Volcanology and Geothermal Research</i> , 2010, 192, 69-84.	0.8	33

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19	Nickel variability in Hawaiian olivine: Evaluating the relative contributions from mantle and crustal processes. <i>American Mineralogist</i> , 2017, 102, 507-518.	0.9	31
20	Dynamics of a powerful deep submarine eruption recorded in H ₂ O contents and speciation in rhyolitic glass: The 2012 Havre eruption. <i>Earth and Planetary Science Letters</i> , 2018, 494, 135-147.	1.8	27
21	Lithium diffusion in olivine records magmatic priming of explosive basaltic eruptions. <i>Earth and Planetary Science Letters</i> , 2018, 500, 127-135.	1.8	27
22	Olivine-Hosted Melt Inclusions: A Microscopic Perspective on a Complex Magmatic World. <i>Annual Review of Earth and Planetary Sciences</i> , 2021, 49, 465-494.	4.6	27
23	The petrologic and degassing behavior of sulfur and other magmatic volatiles from the 2018 eruption of K�lauea, Hawaii: melt concentrations, magma storage depths, and magma recycling. <i>Bulletin of Volcanology</i> , 2021, 83, 1.	1.1	25
24	Textural evolution of magma during the 9.4-ka trachytic explosive eruption at Kilian Volcano, Cha�ne des Puys, France. <i>Bulletin of Volcanology</i> , 2017, 79, 1.	1.1	23
25	D/H ratios and H ₂ O contents record degassing and rehydration history of rhyolitic magma and pyroclasts. <i>Earth and Planetary Science Letters</i> , 2020, 530, 115909.	1.8	16
26	Extreme incompatibility of helium during mantle melting: Evidence from undegassed mid-ocean ridge basalts. <i>Earth and Planetary Science Letters</i> , 2016, 454, 192-202.	1.8	15
27	Assembly and turnover of neurofilaments in growing axonal neurites. <i>Biology Open</i> , 2018, 7, .	0.6	15
28	Fo and Ni Relations in Olivine Differentiate between Crystallization and Diffusion Trends. <i>Journal of Petrology</i> , 2021, 61, .	1.1	15
29	The historic events at K�lauea Volcano in 2018: summit collapse, rift zone eruption, and Mw 6.9 earthquake: preface to the special issue. <i>Bulletin of Volcanology</i> , 2020, 82, 1.	1.1	13
30	Oxidation in CSPV experiments involving H ₂ O-bearing mafic magmas: Quantification and mitigation. <i>American Mineralogist</i> , 2013, 98, 1285-1296.	0.9	12
31	Collapsing volcanoes: the sleeping giants' threat. <i>Geology Today</i> , 2010, 26, 72-77.	0.3	11
32	Dynamics of an unusual cone-building trachyte eruption at Pu�u Wa�awa, Hual�lai volcano, Hawaii. <i>Bulletin of Volcanology</i> , 2017, 79, 1.	1.1	9
33	Basalt, Unveiling Fluid-filled Fractures, Inducing Sediment Intra-void Transport, Ephemeral: Examples from Katla 1918. <i>Journal of Volcanology and Geothermal Research</i> , 2019, 369, 121-144.	0.8	9
34	Phosphorus Coupling Obscures Lithium Geospeedometry in Olivine. <i>Frontiers in Earth Science</i> , 2020, 8, .	0.8	9
35	Using Volatile Element Concentration Profiles in Crystal-Hosted Melt Embayments to Estimate Magma Decompression Rate: Assumptions and Inherited Errors. <i>Geochemistry, Geophysics, Geosystems</i> , 2021, 22, e2021GC009672.	1.0	9
36	Evaluating lava flow propagation models with a case study from the 2018 eruption of K�lauea Volcano, Hawaii. <i>Bulletin of Volcanology</i> , 2021, 83, 1.	1.1	9

#	ARTICLE	IF	CITATIONS
37	Chemical heterogeneities reveal early rapid cooling of Apollo Troctolite 76535. <i>Nature Communications</i> , 2021, 12, 7054.	5.8	8
38	Magma balloons or bombs?. <i>Nature Geoscience</i> , 2013, 6, 802-803.	5.4	7
39	On the rise: using reentrants to extract magma ascent rates in the Bandelier Tuff caldera complex, New Mexico, USA. <i>Bulletin of Volcanology</i> , 2022, 84, .	1.1	7
40	Discovery of a trachyte ignimbrite sequence at Hualālai, Hawaii. <i>Bulletin of Volcanology</i> , 2016, 78, 1.	1.1	6
41	Influence of a GSK3 β phosphorylation site within the proximal C-terminus of neurofilament-H on neurofilament dynamics. <i>Biology Open</i> , 2017, 6, 1516-1527.	0.6	4
42	Rheological change and degassing during a trachytic Vulcanian eruption at Kilian Volcano, Chaîne des Puys, France. <i>Bulletin of Volcanology</i> , 2020, 82, 1.	1.1	3
43	Outgassing through magmatic fractures enables effusive eruption of silicic magma. <i>Journal of Volcanology and Geothermal Research</i> , 2022, 430, 107617.	0.8	3