

# Larry G Mastin

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4691347/publications.pdf>

Version: 2024-02-01

41  
papers

2,538  
citations

236925

25  
h-index

265206

42  
g-index

54  
all docs

54  
docs citations

54  
times ranked

2095  
citing authors

#	ARTICLE	IF	CITATIONS
1	Progress in protecting air travel from volcanic ash clouds. <i>Bulletin of Volcanology</i> , 2022, 84, 1.	3.0	6
2	The Independent Volcanic Eruption Source Parameter Archive (IVESPA, version 1.0): A new observational database to support explosive eruptive column model validation and development. <i>Journal of Volcanology and Geothermal Research</i> , 2021, 417, 107295.	2.1	28
3	Evaluating the state-of-the-art in remote volcanic eruption characterization Part I: Raikoke volcano, Kuril Islands. <i>Journal of Volcanology and Geothermal Research</i> , 2021, 419, 107354.	2.1	21
4	Evaluating the state-of-the-art in remote volcanic eruption characterization Part II: Ulawun volcano, Papua New Guinea. <i>Journal of Volcanology and Geothermal Research</i> , 2021, 420, 107381.	2.1	10
5	Mechanisms for ballistic block ejection during the 2016–2017 shallow submarine eruption of Bogoslof volcano, Alaska. <i>Bulletin of Volcanology</i> , 2020, 82, 1.	3.0	3
6	Comparing Simulations of Umbrella-Cloud Growth and Ash Transport with Observations from Pinatubo, Kelud, and Calbuco Volcanoes. <i>Atmosphere</i> , 2020, 11, 1038.	2.3	7
7	Did ice-charging generate volcanic lightning during the 2016–2017 eruption of Bogoslof volcano, Alaska?. <i>Bulletin of Volcanology</i> , 2020, 82, 1.	3.0	45
8	Operational Modelling of Umbrella Cloud Growth in a Lagrangian Volcanic Ash Transport and Dispersion Model. <i>Atmosphere</i> , 2020, 11, 200.	2.3	18
9	Laboratory Experiments of Volcanic Ash Resuspension by Wind. <i>Journal of Geophysical Research D: Atmospheres</i> , 2019, 124, 9534-9560.	3.3	18
10	Modeling Ash Dispersal From Future Eruptions of Taupo Supervolcano. <i>Geochemistry, Geophysics, Geosystems</i> , 2019, 20, 3375-3401.	2.5	18
11	Investigating the Accuracy of One-Dimensional Volcanic Plume Models using Laboratory Experiments and Field Data. <i>Journal of Geophysical Research: Solid Earth</i> , 2019, 124, 11290-11304.	3.4	4
12	Globally detected volcanic lightning and umbrella dynamics during the 2014 eruption of Kelud, Indonesia. <i>Journal of Volcanology and Geothermal Research</i> , 2019, 382, 81-91.	2.1	28
13	Turbulence, entrainment and low-order description of a transitional variable-density jet. <i>Journal of Fluid Mechanics</i> , 2018, 836, 1009-1049.	3.4	16
14	Experimental study of analogue vent erosion towards nozzle shapes. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 367, 79-87.	2.1	3
15	New Zealand supereruption provides time marker for the Last Glacial Maximum in Antarctica. <i>Scientific Reports</i> , 2017, 7, 12238.	3.3	59
16	Volcanic lightning and plume behavior reveal evolving hazards during the April 2015 eruption of Calbuco volcano, Chile. <i>Geophysical Research Letters</i> , 2016, 43, 3563-3571.	4.0	112
17	Confort 15 model of conduit dynamics: applications to Pantelleria Green Tuff and Etna 122 BC eruptions. <i>Contributions To Mineralogy and Petrology</i> , 2016, 171, 1.	3.1	29
18	Adjusting particle-size distributions to account for aggregation in tephra-deposit model forecasts. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 9399-9420.	4.9	18

#	ARTICLE	IF	CITATIONS
19	Hail formation triggers rapid ash aggregation in volcanic plumes. Nature Communications, 2015, 6, 7860.	12.8	59
20	Cycles of explosive and effusive eruptions at K�lauea Volcano, Hawai�i. Geology, 2014, 42, 631-634.	4.4	49
21	Modeling ash fall distribution from a Yellowstone supereruption. Geochemistry, Geophysics, Geosystems, 2014, 15, 3459-3475.	2.5	46
22	Testing the accuracy of a 1�D volcanic plume model in estimating mass eruption rate. Journal of Geophysical Research D: Atmospheres, 2014, 119, 2474-2495.	3.3	67
23	Injection, transport, and deposition of tephra during event 5 at Redoubt Volcano, 23 March, 2009. Journal of Volcanology and Geothermal Research, 2013, 259, 201-213.	2.1	21
24	Impact of reduced near�field entrainment of overpressured volcanic jets on plume development. Journal of Geophysical Research, 2012, 117, .	3.3	22
25	Ash3d: A finite�volume, conservative numerical model for ash transport and tephra deposition. Journal of Geophysical Research, 2012, 117, .	3.3	72
26	Experimental Study of Near-Field Entrainment of Moderately Overpressured Jets. Journal of Fluids Engineering, Transactions of the ASME, 2011, 133, .	1.5	16
27	Improved prediction and tracking of volcanic ash clouds. Journal of Volcanology and Geothermal Research, 2009, 186, 1-9.	2.1	65
28	A multidisciplinary effort to assign realistic source parameters to models of volcanic ash-cloud transport and dispersion during eruptions. Journal of Volcanology and Geothermal Research, 2009, 186, 10-21.	2.1	561
29	Improved constraints on the estimated size and volatile content of the Mount St. Helens magma system from the 2004�2008 history of dome growth and deformation. Geophysical Research Letters, 2009, 36, .	4.0	35
30	Experimental study of near�field air entrainment by subsonic volcanic jets. Journal of Geophysical Research, 2009, 114, .	3.3	20
31	Generation of fine hydromagmatic ash by growth and disintegration of glassy rinds. Journal of Geophysical Research, 2007, 112, .	3.3	48
32	A user-friendly one-dimensional model for wet volcanic plumes. Geochemistry, Geophysics, Geosystems, 2007, 8, n/a-n/a.	2.5	125
33	The controlling effect of viscous dissipation on magma flow in silicic conduits. Journal of Volcanology and Geothermal Research, 2005, 143, 17-28.	2.1	48
34	What makes hydromagmatic eruptions violent? Some insights from the Keanak�ko'i Ash, K�lauea Volcano, Hawai�i. Journal of Volcanology and Geothermal Research, 2004, 137, 15-31.	2.1	69
35	Gas evolution in eruptive conduits: combining insights from high temperature and pressure decompression experiments with steady-state flow modeling. Journal of Volcanology and Geothermal Research, 2004, 129, 23-36.	2.1	89
36	Insights into volcanic conduit flow from an open-source numerical model. Geochemistry, Geophysics, Geosystems, 2002, 3, 1-18.	2.5	101

#	ARTICLE	IF	CITATIONS
37	Adiabatic temperature changes of magma-gas mixtures during ascent and eruption. Contributions To Mineralogy and Petrology, 2001, 141, 307-321.	3.1	48
38	Evidence for water influx from a caldera lake during the explosive hydromagmatic eruption of 1790, Kilauea volcano, Hawaii. Journal of Geophysical Research, 1997, 102, 20093-20109.	3.3	65
39	Thermodynamics of gas and steam-blast eruptions. Bulletin of Volcanology, 1995, 57, 85-98.	3.0	96
40	Explosive tephra emissions at Mount St. Helens, 1989-1991: The violent escape of magmatic gas following storms?. Bulletin of the Geological Society of America, 1994, 106, 175-185.	3.3	63
41	The roles of magma and groundwater in the phreatic eruptions at Inyo Craters, Long Valley Caldera, California. Bulletin of Volcanology, 1991, 53, 579-596.	3.0	37