Jacopo Taddeucci

List of Publications by Year
in descending order

94 papers	3,616 citations	109321 35 h-index	155660 55 g-index
109 all docs	109 docs citations	109 times ranked	2341 citing authors

#	Article	IF	Citations
1	The fragmentation threshold of pyroclastic rocks. Earth and Planetary Science Letters, 2004, 226, 139-148.	4.4	230
2	Conduit processes during the Julyâ€“August 2001 explosive activity of Mt. Etna (Italy): inferences from glass chemistry and crystal size distribution of ash particles. Journal of Volcanology and Geothermal Research, 2004, 137, 33-54.	2.1	159
3	Monitoring the explosive activity of the July-August 2001 eruption of Mt. Etna (Italy) by ash characterization. Geophysical Research Letters, 2002, 29, 71-1-71-4.	4.0	123
4	Experimental observation of stick-slip instability fronts. Geophysical Journal International, 2010, 180, 697-702.	2.4	115
5	Eruptive history and petrologic evolution of the Albano multiple maar (Alban Hills, Central Italy). Bulletin of Volcanology, 2006, 68, 567-591.	3.0	101
6	Highâ€speed imaging of Strombolian explosions: The ejection velocity of pyroclasts. Geophysical Research Letters, 2012, 39, .	4.0	94
7	Aggregation-dominated ash settling from the EyjafjallajÃ¶kull volcanic cloud illuminated by field and laboratory high-speed imaging. Geology, 2011, 39, 891-894.	4.4	88
8	Post-caldera activity in the Alban Hills volcanic district (Italy): 40Ar/39Ar geochronology and insights into magma evolution. Bulletin of Volcanology, 2003, 65, 227-247.	3.0	86
9	Maarâ€diatreme geometry and deposits: Subsurface blast experiments with variable explosion depth. Geochemistry, Geophysics, Geosystems, 2014, 15, 740-764.	2.5	83
10	Compositional, morphological, and hysteresis characterization of magnetic airborne particulate matter in Rome, Italy. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	78
11	An analytical model for gas overpressure in slugâ€driven explosions: Insights into Strombolian volcanic eruptions. Journal of Geophysical Research, 2012, 117, .	3.3	77
12	Conduit implosion during Vulcanian eruptions. Geology, 2005, 33, 581.	4.4	76
13	The thickness of the falling film of liquid around a Taylor bubble. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 1041-1064.	2.1	70
14	Energy consumption by magmatic fragmentation and pyroclast ejection during Vulcanian eruptions. Earth and Planetary Science Letters, 2010, 291, 60-69.	4.4	68
15	Shifting styles of basaltic explosive activity during the 2002â€“03 eruption of Mt. Etna, Italy. Journal of Volcanology and Geothermal Research, 2009, 180, 110-122.	2.1	66
16	Sub-surface dynamics and eruptive styles of maars in the Colli Albani Volcanic District, Central Italy. Journal of Volcanology and Geothermal Research, 2009, 180, 189-202.	2.1	60
17	Experimental birth of a maarâ€“diatreme volcano. Journal of Volcanology and Geothermal Research, 2013, 260, 1-12.	2.1	55
18	The thermal stability of EyjafjallajÃ¶kull ash versus turbine ingestion test sands. Journal of Applied Volcanology, 2014, 3, .	2.0	55

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19	Basaltic scoria textures from a zoned conduit as precursors to violent Strombolian activity. Geology, 2010, 38, 439-442.	4.4	54
20	Rock magnetism and palaeomagnetism of the Montalbano Jonico section (Italy): evidence for late diagenetic growth of greigite and implications for magnetostratigraphy. Geophysical Journal International, 2010, 180, 1049-1066.	2.4	53
21	The effect of preâ€existing craters on the initial development of explosive volcanic eruptions: An experimental investigation. Geophysical Research Letters, 2013, 40, 507-510.	4.0	53
22	Experimental craters formed by single and multiple buried explosions and implications for volcanic craters with emphasis on maars. Geophysical Research Letters, 2012, 39, .	4.0	52
23	Pyroclast Tracking Velocimetry illuminates bomb ejection and explosion dynamics at Stromboli (Italy) and Yasur (Vanuatu) volcanoes. Journal of Geophysical Research: Solid Earth, 2014, 119, 5384-5397.	3.4	52
24	Mid-distal occurrences of the Albano Maar pyroclastic deposits and their relevance for reassessing the eruptive scenarios of the most recent activity at the Colli Albani Volcanic District, Central Italy. Quaternary International, 2007, 171-172, 160-178.	1.5	51
25	Linked frequency and intensity of persistent volcanic activity at Stromboli (Italy). Geophysical Research Letters, 2013, 40, 3384-3388.	4.0	48
26	Integrating puffing and explosions in a general scheme for Strombolianâ€style activity. Journal of Geophysical Research: Solid Earth, 2017, 122, 1860-1875.	3.4	48
27	Recurrence of volcanic activity along the Roman Comagmatic Province (Tyrrhenian margin of Italy) and its tectonic significance. Tectonics, 2004, 23, n/a-n/a.	2.8	47
28	Eruption dynamics and tephra dispersal from the 24 November 2006 paroxysm at South-East Crater, Mt Etna, Italy. Journal of Volcanology and Geothermal Research, 2014, 274, 78-91.	2.1	47
29	Viscous plugging can enhance and modulate explosivity of strombolian eruptions. Earth and Planetary Science Letters, 2015, 423, 210-218.	4.4	47
30	Hawaiian and Strombolian Eruptions. , 2015, , 485-503.		47
31	Cooling rate-induced differentiation in anhydrous and hydrous basalts at 500 MPa: Implications for the storage and transport of magmas in dikes. Chemical Geology, 2010, 270, 164-178.	3.3	46
32	The 472 AD Pollena eruption of Somma-Vesuvius (Italy) and its environmental impact at the end of the Roman Empire. Journal of Volcanology and Geothermal Research, 2002, 113, 19-36.	2.1	45
33	Stronger or longer: Discriminating between Hawaiian and Strombolian eruption styles. Geology, 2016, 44, 163-166.	4.4	43
34	Tephra ring interpretation in light of evolving maarâ€“diatreme concepts: Stracciacappa maar (central) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.1	39
35	The effect of particle size on the rheology of liquidâ€solid mixtures with application to lava flows: Results from analogue experiments. Geochemistry, Geophysics, Geosystems, 2013, 14, 2661-2669.	2.5	37
36	A note on maar eruption energetics: current models and their application. Bulletin of Volcanology, 2010, 72, 75-83.	3.0	36

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37	CO2 bubble generation and migration during magmaâ€“carbonate interaction. Contributions To Mineralogy and Petrology, 2015, 169, 1.	3.1	36
38	Particle size-density relationships in pyroclastic deposits: inferences for emplacement processes. Bulletin of Volcanology, 2002, 64, 273-284.	3.0	35
39	Uncovering the eruptive patterns of the 2019 doubleÂparoxysm eruption crisis of Stromboli volcano. Nature Communications, 2021, 12, 4213.	12.8	35
40	High-speed imaging, acoustic features, and aeroacoustic computations of jet noise from Strombolian (and Vulcanian) explosions. Geophysical Research Letters, 2014, 41, 3096-3102.	4.0	34
41	Photo-acoustic study of subshear and supershear ruptures in the laboratory. Earth and Planetary Science Letters, 2011, 308, 424-432.	4.4	33
42	SEM-based methods for the analysis of basaltic ash from weak explosive activity at Etna in 2006 and the 2007 eruptive crisis at Stromboli. Physics and Chemistry of the Earth, 2012, 45-46, 113-127.	2.9	33
43	Physical parameterization of Strombolian eruptions via experimentallyâ€validated modeling of highâ€speed observations. Geophysical Research Letters, 2012, 39, .	4.0	33
44	Inâ€flight dynamics of volcanic ballistic projectiles. Reviews of Geophysics, 2017, 55, 675-718.	23.0	32
45	Assessing the volcanic hazard for Rome: ⁴⁰Ar/³⁹Ar and Inâ€SAR constraints on the most recent eruptive activity and presentâ€day uplift at Colli Albani Volcanic District. Geophysical Research Letters, 2016, 43, 6898-6906.	4.0	31
46	Effect of particle volume fraction on the settling velocity of volcanic ash particles: insights from joint experimental and numerical simulations. Scientific Reports, 2017, 7, 39620.	3.3	31
47	The dynamics of volcanic jets: Temporal evolution of particles exit velocity from shockâ€tube experiments. Journal of Geophysical Research: Solid Earth, 2017, 122, 6031-6045.	3.4	30
48	Recycled ejecta modulating Strombolian explosions. Bulletin of Volcanology, 2016, 78, 1.	3.0	29
49	The 15 March 2007 paroxysm of Stromboli: video-image analysis, and textural and compositional features of the erupted deposit. Bulletin of Volcanology, 2013, 75, 1.	3.0	28
50	Characteristics of puffing activity revealed by ground-based, thermal infrared imaging: the example of Stromboli Volcano (Italy). Bulletin of Volcanology, 2017, 79, 1.	3.0	28
51	Experimental and analytical modeling of basaltic ash explosions at Mount Etna, Italy, 2001. Journal of Geophysical Research, 2004, 109, .	3.3	27
52	The basal ash deposit of the Sovana Eruption (Vulsini Volcanoes, central Italy): the product of a dilute pyroclastic density current. Journal of Volcanology and Geothermal Research, 1998, 87, 233-254.	2.1	26
53	Temporal evolution of the Minoan eruption (Santorini, Greece), as recorded by its Plinian fall deposit and interlayered ash flow beds. Journal of Volcanology and Geothermal Research, 2001, 109, 299-317.	2.1	26
54	Highâ€speed imaging of Strombolian eruptions: Gasâ€pyroclast dynamics in initial volcanic jets. Geophysical Research Letters, 2015, 42, 6253-6260.	4.0	25

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55	Constraints on magmaâ€“wall rock thermal interaction during explosive eruptions from textural analysis of cored bombs. Journal of Volcanology and Geothermal Research, 2010, 192, 27-34.	2.1	24
56	The Initial Development of Transient Volcanic Plumes as a Function of Source Conditions. Journal of Geophysical Research: Solid Earth, 2017, 122, 9784-9803.	3.4	24
57	Mechanisms of Ash Generation at Basaltic Volcanoes: The Case of Mount Etna, Italy. Frontiers in Earth Science, 2019, 7, .	1.8	24
58	Pyroclast Tracking Velocimetry: A particle tracking velocimetryâ€based tool for the study of Strombolian explosive eruptions. Journal of Geophysical Research: Solid Earth, 2014, 119, 5369-5383.	3.4	23
59	"Explosive volcanic activity at Mt. Yasur: A characterization of the acoustic events (9â€“12th July 2011)". Journal of Volcanology and Geothermal Research, 2016, 322, 175-183.	2.1	23
60	Ash aggregation enhanced by deposition and redistribution of salt on the surface of volcanic ash in eruption plumes. Scientific Reports, 2017, 7, 45762.	3.3	23
61	Experimental simulations of volcanic ash resuspension by wind under the effects of atmospheric humidity. Scientific Reports, 2018, 8, 14509.	3.3	23
62	MeMoVolc consensual document: a review of cross-disciplinary approaches to characterizing small explosive magmatic eruptions. Bulletin of Volcanology, 2015, 77, 1.	3.0	22
63	The effect of H2O on the viscosity of K-trachytic melts at magmatic temperatures. Chemical Geology, 2006, 235, 124-137.	3.3	21
64	Fracturing and healing of basaltic magmas during explosive volcanic eruptions. Nature Geoscience, 2021, 14, 248-254.	12.9	21
65	The acoustic signatures of ground acceleration, gas expansion, and spall fallback in experimental volcanic explosions. Geophysical Research Letters, 2014, 41, 1916-1922.	4.0	20
66	Flow and fracturing of viscoelastic media under diffusion-driven bubble growth: An analogue experiment for eruptive volcanic conduits. Earth and Planetary Science Letters, 2006, 243, 771-785.	4.4	19
67	Maars to calderas: end-members on a spectrum of explosive volcanic depressions. Frontiers in Earth Science, 2015, 3, .	1.8	19
68	Unoccupied Aircraft Systems (UASs) Reveal the Morphological Changes at Stromboli Volcano (Italy) before, between, and after the 3 July and 28 August 2019 Paroxysmal Eruptions. Remote Sensing, 2021, 13, 2870.	4.0	18
69	Advances in the study of volcanic ash. Eos, 2007, 88, 253-256.	0.1	17
70	Parameterizing multi-vent activity at Stromboli Volcano (Aeolian Islands, Italy). Bulletin of Volcanology, 2018, 80, 1.	3.0	17
71	Characterising vent and crater shape changes at Stromboli: implications for risk areas. Volcanica, 2021, 4, 87-105.	1.8	17
72	Time-series analysis of fissure-fed multi-vent activity: a snapshot from the July 2014 eruption of Etna volcano (Italy). Bulletin of Volcanology, 2017, 79, 1.	3.0	16

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73	Experimental investigation of the aggregationâ€disaggregation of colliding volcanic ash particles in turbulent, lowâ€humidity suspensions. Geophysical Research Letters, 2015, 42, 1068-1075.	4.0	13
74	Sequential fragmentation/transport theory, pyroclast sizeâ€“density relationships, and the emplacement dynamics of pyroclastic density currents â€" A case study on the Mt. St. Helens (USA) 1980 eruption. Journal of Volcanology and Geothermal Research, 2014, 275, 1-13.	2.1	12
75	Volcaniclastic aggradation in a semiarid environment, northwestern Vulcano Island, Italy. Bulletin of the Geological Society of America, 1998, 110, 630-643.	3.3	12
76	High-resolution geochemistry of volcanic ash highlights complex magma dynamics during the EyjafjallajÃ¶kull 2010 eruption. American Mineralogist, 2017, 102, 1173-1186.	1.9	12
77	Field-based measurements of volcanic ash resuspension by wind. Earth and Planetary Science Letters, 2021, 554, 116684.	4.4	11
78	3â€<scp>D</scp> highâ€speed imaging of volcanic bomb trajectory in basaltic explosive eruptions. Geochemistry, Geophysics, Geosystems, 2016, 17, 4268-4275.	2.5	10
79	Time evolution of transient volcanic plumes: Insights from fractal analysis. Journal of Volcanology and Geothermal Research, 2019, 371, 59-71.	2.1	10
80	Volcanic Vortex Rings: Axial Dynamics, Acoustic Features, and Their Link to Vent Diameter and Supersonic Jet Flow. Geophysical Research Letters, 2021, 48, e2021GL092899.	4.0	9
81	Insights into explosion dynamics and the production of ash at Stromboli from samples collected in real-time, October 2009. , 2013, , .		7
82	Explosive volcanic activity at Mt. Yasur: A characterization of the acoustic events (9â€"12th July 2011). Journal of Volcanology and Geothermal Research, 2015, 302, 24.	2.1	7
83	Gasâ€Pyroclast Motions in Volcanic Conduits During Strombolian Eruptions, in Light of Shock Tube Experiments. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB019182.	3.4	7
84	Ash Features from Ordinary Activity at Stromboli Volcano. International Journal of Geosciences, 2014, 05, 1361-1382.	0.6	7
85	The Birth of a Hawaiian Fissure Eruption. Journal of Geophysical Research: Solid Earth, 2021, 126, .	3.4	6
86	Multi-parametric characterization of explosive activity at Batu Tara Volcano (Flores Sea, Indonesia). Journal of Volcanology and Geothermal Research, 2021, 413, 107199.	2.1	6
87	Drone Peers into Open Volcanic Vents. Eos, 2017, , .	0.1	5
88	From magma ascent to ash generation: investigating volcanic conduit processes by integrating experiments, numerical modeling, and observations. Annals of Geophysics, 2017, 60, .	1.0	5
89	Eruptive Styles Recognition Using High Temporal Resolution Geostationary Infrared Satellite Data. Remote Sensing, 2019, 11, 669.	4.0	4
90	The dynamics of explosive mafic eruptions: New insights from multiparametric observations. , 2021, , 379-411.		4

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91	The electrical signature of mafic explosive eruptions at Stromboli volcano, Italy. Scientific Reports, 2022, 12, .	3.3	4
92	Modeling the crystallization conditions of clinopyroxene crystals erupted during Februaryâ€“April 2021 lava fountains at Mt. Etna: Implications for the dynamic transfer of magmas. Lithos, 2022, 420-421, 106710.	1.4	3
93	Experimental multiblast craters and ejecta â€” seismoâ€acoustics, jet characteristics, craters, and ejecta deposits and implications for volcanic explosions. Journal of Geophysical Research: Solid Earth, 0, , .	3.4	1
94	Reply to comment by M. A. Laurenzi on â€œRecurrence of volcanic activity along the Roman Comagmatic Province (Tyrrhenian margin of Italy) and its tectonic significanceâ€. Tectonics, 2005, 24, n/a-n/a.	2.8	0