

Raffaello Cioni

List of Publications by Year in descending order

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112
papers

4,901
citations

76326

40
h-index

98798

67
g-index

123
all docs

123
docs citations

123
times ranked

3019
citing authors

#	ARTICLE	IF	CITATIONS
1	Age and whole rock glass compositions of proximal pyroclastics from the major explosive eruptions of Somma-Vesuvius: A review as a tool for distal tephrostratigraphy. <i>Journal of Volcanology and Geothermal Research</i> , 2008, 177, 1-18.	2.1	257
2	Compositional Layering and Syn-eruptive Mixing of a Periodically Refilled Shallow Magma Chamber: the AD 79 Plinian Eruption of Vesuvius. <i>Journal of Petrology</i> , 1995, 36, 739-776.	2.8	199
3	Pyroclastic deposits as a guide for reconstructing the multi-stage evolution of the Somma-Vesuvius Caldera. <i>Bulletin of Volcanology</i> , 1999, 61, 207-222.	3.0	187
4	Developing an Event Tree for probabilistic hazard and risk assessment at Vesuvius. <i>Journal of Volcanology and Geothermal Research</i> , 2008, 178, 397-415.	2.1	179
5	Explosive activity and eruption scenarios at Somma-Vesuvius (Italy): Towards a new classification scheme. <i>Journal of Volcanology and Geothermal Research</i> , 2008, 178, 331-346.	2.1	166
6	Tephra sedimentation during the 2010 Eyjafjallajökull eruption (Iceland) from deposit, radar, and satellite observations. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	142
7	Upward migration of Vesuvius magma chamber over the past 20,000 years. <i>Nature</i> , 2008, 455, 216-219.	27.8	131
8	Magmatic and phreatomagmatic phases in explosive eruptions of Vesuvius as deduced by grain-size and component analysis of the pyroclastic deposits. <i>Journal of Volcanology and Geothermal Research</i> , 1989, 38, 287-307.	2.1	118
9	Breadcrust bombs as indicators of Vulcanian eruption dynamics at Guagua Pichincha volcano, Ecuador. <i>Bulletin of Volcanology</i> , 2006, 69, 281-300.	3.0	117
10	Thermal and compositional evolution of the shallow magma chambers of Vesuvius: Evidence from pyroxene phenocrysts and melt inclusions. <i>Journal of Geophysical Research</i> , 1998, 103, 18277-18294.	3.3	116
11	Complex changes in eruption dynamics during the 79 AD eruption of Vesuvius. <i>Bulletin of Volcanology</i> , 2005, 67, 144-159.	3.0	109
12	The major and trace element glass compositions of the productive Mediterranean volcanic sources: tools for correlating distal tephra layers in and around Europe. <i>Quaternary Science Reviews</i> , 2015, 118, 48-66.	3.0	108
13	Assessing pyroclastic fall hazard through field data and numerical simulations: Example from Vesuvius. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	107
14	Contrasting styles of Mount Vesuvius activity in the period between the Avellino and Pompeii Plinian eruptions, and some implications for assessment of future hazards. <i>Bulletin of Volcanology</i> , 2002, 64, 372-391.	3.0	103
15	Temperatures of the A.D. 79 pyroclastic density current deposits (Vesuvius, Italy). <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	94
16	Petrology and geochemistry of the ultrapotassic rocks from the Sabatini Volcanic District, central Italy: the role of evolutionary processes in the genesis of variably enriched alkaline magmas. <i>Journal of Volcanology and Geothermal Research</i> , 1997, 75, 107-136.	2.1	91
17	Complex dynamics of small-moderate volcanic events: the example of the 2011 rhyolitic Cordón Caulle eruption, Chile. <i>Bulletin of Volcanology</i> , 2015, 77, 1.	3.0	86
18	Volatile content and degassing processes in the AD 79 magma chamber at Vesuvius (Italy). <i>Contributions To Mineralogy and Petrology</i> , 2000, 140, 40-54.	3.1	85

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19	Changes in eruptive style during the A.D. 1538 Monte Nuovo eruption (Phlegrean Fields, Italy): the role of syn-eruptive crystallization. <i>Bulletin of Volcanology</i> , 2005, 67, 601-621.	3.0	77
20	Variability of the eruption dynamics during a Subplinian event: the Greenish Pumice eruption of Somma-Vesuvius (Italy). <i>Journal of Volcanology and Geothermal Research</i> , 2003, 124, 89-114.	2.1	74
21	Dynamics of wind-affected volcanic plumes: The example of the 2011 Cordón Caulle eruption, Chile. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 2242-2261.	3.4	70
22	Evaluation of results from the fourth and fifth IAVCEI field workshops on volcanic gases, Vulcano island, Italy and Java, Indonesia. <i>Journal of Volcanology and Geothermal Research</i> , 2001, 108, 157-172.	2.1	68
23	Emergency planning and mitigation at Vesuvius: A new evidence-based approach. <i>Journal of Volcanology and Geothermal Research</i> , 2008, 178, 454-473.	2.1	68
24	Insights into the dynamics and evolution of the 2010 Eyjafjallajökull summit eruption (Iceland) provided by volcanic ash textures. <i>Earth and Planetary Science Letters</i> , 2014, 394, 111-123.	4.4	66
25	Chronology and impact of the 2011 Cordón Caulle eruption, Chile. <i>Natural Hazards and Earth System Sciences</i> , 2016, 16, 675-704.	3.6	61
26	Potassic primary melts of vulsini (Roman Province): evidence from mineralogy and melt inclusions. <i>Contributions To Mineralogy and Petrology</i> , 1995, 120, 186-196.	3.1	60
27	Pyroclastic flow hazard assessment at Somma-Vesuvius based on the geological record. <i>Bulletin of Volcanology</i> , 2010, 72, 1021-1038.	3.0	60
28	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.	4.4	57
29	The Pomici di Avellino eruption of Somma-Vesuvius (3.9 ka bp). Part I: stratigraphy, compositional variability and eruptive dynamics. <i>Bulletin of Volcanology</i> , 2010, 72, 539-558.	3.0	56
30	Carbonate-derived CO ₂ purging magma at depth: Influence on the eruptive activity of Somma-Vesuvius, Italy. <i>Earth and Planetary Science Letters</i> , 2011, 310, 84-95.	4.4	54
31	Scavenging of sulphur, halogens and trace metals by volcanic ash: The 2010 Eyjafjallajökull eruption. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 103, 138-160.	3.9	54
32	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.	4.4	53
33	Fingerprinting ash deposits of small scale eruptions by their physical and textural features. <i>Journal of Volcanology and Geothermal Research</i> , 2008, 177, 277-287.	2.1	51
34	Sedimentation of long-lasting wind-affected volcanic plumes: the example of the 2011 rhyolitic Cordón Caulle eruption, Chile. <i>Bulletin of Volcanology</i> , 2015, 77, 1.	3.0	51
35	Aborted propagation of the Ethiopian rift caused by linkage with the Kenyan rift. <i>Nature Communications</i> , 2019, 10, 1309.	12.8	49
36	Transport and deposition of pyroclastic density currents over an inhabited area: the deposits of the AD 79 eruption of Vesuvius at Herculaneum, Italy. <i>Sedimentology</i> , 2002, 49, 929-953.	3.1	48

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37	Determination of the largest clast sizes of tephra deposits for the characterization of explosive eruptions: a study of the IAVCEI commission on tephra hazard modelling. <i>Bulletin of Volcanology</i> , 2013, 75, 1.	3.0	48
38	Morphologic features of juvenile pyroclasts from magmatic and phreatomagmatic deposits of Vesuvius. <i>Journal of Volcanology and Geothermal Research</i> , 1992, 51, 61-78.	2.1	46
39	Identifying recycled ash in basaltic eruptions. <i>Scientific Reports</i> , 2014, 4, 5851.	3.3	46
40	Lahar hazard assessment in the southern drainage system of Cotopaxi volcano, Ecuador: Results from multiscale lahar simulations. <i>Geomorphology</i> , 2014, 207, 51-63.	2.6	40
41	Near-Real-Time Tephra Fallout Assessment at Mt. Etna, Italy. <i>Remote Sensing</i> , 2019, 11, 2987.	4.0	40
42	Archaeomagnetic results from mural paintings and pyroclastic rocks in Pompeii and Herculaneum. <i>Physics of the Earth and Planetary Interiors</i> , 2000, 118, 227-240.	1.9	39
43	Physical volcanology of the post-twelfth-century activity at Cotopaxi volcano, Ecuador: Behavior of an andesitic central volcano. <i>Bulletin of the Geological Society of America</i> , 2011, 123, 1193-1215.	3.3	39
44	Nature and Evolution of Primitive Vesuvius Magmas: an Experimental Study. <i>Journal of Petrology</i> , 2014, 55, 2281-2310.	2.8	37
45	Plinian and Subplinian Eruptions. , 2015, , 519-535.		35
46	Potential impacts of tephra fallout from a large-scale explosive eruption at Sakurajima volcano, Japan. <i>Bulletin of Volcanology</i> , 2017, 79, 1.	3.0	33
47	MeMoVolc report on classification and dynamics of volcanic explosive eruptions. <i>Bulletin of Volcanology</i> , 2016, 78, 1.	3.0	31
48	The 512 AD eruption of Vesuvius: complex dynamics of a small scale subplinian event. <i>Bulletin of Volcanology</i> , 2011, 73, 789-810.	3.0	30
49	Assessing future vent opening locations at the Somma-Vesuvio volcanic complex: 2. Probability maps of the caldera for a future Plinian/sub-Plinian event with uncertainty quantification. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 4357-4376.	3.4	28
50	Geomorphology of Mount Ararat/Ağrı Dağı (Ağrı Dağı Milli Parkı, Eastern Anatolia, Turkey). <i>Journal of Maps</i> , 2017, 13, 182-190.	2.0	28
51	Aeolian Remobilisation of the 2011-Cordón Caulle Tephra-Fallout Deposit: Example of an Important Process in the Life Cycle of Volcanic Ash. <i>Frontiers in Earth Science</i> , 0, 7, .	1.8	28
52	Temperature of Vesuvius magmas. <i>Geology</i> , 1999, 27, 443.	4.4	27
53	Caldera structure, amount of collapse, and erupted volumes: The case of Bolsena caldera, Italy. <i>Bulletin of the Geological Society of America</i> , 2012, 124, 1562-1576.	3.3	27
54	Stability of volcanic conduits during explosive eruptions. <i>Journal of Volcanology and Geothermal Research</i> , 2017, 339, 52-62.	2.1	27

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55	Evidence for lahar-triggering mechanisms in complex stratigraphic sequences: the post-twelfth century eruptive activity of Cotopaxi Volcano, Ecuador. <i>Bulletin of Volcanology</i> , 2013, 75, 1.	3.0	26
56	Dynamics of ash-dominated eruptions at Vesuvius: the post-512 AD AS1a event. <i>Bulletin of Volcanology</i> , 2011, 73, 699-715.	3.0	25
57	Precursory phenomena and destructive events related to the Late Bronze Age Minoan (Thera, Greece) and <sc>AD</sc> 79 (Vesuvius, Italy) Plinian eruptions; inferences from the stratigraphy in the archaeological areas. <i>Geological Society Special Publication</i> , 2000, 171, 123-141.	1.3	24
58	Apulian Bronze Age pottery as a long-distance indicator of the Avellino Pumice eruption (Vesuvius,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.3	24
59	Eruption early warning at Vesuvius: The A.D. 1631 lesson. <i>Geophysical Research Letters</i> , 2006, 33, n/a-n/a.	4.0	24
60	Magma degassing and eruption dynamics of the Avellino pumice Plinian eruption of Somma Vesuvius (Italy). Comparison with the Pompeii eruption. <i>Earth and Planetary Science Letters</i> , 2012, 331-332, 257-268.	4.4	23
61	Chlorine as a geobarometer for alkaline magmas: Evidence from a systematic study of the eruptions of Mount Somma-Vesuvius. <i>Scientific Reports</i> , 2016, 6, 21726.	3.3	23
62	Precursors to the plinian eruptions of theria (late bronze age) and vesuvius (AD 79): Data from archaeological areas. <i>Physics and Chemistry of the Earth</i> , 2000, 25, 719-724.	0.6	22
63	Effects of experimental reheating of natural basaltic ash at different temperatures and redox conditions. <i>Contributions To Mineralogy and Petrology</i> , 2013, 165, 863-883.	3.1	22
64	MeMoVolc consensual document: a review of cross-disciplinary approaches to characterizing small explosive magmatic eruptions. <i>Bulletin of Volcanology</i> , 2015, 77, 1.	3.0	22
65	The 1914 Taisho eruption of Sakurajima volcano: stratigraphy and dynamics of the largest explosive event in Japan during the twentieth century. <i>Bulletin of Volcanology</i> , 2017, 79, 1.	3.0	22
66	Assessing future vent opening locations at the Somma Vesuvio volcanic complex: 1. A new information geodatabase with uncertainty characterizations. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 4336-4356.	3.4	22
67	Volcanic evolution of the Somma-Vesuvius Complex (Italy). <i>Journal of Maps</i> , 2020, 16, 137-147.	2.0	19
68	Dynamics and tephra dispersal of Violent Strombolian eruptions at Vesuvius: insights from field data, wind reconstruction and numerical simulation of the 1906 event. <i>Bulletin of Volcanology</i> , 2015, 77, 1.	3.0	18
69	The Volcanic and Mining Geoheritage of San Pietro Island (Sulcis, Sardinia, Italy): the Potential for Geosite Valorization. <i>Geoheritage</i> , 2019, 11, 1567-1581.	2.8	18
70	Conduit stability effects on intensity and steadiness of explosive eruptions. <i>Scientific Reports</i> , 2018, 8, 4125.	3.3	17
71	Tree-Based Enhancement of Kinetic Energy Models for Reproducing Channelization Processes of Pyroclastic Density Currents. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2019JB019271.	3.4	16
72	The explosive activity of the 1669 Monti Rossi eruption at Mt. Etna (Italy). <i>Journal of Volcanology and Geothermal Research</i> , 2016, 328, 115-133.	2.1	15

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73	The Baia�Fondi di Baia eruption at Campi Flegrei: stratigraphy and dynamics of a multi-stage caldera reactivation event. <i>Bulletin of Volcanology</i> , 2017, 79, 1.	3.0	15
74	Exposure-based risk assessment and emergency management associated with the fallout of large clasts at Mount Etna. <i>Natural Hazards and Earth System Sciences</i> , 2019, 19, 589-610.	3.6	15
75	Defining the Pre-Eruptive States of Active Volcanoes for Improving Eruption Forecasting. <i>Frontiers in Earth Science</i> , 2022, 10, .	1.8	15
76	Tephrochronology and tephrostratigraphy of two Pleistocene continental fossiliferous successions from central Italy. <i>Journal of Quaternary Science</i> , 2003, 18, 545-556.	2.1	13
77	Strategies for helium pycnometry density measurements of welded ignimbritic rocks. <i>Measurement: Journal of the International Measurement Confederation</i> , 2021, 173, 108640.	5.0	13
78	Physical constraints for effective magma-water interaction along volcanic conduits during silicic explosive eruptions. <i>Geology</i> , 2018, 46, 867-870.	4.4	12
79	Recent volcano-tectonic activity of the Ririba rift and the evolution of rifting in South Ethiopia. <i>Journal of Volcanology and Geothermal Research</i> , 2020, 403, 106989.	2.1	12
80	Evolution of Conduit Geometry and Eruptive Parameters During Effusive Events. <i>Geophysical Research Letters</i> , 2018, 45, 7471-7480.	4.0	10
81	Physical and Aerodynamic Characterization of Particle Clusters at Sakurajima Volcano (Japan). <i>Frontiers in Earth Science</i> , 2020, 8, .	1.8	10
82	Low-Energy Fragmentation Dynamics at Copahue Volcano (Argentina) as Revealed by an Infrasonic Array and Ash Characteristics. <i>Frontiers in Earth Science</i> , 2021, 9, .	1.8	9
83	Rheomorphic diapirs in densely welded ignimbrites: The Serra di Paringianu ignimbrite of Sardinia, Italy. <i>Journal of Volcanology and Geothermal Research</i> , 2013, 258, 12-23.	2.1	8
84	Estimating eruptive parameters and related uncertainties for pyroclastic density currents deposits: worked examples from Somma-Vesuvius (Italy). <i>Bulletin of Volcanology</i> , 2020, 82, 1.	3.0	8
85	Reproducing pyroclastic density current deposits of the 79�CE eruption of the Somma�Vesuvius volcano using the box-model approach. <i>Solid Earth</i> , 2021, 12, 119-139.	2.8	8
86	Magmatic reactivation of the Campi Flegrei volcanic system: insights from the Baia�Fondi di Baia eruption. <i>Bulletin of Volcanology</i> , 2018, 80, 1.	3.0	7
87	Eruption type probability and eruption source parameters at Cotopaxi and Guagua Pichincha volcanoes (Ecuador) with uncertainty quantification. <i>Bulletin of Volcanology</i> , 2021, 83, 1.	3.0	7
88	Thematic vent opening probability maps and hazard assessment of small-scale pyroclastic density currents in the San Salvador volcanic complex (El Salvador) and Nejapa-Chiltepe volcanic complex (Nicaragua). <i>Natural Hazards and Earth System Sciences</i> , 2021, 21, 1639-1665.	3.6	7
89	Structural geology of crystal-rich, silicic lava flows: A case study from San Pietro Island (Sardinia.) Tj ETQq1 1 0.784314 rgBT /Overlock		5
90	Tracing the boundaries of Cenozoic volcanic edifices from Sardinia (Italy): a geomorphometric contribution. <i>Earth Surface Dynamics</i> , 2014, 2, 481-492.	2.4	5

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91	Comment on: "The dark nature of Somma-Vesuvius volcano: Evidence from the ^{14}C 43.5kaBP Avellino eruption" by Milia A., Raspini A., Torrente M.M.. Quaternary International, 2008, 192, 102-109.	1.5	4
92	The crater lake of Ilamatepec (Santa Ana) volcano, El Salvador: insights into lake gas composition and implications for monitoring. Bulletin of Volcanology, 2019, 81, 1.	3.0	4
93	Origin of volcanic-hosted Mn-oxide mineralization from San Pietro Island (SW Sardinia, Italy): An integrated geochemical, mineralogical and isotopic study. Journal of Geochemical Exploration, 2019, 204, 206-223.	3.2	4
94	Effusion Rate Evolution During Small Volume Basaltic Eruptions: Insights From Numerical Modeling. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB019301.	3.4	4
95	The Vesuvius and the other volcanoes of Central Italy. Geological Field Trips, 2017, 9, 1-158.	0.5	4
96	Explosive Behavior of Intermediate Magmas: The Example of Cotopaxi Volcano (Ecuador). Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009991.	2.5	4
97	Calibration strategies of PDC kinetic energy models and their application to the construction of hazard maps. Bulletin of Volcanology, 2022, 84, 1.	3.0	4
98	http://www.socgeol.it/368/58/products/a_simplified_scheme_for_the_description_of_textural_features_in_welded_ignimbrites_the_e Bollettino Della Societ� Geologica Italiana, 2009, , 615-627.	2.0	3
99	Lithofacies characteristics of diatreme deposits: Examples from a basaltic volcanic field of SW Sardinia (Italy). Journal of Volcanology and Geothermal Research, 2013, 255, 1-14.	2.1	3
100	The onset of an eruption: selective assimilation of hydrothermal minerals during pre-eruptive magma ascent of the 2010 summit eruption of Eyjafjallaj�kull volcano, Iceland. Journal of Volcanology and Geothermal Research, 2016, 327, 449-458.	2.1	3
101	The 2nd to 4th century explosive activity of Vesuvius: new data on the timing of the upward migration of the post-A.D. 79 magma chamber. Annals of Geophysics, 2013, 56, .	1.0	3
102	Syn-Eruptive Processes During the January�February 2019 Ash-Rich Emissions Cycle at Mt. Etna (Italy): Implications for Petrological Monitoring of Volcanic Ash. Frontiers in Earth Science, 2022, 10, .	1.8	3
103	Potassic primary melts of Vulsini (Roman Province): evidence from mineralogy and melt inclusions. Contributions To Mineralogy and Petrology, 1995, 120, 186-196.	3.1	3
104	Eruptive dynamics and fragmentation mechanisms during cyclic Vulcanian activity at Sakurajima volcano (Japan): Insights from ash texture analysis. Journal of Volcanology and Geothermal Research, 2022, 428, 107582.	2.1	3
105	The Lithic Component of Pyroclastic Deposits as a Proxy for the Reconstruction of the Syneruptive Evolution of Volcanic Conduits: The CE 79 Eruption of Vesuvius. Journal of Geophysical Research: Solid Earth, 2019, 124, 11022-11037.	3.4	2
106	Experimental constraints on pre-eruption conditions of the 1631 Vesuvius eruption. Journal of Volcanology and Geothermal Research, 2020, 406, 107076.	2.1	2
107	The city of Napoli and its active volcanoes. Geological Field Trips, 2019, 11, 1-107.	0.5	2
108	Reply to the "Comment by Delmelle et al. (2013) on "Scavenging of sulfur, halogens and trace metals by volcanic ash: The 2010 Eyjafjallaj�kull eruption" by Bagnato et al. (2013)" by Geochimica Et Cosmochimica Acta, 2014, 127, 385-389.	3.9	1

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109	Geochemical and textural constraints on degassing processes in sub-Plinian eruptions: case-study of the Greenish Pumice eruption of Mount Somma-Vesuvius. <i>Bulletin of Volcanology</i> , 2018, 80, 1.	3.0	1
110	Physical constraints for effective magma-water interaction along volcanic conduits during silicic explosive eruptions: REPLY. <i>Geology</i> , 2019, 47, e462-e462.	4.4	1
111	Understanding volcanic systems and their dynamics combining field and physical volcanology with petrology studies. , 2021, , 285-328.		1
112	Editorial - Consolidating the new deal of the Italian Journal of Geosciences. <i>Italian Journal of Geosciences</i> , 2013, , 3-3.	0.8	0