Alessandro Fornaciai

List of Publications by Year in descending order

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186209 254106 1,959 56 28 43 citations h-index g-index papers 58 58 58 1972 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Release of a 10-m-resolution DEM for the Italian territory: Comparison with global-coverage DEMs and anaglyph-mode exploration via the web. Computers and Geosciences, 2012, 38, 168-170.	2.0	194
2	Forecasting lava flow paths by a stochastic approach. Geophysical Research Letters, 2005, 32, .	1.5	104
3	Multiview 3D reconstruction in geosciences. Computers and Geosciences, 2012, 44, 168-176.	2.0	96
4	Lava flow hazard at Fogo Volcano, Cabo Verde, before and after the 2014–2015 eruption. Natural Hazards and Earth System Sciences, 2016, 16, 1925-1951.	1.5	69
5	Morphology of basaltic lava channels during the Mt. Etna September 2004 eruption from airborne laser altimeter data. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	67
6	Morphometry of scoria cones, and their relation to geodynamic setting: A DEM-based analysis. Journal of Volcanology and Geothermal Research, 2012, 217-218, 56-72.	0.8	67
7	Volcanological applications of unoccupied aircraft systems (UAS): Developments, strategies, and future challenges. Volcanica, 2020, 3, 67-114.	0.6	63
8	LIDAR strip adjustment: Application to volcanic areas. Geomorphology, 2009, 111, 123-135.	1.1	61
9	Lava flow identification and aging by means of lidar intensity: Mount Etna case. Journal of Geophysical Research, 2007, 112 , .	3.3	58
10	Lava flow hazard at Nyiragongo volcano, D.R.C Bulletin of Volcanology, 2009, 71, 363-374.	1.1	57
11	Lava flow hazard and risk at Mt. Cameroon volcano. Bulletin of Volcanology, 2012, 74, 423-439.	1.1	54
12	UAV-based remote sensing surveys of lava flow fields: a case study from Etna's 1974 channel-fed lava flows. Bulletin of Volcanology, 2018, 80, 1.	1.1	51
13	Digital elevation model construction from structured topographic data: The DEST algorithm. Journal of Geophysical Research, 2004, 109, .	3.3	46
14	Construction dynamics of a lava channel. Bulletin of Volcanology, 2009, 71, 459-474.	1.1	42
15	A new approach to risk assessment of lava flow at Mount Etna. Geology, 2009, 37, 1111-1114.	2.0	41
16	The 2014 Effusive Eruption at Stromboli: New Insights from In Situ and Remote-Sensing Measurements. Remote Sensing, 2018, 10, 2035.	1.8	41
17	A microscopic information system (MIS) for petrographic analysis. Computers and Geosciences, 2010, 36, 665-674.	2.0	40
18	The regular shape of stratovolcanoes: A DEM-based morphometrical approach. Journal of Volcanology and Geothermal Research, 2010, 193, 171-181.	0.8	39

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19	Topographic control on lava flow paths at Mount Etna, Italy: Implications for hazard assessment. Journal of Geophysical Research, 2009, 114, .	3.3	38
20	Lidar surveys reveal eruptive volumes and rates at Etna, 2007–2010. Geophysical Research Letters, 2016, 43, 4270-4278.	1.5	38
21	Detecting short-term evolution of Etnean scoria cones: a LIDAR-based approach. Bulletin of Volcanology, 2010, 72, 1209-1222.	1.1	36
22	Mapping and DOWNFLOW simulation of recent lava flow fields at Mount Etna. Journal of Volcanology and Geothermal Research, 2011, 204, 27-39.	0.8	35
23	Hazard assessment at Mount Etna using a hybrid lava flow inundation model and satellite-based land classification. Natural Hazards, 2011, 58, 1001-1027.	1.6	35
24	A relation between lava discharge rate, thermal insulation, and flow area set using lidar data. Geophysical Research Letters, 2010, 37, .	1.5	34
25	Best-fit results from application of a thermo-rheological model for channelized lava flow to high spatial resolution morphological data. Geophysical Research Letters, 2007, 34, .	1.5	33
26	The Vegetation Resilience After Fire (VRAF) index: Development, implementation and an illustration from central Italy. International Journal of Applied Earth Observation and Geoinformation, 2008, 10, 312-329.	1.4	32
27	Lava flow hazard at Nyiragongo Volcano, DRC. Bulletin of Volcanology, 2009, 71, 375-387.	1.1	31
28	The distal segment of Etna's 2001 basaltic lava flow. Bulletin of Volcanology, 2010, 72, 119-127.	1.1	29
29	Volcanic field elongation, vent distribution, and tectonic evolution of a continental rift: The Main Ethiopian Rift example., 2016, 12, 706-720.		28
30	Application of an ultra-wide band sensor-free wireless network for ground monitoring. Engineering Geology, 2018, 238, 1-14.	2.9	26
31	Validation of an integrated satellite-data-driven response to an effusive crisis: the April–May 2018 eruption of Piton de la Fournaise. Annals of Geophysics, 2019, 61, .	0.5	26
32	Visualization and comparison of DEM-derived parameters. Application to volcanic areas. Geomorphology, 2017, 290, 69-84.	1.1	25
33	A LiDAR survey of Stromboli volcano (Italy): Digital elevation model-based geomorphology and intensity analysis. International Journal of Remote Sensing, 2010, 31, 3177-3194.	1.3	24
34	Catching Geomorphological Response to Volcanic Activity on Steep Slope Volcanoes Using Multi-Platform Remote Sensing. Remote Sensing, 2020, 12, 438.	1.8	24
35	LiDAR-based digital terrain analysis of an area exposed to the risk of lava flow invasion: the Zafferana Etnea territory, Mt. Etna (Italy). Natural Hazards, 2009, 50, 321-334.	1.6	23
36	Changes of the susceptibility to lava flow invasion induced by morphological modifications of an active volcano: the case of Mount Etna, Italy. Natural Hazards, 2010, 54, 537-546.	1.6	22

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37	Morphometric analysis of lava flow units: Case study over LIDAR-derived topography at Mount Etna, Italy. Journal of Volcanology and Geothermal Research, 2012, 235-236, 11-22.	0.8	22
38	A Flexible Wireless Sensor Network Based on Ultra-Wide Band Technology for Ground Instability Monitoring. Sensors, 2018, 18, 2948.	2.1	21
39	Dissolution/crystallization kinetics recorded in the 2002–2003 lavas of Stromboli (Italy). Bulletin of Volcanology, 2009, 71, 631-641.	1.1	20
40	Rapid Updating and Improvement of Airborne LIDAR DEMs Through Ground-Based SfM 3-D Modeling of Volcanic Features. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 6687-6699.	2.7	19
41	Lava flow hazard map of Piton de la Fournaise volcano. Natural Hazards and Earth System Sciences, 2021, 21, 2355-2377.	1.5	19
42	Reconstructing eroded paleovolcanoes on Gran Canaria, Canary Islands, using advanced geomorphometry. Geomorphology, 2016, 253, 123-134.	1.1	18
43	Uncertainties in lava flow hazard maps derived from numerical simulations: The case study of Mount Etna. Journal of Volcanology and Geothermal Research, 2013, 260, 90-102.	0.8	17
44	Modeling Tsunamis Generated by Submarine Landslides at Stromboli Volcano (Aeolian Islands, Italy): A Numerical Benchmark Study. Frontiers in Earth Science, 2021, 9, .	0.8	17
45	Crystal size distributions of plagioclase in lavas from the July–August 2001 Mount Etna eruption. Bulletin of Volcanology, 2015, 77, 1.	1.1	16
46	Subaerial-submarine morphological changes at Stromboli volcano (Italy) induced by the 2019–2020 eruptive activity. Geomorphology, 2022, 400, 108093.	1.1	12
47	DOWNFLOW code and LIDAR technology for lava flow analysis and hazard assessment at Mount Etna. Annals of Geophysics, 2011, 54, .	0.5	10
48	The 2004–2005ÂMt. Etna Compound Lava Flow Field: A Retrospective Analysis by Combining Remote and Field Methods. Journal of Geophysical Research: Solid Earth, 2021, 126, e2020JB020499.	1.4	8
49	Dispersion index of topographic surfaces. Geomorphology, 2012, 153-154, 169-178.	1.1	7
50	Simulating the area covered by lava flows using the DOWNFLOW code. Geological Society Special Publication, 2016, 426, 293-312.	0.8	7
51	Relative seismic and tsunami risk assessment for Stromboli Island (Italy). International Journal of Disaster Risk Reduction, 2022, 76, 103002.	1.8	5
52	Detection of Ground Control Points using the SITOGEOGIS tool to orthorectify Landsat 7 ETM + images. European Journal of Remote Sensing, 2008, , 55-63.	0.2	3
53	A Flexible Wireless Sensor Network Based on Ultra-Wide Band Technology for Ground Instability Monitoring. Sensors, 2018, 18, .	2.1	2
54	Seismic lines Offshore Mount Etna (SOME): open database. Annals of Geophysics, 2017, 60, .	0.5	1

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55	Reconstruction of the 2002 tsunami at Stromboli using the non-hydrostatic WAVE model (NHWAVE). Geological Society Special Publication, 2024, 519, 107-130.	0.8	О
56	Forest destruction by â€̃aâ€̃Ä•lava flow during Etna's 2002–03 eruption: Mechanical, thermal, and environmental interactions. Journal of Volcanology and Geothermal Research, 2022, 429, 107621.	0.8	0