

# Francesco Mazzarini

## List of Publications by Year in descending order

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108  
papers

3,727  
citations

101496

36  
h-index

155592

55  
g-index

112  
all docs

112  
docs citations

112  
times ranked

3434  
citing authors

#	ARTICLE	IF	CITATIONS
1	Evolution of the Main Ethiopian Rift in the frame of Afar and Kenya rifts propagation. <i>Tectonics</i> , 2005, 24, n/a-n/a.	1.3	193
2	Cenozoic geodynamics of the Ross Sea region, Antarctica: Crustal extension, intraplate strike-slip faulting, and tectonic inheritance. <i>Journal of Geophysical Research</i> , 1997, 102, 24669-24696.	3.3	161
3	The Pali Aike Volcanic Field, Patagonia: slab-window magmatism near the tip of South America. <i>Tectonophysics</i> , 2000, 321, 407-427.	0.9	140
4	Surface ruptures following the 30 October 2016 <i>M</i> <sub>w</sub> 6.5 Norcia earthquake, central Italy. <i>Journal of Maps</i> , 2018, 14, 151-160.	1.0	121
5	Slab window-related magmatism from southernmost South America: the Late Miocene mafic volcanics from the Estancia Glencross Area (45°S, Argentina-Chile). <i>Lithos</i> , 2001, 57, 67-89.	0.6	111
6	Morphometry of scoria cones located on a volcano flank: A case study from Mt. Etna (Italy), based on high-resolution LiDAR data. <i>Journal of Volcanology and Geothermal Research</i> , 2009, 186, 320-330.	0.8	109
7	Fault architecture in the Main Ethiopian Rift and comparison with experimental models: Implications for rift evolution and Nubia-Somalia kinematics. <i>Earth and Planetary Science Letters</i> , 2011, 301, 479-492.	1.8	108
8	The Yerer-Tullu Wellel volcanotectonic lineament: a transtensional structure in central Ethiopia and the associated magmatic activity. <i>Journal of African Earth Sciences</i> , 1998, 26, 135-150.	0.9	100
9	Coseismic ruptures of the 24 August 2016, <i>M</i> <sub>w</sub> 6.0 Amatrice earthquake (central Italy). <i>Journal of Geophysical Research</i> , 2017, 122, 10,784-10,814.	1.5	94
10	Evolution of an active lava flow field using a multitemporal LIDAR acquisition. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	92
11	The changing face of Mount Etna's summit area documented with Lidar technology. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	79
12	Spatial distribution of cones and satellite-detected lineaments in the Pali Aike Volcanic Field (southernmost Patagonia): insights into the tectonic setting of a Neogene rift system. <i>Journal of Volcanology and Geothermal Research</i> , 2003, 125, 291-305.	0.8	77
13	Active strike-slip faulting in El Salvador, Central America. <i>Geology</i> , 2005, 33, 989.	2.0	68
14	Morphology of basaltic lava channels during the Mt. Etna September 2004 eruption from airborne laser altimeter data. <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a.	1.5	67
15	The origin of along-rift variations in faulting and magmatism in the Ethiopian Rift. <i>Tectonics</i> , 2015, 34, 464-477.	1.3	65
16	Lava flow identification and aging by means of lidar intensity: Mount Etna case. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	58
17	TINITALY/01: a new Triangular Irregular Network of Italy. <i>Annals of Geophysics</i> , 2009, 50, .	0.5	56
18	Self-similar clustering of cinder cones and crust thickness in the Michoacan-Guanajuato and Sierra de Chichinautzin volcanic fields, Trans-Mexican Volcanic Belt. <i>Tectonophysics</i> , 2010, 486, 55-64.	0.9	52

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19	Vent distribution and crustal thickness in stretched continental crust: The case of the Afar Depression (Ethiopia). , 2007, 3, 152.		49
20	Aborted propagation of the Ethiopian rift caused by linkage with the Kenyan rift. Nature Communications, 2019, 10, 1309.	5.8	49
21	The protracted development of focused magmatic intrusion during continental rifting. Tectonics, 2014, 33, 875-897.	1.3	47
22	Dynamics of magma emplacement in centrifuge models of continental extension with implications for flank volcanism. Tectonics, 2001, 20, 1053-1065.	1.3	46
23	Multiple hydrofracturing by boron-rich fluids in the Late Miocene contact aureole of eastern Elba Island (Tuscany, Italy). Terra Nova, 2008, 20, 318-326.	0.9	46
24	Mud volcanoes as potential indicators of regional stress and pressurized layer depth. Tectonophysics, 2010, 494, 32-47.	0.9	45
25	Magma emplacement in a thrust ramp anticline: The Gavorrano Granite (northern Apennines, Italy). Tectonics, 2005, 24, n/a-n/a.	1.3	44
26	Seismic and landslide source of the 1908 Straits of Messina tsunami (Sicily, Italy). Geophysical Research Letters, 2009, 36, .	1.5	44
27	Magma-induced strain localization in centrifuge models of transfer zones. Tectonophysics, 2002, 348, 205-218.	0.9	43
28	The DEM of Mt. Etna: Geomorphological and structural implications. Geodinamica Acta, 1999, 12, 279-290.	2.2	42
29	Construction dynamics of a lava channel. Bulletin of Volcanology, 2009, 71, 459-474.	1.1	42
30	U-Pb and <sup>40</sup> Ar/ <sup>39</sup> Ar geochronology of Palaeozoic units in the northern Apennines: determining protolith age and alpine evolution using the Calamita Schist and Ortano Porphyroid. Geological Journal, 2011, 46, 288-310.	0.6	41
31	Spatial relationship between earthquakes and volcanic vents in the central-northern Main Ethiopian Rift. Journal of Volcanology and Geothermal Research, 2013, 262, 123-133.	0.8	41
32	New Constraints on the Evolution of the Inner Northern Apennines by <sup>40</sup> Ar Dating of Late Miocene-Early Pliocene Compression on the Island of Elba, Italy. Tectonics, 2018, 37, 3229-3243.	1.3	41
33	Large submarine landslides offshore Mt. Etna. Geophysical Research Letters, 2006, 33, .	1.5	39
34	Topographic control on lava flow paths at Mount Etna, Italy: Implications for hazard assessment. Journal of Geophysical Research, 2009, 114, .	3.3	38
35	Vein development during folding in the upper brittle crust: The case of tourmaline-rich veins of eastern Elba Island, northern Tyrrhenian Sea, Italy. Journal of Structural Geology, 2011, 33, 1509-1522.	1.0	38
36	Lidar surveys reveal eruptive volumes and rates at Etna, 2007-2010. Geophysical Research Letters, 2016, 43, 4270-4278.	1.5	38

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37	Structural analysis of the eruptive fissures at Mount Etna (Italy). <i>Annals of Geophysics</i> , 2011, 54, .	0.5	37
38	Coseismic effects of the 2016 Amatrice seismic sequence: first geological results. <i>Annals of Geophysics</i> , 2016, 59, .	0.5	37
39	Spectral properties of volcanic materials from hyperspectral field and satellite data compared with LiDAR data at Mt. Etna. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2009, 11, 142-155.	1.4	36
40	Monogenetic vent self-similar clustering in extending continental crust: Examples from the East African Rift System. , 2010, 6, 567-582.		34
41	The intimate relationship between strain and magmatism: A numerical treatment of clustered monogenetic fields in the Main Ethiopian Rift. <i>Tectonics</i> , 2013, 32, 49-64.	1.3	34
42	Best-fit results from application of a thermo-rheological model for channelized lava flow to high spatial resolution morphological data. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	33
43	Volcanic vent self-similar clustering and crustal thickness in the northern Main Ethiopian Rift. <i>Geophysical Research Letters</i> , 2004, 31, .	1.5	32
44	The Vegetation Resilience After Fire (VRAF) index: Development, implementation and an illustration from central Italy. <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2008, 10, 312-329.	1.4	32
45	Flank Cones at Mount Etna Volcano: Do they have a power-law distribution?. <i>Bulletin of Volcanology</i> , 2001, 62, 420-430.	1.1	31
46	Strain rate and bimodal volcanism in the continental rift: Debre Zeyt volcanic field, northern MER, Ethiopia. <i>Journal of African Earth Sciences</i> , 2004, 39, 415-420.	0.9	31
47	A structural and geophysical approach to the study of fractured aquifers in the Scansano-Magliano in Toscana Ridge, southern Tuscany, Italy. <i>Hydrogeology Journal</i> , 2009, 17, 1233-1246.	0.9	31
48	The Zuccale Fault, Elba Island, Italy: A new perspective from fault architecture. <i>Tectonics</i> , 2015, 34, 1195-1218.	1.3	31
49	The distal segment of Etna's 2001 basaltic lava flow. <i>Bulletin of Volcanology</i> , 2010, 72, 119-127.	1.1	29
50	Holocene Beach Ridges and Coastal Evolution in the Cabo Raso Bay (Atlantic Patagonian Coast,) Tj ETQq0 0 0 rgBT /Overlock, 10 Tf 50 2	0.1	29
51	The deformation offshore of Mount Etna as imaged by multichannel seismic reflection profiles. <i>Journal of Volcanology and Geothermal Research</i> , 2013, 251, 50-64.	0.8	29
52	Heterogeneous brittle-ductile deformation at shallow crustal levels under high thermal conditions: The case of a synkinematic contact aureole in the inner northern Apennines, southeastern Elba Island, Italy. <i>Tectonophysics</i> , 2017, 717, 547-564.	0.9	29
53	Relations between deformation and upper crustal magma emplacement in laboratory physical models. <i>Tectonophysics</i> , 2010, 484, 139-146.	0.9	28
54	Volcanic field elongation, vent distribution, and tectonic evolution of a continental rift: The Main Ethiopian Rift example. , 2016, 12, 706-720.		28

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55	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.	1.4	28
56	The DEM of Mt. Etna: geomorphological and structural implications. <i>Geodinamica Acta</i> , 1999, 12, 279-290.	2.2	26
57	Hydraulic connection and fluid overpressure in upper crustal rocks: Evidence from the geometry and spatial distribution of veins at Botrona quarry, southern Tuscany, Italy. <i>Journal of Structural Geology</i> , 2007, 29, 1386-1399.	1.0	26
58	Role of local wind circulation in plume monitoring at Mt. Etna volcano (Sicily): Insights from a mesoscale numerical model. <i>Geophysical Research Letters</i> , 2004, 31, n/a-n/a.	1.5	24
59	A LiDAR survey of Stromboli volcano (Italy): Digital elevation model-based geomorphology and intensity analysis. <i>International Journal of Remote Sensing</i> , 2010, 31, 3177-3194.	1.3	24
60	A rapid method to assess fire-related debris flow hazard in the Mediterranean region: An example from Sicily (southern Italy). <i>International Journal of Applied Earth Observation and Geoinformation</i> , 2005, 7, 217-231.	1.4	23
61	Spatial variability of volcanic features in early-stage rift settings: the case of the Tanzania Divergence, East African rift system. <i>Terra Nova</i> , 2014, 26, 461-468.	0.9	23
62	Coexistence of contractional and extensional tectonics during the northern Apennines orogeny: the late Miocene out-of-sequence thrust in the Elba Island nappe stack. <i>Geological Journal</i> , 2017, 52, 353-368.	0.6	23
63	Pliocene crustal shortening on the Tyrrhenian side of the northern Apennines: evidence from the Gavorrano antiform (southern Tuscany, Italy). <i>Journal of the Geological Society</i> , 2008, 165, 105-114.	0.9	22
64	Morphometric analysis of lava flow units: Case study over LIDAR-derived topography at Mount Etna, Italy. <i>Journal of Volcanology and Geothermal Research</i> , 2012, 235-236, 11-22.	0.8	22
65	Evolution of shear zones through the brittle-ductile transition: The Calamita Schists (Elba Island, Italy). <i>Tectonophysics</i> , 2014, 574, 1-14.	1.0	22
66	Fluids mobilization in Arabia Terra, Mars: Depth of pressurized reservoir from mounds self-similar clustering. <i>Icarus</i> , 2019, 321, 938-959.	1.1	22
67	Fissural volcanism, polygenetic volcanic fields, and crustal thickness in the Payen Volcanic Complex on the central Andes foreland (Mendoza, Argentina). <i>Geochemistry, Geophysics, Geosystems</i> , 2008, 9, 1-14.	1.0	21
68	Syn-orogenic Exhumation of High-P Units by Upward Extrusion in an Accretionary Wedge: Insights From the Eastern Elba Nappe Stack (Northern Apennines, Italy). <i>Tectonics</i> , 2021, 40, e2020TC006348.	1.3	21
69	Brittle ice shell thickness of Enceladus from fracture distribution analysis. <i>Icarus</i> , 2017, 297, 252-264.	1.1	19
70	Shallow submarine seep of abiogenic methane from serpentinized peridotite off the Island of Elba, Italy. <i>Applied Geochemistry</i> , 2019, 100, 1-7.	1.4	19
71	Fluid circulation in the upper brittle crust: Thickness distribution, hydraulic transmissivity fluid inclusion and isotopic data of veins hosted in the Oligocene sandstones of the Macigno Formation in southern Tuscany, Italy. <i>Tectonophysics</i> , 2010, 493, 118-138.	0.9	17
72	The Cotoncello Shear Zone (Elba Island, Italy): The deep root of a fossil oceanic detachment fault in the Ligurian ophiolites. <i>Lithos</i> , 2017, 278-281, 445-463.	0.6	17

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73	Discovering geothermal supercritical fluids: a new frontier for seismic exploration. Scientific Reports, 2017, 7, 14592.	1.6	17
74	Self-similar clustering distribution of structural features on Ascræus Mons (Mars): implications for magma chamber depth. Geological Society Special Publication, 2015, 401, 203-218.	0.8	16
75	High- <i>P</i> (<i>P</i>=1.5–1.8 GPa) blueschist from Elba: Implications for underthrusting and exhumation of continental units in the Northern Apennines. Journal of Metamorphic Geology, 2020, 38, 495-525.	1.6	15
76	Structural and lithological control on fluid circulation, dilation and ore mineralization (Rio Albano) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	1.0	14
77	Estimate of depths of source fluids related to mound fields on Mars. Planetary and Space Science, 2018, 164, 164-173.	0.9	13
78	Surface Expressions of Subsurface Sediment Mobilization Rooted into a Gas Hydrate-Rich Cryosphere on Mars. Scientific Reports, 2019, 9, 8603.	1.6	12
79	Recent volcano-tectonic activity of the Ririba rift and the evolution of rifting in South Ethiopia. Journal of Volcanology and Geothermal Research, 2020, 403, 106989.	0.8	12
80	Hydrofracturing-related sill and dyke emplacement at shallow crustal levels: the Eastern Elba Dyke Complex, Italy. Geological Society Special Publication, 2008, 302, 121-129.	0.8	11
81	The Deep Structure of the Larderello-travale Geothermal Field (Italy) from Integrated, Passive Seismic Investigations. Energy Procedia, 2014, 59, 227-234.	1.8	11
82	Introduction: Anatomy of rifting: Tectonics and magmatism in continental rifts, oceanic spreading centers, and transforms. , 2015, 11, 1256-1261.		10
83	Interaction between normal faults and pre-existing thrust systems in analogue models. Geological Society Special Publication, 2006, 253, 65-78.	0.8	9
84	Remotely triggered micro- earthquakes in the Larderello-Travale Geothermal Field (Italy) following the 2012 May 20, Mw 5.9 Po-plain earthquake. Geophysical Research Letters, 2013, 40, 835-840.	1.5	9
85	Morphological and multivariate statistical analysis of quaternary monogenetic vents in the Central Anatolian Volcanic Province (Turkey): Implications for the volcano-tectonic evolution. Journal of Volcanology and Geothermal Research, 2021, 416, 107280.	0.8	9
86	Equatorial grooves distribution on Ganymede: Length and self-similar clustering analysis. Planetary and Space Science, 2021, 195, 105140.	0.9	8
87	AlpArray-Italy: Site description and noise characterization. Advances in Geosciences, 0, 43, 39-52.	12.0	8
88	Geology of the Northern Apennines nappe stack on eastern Elba (Italy): new insights on the Neogene orogenic evolution of the Northern Tyrrhenian Sea. Journal of Maps, 2021, 17, 533-546.	1.0	6
89	Tectonic control on laccolith emplacement in the northern Apennines fold-thrust belt: the Gavorrano intrusion (southern Tuscany, Italy). Geological Society Special Publication, 2004, 234, 151-161.	0.8	5
90	Introduction: LASI III- "Magma pulses and sheets in tabular intrusions. , 2010, 6, 161-162.		4

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91	New Chronological Constraints from Hypogean Deposits for Late Pliocene to Recent Morphotectonic History of the Alpi Apuane (NW Tuscany, Italy). <i>Geosciences (Switzerland)</i> , 2021, 11, 65.	1.0	4
92	Deformation history of a foredeep basin during the incorporation of its deposits within an advancing orogenic wedge: The case of the Oligocene-Early Miocene Macigno Costiero Formation, southern Tuscany, northern Apennines, Italy. <i>Journal of Structural Geology</i> , 2021, 147, 104347.	1.0	4
93	Vent distribution and structural inheritance in an embryonic rift: The example of the Chyulu Hills off-rift magmatic range (South Kenya). <i>Journal of Volcanology and Geothermal Research</i> , 2021, 416, 107268.	0.8	4
94	Rheological and Mechanical Layering of the Crust Underneath Thumbprint Terrains in Arcadia Planitia, Mars. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, .	1.5	4
95	Emplacement of a felsic dyke swarm during progressive heterogeneous deformation, Eastern Elba Dyke Complex (Island of Elba, Italy). <i>Journal of Structural Geology</i> , 2022, 159, 104600.	1.0	4
96	Volcano dynamics vs tectonics on Mars: evidence from Pavonis Mons. <i>Journal of Volcanology and Geothermal Research</i> , 2021, 410, 107148.	0.8	3
97	Messinian-Early Pliocene crustal shortening along the Tyrrhenian margin of Tuscany, Italy. <i>Bollettino Della Societ� Geologica Italiana</i> , 2009, , 593-604.	2.0	3
98	Detection of Ground Control Points using the SITOGEOGIS tool to orthorectify Landsat 7 ETM + images. <i>European Journal of Remote Sensing</i> , 2008, , 55-63.	0.2	3
99	Rock-type discrimination by field, TM and SPOT data, Tarn Flat, Antarctica. <i>International Journal of Remote Sensing</i> , 1999, 20, 403-420.	1.3	2
100	Rock mapping of glaciated areas by satellite image processing. <i>Polar Research</i> , 1994, 13, 23-33.	1.6	1
101	Interactions between low-angle normal faults and plutonism in the upper crust: Insights from the island of Elba, Italy: Comment. <i>Bulletin of the Geological Society of America</i> , 2012, 124, 1913-1915.	1.6	1
102	2012 hyperspectral airborne campaign on Etna: Multi data acquisition for ASI-PRISMA project. , 2013, , .		1
103	Seismic lines Offshore Mount Etna (SOME): open database. <i>Annals of Geophysics</i> , 2017, 60, .	0.5	1
104	Landsat 5 TM images and DEM in lithologic mapping of Payen Volcanic Field (Mendoza Province,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 .	0.2	1
105	Surface roughness of pyroclastic deposits at Mt. Etna by 3D laser scanning. <i>Annals of Geophysics</i> , 2009, 51, .	0.5	1
106	Rock mapping of glaciated areas by satellite image processing. <i>Polar Research</i> , 1994, 13, 23-33.	1.6	1
107	Fluid transfer and vein thickness distribution in high and low temperature hydrothermal systems at shallow crustal level in southern Tuscany (Italy). <i>Annals of Geophysics</i> , 2014, 57, .	0.5	0
108	Comment on "Unveiling ductile deformation during fast exhumation of a granitic pluton in a transfer zone" by Richard Spiess, Antonio Langone, Alfredo Caggianelli, Finlay M. Stuart, Martina Zucchi, Caterina Bianco, Andrea Brogi, & Domenico Liotta. <i>Journal of Structural Geology</i> , 2022, 155, 104499.	1.0	0