# Gaetana Ganci

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7140084/publications.pdf

Version: 2024-02-01

| 60 | 1,603 | 218592 | 315616 |
|---|---|---|---|
| papers | citations | 26 h-index | 38 g-index |

| 79 | 79 | 79 | 1087 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The initial phases of the 2008â€“2009 Mount Etna eruption: A multidisciplinary approach for hazard assessment. Journal of Geophysical Research, 2011, 116, . | 3.3 | 93 |
| 2 | An emergent strategy for volcano hazard assessment: From thermal satellite monitoring to lava flow modeling. Remote Sensing of Environment, 2012, 119, 197-207. | 4.6 | 92 |
| 3 | A year of lava fountaining at Etna: Volumes from SEVIRI. Geophysical Research Letters, 2012, 39, . | 1.5 | 85 |
| 4 | Near-real-time forecasting of lava flow hazards during the 12-13 January 2011 Etna eruption. Geophysical Research Letters, 2011, 38, n/a-n/a. | 1.5 | 77 |
| 5 | Lava flow hazard modeling during the 2014â€“2015 Fogo eruption, Cape Verde. Journal of Geophysical Research: Solid Earth, 2016, 121, 2290-2303. | 1.4 | 69 |
| 6 | Lava flow hazards at Mount Etna: constraints imposed by eruptive history and numerical simulations. Scientific Reports, 2013, 3, 3493. | 1.6 | 61 |
| 7 | Modelling of ground deformation and gravity fields using finite element method: an application to Etna volcano. Geophysical Journal International, 2007, 169, 775-786. | 1.0 | 57 |
| 8 | Dynamics of a lava fountain revealed by geophysical, geochemical and thermal satellite measurements: The case of the 10 April 2011 Mt Etna eruption. Geophysical Research Letters, 2011, 38, n/a-n/a. | 1.5 | 51 |
| 9 | Mapping Volcanic Deposits of the 2011â€“2015 Etna Eruptive Events Using Satellite Remote Sensing. Frontiers in Earth Science, 2018, 6, . | 0.8 | 48 |
| 10 | Numerical simulation of basaltic lava flows in the Auckland Volcanic Field, New Zealandâ€”implication for volcanic hazard assessment. Bulletin of Volcanology, 2014, 76, 1. | 1.1 | 43 |
| 11 | Why Does a Mature Volcano Need New Vents? The Case of the New Southeast Crater at Etna. Frontiers in Earth Science, 2016, 4, . | 0.8 | 41 |
| 12 | Lidar surveys reveal eruptive volumes and rates at Etna, 2007â€“2010. Geophysical Research Letters, 2016, 43, 4270-4278. | 1.5 | 38 |
| 13 | How the variety of satellite remote sensing data over volcanoes can assist hazard monitoring efforts: The 2011 eruption of Nabro volcano. Remote Sensing of Environment, 2020, 236, 111426. | 4.6 | 38 |
| 14 | Thermal insights into the dynamics of Nyiragongo lava lake from ground and satellite measurements. Journal of Geophysical Research: Solid Earth, 2013, 118, 5771-5784. | 1.4 | 36 |
| 15 | The VEI 2 Christmas 2018 Etna Eruption: A Small But Intense Eruptive Event or the Starting Phase of a Larger One?. Remote Sensing, 2020, 12, 905. | 1.8 | 36 |
| 16 | Attenuation of body waves in Southeastern Sicily (Italy). Physics of the Earth and Planetary Interiors, 2003, 135, 267-279. | 0.7 | 33 |
| 17 | HOTSAT: a multiplatform system for the thermal monitoring of volcanic activity using satellite data. Geological Society Special Publication, 2016, 426, 207-221. | 0.8 | 33 |
| 18 | Mapping Recent Lava Flows at Mount Etna Using Multispectral Sentinel-2 Images and Machine Learning Techniques. Remote Sensing, 2019, 11, 1916. | 1.8 | 33 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | From source to surface: dynamics of Etnaâ€™s lava fountains investigated by continuous strain, magnetic, ground and satellite thermal data. Bulletin of Volcanology, 2013, 75, 1. | 1.1 | 32 |
| 20 | Static stress changes induced by the magmatic intrusions during the 2002â€“2003 Etna eruption. Journal of Geophysical Research, 2008, 113, . | 3.3 | 30 |
| 21 | Separating the thermal fingerprints of lava flows and simultaneous lava fountaining using groundâ€based thermal camera and SEVIRI measurements. Geophysical Research Letters, 2013, 40, 5058-5063. | 1.5 | 30 |
| 22 | Emplacement conditions of the 1256 AD Al-Madinah lava flow field in Harrat Rahat, Kingdom of Saudi Arabia â€” Insights from surface morphology and lava flow simulations. Journal of Volcanology and Geothermal Research, 2016, 309, 14-30. | 0.8 | 30 |
| 23 | The HOTSAT volcano monitoring system based on combined use of SEVIRI and MODIS multispectral data. Annals of Geophysics, 2011, 54, . | 0.5 | 30 |
| 24 | A texton-based cloud detection algorithm for MSG-SEVIRI multispectral images. Geomatics, Natural Hazards and Risk, 2011, 2, 279-290. | 2.0 | 29 |
| 25 | Quantifying Effusion Rates at Active Volcanoes through Integrated Time-Lapse Laser Scanning and Photography. Remote Sensing, 2015, 7, 14967-14987. | 1.8 | 29 |
| 26 | Quantifying lava flow hazards in response to effusive eruption. Bulletin of the Geological Society of America, 2016, 128, 752-763. | 1.6 | 29 |
| 27 | MAGFLOW: a physics-based model for the dynamics of lava-flow emplacement. Geological Society Special Publication, 2016, 426, 357-373. | 0.8 | 29 |
| 28 | Overflows and Pyroclastic Density Currents in March-April 2020 at Stromboli Volcano Detected by Remote Sensing and Seismic Monitoring Data. Remote Sensing, 2020, 12, 3010. | 1.8 | 29 |
| 29 | Living at the edge of an active volcano: Risk from lava flows on Mt. Etna. Bulletin of the Geological Society of America, 2020, 132, 1615-1625. | 1.6 | 26 |
| 30 | 3D numerical deformation model of the intrusive event forerunning the 2001 Etna eruption. Physics of the Earth and Planetary Interiors, 2008, 168, 88-96. | 0.7 | 24 |
| 31 | Anatomy of a Paroxysmal Lava Fountain at Etna Volcano: The Case of the 12 March 2021, Episode. Remote Sensing, 2021, 13, 3052. | 1.8 | 23 |
| 32 | Satellite-driven modeling approach for monitoring lava flow hazards during the 2017 Etna eruption. Annals of Geophysics, 2018, 61, . | 0.5 | 21 |
| 33 | GPUSPH: a Smoothed Particle Hydrodynamics model for the thermal and rheological evolution of lava flows. Geological Society Special Publication, 2016, 426, 387-408. | 0.8 | 18 |
| 34 | 3D Lava flow mapping of the 17â€“25 May 2016 Etna eruption using tri-stereo optical satellite data. Annals of Geophysics, 2018, 61, . | 0.5 | 18 |
| 35 | Changing Eruptive Styles at the South-East Crater of Mount Etna: Implications for Assessing Lava Flow Hazards. Frontiers in Earth Science, 2019, 7, . | 0.8 | 17 |
| 36 | LAV@HAZARD: a web-GIS interface for volcanic hazard assessment. Annals of Geophysics, 2011, 54, . | 0.5 | 16 |

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|---|---|---|---|
| 37 | Satellite and Ground Remote Sensing Techniques to Trace the Hidden Growth of a Lava Flow Field: The 2014â€“2015 Effusive Eruption at Fogo Volcano (Cape Verde). Remote Sensing, 2018, 10, 1115. | 1.8 | 15 |
| 38 | Semi-implicit 3D SPH on GPU for lava flows. Journal of Computational Physics, 2018, 375, 854-870. | 1.9 | 14 |
| 39 | Recognizing Eruptions of Mount Etna through Machine Learning Using Multiperspective Infrared Images. Remote Sensing, 2020, 12, 970. | 1.8 | 14 |
| 40 | Satellite-Based Reconstruction of the Volcanic Deposits during the December 2015 Etna Eruption. Data, 2019, 4, 120. | 1.2 | 13 |
| 41 | Conclusion: recommendations and findings of the RED SEED working group. Geological Society Special Publication, 2016, 426, 567-648. | 0.8 | 12 |
| 42 | Smart Decision Support Systems for Volcanic Applications. Energies, 2019, 12, 1216. | 1.6 | 10 |
| 43 | Spaceborne EO and a Combination of Inverse and Forward Modelling for Monitoring Lava Flow Advance. Remote Sensing, 2019, 11, 3032. | 1.8 | 9 |
| 44 | Effusion Rates on Mt. Etna and Their Influence on Lava Flow Hazard Assessment. Remote Sensing, 2022, 14, 1366. | 1.8 | 9 |
| 45 | A high sensitivity conditioning circuit for capacitive sensors including stray effects compensation and dummy sensors approach. , 0, , . | | 8 |
| 46 | Testing a geographical information system for damage and evacuation assessment during an effusive volcanic crisis. Geological Society Special Publication, 2016, 426, 649-672. | 0.8 | 7 |
| 47 | The 2019 Eruptive Activity at Stromboli Volcano: A Multidisciplinary Approach to Reveal Hidden Features of the â€œUnexpectedâ€•3 July Paroxysm. Remote Sensing, 2021, 13, 4064. | 1.8 | 7 |
| 48 | Optimizing Satellite Monitoring of Volcanic Areas Through GPUs and Multi-Core CPUs Image Processing: An OpenCL Case Study. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 2445-2452. | 2.3 | 6 |
| 49 | Modeling of Geophysical Flows through GPUFLOW. Applied Sciences (Switzerland), 2022, 12, 4395. | 1.3 | 6 |
| 50 | Preliminary validation of lava benchmark tests on the GPUSPH particle engine. Annals of Geophysics, 2018, 61, . | 0.5 | 5 |
| 51 | The Impact of Dynamic Emissivityâ€“Temperature Trends on Spaceborne Data: Applications to the 2001 Mount Etna Eruption. Remote Sensing, 2022, 14, 1641. | 1.8 | 5 |
| 52 | Changes in the Eruptive Style of Stromboli Volcano before the 2019 Paroxysmal Phase Discovered through SOM Clustering of Seismo-Acoustic Features Compared with Camera Images and GBInSAR Data. Remote Sensing, 2022, 14, 1287. | 1.8 | 5 |
| 53 | A particle swarm optimizationâ€“based heuristic to optimize the configuration of artificial barriers for the mitigation of lava flow risk. Environmental Modelling and Software, 2021, 139, 105023. | 1.9 | 4 |
| 54 | 3D lava flow mapping in volcanic areas using multispectral and stereo optical satellite data. AIP Conference Proceedings, 2020, , . | 0.3 | 4 |

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|---|---|---|---|
| 55 | Cloud Photogrammetry from Space. International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives, 0, XL-7/W3, 247-254. | 0.2 | 3 |
| 56 | Hot spot detection and effusion rate estimation using satellite data to drive lava flow simulations. , 2008, , . | | 2 |
| 57 | Volcanic Hazard Monitoring Using Multi-Source Satellite Imagery. , 2021, , . | | 2 |
| 58 | A bio-inspired auditory perception model for amplitude-frequency clustering (keynote Paper). , 2005, , . | | 2 |
| 59 | Simulating Complex Fluids with Smoothed Particle Hydrodynamics. Annals of Geophysics, 2017, 60, . | 0.5 | 2 |
| 60 | Improving cloud detection with imperfect satellite images using an artificial neural network approach. , 2019, , . | | 0 |