

# Sonia Calvari

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

123  
papers

4,140  
citations

37  
h-index

60  
g-index

139  
ext. papers

4,641  
ext. citations

2.7  
avg, IF

5.29  
L-index

#	Paper	IF	Citations
123	Structure of the Shallow Supply System at Stromboli Volcano, Italy, through Integration of Muography, Digital Elevation Models, Seismicity, and Ground Deformation Data. <i>Geophysical Monograph Series</i> , <b>2022</b> , 75-91	1.1	2
122	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. <i>Remote Sensing</i> , <b>2022</b> , 14, 1287	5	0
121	Comparison between Automated and Manual Detection of Lava Fountains from Fixed Monitoring Thermal Cameras at Etna Volcano, Italy. <i>Remote Sensing</i> , <b>2022</b> , 14, 2392	5	4
120	Classifying Major Explosions and Paroxysms at Stromboli Volcano (Italy) from Space. <i>Remote Sensing</i> , <b>2021</b> , 13, 4080	5	1
119	Variable Magnitude and Intensity of Strombolian Explosions: Focus on the Eruptive Processes for a First Classification Scheme for Stromboli Volcano (Italy). <i>Remote Sensing</i> , <b>2021</b> , 13, 944	5	7
118	Anatomy of a Paroxysmal Lava Fountain at Etna Volcano: The Case of the 12 March 2021, Episode. <i>Remote Sensing</i> , <b>2021</b> , 13, 3052	5	3
117	The VEI 2 Christmas 2018 Etna Eruption: A Small But Intense Eruptive Event or the Starting Phase of a Larger One?. <i>Remote Sensing</i> , <b>2020</b> , 12, 905	5	21
116	Overflows and Pyroclastic Density Currents in March-April 2020 at Stromboli Volcano Detected by Remote Sensing and Seismic Monitoring Data. <i>Remote Sensing</i> , <b>2020</b> , 12, 3010	5	14
115	Recognizing Eruptions of Mount Etna through Machine Learning Using Multiperspective Infrared Images. <i>Remote Sensing</i> , <b>2020</b> , 12, 970	5	9
114	Geophysical precursors of the July-August 2019 paroxysmal eruptive phase and their implications for Stromboli volcano (Italy) monitoring. <i>Scientific Reports</i> , <b>2020</b> , 10, 10296	4.9	32
113	Plume Height Time-Series Retrieval Using Shadow in Single Spatial Resolution Satellite Images. <i>Remote Sensing</i> , <b>2020</b> , 12, 3951	5	4
112	Integration of Ground-Based Remote-Sensing and In Situ Multidisciplinary Monitoring Data to Analyze the Eruptive Activity of Stromboli Volcano in 2017-2018. <i>Remote Sensing</i> , <b>2019</b> , 11, 1813	5	17
111	Understanding Lava Flow Morphologies and Structures for Hazard Assessment. <i>Annals of Geophysics</i> , <b>2019</b> , 61,	1.1	3
110	Preface Special Issue: MeMoVolc. <i>Annals of Geophysics</i> , <b>2019</b> , 62,	1.1	2
109	The 2014 Effusive Eruption at Stromboli: New Insights from In Situ and Remote-Sensing Measurements. <i>Remote Sensing</i> , <b>2018</b> , 10, 2035	5	29
108	Satellite and Ground Remote Sensing Techniques to Trace the Hidden Growth of a Lava Flow Field: The 2014-2015 Effusive Eruption at Fogo Volcano (Cape Verde). <i>Remote Sensing</i> , <b>2018</b> , 10, 1115	5	12
107	UAV-based remote sensing surveys of lava flow fields: a case study from Etna's 1974 channel-fed lava flows. <i>Bulletin of Volcanology</i> , <b>2018</b> , 80, 1	2.4	37

106	Paroxysmal Explosions, Lava Fountains and Ash Plumes at Etna Volcano: Eruptive Processes and Hazard Implications. <i>Frontiers in Earth Science</i> , <b>2018</b> , 6,	3.5	31
105	Supporting the Development of Procedures for Communications During Volcanic Emergencies: Lessons Learnt from the Canary Islands (Spain) and Etna and Stromboli (Italy). <i>Advances in Volcanology</i> , <b>2017</b> , 289-305	0	6
104	A new approach to investigate an eruptive paroxysmal sequence using camera and strainmeter networks: Lessons from the 3 <sup>rd</sup> December 2015 activity at Etna volcano. <i>Earth and Planetary Science Letters</i> , <b>2017</b> , 475, 231-241	5.3	23
103	Topographic Maps of Mount Etna's Summit Craters, updated to December 2015. <i>Journal of Maps</i> , <b>2017</b> , 13, 674-683	2.2	29
102	Translations of volcanological terms: cross-cultural standards for teaching, communication, and reporting. <i>Bulletin of Volcanology</i> , <b>2017</b> , 79, 1	2.4	3
101	Hazard mitigation and crisis management during major flank eruptions at Etna volcano: reporting on real experience. <i>Geological Society Special Publication</i> , <b>2016</b> , 426, 447-461	1.7	13
100	Conclusion: recommendations and findings of the RED SEED working group. <i>Geological Society Special Publication</i> , <b>2016</b> , 426, 567-648	1.7	8
99	Lava flow hazard modeling during the 2014-2015 Fogo eruption, Cape Verde. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2016</b> , 121, 2290-2303	3.6	36
98	Monitoring crater-wall collapse at active volcanoes: a study of the 12 January 2013 event at Stromboli. <i>Bulletin of Volcanology</i> , <b>2016</b> , 78, 1	2.4	28
97	Quantifying Effusion Rates at Active Volcanoes through Integrated Time-Lapse Laser Scanning and Photography. <i>Remote Sensing</i> , <b>2015</b> , 7, 14967-14987	5	22
96	Reactivation of Stromboli's summit craters at the end of the 2007 effusive eruption detected by thermal surveys and seismicity. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2015</b> , 120, 7376-7395	3.6	6
95	Magma emission rates from shallow submarine eruptions using airborne thermal imaging. <i>Remote Sensing of Environment</i> , <b>2014</b> , 154, 219-225	13.2	8
94	Major eruptive style changes induced by structural modifications of a shallow conduit system: the 2007-2012 Stromboli case. <i>Bulletin of Volcanology</i> , <b>2014</b> , 76, 1	2.4	43
93	Eruptive processes leading to the most explosive lava fountain at Etna volcano: The 23 November 2013 episode. <i>Geophysical Research Letters</i> , <b>2014</b> , 41, 4912-4919	4.9	44
92	The Stromboli Volcano: An Integrated Study of the 2002-2003 Eruption Introduction. <i>Geophysical Monograph Series</i> , <b>2013</b> , 1-3	1.1	
91	Geological-Structural Framework of Stromboli Volcano, Past Collapses, and the Possible Influence on the Events of the 2002-2003 Crisis. <i>Geophysical Monograph Series</i> , <b>2013</b> , 5-17	1.1	5
90	Volcanology and Magma Geochemistry of the Present-Day Activity: Constraints on the Feeding System. <i>Geophysical Monograph Series</i> , <b>2013</b> , 19-37	1.1	20
89	Dynamics of Strombolian Activity. <i>Geophysical Monograph Series</i> , <b>2013</b> , 39-48	1.1	26

88	Volcanic and Seismic Activity at Stromboli Preceding the 2002-2003 Flank Eruption. <i>Geophysical Monograph Series</i> , <b>2013</b> , 93-104	1.1	4
87	The Eruptive Activity of 28 and 29 December 2002. <i>Geophysical Monograph Series</i> , <b>2013</b> , 105-115	1.1	10
86	Geochemical Prediction of the 2002-2003 Stromboli Eruption from Variations in CO <sub>2</sub> and Rn Emissions and in Helium and Carbon Isotopes. <i>Geophysical Monograph Series</i> , <b>2013</b> , 117-128	1.1	0
85	Slope Failures Induced by the December 2002 Eruption at Stromboli Volcano. <i>Geophysical Monograph Series</i> , <b>2013</b> , 129-145	1.1	4
84	The Double Landslide-Induced Tsunami. <i>Geophysical Monograph Series</i> , <b>2013</b> , 147-156	1.1	2
83	Deep-Sea Deposits of the Stromboli 30 December 2002 Landslide. <i>Geophysical Monograph Series</i> , <b>2013</b> , 157-169	1.1	1
82	Integrated Subaerial-Submarine Morphological Evolution of the Sciara del Fuoco after the 2002 Landslide. <i>Geophysical Monograph Series</i> , <b>2013</b> , 171-182	1.1	8
81	Evolution of the Lava Flow Field by Daily Thermal and Visible Airborne Surveys. <i>Geophysical Monograph Series</i> , <b>2013</b> , 201-211	1.1	1
80	Textural and Compositional Characteristics of Lavas Emitted During the December 2002 to July 2003 Stromboli Eruption (Italy): Inferences on Magma Dynamics. <i>Geophysical Monograph Series</i> , <b>2013</b> , 213-228	1.1	1
79	Gas Flux Rate and Migration of the Magma Column. <i>Geophysical Monograph Series</i> , <b>2013</b> , 259-267	1.1	1
78	Seismological Insights on the Shallow Magma System. <i>Geophysical Monograph Series</i> , <b>2013</b> , 279-286	1.1	
77	Fluid Circulation and Permeability Changes in the Summit Area of Stromboli Volcano. <i>Geophysical Monograph Series</i> , <b>2013</b> , 287-303	1.1	
76	The 5 April 2003 Explosion of Stromboli: Timing of Eruption Dynamics Using Thermal Data. <i>Geophysical Monograph Series</i> , <b>2013</b> , 305-316	1.1	8
75	The Paroxysmal Event and Its Deposits. <i>Geophysical Monograph Series</i> , <b>2013</b> , 317-329	1.1	16
74	The 5 April 2003 Paroxysm at Stromboli: A Review of Geochemical Observations. <i>Geophysical Monograph Series</i> , <b>2013</b> , 347-358	1.1	
73	Ground Deformation from Ground-Based SAR Interferometry. <i>Geophysical Monograph Series</i> , <b>2013</b> , 359-372		3
72	2002-2003 Lava Flow Eruption of Stromboli: A Contribution to Understanding Lava Discharge Mechanisms Using Periodic Digital Photogrammetry Surveys. <i>Geophysical Monograph Series</i> , <b>2013</b> , 229-246	1.1	3
71	Scientific Community and Civil Protection Synergy During the Stromboli 2002-2003 Eruption. <i>Geophysical Monograph Series</i> , <b>2013</b> , 387-397	1.1	4

70	From source to surface: dynamics of Etna's lava fountains investigated by continuous strain, magnetic, ground and satellite thermal data. <i>Bulletin of Volcanology</i> , <b>2013</b> , 75, 1	2.4	27
69	Separating the thermal fingerprints of lava flows and simultaneous lava fountaining using ground-based thermal camera and SEVIRI measurements. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 5058-5063	4.9	26
68	Thermal insights into the dynamics of Nyiragongo lava lake from ground and satellite measurements. <i>Journal of Geophysical Research: Solid Earth</i> , <b>2013</b> , 118, 5771-5784	3.6	31
67	Major effusive eruptions and recent lava fountains: Balance between expected and erupted magma volumes at Etna volcano. <i>Geophysical Research Letters</i> , <b>2013</b> , 40, 6069-6073	4.9	44
66	Correction to thirty years of satellite-derived lava discharge rates at Etna: Implications for steady volumetric output. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		7
65	On the time-scale of thermal cycles associated with open-vent degassing. <i>Bulletin of Volcanology</i> , <b>2012</b> , 74, 1281-1292	2.4	17
64	The 7 September 2008 Vulcanian explosion at Stromboli volcano: Multiparametric characterization of the event and quantification of the ejecta. <i>Journal of Geophysical Research</i> , <b>2012</b> , 117, n/a-n/a		25
63	A year of lava fountaining at Etna: Volumes from SEVIRI. <i>Geophysical Research Letters</i> , <b>2012</b> , 39, n/a-n/a	4.9	64
62	Dynamics of the shallow plumbing system investigated from borehole strainmeters and cameras during the 15 March, 2007 Vulcanian paroxysm at Stromboli volcano. <i>Earth and Planetary Science Letters</i> , <b>2012</b> , 357-358, 249-256	5.3	32
61	Lava discharge during Etna's January 2011 fire fountain tracked using MSG-SEVIRI. <i>Bulletin of Volcanology</i> , <b>2012</b> , 74, 787-793	2.4	27
60	The initial phases of the 2008-2009 Mount Etna eruption: A multidisciplinary approach for hazard assessment. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		76
59	Thirty years of satellite-derived lava discharge rates at Etna: Implications for steady volumetric output. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116,		67
58	An unloading foam model to constrain Etna's 11-13 January 2011 lava fountaining episode. <i>Journal of Geophysical Research</i> , <b>2011</b> , 116, n/a-n/a		58
57	Lava effusion [A slow fuse for paroxysms at Stromboli volcano?]. <i>Earth and Planetary Science Letters</i> , <b>2011</b> , 301, 317-323	5.3	46
56	<sup>40</sup> Ar/ <sup>39</sup> Ar geochronology of Holocene basalts; examples from Stromboli, Italy. <i>Quaternary Geochronology</i> , <b>2011</b> , 6, 223-232	2.7	30
55	Volcano surveillance using infrared cameras. <i>Earth-Science Reviews</i> , <b>2011</b> , 106, 63-91	10.2	121
54	Reconstruction of the eruptive activity on the NE sector of Stromboli volcano: timing of flank eruptions since 15 ka. <i>Bulletin of Volcanology</i> , <b>2011</b> , 73, 101-112	2.4	13
53	The Miocene Costa Giardini diatreme, Iblean Mountains, southern Italy: model for maar-diatreme formation on a submerged carbonate platform. <i>Bulletin of Volcanology</i> , <b>2011</b> , 73, 557-576	2.4	8

52	The 2007 Stromboli eruption: Event chronology and effusion rates using thermal infrared data. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		71
51	Conduit flow experiments help constraining the regime of explosive eruptions. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		35
50	Morphological complexities and hazards during the emplacement of channel-fed 'a' lava flow fields: A study of the 2001 lower flow field on Etna. <i>Bulletin of Volcanology</i> , <b>2010</b> , 72, 641-656	2.4	24
49	Lava flow superposition: The reactivation of flow units in compound 'a' flows. <i>Journal of Volcanology and Geothermal Research</i> , <b>2010</b> , 194, 100-106	2.8	15
48	Spatial variations in lava flow field thermal structure and effusion rate derived from very high spatial resolution hyperspectral (MIVIS) data. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		22
47	Shallow magma transport for the 2002-03 Mt. Etna eruption inferred from thermal infrared surveys. <i>Journal of Volcanology and Geothermal Research</i> , <b>2008</b> , 177, 301-312	2.8	39
46	Lava lake surface characterization by thermal imaging: Erta 'Ale volcano (Ethiopia). <i>Geochemistry, Geophysics, Geosystems</i> , <b>2008</b> , 9, n/a-n/a	3.6	25
45	Pyroclastic density currents resulting from the interaction of basaltic magma with hydrothermally altered rock: an example from the 2006 summit eruptions of Mount Etna, Italy. <i>Bulletin of Volcanology</i> , <b>2008</b> , 70, 1249-1268	2.4	57
44	The morphology and evolution of the Stromboli 2002-03 lava flow field: an example of a basaltic flow field emplaced on a steep slope. <i>Bulletin of Volcanology</i> , <b>2007</b> , 69, 661-679	2.4	55
43	Strombolian explosive styles and source conditions: insights from thermal (FLIR) video. <i>Bulletin of Volcanology</i> , <b>2007</b> , 69, 769-784	2.4	182
42	Lava effusion rate definition and measurement: a review. <i>Bulletin of Volcanology</i> , <b>2007</b> , 70, 1-22	2.4	204
41	The 5 April 2003 vulcanian paroxysmal explosion at Stromboli volcano (Italy) from field observations and thermal data. <i>Journal of Volcanology and Geothermal Research</i> , <b>2006</b> , 149, 160-175	2.8	91
40	The changing morphology of an open lava channel on Mt. Etna. <i>Bulletin of Volcanology</i> , <b>2006</b> , 68, 497-515	2.4	73
39	Chronology and complex volcanic processes during the 2002-03 flank eruption at Stromboli volcano (Italy) reconstructed from direct observations and surveys with a handheld thermal camera. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		110
38	Etna 2004-05: An archetype for geodynamically-controlled effusive eruptions. <i>Geophysical Research Letters</i> , <b>2005</b> , 32,	4.9	112
37	Correction to Chronology and complex volcanic processes during the 2002-03 flank eruption at Stromboli volcano (Italy) reconstructed from direct observations and surveys with a handheld thermal camera. <i>Journal of Geophysical Research</i> , <b>2005</b> , 110,		6
36	Heat loss measured at a lava channel and its implications for down-channel cooling and rheology <b>2005</b> ,		12
35	A multi-disciplinary study of the 2002-03 Etna eruption: insights into a complex plumbing system. <i>Bulletin of Volcanology</i> , <b>2005</b> , 67, 314-330	2.4	240

34	Lava effusion rates from hand-held thermal infrared imagery: an example from the June 2003 effusive activity at Stromboli. <i>Bulletin of Volcanology</i> , <b>2005</b> , 68, 107-117	2.4	67
33	Formation of lava stalactites in the master tube of the 1792-1793 flow field, Mt. Etna (Italy). <i>American Mineralogist</i> , <b>2005</b> , 90, 1413-1421	2.9	7
32	Magnetic Field Monitoring at Mt. Etna During the Last 20 Years. <i>Geophysical Monograph Series</i> , <b>2004</b> , 241-262	1.1	4
31	Application of the Cellular Automata Model Sciara to the 2001 Mount Etna Crisis. <i>Geophysical Monograph Series</i> , <b>2004</b> , 343-356	1.1	6
30	Mt. Etna Volcano: A Seismological Framework. <i>Geophysical Monograph Series</i> , <b>2004</b> , 147-165	1.1	26
29	The Control of Lava Flows at Mt. Etna. <i>Geophysical Monograph Series</i> , <b>2004</b> , 357-369	1.1	7
28	Twelve Years of Ground Deformation Studies on Mt. Etna Volcano Based on Gps Surveys. <i>Geophysical Monograph Series</i> , <b>2004</b> , 321-341	1.1	18
27	Continuous tilt monitoring: Lesson learned from 20 years experience at Mt. Etna. <i>Geophysical Monograph Series</i> , <b>2004</b> , 307-320	1.1	12
26	Dynamics of Magmas at Mount Etna. <i>Geophysical Monograph Series</i> , <b>2004</b> , 91-110	1.1	30
25	Pulsed lava effusion at Mount Etna during 2001. <i>Journal of Volcanology and Geothermal Research</i> , <b>2004</b> , 137, 231-246	2.8	51
24	Unusual sedimentary deposits on the SE side of Stromboli volcano, Italy: products of a tsunami caused by the ca. 5000 years BP Sciara del Fuoco collapse?. <i>Journal of Volcanology and Geothermal Research</i> , <b>2004</b> , 137, 329-340	2.8	12
23	Development of tumuli in the medial portion of the 1983 aa flow-field, Mount Etna, Sicily. <i>Journal of Volcanology and Geothermal Research</i> , <b>2004</b> , 132, 173-187	2.8	44
22	Birth, growth and morphologic evolution of the "Laghetto" cinder cone during the 2001 Etna eruption. <i>Journal of Volcanology and Geothermal Research</i> , <b>2004</b> , 132, 225-239	2.8	90
21	Volcanic Gas Emissions from the Summit Craters and Flanks of Mt. Etna, 1987-2000. <i>Geophysical Monograph Series</i> , <b>2004</b> , 111-128	1.1	52
20	Eruptions of Mt. Etna during the past 3,200 Years: A revised compilation integrating the historical and stratigraphic records. <i>Geophysical Monograph Series</i> , <b>2004</b> , 1-27	1.1	41
19	Geological Evolution of Etna Volcano. <i>Geophysical Monograph Series</i> , <b>2004</b> , 49-63	1.1	24
18	Modeling of Ground Deformation Associated with Recent Lateral Eruptions: Mechanics of Magma Ascent and Intermediate Storage at Mt. Etna. <i>Geophysical Monograph Series</i> , <b>2004</b> , 293-306	1.1	25
17	Monitoring active volcanoes using a handheld thermal camera <b>2004</b> ,		5

16	Valle Del Bove, Eastern Flank of Etna Volcano: a Comprehensive Model for the Opening of the Depression and Implications for Future Hazards. <i>Geophysical Monograph Series</i> , <b>2004</b> , 65-75	1.1	17
15	Faulting Processes and Earthquake Source Parameters at Mount Etna: State of the art and Perspectives. <i>Geophysical Monograph Series</i> , <b>2004</b> , 167-189	1.1	4
14	Last 100 Ka Tephrostratigraphic Record of Mount Etna. <i>Geophysical Monograph Series</i> , <b>2004</b> , 77-89	1.1	8
13	Effusion rate estimations during the 1999 summit eruption on Mount Etna, and growth of two distinct lava flow fields. <i>Journal of Volcanology and Geothermal Research</i> , <b>2003</b> , 119, 107-123	2.8	109
12	The volcanic ash problem. <i>Journal of Volcanology and Geothermal Research</i> , <b>2003</b> , 122, 1-5	2.8	107
11	The application of a long-range laser scanner for monitoring volcanic activity on Mount Etna. <i>Journal of Volcanology and Geothermal Research</i> , <b>2003</b> , 123, 203-210	2.8	38
10	Revisiting the 1669 Etnean eruptive crisis using a cellular automata model and implications for volcanic hazard in the Catania area. <i>Journal of Volcanology and Geothermal Research</i> , <b>2003</b> , 123, 211-230	2.8	42
9	Dynamics of the December 2002 flank failure and tsunamis at Stromboli volcano inferred by volcanological and geophysical observations. <i>Geophysical Research Letters</i> , <b>2003</b> , 30,	4.9	151
8	Instabilities in the summit region of Mount Etna during the 1999 eruption. <i>Bulletin of Volcanology</i> , <b>2002</b> , 63, 526-535	2.4	43
7	Multidisciplinary approach yields insight into mt. etna eruption. <i>Eos</i> , <b>2001</b> , 82, 653-653	1.5	62
6	Facies analysis and depositional mechanisms of hydroclastite breccias, Acicastello, eastern Sicily. <i>Sedimentary Geology</i> , <b>1999</b> , 129, 127-141	2.8	7
5	Lava tube morphology on Etna and evidence for lava flow emplacement mechanisms. <i>Journal of Volcanology and Geothermal Research</i> , <b>1999</b> , 90, 263-280	2.8	99
4	Etna avalanche deposit prompts call for hazard reassessment. <i>Eos</i> , <b>1999</b> , 80, 345	1.5	1
3	Debris-avalanche deposits of the Milo Lahar sequence and the opening of the Valle del Bove on Etna volcano (Italy). <i>Journal of Volcanology and Geothermal Research</i> , <b>1998</b> , 87, 193-209	2.8	42
2	Formation of lava tubes and extensive flow field during the 1991-1993 eruption of Mount Etna. <i>Journal of Geophysical Research</i> , <b>1998</b> , 103, 27291-27301		147
1	Relevance of the Chiancone volcanoclastic deposit in the recent history of Etna Volcano (Italy). <i>Journal of Volcanology and Geothermal Research</i> , <b>1996</b> , 72, 239-258	2.8	28