Simone Cesca

List of Publications by Year in descending order

108 papers	3,294 citations	186265 28 h-index	175258 52 g-index
147 all docs	147 docs citations	147 times ranked	3065 citing authors

#	Article	IF	Citations
1	Intermediate-depth earthquakes in southern Spain and Alboran Sea. Tectonophysics, 2022, 825, 229238.	2.2	3
2	Insight into the 2017â€“2019 Lurestan arc seismic sequence (Zagros, Iran); complex earthquake interaction in the basement and sediments. Geophysical Journal International, 2022, 230, 114-130.	2.4	3
3	Massive earthquake swarm driven by magmatic intrusion at the Bransfield Strait, Antarctica. Communications Earth & Environment, 2022, 3, .	6.8	15
4	Monitoring microseismicity of the Hengill Geothermal Field in Iceland. Scientific Data, 2022, 9, 220.	5.3	9
5	Reply to: Multiple induced seismicity mechanisms at Castor underground gas storage illustrate the need for thorough monitoring. Nature Communications, 2022, 13, .	12.8	1
6	Source mechanisms and rupture processes of the Jujuy seismic nest, Chile-Argentina border. Journal of South American Earth Sciences, 2022, 117, 103887.	1.4	5
7	Earthquake Fingerprint of an Incipient Subduction of a Bathymetric High. Geophysical Research Letters, 2022, 49, .	4.0	3
8	Source study of 2017 Hojedk triplet earthquake sequence, southeast Iran. Journal of Seismology, 2021, 25, 85-101.	1.3	5
9	Relative earthquake location procedure for clustered seismicity with a single station. Geophysical Journal International, 2021, 225, 608-626.	2.4	3
10	Towards a regional, automated full moment tensor inversion for medium to large magnitude events in the Iranian plateau. Journal of Seismology, 2021, 25, 653-669.	1.3	2
11	The 2014 Juan FernÃ¡ndez microplate earthquake doublet: Evidence for large thrust faulting driven by microplate rotation. Tectonophysics, 2021, 801, 228720.	2.2	2
12	On the Source Parameters and Genesis of the 2017, Mw 4 Montesano Earthquake in the Outer Border of the Val dâ€™Agri Oilfield (Italy). Frontiers in Earth Science, 2021, 8, .	1.8	6
13	Rupture Directivity in 3D Inferred From Acoustic Emissions Events in a Mine-Scale Hydraulic Fracturing Experiment. Frontiers in Earth Science, 2021, 9, .	1.8	7
14	Reservoir-Triggered Earthquakes Around the AtatÃ¼rk Dam (Southeastern Turkey). Frontiers in Earth Science, 2021, 9, .	1.8	9
15	Regional centroid moment tensorÂinversion of small to moderate earthquakes in the Alps using the dense AlpArray seismic network: challenges and seismotectonic insights. Solid Earth, 2021, 12, 1233-1257.	2.8	19
16	Repeating earthquakes and ground deformation reveal the structure and triggering mechanisms of the Pernicana fault, Mt. Etna. Communications Earth & Environment, 2021, 2, .	6.8	4
17	How to Assess the Moment Tensor Inversion Resolution for Mining Induced Seismicity: A Case Study for the Rudna Mine, Poland. Frontiers in Earth Science, 2021, 9, .	1.8	5
18	Seismicity at the Castor gas reservoir driven by pore pressure diffusion and asperities loading. Nature Communications, 2021, 12, 4783.	12.8	22

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19	Detection and potential early warning of catastrophic flow events with regional seismic networks. Science, 2021, 374, 87-92.	12.6	54
20	The 2019â€“2020 Khalili (Iran) Earthquake Sequenceâ€”Anthropogenic Seismicity in the Zagros Simply Folded Belt?. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022797.	3.4	9
21	Insights Into Hydraulic Fracture Growth Gained From a Joint Analysis of Seismometerâ€Derived Tilt Signals and Acoustic Emissions. Journal of Geophysical Research: Solid Earth, 2021, 126, .	3.4	5
22	Inflating Shallow Plumbing System of Bezymianny Volcano, Kamchatka, Studied by InSAR and Seismicity Data Prior to the 20 December 2017 Eruption. Frontiers in Earth Science, 2021, 9, .	1.8	3
23	Re-evaluation of Seismic Intensities and Relocation of 1969 Saint Vincent Cape Seismic Sequence: A Comparison with the 1755 Lisbon Earthquake. Pure and Applied Geophysics, 2020, 177, 1781-1800.	1.9	15
24	Drainage of a deep magma reservoir near Mayotte inferred from seismicity and deformation. Nature Geoscience, 2020, 13, 87-93.	12.9	109
25	Seismicity clusters in Central Chile: investigating the role of repeating earthquakes and swarms in a subduction region. Geophysical Journal International, 2020, 224, 2028-2043.	2.4	8
26	Clusty, the waveform-based network similarity clustering toolbox: concept and application to image complex faulting offshore Zakynthos (Greece). Geophysical Journal International, 2020, 224, 2044-2059.	2.4	15
27	Earthquake Swarms, Slow Slip and Fault Interactions at the Westernâ€End of the Hellenic Subduction System Precede the M_w 6.9 Zakynthos Earthquake, Greece. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009243.	2.5	12
28	Full-waveform-based characterization of acoustic emission activity in a mine-scale experiment: a comparison of conventional and advanced hydraulic fracturing schemes. Geophysical Journal International, 2020, 222, 189-206.	2.4	27
29	An application of coherence-based method for earthquake detection and microseismic monitoring (Irpinia fault system, Southern Italy). Journal of Seismology, 2020, 24, 979-989.	1.3	7
30	Seiscloud, a tool for density-based seismicity clustering and visualization. Journal of Seismology, 2020, 24, 443-457.	1.3	27
31	Focal Parameters of Earthquakes Offshore Cape St. Vincent Using an Amphibious Network. Pure and Applied Geophysics, 2020, 177, 1761-1780.	1.9	12
32	Detection of weak seismic sequences based on arrival time coherence and empiric network detectability: an application at a near fault observatory. Geophysical Journal International, 2019, 218, 2054-2065.	2.4	18
33	Seismic activity during the 2013â€“2015 intereruptive phase at Lascar volcano, Chile. Geophysical Journal International, 2019, 219, 449-463.	2.4	7
34	Growth and collapse of a littoral lava dome during the 2018/19 eruption of Kadovar Volcano, Papua New Guinea, analyzed by multi-sensor satellite imagery. Journal of Volcanology and Geothermal Research, 2019, 388, 106704.	2.1	19
35	Automated Quality Control for Large Seismic Networks: Implementation and Application to the AlpArray Seismic Network. Seismological Research Letters, 2019, 90, 1177-1190.	1.9	17
36	Did the Deadly 1917 Monterchi Earthquake Occur on the Lowâ€Angle Alto Tiberina (Central Italy) Normal Fault?. Seismological Research Letters, 2019, 90, 1131-1144.	1.9	1

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37	SHEER â€œsmartâ€•database: technical note. Acta Geophysica, 2019, 67, 291-297.	2.0	1
38	Event couple spectral ratio <i>Q</i> method for earthquake clusters: application to northwest Bohemia. Solid Earth, 2019, 10, 317-328.	2.8	6
39	Small-aperture array as a tool to monitor fluid injection- and extraction-induced microseismicity: applications and recommendations. Acta Geophysica, 2019, 67, 311-326.	2.0	4
40	Breaking a subduction-termination from top to bottom: The large 2016 KaikÅura Earthquake, New Zealand. Earth and Planetary Science Letters, 2019, 506, 221-230.	4.4	36
41	A multi-technology analysis of the 2017 North Korean nuclear test. Solid Earth, 2019, 10, 59-78.	2.8	29
42	Anthropogenic seismicity in Italy and its relation to tectonics: State of the art and perspectives. Anthropocene, 2018, 21, 80-94.	3.3	24
43	The November 2017 M _w 5.5 Pohang earthquake: A possible case of induced seismicity in South Korea. Science, 2018, 360, 1003-1006.	12.6	325
44	Moment tensor inversion with three-dimensional sensor configuration of mining induced seismicity (Kiruna mine, Sweden). Geophysical Journal International, 2018, 213, 2147-2160.	2.4	19
45	Seismological Constraints on the Source Mechanism of the Damaging Seismic Event of 21 August 2017 on Ischia Island (Southern Italy). Seismological Research Letters, 2018, 89, 1741-1749.	1.9	14
46	Challenges in Regional Moment Tensor Resolution and Interpretation. Springer Natural Hazards, 2018, , 163-181.	0.3	5
47	Magmatic or Not Magmatic? The 2015â€“2016 Seismic Swarm at the Long-Dormant Jailolo Volcano, West Halmahera, Indonesia. Frontiers in Earth Science, 2018, 6, .	1.8	23
48	Source Complexity of an Injection Induced Event: The 2016 <scp>M_w</scp> 5.1 Fairview, Oklahoma Earthquake. Geophysical Research Letters, 2018, 45, 4025-4032.	4.0	20
49	The seismic sequence of 30th Mayâ€“9th June 2016 in the geothermal site of Torre Alfina (central Italy) and related variations in soil gas emissions. Journal of Volcanology and Geothermal Research, 2018, 359, 21-36.	2.1	9
50	Induced seismicity response of hydraulic fracturing: results of a multidisciplinary monitoring at the Wysin site, Poland. Scientific Reports, 2018, 8, 8653.	3.3	27
51	Moment Tensor Inversion for Nuclear Explosions: What Can We Learn from the 6 January and 9 September 2016 Nuclear Tests, North Korea?. Seismological Research Letters, 2017, 88, 300-310.	1.9	28
52	Crustal velocity structure and earthquake processes of Garhwal-Kumaun Himalaya: Constraints from regional waveform inversion and array beam modeling. Tectonophysics, 2017, 712-713, 45-63.	2.2	26
53	Current challenges in monitoring, discrimination, and management of induced seismicity related to underground industrial activities: A European perspective. Reviews of Geophysics, 2017, 55, 310-340.	23.0	235
54	Complex rupture process of the Mw 7.8, 2016, Kaikoura earthquake, New Zealand, and its aftershock sequence. Earth and Planetary Science Letters, 2017, 478, 110-120.	4.4	91

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55	Automated Full Waveform Detection and Location Algorithm of Acoustic Emissions from Hydraulic Fracturing Experiment. Procedia Engineering, 2017, 191, 697-702.	1.2	18
56	Characterization of Hydraulic Fractures Growth During the Ã„spÃ¶ Hard Rock Laboratory Experiment (Sweden). Rock Mechanics and Rock Engineering, 2017, 50, 2985-3001.	5.4	43
57	The 2016 south Alboran earthquake (Mw= 6.4): A reactivation of the Ibero-Maghrebian region?. Tectonophysics, 2017, 712-713, 704-715.	2.2	21
58	Monitoring performance using synthetic data for induced microseismicity by hydrofracking at the Wysin site (Poland). Geophysical Journal International, 2017, 210, 42-55.	2.4	23
59	The Sheer Approach To Shale Gas Exploration And Exploitation Associated Risks. , 2017, , .		1
60	Misalignment Angle Correction of Borehole Seismic Sensors: The Case Study of the Collalto Seismic Network. Seismological Research Letters, 2016, 87, 668-677.	1.9	3
61	Resolving source mechanisms of microseismic swarms induced by solution mining. Geophysical Journal International, 2016, 206, 696-715.	2.4	12
62	Imaging active faulting in a region of distributed deformation from the joint clustering of focal mechanisms and hypocentres: Application to the Azoresâ€“western Mediterranean region. Tectonophysics, 2016, 676, 70-89.	2.2	50
63	Automated microseismic event location using Master-Event Waveform Stacking. Scientific Reports, 2016, 6, 25744.	3.3	49
64	Gradual caldera collapse at BÃ¡rdarbunga volcano, Iceland, regulated by lateral magma outflow. Science, 2016, 353, aaf8988.	12.6	230
65	TheM_w8.1 2014 Iquique, Chile, seismic sequence: a tale of foreshocks and aftershocks. Geophysical Journal International, 2016, 204, 1766-1780.	2.4	49
66	Complex Rupture Process of the 19 March 2013, Rudna Mine (Poland) Induced Seismic Event and Collapse in the Light of Local and Regional Moment Tensor Inversion. Seismological Research Letters, 2016, 87, 274-284.	1.9	34
67	Stress changes, focal mechanisms, and earthquake scaling laws for the 2000 dike at Miyakejima (Japan). Journal of Geophysical Research: Solid Earth, 2015, 120, 4130-4145.	3.4	23
68	Discrimination between induced, triggered, and natural earthquakes close to hydrocarbon reservoirs: A probabilistic approach based on the modeling of depletionâ€induced stress changes and seismological source parameters. Journal of Geophysical Research: Solid Earth, 2015, 120, 2491-2509.	3.4	69
69	Full Waveform Seismological Advances for Microseismic Monitoring. Advances in Geophysics, 2015, 56, 169-228.	2.8	53
70	The 8 October 2011 Earthquake at El Hierro (M_wÂ4.0): Focal Mechanisms of the Mainshock and Its Foreshocks. Bulletin of the Seismological Society of America, 2015, 105, 330-340.	2.3	15
71	Aseismic transient driving the swarm-like seismic sequence in the Pollino range, Southern Italy. Geophysical Journal International, 2015, 201, 1553-1567.	2.4	40
72	Maximum Magnitude of Completeness in a Salt Mine. Bulletin of the Seismological Society of America, 2015, 105, 1491-1501.	2.3	4

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73	Systematic Changes of Earthquake Rupture with Depth: A Case Study from the 2010M_wÂ8.8 Maule, Chile, Earthquake Aftershock Sequence. Bulletin of the Seismological Society of America, 2015, 105, 2468-2479.	2.3	10
74	The 1748 Montesa (southeast Spain) earthquake â€" A singular event. Tectonophysics, 2015, 664, 139-153.	2.2	7
75	Case Studies of Depletion Induced Seismicity Using Rate & State Modeling for Probabilistic Discrimination and Hazard. , 2015, , .		0
76	Identification and characterization of growing large-scale en-echelon fractures in a salt mine. Geophysical Journal International, 2014, 196, 1092-1105.	2.4	16
77	The 2013 Septemberâ€"October seismic sequence offshore Spain: a case of seismicity triggered by gas injection?. Geophysical Journal International, 2014, 198, 941-953.	2.4	93
78	Rupture process of the Lorca (southeast Spain) 11 May 2011 (M w â€‰=â€‰5.1) earthquake. Journal of Seismology, 2014, 18, 481.	1.3	8
79	Seismicity monitoring by cluster analysis of moment tensors. Geophysical Journal International, 2014, 196, 1813-1826.	2.4	43
80	Seismogenesis of exceptional ground motion due to a sequence of mining induced tremors from Legnica-GÅ‚ogÃ³w Copper District in Poland. Geophysical Journal International, 2014, 198, 40-54.	2.4	13
81	Automated seismic event location by waveform coherence analysis. Geophysical Journal International, 2014, 196, 1742-1753.	2.4	90
82	Evidence for tensile faulting deduced from full waveform moment tensor inversion during the stimulation of the Basel enhanced geothermal system. Geothermics, 2014, 52, 74-83.	3.4	32
83	The MINE Project: Monitoring Induced Seismicity in a German Coal Mine. Advanced Technologies in Earth Sciences, 2014, , 63-81.	0.9	0
84	Automated Seismic Event Location by Travel-Time Stacking: An Application to Mining Induced Seismicity. Seismological Research Letters, 2013, 84, 666-677.	1.9	80
85	Seismic Characterization of the Chelyabinsk Meteor's Terminal Explosion. Seismological Research Letters, 2013, 84, 1021-1025.	1.9	23
86	Waveform inversion of small-to-moderate earthquakes located offshore southwest Iberia. Geophysical Journal International, 2013, 192, 248-259.	2.4	40
87	Recommendation for the discrimination of human-related and natural seismicity. Journal of Seismology, 2013, 17, 197-202.	1.3	64
88	Discrimination of induced seismicity by full moment tensor inversion and decomposition. Journal of Seismology, 2013, 17, 147-163.	1.3	99
89	Preface to the special issue â€œTriggered and induced seismicity: probabilities and discriminationâ€• Journal of Seismology, 2013, 17, 1-4.	1.3	13
90	Automated full moment tensor inversion of coal mining-induced seismicity. Geophysical Journal International, 2013, 195, 1267-1281.	2.4	42

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91	Source modelling of the M5â€“6 Emilia-Romagna, Italy, earthquakes (2012 May 20â€–29). Geophysical Journal International, 2013, 193, 1658-1672.	2.4	37
92	Improving the estimation of detection probability and magnitude of completeness in strongly heterogeneous media, an application to acoustic emission (AE). Geophysical Journal International, 2013, 193, 1556-1569.	2.4	10
93	Investigating the Origin of Seismic Swarms. Eos, 2013, 94, 361-362.	0.1	9
94	Proceso de ruptura del sismo de Lorca.. FÃsica De La Tierra, 2013, 24, .	0.1	1
95	Fast Kinematic Waveform Inversion and Robustness Analysis: Application to the 2007 Mw 5.9 Horseshoe Abyssal Plain Earthquake Offshore Southwest Iberia. Bulletin of the Seismological Society of America, 2012, 102, 361-376.	2.3	22
96	A complex linear least-squares method to derive relative and absolute orientations of seismic sensors. Geophysical Journal International, 2012, 188, 1243-1254.	2.4	30
97	The 2010 Granada, Spain, Deep Earthquake. Bulletin of the Seismological Society of America, 2011, 101, 2418-2430.	2.3	48
98	Rupture process of the 2001 May 7 Mw 4.3 Ekofisk induced earthquake. Geophysical Journal International, 2011, 187, 407-413.	2.4	22
99	Rapid directivity detection by azimuthal amplitude spectra inversion. Journal of Seismology, 2011, 15, 147-164.	1.3	30
100	Automated procedure for point and kinematic source inversion at regional distances. Journal of Geophysical Research, 2010, 115, .	3.3	87
101	Effects of topography and crustal heterogeneities on the source estimation of LP event at Kilauea volcano. Geophysical Journal International, 2008, 172, 1219-1236.	2.4	23
102	A frequency domain inversion code to retrieve time-dependent parameters of very long period volcanic sources. Computers and Geosciences, 2008, 34, 235-246.	4.2	14
103	The 7 June 2007 mbLg 4.2 Escopete Earthquake: An Event with Significant Ground Motion in a Stable Zone (Central Iberian Peninsula). Seismological Research Letters, 2008, 79, 820-829.	1.9	3
104	Modelling of the April 5, 2003, Stromboli (Italy) paroxysmal eruption from the inversion of broadband seismic data. Earth and Planetary Science Letters, 2007, 261, 164-178.	4.4	13
105	Amplitude spectra moment tensor inversion of shallow earthquakes in Spain. Geophysical Journal International, 2006, 166, 839-854.	2.4	65
106	The Bullas (Murcia, SE Spain) earthquake, 29 January 2005. Journal of Seismology, 2006, 10, 65-72.	1.3	16
107	Influence of lithospheric and mantle stratification on co- andÃ¯Â¿Â½post-seismic deformation due to finite faults. Geophysical Journal International, 2000, 143, 575-581.	2.4	6
108	Full-Waveform based methods for Microseismic Monitoring Operations: an Application to Natural and Induced Seismicity in the Hengill Geothermal Area, Iceland. Advances in Geosciences, 0, 54, 129-136.	12.0	7