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	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
2	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
3	Gradual caldera collapse at Bárdarbunga volcano, Iceland, regulated by lateral magma outflow. Science, 2016, 353, aaf8988.	12.6	230
4	Drainage of a deep magma reservoir near Mayotte inferred from seismicity and deformation. Nature Geoscience, 2020, 13, 87-93.	12.9	109
5	Discrimination of induced seismicity by full moment tensor inversion and decomposition. Journal of Seismology, 2013, 17, 147-163.	1.3	99
6	The 2013 September–October seismic sequence offshore Spain: a case of seismicity triggered by gas injection?. Geophysical Journal International, 2014, 198, 941-953.	2.4	93
7	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
8	Automated seismic event location by waveform coherence analysis. Geophysical Journal International, 2014, 196, 1742-1753.	2.4	90
9	Automated procedure for point and kinematic source inversion at regional distances. Journal of Geophysical Research, 2010, 115, .	3.3	87
10	Automated Seismic Event Location by Travel-Time Stacking: An Application to Mining Induced Seismicity. Seismological Research Letters, 2013, 84, 666-677.	1.9	80
11	Discrimination between induced, triggered, and natural earthquakes close to hydrocarbon reservoirs: A probabilistic approach based on the modeling of depletioninduced stress changes and seismological source parameters. Journal of Geophysical Research: Solid Earth, 2015, 120, 2491-2509.	3.4	69
12	Amplitude spectra moment tensor inversion of shallow earthquakes in Spain. Geophysical Journal International, 2006, 166, 839-854.	2.4	65
13	Recommendation for the discrimination of human-related and natural seismicity. Journal of Seismology, 2013, 17, 197-202.	1.3	64
14	Detection and potential early warning of catastrophic flow events with regional seismic networks. Science, 2021, 374, 87-92.	12.6	54
15	Full Waveform Seismological Advances for Microseismic Monitoring. Advances in Geophysics, 2015, 56, 169-228.	2.8	53
16	Imaging active faulting in a region of distributed deformation from the joint clustering of focal mechanisms and hypocentres: Application to the Azores–western Mediterranean region. Tectonophysics, 2016, 676, 70-89.	2.2	50
17	Automated microseismic event location using Master-Event Waveform Stacking. Scientific Reports, 2016, 6, 25744.	3.3	49
18	The M_w 8.1 2014 Iquique, Chile, seismic sequence: a tale of foreshocks and aftershocks. Geophysical Journal International, 2016, 204, 1766-1780.	2.4	49

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19	The 2010 Granada, Spain, Deep Earthquake. Bulletin of the Seismological Society of America, 2011, 101, 2418-2430.	2.3	48
20	Seismicity monitoring by cluster analysis of moment tensors. Geophysical Journal International, 2014, 196, 1813-1826.	2.4	43
21	Characterization of Hydraulic Fractures Growth During the Ä„spö Hard Rock Laboratory Experiment (Sweden). Rock Mechanics and Rock Engineering, 2017, 50, 2985-3001.	5.4	43
22	Automated full moment tensor inversion of coal mining-induced seismicity. Geophysical Journal International, 2013, 195, 1267-1281.	2.4	42
23	Waveform inversion of small-to-moderate earthquakes located offshore southwest Iberia. Geophysical Journal International, 2013, 192, 248-259.	2.4	40
24	Aseismic transient driving the swarm-like seismic sequence in the Pollino range, Southern Italy. Geophysical Journal International, 2015, 201, 1553-1567.	2.4	40
25	Source modelling of the M5â€"6 Emilia-Romagna, Italy, earthquakes (2012 May 20â€"29). Geophysical Journal International, 2013, 193, 1658-1672.	2.4	37
26	Breaking a subduction-termination from top to bottom: The large 2016 Kaikōura Earthquake, New Zealand. Earth and Planetary Science Letters, 2019, 506, 221-230.	4.4	36
27	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
28	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
29	Rapid directivity detection by azimuthal amplitude spectra inversion. Journal of Seismology, 2011, 15, 147-164.	1.3	30
30	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
31	A multi-technology analysis of the 2017 North Korean nuclear test. Solid Earth, 2019, 10, 59-78.	2.8	29
32	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
33	Induced seismicity response of hydraulic fracturing: results of a multidisciplinary monitoring at the Wysin site, Poland. Scientific Reports, 2018, 8, 8653.	3.3	27
34	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
35	Seiscloud, a tool for density-based seismicity clustering and visualization. Journal of Seismology, 2020, 24, 443-457.	1.3	27
36	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

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37	Anthropogenic seismicity in Italy and its relation to tectonics: State of the art and perspectives. Anthropocene, 2018, 21, 80-94.	3.3	24
38	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
39	Seismic Characterization of the Chelyabinsk Meteor's Terminal Explosion. Seismological Research Letters, 2013, 84, 1021-1025.	1.9	23
40	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
41	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
42	Magmatic or Not Magmatic? The 2015–2016 Seismic Swarm at the Long-Dormant Jailolo Volcano, West Halmahera, Indonesia. Frontiers in Earth Science, 2018, 6, .	1.8	23
43	Rupture process of the 2001 May 7 Mw 4.3 Ekofisk induced earthquake. Geophysical Journal International, 2011, 187, 407-413.	2.4	22
44	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
45	Seismicity at the Castor gas reservoir driven by pore pressure diffusion and asperities loading. Nature Communications, 2021, 12, 4783.	12.8	22
46	The 2016 south Alboran earthquake (Mw= 6.4): A reactivation of the Ibero-Maghrebian region?. Tectonophysics, 2017, 712-713, 704-715.	2.2	21
47	Source Complexity of an Injection Induced Event: The 2016 M_w 5.1 Fairview, Oklahoma Earthquake. Geophysical Research Letters, 2018, 45, 4025-4032.	4.0	20
48	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
49	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
50	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
51	Automated Full Waveform Detection and Location Algorithm of Acoustic Emissions from Hydraulic Fracturing Experiment. Procedia Engineering, 2017, 191, 697-702.	1.2	18
52	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
53	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
54	The Bullas (Murcia, SE Spain) earthquake, 29 January 2005. Journal of Seismology, 2006, 10, 65-72.	1.3	16

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55	Identification and characterization of growing large-scale en-echelon fractures in a salt mine. Geophysical Journal International, 2014, 196, 1092-1105.	2.4	16
56	The 8 October 2011 Earthquake at El Hierro (M_w Â4.0): Focal Mechanisms of the Mainshock and Its Foreshocks. Bulletin of the Seismological Society of America, 2015, 105, 330-340.	2.3	15
57	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
58	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
59	Massive earthquake swarm driven by magmatic intrusion at the Bransfield Strait, Antarctica. Communications Earth & Environment, 2022, 3, .	6.8	15
60	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
61	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
62	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
63	Preface to the special issue â€œTriggered and induced seismicity: probabilities and discriminationâ€• Journal of Seismology, 2013, 17, 1-4.	1.3	13
64	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
65	Resolving source mechanisms of microseismic swarms induced by solution mining. Geophysical Journal International, 2016, 206, 696-715.	2.4	12
66	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
67	Focal Parameters of Earthquakes Offshore Cape St. Vincent Using an Amphibious Network. Pure and Applied Geophysics, 2020, 177, 1761-1780.	1.9	12
68	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
69	Systematic Changes of Earthquake Rupture with Depth: A Case Study from the 2010 M_w Â8.8 Maule, Chile, Earthquake Aftershock Sequence. Bulletin of the Seismological Society of America, 2015, 105, 2468-2479.	2.3	10
70	Investigating the Origin of Seismic Swarms. Eos, 2013, 94, 361-362.	0.1	9
71	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
72	Reservoir-Triggered Earthquakes Around the AtatÃ¼rk Dam (Southeastern Turkey). Frontiers in Earth Science, 2021, 9, .	1.8	9

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73	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
74	Monitoring microseismicity of the Hengill Geothermal Field in Iceland. Scientific Data, 2022, 9, 220.	5.3	9
75	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
76	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
77	The 1748 Montesa (southeast Spain) earthquake â€" A singular event. Tectonophysics, 2015, 664, 139-153.	2.2	7
78	Seismic activity during the 2013â€"2015 intereruptive phase at Lascar volcano, Chile. Geophysical Journal International, 2019, 219, 449-463.	2.4	7
79	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
80	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
81	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
82	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
83	Event couple spectral ratio &lt;i&gt;Q&lt;/i&gt; method for earthquake clusters: application to northwest Bohemia. Solid Earth, 2019, 10, 317-328.	2.8	6
84	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
85	Challenges in Regional Moment Tensor Resolution and Interpretation. Springer Natural Hazards, 2018, , 163-181.	0.3	5
86	Source study of 2017 Hojedk triplet earthquake sequence, southeast Iran. Journal of Seismology, 2021, 25, 85-101.	1.3	5
87	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
88	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
89	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
90	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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91	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
92	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
93	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
94	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
95	Relative earthquake location procedure for clustered seismicity with a single station. Geophysical Journal International, 2021, 225, 608-626.	2.4	3
96	Intermediate-depth earthquakes in southern Spain and Alboran Sea. Tectonophysics, 2022, 825, 229238.	2.2	3
97	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
98	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
99	Earthquake Fingerprint of an Incipient Subduction of a Bathymetric High. Geophysical Research Letters, 2022, 49, .	4.0	3
100	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
101	The 2014 Juan FernÃ¡ndez microplate earthquake doublet: Evidence for large thrust faulting driven by microplate rotation. Tectonophysics, 2021, 801, 228720.	2.2	2
102	Proceso de ruptura del sismo de Lorca.. FÃsica De La Tierra, 2013, 24, .	0.1	1
103	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
104	SHEER â€œsmartâ€•database: technical note. Acta Geophysica, 2019, 67, 291-297.	2.0	1
105	The Sheer Approach To Shale Gas Exploration And Exploitation Associated Risks. , 2017, , .		1
106	Reply to: Multiple induced seismicity mechanisms at Castor underground gas storage illustrate the need for thorough monitoring. Nature Communications, 2022, 13, .	12.8	1
107	The MINE Project: Monitoring Induced Seismicity in a German Coal Mine. Advanced Technologies in Earth Sciences, 2014, , 63-81.	0.9	0
108	Case Studies of Depletion Induced Seismicity Using Rate & State Modeling for Probabilistic Discrimination and Hazard. , 2015, , .		0