Eleonore Stutzmann

List of Publications by Year
in descending order

108 papers	5,734 citations	66343 42 h-index	82547 72 g-index
139 all docs	139 docs citations	139 times ranked	3616 citing authors

#	Article	IF	Citations
1	Imaging the crust and uppermost mantle structure of Portugal (West Iberia) with seismic ambient noise. Geophysical Journal International, 2022, 230, 1106-1120.	2.4	6
2	The Far Side of Mars: Two Distant Marsquakes Detected by InSight. The Seismic Record, 2022, 2, 88-99.	3.1	29
3	An autonomous lunar geophysical experiment package (ALGEP) for future space missions. Experimental Astronomy, 2022, 54, 617-640.	3.7	2
4	Quantifying microseismic noise generation from coastal reflection of gravity waves recorded by seafloor DAS. Geophysical Journal International, 2022, 231, 394-407.	2.4	10
5	Evidence for crustal seismic anisotropy at the InSight lander site. Earth and Planetary Science Letters, 2022, 593, 117654.	4.4	21
6	Companion guide to the marsquake catalog from InSight, Sols 0â€“478: Data content and non-seismic events. Physics of the Earth and Planetary Interiors, 2021, 310, 106597.	1.9	64
7	The Polarization of Ambient Noise on Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006545.	3.6	33
8	A machine-learning approach for automatic classification of volcanic seismicity at La SoufriÃ¨re Volcano, Guadeloupe. Journal of Volcanology and Geothermal Research, 2021, 411, 107151.	2.1	13
9	Seismology and Environment. Encyclopedia of Earth Sciences Series, 2021, , 1655-1661.	0.1	0
10	Finding SEIS North on Mars: Comparisons Between SEIS Sundial, Inertial and Imaging Measurements and Consequences for Seismic Analysis. Earth and Space Science, 2021, 8, e2020EA001286.	2.6	3
11	Autocorrelation of the Ground Vibrations Recorded by the SEISâ€InSight Seismometer on Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006498.	3.6	34
12	RÃ‰SIF-SI: A Distributed Information System for French Seismological Data. Seismological Research Letters, 2021, 92, 1832-1853.	1.9	9
13	Locating Rockfalls Using Interâ€Station Ratios of Seismic Energy at Dolomieu Crater, Piton de la Fournaise Volcano. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF005715.	2.8	6
14	Seismic Noise Autocorrelations on Mars. Earth and Space Science, 2021, 8, e2021EA001755.	2.6	31
15	Thickness and structure of the martian crust from InSight seismic data. Science, 2021, 373, 438-443.	12.6	140
16	Seismic detection of the martian core. Science, 2021, 373, 443-448.	12.6	169
17	Potential Pitfalls in the Analysis and Structural Interpretation of Seismic Data from the Mars <i>InSight</i> Mission. Bulletin of the Seismological Society of America, 2021, 111, 2982-3002.	2.3	42
18	Resonances and Lander Modes Observed by InSight on Mars (1â€“9Â Hz). Bulletin of the Seismological Society of America, 2021, 111, 2924-2950.	2.3	30

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19	Anatomy of Continuous Mars SEIS and Pressure Data from Unsupervised Learning. Bulletin of the Seismological Society of America, 2021, 111, 2964-2981.	2.3	14
20	Simulation of Topography Effects on Rockfallâ€Generated Seismic Signals: Application to Piton de la Fournaise Volcano. Journal of Geophysical Research: Solid Earth, 2020, 125, e2020JB019874.	3.4	6
21	Detection, Analysis, and Removal of Glitches From InSight's Seismic Data From Mars. Earth and Space Science, 2020, 7, e2020EA001317.	2.6	75
22	MSS/1: Singleâ€Station and Singleâ€Event Marsquake Inversion. Earth and Space Science, 2020, 7, e2020EA001118.	2.6	16
23	Modelling capsizing icebergs in the open ocean. Geophysical Journal International, 2020, 223, 1265-1287.	2.4	5
24	Constraints on the shallow elastic and anelastic structure of Mars from InSight seismic data. Nature Geoscience, 2020, 13, 213-220.	12.9	207
25	The seismicity of Mars. Nature Geoscience, 2020, 13, 205-212.	12.9	194
26	Constraining landslide characteristics with Bayesian inversion of field and seismic data. Geophysical Journal International, 2020, 221, 1341-1348.	2.4	18
27	Initial results from the InSight mission on Mars. Nature Geoscience, 2020, 13, 183-189.	12.9	274
28	Introducing noisi: a Python tool for ambient noise cross-correlation modeling and noise source inversion. Solid Earth, 2020, 11, 1597-1615.	2.8	6
29	Seismology and Environment. Encyclopedia of Earth Sciences Series, 2020, , 1-8.	0.1	1
30	Characterization of Microseismic Noise in Cape Verde. Bulletin of the Seismological Society of America, 2019, 109, 1099-1109.	2.3	8
31	Large-scale flow of Indian Ocean asthenosphere driven by RÃ©union plume. Nature Geoscience, 2019, 12, 1043-1049.	12.9	29
32	Tomography of crust and lithosphere in the western Indian Ocean from noise cross-correlations of land and ocean bottom seismometers. Geophysical Journal International, 2019, 219, 924-944.	2.4	18
33	SEIS: Insightâ€™s Seismic Experiment for Internal Structure of Mars. Space Science Reviews, 2019, 215, 12.	8.1	238
34	Marsâ€™ Background Free Oscillations. Space Science Reviews, 2019, 215, 1.	8.1	7
35	Monitoring Greenland ice sheet buoyancy-driven calving discharge using glacial earthquakes. Annals of Glaciology, 2019, 60, 75-95.	1.4	17
36	Sea State Trends and Variability: Consistency Between Models, Altimeters, Buoys, and Seismic Data (1979â€"2016). Journal of Geophysical Research: Oceans, 2019, 124, 3923-3940.	2.6	29

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37	Global scale analysis and modelling of primary microseisms. Geophysical Journal International, 2019, 218, 560-572.	2.4	16
38	Blind source separation of temporally independent microseisms. Geophysical Journal International, 2019, 216, 1260-1275.	2.4	4
39	Infragravity waves: From driving mechanisms to impacts. Earth-Science Reviews, 2018, 177, 774-799.	9.1	165
40	Joint inversion of the first overtone and fundamental mode for deep imaging at the Valhall oil field using ambient noise. Geophysical Journal International, 2018, 214, 122-132.	2.4	24
41	Lowâ€Frequency Ambient Noise Autocorrelations: Waveforms and Normal Modes. Seismological Research Letters, 2018, 89, 1488-1496.	1.9	26
42	Numerical Modeling of Iceberg Capsizing Responsible for Glacial Earthquakes. Journal of Geophysical Research F: Earth Surface, 2018, 123, 3013-3033.	2.8	7
43	Atmospheric Science with InSight. Space Science Reviews, 2018, 214, 1.	8.1	88
44	The Earth's Hum Variations From a Global Model and Seismic Recordings Around the Indian Ocean. Geochemistry, Geophysics, Geosystems, 2018, 19, 4006-4020.	2.5	12
45	SKS splitting in the Western Indian Ocean from land and seafloor seismometers: Plume, plate and ridge signatures. Earth and Planetary Science Letters, 2018, 498, 169-184.	4.4	17
46	Measuring Group Velocity in Seismic Noise Correlation Studies Based on Phase Coherence and Resampling Strategies. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 1928-1935.	6.3	18
47	First Observation of the Earth's Permanent Free Oscillations on Ocean Bottom Seismometers. Geophysical Research Letters, 2017, 44, 10,988.	4.0	21
48	The Effect of Water Column Resonance on the Spectra of Secondary Microseism <i>P</i> Waves. Journal of Geophysical Research: Solid Earth, 2017, 122, 8121-8142.	3.4	13
49	Anisotropic Tomography Around La RÃ©union Island From Rayleigh Waves. Journal of Geophysical Research: Solid Earth, 2017, 122, 9132-9148.	3.4	35
50	Extracting surface waves, hum and normal modes: time-scale phase-weighted stack and beyond. Geophysical Journal International, 2017, 211, 30-44.	2.4	44
51	Complex force history of a calvingâ€generated glacial earthquake derived from broadband seismic inversion. Geophysical Research Letters, 2016, 43, 1055-1065.	4.0	24
52	Imaging the lithospheric structure beneath the Indian continent. Journal of Geophysical Research: Solid Earth, 2016, 121, 7450-7468.	3.4	78
53	Ray-theoretical modeling of secondary microseism<i>P</i>waves. Geophysical Journal International, 2016, 206, 1730-1739.	2.4	44
54	Global tomography using seismic hum. Geophysical Journal International, 2016, 204, 1222-1236.	2.4	70

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55	On the shaping factors of the secondary microseismic wavefield. Journal of Geophysical Research: Solid Earth, 2015, 120, 6241-6262.	3.4	53
56	Numerical modeling of the Mount Meager landslide constrained by its force history derived from seismic data. Journal of Geophysical Research: Solid Earth, 2015, 120, 2579-2599.	3.4	71
57	Sources of secondary microseisms in the Indian Ocean. Geophysical Journal International, 2015, 202, 1180-1189.	2.4	25
58	How ocean waves rock the Earth: Two mechanisms explain microseisms with periods 3 to 300â€‰s. Geophysical Research Letters, 2015, 42, 765-772.	4.0	188
59	Model Space Exploration for Determining Landslide Source History from Long-Period Seismic Data. Pure and Applied Geophysics, 2015, 172, 389-413.	1.9	29
60	Modelling the ocean site effect on seismic noise body waves. Geophysical Journal International, 2014, 197, 1096-1106.	2.4	74
61	Seismic Network in Greenland Monitors Earth and Ice System. Eos, 2014, 95, 13-14.	0.1	43
62	Tracking major storms from microseismic and hydroacoustic observations on the seafloor. Geophysical Research Letters, 2014, 41, 8825-8831.	4.0	45
63	Detection of microseismic compressional (<i>P</i>) body waves aided by numerical modeling of oceanic noise sources. Journal of Geophysical Research: Solid Earth, 2013, 118, 4312-4324.	3.4	43
64	Characteristic atmosphereâ€“oceanâ€“solid earth interactions in the Antarctic coastal and marine environment inferred from seismic and infrasound recording at Syowa Station, East Antarctica. Geological Society Special Publication, 2013, 381, 469-480.	1.3	3
65	Residual homogenization for seismic forward and inverse problems in layered media. Geophysical Journal International, 2013, 194, 470-487.	2.4	37
66	The GEOSCOPE Program: Progress and Challenges during the Past 30 Years. Seismological Research Letters, 2013, 84, 250-250.	1.9	1
67	Modelling secondary microseismic noise by normal mode summation. Geophysical Journal International, 2013, 193, 1732-1745.	2.4	86
68	Frequencyâ€dependent noise sources in the North Atlantic Ocean. Geochemistry, Geophysics, Geosystems, 2013, 14, 5341-5353.	2.5	25
69	Phenomenal Sea States and Swell from a North Atlantic Storm in February 2011: A Comprehensive Analysis. Bulletin of the American Meteorological Society, 2012, 93, 1825-1832.	3.3	60
70	From seismic noise to ocean wave parameters: General methods and validation. Journal of Geophysical Research, 2012, 117, .	3.3	62
71	Modelling long-term seismic noise in various environments. Geophysical Journal International, 2012, 191, 707-722.	2.4	104
72	Cape Verde hotspot from the upper crust to the top of the lower mantle. Earth and Planetary Science Letters, 2012, 319-320, 259-268.	4.4	44

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73	Numerical modeling of the Mount Steller landslide flow history and of the generated long period seismic waves. Geophysical Research Letters, 2012, 39, .	4.0	108
74	How moderate sea states can generate loud seismic noise in the deep ocean. Geophysical Research Letters, 2012, 39, .	4.0	57
75	Polarized Earth's ambient microseismic noise. Geochemistry, Geophysics, Geosystems, 2011, 12, n/a-n/a.	2.5	88
76	Observations of the seasonality of the Antarctic microseismic signal, and its association to sea ice variability. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	52
77	Ocean wave sources of seismic noise. Journal of Geophysical Research, 2011, 116, .	3.3	246
78	Using instantaneous phase coherence for signal extraction from ambient noise data at a local to a global scale. Geophysical Journal International, 2011, 184, 494-506.	2.4	194
79	The GEOSCOPE Program: Progress and Challenges during the Past 30 Years. Seismological Research Letters, 2010, 81, 427-452.	1.9	22
80	Observations of <i>S</i>410<i>p</i> and <i>S</i>350<i>p</i> phases at seismograph stations in California. Journal of Geophysical Research, 2010, 115, .	3.3	34
81	Stratification of the Earth beneath the Azores from P and S receiver functions. Earth and Planetary Science Letters, 2010, 299, 91-103.	4.4	51
82	Global climate imprint on seismic noise. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	112
83	Upper mantle structure of shear-waves velocities and stratification of anisotropy in the Afar Hotspot region. Tectonophysics, 2008, 462, 164-177.	2.2	51
84	Mantle plumes: Thin, fat, successful, or failing? Constraints to explain hot spot volcanism through time and space. Geophysical Research Letters, 2008, 35, .	4.0	83
85	Buckling instabilities of subducted lithosphere beneath the transition zone. Earth and Planetary Science Letters, 2007, 254, 173-179.	4.4	97
86	Understanding seismic heterogeneities in the lower mantle beneath the Americas from seismic tomography and plate tectonic history. Journal of Geophysical Research, 2007, 112, .	3.3	77
87	Mantle upwellings and convective instabilities revealed by seismic tomography and helium isotope geochemistry beneath eastern Africa. Geophysical Research Letters, 2007, 34, .	4.0	44
88	Anisotropic structure of the African upper mantle from Rayleigh and Love wave tomography. Physics of the Earth and Planetary Interiors, 2006, 155, 48-62.	1.9	125
89	Azores hotspot signature in the upper mantle. Journal of Volcanology and Geothermal Research, 2006, 156, 23-34.	2.1	62
90	Convective patterns under the Indo-Atlantic Â« box Â». Earth and Planetary Science Letters, 2005, 239, 233-252.	4.4	138

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91	Poisson's ratio in the lower mantle beneath Alaska: Evidence for compositional heterogeneity. Journal of Geophysical Research, 2004, 109, .	3.3	23
92	Surface wave higher-mode phase velocity measurements using a roller-coaster-type algorithm. Geophysical Journal International, 2003, 155, 289-307.	2.4	40
93	Anisotropic tomography of the Atlantic Ocean. Physics of the Earth and Planetary Interiors, 2002, 132, 237-248.	1.9	51
94	Geophysical ocean bottom observatories or temporary portable networks?. Developments in Marine Technology, 2002, , 59-81.	0.5	2
95	MOISE: A Prototype Multiparameter Ocean-Bottom Station. Bulletin of the Seismological Society of America, 2001, 91, 885-892.	2.3	20
96	GEOSCOPE Station Noise Levels. Bulletin of the Seismological Society of America, 2000, 90, 690-701.	2.3	131
97	Effect of a plume on long period surface waves computed with normal modes coupling. Physics of the Earth and Planetary Interiors, 2000, 119, 57-74.	1.9	17
98	Constraint on the S-wave velocity at the base of the mantle. Geophysical Research Letters, 2000, 27, 1571-1574.	4.0	16
99	The GEOSCOPE program: its data center. Physics of the Earth and Planetary Interiors, 1999, 113, 25-43.	1.9	12
100	Anisotropic tomography of the Atlantic Ocean from Rayleigh surface waves. Physics of the Earth and Planetary Interiors, 1998, 106, 257-273.	1.9	32
101	Towards multiscalar and multiparameter networks for the next century: The French efforts. Physics of the Earth and Planetary Interiors, 1998, 108, 155-174.	1.9	21
102	MOISE: A pilot experiment towards long term sea-floor geophysical observatories. Earth, Planets and Space, 1998, 50, 927-937.	2.5	39
103	On PP-P differential travel time measurements. Geophysical Research Letters, 1996, 23, 1833-1836.	4.0	10
104	Tomography of the transition zone from the inversion of higher-mode surface waves. Physics of the Earth and Planetary Interiors, 1994, 86, 99-115.	1.9	26
105	The French Pilot Experiment OFM-SISMOBS: first scientific results on noise level and event detection. Physics of the Earth and Planetary Interiors, 1994, 84, 321-336.	1.9	58
106	An inverse technique for retrieving higher mode phase velocity and mantle structure. Geophysical Journal International, 1993, 113, 669-683.	2.4	61
107	Preparing for InSight: Evaluation of the Blind Test for Martian Seismicity. Seismological Research Letters, 0, , .	1.9	5
108	Towards the Processing of Large Data Volumes with Phase Crossâ€Correlation. Seismological Research Letters, 0, , .	1.9	14