Mark P Panning

List of Publications by Year
in descending order

75 papers	4,241 citations	136740 32 h-index	110170 64 g-index
84 all docs	84 docs citations	84 times ranked	2309 citing authors

#	Article	IF	Citations
1	Global anisotropy and the thickness of continents. Nature, 2003, 422, 707-711.	13.7	397
2	A three-dimensional radially anisotropic model of shear velocity in the whole mantle. Geophysical Journal International, 2006, 167, 361-379.	1.0	343
3	Initial results from the InSight mission on Mars. Nature Geoscience, 2020, 13, 183-189.	5.4	274
4	SEIS: Insightâ€™s Seismic Experiment for Internal Structure of Mars. Space Science Reviews, 2019, 215, 12.	3.7	238
5	Constraints on the shallow elastic and anelastic structure of Mars from InSight seismic data. Nature Geoscience, 2020, 13, 213-220.	5.4	207
6	The seismicity of Mars. Nature Geoscience, 2020, 13, 205-212.	5.4	194
7	Inferences on Flow at the Base of Earth's Mantle Based on Seismic Anisotropy. Science, 2004, 303, 351-353.	6.0	188
8	Seismic detection of the martian core. Science, 2021, 373, 443-448.	6.0	169
9	Thickness and structure of the martian crust from InSight seismic data. Science, 2021, 373, 438-443.	6.0	140
10	Geophysical Investigations of Habitability in Iceâ€Covered Ocean Worlds. Journal of Geophysical Research E: Planets, 2018, 123, 180-205.	1.5	133
11	Importance of crustal corrections in the development of a new global model of radial anisotropy. Journal of Geophysical Research, 2010, 115, .	3.3	130
12	Upper mantle structure of Mars from InSight seismic data. Science, 2021, 373, 434-438.	6.0	105
13	The Marsquake catalogue from InSight, sols 0â€“478. Physics of the Earth and Planetary Interiors, 2021, 310, 106595.	0.7	97
14	Pre-mission InSights on the Interior of Mars. Space Science Reviews, 2019, 215, 1.	3.7	85
15	Planned Products of the Mars Structure Service for the InSight Mission to Mars. Space Science Reviews, 2017, 211, 611-650.	3.7	80
16	Science Goals and Objectives for the Dragonfly Titan Rotorcraft Relocatable Lander. Planetary Science Journal, 2021, 2, 130.	1.5	80
17	Geology and Physical Properties Investigations by the InSight Lander. Space Science Reviews, 2018, 214, 1.	3.7	77
18	Verifying single-station seismic approaches using Earth-based data: Preparation for data return from the InSight mission to Mars. Icarus, 2015, 248, 230-242.	1.1	71

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19	Measurement and implications of frequency dependence of attenuation. Earth and Planetary Science Letters, 2009, 282, 285-293.	1.8	66
20	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.	0.7	64
21	Single-station and single-event marsquake location and inversion for structure using synthetic Martian waveforms. Physics of the Earth and Planetary Interiors, 2016, 258, 28-42.	0.7	56
22	Impact-Seismic Investigations of the InSight Mission. Space Science Reviews, 2018, 214, 1.	3.7	48
23	InSight Constraints on the Global Character of the Martian Crust. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	45
24	First Focal Mechanisms of Marsquakes. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006546.	1.5	43
25	Potential Pitfalls in the Analysis and Structural Interpretation of Seismic Data from the Mars InSight Mission. Bulletin of the Seismological Society of America, 2021, 111, 2982-3002.	1.1	42
26	The Marsquake Service: Securing Daily Analysis of SEIS Data and Building the Martian Seismicity Catalogue for InSight. Space Science Reviews, 2018, 214, 1.	3.7	41
27	The rheology and thermal history of Mars revealed by the orbital evolution of Phobos. Nature, 2019, 569, 523-527.	13.7	39
28	Expected Seismicity and the Seismic Noise Environment of Europa. Journal of Geophysical Research E: Planets, 2018, 123, 163-179.	1.5	38
29	Preparing for InSight: An Invitation to Participate in a Blind Test for Martian Seismicity. Seismological Research Letters, 2017, 88, 1290-1302.	0.8	37
30	Insights Into Permafrost and Seasonal Activeâ€Layer Dynamics From Ambient Seismic Noise Monitoring. Journal of Geophysical Research F: Earth Surface, 2019, 124, 1798-1816.	1.0	37
31	Seismic Wave Propagation in Icy Ocean Worlds. Journal of Geophysical Research E: Planets, 2018, 123, 206-232.	1.5	35
32	Improving Constraints on Planetary Interiors With PPs Receiver Functions. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006983.	1.5	34
33	Seismic waveform modelling in a 3-D Earth using the Born approximation: potential shortcomings and a remedy. Geophysical Journal International, 2009, 177, 161-178.	1.0	33
34	The Polarization of Ambient Noise on Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006545.	1.5	33
35	Vital Signs: Seismology of Icy Ocean Worlds. Astrobiology, 2018, 18, 37-53.	1.5	31
36	Seismic Noise Autocorrelations on Mars. Earth and Space Science, 2021, 8, e2021EA001755.	1.1	31

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37	Long-period seismology on Europa: 2. Predicted seismic response. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	30
38	Resonances and Lander Modes Observed by InSight on Mars (1â€“9ÂHz). Bulletin of the Seismological Society of America, 2021, 111, 2924-2950.	1.1	30
39	On the computation of long period seismograms in a 3-D earth using normal mode based approximations. Geophysical Journal International, 2008, 175, 520-536.	1.0	29
40	The Far Side of Mars: Two Distant Marsquakes Detected by InSight. The Seismic Record, 2022, 2, 88-99.	1.3	29
41	A simple method for improving crustal corrections in waveform tomography. Geophysical Journal International, 2010, , no-no.	1.0	25
42	Onâ€Deck Seismology: Lessons from InSight for Future Planetary Seismology. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006353.	1.5	25
43	Long-period seismology on Europa: 1. Physically consistent interior models. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	23
44	Seismicity on tidally active solid-surface worlds. Icarus, 2020, 338, 113466.	1.1	20
45	Surface wave tomography for azimuthal anisotropy in a strongly reduced parameter space. Geophysical Journal International, 2008, 174, 629-648.	1.0	19
46	Analyzing Low Frequency Seismic Events at Cerberus Fossae as Long Period Volcanic Quakes. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006518.	1.5	19
47	USArray shear wave splitting shows seismic anisotropy from both lithosphere and asthenosphere. Geology, 2015, 43, 667-670.	2.0	17
48	MSS/1: Singleâ€Station and Singleâ€Event Marsquake Inversion. Earth and Space Science, 2020, 7, e2020EA001118.	1.1	16
49	Near-source velocity structure and isotropic moment tensors: A case study of the Long Valley Caldera. Geophysical Research Letters, 2001, 28, 1815-1818.	1.5	14
50	Exploration of Icy Ocean Worlds Using Geophysical Approaches. Planetary Science Journal, 2021, 2, 150.	1.5	14
51	Seasonal seismic activity on Mars. Earth and Planetary Science Letters, 2021, 576, 117171.	1.8	13
52	Empirical recurrence rates for ground motion signals on planetary surfaces. Icarus, 2018, 303, 273-279.	1.1	12
53	Bayesian inversion of the Martian structure using geodynamic constraints. Geophysical Journal International, 2021, 226, 1615-1644.	1.0	12
54	Azimuthal anisotropy in the Chile Ridge subduction region retrieved from ambient noise. Lithosphere, 2011, 3, 393-400.	0.6	11

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55	On the Detectability and Use of Normal Modes for Determining Interior Structure of Mars. Space Science Reviews, 2018, 214, 1.	3.7	11
56	Karstâ€driven flexural isostasy in Northâ€Central Florida. Geochemistry, Geophysics, Geosystems, 2017, 18, 3327-3339.	1.0	10
57	Geophysical Observations of Phobos Transits by InSight. Geophysical Research Letters, 2020, 47, e2020GL089099.	1.5	10
58	Non-linear 3-D Born shear waveform tomography in Southeast Asia. Geophysical Journal International, 2012, 190, 463-475.	1.0	9
59	Seismic response of the Mars Curiosity Rover: Implications for future planetary seismology. Icarus, 2019, 317, 373-378.	1.1	9
60	Seismic signal from waves on Titan's seas. Earth and Planetary Science Letters, 2019, 520, 250-259.	1.8	9
61	Standing on Apolloâ€™s Shoulders: A Microseismometer for the Moon. Planetary Science Journal, 2021, 2, 36.	1.5	9
62	Wind and surface roughness considerations for seismic instrumentation on a relocatable lander for Titan. Planetary and Space Science, 2021, 206, 105320.	0.9	8
63	The Lunar Geophysical Network Landing Sites Science Rationale. Planetary Science Journal, 2022, 3, 40.	1.5	7
64	Hydrostratigraphy characterization of the Floridan aquifer system using ambient seismic noise. Geophysical Journal International, 2017, 209, 876-889.	1.0	5
65	Preparing for InSight: Evaluation of the Blind Test for Martian Seismicity. Seismological Research Letters, 0, , .	0.8	5
66	Ambient Noise Tomography With Common Receiver Clusters in Distributed Sensor Networks. IEEE Transactions on Signal and Information Processing Over Networks, 2020, 6, 656-666.	1.6	5
67	Enceladus as a potential oasis for life: Science goals and investigations for future explorations. Experimental Astronomy, 2022, 54, 809-847.	1.6	5
68	Modeling approaches in planetary seismology. , 2015, , 140-156.		4
69	Crustal Shear Wave Velocity Structure of Central Idaho and Eastern Oregon From Ambient Seismic Noise: Results From the IDOR Project. Journal of Geophysical Research: Solid Earth, 2019, 124, 1601-1625.	1.4	4
70	Seismic Detection of Euroquakes Originating From Europa's Silicate Interior. Earth and Space Science, 2022, 9, .	1.1	3
71	Seismology on Titan: A seismic signal and noise budget in preparation for Dragonfly. , 2020, , .		2
72	Reply to â€œComment on â€˜Measurement and implications of frequency dependence of attenuationâ€™â€•by I. Morozov. Earth and Planetary Science Letters, 2010, 293, 216-217.	1.8	1

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73	Underground Microseismic Event Monitoring and Localization within Sensor Networks. Sensors, 2021, 21, 2830.	2.1	1
74	Measuring Fundamental and Higher Mode Surface Wave Dispersion on Mars From Seismic Waveforms. Earth and Space Science, 2021, 8, e2020EA001263.	1.1	0
75	Elastic Wave Analyzer for Icy Sub-Surfaces (EWAIS) in the Solar System. , 2021, , .		0