Mark P Panning

List of Publications by Citations

71 papers	2,740 citations	26 h-index	51 g-index
84 ext. papers	3,525 ext. citations	7.4 avg, IF	4.99 L-index

#	Paper	IF	Citations
71	Global anisotropy and the thickness of continents. *Nature*, **2003**, 422, 707-11	50.4	352
70	A three-dimensional radially anisotropic model of shear velocity in the whole mantle. *Geophysical Journal International*, **2006**, 167, 361-379	2.6	288
69	Inferences on flow at the base of Earth's mantle based on seismic anisotropy. *Science*, **2004**, 303, 351-3	33.3	180
68	Initial results from the InSight mission on Mars. *Nature Geoscience*, **2020**, 13, 183-189	18.3	155
67	SEIS: Insight's Seismic Experiment for Internal Structure of Mars. *Space Science Reviews*, **2019**, 215, 12	7.5	143
66	Constraints on the shallow elastic and anelastic structure of Mars from InSight seismic data. *Nature Geoscience*, **2020**, 13, 213-220	18.3	129
65	The seismicity of Mars. *Nature Geoscience*, **2020**, 13, 205-212	18.3	121
64	Importance of crustal corrections in the development of a new global model of radial anisotropy. *Journal of Geophysical Research*, **2010**, 115,		101
63	Geophysical Investigations of Habitability in Ice-Covered Ocean Worlds. *Journal of Geophysical Research E: Planets*, **2018**, 123, 180-205	4.1	71
62	Planned Products of the Mars Structure Service for the InSight Mission to Mars. *Space Science Reviews*, **2017**, 211, 611-650	7.5	69
61	Pre-mission InSights on the Interior of Mars. *Space Science Reviews*, **2019**, 215, 1	7.5	61
60	Verifying single-station seismic approaches using Earth-based data: Preparation for data return from the InSight mission to Mars. *Icarus*, **2015**, 248, 230-242	3.8	58
59	Measurement and implications of frequency dependence of attenuation. *Earth and Planetary Science Letters*, **2009**, 282, 285-293	5.3	57
58	Thickness and structure of the martian crust from InSight seismic data. *Science*, **2021**, 373, 438-443	33.3	54
57	Seismic detection of the martian core. *Science*, **2021**, 373, 443-448	33.3	54
56	Geology and Physical Properties Investigations by the InSight Lander. *Space Science Reviews*, **2018**, 214, 1	7.5	53
55	Upper mantle structure of Mars from InSight seismic data. *Science*, **2021**, 373, 434-438	33.3	45

54	The Marsquake catalogue from InSight, sols 0–478. *Physics of the Earth and Planetary Interiors*, **2021**, 310, 106595	2.3	45
53	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	2.3	44
52	Impact-Seismic Investigations of the InSight Mission. *Space Science Reviews*, **2018**, 214, 1	7.5	36
51	Companion guide to the marsquake catalog from InSight, Sols 0–478: Data content and non-seismic events. *Physics of the Earth and Planetary Interiors*, **2021**, 310, 106597	2.3	35
50	Preparing for InSight: An Invitation to Participate in a Blind Test for Martian Seismicity. *Seismological Research Letters*, **2017**, 88, 1290-1302	3	32
49	Seismic waveform modelling in a 3-D Earth using the Born approximation: potential shortcomings and a remedy. *Geophysical Journal International*, **2009**, 177, 161-178	2.6	29
48	The rheology and thermal history of Mars revealed by the orbital evolution of Phobos. *Nature*, **2019**, 569, 523-527	50.4	27
47	The Marsquake Service: Securing Daily Analysis of SEIS Data and Building the Martian Seismicity Catalogue for InSight. *Space Science Reviews*, **2018**, 214, 1	7.5	27
46	Seismic Wave Propagation in Icy Ocean Worlds. *Journal of Geophysical Research E: Planets*, **2018**, 123, 206-232	4.1	26
45	Expected Seismicity and the Seismic Noise Environment of Europa. *Journal of Geophysical Research E: Planets*, **2018**, 123, 163-179	4.1	26
44	On the computation of long period seismograms in a 3-D earth using normal mode based approximations. *Geophysical Journal International*, **2008**, 175, 520-536	2.6	25
43	Long-period seismology on Europa: 2. Predicted seismic response. *Journal of Geophysical Research*, **2006**, 111, n/a-n/a		25
42	Insights Into Permafrost and Seasonal Active-Layer Dynamics From Ambient Seismic Noise Monitoring. *Journal of Geophysical Research F: Earth Surface*, **2019**, 124, 1798-1816	3.8	23
41	Vital Signs: Seismology of Icy Ocean Worlds. *Astrobiology*, **2018**, 18, 37-53	3.7	23
40	A simple method for improving crustal corrections in waveform tomography. *Geophysical Journal International*, **2010**, no-no	2.6	19
39	Long-period seismology on Europa: 1. Physically consistent interior models. *Journal of Geophysical Research*, **2006**, 111, n/a-n/a		19
38	The Polarization of Ambient Noise on Mars. *Journal of Geophysical Research E: Planets*, **2021**, 126, e2020JE006545	4.1	19
37	Science Goals and Objectives for the Dragonfly Titan Rotorcraft Relocatable Lander. *Planetary Science Journal*, **2021**, 2, 130	2.9	17

36	On-Deck Seismology: Lessons from InSight for Future Planetary Seismology. *Journal of Geophysical Research E: Planets*, **2020**, 125, e2019JE006353	4.1	16
35	First Focal Mechanisms of Marsquakes. *Journal of Geophysical Research E: Planets*, **2021**, 126, e2020JE006546	4.1	15
34	Seismic Noise Autocorrelations on Mars. *Earth and Space Science*, **2021**, 8, e2021EA001755	3.1	15
33	Surface wave tomography for azimuthal anisotropy in a strongly reduced parameter space. *Geophysical Journal International*, **2008**, 174, 629-648	2.6	14
32	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	2.3	14
31	Resonances and Lander Modes Observed by InSight on Mars (1 Hz). *Bulletin of the Seismological Society of America*,	2.3	14
30	USArray shear wave splitting shows seismic anisotropy from both lithosphere and asthenosphere. *Geology*, **2015**, 43, 667-670	5	11
29	Improving Constraints on Planetary Interiors With PPs Receiver Functions. *Journal of Geophysical Research E: Planets*, **2021**, 126, e2021JE006983	4.1	11
28	Seismicity on tidally active solid-surface worlds. *Icarus*, **2019**, 338, 113466	3.8	10
27	InSight constraints on the global character of the Martian crust. *Journal of Geophysical Research E: Planets*,	4.1	10
26	Karst-driven flexural isostasy in North-Central Florida. *Geochemistry, Geophysics, Geosystems*, **2017**, 18, 3327-3339	3.6	9
25	On the Detectability and Use of Normal Modes for Determining Interior Structure of Mars. *Space Science Reviews*, **2018**, 214, 1	7.5	9
24	The Far Side of Mars: Two Distant Marsquakes Detected by InSight. *The Seismic Record*, **2022**, 2, 88-99		9
23	Non-linear 3-D Born shear waveform tomography in Southeast Asia. *Geophysical Journal International*, **2012**, 190, 463-475	2.6	8
22	Azimuthal anisotropy in the Chile Ridge subduction region retrieved from ambient noise. *Lithosphere*, **2011**, 3, 393-400	2.7	8
21	MSS/1: Single-Station and Single-Event Marsquake Inversion. *Earth and Space Science*, **2020**, 7, e2020EA001188	3.1	8
20	Seismic response of the Mars Curiosity Rover: Implications for future planetary seismology. *Icarus*, **2019**, 317, 373-378	3.8	7
19	Analyzing Low Frequency Seismic Events at Cerberus Fossae as Long Period Volcanic Quakes. *Journal of Geophysical Research E: Planets*, **2021**, 126, e2020JE006518	4.1	7

18	Seismic signal from waves on Titan's seas. *Earth and Planetary Science Letters*, **2019**, 520, 250-259	5.3	6
17	Empirical recurrence rates for ground motion signals on planetary surfaces. *Icarus*, **2018**, 303, 273-279	3.8	6
16	Near-source velocity structure and isotropic moment tensors: A case study of the Long Valley Caldera. *Geophysical Research Letters*, **2001**, 28, 1815-1818	4.9	5
15	Geophysical Observations of Phobos Transits by InSight. *Geophysical Research Letters*, **2020**, 47, e2020GL089099	4.9	5
14	Bayesian inversion of the Martian structure using geodynamic constraints. *Geophysical Journal International*, **2021**, 226, 1615-1644	2.6	5
13	Hydrostratigraphy characterization of the Floridan aquifer system using ambient seismic noise. *Geophysical Journal International*, **2017**, 209, 876-889	2.6	4
12	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	3.6	3
11	Modeling approaches in planetary seismology140-156		3
10	Seasonal seismic activity on Mars. *Earth and Planetary Science Letters*, **2021**, 576, 117171	5.3	3
9	Exploration of Icy Ocean Worlds Using Geophysical Approaches. *Planetary Science Journal*, **2021**, 2, 150	2.9	3
8	Wind and surface roughness considerations for seismic instrumentation on a relocatable lander for Titan. *Planetary and Space Science*, **2021**, 206, 105320	2	3
7	The Lunar Geophysical Network Landing Sites Science Rationale. *Planetary Science Journal*, **2022**, 3, 40	2.9	3
6	Preparing for InSight: Evaluation of the Blind Test for Martian Seismicity. *Seismological Research Letters*, **2019**,	3	2
5	Enceladus as a potential oasis for life: Science goals and investigations for future explorations. *Experimental Astronomy*,1	1.3	2
4	Reply to "Comment on "Measurement and implications of frequency dependence of attenuation" by I. Morozov. *Earth and Planetary Science Letters*, **2010**, 293, 216-217	5.3	1
3	Ambient Noise Tomography With Common Receiver Clusters in Distributed Sensor Networks. *IEEE Transactions on Signal and Information Processing Over Networks*, **2020**, 6, 656-666	2.8	1
2	Standing on Apollo's Shoulders: A Microseismometer for the Moon. *Planetary Science Journal*, **2021**, 2, 36	2.9	1
1	Measuring Fundamental and Higher Mode Surface Wave Dispersion on Mars From Seismic Waveforms. *Earth and Space Science*, **2021**, 8, e2020EA001263	3.1	