Philippe H LognonnÃ©

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2881060/publications.pdf

Version: 2024-02-01

235 papers	11,043 citations	23567 58 h-index	40979 93 g-index

249 all docs	249 docs citations	249 times ranked	3842 citing authors

#	Article	IF	Citations
1	Seismic Detection of the Lunar Core. Science, 2011, 331, 309-312.	12.6	451
2	Initial results from the InSight mission on Mars. Nature Geoscience, 2020, 13, 183-189.	12.9	274
3	Ionospheric detection of gravity waves induced by tsunamis. Geophysical Journal International, 2005, 160, 840-848.	2.4	266
4	SEIS: Insightâ€™s Seismic Experiment for Internal Structure of Mars. Space Science Reviews, 2019, 215, 12.	8.1	238
5	A new seismic model of the Moon: implications for structure, thermal evolution and formation of the Moon. Earth and Planetary Science Letters, 2003, 211, 27-44.	4.4	216
6	Very preliminary reference Moon model. Physics of the Earth and Planetary Interiors, 2011, 188, 96-113.	1.9	214
7	Constraints on the shallow elastic and anelastic structure of Mars from InSight seismic data. Nature Geoscience, 2020, 13, 213-220.	12.9	207
8	The seismicity of Mars. Nature Geoscience, 2020, 13, 205-212.	12.9	194
9	Ionospheric remote sensing of the Denali Earthquake Rayleigh surface waves. Geophysical Research Letters, 2003, 30, .	4.0	179
10	Acoustic waves generated from seismic surface waves: propagation properties determined from Doppler sounding observations and normal-mode modelling. Geophysical Journal International, 2004, 158, 1067-1077.	2.4	173
11	Seismic detection of the martian core. Science, 2021, 373, 443-448.	12.6	169
12	The atmosphere of Mars as observed by InSight. Nature Geoscience, 2020, 13, 190-198.	12.9	161
13	Computation of seismograms and atmospheric oscillations by normal-mode summation for a spherical earth model with realistic atmosphere. Geophysical Journal International, 1998, 135, 388-406.	2.4	159
14	The resonant response of the ionosphere imaged after the 2011 off the Pacific coast of Tohoku Earthquake. Earth, Planets and Space, 2011, 63, 853-857.	2.5	159
15	From Sumatra 2004 to Tohokuâ€Oki 2011: The systematic GPS detection of the ionospheric signature induced by tsunamigenic earthquakes. Journal of Geophysical Research: Space Physics, 2013, 118, 3626-3636.	2.4	155
16	Selection of the InSight Landing Site. Space Science Reviews, 2017, 211, 5-95.	8.1	150
17	Three-dimensional waveform modeling of ionospheric signature induced by the 2004 Sumatra tsunami. Geophysical Research Letters, 2006, 33, .	4.0	142
18	Thickness and structure of the martian crust from InSight seismic data. Science, 2021, 373, 438-443.	12.6	140

#	Article	IF	Citations
19	A seismic model of the lunar mantle and constraints on temperature and mineralogy. Physics of the Earth and Planetary Interiors, 2006, 159, 140-166.	1.9	136
20	Planetary seismology. Surveys in Geophysics, 1993, 14, 239-302.	4.6	132
21	Imaging and modeling the ionospheric airglow response over Hawaii to the tsunami generated by the Tohoku earthquake of 11 March 2011. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	127
22	Constraints on the Martian lithosphere from gravity and topography data. Journal of Geophysical Research, 2005, 110, .	3.3	122
23	Ionospheric gravity waves detected offshore Hawaii after tsunamis. Geophysical Research Letters, 2010, 37, .	4.0	122
24	Detection and modeling of Rayleigh wave induced patterns in the ionosphere. Journal of Geophysical Research, 2011, 116, .	3.3	121
25	The effects of the atmospheric pressure changes on seismic signals or how to improve the quality of a station. Bulletin of the Seismological Society of America, 1996, 86, 1760-1769.	2.3	117
26	Ground-based GPS imaging of ionospheric post-seismic signal. Planetary and Space Science, 2006, 54, 528-540.	1.7	115
27	PLANETARY SEISMOLOGY. Annual Review of Earth and Planetary Sciences, 2005, 33, 571-604.	11.0	108
28	Ionospheric response to earthquakes of different magnitudes: Larger quakes perturb the ionosphere stronger and longer. Geophysical Research Letters, 2013, 40, 1675-1681.	4.0	108
29	Geology of the InSight landing site on Mars. Nature Communications, 2020, 11, 1014.	12.8	107
30	Upper mantle structure of Mars from InSight seismic data. Science, 2021, 373, 434-438.	12.6	105
31	InSight Auxiliary Payload Sensor Suite (APSS). Space Science Reviews, 2019, 215, 1.	8.1	104
32	First ionospheric images of the seismic fault slip on the example of the Tohoku-oki earthquake. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	102
33	Geomagnetic dependence of ionospheric disturbances induced by tsunamigenic internal gravity waves. Geophysical Journal International, 2008, 173, 753-765.	2.4	99
34	The Marsquake catalogue from InSight, sols 0â€“478. Physics of the Earth and Planetary Interiors, 2021, 310, 106595.	1.9	97
35	Lithosphereï¿½ï¿½atmosphereï¿½ï¿½ionosphere coupling after the 2003 explosive eruption of the Soufriere Hills Volcano, Montserrat. Geophysical Journal International, 2009, 179, 1537-1546.	2.4	94
36	Normal modes modelling of post-seismic ionospheric oscillations. Geophysical Research Letters, 2001, 28, 697-700.	4.0	90

#	Article	IF	Citations
37	Atmospheric Science with InSight. Space Science Reviews, 2018, 214, 1.	8.1	88
38	Pre-mission InSights on the Interior of Mars. Space Science Reviews, 2019, 215, 1.	8.1	85
39	Lateral variations of lunar crustal thickness from the Apollo seismic data set. Earth and Planetary Science Letters, 2006, 243, 1-14.	4.4	83
40	The BepiColombo Laser Altimeter (BELA): Concept and baseline design. Planetary and Space Science, 2007, 55, 1398-1413.	1.7	80
41	Planned Products of the Mars Structure Service for the InSight Mission to Mars. Space Science Reviews, 2017, 211, 611-650.	8.1	80
42	Three-dimensional numerical modeling of tsunami-related internal gravity waves in the Hawaiian atmosphere. Earth, Planets and Space, 2011, 63, 847-851.	2.5	77
43	Geology and Physical Properties Investigations by the InSight Lander. Space Science Reviews, 2018, 214, 1.	8.1	77
44	Detection, Analysis, and Removal of Glitches From InSight's Seismic Data From Mars. Earth and Space Science, 2020, 7, e2020EA001317.	2.6	75
45	The Noise Model of the SEIS Seismometer of the InSight Mission to Mars. Space Science Reviews, 2017, 211, 383-428.	8.1	73
46	Verifying single-station seismic approaches using Earth-based data: Preparation for data return from the InSight mission to Mars. Icarus, 2015, 248, 230-242.	2.5	71
47	A consistent picture of early hydrodynamic escape of Venus atmosphere explaining present Ne and Ar isotopic ratios and low oxygen atmospheric content. Earth and Planetary Science Letters, 2009, 286, 503-513.	4.4	70
48	Does the Moon possess a molten core? Probing the deep lunar interior using results from LLR and Lunar Prospector. Journal of Geophysical Research, 2004, 109, .	3.3	69
49	Modelling of coupled normal modes of the Earth: the spectral method. Geophysical Journal International, 1990, 102, 365-395.	2.4	68
50	Interior structure of terrestrial planets: Modeling Mars' mantle and its electromagnetic, geodetic, and seismic properties. Journal of Geophysical Research, 2005, 110, .	3.3	68
51	Crustal and time-varying magnetic fields at the InSight landing site on Mars. Nature Geoscience, 2020, 13, 199-204.	12.9	68
52	Evaluating the Wind-Induced Mechanical Noise on the InSight Seismometers. Space Science Reviews, 2017, 211, 429-455.	8.1	65
53	Normal modes and seismograms in an anelastic rotating Earth. Journal of Geophysical Research, 1991, 96, 20309-20319.	3.3	64
54	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

#	Article	IF	Citations
55	The NetLander very broad band seismometer. Planetary and Space Science, 2000, 48, 1289-1302.	1.7	61
56	Three-dimensional ionospheric tomography of post-seismic perturbations produced by the Denali earthquake from GPS data. Geophysical Journal International, 2005, 163, 1049-1064.	2.4	61
57	Prompt gravity signal induced by the 2011 Tohoku-Oki earthquake. Nature Communications, 2016, 7, 13349.	12.8	61
58	Lunar Seismology: An Update on Interior Structure Models. Space Science Reviews, 2019, 215, 1.	8.1	60
59	First seismic receiver functions on the Moon. Geophysical Research Letters, 2001, 28, 3031-3034.	4.0	59
60	Lunar Seismology: A Data and Instrumentation Review. Space Science Reviews, 2020, 216, 1.	8.1	59
61	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
62	A Pre-Landing Assessment of Regolith Properties at the InSight Landing Site. Space Science Reviews, 2018, 214, 1.	8.1	58
63	Ultra broad band seismology on InterMarsNet. Planetary and Space Science, 1996, 44, 1237-1249.	1.7	57
64	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.	1.9	56
65	First tsunami gravity wave detection in ionospheric radio occultation data. Earth and Space Science, 2015, 2, 125-133.	2.6	55
66	Planetary Magnetic Dynamo Effect on Atmospheric Protection of Early Earth and Mars. Space Science Reviews, 2007, 129, 279-300.	8.1	53
67	Moon meteoritic seismic hum: Steady state prediction. Journal of Geophysical Research, 2009, 114, .	3.3	53
68	Estimations of the Seismic Pressure Noise on Mars Determined from Large Eddy Simulations and Demonstration of Pressure Decorrelation Techniques for the Insight Mission. Space Science Reviews, 2017, 211, 457-483.	8.1	53
69	Tidally induced surface displacements, external potential variations, and gravity variations on Mars. Icarus, 2003, 161, 281-296.	2.5	52
70	Farside explorer: unique science from a mission to the farside of the moon. Experimental Astronomy, 2012, 33, 529-585.	3.7	52
71	A probabilistic framework for single-station location of seismicity on Earth and Mars. Physics of the Earth and Planetary Interiors, 2017, 262, 48-65.	1.9	50
72	Modeling of Ground Deformation and Shallow Surface Waves Generated by Martian Dust Devils and Perspectives for Near-Surface Structure Inversion. Space Science Reviews, 2017, 211, 501-524.	8.1	49

#	Article	IF	Citations
73	Impact-Seismic Investigations of the InSight Mission. Space Science Reviews, 2018, 214, 1.	8.1	48
74	Planetary Seismology. , 2007, , 69-122.		48
75	Nostradamus: The radar that wanted to be a seismometer. Geophysical Research Letters, 2010, 37, .	4.0	47
76	Network science landers for Mars. Advances in Space Research, 1999, 23, 1915-1924.	2.6	46
77	Modelling of the total electronic content and magnetic field anomalies generated by the 2011 Tohoku-Oki tsunami and associated acoustic-gravity waves. Geophysical Journal International, 2012, , no-no.	2.4	46
78	InSight Constraints on the Global Character of the Martian Crust. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	45
79	Parameters of seismic source as deduced from 1â€‰Hz ionospheric GPS data: Case study of the 2011 Tohokuâ€oki event. Journal of Geophysical Research: Space Physics, 2013, 118, 5942-5950.	2.4	44
80	Subsurface Structure at the InSight Landing Site From Compliance Measurements by Seismic and Meteorological Experiments. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006387.	3.6	44
81	First Focal Mechanisms of Marsquakes. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006546.	3.6	43
82	An Investigation of the Mechanical Properties of Some Martian Regolith Simulants with Respect to the Surface Properties at the InSight Mission Landing Site. Space Science Reviews, 2017, 211, 191-213.	8.1	42
83	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	42
84	The Marsquake Service: Securing Daily Analysis of SEIS Data and Building the Martian Seismicity Catalogue for InSight. Space Science Reviews, 2018, 214, 1.	8.1	41
85	GOCE: The first seismometer in orbit around the Earth. Geophysical Research Letters, 2013, 40, 1015-1020.	4.0	40
86	Crust stratigraphy and heterogeneities of the first kilometers at the dichotomy boundary in western Elysium Planitia and implications for InSight lander. Icarus, 2020, 338, 113511.	2.5	40
87	Highâ€Frequency Seismic Events on Mars Observed by InSight. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006670.	3.6	40
88	Seismometer Detection of Dust Devil Vortices by Ground Tilt. Bulletin of the Seismological Society of America, 2015, 105, 3015-3023.	2.3	39
89	The rheology and thermal history of Mars revealed by the orbital evolution of Phobos. Nature, 2019, 569, 523-527.	27.8	39
90	Response of the ionosphere to the seismic trigerred acoustic waves: electron density and electromagnetic fluctuations. Geophysical Journal International, 2009, 176, 1-13.	2.4	38

#	Article	IF	Citations
91	Seismic waveform modeling and surface wave tomography in a three-dimensional Earth: asymptotic and non-asymptotic approaches. Physics of the Earth and Planetary Interiors, 2000, 119, 37-56.	1.9	37
92	Planetary Seismology. , 2015, , 65-120.		37
93	Preparing for InSight: An Invitation to Participate in a Blind Test for Martian Seismicity. Seismological Research Letters, 2017, 88, 1290-1302.	1.9	37
94	Detecting atmospheric perturbations produced by Venus quakes. Geophysical Research Letters, 2005, 32, .	4.0	36
95	Power and duration of impact flashes on the Moon: Implication for the cause of radiation. Icarus, 2012, 218, 115-124.	2.5	36
96	A top-down origin for martian mantle plumes. Icarus, 2006, 185, 197-210.	2.5	35
97	Presentâ€Day Mars' Seismicity Predicted From 3â€D Thermal Evolution Models of Interior Dynamics. Geophysical Research Letters, 2018, 45, 2580-2589.	4.0	35
98	Erratum to â€œVery Preliminary Reference Moon Modelâ€ by R.F. Garcia, J. Gagnepain-Beyneix, S. Chevrot, P. LognonnÃ© [Phys. Earth Planet. Inter. 188 (2011) 96â€“113]. Physics of the Earth and Planetary Interiors, 2012, 202-203, 89-91.	1.9	34
99	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
100	Improving Constraints on Planetary Interiors With PPs Receiver Functions. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006983.	3.6	34
101	The Polarization of Ambient Noise on Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006545.	3.6	33
102	A Comodulation Analysis of Atmospheric Energy Injection Into the Ground Motion at InSight, Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006538.	3.6	33
103	A sophisticated lander for scientific exploration of Mars: scientific objectives and implementation of the Mars-96 Small Station. Planetary and Space Science, 1998, 46, 717-737.	1.7	32
104	Seismic waves in the ionosphere. Europhysics News, 2006, 37, 11-15.	0.3	32
105	A swarm of small shield volcanoes on Syria Planum, Mars. Journal of Geophysical Research, 2008, 113, .	3.3	32
106	Lander radioscience for obtaining the rotation and orientation of Mars. Planetary and Space Science, 2009, 57, 1050-1067.	1.7	32
107	Volatiles in the atmosphere of Mars: The effects of volcanism and escape constrained by isotopic data. Earth and Planetary Science Letters, 2011, 303, 299-309.	4.4	32
108	Large impacts detected by the Apollo seismometers: Impactor mass and source cutoff frequency estimations. Icarus, 2011, 211, 1049-1065.	2.5	32

#	Article	IF	Citations
109	Optimisation of seismic network design: Application to a geophysical international lunar network. Planetary and Space Science, 2011, 59, 343-354.	1.7	32
110	Future Mars geophysical observatories for understanding its internal structure, rotation, and evolution. Planetary and Space Science, 2012, 68, 123-145.	1.7	32
111	The seismic OPTIMISM experiment. Planetary and Space Science, 1998, 46, 739-747.	1.7	31
112	Tsunami detection in the ionosphere. Space Research Today, 2005, 163, 23-27.	0.1	31
113	The EChO science case. Experimental Astronomy, 2015, 40, 329-391.	3.7	31
114	Analysis of Regolith Properties Using Seismic Signals Generated by InSightâ€™s HP3 Penetrator. Space Science Reviews, 2017, 211, 315-337.	8.1	31
115	Vital Signs: Seismology of Icy Ocean Worlds. Astrobiology, 2018, 18, 37-53.	3.0	31
116	Pressure Effects on the SEISâ€InSight Instrument, Improvement of Seismic Records, and Characterization of Long Period Atmospheric Waves From Ground Displacements. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006278.	3.6	31
117	Seismic Noise Autocorrelations on Mars. Earth and Space Science, 2021, 8, e2021EA001755.	2.6	31
118	Excitation of Jovian Seismic Waves by the Shoemaker-Levy 9 Cometary Impact. Icarus, 1994, 110, 180-195.	2.5	30
119	Monitoring of Dust Devil Tracks Around the InSight Landing Site, Mars, and Comparison With In Situ Atmospheric Data. Geophysical Research Letters, 2020, 47, e2020GL087234.	4.0	30
120	Resonances and Lander Modes Observed by InSight on Mars (1â€“9ÂHz). Bulletin of the Seismological Society of America, 2021, 111, 2924-2950.	2.3	30
121	Modeling of atmospheric-coupled Rayleigh waves on planets with atmosphere: From Earth observation to Mars and Venus perspectives. Journal of the Acoustical Society of America, 2016, 140, 1447-1468.	1.1	29
122	Traveling ionospheric disturbances propagating ahead of the Tohoku-Oki tsunami: a case study. Geophysical Journal International, 2016, 204, 1148-1158.	2.4	29
123	The Far Side of Mars: Two Distant Marsquakes Detected by InSight. The Seismic Record, 2022, 2, 88-99.	3.1	29
124	Water, Life, and Planetary Geodynamical Evolution. Space Science Reviews, 2007, 129, 167-203.	8.1	28
125	Tsunami Wave Height Estimation from GPSâ€Derived Ionospheric Data. Journal of Geophysical Research: Space Physics, 2018, 123, 4329-4348.	2.4	28
126	Martian Infrasound: Numerical Modeling and Analysis of InSight's Data. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006376.	3.6	28

#	Article	IF	Citations
127	Network science, NetLander: a european mission to study the planet Mars. Planetary and Space Science, 2004, 52, 977-985.	1.7	27
128	Evaluation of deep moonquake source parameters: Implication for fault characteristics and thermal state. Journal of Geophysical Research E: Planets, 2017, 122, 1487-1504.	3.6	27
129	Tsunami signature in the ionosphere: A simulation of OTH radar observations. Radio Science, 2011, 46, .	1.6	26
130	Planetary Seismology. , 2007, , 69-122.		25
131	Onâ€Deck Seismology: Lessons from InSight for Future Planetary Seismology. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006353.	3.6	25
132	Magnitude Scales for Marsquakes Calibrated from InSight Data. Bulletin of the Seismological Society of America, 2021, 111, 3003-3015.	2.3	25
133	Radar sounding of temperate permafrost in Alaska: Analogy to the Martian midlatitude to high-latitude ice-rich terrains. Journal of Geophysical Research, 2011, 116, .	3.3	24
134	A New Crater Near InSight: Implications for Seismic Impact Detectability on Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006382.	3.6	24
135	Vortexâ€Dominated Aeolian Activity at InSight's Landing Site, Part 1: Multiâ€Instrument Observations, Analysis, and Implications. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006757.	3.6	23
136	Energy Envelope and Attenuation Characteristics of High-Frequency (HF) and Very-High-Frequency (VF) Martian Events. Bulletin of the Seismological Society of America, 2021, 111, 3016-3034.	2.3	23
137	The present-day atmosphere of Mars: Where does it come from?. Earth and Planetary Science Letters, 2009, 277, 384-393.	4.4	22
138	A Numerical Model of the SEIS Leveling System Transfer Matrix and Resonances: Application to SEIS Rotational Seismology and Dynamic Ground Interaction. Space Science Reviews, 2018, 214, 1.	8.1	22
139	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
140	10 Normal modes of the earth and planets. International Geophysics, 2002, 81, 125-l.	0.6	21
141	Evidence for crustal seismic anisotropy at the InSight lander site. Earth and Planetary Science Letters, 2022, 593, 117654.	4.4	21
142	FrÃ©chet derivatives of coupled seismograms with respect to an anelastic rotating earth. Geophysical Journal International, 1996, 124, 456-482.	2.4	20
143	Finite-Difference Modeling of Acoustic and Gravity Wave Propagation in Mars Atmosphere: Application to Infrasounds Emitted by Meteor Impacts. Space Science Reviews, 2017, 211, 547-570.	8.1	20
144	The whirlwinds of Elysium: A catalog and meteorological characteristics of â€œdust devilâ€•vortices observed by InSight on Mars. Icarus, 2021, 355, 114119.	2.5	20

#	Article	IF	Citations
145	Geometry and Segmentation of Cerberus Fossae, Mars: Implications for Marsquake Properties. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	20
146	Impact Seismology: A Search for Primary Pressure Waves Following Impacts A and H. Icarus, 1996, 121, 331-340.	2.5	19
147	Sounding the subsurface of Athabasca Valles using MARSIS radar data: Exploring the volcanic and fluvial hypotheses for the origin of the rafted plate terrain. Journal of Geophysical Research, 2009, 114, .	3.3	19
148	Impact cutoff frequency â€“ momentum scaling law inverted from Apollo seismic data. Earth and Planetary Science Letters, 2015, 427, 57-65.	4.4	19
149	Simulations of Seismic Wave Propagation on Mars. Space Science Reviews, 2017, 211, 571-594.	8.1	19
150	Super High Frequency Events: A New Class of Events Recorded by the InSight Seismometers on Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006599.	3.6	19
151	Analyzing Low Frequency Seismic Events at Cerberus Fossae as Long Period Volcanic Quakes. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006518.	3.6	19
152	Planetary seismometry. , 0, , 36-48.		18
153	Magnitude Scales for Marsquakes. Bulletin of the Seismological Society of America, 2018, 108, 2764-2777.	2.3	18
154	Seismic sources of InSight marsquakes and seismotectonic context of Elysium Planitia, Mars. Tectonophysics, 2022, 837, 229434.	2.2	18
155	Scattering Attenuation of the Martian Interior through Coda-Wave Analysis. Bulletin of the Seismological Society of America, 2021, 111, 3035-3054.	2.3	17
156	Seismic High-Resolution Acquisition Electronics for the NASA InSight Mission on Mars. Bulletin of the Seismological Society of America, 2021, 111, 2909-2923.	2.3	17
157	Numerical assessment of the effects of topography and crustal thickness on martian seismograms using a coupled modal solutionâ€“spectral element method. Icarus, 2008, 196, 78-89.	2.5	16
158	Tsunami modeling with solid Earthâ€“oceanâ€“atmosphere coupled normal modes. Geophysical Journal International, 2017, 211, 1119-1138.	2.4	16
159	The Seismic Moment and Seismic Efficiency of Small Impacts on Mars. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006540.	3.6	16
160	MSS/1: Singleâ€Station and Singleâ€Event Marsquake Inversion. Earth and Space Science, 2020, 7, e2020EA001118.	2.6	16
161	Constraining Martian Regolith and Vortex Parameters From Combined Seismic and Meteorological Measurements. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006410.	3.6	16
162	New approach to detect seismic surface waves in 1Hz-sampled GPS time series. Scientific Reports, 2011, 1, 44.	3.3	15

#	Article	IF	Citations
163	Resonances of the InSight Seismometer on Mars. Bulletin of the Seismological Society of America, 2021, 111, 2951-2963.	2.3	15
164	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
165	Seasonal seismic activity on Mars. Earth and Planetary Science Letters, 2021, 576, 117171.	4.4	13
166	Normal modes and long period seismograms in a 3D anelastic elliptical rotating Earth. Geophysical Research Letters, 2003, 30, n/a-n/a.	4.0	12
167	Bayesian inversion of the Martian structure using geodynamic constraints. Geophysical Journal International, 2021, 226, 1615-1644.	2.4	12
168	On the possibility of lunar core phase detection using new seismometers for soft-landers in future lunar missions. Planetary and Space Science, 2013, 81, 18-31.	1.7	11
169	On the Detectability and Use of Normal Modes for Determining Interior Structure of Mars. Space Science Reviews, 2018, 214, 1.	8.1	11
170	Seismic Waves from Atmospheric Sources and Atmospheric/Ionospheric Signatures of Seismic Waves. , 2010, , 281-304.		11
171	Influence of Body Waves, Instrumentation Resonances, and Prior Assumptions on Rayleigh Wave Ellipticity Inversion for Shallow Structure at the InSight Landing Site. Space Science Reviews, 2018, 214, 1.	8.1	10
172	Geophysical Observations of Phobos Transits by InSight. Geophysical Research Letters, 2020, 47, e2020GL089099.	4.0	10
173	The first active seismic experiment on Mars to characterize the shallow subsurface structure at the InSight landing site. , 2019, , .		10
174	Seasonal variations of subsurface seismic velocities monitored by the SEIS-InSight seismometer on Mars. Geophysical Journal International, 2022, 229, 776-799.	2.4	10
175	Lunar Surface Gravimeter as a lunar seismometer: Investigation of a new source of seismic information on the Moon. Journal of Geophysical Research E: Planets, 2015, 120, 343-358.	3.6	9
176	The Ionospheric view of the 2011 Tohoku-Oki earthquake seismic source: the first 60â€‰seconds of the rupture. Scientific Reports, 2020, 10, 5232.	3.3	9
177	Seismic constraints from a Mars impact experiment using InSight and Perseverance. Nature Astronomy, 2022, 6, 59-64.	10.1	9
178	Diffraction of long period Rayleigh waves by a slab: effects of mode coupling. Geophysical Research Letters, 1997, 24, 1035-1038.	4.0	8
179	Search for Infrasound Signals in InSight Data Using Coupled Pressure/Ground Deformation Methods. Bulletin of the Seismological Society of America, 2021, 111, 3055-3064.	2.3	8
180	Effect of a global plume distribution on Earth normal modes. Geophysical Research Letters, 1990, 17, 1493-1496.	4.0	7

#	Article	IF	Citations
181	MEP (Mars Environment Package): toward a package for studying environmental conditions at the surface of Mars from future lander/rover missions. Advances in Space Research, 2004, 34, 1702-1709.	2.6	7
182	On the scientific aims of the MISS seismic experiment. Solar System Research, 2014, 48, 11-21.	0.7	7
183	Remote sensing of venusian seismic activity with a small spacecraft, the VAMOS mission concept. , 2018, , .		7
184	Marsâ€™ Background Free Oscillations. Space Science Reviews, 2019, 215, 1.	8.1	7
185	Estimation of the Seismic Moment Rate from an Incomplete Seismicity Catalog, in the Context of the InSight Mission to Mars. Bulletin of the Seismological Society of America, 2019, 109, 1125-1147.	2.3	7
186	High Precision SEIS Calibration for the InSight Mission and Its Applications. Space Science Reviews, 2019, 215, 1.	8.1	7
187	Lagrangianâ€based Simulations of Hypervelocity Impact Experiments on Mars Regolith Proxy. Geophysical Research Letters, 2020, 47, e2020GL087393.	4.0	7
188	The Site Tilt and Lander Transfer Function from the Short-Period Seismometer of InSight on Mars. Bulletin of the Seismological Society of America, 2021, 111, 2889-2908.	2.3	7
189	Numerical Simulations of the Apollo Sâ€IVB Artificial Impacts on the Moon. Earth and Space Science, 2021, 8, e2021EA001887.	2.6	7
190	The Lunar Geophysical Network Landing Sites Science Rationale. Planetary Science Journal, 2022, 3, 40.	3.6	7
191	Effect of sharp lateral heterogeneity on the Earth's normal modes. Geophysical Research Letters, 1989, 16, 397-400.	4.0	6
192	The Lavoisier mission : A system of descent probe and balloon flotilla for geochemical investigation of the deep atmosphere and surface of Venus. Advances in Space Research, 2002, 29, 255-264.	2.6	6
193	Contributions of Space Missions to Better Tsunami Science: Observations, Models and Warnings. Surveys in Geophysics, 2020, 41, 1535-1581.	4.6	6
194	A Reconstruction Algorithm for Temporally Aliased Seismic Signals Recorded by the InSight Mars Lander. Earth and Space Science, 2021, 8, e2020EA001234.	2.6	6
195	Inversion of Meteor Rayleigh Waves on Earth and Modeling of Air Coupled Rayleigh Waves on Mars. Space Science Reviews, 2018, 214, 1.	8.1	5
196	Preparing for InSight: Evaluation of the Blind Test for Martian Seismicity. Seismological Research Letters, 0, , .	1.9	5
197	Listening for the Landing: Seismic Detections of Perseverance's Arrival at Mars With InSight. Earth and Space Science, 2021, 8, e2020EA001585.	2.6	5
198	Planetary Magnetic Dynamo Effect on Atmospheric Protection of Early Earth and Mars. Space Sciences Series of ISSI, 2007, , 279-300.	0.0	5

#	Article	IF	Citations
199	A new technique in demodulation of normal modes. Physics of the Earth and Planetary Interiors, 1994, 84, 139-160.	1.9	4
200	10 micron mapping of Jupiter on the CFHT after the impacts of comet P/Shoemakerâ€Levy 9. Geophysical Research Letters, 1995, 22, 1777-1780.	4.0	4
201	Scientific objectives of the DYNAMO mission. Advances in Space Research, 2001, 27, 1851-1860.	2.6	4
202	85.16 Higher order perturbation theory: 3D synthetic seismogram package. International Geophysics, 2003, 81, 1639.	0.6	4
203	Effects of ejecta accumulation on the crater population of asteroid 433 Eros. Journal of Geophysical Research, 2009, 114, .	3.3	4
204	Impact seismology on terrestrial and giant planets. , 2015, , 250-263.		4
205	Frequency band enlargement of the penetrator seismometer and its application to moonquake observation. Advances in Space Research, 2015, 56, 341-354.	2.6	4
206	The scientific rationale for deployment of a long-lived geophysical network on the Moon. , 2021, 53, .		4
207	Forward Modeling of the Phobos Tides and Applications to the First Martian Year of the InSight Mission. Earth and Space Science, 2021, 8, e2021EA001669.	2.6	4
208	Introduction: A Multidisciplinary Approach to Habitability. Space Science Reviews, 2007, 129, 1-5.	8.1	3
209	Epilogue: The Origins of Life in the Solar System and Future Exploration. Space Science Reviews, 2007, 129, 301-304.	8.1	3
210	Subsurface water detection on Mars by astronauts using a seismic refraction method: Tests during a manned Mars mission simulation. Acta Astronautica, 2009, 64, 457-466.	3.2	3
211	Low frequency noise elimination technique for 24-bit Î£-Î” data acquisition systems. Review of Scientific Instruments, 2015, 86, 034708.	1.3	3
212	Development of the Primary Sorption Pump for the SEIS Seismometer of the InSight Mission to Mars. Space Science Reviews, 2018, 214, 1.	8.1	3
213	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
214	Lander and penetrator science for near-Earth object mitigation studies. , 2004, , 266-291.		3
215	Mars in depth. Astronomy and Geophysics, 2003, 44, 4.15-4.15.	0.2	2
216	Probing the Interiors of Planets withÂGeophysical Tools. , 2014, , 1185-1204.		2

#	Article	IF	Citations
217	Determining True North on Mars by Using a Sundial on InSight. Space Science Reviews, 2019, 215, 1.	8.1	2
218	Geophysical ocean bottom observatories or temporary portable networks?. Developments in Marine Technology, 2002, , 59-81.	0.5	2
219	Questions to Heaven. Astronomy and Geophysics, 2021, 62, 6.22-6.25.	0.2	2
220	The interaction between the SEIS seismometer of the InSight Martian mission and a regolith simulant. Geotechnique, 2024, 74, 42-53.	4.0	2
221	An autonomous lunar geophysical experiment package (ALGEP) for future space missions. Experimental Astronomy, 2022, 54, 617-640.	3.7	2
222	Sparse Reconstruction of Aliased Seismic Signals Recorded During the Insight Mars Mission. , 2019, , .		1
223	Water, Life, and Planetary Geodynamical Evolution. Space Sciences Series of ISSI, 2007, , 167-203.	0.0	1
224	VAMOS: a SmallSat mission concept for remote sensing of Venusian seismic activity from orbit. , 2018, , .		1
225	Introduction to the Special Issue on Mars Seismology. Bulletin of the Seismological Society of America, 2021, 111, 2883-2888.	2.3	1
226	The magnetic fluctuations in the Ionosphere induced by 26 December 2004 Sumatra Tsunami. , 2007, , .		0
227	Reply to the comment of Robert E. Grimm and David E. Stillman on â€œSubsurface water detection on mars by astronauts using a seismic refraction method: Tests during a manned mars simulationâ€• Acta Astronautica, 2009, 64, 656-657.	3.2	0
228	The InSight Blind Test: An Opportunity to Bring a Research Dataset into Teaching Programs. Seismological Research Letters, 2020, 91, 1064-1073.	1.9	0
229	Measuring Fundamental and Higher Mode Surface Wave Dispersion on Mars From Seismic Waveforms. Earth and Space Science, 2021, 8, e2020EA001263.	2.6	0
230	Seismology on Venus with infrasound observations from balloon and orbit. , 2021, 53, .		0
231	â€œLand & Flyâ€•Methods for Effective, Future Lunar Exploration. , 2021, 53, .		0
232	New-Frontiers (NF) Class In-Situ Exploration of Venus: The Venus Climate and Geophysics Mission Concept. , 2021, 53, .		0
233	Design of an Antenna Array for GNSS/GPS Network. Lecture Notes in Computer Science, 2012, , 183-190.	1.3	0
234	Modeling of the Total Electronic Content and magnetic field anomalies generated by the 2011 Tohoku-oki tsunami and associated acoustic-gravity waves. , 2013, , .		0

#	Article	IF	Citations
235	Traveling ionosphere disturbances excited ahead of the Tohoku-Oki tsunami: a case study. , 2015, , .		0