Naomi Murdoch

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7037743/publications.pdf

Version: 2024-02-01

75 papers

3,726 citations

147726 31 h-index 60 g-index

84 all docs

84 docs citations

84 times ranked 2460 citing authors

#	Article	IF	CITATIONS
1	The influence of gravity on granular impacts. Astronomy and Astrophysics, 2022, 658, A118.	2.1	5
2	The MMX rover: performing in situ surface investigations on Phobos. Earth, Planets and Space, 2022, 74, .	0.9	20
3	In situ recording of Mars soundscape. Nature, 2022, 605, 653-658.	13.7	30
4	Investigation of magnetic field signals during vortex-induced pressure drops at InSight. Planetary and Space Science, 2022, 217, 105487.	0.9	3
5	The dynamic atmospheric and aeolian environment of Jezero crater, Mars. Science Advances, 2022, 8, .	4.7	47
6	The ESA Hera Mission: Detailed Characterization of the DART Impact Outcome and of the Binary Asteroid (65803) Didymos. Planetary Science Journal, 2022, 3, 160.	1.5	82
7	Spectral Analysis of the Martian Atmospheric Turbulence: InSight Observations. Geophysical Research Letters, 2022, 49, .	1.5	7
8	The Polarization of Ambient Noise on Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006545.	1.5	33
9	Experimental Wind Characterization with the SuperCam Microphone under a Simulated martian Atmosphere. Icarus, 2021, 354, 114060.	1.1	12
10	Measuring Fundamental and Higher Mode Surface Wave Dispersion on Mars From Seismic Waveforms. Earth and Space Science, 2021, 8, e2020EA001263.	1.1	0
11	Constraining Martian Regolith and Vortex Parameters From Combined Seismic and Meteorological Measurements. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006410.	1.5	16
12	Low-velocity impacts into granular material: application to small-body landing. Monthly Notices of the Royal Astronomical Society, 2021, 503, 3460-3471.	1.6	13
13	The SuperCam Instrument Suite on the Mars 2020 Rover: Science Objectives and Mast-Unit Description. Space Science Reviews, 2021, 217, 1.	3.7	131
14	A Comodulation Analysis of Atmospheric Energy Injection Into the Ground Motion at InSight, Mars. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006538.	1.5	33
15	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.	1.5	23
16	Lander and rover histories of dust accumulation on and removal from solar arrays on Mars. Planetary and Space Science, 2021, 207, 105337.	0.9	23
17	A Study of Daytime Convective Vortices and Turbulence in the Martian Planetary Boundary Layer Based on Halfâ€n‥ear of InSight Atmospheric Measurements and Largeâ€Eddy Simulations. Journal of Geophysical Research E: Planets, 2021, 126, .	1.5	45
18	The SuperCam Instrument Suite on the NASA Mars 2020 Rover: Body Unit and Combined System Tests. Space Science Reviews, 2021, 217, 4.	3.7	160

#	Article	IF	Citations
19	Search for Infrasound Signals in InSight Data Using Coupled Pressure/Ground Deformation Methods. Bulletin of the Seismological Society of America, 2021, 111, 3055-3064.	1.1	8
20	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.	1.1	7
21	The influence of gravity on granular impacts. Astronomy and Astrophysics, 2021, 656, A97.	2.1	8
22	Resonances and Lander Modes Observed by InSight on Mars (1–9ÂHz). Bulletin of the Seismological Society of America, 2021, 111, 2924-2950.	1.1	30
23	Seasonal Variability of the Daytime and Nighttime Atmospheric Turbulence Experienced by InSight on Mars. Geophysical Research Letters, 2021, 48, e2021GL095453.	1.5	31
24	Surface environment of Phobos and Phobos simulant UTPS. Earth, Planets and Space, 2021, 73, .	0.9	15
25	MSS/1: Singleâ€Station and Singleâ€Event Marsquake Inversion. Earth and Space Science, 2020, 7, e2020EA001118.	1.1	16
26	Validating N-body code chrono for granular DEM simulations in reduced-gravity environments. Monthly Notices of the Royal Astronomical Society, 2020, 498, 1062-1079.	1.6	13
27	Subsurface Structure at the InSight Landing Site From Compliance Measurements by Seismic and Meteorological Experiments. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006387.	1.5	44
28	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.	1.5	31
29	Geology of the InSight landing site on Mars. Nature Communications, 2020, 11, 1014.	5.8	107
30	The atmosphere of Mars as observed by InSight. Nature Geoscience, 2020, 13, 190-198.	5.4	161
31	Constraints on the shallow elastic and anelastic structure of Mars from InSight seismic data. Nature Geoscience, 2020, 13, 213-220.	5.4	207
32	The seismicity of Mars. Nature Geoscience, 2020, 13, 205-212.	5.4	194
33	Onâ€Deck Seismology: Lessons from InSight for Future Planetary Seismology. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006353.	1.5	25
34	Monitoring of Dust Devil Tracks Around the InSight Landing Site, Mars, and Comparison With In Situ Atmospheric Data. Geophysical Research Letters, 2020, 47, e2020GL087234.	1.5	30
35	Initial results from the InSight mission on Mars. Nature Geoscience, 2020, 13, 183-189.	5.4	274
36	Exploring planets and asteroids with 6DoF sensors: Utopia and realism. Earth, Planets and Space, 2020, 72, .	0.9	8

#	Article	IF	Citations
37	SEIS: Insight's Seismic Experiment for Internal Structure of Mars. Space Science Reviews, 2019, 215, 12.	3.7	238
38	Listening to laser sparks: a link between Laser-Induced Breakdown Spectroscopy, acoustic measurements and crater morphology. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2019, 153, 50-60.	1.5	57
39	Small Solar System Bodies as granular media. Astronomy and Astrophysics Review, 2019, 27, 1.	9.1	31
40	Laser-induced breakdown spectroscopy acoustic testing of the Mars 2020 microphone. Planetary and Space Science, 2019, 165, 260-271.	0.9	32
41	CASTAway: An asteroid main belt tour and survey. Advances in Space Research, 2018, 62, 1998-2025.	1.2	18
42	European component of the AIDA mission to a binary asteroid: Characterization and interpretation of the impact of the DART mission. Advances in Space Research, 2018, 62, 2261-2272.	1.2	118
43	Direct observations of asteroid interior and regolith structure: Science measurement requirements. Advances in Space Research, 2018, 62, 2141-2162.	1.2	54
44	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.	3.7	22
45	Atmospheric Science with InSight. Space Science Reviews, 2018, 214, 1.	3.7	88
46	Flexible Mode Modelling of the InSight Lander and Consequences for the SEIS Instrument. Space Science Reviews, 2018, 214, 1.	3.7	16
47	Near-Field Seismic Propagation and Coupling Through Mars' Regolith: Implications for the InSight Mission. Space Science Reviews, 2018, 214, 1.	3.7	7
48	Geology and Physical Properties Investigations by the InSight Lander. Space Science Reviews, 2018, 214, 1.	3.7	77
49	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.	3.7	10
50	Isolation of Seismic Signal from InSight/SEIS-SP Microseismometer Measurements. Space Science Reviews, 2018, 214, 1.	3.7	2
51	A Pre-Landing Assessment of Regolith Properties at the InSight Landing Site. Space Science Reviews, 2018, 214, 1.	3.7	58
52	Seismic Coupling of Short-Period Wind Noise Through Mars' Regolith for NASA's InSight Lander. Space Science Reviews, 2017, 211, 485-500.	3.7	20
53	Planned Products of the Mars Structure Service for the InSight Mission to Mars. Space Science Reviews, 2017, 211, 611-650.	3.7	80
54	Probing the internal structure of the asteriod Didymoon with a passive seismic investigation. Planetary and Space Science, 2017, 144, 89-105.	0.9	16

#	Article	IF	CITATIONS
55	The Noise Model of the SEIS Seismometer of the InSight Mission to Mars. Space Science Reviews, 2017, 211, 383-428.	3.7	73
56	Preparing for InSight: An Invitation to Participate in a Blind Test for Martian Seismicity. Seismological Research Letters, 2017, 88, 1290-1302.	0.8	37
57	Evaluating the Wind-Induced Mechanical Noise on the InSight Seismometers. Space Science Reviews, 2017, 211, 429-455.	3.7	65
58	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.	3.7	53
59	Small solar system bodies as granular systems. EPJ Web of Conferences, 2017, 140, 14011.	0.1	1
60	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
61	Field Measurements of Terrestrial and Martian Dust Devils. Space Science Reviews, 2016, 203, 39-87.	3.7	39
62	A novel facility for reduced-gravity testing: A setup for studying low-velocity collisions into granular surfaces. Review of Scientific Instruments, 2016, 87, 084504.	0.6	13
63	Seismometer Detection of Dust Devil Vortices by Ground Tilt. Bulletin of the Seismological Society of America, 2015, 105, 3015-3023.	1.1	39
64	Micro-meteoroid seismic uplift and regolith concentration on kilometric scale asteroids. Icarus, 2015, 253, 159-168.	1.1	18
65	Asteroid Surface Geophysics. , 2015, , .		21
66	Thermal fatigue as the origin of regolith on small asteroids. Nature, 2014, 508, 233-236.	13.7	280
67	Granular Convection in Microgravity. Physical Review Letters, 2013, 110, 018307.	2.9	58
68	Granular shear flow in varying gravitational environments. Granular Matter, 2013, 15, 129-137.	1.1	27
69	Simulating regoliths in microgravity. Monthly Notices of the Royal Astronomical Society, 2013, 433, 506-514.	1.6	16
70	Publisher's Note: Granular Convection in Microgravity [Phys. Rev. Lett. 110 , 018307 (2013)]. Physical Review Letters, 2013, 110, .	2.9	2
71	AIDA: Asteroid Impact and Deflection Assessment. Proceedings of the International Astronomical Union, 2012, 10, 480-480.	0.0	2
72	Numerical simulations of granular dynamics II: Particle dynamics in a shaken granular material. Icarus, 2012, 219, 321-335.	1.1	8

#	Article	IF	CITATIONS
73	Numerical simulations of granular dynamics: I. Hard-sphere discrete element method and tests. Icarus, 2011, 212, 427-437.	1.1	61
74	An experimental study of low-velocity impacts into granular material in reduced gravity. Monthly Notices of the Royal Astronomical Society, 0, , stw3391.	1.6	10
75	Preparing for InSight: Evaluation of the Blind Test for Martian Seismicity. Seismological Research Letters, 0, , .	0.8	5