Don Banfield

List of Publications by Year
in descending order

90 papers	6,197 citations	61857 43 h-index	66788 78 g-index
92 all docs	92 docs citations	92 times ranked	3102 citing authors

#	Article	IF	Citations
1	In Situ exploration of the giant planets. Experimental Astronomy, 2022, 54, 975-1013.	1.6	5
2	InSight Pressure Data Recalibration, and Its Application to the Study of Longâ€Term Pressure Changes on Mars. Journal of Geophysical Research E: Planets, 2022, 127, .	1.5	12
3	The dynamic atmospheric and aeolian environment of Jezero crater, Mars. Science Advances, 2022, 8, .	4.7	47
4	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
5	The Marsquake catalogue from InSight, sols 0â€“478. Physics of the Earth and Planetary Interiors, 2021, 310, 106595.	0.7	97
6	Vortexâ€Dominated Aeolian Activity at InSight's Landing Site, Part 2: Local Meteorology, Transport Dynamics, and Model Analysis. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006514.	1.5	19
7	Constraining Martian Regolith and Vortex Parameters From Combined Seismic and Meteorological Measurements. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006410.	1.5	16
8	The Mars Environmental Dynamics Analyzer, MEDA. A Suite of Environmental Sensors for the Mars 2020 Mission. Space Science Reviews, 2021, 217, 48.	3.7	57
9	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
10	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
11	Forward Modeling of the Phobos Tides and Applications to the First Martian Year of the InSight Mission. Earth and Space Science, 2021, 8, e2021EA001669.	1.1	4
12	Soil Thermophysical Properties Near the InSight Lander Derived From 50 Sols of Radiometer Measurements. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006859.	1.5	22
13	A Study of Daytime Convective Vortices and Turbulence in the Martian Planetary Boundary Layer Based on Halfâ€aâ€Year of InSight Atmospheric Measurements and Largeâ€Eddy Simulations. Journal of Geophysical Research E: Planets, 2021, 126, .	1.5	45
14	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
15	Seasonal Variability of the Daytime and Nighttime Atmospheric Turbulence Experienced by InSight on Mars. Geophysical Research Letters, 2021, 48, e2021GL095453.	1.5	31
16	Seasonal seismic activity on Mars. Earth and Planetary Science Letters, 2021, 576, 117171.	1.8	13
17	On the problem of a variable Mars atmospheric composition in the determination of temperature and density from the adiabatic speed of sound. Planetary and Space Science, 2020, 193, 105064.	0.9	2
18	Geophysical Observations of Phobos Transits by InSight. Geophysical Research Letters, 2020, 47, e2020GL089099.	1.5	10

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19	Effects of a Large Dust Storm in the Nearâ€Surface Atmosphere as Measured by InSight in Elysium Planitia, Mars. Comparison With Contemporaneous Measurements by Mars Science Laboratory. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006493.	1.5	30
20	Scientific Observations With the InSight Solar Arrays: Dust, Clouds, and Eclipses on Mars. Earth and Space Science, 2020, 7, e2019EA000992.	1.1	24
21	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
22	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
23	Flow Testing of a Sonic Anemometer for the Martian Environment. , 2020, , .		0
24	Martian Infrasound: Numerical Modeling and Analysis of InSight's Data. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006376.	1.5	28
25	The Holy Grail: A road map for unlocking the climate record stored within Marsâ€™ polar layered deposits. Planetary and Space Science, 2020, 184, 104841.	0.9	30
26	Geology of the InSight landing site on Mars. Nature Communications, 2020, 11, 1014.	5.8	107
27	The atmosphere of Mars as observed by InSight. Nature Geoscience, 2020, 13, 190-198.	5.4	161
28	Constraints on the shallow elastic and anelastic structure of Mars from InSight seismic data. Nature Geoscience, 2020, 13, 213-220.	5.4	207
29	Crustal and time-varying magnetic fields at the InSight landing site on Mars. Nature Geoscience, 2020, 13, 199-204.	5.4	68
30	The seismicity of Mars. Nature Geoscience, 2020, 13, 205-212.	5.4	194
31	Onâ€Deck Seismology: Lessons from InSight for Future Planetary Seismology. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006353.	1.5	25
32	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
33	Initial results from the InSight mission on Mars. Nature Geoscience, 2020, 13, 183-189.	5.4	274
34	SEIS: Insightâ€™s Seismic Experiment for Internal Structure of Mars. Space Science Reviews, 2019, 215, 12.	3.7	238
35	Uranus and Neptune missions: A study in advance of the next Planetary Science Decadal Survey. Planetary and Space Science, 2019, 177, 104680.	0.9	50
36	InSight Auxiliary Payload Sensor Suite (APSS). Space Science Reviews, 2019, 215, 1.	3.7	104

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37	Aerosols and methane in the ice giant atmospheres inferred from spatially resolved, near-infrared spectra: I. Uranus, 2001â€“2007. Icarus, 2018, 310, 54-76.	1.1	12
38	Impact-Seismic Investigations of the InSight Mission. Space Science Reviews, 2018, 214, 1.	3.7	48
39	Atmospheric Science with InSight. Space Science Reviews, 2018, 214, 1.	3.7	88
40	SPRITE: A Saturn probe new frontiers mission. , 2018, , .		4
41	Geology and Physical Properties Investigations by the InSight Lander. Space Science Reviews, 2018, 214, 1.	3.7	77
42	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.	3.7	49
43	Evaluating the Wind-Induced Mechanical Noise on the InSight Seismometers. Space Science Reviews, 2017, 211, 429-455.	3.7	65
44	A Martian acoustic anemometer. Journal of the Acoustical Society of America, 2016, 140, 1420-1428.	0.5	13
45	The Hera Saturn entry probe mission. Planetary and Space Science, 2016, 130, 80-103.	0.9	26
46	Winds, waves and shorelines from ancient martian seas. Icarus, 2015, 250, 368-383.	1.1	18
47	An Environmental Wind Tunnel Facility for Testing Meteorological Sensor Systems. Journal of Atmospheric and Oceanic Technology, 2014, 31, 447-457.	0.5	35
48	The science case for an orbital mission to Uranus: Exploring the origins and evolution of ice giant planets. Planetary and Space Science, 2014, 104, 122-140.	0.9	56
49	Thermal tides during the 2001 Martian globalâ€scale dust storm. Journal of Geophysical Research E: Planets, 2014, 119, 506-519.	1.5	42
50	Stratospheric aerosols on Jupiter from Cassini observations. Icarus, 2013, 226, 159-171.	1.1	54
51	Saturnâ€™s cloud structure inferred from Cassini ISS. Icarus, 2013, 225, 93-110.	1.1	36
52	OSS (Outer Solar System): a fundamental and planetary physics mission to Neptune, Triton and the Kuiper Belt. Experimental Astronomy, 2012, 34, 203-242.	1.6	37
53	Uranus Pathfinder: exploring the origins and evolution of Ice Giant planets. Experimental Astronomy, 2012, 33, 753-791.	1.6	44
54	Jovian chromophore characteristics from multispectral HST images. Icarus, 2011, 215, 552-583.	1.1	16

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55	Accommodation Study for an Anemometer on a Martian Lander. Journal of Atmospheric and Oceanic Technology, 2011, 28, 210-218.	0.5	7
56	Saturn's emitted power. Journal of Geophysical Research, 2010, 115, .	3.3	33
57	Kronos: exploring the depths of Saturn with probes and remote sensing through an international mission. Experimental Astronomy, 2009, 23, 947-976.	1.6	10
58	Determining a tilt in Titanâ€™s northâ€“south albedo asymmetry from Cassini images. Icarus, 2009, 203, 242-249.	1.1	21
59	Thermal tides in the Martian middle atmosphere as seen by the Mars Climate Sounder. Journal of Geophysical Research, 2009, 114, .	3.3	94
60	Intense polar temperature inversion in the middle atmosphere on Mars. Nature Geoscience, 2008, 1, 745-749.	5.4	71
61	Strong jet and a new thermal wave in Saturn's equatorial stratosphere. Geophysical Research Letters, 2008, 35, .	1.5	22
62	Velocity and vorticity measurements of Jupiter's Great Red Spot using automated cloud feature tracking. Icarus, 2007, 188, 35-46.	1.1	53
63	One Martian year of atmospheric observations using MER Mini-TES. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	147
64	Constraints on dust aerosols from the Mars Exploration Rovers using MGS overflights and Mini-TES. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	159
65	Aeolian processes at the Mars Exploration Rover Meridiani Planum landing site. Nature, 2005, 436, 58-61.	13.7	233
66	A Martian sonic anemometer. , 2005, , .		20
67	Planetary descent probes: polarization nephelometer and hydrogen ortho/para instruments. , 2005, , .		3
68	Atmospheric Imaging Results from the Mars Exploration Rovers: Spirit and Opportunity. Science, 2004, 306, 1753-1756.	6.0	219
69	First Atmospheric Science Results from the Mars Exploration Rovers Mini-TES. Science, 2004, 306, 1750-1753.	6.0	102
70	Traveling waves in the martian atmosphere from MGS TES Nadir data. Icarus, 2004, 170, 365-403.	1.1	107
71	Forced waves in the martian atmosphere from MGS TES nadir data. Icarus, 2003, 161, 319-345.	1.1	101
72	Operations and calibration of the solid-state imaging system during the Galileo extended mission at Jupiter. Optical Engineering, 2003, 42, 494.	0.5	8

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73	Traveling waves in the Northern Hemisphere of Mars. Geophysical Research Letters, 2002, 29, 29-1-29-4.	1.5	72
74	An HST Study of Jovian Chromophores. Icarus, 2001, 149, 94-106.	1.1	23
75	Near-IR Spectrophotometry of Saturnian Aerosolsâ€"Meridional and Vertical Distribution. Icarus, 2001, 152, 407-422.	1.1	35
76	Color and the Vertical Structure in Jupiter's Belts, Zones, and Weather Systems. Icarus, 2001, 154, 459-474.	1.1	67
77	Observation of moist convection in Jupiter's atmosphere. Nature, 2000, 403, 628-630.	13.7	182
78	Moist convection as an energy source for the large-scale motions in Jupiter's atmosphere. Nature, 2000, 403, 630-632.	13.7	155
79	Thermal tides and stationary waves on Mars as revealed by Mars Global Surveyor thermal emission spectrometer. Journal of Geophysical Research, 2000, 105, 9521-9537.	3.3	62
80	Near-IR Spectrophotometry of Jovian Aerosolsâ€"Meridional and Vertical Distributions. Icarus, 1998, 134, 11-23.	1.1	41
81	Galileo Imaging of Jupiter's Atmosphere: The Great Red Spot, Equatorial Region, and White Ovals. Icarus, 1998, 135, 265-275.	1.1	106
82	Jupiter's Cloud Structure from Galileo Imaging Data. Icarus, 1998, 135, 230-250.	1.1	158
83	Absolute Reflectivity Spectra of Jupiter: 0.25â€“3.5 Micrometers. Icarus, 1996, 121, 351-360.	1.1	25
84	Galileo's First Images of Jupiter and the Galilean Satellites. Science, 1996, 274, 377-385.	6.0	152
85	Martian Weather Correlation Length Scales. Icarus, 1996, 119, 130-143.	1.1	13
86	2 Î¼m Spectrophotometry of Jovian Stratospheric Aerosolsâ€"Scattering Opacities, Vertical Distributions, and Wind Speeds. Icarus, 1996, 121, 389-410.	1.1	38
87	A dynamical history of the inner Neptunian satellites. Icarus, 1992, 99, 390-401.	1.1	69
88	Neptune's Story. Science, 1989, 245, 500-504.	6.0	138
89	Voyager 2 at Neptune: Imaging Science Results. Science, 1989, 246, 1422-1449.	6.0	573
90	The characterisation of cMUTs at low gas pressures. , 0, , .		1