

Matt Siegler

List of Publications by Year in descending order

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49
papers

2,772
citations

304743

22
h-index

276875

41
g-index

49
all docs

49
docs citations

49
times ranked

2002
citing authors

#	ARTICLE	IF	CITATIONS
1	Diviner Lunar Radiometer Observations of Cold Traps in the Moon's South Polar Region. <i>Science</i> , 2010, 330, 479-482.	12.6	385
2	Initial results from the InSight mission on Mars. <i>Nature Geoscience</i> , 2020, 13, 183-189.	12.9	274
3	Lunar equatorial surface temperatures and regolith properties from the Diviner Lunar Radiometer Experiment. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	229
4	Global Regolith Thermophysical Properties of the Moon From the Diviner Lunar Radiometer Experiment. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 2371-2400.	3.6	193
5	Evidence for exposed water ice in the Moon's south polar regions from Lunar Reconnaissance Orbiter ultraviolet albedo and temperature measurements. <i>Icarus</i> , 2015, 255, 58-69.	2.5	188
6	Properties of rubble-pile asteroid (101955) Bennu from OSIRIS-REx imaging and thermal analysis. <i>Nature Astronomy</i> , 2019, 3, 341-351.	10.1	188
7	Thermal Stability of Volatiles in the North Polar Region of Mercury. <i>Science</i> , 2013, 339, 300-303.	12.6	119
8	Evidence for surface water ice in the lunar polar regions using reflectance measurements from the Lunar Orbiter Laser Altimeter and temperature measurements from the Diviner Lunar Radiometer Experiment. <i>Icarus</i> , 2017, 292, 74-85.	2.5	119
9	Lunar true polar wander inferred from polar hydrogen. <i>Nature</i> , 2016, 531, 480-484.	27.8	90
10	Low-altitude magnetic field measurements by MESSENGER reveal Mercury's ancient crustal field. <i>Science</i> , 2015, 348, 892-895.	12.6	89
11	Asteroid (101955) Bennu's weak boulders and thermally anomalous equator. <i>Science Advances</i> , 2020, 6, .	10.3	83
12	Seasonal Polar Temperatures on the Moon. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 2505-2521.	3.6	80
13	Evolution of lunar polar ice stability. <i>Icarus</i> , 2015, 255, 78-87.	2.5	72
14	Diviner Lunar Radiometer Observations of the LCROSS Impact. <i>Science</i> , 2010, 330, 477-479.	12.6	68
15	Effects of orbital evolution on lunar ice stability. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	63
16	A Pre-Landing Assessment of Regolith Properties at the InSight Landing Site. <i>Space Science Reviews</i> , 2018, 214, 1.	8.1	58
17	Lunar heat flow: Regional perspective of the Apollo landing sites. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 47-63.	3.6	51
18	InSight Constraints on the Global Character of the Martian Crust. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	3.6	45

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19	A Model for the Thermophysical Properties of Lunar Regolith at Low Temperatures. Journal of Geophysical Research E: Planets, 2019, 124, 1989-2011.	3.6	39
20	New Constraints on Thermal and Dielectric Properties of Lunar Regolith from LRO Diviner and Chandradar Microwave Radiometer. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006130.	3.6	29
21	Lunar Titanium and Frequency-Dependent Microwave Loss Tangent as Constrained by the Chandradar MRM and LRO Diviner Lunar Radiometers. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006405.	3.6	27
22	Implications for Ice Stability and Particle Ejection From High-Resolution Temperature Modeling of Asteroid (101955) Bennu. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006323.	3.6	24
23	Thermal Conductivity of the Martian Soil at the InSight Landing Site From HP ³ Active Heating Experiments. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006861.	3.6	23
24	Inversion of Dielectric Properties of the Lunar Regolith Media With Temperature Profiles Using Chandradar Microwave Radiometer Observations. IEEE Geoscience and Remote Sensing Letters, 2015, 12, 384-388.	3.1	22
25	Framework for Coordinated Efforts in the Exploration of Volatiles in the South Polar Region of the Moon. Planetary Science Journal, 2021, 2, 103.	3.6	22
26	Soil Thermophysical Properties Near the InSight Lander Derived From 50 Sols of Radiometer Measurements. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006859.	3.6	22
27	Carbon Dioxide Cold Traps on the Moon. Geophysical Research Letters, 2021, 48, .	4.0	20
28	The InSight Mars Lander and Its Effect on the Subsurface Thermal Environment. Space Science Reviews, 2017, 211, 259-275.	8.1	16
29	Interannual perturbations of the Martian surface heat flow by atmospheric dust opacity variations. Journal of Geophysical Research E: Planets, 2016, 121, 2166-2175.	3.6	14
30	Geomorphic Evidence for the Presence of Ice Deposits in the Permanently Shadowed Regions of Scott Crater on the Moon. Geophysical Research Letters, 2021, 48, e2020GL090780.	4.0	14
31	Groundwater production from geothermal heating on early Mars and implication for early martian habitability. Science Advances, 2020, 6, .	10.3	13
32	Near Surface Properties of Martian Regolith Derived From InSight HP ³ RAD Temperature Observations During Phobos Transits. Geophysical Research Letters, 2021, 48, e2021GL093542.	4.0	13
33	Dielectric properties and stratigraphy of regolith in the lunar South Pole-Aitken basin: Observations from the Lunar Penetrating Radar. Astronomy and Astrophysics, 2022, 661, A47.	5.1	13
34	The Scientific Value of a Sustained Exploration Program at the Aristarchus Plateau. Planetary Science Journal, 2021, 2, 136.	3.6	11
35	New Illumination and Temperature Constraints of Mercury's Volatile Polar Deposits. Planetary Science Journal, 2020, 1, 57.	3.6	11
36	A Global Thermal Conductivity Model for Lunar Regolith at Low Temperatures. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006829.	3.6	10

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37	Depletion of Heat Producing Elements in the Martian Mantle. <i>Geophysical Research Letters</i> , 2019, 46, 12756-12763.	4.0	9
38	Spectrophotometric Modeling and Mapping of (101955) Bennu. <i>Planetary Science Journal</i> , 2021, 2, 117.	3.6	9
39	Reconciling the Infrared and Microwave Observations of the Lunar South Pole: A Study on Subsurface Temperature and Regolith Density. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006623.	3.6	6
40	The Effects of Terrain Properties Upon the Small Crater Population Distribution at Giordano Bruno: Implications for Lunar Chronology. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	3.6	5
41	A New Method to Evaluate and Modify Changâ€™E-2 Microwave Radiometer Low-Frequency Data Constrained From Diviner Thermal Measurements. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2022, 60, 1-13.	6.3	2
42	Solar-System-Wide Significance of Mars Polar Science. , 2021, 53, .		2
43	NanoSWARM: NanoSatellites for Space Weathering, Surface Water, Solar Wind, and Remanent Magnetism. , 2021, 53, .		1
44	Lunar Volatiles and Solar System Science. , 2021, 53, .		1
45	Improvements to the Apollo 15 and 17 heat flow experiment data archive. <i>Planetary and Space Science</i> , 2020, 187, 104944.	1.7	0
46	Unlocking the Climate Record Stored within Marsâ€™ Polar Layered Deposits. , 2021, 53, .		0
47	Science Case for Microwave Wavelength Measurements. , 2021, 53, .		0
48	Science Opportunities offered by Mercuryâ€™s Ice-Bearing Polar Deposits. , 2021, 53, .		0
49	Mission to Characterize Volatiles in Old, Cold, Permanently Shadowed Regions on the Moon. , 2021, 53, .		0