

Jason M Soderblom

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/8959930/publications.pdf>

Version: 2024-02-01

77
papers

3,598
citations

117571

34
h-index

133188

59
g-index

80
all docs

80
docs citations

80
times ranked

2132
citing authors

#	ARTICLE	IF	CITATIONS
1	The identification of liquid ethane in Titan's Ontario Lacus. <i>Nature</i> , 2008, 454, 607-610.	13.7	254
2	The NASA Roadmap to Ocean Worlds. <i>Astrobiology</i> , 2019, 19, 1-27.	1.5	209
3	Titan's inventory of organic surface materials. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	184
4	Lunar impact basins revealed by Gravity Recovery and Interior Laboratory measurements. <i>Science Advances</i> , 2015, 1, e1500852.	4.7	173
5	Correlations between Cassini VIMS spectra and RADAR SAR images: Implications for Titan's surface composition and the character of the Huygens Probe Landing Site. <i>Planetary and Space Science</i> , 2007, 55, 2025-2036.	0.9	168
6	Soils of Eagle Crater and Meridiani Planum at the Opportunity Rover Landing Site. <i>Science</i> , 2004, 306, 1723-1726.	6.0	153
7	Pancam Multispectral Imaging Results from the Spirit Rover at Gusev Crater. <i>Science</i> , 2004, 305, 800-806.	6.0	153
8	Pancam Multispectral Imaging Results from the Opportunity Rover at Meridiani Planum. <i>Science</i> , 2004, 306, 1703-1709.	6.0	135
9	Titan's fluvial valleys: Morphology, distribution, and spectral properties. <i>Planetary and Space Science</i> , 2012, 60, 34-51.	0.9	98
10	Organic sedimentary deposits in Titan's dry lakebeds: Probable evaporite. <i>Icarus</i> , 2011, 216, 136-140.	1.1	96
11	Fluvial erosion and post-erosional processes on Titan. <i>Icarus</i> , 2008, 197, 526-538.	1.1	88
12	Sedimentary textures formed by aqueous processes, Erebus crater, Meridiani Planum, Mars. <i>Geology</i> , 2006, 34, 1085.	2.0	84
13	Science Goals and Objectives for the Dragonfly Titan Rotorcraft Relocatable Lander. <i>Planetary Science Journal</i> , 2021, 2, 130.	1.5	80
14	Formation of the Orientale lunar multiring basin. <i>Science</i> , 2016, 354, 441-444.	6.0	78
15	Observations of Titan's Northern lakes at 5 $\frac{1}{4}$ m: Implications for the organic cycle and geology. <i>Icarus</i> , 2012, 221, 768-786.	1.1	72
16	Shoreline features of Titan's Ontario Lacus from Cassini/VIMS observations. <i>Icarus</i> , 2009, 201, 217-225.	1.1	69
17	Specular reflection on Titan: Liquids in Kraken Mare. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	69
18	The fractured Moon: Production and saturation of porosity in the lunar highlands from impact cratering. <i>Geophysical Research Letters</i> , 2015, 42, 6939-6944.	1.5	63

#	ARTICLE	IF	CITATIONS
19	The geology of Hotei Regio, Titan: Correlation of Cassini VIMS and RADAR. <i>Icarus</i> , 2009, 204, 610-618.	1.1	62
20	Evidence of Titan's climate history from evaporite distribution. <i>Icarus</i> , 2014, 243, 191-207.	1.1	62
21	Mapping and interpretation of Sinlap crater on Titan using Cassini VIMS and RADAR data. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	60
22	Identification of buried lunar impact craters from GRAIL data and implications for the nearside maria. <i>Geophysical Research Letters</i> , 2016, 43, 2445-2455.	1.5	56
23	Preimpact porosity controls the gravity signature of lunar craters. <i>Geophysical Research Letters</i> , 2015, 42, 9711-9716.	1.5	50
24	Spectrophotometric properties of materials observed by Pancam on the Mars Exploration Rovers: 1. Spirit. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	49
25	Geomorphologic mapping of titan's polar terrains: Constraining surface processes and landscape evolution. <i>Icarus</i> , 2017, 282, 214-236.	1.1	46
26	Precipitation-induced surface brightenings seen on Titan by Cassini VIMS and ISS. <i>Planetary Science</i> , 2013, 2, .	1.5	45
27	Geology of the Selk crater region on Titan from Cassini VIMS observations. <i>Icarus</i> , 2010, 208, 905-912.	1.1	44
28	Wave constraints for Titan's Jingpo Lacus and Kraken Mare from VIMS specular reflection lightcurves. <i>Icarus</i> , 2011, 211, 722-731.	1.1	38
29	Gravity field of the Orientale basin from the Gravity Recovery and Interior Laboratory Mission. <i>Science</i> , 2016, 354, 438-441.	6.0	38
30	Geomorphological map of the Afekan Crater region, Titan: Terrain relationships in the equatorial and mid-latitude regions. <i>Icarus</i> , 2016, 270, 130-161.	1.1	38
31	Subsurface morphology and scaling of lunar impact basins. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 1695-1712.	1.5	37
32	Titan's "Magic Islands": Transient features in a hydrocarbon sea. <i>Icarus</i> , 2016, 271, 338-349.	1.1	37
33	Spectral properties of Titan's impact craters imply chemical weathering of its surface. <i>Geophysical Research Letters</i> , 2015, 42, 3746-3754.	1.5	36
34	Cassini RADAR: prospects for Titan surface investigations using the microwave radiometer. <i>Planetary and Space Science</i> , 2003, 51, 353-364.	0.9	35
35	Small-scale density variations in the lunar crust revealed by GRAIL. <i>Icarus</i> , 2017, 291, 107-123.	1.1	34
36	Titan as Revealed by the Cassini Radar. <i>Space Science Reviews</i> , 2019, 215, 1.	3.7	34

#	ARTICLE	IF	CITATIONS
37	A radar map of Titan Seas: Tidal dissipation and ocean mixing through the throat of Kraken. <i>Icarus</i> , 2014, 237, 9-15.	1.1	33
38	Analysis of a cryolava flow-like feature on Titan. <i>Planetary and Space Science</i> , 2009, 57, 870-879.	0.9	31
39	Modeling specular reflections from hydrocarbon lakes on Titan. <i>Icarus</i> , 2012, 220, 744-751.	1.1	31
40	Cassini/VIMS observes rough surfaces on Titan's Punga Mare in specular reflection. <i>Planetary Science</i> , 2014, 3, 3.	1.5	31
41	Labyrinth terrain on Titan. <i>Icarus</i> , 2020, 344, 113764.	1.1	29
42	VIMS spectral mapping observations of Titan during the Cassini prime mission. <i>Planetary and Space Science</i> , 2009, 57, 1950-1962.	0.9	28
43	Explorer of Enceladus and Titan (E2T): Investigating ocean worlds' evolution and habitability in the solar system. <i>Planetary and Space Science</i> , 2018, 155, 73-90.	0.9	26
44	Reexamination of Early Lunar Chronology With GRAIL Data: Terranes, Basins, and Impact Fluxes. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 1596-1617.	1.5	25
45	Cassini RADAR Sequence Planning and Instrument Performance. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2009, 47, 1777-1795.	2.7	24
46	Martian phase function: Modeling the visible to near-infrared surface photometric function using HST-WFPC2 data. <i>Icarus</i> , 2006, 184, 401-423.	1.1	23
47	A TRANSMISSION SPECTRUM OF TITAN'S NORTH POLAR ATMOSPHERE FROM A SPECULAR REFLECTION OF THE SUN. <i>Astrophysical Journal</i> , 2013, 777, 161.	1.6	23
48	Geomorphology of comet 67P/Churyumov-Gerasimenko. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 469, S50-S67.	1.6	23
49	The Role of Breccia Lenses in Regolith Generation From the Formation of Small, Simple Craters: Application to the Apollo 15 Landing Site. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 527-543.	1.5	21
50	A newly discovered impact crater in Titan's Senkyo: Cassini VIMS observations and comparison with other impact features. <i>Planetary and Space Science</i> , 2012, 60, 18-25.	0.9	18
51	Observational evidence for active dust storms on Titan at equinox. <i>Nature Geoscience</i> , 2018, 11, 727-732.	5.4	18
52	The Cassini VIMS archive of Titan: From browse products to global infrared color maps. <i>Icarus</i> , 2019, 319, 121-132.	1.1	17
53	Science goals and mission concept for the future exploration of Titan and Enceladus. <i>Planetary and Space Science</i> , 2014, 104, 59-77.	0.9	15
54	Observational Evidence for Summer Rainfall at Titan's North Pole. <i>Geophysical Research Letters</i> , 2019, 46, 1205-1212.	1.5	14

#	ARTICLE	IF	CITATIONS
55	Mars Exploration Rover Navigation Camera in-flight calibration. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	12
56	Interactions between complex craters and the lunar crust: Analysis using GRAIL data. <i>Journal of Geophysical Research E: Planets</i> , 2016, 121, 1488-1497.	1.5	12
57	Isostatic Compensation of the Lunar Highlands. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 646-665.	1.5	10
58	Migrating Scarps as a Significant Driver for Cometary Surface Evolution. <i>Geophysical Research Letters</i> , 2019, 46, 12794-12804.	1.5	10
59	Stratification Dynamics of Titan's Lakes via Methane Evaporation. <i>Planetary Science Journal</i> , 2020, 1, 26.	1.5	10
60	Nitrogen Exsolution and Bubble Formation in Titan's Lakes. <i>Geophysical Research Letters</i> , 2019, 46, 13658-13667.	1.5	9
61	Correlations between VIMS and RADAR data over the surface of Titan: Implications for Titan's surface properties. <i>Icarus</i> , 2010, 208, 366-384.	1.1	8
62	Constraints on Lunar Crustal Porosity From the Gravitational Signature of Impact Craters. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 2281-2294.	1.5	8
63	A New Digital Terrain Model of the Huygens Landing Site on Saturn's Largest Moon, Titan. <i>Earth and Space Science</i> , 2020, 7, e2020EA001127.	1.1	7
64	Geomorphological map of the South Belet Region of Titan. <i>Icarus</i> , 2021, 366, 114516.	1.1	7
65	Spatio-temporal Variation of Bright Ephemeral Features on Titan's North Pole. <i>Planetary Science Journal</i> , 2020, 1, 31.	1.5	7
66	Bombardment history of the Moon constrained by crustal porosity. <i>Nature Geoscience</i> , 2022, 15, 531-535.	5.4	7
67	Spherical Radiative Transfer in C++ (SRTC++): A Parallel Monte Carlo Radiative Transfer Model for Titan. <i>Astronomical Journal</i> , 2018, 155, 264.	1.9	6
68	Lunar Megaregolith Structure Revealed by GRAIL Gravity Data. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095978.	1.5	6
69	Science goals and new mission concepts for future exploration of Titan's atmosphere, geology and habitability: titan POLar scout/orbitEr and in situ lake lander and DrONE explorer (POSEIDON). <i>Experimental Astronomy</i> , 2022, 54, 911-973.	1.6	5
70	Investigating the Influences of Crustal Thickness and Temperature on the Uplift of Mantle Materials Beneath Large Impact Craters on the Moon. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006533.	1.5	3
71	Exploration of Enceladus and Titan: investigating ocean worlds' evolution and habitability in the Saturn system. <i>Experimental Astronomy</i> , 2022, 54, 877-910.	1.6	3
72	Tracking Short-term Variations in the Haze Distribution of Titan's Atmosphere with SINFONI VLT. <i>Planetary Science Journal</i> , 2021, 2, 180.	1.5	3

#	ARTICLE	IF	CITATIONS
73	Titan's surface and atmosphere. <i>Icarus</i> , 2016, 270, 1.	1.1	2
74	Diffraction-limited Titan Surface Imaging from Orbit Using Near-infrared Atmospheric Windows. <i>Planetary Science Journal</i> , 2020, 1, 24.	1.5	2
75	Methane-saturated Layers Limit the Observability of Impact Craters on Titan. <i>Planetary Science Journal</i> , 2022, 3, 50.	1.5	2
76	Feasibility Study of a High-Resolution Shallow Surface Penetration Radar for Space Application. <i>Radio Science</i> , 2021, 56, e2020RS007118.	0.8	1
77	Tidal Currents Detected in Kraken Mare Straits from Cassini VIMS Sun Glitter Observations. <i>Planetary Science Journal</i> , 2020, 1, 35.	1.5	1