J L Lunine

List of Publications by Year
in descending order

383	31,546	3933 88	5988 160
papers	citations	h-index	g-index

390	390	390	11131
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Science Goals and Mission Architecture of the Europa Lander Mission Concept. Planetary Science Journal, 2022, 3, 22.	3.6	42
2	Revelations on Jupiter's formation, evolution and interior: Challenges from Juno results. Icarus, 2022, 378, 114937.	2.5	29
3	Dual storage and release of molecular oxygen in comet 67P/Churyumovâ€“Gerasimenko. Nature Astronomy, 2022, 6, 724-730.	10.1	8
4	Jupiterâ€™s inhomogeneous envelope. Astronomy and Astrophysics, 2022, 662, A18.	5.1	31
5	Science Objectives for Flagship-Class Mission Concepts for the Search for Evidence of Life at Enceladus. Astrobiology, 2022, 22, 685-712.	3.0	21
6	Titan Stratospheric Haze Bands Observed in Cassini VIMS as Tracers of Meridional Circulation. Planetary Science Journal, 2022, 3, 114.	3.6	3
7	The Possible Formation of Jupiter from Supersolar Gas. Planetary Science Journal, 2022, 3, 141.	3.6	7
8	Jupiter's Temperature Structure: A Reassessment of the Voyager Radio Occultation Measurements. Planetary Science Journal, 2022, 3, 159.	3.6	11
9	Airfall on Comet 67P/Churyumovâ€“Gerasimenko. Icarus, 2021, 354, 114004.	2.5	26
10	Oxidation processes diversify the metabolic menu on Enceladus. Icarus, 2021, 364, 114248.	2.5	29
11	Bayesian analysis of Juno/JIRAM's NIR observations of Europa. Icarus, 2021, 357, 114215.	2.5	7
12	Science Goals and Mission Objectives for the Future Exploration of Ice Giants Systems: A Horizon 2061 Perspective. Space Science Reviews, 2021, 217, 1.	8.1	11
13	Future missions. , 2021, , 207-222.		2
14	Lightning Generation in Moist Convective Clouds and Constraints on the Water Abundance in Jupiter. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006504.	3.6	5
15	On the clouds and ammonia in Jupiterâ€™s upper troposphere from Juno JIRAM reflectivity observations. Monthly Notices of the Royal Astronomical Society, 2021, 503, 4892-4907.	4.4	5
16	Cold Traps of Hypervolatiles in the Protosolar Nebula at the Origin of the Peculiar Composition of Comet C/2016 R2 (PanSTARRS). Planetary Science Journal, 2021, 2, 72.	3.6	16
17	The Enceladus Orbilander Mission Concept: Balancing Return and Resources in the Search for Life. Planetary Science Journal, 2021, 2, 77.	3.6	74
18	Understanding Hypervelocity Sampling of Biosignatures in Space Missions. Astrobiology, 2021, 21, 421-442.	3.0	31

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19	Plutoâ€™s Haze Abundance and Size Distribution from Limb Scatter Observations by MVIC. Planetary Science Journal, 2021, 2, 91.	3.6	5
20	The Nature and Composition of Jupiterâ€™s Building Blocks Derived from the Water Abundance Measurements by the Juno Spacecraft. Astrophysical Journal Letters, 2021, 918, L23.	8.3	8
21	A Comprehensive Revisit of Select Galileo/NIMS Observations of Europa. Planetary Science Journal, 2021, 2, 183.	3.6	5
22	Jupiter's Overturning Circulation: Breaking Waves Take the Place of Solid Boundaries. Geophysical Research Letters, 2021, 48, e2021GL095756.	4.0	11
23	Evidence for Multiple Ferrelâ€Like Cells on Jupiter. Geophysical Research Letters, 2021, 48, e2021GL095651.	4.0	18
24	Spin Dynamics of Extrasolar Giant Planets in Planetâ€“Planet Scattering. Astrophysical Journal, 2021, 920, 151.	4.5	3
25	Microwave observations reveal the deep extent and structure of Jupiterâ€™s atmospheric vortices. Science, 2021, 374, 968-972.	12.6	23
26	The Bathymetry of Moray Sinus at Titan's Kraken Mare. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006558.	3.6	10
27	Residual Study: Testing Jupiter Atmosphere Models Against Juno MWR Observations. Earth and Space Science, 2020, 7, e2020EA001229.	2.6	3
28	Turbulence Power Spectra in Regions Surrounding Jupiter's South Polar Cyclones From Juno/JIRAM. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006096.	3.6	8
29	Tracing the Origins of the Ice Giants Through Noble Gas Isotopic Composition. Space Science Reviews, 2020, 216, 1.	8.1	13
30	Storms and the Depletion of Ammonia in Jupiter: II. Explaining the Juno Observations. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006404.	3.6	24
31	Small lightning flashes from shallow electrical storms on Jupiter. Nature, 2020, 584, 55-58.	27.8	27
32	The role of ice lines in the formation of Uranus and Neptune. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20200107.	3.4	15
33	Twoâ€Year Observations of the Jupiter Polar Regions by JIRAM on Board Juno. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006098.	3.6	24
34	Discriminating Abiotic and Biotic Fingerprints of Amino Acids and Fatty Acids in Ice Grains Relevant to Ocean Worlds. Astrobiology, 2020, 20, 1168-1184.	3.0	38
35	The root of anomalously specular reflections from solid surfaces on Saturnâ€™s moon Titan. Nature Communications, 2020, 11, 2829.	12.8	6
36	Key Atmospheric Signatures for Identifying the Source Reservoirs of Volatiles in Uranus and Neptune. Space Science Reviews, 2020, 216, 1.	8.1	14

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37	On the Spatial Distribution of Minor Species in Jupiter's Troposphere as Inferred From Juno JIRAM Data. Journal of Geophysical Research E: Planets, 2020, 125, e2019JE006206.	3.6	14
38	The water abundance in Jupiterâ€™s equatorial zone. Nature Astronomy, 2020, 4, 609-616.	10.1	96
39	Planetary Refractory Composition and Volatile Accretion into Gas Giants in the Protoplanetary Disks of the Sun and WASP-12. Astrophysical Journal, 2020, 904, 129.	4.5	2
40	Raised Rims Around Titan's Sharpâ€Edged Depressions. Geophysical Research Letters, 2019, 46, 5846-5854.	4.0	13
41	Possible explosion crater origin of small lake basins with raised rims on Titan. Nature Geoscience, 2019, 12, 791-796.	12.9	14
42	Titan as Revealed by the Cassini Radar. Space Science Reviews, 2019, 215, 1.	8.1	34
43	Modeling early Titan's ocean composition. Icarus, 2019, 333, 61-70.	2.5	16
44	Deep and methane-rich lakes on Titan. Nature Astronomy, 2019, 3, 535-542.	10.1	30
45	Decomposition of amino acids in water with application to in-situ measurements of Enceladus, Europa and other hydrothermally active icy ocean worlds. Icarus, 2019, 329, 140-147.	2.5	24
46	Serendipitous infrared observations of Europa by Juno/JIRAM. Icarus, 2019, 328, 1-13.	2.5	15
47	Close Cassini flybys of Saturnâ€™s ring moons Pan, Daphnis, Atlas, Pandora, and Epimetheus. Science, 2019, 364, .	12.6	24
48	Jupiterâ€™s Formation in the Vicinity of the Amorphous Ice Snowline. Astrophysical Journal, 2019, 875, 9.	4.5	31
49	A Statistical Approach to Planetesimal Condensate Composition beyond the Snowline Based on the Carbon-to-oxygen Ratio. Astrophysical Journal, 2019, 887, 3.	4.5	5
50	Alluvial and fluvial fans on Saturn's moon Titan reveal processes, materials and regional geology. Geological Society Special Publication, 2018, 440, 281-305.	1.3	19
51	Clusters of cyclones encircling Jupiterâ€™s poles. Nature, 2018, 555, 216-219.	27.8	90
52	A suppression of differential rotation in Jupiterâ€™s deep interior. Nature, 2018, 555, 227-230.	27.8	165
53	Measurement of Jupiterâ€™s asymmetric gravity field. Nature, 2018, 555, 220-222.	27.8	177
54	Jupiterâ€™s atmospheric jet streams extend thousands of kilometres deep. Nature, 2018, 555, 223-226.	27.8	189

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55	Morphological evidence that Titanâ€™s southern hemisphere basins are paleoseas. Icarus, 2018, 310, 140-148.	2.5	24
56	Cold cases: What we don't know about Saturn's Moons. Planetary and Space Science, 2018, 155, 41-49.	1.7	5
57	Innocent Bystanders: Orbital Dynamics of Exomoons During Planetâ€“Planet Scattering. Astrophysical Journal, 2018, 852, 85.	4.5	45
58	A post-Cassini view of Titanâ€™s methane-based hydrologic cycle. Nature Geoscience, 2018, 11, 306-313.	12.9	59
59	Bathymetry and composition of Titan's Ontario Lacus derived from Monte Carlo-based waveform inversion of Cassini RADAR altimetry data. Icarus, 2018, 300, 203-209.	2.5	38
60	Program options to explore ocean worlds. Acta Astronautica, 2018, 143, 285-296.	3.2	14
61	Exploring the Ocean Worlds. , 2018, , .		0
62	Characterization of Mesoscale Waves in the Jupiter NEB by Jupiter InfraRed Auroral Mapper on board Juno. Astronomical Journal, 2018, 156, 246.	4.7	5
63	The Origin and Evolution of Saturn, with Exoplanet Perspective. , 2018, , 5-43.		23
64	Noble Gas Abundance Ratios Indicate the Agglomeration of 67P/Churyumovâ€“Gerasimenko from Warmed-up Ice. Astrophysical Journal Letters, 2018, 865, L11.	8.3	11
65	Origin of Molecular Oxygen in Comets: Current Knowledge and Perspectives. Space Science Reviews, 2018, 214, 1.	8.1	23
66	Synthesis of Molecular Oxygen via Irradiation of Ice Grains in the Protosolar Nebula. Astrophysical Journal, 2018, 858, 66.	4.5	11
67	First Estimate of Wind Fields in the Jupiter Polar Regions From JIRAMâ€Juno Images. Journal of Geophysical Research E: Planets, 2018, 123, 1511-1524.	3.6	24
68	Saturnâ€™s Formation and Early Evolution at the Origin of Jupiterâ€™s Massive Moons. Astronomical Journal, 2018, 155, 224.	4.7	26
69	Titan's Meteorology Over the Cassini Mission: Evidence for Extensive Subsurface Methane Reservoirs. Geophysical Research Letters, 2018, 45, 5320-5328.	4.0	47
70	Prevalent lightning sferics at 600 megahertz near Jupiterâ€™s poles. Nature, 2018, 558, 87-90.	27.8	52
71	Cassini radar observation of Punga Mare and environs: Bathymetry and composition. Earth and Planetary Science Letters, 2018, 496, 89-95.	4.4	20
72	JIRAM, the Jovian Infrared Auroral Mapper. Space Science Reviews, 2017, 213, 393-446.	8.1	91

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73	Laboratory measurements of nitrogen dissolution in Titan lake fluids. Icarus, 2017, 289, 94-105.	2.5	35
74	Cassini finds molecular hydrogen in the Enceladus plume: Evidence for hydrothermal processes. Science, 2017, 356, 155-159.	12.6	396
75	Acetonitrile cluster solvation in a cryogenic ethane-methane-propane liquid: Implications for Titan lake chemistry. Journal of Chemical Physics, 2017, 146, 104308.	3.0	5
76	Jupiterâ€™s interior and deep atmosphere: The initial pole-to-pole passes with the Juno spacecraft. Science, 2017, 356, 821-825.	12.6	229
77	Preliminary results on the composition of Jupiter's troposphere in hot spot regions from the JIRAM/Juno instrument. Geophysical Research Letters, 2017, 44, 4615-4624.	4.0	20
78	Characterization of the white ovals on Jupiter's southern hemisphere using the first data by the Juno/JIRAM instrument. Geophysical Research Letters, 2017, 44, 4660-4668.	4.0	15
79	Stability of Sulphur Dimers (S₂) in Cometary Ices. Astrophysical Journal, 2017, 835, 134.	4.5	9
80	MWR: Microwave Radiometer for the Juno Mission to Jupiter. Space Science Reviews, 2017, 213, 139-185.	8.1	64
81	Impact of Radiogenic Heating on the Formation Conditions of Comet 67P/Churyumovâ€“Gerasimenko. Astrophysical Journal Letters, 2017, 839, L4.	8.3	19
82	Enceladus and its plume. Nature Astronomy, 2017, 1, 581-581.	10.1	1
83	Environmental design implications for two deep space SmallSats. Acta Astronautica, 2017, 139, 390-395.	3.2	4
84	Implications of the ammonia distribution on Jupiter from 1 to 100Âbars as measured by the Juno microwave radiometer. Geophysical Research Letters, 2017, 44, 7676-7685.	4.0	31
85	Modeling Synthetic Spectra for Transiting Extrasolar Giant Planets: Detectability of H₂S and PH₃ with the James Webb Space Telescope. Astrophysical Journal, 2017, 850, 199.	4.5	38
86	The Juno Mission. Space Science Reviews, 2017, 213, 5-37.	8.1	222
87	Geomorphologic mapping of titan's polar terrains: Constraining surface processes and landscape evolution. Icarus, 2017, 282, 214-236.	2.5	46
88	Ocean worlds exploration. Acta Astronautica, 2017, 131, 123-130.	3.2	93
89	The Effect of Atmospheric Cooling on Vertical Velocity Dispersion and Density Distribution of Brown Dwarfs^{âˆ—}. Astrophysical Journal, 2017, 847, 53.	4.5	12
90	MWR: Microwave Radiometer for the Juno Mission to Jupiter. , 2017, , 123-169.		0

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91	The Juno Mission. , 2017, , 5-37.		4
92	Polymorphism and electronic structure of polyimine and its potential significance for prebiotic chemistry on Titan. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 8121-8126.	7.1	35
93	Modeling the disequilibrium species for Jupiter and Saturn: Implications for Juno and Saturn entry probe. Icarus, 2016, 276, 21-38.	2.5	41
94	The mass spectrometer for planetary exploration (MASPEX). , 2016, , .		34
95	Enceladus Life Finder: The search for life in a habitable Moon. , 2016, , .		39
96	Solar System Observations with theJames Webb Space Telescope. Publications of the Astronomical Society of the Pacific, 2016, 128, 025004.	3.1	13
97	Radar Sounding Using the Cassini Altimeter: Waveform Modeling and Monte Carlo Approach for Data Inversion of Observations of Titan's Seas. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 5646-5656.	6.3	31
98	The sustainability of habitability on terrestrial planets: Insights, questions, and needed measurements from Mars for understanding the evolution of Earthâ€like worlds. Journal of Geophysical Research E: Planets, 2016, 121, 1927-1961.	3.6	72
99	The presence of clathrates in comet 67P/Churyumov-Gerasimenko. Science Advances, 2016, 2, e1501781.	10.3	38
100	POSSIBLE INTERNAL STRUCTURES AND COMPOSITIONS OF PROXIMA CENTAURI b. Astrophysical Journal Letters, 2016, 831, L16.	8.3	48
101	ORIGIN OF MOLECULAR OXYGEN IN COMET 67P/CHURYUMOVâ€“GERASIMENKO. Astrophysical Journal Letters, 2016, 823, L41.	8.3	58
102	The Hera Saturn entry probe mission. Planetary and Space Science, 2016, 130, 80-103.	1.7	26
103	Composition, seasonal change, and bathymetry of Ligeia Mare, Titan, derived from its microwave thermal emission. Journal of Geophysical Research E: Planets, 2016, 121, 233-251.	3.6	44
104	Titanâ€™s â€œMagic Islandsâ€: Transient features in a hydrocarbon sea. Icarus, 2016, 271, 338-349.	2.5	37
105	A PROTOSOLAR NEBULA ORIGIN FOR THE ICES AGGLOMERATED BY COMET 67P/CHURYUMOVâ€“GERASIMENKO. Astrophysical Journal Letters, 2016, 819, L33.	8.3	43
106	The fate of ethane in Titanâ€™s hydrocarbon lakes and seas. Icarus, 2016, 270, 37-40.	2.5	10
107	Nebular dead zone effects on the D/H ratio in chondrites and comets. Astronomy and Astrophysics, 2015, 583, A58.	5.1	6
108	Orbital instability of close-in exomoons in non-coplanar systems. Monthly Notices of the Royal Astronomical Society, 2015, 449, 828-834.	4.4	28

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109	New insights on Jupiterâ€™s deep water abundance from disequilibrium species. Icarus, 2015, 250, 154-164.	2.5	33
110	Interiors and Evolution of Icy Satellites. , 2015, , 605-635.		24
111	GCM simulations of Titanâ€™s middle and lower atmosphere and comparison to observations. Icarus, 2015, 250, 516-528.	2.5	97
112	Solvation of nitrogen compounds in Titanâ€™s seas, precipitates, and atmosphere. Icarus, 2015, 256, 1-12.	2.5	18
113	Membrane alternatives in worlds without oxygen: Creation of an azotosome. Science Advances, 2015, 1, e1400067.	10.3	61
114	Laboratory measurements of cryogenic liquid alkane microwave absorptivity and implications for the composition of Ligeia Mare, Titan. Geophysical Research Letters, 2015, 42, 1340-1345.	4.0	48
115	Observations of Transiting Exoplanets with the James Webb Space Telescope (JWST). Publications of the Astronomical Society of the Pacific, 2014, 126, 1134-1173.	3.1	245
116	NEW INSIGHTS ON SATURN'S FORMATION FROM ITS NITROGEN ISOTOPIC COMPOSITION. Astrophysical Journal Letters, 2014, 796, L28.	8.3	22
117	Scientific rationale for Saturn×3s in situ exploration. Planetary and Space Science, 2014, 104, 29-47.	1.7	49
118	Measuring Jupiter's water abundance by Juno: the link between interior and formation models. Monthly Notices of the Royal Astronomical Society, 2014, 441, 2273-2279.	4.4	46
119	The Gravity Field and Interior Structure of Enceladus. Science, 2014, 344, 78-80.	12.6	339
120	Transient features in a Titan sea. Nature Geoscience, 2014, 7, 493-496.	12.9	43
121	CARBON-RICH PLANET FORMATION IN A SOLAR COMPOSITION DISK. Astrophysical Journal, 2014, 785, 125.	4.5	77
122	THE MEASURED COMPOSITIONS OF URANUS AND NEPTUNE FROM THEIR FORMATION ON THE CO ICE LINE. Astrophysical Journal, 2014, 793, 9.	4.5	63
123	Giant Planets. , 2014, , 301-312.		1
124	Simulations of Titanâ€™s paleoclimate. Icarus, 2014, 243, 264-273.	2.5	39
125	The bathymetry of a Titan sea. Geophysical Research Letters, 2014, 41, 1432-1437.	4.0	119
126	Modeling nitrogen-gas, -liquid, -solid chemistries at low temperatures (173â€“298K) with applications to Titan. Icarus, 2014, 236, 1-8.	2.5	10

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127	PROTOSOLAR AMMONIA AS THE UNIQUE SOURCE OF TITAN's NITROGEN. Astrophysical Journal Letters, 2014, 788, L24.	8.3	74
128	Shape, topography, gravity anomalies and tidal deformation of Titan. Icarus, 2014, 236, 169-177.	2.5	88
129	Equilibrium composition between liquid and clathrate reservoirs on Titan. Icarus, 2014, 239, 39-45.	2.5	22
130	A radar map of Titan Seas: Tidal dissipation and ocean mixing through the throat of Kraken. Icarus, 2014, 237, 9-15.	2.5	33
131	Influence of the C/O ratio on titanium and vanadium oxides in protoplanetary disks. Astronomy and Astrophysics, 2014, 561, A60.	5.1	4
132	JIRAM, the Jovian Infrared Auroral Mapper. , 2014, , 271-324.		4
133	Does ice float in Titanâ€™s lakes and seas?. Icarus, 2013, 223, 628-631.	2.5	20
134	TiME - The Titan Mare Explorer. , 2013, , .		34
135	Volatile Trapping in Martian Clathrates. Space Science Reviews, 2013, 174, 213-250.	8.1	39
136	Titanâ€™s Xanadu region: Geomorphology and formation scenario. Icarus, 2013, 223, 796-803.	2.5	9
137	Cryovolcanism on Titan: New results from Cassini RADAR and VIMS. Journal of Geophysical Research E: Planets, 2013, 118, 416-435.	3.6	128
138	Wind driven capillary-gravity waves on Titanâ€™s lakes: Hard to detect or non-existent?. Icarus, 2013, 225, 403-412.	2.5	42
139	On the possible noble gas deficiency of Plutoâ€™s atmosphere. Icarus, 2013, 225, 856-861.	2.5	16
140	THE RADIAL DISTRIBUTION OF WATER ICE AND CHROMOPHORES ACROSS SATURN'S SYSTEM. Astrophysical Journal, 2013, 766, 76.	4.5	26
141	Microlensing detection of extrasolar planets. Reports on Progress in Physics, 2013, 76, 056901.	20.1	26
142	The Tides of Titan. Science, 2012, 337, 457-459.	12.6	237
143	NEBULAR WATER DEPLETION AS THE CAUSE OF JUPITER'S LOW OXYGEN ABUNDANCE. Astrophysical Journal Letters, 2012, 751, L7.	8.3	68
144	THE¹²C/¹³C RATIO ON TITAN FROMCASSINIINMS MEASUREMENTS AND IMPLICATIONS FOR THE EVOLUTION OF METHANE. Astrophysical Journal, 2012, 749, 160.	4.5	66

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145	High precision astrometry mission for the detection and characterization of nearby habitable planetary systems with the Nearby Earth Astrometric Telescope (NEAT). Experimental Astronomy, 2012, 34, 385-413.	3.7	73
146	Building Terrestrial Planets. Annual Review of Earth and Planetary Sciences, 2012, 40, 251-275.	11.0	392
147	Modeling ammoniaâ€“ammonium aqueous chemistries in the Solar Systemâ€™s icy bodies. Icarus, 2012, 220, 932-946.	2.5	56
148	Saturnâ€™s icy satellites and rings investigated by Cassiniâ€“VIMS: III â€“ Radial compositional variability. Icarus, 2012, 220, 1064-1096.	2.5	86
149	THE DUAL ORIGIN OF THE NITROGEN DEFICIENCY IN COMETS: SELECTIVE VOLATILE TRAPPING IN THE NEBULA AND POSTACCRETION RADIOGENIC HEATING. Astrophysical Journal, 2012, 757, 146.	4.5	29
150	Large Habitable Moons. , 2012, , 175-200.		4
151	Small Habitable Worlds. , 2012, , 201-228.		7
152	PLANETESIMAL COMPOSITIONS IN EXOPLANET SYSTEMS. Astrophysical Journal, 2012, 757, 192.	4.5	72
153	A frozen super-Earth orbiting a star at the bottom of the main sequence. Astronomy and Astrophysics, 2012, 540, A78.	5.1	56
154	Mars cryosphere: A potential reservoir for heavy noble gases?. Icarus, 2012, 218, 80-87.	2.5	14
155	Geophysical evolution of Saturnâ€™s satellite Phoebe, a large planetesimal in the outer Solar System. Icarus, 2012, 219, 86-109.	2.5	53
156	Titan's lakes chemical composition: Sources of uncertainties and variability. Planetary and Space Science, 2012, 61, 99-107.	1.7	47
157	Volatile Trapping in Martian Clathrates. Space Sciences Series of ISSI, 2012, , 213-250.	0.0	0
158	Robotic test bed for autonomous surface exploration of Titan, Mars, and other planetary bodies. , 2011, , .		26
159	The exoplanet microlensing survey by the proposed WFIRST Observatory. Proceedings of SPIE, 2011, , .	0.8	6
160	Chemistry of the Solar System Revealed in the Interiors of the Giant Planets. Proceedings of the International Astronomical Union, 2011, 7, 249-260.	0.0	1
161	ON THE VOLATILE ENRICHMENTS AND HEAVY ELEMENT CONTENT IN HD189733b. Astrophysical Journal, 2011, 727, 77.	4.5	38
162	CARBON-RICH GIANT PLANETS: ATMOSPHERIC CHEMISTRY, THERMAL INVERSIONS, SPECTRA, AND FORMATION CONDITIONS. Astrophysical Journal, 2011, 743, 191.	4.5	137

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163	REMOVAL OF TITAN'S ATMOSPHERIC NOBLE GASES BY THEIR SEQUESTRATION IN SURFACE CLATHRATES. Astrophysical Journal Letters, 2011, 740, L9.	8.3	28
164	Atmospheric Planetary Probes and Balloons in the Solar System. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2011, 225, 154-180.	1.3	3
165	Insolation in Titanâ€™s troposphere. Icarus, 2011, 216, 116-119.	2.5	13
166	Regional geomorphology and history of Titanâ€™s Xanadu province. Icarus, 2011, 211, 672-685.	2.5	52
167	Transient surface liquid in Titanâ€™s polar regions from Cassini. Icarus, 2011, 211, 655-671.	2.5	113
168	Phosphorus chemistry on Titan. Icarus, 2011, 212, 751-761.	2.5	11
169	Cassini SAR, radiometry, scatterometry and altimetry observations of Titanâ€™s dune fields. Icarus, 2011, 213, 608-624.	2.5	74
170	Organic chemistry on the surface of Titan. Rendiconti Lincei, 2011, 22, 183-189.	2.2	13
171	Space telescope: Debt problems go deeper. Nature, 2011, 479, 478-478.	27.8	0
172	Rapid and Extensive Surface Changes Near Titanâ€™s Equator: Evidence of April Showers. Science, 2011, 331, 1414-1417.	12.6	184
173	Dynamical Models of Terrestrial Planet Formation. Advanced Science Letters, 2011, 4, 325-338.	0.2	20
174	Detection and mapping of hydrocarbon deposits on Titan. Journal of Geophysical Research, 2010, 115, .	3.3	147
175	ABOUT THE POSSIBLE ROLE OF HYDROCARBON LAKES IN THE ORIGIN OF TITAN'S NOBLE GAS ATMOSPHERIC DEPLETION. Astrophysical Journal Letters, 2010, 721, L117-L120.	8.3	16
176	THE ROLE OF METHANOL IN THE CRYSTALLIZATION OF TITAN'S PRIMORDIAL OCEAN. Astrophysical Journal, 2010, 724, 887-894.	4.5	23
177	IMPACT REGIMES AND POST-FORMATION SEQUESTRATION PROCESSES: IMPLICATIONS FOR THE ORIGIN OF HEAVY NOBLE GASES IN TERRESTRIAL PLANETS. Astrophysical Journal, 2010, 714, 1418-1423.	4.5	9
178	Distribution and interplay of geologic processes on Titan from Cassini radar data. Icarus, 2010, 205, 540-558.	2.5	122
179	Correlations between VIMS and RADAR data over the surface of Titan: Implications for Titanâ€™s surface properties. Icarus, 2010, 208, 366-384.	2.5	8
180	Identification of cryovolcanism on Titan using fuzzy cognitive maps. Planetary and Space Science, 2010, 58, 761-779.	1.7	38

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181	Threshold of wave generation on Titanâ€™s lakes and seas: Effect of viscosity and implications for Cassini observations. Icarus, 2010, 207, 932-937.	2.5	54
182	Characterization of Titanâ€™s Ontario Lacus region from Cassini/VIMS observations. Icarus, 2010, 210, 823-831.	2.5	16
183	Future prospects for the detection and characterization of extrasolar planets. EPJ Web of Conferences, 2010, 9, 277-285.	0.3	0
184	Our Cosmic Heritage of Complex Molecules. EAS Publications Series, 2010, 41, 465-483.	0.3	0
185	Dynamical Habitability of Planetary Systems. Astrobiology, 2010, 10, 33-43.	3.0	42
186	Co-Evolution of Atmospheres, Life, and Climate. Astrobiology, 2010, 10, 77-88.	3.0	45
187	Deciphering Spectral Fingerprints of Habitable Exoplanets. Astrobiology, 2010, 10, 89-102.	3.0	88
188	Geophysical and Atmospheric Evolution of Habitable Planets. Astrobiology, 2010, 10, 45-68.	3.0	47
189	Active shoreline of Ontario Lacus, Titan: A morphological study of the lake and its surroundings. Geophysical Research Letters, 2010, 37, .	4.0	66
190	Bathymetry and absorptivity of Titan's Ontario Lacus. Journal of Geophysical Research, 2010, 115, .	3.3	49
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