

Cassini Observes the Active South Pole of Enceladus

Science

311, 1393-1401

DOI: [10.1126/science.1123013](https://doi.org/10.1126/science.1123013)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Identification of a Dynamic Atmosphere at Enceladus with the Cassini Magnetometer. <i>Science</i> , 2006, 311, 1406-1409.	6.0	338
2	GEOCHEMISTRY: Follow the Nitrogen. <i>Science</i> , 2006, 312, 708-709.	6.0	59
3	Cassini radio occultations of Saturn's ionosphere: Model comparisons using a constant water flux. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	46
4	Tidally heated moons: from icy worlds to temperate habitats. , 2006, , .		1
5	The Potential for Tidally Heated Icy and Temperate Moons around Exoplanets. <i>Astrophysical Journal</i> , 2006, 648, 1196-1205.	1.6	83
6	Enceladus: A Source of Nitrogen and an Explanation for the Water Vapor Plume Observed by Cassini. <i>Astrophysical Journal</i> , 2006, 649, L133-L136.	1.6	34
7	The Enceladus and OH Tori at Saturn. <i>Astrophysical Journal</i> , 2006, 644, L137-L139.	1.6	116
8	Science-Driven Design of ENCELADUS Flyby Geometry. , 2006, , .		4
9	Diapir-induced reorientation of Saturn's moon Enceladus. <i>Nature</i> , 2006, 441, 614-616.	13.7	120
10	Near-infrared spectra of the leading and trailing hemispheres of Enceladus. <i>Icarus</i> , 2006, 182, 211-223.	1.1	59
11	Subsurface oceans and deep interiors of medium-sized outer planet satellites and large trans-neptunian objects. <i>Icarus</i> , 2006, 185, 258-273.	1.1	245
13	E ring dust sources: Implications from Cassini's dust measurements. <i>Planetary and Space Science</i> , 2006, 54, 1024-1032.	0.9	59
14	Mapping of the icy Saturnian satellites: First results from Cassini-ISS. <i>Planetary and Space Science</i> , 2006, 54, 1137-1145.	0.9	16
15	A Clathrate Reservoir Hypothesis for Enceladus' South Polar Plume. <i>Science</i> , 2006, 314, 1764-1766.	6.0	156
16	Enceladus: Cosmic Gymnast, Volatile Miniworld. <i>Science</i> , 2006, 311, 1389-1391.	6.0	58
17	Cassini Encounters Enceladus: Background and the Discovery of a South Polar Hot Spot. <i>Science</i> , 2006, 311, 1401-1405.	6.0	481
18	The potential for prebiotic chemistry in the possible cryovolcanic dome Ganesa Macula on Titan. <i>International Journal of Astrobiology</i> , 2006, 5, 57-65.	0.9	41
19	Composition and Physical Properties of Enceladus' Surface. <i>Science</i> , 2006, 311, 1425-1428.	6.0	199

#	ARTICLE	IF	CITATIONS
20	Cassini Dust Measurements at Enceladus and Implications for the Origin of the E Ring. <i>Science</i> , 2006, 311, 1416-1418.	6.0	304
21	Does Enceladus Govern Magnetospheric Dynamics at Saturn?. <i>Science</i> , 2006, 311, 1391-1392.	6.0	31
22	Cassini Ion and Neutral Mass Spectrometer: Enceladus Plume Composition and Structure. <i>Science</i> , 2006, 311, 1419-1422.	6.0	590
23	Major Satellites of the Giant Planets. , 2007, , 1-29.		1
24	True Polar Wander: Linking Deep and Shallow Geodynamics to Hydro- and Bio-Spheric Hypotheses. , 2007, , 565-589.		8
25	True Polar Wander: Linking Deep and Shallow Geodynamics to Hydro- and Biospheric Hypotheses. , 2007, , 511-530.		7
26	Interiors and Evolution of Icy Satellites. , 2007, , 509-539.		8
27	Precipitation in the Solar System. <i>Physics Teacher</i> , 2007, 45, 502-505.	0.2	1
28	Hydrothermal Systems in Small Ocean Planets. <i>Astrobiology</i> , 2007, 7, 987-1005.	1.5	213
29	M Stars as Targets for Terrestrial Exoplanet Searches And Biosignature Detection. <i>Astrobiology</i> , 2007, 7, 85-166.	1.5	330
30	PLANETARY SCIENCE: A New Spin on Saturn's Rotation. <i>Science</i> , 2007, 316, 380-381.	6.0	3
31	Unified model of tectonics and heat transport in a frigid Enceladus. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 13578-13581.	3.3	40
32	The Variable Rotation Period of the Inner Region of Saturn's Plasma Disk. <i>Science</i> , 2007, 316, 442-445.	6.0	223
33	Interior Structure, Composition, and Mineralogy of the Terrestrial Planets. , 2007, , 27-68.		8
35	The Origin of the Natural Satellites. , 2007, , 465-508.		8
36	Energy, Chemical Disequilibrium, and Geological Constraints on Europa. <i>Astrobiology</i> , 2007, 7, 1006-1022.	1.5	181
37	Enceladus: Cosmic Graffiti Artist Caught in the Act. <i>Science</i> , 2007, 315, 815-815.	6.0	98
38	Saturn's satellite Rhea is a homogeneous mix of rock and ice. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	39

#	ARTICLE	IF	CITATIONS
39	Convection in Enceladus' ice shell: Conditions for initiation. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	63
40	Signatures of Enceladus in Saturn's E ring. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	22
41	Polar wind outflow model: Saturn results. <i>Journal of Geophysical Research</i> , 2007, 112, n/a-n/a.	3.3	45
42	Electron sources in Saturn's magnetosphere. <i>Journal of Geophysical Research</i> , 2007, 112, n/a-n/a.	3.3	83
43	Electron microdiffusion in the Saturnian radiation belts: Cassini MIMI/LEMMS observations of energetic electron absorption by the icy moons. <i>Journal of Geophysical Research</i> , 2007, 112, n/a-n/a.	3.3	63
44	Understanding the escape of water from Enceladus. <i>Journal of Geophysical Research</i> , 2007, 112, n/a-n/a.	3.3	77
45	Mass loading of Saturn's magnetosphere near Enceladus. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	64
46	Pressurized oceans and the eruption of liquid water on Europa and Enceladus. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	130
47	Reorientation of icy satellites by impact basins. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	31
48	An oceanic composition on early and today's Enceladus. <i>Geophysical Research Letters</i> , 2007, 34, n/a-n/a.	1.5	136
49	Hemisphere coupling in Enceladus' asymmetric plasma interaction. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	35
50	Rotational stability of tidally deformed planetary bodies. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	26
51	Clathrate hydrates under pressure. <i>Physics Today</i> , 2007, 60, 42-47.	0.3	119
52	Interior Structure, Composition, and Mineralogy of the Terrestrial Planets. , 2007, , 27-68.		18
53	Extremophiles: defining the envelope for the search for life in the universe. , 2007, , 113-134.		8
54	Enceladus: Cassini observations and implications for the search for life. <i>Astronomy and Astrophysics</i> , 2007, 463, 353-357.	2.1	41
56	Stagnant lid convection in the mid-sized icy satellites of Saturn. <i>Icarus</i> , 2007, 186, 420-435.	1.1	38
57	Monte Carlo simulations of the water vapor plumes on Enceladus. <i>Icarus</i> , 2007, 188, 154-161.	1.1	78

#	ARTICLE	IF	CITATIONS
58	Enceladus: The likely dominant nitrogen source in Saturn's magnetosphere. <i>Icarus</i> , 2007, 188, 356-366.	1.1	47
59	Tidal heating in Enceladus. <i>Icarus</i> , 2007, 188, 535-539.	1.1	142
60	Shapes of the saturnian icy satellites and their significance. <i>Icarus</i> , 2007, 190, 573-584.	1.1	153
61	Degree-one convection and the origin of Enceladus' dichotomy. <i>Icarus</i> , 2007, 191, 203-210.	1.1	28
62	Metasomatic clathrate xenoliths as a possible source for the south polar plumes of Enceladus. <i>Icarus</i> , 2007, 191, 743-748.	1.1	29
63	Inside Enceladus. <i>Nature</i> , 2007, 445, 376-377.	13.7	10
64	Bounty beneath the Nullarbor. <i>Nature</i> , 2007, 445, 377-377.	13.7	0
65	Cracks under stress. <i>Nature</i> , 2007, 447, 276-277.	13.7	6
66	Shear heating as the origin of the plumes and heat flux on Enceladus. <i>Nature</i> , 2007, 447, 289-291.	13.7	232
67	Eruptions arising from tidally controlled periodic openings of rifts on Enceladus. <i>Nature</i> , 2007, 447, 292-294.	13.7	154
68	Association of the jets of Enceladus with the warmest regions on its south-polar fractures. <i>Nature</i> , 2007, 449, 695-697.	13.7	150
69	The composition of Saturn's E ring. <i>Monthly Notices of the Royal Astronomical Society</i> , 2007, 377, 1588-1596.	1.6	73
70	Astrophysics in 2006. <i>Space Science Reviews</i> , 2007, 132, 1-182.	3.7	9
71	Enceladus' plume: Compositional evidence for a hot interior. <i>Icarus</i> , 2007, 187, 569-573.	1.1	145
72	Enceladus: Present internal structure and differentiation by early and long-term radiogenic heating. <i>Icarus</i> , 2007, 188, 345-355.	1.1	141
73	Enceladus' south polar sea. <i>Icarus</i> , 2007, 189, 72-82.	1.1	104
74	Arecibo radar observations of Rhea, Dione, Tethys, and Enceladus. <i>Icarus</i> , 2007, 191, 702-711.	1.1	18
75	Unstable extension of Enceladus' lithosphere. <i>Icarus</i> , 2007, 192, 92-105.	1.1	47

#	ARTICLE	IF	CITATIONS
76	Tidal heating and the long-term stability of a subsurface ocean on Enceladus. <i>Icarus</i> , 2008, 194, 675-689.	1.1	171
77	Solid tidal friction above a liquid water reservoir as the origin of the south pole hotspot on Enceladus. <i>Icarus</i> , 2008, 196, 642-652.	1.1	124
78	Growth and evolution of small porous icy bodies with an adaptive-grid thermal evolution code. Application to Kuiper belt objects and Enceladus. <i>Icarus</i> , 2008, 197, 211-220.	1.1	34
79	Habitability of Enceladus: Planetary Conditions for Life. <i>Origins of Life and Evolution of Biospheres</i> , 2008, 38, 355-369.	0.8	67
80	An Approach to Searching for Life on Mars, Europa, and Enceladus. <i>Space Science Reviews</i> , 2008, 135, 49-54.	3.7	25
81	The Charging of Planetary Rings. <i>Space Science Reviews</i> , 2008, 137, 435-453.	3.7	21
82	Exospheres and Atmospheric Escape. <i>Space Science Reviews</i> , 2008, 139, 355-397.	3.7	103
83	High-resolution Enceladus atlas derived from Cassini-ISS images. <i>Planetary and Space Science</i> , 2008, 56, 109-116.	0.9	27
84	Ion and neutral sources and sinks within Saturn's inner magnetosphere: Cassini results. <i>Planetary and Space Science</i> , 2008, 56, 3-18.	0.9	119
85	The search for life beyond Earth through fuzzy expert systems. <i>Planetary and Space Science</i> , 2008, 56, 448-472.	0.9	23
86	Saturnian icy satellites: Disk-integrated observations of the brightness opposition surge at low phase angles. <i>Planetary and Space Science</i> , 2008, 56, 386-397.	0.9	8
87	Study of a thermal drill head for the exploration of subsurface planetary ice layers. <i>Planetary and Space Science</i> , 2008, 56, 1280-1292.	0.9	34
88	Geysers of Enceladus: Quantitative analysis of qualitative models. <i>Planetary and Space Science</i> , 2008, 56, 1596-1606.	0.9	26
89	Radiation effects in ice: New results. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2008, 266, 3057-3062.	0.6	23
90	Photometric and spectral analysis of the distribution of crystalline and amorphous ices on Enceladus as seen by Cassini. <i>Icarus</i> , 2008, 193, 397-406.	1.1	37
91	The E ring in the vicinity of Enceladus. <i>Icarus</i> , 2008, 193, 420-437.	1.1	114
92	Thermal convection in ice-I shells of Titan and Enceladus. <i>Icarus</i> , 2008, 193, 387-396.	1.1	63
93	Compositional mapping of Saturn's satellite Dione with Cassini VIMS and implications of dark material in the Saturn system. <i>Icarus</i> , 2008, 193, 372-386.	1.1	135

#	ARTICLE	IF	CITATIONS
94	The E-ring in the vicinity of Enceladus. <i>Icarus</i> , 2008, 193, 438-454.	1.1	126
95	Tidal evolution of Mimas, Enceladus, and Dione. <i>Icarus</i> , 2008, 193, 213-223.	1.1	69
96	Distribution of icy particles across Enceladus' surface as derived from Cassini-VIMS measurements. <i>Icarus</i> , 2008, 193, 407-419.	1.1	64
97	Tectonic patterns on reoriented and despun planetary bodies. <i>Icarus</i> , 2008, 195, 459-473.	1.1	53
98	A model for the temperature-dependence of tidal dissipation in convective plumes on icy satellites: Implications for Europa and Enceladus. <i>Icarus</i> , 2008, 195, 758-764.	1.1	37
99	The oxidation state of hydrothermal systems on early Enceladus. <i>Icarus</i> , 2008, 197, 157-163.	1.1	45
100	Release of N ₂ , CH ₄ , CO ₂ , and H ₂ O from surface ices on Enceladus. <i>Icarus</i> , 2008, 197, 152-156.	1.1	7
101	Sources and losses of energetic protons in Saturn's magnetosphere. <i>Icarus</i> , 2008, 197, 519-525.	1.1	64
102	Tidally driven stress accumulation and shear failure of Enceladus's tiger stripes. <i>Icarus</i> , 2008, 198, 435-451.	1.1	87
103	Model of explosive eruptions of water vapor and dust on icy satellites. <i>Solar System Research</i> , 2008, 42, 124-138.	0.3	1
104	Ionization chemistry in H ₂ O-dominated atmospheres of icy moons. <i>Solar System Research</i> , 2008, 42, 473-487.	0.3	12
105	Slow dust in Enceladus' plume from condensation and wall collisions in tiger stripe fractures. <i>Nature</i> , 2008, 451, 685-688.	13.7	162
106	Water vapour jets inside the plume of gas leaving Enceladus. <i>Nature</i> , 2008, 456, 477-479.	13.7	115
107	Explosive instability of water-ammonium ice. <i>JETP Letters</i> , 2008, 88, 240-243.	0.4	3
108	Mass unloading along the inner edge of the Enceladus plasma torus. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	16
109	Large-scale structure of Saturn's E-ring. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	53
110	Interaction evidence between Enceladus' atmosphere and Saturn's magnetosphere. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	16
111	Identification of Saturn's magnetospheric regions and associated plasma processes: Synopsis of Cassini observations during orbit insertion. <i>Reviews of Geophysics</i> , 2008, 46, .	9.0	23

#	ARTICLE	IF	CITATIONS
112	Comparative Aeronomy. Space Sciences Series of ISSI, 2008, , .	0.0	7
113	In-Flight Modification of the Cassini Reference Trajectory. , 2008, , .		3
114	Overview of the Cassini Extended Mission Trajectory. , 2008, , .		30
115	On the Design of an Enceladus Science Orbit. , 2008, , .		2
116	The Charging of Planetary Rings. Space Sciences Series of ISSI, 2008, , 435-453.	0.0	0
117	The LaPaz Icefield 04840 meteorite: Mineralogy, metamorphism, and origin of an amphibole- and biotite-bearing R chondrite. Geochimica Et Cosmochimica Acta, 2008, 72, 5757-5780.	1.6	90
118	Near-surface heating on Enceladus and the south polar thermal anomaly. Geophysical Research Letters, 2008, 35, .	1.5	29
119	Cassini detection of water-group pickup ions in the Enceladus torus. Geophysical Research Letters, 2008, 35, .	1.5	47
120	Evidence for temporal variability of Enceladus' gas jets: Modeling of Cassini observations. Geophysical Research Letters, 2008, 35, .	1.5	78
121	Enceladus: An estimate of heat flux and lithospheric thickness from flexurally supported topography. Geophysical Research Letters, 2008, 35, .	1.5	60
122	Enceladus: A potential source of ammonia products and molecular nitrogen for Saturn's magnetosphere. Journal of Geophysical Research, 2008, 113, .	3.3	33
123	Plasma temperatures in Saturn's ionosphere. Journal of Geophysical Research, 2008, 113, .	3.3	41
124	Mobile lid convection beneath Enceladus' south polar terrain. Journal of Geophysical Research, 2008, 113, .	3.3	59
125	Is Enceladus' plume tidally controlled?. Geophysical Research Letters, 2008, 35, .	1.5	16
126	Water in the Solar System. Annual Review of Astronomy and Astrophysics, 2008, 46, 57-87.	8.1	78
127	Cassini-Huygens Mission Overview and Recent Science Results. Aerospace Conference Proceedings IEEE, 2008, , .	0.0	4
128	Radiant flux from Earth's subaerially erupting volcanoes. International Journal of Remote Sensing, 2008, 29, 6443-6466.	1.3	42
129	Enceladus—Oasis or Ice Ball?. Science, 2008, 320, 1432-1433.	6.0	17

#	ARTICLE	IF	CITATIONS
130	Intelligent systems for the autonomous exploration of Titan and Enceladus. Proceedings of SPIE, 2008, , .	0.8	4
131	Life in the Universe. Advances in Astrobiology and Biogeophysics, 2008, , .	0.6	104
132	Enceladus Mission Architecture Using Titan Aerogravity Assist for Orbital Capture About Saturn. Journal of Spacecraft and Rockets, 2008, 45, 635-638.	1.3	4
133	Mission Concepts for Studying Enceladus. AIP Conference Proceedings, 2008, , .	0.3	2
134	The Possible Origin and Persistence of Life on Enceladus and Detection of Biomarkers in the Plume. Astrobiology, 2008, 8, 909-919.	1.5	166
135	COMMISSION 16: PHYSICAL STUDY OF PLANETS AND SATELLITES. Proceedings of the International Astronomical Union, 2008, 4, 163-168.	0.0	0
136	First High Solar Phase Angle Observations of Rhea Using <i>Cassini</i> VIMS: Upper Limits on Water Vapor and Geologic Activity. Astrophysical Journal, 2008, 680, L65-L68.	1.6	7
137	IS THE 3.5 μ m INFRARED FEATURE ON ENCELADUS DUE TO HYDROGEN PEROXIDE?. Astrophysical Journal, 2009, 694, L92-L94.	1.6	13
138	A biologist's guide to the solar system. , 0, , 115-142.		2
139	Planetary structural mapping. , 0, , 351-396.		2
140	Saturn Impact Trajectories for Cassini End-of-Mission. Journal of Spacecraft and Rockets, 2009, 46, 353-364.	1.3	13
141	Cycler Trajectories in Planetary Moon Systems. Journal of Guidance, Control, and Dynamics, 2009, 32, 143-157.	1.6	27
142	The Communicating Pipe Model for Icy Plumes on Enceladus. Chinese Physics Letters, 2009, 26, 119601.	1.3	1
143	Response of Saturn's ionosphere to solar radiation: Testing parameterizations for thermal electron heating and secondary ionization processes. Planetary and Space Science, 2009, 57, 1699-1705.	0.9	25
144	On the design of an Enceladus science orbit. Acta Astronautica, 2009, 65, 27-39.	1.7	29
145	Crater modification and geologic activity in Enceladus' heavily cratered plains: Evidence from the impact crater distribution. Icarus, 2009, 202, 656-668.	1.1	69
146	A redetermination of the ice/vapor ratio of Enceladus's plumes: Implications for sublimation and the lack of a liquid water reservoir. Icarus, 2009, 203, 238-241.	1.1	29
147	Saturn Satellites as Seen by Cassini Mission. Earth, Moon and Planets, 2009, 105, 289-310.	0.3	4

#	ARTICLE	IF	CITATIONS
148	TandEM: Titan and Enceladus mission. <i>Experimental Astronomy</i> , 2009, 23, 893-946.	1.6	77
149	Sodium salts in E-ring ice grains from an ocean below the surface of Enceladus. <i>Nature</i> , 2009, 459, 1098-1101.	13.7	435
150	No sodium in the vapour plumes of Enceladus. <i>Nature</i> , 2009, 459, 1102-1104.	13.7	41
151	Liquid water on Enceladus from observations of ammonia and ^{40}Ar in the plume. <i>Nature</i> , 2009, 460, 487-490.	13.7	470
152	Volcanism in the Solar System. <i>Nature Geoscience</i> , 2009, 2, 389-397.	5.4	49
153	Endogenic heat from Enceladus' south polar fractures: New observations, and models of conductive surface heating. <i>Icarus</i> , 2009, 199, 189-196.	1.1	55
154	Titania's radius and an upper limit on its atmosphere from the September 8, 2001 stellar occultation. <i>Icarus</i> , 2009, 199, 458-476.	1.1	26
155	Fracture penetration in planetary ice shells. <i>Icarus</i> , 2009, 199, 536-541.	1.1	41
156	Did Saturn's rings form during the Late Heavy Bombardment?. <i>Icarus</i> , 2009, 199, 413-428.	1.1	107
157	Three tenuous rings/arcs for three tiny moons. <i>Icarus</i> , 2009, 199, 378-386.	1.1	51
158	Saturn in hot water: Viscous evolution of the Enceladus torus. <i>Icarus</i> , 2009, 202, 280-286.	1.1	26
159	Thermal evolution of Kuiper belt objects, with implications for cryovolcanism. <i>Icarus</i> , 2009, 202, 694-714.	1.1	89
160	The rheology of cryovolcanic slurries: Motivation and phenomenology of methanol-water slurries with implications for Titan. <i>Icarus</i> , 2009, 202, 607-619.	1.1	15
161	Origin of ice diapirism, true polar wander, subsurface ocean, and tiger stripes of Enceladus driven by compositional convection. <i>Icarus</i> , 2009, 202, 669-680.	1.1	21
162	Geological implications of a physical libration on Enceladus. <i>Icarus</i> , 2009, 203, 541-552.	1.1	35
163	The absence of endogenic methane on Titan and its implications for the origin of atmospheric nitrogen. <i>Icarus</i> , 2009, 204, 637-644.	1.1	35
164	Recent orbital evolution and the internal structures of Enceladus and Dione. <i>Icarus</i> , 2009, 204, 597-609.	1.1	37
165	The opposition effect in the outer Solar system: A comparative study of the phase function morphology. <i>Planetary and Space Science</i> , 2009, 57, 1282-1301.	0.9	13

#	ARTICLE	IF	CITATIONS
166	Energetic particles in Saturn's magnetosphere during the Cassini nominal mission (July 2004â€“(July) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	0.9	43
167	Old Faithful model for radiolytic gas-driven cryovolcanism at Enceladus. Planetary and Space Science, 2009, 57, 1607-1620.	0.9	37
168	The plasma interaction of Enceladus: 3D hybrid simulations and comparison with Cassini MAG data. Planetary and Space Science, 2009, 57, 2113-2122.	0.9	51
169	Thermodynamics and Mass Transport in Multicomponent, Multiphase H ₂ O Systems of Planetary Interest. Annual Review of Earth and Planetary Sciences, 2009, 37, 449-477.	4.6	31
170	Uniform parameterized theory of convection in medium sized icy satellites of Saturn. Acta Geophysica, 2009, 57, 548-566.	1.0	4
171	On the tidal heating of Enceladus. Journal of Geodynamics, 2009, 48, 247-252.	0.7	4
172	The Search for Alien Life in Our Solar System: Strategies and Priorities. Astrobiology, 2009, 9, 335-343.	1.5	87
173	Life in ice: implications to astrobiology. Proceedings of SPIE, 2009, , .	0.8	0
174	Fine jet structure of electrically charged grains in Enceladus' plume. Geophysical Research Letters, 2009, 36, .	1.5	86
175	Ocean tides heat Enceladus. Geophysical Research Letters, 2009, 36, .	1.5	52
176	Cassini detection of Enceladus' cold waterâ€“group plume ionosphere. Geophysical Research Letters, 2009, 36, .	1.5	57
177	Oneâ€“hundredâ€“kmâ€“scale basins on Enceladus: Evidence for an active ice shell. Geophysical Research Letters, 2009, 36, .	1.5	38
178	Thermal ion flow in Saturn's inner magnetosphere measured by the Cassini plasma spectrometer: A signature of the Enceladus torus?. Geophysical Research Letters, 2009, 36, .	1.5	68
179	Identification of photoelectron energy peaks in Saturn's inner neutral torus. Journal of Geophysical Research, 2009, 114, .	3.3	19
180	Importance of Model Simulations in Cassini In-Flight Mission Events. , 2009, , .		5
181	Analysis of architectures for the scientific exploration of Enceladus. , 2009, , .		3
182	Water on Planets. Proceedings of the International Astronomical Union, 2009, 5, 29-44.	0.0	1
183	Electron density dropout near Enceladus in the context of waterâ€“vapor and waterâ€“ice. Geophysical Research Letters, 2009, 36, .	1.5	42

#	ARTICLE	IF	CITATIONS
184	Solar primary and secondary ionization at Saturn. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	48
185	Interior Models of Icy Satellites and Prospects of Investigation. <i>Proceedings of the International Astronomical Union</i> , 2009, 5, 113-120.	0.0	0
186	The surface composition of Enceladus: clues from the Ultraviolet. <i>Proceedings of the International Astronomical Union</i> , 2009, 5, 126-130.	0.0	1
187	A cometary perspective of Enceladus. <i>Proceedings of the International Astronomical Union</i> , 2009, 5, 151-156.	0.0	1
188	Europa, Enceladus, and Titan as possible sites for life. <i>Proceedings of the International Astronomical Union</i> , 2009, 5, 676-677.	0.0	2
189	TIDALLY HEATED TERRESTRIAL EXOPLANETS: VISCOELASTIC RESPONSE MODELS. <i>Astrophysical Journal</i> , 2009, 707, 1000-1015.	1.6	156
190	Tectonics of the outer planet satellites. , 2009, , 264-350.		30
191	Photolysis of solid NH ₃ and NH ₃ â€“H ₂ O mixtures at 193 nm. <i>Journal of Chemical Physics</i> , 2010, 133, 214506.	1.2	21
192	On the thermal history of Saturnâ€™s satellites Titan and Enceladus. <i>Solar System Research</i> , 2010, 44, 192-201.	0.3	6
193	The ultraviolet reflectance of Enceladus: Implications for surface composition. <i>Icarus</i> , 2010, 206, 608-617.	1.1	52
194	Mechanisms for incorporation of hydrogen in and on terrestrial planetary surfaces. <i>Icarus</i> , 2010, 208, 425-437.	1.1	56
195	The initial responses of hot liquid water released under low atmospheric pressures: Experimental insights. <i>Icarus</i> , 2010, 210, 488-506.	1.1	13
196	Magnetic Fields of the Satellites of Jupiter and Saturn. <i>Space Science Reviews</i> , 2010, 152, 271-305.	3.7	41
197	Induced Magnetic Fields in Solar System Bodies. <i>Space Science Reviews</i> , 2010, 152, 391-421.	3.7	58
198	Exobiology and Planetary Protection of icy moons. <i>Space Science Reviews</i> , 2010, 153, 511-535.	3.7	13
199	Atmospheric/Exospheric Characteristics of Icy Satellites. <i>Space Science Reviews</i> , 2010, 153, 155-184.	3.7	31
200	Evolution of Icy Satellites. <i>Space Science Reviews</i> , 2010, 153, 447-484.	3.7	49
201	Implications of Rotation, Orbital States, Energy Sources, and Heat Transport for Internal Processes in Icy Satellites. <i>Space Science Reviews</i> , 2010, 153, 317-348.	3.7	52

#	ARTICLE	IF	CITATIONS
202	Surface, Subsurface and Atmosphere Exchanges on the Satellites of the Outer Solar System. <i>Space Science Reviews</i> , 2010, 153, 375-410.	3.7	19
203	Characteristics of Icy Surfaces. <i>Space Science Reviews</i> , 2010, 153, 63-111.	3.7	32
204	Chemical Composition of Icy Satellite Surfaces. <i>Space Science Reviews</i> , 2010, 153, 113-154.	3.7	65
205	Interpretation and analysis of planetary structures. <i>Journal of Structural Geology</i> , 2010, 32, 855-875.	1.0	71
206	Identification of cryovolcanism on Titan using fuzzy cognitive maps. <i>Planetary and Space Science</i> , 2010, 58, 761-779.	0.9	38
207	Thermal inertia and bolometric Bond albedo values for Mimas, Enceladus, Tethys, Dione, Rhea and Iapetus as derived from Cassini/CIRS measurements. <i>Icarus</i> , 2010, 206, 573-593.	1.1	113
208	Dione's spectral and geological properties. <i>Icarus</i> , 2010, 206, 631-652.	1.1	61
209	Cassini spectra and photometry 0.25–5.1 μ m of the small inner satellites of Saturn. <i>Icarus</i> , 2010, 206, 524-536.	1.1	16
210	Subsurface heat transfer on Enceladus: Conditions under which melting occurs. <i>Icarus</i> , 2010, 206, 594-607.	1.1	58
211	How the Enceladus dust plume feeds Saturn's E ring. <i>Icarus</i> , 2010, 206, 446-457.	1.1	125
212	Disk-integrated bolometric Bond albedos and rotational light curves of saturnian satellites from Cassini Visual and Infrared Mapping Spectrometer. <i>Icarus</i> , 2010, 206, 537-560.	1.1	39
213	Atmospheric control of the cooling rate of impact melts and cryolavas on Titan's surface. <i>Icarus</i> , 2010, 208, 887-895.	1.1	14
214	Meridional distribution of CH ₃ C ₂ H and C ₄ H ₂ in Saturn's stratosphere from CIRS/Cassini limb and nadir observations. <i>Icarus</i> , 2010, 209, 682-695.	1.1	35
215	On the origin of south polar folds on Enceladus. <i>Icarus</i> , 2010, 208, 499-503.	1.1	28
216	Galileo PPR observations of Europa: Hotspot detection limits and surface thermal properties. <i>Icarus</i> , 2010, 210, 763-769.	1.1	44
217	The four hundred years of planetary science since Galileo and Kepler. <i>Nature</i> , 2010, 466, 575-584.	13.7	11
218	The role of episodic overturn in generating the surface geology and heat flow on Enceladus. <i>Nature Geoscience</i> , 2010, 3, 88-91.	5.4	67
219	Tectonic overturn on Enceladus. <i>Nature Geoscience</i> , 2010, 3, 75-76.	5.4	11

#	ARTICLE	IF	CITATIONS
220	The influence of Titan on Saturn kilometric radiation. <i>Annales Geophysicae</i> , 2010, 28, 395-406.	0.6	4
221	An Evolving View of Saturn's Dynamic Rings. <i>Science</i> , 2010, 327, 1470-1475.	6.0	127
222	A Search for Water Masers in the Saturnian System. <i>Publication of the Astronomical Society of Japan</i> , 2010, 62, L17-L21.	1.0	2
223	Radiation chemistry in ammonia-water ices. <i>Journal of Chemical Physics</i> , 2010, 132, 054508.	1.2	21
224	Ion Pickup at Comets: Comparison with Other Unmagnetized Objects. <i>AIP Conference Proceedings</i> , 2010, , .	0.3	2
225	Neutral Clouds and Their Influence on Pick-up Ions in Saturn's Magnetosphere. , 2010, , .		1
226	Librational response of Enceladus. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	33
227	Modeling the Enceladus plume's plasma interaction. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	27
228	Hybrid simulations of the plasma environment around Enceladus. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	8
229	Phase relations between energetic neutral atom intensities and kilometric radio emissions at Saturn. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	10
230	Interaction of Saturn's magnetosphere and its moons: 1. Interaction between corotating plasma and standard obstacles. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	20
231	Periodic plasma escape from the mass-loaded Kronian magnetosphere. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	43
232	Enceladus plume variability and the neutral gas densities in Saturn's magnetosphere. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	93
233	Detection and measurement of ice grains and gas distribution in the Enceladus plume by Cassini's Ion Neutral Mass Spectrometer. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	56
234	An approach to numerical simulation of the gas distribution in the atmosphere of Enceladus. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	31
235	Coupling mantle convection and tidal dissipation: Applications to Enceladus and Earth-like planets. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	46
236	Sodium chloride as a geophysical probe of a subsurface ocean on Enceladus. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	25
237	Modification of the plasma in the nearvicinity of Enceladus by the enveloping dust. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	26

#	ARTICLE	IF	CITATIONS
238	Cassini INMS observations of neutral molecules in Saturn's E-ring. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	25
239	Interaction of Saturn's magnetosphere and its moons: 3. Time variation of the Enceladus plume. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	11
240	Simulating the one-dimensional structure of Titan's upper atmosphere: 2. Alternative scenarios for methane escape. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	27
241	Saturn: Atmosphere, Ionosphere, and Magnetosphere. <i>Science</i> , 2010, 327, 1476-1479.	6.0	21
242	Percy W. Bridgman's second century. <i>High Pressure Research</i> , 2010, 30, 581-619.	0.4	42
243	Negative ions at Titan and Enceladus: recent results. <i>Faraday Discussions</i> , 2010, 147, 293.	1.6	51
244	Environmental review of geyser basins: resources, scarcity, threats, and benefits. <i>Environmental Reviews</i> , 2010, 18, 209-238.	2.1	5
245	Io's Tortured Interior. <i>Science</i> , 2011, 332, 1157-1158.	6.0	0
246	Limits of Enceladus's ice shell thickness from tidally driven tiger stripe shear failure. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	30
247	Outer magnetospheric structure: Jupiter and Saturn compared. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	30
248	Neutral H ₂ and H ₂ ⁺ ions in the Saturnian magnetosphere. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	22
249	Influence of negatively charged plume grains and hemisphere coupling currents on the structure of Enceladus' Alfvén wings: Analytical modeling of Cassini magnetometer observations. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	50
250	High heat flow from Enceladus' south polar region measured using 10 ⁶ –600 cm ² Cassini/CIRS data. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	145
251	Joule heating of the south polar terrain on Enceladus. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	8
252	Auroral hiss, electron beams and standing Alfvén wave currents near Saturn's moon Enceladus. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	23
253	The composition and structure of the Enceladus plume. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	136
254	Cryoclastic origin of particles on the surface of Enceladus. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	16
255	A fracture history on Enceladus provides evidence for a global ocean. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	74

#	ARTICLE	IF	CITATIONS
256	Long term time variations of the suprathermal ions in Saturn's magnetosphere. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	17
257	Stream particles as the probe of the dust-plasma-magnetosphere interaction at Saturn. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	25
258	Electron energetics in the Enceladus torus. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	15
259	Probing Saturn's ion cyclotron waves on high-inclination orbits: Lessons for wave generation. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	18
260	The water vapor plumes of Enceladus. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	39
261	Dusty plasma in the vicinity of Enceladus. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	89
262	Processes involving clusters and small particles in a buffer gas. <i>Physics-Uspekhi</i> , 2011, 54, 691-721.	0.8	55
264	Production of Oxidants by Ion Bombardment of Icy Moons in the Outer Solar System. <i>Advances in Astronomy</i> , 2011, 2011, 1-10.	0.5	12
265	<i>HUBBLE SPACE TELESCOPE</i>/ADVANCED CAMERA FOR SURVEYS OBSERVATIONS OF EUROPA'S ATMOSPHERIC ULTRAVIOLET EMISSION AT EASTERN ELONGATION. <i>Astrophysical Journal</i> , 2011, 738, 153.	1.6	34
266	Estimation of Enceladus Plume Density Using Cassini Flight Data. , 2011, , .		0
267	Direct detection of the Enceladus water torus with<i>Herschel</i>. <i>Astronomy and Astrophysics</i> , 2011, 532, L2.	2.1	59
268	The auroral footprint of Enceladus on Saturn. <i>Nature</i> , 2011, 472, 331-333.	13.7	82
269	The effect of Nix and Hydra on the putative Plutoâ€“Charon dust cloud. <i>Planetary and Space Science</i> , 2011, 59, 1647-1653.	0.9	21
270	Miniature mass spectrometer equipped with electrospray and desorption electrospray ionization for direct analysis of organics from solids and solutions. <i>International Journal of Mass Spectrometry</i> , 2011, 306, 187-195.	0.7	50
271	Accretion of Saturnâ€™s mid-sized moons during the viscous spreading of young massive rings: Solving the paradox of silicate-poor rings versus silicate-rich moons. <i>Icarus</i> , 2011, 216, 535-550.	1.1	123
272	Total particulate mass in Enceladus plumes and mass of Saturnâ€™s E ring inferred from Cassini ISS images. <i>Icarus</i> , 2011, 216, 492-506.	1.1	64
273	A Two-Tiered Approach to Assessing the Habitability of Exoplanets. <i>Astrobiology</i> , 2011, 11, 1041-1052.	1.5	117
274	Mapping Magnetospheric Equatorial Regions at Saturn from Cassini Prime Mission Observations. <i>Space Science Reviews</i> , 2011, 164, 1-83.	3.7	40

#	ARTICLE	IF	CITATIONS
275	Ultraviolet emissions in the planetary atmospheres. <i>Astrophysics and Space Science</i> , 2011, 335, 3-8.	0.5	2
276	Return to Europa: Overview of the Jupiter Europa orbiter mission. <i>Advances in Space Research</i> , 2011, 48, 629-650.	1.2	22
277	Plasma, plumes and rings: Saturn system dynamics as recorded in global color patterns on its midsize icy satellites. <i>Icarus</i> , 2011, 211, 740-757.	1.1	114
278	Tidal dynamical considerations constrain the state of an ocean on Enceladus. <i>Icarus</i> , 2011, 211, 770-779.	1.1	75
279	An assessment and test of Enceladus as an important source of Saturn's ring atmosphere and ionosphere. <i>Icarus</i> , 2011, 212, 294-299.	1.1	12
280	Characteristics of the dust-plasma interaction near Enceladus's South Pole. <i>Planetary and Space Science</i> , 2011, 59, 17-25.	0.9	43
281	The search for life in our Solar System and the implications for science and society. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2011, 369, 594-606.	1.6	34
282	A salt-water reservoir as the source of a compositionally stratified plume on Enceladus. <i>Nature</i> , 2011, 474, 620-622.	13.7	394
283	Dynamic Landmarking for Surface Feature Identification and Change Detection. <i>ACM Transactions on Intelligent Systems and Technology</i> , 2012, 3, 1-22.	2.9	13
284	Autonomous detection of volcanic plumes on outer planetary bodies. , 2012, , .		1
285	Ammonia clathrate hydrates as new solid phases for Titan, Enceladus, and other planetary systems. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012, 109, 14785-14790.	3.3	99
286	New experimental studies of ice grain ejection by massive gas flow, implications to comets, Enceladus, Triton and Mars. <i>EAS Publications Series</i> , 2012, 58, 205-208.	0.3	1
287	Remote Raman Spectroscopy for Planetary Exploration: A Review. <i>Applied Spectroscopy</i> , 2012, 66, 137-150.	1.2	105
288	BLISTERING AND EXPLOSIVE DESORPTION OF IRRADIATED AMMONIA-WATER MIXTURES. <i>Astrophysical Journal</i> , 2012, 744, 102.	1.6	7
289	Cassini capturing of freshly-produced water-group ions in the Enceladus torus. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	7
290	Survey of Spacecraft Trajectory Design in Strongly Perturbed Environments. <i>Journal of Guidance, Control, and Dynamics</i> , 2012, 35, 705-720.	1.6	39
291	Friction of ice on ice. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	87
292	The Planetary Time Scale. , 2012, , 275-298.		8

#	ARTICLE	IF	CITATIONS
293	Ion densities and velocities in the inner plasma torus of Saturn. <i>Planetary and Space Science</i> , 2012, 73, 151-160.	0.9	36
294	Tectonothermal evolution of solid bodies: terrestrial planets, exoplanets and moons. <i>Australian Journal of Earth Sciences</i> , 2012, 59, 189-198.	0.4	7
295	Aqueous fluid composition in CI chondritic materials: Chemical equilibrium assessments in closed systems. <i>Icarus</i> , 2012, 220, 713-729.	1.1	81
296	Mimasâ€™ far-UV albedo: Spatial variations. <i>Icarus</i> , 2012, 220, 922-931.	1.1	17
297	Modeling ammoniaâ€™ ammonium aqueous chemistries in the Solar Systemâ€™s icy bodies. <i>Icarus</i> , 2012, 220, 932-946.	1.1	56
298	Tidal control of jet eruptions on Enceladus as observed by Cassini ISS between 2005 and 2007. <i>Icarus</i> , 2012, 220, 896-903.	1.1	22
299	Saturnâ€™s icy satellites and rings investigated by Cassiniâ€™ VIMS: III â€™ Radial compositional variability. <i>Icarus</i> , 2012, 220, 1064-1096.	1.1	86
300	Microchip capillary electrophoresis instrumentation for in situ analysis in the search for extraterrestrial life. <i>Electrophoresis</i> , 2012, 33, 2624-2638.	1.3	44
301	Ion chemistry in space. <i>Reports on Progress in Physics</i> , 2012, 75, 066901.	8.1	194
302	Life in the Saturnian Neighborhood. <i>Cellular Origin and Life in Extreme Habitats</i> , 2012, , 485-522.	0.3	0
303	Charged nanograins in the Enceladus plume. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	71
304	Seasonal variations in Saturn's plasma between the main rings and Enceladus. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	27
305	Flow stagnation at Enceladus: The effects of neutral gas and charged dust. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	9
306	Effect of photoâ€™dissociation on the spreading of OH and O clouds in Saturn's inner magnetosphere. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	4
307	Modeling of electron fluxes in the Enceladus plume. <i>Journal of Geophysical Research</i> , 2012, 117, n/a-n/a.	3.3	8
308	The roles of charge exchange and dissociation in spreading Saturn's neutral clouds. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	42
309	Enceladus' extreme heat flux as revealed by its relaxed craters. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	85
310	On the application of simple rift basin models to the south polar region of Enceladus. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	11

#	ARTICLE	IF	CITATIONS
311	Enceladus: A hypothesis for bringing both heat and chemicals to the surface. <i>Icarus</i> , 2012, 221, 53-62.	1.1	46
312	Behavior of nearby synchronous rotations of a Poincaré-Hough satellite at low eccentricity. <i>Celestial Mechanics and Dynamical Astronomy</i> , 2012, 112, 353-383.	0.5	9
313	The impact of a weak south pole on thermal convection in Enceladus's ice shell. <i>Icarus</i> , 2012, 218, 320-330.	1.1	24
314	The role of ejecta in the small crater populations on the mid-sized saturnian satellites. <i>Icarus</i> , 2012, 218, 602-621.	1.1	46
315	Late-stage impacts and the orbital and thermal evolution of Tethys. <i>Icarus</i> , 2012, 218, 348-355.	1.1	11
316	The Cassini Enceladus encounters 2005-2010 in the view of energetic electron measurements. <i>Icarus</i> , 2012, 218, 433-447.	1.1	14
317	Efficiency of neutrino-induced radio measurements to inspect local areas of Enceladus. <i>Icarus</i> , 2012, 218, 555-560.	1.1	2
318	The electromagnetic pickup of submicron-sized dust above Enceladus's northern hemisphere. <i>Icarus</i> , 2012, 219, 498-501.	1.1	12
319	Tidally-induced melting events as the origin of south-pole activity on Enceladus. <i>Icarus</i> , 2012, 219, 655-664.	1.1	60
320	UV spectrum of Enceladus. <i>Icarus</i> , 2012, 220, 29-35.	1.1	7
321	The distribution of Titan's high-altitude (out to $\sim 1/450,000$ km) exosphere from energetic neutral atom (ENA) measurements by Cassini/INCA. <i>Planetary and Space Science</i> , 2012, 60, 107-114.	0.9	28
322	Giant impacts in the Saturnian system: A possible origin of diversity in the inner mid-sized satellites. <i>Planetary and Space Science</i> , 2012, 63-64, 133-138.	0.9	34
323	The Saturnian satellite Rhea as seen by Cassini VIMS. <i>Planetary and Space Science</i> , 2012, 61, 142-160.	0.9	38
324	Temperature and grain size dependence of near-IR spectral signature of crystalline water ice: From lab experiments to Enceladus' south pole. <i>Planetary and Space Science</i> , 2012, 61, 124-134.	0.9	11
325	Image processing onboard spacecraft for autonomous plume detection. <i>Planetary and Space Science</i> , 2012, 62, 153-159.	0.9	15
326	Charging of ice grains in Saturn's E ring: theory and observations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 423, 176-184.	1.6	12
327	Planetary Magnetospheres. , 2013, , 251-307.		23
328	Radiation Resistance of Sequencing Chips for <i>in situ</i> Life Detection. <i>Astrobiology</i> , 2013, 13, 560-569.	1.5	9

#	ARTICLE	IF	CITATIONS
329	Ice rheology and tidal heating of Enceladus. <i>Icarus</i> , 2013, 226, 10-19.	1.1	32
330	An observed correlation between plume activity and tidal stresses on Enceladus. <i>Nature</i> , 2013, 500, 182-184.	13.7	136
331	The Science of Solar System Ices. <i>Astrophysics and Space Science Library</i> , 2013, , .	1.0	35
332	Micrometer-sized ice particles for planetary-science experiments " II. Bidirectional reflectance. <i>Icarus</i> , 2013, 225, 352-366.	1.1	22
333	Thermal convection in a spherical shell with melting/freezing at either or both of its boundaries. <i>Journal of Earth Science (Wuhan, China)</i> , 2013, 24, 669-682.	1.1	13
334	Assessing planetary protection and contamination control technologies for planetary science missions. , 2013, , .		3
335	Life detection with the Enceladus Orbiting Sequencer. , 2013, , .		4
336	Experimental Investigations into Astrophysically Relevant Ionic Reactions. <i>Chemical Reviews</i> , 2013, 113, 8872-8905.	23.0	52
337	Habitability of Other Planets and Satellites. <i>Cellular Origin and Life in Extreme Habitats</i> , 2013, , .	0.3	1
338	Constraints on the detection of cryovolcanic plumes on Europa. <i>Planetary and Space Science</i> , 2013, 86, 1-9.	0.9	34
339	Clathrate Hydrates: Implications for Exchange Processes in the Outer Solar System. <i>Astrophysics and Space Science Library</i> , 2013, , 409-454.	1.0	27
340	Spontaneous formation of nonspherical water ice grains in a plasma environment. <i>Geophysical Research Letters</i> , 2013, 40, 6258-6263.	1.5	19
341	The Early Evolution of the Atmospheres of Terrestrial Planets. <i>Thirty Years of Astronomical Discovery With UKIRT</i> , 2013, , .	0.3	4
342	The shape of Enceladus as explained by an irregular core: Implications for gravity, libration, and survival of its subsurface ocean. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 1775-1788.	1.5	19
343	Smart, texture-sensitive instrument classification for in situ rock and layer analysis. <i>Geophysical Research Letters</i> , 2013, 40, 4188-4193.	1.5	17
344	Periodicities in Saturn's magnetosphere. <i>Reviews of Geophysics</i> , 2013, 51, 1-30.	9.0	87
345	Modeling serpentinization: Applied to the early evolution of Enceladus and Mimas. <i>Icarus</i> , 2013, 225, 763-774.	1.1	40
346	Cryovolcanism on Titan: New results from Cassini RADAR and VIMS. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 416-435.	1.5	128

#	ARTICLE	IF	CITATIONS
347	The temperature and width of an active fissure on Enceladus measured with Cassini VIMS during the 14 April 2012 South Pole flyover. <i>Icarus</i> , 2013, 226, 1128-1137.	1.1	69
348	Impact of tidal heating on the onset of convection in Enceladus's ice shell. <i>Icarus</i> , 2013, 226, 898-904.	1.1	25
349	THE RADIAL DISTRIBUTION OF WATER ICE AND CHROMOPHORES ACROSS SATURN'S SYSTEM. <i>Astrophysical Journal</i> , 2013, 766, 76.	1.6	26
350	Estimation and Modeling of Enceladus Plume Jet Density Using Cassini Flight Data. <i>Journal of Spacecraft and Rockets</i> , 2013, 50, 317-325.	1.3	5
351	Microbial communities in the subglacial waters of the Vatnajökull ice cap, Iceland. <i>ISME Journal</i> , 2013, 7, 427-437.	4.4	60
352	Formation of a Nitrogen-Rich Atmosphere on Titan: A Review of Pre- and Post-Cassini-Huygens Knowledge. <i>Thirty Years of Astronomical Discovery With UKIRT</i> , 2013, , 107-122.	0.3	1
353	Enceladus: An Active Ice World in the Saturn System. <i>Annual Review of Earth and Planetary Sciences</i> , 2013, 41, 693-717.	4.6	142
354	Energetic aspects of Enceladus' magnetospheric interaction. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 3430-3445.	0.8	8
355	The extended Saturnian neutral cloud as revealed by global ENA simulations using Cassini/MIMI measurements. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 3027-3041.	0.8	30
356	Enceladus auroral hiss observations: Implications for electron beam locations. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 160-166.	0.8	8
357	Role of geobiology in the astrobiological exploration of the Solar System. , 2013, , .		2
358	Dust and spacecraft charging in Saturn's E ring. <i>Earth, Planets and Space</i> , 2013, 65, 149-156.	0.9	14
359	Tides on Satellites of Giant Planets. <i>Lecture Notes in Physics</i> , 2013, , 167-200.	0.3	5
360	Tidal Venuses: Triggering a Climate Catastrophe via Tidal Heating. <i>Astrobiology</i> , 2013, 13, 225-250.	1.5	124
361	Review of Exchange Processes on Ganymede in View of Its Planetary Protection Categorization. <i>Astrobiology</i> , 2013, 13, 991-1004.	1.5	16
362	The effect of an asymmetric core on convection in Enceladus' ice shell: Implications for south polar tectonics and heat flux. <i>Geophysical Research Letters</i> , 2013, 40, 5610-5614.	1.5	15
363	Convection-driven compaction as a possible origin of Enceladus's long wavelength topography. <i>Journal of Geophysical Research E: Planets</i> , 2013, 118, 908-915.	1.5	40
364	Photoelectrons in the Enceladus plume. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 5099-5108.	0.8	13

#	ARTICLE	IF	CITATIONS
365	Eruptions at Lone Star Geyser, Yellowstone National Park, USA: 1. Energetics and eruption dynamics. <i>Journal of Geophysical Research: Solid Earth</i> , 2013, 118, 4048-4062.	1.4	49
366	DSMC Simulation of Near-field Enceladus Plumes from Tiger Stripe Fractures. , 2013, , .		1
367	Astrometric reduction of Cassini ISS images of the Saturnian satellites Mimas and Enceladus. <i>Astronomy and Astrophysics</i> , 2013, 551, A129.	2.1	20
368	Planetary volcanism. , 2013, , 384-413.		4
369	Quantum Tunnelling to the Origin and Evolution of Life. <i>Current Organic Chemistry</i> , 2013, 17, 1758-1770.	0.9	50
370	Relative age dating of cosmic and terrestrial events: the cratering record. , 0, , 61-72.		0
371	Auroral Processes Associated with Saturn's Moon Enceladus. <i>Geophysical Monograph Series</i> , 2013, , 305-314.	0.1	7
373	Cryovolcanic Features. , 2014, , 1-10.		0
374	Bright Plains (Icy Moons). , 2014, , 1-4.		0
375	Albedo Feature. , 2014, , 1-26.		0
376	Geyser. , 2014, , 1-8.		0
378	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
379	Antifreezes Act as Catalysts for Methane Hydrate Formation from Ice. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 10429-10433.	7.2	33
380	A Sublimation-driven Exospheric Model of Ceres. <i>Planetary and Space Science</i> , 2014, 104, 157-162.	0.9	14
381	A model of the spatial and size distribution of Enceladus ³ dust plume. <i>Planetary and Space Science</i> , 2014, 104, 216-233.	0.9	15
382	Some remarks on the early evolution of Enceladus. <i>Planetary and Space Science</i> , 2014, 104, 185-199.	0.9	8
383	Orbital apocenter is not a sufficient condition for HST/STIS detection of Europa's water vapor aurora. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E5123-32.	3.3	65
384	Extreme Ultraviolet Radiation Measurement for Planetary Atmospheres/Magnetospheres from the Earth-Orbiting Spacecraft (Extreme Ultraviolet Spectroscopy for Exospheric Dynamics: EXCEED). <i>Space Science Reviews</i> , 2014, 184, 237-258.	3.7	68

#	ARTICLE	IF	CITATIONS
385	Water transport in planetary ice shells by two-phase flow – a parametric study. <i>Geophysical and Astrophysical Fluid Dynamics</i> , 2014, 108, 639-666.	0.4	8
386	How Do Modern Extreme Hydrothermal Environments Inform the Identification of Martian Habitability? The Case of the El Tatio Geyser Field. <i>Challenges</i> , 2014, 5, 430-443.	0.9	12
387	On the Response of Halophilic Archaea to Space Conditions. <i>Life</i> , 2014, 4, 66-76.	1.1	15
388	Autonomous volcanic plume detection on planetary bodies. <i>Acta Astronautica</i> , 2014, 97, 151-163.	1.7	3
389	Geophysical and Geochemical Evidence for Deep Temperature Variations Beneath Mid-Ocean Ridges. <i>Science</i> , 2014, 344, 80-83.	6.0	169
390	The Gravity Field and Interior Structure of Enceladus. <i>Science</i> , 2014, 344, 78-80.	6.0	339
391	Follow the Plume: The Habitability of Enceladus. <i>Astrobiology</i> , 2014, 14, 352-355.	1.5	91
392	Planetary habitability: lessons learned from terrestrial analogues. <i>International Journal of Astrobiology</i> , 2014, 13, 81-98.	0.9	107
393	Geology and Photometric Variation of Solar System Bodies with Minor Atmospheres: Implications for Solid Exoplanets. <i>Astrobiology</i> , 2014, 14, 753-768.	1.5	15
394	Navigation system for a research ice probe for antarctic glaciers. , 2014, , .		7
395	Antarctic analog for dilational bands on Europa. <i>Earth and Planetary Science Letters</i> , 2014, 401, 275-283.	1.8	2
396	Cassini’s VIMS observations of Saturn’s main rings: I. Spectral properties and temperature radial profiles variability with phase angle and elevation. <i>Icarus</i> , 2014, 241, 45-65.	1.1	24
397	Thermophysical property variations across Dione and Rhea. <i>Icarus</i> , 2014, 241, 239-247.	1.1	23
398	HOW THE GEYSERS, TIDAL STRESSES, AND THERMAL EMISSION ACROSS THE SOUTH POLAR TERRAIN OF ENCELADUS ARE RELATED. <i>Astronomical Journal</i> , 2014, 148, 45.	1.9	129
400	Structure and evolution of the lunar Procellarum region as revealed by GRAIL gravity data. <i>Nature</i> , 2014, 514, 68-71.	13.7	85
401	Major Satellites of the Giant Planets. , 2014, , 313-334.		1
402	Formation, Habitability, and Detection of Extrasolar Moons. <i>Astrobiology</i> , 2014, 14, 798-835.	1.5	120
403	Random dust charge fluctuations in the near-Enceladus plasma. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 6190-6198.	0.8	9

#	ARTICLE	IF	CITATIONS
404	Comparative estimates of the heat generated by ocean tides on icy satellites in the outer Solar System. <i>Icarus</i> , 2014, 243, 358-385.	1.1	47
405	TIDALLY MODULATED ERUPTIONS ON ENCELADUS: <i>CASSINI</i> ISS OBSERVATIONS AND MODELS. <i>Astronomical Journal</i> , 2014, 148, 46.	1.9	66
406	Formation of ridges on Europa above crystallizing water bodies inside the ice shell. <i>Icarus</i> , 2014, 237, 190-201.	1.1	24
407	Non-steady state tidal heating of Enceladus. <i>Icarus</i> , 2014, 235, 75-85.	1.1	24
408	Planetary protection on international waters: An onboard protocol for capsule retrieval and biosafety control in sample return mission. <i>Advances in Space Research</i> , 2014, 53, 1135-1142.	1.2	7
409	Planetary Reorientation. <i>Annual Review of Earth and Planetary Sciences</i> , 2014, 42, 605-634.	4.6	30
410	An estimate of the dust pickup current at Enceladus. <i>Icarus</i> , 2014, 239, 217-221.	1.1	8
411	Processing of analogues of plume fallout in cold regions of Enceladus by energetic electrons. <i>Astronomy and Astrophysics</i> , 2014, 570, A120.	2.1	23
412	Electron density inside Enceladus plume inferred from plasma oscillations excited by dust impacts. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 3373-3380.	0.8	22
413	Properties of dust particles near Saturn inferred from voltage pulses induced by dust impacts on Cassini spacecraft. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 6294-6312.	0.8	40
414	Ion densities and magnetic signatures of dust pickup at Enceladus. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 2740-2774.	0.8	38
415	Keogram analysis of ENA images at Saturn. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 1771-1780.	0.8	17
416	Testâ€particle simulation of energetic electronâ€H ₂ O elastic collision along Saturn's magnetic field line around Enceladus. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 8971-8978.	0.8	1
417	Acoustic in-ice positioning in the Enceladus Explorer project. <i>Annals of Glaciology</i> , 2014, 55, 253-259.	2.8	7
418	Remote-Sensing of Planetary Surface Using Infrared Spectroscopy. <i>Microscopy and Microanalysis</i> , 2014, 20, 1666-1667.	0.2	0
419	Self-consistent generation of singleâ€plume state for Enceladus using non-Newtonian rheology. <i>Journal of Geophysical Research E: Planets</i> , 2014, 119, 416-439.	1.5	13
420	Dust charging in the Enceladus torus. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 221-236.	0.8	9
421	Accordion Ridges. , 2015, , 4-4.		0

#	ARTICLE	IF	CITATIONS
422	Ablation Polygon. , 2015, , 4-4.		0
423	Constraining the heat flux between Enceladus's tiger stripes: Numerical modeling of funiscular plains formation. Icarus, 2015, 260, 232-245.	1.1	27
424	Aeolian Bedforms. , 2015, , 5-5.		0
425	Aeolian Deposits. , 2015, , 5-12.		0
426	Thermal Contraction Crack Polygons (Permafrost). , 2015, , 2126-2130.		0
427	Ablation Hollow (Mars). , 2015, , 1-4.		0
428	Yardang. , 2015, , 2339-2347.		0
429	A new upper limit to the field-aligned potential near Titan. Geophysical Research Letters, 2015, 42, 4676-4684.	1.5	15
430	Internally driven large-scale changes in the size of Saturn's magnetosphere. Journal of Geophysical Research: Space Physics, 2015, 120, 7289-7306.	0.8	39
431	Modeling Europa's dust plumes. Geophysical Research Letters, 2015, 42, 10,541.	1.5	24
432	Interiors of Icy Moons from an Astrobiology Perspective: Deep Oceans and Icy Crusts. , 2015, , 459-487.		1
433	Avulsion Channel. , 2015, , 102-109.		1
434	In situ apparatus for the study of clathrate hydrates relevant to solar system bodies using synchrotron X-ray diffraction and Raman spectroscopy. Astronomy and Astrophysics, 2015, 574, A91.	2.1	5
435	Characteristics of ice grains in the Enceladus plume from Cassini observations. Journal of Geophysical Research: Space Physics, 2015, 120, 915-937.	0.8	34
436	Saturn Plasma Sources and Associated Transport Processes. Space Science Reviews, 2015, 192, 237-283.	3.7	25
437	Gravitational spreading, bookshelf faulting, and tectonic evolution of the South Polar Terrain of Saturn's moon Enceladus. Icarus, 2015, 260, 409-439.	1.1	30
438	A new approach to Saturn's periodicities. Journal of Geophysical Research: Space Physics, 2015, 120, 6436-6442.	0.8	5
439	Asymmetries observed in Saturn's magnetopause geometry. Geophysical Research Letters, 2015, 42, 6890-6898.	1.5	18

#	ARTICLE	IF	CITATIONS
440	Global contraction/expansion and polar lithospheric thinning on Titan from patterns of tectonism. <i>Journal of Geophysical Research E: Planets</i> , 2015, 120, 1220-1236.	1.5	24
441	Assessing the Ecophysiology of Methanogens in the Context of Recent Astrobiological and Planetological Studies. <i>Life</i> , 2015, 5, 1652-1686.	1.1	55
442	Shallow normal fault slopes on Saturnian icy satellites. <i>Journal of Geophysical Research E: Planets</i> , 2015, 120, 2053-2083.	1.5	16
443	Evidence for a seasonally dependent ring plasma in the region between Saturn's A Ring and Enceladus' orbit. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 6276-6285.	0.8	17
444	Amorphous Solid Water: Pulsed Heating of Buried N ₂ O ₄ . <i>Journal of Physical Chemistry C</i> , 2015, 119, 14548-14560.	1.5	1
445	Physics of Terrestrial Planets and Moons: An Introduction and Overview. , 2015, , 1-22.		4
446	Interior Structure, Composition, and Mineralogy of the Terrestrial Planets. , 2015, , 23-64.		24
447	Ice collapse over trapped water bodies on Enceladus and Europa. <i>Geophysical Research Letters</i> , 2015, 42, 712-719.	1.5	30
448	Low-speed friction and brittle compressive failure of ice: fundamental processes in ice mechanics. <i>International Materials Reviews</i> , 2015, 60, 451-478.	9.4	24
449	Aeolian Dust Deposits. , 2015, , 12-18.		0
450	Aureole Deposit (Olympus Mons). , 2015, , 97-102.		0
451	Agglutinate Cone. , 2015, , 24-24.		0
452	Modeling the total dust production of Enceladus from stochastic charge equilibrium and simulations. <i>Planetary and Space Science</i> , 2015, 119, 208-221.	0.9	10
453	A common origin for ridge-and-trough terrain on icy satellites by sluggish lid convection. <i>Physics of the Earth and Planetary Interiors</i> , 2015, 249, 18-27.	0.7	12
454	ON THE POSSIBILITY OF SIGNIFICANT ELECTRON DEPLETION DUE TO NANOGRAIN CHARGING IN THE COMA OF COMET 67P/CHURYUMOV-GERASIMENKO NEAR PERIHELION. <i>Astrophysical Journal</i> , 2015, 798, 130.	1.6	15
455	Possible evidence for a methane source in Enceladus' ocean. <i>Geophysical Research Letters</i> , 2015, 42, 1334-1339.	1.5	65
456	Interiors and Evolution of Icy Satellites. , 2015, , 605-635.		24
457	Planetary Atmospheres. , 2015, , 429-472.		16

#	ARTICLE	IF	CITATIONS
458	A unified nomenclature for tectonic structures on the surface of Enceladus. <i>Icarus</i> , 2015, 258, 67-81.	1.1	14
459	2D models of gas flow and ice grain acceleration in Enceladus's vents using DSMC methods. <i>Icarus</i> , 2015, 257, 362-376.	1.1	4
460	Study on morphology and growth of water-ice grains spontaneously generated in a laboratory plasma. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2015, 127, 83-91.	0.6	11
461	An introduction to the data and tools of planetary geomorphology. <i>Geomorphology</i> , 2015, 240, 137-145.	1.1	16
462	The fluffy core of Enceladus. <i>Icarus</i> , 2015, 258, 54-66.	1.1	61
463	The Origin of the Natural Satellites. , 2015, , 559-604.		20
464	Linking Europa's plume activity to tides, tectonics, and liquid water. <i>Icarus</i> , 2015, 253, 169-178.	1.1	22
465	On understanding the physics of the Enceladus south polar plume via numerical simulation. <i>Icarus</i> , 2015, 253, 205-222.	1.1	34
466	TRACKING THE GEYSERS OF ENCELADUS INTO SATURN'S E RING. <i>Astronomical Journal</i> , 2015, 149, 156.	1.9	10
467	Structural mapping of Enceladus and implications for formation of tectonized regions. <i>Journal of Geophysical Research E: Planets</i> , 2015, 120, 928-950.	1.5	56
468	Particle-in-cell simulation of spacecraft/plasma interactions in the vicinity of Enceladus. <i>Icarus</i> , 2015, 257, 1-8.	1.1	7
469	Curtain eruptions from Enceladus's south-polar terrain. <i>Nature</i> , 2015, 521, 57-60.	13.7	53
470	The pH of Enceladus's ocean. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 162, 202-219.	1.6	205
471	FORMATION AND ALIGNMENT OF ELONGATED, FRACTAL-LIKE WATER-ICE GRAINS IN EXTREMELY COLD, WEAKLY IONIZED PLASMA. <i>Astrophysical Journal</i> , 2015, 802, 112.	1.6	18
472	Runaway greenhouse effect on exomoons due to irradiation from hot, young giant planets. <i>International Journal of Astrobiology</i> , 2015, 14, 335-343.	0.9	47
473	VISCOELASTIC MODELS OF TIDALLY HEATED EXOMOONS. <i>Astrophysical Journal</i> , 2015, 804, 41.	1.6	41
474	Timing of water plume eruptions on Enceladus explained by interior viscosity structure. <i>Nature Geoscience</i> , 2015, 8, 601-604.	5.4	41
475	ENCELADUS'S GEYSERS: RELATION TO GEOLOGICAL FEATURES. <i>Astronomical Journal</i> , 2015, 150, 96.	1.9	27

#	ARTICLE	IF	CITATIONS
476	Constraints from Comets on the Formation and Volatile Acquisition of the Planets and Satellites. <i>Space Science Reviews</i> , 2015, 197, 297-342.	3.7	25
477	The interaction between Saturn's moons and their plasma environments. <i>Physics Reports</i> , 2015, 602, 1-65.	10.3	21
478	Plasma regions, charged dust and field-aligned currents near Enceladus. <i>Planetary and Space Science</i> , 2015, 117, 453-469.	0.9	16
479	Spatial distribution of ice blocks on Enceladus and implications for their origin and emplacement. <i>Icarus</i> , 2015, 245, 162-176.	1.1	20
480	A kinetic study of the formation of organic solids from formaldehyde: Implications for the origin of extraterrestrial organic solids in primitive Solar System objects. <i>Icarus</i> , 2015, 248, 412-423.	1.1	35
481	Powering Triton's recent geological activity by obliquity tides: Implications for Pluto geology. <i>Icarus</i> , 2015, 246, 2-10.	1.1	61
482	Prerequisites for explosive cryovolcanism on dwarf planet-class Kuiper belt objects. <i>Icarus</i> , 2015, 246, 48-64.	1.1	53
483	The interior and orbital evolution of Charon as preserved in its geologic record. <i>Icarus</i> , 2015, 246, 11-20.	1.1	19
484	A lander mission to probe subglacial water on Saturn's moon Enceladus for life. <i>Acta Astronautica</i> , 2015, 106, 63-89.	1.7	64
485	Fault geometries on Uranus' satellite Miranda: Implications for internal structure and heat flow. <i>Icarus</i> , 2015, 247, 35-52.	1.1	40
486	Possibility for albedo estimation of exomoons: Why should we care about M dwarfs?. <i>Astronomy and Astrophysics</i> , 2016, 592, A139.	2.1	3
487	Enceladus's internal ocean and ice shell constrained from Cassini gravity, shape, and libration data. <i>Geophysical Research Letters</i> , 2016, 43, 5653-5660.	1.5	141
488	Elastic tidal response of a laterally heterogeneous planet: a complete perturbation formulation. <i>Geophysical Journal International</i> , 2016, 207, 89-110.	1.0	4
489	Transport and chemical loss rates in Saturn's inner plasma disk. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 2321-2334.	0.8	3
490	Short periodicities in low-frequency plasma waves at Saturn. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 6562-6572.	0.8	5
491	The distribution and characterization of strike-slip faults on Enceladus. <i>Geophysical Research Letters</i> , 2016, 43, 2456-2464.	1.5	19
492	Extraterrestrial sound for planetaria: A pedagogical study. <i>Journal of the Acoustical Society of America</i> , 2016, 140, 1469-1480.	0.5	3
493	Cryolava flow destabilization of crustal methane clathrate hydrate on Titan. <i>Icarus</i> , 2016, 274, 23-32.	1.1	9

#	ARTICLE	IF	CITATIONS
494	Interpreting the densities of the Kuiper belt's dwarf planets. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 460, 1542-1548.	1.6	38
495	Controlled boiling on Enceladus. 1. Model of the vapor-driven jets. <i>Icarus</i> , 2016, 272, 309-318.	1.1	30
496	Strategic map for exploring the ocean-world Enceladus. <i>Acta Astronautica</i> , 2016, 126, 52-58.	1.7	20
497	Enceladus's and Dione's floating ice shells supported by minimum stress isostasy. <i>Geophysical Research Letters</i> , 2016, 43, 10,088.	1.5	126
499	PROBING FOR EVIDENCE OF PLUMES ON EUROPA WITH HST/STIS. <i>Astrophysical Journal</i> , 2016, 829, 121.	1.6	194
500	A comprehensive analysis of ion cyclotron waves in the equatorial magnetosphere of Saturn. <i>Planetary and Space Science</i> , 2016, 129, 47-60.	0.9	17
501	Electrical conductivity of the dusty plasma in the Enceladus plume. <i>Icarus</i> , 2016, 278, 79-87.	1.1	10
502	Crustal control of dissipative ocean tides in Enceladus and other icy moons. <i>Icarus</i> , 2016, 280, 278-299.	1.1	44
503	PHOTOMETRIC MEASUREMENTS OF H ₂ O ICE CRYSTALLINITY ON TRANS-NEPTUNIAN OBJECTS*. <i>Astrophysical Journal</i> , 2016, 827, 65.	1.6	7
504	Dual-telescope multi-channel thermal-infrared radiometer for outer planet fly-by missions. <i>Acta Astronautica</i> , 2016, 128, 628-639.	1.7	7
505	Cryovolcanism on Ceres. <i>Science</i> , 2016, 353, .	6.0	164
506	The Astrobiology Primer v2.0. <i>Astrobiology</i> , 2016, 16, 561-653.	1.5	133
507	Effect of the tiger stripes on the deformation of Saturn's moon Enceladus. <i>Geophysical Research Letters</i> , 2016, 43, 7417-7423.	1.5	26
508	Seasonal variations in Saturn's plasma sheet warping. <i>Geophysical Research Letters</i> , 2016, 43, 11,957.	1.5	12
509	Early Thermal History of Rhea: The Role of Serpentinization and Liquid State Convection. <i>Acta Geophysica</i> , 2016, 64, 2677-2716.	1.0	1
510	In-situ measurements of Saturn's dusty rings based on dust impact signals detected by Cassini RPWS. <i>Icarus</i> , 2016, 279, 51-61.	1.1	25
511	The diurnal libration and interior structure of Enceladus. <i>Icarus</i> , 2016, 277, 311-318.	1.1	41
512	Saturn's icy satellites investigated by Cassini-VIMS. IV. Daytime temperature maps. <i>Icarus</i> , 2016, 271, 292-313.	1.1	23

#	ARTICLE	IF	CITATIONS
513	Plasma dynamics in Saturn's middle-latitude ionosphere and implications for magnetosphere-ionosphere coupling. <i>Icarus</i> , 2016, 274, 261-271.	1.1	4
514	THEO concept mission: Testing the Habitability of Enceladus's Ocean. <i>Advances in Space Research</i> , 2016, 58, 1117-1137.	1.2	13
515	Recent tectonic activity on Pluto driven by phase changes in the ice shell. <i>Geophysical Research Letters</i> , 2016, 43, 6775-6782.	1.5	52
516	Plasma Sources of Solar System Magnetospheres. <i>Space Sciences Series of ISSI</i> , 2016, , .	0.0	0
517	DYNAMICAL EVIDENCE FOR A LATE FORMATION OF SATURN'S MOONS. <i>Astrophysical Journal</i> , 2016, 820, 97.	1.6	117
518	Dusty plasma of the Enceladus plume. <i>Plasma Physics and Controlled Fusion</i> , 2016, 58, 014010.	0.9	5
519	A 1-D evolutionary model for icy satellites, applied to Enceladus. <i>Icarus</i> , 2016, 268, 1-11.	1.1	17
520	Mechanics of evenly spaced strike-slip faults and its implications for the formation of tiger-stripe fractures on Saturn's moon Enceladus. <i>Icarus</i> , 2016, 266, 204-216.	1.1	16
521	The Biosphere. , 2016, , 279-316.		1
522	Consequences of large impacts on Enceladus's core shape. <i>Icarus</i> , 2016, 264, 300-310.	1.1	31
524	The obliquity of Enceladus. <i>Icarus</i> , 2016, 268, 12-31.	1.1	52
525	Surface ages of mid-size saturnian satellites. <i>Icarus</i> , 2016, 264, 90-101.	1.1	12
526	Aggregate particles in the plumes of Enceladus. <i>Icarus</i> , 2016, 264, 227-238.	1.1	16
527	Enceladus's measured physical libration requires a global subsurface ocean. <i>Icarus</i> , 2016, 264, 37-47.	1.1	289
528	Investigation of diurnal variability of water vapor in Enceladus' plume by the Cassini ultraviolet imaging spectrograph. <i>Geophysical Research Letters</i> , 2017, 44, 672-677.	1.5	20
529	Dust clouds and plasmoids in Saturn's magnetosphere as seen with four Cassini instruments. <i>Advances in Space Research</i> , 2017, 59, 1614-1628.	1.2	1
530	The implications of tides on the Mimas ocean hypothesis. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 400-410.	1.5	16
531	Impact crater relaxation on Dione and Tethys and relation to past heat flow. <i>Icarus</i> , 2017, 288, 37-52.	1.1	36

#	ARTICLE	IF	CITATIONS
532	Remote Sensing of Potential Biosignatures from Rocky, Liquid, or Icy (Exo)Planetary Surfaces. <i>Astrobiology</i> , 2017, 17, 231-252.	1.5	29
533	Ceres interaction with the solar wind. <i>Geophysical Research Letters</i> , 2017, 44, 2070-2077.	1.5	9
534	Identification of Accretion as Grain Growth Mechanism in Astrophysically Relevant Water-Ice Dusty Plasma Experiment. <i>Astrophysical Journal</i> , 2017, 837, 56.	1.6	11
535	The Fascinating and Complex Dynamics of Geyser Eruptions. <i>Annual Review of Earth and Planetary Sciences</i> , 2017, 45, 31-59.	4.6	60
536	B-DNA model systems in non-terran bio-solvents: implications for structure, stability and replication. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 16969-16978.	1.3	25
537	Inner Workings: Icy ocean worlds offer chances to find life. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 4566-4568.	3.3	10
538	Frequency-dependent tidal dissipation in a viscoelastic Saturnian core and expansion of Mimas's semi-major axis. <i>Astronomy and Astrophysics</i> , 2017, 599, L10.	2.1	9
539	Alternative Energy: Production of H ₂ by Radiolysis of Water in the Rocky Cores of Icy Bodies. <i>Astrophysical Journal Letters</i> , 2017, 840, L8.	3.0	37
540	True polar wander of Enceladus from topographic data. <i>Icarus</i> , 2017, 295, 46-60.	1.1	43
541	Long reach sampling for ocean worlds. , 2017, , .		2
542	Europa mission update: Beyond payload selection. , 2017, , .		17
543	Towards in situ sequencing for life detection. , 2017, , .		17
544	Surface mobility on ocean worlds. , 2017, , .		2
545	Photoinitiated Dynamics in Amorphous Solid Water via Nanoimprint Lithography. <i>Journal of Physical Chemistry A</i> , 2017, 121, 4968-4981.	1.1	2
546	Ion trapping by dust grains: Simulation applications to the Enceladus plume. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 729-743.	1.5	5
547	The origin and evolution of a differentiated Mimas. <i>Icarus</i> , 2017, 296, 183-196.	1.1	16
548	The impact of a pressurized regional sea or global ocean on stresses on Enceladus. <i>Journal of Geophysical Research E: Planets</i> , 2017, 122, 1258-1275.	1.5	12
549	Enceladus: Hot spots on an ice world. <i>Nature Astronomy</i> , 2017, 1, .	4.2	1

#	ARTICLE	IF	CITATIONS
550	Deciphering sub-micron ice particles on Enceladus surface. <i>Icarus</i> , 2017, 290, 183-200.	1.1	22
551	Spatially resolved near infrared observations of Enceladus's tiger stripe eruptions from Cassini VIMS. <i>Icarus</i> , 2017, 292, 1-12.	1.1	10
552	Pit chains on Enceladus signal the recent tectonic dissection of the ancient cratered terrains. <i>Icarus</i> , 2017, 294, 209-217.	1.1	20
553	Magnetic signatures of ion cyclotron waves during Cassini's high-inclination orbits of Saturn. <i>Planetary and Space Science</i> , 2017, 136, 34-45.	0.9	4
554	Resolved spectrophotometric properties of the Ceres surface from Dawn Framing Camera images. <i>Icarus</i> , 2017, 288, 201-225.	1.1	69
555	Thermally anomalous features in the subsurface of Enceladus's south polar terrain. <i>Nature Astronomy</i> , 2017, 1, .	4.2	41
557	Tidal synchronization of an anelastic multi-layered body: Titan's synchronous rotation. <i>Celestial Mechanics and Dynamical Astronomy</i> , 2017, 129, 359-396.	0.5	10
558	The Possible Emergence of Life and Differentiation of a Shallow Biosphere on Irradiated Icy Worlds: The Example of Europa. <i>Astrobiology</i> , 2017, 17, 1265-1273.	1.5	58
559	Enceladus Plume Structure and Time Variability: Comparison of Cassini Observations. <i>Astrobiology</i> , 2017, 17, 926-940.	1.5	43
560	Plume Activity and Tidal Deformation on Enceladus Influenced by Faults and Variable Ice Shell Thickness. <i>Astrobiology</i> , 2017, 17, 941-954.	1.5	35
561	Thermal evolution of trans-Neptunian objects, icy satellites, and minor icy planets in the early solar system. <i>Meteoritics and Planetary Science</i> , 2017, 52, 2470-2490.	0.7	13
562	Researching the Earth and a Few of Its Neighbors. <i>Annual Review of Earth and Planetary Sciences</i> , 2017, 45, 1-29.	4.6	2
563	Brittle ice shell thickness of Enceladus from fracture distribution analysis. <i>Icarus</i> , 2017, 297, 252-264.	1.1	19
564	Dust ablation on the giant planets: Consequences for stratospheric photochemistry. <i>Icarus</i> , 2017, 297, 33-58.	1.1	82
565	Could It Be Snowing Microbes on Enceladus? Assessing Conditions in Its Plume and Implications for Future Missions. <i>Astrobiology</i> , 2017, 17, 876-901.	1.5	67
566	Keeping the ocean warm. <i>Nature Astronomy</i> , 2017, 1, 821-822.	4.2	0
567	Antarctic environments as models of planetary habitats: University Valley as a model for modern Mars and Lake Untersee as a model for Enceladus and ancient Mars. <i>Polar Journal</i> , 2017, 7, 303-318.	0.4	10
568	The water-carbon dioxide miscibility surface to 450 °C and 7 GPa. <i>Numerische Mathematik</i> , 2017, 317, 967-989.	0.7	12

#	ARTICLE	IF	CITATIONS
569	Powering prolonged hydrothermal activity inside Enceladus. <i>Nature Astronomy</i> , 2017, 1, 841-847.	4.2	158
570	Feasibility of Detecting Bioorganic Compounds in Enceladus Plumes with the Enceladus Organic Analyzer. <i>Astrobiology</i> , 2017, 17, 902-912.	1.5	35
571	Abiotic and Biotic Formation of Amino Acids in the Enceladus Ocean. <i>Astrobiology</i> , 2017, 17, 862-875.	1.5	40
573	Detecting Darwinism from Molecules in the Enceladus Plumes, Jupiter's Moons, and Other Planetary Water Lagoons. <i>Astrobiology</i> , 2017, 17, 840-851.	1.5	39
574	Energy-banded ions in Saturn's magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 5181-5202.	0.8	3
575	Constraining the Enceladus plume using numerical simulation and Cassini data. <i>Icarus</i> , 2017, 281, 357-378.	1.1	14
576	Decadal timescale variability of the Enceladus plumes inferred from Cassini images. <i>Icarus</i> , 2017, 282, 260-275.	1.1	29
577	Ring formation around giant planets by tidal disruption of a single passing large Kuiper belt object. <i>Icarus</i> , 2017, 282, 195-213.	1.1	61
578	Interior thermal state of Enceladus inferred from the viscoelastic state of the ice shell. <i>Icarus</i> , 2017, 284, 387-393.	1.1	25
579	High energy electron sintering of icy regoliths: Formation of the PacMan thermal anomalies on the icy Saturnian moons. <i>Icarus</i> , 2017, 285, 211-223.	1.1	13
580	A Community Grows around the Geysering World of Enceladus. <i>Astrobiology</i> , 2017, 17, 815-819.	1.5	4
581	Density Structures, Dynamics, and Seasonal and Solar Cycle Modulations of Saturn's Inner Plasma Disk. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 12,258.	0.8	8
582	Particle Radiation Sources, Propagation and Interactions in Deep Space, at Earth, the Moon, Mars, and Beyond: Examples of Radiation Interactions and Effects. <i>Space Science Reviews</i> , 2017, 212, 1069-1106.	3.7	18
583	Cassini's Huygens: Saturn, rings and moons. <i>Astronomy and Geophysics</i> , 2017, 58, 4.20-4.25.	0.1	1
584	Nucleophilic Substitution in Solution: Activation Strain Analysis of Weak and Strong Solvent Effects. <i>Chemistry - A European Journal</i> , 2018, 24, 5927-5938.	1.7	53
585	Seismic Wave Propagation in Icy Ocean Worlds. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 206-232.	1.5	35
586	Titan's cold case files - Outstanding questions after Cassini-Huygens. <i>Planetary and Space Science</i> , 2018, 155, 50-72.	0.9	37
587	Dynamics of Water Ice Grains Formed in a Plasma Where Gravitational Force is Compensated by Thermophoretic Force. <i>IEEE Transactions on Plasma Science</i> , 2018, 46, 688-693.	0.6	5

#	ARTICLE	IF	CITATIONS
588	Biological methane production under putative Enceladus-like conditions. Nature Communications, 2018, 9, 748.	5.8	91
589	The Rings of Saturn. , 0, , 51-92.		10
590	Dusty Rings. , 0, , 308-337.		6
591	Plasma, Neutral Atmosphere, and Energetic Radiation Environments of Planetary Rings. , 0, , 363-398.		3
592	The Origin of Planetary Ring Systems. , 0, , 517-538.		12
593	Spatial variations in the dust-to-gas ratio of Enceladus's plume. Icarus, 2018, 305, 123-138.	1.1	15
594	Halogens on and Within the Ocean Worlds of the Outer Solar System. Springer Geochemistry, 2018, , 997-1016.	0.1	2
595	Water and the Interior Structure of Terrestrial Planets and Icy Bodies. Space Science Reviews, 2018, 214, 1.	3.7	33
596	European double ridge morphometry as a test of formation models. Icarus, 2018, 305, 225-249.	1.1	12
597	Physical Processes in the Dusty Plasma of the Enceladus Plume. Astrophysics and Space Science Library, 2018, , 241-262.	1.0	2
598	Modeling, Analysis, and Interpretation of Photoelectron Energy Spectra at Enceladus Observed by Cassini. Journal of Geophysical Research: Space Physics, 2018, 123, 287-296.	0.8	5
599	Strategies for Detecting Biological Molecules on Titan. Astrobiology, 2018, 18, 571-585.	1.5	33
600	Enceladus Vent Explorer Concept. , 2018, , 665-717.		4
601	Stagnant lid tectonics: Perspectives from silicate planets, dwarf planets, large moons, and large asteroids. Geoscience Frontiers, 2018, 9, 103-119.	4.3	72
602	Exospheric escape: A parametrical study. Advances in Space Research, 2018, 62, 2364-2371.	1.2	10
603	Energetic electron measurements near Enceladus by Cassini during 2005-2015. Icarus, 2018, 306, 256-274.	1.1	4
604	Explorer of Enceladus and Titan (E2T): Investigating ocean worlds' evolution and habitability in the solar system. Planetary and Space Science, 2018, 155, 73-90.	0.9	26
605	Occupied and Empty Regions of the Space of Extremophile Parameters. , 2018, , 199-230.		5

#	ARTICLE	IF	CITATIONS
606	Enceladusâ€™ near-surface CO2 gas pockets and surface frost deposits. <i>Icarus</i> , 2018, 302, 18-26.	1.1	8
607	Extraction of amino acids from aerogel for analysis by capillary electrophoresis. Implications for a mission concept to Enceladusâ€™ Plume. <i>Electrophoresis</i> , 2018, 39, 620-625.	1.3	6
608	Enceladusâ€™s crust as a non-uniform thin shell: I tidal deformations. <i>Icarus</i> , 2018, 302, 145-174.	1.1	36
609	Optimization Strategies for Real-Time Control of an Autonomous Melting Probe. , 2018, , .		1
610	Limits on Dione's Activity Using Cassini/CIRS Data. <i>Geophysical Research Letters</i> , 2018, 45, 5876-5898.	1.5	2
611	A New Enceladus Global Control Network, Image Mosaic, and Updated Pointing Kernels From Cassini's 13â€™ Year Mission. <i>Earth and Space Science</i> , 2018, 5, 604-621.	1.1	13
612	Life in the Universe. , 2018, , .		23
613	Signatures of Life. , 2018, , 165-181.		0
614	Cassini/MIMI Observations on the Dungey Cycle Reconnection and Kelvinâ€™Helmholtz Instability in Saturn's Magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 7271-7275.	0.8	3
615	How to Detect Life on Icy Moons. <i>Astrobiology</i> , 2018, 18, 843-855.	1.5	30
616	Global Configuration and Seasonal Variations of Saturnâ€™s Magnetosphere. , 2018, , 126-165.		2
617	Saturnâ€™s Ionosphere. , 2018, , 196-223.		3
618	Dust Emission by Active Moons. <i>Space Science Reviews</i> , 2018, 214, 1.	3.7	3
619	The Liquidus Temperature for Methanolâ€™Water Mixtures at High Pressure and Low Temperature, With Application to Titan. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 3080-3087.	1.5	7
620	Philanthropic Space Science: The Breakthrough Initiatives. <i>New Space</i> , 2018, 6, 262-268.	0.4	9
621	Ocean Worlds in the Outer Regions of the Solar System (Review). <i>Solar System Research</i> , 2018, 52, 371-381.	0.3	10
622	Energetic Ion Moments and Polytropic Index in Saturn's Magnetosphere using Cassini/MIMI Measurements: A Simple Model Based on $\langle v^p \rangle$ Distribution Functions. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 8066-8086.	0.8	34
623	Extraterrestrial lava lakes. <i>Journal of Volcanology and Geothermal Research</i> , 2018, 366, 74-95.	0.8	4

#	ARTICLE	IF	CITATIONS
624	Internal Versus External Sources of Plasma at Saturn: Overview From Magnetospheric Imaging Investigation/Chargeâ€Energyâ€Mass Spectrometer Data. Journal of Geophysical Research: Space Physics, 2018, 123, 4712-4727.	0.8	15
625	Revisiting the pre-main-sequence evolution of stars. Astronomy and Astrophysics, 2018, 618, A132.	2.1	26
626	Dynamics of nonspherical, fractal-like water-ice particles in a plasma environment. Scientific Reports, 2018, 8, 15405.	1.6	6
627	First astrometric reduction of Cassini Imaging Science Subsystem images using an automatic procedure: application to Enceladus images 2013â€2017. Monthly Notices of the Royal Astronomical Society, 2018, 481, 98-104.	1.6	8
628	Cassini UVIS solar occultations by Saturnâ€™s F ring and the detection of collision-produced micron-sized dust. Icarus, 2018, 306, 171-199.	1.1	5
629	Review of Saturnâ€™s icy moons following the Cassini mission. Reports on Progress in Physics, 2018, 81, 065901.	8.1	9
630	Evidence of a plume on Europa from Galileo magnetic and plasma wave signatures. Nature Astronomy, 2018, 2, 459-464.	4.2	164
631	Simulation of precise and safe landing near a plume source on Enceladus. , 2018, , .		0
632	Roving on ice: Field testing an Ice Screw End Effector and sample collection tool. , 2018, , .		4
634	Searching for life with mass spectrometry. Astronomy and Geophysics, 2018, 59, 3.23-3.24.	0.1	4
635	Interior structures and tidal heating in the TRAPPIST-1 planets. Astronomy and Astrophysics, 2018, 613, A37.	2.1	49
636	Cladistical Analysis of the Jovian and Saturnian Satellite Systems. Astrophysical Journal, 2018, 859, 97.	1.6	11
637	Dust Phenomena Relating to Airless Bodies. Space Science Reviews, 2018, 214, 1.	3.7	21
638	Cassini RPWS Dust Observation Near the Janus/Epimetheus Orbit. Journal of Geophysical Research: Space Physics, 2018, 123, 4952-4960.	0.8	9
639	Exploring Kepler Giant Planets in the Habitable Zone. Astrophysical Journal, 2018, 860, 67.	1.6	32
640	Nature, distribution and origin of CO2 on Enceladus. Icarus, 2019, 317, 491-508.	1.1	14
641	Voyager 2 constraints on plasmoidâ€based transport at Uranus. Geophysical Research Letters, 2019, 46, 10710-10718.	1.5	17
642	Follow the High Subcritical Water. Geosciences (Switzerland), 2019, 9, 249.	1.0	3

#	ARTICLE	IF	CITATIONS
643	Internal Energy Dissipation in Enceladus's Subsurface Ocean From Tides and Libration and the Role of Inertial Waves. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 2198-2212.	1.5	34
644	Peptide Synthesis under the Alkaline Hydrothermal Conditions on Enceladus. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 2559-2568.	1.2	20
645	Low-mass nitrogen-, oxygen-bearing, and aromatic compounds in Enceladean ice grains. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 5231-5243.	1.6	98
646	Icelandic Pit Chains as Planetary Analogs: Using Morphologic Measurements of Pit Chains to Determine Regolith Thickness. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 2983-2999.	1.5	8
647	Differentiation of Enceladus and Retention of a Porous Core. <i>Astrophysical Journal</i> , 2019, 882, 47.	1.6	14
648	Energetic Electron Patterns in the New SLS5 Longitude System. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 7889-7897.	0.8	0
649	Dust and Snow Cover on Saturn's Icy Moons. <i>Geophysical Research Letters</i> , 2019, 46, 11747-11755.	1.5	9
650	Enabling Onboard Detection of Events of Scientific Interest for the Europa Clipper Spacecraft. , 2019, , .		11
651	Chemical Ionization Mass Spectrometry: Applications for the In Situ Measurement of Nonvolatile Organics at Ocean Worlds. <i>Astrobiology</i> , 2019, 19, 1196-1210.	1.5	9
652	Circumplanetary Dust Populations. <i>Space Science Reviews</i> , 2019, 215, 1.	3.7	8
653	Implications of nonsynchronous rotation on the deformational history and ice shell properties in the south polar terrain of Enceladus. <i>Icarus</i> , 2019, 321, 445-457.	1.1	12
654	Cassini-Huygensâ€™™ exploration of the Saturn system: 13 years of discovery. <i>Science</i> , 2019, 364, 1046-1051.	6.0	35
655	Acidâ€“Base Catalytic Effects on Reduction of Methanol in Hot Water. <i>Catalysts</i> , 2019, 9, 373.	1.6	2
656	Accurate modelling of the low-order secondary resonances in the spin-orbit problem. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2019, 77, 181-202.	1.7	3
657	Quantifying Mass and Magnetic Flux Transport in Saturn's Magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 1916-1926.	0.8	6
658	Melting curve and chemical stability of ammonia at high pressure: Combined x-ray diffraction and Raman study. <i>Physical Review B</i> , 2019, 99, .	1.1	13
659	Ultraviolet observation of Enceladus' plume in transit across Saturn, compared to Europa. <i>Icarus</i> , 2019, 330, 256-260.	1.1	8
660	Convection in Thin Shells of Icy Satellites: Effects of Latitudinal Surface Temperature Variations. <i>Journal of Geophysical Research E: Planets</i> , 2019, 124, 2029-2053.	1.5	7

#	ARTICLE	IF	CITATIONS
661	Magnetic Signatures of a Plume at Europa During the Galileo E26 Flyby. <i>Geophysical Research Letters</i> , 2019, 46, 1149-1157.	1.5	42
662	The Refractive Index of Amorphous and Crystalline Water Ice in the UV-vis. <i>Astrophysical Journal</i> , 2019, 875, 131.	1.6	20
663	Exploring, Mapping, and Data Management Integration of Habitable Environments in Astrobiology. <i>Frontiers in Microbiology</i> , 2019, 10, 147.	1.5	3
664	The Origin and Fate of O ₂ in Europa's Ice: An Atmospheric Perspective. <i>Space Science Reviews</i> , 2019, 215, 1.	3.7	9
665	Enceladus: Evidence and Unsolved Questions for an Ice-Covered Habitable World. , 2019, , 399-407.		1
666	Enceladus's ice shell structure as a window on internal heat production. <i>Icarus</i> , 2019, 332, 111-131.	1.1	77
667	Serendipitous infrared observations of Europa by Juno/JIRAM. <i>Icarus</i> , 2019, 328, 1-13.	1.1	15
668	Ferrovulcanism: Iron Volcanism on Metallic Asteroids. <i>Geophysical Research Letters</i> , 2019, 46, 5055-5064.	1.5	19
669	Tidal heating and the habitability of the TRAPPIST-1 exoplanets. <i>Astronomy and Astrophysics</i> , 2019, 624, A2.	2.1	30
670	How Adsorption Affects the Gas-Ice Partitioning of Organics Erupted from Enceladus. <i>Astrophysical Journal</i> , 2019, 873, 28.	1.6	16
671	Evolution of Saturn's mid-sized moons. <i>Nature Astronomy</i> , 2019, 3, 543-552.	4.2	58
672	Formation of the Cassini Division II. Possible histories of Mimas and Enceladus. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 486, 2947-2963.	1.6	7
673	Tidal dissipation in Enceladus' uneven, fractured ice shell. <i>Icarus</i> , 2019, 328, 218-231.	1.1	32
674	<i>Herschel</i> map of Saturn's stratospheric water, delivered by the plumes of Enceladus. <i>Astronomy and Astrophysics</i> , 2019, 630, A87.	2.1	15
675	Organic Molecules: Is It Possible to Distinguish Aromatics from Aliphatics Collected by Space Missions in High Speed Impacts?. <i>Sci</i> , 2019, 1, 53.	1.8	4
676	Spectral Analyses of Saturn's Moons Using the <i>Cassini</i> Visual Infrared Mapping Spectrometer. , 2019, , 428-441.		1
677	Compressional Ridges on Baret Montes, Pluto as Observed by New Horizons. <i>Geophysical Research Letters</i> , 2019, 46, 14328-14335.	1.5	1
678	Design optimization of a lightweight rocker-bogie rover for ocean worlds applications. <i>International Journal of Advanced Robotic Systems</i> , 2019, 16, 172988141988569.	1.3	10

#	ARTICLE	IF	CITATIONS
679	Orbital evolution of Saturn's mid-sized moons and the tidal heating of Enceladus. <i>Icarus</i> , 2019, 317, 570-582.	1.1	15
680	Do tidally-generated inertial waves heat the subsurface oceans of Europa and Enceladus?. <i>Icarus</i> , 2019, 321, 126-140.	1.1	31
681	Tunnel Formation in Basalt Glass. <i>Astrobiology</i> , 2019, 19, 132-144.	1.5	6
682	The NASA Roadmap to Ocean Worlds. <i>Astrobiology</i> , 2019, 19, 1-27.	1.5	209
683	Parametric study of water vapor and water ice particle plumes based on DSMC calculations: Application to the Enceladus geysers. <i>Icarus</i> , 2019, 319, 729-744.	1.1	4
684	Surface deposition of the Enceladus plume and the zenith angle of emissions. <i>Icarus</i> , 2019, 319, 33-42.	1.1	36
685	Early Earth Atmosphere and Oceans. , 2019, , 49-61.		0
686	Collecting amino acids in the Enceladus plume. <i>International Journal of Astrobiology</i> , 2019, 18, 47-59.	0.9	24
687	Ground-based detection of a cloud of methanol from Enceladus: when is a biomarker not a biomarker?. <i>International Journal of Astrobiology</i> , 2019, 18, 25-32.	0.9	4
688	Time variability of the Enceladus plumes: Orbital periods, decadal periods, and aperiodic change. <i>Icarus</i> , 2020, 344, 113345.	1.1	17
689	Titan's ionospheric chemistry, fullerenes, oxygen, galactic cosmic rays and the formation of exobiological molecules on and within its surfaces and lakes. <i>Icarus</i> , 2020, 344, 113246.	1.1	11
690	Proposed plume source regions on Europa: No evidence for endogenic thermal emission. <i>Icarus</i> , 2020, 338, 113500.	1.1	13
691	Andrade rheology in time-domain. Application to Enceladus' dissipation of energy due to forced libration. <i>Icarus</i> , 2020, 343, 113610.	1.1	18
692	Scaling of heat transfer in stagnant lid convection for the outer shell of icy moons: Influence of rheology. <i>Icarus</i> , 2020, 338, 113448.	1.1	8
693	Cascading parallel fractures on Enceladus. <i>Nature Astronomy</i> , 2020, 4, 234-239.	4.2	18
694	The composition and structure of Enceladus' plume from the complete set of Cassini UVIS occultation observations. <i>Icarus</i> , 2020, 344, 113461.	1.1	29
695	Feasibility of Enceladus plume biosignature analysis: Successful capture of organic ice particles in hypervelocity impacts. <i>Meteoritics and Planetary Science</i> , 2020, 55, .	0.7	10
696	Modeling cryogenic mud volcanism on Pluto. <i>Journal of Volcanology and Geothermal Research</i> , 2020, 406, 107070.	0.8	5

#	ARTICLE	IF	CITATIONS
697	Can a Combination of Convective and Magmatic Heat Transport in the Mantle Explain Io's Volcanic Pattern?. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2020JE006521.	1.5	7
698	Tectonics of Enceladus's South Pole: Block Rotation of the Tiger Stripes. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2020JE006471.	1.5	8
699	The varied sources of faculae-forming brines in Ceres's Occator crater emplaced via hydrothermal brine effusion. <i>Nature Communications</i> , 2020, 11, 3680.	5.8	41
700	On the Habitability and Future Exploration of Ocean Worlds. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	36
701	Heat Production and Tidally Driven Fluid Flow in the Permeable Core of Enceladus. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006209.	1.5	18
702	Organic Molecules: Is It Possible to Distinguish Aromatics from Aliphatics Collected by Space Missions in High-Speed Impacts?. <i>Sci</i> , 2020, 2, 56.	1.8	3
703	Key Technologies and Instrumentation for Subsurface Exploration of Ocean Worlds. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	18
704	Returning Samples From Enceladus for Life Detection. <i>Frontiers in Astronomy and Space Sciences</i> , 2020, 7, .	1.1	32
705	Strength Evolution of Ice Plume Deposit Analogs of Enceladus and Europa. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL088953.	1.5	10
706	Microbial Component Detection in Enceladus Snowing Phenomenon. <i>Astrophysical Bulletin</i> , 2020, 75, 166-175.	0.3	2
707	Magnetospheric Studies: A Requirement for Addressing Interdisciplinary Mysteries in the Ice Giant Systems. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	16
708	The rings and small moons of Uranus and Neptune. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190482.	1.6	7
709	Alkaline exospheres of exoplanet systems: evaporative transmission spectra. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 497, 5271-5291.	1.6	26
710	Organic Molecules: Is It Possible To Distinguish Aromatics From Aliphatics Collected By Space Missions in High-Speed Impacts. <i>Sci</i> , 2020, 2, 12.	1.8	0
711	A wind tunnel study of the effect of intermediate density ratio on saltation threshold. <i>Aeolian Research</i> , 2020, 45, 100601.	1.1	13
712	Forecasting Rates of Volcanic Activity on Terrestrial Exoplanets and Implications for Cryovolcanic Activity on Extrasolar Ocean Worlds. <i>Publications of the Astronomical Society of the Pacific</i> , 2020, 132, 084402.	1.0	19
713	Design and performance of low-energy orbits for the exploration of Enceladus. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2020, 90, 105393.	1.7	7
714	An Analysis of the Statistics and Systematics of Limb Anomaly Detections in HST/STIS Transit Images of Europa. <i>Astronomical Journal</i> , 2020, 159, 155.	1.9	10

#	ARTICLE	IF	CITATIONS
715	Tidally Heated Convection and the Occurrence of Melting in Icy Satellites: Application to Europa. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006248.	1.5	31
716	Simulating microbial processes in extraterrestrial, aqueous environments. <i>Journal of Microbiological Methods</i> , 2020, 172, 105883.	0.7	7
717	Joint Europa Mission (JEM): a multi-scale study of Europa to characterize its habitability and search for extant life. <i>Planetary and Space Science</i> , 2020, 193, 104960.	0.9	15
718	The formation of Enceladus' Tiger Stripe Fractures from eccentricity tides. <i>Earth and Planetary Science Letters</i> , 2020, 544, 116389.	1.8	11
719	Organic Molecules: Is It Possible to Distinguish Aromatics from Aliphatics Collected by Space Missions in High-Speed Impacts?. <i>Sci</i> , 2020, 2, 41.	1.8	0
720	Preliminary estimation of the detection possibilities of Ganymede's water vapor environment with MAJIS. <i>Planetary and Space Science</i> , 2020, 191, 105004.	0.9	5
721	Ice-Ocean Exchange Processes in the Jovian and Saturnian Satellites. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	43
722	On the Restricted 3-Body Problem for the Saturn-Enceladus system: mission geometry & orbit design for plume sampling missions. , 2020, , .		6
723	Landing Trajectories to Moons from the Unstable Invariant Manifolds of Periodic Libration Point Orbits. , 2020, , .		4
724	Hidden tectonism on Miranda's Elsinore Corona revealed by polygonal impact craters. <i>Icarus</i> , 2020, 343, 113687.	1.1	24
725	Targeting the geysers on Enceladus by viffing descent through the icy plumes. <i>Advances in Space Research</i> , 2020, 65, 1863-1876.	1.2	2
726	Characterizing deposits emplaced by cryovolcanic plumes on Europa. <i>Icarus</i> , 2020, 343, 113667.	1.1	20
727	Experimental and Simulation Efforts in the Astrobiological Exploration of Exooceans. <i>Space Science Reviews</i> , 2020, 216, 9.	3.7	25
728	The Carbonate Geochemistry of Enceladus' Ocean. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL085885.	1.5	64
729	Towards Determining Biosignature Retention in Icy World Plumes. <i>Life</i> , 2020, 10, 40.	1.1	7
730	The Search for Europa's Plumes: No Surface Patterns or Changes 1979-2007?. <i>Astrophysical Journal Letters</i> , 2020, 892, L12.	3.0	7
731	Ammonia-water freezing as a mechanism for recent cryovolcanism on Pluto. <i>Icarus</i> , 2021, 356, 113763.	1.1	9
732	Observational properties of low-energy orbits around icy moons. <i>Acta Astronautica</i> , 2021, 178, 743-756.	1.7	3

#	ARTICLE	IF	CITATIONS
733	Partitioning of Crystalline and Amorphous Phases During Freezing of Simulated Enceladus Ocean Fluids. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, .	1.5	21
734	Repeated impact-driven plume formation on Enceladus over megayear timescales. <i>Icarus</i> , 2021, 357, 114281.	1.1	2
736	Astrobiology: An Overview. , 2021, , 737-757.		0
737	The 2018 reawakening and eruption dynamics of Steamboat Geyser, the world's tallest active geyser. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	24
738	Method for detecting and quantitating capture of organic molecules in hypervelocity impacts. <i>MethodsX</i> , 2021, 8, 101239.	0.7	5
739	Lava worlds: Cosmic cousins. , 2021, , 190-218.		0
740	Identification of Possible Heat Sources for the Thermal Output of Enceladus. <i>Planetary Science Journal</i> , 2021, 2, 29.	1.5	1
741	Forming Relic Cratered Blocks: Left-Lateral Shear on Enceladus Inferred From Ice-Shell Deformation in the Leading Hemisphere. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006499.	1.5	5
742	Science orbits in the Saturn-Enceladus circular restricted three-body problem with oblate primaries. <i>Acta Astronautica</i> , 2021, 180, 398-416.	1.7	6
743	Comment on "An Active Plume Eruption on Europa During Galileo Flyby E26 as Indicated by Energetic Proton Depletions" by Huybrighs et al.. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL091550.	1.5	7
744	The 3D Structure of Saturn Magnetospheric Neutral Tori Produced by the Enceladus Plumes. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2020JA028775.	0.8	4
745	The Dual-Rasp Sampling System Design with Closed Pneumatic Sample Transfer. , 2021, , .		0
746	Adsorption of organic compounds at the surface of Enceladus ice grains. A grand canonical Monte Carlo simulation study. <i>Molecular Simulation</i> , 2022, 48, 19-30.	0.9	4
747	Ocean Worlds: A Roadmap for Science and Exploration. , 2021, 53, .		0
748	Blocks Size Frequency Distribution in the Enceladus Tiger Stripes Area: Implications on Their Formative Processes. <i>Universe</i> , 2021, 7, 82.	0.9	9
749	Development of a Lander Autonomy Testbed for Ocean Worlds Missions. , 2021, , .		3
751	Calathus: A sample-return mission to Ceres. <i>Acta Astronautica</i> , 2021, 181, 112-129.	1.7	8
752	Sampling Accelerated Micron Scale Ice Particles with a Quadrupole Ion Trap Mass Spectrometer. <i>Journal of the American Society for Mass Spectrometry</i> , 2021, 32, 1162-1168.	1.2	9

#	ARTICLE	IF	CITATIONS
753	Analytical Chemistry in Astrobiology. <i>Analytical Chemistry</i> , 2021, 93, 5981-5997.	3.2	7
754	The Enceladus Orbilander Mission Concept: Balancing Return and Resources in the Search for Life. <i>Planetary Science Journal</i> , 2021, 2, 77.	1.5	74
755	On the structure of the Enceladus plume. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 504, 6216-6222.	1.6	0
756	Environments, needs and opportunities for future space photovoltaic power generation: A review. <i>Applied Energy</i> , 2021, 290, 116757.	5.1	41
757	Dynamics of a Solidifying Icy Satellite Shell. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2020JE006741.	1.5	20
758	Prokaryotic Diversity and Metabolically Active Communities in Brines from Two Perennially Ice-Covered Antarctic Lakes. <i>Astrobiology</i> , 2021, 21, 551-565.	1.5	8
759	Sampling Plume Deposits on Enceladus's Surface to Explore Ocean Materials and Search for Traces of Life or Biosignatures. <i>Planetary Science Journal</i> , 2021, 2, 100.	1.5	8
760	Characterizing the ice-ocean interface of icy worlds: A theoretical approach. <i>Icarus</i> , 2021, 360, 114318.	1.1	21
761	Breaking the symmetry by breaking the ice shell: An impact origin for the south polar terrain of Enceladus. <i>Icarus</i> , 2021, 359, 114302.	1.1	8
762	Two-body model for the spatial distribution of dust ejected from an atmosphereless body. <i>Astronomy and Astrophysics</i> , 2021, 650, A186.	2.1	0
763	Projected Seismic Activity at the Tiger Stripe Fractures on Enceladus, Saturn, From an Analog Study of Tidally Modulated Icequakes Within the Ross Ice Shelf, Antarctica. <i>Journal of Geophysical Research E: Planets</i> , 2021, 126, e2021JE006862.	1.5	7
764	Constraints on effusive cryovolcanic eruptions on Europa using topography obtained from Galileo images. <i>Icarus</i> , 2021, 361, 114373.	1.1	17
765	Exploration of Enceladus and Titan: investigating ocean worlds's evolution and habitability in the Saturn system. <i>Experimental Astronomy</i> , 2022, 54, 877-910.	1.6	3
766	Propagation of Vertical Fractures through Planetary Ice Shells: The Role of Basal Fractures at the Ice-Ocean Interface and Proximal Cracks. <i>Planetary Science Journal</i> , 2021, 2, 135.	1.5	8
767	The Science Case for a Return to Enceladus. <i>Planetary Science Journal</i> , 2021, 2, 132.	1.5	40
768	Plume Source Localization on Enceladus by Sequential Monte Carlo Method. <i>Journal of Spacecraft and Rockets</i> , 2021, 58, 1084-1093.	1.3	1
769	Exploration of Icy Ocean Worlds Using Geophysical Approaches. <i>Planetary Science Journal</i> , 2021, 2, 150.	1.5	14
770	On the Feasibility of Informative Biosignature Measurements Using an Enceladus Plume Organic Analyzer. <i>Planetary Science Journal</i> , 2021, 2, 163.	1.5	6

#	ARTICLE	IF	CITATIONS
771	Capillary electrophoresis method for analysis of inorganic and organic anions related to habitability and the search for life. <i>Electrophoresis</i> , 2021, 42, 1956-1964.	1.3	11
772	Orbiting Astronomical Satellite for Investigating Stellar Systems (OASIS): following the water trail from the interstellar medium to oceans. , 2021, , .		8
773	Short lifespans of serpentinization in the rocky core of Enceladus: Implications for hydrogen production. <i>Icarus</i> , 2021, 364, 114461.	1.1	18
774	Optical design adopting tilted filters for reduction of stray light in planetary exploration cameras and other optics. , 2021, , .		0
775	Salt grains in hypervelocity impacts in the laboratory: Methods to sample plumes from the ice worlds Enceladus and Europa. <i>Meteoritics and Planetary Science</i> , 2021, 56, 1652-1668.	0.7	4
776	A Recipe for the Geophysical Exploration of Enceladus. <i>Planetary Science Journal</i> , 2021, 2, 157.	1.5	14
777	A Case for a Small to Negligible Influence of Dust Charging on the Ionization Balance in the Coma of Comet 67P. <i>Planetary Science Journal</i> , 2021, 2, 156.	1.5	3
778	Advances in carbon isotope analysis of trapped methane and volatile hydrocarbons in crystalline rock cores. <i>Rapid Communications in Mass Spectrometry</i> , 2021, 35, e9170.	0.7	3
780	Enceladus' Tiger Stripes as Frictional Faults: Effect on Stress and Heat Production. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094849.	1.5	5
781	Fluorescence microscope as a core instrument for extraterrestrial-life detection methods. , 2021, , .		0
782	Quantitative evaluation of the feasibility of sampling the ice plumes at Enceladus for biomarkers of extraterrestrial life. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	9
783	Tiger: Concept Study for a New Frontiers Enceladus Habitability Mission. <i>Planetary Science Journal</i> , 2021, 2, 195.	1.5	5
784	Solving the Laplace Tidal Equations using Freely Available, Easily Extensible Finite Element Software. <i>Computers and Geosciences</i> , 2021, 155, 104865.	2.0	1
786	The biosphere. , 2022, , 269-303.		0
787	The Geochemistry of Icy Moons. , 2021, , 207-216.		2
788	Hydrothermal Processes and Systems on Other Planets and Satellites: Clues for the Search of Extraterrestrial Life. , 2009, , 1131-1211.		1
789	The Dynamics of Saturn's Magnetosphere. , 2009, , 257-279.		35
790	Diffuse Rings. , 2009, , 511-536.		22

#	ARTICLE	IF	CITATIONS
791	Origin and Evolution of Saturn's Ring System. , 2009, , 537-575.		34
792	Icy Satellites of Saturn: Impact Cratering and Age Determination. , 2009, , 613-635.		29
793	Icy Satellites: Geological Evolution and Surface Processes. , 2009, , 637-681.		34
794	Enceladus: An Active Cryovolcanic Satellite. , 2009, , 683-724.		65
795	Cartographic Mapping of the Icy Satellites Using ISS and VIMS Data. , 2009, , 763-781.		15
796	Origin of the Saturn System. , 2009, , 55-74.		3
797	Saturn: Composition and Chemistry. , 2009, , 83-112.		23
798	Saturn's Magnetospheric Configuration. , 2009, , 203-255.		44
799	Induced Magnetic Fields in Solar System Bodies. Space Sciences Series of ISSI, 2009, , 391-421.	0.0	5
800	Geology of Icy Bodies. Astrophysics and Space Science Library, 2013, , 279-367.	1.0	8
801	Radiation Effects in Water Ice in the Outer Solar System. Astrophysics and Space Science Library, 2013, , 527-549.	1.0	16
803	Astrobiology: An Overview. , 2020, , 1-17.		1
804	Moons of Exoplanets: Habitats for Life?. , 2008, , 285-303.		24
805	4.2.3.5 Planetary geology: Craters and chronology, Volcanism, Tectonics. Landolt-Börnstein - Group VI Astronomy and Astrophysics, 2009, , 345-433.	0.1	4
806	Clean In Situ Subsurface Exploration of Icy Environments in the Solar System. Cellular Origin and Life in Extreme Habitats, 2013, , 367-397.	0.3	7
807	Heating of Enceladus due to the dissipation of ocean tides. Icarus, 2020, 348, 113821.	1.1	16
808	Photometrically-corrected global infrared mosaics of Enceladus: New implications for its spectral diversity and geological activity. Icarus, 2020, 349, 113848.	1.1	10
810	Subglacial environments and the search for life beyond the Earth. Geophysical Monograph Series, 2011, , 129-148.	0.1	10

#	ARTICLE	IF	CITATIONS
811	The Composition of $\sim 96\text{\AA}$ V^{W} in Saturn's Magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027315.	0.8	2
812	Enceladus gets active. <i>Nature</i> , 0, , .	13.7	1
813	Macromolecular organic compounds from the depths of Enceladus. <i>Nature</i> , 2018, 558, 564-568.	13.7	282
814	Monitoring of the evolution of H_2O vapor in the stratosphere of Jupiter over an 18-yr period with the <i>Odin</i> space telescope. <i>Astronomy and Astrophysics</i> , 2020, 641, A140.	2.1	5
815	Near-Infrared Spectroscopy of Charon: Possible Evidence for Cryovolcanism on Kuiper Belt Objects. <i>Astrophysical Journal</i> , 2007, 663, 1406-1419.	1.6	126
816	SPECTRAL OBSERVATIONS OF THE ENCELADUS PLUME WITH CASSINI-VIMS. <i>Astrophysical Journal</i> , 2009, 693, 1749-1762.	1.6	72
817	Life in Ice on Other Worlds. , 0, , 290-304.		3
818	Detection of Biomarkers in Gas Plumes Using a Multi-Spectral Camera in the Proposed Enceladus Orbiter Mission (NASA). , 2017, 21, 35-44.	0.1	2
819	Polarimetry of Saturnian satellite Enceladus. <i>Advances in Astronomy and Space Physics</i> , 2015, 5, 29-32.	0.2	2
820	Geodynamics of Europa's Icy Shell. , 0, , 381-404.		5
821	Exploration of Enceladus's Water-Rich Plumes toward Understanding of Chemistry and Biology of the Interior Ocean. <i>Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan</i> , 2014, 12, Tk_7-Tk_11.	0.1	5
822	The Geochemistry of Enceladus: Composition and Controls. , 2018, , .		35
823	Geophysics and Tidal-Thermal Evolution of Enceladus. , 2018, , .		5
824	Estimation and Modeling of Enceladus Plume Jet Density Using Reaction Wheel Control Data. , 2010, , .		2
826	ENCELADUS GEODETIC FRAMEWORK. <i>International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives</i> , 0, XLII-3/W1, 113-118.	0.2	3
827	Signatures of Life. <i>Advances in Astrobiology and Biogeophysics</i> , 2008, , 165-182.	0.6	0
828	Exospheres and Atmospheric Escape. <i>Space Sciences Series of ISSI</i> , 2008, , 355-397.	0.0	7
829	Magnetic Fields of the Satellites of Jupiter and Saturn. <i>Space Sciences Series of ISSI</i> , 2009, , 271-305.	0.0	1

#	ARTICLE	IF	CITATIONS
830	Implications of Rotation, Orbital States, Energy Sources, and Heat Transport for Internal Processes in Icy Satellites. Space Sciences Series of ISSI, 2010, , 315-346.	0.0	0
832	Chemical Composition of Icy Satellite Surfaces. Space Sciences Series of ISSI, 2010, , 111-152.	0.0	0
833	Characteristics of Icy Surfaces. Space Sciences Series of ISSI, 2010, , 61-109.	0.0	3
834	Atmospheric/Exospheric Characteristics of Icy Satellites. Space Sciences Series of ISSI, 2010, , 153-182.	0.0	0
835	Evolution of Icy Satellites. Space Sciences Series of ISSI, 2010, , 445-482.	0.0	1
836	Surface, Subsurface and Atmosphere Exchanges on the Satellites of the Outer Solar System. Space Sciences Series of ISSI, 2010, , 373-408.	0.0	1
837	10.1007/s11208-008-2004-x. , 2010, 42, 124.		0
840	Modeling and Simulation of Near-field Enceladus Plumes from Tiger Stripe Fractures Using a Collision-limiter Condensation Model. , 2012, , .		0
841	Satellite and Ring Systems. Astronomy and Astrophysics Library, 2014, , 521-595.	0.2	0
842	Tiger Stripe Fractures (Enceladus). , 2014, , 1-4.		0
843	Y-Shaped Discontinuity. , 2014, , 1-5.		0
844	Enceladus. , 2014, , 1-3.		0
845	Guidance, Navigation and Control for Landing and Repositioning on Saturn's Moon Enceladus. , 2014, , .		0
847	Tiger Stripe Fractures (Enceladus). , 2015, , 2148-2150.		0
848	Enceladus. , 2015, , 723-725.		1
849	Albedo Feature. , 2015, , 30-52.		0
850	Bright Plains (Icy Moons). , 2015, , 180-182.		0
851	Y-Shaped Discontinuity. , 2015, , 2347-2350.		0

#	ARTICLE	IF	CITATIONS
852	Geyser. , 2015, , 835-841.		0
853	Cryovolcanic Features. , 2015, , 487-494.		0
854	Saturn Plasma Sources and Associated Transport Processes. Space Sciences Series of ISSI, 2016, , 237-283.	0.0	1
856	Particle Radiation Sources, Propagation and Interactions in Deep Space, at Earth, the Moon, Mars, and Beyond: Examples of Radiation Interactions and Effects. Space Sciences Series of ISSI, 2017, , 257-294.	0.0	0
857	Constraints from Comets on the Formation and Volatile Acquisition of the Planets and Satellites. , 2017, , 297-342.		0
858	Water and the Interior Structure of Terrestrial Planets and Icy Bodies. Space Sciences Series of ISSI, 2018, , 343-375.	0.0	0
859	Enceladus. , 2019, , 1-3.		0
860	Astrobiology: An Overview. , 2019, , 1-17.		0
861	Future planetary instrument capabilities made possible by micro- and nanotechnology. , 2019, , .		0
863	Evidence of Electron Density Enhancements in the Postâ€Apoapsis Sector of Enceladus' Orbit. Journal of Geophysical Research: Space Physics, 2020, 125, .	0.8	0
864	The Planetary Time Scale. , 2020, , 443-480.		5
865	The subsurface habitability of small, icy exomoons. Astronomy and Astrophysics, 2020, 636, A50.	2.1	6
866	Do Oceanic Convection and Clathrate Dissociation Drive Europaâ€™s Geysers?. Planetary Science Journal, 2021, 2, 221.	1.5	3
867	Periodic orbits for interferometric and tomographic radar imaging of Saturnâ€™s moon Enceladus. Acta Astronautica, 2022, 191, 326-345.	1.7	2
868	Enceladus as a Potential Niche for Methanogens and Estimation of Its Biomass. Life, 2021, 11, 1182.	1.1	5
869	Satellite and Ring Systems. Astronomy and Astrophysics Library, 2008, , 151-211.	0.2	0
870	Early results about Saturnâ€™s rings from Cassini. , 2007, , 147-200.		0
872	Saturn: The Beauty of Rings. , 2007, , 335-357.		0

#	ARTICLE	IF	CITATIONS
873	Expected effect of atomic oxygen of Europa's exosphere on the MAss Spectrometer for Planetary EXploration. <i>Planetary and Space Science</i> , 2020, 188, 104918.	0.9	2
874	The search for life in the solar system. <i>Transactions of the American Clinical and Climatological Association</i> , 2009, 120, 299-325.	0.9	2
875	Discrete element modeling of planetary ice analogs: mechanical behavior upon sintering. <i>Granular Matter</i> , 2022, 24, 1.	1.1	2
876	Enceladus as a potential oasis for life: Science goals and investigations for future explorations. <i>Experimental Astronomy</i> , 2022, 54, 809-847.	1.6	5
877	Habitability of the early Earth: liquid water under a faint young Sun facilitated by strong tidal heating due to a closer Moon. <i>Palaontologische Zeitschrift</i> , 2021, 95, 563-575.	0.8	7
878	Thrust faulting as the origin of dorsa in the trailing hemisphere of Enceladus. <i>Icarus</i> , 2022, 375, 114815.	1.1	4
879	Enceladus and Titan: emerging worlds of the Solar System. <i>Experimental Astronomy</i> , 0, , 1.	1.6	1
880	Hypotheses for Triton's plumes: New analyses and future remote sensing tests. <i>Icarus</i> , 2022, 375, 114835.	1.1	6
881	Single- and Multi-Pass Magnetometric Subsurface Ocean Detection and Characterization in Icy Worlds Using Principal Component Analysis (PCA): Application to Triton. <i>Earth and Space Science</i> , 2022, 9, .	1.1	9
882	Cryovolcanism. , 2022, , 161-234.		3
884	Theoretical Considerations on the Characteristic Timescales of Hydrogen Generation by Serpentinization Reactions on Enceladus. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	10
885	Quantitative and Compositional Analysis of Trace Amino Acids in Icy Moon Analogues Using a Microcapillary Electrophoresis Laser-Induced Fluorescence Detection System. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 333-345.	1.2	2
886	Non-linear radar response to the radial structure of Europa plume fallout deposits. <i>Icarus</i> , 2022, 378, 114935.	1.1	1
887	Modeling the complete set of Cassini's UVIS occultation observations of Enceladus's plume. <i>Icarus</i> , 2022, 383, 114918.	1.1	1
888	Cooling Crusts Create Concomitant Cryovolcanic Cracks. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	8
889	Probing the Icy Shell Structure of Ocean Worlds with Gravity-Topography Admittance. <i>Planetary Science Journal</i> , 2022, 3, 53.	1.5	5
890	The Detection of Seismicity on Icy Ocean Worlds by Single-Station and Small-Aperture Seismometer Arrays. <i>Earth and Space Science</i> , 2022, 9, .	1.1	3
891	Interpreting Molecular and Isotopic Biosignatures in Methane-Derived Authigenic Carbonates in the Light of a Potential Carbon Cycle in the Icy Moons. <i>Astrobiology</i> , 2022, 22, 552-567.	1.5	1

#	ARTICLE	IF	CITATIONS
892	Science Objectives for Flagship-Class Mission Concepts for the Search for Evidence of Life at Enceladus. <i>Astrobiology</i> , 2022, 22, 685-712.	1.5	21
893	Analytical Chemistry Throughout This Solar System. <i>Annual Review of Analytical Chemistry</i> , 2022, 15, 197-219.	2.8	2
894	The Case for a New Frontiersâ€ˆClass Uranus Orbiter: System Science at an Underexplored and Unique World with a Mid-scale Mission. <i>Planetary Science Journal</i> , 2022, 3, 58.	1.5	12
895	The Role of Atmospheric Exchange in Falseâ€ˆPositive Biosignature Detection. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	4
896	Interiors of Earth-Like Planets and Satellites of the Solar System. <i>Surveys in Geophysics</i> , 0, , 1.	2.1	5
897	Effects of trapped ions concentration on the dynamics of dustâ€ˆacoustic periodic travelling waves in dusty plasmas. <i>Contributions To Plasma Physics</i> , 2022, 62, .	0.5	3
898	The Tides of Enceladus' Porous Core. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	20
899	Survival strategies of an anoxic microbial ecosystem in Lake Untersee, a potential analog for Enceladus. <i>Scientific Reports</i> , 2022, 12, 7376.	1.6	3
900	Resurfacing: An Approach to Planetary Protection for Geologically Active Ocean Worlds. <i>Planetary Science Journal</i> , 2022, 3, 108.	1.5	1
901	Exosphere-mediated migration of volatile species on airless bodies across the solar system. <i>Icarus</i> , 2022, 384, 115092.	1.1	6
902	Dust-acoustic solitary and periodic waves in a plasma with ion distribution with trapped particles. <i>Radiation Effects and Defects in Solids</i> , 0, , 1-16.	0.4	2
903	Life detection in space: Current methods and future technologies. , 2022, , 221-253.		0
904	Habitability in the Solar System beyond the Earth and the search for life. , 2022, , 167-177.		2
905	Statistics of Water-group Band Ion Cyclotron Waves in Saturn's Inner Magnetosphere Based on 13 yr of Cassini Measurements. <i>Astrophysical Journal</i> , 2022, 932, 56.	1.6	3
906	Production and Impact Characterization of Enceladus Ice Grain Analogues. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 1813-1822.	1.2	9
907	Solid phase extraction on reverse phase chromatographic media subjected to stresses expected for extraterrestrial implementation. <i>Analyst</i> , The, 2022, 147, 3514-3524.	1.7	2
908	Grain growth inhibited during grain size-sensitive creep in polycrystalline ice: an energy dissipation-rate perspective. <i>Physics and Chemistry of Minerals</i> , 2022, 49, .	0.3	0
909	Extreme Exoworlds and the Extremophile Paradox. <i>Astrobiology</i> , 0, , .	1.5	0

#	ARTICLE	IF	CITATIONS
910	On computing viscoelastic Love numbers for general planetary models: the <tt>ALMA3</tt> code. <i>Geophysical Journal International</i> , 2022, 231, 1502-1517.	1.0	6
911	Solar System Science with the Orbiting Astronomical Satellite Investigating Stellar Systems (OASIS) Observatory. <i>Space Science Reviews</i> , 2022, 218, .	3.7	1
912	Different Ice-shell Geometries on Europa and Enceladus due to Their Different Sizes: Impacts of Ocean Heat Transport. <i>Astrophysical Journal</i> , 2022, 934, 116.	1.6	12
913	Microfluidic Chromatography for Enhanced Amino Acid Detection at Ocean Worlds. <i>Astrobiology</i> , 2022, 22, 1116-1128.	1.5	3
914	Very long-term periodicity of episodic zircon production and Earth system evolution. <i>Earth-Science Reviews</i> , 2022, 233, 104164.	4.0	6
915	Insight Into Io Enabled by Characterization of Its Neutral Oxygen Torus. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	0.8	2
916	Chemical Fractionation Modeling of Plumes Indicates a Gas-rich, Moderately Alkaline Enceladus Ocean. <i>Planetary Science Journal</i> , 2022, 3, 191.	1.5	15
917	Advances in Mass Spectrometers for Flyby Space Missions for the Analysis of Biosignatures and Other Complex Molecules. <i>Universe</i> , 2022, 8, 416.	0.9	3
918	On Icy Ocean Worlds, Size Controls Ice Shell Geometry. <i>Astrophysical Journal</i> , 2022, 935, 103.	1.6	6
919	Extraterrestrial Life Signature Detection Microscopy: Search and Analysis of Cells and Organics on Mars and Other Solar System Bodies. <i>Space Science Reviews</i> , 2022, 218, .	3.7	2
921	Tidal drag in exoplanet oceans. , 2023, , 417-439.		0
922	Seismology in the solar system. <i>Advances in Geophysics</i> , 2022, , 9-64.	1.1	4
923	Abundant phosphorus expected for possible life in Enceladus's ocean. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2022, 119, .	3.3	16
924	Chemical and physical processes caused by electrons impacting on H ₂ O-CO mixed ices. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, , .	1.6	0
925	Ocean dynamics and tracer transport over the south pole geysers of Enceladus. <i>Monthly Notices of the Royal Astronomical Society</i> , 2022, 517, 3485-3494.	1.6	9
926	Detecting Lipids on Planetary Surfaces with Laser Desorption Ionization Mass Spectrometry. <i>Planetary Science Journal</i> , 2022, 3, 241.	1.5	1
927	Planetary Caves: A Solar System View of Processes and Products. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	3
928	A multi-lander New Frontiers mission concept study for Enceladus: SILENUS. <i>Frontiers in Astronomy and Space Sciences</i> , 0, 9, .	1.1	3

#	ARTICLE	IF	CITATIONS
929	Hydrothermal Processing of Microorganisms: Mass Spectral Signals of Degraded Biosignatures for Life Detection on Icy Moons. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 2508-2518.	1.2	3
930	From planetary exploration goals to technology requirements. , 2023, , 177-248.		1
931	From science questions to Solar System exploration. , 2023, , 65-175.		0
932	The Plasma Environment of Comet 67P/Churyumov-Gerasimenko. <i>Space Science Reviews</i> , 2022, 218, .	3.7	11
933	Measurements of regolith thicknesses on Enceladus: Uncovering the record of plume activity. <i>Icarus</i> , 2023, 392, 115369.	1.1	5
934	Toward Detecting Biosignatures of DNA, Lipids, and Metabolic Intermediates from Bacteria in Ice Grains Emitted by Enceladus and Europa. <i>Astrobiology</i> , 2023, 23, 60-75.	1.5	11
935	Moonraker: Enceladus Multiple Flyby Mission. <i>Planetary Science Journal</i> , 2022, 3, 268.	1.5	5
936	Surfaceâ€”toâ€”Ocean Exchange by the Sinking of Impact Generated Melt Chambers on Europa. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	7
937	The ETNA mission concept: Assessing the habitability of an active ocean world. <i>Frontiers in Astronomy and Space Sciences</i> , 0, 9, .	1.1	2
938	Highlight Advances in Planetary Physics in the Solar System: In Situ Detection Over the Past 20 Years. <i>Space: Science & Technology</i> , 2023, 3, .	1.0	0
939	Enceladus erupts. <i>Physics Today</i> , 2023, 76, 62-63.	0.3	2
940	Simulating spatial variations of lithospheric folding in the south polar terrain of Enceladus. <i>Icarus</i> , 2023, 394, 115431.	1.1	0
941	The Bolometric Bond Albedo of Enceladus. <i>Icarus</i> , 2023, 394, 115429.	1.1	1
942	Terrestrial analogs & submarine hydrothermal ventsâ€”their roles in exploring ocean worlds, habitability, and life beyond earth. , 2023, , 311-358.		0
943	Resonant Scattering of Radiation Belt Electrons at Saturn by Ion Cyclotron Waves. <i>Geophysical Research Letters</i> , 2023, 50, .	1.5	4
944	Salty ocean and submarine hydrothermal vents on Saturnâ€™s Moon Enceladusâ€”Tall plume of gas, jets of water vapor & organic-enriched ice particles spewing from its south pole. , 2023, , 583-616.		0
945	Dispersion of Bacteria by Low-Pressure Boiling: Life Detection in Enceladus' Plume Material. <i>Astrobiology</i> , 2023, 23, 269-279.	1.5	3
946	The Fermi Paradox and Astrobiology. , 2023, , 209-266.		0

#	ARTICLE	IF	CITATIONS
947	Microwaving Mimas, Enceladus, Tethys, Dione, Rhea, Iapetus and Phoebe: Insights into the regolith properties and geological history of Saturn's icy satellites. <i>Icarus</i> , 2023, 394, 115446.	1.1	3
948	Moonquake-triggered mass wasting processes on icy satellites. <i>Icarus</i> , 2023, 399, 115534.	1.1	3
949	Study of the eruption mechanism of Saturn's moon Enceladus plume using the mathematical model of a geyser (periodic bubbling spring). , 2022, , .		0
950	OLYMPIA-LILBID: A New Laboratory Setup to Calibrate Spaceborne Hypervelocity Ice Grain Detectors Using High-Resolution Mass Spectrometry. <i>Analytical Chemistry</i> , 2023, 95, 3621-3628.	3.2	1
951	Spectroscopic Detection of Biosignatures in Natural Ice Samples as a Proxy for Icy Moons. <i>Life</i> , 2023, 13, 478.	1.1	0
952	Particle entrainment and rotating convection in Enceladus's ocean. <i>Communications Earth & Environment</i> , 2023, 4, .	2.6	4
953	Circumplanetary disk ices. <i>Astronomy and Astrophysics</i> , 2023, 672, A142.	2.1	0
954	Stacking Lake Ice Analog Cryotectonic Dynamics on Dione's Wispy Terrain. , 0, , .		0
955	Mass Spectrometric Fingerprints of Organic Compounds in NaCl-Rich Ice Grains from Europa and Enceladus. <i>ACS Earth and Space Chemistry</i> , 2023, 7, 735-752.	1.2	7
956	Velocity Dependence of Submicron Ice Grain Rebound, Sticking, Particle Fragmentation, and Impact Ionization up to 2.4 km/s. <i>ACS Earth and Space Chemistry</i> , 2023, 7, 764-773.	1.2	2
957	Robotic Mobility and Sampling Systems for Ocean-World Bodies. , 2023, , 907-933.		0
972	Enceladus. , 2023, , 891-893.		0
996	Titan, Enceladus, and other icy moons of Saturn. , 2024, , 315-356.		0