

Ongoing hydrothermal activities within Enceladus

Nature

519, 207-210

DOI: [10.1038/nature14262](https://doi.org/10.1038/nature14262)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Modeling Europa's dust plumes. <i>Geophysical Research Letters</i> , 2015, 42, 10,541.	1.5	24
2	SILICATES ON IAPETUS FROM CASSINI'S COMPOSITE INFRARED SPECTROMETER. <i>Astrophysical Journal Letters</i> , 2015, 811, L27.	3.0	1
3	Chemical Gardens as Flow-through Reactors Simulating Natural Hydrothermal Systems. <i>Journal of Visualized Experiments</i> , 2015, , .	0.2	17
4	Hydrogen-rich hydrothermal environments in the Hadean ocean inferred from serpentinization of komatiites at 300°C and 500 bar. <i>Progress in Earth and Planetary Science</i> , 2015, 2, .	1.1	45
5	Assessing the Ecophysiology of Methanogens in the Context of Recent Astrobiological and Planetological Studies. <i>Life</i> , 2015, 5, 1652-1686.	1.1	55
6	Hints of hot springs found on Saturnian moon. <i>Nature</i> , 2015, , .	13.7	0
7	Microbial processes and factors controlling their activities in alkaline lakes of the Mongolian plateau. <i>Chinese Journal of Oceanology and Limnology</i> , 2015, 33, 1391-1401.	0.7	17
8	Microorganisms in extreme environments with a view to astrobiology in the outer solar system. <i>Proceedings of SPIE</i> , 2015, , .	0.8	1
9	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
10	Enceladus' hot springs. <i>Nature</i> , 2015, 519, 162-163.	13.7	7
11	From Chemical Gardens to Chemobrionics. <i>Chemical Reviews</i> , 2015, 115, 8652-8703.	23.0	216
12	The fluffy core of Enceladus. <i>Icarus</i> , 2015, 258, 54-66.	1.1	61
14	The pH of Enceladus' ocean. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 162, 202-219.	1.6	205
15	High-temperature water-rock interactions and hydrothermal environments in the chondrite-like core of Enceladus. <i>Nature Communications</i> , 2015, 6, 8604.	5.8	152
16	Impact craters: An ice study on Rhea. <i>Icarus</i> , 2015, 261, 80-90.	1.1	20
17	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
18	Geophysical controls of chemical disequilibria in Europa. <i>Geophysical Research Letters</i> , 2016, 43, 4871-4879.	1.5	153
19	THE EFFECTS OF CRACKING ON THE SURFACE POTENTIAL OF ICY GRAINS IN SATURN'S E-RING: LABORATORY STUDIES. <i>Astrophysical Journal</i> , 2016, 825, 106.	1.6	4

#	ARTICLE	IF	CITATIONS
20	Strategic map for exploring the ocean-world Enceladus. <i>Acta Astronautica</i> , 2016, 126, 52-58.	1.7	20
21	AstRoMap European Astrobiology Roadmap. <i>Astrobiology</i> , 2016, 16, 201-243.	1.5	99
22	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
23	Enceladus Life Finder: The search for life in a habitable Moon. , 2016, , .		39
24	Crustal control of dissipative ocean tides in Enceladus and other icy moons. <i>Icarus</i> , 2016, 280, 278-299.	1.1	44
25	Microbial Morphology and Motility as Biosignatures for Outer Planet Missions. <i>Astrobiology</i> , 2016, 16, 755-774.	1.5	34
26	The Astrobiology Primer v2.0. <i>Astrobiology</i> , 2016, 16, 561-653.	1.5	133
27	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
28	Fluid chemistry in the Solitaire and Dodo hydrothermal fields of the Central Indian Ridge. <i>Geofluids</i> , 2016, 16, 988-1005.	0.3	29
29	Hydrogen and carbon isotope systematics in hydrogenotrophic methanogenesis under H ₂ -limited and H ₂ -enriched conditions: implications for the origin of methane and its isotopic diagnosis. <i>Progress in Earth and Planetary Science</i> , 2016, 3, .	1.1	35
30	The diurnal libration and interior structure of Enceladus. <i>Icarus</i> , 2016, 277, 311-318.	1.1	41
31	THEO concept mission: Testing the Habitability of Enceladus's Ocean. <i>Advances in Space Research</i> , 2016, 58, 1117-1137.	1.2	13
32	Cassini's Grand Finale. <i>Nature Geoscience</i> , 2016, 9, 472-473.	5.4	17
33	Geologic evolution of the Lost City Hydrothermal Field. <i>Geochemistry, Geophysics, Geosystems</i> , 2016, 17, 375-394.	1.0	30
34	Genesis of volatile components at Saturn's regular satellites. Origin of Titan's atmosphere. <i>Geochemistry International</i> , 2016, 54, 7-26.	0.2	8
35	Potassium chloride-bearing ice VII and ice planet dynamics. <i>Geochimica Et Cosmochimica Acta</i> , 2016, 174, 156-166.	1.6	4
36	Sustained eruptions on Enceladus explained by turbulent dissipation in tiger stripes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 3972-3975.	3.3	74
38	Consequences of large impacts on Enceladus's core shape. <i>Icarus</i> , 2016, 264, 300-310.	1.1	31

#	ARTICLE	IF	CITATIONS
39	Navigation technology for exploration of glacier ice with maneuverable melting probes. <i>Cold Regions Science and Technology</i> , 2016, 123, 53-70.	1.6	46
40	Habitability: A Review. <i>Astrobiology</i> , 2016, 16, 89-117.	1.5	246
41	Aggregate particles in the plumes of Enceladus. <i>Icarus</i> , 2016, 264, 227-238.	1.1	16
42	Enceladus's measured physical libration requires a global subsurface ocean. <i>Icarus</i> , 2016, 264, 37-47.	1.1	289
43	Thermodynamics, Disequilibrium, Evolution: Far-From-Equilibrium Geological and Chemical Considerations for Origin-Of-Life Research. <i>Origins of Life and Evolution of Biospheres</i> , 2017, 47, 39-56.	0.8	54
44	Synchronized chaotic targeting and acceleration of surface chemistry in prebiotic hydrothermal microenvironments. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 1275-1280.	3.3	15
45	Remote Sensing of Potential Biosignatures from Rocky, Liquid, or Icy (Exo)Planetary Surfaces. <i>Astrobiology</i> , 2017, 17, 231-252.	1.5	29
46	Salt partitioning between water and high-pressure ices. Implication for the dynamics and habitability of icy moons and water-rich planetary bodies. <i>Earth and Planetary Science Letters</i> , 2017, 463, 36-47.	1.8	39
47	Cassini finds molecular hydrogen in the Enceladus plume: Evidence for hydrothermal processes. <i>Science</i> , 2017, 356, 155-159.	6.0	396
48	Detecting molecular hydrogen on Enceladus. <i>Science</i> , 2017, 356, 132-133.	6.0	7
49	Fates of satellite ejecta in the Saturn system, II. <i>Icarus</i> , 2017, 284, 70-89.	1.1	13
51	Radioisotope power system-based enceladus smallsat mission concept: Enceladus express. , 2017, , .		0
52	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
53	Spatially resolved near infrared observations of Enceladus's tiger stripe eruptions from Cassini VIMS. <i>Icarus</i> , 2017, 292, 1-12.	1.1	10
54	Thermally anomalous features in the subsurface of Enceladus's south polar terrain. <i>Nature Astronomy</i> , 2017, 1, .	4.2	41
55	New Perspectives on Mineral Nucleation and Growth. , 2017, , .		50
56	Experimentally Testing Hydrothermal Vent Origin of Life on Enceladus and Other Icy/Ocean Worlds. <i>Astrobiology</i> , 2017, 17, 820-833.	1.5	62
57	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

#	ARTICLE	IF	CITATIONS
58	A Novel Strategy to Seek Biosignatures at Enceladus and Europa. <i>Astrobiology</i> , 2017, 17, 852-861.	1.5	9
59	Laboratory Studies of Methane and Its Relationship to Prebiotic Chemistry. <i>Astrobiology</i> , 2017, 17, 786-812.	1.5	20
60	Digital Holographic Microscopy, a Method for Detection of Microorganisms in Plume Samples from Enceladus and Other Icy Worlds. <i>Astrobiology</i> , 2017, 17, 913-925.	1.5	26
61	Aqueous geochemistry in icy world interiors: Equilibrium fluid, rock, and gas compositions, and fate of antifreezes and radionuclides. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 212, 324-371.	1.6	74
62	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
63	Keeping the ocean warm. <i>Nature Astronomy</i> , 2017, 1, 821-822.	4.2	0
64	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
65	Powering prolonged hydrothermal activity inside Enceladus. <i>Nature Astronomy</i> , 2017, 1, 841-847.	4.2	158
67	Feasibility of Detecting Bioorganic Compounds in Enceladus Plumes with the Enceladus Organic Analyzer. <i>Astrobiology</i> , 2017, 17, 902-912.	1.5	35
68	Abiotic and Biotic Formation of Amino Acids in the Enceladus Ocean. <i>Astrobiology</i> , 2017, 17, 862-875.	1.5	40
70	Earth as a Tool for Astrobiology – A European Perspective. <i>Space Science Reviews</i> , 2017, 209, 43-81.	3.7	68
71	Can Life Begin on Enceladus? A Perspective from Hydrothermal Chemistry. <i>Astrobiology</i> , 2017, 17, 834-839.	1.5	60
72	Cosmic dust in space and on Earth. <i>Astronomy and Geophysics</i> , 2017, 58, 1.35-1.40.	0.1	4
73	Relationships between sucretolerance and salinotolerance in bacteria from hypersaline environments and their implications for the exploration of Mars and the icy worlds. <i>International Journal of Astrobiology</i> , 2017, 16, 156-162.	0.9	10
74	Ocean worlds exploration. <i>Acta Astronautica</i> , 2017, 131, 123-130.	1.7	93
75	A Community Grows around the Geysering World of Enceladus. <i>Astrobiology</i> , 2017, 17, 815-819.	1.5	4
76	Hydrothermal Microflow Technology as a Research Tool for Origin-of-Life Studies in Extreme Earth Environments. <i>Life</i> , 2017, 7, 37.	1.1	10
77	Inhabited or Uninhabited? Pitfalls in the Interpretation of Possible Chemical Signatures of Extraterrestrial Life. <i>Frontiers in Microbiology</i> , 2017, 8, 1622.	1.5	16

#	ARTICLE	IF	CITATIONS
78	Origin of the Reductive Tricarboxylic Acid (rTCA) Cycle-Type CO ₂ Fixation: A Perspective. <i>Life</i> , 2017, 7, 39.	1.1	23
79	Cassiniâ€™Huygens: Saturn, rings and moons. <i>Astronomy and Geophysics</i> , 2017, 58, 4.20-4.25.	0.1	1
80	Biological methane production under putative Enceladus-like conditions. <i>Nature Communications</i> , 2018, 9, 748.	5.8	91
81	Dusty Rings. , 0, , 308-337.		6
82	Laboratory Studies of Planetary Ring Systems. , 0, , 494-516.		1
83	An experimental study on impactâ€™induced alterations of planetary organic simulants. <i>Meteoritics and Planetary Science</i> , 2018, 53, 1267-1282.	0.7	4
84	Halogens on and Within the Ocean Worlds of the Outer Solar System. <i>Springer Geochemistry</i> , 2018, , 997-1016.	0.1	2
85	Water and the Interior Structure of Terrestrial Planets and Icy Bodies. <i>Space Science Reviews</i> , 2018, 214, 1.	3.7	33
86	Does Titanâ€™s long-wavelength topography contain information about subsurface ocean dynamics?. <i>Icarus</i> , 2018, 310, 149-164.	1.1	22
87	Cold cases: What we don't know about Saturn's Moons. <i>Planetary and Space Science</i> , 2018, 155, 41-49.	0.9	5
88	Discovery of moganite in a lunar meteorite as a trace of H ₂ O ice in the Moonâ€™s regolith. <i>Science Advances</i> , 2018, 4, eaar4378.	4.7	21
89	Sea ice, extremophiles and life on extra-terrestrial ocean worlds. <i>International Journal of Astrobiology</i> , 2018, 17, 1-16.	0.9	62
90	Experimental conditions affecting the kinetics of aqueous HCN polymerization as revealed by UVâ€™vis spectroscopy. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018, 191, 389-397.	2.0	14
91	Impact ionisation mass spectrometry of platinum-coated olivine and magnesite-dominated cosmic dust analogues. <i>Planetary and Space Science</i> , 2018, 156, 96-110.	0.9	16
92	Explorer of Enceladus and Titan (E2T): Investigating ocean worlds' evolution and habitability in the solar system. <i>Planetary and Space Science</i> , 2018, 155, 73-90.	0.9	26
93	Occupied and Empty Regions of the Space of Extremophile Parameters. , 2018, , 199-230.		5
94	Geophysical Investigations of Habitability in Iceâ€™Covered Ocean Worlds. <i>Journal of Geophysical Research E: Planets</i> , 2018, 123, 180-205.	1.5	133
95	Life in the Universe. , 2018, , .		23

#	ARTICLE	IF	CITATIONS
97	The Habitability of Icy Ocean Worlds in the Solar System. , 2018, , 2855-2877.		2
98	How to Detect Life on Icy Moons. <i>Astrobiology</i> , 2018, 18, 843-855.	1.5	30
99	Dust Emission by Active Moons. <i>Space Science Reviews</i> , 2018, 214, 1.	3.7	3
100	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
101	Ocean Worlds in the Outer Regions of the Solar System (Review). <i>Solar System Research</i> , 2018, 52, 371-381.	0.3	10
102	In situ collection of dust grains falling from Saturnâ€™s rings into its atmosphere. <i>Science</i> , 2018, 362, .	6.0	44
103	Kinetics of D/H isotope fractionation between molecular hydrogen and water. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 242, 191-212.	1.6	15
104	Measuring Perchlorate and Sulfate in Planetary Brines Using Raman Spectroscopy. <i>ACS Earth and Space Chemistry</i> , 2018, 2, 1068-1074.	1.2	4
105	Is Extraterrestrial Life Suppressed on Subsurface Ocean Worlds due to the Paucity of Bioessential Elements?. <i>Astronomical Journal</i> , 2018, 156, 151.	1.9	29
106	Habitability of Exoplanet Waterworlds. <i>Astrophysical Journal</i> , 2018, 864, 75.	1.6	76
107	Simulating putative Enceladus-like conditions: The possibility of biological methane production on Saturnâ€™s icy moon. <i>Proceedings of the International Astronomical Union</i> , 2018, 14, 219-221.	0.0	1
108	Review of Saturnâ€™s icy moons following the Cassini mission. <i>Reports on Progress in Physics</i> , 2018, 81, 065901.	8.1	9
109	Cryogenic silicification of microorganisms in hydrothermal fluids. <i>Earth and Planetary Science Letters</i> , 2018, 498, 1-8.	1.8	12
110	Low Energy Subsurface Environments as Extraterrestrial Analogs. <i>Frontiers in Microbiology</i> , 2018, 9, 1605.	1.5	37
111	Lunar and Martian Silica. <i>Minerals (Basel, Switzerland)</i> , 2018, 8, 267.	0.8	19
112	Geoelectrodes and Fuel Cells for Simulating Hydrothermal Vent Environments. <i>Astrobiology</i> , 2018, 18, 1147-1158.	1.5	5
113	Binding of Nucleic Acid Components to the Serpentinite-Hosted Hydrothermal Mineral Brucite. <i>Astrobiology</i> , 2018, 18, 989-1007.	1.5	18
115	Deepâ€Sea Hydrothermal Fields as Natural Power Plants. <i>ChemElectroChem</i> , 2018, 5, 2162-2166.	1.7	15

#	ARTICLE	IF	CITATIONS
116	Project VALKYRIE: Laser-Powered Cryobots and Other Methods for Penetrating Deep Ice on Ocean Worlds. , 2018, , 47-165.		12
117	Exploring Kepler Giant Planets in the Habitable Zone. <i>Astrophysical Journal</i> , 2018, 860, 67.	1.6	32
118	Operation of pneumatically-actuated membrane-based microdevices for in situ analysis of extraterrestrial organic molecules after prolonged storage and in multiple orientations with respect to Earth's gravitational field. <i>Sensors and Actuators B: Chemical</i> , 2018, 272, 229-235.	4.0	8
119	Tightly coupled navigation system of a differential magnetometer system and a MEMS-IMU for Enceladus. , 2018, , .		1
120	Follow the High Subcritical Water. <i>Geosciences (Switzerland)</i> , 2019, 9, 249.	1.0	3
121	Analogue spectra for impact ionization mass spectra of water ice grains obtained at different impact speeds in space. <i>Rapid Communications in Mass Spectrometry</i> , 2019, 33, 1751-1760.	0.7	21
122	Enceladus: First Observed Primordial Soup Could Arbitrate Origin-of-Life Debate. <i>Astrobiology</i> , 2019, 19, 1263-1278.	1.5	26
123	Biomarker Profiling of Microbial Mats in the Geothermal Band of Cerro Caliente, Deception Island (Antarctica): Life at the Edge of Heat and Cold. <i>Astrobiology</i> , 2019, 19, 1490-1504.	1.5	27
124	Peptide Synthesis under the Alkaline Hydrothermal Conditions on Enceladus. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 2559-2568.	1.2	20
125	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
126	Using dust shed from asteroids as microsamples to link remote measurements with meteorite classes. <i>Meteoritics and Planetary Science</i> , 2019, 54, 2046-2066.	0.7	4
127	The Dawn of Dust Astronomy. <i>Space Science Reviews</i> , 2019, 215, 1.	3.7	19
128	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
129	Astrobiologie - die Suche nach außerirdischem Leben. , 2019, , .		2
131	Origin and Evolution of Life-Related Molecules. , 2019, , 261-276.		0
132	Circumplanetary Dust Populations. <i>Space Science Reviews</i> , 2019, 215, 1.	3.7	8
133	Contributions from Accreted Organics to Titan's Atmosphere: New Insights from Cometary and Chondritic Data. <i>Astrophysical Journal</i> , 2019, 871, 59.	1.6	39
134	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

#	ARTICLE	IF	CITATIONS
135	Enceladus's crust as a non-uniform thin shell: II tidal dissipation. <i>Icarus</i> , 2019, 332, 66-91.	1.1	31
136	Cassini-Huygens™ exploration of the Saturn system: 13 years of discovery. <i>Science</i> , 2019, 364, 1046-1051.	6.0	35
137	Acid-Base Catalytic Effects on Reduction of Methanol in Hot Water. <i>Catalysts</i> , 2019, 9, 373.	1.6	2
138	A Test in a High Altitude Lake of a Multi-Parametric Rapid Methodology for Assessing Life in Liquid Environments on Planetary Bodies: A Potential New Freshwater Polychaete Tubeworm Community. <i>Frontiers in Environmental Science</i> , 2019, 7, .	1.5	1
139	Recent cryovolcanism in Virgil Fossae on Pluto. <i>Icarus</i> , 2019, 330, 155-168.	1.1	45
140	Living at the Extremes: Extremophiles and the Limits of Life in a Planetary Context. <i>Frontiers in Microbiology</i> , 2019, 10, 780.	1.5	339
141	Decomposition of amino acids in water with application to in-situ measurements of Enceladus, Europa and other hydrothermally active icy ocean worlds. <i>Icarus</i> , 2019, 329, 140-147.	1.1	24
142	New Mixed Finite Element Methods for Natural Convection with Phase-Change in Porous Media. <i>Journal of Scientific Computing</i> , 2019, 80, 141-174.	1.1	10
143	Enceladus: Evidence and Unsolved Questions for an Ice-Covered Habitable World. , 2019, , 399-407.		1
144	Enceladus's ice shell structure as a window on internal heat production. <i>Icarus</i> , 2019, 332, 111-131.	1.1	77
145	Biological Contamination Prevention for Outer Solar System Moons of Astrobiological Interest: What Do We Need to Know?. <i>Astrobiology</i> , 2019, 19, 951-974.	1.5	24
146	Challenges of identifying putative planetary-origin meteorites of non-igneous material. <i>Geoscience Frontiers</i> , 2019, 10, 1879-1890.	4.3	1
147	Evolution of Saturn's mid-sized moons. <i>Nature Astronomy</i> , 2019, 3, 543-552.	4.2	58
148	Tidal dissipation in Enceladus' uneven, fractured ice shell. <i>Icarus</i> , 2019, 328, 218-231.	1.1	32
149	Translational and Rotational Diffusion in Liquid Water at Very High Pressure: A Simulation Study. <i>Journal of Physical Chemistry B</i> , 2019, 123, 10025-10035.	1.2	4
150	Membrane Lipid Composition and Amino Acid Excretion Patterns of <i>Methanothermococcus okinawensis</i> Grown in the Presence of Inhibitors Detected in the Enceladian Plume. <i>Life</i> , 2019, 9, 85.	1.1	12
151	Introduction to Volatiles in the Martian Crust. , 2019, , 1-12.		5
152	Do tidally-generated inertial waves heat the subsurface oceans of Europa and Enceladus?. <i>Icarus</i> , 2019, 321, 126-140.	1.1	31

#	ARTICLE	IF	CITATIONS
153	The NASA Roadmap to Ocean Worlds. <i>Astrobiology</i> , 2019, 19, 1-27.	1.5	209
154	Long-term stability of Enceladus's uneven ice shell. <i>Icarus</i> , 2019, 319, 476-484.	1.1	59
155	The mid-IR spectral effects of darkening agents and porosity on the silicate surface features of airless bodies. <i>Icarus</i> , 2019, 321, 71-81.	1.1	3
156	A Systematic Way to Life Detection: Combining Field, Lab and Space Research in Low Earth Orbit. <i>Advances in Astrobiology and Biogeophysics</i> , 2019, , 111-122.	0.6	4
157	Carbonate-hydroxide chemical-garden tubes in the soda ocean of Enceladus: Abiotic membranes and microtubular forms of calcium carbonate. <i>Icarus</i> , 2019, 319, 337-348.	1.1	21
158	Collecting amino acids in the Enceladus plume. <i>International Journal of Astrobiology</i> , 2019, 18, 47-59.	0.9	24
159	Subsurface exolife. <i>International Journal of Astrobiology</i> , 2019, 18, 112-141.	0.9	33
160	The effect of high-velocity dust particle impacts on microchannel plate (MCP) detectors. <i>Planetary and Space Science</i> , 2020, 183, 104628.	0.9	8
161	Cooling patterns in rotating thin spherical shells – Application to Titan's subsurface ocean. <i>Icarus</i> , 2020, 338, 113509.	1.1	28
162	Protein Stability in Titan's Subsurface Water Ocean. <i>Astrobiology</i> , 2020, 20, 190-198.	1.5	1
163	Ceres: Astrobiological Target and Possible Ocean World. <i>Astrobiology</i> , 2020, 20, 269-291.	1.5	43
164	Planetary exploration of Saturn moons Enceladus and Dione. <i>Acta Astronautica</i> , 2020, 168, 200-203.	1.7	1
165	Metastable equilibrium of substitution reactions among oxygen- and nitrogen-bearing organic compounds at hydrothermal conditions. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 272, 93-104.	1.6	7
166	Analog Experiments for the Identification of Trace Biosignatures in Ice Grains from Extraterrestrial Ocean Worlds. <i>Astrobiology</i> , 2020, 20, 179-189.	1.5	37
167	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
170	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
171	The convergence of minerals and life. <i>Physics of Life Reviews</i> , 2020, 34-35, 99-104.	1.5	1
172	On the Habitability and Future Exploration of Ocean Worlds. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	36

#	ARTICLE	IF	CITATIONS
173	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
174	Key Technologies and Instrumentation for Subsurface Exploration of Ocean Worlds. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	18
175	Returning Samples From Enceladus for Life Detection. <i>Frontiers in Astronomy and Space Sciences</i> , 2020, 7, .	1.1	32
176	Kinetics and Mechanisms of Hydrothermal Ketonic Decarboxylation. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 2082-2095.	1.2	6
177	Demonstration of Autonomous Nested Search for Local Maxima Using an Unmanned Underwater Vehicle. , 2020, , .		2
178	In Situ Formation of Monohydrocalcite in Alkaline Saline Lakes of the Valley of Gobi Lakes: Prediction for Mg, Ca, and Total Dissolved Carbonate Concentrations in Enceladus's Ocean and Alkaline-Carbonate Ocean Worlds. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 669.	0.8	12
179	Microbial Component Detection in Enceladus Snowing Phenomenon. <i>Astrophysical Bulletin</i> , 2020, 75, 166-175.	0.3	2
180	3D Printed Minerals as Astrobiology Analogs of Hydrothermal Vent Chimneys. <i>Astrobiology</i> , 2020, 20, 1405-1412.	1.5	3
181	Effect of Copper Salts on Amide Hydrothermal Formation and Reactivity. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 1596-1603.	1.2	4
182	Molecular evolution during hydrothermal reactions from formaldehyde and ammonia simulating aqueous alteration in meteorite parent bodies. <i>Icarus</i> , 2020, 347, 113827.	1.1	18
183	The ambivalent role of water at the origins of life. <i>FEBS Letters</i> , 2020, 594, 2717-2733.	1.3	37
184	Effects of Amino Acids on Iron-Silicate Chemical Garden Precipitation. <i>Langmuir</i> , 2020, 36, 5793-5801.	1.6	20
185	Discriminating Abiotic and Biotic Fingerprints of Amino Acids and Fatty Acids in Ice Grains Relevant to Ocean Worlds. <i>Astrobiology</i> , 2020, 20, 1168-1184.	1.5	38
186	Theoretical Study of Formation of Methanol under Hydrothermal Conditions. <i>Journal of Physical Chemistry A</i> , 2020, 124, 4496-4505.	1.1	0
187	Simulating microbial processes in extraterrestrial, aqueous environments. <i>Journal of Microbiological Methods</i> , 2020, 172, 105883.	0.7	7
188	Internally Heated Porous Convection: An Idealized Model for Enceladus' Hydrothermal Activity. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2020JE006451.	1.5	10
189	Ice-Ocean Exchange Processes in the Jovian and Saturnian Satellites. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	43
190	Characterizing organic particle impacts on inert metal surfaces: Foundations for capturing organic molecules during hypervelocity transits of Enceladus plumes. <i>Meteoritics and Planetary Science</i> , 2020, 55, 465-479.	0.7	19

#	ARTICLE	IF	CITATIONS
191	Simulating Serpentinization as It Could Apply to the Emergence of Life Using the JPL Hydrothermal Reactor. <i>Astrobiology</i> , 2020, 20, 307-326.	1.5	22
192	Microbial Diversity and Biosignatures: An Icy Moons Perspective. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	14
193	Characterizing deposits emplaced by cryovolcanic plumes on Europa. <i>Icarus</i> , 2020, 343, 113667.	1.1	20
194	Large Ocean Worlds with High-Pressure Ices. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	62
195	Experimental and Simulation Efforts in the Astrobiological Exploration of Exooceans. <i>Space Science Reviews</i> , 2020, 216, 9.	3.7	25
196	The Carbonate Geochemistry of Enceladus' Ocean. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL085885.	1.5	64
197	Factoring Origin of Life Hypotheses into the Search for Life in the Solar System and Beyond. <i>Life</i> , 2020, 10, 52.	1.1	16
198	Exo-Ocean Exploration with Deep-Sea Sensor and Platform Technologies. <i>Astrobiology</i> , 2020, 20, 897-915.	1.5	15
199	Towards Determining Biosignature Retention in Icy World Plumes. <i>Life</i> , 2020, 10, 40.	1.1	7
200	Direct Synthesis of Amides from Amines and Carboxylic Acids under Hydrothermal Conditions. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 722-729.	1.2	18
201	Quantitative in situ mapping of elements in deep-sea hydrothermal vents using laser-induced breakdown spectroscopy and multivariate analysis. <i>Deep-Sea Research Part I: Oceanographic Research Papers</i> , 2020, 158, 103232.	0.6	28
202	Synthetic fluid inclusions XXIII. Effect of temperature and fluid composition on rates of serpentinization of olivine. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 292, 285-308.	1.6	16
203	The effect of Europa and Enceladus analog seawater composition on isotopic measurements of volatile CO ₂ . <i>Icarus</i> , 2021, 358, 114216.	1.1	1
204	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
205	Oxidation processes diversify the metabolic menu on Enceladus. <i>Icarus</i> , 2021, 364, 114248.	1.1	29
206	Science Goals and Mission Objectives for the Future Exploration of Ice Giants Systems: A Horizon 2061 Perspective. <i>Space Science Reviews</i> , 2021, 217, 1.	3.7	11
207	Repeated impact-driven plume formation on Enceladus over megayear timescales. <i>Icarus</i> , 2021, 357, 114281.	1.1	2
208	Plausible Emergence of Biochemistry in Enceladus Based on Chemobionics. <i>Chemistry - A European Journal</i> , 2021, 27, 600-604.	1.7	9

#	ARTICLE	IF	CITATIONS
209	Revealing a new transport form of natural material by naturally occurring spherical amorphous silica particles in soil aerosol. <i>Chemical Geology</i> , 2021, 559, 119950.	1.4	6
212	Method for detecting and quantitating capture of organic molecules in hypervelocity impacts. <i>MethodsX</i> , 2021, 8, 101239.	0.7	5
213	Iron- and Silicate Chemical Garden Morphology and Silicate Reactivity with Alpha-Keto Acids. <i>ChemSystemsChem</i> , 2021, 3, e2000058.	1.1	3
214	Identification of Possible Heat Sources for the Thermal Output of Enceladus. <i>Planetary Science Journal</i> , 2021, 2, 29.	1.5	1
215	Editorial: Astrobiology of Mars, Europa, Titan and Enceladus - Most Likely Places for Alien Life. <i>Frontiers in Astronomy and Space Sciences</i> , 2021, 8, .	1.1	3
216	Exobiology Extant Life Surveyor (EELS). , 2021, , .		0
217	Minimum Units of Habitability and Their Abundance in the Universe. <i>Astrobiology</i> , 2021, 21, 481-489.	1.5	6
218	Ocean Energy for Ocean Worlds. , 2021, , .		0
219	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
220	Analytical Chemistry in Astrobiology. <i>Analytical Chemistry</i> , 2021, 93, 5981-5997.	3.2	7
221	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
222	Quantifying the extent of amide and peptide bond synthesis across conditions relevant to geologic and planetary environments. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 300, 318-332.	1.6	11
223	Active microbial sulfate reduction in fluids of serpentinizing peridotites of the continental subsurface. <i>Communications Earth & Environment</i> , 2021, 2, .	2.6	21
224	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
225	How deep is the ocean? Exploring the phase structure of water-rich sub-Neptunes. <i>Monthly Notices of the Royal Astronomical Society</i> , 2021, 505, 3414-3432.	1.6	20
226	Self-preserving ice layers on CO ₂ clathrate particles: Implications for Enceladus, Pluto, and similar ocean worlds. <i>Astronomy and Astrophysics</i> , 2021, 650, A54.	2.1	16
227	Bayesian analysis of Enceladus's plume data to assess methanogenesis. <i>Nature Astronomy</i> , 2021, 5, 805-814.	4.2	29
228	Life on Enceladus? It depends on its origin. <i>Nature Astronomy</i> , 2021, 5, 740-741.	4.2	11

#	ARTICLE	IF	CITATIONS
229	High-Rayleigh-number convection in porous fluid layers. <i>Journal of Fluid Mechanics</i> , 2021, 920, .	1.4	9
230	Objectives of the Millimetron Space Observatory science program and technical capabilities of its realization. <i>Physics-Uspokhi</i> , 2021, 64, 386-419.	0.8	24
231	Carbonaceous nanoparticles in Zibo hot springs: Implications for the cycling of carbon and associated elements. <i>Environmental Chemistry Letters</i> , 2021, 19, 4009.	8.3	2
232	Exploration of Enceladus and Titan: investigating ocean worlds™ evolution and habitability in the Saturn system. <i>Experimental Astronomy</i> , 2022, 54, 877-910.	1.6	3
233	The Science Case for a Return to Enceladus. <i>Planetary Science Journal</i> , 2021, 2, 132.	1.5	40
234	On the Feasibility of Informative Biosignature Measurements Using an Enceladus Plume Organic Analyzer. <i>Planetary Science Journal</i> , 2021, 2, 163.	1.5	6
235	Short lifespans of serpentinization in the rocky core of Enceladus: Implications for hydrogen production. <i>Icarus</i> , 2021, 364, 114461.	1.1	18
236	Hydrothermal Experiments with Protonated Benzylamines Provide Predictions of Temperature-Dependent Deamination Rates for Geochemical Modeling. <i>ACS Earth and Space Chemistry</i> , 2021, 5, 1997-2012.	1.2	4
237	Ocean Circulation on Enceladus with a High- versus Low-salinity Ocean. <i>Planetary Science Journal</i> , 2021, 2, 151.	1.5	31
238	A Recipe for the Geophysical Exploration of Enceladus. <i>Planetary Science Journal</i> , 2021, 2, 157.	1.5	14
239	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
240	Enceladus' Tiger Stripes as Frictional Faults: Effect on Stress and Heat Production. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094849.	1.5	5
241	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
242	Tiger: Concept Study for a New Frontiers Enceladus Habitability Mission. <i>Planetary Science Journal</i> , 2021, 2, 195.	1.5	5
243	Prospects for Life Beyond Earth. , 2021, , 258-262.		0
244	The Geochemistry of Icy Moons. , 2021, , 207-216.		2
245	Prebiotic Organic Chemistry of Formamide and the Origin of Life in Planetary Conditions: What We Know and What Is the Future. <i>International Journal of Molecular Sciences</i> , 2021, 22, 917.	1.8	15
246	Silica and Alumina Nanophases: Natural Processes and Industrial Applications. , 2017, , 293-316.		10

#	ARTICLE	IF	CITATIONS
247	Monolithic Simulation of Convection-Coupled Phase-Change: Verification and Reproducibility. Lecture Notes in Computational Science and Engineering, 2018, , 177-197.	0.1	2
248	Macromolecular organic compounds from the depths of Enceladus. Nature, 2018, 558, 564-568.	13.7	282
249	Lithogenic hydrogen supports microbial primary production in subglacial and proglacial environments. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	18
250	Serpentinite and the search for life beyond Earth. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20180421.	1.6	29
251	Exploring Deep-Sea Brines as Potential Terrestrial Analogues of Oceans in the Icy Moons of the Outer Solar System. Current Issues in Molecular Biology, 2020, 38, 123-162.	1.0	16
252	Removal of organic contaminants from iron sulfides as a pretreatment for mineral-mediated chemical synthesis under prebiotic hydrothermal conditions. Geochemical Journal, 2017, 51, 495-505.	0.5	3
253	The Geochemistry of Enceladus: Composition and Controls. , 2018, , .		35
254	Geophysics and Tidal-Thermal Evolution of Enceladus. , 2018, , .		5
255	On the Origin of the Pluto System. , 2020, , 1-1.		4
256	Instantaneous Habitable Windows in the Parameter Space of Enceladus' Ocean. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006951.	1.5	10
257	Wonder of the Solar System: Icy Geysers and Liquid Water on Enceladus. , 2016, , 37-44.		0
258	Die Ursprünge des Lebendigen. , 2017, , 153-220.		0
259	The Habitability of Icy Ocean Worlds in the Solar System. , 2018, , 1-23.		0
260	Water and the Interior Structure of Terrestrial Planets and Icy Bodies. Space Sciences Series of ISSI, 2018, , 343-375.	0.0	0
261	Ursprung und Evolution des Lebendigen. , 2019, , 193-279.		0
262	Bacterial Communities from Deep Hydrothermal Systems: The Southern Gulf of California as an Example of Primeval Environments. Cuatro Ciénegas Basin: an Endangered Hyperdiverse Oasis, 2020, , 149-166.	0.4	3
263	The Planets, Their Satellites and Smaller Planetary Bodies. Springer Textbooks in Earth Sciences, Geography and Environment, 2020, , 605-633.	0.1	0
264	The subsurface habitability of small, icy exomoons. Astronomy and Astrophysics, 2020, 636, A50.	2.1	6

#	ARTICLE	IF	CITATIONS
265	Enceladus as a Potential Niche for Methanogens and Estimation of Its Biomass. <i>Life</i> , 2021, 11, 1182.	1.1	5
266	The Deep Rocky Biosphere: New Geomicrobiological Insights and Prospects. <i>Frontiers in Microbiology</i> , 2021, 12, 785743.	1.5	3
267	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
268	Enceladus and Titan: emerging worlds of the Solar System. <i>Experimental Astronomy</i> , 0, , 1.	1.6	1
269	Cryovolcanism. , 2022, , 161-234.		3
270	Assessment of Automated Nucleic Acid Extraction Systems in Combination with MinION Sequencing As Potential Tools for the Detection of Microbial Biosignatures. <i>Astrobiology</i> , 2022, 22, 87-103.	1.5	8
271	Mass Spectrometric Fingerprints of Bacteria and Archaea for Life Detection on Icy Moons. <i>Astrobiology</i> , 2022, 22, 143-157.	1.5	11
272	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
273	Developing technological synergies between deep-sea and space research. <i>Elementa</i> , 2022, 10, .	1.1	8
274	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
276	The Lake Alchichica from an Astrobiological Perspective. , 2022, , 391-413.		0
277	Modeling the complete set of Cassiniâ€™s UVIS occultation observations of Enceladusâ€™ plume. <i>Icarus</i> , 2022, 383, 114918.	1.1	1
278	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
279	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
280	Analytical Chemistry Throughout This Solar System. <i>Annual Review of Analytical Chemistry</i> , 2022, 15, 197-219.	2.8	2
281	Geologically rapid aqueous mineral alteration at subfreezing temperatures in icy worlds. <i>Nature Astronomy</i> , 2022, 6, 554-559.	4.2	12
282	Incorporating Microbes into Laboratory-Grown Chimneys for Hydrothermal Microbiology Experiments. <i>ACS Earth and Space Chemistry</i> , 2022, 6, 953-961.	1.2	2
285	The Tides of Enceladus' Porous Core. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	20

#	ARTICLE	IF	CITATIONS
286	Science Autonomy for Ocean Worlds Astrobiology: A Perspective. <i>Astrobiology</i> , 2022, 22, 901-913.	1.5	7
287	Extremophiles in Earth's Deep Seas: A View Toward Life in Exo-Oceans. <i>Astrobiology</i> , 2022, 22, 1009-1028.	1.5	3
288	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
289	Is the Ocean of Enceladus in a Primitive Evolutionary Stage?. , 0, , .		0
290	Habitability in the Solar System beyond the Earth and the search for life. , 2022, , 167-177.		2
291	Standards of evidence in the search for extraterrestrial life. , 2022, , 1-17.		0
293	Ice Shell Structure and Composition of Ocean Worlds: Insights from Accreted Ice on Earth. <i>Astrobiology</i> , 2022, 22, 937-961.	1.5	15
294	Characterization of groundwater chemistry beneath Gale Crater on early Mars by hydrothermal experiments. <i>Icarus</i> , 2022, 386, 115149.	1.1	0
295	How does salinity shape ocean circulation and ice geometry on Enceladus and other icy satellites?. <i>Science Advances</i> , 2022, 8, .	4.7	31
296	Contamination analysis of Arctic ice samples as planetary field analogs and implications for future life-detection missions to Europa and Enceladus. <i>Scientific Reports</i> , 2022, 12, .	1.6	5
297	Developing a Laser Induced Liquid Beam Ion Desorption Spectral Database as Reference for Spaceborne Mass Spectrometers. <i>Earth and Space Science</i> , 2022, 9, .	1.1	9
298	Geoelectrochemistry-driven alteration of amino acids to derivative organics in carbonaceous chondrite parent bodies. <i>Nature Communications</i> , 2022, 13, .	5.8	3
299	Chemical Fractionation Modeling of Plumes Indicates a Gas-rich, Moderately Alkaline Enceladus Ocean. <i>Planetary Science Journal</i> , 2022, 3, 191.	1.5	15
300	Experimental serpentinization of iron-rich olivine (hortonolite): Implications for hydrogen generation and secondary mineralization on Mars and icy moons. <i>Geochimica Et Cosmochimica Acta</i> , 2022, 335, 98-110.	1.6	3
301	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
302	Volcanically hosted venting with indications of ultramafic influence at Aurora hydrothermal field on Gakkel Ridge. <i>Nature Communications</i> , 2022, 13, .	5.8	8
303	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
304	Detecting Lipids on Planetary Surfaces with Laser Desorption Ionization Mass Spectrometry. <i>Planetary Science Journal</i> , 2022, 3, 241.	1.5	1

#	ARTICLE	IF	CITATIONS
305	A multi-lander New Frontiers mission concept study for Enceladus: SILENUS. <i>Frontiers in Astronomy and Space Sciences</i> , 0, 9, .	1.1	3
306	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
307	The role of ocean circulation in driving hemispheric symmetry breaking of the ice shell of Enceladus. <i>Earth and Planetary Science Letters</i> , 2022, 599, 117845.	1.8	5
308	The Plasma Environment of Comet 67P/Churyumov-Gerasimenko. <i>Space Science Reviews</i> , 2022, 218, .	3.7	11
309	Liquid and supercritical CO ₂ as an organic solvent in Hadean seafloor hydrothermal systems: implications for prebiotic chemical evolution. <i>Progress in Earth and Planetary Science</i> , 2022, 9, .	1.1	4
310	Measurements of regolith thicknesses on Enceladus: Uncovering the record of plume activity. <i>Icarus</i> , 2023, 392, 115369.	1.1	5
311	Moonraker: Enceladus Multiple Flyby Mission. <i>Planetary Science Journal</i> , 2022, 3, 268.	1.5	5
312	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
313	Putative Methanogenic Biosphere in Enceladus's Deep Ocean: Biomass, Productivity, and Implications for Detection. <i>Planetary Science Journal</i> , 2022, 3, 270.	1.5	10
314	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
315	DNA Polymerization in Icy Moon Abyssal Pressure Conditions. <i>Astrobiology</i> , 2024, 24, 151-162.	1.5	0
316	Surviving in Ocean Worlds: Experimental Characterization of Fiber Optic Tethers across Europa-like Ice Faults and Unraveling the Sliding Behavior of Ice. <i>Planetary Science Journal</i> , 2023, 4, 1.	1.5	3
317	Terrestrial analogs & submarine hydrothermal ventsâ€™ their roles in exploring ocean worlds, habitability, and life beyond earth. , 2023, , 311-358.		0
318	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
319	Hunting for environments favorable to life on planets, moons, dwarf planets, and meteorites. , 2023, , 737-772.		0
320	Dispersion of Bacteria by Low-Pressure Boiling: Life Detection in Enceladus' Plume Material. <i>Astrobiology</i> , 2023, 23, 269-279.	1.5	3
321	The Fermi Paradox and Astrobiology. , 2023, , 209-266.		0
322	Study of the eruption mechanism of Saturnâ€™s moon Enceladus plume using the mathematical model of a geyser (periodic bubbling spring). , 2022, , .		0

#	ARTICLE	IF	CITATIONS
323	Subsurface Science and Search for Life in Ocean Worlds. Planetary Science Journal, 2023, 4, 22.	1.5	3
324	OLYMPIA-LILBID: A New Laboratory Setup to Calibrate Spaceborne Hypervelocity Ice Grain Detectors Using High-Resolution Mass Spectrometry. Analytical Chemistry, 2023, 95, 3621-3628.	3.2	1
325	Particle entrainment and rotating convection in Enceladus's ocean. Communications Earth & Environment, 2023, 4, .	2.6	4
326	Molecular rotations trigger a glass-to-plastic fcc heterogeneous crystallization in high-pressure water. Journal of Chemical Physics, 2023, 158, .	1.2	5
327	Huge Variation in H ₂ Generation During Seawater Alteration of Ultramafic Rocks. Geochemistry, Geophysics, Geosystems, 2023, 24, .	1.0	2
328	Mass Spectrometric Fingerprints of Organic Compounds in NaCl-Rich Ice Grains from Europa and Enceladus. ACS Earth and Space Chemistry, 2023, 7, 735-752.	1.2	7
329	Evaluating the abiotic synthesis potential and the stability of building blocks of life beneath an impact-induced steam atmosphere. Frontiers in Microbiology, 0, 14, .	1.5	1
330	Discriminating Aromatic Parent Compounds and Their Derivative Isomers in Ice Grains From Enceladus and Europa Using a Laboratory Analogue for Spaceborne Mass Spectrometers. Earth and Space Science, 2023, 10, .	1.1	2
331	Instrumentation for Planetary Exploration. , 2023, , 277-307.		0