

J Hunter Waite, Jr

List of Publications by Year in descending order

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papers

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#	ARTICLE	IF	CITATIONS
1	Cassini Ion and Neutral Mass Spectrometer: Enceladus Plume Composition and Structure. <i>Science</i> , 2006, 311, 1419-1422.	6.0	590
2	The Process of Tholin Formation in Titan's Upper Atmosphere. <i>Science</i> , 2007, 316, 870-875.	6.0	585
3	Liquid water on Enceladus from observations of ammonia and ^{40}Ar in the plume. <i>Nature</i> , 2009, 460, 487-490.	13.7	470
4	67P/Churyumov-Gerasimenko, a Jupiter family comet with a high D/H ratio. <i>Science</i> , 2015, 347, 1261952.	6.0	403
5	Ion Neutral Mass Spectrometer Results from the First Flyby of Titan. <i>Science</i> , 2005, 308, 982-986.	6.0	402
6	Cassini finds molecular hydrogen in the Enceladus plume: Evidence for hydrothermal processes. <i>Science</i> , 2017, 356, 155-159.	6.0	396
7	Prebiotic chemicals—amino acid and phosphorus—in the coma of comet 67P/Churyumov-Gerasimenko. <i>Science Advances</i> , 2016, 2, e1600285.	4.7	393
8	Discovery of heavy negative ions in Titan's ionosphere. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	365
9	Rosina — Rosetta Orbiter Spectrometer for Ion and Neutral Analysis. <i>Space Science Reviews</i> , 2007, 128, 745-801.	3.7	331
10	Detection of H_3^+ on Jupiter. <i>Nature</i> , 1989, 340, 539-541.	13.7	314
11	Macromolecular organic compounds from the depths of Enceladus. <i>Nature</i> , 2018, 558, 564-568.	13.7	282
12	Abundant molecular oxygen in the coma of comet 67P/Churyumov—Gerasimenko. <i>Nature</i> , 2015, 526, 678-681.	13.7	260
13	Jupiter's interior and deep atmosphere: The initial pole-to-pole passes with the Juno spacecraft. <i>Science</i> , 2017, 356, 821-825.	6.0	229
14	Time variability and heterogeneity in the coma of 67P/Churyumov-Gerasimenko. <i>Science</i> , 2015, 347, aaa0276.	6.0	222
15	Electron precipitation and related aeronomy of the Jovian thermosphere and ionosphere. <i>Journal of Geophysical Research</i> , 1983, 88, 6143-6163.	3.3	221
16	The pH of Enceladus's ocean. <i>Geochimica Et Cosmochimica Acta</i> , 2015, 162, 202-219.	1.6	205
17	Ultraviolet emissions from the magnetic footprints of Io, Ganymede and Europa on Jupiter. <i>Nature</i> , 2002, 415, 997-1000.	13.7	203
18	Molecular nitrogen in comet 67P/Churyumov-Gerasimenko indicates a low formation temperature. <i>Science</i> , 2015, 348, 232-235.	6.0	195

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19	Composition of Titan's ionosphere. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	191
20	The Cassini Ion and Neutral Mass Spectrometer (INMS) Investigation. <i>Space Science Reviews</i> , 2004, 114, 113-231.	3.7	188
21	A pulsating auroral X-ray hot spot on Jupiter. <i>Nature</i> , 2002, 415, 1000-1003.	13.7	183
22	Hubble Space Telescope imaging of Jupiter's UV aurora during the Galileo orbiter mission. <i>Journal of Geophysical Research</i> , 1998, 103, 20217-20236.	3.3	170
23	A self-consistent model of the Jovian auroral thermal structure. <i>Journal of Geophysical Research</i> , 2001, 106, 12933-12952.	3.3	169
24	Magnetospheric Science Objectives of the Juno Mission. <i>Space Science Reviews</i> , 2017, 213, 219-287.	3.7	163
25	Xenon isotopes in 67P/Churyumov-Gerasimenko show that comets contributed to Earth's atmosphere. <i>Science</i> , 2017, 356, 1069-1072.	6.0	161
26	Jupiter's main auroral oval observed with HST-STIS. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	157
27	INMS-derived composition of Titan's upper atmosphere: Analysis methods and model comparison. <i>Planetary and Space Science</i> , 2009, 57, 1895-1916.	0.9	152
28	Simultaneous Chandra X ray, Hubble Space Telescope ultraviolet, and Ulysses radio observations of Jupiter's aurora. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	149
29	New model of Saturn's ionosphere with an influx of water from the rings. <i>Nature</i> , 1984, 312, 136-138.	13.7	140
30	The composition and structure of the Enceladus plume. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	136
31	Jupiter's polar auroral emissions. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	135
32	An auroral flare at Jupiter. <i>Nature</i> , 2001, 410, 787-789.	13.7	130
33	Energetic ion precipitation at Titan. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	128
34	Serpentinization and the Formation of H ₂ and CH ₄ on Celestial Bodies (Planets, Moons, Comets). <i>Astrobiology</i> , 2015, 15, 587-600.	1.5	121
35	X-rays from solar system objects. <i>Planetary and Space Science</i> , 2007, 55, 1135-1189.	0.9	119
36	Cassini Finds an Oxygen-Carbon Dioxide Atmosphere at Saturn's Icy Moon Rhea. <i>Science</i> , 2010, 330, 1813-1815.	6.0	116

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37	Elemental and molecular abundances in comet 67P/Churyumov-Gerasimenko. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 594-607.	1.6	112
38	Jupiter's magnetosphere and aurorae observed by the Juno spacecraft during its first polar orbits. <i>Science</i> , 2017, 356, 826-832.	6.0	109
39	Cassini Ion and Neutral Mass Spectrometer data in Titan's upper atmosphere and exosphere: Observation of a suprathermal corona. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	108
40	The role of H ₃ ⁺ in planetary atmospheres. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2000, 358, 2485-2502.	1.6	106
41	A study of Jupiter's aurorae with XMM-Newton. <i>Astronomy and Astrophysics</i> , 2007, 463, 761-774.	2.1	104
42	Exospheres and Atmospheric Escape. <i>Space Science Reviews</i> , 2008, 139, 355-397.	3.7	103
43	Transient aurora on Jupiter from injections of magnetospheric electrons. <i>Nature</i> , 2002, 415, 1003-1005.	13.7	98
44	Auroral oxygen precipitation at Jupiter. <i>Journal of Geophysical Research</i> , 1995, 100, 17153.	3.3	94
45	Equatorial X-ray Emissions: Implications for Jupiter's High Exospheric Temperatures. <i>Science</i> , 1997, 276, 104-108.	6.0	91
46	Implications of Jovian X-ray emission for magnetosphere-ionosphere coupling. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	91
47	ROSAT observations of the Jupiter aurora. <i>Journal of Geophysical Research</i> , 1994, 99, 14799.	3.3	87
48	Detection of argon in the coma of comet 67P/Churyumov-Gerasimenko. <i>Science Advances</i> , 2015, 1, e1500377.	4.7	87
49	Fine jet structure of electrically charged grains in Enceladus' plume. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	86
50	Structure of the ionosphere and atmosphere of Saturn From Pioneer 11 Saturn radio occultation. <i>Journal of Geophysical Research</i> , 1980, 85, 5857-5870.	3.3	84
51	Horizontal structures and dynamics of Titan's thermosphere. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	83
52	Titan's ionosphere: Model comparisons with Cassini Ta data. <i>Geophysical Research Letters</i> , 2005, 32, n/a-n/a.	1.5	81
53	On magnetospheric electron impact ionisation and dynamics in Titan's ram-side and polar ionosphere – a Cassini case study. <i>Annales Geophysicae</i> , 2007, 25, 2359-2369.	0.6	78
54	Coupled ion and neutral rotating model of Titan's upper atmosphere. <i>Icarus</i> , 2008, 197, 110-136.	1.1	77

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55	TandEM: Titan and Enceladus mission. <i>Experimental Astronomy</i> , 2009, 23, 893-946.	1.6	77
56	The precipitation of energetic heavy ions into the upper atmosphere of Jupiter. <i>Journal of Geophysical Research</i> , 1988, 93, 7251-7271.	3.3	75
57	Spectral morphology of the X-ray emission from Jupiter's aurorae. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	75
58	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
59	Titan's thermospheric response to various plasma environments. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	73
60	Chemical interactions between Saturn's atmosphere and its rings. <i>Science</i> , 2018, 362, .	6.0	73
61	Thermal profiles in the auroral regions of Jupiter. <i>Journal of Geophysical Research</i> , 1993, 98, 18803-18811.	3.3	69
62	Jupiter Thermospheric General Circulation Model (JTGCM): Global structure and dynamics driven by auroral and Joule heating. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	69
63	Diurnal variations of Titan's ionosphere. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	69
64	Ion densities and composition of Titan's upper atmosphere derived from the Cassini Ion Neutral Mass Spectrometer: Analysis methods and comparison of measured ion densities to photochemical model simulations. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	67
65	THE ¹² C/ ¹³ C RATIO ON TITAN FROM CASSINI INMS MEASUREMENTS AND IMPLICATIONS FOR THE EVOLUTION OF METHANE. <i>Astrophysical Journal</i> , 2012, 749, 160.	1.6	66
66	Possible evidence for a methane source in Enceladus' ocean. <i>Geophysical Research Letters</i> , 2015, 42, 1334-1339.	1.5	65
67	Enceladus: An Active Cryovolcanic Satellite. , 2009, , 683-724.		65
68	A possible auroral signature of a magnetotail reconnection process on Jupiter. <i>Journal of Geophysical Research</i> , 2004, 109, .	3.3	64
69	The Carbonate Geochemistry of Enceladus' Ocean. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL085885.	1.5	64
70	Isotopic evolution of the major constituents of Titan's atmosphere based on Cassini data. <i>Planetary and Space Science</i> , 2009, 57, 1917-1930.	0.9	63
71	Europa's surface composition and sputter-produced ionosphere. <i>Geophysical Research Letters</i> , 1998, 25, 3257-3260.	1.5	62
72	First observation of Jupiter by XMM-Newton. <i>Astronomy and Astrophysics</i> , 2004, 424, 331-337.	2.1	62

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73	The evolution of solar wind strahl with heliospheric distance. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 3858-3874.	0.8	61
74	Titan's ionospheric composition and structure: Photochemical modeling of Cassini INMS data. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	60
75	Oxygen Ions Observed Near Saturn's A Ring. <i>Science</i> , 2005, 307, 1260-1262.	6.0	57
76	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
77	Extreme ultraviolet explorer satellite observation of Jupiter's Io plasma torus. <i>Astrophysical Journal</i> , 1994, 426, L51.	1.6	56
78	The Jovian aurora: Electron or ion precipitation?. <i>Journal of Geophysical Research</i> , 1988, 93, 7244-7250.	3.3	55
79	A Remarkable Auroral Event on Jupiter Observed in the Ultraviolet with the Hubble Space Telescope. <i>Science</i> , 1994, 266, 1675-1678.	6.0	55
80	Cassini CAPS's observations of negative ions in Titan's ionosphere: Trends of density with altitude. <i>Geophysical Research Letters</i> , 2013, 40, 4481-4485.	1.5	55
81	Jovian X-ray emission from solar X-ray scattering. <i>Geophysical Research Letters</i> , 2000, 27, 1339-1342.	1.5	54
82	A Revised Sensitivity Model for Cassini INMS: Results at Titan. <i>Space Science Reviews</i> , 2015, 190, 47-84.	3.7	54
83	Solar control on Jupiter's equatorial X-ray emissions: 26â€“29 November 2003 XMM-Newton observation. <i>Geophysical Research Letters</i> , 2005, 32, .	1.5	53
84	Juno observations of spot structures and a split tail in Io-induced aurorae on Jupiter. <i>Science</i> , 2018, 361, 774-777.	6.0	53
85	Waves and horizontal structures in Titan's thermosphere. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	52
86	Krypton isotopes and noble gas abundances in the coma of comet 67P/Churyumov-Gerasimenko. <i>Science Advances</i> , 2018, 4, eaar6297.	4.7	52
87	Titan's corona: The contribution of exothermic chemistry. <i>Icarus</i> , 2007, 191, 236-250.	1.1	51
88	Negative ions at Titan and Enceladus: recent results. <i>Faraday Discussions</i> , 2010, 147, 293.	1.6	51
89	Discovery of Soft X-ray Emission from Io, Europa, and the Io Plasma Torus. <i>Astrophysical Journal</i> , 2002, 572, 1077-1082.	1.6	48
90	The role of ion-molecule reactions in the growth of heavy ions in Titan's ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 5951-5963.	0.8	48

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91	Mapping the electron energy in Jupiter's aurora: Hubble spectral observations. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 9072-9088.	0.8	47
92	Carbon Chain Anions and the Growth of Complex Organic Molecules in Titan's Ionosphere. <i>Astrophysical Journal Letters</i> , 2017, 844, L18.	3.0	45
93	A PROTOSOLAR NEBULA ORIGIN FOR THE ICES AGGLOMERATED BY COMET 67P/CHURYUMOV-GERASIMENKO. <i>Astrophysical Journal Letters</i> , 2016, 819, L33.	3.0	43
94	Enceladus Plume Structure and Time Variability: Comparison of Cassini Observations. <i>Astrobiology</i> , 2017, 17, 926-940.	1.5	43
95	Electron density dropout near Enceladus in the context of water vapor and water ice. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	42
96	Mass Loss Processes in Titan's Upper Atmosphere. , 2009, , 373-391.		42
97	Chandra Observation of an X-Ray Flare at Saturn: Evidence of Direct Solar Control on Saturn's Disk X-Ray Emissions. <i>Astrophysical Journal</i> , 2005, 624, L121-L124.	1.6	40
98	The Science Case for a Return to Enceladus. <i>Planetary Science Journal</i> , 2021, 2, 132.	1.5	40
99	Cassini UVIS observations of Jupiter's auroral variability. <i>Icarus</i> , 2005, 178, 312-326.	1.1	39
100	Electrically Heated, Air-Cooled Thermal Modulator and at-Column Heating for Comprehensive Two-Dimensional Gas Chromatography. <i>Analytical Chemistry</i> , 2005, 77, 2786-2794.	3.2	39
101	The water vapor plumes of Enceladus. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	39
102	Enceladus Life Finder: The search for life in a habitable Moon. , 2016, , .		39
103	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
104	Ion transport in Titan's upper atmosphere. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	38
105	Developing a self-consistent description of Titan's upper atmosphere without hydrodynamic escape. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 4957-4972.	0.8	38
106	Flux transfer event observation at Saturn's dayside magnetopause by the Cassini spacecraft. <i>Geophysical Research Letters</i> , 2016, 43, 6713-6723.	1.5	38
107	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
108	Dust grains fall from Saturn's D-ring into its equatorial upper atmosphere. <i>Science</i> , 2018, 362, .	6.0	37

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109	The geomagnetic mass spectrometer's mass and energy dispersions of ionospheric ion flows into the magnetosphere. <i>Nature</i> , 1985, 316, 612-613.	13.7	36
110	Secular and local time dependence of Jovian X ray emissions. <i>Journal of Geophysical Research</i> , 1998, 103, 20083-20088.	3.3	35
111	Simulating the one-dimensional structure of Titan's upper atmosphere: 1. Formulation of the Titan Global Ionosphere-Thermosphere Model and benchmark simulations. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	34
112	Cusp observation at Saturn's high-latitude magnetosphere by the Cassini spacecraft. <i>Geophysical Research Letters</i> , 2014, 41, 1382-1388.	1.5	34
113	The mass spectrometer for planetary exploration (MASPEX). , 2016, , .		34
114	X-ray emission from the outer planets: Albedo for scattering and fluorescence of solar X rays. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	32
115	Rotationally driven magnetic reconnection in Saturn's dayside. <i>Nature Astronomy</i> , 2018, 2, 640-645.	4.2	32
116	Doppler shifted H Ly \pm Emission from Jupiter's aurora. <i>Geophysical Research Letters</i> , 1989, 16, 587-590.	1.5	31
117	A primordial origin for the atmospheric methane of Saturn's moon Titan. <i>Icarus</i> , 2009, 204, 749-751.	1.1	31
118	Plume ionosphere of Enceladus as seen by the Cassini ion and neutral mass spectrometer. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	31
119	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
120	Observed decline in Titan's thermospheric methane due to solar cycle drivers. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 8586-8599.	0.8	31
121	Low- to middle-latitude X-ray emission from Jupiter. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	30
122	The Discovery of Oxygen K α X-Ray Emission from the Rings of Saturn. <i>Astrophysical Journal</i> , 2005, 627, L73-L76.	1.6	29
123	THE DUAL ORIGIN OF THE NITROGEN DEFICIENCY IN COMETS: SELECTIVE VOLATILE TRAPPING IN THE NEBULA AND POSTACCRETION RADIOGENIC HEATING. <i>Astrophysical Journal</i> , 2012, 757, 146.	1.6	29
124	Oxidation processes diversify the metabolic menu on Enceladus. <i>Icarus</i> , 2021, 364, 114248.	1.1	29
125	Ion chemistry in the coma of comet 67P near perihelion. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 462, S67-S77.	1.6	28
126	ROSAT Observations of X-ray Emissions from Jupiter During the Impact of Comet Shoemaker-Levy 9. <i>Science</i> , 1995, 268, 1598-1601.	6.0	27

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127	Neutral Atmospheres. <i>Space Science Reviews</i> , 2008, 139, 191-234.	3.7	27
128	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
129	Energetics of Titan's ionosphere: Model comparisons with Cassini data. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	27
130	Saturn's Dusty Ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 1679-1697.	0.8	27
131	Electron Density Distributions in Saturn's Ionosphere. <i>Geophysical Research Letters</i> , 2019, 46, 3061-3068.	1.5	27
132	At-column heating and a resistively heated, liquid-cooled thermal modulator for a low-resource bench-top GCA-GC. <i>Journal of Separation Science</i> , 2006, 29, 1001-1008.	1.3	26
133	Modification of the plasma in the nearvicinity of Enceladus by the enveloping dust. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	26
134	Models of Saturn's Equatorial Ionosphere Based on In Situ Data From Cassini's Grand Finale. <i>Geophysical Research Letters</i> , 2018, 45, 9398-9407.	1.5	26
135	Cassini INMS observations of neutral molecules in Saturn's E-ring. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	25
136	Material Flux From the Rings of Saturn Into Its Atmosphere. <i>Geophysical Research Letters</i> , 2018, 45, 10,093.	1.5	25
137	Simulating the one-dimensional structure of Titan's upper atmosphere: 3. Mechanisms determining methane escape. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	24
138	Ion and aerosol precursor densities in Titan's ionosphere: A multiinstrument case study. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 10075-10090.	0.8	23
139	Corotating Magnetic Reconnection Site in Saturn's Magnetosphere. <i>Astrophysical Journal Letters</i> , 2017, 846, L25.	3.0	23
140	Microwave observations reveal the deep extent and structure of Jupiter's atmospheric vortices. <i>Science</i> , 2021, 374, 968-972.	6.0	23
141	Two fundamentally different drivers of dipolarizations at Saturn. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 4348-4356.	0.8	22
142	Thermal Structure and Composition of Saturn's Upper Atmosphere From Cassini/Ion Neutral Mass Spectrometer Measurements. <i>Geophysical Research Letters</i> , 2018, 45, 10,951.	1.5	22
143	The Ion Composition of Saturn's Equatorial Ionosphere as Observed by Cassini. <i>Geophysical Research Letters</i> , 2019, 46, 6315-6321.	1.5	22
144	The ionosphere of Saturn: Predictions for Pioneer 11. <i>Geophysical Research Letters</i> , 1979, 6, 723-726.	1.5	21

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145	Supersonic ion outflows in the polar magnetosphere via the geomagnetic spectrometer. <i>Geophysical Research Letters</i> , 1985, 12, 757-760.	1.5	21
146	First terrestrial soft X-ray auroral observation by the Chandra X-ray Observatory. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2007, 69, 179-187.	0.6	21
147	Primordial N ₂ provides a cosmochemical explanation for the existence of Sputnik Planitia, Pluto. <i>Icarus</i> , 2018, 313, 79-92.	1.1	21
148	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
149	Observations of Coherent Transverse Ion Acceleration. <i>Geophysical Monograph Series</i> , 0, , 50-55.	0.1	20
150	Laboratory Studies of Methane and Its Relationship to Prebiotic Chemistry. <i>Astrobiology</i> , 2017, 17, 786-812.	1.5	20
151	Atmospheric Waves and Their Possible Effect on the Thermal Structure of Saturn's Thermosphere. <i>Geophysical Research Letters</i> , 2019, 46, 2372-2380.	1.5	20
152	Simulating the time-dependent response of Titan's upper atmosphere to periods of magnetospheric forcing. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	19
153	Impact of Radiogenic Heating on the Formation Conditions of Comet 67P/Churyumov-Gerasimenko. <i>Astrophysical Journal Letters</i> , 2017, 839, L4.	3.0	19
154	On the origin of polar ion streams. <i>Geophysical Research Letters</i> , 1985, 12, 149-152.	1.5	18
155	Superthermal electron processes in the upper atmosphere of Uranus: Aurora and electroglow. <i>Journal of Geophysical Research</i> , 1988, 93, 14295-14308.	3.3	18
156	Processes of auroral thermal structure at Jupiter: Analysis of multispectral temperature observations with the Jupiter Thermosphere General Circulation Model. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	18
157	Design and performance evaluation of a two-stage resistively-heated thermal modulator for GC – GC. <i>Analytical Methods</i> , 2010, 2, 936.	1.3	18
158	An empirical approach to modeling ion production rates in Titan's ionosphere I: Ion production rates on the dayside and globally. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 1264-1280.	0.8	18
159	Volatile Origin and Cycles: Nitrogen and Methane. , 2009, , 177-199.		18
160	Evidence for Multiple Ferrel-Like Cells on Jupiter. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095651.	1.5	18
161	The ionosphere of Uranus: A myriad of possibilities. <i>Geophysical Research Letters</i> , 1986, 13, 6-9.	1.5	17
162	Processes of equatorial thermal structure at Jupiter: An analysis of the Galileo temperature profile with a three-dimensional model. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	17

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163	Titan's ionosphere: A survey of solar EUV influences. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 7491-7503.	0.8	17
164	Ring Shadowing Effects on Saturn's Ionosphere: Implications for Ring Opacity and Plasma Transport. <i>Geophysical Research Letters</i> , 2018, 45, 10,084.	1.5	17
165	Plume and Surface Composition of Enceladus. , 2018, , .		17
166	On the possible noble gas deficiency of Pluto's atmosphere. <i>Icarus</i> , 2013, 225, 856-861.	1.1	16
167	How Adsorption Affects the Gas-Ice Partitioning of Organics Erupted from Enceladus. <i>Astrophysical Journal</i> , 2019, 873, 28.	1.6	16
168	Plasma Observations During the 7 June 2021 Ganymede Flyby From the Jovian Auroral Distributions Experiment (JADE) on Juno. <i>Geophysical Research Letters</i> , 2022, 49, .	1.5	16
169	A new upper limit to the field-aligned potential near Titan. <i>Geophysical Research Letters</i> , 2015, 42, 4676-4684.	1.5	15
170	Reconnection Acceleration in Saturn's Dayside Magnetodisk: A Multicase Study with Cassini. <i>Astrophysical Journal Letters</i> , 2018, 868, L23.	3.0	15
171	The Role of Clathrate Formation in Europa's Ocean Composition. <i>Astrophysical Journal</i> , 2019, 885, 14.	1.6	15
172	Morphology of the Auroral Tail of Io, Europa, and Ganymede From JIRAM L&B Imager. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029450.	0.8	15
173	Comparison of auroral processes: Earth and Jupiter. <i>Geophysical Monograph Series</i> , 2002, , 115-139.	0.1	14
174	The source of heavy organics and aerosols in Titan's atmosphere. <i>Proceedings of the International Astronomical Union</i> , 2008, 4, 321-326.	0.0	14
175	An empirical approach to modeling ion production rates in Titan's ionosphere II: Ion production rates on the nightside. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 1281-1298.	0.8	14
176	Recurrent Magnetic Dipolarization at Saturn: Revealed by Cassini. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 8502-8517.	0.8	14
177	The Cassini Ion and Neutral Mass Spectrometer (INMS) Investigation. , 2004, , 113-231.		14
178	Comment on "Bremsstrahlung X rays from Jovian auroral electrons" by D. D. Barbosa. <i>Journal of Geophysical Research</i> , 1991, 96, 19529-19532.	3.3	13
179	Photoelectrons in the Enceladus plume. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 5099-5108.	0.8	13
180	Ion Energization in Upwelling Ion Events. <i>Geophysical Monograph Series</i> , 0, , 61-66.	0.1	13

#	ARTICLE	IF	CITATIONS
181	Heavy negative ion growth in Titan's polar winter. Monthly Notices of the Royal Astronomical Society, 2019, 490, 2254-2261.	1.6	13
182	Juno Plasma Wave Observations at Ganymede. Geophysical Research Letters, 2022, 49, .	1.5	13
183	Cassini plasma observations of Saturn's magnetospheric cusp. Journal of Geophysical Research: Space Physics, 2016, 121, 12,047.	0.8	12
184	Global Spatial Distribution of Dipolarization Fronts in the Saturn's Magnetosphere: Cassini Observations. Geophysical Research Letters, 2021, 48, e2021GL092701.	1.5	11
185	Jupiter's Overturning Circulation: Breaking Waves Take the Place of Solid Boundaries. Geophysical Research Letters, 2021, 48, e2021GL095756.	1.5	11
186	Mass Spectrometric Fingerprints of Bacteria and Archaea for Life Detection on Icy Moons. Astrobiology, 2022, 22, 143-157.	1.5	11
187	Jupiter's Temperature Structure: A Reassessment of the Voyager Radio Occultation Measurements. Planetary Science Journal, 2022, 3, 159.	1.5	11
188	Solar cycle variations in ion composition in the dayside ionosphere of Titan. Journal of Geophysical Research: Space Physics, 2016, 121, 8013-8037.	0.8	10
189	Mechanisms of Saturn's Near-Noon Transient Aurora: In Situ Evidence From Cassini Measurements. Geophysical Research Letters, 2017, 44, 11,217.	1.5	10
190	Saturn's near-equatorial ionospheric conductivities from in situ measurements. Scientific Reports, 2020, 10, 7932.	1.6	10
191	Asymmetry in the Jovian auroral Lyman- α line profile due to thermospheric high-speed flow. Journal of Geophysical Research, 2010, 115, .	3.3	9
192	High-Altitude Production of Titan's Aerosols. , 2009, , 201-214.		9
193	Experimental Coupling of a MEMS Gas Chromatograph and a Mass Spectrometer for Organic Analysis in Space Environments. ACS Earth and Space Chemistry, 2020, 4, 1718-1729.	1.2	8
194	Dynamic evolution of low-energy ions in the terrestrial magnetosphere. Geophysical Monograph Series, 1988, , 177-183.	0.1	7
195	The Longitudinal Variation of the Color Ratio of the Jovian Ultraviolet Aurora: A Geometric Effect?. Geophysical Research Letters, 1998, 25, 1601-1604.	1.5	7
196	Time-Dependent Numerical Simulation of Hot Ion Outflow from the Polar Ionosphere. Geophysical Monograph Series, 0, , 366-371.	0.1	7
197	Microchannel plate detector detection efficiency to monoenergetic electrons between 3 and 28 keV. Review of Scientific Instruments, 2017, 88, 053302.	0.6	7
198	Cassini CAPS Identification of Pickup Ion Compositions at Rhea. Geophysical Research Letters, 2018, 45, 1704-1712.	1.5	7

#	ARTICLE	IF	CITATIONS
199	Analytical model of rotating two-cell convection at Saturn. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 1980-1993.	0.8	6
200	Surface current balance and thermoelectric whistler wings at airless astrophysical bodies: Cassini at Rhea. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 8881-8901.	0.8	6
201	Microchannel Plate Detection Efficiency to Monoenergetic Photons Between 0.66 and 20 MeV. <i>IEEE Transactions on Nuclear Science</i> , 2018, 65, 980-988.	1.2	6
202	Modeling, Analysis, and Interpretation of Photoelectron Energy Spectra at Enceladus Observed by Cassini. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 287-296.	0.8	5
203	Heavy Positive Ion Groups in Titan's Ionosphere from Cassini Plasma Spectrometer IBS Observations. <i>Planetary Science Journal</i> , 2021, 2, 26.	1.5	5
204	In Situ exploration of the giant planets. <i>Experimental Astronomy</i> , 2022, 54, 975-1013.	1.6	5
205	MEMS GC Column Performance for Analyzing Organics and Biological Molecules for Future Landed Planetary Missions. <i>Frontiers in Astronomy and Space Sciences</i> , 2022, 9, .	1.1	5
206	Ion energy distributions and densities in the plume of Enceladus. <i>Planetary and Space Science</i> , 2016, 130, 60-79.	0.9	4
207	Applications of the Jupiter Global Ionosphere-Thermosphere Model: A case study of auroral electron energy deposition. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 2210-2236.	0.8	4
208	Energetic electron measurements near Enceladus by Cassini during 2005-2015. <i>Icarus</i> , 2018, 306, 256-274.	1.1	4
209	Searching for life with mass spectrometry. <i>Astronomy and Geophysics</i> , 2018, 59, 3.23-3.24.	0.1	4
210	Long-standing Small-scale Reconnection Processes at Saturn Revealed by Cassini. <i>Astrophysical Journal Letters</i> , 2019, 884, L14.	3.0	4
211	Observations and Electron Density Retrievals of Jupiter's Discrete Auroral Arcs Using the Juno Microwave Radiometer. <i>Journal of Geophysical Research E: Planets</i> , 2020, 125, e2019JE006293.	1.5	4
212	Constraining the Positive Ion Composition in Saturn's Lower Ionosphere with the Effective Recombination Coefficient. <i>Planetary Science Journal</i> , 2021, 2, 39.	1.5	4
213	X-RAY EMISSION FROM PLANETS AND COMETS: RELATIONSHIP WITH SOLAR X-RAYS AND SOLAR WIND. , 2009, , 229-244.		3
214	Statistical Study of Enhanced Ion Fluxes in the Outer Plasmasphere. <i>Geophysical Monograph Series</i> , 0, , 172-176.	0.1	3
215	Modeling insights into the locations of density enhancements from the Enceladus water vapor jets. <i>Journal of Geophysical Research E: Planets</i> , 2015, 120, 1763-1773.	1.5	3
216	Evidence of $m=1$ density mode (plasma cam) in Saturn's rotating magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 2335-2348.	0.8	3

#	ARTICLE	IF	CITATIONS
217	Photoionization Modeling of Titan's Dayside Ionosphere. <i>Astrophysical Journal Letters</i> , 2017, 850, L26.	3.0	3
218	Limits on the Contribution of Endogenic Radiolysis to the Presence of Molecular Oxygen in Comet 67P/Churyumov-Gerasimenko. <i>Astrophysical Journal</i> , 2018, 864, 9.	1.6	3
219	Plasma Transport in Saturn's Low-Latitude Ionosphere: Cassini Data. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 4881-4888.	0.8	3
220	A Rotating Azimuthally Distributed Auroral Current System on Saturn Revealed by the Cassini Spacecraft. <i>Astrophysical Journal Letters</i> , 2021, 919, L25.	3.0	3
221	Spatial Variations of Low-mass Negative Ions in Titan's Upper Atmosphere. <i>Planetary Science Journal</i> , 2020, 1, 50.	1.5	3
222	Fast and Slow Water Ion Populations in the Enceladus Plume. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027591.	0.8	2
223	Neutral Atmospheres. <i>Space Sciences Series of ISSI</i> , 2008, , 191-234.	0.0	1
224	Enceladus and Titan: emerging worlds of the Solar System. <i>Experimental Astronomy</i> , 0, , 1.	1.6	1
225	Conductivities of Titan's Dusty Ionosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	0.8	1
226	The Cassini RPWS/LP Observations of Dusty Plasma in the Kronian System. <i>Proceedings of the International Astronomical Union</i> , 2018, 14, 415-416.	0.0	0