

Christopher Arridge

List of Publications by Year in descending order

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138
papers

5,261
citations

66234

42
h-index

106150

65
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143
all docs

143
docs citations

143
times ranked

1798
citing authors

#	ARTICLE	IF	CITATIONS
1	Cassini Magnetometer Observations During Saturn Orbit Insertion. <i>Science</i> , 2005, 307, 1266-1270.	6.0	211
2	Warping of Saturn's magnetospheric and magnetotail current sheets. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	148
3	A new form of Saturn's magnetopause using a dynamic pressure balance model, based on in situ, multi-instrument Cassini measurements. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	145
4	Titan's Magnetic Field Signature During the First Cassini Encounter. <i>Science</i> , 2005, 308, 992-995.	6.0	133
5	Modeling the size and shape of Saturn's magnetopause with variable dynamic pressure. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	133
6	Origin of Saturn's aurora: Simultaneous observations by Cassini and the Hubble Space Telescope. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	127
7	Cassini observations of the variation of Saturn's ring current parameters with system size. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	108
8	Ionospheric electrons in Titan's tail: Plasma structure during the Cassini T9 encounter. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	103
9	Cassini observations of a Kelvin-Helmholtz vortex in Saturn's outer magnetosphere. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	100
10	Strong rapid dipolarizations in Saturn's magnetotail: In situ evidence of reconnection. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	93
11	Saturn's magnetodisc current sheet. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	89
12	Large-scale dynamics of Saturn's magnetopause: Observations by Cassini. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	86
13	Fine jet structure of electrically charged grains in Enceladus' plume. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	86
14	Plasma in Saturn's nightside magnetosphere and the implications for global circulation. <i>Planetary and Space Science</i> , 2009, 57, 1714-1722.	0.9	85
15	Periodic motion of Saturn's nightside plasma sheet. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	84
16	Polarization and phase of planetary-period magnetic field oscillations on high-latitude field lines in Saturn's magnetosphere. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	83
17	Titan's near magnetotail from magnetic field and electron plasma observations and modeling: Cassini flybys TA, TB, and T3. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	82
18	Derivation of density and temperature from the Cassini-Huygens CAPS electron spectrometer. <i>Planetary and Space Science</i> , 2008, 56, 901-912.	0.9	81

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19	Sources of rotational signals in Saturn's magnetosphere. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	74
20	Properties of Saturn kilometric radiation measured within its source region. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	74
21	A model of force balance in Saturn's magnetodisc. <i>Monthly Notices of the Royal Astronomical Society</i> , 2010, 401, 2349-2371.	1.6	73
22	Dual periodicities in planetaryâ€‘period magnetic field oscillations in Saturn's tail. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	70
23	Surface waves on Saturn's dawn flank magnetopause driven by the Kelvinâ€‘Helmholtz instability. <i>Planetary and Space Science</i> , 2009, 57, 1769-1778.	0.9	68
24	The evolution of solar wind strahl with heliospheric distance. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 3858-3874.	0.8	61
25	Auroral current systems in Saturn's magnetosphere: comparison of theoretical models with Cassini and HST observations. <i>Annales Geophysicae</i> , 2008, 26, 2613-2630.	0.6	60
26	Saturn's inner magnetospheric convection pattern: Further evidence. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	60
27	Solar Cycle Effects on the Dynamics of Jupiterâ€™s and Saturnâ€™s Magnetospheres. <i>Solar Physics</i> , 2011, 274, 481-502.	1.0	59
28	Mass of Saturn's magnetodisc: Cassini observations. <i>Geophysical Research Letters</i> , 2007, 34, .	1.5	57
29	Magnetic field structure of Saturn's dayside magnetosphere and its mapping to the ionosphere: Results from ring current modeling. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	57
30	Particle pressure, inertial force, and ring current density profiles in the magnetosphere of Saturn, based on Cassini measurements. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	57
31	The variability of Titan's magnetic environment. <i>Planetary and Space Science</i> , 2009, 57, 1813-1820.	0.9	56
32	The science case for an orbital mission to Uranus: Exploring the origins and evolution of ice giant planets. <i>Planetary and Space Science</i> , 2014, 104, 122-140.	0.9	56
33	Upstream of Saturn and Titan. <i>Space Science Reviews</i> , 2011, 162, 25-83.	3.7	52
34	An empirical model of Saturn's bow shock: Cassini observations of shock location and shape. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	51
35	Orientation, location, and velocity of Saturn's bow shock: Initial results from the Cassini spacecraft. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	50
36	Reconnection at the magnetopause of Saturn: Perspective from FTE occurrence and magnetosphere size. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	50

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37	Auroral signatures of multiple magnetopause reconnection at Saturn. <i>Geophysical Research Letters</i> , 2013, 40, 4498-4502.	1.5	50
38	A multi-instrument view of tail reconnection at Saturn. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	48
39	Magnetopause oscillations near the planetary period at Saturn: Occurrence, phase, and amplitude. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	48
40	Nature of magnetic fluctuations in Saturn's middle magnetosphere. <i>Journal of Geophysical Research</i> , 2006, 111, .	3.3	47
41	Cassini observations of ion and electron beams at Saturn and their relationship to infrared auroral arcs. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	47
42	Characterization of auroral current systems in Saturn's magnetosphere: High-latitude Cassini observations. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	44
43	Uranus Pathfinder: exploring the origins and evolution of Ice Giant planets. <i>Experimental Astronomy</i> , 2012, 33, 753-791.	1.6	44
44	Saturn's Magnetospheric Configuration. , 2009, , 203-255.		44
45	Cassini in Titan's tail: CAPS observations of plasma escape. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	43
46	Complex structure within Saturn's infrared aurora. <i>Nature</i> , 2008, 456, 214-217.	13.7	42
47	Thermal electron periodicities at 20 ^R in Saturn's magnetosphere. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	41
48	Plasma electrons in Saturn's magnetotail: Structure, distribution and energisation. <i>Planetary and Space Science</i> , 2009, 57, 2032-2047.	0.9	41
49	Northward field excursions in Saturn's magnetotail and their relationship to magnetospheric periodicities. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	41
50	Large-Scale Structure and Dynamics of the Magnetotails of Mercury, Earth, Jupiter and Saturn. <i>Space Science Reviews</i> , 2014, 182, 85-154.	3.7	41
51	Dynamics and seasonal variations in Saturn's magnetospheric plasma sheet, as measured by Cassini. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	40
52	Mapping Magnetospheric Equatorial Regions at Saturn from Cassini Prime Mission Observations. <i>Space Science Reviews</i> , 2011, 164, 1-83.	3.7	40
53	Statistical properties of the magnetic field in the Kronian magnetotail lobes and current sheet. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	39
54	Saturn's ring current: Local time dependence and temporal variability. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	39

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55	Internally driven large-scale changes in the size of Saturn's magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 7289-7306.	0.8	39
56	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
57	Signatures of field-aligned currents in Saturn's nightside magnetosphere. <i>Geophysical Research Letters</i> , 2009, 36, .	1.5	37
58	Solar Wind and Internally Driven Dynamics: Influences on Magnetodiscs and Auroral Responses. <i>Space Science Reviews</i> , 2015, 187, 51-97.	3.7	36
59	Statistical characteristics of field-aligned currents in Saturn's nightside magnetosphere. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	35
60	Auroral electron distributions within and close to the Saturn kilometric radiation source region. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	35
61	Cassini in situ observations of long-duration magnetic reconnection in Saturn's magnetotail. <i>Nature Physics</i> , 2016, 12, 268-271.	6.5	35
62	Cusp observation at Saturn's high-latitude magnetosphere by the Cassini spacecraft. <i>Geophysical Research Letters</i> , 2014, 41, 1382-1388.	1.5	34
63	CMI growth rates for Saturnian kilometric radiation. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	33
64	Influence of hot plasma pressure on the global structure of Saturn's magnetodisk. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	33
65	In situ observations of the effect of a solar wind compression on Saturn's magnetotail. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	33
66	Analysis of a coronal mass ejection and corotating interaction region as they travel from the Sun passing Venus, Earth, Mars, and Saturn. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 1566-1588.	0.8	33
67	Formation of Saturn's ring spokes by lightning-induced electron beams. <i>Geophysical Research Letters</i> , 2006, 33, .	1.5	32
68	The effect of spacecraft radiation sources on electron moments from the Cassini CAPS electron spectrometer. <i>Planetary and Space Science</i> , 2009, 57, 854-869.	0.9	32
69	Hot flow anomalies at Saturn's bow shock. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	32
70	Comparative magnetotail flapping: an overview of selected events at Earth, Jupiter and Saturn. <i>Annales Geophysicae</i> , 2013, 31, 817-833.	0.6	32
71	Rotationally driven magnetic reconnection in Saturn's dayside. <i>Nature Astronomy</i> , 2018, 2, 640-645.	4.2	32
72	The calibration of the Cassini-Huygens CAPS Electron Spectrometer. <i>Planetary and Space Science</i> , 2010, 58, 427-436.	0.9	31

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73	Electron beams as the source of whistler-mode auroral hiss at Saturn. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	31
74	Extraordinary field-aligned current signatures in Saturn's high-latitude magnetosphere: Analysis of Cassini data during Revolution 89. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	31
75	Cassini multi-instrument assessment of Saturn's polar cap boundary. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 8161-8177.	0.8	31
76	Electron optical study of the Venus Express ASPERA-4 Electron Spectrometer (ELS) top-hat electrostatic analyser. <i>Measurement Science and Technology</i> , 2009, 20, 055204.	1.4	30
77	Outer magnetospheric structure: Jupiter and Saturn compared. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	30
78	The geometric factor of electrostatic plasma analyzers: A case study from the Fast Plasma Investigation for the Magnetospheric Multiscale mission. <i>Review of Scientific Instruments</i> , 2012, 83, 033303.	0.6	30
79	Nature of the ring current in Saturn's dayside magnetosphere. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	27
80	Supercorotating return flow from reconnection in Saturn's magnetotail. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	1.5	24
81	Cassini observations of ionospheric photoelectrons at large distances from Titan: Implications for Titan's exospheric environment and magnetic tail. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	24
82	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
83	Cassini encounters with hot flow anomaly-like phenomena at Saturn's bow shock. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	22
84	Polar confinement of Saturn's magnetosphere revealed by in situ Cassini observations. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 2858-2875.	0.8	21
85	Field dipolarization in Saturn's magnetotail with planetward ion flows and energetic particle flow bursts: Evidence of quasi-steady reconnection. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 3603-3617.	0.8	20
86	Titan's plasma environment during a magnetosheath excursion: Real-time scenarios for Cassini's T32 flyby from a hybrid simulation. <i>Annales Geophysicae</i> , 2009, 27, 669-685.	0.6	18
87	Excitation of electron cyclotron harmonic waves in the inner Saturn magnetosphere within local plasma injections. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	18
88	Asymmetries observed in Saturn's magnetopause geometry. <i>Geophysical Research Letters</i> , 2015, 42, 6890-6898.	1.5	18
89	Cassini observations of Saturn's southern polar cusp. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 3006-3030.	0.8	17
90	Cassini observations of ionospheric plasma in Saturn's magnetotail lobes. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 338-357.	0.8	16

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91	Local Time Asymmetries in Jupiter's Magnetodisc Currents. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027455.	0.8	16
92	Electromagnetic induction in the icy satellites of Uranus. <i>Icarus</i> , 2021, 367, 114562.	1.1	16
93	Reconnection Acceleration in Saturn's Dayside Magnetodisk: A Multicase Study with Cassini. <i>Astrophysical Journal Letters</i> , 2018, 868, L23.	3.0	15
94	Statistical ring current of Saturn. <i>Journal of Geophysical Research</i> , 2012, 117, n/a-n/a.	3.3	14
95	The Cassini Enceladus encounters 2005–2010 in the view of energetic electron measurements. <i>Icarus</i> , 2012, 218, 433-447.	1.1	14
96	Source region and growth analysis of narrowband Z -mode emission at Saturn. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 11,929.	0.8	14
97	Recurrent Magnetic Dipolarization at Saturn: Revealed by Cassini. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 8502-8517.	0.8	14
98	Saturn's auroral/polar H_{3+} infrared emission: The effect of solar wind compression. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	13
99	Photoelectrons in the Enceladus plume. <i>Journal of Geophysical Research: Space Physics</i> , 2013, 118, 5099-5108.	0.8	13
100	Sources of Local Time Asymmetries in Magnetodiscs. <i>Space Science Reviews</i> , 2015, 187, 301-333.	3.7	13
101	Modeling the compressibility of Saturn's magnetosphere in response to internal and external influences. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 1572-1589.	0.8	13
102	Ice giant system exploration in the 2020s: an introduction. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190473.	1.6	13
103	Electric field variability and classifications of Titan's magnetoplasma environment. <i>Annales Geophysicae</i> , 2011, 29, 1253-1258.	0.6	12
104	Cassini plasma observations of Saturn's magnetospheric cusp. <i>Journal of Geophysical Research: Space Physics</i> , 2016, 121, 12,047.	0.8	12
105	Ice giant magnetospheres. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190480.	1.6	12
106	The Case for a New Frontiers-Class 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
107	Global configuration of Saturn's magnetic field derived from observations. <i>Geophysical Research Letters</i> , 2010, 37, .	1.5	11
108	An indication of the existence of a solar wind strahl at 10% AU. <i>Geophysical Research Letters</i> , 2013, 40, 2495-2499.	1.5	10

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109	A combined model of pressure variations in Titan's plasma environment. <i>Geophysical Research Letters</i> , 2014, 41, 8730-8735.	1.5	10
110	Cassini observations of aperiodic waves on Saturn's magnetodisc. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 8063-8077.	0.8	9
111	An isolated, bright cusp aurora at Saturn. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 6121-6138.	0.8	9
112	Saturn's Open-Closed Field Line Boundary: A Cassini Electron Survey at Saturn's Magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 10018-10035.	0.8	9
113	Introducing the Voyage 2050 White Papers, contributions from the science community to ESA's long-term plan for the Scientific Programme. <i>Experimental Astronomy</i> , 2021, 51, 551-558.	1.6	8
114	The Role of Intense Upper Hybrid Resonance Emissions in the Generation of Saturn Narrowband Emission. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 5709-5718.	0.8	7
115	Diamagnetic depression observations at Saturn's magnetospheric cusp by the Cassini spacecraft. <i>Journal of Geophysical Research: Space Physics</i> , 2017, 122, 6283-6303.	0.8	6
116	Survey of Thermal Plasma Composition in Saturn's Magnetosphere Using Time-of-Flight Data From Cassini/CAPS. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 6494-6513.	0.8	6
117	Local Time Variation in the Large-scale Structure of Saturn's Magnetosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 7425-7441.	0.8	6
118	Tracking Counterpart Signatures in Saturn's Auroras and ENA Imagery During Large-scale Plasma Injection Events. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027542.	0.8	6
119	The magnetospheres of Jupiter and Saturn and their lessons for the Earth. <i>Advances in Space Research</i> , 2008, 41, 1310-1318.	1.2	5
120	The Periodic Flapping and Breathing of Saturn's Magnetodisk During Equinox. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 8292-8316.	0.8	5
121	Mapping Saturn's Nightside Plasma Sheet Using Cassini's Proximal Orbits. <i>Geophysical Research Letters</i> , 2018, 45, 6798-6804.	1.5	4
122	Long-standing Small-scale Reconnection Processes at Saturn Revealed by Cassini. <i>Astrophysical Journal Letters</i> , 2019, 884, L14.	3.0	4
123	Current Density in Saturn's Equatorial Current Sheet: Cassini Magnetometer Observations. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 279-292.	0.8	4
124	Trapped Particle Motion in Magnetodisk Fields. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA027827.	0.8	4
125	Giant Planet Magnetodiscs and Aurorae—An Introduction. <i>Space Science Reviews</i> , 2015, 187, 1-3.	3.7	3
126	Future Missions to the Giant Planets that Can Advance Atmospheric Science Objectives. <i>Space Science Reviews</i> , 2020, 216, 1.	3.7	3

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127	Distribution and Properties of Magnetic Flux Ropes in Titan's Ionosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027570.	0.8	3
128	The Statistical Morphology of Saturn's Equatorial Energetic Neutral Atom Emission. Geophysical Research Letters, 2021, 48, e2020GL091595.	1.5	3
129	Modeling Non-Free and Deformed Flux Ropes in Titan's Ionosphere. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027571.	0.8	2
130	Sources of Local Time Asymmetries in Magnetodiscs. Space Sciences Series of ISSI, 2016, , 301-333.	0.0	2
131	AXIOM: Advanced X-ray imaging of the magnetosheath. Astronomische Nachrichten, 2012, 333, 388-392.	0.6	1
132	Magnetotails throughout the solar system. Astronomy and Geophysics, 2010, 51, 6.28-6.30.	0.1	0
133	Large-Scale Structure in the Magnetospheres of Jupiter and Saturn. , 2011, , 343-358.		0
134	Correction to "Cassini observations of ion and electron beams at Saturn and their relationship to infrared auroral arcs". Journal of Geophysical Research, 2012, 117, .	3.3	0
135	Cassini tracks Saturn's equatorial current sheet. Astronomy and Geophysics, 2017, 58, 1.17-1.20.	0.1	0
136	How does the Sun Influence the Magnetospheres of Jupiter and Saturn?. Proceedings of the International Astronomical Union, 2017, 13, 109-113.	0.0	0
137	Vertical Current Density Structure of Saturn's Equatorial Current Sheet. Journal of Geophysical Research: Space Physics, 2019, 124, 5097-5106.	0.8	0
138	Upstream of Saturn and Titan. Space Sciences Series of ISSI, 2011, , 25-83.	0.0	0