J R Johnson

List of Publications by Year in descending order

94 papers	3,056 citations	159585 30 h-index	182427 51 g-index
104 all docs	104 docs citations	104 times ranked	2061 citing authors

#	Article	IF	Citations
1	Kinetic AlfvÃ©n waves and plasma transport at the magnetopause. Geophysical Research Letters, 1997, 24, 1423-1426.	4.0	187
2	The Jovian Auroral Distributions Experiment (JADE) on the Juno Mission to Jupiter. Space Science Reviews, 2017, 213, 547-643.	8.1	187
3	Stochastic ion heating at the magnetopause due to kinetic AlfvÃ©n waves. Geophysical Research Letters, 2001, 28, 4421-4424.	4.0	143
4	Dawn-dusk asymmetries, ion spectra, and sources in the northward interplanetary magnetic field plasma sheet. Journal of Geophysical Research, 2005, 110, .	3.3	118
5	Kp forecast models. Journal of Geophysical Research, 2005, 110, .	3.3	109
6	Kelvin Helmholtz Instability in Planetary Magnetospheres. Space Science Reviews, 2014, 184, 1-31.	8.1	90
7	Kinetic AlfvÃ©n waves as a source of plasma transport at the dayside magnetopause. Journal of Geophysical Research, 1994, 99, 17405.	3.3	88
8	Kinetic AlfvÃ©n Wave Turbulence and Transport through a Reconnection Diffusion Region. Physical Review Letters, 2009, 102, 015001.	7.8	87
9	Review of Solar Wind Entry into and Transport Within the Plasma Sheet. Space Science Reviews, 2014, 184, 33-86.	8.1	82
10	Information theoretical approach to discovering solar wind drivers of the outer radiation belt. Journal of Geophysical Research: Space Physics, 2016, 121, 9378-9399.	2.4	79
11	Small-scale, dispersive field line resonances in the hot magnetospheric plasma. Journal of Geophysical Research, 1998, 103, 26559-26572.	3.3	76
12	Signatures of mode conversion and kinetic AlfvÃ©n waves at the magnetopause. Geophysical Research Letters, 2001, 28, 227-230.	4.0	74
13	Particle transport and energization associated with substorms. Journal of Geophysical Research, 2000, 105, 18741-18752.	3.3	70
14	Twoâ€dimensional hybrid code simulation of electromagnetic ion cyclotron waves of multiâ€ion plasmas in a dipole magnetic field. Journal of Geophysical Research, 2010, 115, .	3.3	70
15	A kinetic-fluid model. Journal of Geophysical Research, 1999, 104, 413-427.	3.3	60
16	Can Ion Cyclotron Waves Propagate to the Ground?. Geophysical Research Letters, 1999, 26, 671-674.	4.0	60
17	Auroral particle precipitation characterized by the substorm cycle. Journal of Geophysical Research: Space Physics, 2013, 118, 1022-1039.	2.4	59
18	Three-Dimensional Mode Conversion Associated with Kinetic AlfvÃ©n Waves. Physical Review Letters, 2012, 109, 125003.	7.8	54

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19	Fullâ€wave modeling of EMIC waves near the He⁺ gyrofrequency. Geophysical Research Letters, 2016, 43, 13-21.	4.0	53
20	Cluster observations of Pc 1â€“2 waves and associated ion distributions during the October and November 2003 magnetic storms. Planetary and Space Science, 2007, 55, 829-848.	1.7	45
21	A solar cycle dependence of nonlinearity in magnetospheric activity. Journal of Geophysical Research, 2005, 110, .	3.3	44
22	Northward interplanetary magnetic field plasma sheet entropies. Journal of Geophysical Research, 2009, 114, .	3.3	44
23	Timescale for the formation of the cold-dense plasma sheet: A case study. Geophysical Research Letters, 2006, 33, .	4.0	41
24	Ion temperature effects on magnetotail AlfvÃ©n wave propagation and electron energization. Journal of Geophysical Research: Space Physics, 2015, 120, 5623-5632.	2.4	39
25	Global structure of mirror modes in the magnetosheath. Journal of Geophysical Research, 1997, 102, 7179-7189.	3.3	37
26	Kinetic Simulations of Electron Acceleration by Dispersive Scale AlfvÃ©n Waves in Jupiter's Magnetosphere. Geophysical Research Letters, 2019, 46, 3043-3051.	4.0	36
27	Formation and transport of entropy structures in the magnetotail simulated with a 3â€Ð global hybrid code. Geophysical Research Letters, 2017, 44, 5892-5899.	4.0	35
28	A study of mode conversion in an oxygenâ€“hydrogen plasma. Physics of Plasmas, 1995, 2, 1274-1284.	1.9	32
29	Hybrid simulation of mode conversion at the magnetopause. Journal of Geophysical Research, 2010, 115, .	3.3	32
30	Effects of heavy ions on ULF wave resonances near the equatorial region. Journal of Geophysical Research, 2008, 113, .	3.3	31
31	Ion gyroradius effects on particle trapping in kinetic AlfvÃ©n waves along auroral field lines. Journal of Geophysical Research: Space Physics, 2016, 121, 10,831.	2.4	31
32	Applications of Information Theory in Solar and Space Physics. Entropy, 2019, 21, 140.	2.2	31
33	External versus internal triggering of substorms: An informationâ€theoretical approach. Geophysical Research Letters, 2014, 41, 5748-5754.	4.0	30
34	The dependence of the strength and thickness of fieldâ€aligned currents on solar wind and ionospheric parameters. Journal of Geophysical Research: Space Physics, 2015, 120, 3987-4008.	2.4	29
35	Equatorially generated ULF waves as a source for the turbulence associated with ion conics. Geophysical Research Letters, 1989, 16, 1469-1472.	4.0	26
36	Kinetic AlfvÃ©n waves in threeâ€dimensional magnetic reconnection. Journal of Geophysical Research: Space Physics, 2016, 121, 6526-6548.	2.4	26

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37	Kinetic AlfvÃ©n Waves From Magnetotail to the Ionosphere in Global Hybrid Simulation Associated With Fast Flows. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027062.	2.4	26
38	Electron acceleration in a geomagnetic Field Line Resonance. Geophysical Research Letters, 2012, 39, .	4.0	25
39	Mirror mode structures in the asymmetric Hermean magnetosheath: Hybrid simulations. Journal of Geophysical Research: Space Physics, 2013, 118, 405-417.	2.4	25
40	Substorm entropies. Journal of Geophysical Research, 2009, 114, .	3.3	24
41	Nonlinear vortex structures with diverging electric fields and their relation to the black aurora. Geophysical Research Letters, 1995, 22, 1481-1484.	4.0	23
42	Substorm plasma sheet ion pressure profiles. Geophysical Research Letters, 2007, 34, .	4.0	23
43	Inferring magnetospheric heavy ion density using EMIC waves. Journal of Geophysical Research: Space Physics, 2015, 120, 6464-6473.	2.4	22
44	Information Theoretic Approach to Discovering Causalities in the Solar Cycle. Astrophysical Journal, 2018, 854, 85.	4.5	22
45	Do solar cycles influence giant cell arteritis and rheumatoid arthritis incidence?. BMJ Open, 2015, 5, e006636-e006636.	1.9	21
46	Resonant absorption of ULF waves at Mercury's magnetosphere. Journal of Geophysical Research, 2008, 113, .	3.3	20
47	Transfer entropy and cumulant-based cost as measures of nonlinear causal relationships in space plasmas: applications to <i>D</i>_{st}. Annales Geophysicae, 2018, 36, 945-952.	1.6	20
48	Introduction to special section on Entropy Properties and Constraints Related to Space Plasma Transport. Journal of Geophysical Research, 2010, 115, .	3.3	19
49	Modification of the loss cone for energetic particles. Geophysical Research Letters, 2014, 41, 8107-8113.	4.0	19
50	Global modeling of ULF waves at Mercury. Geophysical Research Letters, 2015, 42, 5147-5154.	4.0	19
51	Ion acceleration and heating by kinetic AlfvÃ©n waves associated with magnetic reconnection. Physics of Plasmas, 2017, 24, .	1.9	19
52	Electron Distributions in Kinetic Scale Field Line Resonances: A Comparison of Simulations and Observations. Geophysical Research Letters, 2018, 45, 5826-5835.	4.0	19
53	ULF wave absorption at Mercury. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	16
54	Solar wind driving of dayside field-aligned currents. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	16

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55	Theory and observations of upward fieldâ€aligned currents at the magnetopause boundary layer. Geophysical Research Letters, 2015, 42, 9149-9155.	4.0	16
56	Linear mode conversion of Langmuir/z-mode waves to radiation in plasmas with various magnetic field strength. Physics of Plasmas, 2013, 20, 122103.	1.9	15
57	Fieldâ€Aligned Currents in Auroral Vortices. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028583.	2.4	15
58	MMS Observations of the Multiscale Wave Structures and Parallel Electron Heating in the Vicinity of the Southern Exterior Cusp. Journal of Geophysical Research: Space Physics, 2021, 126, e2019JA027698.	2.4	15
59	Untangling the Solar Wind and Magnetospheric Drivers of the Radiation Belt Electrons. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	15
60	Field-line resonance structures in Mercuryâ€™s multi-ion magnetosphere. Earth, Planets and Space, 2013, 65, 447-451.	2.5	14
61	On the fieldâ€aligned electric field in the polar cap. Geophysical Research Letters, 2015, 42, 5090-5099.	4.0	13
62	Gyrokinetic particle simulation of nonlinear evolution of mirror instability. Journal of Geophysical Research: Space Physics, 2013, 118, 7211-7218.	2.4	12
63	Identifying Active Kelvinâ€“Helmholtz Vortices on Saturn's Magnetopause Boundary. Geophysical Research Letters, 2020, 47, e2019GL084206.	4.0	12
64	Periodic Narrowband Radio Wave Emissions and Inward Plasma Transport at Saturn's Magnetosphere. Astronomical Journal, 2020, 159, 249.	4.7	12
65	Kelvinâ€“Helmholtzâ€Related Turbulent Heating at Saturn's Magnetopause Boundary. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028479.	2.4	12
66	Determining EMIC Wave Vector Properties Through Multiâ€Point Measurements: The Wave Curl Analysis. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028922.	2.4	10
67	Linear dispersion relation for the mirror instability in context of the gyrokinetic theory. Physics of Plasmas, 2013, 20, 104501.	1.9	9
68	Effect of Field-Line Curvature on the Ionospheric Accessibility of Relativistic Electron Beam Experiments. Frontiers in Astronomy and Space Sciences, 2019, 6, .	2.8	9
69	Magnetospheric Multiscale Observations of the Source Region of Energetic Electron Microinjections Along the Duskside, Highâ€Latitude Magnetopause Boundary Layer. Geophysical Research Letters, 2021, 48, e2021GL092466.	4.0	9
70	Mirror force induced wave dispersion in AlfvÃ©n waves. Physics of Plasmas, 2013, 20, .	1.9	8
71	Electron Inertial Effects on Linearly Polarized Electromagnetic Ion Cyclotron Waves at Earth's Magnetosphere. Journal of Geophysical Research: Space Physics, 2019, 124, 2643-2655.	2.4	8
72	Information Theoretical Approach to Understanding Flare Waiting Times. Astrophysical Journal, 2020, 899, 148.	4.5	8

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73	Localization of Ultra-Low Frequency Waves in Multi-Ion Plasmas of the Planetary Magnetosphere. Journal of Astronomy and Space Sciences, 2015, 32, 289-295.	1.0	8
74	Cluster observations of bandâ€limited Pc 1 waves associated with streaming H⁺ and O⁺ions in the highâ€altitude plasma mantle. Journal of Geophysical Research, 2012, 117, .	3.3	7
75	Electron Energization by Parallel Electric Fields in Poloidal Standing Waves. Journal of Geophysical Research: Space Physics, 2019, 124, 6691-6700.	2.4	7
76	The Solar Memory from Hours to Decades. Astrophysical Journal, 2021, 921, 82.	4.5	7
77	The Poissonian Origin of Power Laws in Solar Flare Waiting Time Distributions. Astrophysical Journal, 2021, 921, 166.	4.5	7
78	Waves in Space Plasmas. AIP Conference Proceedings, 2009, , .	0.4	6
79	An Information-Theoretical Approach to Space Weather. , 2018, , 45-69.		6
80	Statistical Study of EMIC Wave Propagation Using Spaceâ€Ground Conjugate Observations. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	6
81	Comment on â€œMode Conversion of Waves in the Ion-Cyclotron Frequency Range in Magnetospheric Plasmasâ€. Physical Review Letters, 2014, 113, 089501.	7.8	5
82	Narrow-band extremely low frequency (ELF) wave phenomena observed at South Pole Station. Geophysical Research Letters, 2006, 33, .	4.0	4
83	Multi-Spacecraft Observations of Fluctuations Occurring Along the Dusk Flank Magnetopause, and Testing the Connection to an Observed Ionospheric Bead. Frontiers in Astronomy and Space Sciences, 2022, 9, .	2.8	4
84	Kinetic AlfvÃ©n waves at the magnetopause mode conversion, transport and formation of LLBL. Geophysical Monograph Series, 2003, , 211-221.	0.1	3
85	On the propagation and mode conversion of auroral medium frequency bursts. Journal of Geophysical Research: Space Physics, 2016, 121, 1706-1721.	2.4	3
86	Untangling the Solar Wind Drivers of the Radiation Belt: An Information Theoretical Approach. , 2018, , 149-175.		3
87	Role of the Solar Minimum in the Waiting Time Distribution Throughout the Heliosphere. Geophysical Research Letters, 2021, 48, e2021GL094348.	4.0	3
88	Coupling Between AlfvÃ©n Wave and Kelvinâ€“Helmholtz Waves in the Low Latitude Boundary Layer. Frontiers in Astronomy and Space Sciences, 2022, 8, .	2.8	3
89	Conductivity tensor for anisotropic plasma in gyrokinetic theory. Physics of Plasmas, 2017, 24, 052121.	1.9	2
90	The Kelvin-Helmholtz Instability From the Perspective of Hybrid Simulations. Frontiers in Astronomy and Space Sciences, 2021, 8, .	2.8	2

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91	Electron Energization Signatures in Traveling Kinetic AlfvÃ©n Waves at Storm Time Injection Fronts. Geophysical Research Letters, 2022, 49, .	4.0	2
92	Fieldâ€aligned currents during the extreme solar minimum between the solar cycles 23 and 24. Journal of Geophysical Research: Space Physics, 2014, 119, 2466-2475.	2.4	1
93	Method for Approximating Field-Line Curves Using Ionospheric Observations of Energy-Variable Electron Beams Launched From Satellites. Frontiers in Astronomy and Space Sciences, 2019, 6, .	2.8	1
94	Imaging the plasma sheet from ionospheric observations. , 2022, , 341-357.		0