John D Richardson

List of Publications by Year
in descending order

118 papers	4,702 citations	101543 36 h-index	110387 64 g-index
120 all docs	120 docs citations	120 times ranked	2554 citing authors

#	Article	IF	Citations
1	Shocks in the Very Local Interstellar Medium. Space Science Reviews, 2022, 218, 27.	8.1	13
2	On the Energization of Pickup Ions Downstream of the Heliospheric Termination Shock by Comparing 0.52â€“55 keV Observed Energetic Neutral Atom Spectra to Ones Inferred from Proton Hybrid Simulations. Astrophysical Journal Letters, 2022, 931, L21.	8.3	11
3	The Early History of Heliospheric Science and the Spacecraft That Made It Possible. Space Science Reviews, 2022, 218, .	8.1	8
4	Observations of the Outer Heliosphere, Heliosheath, and Interstellar Medium. Space Science Reviews, 2022, 218, .	8.1	21
5	Magnetic Fields Observed by Voyager 2 in the Heliosheath. Astrophysical Journal, 2021, 906, 119.	4.5	8
6	Hybrid Simulations of Interstellar Pickup Protons Accelerated at the Solar-wind Termination Shock at Multiple Locations. Astrophysical Journal, 2021, 911, 27.	4.5	20
7	Energetic Neutral Atom Fluxes from the Heliosheath: Constraints from in situ Measurements and Models. Astrophysical Journal Letters, 2021, 915, L26.	8.3	9
8	No Stagnation Region before the Heliopause at Voyager 1? Inferences from New Voyager 2 Results. Astrophysical Journal, 2021, 906, 126.	4.5	8
9	Using Magnetic Flux Conservation to Determine Heliosheath Speeds. Astrophysical Journal Letters, 2021, 919, L28.	8.3	5
10	Signature of a Heliotail Organized by the Solar Magnetic Field and the Role of Nonideal Processes in Modeled IBEX ENA Maps: A Comparison of the BU and Moscow MHD Models. Astrophysical Journal, 2021, 921, 164.	4.5	14
11	A Turbulent Heliosheath Driven by the Rayleighâ€“Taylor Instability. Astrophysical Journal, 2021, 922, 181.	4.5	21
12	The Development of a Split-tail Heliosphere and the Role of Non-ideal Processes: A Comparison of the BU and Moscow Models. Astrophysical Journal, 2021, 923, 179.	4.5	14
13	(Non)radial Solar Wind Propagation through the Heliosphere. Astrophysical Journal Letters, 2020, 897, L39.	8.3	9
14	Voyager 2 Observations Near the Heliopause. Journal of Physics: Conference Series, 2020, 1620, 012016.	0.4	3
15	Influence of Solar Disturbances on Galactic Cosmic Rays in the Solar Wind, Heliosheath, and Local Interstellar Medium: Advanced Composition Explorer, New Horizons, and Voyager Observations. Astrophysical Journal, 2020, 905, 69.	4.5	15
16	Density of Neutral Hydrogen in the Sun's Interstellar Neighborhood. Astrophysical Journal, 2020, 903, 48.	4.5	56
17	The Downwind Solar Wind: Model Comparison with Pioneer 10 Observations. Astrophysical Journal Letters, 2020, 901, L23.	8.3	16
18	Combined â^¼10 eV to â^¼344 MeV Particle Spectra and Pressures in the Heliosheath along the Voyager 2 Trajectory. Astrophysical Journal Letters, 2020, 905, L24.	8.3	24

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19	Magnetic field and particle measurements made by Voyager 2 at and near the heliopause. Nature Astronomy, 2019, 3, 1007-1012.	10.1	69
20	Voyager 2 plasma observations of the heliopause and interstellar medium. Nature Astronomy, 2019, 3, 1019-1023.	10.1	78
21	Correlation of Long-term Cosmic-Ray Modulation with Solar Activity Parameters. Astrophysical Journal, 2019, 883, 73.	4.5	24
22	Heliosheath Properties Measured from a Voyager 2 to Voyager 1 Transient. Astrophysical Journal, 2019, 883, 101.	4.5	22
23	A Magnetic Pressure Front Upstream of the Heliopause and the Heliosheath Magnetic Fields and Plasma, Observed during 2017. Astrophysical Journal, 2019, 877, 31.	4.5	14
24	Magnetic Turbulence Spectra and Intermittency in the Heliosheath and in the Local Interstellar Medium. Astrophysical Journal, 2019, 872, 40.	4.5	40
25	AlfvÃ©nic velocity spikes and rotational flows in the near-Sun solar wind. Nature, 2019, 576, 228-231.	27.8	311
26	Voyager 2 Observations of Plasma and Pressure Pulses. Journal of Physics: Conference Series, 2018, 1100, 012019.	0.4	3
27	Interstellar Mapping and Acceleration Probe (IMAP): A New NASA Mission. Space Science Reviews, 2018, 214, 1.	8.1	129
28	Heliosheath Magnetic Field and Plasma Observed by Voyager 2 during 2015 Near Solar Maximum. Astrophysical Journal, 2018, 861, 9.	4.5	14
29	Transition from the Unipolar Region to the Sector Zone: Voyager 2, 2013 and 2014. Astrophysical Journal, 2017, 841, 47.	4.5	10
30	The Formation of Magnetic Depletions and Flux Annihilation Due to Reconnection in the Heliosheath. Astrophysical Journal, 2017, 837, 159.	4.5	15
31	Evolution of Proton and Alpha Particle Velocities through the Solar Cycle. Astrophysical Journal, 2017, 850, 164.	4.5	16
32	Evolution of AlfvÃ©nic Fluctuations inside an Interplanetary Coronal Mass Ejection and Their Contribution to Local Plasma Heating: Joint Observations from 1.0 to 5.4 au. Astrophysical Journal Letters, 2017, 851, L2.	8.3	13
33	Interplanetary coronal mass ejection observed at STEREOâ€A, Mars, comet 67P/Churyumovâ€Gerasimenko, Saturn, and New Horizons en route to Pluto: Comparison of its Forbush decreases at 1.4, 3.1, and 9.9ÂAU. Journal of Geophysical Research: Space Physics, 2017, 122, 7865-7890.	2.4	87
34	PRESSURE PULSES AT VOYAGER 2: DRIVERS OF INTERSTELLAR TRANSIENTS?. Astrophysical Journal, 2017, 834, 190.	4.5	35
35	Pressure Waves in the Heliosheath?. Journal of Physics: Conference Series, 2017, 900, 012017.	0.4	2
36	Observations of Low-Frequency Magnetic Waves due to Newborn Interstellar Pickup Ions Using ACE, Ulysses, and Voyager Data. Journal of Physics: Conference Series, 2017, 900, 012018.	0.4	13

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37	SUNWARD-PROPAGATING ALFVÃ‰NIC FLUCTUATIONS OBSERVED IN THE HELIOSPHERE. Astrophysical Journal Letters, 2016, 824, L2.	8.3	15
38	Voyager 2 solar plasma and magnetic field spectral analysis for intermediate data sparsity. Journal of Geophysical Research: Space Physics, 2016, 121, 3905-3919.	2.4	17
39	VOYAGER OBSERVATIONS OF MAGNETIC SECTORS AND HELIOSPHERIC CURRENT SHEET CROSSINGS IN THE OUTER HELIOSPHERE. Astrophysical Journal, 2016, 831, 115.	4.5	8
40	PLASMA HEATING INSIDE INTERPLANETARY CORONAL MASS EJECTIONS BY ALFVÃ‰NIC FLUCTUATIONS DISSIPATION. Astrophysical Journal Letters, 2016, 831, L13.	8.3	11
41	HELIOSHEATH MAGNETIC FIELD AND PLASMA OBSERVED BY VOYAGERÂ2 DURING 2012 IN THE RISING PHASE OF SOLAR CYCLE 24. Astrophysical Journal, 2016, 818, 147.	4.5	13
42	VOYAGER OBSERVATIONS OF MAGNETIC WAVES DUE TO NEWBORN INTERSTELLAR PICKUP IONS: 2â€“6 au. Astrophysical Journal, 2016, 822, 94.	4.5	29
43	The solar wind during current and past solar minima and maxima. Journal of Geophysical Research: Space Physics, 2015, 120, 10,250.	2.4	19
44	Constraining the pickup ion abundance and temperature through the multifluid reconstruction of the Voyager 2 termination shock crossing. Journal of Geophysical Research: Space Physics, 2015, 120, 7130-7153.	2.4	19
45	The electron distribution function downstream of the solar-wind termination shock: Where are the hot electrons?. Astronomy and Astrophysics, 2015, 579, A18.	5.1	29
46	TRIANGULATION OF THE INTERSTELLAR MAGNETIC FIELD. Astrophysical Journal Letters, 2015, 813, L20.	8.3	20
47	MAGNETIC FLUX CONSERVATION IN THE HELIOSHEATH INCLUDING SOLAR CYCLE VARIATIONS OF MAGNETIC FIELD INTENSITY. Astrophysical Journal Letters, 2015, 803, L6.	8.3	13
48	Solar wind at 33â€‰AU: Setting bounds on the Pluto interaction for New Horizons. Journal of Geophysical Research E: Planets, 2015, 120, 1497-1511.	3.6	19
49	Plasma and Flows in the Heliosheath. Journal of Physics: Conference Series, 2015, 577, 012021.	0.4	11
50	PLASMA AND MAGNETIC FIELD CHARACTERISTICS OF SOLAR CORONAL MASS EJECTIONS IN RELATION TO GEOMAGNETIC STORM INTENSITY AND VARIABILITY. Astrophysical Journal Letters, 2015, 809, L34.	8.3	81
51	IMPACT OF PICKUP IONS ON THE SHOCK FRONT NONSTATIONARITY AND ENERGY DISSIPATION OF THE HELIOSPHERIC TERMINATION SHOCK: TWO-DIMENSIONAL FULL PARTICLE SIMULATIONS AND COMPARISON WITH<i>VOYAGER 2</i>OBSERVATIONS. Astrophysical Journal, 2015, 809, 28.	4.5	33
52	<i>VOYAGER 2</i>OBSERVATIONS OF PLASMAS AND FLOWS OUT TO 104 AU. Astrophysical Journal, 2014, 792, 126.	4.5	40
53	Heliosheath magnetic field and plasma observed by Voyager 2 during 2011. Journal of Geophysical Research: Space Physics, 2014, 119, 6062-6073.	2.4	7
54	PLASMA FLOWS IN THE HELIOSHEATH ALONG THE<i>VOYAGER 1</i>AND<i>2</i>TRAJECTORIES DUE TO EFFECTS OF THE 11 YR SOLAR CYCLE. Astrophysical Journal, 2014, 794, 29.	4.5	17

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55	PROPAGATION OF THE 2012 MARCH CORONAL MASS EJECTIONS FROM THE SUN TO HELIOPAUSE. Astrophysical Journal Letters, 2014, 788, L28.	8.3	47
56	Solar windâ€magnetosphere energy coupling function fitting: Results from a global MHD simulation. Journal of Geophysical Research: Space Physics, 2014, 119, 6199-6212.	2.4	51
57	The Solar Wind in the Outer Heliosphere and Heliosheath. Space Science Reviews, 2013, 176, 217-235.	8.1	36
58	Voyager observations of the interaction of the heliosphere with the interstellar medium. Journal of Advanced Research, 2013, 4, 229-233.	9.5	5
59	MAGNETIC FLUX CONSERVATION IN THE HELIOSHEATH. Astrophysical Journal Letters, 2013, 762, L14.	8.3	23
60	<i>VOYAGER 2</i> OBSERVES A LARGE DENSITY INCREASE IN THE HELIOSHEATH. Astrophysical Journal Letters, 2012, 759, L19.	8.3	25
61	IS THE MAGNETIC FIELD IN THE HELIOSHEATH LAMINAR OR A TURBULENT SEA OF BUBBLES?. Astrophysical Journal, 2011, 734, 71.	4.5	71
62	PLASMA NEAR THE HELIOSHEATH: OBSERVATIONS AND MODELING. Astrophysical Journal Letters, 2011, 728, L21.	8.3	50
63	PLASMA IN THE HELIOSHEATH: 3.5 YEARS OF OBSERVATIONS. Astrophysical Journal Letters, 2011, 734, L21.	8.3	40
64	VARIABILITY OF PLASMA IN THE HELIOSHEATH. Astrophysical Journal, 2011, 740, 113.	4.5	15
65	PLASMA NEAR THE HELIOSHEATH: OBSERVATIONS AND INTERPRETATIONS. Astrophysical Journal Letters, 2010, 711, L44-L47.	8.3	13
66	TURBULENT HEATING OF THE DISTANT SOLAR WIND BY INTERSTELLAR PICKUP PROTONS IN A DECELERATING FLOW. Astrophysical Journal, 2010, 719, 716-721.	4.5	57
67	Heliospheric shocks and sheaths. , 2010, , .		0
68	Relating IBEX and Voyager Data through Global Modeling of the Heliospheric Interface. , 2010, , .		2
69	Interplanetary shock characteristics and associated geosynchronous magnetic field variations estimated from sudden impulses observed on the ground. Journal of Geophysical Research, 2010, 115, .	3.3	27
70	Observations of the magnetic field and plasma in the heliosheath by Voyager 2 from 2007.7 to 2009.4. Journal of Geophysical Research, 2010, 115, .	3.3	14
71	Reflected ions at interplanetary shocks. Geophysical Research Letters, 2010, 37, .	4.0	4
72	Case study of nightside magnetospheric magnetic field response to interplanetary shocks. Journal of Geophysical Research, 2010, 115, .	3.3	25

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73	Heliospheric shocks and sheaths. , 2009, , .		1
74	The Solar Wind in the Outer Heliosphere. Space Science Reviews, 2009, 143, 7-20.	8.1	32
75	The Dynamic Heliosphere: Outstanding Issues. Space Science Reviews, 2009, 143, 57-83.	8.1	12
76	A strong, highly-tilted interstellar magnetic field near the Solar System. Nature, 2009, 462, 1036-1038.	27.8	122
77	Plasma flows in the heliosheath. Geophysical Research Letters, 2009, 36, .	4.0	26
78	Geospace magnetic field responses to interplanetary shocks. Journal of Geophysical Research, 2009, 114, .	3.3	44
79	Cool heliosheath plasma and deceleration of the upstream solar wind at the termination shock. Nature, 2008, 454, 63-66.	27.8	363
80	Magnetic fields at the solar wind termination shock. Nature, 2008, 454, 75-77.	27.8	205
81	Global structure and dynamics of largeâ€scale fluctuations in the solar wind: Voyager 2 observations during 2005 and 2006. Journal of Geophysical Research, 2008, 113, .	3.3	6
82	Deflection flows ahead of ICMEs as an indicator of curvature and geoeffectiveness. Journal of Geophysical Research, 2008, 113, .	3.3	16
83	Properties of the termination shock observed by Voyager 2. Geophysical Research Letters, 2008, 35, .	4.0	18
84	Plasma temperature distributions in the heliosheath. Geophysical Research Letters, 2008, 35, .	4.0	53
85	Plasma Near the Termination Shock and in the Heliosheath. AIP Conference Proceedings, 2008, , .	0.4	0
86	Flows and obstacles in the heliosphere. Proceedings of the International Astronomical Union, 2008, 4, 577-587.	0.0	1
87	Determining the LIC H density from the solar wind slowdown. Astronomy and Astrophysics, 2008, 491, 1-5.	5.1	66
88	Temperature Anisotropy in a Shocked Plasma: Mirror-Mode Instabilities in the Heliosheath. Astrophysical Journal, 2007, 659, L65-L68.	4.5	41
89	Response of the magnetic field in the geosynchronous orbit to solar wind dynamic pressure pulses. Journal of Geophysical Research, 2007, 112, .	3.3	21
90	A comparison of magnetosheaths, ICME sheaths, and the heliosheath. AIP Conference Proceedings, 2007, , .	0.4	3

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91	Thermodynamic structure of collision-dominated expanding plasma: Heating of interplanetary coronal mass ejections. Journal of Geophysical Research, 2006, 111, .	3.3	54
92	Plasma depletion and mirror waves ahead of interplanetary coronal mass ejections. Journal of Geophysical Research, 2006, 111, .	3.3	52
93	Constraints on the global structure of magnetic clouds: Transverse size and curvature. Journal of Geophysical Research, 2006, 111, .	3.3	145
94	Effect of interplanetary shock strengths and orientations on storm sudden commencement rise times. Geophysical Research Letters, 2006, 33, .	4.0	39
95	Cassini radio occultations of Saturn's ionosphere: Model comparisons using a constant water flux. Geophysical Research Letters, 2006, 33, .	4.0	46
96	Correlation between energetic ion enhancements and heliospheric current sheet crossings in the outer heliosphere. Geophysical Research Letters, 2006, 33, .	4.0	14
97	Turbulent Heating of the Solar Wind by Newborn Interstellar Pickup Protons. Astrophysical Journal, 2006, 638, 508-517.	4.5	144
98	Source and consequences of a large shock near 79 AU. Geophysical Research Letters, 2006, 33, .	4.0	29
99	Voyager Observations of Interplanetary Shocks. AIP Conference Proceedings, 2005, , .	0.4	4
100	Propagation of the October/November 2003 CMEs through the heliosphere. Geophysical Research Letters, 2005, 32, .	4.0	61
101	Relation between the solar wind dynamic pressure at Voyager 2 and the energetic particle events at Voyager 1. Journal of Geophysical Research, 2005, 110, .	3.3	16
102	Characteristics of the interplanetary coronal mass ejections in the heliosphere between 0.3 and 5.4 AU. Journal of Geophysical Research, 2005, 110, .	3.3	81
103	Sharp boundaries of small- and middle-scale solar wind structures. Journal of Geophysical Research, 2005, 110, .	3.3	29
104	Interplanetary coronal mass ejections observed by Voyager 2 between 1 and 30 AU. Journal of Geophysical Research, 2004, 109, .	3.3	36
105	The radial temperature profile of the solar wind. Geophysical Research Letters, 2003, 30, n/a-n/a.	4.0	71
106	Evolution of the multiscale statistical properties of corotating streams from 1 to 95 AU. Journal of Geophysical Research, 2003, 108, .	3.3	14
107	Sectors in the distant heliosphere: Voyager 1 and 2 observations from 1999 through 2002 between 57 and 83 AU. Journal of Geophysical Research, 2003, 108, .	3.3	27
108	Evolution of Magnetic Fields in Corotating Interaction Regions from 1 to 95 AU: Order to Chaos. Astrophysical Journal, 2003, 590, 554-566.	4.5	26

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109	Voyager 1and2Observations of Magnetic Fields and Associated Cosmicâ€Ray Variations from 2000 through 2001: 60â€"87 AU. Astrophysical Journal, 2003, 582, 540-549.	4.5	37
110	Largeâ€Scale Magnetic Field Fluctuations and Development of the 1999â€"2000 Global Merged Interaction Region: 1â€"60 AU. Astrophysical Journal, 2003, 585, 1158-1168.	4.5	26
111	The life of a CME and the development of a MIR: From the Sun to 58 AU. Journal of Geophysical Research, 2002, 107, SSH 1-1.	3.3	50
112	Heating of the low-latitude solar wind by dissipation of turbulent magnetic fluctuations. Journal of Geophysical Research, 2001, 106, 8253-8272.	3.3	256
113	Energy partition between solar wind protons and pickup ions in the distant heliosphere: A three-fluid approach. Journal of Geophysical Research, 2001, 106, 29401-29407.	3.3	51
114	North-south flows at 47 AU: A heliospheric vortex street?. Journal of Geophysical Research, 2000, 105, 10501-10507.	3.3	10
115	Thermal anisotropies in the solar wind: Evidence of heating by interstellar pickup ions?. Geophysical Research Letters, 1996, 23, 3259-3262.	4.0	25
116	Meridional flow in the solar wind. Journal of Geophysical Research, 1996, 101, 19995-20002.	3.3	9
117	Radial evolution of the solar wind from IMP 8 to Voyager 2. Geophysical Research Letters, 1995, 22, 325-328.	4.0	156
118	Evidence for a solar wind slowdown in the outer heliosphere?. Geophysical Research Letters, 1995, 22, 1469-1472.	4.0	88