Leonard Burlaga

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/5061962/publications.pdf

Version: 2024-02-01

123	6,111	76326	76900
papers	citations	40 h-index	74 g-index

124	124	124	1832
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Shocks in the Very Local Interstellar Medium. Space Science Reviews, 2022, 218, 27.	8.1	13
2	Observations of the Outer Heliosphere, Heliosheath, and Interstellar Medium. Space Science Reviews, 2022, 218, .	8.1	21
3	Magnetic Field Observations in the Very Local Interstellar Medium by Voyagers 1 and 2. Astrophysical Journal, 2022, 932, 59.	4.5	11
4	Magnetic Fields Observed by Voyager 2 in the Heliosheath. Astrophysical Journal, 2021, 906, 119.	4.5	8
5	Magnetic Field and Plasma Density Observations of a Pressure Front by Voyager 1 during 2020 in the Very Local Interstellar Medium. Astrophysical Journal, 2021, 911, 61.	4.5	24
6	Magnetic Field Draping of the Heliopause and Its Consequences for Radio Emission in the Very Local Interstellar Medium. Astrophysical Journal Letters, 2021, 917, L20.	8.3	15
7	A Foreshock Model for Interstellar Shocks of Solar Origin: Voyager 1 and 2 Observations. Astronomical Journal, 2021, 161, 11.	4.7	21
8	Using Magnetic Flux Conservation to Determine Heliosheath Speeds. Astrophysical Journal Letters, 2021, 919, L28.	8.3	5
9	Origin of the Weak Plasma Emission Line Detected by Voyager 1 in the Interstellar Medium: Evidence for Suprathermal Electrons. Astrophysical Journal, 2021, 921, 62.	4.5	10
10	Signatures of Intermittency and Fine-scale Turbulence in the Very Local Interstellar Medium. Astrophysical Journal Letters, 2020, 897, L28.	8.3	16
11	Voyager 2 Observations Near the Heliopause. Journal of Physics: Conference Series, 2020, 1620, 012016.	0.4	3
12	Voyager 1 and 2 Observations of a Change in the Nature of Magnetic Fluctuations in the VLISM with Increasing Distance from the Heliopause. Astronomical Journal, 2020, 160, 40.	4.7	17
13	Turbulence in the Very Local Interstellar Medium (VLISM). Astrophysical Journal, 2020, 900, 166.	4.5	13
14	Intermittency and q-Gaussian Distributions in the Magnetic Field of the Very Local Interstellar Medium (VLISM) Observed by Voyager 1 and Voyager 2. Astrophysical Journal Letters, 2020, 901, L2.	8.3	6
15	Magnetic field and particle measurements made by Voyager 2 at and near the heliopause. Nature Astronomy, 2019, 3, 1007-1012.	10.1	69
16	Voyager 2 plasma observations of the heliopause and interstellar medium. Nature Astronomy, 2019, 3, 1019-1023.	10.1	78
17	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
18	ACR Proton Acceleration Associated with Reconnection Processes beyond the Heliospheric Termination Shock. Astrophysical Journal, 2019, 886, 144.	4.5	41

#	Article	IF	Citations
19	Turbulence in the Outer Heliosheath. Astrophysical Journal, 2018, 854, 20.	4.5	64
20	Heliosheath Magnetic Field and Plasma Observed by Voyager 2 during 2015 Near Solar Maximum. Astrophysical Journal, 2018, 861, 9.	4.5	14
21	Transition from the Unipolar Region to the Sector Zone: Voyager 2, 2013 and 2014. Astrophysical Journal, 2017, 841, 47.	4.5	10
22	Observation of Magnetic Waves Excited by Newborn Interstellar Pickup He+ Observed by the Voyager 2 Spacecraft at 30 au. Astrophysical Journal, 2017, 849, 61.	4.5	15
23	Three-dimensional Features of the Outer Heliosphere Due to Coupling between the Interstellar and Heliospheric Magnetic Field. V. The Bow Wave, Heliospheric Boundary Layer, Instabilities, and Magnetic Reconnection. Astrophysical Journal, 2017, 845, 9.	4.5	65
24	Modeling Shocks Detected by Voyager 1 in the Local Interstellar Medium. Astrophysical Journal Letters, 2017, 843, L32.	8.3	41
25	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
26	OBSERVATIONS OF THE INTERSTELLAR MAGNETIC FIELD IN THE OUTER HELIOSHEATH: VOYAGER 1. Astrophysical Journal, 2016, 829, 134.	4.5	59
27	VOYAGER OBSERVATIONS OF MAGNETIC SECTORS AND HELIOSPHERIC CURRENT SHEET CROSSINGS IN THE OUTER HELIOSPHERE. Astrophysical Journal, 2016, 831, 115.	4.5	8
28	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
29	PRECURSORS TO INTERSTELLAR SHOCKS OF SOLAR ORIGIN. Astrophysical Journal, 2015, 809, 121.	4.5	68
30	Transient shocks beyond the heliopause. Journal of Physics: Conference Series, 2015, 642, 012008.	0.4	14
31	TRIANGULATION OF THE INTERSTELLAR MAGNETIC FIELD. Astrophysical Journal Letters, 2015, 813, L20.	8.3	20
32	IN SITU OBSERVATIONS OF MAGNETIC TURBULENCE IN THE LOCAL INTERSTELLAR MEDIUM. Astrophysical Journal Letters, 2015, 804, L31.	8.3	71
33	MAGNETIC FIELD FLUCTUATIONS OBSERVED IN THE HELIOSHEATH AND INTERSTELLAR MAGNETIC FIELD BYVOYAGER 1AT 115.7-124.9 AU DURING 2011-2013. Astrophysical Journal, 2014, 792, 134.	4.5	27
34	INTERSTELLAR MAGNETIC FIELDS OBSERVED BY VOYAGER 1 BEYOND THE HELIOPAUSE. Astrophysical Journal Letters, 2014, 795, L19.	8.3	40
35	MULTIFRACTAL STRUCTURES DETECTED BY VOYAGER 1 AT THE HELIOSPHERIC BOUNDARIES. Astrophysical Journal Letters, 2014, 793, L30.	8.3	19
36	VOYAGER 1OBSERVATIONS OF THE INTERSTELLAR MAGNETIC FIELD AND THE TRANSITION FROM THE HELIOSHEATH. Astrophysical Journal, 2014, 784, 146.	4.5	72

#	Article	IF	Citations
37	Heliosheath magnetic field and plasma observed by Voyager 2 during 2011. Journal of Geophysical Research: Space Physics, 2014, 119, 6062-6073.	2.4	7
38	The Solar Wind in the Outer Heliosphere and Heliosheath. Space Science Reviews, 2013, 176, 217-235.	8.1	36
39	In Situ Observations of Interstellar Plasma with Voyager 1. Science, 2013, 341, 1489-1492.	12.6	276
40	EVIDENCE FOR A SHOCK IN INTERSTELLAR PLASMA: VOYAGER 1. Astrophysical Journal Letters, 2013, 778, L3.	8.3	64
41	Unsteady processes in the vicinity of the heliopause: Are we in the LISM yet?. , 2013, , .		1
42	Magnetic Field Observations as Voyager 1 Entered the Heliosheath Depletion Region. Science, 2013, 341, 147-150.	12.6	158
43	MAGNETIC FLUX CONSERVATION IN THE HELIOSHEATH. Astrophysical Journal Letters, 2013, 762, L14.	8.3	23
44	MAGNETIC FIELD STRENGTH FLUCTUATIONS AND THEq-TRIPLET IN THE HELIOSHEATH:VOYAGER 2OBSERVATIONS FROM 91.0 TO 94.2 AU AT LATITUDE 30Â° S. Astrophysical Journal, 2013, 765, 35.	4.5	25
45	Numerical modeling of the solar wind flow with observational boundary conditions. , 2012, , .		2
46	RADIAL VELOCITY ALONG THE VOYAGER 1 TRAJECTORY: THE EFFECT OF SOLAR CYCLE. Astrophysical Journal Letters, 2012, 750, L4.	8.3	36
47	Magnetic field fluctuations observed in the heliosheath by Voyager 1 at 114ÂÂ±Â2ÂAU during 2010. Journal of Geophysical Research, 2012, 117, .	3.3	7
48	OBSERVATION OF BERNSTEIN WAVES EXCITED BY NEWBORN INTERSTELLAR PICKUP IONS IN THE SOLAR WIND. Astrophysical Journal, 2012, 745, 112.	4.5	25
49	MAGNETIC FIELD STRENGTH FLUCTUATIONS IN THE HELIOSHEATH:VOYAGER 1OBSERVATIONS DURING 2009. Astrophysical Journal, 2012, 744, 51.	4.5	22
50	Numerical modeling of transient phenomena in the distant solar wind and in the heliosheath. , 2012, , .		2
51	Current sheets in the heliosheath: Voyager 1, 2009. Journal of Geophysical Research, 2011, 116, .	3.3	27
52	Voyager observations of magnetic fields and cosmic rays in the heliosheath. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	15
53	PLASMA NEAR THE HELIOSHEATH: OBSERVATIONS AND MODELING. Astrophysical Journal Letters, 2011, 728, L21.	8.3	50
54	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

#	Article	IF	Citations
55	OBSERVATIONS OF THE HELIOSHEATH AND SOLAR WIND NEAR THE TERMINATION SHOCK BYVOYAGER 2. Astrophysical Journal, 2009, 692, 1125-1130.	4.5	40
56	MAGNETIC FIELD STRENGTH FLUCTUATIONS AND TEMPERATURE IN THE HELIOSHEATH. Astrophysical Journal, 2009, 691, L82-L86.	4.5	29
57	COMPRESSIBLE â€œTURBULENCEâ€•OBSERVED IN THE HELIOSHEATH BYVOYAGER 2. Astrophysical Journal, 2009, 703, 311-324.	4.5	76
58	Radial and solar cycle variations of the magnetic fields in the heliosheath: Voyager 1 observations from 2005 to 2008. Journal of Geophysical Research, 2009, 114, .	3.3	17
59	Magnetic fields at the solar wind termination shock. Nature, 2008, 454, 75-77.	27.8	205
60	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
61	Tsallis Distribution Functions in the Solar Wind: Magnetic Field and Velocity Observations. AIP Conference Proceedings, 2007, , .	0.4	1
62	Tsallis distributions of magnetic field strength variations in the heliosphere: 5 to 90 AU. Journal of Geophysical Research, 2007, 112, .	3.3	38
63	Linear magnetic holes in a unipolar region of the heliosheath observed by Voyager 1. Journal of Geophysical Research, 2007, 112, .	3.3	28
64	Magnetic Fields in the Heliosheath and Distant Heliosphere:Voyager 1and2Observations During 2005 and 2006. Astrophysical Journal, 2007, 668, 1246-1258.	4.5	34
65	Multiscale structure of magnetic fields in the heliosheath. Journal of Geophysical Research, 2006, 111, .	3.3	38
66	Correlation between energetic ion enhancements and heliospheric current sheet crossings in the outer heliosphere. Geophysical Research Letters, 2006, 33, .	4.0	14
67	Magnetic fields in the heliosheath. AIP Conference Proceedings, 2006, , .	0.4	2
68	Source and consequences of a large shock near 79 AU. Geophysical Research Letters, 2006, 33, .	4.0	29
69	Trains of magnetic holes and magnetic humps in the heliosheath. Geophysical Research Letters, 2006, 33, .	4.0	48
70	Tsallis Statistics of the Magnetic Field in the Heliosheath. Astrophysical Journal, 2006, 644, L83-L86.	4.5	40
71	Magnetic Fields in the Heliosheath:Voyager 1Observations. Astrophysical Journal, 2006, 642, 584-592.	4.5	69
72	Crossing the Termination Shock into the Heliosheath: Magnetic Fields. Science, 2005, 309, 2027-2029.	12.6	220

#	Article	IF	Citations
73	Tsallis distributions of the large-scale magnetic field strength fluctuations in the solar wind from 7 to 87 AU. Journal of Geophysical Research, 2005, 110, .	3.3	27
74	A Transition to Fast Flows and Its Effects on the Magnetic Fields and Cosmic Rays Observed byVoyager 2near 70 AU. Astrophysical Journal, 2005, 618, 1074-1078.	4.5	11
75	Multi-scale probability distributions of solar wind speed fluctuations at 1 AU described by a generalized Tsallis distribution. Geophysical Research Letters, 2004, 31, .	4.0	27
76	Multiscale structure of the magnetic field and speed at 1 AU during the declining phase of solar cycle 23 described by a generalized Tsallis probability distribution function. Journal of Geophysical Research, 2004, 109, .	3.3	36
77	On radial heliospheric magnetic fields: Voyager 2 observation and model. Journal of Geophysical Research, 2003, 108, .	3.3	16
78	A model and observations of the multifractal spectrum of the heliospheric magnetic field strength fluctuations near 40 AU. Geophysical Research Letters, 2003, 30, n/a-n/a.	4.0	22
79	Correlated solar wind speed, density, and magnetic field changes at Voyager 2. Geophysical Research Letters, 2003, 30, n/a-n/a.	4.0	32
80	Evolution of the multiscale statistical properties of corotating streams from 1 to 95 AU. Journal of Geophysical Research, 2003, 108, .	3.3	14
81	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
82	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
83	Heliospheric magnetic field strength and polarity from 1 to 81 AU during the ascending phase of solar cycle 23. Journal of Geophysical Research, 2002, 107, SSH 20-1.	3.3	58
84	Large-scale speed fluctuations at 1 AU on scales from 1 hour to â‰ˆ1 year: 1999 and 1995. Journal of Geophysical Research, 2002, 107, SSH 18-1.	3.3	23
85	Speed fluctuations near 60 AU on scales from 1 day to 1 year: Observations and model. Journal of Geophysical Research, 2002, 107, SSH 20-1.	3.3	3
86	Terminology for ejecta in the solar wind. Eos, 2001, 82, 433-433.	0.1	16
87	Spacecraft studies of the interplanetary magnetic field. Journal of Geophysical Research, 2001, 106, 15803-15817.	3.3	45
88	North-south flows at 47 AU: A heliospheric vortex street?. Journal of Geophysical Research, 2000, 105, 10501-10507.	3.3	10
89	Fast and Slow Flows in the Solar Wind Near the Ecliptic at 1 AU?. Space Science Reviews, 1999, 87, 137-140.	8.1	20
90	Shocks in the distant heliosphere. Journal of Geophysical Research, 1999, 104, 6721-6727.	3.3	14

#	Article	IF	Citations
91	Evolution of a strong shock in the distant heliosphere. Journal of Geophysical Research, 1999, 104, 19787-19795.	3.3	10
92	Voyager Observations of the Magnetic Field in the Distant Heliosphere. Space Science Reviews, 1998, 83, 105-121.	8.1	20
93	Global patterns of heliospheric magnetic field polarities and elevation angles: 1990 through 1995. Journal of Geophysical Research, 1997, 102, 19731-19742.	3.3	26
94	Possible plasma depletion layer ahead of an interplanetary ejecta. Journal of Geophysical Research, 1997, 102, 7087-7093.	3.3	13
95	Merged interaction regions and large-scale fluctuations observed by voyagers 1 and 2 in the distant heliosphere. AIP Conference Proceedings, 1996, , .	0.4	2
96	Voyager observations of the magnetic field, interstellar pickup ions and solar wind in the distant heliosphere. Space Science Reviews, 1996, 78, 33-42.	8.1	21
97	Locations of the termination shock and the heliopause. Journal of Geophysical Research, 1995, 100, 17015.	3.3	44
98	Merged interaction regions and large-scale magnetic field fluctuations during 1991: Voyager 2 observations. Journal of Geophysical Research, 1994, 99, 19341.	3.3	25
99	Pickup protons and pressure-balanced structures: Voyager 2 observations in merged interaction regions near 35 AU. Journal of Geophysical Research, 1994, 99, 21511.	3.3	59
100	Interaction of global merged interaction region shock with the heliopause and its relation to the 2- and 3-kHz radio emissions. Journal of Geophysical Research, 1994, 99, 21457.	3.3	31
101	Cosmic ray modulation and the distant heliospheric magnetic field: Voyager 1 and 2 observations from 1986 to 1989. Journal of Geophysical Research, 1993, 98, 1-11.	3.3	200
102	Cosmic-ray modulation, merged interaction regions, and multifractals. Astrophysical Journal, 1993, 407, 347.	4.5	63
103	Multifractal structure of the interplanetary magnetic field: Voyager 2 observations near 25 AU, 1987â€1988. Geophysical Research Letters, 1991, 18, 69-72.	4.0	111
104	Multifractal structure of speed fluctuations in recurrent streams at 1 AU and near 6 AU. Geophysical Research Letters, 1991, 18, 1651-1654.	4.0	64
105	Intermittent turbulence in the solar wind. Journal of Geophysical Research, 1991, 96, 5847-5851.	3.3	222
106	Global configuration of a magnetic cloud. Geophysical Monograph Series, 1990, , 373-377.	0.1	118
107	Heliospheric shocks and catastrophe theory. Geophysical Research Letters, 1990, 17, 1633-1636.	4.0	0
108	First results from the Giotto magnetometer experiment at comet Halley. Nature, 1986, 321, 352-355.	27.8	331

#	Article	IF	Citations
109	Cosmic ray modulation and turbulent interaction regions near 11 AU. Journal of Geophysical Research, 1985, 90, 12027-12039.	3.3	190
110	MHD processes in the outer heliosphere. Space Science Reviews, 1984, 39, 255.	8.1	137
111	Interplanetary flow systems associated with cosmic ray modulation in 1977â€“1980. Journal of Geophysical Research, 1984, 89, 6579-6587.	3.3	145
112	Dynamical evolution of interplanetary magnetic fields and flows between 0.3 AU and 8.5 AU: Entrainment. Geophysical Research Letters, 1983, 10, 413-416.	4.0	82
113	Surface waves on Saturn's magnetopause. Nature, 1981, 292, 750-753.	27.8	53
114	Jupiter's magnetic tail. Nature, 1979, 280, 799-802.	27.8	36
115	Interplanetary current sheets at 1 AU. Journal of Geophysical Research, 1977, 82, 3191-3200.	3.3	106
116	Diamagnetic boundary layers: A kinetic theory. Astrophysics and Space Science, 1976, 45, 303-325.	1.4	74
117	Interplanetary streams and their interaction with the earth. Space Science Reviews, 1975, 17, 327-352.	8.1	109
118	Solar wind interaction with Comet Bennett (1969i). Solar Physics, 1973, 30, 211-222.	2.5	10
119	Magnetic and thermal pressures in the solar wind. Solar Physics, 1970, 15, 61-71.	2.5	159
120	Directional discontinuities in the interplanetary magnetic field. Solar Physics, 1969, 7, 54-71.	2.5	161
121	Micro-scale structures in the interplanetary medium. Solar Physics, 1968, 4, 67-92.	2.5	194
122	Macro- and micro-structure of the interplanetary magnetic field. Canadian Journal of Physics, 1968, 46, S962-S965.	1.1	80
123	Magnetic Clouds. Geophysical Monograph Series, 0, , 157-168.	0.1	38