Timothy Horbury

List of Publications by Year
in descending order

84 papers	5,416 citations	101543 36 h-index	82547 72 g-index
84 all docs	84 docs citations	84 times ranked	2193 citing authors

#	Article	IF	Citations
1	Flux Rope Merging and the Structure of Switchbacks in the Solar Wind. Astrophysical Journal, 2022, 925, 213.	4.5	11
2	Analysis of multiscale structures at the quasi-perpendicular Venus bow shock. Astronomy and Astrophysics, 2022, 660, A64.	5.1	5
3	Flux rope and dynamics of the heliospheric current sheet. Astronomy and Astrophysics, 2022, 659, A110.	5.1	20
4	Suprathermal Ion Energy Spectra and Anisotropies near the Heliospheric Current Sheet Crossing Observed by the Parker Solar Probe during Encounter 7. Astrophysical Journal, 2022, 927, 62.	4.5	3
5	On the Transmission of Turbulent Structures across the Earthâ€™s Bow Shock. Astrophysical Journal, 2022, 933, 167.	4.5	15
6	First near-relativistic solar electron events observed by EPD onboard Solar Orbiter. Astronomy and Astrophysics, 2021, 656, L3.	5.1	16
7	Radial evolution of the April 2020 stealth coronal mass ejection between 0.8 and 1 AU. Astronomy and Astrophysics, 2021, 656, A1.	5.1	15
8	Evolution of Solar Wind Turbulence from 0.1 to 1 au during the First Parker Solar Probeâ€“Solar Orbiter Radial Alignment. Astrophysical Journal Letters, 2021, 912, L21.	8.3	49
9	Kinetic electrostatic waves and their association with current structures in the solar wind. Astronomy and Astrophysics, 2021, 656, A23.	5.1	12
10	Switchbacks as signatures of magnetic flux ropes generated by interchange reconnection in the corona. Astronomy and Astrophysics, 2021, 650, A2.	5.1	80
11	Multi-spacecraft observations of the structure of the sheath of an interplanetary coronal mass ejection and related energetic ion enhancement. Astronomy and Astrophysics, 2021, 656, A8.	5.1	14
12	Study of two interacting interplanetary coronal mass ejections encountered by Solar Orbiter during its first perihelion passage. Astronomy and Astrophysics, 2021, 656, A5.	5.1	9
13	Enhanced proton parallel temperature inside patches of switchbacks in the inner heliosphere. Astronomy and Astrophysics, 2021, 650, L1.	5.1	43
14	The first widespread solar energetic particle event observed by Solar Orbiter on 2020 November 29. Astronomy and Astrophysics, 2021, 656, A20.	5.1	36
15	Statistical analysis of orientation, shape, and size of solar wind switchbacks. Astronomy and Astrophysics, 2021, 650, A1.	5.1	34
16	Density fluctuations associated with turbulence and waves. Astronomy and Astrophysics, 2021, 656, A19.	5.1	24
17	First year of energetic particle measurements in the inner heliosphere with Solar Orbiterâ€™s Energetic Particle Detector. Astronomy and Astrophysics, 2021, 656, A22.	5.1	29
18	Evidence for local particle acceleration in the first recurrent galactic cosmic ray depression observed by Solar Orbiter. Astronomy and Astrophysics, 2021, 656, L10.	5.1	2

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19	Solar Orbiter observations of an ion-scale flux rope confined to a bifurcated solar wind current sheet. Astronomy and Astrophysics, 2021, 656, A27.	5.1	6
20	Active Region Contributions to the Solar Wind over Multiple Solar Cycles. Solar Physics, 2021, 296, 1.	2.5	14
21	Plasma properties, switchback patches, and low Î±-particle abundance in slow AlfvÃ©nic coronal hole wind at 0.13 au. Monthly Notices of the Royal Astronomical Society, 2021, 508, 236-244.	4.4	9
22	Multi-spacecraft study of the solar wind at solar minimum: Dependence on latitude and transient outflows. Astronomy and Astrophysics, 2021, 652, A105.	5.1	9
23	Solar Orbiter observations of the structure of reconnection outflow layers in the solar wind. Astronomy and Astrophysics, 2021, 656, L8.	5.1	5
24	Magnetic reconnection as a mechanism to produce multiple thermal proton populations and beams locally in the solar wind. Astronomy and Astrophysics, 2021, 656, A37.	5.1	12
25	Solar Orbiterâ€™s encounter with the tail of comet C/2019 Y4 (ATLAS): Magnetic field draping and cometary pick-up ion waves. Astronomy and Astrophysics, 2021, 656, A39.	5.1	4
26	Multiscale views of an AlfvÃ©nic slow solar wind: 3D velocity distribution functions observed by the Proton-Alpha Sensor of Solar Orbiter. Astronomy and Astrophysics, 2021, 656, A36.	5.1	12
27	First observations and performance of the RPW instrument on board the Solar Orbiter mission. Astronomy and Astrophysics, 2021, 656, A41.	5.1	9
28	A Solar Source of AlfvÃ©nic Magnetic Field Switchbacks: In Situ Remnants of Magnetic Funnels on Supergranulation Scales. Astrophysical Journal, 2021, 923, 174.	4.5	67
29	The Solar Orbiter mission. Astronomy and Astrophysics, 2020, 642, A1.	5.1	514
30	The Energetic Particle Detector. Astronomy and Astrophysics, 2020, 642, A7.	5.1	107
31	Proton core behaviour inside magnetic field switchbacks. Monthly Notices of the Royal Astronomical Society, 2020, 498, 5524-5531.	4.4	29
32	The origin of slow AlfvÃ©nic solar wind at solar minimum. Monthly Notices of the Royal Astronomical Society, 2020, 492, 39-44.	4.4	30
33	Highly AlfvÃ©nic slow solar wind at 0.3 au during a solar minimum: Helios insights for Parker Solar Probe and Solar Orbiter. Astronomy and Astrophysics, 2020, 633, A166.	5.1	23
34	Parker Solar Probe In Situ Observations of Magnetic Reconnection Exhausts during Encounter 1. Astrophysical Journal, Supplement Series, 2020, 246, 34.	7.7	65
35	The Solar Orbiter Radio and Plasma Waves (RPW) instrument. Astronomy and Astrophysics, 2020, 642, A12.	5.1	80
36	The Solar Orbiter magnetometer. Astronomy and Astrophysics, 2020, 642, A9.	5.1	136

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37	The Solar Orbiter Solar Wind Analyser (SWA) suite. Astronomy and Astrophysics, 2020, 642, A16.	5.1	141
38	The Solar Orbiter Science Activity Plan. Astronomy and Astrophysics, 2020, 642, A3.	5.1	67
39	Sharp AlfvÃ©nic Impulses in the Near-Sun Solar Wind. Astrophysical Journal, Supplement Series, 2020, 246, 45.	7.7	115
40	Thermodynamics of pure fast solar wind: radial evolution of the temperatureâ€“speed relationship in the inner heliosphere. Monthly Notices of the Royal Astronomical Society, 2019, 488, 2380-2386.	4.4	23
41	Alpha particle thermodynamics in the inner heliosphere fast solar wind. Astronomy and Astrophysics, 2019, 623, L2.	5.1	25
42	AlfvÃ©nic velocity spikes and rotational flows in the near-Sun solar wind. Nature, 2019, 576, 228-231.	27.8	311
43	Highly structured slow solar wind emerging from an equatorial coronal hole. Nature, 2019, 576, 237-242.	27.8	401
44	Radial evolution of the solar wind in pure high-speed streams: HELIOS revised observations. Monthly Notices of the Royal Astronomical Society, 2019, 483, 3730-3737.	4.4	42
45	Diagnosing solar wind origins usingin situmeasurements in the inner heliosphere. Monthly Notices of the Royal Astronomical Society, 2019, 482, 1706-1714.	4.4	48
46	Linear Stability in the Inner Heliosphere: Helios Re-evaluated. Astrophysical Journal, 2019, 887, 234.	4.5	16
47	Predicting Large-scale Coronal Structure for Parker Solar Probe Using Open Source Software. Research Notes of the AAS, 2019, 3, 57.	0.7	6
48	Number density structures in the inner heliosphere. Astronomy and Astrophysics, 2018, 613, A62.	5.1	11
49	On the 1/f Spectrum in the Solar Wind and Its Connection with Magnetic Compressibility. Astrophysical Journal Letters, 2018, 869, L32.	8.3	53
50	A New Inner Heliosphere Proton Parameter Dataset from the Helios Mission. Solar Physics, 2018, 293, 155.	2.5	34
51	Short, large-amplitude speed enhancements in the near-Sunfast solar wind. Monthly Notices of the Royal Astronomical Society, 2018, 478, 1980-1986.	4.4	95
52	The FIELDS Instrument Suite for Solar Probe Plus. Space Science Reviews, 2016, 204, 49-82.	8.1	521
53	Measures of three-dimensional anisotropy and intermittency in strong AlfvÃ©nic turbulence. Monthly Notices of the Royal Astronomical Society, 2016, 459, 2130-2139.	4.4	35
54	ION KINETIC ENERGY CONSERVATION AND MAGNETIC FIELD STRENGTH CONSTANCY IN MULTI-FLUID SOLAR WIND ALFVÃ‰NIC TURBULENCE. Astrophysical Journal, 2015, 802, 11.	4.5	72

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55	Magnetic field rotations in the solar wind at kinetic scales. Monthly Notices of the Royal Astronomical Society: Letters, 2015, 453, L64-L68.	3.3	18
56	Dependence of solar wind speed on the local magnetic field orientation: Role of AlfvÃ©nic fluctuations. Geophysical Research Letters, 2014, 41, 259-265.	4.0	83
57	The role of pressure gradients in driving sunward magnetosheath flows and magnetopause motion. Journal of Geophysical Research: Space Physics, 2014, 119, 8117-8125.	2.4	43
58	Ensemble downscaling in coupled solar windâ€magnetosphere modeling for space weather forecasting. Space Weather, 2014, 12, 395-405.	3.7	27
59	Magnetospheric â€œmagicâ€•frequencies as magnetopause surface eigenmodes. Geophysical Research Letters, 2013, 40, 5003-5008.	4.0	37
60	Alignment and Scaling of Large-Scale Fluctuations in the Solar Wind. Physical Review Letters, 2013, 110, 025003.	7.8	41
61	THREE-DIMENSIONAL STRUCTURE OF SOLAR WIND TURBULENCE. Astrophysical Journal, 2012, 758, 120.	4.5	105
62	Magnetosheath pressure pulses: Generation downstream of the bow shock from solar wind discontinuities. Journal of Geophysical Research, 2012, 117, .	3.3	86
63	Magnetic Discontinuities in the Near-Earth Solar Wind: Evidence of In-Transit Turbulence or Remnants ofÂCoronal Structure?. Solar Physics, 2011, 269, 411-420.	2.5	44
64	The Variation of Solar Wind Correlation Lengths Over Three Solar Cycles. Solar Physics, 2010, 262, 191-198.	2.5	34
65	Power and spectral index anisotropy of the entire inertial range of turbulence in the fast solar wind. Monthly Notices of the Royal Astronomical Society: Letters, 2010, 407, L31-L35.	3.3	151
66	Size, shape, and orientation of magnetosheath mirror mode structures. Journal of Geophysical Research, 2009, 114, .	3.3	24
67	Conservation of open solar magnetic flux and the floor in the heliospheric magnetic field. Geophysical Research Letters, 2008, 35, .	4.0	58
68	Estimating total heliospheric magnetic flux from singleâ€point in situ measurements. Journal of Geophysical Research, 2008, 113, .	3.3	62
69	Anisotropic Scaling of Magnetohydrodynamic Turbulence. Physical Review Letters, 2008, 101, 175005.	7.8	326
70	Kinetic aspects of foreshock cavities. Geophysical Research Letters, 2006, 33, .	4.0	25
71	Small-scale solitary wave pulses observed by the Ulysses magnetic field experiment. Journal of Geophysical Research, 2006, 111, .	3.3	10
72	Ripples observed on the surface of the Earth's quasi-perpendicular bow shock. Journal of Geophysical Research, 2006, 111, .	3.3	45

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73	Cluster at the Bow Shock: Introduction. Space Science Reviews, 2005, 118, 155-160.	8.1	20
74	Quasi-perpendicular Shock Structure and Processes. Space Science Reviews, 2005, 118, 161-203.	8.1	144
75	Quasi-parallel Shock Structure and Processes. Space Science Reviews, 2005, 118, 205-222.	8.1	119
76	Cluster at the Bow Shock: Status and Outlook. Space Science Reviews, 2005, 118, 223-227.	8.1	4
77	Motion and orientation of magnetic field dips and peaks in the terrestrial magnetosheath. Journal of Geophysical Research, 2004, 109, .	3.3	35
78	Ion cyclotron waves in the high altitude cusp: CLUSTER observations at varying spacecraft separations. Geophysical Research Letters, 2003, 30, .	4.0	34
79	Cluster observations of fast magnetosonic waves in the terrestrial foreshock. Geophysical Research Letters, 2002, 29, 3-1-3-4.	4.0	43
80	Evolution of magnetic field fluctuations in high-speed solar wind streams: Ulysses and Helios observations. Journal of Geophysical Research, 2001, 106, 15929-15940.	3.3	62
81	Magnetic field depressions in the solar wind. Journal of Geophysical Research, 2000, 105, 12725-12732.	3.3	56
82	Heliospheric magnetic field polarity inversions at high heliographic latitudes. Geophysical Research Letters, 1999, 26, 631-634.	4.0	98
83	Solar wind current sheets and deHoffmann-Teller analysis. First results from Solar Orbiter's DC electric field measurements. Astronomy and Astrophysics, 0, , .	5.1	13
84	High-cadence measurements of electron pitch-angle distributions from Solar Orbiter SWA-EAS burst mode operations. Astronomy and Astrophysics, 0, , .	5.1	5