Bernard J Vasquez

List of Publications by Year
in descending order

101	2,854	172457 29	189892 50
papers	citations	h-index	g-index

103	103	103	1016
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Three-dimensional Hybrid Simulation Results of a Variable Magnetic Helicity Signature at Proton Kinetic Scales. Astrophysical Journal, 2022, 924, 41.	4.5	0
2	The Effect of Solar Wind Turbulence on Parallel and Oblique Firehose Instabilities. Astrophysical Journal, 2022, 924, 111.	4.5	6
3	High-latitude Observations of Inertial-range Turbulence by the Ulysses Spacecraft During the Solar Minimum of 1993â€“96. Astrophysical Journal, 2022, 927, 43.	4.5	4
4	Proton Heating by a Protonâ€“Alpha Drift Instability with an Anisotropic Alpha-particle Temperature in a Turbulent Solar-wind Plasma. Astrophysical Journal, 2022, 930, 120.	4.5	4
5	Magnetic Waves Excited by Newborn Pickup H⁺ Near Jupiter: Neutral Hydrogen Loss by the Planetary System. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	1
6	Driving and Dissipation of Solar-Wind Turbulence: What is the Evidence?. Frontiers in Astronomy and Space Sciences, 2021, 7, .	2.8	14
7	Low-frequency Waves due to Newborn Interstellar Pickup He⁺ Observed by the Ulysses Spacecraft. Astrophysical Journal, 2021, 923, 185.	4.5	4
8	Suprathermal Proton Spectra at Interplanetary Shocks in 3D Hybrid Simulations. Astrophysical Journal, 2020, 897, 109.	4.5	2
9	A Study of a Magnetic Cloud Propagating Through Largeâ€Amplitude AlfvÃ©n Waves. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027638.	2.4	4
10	Mirror and Proton-cyclotron Instabilities Coexisting with Ambient Turbulence in a Protonâ€“Alpha Plasma. Astrophysical Journal, 2020, 889, 7.	4.5	11
11	Proton Perpendicular Heating in Turbulence Simulations: Determination of the Velocity Diffusion Coefficient. Astrophysical Journal, 2020, 893, 71.	4.5	6
12	Solar Wind Turbulence from 1 to 45 au. II. Analysis of Inertial-range Fluctuations Using Voyager and ACE Observations. Astrophysical Journal, 2020, 900, 92.	4.5	14
13	Solar Wind Turbulence from 1 to 45 au. I. Evidence for Dissipation of Magnetic Fluctuations Using Voyager and ACE Observations. Astrophysical Journal, 2020, 900, 91.	4.5	18
14	Solar Wind Turbulence from 1 to 45 au. III. Anisotropy of Magnetic Fluctuations in the Inertial Range Using Voyager and ACE Observations. Astrophysical Journal, 2020, 900, 93.	4.5	20
15	Solar Wind Turbulence from 1 to 45 au. IV. Turbulent Transport and Heating of the Solar Wind Using Voyager Observations. Astrophysical Journal, 2020, 900, 94.	4.5	22
16	Flight Calibration of the Van Allen Probe Magnetometers. Astrophysical Journal, Supplement Series, 2020, 250, 4.	7.7	1
17	Solar Wind Turbulence from 1 to 45 au. V. Data Intervals from the Voyager Observations. Astrophysical Journal, Supplement Series, 2020, 250, 14.	7.7	2
18	Advanced Composition Explorer Observations of Turbulence from 1998 through 2002: Data Intervals. Astrophysical Journal, Supplement Series, 2020, 250, 15.	7.7	4

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19	Four-dimensional Frequencyâ€“Wavenumber Power Spectrum of a Strong Turbulence Obtained from Hybrid Kinetic Simulations. Astrophysical Journal, 2020, 903, 80.	4.5	2
20	Proton Temperature-anisotropy Instability Coexisting with Ambient Turbulence in the Solar-wind Plasma. Astrophysical Journal, 2019, 875, 125.	4.5	10
21	Perpendicular Ion Heating by Cyclotron Resonant Dissipation of Turbulently Generated Kinetic AlfvÃ©n Waves in the Solar Wind. Astrophysical Journal, 2019, 887, 63.	4.5	18
22	Quasilinear Consequences of Turbulent Ion Heating by Magnetic Moment Breaking. Astrophysical Journal, 2019, 870, 119.	4.5	8
23	Ion Heating Resulting from the Deceleration of Alpha Particles by a Proton-alpha Drift Instability in a Nonuniform Solar-wind Plasma. Astrophysical Journal, 2019, 870, 121.	4.5	10
24	Two-dimensional Nonlinear Simulations of Temperature-anisotropy Instabilities with a Proton-alpha Drift. Astrophysical Journal, 2018, 856, 153.	4.5	7
25	Effects in the Nearâ€Magnetopause Magnetosheath Elicited by Largeâ€Amplitude AlfvÃ©nic Fluctuations Terminating in a Field and Flow Discontinuity. Journal of Geophysical Research: Space Physics, 2018, 123, 8983-9004.	2.4	3
26	Correlation Scales of the Turbulent Cascade at 1 AU. Journal of Physics: Conference Series, 2018, 1100, 012023.	0.4	0
27	The Turbulent Cascade for High Cross-helicity States at 1 au. II. Minor Energy. Astrophysical Journal, 2018, 867, 156.	4.5	6
28	Magnetic Waves Excited by Newborn Interstellar Pickup Ions Measured by the Voyager Spacecraft from 1 to 45 au. III. Observation Times. Astrophysical Journal, Supplement Series, 2018, 237, 34.	7.7	16
29	Correlation Scales of the Turbulent Cascade at 1 au. Astrophysical Journal, 2018, 858, 21.	4.5	15
30	Magnetic Waves Excited by Newborn Interstellar Pickup Ions Measured by the Voyager Spacecraft from 1 to 45 au. II. Instability and Turbulence Analyses. Astrophysical Journal, 2018, 863, 76.	4.5	22
31	Magnetic Waves Excited by Newborn Interstellar Pickup Ions Measured by the Voyager Spacecraft from 1 to 45 au. I. Wave Properties. Astrophysical Journal, 2018, 863, 75.	4.5	21
32	The Turbulence Magnetic Helicity Signature in the Interplanetary Medium: A Blackmanâ€“Tukey and Morlet Wavelet Analysis. Astrophysical Journal, 2018, 855, 121.	4.5	9
33	Listing of 502 Times When the Ulysses Magnetic Fields Instrument Observed Waves Due to Newborn Interstellar Pickup Protons. Astrophysical Journal, 2017, 840, 13.	4.5	13
34	Concerning the heliumâ€toâ€hydrogen number density ratio in very slow ejecta and winds near solar minimum. Journal of Geophysical Research: Space Physics, 2017, 122, 1487-1512.	2.4	2
35	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
36	MMS Observations of Reconnection at Dayside Magnetopause Crossings During Transitions of the Solar Wind to Subâ€AlfvÃ©nic Flow. Journal of Geophysical Research: Space Physics, 2017, 122, 9934-9951.	2.4	3

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37	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
38	MAGNETIC HELICITY OF ION KINETIC TURBULENCE WITH A NONZERO ELECTRON TEMPERATURE. Astrophysical Journal, 2016, 820, 15.	4.5	9
39	THE EFFECT OF ELECTRON THERMAL PRESSURE ON THE OBSERVED MAGNETIC HELICITY IN THE SOLAR WIND. Astrophysical Journal, 2016, 833, 212.	4.5	7
40	A SURVEY OF MAGNETIC WAVES EXCITED BY NEWBORN INTERSTELLAR He⁺ OBSERVED BY THE ACE SPACECRAFT AT 1 au. Astrophysical Journal, 2016, 830, 47.	4.5	22
41	VOYAGER OBSERVATIONS OF MAGNETIC WAVES DUE TO NEWBORN INTERSTELLAR PICKUP IONS: 2â€“6 au. Astrophysical Journal, 2016, 822, 94.	4.5	29
42	ACE observations of magnetic waves arising from newborn interstellar pickup helium ions. Geophysical Research Letters, 2015, 42, 9617-9623.	4.0	16
43	STATISTICAL ANALYSIS OF THE MAGNETIC HELICITY SIGNATURE OF THE SOLAR WIND TURBULENCE AT 1 AU. Astrophysical Journal, 2015, 806, 78.	4.5	19
44	Third-moment descriptions of the interplanetary turbulent cascade, intermittency and back transfer. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140150.	3.4	60
45	HEATING RATE SCALING OF TURBULENCE IN THE PROTON KINETIC REGIME. Astrophysical Journal, 2015, 806, 33.	4.5	28
46	KINETIC EVOLUTION OF CORONAL HOLE PROTONS BY IMBALANCED ION-CYCLOTRON WAVES: IMPLICATIONS FOR MEASUREMENTS BY SOLAR PROBE PLUS. Astrophysical Journal, 2015, 808, 119.	4.5	5
47	Proton temperature change with heliocentric distance from 0.3 to 1 AU according to relative temperatures. Journal of Geophysical Research: Space Physics, 2014, 119, 3267-3280.	2.4	14
48	The role of electron equation of state in heating partition of protons in a collisionless plasma. Physics of Plasmas, 2014, 21, 022301.	1.9	20
49	VARIABLE CASCADE DYNAMICS AND INTERMITTENCY IN THE SOLAR WIND AT 1 AU. Astrophysical Journal, 2014, 786, 52.	4.5	29
50	ULYSSESOBSERVATIONS OF MAGNETIC WAVES DUE TO NEWBORN INTERSTELLAR PICKUP IONS. I. NEW OBSERVATIONS AND LINEAR ANALYSIS. Astrophysical Journal, 2014, 784, 150.	4.5	34
51	ULYSSESOBSERVATIONS OF MAGNETIC WAVES DUE TO NEWBORN INTERSTELLAR PICKUP IONS. II. APPLICATION OF TURBULENCE CONCEPTS TO LIMITING WAVE ENERGY AND OBSERVABILITY. Astrophysical Journal, 2014, 787, 133.	4.5	33
52	THREE-DIMENSIONAL HYBRID SIMULATION STUDY OF ANISOTROPIC TURBULENCE IN THE PROTON KINETIC REGIME. Astrophysical Journal, 2014, 788, 178.	4.5	30
53	Magnetic helicity signature produced by cross-field 2D turbulence. AIP Conference Proceedings, 2013, , .	0.4	1
54	Analysis of multi-dimensional correlation functions in the solar wind. AIP Conference Proceedings, 2013, , .	0.4	3

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55	Solar wind magnetic field discontinuities and turbulence generated current layers. AIP Conference Proceedings, 2013, , .	0.4	5
56	MAGNETIC HELICITY IN THE DISSIPATION RANGE OF STRONG IMBALANCED TURBULENCE. Astrophysical Journal, 2013, 768, 62.	4.5	21
57	VELOCITY POWER SPECTRA FROM CROSS-FIELD TURBULENCE IN THE PROTON KINETIC REGIME. Astrophysical Journal, 2012, 747, 19.	4.5	32
58	Temporal and radial variation of the solar wind temperatureâ€speed relationship. Journal of Geophysical Research, 2012, 117, .	3.3	54
59	Advance warning of highâ€speed ejecta based on realâ€time shock analyses: When fastâ€moving ejecta appear to be overtaking slowâ€moving shocks. Space Weather, 2012, 10, .	3.7	5
60	THE TURBULENT CASCADE AND PROTON HEATING IN THE SOLAR WIND DURING SOLAR MINIMUM. Astrophysical Journal, 2012, 754, 93.	4.5	45
61	OBSERVATIONAL CONSTRAINTS ON THE ROLE OF CYCLOTRON DAMPING AND KINETIC ALFVÃ‰N WAVES IN THE SOLAR WIND. Astrophysical Journal, 2012, 745, 8.	4.5	73
62	Turbulence associated with corotating interaction regions at 1AU: Inertial range cross-helicity spectra. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	11
63	Turbulence associated with corotating interaction regions at 1 AU: Inertial and dissipation range magnetic field spectra. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	15
64	A SHORT-TIMESCALE CHANNEL OF DISSIPATION OF THE STRONG SOLAR WIND TURBULENCE. Astrophysical Journal, 2011, 739, 22.	4.5	49
65	A KINETIC MODEL OF SOLAR WIND GENERATION BY OBLIQUE ION-CYCLOTRON WAVES. Astrophysical Journal, 2011, 731, 88.	4.5	34
66	THIRD MOMENTS AND THE ROLE OF ANISOTROPY FROM VELOCITY SHEAR IN THE SOLAR WIND. Astrophysical Journal, 2011, 736, 44.	4.5	31
67	THE TURBULENT CASCADE FOR HIGH CROSS-HELICITY STATES AT 1 AU. Astrophysical Journal, 2010, 713, 920-934.	4.5	46
68	PERPENDICULAR PROTON HEATING DUE TO ENERGY CASCADE OF FAST MAGNETOSONIC WAVES IN THE SOLAR CORONA. Astrophysical Journal, 2010, 709, 1003-1008.	4.5	25
69	Comment on â€œScaling Laws of Turbulence and Heating of Fast Solar Wind: The Role of Density Fluctuationsâ€ Physical Review Letters, 2010, 104, 189001; author reply 189002.	7.8	15
70	SmithetÂal.Reply:. Physical Review Letters, 2010, 104, .	7.8	6
71	Inertialâ€range anisotropies in the solar wind from 0.3 to 1 AU: Helios 1 observations. Journal of Geophysical Research, 2010, 115, .	3.3	34
72	The effect of spectral anisotropy of fast magnetosonic turbulence on the plasma heating at the proton kinetic scales. Physics of Plasmas, 2010, 17, .	1.9	16

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73	THE TURBULENT CASCADE AND PROTON HEATING IN THE SOLAR WIND AT 1 AU. Astrophysical Journal, 2009, 697, 1119-1127.	4.5	114
74	PREFERENTIAL ACCELERATION AND PERPENDICULAR HEATING OF MINOR IONS IN A COLLISIONLESS CORONAL HOLE. Astrophysical Journal, 2009, 696, 591-600.	4.5	36
75	Turbulent Cascade at 1ÂAU in High Cross-Helicity Flows. Physical Review Letters, 2009, 103, 201101.	7.8	62
76	Anisotropies and helicities in the solar wind inertial and dissipation ranges at 1 AU. Journal of Geophysical Research, 2008, 113, .	3.3	97
77	A Kinetic Model of Acceleration and Heating of Coronal Hole Minor Ions. AIP Conference Proceedings, 2008, , .	0.4	0
78	Statistical Analysis of the Highâ€Frequency Spectral Break of the Solar Wind Turbulence at 1 AU. Astrophysical Journal, 2008, 675, 1576-1583.	4.5	91
79	Turbulence spectrum of interplanetary magnetic fluctuations and the rate of energy cascade. AIP Conference Proceedings, 2007, , .	0.4	4
80	Preferential Perpendicular Heating of Coronal Hole Minor Ions by the Fermi Mechanism. Astrophysical Journal, 2007, 668, 546-556.	4.5	51
81	Evaluation of the turbulent energy cascade rates from the upper inertial range in the solar wind at 1 AU. Journal of Geophysical Research, 2007, 112, .	3.3	149
82	Numerous small magnetic field discontinuities of Bartels rotation 2286 and the potential role of AlfvÃ©nic turbulence. Journal of Geophysical Research, 2007, 112, .	3.3	111
83	Interplanetary magnetic fluctuation anisotropy in the inertial range. Journal of Geophysical Research, 2006, 111, .	3.3	84
84	Dissipation of the Perpendicular Turbulent Cascade in the Solar Wind. Astrophysical Journal, 2006, 639, 1177-1185.	4.5	73
85	Dependence of the Dissipation Range Spectrum of Interplanetary Magnetic Fluctuationson the Rate of Energy Cascade. Astrophysical Journal, 2006, 645, L85-L88.	4.5	289
86	Resonant absorption of an AlfvÃ©n wave: Hybrid simulations. Journal of Geophysical Research, 2005, 110, .	3.3	5
87	Nonlinear AlfvÃ©n waves: 1. Interactions between outgoing and ingoing waves according to an amplitude expansion. Journal of Geophysical Research, 2004, 109, .	3.3	9
88	Nonlinear AlfvÃ©n waves: 2. The influence of wave advection and finite wavelength effects. Journal of Geophysical Research, 2004, 109, .	3.3	10
89	Cross-field energy transfer of a body AlfvÃ©n wave propagating along and across a pressure-balanced structure. Geophysical Research Letters, 2004, 31, .	4.0	7
90	Deceleration of relative streaming between proton components among nonlinear low-frequency AlfvÃ©n waves. Journal of Geophysical Research, 2004, 109, .	3.3	17

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91	Deceleration of streaming alpha particles interacting with waves and imbedded rotational discontinuities. Journal of Geophysical Research, 2003, 108, .	3.3	20
92	Evolution and dissipation of imbedded rotational discontinuities and AlfvÃ©n waves in nonuniform plasma and the resultant proton heating. Journal of Geophysical Research, 2001, 106, 5661-5681.	3.3	41
93	Nature of fluctuations on directional discontinuities inside a solar ejection: Wind and IMP 8 observations. Journal of Geophysical Research, 2001, 106, 29283-29298.	3.3	17
94	A reconnection layer associated with a magnetic cloud. Advances in Space Research, 2001, 28, 759-764.	2.6	61
95	Formation of pressure-balanced structures and fast waves from nonlinear AlfvÃ©n waves. Journal of Geophysical Research, 1999, 104, 4681-4696.	3.3	60
96	Formation of spherically polarized AlfvÃ©n waves and imbedded rotational discontinuities from a small number of entirely oblique waves. Journal of Geophysical Research, 1998, 103, 335-347.	3.3	41
97	Formation of imbedded rotational discontinuities with nearly field aligned normals. Journal of Geophysical Research, 1998, 103, 349-365.	3.3	23
98	Formation of arc-shaped AlfvÃ©n waves and rotational discontinuities from oblique linearly polarized wave trains. Journal of Geophysical Research, 1996, 101, 13527-13540.	3.3	55
99	The making of an Alfvèınic fluctuation: The resolution of a second-order analysis. AIP Conference Proceedings, 1996, , .	0.4	0
100	Simulation study of the role of ion kinetics in low- frequency wave train evolution. Journal of Geophysical Research, 1995, 100, 1779.	3.3	86
101	A wave model interpretation of the evolution of rotational discontinuities. Journal of Geophysical Research, 1993, 98, 1277-1292.	3.3	26