Eberhard Moebius

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3710227/publications.pdf

Version: 2024-02-01

79 papers

4,420 citations

34 h-index 102304 66 g-index

82 all docs 82 docs citations

82 times ranked 1864 citing authors

#	Article	IF	CITATIONS
1	Global Observations of the Interstellar Interaction from the Interstellar Boundary Explorer (IBEX). Science, 2009, 326, 959-962.	6.0	461
2	The Interstellar Boundary Explorer High Energy (IBEX-Hi) Neutral Atom Imager. Space Science Reviews, 2009, 146, 75-103.	3.7	226
3	Comparison of Interstellar Boundary Explorer Observations with 3D Global Heliospheric Models. Science, 2009, 326, 966-968.	6.0	221
4	Extended magnetic reconnection at the Earth's magnetopause from detection of bi-directional jets. Nature, 2000, 404, 848-850.	13.7	212
5	The IBEX-Lo Sensor. Space Science Reviews, 2009, 146, 117-147.	3.7	171
6	Width and Variation of the ENA Flux Ribbon Observed by the Interstellar Boundary Explorer. Science, 2009, 326, 962-964.	6.0	166
7	INTERSTELLAR GAS FLOW PARAMETERS DERIVED FROM INTERSTELLAR BOUNDARY EXPLORER-LO OBSERVATIONS IN 2009 AND 2010: ANALYTICAL ANALYSIS. Astrophysical Journal, Supplement Series, 2012, 198, 11.	3.0	160
8	SEPARATION OF THE <i>INTERSTELLAR BOUNDARY EXPLORER </i> ENERGETIC NEUTRAL ATOM FLUX. Astrophysical Journal, 2011, 731, 56.	1.6	153
9	NEUTRAL INTERSTELLAR HELIUM PARAMETERS BASED ON IBEX-Lo OBSERVATIONS AND TEST PARTICLE CALCULATIONS. Astrophysical Journal, Supplement Series, 2012, 198, 12.	3.0	145
10	Quasi-perpendicular Shock Structure and Processes. Space Science Reviews, 2005, 118, 161-203.	3.7	144
11	Direct Observations of Interstellar H, He, and O by the Interstellar Boundary Explorer. Science, 2009, 326, 969-971.	6.0	135
12	Interstellar Mapping and Acceleration Probe (IMAP): A New NASA Mission. Space Science Reviews, 2018, 214, 1.	3.7	129
13	Quasi-parallel Shock Structure and Processes. Space Science Reviews, 2005, 118, 205-222.	3.7	119
14	THE FIRST THREE YEARS OF <i>IBEX</i> OBSERVATIONS AND OUR EVOLVING HELIOSPHERE. Astrophysical Journal, Supplement Series, 2012, 203, 1.	3.0	114
15	FAST observations of ion solitary waves. Journal of Geophysical Research, 2003, 108, .	3.3	107
16	Global Anisotropies in TeV Cosmic Rays Related to the Sun's Local Galactic Environment from IBEX. Science, 2014, 343, 988-990.	6.0	98
17	SEPARATION OF THE RIBBON FROM GLOBALLY DISTRIBUTED ENERGETIC NEUTRAL ATOM FLUX USING THE FIRST FIVE YEARS OF <i>IBEX</i> OBSERVATIONS. Astrophysical Journal, Supplement Series, 2014, 215, 13.	3.0	97
18	WARMER LOCAL INTERSTELLAR MEDIUM: A POSSIBLE RESOLUTION OF THE <i>ULYSSES </i> - <i>IBEX </i> ENIGMA. Astrophysical Journal, 2015, 801, 28.	1.6	90

#	Article	IF	CITATIONS
19	<i>IBEX</i> : THE FIRST FIVE YEARS (2009-2013). Astrophysical Journal, Supplement Series, 2014, 213, 20.	3.0	89
20	Seven Years of Imaging the Global Heliosphere with IBEX. Astrophysical Journal, Supplement Series, 2017, 229, 41.	3.0	79
21	INTERSTELLAR NEUTRAL HELIUM IN THE HELIOSPHERE FROM IBEX OBSERVATIONS. IV. FLOW VECTOR, MACH NUMBER, AND ABUNDANCE OF THE WARM BREEZE. Astrophysical Journal, Supplement Series, 2016, 223, 25.	3.0	71
22	Implications of solar wind suprathermal tails for IBEX ENA images of the heliosheath. Journal of Geophysical Research, 2008, 113 , .	3.3	67
23	Decades-Long Changes of the Interstellar Wind Through Our Solar System. Science, 2013, 341, 1080-1082.	6.0	63
24	LOCAL INTERSTELLAR NEUTRAL HYDROGEN SAMPLED IN SITU BY <i>IBEX</i> . Astrophysical Journal, Supplement Series, 2012, 198, 14.	3.0	59
25	SOLAR RADIATION PRESSURE AND LOCAL INTERSTELLAR MEDIUM FLOW PARAMETERS FROM (i) INTERSTELLAR BOUNDARY EXPLORER (i) LOW ENERGY HYDROGEN MEASUREMENTS. Astrophysical Journal, 2013, 775, 86.	1.6	57
26	AN ANALYTICAL MODEL OF INTERSTELLAR GAS IN THE HELIOSPHERE TAILORED TO <i>INTERSTELLAR BOUNDARY EXPLORER</i> OBSERVATIONS. Astrophysical Journal, Supplement Series, 2012, 198, 10.	3.0	54
27	LOW ENERGY NEUTRAL ATOMS FROM THE HELIOSHEATH. Astrophysical Journal, 2014, 784, 89.	1.6	53
28	Diagnosing the Neutral Interstellar Gas Flow at 1 AU with IBEX-Lo. Space Science Reviews, 2009, 146, 149-172.	3.7	46
29	HELIOSPHERIC NEUTRAL ATOM SPECTRA BETWEEN 0.01 AND 6 keV FROM <i>IBEX</i> . Astrophysical Journal, 2012, 754, 14.	1.6	46
30	Energyâ€dependent Charge States and Their Connection with Ion Abundances in Impulsive Solar Energetic Particle Events. Astrophysical Journal, 2008, 687, 623-634.	1.6	43
31	Physical Processes in the Outer Heliosphere. Space Science Reviews, 2009, 146, 275-294.	3.7	42
32	Temporal Evolution of the Solar Wind Bulk Velocity atÂSolar Minimum by Correlating the STEREO A andÂBÂPLASTIC Measurements. Solar Physics, 2009, 256, 365-377.	1.0	37
33	Time Dependence of the IBEX Ribbon and the Globally Distributed Energetic Neutral Atom Flux Using the First 9 Years of Observations. Astrophysical Journal, Supplement Series, 2018, 239, 1.	3.0	37
34	Interstellar Neutral Helium in the Heliosphere from IBEX Observations. VI. The He ⁺ Density and the Ionization State in the Very Local Interstellar Matter. Astrophysical Journal, 2019, 882, 60.	1.6	35
35	Cluster Observes the High-Altitude CUSP Region. Surveys in Geophysics, 2005, 26, 135-175.	2.1	34
36	Interstellar Neutral Helium in the Heliosphere from IBEX Observations. V. Observations in IBEX-Lo ESA Steps 1, 2, and 3. Astrophysical Journal, 2018, 854, 119.	1.6	34

#	Article	IF	Citations
37	THE Ne-TO-O ABUNDANCE RATIO OF THE INTERSTELLAR MEDIUM FROM (i>IBEX lo OBSERVATIONS. Astrophysical Journal, 2014, 795, 97.	1.6	32
38	Energetic magnetospheric oxygen in the magnetosheath and its response to IMF orientation: Cluster observations. Journal of Geophysical Research, 2004, 109, .	3.3	28
39	Observation of energy-dependent ionic charge states in impulsive solar energetic particle events. Advances in Space Research, 2006, 38, 493-497.	1.2	28
40	The Interstellar Boundary Explorer Science Operations Center. Space Science Reviews, 2009, 146, 207-234.	3.7	26
41	IBEX Backgrounds and Signal-to-Noise Ratio. Space Science Reviews, 2009, 146, 173-206.	3.7	26
42	Very Local Interstellar Medium Revealed by a Complete Solar Cycle of Interstellar Neutral Helium Observations with IBEX. Astrophysical Journal, Supplement Series, 2022, 259, 42.	3.0	25
43	The ion-optical prototype of the low energy neutral atom sensor of the Interstellar Boundary Explorer Mission (IBEX). Review of Scientific Instruments, 2007, 78, 124502.	0.6	23
44	In Situ Observations of Solar Wind Stream Interface Evolution. Solar Physics, 2009, 259, 323-344.	1.0	23
45	INTERSTELLAR FLOW LONGITUDE FROM THE SYMMETRY OF THE PICKUP ION CUTOFF AT 1 AU. Astrophysical Journal, 2015, 815, 20.	1.6	23
46	TRIANGULATION OF THE INTERSTELLAR MAGNETIC FIELD. Astrophysical Journal Letters, 2015, 813, L20.	3.0	20
47	PRECISION POINTING OF IBEX-Lo OBSERVATIONS. Astrophysical Journal, Supplement Series, 2012, 198, 9.	3.0	19
48	<title>Metalized polyimide filters for x-ray astronomy and other applications</title> ., 1997, 3113, 432.		18
49	THE SOLAR WIND AS A POSSIBLE SOURCE OF FAST TEMPORAL VARIATIONS OF THE HELIOSPHERIC RIBBON. Astrophysical Journal, 2013, 776, 109.	1.6	18
50	Radiation Pressure from Interstellar Hydrogen Observed by IBEX through Solar Cycle 24. Astrophysical Journal, 2019, 887, 217.	1.6	18
51	CAN <i>IBEX</i> IDENTIFY VARIATIONS IN THE GALACTIC ENVIRONMENT OF THE SUN USING ENERGETIC NEUTRAL ATOMS?. Astrophysical Journal, 2010, 719, 1984-1992.	1.6	16
52	Escape of O ⁺ through the distant tail plasma sheet. Geophysical Research Letters, 2010, 37,	1.5	16
53	Science Opportunities from Observations of the Interstellar Neutral Gas with Adjustable Boresight Direction. Astrophysical Journal, Supplement Series, 2019, 245, 28.	3.0	15
54	Investigation of the source region of ionospheric oxygen outflow in the cleft/cusp using multi-spacecraft observations by CIS onboard Cluster. Advances in Space Research, 2004, 34, 2459-2464.	1.2	13

#	Article	IF	Citations
55	Solar wind ion trends and signatures: STEREO PLASTIC observations approaching solar minimum. Annales Geophysicae, 2009, 27, 3909-3922.	0.6	12
56	Interstellar Neutral He Parameters from Crossing Parameter Tubes with the Interstellar Mapping and Acceleration Probe Informed by 10 yr of Interstellar Boundary Explorer Observations. Astrophysical Journal, Supplement Series, 2022, 258, 7.	3.0	12
57	Development of the nano-dust analyzer (NDA) for detection and compositional analysis of nanometer-size dust particles originating in the inner heliosphere. Review of Scientific Instruments, 2014, 85, 035113.	0.6	10
58	Secondary Interstellar Oxygen in the Heliosphere: Numerical Modeling and Comparison with IBEX-Lo Data. Astrophysical Journal, 2017, 850, 119.	1.6	10
59	Inhomogeneity in the Local ISM and Its Relation to the Heliosphere. Space Science Reviews, 2022, 218, 16.	3.7	10
60	Effect of Rapid Changes of Solar Wind Conditions on the Pickup Ion Velocity Distribution. Journal of Geophysical Research: Space Physics, 2019, 124, 6418-6437.	0.8	9
61	The Characterization of Secondary Interstellar Neutral Oxygen beyond the Heliopause: A Detailed Analysis of the IBEX-Lo Oxygen Observations. Astrophysical Journal, 2019, 880, 4.	1.6	9
62	Evidence for Massâ€perâ€Charge–dependent Acceleration of a Multipleâ€Component Seed Population by CMEâ€driven Interplanetary Shocks Near 1 AU. Astrophysical Journal, 2008, 682, 690-696.	1.6	8
63	The IBEX Ribbon and the Thickness of the Inner Heliosheath. Astrophysical Journal, 2018, 861, 109.	1.6	8
64	NICE: an instrument for direct mass spectrometric measurement of interstellar neutral gas. Measurement Science and Technology, 2005, 16, 1667-1676.	1.4	7
65	Inner Source C ⁺ /O ⁺ Pickup Ions Produced by Solar Wind Recycling, Neutralization, Backscattering, Sputtering, and Sputtering-induced Recycling. Astrophysical Journal, 2018, 861, 98.	1.6	7
66	The free escape continuum of diffuse ions upstream of the Earth's quasiâ€parallel bow shock. Journal of Geophysical Research: Space Physics, 2013, 118, 4425-4434.	0.8	6
67	The Pitch-angle Distributions of Suprathermal Ions near an Interplanetary Shock. Astrophysical Journal Letters, 2020, 888, L22.	3.0	6
68	Interstellar Mapping and Acceleration Probe (IMAP). Journal of Physics: Conference Series, 2016, 767, 012025.	0.3	5
69	A Consistent Scenario for the IBEX Ribbon, Anisotropies in TeV Cosmic Rays, and the Local Interstellar Medium. ASTRA Proceedings, 0, 2, 9-16.	0.0	5
70	Proton Enhancement and Decreased O[sup $6+$] \hat{a} •H at the Heliospheric Current Sheet: Implications for the Origin of Slow Solar Wind. AIP Conference Proceedings, 2010, , .	0.3	4
71	Characteristics of Yohkoh X-ray flares and charge states of SEP Fe ions. Advances in Space Research, 2002, 30, 623-628.	1.2	2
72	Diagnostics of corotating interaction regions with the kinetic properties of iron ions as determined with STEREO/PLASTIC. Annales Geophysicae, 2010, 28, 491-497.	0.6	2

#	Article	IF	CITATIONS
73	Hybrid Simulations for Pickup Ion Distributions at the Termination Shock. AIP Conference Proceedings, 2010, , .	0.3	2
74	Anisotropies in TeV Cosmic Rays Related to the IBEX Ribbon. Journal of Physics: Conference Series, 2014, 531, 012010.	0.3	2
75	Anisotropies in TeV Cosmic Rays Related to the Local Interstellar Magnetic Field from the IBEX Ribbon. Journal of Physics: Conference Series, 2015, 577, 012023.	0.3	1
76	The Local Interstellar Magnetic Field Observed by Voyager 1 and IBEX. Journal of Physics: Conference Series, 2018, 1100, 012021.	0.3	1
77	Sources and acceleration efficiencies for energetic particles in the heliosphere. Plasma Physics and Controlled Fusion, 2006, 48, B239-B247.	0.9	0
78	Energetic neutral atom and interstellar flow observations with IBEX: Implications for the global heliosphere. AIP Conference Proceedings, 2016, , .	0.3	0
79	Cluster Observes the High-Altitude Cusp Region. , 2005, , 135-175.		0