Pekka Janhunen

List of Publications by Year
in descending order

168 papers	4,308 citations	109321 35 h-index	155660 55 g-index
173 all docs	173 docs citations	173 times ranked	2012 citing authors

#	Article	IF	Citations
1	Electric Sail for Spacecraft Propulsion. Journal of Propulsion and Power, 2004, 20, 763-764.	2.2	198
2	A Positive Conservative Method for Magnetohydrodynamics Based on HLL and Roe Methods. Journal of Computational Physics, 2000, 160, 649-661.	3.8	158
3	Simulation study of solar wind push on a charged wire: basis of solar wind electric sail propulsion. Annales Geophysicae, 2007, 25, 755-767.	1.6	131
4	Invited Article: Electric solar wind sail: Toward test missions. Review of Scientific Instruments, 2010, 81, 111301.	1.3	112
5	Electric Sail Performance Analysis. Journal of Spacecraft and Rockets, 2008, 45, 122-129.	1.9	111
6	Stormtime energy transfer in global MHD simulation. Journal of Geophysical Research, 2003, 108, .	3.3	108
7	Modelling the solar wind interaction with Mercury by a quasi-neutral hybrid model. Annales Geophysicae, 2003, 21, 2133-2145.	1.6	94
8	Solar wind and magnetospheric ion impact on Mercury's surface. Geophysical Research Letters, 2003, 30, n/a-n/a.	4.0	91
9	The GUMICS-4 global MHD magnetosphereâ€“ionosphere coupling simulation. Journal of Atmospheric and Solar-Terrestrial Physics, 2012, 80, 48-59.	1.6	88
10	Ion escape from Mars in a quasi-neutral hybrid model. Journal of Geophysical Research, 2002, 107, SIA 1-1.	3.3	78
11	Atmospheric effects of proton precipitation in the Martian atmosphere and its connection to the Mars-solar wind interaction. Journal of Geophysical Research, 2001, 106, 5617-5634.	3.3	69
12	Spin Plane Control and Thrust Vectoring of Electric Solar Wind Sail. Journal of Propulsion and Power, 2013, 29, 178-185.	2.2	63
13	Relation of polar auroral arcs to magnetotail twisting and IMF rotation: a systematic MHD simulation study. Annales Geophysicae, 2004, 22, 951-970.	1.6	62
14	Continuous reconnection line and pressureâ€dependent energy conversion on the magnetopause in a global MHD model. Journal of Geophysical Research, 2007, 112, .	3.3	59
15	Oxygen ion escape at Mars in a hybrid model: High energy and low energy ions. Icarus, 2010, 206, 152-163.	2.5	59
16	Electric solar wind sail mass budget model. Geoscientific Instrumentation, Methods and Data Systems, 2013, 2, 85-95.	1.6	59
17	Venusâ€“solar wind interaction: Asymmetries and the escape of ions. Planetary and Space Science, 2006, 54, 1472-1481.	1.7	57
18	Electrostatic Plasma Brake for Deorbiting a Satellite. Journal of Propulsion and Power, 2010, 26, 370-372.	2.2	53

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19	Aalto-1 nanosatellite â€“ technical description and mission objectives. Geoscientific Instrumentation, Methods and Data Systems, 2013, 2, 121-130.	1.6	52
20	Increased electric sail thrust through removal of trapped shielding electrons by orbit chaotisation due to spacecraft body. Annales Geophysicae, 2009, 27, 3089-3100.	1.6	49
21	ESTCube-1 in-orbit experience and lessons learned. IEEE Aerospace and Electronic Systems Magazine, 2015, 30, 12-22.	1.3	48
22	Observations of Substorm Electrodynamics Using the Miracle Network. Astrophysics and Space Science Library, 1998, , 111-114.	2.7	48
23	Assessment of ionospheric Joule heating by GUMICS-4 MHD simulation, AMIE, and satellite-based statistics: towards a synthesis. Annales Geophysicae, 2005, 23, 2051-2068.	1.6	47
24	Ionospheric energy input as a function of solar wind parameters: global MHD simulation results. Annales Geophysicae, 2004, 22, 549-566.	1.6	46
25	Surface conductivity of Mercury provides current closure and may affect magnetospheric symmetry. Annales Geophysicae, 2004, 22, 1829-1837.	1.6	46
26	HLLC solver for ideal relativistic MHD. Journal of Computational Physics, 2007, 223, 643-656.	3.8	44
27	Magnetopause reconnection and energy conversion as influenced by the dipole tilt and the IMF B_x. Journal of Geophysical Research: Space Physics, 2014, 119, 4484-4494.	2.4	43
28	Titan in subsonic and supersonic flow. Geophysical Research Letters, 2004, 31, .	4.0	42
29	Hybrid simulation study of ion escape at Titan for different orbital positions. Advances in Space Research, 2006, 38, 799-805.	2.6	42
30	Thrust vectoring of an electric solar wind sail with a realistic sail shape. Acta Astronautica, 2017, 131, 145-151.	3.2	42
31	On the characterization of magnetic reconnection in global MHD simulations. Annales Geophysicae, 2006, 24, 3059-3069.	1.6	41
32	Compression of the Earth's magnetotail by interplanetary shocks directly drives transient magnetic flux closure. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	40
33	Assessing the performance of communityâ€available global MHD models using key system parameters and empirical relationships. Space Weather, 2015, 13, 868-884.	3.7	40
34	The closure of region-1 field-aligned current in MHD simulation. Geophysical Research Letters, 1997, 24, 1419-1422.	4.0	38
35	Role of solar wind dynamic pressure in driving ionospheric Joule heating. Journal of Geophysical Research, 2004, 109, .	3.3	37
36	Wire-to-wire bonding of Î¼m-diameter aluminum wires for the Electric Solar Wind Sail. Microelectronic Engineering, 2011, 88, 3267-3269.	2.4	37

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37	Cusp and magnetopause locations in global MHD simulation. Journal of Geophysical Research, 2001, 106, 29435-29450.	3.3	36
38	The response of the Hermean magnetosphere to the interplanetary magnetic field. Advances in Space Research, 2004, 33, 2176-2181.	2.6	36
39	Ion escape at Mars: Comparison of a 3-D hybrid simulation with Mars Express IMA/ASPERA-3 measurements. Icarus, 2006, 182, 350-359.	2.5	34
40	ESTCube-1 nanosatellite for electric solar wind sail in-orbit technology demonstration. Proceedings of the Estonian Academy of Sciences, 2014, 63, 2000.	1.5	34
41	Field-aligned conductance values estimated from Maxwellian and kappa distributions in quiet and disturbed events using Freja electron data. Annales Geophysicae, 1998, 16, 298-302.	1.6	33
42	Oxygen ions at Titan's exobase in a Voyager 1â€“type interaction from a hybrid simulation. Journal of Geophysical Research, 2007, 112, .	3.3	33
43	Perpendicular particle simulation of theEregion Farley-Buneman instability. Journal of Geophysical Research, 1994, 99, 11461.	3.3	32
44	Oxygen ion escape from Venus in a global hybrid simulation: role of the ionospheric O⁺ ions. Annales Geophysicae, 2009, 27, 4333-4348.	1.6	31
45	A numerical ionosphereâ€“magnetosphere coupling model with variable conductivities. Journal of Geophysical Research, 1993, 98, 9519-9530.	3.3	30
46	One kilometer (1 km) electric solar wind sail tether produced automatically. Review of Scientific Instruments, 2013, 84, 095102.	1.3	30
47	Aalto-1, multi-payload CubeSat: In-orbit results and lessons learned. Acta Astronautica, 2021, 187, 557-568.	3.2	30
48	Electric Sailing under Observed Solar Wind Conditions. Astrophysics and Space Sciences Transactions, 2009, 5, 61-69.	1.0	30
49	Coulomb drag propulsion experiments of ESTCube-2 and FORESAIL-1. Acta Astronautica, 2020, 177, 771-783.	3.2	29
50	Aalto-1, multi-payload CubeSat: Design, integration and launch. Acta Astronautica, 2021, 187, 370-383.	3.2	29
51	What high altitude observations tell us about the auroral acceleration: A Cluster/DMSP conjunction. Geophysical Research Letters, 2003, 30, .	4.0	27
52	Statistics of Joule heating in the auroral zone and polar cap using Astrid-2 satellite Poynting flux. Annales Geophysicae, 2004, 22, 4133-4142.	1.6	27
53	X rays from solar wind charge exchange at Mars: A comparison of simulations and observations. Geophysical Research Letters, 2004, 31, .	4.0	27
54	On the impact of multiply charged heavy solar wind ions on the surface of Mercury, the Moon and Ceres. Planetary and Space Science, 2008, 56, 1506-1516.	1.7	27

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55	The current-voltage relationship revisited: exact and approximate formulas with almost general validity for hot magnetospheric electrons for bi-Maxwellian and kappa distributions. Annales Geophysicae, 1998, 16, 292-297.	1.6	26
56	Polar observations of electron density distribution in the Earthâ€™s magnetosphere. 1. Statistical results. Annales Geophysicae, 2002, 20, 1711-1724.	1.6	26
57	Generation of Bernstein waves by ion shell distributions in the auroral region. Annales Geophysicae, 2003, 21, 881-891.	1.6	25
58	On the feasibility of a negative polarity electric sail. Annales Geophysicae, 2009, 27, 1439-1447.	1.6	25
59	Precipitation and total power consumption in the ionosphere: Global MHD simulation results compared with Polar and SNOE observations. Annales Geophysicae, 2006, 24, 861-872.	1.6	24
60	Morphology of the magnetic field near Titan: Hybrid model study of the Cassini T9 flyby. Geophysical Research Letters, 2007, 34, .	4.0	24
61	Status report of the electric sail in 2009. Acta Astronautica, 2011, 68, 567-570.	3.2	24
62	Photonic spin control for solar wind electric sail. Acta Astronautica, 2013, 83, 85-90.	3.2	24
63	How does the U-shaped potential close above the acceleration region? A study using Polar data. Annales Geophysicae, 1999, 17, 1276-1283.	1.6	23
64	Simulation study of the plasma-brake effect. Annales Geophysicae, 2014, 32, 1207-1216.	1.6	23
65	FORESAILâ€1 CubeSat Mission to Measure Radiation Belt Losses and Demonstrate Deorbiting. Journal of Geophysical Research: Space Physics, 2019, 124, 5783-5799.	2.4	23
66	STARE velocities: the importance of off-orthogonality and ion motions. Annales Geophysicae, 2003, 21, 729-743.	1.6	22
67	New interpretation of magnetospheric energy circulation. Geophysical Research Letters, 2006, 33, .	4.0	22
68	The Venusian induced magnetosphere: A case study of plasma and magnetic field measurements on the Venus Express mission. Planetary and Space Science, 2008, 56, 796-801.	1.7	22
69	Plasma and wave phenomena induced by neutral gas releases in the solar wind. Annales Geophysicae, 2002, 20, 1-11.	1.6	22
70	New model for auroral acceleration: O-shaped potential structure cooperating with waves. Annales Geophysicae, 2000, 18, 596-607.	1.6	21
71	The magnetotail reconnection region in a global MHD simulation. Annales Geophysicae, 2005, 23, 3753-3764.	1.6	21
72	Optimal interplanetary rendezvous combining electric sail and high thrust propulsion system. Acta Astronautica, 2011, 68, 603-621.	3.2	21

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73	Overview of electric solar wind sail applications. Proceedings of the Estonian Academy of Sciences, 2014, 63, 267.	1.5	21
74	E-sail test payload of the ESTCube-1 nanosatellite. Proceedings of the Estonian Academy of Sciences, 2014, 63, 210.	1.5	21
75	Altitude dependence of plasma density in the auroral zone. Annales Geophysicae, 2002, 20, 1743-1750.	1.6	21
76	Reconstruction of electron precipitation characteristics from a set of multiwavelength digital all-sky auroral images. Journal of Geophysical Research, 2001, 106, 18505-18516.	3.3	20
77	Hysteresis in solar wind power input to the magnetosphere. Geophysical Research Letters, 2006, 33, .	4.0	20
78	Electric sail control mode for amplified transverse thrust. Acta Astronautica, 2015, 106, 111-119.	3.2	20
79	Polar observations of electron density distribution in the Earthâ€™s magnetosphere. 2. Density profiles. Annales Geophysicae, 2002, 20, 1725-1735.	1.6	19
80	Velocities of auroral coherent echoes at 12 and 144 MHz. Annales Geophysicae, 2002, 20, 1647-1661.	1.6	19
81	AlfvÃ©nic Electron Acceleration in Aurora Occurs in Global AlfvÃ©n Resonosphere Region. Space Science Reviews, 2006, 122, 89-95.	8.1	19
82	Different AlfvÃ©n wave acceleration processes of electrons in substorms at ~4-5 <i>R_E</i> and 2-3 <i>R_E</i> radial distance. Annales Geophysicae, 2004, 22, 2213-2227.	1.6	19
83	Planetary ENA imaging: Effects of different interaction models for Mars. Planetary and Space Science, 2006, 54, 117-131.	1.7	18
84	Statistical comparison of seasonal variations in the GUMICSâ€4 global MHD model ionosphere and measurements. Space Weather, 2014, 12, 582-600.	3.7	18
85	On the properties of O+ and O2+ ions in a hybrid model and in Mars Express IMA/ASPERA-3 data: A case study. Planetary and Space Science, 2008, 56, 1204-1213.	1.7	17
86	Hybrid modelling the Pioneer Venus Orbiter magnetic field observations. Advances in Space Research, 2008, 41, 1361-1374.	2.6	17
87	Simulations of solar wind charge exchange X-ray emissions at Venus. Geophysical Research Letters, 2007, 34, .	4.0	16
88	Hybrid simulations of the O+ ion escape from Venus: Influence of the solar wind density and the IMF x component. Advances in Space Research, 2009, 43, 1436-1441.	2.6	16
89	Electric Sail for a Near-Earth Asteroid Sample Return Mission: Case 1998 KY26. Journal of Aerospace Engineering, 2014, 27, .	1.4	16
90	Fast E-sail Uranus entry probe mission. Planetary and Space Science, 2014, 104, 141-146.	1.7	16

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91	A study of inverted-V auroral acceleration mechanisms using Polar/Fast Auroral Snapshot conjunctions. Journal of Geophysical Research, 2001, 106, 18995-19011.	3.3	15
92	Magnetized Mars: Transformation of Earth-like magnetosphere to Venus-like induced magnetosphere. Planetary and Space Science, 2008, 56, 823-827.	1.7	15
93	Magnetospheric feedback in solar wind energy transfer. Journal of Geophysical Research, 2010, 115, .	3.3	15
94	Widely different characteristics of oxygen and hydrogen ion escape from Venus. Geophysical Research Letters, 2010, 37, .	4.0	15
95	Nano-graphite cold cathodes for electric solar wind sail. Carbon, 2015, 81, 132-136.	10.3	15
96	Analysis of the substorm trigger phase using multiple ground-based instrumentation. Geophysical Research Letters, 1995, 22, 2065-2068.	4.0	14
97	On the current-voltage relationship in auroral breakups and westwards-travelling surges. Annales Geophysicae, 1996, 14, 1265-1273.	1.6	14
98	On the possibility of using an electromagnetic ionosphere in global MHD simulations. Annales Geophysicae, 1998, 16, 397-402.	1.6	14
99	Cassini Plasma Spectrometer and hybrid model study on Titan's interaction: Effect of oxygen ions. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	14
100	On large plasmoid formation in a global magnetohydrodynamic simulation. Annales Geophysicae, 2011, 29, 167-179.	1.6	14
101	Characteristics of a stable arc based on FAST and MIRACLE observations. Annales Geophysicae, 2000, 18, 152-160.	1.6	13
102	The occurrence frequency of auroral potential structures and electric fields as a function of altitude using Polar/EFI data. Annales Geophysicae, 2004, 22, 1233-1250.	1.6	13
103	Aalto-1 - An experimental nanosatellite for hyperspectral remote sensing. , 2011, , .		13
104	Windsock memory COnditioned RAM (COâ€RAM) pressure effect: Forced reconnection in the Earth's magnetotail. Journal of Geophysical Research: Space Physics, 2014, 119, 6273-6293.	2.4	13
105	Electric sail option for cometary rendezvous. Acta Astronautica, 2016, 127, 684-692.	3.2	13
106	Moving an asteroid with electric solar wind sail. Astrophysics and Space Sciences Transactions, 2010, 6, 41-48.	1.0	13
107	EMMIâ€"Electric solar wind sail facilitated Manned Mars Initiative. Acta Astronautica, 2015, 113, 22-28.	3.2	12
108	Observational study of generation conditions of substorm-associated low-frequency AKR emissions. Annales Geophysicae, 2004, 22, 3571-3582.	1.6	11

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109	Energisation of O+ and O+ 2 Ions at Mars: An Analysis of a 3-D Quasi-Neutral Hybrid Model Simulation. Space Science Reviews, 2007, 126, 39-62.	8.1	11
110	Verification of the GUMICSâ€4 global MHD code using empirical relationships. Journal of Geophysical Research: Space Physics, 2013, 118, 3138-3146.	2.4	11
111	Parallel grid library for rapid and flexible simulation development. Computer Physics Communications, 2013, 184, 1297-1309.	7.5	11
112	Some recent developments in understanding auroral electron acceleration processes. IEEE Transactions on Plasma Science, 2003, 31, 1178-1191.	1.3	10
113	Testing an inversion method for estimating electron energy fluxes from all-sky camera images. Annales Geophysicae, 2004, 22, 1961-1971.	1.6	10
114	Statistics of a parallel Poynting vector in the auroral zone as a function of altitude using Polar EFI and MFE data and Astrid-2 EMMA data. Annales Geophysicae, 2005, 23, 1797-1806.	1.6	10
115	Morphology of the magnetic field near Mars and the role of the magnetic crustal anomalies: Dayside region. Planetary and Space Science, 2008, 56, 852-855.	1.7	10
116	Nanospacecraft fleet for multi-asteroid touring with electric solar wind sails. , 2018, , .		10
117	STARE velocities: 2. Evening westward electron flow. Annales Geophysicae, 2004, 22, 1077-1091.	1.6	10
118	Auroral fading in ionosphere-magnetosphere coupling model: Implications for possible mechanisms. Geophysical Research Letters, 1995, 22, 2049-2052.	4.0	9
119	STARE: Observations of a field-aligned line current. Geophysical Research Letters, 1999, 26, 21-24.	4.0	9
120	Some observational phenomena are well reproduced by our global MHD while others are not: remarks on what, why and how. Advances in Space Research, 2001, 28, 1685-1691.	2.6	9
121	A hybrid simulation model for a stable auroral arc. Annales Geophysicae, 2002, 20, 1603-1616.	1.6	9
122	Simulations of X-rays from solar wind charge exchange at Mars: Parameter dependence. Advances in Space Research, 2005, 36, 2057-2065.	2.6	9
123	Three-dimensional stabilization mechanism for the auroral Farley-Buneman instability. Journal of Atmospheric and Solar-Terrestrial Physics, 1992, 54, 1633-1643.	0.9	8
124	On the current-voltage relationship in fluid theory. Annales Geophysicae, 1999, 17, 11-26.	1.6	8
125	The occurrence frequency of upward ion beams in the auroral zone as a function of altitude using Polar/TIMAS and DE-1/EICS data. Annales Geophysicae, 2003, 21, 2059-2072.	1.6	8
126	Middle-energy electron anisotropies in the auroral region. Annales Geophysicae, 2004, 22, 237-249.	1.6	8

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127	Electric sail, photonic sail and deorbiting applications of the freely guided photonic blade. Acta Astronautica, 2014, 93, 410-417.	3.2	8
128	On the current-voltage relationship in auroral breakups and westwards-travelling surges. Annales Geophysicae, 1996, 14, 1265.	1.6	8
129	A case study of electron precipitation in the late substorm growth phase on and nearby a preonset arc. Annales Geophysicae, 1998, 16, 1567-1572.	1.6	7
130	Ionospheric shear flow situations observed by the MIRACLE network, and the concept of Harang discontinuity. Geophysical Monograph Series, 2000, , 227-236.	0.1	7
131	A statistical study of nightside inverted-V events using Freja electron data: implications for the currentâ€“voltage relationship. Journal of Atmospheric and Solar-Terrestrial Physics, 2000, 62, 81-92.	1.6	7
132	Energetics of a substorm on 15 August, 2001: Comparing empirical methods and a global MHD simulation. Advances in Space Research, 2005, 36, 1825-1829.	2.6	7
133	Aspects of nanospacecraft design for main-belt sailing voyage. Advances in Space Research, 2021, 67, 2957-2980.	2.6	7
134	On the current-voltage relationship in fluid theory. Annales Geophysicae, 1999, 17, 11.	1.6	7
135	Mesoscale structure of a morning sector ionospheric shear flow region determined by conjugate Cluster II and MIRACLE ground-based observations. Annales Geophysicae, 2003, 21, 1737-1751.	1.6	7
136	Difference in the current-voltage relationships between dawn and duskside inverted-V events. Journal of Geophysical Research, 2000, 105, 5373-5380.	3.3	6
137	Ion shell distributions as free energy source for plasma waves on auroral field lines mapping to plasma sheet boundary layer. Annales Geophysicae, 2004, 22, 2115-2133.	1.6	6
138	Ionospheric Power Consumption in Global MHD Simulation Predicted From Solar Wind Measurements. IEEE Transactions on Plasma Science, 2004, 32, 1511-1518.	1.3	6
139	Timing of changes in the solar wind energy input in relation to ionospheric response. Journal of Geophysical Research, 2010, 115, .	3.3	6
140	Volume cross section of auroral radar backscatter and RMS plasma fluctuations inferred from coherent and incoherent scatter data: a response on backscatter volume parameters. Annales Geophysicae, 2011, 29, 1081-1092.	1.6	6
141	Safety criteria for flying E-sail through solar eclipse. Acta Astronautica, 2015, 114, 1-5.	3.2	6
142	Miniature Spectral Imager in-Orbit Demonstration Results from Aalto-1 Nanosatellite Mission. , 2018, , .		6
143	Variations of the magnetic field near Mars caused by magnetic crustal anomalies. Planetary and Space Science, 2008, 56, 856-860.	1.7	5
144	Auroral potential structures and current-voltage relationship: summary of recent results. Physics and Chemistry of the Earth, Part C: Solar, Terrestrial and Planetary Science, 2001, 26, 107-111.	0.2	4

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145	Boltzmann electron PIC simulation of the E-sail effect. Annales Geophysicae, 2015, 33, 1507-1512.	1.6	4
146	On recent developments in E-region irregularity simulationsand a summary of related theory. Annales Geophysicae, 1995, 13, 791-806.	1.6	3
147	Latitude-energy structure of multiple ion beamlets in Polar/TIMAS data in plasma sheet boundary layer and boundary plasma sheet below 6 <i>R_E</i> radial distance: basic properties and statistical analysis. Annales Geophysicae, 2005, 23, 867-876.	1.6	3
148	The electron drift velocity, ion acoustic speed and irregularity drifts in high-latitude E-region. Annales Geophysicae, 2008, 26, 3395-3409.	1.6	3
149	The impact on global magnetohydrodynamic simulations from varying initialisation methods: results from GUMICS-4. Annales Geophysicae, 2017, 35, 907-922.	1.6	3
150	Particle telescope aboard FORESAIL-1: Simulated performance. Advances in Space Research, 2020, 66, 29-41.	2.6	3
151	Application of conformal mapping to 2-D conductivity structures with non-uniform primary sources. Geophysical Journal International, 1991, 105, 185-190.	2.4	2
152	Biological Feedbacks as Cause and Demise of Neoproterozoic Icehouse: Astrobiological Prospects for Faster Evolution and Importance of Cold Conditions. PLoS ONE, 2007, 2, e214.	2.5	2
153	Deorbiting Strategies: Comparison between Electrostatic Plasma Brake and Conventional Propulsion. , 2011, , .		2
154	Aalto-1: a hyperspectral Earth observing nanosatellite. Proceedings of SPIE, 2011, , .	0.8	2
155	Wrecker: an unreeling mechanism for a thin electrically conductive space tether. CEAS Space Journal, 2015, 7, 53-68.	2.3	2
156	Altitude extension of auroral potential structures by event-based and statistical studies. Advances in Space Research, 2001, 28, 1575-1580.	2.6	1
157	On the response of ionospheric electrojets to solar wind discontinuities. Annales Geophysicae, 2009, 27, 3791-3803.	1.6	1
158	Astrobiology: Study of factors related to the origin and survival of life on Earth and elsewhere. Planetary and Space Science, 2009, 57, 429.	1.7	1
159	Determining the quality of space tether in a nondestructive manner. , 2013, , .		1
160	Thermo-photovoltaic spacecraft electricity generation. Astrophysics and Space Sciences Transactions, 2010, 6, 19-26.	1.0	1
161	Propagation of the electromagnetic signal from lightning over a non-planar inhomogeneous Earth. Journal of Atmospheric and Solar-Terrestrial Physics, 1992, 54, 251-264.	0.9	0
162	MathHDF: MathLink-Based Distributed Visualization between Mathematica and HDF Files. Computers in Physics, 1993, 7, 290.	0.5	0

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163	The magnetic field near Mars: A comparison between a hybrid model, Mars Global Surveyor and Mars Express observations. Planetary and Space Science, 2008, 56, 828-831.	1.7	0
164	On the development of a spherical hybrid model - Lessons and applications. Proceedings of the International Astronomical Union, 2010, 6, 89-91.	0.0	0
165	Forcing continuous reconnection in hybrid simulations. Physics of Plasmas, 2014, 21, 072906.	1.9	0
166	Aalto-1 Earth Observation nanosatellite mission status and in orbit experiments. , 2017, , .		0
167	Steam balloon concept for lifting rockets to launch altitude. Aeronautical Journal, 2019, 123, 600-616.	1.6	0
168	On recent developments in E-region irregularity. Annales Geophysicae, 1995, 13, 791.	1.6	0