Michael Lockwood

List of Publications by Year
in descending order

396	16,123	16411 64	30010 103
papers	citations	h-index	g-index

408	408	408	6260
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	SOLAR INFLUENCES ON CLIMATE. Reviews of Geophysics, 2010, 48, .	9.0	1,014
2	A doubling of the Sun's coronal magnetic field during the past 100 years. Nature, 1999, 399, 437-439.	13.7	501
3	Dependence of convective flows and particle precipitation in the highâ€latitude dayside ionosphere on the X and Y components of the interplanetary magnetic field. Journal of Geophysical Research, 1991, 96, 5557-5564.	3.3	269
4	The cleft ion fountain. Journal of Geophysical Research, 1985, 90, 9736-9748.	3.3	241
5	A new source of suprathermal O⁺ ions near the dayside polar cap boundary. Journal of Geophysical Research, 1985, 90, 4099-4116.	3.3	215
6	Midday auroral breakup events and related energy and momentum transfer from the magnetosheath. Journal of Geophysical Research, 1990, 95, 1039-1060.	3.3	188
7	Interplanetary magnetic field control of dayside auroral activity and the transfer of momentum across the dayside magnetopause. Planetary and Space Science, 1989, 37, 1347-1365.	0.9	179
8	Production of polar cap electron density patches by transient magnetopause reconnection. Geophysical Research Letters, 1992, 19, 1731-1734.	1.5	178
9	The excitation of plasma convection in the highâ€latitude ionosphere. Journal of Geophysical Research, 1990, 95, 7961-7972.	3.3	176
10	First imaging of corotating interaction regions using the STEREO spacecraft. Geophysical Research Letters, 2008, 35, .	1.5	165
11	Earth's magnetospheric cusps. Reviews of Geophysics, 1996, 34, 233-260.	9.0	164
12	The variation of reconnection rate at the dayside magnetopause and cusp ion precipitation. Journal of Geophysical Research, 1992, 97, 14841-14847.	3.3	160
13	Reconnection at the high-latitude magnetopause during northward interplanetary magnetic field conditions. Journal of Geophysical Research, 2001, 106, 25467-25488.	3.3	158
14	The Maunder minimum (1645â€“1715) was indeed a grand minimum: A reassessment of multiple datasets. Astronomy and Astrophysics, 2015, 581, A95.	2.1	158
15	Low and middle altitude cusp particle signatures for general magnetopause reconnection rate variations: 1. Theory. Journal of Geophysical Research, 1994, 99, 8531.	3.3	152
16	Potential influences on the United Kingdom's floods of winter 2013/14. Nature Climate Change, 2014, 4, 769-777.	8.1	149
17	Recent oppositely directed trends in solar climate forcings and the global mean surface air temperature. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2007, 463, 2447-2460.	1.0	148
18	Are cold winters in Europe associated with low solar activity?. Environmental Research Letters, 2010, 5, 024001.	2.2	148

#	Article	IF	Citations
19	Detection and Attribution of Climate Change: from Global to Regional. , 2014, , 867-952.		144
20	The dependence of high-latitude dayside ionospheric flows on the North-South component of the IMF: A high time resolution correlation analysis using EISCAT â€œPolarâ€•and AMPTE UKS and IRM data. Planetary and Space Science, 1988, 36, 471-498.	0.9	138
21	THE RISE AND FALL OF OPEN SOLAR FLUX DURING THE CURRENT GRAND SOLAR MAXIMUM. Astrophysical Journal, 2009, 700, 937-944.	1.6	137
22	The Solar Orbiter magnetometer. Astronomy and Astrophysics, 2020, 642, A9.	2.1	136
23	Solar Influence on Global and Regional Climates. Surveys in Geophysics, 2012, 33, 503-534.	2.1	135
24	Solar causes of the long-term increase in geomagnetic activity. Journal of Geophysical Research, 1999, 104, 28325-28342.	3.3	133
25	On the quasiâ€periodic nature of magnetopause flux transfer events. Journal of Geophysical Research, 1993, 98, 5935-5940.	3.3	132
26	The ionospheric signatures of flux transfer events and solar wind dynamic pressure changes. Journal of Geophysical Research, 1990, 95, 17113-17135.	3.3	130
27	Pressure-driven magnetopause motions and attendant response on the ground. Planetary and Space Science, 1989, 37, 589-607.	0.9	127
28	Upwelling O⁺ ion source characteristics. Journal of Geophysical Research, 1986, 91, 7019-7031.	3.3	122
29	Solar change and climate: an update in the light of the current exceptional solar minimum. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 303-329.	1.0	119
30	The cleft ion fountain: A twoâ€dimensional kinetic model. Journal of Geophysical Research, 1985, 90, 9749-9762.	3.3	116
31	Ionospheric signatures of pulsed reconnection at the Earth's magnetopause. Nature, 1993, 361, 424-428.	13.7	115
32	On the importance of interplanetary magnetic field âˆ£B_yâˆ£ on polar cap patch formation. Journal of Geophysical Research, 2011, 116, .	3.3	114
33	Direct Observations of the Evolution of Polar Cap Ionization Patches. Science, 2013, 339, 1597-1600.	6.0	111
34	Stereoscopic imaging of an Earthâ€impacting solar coronal mass ejection: A major milestone for the STEREO mission. Geophysical Research Letters, 2009, 36, .	1.5	110
35	Long-term drift of the coronal source magnetic flux and the total solar irradiance. Geophysical Research Letters, 1999, 26, 2461-2464.	1.5	109
36	Enhanced signature of solar variability in Eurasian winter climate. Geophysical Research Letters, 2010, 37, .	1.5	108

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37	Reconstruction and Prediction of Variations in the Open Solar Magnetic Flux and Interplanetary Conditions. Living Reviews in Solar Physics, 2013, 10, 1.	7.8	101
38	A New Calibrated Sunspot Group Series Since 1749: Statistics of Active Day Fractions. Solar Physics, 2016, 291, 2685-2708.	1.0	101
39	Results from the CERN pilot CLOUD experiment. Atmospheric Chemistry and Physics, 2010, 10, 1635-1647.	1.9	96
40	Response time of the high-latitude dayside ionosphere to sudden changes in the north-south component of the IMF. Planetary and Space Science, 1988, 36, 1415-1428.	0.9	95
41	A Multispacecraft Analysis of a Small-Scale Transient Entrained by Solar Wind Streams. Solar Physics, 2009, 256, 307-326.	1.0	93
42	Effects of a mid-latitude solar eclipse on the thermosphere and ionosphere - A modelling study. Geophysical Research Letters, 1998, 25, 3787-3790.	1.5	89
43	Flux transfer events at the magnetopause and in the ionosphere. Geophysical Research Letters, 1990, 17, 2241-2244.	1.5	88
44	Lowâ€altitude signatures of the cusp and flux transfer events. Geophysical Research Letters, 1989, 16, 879-882.	1.5	83
45	Centennial changes in the solar wind speed and in the open solar flux. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	82
46	Dayside auroral activity and magnetic flux transfer from the solar wind. Geophysical Research Letters, 1989, 16, 33-36.	1.5	81
47	Eastward propagation of a plasma convection enhancement following a southward turning of the interplanetary magnetic field. Geophysical Research Letters, 1986, 13, 72-75.	1.5	80
48	Intermittent release of transients in the slow solar wind: 1. Remote sensing observations. Journal of Geophysical Research, 2010, 115, .	3.3	80
49	Long-term variations in the magnetic fields of the Sun and the heliosphere: Their origin, effects, and implications. Journal of Geophysical Research, 2001, 106, 16021-16038.	3.3	79
50	Nonâ€Maxwellian ion velocity distributions observed using EISCAT. Geophysical Research Letters, 1987, 14, 111-114.	1.5	78
51	the pulsating cusp. Geophysical Research Letters, 1990, 17, 1069-1072.	1.5	78
52	Superthermal ion signatures of auroral acceleration processes. Journal of Geophysical Research, 1985, 90, 1611-1618.	3.3	77
53	EISCAT observations of bursts of rapid flow in the high latitude dayside ionosphere. Geophysical Research Letters, 1986, 13, 909-912.	1.5	76
54	Ionospheric convection response to slow, strong variations in a northward interplanetary magnetic field: A case study for January 14, 1988. Journal of Geophysical Research, 1993, 98, 19273-19292.	3.3	75

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55	Regional climate impacts of a possible future grand solar minimum. Nature Communications, 2015, 6, 7535.	5.8	75
56	Relationship of dayside auroral precipitations to the open-closed separatrix and the pattern of convective flow. Journal of Geophysical Research, 1997, 102, 17475-17487.	3.3	73
57	Multi-instrument ground-based observations of a travelling convection vortices event. Annales Geophysicae, 1996, 14, 162-181.	0.6	70
58	The Evolution of the Sun's Open Magnetic Flux â€“ II. Full Solar Cycle Simulations. Solar Physics, 2002, 209, 287-309.	1.0	70
59	Events of enhanced convection and related dayside auroral activity. Journal of Geophysical Research, 1995, 100, 23917.	3.3	69
60	Plasma transfer processes at the magnetopause. Space Science Reviews, 1999, 88, 207-283.	3.7	69
61	Variability of the interplanetary medium at 1 a.u. over 24 years: 1963â€“1986. Planetary and Space Science, 1991, 39, 411-423.	0.9	68
62	Twenty-three cycles of changing open solar magnetic flux. Journal of Geophysical Research, 2003, 108, .	3.3	67
63	Reconfiguration and closure of lobe flux by reconnection during northward IMF: possible evidence for signatures in cusp/cleft auroral emissions. Annales Geophysicae, 1999, 17, 996-1011.	0.6	66
64	Variability of dayside convection and motions of the cusp/cleft aurora. Geophysical Research Letters, 1993, 20, 1011-1014.	1.5	65
65	A solar storm observed from the Sun to Venus using the STEREO, Venus Express, and MESSENGER spacecraft. Journal of Geophysical Research, 2009, 114, .	3.3	65
66	Predicting space climate change. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	65
67	INFERRING THE STRUCTURE OF THE SOLAR CORONA AND INNER HELIOSPHERE DURING THE MAUNDER MINIMUM USING GLOBAL THERMODYNAMIC MAGNETOHYDRODYNAMIC SIMULATIONS. Astrophysical Journal, 2015, 802, 105.	1.6	65
68	On the origins and timescales of geoeffective IMF. Space Weather, 2016, 14, 406-432.	1.3	65
69	Coronal mass ejections are not coherent magnetohydrodynamic structures. Scientific Reports, 2017, 7, 4152.	1.6	65
70	Dayside ionospheric convection changes in response to longâ€period interplanetary Magnetic field oscillations: Determination of the ionospheric phase velocity. Journal of Geophysical Research, 1992, 97, 19373-19380.	3.3	64
71	Cyclic loss of open solar flux since 1868: The link to heliospheric current sheet tilt and implications for the Maunder Minimum. Journal of Geophysical Research, 2012, 117, .	3.3	64
72	Evidence of component merging equatorward of the cusp. Journal of Geophysical Research, 1999, 104, 22623-22633.	3.3	62

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73	Solar wind-magnetosphere coupling functions on timescales of 1 day to 1 year. Annales Geophysicae, 2007, 25, 495-506.	0.6	62
74	Heliospheric modulation of galactic cosmic rays during grand solar minima: Past and future variations. Geophysical Research Letters, 2012, 39, .	1.5	61
75	Direct observations of the full Dungey convection cycle in the polar ionosphere for southward interplanetary magnetic field conditions. Journal of Geophysical Research: Space Physics, 2015, 120, 4519-4530.	0.8	61
76	Excess open solar magnetic flux from satellite data: 2. A survey of kinematic effects. Journal of Geophysical Research, 2009, 114, .	3.3	60
77	Solar origin of heliospheric magnetic field inversions: Evidence for coronal loop opening within pseudostreamers. Journal of Geophysical Research: Space Physics, 2013, 118, 1868-1879.	0.8	60
78	Reconstruction of geomagnetic activity and near-Earth interplanetary conditions over the past 167 yr â€“ Part 4: Near-Earth solar wind speed, IMF, and open solar flux. Annales Geophysicae, 2014, 32, 383-399.	0.6	60
79	Comment on â€œA statistical study of the ionospheric convection response to changing interplanetary magnetic field conditions using the assimilative mapping of ionospheric electrodynamics techniqueâ€• by A.J. Ridley et al.. Journal of Geophysical Research, 1999, 104, 4387-4391.	3.3	59
80	Effects of solar wind magnetosphere coupling recorded at different geomagnetic latitudes: Separation of directlyâ€driven and storage/release systems. Geophysical Research Letters, 2008, 35, .	1.5	59
81	How is open solar magnetic flux lost over the solar cycle?. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	56
82	Polar cap patch segmentation of the tongue of ionization in the morning convection cell. Geophysical Research Letters, 2013, 40, 2918-2922.	1.5	56
83	The statistical cusp: a flux transfer event model. Planetary and Space Science, 1992, 40, 1251-1268.	0.9	54
84	The Maunder minimum and the Little Ice Age: an update from recent reconstructions and climate simulations. Journal of Space Weather and Space Climate, 2017, 7, A33.	1.1	54
85	Open solar flux estimates from near-Earth measurements of the interplanetary magnetic field: comparison of the first two perihelion passes of the Ulysses spacecraft. Annales Geophysicae, 2004, 22, 1395-1405.	0.6	53
86	The 22-Year Hale Cycle in Cosmic Ray Flux â€“ Evidence for Direct Heliospheric Modulation. Solar Physics, 2014, 289, 407-421.	1.0	53
87	Implications of the altitude of transient 630â€nm dayside auroral emissions. Journal of Geophysical Research, 1993, 98, 15571-15587.	3.3	52
88	On the cause of a magnetospheric flux transfer event. Journal of Geophysical Research, 1998, 103, 26453-26478.	3.3	52
89	Intermittent release of transients in the slow solar wind: 2. In situ evidence. Journal of Geophysical Research, 2010, 115, .	3.3	52
90	Global solar wind variations over the last four centuries. Scientific Reports, 2017, 7, 41548.	1.6	52

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91	Centennial variations in sunspot number, open solar flux, and streamer belt width: 1. Correction of the sunspot number record since 1874. Journal of Geophysical Research: Space Physics, 2014, 119, 5172-5182.	0.8	51
92	Flow-aligned jets in the magnetospheric cusp: Results from the Geospace Environment Modeling Pilot Program. Journal of Geophysical Research, 1995, 100, 7649.	3.3	50
93	Flux transfer events at the dayside magnetopause: Transient reconnection or magnetosheath dynamic pressure pulses?. Journal of Geophysical Research, 1991, 96, 5497-5509.	3.3	49
94	On the longitudinal extent of magnetopause reconnection pulses. Annales Geophysicae, 1996, 14, 865-878.	0.6	49
95	Evidence for solar wind modulation of lightning. Environmental Research Letters, 2014, 9, 055004.	2.2	49
96	Coordinated Cluster/Double Star observations of dayside reconnection signatures. Annales Geophysicae, 2005, 23, 2867-2875.	0.6	47
97	A survey of simultaneous observations of the high-latitude ionosphere and interplanetary magnetic field with EISCAT and AMPTE-UKS. Journal of Atmospheric and Solar-Terrestrial Physics, 1986, 48, 987-1008.	0.9	46
98	Oscillations in the open solar magnetic flux with a period of 1.68 years: imprint on galactic cosmic rays and implications for heliospheric shielding. Annales Geophysicae, 2004, 22, 4381-4395.	0.6	45
99	Recent oppositely directed trends in solar climate forcings and the global mean surface air temperature. II. Different reconstructions of the total solar irradiance variation and dependence on response time scale. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 1367-1385.	1.0	45
100	Centennial changes in the heliospheric magnetic field and open solar flux: The consensus view from geomagnetic data and cosmogenic isotopes and its implications. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	45
101	The persistence of solar activity indicators and the descent of the Sun into Maunder Minimum conditions. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	45
102	The contribution of flux transfer events to convection. Geophysical Research Letters, 1995, 22, 1185-1188.	1.5	44
103	Solar cycle 24: Implications for energetic particles and long-term space climate change. Geophysical Research Letters, 2011, 38, n/a-n/a.	1.5	44
104	A Computationally Efficient, Time-Dependent Model of the Solar Wind for Use as a Surrogate to Three-Dimensional Numerical Magnetohydrodynamic Simulations. Solar Physics, 2020, 295, 1.	1.0	44
105	Nonâ€thermal plasma observations using EISCAT: Aspect angle dependence. Geophysical Research Letters, 1987, 14, 957-960.	1.5	43
106	Ionospheric origin of magnetospheric O⁺ ions. Geophysical Research Letters, 1981, 8, 381-384.	1.5	42
107	On flow reversal boundaries and transpolar voltage in average models of high-latitude convection. Planetary and Space Science, 1991, 39, 397-409.	0.9	42
108	Top-down solar modulation of climate: evidence for centennial-scale change. Environmental Research Letters, 2010, 5, 034008.	2.2	42

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109	Semi-annual, annual and Universal Time variations in the magnetosphere and in geomagnetic activity: 1. Geomagnetic data. Journal of Space Weather and Space Climate, 2020, 10, 23.	1.1	42
110	The modelled occurrence of nonâ€thermal plasma in the ionospheric Fâ€region and the possible consequences for ion outflows into the magnetosphere. Geophysical Research Letters, 1987, 14, 371-374.	1.5	41
111	The Evolution of the Sun's Open Magnetic Flux â€“ I. A Single Bipole. Solar Physics, 2002, 207, 291-308.	1.0	41
112	Comment on â€œTheIDVindex: Its derivation and use in inferring long-term variations of the interplanetary magnetic field strengthâ€•by Leif Svalgaard and Edward W. Cliver. Journal of Geophysical Research, 2006, 111, .	3.3	41
113	Extended Magnetic Reconnection across the Dayside Magnetopause. Physical Review Letters, 2011, 107, 025004.	2.9	41
114	Possible impacts of a future grand solar minimum on climate: Stratospheric and global circulation changes. Journal of Geophysical Research D: Atmospheres, 2015, 120, 9043-9058.	1.2	41
115	A numerical model of the ionospheric signatures of time-varying magneticreconnection: I. ionospheric convection. Annales Geophysicae, 2004, 22, 73-91.	0.6	41
116	Large plasma velocities along the magnetic field line in the auroral zone. Nature, 1988, 336, 231-232.	13.7	40
117	Multiple, discrete arcs on sunward convecting field lines in the 14-15 MLT region. Journal of Geophysical Research, 1994, 99, 6113.	3.3	40
118	Modelling signatures of pulsed magnetopause reconnection in cusp ion dispersion signatures seen at middle altitudes. Geophysical Research Letters, 1998, 25, 591-594.	1.5	40
119	Solar cycle evolution of dipolar and pseudostreamer belts and their relation to the slow solar wind. Journal of Geophysical Research: Space Physics, 2014, 119, 36-46.	0.8	40
120	Observations at the magnetopause and in the auroral ionosphere of momentum transfer from the solar wind. Advances in Space Research, 1988, 8, 281-299.	1.2	39
121	Ion flows and heating at a contracting polar-cap boundary. Planetary and Space Science, 1988, 36, 1229-1253.	0.9	39
122	Ionospheric ion upwelling in the wake of flux transfer events at the dayside magnetopause. Journal of Geophysical Research, 1988, 93, 5641-5654.	3.3	39
123	Motion of the dayside polar cap boundary during substorm cycles: II. Generation of poleward-moving events and polar cap patches by pulses in the magnetopause reconnection rate. Annales Geophysicae, 2005, 23, 3513-3532.	0.6	39
124	A comparison between largeâ€scale irregularities and scintillations in the polar ionosphere. Geophysical Research Letters, 2016, 43, 4790-4798.	1.5	39
125	Interplanetary magnetic field properties and variability near Mercury's orbit. Journal of Geophysical Research: Space Physics, 2017, 122, 7907-7924.	0.8	39
126	ESR and EISCAT observations of the response of the cusp and cleft to IMF orientation changes. Annales Geophysicae, 2000, 18, 1009-1026.	0.6	38

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127	The Sunâ€“Earth Connection in Time Scales from Years to Decades and Centuries. Space Science Reviews, 2001, 95, 625-637.	3.7	38
128	An evaluation of the correlation between open solar flux and total solar irradiance. Astronomy and Astrophysics, 2002, 382, 678-687.	2.1	38
129	Transpolar voltage and polar cap flux during the substorm cycle and steady convection events. Journal of Geophysical Research, 2009, 114, .	3.3	38
130	Reconstruction of geomagnetic activity and near-Earth interplanetary conditions over the past 167 yr â€“ Part 1: A new geomagnetic data composite. Annales Geophysicae, 2013, 31, 1957-1977.	0.6	38
131	How the magnetopause transition parameter works. Geophysical Research Letters, 1997, 24, 373-376.	1.5	37
132	Thermal ion flows in the topside auroral ionosphere and the effects of low-altitude, transverse acceleration. Planetary and Space Science, 1982, 30, 595-609.	0.9	36
133	The geomagnetic mass spectrometerâ€" mass and energy dispersions of ionospheric ion flows into the magnetosphere. Nature, 1985, 316, 612-613.	13.7	36
134	Recent changes in solar outputs and the global mean surface temperature. III. Analysis of contributions to global mean air surface temperature rise. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2008, 464, 1387-1404.	1.0	36
135	What influence will future solar activity changes over the 21st century have on projected global nearâ€surface temperature changes?. Journal of Geophysical Research, 2012, 117, .	3.3	36
136	A statistical study of large field-aligned flows of thermal ions at high-latitudes. Planetary and Space Science, 1990, 38, 1187-1201.	0.9	35
137	Dayside moving auroral transients related to LLBL dynamics. Geophysical Research Letters, 1996, 23, 3247-3250.	1.5	35
138	Simultaneous optical and radar signatures of poleward-moving auroral forms. Annales Geophysicae, 2000, 18, 1054-1066.	0.6	35
139	Centennial variations in sunspot number, open solar flux and streamer belt width: 3. Modeling. Journal of Geophysical Research: Space Physics, 2014, 119, 5193-5209.	0.8	35
140	The Development of a Space Climatology: 1. Solar Wind Magnetosphere Coupling as a Function of Timescale and the Effect of Data Gaps. Space Weather, 2019, 17, 133-156.	1.3	35
141	The excitation of ionospheric convection. Journal of Atmospheric and Solar-Terrestrial Physics, 1991, 53, 177-199.	0.9	34
142	Ion acceleration at both the interior and exterior AlfvÃ©n waves associated with the magnetopause reconnection site: Signatures in cusp precipitation. Journal of Geophysical Research, 1996, 101, 21501-21513.	3.3	34
143	Plasma structure within poleward-moving cusp/cleft auroral transients: EISCAT Svalbard radar observations and an explanation in terms of large local time extent of events. Annales Geophysicae, 2000, 18, 1027-1042.	0.6	34
144	Cusp ion steps, field-aligned currents and poleward moving auroral forms. Journal of Geophysical Research, 2001, 106, 29555-29569.	3.3	34

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145	The dynamics and relationships of precipitation, temperature and convection boundaries in the dayside auroral ionosphere. Annales Geophysicae, 2004, 22, 1973-1987.	0.6	34
146	THE ACCURACY OF USING THEULYSSESRESULT OF THE SPATIAL INVARIANCE OF THE RADIAL HELIOSPHERIC FIELD TO COMPUTE THE OPEN SOLAR FLUX. Astrophysical Journal, 2009, 701, 964-973.	1.6	34
147	Earth's ion upflow associated with polar cap patches: Global and in situ observations. Geophysical Research Letters, 2016, 43, 1845-1853.	1.5	34
148	AN ASSESSMENT OF SUNSPOT NUMBER DATA COMPOSITES OVER 1845â€“2014. Astrophysical Journal, 2016, 824, 54.	1.6	34
149	Tests of Sunspot Number Sequences: 3. Effects of Regression Procedures on the Calibration of Historic Sunspot Data. Solar Physics, 2016, 291, 2829-2841.	1.0	34
150	Sunward Strahl: A Method to Unambiguously Determine Open Solar Flux from In Situ Spacecraft Measurements Using Suprathermal Electron Data. Journal of Geophysical Research: Space Physics, 2017, 122, 10,980.	0.8	34
151	Hourly weather observations from the Scottish Highlands (1883â€“1904) rescued by volunteer citizen scientists. Geoscience Data Journal, 2019, 6, 160-173.	1.8	34
152	Analysis of incoherent scatter radar data from non-thermal F-region plasma. Journal of Atmospheric and Solar-Terrestrial Physics, 1989, 51, 483-495.	0.9	33
153	Location and characteristics of the reconnection X line deduced from low-altitude satellite and ground-based observations: 1. Theory. Journal of Geophysical Research, 1995, 100, 21791-21802.	3.3	33
154	Excess open solar magnetic flux from satellite data: 1. Analysis of the third perihelion Ulysses pass. Journal of Geophysical Research, 2009, 114, .	3.3	33
155	Nearâ€Earth heliospheric magnetic field intensity since 1750: 1. Sunspot and geomagnetic reconstructions. Journal of Geophysical Research: Space Physics, 2016, 121, 6048-6063.	0.8	33
156	On the determination of ion temperature in the auroral F-region ionosphere. Planetary and Space Science, 1988, 36, 1295-1304.	0.9	32
157	Coordinated Cluster, ground-based instrumentation and low-altitude satellite observations of transient poleward-moving events in the ionosphere and in the tail lobe. Annales Geophysicae, 2001, 19, 1589-1612.	0.6	32
158	Reconstruction of geomagnetic activity and near-Earth interplanetary conditions over the past 167 yr â€“ Part 2: A new reconstruction of the interplanetary magnetic field. Annales Geophysicae, 2013, 31, 1979-1992.	0.6	32
159	Auroral and plasma flow transients at magnetic noon. Planetary and Space Science, 1990, 38, 973-993.	0.9	31
160	Identifying the Open-Closed Field Line Boundary. , 1998, , 73-90.		31
161	Ionospheric measurements of relative coronal brightness during the total solar eclipses of 11 August, 1999 and 9 July, 1945. Annales Geophysicae, 2000, 18, 182-190.	0.6	31
162	Polar cap hot patches: Enhanced density structures different from the classical patches in the ionosphere. Geophysical Research Letters, 2017, 44, 8159-8167.	1.5	31

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163	IMF control of cusp proton emission intensity and dayside convection: implications for component and anti-parallel reconnection. Annales Geophysicae, 2003, 21, 955-982.	0.6	31
164	Comment on â€œMapping the dayside ionosphere to the magnetosphere according to particle precipitation characteristicsâ€•by Newell and Meng. Geophysical Research Letters, 1993, 20, 1739-1740.	1.5	30
165	High-Latitude Particle Precipitation and its Relationship to Magnetospheric Source Regions. , 1997, 80, 77-107.		30
166	Coordinated Cluster and ground-based instrument observations of transient changes in the magnetopause boundary layer during an interval of predominantly northward IMF: relation to reconnection pulses and FTE signatures. Annales Geophysicae, 2001, 19, 1613-1640.	0.6	30
167	Low-energy ion outflows from the ionosphere during a major polar cap expansion â€” evidence for equatorward motion of inverted-V structures. Advances in Space Research, 1986, 6, 93-101.	1.2	29
168	Incoherent scatter radar observations of non-Maxwellian ion velocity distributions in the auroral F-region. Advances in Space Research, 1989, 9, 113-118.	1.2	29
169	Galactic Cosmic Ray Modulation near the Heliospheric Current Sheet. Solar Physics, 2014, 289, 2653-2668.	1.0	29
170	Space climate and space weather over the past 400 years: 1. The power input to the magnetosphere. Journal of Space Weather and Space Climate, 2017, 7, A25.	1.1	29
171	The evolution of inverted magnetic fields through the inner heliosphere. Monthly Notices of the Royal Astronomical Society, 2020, 494, 3642-3655.	1.6	29
172	Graphical evidence for the solar coronal structure during the Maunder minimum: comparative study of the total eclipse drawings in 1706 and 1715. Journal of Space Weather and Space Climate, 2021, 11, 1.	1.1	29
173	Thermospheric control of the auroral source of O⁺ ions for the magnetosphere. Journal of Geophysical Research, 1984, 89, 301-315.	3.3	28
174	Transient reconnection: Search for ionospheric signatures. Eos, 1990, 71, 709-720.	0.1	28
175	The characteristics of the magnetopause reconnection X-line deduced from low-altitude satellite observations of cusp ions. Geophysical Research Letters, 1994, 21, 2757-2760.	1.5	28
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