Kjellmar Oksavik

List of Publications by Year
in descending order

112	3,330	117625	175258
papers	citations	34 h-index	52 g-index

122	122	122	1815
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Variations in the polar cap area during two substorm cycles. Annales Geophysicae, 2003, 21, 1121-1140.	1.6	173
2	Van Allen probes, NOAA, GOES, and ground observations of an intense EMIC wave event extending over 12 h in magnetic local time. Journal of Geophysical Research: Space Physics, 2015, 120, 5465-5488.	2.4	127
3	Space weather challenges of the polar cap ionosphere. Journal of Space Weather and Space Climate, 2013, 3, A02.	3.3	112
4	Correlation between core ion energization, suprathermal electron bursts, and broadband ELF plasma waves. Journal of Geophysical Research, 1998, 103, 4171-4186.	3.3	94
5	Loss of relativistic electrons: Evidence for pitch angle scattering by electromagnetic ion cyclotron waves excited by unstable ring current protons. Journal of Geophysical Research, 2007, 112, .	3.3	85
6	First inâ€situ measurements of HF radar echoing targets. Geophysical Research Letters, 2012, 39, .	4.0	80
7	Ionospheric patch formation: Direct measurements of the origin of a polar cap patch. Geophysical Research Letters, 2004, 31, .	4.0	74
8	On the entry and transit of highâ€density plasma across the polar cap. Journal of Geophysical Research, 2010, 115, .	3.3	73
9	First observations of the temporal/spatial variation of the sub-auroral polarization stream from the SuperDARN Wallops HF radar. Geophysical Research Letters, 2006, 33, .	4.0	70
10	Direct observations of injection events of subauroral plasma into the polar cap. Geophysical Research Letters, 2006, 33, .	4.0	69
11	High-resolution observations of the small-scale flow pattern associated with a poleward moving auroral form in the cusp. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	65
12	In situ measurement of a newly created polar cap patch. Journal of Geophysical Research, 2010, 115, .	3.3	65
13	Dayâ€night coupling by a localized flow channel visualized by polar cap patch propagation. Geophysical Research Letters, 2014, 41, 3701-3709.	4.0	65
14	Evidence for particle injection as the cause of Dst reduction during HILDCAA events. Journal of Atmospheric and Solar-Terrestrial Physics, 2004, 66, 177-186.	1.6	62
15	Observations of isolated polar cap patches by the European Incoherent Scatter (EISCAT) Svalbard and Super Dual Auroral Radar Network (SuperDARN) Finland radars. Journal of Geophysical Research, 2006, 111, .	3.3	62
16	Relativistic electron losses related to EMIC waves during CIR and CME storms. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 1126-1144.	1.6	60
17	The science case for the EISCAT_3D radar. Progress in Earth and Planetary Science, 2015, 2, .	3.0	60
18	GPS scintillation and irregularities at the front of an ionization tongue in the nightside polar ionosphere. Journal of Geophysical Research: Space Physics, 2014, 119, 8624-8636.	2.4	59

#	Article	IF	Citations
19	Observations of ionospheric convection from the Wallops SuperDARN radar at middle latitudes. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	55
20	In situ measurements of plasma irregularity growth in the cusp ionosphere. Journal of Geophysical Research, 2012, 117, .	3.3	55
21	Scintillation and loss of signal lock from poleward moving auroral forms in the cusp ionosphere. Journal of Geophysical Research: Space Physics, 2015, 120, 9161-9175.	2.4	55
22	Multi-instrument mapping of the small-scale flow dynamics related to a cusp auroral transient. Annales Geophysicae, 2005, 23, 2657-2670.	1.6	54
23	Severe and localized GNSS scintillation at the poleward edge of the nightside auroral oval during intense substorm aurora. Journal of Geophysical Research: Space Physics, 2015, 120, 10,607.	2.4	54
24	EISCAT observations of plasma patches at sub-auroral cusp latitudes. Annales Geophysicae, 2006, 24, 2363-2374.	1.6	51
25	GPS phase scintillation at high latitudes during the geomagnetic storm of 17â€“18 March 2015. Journal of Geophysical Research: Space Physics, 2016, 121, 10,448.	2.4	49
26	Reversed flow events in the winter cusp ionosphere observed by the European Incoherent Scatter (EISCAT) Svalbard radar. Journal of Geophysical Research, 2007, 112, .	3.3	48
27	Statistical study of the GNSS phase scintillation associated with two types of auroral blobs. Journal of Geophysical Research: Space Physics, 2016, 121, 4679-4697.	2.4	46
28	GPS scintillations associated with cusp dynamics and polar cap patches. Journal of Space Weather and Space Climate, 2017, 7, A23.	3.3	46
29	On the relationship between ion upflow events and cusp auroral transients. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	45
30	ESR mapping of polar-cap patches in the dark cusp. Geophysical Research Letters, 2002, 29, 24-1-24-4.	4.0	44
31	On the relationship between thin Birkeland current arcs and reversed flow channels in the winter cusp/cleft ionosphere. Journal of Geophysical Research, 2008, 113, .	3.3	44
32	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.	1.6	39
33	Ring current intensity estimated from low-altitude proton observations. Journal of Geophysical Research, 2002, 107, SMP 30-1.	3.3	38
34	Multiâ€instrument observations from Svalbard of a traveling convection vortex, electromagnetic ion cyclotron wave burst, and proton precipitation associated with a bow shock instability. Journal of Geophysical Research: Space Physics, 2013, 118, 2975-2997.	2.4	38
35	Thermal ion upflow in the cusp ionosphere and its dependence on soft electron energy flux. Journal of Geophysical Research, 2010, 115, .	3.3	35
36	Inâ€flight calibration of NOAA POES proton detectorsâ€”Derivation of the MEPED correction factors. Journal of Geophysical Research: Space Physics, 2015, 120, 9578-9593.	2.4	35

#	Article	IF	Citations
37	Dayside Transient Phenomena and Their Impact on the Magnetosphere and Ionosphere. Space Science Reviews, 2022, 218, .	8.1	35
38	The dynamics and relationships of precipitation, temperature and convection boundaries in the dayside auroral ionosphere. Annales Geophysicae, 2004, 22, 1973-1987.	1.6	34
39	Identification of the temperature gradient instability as the source of decameter-scale ionospheric irregularities on plasmapause field lines. Geophysical Research Letters, 2006, 33, n/a-n/a.	4.0	34
40	Storm time equatorial belt - an â€œimageâ€•of RC behavior. Geophysical Research Letters, 2003, 30, .	4.0	33
41	A comparison of SuperDARN ACF fitting methods. Radio Science, 2013, 48, 274-282.	1.6	31
42	Intensity asymmetries in the dusk sector of the poleward auroral oval due to IMF B_x. Journal of Geophysical Research: Space Physics, 2014, 119, 9497-9507.	2.4	29
43	Three-dimensional energetic ion sounding of the magnetopause using Cluster/RAPID. Geophysical Research Letters, 2002, 29, 61-1-61-4.	4.0	28
44	Reversed flow events in the cusp ionosphere detected by SuperDARN HF radars. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	28
45	On the nonâ€conjugacy of nightside aurora and their generator mechanisms. Journal of Geophysical Research: Space Physics, 2013, 118, 3394-3406.	2.4	27
46	Motion of the dayside polar cap boundary during substorm cycles: I. Observations of pulses in the magnetopause reconnection rate. Annales Geophysicae, 2005, 23, 3495-3511.	1.6	27
47	Two methods to forecast auroral displays. Journal of Space Weather and Space Climate, 2011, 1, A03.	3.3	26
48	Dynamic effects of restoring footpoint symmetry on closed magnetic field lines. Journal of Geophysical Research: Space Physics, 2016, 121, 3963-3977.	2.4	24
49	GPS Scintillations and Losses of Signal Lock at High Latitudes During the 2015 St. Patrick's Day Storm. Journal of Geophysical Research: Space Physics, 2018, 123, 7943-7957.	2.4	24
50	Multiple transpolar auroral arcs reveal insight about coupling processes in the Earthâ€™s magnetotail. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16193-16198.	7.1	24
51	Optical and particle signatures of magnetospheric boundary layers near magnetic noon: Satellite and ground-based observations. Journal of Geophysical Research, 2000, 105, 27555-27568.	3.3	22
52	Determining the axial direction of highâ€shear flux transfer events: Implications for models of FTE structure. Journal of Geophysical Research, 2012, 117, .	3.3	22
53	A space hurricane over the Earthâ€™s polar ionosphere. Nature Communications, 2021, 12, 1207.	12.8	21
54	On a new process for cusp irregularity production. Annales Geophysicae, 2008, 26, 2871-2885.	1.6	20

#	Article	IF	Citations
55	The Ion/Electron Temperature Characteristics of Polar Cap Classical and Hot Patches and Their Influence on Ion Upflow. Geophysical Research Letters, 2018, 45, 8072-8080.	4.0	20
56	Simultaneous optical, CUTLASS HF radar, and FAST spacecraft observations: signatures of boundary layer processes in the cusp. Annales Geophysicae, 2004, 22, 511-525.	1.6	19
57	TRANS4: a new coupled electron/proton transport code â€“ comparison to observations above Svalbard using ESR, DMSP and optical measurements. Annales Geophysicae, 2007, 25, 661-673.	1.6	19
58	Observations of Asymmetries in Ionospheric Return Flow During Different Levels of Geomagnetic Activity. Journal of Geophysical Research: Space Physics, 2018, 123, 4638-4651.	2.4	19
59	Estimates of magnetotail reconnection rate based on IMAGE FUV and EISCAT measurements. Annales Geophysicae, 2005, 23, 123-134.	1.6	18
60	Equatorward propagating auroral arcs driven by ULF wave activity: Multipoint groundâ€•and spaceâ€based observations in the dusk sector auroral oval. Journal of Geophysical Research: Space Physics, 2017, 122, 5591-5605.	2.4	17
61	Cluster boundary layer measurements and optical observations at magnetically conjugate sites. Annales Geophysicae, 2001, 19, 1655-1668.	1.6	17
62	Ion upflow dependence on ionospheric density and solar photoionization. Journal of Geophysical Research: Space Physics, 2015, 120, 10039-10052.	2.4	16
63	A New Empirical Model of the Subauroral Polarization Stream. Journal of Geophysical Research: Space Physics, 2018, 123, 7342-7357.	2.4	16
64	On the Production of Ionospheric Irregularities Via Kelvinâ€Helmholtz Instability Associated with Cusp FlowÂChannels. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027734.	2.4	16
65	Observations of Pi2 pulsations by the Wallops HF radar in association with substorm expansion. Geophysical Research Letters, 2007, 34, .	4.0	15
66	Scintillation and irregularities from the nightside part of a Sunâ€aligned polar cap arc. Journal of Geophysical Research: Space Physics, 2016, 121, 5723-5736.	2.4	15
67	Observational Evidence for Throat Aurora Being Associated With Magnetopause Reconnection. Geophysical Research Letters, 2019, 46, 7113-7120.	4.0	15
68	Energetic particle sounding of the magnetopause: A contribution by Cluster/RAPID. Journal of Geophysical Research, 2004, 109, .	3.3	14
69	On the source of the polar wind in the polar topside ionosphere: First results from the EISCAT Svalbard radar. Geophysical Research Letters, 2009, 36, .	4.0	14
70	Dynamic properties of throat aurora revealed by simultaneous ground and satellite observations. Journal of Geophysical Research: Space Physics, 2017, 122, 3469-3486.	2.4	14
71	Observations of structured optical emissions and particle precipitation equatorward of the traditional auroral oval. Journal of Geophysical Research, 2007, 112, .	3.3	13
72	First radar measurements of ionospheric electric fields at subâ€second temporal resolution. Geophysical Research Letters, 2008, 35, .	4.0	13

#	Article	IF	Citations
73	Separation and Quantification of Ionospheric Convection Sources: 2. The Dipole Tilt Angle Influence on Reverse Convection Cells During Northward IMF. Journal of Geophysical Research: Space Physics, 2019, 124, 6182-6194.	2.4	13
74	First radar observations in the vicinity of the plasmapause of pulsed ionospheric flows generated by bursty bulk flows. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	12
75	Simultaneous groundâ€based optical and HF radar observations of the ionospheric footprint of the open/closed field line boundary along the geomagnetic meridian. Journal of Geophysical Research: Space Physics, 2015, 120, 9859-9874.	2.4	12
76	Energetic Proton Spectra Measured by the Van Allen Probes. Journal of Geophysical Research: Space Physics, 2017, 122, 10,129.	2.4	12
77	Pulsating dayside aurora in relation to ion upflow events during a northward interplanetary magnetic field (IMF) dominated by a strongly negative IMF BY. Journal of Geophysical Research, 2007, 112, n/a-n/a.	3.3	11
78	Proton injections into the ring current associated with B _z variations during HILDCAA events. Geophysical Monograph Series, 0, , 249-255.	0.1	11
79	Simultaneous Rocket and Scintillation Observations of Plasma Irregularities Associated With a Reversed Flow Event in the Cusp Ionosphere. Journal of Geophysical Research: Space Physics, 2019, 124, 7098-7111.	2.4	11
80	Latitude distribution of vertically precipitating energetic neutral atoms observed at low altitudes. Geophysical Research Letters, 2006, 33, .	4.0	10
81	Thermally excited 630.0â€‰nm O(1 D) emission in the cusp: A frequent highâ€altitude transient signature. Journal of Geophysical Research: Space Physics, 2013, 118, 5842-5852.	2.4	10
82	Simultaneous observations of traveling convection vortices: Ionosphereâ€thermosphere coupling. Journal of Geophysical Research: Space Physics, 2017, 122, 4943-4959.	2.4	10
83	The Linkage between the Ring Current and the Ionosphere System. Geophysical Monograph Series, 0, , 135-143.	0.1	9
84	Separation and Quantification of Ionospheric Convection Sources: 1. A New Technique. Journal of Geophysical Research: Space Physics, 2019, 124, 6343-6357.	2.4	9
85	Seasonal and Hemispheric Asymmetries of F Region Polar Cap Plasma Density: Swarm and CHAMP Observations. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028084.	2.4	9
86	F region ionosphere effects on the mapping accuracy of SuperDARN HF radar echoes. Radio Science, 2016, 51, 490-506.	1.6	8
87	Dayside Fieldâ€Aligned Current Impacts on Ionospheric Irregularities. Geophysical Research Letters, 2020, 47, e2019GL086722.	4.0	8
88	Solar and Geomagnetic Activity Impact on Occurrence and Spatial Size of Cold and Hot Polar Cap Patches. Geophysical Research Letters, 2021, 48, e2021GL094526.	4.0	8
89	Interferometric Study of Ionospheric Plasma Irregularities in Regions of Phase Scintillations and HF Backscatter. Geophysical Research Letters, 2022, 49, .	4.0	8
90	Height profiles of the ionospheric electron density derived using space-based remote sensing of UV and X ray emissions and EISCAT radar data: A ground-truth experiment. Journal of Geophysical Research, 2006, 111, .	3.3	7

#	Article	IF	Citations
91	Electron temperature in the cusp as measured with the SCIFERâ€2 sounding rocket. Journal of Geophysical Research, 2012, 117, .	3.3	7
92	Ring Current Behavior as Revealed by Energetic Proton Precipitation. Geophysical Monograph Series, 0, , 237-247.	0.1	7
93	A Study of Automatically Detected Flow Channels in the Polar Cap Ionosphere. Journal of Geophysical Research: Space Physics, 2019, 124, 9430-9447.	2.4	7
94	Overview of the Rocket Experiment for Neutral Upwelling Sounding Rocket 2 (RENU2). Geophysical Research Letters, 2020, 47, e2018GL081885.	4.0	7
95	Statistical Study of the Relationship Between Ion Upflow and Fieldâ€Aligned Current in the Topside Ionosphere for Both Hemispheres During Geomagnetic Disturbed and Quiet Time. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027538.	2.4	6
96	Electron Density Depletion Region Observed in the Polar Cap Ionosphere. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028432.	2.4	6
97	Multi-instrument observations of large-scale atmospheric gravity waves/traveling ionospheric disturbances associated with enhanced auroral activity over Svalbard. Advances in Space Research, 2019, 63, 270-281.	2.6	5
98	A Statistical Study of Polar Cap Flow Channels and Their IMF By Dependence. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028359.	2.4	5
99	GPS Scintillations and TEC Variations in Association With a Polar Cap Arc. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028968.	2.4	5
100	How Often Do Thermally Excited 630.0 nm Emissions Occur in the Polar Ionosphere?. Journal of Geophysical Research: Space Physics, 2018, 123, 698-710.	2.4	4
101	Recent Developments in Our Knowledge of Inner Magnetosphereâ€Ionosphere Convection. Journal of Geophysical Research: Space Physics, 2018, 123, 7276-7282.	2.4	4
102	Ionospheric signatures of the low-latitude boundary layer under conditions of northward IMF and small clock angle. Annales Geophysicae, 2006, 24, 2169-2178.	1.6	3
103	On the contribution of thermal excitation to the total 630.0Ânm emissions in the northern cusp ionosphere. Journal of Geophysical Research: Space Physics, 2017, 122, 1234-1245.	2.4	3
104	The Cusp as a VLF Saucer Source: First Rocket Observations of Longâ€Duration VLF Saucers on the Dayside. Geophysical Research Letters, 2021, 48, e2020GL090747.	4.0	3
105	Exploring solar-terrestrial interactions via multiple imaging observers. Experimental Astronomy, 0, , 1.	3.7	3
106	Plasma density gradients at the edge of polar ionospheric holes: the absence of phase scintillation. Annales Geophysicae, 2020, 38, 575-590.	1.6	3
107	The Dependence of Cold and Hot Patches on Local Plasma Transport and Particle Precipitation in Northern Hemisphere Winter. Geophysical Research Letters, 2022, 49, .	4.0	3
108	Effects of modification of the polar ionosphere with high-power short-wave extraordinary-mode HF waves produced by the spear heating facility. Radiophysics and Quantum Electronics, 2012, 55, 126-141.	0.5	2

#	Article	IF	Citations
109	Seasonal and Solar Cycle Variations of Thermally Excited 630.0Ânm Emissions in the Polar Ionosphere. Journal of Geophysical Research: Space Physics, 2018, 123, 7029-7039.	2.4	2
110	Spectral enhancements associated with Pi1B events observed at high latitude. Journal of Geophysical Research, 2012, 117, .	3.3	1
111	Challenges and Strategic Research Plans for Earth and Heliosphere: Research Infrastructures, Projects and Initiatives. Proceedings of the International Astronomical Union, 2017, 13, 219-225.	0.0	0
112	Nordlyset: Den himmelske danserinnen!. Naturen, 2021, 145, 128-137.	0.0	0