Alexander Koustov

List of Publications by Year
in descending order

62 papers	879 citations	430874 18 h-index	580821 25 g-index
72 all docs	72 docs citations	72 times ranked	537 citing authors

<table>
<tr><th>#</th><th>Article</th><th>IF</th><th>Citations</th></tr>
<tr><td>1</td><td>Refractive index effects on the scatter volume location and Doppler velocity estimates of ionospheric HF backscatter echoes. Annales Geophysicae, 2009, 27, 4207-4219.</td><td>1.6</td><td>50</td></tr>
<tr><td>2</td><td>Comparison of DMSP cross-track ion drifts and SuperDARN line-of-sight velocities. Annales Geophysicae, 2005, 23, 2479-2486.</td><td>1.6</td><td>48</td></tr>
<tr><td>3</td><td>Evolution of ionospheric multicell convection during northward interplanetary magnetic field with |Bz/By| > 1. Journal of Geophysical Research, 2000, 105, 27095-27107.</td><td>3.3</td><td>40</td></tr>
<tr><td>4</td><td>On the factors controlling occurrence of F-region coherent echoes. Annales Geophysicae, 2002, 20, 1385-1397.</td><td>1.6</td><td>34</td></tr>
<tr><td>5</td><td>On the relationship between the velocity of E-region HF echoes and <i>E</i>x<i>B</i> plasma drift. Annales Geophysicae, 2005, 23, 371-378.</td><td>1.6</td><td>30</td></tr>
<tr><td>6</td><td>Seasonal variation of HF radarFregion echo occurrence in the midnight sector. Journal of Geophysical Research, 2004, 109, .</td><td>3.3</td><td>29</td></tr>
<tr><td>7</td><td>Observations of high-velocity SAPS-like flows with the King Salmon SuperDARN radar. Annales Geophysicae, 2006, 24, 1591-1608.</td><td>1.6</td><td>29</td></tr>
<tr><td>8</td><td>SuperDARN convection and Sondrestrom plasma drift. Annales Geophysicae, 2001, 19, 749-759.</td><td>1.6</td><td>25</td></tr>
<tr><td>9</td><td>IMF By effects in the magnetospheric convection on closed magnetic field lines. Geophysical Research Letters, 2003, 30, .</td><td>4.0</td><td>25</td></tr>
<tr><td>10</td><td>Simultaneous HF measurements of E- and F-region Doppler velocities at large flow angles. Annales Geophysicae, 2004, 22, 1177-1185.</td><td>1.6</td><td>24</td></tr>
<tr><td>11</td><td>HF ground scatter from the polar cap: Ionospheric propagation and ground surface effects. Journal of Geophysical Research, 2010, 115, .</td><td>3.3</td><td>23</td></tr>
<tr><td>12</td><td>Examining the Potential of the Super Dual Auroral Radar Network for Monitoring the Space Weather Impact of Solar Xâ€Ray Flares. Space Weather, 2018, 16, 1348-1362.</td><td>3.7</td><td>23</td></tr>
<tr><td>13</td><td><i>PCN</i> magnetic index and average convection velocity in the polar cap inferred from SuperDARN radar measurements. Journal of Geophysical Research, 2009, 114, .</td><td>3.3</td><td>21</td></tr>
<tr><td>14</td><td>Monitoring the F-region peak electron density using HF backscatter interferometry. Geophysical Research Letters, 2011, 38, n/a-n/a.</td><td>4.0</td><td>21</td></tr>
<tr><td>15</td><td>Observations of 50- and 12-MHz auroral coherent echoes at the Antarctic Syowa station. Journal of Geophysical Research, 2001, 106, 12875-12887.</td><td>3.3</td><td>20</td></tr>
<tr><td>16</td><td>Velocities of auroral coherent echoes at 12 and 144 MHz. Annales Geophysicae, 2002, 20, 1647-1661.</td><td>1.6</td><td>19</td></tr>
<tr><td>17</td><td>Time evolution of the subauroral electric fields: A case study during a sequence of two substorms. Journal of Geophysical Research, 2009, 114, .</td><td>3.3</td><td>19</td></tr>
<tr><td>18</td><td>Velocity of E-region HF echoes under strongly-driven electrojet conditions. Annales Geophysicae, 2012, 30, 235-250.</td><td>1.6</td><td>19</td></tr>
</table>

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19	A Comparison of Crossâ€Track Ion Drift Measured by the Swarm Satellites and Plasma Convection Velocity Measured by SuperDARN. Journal of Geophysical Research: Space Physics, 2019, 124, 4710-4724.	2.4	17
20	Threeâ€way validation of the Rankin Inlet PolarDARN radar velocity measurements. Radio Science, 2009, 44, .	1.6	16
21	Coordinated observations of nighttime mediumâ€scale traveling ionospheric disturbances in 630â€nm airglow and HF radar echoes at midlatitudes. Journal of Geophysical Research, 2009, 114, .	3.3	16
22	Spherical cap harmonic analysis of Super Dual Auroral Radar Network (SuperDARN) observations for generating maps of ionospheric convection. Journal of Geophysical Research, 2010, 115, .	3.3	16
23	Seasonal and diurnal variations of PolarDARN F region echo occurrence in the polar cap and their causes. Journal of Geophysical Research: Space Physics, 2014, 119, 10,426.	2.4	16
24	CUTLASS HF radar observations of high-velocity E-region echoes. Annales Geophysicae, 2001, 19, 411-424.	1.6	15
25	Multifrequency measurements of HF Doppler velocity in the auroralEregion. Journal of Geophysical Research, 2002, 107, SIA 25-1-SIA 25-12.	3.3	13
26	Aspect angle dependence of the <i>E</i> region irregularity velocity at large flow angles. Journal of Geophysical Research, 2007, 112, .	3.3	13
27	Dependence of SuperDARN cross polar cap potential upon the solar wind electric field and magnetopause subsolar distance. Journal of Geophysical Research, 2008, 113, .	3.3	13
28	On the power-velocity relationship for 12- and 50-MHz auroral coherent echoes. Journal of Geophysical Research, 2001, 106, 15455-15469.	3.3	12
29	Response of ionospheric convection to sharp southward IMF turnings inferred from magnetometer and radar data. Journal of Geophysical Research, 2012, 117, .	3.3	12
30	Variations in the occurrence of SuperDARN F region echoes. Annales Geophysicae, 2014, 32, 147-156.	1.6	12
31	Substorm onset times as derived from geomagnetic indices. Geophysical Research Letters, 2002, 29, 134-1-134-4.	4.0	11
32	Heights of SuperDARN F region echoes estimated from the analysis of HF radio wave propagation. Annales Geophysicae, 2007, 25, 1987-1994.	1.6	11
33	On the SuperDARN cross polar cap potential saturation effect. Annales Geophysicae, 2009, 27, 3755-3764.	1.6	11
34	Seasonal and solar cycle variations in the ionospheric convection reversal boundary location inferred from monthly SuperDARN data sets. Annales Geophysicae, 2016, 34, 227-239.	1.6	11
35	A study of aspect angle effects in theE-region irregularity velocity using multi-point electric field measurements. Geophysical Research Letters, 2006, 33, .	4.0	10
36	Electron density and electric field over Resolute Bay andFregion ionospheric echo detection with the Rankin Inlet and Inuvik SuperDARN radars. Radio Science, 2014, 49, 1194-1205.	1.6	10

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37	Calibration and assessment of Swarm ion drift measurements using a comparison with a statistical convection model. Earth, Planets and Space, 2016, 68, .	2.5	10
38	Signatures of moving polar cap arcs in the F-region PolarDARN echoes. Annales Geophysicae, 2012, 30, 441-455.	1.6	9
39	Resolute Bay CADI ionosonde drifts, PolarDARN HF velocities, and cross polar cap potential. Radio Science, 2012, 47, .	1.6	9
40	Occurrence of F region echoes for the polar cap SuperDARN radars. Earth, Planets and Space, 2019, 71, .	2.5	8
41	Eâ€CHAIM as a Model of Total Electron Content: Performance and Diagnostics. Space Weather, 2021, 19, e2021SW002872.	3.7	8
42	A Comparison of the Topside Electron Density Measured by the Swarm Satellites and Incoherent Scatter Radars Over Resolute Bay, Canada. Radio Science, 2021, 56, e2021RS007326.	1.6	8
43	A first comparison of irregularity and ion drift velocity measurements in the E-region. Annales Geophysicae, 2006, 24, 2375-2389.	1.6	7
44	Statistical study of midlatitude <i>E</i> region echoes observed by the Hokkaido SuperDARN HF radar. Journal of Geophysical Research: Space Physics, 2015, 120, 9959-9976.	2.4	7
45	On the consistency of the SuperDARN radar velocity and Eâ€‰Ã—â€‰B plasma drift. Radio Science, 2016, 51, 1792-1805.	1.6	7
46	Seasonal effect for polar cap sunward plasma flows at strongly northward IMF <i>B_z</i>. Journal of Geophysical Research: Space Physics, 2017, 122, 2530-2541.	2.4	7
47	Observations of double-peakedEregion coherent spectra with the CUTLASS Finland HF radar. Radio Science, 2004, 39, n/a-n/a.	1.6	6
48	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
49	Hokkaido HF radar signatures of periodically reoccurring nighttime mediumâ€scale traveling ionospheric disturbances detected at short ranges. Journal of Geophysical Research: Space Physics, 2014, 119, 1200-1218.	2.4	6
50	Largeâ€Scale Comparison of Polar Cap Ionospheric Velocities Measured by RISRâ€C, RISRâ€N, and SuperDARN. Radio Science, 2018, 53, 624-639.	1.6	6
51	Comparison of SuperDARN peak electron density estimates based on elevation angle measurements to ionosonde and incoherent scatter radar measurements. Earth, Planets and Space, 2020, 72, 43.	2.5	6
52	STARE velocity at large flow angles: is it related to the ion acoustic speed?. Annales Geophysicae, 2006, 24, 873-885.	1.6	5
53	Poker Flat Incoherent Scatter Radar observations of anomalous electron heating in the E region. Annales Geophysicae, 2013, 31, 1163-1176.	1.6	5
54	Interhemispheric Asymmetry of the Sunward Plasma Flows for Strongly Dominant IMF <i>B</i>_{<i>Z</i>}Â>Â0. Journal of Geophysical Research: Space Physics, 2018, 123, 315-325.	2.4	5

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55	Longâ€term variations in the intensity of polar cap plasma flows inferred from SuperDARN. Journal of Geophysical Research: Space Physics, 2015, 120, 9722-9737.	2.4	4
56	A comparison of CADIâ€inferred <i>F</i> region plasma convection and DMSP ion drift above Resolute Bay. Radio Science, 2007, 42, .	1.6	3
57	Dependence of spectral width of ionosphericFregion HF echoes on electric field. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	3
58	Optimal <i>F</i> Region Electron Density for the PolarDARN Radar Echo Detection Near the Resolute Bay Zenith. Radio Science, 2018, 53, 1002-1013.	1.6	3
59	Echo occurrence in the southern polar ionosphere for the SuperDARN Dome C East and Dome C North radars. Polar Science, 2021, 28, 100684.	1.2	3
60	Interplanetary magnetic field control and magnetic conjugacy of auroral <i>E</i> region backscatter. Journal of Geophysical Research, 2012, 117, .	3.3	2
61	Validation of Clyde River SuperDARN radar velocity measurements with the RISR-C incoherent scatter radar. Annales Geophysicae, 2018, 36, 1657-1666.	1.6	1
62	Velocity of SuperDARN Echoes at Intermediate Radar Ranges. Radio Science, 2020, 55, .	1.6	1