Roger H Varney

List of Publications by Year
in descending order

60 papers	760 citations	567281 15 h-index	642732 23 g-index
67 all docs	67 docs citations	67 times ranked	908 citing authors

#	Article	IF	Citations
1	Ground and Space-Based Measurement of Rocket Engine Burns in the Ionosphere. IEEE Transactions on Plasma Science, 2012, 40, 1267-1286.	1.3	58
2	Influence of an inertiaâ€gravity wave on mesospheric dynamics: A case study with the Poker Flat Incoherent Scatter Radar. Journal of Geophysical Research, 2010, 115, .	3.3	46
3	Topside Electron Density Representations for Middle and High Latitudes: A Topside Parameterization for Eâ€CHAIM Based On the NeQuick. Journal of Geophysical Research: Space Physics, 2018, 123, 1603-1617.	2.4	40
4	The electron density dependence of polar mesospheric summer echoes. Journal of Atmospheric and Solar-Terrestrial Physics, 2011, 73, 2153-2165.	1.6	35
5	Observations of electric fields associated with internal gravity waves. Journal of Geophysical Research, 2009, 114, .	3.3	31
6	SAMI2â€PE: A model of the ionosphere including multistream interhemispheric photoelectron transport. Journal of Geophysical Research, 2012, 117, .	3.3	29
7	A Bottomside Parameterization for the Empirical Canadian High Arctic Ionospheric Model. Radio Science, 2019, 54, 397-414.	1.6	26
8	Heating of the sunlit polar cap ionosphere by reflected photoelectrons. Journal of Geophysical Research: Space Physics, 2014, 119, 8660-8684.	2.4	24
9	Influence of ion outflow in coupled geospace simulations: 1. Physicsâ€based ion outflow model development and sensitivity study. Journal of Geophysical Research: Space Physics, 2016, 121, 9671-9687.	2.4	24
10	Salient Midlatitude Ionosphereâ€Thermosphere Disturbances Associated With SAPS During a Minor but Geoâ€Effective Storm at Deep Solar Minimum. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029509.	2.4	24
11	Spectral observations of polar mesospheric summer echoes at 33cm (450MHz) with the Poker Flat Incoherent Scatter Radar. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 662-674.	1.6	21
12	Radar, lidar, and optical observations in the polar summer mesosphere shortly after a space shuttle launch. Journal of Geophysical Research, 2010, 115, .	3.3	18
13	Effects of sudden commencement on the ionosphere: PFISR observations and global MHD simulation. Geophysical Research Letters, 2017, 44, 3047-3058.	4.0	17
14	Statistical Characteristics of Polar Cap Patches Observed by RISRâ€C. Journal of Geophysical Research: Space Physics, 2018, 123, 6981-6995.	2.4	17
15	Pathways of F region thermospheric mass density enhancement via soft electron precipitation. Journal of Geophysical Research: Space Physics, 2015, 120, 5824-5831.	2.4	16
16	Ion upflow dependence on ionospheric density and solar photoionization. Journal of Geophysical Research: Space Physics, 2015, 120, 10039-10052.	2.4	16
17	Topside equatorial ionospheric density, temperature, and composition under equinox, low solar flux conditions. Journal of Geophysical Research: Space Physics, 2015, 120, 3899-3912.	2.4	16
18	Fieldâ€Aligned GPS Scintillation: Multisensor Data Fusion. Journal of Geophysical Research: Space Physics, 2018, 123, 974-992.	2.4	16

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19	Mesoscale <i>F</i> Region Neutral Winds Associated With Quasiâ€steady and Transient Nightside Auroral Forms. Journal of Geophysical Research: Space Physics, 2018, 123, 7968-7984.	2.4	15
20	Modeling the interaction between convection and nonthermal ion outflows. Journal of Geophysical Research: Space Physics, 2015, 120, 2353-2362.	2.4	14
21	Influence of ion outflow in coupled geospace simulations: 2. Sawtooth oscillations driven by physicsâ€based ion outflow. Journal of Geophysical Research: Space Physics, 2016, 121, 9688-9700.	2.4	14
22	Extreme Magnetosphereâ€Ionosphereâ€Thermosphere Responses to the 5 April 2010 Supersubstorm. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027654.	2.4	14
23	First simultaneous multistation observations of the polar cap thermospheric winds. Journal of Geophysical Research: Space Physics, 2017, 122, 907-915.	2.4	13
24	Twoâ€Dimensional Maps of In Situ Ionospheric Plasma Flow Data Near Auroral Arcs Using Auroral Imagery. Journal of Geophysical Research: Space Physics, 2019, 124, 3036-3056.	2.4	12
25	AMISRâ€14: Observations of equatorial spread <i>F</i>. Geophysical Research Letters, 2015, 42, 5100-5108.	4.0	11
26	Examining the use of the NeQuick bottomside and topside parameterizations at high latitudes. Advances in Space Research, 2018, 61, 287-294.	2.6	11
27	Observations of Reduced Turbulence and Wave Activity in the Arctic Middle Atmosphere Following the January 2015 Sudden Stratospheric Warming. Journal of Geophysical Research D: Atmospheres, 2018, 123, 13259-13276.	3.3	11
28	Ionospheric Modulation by Storm Time Pc5 ULF Pulsations and the Structure Detected by PFISRâ€THEMIS Conjunction. Geophysical Research Letters, 2020, 47, e2020GL089060.	4.0	11
29	Sensitivity studies of equatorial topside electron and ion temperatures. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	9
30	Analysis of Plasma Irregularities on a Range of Scintillationâ€Scales Using the Resolute Bay Incoherent Scatter Radars. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027112.	2.4	9
31	Observations of polar mesospheric summer echoes using PFISR during the summer of 2007. Journal of Atmospheric and Solar-Terrestrial Physics, 2009, 71, 470-476.	1.6	8
32	Estimating the electron energy distribution during ionospheric modification from spectrographic airglow measurements. Journal of Geophysical Research, 2012, 117, .	3.3	8
33	Heaterâ€induced ionization inferred from spectrometric airglow measurements. Journal of Geophysical Research: Space Physics, 2014, 119, 2038-2045.	2.4	8
34	Strong ambipolarâ€driven ion upflow within the cleft ion fountain during low geomagnetic activity. Journal of Geophysical Research: Space Physics, 2016, 121, 6950-6969.	2.4	8
35	Ionospheric Electron Heating Associated With Pulsating Auroras: Joint Optical and PFISR Observations. Journal of Geophysical Research: Space Physics, 2018, 123, 4430-4456.	2.4	8
36	Radar Observations of Flows Leading to Substorm Onset Over Alaska. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028147.	2.4	8

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37	Concurrent observations at the magnetic equator of smallâ€scale irregularities and largeâ€scale depletions associated with equatorial spread <i>F</i>. Journal of Geophysical Research: Space Physics, 2015, 120, 10,883.	2.4	7
38	On the consistency of the SuperDARN radar velocity and Eâ€‰Ã—â€‰B plasma drift. Radio Science, 2016, 51, 1792-1805.	1.6	7
39	A New Framework to Incorporate Highâ€Latitude Input for Mesoscale Electrodynamics. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027562.	2.4	7
40	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
41	HIWIND Observation of Summer Season Polar Cap Thermospheric Winds. Journal of Geophysical Research: Space Physics, 2019, 124, 9270-9277.	2.4	6
42	Auroral ionospheric plasma flow extraction using subsonic retarding potential analyzers. Review of Scientific Instruments, 2020, 91, 094503.	1.3	6
43	Radar Observations of Flows Leading to Longitudinal Expansion of Substorm Onset Over Alaska. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028148.	2.4	6
44	Sources of variability in equatorial topside ionospheric and plasmaspheric temperatures. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 103, 83-93.	1.6	5
45	Effects of Substorms on Highâ€Latitude Upper Thermospheric Winds. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028193.	2.4	5
46	Statistical Study of Ion Upflow and Downflow Observed by PFISR. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA028179.	2.4	4
47	Thermospheric Impact on the Magnetosphere Through Ionospheric Outflow. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028656.	2.4	4
48	Cusp Dynamics and Polar Cap Patch Formation Associated With a Small IMF Southward Turning. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA029090.	2.4	4
49	An Investigation of Auroral E Region Energy Exchange Using Poker Flat Incoherent Scatter Radar Observations During Fall Equinox Conditions. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029371.	2.4	4
50	Direct Connection Between Auroral Oval Streamers/Flow Channels and Equatorward Traveling Ionospheric Disturbances. Frontiers in Astronomy and Space Sciences, 2021, 8, .	2.8	4
51	Topside measurements at Jicamarca during the 2019 â€•2020 deep solar minimum. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029695.	2.4	4
52	Parametric study of density cavities caused by ion outflow in the topside ionosphere. Journal of Atmospheric and Solar-Terrestrial Physics, 2017, 156, 37-49.	1.6	3
53	An Explanation for Arecibo Plasma Line Power Striations. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028734.	2.4	3
54	Examining the Auroral Ionosphere in Three Dimensions Using Reconstructed 2D Maps of Auroral Data to Drive the 3D GEMINI Model. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029749.	2.4	3

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55	Ionospheric Scintillation Data Inversion to Characterize the Structures Associated With a Series of Polar Cap Patches. Radio Science, 2021, 56, e2020RS007235.	1.6	2
56	Simultaneous Observations of a Polar Cap Sporadicâ€E Layer by Twin Incoherent Scatter Radars at Resolute. Journal of Geophysical Research: Space Physics, 2022, 127, .	2.4	2
57	On the Relation Between Soft Electron Precipitations in the Cusp Region and Solar Wind Coupling Functions. Journal of Geophysical Research: Space Physics, 2018, 123, 211-226.	2.4	1
58	Seasonal and Solar Cycle Dependence of Energy Transfer Rates in the Auroral Eâ€Region. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029719.	2.4	1
59	Ion Heating in the Polar Cap Under Northwards IMF Bz. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029155.	2.4	0
60	Auroral heating of plasma patches due to highâ€latitude reconnection. Journal of Geophysical Research: Space Physics, 2021, 126, e2021JA029657.	2.4	0