

Juha Vierinen

List of Publications by Year in descending order

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Version: 2024-02-01

80
papers

1,423
citations

393982

19
h-index

395343

33
g-index

94
all docs

94
docs citations

94
times ranked

1238
citing authors

#	ARTICLE	IF	CITATIONS
1	GNSS Observations of Ionospheric Variations During the 21 August 2017 Solar Eclipse. <i>Geophysical Research Letters</i> , 2017, 44, 12,041.	1.5	97
2	Statistical framework for estimating GNSS bias. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 1303-1312.	1.2	92
3	2022 Tonga Volcanic Eruption Induced Global Propagation of Ionospheric Disturbances via Lamb Waves. <i>Frontiers in Astronomy and Space Sciences</i> , 2022, 9, .	1.1	92
4	Ionospheric Bow Waves and Perturbations Induced by the 21 August 2017 Solar Eclipse. <i>Geophysical Research Letters</i> , 2017, 44, 12,067.	1.5	91
5	The science case for the EISCAT_3D radar. <i>Progress in Earth and Planetary Science</i> , 2015, 2, .	1.1	60
6	Subauroral and Polar Traveling Ionospheric Disturbances During the 7–9 September 2017 Storms. <i>Space Weather</i> , 2019, 17, 1748-1764.	1.3	50
7	Significant Ionospheric Hole and Equatorial Plasma Bubbles After the 2022 Tonga Volcano Eruption. <i>Space Weather</i> , 2022, 20, .	1.3	43
8	Pronounced Suppression and Pattern Merging of Equatorial Ionization Anomalies After the 2022 Tonga Volcano Eruption. <i>Journal of Geophysical Research: Space Physics</i> , 2022, 127, .	0.8	42
9	KAIRA: The Kilpisjärvi Atmospheric Imaging Receiver Array System Overview and First Results. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2015, 53, 1440-1451.	2.7	38
10	Retrieving horizontally resolved wind fields using multi-static meteor radar observations. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 4891-4907.	1.2	36
11	Traveling Ionospheric Disturbances and Ionospheric Perturbations Associated With Solar Flares in September 2017. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 5894-5917.	0.8	36
12	Radar images of the Moon at 6-meter wavelength. <i>Icarus</i> , 2017, 297, 179-188.	1.1	31
13	Ionospheric tomography in Bayesian framework with Gaussian Markov random field priors. <i>Radio Science</i> , 2015, 50, 138-152.	0.8	28
14	Observing Mesospheric Turbulence With Specular Meteor Radars: A Novel Method for Estimating Second-Order Statistics of Wind Velocity. <i>Earth and Space Science</i> , 2019, 6, 1171-1195.	1.1	28
15	Coded continuous wave meteor radar. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 829-839.	1.2	27
16	Multistatic Specular Meteor Radar Network in Peru: System Description and Initial Results. <i>Earth and Space Science</i> , 2021, 8, e2020EA001293.	1.1	25
17	Lag profile inversion method for EISCAT data analysis. <i>Annales Geophysicae</i> , 2008, 26, 571-581.	0.6	24
18	Radiometric measurements of electron temperature and opacity of ionospheric perturbations. <i>Radio Science</i> , 2015, 50, 130-137.	0.8	24

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19	Beacon satellite receiver for ionospheric tomography. <i>Radio Science</i> , 2014, 49, 1141-1152.	0.8	23
20	Coherent MIMO to Improve Aperture Synthesis Radar Imaging of Field-Aligned Irregularities: First Results at Jicamarca. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2018, 56, 2980-2990.	2.7	23
21	Gaussian Markov Random Field Priors in Ionospheric 3-D Multi-Instrument Tomography. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2018, 56, 7009-7021.	2.7	23
22	Ionospheric electron density profiles inverted from a spectral riometer measurement. <i>Geophysical Research Letters</i> , 2014, 41, 5370-5375.	1.5	19
23	Spacecraft Radio Frequency Fluctuations in the Solar Corona: A MESSENGERâ€“HELIOS Composite Study. <i>Astrophysical Journal</i> , 2019, 871, 202.	1.6	19
24	Fourâ€“Dimensional Quantification of Kelvinâ€“Helmholtz Instabilities in the Polar Summer Mesosphere Using Volumetric Radar Imaging. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086081.	1.5	18
25	Electrified Postsunrise Ionospheric Perturbations at Millstone Hill. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095151.	1.5	18
26	Broadband meterâ€“wavelength observations of ionospheric scintillation. <i>Journal of Geophysical Research: Space Physics</i> , 2014, 119, 10,544.	0.8	17
27	Could negative ion production explain the polar mesosphere winter echo (PMWE) modulation in active HF heating experiments?. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	15
28	High latitude artificial periodic irregularity observations with the upgraded EISCAT heating facility. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2013, 105-106, 253-261.	0.6	15
29	Dataâ€“driven numerical simulations of equatorial spread F in the Peruvian sector 3: Solstice. <i>Journal of Geophysical Research: Space Physics</i> , 2015, 120, 10,809.	0.8	15
30	New incoherent scatter diagnostic methods for the heated D-region ionosphere. <i>Annales Geophysicae</i> , 2008, 26, 2273-2279.	0.6	14
31	A multistatic HF beacon network for ionospheric specification in the Peruvian sector. <i>Radio Science</i> , 2016, 51, 392-401.	0.8	13
32	High temporal resolution observations of auroral electron density using superthermal electron enhancement of Langmuir waves. <i>Geophysical Research Letters</i> , 2016, 43, 5979-5987.	1.5	13
33	ICEBEAR: An Allâ€“Digital Bistatic Coded Continuousâ€“Wave Radar for Studies of the <i>E</i> Region of the Ionosphere. <i>Radio Science</i> , 2019, 54, 349-364.	0.8	13
34	First Studies of Mesosphere and Lower Thermosphere Dynamics Using a Multistatic Specular Meteor Radar Network Over Southern Patagonia. <i>Earth and Space Science</i> , 2021, 8, e2020EA001356.	1.1	13
35	Bayesian statistical ionospheric tomography improved by incorporating ionosonde measurements. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 1859-1869.	1.2	12
36	Pulsating aurora and cosmic noise absorption associated with growth-phase arcs. <i>Annales Geophysicae</i> , 2018, 36, 59-69.	0.6	12

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37	Solar Flare Effects on 150â€škm Echoes Observed Over Jicamarca: WACCMâ€š Simulations. Geophysical Research Letters, 2019, 46, 10951-10958.	1.5	12
38	Conjugate Ionospheric Perturbation During the 2017 Solar Eclipse. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028531.	0.8	12
39	Mismatched Filtering of Aperiodic Quadriphase Codes. IEEE Transactions on Information Theory, 2008, 54, 1742-1749.	1.5	11
40	Radio Occultation Observations of the Solar Corona Over 1.60â€š“1.86â€š TM : Faraday Rotation and Frequency Shift Analysis. Journal of Geophysical Research: Space Physics, 2019, 124, 7761-7777.	0.8	11
41	Coronal Electron Density Fluctuations Inferred from Akatsuki Spacecraft Radio Observations. Solar Physics, 2020, 295, 1.	1.0	11
42	A graphics architecture for high-end interactive television terminals. ACM Transactions on Multimedia Computing, Communications and Applications, 2006, 2, 343-357.	3.0	10
43	Polyphase alternating codes. Annales Geophysicae, 2008, 26, 2237-2243.	0.6	10
44	Transmission code optimization method for incoherent scatter radar. Annales Geophysicae, 2008, 26, 2923-2927.	0.6	10
45	Plasma parameter estimation from multistatic, multibeam incoherent scatter data. Journal of Geophysical Research: Space Physics, 2014, 119, 10,528.	0.8	10
46	Fast comparison of IS radar code sequences for lag profile inversion. Annales Geophysicae, 2008, 26, 2291-2301.	0.6	9
47	Phase-coded pulse aperiodic transmitter coding. Annales Geophysicae, 2009, 27, 2799-2811.	0.6	9
48	First artificial periodic inhomogeneity experiments at HAARP. Geophysical Research Letters, 2015, 42, 1297-1303.	1.5	9
49	An explanation for observations of apparently high-altitude meteors. Monthly Notices of the Royal Astronomical Society, 2014, 438, 2406-2412.	1.6	8
50	Faraday rotation fluctuations of MESSENGER radio signals through the equatorial lower corona near solar minimum. Space Weather, 2017, 15, 310-324.	1.3	8
51	Radar imaging with EISCAT 3D. Annales Geophysicae, 2021, 39, 119-134.	0.6	8
52	Radar observations of thermal plasma oscillations in the ionosphere. Geophysical Research Letters, 2017, 44, 5301-5307.	1.5	6
53	Range-Doppler Mapping of Space-Based Targets Using the JRO 50â€šMHz Radar. Earth, Moon and Planets, 2017, 120, 169-188.	0.3	6
54	The Case for Combining a Large Lowâ€šBand Very High Frequency Transmitter With Multiple Receiving Arrays for Geospace Research: A Geospace Radar. Radio Science, 2019, 54, 533-551.	0.8	6

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55	First observations of the McMurdoâ€™South Pole oblique ionospheric HF channel. Atmospheric Measurement Techniques, 2020, 13, 3023-3031.	1.2	6
56	Towards multi-purpose IS radar experiments. Annales Geophysicae, 2008, 26, 2281-2289.	0.6	5
57	Allâ€™sky interferometric riometry. Radio Science, 2015, 50, 1050-1061.	0.8	5
58	In Vitro Volume Imaging of Articular Cartilage Using Chirp-Coded High Frequency Ultrasound. , 2018, , .		5
59	Determination of the Azimuthal Extent of Coherent Eâ€™Region Scatter Using the ICEBEAR Linear Receiver Array. Radio Science, 2021, 56, e2020RS007191.	0.8	5
60	Radar observability of near-Earth objects using EISCAT 3D. Annales Geophysicae, 2020, 38, 861-879.	0.6	5
61	Multiple E-Region Radar Propagation Modes Measured by the VHF SIMONe Norway System During Active Ionospheric Conditions. Frontiers in Astronomy and Space Sciences, 2022, 9, .	1.1	5
62	A Search for Meteoroid Lunar Impact Generated Electromagnetic Pulses. Earth, Moon and Planets, 2016, 119, 1-21.	0.3	4
63	The 3â€™ Distribution of Artificial Aurora Induced by HF Radio Waves in the Ionosphere. Journal of Geophysical Research: Space Physics, 2019, 124, 2992.	0.8	4
64	Frequency spectra of horizontal winds in the mesosphere and lower thermosphere region from multistatic specular meteor radar observations during the SIMONe 2018 campaign. Earth, Planets and Space, 2022, 74, .	0.9	4
65	Amplitude domain analysis of strong range and Doppler spread radar echos. Annales Geophysicae, 2008, 26, 2419-2426.	0.6	3
66	Kilpisjärvi Atmospheric Imaging Receiver Array — First results. , 2013, , .		3
67	An Explanation for Arecibo Plasma Line Power Striations. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028734.	0.8	3
68	Open graphical framework for interactive TV. Multimedia Tools and Applications, 2006, 30, 189-203.	2.6	2
69	Radio Array of Portable Interferometric Detectors (RAPID): Development of a deployable multiple application radio array. , 2015, , .		2
70	On the theory of the incoherent scatter gyrolines. Radio Science, 2017, 52, 723-730.	0.8	2
71	A New Technique for Investigating Dust Charging in the PMSE Source Region. Geophysical Research Letters, 2020, 47, e2020GL089639.	1.5	2
72	GPS Data Processing for Scientific Studies of the Earthâ€™s Atmosphere and Near-Space Environment. , 2016, , 1-12.		2

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73	Observing electric field and neutral wind with EISCAT 3D. <i>Annales Geophysicae</i> , 2021, 39, 961-974.	0.6	2
74	On the determination of ionospheric electron density profiles using multi-frequency riometry. <i>Geoscientific Instrumentation, Methods and Data Systems</i> , 2022, 11, 25-35.	0.6	2
75	Polyphase-coded incoherent scatter measurements at Millstone Hill. <i>Radio Science</i> , 2013, 48, 519-526.	0.8	1
76	Millstone Hill ISR Measurements of Small Aspect Angle Spectra. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2019JA027708.	0.8	1
77	Validation of Multistatic Meteor Radar Analysis Using Modeled Mesospheric Dynamics: An Assessment of the Reliability of Gradients and Vertical Velocities. <i>Journal of Geophysical Research D: Atmospheres</i> , 2022, 127, .	1.2	1
78	Fractional baud-length coding. <i>Annales Geophysicae</i> , 2011, 29, 1189-1196.	0.6	0
79	Planetary radar science case for EISCAT-3D. <i>Annales Geophysicae</i> , 2021, 39, 427-438.	0.6	0
80	GPS Data Processing for Scientific Studies of the Earth's Atmosphere and Near-Space Environment. , 2017, , 805-816.		0