

# Nickolay Ivchenko

## List of Publications by Year in descending order

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83  
papers

1,482  
citations

361045

20  
h-index

360668

35  
g-index

97  
all docs

97  
docs citations

97  
times ranked

1379  
citing authors

#	ARTICLE	IF	CITATIONS
1	Lower-thermosphere ionosphere (LTI) quantities: current status of measuring techniques and models. <i>Annales Geophysicae</i> , 2021, 39, 189-237.	0.6	25
2	A sublimated water atmosphere on Ganymede detected from Hubble Space Telescope observations. <i>Nature Astronomy</i> , 2021, 5, 1043-1051.	4.2	24
3	Multi-Point Measurements of the Plasma Properties Inside an Aurora From the SPIDER Sounding Rocket. <i>Journal of Geophysical Research: Space Physics</i> , 2021, 126, e2021JA029204.	0.8	5
4	On the relationship of energetic particle precipitation and mesopause temperature. <i>Annales Geophysicae</i> , 2021, 39, 795-809.	0.6	1
5	Fine-scale dynamics of fragmented aurora-like emissions. <i>Annales Geophysicae</i> , 2021, 39, 975-989.	0.6	3
6	Variability of $10^8$ m's poynting flux: A parameter study using MHD simulations. <i>Planetary and Space Science</i> , 2020, 192, 105058.	0.9	2
7	An attempt to detect transient changes in $10^8$ m's $SO$ and NaCl atmosphere. <i>Journal of Geophysical Research: Space Physics</i> , 2020, 125, e2020JA028225.	1.1	16
8	An Analysis of the Statistics and Systematics of Limb Anomaly Detections in HST/STIS Transit Images of Europa. <i>Astronomical Journal</i> , 2020, 159, 155.	1.9	10
9	The MATS satellite mission gravity wave studies by Mesospheric Airglow/Aerosol Tomography and Spectroscopy. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 431-455.	1.9	13
10	Collisionless electron cooling in a plasma thruster plume: experimental validation of a kinetic model. <i>Plasma Sources Science and Technology</i> , 2020, 29, 035029.	1.3	6
11	Horizontal electric fields from flow of auroral $O^+$ and $P^+$ ions at sub-second temporal resolution. <i>Annales Geophysicae</i> , 2020, 38, 845-859.	0.6	3
12	Patch Size Evolution During Pulsating Aurora. <i>Journal of Geophysical Research: Space Physics</i> , 2019, 124, 4725-4738.	0.8	13
13	Non-Maxwellian electron energy probability functions in the plume of a SPT-100 Hall thruster. <i>Plasma Sources Science and Technology</i> , 2018, 27, 015006.	1.3	12
14	Effect of second harmonic in pulse-width-modulation-based DAC for feedback of digital fluxgate magnetometer. <i>Measurement Science and Technology</i> , 2018, 29, 045008.	1.4	2
15	SELMA mission: How do airless bodies interact with space environment? The Moon as an accessible laboratory. <i>Planetary and Space Science</i> , 2018, 156, 23-40.	0.9	5
16	Photocurrent modelling and experimental confirmation for meteoric smoke particle detectors on board atmospheric sounding rockets. <i>Atmospheric Measurement Techniques</i> , 2018, 11, 5299-5314.	1.2	2
17	Characterisation of the analogue read-out chain for the CCDs onboard the mesospheric airglow/aerosol tomography and spectroscopy (MATS). , 2018, , .		2
18	DETECTION OF A HYDROGEN CORONA IN HST Ly $\alpha$ IMAGES OF EUROPA IN TRANSIT OF JUPITER. <i>Astronomical Journal</i> , 2017, 153, 67.	1.9	27

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19	Deployment of Bistable Self-Deployable Tape Spring Booms Using a Gravity Offloading System. Journal of Aerospace Engineering, 2017, 30, .	0.8	20
20	Detection of a hydrogen corona at Callisto. Journal of Geophysical Research E: Planets, 2017, 122, 1046-1055.	1.5	14
21	New constraints on Ganymede's hydrogen corona: Analysis of Lyman- $\alpha$ emissions observed by HST/STIS between 1998 and 2014. Planetary and Space Science, 2017, 148, 35-44.	0.9	20
22	Post-flight trajectory reconstruction of suborbital free-flyers using GPS raw data. Journal of Geodetic Science, 2017, 7, .	0.5	1
23	Relation of anomalous F $\tilde{A}$ region radar echoes in the high-latitude ionosphere to auroral precipitation. Annales Geophysicae, 2017, 35, 475-479.	0.6	3
24	Variations in energy, flux, and brightness of pulsating aurora measured at high time resolution. Annales Geophysicae, 2017, 35, 493-503.	0.6	10
25	Plasma line observations from the EISCAT Svalbard Radar during the International Polar Year. Annales Geophysicae, 2017, 35, 1143-1149.	0.6	2
26	Small Explorer for Advanced Missions (SEAM), a CCSDS compatible CubeSat supported on a global commercial ground network. , 2016, , .		1
27	Constraints on an exosphere at Ceres from Hubble Space Telescope observations. Geophysical Research Letters, 2016, 43, 2465-2472.	1.5	19
28	Electrodynamics and energy characteristics of aurora at high resolution by optical methods. Journal of Geophysical Research: Space Physics, 2016, 121, 5966-5974.	0.8	10
29	Europa's far ultraviolet oxygen aurora from a comprehensive set of HST observations. Journal of Geophysical Research: Space Physics, 2016, 121, 2143-2170.	0.8	54
30	Auroral ion acoustic wave enhancement observed with a radar interferometer system. Annales Geophysicae, 2015, 33, 837-844.	0.6	4
31	Digital fluxgate magnetometer: design notes. Measurement Science and Technology, 2015, 26, 125901.	1.4	14
32	Coexisting structures from high $\hat{e}$ and low $\hat{e}$ energy precipitation in fine $\hat{e}$ scale aurora. Geophysical Research Letters, 2015, 42, 1290-1296.	1.5	11
33	Compound auroral micromorphology: ground-based high-speed imaging. Earth, Planets and Space, 2015, 67, 23.	0.9	13
34	On the relation of Langmuir turbulence radar signatures to auroral conditions. Journal of Geophysical Research: Space Physics, 2014, 119, 8499-8511.	0.8	7
35	RELATIVE BRIGHTNESS OF THE O <sup>+</sup> (<sup>2</sup> <i>D</i> - <sup>2</sup> <i>P</i>) DOUBLETS IN LOW-ENERGY AURORAE. Astrophysical Journal, 2014, 797, 64.	1.6	6
36	Radar interferometer calibration of the EISCAT Svalbard Radar and a additional receiver station. Journal of Atmospheric and Solar-Terrestrial Physics, 2013, 105-106, 287-292.	0.6	3

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37	Technical Note: A novel rocket-based in situ collection technique for mesospheric and stratospheric aerosol particles. <i>Atmospheric Measurement Techniques</i> , 2013, 6, 777-785.	1.2	3
38	Enhanced EISCAT UHF backscatter during high-energy auroral electron precipitation. <i>Annales Geophysicae</i> , 2013, 31, 1681-1687.	0.6	10
39	Observations of HF-induced instability in the auroral E region. <i>Annales Geophysicae</i> , 2013, 31, 1103-1108.	0.6	1
40	Monoenergetic high-energy electron precipitation in thin auroral filaments. <i>Geophysical Research Letters</i> , 2012, 39, .	1.5	7
41	Project "Development of the Methodology of Experiment and Technical Support for Studies of the Flow Cyclotron Maser in the Earth's Magnetosphere by Creating an Artificial Ionization Cloud From a Geophysical Rocket". <i>Optica Pura Y Aplicada</i> , 2012, 45, 45-49.	0.0	0
42	Dynamics and characteristics of black aurora as observed by high-resolution ground-based imagers and radar. <i>International Journal of Remote Sensing</i> , 2011, 32, 2973-2985.	1.3	7
43	Separating and quantifying ionospheric responses to proton and electron precipitation over Svalbard. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	3
44	Energy and flux variations across thin auroral arcs. <i>Annales Geophysicae</i> , 2011, 29, 1699-1712.	0.6	24
45	Simultaneous observations of small multi-scale structures in an auroral arc. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2010, 72, 633-637.	0.6	14
46	Using multispectral optical observations to identify the acceleration mechanism responsible for flickering aurora. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	23
47	Rise and fall of electron temperatures: Ohmic heating of ionospheric electrons from underdense HF radio wave pumping. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	19
48	Resonance scattering by auroral N <sub>2</sub> <sup>+</sup> : steady state theory and observations from Svalbard. <i>Annales Geophysicae</i> , 2009, 27, 3465-3478.	0.6	7
49	Simultaneous imaging of aurora on small scale in OI (777.4 nm) and N <sub>2</sub> <sup>+</sup> 1P to estimate energy and flux of precipitation. <i>Annales Geophysicae</i> , 2009, 27, 2881-2891.	0.6	31
50	Modelling of N <sub>2</sub> <sup>+</sup> 1P emission rates in aurora using various cross sections for excitation. <i>Annales Geophysicae</i> , 2009, 27, 2545-2553.	0.6	15
51	On the equatorward phase propagation of high-m ULF pulsations observed by radars. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2009, 71, 1677-1680.	0.6	20
52	First direct optical observations of plasma flows using afterglow of in discrete aurora. <i>Journal of Atmospheric and Solar-Terrestrial Physics</i> , 2009, 71, 228-238.	0.6	19
53	F-region electron heating by X-mode radiowaves in underdense conditions. <i>Annales Geophysicae</i> , 2009, 27, 2585-2592.	0.6	20
54	Small-scale structures in flickering aurora. <i>Geophysical Research Letters</i> , 2008, 35, .	1.5	16

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55	Miniaturized digital fluxgate magnetometer for small spacecraft applications. Measurement Science and Technology, 2008, 19, 015202.	1.4	44
56	An optical study of multiple NEIAL events driven by low energy electron precipitation. Annales Geophysicae, 2008, 26, 2435-2447.	0.6	6
57	Using spectral characteristics to interpret auroral imaging in the 731.9 nm O <sup>+</sup> line. Annales Geophysicae, 2008, 26, 1905-1917.	0.6	8
58	Rotational temperature of N <sup>2+</sup> (0,2) ions from spectrographic measurements used to infer the energy of precipitation in different auroral forms and compared with radar measurements. Annales Geophysicae, 2008, 26, 853-866.	0.6	10
59	Morphology and dynamics of aurora at fine scale: first results from the ASK instrument. Annales Geophysicae, 2008, 26, 1041-1048.	0.6	37
60	Phase calibration of the EISCAT Svalbard Radar interferometer using optical satellite signatures. Annales Geophysicae, 2006, 24, 2419-2427.	0.6	5
61	Optical Flow Analysis of the Aurora Borealis. IEEE Geoscience and Remote Sensing Letters, 2006, 3, 159-163.	1.4	19
62	Temporal and spatial evolution of discrete auroral arcs as seen by Cluster. Annales Geophysicae, 2005, 23, 2531-2557.	0.6	25
63	Multispectral observations of auroral rays and curls. Geophysical Research Letters, 2005, 32, n/a-n/a.	1.5	19
64	Dynamic rayed aurora and enhanced ion-acoustic radar echoes. Annales Geophysicae, 2005, 23, 3-11.	0.6	30
65	EMMA - the Electric and Magnetic Monitor of the Aurora on Astrid-2. Annales Geophysicae, 2004, 22, 115-123.	0.6	7
66	Observation of O <sup>+</sup> (<sup>4</sup>P-<sup>4</sup>D<sup>0</sup>) lines in electron aurora over Svalbard. Annales Geophysicae, 2004, 22, 2805-2817.	0.6	5
67	Statistics of Joule heating in the auroral zone and polar cap using Astrid-2 satellite Poynting flux. Annales Geophysicae, 2004, 22, 4133-4142.	0.6	27
68	Observation of O <sup>+</sup> 4P-4D <sup>0</sup> lines in proton aurora over Svalbard. Geophysical Research Letters, 2004, 31, n/a-n/a.	1.5	5
69	Electron signatures and Alfvén waves. Journal of Geophysical Research, 2002, 107, SMP 15-1.	3.3	41
70	â€œCurrent singularitiesâ€•observed on Astrid-2. Advances in Space Research, 2002, 30, 1779-1782.	1.2	3
71	Inhomogeneous transverse electric fields and wave generation in the auroral region: A statistical study. Journal of Geophysical Research, 2001, 106, 10803-10816.	3.3	24
72	Observation of low frequency electromagnetic activity at 1000 km altitude. Annales Geophysicae, 2001, 19, 643-648.	0.6	12

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73	Magnetospheric response to the solar wind as indicated by the cross-polar potential drop and the low-latitude asymmetric disturbance field. <i>Annales Geophysicae</i> , 2001, 19, 649-653.	0.6	2
74	First results of electric field and density observations by Cluster EFW based on initial months of operation. <i>Annales Geophysicae</i> , 2001, 19, 1219-1240.	0.6	273
75	Temporal evolution of the electric field accelerating electrons away from the auroral ionosphere. <i>Nature</i> , 2001, 414, 724-727.	13.7	132
76	Disturbance of plasma environment in the vicinity of the Astrid-2 microsatellite. <i>Annales Geophysicae</i> , 2001, 19, 655-666.	0.6	12
77	Inertial Alfvén waves in the ionosphere: theoretical considerations and experimental constraints. AIP Conference Proceedings, 2000, . .	0.3	0
78	Electron Energization by Alfvén Waves: Freja and Sounding Rocket Observations. <i>Physica Scripta</i> , 2000, T84, 151.	1.2	14
79	A statistical study of the magnetosphere boundary crossings by the Geotail satellite. <i>Geophysical Research Letters</i> , 2000, 27, 2881-2884.	1.5	17
80	Quasiperiodic oscillations observed at the edge of an auroral arc by auroral turbulence 2. <i>Geophysical Research Letters</i> , 1999, 26, 3365-3368.	1.5	36
81	Multipoint measurements of large DC electric fields and shears in the auroral zone. <i>Geophysical Research Letters</i> , 1999, 26, 3369-3372.	1.5	9
82	Multiple-point electron measurements in a nightside auroral arc: Auroral turbulence II particle observations. <i>Geophysical Research Letters</i> , 1999, 26, 3361-3364.	1.5	34
83	Generation mechanisms of the ELF-ULF waves related to the flux transfer events. <i>Advances in Space Research</i> , 1997, 19, 1933-1937.	1.2	1