Alexander L Mishev

List of Publications by Year
in descending order

73 papers	1,603 citations	279701 23 h-index	315616 38 g-index
74 all docs	74 docs citations	74 times ranked	1230 citing authors

#	Article	IF	Citations
1	A new model of cosmogenic production of radiocarbon 14C in the atmosphere. Earth and Planetary Science Letters, 2012, 337-338, 114-120.	1.8	118
2	Heliospheric modulation of cosmic rays during the neutron monitor era: Calibration using PAMELA data for 2006â€“2010. Journal of Geophysical Research: Space Physics, 2017, 122, 3875-3887.	0.8	107
3	Production of cosmogenic isotopes ⁷Be, ¹⁰Be, ¹⁴C, ²²Na, and ³⁶Cl in the atmosphere: Altitudinal profiles of yield functions. Journal of Geophysical Research D: Atmospheres, 2016, 121, 8125-8136.	1.2	96
4	Neutron monitor yield function: New improved computations. Journal of Geophysical Research: Space Physics, 2013, 118, 2783-2788.	0.8	81
5	The first<i>SEPServer</i>event catalogue ~68-MeV solar proton events observed at 1 AU in 1996â€“2010. Journal of Space Weather and Space Climate, 2013, 3, A12.	1.1	77
6	Analysis of the ground level enhancement on 17 May 2012 using data from the global neutron monitor network. Journal of Geophysical Research: Space Physics, 2014, 119, 670-679.	0.8	72
7	GLE and Sub-GLE Redefinition in the Light of High-Altitude Polar Neutron Monitors. Solar Physics, 2017, 292, 1.	1.0	62
8	First Analysis of Ground-Level Enhancement (GLE) 72 on 10 September 2017: Spectral and Anisotropy Characteristics. Solar Physics, 2018, 293, 1.	1.0	51
9	Eccentric dipole approximation of the geomagnetic field: Application to cosmic ray computations. Advances in Space Research, 2013, 52, 22-29.	1.2	39
10	Can we properly model the neutron monitor count rate?. Journal of Geophysical Research: Space Physics, 2015, 120, 7172-7178.	0.8	39
11	Assessment of spectral and angular characteristics of sub-GLE events using the global neutron monitor network. Journal of Space Weather and Space Climate, 2017, 7, A28.	1.1	39
12	Investigating the Origins of Two Extreme Solar Particle Events: Proton Source Profile and Associated Electromagnetic Emissions. Astrophysical Journal, 2017, 839, 79.	1.6	37
13	In Situ Data and Effect Correlation During September 2017 Solar Particle Event. Space Weather, 2019, 17, 99-117.	1.3	35
14	The first ground-level enhancement of solar cycle 25 on 28 October 2021. Astronomy and Astrophysics, 2022, 660, L5.	2.1	34
15	Updated Neutronâ€Monitor Yield Function: Bridging Between In Situ and Groundâ€Based Cosmic Ray Measurements. Journal of Geophysical Research: Space Physics, 2020, 125, e2019JA027433.	0.8	33
16	Analysis of the Ground-Level Enhancements on 14 July 2000 and 13 December 2006 Using Neutron Monitor Data. Solar Physics, 2016, 291, 1225-1239.	1.0	32
17	Revisited Reference Solar Proton Event of 23 February 1956: Assessment of the Cosmogenicâ€Isotope Method Sensitivity to Extreme Solar Events. Journal of Geophysical Research: Space Physics, 2020, 125, e2020JA027921.	0.8	31
18	Model for induced ionization by galactic cosmic rays in the Earth atmosphere and ionosphere. Advances in Space Research, 2009, 44, 1002-1007.	1.2	30

#	Article	IF	Citations
19	Assessment of the Radiation Environment at Commercial Jetâ€Flight Altitudes During GLE 72 on 10 September 2017 Using Neutron Monitor Data. Space Weather, 2018, 16, 1921-1929.	1.3	28
20	Numerical model for computation of effective and ambient dose equivalent at flight altitudes. Journal of Space Weather and Space Climate, 2015, 5, A10.	1.1	27
21	Ionization of the Polar Atmosphere by Energetic Electron Precipitation Retrieved From Balloon Measurements. Geophysical Research Letters, 2019, 46, 990-996.	1.5	27
22	Computation of dose rate at flight altitudes during ground level enhancements no. 69, 70 and 71. Advances in Space Research, 2015, 55, 354-362.	1.2	26
23	Mini Neutron Monitors at Concordia Research Station, Central Antarctica. Journal of Astronomy and Space Sciences, 2015, 32, 281-287.	0.3	26
24	Impact of cosmic rays and solar energetic particles on the Earthâ€™s ionosphere and atmosphere. Journal of Space Weather and Space Climate, 2013, 3, A14.	1.1	24
25	Normalized ionization yield function for various nuclei obtained with full Monte Carlo simulations. Advances in Space Research, 2011, 48, 19-24.	1.2	22
26	Current status and possible extension of the global neutron monitor network. Journal of Space Weather and Space Climate, 2020, 10, 17.	1.1	22
27	Ionization effect of solar protons in the Earth atmosphere â€" Case study of the 20 January 2005 SEP event. Advances in Space Research, 2011, 48, 1232-1237.	1.2	21
28	New Method of Assessment of the Integral Fluence of Solar Energetic (>â€‰1 GV Rigidity) Particles from Neutron Monitor Data. Solar Physics, 2019, 294, 1.	1.0	19
29	Multiple Sources of Solar High-energy Protons. Astrophysical Journal, 2021, 915, 12.	1.6	19
30	High-Resolution Spectral and Anisotropy Characteristics of Solar Protons During the GLE Nâ˜73 on 28 October 2021 Derived with Neutron-Monitor Data Analysis. Solar Physics, 2022, 297, .	1.0	19
31	Model CRAC:EPII for atmospheric ionization due to precipitating electrons: Yield function and applications. Journal of Geophysical Research: Space Physics, 2016, 121, 1736-1743.	0.8	18
32	Interplanetary Protons versus Interacting Protons in the 2017 September 10 Solar Eruptive Event. Astrophysical Journal, 2020, 890, 13.	1.6	18
33	Spectra of high energy electron precipitation and atmospheric ionization rates retrieval from balloon measurements. Science of the Total Environment, 2019, 693, 133242.	3.9	17
34	Calculation of atmospheric ionization induced by electrons with non-vertical precipitation: Updated model CRAC-EPII. Advances in Space Research, 2017, 59, 2295-2300.	1.2	16
35	GLE # 67 Event on 2 November 2003: An Analysis of the Spectral and Anisotropy Characteristics Using Verified Yield Function and Detrended Neutron Monitor Data. Solar Physics, 2021, 296, 1.	1.0	16
36	Recent gamma background measurements at high mountain altitude. Journal of Environmental Radioactivity, 2012, 113, 77-82.	0.9	15

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37	GAMMA RAYS STUDIES BASED ON ATMOSPHERIC CHERENKOV TECHNIQUE AT HIGH MOUNTAIN ALTITUDE. International Journal of Modern Physics A, 2005, 20, 7016-7019.	0.5	13
38	An Anisotropic Cosmic-Ray Enhancement Event on 07-June-2015: A Possible Origin. Solar Physics, 2018, 293, 1.	1.0	12
39	Application of the Verified Neutron Monitor Yield Function for an Extended Analysis of the GLE <i>#</i> 71 on 17 May 2012. Space Weather, 2021, 19, e2020SW002626.	1.3	12
40	Computation of radiation environment during ground level enhancements 65, 69 and 70 at equatorial region and flight altitudes. Advances in Space Research, 2014, 54, 528-535.	1.2	11
41	Contribution of cosmic ray particles to radiation environment at high mountain altitude: Comparison of Monte Carlo simulations with experimental data. Journal of Environmental Radioactivity, 2016, 153, 15-22.	0.9	11
42	About the Altitude Profile of the Atmospheric Cut-Off of Cosmic Rays: New Revised Assessment. Solar Physics, 2021, 296, 1.	1.0	11
43	Experimental study and Monte Carlo modeling of the Cherenkov effect. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 474, 101-107.	0.7	10
44	Neutron monitor count rate increase as a proxy for dose rate assessment at aviation altitudes during GLEs. Journal of Space Weather and Space Climate, 2018, 8, A46.	1.1	10
45	Spatial Organization of Seven Extreme Solar Energetic Particle Events. Astrophysical Journal Letters, 2018, 862, L20.	3.0	10
46	Analysis of Lateral Distribution of Atmospheric Cherenkov Light at High Mountain Altitude Towards Event Reconstruction. , 2012, 2012, 1-12.		10
47	Upgrade of GLE database: Assessment of effective dose rate at flight altitude. Advances in Space Research, 2018, 62, 398-407.	1.2	9
48	Ionization in the Earthâ€™s Atmosphere Due to Isotropic Energetic Electron Precipitation: Ion Production and Primary Electron Spectra. Remote Sensing, 2021, 13, 4161.	1.8	9
49	Relationships between neutron fluxes and rain flows. Advances in Space Research, 2010, 46, 637-641.	1.2	8
50	Computations of cosmic ray propagation in the Earth's atmosphere, towards a GLE analysis. Journal of Physics: Conference Series, 2013, 409, 012152.	0.3	8
51	Cosmic ray studies at Moussala â€“ Past, present and future. Advances in Space Research, 2009, 44, 1173-1177.	1.2	7
52	Preface to measurement, specification and forecasting of the Solar Energetic Particle (SEP) environment and Ground Level Enhancements (GLEs). Journal of Space Weather and Space Climate, 2019, 9, E1.	1.1	6
53	Fluences of solar energetic particles for last three GLE events: Comparison of different reconstruction methods. Advances in Space Research, 2022, 70, 2585-2592.	1.2	6
54	Short- and Medium-Term Induced Ionization in the Earth Atmosphere by Galactic and Solar Cosmic Rays. International Journal of Atmospheric Sciences, 2013, 2013, 1-9.	0.5	5

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55	Neutron monitor yield function for solar neutrons: A new computation. Journal of Geophysical Research: Space Physics, 2016, 121, 117-128.	0.8	5
56	Measurements of natural radiation with an MDU Liulin type device at ground and in the atmosphere at various conditions in the Arctic region. Radiation Measurements, 2022, 154, 106757.	0.7	5
57	Simulations and measurements of Atmospheric Cherenkov light, neutron and muon cosmic ray flux at Basic Environmental Observatory Moussala for space weather studies. Journal of Instrumentation, 2007, 2, P04002-P04002.	0.5	3
58	Ionization effect in the Earthâ€™s atmosphere due to cosmic rays during the GLE<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si11.svg"><mml:mrow><mml:mo>#</mml:mo></mml:mrow></mml:math>71 on 17 May 2012. Advances in Space Research, 2022, 69, 2893-2901.	1.2	3
59	Modelling and study of the Cherenkov effect. Radiation Physics and Chemistry, 2001, 61, 371-373.	1.4	2
60	Mass Composition and Energy Estimation of Primary Cosmic Ray Using Atmospheric Cherenkov Light Reconstruction. AIP Conference Proceedings, 2007, , .	0.3	2
61	Comparison of ionization effect in the atmosphere of the Earth due to GLE 65 and GLE 69. Journal of Physics: Conference Series, 2013, 409, 012211.	0.3	2
62	The upgraded GLE database includes assessment of radiation exposure at flight altitudes. Journal of Physics: Conference Series, 2019, 1181, 012061.	0.3	2
63	Highâ€Altitude Polar NM With the New DAQ System as a Tool to Study Details of the Cosmicâ€Ray Induced Nucleonic Cascade. Journal of Geophysical Research: Space Physics, 2021, 126, e2020JA028959.	0.8	2
64	Global planetary ionization maps in Regener-Pfotzer cosmic ray maximum for GLE 66 during magnetic superstorm of 29â€“31 October 2003. Advances in Space Research, 2022, 70, 2593-2601.	1.2	2
65	Diurnal anisotropy of polar neutron monitors: Dome C looks poleward. Advances in Space Research, 2022, 70, 2618-2624.	1.2	2
66	Analysis of sub-GLE and GLE events using NM data: space weather applications. Journal of Physics: Conference Series, 2019, 1181, 012006.	0.3	1
67	Contribution au dÃ©veloppement de nouvelles techniques pour la dÃ©tection des rayonnements cosmiques. Radioprotection, 2003, 38, 147-165.	0.5	1
68	A New neutron monitor yield function computed for different altitudes: Application for a GLE analysis. , 2016, , .		1
69	Cherenkov Telescope for Ground Based Gamma Astronomy Kartalska Field Project Proposal. AIP Conference Proceedings, 2007, , .	0.3	0
70	The Neutron Flux Meter and Muon Hodoscope Present Status and Further Development. AIP Conference Proceedings, 2007, , .	0.3	0
71	Connection Between Astroparticle and Environmental Studies at BEO Moussala. AIP Conference Proceedings, 2007, , .	0.3	0
72	The influence of low energy hadron interaction models in CORSIKA code on atmospheric ionization due to heavy nuclei. Journal of Physics: Conference Series, 2013, 409, 012209.	0.3	0

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73	Improved COsmic Ray Ionization Model for Atmosphere and Ionosphere (CORIMIA) with account of Monte Carlo Simulations. Journal of Physics: Conference Series, 2013, 409, 012212.	0.3	0