Anatoly A Petrukhin

List of Publications by Year
in descending order

111	699	623734	677142
papers	citations	14 h-index	22 g-index

111	111	111	242
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Muon puzzle in cosmic ray experiments and its possible solution. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 742, 228-231.	1.6	40
2	Real-time data of muon hodoscope URAGAN. Advances in Space Research, 2015, 56, 2693-2705.	2.6	37
3	Investigation of very high energy cosmic rays by means of inclined muon bundles. Astroparticle Physics, 2018, 98, 13-20.	4.3	37
4	The array for EAS neutron component detection. Journal of Instrumentation, 2014, 9, C08028-C08028.	1.2	31
5	The wide-aperture gamma-ray telescope TAIGA-HiSCORE in the Tunka Valley: Design, composition and commissioning. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 845, 367-372.	1.6	31
6	TAIGA Gamma Observatory: Status and Prospects. Physics of Atomic Nuclei, 2018, 81, 497-507.	0.4	29
7	TAIGA the Tunka Advanced Instrument for cosmic ray physics and Gamma Astronomy â€" present status and perspectives.. Journal of Instrumentation, 2014, 9, C09021-C09021.	1.2	27
8	The TAIGA experiment: From cosmic-ray to gamma-ray astronomy in the Tunka valley. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 845, 330-333.	1.6	19
9	TAIGAâ€"an advanced hybrid detector complex for astroparticle physics and high energy gamma-ray astronomy in the Tunka valley. Journal of Instrumentation, 2020, 15, C09031-C09031.	1.2	19
10	The coordinate-tracking detector based on the drift chambers for ultrahigh-energy cosmic ray investigations. Journal of Instrumentation, 2014, 9, C08018-C08018.	1.2	18
11	A Cherenkov Water Calorimeter Based on Quasi-Spherical Modules. Instruments and Experimental Techniques, 2018, 61, 649-657.	0.5	17
12	Long-term variations in the muon flux angular distribution. Geomagnetism and Aeronomy, 2013, 53, 571-579.	0.8	16
13	The TAIGA experiment: from cosmic ray to gamma-ray astronomy in the Tunka valley. Journal of Physics: Conference Series, 2016, 718, 052006.	0.4	16
14	Cherenkov Water Detector NEVOD: A New Stage of Development. Physics Procedia, 2015, 74, 435-441.	1.2	15
15	TAIGA experiment: present status and perspectives. Journal of Instrumentation, 2017, 12, C08018-C08018.	1.2	14
16	Scintillation detectors for the TAIGA experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2019, 936, 254-256.	1.6	13
17	The ProtoPRISMA array for EAS study: first results. Journal of Physics: Conference Series, 2013, 409, 012044.	0.4	12
18	Present status of muon diagnostics. Journal of Physics: Conference Series, 2013, 409, 012192.	0.4	11

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19	Local anisotropy of muon flux â€“ The basis of the method of muon diagnostics of extra-terrestrial space. Advances in Space Research, 2015, 56, 2713-2718.	2.6	11
20	Investigating the characteristics of scintillation detectors for the NEVOD-EAS experiment. Instruments and Experimental Techniques, 2016, 59, 781-788.	0.5	11
21	The array of scintillation detectors with natural boron for EAS neutrons investigations. Journal of Instrumentation, 2017, 12, C07029-C07029.	1.2	11
22	The Calibration Telescope System of the NEVOD Cherenkov Water Detector. Instruments and Experimental Techniques, 2018, 61, 673-679.	0.5	10
23	Novel method for detecting the hadronic component of extensive air showers. Physics of Atomic Nuclei, 2015, 78, 349-352.	0.4	9
24	The Taiga project. Journal of Physics: Conference Series, 2016, 675, 032037.	0.4	9
25	First results of the tracking system calibration of the TAIGA-IACT telescope. Journal of Physics: Conference Series, 2019, 1181, 012045.	0.4	9
26	Development of a novel wide-angle gamma-ray imaging air Cherenkov telescope with SiPM-based camera for the TAIGA hybrid installation. Journal of Instrumentation, 2020, 15, C09062-C09062.	1.2	9
27	Status of a development of the large scale coordinate-tracking setup based on the drift chambers. Journal of Physics: Conference Series, 2015, 632, 012031.	0.4	8
28	The TAIGA timing array HiSCORE - first results. EPJ Web of Conferences, 2017, 136, 03008.	0.3	8
29	Energy release of inclined muon groups in the nevod water Cherenkov detector. Bulletin of the Lebedev Physics Institute, 2014, 41, 218-221.	0.6	7
30	EAS array of the NEVOD Experimental Complex. Journal of Physics: Conference Series, 2015, 632, 012029.	0.4	7
31	Study of Characteristics of the Quasi-spherical Measurement Modules of the Cherenkov Water Calorimeter NEVOD. Physics Procedia, 2015, 74, 442-448.	1.2	7
32	Cluster type EAS array of the NEVOD experimental complex. Journal of Instrumentation, 2017, 12, C06033-C06033.	1.2	7
33	TAIGAâ€"A hybrid array for high-energy gamma astronomy and cosmic-ray physics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 958, 162113.	1.6	7
34	Design features and data acquisition system of the TAIGA-Muon scintillation array. Journal of Instrumentation, 2020, 15, C06057-C06057.	1.2	7
35	Towards gamma-ray astronomy with timing arrays. Journal of Physics: Conference Series, 2015, 632, 012042.	0.4	6
36	Study of the energy deposit of muon bundles in the NEVOD detector. EPJ Web of Conferences, 2015, 99, 06004.	0.3	6

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37	Project of the URAN array for registration of atmospheric neutrons. Journal of Physics: Conference Series, 2016, 675, 032043.	0.4	6
38	The registration system of the coordinate-tracking setup on the drift chambers. Journal of Physics: Conference Series, 2016, 675, 032039.	0.4	6
39	Nuclear-physical approach to interpretation of results of cosmic ray investigations above the knee. Nuclear Physics, Section B, Proceedings Supplements, 2011, 212-213, 235-240.	0.4	5
40	Proposal of NEVOD-EAS shower array. Journal of Physics: Conference Series, 2013, 409, 012098.	0.4	5
41	Study of characteristics of Forbush decreases detected in 2006 â€“ 2011 by means of muon hodoscope URAGAN. Journal of Physics: Conference Series, 2013, 409, 012189.	0.4	5
42	Measurements of the energy deposit of inclined muon bundles in the CWD NEVOD. Journal of Physics: Conference Series, 2015, 632, 012095.	0.4	5
43	Simulation of the hybrid Tunka Advanced International Gamma-ray and Cosmic ray Astrophysics (TAIGA). Journal of Physics: Conference Series, 2015, 632, 012040.	0.4	5
44	Investigation of the Energy Loss of Muon Bundles in the Cherenkov Water Calorimeter. Physics of Atomic Nuclei, 2019, 82, 680-684.	0.4	5
45	INFLUENCE OF THE RESULTS OF UHECR DETECTION ON THE LHC EXPERIMENTS. Acta Polytechnica, 2013, 53, 707-711.	0.6	4
46	Study of cascade showers generated by near-horizontal muons in the water Cherenkov detector with a dense array of optical modules. Bulletin of the Lebedev Physics Institute, 2014, 41, 292-296.	0.6	4
47	Measuring module of the Cherenkov water detector NEVOD. Journal of Physics: Conference Series, 2015, 632, 012015.	0.4	4
48	Measuring the energy deposited by muon bundles of inclined EAS in the NEVODâ€“DECOR experiment. Physics of Particles and Nuclei, 2018, 49, 101-104.	0.7	4
49	Optimization of electromagnetic and hadronic extensive air shower identification using the muon detectors of the TAIGA experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 952, 161730.	1.6	4
50	A combined analysis of geomagnetic data and cosmic ray secondaries for the September 2017 space weather event studies. Russian Journal of Earth Sciences, 2019, 19, 1-10.	0.7	4
51	Experimental Complex TAIGA. Physics of Atomic Nuclei, 2020, 83, 1375-1382.	0.4	4
52	Muon Hodoscope with Scintillation Strips. Physics Procedia, 2015, 74, 478-485.	1.2	3
53	Real-time experimental data of the muon hodoscope URAGAN accessible in www. Journal of Physics: Conference Series, 2015, 632, 012086.	0.4	3
54	Investigation of cascade showers in the Cherenkov water detector NEVOD. Journal of Physics: Conference Series, 2015, 632, 012038.	0.4	3

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55	Local anisotropy of muon flux during Forbush decreases from URAGAN data. Journal of Physics: Conference Series, 2015, 632, 012049.	0.4	3
56	The detector on the basis of drift chambers for inclined muon bundle investigations. Journal of Instrumentation, 2017, 12, C07005-C07005.	1.2	3
57	Temporal and lateral distributions of EAS neutron component measured with PRISMA-32. Journal of Physics: Conference Series, 2017, 798, 012202.	0.4	3
58	Application of Drift Chambers for Research of Cosmic-Ray Muon Bundles. Physics of Atomic Nuclei, 2018, 81, 1325-1331.	0.4	3
59	The TAIGA Experiment: From Cosmic Ray Physics to Gamma Astronomy in the Tunka Valley. Physics of Particles and Nuclei, 2018, 49, 589-598.	0.7	3
60	Tunka Advanced Instrument for cosmic rays and Gamma Astronomy. Journal of Physics: Conference Series, 2019, 1263, 012006.	0.4	3
61	Analysis of thunderstorms based on the data obtained by MH URAGAN and DMRL-C. Journal of Physics: Conference Series, 2019, 1390, 012060.	0.4	3
62	Cherenkov EAS arrays in the Tunka astrophysical center: From Tunka-133 to the TAIGA gamma and cosmic ray hybrid detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 952, 161830.	1.6	3
63	Reconstruction of single muon tracks in Cherenkov water detector NEVOD. Journal of Physics: Conference Series, 2013, 409, 012132.	0.4	2
64	Muon problem in UHECR investigations. Journal of Physics: Conference Series, 2013, 409, 012103.	0.4	2
65	Energy Characteristics of Forbush Decreases for Different Types of Heliospheric Disturbances According to Muon Hodoscope URAGAN. Physics Procedia, 2015, 74, 470-477.	1.2	2
66	Studies of Thunderstorm Events Based on the Data of Muon Hodoscope URAGAN and Meteorological Radar DMRL-C. Physics Procedia, 2015, 74, 486-492.	1.2	2
67	Temperature effect corrections for URAGAN based on CAO, GDAS, NOAA data. Journal of Physics: Conference Series, 2015, 632, 012054.	0.4	2
68	The Tunka detector complex: from cosmic-ray to gamma-ray astronomy. Journal of Physics: Conference Series, 2015, 632, 012034.	0.4	2
69	Powerful non-geoeffective interplanetary disturbance of July 2012 observed by muon hodoscope URAGAN. Advances in Space Research, 2015, 56, 2833-2838.	2.6	2
70	Characteristics of the Forbush decrease of 22 June 2015 measured by means of the muon hodoscope URAGAN. Journal of Physics: Conference Series, 2016, 675, 032038.	0.4	2
71	TAIGA - a hybrid array for high energy gamma astronomy and cosmic ray physics. EPJ Web of Conferences, 2018, 191, 01007.	0.3	2
72	Low-background EN-detector for the investigation of the neutron component of EASs. Physics of Particles and Nuclei, 2018, 49, 47-50.	0.7	2

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73	The application of multi-wire drift chambers in cosmic ray research. Physics of Particles and Nuclei, 2018, 49, 86-89.	0.7	2
74	Expected Spectra of Muon-Induced Cascades in IceCube. Physics of Atomic Nuclei, 2019, 82, 689-693.	0.4	2
75	Cascade showers in the Cherenkov light in water. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 952, 161850.	1.6	2
76	Cherenkov water detector NEVOD and its further development. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 952, 161585.	1.6	2
77	Measuring the Cherenkov light yield from cosmic ray muon bundles in the water detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2020, 952, 161586.	1.6	2
78	Study of heliospheric disturbances on the basis of cosmic ray muon flux anisotropy. Journal of Physics: Conference Series, 2013, 409, 012196.	0.4	1
79	NEEDS for LHC experiment planning from results of very high energy cosmic ray Investigations (NEEDS-2). EPJ Web of Conferences, 2015, 99, 12004.	0.3	1
80	Investigation of the energy characteristics of EAS muon component with the NEVOD-DECOR setup. Journal of Physics: Conference Series, 2016, 675, 032035.	0.4	1
81	Multisector scintillation detector with fiber-optic light collection. Journal of Instrumentation, 2017, 12, C07004-C07004.	1.2	1
82	Investigation of EAS electron and muon components by means of the NEVOD calibration telescope system. Journal of Physics: Conference Series, 2017, 798, 012044.	0.4	1
83	Energy characteristics of multi-muon events in a wide range of zenith angles. Journal of Physics: Conference Series, 2017, 798, 012049.	0.4	1
84	Cherenkov Water Detectors in Particle Physics and Cosmic Rays. Physics of Atomic Nuclei, 2017, 80, 1557-1566.	0.4	1
85	Application of New Approximations of the Lateral Distribution of EAS Cherenkov Light in the Atmosphere. Physics of Atomic Nuclei, 2018, 81, 1294-1300.	0.4	1
86	Studying the Anisotropy of the Muon Flux during Nongeoeffective Coronal Mass Ejections of 2016. Physics of Atomic Nuclei, 2018, 81, 1370-1373.	0.4	1
87	Cosmic Ray Muons of High and Ultrahigh Energies. Physics of Particles and Nuclei, 2018, 49, 639-651.	0.7	1
88	Possible approach to the analysis of nucleus-nucleus interactions at very high energies. Journal of Physics: Conference Series, 2019, 1181, 012090.	0.4	1
89	Investigation of muon bundles generated by UHECR by means of the new coordinate-tracking detector. Journal of Physics: Conference Series, 2019, 1390, 012132.	0.4	1
90	Forbush Decreases During 2007â€“2018 According to the Muon Hodoscope URAGAN Data. Physics of Atomic Nuclei, 2019, 82, 892-896.	0.4	1

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91	NEVODâ€“DECOR Experiment on the Measurement of the Energy Deposit of Cosmic Ray Muon Bundles. Physics of Atomic Nuclei, 2020, 83, 1369-1374.	0.4	1
92	Status of the TAIGA Experiment: From Cosmic-Ray Physics to Gamma Astronomy in Tunka Valley. Physics of Atomic Nuclei, 2020, 83, 905-915.	0.4	1
93	New technique and results of cosmic ray investigations in the energy interval 1015â€“1019eV. EPJ Web of Conferences, 2013, 53, 08001.	0.3	0
94	LARGE AREA HODOSCOPES FOR MUON DIAGNOSTICS OF HELIOSPHERE AND EARTHâ€™S MAGNETOSPHERE. Acta Polytechnica, 2013, 53, 807-810.	0.6	0
95	Restoration of parameters of high-energy cascades in Cherenkov water calorimeter with a dense array of quasispherical modules. Physics of Atomic Nuclei, 2015, 78, 1511-1516.	0.4	0
96	Are the primary cosmic ray and EAS spectra the same or not?. Journal of Physics: Conference Series, 2015, 632, 012021.	0.4	0
97	New approach to cosmic ray investigations above the knee. Journal of Physics: Conference Series, 2016, 718, 052029.	0.4	0
98	Spatial distribution of Cherenkov light from cascade showers in water. Journal of Physics: Conference Series, 2016, 675, 032036.	0.4	0
99	First results of the cosmic ray muon variation study by means of the scintillation muon hodoscope. Journal of Physics: Conference Series, 2016, 675, 032042.	0.4	0
100	Search of predictors of geoeffective heliospheric events by means of muon hodoscope URAGAN. Journal of Physics: Conference Series, 2016, 675, 032033.	0.4	0
101	Spatial distribution of Cherenkov light from cascade showers in water. Physics of Atomic Nuclei, 2016, 79, 1546-1551.	0.4	0
102	Analysis of powerful heliospheric non-geoeffective event of the 28 April, 2015 in muon flux. Journal of Physics: Conference Series, 2016, 675, 032040.	0.4	0
103	The 2nd International Conference on Particle Physics and Astrophysics. Journal of Physics: Conference Series, 2017, 798, 011001.	0.4	0
104	Heavy particles at the LHC and in cosmic rays. Physics of Particles and Nuclei, 2017, 48, 793-795.	0.7	0
105	Nucleus-nucleus interactions in very-high-energy cosmic ray experiments. EPJ Web of Conferences, 2017, 158, 01003.	0.3	0
106	Techniques for detecting the Cherenkov light from cascade showers in water. Physics of Particles and Nuclei, 2018, 49, 60-63.	0.7	0
107	Possible explanation of results of CR investigations in the energy interval 1015 â€“ 1017 eV: Nuclear-physical approach. Journal of Physics: Conference Series, 2019, 1181, 012022.	0.4	0
108	Status of the URAN array for detection of EAS neutron component. Journal of Physics: Conference Series, 2019, 1181, 012081.	0.4	0

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109	Near-Vertical Local Density Spectra of the EAS Charged Particles in the Energy Range of 1014â€“1017 eV. Physics of Atomic Nuclei, 2019, 82, 699-703.	0.4	0
110	An approach for identification of ultrahigh energy extensive air showers with scintillation detectors at TAIGA experiment. Journal of Instrumentation, 2020, 15, C09037-C09037.	1.2	0
111	Simple Geometrical Model of Nucleusâ€”Nucleus Interactions at Very High Energies. Physics of Atomic Nuclei, 2019, 82, 929-933.	0.4	0