

Vasilii Mochalov

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	New Measurement of the $\langle \text{mml:math} \rangle$ $\text{display}=\text{"inline"}$ $\langle \text{mml:msup} \rangle$ $\langle \text{mml:mi} \rangle \bar{K}^- \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 0 \langle \text{mml:mn} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:math} \rangle$ Radiative Decay Width. Physical Review Letters, 2011, 106, 162303.	7.8	81
2	Technical design report for the \overline{P} ANDA (AntiProton Annihilations at Darmstadt) Straw Tube Tracker. European Physical Journal A, 2013, 49, 1.	2.5	71
3	Search for $\tilde{\Lambda}^+(1540)$ Pentaquark in High-Statistics Measurement of $\bar{K}^0 \pi^+ K^- \pi^0$ nat CLAS. Physical Review Letters, 2006, 96, 042001.	7.8	69
4	Search for the $\tilde{\Lambda}^+$ pentaquark in the reactions $\bar{K}^0 \pi^+ K^- \pi^0$ and $\bar{K}^0 K^- \pi^+ \pi^0$. Physical Review D, 2006, 74, .	4.7	51
5	First study of radiation hardness of lead tungstate crystals at low temperatures. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 582, 575-580.	1.6	42
6	Observation of significant spin effects in hard collisions at 40 GeV/c. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 243, 461-464.	4.1	38
7	Photoproduction of $\langle \text{mml:math} \rangle$ $\text{display}=\text{"inline"}$ $\langle \text{mml:msup} \rangle$ $\langle \text{mml:mi} \rangle \bar{K}^- \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:msup} \rangle$ $\langle \text{mml:mi} \rangle \bar{K}^0 \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle$ pairs on the proton. Physical Review D, 2009, 80, .	4.7	31
8	Feasibility studies of time-like proton electromagnetic form factors at \overline{P} ANDA at FAIR. European Physical Journal A, 2016, 52, 1.	2.5	31
9	Experimental access to Transition Distribution Amplitudes with the $\tilde{\Lambda}$, ANDA experiment at FAIR. European Physical Journal A, 2015, 51, 1.	2.5	29
10	Measurement of Direct $\langle \text{mml:math} \rangle$ $\text{display}=\text{"inline"}$ $\langle \text{mml:msub} \rangle$ $\langle \text{mml:mi} \rangle f \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 0 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle$ $\langle \text{mml:mo} \rangle$ stretchy="false"> $(\langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 980 \langle \text{mml:mn} \rangle \langle \text{mml:mo} \rangle) T_j ETQq0 0 0 rgBT /Overlock 10 Tf 50 377 Td$ ($\text{stretchy}=\text{"false"}$) $\langle \text{mml:math} \rangle$ 2009, 102, 102001.	4.7	21
11	Study of doubly strange systems using stored antiprotons. Nuclear Physics A, 2016, 954, 323-340. Feasibility study for the measurement of $\langle \text{mml:math} \rangle$ $\text{display}=\text{"inline"}$ $\langle \text{mml:mrow} \rangle$ $\langle \text{mml:mi} \rangle \bar{K}^0 \langle \text{mml:mi} \rangle N \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ transition distribution amplitudes at $\langle \text{mml:math} \rangle$ $\text{display}=\text{"inline"}$ $\langle \text{mml:mrow} \rangle$ $\langle \text{mml:mover accent="true"} \rangle$ $\langle \text{mml:mrow} \rangle$ $\langle \text{mml:mi} \rangle$ $\text{mathvariant="sans-serif"}$ $P \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle$ $\langle \text{mml:mrow} \rangle$ $\langle \text{mml:mo accent="true"}$ $\langle \text{mml:math} \rangle$ Precision measurement of energy and position resolutions of the BTeV electromagnetic calorimeter prototype. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 510, 248-261.	1.5	22
12	Study of radiation damage in lead tungstate crystals using intense high-energy beams. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 512, 488-505.	1.6	19
13	Radiation Hardness and Recovery Processes of PWO Crystals at $-25^\circ C$. IEEE Transactions on Nuclear Science, 2008, 55, 1283-1288.	2.0	19
14	Development of a momentum determined electron beam in the 1-10 GeV range. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 510, 211-218.	1.6	14
15	Study of the compensated lead hadron calorimeter on hadron, electron and lead-ion beams. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 461, 381-383.	1.6	13
16	Search for $\tilde{\Lambda}^++\tilde{\Lambda}^-$ Pentaquarks in the Exclusive Reaction $\bar{K}^0 \pi^+ K^- \pi^0$. Physical Review Letters, 2006, 97, 102001.	7.8	13

#	ARTICLE	IF	CITATIONS
19	Spin physics at IHEP. Physics of Particles and Nuclei, 2013, 44, 930-936.	0.7	11
20	Comparison of radiation damage in lead tungstate crystals under pion and gamma irradiation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 530, 286-292.	1.6	10
21	LED monitoring system for the BTeV lead tungstate crystal calorimeter prototype. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2004, 534, 486-495.	1.6	8
22	Design and performance of LED calibration system prototype for the lead tungstate crystal calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 556, 94-99.	1.6	8
23	PANDA electromagnetic calorimeters. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 598, 224-228.	1.6	8
24	Measurement of the single-spin asymmetry in the reaction $\bar{d} \rightarrow d \pi^+ \pi^-$ in the beam-fragmentation region at 40 GeV and p_T of up to 2 GeV/c. Physics of Atomic Nuclei, 2010, 73, 2017-2021.	0.4	8
25	Correlation of beam electron and LED signal losses under irradiation and long-term recovery of lead tungstate crystals. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 550, 543-550.	1.6	7
26	Preparation of new polarization experiment SPASCHARM at IHEP. Journal of Physics: Conference Series, 2011, 295, 012018.	0.4	6
27	Search for new forms of matter in antimatter-matter interactions in the panda experiment. Atomic Energy, 2012, 112, 129-138.	0.4	6
28	Indication on the universal hadron substructure: Constituent quarks. Physical Review D, 2004, 69, .	4.7	5
29	Study of possible scintillation mechanism damage in crystals after pion irradiation. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2005, 540, 131-139.	1.6	5
30	Performance of a fine-sampling electromagnetic calorimeter prototype in the energy range from 1 to 19GeV. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 606, 432-438.	1.6	5
31	Nuclear targets for a precision measurement of the neutral pion radiative width. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 612, 46-49.	1.6	5
32	Test beam study of the PANDA shashlyk calorimeter prototype. Journal of Physics: Conference Series, 2009, 160, 012021.	0.4	4
33	The BTeV electromagnetic calorimeter. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 494, 313-317.	1.6	3
34	Single-spin asymmetry of inclusive π^0 -meson production in 40-GeV pion interactions with a polarized target in the target-fragmentation region. Physics of Atomic Nuclei, 2004, 67, 1495-1504.	0.4	3
35	The Electromagnetic Calorimeter of the BTeV Experiment. Nuclear Physics, Section B, Proceedings Supplements, 2006, 150, 262-266.	0.4	3
36	Polarimeters for the SPASCHARM Experiment. International Journal of Modern Physics Conference Series, 2016, 40, 1660086.	0.7	3

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37	Elastic scattering polarimeter for a polarized antiproton beam at U-70 accelerator of IHEP. Journal of Physics: Conference Series, 2016, 678, 012034.	0.4	3
38	Single-spin asymmetry of inclusive neutral-pion production in $pp \rightarrow$ interactions at 70 GeV in the region $0.4 < F < 0.1$. Physics of Atomic Nuclei, 2005, 68, 1790-1795.	0.4	2
39	Reconstructing the coordinates of inclined showers in lead glass electromagnetic calorimeters. Instruments and Experimental Techniques, 2007, 50, 458-468.	0.5	2
40	Measuring the momentum dispersion of a proton beam extracted from the U-70 accelerator by channeling. Instruments and Experimental Techniques, 2010, 53, 621-628.	0.5	2
41	Analyzing Power in the Reaction $p + p \rightarrow 0 + X$ in the polarized-target fragmentation region at an energy of 50 GeV. Physics of Atomic Nuclei, 2014, 77, 595-601.	0.4	2
42	High precision photon flux determination for photon tagging experiments. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 767, 300-309.	1.6	2
43	Searches for single-spin asymmetry in the inclusive production of neutral pions in the central region at a proton beam energy of 70 GeV. Physics of Atomic Nuclei, 2004, 67, 1487-1494.	0.4	1
44	Monte Carlo reconstruction of the shower coordinates and shape in the electromagnetic calorimeter. Instruments and Experimental Techniques, 2006, 49, 468-482.	0.5	1
45	Effect of β^3 irradiation on the scintillation and optical properties of lead tungstate crystals. Instruments and Experimental Techniques, 2009, 52, 665-672.	0.5	1
46	Studying the radiation hardness of lead tungstate crystals under long-term β^3 irradiation. Instruments and Experimental Techniques, 2013, 56, 271-275.	0.5	1
47	Study of single-spin asymmetries with polarized target at the SPASCHARM experiment at U70 accelerator. Journal of Physics: Conference Series, 2016, 678, 012048.	0.4	1
48	Systematic Study of Spin Effects at SPASCHARM Experiment at 70-GeV Accelerator in Protvino. International Journal of Modern Physics Conference Series, 2016, 40, 1660106.	0.7	1
49	Polarized proton and antiproton beams for the SPASCHARM experiment at U-70 accelerator. Journal of Physics: Conference Series, 2017, 798, 012177.	0.4	1
50	Extraction of a 70-GeV/cProton Beam to the RAMPEX Setup by Using a Silicon Crystal. Instruments and Experimental Techniques, 2001, 44, 1-11.	0.5	0
51	General features of single-spin asymmetry in inclusive pion production in fixed-target experiments. Physics of Atomic Nuclei, 2004, 67, 2169-2175.	0.4	0
52	Physics with antiprotons at $\sqrt{s} = 200$ GeV. Physics of Atomic Nuclei, 2004, 67, 2176-2180.	0.4	0
53	Polarimetry with inclusive charged pions at U-70 accelerator of IHEP. Journal of Physics: Conference Series, 2016, 678, 012028.	0.4	0
54	Polarized antiproton beam at U-70 accelerator of IHEP. Journal of Physics: Conference Series, 2016, 678, 012047.	0.4	0

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55	Study of single-spin asymmetries with polarized target at the SPASCHARM experiment at U70 accelerator. Journal of Physics: Conference Series, 2017, 798, 012096.	0.4	0
56	Beam polarimetry at the SPASCHARM experiment at IHEP U-70 accelerator. Journal of Physics: Conference Series, 2017, 798, 012179.	0.4	0
57	AN AT SMALL NEGATIVE VALUES OF x_F IN THE REACTION $p + p \rightarrow \pi^0 + X$ AT 70 GeV AND UNIVERSAL THRESHOLD IN INCLUSIVE PION PRODUCTION., 2005, ,.	0	
58	SINGLE SPIN ASYMMETRY MEASUREMENTS FOR π^0 INCLUSIVE PRODUCTION IN $p + p \rightarrow \pi^0 + X$ AND $\pi^+ + p \rightarrow \pi^0 + X$ REACTIONS AT 70 AND 40 GeV RESPECTIVELY., 2005, ,.	0	
59	PANDA Forward Spectrometer Calorimeter., 2016, ,.	0	