

Sergey Polosatkin

List of Publications by Year in descending order

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50
papers

603
citations

567281

15
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642732

23
g-index

50
all docs

50
docs citations

50
times ranked

415
citing authors

#	ARTICLE	IF	CITATIONS
1	Blistering of the selected materials irradiated by intense 200keV proton beam. Journal of Nuclear Materials, 2010, 396, 43-48.	2.7	44
2	Observation of spectral composition and polarization of sub-terahertz emission from dense plasma during relativistic electron beam-plasma interaction. Physics of Plasmas, 2014, 21, 082106.	1.9	37
3	Dynamics and Spectral Composition of Subterahertz Emission From Plasma Column Due to Two-Stream Instability of Strong Relativistic Electron Beam. IEEE Transactions on Terahertz Science and Technology, 2016, 6, 245-252.	3.1	36
4	Overview of results from the MST reversed field pinch experiment. Nuclear Fusion, 2013, 53, 104017.	3.5	33
5	Direct observation of anomalously low longitudinal electron heat conductivity in the course of collective relaxation of a high-current relativistic electron beam in plasma. JETP Letters, 2003, 77, 358-361.	1.4	32
6	Generation of High-Power Sub-THz Waves in Magnetized Turbulent Electron Beam Plasmas. Journal of Infrared, Millimeter, and Terahertz Waves, 2014, 35, 81-90.	2.2	30
7	Surface modification and droplet formation of tungsten under hot plasma irradiation at the GOL-3. Journal of Nuclear Materials, 2013, 438, S677-S680.	2.7	28
8	Study of the mechanism for fast ion heating in the GOL-3 multimirror magnetic confinement system. Plasma Physics Reports, 2005, 31, 462-475.	0.9	26
9	Diagnostic system for studying generation of subterahertz radiation during beam-plasma interaction in the GOL-3 facility. Plasma Physics Reports, 2012, 38, 450-459.	0.9	25
10	Calculation of cracking under pulsed heat loads in tungsten manufactured according to ITER specifications. Journal of Nuclear Materials, 2015, 467, 165-171.	2.7	24
11	Fast ion confinement and stability in a neutral beam injected reversed field pinch. Physics of Plasmas, 2013, 20, .	1.9	19
12	Temporal structure of double plasma frequency emission of thin beam-heated plasma. Physics of Plasmas, 2013, 20, .	1.9	17
13	Experimental study of the dynamics of neutron emission from the GOL-3 multimirror trap. Plasma Physics Reports, 2006, 32, 94-102.	0.9	16
14	Plasma system of the GOL-3T facility. Plasma Physics Reports, 2015, 41, 863-872.	0.9	16
15	Overview of results from the MST reversed field pinch experiment. Nuclear Fusion, 2015, 55, 104006.	3.5	16
16	Qualification of Boron Carbide Ceramics for Use in ITER Ports. IEEE Transactions on Plasma Science, 2020, 48, 1474-1478.	1.3	16
17	Time-resolved ion energy distribution measurements using an advanced neutral particle analyzer on the MST reversed-field pinch. Review of Scientific Instruments, 2012, 83, 10D302.	1.3	15
18	Measurement of the ionization yield of nuclear recoils in liquid argon at 80 and 233 keV. Europhysics Letters, 2014, 108, 12001.	2.0	14

#	ARTICLE	IF	CITATIONS
19	Two Ways for High-Power Generation of Subterahertz Radiation by Usage of Strong Relativistic Electron Beams. IEEE Transactions on Terahertz Science and Technology, 2015, 5, 478-485.	3.1	14
20	Creation of a long magnetized plasma column in a metal chamber. Plasma Physics Reports, 2014, 40, 161-177.	0.9	13
21	MM-wave emission by magnetized plasma during sub-relativistic electron beam relaxation. Physics of Plasmas, 2015, 22, .	1.9	13
22	Fast neutron flux analyzer with real-time digital pulse shape discrimination. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2016, 827, 13-17.	1.6	13
23	Spectral Diagnostics for Plasma Research at the GOL-3 Facility. Instruments and Experimental Techniques, 2004, 47, 224-229.	0.5	12
24	Study of the impurity composition and effective plasma charge in the GOL-3 facility. Plasma Physics Reports, 2015, 41, 529-534.	0.9	10
25	Calibration of an advanced neutral particle analyzer for the Madison Symmetric Torus reversed-field pinch. Review of Scientific Instruments, 2012, 83, 10D704.	1.3	8
26	Study of plasma rotation in the GOL-3 facility. Plasma Physics Reports, 2012, 38, 718-728.	0.9	7
27	Multi-purpose fast neutron spectrum analyzer with real-time signal processing. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 720, 23-25.	1.6	6
28	Yield determination for a titanium neutron-forming target. Atomic Energy, 2013, 113, 345-350.	0.4	6
29	Test results of boron carbide ceramics for ITER port protection. Fusion Engineering and Design, 2021, 168, 112426.	1.9	6
30	Experimental study of the evaporation and expansion of a solid pellet in a plasma heated by an electron beam. Plasma Physics Reports, 2004, 30, 9-17.	0.9	5
31	Determining the Spatial Structure of a High-Power Electron Beam Using Optical Radiation Emitted by a Beam Collector. Instruments and Experimental Techniques, 2004, 47, 194-200.	0.5	5
32	Multichannel Thomson scattering diagnostics for the GOL-3 facility. Plasma Physics Reports, 2006, 32, 108-113.	0.9	5
33	Diagnostics of heavy impurities at GOL-3 facility. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2010, 623, 750-753.	1.6	5
34	Two-pulse Thomson scattering system for measurements of fast fluctuations of electron density in multimirror trap GOL-3. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 720, 39-41.	1.6	5
35	Neutral particle analyzer for studies of fast ion population in plasma. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2013, 720, 42-44.	1.6	5
36	A Complex of Imaging Diagnostic Devices of Vacuum UV Radiation for the GOL-3 Multimirror Trap. Instruments and Experimental Techniques, 2004, 47, 234-239.	0.5	4

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37	Effect of sublevel population mixing on the interpretation of doppler-shift spectroscopy measurements of neutral beam content. <i>Journal of Instrumentation</i> , 2013, 8, P05007-P05007.	1.2	4
38	Measurement of high pulsed pressures using the shift of ruby fluorescence lines. <i>Instruments and Experimental Techniques</i> , 2006, 49, 293-296.	0.5	3
39	The study of neutron burst shape of a neutron tube driven by dispenser cathode. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2016, 828, 91-96.	1.6	3
40	Study of sublevel population mixing effects in hydrogen neutral beams. <i>Review of Scientific Instruments</i> , 2014, 85, 02A707.	1.3	2
41	On calibration of the response of liquid argon detectors to nuclear recoils using inelastic neutron scattering on ^{40}Ar . <i>Journal of Instrumentation</i> , 2014, 9, P10017-P10017.	1.2	2
42	Modeling of Deuterium Ionization and Extraction From an Ion Source Driven by Heated Cathode. <i>IEEE Transactions on Plasma Science</i> , 2015, 43, 3856-3867.	1.3	2
43	Nuclear recoil detection in liquid argon using a two-phase CRAD and DD neutron generator. <i>Journal of Instrumentation</i> , 2014, 9, C08020-C08020.	1.2	1
44	Intensity radial profiles of VUV line radiation near the solid target in a hot plasma. <i>European Physical Journal D</i> , 2004, 54, C89-C94.	0.4	0
45	LWIR detectors for subthermonuclear plasma study. , 2006, , .		0
46	Multipurpose implanter for high technology development. <i>Bulletin of the Lebedev Physics Institute</i> , 2009, 36, 325-326.	0.6	0
47	Investigation of subterhaertz emission from turbulent plasma heated by powerful REB at multimirror trap GOL-3. , 2009, , .		0
48	Optical spectroscopy of plasma of the radio-frequency emitter of a powerful fast neutral beam injector. <i>Instruments and Experimental Techniques</i> , 2010, 53, 253-257.	0.5	0
49	Sub-THz wave generation by magnetized plasma with strong turbulence driven by high-current REB. , 2013, , .		0
50	High-power terahertz emission at plasma and double plasma frequencies during REB-plasma interaction. , 2015, , .		0