Alexander S Pirozhkov

List of Publications by Year
in descending order

49 papers	1,853 citations	471509 17 h-index	276875 41 g-index
49 all docs	49 docs citations	49 times ranked	1408 citing authors

#	Article	IF	Citations
1	Construction of a Magnetic Bottle Electron Spectrometer for Electron Energy Measurement in BISER X-Rays and Xe Interaction. Plasma and Fusion Research, 2022, 17, 2406020-2406020.	0.7	0
2	Improvement of the temporal contrast of pre-pulses by post-pulses in a petawatt J-KAREN-P laser facility. , 2021, , .		0
3	Analysis of LyÎ± Dielectronic Satellites to Characterize Temporal Profile of Intense Femtosecond Laser Pulses. Crystals, 2021, 11, 130.	2.2	2
4	Ultra-strong attosecond laser focus produced by a relativistic-flying parabolic mirror. , 2021, , .		0
5	Enhancement of pre-pulse and picosecond pedestal contrast of the petawatt J-KAREN-P laser. High Power Laser Science and Engineering, 2021, 9, .	4.6	13
6	Relativistic flying laser focus by a laser-produced parabolic plasma mirror. Physical Review A, 2021, 104, .	2.5	4
7	Petawatt Femtosecond Laser Pulses from Titanium-Doped Sapphire Crystal. Crystals, 2020, 10, 783.	2.2	11
8	Relativistic flying forcibly oscillating reflective diffraction grating. Physical Review E, 2020, 102, 053202.	2.1	3
9	Optical probing of relativistic plasma singularities. Physics of Plasmas, 2020, 27, .	1.9	8
10	Status and progress of the J-KAREN-P high intensity laser system at QST. High Energy Density Physics, 2020, 36, 100771.	1.5	9
11	Experimental investigation on the temporal contrast of pre-pulses by post-pulses in a petawatt laser facility. Optics Letters, 2020, 45, 1100.	3.3	15
12	Relativistic Flying Mirrors as a Compact Source of Coherent Short-Wavelength Radiation. , 2020, , .		0
13	Relativisitcally upshifted higher harmonic generation via relativistic flying mirrors. Plasma Physics and Controlled Fusion, 2018, 60, 074007.	2.1	12
14	High-contrast high-intensity repetitive petawatt laser. Optics Letters, 2018, 43, 2595.	3.3	104
15	Laser Requirements for High-Order Harmonic Generation by Relativistic Plasma Singularities. Quantum Beam Science, 2018, 2, 7.	1.2	6
16	Coherent, Short-Pulse X-ray Generation via Relativistic Flying Mirrors. Quantum Beam Science, 2018, 2, 9.	1.2	17
17	High contrast high intensity petawatt J-KAREN-P laser facility at QST. Proceedings of SPIE, 2017, , .	0.8	2
18	Approaching the diffraction-limited, bandwidth-limited Petawatt. Optics Express, 2017, 25, 20486.	3.4	78

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19	Ultrahigh-contrast kilojoule-class petawatt LFEX laser using a plasma mirror. Applied Optics, 2016, 55, 6850.	2.1	30
20	High-order harmonics from relativistic laser plasmas. Proceedings of SPIE, 2015, , .	0.8	0
21	Recent Advances on the J-KAREN laser upgrade. , 2015, , .		0
22	High-Contrast, High-Intensity Petawatt-Class Laser and Applications. IEEE Journal of Selected Topics in Quantum Electronics, 2015, 21, 232-249.	2.9	60
23	Prepulse and amplified spontaneous emission effects on the interaction of a petawatt class laser with thin solid targets. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 745, 150-163.	1.6	46
24	High order harmonics from relativistic electron spikes. New Journal of Physics, 2014, 16, 093003.	2.9	26
25	Controlling the generation of high frequency electromagnetic pulses with relativistic flying mirrors using an inhomogeneous plasma. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 1114-1118.	2.1	13
26	Relativistic mirrors in plasmas. Novel results and perspectives. Physics-Uspekhi, 2013, 56, 429-464.	2.2	112
27	Ultra-Intense, High Spatio-Temporal Quality Petawatt-Class Laser System and Applications. Applied Sciences (Switzerland), 2013, 3, 214-250.	2.5	15
28	On the breaking of a plasma wave in a thermal plasma. II. Electromagnetic wave interaction with the breaking plasma wave. Physics of Plasmas, 2012, 19, 113103.	1.9	17
29	On the breaking of a plasma wave in a thermal plasma. I. The structure of the density singularity. Physics of Plasmas, 2012, 19, .	1.9	22
30	Temporal contrast enhancement of petawatt-class laser pulses. Optics Letters, 2012, 37, 3363.	3.3	44
31	Proton acceleration to 40ÂMeV using a high intensity, high contrast optical parametric chirped-pulse amplification/Ti:sapphire hybrid laser system. Optics Letters, 2012, 37, 2868.	3.3	100
32	Possibility of measuring photon-photon scattering via relativistic mirrors. Physical Review A, 2012, 86, .	2.5	29
33	Review of laser-driven ion sources and their applications. Reports on Progress in Physics, 2012, 75, 056401.	20.1	783
34	Efficient generation of Xe K-shell x rays by high-contrast interaction with submicrometer clusters. Optics Letters, 2011, 36, 1614.	3.3	22
35	Method of Observing the Spot Where Full-Power Counter-Propagating Laser Pulses Collide in Plasma Media. Applied Physics Express, 2010, 3, 016101.	2.4	2
36	Radial focusing and energy compression of a laser-produced proton beam by a synchronous rf field. Physical Review Special Topics: Accelerators and Beams, 2009, 12, .	1.8	10

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37	Experimental and computational characterization of hydrodynamic expansion of a preformed plasma from thin-foil target for laser-driven proton acceleration. Journal of Plasma Physics, 2009, 75, 609-617.	2.1	6
38	Demonstration of Flying Mirror with Improved Efficiency. , 2009, , .		6
39	Characteristics of a laser-produced proton beam improved by a synchronous RF field. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 599, 15-19.	1.6	7
40	High-intensity laser-driven particle and electromagnetic wave sources for science, industry, and medicine. Frontiers of Optoelectronics in China, 2009, 2, 299-303.	0.2	0
41	Development of Laser-driven Proton Source Toward Its Applications. Journal of the Optical Society of Korea, 2009, 13, 37-41.	0.6	3
42	Simultaneous Generation of UV Harmonics and Protons From a Thin-Foil Target With a High-Intensity Laser. IEEE Transactions on Plasma Science, 2008, 36, 1812-1816.	1.3	4
43	Laser prepulse dependency of proton-energy distributions in ultraintense laser-foil interactions with an online time-of-flight technique. Physics of Plasmas, 2007, 14, 043104.	1.9	65
44	High-Quality Laser-Produced Proton Beam Realized by the Application of a Synchronous RF Electric Field. Japanese Journal of Applied Physics, 2007, 46, L717-L720.	1.5	20
45	Intensity Scalings of Attosecond Pulse Generation by the Relativistic-irradiance Laser Pulses. Springer Series in Optical Sciences, 2007, , 265-272.	0.7	2
46	Characterization of Thin-Foil Preformed Plasmas for High-Intensity Laser Plasma Interactions. Acta Physica Hungarica A Heavy Ion Physics, 2006, 26, 327-333.	0.4	1
47	Attosecond pulse generation in the relativistic regime of the laser-foil interaction: The sliding mirror model. Physics of Plasmas, 2006, 13, 013107.	1.9	82
48	Generation of high-energy attosecond pulses by the relativistic-irradiance short laser pulse interacting with a thin foil. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 349, 256-263.	2.1	35
49	Extreme ultraviolet diagnostics of preformed plasma in laser-driven proton acceleration experiments. Review of Scientific Instruments, 2006, 77, 123302.	1.3	7