

Alexander P Potylitsyn

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4859939/publications.pdf>

Version: 2024-02-01

112
papers

1,000
citations

623734

14
h-index

477307

29
g-index

112
all docs

112
docs citations

112
times ranked

659
citing authors

#	ARTICLE	IF	CITATIONS
1	Observation of quasi-monochromatic resonant Cherenkov diffraction radiation. Results in Physics, 2022, 33, 105079.	4.1	4
2	Diffraction shadowing of coherent polarization radiation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 391, 127135.	2.1	2
3	Partial Focusing of Coherent Optical Transition Radiation and Measurement of Transverse Size of Femtosecond Electron Bunches. Russian Physics Journal, 2021, 63, 2076-2084.	0.4	0
4	First observation of quasi-monochromatic optical Cherenkov radiation in a dispersive medium (quartz). Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 417, 127680.	2.1	6
5	Ultra-monochromatic far-infrared Cherenkov diffraction radiation in a super-radiant regime. Scientific Reports, 2020, 10, 20961.	3.3	3
6	Radiation Losses of the Relativistic Charge Moving Near a Dielectric Radiator. Russian Physics Journal, 2020, 62, 2187-2193.	0.4	0
7	Measuring Electron Beam Divergence with Cherenkov Light. Physics of Particles and Nuclei Letters, 2020, 17, 27-31.	0.4	1
8	Noninvasive bunch length measurements exploiting Cherenkov diffraction radiation. Physical Review Accelerators and Beams, 2020, 23, .	1.6	16
9	Image of the transverse bunch profile via coherent optical transition radiation. Physical Review Accelerators and Beams, 2020, 23, .	1.6	5
10	A Potential Method for Diagnostics of Subfemtosecond Electron Beams Using Coherent Optical Transition Radiation. Russian Physics Journal, 2019, 61, 2073-2078.	0.4	1
11	Vavilov-Cherenkov Radiation in an Inclined Dielectric Plate and Violation of Azimuthal Symmetry. Physics of Particles and Nuclei Letters, 2019, 16, 127-132.	0.4	14
12	Spatial resolution improvement for an optical transition radiation monitor by asymmetric light collection. Optics Express, 2018, 26, 30231.	3.4	2
13	Cherenkov radiation from the target with predetermined dielectric properties, produced by a 3D-printer. Nuclear Instruments & Methods in Physics Research B, 2017, 402, 194-197.	1.4	1
14	Scattering of strong electromagnetic wave by relativistic electrons: Thomson and Compton regimes. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2017, 851, 82-91.	1.6	0
15	Monochromatic coherent grating transition radiation in sub-THz frequency range. Nuclear Instruments & Methods in Physics Research B, 2017, 402, 153-156.	1.4	6
16	Angular distribution of coherent Cherenkov radiation from a bunch passing through a vacuum channel in the dielectric target. Nuclear Instruments & Methods in Physics Research B, 2017, 402, 139-143.	1.4	2
17	2D Synchrotron Radiation Interferometer for Measuring the Transverse Dimensions of an Electron Beam in a Circular Accelerator. Russian Physics Journal, 2017, 60, 685-692.	0.4	0
18	Photon spectrum and polarization for high conversion coefficient in the Compton backscattering process. Nuclear Instruments & Methods in Physics Research B, 2017, 402, 216-219.	1.4	2

#	ARTICLE	IF	CITATIONS
19	Diagnostics of Electron Beams Based on Cherenkov Radiation in an Optical Fiber. Russian Physics Journal, 2017, 59, 1681-1685.	0.4	2
20	Smith-Purcell radiation from periodic beams. Optics Express, 2017, 25, 26310.	3.4	26
21	Monochromaticity of coherent Smith-Purcell radiation from finite size grating. Physical Review Accelerators and Beams, 2017, 20, .	1.6	14
22	Coherent Cherenkov radiation as an intense THz source. Journal of Physics: Conference Series, 2016, 732, 012006.	0.4	5
23	Spectral characteristics of Compton backscattering sources. Linear and nonlinear modes. Nuclear Instruments & Methods in Physics Research B, 2015, 355, 246-250.	1.4	3
24	Coherent radiation of relativistic electrons in dielectric fibers. Nuclear Instruments & Methods in Physics Research B, 2015, 355, 125-128.	1.4	1
25	RREPS13 and Meghri13. Journal of Physics: Conference Series, 2014, 517, 011001.	0.4	0
26	Polarization Radiation in a Teflon Target. Journal of Physics: Conference Series, 2014, 517, 012004.	0.4	3
27	Undulator-Based and Crystal-Based Gamma Radiation Sources for Positron Generation. Journal of Physics: Conference Series, 2014, 517, 012041.	0.4	0
28	Observation of the stimulated coherent diffraction radiation in an open resonator at LUCX facility. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 763, 424-432.	1.6	14
29	Statistical simulation of multiple Compton backscattering process. Physics of Particles and Nuclei, 2014, 45, 1000-1012.	0.7	5
30	Coherent Diffraction and Cherenkov Radiation in Fibers. Journal of Physics: Conference Series, 2014, 517, 012022.	0.4	1
31	Characteristics of final particles in multiple Compton backscattering process. Nuclear Instruments & Methods in Physics Research B, 2013, 309, 15-19.	1.4	4
32	Comment on "Quantum effects in spontaneous emission by a relativistic, undulating electron beam" by Robb G. R. M. and Bonifacio R.. Europhysics Letters, 2012, 100, 24006.	2.0	9
33	A possibility of transverse beam size diagnostics using parametric X-ray radiation. Journal of Physics: Conference Series, 2012, 357, 012018.	0.4	18
34	Experimental Research of the Diffraction and Vavilov-Cherenkov Radiation Generation in a Teflon Target. Journal of Physics: Conference Series, 2012, 357, 012020.	0.4	5
35	Sub-millimeter Bunch Length Non-invasive Diagnostic Based on the Diffraction and Cherenkov Radiation. Journal of Physics: Conference Series, 2012, 357, 012023.	0.4	5
36	IX International Symposium on Radiation from Relativistic Electrons in Periodic Structures (RREPS-2011). Journal of Physics: Conference Series, 2012, 357, 011001.	0.4	0

#	ARTICLE	IF	CITATIONS
37	Radiation properties of metamaterials in millimeter wavelength region. , 2012, , .		0
38	Cavity optimization for compact accelerator-based free-electron maser. , 2012, , .		0
39	Acoustic "pumping effect" for quartz monochromators. Journal of Physics: Conference Series, 2012, 357, 012031.	0.4	3
40	Interference of the transient radiation fields produced by an electric charge and a magnetic moment. Russian Physics Journal, 2012, 54, 1249-1255.	0.4	5
41	Investigation of the surface current excitation by a relativistic electron electromagnetic field. Journal of Physics: Conference Series, 2010, 236, 012024.	0.4	2
42	"Shadowing" of the electromagnetic field of relativistic charged particles. Journal of Physics: Conference Series, 2010, 236, 012004.	0.4	12
43	Development of microwave and soft X-ray sources based on coherent radiation and Thomson scattering. Journal of Physics: Conference Series, 2010, 236, 012009.	0.4	3
44	Asymmetry of bremsstrahlung by moderately relativistic polarized electrons. European Physical Journal C, 2010, 70, 107-111.	3.9	1
45	Coherent synchrotron radiation and radiative electron polarization. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 115106.	3.6	1
46	Detector for coherent synchrotron radiation measurements from separate electron bunches in a millimeter wavelength region. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 603, 35-37.	1.6	3
47	Generalized surface current method in the macroscopic theory of diffraction radiation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 1988-1996.	2.1	28
48	Experimental observation and investigation of the prewave zone effect in optical diffraction radiation. Physical Review Special Topics: Accelerators and Beams, 2008, 11, .	1.8	10
49	<title>Monochromatization of high-current nanosecond pulse source of x-ray bremsstrahlung</title>. , 2007, , .		0
50	<title>Coherent bremsstrahlung in thick crystals radiation losses and photon multiplicity</title>. , 2007, , .		0
51	X-ray diffraction radiation in conditions of Cherenkov effect. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 359, 509-511.	2.1	11
52	Energy loss of electrons passing through a laser flash in a storage ring. Nuclear Instruments & Methods in Physics Research B, 2005, 227, 209-215.	1.4	0
53	Observation of optical diffraction radiation from a slit target at KEK accelerator test facility. Nuclear Instruments & Methods in Physics Research B, 2005, 227, 158-169.	1.4	14
54	Diffraction radiation from a charged particle moving through a rectangular hole in a rectangular screen. Nuclear Instruments & Methods in Physics Research B, 2005, 227, 198-208.	1.4	6

#	ARTICLE	IF	CITATIONS
55	Coherent radiation recoil effect for the optical diffraction radiation beam size monitor at SLAC FFTB. Nuclear Instruments & Methods in Physics Research B, 2005, 227, 170-174.	1.4	5
56	Experimental investigation of coherent Smith-Purcell radiation from a flat grating. Nuclear Instruments & Methods in Physics Research B, 2005, 227, 175-179.	1.4	5
57	Beam-Size Measurement with Optical Diffraction Radiation at KEK Accelerator Test Facility. Physical Review Letters, 2004, 93, 244802.	7.8	72
58	THE PHOTON COLLIDER AT TESLA. International Journal of Modern Physics A, 2004, 19, 5097-5186.	1.5	120
59	APPLICATION OF OPTICAL DIFFRACTION RADIATION TO A NON-INVASIVE LOW-EMITTANCE HIGH-BRIGHTNESS BEAM DIAGNOSTICS. , 2004, , .		2
60	Status of optical diffraction radiation experiment at KEK-ATF extraction line. Nuclear Instruments & Methods in Physics Research B, 2003, 201, 140-152.	1.4	4
61	Quasimonochromatic resonant diffraction radiation as a possible tool for non-invasive beam diagnostics. Nuclear Instruments & Methods in Physics Research B, 2003, 201, 133-139.	1.4	3
62	Grating optical diffraction radiation – Promising technique for non-invasive beam diagnostics. Nuclear Instruments & Methods in Physics Research B, 2003, 201, 201-211.	1.4	4
63	Stochastics of multiple electron-photon head-on collisions. Nuclear Instruments & Methods in Physics Research B, 2003, 201, 307-314.	1.4	8
64	Observation of Incoherent Diffraction Radiation from a Single-Edge Target in the Visible-Light Region. Physical Review Letters, 2003, 90, 104801.	7.8	39
65	Extremely Low Vertical-Emittance Beam in the Accelerator Test Facility at KEK. Physical Review Letters, 2002, 88, 194801.	7.8	36
66	Resonance Diffraction Radiation from Ultrarelativistic Particles. Russian Physics Journal, 2002, 45, 905-913.	0.4	1
67	Title is missing!. Russian Physics Journal, 2002, 45, 922-926.	0.4	0
68	Optical Polarization Radiation of Relativistic Electrons in Conducting Targets. Russian Physics Journal, 2002, 45, 895-904.	0.4	0
69	Resonant Diffraction. Chemical Reviews, 2001, 101, 1843-1868.	47.7	162
70	Feasibility of optical diffraction radiation for a non-invasive low-emittance beam diagnostics. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2001, 472, 309-317.	1.6	27
71	Title is missing!. Russian Physics Journal, 2001, 44, 292-298.	0.4	0
72	Polarization Bremsstrahlung. Russian Physics Journal, 2001, 44, 213-219.	0.4	0

#	ARTICLE	IF	CITATIONS
91	Properties of coherent bremsstrahlung from electrons in thick single crystals. Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika), 1991, 34, 490-506.	0.0	0
92	Change in γ radiation properties due to cooling of single-crystal targets. Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika), 1991, 34, 507-514.	0.0	0
93	Spatial distribution of γ rays from electrons passing through a crystal close to the crystal axis. Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika), 1991, 34, 522-526.	0.0	0
94	Angular distribution of the soft component of radiation from relativistic electrons near planar orientation in thick single crystals. Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika), 1991, 34, 507-514.	0.0	0
95	Radiation produced by electrons making multiple passes through thin internal targets in the Tomsk Synchrotron. Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika), 1991, 34, 507-514.	0.0	0
96	The number of photons emitted by a channeled electron. Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika), 1991, 34, 507-514.	0.0	0
97	Experimental study of the albedo of a beam of γ rays produced by ultrarelativistic electrons. Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika), 1991, 34, 555-564.	0.0	2
98	Influence of K_{α} absorption in (111) Ge crystal on spectral yield of parametric X-rays. Physics Letters, Section A: General, Atomic and Solid State Physics, 1990, 147, 326-328.	2.1	9
99	Observation of spectral line splitting for parametric X-rays. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 120, 486-488.	2.1	0
100	Angular distribution and energy dependence of parametric X-ray radiation. Physics Letters, Section A: General, Atomic and Solid State Physics, 1986, 118, 363-365.	2.1	7
101	Observation of monochromatic X-ray radiation from 900 MeV electrons transmitting through a diamond crystal. Physics Letters, Section A: General, Atomic and Solid State Physics, 1985, 110, 177-179.	2.1	35
102	Energy characteristics of planar-channeling radiation for high-energy electrons in diamond. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 83, 337-340.	2.1	13
103	Channeling radiation of 4.9 MeV electrons in crystals. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 81, 40-42.	2.1	5
104	Effect of channeling on $\hat{\Gamma}^3$ -radiation spectra of 870 MeV electrons in diamond crystal. Physics Letters, Section A: General, Atomic and Solid State Physics, 1981, 82, 54-56.	2.1	3
105	Variation of $\hat{\Gamma}^3$ -ray spectra with the energy of channeled electrons. Physics Letters, Section A: General, Atomic and Solid State Physics, 1980, 75, 316-318.	2.1	9
106	Orientation effect of sound excitation by channeled electrons in diamond. Physics Letters, Section A: General, Atomic and Solid State Physics, 1980, 77, 266-268.	2.1	0
107	Deflection of a $\hat{\Gamma}^3$ -radiation beam produced by 900 MeV channeled electrons in a bent crystal. Physics Letters, Section A: General, Atomic and Solid State Physics, 1980, 77, 263-265.	2.1	8
108	Gamma-radiation of channelled electrons in diamond crystal. Nuclear Instruments & Methods, 1980, 169, 585-588.	1.2	3

#	ARTICLE	IF	CITATIONS
109	Radiation from a channeled electron in a crystal. Soviet Physics Journal (English Translation of) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	0.6	1
110	Asymmetry of formation of ρ^+ -mesons by linearly polarized photons in the region of the first pion-nucleon resonance. Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.6	1
111	Beam Test Proposal of an ODR Beam Size Monitor at SLAC FFTB. , 0, , .		1
112	The Possibility of Noninvasive Micron High Energy Electron Beam Size Measurement Using Diffraction Radiation. , 0, , .		1