Alexander Frank

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1468760/publications.pdf

Version: 2024-02-01

50	516	687363	794594
papers	citations	13	19
		h-index	g-index

50	50	50	115
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Neutron diffraction on a moving grating and quasi-energy of cold neutrons. Physics Letters, Section A: General, Atomic and Solid State Physics, 1994, 188, 120-124.	2.1	30
2	Phase modulation of a neutron wave and diffraction of ultracold neutrons on a moving grating. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 311, 6-12.	2.1	30
3	Effect of accelerated matter in neutron optics. Physics of Atomic Nuclei, 2008, 71, 1656-1674.	0.4	27
4	Neutron spin interferometry. Physics Letters, Section A: General, Atomic and Solid State Physics, 1991, 153, 299-302.	2.1	24
5	New gravitational experiment with ultracold neutrons. JETP Letters, 2007, 86, 225-229.	1.4	24
6	Time focusing of nutrons. Physics of Atomic Nuclei, 2000, 63, 545-547.	0.4	23
7	New experiment on the observation of the effect of accelerating matter in neutron optics. JETP Letters, 2011, 93, 361-365.	1.4	21
8	A quantum time lens for ultracold neutrons. JETP Letters, 2003, 78, 188-192.	1.4	18
9	Neutron diffraction at a moving grating as a nonstationary quantum phenomenon. JETP Letters, 2005, 81, 427-431.	1.4	17
10	Effect of accelerating matter in neutron optics. JETP Letters, 2006, 84, 363-367.	1.4	17
11	Optics of ultracold neutrons and the neutron-microscope problem. Uspekhi Fizicheskikh Nauk, 1987, 30, 110-133.	0.3	15
12	Diffraction of ultracold neutrons on a moving grating and neutron focusing in time. Physica B: Condensed Matter, 2004, 350, 246-249.	2.7	15
13	Larmor clock and measuring of neutron interaction time with quantum objects. Physica B: Condensed Matter, 2001, 297, 307-310.	2.7	14
14	Neutron optics of strongly absorbing media and interaction of long-wave neutrons with gadolinium films. Physics of Atomic Nuclei, 2003, 66, 1831-1845.	0.4	14
15	Dynamic reflection and refraction of neutrons at the boundaries of matter characterized by a variable magnetic induction. Physics of Atomic Nuclei, 2005, 68, 1104-1119.	0.4	13
16	Measurement of the neutron interaction time with quantum objects. JETP Letters, 2002, 75, 605-609.	1.4	12
17	Larmor spin precession and neutron optics. Physics of Atomic Nuclei, 2002, 65, 2009-2020.	0.4	12
18	Commemoration of the centenary of the birth of Academician I M Frank (Scientific session of the) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 52, 377-413.	2.2	11

#	Article	IF	Citations
19	New test of the weak equivalence principle for neutrons. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2009, 611, 314-317.	1.6	11
20	Interaction of waves with a birefringent medium moving with acceleration. Physics of Atomic Nuclei, 2013, 76, 1423-1433.	0.4	11
21	Dynamic theory of neutron diffraction from a moving grating. Journal of Experimental and Theoretical Physics, 2016, 122, 32-42.	0.9	11
22	Fundamental properties of the neutron: Fifty years of research. Uspekhi Fizicheskikh Nauk, 1982, 25, 280-297.	0.3	10
23	Modern optics of long-wavelength neutrons. Uspekhi Fizicheskikh Nauk, 1991, 34, 980-987.	0.3	10
24	Superslow neutrons and the dispersion law for neutron waves in matter. Physical Review A, 1997, 55, 1129-1139.	2.5	10
25	Spectroscopy of ultracold neutrons diffracted by a moving grating. Physical Review A, 2016, 93, .	2.5	10
26	Neutron Multiray Reflectiona. Annals of the New York Academy of Sciences, 1995, 755, 858-860.	3.8	8
27	‹title›Neutron multilayer structures for fundamental experiments in UCN optics‹/title›. , 1999, 3767, 360.		8
28	Quantum effects in a one-dimensional magnetic gravitational trap for ultracold neutrons. JETP Letters, 2004, 79, 313-315.	1.4	8
29	Diffraction in Time and a New Type of Interferometry with Nonseparated Beamsa. Annals of the New York Academy of Sciences, 1995, 755, 293-302.	3.8	7
30	Dynamic reflection and refraction of neutrons. Physica B: Condensed Matter, 2009, 404, 2550-2552.	2.7	7
31	On the dispersion law of neutrons in accelerated matter. JETP Letters, 2015, 100, 613-614.	1.4	7
32	Ultracold neutrons and the interaction of waves with moving matter. Physics of Particles and Nuclei, 2016, 47, 647-666.	0.7	7
33	Goosâ€“HÃnchen effect in neutron optics and the reflection time of neutron waves. Physics-Uspekhi, 2018, 61, 952-964.	2.2	7
34	Ultracold-neutron microscopy. Soviet Atomic Energy, 1989, 66, 106-114.	0.1	6
35	Experimental verification of the 1/v law for the absorption cross section of ultracold neutrons in natural gadolinium. JETP Letters, 2006, 84, 105-109.	1.4	5
36	Accelerating medium effect as a general wave phenomenon. Journal of Physics: Conference Series, 2012, 340, 012042.	0.4	5

#	Article	IF	Citations
37	Experimental check of the dispersion law for ultracold neutrons. JETP Letters, 1998, 67, 786-792.	1.4	4
38	On the Goos-HÃnchen effect in neutron optics. Journal of Physics: Conference Series, 2014, 528, 012029.	0.4	4
39	On the possibility of measuring the gravitational interaction of the neutron with a macroscopic body. Physics of Atomic Nuclei, 2009, 72, 1818-1822.	0.4	3
40	Acceleration and deceleration of neutrons: From the phase modulation of a neutron wave to a neutron turbine with refracting prisms. Physics of Atomic Nuclei, 2013, 76, 544-548.	0.4	3
41	Nonstationary Diffraction of Ultracold Neutrons from a Moving Grating and Efficiency of Energy Transfer to a Neutron. Journal of Experimental and Theoretical Physics, 2019, 129, 806-811.	0.9	3
42	Nonstationary neutron diffraction by surface acoustic waves. Physical Review B, 2020, 101, .	3.2	3
43	Interaction of Ultracold Neutrons with a Neutron Interference Filter Oscillating in Space. Journal of Surface Investigation, 2020, 14, 6-12.	0.5	3
44	Interaction of a wave packet with potential structures moving with acceleration. European Physical Journal D, 2021, 75, 1.	1.3	3
45	On the Possibility of Creating a UCN Source at a Periodic Pulsed Reactor. Physics of Particles and Nuclei, 2022, 53, 33-44.	0.7	2
46	Neutron Spin Precession Optics: Recent Results and Some Perspectives. Lecture Notes in Physics, 2002, , 165-175.	0.7	1
47	On Observation of the Goosâ€“HÃnchen Shift of a Neutron Beam. Journal of Surface Investigation, 2020, 14, S127-S131.	0.5	1
48	Reflection of neutrons from a resonant potential structure oscillating in space. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 420, 127748.	2.1	1
49	Petr Efimovich Spivak (on his eightieth birthday). Uspekhi Fizicheskikh Nauk, 1991, 34, 639-640.	0.3	0
50	New test of the dynamic theory of neutron diffraction by a moving grating. EPJ Web of Conferences, 2018, 177, 03005.	0.3	0