

Oleg N Prudnikov

List of Publications by Citations

Source: <https://exaly.com/author-pdf/2202253/oleg-n-prudnikov-publications-by-citations.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

45
papers

282
citations

7
h-index

16
g-index

59
ext. papers

364
ext. citations

1.3
avg, IF

2.66
L-index

#	Paper	IF	Citations
45	Two-dimensional photonic crystal color filter development. <i>Optics Express</i> , 2009 , 17, 8621-9	3.3	81
44	High angular tolerant color filter using subwavelength grating. <i>Applied Physics Letters</i> , 2009 , 94, 213104	3.4	58
43	Steady state of a low-density ensemble of atoms in a monochromatic field taking into account recoil effects. <i>Journal of Experimental and Theoretical Physics</i> , 2011 , 112, 939-945	1	16
42	Kinetics of atoms in the field produced by elliptically polarized waves. <i>Journal of Experimental and Theoretical Physics</i> , 2004 , 98, 438-454	1	13
41	Sub-Doppler laser cooling on combined optical transitions. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2003 , 20, 909	1.7	11
40	The light pressure force and the friction and diffusion coefficients for atoms in a resonant nonuniformly polarized laser field. <i>Journal of Experimental and Theoretical Physics</i> , 2003 , 96, 383-401	1	10
39	Tunable frequency-stabilised laser for studying the cooling dynamics of Rb atoms in a magneto-optical trap. <i>Quantum Electronics</i> , 2004 , 34, 341-347	1.8	9
38	Quantum treatment of two-stage sub-Doppler laser cooling of magnesium atoms. <i>Physical Review A</i> , 2015 , 92,	2.6	7
37	Dissipative light mask generated by a nonuniformly polarized field for atomic lithography. <i>Journal of Experimental and Theoretical Physics</i> , 2007 , 104, 839-845	1	7
36	Two-temperature momentum distribution in a thulium magneto-optical trap. <i>Physical Review A</i> , 2017 , 96,	2.6	6
35	New approaches in deep laser cooling of magnesium atoms for quantum metrology. <i>Laser Physics</i> , 2016 , 26, 095503	1.2	6
34	Magneto-optical trap formed by elliptically polarised light waves for Mg atoms. <i>Quantum Electronics</i> , 2016 , 46, 661-667	1.8	5
33	Basis of polarization-dressed states of an atom in an elliptically polarized resonant field. <i>Journal of Experimental and Theoretical Physics</i> , 2004 , 99, 1137-1149	1	5
32	New friction force due to spontaneous light pressure. <i>JETP Letters</i> , 1999 , 70, 443-449	1.2	5
31	Laser cooling of $^{171}\text{Yb}^+$ ions in a frequency-modulated field. <i>Quantum Electronics</i> , 2017 , 47, 806-811	1.8	4
30	Spectroscopy of the quadrupole clock transition of ytterbium-171 ions for optical frequency standard development. <i>Quantum Electronics</i> , 2019 , 49, 412-417	1.8	4
29	Anomalous spatial concentration of atoms in the field of a standing light wave. <i>JETP Letters</i> , 2012 , 95, 399-402	1.2	4

28	Three-dimensional theory of the magneto-optical trap. <i>Journal of Experimental and Theoretical Physics</i> , 2015 , 120, 587-594	1	4
27	Quasiclassical laser cooling in an intense standing wave. <i>Journal of Optics B: Quantum and Semiclassical Optics</i> , 2004 , 6, 336-344		4
26	Kinetics of atoms in an elliptically polarized standing wave. <i>Journal of Experimental and Theoretical Physics</i> , 1999 , 88, 433-440	1	4
25	Magneto-optical force in a resonant field of elliptically polarized light waves. <i>Physical Review A</i> , 2008 , 77,	2.6	3
24	Polarization-gradient laser cooling as a way to create strongly localized structures for atom lithography. <i>Physical Review A</i> , 2007 , 75,	2.6	3
23	Scaling law in laser cooling on narrow-line optical transitions. <i>Physical Review A</i> , 2019 , 99,	2.6	2
22	Kinetics of atoms in a bichromatic field formed by elliptically polarised waves. <i>Quantum Electronics</i> , 2017 , 47, 438-445	1.8	2
21	Essentially nonequilibrium steady state of atoms in an optical field. <i>JETP Letters</i> , 2015 , 102, 576-580	1.2	2
20	Laser cooling limits in fields with a polarisation gradient of atoms with different recoil energies. <i>Quantum Electronics</i> , 2020 , 50, 939-946	1.8	2
19	Kinetics of atoms in a bichromatic field. <i>Journal of Experimental and Theoretical Physics</i> , 2013 , 117, 222-231		1
18	Rectification of the dipole force in a monochromatic field created by elliptically polarized waves. <i>Journal of Experimental and Theoretical Physics</i> , 2001 , 93, 63-70	1	1
17	Itat'ev-Stratonovich dilemma in the problem of laser cooling of atoms: limits of applicability of the semiclassical approximation. <i>Quantum Electronics</i> , 2022 , 52, 130-136	1.8	1
16	Combined atomic clock with blackbody-radiation-shift-induced instability below 10^{-19} under natural environment conditions. <i>New Journal of Physics</i> , 2021 , 23, 023032	2.9	1
15	Quantum treatment of laser cooling on weak transitions: multipeaks and bimodal momentum distributions. <i>Journal of Physics: Conference Series</i> , 2018 , 951, 012004	0.3	1
14	Atom interferometry with ultracold Mg atoms: frequency standard and quantum sensors. <i>Journal of Physics: Conference Series</i> , 2020 , 1508, 012002	0.3	0
13	Laser pulse shape dependence of poly-Si crystallization. <i>AIP Advances</i> , 2017 , 7, 125102	1.5	0
12	Magneto-optical force in the resonance field formed by elliptically polarized light waves. <i>Journal of Experimental and Theoretical Physics</i> , 2008 , 106, 839-845	1	0
11	Quantum theory of laser cooling: Statistical description of the process dynamics. <i>Journal of Experimental and Theoretical Physics</i> , 2016 , 123, 1-11	1	0

10	Guided-mode waves structure of electric and magnetic dipole resonances in a metamaterial slab. <i>Optics Express</i> , 2021 , 29, 30610-30624	3.3	0
9	Deep laser cooling of strontium atoms on $1S_0-3P_0$ transition. <i>Journal of Physics: Conference Series</i> , 2017 , 793, 012011	0.3	
8	Deep sub-Doppler cooling of Mg in MOT formed by light waves with elliptical polarization. <i>Journal of Physics: Conference Series</i> , 2017 , 793, 012021	0.3	
7	An optical frequency standard based on ultracold magnesium atoms. <i>Journal of Physics: Conference Series</i> , 2017 , 793, 012008	0.3	
6	Studying the possibility of deep laser cooling of ^{24}Mg atoms in an optical lattice: Two-level quantum model. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2017 , 81, 1420-1428	0.4	
5	Steady-state light-induced forces in atomic nanolithography. <i>Journal of Experimental and Theoretical Physics</i> , 2005 , 101, 584-596	1	
4	Magneto-optical trap for ^6Li atoms formed by elliptically polarised light waves. <i>Quantum Electronics</i> , 2022 , 52, 137-143	1.8	
3	Guided-mode resonance in periodic surface textures on Si thin films induced by nanosecond laser irradiation. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , 2021 , 45, 100923	2.6	
2	Quantum theory of the laser cooling of two-level atoms in the field of a standing light wave: A statistical description of dynamics. <i>Bulletin of the Russian Academy of Sciences: Physics</i> , 2016 , 80, 55-59	0.4	
1	Study of laser cooling in deep optical lattice: two-level quantum model. <i>Journal of Physics: Conference Series</i> , 2018 , 951, 012019	0.3	