

Gabor Demeter

List of Publications by Citations

Source: <https://exaly.com/author-pdf/942748/gabor-demeter-publications-by-citations.pdf>

Version: 2024-04-27

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.

39
papers

308
citations

10
h-index

15
g-index

46
ext. papers

372
ext. citations

3.2
avg, IF

3.27
L-index

#	Paper	IF	Citations
39	Transition to Chaos via Gluing Bifurcations in Optically Excited Nematic Liquid Crystals. <i>Physical Review Letters</i> , 1999 , 83, 4744-4747	7.4	45
38	Complex nonlinear behavior in optically excited nematic liquid crystals. <i>Physical Review E</i> , 2000 , 61, 6678-6688	2.8	22
37	Numerical investigation of optically induced director oscillations in nematic liquid crystals. <i>Physical Review E</i> , 2001 , 64, 020701	2.4	21
36	Population transfer in three-level atoms with Doppler-broadened transition lines by a single frequency-chirped short laser pulse. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2000 , 17, 107	1.7	21
35	Coherent population transfer in Rb atoms by frequency-chirped laser pulses. <i>Physical Review A</i> , 2003 , 68,	2.6	19
34	Creation of a coherent superposition of quantum states by a single frequency-chirped short laser pulse. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2008 , 25, 166	1.7	14
33	Transient laser cooling of two-level quantum systems with narrow natural linewidths. <i>Physical Review A</i> , 1996 , 53, 2885-2888	2.6	14
32	Light-induced dynamics in nematic liquid crystals – fascinating world of complex nonlinear phenomena. <i>Physics Reports</i> , 2007 , 448, 133-162	27.7	12
31	Pulse propagation in a dressed, degenerate system. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2013 , 30, 829	1.7	10
30	Pattern-forming instability induced by light in pure and dye-doped nematic liquid crystals. <i>Physical Review E</i> , 2002 , 66, 031707	2.4	10
29	Deflection and splitting of atomic beams with counterpropagating, short, chirped laser pulses. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1998 , 15, 16	1.7	9
28	Advanced neutral alkali beam diagnostics for applications in fusion research (invited). <i>Review of Scientific Instruments</i> , 2018 , 89, 10D107	1.7	9
27	Solving the Maxwell-Bloch equations for resonant nonlinear optics using GPUs. <i>Computer Physics Communications</i> , 2013 , 184, 1203-1210	4.2	8
26	Influence of the backflow effect on the orientational dynamics induced by light in nematics. <i>Physical Review E</i> , 2005 , 71, 051711	2.4	8
25	Composite pulses for high-fidelity population inversion in optically dense, inhomogeneously broadened atomic ensembles. <i>Physical Review A</i> , 2016 , 93,	2.6	7
24	Adiabatic passage in photon-echo quantum memories. <i>Physical Review A</i> , 2013 , 88,	2.6	7
23	Mechanical effect of retroreflected frequency-chirped laser pulses on two-level atoms. <i>Physical Review A</i> , 2006 , 74,	2.6	7

22	Numerical study of optically induced director oscillations in nematic liquid crystals: transition to chaos via homoclinic gluings and the role of backflow. <i>Physical Review E</i> , 2005 , 72, 051712	2.4	7
21	Tomography using neural networks. <i>Review of Scientific Instruments</i> , 1997 , 68, 1438-1443	1.7	6
20	Manipulation of two-level quantum systems with narrow transition lines by short linearly polarized frequency-chirped laser pulses. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1996 , 13, 1697-1707	1.7	6
19	Propagation of frequency-chirped laser pulses in a medium of atoms with a Λ level scheme. <i>Physical Review A</i> , 2007 , 76,	2.6	5
18	Orientalional Dynamics Induced by Circularly Polarized Light in Nematic Liquid Crystals. <i>Molecular Crystals and Liquid Crystals</i> , 2004 , 421, 117-131	0.5	5
17	Proton beam defocusing in AWAKE: comparison of simulations and measurements. <i>Plasma Physics and Controlled Fusion</i> ,	2	5
16	Theory of the adiabatic passage in two-level quantum systems with superpositional initial states. <i>Journal of Modern Optics</i> , 1997 , 44, 1511-1523	1.1	4
15	Experimental study of wakefields driven by a self-modulating proton bunch in plasma. <i>Physical Review Accelerators and Beams</i> , 2020 , 23,	1.8	4
14	Transition between Instability and Seeded Self-Modulation of a Relativistic Particle Bunch in Plasma. <i>Physical Review Letters</i> , 2021 , 126, 164802	7.4	4
13	Propagation of ultrashort resonant ionizing laser pulses in rubidium vapor. <i>Physical Review A</i> , 2019 , 99,	2.6	3
12	Nonlinear pulse propagation phenomena in ion-doped dielectric crystals. <i>Physical Review A</i> , 2012 , 85,	2.6	3
11	Multiphoton adiabatic passage for atom optics applications. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2009 , 26, 867	1.7	3
10	Coherence creation in an optically thick medium by matched propagation of a chirped-laser-pulse pair. <i>Physical Review A</i> , 2014 , 89,	2.6	2
9	Coherence rephasing combined with spin-wave storage using chirped control pulses. <i>Physical Review A</i> , 2014 , 89,	2.6	2
8	Proton Bunch Self-Modulation in Plasma with Density Gradient. <i>Physical Review Letters</i> , 2020 , 125, 264801	7.4	2
7	Quantum control of multilevel atoms with rotational degeneracy using short laser pulses. <i>Physical Review A</i> , 2010 , 82,	2.6	1
6	LIGHT-INDUCED PATTERN FORMATION IN NEMATIC LIQUID CRYSTALS. <i>Molecular Crystals and Liquid Crystals</i> , 2001 , 366, 807-814		1
5	Simulation and experimental study of proton bunch self-modulation in plasma with linear density gradients. <i>Physical Review Accelerators and Beams</i> , 2021 , 24,	1.8	1

- 4 Velocity-tuned resonances between different ground-state sublevels in two (σ and π polarized) standing waves. *Physical Review A*, **1997**, 56, 1472-1480 2.6
- 3 DYNAMICAL PHENOMENA IN NEMATIC LIQUID CRYSTALS INDUCED BY LIGHT **2006**, 83-122
- 2 Coherent interaction of frequency-modulated laser pulses with Rb atoms. *European Physical Journal A*, **2004**, 20, 167-176
- 1 Analysis of proton bunch parameters in the AWAKE experiment. *Journal of Instrumentation*, **2021**, 16, P11031 1