Nikolai L Manakov

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/543031/publications.pdf

Version: 2024-02-01

77 papers

2,044 citations

218677 26 h-index 254184 43 g-index

77 all docs

77 docs citations

77 times ranked 809 citing authors

#	Article	IF	CITATIONS
1	Electron Vortices in Photoionization by Circularly Polarized Attosecond Pulses. Physical Review Letters, 2015, 115, 113004.	7.8	141
2	Analytic Description of the High-Energy Plateau in Harmonic Generation by Atoms: Can the Harmonic Power Increase with Increasing Laser Wavelengths?. Physical Review Letters, 2009, 102, 243901.	7.8	132
3	Wavelength Scaling of High-Harmonic Yield: Threshold Phenomena and Bound State Symmetry Dependence. Physical Review Letters, 2008, 100, 173001.	7.8	120
4	Analytic formulae for high harmonic generation. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 035601.	1.5	90
5	Interaction of laser radiation with a negative ion in the presence of a strong static electric field. Journal of Physics B: Atomic, Molecular and Optical Physics, 2000, 33, R141-R214.	1.5	86
6	Perturbation theory analysis of attosecond photoionization. Physical Review A, 2009, 80, .	2.5	79
7	Multistart spiral electron vortices in ionization by circularly polarized UV pulses. Physical Review A, 2016, 94, .	2.5	78
8	A new technique in the theory of angular distributions in atomic processes: the angular distribution of photoelectrons in single and double photoionization. Journal of Physics B: Atomic, Molecular and Optical Physics, 1996, 29, 2711-2737.	1.5	76
9	Multiphoton detachment of a negative ion by an elliptically polarized, monochromatic laser field. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, R49-R124.	1.5	72
10	Threshold-Related Enhancement of the High-Energy Plateau in Above-Threshold Detachment. Physical Review Letters, 2002, 88, 193001.	7.8	62
11	Static-Electric-Field-Induced Polarization Effects in Harmonic Generation. Physical Review Letters, 2000, 85, 732-735.	7.8	61
12	Analytic theory of high-order-harmonic generation by an intense few-cycle laser pulse. Physical Review A, 2012, 85, .	2.5	47
13	High-order harmonic generation by atoms in a few-cycle laser pulse: Carrier-envelope phase and many-electron effects. Physical Review A, 2011, 83, .	2.5	43
14	Circular dichroism from unpolarized atoms in multiphoton multicolor ionization. Physical Review A, 2000, 62, .	2.5	41
15	Strong field detachment of a negative ion with non-zero angular momentum: application to FÂ. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, L419-L426.	1.5	41
16	Elliptic dichroism and angular distribution of electrons in two-photon ionization of atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 1999, 32, 3747-3767.	1.5	40
17	Kinematical vortices in double photoionization of helium by attosecond pulses. Physical Review A, 2017, 96, .	2.5	40
18	Vacuum polarization by a Coulomb field. Analytical approximation of the polarization potential. Journal of Physics B: Atomic, Molecular and Optical Physics, 1991, 24, 559-569.	1.5	39

#	Article	IF	CITATIONS
19	Quasistationary quasi-energy states and convergence of perturbation series in a monochromatic field. Theoretical and Mathematical Physics (Russian Federation), 1981, 48, 815-822.	0.9	36
20	Control of Harmonic Generation by the Time Delay Between Two-Color, Bicircular Few-Cycle Mid-IR Laser Pulses. Physical Review Letters, 2018, 120, 263203.	7.8	33
21	High-order-harmonic-generation spectroscopy with an elliptically polarized laser field. Physical Review A, 2012, 86, .	2.5	31
22	Validity of Factorization of the High-Energy Photoelectron Yield in Above-Threshold Ionization of an Atom by a Short Laser Pulse. Physical Review Letters, 2012, 108, 213002.	7.8	29
23	Nonlinear Dichroism in Back-to-Back Double Ionization of He by an Intense Elliptically Polarized Few-Cycle Extreme Ultraviolet Pulse. Physical Review Letters, 2014, 113, 223002.	7.8	29
24	Dynamical electron vortices in attosecond double photoionization of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">H</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math> . Physical Review A, 2018, 98, .	2.5	28
25	dc Field-Induced, Phase and Polarization Control of Interference between One- and Two-Photon Ionization Amplitudes. Physical Review Letters, 1999, 82, 4791-4794.	7.8	27
26	Threshold Effects on Angular Distributions for Multiphoton Detachment by Intense Elliptically Polarized Light. Physical Review Letters, 2001, 87, 133001.	7.8	27
27	Elliptic and Circular Dichroism Effects in Two-Photon Double Ionization of Atoms. Physical Review Letters, 2006, 97, 123002.	7.8	26
28	Photon-polarization effects and their angular dependence in relativistic two-photon bound-bound transitions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2000, 33, 4425-4446.	1.5	22
29	Analytic description of elastic electron-atom scattering in an elliptically polarized laser field. Physical Review A, 2013, 87, .	2.5	22
30	Resonant electron-atom bremsstrahlung in an intense laser field. Physical Review A, 2014, 89, .	2.5	22
31	Harmonic generation spectroscopy with a two-colour laser field having orthogonal linear polarizations. Journal of Physics B: Atomic, Molecular and Optical Physics, 2013, 46, 231001.	1.5	21
32	Adiabatic-limit Coulomb factors for photoelectron and high-order-harmonic spectra. Physical Review A, 2017, 96, .	2.5	21
33	Analytic model for the description of above-threshold ionization by an intense short laser pulse. Physical Review A, 2014, 89, .	2.5	20
34	Scaling laws for high-order-harmonic generation with midinfrared laser pulses. Physical Review A, 2015, 92, .	2.5	20
35	Attosecond-pulse metrology based on high-order harmonic generation. Physical Review A, 2020, 101, .	2.5	20
36	Perturbative calculation of the triply differential cross section for photo-double-ionization of He. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, L543-L552.	1.5	19

#	Article	IF	CITATIONS
37	An analytical quantum model for intense field processes: quantum origin of rescattering plateaus. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, S283-S305.	1.5	19
38	Invariant representations of finite rotation matrices and some applications. Physical Review A, 1998, 57, 3233-3244.	2.5	17
39	Exact analytic relation between quantum defects and scattering phases with applications to Green's functions in quantum defect theory. European Physical Journal D, 2000, 8, 347-359.	1.3	17
40	XUV-assisted high-order-harmonic-generation spectroscopy. Physical Review A, 2018, 98, .	2.5	17
41	Analytic description of high-order harmonic generation in the adiabatic limit with application to an initial s state in an intense bicircular laser pulse. Physical Review A, 2019, 99, .	2.5	17
42	Perturbative analysis of the triply differential cross section and circular dichroism in photo-double-ionization of He. Physical Review A, 2004, 69, .	2.5	14
43	Control of threshold enhancements in harmonic generation by atoms in a two-color laser field with orthogonal polarizations. Physical Review A, 2016, 93, .	2.5	14
44	Analytic description of the high-energy plateau in laser-assisted electron–atom scattering. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 241002.	1.5	13
45	Atomic photoionization experiment by harmonic-generation spectroscopy. Physical Review A, 2016, 93, .	2.5	12
46	Adiabatic expressions for the wave function of an electron in a finite-range potential and an intense low-frequency laser pulse. Physical Review A, 2021, 104, .	2.5	12
47	Nondipole effects in the triply differential cross section for double photoionization of He. Physical Review A, 2005, 71, .	2.5	11
48	Rescattering effects in the multiphoton regime. Journal of Physics B: Atomic, Molecular and Optical Physics, 2005, 38, L375-L382.	1.5	11
49	Quasienergy of a System Subjected to a Periodic External Disturbance. Uspekhi Fizicheskikh Nauk, 1975, 18, 920-921.	0.3	10
50	Atomic orientation effects in light scattering due to dissipative processes. Journal of Physics B: Atomic, Molecular and Optical Physics, 1996, 29, L7-L12.	1.5	10
51	Carrier-envelope-phase-induced asymmetries in double ionization of helium by an intense few-cycle XUV pulse. Physical Review A, 2013, 88, .	2.5	10
52	Polarization control of direct (non-sequential) two-photon double ionization of He. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 3115-3126.	1.5	9
53	Zero-range-potential model for strong-field molecular processes: Dynamic polarizability and photodetachment cross section. Physical Review A, 2013, 88, .	2.5	9
54	Comment on "Photodetachment in combined static and dynamic electric fields― Physical Review A, 2001, 64, .	2.5	8

#	Article	IF	CITATIONS
55	Plateau Structure in Resonant Laser-Assisted Electron-Atom Scattering. Physical Review Letters, 2009, 102, 103201.	7.8	8
56	DC field-induced resonance and polarization effects in two-photon transitions between atomic states with different parity. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 2109-2117.	1.5	7
57	Static-electric-field behaviour in negative ion detachment by an intense, high-frequency laser field. Journal of Physics B: Atomic, Molecular and Optical Physics, 2001, 34, L579-L586.	1.5	7
58	Comment on analytical calculations of two-photon transition amplitudes for the hydrogen atom. Journal of Physics B: Atomic, Molecular and Optical Physics, 2005, 38, 311-316.	1.5	6
59	Comment on "Universality of Returning Electron Wave Packet in High-Order Harmonic Generation with Midinfrared Laser Pulses― Physical Review Letters, 2015, 114, 069301.	7.8	6
60	Electron interference in atomic ionization by two crossing polarized ultrashort pulses. Physical Review A, 2021, 103, .	2.5	6
61	Nonlinear variations in the Faraday effect caused in atomic systems by a strong magnetic field. Physical Review A, 1980, 21, 1589-1594.	2.5	5
62	Generation of optical harmonics in atoms. Soviet Journal of Quantum Electronics, 1975, 5, 22-26.	0.1	4
63	DC-field-induced resonance and polarization effects in two-colour frequency mixing in atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2000, 33, 2057-2073.	1.5	4
64	Circular dichroism at equal energy sharing in photo-double-ionization of He. Physical Review A, 2004, 70, .	2.5	4
65	Analytic description of the above-threshold detachment in the adiabatic limit. Physical Review A, 2020, 102, .	2.5	4
66	Changes in the polarization properties of an electromagnetic wave caused by atoms in external fields. Soviet Journal of Quantum Electronics, 1975, 5, 1055-1059.	0.1	3
67	Control of atomic dynamics in laser-assisted electron-atom scattering through the driving-laser ellipticity. Physical Review A, 2013, 87, .	2.5	3
68	Circular dichroism in classical Coulomb scattering involving bremsstrahlung. Physical Review A, 2005, 72, .	2.5	2
69	Molecular Symmetry-Mixed Dichroism in Double Photoionization of <mml:math display="inline" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mrow><mml:mi mathvariant="normal">H</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow><td>7.8 ><td>2 row></td></td></mml:msub></mml:mrow></mml:math>	7.8 > <td>2 row></td>	2 row>
70	Conference Series, 2009, 123, 143202. Analytic formulas for above threshold ionization or detachment plateau spectra. Journal of Physics: Conference Series, 2009, 194, 032033.	0.4	1
71	Suppression of the contribution of short trajectories into above-threshold ionisation spectra by a two-colour laser field. Quantum Electronics, 2016, 46, 361-365.	1.0	1
72	Solving a certain differential equation in the theory of magnetic resonance. Radiophysics and Quantum Electronics, 1976, 19, 1330-1331.	0.5	0

#	Article	IF	CITATIONS
73	Nondipole Effects in Double Photoionization of He. AIP Conference Proceedings, 2006, , .	0.4	0
74	Laser-induced resonant structure in electron-atom scattering. Journal of Physics: Conference Series, 2009, 194, 112004.	0.4	0
75	Ellipticity dependence of high harmonic yield in intense laser field: case of s-valence electron. Quantum Electronics, 2016, 46, 366-370.	1.0	0
76	RESCATTERING-INDUCED EFFECTS FOR ELECTRON-ATOM SCATTERING IN THE PRESENCE OF A CIRCULARLY POLARIZED LASER FIELD. , $2006, , .$		0
77	Circular Dichroism in the Photoionization of Unpolarized Atoms by Two Crossing Photon Beams. Atoms, 2021, 9, 108.	1.6	0