

Igor A Ivanov

List of Publications by Year in descending order

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140
papers

2,584
citations

172457

29
h-index

214800

47
g-index

141
all docs

141
docs citations

141
times ranked

1325
citing authors

#	ARTICLE	IF	CITATIONS
1	Strong-field ionization of argon: Electron momentum spectra and nondipole effects. <i>Physical Review A</i> , 2022, 105, .	2.5	3
2	Analysis of correlations in strong field ionization. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2022, 55, 055001.	1.5	3
3	Distribution of absorbed photons in the tunneling ionization process. <i>Scientific Reports</i> , 2021, 11, 3956.	3.3	1
4	Controlling quantum numbers and light emission of Rydberg states via the laser pulse duration. <i>Physical Review A</i> , 2021, 103, .	2.5	8
5	Classical backpropagation for probing the backward rescattering time of a tunnel-ionized electron in an intense laser field. <i>Physical Review A</i> , 2021, 104, .	2.5	2
6	Two-pulse interference and correlation in an attoclock. <i>Physical Review A</i> , 2021, 104, .	2.5	1
7	Effect of the finite speed of light in ionization of extended molecular systems. <i>Scientific Reports</i> , 2021, 11, 21457.	3.3	3
8	Atomic ionization driven by the quantized electromagnetic field in a Fock state. <i>Physical Review A</i> , 2020, 102, .	2.5	3
9	Ionization yield measurement using metal electrodes with a static electric field in ambient air. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2020, 53, 174003.	1.5	3
10	Simple man model in the Heisenberg picture. <i>Communications Physics</i> , 2020, 3, .	5.3	3
11	Time correlation inside a laser pulse. <i>Physical Review A</i> , 2020, 101, .	2.5	4
12	Attosecond streaking using a rescattered electron in an intense laser field. <i>Scientific Reports</i> , 2020, 10, 22075.	3.3	8
13	Quantum chaos in strong field ionization of hydrogen. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2019, 52, 225002.	1.5	2
14	Relativistic Nondipole Effects in Strong-Field Atomic Ionization at Moderate Intensities. <i>Physical Review Letters</i> , 2019, 123, 093201.	7.8	30
15	Attosecond angular streaking and tunnelling time in atomic hydrogen. <i>Nature</i> , 2019, 568, 75-77.	27.8	190
16	Thermo-optical properties of EuF ₂ -based crystals. <i>Applied Physics Letters</i> , 2019, 114, .	3.3	15
17	Entropy-based view of the strong field ionization process. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2019, 52, 085601.	1.5	2
18	Strong-field approximation and its modifications as evolution equations. <i>Physical Review A</i> , 2019, 99, .	2.5	3

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19	Instantaneous ionization rate as a functional derivative. Communications Physics, 2018, 1, .	5.3	16
20	Strong-field-approximation model for coherent extreme-ultraviolet emission generated through frustrated tunneling ionization. Physical Review A, 2018, 98, .	2.5	9
21	Coherent extreme-ultraviolet emission generated through frustrated tunnelling ionization. Nature Photonics, 2018, 12, 620-624.	31.4	42
22	Direct sampling of a light wave in air. Optica, 2018, 5, 402.	9.3	77
23	Investigation of the Thermal Conductivity Terbium Gallium and Terbium Scandium Aluminum Garnet Crystals. Crystallography Reports, 2018, 63, 451-455.	0.6	6
24	Exit point in the strong field ionization process. Scientific Reports, 2017, 7, 39919.	3.3	23
25	Attoclock using Atomic Hydrogen. Journal of Physics: Conference Series, 2017, 875, 022039.	0.4	0
26	Angle-dependent time delay in two-color XUV+IR photoemission of He and Ne. Physical Review A, 2017, 96, .	2.5	44
27	Spin-flip processes and nondipole effects in above-threshold ionization of hydrogen in ultrastrong laser fields. Physical Review A, 2017, 96, .	2.5	8
28	Measuring laser carrier-envelope-phase effects in the noble gases with an atomic hydrogen calibration standard. Physical Review A, 2017, 96, .	2.5	6
29	Intensity-dependent shift in transverse electron momentum distribution for strong field ionization. Journal of Physics: Conference Series, 2017, 875, 022020.	0.4	0
30	Photoionization in the presence of circularly polarized fundamental and odd-order harmonic fields. Physical Review A, 2017, 95, .	2.5	6
31	Generation and characterization of a single-cycle laser pulse. , 2017, , .		0
32	Transverse electron momentum distribution in tunneling and over the barrier ionization by laser pulses with varying ellipticity. Scientific Reports, 2016, 6, 19002.	3.3	13
33	Angular dependence of photoemission time delay in helium. Physical Review A, 2016, 94, .	2.5	119
34	Nondipole effects in strong-field ionization. Physical Review A, 2016, 94, .	2.5	29
35	Low-energy structures in strong-field ionization. Physical Review A, 2016, 93, .	2.5	1
36	Time evolution of the lateral-velocity distribution for a strong-field-ionization process. Physical Review A, 2016, 93, .	2.5	2

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37	Relativistic approach to the tunneling-time problem. <i>Physical Review A</i> , 2015, 92, .	2.5	10
38	Origin of the cusp in the transverse momentum distribution for the process of strong-field ionization. <i>Physical Review A</i> , 2015, 92, .	2.5	4
39	Pulse-shape effects in strong-field atomic ionization by an XUV pulse. <i>Journal of Physics: Conference Series</i> , 2015, 635, 092021.	0.4	0
40	Transverse electron momentum distribution in strong field ionization: transition from tunneling to over the barrier ionization regimes. <i>Journal of Physics: Conference Series</i> , 2015, 635, 092077.	0.4	0
41	Transverse electron momentum distribution of spin orbit wave packets. <i>Journal of Physics: Conference Series</i> , 2015, 635, 092006.	0.4	0
42	Relativistic calculation of the electron momentum shift in tunneling ionization. <i>Journal of Physics: Conference Series</i> , 2015, 635, 092007.	0.4	0
43	Transverse electron momentum distribution in tunneling and over the barrier ionization by strong-field laser pulses. <i>Journal of Physics: Conference Series</i> , 2015, 635, 092073.	0.4	1
44	Interpreting attoclock measurements of tunnelling times. <i>Nature Physics</i> , 2015, 11, 503-508.	16.7	256
45	Investigation of thermo-optical characteristics of magneto-active crystal Na _{0.37} Tb _{0.63} F _{2.26} . <i>Optics Letters</i> , 2015, 40, 4919.	3.3	32
46	Endpoint contribution to the instantaneous ionization rate for tunneling ionization. <i>Physical Review A</i> , 2015, 91, .	2.5	2
47	Relativistic calculation of the electron-momentum shift in tunneling ionization. <i>Physical Review A</i> , 2015, 91, .	2.5	40
48	Attosecond Spatial Control of Electron Wave Packet Emission Dynamics. <i>Springer Proceedings in Physics</i> , 2015, , 113-117.	0.2	0
49	Laser-sub-cycle two-dimensional electron-momentum mapping using orthogonal two-color fields. <i>Physical Review A</i> , 2014, 90, .	2.5	55
50	Relativistic effects in time delay of atomic photoionization. <i>Physical Review A</i> , 2014, 89, .	2.5	9
51	Atomic delay in helium, neon, argon and krypton. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2014, 47, 245003.	1.5	85
52	Growth and magneto-optical properties of Na _{0.37} Tb _{0.63} F _{2.26} cubic single crystal. <i>Crystallography Reports</i> , 2014, 59, 718-723.	0.6	25
53	Transverse-electron-momentum distribution in pump-probe sequential double ionization. <i>Physical Review A</i> , 2014, 90, .	2.5	10
54	Displacement effect in strong-field atomic ionization by an XUV pulse. <i>Physical Review A</i> , 2014, 90, .	2.5	22

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55	Evolution of the transverse photoelectron-momentum distribution for atomic ionization driven by a laser pulse with varying ellipticity. Physical Review A, 2014, 90, .	2.5	47
56	Strong-field ionization of He by elliptically polarized light in attoclock configuration. Physical Review A, 2014, 89, .	2.5	61
57	Time delay in atomic photoionization with circularly polarized light. Journal of Physics: Conference Series, 2014, 488, 032003.	0.4	0
58	Attoclock Measurements of Strong-Field Ionization Times. , 2014, , .		0
59	Extraction of the attosecond time delay in atomic photoionization using the soft-photon approximation. Physical Review A, 2013, 87, .	2.5	4
60	Time delay in atomic photoionization with circularly polarized light. Physical Review A, 2013, 87, .	2.5	36
61	Two-photon double ionization of the H ₂ molecule: Cross sections and amplitude analysis. Physical Review A, 2013, 87, .	2.5	12
62	Jost-function approach to quantum defect theory. Physical Review A, 2013, 88, .	2.5	0
63	Single-photon double ionization of H $\langle\text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\langle\text{mml:mrow />\langle\text{mml:mn}>2\langle\text{mml:mn}>\langle\text{mml:mrow />\langle\text{mml:math}>away from equilibrium: A showcase of two-center electron interference. Physical Review A, 2012, 86, .$	2.5	5
64	Double photoionization of the hydrogen molecule from the viewpoint of the time-delay theory. Physical Review A, 2012, 86, .	2.5	9
65	Locating the origin of photoelectrons in atomic photoionization. Physical Review A, 2012, 85, .	2.5	3
66	Time-dependent calculations of double photoionization of the aligned H ₂ molecule. Physical Review A, 2012, 85, .	2.5	21
67	Complete characterization of the process of single-photon two-electron ionization of helium. Journal of Physics: Conference Series, 2012, 388, 022002.	0.4	0
68	Atomic photoionization: When does it actually begin?. Journal of Physics: Conference Series, 2012, 388, 032009.	0.4	0
69	Attosecond time-delay spectroscopy of the hydrogen molecule. Physical Review A, 2012, 86, .	2.5	22
70	Timing analysis of two-electron photoemission. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 101003.	1.5	17
71	Strong-field ionization of lithium. Physical Review A, 2011, 83, .	2.5	57
72	On the account of final state correlation in double ionization processes. European Physical Journal D, 2011, 61, 563-569.	1.3	3

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73	Complete characterization of double photoionization processes. <i>Physical Review A</i> , 2011, 83, .	2.5	4
74	Time delay in strong-field photoionization of a hydrogen atom. <i>Physical Review A</i> , 2011, 83, .	2.5	40
75	Atomic systems with one and two active electrons in electromagnetic fields: Ionization and high harmonics generation. <i>Journal of Physics: Conference Series</i> , 2010, 212, 012022.	0.4	0
76	Delay in Atomic Photoionization. <i>Physical Review Letters</i> , 2010, 105, 233002.	7.8	147
77	Modifying the high-energy part of the above-threshold-ionization spectrum. <i>Physical Review A</i> , 2010, 82, .	2.5	6
78	Angular anisotropy parameters for sequential two-photon double ionization of helium. <i>Physical Review A</i> , 2009, 79, .	2.5	12
79	Tailoring the waveforms to extend the high-order harmonic generation cutoff. <i>Physical Review A</i> , 2009, 80, .	2.5	9
80	Calculation of HHG spectra in complex atoms. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2009, 42, 145601.	1.5	6
81	Terbium gallium garnet for high average power Faraday isolators: modern aspects of growing and characterization. , 2009, , .		5
82	Nd ³⁺ :GGG and Cr ⁴⁺ :GGG epitaxial films for neodymium lasers. <i>Physics of Wave Phenomena</i> , 2009, 17, 77-91.	1.1	3
83	Harmonic generation for atoms in fields of varying ellipticity: Single-active-electron model with Hartree-Fock potential. <i>Physical Review A</i> , 2009, 79, .	2.5	10
84	Above-threshold-ionization structures in photoelectron momentum distributions for single ionization of He by a strong electromagnetic field. <i>Physical Review A</i> , 2009, 80, .	2.5	2
85	Angular anisotropy parameters for sequential two-photon double ionization of helium. <i>Journal of Physics: Conference Series</i> , 2009, 194, 022032.	0.4	0
86	Multi-photon ionization of lithium. <i>Journal of Physics: Conference Series</i> , 2009, 194, 032031.	0.4	0
87	Investigation of the variations in the crystallization front shape during growth of gadolinium gallium and terbium gallium crystals by the Czochralski method. <i>Crystallography Reports</i> , 2008, 53, 1181-1190.	0.6	10
88	High harmonics generation from excited states of atomic lithium. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008, 41, 115603.	1.5	10
89	Perturbative calculation of two-photon double electron ionization of helium. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008, 41, 095002.	1.5	21
90	Resonant enhancement of generation of harmonics. <i>Physical Review A</i> , 2008, 78, .	2.5	20

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91	Single-photon double ionization of negative hydrogen ions in the presence of a dc electric field. Physical Review A, 2007, 75, .	2.5	2
92	Angular anisotropy parameters and recoil-ion momentum distribution in two-photon double ionization of helium. Physical Review A, 2007, 76, .	2.5	8
93	Two-photon double ionization of helium in the region of photon energies $42 \leq 50$ eV. Physical Review A, 2007, 75, .	2.5	61
94	Convergent close coupling calculations of two-photon double ionization of He. Journal of Physics: Conference Series, 2007, 88, 012051.	0.4	5
95	Preparation and study of epitaxial Cr ⁴⁺ : GGG films for passive Q-switches in neodymium lasers. Quantum Electronics, 2006, 36, 620-623.	1.0	2
96	<title>Simultaneous fitting of several x-ray rocking curves from different crystallographic planes of multilayer heterostructures</title>. , 2006, , .		0
97	Helium atom in the monochromatic electromagnetic field. European Physical Journal D, 2006, 38, 249-255.	1.3	4
98	Helium atom in presence of DC and AC electric fields. European Physical Journal D, 2006, 38, 471-479.	1.3	5
99	Convergent close-coupling calculations of two-photon double ionization of helium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 1731-1742.	1.5	45
100	Single-photon double ionization of helium in the presence of dc electric field. Physical Review A, 2006, 74, .	2.5	5
101	Influence of the orientation of a crystal on thermal polarization effects in high-power solid-state lasers. JETP Letters, 2005, 81, 90-94.	1.4	40
102	On the use of the Kramers-Henneberger Hamiltonian in multi-photon ionization calculations. Journal of Physics B: Atomic, Molecular and Optical Physics, 2005, 38, 2245-2255.	1.5	9
103	Lippmann-Schwinger description of multiphoton ionization. Physical Review A, 2005, 71, .	2.5	6
104	SVD as a method of the construction of the antisymmetrized basis functions for a multi-electron atom. Journal of Physics B: Atomic, Molecular and Optical Physics, 2004, 37, 2519-2527.	1.5	0
105	Complex rotation method for the Dirac Hamiltonian. Physical Review A, 2004, 69, .	2.5	28
106	Quantum-radiative cooling for solar cells with textured surface. , 2004, 5520, 154.		1
107	Asymptotic description of the Rydberg states with $L > 0$ in a two-electron atom. European Physical Journal D, 2003, 27, 203-208.	1.3	9
108	Reconstruction of phase shifts as functions of energy using bound-state energies and low-energy scattering data. Physical Review A, 2003, 67, .	2.5	2

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109	Combined effect of electric field and spin-orbit interaction on doubly excited Feshbach resonance states of helium below the $N=2$ threshold. <i>Physical Review A</i> , 2003, 68, .	2.5	10
110	Use of scanning Hartmann sensor for measurement of thermal lensing in TGG crystal. , 2003, , .		3
111	Pick-off annihilation in positronium scattering from alkali-metal ions. <i>Physical Review A</i> , 2002, 65, .	2.5	8
112	Semiempirical model of positron scattering and annihilation. <i>Physical Review A</i> , 2002, 65, .	2.5	65
113	Positronium-positronium scattering using the stochastic variational method. <i>Physical Review A</i> , 2002, 65, .	2.5	44
114	Positronium-hydrogen scattering using the stochastic variational method. <i>Physical Review A</i> , 2002, 65, .	2.5	30
115	Asymptotically exact expression for the energies of the $3s$ Rydberg series in a two-electron system. <i>Physical Review A</i> , 2002, 66, .	2.5	9
116	Measuring the positron affinities of atoms: II. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2001, 34, L121-L129.	1.5	8
117	Elastic Positronium-Atom Scattering Using the Stochastic Variational Method. <i>Physical Review Letters</i> , 2001, 87, 063201.	7.8	67
118	Positronium scattering from closed-shell atoms and ions. <i>Physical Review A</i> , 2001, 65, .	2.5	40
119	dc Stark effect for doubly excited Feshbach resonance states of the positronium negative ion below the $N=2$ threshold of a positronium atom. <i>Physical Review A</i> , 2001, 63, .	2.5	8
120	Supermultiplet structure of the doubly excited positronium negative ion. <i>Physical Review A</i> , 2000, 61, .	2.5	29
121	Electric-field influence on doubly excited Feshbach resonance states of the positronium negative ion below the $N=3$ threshold of the positronium atom. <i>Physical Review A</i> , 2000, 61, .	2.5	3
122	Optical model theory for positron annihilation during scattering. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2000, 33, L831-L837.	1.5	16
123	Dispersion relation for the ground-state energy of a two-electron atom. <i>Physical Review A</i> , 1998, 57, 1516-1518.	2.5	7
124	Numerical calculation of the complex energy of the resonance of a two-electron atom with nuclear charge below the threshold value. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1998, 31, 3335-3344.	1.5	20
125	WKB quantization of the Morse Hamiltonian and periodic meromorphic functions. <i>Journal of Physics A</i> , 1997, 30, 3977-3982.	1.6	4
126	Critical compilation of the inner-shell excited energy levels and spectrum of lithium-like Neon (Ne) Tj ETQq0 0 0 rgBTJ /Overlock 10 Tf 50	2.5	9

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127	Sum rule for the spectra of potentials. Journal of Physics A, 1997, 30, 4337-4339.	1.6	0
128	Stark effect in hydrogen: Reconstruction of the complex ground-state energy from the coefficients of an asymptotic perturbation expansion. Physical Review A, 1997, 56, 202-207.	2.5	8
129	Ground-state energy of a two-electron atom as a function of $\lambda = 1/Z$: Singular points and asymptotic behavior. Physical Review A, 1996, 54, 2792-2796.	2.5	10
130	The harmonic oscillator and Coulomb potentials - two exceptions from the point of view of a function theory. Journal of Physics A, 1996, 29, 3203-3207.	1.6	6
131	Analytic properties of the exact energy of the ground state of a two-electron atom as a function of $1/Z$. Physical Review A, 1995, 52, 1942-1947.	2.5	15
132	Radius of convergence of the $1/Z$ expansion for the ground state of a two-electron atom. Physical Review A, 1995, 51, 1080-1084.	2.5	29
133	Two-electron atoms: $o(4,2)$ operator replacements and large-order perturbation theory with respect to the replaced kinetic-energy operator. Physical Review A, 1994, 49, 184-191.	2.5	5
134	Energy levels of configurations $3l3l'$ for He-like ions with $Z=2-26$. Journal of Physics B: Atomic, Molecular and Optical Physics, 1993, 26, 4695-4701.	1.5	1
135	The Thermal Conductivity of Monocrystalline Gallium Garnets Doped with Rare-Earth Elements and Chromium in the Range $6 \times 10^2 - 300$ K. Crystal Research and Technology, 1992, 27, 535-543.	1.3	43
136	Autoionization states $1s2l1l'$ -energy and autoionization rates. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1991, 21, S151-S152.	1.0	0
137	Z-dependences of atomic parameters of autoionization states of two-electron systems. Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika), 1990, 33, 670-684.	0.0	1
138	Z dependences of the energy levels and autoionization rates for $2l3l'$ states of two-electron systems. Journal of Physics B: Atomic, Molecular and Optical Physics, 1990, 23, 4451-4467.	1.5	15
139	Atoms with one and two active electrons in strong laser fields. , 0, , 98-115.		0
140	Coherent Control of Extreme Ultraviolet Emission Generated through Frustrated Tunneling Ionization. New Journal of Physics, 0, , .	2.9	1