

# Alexander Glushkov

## List of Publications by Year in descending order

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53  
papers

958  
citations

471509

17  
h-index

434195

31  
g-index

53  
all docs

53  
docs citations

53  
times ranked

107  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spectroscopy and kinetics of IR laser interaction with atmospheric molecules: Effects of cooling and chaos. <i>Journal of Physics: Conference Series</i> , 2020, 1412, 132050.	0.4	0
2	Geometry of a Relativistic Quantum Chaos: New approach to dynamics of quantum systems in electromagnetic field and some applications. <i>Proceedings of the International Geometry Center</i> , 2020, 8, 79-86.	0.3	0
3	Geometry of Chaos: Advanced computational approach to treating chaotic dynamics of environmental radioactivity systems I General Formalism. <i>Proceedings of the International Geometry Center</i> , 2020, 8, 69-78.	0.3	1
4	Generalized energy approach for calculating electron collision cross-sections for multicharged ions in a plasma: Debye shielding model. <i>International Journal of Quantum Chemistry</i> , 2011, 111, 288-296.	2.0	21
5	Energy Approach to Atoms in a Laser Field and Quantum Dynamics with Laser Pulses of Different Shape. , 2010, , .		3
6	GENERALIZED MULTICONFIGURATION MODEL OF DECAY OF MULTIPOLE GIANT RESONANCES APPLIED TO ANALYSIS OF REACTION ( $^{14}N$ - n) ON THE NUCLEUS $^{40}Ca$ . <i>International Journal of Modern Physics A</i> , 2009, 24, 611-615.	1.5	23
7	Green's function method in quantum chemistry: New numerical algorithm for the Dirac equation with complex energy and Fermi model nuclear potential. <i>International Journal of Quantum Chemistry</i> , 2009, 109, 1717-1727.	2.0	29
8	Electrodynamical and quantum-chemical approaches to modeling the electrochemical and catalytic processes on metals, metal alloys, and semiconductors. <i>International Journal of Quantum Chemistry</i> , 2009, 109, 3473-3481.	2.0	16
9	Optimized perturbation theory scheme for calculating the interatomic potentials and hyperfine lines shift for heavy atoms in the buffer inert gas. <i>International Journal of Quantum Chemistry</i> , 2009, 109, 3325-3329.	2.0	26
10	On possible genesis of fractal dimensions in the turbulent pulsations of cosmic plasma "galactic cosmic rays" turbulent pulsation in planetary atmosphere system. <i>Advances in Space Research</i> , 2008, 42, 1614-1617.	2.6	2
11	Signatures of low-dimensional chaos in hourly water level measurements at coastal site of Mariupol, Ukraine. <i>Stochastic Environmental Research and Risk Assessment</i> , 2008, 22, 777-787.	4.0	10
12	Spectroscopy of cooperative laser electron nuclear effects in multiatomic molecules. <i>Molecular Physics</i> , 2008, 106, 1257-1260.	1.7	32
13	Calculation of the characteristics of radiative multiphoton absorption and emission lines when an atom interacts with pulsed laser radiation. <i>Journal of Applied Spectroscopy</i> , 2007, 74, 305-309.	0.7	20
14	Using non-decimated wavelet decomposition to analyse time variations of North Atlantic Oscillation, eddy kinetic energy, and Ukrainian precipitation. <i>Journal of Hydrology</i> , 2006, 322, 14-24.	5.4	30
15	Quantum stochastic modeling energy transfer and effect of rotational and V-T relaxation on multiphoton excitation and dissociation for CF <sub>3</sub> Br molecules. <i>International Journal of Quantum Chemistry</i> , 2005, 104, 512-516.	2.0	6
16	Consistent QED approach to calculation of electron-collision excitation cross sections and strengths: Ne-like ions. <i>International Journal of Quantum Chemistry</i> , 2005, 104, 562-569.	2.0	53
17	Using meteorological data for reconstruction of annual runoff series over an ungauged area: Empirical orthogonal function approach to Moldova "Southwest Ukraine region. <i>Atmospheric Research</i> , 2005, 77, 100-113.	4.1	14
18	Atmospheric teleconnection patterns and eddy kinetic energy content: wavelet analysis. <i>Nonlinear Processes in Geophysics</i> , 2004, 11, 295-301.	1.3	16

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19	DC strong field stark effect for nonhydrogenic atoms: Consistent quantum mechanical approach. International Journal of Quantum Chemistry, 2004, 99, 936-939.	2.0	41
20	Cooperative laser-electron-nuclear processes: QED calculation of electron satellites spectra for multi-charged ion in laser field. International Journal of Quantum Chemistry, 2004, 99, 889-893.	2.0	37
21	QED calculation of the superheavy elements ions: Energy levels, Lamb shift, hyperfine structure, nuclear finite size effect. Nuclear Physics A, 2004, 734, E21-E24.	1.5	39
22	Calculation of the spectroscopic characteristics of the dimers of alkali elements on the basis of a model perturbation theory. Journal of Applied Spectroscopy, 1998, 65, 343-350.	0.7	1
23	Calculation of the spectroscopic characteristics of biatomic van der Waals molecules and ions: Inert gas atom $\hat{\alpha}^{\infty}$ halogen-type inert gas ion in the ground state. Russian Physics Journal, 1998, 41, 223-226.	0.4	3
24	Bond energy calculation for the negative ions of heavy elements. Journal of Structural Chemistry, 1998, 39, 175-178.	1.0	4
25	Calculation of alkaline metal dimers in terms of model perturbation theory. Journal of Structural Chemistry, 1998, 39, 179-185.	1.0	9
26	Calculation of the potential of interaction of excited atoms of alkali elements with a mercury atom: A-Hg interaction (A=K, Fr). Russian Physics Journal, 1996, 39, 77-80.	0.4	0
27	Calculation and extrapolation of oscillator strengths in Rb-like, multiply charged ions. Russian Physics Journal, 1996, 39, 81-83.	0.4	9
28	Calculation of binding energy in negative ions of the alkaline-earth atoms Ca and Sr. Russian Physics Journal, 1996, 39, 826-829.	0.4	0
29	Calculation of the spectroscopic parameters of van der waals diatomic molecules: An excited alkali Na or K atom and an inert gas atom. Russian Physics Journal, 1996, 39, 830-833.	0.4	0
30	Calculation of the spectroscopic parameters of diatomic van der waals molecules consisting of an inert gas atom and a halogen atom in the ground state. Russian Physics Journal, 1996, 39, 961-964.	0.4	0
31	Calculation of the spectroscopic parameters of the potential of interaction of a potassium atom with Zn and Cd atoms. Journal of Applied Spectroscopy, 1996, 63, 812-815.	0.7	0
32	Calculation of the oscillator strengths in Fr-like multiply charged ions. Journal of Applied Spectroscopy, 1996, 63, 28-30.	0.7	16
33	Transition energies and oscillator strengths in the spectrum of a co molecule. Journal of Applied Spectroscopy, 1996, 63, 279-282.	0.7	6
34	Calculation of interaction potentials for excited alkali atom-mercury atom systems. the $K^*$ -Hg interaction. Journal of Structural Chemistry, 1995, 36, 551-556.	1.0	0
35	Effective account of $2p \hat{\alpha}^{\infty} 2h$ excitations in molecular calculations by the equation-of-motion method. Journal of Structural Chemistry, 1995, 36, 557-564.	1.0	3
36	A consistent approach to construction of the model valence electron hamiltonian: $M_2$ , $M = Li, Na, K, Rb, Cs$ . Journal of Structural Chemistry, 1994, 34, 651-658.	1.0	2

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37	New form of effective potential to calculate polarization effects of the $\pi$ -electronic states of organic molecules. <i>Journal of Structural Chemistry</i> , 1994, 34, 659-665.	1.0	11
38	Calculation of the interaction potential for excited alkali element atoms with the mercury atom. Rb*-Hg interaction. <i>Russian Physics Journal</i> , 1994, 37, 540-545.	0.4	0
39	DC strong-field Stark effect: consistent quantum-mechanical approach. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1993, 26, L379-L385.	1.5	67
40	Radiation decay of atomic states: atomic residue polarization and gauge noninvariant contributions. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1992, 170, 33-36.	2.1	96
41	Oscillator strengths of Cs and Rb-like ions. <i>Journal of Applied Spectroscopy</i> , 1992, 56, 5-9.	0.7	21
42	Polarization effects in ethylene molecule spectrum calculation. <i>Journal of Applied Spectroscopy</i> , 1992, 56, 309-312.	0.7	6
43	Calculation of the spectra of potassium-like multicharged ions. <i>Russian Physics Journal</i> , 1992, 35, 999-1004.	0.4	15
44	Thomas-Fermi model of a many-particle oscillator. <i>Russian Physics Journal</i> , 1992, 35, 641-646.	0.4	1
45	Calculation and extrapolation of spectroscopic characteristics of Ga-like ions. <i>Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika)</i> , 1991, 34, 307-311.	0.0	1
46	Relativistic multiconfiguration time-dependent self-consistent-field theory for molecules. <i>Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika)</i> , 1991, 34, 871-876.	0.0	9
47	A new method of calculating the spectrum and the self-consistent field of negative ions. <i>Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika)</i> , 1990, 33, 754-758.	0.0	3
48	Relativistic polarization potential of a many-electron atom. <i>Soviet Physics Journal (English)</i> Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302 Td	0.0	24
49	Effective optimized energy functional in molecular theory. <i>Journal of Structural Chemistry</i> , 1990, 31, 8-11.	1.0	3
50	S-Matrix formalism calculation of atomic transition probabilities with inclusion of polarization effects. <i>Soviet Physics Journal (English Translation of Izvestiia Vysshikh Uchebnykh Zavedenii, Fizika)</i> , 1989, 32, 1010-1014.	0.0	16
51	Perturbation theory with a model zeroth approximation for molecules: A new form of polarization potential. <i>Journal of Structural Chemistry</i> , 1989, 30, 141-144.	1.0	2
52	Theoretical investigation of spectra of multicharged ions of F-like and Ne-like isoelectronic sequences. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1986, 36, 127-145.	2.3	108
53	High Order Corrections in the Relativistic Perturbation Theory with the Model Zeroth Approximation, Mg-Like and Ne-Like Ions. <i>Physica Scripta</i> , 1985, 32, 513-522.	2.5	103