Andrey Stolyarov

List of Publications by Year in descending order

125	1,899	218381	344852
papers	citations	26 h-index	36 g-index

126	126	126	807
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Duo: A general program for calculating spectra of diatomic molecules. Computer Physics Communications, 2016, 202, 262-275.	3.0	134
2	The câ€‰3Î£+, bâ€‰3Î, and aâ€‰3Î£+ states of NaK revisited. Journal of Chemical Physics, 2000, 112, 5740-5750.	1.2	52
3	Solution of the fully mixed state problem: Direct deperturbation analysis of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi><mml:mspace width="0.2em" /><mml:mmultiscripts><mml:mi>Î£</mml:mi><mml:none /><mml:mo>+</mml:mo><mml:mprescripts /><mml:none	1.0	47
4	Spectroscopic data, spin-orbit functions, and revised analysis of strong perturbative interactions for the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi><mml:msup><mml:mi>â€,</mml:mi><mml:mrow><mml:mn>1</mml:mn>	1.0	46
5	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>b</mml:mi><mml:msup><mml:mi>â€,</. Physical Review A, 2010, 81, . High resolution spectroscopy and channel-coupling treatment of the Aâ€Š1Î£+â€“bâ€Š3Î complex of NaRb. Journal of Chemical Physics, 2002, 117, 7980-7988.	1.2	45
6	Deperturbation treatment of theAÎ£+1â€“bÎ3complex of NaRb and prospects for ultracold molecule formation inXÎ£+1(v=0;J=0). Physical Review A, 2007, 75, .	1.0	45
7	Spectroscopic observations, spin-orbit functions, and coupled-channel deperturbation analysis of data on the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi><mml:mtext>â€‰</mml:mtext><mml:msubsup><mml:mrow><mml:mmultiscripts /><mml:none /><mml:mn>1</mml:mn></mml:mmultiscripts></mml:mrow><mml:mi>u</mml:mi><mml:mo>+</mml:mo></mml:msubsup></mml:m	1.0	44
8	xmlns:mml="http://www.w3.org/1998/Math/MathML" displa. Physical Review A, 2009, 80, . Direct-potential-fit analyses yield improved empirical potentials for the ground $X,^1Sigma _g^+$XÎ£g+1 state of Be2. Journal of Chemical Physics, 2014, 140, 064315.	1.2	44
9	Laser synthesis of ultracold alkali metal dimers: optimization and control. Russian Chemical Reviews, 2015, 84, 1001-1020.	2.5	42
10	Global analysis of data on the spin-orbit-coupled<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi></mml:mrow></mml:math><mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow /><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msup><mml:msubsup><mml:mi>Î£</mml:mi><mml:mrow><mml:mi>u</mml:mi>	1.0	41
11	Quasi-relativistic treatment of the low-lying KCs states. Journal of Molecular Spectroscopy, 2009, 256, 57-67.	0.4	40
12	Impact of the dipole-moment representation on the intensity of high overtones. Journal of Molecular Spectroscopy, 2016, 330, 36-42.	0.4	38
13	Adaptive analytical mapping procedure for efficiently solving the radial SchrÃ¶dinger equation. Physical Review A, 2008, 78, .	1.0	35
14	Dissociative recombination of rare gas hydride ions: II. ArH+. Journal of Physics B: Atomic, Molecular and Optical Physics, 2005, 38, L175-L181.	0.6	33
15	Fourier-transform spectroscopy and coupled-channels deperturbation treatment of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi><mml:msup><mml:mi>â€,</mml:mi><mml:mrow><mml:mn>1</mml:mn></mml:mrow></mml:msup>	1.0	33
16	Fourier transform spectroscopy and extended deperturbation treatment of the spin-orbit-coupled<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi><mml:msup><mml:mspace width="0.16em" /><mml:mn>1</mml:mn></mml:msup><mml:msubsup><mml:mi>Î£</mml:mi><mml:mi>u</mml:mi><mml:mo>+</mml:mo>	1.0	33
17	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>b</mml:mi><mml:msup><mml:mspace width="0.16em" /><. Physic Approximate sum rule for diatomic vibronic states. Physical Review A, 1994, 49, 1693-1697.	1.0	31
18	Energy and radiative properties of the low-lying NaRb states. Physical Review A, 2001, 63, .	1.0	31

#	Article	IF	Citations
19	Permanent electric dipoles andÎ›-doubling constants in the lowestÎ1states of RbCs. Physical Review A, 2005, 71, .	1.0	29
20	Fourier transform spectroscopy and direct potential fit of a shelflike state: Application to E(4)1Î£+ KCs. Journal of Chemical Physics, 2011, 134, 104307.	1.2	29
21	Peculiarities of high-overtone transition probabilities in carbon monoxide revealed by high-precision calculation. Journal of Chemical Physics, 2015, 143, 154301.	1.2	29
22	Approximate sum rule for diatomic vibronic states as a tool for the evaluation of molecular properties. Chemical Physics Letters, 1994, 228, 219-224.	1.2	28
23	Lifetimes and transition dipole moment functions of NaK low lying singlet states: Empirical and ab initio approach. Journal of Chemical Physics, 1998, 109, 6725-6735.	1.2	28
24	Ab initio nonadiabatic calculation of the sensitivity coefficients for the X 1Î£ g + â† ' B 1Î£ u + ; C 1Îu lines of H2 to the proton-to-electron mass ratio. JETP Letters, 2006, 83, 303-307.	0.4	28
25	Approximate relativistic coupled-cluster calculations on heavy alkali-metal diatomics: Application to the spin-orbit-coupled <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msup><mml:mi>A</mml:mi><mml:mn>1</mml:mn></mml:msup><mml:mo>+</mml:mo></mml:mrow></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msup><mml:mi>b</mml:mi><mml:mn>3</mml:mn></mml:msup><mml:mo>+</mml:mo></mml:mrow></mml:math> states of RbCs. Physical Review A, 2010, 82, .	1.0	26
26	Near-dissociation photoassociative production of deeply bound NaCs molecules. Physical Review A, 2010, 82, .	1.0	26
27	The X2Î£+ state of LiCa studied by Fourier-transform spectroscopy. Journal of Chemical Physics, 2011, 135, 174303.	1.2	26
28	The phase formalism for the one-dimensional eigenvalue problem and its relation with the quantum Bohr-Sommerfeld rule. Journal of Physics B: Atomic, Molecular and Optical Physics, 1990, 23, 2419-2426.	0.6	24
29	NaK Î› doubling and permanent electric dipoles in low-lying1Îstates:â€ƒExperiment and theory. Physical Review A, 1998, 58, 1932-1943.	1.0	23
30	Modeling of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>X</mml:mi></mml:math><mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow /><mml:mn>1</mml:mn></mml:msup><mml:msup><mml:mi>Î£</mml:mi><mml:mo>+</mml:mo></mml:msup></mml:mrow></mml:math>	1.0	22
31	Fourier-transform spectroscopy of (4)1Î£+â†'<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML">$(1)^3Delta _1ightarrow b{,}^3Pi _{0^pm }$(1)3Î"1â†'bÎ±3 transitions in KCs and deperturbation treatment of Aâ€‰1Î£+ and bâ€‰3Î states. Journal of Chemical Physics, 2013, 139, 244301.	1.2	22
32	Permanent electric dipoles in Bâ€Š[sup 1]Î and Dâ€Š[sup 1]Î states of NaRb: Experiment and theory. Journal of Chemical Physics, 2000, 113, 4896.	1.2	19
33	Theoretical study of the ArH+ electronic states. Physical Chemistry Chemical Physics, 2005, 7, 2259.	1.3	18
34	Direct coupled-channels deperturbation analysis of the A1Î£+ âˆ¼ b3Î complex in LiCs with experimental accuracy. Journal of Chemical Physics, 2015, 142, 234308.	1.2	18
35	Electronic Transition Dipole Moments in Relativistic Coupled-Cluster Theory: the Finite-Field Method. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2018, 124, 451-456.	0.2	18
36	NaKâ€‚D1Î electric dipole moment measurement by Stark level crossing andeâ€"fmixing spectroscopy. Journal of Chemical Physics, 1997, 106, 2195-2204.	1.2	17

#	Article	IF	Citations
37	Experimental studies of the NaRb ground-state potential up to thevâ€³=76level. Physical Review A, 2002, 66, .	1.0	17
38	Lifetime measurements and quantum-defect theory treatment of the kâ€‰3Îuâ^' state of hydrogen molecule. Journal of Chemical Physics, 2003, 118, 121-129.	1.2	17
39	Competition between predissociative and radiative decays in thee3Î£u+andd3Îuâ^'states ofH2andD2. Physical Review A, 1999, 60, 4494-4503.	1.0	16
40	Direct excitation of the â€œdarkâ€<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>b</mml:mi></mml:mrow></mml:math><mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msup><mml:mi>Î</mml:mi></mml:mrow></mml:math>state predicted by deperturbation analysis of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/Math	1.0	16
41	Extended Fourier-transform spectroscopy studies and deperturbation analysis of the spin-orbit coupledA1Î£+andb3Î states in RbCs. Journal of Chemical Physics, 2014, 141, 184309.	1.2	16
42	Analytical approximations for adiabatic and non-adiabatic matrix elements of homonuclear diatomic Rydberg states. Application to the singlet p-complex of the hydrogen molecule. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 3077-3093.	0.6	15
43	Rapid, accurate calculation of the s-wave scattering length. Journal of Chemical Physics, 2011, 135, 154108.	1.2	15
44	Ab initio long-range interaction and adiabatic channel capture model for ultracold reactions between the KRb molecules. Journal of Chemical Physics, 2012, 137, 114305.	1.2	15
45	Fourier-transform spectroscopy and deperturbation analysis of the spin-orbit coupled A1Î£+ and b3Î states of KRb. Journal of Chemical Physics, 2016, 144, 144310.	1.2	15
46	Ab initio interatomic potentials and transport properties of alkali metal (M = Rb and Cs)â€“rare gas (Rg) Tj ETQq0 0 0 rgBT /Overlock 10	1.3	15
47	Radiative properties of diatomic Rydberg states in quantum defect theory. Application to the hydrogen molecule. Journal of Physics B: Atomic, Molecular and Optical Physics, 1999, 32, 527-535.	0.6	14
48	The origin of Î›-doubling effect for the Bâ€‰1âˆ and Dâ€‰1âˆ•states of NaK. Journal of Chemical Physics, 2000, 113, 8589-8593.	1.2	14
49	Direct deperturbation analysis of the AÎ2â^¼BÎ£+2 complex of LiAr7,6 isotopomers. Journal of Chemical Physics, 2005, 123, 204307.	1.2	14
50	Investigation of the D 1Î state of NaK by polarisation labelling spectroscopy. Journal of Molecular Spectroscopy, 2008, 250, 27-32.	0.4	14
51	The CaO orange system in meteor spectra. Planetary and Space Science, 2018, 151, 27-32.	0.9	14
52	Determination of electronic transition strengths in diatomic molecules using laser-induced fluorescence: Application to 80Se2BOu+-XOg+ and B1u+-X1g+. Journal of Molecular Spectroscopy, 1989, 137, 251-267.	0.4	13
53	Alignmentâ€orientation conversion by quadratic Zeeman effect: Analysis and observation for Te2. Journal of Chemical Physics, 1993, 99, 5748-5753.	1.2	13
54	Analog of the Hellmann-Feynman theorem in multichannel quantum-defect theory. Physical Review A, 2001, 63, .	1.0	13

#	Article	IF	Citations
55	Analogue of oscillation theorem for nonadiabatic diatomic states: application to the Aâ€‰1Î£+ and bâ€‰3Î states of KCs. Physical Chemistry Chemical Physics, 2010, 12, 4809.	1.3	13
56	Intensity anomalies in the rotational and ro-vibrational spectra of diatomic molecules. Journal of Chemical Physics, 2017, 147, 164309.	1.2	13
57	Intensities of the laser-induced fluorescence of 130Te2 and electronic transition strengths for the AOu+-XOg+ and BOu+-XOg+ systems. Journal of Molecular Spectroscopy, 1987, 125, 1-13.	0.4	12
58	Spinâ€”orbit coupling in the D¹Î” âˆ¼ d³Î” complex of²³Na³⁹K. Molecular Physics, 1999, 96, 955-961.	0.8	12
59	Nonadiabatic representation for thei3Îgâ^'â€“j3Î”gâ^'complex ofH2andD2. Physical Review A, 2000, 61, .	1.0	12
60	Experimental and theoretical studies of the coupled<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>A</mml:mi><mml:mspace width="0.16em" /><mml:msup><mml:mrow /><mml:mn>1</mml:mn></mml:msup><mml:msup><mml:mi mathvariant="normal">Î£</mml:mi><mml:mo>+</mml:mo></mml:msup></mml:mrow></mml:math>and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>b</mml:mi><mml:mspace width="0.16em" /><mml:mmultiscripts><mml:mi mathvariant="normal">Î</mml:mi><mml:mprescripts />	1.0	12
61	Semi-empirical ground-state potential of carbon monoxide with physical behavior in the limits of small and large inter-atomic separations. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 217, 262-273.	1.1	12
62	Effects of perturbations on the term values, LandÃ© factors of B0u+ and A1u states and on intensities of B0u+-X1g transitions of 130Te2. Chemical Physics Letters, 1990, 166, 290-294.	1.2	11
63	Molecular hydrogen 3s,dâ€‰3Î›g+ complex revisited. Journal of Chemical Physics, 2002, 116, 6618-6627.	1.2	11
64	Theoretical study of spinâ€“orbit and Coriolis coupling among the low-lying states of Rb2 and Cs2. Chemical Physics, 2015, 462, 51-56.	0.9	11
65	The I₂(B) predissociation by solving an inverse atoms-in-molecule problem. Molecular Physics, 2001, 99, 91-101.	0.8	10
66	LIF intensity distribution as a deperturbation tool: application to the fully-mixed â€“ complex of NaRb. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 95, 165-174.	1.1	10
67	Global deperturbation analysis from energetic, magnetic, and radiative measurements: Application to Te2. Journal of Chemical Physics, 1993, 99, 7873-7887.	1.2	9
68	Theoretical spectroscopy of molecular iodine. 1. Ab initio study on the B0⁺ _u â^' X0⁺ _g, A1_u â^' X0⁺ _g and Bâ€²1_u â^' X0⁺ _g radiative transition intensities. Molecular Physics, 2000, 98, 1973-1979.	0.8	9
69	Experimental and theoretical studies of Î› doublings and permanent electric dipoles in the low-lying Î1 states of NaCs. Journal of Chemical Physics, 2006, 124, 184318.	1.2	9
70	Spectroscopic studies of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mo>(</mml:mo><mml:mn>4</mml:mn><mml:mo>)</mml:mo></mml:mrow></mml:msup></mml:mrow></mml:math> of RbCs and modeling of the optical cycle for ultracold<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>X</mml:mi></mml:math>Â<mml:math xmlns:mml="http://www.w3.org/199. Physical Review A, 2013, 87, .	1.0	9
71	Ab initio and long-range studies of the electronic transition dipole moments among the low-lying states of Rb2 and Cs2 molecules. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 177, 283-290.	1.1	9
72	Fourier-transform spectroscopy, relativistic electronic structure calculation, and coupled-channel deperturbation analysis of the fully mixed <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>A</mml:mi><mml:msup><mml:mspace width="0.16em" /><mml:mn>1</mml:mn></mml:msup><mml:msubsup><mml:mi mathvariant="normal">Î£</mml:mi><mml:mi>u</mml:mi><mml:mo>+</mml:mo></mml:msubsup></mml:mrow></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>b</mml:mi>.	1.0	9

#	Article	IF	Citations
73	A first principles study of the spinâ€“orbit coupling effect in LiM (M = Na, K, Rb, Cs) molecules. Physical Chemistry Chemical Physics, 2020, 22, 2295-2306.	1.3	9
74	Semi-empirical dipole moment of carbon monoxide and line lists for all its isotopologues revisited. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 280, 108090.	1.1	9
75	Rotational magnetic moment of the Na2molecule in Aâ€‰1Î£+ustate: Perturbation effects. Journal of Chemical Physics, 1992, 96, 3510-3522.	1.2	8
76	Intensities and electronic transition strengths of seven Te2 visible and i.r. band systems. Journal of Quantitative Spectroscopy and Radiative Transfer, 1992, 47, 143-158.	1.1	8
77	Observation ofAâ€‰1Î£u+â¼bâ€‰3Îuinteraction ingfactors of weakly coupled Na2Aâ€‰1Î£u+state levels. Journal of Chemical Physics, 1993, 98, 826-835.	1.2	8
78	Magnetic field induced alignmentâ€“orientation conversion: Nonlinear energy shift and predissociation in Te2B1ustate. Journal of Chemical Physics, 1996, 105, 37-49.	1.2	8
79	Ab initio and quantum-defect calculations for the Rydberg states of ArH. Physical Chemistry Chemical Physics, 2006, 8, 247-255.	1.3	8
80	Potential Energy Curves for Alkali Metal-Rare Gas Exciplex Lasers. , 2010, , .		7
81	Long-range behavior of the transition dipole moments of heteronuclear dimers XY (X, Y = Li, Na, K, Rb) based on ab initio calculations. Physical Chemistry Chemical Physics, 2018, 20, 1889-1896.	1.3	7
82	Ab initioand analytical studies of the spin-orbit coupling in heteronuclear alkali-metal dimers<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="italic">AB</mml:mi></mml:mrow></mml:math>(<mml:math) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 327 Td (xmlns:mml="h	1.7	7
83	Experimental and theoretical studies of photoinduced reactions in the solid phase of the interstellar medium. Russian Chemical Reviews, 2020, 89, 430-448.	2.5	7
84	Mathematical justification of the r-centroid approximation. Journal of Quantitative Spectroscopy and Radiative Transfer, 1986, 35, 415-418.	1.1	6
85	Separation of quadratic and linear external field effects in highJquantum beats. Journal of Chemical Physics, 1994, 101, 5559-5565.	1.2	6
86	Radiative lifetimes of the NaRb C(3)1Î£+ state: experiment and theory. European Physical Journal D, 2006, 39, 373-378.	0.6	6
87	Radiative lifetimes of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:mo>(</mml:mo><mml:mn>1</mml:mn><mml:mo>â€“</mml:mo><mml:mn>3</mml:mn> width="0.2em" /><mml:mmultiscripts><mml:mi>Î</mml:mi><mml:mprescripts /><mml:none /><mml:mn>1</mml:mn></mml:mmultiscripts></mml:mrow></mml:math>states in NaCs: Experiment and theory. Physical Review A, 2007, 76, .	1.0	6
88	A Reduced Method of Coupled Vibrational Channels: Analysis of Regular Perturbations in the $${{c}^{3}}{mathbf{Sigma }}_{{mathbf{Omega }}}^{ + }$$ -State of a KRb Molecule. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2018, 125, 464-469.	0.2	6
89	Spectroscopy of Diatomic Molecules in an Adiabatic Approximation. Russian Journal of Physical Chemistry A, 2019, 93, 1865-1872.	0.1	6
90	Tackling the FeO orange band puzzle in meteor and airglow spectra through combined astronomical and laboratory studies. Monthly Notices of the Royal Astronomical Society, 2020, 500, 4296-4306.	1.6	6

#	Article	IF	Citations
91	Solution of the radial SchrÃ¶dinger equation by a modified â€œshootingâ€•method. European Physical Journal D, 1987, 37, 529-536.	0.4	5
92	Improvement on Van Vleck's formula for diatomic nonadiabatic energy shifts. Chemical Physics Letters, 1997, 267, 207-214.	1.2	5
93	Energy and radiative properties of the (3)Î1 and (5)Î£+1 states of RbCs: Experiment and theory. Physical Review A, 2017, 96, .	1.0	5
94	The spin-orbit coupling of the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si9.svg"><mml:mrow><mml:msup><mml:mn>6</mml:mn><mml:mn>1</mml:mn></mml:msup><mml:msup><mml:mstyle mathvariant="normal"><mml:mi>Î£</mml:mi></mml:mstyle><mml:mo>+</mml:mo></mml:msup></mml:mrow></mml:math> and 43Î states in KCs: Observation and deperturbation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 239, 106650.	1.1	5
95	Long-range potentials and dipole moments of the CO electronic states converging to the ground dissociation limit. Physical Chemistry Chemical Physics, 2020, 22, 12058-12067.	1.3	5
96	The Influence of the Rotation-Vibrational Interaction on the Franck-Condon Factors for Diatomic Molecules. Spectroscopy Letters, 1986, 19, 1113-1124.	0.5	4
97	Twofold diabatization of the KRb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mo>(</mml:mo><mml:mn>1</mml:mn><mml:mo>â€“</mml:mo><mml:mn mathvariant="normal">Î</mml:mi><mml:mprescripts /><mml:none /><mml:mn>1</mml:mn></mml:mmultiscripts></mml:math>complex in the framework ofab initio and deperturbation approaches. Physical Review A, 2016, 94, .	1.0	4
98	The Photolysis of Aromatic Hydrocarbons Adsorbed on the Surfaces of Cosmic Dust Grains. Astronomy Reports, 2019, 63, 633-641.	0.2	4
99	ExoMol molecular line lists â€“ XLIII. Rovibronic transitions corresponding to the close-lying XÂ2Î and AÂ2Î£+ states of NaO. Monthly Notices of the Royal Astronomical Society, 2022, 511, 2349-2355.	1.6	4
100	A New Approach to the Estimation of Accuracy of Calculations of Vibrational Wavefunctions and Radiative Parameters. Spectroscopy Letters, 1985, 18, 671-678.	0.5	3
101	The Quantum and Semiclassical Phase Formalism for Obtaining the 1D Eigenfunctions. Spectroscopy Letters, 1992, 25, 271-277.	0.5	3
102	The Effect of Relativistic Interactions on the Spectral Characteristics of the Ground State of Carbon Monoxide. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2018, 125, 470-475.	0.2	3
103	An accurate ab initio electronic structure calculation for interstellar argonium. Journal of Quantitative Spectroscopy and Radiative Transfer, 2019, 234, 139-146.	1.1	3
104	Observation and modeling of bound-free transitions to the X1Î£+ and a3Î£+ states of KCs. Journal of Chemical Physics, 2022, 156, 114305.	1.2	3
105	Publisher's Note: Deperturbation treatment of theAÎ£+1â€“bÎ3complex of NaRb and prospects for ultracold molecule formation inXÎ£+1(v=0;J=0)[Phys. Rev. A75, 042503 (2007)]. Physical Review A, 2007, 75, .	1.0	2
106	Nonempirical studies of the molecular properties and thermodynamic functions of urea in the ideal gas state. Russian Journal of Physical Chemistry A, 2009, 83, 270-275.	0.1	2
107	Laser-induced processes in chemistry and material sciences. Russian Chemical Reviews, 2015, 84, E01-E01.	2.5	2
108	Data bank RADEN. , 1994, , .		1

#	Article	IF	Citations
109	Fourier-transform spectroscopy, direct potential fit, and electronic structure calculations on the entirely perturbed (4) <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msup><mml:mspace width="0.16em" /><mml:mn>1</mml:mn></mml:msup><mml:mi mathvariant="normal">Î</mml:mi></mml:mrow></mml:math> state of RbCs. Physical Review A, 2018, 98, .	1.0	1
110	Theoretical study of the Coriolis effect in LiNa, LiK, and LiRb molecules. Physical Chemistry Chemical Physics, 2021, 23, 5187-5198.	1.3	1
111	Laser Synthesis of Ultra-Cold Molecules: From Design to Production. Springer Series in Chemical Physics, 2017, , 169-177.	0.2	1
112	A1E u+~b3II u interaction studies from Na 2 g-factor measurements. , 1994, 2205, 253.		0
113	Occurrence of circular polarization in Te 2 fluorescence due to quadratic Zeeman effect. , 1994, , .		0
114	Molecular constant error propagations into Franck-Condon integrals. , 1994, , .		0
115	Deperturbation analysis of Te 2 molecule. , 1994, , .		0
116	Stark level crossing and optical-rf double resonance in NaK D 1 Î. , 1997, , .		0
117	Magnetic predissociation in Te 2 B 1 u. , 1997, 3090, 189.		0
118	Studies of rotational level Î›-doubling by rf-optical double resonance spectroscopy: application to NaK D1Î. Journal of Molecular Structure, 1997, 410-411, 55-58.	1.8	0
119	Lifetimes of the k3Îu state in the H2 and D2â€"experiment and theory. Radiation Physics and Chemistry, 2003, 68, 165-167.	1.4	0
120	Spin-orbit, radial, and angular coupling effects in the NaRb excited states. , 2009, , .		0
121	Theoretical Investigations of Alkali Metalâ€"Rare Gas Photodissociation Lasers. , 2010, , .		0
122	Nonadiabatic effects in (1~2)1Îâ€"X1Î£+ rovibronic transitions of KRb molecules. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2017, 123, 676-681.	0.2	0
123	Ab Initio Simulation of Transport Properties in Rbâ€"CH4 and Csâ€"CH4 Laser Media. Russian Journal of Physical Chemistry A, 2018, 92, 756-759.	0.1	0
124	The collision cross-sections for protonâ€"argon interaction based on ab initio potential. Journal of Plasma Physics, 2020, 86, .	0.7	0
125	Cosmological Constraints on a Temporal Variation of the Proton-to-electron Mass Ratio based on the Red-shifted Lines of Extragalactic Argonium. Astronomy Reports, 2021, 65, 1211-1214.	0.2	0