Sergey A Astashkevich

List of Publications by Year
in descending order

37	235	1307594	1058476
papers	citations	7 h-index	14 g-index

37	37	37	118
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electron vortexes in two-dimensional steady photoplasma. Chinese Journal of Physics, 2022, 75, 69-75.	3.9	3
2	Influence of collisional broadening on resonance photoplasma parameters in a sodium-argon mixture. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 288, 108256.	2.3	3
3	On the Validity of Two-Chamber Configuration for the Generation of Electromotive Force in Photoplasma. IEEE Transactions on Plasma Science, 2021, 49, 990-996.	1.3	4
4	Influence of Vortex Electron Currents on Transport Processes in 2-D Photoplasma of Sodiumâ€“Noble Gas Mixtures. IEEE Transactions on Plasma Science, 2021, 49, 1009-1016.	1.3	4
5	Optimization of Photoelectric Converter Based on a Two-Chamber Naâ€“Ar Gas Photoplasma. IEEE Transactions on Plasma Science, 2020, 48, 402-409.	1.3	7
6	Studies of H2 photoionization by a strong ultrashort x-ray pulse on base of a trajectory method. Laser Physics, 2020, 30, 075301.	1.2	1
7	2-D Simulation of Two-Chamber Photoplasma for Conversion of Light Radiation to Electrical Energy. IEEE Transactions on Plasma Science, 2020, 48, 394-401.	1.3	9
8	2D simulation of solar/lamp two-chamber photoelectric converter with different sodiumâ€“noble gas mixtures. Plasma Sources Science and Technology, 2020, 29, 115005.	3.1	7
9	Comparison of information theoretic products and inequalities for the lowest bound and unbound electronic states of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:msubsup><mml:mrow><mml:mi mathvariant="normal">H</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow><mml:mrow><mml:mo linebreak="badbreak" linebreakstyle="after">+</mml:mo></mml:mrow></mml:msubsup></mml:math> based on exact calculation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 38	2.1	2
10	Creation of resonance photoplasma by concentrated solar/gas lamp irradiation. Self-consistent modeling. Physics of Plasmas, 2019, 26, 103509.	1.9	10
11	Evaluation of the photoionization probability of H2+ by the trajectory semiclassical method. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 1881-1884.	2.1	3
12	A systematic semiempirical study of information inequalities for the vibrational levels of a diatomic molecule for the example of the ground electronic state of 7Li2. Optics and Spectroscopy (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	0.6	2
13	Photoionization of hydrogen molecular ion by ultrashort photo-pulse in a wide range of field magnitudes. Journal of Physics: Conference Series, 2017, 927, 012081.	0.4	0
14	Using two-chamber photoplasma for creating photovoltaic converter. Journal of Physics: Conference Series, 2017, 927, 012004.	0.4	3
15	Comments on â€œStatistical complexity and Fisherâ€“Shannon information measure ofH2+â€•[Phys. Lett. A 372 (13) (2008) 2271â€“2273]. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 2554-2556.	2.1	3
16	Lifetimes of Vibro-Rotational Levels in Excited Electronic States of Diatomic Hydrogen Isotopologues. Journal of Physical and Chemical Reference Data, 2015, 44, 023105.	4.2	12
17	On an inconsistency between experimental and non-empirical data on the lifetimes of electronicâ€“vibrationalâ€“rotational states of the H2, HD, and D2 molecules. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2015, 119, 599-602.	0.6	0
18	Spectroscopic determination of Fisher information on vibrational states of diatomic molecules using the example of the X 1Î£ g + state of a Li2 molecule. Optics and Spectroscopy (English Translation of) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.6	8

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19	Semiempirical study of perturbations of the landÃ© g factors of electronic-vibrational-rotational levels of hydrogen: IV. The I 1Î g âˆ' , R 1Î g âˆ' , J 1Î" g âˆ' , and S 1Î" g âˆ' states of the H2 and D2 molecules. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2007, 102, 175-185.	0.6	2
20	Observation of perturbations in the rovibronic transition probabilities for the (4d)r 3Î g âˆ' , (4d) s 3 Î" g âˆ' â†' (2p) c 3Î u Â± band systems of the H2 molecule. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq0 0 0 rgBT /Overlo	0.6	2
21	The radiative characteristics of hydrogen rovibronic states: II. The probabilities of the i 3Î g âˆ' , j 3Î" g âˆ' â†' b 3Î£ u + , c 3Î u Â± spontaneous transitions in H2, HD, and D2. Russian Journal of Physical Chemistry B, 2007, 1, 1-14.	1.3	2
22	The radiative characteristics of the rovibronic states of the hydrogen molecule: III. The probabilities of the h 3Î£ g + , g 3Î£ g + , i 3Î g + , j 3Î" g + â†' c 3Î u Â± spontaneous transitions in the H2 molecule. Russian Journal of Physical Chemistry B, 2007, 1, 197-207.	1.3	2
23	Comparative analysis of perturbations of the energy, radiative, and magnetic characteristics of electronic-vibrational-rotational states of the hydrogen molecule. Optics and Spectroscopy (English) Tj ETQq1 1 0.784314 rgBT /Over	0.6	3
24	Semiempirical investigation of perturbations of the g factors of electronic-vibrational-rotational levels of hydrogen: III. The r 3Î g âˆ' and s 3Î" g âˆ' states of the H2 and D2 molecules. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2006, 101, 508-515.	0.6	4
25	Semiempirical study of perturbations of the LandÃ© g factors of the electronic-vibrational-rotational levels of hydrogen: I. Theory. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	0.6	10
26	Semiempirical study of perturbations of the LandÃ© g factors of electronic-vibrational-rotational levels of hydrogen: II. i 3 g âˆ' and j 3Î" g âˆ' states of the H2, HD, and D2 molecules. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2004, 96, 35-46.	0.6	1
27	On the inconsistency of spectroscopic data on the (3dÏ€)i 3Î g âˆ' and (3dÎ´) j 3Î" g âˆ' states of the hydrogen molecule and the problems of semiempirical and ab initio calculations. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2004, 97, 16-29.	0.6	2
28	Lifetimes of the electronic-vibrational-rotational states of hydrogen molecule (Review). Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2002, 92, 818-850.	0.6	25
29	A semiempirical analysis of perturbations in the triplet 3s, 3d complex of molecular hydrogen: The radiative lifetimes for rovibronic levels of the h 3Î£ g + , g 3Î£ g + , i 3Î g + , and j 3Î" g + states of H2. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2002, 93, 380-388.	0.6	2
30	Perturbation of the radiative lifetimes of rovibronic levels of the nl complex of terms of a diatomic molecule. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2002, 93, 501-508.	0.6	3
31	Probabilities of rovibronic transitions in the I 1Î g âˆ' , J 1Î" g âˆ' â†'C 1Î Â± u systems of bands of the deuterium molecule. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2001, 90, 212-221.	0.6	2
32	Electronic branching ratios of spontaneous emission for transitions between states of the 3d and 2p singlet complexes of terms of H2. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 217 T	0.6	6
33	Perturbations of radiative lifetimes of rovibrational levels of the I1 Î g - and J1 Î" g - states of H2. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2000, 89, 13-22.	0.6	3
34	Comparison of semiempirical and ab initio absolute probabilities of rovibronic transitions for the I 1Î g âˆ' , J 1Î" g âˆ' â†'C 1Î u Â± system of bands of the H2 molecule. Optics and Spectroscopy (English Translation of) Tj ETQq0 0 0 rgBT /Ove	0.6	2
35	Relative probabilities of spontaneous transitions in vâ€³ progressions of the G1Î£ g + , vâ€²â†'B 1Î£ u + , vâ€³ bands of the H2 molecule. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2000, 88, 835-843.	0.6	2
36	Perturbations of Radiative Lifetimes of Rovibrational Levels of the I[sup 1]Î[sup -][sub g] and J[sup 1]Î"[sup -][sub g] States of H[sub 2]. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2000, 89, 13.	0.6	5

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37	Radiative characteristics of 3p Î£, Î; 3d Îâ^', Î"â^' states of H2 and determination of gas temperature of low pressure hydrogen containing plasmas. Journal of Quantitative Spectroscopy and Radiative Transfer, 1996, 56, 725-751.	2.3	93