

Boris G Sartakov

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2154513/publications.pdf>

Version: 2024-02-01

73

papers

3,119

citations

172457

29

h-index

155660

55

g-index

74

all docs

74

docs citations

74

times ranked

1677

citing authors

#	ARTICLE	IF	CITATIONS
1	Spectroscopic characterization of singlet-triplet doorway states of aluminum monofluoride. <i>Journal of Chemical Physics</i> , 2022, 156, 184301.	3.0	2
2	Spectroscopic characterization of the α^3 state of aluminum monofluoride. <i>Journal of Chemical Physics</i> , 2022, 156, 124306.	3.0	2
3	Hyperfine-resolved optical spectroscopy of the $A2\hat{\Delta} \rightarrow X2\hat{\Sigma}^+$ transition in MgF. <i>Journal of Chemical Physics</i> , 2022, 156, 134301.	3.0	9
4	Quantitative Study of Enantiomer-Specific State Transfer. <i>Physical Review Letters</i> , 2022, 128, 173001.	7.8	26
5	Laser-induced plasma on a metal surface for ionization of organic compounds at atmospheric pressure. <i>International Journal of Mass Spectrometry</i> , 2021, 461, 116498.	1.5	8
6	Characterisation of the $\langle i>b</i>³\hat{\Sigma}^+ + </sup>, $\langle v = 0$$ state and its interaction with the $\langle i>A</i>¹\hat{\Gamma}$ state in aluminium monofluoride. <i>Molecular Physics</i> , 2021, 119, e1810351.	1.7	10
7	Optical cycling of AlF molecules. <i>New Journal of Physics</i> , 2021, 23, 075001.	2.9	24
8	Mixed ortho- H ₂ and para- H ₂ clusters studied by vibrational coherent anti-Stokes Raman spectroscopy. <i>Physical Review B</i> , 2020, 101, .	3.2	3
9	$\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" > \langle mml:mi mathvariant="normal" \rangle \hat{I} \langle /mml:mi \rangle \langle /mml:math \rangle$ doubling in the $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" > \langle mml:mrow \rangle \langle mml:msup \rangle \langle mml:mi \rangle B \langle /mml:mi \rangle \langle mml:mn \rangle 2 \langle /mml:mn \rangle \langle mml:math \rangle$ state of TlF. <i>Physical Review A</i> , 2020, 101, .	1.5	8
10	Spectroscopic characterization of aluminum monofluoride with relevance to laser cooling and trapping. <i>Physical Review A</i> , 2019, 100, .	2.5	41
11	$\langle sub>Formation of Core "Shell" Ethane "Silver" Clusters in He Droplets</sub>.$ <i>Journal of Physical Chemistry A</i> , 2017, 121, 5978-5982.	2.5	5
12	Formation of Large Ag Clusters with Shells of Methane, Ethylene, and Acetylene in He Droplets. <i>Journal of Physical Chemistry A</i> , 2016, 120, 6738-6744.	2.5	9
13	Stark Interference of Electric and Magnetic Dipole Transitions in the $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" \rangle \langle mml:mrow \rangle \langle mml:mi \rangle A \langle /mml:mi \rangle \langle mml:mo \rangle \hat{A} \langle /mml:mo \rangle \langle mml:mi \rangle X \langle /mml:mi \rangle \langle /mml:mrow \rangle \langle /mml:math \rangle$ Band of OH. <i>Physical Review Letters</i> , 2016, 116, 153001.	7.8	2
14	Internal Rotation of Methane Molecules in Large Clusters. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 47-50.	4.6	6
15	Measuring and manipulating the temperature of cold molecules trapped on a chip. <i>Physical Review A</i> , 2015, 92, .	2.5	5
16	Rotation of methane molecules in dimers and small clusters. <i>Journal of Chemical Physics</i> , 2015, 143, 084305.	3.0	8
17	CMIstark: Python package for the Stark-effect calculation and symmetry classification of linear, symmetric and asymmetric top wavefunctions in dc electric fields. <i>Computer Physics Communications</i> , 2014, 185, 339-349.	7.5	31
18	Infrared spectroscopy of carbonyl sulfide inside a pure 3He droplet. <i>Journal of Chemical Physics</i> , 2012, 136, 134316.	3.0	23

#	ARTICLE	IF	CITATIONS
19	On the role of laser irradiation in the processes of laser desorption/ionisation from silicon surfaces. Quantum Electronics, 2011, 41, 835-842.	1.0	14
20	Producing translationally cold, ground-state CO molecules. Journal of Chemical Physics, 2011, 135, 114201.	3.0	10
21	Suppression of nonadiabatic losses of molecules from chip-based microtraps. Physical Review A, 2011, 83, .	2.5	20
22	Matrix Isolation Spectroscopy in Helium Droplets. , 2011, , 203-230.		6
23	Spectroscopic investigation of OCS ($p\text{-H}_2$) n ($n=1\text{--}16$) complexes inside helium droplets: Evidence for superfluid behavior. Journal of Chemical Physics, 2010, 132, 064501.	3.0	31
24	Intensity-resolved IR multiple photon ionization and fragmentation of C ₆₀ . Journal of Chemical Physics, 2010, 132, 074305.	3.0	63
25	Rotation of methane and silane molecules in He droplets. Journal of Chemical Physics, 2010, 132, 074302.	3.0	26
26	Nonadiabatic transitions in electrostatically trapped ammonia molecules. Physical Review A, 2009, 79, .	2.5	33
27	Large enhancement of the vibration-rotation coupling of the $\tilde{\nu}_{21}$ and $\tilde{\nu}_{23}$ states of silane in helium droplets. Journal of Chemical Physics, 2009, 131, 241103.	3.0	4
28	Prospects for precision measurements on ammonia molecules in a fountain. European Physical Journal: Special Topics, 2008, 163, 55-69.	2.6	66
29	Evolution of the vibrational spectrum of ammonia from single molecule to bulk. Journal of Chemical Physics, 2008, 128, 134509.	3.0	49
30	Infrared Q-branch anomalies on cooling small OCS ($p\text{H}_2$) n clusters from 0.38 K to 0.15 K. Europhysics Letters, 2008, 83, 66008.	2.0	14
31	Optical Pumping of Trapped Neutral Molecules by Blackbody Radiation. Physical Review Letters, 2007, 98, 133001.	7.8	76
32	Study of NH Stretching Vibrations in Small Ammonia Clusters by Infrared Spectroscopy in He Droplets and ab Initio Calculations. Journal of Physical Chemistry A, 2007, 111, 7460-7471.	2.5	59
33	Gas-phase infrared multiple photon dissociation spectroscopy of mass-selected molecular ions. International Journal of Mass Spectrometry, 2006, 254, 1-19.	1.5	488
34	Infrared intensity in small ammonia and water clusters. Journal of Chemical Physics, 2006, 124, 241101.	3.0	87
35	Infrared multiphoton ionization of superhot C ₆₀ : Experiment and model calculations. Journal of Chemical Physics, 2006, 124, 184312.	3.0	10
36	Fine structure of the (S ₁ → S ₀) band origins of phthalocyanine molecules in helium droplets. Journal of Chemical Physics, 2004, 121, 9396-9405.	3.0	35

#	ARTICLE	IF	CITATIONS
37	Decelerated molecular beams for high-resolution spectroscopy. European Physical Journal D, 2004, 31, 337-349.	1.3	163
38	The infrared spectrum of the adamantyl cation. Chemical Physics Letters, 2004, 400, 201-205.	2.6	25
39	The infrared spectrum of the benzoyl cation. Chemical Physics Letters, 2003, 367, 576-580.	2.6	23
40	Orientation of O(3) and SU(2)-Cl representations in cubic point groups (Oh,Td) for application to molecular spectroscopy. Journal of Molecular Spectroscopy, 2003, 219, 313-325.	1.2	56
41	Optical pumping of metastable NH radicals into the paramagnetic ground state. Physical Review A, 2003, 68, .	2.5	17
42	High-resolution infrared spectra of the OCS-H ₂ , HD, and D ₂ van der Waals complexes in liquid helium droplets. Journal of Chemical Physics, 2003, 118, 8656-8670.	3.0	27
43	Laboratory Infrared Spectroscopy of Cationic Polycyclic Aromatic Hydrocarbon Molecules. Astrophysical Journal, 2003, 591, 968-985.	4.5	229
44	Effect of the Symmetry of H ₂ Molecules on their Rotations around an OCS Molecule in Superfluid H ₄ eDroplets. Physical Review Letters, 2002, 89, 225301.	7.8	61
45	Hyperfine structure of ND ₃ . Physical Review A, 2002, 66, .	2.5	29
46	Spectroscopy of OCS-H _n hydrogen clusters in He droplets. Faraday Discussions, 2001, 118, 19-32.	3.2	54
47	The structure of the OCS-H ₂ van der Waals complex embedded inside [sup 4]He/[sup 3]He droplets. Journal of Chemical Physics, 2001, 114, 617.	3.0	44
48	Gas-Phase Infrared Spectrum of the Coronene Cation. Astrophysical Journal, 2001, 560, L99-L103.	4.5	64
49	Spectroscopy of Single Molecules and Clusters Inside Superfluid Helium Droplets., 2001,, 755-774.	8	
50	New Accurate Fit of an Extended Set of Saturation Data for the 1½/3 Band of SF ₆ : Comparison of Hamiltonians in the Spherical and Cubic Tensor Formalisms. Journal of Molecular Spectroscopy, 2000, 199, 188-204.	1.2	30
51	Anomalous reflection of water surface during laser ablation. Optics Communications, 2000, 182, 17-24.	2.1	7
52	Spectroscopy of molecules in helium droplets. Physica B: Condensed Matter, 2000, 280, 65-72.	2.7	40
53	IR-REMPI spectroscopy for thermometry of C ₆₀ . Chemical Physics Letters, 2000, 321, 508-513.	2.6	10
54	Infrared spectroscopy of gas-phase zirconium oxide clusters. Chemical Physics, 2000, 262, 31-39.	1.9	62

#	ARTICLE		IF	CITATIONS
55	The rotational spectrum of single OCS molecules in liquid 4He droplets. <i>Journal of Chemical Physics</i> , 2000, 112, 4485-4495.	3.0	208	
56	Evidence for Superfluidity in Para-Hydrogen Clusters Inside Helium-4 Droplets at 0.15 Kelvin. <i>Science</i> , 2000, 289, 1532-1535.	12.6	216	
57	High resolution infrared spectroscopy of single SF ₆ molecules in helium droplets. II. The effect of small amounts of 4He in large 3He droplets. <i>Journal of Chemical Physics</i> , 1999, 110, 5124-5136.	3.0	63	
58	High resolution infrared spectroscopy of single SF ₆ molecules in helium droplets. I. Size effects in 4He droplets. <i>Journal of Chemical Physics</i> , 1999, 110, 5109-5123.	3.0	88	
59	Excitation of C ₆₀ using a chirped free electron laser. <i>Optics Express</i> , 1999, 4, 46.	3.4	30	
60	Rotational Structure of the IR Spectra of Single SF ₆ Molecules in Liquid4He and3He Droplets. <i>Journal of Molecular Spectroscopy</i> , 1997, 185, 204-206.	1.2	101	
61	Interaction of Vibrational Fundamental and Combination States of Ethylene in the 3 1/4m Region. <i>Journal of Molecular Spectroscopy</i> , 1997, 185, 31-47.	1.2	45	
62	Selective population of dressed states by rapid adiabatic passage. <i>Chemical Physics Letters</i> , 1996, 248, 244-248.	2.6	3	
63	Multiple-Photon Dynamics in Molecules: A New Approach to High Resolution Spectroscopy of Highly Excited Vibrational States. <i>Journal of Molecular Spectroscopy</i> , 1996, 180, 207-217.	1.2	2	
64	Upâ€“downâ€“upâ€“... multiphoton excitation of twoâ€“level systems. <i>Journal of Chemical Physics</i> , 1996, 104, 3438-3444.	3.0	4	
65	Alignment and orientation of nonpolar molecules utilizing the laserâ€“induced acâ€“Stark effect. <i>Journal of Chemical Physics</i> , 1994, 101, 9384-9394.	3.0	18	
66	Interference phenomena in two-photon transitions caused by laser-induced ac-Stark effect. <i>Canadian Journal of Physics</i> , 1994, 72, 1273-1283.	1.1	4	
67	Multiphoton multi laser excitation of SF ₆ in a molecular beam. <i>Chemical Physics</i> , 1993, 173, 9-16.	1.9	4	
68	The Spectral Features of Polyatomic Molecules Multiphoton Excitation in a Strong IR-Laser Field. <i>Laser Chemistry</i> , 1992, 12, 147-172.	0.5	9	
69	Spectroscopy of the polyatomic molecules, excited by an intense IR laser field. <i>Journal of Molecular Structure</i> , 1984, 115, 225-228.	3.6	0	
70	Multiphoton spectroscopy of the gasdynamically cooled SF ₆ : third harmonic generation and dissociation spectrum. <i>Journal of Molecular Structure</i> , 1984, 115, 229-232.	3.6	2	
71	On the IR-laser dissociation spectrum structure of the gas dynamically cooled SF ₆ . <i>IEEE Journal of Quantum Electronics</i> , 1981, 17, 2582-2582.	1.9	0	
72	Spectral characteristics of the SF ₆ molecules excitation by a strong IR laser field at continuously tuned radiation frequency. <i>Optics Communications</i> , 1979, 31, 309-312.	2.1	43	

ARTICLE

IF CITATIONS

- 73 The spectral structure of the low level excitation in the process of the collisionless dissociation of polyatomic molecules. Optics Communications, 1978, 26, 45-49. 2.1 22