

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	Gas-phase infrared multiple photon dissociation spectroscopy of mass-selected molecular ions. <i>International Journal of Mass Spectrometry</i> , 2006, 254, 1-19.	1.5	488
2	Laboratory Infrared Spectroscopy of Cationic Polycyclic Aromatic Hydrocarbon Molecules. <i>Astrophysical Journal</i> , 2003, 591, 968-985.	4.5	229
3	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
4	The rotational spectrum of single OCS molecules in liquid 4He droplets. <i>Journal of Chemical Physics</i> , 2000, 112, 4485-4495.	3.0	208
5	Decelerated molecular beams for high-resolution spectroscopy. <i>European Physical Journal D</i> , 2004, 31, 337-349.	1.3	163
6	Rotational Structure of the IR Spectra of Single SF ₆ Molecules in Liquid 4He and 3He Droplets. <i>Journal of Molecular Spectroscopy</i> , 1997, 185, 204-206.	1.2	101
7	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
8	Infrared intensity in small ammonia and water clusters. <i>Journal of Chemical Physics</i> , 2006, 124, 241101.	3.0	87
9	Optical Pumping of Trapped Neutral Molecules by Blackbody Radiation. <i>Physical Review Letters</i> , 2007, 98, 133001.	7.8	76
10	Prospects for precision measurements on ammonia molecules in a fountain. <i>European Physical Journal: Special Topics</i> , 2008, 163, 55-69.	2.6	66
11	Gas-Phase Infrared Spectrum of the Coronene Cation. <i>Astrophysical Journal</i> , 2001, 560, L99-L103.	4.5	64
12	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
13	Intensity-resolved IR multiple photon ionization and fragmentation of C ₆₀ . <i>Journal of Chemical Physics</i> , 2010, 132, 074305.	3.0	63
14	Infrared spectroscopy of gas-phase zirconium oxide clusters. <i>Chemical Physics</i> , 2000, 262, 31-39.	1.9	62
15	Effect of the Symmetry of H ₂ Molecules on their Rotations around an OCS Molecule in Superfluid 4He Droplets. <i>Physical Review Letters</i> , 2002, 89, 225301.	7.8	61
16	Study of NH Stretching Vibrations in Small Ammonia Clusters by Infrared Spectroscopy in He Droplets and ab Initio Calculations. <i>Journal of Physical Chemistry A</i> , 2007, 111, 7460-7471.	2.5	59
17	Orientation of O(3) and SU(2) \hat{S} -CI representations in cubic point groups (Oh, Td) for application to molecular spectroscopy. <i>Journal of Molecular Spectroscopy</i> , 2003, 219, 313-325.	1.2	56
18	Spectroscopy of OCS-hydrogen clusters in He droplets. <i>Faraday Discussions</i> , 2001, 118, 19-32.	3.2	54

#	ARTICLE	IF	CITATIONS
19	Evolution of the vibrational spectrum of ammonia from single molecule to bulk. Journal of Chemical Physics, 2008, 128, 134509.	3.0	49
20	Interaction of Vibrational Fundamental and Combination States of Ethylene in the 3 $\hat{1}/4$ m Region. Journal of Molecular Spectroscopy, 1997, 185, 31-47.	1.2	45
21	The structure of the OCS \hat{e} 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
22	Spectral characteristics of the SF6 molecules excitation by a strong IR laser field at continuously tuned radiation frequency. Optics Communications, 1979, 31, 309-312.	2.1	43
23	Spectroscopic characterization of aluminum monofluoride with relevance to laser cooling and trapping. Physical Review A, 2019, 100, .	2.5	41
24	Spectroscopy of molecules in helium droplets. Physica B: Condensed Matter, 2000, 280, 65-72.	2.7	40
25	Fine structure of the (S1 $\hat{+}$ 60) band origins of phthalocyanine molecules in helium droplets. Journal of Chemical Physics, 2004, 121, 9396-9405.	3.0	35
26	Nonadiabatic transitions in electrostatically trapped ammonia molecules. Physical Review A, 2009, 79, .	2.5	33
27	Spectroscopic investigation of OCS (p-H ₂) \hat{n} \hat{e} (n=1 \hat{e} 16) complexes inside helium droplets: Evidence for superfluid behavior. Journal of Chemical Physics, 2010, 132, 064501.	3.0	31
28	CMlstar: Python package for the Stark-effect calculation and symmetry classification of linear, symmetric and asymmetric top wavefunctions in dc electric fields. Computer Physics Communications, 2014, 185, 339-349.	7.5	31
29	Excitation of C60 using a chirped free electron laser. Optics Express, 1999, 4, 46.	3.4	30
30	New Accurate Fit of an Extended Set of Saturation Data for the $\hat{1}/23$ Band of SF6: Comparison of Hamiltonians in the Spherical and Cubic Tensor Formalisms. Journal of Molecular Spectroscopy, 2000, 199, 188-204.	1.2	30
31	Hyperfine structure of ND ₃ . Physical Review A, 2002, 66, .	2.5	29
32	High-resolution infrared spectra of the OCS \hat{e} H ₂ , \hat{e} \hat{e} HD, and \hat{e} \hat{e} D ₂ van der Waals complexes in liquid helium droplets. Journal of Chemical Physics, 2003, 118, 8656-8670.	3.0	27
33	Rotation of methane and silane molecules in He droplets. Journal of Chemical Physics, 2010, 132, 074302.	3.0	26
34	Quantitative Study of Enantiomer-Specific State Transfer. Physical Review Letters, 2022, 128, 173001.	7.8	26
35	The infrared spectrum of the adamantyl cation. Chemical Physics Letters, 2004, 400, 201-205.	2.6	25
36	Optical cycling of AlF molecules. New Journal of Physics, 2021, 23, 075001.	2.9	24

#	ARTICLE	IF	CITATIONS
37	The infrared spectrum of the benzoyl cation. <i>Chemical Physics Letters</i> , 2003, 367, 576-580.	2.6	23
38	Infrared spectroscopy of carbonyl sulfide inside a pure ³ He droplet. <i>Journal of Chemical Physics</i> , 2012, 136, 134316.	3.0	23
39	The spectral structure of the low level excitation in the process of the collisionless dissociation of polyatomic molecules. <i>Optics Communications</i> , 1978, 26, 45-49.	2.1	22
40	Suppression of nonadiabatic losses of molecules from chip-based microtraps. <i>Physical Review A</i> , 2011, 83, .	2.5	20
41	Alignment and orientation of nonpolar molecules utilizing the laser-induced Stark effect. <i>Journal of Chemical Physics</i> , 1994, 101, 9384-9394.	3.0	18
42	Optical pumping of metastable NH radicals into the paramagnetic ground state. <i>Physical Review A</i> , 2003, 68, .	2.5	17
43	Infrared Q-branch anomalies on cooling small OCS (pH ₂) _n clusters from 0.38â€‰K to 0.15â€‰K. <i>Europhysics Letters</i> , 2008, 83, 66008.	2.0	14
44	On the role of laser irradiation in the processes of laser desorption/ionisation from silicon surfaces. <i>Quantum Electronics</i> , 2011, 41, 835-842.	1.0	14
45	IR-REMPI spectroscopy for thermometry of C60. <i>Chemical Physics Letters</i> , 2000, 321, 508-513.	2.6	10
46	Infrared multiphoton ionization of superhot C60: Experiment and model calculations. <i>Journal of Chemical Physics</i> , 2006, 124, 184312.	3.0	10
47	Producing translationally cold, ground-state CO molecules. <i>Journal of Chemical Physics</i> , 2011, 135, 114201.	3.0	10
48	Characterisation of the $b^3\Sigma^+_{g,1}$, $v=0$ state and its interaction with the $A^1\Sigma^+_{g,1}$ state in aluminium monofluoride. <i>Molecular Physics</i> , 2021, 119, e1810351.	1.7	10
49	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
50	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
51	Hyperfine-resolved optical spectroscopy of the $A^2\hat{1}\hat{X}^2\hat{1}+$ transition in MgF. <i>Journal of Chemical Physics</i> , 2022, 156, 134301.	3.0	9
52	Rotation of methane molecules in dimers and small clusters. <i>Journal of Chemical Physics</i> , 2015, 143, 084305.	3.0	8
53	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
54	Spectroscopy of Single Molecules and Clusters Inside Superfluid Helium Droplets. , 2001, , 755-774.		8

#	ARTICLE	IF	CITATIONS
55	Anomalous reflection of water surface during laser ablation. Optics Communications, 2000, 182, 17-24.	2.1	7
56	Internal Rotation of Methane Molecules in Large Clusters. Journal of Physical Chemistry Letters, 2016, 7, 47-50.	4.6	6
57	Matrix Isolation Spectroscopy in Helium Droplets. , 2011, , 203-230.		6
58	Measuring and manipulating the temperature of cold molecules trapped on a chip. Physical Review A, 2015, 92, .	2.5	5
59	_{Formation of Core Shell Ethane Silver Clusters in Helium Droplets}. Journal of Physical Chemistry A, 2017, 121, 5978-5982.	2.5	5
60	Multiphoton multi laser excitation of SF6 in a molecular beam. Chemical Physics, 1993, 173, 9-16.	1.9	4
61	Interference phenomena in two-photon transitions caused by laser-induced ac-Stark effect. Canadian Journal of Physics, 1994, 72, 1273-1283.	1.1	4
62	Upâ€“downâ€“upâ€“... multiphoton excitation of twoâ€“level systems. Journal of Chemical Physics, 1996, 104, 3438-3444.	3.0	4
63	Large enhancement of the vibration-rotation coupling of the $\hat{1}/2_1$ and $\hat{1}/2_3$ states of silane in helium droplets. Journal of Chemical Physics, 2009, 131, 241103.	3.0	4
64	Selective population of dressed states by rapid adiabatic passage. Chemical Physics Letters, 1996, 248, 244-248.	2.6	3
65	Mixed ortho- H2 and para- H2 clusters studied by vibrational coherent anti-Stokes Raman spectroscopy. Physical Review B, 2020, 101, .	3.2	3
66	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi mathvariant="normal">Î</mml:mi></mml:math> doubling in the <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:mrow></mml:math> state of TIF. Physical Review A, 2020, 101, .	3.5	3
67	Multiphoton spectroscopy of the gasdynamically cooled SF6: third harmonic generation and dissociation spectrum. Journal of Molecular Structure, 1984, 115, 229-232.	3.6	2
68	Multiple-Photon Dynamics in Molecules: A New Approach to High Resolution Spectroscopy of Highly Excited Vibrational States. Journal of Molecular Spectroscopy, 1996, 180, 207-217.	1.2	2
69	Stark Interference of Electric and Magnetic Dipole Transitions in the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi><mml:mo>âˆ“</mml:mo><mml:mi>X</mml:mi></mml:mrow></mml:math> Band of OH. Physical Review Letters, 2016, 116, 153001.	7.8	2
70	Spectroscopic characterization of singlet-triplet doorway states of aluminum monofluoride. Journal of Chemical Physics, 2022, 156, 184301.	3.0	2
71	Spectroscopic characterization of the a³Î state of aluminum monofluoride. Journal of Chemical Physics, 2022, 156, 124306.	3.0	2
72	On the IR-laser dissociation spectrum structure of the gas dynamically cooled SF6. IEEE Journal of Quantum Electronics, 1981, 17, 2582-2582.	1.9	0

#	ARTICLE	IF	CITATIONS
73	Spectroscopy of the polyatomic molecules, excited by an intense IR laser field. Journal of Molecular Structure, 1984, 115, 225-228.	3.6	0