

# Leonid A Surin

## List of Publications by Year in descending order

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56  
papers

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citations

471371

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times ranked

520  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ab initio potential energy surface and microwave spectrum of the NH <sub>3</sub> –N <sub>2</sub> van der Waals complex. Journal of Chemical Physics, 2020, 152, 234304.	1.2	3
2	Jet spectroscopy of weakly bound complexes of astrophysical interest: NH <sub>3</sub> –Ne and NH <sub>3</sub> –H <sub>2</sub> . , 2020, , .		0
3	Double resonance rotational spectroscopy of He–HCO <sup>+</sup> . Physical Chemistry Chemical Physics, 2019, 21, 3440-3445.	1.3	17
4	Millimeter-wave detection of doubly excited bending mode in the CO–N <sub>2</sub> van der Waals complex. Journal of Molecular Spectroscopy, 2019, 362, 21-24.	0.4	2
5	Ab initio potential and rotational spectra of the CO–N <sub>2</sub> complex. Journal of Chemical Physics, 2018, 148, 044313.	1.2	13
6	Microwave spectra and nuclear quadrupole structure of the NH <sub>3</sub> –N <sub>2</sub> van der Waals complex and its deuterated isotopologues. Journal of Chemical Physics, 2018, 149, 224305.	1.2	5
7	Rotational Spectroscopy of the NH <sub>3</sub> –H <sub>2</sub> Molecular Complex. Astrophysical Journal, 2017, 838, 27.	1.6	17
8	OROTRON intracavity millimeter-wave spectroscopy of weakly bound complexes containing molecular hydrogen. , 2017, , .		0
9	Rotational study of the NH <sub>3</sub> –CO complex: Millimeter-wave measurements and ab initio calculations. Journal of Chemical Physics, 2015, 142, 114308.	1.2	14
10	A new millimeter-wave observation of the weakly bound CO–N <sub>2</sub> complex. Journal of Molecular Spectroscopy, 2015, 307, 54-58.	0.4	7
11	First observation of the rotational spectrum of the HD–CO weakly bound complex. Journal of Molecular Spectroscopy, 2015, 307, 18-19.	0.4	5
12	Rotational study of the CH <sub>4</sub> –CO complex: Millimeter-wave measurements and ab initio calculations. Journal of Chemical Physics, 2015, 143, 154303.	1.2	11
13	Nonclassical rotations of single molecules in small helium and hydrogen clusters: Manifestation of microscopic superfluidity. JETP Letters, 2013, 97, 57-65.	0.4	9
14	A comprehensive experimental and theoretical study of H <sub>2</sub> –CO spectra. Journal of Chemical Physics, 2013, 138, 084307.	1.2	52
15	Study of the spectrum of the Kr-CO weakly bound molecular complex in the millimeter-wavelength range. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2012, 112, 696-701.	0.2	0
16	Millimeter-wave spectroscopy of the weakly bound molecular complex NH <sub>3</sub> -N <sub>2</sub> . Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2012, 113, 1-4.	0.2	6
17	Millimeter-wave study of the CH <sub>4</sub> –CO complex: New measurements with OROTRON spectrometer. Journal of Molecular Spectroscopy, 2011, 268, 112-114.	0.4	4
18	Submillimeter-wave spectroscopy of the K=2–1 subband of the Ne–CO complex. Journal of Molecular Spectroscopy, 2011, 270, 116-119.	0.4	5

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19	The problem of the structure (state of helium) in small He N -CO clusters. Journal of Experimental and Theoretical Physics, 2010, 111, 770-775.	0.2	4
20	Comment on: The molecular symmetry group of the CO dimer and the assignments of the intermolecular vibrations, by: K.M.T. Yamada, J. Mol. Spectrosc. 254 (2009) 87. Journal of Molecular Spectroscopy, 2010, 259, 60-61.	0.4	2
21	Rotational study of carbon monoxide isotopologues in small 4He clusters. Physical Chemistry Chemical Physics, 2010, 12, 8260.	1.3	21
22	On the 40th anniversary of the Institute of Spectroscopy of the Russian Academy of Sciences (Scientific session of the Physical Sciences Division of the Russian Academy of Sciences, 8 October) Tj ETQq0 0 0 rgBT /Overlook 10 Tf 5		
23	Spectroscopy of small helium clusters and 'nanoscopic' superfluidity: HeNâ€“ CO,N=2â€“20.... Physics-Uspexhi, 2009, 52, .	0.8	4
24	Search for corannulene (C<sub>20</sub>H<sub>10</sub>) in the Red Rectangle. Monthly Notices of the Royal Astronomical Society, 2009, 397, 1053-1060.	1.6	39
25	Millimeter-wave spectroscopy of weakly bound molecular complexes: Isotopologues of He-CO. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2009, 106, 183-189.	0.2	12
26	Microwave spectroscopy of the weakly bound CO-ortho-D2 molecular complex. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2009, 106, 655-659.	0.2	9
27	ROTATIONAL SPECTROSCOPY OF THE CO-PARA-H<sub>2</sub> MOLECULAR COMPLEX. Astrophysical Journal, 2009, 703, 2108-2112.	1.6	26
28	Rotational Study of Carbon Monoxide Solvated with Helium Atoms. Physical Review Letters, 2008, 101, 233401.	2.9	53
29	Higher Energy States in the CO Dimer:â€“ Millimeter-Wave Spectra and Rovibrational Calculations. Journal of Physical Chemistry A, 2007, 111, 12238-12247.	1.1	35
30	Millimeter-wave study of the COâ€“N2 van der Waals complex: new measurements of COâ€“orthoN2 and assignments of new states of COâ€“paraN2. Journal of Molecular Structure, 2006, 795, 198-208.	1.8	16
31	Unusual rotations in helium and hydrogen nanoclusters and 'nanoscopic' superfluidity. Physics-Uspexhi, 2006, 49, 1113-1129.	0.8	17
32	Isotope effects in the CO dimer: Millimeter wave spectrum and rovibrational calculations of (C12O18)2. Journal of Chemical Physics, 2006, 125, 094304.	1.2	9
33	Millimeter-wave spectrum of Neâ€“CO: new measurements. Journal of Molecular Spectroscopy, 2005, 230, 149-152.	0.4	9
34	The potential energy surface of the Ar-CO complex obtained using high-resolution data. Journal of Chemical Physics, 2004, 121, 4691-4698.	1.2	13
35	Monomer counterrotations and tunneling splitting in CO dimer by data of millimeter wave spectroscopy. JETP Letters, 2004, 80, 98-102.	0.4	2
36	The millimeter wave spectrum of the 13C16O dimer. Journal of Molecular Spectroscopy, 2004, 223, 132-137.	0.4	14

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37	The CO dimer: new light on a mysterious molecule. <i>Journal of Molecular Spectroscopy</i> , 2003, 222, 93-101.	0.4	38
38	Laboratory Precision Measurements of the Rotational Spectrum of $^{12}\text{C}^{17}\text{O}$ and $^{13}\text{C}^{17}\text{O}$ . <i>Astrophysical Journal</i> , 2003, 582, 262-268.	1.6	33
39	Millimeter-Wave Spectra of the CO Dimer: Three New States and Further Evidence of Distinct Isomers. <i>Journal of Molecular Spectroscopy</i> , 2002, 214, 87-93.	0.4	33
40	Detection of the bending vibration of the $\text{CO}^{\text{ortho}}\text{N}_2$ complex. <i>Journal of Molecular Structure</i> , 2002, 612, 207-211.	1.8	16
41	Doppler-Free Two-Photon Millimeter Wave Transitions in OCS and $\text{CHF}_3$ . <i>Physical Review Letters</i> , 2001, 86, 2002-2005.	2.9	11
42	Millimeter-wave intracavity-jet OROTRON-spectrometer for investigation of van der Waals complexes. <i>Review of Scientific Instruments</i> , 2001, 72, 2535-2542.	0.6	65
43	Millimeter Wave Spectroscopy of Ne-CO. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2000, 55, 754-758.	0.7	9
44	Intracavity millimeter wave spectroscopy of molecules in excited vibrational states. <i>Vibrational Spectroscopy</i> , 2000, 24, 147-155.	1.2	3
45	The weakly bound complex $\text{CO}^{\text{ortho}}\text{D}_2$ : Detection of millimeter-wave transitions. <i>Journal of Chemical Physics</i> , 2000, 113, 9351-9352.	1.2	13
46	The CO dimer millimeter wave spectrum: Detection of tunneling transitions. <i>Journal of Chemical Physics</i> , 2000, 113, 3034-3038.	1.2	34
47	Detection of the millimeter wave spectra of the weakly bound complexes $3\text{He}^{\text{ortho}}\text{CO}$ and $4\text{He}^{\text{ortho}}\text{CO}$ . <i>Journal of Chemical Physics</i> , 2000, 112, 4064-4068.	1.2	38
48	Discovery of the rotational spectrum of the weakly bound complex $\text{CO}^{\text{ortho}}\text{H}_2$ . <i>Chemical Physics Letters</i> , 1999, 304, 145-149.	1.2	34
49	Highly Pure Inversion Spectrum of $\text{ND}_3$ in the $v_2 = 1$ State. <i>Journal of Molecular Spectroscopy</i> , 1999, 194, 142-144.	0.4	2
50	Submillimeter Detection of the van der Waals Stretching Vibration of the $\text{Ar}^{\text{ortho}}\text{CO}$ Complex. <i>Journal of Molecular Spectroscopy</i> , 1999, 196, 139-145.	0.4	16
51	Microwave and millimeter wave study of Ortho- $\text{N}_2$ states of $\text{CO}^{\text{ortho}}\text{N}_2$ . <i>Journal of Chemical Physics</i> , 1999, 111, 10476-10483.	1.2	28
52	Novel Intracavity Jet Millimeter Wave Spectrometer: Detection of b-Type Rotational Transitions of Ne-CO. <i>Journal of Molecular Spectroscopy</i> , 1998, 192, 243-246.	0.4	29
53	Application of highly sensitive millimeter-wave cavity spectrometer based on orotron for gas analysis. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 1997, 53, 835-843.	2.0	5
54	Two highly sensitive microwave cavity spectrometers. <i>Review of Scientific Instruments</i> , 1996, 67, 3458-3464.	0.6	21

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55	Highly sensitive millimeter-wave spectrometer based on an orotron. , 1994, 2205, 466.		0
56	Highly sensitive millimetre-wave spectrometer based on an orotron. Measurement Science and Technology, 1992, 3, 873-878.	1.4	13