

Leonid A Surin

List of Publications by Year in descending order

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56
papers

917
citations

471371

17
h-index

501076

28
g-index

57
all docs

57
docs citations

57
times ranked

520
citing authors

#	ARTICLE	IF	CITATIONS
1	Millimeter-wave intracavity-jet OROTRON-spectrometer for investigation of van der Waals complexes. Review of Scientific Instruments, 2001, 72, 2535-2542.	0.6	65
2	Rotational Study of Carbon Monoxide Solvated with Helium Atoms. Physical Review Letters, 2008, 101, 233401.	2.9	53
3	A comprehensive experimental and theoretical study of H ₂ ¹³ C ¹⁸ O spectra. Journal of Chemical Physics, 2013, 138, 084307.	1.2	52
4	Search for corannulene (C ₂₀ H ₁₀) in the Red Rectangle. Monthly Notices of the Royal Astronomical Society, 2009, 397, 1053-1060.	1.6	39
5	Detection of the millimeter wave spectra of the weakly bound complexes 3He- ¹³ C ¹⁸ O and 4He- ¹³ C ¹⁸ O. Journal of Chemical Physics, 2000, 112, 4064-4068.	1.2	38
6	The CO dimer: new light on a mysterious molecule. Journal of Molecular Spectroscopy, 2003, 222, 93-101.	0.4	38
7	Higher Energy States in the CO Dimer: Millimeter-Wave Spectra and Rovibrational Calculations. Journal of Physical Chemistry A, 2007, 111, 12238-12247.	1.1	35
8	Discovery of the rotational spectrum of the weakly bound complex CO- ¹³ C ¹⁸ O. Chemical Physics Letters, 1999, 304, 145-149.	1.2	34
9	The CO dimer millimeter wave spectrum: Detection of tunneling transitions. Journal of Chemical Physics, 2000, 113, 3034-3038.	1.2	34
10	Millimeter-Wave Spectra of the CO Dimer: Three New States and Further Evidence of Distinct Isomers. Journal of Molecular Spectroscopy, 2002, 214, 87-93.	0.4	33
11	Laboratory Precision Measurements of the Rotational Spectrum of ¹² C ¹⁷ O and ¹³ C ¹⁷ O. Astrophysical Journal, 2003, 582, 262-268.	1.6	33
12	Novel Intracavity Jet Millimeter Wave Spectrometer: Detection of b-Type Rotational Transitions of Ne-CO. Journal of Molecular Spectroscopy, 1998, 192, 243-246.	0.4	29
13	Microwave and millimeter wave study of Ortho-N ₂ states of CO- ¹³ C ¹⁸ O. Journal of Chemical Physics, 1999, 111, 10476-10483.	1.2	28
14	ROTATIONAL SPECTROSCOPY OF THE CO-PARA-H ₂ MOLECULAR COMPLEX. Astrophysical Journal, 2009, 703, 2108-2112.	1.6	26
15	Two highly sensitive microwave cavity spectrometers. Review of Scientific Instruments, 1996, 67, 3458-3464.	0.6	21
16	Rotational study of carbon monoxide isotopologues in small 4He clusters. Physical Chemistry Chemical Physics, 2010, 12, 8260.	1.3	21
17	Unusual rotations in helium and hydrogen nanoclusters and 'nanoscopic' superfluidity. Physics-Uspokhi, 2006, 49, 1113-1129.	0.8	17
18	Rotational Spectroscopy of the NH ₃ - ¹³ C ¹⁸ O Molecular Complex. Astrophysical Journal, 2017, 838, 27.	1.6	17

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19	Double resonance rotational spectroscopy of He ⁺ HCO ⁺ . Physical Chemistry Chemical Physics, 2019, 21, 3440-3445.	1.3	17
20	Submillimeter Detection of the van der Waals Stretching Vibration of the Ar ⁺ CO Complex. Journal of Molecular Spectroscopy, 1999, 196, 139-145.	0.4	16
21	Detection of the bending vibration of the CO ⁺ orthoN ₂ complex. Journal of Molecular Structure, 2002, 612, 207-211.	1.8	16
22	Millimeter-wave study of the CO ⁺ N ₂ van der Waals complex: new measurements of CO ⁺ orthoN ₂ and assignments of new states of CO ⁺ paraN ₂ . Journal of Molecular Structure, 2006, 795, 198-208.	1.8	16
23	The millimeter wave spectrum of the ¹³ C ¹⁶ O dimer. Journal of Molecular Spectroscopy, 2004, 223, 132-137.	0.4	14
24	Rotational study of the NH ₃ ⁺ CO complex: Millimeter-wave measurements and ab initio calculations. Journal of Chemical Physics, 2015, 142, 114308.	1.2	14
25	Highly sensitive millimetre-wave spectrometer based on an orotron. Measurement Science and Technology, 1992, 3, 873-878.	1.4	13
26	The weakly bound complex CO ⁺ orthoD ₂ : Detection of millimeter-wave transitions. Journal of Chemical Physics, 2000, 113, 9351-9352.	1.2	13
27	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
28	<i>Ab initio</i> potential and rotational spectra of the CO ⁺ N ₂ complex. Journal of Chemical Physics, 2018, 148, 044313.	1.2	13
29	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
30	Doppler-Free Two-Photon Millimeter Wave Transitions in OCS and CHF ₃ . Physical Review Letters, 2001, 86, 2002-2005.	2.9	11
31	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 ETQq1 1 0.784814 rgBII /Overlo	0.4	11
32	Rotational study of the CH ₄ ⁺ CO complex: Millimeter-wave measurements and ab initio calculations. Journal of Chemical Physics, 2015, 143, 154303.	1.2	11
33	Millimeter Wave Spectroscopy of Ne-CO. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2000, 55, 754-758.	0.7	9
34	Millimeter-wave spectrum of Ne ⁺ CO: new measurements. Journal of Molecular Spectroscopy, 2005, 230, 149-152.	0.4	9
35	Isotope effects in the CO dimer: Millimeter wave spectrum and rovibrational calculations of (C ¹² O ¹⁸) ₂ . Journal of Chemical Physics, 2006, 125, 094304.	1.2	9
36	Microwave spectroscopy of the weakly bound CO-ortho-D ₂ molecular complex. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2009, 106, 655-659.	0.2	9

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37	Nonclassical rotations of single molecules in small helium and hydrogen clusters: Manifestation of ϵ -microscopic superfluidity. JETP Letters, 2013, 97, 57-65.	0.4	9
38	A new millimeter-wave observation of the weakly bound CO-N ₂ complex. Journal of Molecular Spectroscopy, 2015, 307, 54-58.	0.4	7
39	Millimeter-wave spectroscopy of the weakly bound molecular complex NH ₃ -N ₂ . Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2012, 113, 1-4.	0.2	6
40	Application of highly sensitive millimeter-wave cavity spectrometer based on orotron for gas analysis. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 1997, 53, 835-843.	2.0	5
41	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
42	First observation of the rotational spectrum of the HD-CO weakly bound complex. Journal of Molecular Spectroscopy, 2015, 307, 18-19.	0.4	5
43	Microwave spectra and nuclear quadrupole structure of the NH ₃ -N ₂ van der Waals complex and its deuterated isotopologues. Journal of Chemical Physics, 2018, 149, 224305.	1.2	5
44	Spectroscopy of small helium clusters and 'nanoscopic' superfluidity: He-N ₂ -CO, N=2-20... Physics-Uspexhi, 2009, 52, .	0.8	4
45	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
46	Millimeter-wave study of the CH ₄ -CO complex: New measurements with OROTRON spectrometer. Journal of Molecular Spectroscopy, 2011, 268, 112-114.	0.4	4
47	Intracavity millimeter wave spectroscopy of molecules in excited vibrational states. Vibrational Spectroscopy, 2000, 24, 147-155.	1.2	3
48	Ab initio potential energy surface and microwave spectrum of the NH ₃ -N ₂ van der Waals complex. Journal of Chemical Physics, 2020, 152, 234304.	1.2	3
49	Highly Pure Inversion Spectrum of ND ₃ in the v ₂ = 1 State. Journal of Molecular Spectroscopy, 1999, 194, 142-144.	0.4	2
50	Monomer counterrotations and tunneling splitting in CO dimer by data of millimeter wave spectroscopy. JETP Letters, 2004, 80, 98-102.	0.4	2
51	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
52	Millimeter-wave detection of doubly excited bending mode in the CO-N ₂ van der Waals complex. Journal of Molecular Spectroscopy, 2019, 362, 21-24.	0.4	2
53	Highly sensitive millimeter-wave spectrometer based on an orotron. , 1994, 2205, 466.		0
54	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

#	ARTICLE	IF	CITATIONS
55	OROTRON intracavity millimeter-wave spectroscopy of weakly bound complexes containing molecular hydrogen. , 2017, , .		0
56	Jet spectroscopy of weakly bound complexes of astrophysical interest: NH ₃ â€“Ne and NH ₃ â€“H ₂ . , 2020, , .		0