

Jarosław Koperski

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5465751/publications.pdf>

Version: 2024-02-01

72
papers

1,033
citations

516710

16
h-index

501196

28
g-index

75
all docs

75
docs citations

75
times ranked

222
citing authors

#	ARTICLE	IF	CITATIONS
1	Rotational characterization of the $E_{3,1}$ Rydberg state of CdNe van der Waals complex via selective J-excitation in OODR process. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 264, 120248.		
2	Rydberg states of ZnAr complex. <i>Molecular Physics</i> , 2022, 120, .	1.7	2
3	Observation of gerade Rydberg state of Cd ₂ van der Waals complex cooled in free-jet expansion beam and excited using optical-optical double resonance method. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 253, 119500.	3.9	0
4	Ro-vibrational cooling of diatomic molecules Cd ₂ and Yb ₂ : rotational energy structure included. <i>Molecular Physics</i> , 2020, 118, e1694712.	1.7	0
5	Bound-free and bound-bound multichannel emission spectra from selectively excited Rydberg states in the ZnAr and CdAr van der Waals complexes. <i>Journal of Molecular Structure</i> , 2020, 1222, 128840.	3.6	5
6	Genetic Algorithm for quick finding of diatomic molecule potential parameters. <i>Molecular Simulation</i> , 2020, 46, 1073-1083.	2.0	2
7	<i>Spectroscopy of CdAr van der Waals complex using OODR process: New determination of the</i> $E_{3,1}$		

#	ARTICLE	IF	CITATIONS
19	The E3 Σ^+ (63S1)-state interatomic potential of CdAr in the long range region revisited: A new method for bond length adjustment. Chemical Physics Letters, 2015, 640, 82-86.	2.6	8
20	Interatomic potentials of the heavy van der Waals dimer Hg ₂ : A test-bed for theory-to-experiment agreement. Physics Reports, 2015, 591, 1-31.	25.6	11
21	Free-bound and bound-bound profiles in excitation spectra of the B31 Σ^+ 10 ⁺ transition in CdNg (Ng=noble) Tj	1.9	13
22	Profiles of (\dots) bands recorded in excitation spectra using b30+u Σ^+ 10 ⁺ transitions in Cd2 and B31 Σ^+ 10 ⁺ transitions in CdAr. Molecular Physics, 2014, 112, 2486-2494.	1.7	13
23	Rotational profiles of vibrational bands recorded at the B31(53P1) Σ^+ 10 ⁺ (51S0) transition in CdAr complex. Chemical Physics Letters, 2014, 591, 64-68.	2.6	13
24	Pulsed supersonic source of vdW complexes for high-temperature applications: Spectroscopy and beam characteristics. European Physical Journal: Special Topics, 2013, 222, 2187-2195.	2.6	5
25	High-temperature high-pressure all-metal pulsed source of van der Waals dimers: Towards the Einstein-Podolsky-Rosen experiment. Review of Scientific Instruments, 2012, 83, 083114.	1.3	12
26	Potentials of the D10u+(61S0) and F31u(63P2) Electronic Rydberg States of Cd ₂ from ab Initio Calculations and Laser-Induced Fluorescence Excitation Spectra. Journal of Physical Chemistry A, 2011, 115, 6851-6860.	2.5	7
27	altimg="si1.gif" overflow="scroll"> < mml:mrow> < mml:msup> < mml:mrow> < mml:mtext>E</mml:mtext> </mml:mrow> < mml:mrow> < mml:mn>3</mml:mathvariant="normal"> </mml:mi> </mml:mrow> < mml:mrow> < mml:mo>+</mml:mo> </mml:mrow> < mml:msup> < mml:mo>		

#	ARTICLE	IF	CITATIONS
37	Is Cd ₂ truly a van der Waals molecule? Analysis of rotational profiles recorded at the ν_1 transitions. <i>Chemical Physics</i> , 2007, 340, 171-180.	1.9	18
38	Spectroscopy of the 11u(51P1) and singlet electronic states of cadmium dimer: Bond lengths and verification of ab initio potentials. <i>Journal of Molecular Spectroscopy</i> , 2007, 243, 134-141.	1.2	8
39	Interatomic potential parameters of CdHe van der Waals complex derived from excitation spectrum of the C11(51P1) \rightarrow X10+(51S0) vibrational transition. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2007, 67, 730-736.	3.9	4
40	Group-12 vdW dimers in free-jet supersonic beams: The legacy of Eugeniusz Czuchaj continues. <i>European Physical Journal: Special Topics</i> , 2007, 144, 107-114.	2.6	6
41	Molecules in the cold environment of a supersonic free-jet beam: from spectroscopy of neutral-neutral interactions to a test of Bell's inequality. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2006, 39, S1125-S1150.	1.5	16
42	The ν_1 -state potentials of Zn ₂ obtained from excitation spectrum recorded at the transition. <i>Chemical Physics</i> , 2006, 327, 229-236.	1.9	17
43	Evidence of a weak dipole transition moment between the ν_1 and 31u(53P1) electronic energy states in Cd ₂ . <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2005, 61, 1835-1840.	3.9	8
44	Short-range repulsion in the D10+(1 Σ^+)-state potential of the CdRG (RG=Ar, Kr) molecules determined from a direct continuum-bound excitation detected at the D10 \rightarrow X10+(1 Σ^+) transition. <i>Chemical Physics Letters</i> , 2005, 416, 147-151.	2.6	12
45	Electronic structure of the CdKr lowest Rydberg state determined from laser-excitation spectra using supersonic beam and double optical resonance methods. <i>Physical Review A</i> , 2004, 69, .	2.5	14
46	Nuclear-spin intensity alternation and rotational-levels symmetry properties in isotopically-resolved excitation spectrum of Cd ₂ . <i>Chemical Physics Letters</i> , 2004, 384, 317-319.	2.6	8
47	The structure of the lowest electronic Rydberg state of CdAr complex determined by laser double resonance method in a supersonic jet-expansion beam. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2003, 59, 2435-2448.	3.9	14
48	Structure of excitation and fluorescence spectra recorded at the 10u+(51P1) \rightarrow X10g+transition of Cd ₂ . <i>Physical Review A</i> , 2003, 68, .	2.5	24
49	Short-Range Characterization of the MeAr (Me=Zn, Cd) Ground-State Potentials from Fluorescence Spectra. <i>Journal of Molecular Spectroscopy</i> , 2002, 212, 162-170.	1.2	23
50	Laser excitation spectrum and spectroscopic potential parameters of Cd ₂ molecule in the 1u(53P2) energy state. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2002, 58, 927-932.	3.9	15
51	Double-well potential energy curve of cadmium-krypton molecule in the B1(53P1) excited state. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2002, 58, 1757-1767.	3.9	16
52	Laser spectroscopy of CdKr molecules in ultraviolet region. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2002, 58, 2709-2724.	3.9	23
53	Study of diatomic van der Waals complexes in supersonic beams. <i>Physics Reports</i> , 2002, 369, 177-326.	25.6	97
54	Spectroscopical characterization of CdNe van der Waals complex in the E1(3 Σ^+) Rydberg state. <i>Chemical Physics Letters</i> , 2002, 357, 119-125.	2.6	14

#	ARTICLE	IF	CITATIONS
55	Absorption and fluorescence laser spectroscopy of CdKr molecule in ultraviolet region. AIP Conference Proceedings, 2001, , .	0.4	1
56	Determination of Interatomic Potentials for the X0+, A0+, and B1 States of HgKr from Fluorescence and Excitation Spectra. Journal of Molecular Spectroscopy, 2001, 207, 172-188.	1.2	9
57	Interatomic potential parameters of CdHe van der Waals complex in the A30+,B31 and X10+ states "revisited". Chemical Physics Letters, 2001, 350, 367-371.	2.6	15
58	Interatomic potentials of cadmium-argon B1(3 Σ^+) and X0+(1 Σ^+) states based on near-dissociation expansion and "hot" bands observed in the B1 \rightarrow X0+ excitation spectrum. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2000, 56, 1613-1626.	3.9	30
59	Improved spectroscopic characterisation of the ground. European Physical Journal D, 2000, 10, 363.	1.3	27
60	Spectroscopic characterization of the ZnNe van der Waals molecule in the X0+(41S0) and D1(41P1) energy states. Physical Review A, 2000, 62, .	2.5	21
61	The Cd ₂ and Zn ₂ van der Waals dimers revisited. Correction for some molecular potential parameters. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 1999, 55, 2221-2229.	3.9	76
62	First Observations of Laser-Excited Hg ₃ and Hg ₂ RG Spectra in a Supersonic Expansion Beam. Journal of Molecular Spectroscopy, 1998, 187, 181-192.	1.2	12
63	Excitation spectrum of the A0+(5 Σ° 3P1), B1(5 Σ° 3P1) \rightarrow X0+(5 Σ° 1S0) transitions in the CdHe van der Waals molecule: Spectroscopic characterization of the X0+, A0+, and B1 electronic energy states. Journal of Chemical Physics, 1998, 109, 459-465.	3.0	26
64	Potential energy curve of the X0+(1 Σ^+) ground state of HgAr determined from (II) $\hat{\nu}'_1(\hat{\nu}'')$ fluorescence spectra (Chemical Physics 211 (1996) 191-201). Chemical Physics, 1997, 214, 431-432.	1.9	9
65	The G0u+(61P1) \rightarrow X0G+Excitation and Fluorescence Spectra of Hg ₂ Excited in a Supersonic Jet. Journal of Molecular Spectroscopy, 1997, 184, 300-308.	1.2	40
66	Potential energy curve of the ground state of HgAr determined from fluorescence spectra. Chemical Physics, 1996, 211, 191-201.	1.9	15
67	Long-range potential of B1(3 Σ^+) state based on a near-dissociation expansion of the mercury-argon molecules. Journal of Chemical Physics, 1996, 105, 4920-4922.	3.0	12
68	Molecular beam spectroscopy of the and transitions in Hg ₂ . Canadian Journal of Physics, 1994, 72, 1070-1077.	1.1	45
69	The O+u(6 3P1) \rightarrow X0+g spectrum of Hg ₂ excited in a supersonic jet. Chemical Physics Letters, 1994, 219, 161-168.	2.6	72
70	Spectroscopy of the A0+ and B1 states in HgAr and HgNe. Chemical Physics, 1994, 186, 401-407.	1.9	28
71	Deep neural network for fitting analytical potential energy curve of diatomic molecules from ro-vibrational spectra. Molecular Simulation, 0, , 1-9.	2.0	1
72	Optical "optical double resonance process in free-jet supersonic expansion of van der Waals molecules: characteristics of the expansion, number of excited molecules and emitted photons. Molecular Physics, 0, , .	1.7	1