

# A Marjatta Lyyra

## List of Publications by Year in descending order

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38

papers

594

citations

687363

13

h-index

642732

23

g-index

40

all docs

40

docs citations

40

times ranked

251

citing authors

#	ARTICLE	IF	CITATIONS
1	Autler-Townes Splitting in Molecular Lithium: Prospects for All-Optical Alignment of Nonpolar Molecules. <i>Physical Review Letters</i> , 1999, 83, 288-291.	7.8	104
2	Direct excitation studies of the diffuse bands of alkali metal dimers. <i>Journal of Chemical Physics</i> , 1988, 88, 2235-2241.	3.0	37
3	Study of the $4\pi^1\Sigma^+$ state of Na <sub>2</sub> by optical-optical double resonance spectroscopy. <i>Journal of Chemical Physics</i> , 1991, 94, 4756-4764.	3.0	33
4	Determination of the long-range potential and dissociation energy of the $1\pi^3\Sigma^+$ state of Na <sub>2</sub> . <i>Journal of Chemical Physics</i> , 1995, 103, 7240-7254.	3.0	30
5	Optical-optical double resonance spectroscopy of the $\pi^1\Sigma^+$ states and $\pi^1\Delta$ states of Na <sub>2</sub> using an ultrasensitive ionization detector. <i>Physical Review Letters</i> , 1993, 71, 1152-1155.	7.8	29
6	Born-Oppenheimer breakdown in a combined-isotopomer analysis of the $A\tilde{\Sigma}^1\Sigma^+$ -X $\tilde{\Sigma}^1\Sigma^+$ system of Li <sub>2</sub> . <i>Journal of Chemical Physics</i> , 2002, 117, 9339-9346.	3.0	29
7	Predissociation of the F(4) $\tilde{\Sigma}^1\Sigma^+$ state of Li <sub>2</sub> . <i>Journal of Chemical Physics</i> , 2000, 112, 7080-7088.	3.0	28
8	Bound-free free $1\pi^3\Sigma^+$ emission from the NaK molecule: Determination of the $1\pi^3\Sigma^+$ repulsive wall above the dissociation limit. <i>Journal of Chemical Physics</i> , 1990, 92, 5801-5813.	3.0	27
9	Electromagnetically induced transparency and dark fluorescence in a cascade three-level diatomic lithium system. <i>Physical Review A</i> , 2006, 73, .	2.5	26
10	Absolute vibrational numbering and molecular constants of the Na <sub>2</sub> $23\pi^1g$ state. <i>Journal of Molecular Spectroscopy</i> , 1989, 134, 119-128.	1.2	25
11	New observation of the $13\pi^1g$ , $23\pi^1g$ states and molecular constants with all 6Li <sub>2</sub> , 7Li <sub>2</sub> , and 6Li7Li data. <i>Journal of Molecular Spectroscopy</i> , 2007, 246, 180-186.	1.2	20
12	Assignment of the diabatic and adiabatic atomic asymptotic limits of K <sub>2</sub> Rydberg states. <i>Journal of Chemical Physics</i> , 1992, 96, 7965-7972.	3.0	17
13	Observation and calculation of the Cs <sub>2</sub> $2\pi^1g$ and b $\tilde{\nu}$ 3 states. <i>Journal of Chemical Physics</i> , 2008, 128, 204313.	3.0	17
14	Quantum state-selected photodissociation of K <sub>2</sub> ( $B\tilde{\Sigma}^1\Sigma^+$ -X $\tilde{\Sigma}^1\Sigma^+$ ): A case study of final state alignment in all-optical multiple resonance photodissociation. <i>Journal of Chemical Physics</i> , 1995, 102, 2440-2451.	3.0	13
15	Hyperfine structure of the $13\pi^1g$ , $2\pi^1g$ , and $3\pi^1g$ states of 6Li7Li. <i>Journal of Chemical Physics</i> , 2002, 116, 10704-10712.	3.0	13
16	The K <sub>2</sub> $2\pi^1g$ state: Observation and analysis. <i>Journal of Chemical Physics</i> , 2007, 126, 194314.	3.0	13
17	Hyperfine structures of the $2\pi^1g$ , $3\pi^1g$ , and $4\pi^1g$ states of Na <sub>2</sub> . <i>Journal of Chemical Physics</i> , 2004, 121, 5821-5827.	3.0	12
18	Re-examination of the Cs <sub>2</sub> ground singlet X $1\Sigma^+$ and triplet a $3\Sigma^+$ states. <i>Journal of Chemical Physics</i> , 2017, 147, 104301.	3.0	12

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19	Experimental study of the $\langle \text{mml:math} \rangle \text{mathvariant="normal"} \rangle \text{F} \langle / \text{mml:math} \rangle$ state of the rubidium dimer. <i>Physical Review A</i> , 2019, 99, .	2.5	10
20	State-selected photodissociation of the $B1\Pi_u$ state of potassium dimer by all-optical triple resonance spectroscopy. <i>The Journal of Physical Chemistry</i> , 1991, 95, 8040-8044.	2.9	9
21	Electronic transition dipole moment and radiative lifetime calculations of sodium dimer ion-pair states. <i>Journal of Chemical Physics</i> , 2015, 143, 104304.	3.0	9
22	Observations and analysis with the spline-based Rydbergâ€“Kleinâ€“Rees approach for the $31\Sigma^+g+$ state of $Rb_2$ . <i>Journal of Chemical Physics</i> , 2016, 144, 024308.	3.0	9
23	New pair of $\Sigma^+\Lambda^+$ mixed levels in $6Li-7Li$ . <i>Chemical Physics Letters</i> , 2001, 349, 426-430.	2.6	8
24	The Autlerâ€“Townes Effect in Molecules: Observations, Theory, and Applications. <i>Advances in Atomic, Molecular and Optical Physics</i> , 2012, , 467-514.	2.3	8
25	All-optical cw quadruple resonance excitation: A coherently driven five-level molecular system. <i>Physical Review A</i> , 2009, 79, .	2.5	7
26	Improved molecular constants for low vibrational levels of the state of $7Li_2$ . <i>Journal of Molecular Spectroscopy</i> , 2008, 247, 184-186.	1.2	6
27	Measurement of the $Na251\Sigma^+g+$ and $61\Sigma^+g+$ transition dipole moments using optical-optical double resonance and Autlerâ€“Townes spectroscopy. <i>Journal of Chemical Physics</i> , 2017, 147, 204301.	3.0	6
28	The $Rb_2 31\Sigma^+g</i>$ state: Observation and analysis. <i>Journal of Chemical Physics</i> , 2018, 149, 224303.	3.0	6
29	The $Na_2 2\Sigma^+g$ state: New observations and hyperfine structure. <i>Journal of Chemical Physics</i> , 2006, 124, 184304.	3.0	5
30	Electronic transition dipole moment and radiative lifetime calculations of lithium dimer ion-pair states. <i>Journal of Molecular Spectroscopy</i> , 2019, 355, 1-7.	1.2	5
31	Final-state alignment from the quantum-state-selected photodissociation of $K_2$ by all-optical triple resonance spectroscopy. <i>Physical Review A</i> , 1994, 49, R1535-R1538.	2.5	4
32	Collisional Line Assignments and Hyperfine Structure Interpretation in $Cs_2 23\Sigma^+g$ State. <i>Chinese Journal of Chemical Physics</i> , 2013, 26, 13-19.	1.3	3
33	Metalâ€“metal and metalâ€“hydrogen reactive transition states. <i>Faraday Discussions of the Chemical Society</i> , 1991, 91, 97-110.	2.2	2
34	ALL-OPTICAL TRIPLE RESONANCE: SPECTROSCOPY AND STATE-SELECTED PHOTODISSOCIATION DYNAMICS. <i>Advanced Series in Physical Chemistry</i> , 1995, , 459-490.	1.5	2
35	Rydberg and Doubly Excited States of $Na_{2-}$ and $Li_{2-}$ . <i>Journal of the Chinese Chemical Society</i> , 2001, 48, 291-299.	1.4	2
36	Frequency domain control of quantum state singlet/triplet character and prospects for an all-optical spin switch. <i>Journal of Modern Optics</i> , 2014, 61, 7-12.	1.3	2

#	ARTICLE	IF	CITATIONS
37	<math>\text{ARTICLEntal study of the<math xmlns:mml="http://www.w3.org/1998/Math/MathML"> alimg="si20.gif" overflow="scroll"><mml:mrow><mml:mi>b</mml:mi><mml:msup><mml:mrow /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msup><mml:msub><mml:mrow><mml:mi mathvariant="normal">1</mml:mi></mml:mrow><mml:mrow><mml:mn>1</mml:mn><mml:mi>u</mml:mi></mml:mrow></mml:msub></math> xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si84.gif" overflow="scroll"><mml:mrow><mml:mi>2</mml:mi><mml:msup><mml:mrow><mml:mi>2</mml:mi></mml:mrow></mml:msup>/>. Journal of Molecular Spectroscopy		
38	Quantum state control using multiple CW lasers. , 2004, , .	1	