Maris Tamanis

List of Publications by Year
in descending order

84 papers	1,578 citations	279798 23 h-index	361022 35 g-index
84 all docs	84 docs citations	84 times ranked	444 citing authors

#	Article	IF	Citations
1	…g of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>X</mml:mi><mml:mspace width="0.2em" /><mml:mmultiscripts><mml:mi mathvariant="bold-italic">Î£</mml:mi><mml:none /><mml:mo>+</mml:mo><mml:mprescripts /><mml:none /><mml:mn>1</mml:mn></mml:mmultiscripts></mml:mrow></mml:math>and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>a</mml:mi>	2.5	102
2	Potentials for modeling cold collisions between Na (3S) and Rb (5S) atoms. Physical Review A, 2005, 72, .	2.5	72
3	The coupling of the X1Î£+and a3Î£+states of the atom pair Na + Cs and modelling cold collisions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, S929-S943.	1.5	58
4	Solution of the fully-mixed-state problem: Direct deperturbation analysis of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi><mml:mspace width="0.2em" /><mml:mmultiscripts><mml:mi>Î£</mml:mi><mml:none /><mml:mo>+</mml:mo><mml:mprescripts /><mml:none /><mml:mn>1</mml:mn></mml:mmultiscripts><mml:mo>â€"</mml:mo><mml:mi>b</mml:mi><mml:mspace	2.5	47
5	Spectroscopic data, spin-orbit functions, and revised analysis of strong perturbative interactions for the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi><mml:msup><mml:mi>â€‚</mml:mi><mml:mrow><mml:mn>1</mml:mn></mml: xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>b</mml:mi><mml:msup><mml:mi>â€‚</. Physical Review A, 2010, 81, .	2.5	46
6	High resolution spectroscopy and channel-coupling treatment of the Aâ€Š1Î£+â€"bâ€Š3Î complex of NaRb. Journal of Chemical Physics, 2002, 117, 7980-7988.	3.0	45
7	Deperturbation treatment of theAÎ£+1â€"bÎ3complex of NaRb and prospects for ultracold molecule formation inXÎ£+1(v=0;J=0). Physical Review A, 2007, 75, .	2.5	45
8	Potential of the ground state of NaRb. Physical Review A, 2004, 69, .	2.5	44
9	Laser synthesis of ultracold alkali metal dimers: optimization and control. Russian Chemical Reviews, 2015, 84, 1001-1020.	6.5	42
10	Global analysis of data on the spin-orbit-coupled<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi></mml:mrow></mml:math><mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow	2.5	41
11	[illegible] xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>X</mml:mi><mml:mtext>â€‰</mml:mtext><mml:msup><mml:mrow><mml:mmultiscripts><mml:none /><mml:none /><mml:mn>1</mml:mn></mml:mmultiscripts></mml:mrow><mml:mo>+</mml:mo></mml:msup></mml:mrow></mml:math>and<m xmlns:mml="http://www.w3.org/1998/Math/MathML" [illegible]<mml:mtext><mml:msup><mml:mrow><mml:mmultiscripts><m	2.5	40
12	Singlet and triplet potentials of the ground-state atom pair Rb<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mo>+</mml:mo></mml:mrow></mml:math>Cs studied by Fourier-transform spectroscopy. Physical Review A, 2011, 83, .	2.5	40
13	The ground electronic state of KCs studied by Fourier transform spectroscopy. Journal of Chemical Physics, 2008, 128, 244316.	3.0	38
14	Spectroscopic studies of NaCs for the ground state asymptote of Na + Cs pairs. European Physical Journal D, 2004, 31, 205-211.	1.3	36
15	Fourier-transform spectroscopy and coupled-channels deperturbation treatment of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi><mml:msup><mml:mi>â€‚</mml:mi><mml:mrow><mml:mn>1</mml:mn></mml: of KCs. Physical Review A, 2010, 81, .	2.5	33
16	Fourier transform spectroscopy and extended deperturbation treatment of the spin-orbit-coupled<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>A</mml:mi><mml:msup><mml:mspace width="0.16em" /><mml:mn>1</mml:mn></mml:msup><mml:msubsup><mml:mi>Î£</mml:mi><mml:mi>u</mml:mi><mml:mo>+</mml:mo><mml:msu xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>b</mml:mi><mml:msup><mml:mspace width="0.16em" /><. Physic	2.5	33
17	Energy and radiative properties of the low-lying NaRb states. Physical Review A, 2001, 63, .	2.5	31
18	Level-crossing spectroscopy of the 7, 9, and10D5âˆ•2states ofCs133and validation of relativistic many-body calculations of the polarizabilities and hyperfine constants. Physical Review A, 2007, 75, .	2.5	30

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19	Permanent electric dipoles andÎ›-doubling constants in the lowestÎ1states of RbCs. Physical Review A, 2005, 71, .	2.5	29
20	Fourier transform spectroscopy and direct potential fit of a shelflike state: Application to <i>E</i>(4)1Î£+ KCs. Journal of Chemical Physics, 2011, 134, 104307.	3.0	29
21	Lifetimes and transition dipole moment functions of NaK low lying singlet states: Empirical and ab initio approach. Journal of Chemical Physics, 1998, 109, 6725-6735.	3.0	28
22	Near-dissociation photoassociative production of deeply bound NaCs molecules. Physical Review A, 2010, 82, .	2.5	26
23	HIGH-RESOLUTION FOURIER TRANSFORM SPECTROSCOPY OF LANTHANUM IN Ar DISCHARGE IN THE NEAR-INFRARED. Astrophysical Journal, Supplement Series, 2013, 208, 18.	7.7	25
24	NaK Î› doubling and permanent electric dipoles in low-lying1Îstates:â€ƒExperiment and theory. Physical Review A, 1998, 58, 1932-1943.	2.5	23
25	High resolution spectroscopy and potential determination of the (3)Î1 state of NaCs. Journal of Chemical Physics, 2006, 124, 174310.	3.0	23
26	Modeling of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>X</mml:mi></mml:math><mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow /><mml:mn>1</mml:mn></mml:msup><mml:msup><mml:mi>Î£</mml:mi><mml:mo>+</mml:mo></mml:msup></mml:mrow></mml:m xmlns:mml="http://www.w3.org/1998/Math/MathML"	2.5	22
27	Fourier-transform spectroscopy of (4)1Î£+ â†’ <i>A</i>â€‰1Î£+ â^' <i>b</i>â€‰3Î, <i>A</i>â€‰1Î£+ â^' <i>b</i>â€‰3Î â†' <i>X</i $(1)^3Delta _1ightarrow b{,}^3Pi _{0^pm }$(1)3Î"1â†'bÎÂ±3 transitions in KCs and deperturbation treatment of <i>A</i>â€‰1Î£+ and <i>b</i>â€‰3Î states. Journal of Chemical Physics, 2013, 139, 244301.	3.0	22
28	Accurate characterisation of the C(3)1Î£+ state of the NaRb molecule. European Physical Journal D, 2005, 36, 57-65.	1.3	20
29	The D1Î state of the NaRb molecule. European Physical Journal D, 2005, 36, 49-55.	1.3	20
30	Permanent electric dipoles in Bâ€Š[sup 1]Î and Dâ€Š[sup 1]Î states of NaRb: Experiment and theory. Journal of Chemical Physics, 2000, 113, 4896.	3.0	19
31	The BÎ1 state of NaCs: High resolution laser induced fluorescence spectroscopy and potential construction. Journal of Chemical Physics, 2007, 127, 224302.	3.0	19
32	Hyperfine structure study of atomic niobium with enhanced sensitivity of Fourier transform spectroscopy. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 205001.	1.5	19
33	Long-range coupling of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>X</mml:mi><mml:msup><mml:mspace width="0.16em" /><mml:mn>1</mml:mn></mml:msup><mml:msup><mml:mi>Î£</mml:mi><mml:mo>+</mml:mo></mml:msup></mml:mrow></mml:m xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>a</mml:mi><mml:msup><mml:mspace width="0.16em" /><mml:mn>3</mml:mn></mml:msup><mml:msup><mml:mi>Î£</mml:mi><mml:mo>+</mml:mo></mml:msup></mml:mrow>.	2.5	19
34	Hyperfine structure measurements of neutral niobium with Fourier transform spectroscopy. Astronomy and Astrophysics, 2010, 516, A70.	5.1	18
35	NaKâ€‚D1Î electric dipole moment measurement by Stark level crossing andeâ€"fmixing spectroscopy. Journal of Chemical Physics, 1997, 106, 2195-2204.	3.0	17
36	Experimental studies of the NaRb ground-state potential up to thevâ€³=76level. Physical Review A, 2002, 66, .	2.5	17

#	ARTICLE	IF	CITATIONS
37	<i>B</i>(1)1Î state of KCs: High-resolution spectroscopy and description of low-lying energy levels. Journal of Chemical Physics, 2012, 136, 064304.	3.0	17
38	Direct excitation of the â€œdarkâ€<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>b</mml:mi></mml:mrow></mml:math><mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow /><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mml:msup><mml:mi>Î</mml:mi></mml:mrow></mml:math>state predicted by deperturbation analysis of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/Math	2.5	16
39	Extended Fourier-transform spectroscopy studies and deperturbation analysis of the spin-orbit coupledA1Î£+andb3Î states in RbCs. Journal of Chemical Physics, 2014, 141, 184309.	3.0	16
40	Line Identification of Atomic and Ionic Spectra of Holmium in the Near-UV. Part I. Spectrum of Ho i. Astrophysical Journal, Supplement Series, 2017, 228, 16.	7.7	16
41	Electric field induced hyperfine level-crossings in (nD)Cs at two-step laser excitation: Experiment and theory. Optics Communications, 2006, 264, 333-341.	2.1	15
42	HYPERFINE STRUCTURE CONSTANTS OF ENERGETICALLY HIGH-LYING LEVELS OF ODD PARITY OF ATOMIC VANADIUM. Astrophysical Journal, Supplement Series, 2014, 214, 9.	7.7	15
43	Fourier-transform spectroscopy and deperturbation analysis of the spin-orbit coupled <i>A</i>1Î£+ and <i>b</i>3Î states of KRb. Journal of Chemical Physics, 2016, 144, 144310.	3.0	15
44	The origin of Î›-doubling effect for the Bâ€‰1âˆand Dâ€‰1âˆ•states of NaK. Journal of Chemical Physics, 2000, 113, 8589-8593.	3.0	14
45	Analogue of oscillation theorem for nonadiabatic diatomic states: application to the Aâ€‰1Î£+ and bâ€‰3Î states of KCs. Physical Chemistry Chemical Physics, 2010, 12, 4809.	2.8	13
46	Hyperfine structure of the 3d³4s4p⁶G multiplet of atomic vanadium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 215001.	1.5	13
47	Ab initio multi-reference perturbation theory calculations of the ground and low-lying electronic states of the KRb molecule. Computational and Theoretical Chemistry, 2016, 1089, 35-42.	2.5	13
48	Line Identification of Atomic and Ionic Spectra of Holmium in the Visible Spectral Range. I. Spectrum of Ho i. Astrophysical Journal, Supplement Series, 2019, 240, 27.	7.7	13
49	Electric-Field-Induced Symmetry Breaking of Angular Momentum Distribution in Atoms. Physical Review Letters, 2006, 97, 043002.	7.8	12
50	Line Identification of Atomic and Ionic Spectra of Holmium in the Near-UV. II. Spectra of Ho ii and Ho iii. Astrophysical Journal, Supplement Series, 2017, 228, 17.	7.7	11
51	LIF intensity distribution as a deperturbation tool: application to the fully-mixed â€“ complex of NaRb. Journal of Quantitative Spectroscopy and Radiative Transfer, 2005, 95, 165-174.	2.3	10
52	Line Identification of Atomic and Ionic Spectra of Holmium in the Visible Spectral Range. II. Spectrum of Ho ii and Ho iii. Astrophysical Journal, Supplement Series, 2019, 240, 28.	7.7	10
53	Experimental and theoretical studies of Î› doublings and permanent electric dipoles in the low-lying Î1 states of NaCs. Journal of Chemical Physics, 2006, 124, 184318.	3.0	9
54	Spectroscopic studies of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow><mml:mo>(</mml:mo><mml:mn>4</mml:mn><mml:mo>)</mml:mo></mml:m of RbCs and modeling of the optical cycle for ultracold<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>X</mml:mi></mml:math>Â<mml:math xmlns:mml="http://www.w3.org/199. Physical Review A, 2013, 87, .	2.5	9

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55	Fourier-transform spectroscopy and description of low-lying energy levels in the <i>B</i>(1)1Î state of RbCs. Journal of Chemical Physics, 2013, 138, 154304.	3.0	9
56	HIGH-RESOLUTION FOURIER TRANSFORM SPECTROSCOPY OF Nb i IN THE NEAR-INFRARED. Astrophysical Journal, Supplement Series, 2015, 221, 14.	7.7	9
57	Investigation of the hyperfine structure of weak atomic Vanadium lines by means of Fourier transform spectroscopy. Journal of Physics B: Atomic, Molecular and Optical Physics, 2015, 48, 115005.	1.5	9
58	Fourier-transform spectroscopy and potential construction of the (2)1Î state in KCs. Journal of Chemical Physics, 2015, 142, 134309.	3.0	9
59	Potential construction of the B (1) 1 Î state in KCs based on Fourier-Transform spectroscopy data. Journal of Quantitative Spectroscopy and Radiative Transfer, 2015, 151, 1-4.	2.3	9
60	Fourier-transform spectroscopy, relativistic electronic structure calculation, and coupled-channel deperturbation analysis of the fully mixed <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>A</mml:mi><mml:msup><mml:mspace width="0.16em" /><mml:mn>1</mml:mn></mml:msup><mml:msubsup><mml:mi mathvariant="normal">Î£</mml:mi><mml:mi>u</mml:mi><mml:mo>+</mml:mo></mml:msubsup></mml:mrow></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>b</mml:mi>.	2.5	9
61	Magnetic field induced alignmentâ€“orientation conversion: Nonlinear energy shift and predissociation in Te2B1ustate. Journal of Chemical Physics, 1996, 105, 37-49.	3.0	8
62	Fourier-transform spectroscopy and relativistic electronic structure calculation on the <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si28.svg"><mml:mrow><mml:msup><mml:mi>c</mml:mi><mml:mn>3</mml:mn></mml:msup><mml:msup><mml:mstyle mathvariant="normal"><mml:mi>Î£</mml:mi></mml:mstyle><mml:mo>+</mml:mo></mml:msup></mml:mrow></mml:math> state of KCs. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 276, 107902.	2.3	7
63	Radiative lifetimes of the NaRb C(3)1Î£+ state: experiment and theory. European Physical Journal D, 2006, 39, 373-378.	1.3	6
64	Radiative lifetimes of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mrow><mml:mo>(</mml:mo><mml:mn>1</mml:mn><mml:mo>â€“</mml:mo><mml:mn>3</mml:… width="0.2em" /><mml:mmultiscripts><mml:mi>Î</mml:mi><mml:mprescripts /><mml:none /><mml:mn>1</mml:mn></mml:mmultiscripts></mml:mrow></mml:math>states in NaCs: Experiment and theory. Physical Review A, 2007, 76.	2.5	6
65	Nonlinear magneto-optical resonances for systems with<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>J</mml:mi><mml:mo>â^¼</mml:mo><mml:mn>100</mml:mn></mml:mrow></mml:math>obse[illegible] in K<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" [illegible]n>2</mml:mn></mml:msub></mml:math>molecules. [illegible]	2.5	6
66	The branching ratio of intercombination <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si42.svg"><mml:mrow><mml:msup><mml:mi>A</mml:mi><mml:mn>1</mml:mn></mml:msup><mml:msup><mml:mstyle mathvariant="normal"><mml:mi>Î£</mml:mi></mml:mstyle><mml:mo>+</mml:mo></mml:msup><mml:mo>â^¼</mml:mo><mml:msu… mathvariant="normal"><mml:mi>Î</mml:mi></mml:mstyle><mml:mo>â†’</mml:mo><mml:msup><mml:mi>a</mml:mi><mml:mn>3</m… Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 256, 107291.	2.3	6
67	Energy transfer, collisional quenching and natural lifetime of laser-excitedD1Î state of the NaRb molecule. Physica Scripta, 1992, 45, 328-330.	2.5	5
68	Influence of the Stark effect on the fluorescence polarization of X1Î£â†’B1Î-state laser-excited NaRb: application to the direct imaging of electric fields. Journal Physics D: Applied Physics, 2001, 34, 624-630.	2.8	5
69	Spontaneous lifetimes and relaxation cross-sections of the D1Î state of NaRb. Chemical Physics Letters, 2003, 382, 593-598.	2.6	5
70	Energy and radiative properties of the (3)Î1 and (5)Î£+1 states of RbCs: Experiment and theory. Physical Review A, 2017, 96, .	2.5	5
71	Observation and modeling of bound-free transitions to the <i>X</i>1Î£+ and <i>a</i>3Î£+ states of KCs. Journal of Chemical Physics, 2022, 156, 114305.	3.0	3
72	Electric field induced alignment-orientation conversion in diatomic molecules: analysis and observation for NaK. Journal of Molecular Structure, 1999, 480-481, 283-287.	3.6	2

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73	Publisher's Note: Deperturbation treatment of theAÎ£+1â€“bÎ3complex of NaRb and prospects for ultracold molecule formation inXÎ£+1(v=0;J=0) [Phys. Rev. A75, 042503 (2007)]. Physical Review A, 2007, 75, .	2.5	2
74	Title is missing!. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 189802-189802.	1.5	1
75	Fourier-transform spectroscopy, direct potential fit, and electronic structure calculations on the entirely perturbed (4) <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msup><mml:mspace width="0.16em" /><mml:mn>1</mml:mn></mml:msup><mml:mi ... of RbCs. Physical Review A, 2018, 98, .	2.5	1
76	The <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si18.svg"><mml:mrow><mml:msup><mml:mi>a</mml:mi><mml:mn>3</mml:mn></mml:msup><mml:msup><mml:mstyle mathvariant="normal"><mml:mi>Î£</mml:mi></mml:mstyle><mml:mo>+</mml:mo></mml:msup></mml:mrow></mml:math> state of KCs revisited: Hyperfine structure analysis and potential refinement. Journal of Quantitative Spectroscopy and Radiative Transfer, 2022, 283, 108124.	2.3	1
77	Stark level crossing and optical-rf double resonance in NaK D 1 Î. , 1997, , .		0
78	Magnetic predissociation in Te 2 B 1 u. , 1997, 3090, 189.		0
79	Studies of rotational level Î›-doubling by rf-optical double resonance spectroscopy: application to NaK D1Î. Journal of Molecular Structure, 1997, 410-411, 55-58.	3.6	0
80	Experimental study of the long range interactions between a Na (3S) and a Rb (5S) atom. , 2005, , .		0
81	Coherent effects in Cs (nD) states in the presence of an external electric field. , 2007, , .		0
82	<title>Level-crossing spectroscopy of the 7, 9, and 10D states of Cs in an external electric field</title>. , 2007, , .		0
83	Spin-orbit, radial, and angular coupling effects in the NaRb excited states. , 2009, , .		0
84	Optical Non-Contact Electric Field Mapping by LIF in Cs Vapor. , 2007, , .		0