

Jarosław Ruczkowski

List of Publications by Year in descending order

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53

papers

711

citations

471509

17

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g-index

53

all docs

53

docs citations

53

times ranked

146

citing authors

#	ARTICLE	IF	CITATIONS
1	Critical analysis of the methods of interpretation in the hyperfine structure of free atoms and ions: case of the model space $(5d+6s)^3$ of the lanthanum atom. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2010, 43, 065001.	1.5	45
2	Construction of energy matrix for complex atoms in space of $(nd+n's)N+2+\sum_{i,j} ndN+2$ configurations. <i>Physica Scripta</i> , 1996, 54, 444-457.	2.5	43
3	An alternative method for determination of oscillator strengths: The example of Sc II. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2014, 145, 20-42.	2.3	34
4	Construction of Energy Matrix for Complex Atoms. Part 2. <i>Physica Scripta</i> , 1999, 59, 49-51.	2.5	29
5	Large Shape Staggering in Neutron-Deficient Bi Isotopes. <i>Physical Review Letters</i> , 2021, 127, 192501.	7.8	27
6	Semi-empirical calculations of oscillator strengths and hyperfine constants for Ti II. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2014, 149, 168-183.	2.3	25
7	Hyperfine-structure measurements and new levels evaluation in singly ionized praseodymium. <i>European Physical Journal D</i> , 2001, 17, 275-284.	1.3	24
8	Interpretation of the Hyperfine Structure of the Even Configuration System of Pr I. <i>Physica Scripta</i> , 2003, 68, 133-140.	2.5	24
9	Construction of the energy matrix for complex atoms Part I: General remarks. <i>European Physical Journal Plus</i> , 2015, 130, 1.	2.6	23
10	Construction of the energy matrix for complex atoms. <i>European Physical Journal Plus</i> , 2016, 131, 1.	2.6	23
11	Hyperfine structure in La II odd configuration levels. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008, 41, 215004.	1.5	20
12	Semi-empirical analysis of oscillator strengths for Nb II. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2015, 155, 1-9.	2.3	20
13	Construction of the energy matrix for complex atoms Part III: Excitation of two equivalent electrons from a closed shell into an open shell or an empty shell. <i>European Physical Journal Plus</i> , 2015, 130, 1.	2.6	19
14	Construction of the energy matrix for complex atoms Part II: Explicit formulae for inter-configuration interactions. <i>European Physical Journal Plus</i> , 2015, 130, 1.	2.6	19
15	Reanalysis and semi-empirical predictions of the hyperfine structure of Zr in the model space $(4d + 5s)^4$. <i>European Physical Journal D</i> , 1998, 4, 39-46.	1.3	18
16	Construction of the energy matrix for complex atoms Part IV: Excitation of one electron from a closed shell into an open shell. <i>European Physical Journal Plus</i> , 2015, 130, 1.	2.6	18
17	Parametric study of the fine and hyperfine structure for the even parity configurations of atomic niobium. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2015, 48, 015006.	1.5	18
18	Semi-empirical predictions of even atomic energy levels and their hyperfine structure for the scandium atom. <i>Atomic Data and Nuclear Data Tables</i> , 2007, 93, 149-165.	2.4	17

#	ARTICLE	IF	CITATIONS
19	Fine- and hyperfine structure investigations of the even-parity configuration system of the atomic holmium. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2018, 209, 180-195.	2.3	17
20	Hyperfine structure, lifetime and oscillator strength of V II. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2015, 166, 55-63.	2.3	16
21	Construction of the energy matrix for complex atoms. <i>European Physical Journal Plus</i> , 2016, 131, 1.	2.6	16
22	Hyperfine structure in La II even configuration levels. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2008, 41, 235002.	1.5	15
23	Hyperfine splitting and isotope shift in the optical transition of Eu isotopes and electromagnetic moments of Eu. <i>European Physical Journal D</i> , 2000, 11, 341-345.	1.3	13
24	Reanalysis and Semi-Empirical Predictions of the Hyperfine Structure of Eu I in the Odd Parity Multiconfiguration System. <i>Physica Scripta</i> , 2002, 65, 237-247.	2.5	13
25	High precision investigations of the hyperfine structure of metastable levels in a chromium atom. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2007, 40, 2785-2797.	1.5	13
26	Fine- and hyperfine structure investigations of even configuration system of atomic terbium. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017, 189, 441-456.	2.3	13
27	Semi-Emperical Predictions of the Hyperfine Structure of ^{179}Hf in the Model Space $(5d + 6s)4$. <i>Journal De Physique II</i> , 1997, 7, 1175-1183.	0.9	12
28	Hyperfine structure constants and isotope shift of the levels of the configuration $4f\ 6\ 5d\ 6s\ 2$ in Eu I. <i>Zeitschrift FÄr Physik D-Atoms Molecules and Clusters</i> , 1993, 27, 103-109.	1.0	11
29	Semi-empirical analysis of the fine structure and oscillator strengths for atomic strontium. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2016, 170, 106-116.	2.3	11
30	Laser resonance ionization spectroscopy of antimony. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2017, 128, 36-44.	2.9	11
31	Progress in the analysis of the even parity configurations of tantalum atom. <i>European Physical Journal: Special Topics</i> , 2013, 222, 2085-2102.	2.6	10
32	Semi-empirical determination of radiative lifetimes for Sc II and Ti II. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2016, 176, 6-11.	2.3	10
33	Recent progress in the theory of the complex atomic hyperfine structure. , 2000, 127, 49-56.		8
34	Semi-empirical determination of radiative parameters for Agâ‰ii. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 459, 3768-3782.	4.4	6
35	Extended analysis of the system of even configurations of Ta II. <i>Atomic Data and Nuclear Data Tables</i> , 2017, 113, 350-360.	2.4	6
36	Fine- and hyperfine structure investigations of the odd-parity configuration system in atomic holmium. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2019, 237, 106642.	2.3	6

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37	Method for detecting the isomeric state<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>I</mml:mi><mml:mo>=</mml:mo><mml:msup><mml:mi>mathvariant="normal">Th</mml:mi><mml:mprescripts /><mml:none /></mml:mrow><mml:mn>229</mml:mn></mml:mrow></mml:math>. Physical Review A, 2015, 92, .	2.5	5
38	Semi-empirical determination of radiative parameters for atomic nickel. Monthly Notices of the Royal Astronomical Society, 2017, 464, 1127-1136.	4.4	5
39	Investigations of the possible second-stage laser cooling transitions for the holmium atom magneto-optical trap. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 246, 106915.	2.3	5
40	Hyperfine structure studies of the electronic levels of the manganese atom. I. Even-parity level system. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 249, 107013.	2.3	5
41	LandÄ© <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"> alimg="si14.svg"><mml:msub><mml:mi>g</mml:mi><mml:mi>J</mml:mi></mml:msub></mml:math> factors of the electronic levels of the holmium atom. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 274, 107865.	2.3	5
42	Construction of the energy matrix for complex atoms. European Physical Journal Plus, 2017, 132, 1.	2.6	4
43	Reanalysis of the even configurations system of atomic niobium. Journal of Quantitative Spectroscopy and Radiative Transfer, 2018, 217, 13-21.	2.3	4
44	Hyperfine structure studies of the electronic levels of the manganese atom. II. Odd-parity level system. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 253, 107138.	2.3	4
45	Semi-empirical determination of the nuclear quadrupole moment of \$\$^{109}\$\$Sn. European Physical Journal Plus, 2021, 136, 1.	2.6	4
46	Observation of Pr+Ions in Paul Trap. Acta Physica Polonica A, 1997, 92, 517-526.	0.5	4
47	Construction of the energy matrix for complex atoms. European Physical Journal Plus, 2017, 132, 1.	2.6	3
48	Semi-empirical description of the fine structure and the radiative parameters for atomic tin. Odd levels. Atomic Data and Nuclear Data Tables, 2020, 135-136, 101342.	2.4	3
49	Estimation of radiative parameters for atomic manganese from the point of view of possible clock transitions and laser cooling schemes. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 276, 107898.	2.3	3
50	LandÄ© g factors of the electronic levels of the europium atom. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 255, 107258.	2.3	3
51	Fineâ€“ and hyperfine structure semiâ€“empirical studies of the neutral and singly ionised bismuth. Determination of the nuclear quadrupole moment of 209Bi. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 275, 107892.	2.3	1
52	INTERPRETATION OF EXPERIMENTS IN PAUL TRAP. Computational Methods in Science and Technology, 1998, 4, 43-56.	0.3	0
53	COMPUTATIONAL PACKAGE FOR ANALYSIS OF THE FINE STRUCTURE OF A FREE ATOM. Computational Methods in Science and Technology, 1998, 4, 79-97.	0.3	0