

Jacek Migdalek

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4482158/publications.pdf>

Version: 2024-02-01

57
papers

1,076
citations

394421

19
h-index

434195

31
g-index

57
all docs

57
docs citations

57
times ranked

284
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of atomic core polarisation on oscillator strengths for $2S_{1/2}-2P_{1/2,3/2}$ and $2P_{1/2,3/2}-2D_{3/2,5/2}$ transitions in Cu I, Ag I and Au I spectra. Journal of Physics B: Atomic and Molecular Physics, 1978, 11, L497-L501.	1.6	109
2	Relativistic oscillator strengths and excitation energies for the $ns^21S_0-nsnp^3P_{1,1}P_1$ transitions. II. Cadmium isoelectronic sequence. Journal of Physics B: Atomic and Molecular Physics, 1986, 19, 1-16.	1.6	95
3	Influence of core polarisation on oscillator strengths along the copper isoelectronic sequence. Journal of Physics B: Atomic and Molecular Physics, 1979, 12, 1113-1123.	1.6	56
4	Relativistic oscillator strengths and excitation energies for the $ns^21S_0-nsnp^3P_{1,1}P_1$ transitions. I. The mercury isoelectronic sequence. Journal of Physics B: Atomic and Molecular Physics, 1985, 18, 1533-1547.	1.6	53
5	The spin-allowed and spin-forbidden $s-p$ transitions in the magnesium isoelectronic sequence. Journal of Physics B: Atomic, Molecular and Optical Physics, 1996, 29, 2985-2996.	1.5	43
6	Relativistic oscillator strengths for some transitions in Cu(I), Ag(I) and Au(I). Journal of Quantitative Spectroscopy and Radiative Transfer, 1978, 20, 81-87.	2.3	41
7	Relativistic CI calculations for the $ns^21S_0-nsnp^3P_{1,1}P_1$ transitions in the cadmium and mercury isoelectronic sequences. Journal of Physics B: Atomic, Molecular and Optical Physics, 1988, 21, 2221-2236.	1.5	37
8	Relativistic Hartree-Fock oscillator strengths for the lowest $s-p$ transitions in the first few members of the Rb(I) and Cs(I) isoelectronic sequences, with allowance for core polarization. Journal of Quantitative Spectroscopy and Radiative Transfer, 1979, 22, 127-134.	2.3	31
9	Core polarization and oscillator strength ratio anomaly in potassium, rubidium and caesium. Journal of Physics B: Atomic, Molecular and Optical Physics, 1998, 31, 1947-1960.	1.5	31
10	The relativistic ab initio model potential versus Dirac-Fock oscillator strengths for silver and gold isoelectronic sequences. Journal of Physics B: Atomic, Molecular and Optical Physics, 2000, 33, 1735-1743.	1.5	30
11	Relativistic oscillator strengths for the $6s^21S_0-6s6p^3P_{1,1}P_1$ transitions in neutral mercury. A new approach to the correlation problem. Journal of Physics B: Atomic and Molecular Physics, 1984, 17, L459-L464.	1.6	29
12	Relativistic configuration-interaction oscillator strength calculations with ab initio model potential wavefunctions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, 3629-3636.	1.5	28
13	Multiconfiguration Dirac-Fock calculations of two electric quadrupole transitions in neutral barium. Physical Review A, 1990, 42, 6897-6899.	2.5	26
14	DIRAC-FOCK OSCILLATOR STRENGTHS FOR E1 TRANSITIONS IN THE SODIUM ISOELECTRONIC SEQUENCE (Na) $J_1 J_2 \dots J_N$ $q_0 q_1 \dots q_N$ $rgBT/O$	2.4	25
15	Relativistic Hartree-Fock oscillator strengths for lowest $np^2P_{1/2,3/2}$ to $(n+1)s^2S_{1/2}$ and $np^2P_{1/2,3/2}$ to $nd^2D_{3/2,5/2}$ transitions in Ga I, In I and Tl I with allowance for core polarisation. Journal of Physics B: Atomic and Molecular Physics, 1979, 12, 2595-2604.	1.6	23
16	Relativistic oscillator strengths for the Cs isoelectronic sequence and collapse of \tilde{a}° and d orbitals. Journal of Quantitative Spectroscopy and Radiative Transfer, 1987, 37, 581-589.	2.3	22
17	Relativistic transition probabilities and lifetimes of low-lying levels in ytterbium. Journal of Physics B: Atomic, Molecular and Optical Physics, 1991, 24, L99-L102.	1.5	22
18	Transition probabilities and lifetimes in neutral barium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2001, 34, 4775-4784.	1.5	21

#	ARTICLE	IF	CITATIONS
19	Comparison of "optimal-level" and "average-level" multiconfigurational Dirac-Fock as well as of relativistic configuration-interaction calculations for the $2S_{01} \rightarrow 1P_{13}, 1P_{11}$ transitions. <i>Physical Review A</i> , 1990, 41, 2869-2872.	2.5	19
20	Influence of core polarisation on relativistic oscillator strengths for lowest s-p transitions in Yb II-Hf IV spectra. <i>Journal of Physics B: Atomic and Molecular Physics</i> , 1980, 13, L169-L174.	1.6	18
21	Local approximations for the exchange interaction between valence and core electrons. <i>Physical Review A</i> , 1980, 22, 22-27.	2.5	18
22	Core polarization, relaxation, and relativistic effects in the first ionization potentials for some systems in Cu, Ag, and Au isoelectronic sequences. <i>Canadian Journal of Physics</i> , 1982, 60, 1317-1322.	1.1	18
23	Correlation effects in a relativistic calculation of the $6s^2 1S_{01} \rightarrow 6s6p^1 P_{11}$ transition in ytterbium. <i>Physical Review A</i> , 1986, 33, 1417-1420.	2.5	18
24	Core-polarization-corrected multiconfiguration Dirac-Fock oscillator strengths and excitation energies for the $5s^2 \rightarrow 5s^1 5p^1$, $5s^2 \rightarrow 5s^1 5p^2$, $5s^2 \rightarrow 5s^1 5p^3$ transitions in Sr I and Y II spectra. <i>Canadian Journal of Physics</i> , 1987, 65, 1612-1619.	1.1	17
25	Relativistic many-body calculations of ionisation energies and fine-structure intervals in Ag and Au atoms. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1990, 23, L5-L8.	1.5	17
26	Correlation effects in a relativistic calculation of the $6s^2 S_{01} \rightarrow 6s6p^1 P_{13}, 1P_{11}$ transitions in barium. <i>Physical Review A</i> , 1987, 35, 3227-3232.	2.5	15
27	Oscillator strengths for some systems with the $ns^2 np$ ground-state configuration. I. Aluminium isoelectronic sequence. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1993, 26, 1391-1402.	1.5	15
28	Relativistic multiconfiguration Dirac-Fock study of $3s^2 3p \rightarrow 3s^2 3d$ transition in aluminium isoelectronic sequence. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1994, 27, 3315-3324.	1.5	15
29	Comparison of relativistic CI and MCRHF calculations of oscillator strengths and excitation energies for the $ns^2 1S_{01} \rightarrow nsnp^1 P_{13}, 1P_{11}$ transitions in neutral cadmium and mercury. <i>Journal of Physics B: Atomic and Molecular Physics</i> , 1987, 20, L1-L6.	1.6	14
30	Relativistic MCDF oscillator strengths for the $4s^2 1S_{01} \rightarrow 4s4p^1 P_{13}, 1P_{11}$ transitions in zinc isoelectronic sequence. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1989, 42, 585-592.	2.3	14
31	Valence-core electron exchange interaction and the collapse of $4f$ and $5d$ orbitals in the cesium isoelectronic sequence. <i>Physical Review A</i> , 1984, 30, 1603-1609.	2.5	13
32	Nonadjustable local model potentials for the exchange interaction between valence and core electrons. <i>Physical Review A</i> , 1981, 24, 649-655.	2.5	12
33	Relativistic effects, core polarisation and relaxation in ionisation potentials along Rb and Cs isoelectronic sequences. <i>Journal of Physics B: Atomic and Molecular Physics</i> , 1984, 17, 1943-1951.	1.6	12
34	Oscillator strengths for some systems with the $ns^2 np$ ground-state configuration. III. Indium isoelectronic sequence. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1994, 27, 5587-5601.	1.5	12
35	One-electron spectrum of Yb^+ : Relativistic energies, transition probabilities and dipole polarizability. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1982, 28, 61-69.	2.3	11
36	The spin-allowed and spin-forbidden $5s^2 1S_{01} \rightarrow 5s5p^1 P_{13}, 1P_{11}$ transitions in strontium isoelectronic sequence. <i>Zeitschrift für Physik D-Atoms Molecules and Clusters</i> , 1993, 27, 9-15.	1.0	11

#	ARTICLE	IF	CITATIONS
37	Influence of relativistic valence-core correlation on p -state fine structure in some univalent systems. Canadian Journal of Physics, 1981, 59, 769-774.	1.1	9
38	Dirac-Fock + core-polarization calculations of E1 transitions in the francium isoelectronic sequence. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 4143-4154.	1.5	9
39	A multiconfiguration Dirac-Fock study of the $6s^2 1S^{\circ} 6s6p \ 3P^{\circ}1, 1P^{\circ}1$ transitions in the Yb isoelectronic sequence. Journal of Quantitative Spectroscopy and Radiative Transfer, 1987, 37, 521-526.	2.3	8
40	Multiconfiguration Dirac-Fock study of the $5d6p3F4^{\circ}$ lifetime in singly ionized lanthanum. Physical Review A, 1991, 43, 4625-4628.	2.5	8
41	Model Potential Approach to Core Polarisation in SCF Calculations. Physica Scripta, 2002, T100, 47.	2.5	8
42	Oscillator strengths for some systems with the $ns2np$ ground-state configuration. II. Gallium isoelectronic sequence. Journal of Physics B: Atomic, Molecular and Optical Physics, 1993, 26, 1403-1414.	1.5	7
43	Collapse of orbitals in the isoelectronic sequence of singly ionized ytterbium. Physical Review A, 2000, 61, .	2.5	7
44	Relativistic E1 transition probabilities and lifetimes along Yb isoelectronic sequence. Journal of Physics B: Atomic, Molecular and Optical Physics, 2012, 45, 145002.	1.5	6
45	Relativistic effects in E1 transition oscillator strengths along the Yb isoelectronic sequence. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 075003.	1.5	5
46	Relativistic configuration-interaction study of transition probabilities in mercury with a model potential wave functions. Physical Review A, 2000, 61, .	2.5	4
47	Relativistic oscillator strengths of the rubidium isoelectronic sequence in the vicinity of the orbital collapse region. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 185004.	1.5	4
48	Core-polarization corrected relativistic energies and radiative data for one-electron spectra of Bi V through U XIV. Canadian Journal of Physics, 2018, 96, 610-614.	1.1	3
49	Single- and multiparameter model potentials in calculations of energies and oscillator strengths for Rb I and Ag I. Journal of Quantitative Spectroscopy and Radiative Transfer, 1992, 48, 341-347.	2.3	2
50	Core-polarization corrected Dirac-Fock computations of one-electron spectra in the rubidium isoelectronic sequence: Mo VI through Pb XLVI. Atomic Data and Nuclear Data Tables, 2021, 142, 101455.	2.4	2
51	Adjustable local approximations for the exchange interaction between valence and core electrons in model-potential calculations. Physical Review A, 1981, 24, 2228-2231.	2.5	1
52	Relativistic SCF calculations of transitions in the principal and intercombination series of mercury. Journal of Quantitative Spectroscopy and Radiative Transfer, 1987, 37, 183-191.	2.3	1
53	Comment on "Oscillator strengths for some systems with the $ns2np$ ground-state configuration. II. Gallium isoelectronic sequence". Journal of Physics B: Atomic, Molecular and Optical Physics, 1994, 27, 825-828.	1.5	1
54	Core polarization and relativistic effects competition in the first ionization potentials for some systems in the Cu, Ag, and Au isoelectronic sequences. International Journal of Quantum Chemistry, 1984, 25, 77-77.	2.0	0

#	ARTICLE	IF	CITATIONS
55	Core-polarization corrected relativistic model potential energies and oscillator strengths for one-electron spectra of Ce XII through Ho XXI and for the W XXVIII spectrum of the silver isoelectronic sequence. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 2019, 52, 125001.	1.5	0
56	Model potential study of Rydberg one-electron spectrum of thallium. <i>Atomic Data and Nuclear Data Tables</i> , 2020, 135-136, 101355.	2.4	0
57	Semi-empirical model potential study of Rydberg transitions in gold one-electron spectrum. <i>Atomic Data and Nuclear Data Tables</i> , 2020, 133-134, 101324.	2.4	0