Bogumil Jeziorski

List of Publications by Year
in descending order

76	6,910	87888 38	82547 72
papers	citations	h-index	g-index

77	77	77	3522
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Perturbation Theory Approach to Intermolecular Potential Energy Surfaces of van der Waals Complexes. Chemical Reviews, 1994, 94, 1887-1930.	47.7	2,385
2	Variation-perturbation treatment of the hydrogen bond between water molecules. Molecular Physics, 1976, 31, 713-729.	1.7	271
3	Effects of adiabatic, relativistic, and quantum electrodynamics interactions on the pair potential and thermophysical properties of helium. Journal of Chemical Physics, 2012, 136, 224303.	3.0	241
4	Symmetry-adapted double-perturbation analysis of intramolecular correlation effects in weak intermolecular interactions. Molecular Physics, 1979, 38, 191-208.	1.7	227
5	Theoretical Determination of the Dissociation Energy of Molecular Hydrogen. Journal of Chemical Theory and Computation, 2009, 5, 3039-3048.	5.3	174
6	Quantum Electrodynamics Effects in Rovibrational Spectra of Molecular Hydrogen. Journal of Chemical Theory and Computation, 2011, 7, 3105-3115.	5.3	169
7	Direct calculation of the Hartree-Fock interaction energy via exchange-perturbation expansion. The He ? He interaction. International Journal of Quantum Chemistry, 1987, 32, 149-164.	2.0	159
8	First-Order perturbation treatment of the short-range repulsion in a system of many closed-shell atoms or molecules. International Journal of Quantum Chemistry, 1976, 10, 281-297.	2.0	155
9	Intermolecular Interactions via Perturbation Theory: From Diatoms to Biomolecules. , 0, , 43-117.		145
10	Symmetryâ€adapted perturbation theory calculation of the Arâ€“H2 intermolecular potential energy surface. Journal of Chemical Physics, 1993, 98, 1279-1292.	3.0	142
11	Manyâ€body theory of exchange effects in intermolecular interactions. Density matrix approach and applications to Heâ€“Fâ˜, Heâ€“HF, H2â€“HF, and Arâ€“H2 dimers. Journal of Chemical Physics, 1994, 100, 5080-5092.	3.0	140
12	Relativistic and Quantum Electrodynamics Effects in the Helium Pair Potential. Physical Review Letters, 2010, 104, 183003.	7.8	135
13	Pair potential for water from symmetry-adapted perturbation theory. Journal of Chemical Physics, 1997, 107, 4207-4218.	3.0	133
14	Symmetry forcing and convergence properties of perturbation expansions for molecular interaction energies. International Journal of Quantum Chemistry, 1978, 14, 271-287.	2.0	128
15	Coupled cluster approach or quadratic configuration interaction?. Journal of Chemical Physics, 1989, 90, 4356-4362.	3.0	123
16	Radiative Corrections to the Polarizability of Helium. Physical Review Letters, 2004, 92, 233001.	7.8	122
17	On the optimal choice of monomer geometry in calculations of intermolecular interaction energies: Rovibrational spectrum of Arâ€“HF from two- and three-dimensional potentials. Journal of Chemical Physics, 2000, 113, 2957-2968.	3.0	100
18	Time-independent coupled cluster theory of the polarization propagator. Implementation and application of the singles and doubles model to dynamic polarizabilities and van der Waals constantsâ€. Molecular Physics, 2006, 104, 2303-2316.	1.7	82

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19	Exchange polarization effects in the interaction of closed-shell systems. Theoretica Chimica Acta, 1977, 46, 277-290.	0.8	81
20	Unitary group approach to spin-adapted open-shell coupled cluster theory. International Journal of Quantum Chemistry, 1995, 56, 129-155.	2.0	75
21	On the exchange polarization effects in the interaction of two helium atoms. Molecular Physics, 1976, 32, 81-91.	1.7	72
22	On the multipole structure of exchange dispersion energy in the interaction of two helium atoms. Molecular Physics, 1977, 33, 971-977.	1.7	69
23	Gaussian geminals in explicitly correlated coupled cluster theory including single and double excitations. Journal of Chemical Physics, 1999, 110, 4165-4183.	3.0	67
24	On the convergence properties of the Rayleigh-SchrÃ¶dinger and the Hirschfelder-Silbey perturbation expansions for molecular interaction energies. International Journal of Quantum Chemistry, 1977, 11, 247-257.	2.0	66
25	Explicitly connected expansion for the average value of an observable in the coupled-cluster theory. International Journal of Quantum Chemistry, 1993, 48, 161-183.	2.0	66
26	Accurate TheoreticalÎ²-Decay Energy Spectrum of the Tritium Molecule and Its Neutrino Mass Dependence. Physical Review Letters, 1985, 55, 1388-1391.	7.8	62
27	Theoretical determination of the polarizability dispersion and the refractive index of helium. Physical Review A, 2016, 93, .	2.5	62
28	MÃ¸ller-Plesset expansion of the dispersion energy in the ring approximation. International Journal of Quantum Chemistry, 1993, 45, 409-431.	2.0	61
29	On the convergence of the symmetrized Rayleighâ€“SchrÃ¶dinger perturbation theory for molecular interaction energies. Journal of Chemical Physics, 1992, 97, 7555-7559.	3.0	59
30	Breit-Pauli and Direct Perturbation Theory Calculations of Relativistic Helium Polarizability. Physical Review Letters, 2001, 86, 5675-5678.	7.8	59
31	Symmetryâ€adapted perturbation theory calculation of the intraâ€atomic correlation contribution to the shortâ€range repulsion of helium atoms. Journal of Chemical Physics, 1990, 92, 7441-7447.	3.0	54
32	Pair Potential with Submillikelvin Uncertainties and Nonadiabatic Treatment of the Halo State of the Helium Dimer. Physical Review Letters, 2017, 119, 123401.	7.8	52
33	An accurate calculation of the firstâ€order interaction energy for the helium dimer. Journal of Chemical Physics, 1989, 91, 4779-4784.	3.0	51
34	Bounds for the scattering length of spin-polarized helium from high-accuracy electronic structure calculations. Journal of Chemical Physics, 2005, 123, 134315.	3.0	50
35	Bethe logarithm and Lamb shift for the hydrogen molecular ion. International Journal of Quantum Chemistry, 1992, 42, 287-319.	2.0	47
36	Multireference coupled-cluster Ansatz. Molecular Physics, 2010, 108, 3043-3054.	1.7	47

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37	An exact treatment of the induction interaction between the atoms in the hydrogen molecule. Molecular Physics, 1974, 27, 649-655.	1.7	45
38	Convergence properties and large-order behavior of the polarization expansion for the interaction energy of hydrogen atoms. Chemical Physics Letters, 1992, 195, 67-76.	2.6	41
39	Second virial coefficients for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>He</mml:mi><mml:mprescripts /><mml:none /><mml:mn>4</mml:mn></mml:mmultiscripts></mml:math> and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi>He</mml:mi><mml:mprescripts /><mml:none /><mml:mn>3</mml:mn></mml:mmultiscripts></mml:math> from an accurate relativistic interaction potential. Physical Review A, 2020, 102, .	2.5	41
40	Electrostatic interactions between molecules from relaxed one-electron density matrices of the coupled cluster singles and doubles model. Molecular Physics, 2002, 100, 1723-1734.	1.7	38
41	Symmetry-adapted perturbation theory of potential-energy surfaces for weakly bound molecular complexes. Computational and Theoretical Chemistry, 1994, 307, 135-151.	1.5	35
42	Complete basis set extrapolations of dispersion, exchange, and coupledâ€clusters contributions to the interaction energy: a helium dimer study. International Journal of Quantum Chemistry, 2008, 108, 2053-2075.	2.0	35
43	Exact calculation of exchange polarization energy for H2+ ion. International Journal of Quantum Chemistry, 1973, 7, 63-73.	2.0	34
44	Unitary group based open-shell coupled cluster theory: Application to van der Waals interactions of high-spin systems. Journal of Chemical Physics, 1999, 111, 1857-1869.	3.0	34
45	Frequency-Dependent Polarizability of Helium Including Relativistic Effects with Nuclear Recoil Terms. Physical Review Letters, 2015, 114, 173004.	7.8	34
46	QED calculation of the dipole polarizability of helium atom. Physical Review A, 2020, 101, .	2.5	34
47	Convergence behavior of the symmetry-adapted perturbation theory for states submerged in Pauli forbidden continuum. Journal of Chemical Physics, 2001, 115, 1137-1152.	3.0	32
48	Convergence of symmetryâ€adapted perturbation theory expansions for pairwise nonadditive interatomic interactions. Journal of Chemical Physics, 1996, 105, 8178-8186.	3.0	30
49	Orbital relaxation and the third-order induction energy in symmetry-adapted perturbation theory. Theoretical Chemistry Accounts, 2010, 127, 211-221.	1.4	30
50	Complete Basis Set Extrapolation of Electronic Correlation Energies Using the Riemann Zeta Function. Journal of Chemical Theory and Computation, 2019, 15, 5398-5403.	5.3	28
51	Completeness criteria for explicitly correlated Gaussian geminal bases of axial symmetry. International Journal of Quantum Chemistry, 1997, 61, 769-776.	2.0	27
52	Reexamination of the calculation of two-center, two-electron integrals over Slater-type orbitals. III. Case study of the beryllium dimer. Physical Review A, 2015, 91, .	2.5	27
53	Symmetry-forcing procedure and convergence behavior of perturbation expansions for molecular interaction energies. Journal of Chemical Physics, 2002, 117, 5124-5134.	3.0	24
54	Explicitly-correlated Gaussian geminals in electronic structure calculations. Molecular Physics, 2010, 108, 3091-3103.	1.7	23

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55	Dispersion interaction of high-spin open-shell complexes in the random phase approximation. Journal of Chemical Physics, 2003, 119, 10497-10511.	3.0	21
56	Long-range asymptotic expansion of the diagonal Bornâ€“Oppenheimer correction. Chemical Physics, 2012, 401, 170-179.	1.9	20
57	Onset of Casimir-Polder Retardation in a Long-Range Molecular Quantum State. Physical Review Letters, 2012, 108, 183201.	7.8	18
58	Perturbation theory calculations of intermolecular interaction energies. International Journal of Quantum Chemistry, 1991, 40, 23-36.	2.0	15
59	Higher dispersion coefficients for the interaction of helium atoms. Chemical Physics Letters, 2008, 459, 183-187.	2.6	14
60	Multipole structure of exchange polarization energy for H2+ Ion. International Journal of Quantum Chemistry, 1973, 7, 745-757.	2.0	13
61	Theoretical determination of polarizability and magnetic susceptibility of neon. Physical Review A, 2020, 102, .	2.5	13
62	Degenerate symmetry-adapted perturbation theory of weak interactions between closed- and open-shell monomers: application to Rydberg states of helium hydride. Theoretical Chemistry Accounts, 1999, 101, 282-291.	1.4	12
63	Direct calculation of interaction-induced molecular properties: An application to the relativistic mass-velocity and Darwin terms in the interaction energy of hydrogen atoms. Physical Review A, 2008, 77, .	2.5	12
64	Infiniteâ€order functional for nonlinear parameters optimization in explicitly correlated coupled cluster theory. International Journal of Quantum Chemistry, 2009, 109, 2872-2884.	2.0	7
65	Asymptotics of the exchange-splitting energy for a diatomic molecular ion from a volume-integral formula of symmetry-adapted perturbation theory. Physical Review A, 2014, 90, .	2.5	7
66	A perturbation calculation of the ground state (X 1Î£+g) energy of the hydrogen molecule. Chemical Physics Letters, 1994, 224, 476-482.	2.6	6
67	Path-integral calculation of the third dielectric virial coefficient of noble gases. Journal of Chemical Physics, 2021, 155, 234103.	3.0	6
68	Exchange splitting of the interaction energy and the multipole expansion of the wave function. Journal of Chemical Physics, 2015, 143, 154106.	3.0	5
69	Determination of the exchange interaction energy from the polarization expansion of the wave function. Physical Review A, 2016, 94, .	2.5	5
70	Convergence properties of the multipole expansion of the exchange contribution to the interaction energy. Molecular Physics, 2016, 114, 1176-1188.	1.7	4
71	Size consistency and counterpoise correction in explicitly correlated calculations of interaction energies and interaction-induced properties. Physical Review A, 2019, 99, .	2.5	4
72	Quantum chemical contribution to electron neutrino mass determination. International Journal of Quantum Chemistry, 1985, 28, 421-441.	2.0	3

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73	Theoretical description of muonic molecular ions. AIP Conference Proceedings, 1988, , .	0.4	1
74	Nonadiabatic calculations fortd? relevant for muon catalyzed fusion. International Journal of Quantum Chemistry, 1991, 40, 671-686.	2.0	0
75	Nonrelativistic Lamb shift for muonic molecules. Hyperfine Interactions, 1993, 82, 179-184.	0.5	0
76	Density effects in antiprotonic helium. AIP Conference Proceedings, 2001, , .	0.4	0