Francisco Javier GÃ¡lvez Cifuentes

List of Publications by Year
in descending order

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86 papers	1,031 citations	394421 19 h-index	552781 26 g-index
86 all docs	86 docs citations	86 times ranked	406 citing authors

#	Article	IF	Citations
1	One and two body densities for excited states of the helium confined atom. International Journal of Quantum Chemistry, 2020, 120, e26048.	2.0	3
2	Hundâ€™s rule in open-shell states of two-electron systems: From free through confined and screened atoms, to quantum dots. Nanosystems: Physics, Chemistry, Mathematics, 2019, 10, 31-41.	0.4	2
3	Study of the low energy spectrum of titanium by using QMC methods. Chemical Physics Letters, 2018, 693, 72-78.	2.6	0
4	Singlet vs. triplet interelectronic repulsion in confined atoms. Chemical Physics Letters, 2018, 702, 106-110.	2.6	8
5	Confinement effects on the electronic structure of M-shell atoms: A study with explicitly correlated wave functions. International Journal of Quantum Chemistry, 2017, 117, e25421.	2.0	10
6	Anisotropic multicluster model in light nuclei. Journal of Physics G: Nuclear and Particle Physics, 2016, 43, 065103.	3.6	0
7	Multi-configurational explicitly correlated wave functions for the study of confined many electron atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 145003.	1.5	14
8	Study of confined many electron atoms by means of the POEP method. Journal of Physics B: Atomic, Molecular and Optical Physics, 2014, 47, 185002.	1.5	21
9	Explicitly correlated wave functions for atoms and singly charged ions from Li through Sr: Variational and Diffusion Monte Carlo results. Chemical Physics Letters, 2014, 615, 21-25.	2.6	2
10	Quantum Monte Carlo ionization potential and electron affinity for transition metal atoms. Chemical Physics Letters, 2013, 559, 12-17.	2.6	12
11	Dynamical correlation effects in the transition probability: A study for the atoms Li to Ar. Chemical Physics Letters, 2012, 548, 1-6.	2.6	1
12	Relativistic, numerically parameterized, optimized, effective potentials for the ground state of the atoms He through Ra. Atomic Data and Nuclear Data Tables, 2011, 97, 109-133.	2.4	4
13	Relativistic quantum similarities in atoms in position and momentum spaces. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 2544-2549.	2.1	4
14	Jastrow correlated and quantum Monte Carlo calculations for the low-lying states of the carbon atom. Journal of Chemical Physics, 2011, 134, 134102.	3.0	9
15	Relativistic effects on complexity indexes in atoms in position and momentum spaces. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 3847-3853.	2.1	10
16	Near Degeneracy Effects on the Low-Lying Spectrum of the Iron Atom. Journal of Physical Chemistry A, 2010, 114, 1953-1956.	2.5	3
17	Quantum Monte Carlo ground state energies for the atoms Li through Ar. Journal of Chemical Physics, 2009, 131, 044115.	3.0	12
18	Explicitly correlated energies for neutral atoms and cations with 37â©½Zâ©½54. Chemical Physics Letters, 2008, 465, 190-192.	2.6	8

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19	Optimized effective potential energies and ionization potentials for the atoms Li to Ra. European Physical Journal D, 2008, 50, 229-235.	1.3	8
20	Quantum Monte Carlo for 3d Transition-Metal Atoms. Journal of Physical Chemistry A, 2008, 112, 2074-2076.	2.5	11
21	State-dependent correlated wavefunctions forsd-shell nuclei. Journal of Physics G: Nuclear and Particle Physics, 2007, 34, 2129-2140.	3.6	0
22	Numerical-parameterized relativistic optimized effective potential for atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 3045-3056.	1.5	5
23	Jastrow correlations and near degeneracy effects in neutral atoms and cations with 3â©½Zâ©½36. Chemical Physics Letters, 2007, 436, 352-356.	2.6	17
24	Correlated wave functions for the ground state of the atoms Li through Kr. Chemical Physics Letters, 2006, 428, 241-244.	2.6	21
25	Correlated wave functions to approach the bound excited states of Li- and Be-. European Physical Journal D, 2006, 40, 161-167.	1.3	2
26	Numerical-parameterized optimized effective potential for atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 3575-3585.	1.5	12
27	One- and two-body densities of carbon isoelectronic series in their low-lying multiplet states from explicitly correlated wave functions. Journal of Chemical Physics, 2006, 124, 044319.	3.0	7
28	Correlated wave functions for the ground and some excited states of the iron atom. Journal of Chemical Physics, 2006, 124, 154101.	3.0	15
29	Excited states of boron isoelectronic series from explicitly correlated wave functions. Journal of Chemical Physics, 2005, 122, 154307.	3.0	18
30	1s22p3 and 1s22s23l, l=s,p,d, excited states of boron isoelectronic series from explicitly correlated wave functions. Journal of Chemical Physics, 2005, 123, 034302.	3.0	14
31	Parameterized optimized effective potential for the ground state of the atoms He through Xe. Atomic Data and Nuclear Data Tables, 2004, 88, 163-202.	2.4	51
32	Momentum space properties for the atoms helium to neon from energy-optimized explicitly correlated wave functions. International Journal of Quantum Chemistry, 2004, 99, 247-255.	2.0	2
33	Electron pair properties for the helium atom from explicitly correlated wave functions. Chemical Physics Letters, 2003, 370, 327-333.	2.6	6
34	Two-electron properties for the beryllium atom from explicitly correlated wavefunctions. Chemical Physics Letters, 2003, 378, 330-336.	2.6	12
35	A parametrized optimized effective potential for atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, 4393-4402.	1.5	36
36	Simple correlated wave functions for the ground and some excited states ofsdshell nuclei. Physical Review C, 2003, 67, .	2.9	4

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37	Excited states of beryllium isoelectronic series from explicitly correlated wave functions. Journal of Chemical Physics, 2003, 118, 6858-6867.	3.0	15
38	Excited states of beryllium atom from explicitly correlated wave functions. Journal of Chemical Physics, 2002, 117, 6071-6082.	3.0	21
39	Reply to Comment on `Correlated one-body momentum density for helium to neon atoms'. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 2191-2193.	1.5	0
40	Margenauâ€“Brink alpha model with central Jastrow and linear state-dependent correlations for p-shell nuclei. Nuclear Physics A, 2002, 710, 29-41.	1.5	4
41	Variational Monte Carlo calculations for some cations and anions of the first-row atoms using explicitly correlated wave functions. International Journal of Quantum Chemistry, 2002, 87, 270-274.	2.0	3
42	Atomic properties from energy-optimized wave functions. Journal of Chemical Physics, 2001, 115, 1166-1171.	3.0	30
43	Variational calculation of some S-states of Coulomb three-body systems. European Physical Journal D, 2001, 13, 201-206.	1.3	5
44	Projected-deformed wavefunctions with central Jastrow and linear state-dependent correlations for8Be and12C. Journal of Physics G: Nuclear and Particle Physics, 2001, 27, 2211-2223.	3.6	6
45	Two-body densities and effective potentials. International Journal of Quantum Chemistry, 2000, 79, 75-81.	2.0	1
46	Central Jastrow and linear state-dependent correlations in nuclei. Journal of Physics G: Nuclear and Particle Physics, 2000, 26, 1795-1807.	3.6	9
47	Correlated one-electron and two-electron densities for the ground state of the lithium atom. Physical Review A, 2000, 61, .	2.5	6
48	Momentum space densities for the beryllium isoelectronic series. Journal of Chemical Physics, 2000, 113, 8631-8636.	3.0	12
49	Correlated one-body momentum density for helium to neon atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 1999, 32, 2245-2255.	1.5	21
50	Correlated electron extracule densities in position and momentum spaces. Journal of Chemical Physics, 1999, 111, 3319-3326.	3.0	32
51	One- and two-body densities for the beryllium isoelectronic series. Journal of Chemical Physics, 1999, 111, 10903-10909.	3.0	19
52	Variational Monte Carlo calculation of two body properties in atoms: Importance sampling considerations. Computer Physics Communications, 1999, 121-122, 493-495.	7.5	2
53	Correlated two-electron momentum properties for helium to neon atoms. Journal of Chemical Physics, 1999, 110, 5721-5727.	3.0	27
54	Factored wave function for boundS-type states of two-electron atomic systems. International Journal of Quantum Chemistry, 1998, 68, 405-413.	2.0	2

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55	A variational Monte Carlo study of the 2s-2p near degeneracy in beryllium, boron, and carbon atoms. Journal of Chemical Physics, 1998, 109, 3346-3351.	3.0	19
56	Correlated Monte Carlo electron-pair density for the atoms helium to neon. Journal of Chemical Physics, 1998, 109, 7075-7084.	3.0	41
57	Spatial generalizations of Kato's cusp condition for two-electron atoms with correlations. Journal of Physics B: Atomic, Molecular and Optical Physics, 1996, 29, 3803-3813.	1.5	6
58	Bounds for the electron density at the nucleus and for the intracule density at the coalescence point for two-electron atoms. Zeitschrift FÃ¼r Physik D-Atoms Molecules and Clusters, 1995, 35, 163-167.	1.0	0
59	Properties of the atomic form factor: Applications and shell structure. International Journal of Quantum Chemistry, 1995, 56, 157-162.	2.0	1
60	Applications of some bounds to density functionals for atoms. International Journal of Quantum Chemistry, 1995, 56, 763-769.	2.0	3
61	Bounds for the atomic electronic density and related functions. Physical Review A, 1995, 51, 2857-2865.	2.5	5
62	Study of the singular anharmonic potentials by means of the analytic continuation method. Journal of Physics A, 1995, 28, 6731-6738.	1.6	22
63	Correlated one- and two-electron densities of low-lying S-states in helium-like atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 1995, 28, 3123-3133.	1.5	25
64	Single-particle and electron-pair densities at the origin in the ground state of helium-like ions. Journal of Physics B: Atomic, Molecular and Optical Physics, 1994, 27, 5131-5137.	1.5	21
65	Calculations of the one- and two-body densities in two-electron atomic systems. Journal of Physics B: Atomic, Molecular and Optical Physics, 1994, 27, 4433-4441.	1.5	11
66	Lower bounds to density-dependent quantities of atoms in terms of logarithmic expectation values. Journal of Physics B: Atomic, Molecular and Optical Physics, 1993, 26, 3991-3998.	1.5	6
67	New bounds for the atomic charge and momentum densities at the origin. Zeitschrift FÃ¼r Physik D-Atoms Molecules and Clusters, 1991, 18, 127-130.	1.0	18
68	Improved lower bounds to the total atomic kinetic energy and other density-dependent quantities. Journal of Physics B: Atomic, Molecular and Optical Physics, 1991, 24, 3343-3350.	1.5	6
69	Atomic charge density at the nucleus and inequalities among radial expectation values. Physical Review A, 1991, 44, 144-147.	2.5	36
70	Inequalities between radial and momentum expectation values of atoms, molecules, and nuclei. Physical Review A, 1990, 41, 4052-4055.	2.5	15
71	Atomic-charge convexity and the electron density at the nucleus. Physical Review A, 1990, 42, 641-644.	2.5	29
72	Rigorous lower bounds to average electron radial and momentum densities for atomic systems. Physical Review A, 1989, 39, 494-500.	2.5	16

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73	Bounds to density-dependent quantities ofD-dimensional many-particle systems in position and momentum spaces: Applications to atomic systems. Physical Review A, 1989, 40, 35-40.	2.5	39
74	Lower bounds on the electronic charge and momentum densities of spherical atoms at the origin. Physical Review A, 1989, 39, 501-505.	2.5	14
75	Rigorous bounds to density-dependent quantities ofD-dimensional many-fermion systems. Physical Review A, 1988, 37, 3634-3637.	2.5	18
76	Lower bounds on the electronic charge and momentum densities of atomic systems at the origin. Physical Review A, 1988, 37, 3154-3157.	2.5	10
77	Improved lower bounds for the atomic charge density at the nucleus. Journal of Physics B: Atomic, Molecular and Optical Physics, 1988, 21, L271-L274.	1.5	21
78	On two sets of orthogonal polynomial systems encountered in nonlinear physics. Journal of Physics A, 1987, 20, 5489-5495.	1.6	0
79	Level density of physical systems with Lanczos-type Hamiltonians. Physical Review A, 1987, 36, 933-936.	2.5	2
80	Bounds for kinetic and exchange energies of fermion systems. Physical Review A, 1987, 35, 2384-2388.	2.5	24
81	Quantum systems with a common density of levels. II. Physics Letters, Section A: General, Atomic and Solid State Physics, 1987, 122, 385-388.	2.1	3
82	Quantum systems with a common density of levels. Physics Letters, Section A: General, Atomic and Solid State Physics, 1986, 113, 454-458.	2.1	5
83	A lower bound for the nuclear kinetic energy. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1985, 156, 287-290.	4.1	14
84	Bounds to the extreme eigenvalues of the Lanczos Hamiltonian of a quantum system. Journal of Physics A, 1985, 18, 2399-2402.	1.6	0
85	Quantum systems with uniform- and regular-level-energy behaviors. Physical Review A, 1985, 32, 625-626.	2.5	3
86	Some open problems of generalised Bessel polynomials. Journal of Physics A, 1984, 17, 2759-2766.	1.6	19