Janos Pipek

List of Publications by Year
in descending order

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		567281	276875
45	2,219	15	41
papers	citations	h-index	g-index

45	45	45	2167
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A fast intrinsic localization procedure applicable for ab initio and semiempirical linear combination of atomic orbital wave functions. Journal of Chemical Physics, 1989, 90, 4916-4926.	3.0	1,517
2	Universal classification scheme for the spatial-localization properties of one-particle states in finite,d-dimensional systems. Physical Review A, 1992, 46, 3148-3163.	2.5	105
3	RÃ©nyi entropies characterizing the shape and the extension of the phase space representation of quantum wave functions in disordered systems. Physical Review E, 2003, 68, 026202.	2.1	69
4	Elementary formula for entanglement entropies of fermionic systems. Physical Review A, 2005, 72, .	2.5	63
5	Localization measure and maximum delocalization in molecular systems. International Journal of Quantum Chemistry, 1989, 36, 487-501.	2.0	48
6	Shape analysis of the level-spacing distribution around the metal-insulator transition in the three-dimensional Anderson model. Physical Review B, 1995, 52, 7783-7786.	3.2	45
7	Power-law localization at the metal-insulator transition by a quasiperiodic potential in one dimension. Physical Review B, 1992, 46, 4978-4981.	3.2	35
8	Dependence ofMO shapes on a continuous measure of delocalization. International Journal of Quantum Chemistry, 1988, 34, 1-13.	2.0	25
9	An economic prediction of the finer resolution level wavelet coefficients in electronic structure calculations. Physical Chemistry Chemical Physics, 2015, 17, 31558-31565.	2.8	24
10	An economic prediction of refinement coefficients in waveletâ€based adaptive methods for electron structure calculations. Journal of Computational Chemistry, 2013, 34, 460-465.	3.3	21
11	Localization properties of the nonbonding ï€ states at the Fermi level in amorphous carbon. Physical Review B, 1990, 42, 5335-5338.	3.2	18
12	Statistical electron densities. International Journal of Quantum Chemistry, 1997, 64, 85-93.	2.0	18
13	One-Parameter Superscaling at the Metal-Insulator Transition in Three Dimensions. Physical Review Letters, 1999, 82, 4683-4686.	7.8	17
14	Localization in aromatic and conjugated hydrocarbons. Shape studies on canonicalPPP one-electron eigenfunctions. International Journal of Quantum Chemistry, 1990, 37, 529-537.	2.0	16
15	Controlled orthogonalization of localized orbitals. International Journal of Quantum Chemistry, 1985, 27, 527-546.	2.0	15
16	Many-Body Perturbation Theory with Localized Orbitals â€" Kapuyâ€™s Approach. Topics in Current Chemistry, 1999, , 43-61.	4.0	15
17	Mathematical characterization and shape analysis of localized, fractal, and complex distributions in extended systems. International Journal of Quantum Chemistry, 1994, 51, 539-553.	2.0	14
18	An effective recursive algorithm for generating many-body Hugenholtz and Goldstone diagrams. Journal of Computational Physics, 1988, 77, 1-17.	3.8	13

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19	Multiresolution analysis of density operators, electron density, and energy functionals. International Journal of Quantum Chemistry, 2001, 84, 523-529.	2.0	13
20	Heat treatment parameters effecting the fractal dimensions of AuGe metallization on GaAs. Applied Physics Letters, 2007, 91, 073107.	3.3	13
21	Multifractality beyond the parabolic approximation: Deviations from the log-normal distribution at criticality in quantum Hall systems. Europhysics Letters, 1996, 36, 437-442.	2.0	11
22	Approximate upper bound for two-electron integrals of molecular orbitals. Chemical Physics Letters, 1984, 111, 430-433.	2.6	10
23	The generalized localization lengths in one-dimensional systems with correlated disorder. Journal of Physics Condensed Matter, 1998, 10, 305-311.	1.8	10
24	Information length and localization in one dimension. Journal of Physics Condensed Matter, 1994, 6, L115-L122.	1.8	8
25	Representation of the Kato electron-electron cusp condition by wavelet-based density-operator expansions. Physical Review A, 2001, 64, .	2.5	8
26	Refinement trajectory and determination of eigenstates by a wavelet based adaptive method. Journal of Chemical Physics, 2006, 125, 174107.	3.0	8
27	A wavelet-based adaptive method for determining eigenstates of electronic systems. Theoretical Chemistry Accounts, 2010, 125, 471-479.	1.4	8
28	On Structural Entropy and Spatial Filling Factor Analysis of Colonoscopy Pictures. Entropy, 2019, 21, 256.	2.2	8
29	Long-range behavior of the off-diagonal Fock matrix elements of localized molecular orbitals. Chemical Physics Letters, 1988, 143, 293-298.	2.6	7
30	Application of the localized representation for studying interaction energies. International Journal of Quantum Chemistry, 1996, 57, 775-780.	2.0	7
31	Adaptive local refinement of the electron density, one-particle density matrices, and electron orbitals by hierarchical wavelet decomposition. Journal of Chemical Physics, 2005, 123, 144107.	3.0	6
32	Localization maps by orbital partitioning of the electron density. Theoretica Chimica Acta, 1993, 86, 379-389.	0.8	4
33	Scaling behavior of energy functionals of highly complex electron distributions. International Journal of Quantum Chemistry, 1998, 70, 125-131.	2.0	4
34	Event-by-event fluid dynamcis. Physical Review E, 2000, 61, 237-246.	2.1	3
35	Correlation effects on some six membered rings and some cyclic linear chains. Acta Physica Academiae Scientiarum Hungaricae, 1981, 51, 31-40.	0.1	2
36	A decomposition of the total energy at the HF-SCF level and at several levels of correlation. III:. Computational and Theoretical Chemistry, 1998, 455, 257-260.	1.5	2

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37	One-parameter superscaling in three dimensions. Physica E: Low-Dimensional Systems and Nanostructures, 2001, 9, 380-383.	2.7	2
38	Local expansion of N-representable one-particle density matrices yielding a prescribed electron density. Journal of Chemical Physics, 2003, 119, 8257-8265.	3.0	2
39	The kinetic energy operator in the subspaces of wavelet analysis. Journal of Mathematical Chemistry, 2009, 46, 261-282.	1.5	2
40	The coupled cluster method and entanglement in three fermion systems. Journal of Mathematical Physics, 2017, 58, 012203.	1.1	2
41	Artifacts of grid-based electron structure calculations. Chemical Physics Letters, 2008, 464, 103-106.	2.6	1
42	Quantum Mechanical Operators in Multiresolution Hilbert Spaces. AIP Conference Proceedings, 2007, , .	0.4	0
43	A study of two-qubit density matrices with fermionic purifications. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 505304.	2.1	0
44	Optimization of the prediction of second refined wavelet coefficients in electron structure calculations. Open Physics, 2016, 14, 643-650.	1.7	0
45	Multiresolution modeling of cavity resonators in microwave systems. , 2016, , .		0