Janos Pipek

List of Publications by Year
in descending order

45 papers	2,219 citations	567281 15 h-index	276875 41 g-index
45 all docs	45 docs citations	45 times ranked	2167 citing authors

#	Article	IF	Citations
1	On Structural Entropy and Spatial Filling Factor Analysis of Colonoscopy Pictures. Entropy, 2019, 21, 256.	2.2	8
2	The coupled cluster method and entanglement in three fermion systems. Journal of Mathematical Physics, 2017, 58, 012203.	1.1	2
3	Optimization of the prediction of second refined wavelet coefficients in electron structure calculations. Open Physics, 2016, 14, 643-650.	1.7	0
4	Multiresolution modeling of cavity resonators in microwave systems. , 2016, , .		0
5	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
6	An economic prediction of refinement coefficients in wavelet‐based adaptive methods for electron structure calculations. Journal of Computational Chemistry, 2013, 34, 460-465.	3.3	21
7	A wavelet-based adaptive method for determining eigenstates of electronic systems. Theoretical Chemistry Accounts, 2010, 125, 471-479.	1.4	8
8	The kinetic energy operator in the subspaces of wavelet analysis. Journal of Mathematical Chemistry, 2009, 46, 261-282.	1.5	2
9	Artifacts of grid-based electron structure calculations. Chemical Physics Letters, 2008, 464, 103-106.	2.6	1
10	A study of two-qubit density matrices with fermionic purifications. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 505304.	2.1	0
11	Heat treatment parameters effecting the fractal dimensions of AuGe metallization on GaAs. Applied Physics Letters, 2007, 91, 073107.	3.3	13
12	Quantum Mechanical Operators in Multiresolution Hilbert Spaces. AIP Conference Proceedings, 2007, , .	0.4	0
13	Refinement trajectory and determination of eigenstates by a wavelet based adaptive method. Journal of Chemical Physics, 2006, 125, 174107.	3.0	8
14	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
15	Elementary formula for entanglement entropies of fermionic systems. Physical Review A, 2005, 72, .	2.5	63
16	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
17	Rényi 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
18	One-parameter superscaling in three dimensions. Physica E: Low-Dimensional Systems and Nanostructures, 2001, 9, 380-383.	2.7	2

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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	Representation of the Kato electron-electron cusp condition by wavelet-based density-operator expansions. Physical Review A, 2001, 64, .	2.5	8
21	Event-by-event fluid dynamcis. Physical Review E, 2000, 61, 237-246.	2.1	3
22	One-Parameter Superscaling at the Metal-Insulator Transition in Three Dimensions. Physical Review Letters, 1999, 82, 4683-4686.	7.8	17
23	Many-Body Perturbation Theory with Localized Orbitals â€" Kapuyâ€™s Approach. Topics in Current Chemistry, 1999, , 43-61.	4.0	15
24	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
25	Scaling behavior of energy functionals of highly complex electron distributions. International Journal of Quantum Chemistry, 1998, 70, 125-131.	2.0	4
26	The generalized localization lengths in one-dimensional systems with correlated disorder. Journal of Physics Condensed Matter, 1998, 10, 305-311.	1.8	10
27	Statistical electron densities. International Journal of Quantum Chemistry, 1997, 64, 85-93.	2.0	18
28	Application of the localized representation for studying interaction energies. International Journal of Quantum Chemistry, 1996, 57, 775-780.	2.0	7
29	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
30	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
31	Information length and localization in one dimension. Journal of Physics Condensed Matter, 1994, 6, L115-L122.	1.8	8
32	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
33	Localization maps by orbital partitioning of the electron density. Theoretica Chimica Acta, 1993, 86, 379-389.	0.8	4
34	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
35	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
36	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

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37	Localization properties of the nonbonding Ï€ states at the Fermi level in amorphous carbon. Physical Review B, 1990, 42, 5335-5338.	3.2	18
38	Localization measure and maximum delocalization in molecular systems. International Journal of Quantum Chemistry, 1989, 36, 487-501.	2.0	48
39	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
40	Long-range behavior of the off-diagonal Fock matrix elements of localized molecular orbitals. Chemical Physics Letters, 1988, 143, 293-298.	2.6	7
41	Dependence ofMO shapes on a continuous measure of delocalization. International Journal of Quantum Chemistry, 1988, 34, 1-13.	2.0	25
42	An effective recursive algorithm for generating many-body Hugenholtz and Goldstone diagrams. Journal of Computational Physics, 1988, 77, 1-17.	3.8	13
43	Controlled orthogonalization of localized orbitals. International Journal of Quantum Chemistry, 1985, 27, 527-546.	2.0	15
44	Approximate upper bound for two-electron integrals of molecular orbitals. Chemical Physics Letters, 1984, 111, 430-433.	2.6	10
45	Correlation effects on some six membered rings and some cyclic linear chains. Acta Physica Academiae Scientiarum Hungaricae, 1981, 51, 31-40.	0.1	2