Szymon Åmiga

List of Publications by Year in descending order

32 papers	520 citations	623734 14 h-index	677142 22 g-index
32 all docs	32 docs citations	32 times ranked	240 citing authors

#	Article	IF	Citations
1	Laplacian-dependent models of the kinetic energy density: Applications in subsystem density functional theory with meta-generalized gradient approximation functionals. Journal of Chemical Physics, 2017, 146, 064105.	3.0	44
2	Comparing ab initio density-functional and wave function theories: The impact of correlation on the electronic density and the role of the correlation potential. Journal of Chemical Physics, 2011, 135, 114111.	3.0	39
3	Orbital-dependent second-order scaled-opposite-spin correlation functionals in the optimized effective potential method. Journal of Chemical Physics, 2014, 141, 024113.	3.0	35
4	Jellium-with-gap model applied to semilocal kinetic functionals. Physical Review B, 2017, 95, .	3.2	26
5	Investigation of the Exchange-Correlation Potentials of Functionals Based on the Adiabatic Connection Interpolation. Journal of Chemical Theory and Computation, 2019, 15, 1006-1015.	5.3	26
6	A density difference based analysis of orbital-dependent exchange-correlation functionals. Molecular Physics, 2014, 112, 700-710.	1.7	25
7	Self-consistent double-hybrid density-functional theory using the optimized-effective-potential method. Journal of Chemical Physics, 2016, 145, 144102.	3.0	25
8	Accurate Kohnâ€“Sham ionization potentials from scaledâ€oppositeâ€spin secondâ€order optimized effective potential methods. Journal of Computational Chemistry, 2016, 37, 2081-2090.	3.3	24
9	Subsystem density functional theory with meta-generalized gradient approximation exchange-correlation functionals. Journal of Chemical Physics, 2015, 142, 154121.	3.0	23
10	Unveiling the Physics Behind Hybrid Functionals. Journal of Physical Chemistry A, 2020, 124, 5606-5614.	2.5	23
11	Spin-Component-Scaled Î”MP2 Parametrization: Toward a Simple and Reliable Method for Ionization Energies. Journal of Chemical Theory and Computation, 2018, 14, 4780-4790.	5.3	21
12	Improved solid stability from a screened range-separated hybrid functional by satisfying semiclassical atom theory and local density linear response. Physical Review B, 2020, 102, .	3.2	19
13	The ab initio density functional theory applied for spin-polarized calculations. Journal of Chemical Physics, 2020, 152, 054109.	3.0	19
14	Self-Consistent Range-Separated Density-Functional Theory with Second-Order Perturbative Correction via the Optimized-Effective-Potential Method. Journal of Chemical Theory and Computation, 2020, 16, 211-223.	5.3	15
15	Accurate density functional made more versatile. Journal of Chemical Physics, 2021, 155, 024103.	3.0	15
16	Modified Interaction-Strength Interpolation Method as an Important Step toward Self-Consistent Calculations. Journal of Chemical Theory and Computation, 2020, 16, 4983-4992.	5.3	14
17	Methods to generate reference total and Pauli kinetic potentials. Physical Review B, 2020, 101, .	3.2	14
18	Insights from the density functional performance of water and waterâ€“solid interactions: SCAN in relation to other meta-GGAs. Journal of Chemical Physics, 2020, 153, 214116.	3.0	14

#	Article	IF	Citations
19	The Role of the Reduced Laplacian Renormalization in the Kinetic Energy Functional Development. Computation, 2019, 7, 65.	2.0	13
20	Improving the applicability of the Pauli kinetic energy density based semilocal functional for solids. New Journal of Physics, 2021, 23, 063007.	2.9	13
21	Generalizing Double-Hybrid Density Functionals: Impact of Higher-Order Perturbation Terms. Journal of Chemical Theory and Computation, 2020, 16, 7413-7430.	5.3	12
22	Density-Dependent Exchangeâ€“Correlation Potentials Derived From highly Accurate Ab initio Calculations. Advances in Quantum Chemistry, 2014, 68, 125-151.	0.8	11
23	Approximate solution of coupled cluster equations: application to the coupled cluster doubles method and non-covalent interacting systems. Physical Chemistry Chemical Physics, 2017, 19, 30249-30260.	2.8	9
24	Plasmon Couplings from Subsystem Time-Dependent Density Functional Theory. Journal of Physical Chemistry A, 2021, 125, 7246-7259.	2.5	9
25	The Correlation Effects in Density Functional Theory Along the Dissociation Path. Advances in Quantum Chemistry, 2016, 73, 263-283.	0.8	7
26	Random-Phase Approximation in Many-Body Noncovalent Systems: Methane in a Dodecahedral Water Cage. Journal of Chemical Theory and Computation, 2021, 17, 804-817.	5.3	6
27	Density-Based Analysis of Spin-Resolved MP2 Method. Advances in Quantum Chemistry, 2018, , 279-293.	0.8	4
28	Benchmark test of a dispersion corrected revised Taoâ€“Mo semilocal functional for thermochemistry, kinetics, and noncovalent interactions of molecules and solids. Journal of Chemical Physics, 2021, 155, 114102.	3.0	4
29	From simple molecules to nanotubes. Reliable predictions of ionization potentials from the Î”MP2-SCS methods. New Journal of Physics, 2020, 22, 083084.	2.9	4
30	Solid-state performance of a meta-GGA screened hybrid density functional constructed from Pauli kinetic enhancement factor dependent semilocal exchange hole. Journal of Chemical Physics, 0, , .	3.0	4
31	Boosting the OEP2-sc method with spin-component scaling. Molecular Physics, 2022, 120, .	1.7	2
32	OEP Orbitals as a Reference for Ab Initio Many-Body Calculations. Advances in Quantum Chemistry, 2014, 68, 105-123.	0.8	1