Matthew J P Hodgson

List of Publications by Year
in descending order

17	242	933447 10	940533 16
papers	citations	h-index	g-index

18	18	18	181
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	How Interatomic Steps in the Exact Kohnâ€“Sham Potential Relate to Derivative Discontinuities of the Energy. Journal of Physical Chemistry Letters, 2017, 8, 5974-5980.	4.6	43
2	Origin of static and dynamic steps in exact Kohn-Sham potentials. Physical Review B, 2016, 93, .	3.2	42
3	Exact time-dependent density-functional potentials for strongly correlated tunneling electrons. Physical Review B, 2013, 88, .	3.2	41
4	Accuracy of electron densities obtained via Koopmans-compliant hybrid functionals. Physical Review Materials, 2018, 2, .	2.4	18
5	Role of electron localization in density functionals. Physical Review B, 2014, 90, .	3.2	15
6	Adiabatic and local approximations for the Kohn-Sham potential in time-dependent Hubbard chains. Physical Review B, 2014, 89, .	3.2	14
7	Local density approximations from finite systems. Physical Review B, 2016, 94, .	3.2	13
8	From Kohnâ€“Sham to Many-Electron Energies via Step Structures in the Exchange-Correlation Potential. Journal of Chemical Theory and Computation, 2021, 17, 1390-1407.	5.3	12
9	Advantageous nearsightedness of many-body perturbation theory contrasted with Kohn-Sham density functional theory. Physical Review B, 2019, 99, .	3.2	10
10	Machine learning the derivative discontinuity of density-functional theory. Machine Learning: Science and Technology, 2022, 3, 015011.	5.0	10
11	GW self-screening error and its correction using a local density functional. Physical Review B, 2018, 97, .	3.2	7
12	Improving the exchange and correlation potential in density-functional approximations through constraints. Faraday Discussions, 2020, 224, 126-144.	3.2	5
13	Accurate real-time evolution of electron densities and ground-state properties from generalized Kohn-Sham theory. Physical Review A, 2020, 101, .	2.5	3
14	Exact exchange-correlation potentials for calculating the fundamental gap with a fixed number of electrons. Physical Review A, 2021, 103, .	2.5	3
15	Electron localisation in static and time-dependent one-dimensional model systems. Journal of Physics Condensed Matter, 2018, 30, 065901.	1.8	2
16	New approaches to study excited states in density functional theory: general discussion. Faraday Discussions, 2020, 224, 483-508.	3.2	2
17	Exact expressions for the height of the interatomic step in the exchange-correlation potential from the derivative discontinuity of the energy. Physical Review A, 2021, 104, .	2.5	1