Matteo Barborini

List of Publications by Year
in descending order

16 papers	299 citations	932766 10 h-index	940134 16 g-index
16 all docs	16 docs citations	16 times ranked	370 citing authors

#	Article	IF	Citations
1	Excitonic-insulator instability and Peierls distortion in one-dimensional semimetals. Physical Review B, 2022, 105, .	1.1	2
2	Correlated Wave Functions for Electronâ€“Positron Interactions in Atoms and Molecules. Journal of Chemical Theory and Computation, 2022, 18, 2267-2280.	2.3	7
3	<scp>TurboRVB</scp>: A many-body toolkit for ab initio electronic simulations by quantum Monte Carlo. Journal of Chemical Physics, 2020, 152, 204121.	1.2	37
4	Angle-resolved photoemission spectroscopy from first-principles quantum Monte Carlo. Journal of Chemical Physics, 2018, 149, 154102.	1.2	1
5	Carbon nanotubes as excitonic insulators. Nature Communications, 2017, 8, 1461.	5.8	51
6	Geometries of low spin states of multi-centre transition metal complexes through extended broken symmetry variational Monte Carlo. Journal of Chemical Physics, 2016, 145, 124107.	1.2	7
7	Correlation Effects in Scanning Tunneling Microscopy Images of Molecules Revealed by Quantum Monte Carlo. Journal of Chemical Theory and Computation, 2016, 12, 5339-5349.	2.3	5
8	Role of Electron Correlation along the Water Splitting Reaction. Journal of Chemical Theory and Computation, 2016, 12, 5803-5810.	2.3	5
9	Neutral, Anionic, and Cationic Manganese Dimers through Density Functional Theory. Journal of Physical Chemistry A, 2016, 120, 1716-1726.	1.1	12
10	Ï€-Conjugation in trans-1,3-Butadiene: Static and Dynamical Electronic Correlations Described through Quantum Monte Carlo. Journal of Chemical Theory and Computation, 2015, 11, 508-517.	2.3	16
11	Ground State Geometries of Polyacetylene Chains from Many-Particle Quantum Mechanics. Journal of Chemical Theory and Computation, 2015, 11, 4109-4118.	2.3	23
12	Investigating Disjoint Non-KekulÃ© Diradicals with Quantum Monte Carlo: The Tetramethyleneethane Molecule through the Jastrow Antisymmetrized Geminal Power Wave Function. Journal of Chemical Theory and Computation, 2015, 11, 5696-5704.	2.3	18
13	Kohn-Sham orbitals and potentials from quantum Monte Carlo molecular densities. Journal of Chemical Physics, 2014, 140, 054102.	1.2	10
14	Reaction pathways by quantum Monte Carlo: Insight on the torsion barrier of 1,3-butadiene, and the conrotatory ring opening of cyclobutene. Journal of Chemical Physics, 2012, 137, 224309.	1.2	35
15	Structural Optimization by Quantum Monte Carlo: Investigating the Low-Lying Excited States of Ethylene. Journal of Chemical Theory and Computation, 2012, 8, 1260-1269.	2.3	46
16	Molecular Electrical Properties from Quantum Monte Carlo Calculations: Application to Ethyne. Journal of Chemical Theory and Computation, 2012, 8, 1952-1962.	2.3	24