

# Jan Hermann

## List of Publications by Year in descending order

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Version: 2024-02-01

23  
papers

2,020  
citations

686830

13  
h-index

676716

22  
g-index

25  
all docs

25  
docs citations

25  
times ranked

2733  
citing authors

#	ARTICLE	IF	CITATIONS
1	DFTB+, a software package for efficient approximate density functional theory based atomistic simulations. <i>Journal of Chemical Physics</i> , 2020, 152, 124101.	1.2	589
2	First-Principles Models for van der Waals Interactions in Molecules and Materials: Concepts, Theory, and Applications. <i>Chemical Reviews</i> , 2017, 117, 4714-4758.	23.0	408
3	Recent developments in the P<sc>y</sc>SCF program package. <i>Journal of Chemical Physics</i> , 2020, 153, 024109.	1.2	388
4	Deep-neural-network solution of the electronic Schrödinger equation. <i>Nature Chemistry</i> , 2020, 12, 891-897.	6.6	272
5	Nanoscale "stacked molecules are bound by collective charge fluctuations. <i>Nature Communications</i> , 2017, 8, 14052.	5.8	69
6	Density Functional Model for van der Waals Interactions: Unifying Many-Body Atomic Approaches with Nonlocal Functionals. <i>Physical Review Letters</i> , 2020, 124, 146401.	2.9	53
7	Theoretical investigation of the Friedländer reaction catalysed by CuBTC: Concerted effect of the adjacent Cu <sup>2+</sup> sites. <i>Catalysis Today</i> , 2013, 204, 101-107.	2.2	33
8	Theoretical investigation of layered zeolite frameworks: Surface properties of 2D zeolites. <i>Catalysis Today</i> , 2014, 227, 2-8.	2.2	25
9	Unifying Microscopic and Continuum Treatments of van der Waals and Casimir Interactions. <i>Physical Review Letters</i> , 2017, 118, 266802.	2.9	25
10	Electronic Exchange and Correlation in van der Waals Systems: Balancing Semilocal and Nonlocal Energy Contributions. <i>Journal of Chemical Theory and Computation</i> , 2018, 14, 1361-1369.	2.3	25
11	Coulomb interactions between dipolar quantum fluctuations in van der Waals bound molecules and materials. <i>Nature Communications</i> , 2021, 12, 137.	5.8	21
12	A novel correction scheme for DFT: A combined vdW-DF/CCSD(T) approach. <i>Journal of Chemical Physics</i> , 2013, 139, 034115.	1.2	18
13	Quantum Chemistry Common Driver and Databases (QCDB) and Quantum Chemistry Engine (QCE<sc>ngine</sc>): Automation and interoperability among computational chemistry programs. <i>Journal of Chemical Physics</i> , 2021, 155, 204801.	1.2	15
14	Phonon-Polariton Mediated Thermal Radiation and Heat Transfer among Molecules and Macroscopic Bodies: Nonlocal Electromagnetic Response at Mesoscopic Scales. <i>Physical Review Letters</i> , 2018, 121, 045901.	2.9	13
15	Convergence to the fixed-node limit in deep variational Monte Carlo. <i>Journal of Chemical Physics</i> , 2021, 154, 124108.	1.2	13
16	Anisotropic Interlayer Force Field for Transition Metal Dichalcogenides: The Case of Molybdenum Disulfide. <i>Journal of Chemical Theory and Computation</i> , 2021, 17, 7237-7245.	2.3	12
17	Communication: Many-body stabilization of non-covalent interactions: Structure, stability, and mechanics of Ag <sub>3</sub> Co(CN) <sub>6</sub> framework. <i>Journal of Chemical Physics</i> , 2016, 145, 241101.	1.2	11
18	Tuning Intermolecular Interactions with Nanostructured Environments. <i>Chemistry of Materials</i> , 2017, 29, 2452-2458.	3.2	9

#	ARTICLE	IF	CITATIONS
19	Impact of nuclear vibrations on van der Waals and Casimir interactions at zero and finite temperature. <i>Science Advances</i> , 2019, 5, eaaw0456.	4.7	7
20	Nonlocal Electronic Correlations in the Cohesive Properties of High-Pressure Hydrogen Solids. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 1521-1527.	2.1	6
21	van der Waals Interactions in Material Modelling. , 2018, , 1-33.		2
22	Fluctuational electrodynamics in atomic and macroscopic systems: van der Waals interactions and radiative heat transfer. <i>Physical Review B</i> , 2020, 102, .	1.1	2
23	Van der Waals Interactions in Material Modelling. , 2020, , 259-291.		0