Christopher J Knight

List of Publications by Year
in descending order

21 papers	856 citations	623734 14 h-index	677142 22 g-index
22 all docs	22 docs citations	22 times ranked	1113 citing authors

#	Article	IF	Citations
1	On the accuracy of the MB-pol many-body potential for water: Interaction energies, vibrational frequencies, and classical thermodynamic and dynamical properties from clusters to liquid water and ice. Journal of Chemical Physics, 2016, 145, 194504.	3.0	214
2	Hydrogen-Bond Topology and the IceVII/VIIIand IceIh/XIProton-Ordering Phase Transitions. Physical Review Letters, 2005, 94, 135701.	7.8	86
3	Molecular Origin of the Vibrational Structure of Ice I_h. Journal of Physical Chemistry Letters, 2017, 8, 2579-2583.	4.6	66
4	An analysis of hydrated proton diffusion in ab initio molecular dynamics. Journal of Chemical Physics, 2015, 142, 014104.	3.0	63
5	Many-Body Interactions in Ice. Journal of Chemical Theory and Computation, 2017, 13, 1778-1784.	5.3	60
6	Hydrogen bond topology and the ice VII/VIII and Ih/XI proton ordering phase transitions. Physical Review E, 2006, 73, 056113.	2.1	59
7	The Dissociated Amorphous Silica Surface: Model Development and Evaluation. Journal of Chemical Theory and Computation, 2010, 6, 3456-3471.	5.3	45
8	Prediction of a Phase Transition to a Hydrogen Bond Ordered Form of Ice VI. Journal of Physical Chemistry B, 2005, 109, 21040-21046.	2.6	41
9	A reexamination of the ice III/IX hydrogen bond ordering phase transition. Journal of Chemical Physics, 2006, 125, 064506.	3.0	33
10	Vaporâ€“liquid equilibrium of water with the MB-pol many-body potential. Journal of Chemical Physics, 2021, 154, 211103.	3.0	32
11	Hydrogen bond ordering in ice V and the transition to ice XIII. Journal of Chemical Physics, 2008, 129, 164513.	3.0	29
12	The role of transient resonances for ultra-fast imaging of single sucrose nanoclusters. Nature Communications, 2020, 11, 167.	12.8	27
13	Communication: Improved ab initio molecular dynamics by minimally biasing with experimental data. Journal of Chemical Physics, 2017, 146, 041102.	3.0	20
14	Anharmonic Rovibrational Partition Functions at High Temperatures: Tests of Reduced-Dimensional Models for Systems with up to Three Fluxional Modes. Journal of Physical Chemistry A, 2019, 123, 6210-6228.	2.5	16
15	Atomistic three-dimensional coherent x-ray imaging of nonbiological systems. Physical Review A, 2016, 94, .	2.5	15
16	Large-scale atomistic calculations of clusters in intense x-ray pulses. Journal of Physics B: Atomic, Molecular and Optical Physics, 2017, 50, 104003.	1.5	14
17	Site Disorder in Ice VII Arising from Hydrogen Bond Fluctuations. Journal of Physical Chemistry A, 2009, 113, 12433-12438.	2.5	9
18	The behavior of methaneâ€“water mixtures under elevated pressures from simulations using many-body potentials. Journal of Chemical Physics, 2022, 156, .	3.0	7

#	Article	IF	Citations
19	Rendezvous algorithms for large-scale modeling and simulation. Journal of Parallel and Distributed Computing, 2021, 147, 184-195.	4.1	3
20	Fluorescence intensity correlation imaging with high spatial resolution and elemental contrast using intense x-ray pulses. Structural Dynamics, 2021, 8, 044101.	2.3	3
21	Extended x-ray emission times of clusters in intense x-ray pulses. Physical Review A, 2020, 101, .	2.5	2