James Chapman

List of Publications by Year
in descending order

16 papers	922 citations	1039880 9 h-index	1058333 14 g-index
17 all docs	17 docs citations	17 times ranked	1525 citing authors

#	Article	IF	Citations
1	Efficient and universal characterization of atomic structures through a topological graph order parameter. Npj Computational Materials, 2022, 8, .	3.5	11
2	Cover Feature: Amorphization of Pseudocapacitive Tâ^'Nb₂O₅ Accelerates Lithium Diffusivity as Revealed Using Tunable Isomorphic Architectures (Batteries & Supercaps) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.3	1
3	Efficient and interpretable graph network representation for angle-dependent properties applied to optical spectroscopy. Npj Computational Materials, 2022, 8, .	3.5	13
4	Quantifying the atomistic free-volume morphology of materials with graph theory. Computational Materials Science, 2022, 213, 111623.	1.4	0
5	Machine learning models for the prediction of energy, forces, and stresses for Platinum. Computational Materials Science, 2020, 174, 109483.	1.4	17
6	Nanoscale Modeling of Surface Phenomena in Aluminum Using Machine Learning Force Fields. Journal of Physical Chemistry C, 2020, 124, 22127-22136.	1.5	9
7	Multiscale Modeling of Defect Phenomena in Platinum Using Machine Learning of Force Fields. Jom, 2020, 72, 4346-4358.	0.9	5
8	Predicting the dynamic behavior of the mechanical properties of platinum with machine learning. Journal of Chemical Physics, 2020, 152, 224709.	1.2	4
9	Iterative-Learning Strategy for the Development of Application-Specific Atomistic Force Fields. Journal of Physical Chemistry C, 2019, 123, 20715-20722.	1.5	20
10	General Atomic Neighborhood Fingerprint for Machine Learning-Based Methods. Journal of Physical Chemistry C, 2019, 123, 15859-15866.	1.5	33
11	A comprehensive computational study of adatom diffusion on the aluminum (1â€¯0â€¯0) surface. Computational Materials Science, 2019, 158, 353-358.	1.4	9
12	A study of adatom ripening on an Al (1 1 1) surface with machine learning force fields. Computational Materials Science, 2017, 129, 332-335.	1.4	33
13	Machine Learning Force Fields: Construction, Validation, and Outlook. Journal of Physical Chemistry C, 2017, 121, 511-522.	1.5	368
14	A universal strategy for the creation of machine learning-based atomistic force fields. Npj Computational Materials, 2017, 3, .	3.5	188
15	TOWARD COMPLETE STATISTICS OF MASSIVE BINARY STARS: PENULTIMATE RESULTS FROM THE CYGNUS OB2 RADIAL VELOCITY SURVEY. Astrophysical Journal, Supplement Series, 2014, 213, 34.	3.0	208
16	Amorphization of Pseudocapacitive Tâ^'Nb ₂ O ₅ Accelerates Lithium Diffusivity as Revealed Using Tunable Isomorphic Architectures. Batteries and Supercaps, 0, , .	2.4	3