Jinyang Xi

List of Publications by Year in descending order

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25 papers	1,968 citations	516215 16 h-index	610482 24 g-index
25 all docs	25 docs citations	25 times ranked	2865 citing authors

#	Article	IF	Citations
1	First-principles prediction of charge mobility in carbon and organic nanomaterials. Nanoscale, 2012, 4, 4348.	2.8	551
2	Carrier Mobility in Graphyne Should Be Even Larger than That in Graphene: A Theoretical Prediction. Journal of Physical Chemistry Letters, 2013, 4, 1443-1448.	2.1	328
3	Unravelling Doping Effects on PEDOT at the Molecular Level: From Geometry to Thermoelectric Transport Properties. Journal of the American Chemical Society, 2015, 137, 12929-12938.	6.6	176
4	Discovery of High-Performance Thermoelectric Chalcogenides through Reliable High-Throughput Material Screening. Journal of the American Chemical Society, 2018, 140, 10785-10793.	6.6	134
5	Intrinsic and Extrinsic Charge Transport in CH3NH3PbI3 Perovskites Predicted from First-Principles. Scientific Reports, 2016, 6, 19968.	1.6	119
6	Tunable Electronic Properties of Two-Dimensional Transition Metal Dichalcogenide Alloys: A First-Principles Prediction. Journal of Physical Chemistry Letters, 2014, 5, 285-291.	2.1	98
7	Modeling thermoelectric transport in organic materials. Physical Chemistry Chemical Physics, 2012, 14, 16505.	1.3	93
8	Electron-phonon couplings and carrier mobility in graphynes sheet calculated using the Wannier-interpolation approach. Journal of Chemical Physics, 2014, 141, 034704.	1.2	82
9	Achieving band convergence by tuning the bonding ionicity in nâ€type Mg₃Sb₂. Journal of Computational Chemistry, 2019, 40, 1693-1700.	1.5	68
10	TransOpt. A code to solve electrical transport properties of semiconductors in constant electronâ€“phonon coupling approximation. Computational Materials Science, 2021, 186, 110074.	1.4	55
11	Intrinsic Charge Transport in Stanene: Roles of Bucklings and Electronâ€“Phonon Couplings. Advanced Electronic Materials, 2017, 3, 1700143.	2.6	47
12	Electronic properties and charge carrier mobilities of graphynes and graphdiynes from first principles. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2015, 5, 215-227.	6.2	42
13	Thermoelectric transport properties in chalcogenides ZnX (X=S, Se): From the role of electron-phonon couplings. Journal of Materiomics, 2021, 7, 310-319.	2.8	24
14	Temperature-dependent band gaps in several semiconductors: from the role of electronâ€“phonon renormalization. Journal of Physics Condensed Matter, 2020, 32, 475503.	0.7	23
15	Theoretical Studies on the Deformation Potential, Electron-Phonon Coupling, and Carrier Transports of Layered Systems. Wuli Huaxue Xuebao/ Acta Physico - Chimica Sinica, 2018, 34, 961-976.	2.2	21
16	Strong electron-phonon interaction induced significant reduction in lattice thermal conductivities for single-layer MoS2 and PtSSe. Materials Today Physics, 2020, 15, 100277.	2.9	19
17	Temperature-dependence of the band gap in the all-inorganic perovskite CsPbI₃ from room to high temperatures. Physical Chemistry Chemical Physics, 2022, 24, 16003-16010.	1.3	17
18	Temperature-Dependent Band Renormalization in CoSb₃ Skutterudites Due to Sb-Ring-Related Vibrations. Chemistry of Materials, 2021, 33, 1046-1052.	3.2	16

#	Article	IF	Citations
19	The origin of intrinsic charge transport for Dirac carbon sheet materials: roles of acetylenic linkage and electronâ€“phonon couplings. Nanoscale, 2019, 11, 10828-10837.	2.8	12
20	Temperatureâ€dependent structural fluctuation and its effect on the electronic structure and charge transport in hybrid perovskite <scp>CH₃NH₃PbI₃</scp>. Journal of Computational Chemistry, 2021, 42, 2213-2220.	1.5	12
21	Unraveling the relationships between chemical bonding and thermoelectric properties: n-type ABO₃ perovskites. Journal of Materials Chemistry A, 2022, 10, 11039-11045.	5.2	10
22	Accelerating the Discovery of Cuâ€“Snâ€“S Thermoelectric Compounds via High-Throughput Synthesis, Characterization, and Machine Learning-Assisted Image Analysis. Chemistry of Materials, 2021, 33, 6918-6924.	3.2	8
23	Significant reduction in lattice thermal conductivity in a p-type filled skutterudite due to strong electronâ€“phonon interactions. Journal of Materials Chemistry A, 2022, 10, 13484-13491.	5.2	8
24	Perspective of the electronâ€“phonon interaction on the electrical transport in thermoelectric/electronic materials. Applied Physics Letters, 2022, 120, .	1.5	5
25	Mechanism of charge transport in organic semiconductors and carbon nanomaterials. Materials Research Society Symposia Proceedings, 2015, 1733, 1.	0.1	0