Iek-Heng Chu

List of Publications by Year
in descending order

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27 papers	1,931 citations	430874 18 h-index	642732 23 g-index
27 all docs	27 docs citations	27 times ranked	2425 citing authors

#	Article	IF	Citations
1	Battery Electrodes, Electrolytes, and Their Interfaces. , 2020, , 1231-1254.		0
2	Rational synthesis and electrochemical performance of LiVOPO₄ polymorphs. Journal of Materials Chemistry A, 2019, 7, 8423-8432.	10.3	20
3	Studies of Functional Defects for Fast Naâ€Ion Conduction in Na_{3â^'}_yPS_{4â^'}_xCl_x with a Combined Experimental and Computational Approach. Advanced Functional Materials, 2019, 29, 1807951.	14.9	51
4	Battery Electrodes, Electrolytes, and Their Interfaces. , 2019, , 1-24.		1
5	Predicting the volumes of crystals. Computational Materials Science, 2018, 146, 184-192.	3.0	4
6	New Insights into the Interphase between the Na Metal Anode and Sulfide Solid-State Electrolytes: A Joint Experimental and Computational Study. ACS Applied Materials & Interfaces, 2018, 10, 10076-10086.	8.0	86
7	Probing Solidâ€“Solid Interfacial Reactions in All-Solid-State Sodium-Ion Batteries with First-Principles Calculations. Chemistry of Materials, 2018, 30, 163-173.	6.7	150
8	Ab Initio Molecular Dynamics Studies of Fast Ion Conductors. , 2018, , 147-168.		8
9	Battery Electrodes, Electrolytes, and Their Interfaces. , 2018, , 1-24.		1
10	Structural Changes in a High-Energy Density VO₂F Cathode upon Heating and Li Cycling. ACS Applied Energy Materials, 2018, 1, 4514-4521.	5.1	10
11	KVOPO₄: A New High Capacity Multielectron Naâ€Ion Battery Cathode. Advanced Energy Materials, 2018, 8, 1800221.	19.5	50
12	Li₃Y(PS₄)₂ and Li₅PS₄Cl₂: New Lithium Superionic Conductors Predicted from Silver Thiophosphates using Efficiently Tiered Ab Initio Molecular Dynamics Simulations. Chemistry of Materials, 2017, 29, 2474-2484.	6.7	85
13	Comparison of the polymorphs of VOPO₄ as multi-electron cathodes for rechargeable alkali-ion batteries. Journal of Materials Chemistry A, 2017, 5, 17421-17431.	10.3	46
14	Effects of Transition-Metal Mixing on Na Ordering and Kinetics in Layered <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>P</mml:mi><mml:mn>2</mml:mn></mml:math> Oxides. Physical Review Applied, 2017, 7, .	3.8	34
15	Data-Driven First-Principles Methods for the Study and Design of Alkali Superionic Conductors. Chemistry of Materials, 2017, 29, 281-288.	6.7	190
16	Electronic Structure Descriptor for the Discovery of Narrow-Band Red-Emitting Phosphors. Chemistry of Materials, 2016, 28, 4024-4031.	6.7	78
17	All-electron self-consistent<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>G</mml:mi><mml:mi>W</mml:mi></mml:mrow></mm the Matsubara-time domain: Implementation and benchmarks of semiconductors and insulators. Physical Review B, 2016, 93, .	3.2	23
18	Elucidating Structureâ€“Compositionâ€“Property Relationships of the Î²-SiAlON:Eu²⁺ Phosphor. Chemistry of Materials, 2016, 28, 8622-8630.	6.7	50

#	Article	IF	Citations
19	Room-Temperature All-solid-state Rechargeable Sodium-ion Batteries with a Cl-doped Na3PS4 Superionic Conductor. Scientific Reports, 2016, 6, 33733.	3.3	205
20	Thermal Stability and Reactivity of Cathode Materials for Li-Ion Batteries. ACS Applied Materials & Interfaces, 2016, 8, 7013-7021.	8.0	93
21	Insights into the Performance Limits of the Li₇P₃S₁₁ Superionic Conductor: A Combined First-Principles and Experimental Study. ACS Applied Materials & Interfaces, 2016, 8, 7843-7853.	8.0	169
22	Elastic Properties of Alkali Superionic Conductor Electrolytes from First Principles Calculations. Journal of the Electrochemical Society, 2016, 163, A67-A74.	2.9	265
23	Electron transport in graphene/graphene side-contact junction by plane-wave multiple-scattering method. Physical Review B, 2015, 91, .	3.2	12
24	Role of Na⁺ Interstitials and Dopants in Enhancing the Na⁺ Conductivity of the Cubic Na₃PS₄ Superionic Conductor. Chemistry of Materials, 2015, 27, 8318-8325.	6.7	202
25	All-electron GW quasiparticle band structures of group 14 nitride compounds. Journal of Chemical Physics, 2014, 141, 044709.	3.0	17
26	Using light-switching molecules to modulate charge mobility in a quantum dot array. Physical Review B, 2014, 89, .	3.2	8
27	Charge Transport in a Quantum Dot Supercrystal. Journal of Physical Chemistry C, 2011, 115, 21409-21415.	3.1	73