Zhiao Yu

List of Publications by Year
in descending order

34 papers	4,383 citations	201674 27 h-index	395702 33 g-index
34 all docs	34 docs citations	34 times ranked	3045 citing authors

#	Article	IF	Citations
1	Liquid electrolyte: The nexus of practical lithium metal batteries. Joule, 2022, 6, 588-616.	24.0	191
2	Capturing the swelling of solid-electrolyte interphase in lithium metal batteries. Science, 2022, 375, 66-70.	12.6	183
3	Rational solvent molecule tuning for high-performance lithium metal battery electrolytes. Nature Energy, 2022, 7, 94-106.	39.5	336
4	Suspension electrolyte with modified Li+ solvation environment for lithium metal batteries. Nature Materials, 2022, 21, 445-454.	27.5	155
5	Reprocessable and Recyclable Polymer Network Electrolytes via Incorporation of Dynamic Covalent Bonds. Chemistry of Materials, 2022, 34, 2393-2399.	6.7	43
6	Scalable, Ultrathin, and Highâ€Temperatureâ€Resistant Solid Polymer Electrolytes for Energyâ€Dense Lithium Metal Batteries. Advanced Energy Materials, 2022, 12, .	19.5	132
7	High-brightness all-polymer stretchable LED with charge-trapping dilution. Nature, 2022, 603, 624-630.	27.8	170
8	Tuning Fluorination of Linear Carbonate for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2022, 169, 040555.	2.9	24
9	A Flexible Single-Ion Gel Electrolyte with a Multiscale Channel for the High-Performance Lithium Metal Batteries. , 2022, 4, 944-952.		5
10	A flexible and highly conductive quasi-solid single-ion polymer electrolyte for high performance Li-metal batteries. Journal of Power Sources, 2022, 537, 231478.	7.8	11
11	A Solutionâ€Processable Highâ€Modulus Crystalline Artificial Solid Electrolyte Interphase for Practical Lithium Metal Batteries. Advanced Energy Materials, 2022, 12, .	19.5	10
12	Electrical resistance of the current collector controls lithium morphology. Nature Communications, 2022, 13, .	12.8	20
13	Polymers in Lithiumâ€Ion and Lithium Metal Batteries. Advanced Energy Materials, 2021, 11, 2003239.	19.5	160
14	Efficient Lithium Metal Cycling over a Wide Range of Pressures from an Anion-Derived Solid-Electrolyte Interphase Framework. ACS Energy Letters, 2021, 6, 816-825.	17.4	46
15	Corrosion of lithium metal anodes during calendar ageing and its microscopic origins. Nature Energy, 2021, 6, 487-494.	39.5	124
16	A Stretchable and Highly Conductive Sulfonic Pendent Single-Ion Polymer Electrolyte Derived from Multifunctional Tri-Block Polyether. ACS Applied Polymer Materials, 2021, 3, 3254-3263.	4.4	11
17	Dualâ€Solvent Liâ€Ion Solvation Enables Highâ€Performance Liâ€Metal Batteries. Advanced Materials, 2021, 33, e2008619.	21.0	123
18	Potentiometric Measurement to Probe Solvation Energy and Its Correlation to Lithium Battery Cyclability. Journal of the American Chemical Society, 2021, 143, 10301-10308.	13.7	83

#	Article	IF	Citations
19	Monolithic optical microlithography of high-density elastic circuits. Science, 2021, 373, 88-94.	12.6	168
20	Influence of solution-state aggregation on conjugated polymer crystallization in thin films and microwire crystals. Giant, 2021, 7, 100064.	5.1	23
21	A molecular design approach towards elastic and multifunctional polymer electronics. Nature Communications, 2021, 12, 5701.	12.8	75
22	High Energy Density Shape Memory Polymers Using Strain-Induced Supramolecular Nanostructures. ACS Central Science, 2021, 7, 1657-1667.	11.3	43
23	Steric Effect Tuned Ion Solvation Enabling Stable Cycling of High-Voltage Lithium Metal Battery. Journal of the American Chemical Society, 2021, 143, 18703-18713.	13.7	205
24	Dynamic spatial progression of isolated lithium during battery operations. Nature, 2021, 600, 659-663.	27.8	111
25	Design Principles of Artificial Solid Electrolyte Interphases for Lithium-Metal Anodes. Cell Reports Physical Science, 2020, 1, 100119.	5.6	133
26	Multivalent Assembly of Flexible Polymer Chains into Supramolecular Nanofibers. Journal of the American Chemical Society, 2020, 142, 16814-16824.	13.7	33
27	Tuning the Mechanical Properties of a Polymer Semiconductor by Modulating Hydrogen Bonding Interactions. Chemistry of Materials, 2020, 32, 5700-5714.	6.7	87
28	Molecular design for electrolyte solvents enabling energy-dense and long-cycling lithium metal batteries. Nature Energy, 2020, 5, 526-533.	39.5	642
29	A New Class of Ionically Conducting Fluorinated Ether Electrolytes with High Electrochemical Stability. Journal of the American Chemical Society, 2020, 142, 7393-7403.	13.7	225
30	A Dynamic, Electrolyte-Blocking, and Single-Ion-Conductive Network for Stable Lithium-Metal Anodes. Joule, 2019, 3, 2761-2776.	24.0	176
31	Organic Semiconducting Alloys with Tunable Energy Levels. Journal of the American Chemical Society, 2019, 141, 6561-6568.	13.7	65
32	Decoupling of mechanical properties and ionic conductivity in supramolecular lithium ion conductors. Nature Communications, 2019, 10, 5384.	12.8	249
33	A Cofacially Stacked Electronâ€Deficient Small Molecule with a High Electron Mobility of over 10 cm² V^{â^'1} s^{â^'1} in Air. Advanced Materials, 2015, 27, 8051-8055.	21.0	97
34	Fine-Tuning of Crystal Packing and Charge Transport Properties of BDOPV Derivatives through Fluorine Substitution. Journal of the American Chemical Society, 2015, 137, 15947-15956.	13.7	224