

# Zhiao Yu

## List of Publications by Year in descending order

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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	Molecular design for electrolyte solvents enabling energy-dense and long-cycling lithium metal batteries. <i>Nature Energy</i> , 2020, 5, 526-533.	39.5	642
2	Rational solvent molecule tuning for high-performance lithium metal battery electrolytes. <i>Nature Energy</i> , 2022, 7, 94-106.	39.5	336
3	Decoupling of mechanical properties and ionic conductivity in supramolecular lithium ion conductors. <i>Nature Communications</i> , 2019, 10, 5384.	12.8	249
4	A New Class of Ionically Conducting Fluorinated Ether Electrolytes with High Electrochemical Stability. <i>Journal of the American Chemical Society</i> , 2020, 142, 7393-7403.	13.7	225
5	Fine-Tuning of Crystal Packing and Charge Transport Properties of BDOPV Derivatives through Fluorine Substitution. <i>Journal of the American Chemical Society</i> , 2015, 137, 15947-15956.	13.7	224
6	Steric Effect Tuned Ion Solvation Enabling Stable Cycling of High-Voltage Lithium Metal Battery. <i>Journal of the American Chemical Society</i> , 2021, 143, 18703-18713.	13.7	205
7	Liquid electrolyte: The nexus of practical lithium metal batteries. <i>Joule</i> , 2022, 6, 588-616.	24.0	191
8	Capturing the swelling of solid-electrolyte interphase in lithium metal batteries. <i>Science</i> , 2022, 375, 66-70.	12.6	183
9	A Dynamic, Electrolyte-Blocking, and Single-Ion-Conductive Network for Stable Lithium-Metal Anodes. <i>Joule</i> , 2019, 3, 2761-2776.	24.0	176
10	High-brightness all-polymer stretchable LED with charge-trapping dilution. <i>Nature</i> , 2022, 603, 624-630.	27.8	170
11	Monolithic optical microlithography of high-density elastic circuits. <i>Science</i> , 2021, 373, 88-94.	12.6	168
12	Polymers in Lithium-Ion and Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2003239.	19.5	160
13	Suspension electrolyte with modified Li <sup>+</sup> solvation environment for lithium metal batteries. <i>Nature Materials</i> , 2022, 21, 445-454.	27.5	155
14	Design Principles of Artificial Solid Electrolyte Interphases for Lithium-Metal Anodes. <i>Cell Reports Physical Science</i> , 2020, 1, 100119.	5.6	133
15	Scalable, Ultrathin, and High-Temperature-Resistant Solid Polymer Electrolytes for Energy-Dense Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	132
16	Corrosion of lithium metal anodes during calendar ageing and its microscopic origins. <i>Nature Energy</i> , 2021, 6, 487-494.	39.5	124
17	Dual-Solvent Li-Ion Solvation Enables High-Performance Li-Metal Batteries. <i>Advanced Materials</i> , 2021, 33, e2008619.	21.0	123
18	Dynamic spatial progression of isolated lithium during battery operations. <i>Nature</i> , 2021, 600, 659-663.	27.8	111

#	ARTICLE	IF	CITATIONS
19	A Cofacially Stacked Electron-Deficient Small Molecule with a High Electron Mobility of over $10 \text{ cm}^2 \text{ V}^{-1} \text{ s}^{-1}$ in Air. <i>Advanced Materials</i> , 2015, 27, 8051-8055.	21.0	97
20	Tuning the Mechanical Properties of a Polymer Semiconductor by Modulating Hydrogen Bonding Interactions. <i>Chemistry of Materials</i> , 2020, 32, 5700-5714.	6.7	87
21	Potentiometric Measurement to Probe Solvation Energy and Its Correlation to Lithium Battery Cyclability. <i>Journal of the American Chemical Society</i> , 2021, 143, 10301-10308.	13.7	83
22	A molecular design approach towards elastic and multifunctional polymer electronics. <i>Nature Communications</i> , 2021, 12, 5701.	12.8	75
23	Organic Semiconducting Alloys with Tunable Energy Levels. <i>Journal of the American Chemical Society</i> , 2019, 141, 6561-6568.	13.7	65
24	Efficient Lithium Metal Cycling over a Wide Range of Pressures from an Anion-Derived Solid-Electrolyte Interphase Framework. <i>ACS Energy Letters</i> , 2021, 6, 816-825.	17.4	46
25	High Energy Density Shape Memory Polymers Using Strain-Induced Supramolecular Nanostructures. <i>ACS Central Science</i> , 2021, 7, 1657-1667.	11.3	43
26	Reprocessable and Recyclable Polymer Network Electrolytes via Incorporation of Dynamic Covalent Bonds. <i>Chemistry of Materials</i> , 2022, 34, 2393-2399.	6.7	43
27	Multivalent Assembly of Flexible Polymer Chains into Supramolecular Nanofibers. <i>Journal of the American Chemical Society</i> , 2020, 142, 16814-16824.	13.7	33
28	Tuning Fluorination of Linear Carbonate for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2022, 169, 040555.	2.9	24
29	Influence of solution-state aggregation on conjugated polymer crystallization in thin films and microwire crystals. <i>Giant</i> , 2021, 7, 100064.	5.1	23
30	Electrical resistance of the current collector controls lithium morphology. <i>Nature Communications</i> , 2022, 13, .	12.8	20
31	A Stretchable and Highly Conductive Sulfonic Pendent Single-Ion Polymer Electrolyte Derived from Multifunctional Tri-Block Polyether. <i>ACS Applied Polymer Materials</i> , 2021, 3, 3254-3263.	4.4	11
32	A flexible and highly conductive quasi-solid single-ion polymer electrolyte for high performance Li-metal batteries. <i>Journal of Power Sources</i> , 2022, 537, 231478.	7.8	11
33	A Solution-Processable High-Modulus Crystalline Artificial Solid Electrolyte Interphase for Practical Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2022, 12, .	19.5	10
34	A Flexible Single-Ion Gel Electrolyte with a Multiscale Channel for the High-Performance Lithium Metal Batteries. , 2022, 4, 944-952.		5