Tianyu Lei

List of Publications by Citations

34 papers	2,933 citations	25 h-index	35 g-index
35 ext. papers	3,749 ext. citations	17.3 avg, IF	5.32 L-index

#	Paper	IF	Citations
34	Multi-Functional Layered WS2 Nanosheets for Enhancing the Performance of Lithium–Sulfur Batteries. *Advanced Energy Materials*, **2017**, 7, 1601843	21.8	395
33	Inhibiting Polysulfide Shuttling with a Graphene Composite Separator for Highly Robust Lithium-Sulfur Batteries. *Joule*, **2018**, 2, 2091-2104	27.8	226
32	Designing Safe Electrolyte Systems for a High-Stability Lithium–Sulfur Battery. *Advanced Energy Materials*, **2018**, 8, 1702348	21.8	210
31	A New Hydrophilic Binder Enabling Strongly Anchoring Polysulfides for High-Performance Sulfur Electrodes in Lithium-Sulfur Battery. *Advanced Energy Materials*, **2018**, 8, 1702889	21.8	194
30	Modulating Electronic Structures of Inorganic Nanomaterials for Efficient Electrocatalytic Water Splitting. *Angewandte Chemie - International Edition*, **2019**, 58, 4484-4502	16.4	194
29	Adsorption-Catalysis Design in the Lithium-Sulfur Battery. *Advanced Energy Materials*, **2020**, 10, 1903008	21.8	154
28	Atomic Interlamellar Ion Path in High Sulfur Content Lithium-Montmorillonite Host Enables High-Rate and Stable Lithium-Sulfur Battery. *Advanced Materials*, **2018**, 30, e1804084	24	151
27	Electronic and Optoelectronic Applications Based on 2D Novel Anisotropic Transition Metal Dichalcogenides. *Advanced Science*, **2017**, 4, 1700231	13.6	145
26	Strategies toward High-Loading Lithium–Sulfur Battery. *Advanced Energy Materials*, **2020**, 10, 2000082	21.8	140
25	TiO Feather Duster as Effective Polysulfides Restrictor for Enhanced Electrochemical Kinetics in Lithium-Sulfur Batteries. *Small*, **2017**, 13, 1701013	11	126
24	A New Member of Electrocatalysts Based on Nickel Metaphosphate Nanocrystals for Efficient Water Oxidation. *Advanced Materials*, **2018**, 30, 1705045	24	117
23	A Nonflammable and Thermotolerant Separator Suppresses Polysulfide Dissolution for Safe and Long-Cycle Lithium-Sulfur Batteries. *Advanced Energy Materials*, **2018**, 8, 1802441	21.8	97
22	Self-Powered, Flexible, and Solution-Processable Perovskite Photodetector Based on Low-Cost Carbon Cloth. *Small*, **2017**, 13, 1701042	11	94
21	An artificial hybrid interphase for an ultrahigh-rate and practical lithium metal anode. *Energy and Environmental Science*, **2021**, 14, 4115-4124	35.4	94
20	Lithiophilic montmorillonite serves as lithium ion reservoir to facilitate uniform lithium deposition. *Nature Communications*, **2019**, 10, 4973	17.4	86
19	Heterostructured NiS/ZnInS Realizing Toroid-like LiO Deposition in Lithium-Oxygen Batteries with Low-Donor-Number Solvents. *ACS Nano*, **2020**, 14, 3490-3499	16.7	64
18	Carbon Quantum Dots Modified Interfacial Interactions and Ion Conductivity for Enhanced High Current Density Performance in Lithium–Sulfur Batteries. *Advanced Energy Materials*, **2019**, 9, 1802955	21.8	64

17	Graphene quantum dots as the nucleation sites and interfacial regulator to suppress lithium dendrites for high-loading lithium-sulfur battery. *Nano Energy*, **2020**, 68, 104373	17.1	61
16	Optimizing Redox Reactions in Aprotic Lithium‐Sulfur Batteries. *Advanced Energy Materials*, **2020**, 10, 2002180	21.8	45
15	TiO 2 nanowire array as a polar absorber for high-performance lithium-sulfur batteries. *Electrochimica Acta*, **2018**, 264, 20-25	6.7	38
14	Self-Confined Growth of Ultrathin 2D Nonlayered Wide-Bandgap Semiconductor CuBr Flakes. *Advanced Materials*, **2019**, 31, e1903580	24	37
13	An Efficient Separator with Low Li-Ion Diffusion Energy Barrier Resolving Feeble Conductivity for Practical Lithium‐Sulfur Batteries. *Advanced Energy Materials*, **2019**, 9, 1901800	21.8	33
12	An Upgraded Lithium Ion Battery Based on a Polymeric Separator Incorporated with Anode Active Materials. *Advanced Energy Materials*, **2019**, 9, 1803627	21.8	31
11	Modulierung der elektronischen Strukturen anorganischer Nanomaterialien f□eine effiziente elektrokatalytische Wasserspaltung. *Angewandte Chemie*, **2019**, 131, 4532-4551	3.6	27
10	A Novel Polar Copolymer Design as a Multi-Functional Binder for Strong Affinity of Polysulfides in Lithium-Sulfur Batteries. *Nanoscale Research Letters*, **2017**, 12, 195	5	26
9	Genetic engineering of porous sulfur species with molecular target prevents host passivation in lithium sulfur batteries. *Energy Storage Materials*, **2020**, 26, 65-72	19.4	24
8	Ferroelectric polarization accelerates lithium-ion diffusion for dendrite-free and highly-practical lithium-metal batteries. *Nano Energy*, **2021**, 79, 105481	17.1	12
7	3D Printed Li‐S Batteries with In Situ Decorated Li2S/C Cathode: Interface Engineering Induced Loading-Insensitivity for Scaled Areal Performance. *Advanced Energy Materials*, **2021**, 11, 2100420	21.8	11
6	In Situ/Operando Raman Techniques in Lithium‐Sulfur Batteries. *Small Structures*,2100170	8.7	10
5	Strong intermolecular polarization to boost polysulfide conversion kinetics for high-performance lithium‐sulfur batteries. *Journal of Materials Chemistry A*, **2021**, 9, 9771-9779	13	8
4	Ferromagnetic-Antiferromagnetic Coupling by Distortion of Fe/Mn Oxygen Octahedrons in (BiFeO) (La Sr MnO) Superlattices. *Small*, **2017**, 13, 1700107	11	6
3	Eliminating anion depletion region and promoting Li+ solvation via anionphilic metal organic framework for dendrite-free lithium deposition. *Nano Energy*, **2022**, 92, 106708	17.1	5
2	Mapping Techniques for the Design of Lithium-Sulfur Batteries.. *Small*, **2022**, e2106657	11	3
1	Ion-Inserted Metal-Organic Frameworks Accelerate the Mass Transfer Kinetics in Lithium-Sulfur Batteries. *Small*, **2021**, 17, e2104367	11	3