Tianyu Lei

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/10891266/publications.pdf

Version: 2024-02-01

35 papers	4,658 citations	172207 29 h-index	360668 35 g-index
35 all docs	35 docs citations	35 times ranked	5441 citing authors

#	Article	IF	Citations
1	Multiâ€Functional Layered WS₂ Nanosheets for Enhancing the Performance of Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2017, 7, 1601843.	10.2	472
2	An artificial hybrid interphase for an ultrahigh-rate and practical lithium metal anode. Energy and Environmental Science, 2021, 14, 4115-4124.	15.6	376
3	Inhibiting Polysulfide Shuttling with a Graphene Composite Separator for Highly Robust Lithium-Sulfur Batteries. Joule, 2018, 2, 2091-2104.	11.7	345
4	Modulating Electronic Structures of Inorganic Nanomaterials for Efficient Electrocatalytic Water Splitting. Angewandte Chemie - International Edition, 2019, 58, 4484-4502.	7.2	340
5	Adsorptionâ€Catalysis Design in the Lithiumâ€Sulfur Battery. Advanced Energy Materials, 2020, 10, 1903008.	10.2	275
6	Strategies toward Highâ€Loading Lithiumâ€“Sulfur Battery. Advanced Energy Materials, 2020, 10, 2000082.	10.2	272
7	A New Hydrophilic Binder Enabling Strongly Anchoring Polysulfides for Highâ€Performance Sulfur Electrodes in Lithiumâ€Sulfur Battery. Advanced Energy Materials, 2018, 8, 1702889.	10.2	270
8	Designing Safe Electrolyte Systems for a Highâ€Stability Lithiumâ€“Sulfur Battery. Advanced Energy Materials, 2018, 8, 1702348.	10.2	266
9	Electronic and Optoelectronic Applications Based on 2D Novel Anisotropic Transition Metal Dichalcogenides. Advanced Science, 2017, 4, 1700231.	5.6	219
10	Atomic Interlamellar Ion Path in High Sulfur Content Lithiumâ€Montmorillonite Host Enables Highâ€Rate and Stable Lithiumâ€“Sulfur Battery. Advanced Materials, 2018, 30, e1804084.	11.1	201
11	A New Member of Electrocatalysts Based on Nickel Metaphosphate Nanocrystals for Efficient Water Oxidation. Advanced Materials, 2018, 30, 1705045.	11.1	149
12	TiO₂ Feather Duster as Effective Polysulfides Restrictor for Enhanced Electrochemical Kinetics in Lithiumâ€“Sulfur Batteries. Small, 2017, 13, 1701013.	5.2	147
13	Lithiophilic montmorillonite serves as lithium ion reservoir to facilitate uniform lithium deposition. Nature Communications, 2019, 10, 4973.	5.8	144
14	A Nonflammable and Thermotolerant Separator Suppresses Polysulfide Dissolution for Safe and Longâ€Cycle Lithiumâ€Sulfur Batteries. Advanced Energy Materials, 2018, 8, 1802441.	10.2	133
15	Self-Powered, Flexible, and Solution-Processable Perovskite Photodetector Based on Low-Cost Carbon Cloth. Small, 2017, 13, 1701042.	5.2	114
16	Heterostructured NiS₂/ZnIn₂S₄ Realizing Toroid-like Li₂O₂ Deposition in Lithiumâ€“Oxygen Batteries with Low-Donor-Number Solvents. ACS Nano, 2020, 14, 3490-3499.	7.3	113
17	Optimizing Redox Reactions in Aprotic Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2020, 10, 2002180.	10.2	112
18	Carbon Quantum Dotsâ€“Modified Interfacial Interactions and Ion Conductivity for Enhanced High Current Density Performance in Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2019, 9, 1802955.	10.2	102

#	Article	IF	Citations
19	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.	8.2	95
20	Selfâ€Confined Growth of Ultrathin 2D Nonlayered Wideâ€Bandgap Semiconductor CuBr Flakes. Advanced Materials, 2019, 31, e1903580.	11.1	61
21	An Efficient Separator with Low Liâ€Ion Diffusion Energy Barrier Resolving Feeble Conductivity for Practical Lithiumâ€“Sulfur Batteries. Advanced Energy Materials, 2019, 9, 1901800.	10.2	61
22	An Upgraded Lithium Ion Battery Based on a Polymeric Separator Incorporated with Anode Active Materials. Advanced Energy Materials, 2019, 9, 1803627.	10.2	53
23	TiO 2 nanowire array as a polar absorber for high-performance lithium-sulfur batteries. Electrochimica Acta, 2018, 264, 20-25.	2.6	49
24	Inâ€‰Situ/Operando Raman Techniques in Lithiumâ€“Sulfur Batteries. Small Structures, 2022, 3, .	6.9	44
25	3D Printed Liâ€“S Batteries with In Situ Decorated Li₂S/C Cathode: Interface Engineering Induced Loadingâ€Insensitivity for Scaled Areal Performance. Advanced Energy Materials, 2021, 11, 2100420.	10.2	37
26	Modulierung der elektronischen Strukturen anorganischer Nanomaterialien fÃ¼r eine effiziente elektrokatalytische Wasserspaltung. Angewandte Chemie, 2019, 131, 4532-4551.	1.6	34
27	Ferroelectric polarization accelerates lithium-ion diffusion for dendrite-free and highly-practical lithium-metal batteries. Nano Energy, 2021, 79, 105481.	8.2	32
28	Genetic engineering of porous sulfur species with molecular target prevents host passivation in lithium sulfur batteries. Energy Storage Materials, 2020, 26, 65-72.	9.5	31
29	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.	3.1	30
30	Strong intermolecular polarization to boost polysulfide conversion kinetics for high-performance lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2021, 9, 9771-9779.	5.2	21
31	Eliminating anion depletion region and promoting Li+ solvation via anionphilic metal organic framework for dendrite-free lithium deposition. Nano Energy, 2022, 92, 106708.	8.2	14
32	Ionâ€Inserted Metalâ€“Organic Frameworks Accelerate the Mass Transfer Kinetics in Lithiumâ€“Sulfur Batteries. Small, 2021, 17, e2104367.	5.2	13
33	Mapping Techniques for the Design of Lithiumâ€Sulfur Batteries. Small, 2022, 18, e2106657.	5.2	13
34	On-chip high-energy interdigital micro-supercapacitors with 3D nanotubular array electrodes. Journal of Materials Chemistry A, 2022, 10, 14051-14059.	5.2	13
35	Ferromagneticâ€“Antiferromagnetic Coupling by Distortion of Fe/Mn Oxygen Octahedrons in (BiFeO₃)_m(La_{0.7}Sr_{0.3}MnO₃)_n Superlattices. Small, 2017, 13, 1700107.	5.2	7