Kai Zhang

List of Publications by Year
in descending order

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50 papers	4,778 citations	172207 29 h-index	197535 49 g-index
50 all docs	50 docs citations	50 times ranked	6827 citing authors

#	Article	IF	Citations
1	Nanostructured Mn-based oxides for electrochemical energy storage and conversion. Chemical Society Reviews, 2015, 44, 699-728.	18.7	740
2	MoS₂ Nanoflowers with Expanded Interlayers as Highâ€Performance Anodes for Sodiumâ€Ion Batteries. Angewandte Chemie - International Edition, 2014, 53, 12794-12798.	7.2	670
3	Pyrite FeS₂for high-rate and long-life rechargeable sodium batteries. Energy and Environmental Science, 2015, 8, 1309-1316.	15.6	628
4	Al2O3-coated porous separator for enhanced electrochemical performance of lithium sulfur batteries. Electrochimica Acta, 2014, 129, 55-61.	2.6	387
5	MoS₂ Nanoflowers with Expanded Interlayers as Highâ€Performance Anodes for Sodiumâ€Ion Batteries. Angewandte Chemie, 2014, 126, 13008-13012.	1.6	310
6	Tailoring Anisotropic Li-Ion Transport Tunnels on Orthogonally Arranged Li-Rich Layered Oxide Nanoplates Toward High-Performance Li-Ion Batteries. Nano Letters, 2017, 17, 1670-1677.	4.5	128
7	Bismuth Nanoparticles Embedded in Carbon Spheres as Anode Materials for Sodium/Lithiumâ€Ion Batteries. Chemistry - A European Journal, 2016, 22, 2333-2338.	1.7	123
8	Preparation of a macroscopic, robust carbon-fiber monolith from filamentous fungi and its application in Liâ€“S batteries. Green Chemistry, 2014, 16, 3926.	4.6	115
9	Nickel foam as interlayer to improve the performance of lithiumâ€“sulfur battery. Journal of Solid State Electrochemistry, 2014, 18, 1025-1029.	1.2	111
10	Improved cyclability of lithiumâ€“sulfur battery cathode using encapsulated sulfur in hollow carbon nanofiber@nitrogen-doped porous carbon coreâ€“shell composite. Carbon, 2014, 78, 1-9.	5.4	108
11	Few-layered MoS₂/C with expanding d-spacing as a high-performance anode for sodium-ion batteries. Nanoscale, 2017, 9, 12189-12195.	2.8	100
12	Mesoporous carbon from biomass: one-pot synthesis and application for Liâ€“S batteries. Journal of Materials Chemistry A, 2014, 2, 13916.	5.2	95
13	A simple synthesis of hollow carbon nanofiber-sulfur composite via mixed-solvent process for lithiumâ€“sulfur batteries. Journal of Power Sources, 2014, 256, 137-144.	4.0	88
14	High performance lithium sulfur batteries with a cassava-derived carbon sheet as a polysulfides inhibitor. New Journal of Chemistry, 2014, 38, 4549-4554.	1.4	82
15	Pomegranate-like microclusters organized by ultrafine Co nanoparticles@nitrogen-doped carbon subunits as sulfur hosts for long-life lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2018, 6, 14178-14187.	5.2	78
16	Hierarchically porous carbon derived from banana peel for lithium sulfur battery with high areal and gravimetric sulfur loading. Journal of Power Sources, 2017, 362, 160-167.	4.0	75
17	Flowerâ€like MoSe₂/C Composite with Expanded (0â€‰0â€‰2) Planes of Fewâ€layer MoSe₂ as the Anode for Highâ€Performance Sodiumâ€Ion Batteries. Chemistry - A European Journal, 2017, 23, 14004-14010.	1.7	74
18	Synergistically enhanced activity of graphene quantum dots/graphene hydrogel composites: a novel all-carbon hybrid electrocatalyst for metal/air batteries. Nanoscale, 2016, 8, 11398-11402.	2.8	59

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19	From filter paper to carbon paper and toward Liâ€“S battery interlayer. Materials Letters, 2014, 121, 198-201.	1.3	53
20	N-doped porous carbon derived from biomass as an advanced electrocatalyst for aqueous aluminium/air battery. International Journal of Hydrogen Energy, 2015, 40, 16230-16237.	3.8	49
21	Application of Partially Fluorinated Ether for Improving Performance of Lithium/Sulfur Batteries. Journal of the Electrochemical Society, 2015, 162, A1460-A1465.	1.3	46
22	Mesoporous MoSe2/C composite as anode material for sodium/lithium ion batteries. Journal of Electroanalytical Chemistry, 2018, 823, 67-72.	1.9	46
23	High areal capacity cathode and electrolyte reservoir render practical Li-S batteries. Nano Energy, 2017, 38, 137-146.	8.2	42
24	Lithium/sulfur batteries with mixed liquid electrolytes based on ethyl 1,1,2,2-tetrafluoroethyl ether. Electrochimica Acta, 2015, 161, 55-62.	2.6	39
25	Micro-nano structure composite cathode material with high sulfur loading for advanced lithiumâ€“sulfur batteries. Electrochimica Acta, 2015, 152, 53-60.	2.6	39
26	Fe/Fe₃C@graphitic carbon shell embedded in carbon nanotubes derived from Prussian blue as cathodes for Liâ€“O₂ batteries. Materials Chemistry Frontiers, 2018, 2, 376-384.	3.2	39
27	A Rational Balance Design of Hybrid Electrolyte Based on Ionic Liquid and Fluorinated Ether in Lithium Sulfur Batteries. Journal of the Electrochemical Society, 2019, 166, A2453-A2458.	1.3	34
28	A hybrid ionic liquid-based electrolyte for high-performance lithiumâ€“sulfur batteries. New Journal of Chemistry, 2020, 44, 361-368.	1.4	34
29	Solvate ionic liquid electrolyte with 1,1,2,2-tetrafluoroethyl 2,2,2-trifluoroethyl ether as a support solvent for advanced lithiumâ€“sulfur batteries. RSC Advances, 2016, 6, 18186-18190.	1.7	32
30	A binary copper-nickel hierarchical structure templated by metal-organic frameworks for efficient hydrogen evolution reaction. International Journal of Hydrogen Energy, 2019, 44, 2841-2847.	3.8	30
31	ZrO(NO3)2 as a functional additive to suppress the diffusion of polysulfides in lithium - Sulfur batteries. Journal of Power Sources, 2019, 442, 227232.	4.0	29
32	Preparation of double-shell Co9S8/Fe3O4 embedded in S/N co-decorated hollow carbon nanoellipsoid derived from Bi-Metal organic frameworks for oxygen evolution reaction. Journal of Power Sources, 2018, 391, 59-66.	4.0	27
33	Improvement on electrochemical performance by electrodeposition of polyaniline nanowires at the top end of sulfur electrode. Applied Surface Science, 2013, 285, 900-906.	3.1	25
34	Molecular-level anchoring of polymer cathodes on carbon nanotubes towards rapid-rate and long-cycle sodium-ion storage. Materials Chemistry Frontiers, 2018, 2, 1805-1810.	3.2	24
35	Multifunctional porous VN nanowires interlayer as polysulfides barrier for high performance lithium sulfur batteries. Journal of Electroanalytical Chemistry, 2019, 832, 475-479.	1.9	23
36	Improved performance of sulfur cathode by an easy and scale-up coating strategy. Journal of Power Sources, 2015, 297, 265-270.	4.0	21

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37	Magnetron-sputtering MoS2 on carbon paper and its application as interlayer for high-performance lithium sulfur batteries. Journal of Electroanalytical Chemistry, 2018, 823, 537-544.	1.9	21
38	Mesoporous Coâ€“Nâ€“C composite as a sulfur host for high-capacity and long-life lithiumâ€“sulfur batteries. Journal of Materials Science, 2018, 53, 13143-13155.	1.7	20
39	Benzoselenol as an organic electrolyte additive in Li-S battery. Nano Research, 2023, 16, 3814-3822.	5.8	20
40	The enhanced performance of lithium sulfur battery with ionic liquid-based electrolyte mixed with fluorinated ether. Ionics, 2019, 25, 2685-2691.	1.2	18
41	A multifunctional gel coating design for simultaneous interface amelioration, polysulfide adsorption and redox regulation in lithium-sulfur batteries. Applied Surface Science, 2020, 533, 147490.	3.1	18
42	Featuring surface sodium storage properties of confined MoS2/bacterial cellulose-derived carbon nanofibers anode. Applied Surface Science, 2020, 530, 147261.	3.1	13
43	A new insight into capacity fading of sulfurized polyacrylonitrile composite in carbonate electrolyte. Journal of Electroanalytical Chemistry, 2021, 882, 114964.	1.9	13
44	Synthesis of spherical porous carbon by spray pyrolysis and its application in Li-S batteries. Journal of Solid State Electrochemistry, 2013, 17, 3169-3175.	1.2	12
45	MoSe2 nanosheets embedded in mesoporous carbon as anode materials for sodium ion batteries. Ionics, 2019, 25, 3143-3152.	1.2	10
46	Atomically ordered and epitaxially grown surface structure in core-shell NCA/NiAl2O4 enabling high voltage cyclic stability for cathode application. Electrochimica Acta, 2019, 300, 437-444.	2.6	10
47	A LiAlO₂/nitrogen-doped hollow carbon spheres (NdHCSs) modified separator for advanced lithiumâ€“sulfur batteries. RSC Advances, 2018, 8, 1632-1637.	1.7	9
48	Metal coordination enhanced Niâ€“Co@N-doped porous carbon coreâ€“shell microsphere bi-functional electrocatalyst and its application in rechargeable zinc/air batteries. RSC Advances, 2016, 6, 83386-83392.	1.7	8
49	Dispersed iron carbide nanoparticles confined in nitrogen and oxygen co-doped porous carbon framework as efficient electrocatalysts for zinc/air batteries. Journal of Electroanalytical Chemistry, 2020, 873, 114369.	1.9	3
50	Co nanoparticles encapsulated in nitrogen-doped carbon frameworks as an efficient electrocatalyst for oxygen evolution reaction. Ionics, 0, , 1.	1.2	0