Huilin Pan

List of Publications by Year
in descending order

68 papers	25,973 citations	36203 51 h-index	102304 66 g-index
69 all docs	69 docs citations	69 times ranked	17722 citing authors

#	Article	IF	Citations
1	The Quest for Stable Potassiumâ€Ion Battery Chemistry. Advanced Materials, 2022, 34, e2106876.	11.1	41
2	Adjusting the local solvation structures and hydrogen bonding networks for stable aqueous batteries with reduced cost. Journal of Energy Chemistry, 2022, 68, 411-419.	7.1	6
3	Origin of Air-Stability for Transition Metal Oxide Cathodes in Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 5338-5345.	4.0	32
4	Advanced Buffering Acidic Aqueous Electrolytes for Ultraâ€Long Life Aqueous Zincâ€Ion Batteries. Small, 2022, 18, e2200742.	5.2	49
5	Towards the practical application of Zn metal anodes for mild aqueous rechargeable Zn batteries. Chemical Science, 2022, 13, 8243-8252.	3.7	63
6	Low-solvation electrolytes for high-voltage sodium-ion batteries. Nature Energy, 2022, 7, 718-725.	19.8	137
7	Effects of waterâ€based binders on electrochemical performance of manganese dioxide cathode in mild aqueous zinc batteries. , 2021, 3, 473-481.		44
8	Cathodes for Aqueous Znâ€Ion Batteries: Materials, Mechanisms, and Kinetics. Chemistry - A European Journal, 2021, 27, 830-860.	1.7	84
9	Value personal growth. Nature Energy, 2021, 6, 4-4.	19.8	0
10	Surface/Interface Structure and Chemistry of Lithiumâ€“Sulfur Batteries: From Density Functional Theory Calculationsâ€™ Perspective. Advanced Energy and Sustainability Research, 2021, 2, 2100007.	2.8	27
11	Manipulating Zn anode reactions through salt anion involving hydrogen bonding network in aqueous electrolytes with PEO additive. Nano Energy, 2021, 82, 105739.	8.2	115
12	Engineering Solid Electrolyte Interface at Nanoâ€Scale for Highâ€Performance Hard Carbon in Sodiumâ€Ion Batteries. Advanced Functional Materials, 2021, 31, 2100278.	7.8	90
13	Tailoring the Stability and Kinetics of Zn Anodes through Trace Organic Polymer Additives in Dilute Aqueous Electrolyte. ACS Energy Letters, 2021, 6, 3236-3243.	8.8	124
14	Rechargeable Mild Aqueous Zinc Batteries for Grid Storage. Advanced Energy and Sustainability Research, 2020, 1, 2000026.	2.8	10
15	Reaction heterogeneity in practical high-energy lithiumâ€“sulfur pouch cells. Energy and Environmental Science, 2020, 13, 3620-3632.	15.6	127
16	Highly Reversible Sodium Ion Batteries Enabled by Stable Electrolyte-Electrode Interphases. ACS Energy Letters, 2020, 5, 3212-3220.	8.8	97
17	Stabilizing Zinc Anode Reactions by Polyethylene Oxide Polymer in Mild Aqueous Electrolytes. Advanced Functional Materials, 2020, 30, 2003932.	7.8	210
18	A lithium-sulfur battery with a solution-mediated pathway operating under lean electrolyte conditions. Nano Energy, 2020, 76, 105041.	8.2	25

#	Article	IF	Citations
19	Excellent Cycling Stability of Sodium Anode Enabled by a Stable Solid Electrolyte Interphase Formed in Etherâ€Based Electrolytes. Advanced Functional Materials, 2020, 30, 2001151.	7.8	60
20	Enabling High-Voltage Lithium-Metal Batteries under Practical Conditions. Joule, 2019, 3, 1662-1676.	11.7	598
21	Monitoring the Stateâ€ofâ€Charge of a Vanadium Redox Flow Battery with the Acoustic Attenuation Coefficient: An In Operando Noninvasive Method. Small Methods, 2019, 3, 1900494.	4.6	14
22	Monolithic solidâ€“electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. Nature Energy, 2019, 4, 796-805.	19.8	621
23	Electrolyte Effect on the Electrochemical Performance of Mild Aqueous Zinc-Electrolytic Manganese Dioxide Batteries. ACS Applied Materials & Interfaces, 2019, 11, 37524-37530.	4.0	47
24	Joint Charge Storage for Highâ€Rate Aqueous Zincâ€“Manganese Dioxide Batteries. Advanced Materials, 2019, 31, e1900567.	11.1	299
25	High-energy lithium metal pouch cells with limited anode swelling and long stable cycles. Nature Energy, 2019, 4, 551-559.	19.8	492
26	Critical Parameters for Evaluating Coin Cells and Pouch Cells of Rechargeable Li-Metal Batteries. Joule, 2019, 3, 1094-1105.	11.7	358
27	Bridging the academic and industrial metrics for next-generation practical batteries. Nature Nanotechnology, 2019, 14, 200-207.	15.6	420
28	Rechargeable Lithium Metal Batteries. , 2019, , 147-203.		0
29	Addressing Passivation in Lithiumâ€“Sulfur Battery Under Lean Electrolyte Condition. Advanced Functional Materials, 2018, 28, 1707234.	7.8	143
30	Lowâ€Defect and Lowâ€Porosity Hard Carbon with High Coulombic Efficiency and High Capacity for Practical Sodium Ion Battery Anode. Advanced Energy Materials, 2018, 8, 1703238.	10.2	414
31	Highâ€Voltage Lithiumâ€Metal Batteries Enabled by Localized Highâ€Concentration Electrolytes. Advanced Materials, 2018, 30, e1706102.	11.1	761
32	Detrimental Effects of Chemical Crossover from the Lithium Anode to Cathode in Rechargeable Lithium Metal Batteries. ACS Energy Letters, 2018, 3, 2921-2930.	8.8	89
33	Lean Electrolyte Batteries: Addressing Passivation in Lithiumâ€“Sulfur Battery Under Lean Electrolyte Condition (Adv. Funct. Mater. 38/2018). Advanced Functional Materials, 2018, 28, 1870275.	7.8	5
34	Non-flammable electrolytes with high salt-to-solvent ratios for Li-ion and Li-metal batteries. Nature Energy, 2018, 3, 674-681.	19.8	557
35	Tailored Reaction Route by Micropore Confinement for Liâ€“S Batteries Operating under Lean Electrolyte Conditions. Advanced Energy Materials, 2018, 8, 1800590.	10.2	55
36	Manipulating Adsorptionâ€“Insertion Mechanisms in Nanostructured Carbon Materials for Highâ€Efficiency Sodium Ion Storage. Advanced Energy Materials, 2017, 7, 1700403.	10.2	662

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37	Improving Lithiumâ€“Sulfur Battery Performance under Lean Electrolyte through Nanoscale Confinement in Soft Swellable Gels. Nano Letters, 2017, 17, 3061-3067.	4.5	122
38	Multinuclear NMR Study of the Solid Electrolyte Interface Formed in Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2017, 9, 14741-14748.	4.0	47
39	Elucidating the Solvation Structure and Dynamics of Lithium Polysulfides Resulting from Competitive Salt and Solvent Interactions. Chemistry of Materials, 2017, 29, 3375-3379.	3.2	117
40	Ammonium Additives to Dissolve Lithium Sulfide through Hydrogen Binding for High-Energy Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2017, 9, 4290-4295.	4.0	74
41	Non-encapsulation approach for high-performance Liâ€“S batteries through controlled nucleation and growth. Nature Energy, 2017, 2, 813-820.	19.8	326
42	Effects of Anion Mobility on Electrochemical Behaviors of Lithiumâ€“Sulfur Batteries. Chemistry of Materials, 2017, 29, 9023-9029.	3.2	35
43	Restricting the Solubility of Polysulfides in Liâ€•S Batteries Via Electrolyte Salt Selection. Advanced Energy Materials, 2016, 6, 1600160.	10.2	66
44	Reversible aqueous zinc/manganese oxide energy storage from conversion reactions. Nature Energy, 2016, 1, .	19.8	2,186
45	Tunable Oxygen Functional Groups as Electrocatalysts on Graphite Felt Surfaces for Allâ€•Vanadium Flow Batteries. ChemSusChem, 2016, 9, 1455-1461.	3.6	66
46	Hard carbon nanoparticles as high-capacity, high-stability anodic materials for Na-ion batteries. Nano Energy, 2016, 19, 279-288.	8.2	341
47	Alkaliâ€•Ion Storage Behaviour in Spinel Lithium Titanate Electrodes. ChemElectroChem, 2015, 2, 1678-1681.	1.7	5
48	On the Way Toward Understanding Solution Chemistry of Lithium Polysulfides for High Energy Liâ€“S Redox Flow Batteries. Advanced Energy Materials, 2015, 5, 1500113.	10.2	142
49	Following the Transient Reactions in Lithiumâ€“Sulfur Batteries Using an In Situ Nuclear Magnetic Resonance Technique. Nano Letters, 2015, 15, 3309-3316.	4.5	107
50	Direct Observation of the Redistribution of Sulfur and Polysufides in Liâ€“S Batteries During the First Cycle by In Situ Xâ€•Ray Fluorescence Microscopy. Advanced Energy Materials, 2015, 5, 1500072.	10.2	84
51	High Energy Density Lithiumâ€“Sulfur Batteries: Challenges of Thick Sulfur Cathodes. Advanced Energy Materials, 2015, 5, 1402290.	10.2	483
52	Electrospun Na3V2(PO4)3/C nanofibers as stable cathode materials for sodium-ion batteries. Nanoscale, 2014, 6, 5081.	2.8	266
53	Lewis Acidâ€“Base Interactions between Polysulfides and Metal Organic Framework in Lithium Sulfur Batteries. Nano Letters, 2014, 14, 2345-2352.	4.5	623
54	Materials Science and Materials Chemistry for Large Scale Electrochemical Energy Storage: From Transportation to Electrical Grid. Advanced Functional Materials, 2013, 23, 929-946.	7.8	590

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55	Room-temperature stationary sodium-ion batteries for large-scale electric energy storage. Energy and Environmental Science, 2013, 6, 2338.	15.6	2,799
56	A Size-Dependent Sodium Storage Mechanism in Li₄Ti₅O₁₂ Investigated by a Novel Characterization Technique Combining in Situ X-ray Diffraction and Chemical Sodiation. Nano Letters, 2013, 13, 4721-4727.	4.5	212
57	Direct atomic-scale confirmation of three-phase storage mechanism in Li4Ti5O12 anodes for room-temperature sodium-ion batteries. Nature Communications, 2013, 4, 1870.	5.8	628
58	Sodium Storage and Transport Properties in Layered Na₂Ti₃O₇ for Roomâ€Temperature Sodiumâ€Ion Batteries. Advanced Energy Materials, 2013, 3, 1186-1194.	10.2	456
59	Controlled Nucleation and Growth Process of Li₂S₂/Li₂S in Lithium-Sulfur Batteries. Journal of the Electrochemical Society, 2013, 160, A1992-A1996.	1.3	89
60	How to Obtain Reproducible Results for Lithium Sulfur Batteries?. Journal of the Electrochemical Society, 2013, 160, A2288-A2292.	1.3	149
61	Sodium Ion Insertion in Hollow Carbon Nanowires for Battery Applications. Nano Letters, 2012, 12, 3783-3787.	4.5	1,552
62	High capacity, reversible alloying reactions in SnSb/C nanocomposites for Na-ion battery applications. Chemical Communications, 2012, 48, 3321.	2.2	566
63	Improved Liâ€Storage Performance of Li₄Ti₅O₁₂ Coated with Cï£¿N Compounds Derived from Pyrolysis of Urea through a Lowâ€Temperature Approach. ChemSusChem, 2012, 5, 526-529.	3.6	52
64	Carbon coated Na3V2(PO4)3 as novel electrode material for sodium ion batteries. Electrochemistry Communications, 2012, 14, 86-89.	2.3	693
65	A Soft Approach to Encapsulate Sulfur: Polyaniline Nanotubes for Lithiumâ€Sulfur Batteries with Long Cycle Life. Advanced Materials, 2012, 24, 1176-1181.	11.1	959
66	Sandwich-type functionalized graphene sheet-sulfur nanocomposite for rechargeable lithium batteries. Physical Chemistry Chemical Physics, 2011, 13, 7660.	1.3	347
67	Electrochemical Energy Storage for Green Grid. Chemical Reviews, 2011, 111, 3577-3613.	23.0	4,276
68	Reversible Sodium Ion Insertion in Single Crystalline Manganese Oxide Nanowires with Long Cycle Life. Advanced Materials, 2011, 23, 3155-3160.	11.1	638