Huilin Pan

List of Publications by Citations

65 papers	19,673 citations	43 h-index	69 g-index
69 ext. papers	22,648 ext. citations	20.9 avg, IF	6.91 L-index

#	Paper	IF	Citations
65	Electrochemical energy storage for green grid. *Chemical Reviews*, **2011**, 111, 3577-613	68.1	3471
64	Room-temperature stationary sodium-ion batteries for large-scale electric energy storage. *Energy and Environmental Science*, **2013**, 6, 2338	35.4	2419
63	Reversible aqueous zinc/manganese oxide energy storage from conversion reactions. *Nature Energy*, **2016**, 1,	62.3	1461
62	Sodium ion insertion in hollow carbon nanowires for battery applications. *Nano Letters*, **2012**, 12, 3783-7	11.5	1322
61	A soft approach to encapsulate sulfur: polyaniline nanotubes for lithium-sulfur batteries with long cycle life. *Advanced Materials*, **2012**, 24, 1176-81	24	881
60	Carbon coated Na3V2(PO4)3 as novel electrode material for sodium ion batteries. *Electrochemistry Communications*, **2012**, 14, 86-89	5.1	596
59	Reversible sodium ion insertion in single crystalline manganese oxide nanowires with long cycle life. *Advanced Materials*, **2011**, 23, 3155-60	24	581
58	Direct atomic-scale confirmation of three-phase storage mechanism in Li$_4$Ti$_5$O$_{12}$ anodes for room-temperature sodium-ion batteries. *Nature Communications*, **2013**, 4, 1870	17.4	577
57	High capacity, reversible alloying reactions in SnSb/C nanocomposites for Na-ion battery applications. *Chemical Communications*, **2012**, 48, 3321-3	5.8	538
56	Lewis acid-base interactions between polysulfides and metal organic framework in lithium sulfur batteries. *Nano Letters*, **2014**, 14, 2345-52	11.5	529
55	Materials Science and Materials Chemistry for Large Scale Electrochemical Energy Storage: From Transportation to Electrical Grid. *Advanced Functional Materials*, **2013**, 23, 929-946	15.6	516
54	Manipulating Adsorption–Insertion Mechanisms in Nanostructured Carbon Materials for High-Efficiency Sodium Ion Storage. *Advanced Energy Materials*, **2017**, 7, 1700403	21.8	486
53	High-Voltage Lithium-Metal Batteries Enabled by Localized High-Concentration Electrolytes. *Advanced Materials*, **2018**, 30, e1706102	24	452
52	High Energy Density Lithium–Sulfur Batteries: Challenges of Thick Sulfur Cathodes. *Advanced Energy Materials*, **2015**, 5, 1402290	21.8	424
51	Sodium Storage and Transport Properties in Layered Na2Ti3O7 for Room-Temperature Sodium-Ion Batteries. *Advanced Energy Materials*, **2013**, 3, 1186-1194	21.8	401
50	Non-flammable electrolytes with high salt-to-solvent ratios for Li-ion and Li-metal batteries. *Nature Energy*, **2018**, 3, 674-681	62.3	357
49	Monolithic solid–electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. *Nature Energy*, **2019**, 4, 796-805	62.3	325

48	Sandwich-type functionalized graphene sheet-sulfur nanocomposite for rechargeable lithium batteries. *Physical Chemistry Chemical Physics*, **2011**, 13, 7660-5	3.6	324
47	Hard carbon nanoparticles as high-capacity, high-stability anodic materials for Na-ion batteries. *Nano Energy*, **2016**, 19, 279-288	17.1	289
46	High-energy lithium metal pouch cells with limited anode swelling and long stable cycles. *Nature Energy*, **2019**, 4, 551-559	62.3	283
45	Enabling High-Voltage Lithium-Metal Batteries under Practical Conditions. *Joule*, **2019**, 3, 1662-1676	27.8	272
44	Low-Defect and Low-Porosity Hard Carbon with High Coulombic Efficiency and High Capacity for Practical Sodium Ion Battery Anode. *Advanced Energy Materials*, **2018**, 8, 1703238	21.8	262
43	Non-encapsulation approach for high-performance Li–S batteries through controlled nucleation and growth. *Nature Energy*, **2017**, 2, 813-820	62.3	256
42	Bridging the academic and industrial metrics for next-generation practical batteries. *Nature Nanotechnology*, **2019**, 14, 200-207	28.7	255
41	Electrospun Na3V2(PO4)3/C nanofibers as stable cathode materials for sodium-ion batteries. *Nanoscale*, **2014**, 6, 5081-6	7.7	235
40	Critical Parameters for Evaluating Coin Cells and Pouch Cells of Rechargeable Li-Metal Batteries. *Joule*, **2019**, 3, 1094-1105	27.8	219
39	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, 4721-7	11.5	195
38	Joint Charge Storage for High-Rate Aqueous Zinc-Manganese Dioxide Batteries. *Advanced Materials* , **2019**, 31, e1900567	24	163
37	How to Obtain Reproducible Results for Lithium Sulfur Batteries?. *Journal of the Electrochemical Society*, **2013**, 160, A2288-A2292	3.9	136
36	Addressing Passivation in Lithium–Sulfur Battery Under Lean Electrolyte Condition. *Advanced Functional Materials*, **2018**, 28, 1707234	15.6	111
35	On the Way Toward Understanding Solution Chemistry of Lithium Polysulfides for High Energy Li–S Redox Flow Batteries. *Advanced Energy Materials*, **2015**, 5, 1500113	21.8	103
34	Improving Lithium-Sulfur Battery Performance under Lean Electrolyte through Nanoscale Confinement in Soft Swellable Gels. *Nano Letters*, **2017**, 17, 3061-3067	11.5	99
33	Following the transient reactions in lithium-sulfur batteries using an in situ nuclear magnetic resonance technique. *Nano Letters*, **2015**, 15, 3309-16	11.5	88
32	Controlled Nucleation and Growth Process of Li2S2/Li2S in Lithium-Sulfur Batteries. *Journal of the Electrochemical Society*, **2013**, 160, A1992-A1996	3.9	82
31	Elucidating the Solvation Structure and Dynamics of Lithium Polysulfides Resulting from Competitive Salt and Solvent Interactions. *Chemistry of Materials*, **2017**, 29, 3375-3379	9.6	78

30	Stabilizing Zinc Anode Reactions by Polyethylene Oxide Polymer in Mild Aqueous Electrolytes. *Advanced Functional Materials*, **2020**, 30, 2003932	15.6	78
29	Direct Observation of the Redistribution of Sulfur and Polysufides in Li-S Batteries During the First Cycle by In Situ X-Ray Fluorescence Microscopy. *Advanced Energy Materials*, **2015**, 5, 1500072	21.8	74
28	Reaction heterogeneity in practical high-energy lithium–sulfur pouch cells. *Energy and Environmental Science*, **2020**, 13, 3620-3632	35.4	59
27	Restricting the Solubility of Polysulfides in Li-S Batteries Via Electrolyte Salt Selection. *Advanced Energy Materials*, **2016**, 6, 1600160	21.8	57
26	Tunable Oxygen Functional Groups as Electrocatalysts on Graphite Felt Surfaces for All-Vanadium Flow Batteries. *ChemSusChem*, **2016**, 9, 1455-61	8.3	52
25	Ammonium Additives to Dissolve Lithium Sulfide through Hydrogen Binding for High-Energy Lithium-Sulfur Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 4290-4295	9.5	51
24	Detrimental Effects of Chemical Crossover from the Lithium Anode to Cathode in Rechargeable Lithium Metal Batteries. *ACS Energy Letters*, **2018**, 3, 2921-2930	20.1	51
23	Improved Li-storage performance of Li4Ti5O12 coated with C-N compounds derived from pyrolysis of urea through a low-temperature approach. *ChemSusChem*, **2012**, 5, 526-9	8.3	50
22	Tailored Reaction Route by Micropore Confinement for Li-S Batteries Operating under Lean Electrolyte Conditions. *Advanced Energy Materials*, **2018**, 8, 1800590	21.8	42
21	Highly Reversible Sodium Ion Batteries Enabled by Stable Electrolyte-Electrode Interphases. *ACS Energy Letters*, **2020**, 5, 3212-3220	20.1	40
20	Manipulating Zn anode reactions through salt anion involving hydrogen bonding network in aqueous electrolytes with PEO additive. *Nano Energy*, **2021**, 82, 105739	17.1	40
19	Multinuclear NMR Study of the Solid Electrolyte Interface Formed in Lithium Metal Batteries. *ACS Applied Materials & Interfaces*, **2017**, 9, 14741-14748	9.5	36
18	Cathodes for Aqueous Zn-Ion Batteries: Materials, Mechanisms, and Kinetics. *Chemistry - A European Journal*, **2021**, 27, 830-860	4.8	31
17	Effects of Anion Mobility on Electrochemical Behaviors of Lithium–Sulfur Batteries. *Chemistry of Materials*, **2017**, 29, 9023-9029	9.6	28
16	Electrolyte Effect on the Electrochemical Performance of Mild Aqueous Zinc-Electrolytic Manganese Dioxide Batteries. *ACS Applied Materials & Interfaces*, **2019**, 11, 37524-37530	9.5	28
15	Excellent Cycling Stability of Sodium Anode Enabled by a Stable Solid Electrolyte Interphase Formed in Ether-Based Electrolytes. *Advanced Functional Materials*, **2020**, 30, 2001151	15.6	27
14	Tailoring the Stability and Kinetics of Zn Anodes through Trace Organic Polymer Additives in Dilute Aqueous Electrolyte. *ACS Energy Letters*, **2021**, 6, 3236-3243	20.1	26
13	Engineering Solid Electrolyte Interface at Nano-Scale for High-Performance Hard Carbon in Sodium-Ion Batteries. *Advanced Functional Materials*, **2021**, 31, 2100278	15.6	22

List of Publications

12	A lithium-sulfur battery with a solution-mediated pathway operating under lean electrolyte conditions. *Nano Energy*, **2020**, 76, 105041	17.1	14
11	Effects of water-based binders on electrochemical performance of manganese dioxide cathode in mild aqueous zinc batteries **2021**, 3, 473-481		13
10	The Quest for Stable Potassium-Ion Battery Chemistry. *Advanced Materials*, **2021**, e2106876	24	10
9	Surface/Interface Structure and Chemistry of Lithium–Sulfur Batteries: From Density Functional Theory Calculations—Perspective. *Advanced Energy and Sustainability Research*, **2021**, 2, 2100007	1.6	9
8	Monitoring the State-of-Charge of a Vanadium Redox Flow Battery with the Acoustic Attenuation Coefficient: An In Operando Noninvasive Method. *Small Methods*, **2019**, 3, 1900494	12.8	8
7	Rechargeable Mild Aqueous Zinc Batteries for Grid Storage. *Advanced Energy and Sustainability Research*, **2020**, 1, 2000026	1.6	5
6	Lean Electrolyte Batteries: Addressing Passivation in Lithium–Sulfur Battery Under Lean Electrolyte Condition (Adv. Funct. Mater. 38/2018). *Advanced Functional Materials*, **2018**, 28, 1870275	15.6	5
5	Advanced Buffering Acidic Aqueous Electrolytes for Ultra-Long Life Aqueous Zinc-Ion Batteries.. *Small*, **2022**, e2200742	11	5
4	Alkali-Ion Storage Behaviour in Spinel Lithium Titanate Electrodes. *ChemElectroChem*, **2015**, 2, 1678-1681	4.3	3
3	Adjusting the local solvation structures and hydrogen bonding networks for stable aqueous batteries with reduced cost. *Journal of Energy Chemistry*, **2022**, 68, 411-419	12	1
2	Rechargeable Lithium Metal Batteries **2019**, 147-203		
1	Value personal growth. *Nature Energy*, **2021**, 6, 4-4	62.3	