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	Electrochemical Energy Storage for Green Grid. Chemical Reviews, 2011, 111, 3577-3613.	23.0	4,276
2	Room-temperature stationary sodium-ion batteries for large-scale electric energy storage. Energy and Environmental Science, 2013, 6, 2338.	15.6	2,799
3	Reversible aqueous zinc/manganese oxide energy storage from conversion reactions. Nature Energy, 2016, 1, .	19.8	2,186
4	Sodium Ion Insertion in Hollow Carbon Nanowires for Battery Applications. Nano Letters, 2012, 12, 3783-3787.	4.5	1,552
5	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
6	Highâ€Voltage Lithiumâ€Metal Batteries Enabled by Localized Highâ€Concentration Electrolytes. Advanced Materials, 2018, 30, e1706102.	11.1	761
7	Carbon coated Na3V2(PO4)3 as novel electrode material for sodium ion batteries. Electrochemistry Communications, 2012, 14, 86-89.	2.3	693
8	Manipulating Adsorptionâ€"Insertion Mechanisms in Nanostructured Carbon Materials for Highâ€Efficiency Sodium Ion Storage. Advanced Energy Materials, 2017, 7, 1700403.	10.2	662
9	Reversible Sodium Ion Insertion in Single Crystalline Manganese Oxide Nanowires with Long Cycle Life. Advanced Materials, 2011, 23, 3155-3160.	11.1	638
10	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
11	Lewis Acidâ€"Base Interactions between Polysulfides and Metal Organic Framework in Lithium Sulfur Batteries. Nano Letters, 2014, 14, 2345-2352.	4.5	623
12	Monolithic solidâ€"electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. Nature Energy, 2019, 4, 796-805.	19.8	621
13	Enabling High-Voltage Lithium-Metal Batteries under Practical Conditions. Joule, 2019, 3, 1662-1676.	11.7	598
14	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
15	High capacity, reversible alloying reactions in SnSb/C nanocomposites for Na-ion battery applications. Chemical Communications, 2012, 48, 3321.	2.2	566
16	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
17	High-energy lithium metal pouch cells with limited anode swelling and long stable cycles. Nature Energy, 2019, 4, 551-559.	19.8	492
18	High Energy Density Lithiumâ€"Sulfur Batteries: Challenges of Thick Sulfur Cathodes. Advanced Energy Materials, 2015, 5, 1402290.	10.2	483

#	Article	IF	Citations
19	Sodium Storage and Transport Properties in Layered Na₂Ti₃O₇ for Roomâ€Temperature Sodiumâ€Ion Batteries. Advanced Energy Materials, 2013, 3, 1186-1194.	10.2	456
20	Bridging the academic and industrial metrics for next-generation practical batteries. Nature Nanotechnology, 2019, 14, 200-207.	15.6	420
21	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
22	Critical Parameters for Evaluating Coin Cells and Pouch Cells of Rechargeable Li-Metal Batteries. Joule, 2019, 3, 1094-1105.	11.7	358
23	Sandwich-type functionalized graphene sheet-sulfur nanocomposite for rechargeable lithium batteries. Physical Chemistry Chemical Physics, 2011, 13, 7660.	1.3	347
24	Hard carbon nanoparticles as high-capacity, high-stability anodic materials for Na-ion batteries. Nano Energy, 2016, 19, 279-288.	8.2	341
25	Non-encapsulation approach for high-performance Liâ€"S batteries through controlled nucleation and growth. Nature Energy, 2017, 2, 813-820.	19.8	326
26	Joint Charge Storage for Highâ€Rate Aqueous Zincâ€"Manganese Dioxide Batteries. Advanced Materials, 2019, 31, e1900567.	11.1	299
27	Electrospun Na3V2(PO4)3/C nanofibers as stable cathode materials for sodium-ion batteries. Nanoscale, 2014, 6, 5081.	2.8	266
28	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
29	Stabilizing Zinc Anode Reactions by Polyethylene Oxide Polymer in Mild Aqueous Electrolytes. Advanced Functional Materials, 2020, 30, 2003932.	7.8	210
30	How to Obtain Reproducible Results for Lithium Sulfur Batteries?. Journal of the Electrochemical Society, 2013, 160, A2288-A2292.	1.3	149
31	Addressing Passivation in Lithiumâ€"Sulfur Battery Under Lean Electrolyte Condition. Advanced Functional Materials, 2018, 28, 1707234.	7.8	143
32	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
33	Low-solvation electrolytes for high-voltage sodium-ion batteries. Nature Energy, 2022, 7, 718-725.	19.8	137
34	Reaction heterogeneity in practical high-energy lithiumâ€"sulfur pouch cells. Energy and Environmental Science, 2020, 13, 3620-3632.	15.6	127
35	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
36	Improving Lithiumâ€"Sulfur Battery Performance under Lean Electrolyte through Nanoscale Confinement in Soft Swellable Gels. Nano Letters, 2017, 17, 3061-3067.	4.5	122

#	Article	IF	Citations
37	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
38	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
39	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
40	Highly Reversible Sodium Ion Batteries Enabled by Stable Electrolyte-Electrode Interphases. ACS Energy Letters, 2020, 5, 3212-3220.	8.8	97
41	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
42	Controlled Nucleation and Growth Process of Li₂S₂/Li₂S in Lithium-Sulfur Batteries. Journal of the Electrochemical Society, 2013, 160, A1992-A1996.	1.3	89
43	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
44	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
45	Cathodes for Aqueous Znâ€Ion Batteries: Materials, Mechanisms, and Kinetics. Chemistry - A European Journal, 2021, 27, 830-860.	1.7	84
46	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
47	Restricting the Solubility of Polysulfides in Liâ€S Batteries Via Electrolyte Salt Selection. Advanced Energy Materials, 2016, 6, 1600160.	10.2	66
48	Tunable Oxygen Functional Groups as Electrocatalysts on Graphite Felt Surfaces for Allâ€Vanadium Flow Batteries. ChemSusChem, 2016, 9, 1455-1461.	3.6	66
49	Towards the practical application of Zn metal anodes for mild aqueous rechargeable Zn batteries. Chemical Science, 2022, 13, 8243-8252.	3.7	63
50	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
51	Tailored Reaction Route by Micropore Confinement for Liâ€“S Batteries Operating under Lean Electrolyte Conditions. Advanced Energy Materials, 2018, 8, 1800590.	10.2	55
52	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
53	Advanced Buffering Acidic Aqueous Electrolytes for Ultraâ€Long Life Aqueous Zincâ€Ion Batteries. Small, 2022, 18, e2200742.	5.2	49
54	Multinuclear NMR Study of the Solid Electrolyte Interface Formed in Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2017, 9, 14741-14748.	4.0	47

#	Article	IF	Citations
55	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
56	Effects of waterâ€based binders on electrochemical performance of manganese dioxide cathode in mild aqueous zinc batteries. , 2021, 3, 473-481.		44
57	The Quest for Stable Potassiumâ€Ion Battery Chemistry. Advanced Materials, 2022, 34, e2106876.	11.1	41
58	Effects of Anion Mobility on Electrochemical Behaviors of Lithiumâ€"Sulfur Batteries. Chemistry of Materials, 2017, 29, 9023-9029.	3.2	35
59	Origin of Air-Stability for Transition Metal Oxide Cathodes in Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2022, 14, 5338-5345.	4.0	32
60	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
61	A lithium-sulfur battery with a solution-mediated pathway operating under lean electrolyte conditions. Nano Energy, 2020, 76, 105041.	8.2	25
62	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
63	Rechargeable Mild Aqueous Zinc Batteries for Grid Storage. Advanced Energy and Sustainability Research, 2020, 1, 2000026.	2.8	10
64	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
65	Alkaliâ€Ion Storage Behaviour in Spinel Lithium Titanate Electrodes. ChemElectroChem, 2015, 2, 1678-1681.	1.7	5
66	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
67	Value personal growth. Nature Energy, 2021, 6, 4-4.	19.8	0
68	Rechargeable Lithium Metal Batteries. , 2019, , 147-203.		0