Fudong Han

List of Publications by Year
in descending order

80 papers	16,839 citations	23544 58 h-index	62565 80 g-index
84 all docs	84 docs citations	84 times ranked	13351 citing authors

#	Article	IF	Citations
1	Interfacial challenges in all-solid-state lithium batteries. Current Opinion in Electrochemistry, 2022, 33, 100933.	2.5	14
2	Li alloy anodes for high-rate and high-areal-capacity solid-state batteries. Journal of Materials Chemistry A, 2022, 10, 12350-12358.	5.2	33
3	Nanostructuring versus microstructuring in battery electrodes. Nature Reviews Materials, 2022, 7, 736-746.	23.3	92
4	Lithium/Sulfide Allâ€Solidâ€State Batteries using Sulfide Electrolytes. Advanced Materials, 2021, 33, e2000751.	11.1	356
5	Local electronic structure variation resulting in Li â€˜filamentâ€™ formation within solid electrolytes. Nature Materials, 2021, 20, 1485-1490.	13.3	226
6	Alloying of Alkali Metals with Tellurene. Advanced Energy Materials, 2021, 11, 2003248.	10.2	11
7	High Interfacial-Energy Interphase Promoting Safe Lithium Metal Batteries. Journal of the American Chemical Society, 2020, 142, 2438-2447.	6.6	195
8	Aqueous lithium-ion batteries with niobium tungsten oxide anodes for superior volumetric and rate capability. Energy Storage Materials, 2020, 27, 506-513.	9.5	40
9	Ultrastable All-Solid-State Sodium Rechargeable Batteries. ACS Energy Letters, 2020, 5, 2835-2841.	8.8	142
10	Rational Designed Mixed-Conductive Sulfur Cathodes for All-Solid-State Lithium Batteries. ACS Applied Materials & Interfaces, 2020, 12, 36066-36071.	4.0	12
11	â€œWater-in-saltâ€•polymer electrolyte for Li-ion batteries. Energy and Environmental Science, 2020, 13, 2878-2887.	15.6	74
12	Sulfur-Embedded FeS₂ as a High-Performance Cathode for Room Temperature All-Solid-State Lithiumâ€“Sulfur Batteries. ACS Applied Materials & Interfaces, 2020, 12, 18519-18525.	4.0	76
13	A Highly Reversible, Dendriteâ€Free Lithium Metal Anode Enabled by a Lithiumâ€Fluorideâ€Enriched Interphase. Advanced Materials, 2020, 32, e1906427.	11.1	168
14	Bio-inspired Nanoscaled Electronic/Ionic Conduction Networks for Room-Temperature All-Solid-State Sodium-Sulfur Battery. Nano Today, 2020, 33, 100860.	6.2	67
15	Identifying the components of the solidâ€“electrolyte interphase in Li-ion batteries. Nature Chemistry, 2019, 11, 789-796.	6.6	331
16	Construction of 3D Electronic/Ionic Conduction Networks for Allâ€Solidâ€State Lithium Batteries. Small, 2019, 15, e1905849.	5.2	69
17	Grain-boundary-resistance-less Na3SbS4-Se solid electrolytes for all-solid-state sodium batteries. Nano Energy, 2019, 66, 104109.	8.2	77
18	Cathode-Supported All-Solid-State Lithiumâ€“Sulfur Batteries with High Cell-Level Energy Density. ACS Energy Letters, 2019, 4, 1073-1079.	8.8	148

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19	A Highâ€Performance Liâ€“Bâ€“H Electrolyte for Allâ€Solidâ€State Li Batteries. Advanced Functional Materials, 2019, 29, 1809219.	7.8	88
20	All-temperature batteries enabled by fluorinated electrolytes with non-polar solvents. Nature Energy, 2019, 4, 882-890.	19.8	557
21	High electronic conductivity as the origin of lithium dendrite formation within solid electrolytes. Nature Energy, 2019, 4, 187-196.	19.8	1,099
22	Interphase Engineering Enabled All-Ceramic Lithium Battery. Joule, 2018, 2, 497-508.	11.7	378
23	Highly reversible zinc metal anode for aqueous batteries. Nature Materials, 2018, 17, 543-549.	13.3	2,080
24	Existence of Solid Electrolyte Interphase in Mg Batteries: Mg/S Chemistry as an Example. ACS Applied Materials & Interfaces, 2018, 10, 14767-14776.	4.0	99
25	High-Performance All-Solid-State Naâ€“S Battery Enabled by Castingâ€“Annealing Technology. ACS Nano, 2018, 12, 3360-3368.	7.3	102
26	Suppressing Li Dendrite Formation in Li₂Sâ€P₂S₅ Solid Electrolyte by LiI Incorporation. Advanced Energy Materials, 2018, 8, 1703644.	10.2	303
27	Reducing Mg Anode Overpotential via Ion Conductive Surface Layer Formation by Iodine Additive. Advanced Energy Materials, 2018, 8, 1701728.	10.2	107
28	Thermodynamics and Kinetics of Sulfur Cathode during Discharge in MgTFSI₂â€“DME Electrolyte. Advanced Materials, 2018, 30, 1704313.	11.1	122
29	A rechargeable aqueous Zn²⁺-battery with high power density and a long cycle-life. Energy and Environmental Science, 2018, 11, 3168-3175.	15.6	258
30	Fluorinated solid electrolyte interphase enables highly reversible solid-state Li metal battery. Science Advances, 2018, 4, eaau9245.	4.7	521
31	Interface engineering of sulfide electrolytes for all-solid-state lithium batteries. Nano Energy, 2018, 53, 958-966.	8.2	227
32	Mechanism Study on the Interfacial Stability of a Lithium Garnet-Type Oxide Electrolyte against Cathode Materials. ACS Applied Energy Materials, 2018, 1, 5968-5976.	2.5	72
33	Long Cycle Life All-Solid-State Sodium Ion Battery. ACS Applied Materials & Interfaces, 2018, 10, 39645-39650.	4.0	44
34	Architectural design and fabrication approaches for solid-state batteries. MRS Bulletin, 2018, 43, 775-781.	1.7	64
35	High energy-density and reversibility of iron fluoride cathode enabled via an intercalation-extrusion reaction. Nature Communications, 2018, 9, 2324.	5.8	136
36	Highâ€Performance Allâ€Solidâ€State Lithiumâ€“Sulfur Batteries Enabled by Amorphous Sulfurâ€Coated Reduced Graphene Oxide Cathodes. Advanced Energy Materials, 2017, 7, 1602923.	10.2	331

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37	High-Performance All-Inorganic Solid-State Sodiumâ€“Sulfur Battery. ACS Nano, 2017, 11, 4885-4891.	7.3	133
38	Electrochemical Techniques for Intercalation Electrode Materials in Rechargeable Batteries. Accounts of Chemical Research, 2017, 50, 1022-1031.	7.6	105
39	Spinel LiNi_{0.5}Mn_{1.5}O₄ Cathode for Highâ€Energy Aqueous Lithiumâ€Ion Batteries. Advanced Energy Materials, 2017, 7, 1600922.	10.2	103
40	High-Voltage Aqueous Magnesium Ion Batteries. ACS Central Science, 2017, 3, 1121-1128.	5.3	256
41	Flexible Aqueous Liâ€Ion Battery with High Energy and Power Densities. Advanced Materials, 2017, 29, 1701972.	11.1	175
42	Reverse Microemulsion Synthesis of Sulfur/Graphene Composite for Lithium/Sulfur Batteries. ACS Nano, 2017, 11, 9048-9056.	7.3	73
43	â€œWater-in-Saltâ€• electrolyte enabled LiMn2O4/TiS2 Lithium-ion batteries. Electrochemistry Communications, 2017, 82, 71-74.	2.3	99
44	Zn/MnO₂ Battery Chemistry With H⁺ and Zn²⁺ Coinsertion. Journal of the American Chemical Society, 2017, 139, 9775-9778.	6.6	1,375
45	Electrochemical Stability of Li₁₀GeP₂S₁₂ and Li₇La₃Zr₂O₁₂ Solid Electrolytes. Advanced Energy Materials, 2016, 6, 1501590.	10.2	781
46	Tailoring Surface Acidity of Metal Oxide for Better Polysulfide Entrapment in Liâ€S Batteries. Advanced Functional Materials, 2016, 26, 7164-7169.	7.8	95
47	A Rechargeable Al/S Battery with an Ionicâ€Liquid Electrolyte. Angewandte Chemie, 2016, 128, 10052-10055.	1.6	64
48	A Rechargeable Al/S Battery with an Ionicâ€Liquid Electrolyte. Angewandte Chemie - International Edition, 2016, 55, 9898-9901.	7.2	215
49	Stabilizing high sulfur loading Liâ€“S batteries by chemisorption of polysulfide on three-dimensional current collector. Nano Energy, 2016, 30, 700-708.	8.2	90
50	Stabilizing high voltage LiCoO₂ cathode in aqueous electrolyte with interphase-forming additive. Energy and Environmental Science, 2016, 9, 3666-3673.	15.6	190
51	High-Performance All-Solid-State Lithiumâ€“Sulfur Battery Enabled by a Mixed-Conductive Li₂S Nanocomposite. Nano Letters, 2016, 16, 4521-4527.	4.5	333
52	â€œWater-in-Saltâ€• electrolytes enable green and safe Li-ion batteries for large scale electric energy storage applications. Journal of Materials Chemistry A, 2016, 4, 6639-6644.	5.2	172
53	Superior Stable Selfâ€Healing SnP₃ Anode for Sodiumâ€Ion Batteries. Advanced Energy Materials, 2015, 5, 1500174.	10.2	197
54	Red Phosphorusâ€“Single-Walled Carbon Nanotube Composite as a Superior Anode for Sodium Ion Batteries. ACS Nano, 2015, 9, 3254-3264.	7.3	359

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55	Carbon cage encapsulating nano-cluster Li2S by ionic liquid polymerization and pyrolysis for high performance Liâ€“S batteries. Nano Energy, 2015, 13, 467-473.	8.2	76
56	Simple Preparation of Carbon Nanofibers with Graphene Layers Perpendicular to the Length Direction and the Excellent Li-Ion Storage Performance. ACS Applied Materials & Interfaces, 2015, 7, 5107-5115.	4.0	8
57	A Battery Made from a Single Material. Advanced Materials, 2015, 27, 3473-3483.	11.1	291
58	Ether-based electrolyte enabled Na/FeS2 rechargeable batteries. Electrochemistry Communications, 2015, 54, 18-22.	2.3	121
59	Roll-to-roll fabrication of organic nanorod electrodes for sodium ion batteries. Nano Energy, 2015, 13, 537-545.	8.2	91
60	Dual-template synthesis of ordered mesoporous carbon/Fe₂O₃nanowires: high porosity and structural stability for supercapacitors. Journal of Materials Chemistry A, 2015, 3, 21501-21510.	5.2	46
61	Hybrid Mg²⁺/Li⁺ Battery with Long Cycle Life and High Rate Capability. Advanced Energy Materials, 2015, 5, 1401507.	10.2	155
62	3D Si/C Fiber Paper Electrodes Fabricated Using a Combined Electrospray/Electrospinning Technique for Liâ€Ion Batteries. Advanced Energy Materials, 2015, 5, 1400753.	10.2	247
63	Thermal formation of porous Fe3O4/C microspheres and the lithium storage performance. Journal of Alloys and Compounds, 2014, 597, 30-35.	2.8	11
64	Expanded graphite as superior anode for sodium-ion batteries. Nature Communications, 2014, 5, 4033.	5.8	1,472
65	Large-scale preparation of hollow graphitic carbon nanospheres. Materials Chemistry and Physics, 2013, 137, 904-909.	2.0	10
66	Toughening and reinforcing zirconia ceramics by introducing boron nitride nanotubes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 546, 301-306.	2.6	22
67	In situ synthesis of one-dimensional MWCNT/SiC porous nanocomposites with excellent microwave absorption properties. Journal of Materials Chemistry, 2011, 21, 13581.	6.7	143
68	Preparation of Carbon Nano-Onions and Their Application as Anode Materials for Rechargeable Lithium-Ion Batteries. Journal of Physical Chemistry C, 2011, 115, 8923-8927.	1.5	143
69	Microwave absorption properties of TiN nanoparticles. Journal of Alloys and Compounds, 2011, 509, 10032-10035.	2.8	23
70	Microwave absorption properties of MWCNT-SiC composites synthesized via a low temperature induced reaction. AIP Advances, 2011, 1, .	0.6	23
71	One-step preparation of six-armed Fe3O4 dendrites with carbon coating applicable for anode material of lithium-ion battery. Materials Letters, 2011, 65, 3157-3159.	1.3	21
72	Simple synthesis of mesoporous boron nitride with strong cathodoluminescence emission. Journal of Solid State Chemistry, 2011, 184, 859-862.	1.4	26

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73	Templateâ€Free Synthesis of Interconnected Hollow Carbon Nanospheres for Highâ€Performance Anode Material in Lithiumâ€Ion Batteries. Advanced Energy Materials, 2011, 1, 798-801.	10.2	284
74	Lowâ€Temperature Synthesis of Meshy Boron Nitride with a Large Surface Area. European Journal of Inorganic Chemistry, 2010, 2010, 3174-3178.	1.0	14
75	A catalyst-free method to silicon nanowires at relative low temperature. Journal of Crystal Growth, 2010, 312, 3579-3582.	0.7	1
76	Rapid, Lowâ€Temperature Synthesis of Î²â€SiC Nanowires from Si and Graphite. Journal of the American Ceramic Society, 2010, 93, 2415-2418.	1.9	7
77	Facile Synthesis of Si₃N₄ Nanocrystals Via an Organicâ€“Inorganic Reaction Route. Journal of the American Ceramic Society, 2009, 92, 535-538.	1.9	28
78	Synthesis of Carbon Spheres via a Low-Temperature Metathesis Reaction. Journal of Physical Chemistry C, 2008, 112, 12134-12137.	1.5	15
79	Solid-State Batteries: An Introduction. ACS Symposium Series, 0, , 1-20.	0.5	2
80	Lithium-Sulfur Solid-State Batteries. ACS Symposium Series, 0, , 267-288.	0.5	1