Qing Zhao

List of Publications by Year in Descending Order

92 papers	9,781 citations	48 h-index	98 g-index
101 ext. papers	12,389 ext. citations	14.8 avg, IF	6.92 L-index

#	Paper	IF	Citations
92	Production of fast-charge Zn-based aqueous batteries via interfacial adsorption of ion-oligomer complexes.. *Nature Communications*, **2022**, 13, 2283	17.4	6
91	Upgrading Carbonate Electrolytes for Ultra-stable Practical Lithium Metal Batteries.. *Angewandte Chemie - International Edition*, **2021**, e202116214	16.4	5
90	Dynamic interphase-mediated assembly for deep cycling metal batteries. *Science Advances*, **2021**, 7, eabl3752	14.3	14
89	On the crystallography and reversibility of lithium electrodeposits at ultrahigh capacity. *Nature Communications*, **2021**, 12, 6034	17.4	16
88	Textured Electrodes: Manipulating Built-In Crystallographic Heterogeneity of Metal Electrodes via Severe Plastic Deformation. *Advanced Materials*, **2021**, e2106867	24	14
87	The early-stage growth and reversibility of Li electrodeposition in Br-rich electrolytes. *Proceedings of the National Academy of Sciences of the United States of America*, **2021**, 118,	11.5	9
86	Regulating electrodeposition morphology in high-capacity aluminium and zinc battery anodes using interfacial metal–substrate bonding. *Nature Energy*, **2021**, 6, 398-406	62.3	51
85	Stabilizing metal battery anodes through the design of solid electrolyte interphases. *Joule*, **2021**, 5, 1119-1142	27.8	54
84	Stabilizing Zinc Electrodeposition in a Battery Anode by Controlling Crystal Growth. *Small*, **2021**, 17, e2101798	11	18
83	Effects of Geometric Confinement on Caging and Dynamics of Polymer-Tethered Nanoparticle Suspensions. *Macromolecules*, **2021**, 54, 426-439	5.5	6
82	Semiconducting Metal-Organic Polymer Nanosheets for a Photoinvolved Li-O Battery under Visible Light. *Journal of the American Chemical Society*, **2021**, 143, 1941-1947	16.4	45
81	Designing Anion-Type Water-Free Zn Solvation Structure for Robust Zn Metal Anode. *Angewandte Chemie - International Edition*, **2021**, 60, 23357-23364	16.4	33
80	Designing Anion-Type Water-Free Zn2+ Solvation Structure for Robust Zn Metal Anode. *Angewandte Chemie*, **2021**, 133, 23545	3.6	13
79	Nanochannels regulating ionic transport for boosting electrochemical energy storage and conversion: a review. *Nanoscale*, **2020**, 12, 15923-15943	7.7	19
78	Designing Polymeric Interphases for Stable Lithium Metal Deposition. *Nano Letters*, **2020**, 20, 5749-5758	11.5	16
77	Spontaneous and field-induced crystallographic reorientation of metal electrodeposits at battery anodes. *Science Advances*, **2020**, 6, eabb1122	14.3	64
76	Electrodeposition of Zinc in Aqueous Electrolytes Containing High Molecular Weight Polymers. *Macromolecules*, **2020**, 53, 2694-2701	5.5	14

75	Achieving Uniform Lithium Electrodeposition in Cross-Linked Poly(ethylene oxide) Networks: Soft Polymers Prevent Metal Dendrite Proliferation. *Macromolecules*, **2020**, 53, 5445-5454	5.5	12
74	Rechargeable Lithium Metal Batteries with an In-Built Solid-State Polymer Electrolyte and a High Voltage/Loading Ni-Rich Layered Cathode. *Advanced Materials*, **2020**, 32, e1905629	24	59
73	Designing solid-state electrolytes for safe, energy-dense batteries. *Nature Reviews Materials*, **2020**, 5, 229-252	73.3	484
72	Proton Intercalation/De-Intercalation Dynamics in Vanadium Oxides for Aqueous Aluminum Electrochemical Cells. *Angewandte Chemie - International Edition*, **2020**, 59, 3048-3052	16.4	67
71	Proton Intercalation/De-Intercalation Dynamics in Vanadium Oxides for Aqueous Aluminum Electrochemical Cells. *Angewandte Chemie*, **2020**, 132, 3072-3076	3.6	11
70	Designing electrolytes with polymerlike glass-forming properties and fast ion transport at low temperatures. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 26053-26060	11.5	26
69	In-Built Polymer-in-Solvent and Solvent-in-Polymer Electrolytes for High-Voltage Lithium Metal Batteries. *Cell Reports Physical Science*, **2020**, 1, 100146	6.1	4
68	Regulating the growth of aluminum electrodeposits: towards anode-free Al batteries. *Journal of Materials Chemistry A*, **2020**, 8, 23231-23238	13	10
67	Synthesis and Properties of Poly-Ether/Ethylene Carbonate Electrolytes with High Oxidative Stability. *Chemistry of Materials*, **2019**, 31, 8466-8472	9.6	20
66	Physical Orphaning versus Chemical Instability: Is Dendritic Electrodeposition of Li Fatal?. *ACS Energy Letters*, **2019**, 4, 1349-1355	20.1	51
65	Solid-state polymer electrolytes with in-built fast interfacial transport for secondary lithium batteries. *Nature Energy*, **2019**, 4, 365-373	62.3	363
64	Stabilizing polymer electrolytes in high-voltage lithium batteries. *Nature Communications*, **2019**, 10, 3091	17.4	63
63	Interphases of Polymer Electrolytes. *Joule*, **2019**, 3, 1569-1571	27.8	8
62	High-resolution Electron Imaging and Spectroscopy of Reactive Materials and Liquid-Solid Interfaces in Energy Storage Devices. *Microscopy and Microanalysis*, **2019**, 25, 2028-2029	0.5	1
61	Microscopic Origins of Caging and Equilibration of Self-Suspended Hairy Nanoparticles. *Macromolecules*, **2019**, 52, 8187-8196	5.5	6
60	Reversible epitaxial electrodeposition of metals in battery anodes. *Science*, **2019**, 366, 645-648	33.3	512
59	Solid-state polymer electrolytes stabilized by task-specific salt additives. *Journal of Materials Chemistry A*, **2019**, 7, 7823-7830	13	48
58	Nonplanar Electrode Architectures for Ultrahigh Areal Capacity Batteries. *ACS Energy Letters*, **2019**, 4, 271-275	20.1	22

57	High-capacity aqueous zinc batteries using sustainable quinone electrodes. *Science Advances*, **2018**, 4, eaao1761	14.3	465
56	Titelbild: Building Organic/Inorganic Hybrid Interphases for Fast Interfacial Transport in Rechargeable Metal Batteries (Angew. Chem. 4/2018). *Angewandte Chemie*, **2018**, 130, 863-863	3.6	
55	Interphases in Lithium–Sulfur Batteries: Toward Deployable Devices with Competitive Energy Density and Stability. *ACS Energy Letters*, **2018**, 3, 2104-2113	20.1	42
54	Stabilizing Protic and Aprotic Liquid Electrolytes at High-Bandgap Oxide Interphases. *Chemistry of Materials*, **2018**, 30, 5655-5662	9.6	31
53	Building Organic/Inorganic Hybrid Interphases for Fast Interfacial Transport in Rechargeable Metal Batteries. *Angewandte Chemie - International Edition*, **2018**, 57, 992-996	16.4	139
52	Building Organic/Inorganic Hybrid Interphases for Fast Interfacial Transport in Rechargeable Metal Batteries. *Angewandte Chemie*, **2018**, 130, 1004-1008	3.6	44
51	Solid electrolyte interphases for high-energy aqueous aluminum electrochemical cells. *Science Advances*, **2018**, 4, eaau8131	14.3	121
50	An Alternative to Lithium Metal Anodes: Non-dendritic and Highly Reversible Sodium Metal Anodes for Li-Na Hybrid Batteries. *Angewandte Chemie - International Edition*, **2018**, 57, 14796-14800	16.4	68
49	An Alternative to Lithium Metal Anodes: Non-dendritic and Highly Reversible Sodium Metal Anodes for Li–Na Hybrid Batteries. *Angewandte Chemie*, **2018**, 130, 15012-15016	3.6	10
48	Introducing ion-transport-regulating nanochannels to lithium-sulfur batteries. *Nano Energy*, **2017**, 33, 205-212	17.1	47
47	High K-storage performance based on the synergy of dipotassium terephthalate and ether-based electrolytes. *Energy and Environmental Science*, **2017**, 10, 552-557	35.4	299
46	MnOOH nanorods as high-performance anodes for sodium ion batteries. *Chemical Communications*, **2017**, 53, 2435-2438	5.8	33
45	Quasi-solid state rechargeable Na-CO batteries with reduced graphene oxide Na anodes. *Science Advances*, **2017**, 3, e1602396	14.3	154
44	Flexible and Free-Standing Organic/Carbon Nanotubes Hybrid Films as Cathode for Rechargeable Lithium-Ion Batteries. *Journal of Physical Chemistry C*, **2017**, 121, 14498-14506	3.8	40
43	Enhanced adsorption of carbonyl molecules on graphene via π–π interaction: a first-principle study. *Science China Materials*, **2017**, 60, 674-680	7.1	11
42	Molecular Engineering with Organic Carbonyl Electrode Materials for Advanced Stationary and Redox Flow Rechargeable Batteries. *Advanced Materials*, **2017**, 29, 1607007	24	177
41	Edge Engineering of MoS2 Nanoribbons as High Performance Electrode Material for Na-ion Battery: A First-Principle Study. *Chinese Journal of Chemistry*, **2017**, 35, 896-902	4.9	8
40	Advanced Organic Electrode Materials for Rechargeable Sodium-Ion Batteries. *Advanced Energy Materials*, **2017**, 7, 1601792	21.8	327

39	Selenium Phosphide (Se4P4) as a New and Promising Anode Material for Sodium-Ion Batteries. *Advanced Energy Materials*, **2017**, 7, 1601973	21.8	107
38	An Insoluble Benzoquinone-Based Organic Cathode for Use in Rechargeable Lithium-Ion Batteries. *Angewandte Chemie*, **2017**, 129, 12735-12739	3.6	27
37	Spinels: Controlled Preparation, Oxygen Reduction/Evolution Reaction Application, and Beyond. *Chemical Reviews*, **2017**, 117, 10121-10211	68.1	789
36	In Situ Atomic Force Microscopic Studies of Single Tin Nanoparticle: Sodiation and Desodiation in Liquid Electrolyte. *ACS Applied Materials & Interfaces*, **2017**, 9, 28620-28626	9.5	20
35	An Insoluble Benzoquinone-Based Organic Cathode for Use in Rechargeable Lithium-Ion Batteries. *Angewandte Chemie - International Edition*, **2017**, 56, 12561-12565	16.4	117
34	Nanostructured organic electrode materials grown on graphene with covalent-bond interaction for high-rate and ultra-long-life lithium-ion batteries. *Nano Research*, **2017**, 10, 4245-4255	10	38
33	Cation-Deficient Spinel ZnMnO Cathode in Zn(CFSO) Electrolyte for Rechargeable Aqueous Zn-Ion Battery. *Journal of the American Chemical Society*, **2016**, 138, 12894-12901	16.4	1011
32	A Flexible Nanostructured Paper of a Reduced Graphene Oxide-Sulfur Composite for High-Performance Lithium-Sulfur Batteries with Unconventional Configurations. *Advanced Materials*, **2016**, 28, 9629-9636	24	268
31	Oxocarbon Salts for Fast Rechargeable Batteries. *Angewandte Chemie*, **2016**, 128, 12716-12720	3.6	49
30	Layered Na2Ti3O7/MgNaTi3O7/Mg0.5NaTi3O7 Nanoribbons as High-Performance Anode of Rechargeable Mg-Ion Batteries. *ACS Energy Letters*, **2016**, 1, 1165-1172	20.1	49
29	Rechargeable Room-Temperature Na-CO2 Batteries. *Angewandte Chemie - International Edition*, **2016**, 55, 6482-6	16.4	157
28	A Sulfur Heterocyclic Quinone Cathode and a Multifunctional Binder for a High-Performance Rechargeable Lithium-Ion Battery. *Angewandte Chemie - International Edition*, **2016**, 55, 6428-32	16.4	146
27	A Sulfur Heterocyclic Quinone Cathode and a Multifunctional Binder for a High-Performance Rechargeable Lithium-Ion Battery. *Angewandte Chemie*, **2016**, 128, 6538-6542	3.6	28
26	Rechargeable Room-Temperature Na□O2 Batteries. *Angewandte Chemie*, **2016**, 128, 6592-6596	3.6	38
25	Facile Spraying Synthesis and High-Performance Sodium Storage of Mesoporous MoS2/C Microspheres. *Advanced Functional Materials*, **2016**, 26, 911-918	15.6	169
24	Rechargeable Lithium Batteries with Electrodes of Small Organic Carbonyl Salts and Advanced Electrolytes. *Industrial & Engineering Chemistry Research*, **2016**, 55, 5795-5804	3.9	74
23	Oxocarbon Salts for Fast Rechargeable Batteries. *Angewandte Chemie - International Edition*, **2016**, 55, 12528-32	16.4	195
22	Porous perovskite calcium□anganese oxide microspheres as an efficient catalyst for rechargeable sodium□xygen batteries. *Journal of Materials Chemistry A*, **2015**, 3, 3320-3324	13	79

21	Rechargeable Lithium-Iodine Batteries with Iodine/Nanoporous Carbon Cathode. *Nano Letters*, **2015**, 15, 5982-7	11.5	133
20	High-Performance Organic Lithium Batteries with an Ether-Based Electrolyte and 9,10-Anthraquinone (AQ)/CMK-3 Cathode. *Advanced Science*, **2015**, 2, 1500018	13.6	126
19	Phosphorus Nanoparticles Encapsulated in Graphene Scrolls as a High-Performance Anode for Sodium-Ion Batteries. *ChemElectroChem*, **2015**, 2, 1652-1655	4.3	69
18	The enhanced hydrogen storage of micro-nanostructured hybrids of Mg(BH4)2-carbon nanotubes. *Nanoscale*, **2015**, 7, 18305-11	7.7	25
17	Micro-nanostructured CuO/C spheres as high-performance anode materials for Na-ion batteries. *Nanoscale*, **2015**, 7, 2770-6	7.7	107
16	Ice-templated preparation and sodium storage of ultrasmall SnO2 nanoparticles embedded in three-dimensional graphene. *Nano Research*, **2015**, 8, 184-192	10	66
15	3D Porous □Fe2O3@C Nanocomposite as High-Performance Anode Material of Na-Ion Batteries. *Advanced Energy Materials*, **2015**, 5, 1401123	21.8	285
14	Recycling Application of Li□MnO2 Batteries as Rechargeable Lithium□Air Batteries. *Angewandte Chemie*, **2015**, 127, 4412-4417	3.6	18
13	High-performance sodium batteries with the 9,10-anthraquinone/CMK-3 cathode and an ether-based electrolyte. *Chemical Communications*, **2015**, 51, 10244-7	5.8	96
12	Sulfur nanodots electrodeposited on ni foam as high-performance cathode for Li-S batteries. *Nano Letters*, **2015**, 15, 721-6	11.5	149
11	Recycling application of Li-MnO□batteries as rechargeable lithium-air batteries. *Angewandte Chemie - International Edition*, **2015**, 54, 4338-43	16.4	94
10	Size effect of lithium peroxide on charging performance of Li-O2 batteries. *Nanoscale*, **2014**, 6, 177-80	7.7	70
9	Pitaya-like Sn@C nanocomposites as high-rate and long-life anode for lithium-ion batteries. *Nanoscale*, **2014**, 6, 2827-32	7.7	124
8	2,2?-Bis(3-hydroxy-1,4-naphthoquinone)/CMK-3 nanocomposite as cathode material for lithium-ion batteries. *Inorganic Chemistry Frontiers*, **2014**, 1, 193-199	6.8	64
7	All organic sodium-ion batteries with Na□□H□□□□ *Angewandte Chemie - International Edition*, **2014**, 53, 5892-6	16.4	313
6	All Organic Sodium-Ion Batteries with Na4C8H2O6. *Angewandte Chemie*, **2014**, 126, 6002-6006	3.6	114
5	Potassium-sulfur batteries: a new member of room-temperature rechargeable metal-sulfur batteries. *Inorganic Chemistry*, **2014**, 53, 9000-5	5.1	143
4	Composite of sulfur impregnated in porous hollow carbon spheres as the cathode of Li-S batteries with high performance. *Nano Research*, **2013**, 6, 38-46	10	206

3	In Situ Surface Self-Reconstruction Strategies in Li-Rich Mn-Based Layered Cathodes for Energy-Dense Li-Ion Batteries. *Advanced Functional Materials*,2112088	15.6	7
2	Upgrading Carbonate Electrolytes for Ultra-stable Practical Lithium Metal Batteries. *Angewandte Chemie*,e202116214	3.6	0
1	Challenges and advances in wide-temperature rechargeable lithium batteries. *Energy and Environmental Science*,	35.4	13