

Shilin Zhang

List of Publications by Year in descending order

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55
papers

6,047
citations

159585

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168389

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docs citations

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times ranked

4991
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | An In-Depth Study of Zn Metal Surface Chemistry for Advanced Aqueous Zn-Ion Batteries. <i>Advanced Materials</i> , 2020, 32, e2003021. | 21.0 | 707 |
| 2 | Designing Dendrite-Free Zinc Anodes for Advanced Aqueous Zinc Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 2001263. | 14.9 | 598 |
| 3 | Recent progress on sodium ion batteries: potential high-performance anodes. <i>Energy and Environmental Science</i> , 2018, 11, 2310-2340. | 30.8 | 561 |
| 4 | Electrolyte Design for In Situ Construction of Highly Zn ²⁺ -Conductive Solid Electrolyte Interphase to Enable High-Performance Aqueous Zn-Ion Batteries under Practical Conditions. <i>Advanced Materials</i> , 2021, 33, e2007416. | 21.0 | 484 |
| 5 | Graphitic Carbon Nanocage as a Stable and High Power Anode for Potassium-Ion Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1801149. | 19.5 | 442 |
| 6 | Bio-inspired design of an <i>in situ</i> multifunctional polymeric solid-electrolyte interphase for Zn metal anode cycling at 30 mA cm ⁻² and 30 mA h cm ⁻² . <i>Energy and Environmental Science</i> , 2021, 14, 5947-5957. | 30.8 | 289 |
| 7 | Toward High-Performance Hybrid Zn-Based Batteries via Deeply Understanding Their Mechanism and Using Electrolyte Additive. <i>Advanced Functional Materials</i> , 2019, 29, 1903605. | 14.9 | 259 |
| 8 | Yolk-Shell Structured FeP@C Nanoboxes as Advanced Anode Materials for Rechargeable Lithium/Potassium-Ion Batteries. <i>Advanced Functional Materials</i> , 2019, 29, 1808291. | 14.9 | 232 |
| 9 | Cathode Materials for Potassium-Ion Batteries: Current Status and Perspective. <i>Electrochemical Energy Reviews</i> , 2018, 1, 625-658. | 25.5 | 201 |
| 10 | Metal chalcogenides for potassium storage. <i>Informa-Ån-Å-Materi-Åly</i> , 2020, 2, 437-465. | 17.3 | 154 |
| 11 | Liquid metal batteries for future energy storage. <i>Energy and Environmental Science</i> , 2021, 14, 4177-4202. | 30.8 | 149 |
| 12 | Hollow-Carbon-Templated Few-Layered V ₅ S ₈ Nanosheets Enabling Ultrafast Potassium Storage and Long-Term Cycling. <i>ACS Nano</i> , 2019, 13, 7939-7948. | 14.6 | 136 |
| 13 | Sulfur-doped mesoporous carbon from surfactant-intercalated layered double hydroxide precursor as high-performance anode nanomaterials for both Li-ion and Na-ion batteries. <i>Carbon</i> , 2015, 93, 143-150. | 10.3 | 135 |
| 14 | Hierarchically scaffolded CoP/CoP ₂ nanoparticles: controllable synthesis and their application as a well-matched bifunctional electrocatalyst for overall water splitting. <i>Nanoscale</i> , 2017, 9, 5677-5685. | 5.6 | 123 |
| 15 | Biomass-Derived Carbon Materials for High-Performance Supercapacitors: Current Status and Perspective. <i>Electrochemical Energy Reviews</i> , 2021, 4, 219-248. | 25.5 | 118 |
| 16 | Electrolyte Engineering Enables High Performance Zinc-Ion Batteries. <i>Small</i> , 2022, 18, e2107033. | 10.0 | 118 |
| 17 | Toward practical lithium-ion battery recycling: adding value, tackling circularity and recycling-oriented design. <i>Energy and Environmental Science</i> , 2022, 15, 2732-2752. | 30.8 | 110 |
| 18 | Structural Engineering of Hierarchical Micro-nanostructured Ge-C Framework by Controlling the Nucleation for Ultralong-Life Li Storage. <i>Advanced Energy Materials</i> , 2019, 9, 1900081. | 19.5 | 99 |

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|----|--|------|-----------|
| 19 | Challenges and prospects of lithium ⁺ CO ₂ batteries. , 2022, 1, e9120001. | | 99 |
| 20 | Dehydration-triggered Ionic Channel Engineering in Potassium Niobate for Li/K ⁺ Ion Storage. Advanced Materials, 2020, 32, e2000380. | 21.0 | 85 |
| 21 | Three-Dimensional Porous Cobalt Phosphide Nanocubes Encapsulated in a Graphene Aerogel as an Advanced Anode with High Coulombic Efficiency for High-Energy Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2019, 11, 5373-5379. | 8.0 | 78 |
| 22 | Rational Design of Core-shell ZnTe@N-doped Carbon Nanowires for High Gravimetric and Volumetric Alkali Metal Ion Storage. Advanced Functional Materials, 2021, 31, 2006425. | 14.9 | 75 |
| 23 | Co@N-CNTs derived from triple-role CoAl-layered double hydroxide as an efficient catalyst for oxygen reduction reaction. Carbon, 2016, 107, 162-170. | 10.3 | 60 |
| 24 | Defect Engineering in a Multiple Confined Geometry for Robust Lithium ⁺ Sulfur Batteries. Advanced Energy Materials, 2022, 12, . | 19.5 | 58 |
| 25 | Crystallographic-site-specific Structural Engineering Enables Extraordinary Electrochemical Performance of High-voltage LiNi _{0.5} Mn _{1.5} O ₄ Spinel Cathodes for Lithium-ion Batteries. Advanced Materials, 2021, 33, e2101413. | 21.0 | 52 |
| 26 | Designing a hybrid electrode toward high energy density with a staged Li ⁺ and PF ₆ ⁻ deintercalation/intercalation mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2815-2823. | 7.1 | 50 |
| 27 | Temperature-gradient induced microstructure evolution in heat-affected zone of electron beam welded Ti-6Al-4V titanium alloy. Journal of Materials Science and Technology, 2019, 35, 1681-1690. | 10.7 | 42 |
| 28 | Polysulfide Filter and Dendrite Inhibitor: Highly Graphitized Wood Framework Inhibits Polysulfide Shuttle and Lithium Dendrites in Li-S Batteries. Advanced Functional Materials, 2021, 31, 2102458. | 14.9 | 42 |
| 29 | Ultrathin Few-layer GeP Nanosheets via Lithiation-assisted Chemical Exfoliation and Their Application in Sodium Storage. Advanced Energy Materials, 2020, 10, 1903826. | 19.5 | 41 |
| 30 | Porous carbon-based MgAlF ₅ ·1.5H ₂ O composites derived from carbon-coated clay presenting super high adsorption capacity for Congo Red. Chemical Engineering Journal, 2021, 406, 126784. | 12.7 | 37 |
| 31 | Accelerated Polysulfide Redox in Binder-free Li ₂ S Cathodes Promises High-energy Density Lithium ⁺ Sulfur Batteries. Advanced Energy Materials, 2021, 11, 2100957. | 19.5 | 35 |
| 32 | Organic electrolyte design for practical potassium-ion batteries. Journal of Materials Chemistry A, 2022, 10, 19090-19106. | 10.3 | 30 |
| 33 | Strong interplay between dopant and SnO ₂ in amorphous transparent (Sn, Nb)O ₂ anode with high conductivity in electrochemical cycling. Journal of Alloys and Compounds, 2018, 735, 2401-2409. | 5.5 | 28 |
| 34 | Synergistic lithium storage of a multi-component Co ₂ SnO ₄ /Co ₃ O ₄ /Al ₂ O ₃ /C composite from a single-source precursor. RSC Advances, 2015, 5, 69932-69938. | 3.6 | 25 |
| 35 | Magnetic carbon-coated palygorskite loaded with cobalt nanoparticles for Congo Red removal from waters. Applied Clay Science, 2020, 198, 105856. | 5.2 | 22 |
| 36 | Biomimetic structure design and construction of cactus-like MoS ₂ /Bi ₁₉ Cl ₃ S ₂₇ photocatalysts for efficient hydrogen evolution. Journal of Materials Chemistry A, 2018, 6, 21404-21409. | 10.3 | 21 |

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|----|---|------|-----------|
| 37 | The unique interconnected structure of hollow carbon skeleton doped by F and N facilitating rapid Li ions diffusion in lithium-sulfur batteries. <i>Carbon</i> , 2022, 195, 207-218. | 10.3 | 21 |
| 38 | Constructing Layered Nanostructures from Non-layered Sulfide Crystals via Surface Charge Manipulation Strategy. <i>Advanced Functional Materials</i> , 2021, 31, 2101676. | 14.9 | 20 |
| 39 | Mineral-modulated Co catalyst with enhanced adsorption and dissociation of BH ₄ ⁻ for hydrogenation of p-nitrophenol to p-aminophenol. <i>Chemosphere</i> , 2022, 291, 132871. | 8.2 | 19 |
| 40 | Suppression on allotropic transformation of Sn planar anode with enhanced electrochemical performance. <i>Applied Surface Science</i> , 2018, 435, 1150-1158. | 6.1 | 18 |
| 41 | Novel layered double hydroxide precursor derived high-Co ₉ S ₈ -content composite as anode for lithium-ion batteries. <i>Journal of Alloys and Compounds</i> , 2018, 768, 485-494. | 5.5 | 18 |
| 42 | Surface Reconstruction-Associated Partially Amorphized Bismuth Oxychloride for Boosted Photocatalytic Water Oxidation. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 5088-5098. | 8.0 | 18 |
| 43 | Encapsulation of BiOCl nanoparticles in N-doped carbon nanotubes as a highly efficient anode for potassium ion batteries. <i>Nanoscale</i> , 2022, 14, 5814-5823. | 5.6 | 18 |
| 44 | Graphene-supported binary active Mn _{0.25} Co _{0.75} O solid solution derived from a CoMn-layered double hydroxide precursor for highly improved lithium storage. <i>RSC Advances</i> , 2016, 6, 19716-19722. | 3.6 | 16 |
| 45 | Amorphous carbon shell on Si particles fabricated by carbonizing of polyphosphazene and enhanced performance as lithium ion battery anode. <i>Materials Letters</i> , 2016, 171, 63-67. | 2.6 | 15 |
| 46 | Hierarchical Porous NiO/NiMoO ₄ Heterostructure as Superior Anode Material for Lithium Storage. <i>ChemPlusChem</i> , 2018, 83, 915-923. | 2.8 | 15 |
| 47 | <i>In situ</i> coupling of Ti ₂ O with rutile TiO ₂ as a core-shell structure and its photocatalysis performance. <i>RSC Advances</i> , 2017, 7, 54662-54667. | 3.6 | 13 |
| 48 | Nitrogen-doped carbon and high-content alumina containing bi-active cobalt oxides for efficient storage of lithium. <i>Journal of Colloid and Interface Science</i> , 2016, 462, 183-190. | 9.4 | 12 |
| 49 | Size effect on the electrochemical reaction path and performance of nano size phosphorus rich skutterudite nickel phosphide. <i>Journal of Alloys and Compounds</i> , 2019, 781, 1059-1068. | 5.5 | 11 |
| 50 | NiS ₂ nanodots on N,S-doped graphene synthesized via interlayer confinement for enhanced lithium-/sodium-ion storage. <i>Journal of Colloid and Interface Science</i> , 2022, 619, 359-368. | 9.4 | 11 |
| 51 | Palygorskite modified with N-doped carbon for sensitive determination of lead(II) by differential pulse anodic stripping voltammetry. <i>Mikrochimica Acta</i> , 2019, 186, 706. | 5.0 | 9 |
| 52 | Heterostructure Manipulation toward Ameliorating Electrodes for Better Lithium Storage Capability. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 17267-17276. | 6.7 | 7 |
| 53 | A Novel Calcium Oxalate/Sepiolite Composite for Highly Selective Adsorption of Pb(II) from Aqueous Solutions. <i>Minerals (Basel, Switzerland)</i> , 2021, 11, 552. | 2.0 | 6 |
| 54 | Sb ₂ Se ₃ nanorods in the confined space of TiO ₂ nanotube arrays facilitating photoelectrochemical hydrogen evolution. <i>Journal of Alloys and Compounds</i> , 2022, 912, 165201. | 5.5 | 5 |

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|----|--|-----|-----------|
| 55 | An Ion Selective Electrode Based on Ti ₃ C ₂ Solid-state Transduction for Rapid Detection of Lead Ion Concentration in Aqueous Solution. <i>Electroanalysis</i> , 0, , . | 2.9 | 0 |