

Selective deposition and stable encapsulation of lithium growth

Nature Energy

1,

DOI: [10.1038/nenergy.2016.10](https://doi.org/10.1038/nenergy.2016.10)

Citation Report

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Carbon-coated nanoparticle superlattices for energy applications. <i>Nanoscale</i> , 2016, 8, 14359-14368. | 2.8 | 11 |
| 2 | Rechargeable Mg/Li hybrid batteries: status and challenges. <i>Journal of Materials Research</i> , 2016, 31, 3125-3141. | 1.2 | 92 |
| 3 | An electrochemical surface-enhanced Raman spectroscopic study on nanorod-structured lithium prepared by electrodeposition. <i>Journal of Raman Spectroscopy</i> , 2016, 47, 1017-1023. | 1.2 | 30 |
| 4 | Li ₂ O-Reinforced Cu Nanoclusters as Porous Structure for Dendrite-Free and Long-Lifespan Lithium Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 26801-26808. | 4.0 | 77 |
| 5 | Morphological Evolution of Electrochemically Plated/Stripped Lithium Microstructures Investigated by Synchrotron X-ray Phase Contrast Tomography. <i>ACS Nano</i> , 2016, 10, 7990-7997. | 7.3 | 108 |
| 6 | Toward Dendrite-Free Lithium Deposition via Structural and Interfacial Synergistic Effects of 3D Graphene@Ni Scaffold. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 26091-26097. | 4.0 | 152 |
| 7 | Few-Layer Graphene Island Seeding for Dendrite-Free Li Metal Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 26895-26901. | 4.0 | 63 |
| 8 | High-Performance Lithium Metal Negative Electrode with a Soft and Flowable Polymer Coating. <i>ACS Energy Letters</i> , 2016, 1, 1247-1255. | 8.8 | 281 |
| 9 | Stabilizing Lithium Metal Anodes by Uniform Li-Ion Flux Distribution in Nanochannel Confinement. <i>Journal of the American Chemical Society</i> , 2016, 138, 15443-15450. | 6.6 | 386 |
| 10 | Large-scale production of silicon nanoparticles@graphene embedded in nanotubes as ultra-robust battery anodes. <i>Journal of Materials Chemistry A</i> , 2017, 5, 4809-4817. | 5.2 | 61 |
| 11 | Anode-Free Sodium Battery through in Situ Plating of Sodium Metal. <i>Nano Letters</i> , 2017, 17, 1296-1301. | 4.5 | 248 |
| 12 | Nanoscale Nucleation and Growth of Electrodeposited Lithium Metal. <i>Nano Letters</i> , 2017, 17, 1132-1139. | 4.5 | 1,081 |
| 13 | High performance lithium metal anode: Progress and prospects. <i>Energy Storage Materials</i> , 2017, 7, 115-129. | 9.5 | 160 |
| 14 | Advanced Micro/Nanostructures for Lithium Metal Anodes. <i>Advanced Science</i> , 2017, 4, 1600445. | 5.6 | 444 |
| 15 | Implantable Solid Electrolyte Interphase in Lithium-Metal Batteries. <i>CheM</i> , 2017, 2, 258-270. | 5.8 | 474 |
| 16 | Electrolyte additive enabled fast charging and stable cycling lithium metal batteries. <i>Nature Energy</i> , 2017, 2, . | 19.8 | 1,048 |
| 17 | Conductivity Modulation of Gold Thin Film at Room Temperature via All-Solid-State Electric-Double-Layer Gating Accelerated by Nonlinear Ionic Transport. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 5056-5061. | 4.0 | 8 |
| 18 | Core-Shell Nanoparticle Coating as an Interfacial Layer for Dendrite-Free Lithium Metal Anodes. <i>ACS Central Science</i> , 2017, 3, 135-140. | 5.3 | 162 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Reviving the lithium metal anode for high-energy batteries. <i>Nature Nanotechnology</i> , 2017, 12, 194-206. | 15.6 | 4,804 |
| 20 | New Nanoconfined Galvanic Replacement Synthesis of Hollow Sb@C Yolk-Shell Spheres Constituting a Stable Anode for High-Rate Li/Na-Ion Batteries. <i>Nano Letters</i> , 2017, 17, 2034-2042. | 4.5 | 386 |
| 21 | A high performance lithium-selenium battery using a microporous carbon confined selenium cathode and a compatible electrolyte. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9350-9357. | 5.2 | 94 |
| 22 | Toward Practical High-Energy Batteries: A Modularly Assembled Oval-Like Carbon Microstructure for Thick Sulfur Electrodes. <i>Advanced Materials</i> , 2017, 29, 1700598. | 11.1 | 110 |
| 23 | Three-dimensional stable lithium metal anode with nanoscale lithium islands embedded in ionically conductive solid matrix. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 4613-4618. | 3.3 | 285 |
| 24 | Taming lithium metal through seeded growth. <i>National Science Review</i> , 2017, 4, 17-18. | 4.6 | 5 |
| 25 | Formation and Inhibition of Metallic Lithium Microstructures in Lithium Batteries Driven by Chemical Crossover. <i>ACS Nano</i> , 2017, 11, 5853-5863. | 7.3 | 155 |
| 26 | Review on High-Loading and High-Energy Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1700260. | 10.2 | 1,307 |
| 27 | 3D lithium metal embedded within lithiophilic porous matrix for stable lithium metal batteries. <i>Nano Energy</i> , 2017, 37, 177-186. | 8.2 | 431 |
| 28 | Lithiophilic Sites in Doped Graphene Guide Uniform Lithium Nucleation for Dendrite-Free Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 7764-7768. | 7.2 | 989 |
| 29 | Encapsulation of Metallic Na in an Electrically Conductive Host with Porous Channels as a Highly Stable Na Metal Anode. <i>Nano Letters</i> , 2017, 17, 3792-3797. | 4.5 | 243 |
| 30 | Lithiophilic Sites in Doped Graphene Guide Uniform Lithium Nucleation for Dendrite-Free Lithium Metal Anodes. <i>Angewandte Chemie</i> , 2017, 129, 7872-7876. | 1.6 | 186 |
| 31 | Lithium Batteries with Nearly Maximum Metal Storage. <i>ACS Nano</i> , 2017, 11, 6362-6369. | 7.3 | 180 |
| 32 | Nanoscale perspective: Materials designs and understandings in lithium metal anodes. <i>Nano Research</i> , 2017, 10, 4003-4026. | 5.8 | 130 |
| 33 | Conformal Lithium Fluoride Protection Layer on Three-Dimensional Lithium by Nonhazardous Gaseous Reagent Freon. <i>Nano Letters</i> , 2017, 17, 3731-3737. | 4.5 | 377 |
| 34 | The long life-span of a Li-metal anode enabled by a protective layer based on the pyrolyzed N-doped binder network. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9339-9349. | 5.2 | 44 |
| 35 | Stable Li Plating/Stripping Electrochemistry Realized by a Hybrid Li Reservoir in Spherical Carbon Granules with 3D Conducting Skeletons. <i>Journal of the American Chemical Society</i> , 2017, 139, 5916-5922. | 6.6 | 410 |
| 36 | Advanced Na-NiCl ₂ Battery Using Nickel-Coated Graphite with Core-Shell Microarchitecture. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 11609-11614. | 4.0 | 39 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Lithium Metal Anodes with an Adaptive "Solid-Liquid" Interfacial Protective Layer. <i>Journal of the American Chemical Society</i> , 2017, 139, 4815-4820. | 6.6 | 460 |
| 38 | Study of the Mechanisms of Internal Short Circuit in a Li/Li Cell by Synchrotron X-ray Phase Contrast Tomography. <i>ACS Energy Letters</i> , 2017, 2, 94-104. | 8.8 | 89 |
| 39 | Strong texturing of lithium metal in batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 12138-12143. | 3.3 | 188 |
| 40 | Free-Standing Hollow Carbon Fibers as High-Capacity Containers for Stable Lithium Metal Anodes. <i>Joule</i> , 2017, 1, 563-575. | 11.7 | 329 |
| 41 | Solid electrolyte interphase formation by propylene carbonate reduction for lithium anode. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 28772-28780. | 1.3 | 18 |
| 42 | A strategy of selective and dendrite-free lithium deposition for lithium batteries. <i>Nano Energy</i> , 2017, 42, 262-268. | 8.2 | 90 |
| 43 | Interfacial Chemistry Regulation via a Skin-Grafting Strategy Enables High-Performance Lithium-Metal Batteries. <i>Journal of the American Chemical Society</i> , 2017, 139, 15288-15291. | 6.6 | 255 |
| 44 | Suppressing Lithium Dendrite Growth by Metallic Coating on a Separator. <i>Advanced Functional Materials</i> , 2017, 27, 1704391. | 7.8 | 141 |
| 45 | A lithium-carbon nanotube composite for stable lithium anodes. <i>Journal of Materials Chemistry A</i> , 2017, 5, 23434-23439. | 5.2 | 70 |
| 46 | Recent approaches to improving lithium metal electrodes. <i>Current Opinion in Electrochemistry</i> , 2017, 6, 70-76. | 2.5 | 9 |
| 47 | In-situ electron microscopy observation of electrochemical sodium plating and stripping dynamics on carbon nanofiber current collectors. <i>Nano Energy</i> , 2017, 42, 122-128. | 8.2 | 53 |
| 48 | Nanostructured Electrode Materials for High-Energy Rechargeable Li, Na and Zn Batteries. <i>Chemistry of Materials</i> , 2017, 29, 9589-9604. | 3.2 | 80 |
| 49 | Understanding materials challenges for rechargeable ion batteries with in situ transmission electron microscopy. <i>Nature Communications</i> , 2017, 8, . | 5.8 | 301 |
| 50 | Controlling the Compositional Chemistry in Single Nanoparticles for Functional Hollow Carbon Nanospheres. <i>Journal of the American Chemical Society</i> , 2017, 139, 13492-13498. | 6.6 | 264 |
| 51 | Ultrahigh-current density anodes with interconnected Li metal reservoir through overlithiation of mesoporous AlF ₃ framework. <i>Science Advances</i> , 2017, 3, e1701301. | 4.7 | 199 |
| 52 | Stable Li Metal Anodes via Regulating Lithium Plating/Stripping in Vertically Aligned Microchannels. <i>Advanced Materials</i> , 2017, 29, 1703729. | 11.1 | 381 |
| 53 | High-Capacitance Hybrid Supercapacitor Based on Multi-Colored Fluorescent Carbon-Dots. <i>Scientific Reports</i> , 2017, 7, 11222. | 1.6 | 224 |
| 54 | Nanodiamonds suppress the growth of lithium dendrites. <i>Nature Communications</i> , 2017, 8, 336. | 5.8 | 327 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 55 | Perovskite $\text{La}_{0.6}\text{Sr}_{0.4}\text{CoO}_3$ as a new polysulfide immobilizer for high-energy lithium-sulfur batteries. <i>Nano Energy</i> , 2017, 40, 360-368. | 8.2 | 69 |
| 56 | Flexible Ti_3C_2 MXene-lithium film with lamellar structure for ultrastable metallic lithium anodes. <i>Nano Energy</i> , 2017, 39, 654-661. | 8.2 | 163 |
| 57 | Protected Lithium-Metal Anodes in Batteries: From Liquid to Solid. <i>Advanced Materials</i> , 2017, 29, 1701169. | 11.1 | 596 |
| 58 | Advanced Porous Carbon Materials for High-Efficient Lithium Metal Anodes. <i>Advanced Energy Materials</i> , 2017, 7, 1700530. | 10.2 | 208 |
| 59 | Dendrite-Suppressed Lithium Plating from a Liquid Electrolyte via Wetting of Li_3N . <i>Advanced Energy Materials</i> , 2017, 7, 1700732. | 10.2 | 190 |
| 60 | Mechanism of Lithium Metal Penetration through Inorganic Solid Electrolytes. <i>Advanced Energy Materials</i> , 2017, 7, 1701003. | 10.2 | 780 |
| 61 | An Effective Lithium Sulfide Encapsulation Strategy for Stable Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2017, 7, 1701122. | 10.2 | 47 |
| 62 | Toward Safe Lithium Metal Anode in Rechargeable Batteries: A Review. <i>Chemical Reviews</i> , 2017, 117, 10403-10473. | 23.0 | 4,365 |
| 63 | Stabilizing Li/electrolyte interface with a transplantable protective layer based on nanoscale LiF domains. <i>Nano Energy</i> , 2017, 39, 662-672. | 8.2 | 143 |
| 64 | Sign change in the net force in sphere-plate and sphere-sphere systems immersed in nonpolar critical fluid due to the interplay between the critical Casimir and dispersion van der Waals forces. <i>Physical Review E</i> , 2017, 96, 022107. | 0.8 | 6 |
| 65 | Carbon enables the practical use of lithium metal in a battery. <i>Carbon</i> , 2017, 123, 744-755. | 5.4 | 105 |
| 66 | Ultrafine Silver Nanoparticles for Seeded Lithium Deposition toward Stable Lithium Metal Anode. <i>Advanced Materials</i> , 2017, 29, 1702714. | 11.1 | 510 |
| 67 | Processable and Moldable Sodium-Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 11921-11926. | 7.2 | 186 |
| 68 | Processable and Moldable Sodium-Metal Anodes. <i>Angewandte Chemie</i> , 2017, 129, 12083-12088. | 1.6 | 64 |
| 69 | Design of Complex Nanomaterials for Energy Storage: Past Success and Future Opportunity. <i>Accounts of Chemical Research</i> , 2017, 50, 2895-2905. | 7.6 | 258 |
| 70 | The recent advances in constructing designed electrode in lithium metal batteries. <i>Chinese Chemical Letters</i> , 2017, 28, 2171-2179. | 4.8 | 64 |
| 71 | Electrochemical performance and interfacial properties of Li-metal in lithium bis(fluorosulfonyl)imide based electrolytes. <i>Scientific Reports</i> , 2017, 7, 15925. | 1.6 | 16 |
| 72 | Reviving Lithium-Metal Anodes for Next-Generation High-Energy Batteries. <i>Advanced Materials</i> , 2017, 29, 1700007. | 11.1 | 908 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 73 | Graphitized Carbon Fibers as Multifunctional 3D Current Collectors for High Areal Capacity Li Anodes. <i>Advanced Materials</i> , 2017, 29, 1700389. | 11.1 | 495 |
| 74 | Revealing Nanoscale Passivation and Corrosion Mechanisms of Reactive Battery Materials in Gas Environments. <i>Nano Letters</i> , 2017, 17, 5171-5178. | 4.5 | 88 |
| 75 | Air-stable and freestanding lithium alloy/graphene foil as an alternative to lithium metal anodes. <i>Nature Nanotechnology</i> , 2017, 12, 993-999. | 15.6 | 376 |
| 76 | Review of nanostructured current collectors in lithium-sulfur batteries. <i>Nano Research</i> , 2017, 10, 4027-4054. | 5.8 | 91 |
| 77 | Anion Hosting Cathodes in Dual-Ion Batteries. <i>ACS Energy Letters</i> , 2017, 2, 1762-1770. | 8.8 | 220 |
| 78 | Flexible and Stretchable Energy Storage: Recent Advances and Future Perspectives. <i>Advanced Materials</i> , 2017, 29, 1603436. | 11.1 | 872 |
| 79 | Towards High-Safe Lithium Metal Anodes: Suppressing Lithium Dendrites via Tuning Surface Energy. <i>Advanced Science</i> , 2017, 4, 1600168. | 5.6 | 399 |
| 80 | Facile Synthesis of Nickel Nanofoam Architectures for Applications in Li-Ion Batteries. <i>Energy Technology</i> , 2017, 5, 422-427. | 1.8 | 12 |
| 81 | Recent Progresses and Development of Advanced Atomic Layer Deposition towards High-Performance Li-Ion Batteries. <i>Nanomaterials</i> , 2017, 7, 325. | 1.9 | 41 |
| 82 | Stress-driven lithium dendrite growth mechanism and dendrite mitigation by electroplating on soft substrates. <i>Nature Energy</i> , 2018, 3, 227-235. | 19.8 | 353 |
| 83 | Carbon nanomaterials for advanced lithium sulfur batteries. <i>Nano Today</i> , 2018, 19, 84-107. | 6.2 | 365 |
| 84 | A multifunctional polymer electrolyte enables ultra-long cycle-life in a high-voltage lithium metal battery. <i>Energy and Environmental Science</i> , 2018, 11, 1197-1203. | 15.6 | 273 |
| 85 | Engineering of lithium-metal anodes towards a safe and stable battery. <i>Energy Storage Materials</i> , 2018, 14, 22-48. | 9.5 | 213 |
| 86 | Coralloid Carbon Fiber-Based Composite Lithium Anode for Robust Lithium Metal Batteries. <i>Joule</i> , 2018, 2, 764-777. | 11.7 | 609 |
| 87 | Problem, Status, and Possible Solutions for Lithium Metal Anode of Rechargeable Batteries. <i>ACS Applied Energy Materials</i> , 2018, 1, 910-920. | 2.5 | 135 |
| 88 | Recent progress and perspective on lithium metal anode protection. <i>Energy Storage Materials</i> , 2018, 14, 199-221. | 9.5 | 195 |
| 89 | Effective strategies for long-cycle life lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 6155-6182. | 5.2 | 157 |
| 90 | Polyethylene oxide film coating enhances lithium cycling efficiency of an anode-free lithium-metal battery. <i>Nanoscale</i> , 2018, 10, 6125-6138. | 2.8 | 215 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 91 | Nanocellulose Modified Polyethylene Separators for Lithium Metal Batteries. Small, 2018, 14, e1704371. | 5.2 | 130 |
| 92 | Vertically Aligned Lithiophilic CuO Nanosheets on a Cu Collector to Stabilize Lithium Deposition for Lithium Metal Batteries. Advanced Energy Materials, 2018, 8, 1703404. | 10.2 | 274 |
| 93 | Effect of LiFSI Concentrations To Form Thickness- and Modulus-Controlled SEI Layers on Lithium Metal Anodes. Journal of Physical Chemistry C, 2018, 122, 9825-9834. | 1.5 | 131 |
| 94 | A synergistic strategy for stable lithium metal anodes using 3D fluorine-doped graphene shuttle-implanted porous carbon networks. Nano Energy, 2018, 49, 179-185. | 8.2 | 138 |
| 95 | Graphene anchored on Cu foam as a lithiophilic 3D current collector for a stable and dendrite-free lithium metal anode. Journal of Materials Chemistry A, 2018, 6, 9899-9905. | 5.2 | 137 |
| 96 | Poly(vinyl alcohol)-Assisted Fabrication of Hollow Carbon Spheres/Reduced Graphene Oxide Nanocomposites for High-Performance Lithium-Ion Battery Anodes. ACS Nano, 2018, 12, 4824-4834. | 7.3 | 141 |
| 97 | Perspectives for restraining harsh lithium dendrite growth: Towards robust lithium metal anodes. Energy Storage Materials, 2018, 15, 148-170. | 9.5 | 247 |
| 98 | Designable ultra-smooth ultra-thin solid-electrolyte interphases of three alkali metal anodes. Nature Communications, 2018, 9, 1339. | 5.8 | 265 |
| 99 | A bidirectional growth mechanism for a stable lithium anode by a platinum nanolayer sputtered on a polypropylene separator. RSC Advances, 2018, 8, 13034-13039. | 1.7 | 21 |
| 100 | Compact 3D Copper with Uniform Porous Structure Derived by Electrochemical Dealloying as Dendrite-Free Lithium Metal Anode Current Collector. Advanced Energy Materials, 2018, 8, 1800266. | 10.2 | 336 |
| 101 | Challenges and perspectives of garnet solid electrolytes for all solid-state lithium batteries. Journal of Power Sources, 2018, 389, 120-134. | 4.0 | 359 |
| 102 | Dendrite formation in silicon anodes of lithium-ion batteries. RSC Advances, 2018, 8, 5255-5267. | 1.7 | 55 |
| 103 | Directing lateral growth of lithium dendrites in micro-compartmented anode arrays for safe lithium metal batteries. Nature Communications, 2018, 9, 464. | 5.8 | 250 |
| 104 | Microscale Lithium Metal Stored inside Cellular Graphene Scaffold toward Advanced Metallic Lithium Anodes. Advanced Energy Materials, 2018, 8, 1703152. | 10.2 | 144 |
| 105 | Dendrite-Free and Performance-Enhanced Lithium Metal Batteries through Optimizing Solvent Compositions and Adding Combinational Additives. Advanced Energy Materials, 2018, 8, 1703022. | 10.2 | 123 |
| 106 | Achieving a stable Na metal anode with a 3D carbon fibre scaffold. Inorganic Chemistry Frontiers, 2018, 5, 864-869. | 3.0 | 40 |
| 107 | A Material Perspective of Rechargeable Metallic Lithium Anodes. Advanced Energy Materials, 2018, 8, 1702296. | 10.2 | 95 |
| 108 | Trapping Lithium into Hollow Silica Microspheres with a Carbon Nanotube Core for Dendrite-Free Lithium Metal Anodes. Nano Letters, 2018, 18, 297-301. | 4.5 | 130 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 109 | Effects of Imide-Orthoborate Dual-Salt Mixtures in Organic Carbonate Electrolytes on the Stability of Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 2469-2479. | 4.0 | 110 |
| 110 | A Flexible Solid Electrolyte Interphase Layer for Long-Life Lithium Metal Anodes. <i>Angewandte Chemie</i> , 2018, 130, 1521-1525. | 1.6 | 82 |
| 111 | Tough Gel Electrolyte Using Double Polymer Network Design for the Safe, Stable Cycling of Lithium Metal Anode. <i>Angewandte Chemie</i> , 2018, 130, 1375-1379. | 1.6 | 17 |
| 112 | Lithiophilic Cu-Cu-Ni Hybrid Structure: Advanced Current Collectors Toward Stable Lithium Metal Anodes. <i>Advanced Materials</i> , 2018, 30, 1705830. | 11.1 | 217 |
| 113 | Electro-plating and stripping behavior on lithium metal electrode with ordered three-dimensional structure. <i>Nano Energy</i> , 2018, 45, 463-470. | 8.2 | 81 |
| 114 | Uniform Lithium Nucleation/Growth Induced by Lightweight Nitrogen-Doped Graphitic Carbon Foams for High-Performance Lithium Metal Anodes. <i>Advanced Materials</i> , 2018, 30, 1706216. | 11.1 | 401 |
| 115 | Metal oxide nanoparticles induced step-edge nucleation of stable Li metal anode working under an ultrahigh current density of 15 mA cm ⁻² . <i>Nano Energy</i> , 2018, 45, 203-209. | 8.2 | 153 |
| 116 | A new binder-free and conductive-additive-free TiO ₂ /WO ₃ -W integrative anode material produced by laser ablation. <i>Journal of Power Sources</i> , 2018, 378, 362-368. | 4.0 | 12 |
| 117 | Insight into the effect of lithium-dendrite suppression by lithium bis(fluorosulfonyl)imide/1,2-dimethoxyethane electrolytes. <i>Electrochimica Acta</i> , 2018, 277, 116-126. | 2.6 | 9 |
| 118 | Multidimensional Evolution of Carbon Structures Underpinned by Temperature-Induced Intermediate of Chloride for Sodium-Ion Batteries. <i>Advanced Science</i> , 2018, 5, 1800080. | 5.6 | 112 |
| 119 | Uniform Li deposition regulated <i>via</i> three-dimensional polyvinyl alcohol nanofiber networks for effective Li metal anodes. <i>Nanoscale</i> , 2018, 10, 10018-10024. | 2.8 | 46 |
| 120 | Ladderlike carbon nanoarrays on 3D conducting skeletons enable uniform lithium nucleation for stable lithium metal anodes. <i>Chemical Communications</i> , 2018, 54, 5330-5333. | 2.2 | 38 |
| 121 | High Voltage Operation of Ni-Rich NMC Cathodes Enabled by Stable Electrode/Electrolyte Interphases. <i>Advanced Energy Materials</i> , 2018, 8, 1800297. | 10.2 | 298 |
| 122 | Hierarchically Bicontinuous Porous Copper as Advanced 3D Skeleton for Stable Lithium Storage. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 13552-13561. | 4.0 | 95 |
| 123 | Dendrite-Free Metallic Lithium in Lithiophilic Carbonized Metal-Organic Frameworks. <i>Advanced Energy Materials</i> , 2018, 8, 1703505. | 10.2 | 144 |
| 124 | Realizing a highly stable sodium battery with dendrite-free sodium metal composite anodes and O ₃ -type cathodes. <i>Nano Energy</i> , 2018, 48, 369-376. | 8.2 | 99 |
| 125 | Silicon-Based Composite Negative Electrode Prepared from Recycled Silicon-Slicing Slurries and Lignin/Lignocellulose for Li-Ion Cells. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 4759-4766. | 3.2 | 49 |
| 126 | All nanocarbon Li-Ion capacitor with high energy and high power density. <i>Materials Today Energy</i> , 2018, 8, 109-117. | 2.5 | 52 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 127 | A Li-dual carbon composite as stable anode material for Li batteries. <i>Energy Storage Materials</i> , 2018, 15, 116-123. | 9.5 | 53 |
| 128 | A room-temperature sodium metal anode enabled by a sodiophilic layer. <i>Nano Energy</i> , 2018, 48, 101-106. | 8.2 | 132 |
| 129 | Boosting the performance of lithium batteries with solid-liquid hybrid electrolytes: Interfacial properties and effects of liquid electrolytes. <i>Nano Energy</i> , 2018, 48, 35-43. | 8.2 | 143 |
| 130 | Dendrite-free Li metal anode by lowering deposition interface energy with Cu ₉₉ Zn alloy coating. <i>Energy Storage Materials</i> , 2018, 14, 143-148. | 9.5 | 99 |
| 131 | Crumpled Graphene Balls Stabilized Dendrite-free Lithium Metal Anodes. <i>Joule</i> , 2018, 2, 184-193. | 11.7 | 300 |
| 132 | Sulfurized solid electrolyte interphases with a rapid Li ⁺ diffusion on dendrite-free Li metal anodes. <i>Energy Storage Materials</i> , 2018, 10, 199-205. | 9.5 | 215 |
| 133 | Improving Li anode performance by a porous 3D carbon paper host with plasma assisted sponge carbon coating. <i>Energy Storage Materials</i> , 2018, 11, 47-56. | 9.5 | 49 |
| 134 | Recent development in lithium metal anodes of liquid-state rechargeable batteries. <i>Journal of Alloys and Compounds</i> , 2018, 730, 135-149. | 2.8 | 44 |
| 135 | Accurate Determination of Coulombic Efficiency for Lithium Metal Anodes and Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1702097. | 10.2 | 704 |
| 136 | A Flexible Solid Electrolyte Interphase Layer for Long-life Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 1505-1509. | 7.2 | 590 |
| 137 | Tough Gel Electrolyte Using Double Polymer Network Design for the Safe, Stable Cycling of Lithium Metal Anode. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 1361-1365. | 7.2 | 131 |
| 138 | Suppression of Dendritic Lithium Growth by in Situ Formation of a Chemically Stable and Mechanically Strong Solid Electrolyte Interphase. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 593-601. | 4.0 | 116 |
| 139 | Robust Pinhole-free Li ₃ N Solid Electrolyte Grown from Molten Lithium. <i>ACS Central Science</i> , 2018, 4, 97-104. | 5.3 | 197 |
| 140 | Macroporous Catalytic Carbon Nanotemplates for Sodium Metal Anodes. <i>Advanced Energy Materials</i> , 2018, 8, 1701261. | 10.2 | 79 |
| 141 | Behavior of Lithium Metal Anodes under Various Capacity Utilization and High Current Density in Lithium Metal Batteries. <i>Joule</i> , 2018, 2, 110-124. | 11.7 | 280 |
| 142 | Guided Lithium Metal Deposition and Improved Lithium Coulombic Efficiency through Synergistic Effects of LiAsF ₆ and Cyclic Carbonate Additives. <i>ACS Energy Letters</i> , 2018, 3, 14-19. | 8.8 | 161 |
| 143 | Bending-tolerant Anodes for Lithium-metal Batteries. <i>Advanced Materials</i> , 2018, 30, 1703891. | 11.1 | 113 |
| 144 | Rethinking sodium-ion anodes as nucleation layers for anode-free batteries. <i>Journal of Materials Chemistry A</i> , 2018, 6, 23875-23884. | 5.2 | 55 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 145 | Revisiting Scientific Issues for Industrial Applications of Lithium-Sulfur Batteries. <i>Energy and Environmental Materials</i> , 2018, 1, 196-208. | 7.3 | 158 |
| 146 | Lithium Metal Penetration Induced by Electrodeposition through Solid Electrolytes: Example in Single-Crystal $\text{Li}_6\text{La}_3\text{ZrTaO}_{12}$ Garnet. <i>Journal of the Electrochemical Society</i> , 2018, 165, A3648-A3655. | 1.3 | 172 |
| 147 | Incorporating Flexibility into Stiffness: Self-Grown Carbon Nanotubes in Melamine Sponges Enable A Lithium-Metal Anode Capacity of 15 mA h cm^{-2} Cyclable at 15 mA cm^{-2} . <i>Advanced Materials</i> , 2019, 31, e1805654. | 11.1 | 95 |
| 148 | Lightweight, Thin, and Flexible Silver Nanopaper Electrodes for High-Capacity Dendrite-Free Sodium Metal Anodes. <i>Advanced Functional Materials</i> , 2018, 28, 1804038. | 7.8 | 73 |
| 149 | Interfaces in Solid-State Lithium Batteries. <i>Joule</i> , 2018, 2, 1991-2015. | 11.7 | 444 |
| 150 | Correlating Structure and Function of Battery Interphases at Atomic Resolution Using Cryoelectron Microscopy. <i>Joule</i> , 2018, 2, 2167-2177. | 11.7 | 284 |
| 151 | A Hierarchical Silver-Nanowire-Graphene Host Enabling Ultrahigh Rates and Superior Long-Term Cycling of Lithium-Metal Composite Anodes. <i>Advanced Materials</i> , 2018, 30, e1804165. | 11.1 | 221 |
| 152 | Strain Redistribution in Metal-Sulfide Composite Anode for Enhancing Volumetric Lithium Storage. <i>ChemElectroChem</i> , 2018, 5, 3906-3912. | 1.7 | 7 |
| 153 | Activate metallic copper as high-capacity cathode for lithium-ion batteries via nanocomposite technology. <i>Nano Energy</i> , 2018, 54, 59-65. | 8.2 | 22 |
| 154 | Upgrading traditional liquid electrolyte via in situ gelation for future lithium metal batteries. <i>Science Advances</i> , 2018, 4, eaat5383. | 4.7 | 337 |
| 155 | Langmuir-Blodgett artificial solid-electrolyte interphases for practical lithium metal batteries. <i>Nature Energy</i> , 2018, 3, 889-898. | 19.8 | 347 |
| 156 | Combinatorial Methods for Improving Lithium Metal Cycling Efficiency. <i>Journal of the Electrochemical Society</i> , 2018, 165, A3000-A3013. | 1.3 | 25 |
| 157 | Oriented growth of Li metal for stable Li/carbon composite negative electrode. <i>Electrochimica Acta</i> , 2018, 292, 227-233. | 2.6 | 20 |
| 158 | Mechanistic insight into dendrite-SEI interactions for lithium metal electrodes. <i>Journal of Materials Chemistry A</i> , 2018, 6, 19664-19671. | 5.2 | 105 |
| 159 | Ionic liquid-immobilized polymer gel electrolyte with self-healing capability, high ionic conductivity and heat resistance for dendrite-free lithium metal batteries. <i>Nano Energy</i> , 2018, 54, 17-25. | 8.2 | 168 |
| 160 | Measuring the Coulombic Efficiency of Lithium Metal Cycling in Anode-Free Lithium Metal Batteries. <i>Journal of the Electrochemical Society</i> , 2018, 165, A3321-A3325. | 1.3 | 97 |
| 161 | Cryogenic Electron Microscopy for Characterizing and Diagnosing Batteries. <i>Joule</i> , 2018, 2, 2225-2234. | 11.7 | 118 |
| 162 | Improved Rechargeability of Lithium Metal Anode via Controlling Lithium-Ion Flux. <i>Advanced Energy Materials</i> , 2018, 8, 1802352. | 10.2 | 109 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 163 | In operando plasmonic monitoring of electrochemical evolution of lithium metal. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11168-11173. | 3.3 | 28 |
| 164 | A proof-of-concept graphite anode with a lithium dendrite suppressing polymer coating. Journal of Power Sources, 2018, 406, 63-69. | 4.0 | 50 |
| 165 | Mixed Lithium Oxynitride/Oxysulfide as an Interphase Protective Layer To Stabilize Lithium Anodes for High-Performance Lithium-Sulfur Batteries. ACS Applied Materials & Interfaces, 2018, 10, 39695-39704. | 4.0 | 35 |
| 166 | In Situ Synthesis of a Lithiophilic Ag-Nanoparticles-Decorated 3D Porous Carbon Framework toward Dendrite-Free Lithium Metal Anodes. ACS Sustainable Chemistry and Engineering, 2018, 6, 15219-15227. | 3.2 | 43 |
| 167 | Pseudocapacitance Induced Uniform Plating/Stripping of Li Metal Anode in Vertical Graphene Nanowalls. Advanced Functional Materials, 2018, 28, 1805638. | 7.8 | 65 |
| 168 | Favorable lithium deposition behaviors on flexible carbon microtube skeleton enable a high-performance lithium metal anode. Journal of Materials Chemistry A, 2018, 6, 19159-19166. | 5.2 | 35 |
| 169 | Solubility-mediated sustained release enabling nitrate additive in carbonate electrolytes for stable lithium metal anode. Nature Communications, 2018, 9, 3656. | 5.8 | 371 |
| 170 | A 3D conductive scaffold with lithiophilic modification for stable lithium metal batteries. Journal of Materials Chemistry A, 2018, 6, 17967-17976. | 5.2 | 57 |
| 171 | Lithiophilic gel polymer electrolyte to stabilize the lithium anode for a quasi-solid-state lithium-sulfur battery. Journal of Materials Chemistry A, 2018, 6, 18627-18634. | 5.2 | 69 |
| 172 | Homogeneous Interface Conductivity for Lithium Dendrite-Free Anode. ACS Energy Letters, 2018, 3, 2259-2266. | 8.8 | 124 |
| 173 | A Chemically Engineered Porous Copper Matrix with Cylindrical Core-Shell Skeleton as a Stable Host for Metallic Sodium Anodes. Advanced Functional Materials, 2018, 28, 1802282. | 7.8 | 104 |
| 174 | Highly Reversible Li Plating Confined in Three-Dimensional Interconnected Microchannels toward High-Rate and Stable Metallic Lithium Anodes. ACS Applied Materials & Interfaces, 2018, 10, 20387-20395. | 4.0 | 42 |
| 175 | Vertically Grown Edge-Rich Graphene Nanosheets for Spatial Control of Li Nucleation. Advanced Energy Materials, 2018, 8, 1800564. | 10.2 | 145 |
| 176 | Chemically polished lithium metal anode for high energy lithium metal batteries. Energy Storage Materials, 2018, 14, 289-296. | 9.5 | 48 |
| 177 | Ultrathin Al ₂ O ₃ -coated reduced graphene oxide membrane for stable lithium metal anode. Rare Metals, 2018, 37, 510-519. | 3.6 | 32 |
| 178 | CoO nanofiber decorated nickel foams as lithium dendrite suppressing host skeletons for high energy lithium metal batteries. Energy Storage Materials, 2018, 14, 335-344. | 9.5 | 164 |
| 179 | Dendrite-Free Sodium-Metal Anodes for High-Energy Sodium-Metal Batteries. Advanced Materials, 2018, 30, e1801334. | 11.1 | 267 |
| 180 | Highly stable garnet solid electrolyte based Li-S battery with modified anodic and cathodic interfaces. Energy Storage Materials, 2018, 15, 282-290. | 9.5 | 121 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 181 | Lithium Silicide Surface Enrichment: A Solution to Lithium Metal Battery. <i>Advanced Materials</i> , 2018, 30, e1801745. | 11.1 | 163 |
| 182 | The effects of lithium salt and solvent on lithium metal anode performance. <i>Solid State Ionics</i> , 2018, 324, 144-149. | 1.3 | 19 |
| 183 | Structural Design of Lithium-Sulfur Batteries: From Fundamental Research to Practical Application. <i>Electrochemical Energy Reviews</i> , 2018, 1, 239-293. | 13.1 | 298 |
| 184 | AlF ₃ -Modified carbon nanofibers as a multifunctional 3D interlayer for stable lithium metal anodes. <i>Chemical Communications</i> , 2018, 54, 8347-8350. | 2.2 | 28 |
| 185 | Incorporating Ionic Paths into 3D Conducting Scaffolds for High Volumetric and Areal Capacity, High Rate Lithium-Metal Anodes. <i>Advanced Materials</i> , 2018, 30, e1801328. | 11.1 | 134 |
| 186 | Electron-rich functional doping carbon host as dendrite-free lithium metal anode. <i>Electrochimica Acta</i> , 2018, 284, 376-381. | 2.6 | 27 |
| 187 | Nanocellulose Structured Paper-Based Lithium Metal Batteries. <i>ACS Applied Energy Materials</i> , 2018, 1, 4341-4350. | 2.5 | 45 |
| 188 | A Versatile Strategy to Fabricate 3D Conductive Frameworks for Lithium Metal Anodes. <i>Advanced Materials Interfaces</i> , 2018, 5, 1800807. | 1.9 | 25 |
| 189 | Lithium metal stripping beneath the solid electrolyte interphase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 8529-8534. | 3.3 | 150 |
| 190 | Horizontal Centripetal Plating in the Patterned Voids of Li/Graphene Composites for Stable Lithium-Metal Anodes. <i>CheM</i> , 2018, 4, 2192-2200. | 5.8 | 107 |
| 191 | Mesoscale Complexations in Lithium Electrodeposition. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 26320-26327. | 4.0 | 61 |
| 192 | Engineering stable interfaces for three-dimensional lithium metal anodes. <i>Science Advances</i> , 2018, 4, eaat5168. | 4.7 | 153 |
| 193 | Controlling Nucleation in Lithium Metal Anodes. <i>Small</i> , 2018, 14, e1801423. | 5.2 | 159 |
| 194 | Silver sites guide spatially homogeneous plating of lithium metal in 3D host. <i>Journal of Electroanalytical Chemistry</i> , 2018, 824, 175-180. | 1.9 | 31 |
| 195 | Electrochemical solid-state amorphization in the immiscible Cu-Li system. <i>Science Bulletin</i> , 2018, 63, 1208-1214. | 4.3 | 8 |
| 196 | Low-Weight 3D Al ₂ O ₃ Network as an Artificial Layer to Stabilize Lithium Deposition. <i>ChemSusChem</i> , 2018, 11, 3243-3252. | 3.6 | 24 |
| 197 | High-Coulombic-Efficiency Carbon/Li Clusters Composite Anode without Precycling or Prelithiation. <i>Small</i> , 2018, 14, e1802226. | 5.2 | 31 |
| 198 | In Situ Scanning Electron Microscope Observations of Li Plating/Stripping Reactions with Pt Current Collectors on LiPON Electrolyte. <i>Journal of the Electrochemical Society</i> , 2018, 165, A1338-A1347. | 1.3 | 26 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 199 | Self-Healing Wide and Thin Li Metal Anodes Prepared Using Calendared Li Metal Powder for Improving Cycle Life and Rate Capability. ACS Applied Materials & Interfaces, 2018, 10, 16521-16530. | 4.0 | 29 |
| 200 | 3D Wettable Framework for Dendrite-Free Alkali Metal Anodes. Advanced Energy Materials, 2018, 8, 1800635. | 10.2 | 196 |
| 201 | Development of a Wire Reference Electrode for Lithium All-Solid-State Batteries with Polymer Electrolyte: FEM Simulation and Experiment. Journal of the Electrochemical Society, 2018, 165, A1363-A1371. | 1.3 | 23 |
| 202 | Interlayer Lithium Plating in Au Nanoparticles Pillared Reduced Graphene Oxide for Lithium Metal Anodes. Advanced Functional Materials, 2018, 28, 1804133. | 7.8 | 142 |
| 203 | Inhibition of lithium dendrite growth by forming rich polyethylene oxide-like species in a solid-electrolyte interphase in a polysulfide/carbonate electrolyte. Journal of Materials Chemistry A, 2018, 6, 16818-16823. | 5.2 | 7 |
| 204 | Electron Energy-Loss Spectroscopy and Imaging \hat{f} . , 2018, , . | | 0 |
| 205 | Reducing lithium deposition overpotential with silver nanocrystals anchored on graphene aerogel. Nanoscale, 2018, 10, 16562-16567. | 2.8 | 44 |
| 206 | Operando monitoring the lithium spatial distribution of lithium metal anodes. Nature Communications, 2018, 9, 2152. | 5.8 | 96 |
| 207 | Tailoring Rod-Like FeSe ₂ Coated with Nitrogen-Doped Carbon for High-Performance Sodium Storage. Advanced Functional Materials, 2018, 28, 1801765. | 7.8 | 287 |
| 208 | Developing High-Performance Lithium Metal Anode in Liquid Electrolytes: Challenges and Progress. Advanced Materials, 2018, 30, e1706375. | 11.1 | 335 |
| 209 | Advanced Low-Cost, High-Voltage, Long-Life Aqueous Hybrid Sodium/Zinc Batteries Enabled by a Dendrite-Free Zinc Anode and Concentrated Electrolyte. ACS Applied Materials & Interfaces, 2018, 10, 22059-22066. | 4.0 | 226 |
| 210 | Advanced Transmission Electron Microscopy for Electrode and Solid-Electrolyte Materials in Lithium-Ion Batteries. Small Methods, 2018, 2, 1800006. | 4.6 | 41 |
| 211 | A lightweight carbon nanofiber-based 3D structured matrix with high nitrogen-doping level for lithium metal anodes. Science China Materials, 2019, 62, 87-94. | 3.5 | 53 |
| 212 | Over-potential induced Li/Na filtrated depositions using stacked graphene coating on copper scaffold. Energy Storage Materials, 2019, 16, 364-373. | 9.5 | 31 |
| 213 | Oxygen and nitrogen co-doped porous carbon granules enabling dendrite-free lithium metal anode. Energy Storage Materials, 2019, 18, 320-327. | 9.5 | 102 |
| 214 | Lithium phosphorus oxynitride as an efficient protective layer on lithium metal anodes for advanced lithium-sulfur batteries. Energy Storage Materials, 2019, 18, 414-422. | 9.5 | 110 |
| 215 | PMMA-assisted Li deposition towards 3D continuous dendrite-free lithium anode. Energy Storage Materials, 2019, 16, 203-211. | 9.5 | 53 |
| 216 | Homogeneous Li deposition through the control of carbon dot-assisted Li-dendrite morphology for high-performance Li-metal batteries. Journal of Materials Chemistry A, 2019, 7, 20325-20334. | 5.2 | 35 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 217 | Lithiated NiCo ₂ O ₄ Nanorods Anchored on 3D Nickel Foam Enable Homogeneous Li Plating/Stripping for High-Power Dendrite-Free Lithium Metal Anode. ACS Applied Materials & Interfaces, 2019, 11, 31824-31831. | 4.0 | 40 |
| 218 | Single-Atom Iron as Lithiophilic Site To Minimize Lithium Nucleation Overpotential for Stable Lithium Metal Full Battery. ACS Applied Materials & Interfaces, 2019, 11, 32008-32014. | 4.0 | 64 |
| 219 | High-Rate Cycling of Lithium-Metal Batteries Enabled by Dual-Salt Electrolyte-Assisted Micropatterned Interfaces. ACS Applied Materials & Interfaces, 2019, 11, 31777-31785. | 4.0 | 20 |
| 220 | Artificial Solid-Electrolyte Interface Facilitating Dendrite-Free Zinc Metal Anodes via Nanowetting Effect. ACS Applied Materials & Interfaces, 2019, 11, 32046-32051. | 4.0 | 223 |
| 221 | Plasma-Strengthened Lithiophilicity of Copper Oxide Nanosheet-Decorated Cu Foil for Stable Lithium Metal Anode. Advanced Science, 2019, 6, 1901433. | 5.6 | 106 |
| 222 | Boosting the Reversibility of Sodium Metal Anode via Heteroatom-Doped Hollow Carbon Fibers. Small, 2019, 15, e1902688. | 5.2 | 76 |
| 223 | Toward High-Performance Li Metal Anode via Difunctional Protecting Layer. Frontiers in Chemistry, 2019, 7, 572. | 1.8 | 12 |
| 224 | ZnO nanoconfined 3D porous carbon composite microspheres to stabilize lithium nucleation/growth for high-performance lithium metal anodes. Journal of Materials Chemistry A, 2019, 7, 19442-19452. | 5.2 | 42 |
| 225 | Characterizing the Li-Solid-Electrolyte Interface Dynamics as a Function of Stack Pressure and Current Density. Joule, 2019, 3, 2165-2178. | 11.7 | 298 |
| 226 | A borate decorated anion-immobilized solid polymer electrolyte for dendrite-free, long-life Li metal batteries. Journal of Materials Chemistry A, 2019, 7, 19970-19976. | 5.2 | 32 |
| 227 | Encapsulating Metallic Lithium into Carbon Nanocages Which Enables a Low-Volume Effect and a Dendrite-Free Lithium Metal Anode. ACS Applied Materials & Interfaces, 2019, 11, 30902-30910. | 4.0 | 24 |
| 228 | The Three-Dimensional Dendrite-Free Zinc Anode on a Copper Mesh with a Zinc-Oriented Polyacrylamide Electrolyte Additive. Angewandte Chemie - International Edition, 2019, 58, 15841-15847. | 7.2 | 648 |
| 229 | Lithiophilic Ag/Li composite anodes via a spontaneous reaction for Li nucleation with a reduced barrier. Journal of Materials Chemistry A, 2019, 7, 20911-20918. | 5.2 | 66 |
| 230 | Uniform Li deposition by regulating the initial nucleation barrier via a simple liquid-metal coating for a dendrite-free Li-metal anode. Journal of Materials Chemistry A, 2019, 7, 18861-18870. | 5.2 | 93 |
| 231 | Long cycle life and dendrite-free lithium morphology in anode-free lithium pouch cells enabled by a dual-salt liquid electrolyte. Nature Energy, 2019, 4, 683-689. | 19.8 | 603 |
| 232 | Batteries Safety: Recent Progress and Current Challenges. Frontiers in Energy Research, 2019, 7, . | 1.2 | 93 |
| 233 | Effect of stress-dependent activation enthalpy on electrochemical reaction and diffusion-reaction-induced stress in spherical electrodes. Results in Physics, 2019, 14, 102407. | 2.0 | 7 |
| 234 | Robust Lithium Metal Anodes Realized by Lithiophilic 3D Porous Current Collectors for Constructing High-Energy Lithium-Sulfur Batteries. ACS Nano, 2019, 13, 8337-8346. | 7.3 | 152 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 235 | A new reflowing strategy based on lithiophilic substrates towards smooth and stable lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 18126-18134. | 5.2 | 32 |
| 236 | Dual Insurance Design Achieves Long-Life Cycling of Li-Metal Batteries under a Wide Temperature Range. <i>ACS Applied Energy Materials</i> , 2019, 2, 5292-5299. | 2.5 | 7 |
| 237 | Tin nanoparticles embedded in a carbon buffer layer as preferential nucleation sites for stable sodium metal anodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 23747-23755. | 5.2 | 77 |
| 238 | Lithium-Metal Growth Kinetics on LLZO Garnet-Type Solid Electrolytes. <i>Joule</i> , 2019, 3, 2030-2049. | 11.7 | 292 |
| 239 | Electrodeposition Technologies for Li-Based Batteries: New Frontiers of Energy Storage. <i>Advanced Materials</i> , 2020, 32, e1903808. | 11.1 | 70 |
| 240 | Nanoengineering Carbon Spheres as Nanoreactors for Sustainable Energy Applications. <i>Advanced Materials</i> , 2019, 31, e1903886. | 11.1 | 251 |
| 241 | A Coaxial-Interweaved Hybrid Lithium Metal Anode for Long-Lifespan Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1901932. | 10.2 | 73 |
| 242 | Flexible Amalgam Film Enables Stable Lithium Metal Anodes with High Capacities. <i>Angewandte Chemie</i> , 2019, 131, 18637-18641. | 1.6 | 7 |
| 243 | Gradient-Distributed Nucleation Seeds on Conductive Host for a Dendrite-Free and High-Rate Lithium Metal Anode. <i>Small</i> , 2019, 15, e1903520. | 5.2 | 83 |
| 244 | N-Doped Carbon Nanofibers with Interweaved Nanochannels for High-Performance Sodium-Ion Storage. <i>Small</i> , 2019, 15, e1904054. | 5.2 | 45 |
| 245 | Encapsulating lithium and sodium inside amorphous carbon nanotubes through gold-seeded growth. <i>Nano Energy</i> , 2019, 66, 104178. | 8.2 | 40 |
| 246 | Dendritic cracking in solid electrolytes driven by lithium insertion. <i>Journal of Power Sources</i> , 2019, 442, 227226. | 4.0 | 67 |
| 247 | Lithium Metal Anode Materials Design: Interphase and Host. <i>Electrochemical Energy Reviews</i> , 2019, 2, 509-517. | 13.1 | 156 |
| 248 | Surface Reinforcing Balloon Trick-Inspired Separator/Li Metal Integrated Assembly To Improve the Electrochemical Performance of Li Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 43122-43129. | 4.0 | 9 |
| 249 | Self-sacrificing template based hollow carbon spheres/molybdenum dioxide nanocomposite for high-performance Lithium-ion batteries. <i>Materials Today Communications</i> , 2019, 21, 100694. | 0.9 | 10 |
| 250 | Scalable and Physical Synthesis of 2D Silicon from Bulk Layered Alloy for Lithium-Ion Batteries and Lithium Metal Batteries. <i>ACS Nano</i> , 2019, 13, 13690-13701. | 7.3 | 143 |
| 251 | Ultrafine Titanium Nitride Sheath Decorated Carbon Nanofiber Network Enabling Stable Lithium Metal Anodes. <i>Advanced Functional Materials</i> , 2019, 29, 1903229. | 7.8 | 112 |
| 252 | Dendrite-Free Li Metal Plating/Stripping Onto Three-Dimensional Vertical-Graphene@Carbon-Cloth Host. <i>Frontiers in Chemistry</i> , 2019, 7, 714. | 1.8 | 24 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 253 | Controlling Li Ion Flux through Materials Innovation for Dendrite-Free Lithium Metal Anodes. <i>Advanced Functional Materials</i> , 2019, 29, 1905940. | 7.8 | 122 |
| 254 | Non-Dendritic Zn Electrodeposition Enabled by Zincophilic Graphene Substrates. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 44077-44089. | 4.0 | 129 |
| 255 | Computational Screening of Current Collectors for Enabling Anode-Free Lithium Metal Batteries. <i>ACS Energy Letters</i> , 2019, 4, 2952-2959. | 8.8 | 108 |
| 256 | A Review of Carbon-Based Materials for Safe Lithium Metal Anodes. <i>Frontiers in Chemistry</i> , 2019, 7, 721. | 1.8 | 30 |
| 257 | Nonflammable and High-Voltage-Tolerated Polymer Electrolyte Achieving High Stability and Safety in 4.9 V-Class Lithium Metal Battery. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 45048-45056. | 4.0 | 73 |
| 258 | Flexible Amalgam Film Enables Stable Lithium Metal Anodes with High Capacities. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18466-18470. | 7.2 | 67 |
| 259 | Suppressing Sponge-Like Li Deposition via AlN-Modified Substrate for Stable Li Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 42261-42270. | 4.0 | 9 |
| 260 | Nucleation and Growth Mechanism of Lithium Metal Electroplating. <i>Journal of the American Chemical Society</i> , 2019, 141, 18612-18623. | 6.6 | 144 |
| 261 | A Lightweight 3D Cu Nanowire Network with Phosphidation Gradient as Current Collector for High-Density Nucleation and Stable Deposition of Lithium. <i>Advanced Materials</i> , 2019, 31, e1904991. | 11.1 | 114 |
| 262 | Marginal Magnesium Doping for High-Performance Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1902278. | 10.2 | 47 |
| 263 | Artificial Solid-Electrolyte Interphase Enabled High-Capacity and Stable Cycling Potassium Metal Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1902697. | 10.2 | 81 |
| 264 | A Sodiophilic Interphase-Mediated, Dendrite-Free Anode with Ultrahigh Specific Capacity for Sodium-Metal Batteries. <i>Angewandte Chemie</i> , 2019, 131, 17210-17216. | 1.6 | 49 |
| 265 | A Sodiophilic Interphase-Mediated, Dendrite-Free Anode with Ultrahigh Specific Capacity for Sodium-Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 17054-17060. | 7.2 | 119 |
| 266 | Improved lithium deposition on silver plated carbon fiber paper. <i>Nano Energy</i> , 2019, 66, 104144. | 8.2 | 38 |
| 267 | Enabling reversible redox reactions in electrochemical cells using protected LiAl intermetallics as lithium metal anodes. <i>Science Advances</i> , 2019, 5, eaax5587. | 4.7 | 84 |
| 268 | An Investigation on the Relationship between the Stability of Lithium Anode and Lithium Nitrate in Electrolyte. <i>Journal of the Electrochemical Society</i> , 2019, 166, A3570-A3574. | 1.3 | 5 |
| 269 | A high-energy potassium-sulfur battery enabled by facile and effective imidazole-solvated copper catalysts. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20584-20589. | 5.2 | 30 |
| 270 | The Three-Dimensional Dendrite-Free Zinc Anode on a Copper Mesh with a Zinc-Oriented Polyacrylamide Electrolyte Additive. <i>Angewandte Chemie</i> , 2019, 131, 15988-15994. | 1.6 | 116 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 271 | Defect Mitigation in Area-selective Atomic Layer Deposition of Ruthenium on Titanium Nitride/Dielectric Nanopatterns. <i>Advanced Materials Interfaces</i> , 2019, 6, 1900896. | 1.9 | 16 |
| 272 | Tandem Interface and Bulk Li-Ion Transport in a Hybrid Solid Electrolyte with Microsized Active Filler. <i>ACS Energy Letters</i> , 2019, 4, 2336-2342. | 8.8 | 80 |
| 273 | Partly lithiated graphitic carbon foam as 3D porous current collectors for dendrite-free lithium metal anodes. <i>Electrochemistry Communications</i> , 2019, 107, 106535. | 2.3 | 26 |
| 274 | Understanding and Predicting Lithium Crystal Growth on Perfect and Defective Interfaces: A Kohn-Sham Density Functional Study. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 37239-37246. | 4.0 | 14 |
| 275 | Lithium-magnesium Alloy as an Anode for Lithium-Sulfur Based Batteries. <i>International Journal of Electrochemical Science</i> , 2019, , 8595-8600. | 0.5 | 5 |
| 276 | A strategy to stabilize 4V-class cathode with ether-containing electrolytes in lithium metal batteries. <i>Journal of Power Sources</i> , 2019, 440, 227101. | 4.0 | 5 |
| 277 | Nano-Cu-embedded carbon for dendrite-free lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 22930-22938. | 5.2 | 17 |
| 278 | Recent advances in nanostructured electrode-electrolyte design for safe and next-generation electrochemical energy storage. <i>Materials Today Nano</i> , 2019, 8, 100057. | 2.3 | 31 |
| 279 | Mega High Utilization of Sodium Metal Anodes Enabled by Single Zinc Atom Sites. <i>Nano Letters</i> , 2019, 19, 7827-7835. | 4.5 | 86 |
| 280 | Homogeneous Deposition of Zinc on Three-Dimensional Porous Copper Foam as a Superior Zinc Metal Anode. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 17737-17746. | 3.2 | 151 |
| 281 | Improved Electrochemical Performance of $\text{Li}_{1.15}\text{Ni}_{0.17}\text{Co}_{0.11}\text{Mn}_{0.57}\text{O}_2$ by Li_2O Cathode Additive. <i>Journal of the Electrochemical Society</i> , 2019, 166, A3387-A3390. | 1.3 | 4 |
| 282 | On the Reliability of Sodium Metal Anodes: The Influence of Neglected Parameters. <i>Journal of the Electrochemical Society</i> , 2019, 166, A3122-A3131. | 1.3 | 17 |
| 283 | Stable lithium-sulfur full cells enabled by dual functional and interconnected mesocarbon arrays. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3289-3297. | 5.2 | 29 |
| 284 | Area-selective atomic layer deposition of cobalt oxide to generate patterned cobalt films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2019, 37, . | 0.9 | 15 |
| 285 | Lithiophilic Ag Nanoparticle Layer on Cu Current Collector toward Stable Li Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 8148-8154. | 4.0 | 120 |
| 286 | Wrinkled Graphene Cages as Hosts for High-Capacity Li Metal Anodes Shown by Cryogenic Electron Microscopy. <i>Nano Letters</i> , 2019, 19, 1326-1335. | 4.5 | 193 |
| 287 | Active-Oxygen-Enhanced Homogeneous Nucleation of Lithium Metal on Ultrathin Layered Double Hydroxide. <i>Angewandte Chemie</i> , 2019, 131, 4002-4006. | 1.6 | 13 |
| 288 | Active-Oxygen-Enhanced Homogeneous Nucleation of Lithium Metal on Ultrathin Layered Double Hydroxide. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3962-3966. | 7.2 | 44 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 289 | Effective Electrochemical Charge Storage in the High-Lithium Compound Li_8ZrO_6 . ACS Applied Energy Materials, 2019, 2, 1274-1287. | 2.5 | 4 |
| 290 | Three-Dimensional Graphene/Ag Aerogel for Durable and Stable Li Metal Anodes in Carbonate-Based Electrolytes. Chemistry - A European Journal, 2019, 25, 5036-5042. | 1.7 | 25 |
| 291 | Electrochemical impedance analysis of the Li/Au- $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ interface during Li dissolution/deposition cycles: Effect of pre-coating $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ with Au. Journal of Electroanalytical Chemistry, 2019, 835, 143-149. | 1.9 | 33 |
| 292 | Electron regulation enabled selective lithium deposition for stable anodes of lithium-metal batteries. Journal of Materials Chemistry A, 2019, 7, 2184-2191. | 5.2 | 30 |
| 293 | Efficient Li-Metal Plating/Stripping in Carbonate Electrolytes Using a LiNO_3 -Gel Polymer Electrolyte, Monitored by Operando Neutron Depth Profiling. Chemistry of Materials, 2019, 31, 4564-4574. | 3.2 | 65 |
| 294 | UV-Initiated Soft-Tough Multifunctional Gel Polymer Electrolyte Achieves Stable-Cycling Li-Metal Battery. ACS Applied Energy Materials, 2019, 2, 4513-4520. | 2.5 | 20 |
| 295 | Liquid Polydimethylsiloxane Grafting to Enable Dendrite-Free Li Plating for Highly Reversible Li-Metal Batteries. Advanced Functional Materials, 2019, 29, 1902220. | 7.8 | 137 |
| 296 | A platinum nanolayer on lithium metal as an interfacial barrier to shuttle effect in Li-S batteries. Journal of Power Sources, 2019, 427, 201-206. | 4.0 | 36 |
| 297 | Electrodeposition behavior of lithium metal on carbon substrates with surface silvering. Carbon, 2019, 152, 503-510. | 5.4 | 16 |
| 298 | A 3D and Stable Lithium Anode for High-Performance Lithium-Iodine Batteries. Advanced Materials, 2019, 31, e1902399. | 11.1 | 137 |
| 299 | Cathode electrolyte interface enabling stable Li-S batteries. Energy Storage Materials, 2019, 21, 474-480. | 9.5 | 59 |
| 300 | Alloy Anodes for Rechargeable Alkali-Metal Batteries: Progress and Challenge. , 2019, 1, 217-229. | | 135 |
| 301 | Double-sided conductive separators for lithium-metal batteries. Energy Storage Materials, 2019, 21, 464-473. | 9.5 | 34 |
| 302 | Horizontal Growth of Lithium on Parallely Aligned MXene Layers towards Dendrite-Free Metallic Lithium Anodes. Advanced Materials, 2019, 31, e1901820. | 11.1 | 174 |
| 303 | Lithiophilic CuO Nanoflowers on Ti -Mesh Inducing Lithium Lateral Plating Enabling Stable Lithium-Metal Anodes with Ultrahigh Rates and Ultralong Cycle Life. Advanced Energy Materials, 2019, 9, 1900853. | 10.2 | 103 |
| 304 | Sulfur-nitrogen co-doped porous carbon nanosheets to control lithium growth for a stable lithium metal anode. Journal of Materials Chemistry A, 2019, 7, 18267-18274. | 5.2 | 71 |
| 305 | A critical study on a 3D scaffold-based lithium metal anode. Electrochimica Acta, 2019, 318, 220-227. | 2.6 | 15 |
| 306 | Electrolyte for lithium protection: From liquid to solid. Green Energy and Environment, 2019, 4, 360-374. | 4.7 | 110 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 307 | Enabling Safe Sodium Metal Batteries by Solid Electrolyte Interphase Engineering: A Review. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 9758-9780. | 1.8 | 88 |
| 308 | The controllable synthesis of Si/Ge composites with a synergistic effect for enhanced Li storage performance. <i>Inorganic Chemistry Frontiers</i> , 2019, 6, 1897-1903. | 3.0 | 8 |
| 309 | Single-cluster Au as an usher for deeply cyclable Li metal anodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 14496-14503. | 5.2 | 51 |
| 310 | Highly Elastic Polyrotaxane Binders for Mechanically Stable Lithium Hosts in Lithium-Metal Batteries. <i>Advanced Materials</i> , 2019, 31, e1901645. | 11.1 | 68 |
| 311 | Temperature-Dependent Nucleation and Growth of Dendrite-Free Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 11364-11368. | 7.2 | 182 |
| 312 | Temperature-Dependent Nucleation and Growth of Dendrite-Free Lithium Metal Anodes. <i>Angewandte Chemie</i> , 2019, 131, 11486-11490. | 1.6 | 72 |
| 313 | Challenges and opportunities towards fast-charging battery materials. <i>Nature Energy</i> , 2019, 4, 540-550. | 19.8 | 1,053 |
| 314 | Expanded-graphite embedded in lithium metal as dendrite-free anode of lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 15871-15879. | 5.2 | 68 |
| 315 | In-Plane Highly Dispersed Cu ₂ O Nanoparticles for Seeded Lithium Deposition. <i>Nano Letters</i> , 2019, 19, 4601-4607. | 4.5 | 75 |
| 316 | A highly stable glass fiber host for lithium metal anode behaving enhanced coulombic efficiency. <i>Electrochimica Acta</i> , 2019, 317, 333-340. | 2.6 | 10 |
| 317 | Conclusions and Perspectives on New Opportunities of Nanostructures and Nanomaterials in Batteries. , 2019, , 359-379. | | 0 |
| 318 | S-doped Graphene-Regional Nucleation Mechanism for Dendrite-Free Lithium Metal Anodes. <i>Advanced Energy Materials</i> , 2019, 9, 1804000. | 10.2 | 74 |
| 319 | Entrapping lithium deposition in lithiophilic reservoir constructed by vertically aligned ZnO nanosheets for dendrite-free Li metal anodes. <i>Nano Energy</i> , 2019, 62, 55-63. | 8.2 | 127 |
| 320 | Nanostructures and Nanomaterials for Lithium Metal Batteries. , 2019, , 159-214. | | 0 |
| 321 | The Inhibition Mechanism of Lithium Dendrite on Nitrogen-Doped Defective Graphite: The First Principles Studies. <i>Journal of the Electrochemical Society</i> , 2019, 166, A1603-A1610. | 1.3 | 2 |
| 322 | Polydopamine-treated three-dimensional carbon fiber-coated separator for achieving high-performance lithium metal batteries. <i>Journal of Power Sources</i> , 2019, 430, 130-136. | 4.0 | 35 |
| 323 | Space-confined strategy to stabilize the lithium storage in the graphene and silver nanoparticles (AgNPs@GO) composite anode of lithium metal batteries. <i>Materials Letters</i> , 2019, 251, 118-121. | 1.3 | 6 |
| 324 | Synthesis and characterization of a hierarchically structured three-dimensional conducting scaffold for highly stable Li metal anodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12882-12892. | 5.2 | 20 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 325 | Unusual Conformal Li Plating on Alloyable Nanofiber Frameworks to Enable Dendrite Suppression of Li Metal Anode. ACS Applied Energy Materials, 2019, 2, 4379-4388. | 2.5 | 35 |
| 326 | An Autotransferable N_3 Li ⁺ Modulating Layer toward Stable Lithium Anodes. Advanced Materials, 2019, 31, e1900342. | 11.1 | 205 |
| 327 | Silver Nanoparticle-Doped 3D Porous Carbon Nanofibers as Separator Coating for Stable Lithium Metal Anodes. ACS Applied Materials & Interfaces, 2019, 11, 17843-17852. | 4.0 | 56 |
| 328 | Conductivity and lithiophilicity gradients guide lithium deposition to mitigate short circuits. Nature Communications, 2019, 10, 1896. | 5.8 | 256 |
| 329 | Electrodeposition of the NaK Alloy with a Liquid Organic Electrolyte. ACS Applied Energy Materials, 2019, 2, 3009-3012. | 2.5 | 11 |
| 330 | A high-performance lithium anode based on N-doped composite graphene. Rare Metals, 2024, 43, 1030-1036. | 3.6 | 6 |
| 331 | Uniform High Ionic Conducting Lithium Sulfide Protection Layer for Stable Lithium Metal Anode. Advanced Energy Materials, 2019, 9, 1900858. | 10.2 | 333 |
| 332 | Dendrite-Free Composite Li Anode Assisted by Ag Nanoparticles in a Wood-Derived Carbon Frame. ACS Applied Materials & Interfaces, 2019, 11, 18361-18367. | 4.0 | 33 |
| 333 | A Single-Crystal Open-Capsule Metal-Organic Framework. Journal of the American Chemical Society, 2019, 141, 7906-7916. | 6.6 | 179 |
| 334 | A scalable slurry process to fabricate a 3D lithiophilic and conductive framework for a high performance lithium metal anode. Journal of Materials Chemistry A, 2019, 7, 13225-13233. | 5.2 | 49 |
| 335 | The Challenge of Lithium Metal Anodes for Practical Applications. Small Methods, 2019, 3, 1800551. | 4.6 | 74 |
| 336 | Eliminating Tip Dendrite Growth by Lorentz Force for Stable Lithium Metal Anodes. Advanced Functional Materials, 2019, 29, 1902630. | 7.8 | 85 |
| 337 | Li/C composites as anodes for high energy density rechargeable Li batteries. Journal of Semiconductors, 2019, 40, 040401. | 2.0 | 1 |
| 338 | A binder-free electrode architecture design for lithium-sulfur batteries: a review. Nanoscale Advances, 2019, 1, 2104-2122. | 2.2 | 46 |
| 339 | Stable high capacity cycling of Li metal via directed and confined Li growth with robust composite sponge. Journal of Power Sources, 2019, 428, 1-7. | 4.0 | 19 |
| 340 | 3D porous carbon networks with highly dispersed SiO_x by molecular-scale engineering toward stable lithium metal anodes. Chemical Communications, 2019, 55, 6034-6037. | 2.2 | 16 |
| 341 | Deterministic growth of a sodium metal anode on a pre-patterned current collector for highly rechargeable seawater batteries. Journal of Materials Chemistry A, 2019, 7, 9773-9781. | 5.2 | 41 |
| 342 | Porous scaffold of TiO ₂ for dendrite-free lithium metal anode. Journal of Alloys and Compounds, 2019, 791, 364-370. | 2.8 | 20 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 343 | Polymerâ€“inorganic solidâ€“electrolyte interphase for stable lithium metal batteries under lean electrolyte conditions. <i>Nature Materials</i> , 2019, 18, 384-389. | 13.3 | 587 |
| 344 | Uniform Lithium Deposition Assisted by Singleâ€“Atom Doping toward Highâ€“Performance Lithium Metal Anodes. <i>Advanced Energy Materials</i> , 2019, 9, 1804019. | 10.2 | 151 |
| 345 | Hollow Carbon Spheres and Their Hybrid Nanomaterials in Electrochemical Energy Storage. <i>Advanced Energy Materials</i> , 2019, 9, 1803900. | 10.2 | 220 |
| 346 | Film-forming electrolyte additives for rechargeable lithium-ion batteries: progress and outlook. <i>Journal of Materials Chemistry A</i> , 2019, 7, 8700-8722. | 5.2 | 135 |
| 347 | Composite lithium electrode with mesoscale skeleton via simple mechanical deformation. <i>Science Advances</i> , 2019, 5, eaau5655. | 4.7 | 79 |
| 348 | Lithiophilic metallic nitrides modified nickel foam by plasma for stable lithium metal anode. <i>Energy Storage Materials</i> , 2019, 23, 539-546. | 9.5 | 88 |
| 349 | Porous equipotential body with heterogeneous nucleation sites: A novel 3D composite current collector for lithium metal anode. <i>Electrochimica Acta</i> , 2019, 309, 460-468. | 2.6 | 21 |
| 350 | Integrated, Flexible Lithium Metal Battery with Improved Mechanical and Electrochemical Cycling Stability. <i>ACS Applied Energy Materials</i> , 2019, 2, 3642-3650. | 2.5 | 15 |
| 351 | Nitridingâ€“Interfaceâ€“Regulated Lithium Plating Enables Flameâ€“Retardant Electrolytes for Highâ€“Voltage Lithium Metal Batteries. <i>Angewandte Chemie</i> , 2019, 131, 7884-7889. | 1.6 | 47 |
| 352 | Nitridingâ€“Interfaceâ€“Regulated Lithium Plating Enables Flameâ€“Retardant Electrolytes for Highâ€“Voltage Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 7802-7807. | 7.2 | 161 |
| 353 | A 3D free-standing lithiophilic silver nanowire aerogel for lithium metal batteries without lithium dendrites and volume expansion: <i>in operando</i> X-ray diffraction. <i>Chemical Communications</i> , 2019, 55, 5689-5692. | 2.2 | 32 |
| 354 | Failure mechanism of Au@Co ₉ S ₈ yolk-shell anode in Li-ion batteries unveiled by <i>in-situ</i> transmission electron microscopy. <i>Applied Physics Letters</i> , 2019, 114, . | 1.5 | 30 |
| 355 | Homogeneous guiding deposition of sodium through main group II metals toward dendrite-free sodium anodes. <i>Science Advances</i> , 2019, 5, eaau6264. | 4.7 | 130 |
| 356 | Key Aspects of Lithium Metal Anodes for Lithium Metal Batteries. <i>Small</i> , 2019, 15, e1900687. | 5.2 | 253 |
| 357 | Seeding lithium seeds towards uniform lithium deposition for stable lithium metal anodes. <i>Nano Energy</i> , 2019, 61, 47-53. | 8.2 | 69 |
| 358 | Nanoscale design of zinc anodes for high-energy aqueous rechargeable batteries. <i>Materials Today Nano</i> , 2019, 6, 100032. | 2.3 | 125 |
| 359 | Electrochemically induced highly ion conductive porous scaffolds to stabilize lithium deposition for lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 11683-11689. | 5.2 | 47 |
| 360 | Dendrite-tamed deposition kinetics using single-atom Zn sites for Li metal anode. <i>Energy Storage Materials</i> , 2019, 23, 587-593. | 9.5 | 73 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 361 | Mixed Ion and Electron-Conducting Scaffolds for High-Rate Lithium Metal Anodes. <i>Advanced Energy Materials</i> , 2019, 9, 1900193. | 10.2 | 91 |
| 362 | Cross Talk between Transition Metal Cathode and Li Metal Anode: Unraveling Its Influence on the Deposition/Dissolution Behavior and Morphology of Lithium. <i>Advanced Energy Materials</i> , 2019, 9, 1900574. | 10.2 | 123 |
| 363 | Surface engineering of commercial Ni foams for stable Li metal anodes. <i>Energy Storage Materials</i> , 2019, 23, 547-555. | 9.5 | 148 |
| 364 | Recent Advances in Hollow Porous Carbon Materials for Lithium-Sulfur Batteries. <i>Small</i> , 2019, 15, e1804786. | 5.2 | 314 |
| 365 | Achieving carbon-rich silicon-containing ceramic anode for advanced lithium ion battery. <i>Ceramics International</i> , 2019, 45, 10572-10580. | 2.3 | 58 |
| 366 | Lithium-Magnesium Alloy as a Stable Anode for Lithium-Sulfur Battery. <i>Advanced Functional Materials</i> , 2019, 29, 1808756. | 7.8 | 148 |
| 367 | Tuning Two Interfaces with Fluoroethylene Carbonate Electrolytes for High-Performance Li/LCO Batteries. <i>ACS Omega</i> , 2019, 4, 3220-3227. | 1.6 | 24 |
| 368 | Growth direction control of lithium dendrites in a heterogeneous lithiophilic host for ultra-safe lithium metal batteries. <i>Journal of Power Sources</i> , 2019, 416, 141-147. | 4.0 | 31 |
| 369 | Self-Assembled Monolayer Enables Slurry-Coating of Li Anode. <i>ACS Central Science</i> , 2019, 5, 468-476. | 5.3 | 64 |
| 370 | Stable Na Plating and Stripping Electrochemistry Promoted by In Situ Construction of an Alloy-Based Sodiophilic Interphase. <i>Advanced Materials</i> , 2019, 31, e1807495. | 11.1 | 135 |
| 371 | Dual Lithiophilic Structure for Uniform Li Deposition. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 10616-10623. | 4.0 | 43 |
| 372 | ZnO nanoarray-modified nickel foam as a lithiophilic skeleton to regulate lithium deposition for lithium-metal batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 7752-7759. | 5.2 | 120 |
| 373 | High-Fluorinated Electrolytes for S Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1803774. | 10.2 | 227 |
| 374 | Sur-/interfacial regulation in all-solid-state rechargeable Li-ion batteries based on inorganic solid-state electrolytes: advances and perspectives. <i>Materials Horizons</i> , 2019, 6, 871-910. | 6.4 | 67 |
| 375 | Facile and scalable electrodeposition of copper current collectors for high-performance Li-metal batteries. <i>Nano Energy</i> , 2019, 59, 500-507. | 8.2 | 45 |
| 376 | Surface Restraint Synthesis of an Organic-Inorganic Hybrid Layer for Dendrite-Free Lithium Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 8717-8724. | 4.0 | 39 |
| 377 | Highly dispersed ultrasmall NiS ₂ nanoparticles in porous carbon nanofiber anodes for sodium ion batteries. <i>Nanoscale</i> , 2019, 11, 4688-4695. | 2.8 | 107 |
| 378 | Prospect for Supramolecular Chemistry in High-Energy-Density Rechargeable Batteries. <i>Joule</i> , 2019, 3, 662-682. | 11.7 | 66 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 379 | Efficient and robust lithium metal electrodes enabled by synergistic surface activationâ€“passivation of copper frameworks. <i>Journal of Materials Chemistry A</i> , 2019, 7, 23208-23215. | 5.2 | 21 |
| 380 | Probing the dynamic evolution of lithium dendrites: a review of <i>in situ</i> operando characterization for lithium metallic batteries. <i>Nanoscale</i> , 2019, 11, 20429-20436. | 2.8 | 26 |
| 381 | Lithiophilic NiO hexagonal plates decorated Ni collector guiding uniform lithium plating for stable lithium metal anode. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24262-24270. | 5.2 | 44 |
| 382 | Aluminum-Based Metalâ€“Organic Frameworks Derived Al ₂ O ₃ -Loading Mesoporous Carbon as a Host Matrix for Lithium-Metal Anodes. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 47939-47947. | 4.0 | 26 |
| 383 | Confined Red Phosphorus in Edible Fungus Slag-Derived Porous Carbon as an Improved Anode Material in Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 47948-47955. | 4.0 | 18 |
| 384 | High-performance sodium-ion batteries with a hard carbon anode: transition from the half-cell to full-cell perspective. <i>Nanoscale</i> , 2019, 11, 22196-22205. | 2.8 | 75 |
| 385 | Conducting and Lithiophilic MXene/Graphene Framework for High-Capacity, Dendrite-Free Lithiumâ€“Metal Anodes. <i>ACS Nano</i> , 2019, 13, 14308-14318. | 7.3 | 155 |
| 386 | Anode Overpotential Control via Interfacial Modification: Inhibition of Lithium Plating on Graphite Anodes. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 46864-46874. | 4.0 | 32 |
| 387 | Energy storage: The future enabled by nanomaterials. <i>Science</i> , 2019, 366, . | 6.0 | 1,119 |
| 388 | Harnessing the unique properties of 2D materials for advanced lithiumâ€“sulfur batteries. <i>Nanoscale Horizons</i> , 2019, 4, 77-98. | 4.1 | 79 |
| 389 | Mitigating Metal Dendrite Formation in Lithiumâ€“Sulfur Batteries via Morphology-Tunable Graphene Oxide Interfaces. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 2060-2070. | 4.0 | 19 |
| 390 | Lithiophilic Faceted Cu(100) Surfaces: High Utilization of Host Surface and Cavities for Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 3092-3096. | 7.2 | 122 |
| 391 | An Interconnected Channelâ€“Like Framework as Host for Lithium Metal Composite Anodes. <i>Advanced Energy Materials</i> , 2019, 9, 1802720. | 10.2 | 83 |
| 392 | Anchoring an Artificial Solidâ€“Electrolyte Interphase Layer on a 3D Current Collector for Highâ€“Performance Lithium Anodes. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 2093-2097. | 7.2 | 89 |
| 393 | Dendrite-Free Lithium Anode Enables the Lithium//Graphite Dual-Ion Battery with Much Improved Cyclic Stability. <i>ACS Applied Energy Materials</i> , 2019, 2, 201-206. | 2.5 | 32 |
| 394 | Regulating Lithium Nucleation via CNTs Modifying Carbon Cloth Film for Stable Li Metal Anode. <i>Small</i> , 2019, 15, e1803734. | 5.2 | 108 |
| 395 | Suppression of dendrites and granules in surface-patterned Li metal anodes using CsPF6. <i>Journal of Power Sources</i> , 2019, 413, 344-350. | 4.0 | 14 |
| 396 | Correlation between Li Plating Behavior and Surface Characteristics of Carbon Matrix toward Stable Li Metal Anodes. <i>Advanced Energy Materials</i> , 2019, 9, 1802777. | 10.2 | 109 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 397 | Bio-inspired low-tortuosity carbon host for high-performance lithium-metal anode. National Science Review, 2019, 6, 247-256. | 4.6 | 57 |
| 398 | Pillared MXene with Ultralarge Interlayer Spacing as a Stable Matrix for High Performance Sodium Metal Anodes. Advanced Functional Materials, 2019, 29, 1805946. | 7.8 | 242 |
| 399 | Guiding Uniform Li Plating/Stripping through Lithium-Aluminum Alloying Medium for Long-Life Li Metal Batteries. Angewandte Chemie - International Edition, 2019, 58, 1094-1099. | 7.2 | 287 |
| 400 | Guiding Uniform Li Plating/Stripping through Lithium-Aluminum Alloying Medium for Long-Life Li Metal Batteries. Angewandte Chemie, 2019, 131, 1106-1111. | 1.6 | 52 |
| 401 | Infiltrating lithium into carbon cloth decorated with zinc oxide arrays for dendrite-free lithium metal anode. Nano Research, 2019, 12, 525-529. | 5.8 | 79 |
| 402 | High-Energy Li Metal Battery with Lithiated Host. Joule, 2019, 3, 732-744. | 11.7 | 160 |
| 403 | Anchoring an Artificial Solid-Electrolyte Interphase Layer on a 3D Current Collector for High-Performance Lithium Anodes. Angewandte Chemie, 2019, 131, 2115-2119. | 1.6 | 11 |
| 404 | Three-dimensional monolithic corrugated graphene/Ni foam for highly stable and efficient Li metal electrode. Journal of Power Sources, 2019, 413, 467-475. | 4.0 | 23 |
| 405 | Multilayer-graphene-stabilized lithium deposition for anode-free lithium-metal batteries. Nanoscale, 2019, 11, 2710-2720. | 2.8 | 118 |
| 406 | Lithiophilic Faceted Cu(100) Surfaces: High Utilization of Host Surface and Cavities for Lithium Metal Anodes. Angewandte Chemie, 2019, 131, 3124-3128. | 1.6 | 8 |
| 407 | Graphitic Carbon Nitride Induced Micro-Electric Field for Dendrite-Free Lithium Metal Anodes. Advanced Energy Materials, 2019, 9, 1803186. | 10.2 | 147 |
| 408 | Recent advances in $\text{Li}_{1-x}\text{Al}_x\text{Ti}_2\text{(PO}_4)_3$ solid-state electrolyte for safe lithium batteries. Energy Storage Materials, 2019, 19, 379-400. | 9.5 | 210 |
| 409 | Dendrite-free lithium metal anode enabled by separator engineering via uniform loading of lithiophilic nucleation sites. Energy Storage Materials, 2019, 19, 24-30. | 9.5 | 157 |
| 410 | Cuprite-coated Cu foam skeleton host enabling lateral growth of lithium dendrites for advanced Li metal batteries. Energy Storage Materials, 2019, 21, 180-189. | 9.5 | 132 |
| 411 | Stainless steel as low-cost high-voltage cathode via stripping/deposition in metal-lithium battery. Electrochimica Acta, 2019, 298, 186-193. | 2.6 | 15 |
| 412 | Alkali Metal Anodes for Rechargeable Batteries. Chem, 2019, 5, 313-338. | 5.8 | 170 |
| 413 | In Situ Formed Shields Enabling Li_2CO_3 -Free Solid Electrolytes: A New Route to Uncover the Intrinsic Lithiophilicity of Garnet Electrolytes for Dendrite-Free Li-Metal Batteries. ACS Applied Materials & Interfaces, 2019, 11, 898-905. | 4.0 | 147 |
| 414 | Palladium nanocrystals-embedded mesoporous hollow carbon spheres with enhanced electrochemical kinetics for high performance lithium sulfur batteries. Carbon, 2019, 143, 878-889. | 5.4 | 70 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 415 | Synergistic Effect of 3D Current Collectors and ALD Surface Modification for High Coulombic Efficiency Lithium Metal Anodes. <i>Advanced Energy Materials</i> , 2019, 9, 1802534. | 10.2 | 132 |
| 416 | Synthesis of interconnected graphene framework with two-dimensional protective layers for stable lithium metal anodes. <i>Energy Storage Materials</i> , 2019, 17, 341-348. | 9.5 | 26 |
| 417 | Study on dead-Li suppression mechanism of Li-hosting vapor-grown-carbon-nanofiber-based protective layer for Li metal anodes. <i>Journal of Power Sources</i> , 2019, 409, 132-138. | 4.0 | 14 |
| 418 | Design of Hollow Nanostructures for Energy Storage, Conversion and Production. <i>Advanced Materials</i> , 2019, 31, e1801993. | 11.1 | 313 |
| 419 | Rechargeable batteries based on anion intercalation graphite cathodes. <i>Energy Storage Materials</i> , 2019, 16, 65-84. | 9.5 | 183 |
| 420 | Spatially uniform deposition of lithium metal in 3D Janus hosts. <i>Energy Storage Materials</i> , 2019, 16, 259-266. | 9.5 | 112 |
| 421 | Recent advances in metal-organic frameworks for lithium metal anode protection. <i>Chinese Chemical Letters</i> , 2020, 31, 609-616. | 4.8 | 40 |
| 422 | PIM-1 as an artificial solid electrolyte interphase for stable lithium metal anode in high-performance batteries. <i>Journal of Energy Chemistry</i> , 2020, 42, 83-90. | 7.1 | 83 |
| 423 | Dendrite-free lithium deposition by coating a lithiophilic heterogeneous metal layer on lithium metal anode. <i>Energy Storage Materials</i> , 2020, 24, 635-643. | 9.5 | 139 |
| 424 | Synergetic Coupling of Lithiophilic Sites and Conductive Scaffolds for Dendrite-Free Lithium Metal Anodes. <i>Small Methods</i> , 2020, 4, 1900177. | 4.6 | 31 |
| 425 | Towards better Li metal anodes: Challenges and strategies. <i>Materials Today</i> , 2020, 33, 56-74. | 8.3 | 404 |
| 426 | Lithiophilic 3D Porous CuZn Current Collector for Stable Lithium Metal Batteries. <i>ACS Energy Letters</i> , 2020, 5, 180-186. | 8.8 | 159 |
| 427 | How Metallic Protection Layers Extend the Lifetime of NASICON-Based Solid-State Lithium Batteries. <i>Journal of the Electrochemical Society</i> , 2020, 167, 050502. | 1.3 | 43 |
| 428 | A Game Changer: Functional Nano/Micromaterials for Smart Rechargeable Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 1902499. | 7.8 | 41 |
| 429 | ZnCo ₂ O ₄ /ZnO induced lithium deposition in multi-scaled carbon/nickel frameworks for dendrite-free lithium metal anode. <i>Journal of Energy Chemistry</i> , 2020, 43, 16-23. | 7.1 | 39 |
| 430 | An ultraviolet polymerized 3D gel polymer electrolyte based on multi-walled carbon nanotubes doped double polymer matrices for lithium-sulfur batteries. <i>Chemical Engineering Journal</i> , 2020, 382, 122714. | 6.6 | 40 |
| 431 | Homogenous charge distribution by free-standing porous structure for dendrite-free Li metal anode. <i>Journal of Energy Chemistry</i> , 2020, 44, 68-72. | 7.1 | 15 |
| 432 | Advanced carbon nanostructures for future high performance sodium metal anodes. <i>Energy Storage Materials</i> , 2020, 25, 811-826. | 9.5 | 114 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 433 | Paraffin wax protecting 3D non-dendritic lithium for backside-plated lithium metal anode. <i>Energy Storage Materials</i> , 2020, 24, 153-159. | 9.5 | 20 |
| 434 | Modeling Overcharge at Graphite Electrodes: Plating and Dissolution of Lithium. <i>Journal of the Electrochemical Society</i> , 2020, 167, 013504. | 1.3 | 21 |
| 435 | Covalently bonded 3D rebar graphene foam for ultrahigh-areal-capacity lithium-metal anodes by in-situ loose powder metallurgy synthesis. <i>Carbon</i> , 2020, 158, 536-544. | 5.4 | 22 |
| 436 | Revisiting the Electroplating Process for Lithium-Metal Anodes for Lithium-Metal Batteries. <i>Angewandte Chemie</i> , 2020, 132, 6730-6739. | 1.6 | 17 |
| 437 | Revisiting the Electroplating Process for Lithium-Metal Anodes for Lithium-Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 6665-6674. | 7.2 | 137 |
| 438 | The influence of surface inhomogeneity on the overcharge and lithium plating of graphite electrodes. <i>JPhys Energy</i> , 2020, 2, 014004. | 2.3 | 9 |
| 439 | Three dimensional frameworks of super ionic conductor for thermodynamically and dynamically favorable sodium metal anode. <i>Nano Energy</i> , 2020, 70, 104479. | 8.2 | 34 |
| 440 | Cycling Performance and Kinetic Mechanism Analysis of a Li Metal Anode in Series-Concentrated Ether Electrolytes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 8366-8375. | 4.0 | 29 |
| 441 | Isotropic Li nucleation and growth achieved by an amorphous liquid metal nucleation seed on MXene framework for dendrite-free Li metal anode. <i>Energy Storage Materials</i> , 2020, 26, 223-233. | 9.5 | 100 |
| 442 | Novel S-doped ordered mesoporous carbon nanospheres toward advanced lithium metal anodes. <i>Nano Energy</i> , 2020, 69, 104443. | 8.2 | 52 |
| 443 | A copper-clad lithiophilic current collector for dendrite-free lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1911-1919. | 5.2 | 49 |
| 444 | Stable Nano-Encapsulation of Lithium Through Seed-Free Selective Deposition for High-Performance Li Battery Anodes. <i>Advanced Energy Materials</i> , 2020, 10, 1902956. | 10.2 | 65 |
| 445 | Realizing both high gravimetric and volumetric capacities in Li/3D carbon composite anode. <i>Nano Energy</i> , 2020, 69, 104471. | 8.2 | 30 |
| 446 | Enabling high-performance sodium metal anodes via A sodiophilic structure constructed by hierarchical Sb ₂ MoO ₆ microspheres. <i>Nano Energy</i> , 2020, 69, 104446. | 8.2 | 43 |
| 447 | Understanding the dropping of lithium plating potential in carbonate electrolyte. <i>Nano Energy</i> , 2020, 70, 104486. | 8.2 | 42 |
| 448 | Single Zinc Atoms Immobilized on MXene (Ti ₃ C ₂ Cl _x) Layers toward Dendrite-Free Lithium Metal Anodes. <i>ACS Nano</i> , 2020, 14, 891-898. | 7.3 | 174 |
| 449 | Self-supported TiN nanorod array/carbon textile as a lithium host that induces dendrite-free lithium plating with high rates and long cycle life. <i>Journal of Materials Chemistry A</i> , 2020, 8, 3293-3299. | 5.2 | 5 |
| 450 | Bottom-top channeling Li nucleation and growth by a gradient lithiophilic 3D conductive host for highly stable Li-metal anodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 1678-1686. | 5.2 | 31 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 451 | Towards high rate Li metal anodes: enhanced performance at high current density in a superconcentrated ionic liquid. <i>Journal of Materials Chemistry A</i> , 2020, 8, 3574-3579. | 5.2 | 25 |
| 452 | Boosting the electrochemical performance of 3D composite lithium metal anodes through synergistic structure and interface engineering. <i>Energy Storage Materials</i> , 2020, 26, 56-64. | 9.5 | 73 |
| 453 | High energy density lithium metal batteries enabled by a porous graphene/MgF ₂ framework. <i>Energy Storage Materials</i> , 2020, 26, 73-82. | 9.5 | 79 |
| 454 | Air-Stable and Dendrite-Free Lithium Metal Anodes Enabled by a Hybrid Interphase of C ₆₀ and Mg. <i>Advanced Energy Materials</i> , 2020, 10, 1903292. | 10.2 | 57 |
| 455 | Porosity- and Graphitization-Controlled Fabrication of Nanoporous Silicon@Carbon for Lithium Storage and Its Conjugation with MXene for Lithium-Metal Anode. <i>Advanced Functional Materials</i> , 2020, 30, 1908721. | 7.8 | 159 |
| 456 | Emerging Functional Porous Polymeric and Carbonaceous Materials for Environmental Treatment and Energy Storage. <i>Advanced Functional Materials</i> , 2020, 30, 1907006. | 7.8 | 176 |
| 457 | Revealing Principles for Design of Lean-Electrolyte Lithium Metal Anode via In Situ Spectroscopy. <i>Journal of the American Chemical Society</i> , 2020, 142, 2021-2022. | 6.6 | 142 |
| 458 | 3D lithiophilic-lithiophobic dual-gradient porous skeleton for highly stable lithium metal anode. <i>Journal of Materials Chemistry A</i> , 2020, 8, 313-322. | 5.2 | 76 |
| 459 | Lithium metal anodes: Present and future. <i>Journal of Energy Chemistry</i> , 2020, 48, 145-159. | 7.1 | 311 |
| 460 | Pencil-drawing on nitrogen and sulfur co-doped carbon paper: An effective and stable host to pre-store Li for high-performance lithium-air batteries. <i>Energy Storage Materials</i> , 2020, 26, 593-603. | 9.5 | 39 |
| 461 | Topotactic Transformation Synthesis of 2D Ultrathin GeS ₂ Nanosheets toward High-Rate and High-Energy-Density Sodium-Ion Half/Full Batteries. <i>ACS Nano</i> , 2020, 14, 531-540. | 7.3 | 71 |
| 462 | Inducing the Formation of In Situ Li ₃ N-Rich SEI via Nanocomposite Plating of Mg ₃ N ₂ with Lithium Enables High-Performance 3D Lithium-Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 627-636. | 4.0 | 64 |
| 463 | Solid-Liquid Coexisting LiNO ₃ Electrolyte for Extremely Stable Lithium Metal Anodes on a Bare Cu Foil. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 706-713. | 3.2 | 11 |
| 464 | Scalable synthesis of lotus-seed-pod-like Si/SiO _x @CNF: Applications in freestanding electrode and flexible full lithium-ion batteries. <i>Carbon</i> , 2020, 158, 163-171. | 5.4 | 30 |
| 465 | Regulating lithium nucleation and growth by zinc modified current collectors. <i>Nano Research</i> , 2020, 13, 45-51. | 5.8 | 19 |
| 466 | Facile and Scalable Modification of a Cu Current Collector toward Uniform Li Deposition of the Li Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 3681-3687. | 4.0 | 28 |
| 467 | Fluorinated hybrid solid-electrolyte-interphase for dendrite-free lithium deposition. <i>Nature Communications</i> , 2020, 11, 93. | 5.8 | 312 |
| 468 | Sodium Deposition with a Controlled Location and Orientation for Dendrite-Free Sodium Metal Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2002308. | 10.2 | 69 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 469 | Creep-Enabled 3D Solid-State Lithium-Metal Battery. <i>CheM</i> , 2020, 6, 2878-2892. | 5.8 | 63 |
| 470 | A superb 3D composite lithium metal anode prepared by in-situ lithiation of sulfurized polyacrylonitrile. <i>Energy Storage Materials</i> , 2020, 33, 452-459. | 9.5 | 14 |
| 471 | Silicon anode design for Li ion batteries: Synergic effects of Ag nanoparticles and ionic liquid electrolytes. <i>Chemical Engineering Journal Advances</i> , 2020, 4, 100037. | 2.4 | 4 |
| 472 | Diffusion-Controlled Porous Crystalline Silicon Lithium Metal Batteries. <i>IScience</i> , 2020, 23, 101586. | 1.9 | 4 |
| 473 | High-Capacity, Dendrite-Free, and Ultrahigh-Rate Lithium-Metal Anodes Based on Monodisperse N-Doped Hollow Carbon Nanospheres. <i>Small</i> , 2020, 16, e2004770. | 5.2 | 27 |
| 474 | Revealing and Elucidating ALD-Derived Control of Lithium Plating Microstructure. <i>Advanced Energy Materials</i> , 2020, 10, 2002736. | 10.2 | 37 |
| 475 | Challenges, mitigation strategies and perspectives in development of Li metal anode. <i>Nano Select</i> , 2020, 1, 622-638. | 1.9 | 4 |
| 476 | Minimizing lithium deactivation during high-rate electroplating via sub-ambient thermal gradient control. <i>Materials Today Energy</i> , 2020, 18, 100538. | 2.5 | 7 |
| 477 | The rational design of biomass-derived carbon materials towards next-generation energy storage: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2020, 134, 110308. | 8.2 | 141 |
| 478 | Toward High-Capacity Battery Anode Materials: Chemistry and Mechanics Intertwined. <i>Chemistry of Materials</i> , 2020, 32, 8755-8771. | 3.2 | 28 |
| 479 | Hard carbons for sodium-ion batteries and beyond. <i>Progress in Energy</i> , 2020, 2, 042002. | 4.6 | 130 |
| 480 | Self-supported NiSe@Ni3S2 core-shell composite on Ni foam for a high-performance asymmetric supercapacitor. <i>Ionics</i> , 2020, 26, 3997-4007. | 1.2 | 19 |
| 481 | Lithiophilic Li-Zn alloy modified 3D Cu foam for dendrite-free lithium metal anode. <i>Journal of Power Sources</i> , 2020, 472, 228520. | 4.0 | 58 |
| 482 | Coupling a Sponge Metal Fibers Skeleton with In Situ Surface Engineering to Achieve Advanced Electrodes for Flexible Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2020, 32, e2003657. | 11.1 | 86 |
| 483 | Pyridinic-to-graphitic conformational change of nitrogen in graphitic carbon nitride by lithium coordination during lithium plating. <i>Energy Storage Materials</i> , 2020, 31, 505-514. | 9.5 | 20 |
| 484 | Unexpected Kirkendall effect in twinned icosahedral nanocrystals driven by strain gradient. <i>Nano Research</i> , 2020, 13, 2641-2649. | 5.8 | 17 |
| 485 | On-Site Fluorination for Enhancing Utilization of Lithium in a Lithium-Sulfur Full Battery. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 53860-53868. | 4.0 | 12 |
| 486 | The Dr Jekyll and Mr Hyde of lithium sulfur batteries. <i>Energy and Environmental Science</i> , 2020, 13, 4808-4833. | 15.6 | 91 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 487 | Two-Dimensional Silicon/Carbon from Commercial Alloy and CO ₂ for Lithium Storage and Flexible Ti ₃ C ₂ T _x MXene-Based Lithium-Metal Batteries. ACS Nano, 2020, 14, 17574-17588. | 7.3 | 108 |
| 488 | Lithium Metal Anodes with Nonaqueous Electrolytes. Chemical Reviews, 2020, 120, 13312-13348. | 23.0 | 393 |
| 489 | Stable metal anodes enabled by a labile organic molecule bonded to a reduced graphene oxide aerogel. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30135-30141. | 3.3 | 17 |
| 490 | Guiding Smooth Li Plating and Stripping by a Spherical Island Model for Lithium Metal Anodes. ACS Applied Materials & Interfaces, 2020, 12, 38098-38105. | 4.0 | 17 |
| 491 | Lithium metal storage in zeolitic imidazolate framework derived nanoarchitectures. Energy Storage Materials, 2020, 33, 95-107. | 9.5 | 40 |
| 492 | Mirror-Like Electrodeposition of Lithium Metal under a Low-Resistance Artificial Solid Electrolyte Interphase Layer. ACS Applied Materials & Interfaces, 2020, 12, 39674-39684. | 4.0 | 7 |
| 493 | Horizontal Stress Release for Protuberance-Free Li Metal Anode. Advanced Functional Materials, 2020, 30, 2002522. | 7.8 | 22 |
| 494 | The stable lithium metal cell with two-electrode biomass carbon. Electrochimica Acta, 2020, 356, 136824. | 2.6 | 11 |
| 495 | Anode-free rechargeable lithium metal batteries: Progress and prospects. Energy Storage Materials, 2020, 32, 386-401. | 9.5 | 136 |
| 496 | Coupling of triporosity and strong Au-Li interaction to enable dendrite-free lithium plating/stripping for long-life lithium metal anodes. Journal of Materials Chemistry A, 2020, 8, 18094-18105. | 5.2 | 56 |
| 497 | Porous Materials Applied in Nonaqueous Li ₂ O Batteries: Status and Perspectives. Advanced Materials, 2020, 32, e2002559. | 11.1 | 115 |
| 498 | Multi-scale Imaging of Solid-State Battery Interfaces: From Atomic Scale to Macroscopic Scale. Chem, 2020, 6, 2199-2218. | 5.8 | 64 |
| 499 | Recent advances and perspectives of 2D silicon: Synthesis and application for energy storage and conversion. Energy Storage Materials, 2020, 32, 115-150. | 9.5 | 74 |
| 500 | Recent progress on electrolyte additives for stable lithium metal anode. Energy Storage Materials, 2020, 32, 306-319. | 9.5 | 126 |
| 501 | Physicochemical Concepts of the Lithium Metal Anode in Solid-State Batteries. Chemical Reviews, 2020, 120, 7745-7794. | 23.0 | 468 |
| 502 | Revealing the Magnesium-Storage Mechanism in Mesoporous Bismuth via Spectroscopy and Ab Initio Simulations. Angewandte Chemie - International Edition, 2020, 59, 21728-21735. | 7.2 | 34 |
| 503 | Facile Synthesis of Ant-Nest-Like Porous Duplex Copper as Deeply Cycling Host for Lithium Metal Anodes. Small, 2020, 16, e2001784. | 5.2 | 33 |
| 504 | Scaffold-structured polymer binders for long-term cycle performance of stabilized lithium-powder electrodes. Electrochimica Acta, 2020, 364, 136878. | 2.6 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 505 | Three-Dimensional Hierarchical Framework Loaded with Lithiophilic Nanorod Arrays for High-Performance Lithium-Metal Anodes. <i>ChemElectroChem</i> , 2020, 7, 4201-4207. | 1.7 | 3 |
| 506 | An interconnected silver coated carbon cloth framework as a host to reduce lithium nucleation over-potential for dendrite-free lithium metal anodes. <i>Journal of Electroanalytical Chemistry</i> , 2020, 878, 114569. | 1.9 | 21 |
| 507 | A graphene oxide and ionic liquid assisted anion-immobilized polymer electrolyte with high ionic conductivity for dendrite-free lithium metal batteries. <i>Journal of Power Sources</i> , 2020, 477, 228754. | 4.0 | 41 |
| 508 | Lithium and Stannum Hybrid Anodes for Flexible Wire-Type Lithium-Oxygen Batteries. <i>Small Structures</i> , 2020, 1, 2000015. | 6.9 | 26 |
| 509 | Inducing uniform lithium nucleation by integrated lithium-rich li-in anode with lithiophilic 3D framework. <i>Energy Storage Materials</i> , 2020, 33, 423-431. | 9.5 | 56 |
| 510 | Bottom-Up Lithium Growth Triggered by Interfacial Activity Gradient on Porous Framework for Lithium-Metal Anode. <i>ACS Energy Letters</i> , 2020, 5, 3108-3114. | 8.8 | 102 |
| 511 | A Review of Solid-State Lithium-Sulfur Battery: Ion Transport and Polysulfide Chemistry. <i>Energy & Fuels</i> , 2020, 34, 11942-11961. | 2.5 | 83 |
| 512 | Bifunctional 3D Hierarchical Hairy Foam toward Ultrastable Lithium/Sulfur Electrochemistry. <i>Advanced Functional Materials</i> , 2020, 30, 2004650. | 7.8 | 29 |
| 513 | A Perspective on interfacial engineering of lithium metal anodes and beyond. <i>Applied Physics Letters</i> , 2020, 117, . | 1.5 | 18 |
| 514 | Dual-Functional Atomic Zinc Decorated Hollow Carbon Nanoreactors for Kinetically Accelerated Polysulfides Conversion and Dendrite Free Lithium Sulfur Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2002271. | 10.2 | 137 |
| 515 | Electrical Dynamic Switching of Magnetic Plasmon Resonance Based on Selective Lithium Deposition. <i>Advanced Materials</i> , 2020, 32, e2000058. | 11.1 | 16 |
| 516 | Semihollow Core-Shell Nanoparticles with Porous SiO ₂ Shells Encapsulating Elemental Sulfur for Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 47368-47376. | 4.0 | 12 |
| 517 | Robustness-Heterogeneity-Induced Ultrathin 2D Structure in Li Plating for Highly Reversible Li-Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 46132-46145. | 4.0 | 29 |
| 518 | High energy density anodes using hybrid Li intercalation and plating mechanisms on natural graphite. <i>Energy and Environmental Science</i> , 2020, 13, 3723-3731. | 15.6 | 44 |
| 519 | Tutorial review on structure-dendrite growth relations in metal battery anode supports. <i>Chemical Society Reviews</i> , 2020, 49, 7284-7300. | 18.7 | 130 |
| 520 | Revealing the Magnesium-Storage Mechanism in Mesoporous Bismuth via Spectroscopy and Ab-initio Simulations. <i>Angewandte Chemie</i> , 2020, 132, 21912-21919. | 1.6 | 4 |
| 521 | Recent Advances of Emerging 2D MXene for Stable and Dendrite-Free Metal Anodes. <i>Advanced Functional Materials</i> , 2020, 30, 2004613. | 7.8 | 140 |
| 522 | Enhanced ion transport in an ether aided super concentrated ionic liquid electrolyte for long-life practical lithium metal battery applications. <i>Journal of Materials Chemistry A</i> , 2020, 8, 18826-18839. | 5.2 | 40 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 523 | Free-standing lithiophilic Ag-nanoparticle-decorated 3D porous carbon nanotube films for enhanced lithium storage. RSC Advances, 2020, 10, 30880-30886. | 1.7 | 9 |
| 524 | Electrode Protection in High-Efficiency Li ⁺ O ₂ Batteries. ACS Central Science, 2020, 6, 2136-2148. | 5.3 | 62 |
| 525 | Ice-Templated Free-Standing Reduced Graphene Oxide for Dendrite-Free Lithium Metal Batteries. ACS Applied Energy Materials, 2020, 3, 11053-11060. | 2.5 | 18 |
| 526 | Electrophoretic Deposited Black Phosphorus on 3D Porous Current Collectors to Regulate Li Nucleation for Dendrite-Free Lithium Metal Anodes. ACS Applied Materials & Interfaces, 2020, 12, 51563-51572. | 4.0 | 30 |
| 527 | Spontaneously Splitting Copper Nanowires into Quantum Dots on Graphdiyne for Suppressing Lithium Dendrites. Advanced Materials, 2020, 32, e2004379. | 11.1 | 74 |
| 528 | A long-lasting dual-function electrolyte additive for stable lithium metal batteries. Nano Energy, 2020, 75, 104889. | 8.2 | 77 |
| 529 | A Powder Metallurgic Approach toward High-Performance Lithium Metal Anodes. Small, 2020, 16, e2000794. | 5.2 | 22 |
| 530 | Core-Shell C@Sb Nanoparticles as a Nucleation Layer for High-Performance Sodium Metal Anodes. Nano Letters, 2020, 20, 4464-4471. | 4.5 | 75 |
| 531 | Fundamentals, impedance, and performance of solid-state Li-metal microbatteries. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, 033212. | 0.9 | 3 |
| 532 | Selective Lithium Deposition on 3D Porous Heterogeneous Lithiophilic Skeleton for Ultrastable Lithium Metal Anodes. ChemNanoMat, 2020, 6, 1200-1207. | 1.5 | 10 |
| 533 | In Situ Formed LiZn Alloy Skeleton for Stable Lithium Anodes. ACS Applied Materials & Interfaces, 2020, 12, 25818-25825. | 4.0 | 32 |
| 534 | Three-Dimensional Magnesiophilic Scaffolds for Reduced Passivation toward High-Rate Mg Metal Anodes in a Noncorrosive Electrolyte. ACS Applied Materials & Interfaces, 2020, 12, 28298-28305. | 4.0 | 40 |
| 535 | Cu ₃ Pt alloy-functionalized Cu mesh as current collector for dendritic-free anodes of potassium metal batteries. Nano Energy, 2020, 75, 104914. | 8.2 | 49 |
| 536 | Atomically dispersed metal active centers as a chemically tunable platform for energy storage devices. Journal of Materials Chemistry A, 2020, 8, 15358-15372. | 5.2 | 16 |
| 537 | In-situ growth of hierarchical N-doped CNTs/Ni Foam scaffold for dendrite-free lithium metal anode. Energy Storage Materials, 2020, 29, 332-340. | 9.5 | 80 |
| 538 | Atomic layer deposition-strengthened lithiophilicity of ultrathin TiO ₂ film decorated Cu foil for stable lithium metal anode. Journal of Power Sources, 2020, 463, 228157. | 4.0 | 33 |
| 539 | Decorating carbon felt with oxides by dipping as dendrite-free host for lithium metal anode. Ionics, 2020, 26, 4381-4390. | 1.2 | 3 |
| 540 | Stable Lithium Metal Anode Enabled by 3D Soft Host. ACS Applied Materials & Interfaces, 2020, 12, 28337-28344. | 4.0 | 36 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 541 | A Lithium Metal Anode Surviving Battery Cycling Above 200 Å°C. <i>Advanced Materials</i> , 2020, 32, e2000952. | 11.1 | 35 |
| 542 | Progress on Lithium Dendrite Suppression Strategies from the Interior to Exterior by Hierarchical Structure Designs. <i>Small</i> , 2020, 16, e2000699. | 5.2 | 63 |
| 543 | Manipulating metals for adaptive thermal camouflage. <i>Science Advances</i> , 2020, 6, eaba3494. | 4.7 | 128 |
| 544 | 3D Flexible, Conductive, and Recyclable Ti ₃ C ₂ T _x MXene-Melamine Foam for High-Areal-Capacity and Long-Lifetime Alkali-Metal Anode. <i>ACS Nano</i> , 2020, 14, 8678-8688. | 7.3 | 164 |
| 545 | Kinetic- versus Diffusion-Driven Three-Dimensional Growth in Magnesium Metal Battery Anodes. <i>Joule</i> , 2020, 4, 1324-1336. | 11.7 | 98 |
| 546 | Two-pronged approach to regulate Li etching for a stable anode. <i>Journal of Power Sources</i> , 2020, 455, 227988. | 4.0 | 14 |
| 547 | A Soft Lithiophilic Graphene Aerogel for Stable Lithium Metal Anode. <i>Advanced Functional Materials</i> , 2020, 30, 2002013. | 7.8 | 60 |
| 548 | Design Principles of Single Atoms on Carbons for Lithium-Sulfur Batteries. <i>Small Methods</i> , 2020, 4, 2000315. | 4.6 | 84 |
| 549 | N-Doped carbon nanotubes decorated with Fe/Ni sites to stabilize lithium metal anodes. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 2747-2752. | 3.0 | 12 |
| 550 | Three-Dimensional Ordered Macro/Mesoporous Cu/Zn as a Lithiophilic Current Collector for Dendrite-Free Lithium Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 31542-31551. | 4.0 | 60 |
| 551 | Generalized Domino-Driven Synthesis of Hollow Hybrid Carbon Spheres with Ultrafine Metal Nitrides/Oxides. <i>Matter</i> , 2020, 3, 246-260. | 5.0 | 30 |
| 552 | Modulating Lithium Nucleation Behavior through Ultrathin Interfacial Layer for Superior Lithium Metal Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 6692-6699. | 2.5 | 8 |
| 553 | Heteroatom-doped 3D porous carbon architectures for highly stable aqueous zinc metal batteries and non-aqueous lithium metal batteries. <i>Chemical Engineering Journal</i> , 2020, 400, 125843. | 6.6 | 115 |
| 554 | Atomically dispersed materials for rechargeable batteries. <i>Nano Energy</i> , 2020, 76, 105085. | 8.2 | 18 |
| 555 | Recent Advances in Lithiophilic Porous Framework toward Dendrite-Free Lithium Metal Anode. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 4185. | 1.3 | 33 |
| 556 | Silicon Quantum Dots Induce Uniform Lithium Plating in a Sandwiched Metal Anode. <i>ChemElectroChem</i> , 2020, 7, 2026-2032. | 1.7 | 8 |
| 557 | An ultrastable lithium metal anode enabled by designed metal fluoride spines. <i>Science Advances</i> , 2020, 6, eaaz3112. | 4.7 | 157 |
| 558 | Functionality of Dual-Phase Lithium Storage in a Porous Carbon Host for Lithium-Metal Anode. <i>Advanced Functional Materials</i> , 2020, 30, 1910538. | 7.8 | 68 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 559 | Morphological and Chemical Mapping of Columnar Lithium Metal. <i>Chemistry of Materials</i> , 2020, 32, 2803-2814. | 3.2 | 10 |
| 560 | Hybrid Effect of Micropatterned Lithium Metal and Three Dimensionally Ordered Macroporous Polyimide Separator on the Cycle Performance of Lithium Metal Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 3721-3727. | 2.5 | 14 |
| 561 | Lithiophilic Silver Coating on Lithium Metal Surface for Inhibiting Lithium Dendrites. <i>Frontiers in Chemistry</i> , 2020, 8, 109. | 1.8 | 16 |
| 562 | Li-Al alloy composite with memory effect as high-performance lithium metal anode. <i>Journal of Power Sources</i> , 2020, 455, 227977. | 4.0 | 30 |
| 563 | Lithiophilic Zn Sites in Porous CuZn Alloy Induced Uniform Li Nucleation and Dendrite-free Li Metal Deposition. <i>Nano Letters</i> , 2020, 20, 2724-2732. | 4.5 | 134 |
| 564 | High-energy long-cycling all-solid-state lithium metal batteries enabled by silver-carbon composite anodes. <i>Nature Energy</i> , 2020, 5, 299-308. | 19.8 | 932 |
| 565 | MOF-derived lithiophilic CuO nanorod arrays for stable lithium metal anodes. <i>Nanoscale</i> , 2020, 12, 9416-9422. | 2.8 | 34 |
| 566 | Regulating electrodeposition morphology of lithium: towards commercially relevant secondary Li metal batteries. <i>Chemical Society Reviews</i> , 2020, 49, 2701-2750. | 18.7 | 310 |
| 567 | A Two-Dimensional Mesoporous Polypyrrole-Graphene Oxide Heterostructure as a Dual-Functional Ion Redistributor for Dendrite-Free Lithium Metal Anodes. <i>Angewandte Chemie</i> , 2020, 132, 12245-12251. | 1.6 | 21 |
| 568 | A Two-Dimensional Mesoporous Polypyrrole-Graphene Oxide Heterostructure as a Dual-Functional Ion Redistributor for Dendrite-Free Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 12147-12153. | 7.2 | 115 |
| 569 | Ionic liquid assisted electrochemical coating zinc nanoparticles on carbon cloth as lithium dendrite suppressing host. <i>Science Bulletin</i> , 2020, 65, 1094-1102. | 4.3 | 18 |
| 570 | Impact of hydrogen on lithium storage on graphene edges. <i>Applied Surface Science</i> , 2020, 515, 145886. | 3.1 | 5 |
| 571 | Atomic-scale simulations for lithium dendrite growth driven by strain gradient. <i>Applied Mathematics and Mechanics (English Edition)</i> , 2020, 41, 533-542. | 1.9 | 5 |
| 572 | Flaky and Dense Lithium Deposition Enabled by a Nanoporous Copper Surface Layer on Lithium Metal Anode. , 2020, 2, 358-366. | | 19 |
| 573 | Current Density Regulated Atomic to Nanoscale Process on Li Deposition and Solid Electrolyte Interphase Revealed by Cryogenic Transmission Electron Microscopy. <i>ACS Nano</i> , 2020, 14, 8766-8775. | 7.3 | 54 |
| 574 | Temperature-Dependent Chemical and Physical Microstructure of Li Metal Anodes Revealed through Synchrotron-Based Imaging Techniques. <i>Advanced Materials</i> , 2020, 32, e2002550. | 11.1 | 53 |
| 575 | Recent advances in research on anodes for safe and efficient lithium-metal batteries. <i>Nanoscale</i> , 2020, 12, 15528-15559. | 2.8 | 31 |
| 576 | Recent advances in the mitigation of dendrites in lithium-metal batteries. <i>Journal of Applied Physics</i> , 2020, 128, . | 1.1 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 577 | Dendrite-Free Sodium Metal Batteries Enabled by the Release of Contact Strain on Flexible and Sodiophilic Matrix. <i>Nano Letters</i> , 2020, 20, 6112-6119. | 4.5 | 42 |
| 578 | Promoting lithium electrodeposition towards the bottom of 3-D copper meshes in lithium-based batteries. <i>Journal of Power Sources</i> , 2020, 472, 228495. | 4.0 | 9 |
| 579 | Laser-Induced Silicon Oxide for Anode-Free Lithium Metal Batteries. <i>Advanced Materials</i> , 2020, 32, e2002850. | 11.1 | 92 |
| 580 | Low-temperature fusion fabrication of Li-Cu alloy anode with in situ formed 3D framework of inert LiCu nanowires for excellent Li storage performance. <i>Science Bulletin</i> , 2020, 65, 1907-1915. | 4.3 | 50 |
| 581 | Hollow multishelled structures revive high energy density batteries. <i>Nanoscale Horizons</i> , 2020, 5, 1287-1292. | 4.1 | 31 |
| 582 | Revisiting the strategies for stabilizing lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 13874-13895. | 5.2 | 54 |
| 583 | Coaxially Encapsulating Ultrafine Metal Nitrides/Oxides into Hollow Carbon Spheres by a Domino-Driven Strategy. <i>Matter</i> , 2020, 3, 16-18. | 5.0 | 1 |
| 584 | Platinum nano-interlayer enhanced interface for stable all-solid-state batteries observed via cryo-transmission electron microscopy. <i>Journal of Materials Chemistry A</i> , 2020, 8, 13541-13547. | 5.2 | 47 |
| 585 | Affinity-engineered carbon nanofibers as a scaffold for Na metal anodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 14757-14768. | 5.2 | 22 |
| 586 | Enabling Rapid Charging Lithium Metal Batteries via Surface Acoustic Wave-Driven Electrolyte Flow. <i>Advanced Materials</i> , 2020, 32, e1907516. | 11.1 | 35 |
| 587 | An amalgam route to stabilize potassium metal anodes over a wide temperature range. <i>Chemical Communications</i> , 2020, 56, 3512-3515. | 2.2 | 43 |
| 588 | Poros Carbons: Structure-Oriented Design and Versatile Applications. <i>Advanced Functional Materials</i> , 2020, 30, 1909265. | 7.8 | 316 |
| 589 | Unveiling a bimetallic FeCo-coupled MoS ₂ composite for enhanced energy storage. <i>Nanoscale</i> , 2020, 12, 10532-10542. | 2.8 | 15 |
| 590 | Toward Stable Lithium Plating/Stripping by Successive Desolvation and Exclusive Transport of Li Ions. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 10461-10470. | 4.0 | 50 |
| 591 | Electrical Conductivity Gradient Based on Heterofibrous Scaffolds for Stable Lithium-Metal Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 1908868. | 7.8 | 64 |
| 592 | The Role of Interlayer Chemistry in Li-Metal Growth through a Garnet-Type Solid Electrolyte. <i>Advanced Energy Materials</i> , 2020, 10, 1903993. | 10.2 | 119 |
| 593 | Lithiophilicity Acetylene Bonds Induced Nucleation and Deposition of Dendrite-Free Lithium Metal Anode. <i>ACS Applied Energy Materials</i> , 2020, 3, 2623-2633. | 2.5 | 18 |
| 594 | Basal Nanosuit of Graphite for High-Energy Hybrid Li Batteries. <i>ACS Nano</i> , 2020, 14, 1837-1845. | 7.3 | 40 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 595 | 3D Vertically Aligned Li Metal Anodes with Ultrahigh Cycling Currents and Capacities of 10 mA cm ⁻² /20 mAh cm ⁻² Realized by Selective Nucleation within Microchannel Walls. <i>Advanced Energy Materials</i> , 2020, 10, 1903753. | 10.2 | 62 |
| 596 | Dendrite-Free Lithium Anodes Enabled by a Commonly Used Copper Antirusting Agent. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 8168-8175. | 4.0 | 35 |
| 597 | Biomacromolecules enabled dendrite-free lithium metal battery and its origin revealed by cryo-electron microscopy. <i>Nature Communications</i> , 2020, 11, 488. | 5.8 | 158 |
| 598 | Redox-Driven Lithium Perfusion to Fabricate Li@Ni ²⁺ Foam Composites for High Lithium-Loading 3D Anodes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 9355-9364. | 4.0 | 24 |
| 599 | Multi-electron reactions of vanadium-based nanomaterials for high-capacity lithium batteries: challenges and opportunities. <i>Materials Today Nano</i> , 2020, 10, 100073. | 2.3 | 30 |
| 600 | Large-scale Modification of Commercial Copper Foil with Lithiophilic Metal Layer for Li Metal Battery. <i>Small</i> , 2020, 16, e1905620. | 5.2 | 71 |
| 601 | Long-life Sodium Metal Anodes Achieved by Cuprous Oxide-modified Ni Foam Host. <i>Energy Technology</i> , 2020, 8, 1901250. | 1.8 | 22 |
| 602 | Lithiophilicity conversion of carbon paper with uniform Cu ₂ O coating: Boosting stable Li-Cu ₂ O-CP composite anode through melting infusion. <i>Chemical Engineering Journal</i> , 2020, 388, 124238. | 6.6 | 5 |
| 603 | Solubility-Dependent Protective Effects of Binary Alloys for Lithium Anode. <i>ACS Applied Energy Materials</i> , 2020, 3, 2278-2284. | 2.5 | 16 |
| 604 | Fast ion/electron conducting scaffold of Li-Zn dual-phase alloy enable uniform deposition of Li metal at high current densities. <i>Journal of Energy Chemistry</i> , 2020, 51, 285-292. | 7.1 | 32 |
| 605 | The synergistic effect of Cu ₂ O and boric acid forming solid electrolyte interphase layer to restrain the dendritic growth. <i>Journal of Power Sources</i> , 2020, 458, 228055. | 4.0 | 13 |
| 606 | An Outlook on Low-Volume-Change Lithium Metal Anodes for Long-Life Batteries. <i>ACS Central Science</i> , 2020, 6, 661-671. | 5.3 | 83 |
| 607 | Lithium Metal Interface Modification for High-Energy Batteries: Approaches and Characterization. <i>Batteries and Supercaps</i> , 2020, 3, 828-859. | 2.4 | 38 |
| 608 | Morphologically controllable Li plating with stable electrochemistry realized in a newly developed DOL-DMM electrolyte system on Au-modified Cu current collector. <i>Ionics</i> , 2020, 26, 3979-3988. | 1.2 | 5 |
| 609 | Sn layer decorated copper mesh with superior lithiophilicity for stable lithium metal anode. <i>Chemical Engineering Journal</i> , 2020, 395, 124922. | 6.6 | 61 |
| 610 | Tortuosity Effects in Lithium-Metal Host Anodes. <i>Joule</i> , 2020, 4, 938-952. | 11.7 | 150 |
| 611 | A super-lithiophilic nanocrystallization strategy for stable lithium metal anodes. <i>Nano Energy</i> , 2020, 73, 104731. | 8.2 | 36 |
| 612 | Artificial nucleation sites with stable SEI for Li metal anodes by aggressive Al pulverization. <i>Nano Energy</i> , 2020, 73, 104746. | 8.2 | 22 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 613 | Realizing Dendrite-Free Lithium Deposition with a Composite Separator. <i>Nano Letters</i> , 2020, 20, 3798-3807. | 4.5 | 66 |
| 614 | Uniform Li Deposition Sites Provided by Atomic Layer Deposition for the Dendrite-free Lithium Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 19530-19538. | 4.0 | 30 |
| 615 | Improving Lithium Metal Composite Anodes with Seeding and Pillaring Effects of Silicon Nanoparticles. <i>ACS Nano</i> , 2020, 14, 4601-4608. | 7.3 | 61 |
| 616 | Thermodynamic analysis and kinetic optimization of high-energy batteries based on multi-electron reactions. <i>National Science Review</i> , 2020, 7, 1367-1386. | 4.6 | 31 |
| 617 | Clusters of CuO nanorods arrays for stable lithium metal anode. <i>Journal of Materials Science</i> , 2020, 55, 9048-9056. | 1.7 | 4 |
| 618 | Uniform Li Plating/Stripping within Ni Macropore Arrays Enabled by Regulated Electric Field Distribution for Ultra-Stable Li-Metal Anodes. <i>IScience</i> , 2020, 23, 101089. | 1.9 | 1 |
| 619 | Stable Lithium Metal Anode Enabled by a Lithiophilic and Electron/Ion Conductive Framework. <i>ACS Nano</i> , 2020, 14, 5618-5627. | 7.3 | 81 |
| 620 | Solidâ€“Solution-Based Metal Alloy Phase for Highly Reversible Lithium Metal Anode. <i>Journal of the American Chemical Society</i> , 2020, 142, 8818-8826. | 6.6 | 199 |
| 621 | Towards practical lithium-metal anodes. <i>Chemical Society Reviews</i> , 2020, 49, 3040-3071. | 18.7 | 473 |
| 622 | Long-lifespan lithiumâ€“metal batteries obtained using a perovskite intercalation layer to stabilize the lithium electrode. <i>Journal of Materials Chemistry A</i> , 2020, 8, 9137-9145. | 5.2 | 4 |
| 623 | Enhanced conductivity and structure stability of BiPO ₄ @C/CNT particles for high-performance bismuth-based batteries. <i>Dalton Transactions</i> , 2020, 49, 5636-5645. | 1.6 | 9 |
| 624 | Anodeâ€“Free Full Cells: A Pathway to Highâ€“Energy Density Lithiumâ€“Metal Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2000804. | 10.2 | 232 |
| 625 | Block copolymer electrolyte with adjustable functional units for solid polymer lithium metal battery. <i>Journal of Energy Chemistry</i> , 2021, 52, 67-74. | 7.1 | 43 |
| 626 | A 3D conducting scaffold with in-situ grown lithiophilic Ni ₂ P nanoarrays for high stability lithium metal anodes. <i>Journal of Energy Chemistry</i> , 2021, 54, 301-309. | 7.1 | 32 |
| 627 | Ag-modified hydrogen titanate nanowire arrays for stable lithium metal anode in a carbonate-based electrolyte. <i>Journal of Energy Chemistry</i> , 2021, 54, 282-290. | 7.1 | 16 |
| 628 | A room temperature alloying strategy to enable commercial metal foil for efficient Li/Na storage and deposition. <i>Energy Storage Materials</i> , 2021, 34, 708-715. | 9.5 | 15 |
| 629 | Understanding all solid-state lithium batteries through in situ transmission electron microscopy. <i>Materials Today</i> , 2021, 42, 137-161. | 8.3 | 64 |
| 630 | Lithium Induced Nanoâ€“Sized Copper with Exposed Lithiophilic Surfaces to Achieve Dense Lithium Deposition for Lithium Metal Anode. <i>Advanced Functional Materials</i> , 2021, 31, 2006950. | 7.8 | 84 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 631 | Electrolyte additives: Adding the stability of lithium metal anodes. Nano Select, 2021, 2, 16-36. | 1.9 | 28 |
| 632 | Solidâ€State Liâ€Metal Batteries: Challenges and Horizons of Oxide and Sulfide Solid Electrolytes and Their Interfaces. Advanced Energy Materials, 2021, 11, . | 10.2 | 312 |
| 633 | Sodiophilic Zn/SnO ₂ porous scaffold to stabilize sodium deposition for sodium metal batteries. Chemical Engineering Journal, 2021, 404, 126469. | 6.6 | 35 |
| 634 | Porous conductive interlayer for dendrite-free lithium metal battery. Journal of Energy Chemistry, 2021, 53, 412-418. | 7.1 | 13 |
| 635 | Na-K liquid alloy: A review on wettability enhancement and ionic carrier selection mechanism. Chinese Chemical Letters, 2021, 32, 983-989. | 4.8 | 8 |
| 636 | Boron-doping induced lithophilic transition of graphene for dendrite-free lithium growth. Journal of Energy Chemistry, 2021, 56, 463-469. | 7.1 | 18 |
| 637 | Recent progress of advanced anode materials of lithium-ion batteries. Journal of Energy Chemistry, 2021, 57, 451-468. | 7.1 | 245 |
| 638 | Interfacial challenges towards stable Li metal anode. Nano Energy, 2021, 79, 105507. | 8.2 | 115 |
| 639 | Advanced electrolyte design for stable lithium metal anode: From liquid to solid. Nano Energy, 2021, 80, 105516. | 8.2 | 111 |
| 640 | 2D Sn/C freestanding frameworks as a robust nucleation layer for highly stable sodium metal anodes with a high utilization. Nano Energy, 2021, 79, 105457. | 8.2 | 46 |
| 641 | Construction of 3D porous CeO ₂ ceramic hosts with enhanced lithiophilicity for dendrite-free lithium metal anode. Journal of Power Sources, 2021, 484, 229253. | 4.0 | 15 |
| 642 | Domino Effect: Gold Electrocatalyzing Lithium Reduction to Accelerate Nitrogen Fixation. Angewandte Chemie - International Edition, 2021, 60, 5257-5261. | 7.2 | 58 |
| 643 | Planar Li growth on Li ₂ Si ₅ modified Li metal for the stabilization of anode. Journal of Materials Science and Technology, 2021, 76, 156-165. | 5.6 | 6 |
| 644 | Design principles of MOF-related materials for highly stable metal anodes in secondary metal-based batteries. Materials Today Energy, 2021, 19, 100608. | 2.5 | 30 |
| 645 | A Carbon Foam with Sodiophilic Surface for Highly Reversible, Ultraâ€Long Cycle Sodium Metal Anode. Advanced Science, 2021, 8, 2003178. | 5.6 | 62 |
| 646 | In Situ Construction of Lithium Silicide Host with Unhindered Lithium Spread for Dendriteâ€Free Lithium Metal Anode. Advanced Functional Materials, 2021, 31, 2008786. | 7.8 | 18 |
| 647 | Highly efficient lithium utilization in lithium metal full-cell by simulated missile guidance and confinement systems. Science China Materials, 2021, 64, 830-839. | 3.5 | 6 |
| 648 | Electro-chemo-mechanics of lithium in solid state lithium metal batteries. Energy and Environmental Science, 2021, 14, 602-642. | 15.6 | 95 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 649 | A dendrite-free composite Li metal anode enabled by lithiophilic Co, N codoped porous carbon nanofibers. <i>Journal of Power Sources</i> , 2021, 483, 229188. | 4.0 | 26 |
| 650 | All-Solid-State Batteries with a Limited Lithium Metal Anode at Room Temperature using a Garnet-Based Electrolyte. <i>Advanced Materials</i> , 2021, 33, e2002325. | 11.1 | 99 |
| 651 | Artificial Solid-Electrolyte Interphase for Lithium Metal Batteries. <i>Batteries and Supercaps</i> , 2021, 4, 445-455. | 2.4 | 56 |
| 652 | Li dendrites inhibition realized by lithiophilic and ion/electron conductive 3D skeleton for Li metal anodes. <i>Chemical Engineering Journal</i> , 2021, 421, 127872. | 6.6 | 11 |
| 653 | Highly reversible and dendrite-free Zn electrodeposition enabled by a thin metallic interfacial layer in aqueous batteries. <i>Chemical Engineering Journal</i> , 2021, 416, 128062. | 6.6 | 75 |
| 654 | Honeycomb Inspired Lithiophilic Scaffold for Ultra-Stable, High-Areal-Capacity Metallic Deposition. <i>Energy Storage Materials</i> , 2021, 35, 378-387. | 9.5 | 11 |
| 655 | Manipulating Particle Chemistry for Hollow Carbon-based Nanospheres: Synthesis Strategies, Mechanistic Insights, and Electrochemical Applications. <i>Accounts of Chemical Research</i> , 2021, 54, 221-231. | 7.6 | 39 |
| 656 | Two-dimensional matrices confining metal single atoms with enhanced electrochemical reaction kinetics for energy storage applications. <i>Energy and Environmental Science</i> , 2021, 14, 1794-1834. | 15.6 | 45 |
| 657 | Research Progress and Future Perspectives on Rechargeable Na ₂ O and Na ₂ CO ₃ Batteries. <i>Energy and Environmental Materials</i> , 2021, 4, 158-177. | 7.3 | 25 |
| 658 | Spatially Controlled Lithium Deposition on Silver-Nanocrystals-Decorated TiO ₂ Nanotube Arrays Enabling Ultrastable Lithium Metal Anode. <i>Advanced Functional Materials</i> , 2021, 31, 2009605. | 7.8 | 40 |
| 659 | Spatially anchoring the lithiophilic composites within the mixed-conducting phase: A hybrid storage mechanism enabled by the Al-Si@AlSiOX composite. <i>Chemical Engineering Journal</i> , 2021, 417, 127915. | 6.6 | 5 |
| 660 | Alternating nanolayers as lithiophilic scaffolds for Li-metal anode. <i>Journal of Energy Chemistry</i> , 2021, 57, 131-139. | 7.1 | 8 |
| 661 | Phosphonium Bromides Regulating Solid Electrolyte Interphase Components and Optimizing Solvation Sheath Structure for Suppressing Lithium Dendrite Growth. <i>Advanced Functional Materials</i> , 2021, 31, 2009013. | 7.8 | 75 |
| 662 | Recent Developments in Dendrite-Free Lithium-Metal Deposition through Tailoring of Micro- and Nanoscale Artificial Coatings. <i>ACS Nano</i> , 2021, 15, 29-46. | 7.3 | 80 |
| 663 | Flexible MnO nanoparticle-anchored N-doped porous carbon nanofiber interlayers for superior performance lithium metal anodes. <i>Nanoscale Advances</i> , 2021, 3, 1136-1147. | 2.2 | 12 |
| 664 | Domino Effect: Gold Electrocatalyzing Lithium Reduction to Accelerate Nitrogen Fixation. <i>Angewandte Chemie</i> , 2021, 133, 5317-5321. | 1.6 | 12 |
| 665 | Li-containing alloys beneficial for stabilizing lithium anode: A review. <i>Engineering Reports</i> , 2021, 3, e12339. | 0.9 | 26 |
| 666 | Polysiloxane Cross-Linked Mechanically Stable MXene-Based Lithium Host for Ultrastable Lithium Metal Anodes with Ultrahigh Current Densities and Capacities. <i>Advanced Functional Materials</i> , 2021, 31, 2008044. | 7.8 | 57 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 667 | Constructing nanoporous Ni foam current collectors for stable lithium metal anodes. <i>Journal of Energy Chemistry</i> , 2021, 58, 124-132. | 7.1 | 26 |
| 668 | High-loading lateral Li deposition realized by a Scalable Fluorocarbon Bonded Laminates. <i>Carbon</i> , 2021, 171, 894-906. | 5.4 | 8 |
| 669 | Rational Design of Multifunctional Integrated Host Configuration with Lithiophilicity&Sulfiphilicity toward High&Performance Li&S Full Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2006033. | 7.8 | 64 |
| 670 | Safer Lithium&ion Batteries from the Separator Aspect: Development and Future Perspectives. <i>Energy and Environmental Materials</i> , 2021, 4, 336-362. | 7.3 | 104 |
| 671 | Modulating the electrical conductivity of a graphene oxide-coated 3D framework for guiding bottom-up lithium growth. <i>Journal of Materials Chemistry A</i> , 2021, 9, 1822-1834. | 5.2 | 22 |
| 672 | Electron cloud migration effect-induced lithiophobicity/lithiophilicity transformation for dendrite-free lithium metal anodes. <i>Nanoscale</i> , 2021, 13, 3027-3035. | 2.8 | 8 |
| 673 | Recent advancements of functional gel polymer electrolytes for rechargeable lithium&metal batteries. <i>Materials Chemistry Frontiers</i> , 2021, 5, 5211-5232. | 3.2 | 22 |
| 674 | Recent advances in separator engineering for effective dendrite suppression of Li&metal anodes. <i>Nano Select</i> , 2021, 2, 993-1010. | 1.9 | 22 |
| 675 | Stable alkali metal anodes enabled by crystallographic optimization â&a review. <i>Journal of Materials Chemistry A</i> , 2021, 9, 20957-20984. | 5.2 | 32 |
| 676 | An Anode-Free Zn&MnO₂ Battery. <i>Nano Letters</i> , 2021, 21, 1446-1453. | 4.5 | 131 |
| 677 | Insights into the deposition chemistry of Li ions in nonaqueous electrolyte for stable Li anodes. <i>Chemical Society Reviews</i> , 2021, 50, 3178-3210. | 18.7 | 126 |
| 678 | The lithium metal anode in Li&S batteries: challenges and recent progress. <i>Journal of Materials Chemistry A</i> , 2021, 9, 10012-10038. | 5.2 | 45 |
| 679 | Unveiling the Origin of Alloy-Seeded and Nondendritic Growth of Zn for Rechargeable Aqueous Zn Batteries. <i>ACS Energy Letters</i> , 2021, 6, 404-412. | 8.8 | 148 |
| 680 | Dendrite&free lithium and sodium metal anodes with deep plating/stripping properties for lithium and sodium batteries. , 2021, 3, 153-166. | | 47 |
| 681 | Covalent Organic Frameworks Construct Precise Lithiophilic Sites for Uniform Lithium Deposition. <i>Matter</i> , 2021, 4, 253-264. | 5.0 | 73 |
| 682 | Growing Nanostructured CuO on Copper Foil via Chemical Etching to Upgrade Metallic Lithium Anode. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 6367-6374. | 4.0 | 20 |
| 683 | Synergistic effects of nanodiamond modified separators toward highly stable and safe lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 16046-16055. | 5.2 | 19 |
| 684 | Recent advances in carbon-shell-based nanostructures for advanced Li/Na metal batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 6070-6088. | 5.2 | 21 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 685 | Slow surface diffusion on Cu substrates in Li metal batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 11042-11048. | 5.2 | 15 |
| 686 | <i>In situ</i> synthesis of graphitic C ₃ N ₄ "poly(1,3-dioxolane) composite interlayers for stable lithium metal anodes. <i>Sustainable Energy and Fuels</i> , 2021, 5, 2433-2440. | 2.5 | 30 |
| 687 | Uniform and dendrite-free zinc deposition enabled by <i>in situ</i> formed AgZn ₃ for the zinc metal anode. <i>Journal of Materials Chemistry A</i> , 2021, 9, 8452-8461. | 5.2 | 121 |
| 688 | Interfacial chemistry in anode-free batteries: challenges and strategies. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7396-7406. | 5.2 | 65 |
| 689 | Insight into the Critical Role of Exchange Current Density on Electrodeposition Behavior of Lithium Metal. <i>Advanced Science</i> , 2021, 8, 2003301. | 5.6 | 146 |
| 690 | Three-Dimensional (3D) Nanostructured Skeleton Substrate Composed of Hollow Carbon Fiber/Carbon Nanosheet/ZnO for Stable Lithium Anode. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 3078-3088. | 4.0 | 34 |
| 691 | A mechanistic review of lithiophilic materials: resolving lithium dendrites and advancing lithium metal-based batteries. <i>Materials Chemistry Frontiers</i> , 2021, 5, 6294-6314. | 3.2 | 35 |
| 692 | Manganese dioxide nanosheet coated carbon cloth as a multifunctional interlayer for advanced lithium-sulfur batteries. <i>Materials Advances</i> , 2021, 2, 688-691. | 2.6 | 5 |
| 693 | Stable sodium metal anodes with a high utilization enabled by an interfacial layer composed of yolk-shell nanoparticles. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13200-13208. | 5.2 | 21 |
| 694 | Advanced <i>in situ</i> technology for Li/Na metal anodes: an in-depth mechanistic understanding. <i>Energy and Environmental Science</i> , 2021, 14, 3872-3911. | 15.6 | 27 |
| 695 | Engineering nanoreactors for metal-chalcogen batteries. <i>Energy and Environmental Science</i> , 2021, 14, 540-575. | 15.6 | 70 |
| 696 | Mechanism for Zincophilic Sites on Zinc-Metal Anode Hosts in Aqueous Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2003419. | 10.2 | 233 |
| 697 | Favourites after five. <i>Nature Energy</i> , 2021, 6, 7-12. | 19.8 | 0 |
| 698 | Understanding the Selective Deposition of Li Metal on Nonuniform Electrode Surfaces Using Atomic Force Microscopy. <i>Journal of the Electrochemical Society</i> , 2021, 168, 020534. | 1.3 | 0 |
| 699 | Dendrite-Free Li-Metal Anode Enabled by Dendritic Structure. <i>Advanced Functional Materials</i> , 2021, 31, 2009712. | 7.8 | 43 |
| 700 | Rational Designs for Lithium-Sulfur Batteries with Low Electrolyte/Sulfur Ratio. <i>Advanced Functional Materials</i> , 2021, 31, 2010499. | 7.8 | 70 |
| 701 | Tortuosity Modulation toward High-Energy and High-Power Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2003663. | 10.2 | 46 |
| 702 | Li-Zn Overlayer to Facilitate Uniform Lithium Deposition for Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 9985-9993. | 4.0 | 19 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 703 | Efficient Lithium Metal Cycling over a Wide Range of Pressures from an Anion-Derived Solid-Electrolyte Interphase Framework. ACS Energy Letters, 2021, 6, 816-825. | 8.8 | 46 |
| 704 | Low-Cost Regulating Lithium Deposition Behaviors by Transition Metal Oxide Coating on Separator. Advanced Functional Materials, 2021, 31, 2007255. | 7.8 | 28 |
| 705 | Lithiophilic and Antioxidative Copper Current Collectors for Highly Stable Lithium Metal Batteries. Advanced Functional Materials, 2021, 31, 2009805. | 7.8 | 47 |
| 706 | Critical Current Density in Solid-State Lithium Metal Batteries: Mechanism, Influences, and Strategies. Advanced Functional Materials, 2021, 31, 2009925. | 7.8 | 239 |
| 707 | Harnessing the Unique Features of 2D Materials toward Dendrite-Free Metal Anodes. Energy and Environmental Materials, 2022, 5, 45-67. | 7.3 | 33 |
| 708 | Nano Cellulose Fibers and Graphene Oxide Coating on Polyolefin Separator With Uniform Li ⁺ Transportation Channels for Long-Life and High-Safety Li Metal Battery. Journal of Electrochemical Energy Conversion and Storage, 2022, 19, . | 1.1 | 3 |
| 709 | Nitrogen-Doped Amorphous Zn-Carbon Multichannel Fibers for Stable Lithium Metal Anodes. Angewandte Chemie - International Edition, 2021, 60, 8515-8520. | 7.2 | 115 |
| 710 | Porous Mixed Ionic Electronic Conductor Interlayers for Solid-State Batteries. Energy Material Advances, 2021, 2021, . | 4.7 | 31 |
| 711 | A Review of Existing and Emerging Methods for Lithium Detection and Characterization in Li-Ion and Li-Metal Batteries. Advanced Energy Materials, 2021, 11, 2100372. | 10.2 | 114 |
| 712 | Superwetting behaviors at the interface between electrode and electrolyte. Cell Reports Physical Science, 2021, 2, 100374. | 2.8 | 22 |
| 713 | Hollow SiO ₂ /C Microspheres with Semigraphitic Carbon Coating as the Lithium Host for Dendrite-Free Lithium Metal Anodes. ACS Applied Energy Materials, 2021, 4, 3905-3912. | 2.5 | 20 |
| 714 | An Overview on Protecting Metal Anodes with Alloy-Type Coating. Batteries and Supercaps, 2021, 4, 1252-1266. | 2.4 | 13 |
| 715 | Design of Robust, Lithiophilic, and Flexible Inorganic-Polymer Protective Layer by Separator Engineering Enables Dendrite-Free Lithium Metal Batteries with LiNi _{0.8} Mn _{0.1} Co _{0.1} O ₂ Cathode. Small, 2021, 17, e2007717. | 5.2 | 108 |
| 716 | Pore-assisted lithium deposition in hierarchically porous and hollow carbon textile for highly stable lithium anode. Journal of Power Sources, 2021, 489, 229464. | 4.0 | 17 |
| 717 | Systematic Evaluation of Carbon Hosts for High-Energy Rechargeable Lithium-Metal Batteries. ACS Energy Letters, 0, , 1550-1559. | 8.8 | 20 |
| 718 | Metal Atom-Decorated Carbon Nanomaterials for Enhancing Li-S/Se Batteries Performances: A Mini Review. Frontiers in Energy Research, 2021, 9, . | 1.2 | 12 |
| 719 | Nitrogen-Doped Amorphous Zn-Carbon Multichannel Fibers for Stable Lithium Metal Anodes. Angewandte Chemie, 2021, 133, 8596-8601. | 1.6 | 17 |
| 720 | Nanometer-Scale Surface Roughness of a 3-D Cu Substrate Promoting Li Nucleation in Li-Metal Batteries. ACS Applied Energy Materials, 2021, 4, 2644-2651. | 2.5 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 721 | The synthesis of crystalline Ni microwire-nanosheet monolith for recoverable host of dendrite-free Li anode. <i>Journal of Power Sources</i> , 2021, 487, 229418. | 4.0 | 8 |
| 722 | Uniform Zn Deposition Achieved by Ag Coating for Improved Aqueous Zinc-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 16869-16875. | 4.0 | 129 |
| 723 | Composite Lithium Protective Layer Formed In Situ for Stable Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 12099-12105. | 4.0 | 38 |
| 724 | Scallion-Inspired Graphene Scaffold Enabled High Rate Lithium Metal Battery. <i>Nano Letters</i> , 2021, 21, 2347-2355. | 4.5 | 20 |
| 725 | Mechanisms of the Planar Growth of Lithium Metal Enabled by the 2D Lattice Confinement from a Ti ₃ C ₂ T _x MXene Intermediate Layer. <i>Advanced Functional Materials</i> , 2021, 31, 2010987. | 7.8 | 33 |
| 726 | Stable Lithium-Carbon Composite Enabled by Dual-Salt Additives. <i>Nano-Micro Letters</i> , 2021, 13, 111. | 14.4 | 11 |
| 727 | Realizing superior energy in a full-cell LIB employing a Li-metal anode via the rational design of a Cu-scaffold host structure with an extremely high porosity. <i>Energy Storage Materials</i> , 2021, 36, 326-332. | 9.5 | 5 |
| 728 | Flexible and stable 3D lithium metal anodes based on self-standing MXene/COF frameworks for high-performance lithium-sulfur batteries. <i>Nano Research</i> , 2021, 14, 3576-3584. | 5.8 | 95 |
| 729 | Fluorinated Interface Layer with Embedded Zinc Nanoparticles for Stable Lithium-Metal Anodes. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 17690-17698. | 4.0 | 17 |
| 730 | Highly Lithiophilic Copper-Reinforced Scaffold Enables Stable Li Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 20240-20250. | 4.0 | 24 |
| 731 | Self-Formed Lithiophilic Alloy Buffer Layer on Copper Foam Framework for Advanced Lithium Metal Anodes. <i>ACS Applied Energy Materials</i> , 2021, 4, 4879-4886. | 2.5 | 8 |
| 732 | Visualizing the Sensitive Lithium with Atomic Precision: Cryogenic Electron Microscopy for Batteries. <i>Accounts of Chemical Research</i> , 2021, 54, 2088-2099. | 7.6 | 59 |
| 733 | Polymorph Evolution Mechanisms and Regulation Strategies of Lithium Metal Anode under Multiphysical Fields. <i>Chemical Reviews</i> , 2021, 121, 5986-6056. | 23.0 | 165 |
| 734 | Silicious nanowires enabled dendrites suppression and flame retardancy for advanced lithium metal anodes. <i>Nano Energy</i> , 2021, 82, 105723. | 8.2 | 50 |
| 735 | Iron carbide allured lithium metal storage in carbon nanotube cavities. <i>Energy Storage Materials</i> , 2021, 36, 459-465. | 9.5 | 39 |
| 736 | Ultrafast Microwave Polarizing Electrons to Form Vertically Aligned Metal Hybrids as Lithiophilic Buffer for Lithium-Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 16594-16601. | 4.0 | 9 |
| 737 | Extraordinary dendrite-free Li deposition on highly uniform facet wrinkled Cu substrates in carbonate electrolytes. <i>Nano Energy</i> , 2021, 82, 105736. | 8.2 | 24 |
| 738 | Covalent Assembly of Two-Dimensional COF@MXene Heterostructures Enables Fast Charging Lithium Hosts. <i>Advanced Functional Materials</i> , 2021, 31, 2101194. | 7.8 | 83 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 739 | Spatial confinement of vertical arrays of lithiophilic SnS ₂ nanosheets enables conformal Li nucleation/growth towards dendrite-free Li metal anode. <i>Energy Storage Materials</i> , 2021, 36, 504-513. | 9.5 | 66 |
| 740 | Interfacial Engineering of Bifunctional Niobium (V)-Based Heterostructure Nanosheet Toward High Efficiency Lean-Electrolyte Lithium-Sulfur Full Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2102314. | 7.8 | 93 |
| 741 | Sowing Silver Seeds within Patterned Ditches for Dendrite-Free Lithium Metal Batteries. <i>Advanced Science</i> , 2021, 8, e2100684. | 5.6 | 42 |
| 742 | Manipulating the ion-transference and deposition kinetics by regulating the surface chemistry of zinc metal anodes for rechargeable zinc-air batteries. <i>Green Energy and Environment</i> , 2023, 8, 318-330. | 4.7 | 12 |
| 743 | Selective elimination of the reactive groups of porous biochar 3D host for stable lithium anodes. <i>Electrochimica Acta</i> , 2021, 388, 138632. | 2.6 | 3 |
| 744 | Dimensionality, Function and Performance of Carbon Materials in Energy Storage Devices. <i>Advanced Energy Materials</i> , 2022, 12, 2100775. | 10.2 | 96 |
| 745 | Rational Design and Engineering of One-Dimensional Hollow Nanostructures for Efficient Electrochemical Energy Storage. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 20102-20118. | 7.2 | 123 |
| 746 | Regulating alkali metal deposition behavior via Li/Na-philic Ni nanoparticles modified 3D hierarchical carbon skeleton. <i>Chemical Engineering Journal</i> , 2021, 412, 128661. | 6.6 | 19 |
| 747 | Self-Assembly Lightweight Honeycomb-Like Prussian Blue Analogue on Cu Foam for Lithium Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 23803-23810. | 4.0 | 19 |
| 748 | Lithium Storage in Bowl-like Carbon: The Effect of Surface Curvature and Space Geometry on Li Metal Deposition. <i>ACS Energy Letters</i> , 2021, 6, 2145-2152. | 8.8 | 41 |
| 749 | A highly stable lithium metal anode enabled by Ag nanoparticle-embedded nitrogen-doped carbon macroporous fibers. <i>Science Advances</i> , 2021, 7, . | 4.7 | 212 |
| 750 | Uniform lithium plating within 3D Cu foam enabled by Ag nanoparticles. <i>Electrochimica Acta</i> , 2021, 379, 138152. | 2.6 | 18 |
| 751 | Rational Design and Engineering of One-Dimensional Hollow Nanostructures for Efficient Electrochemical Energy Storage. <i>Angewandte Chemie</i> , 2021, 133, 20262-20278. | 1.6 | 13 |
| 752 | Regulating the Stable Lithium and Polysulfide Deposition in Batteries by a Gold Nanoparticle Modified Vertical Graphene Host. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2100044. | 2.8 | 4 |
| 753 | Recent Advances in Understanding the Formation and Mitigation of Dendrites in Lithium Metal Batteries. <i>Energy & Fuels</i> , 2021, 35, 9187-9208. | 2.5 | 14 |
| 754 | Planting CuGa ₂ seeds assisted with liquid metal for selective wrapping deposition of lithium. <i>Energy Storage Materials</i> , 2021, 37, 466-475. | 9.5 | 38 |
| 755 | Redistributing Li-ion flux and homogenizing Li-metal growth by N-doped hierarchically porous membranes for dendrite-free Lithium metal batteries. <i>Energy Storage Materials</i> , 2021, 37, 233-242. | 9.5 | 41 |
| 756 | Phase-Separation-Induced Porous Lithiophilic Polymer Coating for High-Efficiency Lithium Metal Batteries. <i>Nano Letters</i> , 2021, 21, 4757-4764. | 4.5 | 44 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 757 | Template-Free Sacrificed Hot Fusion Construction and Nanoseed Modification of 3D Porous Copper Nanoscaffold Host for Stable Cycling Lithium Metal Anodes. <i>Advanced Functional Materials</i> , 2021, 31, 2102735. | 7.8 | 51 |
| 758 | Sustainable and Robust Graphene Cellulose Paper Decorated with Lithiophilic Au Nanoparticles to Enable Dendrite-Free and High-Power Lithium Metal Anode. <i>Chemistry - A European Journal</i> , 2021, 27, 8168-8177. | 1.7 | 7 |
| 759 | Structurally stabilized lithium-metal anode via surface chemistry engineering. <i>Energy Storage Materials</i> , 2021, 37, 315-324. | 9.5 | 46 |
| 760 | Dual-Solvent Li-Ion Solvation Enables High-Performance Li-Metal Batteries. <i>Advanced Materials</i> , 2021, 33, e2008619. | 11.1 | 123 |
| 761 | Consecutive Nucleation and Confinement Modulation towards Li Plating in Seeded Capsules for Durable Li-Metal Batteries. <i>Angewandte Chemie</i> , 2021, 133, 14159-14169. | 1.6 | 16 |
| 762 | Realizing high-power and high-capacity zinc/sodium metal anodes through interfacial chemistry regulation. <i>Nature Communications</i> , 2021, 12, 3083. | 5.8 | 167 |
| 763 | Consecutive Nucleation and Confinement Modulation towards Li Plating in Seeded Capsules for Durable Li-Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 14040-14050. | 7.2 | 70 |
| 764 | Inhibition of Lithium Dendrite Formation in Lithium Metal Batteries via Regulated Cation Transport through Ultrathin Sub-Nanometer Porous Carbon Nanomembranes. <i>Advanced Energy Materials</i> , 2021, 11, 2100666. | 10.2 | 45 |
| 765 | Lithium dendrite suppression by facile interfacial barium engineering for stable 5V-class lithium metal batteries with carbonate-based electrolyte. <i>Chemical Engineering Journal</i> , 2021, 414, 128928. | 6.6 | 19 |
| 766 | Lithium-Rich Anti-perovskite Li ₂ O/Br-Based Polymer Electrolytes Enabling an Improved Interfacial Stability with a Three-Dimensional-Structured Lithium Metal Anode in All-Solid-State Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 28108-28117. | 4.0 | 13 |
| 767 | Recent smart lithium anode configurations for high-energy lithium metal batteries. <i>Energy Storage Materials</i> , 2021, 38, 262-275. | 9.5 | 47 |
| 768 | Homogeneous bottom-growth of lithium metal anode enabled by double-gradient lithiophilic skeleton. <i>Journal of Energy Chemistry</i> , 2021, 57, 392-400. | 7.1 | 35 |
| 769 | Design of safe, long-cycling and high-energy lithium metal anodes in all working conditions: Progress, challenges and perspectives. <i>Energy Storage Materials</i> , 2021, 38, 157-189. | 9.5 | 52 |
| 770 | Advances in multimetallic alloy-based anodes for alkali-ion and alkali-metal batteries. <i>Materials Today</i> , 2021, 50, 259-275. | 8.3 | 35 |
| 771 | Lithiophilic amide-functionalized carbon nanotube skeleton for dendrite-free lithium metal anodes. <i>Chemical Engineering Journal</i> , 2021, 414, 128698. | 6.6 | 31 |
| 772 | Lithium Host:Advanced architecture components for lithium metal anode. <i>Energy Storage Materials</i> , 2021, 38, 276-298. | 9.5 | 89 |
| 773 | Investigating Parasitic Reactions in Anode-Free Li Metal Cells with Isothermal Microcalorimetry. <i>Journal of the Electrochemical Society</i> , 2021, 168, 060527. | 1.3 | 12 |
| 774 | Effect of diffusion constant on the morphology of dendrite growth in lithium metal batteries. <i>Journal of Chemical Physics</i> , 2021, 154, 234705. | 1.2 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 775 | Au@rGO modified Ni foam as a stable host for lithium metal anode. <i>Solid State Ionics</i> , 2021, 364, 115636. | 1.3 | 5 |
| 776 | Quantitatively Designing Porous Copper Current Collectors for Lithium Metal Anodes. <i>ACS Applied Energy Materials</i> , 2021, 4, 6454-6465. | 2.5 | 17 |
| 777 | Forging Inspired Processing of Sodium-Fluorinated Graphene Composite as Dendrite-Free Anode for Long-Life Na- CO_2 Cells. <i>Energy and Environmental Materials</i> , 2022, 5, 572-581. | 7.3 | 8 |
| 778 | Scalable and Controllable Synthesis of Interface-Engineered Nanoporous Host for Dendrite-Free and High Rate Zinc Metal Batteries. <i>ACS Nano</i> , 2021, 15, 11828-11842. | 7.3 | 140 |
| 779 | In situ monitoring nanoscale solid-state phase transformation of Ag nanowire during electrochemical reaction. <i>Scripta Materialia</i> , 2021, 199, 113835. | 2.6 | 1 |
| 780 | A Sandwich Structure Composite Solid Electrolyte with Enhanced Interface Stability and Electrochemical Properties For Solid-state Lithium Batteries. <i>Journal of the Electrochemical Society</i> , 2021, 168, 070513. | 1.3 | 10 |
| 781 | Design Principle, Optimization Strategies, and Future Perspectives of Anode-Free Configurations for High-Energy Rechargeable Metal Batteries. <i>Electrochemical Energy Reviews</i> , 2021, 4, 601-631. | 13.1 | 69 |
| 782 | Hydrogen-Bonding Crosslinking MXene to Highly Robust and Ultralight Aerogels for Strengthening Lithium Metal Anode. <i>Small Science</i> , 2021, 1, 2100021. | 5.8 | 41 |
| 783 | Cations Coordination-Regulated Reversibility Enhancement for Aqueous Zn-Ion Battery. <i>Advanced Functional Materials</i> , 2021, 31, 2105736. | 7.8 | 59 |
| 784 | Nano-channel-based physical and chemical synergic regulation for dendrite-free lithium plating. <i>Nano Research</i> , 2021, 14, 3585-3597. | 5.8 | 17 |
| 785 | LixCu alloy nanowires nested in Ni foam for highly stable Li metal composite anode. <i>Science China Materials</i> , 2022, 65, 69-77. | 3.5 | 13 |
| 786 | Ice-colloidal templated carbon host for highly efficient, dendrite free Li metal anode. <i>Carbon</i> , 2021, 179, 256-265. | 5.4 | 7 |
| 787 | Anticorrosive Copper Current Collector Passivated by Self-Assembled Porous Membrane for Highly Stable Lithium Metal Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2104930. | 7.8 | 32 |
| 788 | N, O-Codoped Carbon Nanosheet Array Enabling Stable Lithium Metal Anode. <i>Advanced Functional Materials</i> , 2021, 31, 2102354. | 7.8 | 45 |
| 789 | Intermetallic interphases in lithium metal and lithium ion batteries. <i>Informa-Ån-Å-Materi-Åly</i> , 2021, 3, 1083-1109. | 8.5 | 35 |
| 790 | Effects of a nanometrically formed lithiophilic silver@copper current collector on the electrochemical nucleation and growth behaviors of lithium metal anodes. <i>Applied Surface Science</i> , 2021, 554, 149578. | 3.1 | 11 |
| 791 | Highly Cyclable All-Solid-State Battery with Deposition-Type Lithium Metal Anode Based on Thin Carbon Black Layer. <i>Advanced Energy and Sustainability Research</i> , 2021, 2, 2100066. | 2.8 | 23 |
| 792 | A Three-Dimensional Surface Layer and a Composite Aphroid Layer Constructed by a Facile Rolling Method for High-Performance Li Metal Anodes. <i>ACS Applied Energy Materials</i> , 2021, 4, 8108-8116. | 2.5 | 8 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 793 | Challenges in regulating interfacial chemistry of the sodium metal anode for room temperature sodium-sulfur batteries. <i>Energy Storage</i> , 2022, 4, e264. | 2.3 | 18 |
| 794 | Chemical dealloying pore structure control of porous copper current collector for dendrite-free lithium anode. <i>Journal of Porous Materials</i> , 2021, 28, 1813-1822. | 1.3 | 8 |
| 795 | Effectively Regulating More Robust Amorphous Li Clusters for Ultrastable Dendrite-Free Cycling. <i>Advanced Science</i> , 2021, 8, e2101584. | 5.6 | 9 |
| 796 | Dendrite-Free and Stable Lithium Metal Battery Achieved by a Model of Stepwise Lithium Deposition and Stripping. <i>Nano-Micro Letters</i> , 2021, 13, 170. | 14.4 | 26 |
| 797 | Revealing the Effect of Nickel Nanoparticles for Li Plating and Stripping Processes on Ni ^x Doped Hollow Carbon Sphere. <i>ChemElectroChem</i> , 2021, 8, 3832. | 1.7 | 0 |
| 798 | Atomistic Mechanism and Long-Term Stability of Using Chlorinated Graphdiyne Film to Reduce Lithium Dendrites in Rechargeable Lithium Metal Batteries. <i>Nano Letters</i> , 2021, 21, 7284-7290. | 4.5 | 12 |
| 799 | Coupling a 3D Lithophilic Skeleton with a Fluorine-Enriched Interface to Enable Stable Lithium Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 37162-37171. | 4.0 | 18 |
| 800 | Research progress on graphene-based materials for high-performance lithium-metal batteries. <i>New Carbon Materials</i> , 2021, 36, 711-728. | 2.9 | 26 |
| 801 | Self-Assembled Monolayers for Batteries. <i>Journal of the American Chemical Society</i> , 2021, 143, 12897-12912. | 6.6 | 47 |
| 802 | Covalent Organic Frameworks and Their Derivatives for Better Metal Anodes in Rechargeable Batteries. <i>ACS Nano</i> , 2021, 15, 12741-12767. | 7.3 | 71 |
| 803 | Conformal coating of lithium-zinc alloy on 3D conducting scaffold for high areal capacity dendrite-free lithium metal batteries. <i>Carbon</i> , 2021, 181, 99-106. | 5.4 | 19 |
| 804 | Uncovering the Relationship between Aging and Cycling on Lithium Metal Battery Self-Discharge. <i>ACS Applied Energy Materials</i> , 2021, 4, 7589-7598. | 2.5 | 21 |
| 805 | Dendrite-Free and Ultra-Long-Life Lithium Metal Anode Enabled via a Three-Dimensional Ordered Porous Nanostructure. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 41744-41752. | 4.0 | 11 |
| 806 | Hierarchical porous carbon nanofibers with lithiophilic metal oxide crystalline grains for long-life Li metal anodes. <i>Composites Communications</i> , 2021, 26, 100789. | 3.3 | 14 |
| 807 | Research Progress on Copper-Based Current Collector for Lithium Metal Batteries. <i>Energy & Fuels</i> , 2021, 35, 12921-12937. | 2.5 | 43 |
| 808 | Mixed ionic/electronic conducting nanosheet arrays for stable lithium storage. <i>Nanotechnology</i> , 2021, 32, 475703. | 1.3 | 3 |
| 809 | Dendrite-Free Reverse Lithium Deposition Induced by Ion Rectification Layer toward Superior Lithium Metal Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2104081. | 7.8 | 39 |
| 810 | Electrospun carbon nanofibers for lithium metal anodes: Progress and perspectives. <i>Chinese Chemical Letters</i> , 2022, 33, 141-152. | 4.8 | 44 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 811 | How to avoid dendrite formation in metal batteries: Innovative strategies for dendrite suppression. <i>Nano Energy</i> , 2021, 86, 106142. | 8.2 | 116 |
| 812 | In-situ transmission electron microscopy for probing the dynamic processes in materials. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 443002. | 1.3 | 13 |
| 813 | Robust silver nanowire membrane with high porosity to construct stable Li metal anodes. <i>Materials Today Energy</i> , 2021, 21, 100751. | 2.5 | 9 |
| 814 | Stabilizing Lithium Metal Anodes by a Self-Healable and Li-Regulating Interlayer. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 44983-44990. | 4.0 | 17 |
| 815 | Interfacial modification by lithiophilic oxide facilitating uniform and thin solid electrolyte interphase towards stable lithium metal anodes. <i>Materials Today Energy</i> , 2021, 21, 100748. | 2.5 | 3 |
| 816 | Research on the Anode Protection of Lithium. <i>Journal of Physics: Conference Series</i> , 2021, 2011, 012084. | 0.3 | 0 |
| 817 | Exploration of Metal/Ti ₃ C ₂ MXene-derived composites as anode for high-performance zinc-ion supercapacitor. <i>Journal of Power Sources</i> , 2021, 506, 230197. | 4.0 | 43 |
| 818 | The carrier transition from Li atoms to Li vacancies in solid-state lithium alloy anodes. <i>Science Advances</i> , 2021, 7, eabi5520. | 4.7 | 110 |
| 819 | Revisiting lithium metal anodes from a dynamic and realistic perspective. <i>EnergyChem</i> , 2021, 3, 100063. | 10.1 | 11 |
| 820 | Self-Healing Nucleation Seeds Induced Long-Term Dendrite-Free Lithium Metal Anode. <i>Nano Letters</i> , 2021, 21, 7715-7723. | 4.5 | 45 |
| 821 | From Lithium-Metal toward Anode-Free Solid-State Batteries: Current Developments, Issues, and Challenges. <i>Advanced Functional Materials</i> , 2021, 31, 2106608. | 7.8 | 98 |
| 822 | Cotton pad derived 3D lithiophilic carbon host for robust Li metal anode: In-situ generated ionic conductive Li ₃ N protective decoration. <i>Chemical Engineering Journal</i> , 2022, 430, 132722. | 6.6 | 34 |
| 823 | Control of electronic conductivity and ionic conductivity of mixed electron-ion conductor and their effects on lithium plating. <i>Ionics</i> , 2021, 27, 5167-5177. | 1.2 | 0 |
| 824 | Strategies for Dendrite-Free lithium metal Anodes: A Mini-review. <i>Journal of Electroanalytical Chemistry</i> , 2021, 897, 115499. | 1.9 | 20 |
| 825 | Capacity-Limited Na-M foil Anode: toward Practical Applications of Na Metal Anode. <i>Small</i> , 2021, 17, e2102126. | 5.2 | 16 |
| 826 | Controlled lithium plating in three-dimensional hosts through nucleation overpotential regulation toward high-areal-capacity lithium metal anode. <i>Materials Today Energy</i> , 2021, 21, 100770. | 2.5 | 25 |
| 827 | Carbon materials for stable Li metal anodes: Challenges, solutions, and outlook. , 2021, 3, 957-975. | | 64 |
| 828 | Feasibility of a Spherical Hollow Carbon Framework as a Stable Host Material for Reversible Metallic Li Storage. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 42732-42740. | 4.0 | 5 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 829 | Ultra-high density nucleation leading to extraordinary long-cycle dendrite-free Li metal deposition. <i>Carbon</i> , 2021, 183, 641-651. | 5.4 | 6 |
| 830 | Advanced strategies for the development of porous carbon as a Li host/current collector for lithium metal batteries. <i>Energy Storage Materials</i> , 2021, 41, 448-465. | 9.5 | 60 |
| 831 | Electrospun Li-confinable hollow carbon fibers for highly stable Li-metal batteries. <i>Chemical Engineering Journal</i> , 2021, 422, 130017. | 6.6 | 33 |
| 832 | Recent progress of carbon nanomaterials for high-performance cathodes and anodes in aqueous zinc ion batteries. <i>Energy Storage Materials</i> , 2021, 41, 715-737. | 9.5 | 93 |
| 833 | Chlorinated dual-protective layers as interfacial stabilizer for dendrite-free lithium metal anode. <i>Energy Storage Materials</i> , 2021, 41, 485-494. | 9.5 | 66 |
| 834 | N-doped carbon tubes with sodiophilic sites for dendrite free sodium metal anode. <i>Solid State Ionics</i> , 2021, 368, 115711. | 1.3 | 24 |
| 835 | “Mechanical” electrochemical coupling structure and the application as a three-dimensional current collector for lithium metal anode. <i>Applied Surface Science</i> , 2021, 563, 150247. | 3.1 | 10 |
| 836 | Lithium-copper alloy embedded in 3D porous copper foam with enhanced electrochemical performance toward lithium metal batteries. <i>Materials Today Energy</i> , 2021, 22, 100871. | 2.5 | 11 |
| 837 | Lithium-gel polymer electrolyte composite anode with large electrolyte-lithium interface for solid-state battery. <i>Electrochimica Acta</i> , 2021, 394, 139123. | 2.6 | 4 |
| 838 | Breaking dendrites of lithium metal electrode by resonance: A theoretical calculation of lattice dynamics. <i>Chemical Physics Letters</i> , 2021, 780, 138921. | 1.2 | 0 |
| 839 | F-N-S doped lithiophilic interphases for stable Li metal and alloy anodes. <i>Journal of Power Sources</i> , 2021, 508, 230334. | 4.0 | 2 |
| 840 | Constructing ultrafine lithiophilic layer on MXene paper by sputtering for stable and flexible 3D lithium metal anode. <i>Chemical Engineering Journal</i> , 2021, 421, 129685. | 6.6 | 42 |
| 841 | Can metallic lithium be electrochemically extracted from water, the universal solvent?. <i>Journal of Molecular Liquids</i> , 2021, 342, 117545. | 2.3 | 3 |
| 842 | Dendrite-free lithium deposition enabled by a vertically aligned graphene pillar architecture. <i>Carbon</i> , 2021, 185, 152-160. | 5.4 | 14 |
| 843 | State of the art two-dimensional covalent organic frameworks: Prospects from rational design and reactions to applications for advanced energy storage technologies. <i>Coordination Chemistry Reviews</i> , 2021, 447, 214152. | 9.5 | 73 |
| 844 | Flexible ordered MnS@CNC/carbon nanofibers membrane based on microfluidic spinning technique as interlayer for stable lithium-metal battery. <i>Journal of Membrane Science</i> , 2021, 637, 119615. | 4.1 | 22 |
| 845 | SnSb binary alloy induced heterogeneous nucleation within the confined nanospace: Toward dendrite-free, flexible and energy/power dense sodium metal batteries. <i>Energy Storage Materials</i> , 2021, 42, 219-230. | 9.5 | 28 |
| 846 | A strongly interactive adatom/substrate interface for dendrite-free and high-rate Li metal anodes. <i>Journal of Energy Chemistry</i> , 2021, 62, 179-190. | 7.1 | 22 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 847 | A mismatch electrical conductivity skeleton enables dendrite-free and high stability lithium metal anode. <i>Nano Energy</i> , 2021, 89, 106421. | 8.2 | 17 |
| 848 | An ultrahigh-energy-density lithium metal capacitor. <i>Energy Storage Materials</i> , 2021, 42, 154-163. | 9.5 | 13 |
| 849 | Hierarchically porous nanofibers comprising multiple core-shell Co ₃ O ₄ @graphitic carbon nanoparticles grafted within N-doped CNTs as functional interlayers for excellent Li-S batteries. <i>Chemical Engineering Journal</i> , 2021, 426, 130805. | 6.6 | 49 |
| 850 | Lithiophilic Sn sites on 3D Cu current collector induced uniform lithium plating/stripping. <i>Chemical Engineering Journal</i> , 2021, 425, 130177. | 6.6 | 21 |
| 851 | Promoting the reversibility of lithium ion/lithium metal hybrid graphite anode by regulating solid electrolyte interface. <i>Nano Energy</i> , 2021, 90, 106510. | 8.2 | 20 |
| 852 | In situ nanocrystal seeding perovskite crystallization toward high-performance solar cells. <i>Materials Today Energy</i> , 2021, 22, 100855. | 2.5 | 9 |
| 853 | A hierarchical porous tin host for dendrite-free, highly reversible zinc anodes. <i>Chemical Engineering Journal</i> , 2021, 425, 130643. | 6.6 | 57 |
| 854 | Synergistic effect of lithiophilic Zn nanoparticles and N-doping for stable Li metal anodes. <i>Journal of Energy Chemistry</i> , 2022, 65, 439-447. | 7.1 | 16 |
| 855 | Interconnected stacked hollow carbon spheres uniformly embedded with Ni ₂ P nanoparticles as scalable host for practical Li metal anode. <i>Chemical Engineering Journal</i> , 2022, 428, 132648. | 6.6 | 18 |
| 856 | Sandwiched Li plating between Lithiophilic-Lithiophobic gradient Silver@Fullerene interphase layer for ultrastable lithium metal anodes. <i>Chemical Engineering Journal</i> , 2022, 429, 132156. | 6.6 | 36 |
| 857 | Bottom-up lithium growth guided by Ag concentration gradient in 3D PVDF framework towards stable lithium metal anode. <i>Journal of Energy Chemistry</i> , 2022, 65, 666-673. | 7.1 | 27 |
| 858 | Ultrathin graphitic C ₃ N ₄ lithiophilic nanosheets regulating Li ⁺ flux for lithium metal batteries. <i>Ionics</i> , 2021, 27, 1069-1079. | 1.2 | 20 |
| 859 | Stabilization of lithium metal anodes by conductive metal-organic framework architectures. <i>Journal of Materials Chemistry A</i> , 2021, 9, 12099-12108. | 5.2 | 10 |
| 860 | Advances in wearable textile-based micro energy storage devices: structuring, application and perspective. <i>Nanoscale Advances</i> , 2021, 3, 6271-6293. | 2.2 | 27 |
| 861 | Recent Progress of Porous Materials in Lithium-Metal Batteries. <i>Small Structures</i> , 2021, 2, 2000118. | 6.9 | 61 |
| 862 | Controlling electrochemical growth of metallic zinc electrodes: Toward affordable rechargeable energy storage systems. <i>Science Advances</i> , 2021, 7, . | 4.7 | 209 |
| 863 | Dual-regulation of ions/electrons in a 3D Cu ₂ O host to guide uniform lithium growth for high-performance lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2021, 9, 10393-10403. | 5.2 | 20 |
| 864 | Directing the deposition of lithium metal to the inner concave surface of graphitic carbon tubes to enable lithium-metal batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 16936-16942. | 5.2 | 5 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 865 | Biomass-based materials for green lithium secondary batteries. <i>Energy and Environmental Science</i> , 2021, 14, 1326-1379. | 15.6 | 157 |
| 866 | Review on Li Deposition in Working Batteries: From Nucleation to Early Growth. <i>Advanced Materials</i> , 2021, 33, e2004128. | 11.1 | 205 |
| 867 | Large areal capacity and dendrite-free anodes with long lifetime enabled by distributed lithium plating with mossy manganese oxides. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9291-9300. | 5.2 | 6 |
| 868 | Recent Advances in Heterostructure Engineering for Lithium-Sulfur Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2003689. | 10.2 | 269 |
| 869 | Superior Sodium Metal Anodes Enabled by Sodiophilic Carbonized Coconut Framework with 3D Tubular Structure. <i>Advanced Energy Materials</i> , 2021, 11, 2003699. | 10.2 | 77 |
| 870 | Practical development and challenges of garnet-structured Li ₇ La ₃ Zr ₂ O ₁₂ electrolytes for all-solid-state lithium-ion batteries: A review. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2021, 28, 1565-1583. | 2.4 | 26 |
| 871 | High-performance lithium battery driven by hybrid lithium storage mechanism in 3D architected carbonized eggshell membrane anode. <i>Carbon</i> , 2020, 166, 26-35. | 5.4 | 9 |
| 872 | Li ₂ S-based anode-free full batteries with modified Cu current collector. <i>Energy Storage Materials</i> , 2020, 30, 179-186. | 9.5 | 71 |
| 873 | Recent advances and perspectives in stable and dendrite-free potassium metal anodes. <i>Energy Storage Materials</i> , 2020, 30, 206-227. | 9.5 | 95 |
| 874 | Building Better Li Metal Anodes in Liquid Electrolyte: Challenges and Progress. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 18-33. | 4.0 | 41 |
| 875 | Li metal deposition and stripping in a solid-state battery via Coble creep. <i>Nature</i> , 2020, 578, 251-255. | 13.7 | 333 |
| 876 | A self-smoothing Li-metal anode enabled via a hybrid interface film. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12045-12054. | 5.2 | 24 |
| 877 | Using ultrathin double-layer gas-permeable capping metal to form sensitive low-power gas sensors. <i>Semiconductor Science and Technology</i> , 2020, 35, 124001. | 1.0 | 2 |
| 878 | Lithium-Gold Reference Electrode for Potential Stability During In Situ Electron Microscopy Studies of Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2020, 167, 110515. | 1.3 | 10 |
| 879 | Improved Capacity Retention of Lithium Ion Batteries under Fast Charge via Metal-Coated Graphite Electrodes. <i>Journal of the Electrochemical Society</i> , 2020, 167, 160503. | 1.3 | 11 |
| 880 | Review of Lithium Plating Detection Methods in Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2020, 167, 160552. | 1.3 | 83 |
| 881 | Favorable Lithium Nucleation on Lithiophilic Framework Porphyrin for Dendrite-Free Lithium Metal Anodes. <i>Research</i> , 2019, 2019, 1-11. | 2.8 | 33 |
| 882 | Storage stability of encapsulated anthocyanin-rich extract from black carrot (<i>Daucus carota</i> ssp.) Tj ETQq1 1 0.784314 rgBT /Overlock 1 0,3 6 | | |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 883 | Favorable Lithium Nucleation on Lithiophilic Framework Porphyrin for Dendrite-Free Lithium Metal Anodes. <i>Research</i> , 2019, 2019, 4608940. | 2.8 | 29 |
| 884 | Vertical Graphenes Grown on a Flexible Graphite Paper as an All-Carbon Current Collector towards Stable Li Deposition. <i>Research</i> , 2020, 2020, 7163948. | 2.8 | 12 |
| 885 | <i>In Situ/Operando</i> Advances of Electrode Processes in Solid-state Lithium Batteries. <i>Acta Chimica Sinica</i> , 2021, 79, 1197. | 0.5 | 2 |
| 886 | A Sodium–Antimony–Telluride Intermetallic Allows Sodium–Metal Cycling at 100% Depth of Discharge and as an Anode-Free Metal Battery. <i>Advanced Materials</i> , 2022, 34, e2106005. | 11.1 | 40 |
| 887 | Quasi-compensatory effect in emerging anode-free lithium batteries. <i>EScience</i> , 2021, 1, 3-12. | 25.0 | 48 |
| 888 | Deeply Cyclable and Ultrahigh-Rate Lithium Metal Anodes Enabled by Coaxial Nanochamber Heterojunction on Carbon Nanofibers. <i>Advanced Science</i> , 2021, 8, e2101940. | 5.6 | 14 |
| 889 | Lithiophilic Property of Artificial Alkoxides and Mercaptide Layers to Guide Uniform Li Nucleation for Stable Lithium Metal Anodes. <i>Journal of Physical Chemistry C</i> , 2021, 125, 22493-22501. | 1.5 | 3 |
| 890 | Mechanistic Probing of Encapsulation and Confined Growth of Lithium Crystals in Carbonaceous Nanotubes. <i>Advanced Materials</i> , 2021, 33, e2105228. | 11.1 | 14 |
| 891 | Thermodynamic Regulation of Dendrite-Free Li Plating on Li_3Bi for Stable Lithium Metal Batteries. <i>Nano Letters</i> , 2021, 21, 8664-8670. | 4.5 | 25 |
| 892 | From Flower-Like to Spherical Deposition: A GCNT Aerogel Scaffold for Fast-Charging Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2102454. | 10.2 | 14 |
| 893 | Realizing Spherical Lithium Deposition by In Situ Formation of a $\text{Li}_2\text{S}/\text{Li-Sn}$ Alloy Mixed Layer on Carbon Paper for Stable and Safe Li Metal Anodes. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 48828-48837. | 4.0 | 10 |
| 894 | Recent Advanced Development of Artificial Interphase Engineering for Stable Sodium Metal Anodes. <i>Small</i> , 2022, 18, e2102250. | 5.2 | 46 |
| 895 | <i>In Situ</i> Formed Li-Ag Alloy Interface Enables $\text{Li}_{10}\text{GeP}_2\text{S}_{12}$ -Based All-Solid-State Lithium Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 50076-50082. | 4.0 | 27 |
| 896 | Understanding the Effects of Alloy Films on the Electrochemical Behavior of Lithium Metal Anodes with Operando Optical Microscopy. <i>Journal of the Electrochemical Society</i> , 2021, 168, 100517. | 1.3 | 10 |
| 897 | Linking the Defects to the Formation and Growth of Li Dendrite in All-Solid-State Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2102148. | 10.2 | 61 |
| 898 | Rechargeable Lithium Metal Batteries. , 2019, , 147-203. | | 0 |
| 899 | Lithium Metal Growth Kinetics on LLZO Garnet Type Solid Electrolytes – <i>In Situ/Operando</i> Study of Lithium Deposition and Dendrite Growth. <i>SSRN Electronic Journal</i> , 0, , . | 0.4 | 0 |
| 900 | N-doped Porous Host with Lithiophilic Co Nanoparticles Implanted into 3D Carbon Nanotubes for Dendrite-Free Lithium Metal Anodes. <i>ACS Applied Energy Materials</i> , 2021, 4, 12871-12881. | 2.5 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 901 | Mapping the Distribution and the Microstructural Dimensions of Metallic Lithium Deposits in an Anode-Free Battery by In Situ EPR Imaging. <i>Chemistry of Materials</i> , 2021, 33, 8223-8234. | 3.2 | 24 |
| 902 | LiCoO ₂ Ultrathin Layer for Uniform Lithium Deposition toward a Highly Stable Lithium Metal Anode. <i>ACS Sustainable Chemistry and Engineering</i> , 2021, 9, 14663-14669. | 3.2 | 5 |
| 903 | Phase Diagram Determined Lithium Plating/Stripping Behaviors on Lithiophilic Substrates. <i>ACS Energy Letters</i> , 2021, 6, 4118-4126. | 8.8 | 65 |
| 904 | Revisiting Classical Rocking Chair Lithium-Ion Battery. <i>Macromolecular Research</i> , 2020, 28, 1175-1191. | 1.0 | 14 |
| 905 | Straining copper foils to regulate the nucleation of lithium for stable lithium metal anode. <i>Energy Storage Materials</i> , 2022, 44, 278-284. | 9.5 | 22 |
| 906 | Asymmetric separator integrated with ferroelectric-BaTiO ₃ and mesoporous-CNT for the reutilization of soluble polysulfide in lithium-sulfur batteries. <i>Journal of Alloys and Compounds</i> , 2022, 893, 162272. | 2.8 | 25 |
| 907 | Acylamino-functionalized crosslinker to synthesize all-solid-state polymer electrolytes for high-stability lithium batteries. <i>Chemical Engineering Journal</i> , 2022, 430, 132948. | 6.6 | 17 |
| 908 | LiF headspace affixed metallic Li composite enables Li accommodation on the anode surface with excellent electrochemical performance. <i>Chemical Engineering Journal</i> , 2022, 430, 132970. | 6.6 | 11 |
| 909 | Optimization of lithium nucleation by current density toward dendrite-free Li metal anode. <i>Journal of Alloys and Compounds</i> , 2022, 893, 162389. | 2.8 | 10 |
| 910 | Mechanism, strategies, and characterizations of Li plating in solid state batteries. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2020, 69, 228204-228204. | 0.2 | 1 |
| 911 | Lithiophilic NiF ₂ coating inducing LiF-rich solid electrolyte interphase by a novel NF ₃ plasma treatment for highly stable Li metal anode. <i>Electrochimica Acta</i> , 2022, 402, 139561. | 2.6 | 9 |
| 912 | A Zn ion hybrid capacitor with enhanced energy density for anode-free. <i>Journal of Power Sources</i> , 2022, 518, 230740. | 4.0 | 6 |
| 913 | Architecture design principles for stable electrodeposition behavior-towards better alkali metal (Li/Na/K) anodes. <i>Energy Storage Materials</i> , 2022, 45, 48-73. | 9.5 | 34 |
| 914 | Mechanistic insights into the electrochemical Li/Na/K-ion storage for aqueous bismuth anode. <i>Energy Storage Materials</i> , 2022, 45, 33-39. | 9.5 | 23 |
| 915 | Regulating the growth of lithium dendrite by coating an ultra-thin layer of gold on separator for improving the fast-charging ability of graphite anode. <i>Journal of Energy Chemistry</i> , 2022, 67, 467-473. | 7.1 | 29 |
| 916 | Artificial Alloy/Li ₃ N Double-Layer Enabling Stable High-Capacity Lithium Metal Anodes. <i>ACS Applied Energy Materials</i> , 2021, 4, 13132-13139. | 2.5 | 10 |
| 917 | A 3D Porous Inverse Opal Ni Structure on a Cu Current Collector for Stable Lithium-Metal Batteries. <i>Batteries and Supercaps</i> , 2022, 5, e202100257. | 2.4 | 5 |
| 918 | An overview of the key challenges and strategies for lithium metal anodes. <i>Journal of Energy Storage</i> , 2022, 47, 103641. | 3.9 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 919 | In Situ Formed Lithiophilic Li _x NbyO in a Carbon Nanofiber Network for Dendrite-Free Li-Metal Anodes. ACS Applied Materials & Interfaces, 2021, 13, 56498-56509. | 4.0 | 6 |
| 920 | Li migration, nucleation and growth behavior regulated by a lithiophilic cobalt phosphide-doped carbon nanofibers derived ion/electron conductive framework. Energy Storage Materials, 2022, 45, 1109-1119. | 9.5 | 30 |
| 921 | High-Dielectric Polymer Coating for Uniform Lithium Deposition in Anode-Free Lithium Batteries. ACS Energy Letters, 2021, 6, 4416-4425. | 8.8 | 63 |
| 922 | Toward Achieving High Kinetics in Anodeless Li ₂ S Battery: Surface Modification of Cu Current Collector. Advanced Functional Materials, 2022, 32, . | 7.8 | 7 |
| 923 | 3D Carbon-Based Porous Anode with a Pore-Size Gradient for High-Performance Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2021, 13, 55227-55234. | 4.0 | 17 |
| 924 | Lithiophilic Carbon Nanofiber/Graphene Nanosheet Composite Scaffold Prepared by a Scalable and Controllable Biofabrication Method for Ultrastable Dendrite-Free Lithium-Metal Anodes. Small, 2022, 18, e2104735. | 5.2 | 10 |
| 925 | Li + solvation mediated interfacial kinetic of alloying matrix for stable Li anodes. Energy and Environmental Materials, 0, , . | 7.3 | 0 |
| 926 | In Search of the Best Solid Electrolyte-Layered Oxide Pairing for Assembling Practical All-Solid-State Batteries. ACS Applied Energy Materials, 2021, 4, 13575-13585. | 2.5 | 26 |
| 927 | Stable lithium metal anode achieved by shortening diffusion path on solid electrolyte interface derived from Cu ₂ O lithiophilic layer. Chemical Engineering Journal, 2022, 433, 133689. | 6.6 | 10 |
| 928 | Constructing stable lithium interfaces via coordination of fluorinated ether and liquid crystal for room-temperature solid-state lithium metal batteries. Chemical Engineering Journal, 2022, 433, 133562. | 6.6 | 8 |
| 929 | Scalable Synthesis of Nano-Sized Bi for Separator Modifying in 5V-Class Lithium Metal Batteries and Potassium Ion Batteries Anodes. Small, 2022, 18, e2104264. | 5.2 | 19 |
| 930 | A novel artificial film of lithiophilic polyethersulfone for inhibiting lithium dendrite. Electrochimica Acta, 2022, 403, 139668. | 2.6 | 3 |
| 931 | In Situ Formed Ag-Li Intermetallic Layer for Stable Cycling of All-Solid-State Lithium Batteries. Advanced Science, 2022, 9, e2103826. | 5.6 | 27 |
| 932 | Constructing porous nanosphere structure current collector by nitriding for lithium metal batteries. Journal of Energy Storage, 2022, 47, 103665. | 3.9 | 6 |
| 933 | Layer-by-layer zinc metal anodes to achieve long-life zinc-ion batteries. Chemical Engineering Journal, 2022, 431, 133902. | 6.6 | 32 |
| 934 | Highly stable lithium anodes from recycled hemp textile. Chemical Communications, 2022, 58, 1946-1949. | 2.2 | 4 |
| 935 | A gradient topology host for a dendrite-free lithium metal anode. Nano Energy, 2022, 94, 106937. | 8.2 | 41 |
| 936 | Molten-Li infusion of ultra-thin interfacial modification layer towards the highly-reversible, energy-dense metallic batteries. Energy Storage Materials, 2022, 45, 796-804. | 9.5 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 937 | Gold-incorporated porous hollow carbon nanofiber for reversible magnesium-metal batteries. Chemical Engineering Journal, 2022, 431, 133968. | 6.6 | 18 |
| 938 | Ultrastable sodium metal plating/stripping by engineering heterogeneous nucleation on TiO ₂ nanotube arrays. Chemical Engineering Journal, 2022, 431, 134272. | 6.6 | 8 |
| 939 | A facile, scalable, high stability Lithium metal anode. SusMat, 2022, 2, 104-112. | 7.8 | 50 |
| 940 | A Li-In alloy anode and Nb ₂ CT _X artificial solid-electrolyte interphase for practical Li metal batteries. Journal of Materials Chemistry A, 2022, 10, 4157-4169. | 5.2 | 13 |
| 941 | Dealloyed nanoporous materials for electrochemical energy conversion and storage. EnergyChem, 2022, 4, 100069. | 10.1 | 43 |
| 942 | Argentophilic pyridinic nitrogen for embedding lithiophilic silver nanoparticles in a three-dimensional carbon scaffold for reversible lithium plating/stripping. Journal of Materials Chemistry A, 2022, 10, 1768-1779. | 5.2 | 10 |
| 943 | Electrostatic Shielding Regulation of Magnetron Sputtered Al-Based Alloy Protective Coatings Enables Highly Reversible Zinc Anodes. Nano Letters, 2022, 22, 1017-1023. | 4.5 | 118 |
| 944 | Single-Atom Reversible Lithiophilic Sites toward Stable Lithium Anodes. Advanced Energy Materials, 2022, 12, . | 10.2 | 49 |
| 945 | Principles and Challenges of Lithium-Sulfur Batteries. Modern Aspects of Electrochemistry, 2022, , 1-18. | 0.2 | 1 |
| 946 | In Situ Construction of Efficient Interface Layer with Lithiophilic Nanoseeds toward Dendrite-Free and Low N/P Ratio Li Metal Batteries. Advanced Science, 2022, 9, e2104391. | 5.6 | 19 |
| 947 | Regulating the Interfacial Electric Field for a Stable Lithium Metal Anode. ACS Sustainable Chemistry and Engineering, 2022, 10, 956-966. | 3.2 | 4 |
| 948 | A surface-nitridized 3D nickel host for lithium metal anodes with long cycling life at a high rate. Nanoscale, 2022, 14, 3480-3486. | 2.8 | 5 |
| 949 | Multifunctional interfacial and structural anode for dendrite-free lithium metal-based batteries. Journal of Central South University, 2022, 29, 373-385. | 1.2 | 3 |
| 950 | Intercalation pseudocapacitance of hollow carbon bubbles with multilayered shells for boosting K-ion storage. Journal of Materials Chemistry A, 2022, 10, 2075-2084. | 5.2 | 6 |
| 951 | Fibrous skeleton-framed, flexible high-energy-density quasi-solid-state lithium metal batteries. , 2022, 1, . | | 21 |
| 952 | Lithium reduction reaction for interfacial regulation of lithium metal anode. Chemical Communications, 2022, 58, 2597-2611. | 2.2 | 14 |
| 953 | Liquid electrolyte: The nexus of practical lithium metal batteries. Joule, 2022, 6, 588-616. | 11.7 | 191 |
| 954 | Mechanistic and nanoarchitectonics insight into Li-host interactions in carbon hosts for reversible Li metal storage. Nano Energy, 2022, 95, 106999. | 8.2 | 22 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 955 | Toward Practical High-Energy and High-Power Lithium Battery Anodes: Present and Future. <i>Advanced Science</i> , 2022, 9, e2105213. | 5.6 | 84 |
| 956 | The roles of nucleation and growth kinetics in determining Li metal morphology for Li metal batteries: columnar versus spherical growth. <i>Journal of Materials Chemistry A</i> , 2022, 10, 5520-5529. | 5.2 | 13 |
| 957 | High strength hydrogels enable dendrite-free Zn metal anodes and high-capacity Zn ²⁺ /MnO ₂ batteries via a modified mechanical suppression effect. <i>Journal of Materials Chemistry A</i> , 2022, 10, 3122-3133. | 5.2 | 17 |
| 958 | Application and research of current collector for lithium-sulfur battery. <i>Ionics</i> , 2022, 28, 1713-1738. | 1.2 | 6 |
| 959 | Development prospects of metal-based two-dimensional nanomaterials in lithium-sulfur batteries. <i>Chinese Chemical Letters</i> , 2023, 34, 107130. | 4.8 | 15 |
| 960 | Customized Structure Design and Functional Mechanism Analysis of Carbon Spheres for Advanced Lithium-Sulfur Batteries. <i>Small</i> , 2022, 18, e2104469. | 5.2 | 31 |
| 961 | Processing robust lithium metal anode for high-security batteries: A minireview. <i>Energy Storage Materials</i> , 2022, 47, 122-133. | 9.5 | 28 |
| 962 | Engineering Sodium Metal Anode with Sodiophilic Bismuthide Penetration for Dendrite-Free and High-Rate Sodium-Ion Battery. <i>Engineering</i> , 2022, 11, 87-94. | 3.2 | 18 |
| 963 | PVDF-HFP layer with high porosity and polarity for high-performance lithium metal anodes in both ether and carbonate electrolytes. <i>Nano Energy</i> , 2022, 95, 107009. | 8.2 | 27 |
| 964 | Highly stable lithium metal composite anode with a flexible 3D lithiophilic skeleton. <i>Nano Energy</i> , 2022, 95, 107013. | 8.2 | 19 |
| 965 | Controlled Lithium Deposition. <i>Frontiers in Energy Research</i> , 2022, 10, . | 1.2 | 3 |
| 966 | Regulation of the Interfaces Between Argyrodite Solid Electrolytes and Lithium Metal Anode. <i>Frontiers in Chemistry</i> , 2022, 10, 837978. | 1.8 | 14 |
| 967 | Homogeneous electric field and Li ⁺ flux regulation in three-dimensional nanofibrous composite framework for ultra-long-life lithium metal anode. <i>Journal of Colloid and Interface Science</i> , 2022, 614, 138-146. | 5.0 | 11 |
| 968 | Scalable hierarchical lithiophilic engineering of metal foam enables stable lithium metal batteries. <i>Chemical Engineering Journal</i> , 2022, 435, 134643. | 6.6 | 23 |
| 969 | Circumferential Li metal deposition at high rates enabled by the synergistic effect of a lithiophilic and ionic conductive network. <i>Journal of Materials Chemistry A</i> , 2022, 10, 5391-5401. | 5.2 | 4 |
| 970 | é”„ç¡«ç”µæ±ç»¼4âæ€§èf½ââCEæâ‡ç-ç•¥. <i>Chinese Science Bulletin</i> , 2022, , . | 0.4 | 1 |
| 971 | A lithiophilic/lithiophobic ternary alloy anode with Ag concentration gradients guides uniform Li deposition. <i>Chemical Communications</i> , 2022, 58, 3158-3161. | 2.2 | 7 |
| 972 | A Novel Dendrite-Free Lithium Metal Anode via Oxygen and Boron Codoped Honeycomb Carbon Skeleton. <i>Small</i> , 2022, 18, e2104876. | 5.2 | 21 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 973 | Affinity-Engineered Flexible Scaffold toward Energy-Dense, Highly Reversible Na Metal Batteries. <i>Energy and Environmental Materials</i> , 2023, 6, . | 7.3 | 11 |
| 974 | A review of concepts and contributions in lithium metal anode development. <i>Materials Today</i> , 2022, 53, 173-196. | 8.3 | 74 |
| 975 | Synergizing Conformal Lithiophilic Granule and Dealloyed Porous Skeleton toward Pragmatic Li Metal Anodes. <i>Small Science</i> , 2022, 2, . | 5.8 | 27 |
| 976 | Highly Reversible and Anticorrosive Zn Anode Enabled by a Ag Nanowires Layer. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 9097-9105. | 4.0 | 19 |
| 977 | Interphase control for high performance lithium metal batteries using ether aided ionic liquid electrolyte. <i>Energy and Environmental Science</i> , 2022, 15, 1907-1919. | 15.6 | 62 |
| 978 | The effect of alkyl substitution position of thienyl outer side chains on photovoltaic performance of A ²⁺ A type acceptors. <i>Energy and Environmental Science</i> , 2022, 15, 2011-2020. | 15.6 | 73 |
| 979 | Lithiophilic Ti ₃ C ₂ T _x -Modified Cu Foam by Electrophoretic Deposition for Dendrite-Free Lithium Metal Anodes. <i>ACS Applied Energy Materials</i> , 2022, 5, 2514-2521. | 2.5 | 8 |
| 980 | Compact Interlaminar Lithium Plating Realized by Silver Nanowires Imbedded in a Stacked Graphene Host with a Rational Void Space. <i>ACS Applied Energy Materials</i> , 2022, 5, 3100-3109. | 2.5 | 0 |
| 981 | MXenes for metal-ion and metal-sulfur batteries: Synthesis, properties, and electrochemistry. <i>Materials Reports Energy</i> , 2022, 2, 100077. | 1.7 | 1 |
| 982 | Controlling Li deposition below the interface. <i>EScience</i> , 2022, 2, 47-78. | 25.0 | 110 |
| 983 | The pathway toward practical application of lithium-metal anodes for non-aqueous secondary batteries. <i>National Science Review</i> , 2022, 9, . | 4.6 | 9 |
| 984 | Double interface regulation: Toward highly stable lithium metal anode with high utilization. <i>Informa-Materially</i> , 2022, 4, . | 8.5 | 21 |
| 985 | 2D PdTe ₂ Thin-Film-Coated Current Collectors for Long-Cycling Anode-Free Rechargeable Batteries. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 15080-15089. | 4.0 | 14 |
| 986 | Advances in carbon materials for stable lithium metal batteries. <i>New Carbon Materials</i> , 2022, 37, 1-24. | 2.9 | 31 |
| 987 | A Combined Lithium Intercalation and Plating Mechanism Using Conductive Carbon-Fiber Electrodes. <i>Batteries and Supercaps</i> , 0, , . | 2.4 | 1 |
| 988 | Regulated lithium deposition behavior by an artificial coating of Cu foil for dendrite-free lithium metal batteries. <i>Materials Today Sustainability</i> , 2022, 18, 100127. | 1.9 | 3 |
| 989 | Highly stabilized and lowly polarized Li anodes using a hybrid surface film with inner Li-Zn nucleation sites and outer LiF-rich protection texture. <i>Science China Materials</i> , 2022, 65, 1779-1788. | 3.5 | 4 |
| 990 | Dendrites-Free Lithium Metal Anode Enabled by Synergistic Surface Structural Engineering. <i>Advanced Functional Materials</i> , 2022, 32, . | 7.8 | 22 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 991 | Seamless alloying stabilizes solid-electrolyte interphase for highly reversible lithium metal anode. Cell Reports Physical Science, 2022, 3, 100785. | 2.8 | 21 |
| 992 | Ag ₂ S-modified 3D Carbon Cloth as a Dendrite Suppressing Framework for High Energy Lithium-Sulfur Batteries. Chemistry Letters, 2022, 51, 504-507. | 0.7 | 2 |
| 993 | Au-coated carbon fabric as Janus current collector for dendrite-free flexible lithium metal anode and battery. Applied Physics Reviews, 2022, 9, . | 5.5 | 18 |
| 994 | Two Birds with One Stone: Using Indium Oxide Surficial Modification to Tune Inner Helmholtz Plane and Regulate Nucleation for Dendrite-free Lithium Anode. Small Methods, 2022, 6, e2200113. | 4.6 | 10 |
| 995 | Surface and Interface Engineering of Zn Anodes in Aqueous Rechargeable Zn-Ion Batteries. Small, 2022, 18, e2200006. | 5.2 | 105 |
| 996 | Constructing 3D Porous Current Collectors for Stable and Dendrite-free Lithium Metal Anodes. Advanced Sustainable Systems, 2022, 6, . | 2.7 | 19 |
| 997 | Boron-doped three-dimensional MXene host for durable lithium-metal anode. Rare Metals, 2022, 41, 2217-2222. | 3.6 | 16 |
| 998 | CuO Nanofilm-Covered Cu Microcone Coating for a Long Cycle Li Metal Anode by In Situ Formed Li ₂ O. ACS Applied Energy Materials, 2022, 5, 3773-3782. | 2.5 | 13 |
| 999 | Carbon Nanotube Interwoven Polyhedrons with Inside-out Lithiophilic Gradients toward Stable Lithium Metal Battery. Chemical Engineering Journal, 2022, , 136256. | 6.6 | 4 |
| 1000 | Spatial Control of Lithium Deposition by Controlling the Lithiophilicity with Copper(I) Oxide Boundaries. Energy and Environmental Materials, 2023, 6, . | 7.3 | 2 |
| 1001 | Li plating on alloy with superior electro-mechanical stability for high energy density anode-free batteries. Energy Storage Materials, 2022, 49, 135-143. | 9.5 | 23 |
| 1002 | A Robust Li-Intercalated Interlayer with Strong Electron Withdrawing Ability Enables Durable and High-Rate Li Metal Anode. ACS Energy Letters, 2022, 7, 1594-1603. | 8.8 | 36 |
| 1003 | Synergistic effect of modest pores and lithiophilic surface on 3D current collectors for stable Li metal anodes. Journal of Alloys and Compounds, 2022, , 164925. | 2.8 | 3 |
| 1004 | Inside-outside Li Deposition Achieved by the Unusual Strategy of Constructing the Hierarchical Lithiophilicity for Dendrite-free and Durable Li Metal Anode. Batteries and Supercaps, 0, , . | 2.4 | 2 |
| 1005 | Porous carbon architectures with different dimensionalities for lithium metal storage. Science and Technology of Advanced Materials, 2022, 23, 169-188. | 2.8 | 21 |
| 1006 | Review "Advances in Rechargeable Li-S Full Cells. Journal of the Electrochemical Society, 2022, 169, 040525. | 1.3 | 11 |
| 1008 | High-performance lithium metal battery realized by regulating Li ⁺ flux distribution on artificial-solid-electrolyte-interphase functionalized 3D carbon framework-Li anode. Materials Today Physics, 2022, 24, 100672. | 2.9 | 3 |
| 1009 | Rationally designed alloy phases for highly reversible alkali metal batteries. Energy Storage Materials, 2022, 48, 223-243. | 9.5 | 20 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1010 | Commercial carbon cloth: An emerging substrate for practical lithium metal batteries. <i>Energy Storage Materials</i> , 2022, 48, 172-190. | 9.5 | 50 |
| 1011 | High area capacity and dendrite-free anode constructed by highly potassiophilic Pd/Cu current collector for low-temperature potassium metal battery. <i>Nano Energy</i> , 2022, 96, 107131. | 8.2 | 30 |
| 1012 | Morphologically and chemically regulated 3D carbon for Dendrite-free lithium metal anodes by a plasma processing. <i>Journal of Colloid and Interface Science</i> , 2022, 619, 198-206. | 5.0 | 7 |
| 1013 | LiF-rich and self-repairing interface induced by MgF ₂ engineered separator enables dendrite-free lithium metal batteries. <i>Chemical Engineering Journal</i> , 2022, 442, 136243. | 6.6 | 31 |
| 1014 | Probe the Localized Electrochemical Environment Effects and Electrode Reaction Dynamics for Metal Batteries using In Situ 3D Microscopy. <i>Advanced Energy Materials</i> , 2022, 12, . | 10.2 | 14 |
| 1015 | <i>Operando</i> Visualization of Morphological Evolution in Mg Metal Anode: Insight into Dendrite Suppression for Stable Mg Metal Batteries. <i>ACS Energy Letters</i> , 2022, 7, 162-170. | 8.8 | 50 |
| 1016 | Failure Mechanism of Lithiophilic Sites in Composite Lithium Metal Anode under Practical Conditions. <i>Advanced Energy Materials</i> , 2022, 12, . | 10.2 | 56 |
| 1017 | High-Efficiency Hybrid Sulfur Cathode Based on Electroactive Niobium Tungsten Oxide and Conductive Carbon Nanotubes for All-Solid-State Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 1212-1221. | 4.0 | 15 |
| 1018 | Enriched Cavities to ZIF-8-Derived Porous Carbon for Reversible Metallic Lithium Storage. <i>ACS Applied Energy Materials</i> , 2021, 4, 14520-14525. | 2.5 | 5 |
| 1019 | Effect of Highly Periodic Au Nanopatterns on Dendrite Suppression in Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 60978-60986. | 4.0 | 14 |
| 1020 | Recent progress and future perspectives of flexible metal-air batteries. <i>SmartMat</i> , 2021, 2, 519-553. | 6.4 | 43 |
| 1021 | A Dendrite-Free Lithium-Metal Anode Enabled by Designed Ultrathin MgF ₂ Nanosheets Encapsulated Inside Nitrogen-Doped Graphene-Like Hollow Nanospheres. <i>Advanced Materials</i> , 2022, 34, e2201801. | 11.1 | 26 |
| 1022 | Development of High-Energy Anodes for All-Solid-State Lithium Batteries Based on Sulfide Electrolytes. <i>Angewandte Chemie</i> , 2022, 134, . | 1.6 | 6 |
| 1023 | Scalable Lithiophilic/Sodiophilic Porous Buffer Layer Fabrication Enables Uniform Nucleation and Growth for Lithium/Sodium Metal Batteries. <i>Advanced Functional Materials</i> , 2022, 32, . | 7.8 | 21 |
| 1024 | Lithiophilic Nickel Phosphide Modifying Carbon Nanofibers for a Highly Reversible Lithium-Metal Anode. <i>ACS Applied Energy Materials</i> , 2022, 5, 4733-4742. | 2.5 | 7 |
| 1025 | MXene chemistry, electrochemistry and energy storage applications. <i>Nature Reviews Chemistry</i> , 2022, 6, 389-404. | 13.8 | 429 |
| 1026 | Multidimensional Co ₃ O ₄ /NiO heterojunctions with rich boundaries incorporated into reduced graphene oxide network for expanding the range of lithiophilic host. <i>Informa-Materially</i> , 2022, 4, . | 8.5 | 19 |
| 1027 | Development of High-Energy Anodes for All-Solid-State Lithium Batteries Based on Sulfide Electrolytes. <i>Angewandte Chemie - International Edition</i> , 2022, 61, . | 7.2 | 40 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1028 | Advanced Current Collector Materials for High-Performance Lithium Metal Anodes. <i>Small</i> , 2022, 18, e2200010. | 5.2 | 33 |
| 1030 | One-Pot Preparation of Lithium Compensation Layer, Lithiophilic Layer, and Artificial Solid Electrolyte Interphase for Lean-Lithium Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 19437-19447. | 4.0 | 4 |
| 1031 | A microgrid-patterned silicon electrode as an electroactive lithium host. <i>Energy and Environmental Science</i> , 2022, 15, 2581-2590. | 15.6 | 12 |
| 1032 | Advanced carbon-based nanostructure frameworks for lithium anodes. , 2022, , 499-520. | | 0 |
| 1033 | Stimulating Cu-Zn alloying for compact Zn metal growth towards high energy aqueous batteries and hybrid supercapacitors. <i>Energy and Environmental Science</i> , 2022, 15, 2889-2899. | 15.6 | 63 |
| 1034 | A nonflammable electrolyte for ultrahigh-voltage (4.8 V-class) Li NCM811 cells with a wide temperature range of 100 Å°C. <i>Energy and Environmental Science</i> , 2022, 15, 2435-2444. | 15.6 | 104 |
| 1035 | Nanocomposites for binder-free Li-S electrodes. , 2022, , 99-119. | | 0 |
| 1036 | Status and perspectives of hierarchical porous carbon materials in terms of high-performance lithium-sulfur batteries. , 2022, 4, 346-398. | | 65 |
| 1037 | No Evidence of Benefits of Host Nano-Carbon Materials for Practical Lithium Anode-Free Cells. <i>Nanomaterials</i> , 2022, 12, 1413. | 1.9 | 5 |
| 1038 | Enabled Uniform Zn Stripping/Plating by Natural Halloysite Nanotube Coating with Opposite Charge for Aqueous Zn-Ion Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 5838-5846. | 3.2 | 13 |
| 1039 | Understanding and modifications on lithium deposition in lithium metal batteries. <i>Rare Metals</i> , 2022, 41, 2800-2818. | 3.6 | 18 |
| 1040 | Targeted Deposition in a Lithiophilic Silver-Modified 3D Cu Host for Lithium-Metal Anodes. <i>Energy and Environmental Materials</i> , 2023, 6, . | 7.3 | 11 |
| 1041 | Facile Lithiophilic 3D Copper Current Collector for Stable Li Metal Anode. <i>Journal of Electronic Materials</i> , 2022, 51, 4248-4256. | 1.0 | 4 |
| 1042 | Thermodynamic Analysis of Initial Steps for Void Formation at Lithium/Solid Electrolyte Interphase Interfaces. <i>ACS Energy Letters</i> , 2022, 7, 1953-1959. | 8.8 | 7 |
| 1043 | Thiophilic-Lithiophilic Hierarchically Porous Membrane-Enabled Full Lithium-Sulfur Battery with a Low N/P Ratio. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 23408-23419. | 4.0 | 10 |
| 1044 | Atomic Sn-enabled high-utilization, large-capacity, and long-life Na anode. <i>Science Advances</i> , 2022, 8, eabm7489. | 4.7 | 42 |
| 1045 | Unveiling the Stress-Buffering Mechanism of Deep Lithiated Ag Nanowires: A Polymer Segmental Motion Strategy toward Ultra-Robust Li Metal Anodes. <i>Advanced Functional Materials</i> , 2022, 32, . | 7.8 | 13 |
| 1046 | Sea-Urchin-like Hierarchical Carbon Spheres with Conical Pores as a Three-Dimensional Lithium Host for Dendrite Suppression. <i>ACS Applied Energy Materials</i> , 2022, 5, 5919-5927. | 2.5 | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1047 | Experimental and first-principles study on amorphous aluminum nitride induced island-like nucleation and planar growth of lithium metal anode. <i>Electrochimica Acta</i> , 2022, 421, 140520. | 2.6 | 1 |
| 1048 | Lithiophilic ZnO confined in microscale carbon cubes as a stable host for lithium metal anodes. <i>Carbon</i> , 2022, 196, 92-101. | 5.4 | 4 |
| 1049 | A review on current collector coating methods for next-generation batteries. <i>Chemical Engineering Journal</i> , 2022, 446, 136860. | 6.6 | 30 |
| 1050 | A dual-confined lithium nucleation and growth design enables dendrite-free lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2022, 10, 11659-11666. | 5.2 | 6 |
| 1051 | Dendrite-free Zn anode supported with 3D carbon nanofiber skeleton towards stable zinc ion batteries. <i>Journal of Colloid and Interface Science</i> , 2022, 623, 1181-1189. | 5.0 | 13 |
| 1052 | Direct correlation between void formation and lithium dendrite growth in solid-state electrolytes with interlayers. <i>Nature Materials</i> , 2022, 21, 1050-1056. | 13.3 | 84 |
| 1053 | Salt-“solvent synchro-constructed robust electrolyte” electrode interphase for high-voltage lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2022, 10, 19903-19913. | 5.2 | 10 |
| 1054 | An Anode-Free Zn-Graphite Battery. <i>Advanced Materials</i> , 2022, 34, e2201957. | 11.1 | 31 |
| 1055 | Highly Potassiophilic Graphdiyne Skeletons Decorated with Cu Quantum Dots Enable Dendrite-Free Potassium-Metal Anodes. <i>Advanced Materials</i> , 2022, 34, e2202685. | 11.1 | 26 |
| 1056 | An Anode-Free Potassium-Metal Battery Enabled by a Directly Grown Graphene-Modulated Aluminum Current Collector. <i>Advanced Materials</i> , 2022, 34, e2202902. | 11.1 | 27 |
| 1057 | Finely-Dispersed Ni ₂ Co Nanoalloys on Flower-Like Graphene Microassembly Empowering a Bi-Service Matrix for Superior Lithium-Sulfur Electrochemistry. <i>Advanced Functional Materials</i> , 2022, 32, . | 7.8 | 22 |
| 1058 | Powder metallurgical 3D nickel current collectors with plasma-induced Ni ₃ N nanocoatings enabling long-life and dendrite-free lithium metal anode. <i>Journal of Energy Chemistry</i> , 2022, 72, 149-157. | 7.1 | 16 |
| 1059 | N-Doped C/ZnO-Modified Cu Foil Current Collector for a Stable Anode of Lithium-Metal Batteries. <i>Industrial & Engineering Chemistry Research</i> , 2022, 61, 7303-7311. | 1.8 | 4 |
| 1060 | Cu Foam-Loaded Cu ₂ Mg Alloy with High Electrochemical Stability to Regulate the Nucleation of Lithium for Dendrite-Free Lithium Metal Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 7149-7157. | 3.2 | 4 |
| 1061 | Lithiophilic pore-gradient structured and oxygen-enriched carbon fiber as dense lithium nucleation enabler for stable lithium metal batteries. <i>Carbon</i> , 2022, 196, 663-675. | 5.4 | 4 |
| 1062 | A sodiophilic VN interlayer stabilizing a Na metal anode. <i>Nanoscale Horizons</i> , 2022, 7, 899-907. | 4.1 | 9 |
| 1063 | Anode-Free Solid-State Lithium Batteries: A Review. <i>Advanced Energy Materials</i> , 2022, 12, . | 10.2 | 81 |
| 1064 | Silver Copper Oxide Nanowires by Electrodeposition for Stable Lithium Metal Anode in Carbonate-Based Electrolytes. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 7196-7204. | 3.2 | 7 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1065 | Ag Nanoparticle-Decorated Mesocarbon Microbeads for Homogeneous Lithium Deposition toward Stable Hybrid Anodes. <i>ACS Applied Nano Materials</i> , 2022, 5, 7908-7916. | 2.4 | 1 |
| 1066 | Modifying the Lithiophilicity of Cu ₂ O/Cu Collector by LiCuO to Restrain Lithium Dendrite Growth. <i>ChemistrySelect</i> , 2022, 7, . | 0.7 | 1 |
| 1067 | Synergistic regulating of dynamic trajectory and lithiophilic nucleation by Heusler alloy for dendrite-free Li deposition. <i>Energy Storage Materials</i> , 2022, 50, 505-513. | 9.5 | 25 |
| 1068 | Progress of carbon and Metal-Based Three-Dimensional materials for Dendrite-Proof and Interface-Compatible lithium metal anode. <i>Applied Surface Science</i> , 2022, 598, 153785. | 3.1 | 11 |
| 1069 | One-Dimensional Porous Li-Confinable Hosts for High-Rate and Stable Li-Metal Batteries. <i>ACS Nano</i> , 2022, 16, 11892-11901. | 7.3 | 22 |
| 1070 | Li-Ca Alloy Composite Anode with Ant-Nest-Like Lithiophilic Channels in Carbon Cloth Enabling High-Performance Li Metal Batteries. <i>Research</i> , 2022, 2022, . | 2.8 | 6 |
| 1071 | Sodiophilic skeleton based on the packing of hard carbon microspheres for stable sodium metal anode without dead sodium. <i>Journal of Energy Chemistry</i> , 2022, 73, 400-406. | 7.1 | 11 |
| 1072 | Surface-Alloyed Nanoporous Zinc as Reversible and Stable Anodes for High-Performance Aqueous Zinc-Ion Battery. <i>Nano-Micro Letters</i> , 2022, 14, . | 14.4 | 65 |
| 1073 | Bilayer carbon-based structure with the promotion of homogenous nucleation for lithium metal anodes. <i>Science China Technological Sciences</i> , 2022, 65, 1558-1566. | 2.0 | 4 |
| 1074 | Asymmetric N ₂ -Coordinated Single Atomic Co Sites for Stable Lithium Metal Anodes. <i>Energy and Environmental Materials</i> , 2023, 6, . | 7.3 | 11 |
| 1075 | K _x C _y phase induced expanded interlayer in ultra-thin carbon toward full potassium-ion capacitors. , 2022, 4, 1151-1168. | | 18 |
| 1076 | Tuning 4f-Center Electron Structure by Schottky Defects for Catalyzing Li Diffusion to Achieve Long-Term Dendrite-Free Lithium Metal Battery. <i>Advanced Science</i> , 2022, 9, . | 5.6 | 24 |
| 1077 | Three-dimensional graphene with charge transfer doping for stable lithium metal anode. <i>Journal of Electroanalytical Chemistry</i> , 2022, 918, 116512. | 1.9 | 1 |
| 1078 | Modification of Cu current collectors for lithium metal batteries – A review. <i>Progress in Materials Science</i> , 2022, 130, 100996. | 16.0 | 56 |
| 1079 | Lithiophilic Sn-Co nano-seeds sealed in a hollow carbon shell to stabilize lithium metal anodes. <i>Chemical Communications</i> , 2022, 58, 9194-9197. | 2.2 | 1 |
| 1080 | Reversing the dendrite growth direction and eliminating the concentration polarization via an internal electric field for stable lithium metal anodes. <i>Chemical Science</i> , 2022, 13, 9277-9284. | 3.7 | 9 |
| 1081 | Influence of amorphous carbon interlayers on nucleation and early growth of lithium metal at the current collector-solid electrolyte interface. <i>Journal of Materials Chemistry A</i> , 2022, 10, 15535-15542. | 5.2 | 8 |
| 1082 | Materials, electrodes and electrolytes advances for next-generation lithium-based anode-free batteries. <i>Oxford Open Materials Science</i> , 2022, 2, . | 0.5 | 5 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1083 | Construction of a N,P doped 3D dendrite-free lithium metal anode by using silicon-containing lithium metal. Dalton Transactions, 2022, 51, 13210-13226. | 1.6 | 1 |
| 1084 | Recent advances of non-lithium metal anode materials for solid-state lithium-ion batteries. Journal of Materials Chemistry A, 2022, 10, 16761-16778. | 5.2 | 23 |
| 1085 | Future prospects for lithium-sulfur batteries: The criticality of solid electrolytes. , 2022, , 327-351. | | 0 |
| 1086 | Modification of a Cu Mesh with Nanowires and Magnesiophilic Ag Sites to Induce Uniform Magnesium Deposition. ACS Applied Materials & Interfaces, 2022, 14, 31148-31159. | 4.0 | 8 |
| 1087 | Recent Advances in Carbon-Based Current Collectors/Hosts for Alkali Metal Anodes. Energy and Environmental Materials, 2023, 6, . | 7.3 | 6 |
| 1088 | <sc>Single-Atom</sc> Lithiophilic Sites Confined within Ordered Porous Carbon for <sc>Ultrastable</sc> Lithium Metal Anodes. Energy and Environmental Materials, 2023, 6, . | 7.3 | 5 |
| 1089 | Built-In Stable Lithiophilic Sites in 3D Current Collectors for Dendrite Free Li Metal Electrode. Small, 2022, 18, . | 5.2 | 11 |
| 1090 | <sc>High-Energy</sc> Lithium-Ion Batteries: Recent Progress and a Promising Future in Applications. Energy and Environmental Materials, 2023, 6, . | 7.3 | 77 |
| 1091 | Enhanced Cyclability of Lithium Metal Anodes Enabled by Anti-aggregation of Lithiophilic Seeds. Nano Letters, 2022, 22, 5874-5882. | 4.5 | 26 |
| 1092 | Boosting the Temperature Adaptability of Lithium Metal Batteries via a Moisture/Acid-Purified, Ion-Diffusion Accelerated Separator. Advanced Energy Materials, 2022, 12, . | 10.2 | 20 |
| 1093 | Electrical resistance of the current collector controls lithium morphology. Nature Communications, 2022, 13, . | 5.8 | 20 |
| 1094 | Regulation of Dendrite-Free Li Plating via Lithiophilic Sites on Lithium-Alloy Surface. ACS Applied Materials & Interfaces, 2022, 14, 33952-33959. | 4.0 | 15 |
| 1096 | A dual-lithiophilic interfacial layer with intensified Lewis basicity and orbital hybridization for high-performance lithium metal batteries. Energy Storage Materials, 2022, 51, 777-788. | 9.5 | 4 |
| 1097 | Application of Ag-based materials in high-performance lithium metal anode: A review. Journal of Materials Science and Technology, 2023, 133, 165-182. | 5.6 | 18 |
| 1098 | Lithiophilic onion-like carbon spheres as lithium metal uniform deposition host. Journal of Colloid and Interface Science, 2022, 627, 783-792. | 5.0 | 12 |
| 1099 | Measuring the Nucleation Overpotential in Lithium Metal Batteries: Never Forget the Counter Electrode!. Journal of the Electrochemical Society, 2022, 169, 070509. | 1.3 | 21 |
| 1100 | Electrosynthesis of Vertically Aligned Zinc Oxide Nanoflakes on 3D Porous Cu Foam Enables Dendrite-Free Li-Metal Anode. ACS Applied Materials & Interfaces, 2022, 14, 33400-33409. | 4.0 | 13 |
| 1101 | A Gelation-Assisted Approach for Versatile MXene Inks. Advanced Functional Materials, 2022, 32, . | 7.8 | 10 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1102 | Long-term stable Li metal anode enabled by strengthened and protected lithiophilic LiZn alloys. <i>Journal of Power Sources</i> , 2022, 543, 231839. | 4.0 | 6 |
| 1103 | Facile synthesis of three-dimensional conducting scaffold with magnesiophilic decorations toward non-dendritic Mg-metal batteries. <i>Journal of Power Sources</i> , 2022, 541, 231724. | 4.0 | 8 |
| 1104 | Dendrite-free and corrosion-resistant sodium metal anode for enhanced sodium batteries. <i>Applied Surface Science</i> , 2022, 600, 154168. | 3.1 | 15 |
| 1105 | A dimensionally stable lithium alloy based composite electrode for lithium metal batteries. <i>Chemical Engineering Journal</i> , 2022, 450, 138074. | 6.6 | 6 |
| 1106 | Three-dimensional Ag/carbon nanotube-graphene foam for high performance dendrite free lithium/sodium metal anodes. <i>Journal of Materials Science and Technology</i> , 2023, 132, 50-58. | 5.6 | 27 |
| 1107 | In Situ Grown MnO ₂ Nanoflower Arrays on Ni Foam (MnO ₂ @NF) as 3D Lithiophilic Hosts for a Stable Lithium Metal Anode. <i>ACS Applied Energy Materials</i> , 2022, 5, 10034-10044. | 2.5 | 6 |
| 1108 | Enhancing the Electrochemical Stability of Lithium Anode by Introducing Lithiophilic Three-dimensional Framework Li ₂ Cu ₃ Zn. <i>Journal of Alloys and Compounds</i> , 2022, , 166437. | 2.8 | 2 |
| 1109 | Stable Li Metal Electrolyte Interface Enabled by SEI Improvement and Cation Shield Functionality of the Azamacrocyclic Ligand in Carbonate Electrolytes. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 35645-35653. | 4.0 | 11 |
| 1110 | Bulk/Interfacial Synergetic Approaches Enable the Stable Anode for High Energy Density All-Solid-State Lithium Sulfur Batteries. <i>ACS Energy Letters</i> , 2022, 7, 2761-2770. | 8.8 | 23 |
| 1111 | Carbon/Lithium Composite Anode for Advanced Lithium Metal Batteries: Design, Progress, In Situ Characterization, and Perspectives. <i>Advanced Energy Materials</i> , 2022, 12, . | 10.2 | 40 |
| 1112 | Crystallographically Textured Electrodes for Rechargeable Batteries: Symmetry, Fabrication, and Characterization. <i>Chemical Reviews</i> , 2022, 122, 14440-14470. | 23.0 | 37 |
| 1113 | Self-densified ultrathin solid electrolyte membrane fabricated from monodispersed sulfide electrolyte nanoparticles. <i>Journal of the American Ceramic Society</i> , 2022, 105, 7344-7354. | 1.9 | 4 |
| 1114 | Advanced Nonflammable Organic Electrolyte Promises Safer Li Metal Batteries: From Solvation Structure Perspectives. <i>Advanced Materials</i> , 2023, 35, . | 11.1 | 35 |
| 1115 | Interface Crystallographic Optimization of Crystal Plane for Stable Metallic Lithium Anode. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 38696-38705. | 4.0 | 11 |
| 1116 | Sb ₂ S ₃ Nanorod Hierarchies Enabling Homogeneous Sodium Deposition for Dendrite-Free Sodium-Metal Batteries. <i>ACS Applied Energy Materials</i> , 2022, 5, 10952-10960. | 2.5 | 4 |
| 1117 | Emerging catalytic materials for practical lithium-sulfur batteries. <i>Journal of Energy Chemistry</i> , 2023, 76, 127-145. | 7.1 | 43 |
| 1118 | Room-Temperature Anode-Free All-Solid-State Batteries via the Conversion Reaction of Metal Fluorides. <i>Advanced Materials</i> , 2022, 34, . | 11.1 | 24 |
| 1119 | Pomegranate-Inspired Graphene Parcel Enables High-Performance Dendrite-Free Lithium Metal Anodes. <i>Advanced Science</i> , 2022, 9, . | 5.6 | 7 |

| # | ARTICLE | IF | CITATIONS |
|------|--|-----|-----------|
| 1120 | Advances in the Emerging Gradient Designs of Li Metal Hosts. Research, 2022, 2022, . | 2.8 | 14 |
| 1121 | Functional Polymer Materials for Advanced Lithium Metal Batteries: A Review and Perspective. Polymers, 2022, 14, 3452. | 2.0 | 3 |
| 1122 | Codoped porous carbon nanofibres as a potassium metal host for nonaqueous K-ion batteries. Nature Communications, 2022, 13, . | 5.8 | 54 |
| 1123 | A Diluted Electrolyte for Long-Life Sulfurized Polyacrylonitrile-Based Anode-Free Li-S Batteries. Polymers, 2022, 14, 3312. | 2.0 | 4 |
| 1124 | CO ₂ Laser Direct-Write Process for Micro-Gradient-Patterned Carbon Composed of Graphene-like and Disordered Carbon Forms for a Robust Anode-Free Li-Metal Battery. ACS Applied Energy Materials, 2022, 5, 10940-10951. | 2.5 | 2 |
| 1125 | Facile and scalable fabrication of lithiophilic Cu ₂ O enables stable lithium metal anode. Journal of Energy Chemistry, 2022, 75, 285-292. | 7.1 | 19 |
| 1126 | Understanding the electro-chemo-mechanics of Li plating in anode-free solid-state batteries with operando 3D microscopy. Matter, 2022, 5, 3912-3934. | 5.0 | 34 |
| 1127 | Constructing methyl methacrylate/MXene artificial solid-electrolyte interphase layer for lithium metal batteries with high electrochemical performance. Applied Surface Science, 2022, 605, 154586. | 3.1 | 7 |
| 1128 | Construction and Modification of Copper Current Collectors for Improved Li Metal Batteries. , 0, , . | | 1 |
| 1129 | Designing 3D Anode Based on Pore-Size-Dependent Li Deposition Behavior for Reversible Li-Free All-Solid-State Batteries. Advanced Science, 2022, 9, . | 5.6 | 12 |
| 1130 | Rationalized design of hyperbranched trans-scale graphene arrays for enduring high-energy lithium metal batteries. Science Advances, 2022, 8, . | 4.7 | 14 |
| 1131 | Dual Vertically Aligned Electrode-Inspired High-Capacity Lithium Batteries. Advanced Science, 2022, 9, . | 5.6 | 13 |
| 1132 | Stable Imprinted Zincophilic Zn Anodes with High Capacity. Advanced Functional Materials, 2022, 32, . | 7.8 | 35 |
| 1133 | Inhibiting intercrystalline reactions of anode with electrolytes for long-cycling lithium batteries. Science Advances, 2022, 8, . | 4.7 | 40 |
| 1134 | Constructing low N/P ratio sodium-based batteries by reversible Na metal electrodeposition on sodiophilic zinc-metal-decorated hard carbons. Journal of Power Sources, 2022, 544, 231862. | 4.0 | 3 |
| 1135 | Guided lithium nucleation and growth on lithiophilic tin-decorated copper substrate. Journal of Energy Chemistry, 2022, 74, 412-419. | 7.1 | 11 |
| 1136 | Lithiophilic Ni ₃ S ₂ layer decorated nickel foam (Ni ₃ S ₂ @Ni foam) with fast ion transfer kinetics for long-life lithium metal anodes. Chemical Engineering Journal, 2022, 450, 138384. | 6.6 | 21 |
| 1137 | A multifunctional subassembly of carbon nanotube paper for stable lithium metal anodes. Materials Today Energy, 2022, 29, 101134. | 2.5 | 1 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1138 | Synergistic effects between dual salts and Li nitrate additive in ether electrolytes for Li-metal anode protection in Li secondary batteries. <i>Journal of Power Sources</i> , 2022, 548, 232017. | 4.0 | 10 |
| 1139 | Recent progress on enhancing the Lithiophilicity of hosts for dendrite-free lithium metal batteries. <i>Energy Storage Materials</i> , 2022, 53, 156-182. | 9.5 | 8 |
| 1140 | Mesoporous copper-based metal glass as current collector for Li metal anode. <i>Chemical Engineering Journal</i> , 2023, 451, 138910. | 6.6 | 21 |
| 1141 | Interfacial modification between argyrodite-type solid-state electrolytes and Li metal anodes using LiPON interlayers. <i>Energy and Environmental Science</i> , 2022, 15, 3805-3814. | 15.6 | 39 |
| 1142 | Dendrite-free lithium metal batteries achieved with Ce-MOF membrane coating with one-dimensional continuous oxygen-containing channels for rapid migration of Li ions. <i>Journal of Materials Chemistry A</i> , 2022, 10, 18248-18255. | 5.2 | 8 |
| 1143 | An anodeless, mechanically flexible and energy/power dense sodium battery prototype. <i>Energy and Environmental Science</i> , 2022, 15, 4686-4699. | 15.6 | 15 |
| 1144 | <i>In situ</i> imaging of lithium superoxide dynamics in an all-solid-state Li-O_2 nanobattery. <i>Journal of Materials Chemistry A</i> , 2022, 10, 20294-20301. | 5.2 | 2 |
| 1145 | Li^+ -intercalated carbon cloth for anode-free Li-ion batteries with unprecedented cyclability. <i>Journal of Materials Chemistry A</i> , 2022, 10, 21456-21464. | 5.2 | 5 |
| 1146 | Insights on the work function of the current collector surface in anode-free lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2022, 10, 20984-20992. | 5.2 | 7 |
| 1147 | Carbon Nanotube Current Collector for Anode-free Battery. <i>Fibers and Polymers</i> , 2022, 23, 2149-2155. | 1.1 | 1 |
| 1148 | Engineering current collectors for advanced alkali metal anodes: A review and perspective. <i>EcoMat</i> , 2023, 5, . | 6.8 | 18 |
| 1149 | High-Energy and Long-Lifespan Potassium-Sulfur Batteries Enabled by Concentrated Electrolyte. <i>Advanced Functional Materials</i> , 2022, 32, . | 7.8 | 16 |
| 1150 | Anionic Coordination Manipulation of Multilayer Solvation Structure Electrolyte for High-Rate and Low-Temperature Lithium Metal Battery. <i>Advanced Energy Materials</i> , 2022, 12, . | 10.2 | 42 |
| 1151 | Dual-Functional Stacked Polymer Fibers for Stable Lithium Metal Batteries in Carbonate-Based Electrolytes. <i>Small Structures</i> , 2022, 3, . | 6.9 | 7 |
| 1152 | Revisiting the Role of Physical Confinement and Chemical Regulation of 3D Hosts for Dendrite-Free Li Metal Anode. <i>Nano-Micro Letters</i> , 2022, 14, . | 14.4 | 23 |
| 1153 | Metal-organic framework derived porous structures towards lithium rechargeable batteries. <i>EcoMat</i> , 2023, 5, . | 6.8 | 33 |
| 1154 | Sodiophilic Current Collectors Based on MOF-Derived Nanocomposites for Anode-Less Na-Metal Batteries. <i>Advanced Energy Materials</i> , 2022, 12, . | 10.2 | 26 |
| 1155 | Facile Replacement Reaction Enables Nano-Ag-Decorated Three-Dimensional Cu Foam as High-Rate Lithium Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 42030-42037. | 4.0 | 11 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1156 | Highly aligned lithiophilic electrospun nanofiber membrane for the multiscale suppression of Li dendrite growth. <i>EScience</i> , 2022, 2, 655-665. | 25.0 | 25 |
| 1157 | Facile Electroless Plating Method to Fabricate a Nickel-Phosphorus-Modified Copper Current Collector for a Lean Lithium-Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 45433-45443. | 4.0 | 9 |
| 1158 | Lithium-Metal Batteries via Suppressing Li Dendrite Growth and Improving Coulombic Efficiency. <i>Small Structures</i> , 2022, 3, . | 6.9 | 26 |
| 1159 | Role of Coatings as Artificial Solid Electrolyte Interphases on Lithium Metal Self-Discharge. <i>Journal of Physical Chemistry C</i> , 2022, 126, 17490-17501. | 1.5 | 5 |
| 1160 | Interfacial high-concentration electrolyte for stable lithium metal anode: Theory, design, and demonstration. <i>Nano Research</i> , 2023, 16, 8321-8328. | 5.8 | 2 |
| 1161 | Achieving a dendrite-free lithium metal anode through lithiophilic surface modification with sodium diethyldithiocarbamate. <i>Inorganic Chemistry Frontiers</i> , 2022, 9, 6498-6509. | 3.0 | 3 |
| 1162 | Strategies and challenges of carbon materials in the practical applications of lithium metal anode: a review. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 26356-26370. | 1.3 | 13 |
| 1163 | Lithium deposition mechanism on Si and Cu substrates in the carbonate electrolyte. <i>Energy and Environmental Science</i> , 2022, 15, 5284-5299. | 15.6 | 18 |
| 1164 | <i>In-situ</i> Modification of Carbon Nanotubes with Metallic Bismuth Nanoparticles for Uniform Lithium Deposition. <i>Wuji Cailiao Xuebao/Journal of Inorganic Materials</i> , 2022, 37, 1337. | 0.6 | 3 |
| 1165 | Lithiophilicity: The key to efficient lithium metal anodes for lithium batteries. <i>Journal of Energy Chemistry</i> , 2023, 77, 123-136. | 7.1 | 31 |
| 1166 | Unlocking the in situ Li plating dynamics and evolution mediated by diverse metallic substrates in all-solid-state batteries. <i>Science Advances</i> , 2022, 8, . | 4.7 | 13 |
| 1167 | Toward Dendrite-Free Metallic Lithium Anodes: From Structural Design to Optimal Electrochemical Diffusion Kinetics. <i>ACS Nano</i> , 2022, 16, 17729-17760. | 7.3 | 50 |
| 1168 | Intrinsic Zn in Brass Enables Li Anode Dendrite-free. <i>Batteries and Supercaps</i> , 0, , . | 2.4 | 0 |
| 1169 | Uniform Lithium Deposition Induced by Zn _x (OH) _y for High-Performance Sulfurized Polyacrylonitrile-Based Lithium-Sulfur Batteries. <i>Polymers</i> , 2022, 14, 4494. | 2.0 | 2 |
| 1170 | Elucidating the suppression of lithium dendrite growth with a void-reduced anti-perovskite solid-state electrolyte pellet for stable lithium metal anodes. <i>Journal of Energy Chemistry</i> , 2023, 77, 62-69. | 7.1 | 4 |
| 1171 | Room-Temperature Liquid-Metal Coated Zn Electrode for Long Life Cycle Aqueous Rechargeable Zn-Ion Batteries. <i>Batteries</i> , 2022, 8, 208. | 2.1 | 3 |
| 1172 | Advanced Material Engineering to Tailor Nucleation and Growth towards Uniform Deposition for Anode-less Lithium Metal Batteries. <i>Small</i> , 2022, 18, . | 5.2 | 9 |
| 1173 | Facile design of alloy-based hybrid layer to stabilize lithium metal anode. <i>Electrochimica Acta</i> , 2022, 436, 141464. | 2.6 | 1 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1174 | A high-performance solid sodium battery enabled by a thin Na-Ti ₃ C ₂ T _x composite anode. <i>Electrochimica Acta</i> , 2022, 436, 141424. | 2.6 | 4 |
| 1175 | Electrochemical behavior and morphological evolution of Li metal anode under high cycling capacity. <i>Energy Storage Materials</i> , 2023, 54, 146-155. | 9.5 | 4 |
| 1176 | Highly reversible Li metal anode using a binary alloy interface. <i>Chemical Communications</i> , 2022, 58, 13455-13458. | 2.2 | 2 |
| 1177 | From anode to cell: synergistic protection strategies and perspectives for stabilized Zn metal in mild aqueous electrolytes. <i>Energy Storage Materials</i> , 2023, 54, 623-640. | 9.5 | 41 |
| 1178 | Stable copper anode enabled by an ionic conducting sulfurized interphase. <i>Electrochimica Acta</i> , 2023, 437, 141490. | 2.6 | 2 |
| 1179 | Focus on the Electroplating Chemistry of Li Ions in Nonaqueous Liquid Electrolytes: Toward Stable Lithium Metal Batteries. <i>Electrochemical Energy Reviews</i> , 2022, 5, . | 13.1 | 29 |
| 1180 | Isotropic Amorphous Protective Layer with Uniform Interfacial Zincophobicity for Stable Zinc Anode. <i>Small</i> , 2022, 18, . | 5.2 | 26 |
| 1181 | Fast-Charging of Hybrid Lithium-Ion/Lithium-Metal Anodes by Nanostructured Hard Carbon Host. <i>ACS Energy Letters</i> , 2022, 7, 4417-4426. | 8.8 | 14 |
| 1182 | Dual-Layered 3D Composite Skeleton Enables Spatially Ordered Lithium Plating/Stripping for Lithium Metal Batteries with Ultra-Low N/P Ratios. <i>ACS Applied Energy Materials</i> , 2022, 5, 14071-14080. | 2.5 | 3 |
| 1183 | High-Power Hybrid Solid-State Lithium-Metal Batteries Enabled by Preferred Directional Lithium Growth Mechanism. <i>ACS Energy Letters</i> , 2023, 8, 9-20. | 8.8 | 21 |
| 1184 | Introducing KI as a functional electrolyte additive to stabilize Li metal anode. <i>Chemical Engineering Journal</i> , 2023, 454, 140395. | 6.6 | 7 |
| 1185 | Electrochemical Solvometallurgy Pathway for the Sustainable Recovery of Bulk Metallic Lithium. , 2023, 1, 59-67. | | 2 |
| 1186 | Advances in Nanofibrous Materials for Stable Lithium-Metal Anodes. <i>ACS Nano</i> , 2022, 16, 17891-17910. | 7.3 | 11 |
| 1187 | An in-situ formed bifunctional layer for suppressing Li dendrite growth and stabilizing the solid electrolyte interphase layer of anode free lithium metal batteries. <i>Journal of Energy Storage</i> , 2022, 56, 105955. | 3.9 | 5 |
| 1188 | A Review of the Application of Carbon Materials for Lithium Metal Batteries. <i>Batteries</i> , 2022, 8, 246. | 2.1 | 9 |
| 1189 | Construction of lithophilic solid electrolyte interfaces with a bottom-up nucleation barrier difference for low-N/P ratio Li-metal batteries. <i>Energy Storage Materials</i> , 2023, 54, 885-894. | 9.5 | 18 |
| 1190 | Prospective strategies for extending long-term cycling performance of anode-free lithium metal batteries. <i>Energy Storage Materials</i> , 2023, 54, 689-712. | 9.5 | 11 |
| 1191 | Synergized N, P dual-doped 3D carbon host derived from filter paper for durable lithium metal anodes. <i>Journal of Colloid and Interface Science</i> , 2023, 632, 1-10. | 5.0 | 5 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1192 | Favorable nucleation and continuous regulation direct uniform and oblate Li deposition. <i>Inorganic Chemistry Frontiers</i> , 2023, 10, 1091-1100. | 3.0 | 1 |
| 1193 | Surface modification of carbon fiber cloth with graphene oxide through an electrophoresis method for lithium metal anode. <i>Carbon</i> , 2023, 203, 743-752. | 5.4 | 13 |
| 1194 | In-situ formation of LiF-rich solid-electrolyte interphases on 3D lithiophilic skeleton for stable lithium metal anode. <i>Energy Storage Materials</i> , 2023, 55, 301-311. | 9.5 | 11 |
| 1195 | Flexible, high-temperature-resistant, highly conductive, and porous siloxane-based single-ion conducting electrolyte membranes for safe and dendrite-free lithium-metal batteries. <i>Journal of Membrane Science</i> , 2023, 668, 121275. | 4.1 | 7 |
| 1196 | Bis(fluorosulfonyl)imide- and allyl-functionalized electrolyte additive as an interface stabilizer for Li-metal batteries. <i>Applied Surface Science</i> , 2023, 614, 156140. | 3.1 | 1 |
| 1197 | The thermodynamically directed dendrite-free lithium metal batteries on LiZn alloy surface. <i>Nano Research</i> , 2023, 16, 8354-8359. | 5.8 | 2 |
| 1198 | Bismuthene Arrays Harvesting Reversible Plating&Alloying Electrochemistry Toward Robust Lithium Metal Batteries. <i>Small Structures</i> , 2023, 4, . | 6.9 | 5 |
| 1199 | Porous Metal Current Collectors for Alkali Metal Batteries. <i>Advanced Science</i> , 2023, 10, . | 5.6 | 17 |
| 1200 | Template-free synthesis of hollow carbon-based nanostructures from MOFs for rechargeable battery applications. <i>Science China Chemistry</i> , 2023, 66, 65-77. | 4.2 | 16 |
| 1201 | Lithium deposition behavior in hard carbon hosts: Optical microscopy and scanning electron microscopy study. <i>Nano Research</i> , 2023, 16, 8368-8376. | 5.8 | 0 |
| 1202 | Three-dimensional MOF-derived host with surface-preferred and spatial-selective effect for dendrite-free lithium metal battery. <i>Journal of Alloys and Compounds</i> , 2023, 938, 168542. | 2.8 | 2 |
| 1203 | Spatially Distributed Lithiophilic Gradient in Low&Porosity 3D Hosts via Capillary Action for High&Performance Li Metal Anodes. <i>Advanced Energy Materials</i> , 2023, 13, . | 10.2 | 9 |
| 1204 | Breaking the structural anisotropy of ZnO enables dendrite-free lithium-metal anode with ultra-long cycling lifespan. <i>Cell Reports Physical Science</i> , 2022, 3, 101164. | 2.8 | 1 |
| 1205 | Stable Anode&Free All&Solid&State Lithium Battery through Tuned Metal Wetting on the Copper Current Collector. <i>Advanced Materials</i> , 2023, 35, . | 11.1 | 23 |
| 1206 | Insights into the Enhanced Reversibility of Graphite Anode Upon Fast Charging Through Li Reservoir. <i>ACS Nano</i> , 2022, 16, 20197-20205. | 7.3 | 7 |
| 1207 | Polyacrylonitrile-Polyvinyl Alcohol-Based Composite Gel-Polymer Electrolyte for All-Solid-State Lithium-Ion Batteries. <i>Polymers</i> , 2022, 14, 5327. | 2.0 | 5 |
| 1208 | Columnar Lithium Deposition Guided by Graphdiyne Nanowalls toward a Stable Lithium Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 55700-55708. | 4.0 | 3 |
| 1209 | Building lithium metal batteries under lean electrolyte conditions: Challenges and progress. <i>Energy Storage Materials</i> , 2023, 55, 708-726. | 9.5 | 16 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1210 | Tension-Induced Cavitation in Li-Metal Stripping. <i>Advanced Materials</i> , 2023, 35, . | 11.1 | 5 |
| 1211 | Challenges and Developments of High Energy Density Anode Materials in Sulfide-Based Solid-State Batteries. <i>ChemElectroChem</i> , 2022, 9, . | 1.7 | 2 |
| 1212 | Influence of Lithiophilic Substrates on Lithium Metal Batteries at Low Temperature. <i>Journal of the Electrochemical Society</i> , 2022, 169, 120509. | 1.3 | 0 |
| 1213 | Advanced Composite Lithium Metal Anodes with 3D Frameworks: Preloading Strategies, Interfacial Optimization, and Perspectives. <i>Small</i> , 2023, 19, . | 5.2 | 10 |
| 1214 | Engineering Lithiophilic Silver Sponge Integrated with Ion-Conductive PVDF/LiF Protective Layer for Dendrite-Free and High-Performance Lithium Metal Batteries. <i>ACS Applied Energy Materials</i> , 2023, 6, 519-529. | 2.5 | 8 |
| 1215 | Present and future of functionalized Cu current collectors for stabilizing lithium metal anodes. , 2023, 2, e9120048. | | 26 |
| 1216 | Synergistic modulation of Li nucleation/growth enabled by CNTs-wrapped lithiophilic CoP/Co ₂ P decorated hollow carbon polyhedron host for stable lithium metal anodes. <i>Nano Research</i> , 2023, 16, 4961-4969. | 5.8 | 3 |
| 1217 | Biomass-derived carbon fibers modified by Ag/rGO for high-performance Li metal composite anode. <i>Journal of Materials Science: Materials in Electronics</i> , 2023, 34, . | 1.1 | 1 |
| 1218 | Recent progress on lithium anode protection for lithium-sulfur batteries: Review and perspective. <i>APL Materials</i> , 2023, 11, . | 2.2 | 9 |
| 1219 | In-situ Constructing A Heterogeneous Layer on Lithium Metal Anodes for Dendrite-Free Lithium Deposition and High Li-ion Flux. <i>Angewandte Chemie</i> , 0, , . | 1.6 | 2 |
| 1220 | In-situ Constructing A Heterogeneous Layer on Lithium Metal Anodes for Dendrite-Free Lithium Deposition and High Li-ion Flux. <i>Angewandte Chemie - International Edition</i> , 2023, 62, . | 7.2 | 18 |
| 1221 | In situ construction of a stable composite solid electrolyte interphase for dendrite-free Zn batteries. <i>Journal of Energy Chemistry</i> , 2023, 79, 450-458. | 7.1 | 14 |
| 1222 | Reversible Lithium Electroplating for High-Energy Rechargeable Batteries. <i>Journal of the Electrochemical Society</i> , 0, , . | 1.3 | 3 |
| 1223 | One-step construction of hollow hybrid carbon spheres embedded with ultrafine Nb ₂ O ₅ . <i>Carbon</i> , 2023, , . | 5.4 | 0 |
| 1224 | A 3D multifunctional host anode from commercial carbon cloth for lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2023, 11, 4205-4219. | 5.2 | 10 |
| 1225 | Anode-less all-solid-state batteries: recent advances and future outlook. <i>Materials Futures</i> , 2023, 2, 013502. | 3.1 | 4 |
| 1226 | A review on lithium-sulfur batteries: Challenge, development, and perspective. <i>Nano Research</i> , 2023, 16, 8097-8138. | 5.8 | 36 |
| 1227 | Electrodeposited 3D lithiophilic Ni microvia host for long cycling Li metal anode at high current density. <i>Electrochimica Acta</i> , 2023, 441, 141797. | 2.6 | 5 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1228 | Unveiling the effect and correlative mechanism of series-dilute electrolytes on lithium metal anodes. <i>Energy Storage Materials</i> , 2023, 56, 141-154. | 9.5 | 11 |
| 1229 | Early Stage Li Plating by Liquid Phase and Cryogenic Transmission Electron Microscopy. <i>ACS Energy Letters</i> , 2023, 8, 715-721. | 8.8 | 9 |
| 1230 | Highly Stable Lithium Metal Anode Constructed by Three-Dimensional Lithiophilic Materials. <i>Batteries</i> , 2023, 9, 30. | 2.1 | 5 |
| 1231 | Interfacial Anchored Sesame Ball-like Ag/C To Guide Lithium Even Plating and Stripping Behavior. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 1934-1943. | 4.0 | 2 |
| 1232 | First fluorescent probe for graphite anodes of lithium-ion battery. <i>Matter</i> , 2023, 6, 873-886. | 5.0 | 7 |
| 1233 | Superfast Mass Transport of Na/K Via Mesochannels for Dendrite-Free Metal Batteries. <i>Advanced Materials</i> , 0, , 2210447. | 11.1 | 8 |
| 1234 | Highly Reversible Lithium Metal Anode Enabled by 3D Lithiophilic-Lithiophobic Dual-Skeletons. <i>Advanced Materials</i> , 0, , 2211203. | 11.1 | 24 |
| 1235 | Realizing Holistic Charging-Discharging for Dendrite-Free Lithium Metal Anodes via Constructing Three-Dimensional Li ⁺ Conductive Networks. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 6666-6675. | 4.0 | 2 |
| 1236 | Tuning Lithiophilic Sites of Ag-Embedded N-Doped Carbon Hollow Spheres via Intentional Blocking Strategy for Ultrastable Li Metal Anode in Rechargeable Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 1785-1796. | 3.2 | 3 |
| 1237 | High-areal-capacity anode-free all-solid-state lithium batteries enabled by interconnected carbon-reinforced ionic-electronic composites. <i>Journal of Materials Chemistry A</i> , 2023, 11, 12713-12718. | 5.2 | 10 |
| 1238 | Composite lithium metal anodes for solid-state battery applications. , 2023, , 81-94. | | 1 |
| 1239 | Uniform lithium deposition guided by Au nanoparticles in vertical-graphene/carbon-cloth skeleton for dendrite-free and stable lithium metal anode. <i>Scripta Materialia</i> , 2023, 229, 115352. | 2.6 | 6 |
| 1240 | Prospects and future perspective of nanomaterials for energy storage applications. , 2023, , 569-578. | | 0 |
| 1241 | Non-Flammable Electrolyte with Lithium Nitrate as the Only Lithium Salt for Boosting Ultra-Stable Cycling and Fire-Safety Lithium Metal Batteries. <i>Advanced Functional Materials</i> , 2023, 33, . | 7.8 | 24 |
| 1242 | A Review of Solid Electrolyte Interphase (SEI) and Dendrite Formation in Lithium Batteries. <i>Electrochemical Energy Reviews</i> , 2023, 6, . | 13.1 | 30 |
| 1243 | High interfacial capacitance enabled stable lithium metal anode for practical lithium metal pouch cells. <i>Energy Storage Materials</i> , 2023, 58, 142-154. | 9.5 | 10 |
| 1244 | Suppressing Universal Cathode Crossover in High-Energy Lithium Metal Batteries via a Versatile Interlayer Design**. <i>Angewandte Chemie - International Edition</i> , 2023, 62, . | 7.2 | 5 |
| 1245 | Suppressing Universal Cathode Crossover in High-Energy Lithium Metal Batteries via a Versatile Interlayer Design**. <i>Angewandte Chemie</i> , 2023, 135, . | 1.6 | 0 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1246 | Geometrical design of top-to-bottom magnesiophilicity-gradient host for reversible Mg-metal batteries. <i>Energy Storage Materials</i> , 2023, 59, 102762. | 9.5 | 4 |
| 1247 | Near-perfect suppression of Li dendrite growth by novel porous hollow carbon fibers embedded with ZnO nanoparticles as stable and efficient anode for Li metal batteries. <i>Chemical Engineering Journal</i> , 2023, 464, 142713. | 6.6 | 7 |
| 1248 | Functional porous carbons for zinc ion energy storage: Structure-Function relationship and future perspectives. <i>Coordination Chemistry Reviews</i> , 2023, 482, 215056. | 9.5 | 5 |
| 1249 | Recent research progress of alloy-containing lithium anodes in lithium-metal batteries. <i>Current Opinion in Solid State and Materials Science</i> , 2023, 27, 101079. | 5.6 | 7 |
| 1250 | Electrolyte strategy toward the low-temperature Li-metal secondary battery. <i>Chemical Engineering Journal</i> , 2023, 465, 142913. | 6.6 | 5 |
| 1251 | Ultrathin Li-rich Li-Cu alloy anode capped with lithiophilic LiC ₆ headspace enabling stable cyclic performance. <i>Journal of Colloid and Interface Science</i> , 2023, 643, 205-213. | 5.0 | 3 |
| 1252 | One step hot-pressing method for hybrid Li metal anode of solid-state lithium metal batteries. <i>Journal of Materials Science and Technology</i> , 2023, 153, 32-40. | 5.6 | 8 |
| 1253 | Ag nanoparticles incorporated interlayer enables ultrahigh critical current density for Li ₆ PS ₅ Cl-based all-solid-state lithium batteries. <i>Journal of Power Sources</i> , 2023, 563, 232836. | 4.0 | 10 |
| 1254 | Growing cuprite nanoparticles on copper current collector toward uniform Li deposition for anode-free lithium batteries. <i>Applied Surface Science</i> , 2023, 617, 156529. | 3.1 | 6 |
| 1255 | Stabilizing nucleation seeds in Li metal anode via ion-selective graphene oxide interfaces. <i>Energy Storage Materials</i> , 2023, 56, 572-581. | 9.5 | 13 |
| 1256 | Mesoporous Gold Film with Surface Sulfur Modification to Enable Dendrite-Free Lithium Plating/Stripping for Long-Life Lithium Metal Anodes. <i>Small Methods</i> , 2023, 7, . | 4.6 | 1 |
| 1257 | Gradient design of imprinted anode for stable Zn-ion batteries. <i>Nature Communications</i> , 2023, 14, . | 5.8 | 99 |
| 1258 | Highly Lithiophilic Three-Dimension Framework of Vertical CuO Nanorod Arrays Decorated Carbon Cloth for Dendrite-Free Li Metal Anode. <i>Batteries</i> , 2023, 9, 127. | 2.1 | 0 |
| 1259 | Growing single-crystalline seeds on lithiophobic substrates to enable fast-charging lithium-metal batteries. <i>Nature Energy</i> , 2023, 8, 340-350. | 19.8 | 52 |
| 1260 | Homogeneous Li ⁺ flux realized by an in situ-formed Li-B alloy layer enabling the dendrite-free lithium metal anode. <i>Inorganic Chemistry Frontiers</i> , 2023, 10, 1485-1492. | 3.0 | 2 |
| 1261 | Sustained-Compensated Interfacial Zincophilic Sites to Assist High-Capacity Aqueous Zn Metal Batteries. <i>Nano Letters</i> , 2023, 23, 1135-1143. | 4.5 | 9 |
| 1262 | Investigating microstructure evolution of lithium metal during plating and stripping via operando X-ray tomographic microscopy. <i>Nature Communications</i> , 2023, 14, . | 5.8 | 12 |
| 1263 | In situ crosslinked hybrid aluminum polymer film for high-performance solid electrolyte interphase of lithium metal battery. <i>Journal of Power Sources</i> , 2023, 563, 232808. | 4.0 | 2 |

| # | ARTICLE | IF | CITATIONS |
|------|---|------|-----------|
| 1264 | Making the deposition surface lithiophobic. <i>Nature Energy</i> , 2023, 8, 321-322. | 19.8 | 1 |
| 1265 | Hydrated Eutectic Electrolytes Stabilizing Quasi-Underpotential Mg Plating/Stripping for High-Voltage Mg Batteries. <i>Angewandte Chemie - International Edition</i> , 2023, 62, . | 7.2 | 5 |
| 1266 | Hydrated Eutectic Electrolytes Stabilizing Quasi-Underpotential Mg Plating/Stripping for High-Voltage Mg Batteries. <i>Angewandte Chemie</i> , 2023, 135, . | 1.6 | 0 |
| 1267 | Current Status and Future Perspective on Lithium Metal Anode Production Methods. <i>Advanced Energy Materials</i> , 2023, 13, . | 10.2 | 38 |
| 1268 | A reactive wetting strategy improves lithium metal reversibility. <i>Energy Storage Materials</i> , 2023, 58, 176-183. | 9.5 | 8 |
| 1269 | Long-Lifespan Lithium Metal Batteries Enabled by a Hybrid Artificial Solid Electrolyte Interface Layer. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 10585-10592. | 4.0 | 8 |
| 1270 | Cu Current Collector with Binder-Free Lithiophilic Nanowire Coating for High Energy Density Lithium Metal Batteries. <i>Small</i> , 2023, 19, . | 5.2 | 12 |
| 1271 | Functionalized Halloysite Scaffold Controls Sodium Dendrite Growth. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 11949-11960. | 4.0 | 6 |
| 1272 | Ultrathin Composite Li Electrode for High-Performance Li Metal Batteries: A Review from Synthetic Chemistry. <i>Advanced Functional Materials</i> , 2023, 33, . | 7.8 | 14 |
| 1273 | Manipulating dielectric property of polymer coatings toward high-retention-rate lithium metal full batteries under harsh critical conditions. <i>Nano Research</i> , 2023, 16, 9240-9249. | 5.8 | 19 |
| 1274 | Fast capture and stabilization of Li ⁺ ions via physicochemical dual effects for an ultra-stable self-supporting Li metal anode. , 2023, 5, . | | 3 |
| 1275 | Li-growth and SEI engineering for anode-free Li-metal rechargeable batteries: A review of current advances. <i>Energy Storage Materials</i> , 2023, 57, 508-539. | 9.5 | 39 |
| 1276 | Thin, Flexible, and High-Performance Solid-State Polymer Electrolyte Membranes for Li ₂ O Batteries. <i>ACS Applied Energy Materials</i> , 2023, 6, 2877-2885. | 2.5 | 0 |
| 1277 | Recent advances in porous carbons for electrochemical energy storage. <i>New Carbon Materials</i> , 2023, 38, 1-15. | 2.9 | 5 |
| 1278 | Feasible approaches for anode-free lithium-metal batteries as next generation energy storage systems. <i>Energy Storage Materials</i> , 2023, 57, 471-496. | 9.5 | 10 |
| 1279 | Reversible, Dendrite-Free, High-Capacity Aluminum Metal Anode Enabled by Aluminophilic Interface Layer. <i>Nano Letters</i> , 2023, 23, 2295-2303. | 4.5 | 14 |
| 1280 | Superior metal storage behavior of Zn-containing porous carbon nanostructures for Na and Li metal batteries. <i>Journal of Materials Chemistry A</i> , 2023, 11, 7276-7285. | 5.2 | 2 |
| 1281 | Assessing Coulombic Efficiency in Lithium Metal Anodes. <i>Chemistry of Materials</i> , 2023, 35, 2381-2393. | 3.2 | 12 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1282 | Directing Highly Ordered and Dense Li Deposition to Achieve Stable Li Metal Batteries. <i>Small</i> , 2023, 19, . | 5.2 | 2 |
| 1283 | Electrochemical Atomic Force Microscopy Study on the Dynamic Evolution of Lithium Deposition. <i>Materials</i> , 2023, 16, 2278. | 1.3 | 2 |
| 1284 | Review of molecular layer deposition process and application to area selective deposition via graphitization. <i>Japanese Journal of Applied Physics</i> , 2023, 62, SG0810. | 0.8 | 1 |
| 1285 | High Li^+ coordinated solvation sheaths enable high-quality Li metal anode. <i>Informa Mater</i> , 2023, 5, . | 8.5 | 2 |
| 1286 | Less is more: a perspective on thinning lithium metal towards high-energy-density rechargeable lithium batteries. <i>Chemical Society Reviews</i> , 2023, 52, 2553-2572. | 18.7 | 36 |
| 1287 | Ultra-thin and ultra-light self-lubricating layer with accelerated dynamics for anode-free lithium metal batteries. <i>Energy Storage Materials</i> , 2023, 58, 110-122. | 9.5 | 7 |
| 1288 | Fundamentals, preparation, and mechanism understanding of Li/Na/Mg-Sn alloy anodes for liquid and solid-state lithium batteries and beyond. <i>Nano Research</i> , 2023, 16, 8191-8218. | 5.8 | 6 |
| 1289 | Ultra-Thin Lithium Silicide Interlayer for Solid-State Lithium Metal Batteries. <i>Advanced Materials</i> , 2023, 35, . | 11.1 | 8 |
| 1290 | Construction of Dynamic Alloy Interfaces for Uniform Li Deposition in Li Metal Batteries. <i>Energy and Environmental Materials</i> , 0, , . | 7.3 | 3 |
| 1291 | Sequential and Dendrite-Free Li Plating on Cu Foil Enabled by an Ultrathin SiO_2 Shell/C Layer. <i>Advanced Energy Materials</i> , 2023, 13, . | 10.2 | 11 |
| 1292 | Interfaces in Sulfide Solid Electrolyte-Based All-Solid-State Lithium Batteries: Characterization, Mechanism and Strategy. <i>Electrochemical Energy Reviews</i> , 2023, 6, . | 13.1 | 19 |
| 1293 | Direct Observation of Nucleation and Growth Behaviors of Lithium by <i>In Situ</i> Electron Microscopy. <i>ACS Energy Letters</i> , 2023, 8, 1929-1935. | 8.8 | 6 |
| 1294 | Stable Lithium Plating in Lithium Metal-Free Solid-State Batteries Enabled by Seeded Lithium Nucleation. <i>Journal of the Electrochemical Society</i> , 2023, 170, 040524. | 1.3 | 8 |
| 1295 | Electrochemically prelithiated carbon anodes with regulated Na-ion intercalation behaviors for advanced sodium-ion energy storage devices. <i>Journal of Materials Chemistry A</i> , 0, , . | 5.2 | 1 |
| 1296 | Modified metallic current collectors for sodium metal anodes. <i>Journal of Solid State Electrochemistry</i> , 2023, 27, 1345-1362. | 1.2 | 1 |
| 1297 | Revealing the Dual-Layered Solid Electrolyte Interphase on Lithium Metal Anodes via Cryogenic Electron Microscopy. <i>ACS Energy Letters</i> , 2023, 8, 2193-2200. | 8.8 | 16 |
| 1298 | Carbide-mediated catalytic hydrogenolysis: defects in graphene on a carbonaceous lithium host for liquid and all-solid-state lithium metal batteries. <i>Energy and Environmental Science</i> , 2023, 16, 2505-2517. | 15.6 | 10 |
| 1299 | Selective Potassium Deposition Enables Dendrite-Resistant Anodes for Ultrastable Potassium Metal Batteries. <i>Advanced Materials</i> , 2023, 35, . | 11.1 | 47 |

| # | ARTICLE | IF | CITATIONS |
|------|--|------|-----------|
| 1300 | ZnO/Carbon Shell/Carbon Cloth as a Stable Host for High Li-Content Anodes. ACS Applied Energy Materials, 2023, 6, 4825-4832. | 2.5 | 3 |
| 1301 | Lightweight and Flexible 3D ERGO@Cu/PA Mesh Current Collector of Li Metal Battery for Dendrite Suppression. ACS Applied Polymer Materials, 0, , . | 2.0 | 0 |
| 1302 | Constructing 3D Skeleton on Commercial Copper Foil via Electrophoretic Deposition of Lithiophilic Building Blocks for Stable Lithium Metal Anodes. Nanomaterials, 2023, 13, 1400. | 1.9 | 2 |
| 1309 | Embedding alloying sites in a lithiated polymer matrix as a stable interphase of lithium electrodes. Chemical Communications, 2023, 59, 6517-6520. | 2.2 | 3 |
| 1312 | Interface engineering of MXene-based heterostructures for lithium-sulfur batteries. Nano Research, 2023, 16, 9158-9178. | 5.8 | 14 |
| 1320 | Decoupling of the Impedance of Solid-Electrolyte Interface and Plated Lithium: Implications for Anode-Free Lithium Metal Battery Technology. ACS Applied Energy Materials, 2023, 6, 6890-6895. | 2.5 | 1 |
| 1331 | Ion modulation engineering toward stable lithium metal anodes. Materials Horizons, 2023, 10, 3218-3236. | 6.4 | 2 |
| 1337 | Ag _x Zn _y Protective Coatings with Selective Zn ²⁺ /H ⁺ Binding Enable Reversible Zn Anodes. Nano Letters, 2023, 23, 6156-6163. | 4.5 | 18 |
| 1340 | Transition metals for stabilizing lithium metal anode: advances and perspectives. Tungsten, 2024, 6, 212-229. | 2.0 | 2 |
| 1358 | Two-dimensional MXenes for flexible energy storage devices. Energy and Environmental Science, 2023, 16, 4191-4250. | 15.6 | 12 |
| 1371 | Towards lithium-free solid-state batteries with nanoscale Ag/Cu sputtered bilayer electrodes. Chemical Communications, 2023, 59, 12346-12349. | 2.2 | 0 |
| 1372 | Li-S Batteries: Challenges, Achievements and Opportunities. Electrochemical Energy Reviews, 2023, 6, . | 13.1 | 22 |
| 1409 | Towards practical lithium metal batteries with composite scaffolded lithium metal: an overview. Advanced Composites and Hybrid Materials, 2023, 6, . | 9.9 | 5 |
| 1417 | From Liquid to Solid-State Lithium Metal Batteries: Fundamental Issues and Recent Developments. Nano-Micro Letters, 2024, 16, . | 14.4 | 1 |
| 1419 | Vanadate Nanomaterials for Electrochemical Energy Storage. , 2023, , 177-219. | | 0 |
| 1421 | Design and application of copper/lithium composite anodes for advanced lithium metal batteries. Rare Metals, 2024, 43, 942-970. | 3.6 | 0 |
| 1422 | Interfacial engineering of lithium metal anodes: what is left to uncover?. Energy Advances, 0, , . | 1.4 | 0 |
| 1424 | 3D-hosted lithium metal anodes. Chemical Society Reviews, 0, , . | 18.7 | 1 |

| # | ARTICLE | IF | CITATIONS |
|------|---|-----|-----------|
| 1429 | Applications for Energy Storage. , 2024, , 153-220. | | 0 |
| 1463 | Strategies to regulate the interface between Li metal anodes and all-solid-state electrolytes. Materials Chemistry Frontiers, 2024, 8, 1421-1450. | 3.2 | 0 |
| 1499 | Graphene-Based Lithium/Sodium Metal Anodes. Engineering Materials, 2024, , 371-390. | 0.3 | 0 |