

Plating a Dendrite-Free Lithium Anode with a Polymer/ Electrolyte

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Citation Report

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 3 | Reshaping Lithium Plating/Stripping Behavior via Bifunctional Polymer Electrolyte for Room-Temperature Solid Li Metal Batteries. <i>Journal of the American Chemical Society</i> , 2016, 138, 15825-15828. | 6.6 | 399 |
| 4 | Large-Scale Production of $V_{0.6}O_{13}$ Cathode Materials Assisted by Thermal Gravimetric Analysis-Infrared Spectroscopy Technology. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 25674-25679. | 4.0 | 12 |
| 5 | A review of recent developments in rechargeable lithium-sulfur batteries. <i>Nanoscale</i> , 2016, 8, 16541-16588. | 2.8 | 326 |
| 6 | Electrochemical Nature of the Cathode Interface for a Solid-State Lithium-Ion Battery: Interface between $LiCoO_2$ and Garnet- $Li_7La_3Zr_2O_{12}$. <i>Chemistry of Materials</i> , 2016, 28, 8051-8059. | 3.2 | 373 |
| 7 | Mastering the interface for advanced all-solid-state lithium rechargeable batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 13313-13317. | 3.3 | 237 |
| 8 | High performance lithium metal anode: Progress and prospects. <i>Energy Storage Materials</i> , 2017, 7, 115-129. | 9.5 | 160 |
| 9 | Solid Polymer Electrolytes with Excellent High-Temperature Properties Based on Brush Block Copolymers Having Rigid Side Chains. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 6130-6137. | 4.0 | 49 |
| 10 | Insights on the Mechanism of Na-Ion Storage in Soft Carbon Anode. <i>Chemistry of Materials</i> , 2017, 29, 2314-2320. | 3.2 | 177 |
| 11 | Reviving the lithium metal anode for high-energy batteries. <i>Nature Nanotechnology</i> , 2017, 12, 194-206. | 15.6 | 4,804 |
| 12 | Lithium battery chemistries enabled by solid-state electrolytes. <i>Nature Reviews Materials</i> , 2017, 2, . | 23.3 | 3,057 |
| 13 | Reducing Interfacial Resistance between Garnet-Structured Solid-State Electrolyte and Li-Metal Anode by a Germanium Layer. <i>Advanced Materials</i> , 2017, 29, 1606042. | 11.1 | 512 |
| 14 | Li_3PO_4 -added garnet-type $Li_{6.5}La_3Zr_{1.5}Ta_{0.5}O_{12}$ for Li-dendrite suppression. <i>Journal of Power Sources</i> , 2017, 354, 68-73. | 4.0 | 150 |
| 15 | Garnet Solid Electrolyte Protected Li-Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 18809-18815. | 4.0 | 247 |
| 16 | The Compensation Effect in the Vogel-Tammann-Fulcher (VTF) Equation for Polymer-Based Electrolytes. <i>Macromolecules</i> , 2017, 50, 3831-3840. | 2.2 | 249 |
| 17 | Boosting the Cycle Life of LiO_2 Batteries at Elevated Temperature by Employing a Hybrid Polymer-Ceramic Solid Electrolyte. <i>ACS Energy Letters</i> , 2017, 2, 1378-1384. | 8.8 | 71 |
| 18 | Three-dimensional bilayer garnet solid electrolyte based high energy density lithium metal-sulfur batteries. <i>Energy and Environmental Science</i> , 2017, 10, 1568-1575. | 15.6 | 499 |
| 19 | Prestoring Lithium into Stable 3D Nickel Foam Host as Dendrite-Free Lithium Metal Anode. <i>Advanced Functional Materials</i> , 2017, 27, 1700348. | 7.8 | 686 |
| 20 | 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 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 21 | 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 |
| 22 | Solid-State Lithium Metal Batteries Promoted by Nanotechnology: Progress and Prospects. <i>ACS Energy Letters</i> , 2017, 2, 1385-1394. | 8.8 | 314 |
| 23 | Ionic conductivity promotion of polymer electrolyte with ionic liquid grafted oxides for all-solid-state lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 12934-12942. | 5.2 | 126 |
| 24 | A Sandwich PVDF/HEC/PVDF Gel Polymer Electrolyte for Lithium Ion Battery. <i>Electrochimica Acta</i> , 2017, 245, 752-759. | 2.6 | 135 |
| 25 | A Toolbox for Lithium-Sulfur Battery Research: Methods and Protocols. <i>Small Methods</i> , 2017, 1, 1700134. | 4.6 | 230 |
| 26 | Hybrid Polymer/Garnet Electrolyte with a Small Interfacial Resistance for Lithium-Ion Batteries. <i>Angewandte Chemie</i> , 2017, 129, 771-774. | 1.6 | 72 |
| 27 | Hybrid Polymer/Garnet Electrolyte with a Small Interfacial Resistance for Lithium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 753-756. | 7.2 | 449 |
| 28 | Engineered Interfaces in Hybrid Ceramic-Polymer Electrolytes for Use in All-Solid-State Li Batteries. <i>ACS Energy Letters</i> , 2017, 2, 134-138. | 8.8 | 75 |
| 29 | Rechargeable Sodium All-Solid-State Battery. <i>ACS Central Science</i> , 2017, 3, 52-57. | 5.3 | 332 |
| 30 | Superior polymer backbone with poly(arylene ether) over polyamide for single ion conducting polymer electrolytes. <i>Journal of Membrane Science</i> , 2017, 525, 349-358. | 4.1 | 57 |
| 31 | Changing Outlook for Rechargeable Batteries. <i>ACS Catalysis</i> , 2017, 7, 1132-1135. | 5.5 | 27 |
| 32 | Conformal, Nanoscale ZnO Surface Modification of Garnet-Based Solid-State Electrolyte for Lithium Metal Anodes. <i>Nano Letters</i> , 2017, 17, 565-571. | 4.5 | 556 |
| 33 | Recent Advancements in Li-Ion Conductors for All-Solid-State Li-Ion Batteries. <i>ACS Energy Letters</i> , 2017, 2, 2734-2751. | 8.8 | 226 |
| 34 | An anion-immobilized composite electrolyte for dendrite-free lithium metal anodes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 11069-11074. | 3.3 | 710 |
| 35 | A Si-doped flexible self-supporting comb-like polyethylene glycol copolymer (Si-PEG) film as a polymer electrolyte for an all solid-state lithium-ion battery. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24444-24452. | 5.2 | 39 |
| 36 | Transient Behavior of the Metal Interface in Lithium Metal-Garnet Batteries. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14942-14947. | 7.2 | 227 |
| 37 | Amorphous modified silyl-terminated 3D polymer electrolyte for high-performance lithium metal battery. <i>Nano Energy</i> , 2017, 41, 646-653. | 8.2 | 94 |
| 38 | A promising TPU/PEO blend polymer electrolyte for all-solid-state lithium ion batteries. <i>Electrochimica Acta</i> , 2017, 257, 31-39. | 2.6 | 159 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 39 | Dumbbell-Shaped Octasilsesquioxanes Functionalized with Ionic Liquids as Hybrid Electrolytes for Lithium Metal Batteries. <i>Chemistry of Materials</i> , 2017, 29, 9275-9283. | 3.2 | 18 |
| 40 | Recent approaches to improving lithium metal electrodes. <i>Current Opinion in Electrochemistry</i> , 2017, 6, 70-76. | 2.5 | 9 |
| 41 | Transient Behavior of the Metal Interface in Lithium Metal/Garnet Batteries. <i>Angewandte Chemie</i> , 2017, 129, 15138-15143. | 1.6 | 12 |
| 42 | Transforming from planar to three-dimensional lithium with flowable interphase for solid lithium metal batteries. <i>Science Advances</i> , 2017, 3, eaao0713. | 4.7 | 131 |
| 43 | Recent progress in solid-state electrolytes for alkali-ion batteries. <i>Science Bulletin</i> , 2017, 62, 1473-1490. | 4.3 | 86 |
| 44 | Columnar Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 14207-14211. | 7.2 | 199 |
| 45 | Columnar Lithium Metal Anodes. <i>Angewandte Chemie</i> , 2017, 129, 14395-14399. | 1.6 | 51 |
| 46 | Electrochemical performance of all-solid-state lithium batteries using inorganic lithium garnets particulate reinforced PEO/LiClO ₄ electrolyte. <i>Electrochimica Acta</i> , 2017, 253, 430-438. | 2.6 | 133 |
| 47 | A Newly Designed Composite Gel Polymer Electrolyte Based on Poly(Vinylidene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 427 Td (Fluorideâ€” - A European Journal, 2017, 23, 15203-15209. | 1.7 | 117 |
| 48 | Construction of interconnected micropores in poly(arylene ether) based single ion conducting blend polymer membranes via vapor-induced phase separation. <i>Journal of Membrane Science</i> , 2017, 544, 47-57. | 4.1 | 36 |
| 49 | Protected Lithium-Metal Anodes in Batteries: From Liquid to Solid. <i>Advanced Materials</i> , 2017, 29, 1701169. | 11.1 | 596 |
| 50 | Advanced Porous Carbon Materials for High-Efficient Lithium Metal Anodes. <i>Advanced Energy Materials</i> , 2017, 7, 1700530. | 10.2 | 208 |
| 51 | Toward Safe Lithium Metal Anode in Rechargeable Batteries: A Review. <i>Chemical Reviews</i> , 2017, 117, 10403-10473. | 23.0 | 4,365 |
| 52 | A facile surface chemistry route to a stabilized lithium metal anode. <i>Nature Energy</i> , 2017, 2, . | 19.8 | 864 |
| 53 | Solid polymer electrolyte based on waterborne polyurethane for all-solid-state lithium ion batteries. <i>Journal of Applied Polymer Science</i> , 2017, 134, 45554. | 1.3 | 20 |
| 54 | Combinatorial approaches for high-throughput characterization of mechanical properties. <i>Journal of Materiomics</i> , 2017, 3, 209-220. | 2.8 | 25 |
| 55 | High Performance Solid Polymer Electrolytes for Rechargeable Batteries: A Self-Catalyzed Strategy toward Facile Synthesis. <i>Advanced Science</i> , 2017, 4, 1700174. | 5.6 | 155 |
| 56 | Organic-inorganic hybrid electrolytes from ionic liquid-functionalized octasilsesquioxane for lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18012-18019. | 5.2 | 60 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 57 | Y-Doped NASICON-type $\text{LiZr}_2(\text{PO}_4)_3$ Solid Electrolytes for Lithium-Metal Batteries. <i>Chemistry of Materials</i> , 2017, 29, 7206-7212. | 3.2 | 77 |
| 58 | The recent advances in constructing designed electrode in lithium metal batteries. <i>Chinese Chemical Letters</i> , 2017, 28, 2171-2179. | 4.8 | 64 |
| 59 | Reviving Lithium-Metal Anodes for Next-Generation High-Energy Batteries. <i>Advanced Materials</i> , 2017, 29, 1700007. | 11.1 | 908 |
| 60 | Conductivity and applications of Li-biphenyl-1,2-dimethoxyethane solution for lithium ion batteries. <i>Chinese Physics B</i> , 2017, 26, 078201. | 0.7 | 11 |
| 61 | An advanced construction strategy of all-solid-state lithium batteries with excellent interfacial compatibility and ultralong cycle life. <i>Journal of Materials Chemistry A</i> , 2017, 5, 16984-16993. | 5.2 | 168 |
| 62 | Interfacial reactions in lithium batteries. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 303001. | 1.3 | 13 |
| 63 | Enhanced Interface Stability of Polymer Electrolytes Using Organic Cage-Type Cucurbit[6]uril for Lithium Metal Batteries. <i>Journal of the Electrochemical Society</i> , 2017, 164, A1834-A1840. | 1.3 | 17 |
| 64 | Progress of rechargeable lithium metal batteries based on conversion reactions. <i>National Science Review</i> , 2017, 4, 54-70. | 4.6 | 128 |
| 65 | Recent Progresses and Development of Advanced Atomic Layer Deposition towards High-Performance Li-Ion Batteries. <i>Nanomaterials</i> , 2017, 7, 325. | 1.9 | 41 |
| 66 | Promises, Challenges, and Recent Progress of Inorganic Solid-State Electrolytes for All-Solid-State Lithium Batteries. <i>Advanced Materials</i> , 2018, 30, e1705702. | 11.1 | 743 |
| 67 | Progress of the Interface Design in All-Solid-State Li-S Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1707533. | 7.8 | 182 |
| 68 | Engineering of lithium-metal anodes towards a safe and stable battery. <i>Energy Storage Materials</i> , 2018, 14, 22-48. | 9.5 | 213 |
| 69 | All-solid-state lithium-ion and lithium metal batteries "paving the way to large-scale production. <i>Journal of Power Sources</i> , 2018, 382, 160-175. | 4.0 | 428 |
| 70 | Recent progress and perspective on lithium metal anode protection. <i>Energy Storage Materials</i> , 2018, 14, 199-221. | 9.5 | 195 |
| 71 | Interphase Engineering Enabled All-Ceramic Lithium Battery. <i>Joule</i> , 2018, 2, 497-508. | 11.7 | 378 |
| 72 | Solid electrolyte based on waterborne polyurethane and poly(ethylene oxide) blend polymer for all-solid-state lithium ion batteries. <i>Solid State Ionics</i> , 2018, 320, 55-63. | 1.3 | 70 |
| 73 | Rechargeable solid-state Li-air batteries: a status report. <i>Rare Metals</i> , 2018, 37, 459-472. | 3.6 | 35 |
| 74 | Vertically Aligned Lithiophilic CuO Nanosheets on a Cu Collector to Stabilize Lithium Deposition for Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1703404. | 10.2 | 274 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 75 | Garnet Electrolyte with an Ultralow Interfacial Resistance for Li-Metal Batteries. <i>Journal of the American Chemical Society</i> , 2018, 140, 6448-6455. | 6.6 | 427 |
| 76 | Mg ₂ B ₂ O ₅ Nanowire Enabled Multifunctional Solid-State Electrolytes with High Ionic Conductivity, Excellent Mechanical Properties, and Flame-Retardant Performance. <i>Nano Letters</i> , 2018, 18, 3104-3112. | 4.5 | 245 |
| 77 | Electric-Field-Directed Parallel Alignment Architecting 3D Lithium-Ion Pathways within Solid Composite Electrolyte. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 15691-15696. | 4.0 | 63 |
| 78 | Perspectives for restraining harsh lithium dendrite growth: Towards robust lithium metal anodes. <i>Energy Storage Materials</i> , 2018, 15, 148-170. | 9.5 | 247 |
| 79 | A novel composite solid polymer electrolyte based on copolymer P(LA-co-TMC) for all-solid-state lithium ionic batteries. <i>Solid State Ionics</i> , 2018, 321, 8-14. | 1.3 | 15 |
| 80 | A bidirectional growth mechanism for a stable lithium anode by a platinum nanolayer sputtered on a polypropylene separator. <i>RSC Advances</i> , 2018, 8, 13034-13039. | 1.7 | 21 |
| 81 | Compact 3D Copper with Uniform Porous Structure Derived by Electrochemical Dealloying as Dendrite-Free Lithium Metal Anode Current Collector. <i>Advanced Energy Materials</i> , 2018, 8, 1800266. | 10.2 | 336 |
| 82 | Challenges and perspectives of garnet solid electrolytes for all solid-state lithium batteries. <i>Journal of Power Sources</i> , 2018, 389, 120-134. | 4.0 | 359 |
| 83 | Solid-State Sodium Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1703012. | 10.2 | 478 |
| 84 | The interfacial behaviours of all-solid-state lithium ion batteries. <i>Ceramics International</i> , 2018, 44, 7319-7328. | 2.3 | 42 |
| 85 | Recent Progress of the Solid-State Electrolytes for High-Energy Metal-Based Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1702657. | 10.2 | 851 |
| 86 | 3D Fiber-Network-Reinforced Bicontinuous Composite Solid Electrolyte for Dendrite-free Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 7069-7078. | 4.0 | 318 |
| 87 | PEO/garnet composite electrolytes for solid-state lithium batteries: From "ceramic-in-polymer" to "polymer-in-ceramic". <i>Nano Energy</i> , 2018, 46, 176-184. | 8.2 | 1,042 |
| 88 | Interfacial Chemistry in Solid-State Batteries: Formation of Interphase and Its Consequences. <i>Journal of the American Chemical Society</i> , 2018, 140, 250-257. | 6.6 | 239 |
| 89 | Electrode-electrolyte interfaces in lithium-based batteries. <i>Energy and Environmental Science</i> , 2018, 11, 527-543. | 15.6 | 474 |
| 90 | A 3D Nanostructured Hydrogel-Framework-Derived High-Performance Composite Polymer Lithium-Ion Electrolyte. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2096-2100. | 7.2 | 484 |
| 91 | A 3D Nanostructured Hydrogel-Framework-Derived High-Performance Composite Polymer Lithium-Ion Electrolyte. <i>Angewandte Chemie</i> , 2018, 130, 2118-2122. | 1.6 | 34 |
| 92 | A Biobased Composite Gel Polymer Electrolyte with Functions of Lithium Dendrites Suppressing and Manganese Ions Trapping. <i>Advanced Energy Materials</i> , 2018, 8, 1702561. | 10.2 | 77 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 93 | Progress and prospect on failure mechanisms of solid-state lithium batteries. <i>Journal of Power Sources</i> , 2018, 392, 94-115. | 4.0 | 151 |
| 94 | Conformation of lithium-aluminium alloy interphase-layer on lithium metal anode used for solid state batteries. <i>Electrochimica Acta</i> , 2018, 277, 268-275. | 2.6 | 44 |
| 95 | Progress and Perspective of Solid-State Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1707570. | 7.8 | 194 |
| 96 | Continuous plating/stripping behavior of solid-state lithium metal anode in a 3D ion-conductive framework. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 3770-3775. | 3.3 | 250 |
| 97 | Designing 3D nanostructured garnet frameworks for enhancing ionic conductivity and flexibility in composite polymer electrolytes for lithium batteries. <i>Energy Storage Materials</i> , 2018, 15, 46-52. | 9.5 | 203 |
| 98 | Artificial Solid Electrolyte Interphase Layer for Lithium Metal Anode in High-Energy Lithium Secondary Pouch Cells. <i>ACS Applied Energy Materials</i> , 2018, 1, 1674-1679. | 2.5 | 33 |
| 99 | A sandwich structure polymer/polymer-ceramics/polymer gel electrolytes for the safe, stable cycling of lithium metal batteries. <i>Journal of Membrane Science</i> , 2018, 555, 169-176. | 4.1 | 71 |
| 100 | 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 |
| 101 | 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 |
| 102 | Ordered mesogenic units-containing hyperbranched star liquid crystal all-solid-state polymer electrolyte for high-safety lithium-ion batteries. <i>Electrochimica Acta</i> , 2018, 259, 213-224. | 2.6 | 35 |
| 103 | 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 |
| 104 | Universal Soldering of Lithium and Sodium Alloys on Various Substrates for Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1701963. | 10.2 | 186 |
| 105 | High Polarity Poly(vinylidene difluoride) Thin Coating for Dendrite-Free and High-Performance Lithium Metal Anodes. <i>Advanced Energy Materials</i> , 2018, 8, 1701482. | 10.2 | 259 |
| 106 | Mechanisms and properties of ion-transport in inorganic solid electrolytes. <i>Energy Storage Materials</i> , 2018, 10, 139-159. | 9.5 | 267 |
| 107 | Recent progresses in the suppression method based on the growth mechanism of lithium dendrite. <i>Journal of Energy Chemistry</i> , 2018, 27, 513-527. | 7.1 | 115 |
| 108 | Advances in Interfaces between Li Metal Anode and Electrolyte. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701097. | 1.9 | 200 |
| 109 | Dendrite-Free Li-Metal Battery Enabled by a Thin Asymmetric Solid Electrolyte with Engineered Layers. <i>Journal of the American Chemical Society</i> , 2018, 140, 82-85. | 6.6 | 404 |
| 110 | Highly Conductive, Light Weight, Robust, Corrosion-Resistant, Scalable, All-Fiber Based Current Collectors for Aqueous Acidic Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1702615. | 10.2 | 63 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 111 | In-situ plasticized polymer electrolyte with double-network for flexible solid-state lithium-metal batteries. <i>Energy Storage Materials</i> , 2018, 10, 85-91. | 9.5 | 227 |
| 112 | A gel single ion conducting polymer electrolyte enables durable and safe lithium ion batteries via graft polymerization. <i>RSC Advances</i> , 2018, 8, 39967-39975. | 1.7 | 36 |
| 113 | Enhanced ionic conductivity in halloysite nanotube-poly(vinylidene fluoride) electrolytes for solid-state lithium-ion batteries. <i>RSC Advances</i> , 2018, 8, 34232-34240. | 1.7 | 34 |
| 114 | Enhanced lithium dendrite suppressing capability enabled by a solid-like electrolyte with different-sized nanoparticles. <i>Chemical Communications</i> , 2018, 54, 13060-13063. | 2.2 | 25 |
| 115 | Stabilization of all-solid-state Li-S batteries with a polymer-ceramic sandwich electrolyte by atomic layer deposition. <i>Journal of Materials Chemistry A</i> , 2018, 6, 23712-23719. | 5.2 | 77 |
| 116 | Organosilica-based ionogel derived nitrogen-doped microporous carbons for high performance supercapacitor electrodes. <i>Inorganic Chemistry Frontiers</i> , 2018, 5, 3091-3098. | 3.0 | 9 |
| 117 | Na-Ion Storage Behaviors of Quadrangular Herringbone-Carbon Nanotubes in Ether- and Ester-Based Electrolyte Systems. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 17184-17193. | 3.2 | 14 |
| 119 | Interfaces Between Cathode and Electrolyte in Solid State Lithium Batteries: Challenges and Perspectives. <i>Frontiers in Chemistry</i> , 2018, 6, 616. | 1.8 | 175 |
| 120 | Opportunities for Rechargeable Solid-State Batteries Based on Li-Intercalation Cathodes. <i>Joule</i> , 2018, 2, 2208-2224. | 11.7 | 153 |
| 121 | Architected Macroporous Polyelectrolytes That Suppress Dendrite Formation during High-Rate Lithium Metal Electrodeposition. <i>Macromolecules</i> , 2018, 51, 7666-7671. | 2.2 | 9 |
| 122 | In Situ Li ₃ PS ₄ Solid-State Electrolyte Protection Layers for Superior Long-Life and High-Rate Lithium-Metal Anodes. <i>Advanced Materials</i> , 2018, 30, e1804684. | 11.1 | 140 |
| 123 | Mechanism Study on the Interfacial Stability of a Lithium Garnet-Type Oxide Electrolyte against Cathode Materials. <i>ACS Applied Energy Materials</i> , 2018, 1, 5968-5976. | 2.5 | 72 |
| 124 | Ameliorating Interfacial Ionic Transportation in All-Solid-State Li-Ion Batteries with Interlayer Modifications. <i>ACS Energy Letters</i> , 2018, 3, 2775-2795. | 8.8 | 66 |
| 125 | Upgrading traditional liquid electrolyte via in situ gelation for future lithium metal batteries. <i>Science Advances</i> , 2018, 4, eaat5383. | 4.7 | 337 |
| 126 | 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 |
| 127 | Interface Engineering for Garnet-Based Solid-State Lithium-Metal Batteries: Materials, Structures, and Characterization. <i>Advanced Materials</i> , 2018, 30, e1802068. | 11.1 | 204 |
| 128 | Architectural design and fabrication approaches for solid-state batteries. <i>MRS Bulletin</i> , 2018, 43, 775-781. | 1.7 | 64 |
| 129 | High-Performance Double-Network Ion Gels with Fast Thermal Healing Capability via Dynamic Covalent Bonds. <i>Chemistry of Materials</i> , 2018, 30, 7752-7759. | 3.2 | 78 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 130 | Recent Progress of Hybrid Solidâ€State Electrolytes for Lithium Batteries. Chemistry - A European Journal, 2018, 24, 18293-18306. | 1.7 | 127 |
| 131 | An AB alternating diblock single ion conducting polymer electrolyte membrane for all-solid-state lithium metal secondary batteries. Journal of Membrane Science, 2018, 566, 181-189. | 4.1 | 35 |
| 132 | Integrative preparation of mesoporous epoxy resinâ€ceramic composite electrolytes with multilayer structure for dendrite-free lithium metal batteries. Journal of Materials Chemistry A, 2018, 6, 19094-19106. | 5.2 | 36 |
| 133 | Interfaceâ€Engineered $\text{Li}_{7-x}\text{La}_3\text{Zr}_2\text{O}_{12}$ -Based Garnet Solid Electrolytes with Suppressed Liâ€Dendrite Formation and Enhanced Electrochemical Performance. ChemSusChem, 2018, 11, 3774-3782. | 3.6 | 64 |
| 134 | Reversible thixotropic gel electrolytes for safer and shape-versatile lithium-ion batteries. Journal of Power Sources, 2018, 401, 126-134. | 4.0 | 15 |
| 135 | Mechanical properties of sulfide glasses in all-solid-state batteries. Journal of the Ceramic Society of Japan, 2018, 126, 719-727. | 0.5 | 75 |
| 136 | A promising PMHS/PEO blend polymer electrolyte for all-solid-state lithium ion batteries. Dalton Transactions, 2018, 47, 14932-14937. | 1.6 | 67 |
| 137 | Polymer lithium-garnet interphase for an all-solid-state rechargeable battery. Nano Energy, 2018, 53, 926-931. | 8.2 | 103 |
| 138 | Fundamental study on the wetting property of liquid lithium. Energy Storage Materials, 2018, 14, 345-350. | 9.5 | 161 |
| 139 | Six-arm star polymer based on discotic liquid crystal as high performance all-solid-state polymer electrolyte for lithium-ion batteries. Journal of Power Sources, 2018, 395, 137-147. | 4.0 | 50 |
| 140 | Progress and future prospects of high-voltage and high-safety electrolytes in advanced lithium batteries: from liquid to solid electrolytes. Journal of Materials Chemistry A, 2018, 6, 11631-11663. | 5.2 | 243 |
| 141 | A hybridized solid-gel nonflammable Li-Battery. Journal of Power Sources, 2018, 394, 26-34. | 4.0 | 15 |
| 142 | Chemically polished lithium metal anode for high energy lithium metal batteries. Energy Storage Materials, 2018, 14, 289-296. | 9.5 | 48 |
| 143 | Recent Advancements in Polymer-Based Composite Electrolytes for Rechargeable Lithium Batteries. Electrochemical Energy Reviews, 2018, 1, 113-138. | 13.1 | 290 |
| 144 | A large-size, bipolar-stacked and high-safety solid-state lithium battery with integrated electrolyte and cathode. Journal of Power Sources, 2018, 394, 57-66. | 4.0 | 65 |
| 145 | Mitigating Interfacial Potential Drop of Cathodeâ€Solid Electrolyte via Ionic Conductor Layer To Enhance Interface Dynamics for Solid Batteries. Journal of the American Chemical Society, 2018, 140, 6767-6770. | 6.6 | 192 |
| 146 | Mixed ionic-electronic conductor enabled effective cathode-electrolyte interface in all solid state batteries. Nano Energy, 2018, 50, 393-400. | 8.2 | 52 |
| 147 | All-solid-state batteries with slurry coated $\text{LiNi}_0.8\text{Co}_0.1\text{Mn}_0.1\text{O}_2$ composite cathode and $\text{Li}_6\text{PS}_5\text{Cl}$ electrolyte: Effect of binder content. Journal of Power Sources, 2018, 391, 73-79. | 4.0 | 168 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 148 | All-Solid-State Li-Ion Battery Using $\text{Li}_{1.5}\text{Al}_{0.5}\text{Ge}_{1.5}(\text{PO}_4)_3$ As Electrolyte Without Polymer Interfacial Adhesion. <i>Journal of Physical Chemistry C</i> , 2018, 122, 14383-14389. | 1.5 | 50 |
| 149 | Use of Tween Polymer To Enhance the Compatibility of the Li/Electrolyte Interface for the High-Performance and High-Safety Quasi-Solid-State Lithium-Sulfur Battery. <i>Nano Letters</i> , 2018, 18, 4598-4605. | 4.5 | 81 |
| 150 | Solid-Liquid Electrolyte as a Nanoion Modulator for Dendrite-Free Lithium Anodes. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 20412-20421. | 4.0 | 17 |
| 151 | Lithium Silicide Surface Enrichment: A Solution to Lithium Metal Battery. <i>Advanced Materials</i> , 2018, 30, e1801745. | 11.1 | 163 |
| 152 | A Superionic Conductive, Electrochemically Stable Dual-Salt Polymer Electrolyte. <i>Joule</i> , 2018, 2, 1838-1856. | 11.7 | 140 |
| 153 | Uniform metal-ion flux through interface-modified membrane for highly stable metal batteries. <i>Electrochimica Acta</i> , 2018, 283, 517-527. | 2.6 | 25 |
| 154 | Nanocellulose Structured Paper-Based Lithium Metal Batteries. <i>ACS Applied Energy Materials</i> , 2018, 1, 4341-4350. | 2.5 | 45 |
| 155 | Ionic liquid enabling stable interface in solid state lithium sulfur batteries working at room temperature. <i>Electrochimica Acta</i> , 2018, 284, 662-668. | 2.6 | 19 |
| 156 | DNA enters a new phase. <i>Nature Nanotechnology</i> , 2018, 13, 624-625. | 15.6 | 4 |
| 157 | A Flexible Dual-Ion Battery Based on PVDF/HFP Modified Gel Polymer Electrolyte with Excellent Cycling Performance and Superior Rate Capability. <i>Advanced Energy Materials</i> , 2018, 8, 1801219. | 10.2 | 243 |
| 158 | Ternary lithium-salt organic ionic plastic crystal polymer composite electrolytes for high voltage, all-solid-state batteries. <i>Energy Storage Materials</i> , 2018, 15, 407-414. | 9.5 | 45 |
| 159 | Structure, Chemistry, and Charge Transfer Resistance of the Interface between $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ Electrolyte and LiCoO_2 Cathode. <i>Chemistry of Materials</i> , 2018, 30, 6259-6276. | 3.2 | 125 |
| 160 | Challenges for Developing Rechargeable Room-Temperature Sodium Oxygen Batteries. <i>Advanced Materials Technologies</i> , 2018, 3, 1800110. | 3.0 | 29 |
| 161 | Nanoflake Arrays of Lithiophilic Metal Oxides for the Ultra-Stable Anodes of Lithium-Metal Batteries. <i>Advanced Functional Materials</i> , 2018, 28, 1803023. | 7.8 | 156 |
| 162 | Engineering Materials for Progressive All-Solid-State Na Batteries. <i>ACS Energy Letters</i> , 2018, 3, 2181-2198. | 8.8 | 116 |
| 163 | A Dual-Salt Gel Polymer Electrolyte with 3D Cross-Linked Polymer Network for Dendrite-Free Lithium Metal Batteries. <i>Advanced Science</i> , 2018, 5, 1800559. | 5.6 | 204 |
| 164 | Ambient temperature solid-state Li-battery based on high-salt-concentrated solid polymeric electrolyte. <i>Journal of Power Sources</i> , 2018, 397, 95-101. | 4.0 | 44 |
| 165 | Fluorinated interphases. <i>Nature Nanotechnology</i> , 2018, 13, 623-624. | 15.6 | 12 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 166 | Tuning hybrid liquid/solid electrolytes by lowering Li salt concentration for lithium batteries. Chinese Physics B, 2018, 27, 068201. | 0.7 | 0 |
| 167 | Development and Challenges of Functional Electrolytes for High-Performance Lithium-Sulfur Batteries. Advanced Functional Materials, 2018, 28, 1800919. | 7.8 | 129 |
| 168 | Excellent room-temperature performance of lithium metal polymer battery with enhanced interfacial compatibility. Electrochimica Acta, 2018, 283, 1261-1268. | 2.6 | 7 |
| 169 | Unlocking the Energy Capabilities of Lithium Metal Electrode with Solid-State Electrolytes. Joule, 2018, 2, 1674-1689. | 11.7 | 212 |
| 170 | A Perovskite Electrolyte That Is Stable in Moist Air for Lithium-Ion Batteries. Angewandte Chemie - International Edition, 2018, 57, 8587-8591. | 7.2 | 103 |
| 171 | Hybrid electrolytes for lithium metal batteries. Journal of Power Sources, 2018, 392, 206-225. | 4.0 | 179 |
| 172 | Flexible poly(ethylene carbonate)/garnet composite solid electrolyte reinforced by poly(vinylidene fluoride) for lithium metal batteries. Journal of Power Sources, 2018, 392, 232-238. | 4.0 | 121 |
| 173 | A Perovskite Electrolyte That Is Stable in Moist Air for Lithium-Ion Batteries. Angewandte Chemie, 2018, 130, 8723-8727. | 1.6 | 7 |
| 174 | Perovskite Membranes with Vertically Aligned Microchannels for All-Solid-State Lithium Batteries. Advanced Energy Materials, 2018, 8, 1801433. | 10.2 | 176 |
| 175 | Stabilizing the Interface of NASICON Solid Electrolyte against Li Metal with Atomic Layer Deposition. ACS Applied Materials & Interfaces, 2018, 10, 31240-31248. | 4.0 | 207 |
| 176 | Will the competitive future of solid state Li metal batteries rely on a ceramic or a composite electrolyte?. Sustainable Energy and Fuels, 2018, 2, 2325-2334. | 2.5 | 14 |
| 177 | Covalently linked metal-organic framework (MOF)-polymer all-solid-state electrolyte membranes for room temperature high performance lithium batteries. Journal of Materials Chemistry A, 2018, 6, 17227-17234. | 5.2 | 145 |
| 178 | Salt-Based Organic-Inorganic Nanocomposites: Towards A Stable Lithium Metal/Li ₁₀ GeP ₂ S ₁₂ Solid Electrolyte Interface. Angewandte Chemie - International Edition, 2018, 57, 13608-13612. | 7.2 | 138 |
| 179 | Salt-Based Organic-Inorganic Nanocomposites: Towards A Stable Lithium Metal/Li ₁₀ GeP ₂ S ₁₂ Solid Electrolyte Interface. Angewandte Chemie, 2018, 130, 13796-13800. | 1.6 | 5 |
| 180 | Dendrite-Free Lithium Deposition via Flexible-Rigid Coupling Composite Network for LiNi _{0.5} Mn _{1.5} O ₄ /Li Metal Batteries. Small, 2018, 14, e1802244. | 5.2 | 83 |
| 181 | Stable Metal Anode enabled by Porous Lithium Foam with Superior Ion Accessibility. Advanced Materials, 2018, 30, e1802156. | 11.1 | 115 |
| 182 | Superior lithium ion conduction of polymer electrolyte with comb-like structure via solvent-free copolymerization for bipolar all-solid-state lithium battery. Journal of Materials Chemistry A, 2018, 6, 13438-13447. | 5.2 | 80 |
| 183 | Solid polymer electrolyte soft interface layer with 3D lithium anode for all-solid-state lithium batteries. Energy Storage Materials, 2019, 17, 309-316. | 9.5 | 279 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 184 | Artificial Interphases for Highly Stable Lithium Metal Anode. Matter, 2019, 1, 317-344. | 5.0 | 508 |
| 185 | Facile Surface Modification Method To Achieve an Ultralow Interfacial Resistance in Garnet-Based Li Metal Batteries. ACS Applied Energy Materials, 2019, 2, 6332-6340. | 2.5 | 20 |
| 186 | Solid-State Electrolytes for Lithium-Ion Batteries: Fundamentals, Challenges and Perspectives. Electrochemical Energy Reviews, 2019, 2, 574-605. | 13.1 | 238 |
| 187 | Dendrite-Free and Stable Lithium Metal Anodes Enabled by an Antimony-Based Lithiophilic Interphase. Chemistry of Materials, 2019, 31, 7565-7573. | 3.2 | 73 |
| 188 | Co-spray printing of LiFePO ₄ and PEO-Li _{1.5} Al _{0.5} Ge _{1.5} (PO ₄) ₃ hybrid electrodes for all-solid-state Li-ion battery applications. Journal of Materials Chemistry A, 2019, 7, 19094-19103. | 5.2 | 25 |
| 189 | Interfacial Incompatibility and Internal Stresses in All-Solid-State Lithium Ion Batteries. Advanced Energy Materials, 2019, 9, 1901810. | 10.2 | 79 |
| 190 | A Crosslinked Polyethyleneglycol Solid Electrolyte Dissolving Lithium Bis(trifluoromethylsulfonyl)imide for Rechargeable Lithium Batteries. ChemSusChem, 2019, 12, 4708-4718. | 3.6 | 25 |
| 191 | Low volume change composite lithium metal anodes. Nano Energy, 2019, 64, 103910. | 8.2 | 68 |
| 192 | In-situ visualization of lithium plating in all-solid-state lithium-metal battery. Nano Energy, 2019, 63, 103895. | 8.2 | 109 |
| 193 | Enabling non-flammable Li-metal batteries <i>via</i> electrolyte functionalization and interface engineering. Journal of Materials Chemistry A, 2019, 7, 17995-18002. | 5.2 | 46 |
| 194 | Artificial solid electrolyte interphase based on polyacrylonitrile for homogenous and dendrite-free deposition of lithium metal. Chinese Physics B, 2019, 28, 078202. | 0.7 | 1 |
| 195 | High-Performance 3-D Fiber Network Composite Electrolyte Enabled with Li-Ion Conducting Nanofibers and Amorphous PEO-Based Cross-Linked Polymer for Ambient All-Solid-State Lithium-Metal Batteries. Advanced Fiber Materials, 2019, 1, 46-60. | 7.9 | 59 |
| 196 | Constructing Multifunctional Interphase between Li _{1.4} Al _{0.4} Ti _{1.6} (PO ₄) ₃ and Li Metal by Magnetron Sputtering for Highly Stable Solid-State Lithium Metal Batteries. Advanced Energy Materials, 2019, 9, 1901604. | 10.2 | 189 |
| 197 | Chemo-Mechanical Challenges in Solid-State Batteries. Trends in Chemistry, 2019, 1, 845-857. | 4.4 | 158 |
| 198 | An Interfacial Layer Based on Polymers of Intrinsic Microporosity to Suppress Dendrite Growth on Li Metal Anodes. Chemistry - A European Journal, 2019, 25, 12052-12057. | 1.7 | 24 |
| 199 | A 2D Layered Natural Ore as a Novel Solid-State Electrolyte. ACS Applied Energy Materials, 2019, 2, 5909-5916. | 2.5 | 24 |
| 200 | Self-Sacrificed Interface-Based on the Flexible Composite Electrolyte for High-Performance All-Solid-State Lithium Batteries. ACS Applied Materials & Interfaces, 2019, 11, 42715-42721. | 4.0 | 31 |
| 201 | Alkali-Metal Anodes: From Lab to Market. Joule, 2019, 3, 2334-2363. | 11.7 | 247 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 202 | Self-Healable Solid Polymeric Electrolytes for Stable and Flexible Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 18146-18149. | 7.2 | 128 |
| 203 | A Compact Gel Membrane Based on a Blend of PEO and PVDF for Dendrite-Free Lithium Metal Anodes. <i>ChemElectroChem</i> , 2019, 6, 5413-5419. | 1.7 | 21 |
| 204 | Li ⁺ -Containing, Continuous Silica Nanofibers for High Li ⁺ Conductivity in Composite Polymer Electrolyte. <i>Small</i> , 2019, 15, e1902729. | 5.2 | 58 |
| 205 | Solid/Solid Interfacial Architecturing of Solid Polymer Electrolyte-Based All-Solid-State Lithium-Sulfur Batteries by Atomic Layer Deposition. <i>Small</i> , 2019, 15, e1903952. | 5.2 | 62 |
| 206 | Constructing Ionic Gradient and Lithiophilic Interphase for High-Rate Li-Metal Anode. <i>Small</i> , 2019, 15, e1905171. | 5.2 | 42 |
| 207 | Challenges and development of composite solid-state electrolytes for high-performance lithium ion batteries. <i>Journal of Power Sources</i> , 2019, 441, 227175. | 4.0 | 168 |
| 208 | A Molecular-Cage Strategy Enabling Efficient Chemisorption-Electrocatalytic Interface in Nanostructured Li ₂ S Cathode for Li-Metal-Free Rechargeable Cells with High Energy. <i>Advanced Functional Materials</i> , 2019, 29, 1905986. | 7.8 | 51 |
| 209 | Self-Healable Solid Polymeric Electrolytes for Stable and Flexible Lithium Metal Batteries. <i>Angewandte Chemie</i> , 2019, 131, 18314-18317. | 1.6 | 13 |
| 210 | Revealing an Interconnected Interfacial Layer in Solid-State Polymer Sodium Batteries. <i>Angewandte Chemie</i> , 2019, 131, 17182-17188. | 1.6 | 7 |
| 211 | Ultrathin, Flexible Polymer Electrolyte for Cost-Effective Fabrication of All-Solid-State Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1902767. | 10.2 | 239 |
| 212 | Nucleation and Growth Mechanism of Lithium Metal Electroplating. <i>Journal of the American Chemical Society</i> , 2019, 141, 18612-18623. | 6.6 | 144 |
| 213 | Differentiated Lithium Salt Design for Multilayered PEO Electrolyte Enables a High-Voltage Solid-State Lithium Metal Battery. <i>Advanced Science</i> , 2019, 6, 1901036. | 5.6 | 202 |
| 214 | Revealing an Interconnected Interfacial Layer in Solid-State Polymer Sodium Batteries. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 17026-17032. | 7.2 | 48 |
| 215 | An Ultrarobust Composite Gel Electrolyte Stabilizing Ion Deposition for Long-Life Lithium Metal Batteries. <i>Advanced Functional Materials</i> , 2019, 29, 1904547. | 7.8 | 76 |
| 216 | 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 |
| 217 | Designing solid-state interfaces on lithium-metal anodes: a review. <i>Science China Chemistry</i> , 2019, 62, 1286-1299. | 4.2 | 86 |
| 218 | Polymer-in-salt solid electrolytes for lithium-ion batteries. <i>Functional Materials Letters</i> , 2019, 12, 1930006. | 0.7 | 25 |
| 219 | Comparing Experimental Measurements of Limiting Current in Polymer Electrolytes with Theoretical Predictions. <i>Journal of the Electrochemical Society</i> , 2019, 166, A3228-A3234. | 1.3 | 33 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 220 | PEO/LAGP hybrid solid polymer electrolytes for ambient temperature lithium batteries by solvent-free, α -one pot preparation. <i>Journal of Energy Storage</i> , 2019, 26, 100947. | 3.9 | 117 |
| 221 | Lithium Graphite Paste: An Interface Compatible Anode for Solid State Batteries. <i>Advanced Materials</i> , 2019, 31, e1807243. | 11.1 | 197 |
| 222 | Stabilizing Na-metal batteries with a manganese oxide cathode using a solid-state composite electrolyte. <i>Journal of Power Sources</i> , 2019, 416, 21-28. | 4.0 | 19 |
| 223 | A new high ionic conductive gel polymer electrolyte enables highly stable quasi-solid-state lithium sulfur battery. <i>Energy Storage Materials</i> , 2019, 22, 256-264. | 9.5 | 89 |
| 224 | Solid polymer electrolytes with poly(vinyl alcohol) and piperidinium based ionic liquid for Li-ion batteries. <i>Solid State Ionics</i> , 2019, 333, 76-82. | 1.3 | 35 |
| 225 | Insights into a layered hybrid solid electrolyte and its application in long lifespan high-voltage all-solid-state lithium batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3882-3894. | 5.2 | 82 |
| 226 | $\text{Li}_{7-x}\text{La}_3\text{Zr}_2\text{O}_{12}$ ceramic nanofiber-incorporated composite polymer electrolytes for lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 3391-3398. | 5.2 | 178 |
| 227 | Efficient Li-Metal Plating/Stripping in Carbonate Electrolytes Using a LiNO_3 -Gel Polymer Electrolyte, Monitored by Operando Neutron Depth Profiling. <i>Chemistry of Materials</i> , 2019, 31, 4564-4574. | 3.2 | 65 |
| 228 | UV-Initiated Soft-Tough Multifunctional Gel Polymer Electrolyte Achieves Stable-Cycling Li-Metal Battery. <i>ACS Applied Energy Materials</i> , 2019, 2, 4513-4520. | 2.5 | 20 |
| 229 | Failure Mechanism and Interface Engineering for NASICON-Structured All-Solid-State Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 20895-20904. | 4.0 | 83 |
| 230 | Double-sided conductive separators for lithium-metal batteries. <i>Energy Storage Materials</i> , 2019, 21, 464-473. | 9.5 | 34 |
| 231 | A silicon anode for garnet-based all-solid-state batteries: Interfaces and nanomechanics. <i>Energy Storage Materials</i> , 2019, 21, 246-252. | 9.5 | 70 |
| 232 | Smart construction of intimate interface between solid polymer electrolyte and 3D-array electrode for quasi-solid-state lithium ion batteries. <i>Journal of Power Sources</i> , 2019, 434, 226726. | 4.0 | 10 |
| 233 | Building an Interfacial Framework: Li/Garnet Interface Stabilization through a Cu_6Sn_5 Layer. <i>ACS Energy Letters</i> , 2019, 4, 1725-1731. | 8.8 | 71 |
| 234 | Solid State Lithium Batteries: Bipolar Design, Fabrication, and Electrochemistry. <i>ChemElectroChem</i> , 2019, 6, 3842-3859. | 1.7 | 80 |
| 235 | Recent progress on solid-state hybrid electrolytes for solid-state lithium batteries. <i>Energy Storage Materials</i> , 2019, 21, 308-334. | 9.5 | 221 |
| 236 | Electrolyte for lithium protection: From liquid to solid. <i>Green Energy and Environment</i> , 2019, 4, 360-374. | 4.7 | 110 |
| 237 | Engineering Janus Interfaces of Ceramic Electrolyte via Distinct Functional Polymers for Stable High-Voltage Li-Metal Batteries. <i>Journal of the American Chemical Society</i> , 2019, 141, 9165-9169. | 6.6 | 272 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 238 | Interface in Solid-State Lithium Battery: Challenges, Progress, and Outlook. ACS Applied Materials & Interfaces, 2019, 11, 22029-22050. | 4.0 | 200 |
| 239 | Ironing Controllable Lithium into Lithiotropic Carbon Fiber Fabric: A Novel Li-Metal Anode with Improved Cyclability and Dendrite Suppression. ACS Applied Materials & Interfaces, 2019, 11, 21584-21592. | 4.0 | 14 |
| 240 | In situ X-ray photoelectron spectroscopy investigation of the solid electrolyte interphase in a Li/Li _{6.4} Ga _{0.2} La ₃ Zr ₂ O ₁₂ /LiFePO ₄ all-solid-state battery. Journal of Solid State Electrochemistry, 2019, 23, 2107-2117. | 1.2 | 19 |
| 241 | Ultra-stable lithium plating/stripping in garnet-based lithium-metal batteries enabled by a SnO ₂ nanolayer. Journal of Power Sources, 2019, 433, 226691. | 4.0 | 39 |
| 242 | Chemically exfoliated boron nitride nanosheets form robust interfacial layers for stable solid-state Li metal batteries. Chemical Communications, 2019, 55, 7703-7706. | 2.2 | 41 |
| 243 | A highly stable glass fiber host for lithium metal anode behaving enhanced coulombic efficiency. Electrochimica Acta, 2019, 317, 333-340. | 2.6 | 10 |
| 244 | Nanostructures and Nanomaterials for Solid-State Batteries. , 2019, , 215-263. | | 2 |
| 245 | Conclusions and Perspectives on New Opportunities of Nanostructures and Nanomaterials in Batteries. , 2019, , 359-379. | | 0 |
| 246 | Covalent interfacial coupling for hybrid solid-state Li ion conductor. Energy Storage Materials, 2019, 23, 277-283. | 9.5 | 22 |
| 247 | Highly dense perovskite electrolyte with a high Li ⁺ conductivity for Li-ion batteries. Journal of Power Sources, 2019, 429, 75-79. | 4.0 | 15 |
| 248 | Constructing Self-Protected Li and Non-Li Candidates for Advanced Lithium Ion and Lithium Metal Batteries. Journal of Physical Chemistry C, 2019, 123, 13318-13323. | 1.5 | 5 |
| 249 | Nanowire Array-Coated Flexible Substrate to Accommodate Lithium Plating for Stable Lithium-Metal Anodes and Flexible Lithium-Organic Batteries. ACS Applied Materials & Interfaces, 2019, 11, 20873-20880. | 4.0 | 23 |
| 250 | Charge Transfer and Storage of an Electrochemical Cell and Its Nano Effects. , 2019, , 29-87. | | 0 |
| 251 | Dense, Melt Cast Sulfide Glass Electrolyte Separators for Li Metal Batteries. Journal of the Electrochemical Society, 2019, 166, A1535-A1542. | 1.3 | 13 |
| 252 | MOF-derived porous Co ₃ O ₄ -NC nanoflake arrays on carbon fiber cloth as stable hosts for dendrite-free Li metal anodes. Energy Storage Materials, 2019, 23, 181-189. | 9.5 | 133 |
| 253 | High Li ⁺ -conductive perovskite Li _{3/8} Sr _{7/16} Ta _{3/4} Zr _{1/4} O ₃ electrolyte prepared by hot-pressing for all-solid-state Li-ion batteries. Solid State Ionics, 2019, 338, 1-4. | 1.3 | 12 |
| 254 | Thin-Film NASICON-Type Li _{1-x} Al _x Ti ₂ (PO ₄) ₃ Solid Electrolyte Directly Fabricated on a Graphite Substrate with a Hydrothermal Method Based on Different Al Sources. ACS Sustainable Chemistry and Engineering, 2019, 7, 10751-10762. | 3.2 | 19 |
| 255 | Nanostructures and Nanomaterials for Batteries. , 2019, , . | | 12 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 256 | High Rate and Stable Solid-State Lithium Metal Batteries Enabled by Electronic and Ionic Mixed Conducting Network Interlayers. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 16578-16585. | 4.0 | 17 |
| 257 | High Li ⁺ transference gel interface between solid-oxide electrolyte and cathode for quasi-solid lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 12244-12252. | 5.2 | 35 |
| 258 | Unitized Configuration Design of Thermally Stable Composite Polymer Electrolyte for Lithium Batteries Capable of Working Over a Wide Range of Temperatures. <i>Advanced Engineering Materials</i> , 2019, 21, 1900055. | 1.6 | 33 |
| 259 | Managing transport properties in composite electrodes/electrolytes for all-solid-state lithium-based batteries. <i>Molecular Systems Design and Engineering</i> , 2019, 4, 850-871. | 1.7 | 38 |
| 260 | Stabilizing Solid Electrolyte-Anode Interface in Li-Metal Batteries by Boron Nitride-Based Nanocomposite Coating. <i>Joule</i> , 2019, 3, 1510-1522. | 11.7 | 235 |
| 261 | Single-ion conducting artificial solid electrolyte interphase layers for dendrite-free and highly stable lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2019, 7, 13113-13119. | 5.2 | 66 |
| 262 | Mechanistic understanding and strategies to design interfaces of solid electrolytes: insights gained from transmission electron microscopy. <i>Journal of Materials Science</i> , 2019, 54, 10571-10594. | 1.7 | 14 |
| 263 | Electro-Chemo-Mechanical Issues at the Interfaces in Solid-State Lithium Metal Batteries. <i>Advanced Functional Materials</i> , 2019, 29, 1900950. | 7.8 | 124 |
| 264 | Influence of sintering temperature on conductivity and mechanical behavior of the solid electrolyte LATP. <i>Ceramics International</i> , 2019, 45, 14697-14703. | 2.3 | 43 |
| 265 | Recent Research on Strategies to Improve Ion Conduction in Alkali Metal-Ion Batteries. <i>Batteries and Supercaps</i> , 2019, 2, 403-427. | 2.4 | 32 |
| 266 | A new approach for synthesizing bulk-type all-solid-state lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 9748-9760. | 5.2 | 23 |
| 267 | Nanohybrid electrolytes for high-energy lithium-ion batteries: recent advances and future challenges. <i>Nanotechnology</i> , 2019, 30, 302002. | 1.3 | 25 |
| 268 | 3D Porous Cu Current Collectors Derived by Hydrogen Bubble Dynamic Template for Enhanced Li Metal Anode Performance. <i>Advanced Functional Materials</i> , 2019, 29, 1808468. | 7.8 | 130 |
| 269 | A polyacrylonitrile (PAN)-based double-layer multifunctional gel polymer electrolyte for lithium-sulfur batteries. <i>Journal of Membrane Science</i> , 2019, 582, 37-47. | 4.1 | 114 |
| 270 | Reducing the Interfacial Resistance in All-Solid-State Lithium Batteries Based on Oxide Ceramic Electrolytes. <i>ChemElectroChem</i> , 2019, 6, 2970-2983. | 1.7 | 41 |
| 271 | Polymer Electrolyte Glue: A Universal Interfacial Modification Strategy for All-Solid-State Li Batteries. <i>Nano Letters</i> , 2019, 19, 2343-2349. | 4.5 | 105 |
| 272 | Solid-state polymer electrolytes with in-built fast interfacial transport for secondary lithium batteries. <i>Nature Energy</i> , 2019, 4, 365-373. | 19.8 | 681 |
| 273 | Synthesis and multi-electrochromic properties of asymmetric structure polymers based on carbazole-EDOT and 2, 5-dithienylpyrrole derivatives. <i>Electrochimica Acta</i> , 2019, 305, 1-10. | 2.6 | 20 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 274 | Ceramic-Salt Composite Electrolytes from Cold Sintering. <i>Advanced Functional Materials</i> , 2019, 29, 1807872. | 7.8 | 72 |
| 275 | Nanofilm conductivity measurements reveal interfacial influence on ion transport in polymer electrolytes. <i>Molecular Systems Design and Engineering</i> , 2019, 4, 597-608. | 1.7 | 16 |
| 276 | Self-Suppression of Lithium Dendrite in All-Solid-State Lithium Metal Batteries with Poly(vinylidene fluoride) Overlayer. <i>ACS Applied Energy Materials</i> , 2019, 2, 298. | 11.1 | 298 |
| 277 | Facile Protection of Lithium Metal for All-Solid-State Batteries. <i>ChemistryOpen</i> , 2019, 8, 192-195. | 0.9 | 21 |
| 278 | Interfacial modification of Li/Garnet electrolyte by a lithiophilic and breathing interlayer. <i>Journal of Power Sources</i> , 2019, 419, 91-98. | 4.0 | 108 |
| 279 | Tuning Two Interfaces with Fluoroethylene Carbonate Electrolytes for High-Performance Li/LCO Batteries. <i>ACS Omega</i> , 2019, 4, 3220-3227. | 1.6 | 24 |
| 280 | Polynitroxide-grafted-graphene: a superior cathode for lithium ion batteries with enhanced charge hopping transportation. <i>Journal of Materials Chemistry A</i> , 2019, 7, 4438-4445. | 5.2 | 21 |
| 282 | Hybridizing poly(vinylidene fluoride-co-hexafluoropropylene) with Li _{6.5} La ₃ Zr _{1.5} Ta _{0.5} O ₁₂ as a lithium-ion electrolyte for solid state lithium metal batteries. <i>Chemical Engineering Journal</i> , 2019, 367, 230-238. | 6.6 | 127 |
| 283 | A nitrogen-containing all-solid-state hyperbranched polymer electrolyte for superior performance lithium batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6801-6808. | 5.2 | 40 |
| 284 | High electrochemical stability of a 3D cross-linked network PEO@nano-SiO ₂ composite polymer electrolyte for lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6832-6839. | 5.2 | 164 |
| 285 | Long Cycle Life Lithium Metal Batteries Enabled with Upright Lithium Anode. <i>Advanced Functional Materials</i> , 2019, 29, 1806752. | 7.8 | 78 |
| 286 | Polar polymer-solvent interaction derived favorable interphase for stable lithium metal batteries. <i>Energy and Environmental Science</i> , 2019, 12, 3319-3327. | 15.6 | 122 |
| 287 | Artificial SEI Transplantation: A Pathway to Enabling Lithium Metal Cycling in Water-Containing Electrolytes. <i>ACS Applied Energy Materials</i> , 2019, 2, 8912-8918. | 2.5 | 6 |
| 288 | Highly Adhesive Li-BN Nanosheet Composite Anode with Excellent Interfacial Compatibility for Solid-State Li Metal Batteries. <i>ACS Nano</i> , 2019, 13, 14549-14556. | 7.3 | 123 |
| 289 | Asymmetric Structure Design of Electrolytes with Flexibility and Lithium Dendrite-Suppression Ability for Solid-State Lithium Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 46783-46791. | 4.0 | 34 |
| 290 | Building Better Batteries in the Solid State: A Review. <i>Materials</i> , 2019, 12, 3892. | 1.3 | 168 |
| 291 | Self-Supporting Dendritic Copper Porous Film Inducing the Lateral Growth of Metallic Lithium for Highly Stable Li Metal Battery. <i>Journal of the Electrochemical Society</i> , 2019, 166, A4073-A4079. | 1.3 | 3 |
| 292 | A new approach to very high lithium salt content quasi-solid state electrolytes for lithium metal batteries using plastic crystals. <i>Journal of Materials Chemistry A</i> , 2019, 7, 25389-25398. | 5.2 | 25 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 293 | Topological polymer electrolyte containing poly(pinacol vinylboronate) segments composited with ceramic nanowires towards ambient-temperature superior performance all-solid-state lithium batteries. <i>Journal of Power Sources</i> , 2019, 413, 318-326. | 4.0 | 22 |
| 294 | Practical Challenges and Future Perspectives of All-Solid-State Lithium-Metal Batteries. <i>CheM</i> , 2019, 5, 753-785. | 5.8 | 595 |
| 295 | Effects of Fluorine Doping on Structural and Electrochemical Properties of $\text{Li}_{6.25}\text{Ga}_{0.25}\text{La}_3\text{Zr}_2\text{O}_{12}$ as Electrolytes for Solid-State Lithium Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 2042-2049. | 4.0 | 85 |
| 296 | Facile interfacial modification via in-situ ultraviolet solidified gel polymer electrolyte for high-performance solid-state lithium ion batteries. <i>Journal of Power Sources</i> , 2019, 409, 31-37. | 4.0 | 76 |
| 297 | A general, highly efficient, high temperature thermal pulse toward high performance solid state electrolyte. <i>Energy Storage Materials</i> , 2019, 17, 234-241. | 9.5 | 55 |
| 298 | Guiding Uniform Li Plating/Stripping through Lithium-Aluminum Alloying Medium for Long-Life Li Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1094-1099. | 7.2 | 287 |
| 299 | Guiding Uniform Li Plating/Stripping through Lithium-Aluminum Alloying Medium for Long-Life Li Metal Batteries. <i>Angewandte Chemie</i> , 2019, 131, 1106-1111. | 1.6 | 52 |
| 300 | Composite solid electrolytes for all-solid-state lithium batteries. <i>Materials Science and Engineering Reports</i> , 2019, 136, 27-46. | 14.8 | 311 |
| 301 | Development of an all-solid-state lithium battery by slurry-coating procedures using a sulfidic electrolyte. <i>Energy Storage Materials</i> , 2019, 17, 204-210. | 9.5 | 125 |
| 302 | Enhanced Interfacial Stability of Hybrid Electrolyte Lithium-Sulfur Batteries with a Layer of Multifunctional Polymer with Intrinsic Nanoporosity. <i>Advanced Functional Materials</i> , 2019, 29, 1805996. | 7.8 | 47 |
| 303 | Nanostructured Metal-Organic Framework (MOF)-Derived Solid Electrolytes Realizing Fast Lithium Ion Transportation Kinetics in Solid-State Batteries. <i>Small</i> , 2019, 15, e1804413. | 5.2 | 93 |
| 304 | Graphitic Carbon Nitride Induced Micro-Electric Field for Dendrite-Free Lithium Metal Anodes. <i>Advanced Energy Materials</i> , 2019, 9, 1803186. | 10.2 | 147 |
| 305 | Graphene Regulated Ceramic Electrolyte for Solid-State Sodium Metal Battery with Superior Electrochemical Stability. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 5064-5072. | 4.0 | 77 |
| 306 | Simultaneously Regulating Lithium Ion Flux and Surface Activity for Dendrite-Free Lithium Metal Anodes. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 5159-5167. | 4.0 | 33 |
| 307 | High electronic conductivity as the origin of lithium dendrite formation within solid electrolytes. <i>Nature Energy</i> , 2019, 4, 187-196. | 19.8 | 1,099 |
| 308 | $\text{Li}_{1.4}\text{Al}_{0.4}\text{Ti}_{1.6}(\text{PO}_4)_3$ nanoparticle-reinforced solid polymer electrolytes for all-solid-state lithium batteries. <i>Solid State Ionics</i> , 2019, 331, 89-95. | 1.3 | 84 |
| 309 | Gallium doped NASICON type $\text{LiTi}_2(\text{PO}_4)_3$ thin-film grown on graphite anode as solid electrolyte for all solid state lithium batteries. <i>Journal of Alloys and Compounds</i> , 2019, 775, 1147-1155. | 2.8 | 36 |
| 310 | Recent advances in $\text{Li}_{1+x}\text{Al}_x\text{Ti}_{2-x}(\text{PO}_4)_3$ solid-state electrolyte for safe lithium batteries. <i>Energy Storage Materials</i> , 2019, 19, 379-400. | 9.5 | 210 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 311 | Alkali Metal Anodes for Rechargeable Batteries. <i>CheM</i> , 2019, 5, 313-338. | 5.8 | 170 |
| 312 | Fabrication and electrochemical characteristics of NCM-based all-solid lithium batteries using nano-grade garnet Al-LLZO powder. <i>Journal of Industrial and Engineering Chemistry</i> , 2019, 71, 445-451. | 2.9 | 40 |
| 313 | Double-Layer Polymer Electrolyte for High-Voltage All-Solid-State Rechargeable Batteries. <i>Advanced Materials</i> , 2019, 31, e1805574. | 11.1 | 321 |
| 314 | Enhancing the ionic conductivity in a composite polymer electrolyte with ceramic nanoparticles anchored to charged polymer brushes. <i>Chinese Chemical Letters</i> , 2020, 31, 831-835. | 4.8 | 25 |
| 315 | Towards rational mechanical design of inorganic solid electrolytes for all-solid-state lithium ion batteries. <i>Energy Storage Materials</i> , 2020, 26, 313-324. | 9.5 | 114 |
| 316 | A supramolecular interaction strategy enabling high-performance all solid state electrolyte of lithium metal batteries. <i>Energy Storage Materials</i> , 2020, 25, 756-763. | 9.5 | 59 |
| 317 | Understanding and suppression strategies toward stable Li metal anode for safe lithium batteries. <i>Energy Storage Materials</i> , 2020, 25, 644-678. | 9.5 | 207 |
| 318 | Towards better Li metal anodes: Challenges and strategies. <i>Materials Today</i> , 2020, 33, 56-74. | 8.3 | 404 |
| 319 | Design Principles of the Anode-Electrolyte Interface for All Solid-State Lithium Metal Batteries. <i>Small Methods</i> , 2020, 4, 1900592. | 4.6 | 88 |
| 320 | Stabilizing Polymer-Lithium Interface in a Rechargeable Solid Battery. <i>Advanced Functional Materials</i> , 2020, 30, 1908047. | 7.8 | 59 |
| 321 | 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 |
| 322 | Boosting High-Rate Zinc-Storage Performance by the Rational Design of Mn ₂ O ₃ Nanoporous Architecture Cathode. <i>Nano-Micro Letters</i> , 2020, 12, 14. | 14.4 | 57 |
| 323 | Superlithiophilic graphene-silver enabling ultra-stable hosts for lithium metal anodes. <i>Inorganic Chemistry Frontiers</i> , 2020, 7, 897-904. | 3.0 | 7 |
| 324 | Genetic engineering of porous sulfur species with molecular target prevents host passivation in lithium sulfur batteries. <i>Energy Storage Materials</i> , 2020, 26, 65-72. | 9.5 | 31 |
| 325 | Dendrite-Free Lithium Plating Induced by In Situ Transferring Protection Layer from Separator. <i>Advanced Functional Materials</i> , 2020, 30, 1907020. | 7.8 | 43 |
| 326 | A sandwich-type composite polymer electrolyte for all-solid-state lithium metal batteries with high areal capacity and cycling stability. <i>Journal of Membrane Science</i> , 2020, 596, 117739. | 4.1 | 77 |
| 327 | Dendrite-free lithium metal and sodium metal batteries. <i>Energy Storage Materials</i> , 2020, 27, 522-554. | 9.5 | 151 |
| 328 | High Uptake and Fast Transportation of LiPF ₆ in a Porous Aromatic Framework for Solid-State Li-Ion Batteries. <i>Angewandte Chemie</i> , 2020, 132, 779-784. | 1.6 | 10 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 329 | Dual interface layers for solid-state Li metal battery with low interfacial resistance and small polarization based on garnet electrolyte. <i>Electrochimica Acta</i> , 2020, 330, 135352. | 2.6 | 24 |
| 330 | Tape-casting Li _{0.34} La _{0.56} TiO ₃ Ceramic Electrolyte Films Permit High Energy Density of Lithium-Metal Batteries. <i>Advanced Materials</i> , 2020, 32, e1906221. | 11.1 | 173 |
| 331 | High Uptake and Fast Transportation of LiPF ₆ in a Porous Aromatic Framework for Solid-State Li-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 769-774. | 7.2 | 36 |
| 332 | Approaching Practically Accessible Solid-State Batteries: Stability Issues Related to Solid Electrolytes and Interfaces. <i>Chemical Reviews</i> , 2020, 120, 6820-6877. | 23.0 | 891 |
| 333 | Advances in Artificial Layers for Stable Lithium Metal Anodes. <i>Chemistry - A European Journal</i> , 2020, 26, 4193-4203. | 1.7 | 36 |
| 334 | Emerging applications of atomic layer deposition for lithium-sulfur and sodium-sulfur batteries. <i>Energy Storage Materials</i> , 2020, 26, 513-533. | 9.5 | 36 |
| 335 | In Situ Growing Chromium Oxynitride Nanoparticles on Carbon Nanofibers to Stabilize Lithium Deposition for Lithium Metal Anodes. <i>Small</i> , 2020, 16, e2003827. | 5.2 | 21 |
| 336 | Processing Strategies to Improve Cell-Level Energy Density of Metal Sulfide Electrolyte-Based All-Solid-State Li Metal Batteries and Beyond. <i>ACS Energy Letters</i> , 2020, 5, 3468-3489. | 8.8 | 68 |
| 337 | A Review of Functional Separators for Lithium Metal Battery Applications. <i>Materials</i> , 2020, 13, 4625. | 1.3 | 84 |
| 338 | Reviewing the current status and development of polymer electrolytes for solid-state lithium batteries. <i>Energy Storage Materials</i> , 2020, 33, 188-215. | 9.5 | 205 |
| 339 | Current status and future perspectives of lithium metal batteries. <i>Journal of Power Sources</i> , 2020, 480, 228803. | 4.0 | 109 |
| 340 | Energy-dense Li metal anodes enabled by thin film electrolytes. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2020, 38, . | 0.9 | 6 |
| 341 | Polymers for Battery Applications—Active Materials, Membranes, and Binders. <i>Advanced Energy Materials</i> , 2021, 11, 2001984. | 10.2 | 75 |
| 342 | High Voltage Stable Polyoxalate Catholyte with Cathode Coating for All-Solid-State Li-Metal/NMC622 Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2002416. | 10.2 | 41 |
| 343 | Solid state polymer ionogel electrolyte for use in Li-ion batteries. <i>SPE Polymers</i> , 2020, 1, 55-65. | 1.4 | 5 |
| 344 | Interface Between Solid-State Electrolytes and Li-Metal Anodes: Issues, Materials, and Processing Routes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 47181-47196. | 4.0 | 62 |
| 345 | CuO-C modified glass fiber films with a mixed ion and electron-conducting scaffold for highly stable lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 21961-21967. | 5.2 | 6 |
| 346 | Optimisation of conductivity of PEO/PVDF-based solid polymer electrolytes in all-solid-state Li-ion batteries. <i>Materials Technology</i> , 2022, 37, 240-247. | 1.5 | 19 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 347 | Evaluation on hybrid ^{2D} electrolyte structure using the liquid electrolyte interlayer containing LiBH ₄ at Li ₇ La ₃ Zr ₂ O ₁₂ Li interface at high operating temperature. <i>Journal of Power Sources</i> , 2020, 478, 228751. | 4.0 | 1 |
| 348 | Recently advances and perspectives of anode-free rechargeable batteries. <i>Nano Energy</i> , 2020, 78, 105344. | 8.2 | 108 |
| 349 | High Polymerization Conversion and Stable High-Voltage Chemistry Underpinning an In Situ Formed Solid Electrolyte. <i>Chemistry of Materials</i> , 2020, 32, 9167-9175. | 3.2 | 81 |
| 350 | Developing high safety Li-metal anodes for future high-energy Li-metal batteries: strategies and perspectives. <i>Chemical Society Reviews</i> , 2020, 49, 5407-5445. | 18.7 | 264 |
| 351 | A New General Paradigm for Understanding and Preventing Li Metal Penetration through Solid Electrolytes. <i>Joule</i> , 2020, 4, 2599-2608. | 11.7 | 71 |
| 352 | An <i>in situ</i> solidifying strategy enabling high-voltage all-solid-state Li-metal batteries operating at room temperature. <i>Journal of Materials Chemistry A</i> , 2020, 8, 25217-25225. | 5.2 | 18 |
| 353 | Flexible, Synergistic Ceramic-Polymer Hybrid Solid-State Electrolyte for Secondary Lithium Metal Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 12709-12715. | 2.5 | 7 |
| 354 | Methods for Lithium Ion NASICON Preparation: From Solid-State Synthesis to Highly Conductive Glass-Ceramics. <i>Journal of Physical Chemistry C</i> , 2020, 124, 26518-26539. | 1.5 | 34 |
| 355 | Ultrathin Li _{6.75} La ₃ Zr _{1.75} Ta _{0.25} O ₁₂ -Based Composite Solid Electrolytes Laminated on Anode and Cathode Surfaces for Anode-free Lithium Metal Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 11713-11723. | 2.5 | 35 |
| 356 | Towards a high-performance garnet-based solid-state Li metal battery: A perspective on recent advances. <i>Journal of Power Sources</i> , 2020, 472, 228571. | 4.0 | 12 |
| 357 | Polymer electrolytes and interfaces toward solid-state batteries: Recent advances and prospects. <i>Energy Storage Materials</i> , 2020, 33, 26-54. | 9.5 | 123 |
| 358 | Stabilizing Liquid Electrolytes in a Porous PVDF Matrix Incorporated with Star Polymers with Linear PEG Arms and CycloPEG Cores. <i>Langmuir</i> , 2020, 36, 9616-9625. | 1.6 | 5 |
| 359 | Fast Li-ion transport and uniform Li-ion flux enabled by a double-layered polymer electrolyte for high performance Li metal battery. <i>Energy Storage Materials</i> , 2020, 32, 55-64. | 9.5 | 75 |
| 360 | 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 |
| 361 | Self-templated synthesis of uniform hollow spheres based on highly conjugated three-dimensional covalent organic frameworks. <i>Nature Communications</i> , 2020, 11, 5561. | 5.8 | 103 |
| 362 | A review of composite solid-state electrolytes for lithium batteries: fundamentals, key materials and advanced structures. <i>Chemical Society Reviews</i> , 2020, 49, 8790-8839. | 18.7 | 461 |
| 363 | Dendrite-Free lithium electrode enabled by graphene aerogels with gradient porosity. <i>Energy Storage Materials</i> , 2020, 33, 329-335. | 9.5 | 28 |
| 364 | Safe, superionic conductive and flexible polymer-in-plastic salts electrolytes for dendrite-free lithium metal batteries. <i>Energy Storage Materials</i> , 2020, 33, 442-451. | 9.5 | 22 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 365 | Structure Design of Cathode Electrodes for Solid-State Batteries: Challenges and Progress. <i>Small Structures</i> , 2020, 1, 2000042. | 6.9 | 73 |
| 366 | Inorganic/polymer hybrid layer stabilizing anode/electrolyte interfaces in solid-state Li metal batteries. <i>Nano Research</i> , 2020, 13, 3230-3234. | 5.8 | 32 |
| 367 | In Situ Curing Technology for Dual Ceramic Composed by Organic-Inorganic Functional Polymer Gel Electrolyte for Dendrite-Free and Robust Lithium-Metal Batteries. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000830. | 1.9 | 14 |
| 368 | Designing Solid-State Electrolytes through the Structural Modification of a High-Performing Ionic Liquid. <i>ChemElectroChem</i> , 2020, 7, 4118-4123. | 1.7 | 10 |
| 369 | Interface engineering of inorganic solid-state electrolytes for high-performance lithium metal batteries. <i>Energy and Environmental Science</i> , 2020, 13, 3780-3822. | 15.6 | 96 |
| 370 | Improving Interfacial Problems between the Cathode and Solid-State Electrolyte by Coating ETPTA-PEG onto the Surface of LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ . <i>International Journal of Electrochemical Science</i> , 2020, , 6330-6342. | 0.5 | 0 |
| 372 | Tuning the Anode-Electrolyte Interface Chemistry for Garnet-Based Solid-State Li Metal Batteries. <i>Advanced Materials</i> , 2020, 32, e2000030. | 11.1 | 156 |
| 373 | Enabling Solid-State Li Metal Batteries by In Situ Forming Ionogel Interlayers. <i>ACS Applied Energy Materials</i> , 2020, 3, 5712-5721. | 2.5 | 28 |
| 374 | Designing Polymeric Interphases for Stable Lithium Metal Deposition. <i>Nano Letters</i> , 2020, 20, 5749-5758. | 4.5 | 23 |
| 376 | A well-designed CoTiO ₃ coating for uncovering and manipulating interfacial compatibility between LiCoO ₂ and Li _{1.3} Al _{0.3} Ti _{1.7} (PO ₄) ₃ in high temperature zone. <i>Applied Surface Science</i> , 2020, 526, 146601. | 3.1 | 18 |
| 377 | Stable Lithium Metal Anode Enabled by 3D Soft Host. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 28337-28344. | 4.0 | 36 |
| 378 | Recently developed strategies to restrain dendrite growth of Li metal anodes for rechargeable batteries. <i>Rare Metals</i> , 2020, 39, 616-635. | 3.6 | 89 |
| 379 | Progress on Lithium Dendrite Suppression Strategies from the Interior to Exterior by Hierarchical Structure Designs. <i>Small</i> , 2020, 16, e2000699. | 5.2 | 63 |
| 380 | Fast lithium ion transport in solid polymer electrolytes from polysulfide-bridged copolymers. <i>Nano Energy</i> , 2020, 75, 104976. | 8.2 | 32 |
| 381 | Chemomechanical Failure Mechanism Study in NASICON-Type Li _{1.3} Al _{0.3} Ti _{1.7} (PO ₄) ₃ Solid-State Lithium Batteries. <i>Chemistry of Materials</i> , 2020, 32, 4998-5008. | 3.2 | 104 |
| 382 | Metal-organic frameworks for solid-state electrolytes. <i>Energy and Environmental Science</i> , 2020, 13, 2386-2403. | 15.6 | 182 |
| 383 | A dendrite-suppressed flexible polymer-in-ceramic electrolyte membrane for advanced lithium batteries. <i>Electrochimica Acta</i> , 2020, 353, 136604. | 2.6 | 12 |
| 384 | PEO-LITFSI-SiO ₂ -SN System Promotes the Application of Polymer Electrolytes in All-Solid-State Lithium-Ion Batteries. <i>ChemistryOpen</i> , 2020, 9, 713-718. | 0.9 | 28 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 385 | A Soft Lithiophilic Graphene Aerogel for Stable Lithium Metal Anode. <i>Advanced Functional Materials</i> , 2020, 30, 2002013. | 7.8 | 60 |
| 386 | Block Copolymer Electrolytes with Excellent Properties in a Wide Temperature Range. <i>ACS Applied Energy Materials</i> , 2020, 3, 6536-6543. | 2.5 | 16 |
| 387 | A Mixed Modified Layer Formed In Situ to Protect and Guide Lithium Plating/Stripping Behavior. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 31411-31418. | 4.0 | 23 |
| 388 | Toward real-time monitoring of lithium metal growth and dendrite formation surveillance for safe lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2020, 8, 7090-7099. | 5.2 | 11 |
| 389 | From Liquid- to Solid-State Batteries: Ion Transfer Kinetics of Heteroionic Interfaces. <i>Electrochemical Energy Reviews</i> , 2020, 3, 221-238. | 13.1 | 117 |
| 390 | 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 |
| 391 | Reducing interfacial resistance of a $\text{Li}_{1.5}\text{Al}_{0.5}\text{Ge}_{1.5}(\text{PO}_4)_3$ solid electrolyte/electrode interface by polymer interlayer protection. <i>RSC Advances</i> , 2020, 10, 10038-10045. | 1.7 | 27 |
| 392 | Interface Modification of lithium Metal Anode and Solid-state Electrolyte with Gel Electrolyte. <i>Journal of the Electrochemical Society</i> , 2020, 167, 070542. | 1.3 | 15 |
| 393 | Status and prospect of garnet/polymer solid composite electrolytes for all-solid-state lithium batteries. <i>Journal of Energy Chemistry</i> , 2020, 50, 154-177. | 7.1 | 169 |
| 394 | Garnet-Based Solid-State Lithium Fluoride Conversion Batteries Benefiting from Eutectic Interlayer of Superior Wettability. <i>ACS Energy Letters</i> , 2020, 5, 1167-1176. | 8.8 | 79 |
| 395 | Interfaces and Interphases in All-Solid-State Batteries with Inorganic Solid Electrolytes. <i>Chemical Reviews</i> , 2020, 120, 6878-6933. | 23.0 | 676 |
| 396 | Advanced Characterization Techniques for Interface in All-Solid-State Batteries. <i>Small Methods</i> , 2020, 4, 2000111. | 4.6 | 35 |
| 397 | LiFSI and LiDFBOP Dual-Salt Electrolyte Reinforces the Solid Electrolyte Interphase on a Lithium Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 33719-33728. | 4.0 | 65 |
| 398 | Enhancing the Interfacial Ionic Transport via <i>In Situ</i> 3D Composite Polymer Electrolytes for Solid-State Lithium Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 7200-7207. | 2.5 | 15 |
| 399 | Garnet-type solid-state electrolytes and interfaces in all-solid-state lithium batteries: progress and perspective. <i>Applied Materials Today</i> , 2020, 20, 100750. | 2.3 | 17 |
| 400 | Facilitating Interfacial Stability Via Bilayer Heterostructure Solid Electrolyte Toward High-Energy, Safe and Adaptable Lithium Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2000709. | 10.2 | 79 |
| 401 | Revisiting the strategies for stabilizing lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 13874-13895. | 5.2 | 54 |
| 402 | Polymer Template Synthesis of Flexible SiO_2 Nanofibers to Upgrade Composite Electrolytes. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 31439-31447. | 4.0 | 58 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 403 | Behind the Candelabra: A Facile Flame Vapor Deposition Method for Interfacial Engineering of Garnet Electrolyte To Enable Ultralong Cycling Solid-State Li ⁺ /FeF ₃ Conversion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 33729-33739. | 4.0 | 32 |
| 404 | Recent progress in all-solid-state lithium batteries: The emerging strategies for advanced electrolytes and their interfaces. Energy Storage Materials, 2020, 31, 401-433. | 9.5 | 107 |
| 405 | Stabilizing lithium metal anode by molecular beam epitaxy grown uniform and ultrathin bismuth film. Nano Energy, 2020, 76, 105068. | 8.2 | 46 |
| 406 | Design strategies for nonaqueous multivalent-ion and monovalent-ion battery anodes. Nature Reviews Materials, 2020, 5, 276-294. | 23.3 | 284 |
| 407 | Construct an Ultrathin Bismuth Buffer for Stable Solid-State Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2020, 12, 12793-12800. | 4.0 | 29 |
| 408 | Nonflammable Nitrile Deep Eutectic Electrolyte Enables High-Voltage Lithium Metal Batteries. Chemistry of Materials, 2020, 32, 3405-3413. | 3.2 | 145 |
| 409 | A Long Cycle Life, All-Solid-State Lithium Battery with a Ceramic-Polymer Composite Electrolyte. ACS Applied Energy Materials, 2020, 3, 2916-2924. | 2.5 | 73 |
| 410 | Overcoming the Interfacial Limitations Imposed by the Solid-Solid Interface in Solid-State Batteries Using Ionic Liquid-Based Interlayers. Small, 2020, 16, e2000279. | 5.2 | 75 |
| 411 | Towards high-performance solid-state Li-S batteries: from fundamental understanding to engineering design. Chemical Society Reviews, 2020, 49, 2140-2195. | 18.7 | 337 |
| 412 | A novel cross-linked nanocomposite solid-state electrolyte with super flexibility and performance for lithium metal battery. Nano Energy, 2020, 71, 104600. | 8.2 | 54 |
| 413 | Dendrite Suppression by a Polymer Coating: A Coarse-Grained Molecular Study. Advanced Functional Materials, 2020, 30, 1910138. | 7.8 | 49 |
| 414 | Challenges in Lithium Metal Anodes for Solid-State Batteries. ACS Energy Letters, 2020, 5, 922-934. | 8.8 | 322 |
| 415 | A glimpse on all-solid-state Li-ion battery (ASSLIB) performance based on novel solid polymer electrolytes: a topical review. Journal of Materials Science, 2020, 55, 6242-6304. | 1.7 | 68 |
| 416 | Shaping the Contact between Li Metal Anode and Solid-State Electrolytes. Advanced Functional Materials, 2020, 30, 1908701. | 7.8 | 44 |
| 417 | Biodegradable Bacterial Cellulose-Supported Quasi-Solid Electrolyte for Lithium Batteries. ACS Applied Materials & Interfaces, 2020, 12, 13950-13958. | 4.0 | 45 |
| 418 | Mechanism Study of Unsaturated Tripropargyl Phosphate as an Efficient Electrolyte Additive Forming Multifunctional Interphases in Lithium Ion and Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2020, 12, 10443-10451. | 4.0 | 47 |
| 419 | A 20 °C operating high capacity solid-state Li-S battery with an engineered carbon support cathode structure. Applied Materials Today, 2020, 19, 100585. | 2.3 | 11 |
| 420 | An ultra-long life, high-performance, flexible Li-CO ₂ battery based on multifunctional carbon electrocatalysts. Nano Energy, 2020, 71, 104595. | 8.2 | 80 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 421 | Polymeric Sulfur as a Li Ion Conductor. Nano Letters, 2020, 20, 2191-2196. | 4.5 | 15 |
| 422 | Interface engineering on cathode side for solid garnet batteries. Chemical Engineering Journal, 2020, 387, 124089. | 6.6 | 80 |
| 423 | Recent advances in the interface design of solid-state electrolytes for solid-state energy storage devices. Materials Horizons, 2020, 7, 1246-1278. | 6.4 | 46 |
| 424 | Progress and Perspective of Ceramic/Polymer Composite Solid Electrolytes for Lithium Batteries. Advanced Science, 2020, 7, 1903088. | 5.6 | 403 |
| 425 | High Voltage, Flexible and Low Cost All-Solid-State Lithium Metal Batteries with a Wide Working Temperature Range. ChemistrySelect, 2020, 5, 1214-1219. | 0.7 | 21 |
| 426 | On battery materials and methods. Materials Today Advances, 2020, 6, 100046. | 2.5 | 81 |
| 427 | In situ fluorinated solid electrolyte interphase towards long-life lithium metal anodes. Nano Research, 2020, 13, 430-436. | 5.8 | 49 |
| 428 | Efficient polysulfide trapping enabled by a polymer adsorbent in lithium-sulfur batteries. Electrochimica Acta, 2020, 336, 135693. | 2.6 | 16 |
| 429 | Stable Interface between Lithium and Electrolyte Facilitated by a Nanocomposite Protective Layer. Small Methods, 2020, 4, 1900751. | 4.6 | 33 |
| 430 | <i>In situ</i> thermally polymerized solid composite electrolytes with a broad electrochemical window for all-solid-state lithium metal batteries. Journal of Materials Chemistry A, 2020, 8, 3892-3900. | 5.2 | 59 |
| 431 | Solvent-Free Synthesis of Thin, Flexible, Nonflammable Garnet-Based Composite Solid Electrolyte for All-Solid-State Lithium Batteries. Advanced Energy Materials, 2020, 10, 1903376. | 10.2 | 284 |
| 432 | Microstructural and Electrochemical Properties of Al- and Ga-Doped $\text{Li}_{7-x}\text{La}_3\text{Zr}_2\text{O}_{12}$ Garnet Solid Electrolytes. ACS Applied Energy Materials, 2020, 3, 4708-4719. | 2.5 | 50 |
| 433 | Transition metal oxides as lithium-free cathodes for solid-state lithium metal batteries. Nano Energy, 2020, 74, 104867. | 8.2 | 25 |
| 434 | A Durable Gel Polymer Electrolyte with Excellent Cycling and Rate Performance for Enhanced Lithium Storage. ACS Applied Energy Materials, 2020, 3, 4906-4913. | 2.5 | 10 |
| 435 | Polymer Electrolyte Membrane with High Ionic Conductivity and Enhanced Interfacial Stability for Lithium Metal Battery. ACS Applied Materials & Interfaces, 2020, 12, 22710-22720. | 4.0 | 23 |
| 436 | Electrolytes and Interphases in Sodium-Based Rechargeable Batteries: Recent Advances and Perspectives. Advanced Energy Materials, 2020, 10, 2000093. | 10.2 | 254 |
| 437 | A novel de-coupling solid polymer electrolyte via semi-interpenetrating network for lithium metal battery. Energy Storage Materials, 2020, 29, 42-51. | 9.5 | 51 |
| 438 | Interface engineering of $\text{Li}_{1.3}\text{Al}_{0.3}\text{Ti}_{1.7}(\text{PO}_4)_3$ ceramic electrolyte via multifunctional interfacial layer for all-solid-state lithium batteries. Journal of Power Sources, 2020, 460, 228125. | 4.0 | 57 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 439 | Porous membrane with improved dendrite resistance for high-performance lithium metal-based battery. <i>Journal of Membrane Science</i> , 2020, 605, 118108. | 4.1 | 52 |
| 440 | Garnet-Type Solid-State Electrolytes: Materials, Interfaces, and Batteries. <i>Chemical Reviews</i> , 2020, 120, 4257-4300. | 23.0 | 655 |
| 441 | High-Safety All-Solid-State Lithium-Ion Battery Working at Ambient Temperature with In-Situ UV-Curing Polymer Electrolyte on the Electrode. <i>ChemElectroChem</i> , 2020, 7, 2599-2607. | 1.7 | 14 |
| 442 | Robust interface layers with redox shuttle reactions suppress the dendrite growth for stable solid-state Li metal batteries. <i>Journal of Energy Chemistry</i> , 2020, 51, 222-229. | 7.1 | 8 |
| 443 | Lithium Dendrite in All-Solid-State Batteries: Growth Mechanisms, Suppression Strategies, and Characterizations. <i>Matter</i> , 2020, 3, 57-94. | 5.0 | 334 |
| 444 | Recent Progress in Solid Electrolytes for Energy Storage Devices. <i>Advanced Functional Materials</i> , 2020, 30, 2000077. | 7.8 | 115 |
| 445 | High-performance lithium metal batteries with ultraconformal interfacial contacts of quasi-solid electrolyte to electrodes. <i>Energy Storage Materials</i> , 2020, 29, 149-155. | 9.5 | 57 |
| 446 | Garnet Solid Electrolyte for Advanced All-Solid-State Li Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2000648. | 10.2 | 182 |
| 447 | Advances in Composite Polymer Electrolytes for Lithium Batteries and Beyond. <i>Advanced Energy Materials</i> , 2021, 11, 2000802. | 10.2 | 162 |
| 448 | 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 |
| 449 | Tribute to John B. Goodenough: From Magnetism to Rechargeable Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2000773. | 10.2 | 11 |
| 450 | Understanding all solid-state lithium batteries through in situ transmission electron microscopy. <i>Materials Today</i> , 2021, 42, 137-161. | 8.3 | 64 |
| 451 | A Multilayer Ceramic Electrolyte for All-Solid-State Li Batteries. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 3781-3790. | 7.2 | 71 |
| 452 | Cryogenic engineering of solid polymer electrolytes for room temperature and 4V-class all-solid-state lithium batteries. <i>Chemical Engineering Journal</i> , 2021, 420, 127623. | 6.6 | 13 |
| 453 | Electrochemistry: Retrospect and Prospects. <i>Israel Journal of Chemistry</i> , 2021, 61, 120-151. | 1.0 | 2 |
| 454 | Structure Code for Advanced Polymer Electrolyte in Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2008208. | 7.8 | 77 |
| 455 | Solid-State Li-Metal Batteries: Challenges and Horizons of Oxide and Sulfide Solid Electrolytes and Their Interfaces. <i>Advanced Energy Materials</i> , 2021, 11, . | 10.2 | 312 |
| 456 | Interfacial Reactions in Inorganic All-Solid-State Lithium Batteries. <i>Batteries and Supercaps</i> , 2021, 4, 8-38. | 2.4 | 39 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 457 | Hybrid Li ⁺ ES pouch cell with a reinforced sulfide glass solid ⁺ state electrolyte film separator. International Journal of Applied Glass Science, 2021, 12, 124-134. | 1.0 | 7 |
| 458 | Asymmetric Polymer Electrolyte Constructed by Metal ⁺ Organic Framework for Solid ⁺ State, Dendrite ⁺ Free Lithium Metal Battery. Advanced Functional Materials, 2021, 31, 2007198. | 7.8 | 123 |
| 459 | 3Li ₂ S-2MoS ₂ filled composite polymer PVDF-HFP/LiODFB electrolyte with excellent interface performance for lithium metal batteries. Applied Surface Science, 2021, 536, 147794. | 3.1 | 15 |
| 460 | Surface modification of Ni foam for stable and dendrite-free lithium deposition. Chemical Engineering Journal, 2021, 405, 127022. | 6.6 | 32 |
| 461 | Beyond garnets, phosphates and phosphosulfides solid electrolytes: New ceramic perspectives for all solid lithium metal batteries. Journal of Power Sources, 2021, 482, 228949. | 4.0 | 59 |
| 462 | Hierarchical Composite ⁺ Solid ⁺ Electrolyte with High Electrochemical Stability and Interfacial Regulation for Boosting Ultra ⁺ Stable Lithium Batteries. Advanced Functional Materials, 2021, 31, . | 7.8 | 57 |
| 463 | Tuning a compatible interface with LLZTO integrated on cathode material for improving NCM811/LLZTO solid-state battery. Chemical Engineering Journal, 2021, 405, 127031. | 6.6 | 36 |
| 464 | Interfacial challenges towards stable Li metal anode. Nano Energy, 2021, 79, 105507. | 8.2 | 115 |
| 465 | Advanced electrolyte design for stable lithium metal anode: From liquid to solid. Nano Energy, 2021, 80, 105516. | 8.2 | 111 |
| 466 | Li-ion conductivity and stability of hot-pressed LiTa ₂ PO ₈ solid electrolyte for all-solid-state batteries. Journal of Materials Science, 2021, 56, 2425-2434. | 1.7 | 20 |
| 467 | Recent advances in organic-inorganic composite solid electrolytes for all-solid-state lithium batteries. Energy Storage Materials, 2021, 34, 388-416. | 9.5 | 131 |
| 468 | Research progress on gel polymer electrolytes for lithium-sulfur batteries. Journal of Energy Chemistry, 2021, 56, 420-437. | 7.1 | 59 |
| 469 | Ion-Exchange Materials for Membrane Capacitive Deionization. ACS ES&T Water, 2021, 1, 217-239. | 2.3 | 56 |
| 470 | Kinetic-matching between electrodes and electrolyte enabling solid-state sodium-ion capacitors with improved voltage output and ultra-long cyclability. Chemical Engineering Journal, 2021, 421, 127832. | 6.6 | 6 |
| 471 | A superior stable interlayer for dendrite-free solid-state lithium metal batteries. Chemical Engineering Journal, 2021, 421, 127727. | 6.6 | 20 |
| 472 | Electro-chemo-mechanics of lithium in solid state lithium metal batteries. Energy and Environmental Science, 2021, 14, 602-642. | 15.6 | 95 |
| 473 | Regulating lithium deposition via bifunctional regular-random cross-linking network solid polymer electrolyte for Li metal batteries. Journal of Power Sources, 2021, 484, 229186. | 4.0 | 28 |
| 474 | Solid Electrolytes for High ⁺ Temperature Stable Batteries and Supercapacitors. Advanced Energy Materials, 2021, 11, 2002869. | 10.2 | 64 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 475 | A Multilayer Ceramic Electrolyte for All-Solid-State Li Batteries. <i>Angewandte Chemie</i> , 2021, 133, 3825-3834. | 1.6 | 13 |
| 476 | 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 |
| 477 | Recent advancements of functional gel polymer electrolytes for rechargeable lithium-metal batteries. <i>Materials Chemistry Frontiers</i> , 2021, 5, 5211-5232. | 3.2 | 22 |
| 478 | Recent advances in separator engineering for effective dendrite suppression of Li-metal anodes. <i>Nano Select</i> , 2021, 2, 993-1010. | 1.9 | 22 |
| 479 | The role of polymers in lithium solid-state batteries with inorganic solid electrolytes. <i>Journal of Materials Chemistry A</i> , 2021, 9, 18701-18732. | 5.2 | 47 |
| 480 | Organoboron-Containing Polymer Electrolytes for High-Performance Lithium Batteries. <i>Advanced Functional Materials</i> , 2021, 31, 2008632. | 7.8 | 28 |
| 481 | Lithium-ion transport in inorganic active fillers used in PEO-based composite solid electrolyte sheets. <i>RSC Advances</i> , 2021, 11, 31855-31864. | 1.7 | 15 |
| 482 | Interfacial engineering facilitating robust $\text{Li}_{6.35}\text{Ga}_{0.15}\text{La}_3\text{Zr}_{1.8}\text{Nb}_{0.2}\text{O}_{12}$ for all-solid-state lithium batteries. <i>Sustainable Energy and Fuels</i> , 2021, 5, 2077-2084. | 2.5 | 10 |
| 483 | Interfacial chemistry in anode-free batteries: challenges and strategies. <i>Journal of Materials Chemistry A</i> , 2021, 9, 7396-7406. | 5.2 | 65 |
| 484 | Surface-modified boron nitride as a filler to achieve high thermal stability of polymer solid-state lithium-metal batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 20530-20543. | 5.2 | 30 |
| 485 | Research progress on the interfaces of solid-state lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9481-9505. | 5.2 | 19 |
| 486 | Organic and Organic-Inorganic Composite Solid Electrolytes. <i>New Developments in NMR</i> , 2021, , 323-363. | 0.1 | 0 |
| 487 | Status and prospect of <i>in situ</i> and <i>operando</i> characterization of solid-state batteries. <i>Energy and Environmental Science</i> , 2021, 14, 4672-4711. | 15.6 | 44 |
| 488 | Functional polymers in electrolyte optimization and interphase design for lithium metal anodes. <i>Journal of Materials Chemistry A</i> , 2021, 9, 13388-13401. | 5.2 | 43 |
| 489 | A composite solid electrolyte with an asymmetric ceramic framework for dendrite-free all-solid-state Li metal batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 9665-9674. | 5.2 | 30 |
| 490 | Integrated interface between composite electrolyte and cathode with low resistance enables ultra-long cycle-lifetime in solid-state lithium-metal batteries. <i>Science China Chemistry</i> , 2021, 64, 673-680. | 4.2 | 16 |
| 491 | CNTs/LiV3O8/Y2O3 Composites with Enhanced Electrochemical Performances as Cathode Materials for Rechargeable Solid-State Lithium Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 8219-8228. | 4.0 | 1 |
| 492 | Favorable Electrochemical Performance of LiMn2O4/LiFePO4 Composite Electrodes Attributed to Composite Solid Electrolytes for All-Solid-State Lithium Batteries. <i>Langmuir</i> , 2021, 37, 2349-2354. | 1.6 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 493 | Solid Polymer Electrolytes with High Conductivity and Transference Number of Li Ions for Li-Based Rechargeable Batteries. <i>Advanced Science</i> , 2021, 8, 2003675. | 5.6 | 172 |
| 494 | Solid-State Lithium Metal Batteries with Extended Cycling Enabled by Dynamic Adaptive Solid-State Interfaces. <i>Advanced Materials</i> , 2021, 33, e2008084. | 11.1 | 61 |
| 495 | Isotropic Sulfurized Polyacrylonitrile Interlayer with Homogeneous Na ⁺ Flux Dynamics for Solid-State Na Metal Batteries. <i>Advanced Energy Materials</i> , 2021, 11, 2003469. | 10.2 | 31 |
| 496 | Interface Aspects in All-Solid-State Li-Based Batteries Reviewed. <i>Advanced Energy Materials</i> , 2021, 11, 2003939. | 10.2 | 66 |
| 497 | Progress and perspective of interface design in garnet electrolyte-based all-solid-state batteries. , 2021, 3, 385-409. | | 28 |
| 498 | Formation of Excellent Cathode/Electrolyte Interface with UV-Cured Polymer Electrolyte through In Situ Strategy. <i>Journal of the Electrochemical Society</i> , 2021, 168, 020511. | 1.3 | 10 |
| 499 | Critical Current Density in Solid-State Lithium Metal Batteries: Mechanism, Influences, and Strategies. <i>Advanced Functional Materials</i> , 2021, 31, 2009925. | 7.8 | 239 |
| 500 | Dendrites in Solid-State Batteries: Ion Transport Behavior, Advanced Characterization, and Interface Regulation. <i>Advanced Energy Materials</i> , 2021, 11, 2003250. | 10.2 | 69 |
| 501 | Design of High-Voltage Stable Hybrid Electrolyte with an Ultrahigh Li Transference Number. <i>ACS Energy Letters</i> , 0, , 1315-1323. | 8.8 | 50 |
| 502 | Enhancing Interfacial Contact in Solid-State Batteries with a Gradient Composite Solid Electrolyte. <i>Small</i> , 2021, 17, e2006578. | 5.2 | 32 |
| 503 | Lithium-Sulfur Batteries Employing Hybrid-electrolyte Structure with Li ₇ La ₃ Zr ₂ O ₁₂ at Middle Operating Temperature: Effect of Li Salts Concentration on Electrochemical Performance. <i>Electrochemistry</i> , 2021, 89, 197-203. | 0.6 | 3 |
| 504 | Bifunctional In Situ Polymerized Interface for Stable LAGP-Based Lithium Metal Batteries. <i>Advanced Materials Interfaces</i> , 2021, 8, 2100072. | 1.9 | 22 |
| 505 | Garnet-Based Solid-State Li Batteries: From Materials Design to Battery Architecture. <i>ACS Energy Letters</i> , 2021, 6, 1920-1941. | 8.8 | 66 |
| 506 | In-Situ Intermolecular Interaction in Composite Polymer Electrolyte for Ultralong Life Quasi-Solid-State Lithium Metal Batteries. <i>Angewandte Chemie</i> , 2021, 133, 12223-12230. | 1.6 | 20 |
| 507 | Stable Cycling of Solid-State Lithium Metal Batteries at Room Temperature via Reducing Electrode/Electrolyte Interfacial Resistance. <i>Journal of Materials Engineering and Performance</i> , 2021, 30, 4543-4551. | 1.2 | 2 |
| 508 | Lithiophilic 3D VN@N-rGO as a Multifunctional Interlayer for Dendrite-Free and Ultrastable Lithium-Metal Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 20125-20136. | 4.0 | 32 |
| 509 | In-Situ Intermolecular Interaction in Composite Polymer Electrolyte for Ultralong Life Quasi-Solid-State Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 12116-12123. | 7.2 | 97 |
| 510 | Helical Polyurethane-Initiated Unique Microphase Separation Architecture for Highly Efficient Lithium Transfer and Battery Performance of a Poly(ethylene oxide)-Based All-Solid-State Electrolyte. <i>ACS Applied Energy Materials</i> , 2021, 4, 4772-4785. | 2.5 | 16 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 511 | Regulating the Solvation Sheath of Li Ions by Using Hydrogen Bonds for Highly Stable Lithium-metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 10871-10879. | 7.2 | 89 |
| 512 | Strategies to Boost Ionic Conductivity and Interface Compatibility of Inorganic - Organic Solid Composite Electrolytes. <i>Energy Storage Materials</i> , 2021, 36, 291-308. | 9.5 | 82 |
| 513 | Regulating the Solvation Sheath of Li Ions by Using Hydrogen Bonds for Highly Stable Lithium-metal Anodes. <i>Angewandte Chemie</i> , 2021, 133, 10966-10974. | 1.6 | 11 |
| 514 | Enhanced electrochemical performance of garnet-based solid-state lithium metal battery with modified anodic and cathodic interfaces. <i>Chinese Journal of Chemical Engineering</i> , 2022, 44, 140-147. | 1.7 | 1 |
| 515 | Recent advances in the interfacial stability, design and in situ characterization of garnet-type Li ₇ La ₃ Zr ₂ O ₁₂ solid-state electrolytes based lithium metal batteries. <i>Ceramics International</i> , 2021, 47, 13280-13290. | 2.3 | 19 |
| 516 | In-situ formation of LiF-rich composite interlayer for dendrite-free all-solid-state lithium batteries. <i>Chemical Engineering Journal</i> , 2021, 411, 128534. | 6.6 | 34 |
| 517 | Insight into bulk charge transfer of lithium metal anodes by synergism of nickel seeding and LiF-Li ₃ N-Li ₂ S co-doped interphase. <i>Energy Storage Materials</i> , 2021, 37, 491-500. | 9.5 | 13 |
| 518 | Polyethylene Oxide-Based Solid-State Composite Polymer Electrolytes for Rechargeable Lithium Batteries. <i>ACS Applied Energy Materials</i> , 2021, 4, 4581-4601. | 2.5 | 59 |
| 519 | Construction of sticky ionic conductive buffer layer for inorganic electrolyte toward stable all-solid-state lithium metal batteries. <i>Journal of Power Sources</i> , 2021, 495, 229765. | 4.0 | 9 |
| 520 | Tailoring inorganic-polymer composites for the mass production of solid-state batteries. <i>Nature Reviews Materials</i> , 2021, 6, 1003-1019. | 23.3 | 409 |
| 521 | Review on Computational-Assisted to Experimental Synthesis, Interfacial Perspectives of Garnet-Solid Electrolytes for All-Solid-State Lithium Batteries. <i>Journal of the Electrochemical Society</i> , 2021, 168, 060529. | 1.3 | 13 |
| 522 | Highly Stable Quasi-Solid-State Lithium Metal Batteries: Reinforced Li _{1.3} Al _{0.3} Ti _{1.7} (PO ₄) ₃ /Li Interface by a Protection Interlayer. <i>Advanced Energy Materials</i> , 2021, 11, 2101339. | 10.2 | 62 |
| 523 | Unlocking the Failure Mechanism of Solid State Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2022, 12, 2100748. | 10.2 | 129 |
| 524 | Stable interface of a high-energy solid-state lithium metal battery via a sandwich composite polymer electrolyte. <i>Journal of Power Sources</i> , 2021, 496, 229835. | 4.0 | 23 |
| 525 | Improving the Interfacial Contact between Li ₇ La ₃ Zr ₂ O ₁₂ and Lithium Anode by Depositing a Film of Silver. <i>Journal of the Electrochemical Society</i> , 2021, 168, 060515. | 1.3 | 6 |
| 526 | Flexible, Mechanically Robust, Solid-State Electrolyte Membrane with Conducting Oxide-Enhanced 3D Nanofiber Networks for Lithium Batteries. <i>Nano Letters</i> , 2021, 21, 7070-7078. | 4.5 | 72 |
| 527 | New Amorphous Oxy-Sulfide Solid Electrolyte Material: Anion Exchange, Electrochemical Properties, and Lithium Dendrite Suppression via <i>In Situ</i> Interfacial Modification. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 26841-26852. | 4.0 | 18 |
| 528 | Modification strategies of Li ₇ La ₃ Zr ₂ O ₁₂ ceramic electrolyte for high-performance solid-state batteries. <i>Tungsten</i> , 2021, 3, 260-278. | 2.0 | 17 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 529 | 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 |
| 530 | Recent Advances of Composite Solid-State Electrolytes for Lithium-Based Batteries. <i>Energy & Fuels</i> , 2021, 35, 11118-11140. | 2.5 | 16 |
| 531 | Progress and perspective of $\text{Li}_x\text{Al}_x\text{Ti}_2\text{PO}_4$ ceramic electrolyte in lithium batteries. <i>Information Materials</i> , 2021, 3, 1195-1217. | 2.5 | 16 |
| 532 | Recent Advances in Application of Ionic Liquids in Electrolyte of Lithium Ion Batteries. <i>Journal of Energy Storage</i> , 2021, 40, 102659. | 3.9 | 80 |
| 533 | Thermally Stable and Nonflammable Electrolytes for Lithium Metal Batteries: Progress and Perspectives. <i>Small Science</i> , 2021, 1, 2100058. | 5.8 | 81 |
| 534 | Modified $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ (LLZO) and LLZO-polymer composites for solid-state lithium batteries. <i>Energy Storage Materials</i> , 2021, 39, 108-129. | 9.5 | 81 |
| 535 | Fracture behavior of solid electrolyte LATP material based on micro-pillar splitting method. <i>Journal of the European Ceramic Society</i> , 2021, 41, 5240-5247. | 2.8 | 8 |
| 536 | Structural Design of Composite Polymer Electrolytes for Solid-state Lithium Metal Batteries. <i>ChemNanoMat</i> , 2021, 7, 1177-1187. | 1.5 | 11 |
| 537 | A flame retarded polymer-based composite solid electrolyte improved by natural polysaccharides. <i>Composites Communications</i> , 2021, 26, 100774. | 3.3 | 39 |
| 538 | Accelerated Electrochemical Investigation of Li Plating Efficiency as Key Parameter for Li Metal Batteries Utilizing a Scanning Droplet Cell. <i>ChemElectroChem</i> , 2021, 8, 3143-3149. | 1.7 | 3 |
| 539 | Advanced Electrolytes Enabling Safe and Stable Rechargeable Li-Metal Batteries: Progress and Prospects. <i>Advanced Functional Materials</i> , 2021, 31, 2105253. | 7.8 | 102 |
| 540 | Fabrication of Elastic Cyclodextrin-Based Triblock Polymer Electrolytes for All-Solid-State Lithium Metal Batteries. <i>ACS Applied Energy Materials</i> , 2021, 4, 9402-9411. | 2.5 | 16 |
| 541 | Lithium solid-state batteries: State-of-the-art and challenges for materials, interfaces and processing. <i>Journal of Power Sources</i> , 2021, 502, 229919. | 4.0 | 92 |
| 542 | The Electrolyte Diffusion Limitation Impact on the Performance of Polymer Composite Electrodes for Solid-State Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2021, 168, 090553. | 1.3 | 0 |
| 543 | Halide Electrolyte Li_3InCl_6 -Based All-Solid-State Lithium Batteries With Slurry-Coated $\text{LiNi}_0.8\text{Co}_0.1\text{Mn}_0.1\text{O}_2$ Composite Cathode: Effect of Binders. <i>Frontiers in Materials</i> , 2021, 8, . | 1.2 | 9 |
| 544 | Heterogeneous electrolyte membranes enabling double-side stable interfaces for solid lithium batteries. <i>Journal of Energy Chemistry</i> , 2021, 60, 162-168. | 7.1 | 40 |
| 545 | Garnet-type solid electrolyte: Advances of ionic transport performance and its application in all-solid-state batteries. <i>Journal of Advanced Ceramics</i> , 2021, 10, 933-972. | 8.9 | 64 |
| 546 | Improving Contact Impedance via Electrochemical Pulses Applied to Lithium-Solid Electrolyte Interface in Solid-State Batteries. <i>ACS Energy Letters</i> , 2021, 6, 3669-3675. | 8.8 | 40 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 547 | Recent progress of asymmetric solid-state electrolytes for lithium/sodium-metal batteries. <i>EnergyChem</i> , 2021, 3, 100058. | 10.1 | 47 |
| 548 | Defect-engineered bilayer MOFs separator for high stability lithium-sulfur batteries. <i>Journal of Alloys and Compounds</i> , 2021, 874, 159917. | 2.8 | 16 |
| 549 | Architecting with a flexible and modified polyethylene oxide coating for ambient-temperature solid-state Li metal batteries. <i>Surface and Coatings Technology</i> , 2021, 421, 127389. | 2.2 | 6 |
| 550 | In-situ construction of stable cathode/Li interfaces simultaneously via different electron density azo compounds for solid-state lithium metal batteries. <i>Energy Storage Materials</i> , 2021, 40, 394-401. | 9.5 | 20 |
| 551 | In situ observation of cracking and self-healing of solid electrolyte interphases during lithium deposition. <i>Science Bulletin</i> , 2021, 66, 1754-1763. | 4.3 | 16 |
| 552 | Challenges and progresses of lithium-metal batteries. <i>Chemical Engineering Journal</i> , 2021, 420, 129739. | 6.6 | 67 |
| 553 | Ionic Liquid Functionalized Gel Polymer Electrolytes for Stable Lithium Metal Batteries. <i>Angewandte Chemie</i> , 2021, 133, 22973-22978. | 1.6 | 19 |
| 554 | Progress in Solid Polymer Electrolytes for Lithium-ion Batteries and Beyond. <i>Small</i> , 2022, 18, e2103617. | 5.2 | 107 |
| 555 | Coupling a Three-Dimensional Nanopillar and Robust Film to Guide Li-Ion Flux for Dendrite-Free Lithium Metal Anodes. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 45416-45425. | 4.0 | 8 |
| 556 | Strategies for Dendrite-Free lithium metal Anodes: A Mini-review. <i>Journal of Electroanalytical Chemistry</i> , 2021, 897, 115499. | 1.9 | 20 |
| 557 | Ionic Liquid Functionalized Gel Polymer Electrolytes for Stable Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 22791-22796. | 7.2 | 58 |
| 558 | PEO based polymer in plastic crystal electrolytes for room temperature high-voltage lithium metal batteries. <i>Nano Energy</i> , 2021, 88, 106205. | 8.2 | 88 |
| 559 | Sandwich composite PEO@(Er _{0.5} Nb _{0.5}) _{0.05} Ti _{0.95} O ₂ @cellulose electrolyte with high cycling stability for all-solid-state lithium metal batteries. <i>Journal of Alloys and Compounds</i> , 2021, 877, 160307. | 2.8 | 13 |
| 560 | 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 |
| 561 | Functional polymers for lithium metal batteries. <i>Progress in Polymer Science</i> , 2021, 122, 101453. | 11.8 | 39 |
| 562 | Sn/C composite anodes for bulk-type all-solid-state batteries. <i>Electrochimica Acta</i> , 2021, 395, 139104. | 2.6 | 10 |
| 563 | Natural "relief" for lithium dendrites: Tailoring protein configurations for long-life lithium metal anodes. <i>Energy Storage Materials</i> , 2021, 42, 22-33. | 9.5 | 22 |
| 564 | Local electric field effect of montmorillonite in solid polymer electrolytes for lithium metal batteries. <i>Nano Energy</i> , 2021, 90, 106490. | 8.2 | 38 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 565 | Ultrathin polymer-in-ceramic and ceramic-in-polymer bilayer composite solid electrolyte membrane for high-voltage lithium metal batteries. <i>Journal of Membrane Science</i> , 2021, 640, 119840. | 4.1 | 37 |
| 566 | A blended gel polymer electrolyte for dendrite-free lithium metal batteries. <i>Applied Surface Science</i> , 2021, 569, 150899. | 3.1 | 18 |
| 567 | Dual-interface reinforced flexible solid garnet batteries enabled by in-situ solidified gel polymer electrolytes. <i>Nano Energy</i> , 2021, 90, 106498. | 8.2 | 74 |
| 568 | A Janus $\text{Li}_{1.5}\text{Al}_{0.5}\text{Ge}_{1.5}(\text{PO}_4)_3$ with high critical current density for high-voltage lithium batteries. <i>Chemical Engineering Journal</i> , 2022, 429, 132506. | 6.6 | 10 |
| 569 | Improved ionic conductivity and Li dendrite suppression of PVDF-based solid electrolyte membrane by LLZO incorporation and mechanical reinforcement. <i>Ionics</i> , 2021, 27, 1101-1111. | 1.2 | 31 |
| 570 | Interrelated interfacial issues between a $\text{Li}_{7-x}\text{La}_3\text{Zr}_2\text{O}_{12}$ -based garnet electrolyte and Li anode in the solid-state lithium battery: a review. <i>Journal of Materials Chemistry A</i> , 2021, 9, 5952-5979. | 5.2 | 50 |
| 571 | Review on Li Deposition in Working Batteries: From Nucleation to Early Growth. <i>Advanced Materials</i> , 2021, 33, e2004128. | 11.1 | 205 |
| 572 | Cathode/gel polymer electrolyte integration design based on continuous composition and preparation technique for high performance lithium ion batteries. <i>RSC Advances</i> , 2021, 11, 3854-3862. | 1.7 | 10 |
| 573 | Enhancing the interface stability of $\text{Li}_{1.3}\text{Al}_{0.3}\text{Ti}_{1.7}(\text{PO}_4)_3$ and lithium metal by amorphous $\text{Li}_{1.5}\text{Al}_{0.5}\text{Ge}_{1.5}(\text{PO}_4)_3$ modification. <i>Ionics</i> , 2020, 26, 3815-3821. | 1.2 | 15 |
| 574 | Practical development and challenges of garnet-structured $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ 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 |
| 575 | Rapid, high-temperature microwave soldering toward a high-performance cathode/electrolyte interface. <i>Energy Storage Materials</i> , 2020, 30, 385-391. | 9.5 | 51 |
| 576 | Cell failures of all-solid-state lithium metal batteries with inorganic solid electrolytes: Lithium dendrites. <i>Energy Storage Materials</i> , 2020, 33, 309-328. | 9.5 | 63 |
| 577 | Reasonable Design of High-Energy-Density Solid-State Lithium-Metal Batteries. <i>Matter</i> , 2020, 2, 805-815. | 5.0 | 130 |
| 578 | Critical interface between inorganic solid-state electrolyte and sodium metal. <i>Materials Today</i> , 2020, 41, 200-218. | 8.3 | 62 |
| 579 | Designing solid-state electrolytes for safe, energy-dense batteries. <i>Nature Reviews Materials</i> , 2020, 5, 229-252. | 23.3 | 1,167 |
| 580 | A self-smoothing Li-metal anode enabled <i>via</i> a hybrid interface film. <i>Journal of Materials Chemistry A</i> , 2020, 8, 12045-12054. | 5.2 | 24 |
| 581 | Synthesis and interface modification of oxide solid-state electrolyte-based all-solid-state lithium-ion batteries: Advances and perspectives. <i>Functional Materials Letters</i> , 2021, 14, 2130002. | 0.7 | 12 |
| 582 | Electrochemical Formation in Super-Concentrated Phosphonium Based Ionic Liquid Electrolyte Using Symmetric Li-Metal Coin Cells. <i>Journal of the Electrochemical Society</i> , 2020, 167, 120526. | 1.3 | 16 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 583 | Mechanical failures in solid-state lithium batteries and their solution. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 226201. | 0.2 | 5 |
| 584 | Impact of the Solidâ€Electrolyte Interface on Dendrite Formation: A Case Study Based on Zinc Metal Electrodes. ChemElectroChem, 2022, 9, . | 1.7 | 1 |
| 585 | Localization of electrons within interlayer stabilizes NASICON-type solid-state electrolyte. Materials Today Energy, 2021, 22, 100875. | 2.5 | 9 |
| 586 | Solid electrolyte-electrode interface based on buffer therapy in solid-state lithium batteries. International Journal of Minerals, Metallurgy and Materials, 2021, 28, 1584-1602. | 2.4 | 13 |
| 587 | Electrolyte Development for Solid-state Lithium Batteries. Inorganic Materials Series, 2019, , 100-135. | 0.5 | 0 |
| 588 | High-Energy All-Solid-State Lithium-Metal Batteries by Nanomaterial Designs. , 2019, , 205-262. | | 0 |
| 589 | Recent Advancements in High-Performance Solid Electrolytes for Li-ion Batteries: Towards a Solid Future. Current Nanoscience, 2020, 16, 507-533. | 0.7 | 0 |
| 590 | An effective artificial layer boosting high-performance all-solid-state lithium batteries with high coulombic efficiency. Journal of Materiomics, 2022, 8, 257-265. | 2.8 | 2 |
| 591 | Anode interface in all-solid-state lithium-metal batteries: Challenges and strategies. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 228805. | 0.2 | 5 |
| 592 | Solid polymer electrolyte with in-situ generated fast Li+ conducting network enable high voltage and dendrite-free lithium metal battery. Energy Storage Materials, 2022, 44, 93-103. | 9.5 | 77 |
| 593 | Interconnected cathode-electrolyte double-layer enabling continuous Li-ion conduction throughout solid-state Li-S battery. Energy Storage Materials, 2022, 44, 136-144. | 9.5 | 24 |
| 594 | Optimization for polyethylene glycol/garnet oxide composite electrolyte membrane for solid-state batteries. Chemical Engineering Journal, 2022, 430, 132803. | 6.6 | 7 |
| 595 | Research progress of interface problems and optimization of garnet-type solid electrolyte. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 228806. | 0.2 | 4 |
| 596 | Three-dimensional porous ceramic framework reinforcing composite electrolyte. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 228203. | 0.2 | 4 |
| 597 | Physical issues in solid garnet batteries. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 228804. | 0.2 | 4 |
| 598 | Quasi-Solid-State Lithium Metal Batteries Using the LiNi _{0.8} Co _{0.1} Mn _{0.1} O ₂ â€Li _{1+x} Al _x Ti _{1-x} Composite Positive Electrode. ACS Applied Materials & Interfaces, 2021, 13, 53810-53817. | | |
| 599 | Ionic Liquid and Polymer Coated Garnet Solid Electrolytes for Highâ€Energy Solidâ€State Lithium Metal Batteries. Energy Technology, 2022, 10, . | 1.8 | 5 |
| 600 | Lithiophilic NiF ₂ coating inducing LiF-rich solid electrolyte interphase by a novel NF ₃ plasma treatment for highly stable Li metal anode. Electrochimica Acta, 2022, 402, 139561. | 2.6 | 9 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 601 | Recent advances of composite electrolytes for solid-state Li batteries. <i>Journal of Energy Chemistry</i> , 2022, 67, 524-548. | 7.1 | 47 |
| 602 | Pushing the boundaries of lithium battery research with atomistic modelling on different scales. <i>Progress in Energy</i> , 2022, 4, 012002. | 4.6 | 12 |
| 603 | Powerful qua-functional electrolyte additive for lithium metal batteries. <i>Green Energy and Environment</i> , 2022, 7, 361-364. | 4.7 | 5 |
| 604 | Electrochemical Dealloying-Enabled 3D Hierarchical Porous Cu Current Collector of Lithium Metal Anodes for Dendrite Growth Inhibition. <i>ACS Applied Energy Materials</i> , 2021, 4, 13903-13911. | 2.5 | 12 |
| 605 | SnF ₂ -Catalyzed Formation of Polymerized Dioxolane as Solid Electrolyte and its Thermal Decomposition Behavior. <i>Angewandte Chemie</i> , 2022, 134, . | 1.6 | 6 |
| 606 | One-Pot Synthesis of Polyester-Based Linear and Graft Copolymers for Solid Polymer Electrolytes. <i>CCS Chemistry</i> , 2022, 4, 3134-3149. | 4.6 | 12 |
| 607 | Extensively Reducing Interfacial Resistance by the Ultrathin Pt Layer between the Garnet-Type Solid-State Electrolyte and Li-Metal Anode. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 56181-56190. | 4.0 | 13 |
| 608 | Lithium-Sulfur Batteries Meet Electrospinning: Recent Advances and the Key Parameters for High Gravimetric and Volume Energy Density. <i>Advanced Science</i> , 2022, 9, e2103879. | 5.6 | 98 |
| 609 | SnF ₂ -Catalyzed Formation of Polymerized Dioxolane as Solid Electrolyte and its Thermal Decomposition Behavior. <i>Angewandte Chemie - International Edition</i> , 2022, 61, . | 7.2 | 42 |
| 610 | Cyclodextrin-Integrated PEO-Based Composite Solid Electrolytes for High-Rate and Ultrastable All-Solid-State Lithium Batteries. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 57380-57391. | 4.0 | 29 |
| 611 | LLCZN/PEO/LiPF ₆ Composite Solid-State Electrolyte for Safe Energy Storage Application. <i>Batteries</i> , 2022, 8, 3. | 2.1 | 8 |
| 612 | Understanding the lithium dendrites growth in garnet-based solid-state lithium metal batteries. <i>Journal of Power Sources</i> , 2022, 521, 230921. | 4.0 | 24 |
| 613 | Interfaces in all solid state Li-metal batteries: A review on instabilities, stabilization strategies, and scalability. <i>Energy Storage Materials</i> , 2022, 45, 969-1001. | 9.5 | 36 |
| 614 | Electrochemical impedance characteristics at various conditions for commercial solid-liquid electrolyte lithium-ion batteries: Part 1. experiment investigation and regression analysis. <i>Energy</i> , 2022, 242, 122880. | 4.5 | 25 |
| 615 | Porous membrane host-derived in-situ polymer electrolytes with double-stabilized electrode interface enable long cycling lithium metal batteries. <i>Chemical Engineering Journal</i> , 2022, 433, 134471. | 6.6 | 40 |
| 616 | Designing Advanced Liquid Electrolytes for Alkali Metal Batteries: Principles, Progress, and Perspectives. <i>Energy and Environmental Materials</i> , 2023, 6, . | 7.3 | 19 |
| 617 | Composite polymer electrolytes reinforced by a three-dimensional polyacrylonitrile/Li _{0.33} La _{0.55} TiO ₃ nanofiber framework for room-temperature dendrite-free all-solid-state lithium metal battery. <i>Rare Metals</i> , 2022, 41, 1870-1879. | 3.6 | 48 |
| 618 | Enhancing the polymer electrolyte-Li metal interface on high-voltage solid-state batteries with Li-based additives inspired by the surface chemistry of Li ₇ La ₃ Zr ₂ O ₁₂ . <i>Journal of Materials Chemistry A</i> , 2022, 10, 2352-2361. | 5.2 | 10 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 619 | Regulating Interfacial Li ⁺ Ion Transport via an Integrated Corrugated 3D Skeleton in Solid Composite Electrolyte for All-Solid-State Lithium Metal Batteries. <i>Advanced Science</i> , 2022, 9, e2104506. | 5.6 | 18 |
| 620 | Lithium-Ion-Conducting Ceramics-Coated Separator for Stable Operation of Lithium Metal-Based Rechargeable Batteries. <i>Materials</i> , 2022, 15, 322. | 1.3 | 9 |
| 621 | Highly conjugated three-dimensional covalent organic frameworks with enhanced Li-ion conductivity as solid-state electrolytes for high-performance lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2022, 10, 8761-8771. | 5.2 | 33 |
| 622 | Constructing effective interface for room-temperature Beta-Al ₂ O ₃ based sodium metal batteries. <i>Journal of Power Sources</i> , 2022, 523, 231034. | 4.0 | 8 |
| 623 | Suppressing lithium dendrites within inorganic solid-state electrolytes. <i>Cell Reports Physical Science</i> , 2022, 3, 100706. | 2.8 | 30 |
| 624 | An in situ-formed high lithiophilic solid lubricant interface layer for garnet-based solid-state lithium metal batteries. <i>Electrochimica Acta</i> , 2022, 407, 139767. | 2.6 | 6 |
| 625 | A review of interfaces within solid-state electrolytes: fundamentals, issues and advancements. <i>Chemical Engineering Journal</i> , 2022, 437, 135179. | 6.6 | 27 |
| 626 | Integrated Solid-State Li-Metal Batteries Mediated by 3D Mixed Ionic & Electronic Anodes and Deformable Melt Interphase. <i>SSRN Electronic Journal</i> , 0, , . | 0.4 | 0 |
| 627 | Recent advances in lithium-ion battery separators with enhanced safety. , 2022, , 269-304. | | 3 |
| 628 | Stabilizing Solid Electrolyte/Li Interface Via Polymer-in-Salt Artificial Protection Layer for High-Rate and Stable Lithium Metal Batteries. <i>SSRN Electronic Journal</i> , 0, , . | 0.4 | 0 |
| 629 | Interface modification of NASICON-type Li-ion conducting ceramic electrolytes: a critical evaluation. <i>Materials Advances</i> , 2022, 3, 3055-3069. | 2.6 | 14 |
| 630 | Scalable, Ultrathin, and High-Temperature-Resistant Solid Polymer Electrolytes for Energy-Dense Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2022, 12, . | 10.2 | 132 |
| 631 | Controlling Li deposition below the interface. <i>EScience</i> , 2022, 2, 47-78. | 25.0 | 110 |
| 632 | Preparation of waterborne polyurethane based on different polyols: the effect of structure and crystallinity. <i>Journal of Polymer Research</i> , 2022, 29, 1. | 1.2 | 4 |
| 633 | Elastic Binder for High-Performance Sulfide-Based All-Solid-State Batteries. <i>ACS Energy Letters</i> , 2022, 7, 1374-1382. | 8.8 | 27 |
| 635 | Influence of lithium metal anode coated with a composite quasi-solid electrolyte on stabilizing the interface of all-solid-state battery. <i>Ionics</i> , 2022, 28, 2649-2660. | 1.2 | 2 |
| 636 | Stabilizing the Li _{1.3} Al _{0.3} Ti _{1.7} (PO ₄) ₃ Li Interface for High Efficiency and Long Lifespan Quasi-Solid-State Lithium Metal Batteries. <i>ChemSusChem</i> , 2022, 15, . | 3.6 | 11 |
| 637 | Review of modification strategies in emerging inorganic solid-state electrolytes for lithium, sodium, and potassium batteries. <i>Joule</i> , 2022, 6, 543-587. | 11.7 | 90 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 638 | Editors'™ Choice" A Fruitful Transition of John B. Goodenough from Oxford to the University of Texas at Austin. <i>Journal of the Electrochemical Society</i> , 2022, 169, 034520. | 1.3 | 1 |
| 639 | Thin Yet Strong Composite Polymer Electrolyte Reinforced by Nanofibrous Membrane for Flexible Dendrite-free Solid-state Lithium Metal Batteries. <i>Advanced Energy and Sustainability Research</i> , 0, , 2100193. | 2.8 | 1 |
| 640 | CuO Nanofilm-Covered Cu Microcone Coating for a Long Cycle Li Metal Anode by In Situ Formed Li_2O . <i>ACS Applied Energy Materials</i> , 2022, 5, 3773-3782. | 2.5 | 13 |
| 641 | Approaching Practically Accessible and Environmentally Adaptive Sodium Metal Batteries with High Loading Cathodes through In Situ Interlock Interface. <i>Advanced Functional Materials</i> , 2022, 32, . | 7.8 | 21 |
| 642 | Asymmetric polymer solid electrolyte constructed by dopamine-modified $\text{Li}_{1.4}\text{Al}_{0.4}\text{Ti}_{1.6}(\text{PO}_4)_3$ for dendrite-free lithium battery. <i>Ionics</i> , 2022, 28, 2693-2700. | 1.2 | 2 |
| 643 | An insulating material in a structured host enables sustainable formation of a granular Li metal for highly durable Li metal battery. <i>Journal of Power Sources</i> , 2022, 527, 231170. | 4.0 | 5 |
| 644 | High-Energy Batteries: Beyond Lithium-Ion and Their Long Road to Commercialisation. <i>Nano-Micro Letters</i> , 2022, 14, 94. | 14.4 | 79 |
| 646 | Electrochemical stability of a NASICON solid electrolyte from the lithium aluminum germanium phosphate (LAGP) series. <i>Solid State Ionics</i> , 2022, 378, 115888. | 1.3 | 13 |
| 647 | Self-exfoliated covalent organic framework nano-mesh enabled regular charge distribution for highly stable lithium metal battery. <i>Energy Storage Materials</i> , 2022, 47, 376-385. | 9.5 | 32 |
| 648 | Multiphase ceramic nanofibers with super-elasticity from ~ 196 to 1600 Å, f. <i>Nano Today</i> , 2022, 44, 101455. | 6.2 | 11 |
| 649 | Recent advances of newly designed in-situ polymerized electrolyte for high energy density/safe solid Li metal batteries. <i>Current Opinion in Electrochemistry</i> , 2022, 33, 100962. | 2.5 | 6 |
| 650 | Integrated solid-state Li-metal batteries mediated by 3D mixed ion-electron conductive anodes and deformable molten interphase. <i>Chemical Engineering Journal</i> , 2022, 442, 136227. | 6.6 | 7 |
| 651 | Hollow spherical organic polymer artificial layer enabled stable Li metal anode. <i>Chemical Engineering Journal</i> , 2022, 442, 136155. | 6.6 | 9 |
| 652 | Gradient trilayer solid-state electrolyte with excellent interface compatibility for high-voltage lithium batteries. <i>Chemical Engineering Journal</i> , 2022, 441, 136077. | 6.6 | 22 |
| 653 | Tough Polymer Electrolyte with an Intrinsically Stabilized Interface with Li Metal for All-Solid-State Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2021, 125, 26339-26347. | 1.5 | 10 |
| 654 | Separators Based on the Dynamic Tip-Occupying Electrostatic Shield Effect for Dendrite-free Lithium-metal Batteries. <i>Advanced Sustainable Systems</i> , 2022, 6, 2100386. | 2.7 | 1 |
| 655 | Remedies to Avoid Failure Mechanisms of Lithium-Metal Anode in Li-Ion Batteries. <i>Inorganics</i> , 2022, 10, 5. | 1.2 | 4 |
| 656 | Interplay between Mechanical and Electrochemical Properties of Block Copolymer Electrolytes and its Effect on Stability against Lithium Metal Electrodes. <i>Journal of the Electrochemical Society</i> , 2021, 168, 120546. | 1.3 | 1 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 657 | Bistrifluoroacetamide-Activated Double-Layer Composite Solid Electrolyte for Dendrite-Free Lithium Metal Battery. <i>Advanced Materials Interfaces</i> , 2022, 9, . | 1.9 | 10 |
| 658 | Novel fast lithium-ion conductor LiTa ₂ PO ₈ enhances the performance of poly(ethylene oxide)-based polymer electrolytes in all-solid-state lithium metal batteries. <i>Chinese Chemical Letters</i> , 2022, 33, 4037-4042. | 4.8 | 12 |
| 659 | Multilayered Solid Polymer Electrolytes with Sacrificial Coating for Suppressing Lithium Dendrite Growth. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 484-491. | 4.0 | 4 |
| 660 | Recent advances of Li ₇ La ₃ Zr ₂ O ₁₂ -based solid-state lithium batteries towards high energy density. <i>Energy Storage Materials</i> , 2022, 49, 299-338. | 9.5 | 30 |
| 661 | A multifunctional nano filler for solid polymer electrolyte toward stable cycling for lithium-metal anodes in lithium-sulfur batteries. <i>Chemical Engineering Journal</i> , 2022, 444, 136328. | 6.6 | 25 |
| 662 | Vertically Heterostructured Solid Electrolytes for Lithium Metal Batteries. <i>Advanced Functional Materials</i> , 2022, 32, . | 7.8 | 23 |
| 663 | Boron Nitride-Based Release Agent Coating Stabilizes Li _{1.3} Al _{0.3} Ti _{1.7} (PO ₄) ₃ /Li Interface with Superior Lean-Lithium Electrochemical Performance and Thermal Stability. <i>Advanced Functional Materials</i> , 2022, 32, . | 7.8 | 27 |
| 664 | Design and developments in ceramic materials for electrochemical applications. , 2022, , 353-377. | | 0 |
| 665 | Defect-Abundant Commercializable 3d Carbon Papers for Fabricating Composite Li Anode with High Loading and Long Life. <i>SSRN Electronic Journal</i> , 0, , . | 0.4 | 0 |
| 666 | Stabilizing Solid Electrolyte/Li Interface Via Polymer-in-Salt Artificial Protection Layer for High-Rate and Stable Lithium Metal Batteries. <i>SSRN Electronic Journal</i> , 0, , . | 0.4 | 0 |
| 667 | Engineering a High-Voltage Durable Cathode/Electrolyte Interface for All-Solid-State Lithium Metal Batteries via <i>In Situ</i> Electropolymerization. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 21018-21027. | 4.0 | 15 |
| 668 | Understanding and modifications on lithium deposition in lithium metal batteries. <i>Rare Metals</i> , 2022, 41, 2800-2818. | 3.6 | 18 |
| 669 | Recent progress in the use of polyanions as solid electrolytes. <i>New Carbon Materials</i> , 2022, 37, 358-370. | 2.9 | 3 |
| 670 | A liquid cathode/anode based solid-state lithium-sulfur battery. <i>Electrochimica Acta</i> , 2022, 421, 140456. | 2.6 | 3 |
| 671 | Interface science in polymer-based composite solid electrolytes in lithium metal batteries. <i>SusMat</i> , 2022, 2, 264-292. | 7.8 | 21 |
| 672 | Advanced inorganic/polymer hybrid electrolytes for all-solid-state lithium batteries. <i>Journal of Advanced Ceramics</i> , 2022, 11, 835-861. | 8.9 | 45 |
| 673 | Recent Developments in Electrolyte Materials for Rechargeable Batteries. <i>Materials Horizons</i> , 2022, , 369-415. | 0.3 | 1 |
| 674 | Defect-abundant commercializable 3D carbon papers for fabricating composite Li anode with high loading and long life. <i>Energy Storage Materials</i> , 2022, 50, 407-416. | 9.5 | 4 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 675 | Distinct Functional Janus Interfaces for Dendrite-Free Li _{1.3} Al _{0.3} Ti _{1.7} (PO ₄) ₃ -Based Lithium Metal Batteries. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 676 | Electrochemical Modified Solid Electrolyte with a Li-Al-O Interface Layer for Improved Room-Temperature Rate Performance of Solid-State Lithium Batteries. ACS Applied Energy Materials, 2022, 5, 7115-7123. | 2.5 | 4 |
| 677 | Advances, challenges, and environmental impacts in metal-air battery electrolytes. Materials Today Energy, 2022, 28, 101064. | 2.5 | 18 |
| 678 | Water-Based Fabrication of a Li ₇ La ₃ Zr ₂ O ₁₂ LiFePO ₄ Solid-State Battery—Toward Green Battery Production. ACS Sustainable Chemistry and Engineering, 2022, 10, 7613-7624. | 3.2 | 13 |
| 679 | Enhancing the Electrochemical Stability of Lithium Anode by Introducing Lithiophilic Three-Dimensional Framework Li ₂ Cu ₃ Zn. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 680 | Reactivity at the Electrode-Electrolyte Interfaces in Li-Ion and Gel Electrolyte Lithium Batteries for LiNi _{0.6} Mn _{0.2} Co _{0.2} O ₂ with Different Particle Sizes. ACS Applied Materials & Interfaces, 0, , . | 4.0 | 6 |
| 681 | Metallic Sodium Anodes for Advanced Sodium Metal Batteries: Progress, Challenges and Perspective. Chemical Record, 2022, 22, . | 2.9 | 10 |
| 682 | Solid Composite Electrolytes for Solid-State Alkali Metal Batteries. ACS Symposium Series, 0, , 395-423. | 0.5 | 1 |
| 683 | Designing Solid-State Composite Electrolytes. ACS Symposium Series, 0, , 425-440. | 0.5 | 0 |
| 684 | Stabilizing solid electrolyte/Li interface via polymer-in-salt artificial protection layer for high-rate and stable lithium metal batteries. Chemical Engineering Journal, 2022, 449, 137682. | 6.6 | 10 |
| 685 | In Situ Construction of a Liquid Film Interface with Fast Ion Transport for Solid Sodium-Ion Batteries. Nano Letters, 2022, 22, 5214-5220. | 4.5 | 12 |
| 686 | Minimizing the interfacial resistance for a solid-state lithium battery running at room temperature. Chemical Engineering Journal, 2022, 448, 137740. | 6.6 | 27 |
| 687 | In-situ construction of dual lithium-ion migration channels in polymer electrolytes for lithium metal batteries. Chemical Engineering Journal, 2022, 448, 137661. | 6.6 | 11 |
| 688 | A solid-state approach to a lithium-sulfur battery. , 2022, , 441-488. | | 2 |
| 689 | Materials, electrodes and electrolytes advances for next-generation lithium-based anode-free batteries. Oxford Open Materials Science, 2022, 2, . | 0.5 | 5 |
| 690 | Solid-State Nanocomposite Ionogel Electrolyte with In-Situ Formed Ionic Channels for Uniform Ion-Flux and Suppressing Dendrite Formation in Lithium Metal Batteries. SSRN Electronic Journal, 0, , . | 0.4 | 0 |
| 691 | Cold-Starting All-Solid-State Batteries from Room Temperature by Thermally Modulated Current Collector in Sub-Minute. Advanced Materials, 2022, 34, . | 11.1 | 5 |
| 692 | An asymmetric bilayer polymer-ceramic solid electrolyte for high-performance sodium metal batteries. Journal of Energy Chemistry, 2022, 74, 18-25. | 7.1 | 21 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 693 | Are Polymer-Based Electrolytes Ready for High-Voltage Lithium Battery Applications? An Overview of Degradation Mechanisms and Battery Performance. <i>Advanced Energy Materials</i> , 2022, 12, . | 10.2 | 70 |
| 694 | Insights on polymeric materials for the optimization of high-capacity anodes. <i>Composites Part B: Engineering</i> , 2022, 243, 110131. | 5.9 | 4 |
| 695 | Increasing the performance of all-solid-state Li batteries by infiltration of Li-ion conducting polymer into LFP-LATP composite cathode. <i>Journal of Power Sources</i> , 2022, 543, 231822. | 4.0 | 10 |
| 696 | High-performance gel electrolyte for enhanced interface compatibility and lithium metal stability in high-voltage lithium battery. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 651, 129665. | 2.3 | 13 |
| 697 | Stabilize garnet/electrode interface via low-melting polymer layer in solid-state lithium metal battery. <i>Electrochimica Acta</i> , 2022, 429, 140907. | 2.6 | 2 |
| 698 | 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 |
| 699 | Interface reconstruction via lithium thermal reduction to realize a long life all-solid-state battery. <i>Energy Storage Materials</i> , 2022, 52, 1-9. | 9.5 | 12 |
| 700 | A functional additive to in-situ construct stable cathode and anode interfaces for all-solid-state lithium-sulfur batteries. <i>Chemical Engineering Journal</i> , 2022, 450, 138208. | 6.6 | 14 |
| 701 | Lithium-ion conductive glass-ceramic electrolytes enable safe and practical Li batteries. <i>Materials Today Energy</i> , 2022, 29, 101118. | 2.5 | 8 |
| 702 | Engineered interfaces between perovskite La _{2/3} Li ₃ TiO ₃ electrolyte and Li metal for solid-state batteries. <i>Frontiers in Chemistry</i> , 0, 10, . | 1.8 | 1 |
| 703 | Active Control of Interface Dynamics in NASICON-Based Rechargeable Solid-State Sodium Batteries. <i>Nano Letters</i> , 2022, 22, 7187-7194. | 4.5 | 26 |
| 705 | Recent advances of anode protection in solid-state lithium metal batteries. <i>Energy Storage Materials</i> , 2022, 52, 130-160. | 9.5 | 26 |
| 706 | Safe solid-state PEO/TPU/LLZO nano network polymer composite gel electrolyte for solid state lithium batteries. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2022, 653, 130040. | 2.3 | 14 |
| 707 | Strategies for rational design of polymer-based solid electrolytes for advanced lithium energy storage applications. <i>Energy Storage Materials</i> , 2022, 52, 430-464. | 9.5 | 44 |
| 708 | A room-temperature ionic liquid-based superionic conductive polymer electrolyte with high thermal stability for long-cycle-life lithium batteries. <i>Colloid and Polymer Science</i> , 2022, 300, 1281-1289. | 1.0 | 1 |
| 709 | Ion coordination to improve ionic conductivity in polymer electrolytes for high performance solid-state batteries. <i>Nano Energy</i> , 2022, 103, 107763. | 8.2 | 9 |
| 710 | Effect of a layer-by-layer assembled ultra-thin film on the solid electrolyte and Li interface. <i>Nanoscale Advances</i> , 0, , . | 2.2 | 2 |
| 711 | A Review on Design Considerations in Polymer and Polymer Composite Solid-State Electrolytes for Solid Li Batteries. <i>SSRN Electronic Journal</i> , 0, , . | 0.4 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 712 | Improvement Strategies toward Stable Lithium-Metal Anodes for High-Energy Batteries. Batteries and Supercaps, 2022, 5, . | 2.4 | 4 |
| 713 | Engineering Ferroelectric Interlayer between $\text{Li}_3\text{Al}_2\text{O}_7$ and Lithium Metal for Stable Solid-State Batteries Operating at Room Temperature. Energy and Environmental Materials, 2023, 6, . | 7.3 | 5 |
| 714 | Te doping effect on the structure and ionic conductivity of LiTa_2PO_8 solid electrolyte. Ceramics International, 2023, 49, 1980-1986. | 2.3 | 3 |
| 715 | Hybrid Ionogel Electrolytes for Advanced Lithium Secondary Batteries: Developments and Challenges. Chemistry - an Asian Journal, 2022, 17, . | 1.7 | 5 |
| 716 | Construction of Polyvinylidene Fluoride Buffer Layers for $\text{Li}_{1.3}\text{Al}_{0.3}\text{Ti}_{1.7}(\text{PO}_4)_3$ Solid-State Electrolytes toward Stable Dendrite-Free Lithium Metal Batteries. Industrial & Engineering Chemistry Research, 2022, 61, 14891-14897. | 1.8 | 10 |
| 717 | Interfaces in Solid-State Batteries: Challenges and Design Strategies. Advances in Material Research and Technology, 2022, , 193-218. | 0.3 | 0 |
| 718 | Molten Salt Driven Conversion Reaction Enabling Lithiophilic and Air-Stable Garnet Surface for Solid-State Lithium Batteries. Advanced Functional Materials, 2022, 32, . | 7.8 | 44 |
| 719 | NASICON solid electrolyte coated by indium film for all-solid-state Li-metal batteries. Tungsten, 2022, 4, 316-322. | 2.0 | 15 |
| 720 | Trade-offs between ion-conducting and mechanical properties: The case of polyacrylate electrolytes. , 2023, 5, . | | 10 |
| 721 | Rational Design of LLZO/Polymer Solid Electrolytes for Solid-State Batteries. Chemistry - an Asian Journal, 2022, 17, . | 1.7 | 5 |
| 722 | Distinct functional Janus interfaces for dendrite-free $\text{Li}_{1.3}\text{Al}_{0.3}\text{Ti}_{1.7}(\text{PO}_4)_3$ -based lithium metal batteries. Electrochimica Acta, 2022, 436, 141395. | 2.6 | 7 |
| 723 | Solid-state nanocomposite ionogel electrolyte with in-situ formed ionic channels for uniform ion-flux and suppressing dendrite formation in lithium metal batteries. Energy Storage Materials, 2023, 54, 40-50. | 9.5 | 17 |
| 724 | A review on design considerations in polymer and polymer composite solid-state electrolytes for solid Li batteries. Journal of Power Sources, 2023, 553, 232267. | 4.0 | 18 |
| 725 | Electrochemical Performance of Highly Ion-Conductive Polymer Electrolyte Membranes Based on Polyoxide-tetrathiol Conetwork for Lithium Metal Batteries. ACS Applied Polymer Materials, 2022, 4, 9417-9429. | 2.0 | 4 |
| 726 | Deformable lithium-ion batteries for wearable and implantable electronics. Applied Physics Reviews, 2022, 9, . | 5.5 | 22 |
| 727 | Related Applications of Solid-State Electrolytes in Lithium-Sulfur Batteries. Advances in Analytical Chemistry, 2022, 12, 341-352. | 0.1 | 0 |
| 728 | A solid-state lithium metal battery with extended cycling and rate performance using a low-melting alloy interface. Inorganic Chemistry Frontiers, 2023, 10, 1011-1017. | 3.0 | 5 |
| 729 | Enabling a compatible Li/garnet interface via a multifunctional additive of sulfur. Journal of Materials Chemistry A, 2022, 11, 251-258. | 5.2 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 730 | Restraining lithium dendrite formation in all-solid-state Li-metal batteries via the surface modification of the ceramic filler. <i>Sustainable Materials and Technologies</i> , 2023, 35, e00548. | 1.7 | 1 |
| 731 | A robust solid electrolyte interphase enabled by solvate ionic liquid for high-performance sulfide-based all-solid-state lithium metal batteries. <i>Nano Research</i> , 2023, 16, 8411-8416. | 5.8 | 5 |
| 732 | Metal-air batteries: progress and perspective. <i>Science Bulletin</i> , 2022, 67, 2449-2486. | 4.3 | 61 |
| 734 | Recent Progress of Polymer Electrolytes for Solid-State Lithium Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , 2023, 11, 1253-1277. | 3.2 | 15 |
| 735 | Low-Cost Zinc-Alginate-Based Hydrogel-Polymer Electrolytes for Dendrite-Free Zinc-Ion Batteries with High Performances and Prolonged Lifetimes. <i>Polymers</i> , 2023, 15, 212. | 2.0 | 7 |
| 736 | In Situ Solidified Gel Polymer Electrolytes for Stable Solid-State Lithium Batteries at High Temperatures. <i>Batteries</i> , 2023, 9, 28. | 2.1 | 8 |
| 737 | Challenges of lithium dendrite formation in solid-state batteries. , 2023, , 95-127. | | 0 |
| 738 | MOFs Containing Solid-State Electrolytes for Batteries. <i>Advanced Science</i> , 2023, 10, . | 5.6 | 22 |
| 739 | Influencing Factors on Li-ion Conductivity and Interfacial Stability of Solid Polymer Electrolytes, Exemplified by Polycarbonates, Polyoxalates and Polymalonates. <i>Angewandte Chemie</i> , 2023, 135, . | 1.6 | 3 |
| 740 | Stabilizing the NASICON Solid Electrolyte in an Inert Atmosphere as a Function of Physical Properties and Sintering Conditions for Solid-State Battery Fabrication. <i>ACS Applied Energy Materials</i> , 2023, 6, 1197-1207. | 2.5 | 2 |
| 741 | Ionic Conduction in Polymer-Based Solid Electrolytes. <i>Advanced Science</i> , 2023, 10, . | 5.6 | 66 |
| 742 | Fundamentals of the Cathode-Electrolyte Interface in All-solid-state Lithium Batteries. <i>ChemSusChem</i> , 2023, 16, . | 3.6 | 1 |
| 743 | Structurally integrated asymmetric polymer electrolyte with stable Janus interface properties for high-voltage lithium metal batteries. <i>Journal of Colloid and Interface Science</i> , 2023, 638, 595-605. | 5.0 | 3 |
| 744 | A Review of Solid Electrolyte Interphase (SEI) and Dendrite Formation in Lithium Batteries. <i>Electrochemical Energy Reviews</i> , 2023, 6, . | 13.1 | 30 |
| 745 | Single and multilayer composite electrolytes for enhanced Li-ion conductivity with restricted polysulfide diffusion for lithium-sulfur battery. <i>Materials Today Energy</i> , 2023, 33, 101274. | 2.5 | 5 |
| 746 | Thin Li _{1.3} Al _{0.3} Ti _{1.7} (PO ₄) ₃ -based composite solid electrolyte with a reinforced interface of in situ formed poly(1,3-dioxolane) for lithium metal batteries. <i>Journal of Colloid and Interface Science</i> , 2023, 644, 53-63. | 5.0 | 6 |
| 747 | Influencing Factors on Li-ion Conductivity and Interfacial Stability of Solid Polymer Electrolytes, Exemplified by Polycarbonates, Polyoxalates and Polymalonates. <i>Angewandte Chemie - International Edition</i> , 2023, 62, . | 7.2 | 19 |
| 748 | Comprehensive review on gum-based electrolytes for energy applications: current status and future projection. <i>Materials Today Chemistry</i> , 2023, 28, 101373. | 1.7 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 749 | Zero-temperature-coefficient of capacitance in BaTiO_3/PI composite films using paraffin as barrier layer. <i>Polymer Composites</i> , 2023, 44, 2757-2765. | 2.3 | 3 |
| 750 | A Review of Polymer-based Solid-State Electrolytes for Lithium-Metal Batteries: Structure, Kinetic, Interface Stability, and Application. <i>Batteries and Supercaps</i> , 2023, 6, . | 2.4 | 14 |
| 751 | Armoring lithium metal anode with soft-rigid gradient interphase toward high-capacity and long-life all-solid-state battery. <i>Green Energy and Environment</i> , 2023, , . | 4.7 | 2 |
| 752 | Boosting the $\text{Li} \text{LAGP}$ interfacial compatibility with trace nonflammable all-fluorinated electrolyte: The role of solid electrolyte interphase. <i>EcoMat</i> , 2023, 5, . | 6.8 | 3 |
| 753 | Solvent-Free and Long-Cycling Garnet-Based Lithium-Metal Batteries. <i>ACS Energy Letters</i> , 2023, 8, 1468-1476. | 8.8 | 9 |
| 754 | Self-shutdown function and uniform Li-ion flux enabled by a double-layered polymer electrolyte for high-performance Li metal batteries. <i>Journal of Solid State Electrochemistry</i> , 0, , . | 1.2 | 0 |
| 755 | 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 |
| 756 | Recycling of garnet solid electrolytes with lithium-dendrite penetration by thermal healing. <i>Science China Materials</i> , 2023, 66, 2192-2198. | 3.5 | 1 |
| 757 | Revealing the mechanisms of lithium-ion transport and conduction in composite solid polymer electrolytes. <i>Cell Reports Physical Science</i> , 2023, 4, 101321. | 2.8 | 6 |
| 758 | Wide-Temperature Flexible Supercapacitor from an Organohydrogel Electrolyte and Its Combined Electrode. <i>Chemistry - A European Journal</i> , 2023, 29, . | 1.7 | 3 |
| 759 | Constructing mutual-philic electrode/non-liquid electrolyte interfaces in electrochemical energy storage systems: Reasons, progress, and perspectives. <i>Energy Storage Materials</i> , 2023, 58, 48-73. | 9.5 | 8 |
| 760 | Anode Interfacial Issues in Solid-State Li Batteries: Mechanistic Understanding and Mitigating Strategies. <i>Energy and Environmental Materials</i> , 2023, 6, . | 7.3 | 20 |
| 761 | A dielectric electrolyte composite with high lithium-ion conductivity for high-voltage solid-state lithium metal batteries. <i>Nature Nanotechnology</i> , 2023, 18, 602-610. | 15.6 | 76 |
| 762 | Pressure and polymer selections for solid-state batteries investigated with high-throughput simulations. <i>Cell Reports Physical Science</i> , 2023, 4, 101328. | 2.8 | 4 |
| 763 | Interfacial Modification, Electrode/Solid-Electrolyte Engineering, and Monolithic Construction of Solid-State Batteries. <i>Electrochemical Energy Reviews</i> , 2023, 6, . | 13.1 | 26 |
| 764 | Carbon skeleton materials derived from rare earth phthalocyanines (MPcs) (M = Yb, La) used as high performance anode materials for lithium-ion batteries. <i>Dalton Transactions</i> , 2023, 52, 6641-6655. | 1.6 | 1 |
| 784 | Thin film oxide solid electrolytes towards high energy density batteries: progress of preparation methods and interface optimization. <i>Journal of Materials Chemistry A</i> , 2023, 11, 15122-15139. | 5.2 | 0 |
| 795 | Electrolyte designs for safer lithium-ion and lithium-metal batteries. <i>Journal of Materials Chemistry A</i> , , , . | 5.2 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 826 | Strategies to regulate the interface between Li metal anodes and all-solid-state electrolytes. Materials Chemistry Frontiers, 2024, 8, 1421-1450. | 3.2 | 0 |
| 840 | Lithium batteries - Secondary systems “ All-solid state systems Lithium-ion polymer battery. , 2024, , . | | 0 |