

Zonghai Chen

List of Publications by Year in descending order

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Version: 2024-02-01

141
papers

15,377
citations

20759

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17546

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146
docs citations

146
times ranked

13781
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Challenges Facing Lithium Batteries and Electrical Double-Layer Capacitors. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 9994-10024. | 7.2 | 2,407 |
| 2 | Nanostructured high-energy cathode materials for advanced lithium batteries. <i>Nature Materials</i> , 2012, 11, 942-947. | 13.3 | 921 |
| 3 | A lithium-oxygen battery based on lithium superoxide. <i>Nature</i> , 2016, 529, 377-382. | 13.7 | 633 |
| 4 | The role of nanotechnology in the development of battery materials for electric vehicles. <i>Nature Nanotechnology</i> , 2016, 11, 1031-1038. | 15.6 | 581 |
| 5 | Role of surface coating on cathode materials for lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2010, 20, 7606. | 6.7 | 569 |
| 6 | Titanium-Based Anode Materials for Safe Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2013, 23, 959-969. | 7.8 | 456 |
| 7 | In situ quantification of interphasial chemistry in Li-ion battery. <i>Nature Nanotechnology</i> , 2019, 14, 50-56. | 15.6 | 373 |
| 8 | Nanostructured Anode Material for High-Power Battery System in Electric Vehicles. <i>Advanced Materials</i> , 2010, 22, 3052-3057. | 11.1 | 359 |
| 9 | Building ultraconformal protective layers on both secondary and primary particles of layered lithium transition metal oxide cathodes. <i>Nature Energy</i> , 2019, 4, 484-494. | 19.8 | 345 |
| 10 | Nanostructured Black Phosphorus/Ketjenblack-Multiwalled Carbon Nanotubes Composite as High Performance Anode Material for Sodium-Ion Batteries. <i>Nano Letters</i> , 2016, 16, 3955-3965. | 4.5 | 246 |
| 11 | Cobalt-Free Nickel Rich Layered Oxide Cathodes for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2013, 5, 11434-11440. | 4.0 | 236 |
| 12 | Examining Hysteresis in Composite $\text{Li}_2\text{MnO}_3 \cdot \text{LiMnO}_2$ Cathode Structures. <i>Journal of Physical Chemistry C</i> , 2013, 117, 6525-6536. | 1.5 | 234 |
| 13 | Challenges for and Pathways toward Li-Metal-Based All-Solid-State Batteries. <i>ACS Energy Letters</i> , 0, , 1399-1404. | 8.8 | 228 |
| 14 | Challenges in Developing Electrodes, Electrolytes, and Diagnostics Tools to Understand and Advance Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1702403. | 10.2 | 221 |
| 15 | In Situ Probing and Synthetic Control of Cationic Ordering in Ni-Rich Layered Oxide Cathodes. <i>Advanced Energy Materials</i> , 2017, 7, 1601266. | 10.2 | 200 |
| 16 | Tuning of Thermal Stability in Layered $\text{Li}(\text{Ni}_x\text{Mn}_y\text{Co}_z)\text{O}_2$. <i>Journal of the American Chemical Society</i> , 2016, 138, 13326-13334. | 6.6 | 178 |
| 17 | Insights into the Effects of Zinc Doping on Structural Phase Transition of P2-Type Sodium Nickel Manganese Oxide Cathodes for High-Energy Sodium Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 22227-22237. | 4.0 | 177 |
| 18 | In situ fabrication of porous-carbon-supported Li_2MnO_2 nanorods at room temperature: application for rechargeable Li-O_2 batteries. <i>Energy and Environmental Science</i> , 2013, 6, 519. | 15.6 | 175 |

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|----|--|------|-----------|
| 19 | Development of Microstrain in Aged Lithium Transition Metal Oxides. <i>Nano Letters</i> , 2014, 14, 4873-4880. | 4.5 | 171 |
| 20 | Reversible Redox Chemistry of Azo Compounds for Sodium-Ion Batteries. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 2879-2883. | 7.2 | 159 |
| 21 | Advanced Electrolytes for Fast-Charging High-Voltage Lithium-Ion Batteries in Wide-Temperature Range. <i>Advanced Energy Materials</i> , 2020, 10, 2000368. | 10.2 | 159 |
| 22 | Tuning the Solid Electrolyte Interphase for Selective Li- and Na-Ion Storage in Hard Carbon. <i>Advanced Materials</i> , 2017, 29, 1606860. | 11.1 | 157 |
| 23 | Revisiting the Corrosion of the Aluminum Current Collector in Lithium-Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1072-1077. | 2.1 | 156 |
| 24 | Redox shuttles for safer lithium-ion batteries. <i>Electrochimica Acta</i> , 2009, 54, 5605-5613. | 2.6 | 148 |
| 25 | In Operando XRD and TXM Study on the Metastable Structure Change of $\text{NaNi}_{1/3}\text{Fe}_{1/3}\text{Mn}_{1/3}\text{O}_2$ under Electrochemical Sodium-Ion Intercalation. <i>Advanced Energy Materials</i> , 2016, 6, 1601306. | 10.2 | 147 |
| 26 | Challenges and Strategies to Advance High-Energy Nickel-Rich Layered Lithium Transition Metal Oxide Cathodes for Harsh Operation. <i>Advanced Functional Materials</i> , 2020, 30, 2004748. | 7.8 | 146 |
| 27 | Insights into the structural effects of layered cathode materials for high voltage sodium-ion batteries. <i>Energy and Environmental Science</i> , 2017, 10, 1677-1693. | 15.6 | 143 |
| 28 | Revealing the Rate-Limiting Li-Ion Diffusion Pathway in Ultrathick Electrodes for Li-Ion Batteries. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5100-5104. | 2.1 | 143 |
| 29 | Multi-scale study of thermal stability of lithiated graphite. <i>Energy and Environmental Science</i> , 2011, 4, 4023. | 15.6 | 140 |
| 30 | Cathode Material with Nanorod Structure—An Application for Advanced High-Energy and Safe Lithium Batteries. <i>Chemistry of Materials</i> , 2013, 25, 2109-2115. | 3.2 | 137 |
| 31 | Exploring Highly Reversible 1.5-Electron Reactions ($\text{V}^{3+}/\text{V}^{4+}/\text{V}^{5+}$) in $\text{Na}_3\text{VCr}(\text{PO}_4)_3$ Cathode for Sodium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 43632-43639. | 4.0 | 134 |
| 32 | Synthetic Control of Kinetic Reaction Pathway and Cationic Ordering in High-Ni Layered Oxide Cathodes. <i>Advanced Materials</i> , 2017, 29, 1606715. | 11.1 | 127 |
| 33 | Parasitic Reactions in Nanosized Silicon Anodes for Lithium-Ion Batteries. <i>Nano Letters</i> , 2017, 17, 1512-1519. | 4.5 | 122 |
| 34 | Probing the Thermal-Driven Structural and Chemical Degradation of Ni-Rich Layered Cathodes by Co/Mn Exchange. <i>Journal of the American Chemical Society</i> , 2020, 142, 19745-19753. | 6.6 | 122 |
| 35 | New class of nonaqueous electrolytes for long-life and safe lithium-ion batteries. <i>Nature Communications</i> , 2013, 4, 1513. | 5.8 | 115 |
| 36 | Cyclic carbonate for highly stable cycling of high voltage lithium metal batteries. <i>Energy Storage Materials</i> , 2019, 17, 284-292. | 9.5 | 115 |

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|----|---|-----|-----------|
| 37 | Surface Modification for Suppressing Interfacial Parasitic Reactions of a Nickel-Rich Lithium-Ion Cathode. <i>Chemistry of Materials</i> , 2019, 31, 2723-2730. | 3.2 | 114 |
| 38 | Cationic Ordering Coupled to Reconstruction of Basic Building Units during Synthesis of High-Ni Layered Oxides. <i>Journal of the American Chemical Society</i> , 2018, 140, 12484-12492. | 6.6 | 113 |
| 39 | Selenium and Sulfur Chemistry for Rechargeable Lithium Batteries: Interplay of Cathode Structures, Electrolytes, and Interfaces. <i>ACS Energy Letters</i> , 2017, 2, 605-614. | 8.8 | 110 |
| 40 | Insight into Ca ²⁺ Substitution Effects on O ₃ Type NaNi _{1/3} Fe _{1/3} Mn _{1/3} O ₂ Cathode Materials for Sodium-Ion Batteries Application. <i>Small</i> , 2018, 14, e1704523. | 5.2 | 97 |
| 41 | Insights into Li/Ni ordering and surface reconstruction during synthesis of Ni-rich layered oxides. <i>Journal of Materials Chemistry A</i> , 2019, 7, 513-519. | 5.2 | 92 |
| 42 | Mechanism of capacity fade of MCMB/Li1.1[Ni1/3Mn1/3Co1/3]O ₂ cell at elevated temperature and additives to improve its cycle life. <i>Journal of Materials Chemistry</i> , 2011, 21, 17754. | 6.7 | 89 |
| 43 | PEDOT-PSS coated ZnO/C hierarchical porous nanorods as ultralong-life anode material for lithium ion batteries. <i>Nano Energy</i> , 2015, 18, 253-264. | 8.2 | 89 |
| 44 | RuO ₂ nanoparticles supported on MnO ₂ nanorods as high efficient bifunctional electrocatalyst of lithium-oxygen battery. <i>Nano Energy</i> , 2016, 28, 63-70. | 8.2 | 88 |
| 45 | Kinetic Study of Parasitic Reactions in Lithium-Ion Batteries: A Case Study on LiNi _{0.6} Mn _{0.2} Co _{0.2} O ₂ . <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 3446-3451. | 4.0 | 88 |
| 46 | Intrinsic Role of Cationic Substitution in Tuning Li/Ni Mixing in High-Ni Layered Oxides. <i>Chemistry of Materials</i> , 2019, 31, 2731-2740. | 3.2 | 85 |
| 47 | Kinetic Limitations in Single-Crystal High-Nickel Cathodes. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 17350-17355. | 7.2 | 84 |
| 48 | Insight into the Capacity Fading Mechanism of Amorphous Se ₂ S ₅ Confined in Micro/Mesoporous Carbon Matrix in Ether-Based Electrolytes. <i>Nano Letters</i> , 2016, 16, 2663-2673. | 4.5 | 83 |
| 49 | Suppressing electrolyte-lithium metal reactivity via Li ⁺ -desolvation in uniform nano-porous separator. <i>Nature Communications</i> , 2022, 13, 172. | 5.8 | 83 |
| 50 | Bifunctional electrolyte additive for lithium-ion batteries. <i>Electrochemistry Communications</i> , 2007, 9, 703-707. | 2.3 | 81 |
| 51 | Identifying the Structural Evolution of the Sodium Ion Battery Na ₂ FePO ₄ F Cathode. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11918-11923. | 7.2 | 79 |
| 52 | In situ observation of thermal-driven degradation and safety concerns of lithiated graphite anode. <i>Nature Communications</i> , 2021, 12, 4235. | 5.8 | 74 |
| 53 | Tris(pentafluorophenyl) Borane as an Additive to Improve the Power Capabilities of Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2006, 153, A1221. | 1.3 | 73 |
| 54 | A 3D flexible and robust HAPs/PVA separator prepared by a freezing-drying method for safe lithium metal batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 6859-6868. | 5.2 | 70 |

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|----|--|------|-----------|
| 55 | The Relationship between the Relative Solvating Power of Electrolytes and Shuttling Effect of Lithium Polysulfides in Lithium-Sulfur Batteries. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 12033-12036. | 7.2 | 69 |
| 56 | Thermal and electrochemical characterization of MCMB/LiNi _{1/3} Co _{1/3} Mn _{1/3} O ₂ using LiBoB as an electrolyte additive. <i>Journal of Power Sources</i> , 2007, 163, 1074-1079. | 4.0 | 67 |
| 57 | Lithium Difluoro(oxalato)borate as Additive to Improve the Thermal Stability of Lithiated Graphite. <i>Electrochemical and Solid-State Letters</i> , 2009, 12, A69. | 2.2 | 66 |
| 58 | Synthesis of full concentration gradient cathode studied by high energy X-ray diffraction. <i>Nano Energy</i> , 2016, 19, 522-531. | 8.2 | 66 |
| 59 | Regulating the Hidden Solvation-Ion-Exchange in Concentrated Electrolytes for Stable and Safe Lithium Metal Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2000901. | 10.2 | 65 |
| 60 | Probing Thermal and Chemical Stability of Na _x Ni _{1/3} Fe _{1/3} Mn _{1/3} O ₂ Cathode Material toward Safe Sodium-Ion Batteries. <i>Chemistry of Materials</i> , 2018, 30, 4909-4918. | 3.2 | 64 |
| 61 | Solid-State Lithium/Selenium-Sulfur Chemistry Enabled via a Robust Solid-Electrolyte Interphase. <i>Advanced Energy Materials</i> , 2019, 9, 1802235. | 10.2 | 63 |
| 62 | High-Voltage and High-Safety Practical Lithium Batteries with Ethylene Carbonate-Free Electrolyte. <i>Advanced Energy Materials</i> , 2021, 11, 2102299. | 10.2 | 59 |
| 63 | Mechanistic Study of Electrolyte Additives to Stabilize High-Voltage Cathode-Electrolyte Interface in Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 44542-44549. | 4.0 | 58 |
| 64 | A practical phosphorus-based anode material for high-energy lithium-ion batteries. <i>Nano Energy</i> , 2020, 74, 104849. | 8.2 | 56 |
| 65 | Role of Lithium Doping in P ₂ -Na _{0.67} Ni _{0.33} Mn _{0.67} O ₂ for Sodium-Ion Batteries. <i>Chemistry of Materials</i> , 2021, 33, 4445-4455. | 3.2 | 56 |
| 66 | Origin and regulation of oxygen redox instability in high-voltage battery cathodes. <i>Nature Energy</i> , 2022, 7, 808-817. | 19.8 | 55 |
| 67 | Excess Li-Ion Storage on Reconstructed Surfaces of Nanocrystals To Boost Battery Performance. <i>Nano Letters</i> , 2017, 17, 6018-6026. | 4.5 | 53 |
| 68 | CuS and Cu ₂ S as Cathode Materials for Lithium Batteries: A Review. <i>ChemElectroChem</i> , 2019, 6, 2825-2840. | 1.7 | 52 |
| 69 | Electrically Conductive Ultrananocrystalline Diamond-Coated Natural Graphite-Copper Anode for New Long Life Lithium-Ion Battery. <i>Advanced Materials</i> , 2014, 26, 3724-3729. | 11.1 | 51 |
| 70 | Design of High-Voltage Stable Hybrid Electrolyte with an Ultrahigh Li Transference Number. <i>ACS Energy Letters</i> , 0, , 1315-1323. | 8.8 | 50 |
| 71 | Solid state synthesis of LiFePO ₄ studied by in situ high energy X-ray diffraction. <i>Journal of Materials Chemistry</i> , 2011, 21, 5604. | 6.7 | 49 |
| 72 | In-built ultraconformal interphases enable high-safety practical lithium batteries. <i>Energy Storage Materials</i> , 2021, 43, 248-257. | 9.5 | 49 |

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|----|---|------|-----------|
| 73 | Study of Thermal Decomposition of $\text{Li}_{1-x}(\text{Ni}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3})_{0.9}\text{O}_2$ Using In Situ High-Energy X-ray Diffraction. <i>Advanced Energy Materials</i> , 2013, 3, 729-736. | 10.2 | 48 |
| 74 | Lithium Tetrafluoro Oxalato Phosphate as Electrolyte Additive for Lithium-Ion Cells. <i>Electrochemical and Solid-State Letters</i> , 2010, 13, A11. | 2.2 | 47 |
| 75 | Probing Thermally Induced Decomposition of Delithiated $\text{Li}_{1.2}\text{Ni}_{0.15}\text{Mn}_{0.55}\text{Co}_{0.1}\text{O}_2$ by in Situ High-Energy X-ray Diffraction. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 12692-12697. | 4.0 | 47 |
| 76 | Modifying the Surface of a High-Voltage Lithium-Ion Cathode. <i>ACS Applied Energy Materials</i> , 2018, 1, 2254-2260. | 2.5 | 46 |
| 77 | Targeted masking enables stable cycling of $\text{LiNi}_{0.6}\text{Co}_{0.2}\text{Mn}_{0.2}\text{O}_2$ at 4.6V. <i>Nano Energy</i> , 2022, 96, 107123. | 8.2 | 42 |
| 78 | Advanced cathode materials for lithium-ion batteries. <i>MRS Bulletin</i> , 2011, 36, 498-505. | 1.7 | 40 |
| 79 | Electrostatic Self-Assembly Enabling Integrated Bulk and Interfacial Sodium Storage in 3D Titania-Graphene Hybrid. <i>Nano Letters</i> , 2018, 18, 336-346. | 4.5 | 40 |
| 80 | Chemistry Design Towards a Stable Sulfide-Based Superionic Conductor $\text{Li}_4\text{Cu}_8\text{Ge}_3\text{S}_{12}$. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 7673-7677. | 7.2 | 37 |
| 81 | Understanding the Stability of Aromatic Redox Shuttles for Overcharge Protection of Lithium-Ion Cells. <i>Journal of the Electrochemical Society</i> , 2006, 153, A2215. | 1.3 | 34 |
| 82 | Cooling Induced Surface Reconstruction during Synthesis of High-Ni Layered Oxides. <i>Advanced Energy Materials</i> , 2019, 9, 1901915. | 10.2 | 34 |
| 83 | Reversible Redox Chemistry of Azo Compounds for Sodium-Ion Batteries. <i>Angewandte Chemie</i> , 2018, 130, 2929-2933. | 1.6 | 33 |
| 84 | Tuning Oxygen Redox Reaction through the Inductive Effect with Proton Insertion in Li-Rich Oxides. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 7277-7284. | 4.0 | 33 |
| 85 | Stress- and Interface-Compatible Red Phosphorus Anode for High-Energy and Durable Sodium-Ion Batteries. <i>ACS Energy Letters</i> , 2021, 6, 547-556. | 8.8 | 33 |
| 86 | Overpotential Tailored Thin and Dense Lithium Carbonate Growth in Solid Electrolyte Interphase for Advanced Lithium Ion Batteries. <i>Advanced Energy Materials</i> , 2022, 12, . | 10.2 | 32 |
| 87 | Storage and Effective Migration of Li-Ion for Defected LiFePO_4 Phase Nanocrystals. <i>Nano Letters</i> , 2016, 16, 601-608. | 4.5 | 31 |
| 88 | Identifying Active Sites for Parasitic Reactions at the Cathode-Electrolyte Interface. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 589-594. | 2.1 | 31 |
| 89 | Anion effects on the solvation structure and properties of imide lithium salt-based electrolytes. <i>RSC Advances</i> , 2019, 9, 41837-41846. | 1.7 | 31 |
| 90 | Insights into the Distinct Lithiation/Sodiation of Porous Cobalt Oxide by in Operando Synchrotron X-ray Techniques and Ab Initio Molecular Dynamics Simulations. <i>Nano Letters</i> , 2017, 17, 953-962. | 4.5 | 30 |

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|-----|---|------|-----------|
| 91 | Revealing the Atomic Origin of Heterogeneous Li ⁺ Ion Diffusion by Probing Na. <i>Advanced Materials</i> , 2019, 31, e1805889. | 11.1 | 30 |
| 92 | Electrochemical Properties of Lithium-Rich Li _{1+x} (Mn ₁₋₃ Ni ₁₋₃ Co ₁₋₃)O ₂ at High Potential. <i>Journal of the Electrochemical Society</i> , 2006, 153, A1818. | 1.3 | 29 |
| 93 | Native lattice strain induced structural earthquake in sodium layered oxide cathodes. <i>Nature Communications</i> , 2022, 13, 436. | 5.8 | 29 |
| 94 | Synchrotron-based X-ray diffraction and absorption spectroscopy studies on layered LiNi _x Mn _y Co _z O ₂ cathode materials: A review. <i>Energy Storage Materials</i> , 2022, 49, 181-208. | 9.5 | 29 |
| 95 | High performance lithium-manganese-rich cathode material with reduced impurities. <i>Nano Energy</i> , 2017, 31, 247-257. | 8.2 | 25 |
| 96 | Internally Referenced DOSY-NMR: A Novel Analytical Method in Revealing the Solution Structure of Lithium-Ion Battery Electrolytes. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 3714-3719. | 2.1 | 25 |
| 97 | Differentiating allotropic LiCoO ₂ /Li ₂ Co ₂ O ₄ : A structural and electrochemical study. <i>Journal of Power Sources</i> , 2014, 271, 97-103. | 4.0 | 24 |
| 98 | Protecting Al foils for high-voltage lithium-ion chemistries. <i>Materials Today Energy</i> , 2018, 7, 18-26. | 2.5 | 24 |
| 99 | Challenges of Fast Charging for Electric Vehicles and the Role of Red Phosphorous as Anode Material: Review. <i>Energies</i> , 2019, 12, 3897. | 1.6 | 24 |
| 100 | Solid state synthesis of layered sodium manganese oxide for sodium-ion battery by in-situ high energy X-ray diffraction and X-ray absorption near edge spectroscopy. <i>Journal of Power Sources</i> , 2017, 341, 114-121. | 4.0 | 23 |
| 101 | Unveiling decaying mechanism through quantitative structure-activity relationship in electrolytes for lithium-ion batteries. <i>Nano Energy</i> , 2021, 83, 105843. | 8.2 | 23 |
| 102 | Effect of Anion Receptor Additives on Electrochemical Performance of Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2010, 114, 15202-15206. | 1.5 | 22 |
| 103 | Migration of Mn cations in delithiated lithium manganese oxides. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 20697-20702. | 1.3 | 22 |
| 104 | Identifying the Structural Evolution of the Sodium Ion Battery Na ₂ FePO ₄ F Cathode. <i>Angewandte Chemie</i> , 2018, 130, 12094-12099. | 1.6 | 22 |
| 105 | Formation of Li ₂ MnO ₃ investigated by in situ synchrotron probes. <i>Journal of Power Sources</i> , 2014, 266, 341-346. | 4.0 | 20 |
| 106 | The migration mechanism of transition metal ions in LiNi _{0.5} Mn _{1.5} O ₄ . <i>Journal of Materials Chemistry A</i> , 2015, 3, 13031-13038. | 5.2 | 20 |
| 107 | A Regenerative Coking and Sulfur Resistant Composite Anode with Cu Exsolution for Intermediate Temperature Solid Oxide Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2018, 165, F629-F634. | 1.3 | 20 |
| 108 | A XANES study of LiVPO ₄ F: a factor analysis approach. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 3254. | 1.3 | 19 |

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|-----|--|------|-----------|
| 109 | A novel multifunctional NiTi/Ag hierarchical composite. <i>Scientific Reports</i> , 2014, 4, 5267. | 1.6 | 19 |
| 110 | Improved Rate Capability of Li-Rich Cathode Materials by Building a Li ⁺ -Conductive Li ₂ BPO ₄ /Li ₂ CO ₃ Nanolayer from Residual Li ₂ CO ₃ on the Surface. <i>ChemElectroChem</i> , 2017, 4, 1443-1449. | 1.7 | 19 |
| 111 | Revealing the Structural Evolution and Phase Transformation of O ₃ -Type NaNi _{1/3} Fe _{1/3} Mn _{1/3} O ₂ Cathode Material on Sintering and Cycling Processes. <i>ACS Applied Energy Materials</i> , 2020, 3, 6107-6114. | 2.5 | 19 |
| 112 | A Novel Stretchable Coaxial NiTi-Sheath/Cu-Core Composite with High Strength and High Conductivity. <i>Advanced Materials</i> , 2013, 25, 1199-1202. | 11.1 | 18 |
| 113 | An in-situ, high-energy X-ray diffraction study of the thermal stability of delithiated LiVPO ₄ F. <i>Journal of Power Sources</i> , 2015, 273, 1250-1255. | 4.0 | 18 |
| 114 | Understanding atomic scale phenomena within the surface layer of a long-term cycled 5 V spinel electrode. <i>Nano Energy</i> , 2016, 19, 297-306. | 8.2 | 18 |
| 115 | The Relationship between the Relative Solvating Power of Electrolytes and Shuttling Effect of Lithium Polysulfides in Lithium-Sulfur Batteries. <i>Angewandte Chemie</i> , 2018, 130, 12209-12212. | 1.6 | 17 |
| 116 | A polymeric composite protective layer for stable Li metal anodes. <i>Nano Convergence</i> , 2020, 7, 21. | 6.3 | 17 |
| 117 | Probing solid-state reaction through microstrain: A case study on synthesis of LiCoO ₂ . <i>Journal of Power Sources</i> , 2020, 469, 228422. | 4.0 | 17 |
| 118 | A Facile Approach to High Precision Detection of Cell-to-Cell Variation for Li-ion Batteries. <i>Scientific Reports</i> , 2020, 10, 7182. | 1.6 | 16 |
| 119 | Critical Evaluation of Potentiostatic Holds as Accelerated Predictors of Capacity Fade during Calendar Aging. <i>Journal of the Electrochemical Society</i> , 2022, 169, 050531. | 1.3 | 16 |
| 120 | Degradation pathway of 2,5-di-tert-butyl-1,4-dimethoxybenzene at high potential. <i>Electrochimica Acta</i> , 2007, 53, 453-458. | 2.6 | 14 |
| 121 | Novel functionalized electrolyte for MCMB/Li _{1.156} Mn _{1.844} O ₄ lithium-ion cells. <i>Energy and Environmental Science</i> , 2011, 4, 4567. | 15.6 | 13 |
| 122 | Interfacial reactions in lithium batteries. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 303001. | 1.3 | 13 |
| 123 | Local spring effect in titanium-based layered oxides. <i>Energy and Environmental Science</i> , 2020, 13, 4371-4380. | 15.6 | 13 |
| 124 | Directionally assembled MoS ₂ with significantly expanded interlayer spacing: a superior anode material for high-rate lithium-ion batteries. <i>Materials Chemistry Frontiers</i> , 2018, 2, 1441-1448. | 3.2 | 12 |
| 125 | A generalized method for high throughput in-situ experiment data analysis: An example of battery materials exploration. <i>Journal of Power Sources</i> , 2015, 279, 246-251. | 4.0 | 11 |
| 126 | A self-assembled dual-phase composite as a precursor of high-performance anodes for intermediate temperature solid oxide fuel cells. <i>Chemical Communications</i> , 2018, 54, 12341-12344. | 2.2 | 11 |

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|-----|---|------|-----------|
| 127 | High-performance LiNi _{0.8} Mn _{0.1} Co _{0.1} O ₂ cathode by nanoscale lithium sulfide coating via atomic layer deposition. <i>Journal of Energy Chemistry</i> , 2022, 69, 531-540. | 7.1 | 11 |
| 128 | Revisiting the initial irreversible capacity loss of LiNi _{0.6} Co _{0.2} Mn _{0.2} O ₂ cathode material batteries. <i>Energy Storage Materials</i> , 2022, 50, 373-379. | 9.5 | 11 |
| 129 | Probing cation intermixing in Li ₂ SnO ₃ . <i>RSC Advances</i> , 2016, 6, 31559-31564. | 1.7 | 10 |
| 130 | Chemistry Design Towards a Stable Sulfide-Based Superionic Conductor Li ₄ Cu ₈ Ge ₃ S ₁₂ . <i>Angewandte Chemie</i> , 2019, 131, 7755-7759. | 1.6 | 9 |
| 131 | Superlattice-structured films by magnetron sputtering as new era electrodes for advanced lithium-ion batteries. <i>Nano Energy</i> , 2020, 76, 105094. | 8.2 | 8 |
| 132 | Surface Modification of Nickel-Rich Cathode Materials by Ionically Conductive Materials at Room Temperature. <i>Energy Technology</i> , 2021, 9, 2100422. | 1.8 | 4 |
| 133 | High Performance Lithium-Ion Batteries Using Fluorinated Compounds. , 2015, , 1-31. | | 2 |
| 134 | Insights into the Performance Degradation of Oxygen-Type Manganese-Rich Layered Oxide Cathodes for High-Voltage Sodium-Ion Batteries. <i>ACS Applied Energy Materials</i> , 2018, , . | 2.5 | 2 |
| 135 | Impact of alginate and fluoroethylene carbonate on the electrochemical performance of SiO ₂ -SnCoC anode for lithium-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2019, 23, 397-405. | 1.2 | 2 |
| 136 | Kinetic Limitations in Single-Crystal High-Nickel Cathodes. <i>Angewandte Chemie</i> , 2021, 133, 17490-17495. | 1.6 | 2 |
| 137 | Lithium-Ion Batteries: A Rigid Naphthalenediimide Triangle for Organic Rechargeable Lithium-Ion Batteries (<i>Adv. Mater.</i> 18/2015). <i>Advanced Materials</i> , 2015, 27, 2948-2948. | 11.1 | 1 |
| 138 | CuS and Cu ₂ S as Cathode Materials for Lithium Batteries: A Review. <i>ChemElectroChem</i> , 2019, 6, 2824-2824. | 1.7 | 0 |
| 139 | Lithium-Ion Batteries: Cooling Induced Surface Reconstruction during Synthesis of High-Ni Layered Oxides (<i>Adv. Energy Mater.</i> 43/2019). <i>Advanced Energy Materials</i> , 2019, 9, 1970173. | 10.2 | 0 |
| 140 | Interfacial Stabilization of a Graphene-Wrapped Cu ₂ S Anode for High-Performance Sodium-Ion Batteries via Atomic Layer Deposition. <i>Journal of Composites Science</i> , 2020, 4, 184. | 1.4 | 0 |
| 141 | Constituting robust interfaces for better lithium-ion batteries and beyond using atomic and molecular layer deposition. , 2022, , . | | 0 |