# Zhen Zhou

List of Publications by Year
in descending order

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Are MXenes Promising Anode Materials for Li Ion Batteries? Computational Studies on Electronic Properties and Li Storage Capability of Ti<sub>3</sub>C<sub>2</sub> and Ti<sub>3</sub>C<sub>2</sub>X<sub>2</sub> (X = F, OH) Monolayer. Journal of the American Chemical Society, 2012, 134, 16909-16916. | 6.6 | 1,768 |
| 2 | MoS<sub>2</sub> Nanoribbons: High Stability and Unusual Electronic and Magnetic Properties. Journal of the American Chemical Society, 2008, 130, 16739-16744. | 6.6 | 876 |
| 3 | Recent advances in MXene: Preparation, properties, and applications. Frontiers of Physics, 2015, 10, 276-286. | 2.4 | 734 |
| 4 | Recent progress in high-voltage lithium ion batteries. Journal of Power Sources, 2013, 237, 229-242. | 4.0 | 688 |
| 5 | Graphene-analogous low-dimensional materials. Progress in Materials Science, 2013, 58, 1244-1315. | 16.0 | 684 |
| 6 | Graphene-related nanomaterials: tuning properties by functionalization. Nanoscale, 2013, 5, 4541. | 2.8 | 614 |
| 7 | The Influence of Carboxyl Groups on the Photoluminescence of Mercaptocarboxylic Acid-Stabilized CdTe Nanoparticles. Journal of Physical Chemistry B, 2003, 107, 8-13. | 1.2 | 581 |
| 8 | Metallic VS<sub>2</sub> Monolayer: A Promising 2D Anode Material for Lithium Ion Batteries. Journal of Physical Chemistry C, 2013, 117, 25409-25413. | 1.5 | 576 |
| 9 | Sâ€Doped Nâ€Rich Carbon Nanosheets with Expanded Interlayer Distance as Anode Materials for Sodiumâ€Ion Batteries. Advanced Materials, 2017, 29, 1604108. | 11.1 | 566 |
| 10 | MXene-based materials for electrochemical energy storage. Journal of Energy Chemistry, 2018, 27, 73-85. | 7.1 | 548 |
| 11 | Spin Gapless Semiconductorâˆ’Metalâˆ’Half-Metal Properties in Nitrogen-Doped Zigzag Graphene Nanoribbons. ACS Nano, 2009, 3, 1952-1958. | 7.3 | 499 |
| 12 | Li ion battery materials with coreâ€“shell nanostructures. Nanoscale, 2011, 3, 3967. | 2.8 | 473 |
| 13 | Towards practical lithium-metal anodes. Chemical Society Reviews, 2020, 49, 3040-3071. | 18.7 | 473 |
| 14 | CO Catalytic Oxidation on Iron-Embedded Graphene: Computational Quest for Low-Cost Nanocatalysts. Journal of Physical Chemistry C, 2010, 114, 6250-6254. | 1.5 | 454 |
| 15 | Enhanced Li Adsorption and Diffusion on MoS<sub>2</sub> Zigzag Nanoribbons by Edge Effects: A Computational Study. Journal of Physical Chemistry Letters, 2012, 3, 2221-2227. | 2.1 | 390 |
| 16 | Recent Breakthroughs in Supercapacitors Boosted by Nitrogenâ€Rich Porous Carbon Materials. Advanced Science, 2017, 4, 1600408. | 5.6 | 348 |
| 17 | Atomic Interface Engineering and Electricâ€Field Effect in Ultrathin Bi<sub>2</sub>MoO<sub>6</sub> Nanosheets for Superior Lithium Ion Storage. Advanced Materials, 2017, 29, 1700396. | 11.1 | 343 |
| 18 | The First Introduction of Graphene to Rechargeable Liâ€“CO<sub>2</sub> Batteries. Angewandte Chemie - International Edition, 2015, 54, 6550-6553. | 7.2 | 305 |

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|---|---|---|---|
| 19 | Preparation and electrochemical studies of Fe-doped Li3V2(PO4)3 cathode materials for lithium-ion batteries. Journal of Power Sources, 2006, 162, 1357-1362. | 4.0 | 297 |
| 20 | Fast Sodium Storage in TiO<sub>2</sub>@CNT@C Nanorods for Highâ€Performance Naâ€Ion Capacitors. Advanced Energy Materials, 2017, 7, 1701222. | 10.2 | 296 |
| 21 | MnPSe<sub>3</sub> Monolayer: A Promising 2D Visibleâ€Light Photohydrolytic Catalyst with High Carrier Mobility. Advanced Science, 2016, 3, 1600062. | 5.6 | 291 |
| 22 | Hydrogenation: A Simple Approach To Realize Semiconductorâ^’Half-Metalâ^’Metal Transition in Boron Nitride Nanoribbons. Journal of the American Chemical Society, 2010, 132, 1699-1705. | 6.6 | 277 |
| 23 | Metalâ€“Organic Frameworks (MOFs) and MOF-Derived Materials for Energy Storage and Conversion. Electrochemical Energy Reviews, 2019, 2, 29-104. | 13.1 | 274 |
| 24 | CoCO3 submicrocube/graphene composites with high lithium storage capability. Nano Energy, 2013, 2, 276-282. | 8.2 | 263 |
| 25 | Coreâ^’Shell Li<sub>3</sub>V<sub>2</sub>(PO<sub>4</sub>)<sub>3</sub>@C Composites as Cathode Materials for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2008, 112, 5689-5693. | 1.5 | 257 |
| 26 | Synthesis and Electrochemical Performance of Sulfur/Highly Porous Carbon Composites. Journal of Physical Chemistry C, 2009, 113, 4712-4716. | 1.5 | 253 |
| 27 | Carbonâ€Supported Divacancyâ€Anchored Platinum Singleâ€Atom Electrocatalysts with Superhigh Pt Utilization for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2019, 58, 1163-1167. | 7.2 | 252 |
| 28 | Graphene, inorganic graphene analogs and their composites for lithium ion batteries. Journal of Materials Chemistry A, 2014, 2, 12104. | 5.2 | 251 |
| 29 | A Ti-anchored Ti2CO2 monolayer (MXene) as a single-atom catalyst for CO oxidation. Journal of Materials Chemistry A, 2016, 4, 4871-4876. | 5.2 | 242 |
| 30 | Core double-shell Si@SiO2@C nanocomposites as anode materials for Li-ion batteries. Chemical Communications, 2010, 46, 2590. | 2.2 | 232 |
| 31 | Role of transition metal nanoparticles in the extra lithium storage capacity of transition metal oxides: a case study of hierarchical coreâ€“shell Fe3O4@C and Fe@C microspheres. Journal of Materials Chemistry A, 2013, 1, 15158. | 5.2 | 230 |
| 32 | Nanosheet-Based NiO Microspheres: Controlled Solvothermal Synthesis and Lithium Storage Performances. Journal of Physical Chemistry C, 2010, 114, 251-255. | 1.5 | 229 |
| 33 | Recent progress in rechargeable alkali metalâ€“air batteries. Green Energy and Environment, 2016, 1, 4-17. | 4.7 | 227 |
| 34 | Metalâ€“CO<sub>2</sub> Batteries on the Road: CO<sub>2</sub> from Contamination Gas to Energy Source. Advanced Materials, 2017, 29, 1605891. | 11.1 | 226 |
| 35 | High and anisotropic carrier mobility in experimentally possible Ti<sub>2</sub>CO<sub>2</sub>(MXene) monolayers and nanoribbons. Nanoscale, 2015, 7, 16020-16025. | 2.8 | 225 |
| 36 | Double-atom catalysts: transition metal dimer-anchored C<sub>2</sub>N monolayers as N<sub>2</sub> fixation electrocatalysts. Journal of Materials Chemistry A, 2018, 6, 18599-18604. | 5.2 | 224 |

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|---|---|---|---|
| 37 | Transition metal anchored C<sub>2</sub>N monolayers as efficient bifunctional electrocatalysts for hydrogen and oxygen evolution reactions. Journal of Materials Chemistry A, 2018, 6, 11446-11452. | 5.2 | 223 |
| 38 | Electronic structures of SiC nanoribbons. Journal of Chemical Physics, 2008, 129, 174114. | 1.2 | 222 |
| 39 | Ti<sub>2</sub>CO<sub>2</sub>MXene: a highly active and selective photocatalyst for CO<sub>2</sub>reduction. Journal of Materials Chemistry A, 2017, 5, 12899-12903. | 5.2 | 221 |
| 40 | Bi<sub>2</sub>O<sub>3</sub>âˆ’Bi<sub>2</sub>WO<sub>6</sub> Composite Microspheres: Hydrothermal Synthesis and Photocatalytic Performances. Journal of Physical Chemistry C, 2011, 115, 5220-5225. | 1.5 | 219 |
| 41 | Towards better photocatalysts: first-principles studies of the alloying effects on the photocatalytic activities of bismuth oxyhalides under visible light. Physical Chemistry Chemical Physics, 2012, 14, 1286-1292. | 1.3 | 216 |
| 42 | Machine learning: Accelerating materials development for energy storage and conversion. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 553-576. | 8.5 | 212 |
| 43 | Micro/Nanostructured Materials for Sodium Ion Batteries and Capacitors. Small, 2018, 14, 1702961. | 5.2 | 210 |
| 44 | Innovation and discovery of grapheneâ€like materials via densityâ€functional theory computations. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2015, 5, 360-379. | 6.2 | 205 |
| 45 | Fabrication of Highâ€Power Liâ€Ion Hybrid Supercapacitors by Enhancing the Exterior Surface Charge Storage. Advanced Energy Materials, 2015, 5, 1500550. | 10.2 | 203 |
| 46 | Rechargeable Liâ€“CO<sub>2</sub> batteries with carbon nanotubes as air cathodes. Chemical Communications, 2015, 51, 14636-14639. | 2.2 | 203 |
| 47 | Preparation and Lithium Storage Performances of Mesoporous Fe<sub>3</sub>O<sub>4</sub>@C Microcapsules. ACS Applied Materials & Interfaces, 2011, 3, 705-709. | 4.0 | 199 |
| 48 | Ni/C Hierarchical Nanostructures with Ni Nanoparticles Highly Dispersed in N-Containing Carbon Nanosheets: Origin of Li Storage Capacity. Journal of Physical Chemistry C, 2012, 116, 23974-23980. | 1.5 | 199 |
| 49 | First-principles studies on facet-dependent photocatalytic properties of bismuth oxyhalides (BiOXs). RSC Advances, 2012, 2, 9224. | 1.7 | 196 |
| 50 | Improved high-rate charge/discharge performances of LiFePO4/C via V-doping. Journal of Power Sources, 2009, 193, 841-845. | 4.0 | 193 |
| 51 | Preparation and electrochemical properties of sulfurâ€“acetylene black composites as cathode materials. Electrochimica Acta, 2009, 54, 3708-3713. | 2.6 | 191 |
| 52 | Computational study of B- or N-doped single-walled carbon nanotubes as NH3 and NO2 sensors. Carbon, 2007, 45, 2105-2110. | 5.4 | 188 |
| 53 | Structure-modulated crystalline covalent organic frameworks as high-rate cathodes for Li-ion batteries. Journal of Materials Chemistry A, 2016, 4, 18621-18627. | 5.2 | 188 |
| 54 | Preparation and electrochemical performances of doughnut-like Ni(OH)2â€“Co(OH)2 composites as pseudocapacitor materials. Nanoscale, 2012, 4, 4498. | 2.8 | 183 |

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|---|---|---|---|
| 55 | Orderly Packed Anodes for Highâ€Power Lithiumâ€Ion Batteries with Superâ€Long Cycle Life: Rational Design of MnCO<sub>3</sub>/Largeâ€Area Graphene Composites. Advanced Materials, 2015, 27, 806-812. | 11.1 | 181 |
| 56 | Electronic structure of heterojunction MoO2/g-C3N4 catalyst for oxidative desulfurization. Applied Catalysis B: Environmental, 2018, 238, 263-273. | 10.8 | 178 |
| 57 | Two-dimensional polyphenylene: experimentally available porous graphene as a hydrogen purification membrane. Chemical Communications, 2010, 46, 3672. | 2.2 | 176 |
| 58 | SiC<sub>2</sub> Silagraphene and Its One-Dimensional Derivatives: Where Planar Tetracoordinate Silicon Happens. Journal of the American Chemical Society, 2011, 133, 900-908. | 6.6 | 171 |
| 59 | Interlayerâ€Spacingâ€Regulated VOPO<sub>4</sub> Nanosheets with Fast Kinetics for Highâ€Capacity and Durable Rechargeable Magnesium Batteries. Advanced Materials, 2018, 30, e1801984. | 11.1 | 171 |
| 60 | Computational Insights into Oxygen Reduction Reaction and Initial Li<sub>2</sub>O<sub>2</sub> Nucleation on Pristine and N-Doped Graphene in Liâ€"O<sub>2</sub> Batteries. ACS Catalysis, 2015, 5, 4309-4317. | 5.5 | 170 |
| 61 | Doping effects of B and N on hydrogen adsorption in single-walled carbon nanotubes through density functional calculations. Carbon, 2006, 44, 939-947. | 5.4 | 169 |
| 62 | Bifunctional electrocatalysts of MOF-derived Coâ€"N/C on bamboo-like MnO nanowires for high-performance liquid- and solid-state Znâ€"air batteries. Journal of Materials Chemistry A, 2018, 6, 9716-9722. | 5.2 | 167 |
| 63 | Ca-Coated Boron Fullerenes and Nanotubes as Superior Hydrogen Storage Materials. Nano Letters, 2009, 9, 1944-1948. | 4.5 | 165 |
| 64 | Sb nanoparticles decorated N-rich carbon nanosheets as anode materials for sodium ion batteries with superior rate capability and long cycling stability. Chemical Communications, 2014, 50, 12888-12891. | 2.2 | 162 |
| 65 | Hierarchical Carbonâ€"Nitrogen Architectures with Both Mesopores and Macrochannels as Excellent Cathodes for Rechargeable Liâ€"O<sub>2</sub> Batteries. Advanced Functional Materials, 2014, 24, 6826-6833. | 7.8 | 161 |
| 66 | Small molecules make big differences: molecular doping effects on electronic and optical properties of phosphorene. Nanotechnology, 2015, 26, 095201. | 1.3 | 159 |
| 67 | Verifying the Rechargeability of Liâ€CO<sub>2</sub> Batteries on Working Cathodes of Ni Nanoparticles Highly Dispersed on Nâ€Doped Graphene. Advanced Science, 2018, 5, 1700567. | 5.6 | 159 |
| 68 | Atomic Feâ€"N<sub>4</sub>/C in Flexible Carbon Fiber Membrane as Binderâ€Free Air Cathode for Znâ€"Air Batteries with Stable Cycling over 1000 h. Advanced Materials, 2022, 34, e2105410. | 11.1 | 158 |
| 69 | Comparative Study of Hydrogen Adsorption on Carbon and BN Nanotubes. Journal of Physical Chemistry B, 2006, 110, 13363-13369. | 1.2 | 157 |
| 70 | Stable layered P3/P2 Na<sub>0.66</sub>Co<sub>0.5</sub>Mn<sub>0.5</sub>O<sub>2</sub> cathode materials for sodium-ion batteries. Journal of Materials Chemistry A, 2015, 3, 20708-20714. | 5.2 | 155 |
| 71 | Pre-lithiated graphene nanosheets as negative electrode materials for Li-ion capacitors with high power and energy density. Journal of Power Sources, 2014, 264, 108-113. | 4.0 | 153 |
| 72 | Computational Screening of 2D Materials and Rational Design of Heterojunctions for Water Splitting Photocatalysts. Small Methods, 2018, 2, 1700359. | 4.6 | 151 |

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|---|---|---|---|
| 73 | Enhanced Photocatalytic Properties in BiOBr Nanosheets with Dominantly Exposed (102) Facets. Journal of Physical Chemistry C, 2014, 118, 14662-14669. | 1.5 | 150 |
| 74 | Cation-induced chirality in a bifunctional metal-organic framework for quantitative enantioselective recognition. Nature Communications, 2019, 10, 5117. | 5.8 | 150 |
| 75 | Boosting the rate capability of hard carbon with an ether-based electrolyte for sodium ion batteries. Journal of Materials Chemistry A, 2017, 5, 9528-9532. | 5.2 | 148 |
| 76 | Tunable Band Structures of Heterostructured Bilayers with Transition-Metal Dichalcogenide and MXene Monolayer. Journal of Physical Chemistry C, 2014, 118, 5593-5599. | 1.5 | 147 |
| 77 | A P2-Na<sub>0.67</sub>Co<sub>0.5</sub>Mn<sub>0.5</sub>O<sub>2</sub> cathode material with excellent rate capability and cycling stability for sodium ion batteries. Journal of Materials Chemistry A, 2016, 4, 11103-11109. | 5.2 | 147 |
| 78 | High performance Liâ€“CO<sub>2</sub> batteries with NiOâ€“CNT cathodes. Journal of Materials Chemistry A, 2018, 6, 2792-2796. | 5.2 | 146 |
| 79 | Nonâ€Metal Ion Coâ€Insertion Chemistry in Aqueous Zn/MnO<sub>2</sub> Batteries. Angewandte Chemie - International Edition, 2021, 60, 7056-7060. | 7.2 | 146 |
| 80 | Tuning electronic and optical properties of MoS<sub>2</sub>monolayer via molecular charge transfer. Journal of Materials Chemistry A, 2014, 2, 16892-16897. | 5.2 | 145 |
| 81 | Effects of dopants and hydrogen on the electrical conductivity of ZnO. Journal of the European Ceramic Society, 2004, 24, 139-146. | 2.8 | 142 |
| 82 | MOF-Derived Porous Co<sub>3</sub>O<sub>4</sub> Hollow Tetrahedra with Excellent Performance as Anode Materials for Lithium-Ion Batteries. Inorganic Chemistry, 2015, 54, 8159-8161. | 1.9 | 142 |
| 83 | Heteroatom-doped graphene as electrocatalysts for air cathodes. Materials Horizons, 2017, 4, 7-19. | 6.4 | 142 |
| 84 | Computational studies on structural and electronic properties of functionalized MXene monolayers and nanotubes. Journal of Materials Chemistry A, 2015, 3, 4960-4966. | 5.2 | 141 |
| 85 | Transition metal doping BiOBr nanosheets with oxygen vacancy and exposed {102} facets for visible light nitrogen fixation. Applied Catalysis B: Environmental, 2021, 281, 119516. | 10.8 | 141 |
| 86 | Electrochemical performance of nanocrystalline Li3V2(PO4)3/carbon composite material synthesized by a novel solâ€“gel method. Electrochimica Acta, 2006, 51, 6498-6502. | 2.6 | 137 |
| 87 | Frenkel-defected monolayer MoS2 catalysts for efficient hydrogen evolution. Nature Communications, 2022, 13, 2193. | 5.8 | 137 |
| 88 | Heteroatom-doped carbon materials and their composites as electrocatalysts for CO<sub>2</sub> reduction. Journal of Materials Chemistry A, 2018, 6, 18782-18793. | 5.2 | 136 |
| 89 | Fast synthesis of core-shell LiCoPO4/C nanocomposite via microwave heating and its electrochemical Li intercalation performances. Electrochemistry Communications, 2009, 11, 95-98. | 2.3 | 132 |
| 90 | Synergistic effect of Zr-MOF on phosphomolybdic acid promotes efficient oxidative desulfurization. Applied Catalysis B: Environmental, 2019, 256, 117804. | 10.8 | 131 |

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| 91 | Yolkâ€"Shell MnO@ZnMn<sub>2</sub>O<sub>4</sub>/Nâ€"C Nanorods Derived from <i>Î±</i>â€MnO<sub>2</sub>/ZIFâ€8 as Anode Materials for Lithium Ion Batteries. Small, 2016, 12, 5564-5571. | 5.2 | 130 |
| 92 | Layer-by-Layer Hybrids of MoS2 and Reduced Graphene Oxide for Lithium Ion Batteries. Electrochimica Acta, 2014, 147, 392-400. | 2.6 | 129 |
| 93 | Phosphorene: what can we know from computations?. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2016, 6, 5-19. | 6.2 | 128 |
| 94 | Electronic Structure and Reactivity of Boron Nitride Nanoribbons with Stone-Wales Defects. Journal of Chemical Theory and Computation, 2009, 5, 3088-3095. | 2.3 | 127 |
| 95 | Identification of cathode stability in Liâ€"CO<sub>2</sub>batteries with Cu nanoparticles highly dispersed on N-doped graphene. Journal of Materials Chemistry A, 2018, 6, 3218-3223. | 5.2 | 126 |
| 96 | A Machine Learning Model on Simple Features for CO<sub>2</sub> Reduction Electrocatalysts. Journal of Physical Chemistry C, 2020, 124, 22471-22478. | 1.5 | 125 |
| 97 | Coreâ€"shell Fe@Fe3C/C nanocomposites as anode materials for Li ion batteries. Electrochimica Acta, 2013, 87, 180-185. | 2.6 | 124 |
| 98 | Achieving battery-level energy density by constructing aqueous carbonaceous supercapacitors with hierarchical porous N-rich carbon materials. Journal of Materials Chemistry A, 2015, 3, 11387-11394. | 5.2 | 123 |
| 99 | Rambutan-Like FeCO<sub>3</sub> Hollow Microspheres: Facile Preparation and Superior Lithium Storage Performances. ACS Applied Materials & Interfaces, 2013, 5, 11212-11217. | 4.0 | 121 |
| 100 | Electrolyteâ€Regulated Solidâ€Electrolyte Interphase Enables Long Cycle Life Performance in Organic Cathodes for Potassiumâ€Ion Batteries. Advanced Functional Materials, 2019, 29, 1807137. | 7.8 | 120 |
| 101 | Structural and Electronic Properties of Graphane Nanoribbons. Journal of Physical Chemistry C, 2009, 113, 15043-15045. | 1.5 | 118 |
| 102 | Fabricating Ir/C Nanofiber Networks as Freeâ€Standing Air Cathodes for Rechargeable Liâ€CO<sub>2</sub> Batteries. Small, 2018, 14, e1800641. | 5.2 | 118 |
| 103 | Do Composite Single-Walled Nanotubes Have Enhanced Capability for Lithium Storage?. Chemistry of Materials, 2005, 17, 992-1000. | 3.2 | 117 |
| 104 | To Achieve Stable Spherical Clusters:Â General Principles and Experimental Confirmations. Journal of the American Chemical Society, 2006, 128, 12829-12834. | 6.6 | 116 |
| 105 | 2D Materials Bridging Experiments and Computations for Electro/Photocatalysis. Advanced Energy Materials, 2022, 12, 2003841. | 10.2 | 116 |
| 106 | Preparation and Electrochemical Hydrogen Storage of Boron Nitride Nanotubes. Journal of Physical Chemistry B, 2005, 109, 11525-11529. | 1.2 | 115 |
| 107 | Origin of photoactivity in graphitic carbon nitride and strategies for enhancement of photocatalytic efficiency: insights from first-principles computations. Physical Chemistry Chemical Physics, 2015, 17, 6280-6288. | 1.3 | 115 |
| 108 | Structural design for anodes of lithium-ion batteries: emerging horizons from materials to electrodes. Materials Horizons, 2015, 2, 553-566. | 6.4 | 115 |

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|---|---|---|---|
| 109 | Co<sub>2</sub>(OH)<sub>2</sub>CO<sub>3</sub> Nanosheets and CoO Nanonets with Tailored Pore Sizes as Anodes for Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2015, 7, 12022-12029. | 4.0 | 113 |
| 110 | CuO Nanoplates for Highâ€Performance Potassiumâ€Ion Batteries. Small, 2019, 15, e1901775. | 5.2 | 111 |
| 111 | Bifunctional electrocatalysts for rechargeable Zn-air batteries. Chinese Journal of Catalysis, 2019, 40, 1298-1310. | 6.9 | 111 |
| 112 | Oriented SnS nanoflakes bound on S-doped N-rich carbon nanosheets with a rapid pseudocapacitive response as high-rate anodes for sodium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 19745-19751. | 5.2 | 108 |
| 113 | Structural evolution from mesoporous Î±-Fe2O3 to Fe3O4@C and Î³-Fe2O3 nanospheres and their lithium storage performances. CrystEngComm, 2011, 13, 4709. | 1.3 | 107 |
| 114 | Molecular Charge Transfer: A Simple and Effective Route To Engineer the Band Structures of BN Nanosheets and Nanoribbons. Journal of Physical Chemistry C, 2011, 115, 18531-18537. | 1.5 | 107 |
| 115 | Tâ€Nb<sub>2</sub>O<sub>5</sub>/C Nanofibers Prepared through Electrospinning with Prolonged Cycle Durability for Highâ€Rate Sodiumâ€“Ion Batteries Induced by Pseudocapacitance. Small, 2017, 13, 1702588. | 5.2 | 107 |
| 116 | A first-principles study of lithium absorption in boron- or nitrogen-doped single-walled carbon nanotubes. Carbon, 2004, 42, 2677-2682. | 5.4 | 106 |
| 117 | Stoneâˆ’Wales Defects in Single-Walled Boron Nitride Nanotubes:â€‰ Formation Energies, Electronic Structures, and Reactivity. Journal of Physical Chemistry C, 2008, 112, 1365-1370. | 1.5 | 105 |
| 118 | Building Artificial Solidâ€Electrolyte Interphase with Uniform Intermolecular Ionic Bonds toward Dendriteâ€Free Lithium Metal Anodes. Advanced Functional Materials, 2020, 30, 2002414. | 7.8 | 104 |
| 119 | Ultrathin Layered Hydroxide Cobalt Acetate Nanoplates Faceâ€toâ€Face Anchored to Graphene Nanosheets for Highâ€Efficiency Lithium Storage. Advanced Functional Materials, 2017, 27, 1605544. | 7.8 | 103 |
| 120 | Metalâ€“CO<sub>2</sub> Batteries at the Crossroad to Practical Energy Storage and CO<sub>2</sub> Recycle. Advanced Functional Materials, 2020, 30, 1908285. | 7.8 | 103 |
| 121 | Boosting bifunctional electrocatalytic activity in S and N co-doped carbon nanosheets for high-efficiency Znâ€“air batteries. Journal of Materials Chemistry A, 2020, 8, 4386-4395. | 5.2 | 101 |
| 122 | Exploiting Synergistic Effect by Integrating Rutheniumâ€“Copper Nanoparticles Highly Coâ€Dispersed on Graphene as Efficient Air Cathodes for Liâ€“CO<sub>2</sub> Batteries. Advanced Energy Materials, 2019, 9, 1802805. | 10.2 | 100 |
| 123 | Porous graphene: Properties, preparation, and potential applications. Science Bulletin, 2012, 57, 2948-2955. | 1.7 | 98 |
| 124 | A promising solâ€“gel route based on citric acid to synthesize Li3V2(PO4)3/carbon composite material for lithium ion batteries. Electrochimica Acta, 2007, 52, 4922-4926. | 2.6 | 97 |
| 125 | Sunlight-driven degradation of Rhodamine B by peanut-shaped porous BiVO<sub>4</sub>nanostructures in the H<sub>2</sub>O<sub>2</sub>-containing system. CrystEngComm, 2012, 14, 1038-1044. | 1.3 | 97 |
| 126 | A New Approach to the Fabrication of a Self-Organizing Film of Heterostructured Polymer/Cu2S Nanoparticles. Advanced Materials, 1998, 10, 529-532. | 11.1 | 96 |

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|---|---|---|---|
| 127 | Li- and Er-codoped ZnO with enhanced 1.54Î¼m photoemission. Applied Physics Letters, 2005, 87, 091109. | 1.5 | 96 |
| 128 | First-principles studies on doped graphene as anode materials in lithium-ion batteries. Theoretical Chemistry Accounts, 2011, 130, 209-213. | 0.5 | 95 |
| 129 | Alkaline rechargeable Ni/Co batteries: Cobalt hydroxides as negative electrode materials. Energy and Environmental Science, 2009, 2, 502. | 15.6 | 93 |
| 130 | Structural and electrochemical properties of Cl-doped LiFePO4/C. Journal of Power Sources, 2010, 195, 3680-3683. | 4.0 | 93 |
| 131 | Ultrasmall MnO@N-rich carbon nanosheets for high-power asymmetric supercapacitors. Journal of Materials Chemistry A, 2014, 2, 12519. | 5.2 | 92 |
| 132 | An Extremely Simple Method for Protecting Lithium Anodes in Liâ€O<sub>2</sub> Batteries. Angewandte Chemie - International Edition, 2018, 57, 12814-12818. | 7.2 | 88 |
| 133 | C N x nanotubes with pyridinelike structures: p-type semiconductors and Li storage materials. Journal of Chemical Physics, 2008, 129, 104703. | 1.2 | 87 |
| 134 | A composite of Co nanoparticles highly dispersed on N-rich carbon substrates: an efficient electrocatalyst for Liâ€“O<sub>2</sub>battery cathodes. Chemical Communications, 2014, 50, 776-778. | 2.2 | 87 |
| 135 | Carbonâ€Based Substrates for Highly Dispersed Nanoparticle and Even Singleâ€Atom Electrocatalysts. Small Methods, 2019, 3, 1900050. | 4.6 | 87 |
| 136 | Sulfur/nickel ferrite composite as cathode with high-volumetric-capacity for lithium-sulfur battery. Science China Materials, 2019, 62, 74-86. | 3.5 | 86 |
| 137 | Effect of lithium difluoro(oxalate)borate (LiDFOB) additive on the performance of high-voltage lithium-ion batteries. Journal of Applied Electrochemistry, 2012, 42, 291-296. | 1.5 | 85 |
| 138 | Controllable atomic defect engineering in layered Ni<sub>x</sub>Fe<sub>1âˆ’x</sub>(OH)<sub>2</sub> nanosheets for electrochemical overall water splitting. Journal of Materials Chemistry A, 2021, 9, 14432-14443. | 5.2 | 84 |
| 139 | A novel solâ€“gel method to synthesize nanocrystalline LiVPO4F and its electrochemical Li intercalation performances. Journal of Power Sources, 2006, 160, 633-637. | 4.0 | 83 |
| 140 | Do Transition Metal Carbonates Have Greater Lithium Storage Capability Than Oxides? A Case Study of Monodisperse CoCO3 and CoO Microspindles. ACS Applied Materials & Interfaces, 2014, 6, 12346-12352. | 4.0 | 83 |
| 141 | Tuning Electronic and Magnetic Properties of Wurtzite ZnO Nanosheets by Surface Hydrogenation. ACS Applied Materials & Interfaces, 2010, 2, 2442-2447. | 4.0 | 79 |
| 142 | LiVOPO4: A cathode material for 4V lithium ion batteries. Journal of Power Sources, 2009, 189, 786-789. | 4.0 | 78 |
| 143 | Morphology Control of Î²-In<sub>2</sub>S<sub>3</sub> from Chrysanthemum-Like Microspheres to Hollow Microspheres: Synthesis and Electrochemical Properties. Crystal Growth and Design, 2009, 9, 113-117. | 1.4 | 78 |
| 144 | Facile preparation of hierarchical Nb<sub>2</sub>O<sub>5</sub> microspheres with photocatalytic activities and electrochemical properties. Journal of Materials Chemistry A, 2014, 2, 9236-9243. | 5.2 | 77 |

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|---|---|---|---|
| 145 | An effective method to screen sodium-based layered materials for sodium ion batteries. Npj Computational Materials, 2018, 4, . | 3.5 | 77 |
| 146 | Moltenâ€Saltâ€Assisted Synthesis of 3D Holey Nâ€Doped Graphene as Bifunctional Electrocatalysts for Rechargeable Znâ€"Air Batteries. Small Methods, 2018, 2, 1800144. | 4.6 | 77 |
| 147 | Fe nanodot-decorated MoS<sub>2</sub> nanosheets on carbon cloth: an efficient and flexible electrode for ambient ammonia synthesis. Journal of Materials Chemistry A, 2019, 7, 27417-27422. | 5.2 | 77 |
| 148 | 2â€‰D Materials for Electrochemical Energy Storage: Design, Preparation, and Application. ChemSusChem, 2020, 13, 1155-1171. | 3.6 | 77 |
| 149 | Electronic and photocatalytic performance of boron phosphide-blue phosphorene vdW heterostructures. Applied Surface Science, 2020, 523, 146483. | 3.1 | 77 |
| 150 | Energetics and electronic structures of AlN nanotubes/wires and their potential application as ammonia sensors. Nanotechnology, 2007, 18, 424023. | 1.3 | 76 |
| 151 | Computational prediction of experimentally possible g-C3N3 monolayer as hydrogen purification membrane. International Journal of Hydrogen Energy, 2014, 39, 5037-5042. | 3.8 | 76 |
| 152 | Improving Electrochemical Performances of Rechargeable Liâ^'CO<sub>2</sub> Batteries with an Electrolyte Redox Mediator. ChemElectroChem, 2017, 4, 2145-2149. | 1.7 | 76 |
| 153 | Well-dispersed Na<sub>3</sub>V<sub>2</sub>(PO<sub>4</sub>)<sub>2</sub>F<sub>3</sub>@rGO with improved kinetics for high-power sodium-ion batteries. Journal of Materials Chemistry A, 2020, 8, 12391-12397. | 5.2 | 76 |
| 154 | Catalyst Design for Electrochemical Reduction of CO<sub>2</sub> to Multicarbon Products. Small Methods, 2021, 5, e2100736. | 4.6 | 74 |
| 155 | Carbonâ€Supported Divacancyâ€Anchored Platinum Singleâ€Atom Electrocatalysts with Superhigh Pt Utilization for the Oxygen Reduction Reaction. Angewandte Chemie, 2019, 131, 1175-1179. | 1.6 | 73 |
| 156 | Nickel single-atom catalysts intrinsically promoted by fast pyrolysis for selective electroreduction of CO2 into CO. Applied Catalysis B: Environmental, 2022, 304, 120997. | 10.8 | 73 |
| 157 | Engineering the Electronic Structure of Single-Walled Carbon Nanotubes by Chemical Functionalization. ChemPhysChem, 2005, 6, 598-601. | 1.0 | 71 |
| 158 | Metalâ€"organic-framework-derived porous 3D heterogeneous NiFe<sub>x</sub>/NiFe<sub>2</sub>O<sub>4</sub>@NC nanoflowers as highly stable and efficient electrocatalysts for the oxygen-evolution reaction. Journal of Materials Chemistry A, 2019, 7, 21338-21348. | 5.2 | 71 |
| 159 | Li/LiFePO4 batteries with room temperature ionic liquid as electrolyte. Electrochemistry Communications, 2009, 11, 1500-1503. | 2.3 | 70 |
| 160 | Nanomaterials and Technologies for Lithiumâ€Ion Hybrid Supercapacitors. ChemNanoMat, 2016, 2, 578-587. | 1.5 | 70 |
| 161 | Ab initio investigations on bulk and monolayer V<sub>2</sub>O<sub>5</sub> as cathode materials for Li-, Na-, K- and Mg-ion batteries. Journal of Materials Chemistry A, 2016, 4, 16606-16611. | 5.2 | 70 |
| 162 | Rational design of C<sub>2</sub>N-based type-II heterojunctions for overall photocatalytic water splitting. Nanoscale Advances, 2019, 1, 154-161. | 2.2 | 70 |

| # | Article | IF | Citations |
|---|---|---|---|
| 163 | Rational design of SnO<sub>2</sub>@C nanocomposites for lithium ion batteries by utilizing adsorption properties of MOFs. Chemical Communications, 2016, 52, 717-720. | 2.2 | 69 |
| 164 | Designing high-voltage carbonyl-containing polycyclic aromatic hydrocarbon cathode materials for Li-ion batteries guided by Clar's theory. Journal of Materials Chemistry A, 2015, 3, 19137-19143. | 5.2 | 68 |
| 165 | NASICONâ€Type Na<sub>3</sub>Zr<sub>2</sub>Si<sub>2</sub>PO<sub>12</sub> Solidâ€State Electrolytes for Sodium Batteries**. ChemElectroChem, 2021, 8, 1035-1047. | 1.7 | 68 |
| 166 | Atomic and Electronic Structures of Fluorinated BN Nanotubes:Â Computational Study. Journal of Physical Chemistry B, 2006, 110, 25678-25685. | 1.2 | 67 |
| 167 | Size- and Surface-dependent Stability, Electronic Properties, and Potential as Chemical Sensors: Computational Studies on One-dimensional ZnO Nanostructures. Journal of Physical Chemistry C, 2008, 112, 13926-13931. | 1.5 | 67 |
| 168 | Structural and electronic properties of grapheneâ€"ZnO interfaces: dispersion-corrected density functional theory investigations. Nanotechnology, 2013, 24, 305401. | 1.3 | 67 |
| 169 | Comparative Study of Carbon and BN Nanographenes: Ground Electronic States and Energy Gap Engineering. Journal of Physical Chemistry C, 2008, 112, 12677-12682. | 1.5 | 66 |
| 170 | Improved cyclic performances of LiCoPO4/C cathode materials for high-cell-potential lithium-ion batteries with thiophene as an electrolyte additive. Electrochimica Acta, 2012, 59, 172-178. | 2.6 | 66 |
| 171 | Tuning band gaps of BN nanosheets and nanoribbons via interfacial dihalogen bonding and external electric field. Nanoscale, 2014, 6, 8624-8634. | 2.8 | 64 |
| 172 | Targeted design of advanced electrocatalysts by machine learning. Chinese Journal of Catalysis, 2022, 43, 11-32. | 6.9 | 63 |
| 173 | In Situ Anchoring Massive Isolated Pt Atoms at Cationic Vacancies of Î±â€Ni<sub>x</sub>Fe<sub>1â€x</sub>(OH)<sub>2</sub> to Regulate the Electronic Structure for Overall Water Splitting. Advanced Functional Materials, 2022, 32, . | 7.8 | 63 |
| 174 | Template-Free Synthesis and Photocatalytic Application of Rutile TiO<sub>2</sub> Hierarchical Nanostructures. Industrial & Engineering Chemistry Research, 2011, 50, 6681-6687. | 1.8 | 62 |
| 175 | GO-induced preparation of flake-shaped Na<sub>3</sub>V<sub>2</sub>(PO<sub>4</sub>)<sub>3</sub>@rGO as high-rate and long-life cathodes for sodium-ion batteries. Journal of Materials Chemistry A, 2017, 5, 25276-25281. | 5.2 | 62 |
| 176 | Critical interface between inorganic solid-state electrolyte and sodium metal. Materials Today, 2020, 41, 200-218. | 8.3 | 62 |
| 177 | Enhanced Lithium Absorption in Single-Walled Carbon Nanotubes by Boron Doping. Journal of Physical Chemistry B, 2004, 108, 9023-9026. | 1.2 | 61 |
| 178 | Single-atom catalysts for electrochemical energy storage and conversion. Journal of Energy Chemistry, 2021, 63, 170-194. | 7.1 | 61 |
| 179 | Surface modification and electrochemical studies of spherical nickel hydroxide. Journal of Power Sources, 1998, 72, 221-225. | 4.0 | 60 |
| 180 | Rutile TiO<sub>2</sub>nanobundles on reduced graphene oxides as anode materials for Li ion batteries. Chemical Communications, 2014, 50, 11915-11918. | 2.2 | 60 |

| # | Article | IF | Citations |
|---|---|---|---|
| 181 | Unveiling the Complex Effects of H<sub>2</sub>O on Dischargeâ€“Recharge Behaviors of Aprotic Lithiumâ€“O<sub>2</sub> Batteries. Journal of Physical Chemistry Letters, 2018, 9, 3333-3339. | 2.1 | 60 |
| 182 | Solâ€“gel preparation and electrochemical performances of LiFe1/3Mn1/3Co1/3PO4/C composites with coreâ€“shell nanostructure. Electrochemistry Communications, 2009, 11, 1183-1186. | 2.3 | 59 |
| 183 | Binder-free NiFe 2 O 4 /C nanofibers as air cathodes for Li-O 2 batteries. Journal of Power Sources, 2018, 377, 136-141. | 4.0 | 59 |
| 184 | Hard carbon derived from corn straw piths as anode materials for sodium ion batteries. Ionics, 2018, 24, 1075-1081. | 1.2 | 59 |
| 185 | Alluaudite Na<sub>2</sub>Co<sub>2</sub>Fe(PO<sub>4</sub>)<sub>3</sub>as an electroactive material for sodium ion batteries. Dalton Transactions, 2015, 44, 7881-7886. | 1.6 | 58 |
| 186 | TiO<sub>2</sub>â€“B nanorods on reduced graphene oxide as anode materials for Li ion batteries. Chemical Communications, 2015, 51, 507-510. | 2.2 | 58 |
| 187 | Design of ultralong-life Liâ€“CO<sub>2</sub> batteries with IrO<sub>2</sub> nanoparticles highly dispersed on nitrogen-doped carbon nanotubes. Journal of Materials Chemistry A, 2020, 8, 3763-3770. | 5.2 | 58 |
| 188 | Ni<sub>3</sub>S<sub>2</sub> anchored to N/S co-doped reduced graphene oxide with highly pleated structure as a sulfur host for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2020, 8, 3834-3844. | 5.2 | 56 |
| 189 | Coupling of triporosity and strong Auâ€“Li interaction to enable dendrite-free lithium plating/stripping for long-life lithium metal anodes. Journal of Materials Chemistry A, 2020, 8, 18094-18105. | 5.2 | 56 |
| 190 | Mesoporous slit-structured NiO for high-performance pseudocapacitors. Physical Chemistry Chemical Physics, 2012, 14, 11048. | 1.3 | 55 |
| 191 | Two better than one: cobaltâ€“copper bimetallic yolkâ€“shell nanoparticles supported on graphene as excellent cathode catalysts for Liâ€“O<sub>2</sub>batteries. Journal of Materials Chemistry A, 2015, 3, 17874-17879. | 5.2 | 55 |
| 192 | ZnOâ€“GaN heterostructured nanosheets for solar energy harvesting: computational studies based on hybrid density functional theory. Journal of Materials Chemistry A, 2013, 1, 2231-2237. | 5.2 | 54 |
| 193 | A composite of CoNiP quantum dot-decorated reduced graphene oxide as a sulfur host for Liâ€“S batteries. Journal of Materials Chemistry A, 2021, 9, 16692-16698. | 5.2 | 54 |
| 194 | Carbon Nanofibers with Embedded Sb<sub>2</sub>Se<sub>3</sub> Nanoparticles as Highly Reversible Anodes for Naâ€Ion Batteries. Small, 2021, 17, e2006016. | 5.2 | 54 |
| 195 | Redox mediators for high-performance lithiumâ€“oxygen batteries. National Science Review, 2022, 9, nwac040. | 4.6 | 54 |
| 196 | Electrical properties of K0.5Na0.5NbO3 thin films grown on Nb:SrTiO3 single-crystalline substrates with different crystallographic orientations. Journal of Applied Physics, 2013, 113, . | 1.1 | 53 |
| 197 | Functionalization of BN nanotubes with dichlorocarbenes. Nanotechnology, 2008, 19, 015202. | 1.3 | 52 |
| 198 | NiFe<sub>2</sub>O<sub>4</sub>â€“CNT composite: an efficient electrocatalyst for oxygen evolution reactions in Liâ€“O<sub>2</sub>batteries guided by computations. Journal of Materials Chemistry A, 2016, 4, 9390-9393. | 5.2 | 52 |

| # | Article | IF | Citations |
|---|---|---|---|
| 199 | 2D Triphosphides: SbP3 and GaP3 monolayer as promising photocatalysts for water splitting. International Journal of Hydrogen Energy, 2019, 44, 5948-5954. | 3.8 | 52 |
| 200 | Structure and properties of phosphorene-like IV-VI 2D materials. Nanotechnology, 2016, 27, 415203. | 1.3 | 51 |
| 201 | Cu<sub>3</sub>-Cluster-Doped Monolayer Mo<sub>2</sub>CO<sub>2</sub> (MXene) as an Electron Reservoir for Catalyzing a CO Oxidation Reaction. ACS Applied Materials & Interfaces, 2018, 10, 32903-32912. | 4.0 | 51 |
| 202 | Firstâ€principles study of molecular hydrogen dissociation on doped Al<sub>12</sub>X (X = B, Al, C, Si,) Tj ETQq0 0 0 rgBT /Overlock 10 | 1.5 | 50 |
| 203 | Enhanced 1.54Î¼m photoluminescence from Er-containing ZnO through nitrogen doping. Applied Physics Letters, 2005, 86, 041107. | 1.5 | 49 |
| 204 | LiVOPO4Hollow Microspheres: One-Pot Hydrothermal Synthesis with Reactants as Self-Sacrifice Templates and Lithium Intercalation Performances. Journal of Physical Chemistry C, 2008, 112, 13043-13046. | 1.5 | 49 |
| 205 | Algorithm screening to accelerate discovery of 2D metal-free electrocatalysts for hydrogen evolution reaction. Journal of Materials Chemistry A, 2019, 7, 19290-19296. | 5.2 | 48 |
| 206 | Preparation and electrochemical Li storage performance of MnO@C nanorods consisting of ultra small MnO nanocrystals. RSC Advances, 2013, 3, 9035. | 1.7 | 47 |
| 207 | Could Li/Ni Disorder be Utilized Positively? Combined Experimental and Computational Investigation on Pillar Effect of Ni at Li Sites on LiCoO 2 at High Voltages. Electrochimica Acta, 2014, 146, 784-791. | 2.6 | 47 |
| 208 | High Carrier Mobility and Pronounced Light Absorption in Methyl-Terminated Germanene: Insights from First-Principles Computations. Journal of Physical Chemistry Letters, 2015, 6, 4252-4258. | 2.1 | 47 |
| 209 | Lithium-air batteries: Challenges coexist with opportunities. APL Materials, 2019, 7, . | 2.2 | 47 |
| 210 | Ultrathin salt-free polymer-in-ceramic electrolyte for solid-state sodium batteries. EScience, 2021, 1, 194-202. | 25.0 | 47 |
| 211 | Transformation from chemisorption to physisorption with tube diameter and gas concentration: Computational studies on NH3 adsorption in BN nanotubes. Journal of Chemical Physics, 2007, 127, 184705. | 1.2 | 46 |
| 212 | Facet-dependent activity of bismuth sulfide as low-cost counter-electrode materials for dye-sensitized solar cells. Journal of Materials Chemistry, 2012, 22, 18572. | 6.7 | 46 |
| 213 | Thermal Instability Induced Oriented 2D Pores for Enhanced Sodium Storage. Small, 2018, 14, e1800639. | 5.2 | 46 |
| 214 | Computational screening and first-principles investigations of NASICON-type Li<sub>x</sub>M<sub>2</sub>(PO<sub>4</sub>)<sub>3</sub> as solid electrolytes for Li batteries. Journal of Materials Chemistry A, 2018, 6, 2625-2631. | 5.2 | 46 |
| 215 | True Nanocable Assemblies with Insulating BN Nanotube Sheaths and Conducting Cu Nanowire Cores. Journal of Physical Chemistry B, 2006, 110, 2529-2532. | 1.2 | 45 |
| 216 | Tiâ€Substituted Boranes as Hydrogen Storage Materials: A Computational Quest for the Ideal Combination of Stable Electronic Structure and Optimal Hydrogen Uptake. Chemistry - A European Journal, 2009, 15, 5910-5919. | 1.7 | 45 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 217 | Synergistic electrocatalytic oxygen reduction reactions of Pd/B4C for ultra-stable Zn-air batteries. Energy Storage Materials, 2018, 15, 226-233. | 9.5 | 45 |
| 218 | Tuning the structure and morphology of Li2O2 by controlling the crystallinity of catalysts for Li-O2 batteries. Chemical Engineering Journal, 2021, 409, 128145. | 6.6 | 45 |
| 219 | Understanding the role of axial O in CO<sub>2</sub> electroreduction on NiN<sub>4</sub> single-atom catalysts <i>via</i> simulations in realistic electrochemical environment. Journal of Materials Chemistry A, 2021, 9, 23515-23521. | 5.2 | 45 |
| 220 | Well-distributed TiO2 nanocrystals on reduced graphene oxides as high-performance anode materials for lithium ion batteries. RSC Advances, 2013, 3, 13696. | 1.7 | 44 |
| 221 | Understanding the Structureâ€“Performance Relationship of Lithium-Rich Cathode Materials from an Oxygen-Vacancy Perspective. ACS Applied Materials & Interfaces, 2020, 12, 47655-47666. | 4.0 | 44 |
| 222 | Î±-Na<sub>2</sub>Ni<sub>2</sub>Fe(PO<sub>4</sub>)<sub>3</sub>: a dual positive/negative electrode material for sodium ion batteries. Dalton Transactions, 2015, 44, 4526-4532. | 1.6 | 43 |
| 223 | Highâ€throughput computational screening of layered and twoâ€dimensional materials. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2019, 9, e1385. | 6.2 | 43 |
| 224 | Synthesis and Catalytic Properties of Sb<sub>2</sub>S<sub>3</sub> Nanowire Bundles as Counter Electrodes for Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2013, 117, 10285-10290. | 1.5 | 42 |
| 225 | Tetragonal-structured anisotropic 2D metal nitride monolayers and their halides with versatile promises in energy storage and conversion. Journal of Materials Chemistry A, 2017, 5, 2870-2875. | 5.2 | 42 |
| 226 | LiFePO<sub>4</sub> Particles Embedded in Fast Bifunctional Conductor rGO&C@Li<sub>3</sub>V<sub>2</sub>(PO<sub>4</sub>)<sub>3</sub> Nanosheets as Cathodes for Highâ€Performance Liâ€Ion Hybrid Capacitors. Advanced Functional Materials, 2019, 29, 1807895. | 7.8 | 42 |
| 227 | Highly reversible alloying/dealloying behavior of SnSb nanoparticles incorporated into N-rich porous carbon nanowires for ultra-stable Na storage. Energy Storage Materials, 2019, 21, 203-209. | 9.5 | 42 |
| 228 | How Do Surface and Edge Effects Alter the Electronic Properties of GaN Nanoribbons?. Journal of Physical Chemistry C, 2011, 115, 1724-1731. | 1.5 | 41 |
| 229 | Do all wurtzite nanotubes prefer faceted ones?. Journal of Chemical Physics, 2009, 130, 204706. | 1.2 | 40 |
| 230 | An Extremely Simple Method for Protecting Lithium Anodes in Liâ€O<sub>2</sub> Batteries. Angewandte Chemie, 2018, 130, 12996-13000. | 1.6 | 40 |
| 231 | First-principles computational studies on layered Na<sub>2</sub>Mn<sub>3</sub>O<sub>7</sub> as a high-rate cathode material for sodium ion batteries. Journal of Materials Chemistry A, 2017, 5, 12752-12756. | 5.2 | 39 |
| 232 | Liâ€N<sub>2</sub> Batteries: A Reversible Energy Storage System?. Angewandte Chemie - International Edition, 2019, 58, 17782-17787. | 7.2 | 39 |
| 233 | Recent Progress in Protecting Lithium Anodes for Liâ€O<sub>2</sub> Batteries. ChemElectroChem, 2019, 6, 1969-1977. | 1.7 | 39 |
| 234 | Single Moâ€“N<sub>4</sub> Atomic Sites Anchored on Nâ€doped Carbon Nanoflowers as Sulfur Host with Multiple Immobilization and Catalytic Effects for Highâ€Performance Lithiumâ€“Sulfur Batteries. Advanced Functional Materials, 2022, 32, . | 7.8 | 39 |

| # | Article | IF | Citations |
|---|---|---|---|
| 235 | A Gadolinium(III) Zeolite-like Metal-Organic-Framework-Based Magnetic Resonance Thermometer. CheM, 2019, 5, 1609-1618. | 5.8 | 38 |
| 236 | Preserving the Edge Magnetism of Zigzag Graphene Nanoribbons by Ethylene Termination: Insight by Clar's Rule. Scientific Reports, 2013, 3, 2030. | 1.6 | 37 |
| 237 | Rational Design of Ni Nanoparticles on Nâ€Rich Ultrathin Carbon Nanosheets for Highâ€Performance Supercapacitor Materials: Embeddedâ€•Versus Anchoredâ€Type Dispersion. Chemistry - A European Journal, 2014, 20, 5046-5053. | 1.7 | 37 |
| 238 | Oxygen reduction reaction on Pt-based electrocatalysts: Four-electron vs. two-electron pathway. Chinese Journal of Catalysis, 2022, 43, 1433-1443. | 6.9 | 37 |
| 239 | Band Gap Engineering of BN Sheets by Interlayer Dihydrogen Bonding and Electric Field Control. ChemPhysChem, 2013, 14, 1787-1792. | 1.0 | 36 |
| 240 | Co<sub>3</sub>O<sub>4</sub> Hollow Nanoparticles and Co Organic Complexes Highly Dispersed on Nâ€Doped Graphene: An Efficient Cathode Catalyst for Liâ€O<sub>2</sub> Batteries. Particle and Particle Systems Characterization, 2015, 32, 680-685. | 1.2 | 36 |
| 241 | Promoting Nitrogen Electroreduction on Mo<sub>2</sub>C Nanoparticles Highly Dispersed on Nâ€Doped Carbon Nanosheets toward Rechargeable Liâ€“N<sub>2</sub> Batteries. Small Methods, 2019, 3, 1800334. | 4.6 | 36 |
| 242 | The Effect of Gas Adsorption on Carbon Nanotubes Properties. Journal of Computational and Theoretical Nanoscience, 2006, 3, 664-669. | 0.4 | 35 |
| 243 | NC unit trapped by fullerenes: a density functional theory study on Sc3NC@C2n (2n = 68, 78 and 80). Physical Chemistry Chemical Physics, 2010, 12, 12442. | 1.3 | 35 |
| 244 | Chrysanthemum-like Co3O4 architectures: Hydrothermal synthesis and lithium storage performances. Solid State Sciences, 2012, 14, 451-455. | 1.5 | 35 |
| 245 | Preparation and Ni-Doping Effect of Nanosized Truncated Octahedral LiCoMnO<sub>4</sub> As Cathode Materials for 5 V Li-Ion Batteries. ACS Applied Materials & Interfaces, 2013, 5, 12185-12189. | 4.0 | 35 |
| 246 | A first-principles study of electronic structure and photocatalytic performance of two-dimensional van der Waals MTe2â€“As (MÂ=ÂMo, W) heterostructures. International Journal of Hydrogen Energy, 2020, 45, 27089-27097. | 3.8 | 35 |
| 247 | Reduced Li diffusion barriers in composite BC3 nanotubes. Chemical Physics Letters, 2005, 415, 323-326. | 1.2 | 34 |
| 248 | Threeâ€Dimensional Grapheneâ€Based Macrostructures for Electrocatalysis. Small, 2021, 17, e2005255. | 5.2 | 34 |
| 249 | Versatile Electronic and Magnetic Properties of Corrugated V<sub>2</sub>O<sub>5</sub> Two-Dimensional Crystal and Its Derived One-Dimensional Nanoribbons: A Computational Exploration. Journal of Physical Chemistry C, 2011, 115, 11983-11990. | 1.5 | 33 |
| 250 | Coreâ€“shell VPO4/C anode materials for Li ion batteries: Computational investigation and solâ€“gel synthesis. Journal of Alloys and Compounds, 2012, 522, 167-171. | 2.8 | 33 |
| 251 | Electronic Properties of Ï€-Conjugated Nickel Bis(dithiolene) Network and Its Addition Reactivity with Ethylene. Journal of Physical Chemistry C, 2013, 117, 14125-14129. | 1.5 | 33 |
| 252 | The First Example of Heteroâ€Tripleâ€Walled Metalâ€“Organic Frameworks with High Chemical Stability Constructed via Flexible Integration of Mixed Molecular Building Blocks. Advanced Science, 2016, 3, 1500283. | 5.6 | 33 |

| # | Article | IF | Citations |
|---|---|---|---|
| 253 | Computational Screening of Layered Materials for Multivalent Ion Batteries. ACS Omega, 2019, 4, 7822-7828. | 1.6 | 33 |
| 254 | A Cu<sub>2</sub>B<sub>2</sub> monolayer with planar hypercoordinate motifs: an efficient catalyst for CO electroreduction to ethanol. Journal of Materials Chemistry A, 2020, 8, 9607-9615. | 5.2 | 32 |
| 255 | High-capacity and small-polarization aluminum organic batteries based on sustainable quinone-based cathodes with Al3+ insertion. Cell Reports Physical Science, 2021, 2, 100354. | 2.8 | 32 |
| 256 | Preparation of porous spherical Î±-Ni(OH)2 and enhancement of high-temperature electrochemical performances through yttrium addition. Electrochimica Acta, 2006, 52, 1120-1126. | 2.6 | 31 |
| 257 | LiVOPO4 as an anode material for lithium ion batteries. Journal of Applied Electrochemistry, 2010, 40, 209-213. | 1.5 | 31 |
| 258 | Achieving Ferromagnetism in Single-Crystalline ZnS Wurtzite Nanowires via Chromium Doping. Journal of Physical Chemistry C, 2010, 114, 12099-12103. | 1.5 | 31 |
| 259 | Porous hollow LiCoMnO 4 microspheres as cathode materials for 5Â V lithium ion batteries. Journal of Power Sources, 2014, 247, 794-798. | 4.0 | 31 |
| 260 | Understanding Rechargeable Liâˆ'O<sub>2</sub> Batteries via Firstâ€Principles Computations. Batteries and Supercaps, 2019, 2, 498-508. | 2.4 | 31 |
| 261 | Fabricating high-performance sodium ion capacitors with P2-Na0.67Co0.5Mn0.5O2 and MOF-derived carbon. Journal of Energy Chemistry, 2019, 28, 79-84. | 7.1 | 31 |
| 262 | Cobalt oxyhydroxide decorating hollow carbon sphere: A high-efficiency multi-functional material for Li-S batteries and alkaline electrocatalysis. Chemical Engineering Journal, 2022, 439, 135790. | 6.6 | 31 |
| 263 | High-temperature electrochemical performance of spherical Ni(OH)2Ni(OH)2 coated with Lu(OH)3Lu(OH)3. International Journal of Hydrogen Energy, 2006, 31, 71-76. | 3.8 | 30 |
| 264 | Electronic and Magnetic Properties of Hybrid Graphene Nanoribbons with Zigzag-Armchair Heterojunctions. Journal of Physical Chemistry C, 2012, 116, 208-213. | 1.5 | 30 |
| 265 | Zeolitic imidazole framework derived composites of nitrogen-doped porous carbon and reduced graphene oxide as high-efficiency cathode catalysts for Liâ€“O<sub>2</sub> batteries. Inorganic Chemistry Frontiers, 2017, 4, 1533-1538. | 3.0 | 30 |
| 266 | SiP monolayers: New 2D structures of group IVâ€“V compounds for visible-light photohydrolytic catalysts. Frontiers of Physics, 2018, 13, 1. | 2.4 | 30 |
| 267 | Improving electrochemical performance of Li3V2(PO4)3 in a thiophene-containing electrolyte. Journal of Power Sources, 2013, 222, 373-378. | 4.0 | 29 |
| 268 | Towards visible-light water splitting Photocatalysts: Band engineering of two-dimensional A5B4O15 perovskites. Nano Energy, 2016, 28, 390-396. | 8.2 | 29 |
| 269 | Integrated insights into Na<sup>+</sup> storage mechanism and electrochemical kinetics of ultrafine V<sub>2</sub>O<sub>3</sub>/S and N co-doped rGO composites as anodes for sodium ion batteries. Journal of Materials Chemistry A, 2019, 7, 22429-22435. | 5.2 | 29 |
| 270 | Computational studies on hydrogen storage in aluminum nitride nanowires/tubes. Nanotechnology, 2009, 20, 215701. | 1.3 | 28 |

| # | Article | IF | Citations |
|---|---|---|---|
| 271 | What is the promising anode material for Na ion batteries?. Science Bulletin, 2018, 63, 146-148. | 4.3 | 28 |
| 272 | Controllable fabrication and structure evolution of hierarchical 1T-MoS2 nanospheres for efficient hydrogen evolution. Green Energy and Environment, 2022, 7, 314-323. | 4.7 | 28 |
| 273 | Perspective on Theoretical Models for CO<sub>2</sub> Electrochemical Reduction. Journal of Physical Chemistry C, 2022, 126, 3820-3829. | 1.5 | 28 |
| 274 | Effects of hydrogen doping through ion implantation on the electrical conductivity of ZnO. International Journal of Hydrogen Energy, 2004, 29, 323-327. | 3.8 | 27 |
| 275 | Single-Layer [Cu<sub>2</sub>Br(IN)<sub>2</sub>]<sub><i>n</i></sub> Coordination Polymer (CP): Electronic and Magnetic Properties, and Implication for Molecular Sensors. Journal of Physical Chemistry C, 2012, 116, 4119-4125. | 1.5 | 27 |
| 276 | In Situ Chelating Synthesis of Hierarchical LiNi<sub>1/3</sub>Co<sub>1/3</sub>Mn<sub>1/3</sub>O<sub>2</sub> Polyhedron Assemblies with Ultralong Cycle Life for Liâ€ion Batteries. Small, 2018, 14, e1704354. | 5.2 | 27 |
| 277 | Recent Advances in Alkali Metalâ€ion Hybrid Supercapacitors. Batteries and Supercaps, 2021, 4, 1108-1121. | 2.4 | 27 |
| 278 | Effects of metal oxides on electrochemical hydrogen storage of nanocrystalline LaMg12â€“Ni composites. Electrochimica Acta, 2005, 50, 2187-2191. | 2.6 | 26 |
| 279 | First-principles studies on structural and electronic properties of GaNâ€“AlN heterostructure nanowires. Nanoscale, 2012, 4, 1078-1084. | 2.8 | 26 |
| 280 | Synthesis of Mesoporous Wallâ€Structured TiO<sub>2</sub> on Reduced Graphene Oxide Nanosheets with High Rate Performance for Lithiumâ€ion Batteries. Chemistry - A European Journal, 2015, 21, 5317-5322. | 1.7 | 26 |
| 281 | Structural changes upon lithium insertion in Ni 0.5 TiOPO 4. Journal of Alloys and Compounds, 2012, 530, 178-185. | 2.8 | 25 |
| 282 | Preparation of coreâ€“shell porous magnetite@carbon nanospheres through chemical vapor deposition as anode materials for lithium-ion batteries. Electrochimica Acta, 2015, 154, 136-141. | 2.6 | 25 |
| 283 | Towards Excellent Anodes for Liâ€ion Batteries with High Capacity and Super Long Lifespan: Confining Ultrasmall Sn Particles into Nâ€Rich Grapheneâ€Based Nanosheets. Particle and Particle Systems Characterization, 2015, 32, 104-111. | 1.2 | 25 |
| 284 | Robust ferromagnetism in zigzag-edge rich MoS<sub>2</sub> pyramids. Nanoscale, 2018, 10, 11578-11584. | 2.8 | 25 |
| 285 | Surface modification of garnet with amorphous SnO<sub>2</sub><i>via</i> atomic layer deposition. Journal of Materials Chemistry A, 2020, 8, 18087-18093. | 5.2 | 25 |
| 286 | Nonâ€Metal Ion Coâ€Insertion Chemistry in Aqueous Zn/MnO<sub>2</sub> Batteries. Angewandte Chemie, 2021, 133, 7132-7136. | 1.6 | 25 |
| 287 | <i>Journal of Materials Chemistry A</i> and <i>Materials Advances</i> Editorâ€™s choice web collection: â€œMachine learning for materials innovationâ€• Journal of Materials Chemistry A, 2021, 9, 1295-1296. | 5.2 | 24 |
| 288 | Improved electrochemical Li insertion performances of Li3V2(PO4)3/carbon composite materials prepared by a solâ€“gel route. Materials Letters, 2007, 61, 4562-4564. | 1.3 | 23 |

| # | Article | IF | Citations |
|---|---|---|---|
| 289 | A Robust Hybrid of SnO<sub>2</sub> Nanoparticles Sheathed by Nâ€Doped Carbon Derived from ZIFâ€8 as Anodes for Liâ€Ion Batteries. ChemNanoMat, 2017, 3, 252-258. | 1.5 | 23 |
| 290 | MoCl<sub>5</sub> as a dual-function redox mediator for Liâ€“O<sub>2</sub> batteries. Journal of Materials Chemistry A, 2019, 7, 14239-14243. | 5.2 | 23 |
| 291 | Controlled synthesis of ZnO with adjustable morphologies from nanosheets to microspheres. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2009, 348, 124-129. | 2.3 | 22 |
| 292 | Iron titanium phosphates as high-specific-capacity electrode materials for lithium ion batteries. Journal of Alloys and Compounds, 2014, 585, 434-441. | 2.8 | 22 |
| 293 | PAN@ZIF-67-Derived â€œGypsophilaâ€•Like CNFs@Co-CoO Composite as a Cathode for Liâ€“O<sub>2</sub> Batteries. Inorganic Chemistry, 2018, 57, 14476-14479. | 1.9 | 22 |
| 294 | Electrical Conductivity of Cu-Doped ZnO and its Change with Hydrogen Implantation. , 2003, 11, 73-79. | | 21 |
| 295 | In situ redox reaction induced firmly anchoring of Na3V2(PO4)2F3 on reduced graphene oxide & carbon nanosheets as cathodes for high stable sodium-ion batteries. Journal of Power Sources, 2021, 516, 230515. | 4.0 | 21 |
| 296 | From Vanadium Naphthalene (V<sub><i>n</i>â€“1</sub>Np<sub><i>n</i></sub>) Sandwich Clusters to VNp Sandwich Nanowire: Structural, Energetic, Electronic, and Magnetic Properties. Journal of Physical Chemistry A, 2012, 116, 1648-1654. | 1.1 | 20 |
| 297 | Enzymeâ€Inspired Roomâ€Temperature Lithiumâ€“Oxygen Chemistry via Reversible Cleavage and Formation of Dioxygen Bonds. Angewandte Chemie - International Edition, 2020, 59, 17856-17863. | 7.2 | 20 |
| 298 | S vacancies in 2D SnS2 accelerating hydrogen evolution reaction. Science China Materials, 2022, 65, 1833-1841. | 3.5 | 19 |
| 299 | Electrochemical behaviour of Ni(OH)2 ultrafine powder. Journal of Power Sources, 1998, 75, 283-287. | 4.0 | 18 |
| 300 | Controlled assembly of fluorescent multilayers from an aqueous solution of CdTe nanocrystals and nonionic carbazole-containing copolymers. Journal of Materials Chemistry, 2003, 13, 1356. | 6.7 | 18 |
| 301 | Coreâ€“shell Ni0.5TiOPO4/C composites as anode materials in Li ion batteries. Electrochimica Acta, 2011, 56, 2290-2294. | 2.6 | 18 |
| 302 | Electrochemical characteristics of nickel hydroxide modified by electroless cobalt coating. International Journal of Hydrogen Energy, 1998, 23, 873-878. | 3.8 | 17 |
| 303 | One-pot solvothermal route to self-assembly of cauliflower-shaped CdS microspheres. Applied Surface Science, 2011, 257, 6595-6600. | 3.1 | 17 |
| 304 | Reduced Graphene Oxideâ€Supported TiO<sub>2</sub> Fiber Bundles with Mesostructures as Anode Materials for Lithiumâ€Ion Batteries. Chemistry - A European Journal, 2015, 21, 14454-14459. | 1.7 | 17 |
| 305 | Band engineering of two-dimensional Ruddlesdenâ€“Popper perovskites for solar utilization: the relationship between chemical components and electronic properties. Journal of Materials Chemistry A, 2019, 7, 11530-11536. | 5.2 | 17 |
| 306 | Doping effects on 1.54Î¼m photoluminescence from Er-containing ZnO. Optical Materials, 2006, 28, 727-730. | 1.7 | 16 |

| # | Article | IF | Citations |
|---|---|---|---|
| 307 | Computational Investigation on Structural and Physical Properties of AlN Nanosheets and Nanoribbons. Journal of Nanoscience and Nanotechnology, 2010, 10, 7200-7203. | 0.9 | 16 |
| 308 | Recent progress of computational investigation on anode materials in Li ion batteries. Frontiers of Physics, 2011, 6, 197-203. | 2.4 | 16 |
| 309 | Defective/Doped Grapheneâ€Based Materials as Cathodes for Metalâ€“Air Batteries. Energy and Environmental Materials, 2022, 5, 1103-1116. | 7.3 | 16 |
| 310 | Direct <i>In Situ</i> Spectroscopic Evidence for Solution-Mediated Oxygen Reduction Reaction Intermediates in Aprotic Lithiumâ€“Oxygen Batteries. Nano Letters, 2022, 22, 501-507. | 4.5 | 16 |
| 311 | Fiberâ€Reinforced Composite Polymer Electrolytes for Solidâ€State Lithium Batteries. Advanced Sustainable Systems, 2022, 6, . | 2.7 | 16 |
| 312 | Changes in the properties and structure of hydrogen-storage electrodes after long-term charge/discharge cycling. Journal of Power Sources, 1998, 72, 236-238. | 4.0 | 15 |
| 313 | Regeneration of hydrogen storage alloy in spent nickelâ€“metal hydride batteries. Journal of Alloys and Compounds, 2002, 336, 237-241. | 2.8 | 15 |
| 314 | Coaxial Nanocables of AlN Nanowire Core and Carbon/BN Nanotube Shell. Journal of Physical Chemistry C, 2007, 111, 18533-18537. | 1.5 | 15 |
| 315 | Micro/Nanostructureâ€Dependent Electrochemical Performances of Sb 2 O 3 Microâ€Bundles as Anode Materials for Sodiumâ€Ion Batteries. ChemElectroChem, 2018, 5, 2522-2527. | 1.7 | 15 |
| 316 | Building the Stable Oxygen Framework in Highâ€Ni Layered Oxide Cathode for Highâ€Energyâ€Density Liâ€Ion Batteries. Energy and Environmental Materials, 2022, 5, 1260-1269. | 7.3 | 15 |
| 317 | Photoluminescence around 1.54 μm from Er-containing ZnO at Room Temperature. Materials Transactions, 2004, 45, 2003-2007. | 0.4 | 14 |
| 318 | First-principles investigations on delithiation of Li<sub>4</sub>NiTeO<sub>6</sub>. Physical Chemistry Chemical Physics, 2014, 16, 16145. | 1.3 | 14 |
| 319 | MnBx monolayers with quasi-planar hypercoordinate Mn atoms and unique magnetic and mechanical properties. FlatChem, 2017, 4, 42-47. | 2.8 | 14 |
| 320 | Computationally predicting spin semiconductors and half metals from doped phosphorene monolayers. Frontiers of Physics, 2019, 14, 1. | 2.4 | 14 |
| 321 | Diversified development of CO2 in energy storage. Green Chemical Engineering, 2020, 1, 79-81. | 3.3 | 14 |
| 322 | Computational study of catalytic effect of C3N4 on H2 release from complex hydrides. International Journal of Hydrogen Energy, 2015, 40, 8897-8902. | 3.8 | 13 |
| 323 | Pd-promoting reduction of zinc salt to PdZn alloy catalyst for the hydrogenation of nitrothioanisole. Journal of Colloid and Interface Science, 2021, 602, 459-468. | 5.0 | 13 |
| 324 | Lightâ€Assisted Liâ€“O<sub>2</sub> Batteries with Lowered Bias Voltages by Redox Mediators. Small, 2022, 18, . | 5.2 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 325 | K<sub>1â€“<i>x</i></sub>Mo<sub>3</sub>P<sub>2</sub>O<sub>14</sub> as Support for Single-Atom Catalysts. Journal of Physical Chemistry C, 2017, 121, 22895-22900. | 1.5 | 12 |
| 326 | Metal-oxygen bonds: Stabilizing the intermediate species towards practical Li-air batteries. Electrochimica Acta, 2018, 259, 313-320. | 2.6 | 12 |
| 327 | Carbon block anodes with columnar nanopores constructed from amine-functionalized carbon nanosheets for sodium-ion batteries. Journal of Materials Chemistry A, 2020, 8, 24393-24400. | 5.2 | 11 |
| 328 | Observation of oxygen evolution over a {Ni12}-cluster-based metal-organic framework. Science China Chemistry, 2022, 65, 1088-1093. | 4.2 | 11 |
| 329 | Electronic and Magnetic Properties of BN Monolayer Sheets with H- or O-Saturated Vacancies: A First-Principles Study. Journal of Computational and Theoretical Nanoscience, 2011, 8, 1513-1519. | 0.4 | 10 |
| 330 | p-Block elements for catalysis. Npj Computational Materials, 2021, 7, . | 3.5 | 10 |
| 331 | Insertion of C<sub>50</sub> into singleâ€walled carbon nanotubes: Selectivity in interwall spacing and C<sub>50</sub> isomers. Journal of Computational Chemistry, 2008, 29, 781-787. | 1.5 | 8 |
| 332 | How Different Are BN Nanotubes from Carbon Nanotubes?. Journal of Computational and Theoretical Nanoscience, 2009, 6, 327-334. | 0.4 | 7 |
| 333 | Metal-decorated defective BN nanosheets as hydrogen storage materials. Frontiers of Physics, 2011, 6, 224-230. | 2.4 | 7 |
| 334 | Computational prediction of the electronic structure and optical properties of graphene-like Î²-CuN<sub>3</sub>. Physical Chemistry Chemical Physics, 2015, 17, 31872-31876. | 1.3 | 7 |
| 335 | Accelerated Mining of 2D Van der Waals Heterojunctions by Integrating Supervised and Unsupervised Learning. Chemistry of Materials, 2022, 34, 5571-5583. | 3.2 | 7 |
| 336 | The transition from two-stage to three-stage evolution of wetting layer of InAs/GaAs quantum dots caused by postgrowth annealing. Applied Physics Letters, 2011, 98, 071914. | 1.5 | 6 |
| 337 | Targeting specific cell organelles with different-faceted nanocrystals that are selectively recognized by organelle-targeting peptides. Chemical Communications, 2020, 56, 7613-7616. | 2.2 | 6 |
| 338 | Functionalization of BN nanotubes with free radicals: electroaffinity-independent configuration and band structure engineering. Frontiers of Physics in China, 2009, 4, 378-382. | 1.0 | 5 |
| 339 | Cuâ€“ion induced self-polymerization of Cu phthalocyanine to prepare low-cost organic cathode materials for Li-ion batteries with ultra-high voltage and ultra-fast rate capability. Journal of Materials Chemistry A, 2021, 9, 24915-24921. | 5.2 | 5 |
| 340 | Coal-based ultrathin N-doped carbon nanosheets synthesized by molten-salt method for high-performance lithium-ion batteries. Nanotechnology, 2022, 33, 425401. | 1.3 | 5 |
| 341 | Effects of Nitrogen Irradiation on Photoluminescence around 1.54 μm from Er-containing ZnO. Materials Transactions, 2004, 45, 2906-2908. | 0.4 | 4 |
| 342 | Synthesis of CuInS2 Microspheres using In2S3 Microspheres as Templates. Australian Journal of Chemistry, 2009, 62, 1690. | 0.5 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 343 | Recent Computational Explorations for Nanostructured Hydrogen Storage Materials. Journal of Computational and Theoretical Nanoscience, 2011, 8, 2398-2405. | 0.4 | 4 |
| 344 | C/CrC nanocomposite coating deposited by magnetron sputtering at high ion irradiation conditions. Journal of Applied Physics, 2011, 110, 073301. | 1.1 | 4 |
| 345 | Enzymeâ€Inspired Roomâ€Temperature Lithiumâ€“Oxygen Chemistry via Reversible Cleavage and Formation of Dioxygen Bonds. Angewandte Chemie, 2020, 132, 18012-18019. | 1.6 | 4 |
| 346 | A New Approach to the Fabrication of a Self-Organizing Film of Heterostructured Polymer/Cu2S Nanoparticles. , 1998, 10, 529. | | 4 |
| 347 | Novel Carbon Nanotube Peapods Encapsulating Au<sub>32</sub> Golden Fullerene. Journal of Computational and Theoretical Nanoscience, 2006, 3, 459-462. | 0.4 | 4 |
| 348 | Fuzzy ta/2 symmetries of straight chain conjugate polyene molecules. Science in China Series B: Chemistry, 2009, 52, 1892-1910. | 0.8 | 3 |
| 349 | Uniform Chrysanthemum-Like Bi2S3 Microspheres for Dye-Sensitised Solar Cells. Australian Journal of Chemistry, 2012, 65, 1342. | 0.5 | 3 |
| 350 | Preparation and electrochemical performance of Mo6V9O40 nanorods as cathode materials for Li batteries. RSC Advances, 2015, 5, 15395-15398. | 1.7 | 3 |
| 351 | Bi-layer Graphene: Structure, Properties, Preparation and Prospects. Current Graphene Science, 2019, 2, 97-105. | 0.5 | 3 |
| 352 | A CO<sub>2</sub>-Assisted Sodiumâ€“Phenanthrenequinone Battery. Journal of Physical Chemistry Letters, 2020, 11, 5350-5353. | 2.1 | 3 |
| 353 | Crystal structures of two thiacalix[4]arene derivatives anchoring four thiadiazole groups. Journal of Chemical Sciences, 2009, 121, 1047-1052. | 0.7 | 2 |
| 354 | Graphitization and Pore Structure Adjustment of Graphene for Energy Storage and Conversion. Current Graphene Science, 2017, 1, . | 0.5 | 2 |
| 355 | Liâ€N 2 Batteries: A Reversible Energy Storage System?. Angewandte Chemie, 2019, 131, 17946-17951. | 1.6 | 2 |
| 356 | Effects of S-Doping and Subsequent Annealing on Photoluminescence around 1.54Å³m from Er-Containing ZnO. Materials Science Forum, 2005, 475-479, 1125-1128. | 0.3 | 1 |
| 357 | Electrochemical Capacitors: Fabrication of High-Power Li-Ion Hybrid Supercapacitors by Enhancing the Exterior Surface Charge Storage (Adv. Energy Mater. 17/2015). Advanced Energy Materials, 2015, 5, n/a-n/a. | 10.2 | 1 |
| 358 | Water Splitting: Computational Screening of 2D Materials and Rational Design of Heterojunctions for Water Splitting Photocatalysts (Small Methods 5/2018). Small Methods, 2018, 2, 1800031. | 4.6 | 1 |
| 359 | Titelbild: Liâ€N<sub>2</sub> Batteries: A Reversible Energy Storage System? (Angew. Chem. 49/2019). Angewandte Chemie, 2019, 131, 17645-17645. | 1.6 | 1 |
| 360 | Journal of Materials Chemistry A and Materials Advances Editor's choice web collection: â€œMachine learning for materials innovationâ€ Materials Advances, 2021, 2, 825-826. | 2.6 | 1 |

| # | Article | IF | Citations |
|---|---|---|---|
| 361 | Reflection of Neutrons from an Optical Grating. Materials Research Society Symposia Proceedings, 1994, 376, 199. | 0.1 | 0 |
| 362 | ACHIEVING P-TYPE SEMICONDUCTING <font>ZnO</font> NANOWIRES VIA DONOR ADSORPTION. Journal of Theoretical and Computational Chemistry, 2013, 12, 1350014. | 1.8 | 0 |
| 363 | InGaAs Complementary metal-oxide-semiconductor fabricated on GaAs Substrate using Al<inf>2</inf>O<inf>3</inf> as gate oxide. , 2014, , . | | 0 |
| 364 | Cover Image, Volume 6, Issue 1. Wiley Interdisciplinary Reviews: Computational Molecular Science, 2016, 6, i-i. | 6.2 | 0 |
| 365 | Frontispiz: Enzymeâ€Inspired Roomâ€Temperature Lithiumâ€“Oxygen Chemistry via Reversible Cleavage and Formation of Dioxygen Bonds. Angewandte Chemie, 2020, 132, . | 1.6 | 0 |
| 366 | Frontispiece: Enzymeâ€Inspired Roomâ€Temperature Lithiumâ€“Oxygen Chemistry via Reversible Cleavage and Formation of Dioxygen Bonds. Angewandte Chemie - International Edition, 2020, 59, . | 7.2 | 0 |
| 367 | Synthesis of metal silicides using polyhedral oligomeric silsesquioxane as a silicon source for semi-hydrogenation of phenylacetylene. Inorganic Chemistry Frontiers, 2022, 9, 1386-1394. | 3.0 | 0 |
| 368 | Improvement in raw-starch-digesting glucoamylase production by electrofusion of Aspergillus niger. Chinese Journal of Biotechnology, 1993, 9, 203-9. | 0.0 | 0 |