

Xiao-Dong Guo

List of Publications by Citations

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430
papers

50,330
citations

114
h-index

214
g-index

459
ext. papers

56,963
ext. citations

12.2
avg, IF

8.16
L-index

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 430 | Lithium-sulfur batteries: electrochemistry, materials, and prospects. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 13186-200 | 16.4 | 1989 |
| 429 | Nanostructured Materials for Electrochemical Energy Conversion and Storage Devices. <i>Advanced Materials</i> , 2008 , 20, 2878-2887 | 24 | 1893 |
| 428 | Smaller sulfur molecules promise better lithium-sulfur batteries. <i>Journal of the American Chemical Society</i> , 2012 , 134, 18510-3 | 16.4 | 1317 |
| 427 | Carbon Coated Fe ₃ O ₄ Nanospindles as a Superior Anode Material for Lithium-Ion Batteries. <i>Advanced Functional Materials</i> , 2008 , 18, 3941-3946 | 15.6 | 1119 |
| 426 | Accommodating lithium into 3D current collectors with a submicron skeleton towards long-life lithium metal anodes. <i>Nature Communications</i> , 2015 , 6, 8058 | 17.4 | 1030 |
| 425 | An Artificial Solid Electrolyte Interphase Layer for Stable Lithium Metal Anodes. <i>Advanced Materials</i> , 2016 , 28, 1853-8 | 24 | 1021 |
| 424 | Binding SnO ₂ nanocrystals in nitrogen-doped graphene sheets as anode materials for lithium-ion batteries. <i>Advanced Materials</i> , 2013 , 25, 2152-7 | 24 | 951 |
| 423 | Tin-Nanoparticles Encapsulated in Elastic Hollow Carbon Spheres for High-Performance Anode Material in Lithium-Ion Batteries. <i>Advanced Materials</i> , 2008 , 20, 1160-1165 | 24 | 938 |
| 422 | High Lithium Electroactivity of Nanometer-Sized Rutile TiO ₂ . <i>Advanced Materials</i> , 2006 , 18, 1421-1426 | 24 | 767 |
| 421 | High-quality Prussian blue crystals as superior cathode materials for room-temperature sodium-ion batteries. <i>Energy and Environmental Science</i> , 2014 , 7, 1643-1647 | 35.4 | 691 |
| 420 | Pt hollow nanospheres: facile synthesis and enhanced electrocatalysts. <i>Angewandte Chemie - International Edition</i> , 2004 , 43, 1540-3 | 16.4 | 631 |
| 419 | Synthesis and Lithium Storage Properties of Co ₃ O ₄ Nanosheet-Assembled Multishelled Hollow Spheres. <i>Advanced Functional Materials</i> , 2010 , 20, 1680-1686 | 15.6 | 615 |
| 418 | LiFePO ₄ Nanoparticles Embedded in a Nanoporous Carbon Matrix: Superior Cathode Material for Electrochemical Energy-Storage Devices. <i>Advanced Materials</i> , 2009 , 21, 2710-2714 | 24 | 597 |
| 417 | Superior Electrode Performance of Nanostructured Mesoporous TiO ₂ (Anatase) through Efficient Hierarchical Mixed Conducting Networks. <i>Advanced Materials</i> , 2007 , 19, 2087-2091 | 24 | 561 |
| 416 | Rutile-TiO ₂ nanocoating for a high-rate Li ₄ Ti ₅ O ₁₂ anode of a lithium-ion battery. <i>Journal of the American Chemical Society</i> , 2012 , 134, 7874-9 | 16.4 | 551 |
| 415 | Mass production and high photocatalytic activity of ZnS nanoporous nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 1269-73 | 16.4 | 511 |
| 414 | Nanocarbon networks for advanced rechargeable lithium batteries. <i>Accounts of Chemical Research</i> , 2012 , 45, 1759-69 | 24.3 | 488 |

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| 413 | A high-energy room-temperature sodium-sulfur battery. <i>Advanced Materials</i> , 2014 , 26, 1261-5 | 24 | 446 |
| 412 | A Flexible Solid Electrolyte Interphase Layer for Long-Life Lithium Metal Anodes. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 1505-1509 | 16.4 | 438 |
| 411 | Improving the electrode performance of Ge through Ge@C core-shell nanoparticles and graphene networks. <i>Journal of the American Chemical Society</i> , 2012 , 134, 2512-5 | 16.4 | 411 |
| 410 | Graphitized Carbon Fibers as Multifunctional 3D Current Collectors for High Areal Capacity Li Anodes. <i>Advanced Materials</i> , 2017 , 29, 1700389 | 24 | 403 |
| 409 | Self-Assembled Nanocomposite of Silicon Nanoparticles Encapsulated in Graphene through Electrostatic Attraction for Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2012 , 2, 1086-1090 | 21.8 | 401 |
| 408 | Watermelon-Inspired Si/C Microspheres with Hierarchical Buffer Structures for Densely Compacted Lithium-Ion Battery Anodes. <i>Advanced Energy Materials</i> , 2017 , 7, 1601481 | 21.8 | 397 |
| 407 | Safety-Reinforced Poly(Propylene Carbonate)-Based All-Solid-State Polymer Electrolyte for Ambient-Temperature Solid Polymer Lithium Batteries. <i>Advanced Energy Materials</i> , 2015 , 5, 1501082 | 21.8 | 391 |
| 406 | Facile synthesis of silicon nanoparticles inserted into graphene sheets as improved anode materials for lithium-ion batteries. <i>Chemical Communications</i> , 2012 , 48, 2198-200 | 5.8 | 379 |
| 405 | Nanostructured polyaniline-decorated Pt/C@PANI core-shell catalyst with enhanced durability and activity. <i>Journal of the American Chemical Society</i> , 2012 , 134, 13252-5 | 16.4 | 373 |
| 404 | Improved Electrode Performance of Porous LiFePO ₄ Using RuO ₂ as an Oxidic Nanoscale Interconnect. <i>Advanced Materials</i> , 2007 , 19, 1963-1966 | 24 | 360 |
| 403 | Rice husk-derived hierarchical silicon/nitrogen-doped carbon/carbon nanotube spheres as low-cost and high-capacity anodes for lithium-ion batteries. <i>Nano Energy</i> , 2016 , 25, 120-127 | 17.1 | 360 |
| 402 | Synthesis of CuO/graphene nanocomposite as a high-performance anode material for lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2010 , 20, 10661 | | 346 |
| 401 | Layered Oxide Cathodes for Sodium-Ion Batteries: Phase Transition, Air Stability, and Performance. <i>Advanced Energy Materials</i> , 2018 , 8, 1701912 | 21.8 | 346 |
| 400 | Sulfur Encapsulated in Graphitic Carbon Nanocages for High-Rate and Long-Cycle Lithium-Sulfur Batteries. <i>Advanced Materials</i> , 2016 , 28, 9539-9544 | 24 | 341 |
| 399 | A Sandwich-Like Hierarchically Porous Carbon/Graphene Composite as a High-Performance Anode Material for Sodium-Ion Batteries. <i>Advanced Energy Materials</i> , 2014 , 4, 1301584 | 21.8 | 341 |
| 398 | Advanced Micro/Nanostructures for Lithium Metal Anodes. <i>Advanced Science</i> , 2017 , 4, 1600445 | 13.6 | 338 |
| 397 | Mono dispersed SnO ₂ nanoparticles on both sides of single layer graphene sheets as anode materials in Li-ion batteries. <i>Journal of Materials Chemistry</i> , 2010 , 20, 5462 | | 338 |
| 396 | An advanced selenium-carbon cathode for rechargeable lithium-selenium batteries. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 8363-7 | 16.4 | 330 |

- 395 Suppressing the P2-O2 Phase Transition of Na_{0.67} Mn_{0.67} Ni_{0.33} O₂ by Magnesium Substitution for Improved Sodium-Ion Batteries. *Angewandte Chemie - International Edition*, **2016**, 55, 7445-9 16.4 330
- 394 Stable Li Plating/Stripping Electrochemistry Realized by a Hybrid Li Reservoir in Spherical Carbon Granules with 3D Conducting Skeletons. *Journal of the American Chemical Society*, **2017**, 139, 5916-5922 16.4 329
- 393 Reshaping Lithium Plating/Stripping Behavior via Bifunctional Polymer Electrolyte for Room-Temperature Solid Li Metal Batteries. *Journal of the American Chemical Society*, **2016**, 138, 15825-15828 16.4 329
- 392 Uniform Lithium Nucleation/Growth Induced by Lightweight Nitrogen-Doped Graphitic Carbon Foams for High-Performance Lithium Metal Anodes. *Advanced Materials*, **2018**, 30, 1706216 24 315
- 391 Subzero-Temperature Cathode for a Sodium-Ion Battery. *Advanced Materials*, **2016**, 28, 7243-8 24 299
- 390 Dendrite-Free Li-Metal Battery Enabled by a Thin Asymmetric Solid Electrolyte with Engineered Layers. *Journal of the American Chemical Society*, **2018**, 140, 82-85 16.4 299
- 389 Carbon-Nanotube-Decorated Nano-LiFePO₄ @C Cathode Material with Superior High-Rate and Low-Temperature Performances for Lithium-Ion Batteries. *Advanced Energy Materials*, **2013**, 3, 1155-1160 21.8 294
- 388 Stable Li Metal Anodes via Regulating Lithium Plating/Stripping in Vertically Aligned Microchannels. *Advanced Materials*, **2017**, 29, 1703729 24 288
- 387 Three-dimensional self-organization of supramolecular self-assembled porphyrin hollow hexagonal nanoprisms. *Journal of the American Chemical Society*, **2005**, 127, 17090-5 16.4 287
- 386 Ultra-uniform SnOx/carbon nanohybrids toward advanced lithium-ion battery anodes. *Advanced Materials*, **2014**, 26, 3943-9 24 283
- 385 Synthesis of MoS₂ nanosheet-graphene nanosheet hybrid materials for stable lithium storage. *Chemical Communications*, **2013**, 49, 1838-40 5.8 276
- 384 Highly Dispersed RuO₂ Nanoparticles on Carbon Nanotubes: Facile Synthesis and Enhanced Supercapacitance Performance. *Journal of Physical Chemistry C*, **2010**, 114, 2448-2451 3.8 274
- 383 High-Energy/Power and Low-Temperature Cathode for Sodium-Ion Batteries: In Situ XRD Study and Superior Full-Cell Performance. *Advanced Materials*, **2017**, 29, 1701968 24 266
- 382 Cu-Si nanocable arrays as high-rate anode materials for lithium-ion batteries. *Advanced Materials*, **2011**, 23, 4415-20 24 266
- 381 Solid-State Lithium Metal Batteries Promoted by Nanotechnology: Progress and Prospects. *ACS Energy Letters*, **2017**, 2, 1385-1394 20.1 259
- 380 High-Capacity Cathode Material with High Voltage for Li-Ion Batteries. *Advanced Materials*, **2018**, 30, 1705575 24 256
- 379 Introducing Dual Functional CNT Networks into CuO Nanomicrospheres toward Superior Electrode Materials for Lithium-Ion Batteries. *Chemistry of Materials*, **2008**, 20, 3617-3622 9.6 255
- 378 Insight into the effect of boron doping on sulfur/carbon cathode in lithium-sulfur batteries. *ACS Applied Materials & Interfaces*, **2014**, 6, 8789-95 9.5 254

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| 377 | Ionothermal synthesis of sulfur-doped porous carbons hybridized with graphene as superior anode materials for lithium-ion batteries. <i>Chemical Communications</i> , 2012 , 48, 10663-5 | 5.8 | 252 |
| 376 | High-Yield Gas/Liquid Interfacial Synthesis of Highly Dispersed Fe ₃ O ₄ Nanocrystals and Their Application in Lithium-Ion Batteries. <i>Chemistry of Materials</i> , 2009 , 21, 1162-1166 | 9.6 | 244 |
| 375 | Free-Standing Hollow Carbon Fibers as High-Capacity Containers for Stable Lithium Metal Anodes. <i>Joule</i> , 2017 , 1, 563-575 | 27.8 | 243 |
| 374 | Ti-Substituted NaNi _{1-x} Mn _x TiO ₂ Cathodes with Reversible O ₃ -P ₃ Phase Transition for High-Performance Sodium-Ion Batteries. <i>Advanced Materials</i> , 2017 , 29, 1700210 | 24 | 233 |
| 373 | Na/vacancy disordering promises high-rate Na-ion batteries. <i>Science Advances</i> , 2018 , 4, eaar6018 | 14.3 | 229 |
| 372 | Facile synthesis of MoS ₂ @CMK-3 nanocomposite as an improved anode material for lithium-ion batteries. <i>Nanoscale</i> , 2012 , 4, 5868-71 | 7.7 | 225 |
| 371 | Suppressing Surface Lattice Oxygen Release of Li-Rich Cathode Materials via Heterostructured Spinel Li _{1-x} Mn _x O Coating. <i>Advanced Materials</i> , 2018 , 30, e1801751 | 24 | 222 |
| 370 | Sodium iron hexacyanoferrate with high Na content as a Na-rich cathode material for Na-ion batteries. <i>Nano Research</i> , 2015 , 8, 117-128 | 10 | 221 |
| 369 | Synthesis of monodispersed wurtzite structure CuInSe ₂ nanocrystals and their application in high-performance organic-inorganic hybrid photodetectors. <i>Journal of the American Chemical Society</i> , 2010 , 132, 12218-21 | 16.4 | 221 |
| 368 | Designing Air-Stable O ₃ -Type Cathode Materials by Combined Structure Modulation for Na-Ion Batteries. <i>Journal of the American Chemical Society</i> , 2017 , 139, 8440-8443 | 16.4 | 219 |
| 367 | Towards better Li metal anodes: Challenges and strategies. <i>Materials Today</i> , 2020 , 33, 56-74 | 21.8 | 216 |
| 366 | Superior radical polymer cathode material with a two-electron process redox reaction promoted by graphene. <i>Energy and Environmental Science</i> , 2012 , 5, 5221-5225 | 35.4 | 207 |
| 365 | Synthesis of hierarchically mesoporous anatase spheres and their application in lithium batteries. <i>Chemical Communications</i> , 2006 , 2783-5 | 5.8 | 207 |
| 364 | Extended Electrochemical Window of Solid Electrolytes via Heterogeneous Multilayered Structure for High-Voltage Lithium Metal Batteries. <i>Advanced Materials</i> , 2019 , 31, e1807789 | 24 | 205 |
| 363 | Recent Advancements in Polymer-Based Composite Electrolytes for Rechargeable Lithium Batteries. <i>Electrochemical Energy Reviews</i> , 2018 , 1, 113-138 | 29.3 | 203 |
| 362 | Electrochemical lithiation synthesis of nanoporous materials with superior catalytic and capacitive activity. <i>Nature Materials</i> , 2006 , 5, 713-7 | 27 | 202 |
| 361 | Guiding Uniform Li Plating/Stripping through Lithium-Aluminum Alloying Medium for Long-Life Li Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 1094-1099 | 16.4 | 202 |
| 360 | Fe ₂ O ₃ Nanostructures: Inorganic Salt-Controlled Synthesis and Their Electrochemical Performance toward Lithium Storage. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 16824-16829 | 3.8 | 200 |

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| 359 | Facile Synthesis of Blocky SiO _x /C with Graphite-Like Structure for High-Performance Lithium-Ion Battery Anodes. <i>Advanced Functional Materials</i> , 2018 , 28, 1705235 | 15.6 | 199 |
| 358 | Upgrading traditional liquid electrolyte via in situ gelation for future lithium metal batteries. <i>Science Advances</i> , 2018 , 4, eaat5383 | 14.3 | 199 |
| 357 | Anisotropic photoresponse properties of single micrometer-sized GeSe nanosheet. <i>Advanced Materials</i> , 2012 , 24, 4528-33 | 24 | 196 |
| 356 | Research progress regarding Si-based anode materials towards practical application in high energy density Li-ion batteries. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 1691-1708 | 7.8 | 193 |
| 355 | Elemental Selenium for Electrochemical Energy Storage. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 256-66 | 6.4 | 187 |
| 354 | Symbiotic Coaxial Nanocables: Facile Synthesis and an Efficient and Elegant Morphological Solution to the Lithium Storage Problem. <i>Chemistry of Materials</i> , 2010 , 22, 1908-1914 | 9.6 | 185 |
| 353 | Enhancing the Kinetics of Li-Rich Cathode Materials through the Pinning Effects of Gradient Surface Na ⁺ Doping. <i>Advanced Energy Materials</i> , 2016 , 6, 1501914 | 21.8 | 185 |
| 352 | SiO Encapsulated in Graphene Bubble Film: An Ultrastable Li-Ion Battery Anode. <i>Advanced Materials</i> , 2018 , 30, e1707430 | 24 | 183 |
| 351 | Electrochemical (de)lithiation of 1D sulfur chains in Li-S batteries: a model system study. <i>Journal of the American Chemical Society</i> , 2015 , 137, 2215-8 | 16.4 | 179 |
| 350 | Passivation of Lithium Metal Anode via Hybrid Ionic Liquid Electrolyte toward Stable Li Plating/Stripping. <i>Advanced Science</i> , 2017 , 4, 1600400 | 13.6 | 176 |
| 349 | Solvothermal Synthesis of LiFePO ₄ Hierarchically Dumbbell-Like Microstructures by Nanoplate Self-Assembly and Their Application as a Cathode Material in Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 3345-3351 | 3.8 | 172 |
| 348 | SnO ₂ -Based Hierarchical Nanomicrostructures: Facile Synthesis and Their Applications in Gas Sensors and Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 14213-14219 | 3.8 | 171 |
| 347 | Tuning the porous structure of carbon hosts for loading sulfur toward long lifespan cathode materials for LiS batteries. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 6602 | 13 | 170 |
| 346 | Wet milled synthesis of an Sb/MWCNT nanocomposite for improved sodium storage. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 13727 | 13 | 169 |
| 345 | In-situ plasticized polymer electrolyte with double-network for flexible solid-state lithium-metal batteries. <i>Energy Storage Materials</i> , 2018 , 10, 85-91 | 19.4 | 165 |
| 344 | Rational design of anode materials based on Group IVA elements (Si, Ge, and Sn) for lithium-ion batteries. <i>Chemistry - an Asian Journal</i> , 2013 , 8, 1948-58 | 4.5 | 163 |
| 343 | Lithium-Schwefel-Batterien: Elektrochemie, Materialien und Perspektiven. <i>Angewandte Chemie</i> , 2013 , 125, 13426-13441 | 3.6 | 163 |
| 342 | Electrospray Synthesis of Silicon/Carbon Nanoporous Microspheres as Improved Anode Materials for Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 14148-14154 | 3.8 | 163 |

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| 341 | Engineering Janus Interfaces of Ceramic Electrolyte via Distinct Functional Polymers for Stable High-Voltage Li-Metal Batteries. <i>Journal of the American Chemical Society</i> , 2019 , 141, 9165-9169 | 16.4 | 161 |
| 340 | A zero-strain insertion cathode material of nickel ferricyanide for sodium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2013 , 1, 14061 | 13 | 159 |
| 339 | Mass Production and High Photocatalytic Activity of ZnS Nanoporous Nanoparticles. <i>Angewandte Chemie</i> , 2005 , 117, 1295-1299 | 3.6 | 154 |
| 338 | Electrospun silicon nanoparticle/porous carbon hybrid nanofibers for lithium-ion batteries. <i>Small</i> , 2013 , 9, 2684-8 | 11 | 153 |
| 337 | Mitigating Voltage Decay of Li-Rich Cathode Material via Increasing Ni Content for Lithium-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 20138-46 | 9.5 | 151 |
| 336 | Highly Disordered Carbon as a Superior Anode Material for Room-Temperature Sodium-Ion Batteries. <i>ChemElectroChem</i> , 2014 , 1, 83-86 | 4.3 | 150 |
| 335 | Synergism of Al-containing solid electrolyte interphase layer and Al-based colloidal particles for stable lithium anode. <i>Nano Energy</i> , 2017 , 36, 411-417 | 17.1 | 143 |
| 334 | Progress of the Interface Design in All-Solid-State LiB Batteries. <i>Advanced Functional Materials</i> , 2018 , 28, 1707533 | 15.6 | 140 |
| 333 | Improving the electrochemical performance of the $\text{Li}_4\text{Ti}_5\text{O}_{12}$ electrode in a rechargeable magnesium battery by lithium-magnesium co-intercalation. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 5757-61 | 16.4 | 139 |
| 332 | Mitigating Interfacial Potential Drop of Cathode-Solid Electrolyte via Ionic Conductor Layer To Enhance Interface Dynamics for Solid Batteries. <i>Journal of the American Chemical Society</i> , 2018 , 140, 6767-6770 | 16.4 | 137 |
| 331 | Improving cycling performance and rate capability of Ni-rich $\text{LiNi}_{0.8}\text{Co}_{0.1}\text{Mn}_{0.1}\text{O}_2$ cathode materials by $\text{Li}_4\text{Ti}_5\text{O}_{12}$ coating. <i>Electrochimica Acta</i> , 2018 , 268, 358-365 | 6.7 | 135 |
| 330 | Efficient 3D conducting networks built by graphene sheets and carbon nanoparticles for high-performance silicon anode. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 2824-8 | 9.5 | 133 |
| 329 | Synthesis of Single-Crystalline Co_3O_4 Octahedral Cages with Tunable Surface Aperture and Their Lithium Storage Properties. <i>Journal of Physical Chemistry C</i> , 2009 , 113, 15553-15558 | 3.8 | 133 |
| 328 | An O3-type $\text{NaNi}_{0.5}\text{Mn}_{0.5}\text{O}_2$ cathode for sodium-ion batteries with improved rate performance and cycling stability. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 17660-17664 | 13 | 131 |
| 327 | Microfluidic etching for fabrication of flexible and all-solid-state micro supercapacitor based on MnO_2 nanoparticles. <i>Nanoscale</i> , 2011 , 3, 2703-8 | 7.7 | 130 |
| 326 | Conductive graphite fiber as a stable host for zinc metal anodes. <i>Electrochimica Acta</i> , 2017 , 244, 172-1776.7 | | 125 |
| 325 | A robust composite of SnO_2 hollow nanospheres enwrapped by graphene as a high-capacity anode material for lithium-ion batteries. <i>Journal of Materials Chemistry</i> , 2012 , 22, 17456 | | 123 |
| 324 | Pt Hollow Nanospheres: Facile Synthesis and Enhanced Electrocatalysts. <i>Angewandte Chemie</i> , 2004 , 116, 1566-1569 | 3.6 | 121 |

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| 323 | A Stable Layered Oxide Cathode Material for High-Performance Sodium-Ion Battery. <i>Advanced Energy Materials</i> , 2019 , 9, 1803978 | 21.8 | 118 |
| 322 | Controllable AuPt bimetallic hollow nanostructures. <i>Chemical Communications</i> , 2004 , 1496-7 | 5.8 | 117 |
| 321 | The Electrochemistry with Lithium versus Sodium of Selenium Confined To Slit Micropores in Carbon. <i>Nano Letters</i> , 2016 , 16, 4560-8 | 11.5 | 117 |
| 320 | Microemulsion Assisted Assembly of 3D Porous S/Graphene@g-C ₃ N ₄ Hybrid Sponge as Free-Standing Cathodes for High Energy Density LiS Batteries. <i>Advanced Energy Materials</i> , 2018 , 8, 1702839 | 21.8 | 115 |
| 319 | A Dual-Salt Gel Polymer Electrolyte with 3D Cross-Linked Polymer Network for Dendrite-Free Lithium Metal Batteries. <i>Advanced Science</i> , 2018 , 5, 1800559 | 13.6 | 115 |
| 318 | Advanced Se ₂ nanocomposites: a bifunctional electrode material for both LiBe and Li-ion batteries. <i>Journal of Materials Chemistry A</i> , 2014 , 2, 13293 | 13 | 114 |
| 317 | Layer structured Fe ₃ O ₄ /nanodisk/reduced graphene oxide composites as high-performance anode materials for lithium-ion batteries. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 3932-6 | 9.5 | 114 |
| 316 | Hierarchically micro/mesoporous activated graphene with a large surface area for high sulfur loading in LiS batteries. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 4799-4802 | 13 | 114 |
| 315 | Better lithium-ion batteries with nanocable-like electrode materials. <i>Energy and Environmental Science</i> , 2011 , 4, 1634 | 35.4 | 114 |
| 314 | High-safety lithium-sulfur battery with prelithiated Si/C anode and ionic liquid electrolyte. <i>Electrochimica Acta</i> , 2013 , 91, 58-61 | 6.7 | 113 |
| 313 | Trapping Lithium into Hollow Silica Microspheres with a Carbon Nanotube Core for Dendrite-Free Lithium Metal Anodes. <i>Nano Letters</i> , 2018 , 18, 297-301 | 11.5 | 111 |
| 312 | Tin Nanoparticles Impregnated in Nitrogen-Doped Graphene for Lithium-Ion Battery Anodes. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 25367-25373 | 3.8 | 110 |
| 311 | Wurtzite Cu ₂ ZnSnSe ₄ nanocrystals for high-performance organic/inorganic hybrid photodetectors. <i>NPG Asia Materials</i> , 2012 , 4, e2-e2 | 10.3 | 109 |
| 310 | Facile Synthesis of Mesoporous TiO ₂ @ Nanosphere as an Improved Anode Material for Superior High Rate 1.5 V Rechargeable Li Ion Batteries Containing LiFePO ₄ @ Cathode. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 10308-10313 | 3.8 | 109 |
| 309 | Low-cost and large-scale synthesis of alkaline earth metal germanate nanowires as a new class of lithium ion battery anode material. <i>Energy and Environmental Science</i> , 2012 , 5, 8007 | 35.4 | 106 |
| 308 | Construction of homogeneously Al ³⁺ doped Ni rich Ni-Co-Mn cathode with high stable cycling performance and storage stability via scalable continuous precipitation. <i>Electrochimica Acta</i> , 2018 , 291, 84-94 | 6.7 | 106 |
| 307 | A highly reversible, low-strain Mg-ion insertion anode material for rechargeable Mg-ion batteries. <i>NPG Asia Materials</i> , 2014 , 6, e120-e120 | 10.3 | 105 |
| 306 | Spin-coated silicon nanoparticle/graphene electrode as a binder-free anode for high-performance lithium-ion batteries. <i>Nano Research</i> , 2012 , 5, 845-853 | 10 | 105 |

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| 305 | Superior hybrid cathode material containing lithium-excess layered material and graphene for lithium-ion batteries. <i>ACS Applied Materials & Interfaces</i> , 2012 , 4, 4858-63 | 9.5 | 105 |
| 304 | Ordered NiCu Nanowire Array with Enhanced Coercivity. <i>Chemistry of Materials</i> , 2003 , 15, 664-667 | 9.6 | 105 |
| 303 | Nitriding-Interface-Regulated Lithium Plating Enables Flame-Retardant Electrolytes for High-Voltage Lithium Metal Batteries. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 7802-7807 | 16.4 | 102 |
| 302 | Progress of rechargeable lithium metal batteries based on conversion reactions. <i>National Science Review</i> , 2017 , 4, 54-70 | 10.8 | 102 |
| 301 | TiO ₂ -Based Composite Nanotube Arrays Prepared via Layer-by-Layer Assembly. <i>Advanced Functional Materials</i> , 2005 , 15, 196-202 | 15.6 | 99 |
| 300 | High performance photodetectors of individual InSe single crystalline nanowire. <i>Journal of the American Chemical Society</i> , 2009 , 131, 15602-3 | 16.4 | 98 |
| 299 | Wet Chemistry Synthesis of Multidimensional Nanocarbon-Sulfur Hybrid Materials with Ultrahigh Sulfur Loading for Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 3584-90 | 9.5 | 97 |
| 298 | Uniform Nucleation of Lithium in 3D Current Collectors via Bromide Intermediates for Stable Cycling Lithium Metal Batteries. <i>Journal of the American Chemical Society</i> , 2018 , 140, 18051-18057 | 16.4 | 96 |
| 297 | A High-Performance Composite Electrode for Vanadium Redox Flow Batteries. <i>Advanced Energy Materials</i> , 2017 , 7, 1700461 | 21.8 | 95 |
| 296 | Direct tracking of the polysulfide shuttling and interfacial evolution in all-solid-state lithium-sulfur batteries: a degradation mechanism study. <i>Energy and Environmental Science</i> , 2019 , 12, 2496-2506 | 35.4 | 94 |
| 295 | Reducing the volume deformation of high capacity SiO _x /G/C anode toward industrial application in high energy density lithium-ion batteries. <i>Nano Energy</i> , 2019 , 60, 485-492 | 17.1 | 94 |
| 294 | Facile synthesis of germanium nanocrystals and their application in organic-inorganic hybrid photodetectors. <i>Advanced Materials</i> , 2011 , 23, 3704-7 | 24 | 94 |
| 293 | Insight into the Interfacial Process and Mechanism in Lithium-Sulfur Batteries: An In Situ AFM Study. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 15835-15839 | 16.4 | 93 |
| 292 | Self-Assembled LiFePO ₄ /C Nano/Microspheres by Using Phytic Acid as Phosphorus Source. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 5019-5024 | 3.8 | 93 |
| 291 | Exposing {010} Active Facets by Multiple-Layer Oriented Stacking Nanosheets for High-Performance Capacitive Sodium-Ion Oxide Cathode. <i>Advanced Materials</i> , 2018 , 30, e1803765 | 24 | 92 |
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