

Guangyuan Wesley Zheng

List of Publications by Year in descending order

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Version: 2024-02-01

64
papers

27,797
citations

32410

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124990

64
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65
all docs

65
docs citations

65
times ranked

26128
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Phase engineering of Mo-V oxides molecular sieves for zinc-ion batteries. <i>Science China Materials</i> , 2022, 65, 939-946. | 3.5 | 4 |
| 2 | Mixed Ionically/Electronically Conductive Double-Phase Interface Enhanced Solid-State Charge Transfer for a High-Performance All-Solid-State Li ⁺ S Battery. <i>Nano Letters</i> , 2022, 22, 433-440. | 4.5 | 12 |
| 3 | Cathode-Supported-Electrolyte Configuration for High-Performance All-Solid-State Lithium ⁺ Sulfur Batteries. <i>ACS Applied Energy Materials</i> , 2020, 3, 11540-11547. | 2.5 | 15 |
| 4 | Stabilizing a Lithium Metal Battery by an In Situ Li ₂ S-modified Interfacial Layer via Amorphous-Sulfide Composite Solid Electrolyte. <i>Nano Letters</i> , 2020, 20, 8273-8281. | 4.5 | 47 |
| 5 | Thermal Conductive 2D Boron Nitride for High-Performance All-Solid-State Lithium ⁺ Sulfur Batteries. <i>Advanced Science</i> , 2020, 7, 2001303. | 5.6 | 46 |
| 6 | Synergistic Effect of Salinized Quinone for Entrapment of Polysulfides for High-Performance Li ⁺ S Batteries. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 23867-23873. | 4.0 | 11 |
| 7 | Mechanical rolling formation of interpenetrated lithium metal/lithium tin alloy foil for ultrahigh-rate battery anode. <i>Nature Communications</i> , 2020, 11, 829. | 5.8 | 246 |
| 8 | Simultaneous Cobalt and Phosphorous Doping of MoS ₂ for Improved Catalytic Performance on Polysulfide Conversion in Lithium ⁺ Sulfur Batteries. <i>Advanced Energy Materials</i> , 2019, 9, 1902096. | 10.2 | 118 |
| 9 | A Cathode-Integrated Sulfur-Deficient Co ₉ S ₈ Catalytic Interlayer for the Reutilization of "Lost" Polysulfides in Lithium ⁺ Sulfur Batteries. <i>ACS Nano</i> , 2019, 13, 7073-7082. | 7.3 | 226 |
| 10 | Large-Scale Color-Changing Thin Film Energy Storage Device with High Optical Contrast and Energy Storage Capacity. <i>ACS Applied Energy Materials</i> , 2018, 1, 1658-1663. | 2.5 | 14 |
| 11 | Robust Pinhole-free Li ₃ N Solid Electrolyte Grown from Molten Lithium. <i>ACS Central Science</i> , 2018, 4, 97-104. | 5.3 | 197 |
| 12 | Elucidating the Catalytic Activity of Oxygen Deficiency in the Polysulfide Conversion Reactions of Lithium ⁺ Sulfur Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1801868. | 10.2 | 164 |
| 13 | Lithium Silicide Surface Enrichment: A Solution to Lithium Metal Battery. <i>Advanced Materials</i> , 2018, 30, e1801745. | 11.1 | 163 |
| 14 | Electrochemical energy storage devices for wearable technology: a rationale for materials selection and cell design. <i>Chemical Society Reviews</i> , 2018, 47, 5919-5945. | 18.7 | 314 |
| 15 | Nanoscale Nucleation and Growth of Electrodeposited Lithium Metal. <i>Nano Letters</i> , 2017, 17, 1132-1139. | 4.5 | 1,081 |
| 16 | Batteries: Just a spoonful of LiPF ₆ . <i>Nature Energy</i> , 2017, 2, . | 19.8 | 7 |
| 17 | Core-Shell Nanoparticle Coating as an Interfacial Layer for Dendrite-Free Lithium Metal Anodes. <i>ACS Central Science</i> , 2017, 3, 135-140. | 5.3 | 162 |
| 18 | Electrocatalysis of polysulfide conversion by sulfur-deficient MoS ₂ nanoflakes for lithium ⁺ sulfur batteries. <i>Energy and Environmental Science</i> , 2017, 10, 1476-1486. | 15.6 | 805 |

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|----|---|------|-----------|
| 19 | Phase Transformations in TiS ₂ during K Intercalation. ACS Energy Letters, 2017, 2, 1835-1840. | 8.8 | 104 |
| 20 | <i>In Situ</i> Observation and Electrochemical Study of Encapsulated Sulfur Nanoparticles by MoS ₂ Flakes. Journal of the American Chemical Society, 2017, 139, 10133-10141. | 6.6 | 126 |
| 21 | Graphite-Encapsulated Li-Metal Hybrid Anodes for High-Capacity Li Batteries. Chem, 2016, 1, 287-297. | 5.8 | 247 |
| 22 | Durable rechargeable zinc-air batteries with neutral electrolyte and manganese oxide catalyst. Journal of Power Sources, 2016, 332, 330-336. | 4.0 | 129 |
| 23 | High-Performance Lithium Metal Negative Electrode with a Soft and Flowable Polymer Coating. ACS Energy Letters, 2016, 1, 1247-1255. | 8.8 | 281 |
| 24 | Balancing surface adsorption and diffusion of lithium-polysulfides on nonconductive oxides for lithium-sulfur battery design. Nature Communications, 2016, 7, 11203. | 5.8 | 1,136 |
| 25 | A Stretchable Graphitic Carbon/Si Anode Enabled by Conformal Coating of a Self-Healing Elastic Polymer. Advanced Materials, 2016, 28, 2455-2461. | 11.1 | 197 |
| 26 | In Situ Chemical Synthesis of Lithium Fluoride/Metal Nanocomposite for High Capacity Prelithiation of Cathodes. Nano Letters, 2016, 16, 1497-1501. | 4.5 | 112 |
| 27 | In Situ Observation of Divergent Phase Transformations in Individual Sulfide Nanocrystals. Nano Letters, 2015, 15, 1264-1271. | 4.5 | 102 |
| 28 | Transparent air filter for high-efficiency PM2.5 capture. Nature Communications, 2015, 6, 6205. | 5.8 | 690 |
| 29 | The synergetic effect of lithium polysulfide and lithium nitrate to prevent lithium dendrite growth. Nature Communications, 2015, 6, 7436. | 5.8 | 1,250 |
| 30 | A Sulfur Cathode with Pomegranate-Like Cluster Structure. Advanced Energy Materials, 2015, 5, 1500211. | 10.2 | 122 |
| 31 | Polymer Nanofiber-Guided Uniform Lithium Deposition for Battery Electrodes. Nano Letters, 2015, 15, 2910-2916. | 4.5 | 495 |
| 32 | Lateral and Vertical Two-Dimensional Layered Topological Insulator Heterostructures. ACS Nano, 2015, 9, 10916-10921. | 7.3 | 30 |
| 33 | A phosphorene-graphene hybrid material as a high-capacity anode for sodium-ion batteries. Nature Nanotechnology, 2015, 10, 980-985. | 15.6 | 1,287 |
| 34 | In-operando optical imaging of temporal and spatial distribution of polysulfides in lithium-sulfur batteries. Nano Energy, 2015, 11, 579-586. | 8.2 | 84 |
| 35 | Improving lithium-sulfur batteries through spatial control of sulphur species deposition on a hybrid electrode surface. Nature Communications, 2014, 5, 3943. | 5.8 | 369 |
| 36 | Facile synthesis of Li ₂ S-polypyrrole composite structures for high-performance Li ₂ S cathodes. Energy and Environmental Science, 2014, 7, 672. | 15.6 | 277 |

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|----|--|------|-----------|
| 37 | High Electrochemical Selectivity of Edge versus Terrace Sites in Two-Dimensional Layered MoS ₂ Materials. Nano Letters, 2014, 14, 7138-7144. | 4.5 | 269 |
| 38 | Charging-free electrochemical system for harvesting low-grade thermal energy. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17011-17016. | 3.3 | 206 |
| 39 | Interconnected hollow carbon nanospheres for stable lithium metal anodes. Nature Nanotechnology, 2014, 9, 618-623. | 15.6 | 1,535 |
| 40 | Improved lithium-sulfur batteries with a conductive coating on the separator to prevent the accumulation of inactive S-related species at the cathode-separator interface. Energy and Environmental Science, 2014, 7, 3381-3390. | 15.6 | 476 |
| 41 | Ultrathin Two-Dimensional Atomic Crystals as Stable Interfacial Layer for Improvement of Lithium Metal Anode. Nano Letters, 2014, 14, 6016-6022. | 4.5 | 656 |
| 42 | Sulfur Cathodes with Hydrogen Reduced Titanium Dioxide Inverse Opal Structure. ACS Nano, 2014, 8, 5249-5256. | 7.3 | 297 |
| 43 | Formation of Stable Phosphorus-Carbon Bond for Enhanced Performance in Black Phosphorus Nanoparticle-Graphite Composite Battery Anodes. Nano Letters, 2014, 14, 4573-4580. | 4.5 | 764 |
| 44 | High-capacity Li ₂ S-graphene oxide composite cathodes with stable cycling performance. Chemical Science, 2014, 5, 1396. | 3.7 | 109 |
| 45 | Electrochemical tuning of layered lithium transition metal oxides for improvement of oxygen evolution reaction. Nature Communications, 2014, 5, 4345. | 5.8 | 411 |
| 46 | Strong Sulfur Binding with Conducting Magn@li-Phase Ti ₂ O ₃ Nanomaterials for Improving Lithium-Sulfur Batteries. Nano Letters, 2014, 14, 5288-5294. | 4.5 | 643 |
| 47 | Stable cycling of lithium sulfide cathodes through strong affinity with a bifunctional binder. Chemical Science, 2013, 4, 3673. | 3.7 | 412 |
| 48 | Understanding the Role of Different Conductive Polymers in Improving the Nanostructured Sulfur Cathode Performance. Nano Letters, 2013, 13, 5534-5540. | 4.5 | 601 |
| 49 | Electrochemical tuning of vertically aligned MoS ₂ nanofilms and its application in improving hydrogen evolution reaction. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 19701-19706. | 3.3 | 894 |
| 50 | High-performance hollow sulfur nanostructured battery cathode through a scalable, room temperature, one-step, bottom-up approach. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 7148-7153. | 3.3 | 359 |
| 51 | Transparent and conductive paper from nanocellulose fibers. Energy and Environmental Science, 2013, 6, 513-518. | 15.6 | 431 |
| 52 | Sulphur-TiO ₂ yolk-shell nanoarchitecture with internal void space for long-cycle lithium-sulphur batteries. Nature Communications, 2013, 4, 1331. | 5.8 | 1,884 |
| 53 | Amphiphilic Surface Modification of Hollow Carbon Nanofibers for Improved Cycle Life of Lithium Sulfur Batteries. Nano Letters, 2013, 13, 1265-1270. | 4.5 | 668 |
| 54 | A membrane-free lithium/polysulfide semi-liquid battery for large-scale energy storage. Energy and Environmental Science, 2013, 6, 1552. | 15.6 | 359 |

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|----|--|------|-----------|
| 55 | Nanostructured paper for flexible energy and electronic devices. MRS Bulletin, 2013, 38, 320-325. | 1.7 | 199 |
| 56 | Nanostructured sulfur cathodes. Chemical Society Reviews, 2013, 42, 3018. | 18.7 | 1,778 |
| 57 | Silicon-conductive nanopaper for Li-ion batteries. Nano Energy, 2013, 2, 138-145. | 8.2 | 155 |
| 58 | Crab Shells as Sustainable Templates from Nature for Nanostructured Battery Electrodes. Nano Letters, 2013, 13, 3385-3390. | 4.5 | 208 |
| 59 | MoSe ₂ and WSe ₂ Nanofilms with Vertically Aligned Molecular Layers on Curved and Rough Surfaces. Nano Letters, 2013, 13, 3426-3433. | 4.5 | 653 |
| 60 | High-Capacity Micrometer-Sized Li ₂ S Particles as Cathode Materials for Advanced Rechargeable Lithium-Ion Batteries. Journal of the American Chemical Society, 2012, 134, 15387-15394. | 6.6 | 624 |
| 61 | Engineering Empty Space between Si Nanoparticles for Lithium-Ion Battery Anodes. Nano Letters, 2012, 12, 904-909. | 4.5 | 658 |
| 62 | Rechargeable Li-O ₂ batteries with a covalently coupled MnCo ₂ O ₄ -graphene hybrid as an oxygen cathode catalyst. Energy and Environmental Science, 2012, 5, 7931. | 15.6 | 393 |
| 63 | Paper supercapacitors by a solvent-free drawing method. Energy and Environmental Science, 2011, 4, 3368. | 15.6 | 290 |
| 64 | Hollow Carbon Nanofiber-Encapsulated Sulfur Cathodes for High Specific Capacity Rechargeable Lithium Batteries. Nano Letters, 2011, 11, 4462-4467. | 4.5 | 1,194 |