# Hongli Zhu

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8010741/publications.pdf

Version: 2024-02-01

| | | | |
|---|---|---|---|
| 112 papers | 13,758 citations | 26567 56 h-index | 24915 109 g-index |
| 115 all docs | 115 docs citations | 115 times ranked | 16919 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Wood-Derived Materials for Green Electronics, Biological Devices, and Energy Applications. Chemical Reviews, 2016, 116, 9305-9374. | 23.0 | 1,110 |
| 2 | Na-Ion Battery Anodes: Materials and Electrochemistry. Accounts of Chemical Research, 2016, 49, 231-240. | 7.6 | 886 |
| 3 | Pure and stable metallic phase molybdenum disulfide nanosheets for hydrogen evolution reaction. Nature Communications, 2016, 7, 10672. | 5.8 | 721 |
| 4 | Tin Anode for Sodium-Ion Batteries Using Natural Wood Fiber as a Mechanical Buffer and Electrolyte Reservoir. Nano Letters, 2013, 13, 3093-3100. | 4.5 | 556 |
| 5 | Transparent paper: fabrications, properties, and device applications. Energy and Environmental Science, 2014, 7, 269-287. | 15.6 | 457 |
| 6 | Highly Thermally Conductive Papers with Percolative Layered Boron Nitride Nanosheets. ACS Nano, 2014, 8, 3606-3613. | 7.3 | 425 |
| 7 | Highly Transparent and Flexible Nanopaper Transistors. ACS Nano, 2013, 7, 2106-2113. | 7.3 | 401 |
| 8 | Sulfideâ€Based Solidâ€State Electrolytes: Synthesis, Stability, and Potential for Allâ€Solidâ€State Batteries. Advanced Materials, 2019, 31, e1901131. | 11.1 | 365 |
| 9 | Two-Dimensional Water-Coupled Metallic MoS<sub>2</sub> with Nanochannels for Ultrafast Supercapacitors. Nano Letters, 2017, 17, 1825-1832. | 4.5 | 337 |
| 10 | Lithium Dendrite in All-Solid-State Batteries: Growth Mechanisms, Suppression Strategies, and Characterizations. Matter, 2020, 3, 57-94. | 5.0 | 334 |
| 11 | Natural Cellulose Fiber as Substrate for Supercapacitor. ACS Nano, 2013, 7, 6037-6046. | 7.3 | 315 |
| 12 | A Thermally Conductive Separator for Stable Li Metal Anodes. Nano Letters, 2015, 15, 6149-6154. | 4.5 | 313 |
| 13 | Anomalous scaling law of strength and toughness of cellulose nanopaper. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 8971-8976. | 3.3 | 296 |
| 14 | Biodegradable transparent substrates for flexible organic-light-emitting diodes. Energy and Environmental Science, 2013, 6, 2105. | 15.6 | 281 |
| 15 | Nanocellulose as green dispersant for two-dimensional energy materials. Nano Energy, 2015, 13, 346-354. | 8.2 | 270 |
| 16 | Freestanding Metallic 1T MoS<sub>2</sub> with Dual Ion Diffusion Paths as High Rate Anode for Sodiumâ€Ion Batteries. Advanced Functional Materials, 2017, 27, 1702998. | 7.8 | 265 |
| 17 | 3D Printed Highâ€Performance Lithium Metal Microbatteries Enabled by Nanocellulose. Advanced Materials, 2019, 31, e1807313. | 11.1 | 226 |
| 18 | Transparent nanopaper with tailored optical properties. Nanoscale, 2013, 5, 3787. | 2.8 | 223 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Metallic MoS<sub>2</sub> for High Performance Energy Storage and Energy Conversion. Small, 2018, 14, e1800640. | 5.2 | 218 |
| 20 | Porous Amorphous FePO<sub>4</sub> Nanoparticles Connected by Single-Wall Carbon Nanotubes for Sodium Ion Battery Cathodes. Nano Letters, 2012, 12, 5664-5668. | 4.5 | 215 |
| 21 | Approaching the limits of transparency and conductivity in graphitic materials through lithium intercalation. Nature Communications, 2014, 5, 4224. | 5.8 | 213 |
| 22 | Nanostructured paper for flexible energy and electronic devices. MRS Bulletin, 2013, 38, 320-325. | 1.7 | 199 |
| 23 | Bacterial-Derived, Compressible, and Hierarchical Porous Carbon for High-Performance Potassium-Ion Batteries. Nano Letters, 2018, 18, 7407-7413. | 4.5 | 192 |
| 24 | Ion Transport Nanotube Assembled with Vertically Aligned Metallic MoS<sub>2</sub> for High Rate Lithiumâ€Ion Batteries. Advanced Energy Materials, 2018, 8, 1702779. | 10.2 | 181 |
| 25 | Extreme Light Management in Mesoporous Wood Cellulose Paper for Optoelectronics. ACS Nano, 2016, 10, 1369-1377. | 7.3 | 161 |
| 26 | Low temperature carbonization of cellulose nanocrystals for high performance carbon anode of sodium-ion batteries. Nano Energy, 2017, 33, 37-44. | 8.2 | 159 |
| 27 | Carbonized-leaf Membrane with Anisotropic Surfaces for Sodium-ion Battery. ACS Applied Materials & Interfaces, 2016, 8, 2204-2210. | 4.0 | 146 |
| 28 | Novel gas sensing platform based on a stretchable laser-induced graphene pattern with self-heating capabilities. Journal of Materials Chemistry A, 2020, 8, 6487-6500. | 5.2 | 135 |
| 29 | Silver nanowire transparent conducting paper-based electrode with high optical haze. Journal of Materials Chemistry C, 2014, 2, 1248-1254. | 2.7 | 131 |
| 30 | Celluloseâ€Nanofiberâ€Enabled 3D Printing of a Carbonâ€Nanotube Microfiber Network. Small Methods, 2017, 1, 1700222. | 4.6 | 130 |
| 31 | Highly transparent paper with tunable haze for green electronics. Energy and Environmental Science, 2014, 7, 3313-3319. | 15.6 | 123 |
| 32 | Chemically Crushed Wood Cellulose Fiber towards High-Performance Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2015, 7, 23291-23296. | 4.0 | 123 |
| 33 | An â€˜antifoulingâ€™ porous loofah sponge with internal microchannels as solar absorbers and water pumpers for thermal desalination. Journal of Materials Chemistry A, 2020, 8, 12323-12333. | 5.2 | 118 |
| 34 | Highly transparent and writable wood all-cellulose hybrid nanostructured paper. Journal of Materials Chemistry C, 2013, 1, 6191. | 2.7 | 117 |
| 35 | Stable Metal Anode enabled by Porous Lithium Foam with Superior Ion Accessibility. Advanced Materials, 2018, 30, e1802156. | 11.1 | 115 |
| 36 | Stable Thiophosphate-Based All-Solid-State Lithium Batteries through Conformally Interfacial Nanocoating. Nano Letters, 2020, 20, 1483-1490. | 4.5 | 112 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Biodegradable, Hygienic, and Compostable Tableware from Hybrid Sugarcane and Bamboo Fibers as Plastic Alternative. Matter, 2020, 3, 2066-2079. | 5.0 | 107 |
| 38 | Strong transparent magnetic nanopaper prepared by immobilization of Fe3O4 nanoparticles in a nanofibrillated cellulose network. Journal of Materials Chemistry A, 2013, 1, 15278. | 5.2 | 104 |
| 39 | Photocatalytic Rejuvenation Enabled Self-Sanitizing, Reusable, and Biodegradable Masks against COVID-19. ACS Nano, 2021, 15, 11992-12005. | 7.3 | 98 |
| 40 | Self-Powered Human-Interactive Transparent Nanopaper Systems. ACS Nano, 2015, 9, 7399-7406. | 7.3 | 97 |
| 41 | Ultralight, highly thermally insulating and fire resistant aerogel by encapsulating cellulose nanofibers with two-dimensional MoS<sub>2</sub>. Nanoscale, 2017, 9, 11452-11462. | 2.8 | 97 |
| 42 | Hybridizing wood cellulose and graphene oxide toward high-performance fibers. NPG Asia Materials, 2015, 7, e150-e150. | 3.8 | 95 |
| 43 | Highly Conductive Microfiber of Graphene Oxide Templated Carbonization of Nanofibrillated Cellulose. Advanced Functional Materials, 2014, 24, 7366-7372. | 7.8 | 94 |
| 44 | Free-Standing Na<sub>2/3</sub>Fe<sub>1/2</sub>Mn<sub>1/2</sub>O<sub>2</sub>@Graphene Film for a Sodium-Ion Battery Cathode. ACS Applied Materials & Interfaces, 2014, 6, 4242-4247. | 4.0 | 88 |
| 45 | A gravure printed antenna on shape-stable transparent nanopaper. Nanoscale, 2014, 6, 9110. | 2.8 | 85 |
| 46 | Superstrong and Tough Hydrogel through Physical Cross-Linking and Molecular Alignment. Biomacromolecules, 2019, 20, 4476-4484. | 2.6 | 83 |
| 47 | Natural Cellulose Nanofibers As Sustainable Enhancers in Construction Cement. PLoS ONE, 2016, 11, e0168422. | 1.1 | 79 |
| 48 | Atomic-Layer-Deposition Functionalized Carbonized Mesoporous Wood Fiber for High Sulfur Loading Lithium Sulfur Batteries. ACS Applied Materials & Interfaces, 2017, 9, 14801-14807. | 4.0 | 77 |
| 49 | Solidâ€State Batteries: Sulfideâ€Based Solidâ€State Electrolytes: Synthesis, Stability, and Potential for Allâ€Solidâ€State Batteries (Adv. Mater. 44/2019). Advanced Materials, 2019, 31, 1970311. | 11.1 | 75 |
| 50 | Nanocellulose-based Translucent Diffuser for Optoelectronic Device Applications with Dramatic Improvement of Light Coupling. ACS Applied Materials & Interfaces, 2015, 7, 26860-26864. | 4.0 | 72 |
| 51 | Processing Strategies to Improve Cell-Level Energy Density of Metal Sulfide Electrolyte-Based All-Solid-State Li Metal Batteries and Beyond. ACS Energy Letters, 2020, 5, 3468-3489. | 8.8 | 68 |
| 52 | Bioinspired Mineralization with Hydroxyapatite and Hierarchical Naturally Aligned Nanofibrillar Cellulose. ACS Applied Materials & Interfaces, 2019, 11, 27598-27604. | 4.0 | 67 |
| 53 | Free-standing porous carbon electrodes derived from wood for high-performance Li-O2 battery applications. Nano Research, 2017, 10, 4318-4326. | 5.8 | 64 |
| 54 | Lightweight, conductive hollow fibers from nature as sustainable electrode materials for microbial energy harvesting. Nano Energy, 2014, 10, 268-276. | 8.2 | 63 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Recycling of natural fiber composites: Challenges and opportunities. Resources, Conservation and Recycling, 2022, 177, 105962. | 5.3 | 62 |
| 56 | Longâ€Cycling Sulfideâ€Based Allâ€Solidâ€State Batteries Enabled by Electrochemoâ€Mechanically Stable Electrodes. Advanced Materials, 2022, 34, e2200401. | 11.1 | 62 |
| 57 | Additive Manufacturing of 3D Aerogels and Porous Scaffolds: A Review. Advanced Functional Materials, 2021, 31, 2103410. | 7.8 | 61 |
| 58 | Flexible, High Temperature, Planar Lighting with Large Scale Printable Nanocarbon Paper. Advanced Materials, 2016, 28, 4684-4691. | 11.1 | 59 |
| 59 | Stable Li Metal Anode Enabled by Space Confinement and Uniform Curvature through Lithiophilic Nanotube Arrays. Advanced Energy Materials, 2020, 10, 1902819. | 10.2 | 55 |
| 60 | Biopolymers Derived from Trees as Sustainable Multifunctional Materials: A Review. Advanced Materials, 2021, 33, e2001654. | 11.1 | 54 |
| 61 | Metal-Free Aqueous Flow Battery with Novel Ultrafiltered Lignin as Electrolyte. ACS Sustainable Chemistry and Engineering, 2018, 6, 5394-5400. | 3.2 | 52 |
| 62 | Amphipathic Binder Integrating Ultrathin and Highly Ionâ€Conductive Sulfide Membrane for Cellâ€Level Highâ€Energyâ€Density Allâ€Solidâ€State Batteries. Advanced Materials, 2021, 33, e2105505. | 11.1 | 52 |
| 63 | Bioinspired Ultrastable Lignin Cathode via Graphene Reconfiguration for Energy Storage. ACS Sustainable Chemistry and Engineering, 2017, 5, 3553-3561. | 3.2 | 51 |
| 64 | Mass Transfer and Reaction Kinetic Enhanced Electrode for Highâ€Performance Aqueous Flow Batteries. Advanced Functional Materials, 2019, 29, 1903192. | 7.8 | 50 |
| 65 | Regulated lithium ionic flux through well-aligned channels for lithium dendrite inhibition in solid-state batteries. Energy Storage Materials, 2020, 31, 344-351. | 9.5 | 48 |
| 66 | Heavy Metal-Free Tannin from Bark for Sustainable Energy Storage. Nano Letters, 2017, 17, 7897-7907. | 4.5 | 46 |
| 67 | Bipolar stackings high voltage and high cell level energy density sulfide based all-solid-state batteries. Energy Storage Materials, 2022, 48, 458-465. | 9.5 | 46 |
| 68 | Plasmonicâ€Enhanced Cholesteric Films: Coassembling Anisotropic Gold Nanorods with Cellulose Nanocrystals. Advanced Optical Materials, 2019, 7, 1801816. | 3.6 | 44 |
| 69 | Bone-Inspired Mineralization with Highly Aligned Cellulose Nanofibers as Template. ACS Applied Materials & Interfaces, 2019, 11, 42486-42495. | 4.0 | 41 |
| 70 | Versatile zeroâ€•to threeâ€dimensional carbon for electrochemical energy storage. , 2021, 3, 895-915. | | 41 |
| 71 | Stretchable, ultrasensitive, and low-temperature NO2 sensors based on MoS2@rGO nanocomposites. Materials Today Physics, 2020, 15, 100265. | 2.9 | 40 |
| 72 | Ligninâ€Derived Holey, Layered, and Thermally Conductive 3D Scaffold for Lithium Dendrite Suppression. Small Methods, 2019, 3, 1800539. | 4.6 | 39 |

| # | Article | IF | Citations |
|---|---|---|---|
| 73 | Stable and Highly Ion-Selective Membrane Made from Cellulose Nanocrystals for Aqueous Redox Flow Batteries. Nano Letters, 2019, 19, 8979-8989. | 4.5 | 38 |
| 74 | Self-Stabilized LiNi0.8Mn0.1Co0.1O2 in thiophosphate-based all-solid-state batteries through extra LiOH. Energy Storage Materials, 2021, 41, 505-514. | 9.5 | 36 |
| 75 | Caterpillar-like graphene confining sulfur by restacking effect for high performance lithium sulfur batteries. Chemical Engineering Journal, 2017, 322, 454-462. | 6.6 | 33 |
| 76 | Aqueous Gating of van der Waals Materials on Bilayer Nanopaper. ACS Nano, 2014, 8, 10606-10612. | 7.3 | 31 |
| 77 | Lignin-AuNPs liquid marble for remotely-controllable detection of Pb2+. Scientific Reports, 2016, 6, 38164. | 1.6 | 31 |
| 78 | Aligned and stable metallic MoS<sub>2</sub> on plasma-treated mass transfer channels for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2017, 5, 25359-25367. | 5.2 | 31 |
| 79 | A solid state energy storage device with supercapacitorâ€“battery hybrid design. Journal of Materials Chemistry A, 2017, 5, 15266-15272. | 5.2 | 31 |
| 80 | High Phase Change Enthalpy Enabled by Nanocellulose Enhanced Shape Stable Boron Nitride Aerogel. ACS Applied Polymer Materials, 2020, 2, 3001-3009. | 2.0 | 31 |
| 81 | Turning Natural Herbaceous Fibers into Advanced Materials for Sustainability. Advanced Fiber Materials, 2022, 4, 736-757. | 7.9 | 31 |
| 82 | Resilient Energy Storage under High-Temperature with In-Situ-Synthesized MnO<sub>x</sub>@Graphene as Anode. ACS Applied Materials & Interfaces, 2017, 9, 33896-33905. | 4.0 | 30 |
| 83 | Tuning Chiral Nematic Pitch of Bioresourced Photonic Films via Coupling Organic Acid Hydrolysis. Advanced Materials Interfaces, 2019, 6, 1802010. | 1.9 | 30 |
| 84 | Stable lithiumâ€“sulfur full cells enabled by dual functional and interconnected mesocarbon arrays. Journal of Materials Chemistry A, 2019, 7, 3289-3297. | 5.2 | 29 |
| 85 | Dualâ€Function, Tunable, Nitrogenâ€Doped Carbon for Highâ€Performance Li Metalâ€“Sulfur Full Cell. Small, 2019, 15, e1804609. | 5.2 | 28 |
| 86 | Fully Water-Soluble, High-Performance Transient Sensors on a Versatile Galactomannan Substrate Derived from the Endosperm. ACS Applied Materials & Interfaces, 2018, 10, 36664-36674. | 4.0 | 26 |
| 87 | Transparent Electrode and Magnetic Permalloy Made from Novel Nanopaper. ACS Applied Materials & Interfaces, 2016, 8, 27081-27090. | 4.0 | 25 |
| 88 | Operando EDXRD Study of Allâ€Solidâ€State Lithium Batteries Coupling Thioantimonate Superionic Conductors with Metal Sulfide. Advanced Energy Materials, 2021, 11, 2002861. | 10.2 | 25 |
| 89 | Role of mesoporosity in cellulose fibers for paper-based fast electrochemical energy storage. Journal of Materials Chemistry A, 2013, 1, 8201. | 5.2 | 23 |
| 90 | Compressible Ionized Natural 3D Interconnected Loofah Membrane for Salinity Gradient Power Generation. Small, 2022, 18, e2104320. | 5.2 | 22 |

| # | Article | IF | Citations |
|---|---|---|---|
| 91 | Ice-Templated Anisotropic Flame-Resistant Boron Nitride Aerogels Enhanced through Surface Modification and Cellulose Nanofibrils. ACS Applied Polymer Materials, 2021, 3, 1358-1367. | 2.0 | 20 |
| 92 | Functionalized Well-Aligned Channels Derived from Wood as a Convection-Enhanced Electrode for Aqueous Flow Batteries. ACS Applied Energy Materials, 2020, 3, 6249-6257. | 2.5 | 19 |
| 93 | A paper-based electrostatic zipper actuator for printable robots. , 2014, , . | | 18 |
| 94 | Abundant Organic Dye as an Anolyte for Aqueous Flow Battery with Multielectron Transfer. ACS Applied Energy Materials, 2019, 2, 7425-7437. | 2.5 | 18 |
| 95 | Understanding Phase Stability of Metallic 1T-MoS2 Anodes for Sodium-Ion Batteries. Condensed Matter, 2019, 4, 53. | 0.8 | 18 |
| 96 | Interconnected stacked hollow carbon spheres uniformly embedded with Ni2P nanoparticles as scalable host for practical Li metal anode. Chemical Engineering Journal, 2022, 428, 132648. | 6.6 | 18 |
| 97 | High Surface Area Nâ€Doped Carbon Fibers with Accessible Reaction Sites for Allâ€Solidâ€State Lithiumâ€Sulfur Batteries. Small, 2022, 18, e2105678. | 5.2 | 16 |
| 98 | Interface Strain Induced Hydrophobic Facet Suppression in Cellulose Nanocomposite Embedded with Highly Oxidized Monolayer Graphene Oxide. Advanced Materials Interfaces, 2017, 4, 1700995. | 1.9 | 15 |
| 99 | Lightweight and Construable Magnetic Wood for Electromagnetic Interference Shielding. Advanced Engineering Materials, 2020, 22, 2000257. | 1.6 | 15 |
| 100 | A high ion-conductive and stable porous membrane for neutral aqueous Zn-based flow batteries. Journal of Membrane Science, 2021, 640, 119804. | 4.1 | 13 |
| 101 | Versatile synthesis of molybdenum sulfide from confined spaces for efficient hydrogen evolution. International Journal of Hydrogen Energy, 2017, 42, 26659-26666. | 3.8 | 11 |
| 102 | Metallic and highly conducting two-dimensional atomic arrays of sulfur enabled by molybdenum disulfide nanotemplate. Npj Computational Materials, 2017, 3, . | 3.5 | 10 |
| 103 | Allâ€Solidâ€State Liâ€“S Batteries Enhanced by Interface StabilizationÂand Reaction Kinetics Promotion through 2D Transition Metal Sulfides. Advanced Materials Interfaces, 2022, 9, . | 1.9 | 10 |
| 104 | Largeâ€Scale Manufacturing of Patternâ€Integrated Paper Liâ€Ion Microbatteries through Rollâ€toâ€Roll Flexographic Printing. Advanced Materials Technologies, 2022, 7, . | 3.0 | 9 |
| 105 | Molecular Engineering of Biorefining Lignin Waste for Solid-State Electrolyte. ACS Sustainable Chemistry and Engineering, 2022, 10, 8704-8714. | 3.2 | 7 |
| 106 | Molybdenum Sulfide Nanosheetâ€Based Hollow Porous Flat Boxes and Nanotubes for Efficient Electrochemical Hydrogen Evolution. ChemCatChem, 2018, 10, 459-464. | 1.8 | 6 |
| 107 | Lithiumâ€Ion Batteries: Ion Transport Nanotube Assembled with Vertically Aligned Metallic MoS<sub>2</sub> for High Rate Lithiumâ€Ion Batteries (Adv. Energy Mater. 15/2018). Advanced Energy Materials, 2018, 8, 1870071. | 10.2 | 4 |
| 108 | SPEEK scaling UP. Joule, 2022, 6, 718-720. | 11.7 | 4 |

| # | Article | IF | Citations |
|---|---|---|---|
| 109 | Nanocarbon Paper: Flexible, High Temperature, Planar Lighting with Large Scale Printable Nanocarbon Paper (Adv. Mater. 23/2016). Advanced Materials, 2016, 28, 4566-4566. | 11.1 | 3 |
| 110 | A Modeling Approach for Optimization of Printed NMC622 Cathode for Capacity Density Improvement under Fast Charging Condition- 3D Simulation and Experimental Validation. , 2022, , . | | 3 |
| 111 | Biopolymeric Materials: Biopolymers Derived from Trees as Sustainable Multifunctional Materials: A Review (Adv. Mater. 28/2021). Advanced Materials, 2021, 33, 2170220. | 11.1 | 2 |
| 112 | Aqueous Flow Batteries: Mass Transfer and Reaction Kinetic Enhanced Electrode for Highâ€Performance Aqueous Flow Batteries (Adv. Funct. Mater. 43/2019). Advanced Functional Materials, 2019, 29, 1970297. | 7.8 | 0 |