

# Jaegwon Ryu

## List of Publications by Year in descending order

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Version: 2024-02-01

38  
papers

1,653  
citations

361045

20  
h-index

344852

36  
g-index

39  
all docs

39  
docs citations

39  
times ranked

2537  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Surficial amide-enabled integrated organic anodeâ€“binder electrode for electrochemical reversibility and fast redox kinetics in lithiumâ€“ion batteries. <i>Applied Surface Science</i> , 2022, 601, 154220. | 3.1 | 5         |
| 2  | Vinyl-Integrated In Situ Cross-Linked Composite Gel Electrolytes for Stable Lithium Metal Anodes. <i>ACS Applied Energy Materials</i> , 2021, 4, 2922-2931.   | 2.5 | 12        |
| 3  | Electrochemical scissoring of disordered silicon-carbon composites for high-performance lithium storage. <i>Energy Storage Materials</i> , 2021, 36, 139-146.   | 9.5 | 20        |
| 4  | Nanoscale anodes for rechargeable batteries: Fundamentals and design principles. , 2021, , 91-157.  |     | 2         |
| 5  | An Electrochemically Activated Nanofilm for Sustainable Mg Anode with Fast Charge Transfer Kinetics. <i>Journal of the Electrochemical Society</i> , 2021, 168, 120519.                                       | 1.3 | 2         |
| 6  | A Game Changer: Functional Nano/Micromaterials for Smart Rechargeable Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 1902499.  | 7.8 | 41        |
| 7  | Roomâ€“Temperature Crosslinkable Natural Polymer Binder for Highâ€“Rate and Stable Silicon Anodes. <i>Advanced Functional Materials</i> , 2020, 30, 1908433.  | 7.8 | 95        |
| 8  | Electrolyte-mediated nanograin intermetallic formation enables superionic conduction and electrode stability in rechargeable batteries. <i>Energy Storage Materials</i> , 2020, 33, 164-172.                  | 9.5 | 17        |
| 9  | Rational Structure Design of Fast-Charging NiSb Bimetal Nanosheet Anode for Lithium Ion Batteries. <i>Energy &amp; Fuels</i> , 2020, 34, 10211-10217.   | 2.5 | 8         |
| 10 | Dual Buffering Inverse Design of Threeâ€“Dimensional Grapheneâ€“Supported Snâ€“TiO <sub>2</sub> Anodes for Durable Lithiumâ€“Ion Batteries. <i>Small</i> , 2020, 16, 2004861.                                 | 5.2 | 13        |
| 11 | Salt-mediated extraction of nanoscale Si building blocks: composite anode for Li-ion full battery with high energy density. <i>Materials Advances</i> , 2020, 1, 2797-2803.                                   | 2.6 | 1         |
| 12 | Lithium Accommodation in a Redoxâ€“Active Covalent Triazine Framework for High Areal Capacity and Fastâ€“Charging Lithiumâ€“Ion Batteries. <i>Advanced Functional Materials</i> , 2020, 30, 2003761.          | 7.8 | 86        |
| 13 | Revisiting Classical Rocking Chair Lithium-Ion Battery. <i>Macromolecular Research</i> , 2020, 28, 1175-1191.   | 1.0 | 14        |
| 14 | Homogeneous Li deposition through the control of carbon dot-assisted Li-dendrite morphology for high-performance Li-metal batteries. <i>Journal of Materials Chemistry A</i> , 2019, 7, 20325-20334.          | 5.2 | 35        |
| 15 | Ultrafast-Charging Silicon-Based Coral-Like Network Anodes for Lithium-Ion Batteries with High Energy and Power Densities. <i>ACS Nano</i> , 2019, 13, 2307-2315.   | 7.3 | 115       |
| 16 | Infinitesimal sulfur fusion yields quasi-metallic bulk silicon for stable and fast energy storage. <i>Nature Communications</i> , 2019, 10, 2351.   | 5.8 | 57        |
| 17 | Atomic-scale combination of germanium-zinc nanofibers for structural and electrochemical evolution. <i>Nature Communications</i> , 2019, 10, 2364.  | 5.8 | 44        |
| 18 | Three-Dimensional Monolithic Organic Battery Electrodes. <i>ACS Nano</i> , 2019, 13, 14357-14367.   | 7.3 | 22        |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 19 | Toward a Metallic Silicon Anode for Practical Lithium-Ion Battery Applications. ECS Meeting Abstracts, 2019, , .   | 0.0 | 0         |
| 20 | Directed Self-Assembly of Asymmetric Block Copolymers in Thin Films Driven by Uniaxially Aligned Topographic Patterns. ACS Nano, 2018, 12, 1642-1649.  | 7.3 | 15        |
| 21 | Folding Graphene Film Yields High Areal Energy Storage in Lithium-Ion Batteries. ACS Nano, 2018, 12, 1739-1746.  | 7.3 | 111       |
| 22 | Fundamental Understanding of Nanostructured Si Electrodes: Preparation and Characterization. ChemNanoMat, 2018, 4, 319-337.  | 1.5 | 19        |
| 23 | Synthesis of dual porous structured germanium anodes with exceptional lithium-ion storage performance. Journal of Power Sources, 2018, 374, 217-224.   | 4.0 | 33        |
| 24 | Mechanical mismatch-driven rippling in carbon-coated silicon sheets for stress-resilient battery anodes. Nature Communications, 2018, 9, 2924.   | 5.8 | 94        |
| 25 | Revealing salt-expedited reduction mechanism for hollow silicon microsphere formation in bi-functional halide melts. Communications Chemistry, 2018, 1, .                                    | 2.0 | 31        |
| 26 | Intramolecular deformation of zeotype-borogermanate toward a three-dimensional porous germanium anode for high-rate lithium storage. Journal of Materials Chemistry A, 2018, 6, 15961-15967. | 5.2 | 17        |
| 27 | Cost-effective approach for structural evolution of Si-based multicomponent for Li-ion battery anodes. Journal of Materials Chemistry A, 2017, 5, 2095-2101.                                 | 5.2 | 20        |
| 28 | Sliding chains keep particles together. Science, 2017, 357, 250-251.   | 6.0 | 11        |
| 29 | Practical considerations of Si-based anodes for lithium-ion battery applications. Nano Research, 2017, 10, 3970-4002.  | 5.8 | 102       |
| 30 | Hybridizing germanium anodes with polysaccharide-derived nitrogen-doped carbon for high volumetric capacity of Li-ion batteries. Journal of Materials Chemistry A, 2017, 5, 15828-15837.     | 5.2 | 23        |
| 31 | Revisiting Surface Modification of Graphite: Dual-layer Coating for High-performance Lithium Battery Anode Materials. Chemistry - an Asian Journal, 2016, 11, 1711-1717.                     | 1.7 | 20        |
| 32 | A multi-stacked hyperporous silicon flake for highly active solar hydrogen production. Chemical Communications, 2016, 52, 10221-10224.   | 2.2 | 21        |
| 33 | All-in-one synthesis of mesoporous silicon nanosheets from natural clay and their applicability to hydrogen evolution. NPC Asia Materials, 2016, 8, e248-e248.                               | 3.8 | 56        |
| 34 | Multiscale Hyperporous Silicon Flake Anodes for High Initial Coulombic Efficiency and Cycle Stability. ACS Nano, 2016, 10, 10589-10597.  | 7.3 | 95        |
| 35 | Generalized Redox-Responsive Assembly of Carbon-Sheathed Metallic and Semiconducting Nanowire Heterostructures. Nano Letters, 2016, 16, 1179-1185.   | 4.5 | 20        |
| 36 | Synthesis of Ultrathin Si Nanosheets from Natural Clays for Lithium-Ion Battery Anodes. ACS Nano, 2016, 10, 2843-2851.   | 7.3 | 274       |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 37 | Nanotubular structured Si-based multicomponent anodes for high-performance lithium-ion batteries with controllable pore size via coaxial electro-spinning. <i>Nanoscale</i> , 2015, 7, 6126-6135. | 2.8 | 40        |
| 38 | Revisit of metallothermic reduction for macroporous Si: compromise between capacity and volume expansion for practical Li-ion battery. <i>Nano Energy</i> , 2015, 12, 161-168.                    | 8.2 | 62        |