Lu Yingying lithium battery energy storage

Ionic liquid-tethered hybrid materials and their applications in secondary batteries, including high energy lithium ion batteries, lithium metal batteries, sodium O2/CO2 and so forth....

Lithium-metal batteries are of particular interest for next-generation electrical energy storage because of their high energy density on both volumetric and gravimetric bases.

Lithium-based batteries have had a profound impact on modern society through their extensive use in portable electronic devices, electric vehicles, and energy storage systems.

Dr. Yingying Lu is the Qiushi Distinguished professor in the College of Chemical and Biological Engineering at Zhejiang University. Her research interests include nanomaterials, ionic liquids, and electrochemical energy ...

In situ polymerization of fluorinated electrolytes for high-voltage and long-cycling solid-state lithium metal batteries Industrial Chemistry & Materials 2025 | Journal article DOI: 10.1039/D4IM00082J

Yingying Lu has been dedicated to energy-related fundamentals and safety problems in batteries for years. By revealing the underlying mechanisms of the formation of lithium dendrite, she found new ways to undermine ...

A stable lithium-scaffold composite electrode is developed by lithium melt infusion into a 3D porous carbon matrix with "lithiophilic" coating, which possesses a high conductive surface area and excellent structural ...

?Zhejiang University? - ??Cited by 19,756?? - ?Energy storage? - ?Lithium-based battery? - ?Ionic liquid?

The combination of in-depth failure mechanism analysis, advanced characterization techniques, economic commercialization and machine learning enables the rapid development of advanced battery technology for ...

Yingying Lu. All solid-state lithium metal batteries (ASSLMBs) provide a promising solution for next-generation rechargeable energy storage due to their high energy density and the high...

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