Nanomaterials in li batteries

Anode-free Li metal batteries suffer from irreversible Li plating/stripping and interfacial side reactions. Here, authors propose a dual-gradient metal layer on Cu current collector to ...

?????? ?? Phosphorus and phosphide nanomaterials for sodium-ion batteries ???????????????? ???? ??? ???? ?? ??? ? ???? ???? ?? ? ...

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Abstract Today, it is crucial to distinguish the potential of hydrogen technologies and bring up all perspectives of their performance, from technological progresses to economic and social ...

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Abstract While lithium-ion batteries have their difficulties, the demand to improve beyond-lithium batteries goes beyond the issues of sustainability and safety. With the pressure for renewable ...

In this study, we introduce an ultrathin (?62 nm thick and 16.5 µg cm -2 in mass), electrochemically inactive component-free lithiophilic multiwalled-carbon-nanotube-forest ...

Nanotechnology and nanomaterials are becoming increasingly important as major technologies. Nanomaterials possess manifold advantages, yet they are not exempt from certain limitations, ...

Nanomaterials have evolved as an active area of research due to its wide range of application domains. The logical design of nanoparticles allows for exceptionally high surface areas. The ...

The increasing demand for high-energy storage systems, particularly in electric vehicles and aerospace, has spotlighted lithium-sulfur (Li-S) batteries due to their superior energy density ...

Solid-state batteries are expected to revolutionize energy storage, promising to be a safer, more efficient and higher-performing alternative to current lithium-ion (Li-ion) batteries. I TE N, a ...

MBenes, an innovative class of two-dimensional transition metal borides characterized by layered structures of transition metal atoms and boron, have recently garnered significant attention in ...

Aqueous zinc-iodine batteries (AZIBs) are important candidates for energy storage systems because of the low cost, high safety, multiple electron transfer properties, and high theoretical ...

MBenes, an emerging family of two-dimensional transition metal boride materials, are gaining prominence in alkali metal-ion battery research owing to their distinctive stratified architecture, ...

?Nanomaterials? ??????????????????????????,???????????(ISSN)?2079-4991???, nanomaterials?????? ...