

A multi-institutional research team led by Georgia Tech's Hailong Chen has developed a new, low-cost cathode that could radically improve lithium-ion batteries (LIBs) -- ...

This paper proposed a predictive energy management strategy with an optimized prediction horizon for the hybrid energy storage system of electric vehicles. Firstly, the receding horizon ...

With the development of new energy vehicles, an increasing number of retired lithium-ion batteries need disposal urgently. Retired lithium-ion batteries still retain about 80 % ...

However, energy storage remains a bottleneck, and solutions are needed through the use of electric vehicles, which traditionally play the role of energy consumption in power systems. To ...

The integration of power grid and electric vehicle (EV) through V2G (vehicle-to-grid) technology is attracting attention from governments and enterprises [1]. Specifically, bi ...

The rising cost of grid disruptions underscores the need to identify cost-effective strategies and investments that can increase the resilience of the U.S. power system.¹ The emerging market ...

Supercapacitors are widely used nowadays. They are known as ultracapacitors or electrochemical double layer capacitors (EDLC), which are energy storage devices providing high energy and ...

The energy management strategy (EMS) is a critical technology for pure electric vehicles equipped with hybrid energy storage systems. This study addresses the challenges of ...

