

With China's "dual carbon" target, low carbon transition has become an crucial goal for the future development of the power system, and due to the rapid increase in the renewable energy ...

Hydrogen energy storage offers a promising solution, but its conventional power-hydrogen-power storage mode faces challenges, including low overall efficiency and high-dimensional solution. ...

Hence, this tutorial will focus on energy storage technologies and help participants understand storage technologies and how best to apply short-term and long-term technologies to the ...

Under the background of carbon peaking and carbon neutrality, the renewable-dominated power grid attracts wide attention. To address the fluctuations of renewable power in different ...

The seasonal variability of renewable energy output is a critical consideration for microgrids with a high penetration of renewable energy sources. To conduct research on optimal scheduling of ...

This study provides a comprehensive literature-based analysis of the long-term thermal and mechanical performance of dynamic phase change materials (DFMs), which play a critical role ...

Secondly, combining the advantages of electrochemical energy storage and hydrogen energy storage technologies, integrating the dual regulation of short-term power and long-term energy, ...

Energy-storage duration is directly linked to energy-storage capacity, with greater capacity enabling longer durations. Whether capacity can be scaled without limitation depends on the ...

