

The battery housing is an essential part of an electric vehicle, housing high-voltage batteries, electronics, sensors and connectors to help protect the overall structure and safety of the ...

In response to the growing demand for lightweight yet robust materials in electric vehicle (EV) battery casings, this study introduces an advanced carbon fiber-reinforced composite (CFRC).

This paper discusses the battery pack thermal management components for electric vehicles that are necessary for the batteries to operate effectively in all weather.

One particular development in EV battery technology where the enclosure will play a key role is in battery swap, where the safe and efficient removal and storage of the battery will depend ...

Batteries with high energy densities become essential with the increased uptake of electric vehicles. Battery housing, a protective casing encapsulating the battery, must fulfil competing...

An electrical energy storage system for electric vehicles that provides improved safety and space efficiency compared to conventional battery packs. The system uses a separate lower ...

The advancement of high-energy-density batteries is vital for the development of lightweight, durable, and intelligent fully electric mobility systems. Reducing battery weight not only ...

The study examines the evolution of battery casing designs from early electric vehicle prototypes to current production models, highlighting the transition from rudimentary protective housings to ...

We leverage simulation tools, material science, and manufacturing expertise to design and build robust, reliable, and efficient battery enclosures tailored to the demanding requirements of ...

High-voltage battery casing or battery housings for electromobility protect both the battery cells and the environment. The development of the housings involves complex, contradictory requirements such ...

