

New energy battery cabinet vibration optimization





Overview

Does random vibration excitation affect the fatigue life of a power battery?

Based on Palmgren-Miner damage theory, they conducted simulation analysis on the fatigue life of the power battery under random vibration excitation. They proposed a method for analyzing the random vibration fatigue of power battery box structures.

Why is it important to optimize the vibration characteristics of battery brackets?

It is imperative to analyze and optimize the vibration characteristics of the battery bracket during the development and design of the vehicle body, which plays a positive role in shortening the design cycle and reducing the development cost.

Does the structural design of the electric vehicle battery bracket affect vibration characteristics?

Abstract - The structural design of the electric vehicle battery bracket significantly affects the noise, vibration, and harshness (NVH) characteristics of the electric vehicle. This paper takes the battery bracket as its object of study, examining its vibration characteristics through frequency response analysis and modal analysis.

Does cell geometry affect the vibration endurance of lithium-ion batteries?

This study suggests that the internal structure and the interface of battery components have a big effect on the vibration endurance of the batteries. This research shows how crucial it is to consider cell geometry when designing and using lithium-ion batteries for structural battery applications.



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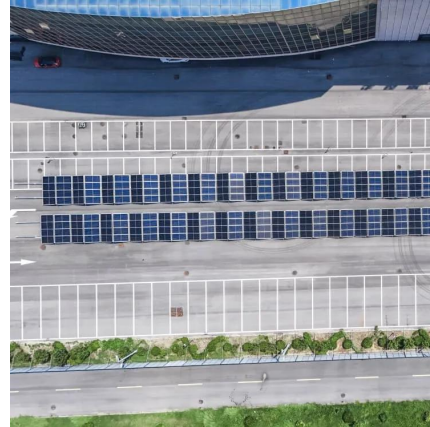
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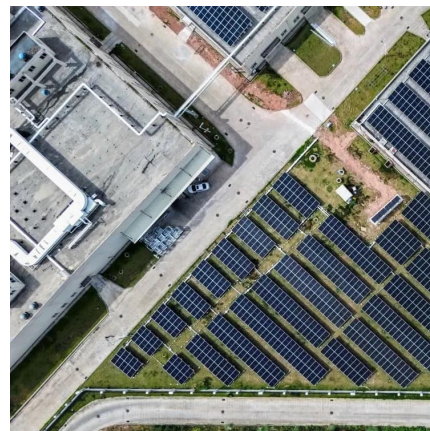


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