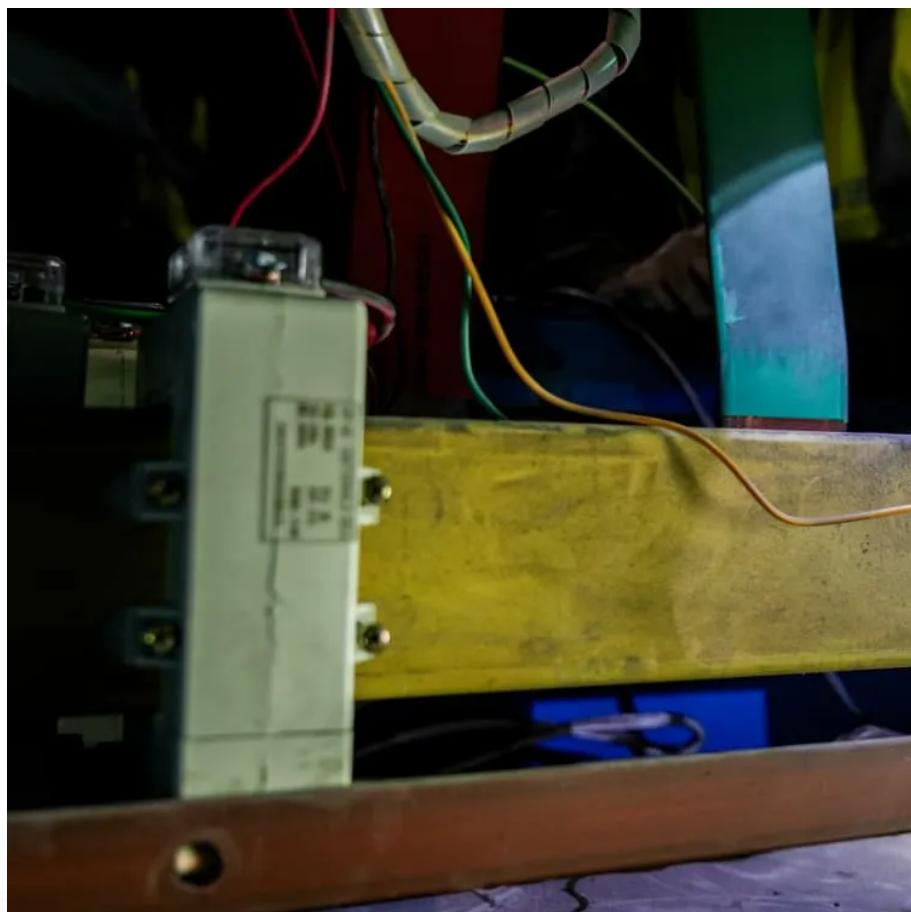




BUHLE POWER

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Overview

How can battery packaging design improve battery safety?

A robust and strategic battery packaging design should also address these issues, including thermal runaway, vibration isolation, and crash safety at the cell and pack level. Therefore, battery safety needs to be evaluated using a multi-disciplinary approach.

How to design a battery pack?

The dimensions of battery packs also require a design to space evaluation. The occupied volume of the pack should be suitable for the related car chassis. As previously mentioned in Section 1, CTP and CTC are two different strategies for packaging design. These approaches differ from the modular one.

How to design Li-ion battery packs?

As discussed, the designers of Li-ion battery packs should use a combination of different tools. These tools could be integrated into a common platform. The lack of an integrated design platform is evident in the literature. Integrating numerical tools, data-driven methods, and life cycle analysis could be a solution.

How to design the crashworthiness of battery pack?

Zhu et al. implemented the crashworthiness design of battery pack through numerical simulations with machine learning approach. The design constitute multiple layered porous with homogenous materials and subjected to the impact of cylindrical indenter.



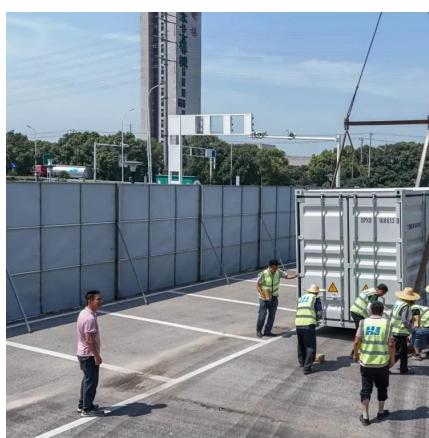
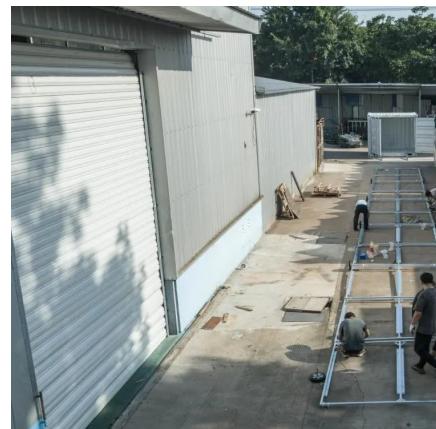
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