

The researchers have evaluated various thermal management techniques for electric motors, which can be broadly categorized as active cooling (air cooling, liquid cooling, ...

Given the limitations of existing air-cooling solutions, liquid cooling is a logical next step for enabling efficient performance of onboard battery cells/ packs, charging stations and other key ...

The applicability of different cooling schemes--such as liquid cooling systems, air cooling systems, spray cooling systems, and oil-based methods--is assessed to find the best ...

Discover the top 5 cooling techniques for electric motors, including fan cooling, liquid cooling, and more. Ensure optimal motor efficiency and extend its lifespan.

The state-of-the-art of various thermal management techniques, including air cooling (natural and forced air cooling, air impingement cooling) and liquid cooling (water/oil ...

Various thermal management strategies are employed in EVs which include air cooling, liquid cooling, solid-liquid phase change material (PCM) based cooling and thermo ...

This paper reviews how heat is generated across a li-ion cell as well as the current research work being done on the four main battery thermal management types which include ...

The increasing demand for more efficient propulsion systems in electric and hybrid vehicles necessitates advanced thermal management in compact electric machines. This ...

Therefore, the performance of liquid cooling tank is curial to the operation of DC, especially for the temperature uniformity among GPUs. In this study, the liquid cooling tank ...

Electric motors are primarily cooled by air, but liquid cooling is becoming common nowadays to achieve higher power density. Air-cooling is the least expensive thermal ...

Specifically, this work extends the concept of hybridization of two-phase technology based on heat pipes with single-phase technology, predominately based on liquid cooling, to ...

Infinity Turbine"s Pulsed Heat Pump Cooling Technology offers an innovative solution to Nvidia Blackwell chip overheating, managing extreme heat loads in high-density AI data centers. ...

The adoption of advanced cooling technologies, such as direct and indirect natural cooling, liquid-cooling cold

plates, submersion, heat pipe, and thermosiphon-based cooling, ...

In order to increase data centers' efficiency and performance, a proper cooling system should be applied. This article provides a comprehensive assessment which explores ...

Abstract: With advancements and innovations in electric vehicles, thermal management of the batteries has been the key focus of the study. As evident by previous research carried out, the ...

During the past decades, liquid cooled cold plate heat sink has been considered as an attractive and effective heat removal tool due to its advantages including easy fabrication ...

