

Study on Battery Thermal Management Systems for Lithium-Ion Batteries

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Abstract: *The increasing adoption of electric vehicles (EVs) as a sustainable alternative to conventional vehicles has highlighted the importance of effective battery thermal management. Lithium-ion batteries, commonly used in EVs, offer advantages like quick recharge times and efficiency but are susceptible to overheating, impacting safety and durability. This project aims to develop a suitable model for battery thermal management using passive and active cooling methods to control and regulate the battery's temperature within a safe range. Implementing an advanced thermal management system enhances battery performance, longevity, and safety, promoting the wider adoption of EVs and contributing to a cleaner and greener transportation future.*

Keywords: electric vehicles

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