Special Issue

Optimized Thermal Energy Storage Technology for EVs Based on Phase Change Material

Message from the Guest Editors

Phase change material (PCM) based thermal energy storage technologies offers great potential for improving the performance and efficiency of electric vehicles (EVs). PCM is a substance capable of absorbing and releasing large amounts of thermal energy during phase transitions. The development of this technology involves selecting suitable PCMs, designing effective encapsulation techniques, implementing control strategies, and integrating the system with existing vehicle components. Implementing optimized thermal energy storage technology based on PCM in EVs can result in improved battery performance, increased driving range, enhanced cabin comfort, and overall energy efficiency, making EVs more viable and sustainable transportation options for the future. This Special Issue aims to present and disseminate the most recent advances related to the design, modelling, application, control, and performance monitoring of all types of PCM based energy storage technologies in the application of EVs.

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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