Special Issue

Advanced Battery Management Technology in Electric Vehicles: Present Status and Future Trends

Message from the Guest Editors

With the increasing global attention to environmental protection and sustainable development, electric vehicles have become a key solution for reducing greenhouse gas emissions. The battery system is one of the core components of electric vehicles. The advancement of this technology will also promote the integration of electric vehicles and renewable energy. An efficient battery system can better integrate with renewable energy sources such as solar and wind power, achieving efficient energy utilization and storage. This helps achieve a greener energy system and promotes the energy independence and stability of electric vehicles. This Special Issue gathers the latest research achievements and innovative perspectives in the field, which will promote the development and application of battery management technology. Research topics that are of interest for this Special Issue include but are not limited to:

- Battery materials, design technology;
- Battery modeling, state estimation, energy management, fault diagnosis;
- Artificial intelligence in battery manufacturing, use, and management;
- Wireless charging technology for batteries;
- Electric vehicles regulate grid load.

Guest Editors

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Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.
Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.
There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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