Special Issue

Electricity and Electronics in Intelligent Battery Management Systems of Electric Vehicles

Message from the Guest Editors

Dear colleagues, Power batteries have been used various types of electric vehicles (EVs), which can facilitate the decarbonization of the transport sector. The battery management system (BMS) has important functions, including battery monitoring, modelling, parameter and state estimation, control and diagnosis, etc. Developing advanced BMS technologies is vital to enhance the safety, efficiency, reliability, and lifespan of the battery system, which are critical to the EV's performance. This Special Issue focuses on emerging technologies and recent breakthroughs of the BMS in automotive applications. Research articles, review articles, and short communications are welcomed. Topics of interest include, but are not limited to:

- State of X estimation
- Battery monitoring, prognostic and diagnostic of power batteries
- Battery modeling, remaining useful lifetime models and evaluations
- Battery system model
- Battery thermal management systems
- Battery fast charging: modeling, estimation and control strategies
- Battery recycling/repurposing
- Battery full life-span management
- Application of novel technologies in the BMS for electric vehicles

Guest Editors

Dr. Xinhua Liu

Prof. Dr. Zhenhai Gao

Prof. Dr. Shichun Yang

Dr. Cheng Zhang

Dr. Shen Li

Dr. Siyan Chen

Batteries

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 6.6

mdpi.com/si/140193

Batteries
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
batteries@mdpi.com

mdpi.com/journal/batteries

Batteries

an Open Access Journal by MDPI

Impact Factor 4.8
CiteScore 6.6

mdpi.com/journal/batteries

MDPI

About the Journal

Message from the Editor-in-Chief

Take the opportunity to publish your original scientific work or a review paper concerning battery materials, battery technology or battery application within this new open access journal. Along with material science, the journal also addresses engineering and multidisciplinary research topics, such as cell and system design or storage system integration. Publishing proffers visibility for the benefit of other experts and facilitates discussion of the research results within the field. You are invited to publish your work, read published papers and to participate in topical discussions.

Editor-in-Chief

Prof. Dr. Karim Zaghib
Department of Chemical and Materials Engineering, Concordia University, Montréal, QC H3G 1M8, Canada

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Electrochemistry) / CiteScore - Q1 (Electrical and Electronic Engineering)