Special Issue

Material Synthesis, Manufacturing and Electrochemical Modelling for Lithium-Ion Batteries in Electric Vehicle

Message from the Guest Editors

Lithium-ion batteries will play a pivotal role in advancing electrification in the automotive industry and achieving our net zero goals. Nevertheless, lithium-ion batteries are facing challenges in existing electric vehicles, e.g., limited driving range, slow charging rate and unreliable temperature performance. These issues hinder the further wide adoption of electric vehicles and their complete replacement of internal combustion engine vehicles. This Special Issue focuses on the latest progress in the development of lithium-ion batteries, including but not limited to:

- Electrode material synthesis (new material discovery, synthesis route optimisation, etc.);
- Electrode manufacturing and structure optimisation;
- Battery modelling (degradation, SEI, temperature, particle cracking, etc.);
- Testing metrology;
- Battery characterisation;
- Lithium-ion battery cell and pack design;
- Life cycle assessment;
- Lithium and beyond (various types of metal-ion batteries).

Guest Editors

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Deadline for manuscript submissions

closed (31 August 2025)

World Electric Vehicle Journal

an Open Access Journal
Published by MDPI

Impact Factor 2.6
CiteScore 5.0

mdpi.com/si/188406

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mdpi.com/journal/wevj

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About the Journal

Message from the Editor-in-Chief

The *World Electric Vehicle Journal* is the official journal of the World Electric Vehicle Association (WEVA) and its members the European Association for Electromobility (AVERE), the Electric Drive Transportation Association (EDTA), and the Electric Vehicle Association of Asia Pacific (EVAAP). Since its foundation in 2007, the journal has aimed to provide a publishing platform for the academic and industrial world to share the latest developments and knowledge about electric vehicles. If you are developing Electric, Plug-in Hybrid, Hybrid Electric, or Fuel Cell Vehicles, we cordially invite you to consider us as the place for you to publish your latest results and innovations.

Editor-in-Chief

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