

## Special Issue

# Electrochemical and Thermal Modeling of Batteries for Electric Vehicle

### Message from the Guest Editors

We invite scientists and engineers to submit articles related to the topics in one or more of the following areas:

- Modeling of the electrochemical and thermal process for distinct types of batteries, such as Lithium-Ion batteries, solid-state batteries, and second-life batteries;
- Optimization of the parameters of batteries (i.e., choice of materials, dimensions, and cell arrangements) for specific EV applications such as heavy-duty pickup trucks;
- Modeling of the battery degradation to optimize the charging and discharging strategies;
- Design of the cooling strategies of EV batteries through thermal-fluid modeling;
- Incorporate the electrochemical and thermal models of batteries into the system modeling of electric vehicles.

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### Guest Editors

Dr. Rongheng Li

Department of Electrical and Computer Engineering, University of Michigan-Dearborn, Dearborn, MI 48126, USA

Dr. Xuan Zhou

Department of Electrical and Computer Engineering, Kettering University, 1700 University Ave., Flint, MI 48504, USA

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### Deadline for manuscript submissions

closed (31 July 2025)



## World Electric Vehicle Journal

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*World Electric Vehicle Journal*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
wevj@mdpi.com

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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.

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### Editor-in-Chief

Prof. Dr. Joeri Van Mierlo

MOBI–Electromobility Research Centre, Department of Electrical Engineering and Energy Technology, Faculty of Engineering Sciences, Vrije Universiteit Brussel, 1050 Brussel, Belgium

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#### High Visibility:

indexed within Scopus, ESCI (Web of Science), Ei Compendex, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) /  
CiteScore - Q2 (Automotive Engineering)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 21 days after submission; acceptance to publication is undertaken in 3.8 days (median values for papers published in this journal in the second half of 2025).