Special Issue

Design, Modelling and Control Strategies for Hybrid and Electric Vehicles

Message from the Guest Editors

This Special Issue welcomes original research papers, review articles, and case studies related to various aspects of EV, HEV, and FCEV design, modelling, and control strategies. Potential topics of interest include, but are not limited to:

- Advanced powertrain architectures and configurations for EVs, HEVs, and FCEVs;
- Optimal battery sizing, placement, and management strategies;
- Modeling and simulation techniques for EV, HEV, and FCEV components and systems;
- Control algorithms for improving energy efficiency and range of EVs and HEVs;
- Control algorithms related to other vehicle objectives (handling, safety, thermal management);
- Vehicle-to-grid (V2G) integration and smart charging strategies;
- Thermal management and cooling strategies for epowertrain and battery systems;
- Lightweight and structural solutions for battery, epowertrain, and vehicle design;
- Safety and reliability aspects of EV systems:
- Economic and environmental considerations of EV, HEV, and FCEV technologies;
- Other innovative technologies on mobility related to electrification.

Guest Editors

Dr. Henrique De Carvalho Pinheiro

Department of Mechanical and Aerospace Engineering, Politecnico di Torino, 10129 Torino, Italy

Dr. Massimiliana Carello

Department of Mechanical and Aerospace Engineering, Politecnico di Torino, 10129 Torino, Italy

Deadline for manuscript submissions

closed (31 December 2024)



World Electric Vehicle Journal

an Open Access Journal Published by MDPI

Impact Factor 2.6 CiteScore 5.0



mdpi.com/si/184137

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

mdpi.com/journal/ wevj





World Electric Vehicle Journal

an Open Access Journal Published by MDPI

Impact Factor 2.6 CiteScore 5.0



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

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

Author Benefits

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 17.6 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

