

Special Issue

Recent Trends in Multi-Physics Simulation and Testing of New E-Mobility Technologies

Message from the Guest Editors

The research of new technologies for improving the efficiency of e-mobility solutions has now become of crucial importance in order to address market scale-up within the automotive industry. Multiphysics simulation and testing tools are therefore key issues to accelerate the development of next-generation electric vehicles and related components. Research on e-mobility is multidisciplinary, involving, e.g., control systems, micro- and power electronics, computational electromagnetics, and mechanics. The current Special Issue aims at addressing new trends in theory, practice, and applications of the most recent technologies for e-mobility systems. The topics of interest include but are not limited to:

- Multiphysics and integrated modeling;
- Smart sensors and energy harvesters;
- Dynamics and control of electric vehicles;
- Power supply and battery design;
- Wireless charging systems;
- Energy efficient powertrain design.

Guest Editors

Prof. Dr. Federico Moro

Dipartimento di Ingegneria Industriale, Università di Padova, 35131 Padova, Italy

Prof. Dr. Alberto Doria

Department of Industrial Engineering, University of Padova, 35131 Padova, Italy

Deadline for manuscript submissions

closed (10 February 2022)



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/31660

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

[mdpi.com/journal/
electronics](https://mdpi.com/journal/electronics)





Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



[mdpi.com/journal/
electronics](https://mdpi.com/journal/electronics)



About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di
Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

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

Journal Rank:

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

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).