Special Issue

Power Electronics in Automotive Industry Applications

Message from the Guest Editors

The main aim of this Special Issue is to seek high-quality submissions that highlight emerging applications, address recent breakthroughs of the Power Electronics technology in Automotive Industry and Electric Vehicle Applications -oriented design, high-power density power converters, robust and reliable power electronics technologies, smart control of power electronics at device, and system levels. The topics of interest include, but are not limited to:

- Power electronics application in electric vehicles, electrical drives, electrical charging system and rechargeable energy storage system
- Application of power electronics in smart DC and AC distribution systems
- High power density power electronic systems
- Electromagnetic compatibility (EMC)
- Common mode voltage/current
- Power Converter design (Inverter, Multilevel Inverter, DC-DC converter, Onboard charger, Integrated power converter, air compressor, lighting and etc.)
- Power Converter control
- Condition monitoring, prognostic and diagnostic of power electronics with enhanced control for reliable and robust applications

Guest Editors

Dr. Emad Samadaei

Dr. Edris Pouresmaeil

Prof. Dr. Kent Bertilsson

Dr. Hani Vahedi

Deadline for manuscript submissions

closed (31 March 2022)



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/84587

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

mdpi.com/journal/electronics





Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



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 guestedited 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), CAPlus / 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).

