Special Issue

Application and Design of Power Electronics Converters for Electric Vehicle Charging

Message from the Guest Editor

The purpose of this Special Issue is to collate innovative research on power electronics solutions for electric vehicle (EV) charging. To address recent breakthroughs in power electronics technology for EV charging, the following characteristics must be explored in depth: high power efficiency, high power density, high reliability, and cost competitive. This Special Issue welcomes the submission of manuscripts for devices, circuits, and control techniques for applications of power electronics converters in EV charging. The topics of interest include but are not limited to the following:

- Power converter application for EVs (driving, charging, and storage);
- Power semiconductor utilization for EVs (wide bandgap device, driving circuit);
- Power converter design for EVs (multilevel converter, high-frequency converter);
- Power converter control for EVs (charging strategy, system diagnosis).

Guest Editor

Prof. Dr. Woo-Young Choi

Division of Electronic Engineering, Jeonbuk National University, Jeonju 561-756, Republic of Korea

Deadline for manuscript submissions

closed (15 October 2024)

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/si/144746

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

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 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).

MDPI