# Special Issue

# Integrated Circuits for Power Conversion: Modeling, Optimization, Design and Applications

## Message from the Guest Editors

With the increase of autonomous and electric vehicles such as drone, electric scooters and bikes, the miniaturization of power electronics becomes of critical importance. The development of small and efficient converters for driving these vehicles with the minimal weight and size is creating new ways. In general, a power integrated circuit includes a power stage and the intelligence which allows controlling such machines, however there are other many types of integrated circuits for power electronics which also play important roles in the power conversion such as monitoring integrated circuits. This special issue aims to gather articles which will cover a vast range of integrated circuits for power electronics Topics include but are not limited to the following:

- battery monitoring and protection
- low power regulators and switching regulators
- drivers for wide band semiconductors(such as Gallium Nitride and Silicon Carbide)
- high-voltage and current meters
- power circuits' modeling, design methodology, optimization techniques and applications

## **Guest Editors**

Dr. Federico Martin Ibanez

Center for Energy Science and Technology, Skolkovo Institute of Science and Technology, Moscow, Russia

Dr. Pallavee Bhatnagar

IES College of Technology, Bhopal, India

Dr. Krishna Kumar Gupta

Electrical and Instrumentation Engineering Department, Thapar Institute of Engineering and Technology, Patiala 147001 (Punjab), India

## Deadline for manuscript submissions

closed (31 July 2022)



## **Electronics**

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/104782

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 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), 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).

