Special Issue

Embedded Systems and Microcontroller Smart Applications

Message from the Guest Editors

This Special Issue of *Electronics* delves into the exciting potential that these advancements unlock for the designers of embedded system. We explore innovative applications leveraging the capabilities of modern microcontrollers, while acknowledging the constant need for efficient resource utilization and cost optimization. The scope of this Special Issue includes the following topics:

- Balancing performance and power consumption:
 Optimizing code and hardware for low-power operation while maintaining the necessary processing speed.
- Security considerations in resource-constrained environments: Implementing robust security measures without compromising system performance or memory footprint.
- The integration of emerging technologies: Exploring the seamless integration of technologies such as machine learning, artificial intelligence, and sensor fusion into resource-limited embedded systems.
- Design for manufacturability and cost-effectiveness:
 Ensuring efficient production processes and minimizing material costs while achieving the desired functionality.

Guest Editors

Dr. Juraj Dudak

Faculty of Materials Science and Technology, Slovak University of Technology, 91724 Trnava, Slovakia

Dr. Peter Strelec

Faculty of Materials Science and Technology, Slovak University of Technology, 91724 Trnava, Slovakia

Deadline for manuscript submissions

15 March 2026



Electronics

an Open Access Journal by MDPI

Impact Factor 2.6 CiteScore 6.1



mdpi.com/si/202500

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).

