

## Special Issue

# Advances in Robotics, Human–Robot Interactions, and Artificial Intelligence

### Message from the Guest Editor

Recent advances in robotics, human–robot interactions (HRIs), and artificial intelligence (AI) are gaining attention for their engineering applications. Modern robotics approaches (industrial automation, medical robots, and social and service robotics) integrate AI-driven algorithms and procedures, enabling adaptive decision-making in dynamic environments. Innovations in these areas enhance flexibility and safety for human collaboration. In HRIs and human cyber–physical systems, breakthroughs in large language models (LLMs) and computer vision improve communication between humans and robots. Moreover, AI progress, particularly reinforcement learning and cognitive robotics, optimize real-time interaction performance and energy efficiency. Challenges still persist in explainable AI (XAI) for trustworthiness, ethical governance, and scalability in heterogeneous environments. Interdisciplinary approaches merging cognitive science, control theory, and edge computing are critical to address these gaps. Future directions include human–robot coevolution, leading to transformative impacts across healthcare, manufacturing, and smart cities.

### Guest Editor

Dr. Cecilio Angulo

IDEAI-UPC Research Centre on Intelligent Data Science and Artificial Intelligence, Universitat Politècnica de Catalunya, 08034 Barcelona, Spain

### Deadline for manuscript submissions

15 February 2026



## Electronics

an Open Access Journal  
by MDPI

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/si/240979](https://mdpi.com/si/240979)

*Electronics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[electronics@mdpi.com](mailto: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), 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).