

## Special Issue

# Cyber-Physical Systems of Industry 4.0: Electronic Interface for Sensor and Actuator Systems

### Message from the Guest Editors

Cyber-physical systems are equipped with sensors and actuators via an electronic interface part of the Internet of Things (IoT), the basis of the future intelligent and autonomous machines in Industry 4.0. Sensors and actuators are generally analog devices characterized by their electrical parameters. They are combined with innovative signal conditioning, analog-to-digital conversion, bus interfacing, data processing and communication, playing a key role in cyber-physical systems. The electronic interface connected directly to the sensor element must ensure the condition of the signal without reducing its quality below the current level commonly found in mechatronics or adaptronics, by including functions at a higher hierarchical level, such as self-testing, self-calibration, self-diagnosis, self-repair, data quality evaluation, local data processing and high-performance models of data exchange. The purpose of this Special Issue is to explore advanced and visionary solutions in terms of the electronic interface for sensor and actuator systems.

---

### Guest Editors

Dr. Ioan Burda

Physics Department, Babes-Bolyai University, 400084 Cluj-Napoca, Romania

Dr. Inhee Lee

Electrical Engineering and Computer Science, University of Pittsburgh, Pittsburgh, PA 15261, USA

---

### Deadline for manuscript submissions

closed (15 September 2023)



## Electronics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/si/153357](https://mdpi.com/si/153357)

*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 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 16.4 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).