

## Special Issue

# Sensor Technologies for Intelligent Transportation Systems

### Message from the Guest Editors

This Special Issue is dedicated to showcasing cutting-edge research and developments in sensor technologies that can be integrated into ITSs to address these challenges. Contributions may include studies on the use of various types of sensors such as LiDAR, radar, ultrasonic, camera, and thermal sensors, as well as the role of the Internet of Things (IoT) in enhancing sensor capabilities within ITS. Through this collection of high-quality research articles, we hope to foster the development of smarter, safer, and more efficient transportation systems for the future. Topics of interests include, but are not limited to, the following:

- Multi-sensor fusion for intelligent transportation system localization, including GNSS, IMU, LiDAR, camera, and high-definition map.
- The integration of sensor data with vehicular and infrastructural systems.
- Sensor-based predictive maintenance for transportation infrastructure
- The application of machine learning and artificial intelligence in processing sensor data
- The reliability and accuracy of sensor data study

### Guest Editors

Dr. Xiwei Bai

Department of Aeronautical and Aviation Engineering, The Hong Kong Polytechnic University, Hong Kong, China

Dr. Yiran Luo

Department of Geomatics Engineering, University of Calgary, Calgary, AB T2N 1N4, Canada

### Deadline for manuscript submissions

15 August 2025



## Electronics

an Open Access Journal  
by MDPI

Impact Factor 2.6  
CiteScore 6.1



[mdpi.com/si/207794](https://mdpi.com/si/207794)

*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).