



## Intelligent Sensors and Control for Vehicle Automation

Guest Editors:

**Dr. Shaohua Cui**

Department of Architecture and  
Civil Engineering, Chalmers  
University of Technology, 412 96  
Gothenburg, Sweden

**Dr. Lei Chen**

RISE Research Institutes of  
Science, Gothenburg, Sweden

**Dr. Wenqi Lu**

Department of Civil and  
Environmental Engineering, The  
Hong Kong University of Science  
and Technology, Hong Kong,  
China

Deadline for manuscript  
submissions:

**20 November 2024**

### Message from the Guest Editors

This Special Issue, entitled "Intelligent Sensors and Control for Vehicle Automation", invites contributions that explore innovative sensor technologies and control strategies that advance the state of the art in vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communications.

Topics of interest include, but are not limited to, the following:

1. Advanced Sensor Technologies in Vehicle Automation: Studies on the latest developments in sensor design and functionality that enhance automated vehicle performance.
2. Control Strategies for Autonomous Vehicles: Research focusing on innovative control mechanisms that ensure safety and reliability in the face of sensor and communication failures.
3. Impact of Sensor and Communication Failures: Analysis of how failures affect vehicle behavior and traffic systems, with strategies for mitigation.
4. Integration of V2V and V2I Communications: Exploration of how vehicle communication systems can enhance sensor data accuracy and vehicle coordination.
5. Data-Driven Approaches in Vehicle Automation: Utilization of big data and AI to improve sensor capabilities and decision-making processes in autonomous vehicles.





# sensors



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Vittorio M. N. Passaro**

Dipartimento di Ingegneria  
Elettrica e dell'Informazione  
(Department of Electrical and  
Information Engineering),  
Politecnico di Bari, Via Edoardo  
Orabona n. 4, 70125 Bari, Italy

## Message from the Editor-in-Chief

*Sensors* is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

## Author Benefits

**Open Access** : free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility**: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Ei Compendex](#), [Inspec](#), [Astrophysics Data System](#), and [other databases](#).

**Journal Rank**: JCR - Q2 (*Instruments & Instrumentation*) / CiteScore - Q1 (*Instrumentation*)

## Contact Us

*Sensors* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sensors](http://mdpi.com/journal/sensors)  
[sensors@mdpi.com](mailto:sensors@mdpi.com)  
[X@Sensors\\_MDPI](#)