

## Special Issue

# Sensing and Managing Traffic Flow

### Message from the Guest Editors

Traditional traffic flow of human-driven vehicles (HVs) exhibits fascinating phenomena such as traffic breakdown and traffic instability. With the development of automated vehicle (AV) technologies, traditional traffic flow would transit into the mixed traffic flow consisting of HVs and AVs, and finally into the traffic flow of full AVs. To understand and manage all kinds of traffic flow, whether traditional traffic flow, mixed traffic flow, or full AV traffic flow, sensors are indispensable, which range from loop detectors and cameras to GPS, Lidar, V2V and V2I communication devices. Based on the sensor data, it is a challenge task for the traffic community to develop effective operational and control strategies (e.g., ramp metering, signal optimization, trajectory planning, cooperative driving, route guiding) to improve safety, efficiency and driving comfort in the traffic flow. The scope of this Special Issue is to collect state-of-the-art research papers related to sensor technologies applied in traffic flow management.

### Guest Editors

Prof. Dr. Rui Jiang

Dr. Junfang Tian

Prof. Dr. Shaowei Yu

Dr. Xiaopeng Li

### Deadline for manuscript submissions

closed (25 July 2023)



## Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/120391](https://mdpi.com/si/120391)

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

[mdpi.com/journal/  
sensors](https://mdpi.com/journal/sensors)





# Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/journal/  
sensors](https://mdpi.com/journal/sensors)



## About the Journal

### 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.

---

### 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

---

### 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 and Instrumentation) / CiteScore - Q1 (Instrumentation)