# Special Issue

# Anomaly Detection and Fault Diagnosis in Sensor Networks

## Message from the Guest Editors

This Special Issue aims to collect high-quality research papers and review articles focusing on recent advances, technologies, solutions, applications and new challenges in the field of anomaly detection and fault diagnosis techniques tailored for sensor networks. Potential topics:

- Anomaly detection algorithms in sensor networks;
- Fault diagnosis in sensor networks;
- Sensor networks as a tool for anomaly detection and fault diagnosis;
- Machine learning algorithms for anomaly detection in sensor networks;
- Artificial intelligence methods for improving accuracy in anomaly detection;
- Bayesian methods, statistical analysis and machine learning for identifying abnormal patterns in sensor data;
- Distributed algorithms and protocols for real-time anomaly detection in large-scale sensor networks;
- Adaptive fault diagnosis;
- Energy-efficient anomaly detection and fault diagnosis in wireless sensor networks;
- Uncertainty evaluation in anomaly detection algorithms and models;
- Diagnostic and prognostic models using sensor networks;
- Fault-tolerant sensor networks;
- In-sensor machine learning computing;
- Security aspects in anomaly detection.

## Guest Editors
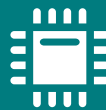
**Dr. Gabriele Patrizi**
Department of Information Engineering, University of Florence, Via di S. Marta 3, 50139, Florence, Italy

**Dr. Marco Carratù**
Department of Industrial Engineering, University of Salerno, 84084 Fisciano, Italy

## Deadline for manuscript submissions

15 June 2026

# 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)