

Special Issue

Artificial Intelligence and Advanced Sensing Techniques for Urban Resilience

Message from the Guest Editors

The Special Issue aims to bring together pioneering research that harnesses the power of artificial intelligence and next-generation sensing technologies to build smarter, safer, and more adaptive cities. We invite original contributions and comprehensive reviews that explore how heterogeneous sensor networks ranging from satellite and aerial remote sensing to ground-level Internet of Things (IoT) devices can be fused with machine learning and deep learning methods to monitor, analyze, and predict the health of urban infrastructure and communities.

- Multisensor data fusion for real-time structural health monitoring, traffic flow analysis, and environmental quality assessment;
- AI-driven anomaly detection and predictive maintenance to anticipate failures in bridges, pipelines, or utility networks;
- IoT-enabled diagnostic platforms that integrate edge computing and cloud analytics for scalable urban monitoring;
- Digital twins and simulation models powered by data-driven algorithms to support scenario planning and emergency response;
- Disaster preparedness and recovery solutions leveraging sensor-based early warning systems and AI-guided decision support.

Guest Editors

Dr. Bin Liang

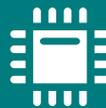
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Message from the Editor-in-Chief

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.

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