

Special Issue

Application of Signal Processing and Communication Technologies in Urban Environment

Message from the Guest Editors

Emerging applications in urban environments, such as smart cities, IoT networks, and autonomous transportation, are driving the increasing demand for seamless and efficient communication systems. However, the complex and dynamic nature of urban environments, characterized by high node density, mobility, interference, and real-time data requirements, poses significant challenges to traditional signal processing and communication systems. This special issue aims to present novel signal processing techniques and intelligent communication algorithms designed to address these new issues in urban environmental systems. The scope of the issue includes channel modeling and prediction, novel modulation waveform technologies, intelligent transceiver design, integrated sensing and communication, digital twin technologies, intelligent network planning, optimization of UAV/vehicle networks, and RIS-assisted communication. The purpose of this special issue is to present state-of-the-art solutions that enhance the performance, scalability, and sustainability of urban communication networks, contributing to the advancement of smart city infrastructures.

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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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