

Special Issue

Architecture and Protocol Design for Wireless Sensor Network

Message from the Guest Editor

This Special Issue focuses on cutting-edge research at the intersection of network architecture design and protocol engineering. We invite original contributions that explore system-level architectural innovations and protocol optimization strategies through interdisciplinary approaches, including but not limited to machine learning (ML), artificial intelligence (AI), and game-theoretic modeling. Submissions should emphasize practical implementations and theoretical breakthroughs addressing the following:

- Architectural trade-offs in heterogeneous networks (e.g., hybrid Wi-Fi/Bluetooth/Zigbee topologies).
- Cross-layer protocol design for QoS-aware MTC/V2X communications.
- Energy-aware MAC/routing protocols with ML-driven dynamic adaptation.
- Resilient network architectures for harsh environments (underwater, industrial, medical).
- Scalable topology control under mobility constraints (UAV-assisted, vehicular networks).
- Security-by-design frameworks for distributed sensor architectures.
- Hardware-software co-design for low-latency edge computing.
- Emergent modulation techniques supporting massive connectivity.

Guest Editor

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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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