

## Special Issue

# Smart Sensing, Innovative Analysis and Optimal Operation of Distribution Systems

### Message from the Guest Editor

This Special Issue aims to showcase original research and review articles on recent advances, technologies, solutions, applications, and current challenges in the field of smart sensing, innovative analysis, and optimal distribution system operation with increased penetration of distributed generations. Potential topics of interest for this Special Issue include, but are not limited, to:

- Renewable resources forecast and modeling;
- Smart sensing and advanced metering infrastructure;
- Innovation system analysis algorithms;
- Distribution grid and smart metering data analytics;
- State estimation and situation awareness of distribution systems;
- Power quality monitoring and energy efficiency analysis;
- Fault diagnosis, asset condition monitoring, and asset management;
- Optimal control and operation of distribution system;
- Non-intrusive load monitoring;
- Demand-side resource modeling and utilization;
- AI and IoT solutions for distribution system operation.

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### Guest Editor

Prof. Dr. Wenpeng Luan

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### Deadline for manuscript submissions

15 November 2026



## Sensors

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## 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.

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### Editor-in-Chief

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