

## Special Issue

# Recent Advances in Sensors for Chemical Detection Applications (2nd Edition)

### Message from the Guest Editor

Chemical detection using low-cost sensors is crucial in fields like industrial processes, environmental sustainability, smart cities, wearable technology, IoT, public health, and autonomous vehicles. Functional materials significantly enhance sensor performance and applicability, enabling portable, low-power, and accurate chemical sensing systems. Current challenges include improving sensor sensitivity, selectivity, stability, calibration, and detection accuracy. Advancements are needed in materials science, sensor nodes, hardware design, system integration, and machine learning algorithms. This Special Issue invites original research and reviews on recent sensor advancements for chemical detection applications. Potential topics include:

- Gas and chemical sensors;
- Advanced and novel sensing materials;
- Sensor calibration methods;
- Machine learning and algorithm development;
- Wireless sensor networks and IoT;
- Smart cities and environmental monitoring;
- Energy and sustainable mobility applications;
- Case studies and emerging chemical sensing concepts.

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### Guest Editor

Prof. Michele Penza

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### Deadline for manuscript submissions

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## 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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