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Chemical Sensors for Toxic Chemical Detection: 2nd Edition

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

The increasing focus on chemical sensing of toxic chemicals is driven by rising health, environmental, and safety standards. Toxic chemicals, such as inorganic species, gases, carcinogens, and pesticides, are used across various sectors, and even trace exposures can have long-term adverse effects. Chemical sensors offer key advantages, including low cost, portability, simplicity, selectivity, and durability.

This Special Issue invites original research and reviews on recent advances and challenges in chemical sensor development for detecting toxic chemicals. Topics of interest include:

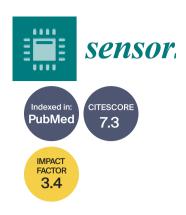
- Trends in electrochemical sensors (immunosensors, biosensors, DNA-based, etc.) for toxic chemical detection;
- Carbon nanomaterials in chemical sensing systems;
- Composite materials as sensing elements;
- Biochips and microarrays in sensor production;
- Optical sensors and arrays for harmful substance detection;
- Acoustic-wave-based sensors;
- Sensors based on living organisms, tissues, and cells;
- Metal nanoparticles in sensing toxic chemicals.

Dr. Marijo Buzuk Guest Editor

Josipa Dugeč







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Message from the Editor-in-Chief

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