Special Issue

Advances in Biological and Environmental Ion Sensing

Message from the Guest Editors

Trace ions, including Zn2+, Cu2+, Mn2+, and I-, play crucial roles in numerous biological processes, and disruption of their homeostasis has been linked to a wide range of diseases. In addition, many of these ions also present significant environmental challenges due to their toxicity. This has resulted in the development of an array of sensors and probes to detect them with excellent selectivity and well-understood mechanisms of action. This Special Issue aims to bring together original research and review articles highlighting recent advances, innovative technologies, emerging applications, and new challenges in the field of biological and environmental trace ion sensing. Potential topics include, but are not limited to, the following:

- Novel nanomaterials and small molecules in ion sensing.
- Trace/harmful ion detection in biological and environmental samples.
- Advanced applications of sensors for biological or environmental ion detection.
- Development of ratiometric or multifunctional sensing platforms.

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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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