Special Issue

Advanced Environmental Sensing Towards Acoustic Monitoring and Modeling: Applications and Challenges

Message from the Guest Editor

Recently, we have seen a growing interest in advanced environmental sensing for acoustic monitoring. Acoustic monitoring with innovative methods and sensors is challenging but offers a large variety of applications and new approaches in several fields of acoustics, from eco and bio acoustic to environmental noise pollution monitoring. Advances in AI and ML methods have enhanced the use of sensors towards the optimization of costs and computational efforts. To this aim, the edge–cloud continuum is still a challenge with few experiences in the field of acoustics. This Special Issue therefore aims to put together original research and review articles on recent advances, technologies, solutions, applications, and new challenges in the field of environmental sensors for acoustic monitoring. Potential topics include, but are not limited to, the following:

- Acoustic sensors for bioacoustics;
- Acoustic sensors for and ecoacoustics;
- Acoustic sensors for noise pollution;
- Sensor network and event detection;
- Sensor network and event classification;
- AI and ML methods in acoustic sensor network;

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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