

Special Issue

Recent Advances in Environmental Monitoring Technology

Message from the Guest Editor

At present, the rapid evolution of sensing technologies is transforming environmental monitoring from static observations into dynamic, real-time data ecosystems. This Special Issue aims to explore the convergence of these hardware advancements with the transformative power of the Internet of Things (IoT), the Industrial Internet of Things (IIoT), and Artificial Intelligence (AI). The integration of intelligent sensors with advanced Machine Learning frameworks for data processing creates a fundamental research field focused on predictive analytics and high-resolution monitoring. Suitable topics for this Special Issue include, but are not limited to, the following:

- Innovative design of environmental sensors and transducers.
- Indirect measurement models and virtual/soft-sensing techniques.
- IoT and IIoT architectures for large-scale environmental networks.
- Development and validation of low-cost, open-source hardware for practical environmental monitoring.
- AI and Machine Learning applications for environmental data fusion and analysis.
- Smart monitoring systems for air, water, and soil quality.

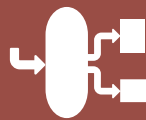
Guest Editor

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