Special Issue

Low-Cost Sensor Applications for Environmental Research: Potentialities and Limitations in Indoor and Outdoor Air Pollution Monitoring

Message from the Guest Editors

The last decade has witnessed a progressive evolution of methodological approaches and strategies for air pollution monitoring and control through the exploitation of low-cost sensors, used exclusively or simultaneously with high-grade scientific instruments. Based on the recent remarkable strides made in the sensor technology field, a wide selection of low-cost sensors have become available on the market, stimulating the scientific community to apply them as strategic tools for the high temporal and spatial resolution monitoring of volatile organic compounds (VOCs) and particulate matter (PM). As a result of their user-friendly interfaces and low maintenance requirements, combined with the availability of high temporal and spatial resolution data, low-cost sensors have contributed to the development of citizen science projects based on sensor networks for atmospheric pollution monitoring enabling specific scientific questions to be addressed. Therefore, a rigorous scientific evaluation of low-cost sensor performances through direct field comparisons with scientific-grade instruments is essential in order to extend their effectiveness.

Guest Editors

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Deadline for manuscript submissions

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Addressing the environmental and public health challenges requires engagement and collaboration among clinicians and public health researchers. Scientific discoveries and advances in this research field play a critical role in providing a rational basis for informed decision-making toward control and prevention of human diseases, especially the illnesses that are induced from environmental exposure to health hazards.

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Editor-in-Chief

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