Special Issue

Big Data and Artificial Intelligence for Air Quality Assessment and Forecasting

Message from the Guest Editors

Air quality evaluation and forecast has become a strategic research area, which is currently facing a major revolution, driven by the availability of wireless sensor networks (WSN) that provide large-scale real-time measurements of pollutant concentrations in the atmosphere and the advances in internet of things (IoT) technologies and disciplines such as big data analytics, machine learning (ML) and artificial intelligence (AI).The objective of this Special Issue is to show and discuss current and future trends in ML approaches aimed at air quality assessment and forecast. Atmosphere invites scientists and researchers to contribute to this Special Issue by submitting manuscripts (research papers, communications and review articles) about ML-based methods, models and algorithms and their practical application to field calibration of low-cost gas and particle (PM) sensors, improvement of the accuracy of low-cost sensors, and short- and long-term prediction of atmospheric pollutant concentrations and air quality index (AQI).

Guest Editors

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About the Journal

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

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