



Development and Application of Low-Cost Environmental Sensors for the Evaluation of Ambient Air Quality and Related Emission Sources

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Deadline for manuscript
submissions:

closed (2 February 2024)

Message from the Guest Editor

Dear Colleagues,

Nowadays, the emerging research field of low-cost sensors (LCSs) have been receiving growing interest and usage, due to their easy field deployment and application. The data acquired by LCSs can provide more details on the spatial distribution and temporal variation of anthropogenic air pollutants. They can be a research tool in the assessment of human health effects and in emission source apportionment. Beyond these, the data acquired from LCSs can be applied as input parameters in air pollution dispersion models, which can improve the accuracy of approximations for local air quality and related concentration/deposition maps. LCS-based measurement systems require the careful evaluation of the analytical performance. Consequently, the topic of instrumental limitations is also of particular importance in research and practical applications.

We welcome papers on the advancement/development of designs and performance, along with indoor/outdoor applications, in the exciting field of low-cost air quality sensors. Researchers are also encouraged to send in manuscripts devoted to air pollution dispersion modelling, assisted by the utilization of LCSs.





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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!

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Journal Rank: CiteScore - Q2 (*Environmental Science (miscellaneous)*)

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