

Special Issue

Nanomaterial-Based Electrochemical Analysis and Treatments of Pollutants

Message from the Guest Editor

Gaseous pollutants, such as volatile organic compounds (VOCs), carbon dioxide (CO₂), carbon monoxide (CO), methane (CH₄), ammonia (NH₃), nitric oxide (NO), nitrogen dioxide (NO₂), hydrogen sulfide (H₂S) and sulfur dioxide (SO₂), have adverse effects (e.g., the greenhouse effect) on the climate and, particularly, on human health (irreversible damage to the respiratory system). The Special Issue aims to disseminate recent advances in the field of various nanomaterials with different compositions, dimensionalities and atomic arrangements for electrochemical sensors and treatments of various air pollutants. Topics of interest for the Special Issue include, but are not limited to, the following:

- Zero-dimensional (0D) metal particle-based electrochemical sensors;
- Graphene or graphene-like 2D material based electrochemical sensors;
- Mixed-dimensional nanomaterials for electrochemical sensors;
- Field effect transistor-based sensors;
- Electrochemical reduction;
- Electrochemical oxidation;
- Single-atom electrochemistry.

Guest Editor

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Deadline for manuscript submissions

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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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