Special Issue

Advanced Nanomaterials in Gas and Humidity Sensors

Message from the Guest Editor

Gas and humidity sensing have transformed with nanomaterials, enhancing performance and sensitivity. Nanotech offers superior selectivity, sensitivity, and faster responses. This trend sparks interest in science and industry, meeting the demand for sensors in environmental, safety, healthcare, and electronics.This Special Issue is dedicated to exploring the latest advancements and innovations in employing nanomaterials for gas- and humidity-sensing applications. We invite the submission of original research articles and comprehensive reviews. The scope of this Special Issue includes, but is not limited to: (1) The synthesis and characterization of nanomaterials with outstanding gas- and humidity-sensing properties; (2) The development of distinctive sensor structures utilizing nanomaterials, including micro/nanostructures, heterostructures, doping, nanocomposites, and more, with exceptional gas- and humidity-sensing capabilities; (3) The exploration of new sensing mechanisms and functionalities for gas- and humidity-sensing devices based on nanomaterials.

Guest Editor

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Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Editor-in-Chief

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