Special Issue

Electrochemical Sensing Applications of Nanomaterials

Message from the Guest Editor

The scope of this Special Issue covers nanomaterials that are formed onto conductive substrates and exhibit enhanced response to changes in the electrolyte environment. In particular, topics of interest include, but are not limited to, the following:

- Fabrication method of nanomaterials exhibiting increased sensitivity toward selected analytes;
- Nanomaterials modified with biological species, namely enzymes, and DNA strains exhibiting highly selective responses;
- Immobilization methods or usage of synthesis methods ensuring attachment of the nanomaterial to the conductive substrate enabling electrochemical readout;
- Usage of screen-printed electrodes as a facile approach toward further commercialization;
- Demonstration of the hybrid sensing performance, e.g., opto-electrochemical response, where both changes in optical and electrochemical response are used for detection.

Guest Editor

Prof. Dr. Katarzyna Siuzdak

Robert Szewalski Institute of Fluid-Flow Machinery of the Polish Academy of Sciences, Gdansk, Poland

Deadline for manuscript submissions

closed (20 November 2021)



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Nanomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

mdpi.com/journal/nanomaterials





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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 nanometerscale 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

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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