

Special Issue

Development of Nanomaterials for Applications in Trace Analysis

Message from the Guest Editor

Nanomaterials (NMs) are a powerful tool for enhancing analytical procedures for trace analysis. Because of their unique properties, NMs are able to significantly improve approaches for sampling, pretreatment, and preconcentration (e.g., by SPE), as well as for detection (e.g., advancing sensing systems, or even providing completely novel approaches). The benefits obtained by the application of NMs are diverse, from saving time and reagents (sustainability), to the miniaturization of devices, or the enhancement of analytical performance, such as increasing sensitivity or selectivity. This Special Issue attempts to cover the recent advances in the development and application of nanomaterials (nanoparticles, nanostructured surfaces, nanofilms, etc.) for enhanced trace analysis. We invite investigators to submit original research articles and letters, as well as review articles and perspective views on the development of nanomaterials for the preconcentration, determination, and/or detection of trace substances, and their application to real-world samples.

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

Prof. Dr. Eugenia Valsami-Jones

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