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Nanomaterials for Surface-Enhanced Raman Spectroscopy and Application in Trace Detection

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Deadline for manuscript submissions: closed (15 May 2019)

Message from the Guest Editors

Dear Colleagues,

With the advances in nanomaterials and nanofabrication, surface-enhanced Raman spectroscopy (SERS) has been extensively developed and applied in the trace detection of various analytes in either a simple or a complicated sample matrix. This includes, but is not limited to, the detection of antibiotic residues in animal-producing meat products, detection of pathogenic bacteria in human urine, and detection of heavy metal contamination of water. Therefore, we invite authors to contribute either original research articles or comprehensive review articles covering the most recent progress and advancement in the development and application of various nanomaterials in SERS trace detection.

This Special Issue aims to cover a broad range of topics, from the synthesis of various nanomaterials that can provide improved reproducibility of SERS signals to developing new protocols that can facilitate the reliable detection of trace amounts of analytes without interfered by the sample matrices significantly.









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Editor-in-Chief

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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, metalorganic 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.

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