Special Issue

SERS/SERRS-Active Nanostructures and Nanocomposites

Message from the Guest Editor

SERS and SERRS are currently widely employed either for monitoring of species in trace concentrations in different environments, or for in situ chemical mapping, including in vivo application. Due to the great improvement in instrumentation and special design of nanomaterials, very low detection limits and increased reproducibility of SERS/SERRS signals have been achieved. This Special Issue of *Nanomaterials* is therefore focused on the innovative preparation of nanostructures and nanocomposites for SERS applications. Mostly, noble metal nanostructures of various shapes, sizes, compositions, and surface functionalizations are successfully synthesized and used for SERS/SERRS. On the other hand, syntheses of nanocomposites serving as good enhancers of Raman scattered light from the molecules being in close vicinity to noble metal nanosurfaces are more challenging because of the lower reproducibility of SERS/SERRS signals. Such nanocomposites can comprise noble metal nanostructures embedded in a functional matrix or being combined with another nanosubstrate which possesses useful properties (e.g., magnetic).

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.

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