

Special Issue

Gold and Silver Nanoparticles for Selective and Sensitive Sensing Applications

Message from the Guest Editor

Gold and silver nanoparticles have become the most popular materials for sensing a wide range of target analytes, such as metal ions, anions, and molecules like saccharides, nucleotides, amino acids, proteins, toxins, etc. They offer numerous advantages including ease in preparation and functionalization, stability, biocompatibility, and size- and shape-dependent optical and electronic properties. Owing to these excellent properties, gold and silver nanoparticles can be utilized as smart nanosensors with a series of methodologies, including colorimetric, fluorescence, surface-enhanced Raman scattering (SERS), light scattering, and electrochemical methods. Therefore, this Special Issue focuses on current developments in the use of nanosensors based on gold and silver nanoparticles for selective and sensitive sensing approaches to various kinds of target analytes, as well as nanocomposites with gold and silver nanoparticles.

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. We are proud of our increasing impact factor and ability to provide rapid decisions to authors.

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