



## Synthesis and Characterization of Plasmonic Nanostructures

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### Message from the Guest Editors

Engineering and designing plasmonic nanostructures by several methods and techniques to control plasmon resonance and electromagnetic field localization is driving many studies in different areas of science and technology such as surface enhance spectroscopy, sensing, photovoltaics, photothermal therapy, antimicrobial agents, photocatalysis, etc. Although the development of this area has increased the applications of plasmonic nanomaterials, as well as the new methods of nanofabrication, controlling and reproducing the desired plasmonic structures remains a major challenge to overcome.

This Special Issue will include research papers addressing the most recent developments in this field to summarize the current state of the art in the synthesis and characterization of nanoplasmonic structures:

- Synthesis and processing of plasmonic nanomaterials;
- Functional plasmonic nanostructures;
- Characterization of nanomaterials;
- Plasmonic nanofabrication.





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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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