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## Nanostructured Materials for Photonics and Plasmonics

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Deadline for manuscript  
submissions:

**closed (15 November 2021)**

### Message from the Guest Editors

Dear Colleagues,

Light-matter interactions at the nanoscale can lead to a plethora of optical effects, thus paving the way for a wide range of applications, from harvesting and new light sources to imaging and sensing. On the other hand, the fabrication of nanostructures that can meet the demand for a suitable light-matter coupling, such as precise shape, size, and geometry, both ordered and disordered, is a research field in constant expansion. Moreover, metallic nanomaterials and their plasmonic properties are known to promote an increase of light-matter interactions. These occurrences have a large impact in enhanced spectroscopies, dramatically increasing their sensitivity, with important outcomes in the diagnostic and medical fields.

This Special Issue of *Nanomaterials* concentrates on a wide range of topics, including advances in the preparation and characterization of photonics and plasmonics materials and their use in modern devices based on light-matter coupling at the nanoscale. Therefore, it is a great pleasure for us to invite you to contribute to this Special Issue.

Dr. Barbara Fazio  
Dr. Cristiano D'Andrea  
Dr. Paolo Matteini  
*Guest Editors*



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# Special Issue



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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, 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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