Special Issue

Optical Properties of Plasmonic/Photonic Nanosystems and Nanomaterials

Message from the Guest Editors

Nanostructured materials for plasmonic/photonic applications have become a new research paradigm poised to transform current technologies. Nanofabrication and characterization of such structures are crucial to boost the performances of optical nanosystems. There is a strong interest in the unconventional optical properties of chiral metamaterials, alternative plasmonic nanostructures (beyond noble metals), hybrid nanostructures and novel 2D or 3D nanostructure arrangements. This Special Issue provides the possibility to highlight the most recent theoretical and experimental developments in the optical properties of plasmonic/photonic nanosystems and nanomaterials and to discuss their potential applications. In this Special Issue, we expect to cover a variety of topics:

- Chiral metamaterials:
- Plasmonic and photonic nanostructures;
- Nanostructures for strong light-matter coupling;
- Hybrid nanophotonics;
- Plasmonic/photonic nanostructures for sensing, energy and hydrogen production.

We look forward to receiving your contributions.

Guest Editors

Dr. Marco Esposito

Dr. Massimo Cuscunà

Dr. David Maria Tobaldi

Deadline for manuscript submissions

closed (30 September 2023)



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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 nanometerscale 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.

Editor-in-Chief

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