# **Special Issue**

## Nano-Optics and Light-Matter Interactions

### Message from the Guest Editor

Nano-optics and specifically interactions between light and matter at the nanoscale are a subject of rapidly increasing scientific importance and technical relevance. In the last few decades, light-matter interactions have been actively investigated in quasiparticles called polaritons. Polaritons, with their half-light-half-matter nature, can have vastly different polarization and dispersion and are confined to the scale of nanometers. Such photonic quasiparticles make it possible to reveal various kinds of light-matter interactions and to produce optical functionalities to manipulate the properties and energy of light at the nanoscale. This Special Issue will present comprehensive research outlining progress in the coupling of photons to material resonances and welcome contributions focusing on optics and photonics, optical materials, optical spectroscopy, condensed matter physics, and optical chemistry. We sincerely invite relevant researchers to contribute to the growing field of light-matter interactions at the nanoscale. You can submit your paper at the following link:https://www.mdpi.com/si/158978

### Guest Editor

Dr. Siyuan Dai Materials Research and Education Center, Department of Mechanical Engineering, Auburn University, Auburn, AL 36849, USA

### Deadline for manuscript submissions

closed (20 May 2024)



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Nanomaterials MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 nanomaterials@mdpi.com

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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

Prof. Dr. Shirley Chiang Department of Physics, University of California Davis, One Shields Avenue, Davis, CA 95616-5270, USA

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