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## Light-Matter Interaction in Nano Systems: Fundamentals and Applications

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submissions:

**closed (20 December 2024)**

### **Message from the Guest Editors**

This Special Issue of *Nanomaterials* aims to bring together research on light-matter interactions with research on nanomaterials. We invite authors to contribute original research articles and review articles to give a fair appraisal of the current state of the art and perspectives on the future of nanophotonics research. Potential topics include, but are not limited to:

- Nanomaterials;
- Specially designed nano-structured materials;
- Light and laser sources;
- Light trapping and cooling;
- Optical phenomena in nano-photonic structures;
- Nanofabrication techniques;
- Nanoplasmonics;
- Quantum, nonlinear and nonlocal effects in nanostructures;
- Photonic crystals;
- Nanowaveguiding devices;
- Single-photon sources.



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# Special Issue



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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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