



an Open Access Journal by MDPI

## Dielectric Nanophotonics and Their Applications

Guest Editors:

**Prof. Emiliano Cortés**

1. Imperial College London,  
Department of Physics, London,  
UK

2. Ludwig-Maximilians-  
Universität München (LMU),  
Department of Physics, Munich,  
Germany

**Dr. Gustavo Grinblat**

Imperial College London,  
Department of Physics, London,  
UK

Deadline for manuscript  
submissions:

**closed (20 October 2019)**

### Message from the Guest Editors

In recent years, the photonics and plasmonics communities have aimed to expand their nano-optics toolbox in order to improve light confinement capabilities of nanomaterials and enhance light–matter interactions at the nanoscale. In particular, nanostructured high-refractive index dielectrics have demonstrated the ability to highly confine electric and magnetic fields to subwavelength volumes and tailor light dispersion, while displaying ultralow absorption—compared to metals—when excited below their bandgap energies. As such, new and interesting applications are expected to emerge by exploiting this type of technology. This Special Issue of *Nanomaterials* aims to highlight articles reporting on novel properties and phenomena of dielectric nanophotonics. It focuses on the fabrication, optical characteristics, and prospective nanophotonic applications of nanostructured dielectrics in the forms of reviews, communications, and academic articles.



[mdpi.com/si/19357](https://mdpi.com/si/19357)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Shirley Chiang**

Department of Physics, University  
of California Davis, One Shields  
Avenue, Davis, CA 95616-5270,  
USA

## 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q2 (*Chemistry, Multidisciplinary*) / CiteScore - Q1 (General Chemical Engineering)

## Contact Us

---

*Nanomaterials* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/nanomaterials](http://mdpi.com/journal/nanomaterials)  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)  
[X@nano\\_mdpi](https://x.com/nano_mdpi)