



## Laser-Generated Periodic Nanostructures

Guest Editors:

**Dr. Peter Simon**

Laser-Laboratorium Göttingen  
e.V., Hans-Adolf-Krebs-Weg 1, D-  
37077 Göttingen, Germany

**Dr. Jürgen Ihlemann**

Laser-Laboratorium Göttingen  
e.V., Hans-Adolf-Krebs-Weg 1, D-  
37077 Göttingen, Germany

**Dr. Jörn Bonse**

Bundesanstalt für  
Materialforschung und -prüfung  
(BAM), Unter den Eichen 87,  
12205 Berlin, Germany

Deadline for manuscript  
submissions:

**closed (31 March 2021)**

### Message from the Guest Editors

Dear Colleagues,

The study of laser fabricated periodic nanostructures is one of the leading topics of today's photonics research. Such structures on the surface of metals, semiconductors, dielectrics or polymers can generate new material properties with special functionalities. Depending on the specific material parameters and the morphology of the structures, new devices like microlasers, optical nanoswitches, optical storage devices, biosensors or antifraud features can be realized. Furthermore, surface textures can be used to improve the tribological properties of special tools for the reduction of friction losses or wear, to modify the wettability or the cell and biofilm growth properties of surfaces or as decoration elements for the refinement of precious goods.

This Special Issue focuses on the latest theoretical developments and practical applications of laser-induced periodic surface structures... For further reading, please follow the link to the Special Issue website at: <https://www.mdpi.com/si/33974>

Dr. Peter Simon

Dr. Jürgen Ihlemann

Dr. Jörn Bonse

*Guest Editors*





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)