



## Novel Applications of Biodegradable Nanocelluloses

Guest Editor:

**Dr. Alessandra Operamolla**

Dipartimento di Chimica  
Università degli Studi di Bari Aldo  
Moro Bari, Italy

Alessandra.operamolla@uniba.it

Deadline for manuscript  
submissions:

**closed (10 December 2020)**

### Message from the Guest Editor

Dear Colleagues,

The development of biodegradable materials has been important for allowing deep comprehension of the properties and behavior of biodegradable polymeric nanoparticles. In particular, nanocelluloses deserve great attention as highly stable and crystalline biodegradable nanomaterials. This Special Issue aims to present new applications of biodegradable nanocelluloses and nanocellulose films in fields such as optoelectronics, nanophotonics, tissue engineering, materials consolidation, biocatalysis, and paper modification. Chemical modifications of the starting materials or preparation of blends with other materials or biomolecules for granting access to novel multifunctional and biohybrid structures are of particular interest for this Special Issue.

Dr. Alessandra Operamolla  
*Guest Editor*





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 many [other databases](#).

**Journal Rank:** [JCR](#) - Q1 (*Physics, Applied*) / [CiteScore](#) - Q1 (*General Chemical Engineering*)

## Contact Us

*Nanomaterials*  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
Fax: +41 61 302 89 18  
[www.mdpi.com](http://www.mdpi.com)

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