



an Open Access Journal by MDPI

Green Synthesis of Nanomaterials

Guest Editor:

Prof. Dr. Giovanni Benelli

Department of Agriculture, Food
and Environment, University of
Pisa, via del Borghetto 80, 56124
Pisa, Italy

Deadline for manuscript
submissions:

closed (15 April 2019)

Message from the Guest Editor

Dear Colleagues,

Nanomaterials possess astonishing physical and chemical properties. They have a key role in the development of novel and effective drugs, catalysts, sensors, and pesticides, to cite just a few examples. Notably, the synthesis of nanomaterials is usually achieved with chemical and physical methods needing the use of extremely toxic chemicals or high-energy inputs. To move towards more eco-friendly processes, researchers have recently focused on so-called “green synthesis”, where microbial, animal-, and plant-borne compounds can be used as cheap reducing and stabilizing agents to fabricate nanomaterials. Green synthesis routes are cheap, environmentally sustainable, and can lead to the fabrication of nano-objects with controlled size and shape—two key features determining their bioactivity.

However, real-world applications of green-fabricated nanomaterials are largely unexplored. This Special Issue will include articles by expert authorities on nanomaterials synthesis and applications. Special emphasis will be devoted to their impact on the environment and long-term toxicity.

Prof. Dr. Giovanni Benelli

Guest Editor



mdpi.com/si/14847

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 - Q1 (*Physics, Applied*) / CiteScore - Q1 (*General Chemical Engineering*)

Contact Us

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

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/nanomaterials
nanomaterials@mdpi.com
[X@nano_mdpi](#)