



Nanomaterials in Biocatalyst

Guest Editors:

Prof. Dr. Raffaele Saladino

Dipartimento di Agrobiologia ed
Agrochimica, Università della
Tuscia, Via S. Camillo de Lellis
s.n.c., 01100 Viterbo, Italy

Prof. Dr. Marcello Crucianelli

Department of Physical and
Chemical Sciences (DSFC),
University of L'Aquila, via Vetoio-
Coppito Due, 67100 L'Aquila, Italy

Deadline for manuscript
submissions:

closed (31 October 2018)

Message from the Guest Editors

Nanoscience is one of the most important stimulating research areas and the last frontier in modern science. From the most simplistic point of view, nanoscience is the science of small particles. Small particles (i.e., flakes, tubes, wires, and spheres with length scales <100 nm) offer unique and advantageous physical and chemical properties, due in part to high surface area-to-volume ratios associated with the emergence of novel surface capabilities. At the nanoscale, new opportunities for fundamental and technological applications become available, with nanomaterials being proposed in different areas such as microelectronics, coatings and paints, and especially biotechnology—the latter including their use as vehicles for enzyme entrapment and encapsulation, DNA transfection, biosensing, and drug delivery. Among the different types of nanomaterials, the use of carbon (e.g., graphene and CNTs), metal/metal oxides, polymeric nanomaterials, semiconductor nanocrystals, quantum dots, and renewable polymers in biocatalysis will be the focus of this Special Issue, analyzing the benefits and critical aspects of the enzyme/support interaction in chemical transformations.





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](#), [CAPus / 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](#)