



New Avenues of Research for Nanoparticle Drug Delivery Systems

Guest Editor:

Prof. Dr. Rafael Prado-Gotor

Department of Physical
Chemistry, Faculty of Chemistry,
University of Seville, 41012
Seville, Spain

Deadline for manuscript
submissions:

closed (30 June 2021)

Message from the Guest Editor

Dear Colleagues,

The understanding of different factors that control the correct procedure for drug loading and nanoparticle drug delivery systems has a significant impact on many scientific fields. Not only the election of the correct nanoparticle, the interaction with the biological system or the study of the liberation mechanism is needed to be perfectly understood. In order to well design nanoparticle drug delivery agents a high drug-to-nanoparticle ratio must be achieved. Also, biocompatibility and control of release kinetics are key factors for the design of NP as drug delivery vectors.

Today, efforts on the development of appropriate nanosystems are focused on producing new materials that release drugs in a sequential manner with different therapeutic efficacy. This Special Issue will try to consider all of these key factors that may be taken into account for nanosystems to be suitable for drug release. We invite authors to contribute original research articles or mini-review articles covering new synthesis and selection type of NP, drug loading into NPs, stability and new results for in vitro and in vivo studies in order to use NP as efficient drug delivery systems.





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](#)