

Special Issue

Nanocarriers for Drug and Gene Delivery: Novel Scenarios in Nanotechnology

Message from the Guest Editor

The advent of the nanotechnologies and their application in the biomedical area has revolutionized scientific research. The number of published papers in this topic is impressive, witnessing on the one hand the liveliness and the general interest that it attracts and on the other the broken promise of the vast majority of the developed nanotechnologies to reach the patient's bed. The poor clinical translation of nano-based approaches involves several aspects, including the limited efficacy of the proposed systems in vivo and the high costs of production and testing. This Special Issue aims to collect the most recent trends on nanotechnologies-based carriers for drug and gene delivery. Research studies encompassing new synthetic approaches of nanocarriers or the encapsulation of novel pharmaceuticals into nanoparticles are encouraged. In addition, in vitro, preclinical and clinical studies analysing the short- and long-term effects of the nanocarriers defining their pharmacokinetics, biodistribution, bioaccumulation, clearance and degradation are considered of great interest. Application fields may include cancer or neurodegenerative and are not limited to them.

Guest Editor

Dr. Alessandra Quarta

Institute of Nanotechnology, CNR NANOTEC, Campus ECOTEKNE, Via Monteroni, 73100 Lecce, Italy

Deadline for manuscript submissions

closed (31 January 2022)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



mdpi.com/si/80315

Applied Sciences
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
appls@mdpi.com

[mdpi.com/journal/
appls](https://mdpi.com/journal/appls)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.3



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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), Inspec, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)