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Nanocarriers for Drug and Gene Delivery: Novel Scenarios in Nanotechnology

Guest Editor:

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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 pharmacokinetics, defining their biodistribution. bioaccumulation. clearance and degradation are considered of great interest. Application fields may include cancer or neurodegenerative and are not limited to them.



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Editor-in-Chief

Message from the Editor-in-Chief

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

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