Special Issue

Role of Nanoparticles as Immunotherapy Agents

Message from the Guest Editor

The application of nanotechnology offers tremendous advantages for diagnosis and therapy in various fields of medicine and, at present, about 230 NPs are used in medicine. The majority of them activate immunity or have no effects: a minority induce immunosuppression or dysregulation of the immune system. Currently. several studies explore the immunostimulating properties of NPs to be used for anticancer therapies and as a vaccine adjuvant and delivery system for infectious, immune, and allergic diseases, their use depending on their effects on various components of the immune system. These effects can be due to several NPs characteristics, such as chemical composition. size, surface charge, shape, dissolution, and, first of all, surface chemistry/functionalization and surface coating. NPs can be engineered to either avoid interaction or to specifically interact with the immune system, inducing immunosuppression or immune stimulation. This Special Issue will collect reviews and original works to represent an updated reference in the field.

Guest Editor

Prof. Dr. Mario Di Gioacchino

Center of Advanced Sciences and Technology, G. d'Annunzio University, Chieti, Italy

Deadline for manuscript submissions

closed (15 December 2021)



Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3 CiteScore 9.2 Indexed in PubMed



mdpi.com/si/80723

Nanomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

mdpi.com/journal/nanomaterials





Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3 CiteScore 9.2 Indexed in PubMed



About the Journal

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 nanometerscale 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.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones

School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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 - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)

