Special Issue

Nanostructured Materials and Coatings for Biomedical Applications

Message from the Guest Editors

Nanotechnology represents a new frontier in the biomedical field regarding the development of novel materials and devices, as well as in diagnosis and imaging techniques. At the nanometric scales, some materials show distinct properties and functionalities that can be exploited for many different biomedical applications, including the development of nanostructured scaffolds for tissue engineering, nanosystems for the delivery of drugs and bioactive molecules, nanometric coatings with antimicrobial properties and improved bioactivity for specific medical purposes. In this regard, this Special Issue aims at collecting the most recent progress in the development of nanotechnology-based approaches for providing new therapeutic options and new effective tools for treating specific diseases, with a special focus on the development of nanostructured materials and coatings and their mechanisms of interaction with the biological world.

Guest Editors

Dr. Federica Paladini

Department of Experimental Medicine, University of Salento, Via per Monteroni, 73100 Lecce, Italy

Dr. Carola Esposito Corcione

Department of Innovation Engineering, University of Salento, Via per Monteroni, 73100 Lecce, Italy

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

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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.

Editor-in-Chief

Prof. Dr. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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