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# Nanoscale Materials and Technologies in Tissue Engineering

Guest Editor:

#### Prof. Dr. Tal Dvir

The Shmunis School of Biomedicine and Cancer Research, Faculty of Life Sciences, Tel Aviv University, Tel Aviv 6997801, Israel

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### Message from the Guest Editor

Dear Colleagues,

In tissue engineering, cells are seeded in 3D biomaterial scaffolds, which provide mechanical support for the growing tissue, as well as biochemical and topographical cues for assembly and function. The desire to closely recapitulate the natural cellular microenvironment and improve tissue function has led researchers to incorporate nanoscale features within the fabricated scaffolds.

The scope of this Special Issue covers nanotechnological advances in tissue engineering. These include technologies for mimicking nanostructures of the extracellular matrix, and the use of inorganic nanoparticles and devices for improving, monitoring and regulating tissue function.

We look forward to receive your valuable contributions to this exciting Special Issue.

Prof. Dr. Tal Dvir *Guest Editor* 









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### **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, metalorganic 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.

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*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