



materials



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Advances in Biomedical Materials: Preparation, Characterization, and Applications

Guest Editor:

Dr. Mikhail V. Khvostov

Laboratory of Pharmacological Researches, N.N. Vorozhtsov Novosibirsk Institute of Organic Chemistry (NIOCH SB RAS), Novosibirsk 630090, Russia

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Message from the Guest Editor

Biomedical materials are widely used for clinical diagnosis, treatment, and the repair or replacement of damaged tissues. At present, biomedical materials have become one of the fastest developing areas in medicine with the greatest potential. In the century of nanoscale, the scientific and clinical approaches of pharmaceuticals are challenging, and in many cases, the necessity of emphasizing practical solutions and applications to theoretical and research-based problems occurs.

Active biomedical materials are designed to interact with biological systems for therapeutics. These materials have various applications such as tissue regeneration and repair, controlled drug delivery. The synthesis and fabrication of active biomedical materials require the use of different methods and technologies.

The Special Issue coverage spans a wide range of topics from basic science to clinical applications, around the theme of preparation, performance, and evaluation of advanced biomedical materials; the chemical, physical, toxicological, and mechanical behavior of materials in physiological environments; and the response of blood and tissues to biomedical materials.



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Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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