







an Open Access Journal by MDPI

# Advanced Biomaterials for Cells Adhesion, Proliferation and Differentiation

Collection Editor:

#### Prof. Dr. Guoping Chen

Research Center for Functional Materials, National Institute for Materials Science, 1-1 Namiki, Tsukuba, Ibaraki 3050044, Japan

## **Message from the Collection Editor**

Dear Colleagues,

Cells adhesion, proliferation and differentiation are involved in various natural phenomena, such as embryogenesis, histogenesis, maintenance of tissue structure, immune response, metastasis, wound healing, as well as tissue integration of biomaterial. Lack of native tissue integration is one of frequent problems associated with the biomaterials surfaces of dental implants. It has prompted a significant body of research regarding the modification of these surfaces. Therefore, there is a constant need to find advanced biomaterials which are very closely related to cell behaviors and particularly to cell adhesion, proliferation and differentiation, that aim to restore a patient's mobility and alleviate pains.

This Special Issue will focus on the recent progress of biopolymers, biometals, bioceramics, biomimetic materials, nanobiomaterials, scaffolds, porous materials, composite materials, smart biomaterials for cell responses in terms of adhesion, spreading, viability, proliferation and differentiation.

Prof. Dr. Guoping Chen

Guest Editor













an Open Access Journal by MDPI

#### **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 iournal covers twenty-five comprehensive biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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.

#### **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, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases

**Journal Rank:** JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

#### **Contact Us**

Materials Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials\_Mdpi