

Special Issue

Stents and Implants for Bioengineering and Biomedical Applications: In Vitro and In Vivo Studies

Message from the Guest Editors

This Special Issue was designed to establish recent studies concerning new technologies, such as the use of new or modified materials to construct stents and implants. We are interested in research assessing biocompatibility of products in a human environment. Articles based on in vitro or in vivo studies are welcome. In recent years, one has observed the evolution in designing and constructing new devices. It concerns new antimicrobial coatings on the surface of stents and the use of nanoparticles. From clinical practice, we know that implants are not ideal ones. They have quite a lot of unwanted features, such as thrombogenicity, stimulating growth of endothelial and subendothelial cells, leading to occlusion of vessels following procedures. Surgery, traumatology, dentistry, cardio surgery, vascular surgery, phlebology are the fields mostly interested in development of this field. Keywords:

- multifunctional stent
- nano functionalized stent
- drug-eluting stent
- nonvascular stent
- dental implantology
- implants in orthopedics
- functional catheter
- biomedical application

Guest Editors

Prof. Dr. Zbigniew Rybak

Pre-Clinical Research Centre, Wrocław Medical University, Bujwida 44, 50-345 Wrocław, Poland

Dr. Piotr Terlecki

Department of Vascular Surgery and Angiology, Medical University of Lublin, 20-081 Lublin, Poland

Deadline for manuscript submissions

closed (10 June 2023)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/137624

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

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Message from the Editorial Board

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.

Editors-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

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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