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 antimitotic coatings on the surface of stents and the use 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 ortopedics
- functional catheter
- biomedical application

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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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