Special Issue

Bio-Binding Materials: Reactivity and Toxicity

Message from the Guest Editors

The present Special Issue is aimed at various types of bio-interaction with an emphasis on binding as a necessary precursor step of different manifestations of toxic action. This includes toxicity both as an undesired hazard and an intended action (targeted therapies). Toxicity is also regarded, among others, as:

- A descriptor of biocompatibility in healthcare industries for medical applications (immobilization of proteins, antigens/antibodies and vaccine preparation, tumor treatment, gene and drug delivery, wound dressing, bone and skin regeneration, tissue engineering, cardiovascular engineering, traumatology and dentistry, implantology);
- A tool that predicts the possible antibacterial action of packaging materials in food industry;
- A key feature for the development of self-cleaning fabrics with stain-resistant and antimicrobial properties;
- A means for the estimation of materials impact on the environment.

Binding materials may include metals and alloys, simple and mixed oxides, minerals, ceramics, polymers, hybrids, composites, nanoparticles and nanostructured materials, etc. Binding receptors envisaged are DNA, peptides, proteins, polysaccharides, biomembranes, etc.

Guest Editors

Dr. Vlad T. Popa

"Ilie Murgulescu" Institute of Physical Chemistry of the Romanian Academy, Bucharest, Romania

Dr. Aurica Precupas

"Ilie Murgulescu" Institute of Physical Chemistry of the Romanian Academy, Bucharest, Romania

Deadline for manuscript submissions

closed (28 February 2022)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/76064

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

mdpi.com/journal/materials

Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/journal/materials

About the Journal

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.

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

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 - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)

MDPI