

Special Issue

Titania-Based Materials for Medical Applications

Message from the Guest Editors

Intense works in searching for new biomaterials and improvements of currently used ones are the response to the modern medicine demand for materials with new physicochemical, mechanical properties and appropriate bioactivity. Titania based-materials are an important group of biomaterials, in addition to their beneficial mechanical properties are high biocompatibility. These type of materials can be used to modify titanium or titanium alloys medical devices surface. The preparation of ceramic titanium materials with high chemical purity, specific physical and mechanical properties is an interesting issue. The strictly defined nano- or microarchitecture allows their enrichment in anti-inflammatory agents, which can be gradually released, e.g., after a surgical procedure. It is also interesting to note that titania-based materials, due to their properties—surface morphology, structure, and reactivity—can affect human body in different ways. Knowledge of the properties and synergistic effects is very important for optimal applications of these materials in various fields of medicine.

Guest Editors

Prof. Dr. Piotr Piszczek

Faculty of Chemistry, Nicolaus Copernicus University in Toruń, ul. Gagarina 7, 87-100 Toruń, Poland

Prof. Dr. Aleksandra Radtke

Faculty of Chemistry, Nicolaus Copernicus University in Toruń, 87-100 Toruń, Poland

Deadline for manuscript submissions

closed (30 April 2021)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/32929

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

[mdpi.com/journal/
materials](https://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](https://mdpi.com/journal/materials)



About the Journal

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

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)