

## Special Issue

# Biomechanics of Contemporary Implants and Prosthesis: Modeling, Experiments, and Clinical Application

### Message from the Guest Editor

A deeper understanding of the technological processes of implants, and the mechanobiological interaction of implants and organisms will potentially allow us to raise the level of medical treatment. In this Special Issue, modern trends of the biomechanics of contemporary implants and prostheses, including experimental and mathematical modeling and clinical application, are highlighted and discussed. I am pleased to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome. Topics of interest include (but are not limited to):

- New methods of design implants and prosthesis;
- Digital solutions for the patient-based treatment;
- CT and MRI based biomechanical simulation;
- Usage of biomaterials for implants and prosthesis;
- Research of biocompatibility for implants and prosthesis;
- Usage metamaterial for implants;
- Influence of the patient's biomechanics on implant loading

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### Guest Editor

Dr. Oskar Sachenkov

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### Deadline for manuscript submissions

closed (15 July 2022)



## Materials

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## 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.

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### Editor-in-Chief

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