Special Issue

Advanced Biomaterials and Biomedical Applications

Message from the Guest Editor

The advancement of healthcare increasingly relies on the design and application of innovative biomaterials that interact efficiently with the human body. Understanding the structure, properties, and behavior of both biological tissues and engineered materials is essential for driving progress in medical technologies. This Special Issue invites contributions that explore the development, fabrication, and characterization of biomedical materials, including bioprinting, drug delivery platforms, and synthetic tissue constructs. We also welcome studies on the mechanical, chemical, and biological properties of biomaterials, the interface between synthetic materials and living tissues, and strategies to enhance biocompatibility and functionality. Collectively, the research studies in this Special Issue aim to deepen our understanding of the materials science underlying biomedical applications and to highlight innovations that can improve diagnostics, therapeutics, and regenerative medicine.

Guest Editor

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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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