Special Issue

Bioinspired Materials: From Concepts to Applications

Message from the Guest Editors

Bioinspired materials refer to artificially synthesized materials developed by mimicking various characteristics or features of living organisms. Bioinspired materials with specific properties can be elaborately designed by studying the morphology, structure, function, and processes of organisms in nature. The concept of bionics is vast and interesting, from materials to components and to structures, providing endless inspiration for scientific development and engineering progress. This Special Issue, entitled "Bioinspired Materials: From Concepts to Applications", will focus on the latest advancements in bioinspired materials, components, and structures. The scope of this Special Issue is extensive, and it welcomes various research methods such as advanced design, manufacturing characterization, performance evaluation, and computational methods. Research on theoretical analysis, experimental testing, and numerical simulations is welcome.

Guest Editors

Dr. Xiaofei Cao

School of Physics and Mechanics, Wuhan University of Technology, Wuhan 430070, China

Prof. Dr. Xiao Kang

Institute of Advanced Structure Technology, Beijing Institute of Technology, Beijing 100081, China

Deadline for manuscript submissions

closed (1 January 2026)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/234764

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 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)

MDPI