Special Issue

Design and Manufacturing of Bioinspired Material and Structures

Message from the Guest Editors

Biomimetic design and manufacturing promote possibilities in manipulating and mimicking the multiscale, multimaterial, and multifunctional structures with excellent acoustical, optical, electrical, thermal, mechanical, and hydrodynamic properties, to name but a few examples. The aim of this SI is to understand the basic design principles and physical/chemical mechanisms that determine optimized structural organization in biological systems and its relationship to function. Moreover, based on the identified physical/chemical principle, we wish to investigate pathways for the synthesis and manufacturing of biomimetic materials and structures. This SI will focus on research advances in the areas of bioinspired advanced design and manufacturing of functional structures and materials for future engineering systems. The growth of bioinspired design and manufacturing technology will open intriguing perspectives for developing materials and structures on the basis of novel manufacturing processes together with new computer-aided design and simulation methods.

Guest Editors

Dr. Xiangjia Li

Dr. Yang Yang

Dr. Tsz Ho Kwok

Deadline for manuscript submissions

closed (10 November 2022)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/90707

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

MDPI

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)