

Special Issue

Collagens, Collagen-Based and Collagen-Mimetic Biomaterials: Preparation, Characterization and Applications

Message from the Guest Editor

Collagens are the major proteins in the extracellular matrix (ECM) and comprise almost 30% of the total cell proteins in mammals. The superfamily of collagen in vertebrates includes over 50 collagens and collagen-like proteins that play a key role in tissue homeostasis, and they have also been implicated in a wide range of pathological conditions. The numerous biomaterials, collagen-based, and collagen-mimetic biomaterials are of great interest, because they present unique properties and have a wide range of applications in the fields of biomaterials, tissue engineering, and biomedicine, including implants, scaffolds, hydrogels, and coatings. The present Special Issue welcomes contributions in the form of full articles, short communications, or review articles on topics related to the design, synthesis, characterization, surface modification, and processing of collagen-based and collagen-mimetic biomaterials for use in different biomedical applications.

Guest Editor

Dr. Andreas Stylianou

1. Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, University of Cyprus, Nicosia, Cyprus
2. School of Sciences, European University Cyprus, Nicosia 2404, Cyprus

Deadline for manuscript submissions

closed (20 May 2022)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/32371

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)