Special Issue

ECM-Mimetic Biomaterials for Tissue Engineering

Message from the Guest Editors

This Special Issue is dedicated to highlighting cuttingedge advances in the design, fabrication, and functionalization of ECM-mimetic nanofibers that better replicate native tissue microenvironments, with the goal of improving regenerative outcomes. Topics of interest include, but are not limited to, the following research areas:

- Multi-material and hybrid systems that mimic the compositional diversity of the ECM;
- Advanced fabrication techniques enabling control over fiber alignment, porosity, and hierarchical organization;
- Functionalization approaches incorporating bioactive motifs to guide cell adhesion, differentiation, and tissue-specific remodeling;
- Smart scaffolds responsive to physiological stimuli for spatiotemporal delivery of therapeutic agents;
- Other related topics.

We look forward to receiving your contributions to this Special Issue.

Guest Editors

Dr. Yazhou Chen

Henan Institute of Advanced Technology, Zhengzhou University, Zhengzhou, China

Dr. Linawati Sutrisno

International Center for Young Scientists (ICYS), National Institute for Materials Science; 1-2-1 Namiki, Tsukuba 305-0044, Ibaraki, Japan

Deadline for manuscript submissions

20 March 2026



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/255292

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

mdpi.com/journal/materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





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

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 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)