

Special Issue

Orthopaedic Bioengineering and Tissue Regeneration: Second Edition

Message from the Guest Editor

Orthopaedic bioengineering and tissue regeneration represent a groundbreaking convergence of engineering, biology, and medicine, with the potential to revolutionise treatment for musculoskeletal disorders. This Special Issue invites submissions that explore innovative biomaterials, scaffolds, and techniques designed to repair and regenerate damaged bone and cartilage tissues.

We welcome contributions focused on orthopaedic bioengineering, especially those that utilise stem cells, growth factors, and biocompatible materials to stimulate tissue repair and regeneration. Furthermore, the integration of computational modelling and advanced imaging technologies enriches our understanding of biomechanics and biological responses to orthopaedic interventions. As this field advances, it promises to yield novel therapies, heralding a new era in musculoskeletal healthcare.

This Special Issue aims to publish high-quality research focused on enhancing biomaterials for orthopaedic applications, data processing, and clinical evaluation in orthopaedic bioengineering. We also welcome technical studies, experimental trials, and clinical assessments.

Guest Editor

Dr. David Putzer

Department of Orthopedics and Traumatologie, Experimental Orthopaedics, Medical University Innsbruck, Anichstrasse 35, 6020 Innsbruck, Austria

Deadline for manuscript submissions

30 November 2026



Bioengineering

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 5.3
Indexed in PubMed



mdpi.com/si/275988

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

[mdpi.com/journal/
bioengineering](https://mdpi.com/journal/bioengineering)





Bioengineering

an Open Access Journal
by MDPI

Impact Factor 3.7
CiteScore 5.3
Indexed in PubMed



[mdpi.com/journal/
bioengineering](https://mdpi.com/journal/bioengineering)



About the Journal

Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Bioengineering* (ISSN 2306-5354). *Bioengineering* is published in open access format – research articles, reviews and other contents are released on the Internet immediately after acceptance. The scientific community and the general public have unlimited and free access to the content as soon as it is published. *Bioengineering* provides an advanced forum for the science and technology of bioengineering. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Anthony Guiseppi-Elie

Department of Biomedical Engineering, Texas A&M University, College Station, TX 77843, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, CAPIus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Biomedical)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).