

Special Issue

Biomaterials Approaches for Disease Modeling

Message from the Guest Editor

This Special Issue on “*Biomaterials Approaches for Disease Modeling*” will focus on original research papers and comprehensive reviews covering the use of engineered materials systems to recapitulate key aspects of diseased tissue in vitro. Topics of interest for this Special Issue include, but are not limited to, the following:

- Three-dimensional culture of patient-derived organoids to model monogenic diseases, cancer, or infection.
- Development of microphysiological systems to model and characterize disease phenotypes.
- 2D and 3D approaches to direct morphogenesis of stem cell-derived microtissues, such as photolithographic patterning and 3D printing/additive manufacturing
- Novel chemical approaches to build complex cellular microenvironments.
- Stimuli responsive materials to mimic disease progression in vitro.
- Development of preclinical drug screening platforms with improved predictive ability and/or reproducibility.

Guest Editor

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Deadline for manuscript submissions

closed (1 December 2021)



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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

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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).