

## Special Issue

# Studies on Implantable Scaffolds: Designs and Biomechanical Properties

### Message from the Guest Editor

Tissue engineering is an interdisciplinary discipline at the intersection of materials science, engineering, and biology to regenerate various types of biological tissues. Advances in scaffold-based tissue engineering continue in response to the growing need for tissue replacement caused by diseases, trauma, or cancers. Despite the explosion of work on the development of synthetic tissue scaffolds, remarkably few have been translated to the clinic. A significant obstacle to translation is that existing scaffolds lack adequate mechanical properties while maintaining biological complexities. This Special Issue encourages researchers to present their studies concerning the improvement in the biomechanical properties of synthetic tissue scaffolds through innovative approaches in materials science, structural design, or in silico methods. It is our pleasure to invite all of you to submit your research to this Special Issue. Research Articles, Communications, and Review Papers are welcome!

### Guest Editor

Dr. Ali Entezari

School of Biomedical Engineering, University of Technology Sydney, Sydney, Australia

### Deadline for manuscript submissions

closed (31 March 2025)



## Journal of Functional Biomaterials

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## About the Journal

### Message from the Editor-in-Chief

The biomaterials field is one of the largest and fastest growing research areas both in the scientific community and in the industrial one. Biomaterials are the result of collaborations between different disciplines: chemistry, medicine, pharmacology, engineering and biology. The objective of this collaboration is to lead to the implementation of new devices to restore form and human body functions. The mission of the *Journal of Functional Biomaterials (JFB)* is to focus attention on physico-chemical characteristics and their importance in the interactions between biomaterials and living tissues. *JFB* seeks to publish studies on the preparation, performance and use of biomaterials in biomedical devices, as well as regarding their behavior in physiological environments. We are pleased to welcome you as our authors.

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### Editor-in-Chief

Prof. Dr. Pankaj Vadgama

School of Engineering and Materials Science, Queen Mary University of London, London, UK

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