

Special Issue

Functional Materials for Dental Restorations—2nd Edition

Message from the Guest Editors

Functional materials have recently been used in various applications within the biomedical field and are expected to be useful in dentistry as well.

Since enamel and dentin do not have regenerative capabilities, decaying tissue must be restored with direct and indirect restorative materials such as resin composites, glass ionomers, ceramic-based materials, alloys, and ceramics. Some of these materials may have functional properties. In particular, functional materials can be utilized to promote the survivability and longevity of restorations due to their adaptation and interaction with dental tissues.

Their capabilities include the inhibition of biofilm formation, the promotion of remineralization, the inhibition of collagen enzymatic degradation, adaptability and biocompatibility without the side effects of toxic therapeutic agents, and the reinforcement of prosthetic materials.

This Special Issue of the Journal of Functional Biomaterials highlights the latest research on the development of novel functional materials and advanced applications of restorative dental materials.

Guest Editors

Dr. Noriko Hiraishi

Cariology and Operative Dentistry, Graduate School of Medical and Dental Sciences, Institute of Science Tokyo, Tokyo, Japan

Dr. James Kit-Hon Tsoi

Dental Materials Science, Faculty of Dentistry, The University of Hong Kong, Sai Ying Pun, Hong Kong

Deadline for manuscript submissions

closed (30 April 2025)



Journal of Functional Biomaterials

an Open Access Journal
by MDPI

Impact Factor 5.2
CiteScore 6.8
Indexed in PubMed



mdpi.com/si/193822

Journal of Functional Biomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jfb@mdpi.com

mdpi.com/journal/

[jfb](https://jfb.mdpi.com)





Journal of Functional Biomaterials

an Open Access Journal
by MDPI

Impact Factor 5.2
CiteScore 6.8
Indexed in PubMed



mdpi.com/journal/

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



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.

Editor-in-Chief

Prof. Dr. Pankaj Vadgama

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

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, Embase, Ei Compendex, Inspec, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Engineering, Biomedical) / CiteScore - Q2 (Biomedical Engineering)