Journal of
Functional Biomaterials

IMPACT FACTOR 4.8
Indexed in: PubMed
CITESCORE 5.0

an Open Access Journal by MDPI

Assays for the Impact of Functional Biomaterials on Cell Proliferation, Cell Viability, and Cell Metabolic Activities

Guest Editors:

Prof. Dr. John H.T. Luong
Innovative Chromatography Group, Irish Separation Science Cluster (ISSC), School of Chemistry, University College Cork, Cork, Ireland

Prof. Dr. Elisabeth Marion Schneider
Klinik für Anästhesiologie, Universitätsklinikum Ulm, Ulm, Germany

Deadline for manuscript submissions:
closed (20 November 2022)

Message from the Guest Editors

This Special Issue invites review and research papers that cover traditional and emerging assays of cell proliferation, cell viability, and cell-cycle analysis after cells are exposed to functional biomaterials. The Special Issue will cover the following topics:

- Novel fluorescent dyes beyond propidium iodide and 7-aminoactinomycin D that bind to double-stranded DNA or RNA of cells with compromised plasma membranes.
- Enzymatic activity fluorogenic substrates: substrates that react with intracellular enzymes in live cells.
- Chemiluminescent ATP assays and other biomarkers.
- Combined substrates and techniques for probing plasma and intracellular cell membrane integrity (dead cells, stressed organelles such as endoplasmic reticulum (ER) and mitochondria), and live cells (esterases).
- Metabolic activity agents: Novel agents that can determine the cellular redox potential in live cells.
- Assays using membrane integrity dyes for early apoptosis. probing biomaterial–cell interactions by spectroscopy (FTIR, Raman, etc.) and spectroscopy (SEM, AFM, etc.)
- Mitotoxicity agents can be used to detect changes in mitochondrial membrane potential.

Journal of
Functional Biomaterials

IMPACT FACTOR 4.8 | Indexed in: PubMed | CITESCORE 5.0

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Pankaj Vadgama
School of Engineering and Materials Science, Queen Mary University of London, London, UK

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.

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, Inspec, CAPlus / SciFinder, AGRIS, and other databases.
Journal Rank: JCR - Q2 (*Engineering, Biomedical*) / CiteScore - Q2 (*Biomedical Engineering*)

Contact Us

Journal of Functional Biomaterials
Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/jfb
jfb@mdpi.com
𝕏@JFB_MDPI