Special Issue

Functional Biomaterials for Skin Reconstruction and Wound Healing

Message from the Guest Editors

When skin is injured, wound healing occurs as a natural response of the organism to restore the skin's physiological structure and function. Wound healing consists of four major overlapping and interconnected stages: hemostasis, inflammation, proliferation, and remodeling. Disruption in the proper sequence and balance of these phases can lead to incomplete wound healing, affecting the functional reconstruction and healing of the injured tissues.

Over the years, various biomaterials formulated in fibers, films, hydrogels, and 3D scaffolds have been developed. For effective wound healing, functional biomaterials exhibiting appropriate mechanical properties, biodegradability and biocompatibility, should have the ability to restore the skin's barrier function, reduce scar formation, control fluid loss, and prevent infection.

This Special Issue aims to include original research articles and reviews on the design, development, and characterization of natural, synthetic, or composite functional biomaterials for their utilization as tissue engineering scaffolds, wound dressing materials, and drug-release systems in skin reconstruction and wound healing applications.

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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.

Editor-in-Chief

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