



Skin Tissue Engineering

Guest Editor:

Dr. Agnes Klar

Tissue Biology Research Unit,
Department of Surgery,
University Children's Hospital
Zurich, 8032 Zurich, Switzerland

Deadline for manuscript
submissions:

closed (31 July 2021)

Message from the Guest Editor

Biomaterials used for skin tissue engineering include natural biopolymers such as collagen type I, fibronectin, glycosaminoglycans (GAGs), hyaluronan, polypeptides, hydroxyapatites, chitosan, alginates, and those that are manufactured synthetically.

A major consideration when engineering a skin replacement therapy is to promote skin repair and regeneration by employing suitable biomatrices that not only support skin cell growth but also allow a proper interaction with the host tissue.

This *Special Issue* focuses on different aspects of skin tissue engineering, particularly on designing new smart matrices for skin substitutes. The ultimate goal of tissue engineering of the skin is to fabricate a complex multi-layered scar-free “artificial skin” including all the skin appendages (hair follicles, sweat glands, and sensory organs) and layers (epidermis, dermis, and hypodermis) with rapid take (vascularization) and the establishment of a functional vascular and nerve network and scar-free integration with the surrounding host tissue.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)