Special Issue

Skin Tissue Engineering

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.

Guest Editor

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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.

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