

Special Issue

Collagens, Collagen-Based and Collagen-Mimetic Biomaterials: Preparation, Characterization and Applications

Message from the Guest Editor

Collagens are the major proteins in the extracellular matrix (ECM) and comprise almost 30% of the total cell proteins in mammals. The superfamily of collagen in vertebrates includes over 50 collagens and collagen-like proteins that play a key role in tissue homeostasis, and they have also been implicated in a wide range of pathological conditions. The numerous biomaterials, collagen-based, and collagen-mimetic biomaterials are of great interest, because they present unique properties and have a wide range of applications in the fields of biomaterials, tissue engineering, and biomedicine, including implants, scaffolds, hydrogels, and coatings. The present Special Issue welcomes contributions in the form of full articles, short communications, or review articles on topics related to the design, synthesis, characterization, surface modification, and processing of collagen-based and collagen-mimetic biomaterials for use in different biomedical applications.

Guest Editor

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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