Special Issue

Advances in the Preparation and Application of Silk Fibroin Materials

Message from the Guest Editor

Silk fibroin protein, a natural biopolymer that is derived from the cocoons of silkworms, especially domestic species Bombyx mori, have internal good biocompatibility, mild immunological response, and antiinflammatory and tuneable physicochemical properties. These have resulted in the use of silk ranging from skin care to tissue regeneration and pharmaceutical applications. The present Special Issue on "Advance in Preparation and Application of Silk Fibroin Materials" will compile research and review papers including, but not exclusively limited to, the following topics: *the processing of silk extraction from natural sources, *genetically engineered silk fibroin and chemically modified silk fibroin, *material structure and function, *biomimetic/bio-inspired materials, *wearable devices, *3D printing, *carbon-neutral materials.

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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