



an Open Access Journal by MDPI

Advanced Nanomaterials and Biomaterials from Self-Assembling Peptides

Guest Editor:

Prof. Dr. Hiroshi Tsutsumi

Institute of Science Tokyo,
School of Life Science and
Technology, Tokyo, Japan

Deadline for manuscript
submissions:

closed (28 February 2021)

Message from the Guest Editor

Dear Colleagues,

Self-assembling peptides are potential scaffolds to construct hybrid nanomaterials for optical and electronic devices that involve light harvesting system. Nanostructures of self-assembling peptides have also received a great deal of attention as scaffolds for mineralization of metallic/inorganic nanomaterials including silica, hydroxyapatite, semiconductor and metal oxides.

In another instance, the assembled structures of designed peptides, such as networked-nanofibers, are expected to be artificial extracellular matrices for cell culture, tissue engineering and regenerative medicine. Networked-nanofibers form hydrogel materials that can give similar environment to natural hydrogels composed of extracellular matrices. In addition, biomaterials fabricated from SAPs are also attractive for biomedical applications, such as drug delivery systems and antibacterial materials.

This Special Issue will focus on the self-assembling peptides as nanomaterials and biomaterials. New entries of self-assembling peptides with various nanostructures and properties are welcomed.

Prof. Dr. Hiroshi Tsutsumi

Guest Editor



mdpi.com/si/13671

Special Issue



an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

Message from the Editorial Board

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.

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), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)