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Advanced Nanomaterials and Biomaterials from Self-Assembling Peptides

Guest Editor:

Prof. Dr. Hiroshi Tsutsumi

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

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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



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Special Issue



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Editor-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

Message from the Editor-in-Chief

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Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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