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Advanced Nanomaterials and Biomaterials from Self-Assembling Peptides

Guest Editor:

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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. Networkednanofibers 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-asssembling 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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Message from the Editor-in-Chief

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