



an Open Access Journal by MDPI

New Advances in Physical Properties of Block Copolymers

Guest Editor:

Prof. Dr. Shinichi Sakurai

Department of Biobased
Materials Science, Kyoto Institute
of Technology, Matsugasaki,
Sakyo-ku, Kyoto 606-8585, Japan

Deadline for manuscript
submissions:

closed (31 December 2021)

Message from the Guest Editor

Block copolymers have attracted continuous and increasing interest due to the aspects of thermoplastic elastomers and heat-shrinkable ability. Such characteristic aspects of block copolymers have been utilized for the preparation of pressure-sensitive adhesion and heat-shrinkable films. Nanoscaled structures due to the microphase separation of block copolymers can be utilized as a nanotemplate or a nanomold for polymer processing, and provide an opportunity for conducting the scientific research to reveal effects of the confined space on crystallization or nanostructure formation due to microphase separation. The nanotemplate has been considered to contribute to the tremendous improvement of memory density in electronic storage media. Furthermore, the surface of block copolymers forming a surface-induced nano-structure can be a promising candidate for a scaffold for the regenerative medical engineering. This Special Issue collects reviews and articles on recent developments in these topics, and focuses on new advances in the physical properties of block copolymer, which will contribute to the exploitation of new fields of block copolymer application.





an Open Access Journal by MDPI

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

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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
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)