



Smart Soft Materials: From Design to Applications

Guest Editor:

Prof. Dr. Jianbo Yin

Smart Materials Laboratory,
Department of Applied Physics,
Northwestern Polytechnical
University, Xi'an 710129, China

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Message from the Guest Editor

Dear Colleagues,

Smart materials can adaptively respond to an external stimulus and exhibit a useful physical or chemical change such as volume, mechanical stress, oxidization–deoxidization, and so on. The stimulus may be mechanical stress, temperature, light, moisture, pH, or an electric or magnetic field. The important characteristic of the response of smart materials is reversibility or tunability by controlling the strength of the stimulus. To obtain smart materials, a key aspect is to develop substances with highly physical and chemical stability and strong stimulus-responsive characteristics. In this regard, soft materials might be very suitable compounds for such purposes owing to their largely tunable ability compared to hard materials. In addition, self-healing properties can be easily induced in soft responsive materials.

This Special Issue will cover the molecular design and preparation of smart soft materials and the versatile applications of smart soft materials in soft actuators, soft wearable devices, soft robotic, tissue engineering, artificial skin, biosensors, etc.





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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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Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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