Special Issue

Novel Designs in Programmable or Self-Assembling Microdevices

Message from the Guest Editors

Recent advances in microfabrication, smart materials, and programmable self-assembly have revolutionized the development of micromachines and microdevices. These systems exhibit unprecedented capabilities in biomedical applications, soft robotics, drug delivery, and adaptive microsystems. By leveraging stimuli-responsive materials, 3D/4D printing, and computational design, researchers can now create dynamic structures that reconfigure autonomously or respond to external triggers. This Special Issue aims to highlight cutting-edge research in programmable and self-assembling microdevices, focusing on novel design strategies, fabrication techniques, and functional applications. We invite original research articles, reviews, and perspectives covering (but not limited to) the following topics:

- Smart self-assembling material design
- 3D/4D printing for self-assembling microstructures
- Smart self-assembling implantable microdevices
- Programmable micromachines and actuation strategies

Guest Editors

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You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the open access format. Research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

Editor-in-Chief

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