

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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Deadline for manuscript submissions

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Message from the Editor-in-Chief

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