



Microscale Surface Tension and Its Applications

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Message from the Guest Editors

Building on advances in miniaturization and soft matter, surface tension effects are a major key to the development of soft/fluidic microrobotics. Various applications are under development: microfluidic and lab-on-chip devices, soft gripping and manipulation of particles, colloidal and interfacial assemblies, fluidic/droplet mechatronics.

In this Special Issue of Micromachines, we invite contributions covering all aspects of microscale engineering relying on surface tension. Particularly, we welcome contributions on fundamentals or applications related to:

- **Drop-botics:** capillary manipulation, gripping, and actuation, sensing, folding, propulsion and bio-inspired solutions
- **Control of surface tension effects:** surface tension gradients, active surfactants, thermocapillarity, electrowetting, elastocapillarity
- **Handling of droplets, bubbles and liquid bridges**
- **Capillary forces:** modelling, measurement, simulation
- **Interfacial engineering:** smart liquids, surface treatments





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Message from the Editor-in-Chief

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