

Special Issue

Micromachines for Chemical Process Intensification, 3rd Edition

Message from the Guest Editor

A sustainable society needs green, efficient, and precise chemical processes. To this end, process intensification at various scales is a common and effective strategy. Recently, micromachines as smart tools for process monitoring and manipulation have been drawing increasing attention from scientists and engineers due to concerns in recognition vision, manipulation capacity, and environmental footprint. For example, flow synthesis based on microtubes opens new reaction windows to resolve challenges in low atoms and energy utilization and large intermediate materials hold-up; microfluidic devices enable the development of labs-on-chips for high-throughput detection. Accordingly, this Special Issue seeks to showcase research papers and review articles that focus on all kinds of micromachines towards chemical process intensification. These may include fixed equipment like micromixers, microreactors, and micro-separators, or variable element like microdroplets, microbubbles, as long they have functions or potential for the improvement of chemical processes. Papers may be discussed with a focus on a chemical process, a micromachine, or an integrated system.

Guest Editor

Prof. Dr. Yangcheng Lu
Department of Chemical Engineering, Tsinghua University, Beijing
100084, China

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Micromachines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
micromachines@mdpi.com

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