Special Issue

Surface-Tension-Driven Flows for Shaping and Fragmenting Matter on the Submillimeter Scale

Message from the Guest Editor

A multitude of technological applications demand the shaping and fragmentation of a continuous phase (gas, liquid, or solid) down to the submillimeter scale in a controlled manner. This fragmentation can be produced by gently deforming, stretching, and splitting matter in its fluid form. The flows arising in these microfluidic processes involve an ample variety of complex phenomena in which the interfacial/surface tension always plays a major role. While microfluidics researchers typically pay attention to the development and characterization of techniques for the purposes mentioned above, fluid dynamicists focus on rather fundamental questions in the quest to reveal the physics involved. This Special Issue aims to present modern microfluidic technologies for shaping and atomizing liquids and gases. It also considers advances in the understanding and modeling of the physical mechanisms underlying those technologies. It is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are all welcome.

Guest Editor

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Deadline for manuscript submissions

closed (30 September 2021)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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