Special Issue

Acoustofluidics: Applications, Phenomena and Fabrication Technique

Message from the Guest Editor

Surface and bulk acoustic wave coupling to fluids at a milli-, micro-, and the nano-scale has uncovered a myriad of intriguing phenomena and has inspired many applications with a high impact commercialization potential. Acoustic-to-fluid (acoustofluidic) interactions have demonstrated a wide range of applications ranging from sensing to chemical analysis and micro-/nano-particle actuation to fluid interface manipulation, such as jetting and nebulization. In addition, the emerging fabrication techniques of the acoustic transducers and reservoirs (made out of 3D printing materials or elastomers, such as PDMS) have propelled the field to demonstrate many practical applications relevant to the lab-on-a-Chip vision. The aim of this Special Issue is to showcase and solicit recent research papers, short communications, and perspective review articles related to acoustofluidic discoveries, novel fabrication techniques, and relevant applications, for example, in particle sorting, fluid mixing, jetting, atomization, micro-/nano-particle synthesis.

Guest Editor

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