Special Issue

Microfluidic Systems and Computational Imaging Methods in Lab-on-a-Chip Technologies

Message from the Guest Editors

The industrial sector surrounding biomedical devices could significantly benefit from microfluidics point-of-care (POC)-based diagnostics. The premise behind POC devices is to perform a diagnostic test near the patient without the need for any infrastructure or trained personnel. This involves reducing the handling of complex fluids, from single cells to multi-phase flows, integrated detection, and sample manipulation. Integrating embedded micro-devices for technologies related to mechanics, optics, microscopy, electronics, fluidics, and computing, together with low-cost micro-fabrication technology, is fundamental in POC device realization. This Special Issue aims to showcase contributions focusing on (but not limited to) new concepts in POC device realization.

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