

Special Issue

Microfluidics and Sensor Technology in Biomedical Engineering

Message from the Guest Editors

The innovative developments made in microfluidic and sensing technologies play a significant role in dynamically evolving biomedical engineering applications, especially in Lab-on-the-Chip, Organ-on-the-Chip and Point-of-Care technologies, among others. The rapidly emerging fabrication techniques in MEMS and NEMS have opened the doors to new sensing technologies with high accuracy. The fascinating microfluidic platforms with the latest 2D and 3D structures may have the ability to precisely define the fluid flow patterns and fluid particle transportation in microchannels with desired accuracy. The synergistic integration of microfluidic and sensing technologies has paved the way for many recent innovations in biomedical engineering, thus contributing to the development of sophisticated equipment for improving human health. This Special Issue will cover the recent and innovative advances made in the development of microfluidic platforms, smart micro/nano-biomedical devices, the integration of MEMS/NEMS, and technical and translational challenges, along with a broader impact.

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