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Microfluidics in Biomedical Engineering

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Message from the Guest Editor

Dear Colleagues,

Microfluidic systems, lab-on-chip (LOC), and micro total analysis systems (mTAS) are making remarkable contributions to the biomedical field by closing the gaps between biology–medicine and engineering. Because of this integration, our understanding of the fundamentals of biology and medicine has increased exponentially in the past decades, resulting in the discovery of new biomarkers, single cell manipulation, body-on-chips, diagnostic micro-biosensors, bio-sensitized nanomaterials and device platforms, microphotonics, etc. Microfluidics for bio applications also involve the integration of many elements, such as microfluidics, microphotonics, nanomaterials and structures, and various actuation and sensing mechanisms. This Special Issue will address challenges involved with modeling, fabrication, integration, and application-specific issues when microfluidics are designed for bio applications.

Prof. Dr. Muthukumaran Packirisamy

Guest Editor



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Special Issue



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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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