Special Issue

Research Highlights in Microfluidics

Message from the Guest Editors

Microfluidics is a new technology platform used to manipulate very small amounts of liquids with high accuracy, and is widely used in the research of biological problems. Microfluidic technology has developed rapidly in recent years. It integrates the sample pretreatment, biochemical reaction, sorting and detection processes involved in the fields of chemistry, biology and medicine into a microfluidic chip and provides a powerful research platform for the foundation and application of these fields. Microfluidic chips can process a large number of samples in parallel, and has the advantages of reduced sample consumption, fast detection speed, simple operation, multi-functional integration, small size and easy of transport. In the future, it will play an important role in the biomedical field, especially in vitro diagnosis. In recent years, the research highlights in microfluidic technology have mainly been focused around the research of efficiency promotion, the combination of multiple micro operation methods, chip processing, microfluidic driving, biological signal detection and so on.

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