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Cost-Effective and Rapid 3D Printing Of Microfluidic Devices for Biomedical Applications

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Abstract

Microfluidic devices play an increasingly vital role in biomedical research, facilitating the manipulation of small fluid volumes for applications such as drug delivery and lab-on-a-chip systems. However, the conventional production of microfluidic devices through the expensive and time-consuming soft lithography technique has limitations in terms of design and fabrication. In this presentation, we introduce our research advancements in 3D printing technology for microfluidic devices. Our innovative approach allows for the rapid and cost-effective creation of transparent microfluidic devices. During my presentation, we will illustrate several exemplary microfluidic devices and their applications in the biomedical field.