Microfabricated Device for Biological Process

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Abstract:
Sample preparation presents a long lasting challenge in biological assays. In light of the fast development of Lab-on-a-Chip, there is urgent need for methods that interface the miniaturized bioassay platform with the macro world. Our research emphasizes the design and fabrication of miniaturized device that will meet the future needs for bioanalysis using small amount (~ µL to sub-µL) of samples.

Summary:
Miniaturized sample preparation devices were fabricated using photolithography, metallization and thin film deposition. The devices contained microfluidic channels fabricated by deep reactive ion etch (DRIE).

The devices were designed for handling samples in ~ µL volume, and interconnecting with BioArray’s BeadChip™ platform [1].

References: