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Microfluidic Device Fabrication for Optical Micromanipulation

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Poster Presentation P9

**MICROFLUIDIC DEVICE FABRICATION FOR OPTICAL
MICROMANIPULATION**

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Integrated "lab-on-a-chip" technologies require the development of miniaturized fluidic devices. We discuss fabrication, control, and performance issues pertinent to the use of microfluidic devices that incorporate optical sieves, for sorting and separating particles of varying size, shape, and molecular structure. The goal of this project is to improve the design of all-optical sorting devices and to address issues associated with microfluidic control. Towards that end, we will examine basic physical considerations appropriate to the microfluidic regime.