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Microfluidic Device Fabrication for Optical Micromanipulation

Michael Berry

Illinois Wesleyan University

Ryan Smith

Illinois Wesleyan University

John van Fleet, Jr

Illinois Wesleyan University

Brian Simonds

Illinois Wesleyan University

Gabriel C. Spalding, Faculty Advisor

Illinois Wesleyan University

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Poster Presentation P9

**MICROFLUIDIC DEVICE FABRICATION FOR OPTICAL
MICROMANIPULATION**

Michael Berry, Ryan Smith, John van Fleet, Jr., Brian Simonds, and Gabriel C. Spalding*
Department of Physics, Illinois Wesleyan University

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.