

Abstract Submitted  
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**Manipulating DNA molecules inside nanopores using magnetic tweezers**<sup>1</sup> HONGBO PENG, SEAN LING, Brown University — There has been intense interest recently in using solid-state nanopores for DNA sequencing. A key to this goal is to develop the capability to control the motion or translocation of DNA molecules through the pore. Magnetic tweezers provide the possibility for manipulating multiple DNA molecules through addressable nanopore arrays. We will report our experimental design as well as the preliminary results on manipulating DNA molecules inside nanopores using magnetic tweezers.

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