

Abstract Submitted
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Nanotorsional Actuator Devices Built on Individual Singlewall Carbon Nanotubes¹ A. R. HALL, M. R. FALVO, Curriculum in Applied and Materials Sciences, University of North Carolina at Chapel Hill, 27599, R. SUPERFINE, Department of Physics and Astronomy, University of North Carolina at Chapel Hill, 27599, S. WASHBURN, Department of Physics and Astronomy and Curriculum in Applied and Materials Sciences, University of North Carolina at Chapel Hill, 27599 — Nanoelectromechanical devices have been fabricated comprising an individual singlewall carbon nanotube as a torsional spring for a fully suspended, lithographed metal platform. The torsional properties of the structure were measured through electrostatic deflections. We discuss the mechanical properties of the oscillator and the electrical response of the nanotube during deflections.

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