

Abstract Submitted  
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**Capillary forces on nanowires** JUN MA, SHENGFENG CHENG, Johns Hopkins University, JAY WALLACE, MACS Consulting, PATRICIA MCGUIGGAN, MARK ROBBINS, Johns Hopkins University — The capillary forces on nanowires have been measured by attaching them to the cantilever of an Atomic Force Microscope (AFM). The nanowires are immersed and retracted from a liquid/air interface. The entire capillary force curve is compared to continuum theory and molecular simulations. Nanowires with different diameters and chemistry and various liquids are investigated. Surface tension, contact angle hysteresis, and dynamical contact angles can be extracted under reasonable assumptions about how the contact line moves along the nanowires.

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