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Liquid solution delivery through the pulled nanopipette combined with QTF-AFM system[1] SANGMIN AN, Seoul Nation University, COREY STAMBAUGH, National Institute of Standards and Technology, GUNN KIM, Sejong University, MANHEE LEE, Harvard University, YONGHEE KIM, KUNYOUNG LEE, WONHO JHE, Seoul Nation University — Nanopipette is a versatile fluidic tool for biochemical analysis, controlled liquid delivery in bio-nanotechnology. However, most of the researches have been performed in solution based system, thus it is challenge to study nanofluidic properties of the liquid solution delivery through the nanopipette in ambient conditions. In this work, we demonstrated the liquid ejection, dispersion, and subsequent deposition of the nanoparticles via a 30 nm aperture pipette based on the quartz tuning fork – atomic force microscope (QTF-AFM) combined nanopipette system.

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