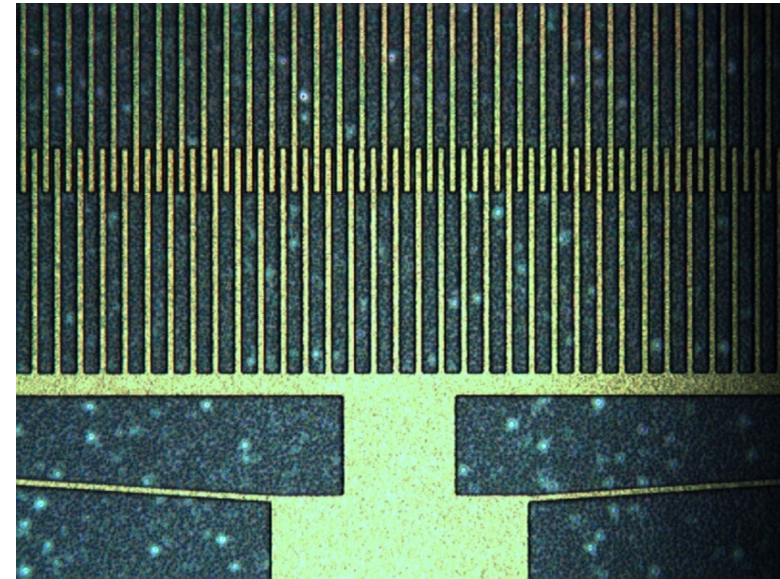
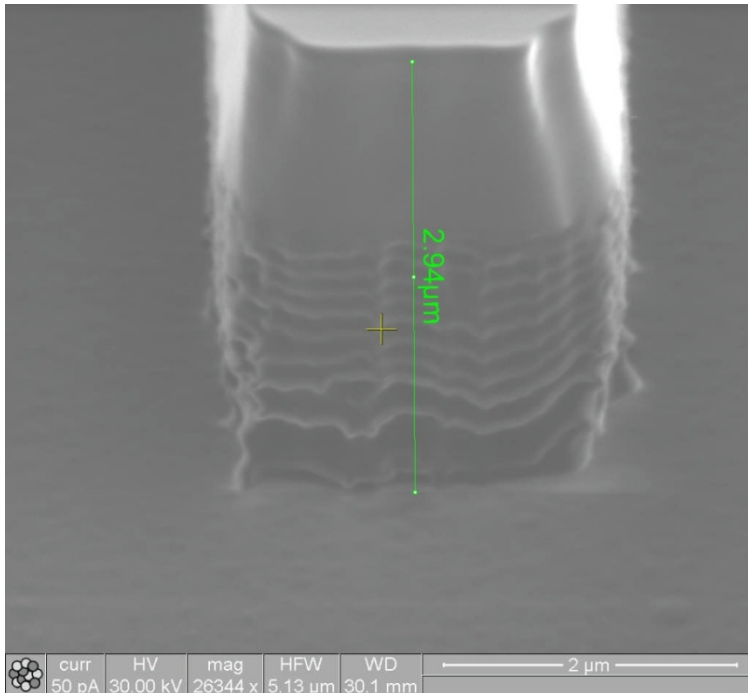


A High Pressure Microfluidic Valve for Control of an Endoscopic Surgical Platform

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NNIN Facility utilized: Nanofabrication Center

- Development of a high pressure valve
 - ◆ Designed for fluid pressure of 100 PSI
 - ◆ Scaled for a flow rate of 0.63 liters/hour
 - ◆ Biocompatibility must be considered
 - ◆ Precision controllability is required



- Future Work
 - ◆ Fabrication process optimization
 - ◆ Evaluation of various valve designs
 - ◆ Testing of valve performance characteristics
 - ◆ Valve packaging design and implementation