

#### 4.1.7 SWISS-ARMY KNIFE NANOLITHOGRAPHY TOOL

X. Wang, C. Liu, "Multifunctional Probe Array for Nanopatterning and Imaging," *Nano Lett.*, 2005, 5, 1867–1872.

Research at the nanoscale most often involves the use of a variety of different instruments. However, it is nearly impossible to perform "serial" nanoscopic operations (more than one type of operation) on a given site.

NU-NSEC researchers have developed a prototype tool that, like a Swiss army knife, is capable of multiple functions. This important new nanotool consists of a variety of probes that can be selectively engaged to access a particular location at the nanoscale and perform "serial" nanoscopic operations. The Swiss army knife array now contains probes for Dip-Pen Nanolithography (DPN) and Scanning Probe Contact Printing (SPCP).

