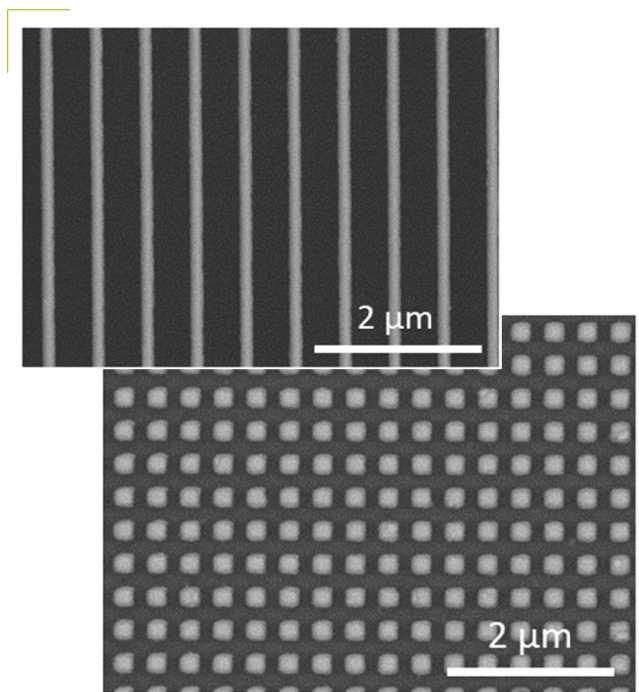
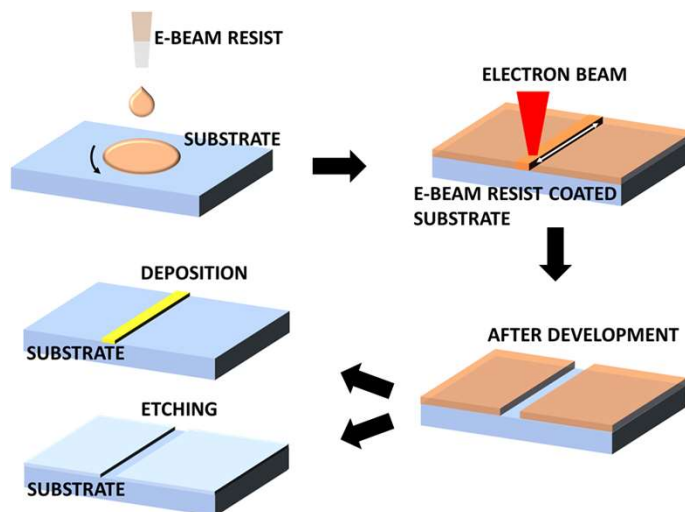


# Nanostructures

An electron beam lithography module is adapted to our HR scanning electron microscope, allowing the fabrication at the nanoscale. By using a combination of different type of electron-sensitive resists, a variety of surfaces with special interest in bioengineering can be processed, from metallic to insulators.

**The fabrication of nanostructures by E-beam lithography starts by:**

spin coating a thin layer of e-beam resist on the working substrate. The resist is then exposed to a focussed electron beam, defining a nanopattern. After lithography development, the pattern is revealed and the exposed substrate areas can be either covered by a metal, to build up nanoelectrodes, or removed by wet etching, to create nanogrooves on the substrate.



Nanostructures consisting on 100nm wide lines and 200nm side squares, done by e-beam lithography, after evaporation of ITO and lift-off process.