AIF

FOCUSED ION BEAM (FIB)

Focused Ion Beam (FIB) is an analytical method used to provide site specific material removal and deposition on the nanoscale.

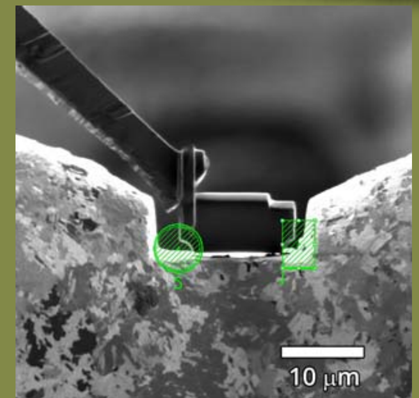
The removal can be with lateral resolution less than 10 nm and deposition resolution can be less than 100 nm.

FIB instruments use an Ion Source to sputter the sample surface. The sputtering process results in atoms or molecules removed from the surface.

TEM Prep

Site specific Location- with Dual Beam FIB system

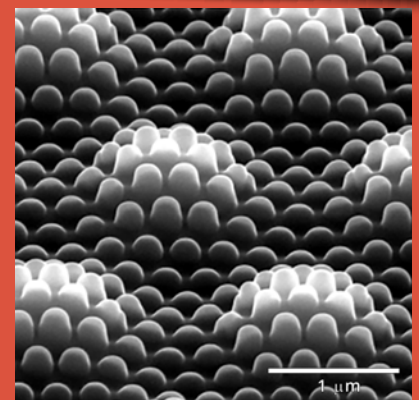
- EASYLIFT MANIPULATOR
- Pt, C, W DEPOSITIONS
- Ga, Xe, Ar, N, O ION BEAMS
- ETD, TLD, BSE, EDS and EBSD DETECTORS



NANO Fabrication

Pattern generator, Stream File or Bitmap

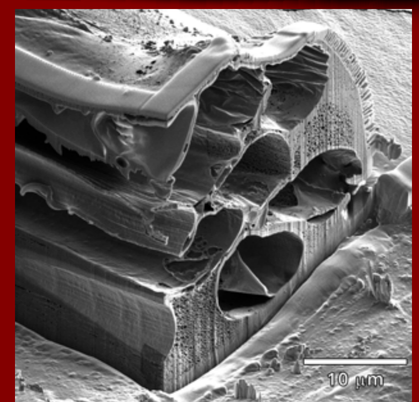
- NANOMETER PRECISION
- Pt, C, W DEPOSITION FEATURES
- Ga, Xe, Ar, N, O ION BEAMS



XSECTION

Rapid removal of material to allow for vertical examination of layers or defects

- HIGH BEAM CURRENT
- HIGH RESOLUTION DETECTORS
- AUTOMATED SLICE & VIEW SOFTWARE



ION Channeling

Grain orientation induced Ion Beam contrast

- GRAIN ORIENTATION CONTRAST
- GRAIN MORPHOLOGY
- ORIENTATION DEPENDENT DEFECTS