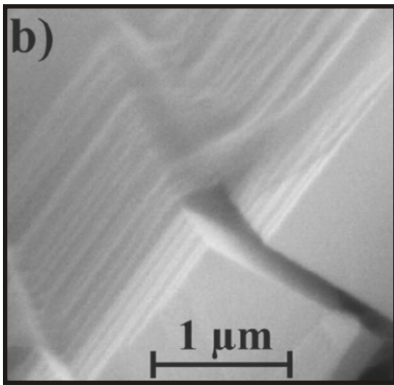
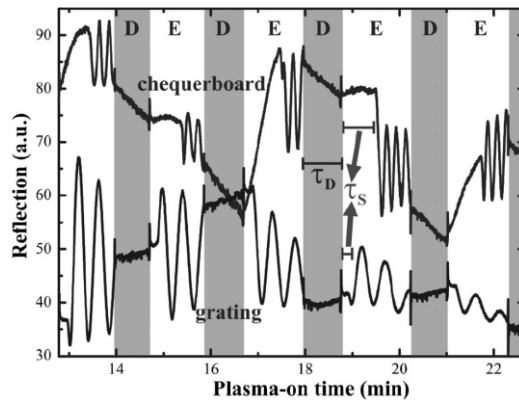


Plasmalab Data

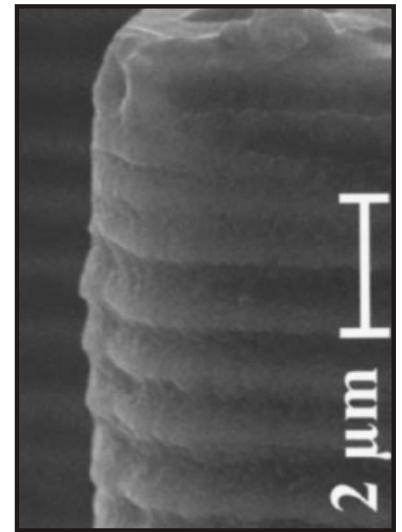
GaAs ICP Etching by Gas Chopping



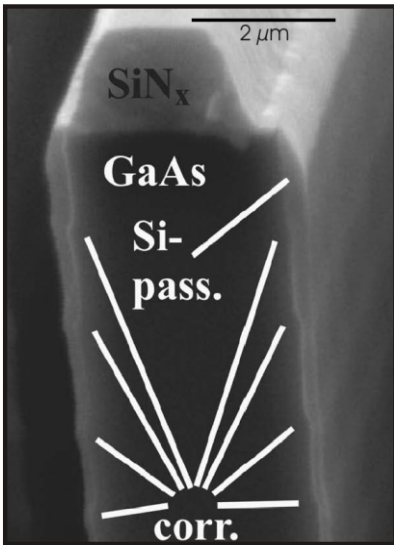
single step process:
 thin sidewall deposition visible
 on broken line: Si:Cl:O



laser interferometer trace
 $time_{DEPOSITION}$
 $time_{SPUTTERETCH}$



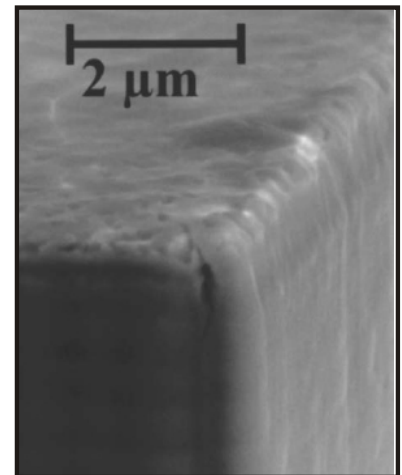
gas chopping process:
 roughness at the top 200 nm
 for the non optimised process



gas chopping process:
 sidewall deposition gets thinner
 towards the bottom
 Aspect Ratio Dependent
 Deposition "ARDD"

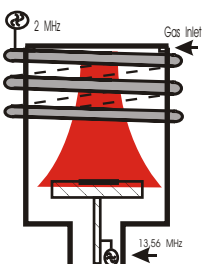


Plasmalab System 100
Plasmalab System 133
Plasmalab 80 Plus



gas chopping process:
 roughness < 20 nm
 for the optimised process

rate > 0.5 µm/min
 selectivity to SiN mask 60 - 100 : 1
 low bias process for low substrate damage
 with kind permission of TU Vienna
 S. Golka, W. Schrenk, G. Strasser



$time_{SPUTTERETCH} / time_{DEPOSITION}$
 for a grating etch
 As the etch continues it takes less
 time to sputteretch off the deposited
 film (Si:Cl:O)

