OXFORD INSTRUMENTS

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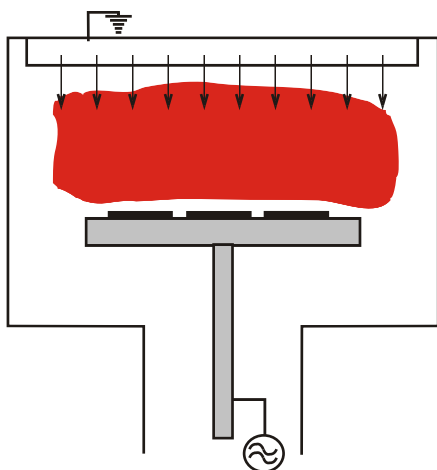
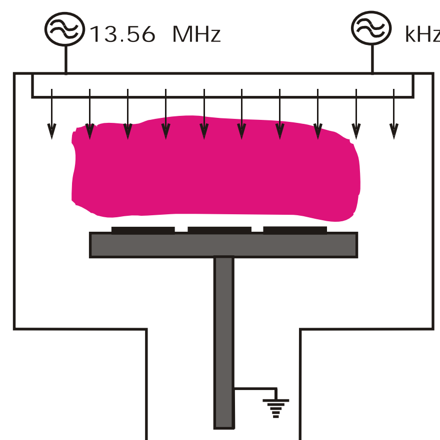
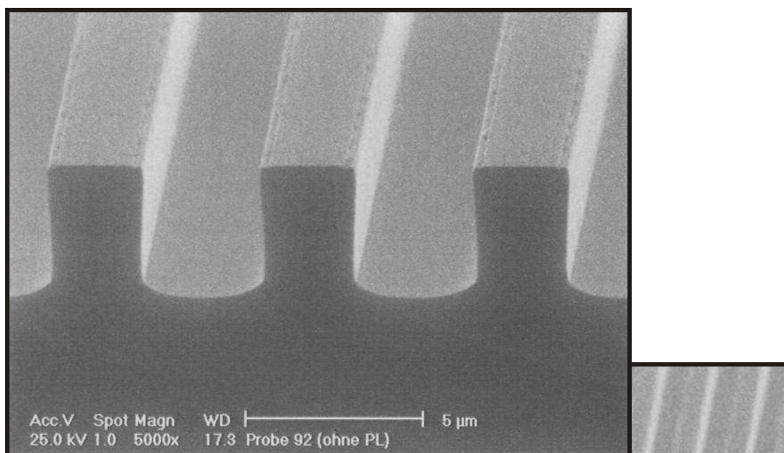
Plasmalab Data

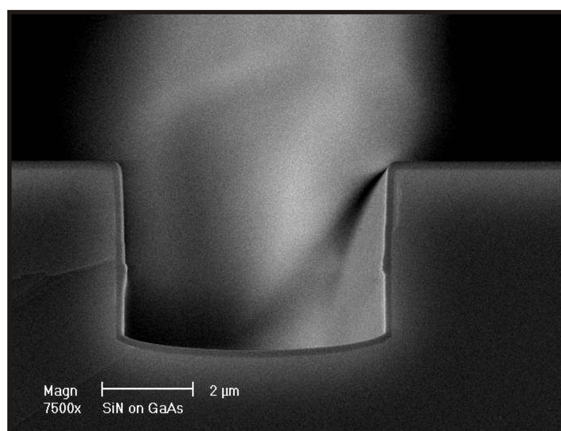
GaAs RIE and Si3N4 PECVD for laser mirrors


Reactive Ion Etching (RIE)



Plasma Enhanced Chemical Vapour Deposition (PECVD)

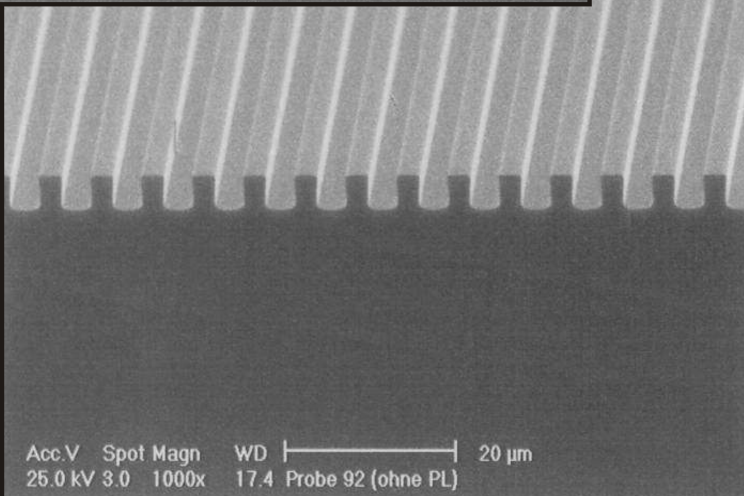




RIE: ***Plasmalab 80 Plus "Master"***
PECVD: ***Plasmalab 80 Plus "Slave"***

SiN deposition rate: 10 - 20 nm / min
- conformal coating
- uniformity < +/- 2 % (4" wafer)

GaAs etch rate: 30 - 80 nm/ min
- anisotropic etch
- selectivity to the mask: > 30 : 1



300 nm Si3N4: conformal deposition
anisotropic GaAs etch using a photoresist mask

Courtesy of TU Vienna, Institut für Festkörperelektronik
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