BR-01
www.oxfordplasma.de/process/soi_tuw.htm

OXFORD INSTRUMENTS

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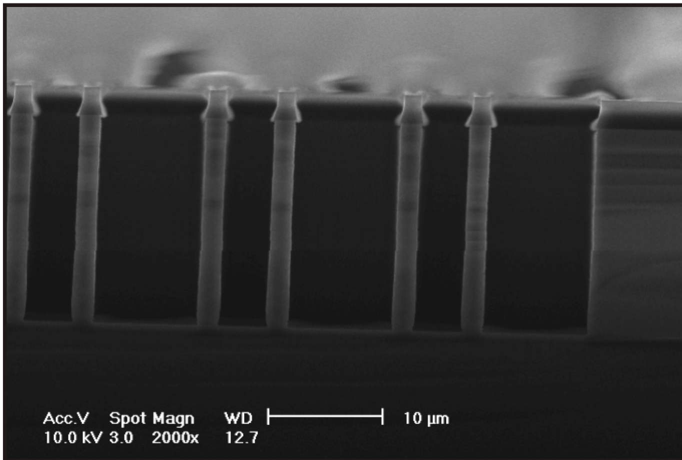
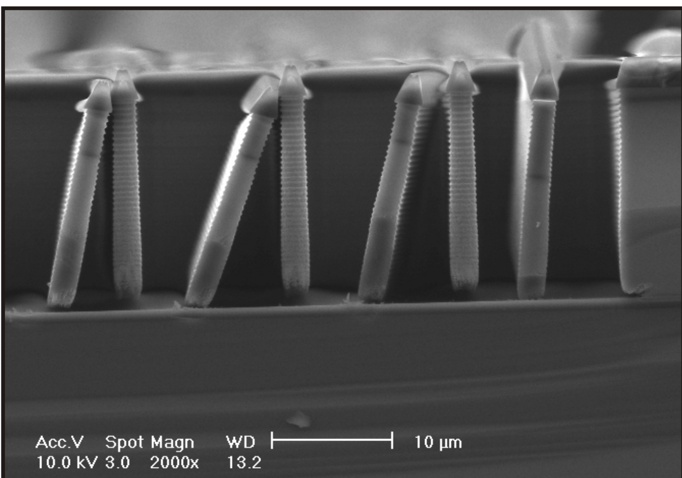
Plasmalab Data

Bosch Process: Notching Reduction



Notching can be avoided / strongly reduced by using the SOI kit.

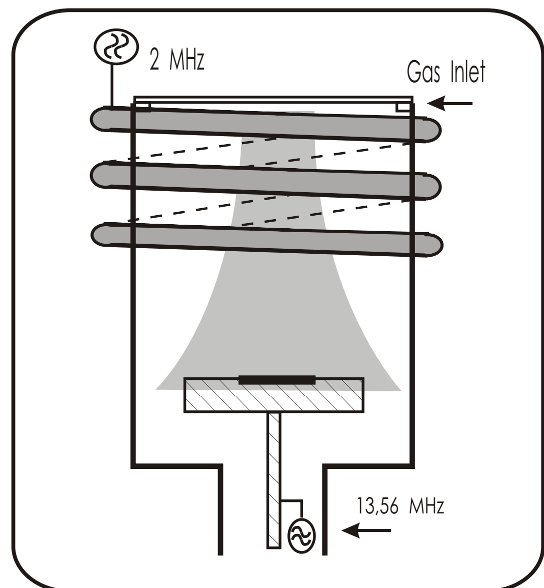


SOI: overetching without SOI kit
The lines get underetched and loose their stability.

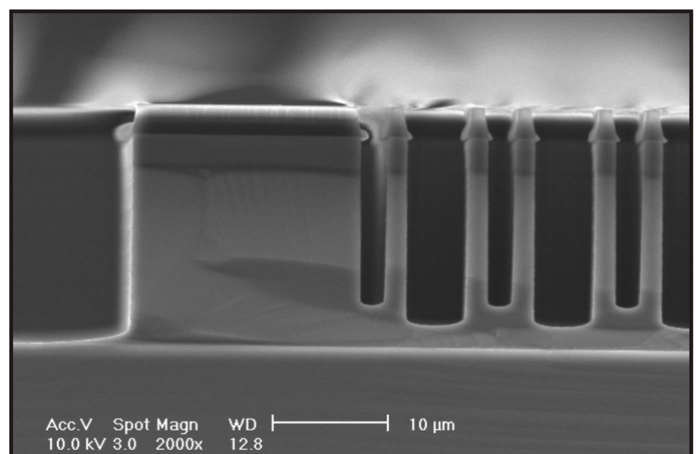
Equipment:
Plasmalab System 80 Plus
Plasmalab System 100/ 133 (Cluster)

With kind permission of Dr. Schalko
TU Vienna and Austria Academy of Science

Results
Rate : 4 µm/ min by ICP180
(Rates up to 10 µm/ min are possible with the larger ICP 380 source.)
Uniformity over 4" wafer ± 4%(ICP180)
Selectivity to SiO2 underneath > 100: 1



Reactive Ion Etching with ICP source



Aspect Ratio Dependent Etching
The "ARDE effect" makes overetch times necessary.