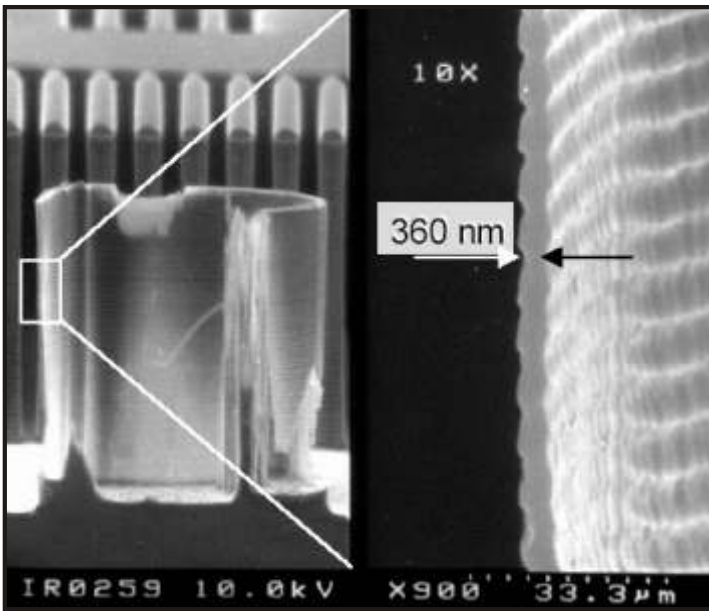
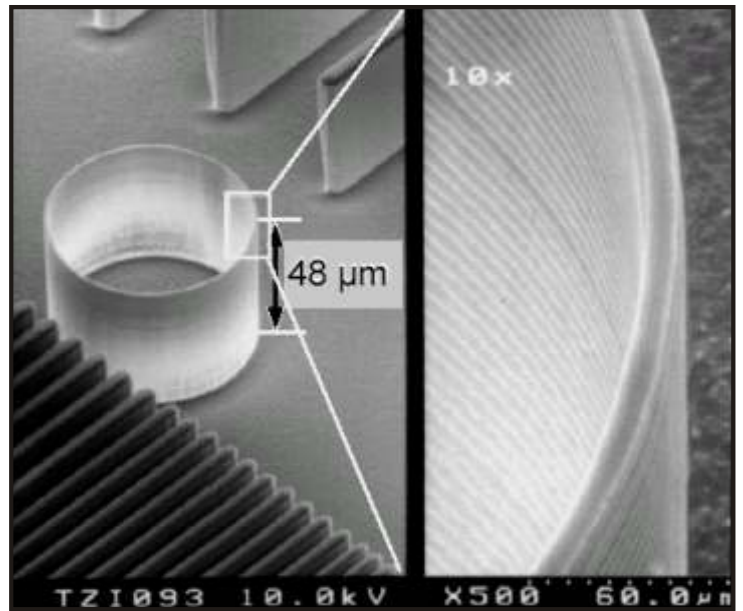


# Plasmalab Data

## Si Cylinder etched by Gas Chopping



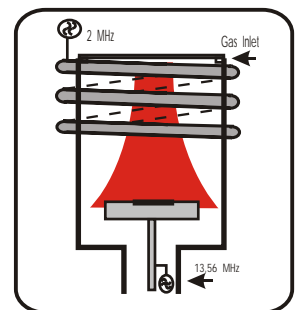
0.36 µm wide wall, 48 µm high  
aspect ratio 130 : 1



50 µm deep etch

Courtesy of University of Kassel, Institute of  
Technical Physics, Dr. I. Rangelow, Mr Volland, Mr Ivanov

*Plasmalab System 100*  
*Plasmalab System 133*



### Technology:

- Reactive Ion Etching
- Inductive Coupled Plasma Source
- room temperature process
- using gas chopping
- He backside cooling

### Results:

- rate : 3- 5 µm/min with the ICP180
- Rates up to 10 µm/ min are possible with the larger ICP 380 source.
- anisotropic etch
- aspect ratio of isolated lines up to 130 : 1
- selectivity to PR 300 - 1.000 : 1