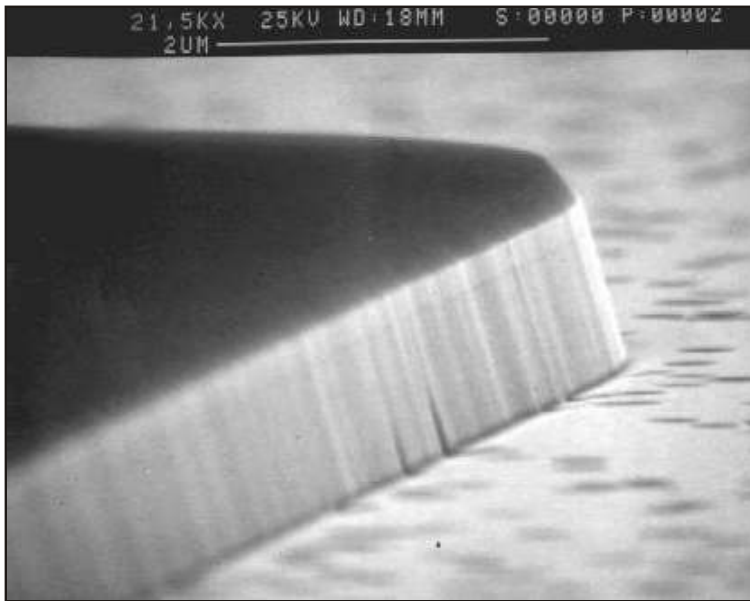
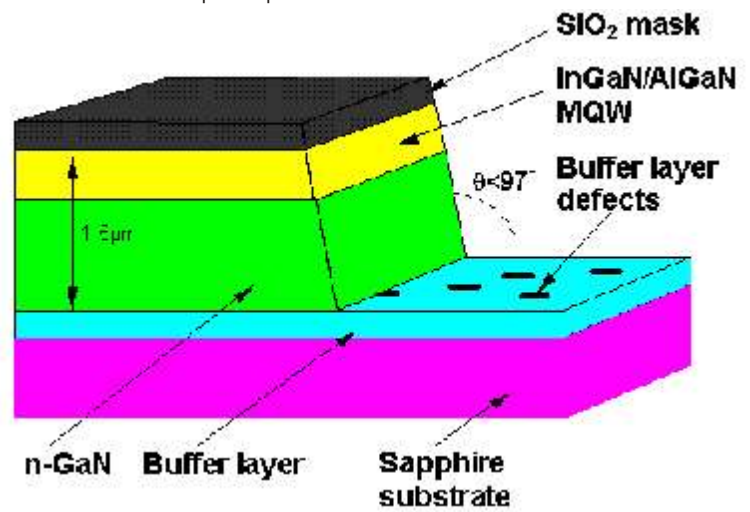


Plasmalab Data

GaN ICP Etching



The SEM shows a 1.7 µm deep etch.

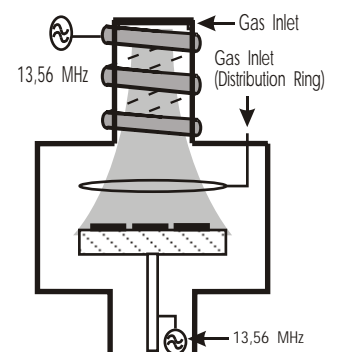


Technology:

Reactive Ion Etching
 with ICP Source (13.56 MHz)
 Inductive Coupled Plasma
 13.56 MHz Plasma Excitation
 Process chemistry: Cl based
 RF driven substrate electrode

Results:

Rate : 0.15 - 0.7 µm/ min
 Selectivity to SiO₂ mask 8 - 10 : 1
 Selectivity to Ni mask 30 : 1
 Selectivity to PR mask 0.7 - 0.9 : 1
 good uniformity: ± 2% (2")
 anisotropic profile
 smooth etched sidewalls suitable :
 laser facet formation



Plasmalab System 100
Plasmalab System 133