OXFORD INSTRUMENTS

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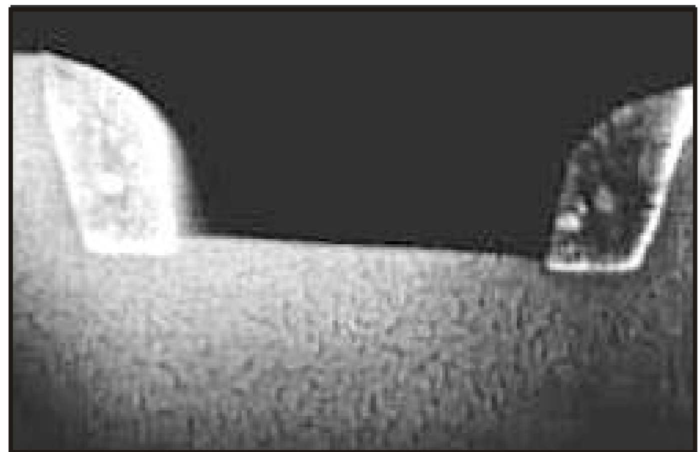
Plasmalab Data

ICP-RIE: Si_3N_4 Spacers on GaAs-HBT's

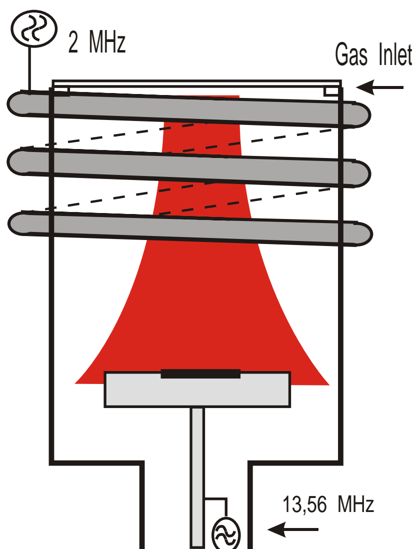


Courtesy of Infineon (Siemens) Munich

Plasmalab System 100

Plasmalab System 133

Plasmalab 80 Plus



Technology:

Inductive Coupled Plasma ICP - RIE*
F based process

Results:

Very low damage by two step process:
1- 13.56 MHz bias at the substrate: 80 Volt
2- no bias: 5 - 20 Volt floating potential
Anisotropic etching, no residues, no surface roughening, uniformity (4" diam.): ± 2%

*original work by ECR, see:
http://www.oxfordplasma.de/technols/rie_ecr.htm