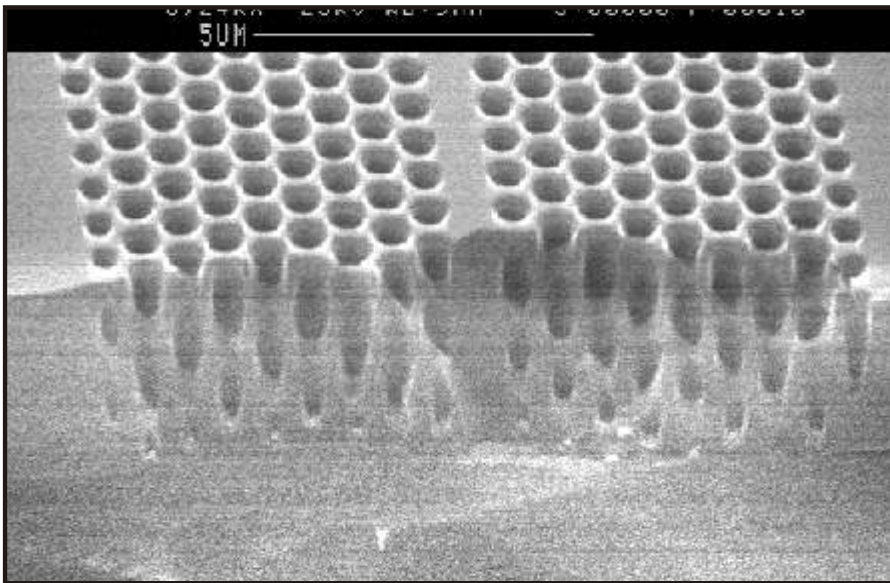


Plasmalab Data

Photonic Crystals: Etching in Si

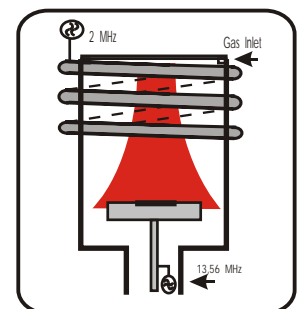


OPT application lab:
5 µm holes etched in Si with stop on SiO₂

Plasmalab 80 Plus

Plasmalab System 100

Plasmalab System 133



Technology:

Reactive Ion Etching
with ICP Source (13.56 MHz)
Inductive Coupled Plasma
RF driven substrate electrode
HBr based process

Results:

0.75 µm diameter holes etched to the bottom
etch stop on SiO₂
etch rate 50 - 100 nm/ min
uniformity over 6": +/- 4 %
anisotropic profile
etch depth up to 10 µm at 5 : 1 aspect ratio