SML2000 Etch Study

Performed by Trevor Fowler at Caltech

Substrate	Resist	Film Thickness
Si wafer	SML2000	2μm

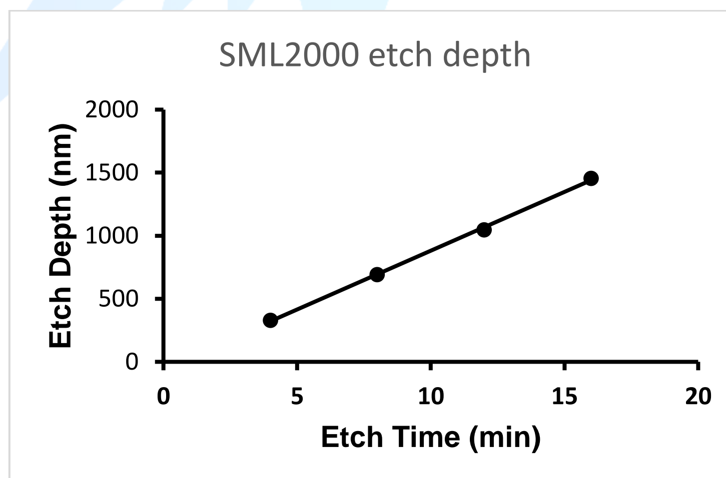
Exposure

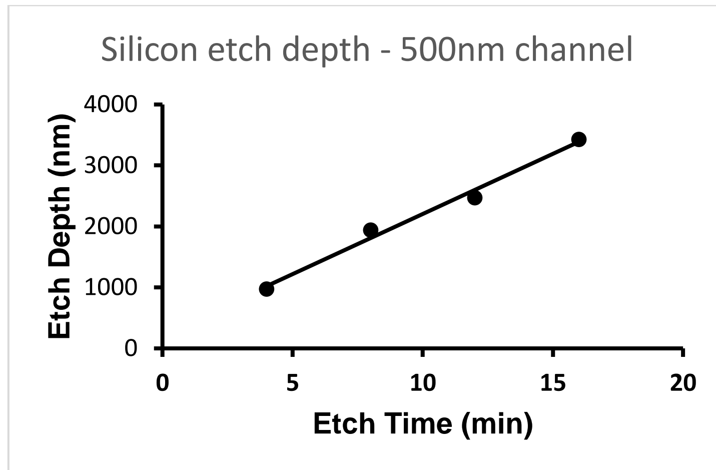
Tool	Pattern	Developer
EBPG – 100kV	500 nm channel	MIBK:IPA (1:3) – 30s

Etch Study

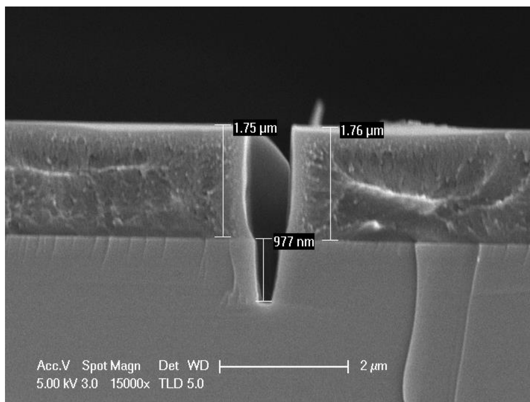
Tool	Oxford 380 ICP etcher
Chamber Pressure	10 mTorr
Wafer Temp	15°C
SF6 Flow Rate	42 sccm
C4F8 Flow Rate	55 sccm
RF Forward Power	23 W
ICP Power	1200 W
He backing pressure	10 mTorr

Etch Rates

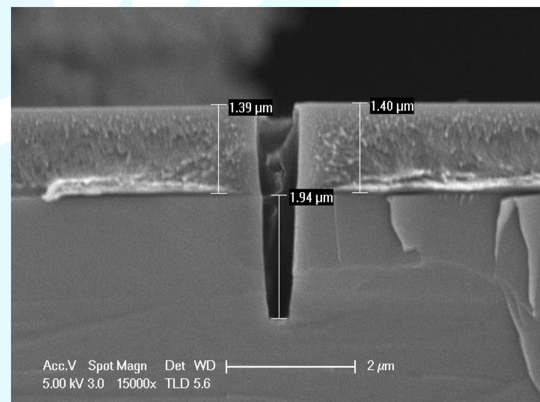




Images



SML on Si profile after 4min etch time



SML on Si profile after 8min etch time