PECVD1 LS SION ~3300A Recipe			PECVD1 SION 3000A Typical Film Properties
1. Chamber Clean (wet clean)	**2. Chamber (clean+coat)**	**3.LS SION Deposition**	**Calibrated every 2-4 weeks**
WET CLEAN	**STAMB_17**	**STAMB_18**	**Check for the latest update on UCSB Nanofab WIKI**
Wipe clean upper chamber walls with DI	step1: Initial t=10", p=2x10-2 T=250C	step1: Initial t=10"	
Wipe off upper chamber walls with IPA	step2: N2 purge t=30" p=300mT	step2: N2 purge t=30"	
	step3: evacuate, base pressure=2x10-2, t=10"	step3: evacuate, t=10"	
	step4:loop	step4:loop	
	step5:gass stabilization, t=30"	step5: SiO2 gass stabilization, t=30"	**SiON-3000A Typical Film properties**
	step6:etch chamber, t=30'	**step6:SiO2 deposition**	**Deposition rate~14.5nm/min**
	step7:evacuate, t=10"	**Time=22'**	**Refractive index@632.8nm=1.714**
	step8:N2 purge	**Temperature=250°C**	**Stress=145MPa**
	step9:evacuate	**Pressure=900mT**	**HF etch rate=396nm/min**
	step10:loop	**Gass Flow:**	
	step11:SiON gass stabilization	**SiH4=150sccm**	
t~81.37sec→	**step12:SiON deposition(200A coat) , t=1"53.6"**	**N2O= 17sccm**	
	step13:evacuate	**N2=125sccm**	
	step14:N2purge, t=30"	**NH3=1.53**	
	step15:end	**Power:**	
		RF1=22W	
		step7:evacuate, t=10"	
		step8:N2 purge t=30"	
		step9:evacuate t=10"	
		step10:loop	

Automatic - Process : STAM_B18 Step: 7

Description: SiON Dep 5000 A

Process Pump: LOVAC

TEMPERATURE

	Setpt	Actual
Channel 2	250	248

	Setpt	Actual
Pressure(mTorr	900	902

GAS CHANNELS

	Setpt	Actual
SiH4	150	148
N2O	17	12
N2	125	124
NH3	1.53	1.54

RF GENERATORS

RF1

RF Control: POWER

RF Config: PE

	Setpt	Actual
Power	22	21
Ref		0.0
DC		28

	Setpt	Elapsed	Left
Time	22:00.0	00:11.0	21:49.0