Advanced PECVD-Nitride2 (HF n=2.00, 9.3nm/min)			
SiN depostion~2400A, 300C			
Step1:	NITRIDE2 coat		
	Name	Value	Changeable
	Process pressure	800 mtorr	N
	RF setpoint	30 W	N
	stabilization time	15 seconds	N
	step time(m)	**10**	**Y**
	step time(s)	**0**	**Y**
	2%SiH4 %He	1040	N
	N2	980	N
	NH3	17	N
Step2:	NITRIDE2 deposition		
	Name	Value	Changeable
	Process pressure	800 mtorr	N
	RF setpoint	30 W	N
	stabilization time	15 seconds	N
	step time(m)	**30**	**Y**
	step time(s)	**0**	**Y**
	2%SiH4 %He	1040	N
	N2	980	N
	NH3	17	N
Step3: STANDARD PLASMA CLEAN			
	1. pump down		
	Name	Value	Changeable
	stabilization time	15 seconds	N
	step time(m)	0	N
	step time(s)	30	N
	2. Pre-purge		
	Name	Value	Changeable
	purge	**1 (Yes/No)**	N
	stabilization time	15 seconds	N
	step time(m)	**1**	**N**
	step time(sec)	0	N
	3.1 High Pressure		
	Name	Value	Changeable
	Cload position	**50%**	**N**
	Ctune position	**50%**	**N**
	Drive Match	**1 (Yes/No)**	**N**
	Process pressure	600 mtorr	N
	RF setpoint=300	300 W	N
	Stabilization time	35 seconds	N
	step time(m)	**ENTER TIME**	Y
	step time(s)	0	Y
	CF4/O2(5)	500 sccm	N

Advanced PECVD Typical Film Properties

Calibrated every 2-4 weeks

Check for the latest update on UCSB Nanofab WIKI

Nitride2~2400A Typical Film Properties

Deposition rate~8nm/min

Refractive index@632.8nm=1.961

Stress=500MPa

HF etch rate=48nm/min

All size particles accumulated in deposition (min=87, max=303)

Mostly small size particles (0.160-0.213)um

Uniformity within the wafer (97.52-99.95)%

For 7min(coat+deposition) run 1min Standard Plasma Clean

Run longer clean, (10-20%) more, only if chamber does not look clean

Nitride2 (HF n-2.00 9.3nm/min)

Recipe parameters

Number	Name
1	process

Name	Process value	Unit	Changeable
Process pressure	800	mtorr	N
RF setpoint	30	W	N
Stabilisation time	15	seconds	N
Steptime (m)	10	minutes	Y
Steptime (s)	0	seconds	Y
2%SiH4%He (1)	1040	sccm	Y
N2 (3)	980	sccm	Y
NH3 (2)	17	sccm	Y