Tool ID: 211
Tool Location: 110

Equipment Information Sheet

Oxford Cobra ICP Etcher

Manager: Jeremy Clark 607-254-6487
Backup: Tom Pennell 607-254-4309

Calls to staff phones will be automatically forwarded to their cell phones during accessible hours. At other times leave a message or send them an email.

SAFETY

- HBr, Cl2, and BCL3 gases are used
- Users must remain in the lab while plasma is running

USAGE RESTRICTIONS

- If using photoresist mask - remove > 5 mm ring at edge (edge bead)
- DO NOT modify recipes without staff permission

SCHEDULING/SIGN-UP RESTRICTIONS

Minimum Tool Time: 15 minutes

MATERIALS COMPATIBILITY CATEGORY

Tool Category 2: Silicon Based Substrates and Select Refractory Metals

Allowed	Not Allowed
Tool category 1/1E materials	No Glass Substrates
Silicon Based Materials only	No CNF Class A or Class B metals and oxides/compounds of (exposed or buried) (ie Magnesium, Zinc, Barium, Calcium)
Si, SiC, SiO_2 substrates	
All Furnace grown or deposited films	
PECVD Films	No Gold, Silver or Copper (Exposed or buried)
ALD dieletric films	No High Vapor pressure materials
CNF Refractory Metals (ie Al, Ti,Ta,W,Pt,Mo,Cr,Ni)	No III/V Compound Semiconductors
Nitrides and Oxides of above metals	No Organic/Biology Molecules prepared-with or without Salt buffers
Cured organics and baked Photoresist	

High Vapor Pressure Metals and Compounds are materials that have a vapor pressure above 1e-6 Torr at 400 C.

Additional Material Restrictions and Exceptions

- No III-V material etching
- Remove the resist bead from whole 4-inch wafers
- Pieces should be mounted to the sapphire wafer

Last Updated: 03/24/2021