

Tool ID: 202
Tool Location: 107

Equipment Information Sheet

Unaxis 770 Deep Silicon Etcher

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

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

USAGE RESTRICTIONS

- User must remain in the lab while tool is in operation

SCHEDULING/SIGN-UP RESTRICTIONS

Minimum Tool Time: 15 minutes

- Maximum 4 hour block reservations anytime.
- Maximum 12 hours reserved in advance at any time per person
- No consecutive research group reservations or monopolization of the schedule by research groups.

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 dielectric 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

- Whole 4 silicon wafers and pieces mounted to sapphire wafer
- Thermal Oxide, Photoresist or Alumina (Al2O3) masks only
- Photoresist masks require edge bead removal (> 5mm around entire edge of wafer)
- No other polymers or adhesives
- No metals exposed to the plasma.

Last Updated: 03/24/2021