Lift-off

INRF application note
Process name: Liftoff

Overview
This is a recipe to perform lift-off of a metal layer.

Time needed
One hour for the pre-evaporation steps, 1.5 – 2.5 hours for the evaporation 0.5 hour for the lift-off.

Materials needed
- Photoresist 1827.
- Acetone, methanol.
- Chlorobenzene.
- MF319 developer.
- Your mask.
- Glassware.

Preparation

Be sure to clean your wafer in acetone, methanol and DI water before beginning.

Procedure
1. Spin coat the photoresist, 4000 RPM for 40 seconds.
2. Hard bake @ 90 deg. C for 30 minutes.
3. Expose for 30 seconds.
4. Soak in chloorobenzene for 5 minutes (Do not breath the fumes!)
5. Blow dry.
6. Develop for 60 seconds in MF319. Inspect under the microscope and develop longer if needed.
7. Evaporate your metal.
8. Soak in acetone for about 10 minutes, then rinse off metal under acetone stream.
9. Rinse in methanol, DI water.

Clean up
The cholorobenzene, acetone, and methanol can be disposed of in the red solvent waste canisters. There is a separate waste container for the developer. It is recommended to use a funnel when pouring liquids into the waste bottle. Rinse all glassware in acetone, methanol, DI water to clean when finished. Do not get any chemicals on your gloves. If you do, throw away the gloves and wash your hands thoroughly.