Oxford ICP Etcher
Aluminum HBr Etch Recipe

Etch Rate: ~ 1075 nm/min

Steps

1. Temperature Stabilization
   a. Run for 2 minutes at 80 °C.

2. Aluminum Breakthrough
   a. Run for 10 seconds at 80 °C and 10 mTorr.
   b. Flow of
      i. Cl₂ – 30 sccm
      ii. He backing – 10 sccm
   c. Power
      i. RF Generator – 200 W
      ii. ICP Generator – 1000 W

3. Aluminum HBr Etch
   a. Run for variable time at 80 °C and 6 mTorr.
   b. Flow of
      i. HBr – 18 sccm
      ii. He backing – 10 sccm
   c. Power
      i. RF Generator – 100 W
      ii. ICP Generator – 800 W

4. Pump to 1e-5
   a. Pump down to pressure of 1 x 10⁻⁵ Pa.

5. Ar Purge
   a. Run for 2 minutes at 80 °C and 20 mTorr.
   b. Flow of
      i. Ar – 100 sccm
      ii. He backing – 10 sccm

6. Pump to 5e-6
   a. Pump down to pressure of 5 x 10⁻⁶ Pa.

7. Ar Purge
   a. Run for 2 minutes at 80 °C and 20 mTorr.
   b. Flow of
      i. Ar – 100 sccm
      ii. He backing – 10 sccm

8. Pump to 5e-6
   a. Pump down to pressure of 5 x 10⁻⁶ Pa.