

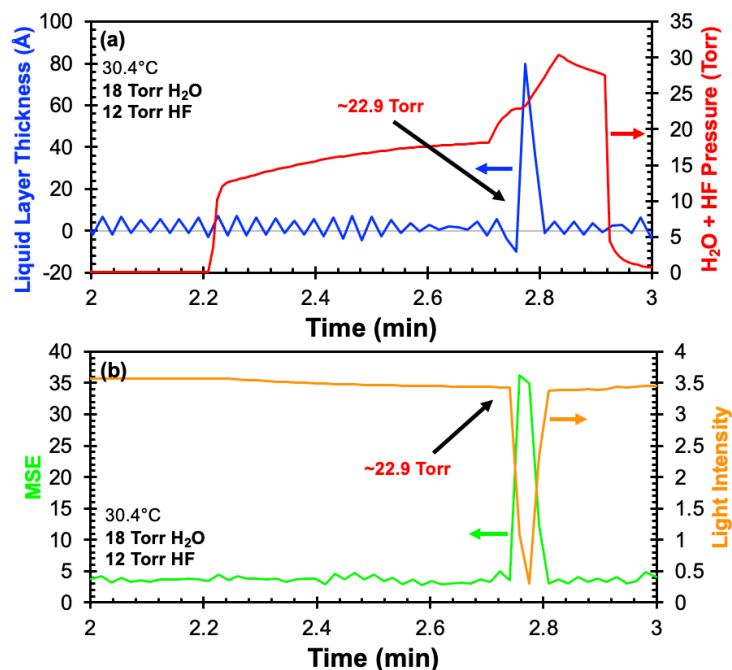


Figure 1. (a) HF/H₂O liquid-layer thickness versus H₂O + HF pressure at SiO₂ substrate temperature of 30.4°C. H₂O pressure is first increased to 18 Torr then HF pressure is increased to 12 Torr. (b) Corresponding light intensity measured by ellipsometer and mean squared error (MSE) during ellipsometry measurement. Condensation of HF/H₂O liquid-layer begins at total H₂O + HF pressure of 22.9 Torr (18 Torr H₂O and 4.9 Torr HF).

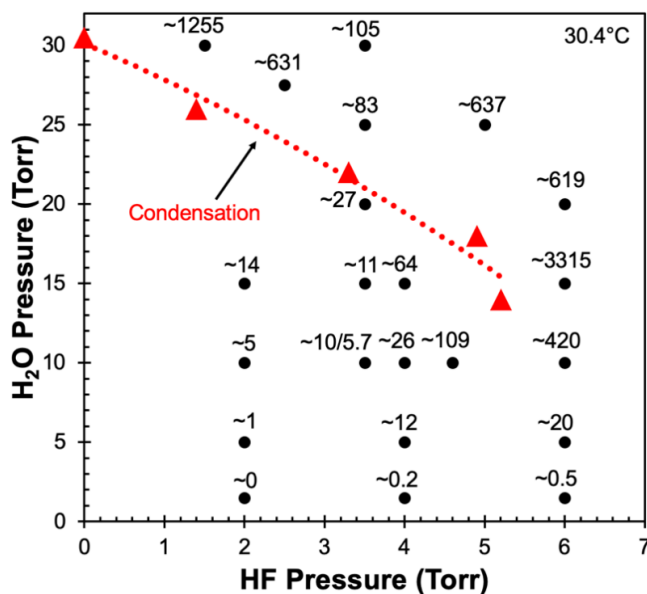


Figure 2. Comparison at 30.4°C of condensation threshold for HF/H₂O liquid-layers and SiO₂ etch rates in Å per 5 s HF exposure at various H₂O and HF pressures. High etch rates are observed at high H₂O and HF pressures where HF/H₂O liquid-layer has condensed on the SiO₂ substrate.