

Figure 1.

Ta₂O₅ thickness versus number of Ta₂O₅ ALE cycles using BCl₃ and HF as the reactants at 250°C. Etch rate is 1.05 Å/cycle.

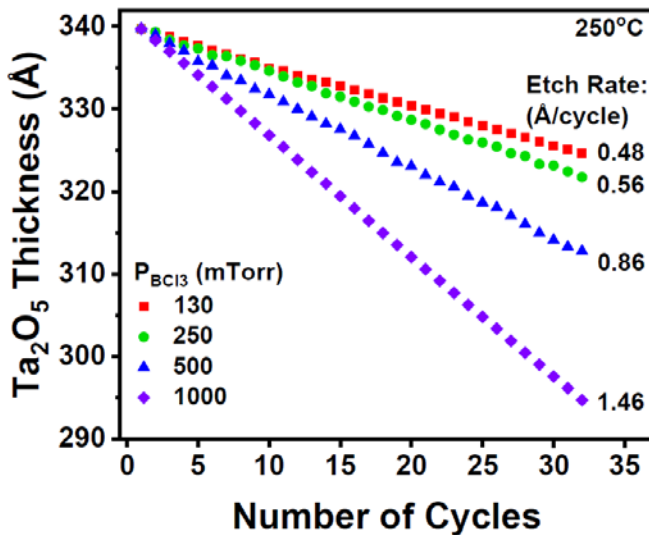


Figure 2.

Ta₂O₅ thickness versus number of Ta₂O₅ ALE cycles using different BCl₃ pressures at 250°C. Etch rate increases with pressure from 0.48 Å/cycle at 130 mTorr to 1.46 Å/cycle at 1000 mTorr.

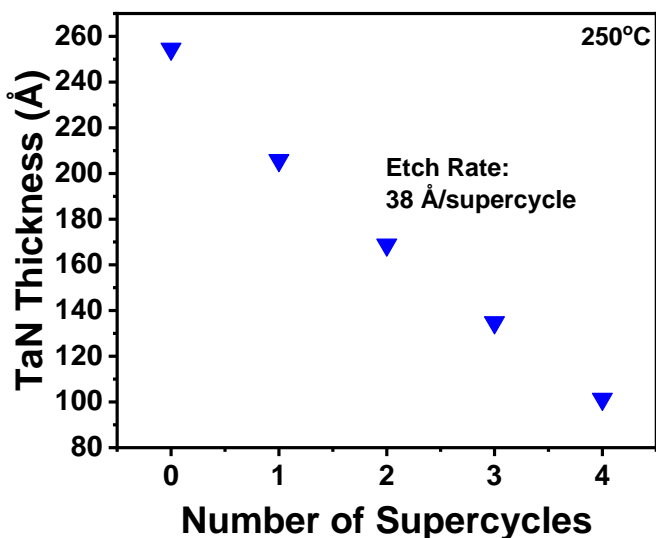


Figure 3.

TaN thickness versus number of supercycles using an initial O₃ exposure and then 60 Ta₂O₅ ALE cycles with BCl₃ and HF as the reactants at 250°C. Etch rate is 38 Å/supercycle.