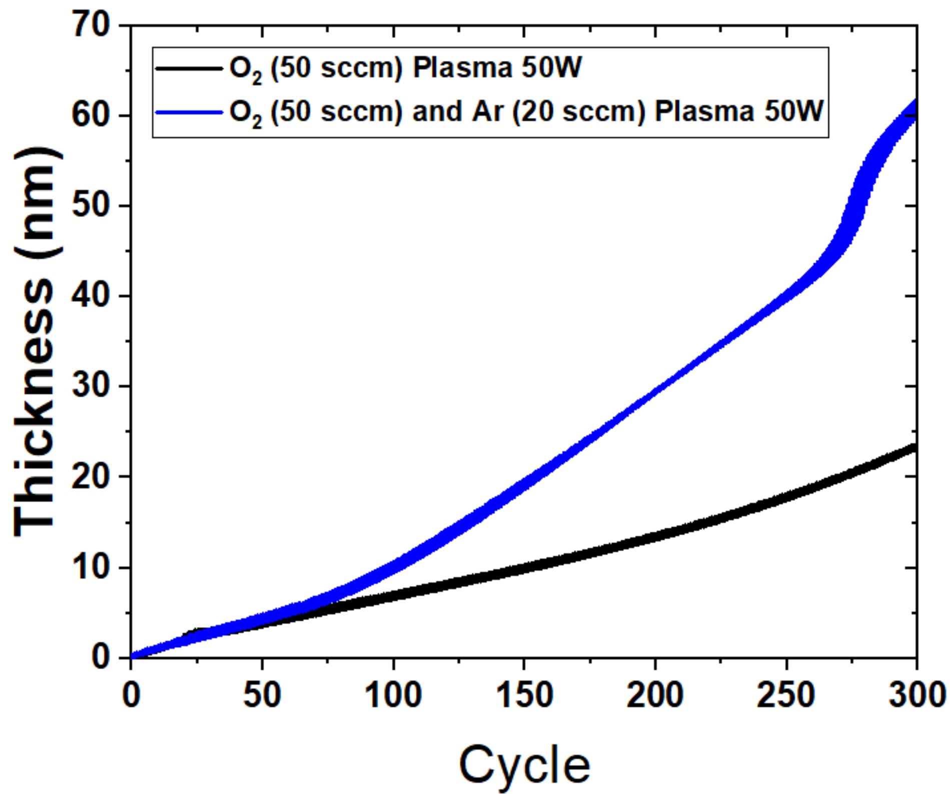

Figure 1: *in situ* ellipsometry monitored Vanadium Oxide thin film growth on Si at 200°C in a hollow cathode plasma (HCP) assisted atomic layer deposition (ALD) chamber under 50 W (a) Oxygen (50 sccm) and (b) Argon (20 sccm) and Oxygen (50 sccm) plasma

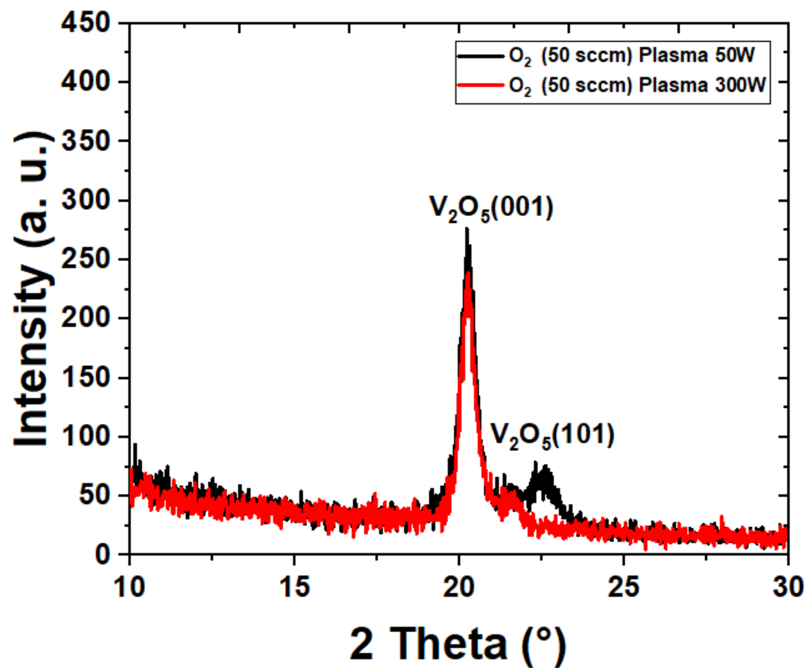

Figure 1: Crystallinity analysis of HCP-ALD grown Vanadium Oxide thin film under 50 W and 300 W plasma revealing V_2O_5 phase