

NH₃ Saturation Curves

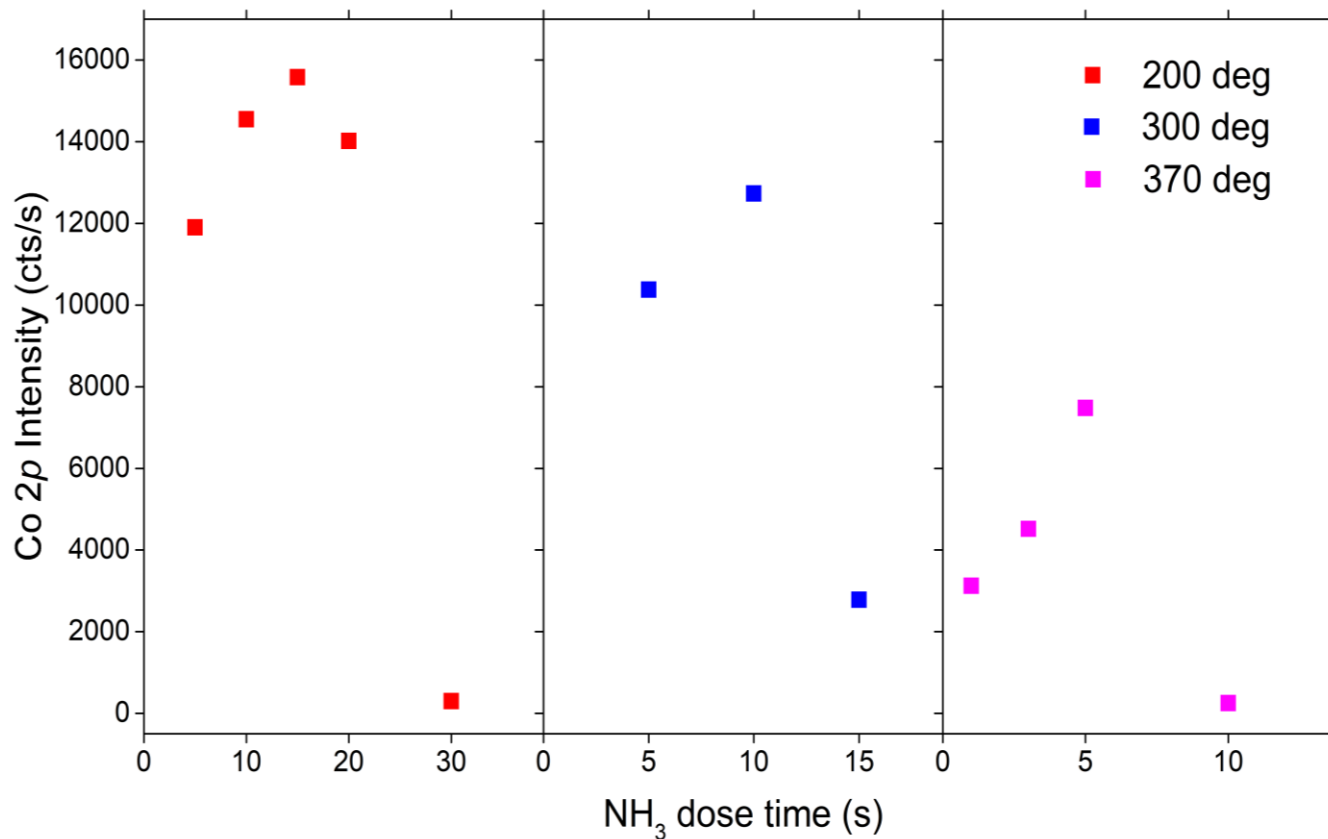


Figure 1: Ammonia plasma saturation curves for a CoCP₂/NH₃ PE-ALD process for three temperatures; 200, 300 and 370 °C. The intensity of the Co 2p was obtained from area-under-curve calculations from the X-ray photoelectron spectroscopy (XPS) spectra. ALD growth rate of the CoN films decreases with increasing temperature. Additionally, the growth rate is inhibited for large NH₃ plasma dose times at all temperatures.