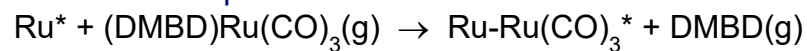
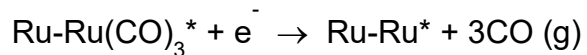


(A) Precursor Adsorption



(B) Electron Stimulated Desorption



* designates surface species

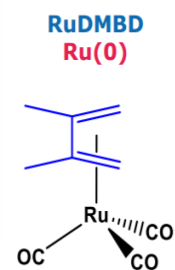


Figure 1: Sequential surface reactions for Ru EE-ALD and (DMBD)Ru(CO)₃ precursor.

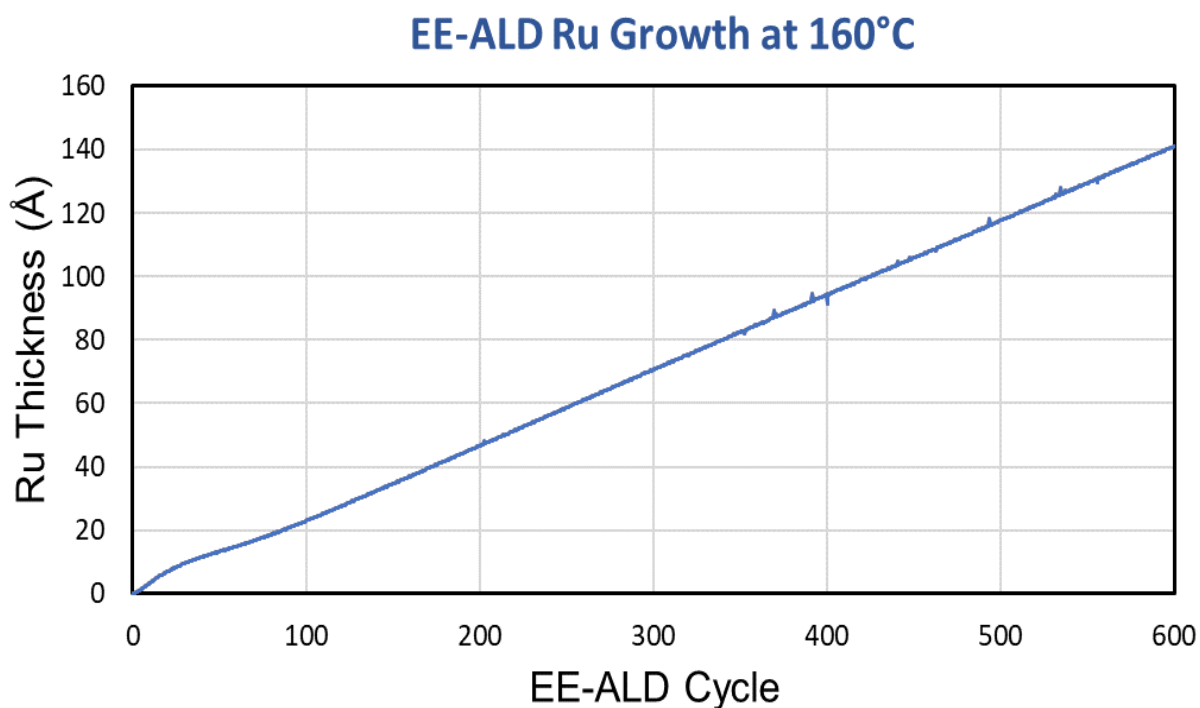


Figure 2: In-situ spectroscopic ellipsometry of Ru grown at 160°C using (DMBD)Ru(CO)₃ and electrons.