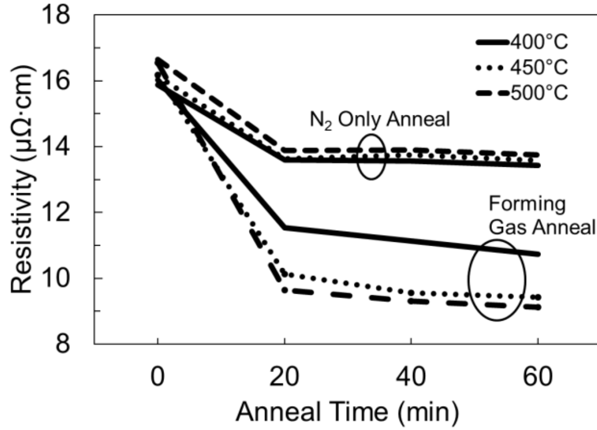

Figure 1: Resistivity of 30 nm Ru thin films after annealing in a forming gas (3% H_2 in N_2) and pure N_2 environments

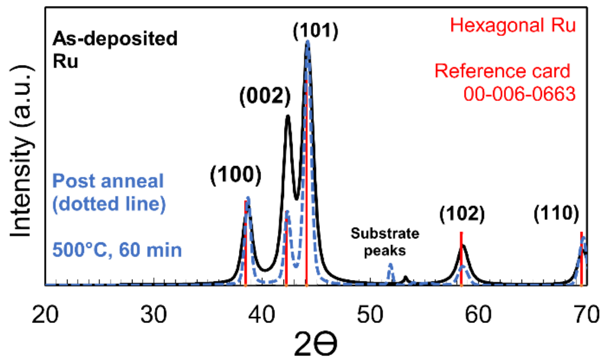

Figure 2: Grazing incidence X-ray diffraction spectra of as-deposited (solid) and post forming gas annealed (dotted) Ru thin films

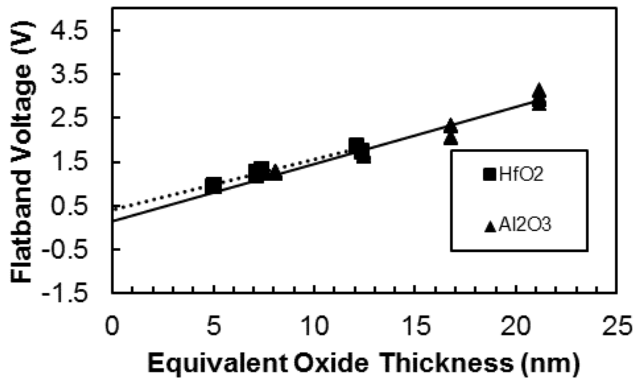

Figure 3: Flat-band voltage vs equivalent oxide thickness for HfO_2 and Al_2O_3 dielectric MOS capacitors with a Ru top electrode used to determine effective work function. Samples were annealed for 60 min. at 500 °C in forming gas