

Figure 1. Change of energy calculated by DFT
(right: $\text{CpZr}(\text{N}(\text{CH}_3)_2)_3$, left: linked- $\text{CpZr}(\text{N}(\text{CH}_3)_2)_3$)

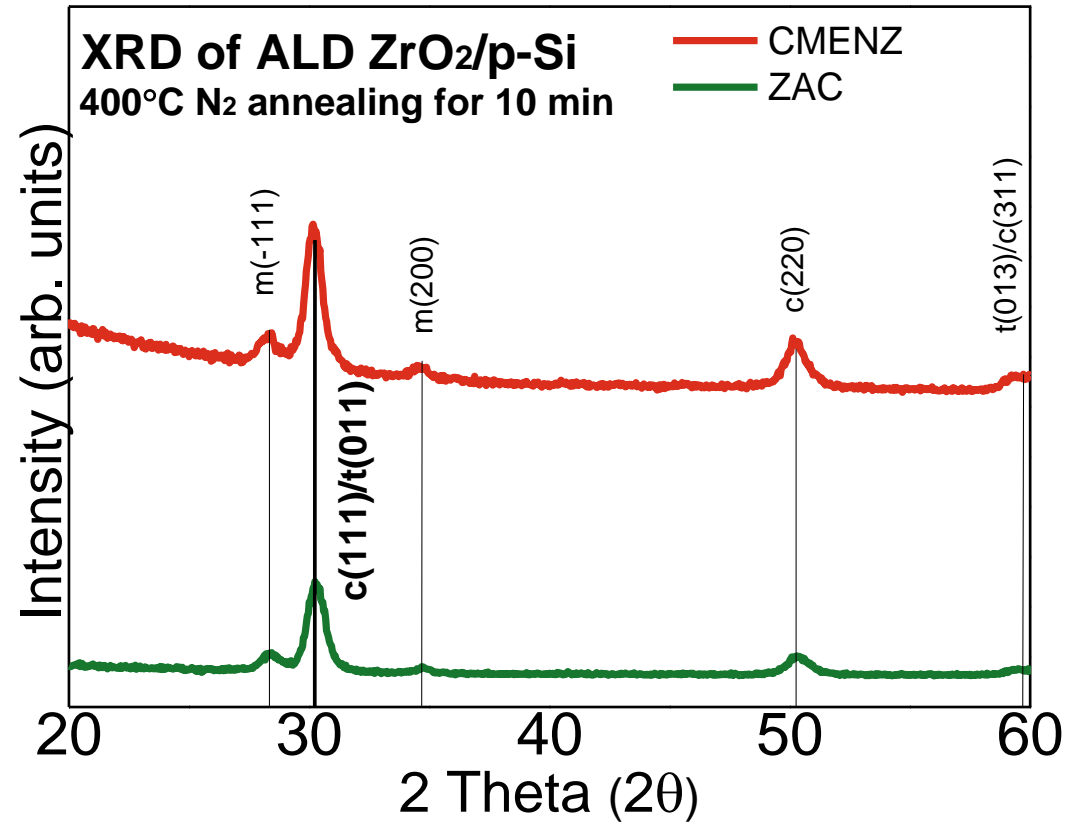


Figure 2. XRD spectra of ALD ZrO₂ films on Si using **Cp-based Zr precursor** and **Newly Synthesized Cp-based Zr precursor**