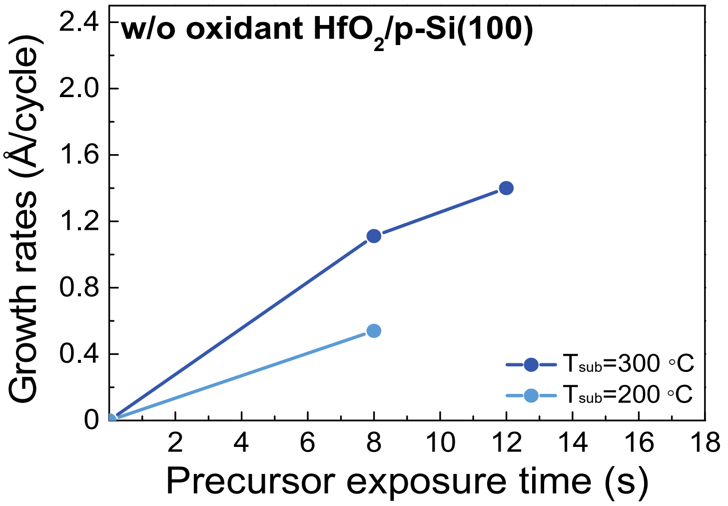
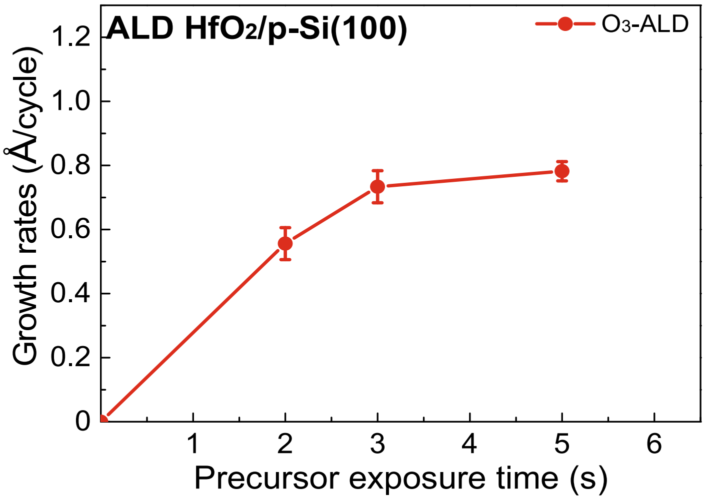
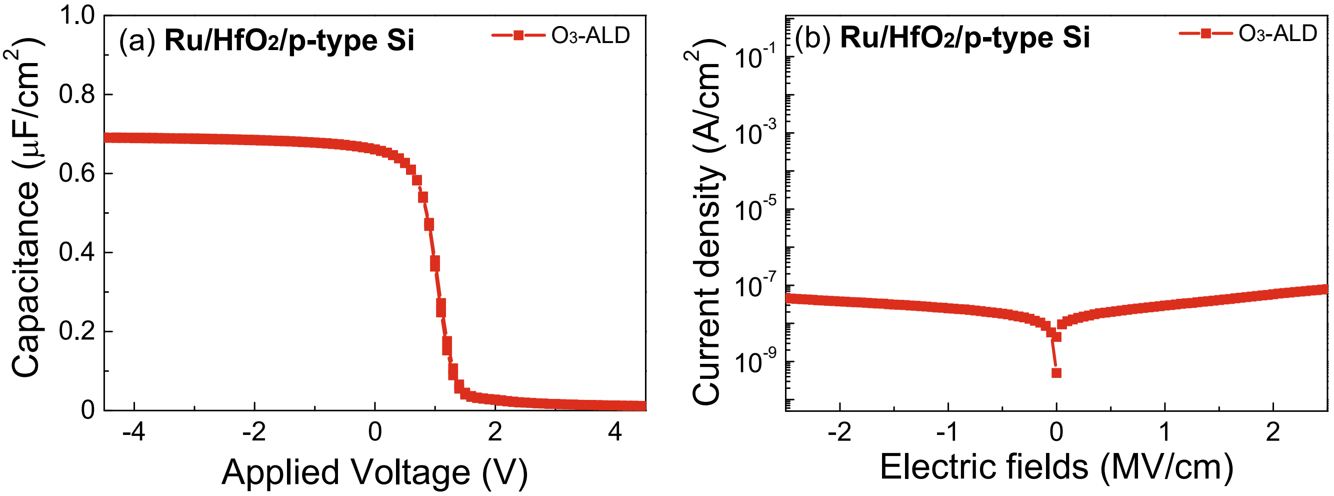
<Growth characteristics of HfO_2 using Homoleptic Precursor>



<Growth characteristics of HfO_2 using Heteroleptic Precursor>



<Electrical properties of HfO_2 using Heteroleptic Precursor>



Definition unit	Dielectric constant	Interface state density (D_{it}) ($cm^{-2}eV^{-1}$)	Trapped oxide charge density (N_{ot}) (cm^{-2})	Leakage current density at -1MV/cm (A/cm^2)
O_3-ALD	23.5	8.63×10^{11}	-1.95×10^{12}	3.54×10^{-8}