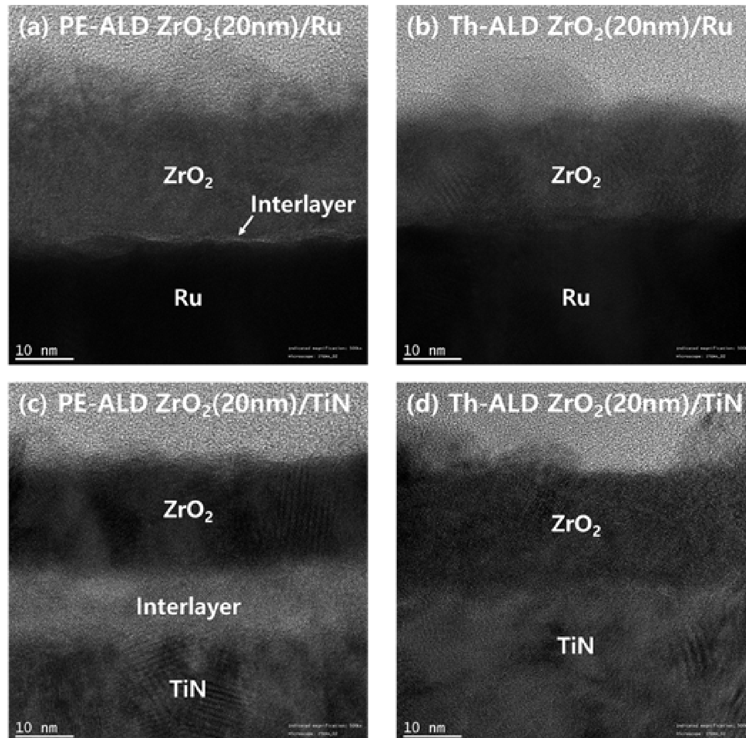

Figure 1. Cross-section TEM image of ALD ZrO_2 film; (a) on Ru substrate using O_2 plasma oxidant, (b) on Ru substrate using H_2O_2 oxidant, (c) on TiN substrate using O_2 plasma oxidant, and (d) on TiN substrate using H_2O_2 oxidant

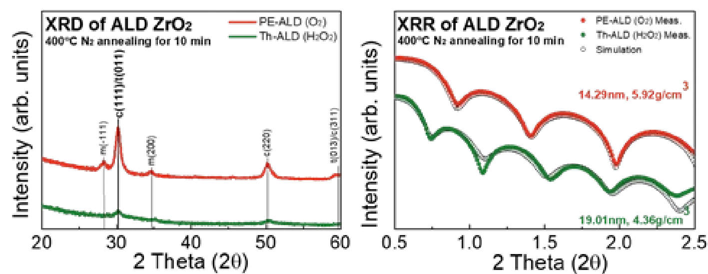

Figure 2. (a) XRD spectra and (b) XRR spectra of ALD ZrO_2 films

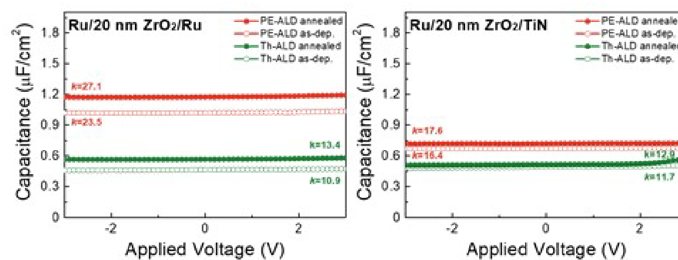

Figure 3. C-V curves of MIM capacitors using 20 nm ALD ZrO_2 films with two different substrates (Ru and TiN) and two different oxidants (O_2 plasma and H_2O_2)