

Electronic Supplementary Information (ESI)

An in-situ study of nucleation and growth of aqueous phase deposited Ga:ZnO transparent conducting films using optical techniques

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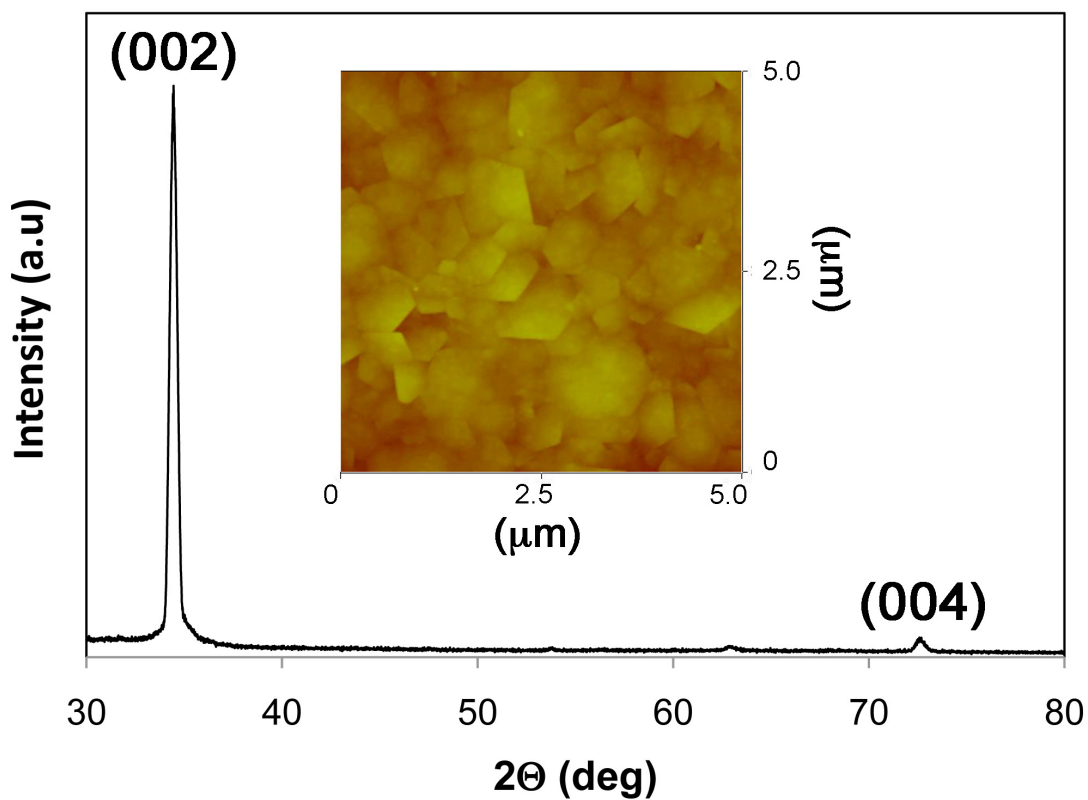


Fig. S1

XRD of Ga:ZnO film grown with 1.92mM $\text{Ga}(\text{NO}_3)_3$ and 1.86mM trisodium citrate. Inset: AFM scan across a 5x5 μm region. Films had a RMS roughness of 12nm.

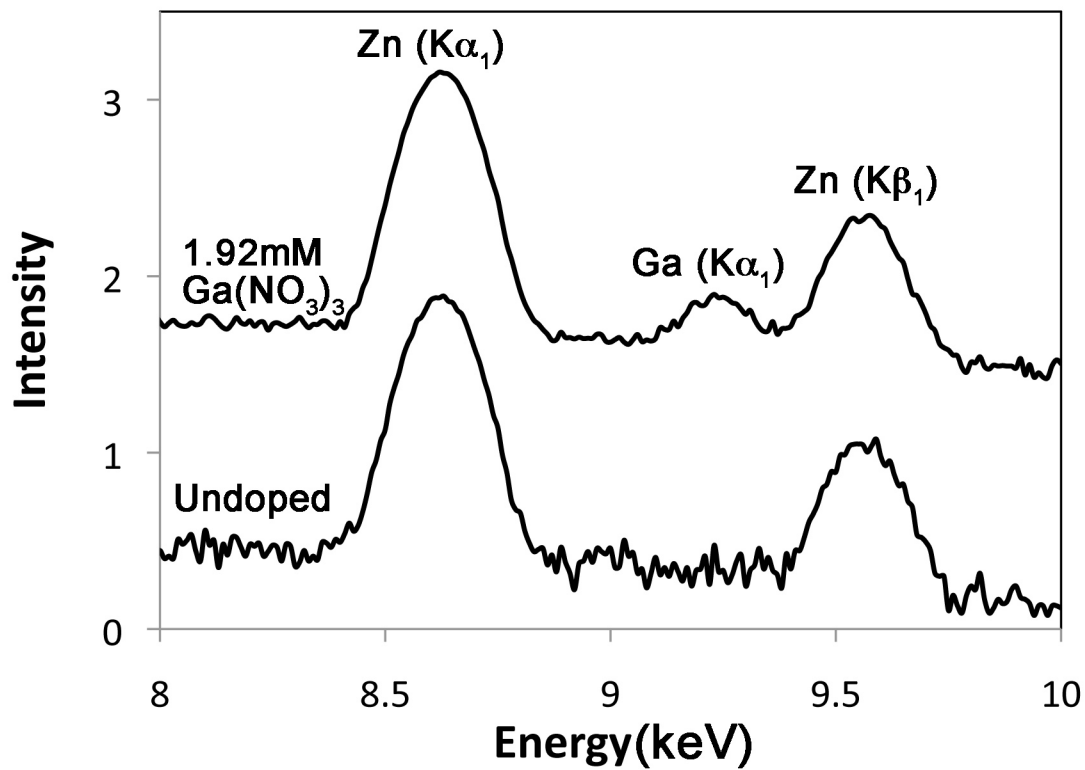


Fig. S2 – EDX spectra of undoped films and films doped with 1.92mM of Ga(NO₃)₃. Doped samples had an additional Ga (Kα₁) peak centered at 9.251keV.

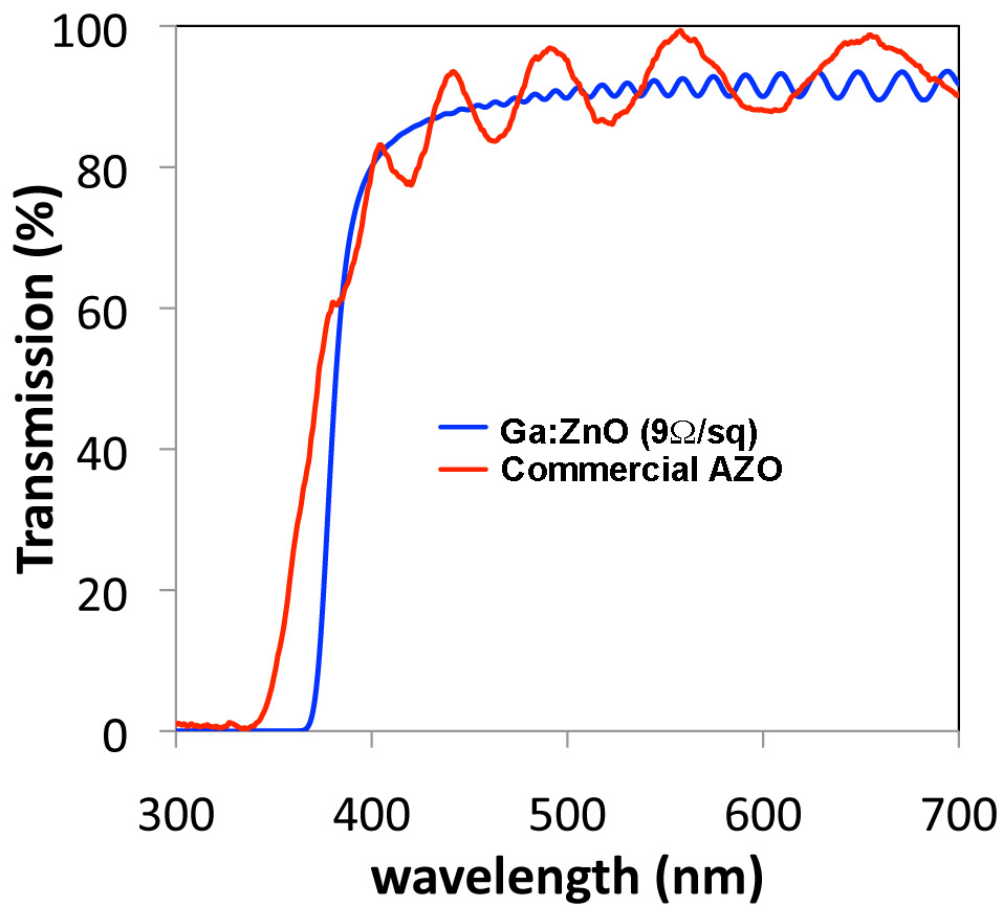


Fig. S3- Transmission spectra of commercial AZO substrate and a 9Ω/sq Ga:ZnO substrate