

Fig.S1: X-ray diffraction patterns of 4wt.%, 6wt.% and 8wt.% of Al: LZO film

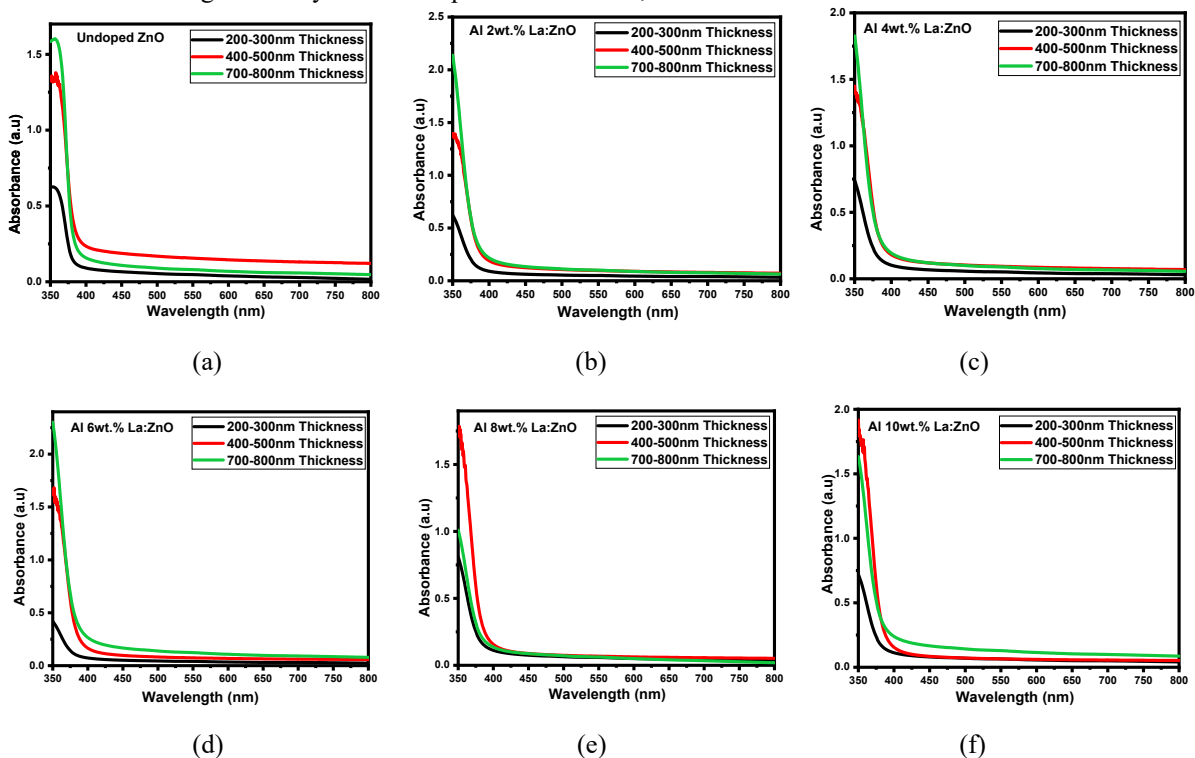


Fig.S2: Absorbances (a.u) v/s Wavelength (nm) of Al: LZO films of 0-10 wt.% (a-f).

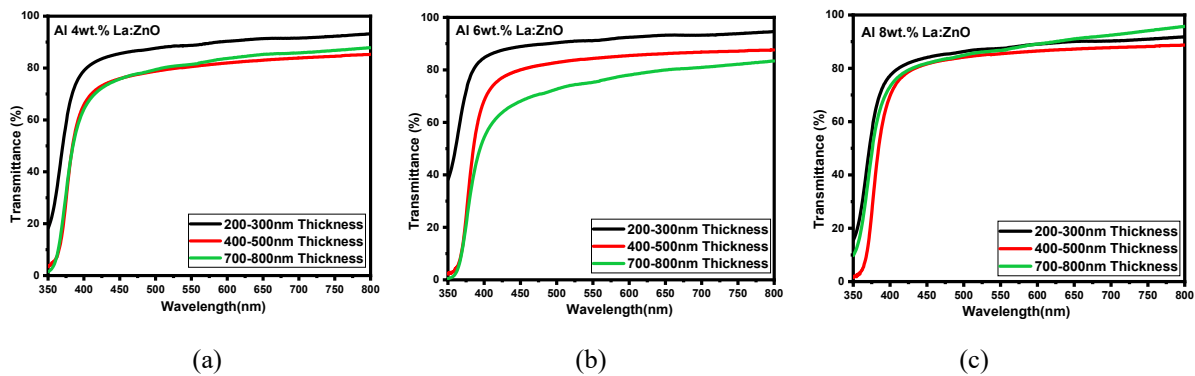


Fig.S3: Transmittance (a.u) v/s Wavelength (nm) of 4wt.%, 6wt.% and 8wt.% of Al: LZO films

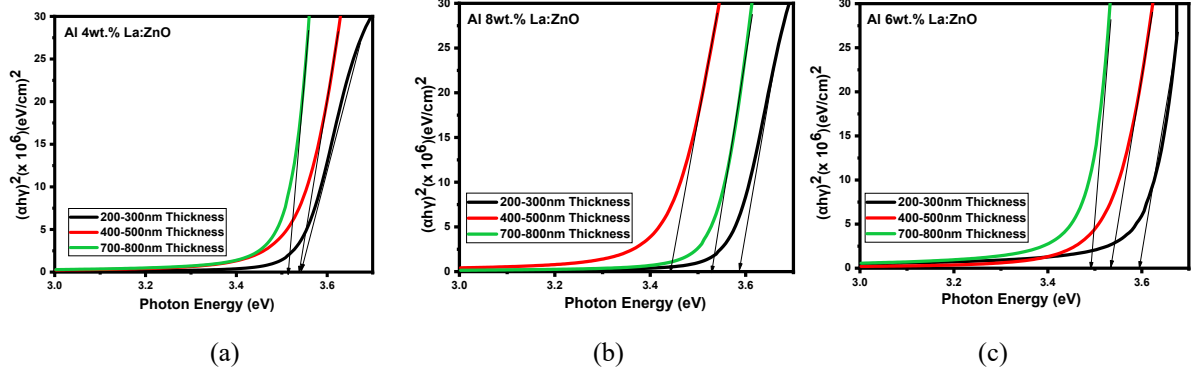


Fig.S4: $(\alpha h\nu)^2$ Vs $h\nu$ of 4wt.%, 6wt.% and 8wt.% of Al: LZO films

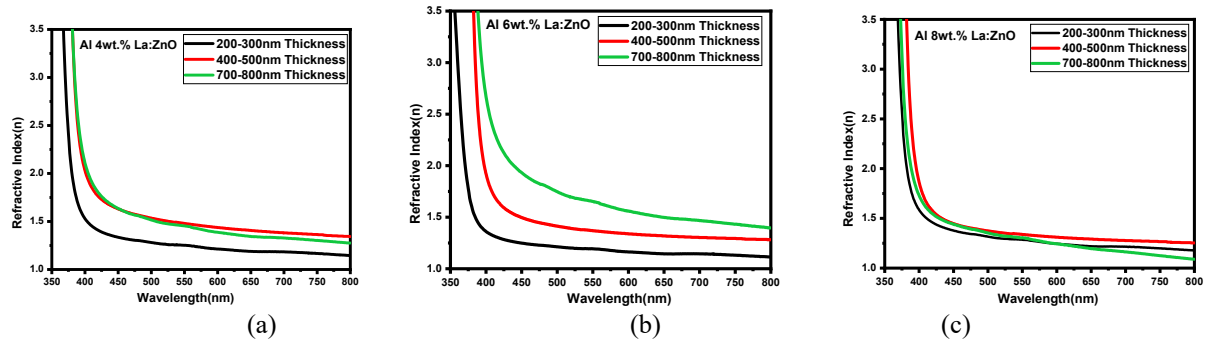


Fig.S5: Refractive index (R.I) Vs Wavelength (λ) of 4wt.%, 6wt.% and 8wt.% of Al: LZO films

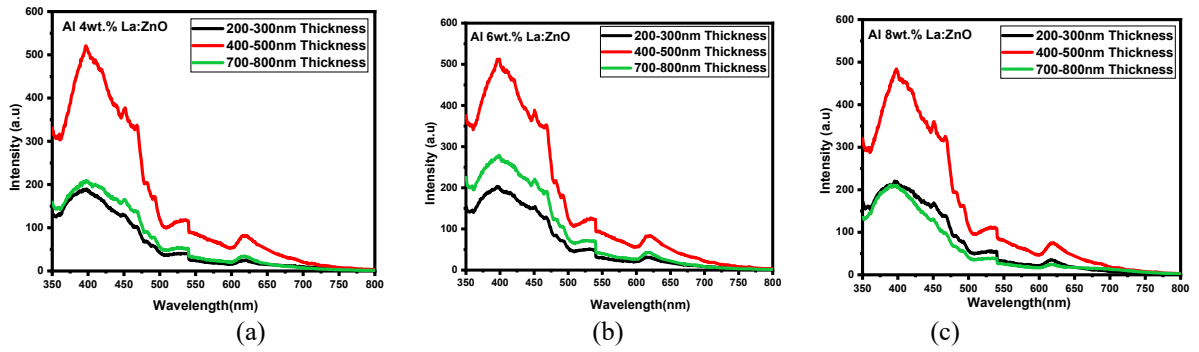


Fig.S6: PL intensity Vs Wavelength of 4wt.%, 6wt.% and 8wt.% of Al: LZO films

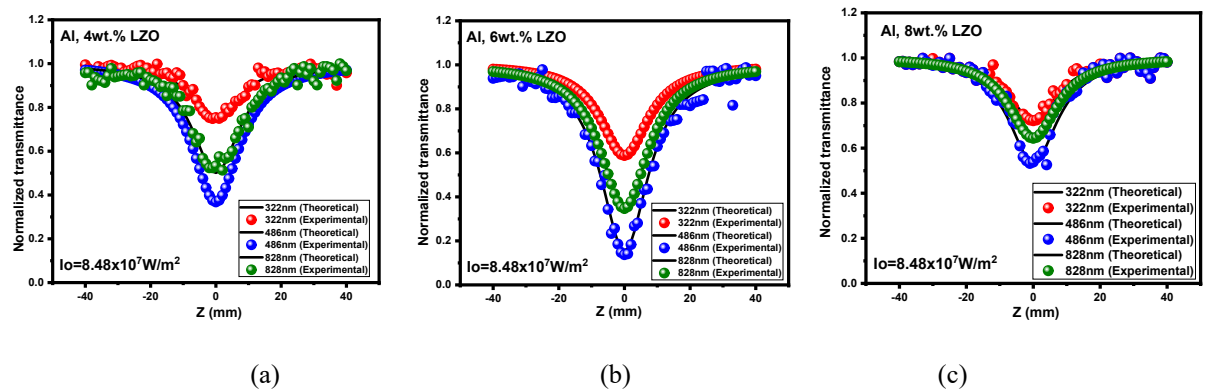


Fig.S7: OA traces of 4wt.%, 6wt.% and 8wt.% of Al: LZO films

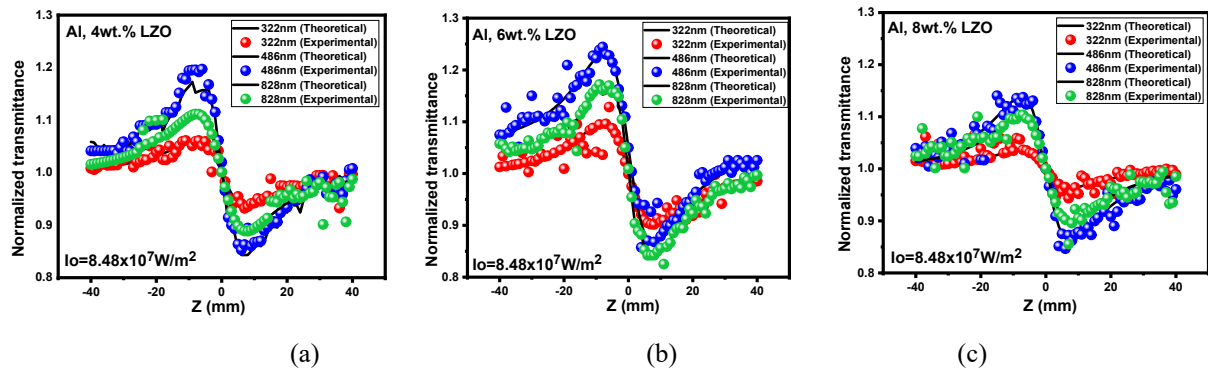


Fig.S8: CA traces of 4wt.%, 6wt.% and 8wt.% of Al: LZO films