

## Nanocomposites and nanomaterials

### Thickness effect on structural, electrical, and optical properties of ZnO films deposited by sol-gel spin coating method

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Zinc oxide (ZnO) thin films have been elaborated by using the sol-gel spin-coating deposition [1] on glass substrates with different thickness at the concentration 1.5 mol/L. Zinc acetate dehydrate [Zn(CH<sub>3</sub>COO)<sub>2</sub> · 2H<sub>2</sub>O] , isopropanol and monoethanolamine (MEA) were used as the precursor, solvent and stabilizer, respectively. The molar ratio of Monoethanolamine to Zinc acetate was maintained as 1. X-ray diffraction [2], ultraviolet-visible spectroscopy and photoluminescence spectroscopy (PL) were employed to deeply investigate the effect of thickness on the structural, optical, and electrical properties of the ZnO thin films. Our results of all thin films were discussed and compared with other works on the same topic[3,4] .

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