

# Structural properties of ZnO thin films deposited by spin-coating method

**T. KACEL, A. Boukerika, M. Hemmous, A. Ziouche**

**Abstract :** ZnO thin films are deposited on the glass substrates by sol-gel spin coating technique by varying the concentration of the sol. X-ray diffraction (XRD) and scanning electron microscopy (SEM) analysis were used to investigate the effect of sol concentration on the crystallinity and surface morphology of the films. X-ray diffraction showed that ZnO films were polycrystalline and have the hexagonal structure. The crystallites are preferentially oriented with (002) and the appearance of only (002) c-axis orientation for precursor concentration at 0.1 M.

**Keywords :** ZnO, Thin films, sol-gel, concentration