

Multilayer ZnO/Al/ZnO coatings were deposited by thermal evaporation on unheated substrates. Subsequently, the coatings were annealed in air in the temperature range 300 – 600 °C. The structural properties of the films were investigated using x-ray diffraction atomic force microscopy. The chemical properties were determined from x-ray photoelectron spectroscopy along with elemental depth profiling. The electrical and optical properties coatings were studied in order to evaluate their performance as transparent conducting coatings. The best performance was obtained with films annealed at 300 °C, for which average visible transmittance was 75% and the resistivity was  $2.9 \times 10^{-3} \Omega\text{.cm}$ .