

Manganese oxide thin films were deposited using thermal evaporation from a tungsten boat. Films were deposited under an oxygen atmosphere, and the effects of thickness, substrate temperature and deposition rate on their properties were investigated. The chemical properties of the films were studied using X-ray photoelectron spectroscopy and X-ray fluorescence. The optical properties were determined from normal-incidence transmittance and reflectance. Based on the chemical and optical characterization, the optimum conditions for the deposition of the films were investigated. Subsequently, the optical properties (refractive index, extinction coefficient and bandgap) of these films were determined.