

Mixed films of zinc oxide (ZnO) and cerium oxide (CeO₂) were deposited on unheated substrates by co-evaporation. The films were annealed in air at 500 °C for 2 h. The surface morphology of the films was characterized using atomic force microscopy. The chemical composition was determined using X-ray photoelectron spectroscopy. The optical properties were derived from normal-incidence reflectance and transmittance measurements. The films were investigated for the detection of carbon monoxide. The effects of the operating temperature and gas concentration on the performance of the sensor were investigated. The sensor response and recovery times were also measured.