Optical properties of Ge doped eutectic SbSe thin films.

S.A. Saleh and A. Al-Hajry
Physics Department, College of Science & Arts, Najran University,
P. O. 1988 Najran, Saudi Arabia

Abstract

Amorphous thin films of Sb65Se35-xGex (x = 0, 5, 10, 15, and 20%) were grown with electron beam evaporation technique onto ultra clean glass substrates at room temperature. The as-deposited films were extensively characterized by X-ray diffraction. The surface morphology as well as the elemental chemical composition of films were investigated by scanning electron microscopy (SEM). The optical measurements of as-deposited films were recorded in the wavelength range of 250 - 2500 nm. The effect of Ge on the optical properties was discussed. Absorption coefficient and band gap of films were determined.

Fifth Conference of Saudi Physical Society (SPS5)',