POTLOG, T., DUCA, D., DOBROMIR, M. Temperature-dependent growth and XPS of Ag-doped ZnTe thin films deposited by close space sublimation method. In: Applied Surface Science. 2015, Vol. 352, p. 33-37. ISSN 0169-4332.

Zinc telluride (ZnTe) thin films were sublimated on a glass substrate using closed space sublimation (CSS) technique. The influence of the substrate temperature on the physical properties is studied. The deposited films were immersed in AgNO 3 solution with different concentrations, and then annealed in air. The structure and composition are studied using X-ray diffraction (XRD) and X-ray photoelectron spectroscopy (XPS). X-ray diffraction patterns of as-deposited ZnTe thin films exhibited polycrystalline behavior. The preferred orientation of (1 1 1) having cubic phase irrespective of the substrate temperature was observed. The XPS analysis confirmed the presence of Ag in the ZnTe thin films after doping by immersion in the AgNO 3 solution of different concentrations.