Properties of GaN seed layer using Ga(mDTC)₃ precursor

홍기남, 박진호* 영남대학교 (chpark@ynu.ac.kr*)

Abstract— Tris (N,N-dimethyldithiocarbamato)-gallium(III) (Ga(mDTC)3) is used as a precursor for formation of seed-layers in growth of gallium nitride (GaN) thin-film. GaN seed layers are formed on Al2O3 substrates by spin-coating method and nitridation in NH3/N2 ambient of reactor at 850OC. Structure of seed layers such as quality, surface morphology is examined by X-Ray Diffracometer, scanning electron microscope (SEM). Photoluminescene (PL) with He-Cd laser source is used to characterize band structure of seed-layers at room temperature.