유기절연체를 사용한 ZnO 박막트랜지스터

최 운 섭 디스플레이공학부, 호서대학교

ZnO TFT with Organic Dielectric

Woon-Seop Choi School of Display Engineering, Hoseo University

Abstract: ZnO Oxide TFT with organic dielectric was prepared. ZnO thin film as active channel was prepared by plasma enhanced atomic deposition technique. Organic dielectric was spin coated on the gate metal. The structure of prepared TFT is bottom gate type and top contact structure. The characterization of oxide TFT was performed. We obtained the mobility of 0.7cm²/Vs, the threshold voltage of -14V, and the on-off ratio of 10⁴. We also obtained good output characterization with solid saturation.

Key Words: ZnO, TFT, ALD, organic dielectric