저온화학기상증착에 의한 인듐산화막 구조에 관한 연구

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Structural study of indium oxide thin films by metal organic chemical vapor deposition

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Abstract: Indium oxide conducting films were deposited on Si(100) substrates at various temperatures by deposition using Indium (III)tris liquid delivery metal organic chemical vapor (2,2,6,6-tetramethyl-3,5-heptanedionato) (dpm)₃ precursors. The films deposited at 200 \sim 400°C were grown with a (111) preferred orientation and exhibit an increase of grain size from 21 to 33nm with increasing deposition temperature. In the range of deposition temperature, there is no metallic indium phase in deposited films

Key Words: MOCVD, Conducting film, ITO