

All Inkjetted Thin Film Transistors Using Polypyrrole Wrapped Single Wall Carbon Nanotube as Active Layers

김선희, 정민훈, James Tour¹, 조규진*
순천대학교; ¹Rice University
(gcho@sunchon.ac.kr*)

Ink-jet printing was used to fabricate all of the components of thin film transistors (TFT) such as three (gate, drain, source) electrodes, dielectric, and active layer. Three different ink-jet inks were prepared using poly(2,4-ethylene dioxothiophene) for the electrodes, poly(4-vinylphenol) for the dielectric, and polypyrrole wrapped single wall carbon nanotube (PWSCNT) for the active layers. In this presentation, the characterizations of both prepared (PWSCNT) and the printed TFT will be reported.