
Poster Presentation

[AMDp1]Oxide TFTs

Thu. Nov 28, 2019 10:40 AM - 1:10 PM Main Hall (1F)

10:40 AM - 1:10 PM

[AMDp1-23L]Contact Properties between Low-Resistive Al-Based Source/Drain and InO_x in Top-Gate Bottom-Contact Oxide Thin-Film Transistor for Application to the Vertical-TFT

*Sori Jeon¹, Kwang-Heum Lee¹, Seung-Hee Lee¹, Chi-Sun Hwang², Sang-Hee Ko Park¹ (1. Korea Advanced Institute of Science and Technology (KAIST) (Korea), 2. Electronics and Telecommunications Research Institute (ETRI) (Korea))

Keywords:Low resistive Al metal, Contact resistance, Bottom-contact structure, Oxide TFT

Vertical-TFT is a promising structure to realize ultra-high resolution displays. Especially, low-resistive Al-based source/drain is necessary to reduce RC delay. Since vertical-TFT is bottom-contact structure, source/drain is oxidized during InO_x semiconductor deposition. Here, we present the quantitative analysis result of metal/active contact properties in top-gate bottom-contact structured TFT, mimicking vertical-TFT.