

Poster Presentation

## [AMDp1]Oxide TFTs

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

---

10:40 AM - 1:10 PM

### [AMDp1-21L]Improved Mobility and Stability of Indium-free Oxide Thin Film Transistor by Metal Capping Layer

\*Ji-Min Park<sup>1</sup>, Ho-Hyun Nahm<sup>2</sup>, Hyun-Suk Kim<sup>1</sup> (1. Chungnam National University (Korea), 2. Korea Advanced Institute of Science and Technology (Korea))

Keywords:thin film transistors, amorphous oxide semiconductors, BaSnO<sub>3</sub>, high mobility, stability

In this work, to get better electrical properties, metal capping layer and lift-off lithography process of a new type of Indium-free amorphous thin films and associated thin-film transistors (TFTs) were investigated. As a result, optimized TFTs showed high mobility ( $>30\text{cm}^2/\text{Vs}$ ) and excellent stability than conventional InZnO TFTs.