

Oral Presentation

[AMD6]Oxide TFT: Device Application

Chair: Chuan Liu (Sun Yat-sen University)

Co-Chair: Susumu Horita (JAIST)

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11:55 AM - 12:15 PM

[AMD6-4]Fabrication of Top-Gate Self-Aligned Amorphous InGaSnO TFTs with High Mobility

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Keywords:IGTO, High Mobility, Deposition Condition, top-gate self-aligned

The effect of deposition condition of dielectric layer on top-gate self-aligned amorphous InGaSnO TFT have been discussed, higher N₂O/SiH₄ gas ratio and medium power are better. The resulting a-IGTO TFT at Gen.4.5 glass exhibited good uniformity and high mobility of 28.57cm²/Vs, sweep swing of 0.27 V/decade, threshold voltage of 0.53V