

Oral Presentation

[AMD7]Oxide TFT: Fabrication Process

Chair: Toshiaki Arai (JOLED Inc.)

Co-Chair: Yujiro Takeda (Sharp)

Fri. Nov 29, 2019 1:20 PM - 2:40 PM Mid-sized Hall B (1F)

1:45 PM - 2:05 PM

[AMD7-2]Effect of Lanthanum Doping on the Electrical Performance of Spray Coated ZnO Thin Film Transistor

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Keywords:Lanthanum, Solution-process, Spray pyrolysis, Thin-film transistor, ZnO

We studied the effect of lanthanum incorporation on the electrical properties of ZnO TFT fabricated by spray pyrolysis. The turn-on voltage (V_{ON}) shifts towards 0 V by La doping. Also, Subthreshold swing (SS) decreases significantly from 387 to 251 mV/dec, by incorporation of lanthanum in ZnO.