

Oral Presentation

[FLX2]Stretchable and Flexbile Devices

Chair: Manabu Ito (Toppan Printing Co.)

Co-Chair: Mitsuru Nakata (NHK)

Thu. Nov 28, 2019 5:20 PM - 6:30 PM Mid-sized Hall B (1F)

6:10 PM - 6:30 PM

[FLX2-3]Study on Top-Gate Self-Aligned InGaZnO TFTs on PI Substrate

*Nian Liu¹, Huafei Xie², Macai Lu¹, Xueru Mei¹, Lei Wen¹, Shujhih Chen¹, Shengdong Zhang², Chiayu Lee¹, Xin Zhang¹ (1. Shenzhen China Star Optoelectronics Semiconductor Display Technology Co.Ltd., China (China), 2. School of Electronic and Computer Engineering, Peking University, Shenzhen, China (China))

Keywords:IGZO, Flexible Display, Polyimide, Thin-Film Transistor, Micro LED

We discussed the effect of polyimide substrate on TFTs, the water from polyimide diffused into IGZO which deteriorated device characteristic. By reducing hydrogen content in GI we optimized device characteristic, and GI 1step deposition is more stable. Finally, we did the static bending and dynamic test, TFTs keep good stability.