

Supplemental Document

The X-ray diffraction (XRD) and grazing-incidence wide-angle X-ray scattering (GIWAX) methods were conducted to analyze the crystallinity and orientation of InOx films using monochromatic X-ray with 1.2398 Å (~10 keV) in wavelength at the 3D and 3C beamline of Pohang Light Source II (PLS-II, Pohang, Republic of Korea). The FETs were fabricated using 3-nm-thick InOx films deposited by ALD using SBIP-03 and ozone as precursor and reactant, respectively.

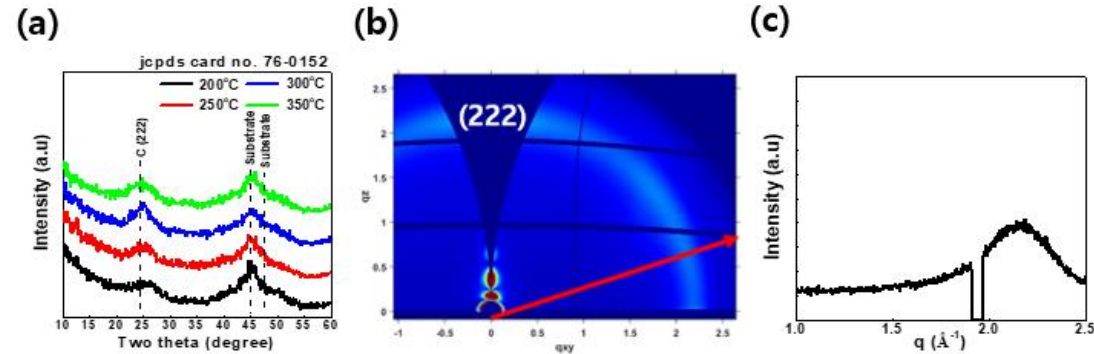


Figure 1. (a) XRD diffraction patterns, (b) GIWAX images and (c) intensity profiles along the 35° degree of the out-of-plane direction for 3 nm thick InOx films.

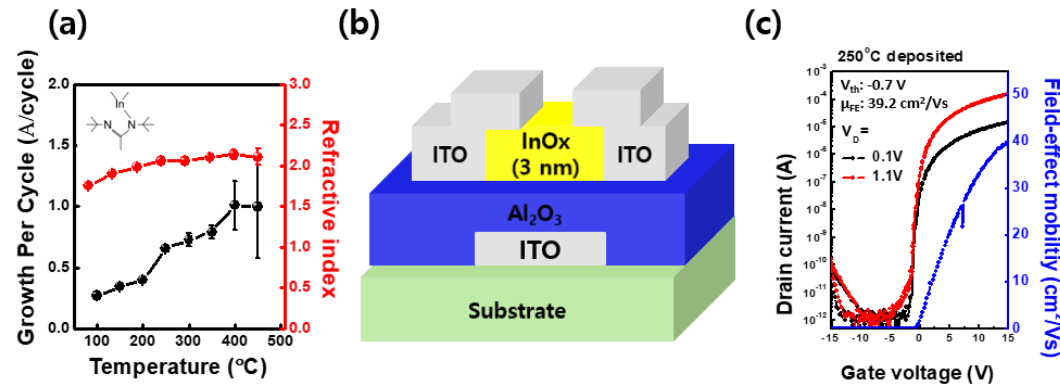


Figure 2. (a) GPC and refractive index of InOx ALD films in terms of deposition temperature and (b) schematics of 3 nm thick InOx channel FETs, and (c) transfer characteristics of FET.

Acknowledgements

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