

Electronic Supplementary Material (ESI) for

Poly(imide-benzoxazole) gate insulators with high thermal resistance for solution-processed flexible indium-zinc oxide thin-film transistors

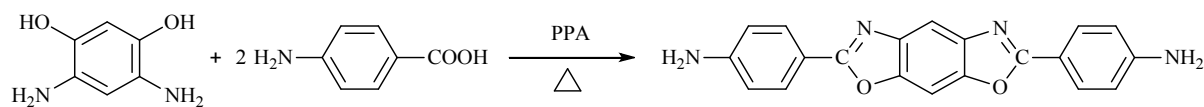
Duyoung Wee,^{‡a} Sungmi Yoo,^{‡ab} Young Hun Kang,^a Yun Ho Kim,^a Jae-Won Ka,^{*a} Song Yun Cho,^a Changjin Lee,^a Juwhan Ryu,^b Mi Hye Yi^a and Kwang-Suk Jang^{*a}

^a Division of Advanced Materials, Korea Research Institute of Chemical Technology, Daejeon 305-600, Republic of Korea.

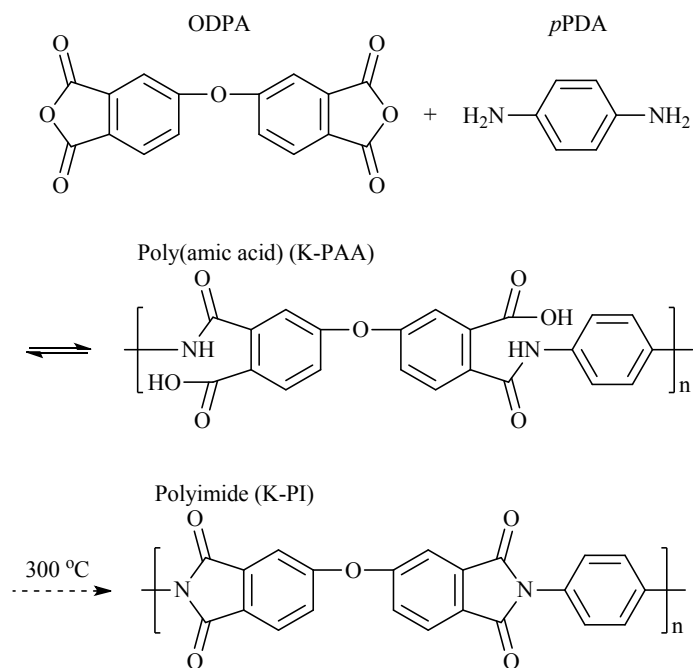
^b Department of Polymer Science and Engineering, Chungnam National University, Daejeon 305-764, Republic of Korea.

[‡] These authors contributed equally to this work.

* Corresponding author: kjang@kriict.re.kr (K.-S Jang); jwka@kriict.re.kr (J.-W. Ka)



Scheme S1 Synthetic route to BODA.



Scheme S2 Synthetic route to K-PI gate insulator.

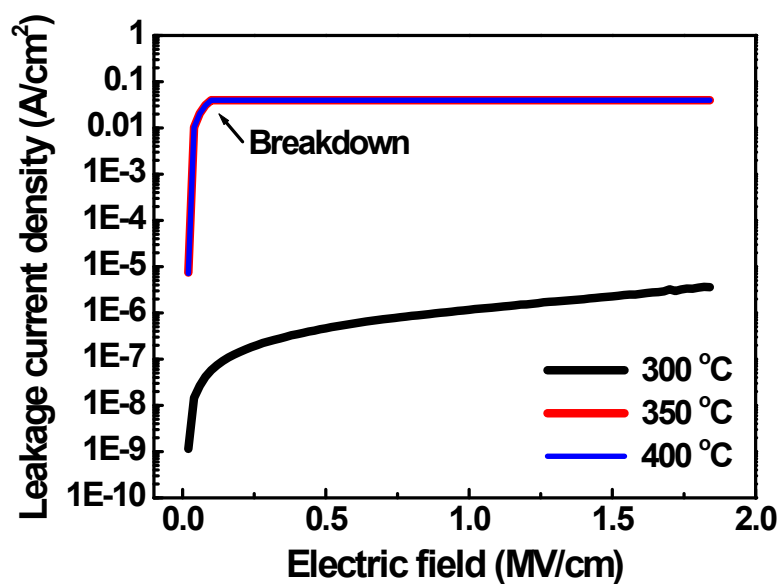


Fig. S1 Electric field-dependent leakage current densities of 500 nm-thick K-PI films after post-annealing at 300 °C, 350 °C and 400 °C.

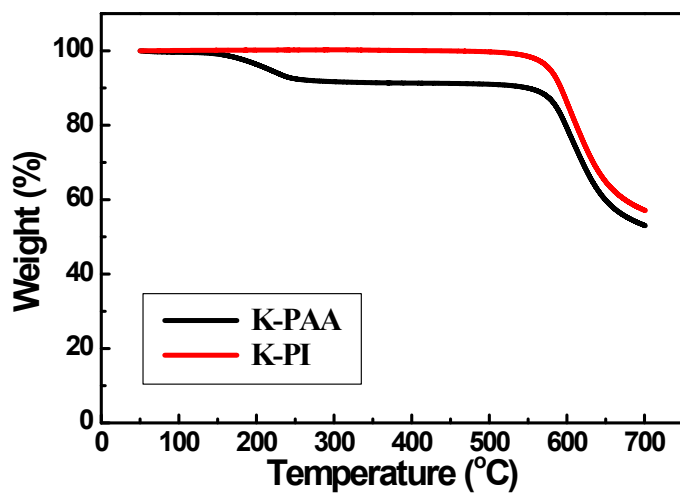


Fig. S2 TGA results of K-PAA and K-PI.

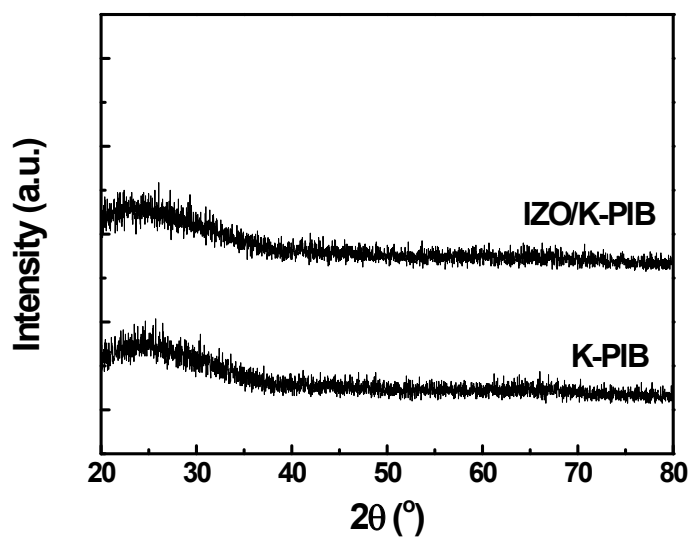


Fig. S3 XRD patterns of K-PIB and IZO/K-PIB films.

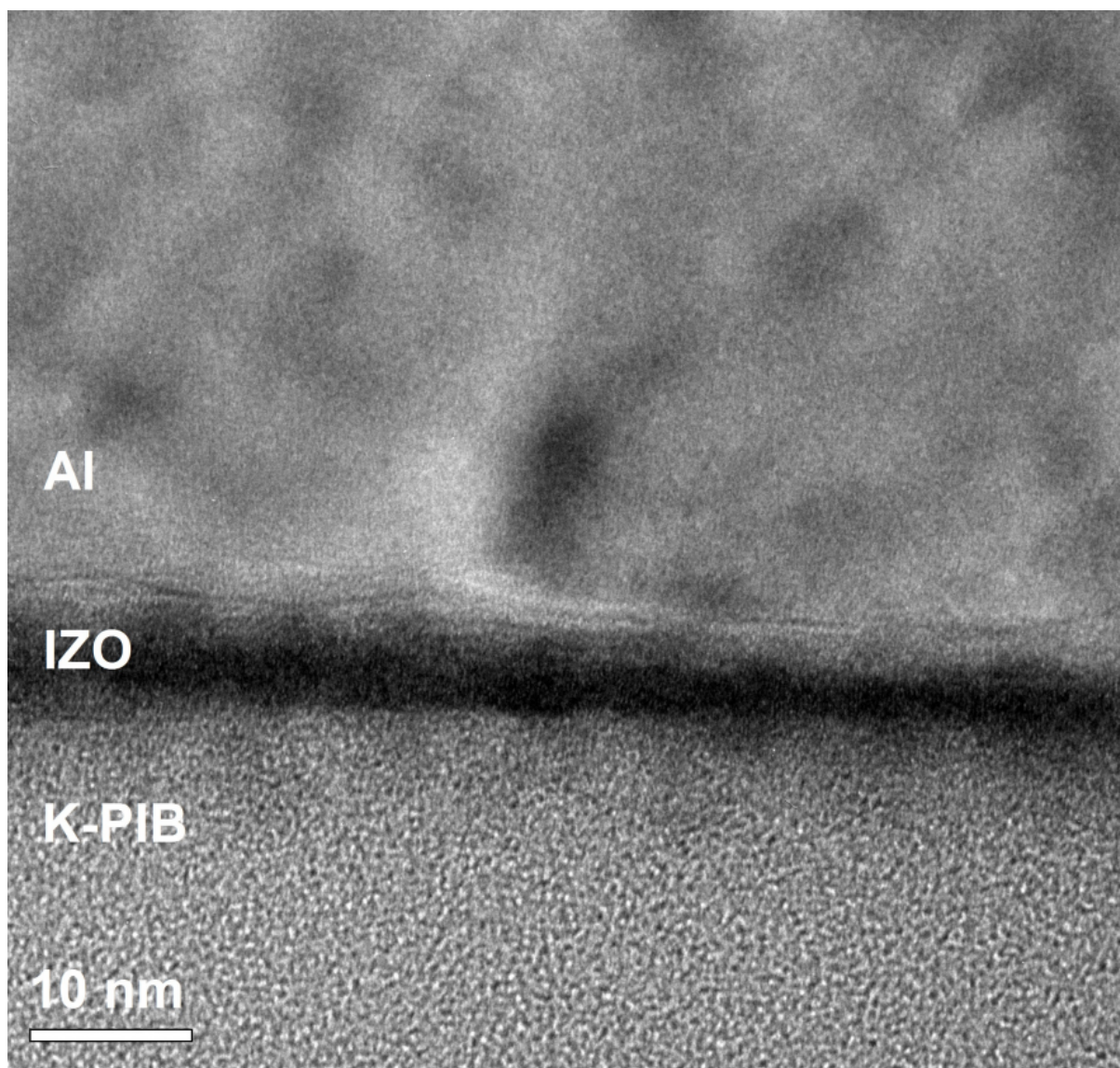


Fig. S4 Cross-sectioned TEM image of IZO layer on K-PIB film.