

Supplementary Information for:

Electrohydrodynamic-jet Printed Zinc-Tin Oxide TFTs and Their Bias Stability

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Table S1. O 1s, Sn 3d and Zn 2p core shells in XPS data and the deconvoluted O 1s core shell of EDH-jet printed ZTO thin film

	At% at 400 °C		At% at 500 °C	
$O_M/O_M+O_{vac}+O_{OH}$	63.57		64.68	
	400 °C	500 °C	400 °C	500 °C
	Peak B.E.	Peak B.E.	At%	At%
O 1s (O_M)	530.24 eV	529.98 eV	39.93	37.99
O 1s (O_{vac})	531.54 eV	531.39 eV	18.57	16.02
O 1s (O_{OH})	532.49 eV	533.04 eV	4.31	4.72
Sn 3d _{5/2}	Approximately 486.2 eV		24.61	23.34
Zn 2p _{3/2}	Approximately 1022.5 eV		12.58	17.92
$O_{vac}/O_M+O_{vac}+O_{OH}$	29.56		27.27	
$O_{OH}/O_M+O_{vac}+O_{OH}$	6.86		8.03	

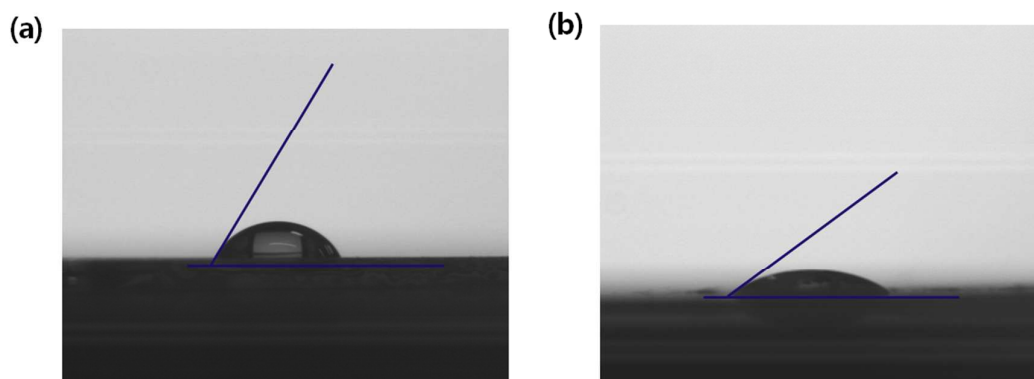


Figure S1. Contact angle measurements of gate insulator surfaces with (a) before UV/O₃ treatment, (b) after UV/O₃ treatment.

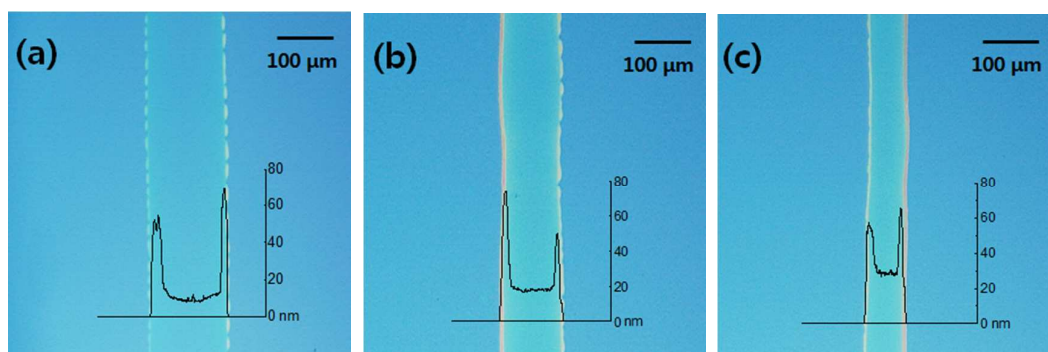


Figure S2. OM image and thickness morphology of EHD-jet printed ZTO lines with various ZTO concentrations (a) 0.1M, (b) 0.3M and (c) 0.5M.

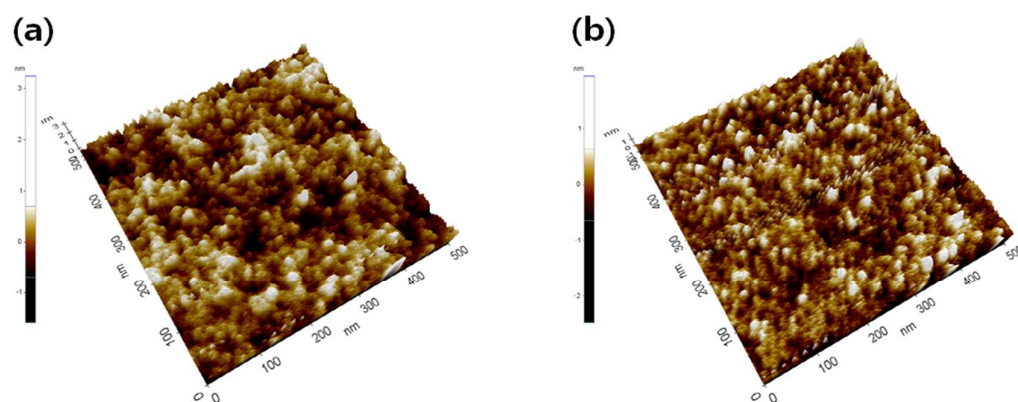


Figure S3. AFM images of surface morphology of the ZTO thin films with fabrication methods; (a) spin coating, (b) EHD printing.