

Supporting Information

Improvement of the Photo-bias Stability of the Zn-Sn-O Field Effect Transistors by an Ozone Treatment

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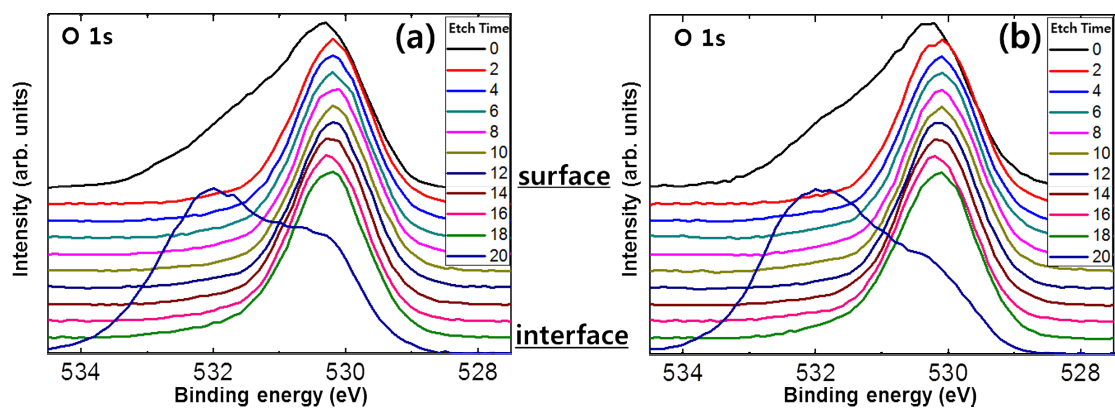
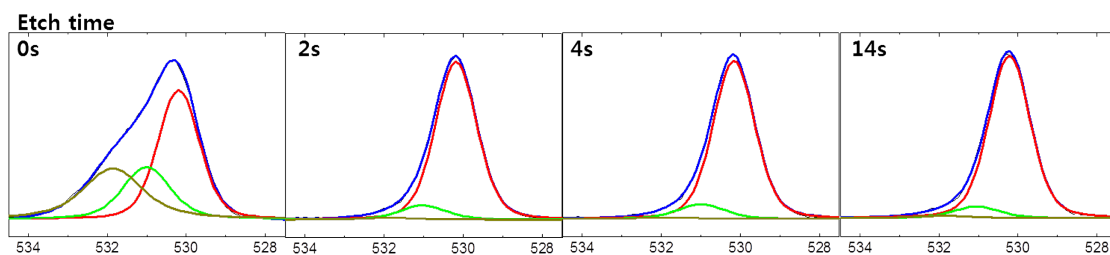
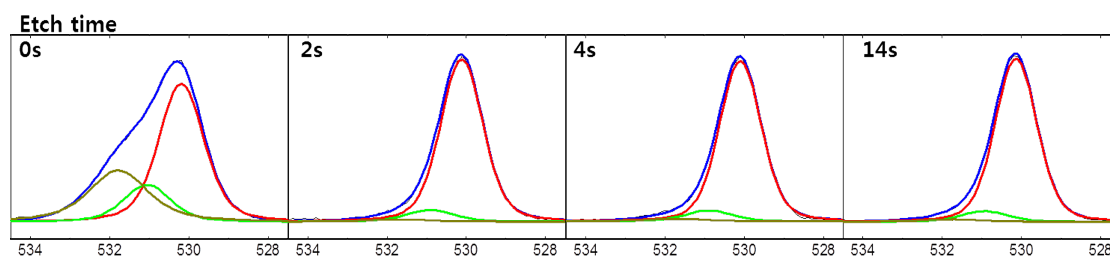


Figure S1. Depth profiling of O *1s* XPS spectra of (a) untreated and (b) 300 s ozone treated ZTO films.



(a) Untreated ZTO film



(b) 300 s ozone treated ZTO film

Figure S2. The evolution of deconvoluted O 1s XPS spectra for the untreated and 300 s ozone treated ZTO films.

Table S1. Comparison of portions of the O 1s peaks deconvoluted from the XPS spectra of the untreated and 300 s-treated ZTO films as a function of XPS etch time.

(a) Untreated ZTO film

XPS Etch time	O 1s peak [eV]		
	Lattice Oxygen (530.20 ± 0.04)	Oxygen deficient (531.06)	Hydroxyl (531.89)
0s	0.549	0.224	0.227
2s	0.885	0.098	0.017
4s	0.887	0.099	0.013
14s	0.901	0.077	0.021

(b) 300 s ozone treated ZTO film

XPS Etch time	O 1s peak [eV]		
	Lattice Oxygen (530.20 ± 0.04)	Oxygen deficient (531.06)	Hydroxyl (531.89)
0s	0.551	0.159	0.289
2s	0.901	0.077	0.021
4s	0.901	0.075	0.024
14s	0.904	0.073	0.023