

## Supplemental Document

Figure 1a illustrates the schematics of the nano-laminated IGZO and PEALD deposition sequence in which the number of each In, Ga, and Zn cycle is the same. Type B and C split the indium layer 1 and 2 times, respectively. Figure 1b shows the transfer parameter of the TFT with each film structure. As the number of In-split increases, the S.S. of the TFT is improved. Figure 1c is the magnitude of threshold voltage shift of the TFTs that shows the improved stability proportionally according to the number of inter-layer.

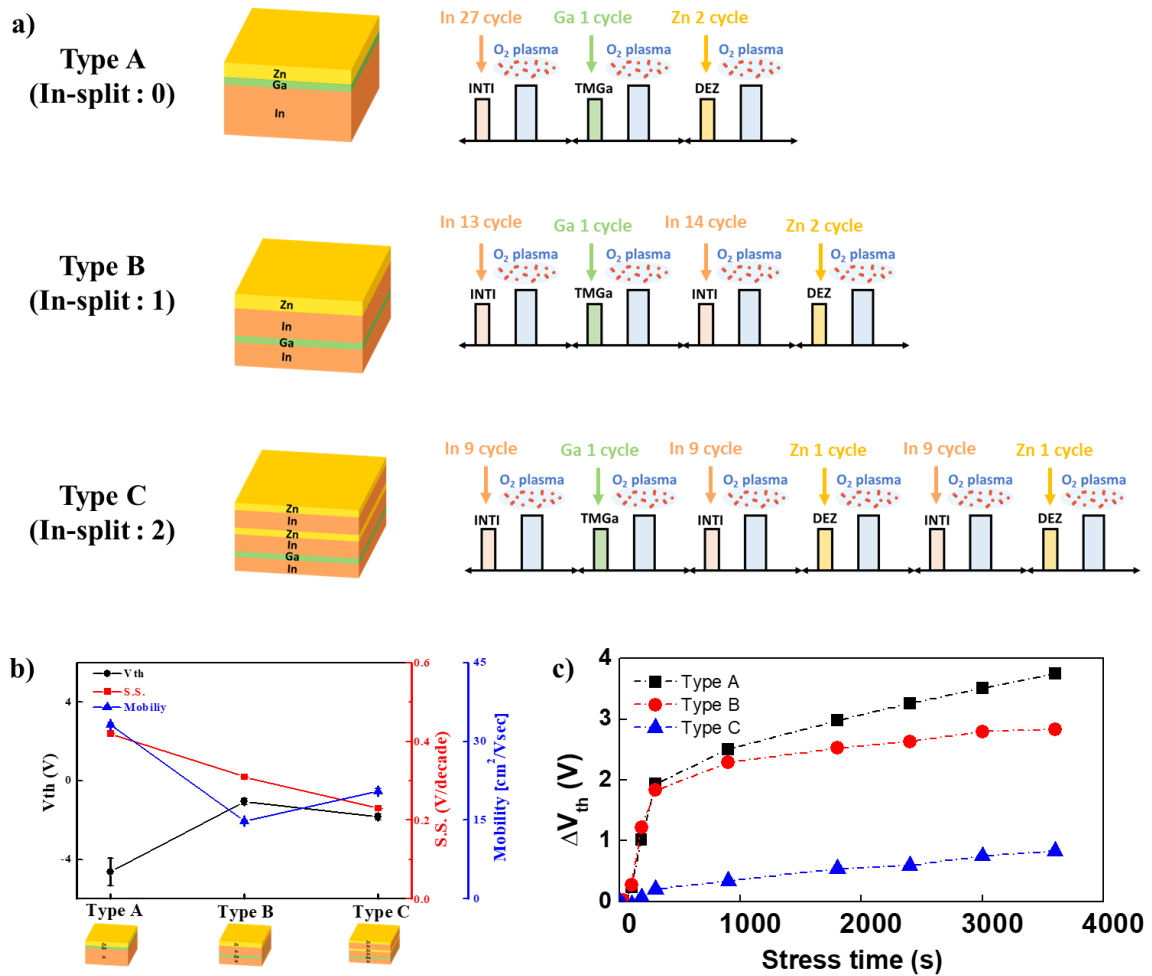


Figure 1. (a) Illustrations of nano laminated IGZO film structures and PEALD deposition sequences. (b) The Transfer parameter and (c) the magnitude of threshold voltage shift under PBS of TFT with each film structure