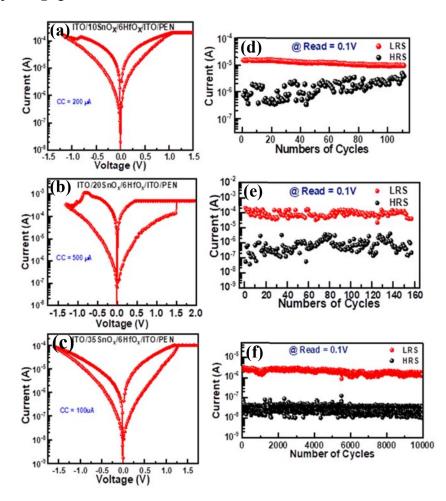
## All Oxide Based Flexible Multi-Folded Invisible Synapse as Vision Photo-receptor

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**Figure S1**: (a), (b) and (c): The optimization of the current-voltage bipolar switching curves of different  $SnO_x$  thicknesses of 5, 20 and 35 nm devices having 6 nm  $HfO_x$  layer for each device ; (e), (f) and (g) are the corresponding endurance results, respectively. The minimum compliance current is used to obtain the best switching and endurance performances. The 35 nm thick  $SnO_x$  layer device can sustain well for more than 10000 cycles along with gradual switching at a low compliance current.