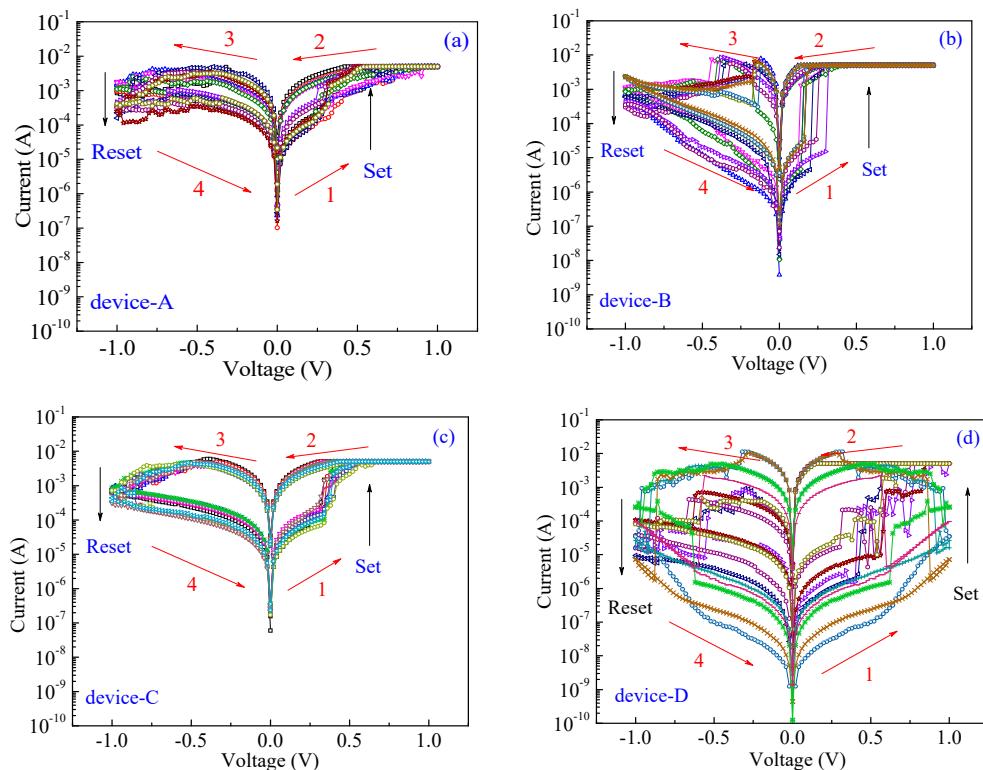


# Supporting Information

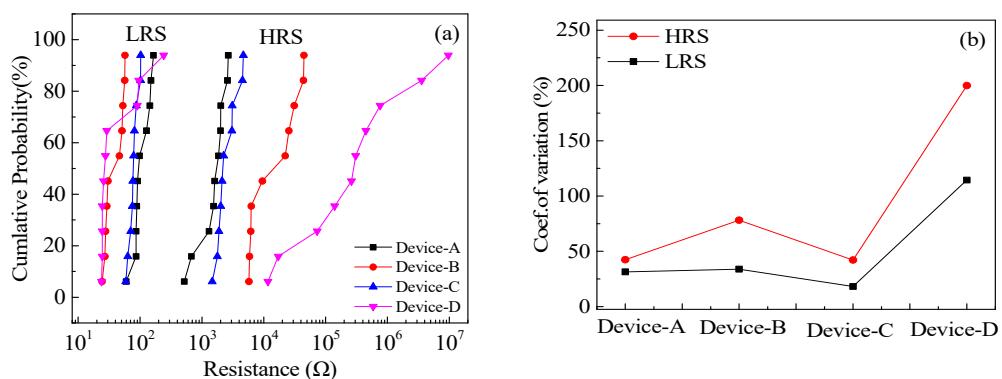
## “Resistive Switching Characteristics of Li-doped ZnO Thin Films based on Magnetron Sputtering”

1. Multiple  $I-V$  characteristics of the resulted devices under a DC voltage.



**Figure S1.** The  $I-V$  characteristics: (a) device-A; (b) device-B; (c) device-C; (d) device-D.

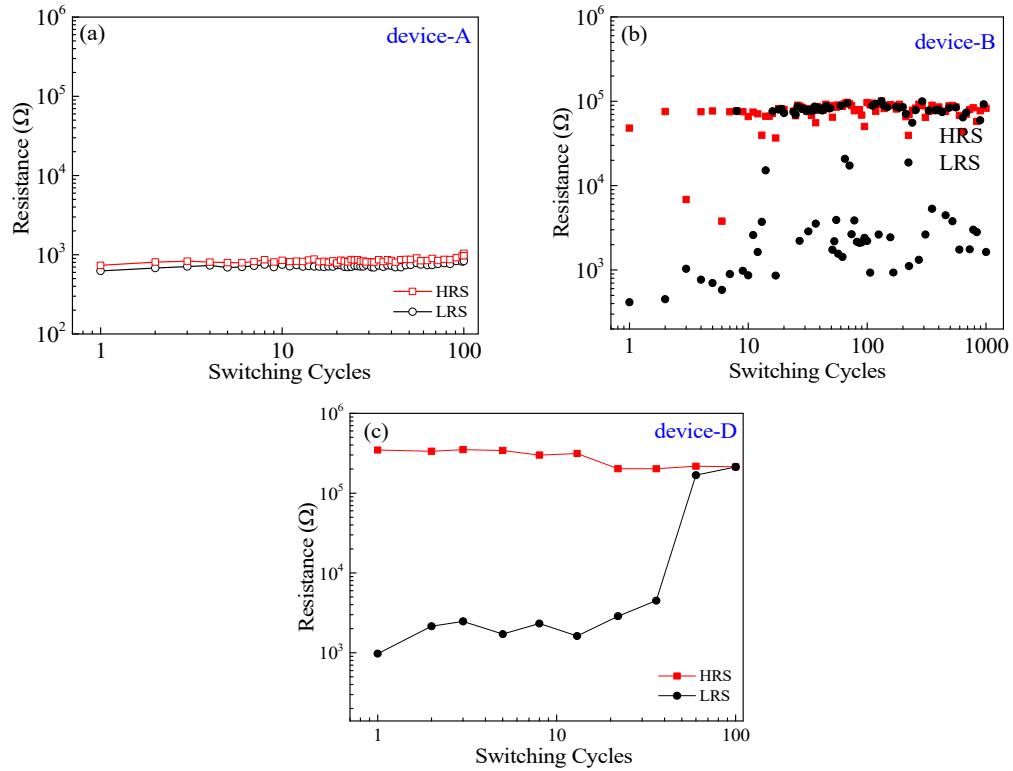
2. The curves of cumulative distributions and the coefficient of variation ( $\sigma/\mu$ ) of  $R_{\text{LRS}}$  and  $R_{\text{HRS}}$



**Figure S2.** (a) The cumulative distributions of  $R_{\text{LRS}}$  and  $R_{\text{HRS}}$ ; (b) The coefficient of

variation of  $R_{\text{LRS}}$  and  $R_{\text{HRS}}$  distribution.

### 3. The endurance characteristics of resistive switching device.



**Figure S3.** The endurance performances of (a) device-A; (b) device-B; (c) device-D.