

Data underlying the publication: Device-Aware Test for Ion Depletion Defects in RRAMs

The document is a readme of provided “defect-free measurements.xlsx”.

The device is 1T-1R structure, fabricated in 130 nm technology. The stack structure is:
(BE/oxide/cap/TE) = (TiN/10nm HfO₂/10nm Ti/TiN).

The first column in the “defect-free measurements.xlsx” is applied voltages between the device, the second column contains the corresponding currents.

The measurement was done by sweeping applied voltages from 0~ -1.8 V~ 0 V~ 1.2 V~0 V, with the step of 0.01 V.

The dataset is for one defect-free device, which is shown in Fig. (10) (a) in the paper.