

Metal-Free, Single-Polymer Device Exhibits Resistive Memory Effect

Unnat Bhansali[†], Mohd A. Khan[†], Dongkyu Cha[†], Mahmoud. N. AlMadhoun[‡], Ruipeng Li[†], Long Chen[†], Aram Amassian[†], Ihab N. Odeh[‡], and Husam N. Alshareef^{†,}*

[†]Materials Science & Engineering, King Abdullah University of Science and Technology

(KAUST)

Thuwal 23955 -6900, Saudi Arabia

[‡]Corporate Research and Innovation Center, Saudi Basic Industries Corporation (SABIC)

Thuwal 23955-6900, Saudi Arabia

SUPPLEMENTARY INFORMATION

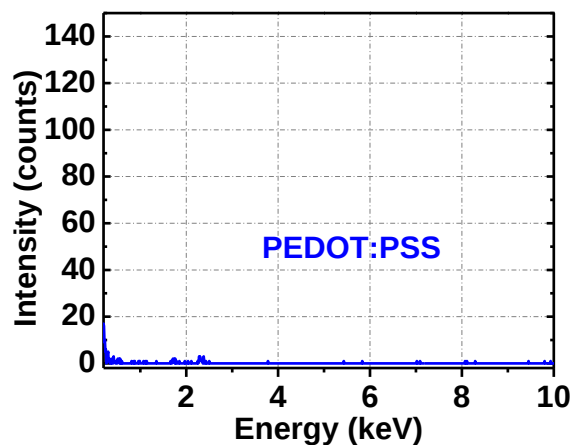


Figure S1. EDX spectrum of PEDOT: PSS active layer adjacent to the gold filament

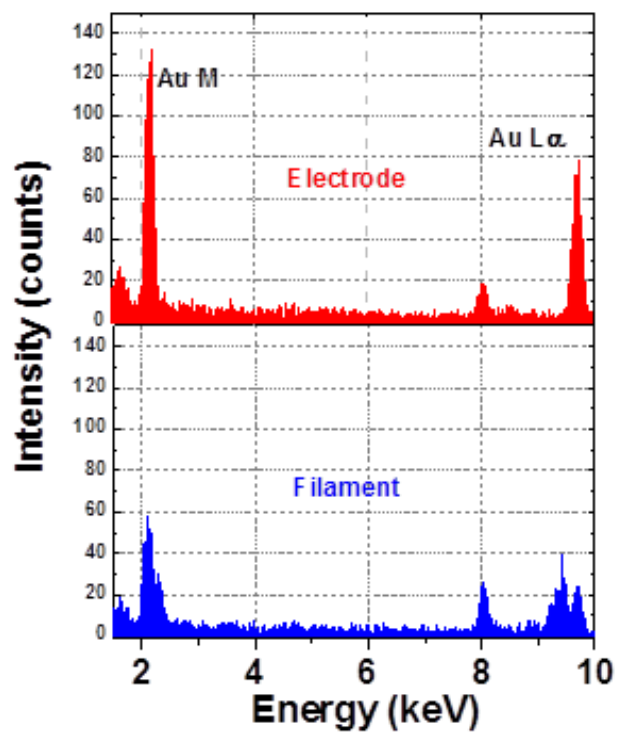


Figure S2. EDX spectrum of Au electrode and Au filament

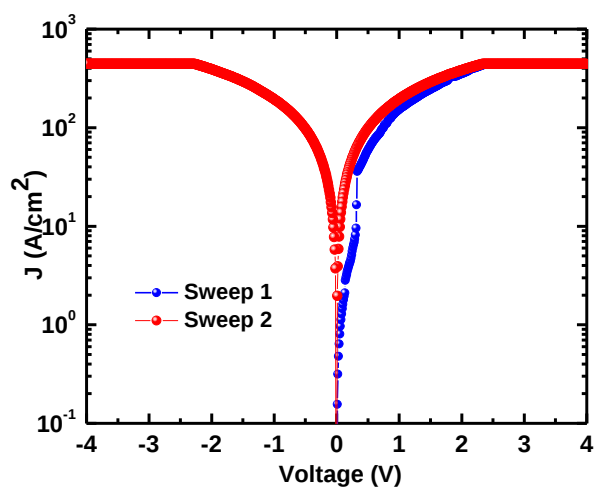


Figure S3. I-V characteristics of PEDOT:PSS memory devices with Pt-Au electrodes upto 4 V

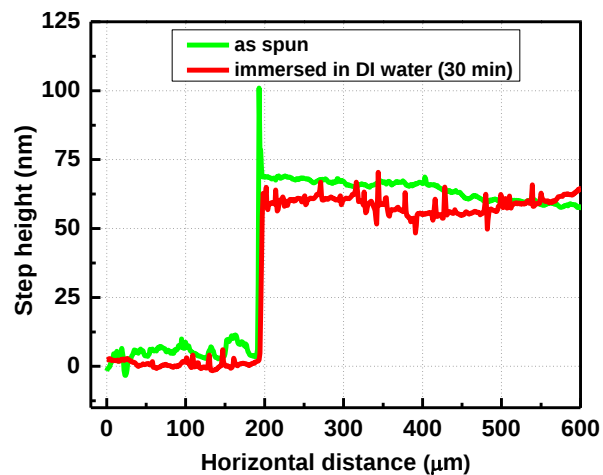


Figure S4. Profilometer thickness of PEDOT:PSS thin films as spun and after immersing in DI water

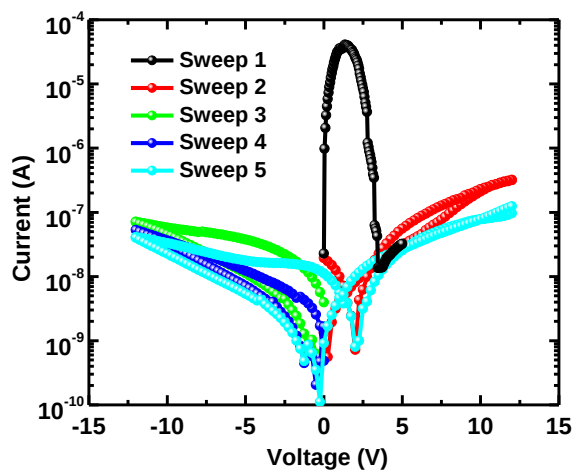


Figure S5. I-V characteristics of all PEDOT:PSS WORM memory devices upto 12 V