Electronic supplementary materials

Aqueous Phase Fabrication and Conversion of Pb(OH)Br into $CH_3NH_3PbBr_3$ Perovskite and its Application in Resistive Memory Switching Devices

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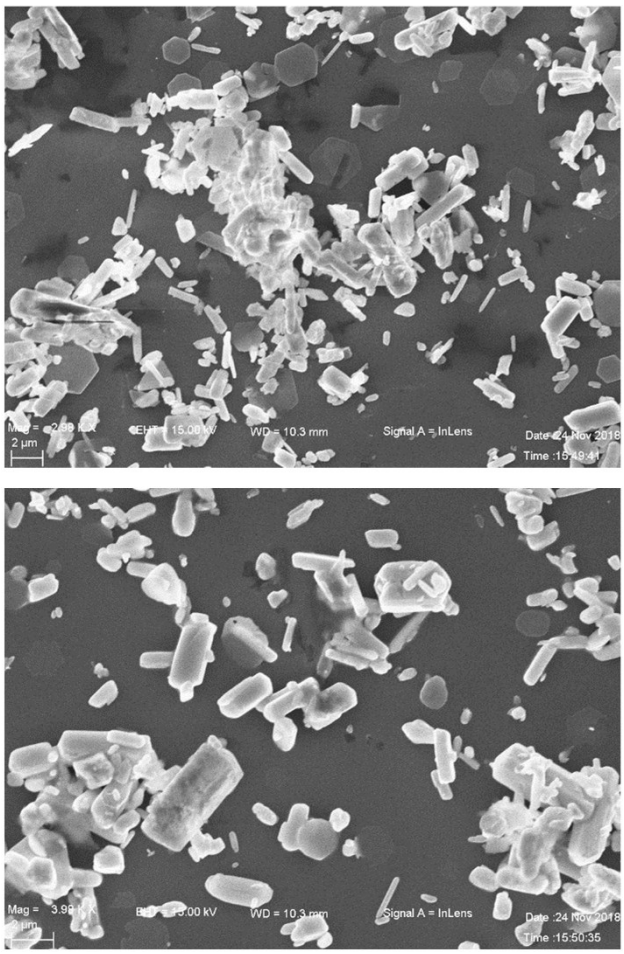

Figure S1 SEM images of the as-prepared Pb(OH)Br crystals dispersed on the glass substrate.

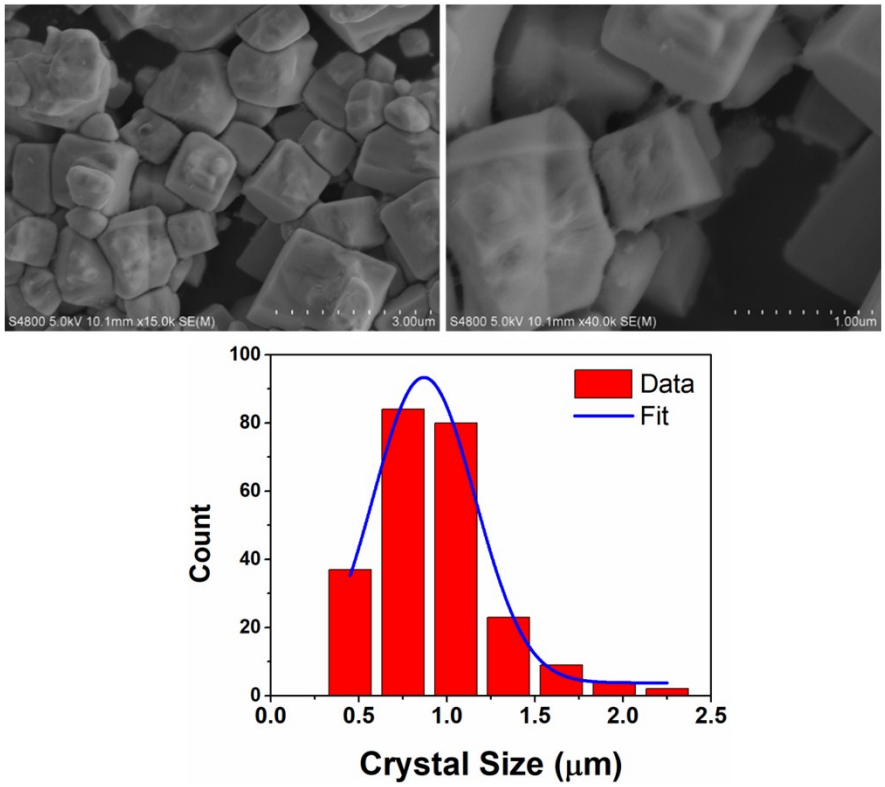

Figure S2 SEM images of the as-prepared $MAPbBr_3$ crystals and the corresponding size distribution histogram.

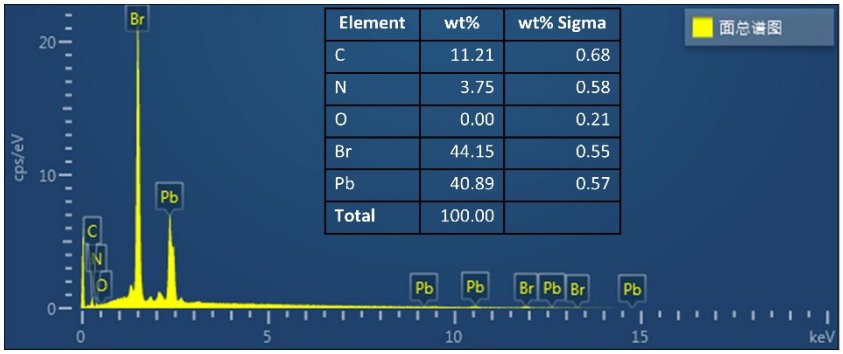

Figure S3 EDS analysis of the $MAPbBr_3$ perovskites.

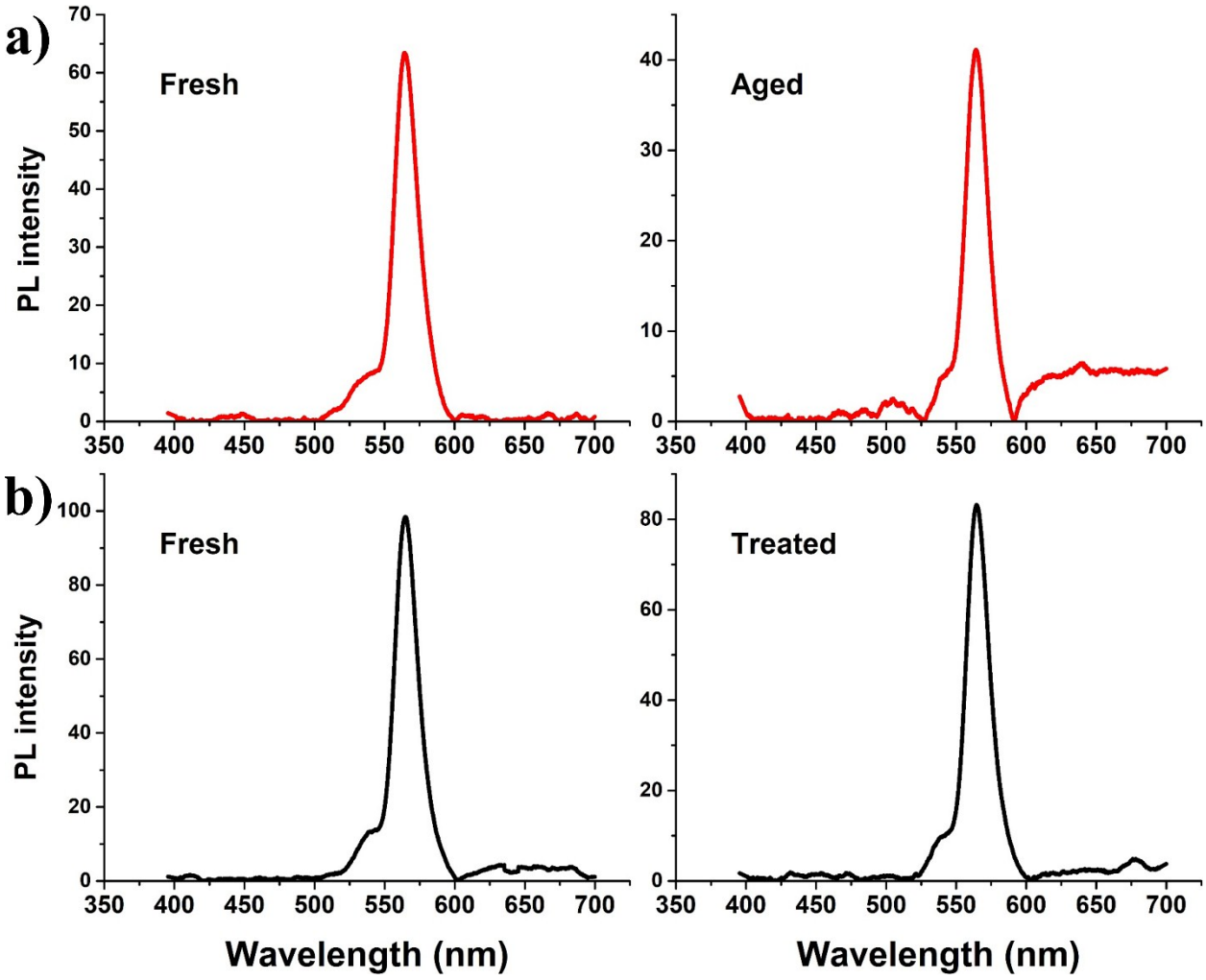

Figure S4 (a) PL spectra of the as-prepared $MAPbBr_3$ and after being exposed to a humid environment with a relative humidity of 60±10% for 40 days. (**b**) PL spectra of the as-prepared $MAPbBr_3$ and therally treated at 90 °C for 60 h.

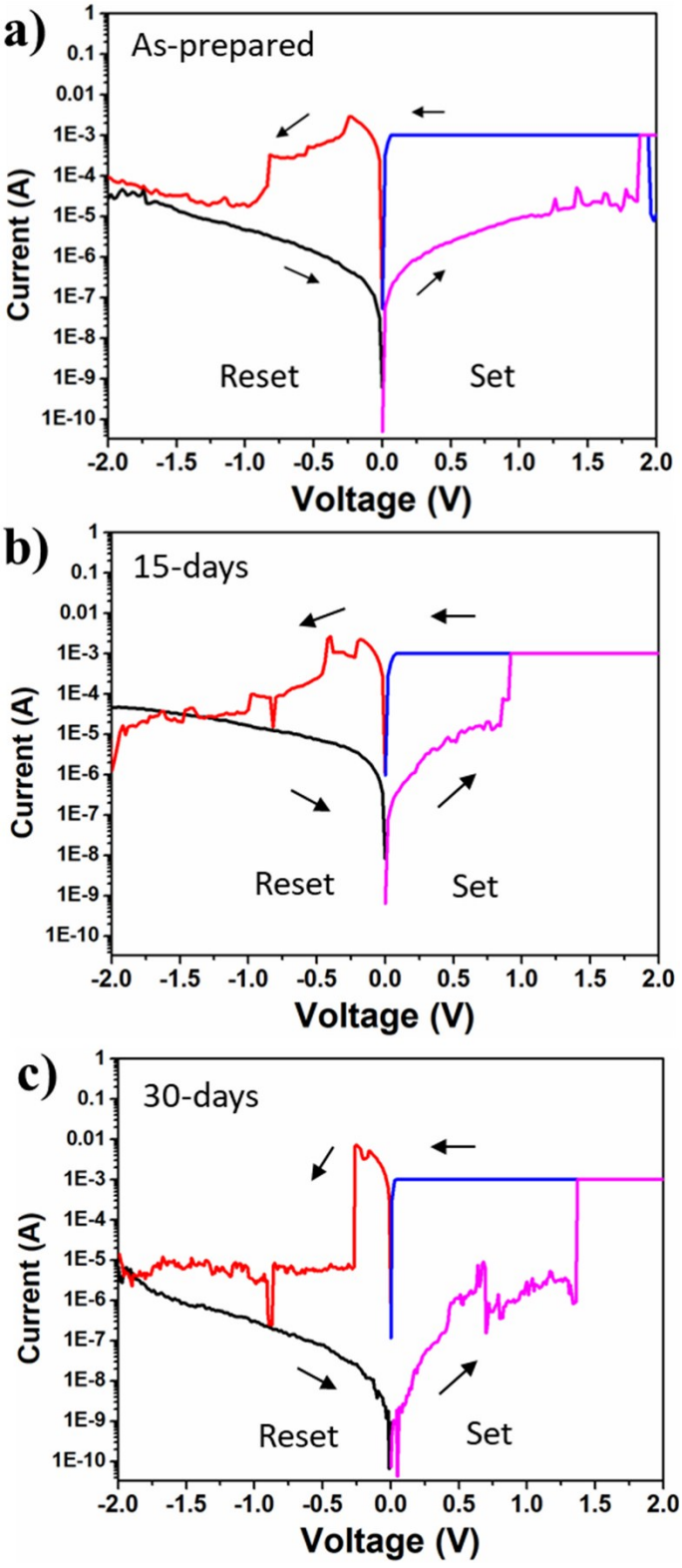

Figure S5 I-V characteristics of the as-prepared and the aged ReRAM device. (a) As-prepared. (b) Aged for 15 days. (c) Aged for 30 days.