Electronic Supplementary Information

Coupled self-assembled monolayer for enhancement of Cu diffusion barrier and adhesion properties

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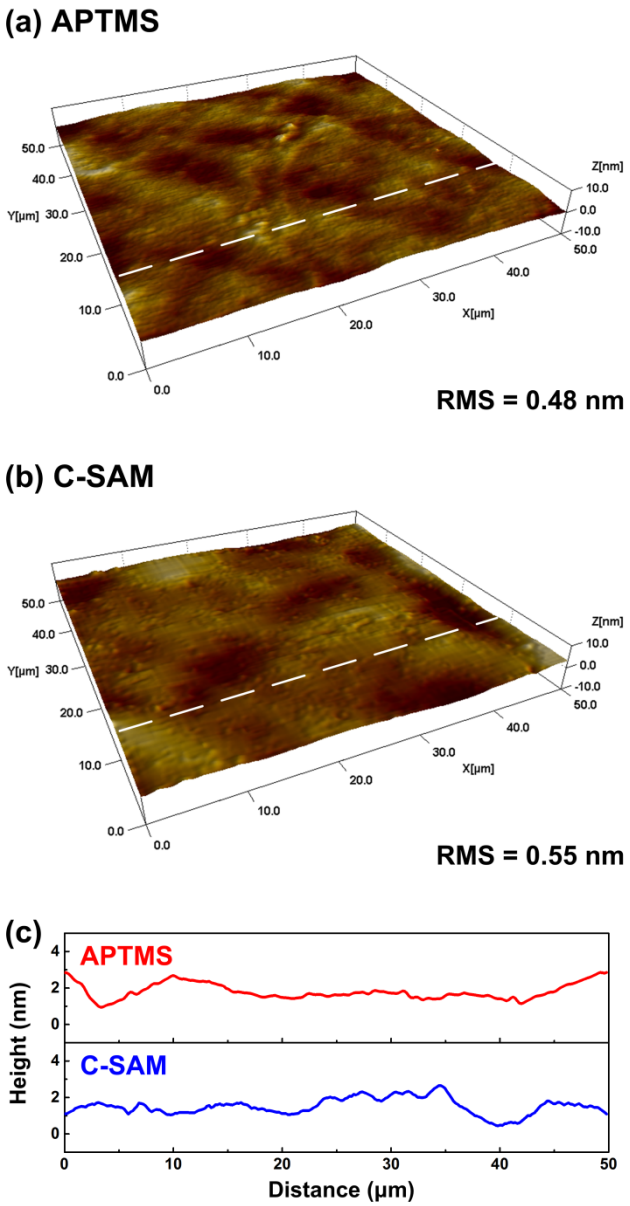

Fig. S1 AFM images of the substrates coated with (a) APTMS and (b) C-SAM and their (c) cross-sectional image obtained from a larger scale.

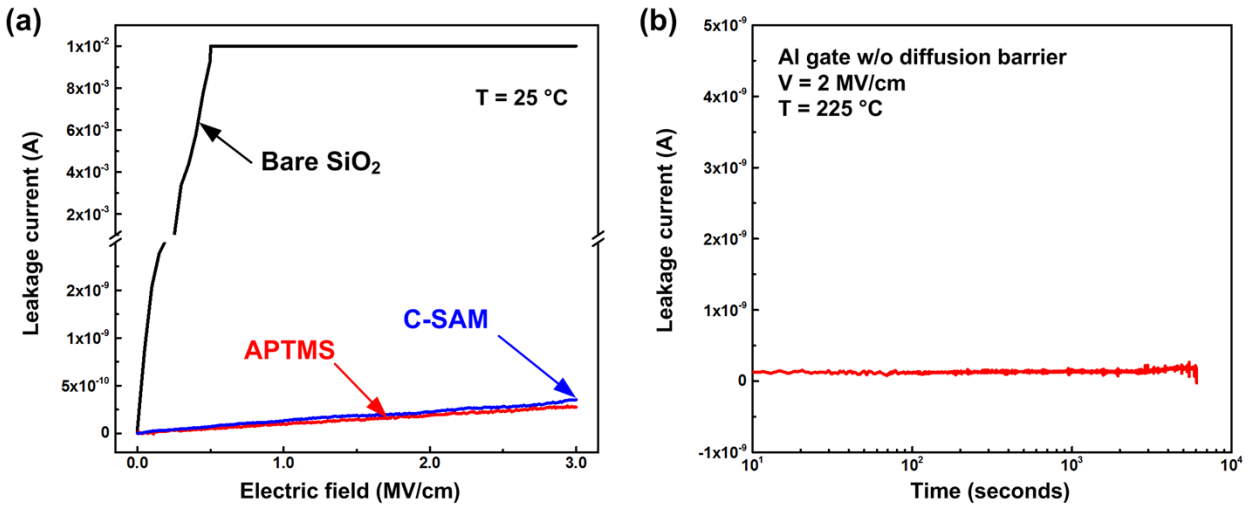

Fig. S2 (a) Representative leakage current versus electric field results of the fabricated MOS capacitors using no diffusion barrier, APTMS, and C-SAM. (b) TDDB test results without diffusion barrier while using Al gate at 225 °C and 2 MV/cm.