

Ultrafast hydrogen sensing through hybrids of semiconducting single-walled carbon nanotubes and tin oxide nanocrystals

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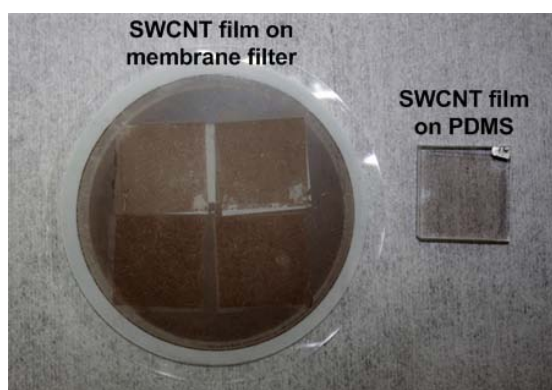


Fig. S1 SWCNT film on membrane filter (left) and PDMS (right).

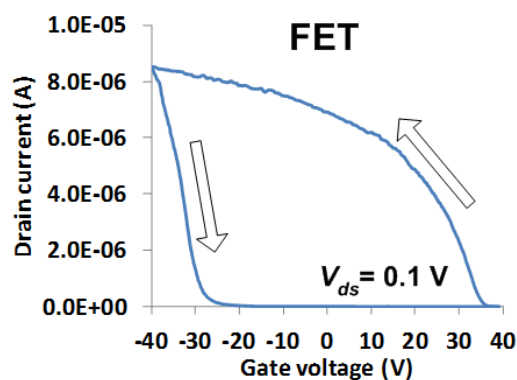


Fig. S2 FET measurement results ($V_{ds} = 0.1$ V) of the SWCNT FET after removing metallic tubes. The SWCNT FET shows a very high on-off ratio (4 to 5 orders of magnitude).

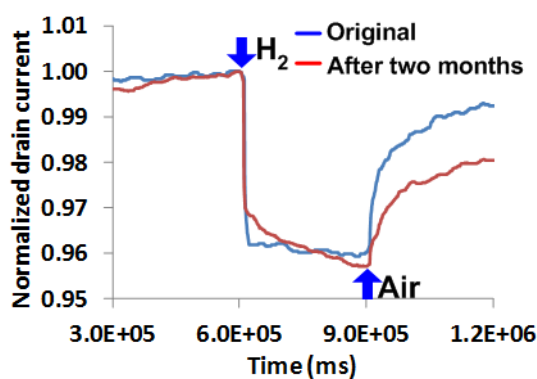


Fig. S3 H₂ sensing results of the SnO₂ NC-SWCNT film sensor before and after storing the sensor in ambient environment for two months. The results show that the sensor has similar sensitivity and response time after the two-month storage, only with slight degradation in the recovery time.