

Electronic Supplementary Information (ESI)

Oxygen and light sensitive field-effect transistors based on ZnO nanoparticles attached to individual double-wall carbon nanotubes

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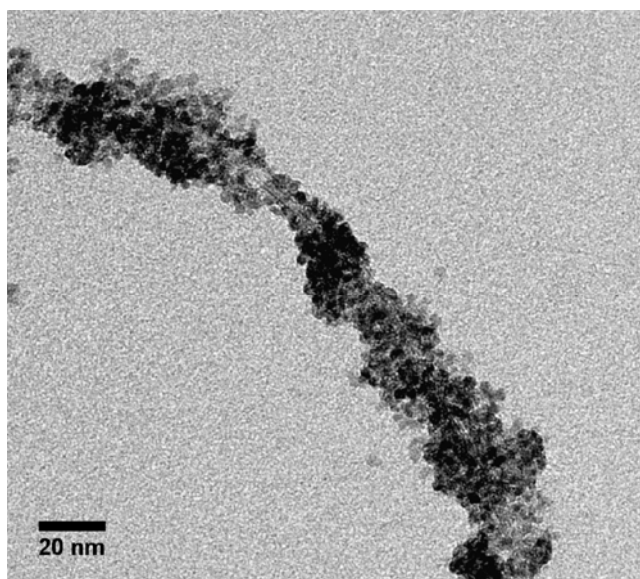


Fig. S1 TEM image of DWCNTs with zinc containing material at the carbon lattice formed immediately upon KOH injection.

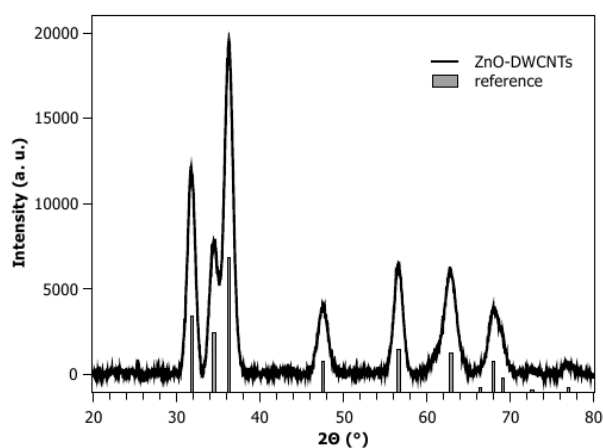


Fig. S2 XRD pattern of the ZnO-DWCNT composites.

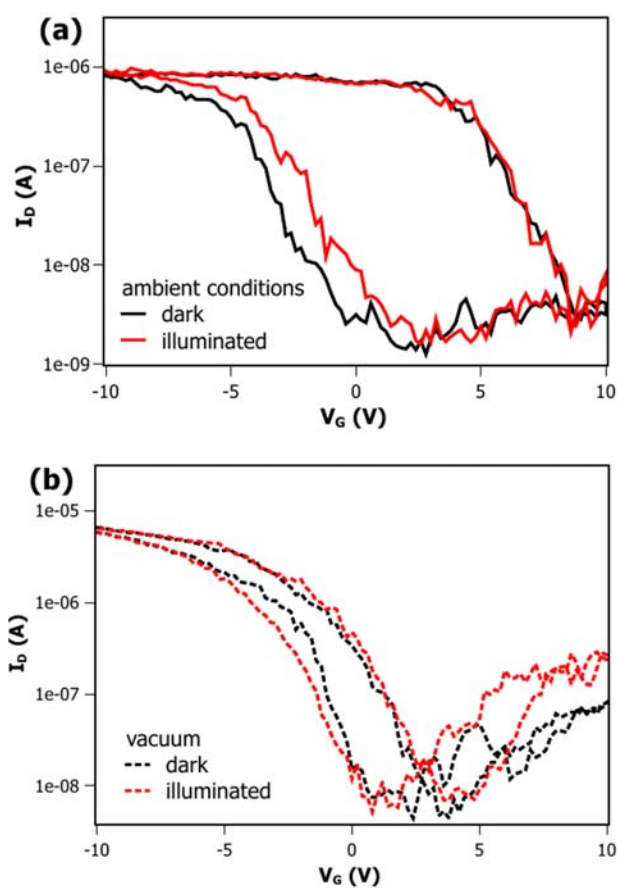


Fig. S3 Comparison of DWCNT FET transfer characteristics with (red line) and without illumination (black line) (a) under ambient and (b) reduced pressure conditions. Measurements were performed at a bias of $V_{DS}=+1$ V.

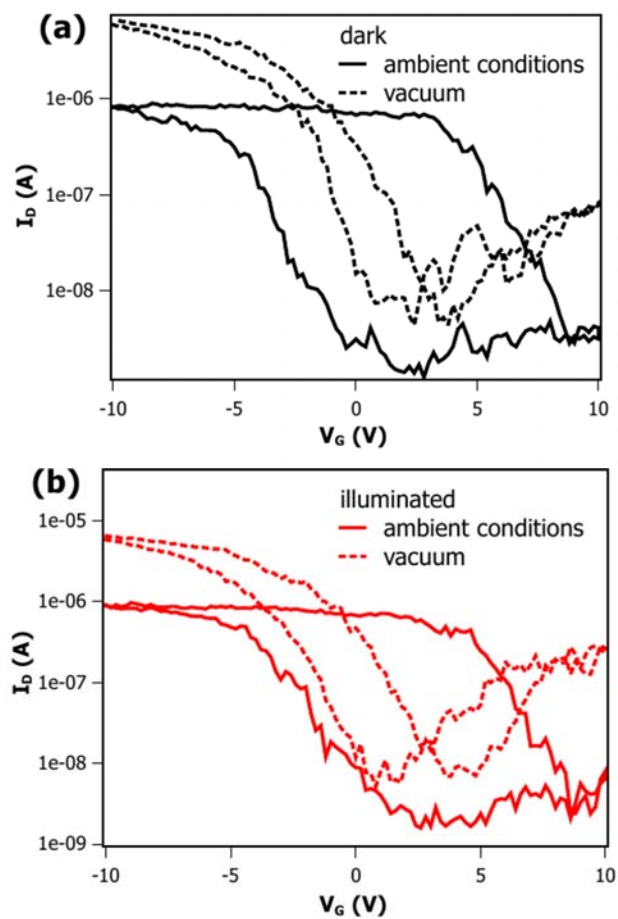


Fig. S4 Comparison of DWCNT FET transfer characteristics under ambient (full line) and vacuum conditions (dotted line) (a) without and (b) upon white light illumination (Xenon lamp, 400 W). Measurements were performed at a bias of $V_{DS} = +1$ V.