Supporting Information

Ambient Processed, Water-Stable, Aqueous-Gated sub 1V n-type Carbon Nanotube Field Effect Transistor

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Figure S1:- (A) Resistance information before and after membrane. There is cconsiderable decrease in the source-drain current before and after the channel of the CNTFET is encapsulated with membrane. For these measurement the gate electrode is floating and the resistance is measured in absence of electrolyte. (B) Zoom in view of the current-voltage after membrane is applied on the channel

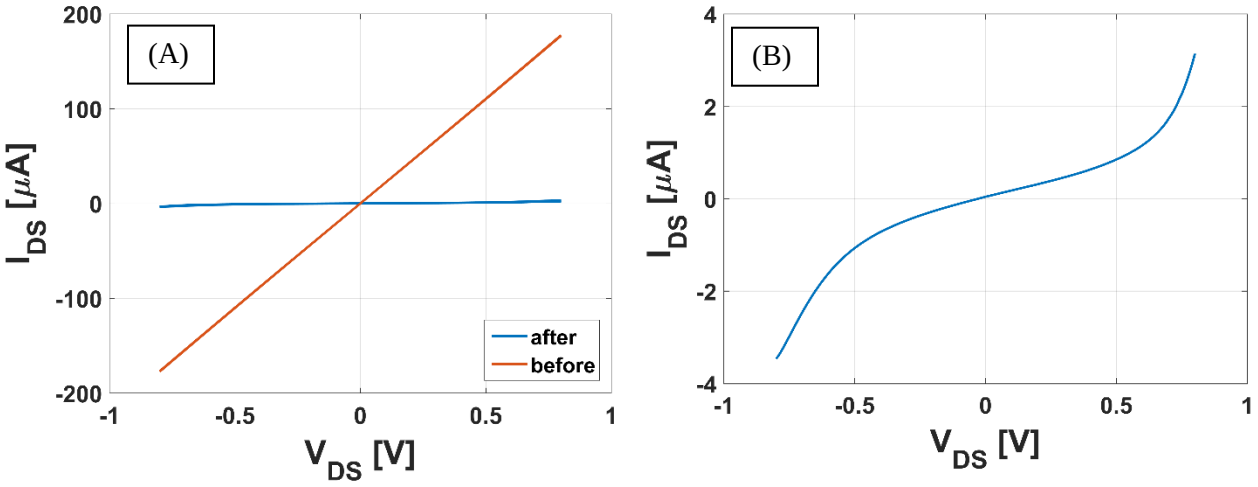

Figure S2:- Semilog plot for the CNTFET shown in Figure 2, (A) before and (B) after CNT channel is encapsulated by the membrane.

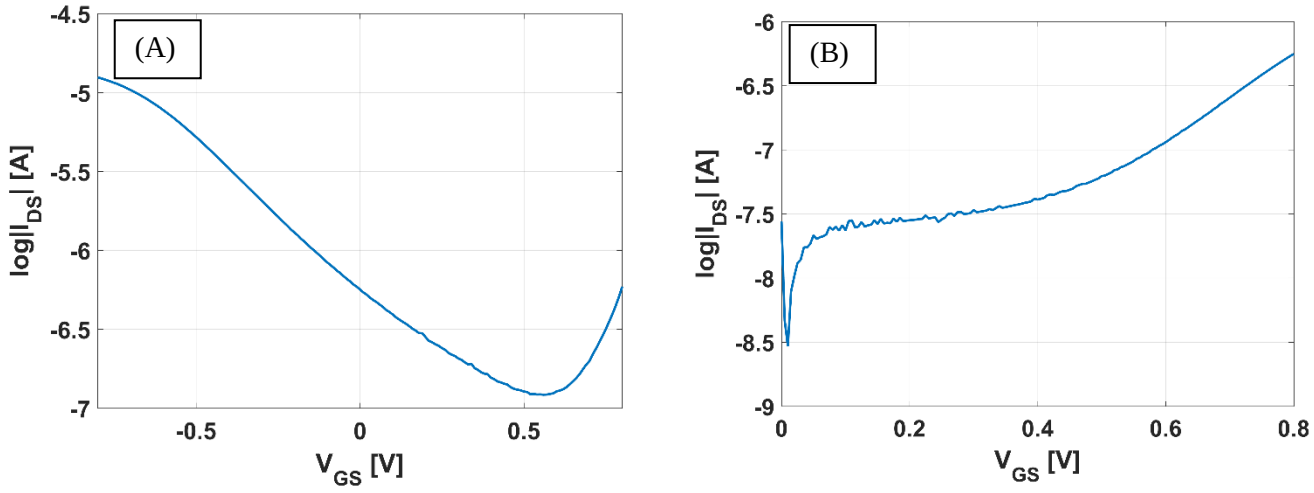

Figure S3:- Transfer curve for a modified n-type CNTFET when the applied gate volatge in the range from -0.8 to +0.8V. The blue line indicates first measurement cycle and orange is the second measurement cycle.

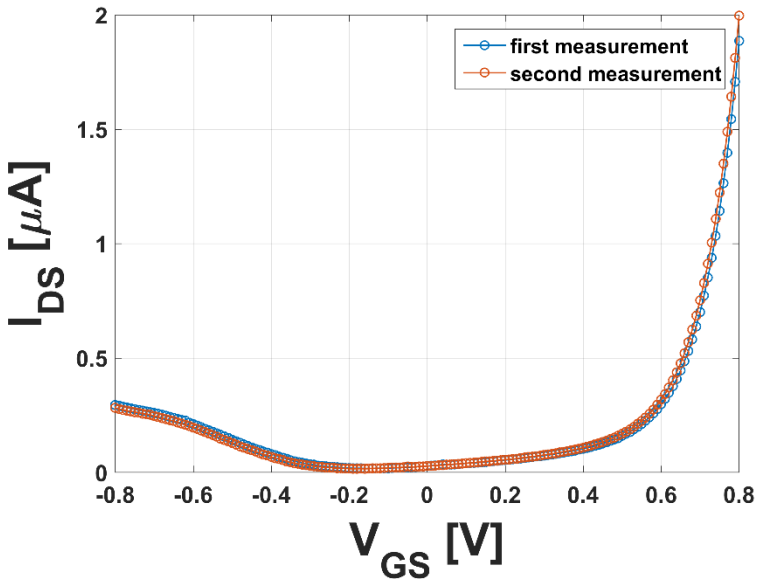

Figure S4:- Transfer curve for the n-type CNTFET measured in saturated KCl after fabrication and re-measured again after two days to get an idea about the stability of the device.

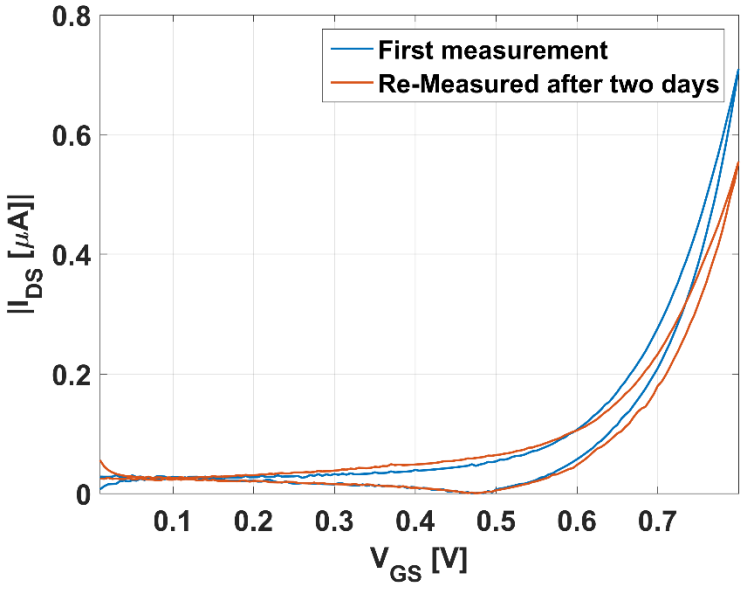

Figure S5:- Transfer curve for p-type CNTFET measured in PBS, KCl and DI-H2O.