## **Supplementary Information**

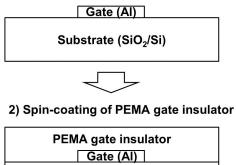
for

Surface grafting of octylamine onto poly(ethylene-*alt*-maleic anhydride) gate insulators for low-voltage DNTT thin-film transistors

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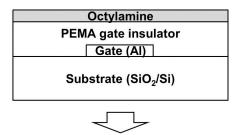
<sup>b</sup>School of Chemical Engineering, Sungkyunkwan University, Suwon 16419, Republic of Korea 1) AI deposition using thermal evaporation



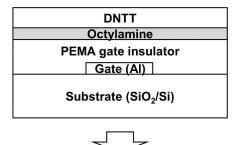
Substrate (SiO<sub>2</sub>/Si)



3) Octylamine treatment by spin-coating



4) DNTT deposition using thermal evaporation



5) DNTT deposition using thermal evaporation

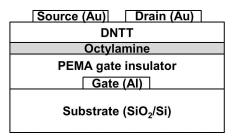
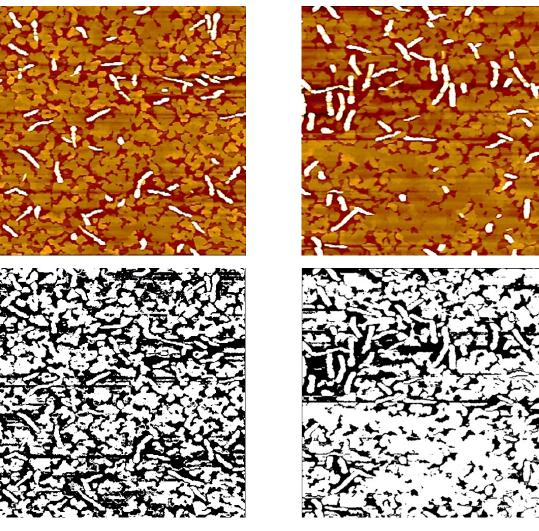


Fig. S1 Scheme of the TFT device fabrication.

## non-treated



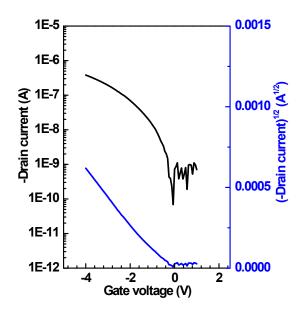
→  $100 - 49.544 = 50.467 \ \mu m^2$ 

→ 100 – 30.711 = 69.289  $\mu$ m<sup>2</sup>

octylamine-treated

🛓 Results							
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	Area	Mean	Min	Мах	MinThr	MaxThr	<u> </u>
1	49.533	255	255	255	9	255	
2	30.711	255	255	255	255	255	
•							

**Fig. S2** The surface coverage measurement of the 12 nm-thick DNTT layers on non-treated and octylamine-treated PEMA thin films.



**Fig. S3** Transfer characteristic ( $I_{ds}$  vs.  $V_{gs}$ ) of the DNTT TFTs with the 60 nm-thick SiO<sub>2</sub> gate insulator.