

# RSC Advances Supporting Information

## Relationship between Dipole Moment of Self-Assembled Monolayers Incorporated in Graphene Transistors and Device Electrical Stabilities

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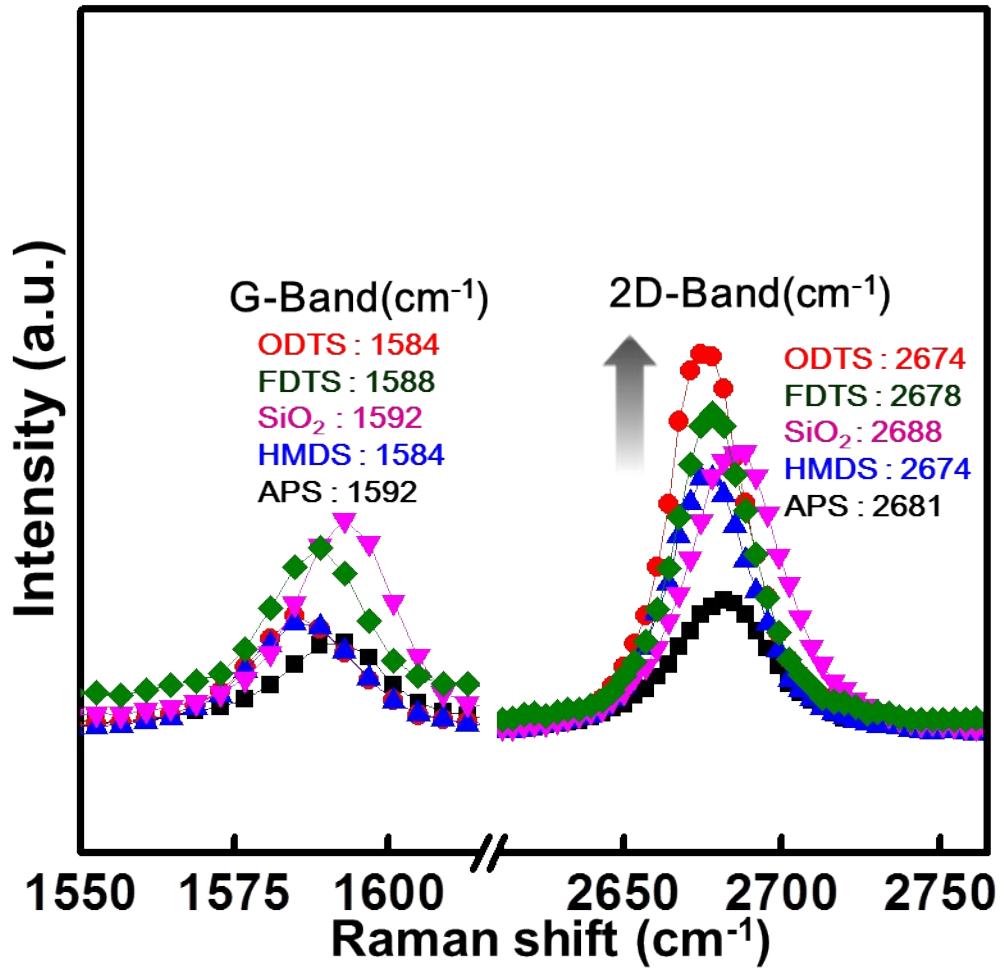
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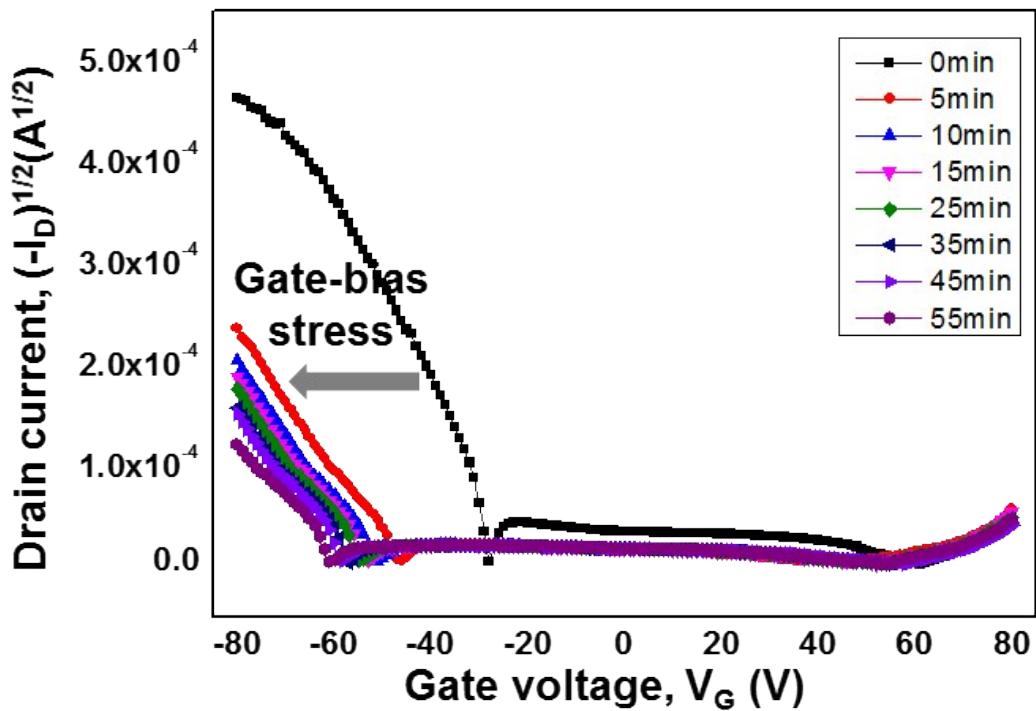
**Table S1.** Water contact angle and thickness of the SAMs used in this study.

	Water contact angle (°)	Thickness (Å) <sup>a</sup>
SiO <sub>2</sub>	< 5	-
HMDS	66	3
ODTS	104	24
APS	50	7
FDTs	107	16

<sup>a</sup> Measured by the ellipsometry.



**Figure S1.** Raman spectra of graphene on various SAMs-modified  $\text{SiO}_2/\text{Si}$  substrates.



**Figure S2.** Bias stability of pentacene FETs with ODTs SAMs after gate bias stress of  $-80$  V. The transfer curves at the saturation regime ( $V_{SD} = -80$  V) were consecutively obtained at the following time intervals: 0, 5, 10, 15, 25, 35, 45, and 55 min.