

RSC Advances Supporting Information

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

Gwang Mo Ku¹, Eunho Lee², Boseok Kang², Jung Hun Lee¹, Kilwon Cho², Wi Hyoung Lee^{1, *}

¹Department of Organic and Nano System Engineering, Konkuk University, Seoul 143-701, Korea.

²Department of Chemical Engineering, Pohang University of Science and Technology, Pohang 790-784, Korea.

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

	Water contact angle (°)	Thickness (Å) ^a
SiO ₂	< 5	-
HMDS	66	3
ODTS	104	24
APS	50	7
FDTS	107	16

^a Measured by the ellipsometry.

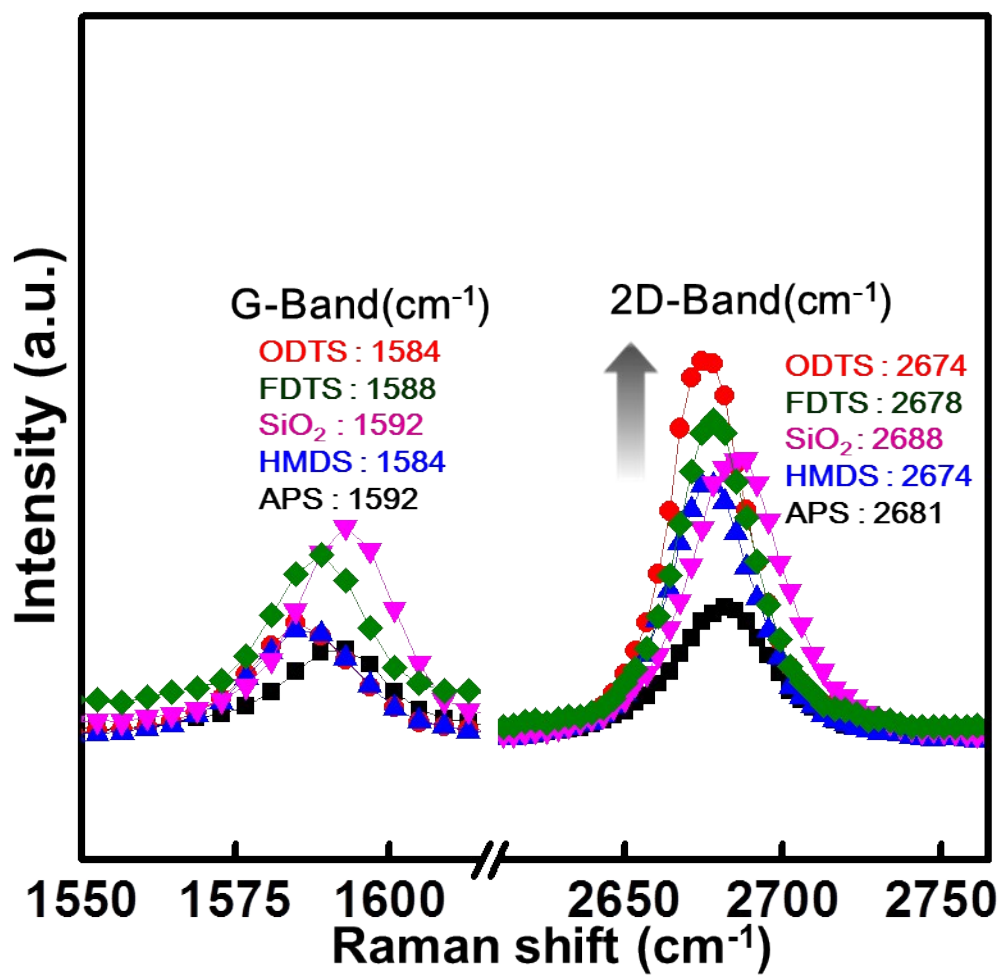


Figure S1. Raman spectra of graphene on various SAMs-modified SiO₂/Si substrates.

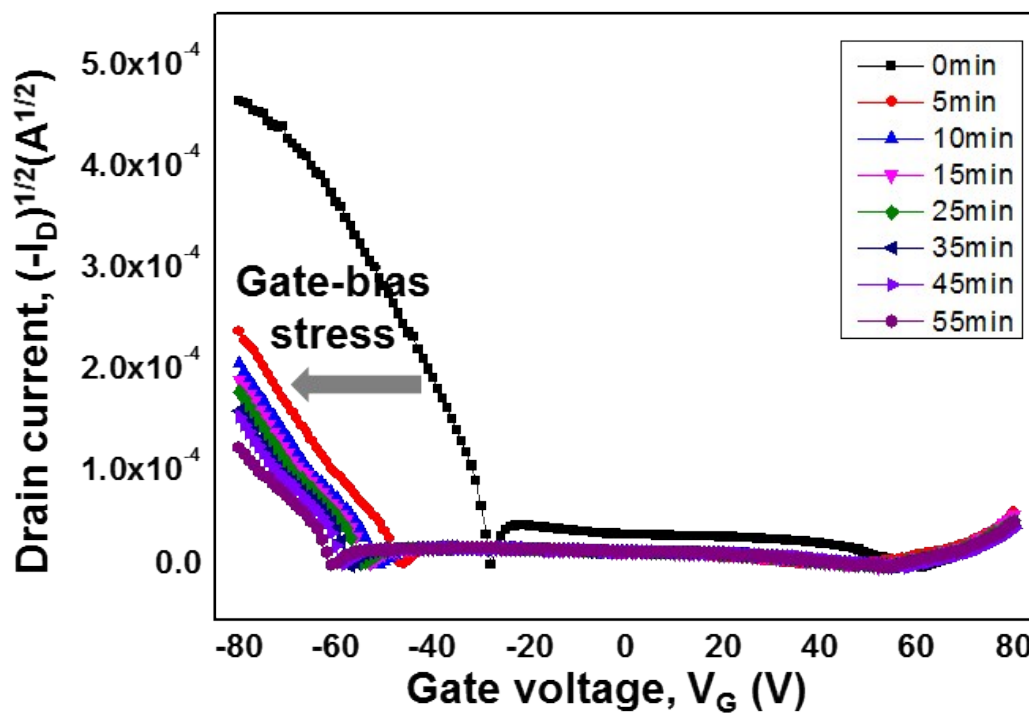


Figure S2. Bias stability of pentacene FETs with ODTS SAMs after gate bias stress of -80 V. The transfer curves at the saturation regime ($V_{SD} = -80$ V) were consecutively obtained at the following time intervals: 0, 5, 10, 15, 25, 35, 45, and 55 min.