Supporting Information for

Atomically-thin Molecular Layer for Electrode Modification of Organic Transistors

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Figure S1. Raman spectra of various aryl–functionalized rGOs deposited onto Au electrodes. Raman spectra of all rGO samples displayed two prominent peaks corresponding to the D peak at 1335 cm⁻¹ and the G peak at 1582 cm⁻¹.



Figure S2. Surface energies of the Au electrodes treated with various aryl–functionalized GOs (black) and rGOs (red).



Figure S3. Ultraviolet photoemission spectra of the Au electrodes treated with various aryl–functionalized rGOs.



Figure S4. Output characteristics $(I_D - V_D \text{ plots})$ of (a) p-type pentacene OFETs ($V_G = 0 \sim -60 \text{ V}$, step size: 15 V) and (b) n-type PTCDI-C₈ OFETs ($V_G = 0 \sim 60 \text{ V}$, step size: 15 V) based on Au electrodes treated with various aryl-functionalized GOs (line) and rGOs (dotted line).



Figure S5. AFM images of the pentacene films deposited onto ODTS, Au, and Au treated with CH₃O-Ph-rGO. The pentacene films deposited onto Au surface exhibited irregularly-shaped grains, while the pentacene films on CH₃O-Ph-rGO surface showed globular structure.