

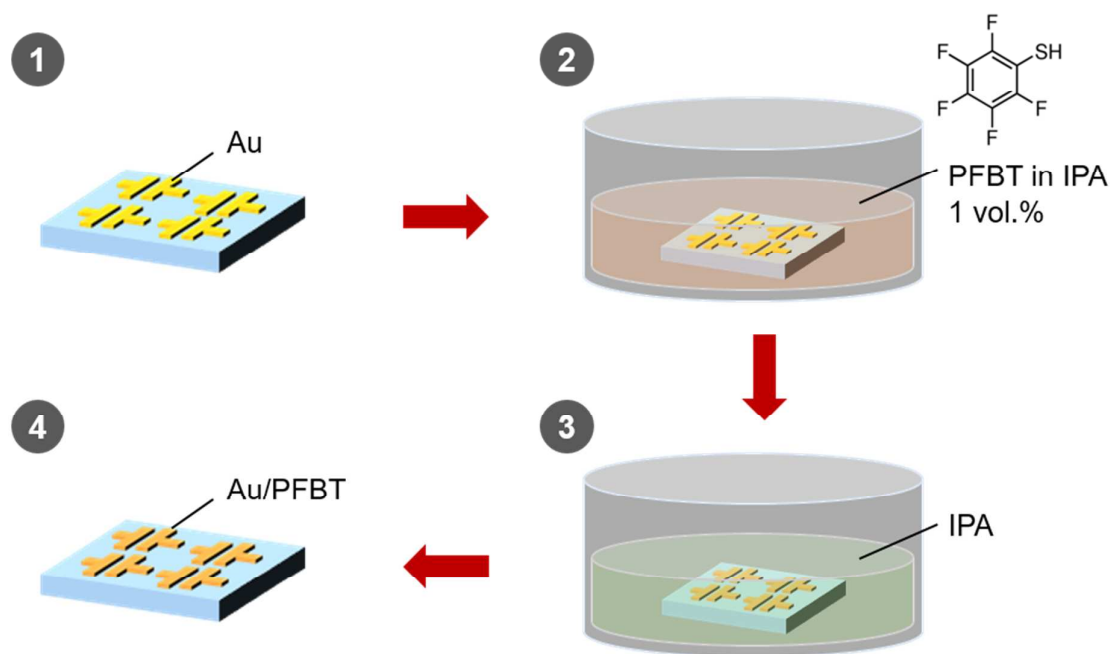
# Supporting Information

## High Speed Ultraviolet Phototransistors based on an Ambipolar Fullerene Derivative

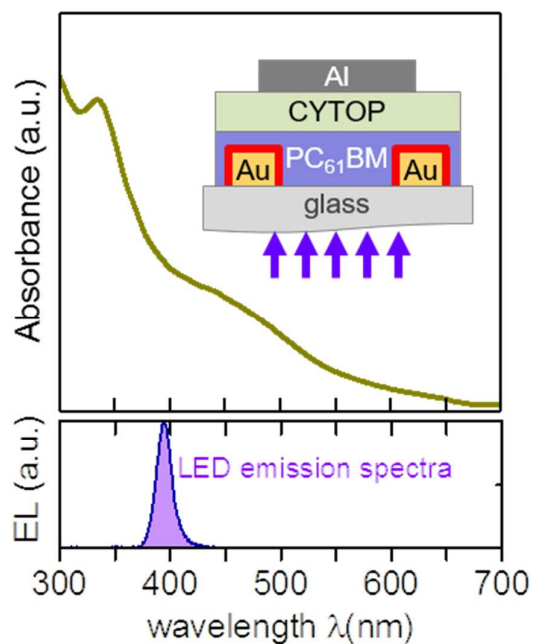
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SI Figures



**Figure S1.** Schematic representation of PFBT application process. (1) Au source and drain contact were thermally evaporated on glass substrate through shadow mask. (2) The whole substrate was immersed into a 1:100 vol.% diluted solution of PFBT in IPA for 1 h. (3) The substrate was then rinsed-off with pure IPA to remove the excess of PFBT. (4) The obtained substrate was eventually dried through a 10-min annealing process at 100 °C in nitrogen.



**Figure S2.** Absorption spectrum of a PC<sub>61</sub>BM layer and electroluminescence (EL) spectrum of the UV LED used for optoelectronic characterisation of the devices. Inset: schematic of the TG-BC transistor architecture employed and the geometry of the UV illumination employed (from the bottom).