Supporting Information

Improving organic memory performance through mounting conjugated branches on a triphenylamine core


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Fig. S1 TGA curves of the three compounds measured in nitrogen atmosphere at a heating rate of 10 °C·min⁻¹.

Fig. S2 The electronic photos of the three compounds film at room temperature: TPA-BBT (right); TPA-2BBT (middle); TPA-3BBT (left).
Fig. S3 Tapping-mode height of AFM topographic images of compounds thin film vacuum-deposited onto ITO at different annealing temperatures: TPA-BBA (a (60 °C), b (100 °C)); TPA-2BBA (c (60 °C), d (80 °C)).

Fig. S4 Tapping-mode height of AFM topographic images of TPA-3BBA thin film vacuum-deposited onto ITO at different annealing temperatures: a (r. t.), b (60 °C), c (80 °C), d (100 °C), e (120 °C).
**Fig. S5** Cyclic voltammetry (CV) curves of the ferrocene in anhydrous dicholomethane solution with 0.1 M Bu₄NPF₆ as the supporting electrolyte. The scan rate was 100 mV·s⁻¹.

**Fig. S6** The schematic illustration of the TPA-nBBT (n=1,2,3) molecular size which was obtained from theoretical calculations (a)TPA-BBT; (b) TPA-2BBT; (c) TPA-3BBT.