

SUPPORTING INFORMATION

Binder polymer influence on the electrical and UV response in organic field-effect transistors

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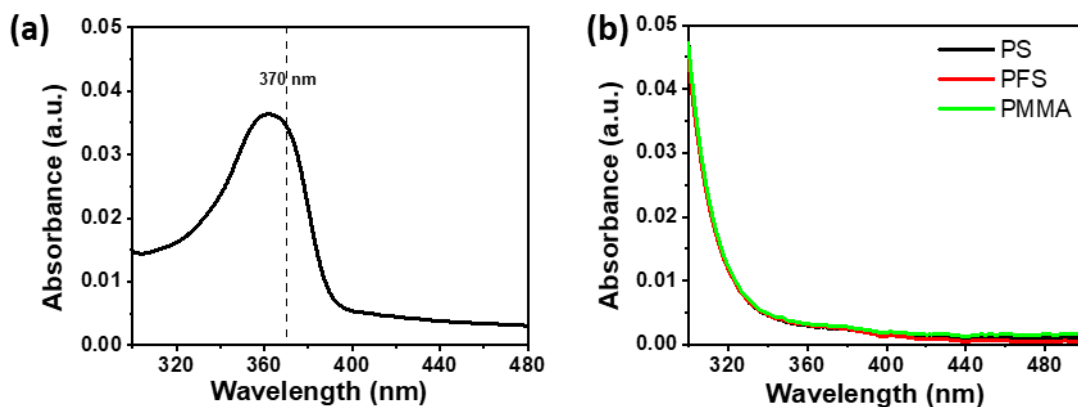


Figure S1. UV-Vis spectra of (a) thin film of Ph-BTBT-10 and b) PMMA, PS and FPS thin films. The dashed lines are the wavelength of UV LED employed in this work for the phototransistor measurements.

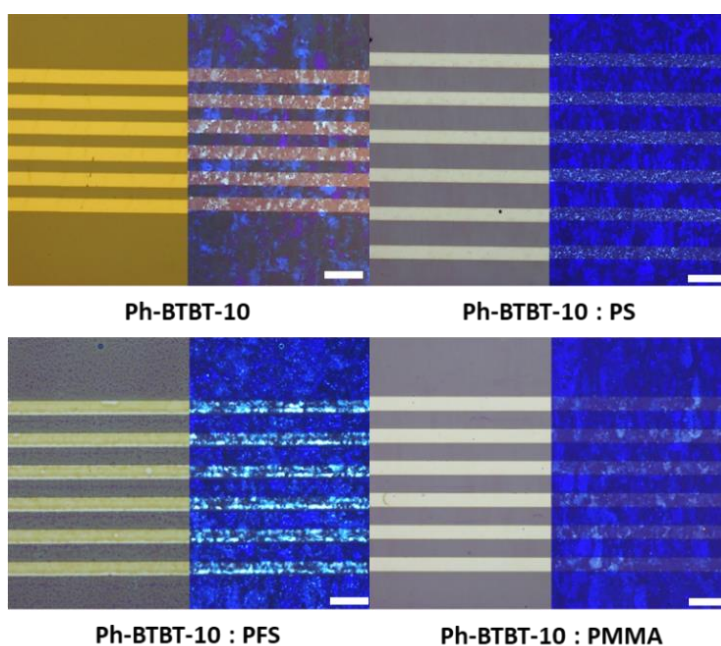


Figure S2. Non-polarised (left) and polarised (right) optical microscopy images of the films based on Ph-BTBT-10 and Ph-BTBT-10 blended with PS, PFS and PMMA deposited by BAMS on a SiO₂/Si substrate with interdigitated electrodes. Scale bar: 100 μm .

Table S1. Thickness and roughness of the films prepared extracted by AFM and relative permittivity of the binding polymers.

	Thickness (nm)	Roughness (nm)	ϵ_r
Pristine	21.7±3.7	3.1±1.9	
PS	22.8±5.4	4.9±1.6	2.2
PFS	19.3±7.2	6.0±0.7	2.8
PMMA	22.2±4.5	2.3±1.6	3.5

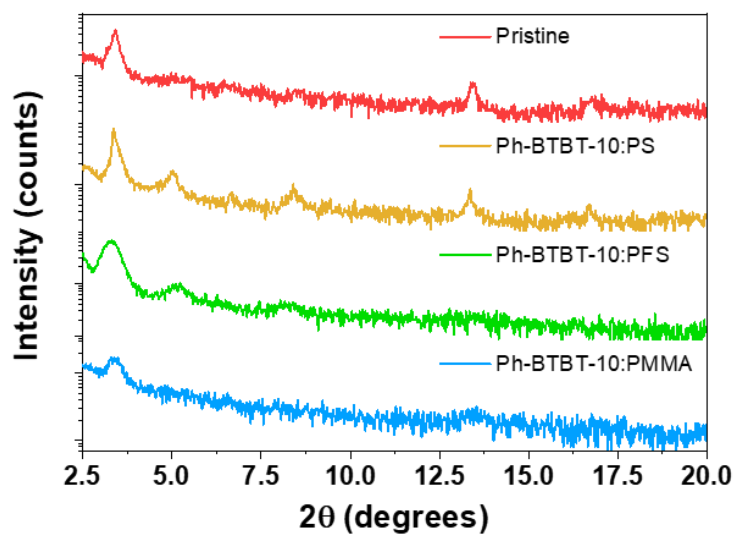


Figure S3. XRD diffractograms of thin films based on Ph-BTBT-10 and Ph-BTBT-10 blended with PS, PFS and PMMA.

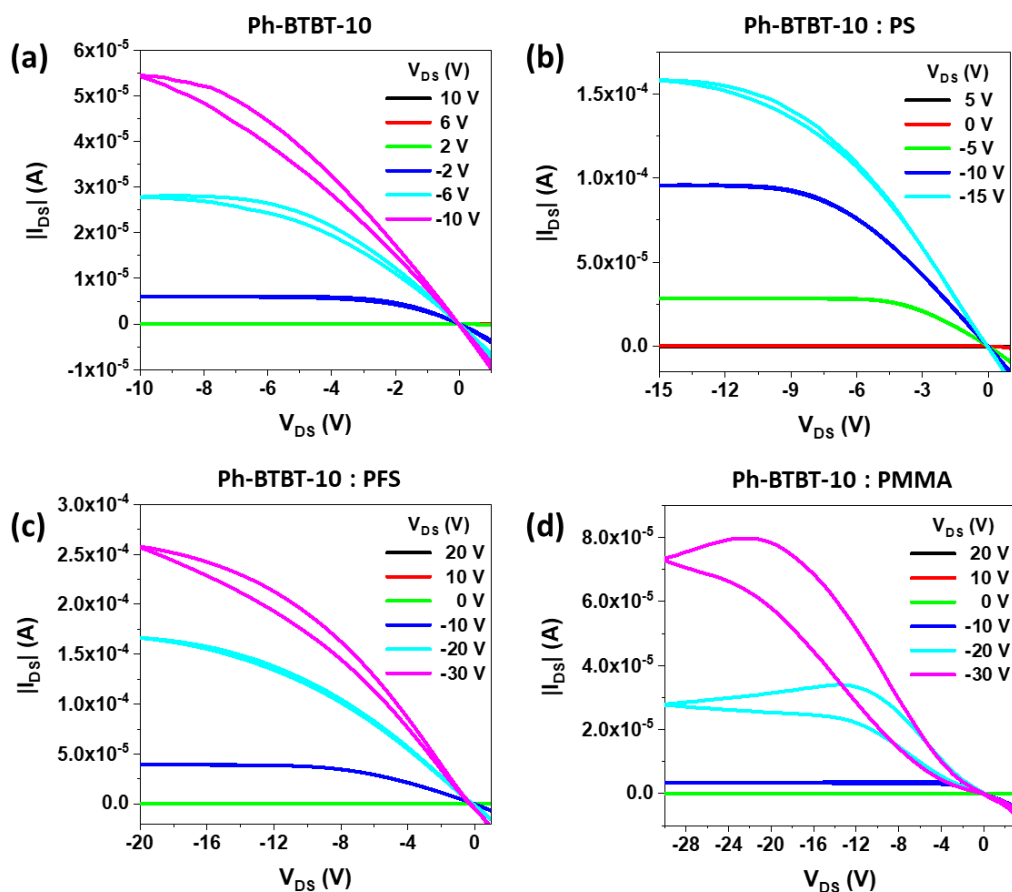


Figure S4. Output characteristics of the OFETs based on Ph-BTBT-10 (a), and Ph-BTBT-10 blended with PS (b), PFS (c) and PMMA (d).

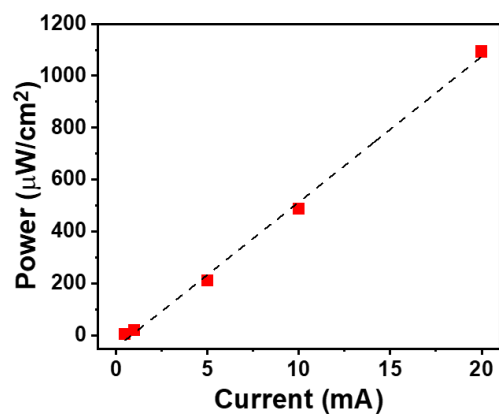


Figure S5. Power emitted versus current of UV LED.

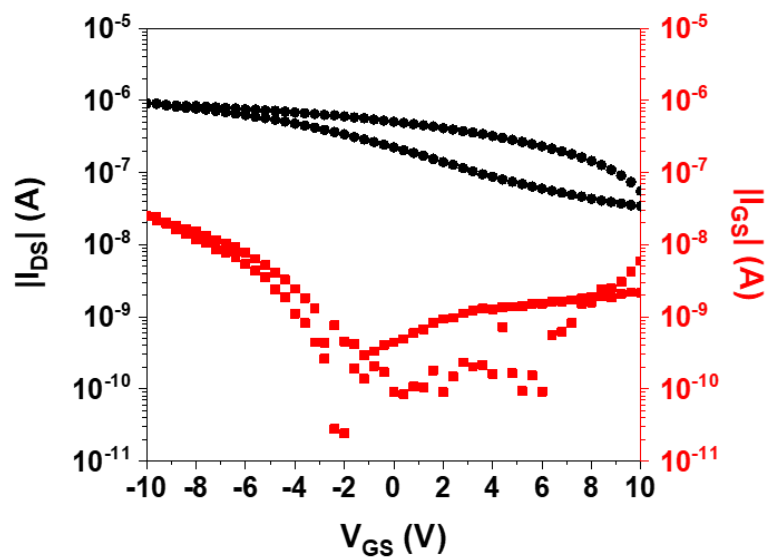


Figure S6. Transfer curves of an OFET based on Ph-BTBT-10:PFS under UV illumination. The black and red line corresponds to the drain and gate current, respectively.