

## Electronic Supplementary Information

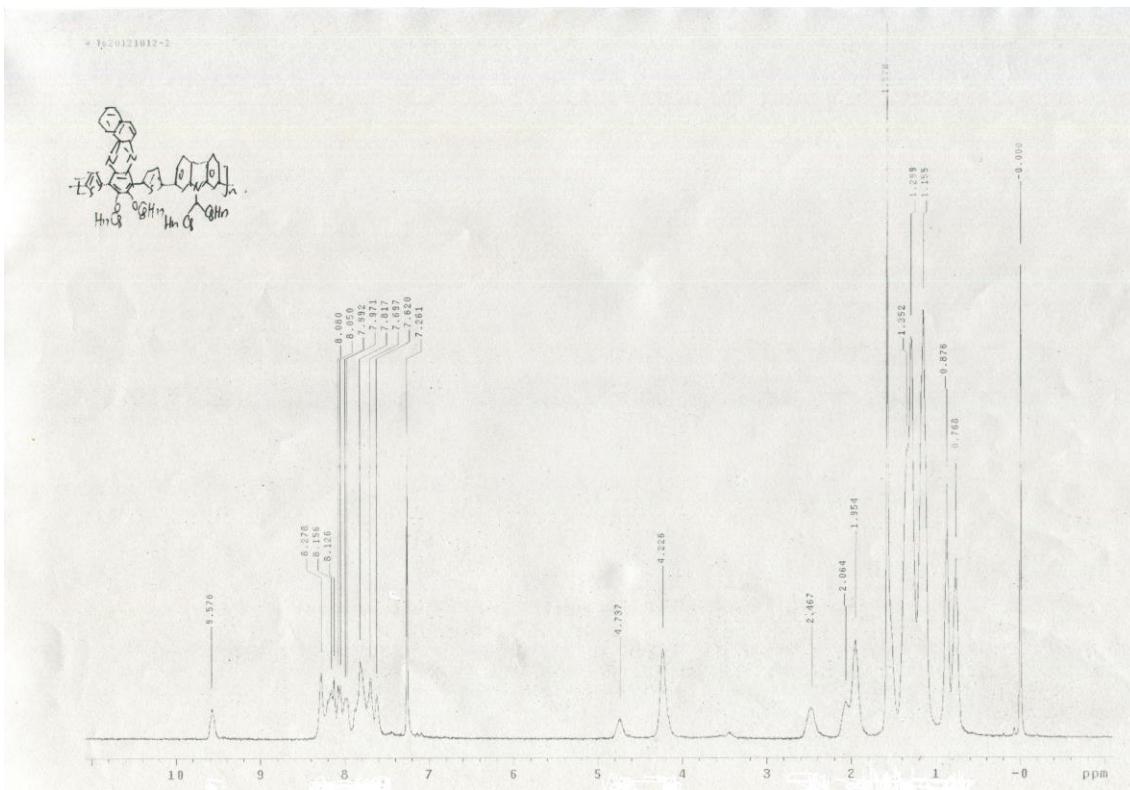
# Copolymers of carbazole and phenazine derivatives: minor structural modification, but totally different photodetector performance

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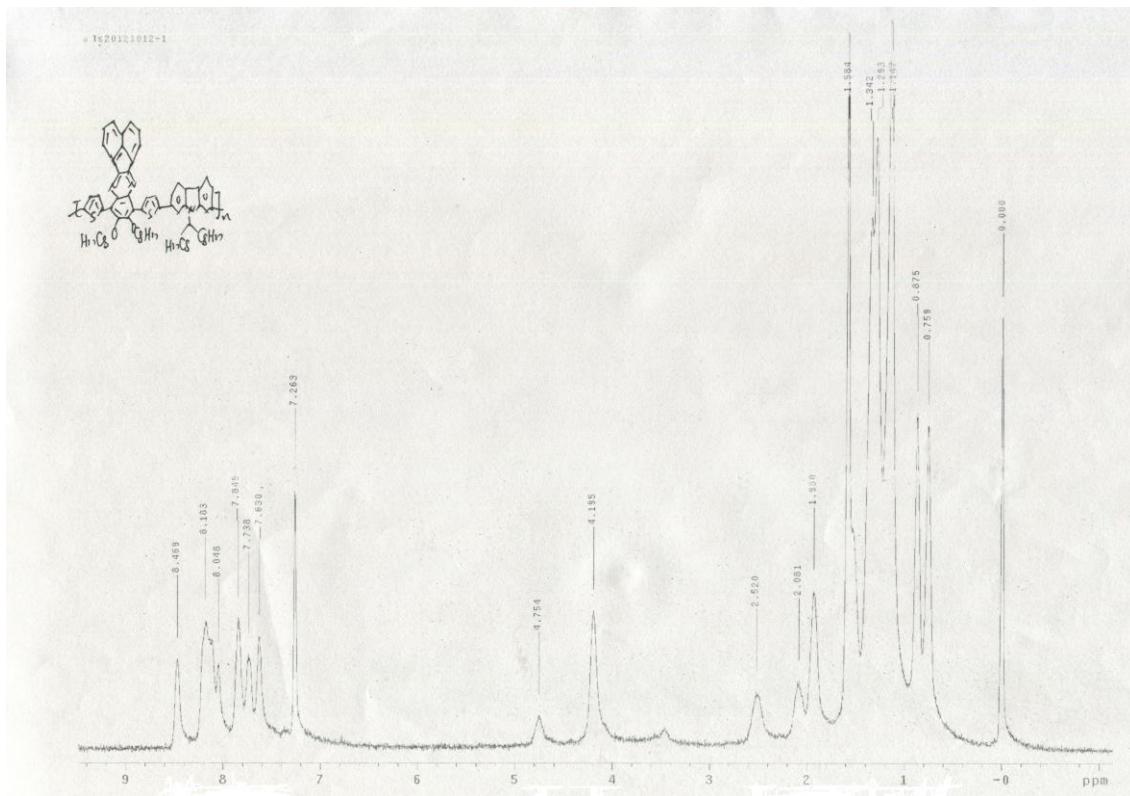
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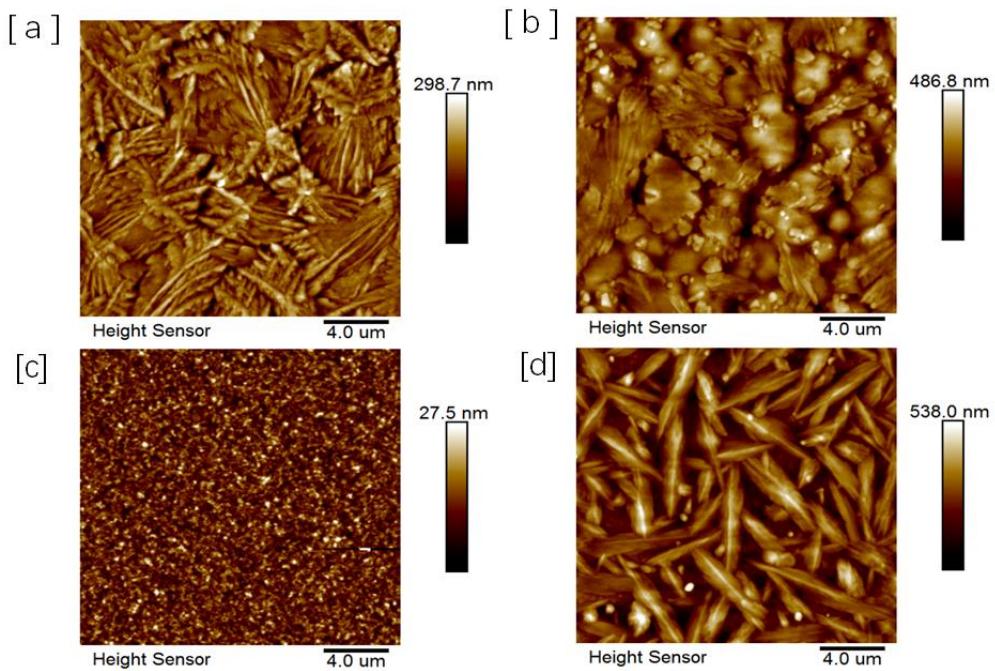
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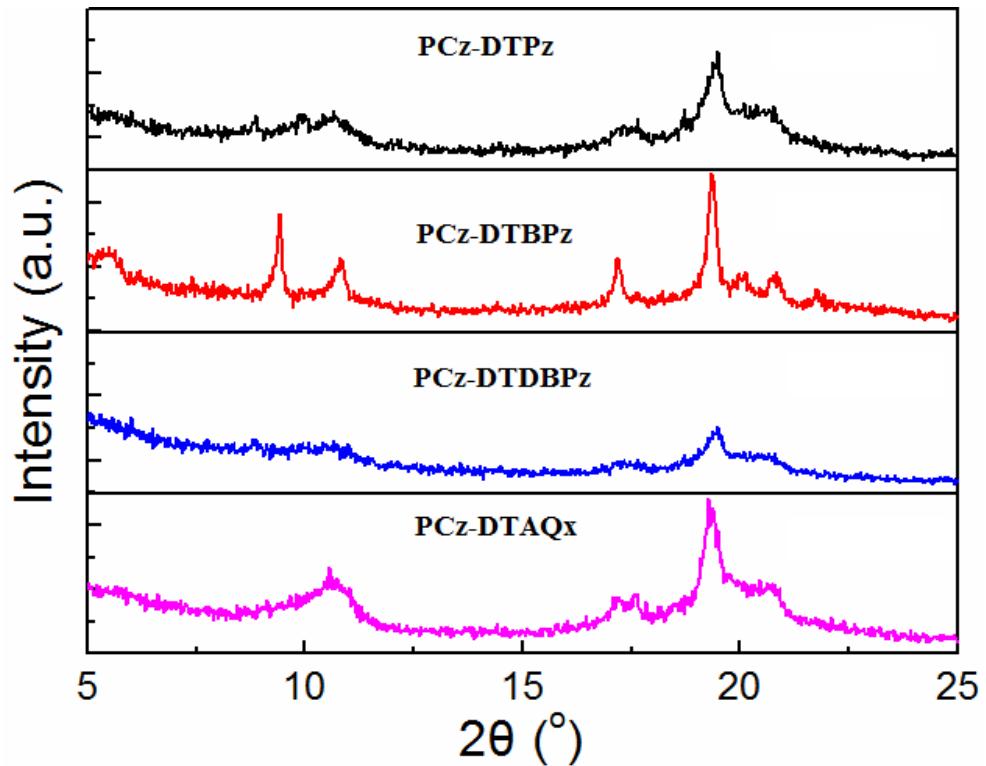
**Figure S1.** The  $^1\text{H}$  NMR spectrum of PCz-DTDBPz conducted in chloroform- $d$ .



**Figure S2.** The  $^1\text{H}$  NMR spectrum of PCz-DTAQx conducted in chloroform- $d$ .



**Figure S3.** AFM images of the active layers from the polymers (polymer: PC<sub>71</sub>BM system). a) PCz-DTPz; b) PCz-DTBPz; c) PCz-DTDBPz; and d) PCz-DTAQx.



**Figure S4.** XRD patterns of the active layers from the polymers (polymer: PC<sub>71</sub>BM system).