

Supporting Information

Ultra-fast spin-mixing in a diketopyrrolopyrrole monomer / fullerene blend charge transfer state

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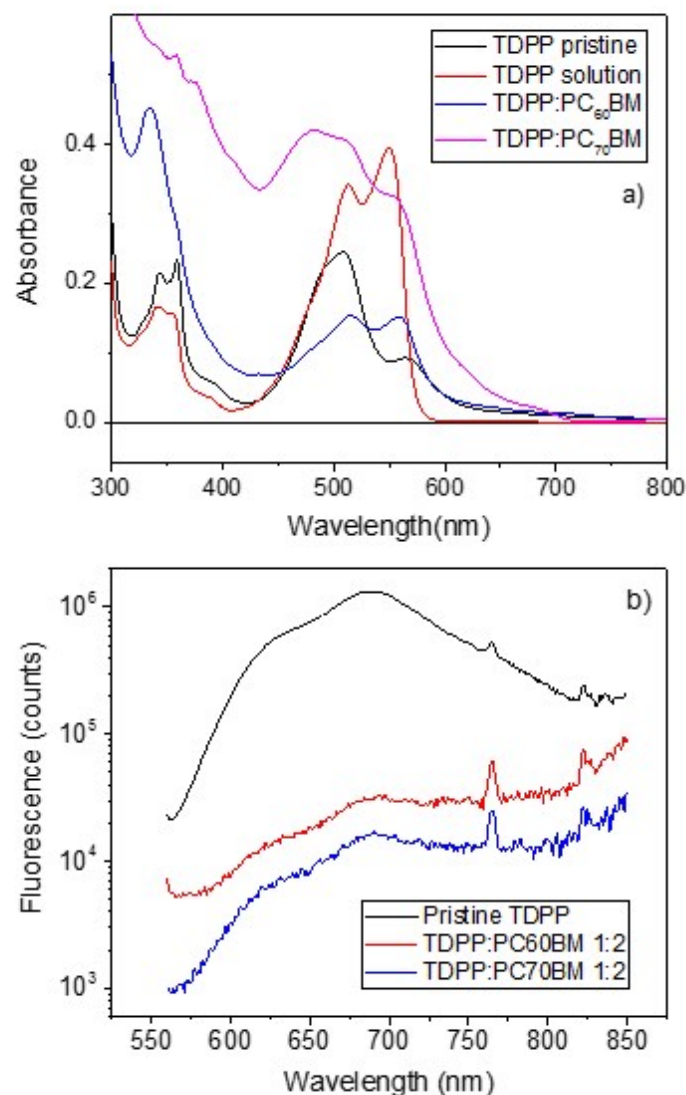


Figure S1. (a) The ground state absorbance spectra of the pristine TDPP film compared to solution (6 % o-dichlorobenzene, 94 % chloroform by volume), along with the two blend films of TDPP:PC₆₀BM and TDPP:PC₇₀BM (both 1:2 by weight). (b) The fluorescence quenching from pristine TDPP to the blend films with fullerene.

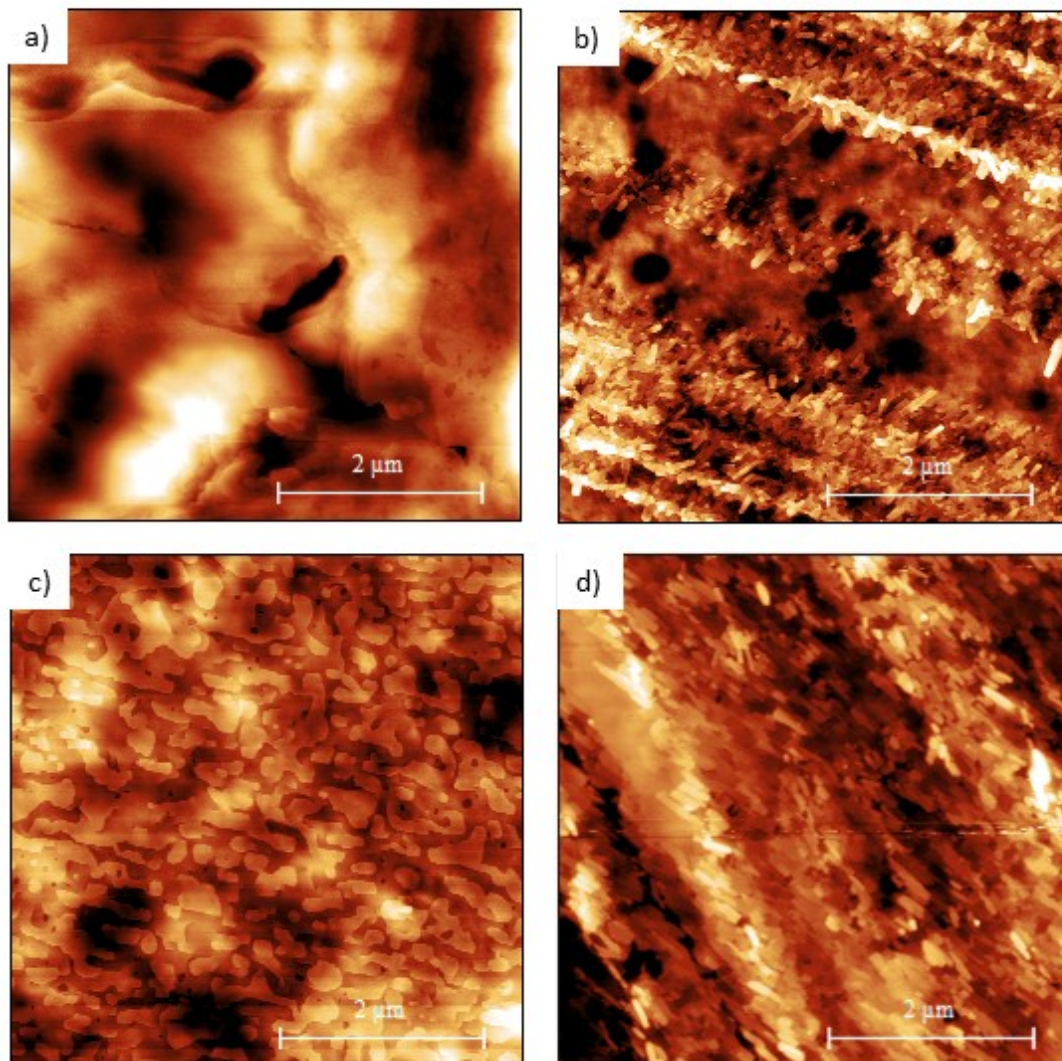


Figure S2. AFM images (scale bar is 2 μm) for (a) pristine TDPP, (b) TDPP:PC₆₀BM (1:2), (c) TDPP:PC₆₀BM (1.6:1), and (d) TDPP:PC₇₀BM (1:2).

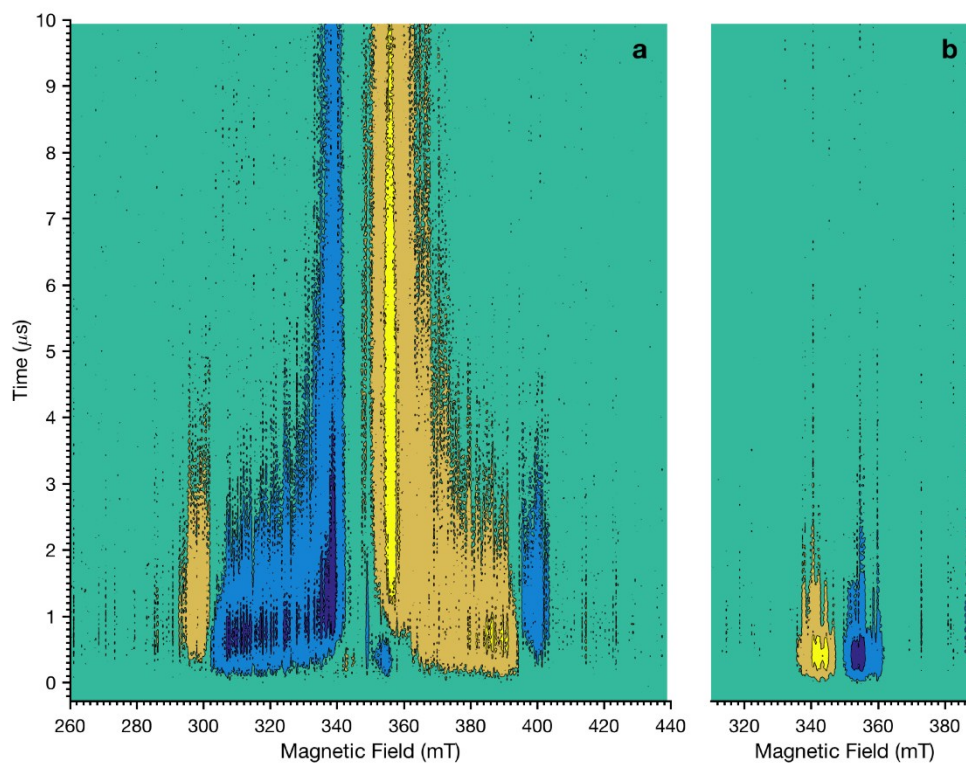


Figure S3. Contour representations of the 2D TR-EPR surfaces correlating the signal intensity as a function of magnetic field and time. (a) TDPP:PC₇₀BM 1:2 blend and (b) PC₇₀BM film. Visual comparison suffices to attribute the central feature in the TDPP:PC₇₀BM 1:2 blend spectrum to a PC₇₀BM triplet generated via ISC.

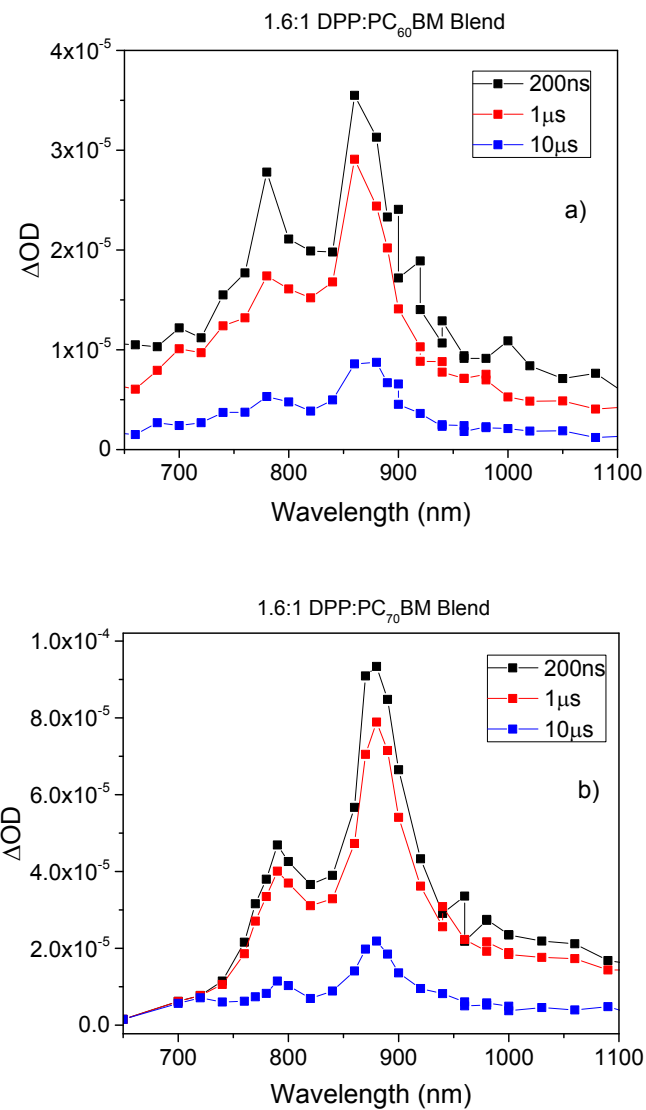


Figure S4. The μ s transient absorption spectra films of (a) TDPP:PC₆₀BM and (b) TDPP:PC₇₀BM, both 1.6:1 by weight, using 510 nm and 130 μ J cm⁻² excitation.