

Supporting Information

Controlling the Pore Size in Conjugated Polymer Films via Crystallization-Driven Phase Separation

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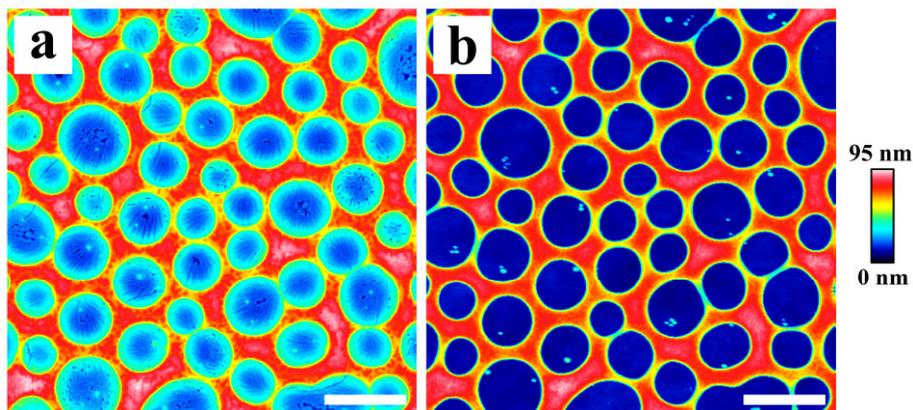


Figure S1. AFM height images of porous P3HT matrix structure before (a) and after (b) selective removal of PEG using deionized water. The size of the scale bar is 4 μm .

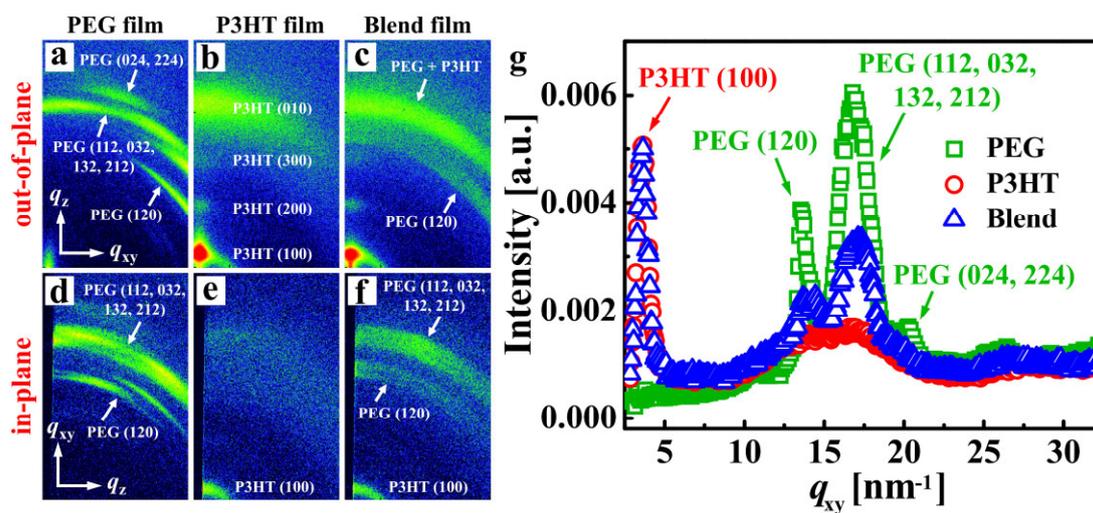


Figure S2. 2D GIWAXS patterns of different films: (a) pure PEG film, (b) pure P3HT film and (c) P3HT:PEG (6:4) blend film. (d) The 1D GIWAXS curves correspond to the in-plane diffractions of (d-e).

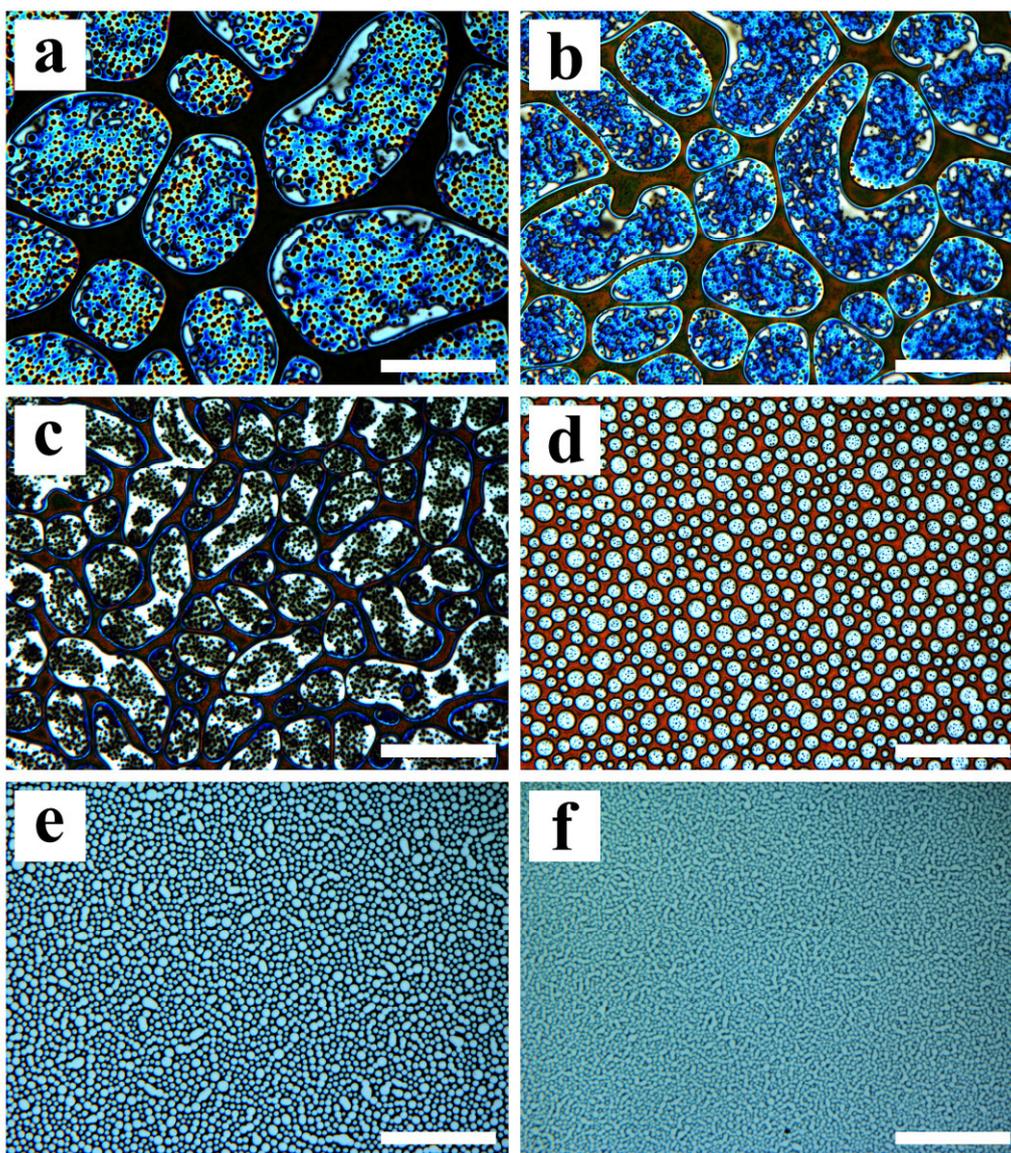


Figure S3. Optical microscope images of P3HT:PEG (6:4) blend films prepared from solutions having concentrations of (a) 5.0 wt-%, (b) 4.0 wt-%, (c) 3.0 wt-%, (d) 2.0 wt-%, (e) 1.0 wt-% and (f) 0.5 wt-%. The size of the scale bar is 40 μm .

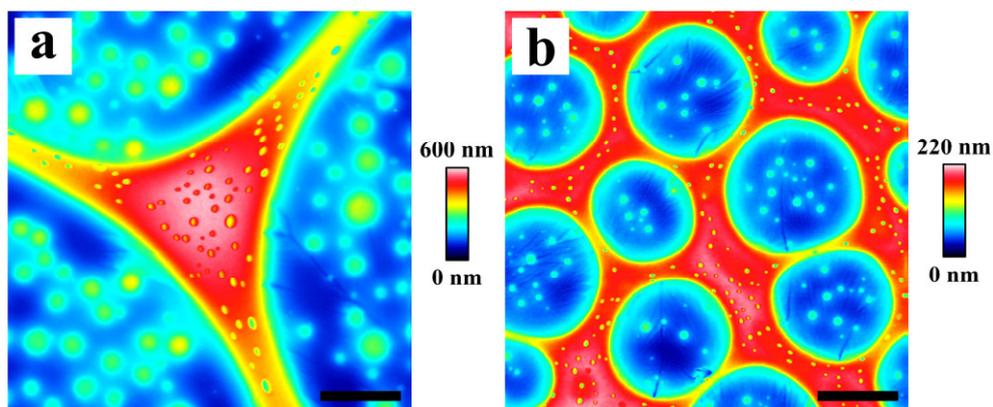


Figure S4. AFM height images of P3HT:PEG (6:4) blend films, prepared from solutions having concentrations of (a) 3.0 wt-% and (b) 2.0 wt-%. The size of the scale bar is 4 μm .

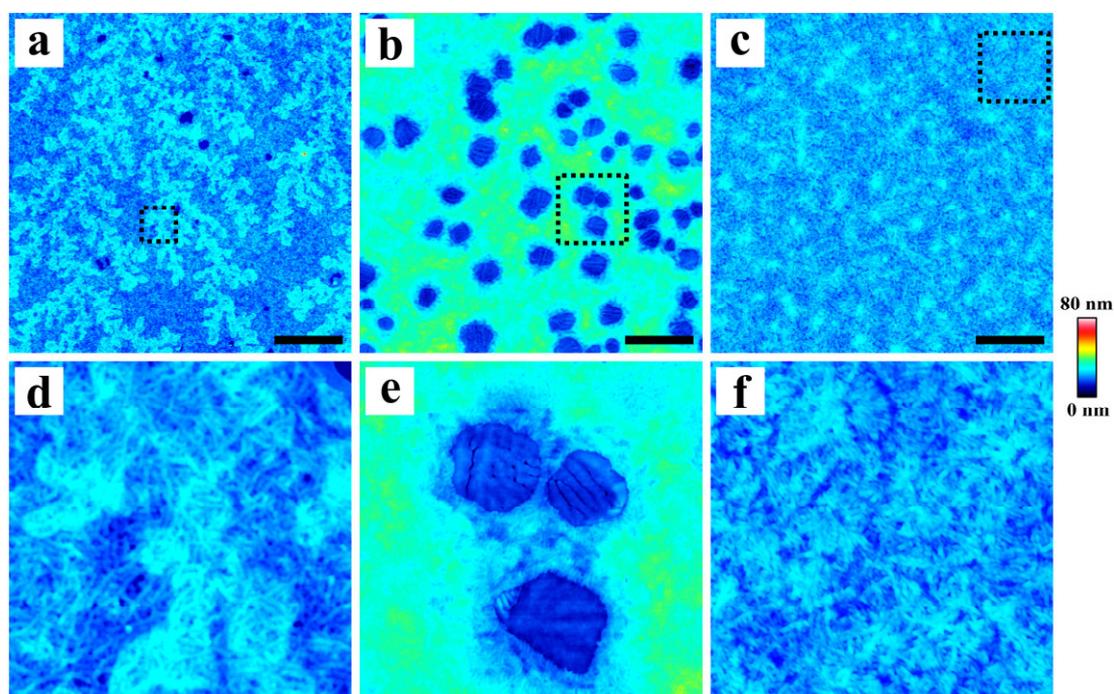


Figure S5. AFM height images of P3HT:PEG (7:3) blends, prepared from solutions having concentrations of 0.1 wt-%, produced at drop casting temperature (T_{dr}): (a, d) 40 °C, (b, e) 50 °C and (c, f) 60 °C. (d), (e) and (f) Detailed images of the regions selected by the dotted black square in (a), (b) and (c), respectively. The size of the scale bar is 2 μm .