

## Supplementary Information

### Improved Efficiency in Fullerene and Non-fullerene Polymer Solar Cells having an Interdigitated Interface with the Electron Transport Layer

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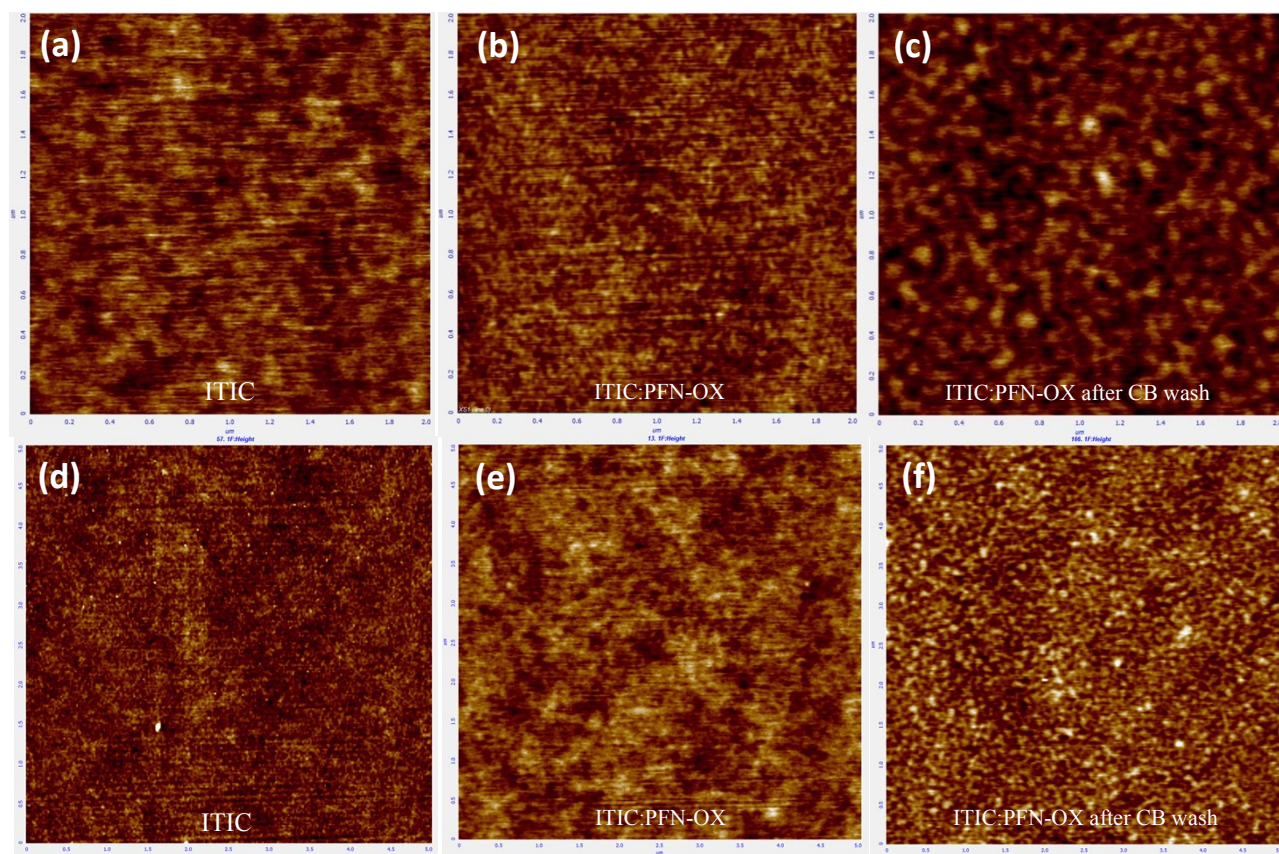


Figure S1. SPM topography images of (a and d) pristine ITIC, and ITIC:PFN-OX (92.5:7.5 wt.%) blend film (b and e) before and (c and f) after CB rinsing. Image size of (a-c) is 2  $\mu\text{m} \times 2 \mu\text{m}$ , and image size of (d-f) 5  $\mu\text{m} \times 5 \mu\text{m}$ .

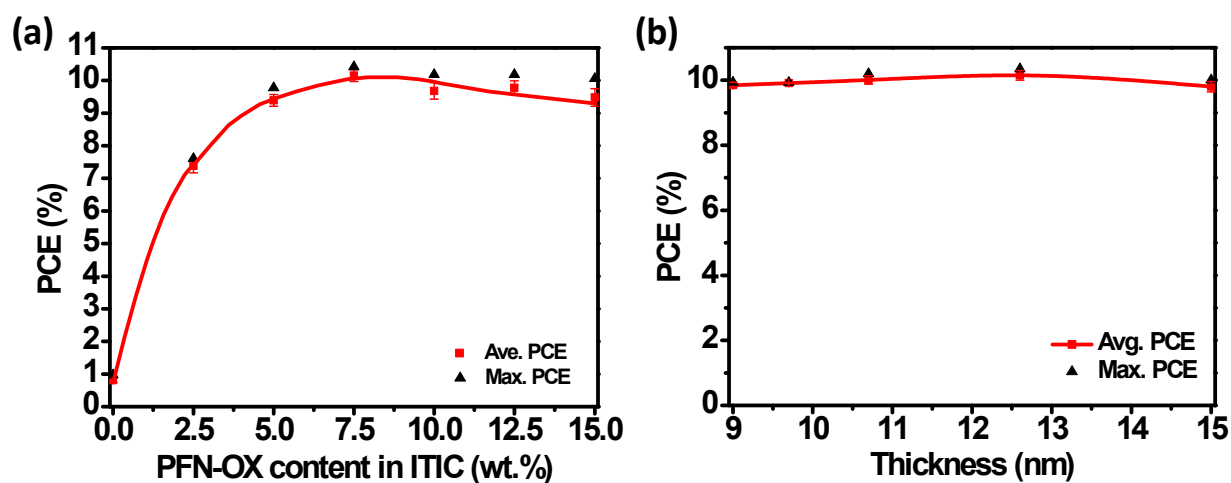


Figure S2. (a) Device PCE as a function of PFN-OX:ITIC ratio in the casting solution. (b) Device PCE as a function of thickness of the ITIC-templated PFN-OX ETL (with a fixed ratio of 7.5:92.5 wt.% in the casting solution).

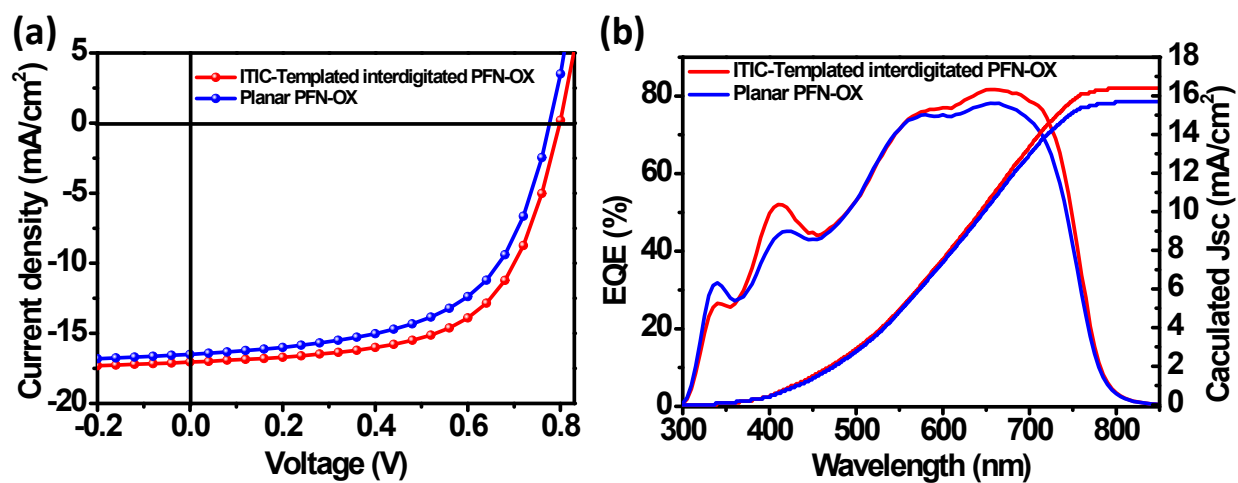


Figure S3. (a) champion J-V curves, (b) corresponding EQE spectra of inverted PTB7-Th:ITIC non-fullerene polymer solar cells employing planar and ITIC-templated interdigitated PFN-OX ETLs.