Supporting Information 1

Fig. S1. a) Conventional TEM image of Sample 1 cross-section with all layers. The image was obtained with 5 micrometres defocusing; b) Central part of image a) with enhanced contrast.

Fig. S2. EFTEM tomography (carbon distribution) in the film without DIO: a) A 3D view, b) An XY cross-section in the middle of film, c) An XZ cross-section. Reconstructed volume is 1.2 x 1.2 x 0.15 µm. See also Supplementary Information 2 for video with tomography reconstruction.

Fig. S3. AFM results for PTB7:PC_{71}BM film deposited on glass/Al: a) topography; b), c), d) current images obtained at $U_{tip}$: b) +0.3 V; c) +3 V; d) -0.5 V; e) -3 V.

Fig. S4. Energy levels of the materials used in this work.⁶