

## Supplementary Information for

### Detection and role of trace impurities in high-performance organic solar cells

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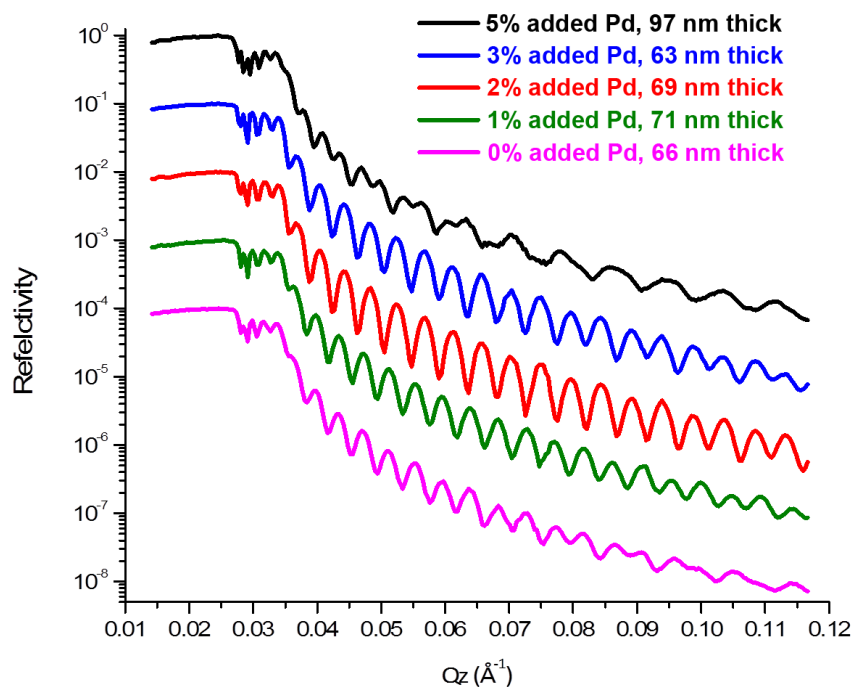
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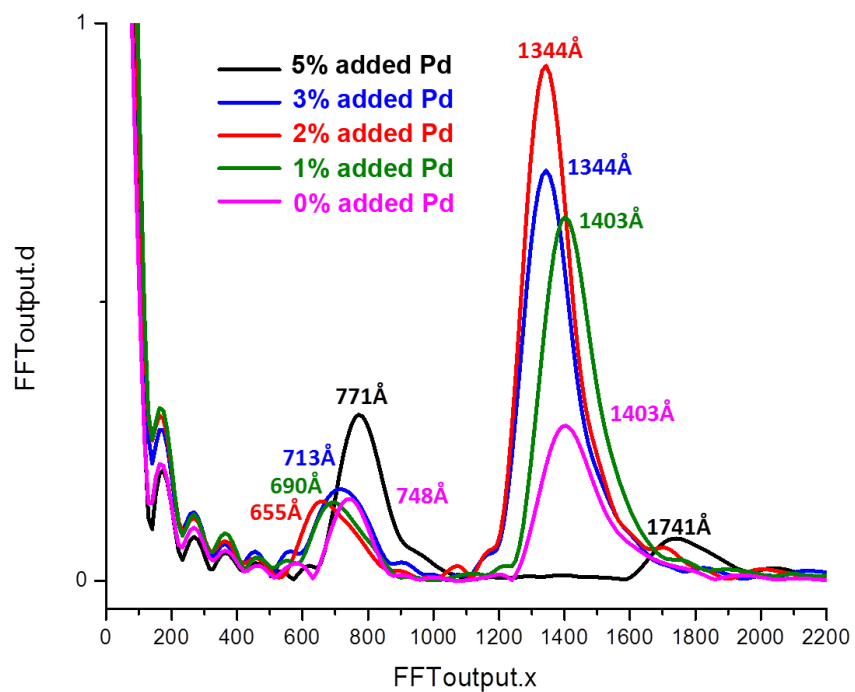
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**Figure S1.** X-ray reflectivity (XRR) data from PTB7/PC<sub>71</sub>BM blend films used in XRF measurements having various amounts of added Pd(PPh<sub>3</sub>)<sub>4</sub> catalyst.



**Figure S2.** Fourier analysis of XRR data from PTB7/PC<sub>71</sub>BM blend films used in XRF measurements having various amounts of added Pd(PPh<sub>3</sub>)<sub>4</sub> catalyst. These FFT signatures were used to measure the film thickness.