

Examining Charge Transport Networks in Organic Bulk Heterojunction Photovoltaic Diodes using $1/f$ Noise Spectroscopy

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Supplementary Information

p_{P3HT}	P3HT:PCBM weight ratio	CF solution for 90 nm (wt%)	DCB Solution for 90 nm (wt%)
0.41	1:3	1.1	2.3
0.51	1:2	1.0	2.2
0.63	1:1	1.0	2.1
0.76	2:1	1.0	2.0
0.85	3:1	0.9	1.9

Table. S1. P3HT:PCBM weight ratio corresponding to p_{P3HT} . Appropriate concentrations of CF non-annealed and DCB annealed active layers to obtain a thickness of *ca.* 90 nm. Film thicknesses measured by AFM.

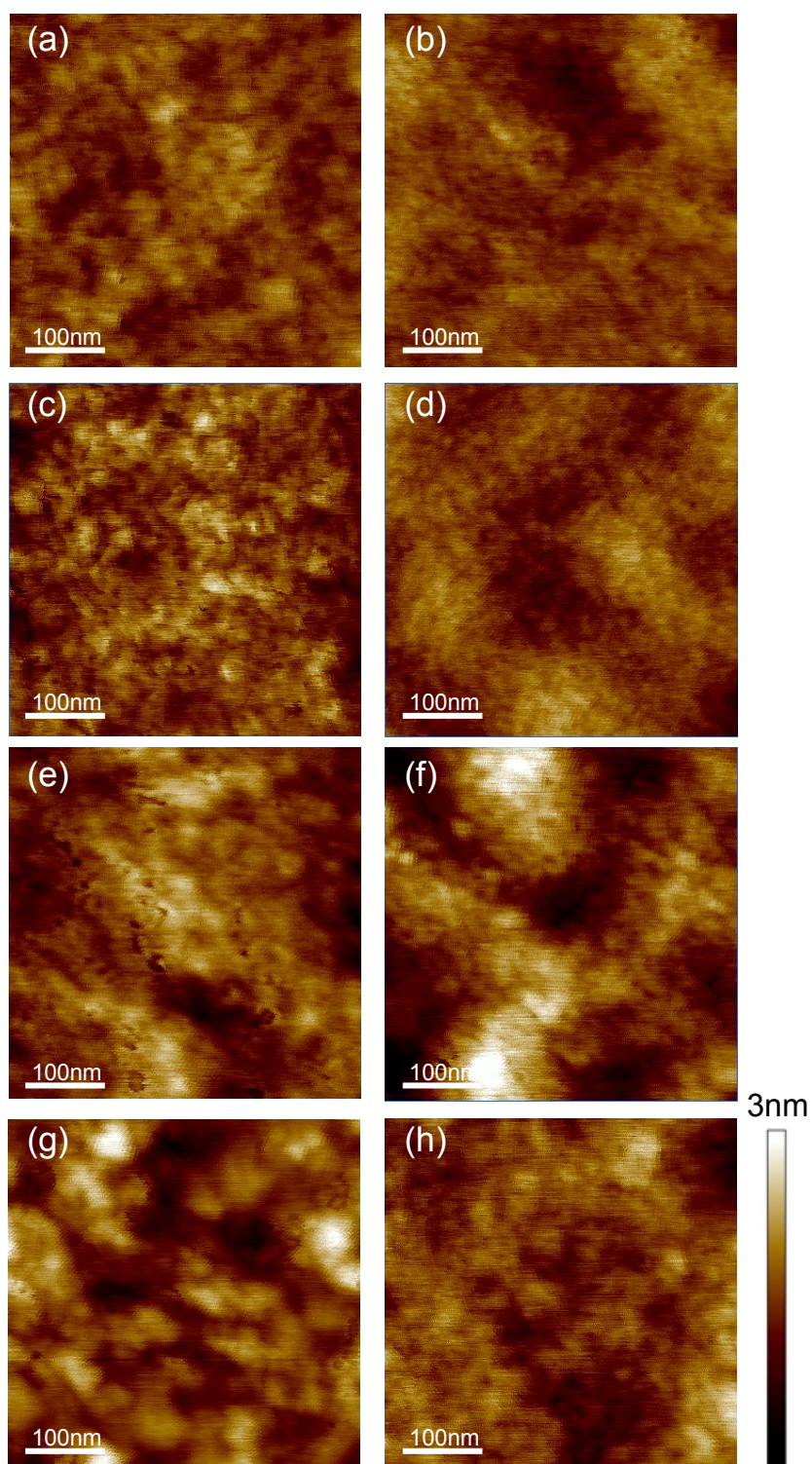


FIG. S2. AFM images of the P3HT:PCBM blends: (a) and (b) $p_{P3HT} = 0.41$, (c) and (d) $p_{P3HT} = 0.51$, (e) and (f) $p_{P3HT} = 0.63$, (g) and (h) $p_{P3HT} = 0.85$; with thermal treatments: left column (a) – (g) corresponds to heterogeneous active layers, while right column (b) – (h) corresponds to homogeneous active layers.

Underlying data files are available to download from the website
<http://dx.doi.org/10.15128/kk91fk86f>