Supporting Information

Enhanced charge extraction of Polymer Solar Cell by Solution-Processable Gold Nanoparticles

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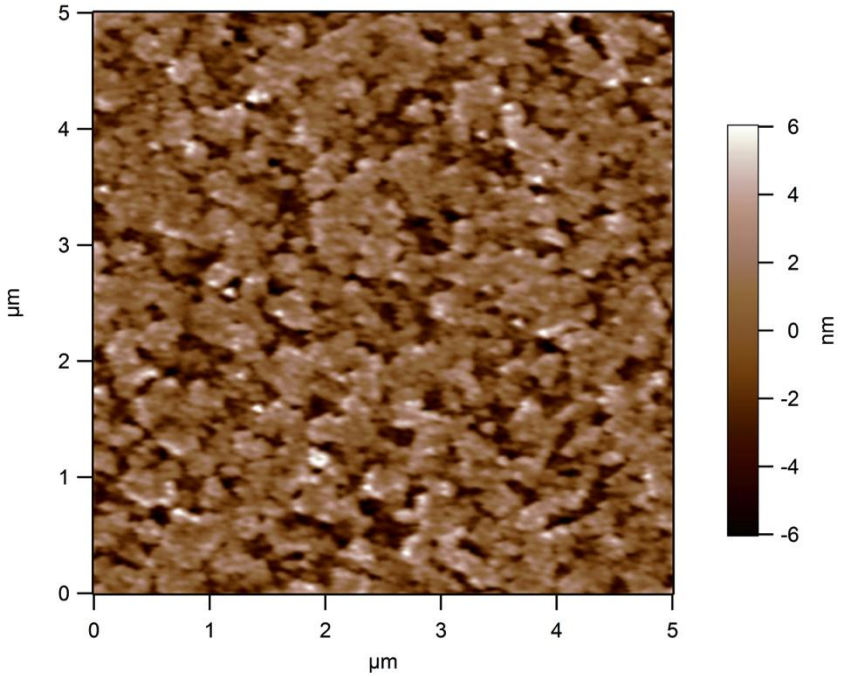

Figure S 1: AFM height topography of blank ITO substrate.

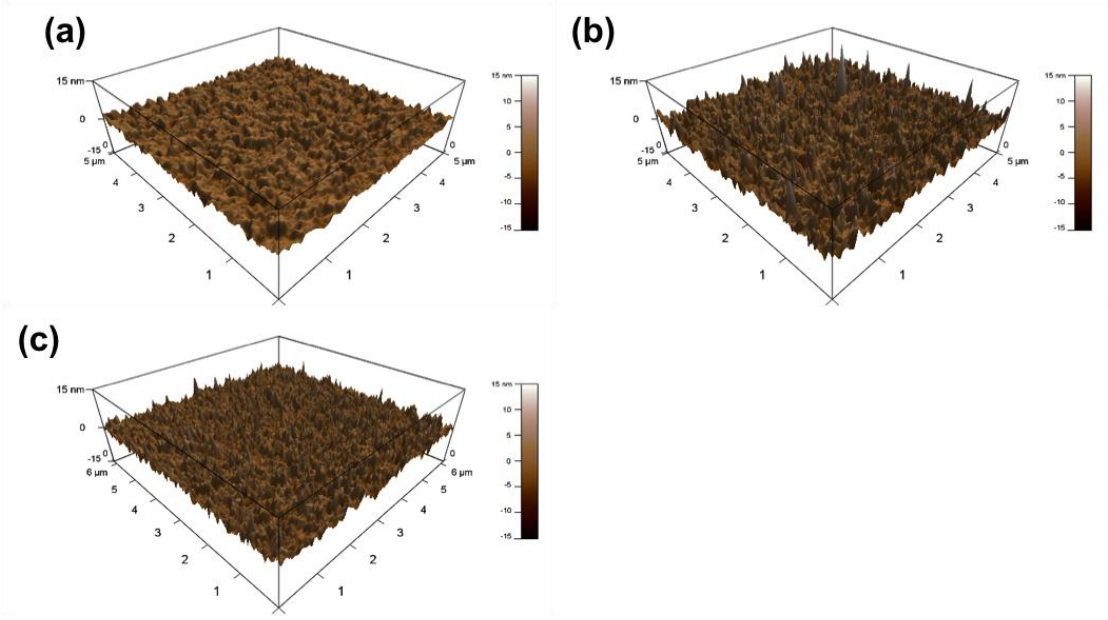

Figure S 2: 3D AFM topography images of (a) V_2O_5, (b) Au-NP/V_2O_5, (c) Au-NP:PSS/V_2O_5 on ITO substrate.

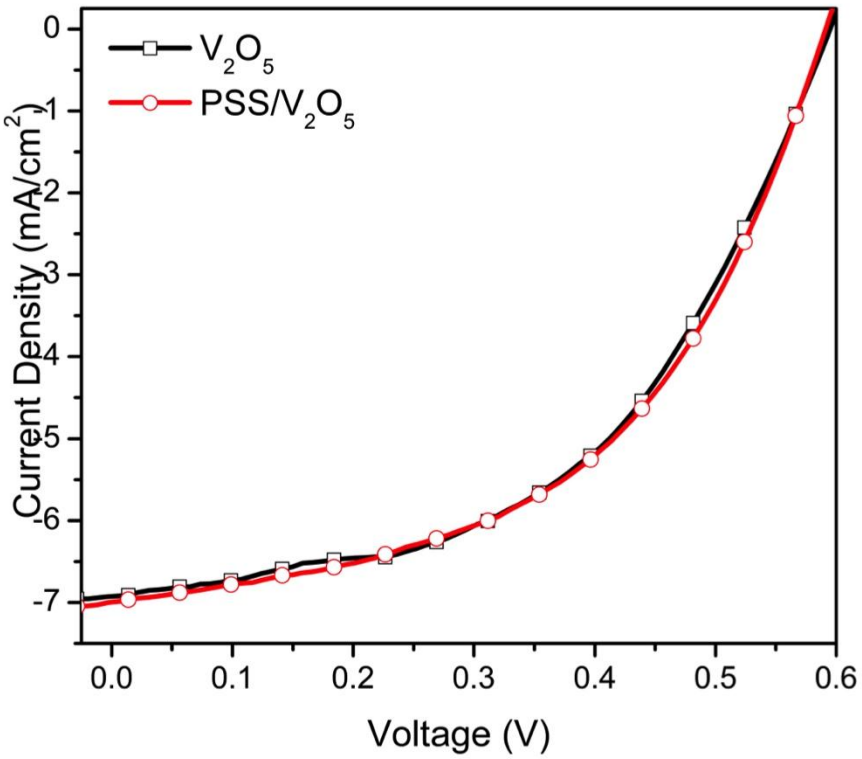

Figure S 3: The effect of insertion of PSS between V_2O_5 and ITO substrate on the current-voltage characteristics of polymer solar cells.

Table S 1: Summary of performance parameters of P3HT:$PC_{61}BM$ solar cells fabricated by varying the component in buffer layer.

Buffer Layer	V_{oc} (V)	J_{sc} (mA/cm^2)	PCE (%)	FF (%)
V_2O_5	0.596	7.02	2.11	50.5
PSS/V_2O_5	0.592	7.00	2.13	51.4