

ELECTRONIC SUPPLEMENTARY INFORMATION

The Effect of Chemical Modification of Fullerene-Based Self-Assembled Monolayers on the Performance of Inverted Polymer Solar Cells

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1. Differential Scanning Calorimetry (DSC) of Fullerene-Based Self-Assembled Materials

The differential scanning calorimetry (DSC) was performed using DSC2010 (TA instruments) under a heating rate of $10\text{ }^{\circ}\text{C min}^{-1}$ and a nitrogen flow of 50 mL min^{-1} .

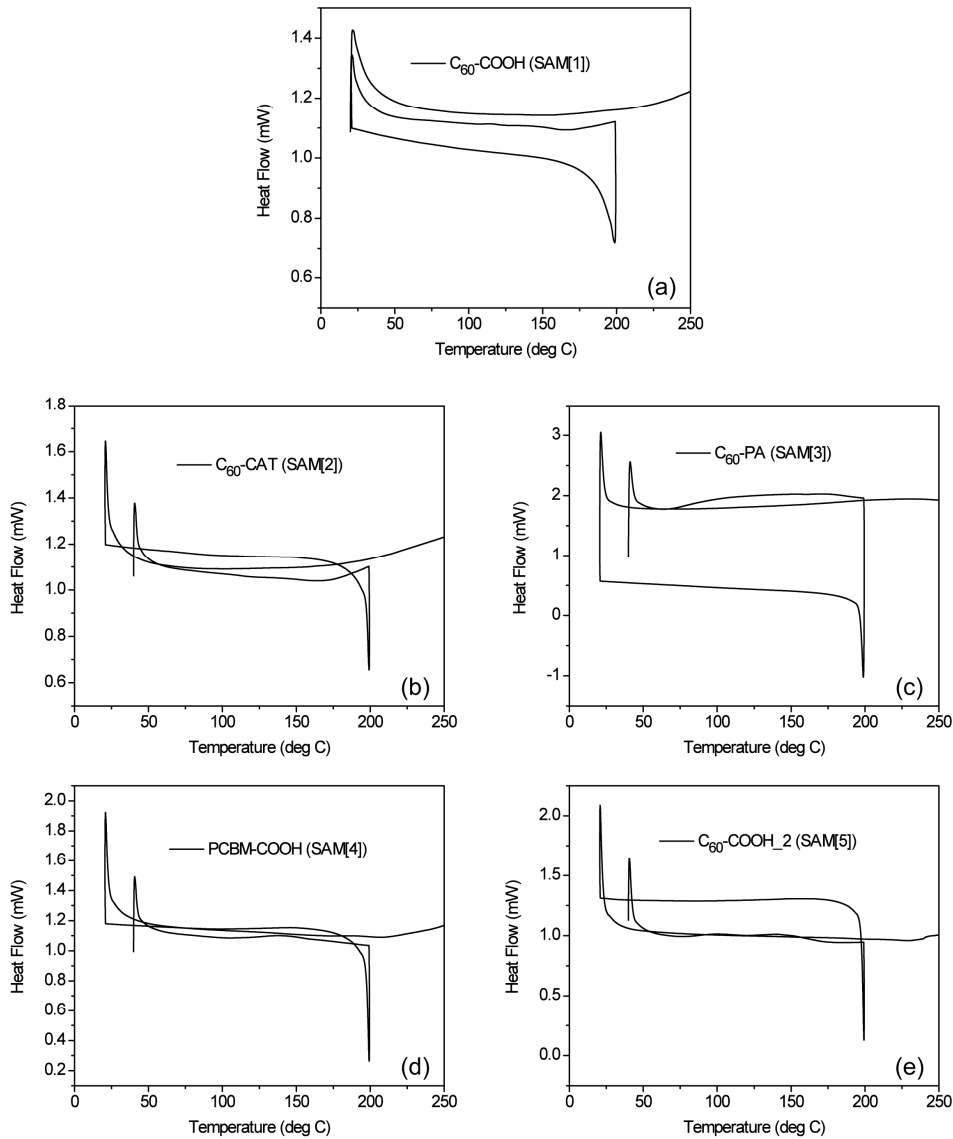


Figure S1. Differential scanning calorimetry of fullerene-based self-assembled materials used at the interface of ZnO/P3HT:PCBM for inverted solar cell devices. (a) $\text{C}_{60}\text{-COOH}$

(SAM[1]), (b) C₆₀-CAT (SAM[2]), (c) C₆₀-PA (SAM[3]), (d) PCBM-COOH (SAM[4]) and (e) C₆₀-COOH₂ (SAM[5]).

2. Contact angle and surface energy measurements of the C₆₀-SAMs

Contact angle and surface energy measurements were performed on a Remé-Hart 100 goniometer. Two probe solvents (de-ionized water, di-iodomethane) were used for the calculation of the surface energy.

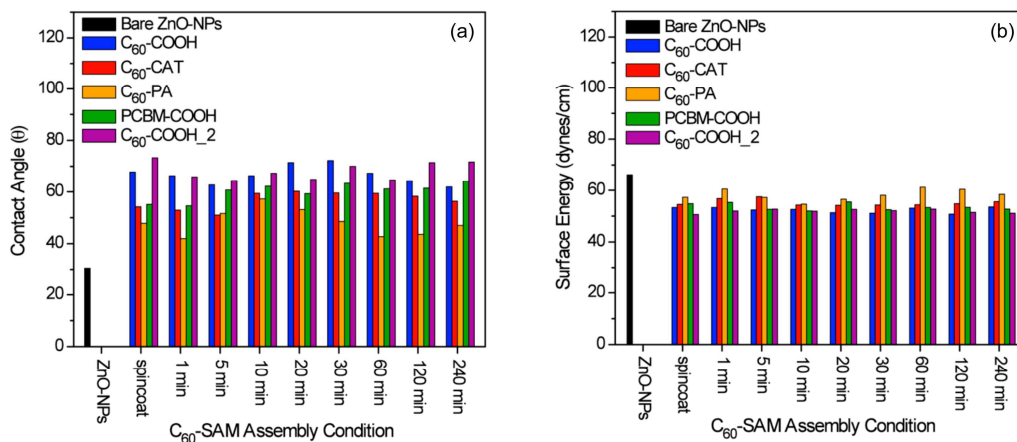


Figure S2. (a) Contact angle and (b) surface energy measurements of C₆₀-SAMs on ZnO-NPs processed by solution spincoating or solution immersion.