Electronic Supplementary Material (ESI) for Nanoscale

Supporting Information for

Gold Nanoparticle–Decorated Graphene Oxides for Plasmonic-Enhanced Polymer Photovoltaic Devices

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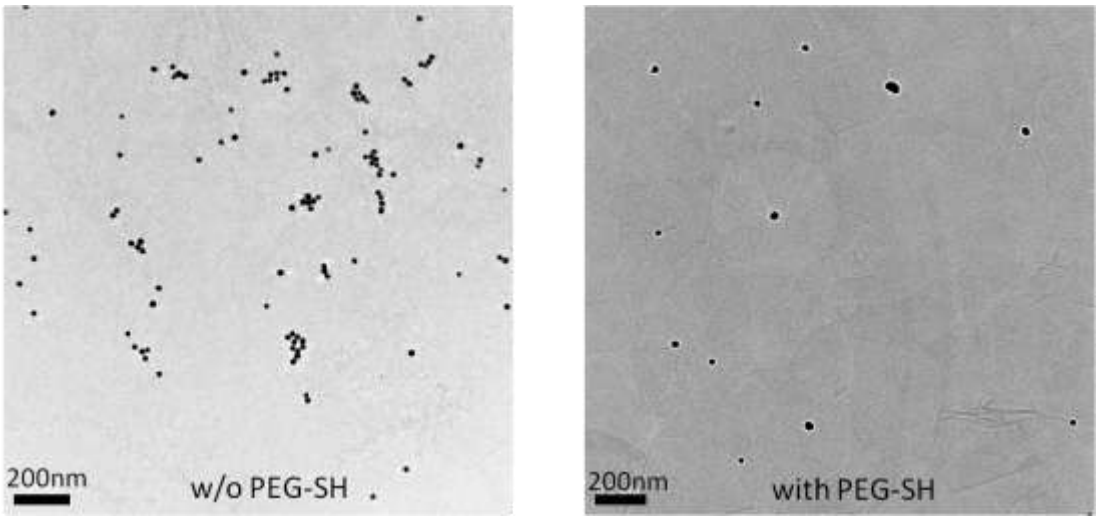

Figure S1. TEM images of AuNP/GO nanocomposites prepared with and without PEG-SH. The concentrations of PEG-SH were 0.13 mM.

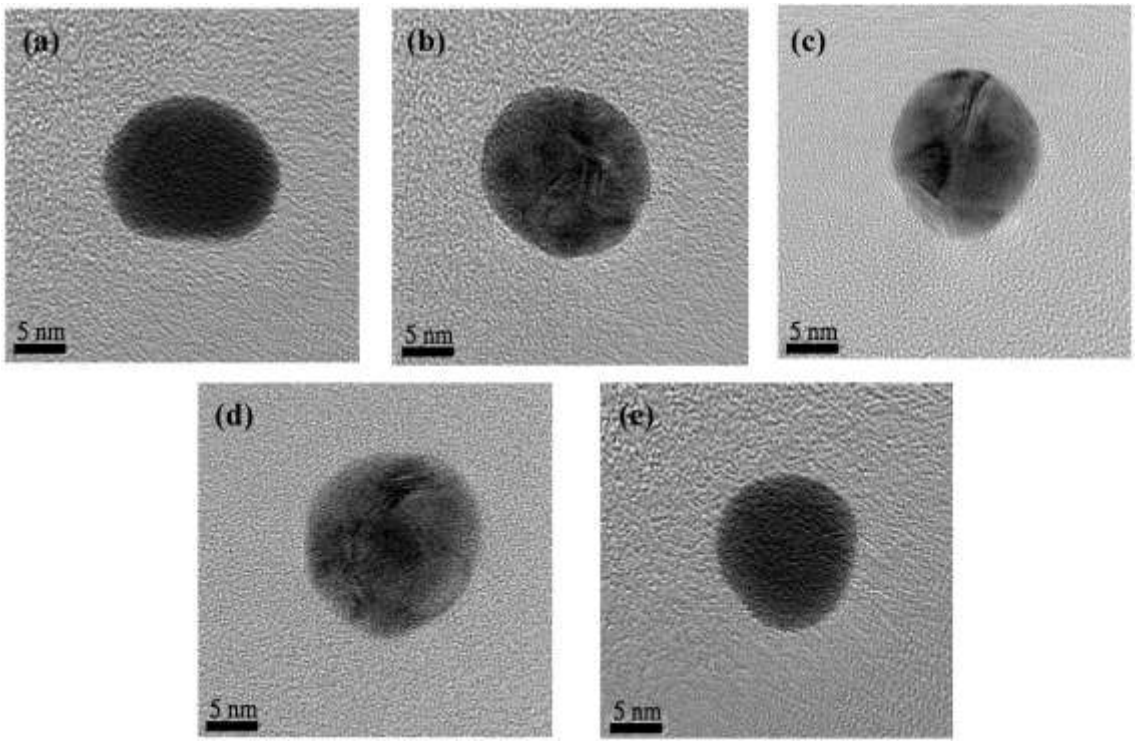

Figure S2. High-resolution TEM images of AuNP/GO nanocomposites prepared with different amounts of PEG-SH. The concentrations of PEG-SH were (a) 0, (b) 0.07, (c) 0.13, (d) 0.26 and (e) 0.52 mM.

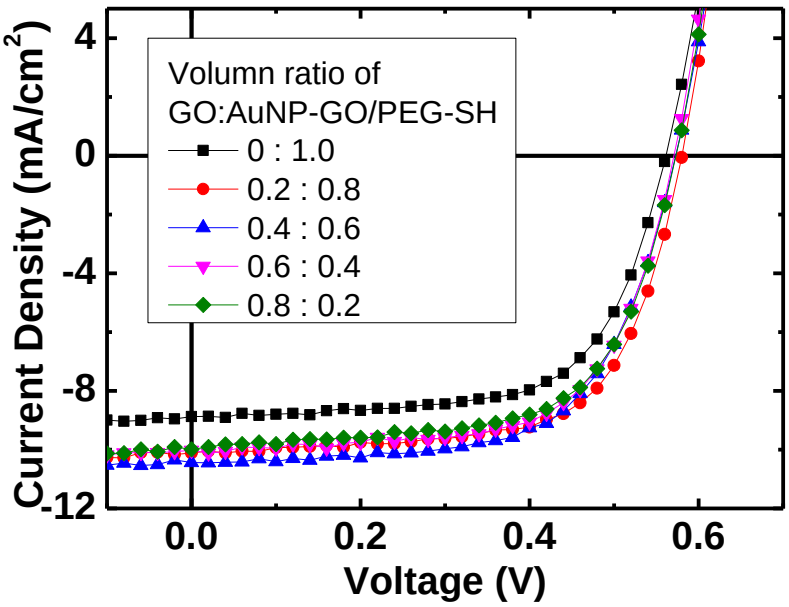

Figure S3. Electrical properties of OPV devices prepared using various concentrations of Au NPs. The density of Au NPs was tuned by diluting the buffer solution with neat GO solutions. The concentration of PEG-SH during the synthesis was fixed at 0.13 mM.

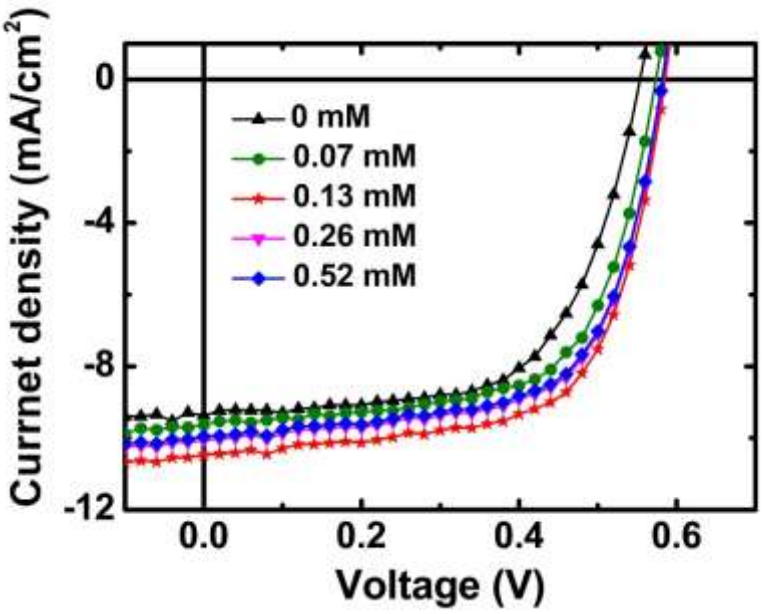

Figure S4. Electrical properties of OPV devices prepared using various concentrations of PEG-SH.

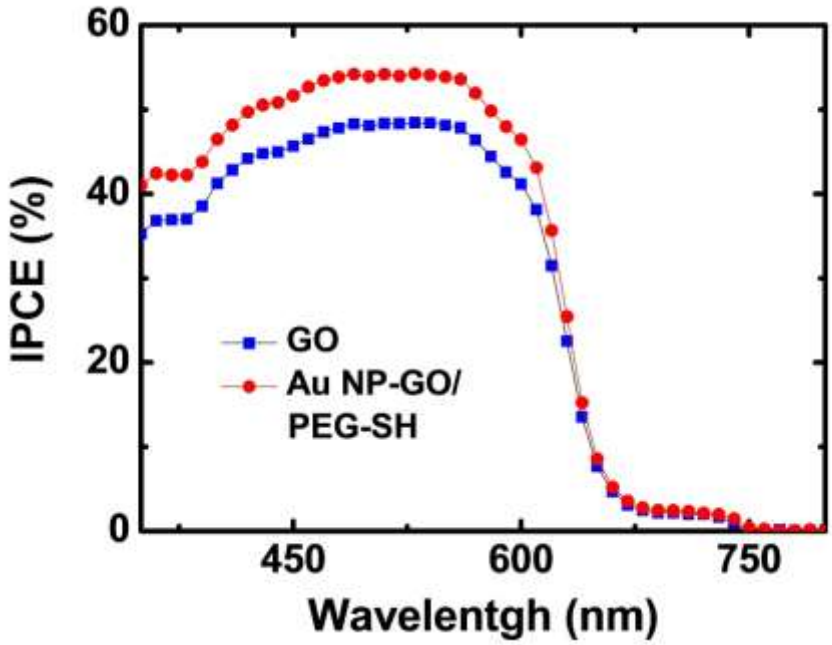

Figure S5. IPCE curves of OPV devices fabricated with GO and a PEG-SH–modified AuNP/GO composite. The photoactive layer consisted of P3HT and ICBA.