Electronic Supplementary Material (ESI)

Fabrication of SERS-Active Conjugated Copolymers/Gold Nanoparticles Composite Films by Interface-Directed Assembly

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Figure S1. (a, b) TEM images, (c, d) SEM images, (e) hydrodynamic diameter distribution and (f) UVvis spectrum recorded for Au NPs prepared by citrate reduction of HAuCl₄ in aqueous solutions.



Figure S2. (a) Absorption, (c) emission spectra and change in relative (b) UV-vis and (d) PL intensity obtained for PPI(-AA)-*b*-P3HT copolymers before and after cross-linking by DPDS in chloroform as a function of [DPDS]/[-COOH].



Figure S3. Distinct photographs recorded for PPI(-AA)-*b*-P3HT copolymers before and after crosslinking by DPDS in chloroform as a function of [DPDS]/[-COOH] under 365 nm UV light irradiation.



Figure S4. (a) FT-IR spectra obtained for (I) PPI(-AA)-*b*-P3HT copolymers, (II) PPI(-AA)-*b*-P3HT/DPDS complex, and (III) PPI(-SH)-*b*-P3HT copolymers. (b) ¹H NMR spectra obtained for (I) DPDS and (II) PPI(-SH)-*b*-P3HT copolymers.