

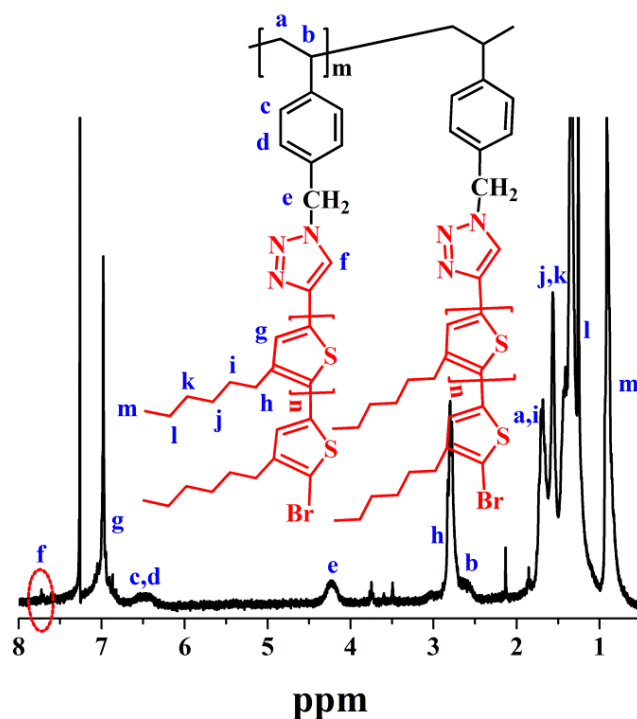
Supporting Information

Functional Copolymer Brushes Composed of Hydrophobic Backbone and Densely Grafted Conjugated Side Chains via a Combination of Living Polymerization with Click Chemistry

Xinchang Pang, Lei Zhao, Chaowei Feng, Ruifeng Wu, Haihong Ma, and Zhiqun Lin*

School of Materials Science and Engineering, Georgia Institute of Technology,
Atlanta, GA 30332, USA

* To whom correspondence should be addressed. Email: zhiqun.lin@mse.gatech.edu



¹⁵ **Figure S1.** ¹H-NMR spectrum of PS-g-P3HT copolymer brush (i.e., sample-b in **Table 2**) in CDCl₃.

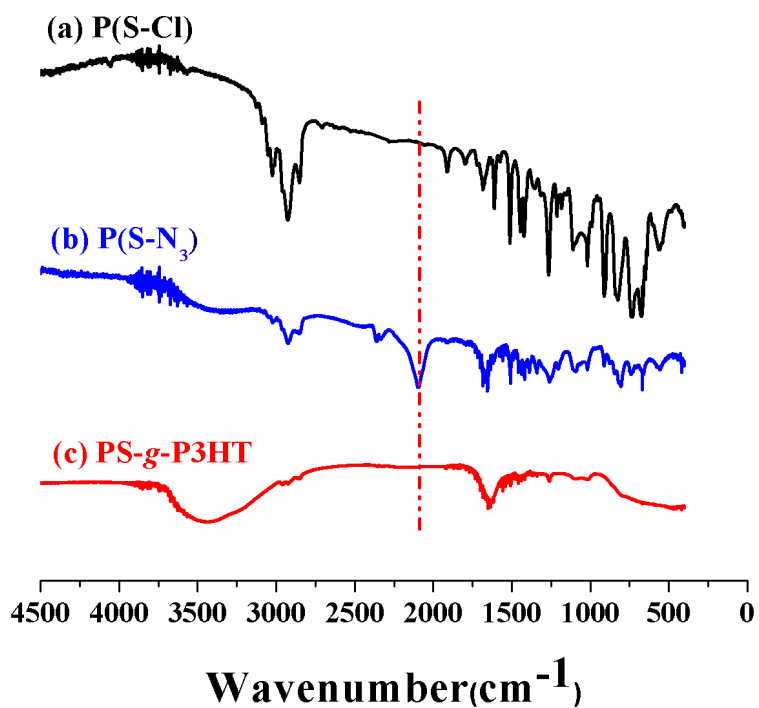


Figure S2. FT-IR spectra of P(S-Cl) (i.e., sample-2 in **Table 1**), PS(S-N₃), and the resulting PS-g-P3HT copolymer brush (i.e., sample-b in **Table 2**).

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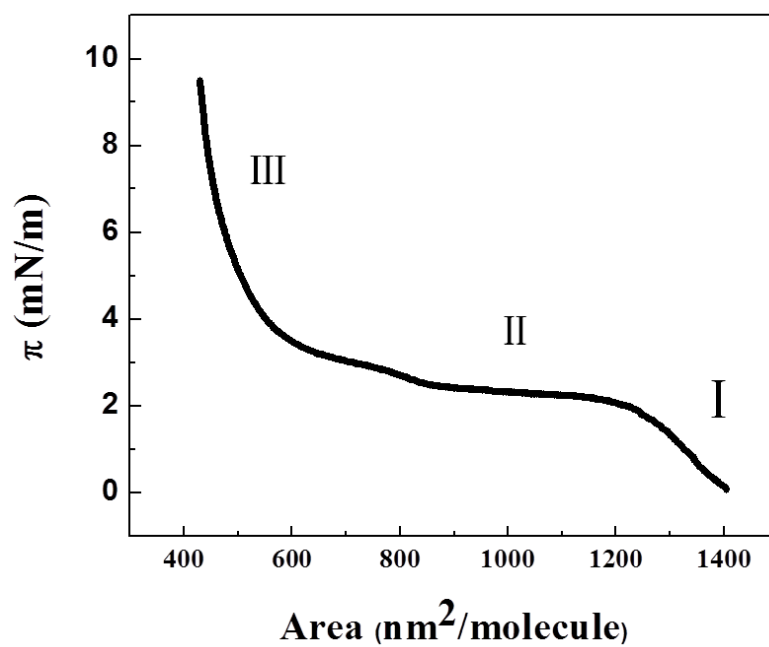


Figure S3. Pressure-area isotherms PS-*g*-P3HT copolymer brushes (i.e., sample-b in **Table 2**): (I) liquid state region, (II) plateau region, and (III) condensed state region.

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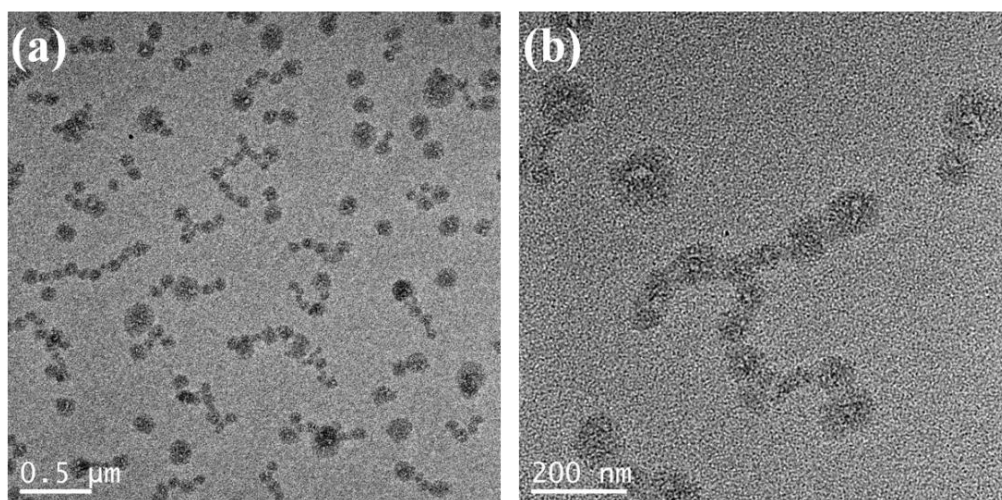


Figure S4. TEM images of Langmuir monolayer of PS-*g*-P3HT deposited at the gas state region. (a): scale bar = 500 nm; (b): scale bar = 200 nm.