## **Supporting Information**

## **Electroluminescent Networks via Photo "Click" Chemistry**

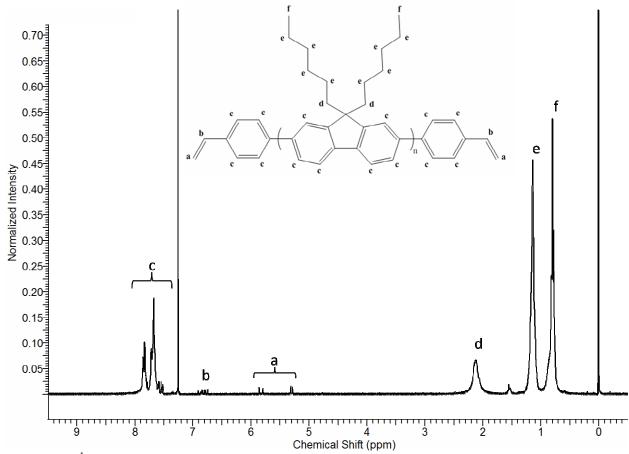
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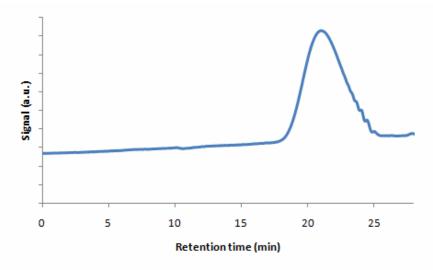
University of Massachusetts Amherst

Conte Center for Polymer Research

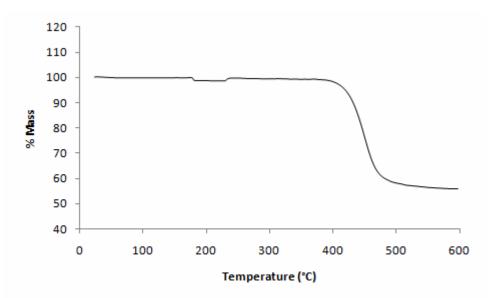
120 Governors Drive, Amherst, Massachusetts 01003



*Figure S1.* <sup>1</sup>H NMR spectrum for synthesized 4-phenylethenyl end-capped poly(styrene).



*Figure S2.* Gel permeation chromatography (GPC) trace of xDHF in THF compared to poly(styrene) standards.



*Figure 3.* Thermogravimetric analysis (TGA) of xDHF. The polymer was found to be thermally stable (5% weight loss) up to 419  $^{\circ}$ C.

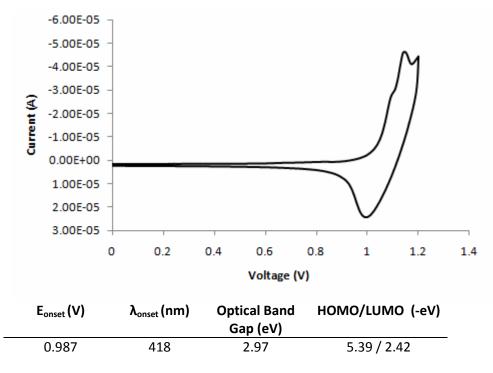


Figure 4. Cyclic voltammetry (CV) and electrochemical properties of xDHF polymer in an electrolyte solution of 0.1 M Bu<sub>4</sub>NPF<sub>6</sub> in acetonitrile using platinum wires (Bioanalytical System Inc.) as both counter and working electrodes and a silver/silver ion reference electrode (Ag in 0.1 M AgNO<sub>3</sub> solution).  $\lambda_{onset}$  and optical band gap were determined from UV-vis absorption (see text) and subsequently used to estimate LUMO level of xDHF from the HOMO level known via CV.