

Supporting Information

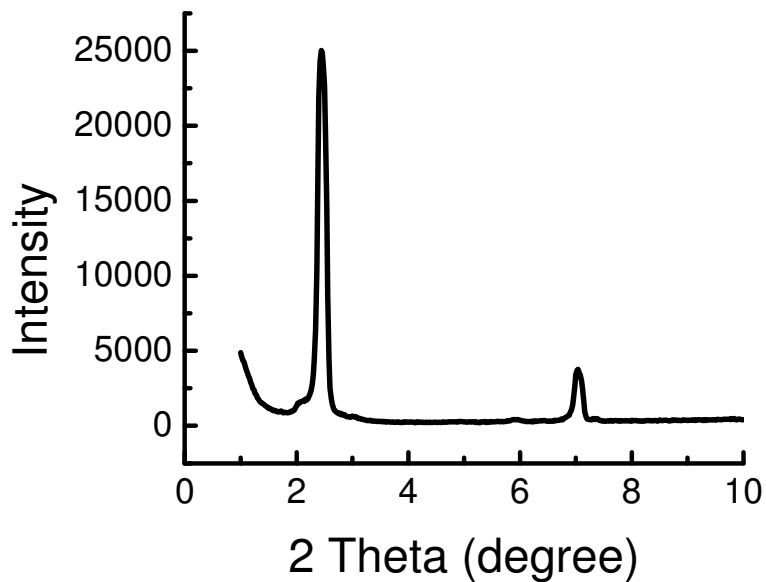


Figure S1. X-ray diffraction pattern of PDA film prepared from 5,7-octadecadiynoic and p-xylylenediamine.

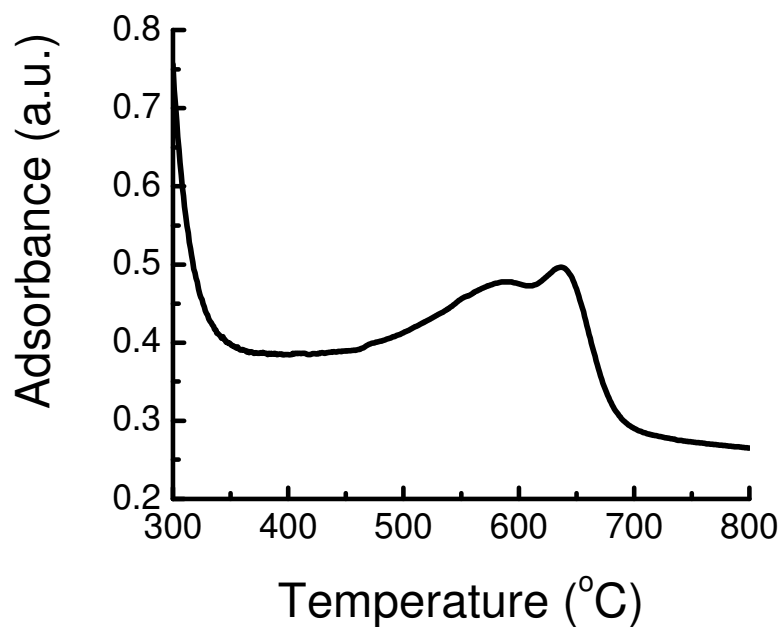


Figure S2. Typical UV-vis spectrum of PDA films prepared from 5,7-octadecadiynoic and p-xylylenediamine after UV irradiation ($\lambda= 254$ nm) for two weeks.

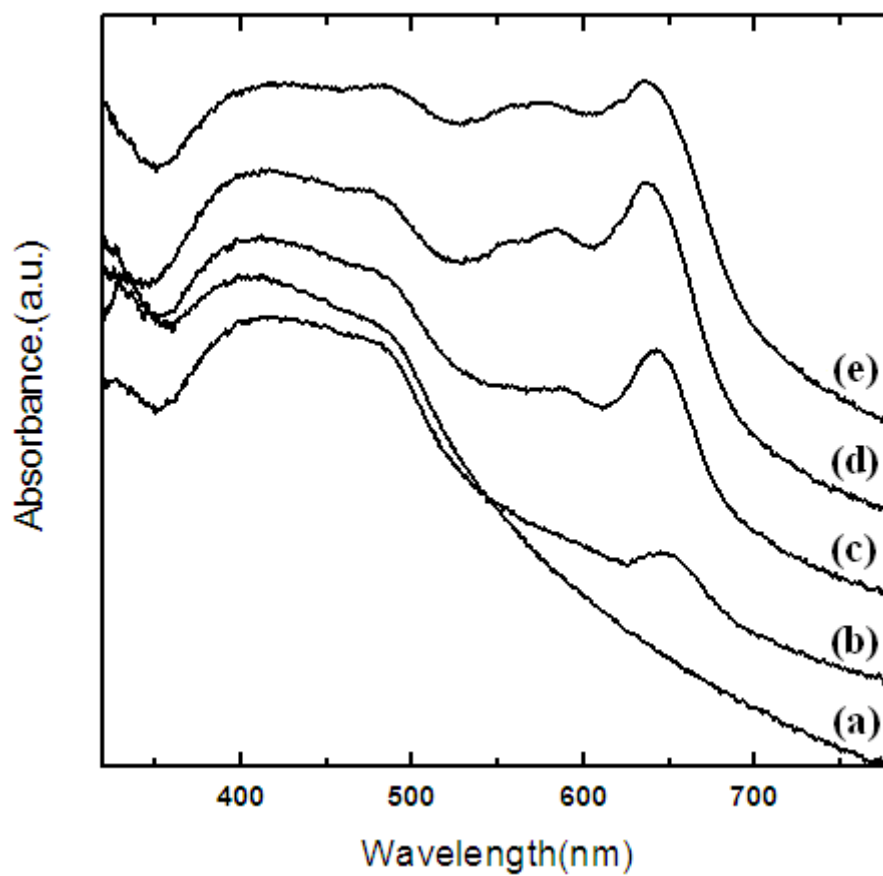


Figure S3. UV-vis spectra of (a) 4, 4'-azodianiline/8,10-heneicosadiynoic acid film and (b) derived blue PDA film, (c) exposure of (b) to UV light for 1 hr, (d) exposure of (b) to UV light for 6 hr, and (e) exposure of (b) to UV light for 12 hr. Wavelength of used UV light is 254 nm.

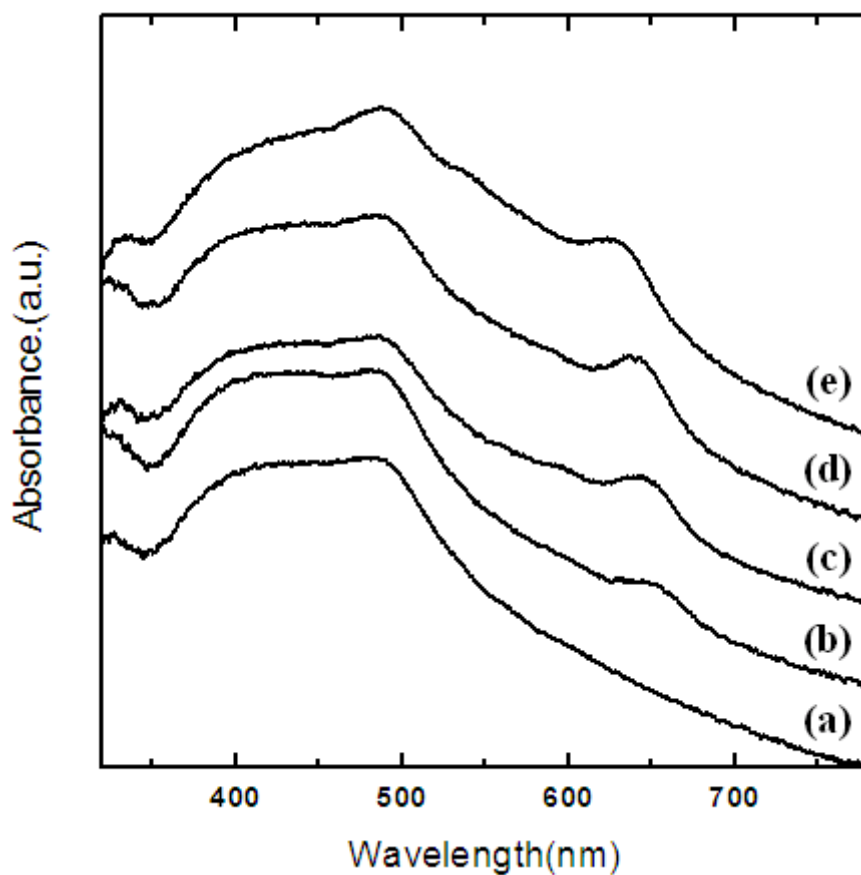


Figure S4. UV-vis spectra of (a) 4, 4'-azodianiline/10,12-pentacosadiynoic acid film and (b) derived blue PDA film, (c) exposure of (b) to UV light for 2.5 hr, (d) exposure of (b) to UV light for 4 hr, and (e) exposure of (b) to UV light for 12 hr. Wavelength of used UV light is 254 nm.