

Supplementary Materials: Multichromic Polymers Containing Alternating Bi(3-Methoxythiophene) and Triphenylamine Based Units with *Para*-Protective Substituents

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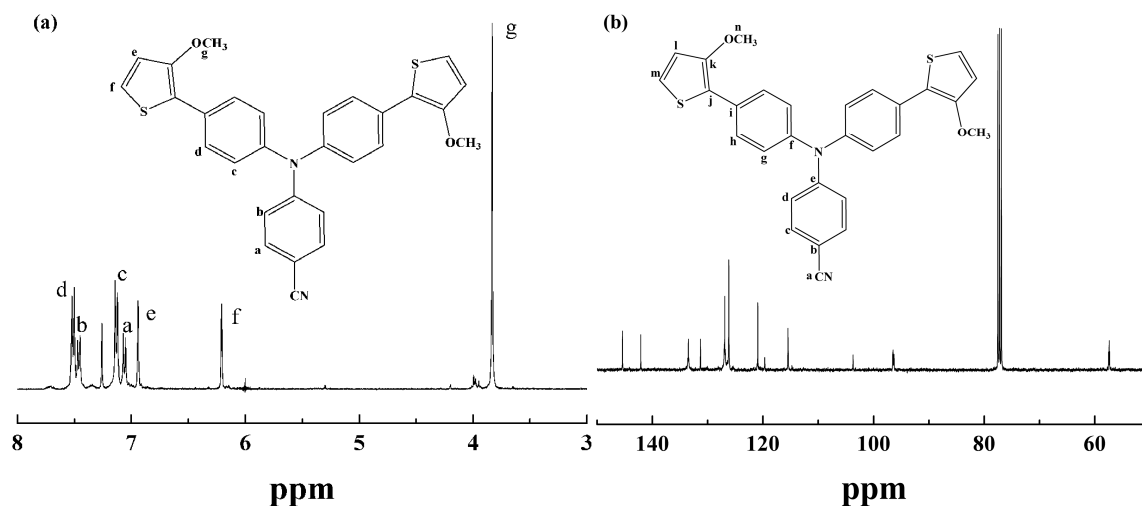


Figure S1. (a) ^1H NMR spectrum of 4-cyano-4',4''-di(4-methoxythiophen-2-yl) triphenylamine (CMTPA) in CDCl_3 . Solvent peak is at $\delta = 7.26$ ppm; (b) ^{13}C NMR spectrum of 4-cyano-4',4''-di(4-methoxythiophen-2-yl) triphenylamine (CMTPA) in CDCl_3 . Solvent peak is at $\delta = 77.3$ ppm.

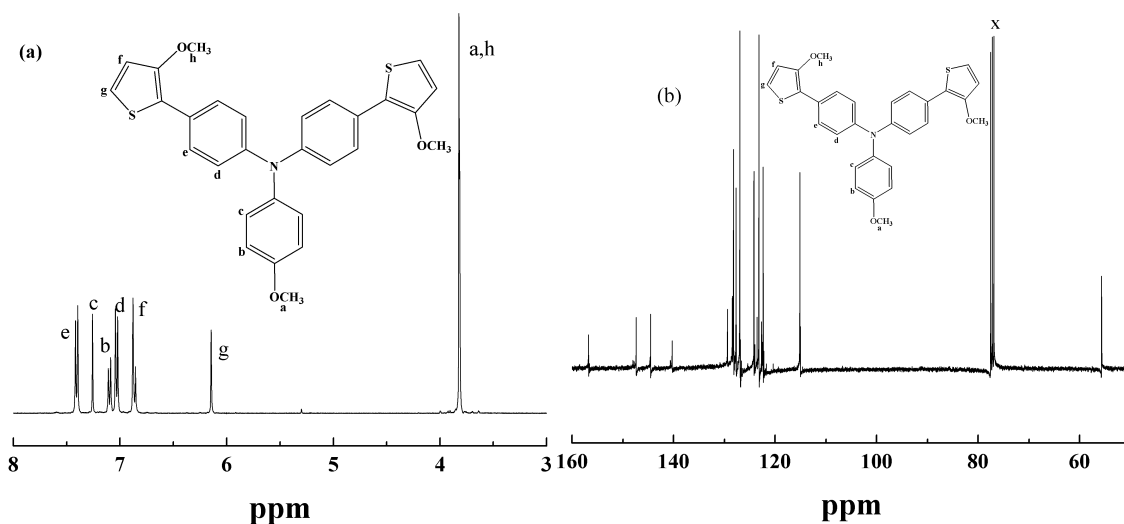
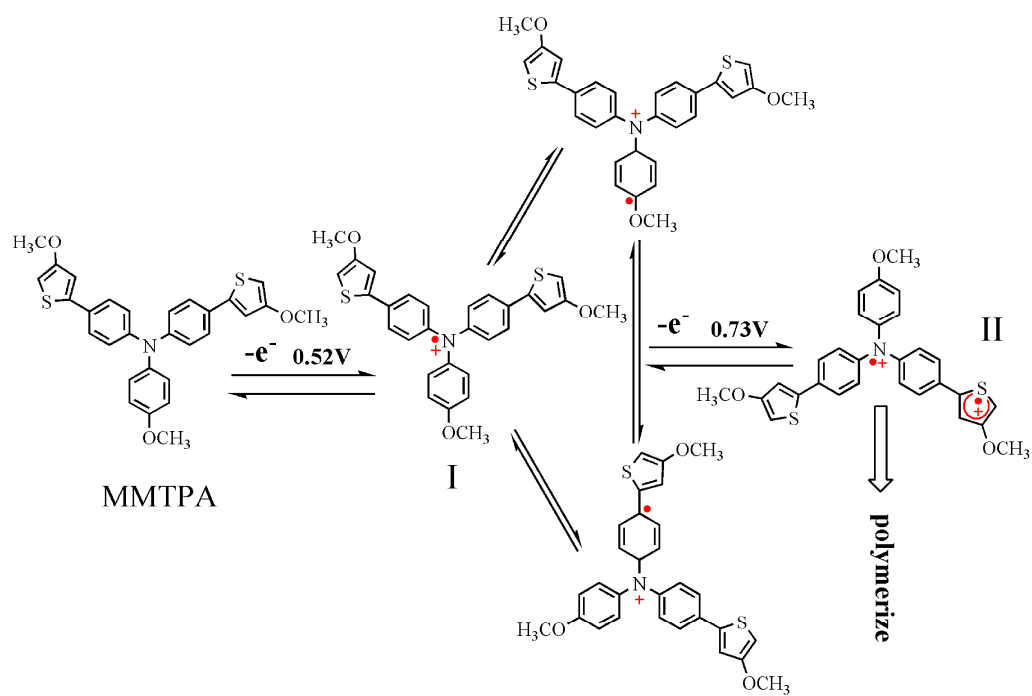


Figure S2. (a) ^1H NMR spectrum of 4-methoxy-4',4''-di(4-methoxythiophen-2-yl) triphenylamine (MMTPA) in CDCl_3 . Solvent peak is at $\delta = 7.26$ ppm; (b) ^{13}C NMR spectrum of 4-methoxy-4',4''-di(4-methoxythiophen-2-yl) triphenylamine (MMTPA) in CDCl_3 . Solvent peak is at $\delta = 77.3$ ppm.



Scheme S1. The coupling mechanism of MMTPA monomer.