Electronic Supplementary Material

Synthesis and photovoltaic properties of new conjugated polymers based on *syn- and anti*-benzodifuran

Chao Hu,[a] Yingying Fu,[b] Shugang Li,[a] Zhiyuan Xie,*[,b] Qing Zhang*[,a]

[a] Department of Polymer Science and Engineering, School of Chemistry and Chemical Engineering, Shanghai Jiaotong University, Shanghai 200240, China
[b] State Key Laboratory of Polymer Physics and Chemistry, Changchun Institute of Applied Chemistry, Chinese Academy of Science, Changchun 130022, China

Contents

1. Characterization

a) NMR spectra of monomers and polymers

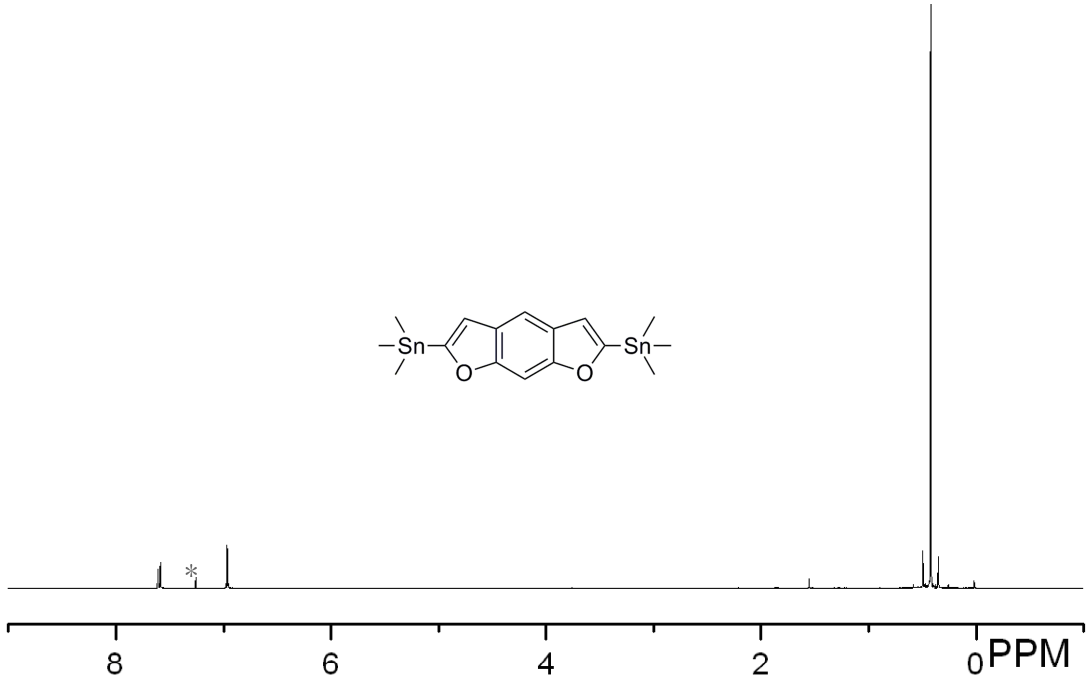

Fig. S1 ^{1}H NMR spectrum of compound **1** in $CDCl_3$.

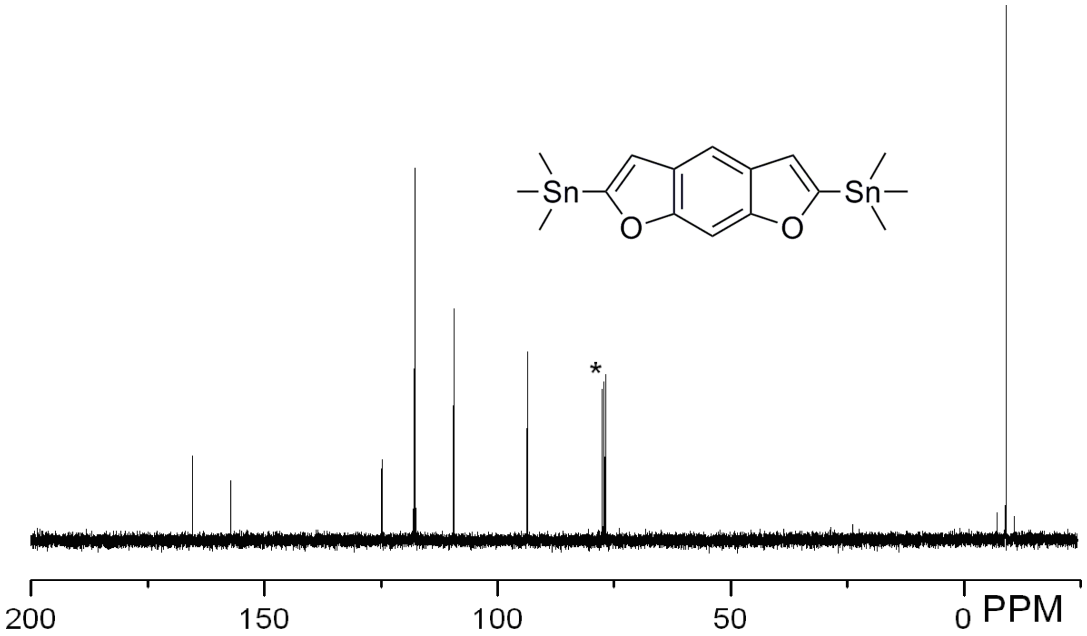

Fig. S2 ^{13}C NMR spectrum of compound **1** in $CDCl_3$.

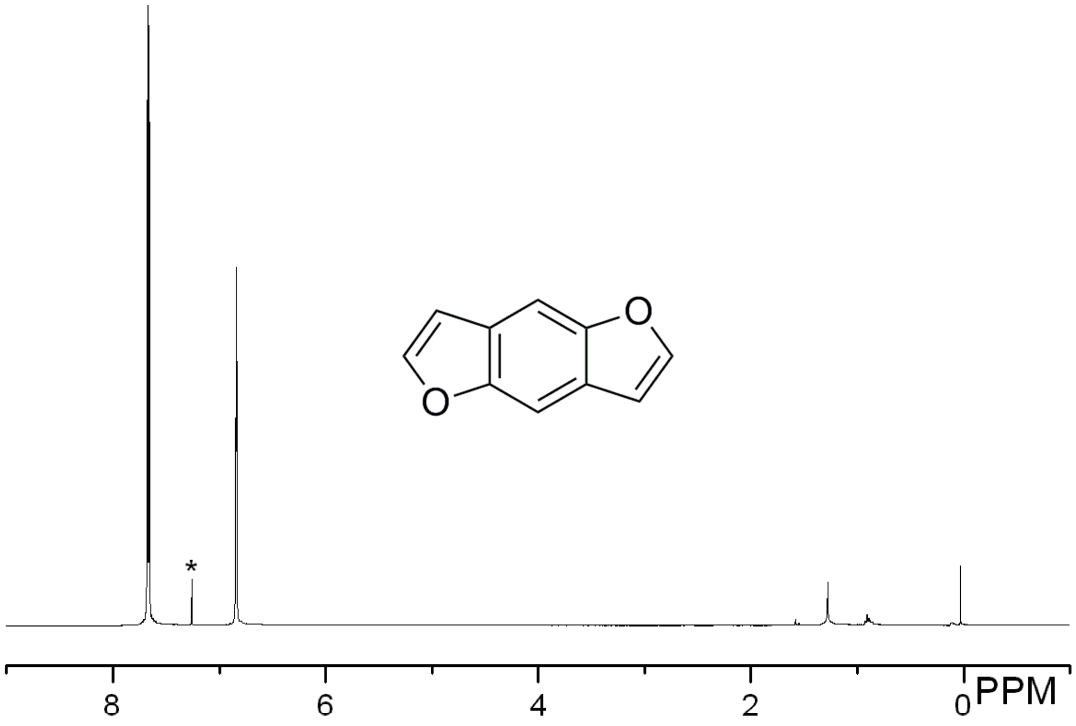

Fig. S3 ^{1}H NMR spectrum of compound **2** in $CDCl_3$.

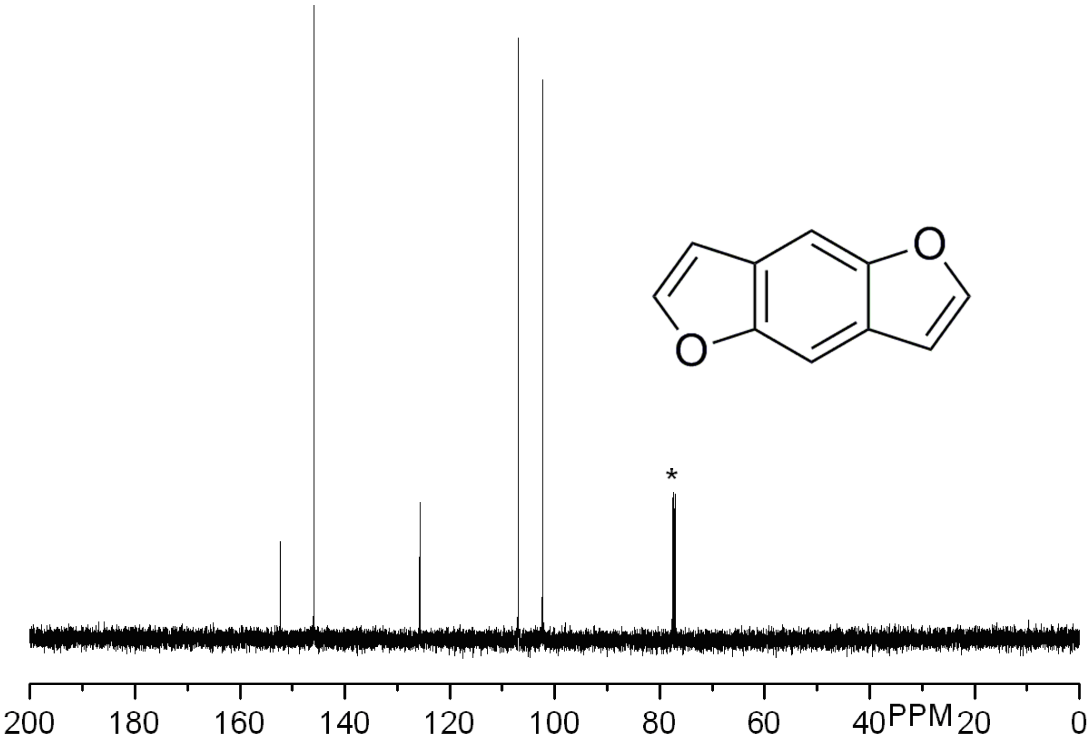

Fig. S4 ^{13}C NMR spectrum of compound **2** in $CDCl_3$.

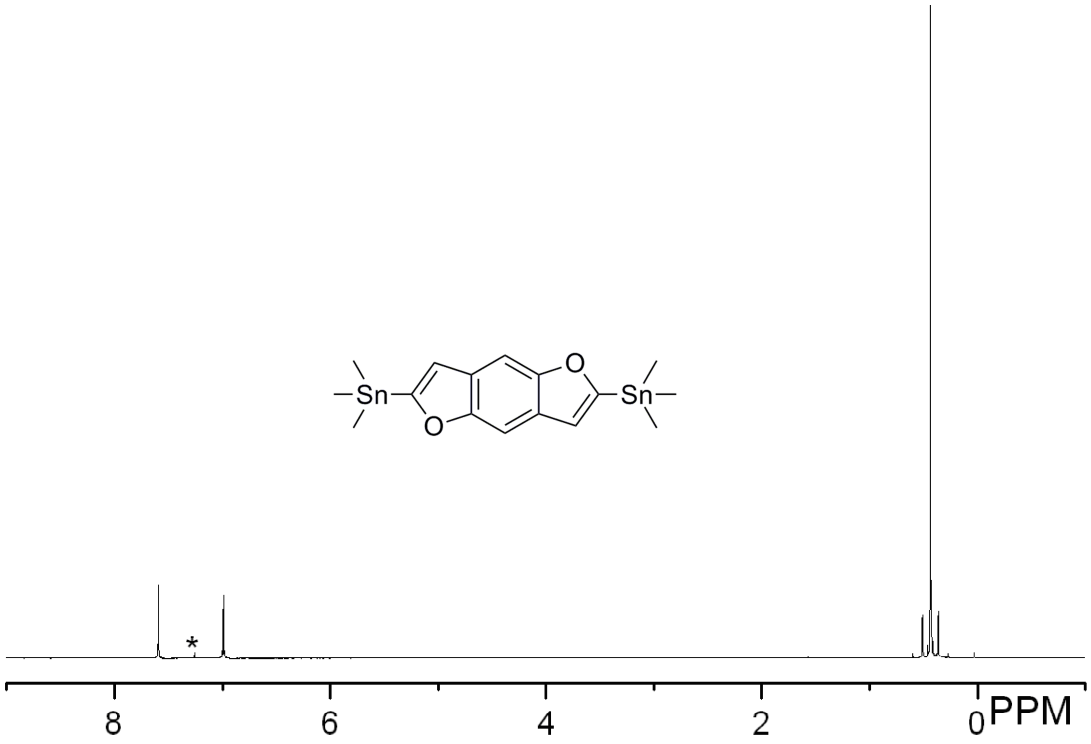

Fig. S5 ^{1}H NMR spectrum of compound **3** in $CDCl_3$.

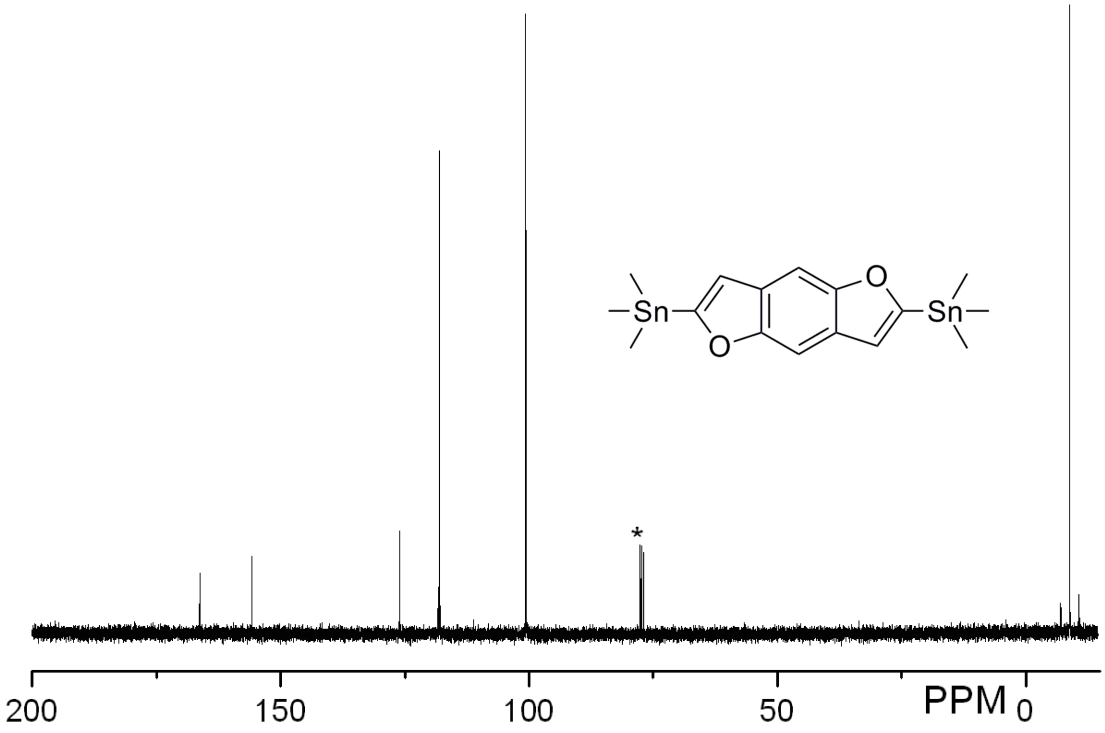

Fig. S6 ^{13}C NMR spectrum of compound **3** in $CDCl_3$.

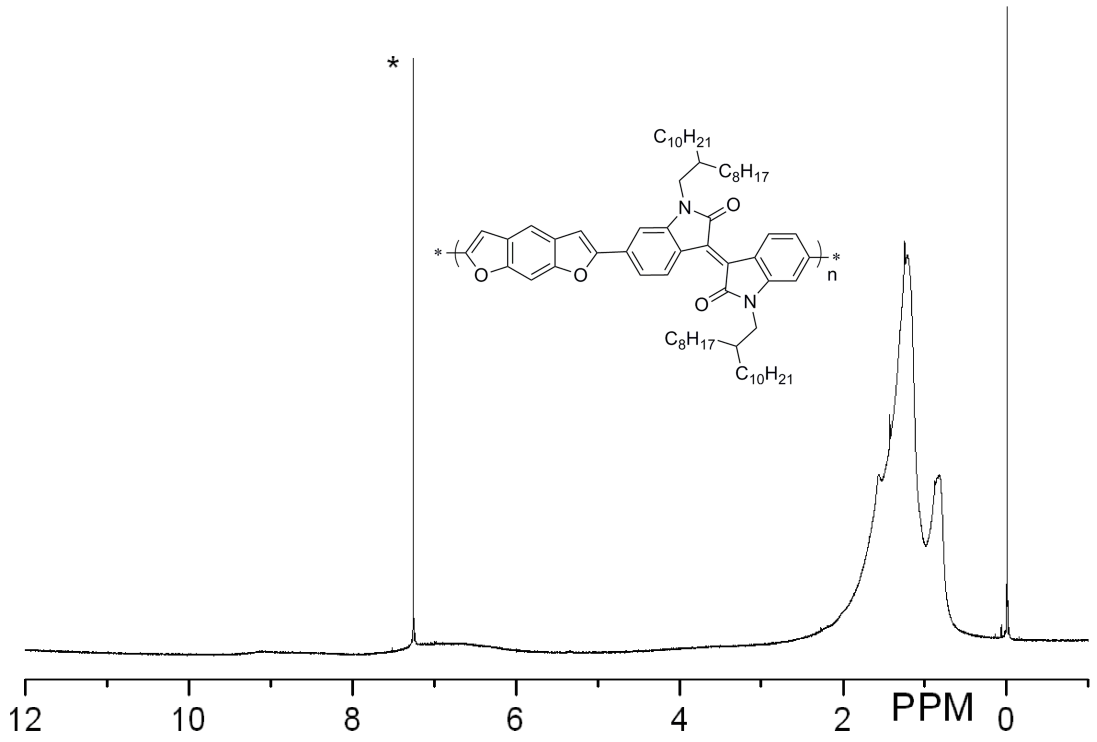

Fig. S7 ^{1}H NMR spectrum of ***syn*-PBDFID** in $CDCl_3$.

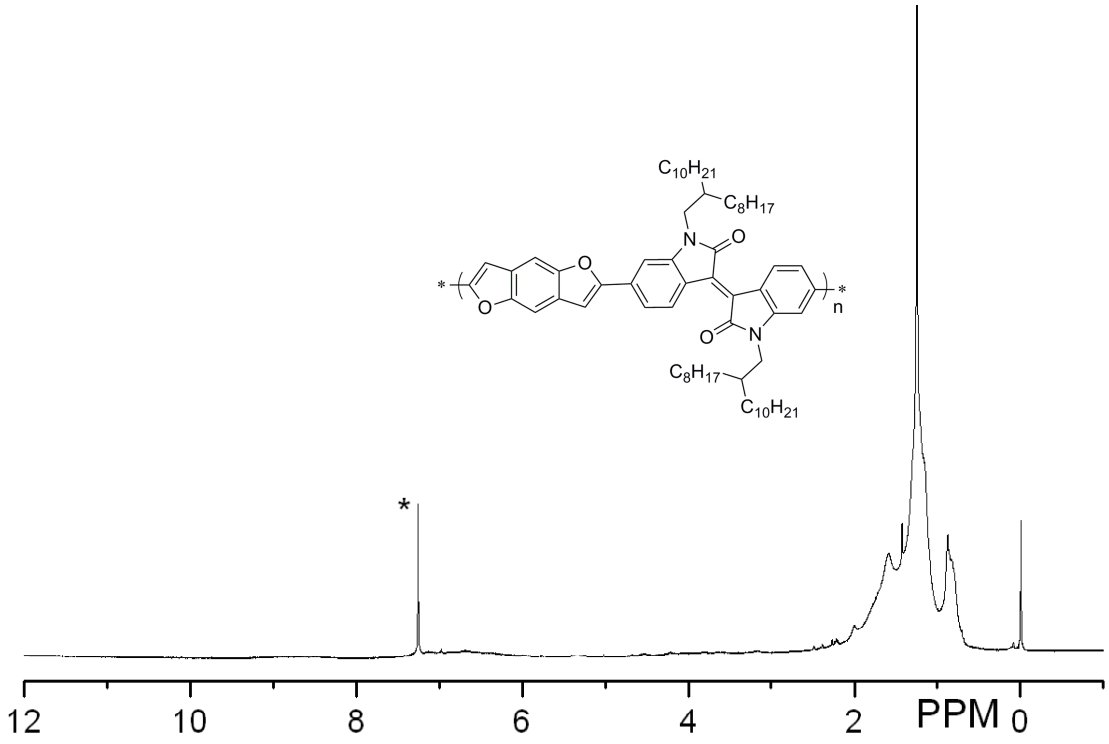

Fig. S8 ^{1}H NMR spectrum of ***anti*-PBDFID** in $CDCl_3$.

b) TGA curves

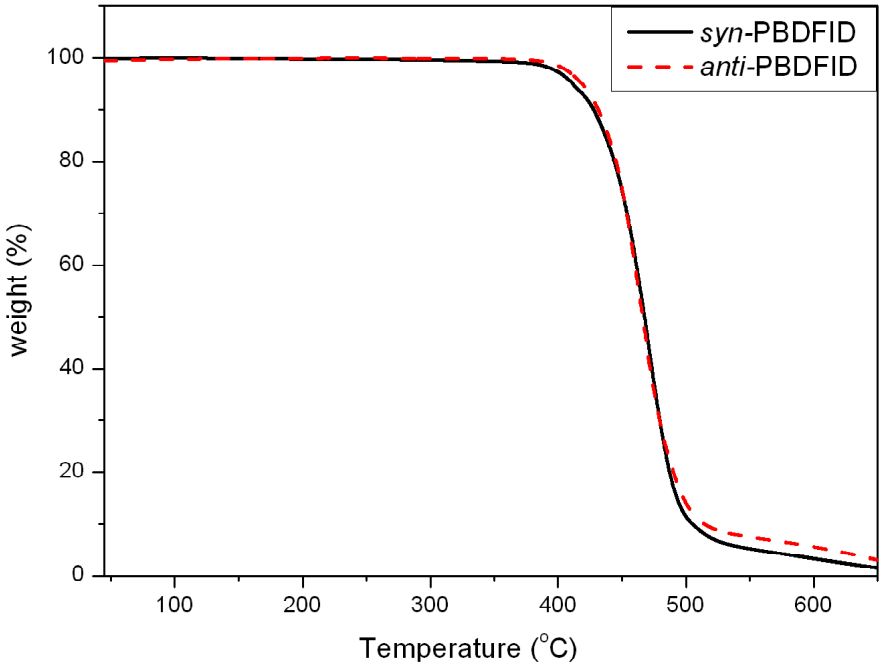

Fig. S9 The TGA plots of polymers.

c) DSC thermograms

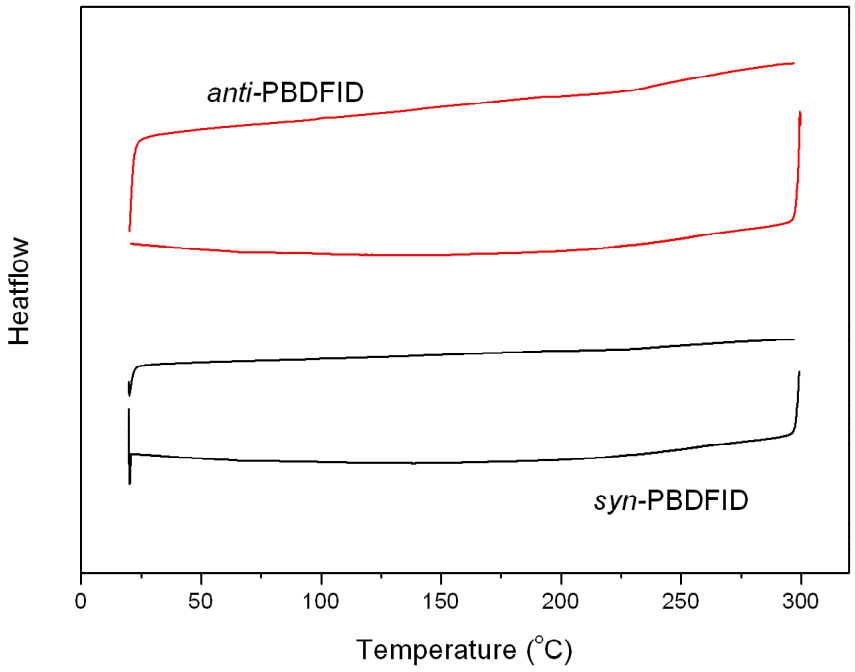

Fig. S10. DSC thermograms during the first heating and cooling scans.

d) Cyclic voltammograms

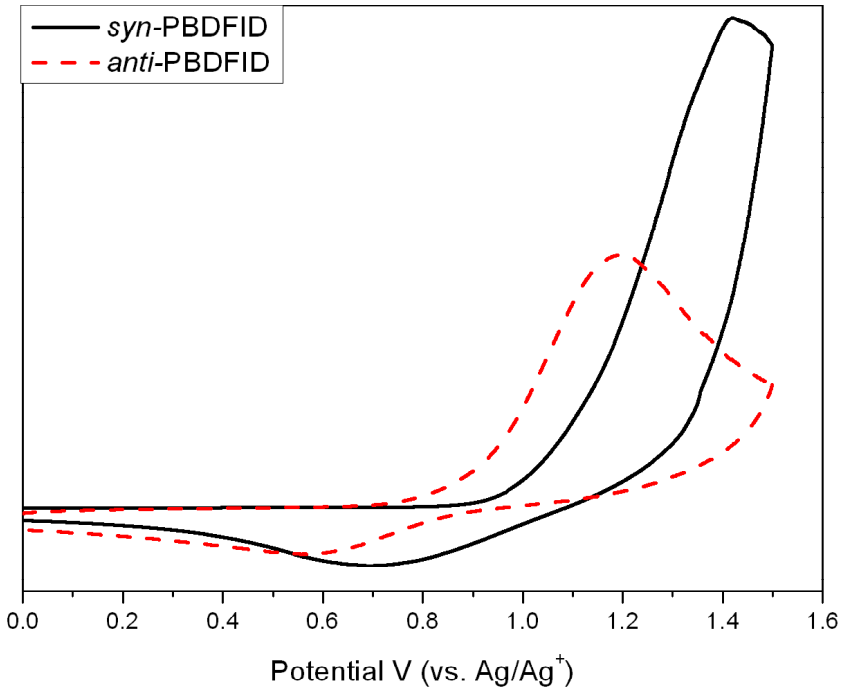

Fig. S11 Cyclic voltammograms of ***syn*-PBDFID** and ***anti*-PBDFID** films in acetonitrile/0.1 M $[n\text{-}Bu_4N]^+[PF_6]^-$ with scan rate of 100 mV/s.