

High-Performance Polymer Solar Cells based on a 2D-Conjugated Polymer with Alkylthio Side-Chain

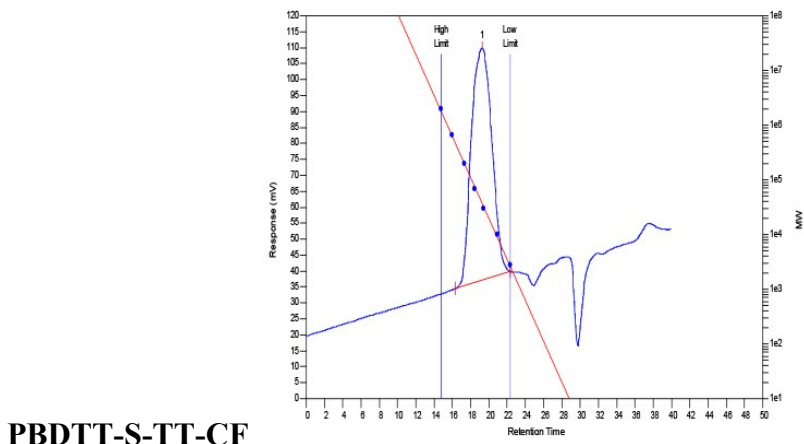
Chaohua Cui^{1, 2}, Zhicai He^{3*}, Yue Wu¹, Xiao Cheng¹, Hongbin Wu³, Yongfang Li^{1, 4*},
Yong Cao³, Wai-Yeung Wong^{2*}

1. Laboratory of Advanced Optoelectronic Materials, College of Chemistry, Chemical Engineering and Materials Science, Soochow University, Suzhou 215123, China. E-mail: liyongfang@suda.edu.cn (Y. Li)

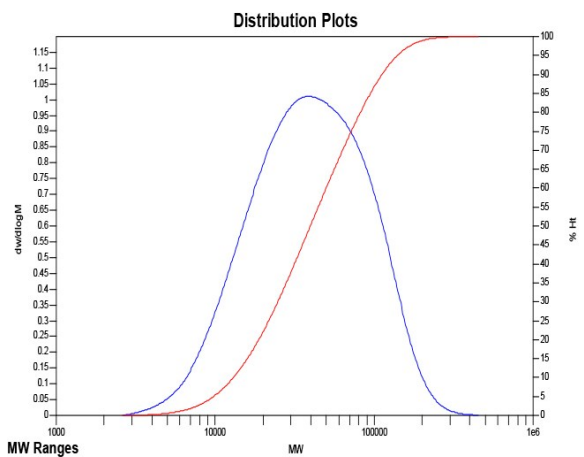
2. Institute of Molecular Functional Materials, Department of Chemistry and Institute of Advanced Materials, Hong Kong Baptist University, Waterloo Road, Hong Kong, P. R. China. E-mail: rwywong@hkbu.edu.hk (W.-Y. Wong)

3. Institute of Polymer Optoelectronic Materials and Devices, State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China. E-mail: zhicaihe@scut.edu.cn (Z. He)

4. Beijing National Laboratory of Molecular Sciences, CAS Key Laboratory of Organic Solids, Institute of Chemistry, Chinese Academy of Sciences, Beijing 100190, P. R. China. E-mail: liyf@iccas.ac.cn (Y. Li)



PBDTT-S-TT-CF



PBDTT-O-TT-CF

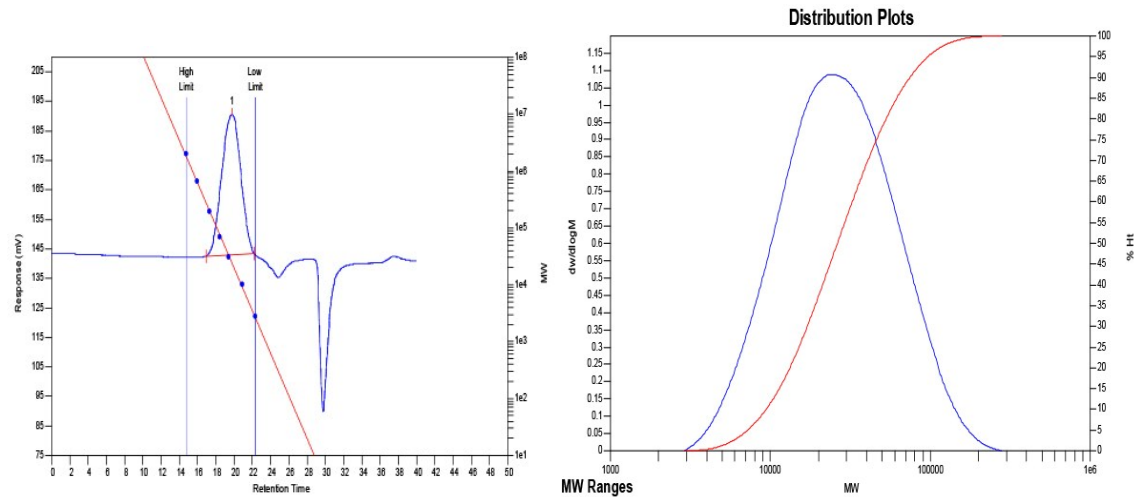


Figure S1. High temperature gel permeation chromatography (GPC) trace of polymers. The molecular weight was measured with 1, 2, 4-trichlorobenzene as eluent at 160 °C.

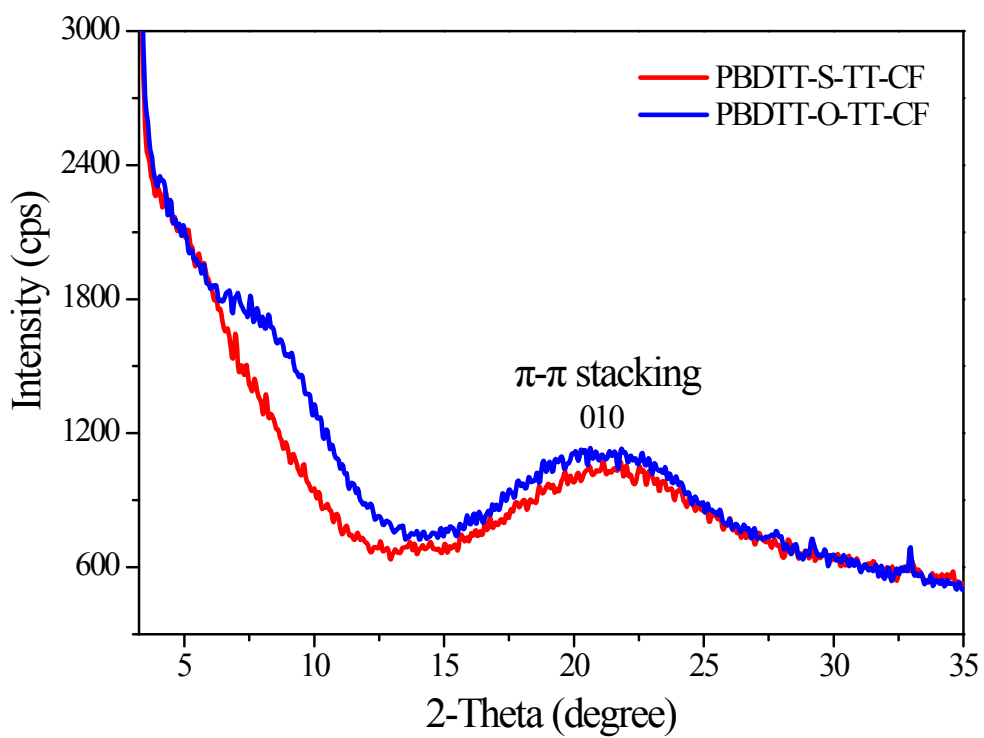


Figure S2. XRD pattern of **PBDTT-S-TT-CF** and **PBDTT-O-TT-CF** films