Enhanced photovoltaic performance of polymer solar cells by designing fused dithienosilolodithiophene (DTtS) structure with enlarged π -

conjugated system

Feng Qi[‡], Yu Zhang[‡], Meixiu Wan, Juan Liu, Lijun Huo^{*}

Key Laboratory of Bio-Inspired Smart Interfacial Science and Technology of Ministry of Education, Beijing Key Laboratory of Bio-inspired Energy Materials and Devices, School of Chemistry, Beihang University, Beijing 100191, China. *E-mail: <u>huolijun@buaa.edu.cn</u> [‡] Dual Contributors

Contents for Supporting Informations :

TGA plots of PDTSDTBT and PDTtSDTBT DSC curves of polymers	
	S2
UV-vis absorption spectra of the polymers	S3
Photovoltaic performance	



Figure S1. TGA plots of PDTSDTBT and PDTtSDTBT with a heating rate of 10 °C/min under an inert atmosphere.



Figure S2. DSC curves of polymers with a scanning rate of 10 °C/min.



Figure S3. UV-vis absorption spectra of the polymers in film on quartz.



Figure S4. a) V_{oc} , b) I_{sc} , c) *FF* and d) *PCE* dependence on Polymer: PC₇₁BM(1:1.5) under the illumination of AM1.5G, 100 mW cm⁻².