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通过调节共轭聚合物侧链实现可绿色溶剂加工的非富勒烯太阳能电池

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To Realize Green Solvent Processable Non-fullerene Organic Solar Cells by Modulating the Side Groups of Conjugated Polymers

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表 S1　基于两种聚合物给体材料的 OSC 器件的光伏性能参数

Table S1　The photovoltaic parameters of polymers:IT-M based OSC devices under different fabrication conditions.

Active layer	Additive and content	V_{oc}/V	J_{sc}/(mA·cm^{-2})	FF/%	PCE/%
PBDB-DT:IT-M	0%	0.93	16.50	42.10	6.46
	0.5%DIO	0.92	18.02	62.29	10.20
	1%DIO	0.91	15.19	55.27	7.66
	0.5%DPE	0.92	15.05	49.62	6.87
	1%DPE	0.92	15.63	52.89	7.63
	1%IPA	0.92	16.24	48.32	7.21
	3%IPA	0.91	15.54	40.89	5.79
PBDB-T:IT-M	0.5%DIO	0.90	13.06	54.00	6.41

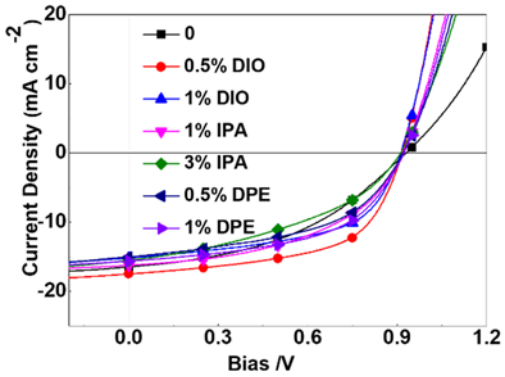

图 S1　PBDB-DT 在不同添加剂条件下 *J*–*V* 曲线

Fig. S1. The *J-V* curves for the devices based on PBDB-DT:IT-M treated with THF as the main processing solvent and varied amount of different additives.

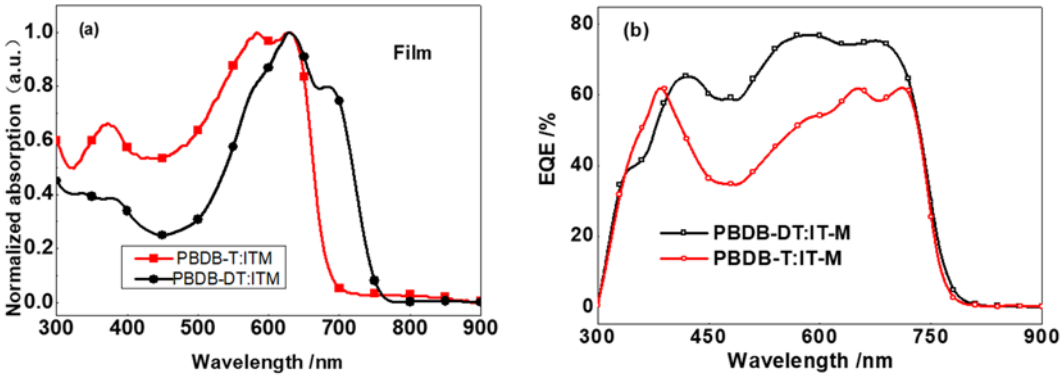

图 S2　(a)共混薄膜的吸收光谱与(b)外量子效率对比

Fig. S2. (a) The absorption spectra for the blend films of PBDB-T:IT-M and PBDB-T:IT-M; (b) the EQE curves for the two kinds of devices.