

Supporting Information for

Highly Crystalline and Uniform Conjugated Polymer Thin Films by Water-Based Biphasic Dip-Coating Technique Minimizing the Use of Halogenated Solvent for Transistor Applications

Eun Hye Kwon,^a Young Jin Jang,^a Gun Woo Kim,^b Min Kim*^c and Yeong Don Park*^{a,b}

Department of Energy and Chemical Engineering, Incheon National University, Incheon 22012, Korea

E-mail: cylee@inu.ac.kr; ydpark@inu.ac.kr

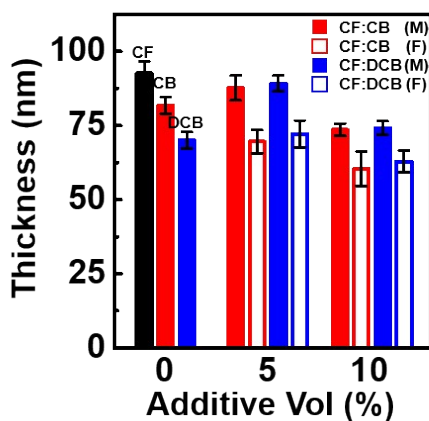


Figure S1. Thicknesses of the P3HT films dip-coated from the biphasic solvents with solvent additives CF:CB and CF:DCB for the two different solvent addition methods.

Table S1. Device parameters of the dip-coated P3HT FET devices. Each device parameter was average value calculated from the 10 devices.

		μ (cm ² V ⁻¹ s ⁻¹) ($\times 10^{-3}$)	On-off ratio ($\times 10^3$)	V_{th}
Pristine	CF	0.13 ± 0.34	1.50 ± 0.49	9 ± 4.11
	CB	12.53 ± 5.00	15.80 ± 5.57	24 ± 1.00
	DCB	25.20 ± 16.00	76.60 ± 7.69	14 ± 3.00
Floating	CF:CB(5)	17.94 ± 6.20	17.90 ± 6.30	19 ± 3.86
	CF:CB(10)	24.66 ± 9.08	26.80 ± 3.24	13 ± 6.00
	CF:DCB(5)	2.74 ± 1.54	3.91 ± 1.66	30 ± 6.03
	CF:DCB(10)	6.02 ± 3.67	9.84 ± 8.93	21 ± 8.62
Mixing	CF:CB(5)	32.21 ± 5.04	21.40 ± 6.91	19 ± 5.51
	CF:CB(10)	39.16 ± 7.82	41.40 ± 3.62	10 ± 2.38
	CF:DCB(5)	6.18 ± 2.21	2.27 ± 2.81	29 ± 4.24
	CF:DCB(10)	9.52 ± 3.73	3.04 ± 2.96	30 ± 3.79