Supplementary material

Sequential Solvent Casting for Improving the Structural Ordering and Electrical Characteristics of Polythiophene Thin Films

Shinae Kim, Boseok Kang, Minjung Lee, Seung Goo Lee^d, Kilwon Cho, Hoichang Yang*, Yeong Don Park*

^a Department of Energy and Chemical Engineering, Incheon National University, Incheon 406-772, Korea

^b Department of Chemical Engineering, Pohang University of Science and Technology, Pohang 790-784, Korea

^c Department of Advanced Fiber Engineering, Optoelectronic Hybrids Research Center, Inha University, Incheon, 402–751, Korea

^d Department of Chemical Engineering, Massachusetts Institute of Technology, Cambridge, Massachusetts 02139, USA

 $^{\perp}S$. K. and B. K. contributed equally to this work.

* Corresponding author. Tel: +82-32-835-8679

E-mail address: hcyang@inha.ac.kr (H.Yang), ydpark@incheon.ac.kr (Y. D. Park)

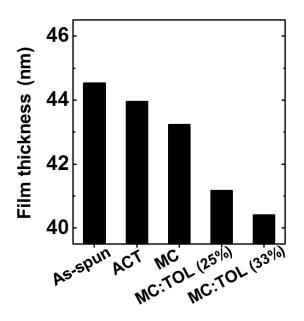


Figure S1. Thickness values of the P3HT films: as-spun or exposed to the various solvents.

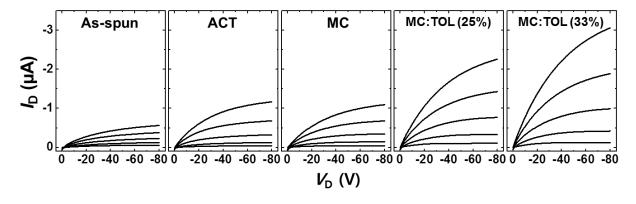


Figure S2. Output characteristics (I_D-V_D) of FETs (V_G steps: 0, -20, -40, -60, -80 V) fabricated using the P3HT thin films exposed to the various solvents.

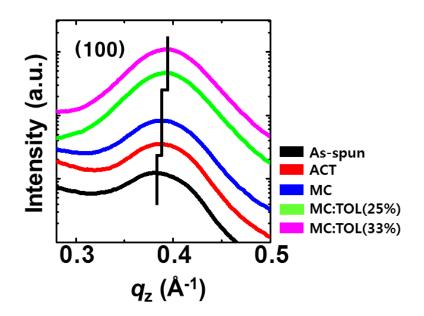


Figure S3. Magnified X-ray intensity profiles of the out-of-plan (100) reflections.