

Supporting information

Photo-response Modulation of Organic Transistors for Multi-level Light Sensing using Active Layer Microstructure Control

Dohyeong Park^{+,1}, Gergely Tarsoly^{+,1}, Dongyub Kwon¹, Tae Joo Shin², Seungmoon Pyo^{,1}*

¹Department of Chemistry, Konkuk University, 120 Neungdong-ro, Gwangjin-gu, Seoul, 05029, Republic of Korea

²Ulsan National Institute of Science and Technology, UNIST Central Research Facilities, Ulsan, Republic of Korea

⁺Equal contribution

^{*}Corresponding author (+82-2-450-3397), E-mail: pyosm@konkuk.ac.kr

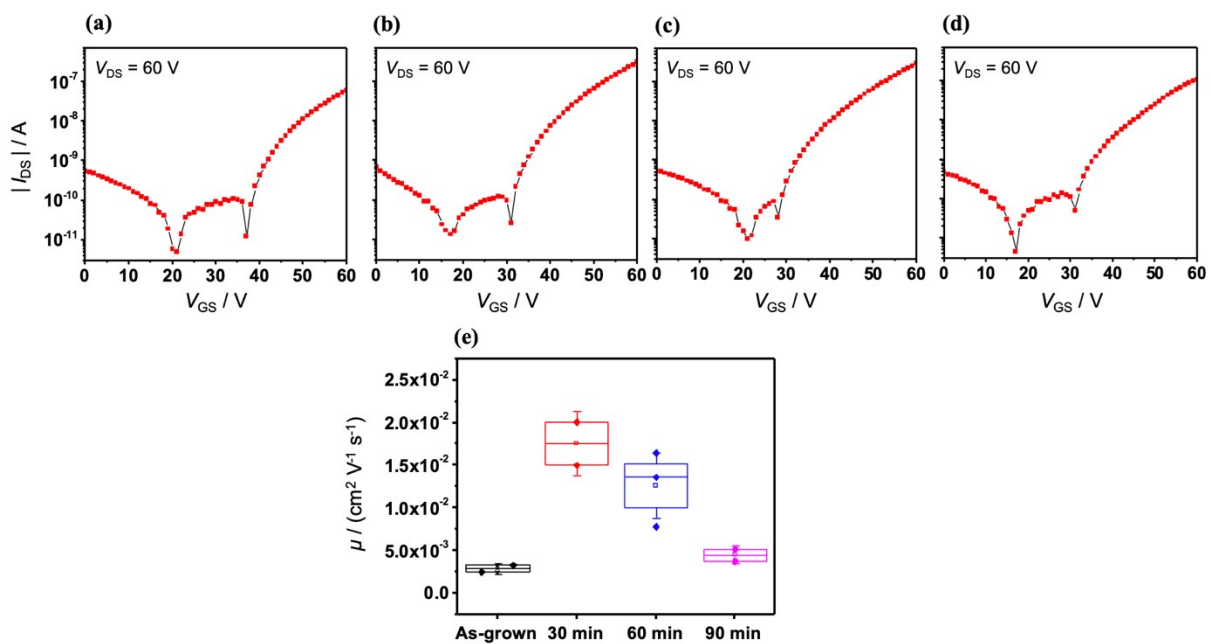


Figure S1. Transfer characteristics of devices with PTCDI-C₁₃ films: (a) as-grown film, SVA treated (DCM vapor) film for (b) 30 min, (c) 60 min and (d) 90 min, and (e) measured field-effect mobilities of the devices.

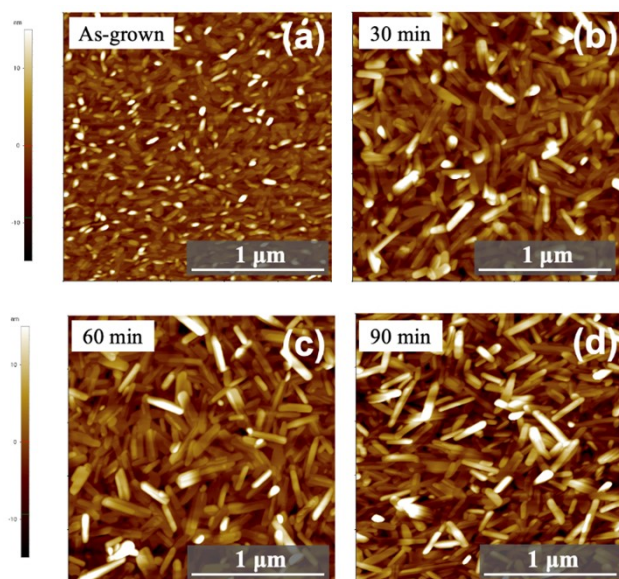


Figure S2. AFM images of PTCDI-C₁₃ films: (a) as-grown film, SVA treated (DCM vapor) film for (b) 30 min, (c) 60 min, and (d) 90 min.

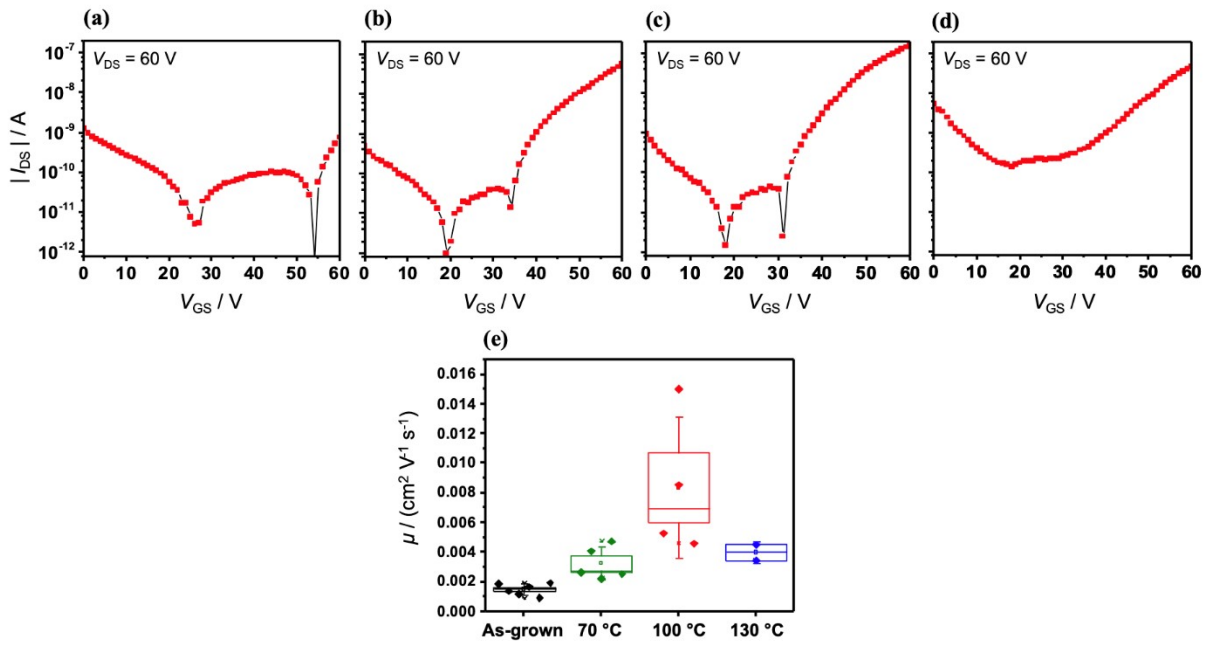


Figure S3. Transfer characteristics of devices with PTCDI-C₁₃ films: (a) as-grown film, TA treated film at (b) 70 °C, (c) 100 °C, and (d) 130 °C for 15 min and, (e) measured field-effect mobilities of the devices.

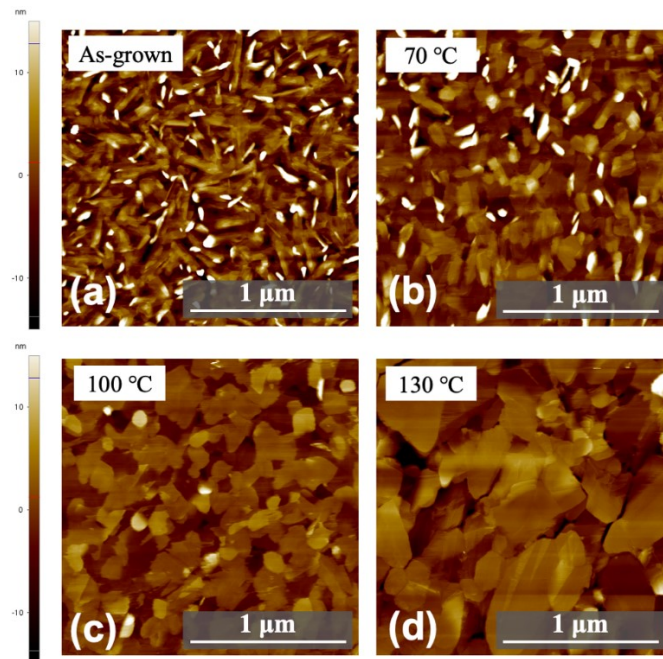


Figure S4. AFM images of PTCDI-C₁₃ films: (a) as-grown film, TA treated film at (b) 70 °C, (c) 100 °C, and (d) 130 °C for 15 min.