Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C.

Supporting Information

Brush-Controlled Oriented Growth of TCNQ Microwire Arrays for Field-Effect Transistors

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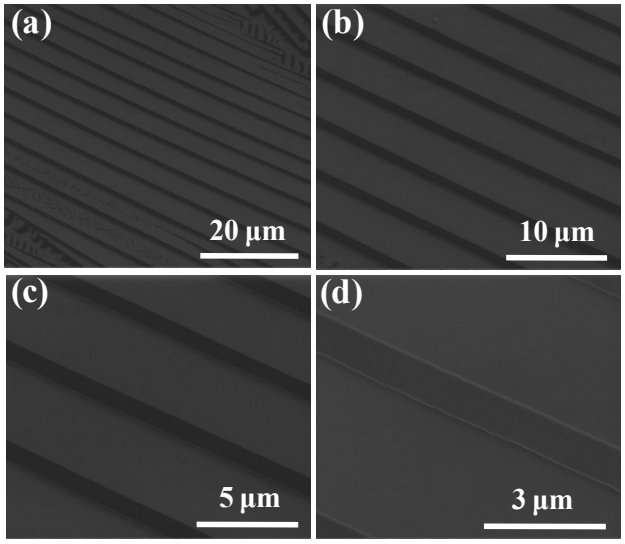

Figure S1. Scanning electron microscope (SEM) images of TCNQ microwire arrays under different magnifications.

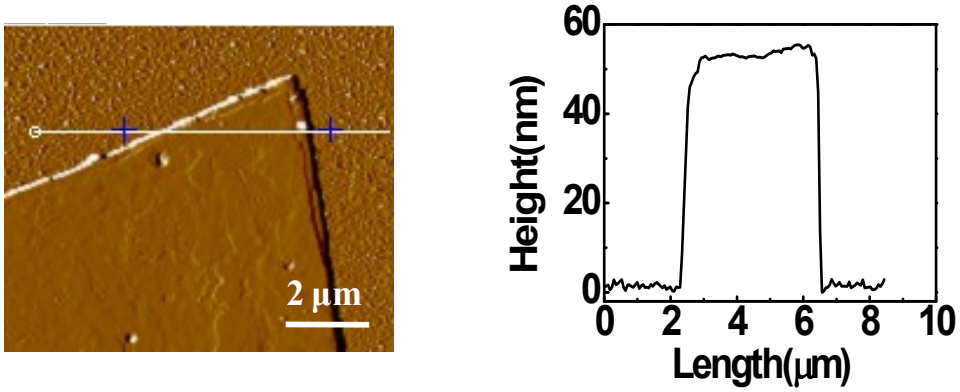

Figure S2. Atomic force microscopy image and corresponding height profile of the TCNQ microsheet.

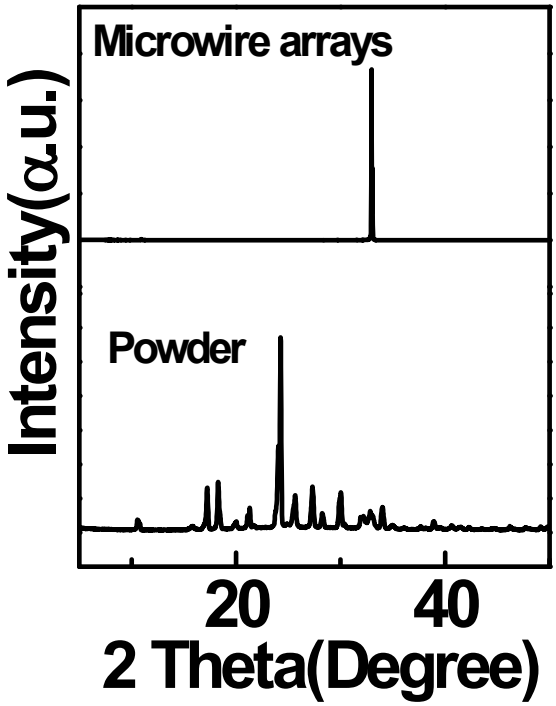

Figure S3. Out-of-plane XRD pattern of TCNQ powder and microwire arrays.

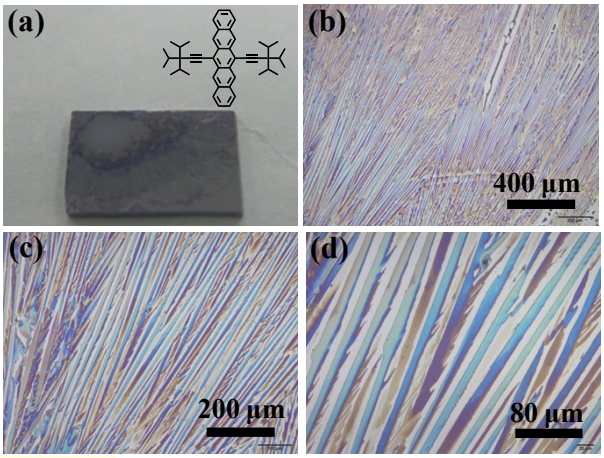

Figure S4. The typical morphology features of TIPS-pentacene microribbon arrays by a writing brush. (a)Digital photograph on the Si substrate. The inset shows the molecular structure of TIPS-pentacene. (b-d) Optical microscope images under different magnifications.

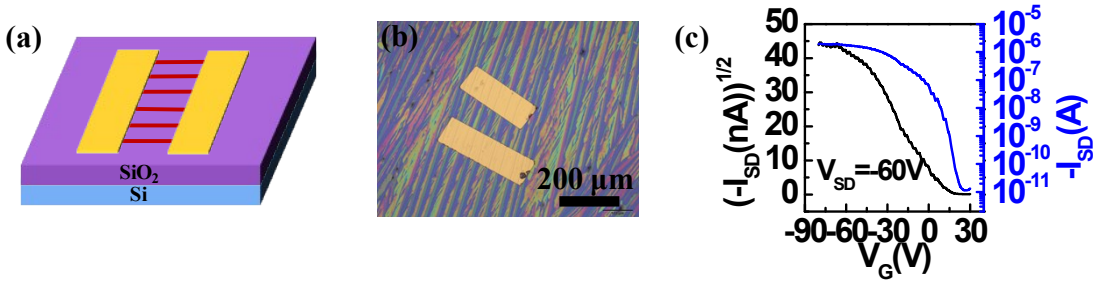

Figure S5. (a)Schematic images of the TIPS-pentacene device. (b)Optical microscope images of the TIPS-pentacene device. (c)The corresponding transfer curves measured in air at room temperature. The mobility can reach 0.09 $cm^2V^{-1}s^{-1}$.