

## Supporting Information

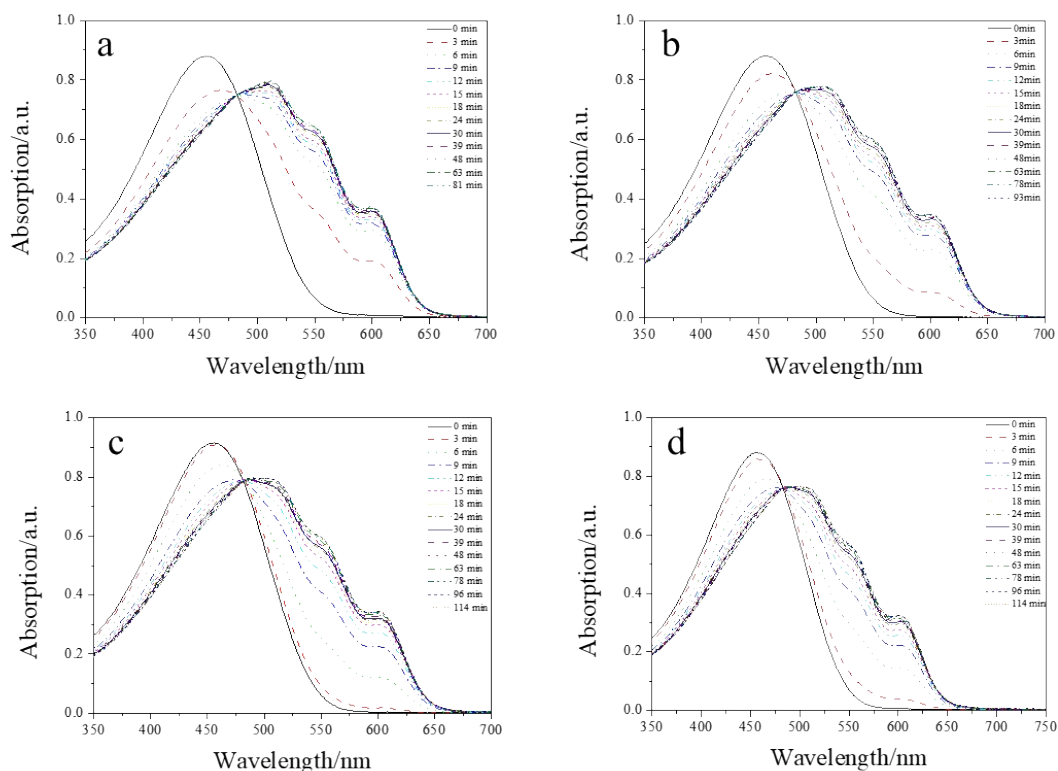


Figure S1. Time-dependent chromism of P3HT crystallized in anisole. (a) Pristine solution crystallized at 16 °C, (b) sonicated solution crystallized at 16 °C, (c) pristine solution crystallized at 26 °C and (d) sonicated solution crystallized at 26 °C. Ultrasonication power: 100 W, ultrasonication time: 3 min.

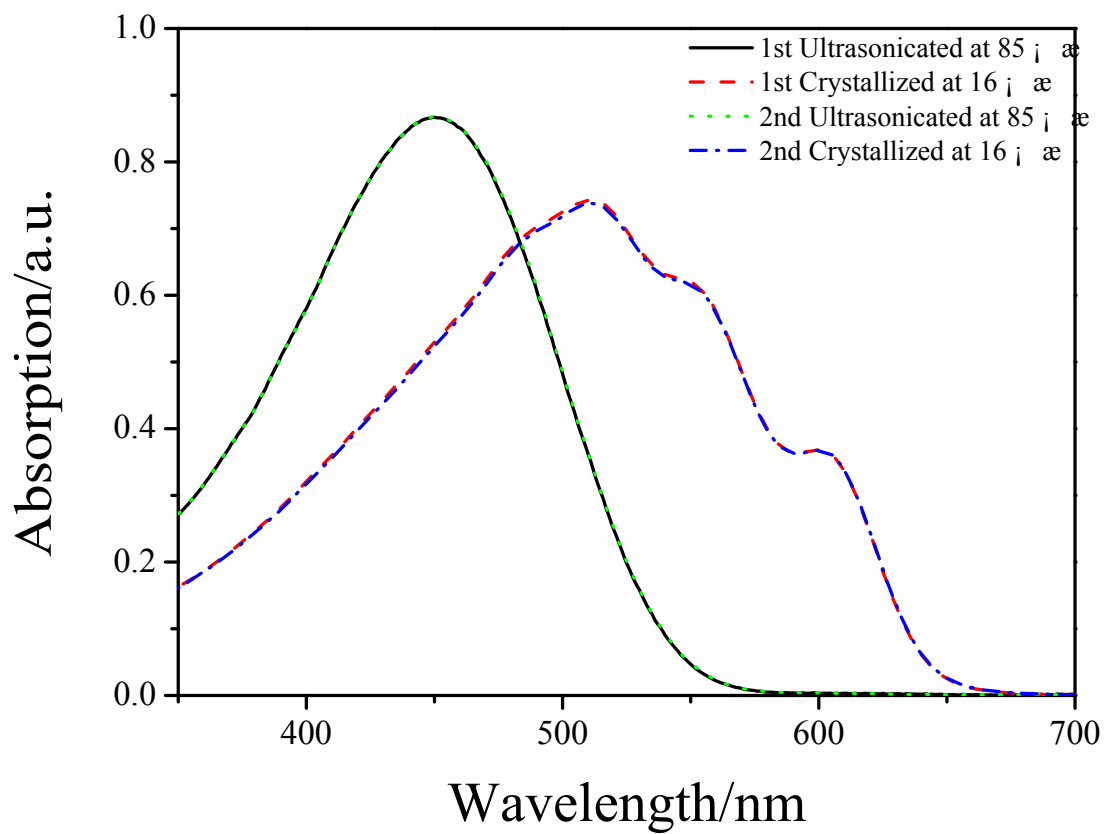


Figure S2. Normalized UV-vis absorption spectra of P3HT solution ultrasonicated at 85 °C, completely crystallized at 16°C, reheated and ultrasonicated at 85 °C and completely crystallized at 16 °C again.

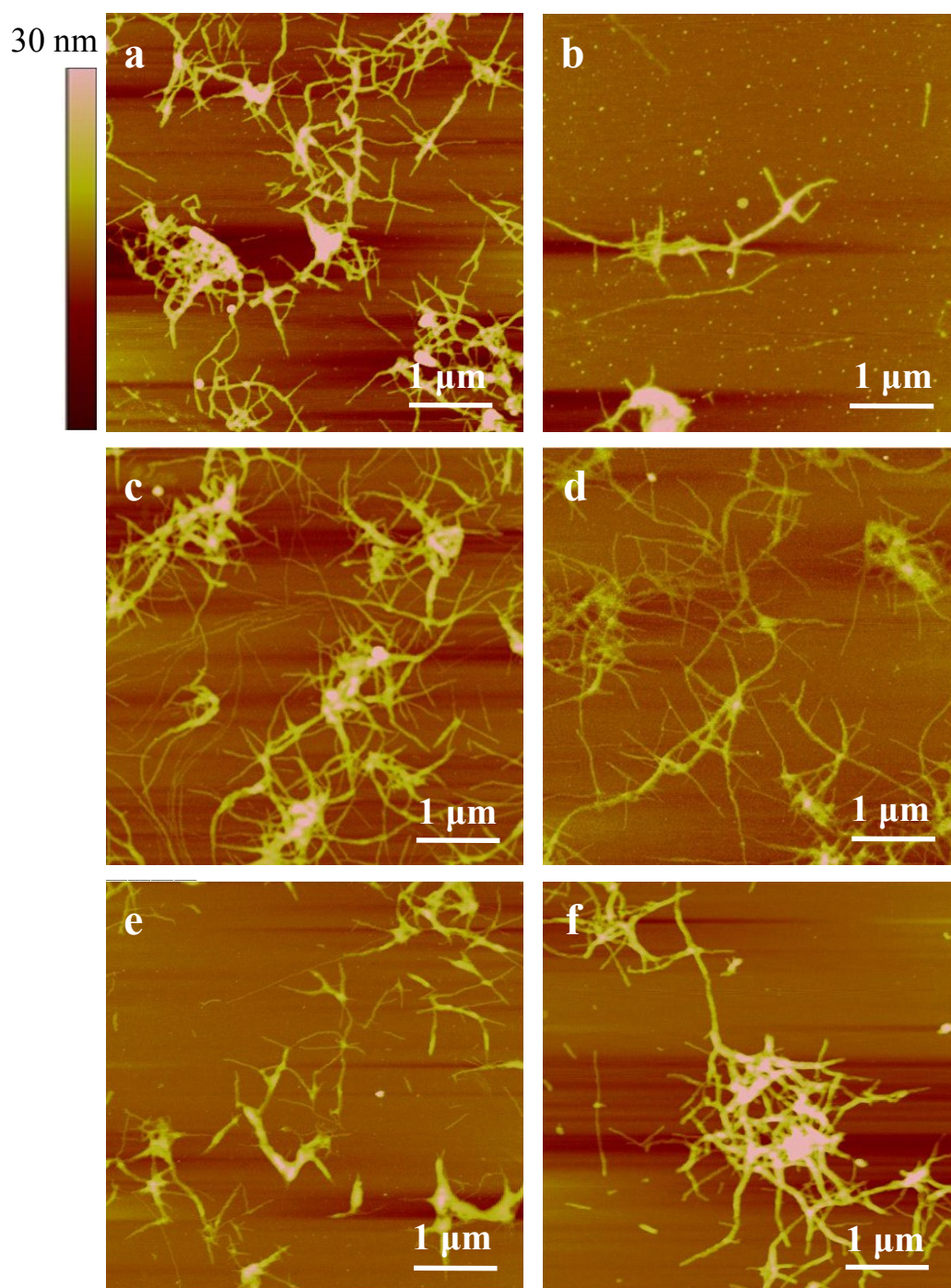


Figure S3. AFM height images of P3HT films formed from the P3HT solution crystallizes at (a) 16 °C without ultrasonication, (b) 16 °C with ultrasonication, (c) 20 °C without ultrasonication, (d) 20 °C with ultrasonication, (e) 26 °C without ultrasonication, and (f) 26 °C with ultrasonication. Ultrasonication power: 100 W, ultrasonication time: 3 min.

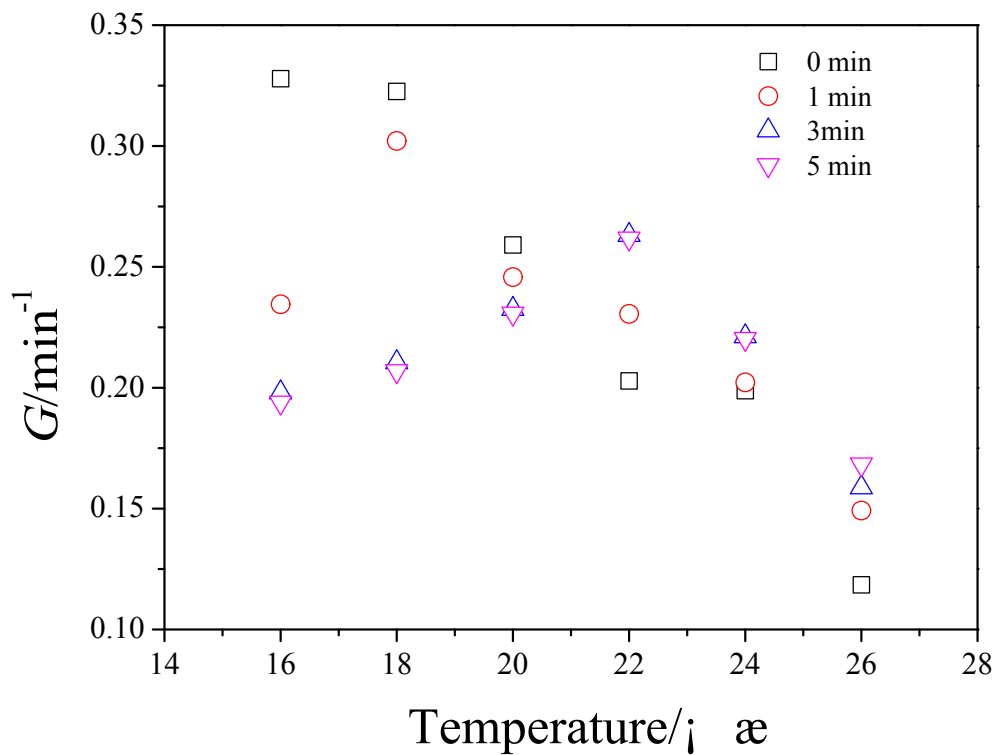


Figure S4. The growth rate  $G$  of P3HT crystals with varying ultrasonication times at different isothermal crystallization temperatures. Ultrasonication power: 100 W, ultrasonication temperature: 85 °C.



Figure S5. The photos of the ultrasonic cleaners of different models: (a) KQ-100 E and (b) SB-5200 DTD.