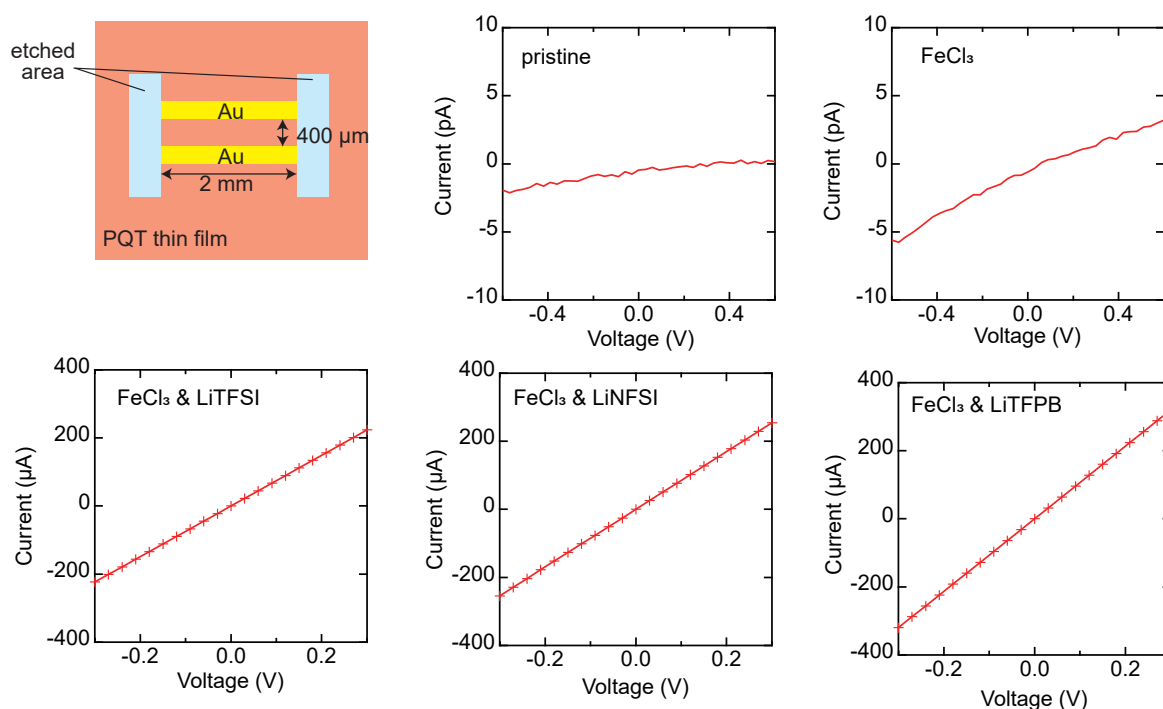


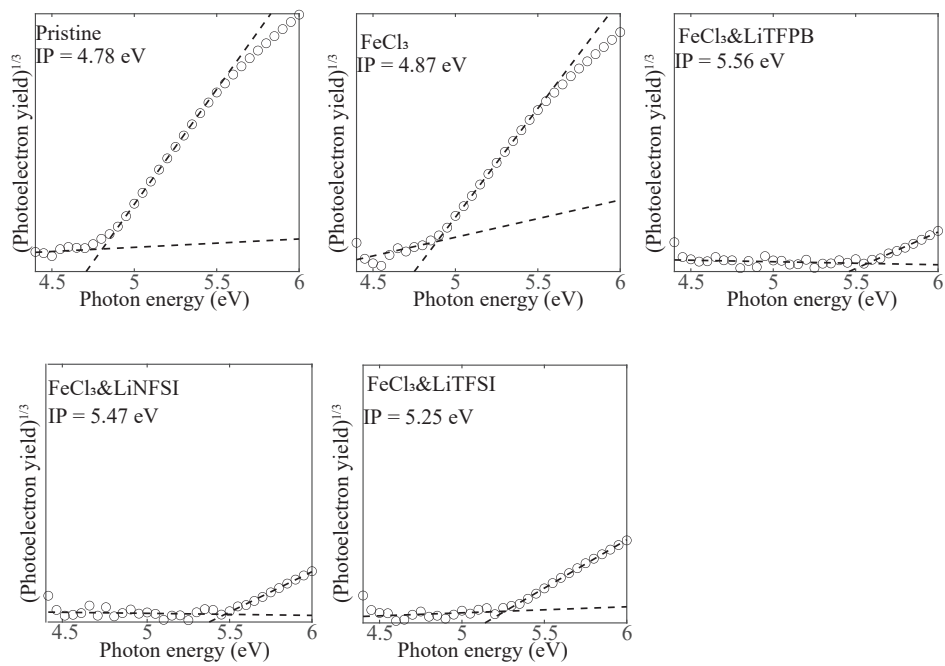
Supplementary Materials for
Chemical doping of a semicrystalline polymeric semiconductor
realizing high stability and work function

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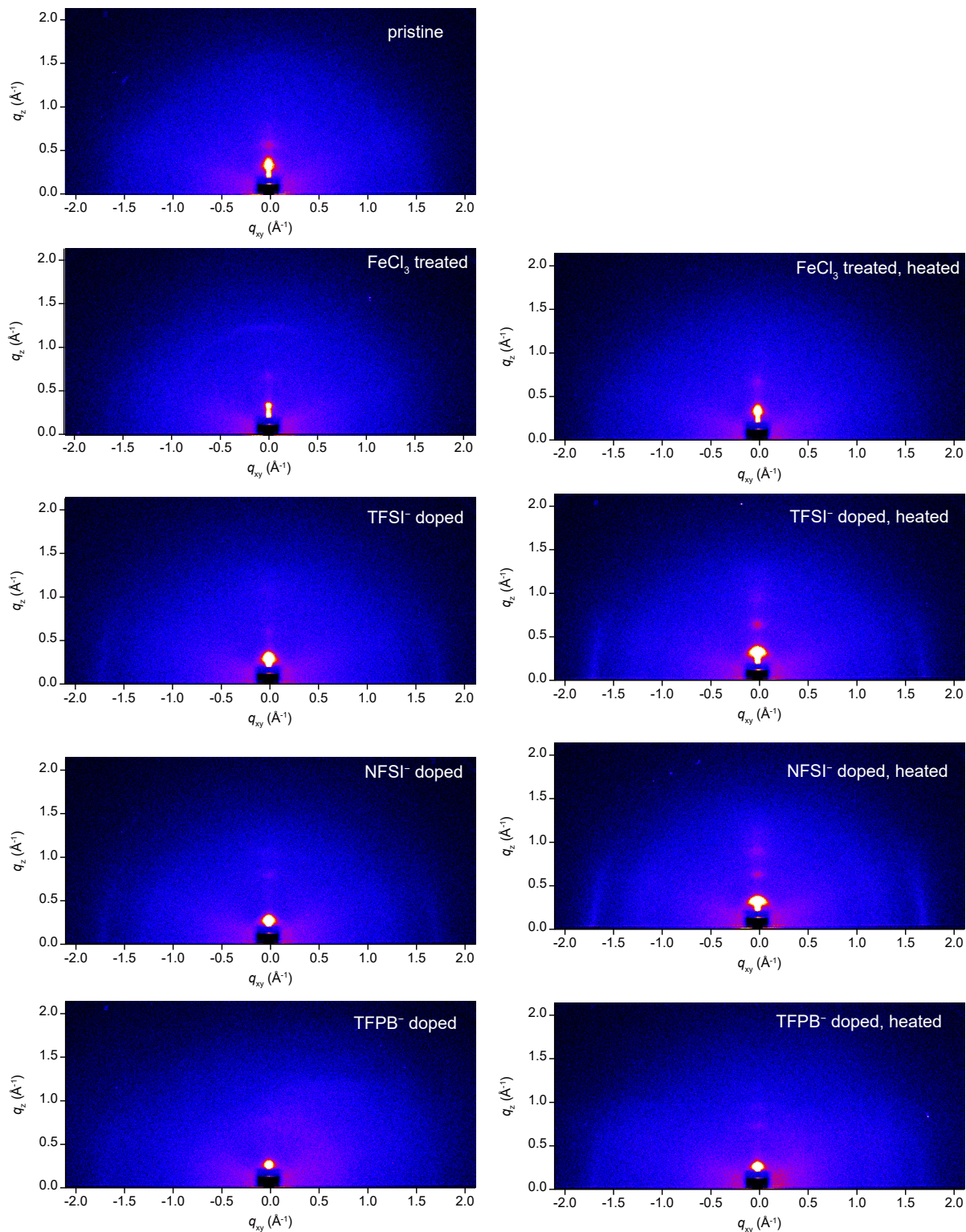
Email: YAMASHITA.Yu@nims.go.jp



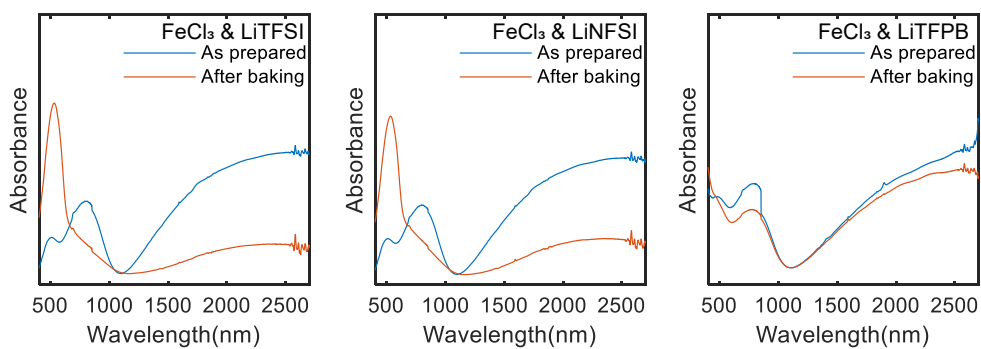
Supplementary Figure S 1: An illustration of channel geometry and representative current-voltage curves of the doped PQT thin films after the doping process. Etching of the semiconductor films were simply done by scratching them with a stick. Current-voltage curves were measured in air using a Keithley 2612B source meter. Employed dopants are denoted in the panels.



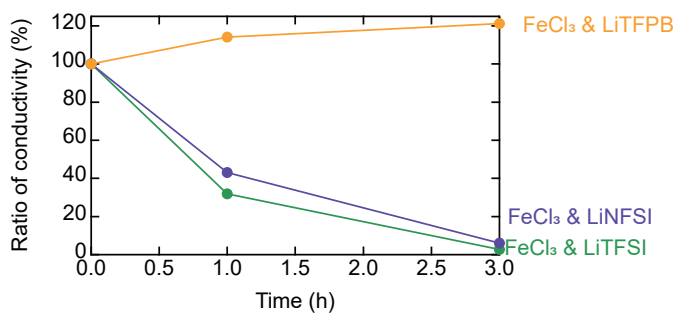
Supplementary Figure S 2: Fitting of PYS spectra of PQT thin films. Employed dopants and value of ionization potential are denoted in the panels.



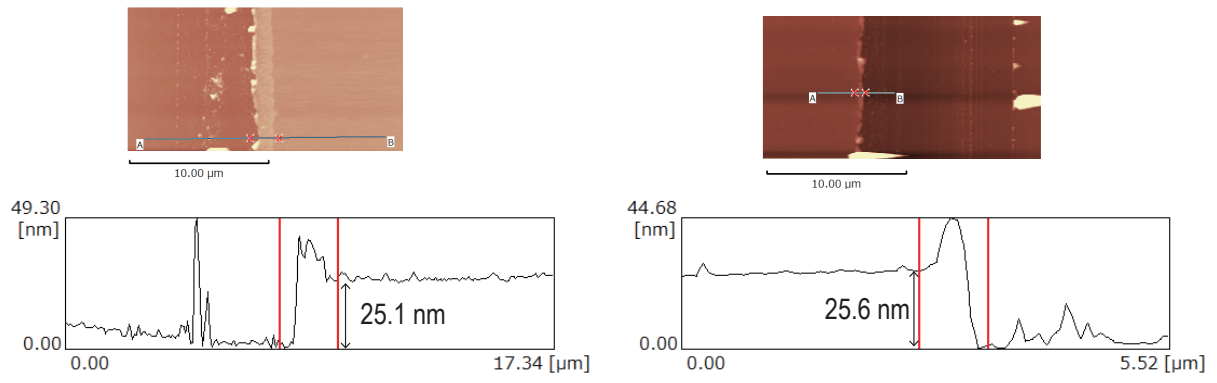
Supplementary Figure S 3: GIWAXS images of treated and untreated PQT thin films. Employed treatments are denoted in the figures. Samples heated at 125°C for 1 h after the chemical doping process are denoted as heated.



Supplementary Figure S 4: UV-Vis spectra of doped PQT thin films before and after heating in a nitrogen atmosphere at 125°C for 1 h. Employed dopants are denoted in the panels.



Supplementary Figure S 5: Ratio of remaining conductivity of doped PQT thin films after heating at 100°C in a nitrogen atmosphere. Employed dopants are denoted.



Supplementary Figure S 6: The AFM images of PQT thin film to determine the thickness. The thin film was scratched to measure the thickness.