

Figure S1. The change in UV-vis absorption spectra of doped PIDF-BT according to doping time for (a) F4TCNQ, (b) F6TCNNQ, (c) FeCl₃, (d) NOBF₄, (e) AuCl₃, and (f) Magic Blue doping.

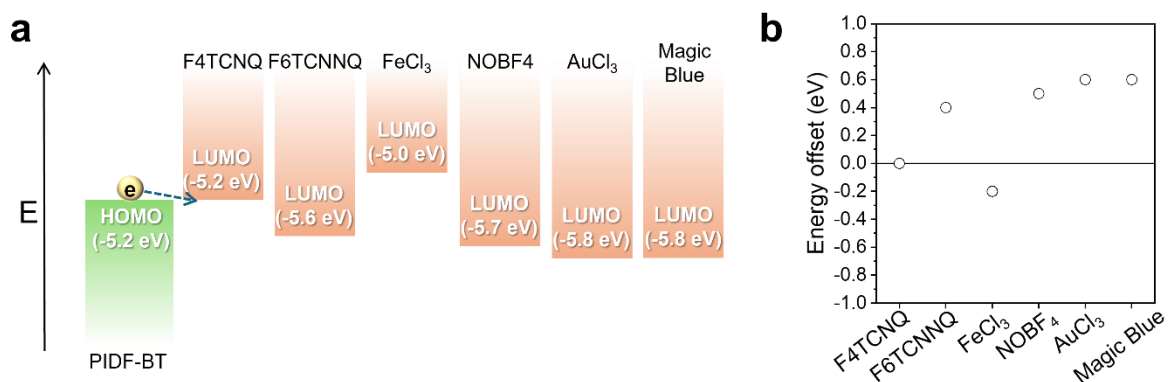


Figure S2. (a) Summary of the energy levels of PIDF-BT and each dopant, and (b) energy level offset between the HOMO of PIDF-BT and the LUMO of each dopant.

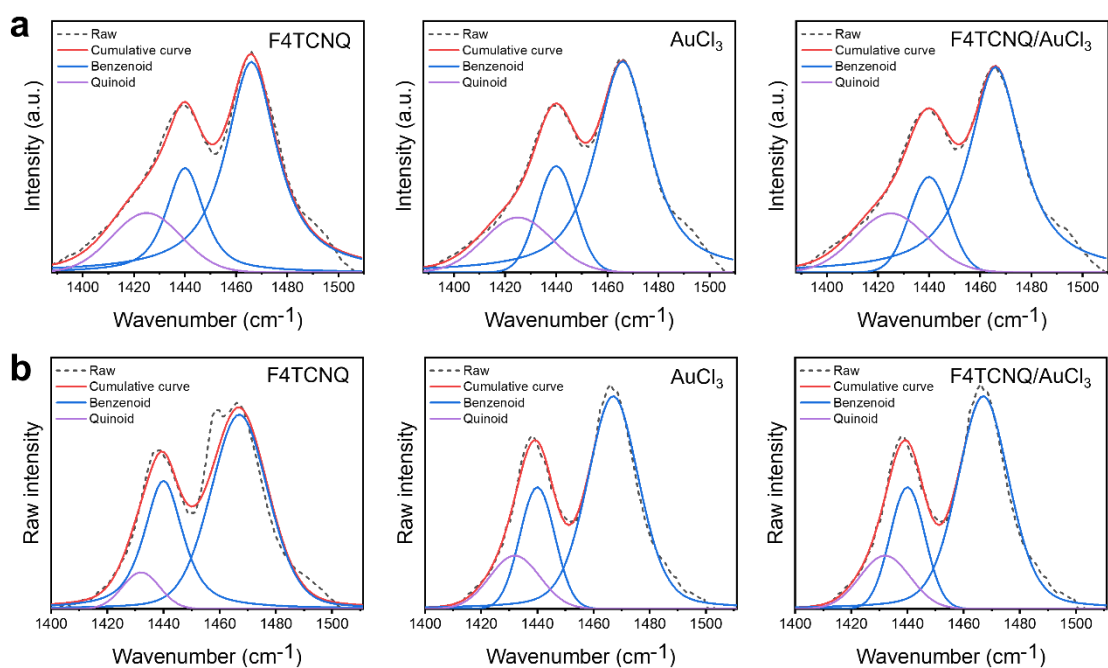


Figure S3. Gaussian fitting of Raman spectra for (a) doped PIDF-BT and (b) doped PIDF-BT@SWCNT