## **Supplementary Information**

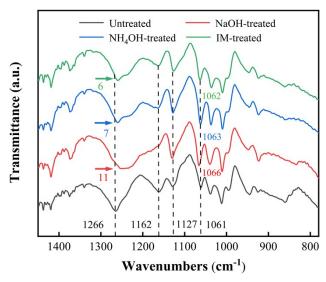


Fig.S1 ATR-FTIR spectra for untreated PEDOT:PSS films and films treated with three bases

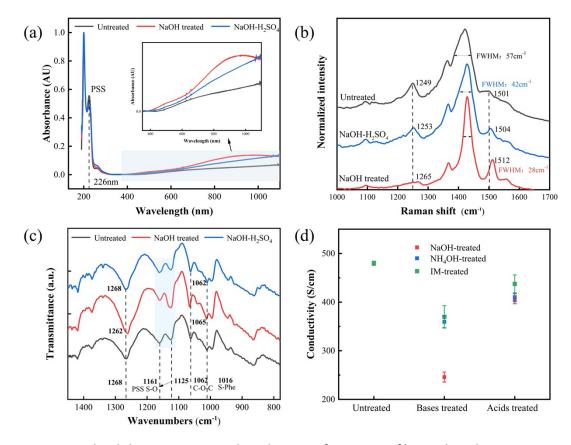


Fig.S2 Doping level characterization and conductivity of PEDOT:PSS films with acid re-treatment after bases treatment. (a) The UV absorption spectra; (b) Raman spectra measured at a 532 nm laser; (c) ATR-FTIR spectra; (d) conductivity of PEDOT:PSS films.

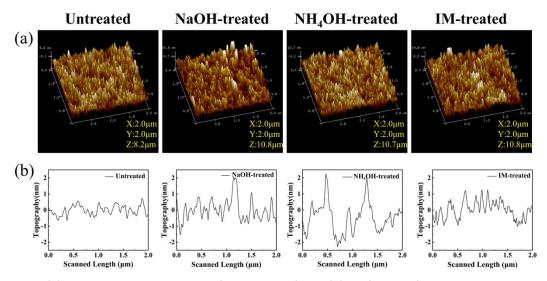


Fig.S3 (a) AFM topography images of PEDOT:PSS films; (b) Surface profiles corresponding to the topography images.

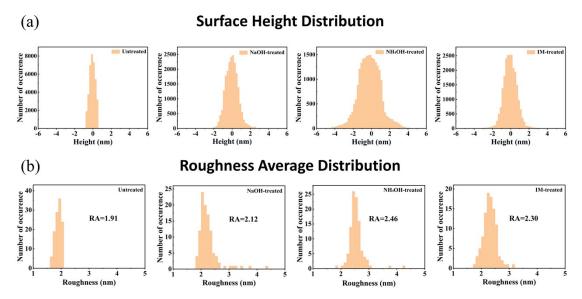


Fig.S4 (a) Surface height distribution corresponding to the images; (b) Surface roughness distribution of the films.