## Supporting information

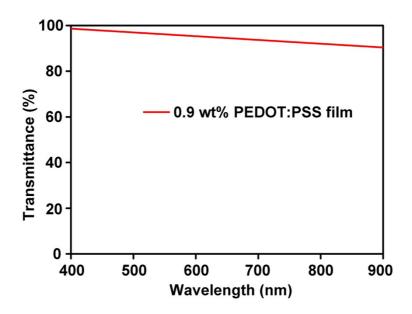


Fig. S1. Optical transmittance spectra of 0.9 wt% PEDOT:PSS film.

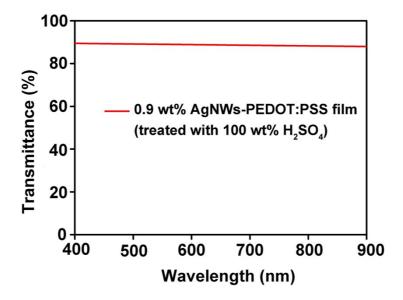


Fig. S2. Optical transmittance spectra of 0.9 wt% AgNWs-PEDOT:PSS composite film treated with 100 wt%  $H_2SO_4$ .