

Supporting Information

Electropolymerization porous aromatic framework film as hole-transport layer for inverted perovskite solar cells with superior stability

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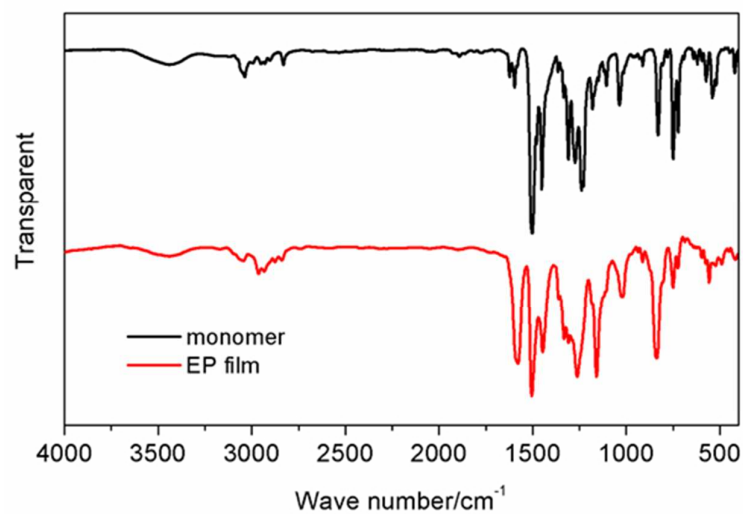


Figure S1. FTIR spectra of monomer M1 and EP PAF86 film.

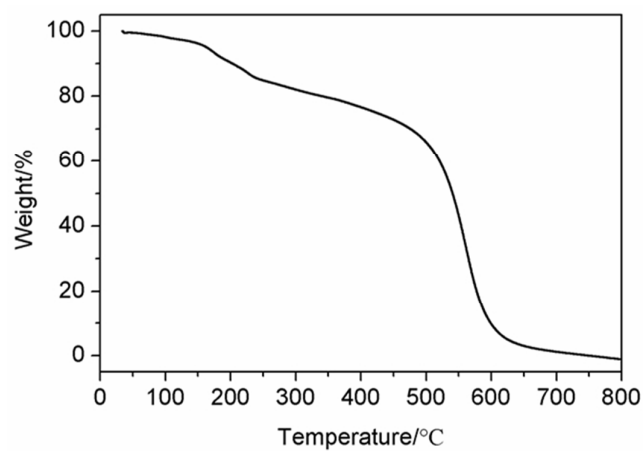


Figure S2. TGA curve of PAF86 film.

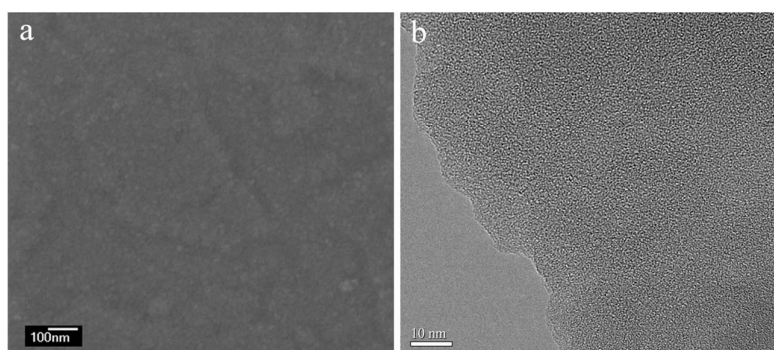


Figure S3. (a) SEM and (b) TEM images of the PAF86 film.

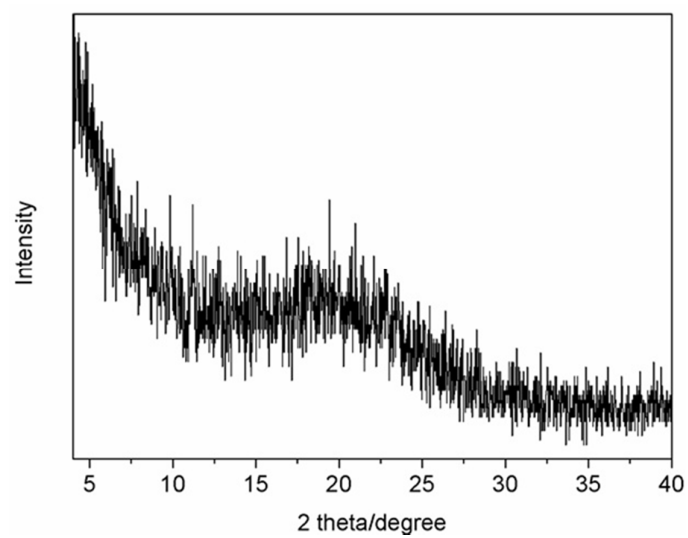


Figure S4. PXRD patterns of the PAF86 film.

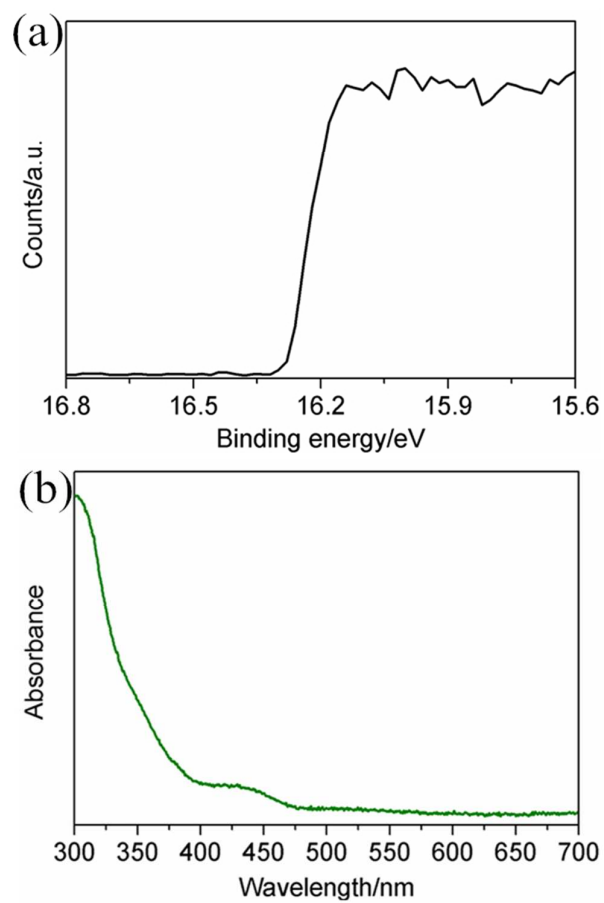


Figure S5. (a) UPS and (b) UV-Vis spectra of the PAF86 film.

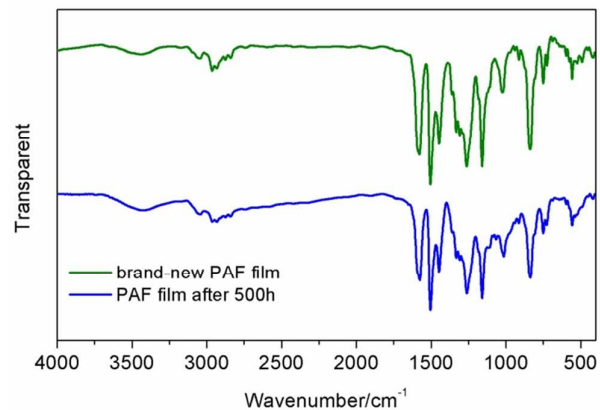


Figure S6. FTIR spectra for PAF film of brand-new and after 500h storage.

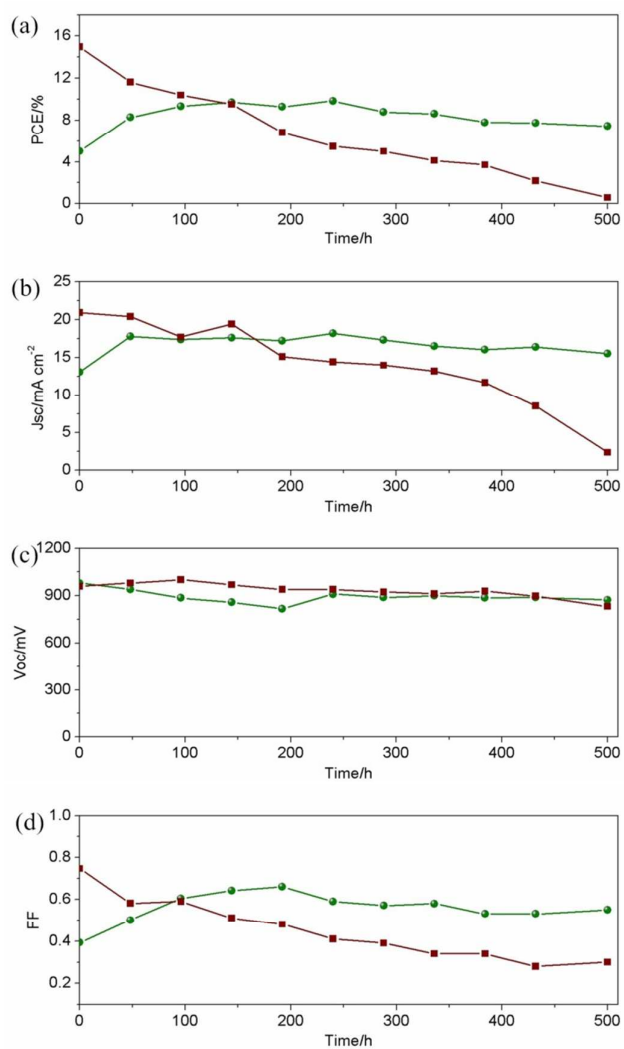


Figure S7. Photovoltaic parameters of PAF film-based (sphere colored olive) and PEDOT:PSS-based (cubic colored wine) devices variation during the duration without encapsulation in air at ambient conditions. (a) PCE; (b) J_{sc} ; (c) V_{oc} ; (d) FF.