

## Supporting Information

### Combination of Al-Doped ZnO and a Conjugated Polyelectrolyte interlayers for small molecule solution-processed solar cells with inverted structure

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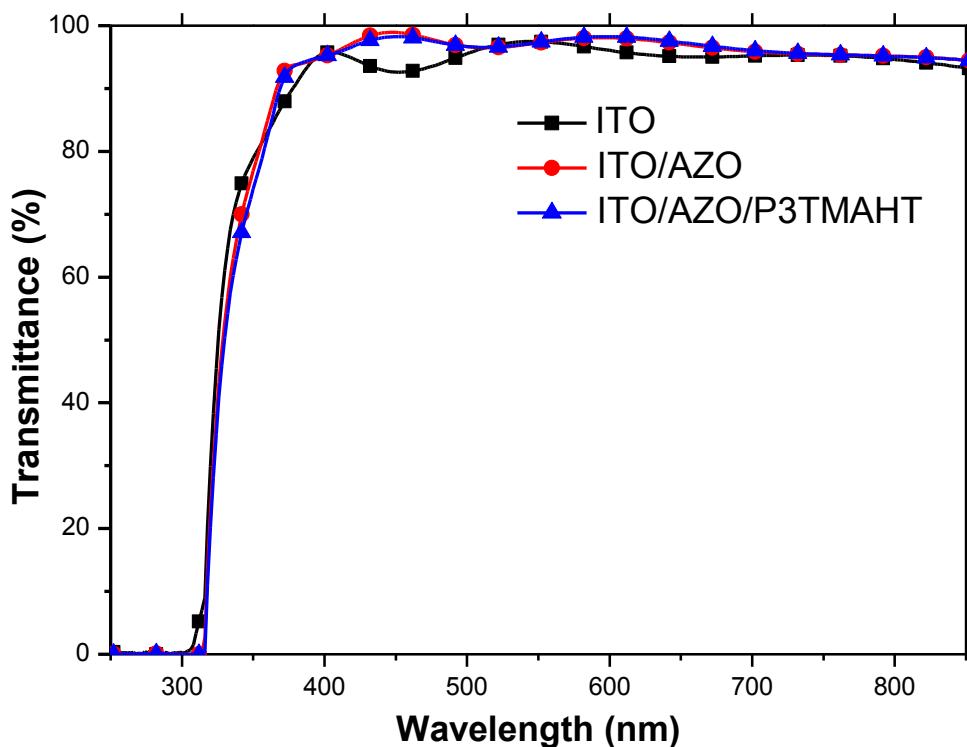


Figure S1. Optical transmittance spectra of the AZO and AZO/P3TMAHT layers on ITO-substrates. (Due to the slight difference between the thickness of the ITO-substrates, the ITO has less transmittance than ITO/AZO and ITO/AZO/P3TMAHT)

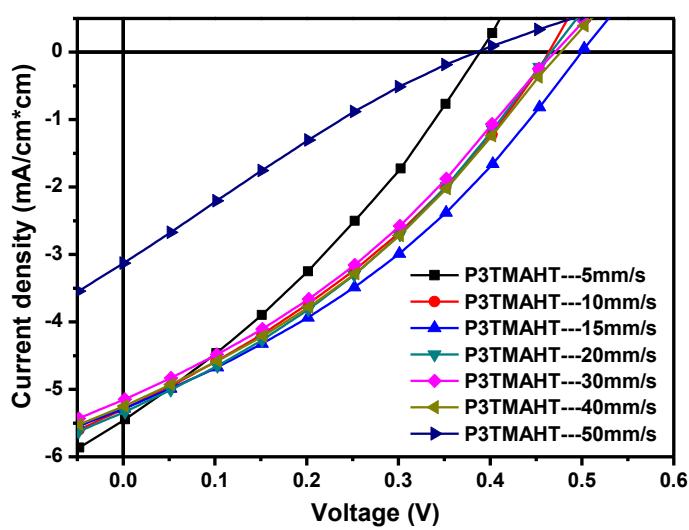


Figure S2. *J-V* characteristics of conventional device (ITO/P3TMAHT /BHJ/Ca/Ag) using different speeds (doctor-blade) for P3TMAHT layer.

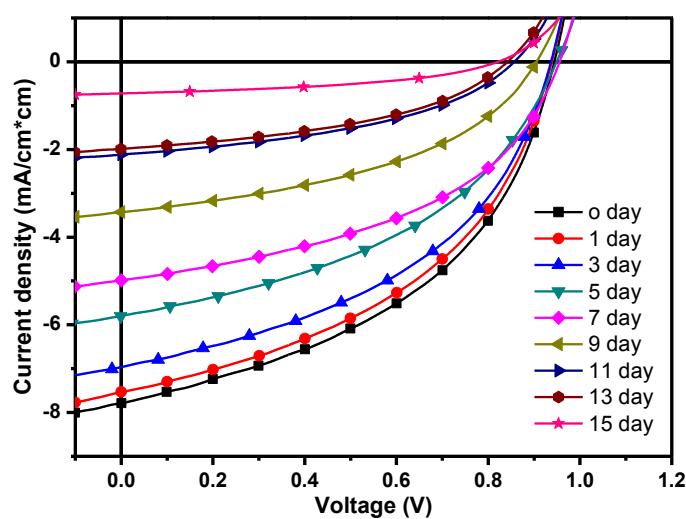


Figure S3. *J-V* characteristics of conventional device (ITO/PEDOT/BHJ/Ca/Ag) without encapsulation in air.

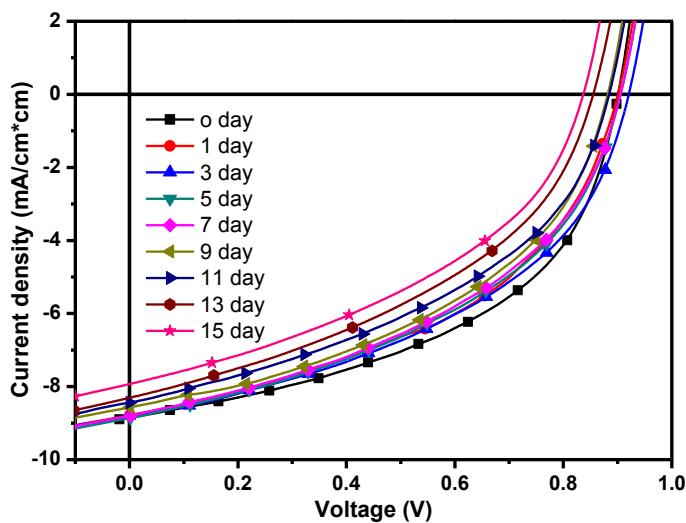


Figure S4. *J-V* characteristics of inverted device (ITO/AZO/P3TMAHT/BHJ/MoO<sub>3</sub>/Ag) without encapsulation in air.