Supporting Information

A Conjugated Microporous Polymer Film by in-situ Electro-chemical

Deposition as Hole Transporting Layers in Organic Photovoltaics

Shuo Yang, Chengdong Yang, Xuning Zhang, Zhong Zheng, Shiqing Bi, Yuan Zhang, Huiqiong Zhou^{*}



Fig. S1 CV profiles of the precursor solution in acetonitrile/DCM (1:4 v/v) in the presence of the TBAP as supporting electrolyte at ambient temperature with the scan rate of 0.05 V/s.

Table S1 Performances of devices based on CMPs filmswith different monomer solution concentration(Cut-off potential: 1.4 V, scan cycles: 2 cycles)

Concentration/ mmol	V _{oc} /V	J _{sc} /mA⋅cm ⁻²	FF/%	PCE/%
0.3	0.70	16.07	55.47	6.24
0.4	0.80	16.47	67.53	8.85
0.5	0.72	16.22	54.48	6.36

(Concentration: 0.4 mmol, scan cycles: 2 cycles)							
Potential/V	V _{oc}	J _{sc} /mA⋅cm ⁻²	FF/%	PCE/%			
1.3	0.74	15.00	58.23	6.47			
1.4	0.80	15.71	68.40	8.55			
1.5	0.66	0.37	14.62	0.035			

Table S2 Performances of devices based on CMPs films with different cut-off portential (Concentration: 0.4 mmol. scan cycles: 2 cycles)

Table S3 Performances of devices based on CMPs filmswith different scan cycles(Concentration: 0.4 mmol, cut-off potential: 1.4 V)

Scan cycles	V _{oc}	J _{sc} /mA⋅cm ⁻²	FF/%	PCE/%
0	0.48	16.55	52.95	4.21
1	0.74	15.24	55.93	6.31
2	0.80	16.14	70.64	8.90
3	0.63	15.64	53.09	6.48