

Supporting Information

Porous PbI₂ films for fabrication of efficient, stable perovskite solar cells via sequential deposition

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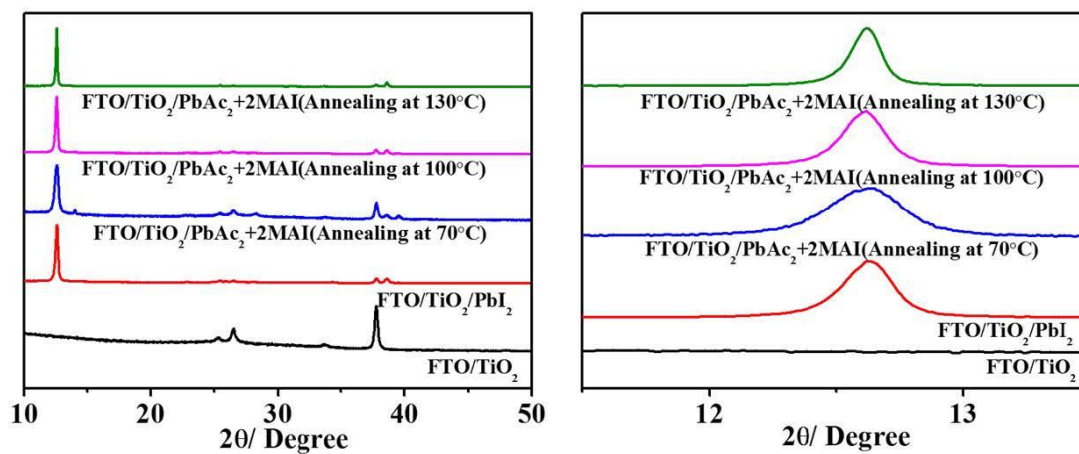


Fig. S1 XRD patterns of the PbAc₂ + 2MAI precursor on the m-TiO₂ substrate under different annealing temperatures, the PbI₂ on the m-TiO₂ substrate and the TiO₂ substrate.

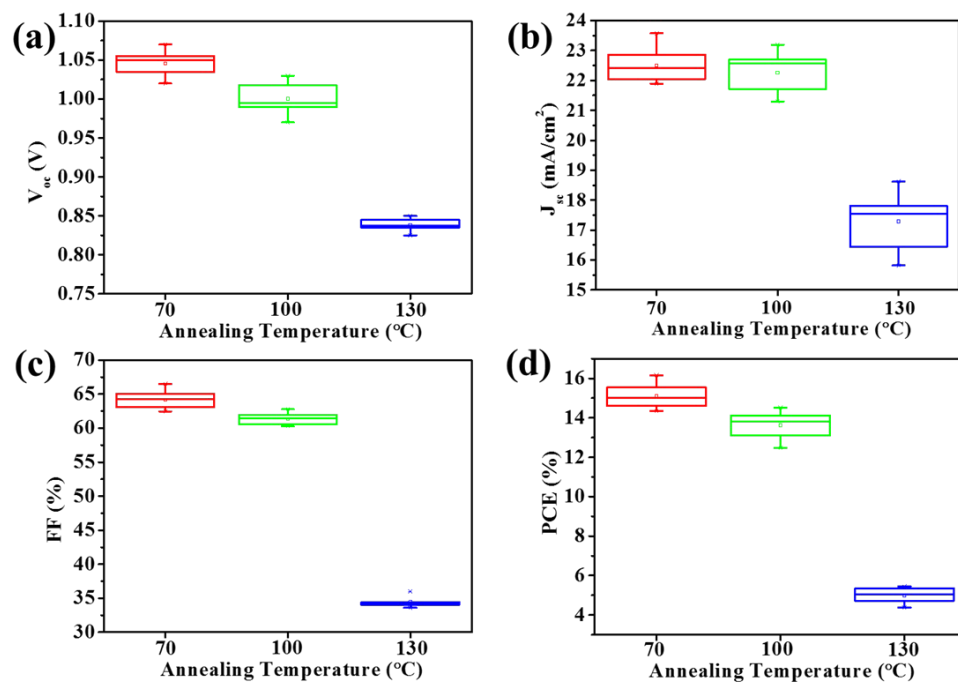


Fig. S2 Comparison of the photovoltaic parameters between the PSCs fabricated from the p-PbI₂ annealed at 70 °C, 100 °C and 130 °C: a) open-circuit voltage V_{oc} ; b) short-circuit current density J_{sc} ; c) fill factor FF; and d) power conversion efficiency PCE.

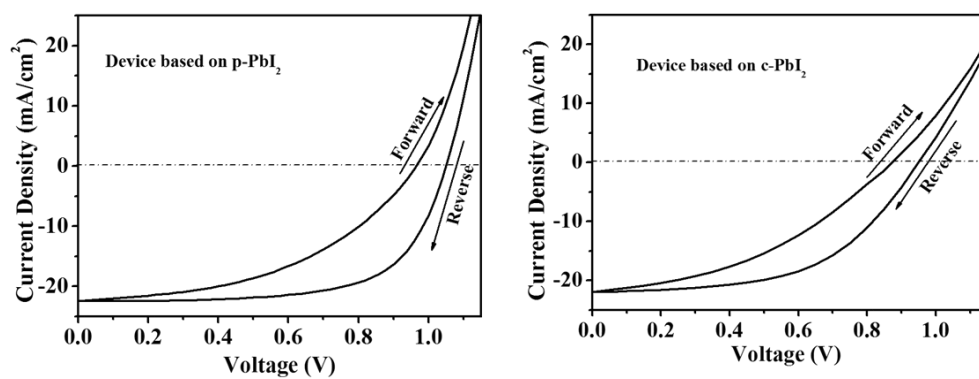


Fig. S3 J-V curves of the devices fabricated from p-PbI₂ and c-PbI₂

Table S1 Photovoltaic parameters of perovskite solar cells fabricated from the precursor mixture of PbAc₂ and MAI with the molar ratio of 1:3.

	V_{oc} (V)	J_{sc} (mA cm ⁻²)	FF (%)	PCE (%)
PbAc₂ : MAI = 1:3	0.973±0.010	14.79±1.51	43.64±0.92	6.28±0.75

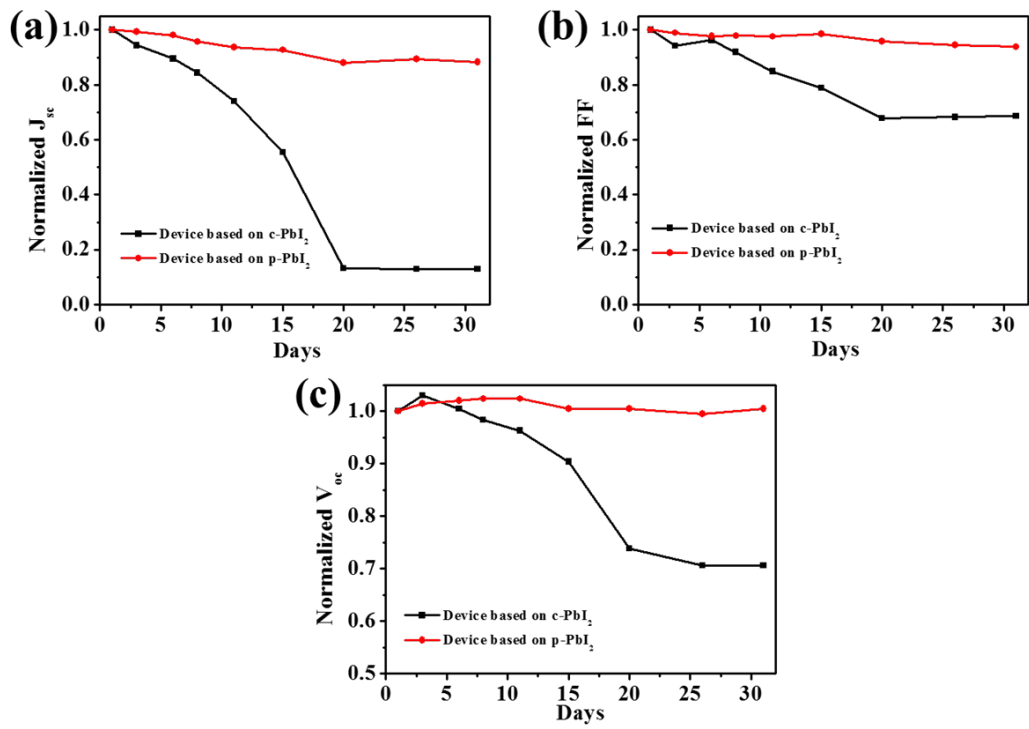


Fig. S4 Stability of PSCs based on c-PbI₂ and p-PbI₂: a) normalized J_{sc} , b) normalized FF, c) normalized V_{oc}

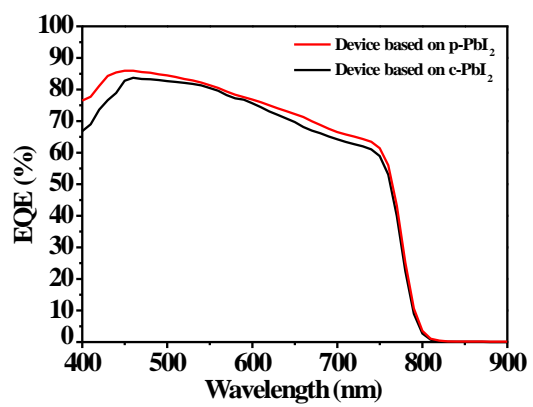


Fig. S5 External quantum efficiency (EQE) spectra of PSCs based on c-PbI₂ and p-PbI₂.