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Electronic Supplementary Information

Solution-Processed n-Doped Fullerene Cathode Interfacial Layer for Efficient and Stable Large-Area Perovskite Solar Cells

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Table S1 Summary of the series and shunt resistances of the devices.

Devic	Shunt resistance [KΩ cm ²]	Series resistance $[\Omega \text{ cm}^2]$
е		
А	0.26	65.3
D	13.8	9.4



Fig. S1 Topographical AFM image of MAPbI₃ perovskite film (scale bar = 1 um).



Fig. S2 Stabilized power output measured close to the maximum power point (~0.9 V) for device B and E.



Fig. S3 The integrated photocurrent of the IPCE spectra with AM 1.5G photon flux.



Fig. S4 Topographical AFM image of CTAB-coated PC₆₁BM/MAPbI₃ film (scale bar = 500 nm).



Fig. S5 The XRD pattern of FAPbI₃ perovskite film.