

Electronic Supplementary Information

Low temperature processed fused-ring electron transport material for efficient planar perovskite solar cells

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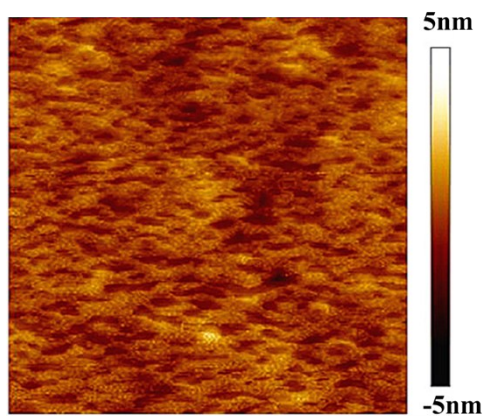


Fig. S1 AFM image of IDIC layer ($1\ \mu\text{m} \times 1\ \mu\text{m}$).

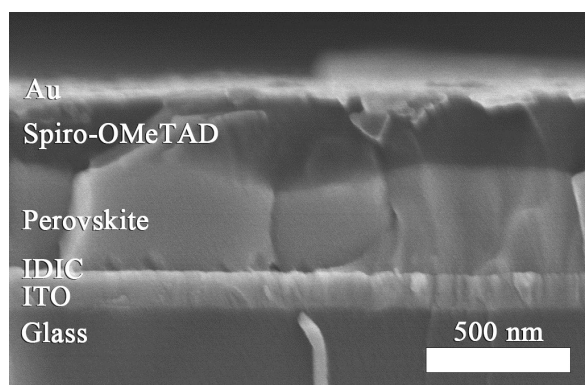


Fig. S2 SEM image of cross-sectional structure of PSCs.

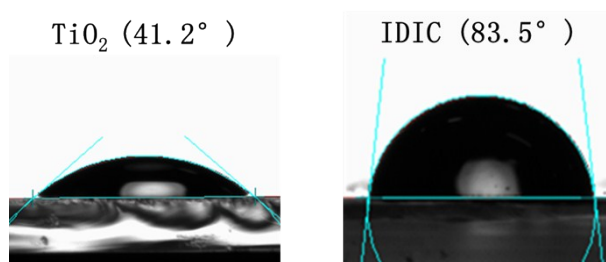


Fig. S3 Water contact angles of different ETL films on glass substrate.

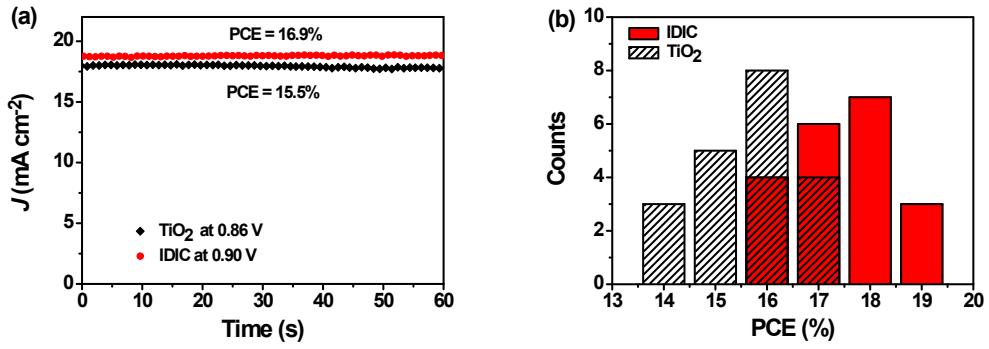


Fig. S4 (a) Steady-state measurement of current and PCE of PSCs; (b) histogram of efficiencies based on 20 devices.

Table S1 Photovoltaic parameters of the modified devices based on IDIC with different concentrations.

IDIC (mg mL ⁻¹)	J_{SC} (mA cm ⁻²)	V_{OC} (V)	FF (%)	PCE (%)
2	22.4	1.06	72.8	17.3
4	23.0	1.06	76.3	18.5
6	22.2	1.06	72.1	16.9
8	21.7	1.05	70.8	16.1