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Supporting Information

Electron Beam Evaporated TiO_2 Layer for High Efficiency Planar Perovskite Solar Cells on Flexible Polyethylene Terephthalate Substrates

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Table S1 Photovoltaic performance values of the same perovskite device measured from different *J-V* scan methods.

Scan method	V_{oc} (V)	J_{sc} (mA/cm^2)	FF (%)	PCE (%)
1 V/s (from 1 V to -0.5 V)	0.9	20.6	75	13.9
1 V/s (from -0.5 V to 1 V)	0.84	20.6	73	12.6
0.5 V/s (from 1 V to -0.5 V)	0.9	20.6	76	14.0
0.2 V/s (from 1 V to -0.5 V)	0.91	20.6	74	13.9
0.1 V/s (from 1 V to -0.5 V)	0.91	20.5	72	13.4
0.05 V/s (from 1 V to -0.5 V)	0.89	19.0	75	12.7

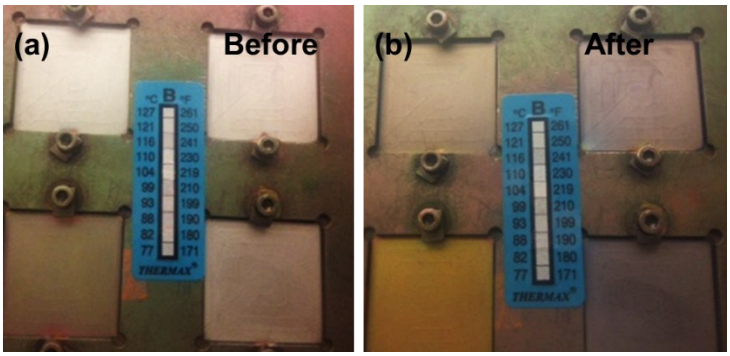

Fig. S1 Irreversible temperature sensor strip on the sample holder before and after e-beam TiO2 evaporation. The color of the strip does not change, indicating the substrate temperature is lower than 77 ^{o}C during evaporation. The color of the sample holder changes, indicating the evaporation of TiO_2 on the holder.