Supporting Information: Laser-scribing optimization for sprayed SnO_2-based perovskite solar modules on flexible plastic substrates

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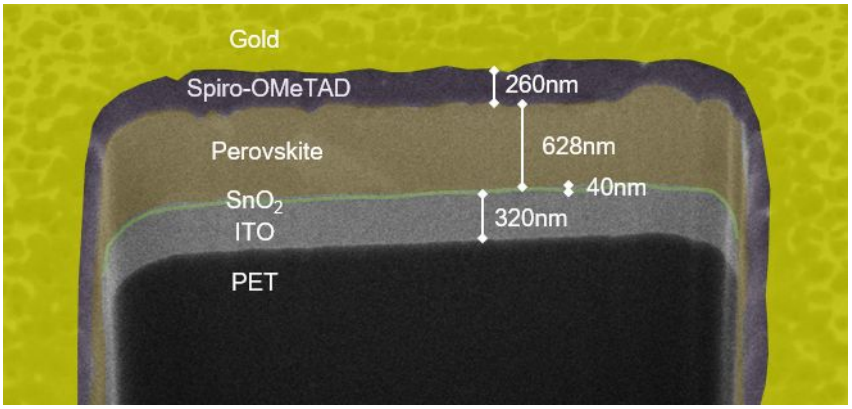

Figure S 1: FIB-cut cross-sectional SEM image of perovskite solar device.

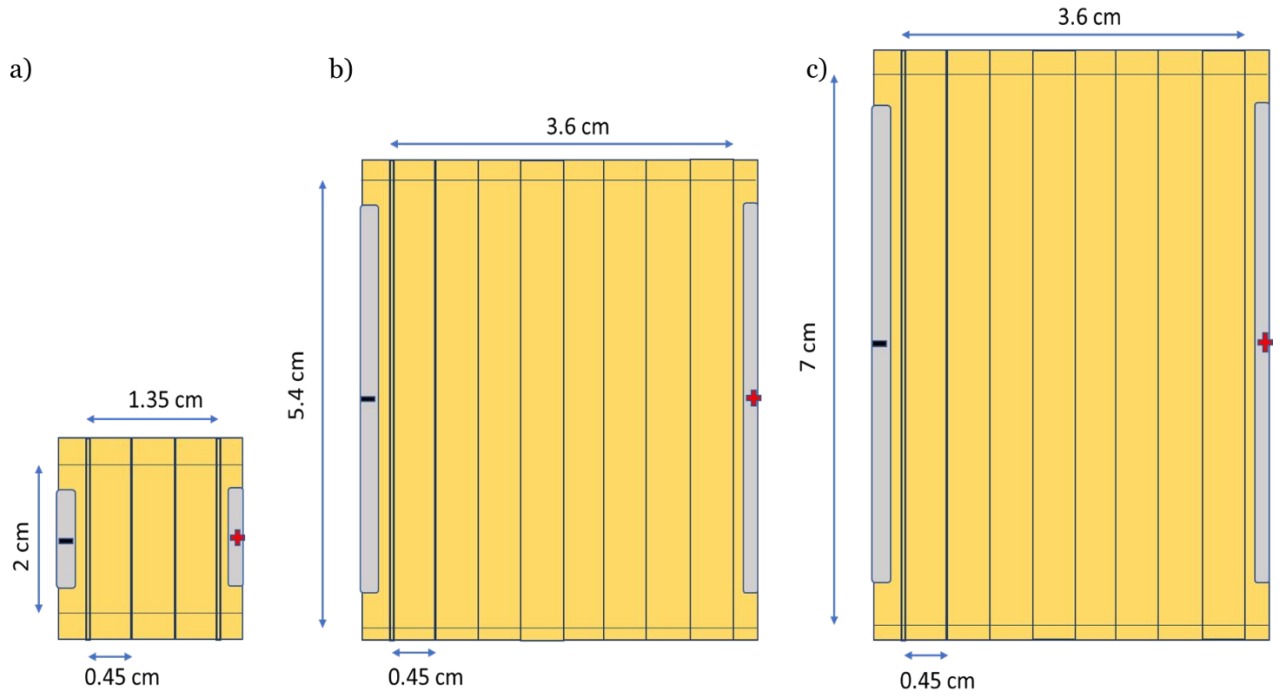

Figure S 2: Schematic representation of module layout a) mini modules with 2.34 cm^2 active area b) M1 modules with 16.84 cm^2 active area c) M2 modules with 21.84 cm^2 active area.

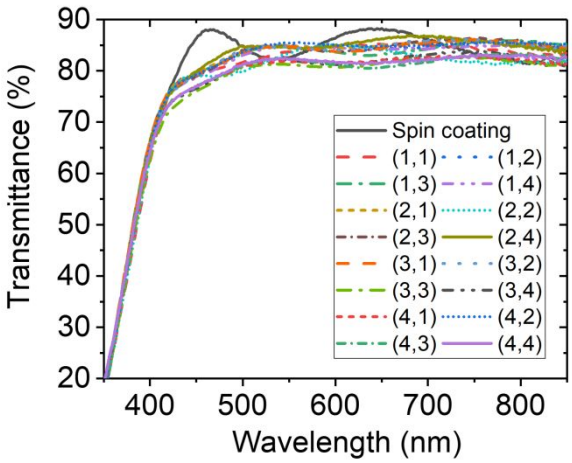

Figure S 3: Transmittance spectra of spray-coated SnO_2 samples from different portions of the 10×12.5 cm^2 flexible PET/ITO substrate used for the automatic spray coating process.

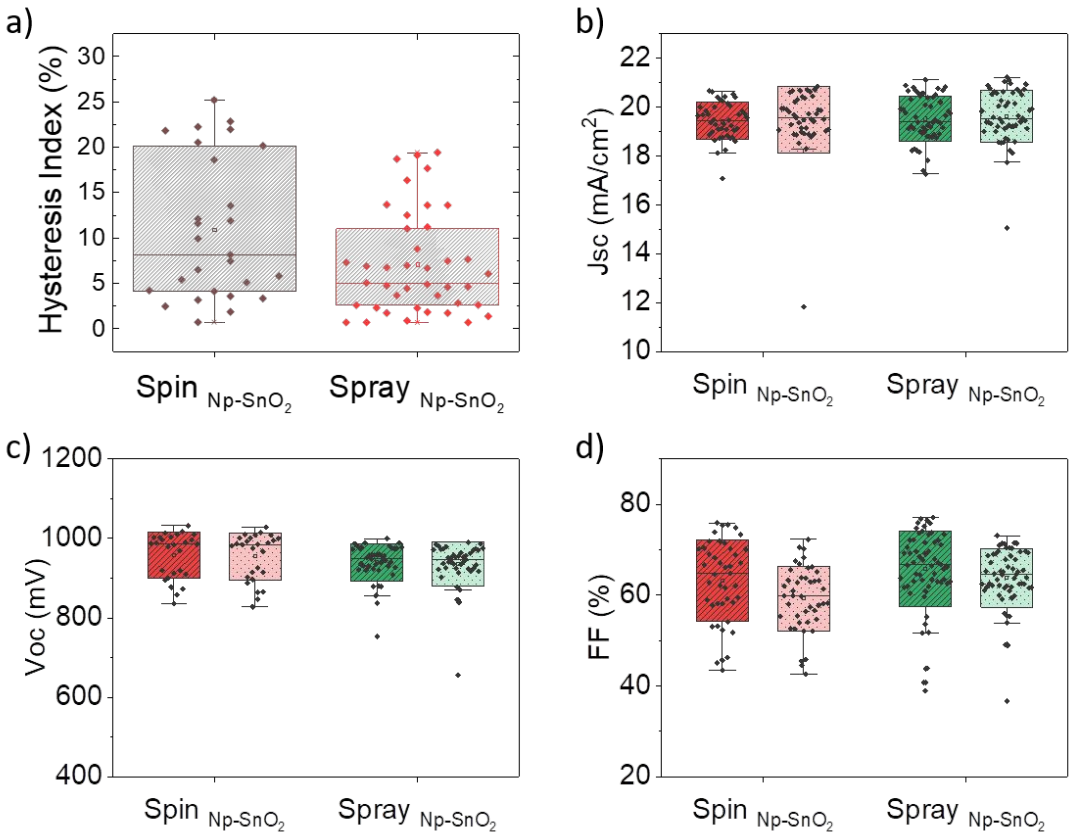

Figure S 4 : a) Hysteresis index calculated as follows: (PCE_{rev} - PCE_{for}) / PCE_{rev}; b) J_{SC}, c) V_{OC} and d) FF obtained from the J-V curves of FPSCs endowed with spray and spin-coated SnO_2 layers.