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Supporting Information for

Tracking the maximum power point of hysteretic perovskite solar cells using a predictive algorithm

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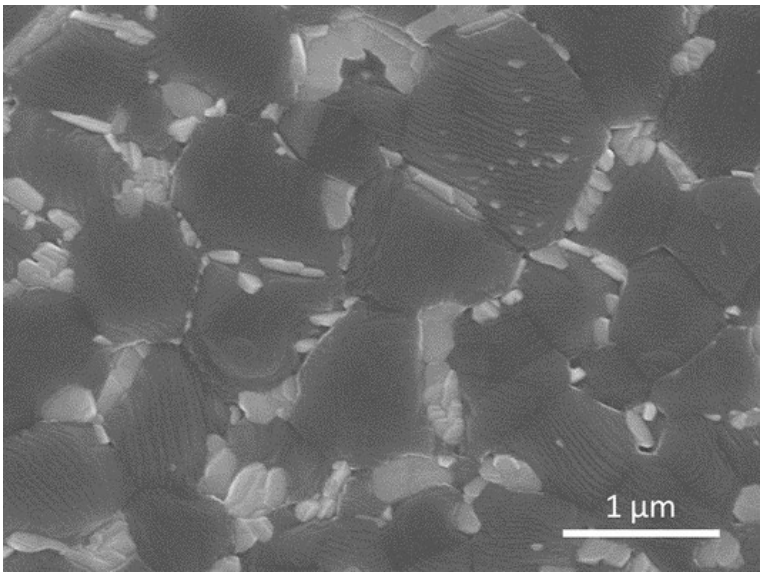

Fig. S1 Top-view SEM image of a $MA_{0.7}FA_{0.3}PbI_3$ perovskite thin film on FTO/C_{60}-SAM substrate. The bright particles are excessive PbI_2 formed on surface and along grain boundaries, which are due to the use of $Pb(SCN)_2$ additive in precursor solutions.

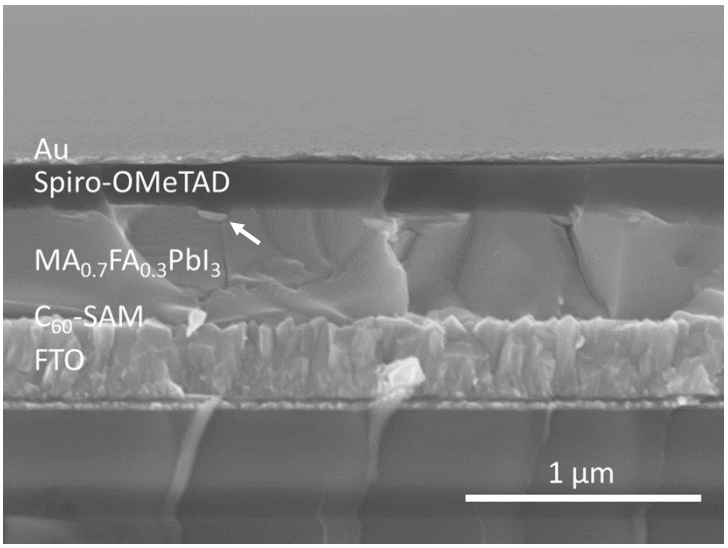

Fig. S2 Cross-sectional SEM image of a perovskite solar cell with the device structure of FTO/C_{60}-SAM/$MA_{0.7}FA_{0.3}PbI_3$/Spiro-OMeTAD/Au. No SnO_2 electron selective layer is used with the intention of preparing perovskite solar cells with large degrees of J-V hysteresis. The bright particle indicated by the white arrow is PbI_2.