

Electronic Supplementary

Information (ESI)

Title: An amorphous MgF_2 anti-reflective thin film for enhanced performance of inverted organic-inorganic perovskite solar cells

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Supplementary Figures

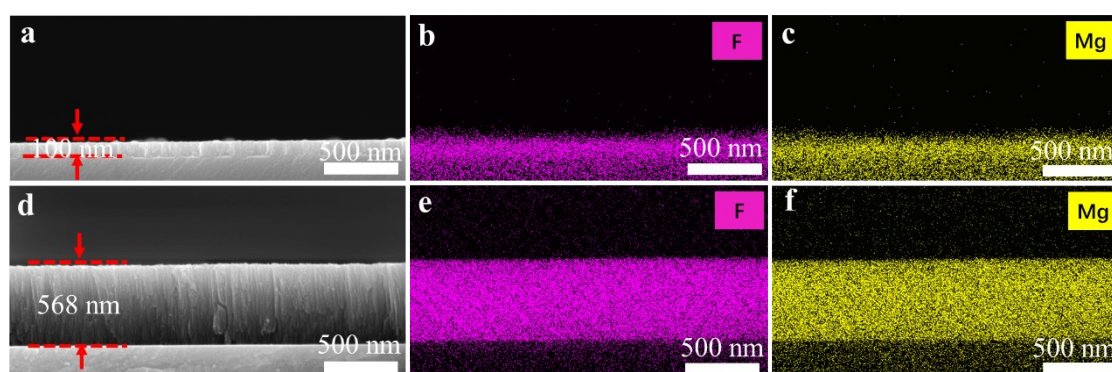


Figure S1 (a) Cross-sections SEM images of 100 nm MgF_2 ARTF on FTO. (b) F and (c) Mg element mapping in cross-section of 100 nm MgF_2 ARTF on FTO. (d) Cross-sections SEM images of 568 nm MgF_2 ARTF on FTO. (e) F and (f) Mg element mapping in cross-section of 568 nm MgF_2 ARTF on FTO.

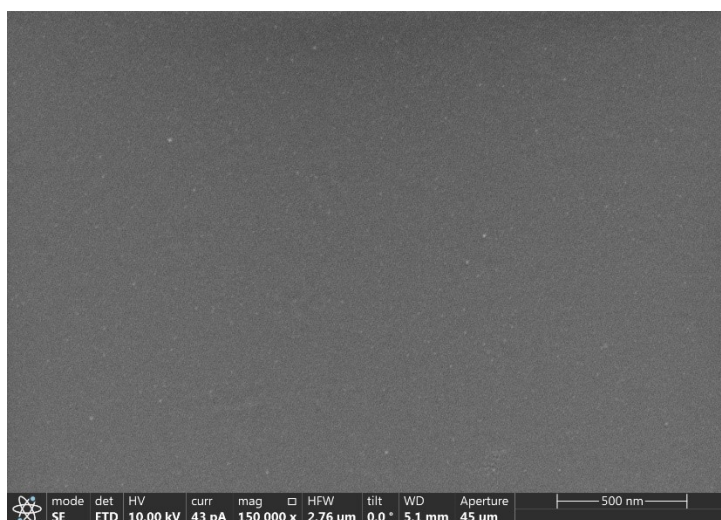


Figure S2 Surface SEM image of glass side of FTO

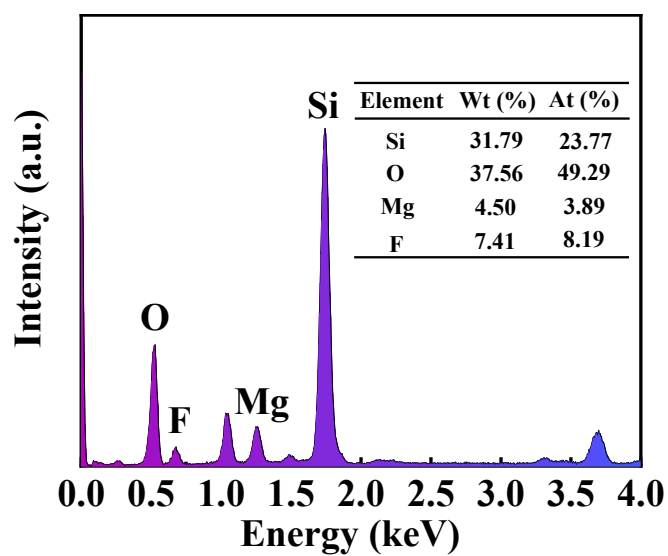


Figure S3 Elemental contents characterized by EDS of MgF₂ ARTF on glass side of FTO

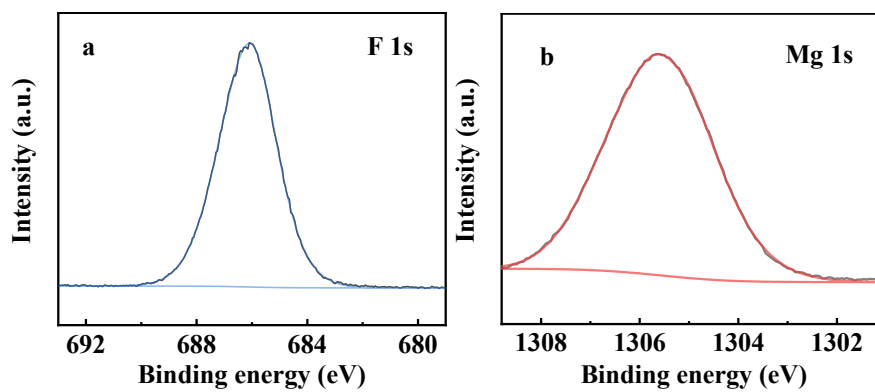


Figure S4 XPS curves of MgF₂ ARTF: a for F1s, b for Mg1s.

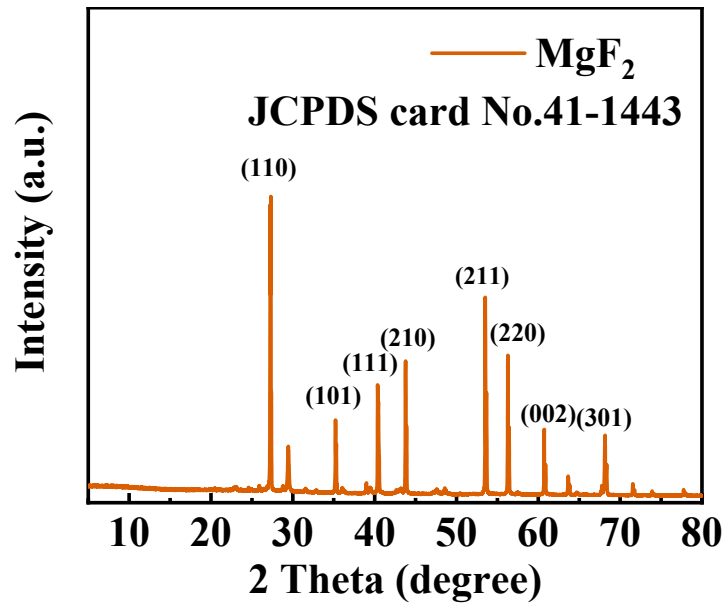


Figure S5 XRD patterns of MgF₂ powder

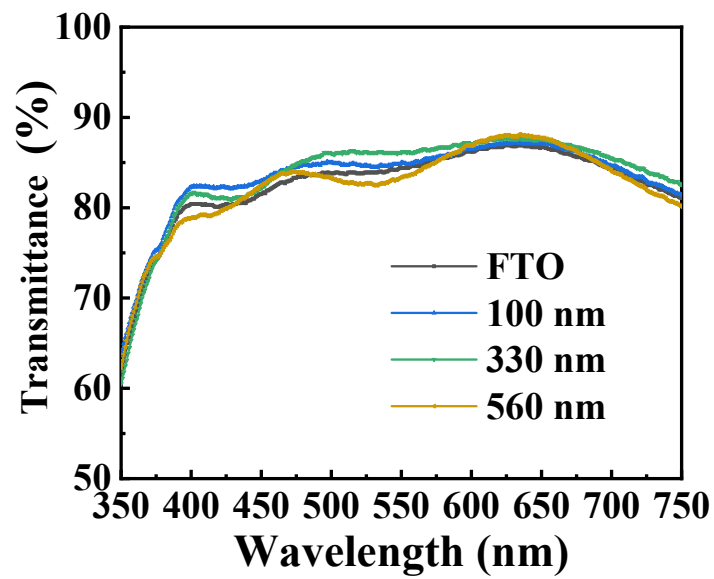


Figure S6 Transmission of FTO with different thickness MgF₂ MgF₂ ARTF

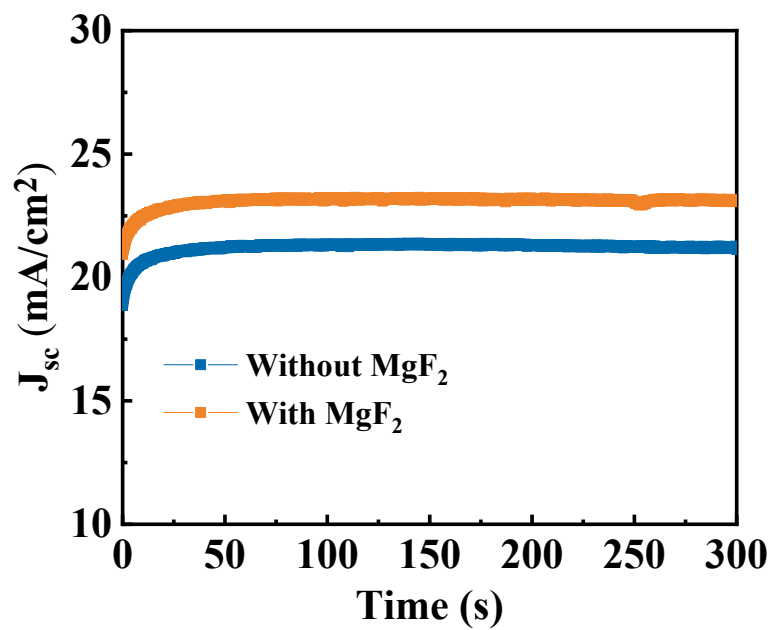


Figure S7 The MPP tracking of the device without and with MgF_2 -ARTF for 300 s.