

Supplementary Materials

Performance Enhancement of perovskite solar cells via the material quality improvement assisted by the MAI/IPA solution post-treatment

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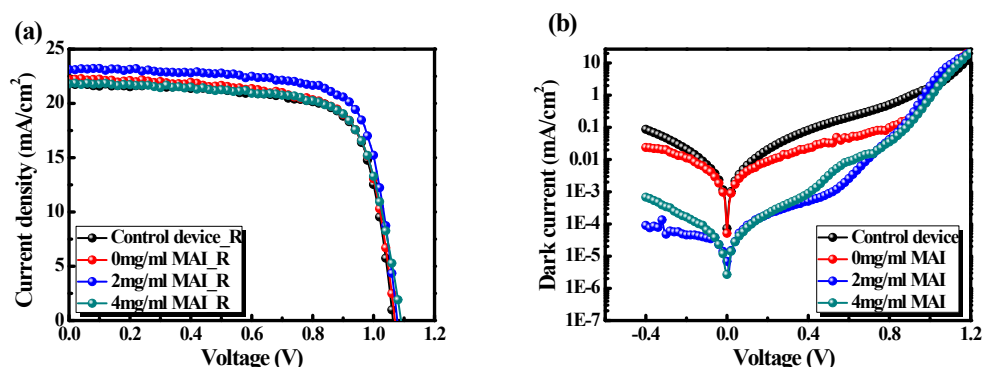


Fig. S1. (a) The J-V characteristic curves with/without MAI/IPA solution treatment in reverse scanning. (b) The dark current with/without MAI/IPA solution treatment.

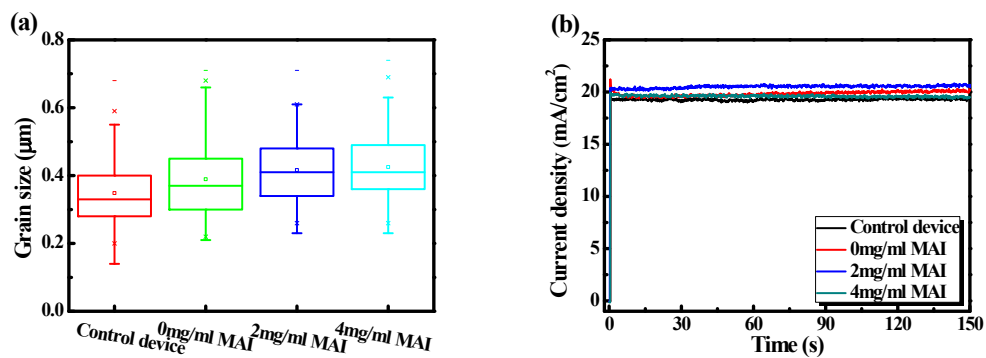


Fig. S2. (a) The statistic of grain size of perovskite films in SEM images. (b) Current density steady-state output measurements with/without MAI/IPA solution treatment

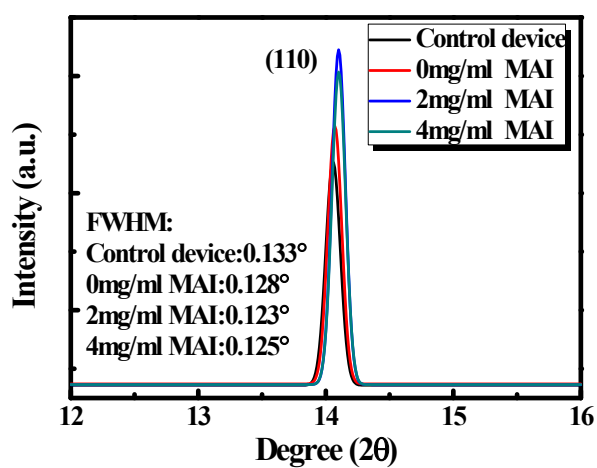
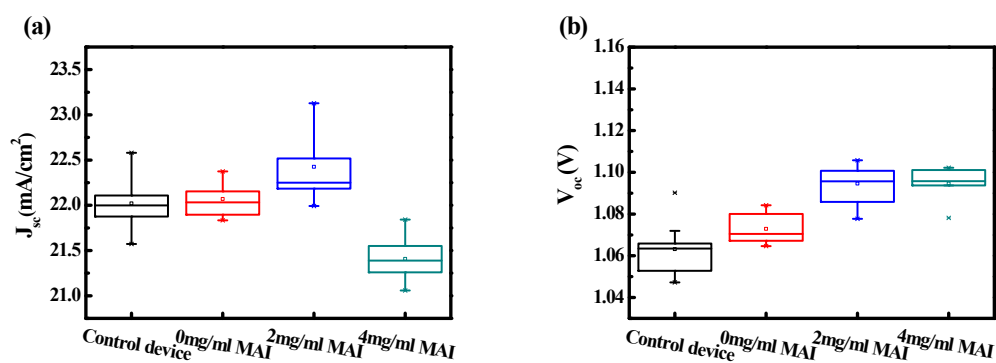


Fig. S3. The XRD patterns of ITO/NiO_x/CH₃NH₃PbI_{3-x}Cl_x with/without MAI/IPA solution post-treatment.



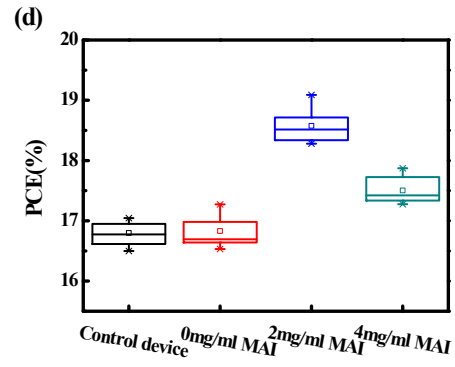
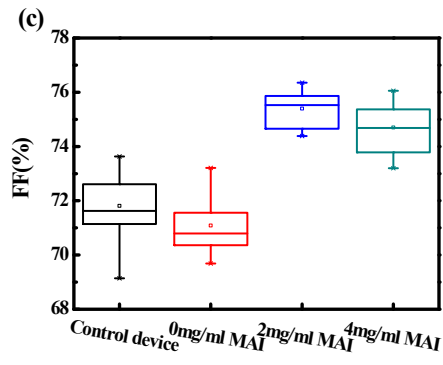


Fig. S4. (a) Statistics of J_{sc} with/without MAI/IPA solution treatment. (b) Statistics of V_{oc} with/without MAI/IPA solution treatment. (c) Statistics of FF with/without MAI/IPA solution treatment. (d) Statistics of PCE with/without MAI/IPA solution treatment.