

Supporting Information for

Interface modification effect by halide-free lead source for perovskite solar cells

Li Xiao^a, Jia Xu^{a,b}, Jing Chen^a, Jicheng Luan^a, Yi Yang^a, Bing Zhang^{a,b}, Jianxi Yao^{a,b,*}, Songyuan Dai^{a,b,*}

1 Beijing Key Laboratory of Novel Thin Film Solar Cells, Renewable Energy School, North China Electric Power University, Beijing 102206, China

2 Beijing Key Laboratory of Energy Security and Clean Utilization, Renewable Energy School, North China Electric Power University, Beijing 102206, China

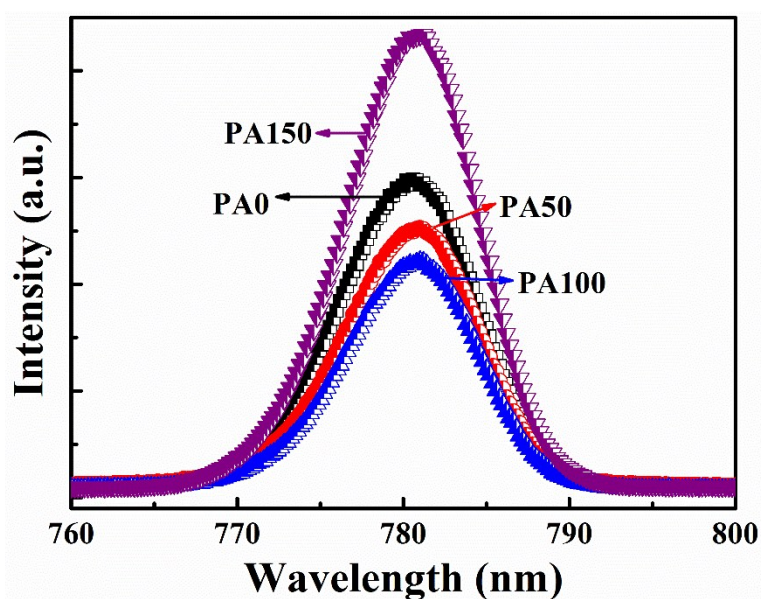


Figure S1. Steady state photoluminescence spectra of A/PA/CH₃NH₃PbI₃ samples of PA0, PA50, PA100 and PA150.

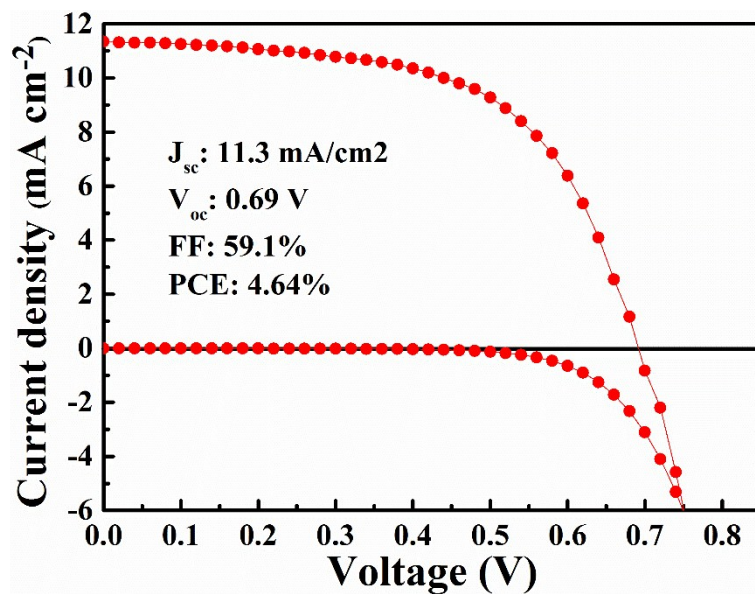


Figure S2. J-V curves of PSC based on A/PA+MAI/spiro-OMeTAD/Au.

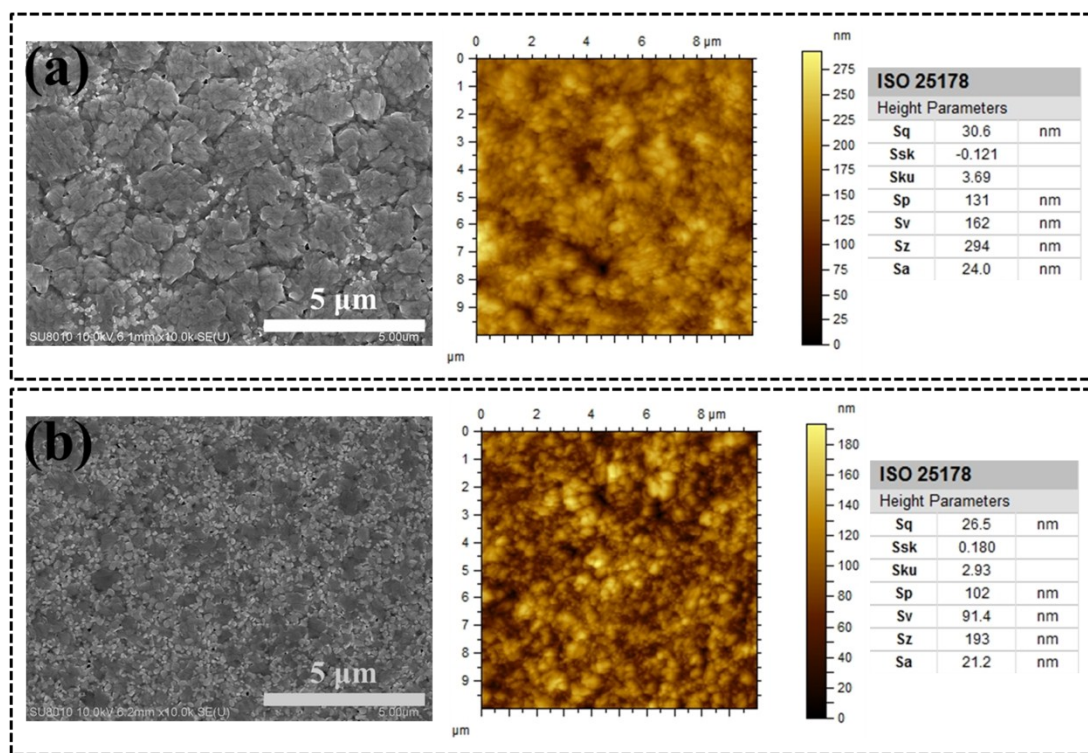


Figure S3. SEM and AFM results of A/PA/CH₃NH₃PbI₃ samples with (a) PA0 and (b) PA100.

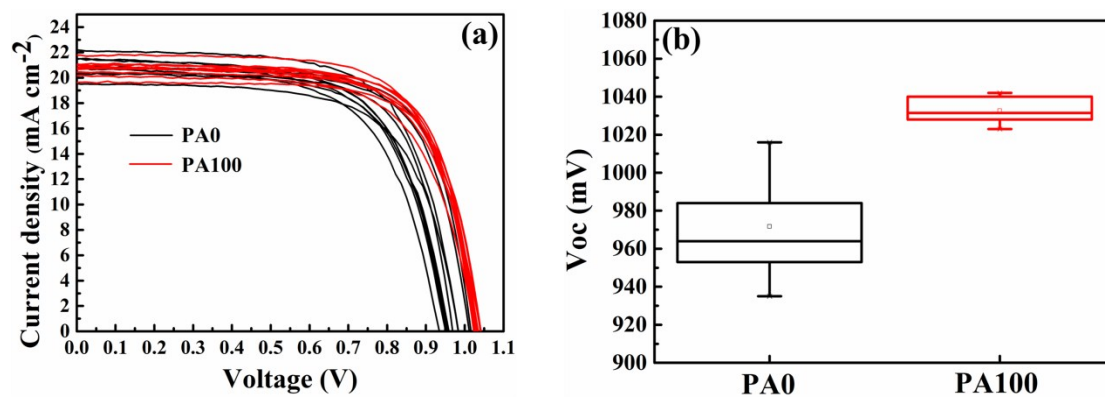


Figure S4. (a) J-V curves of 10 individual PSCs with/without PA and (b) box plots of their V_{oc} .