materials

MDPI

SUPPLEMENTARY

Metal Oxide Oxidation Catalysts as Scaffolds for Perovskite Solar Cells

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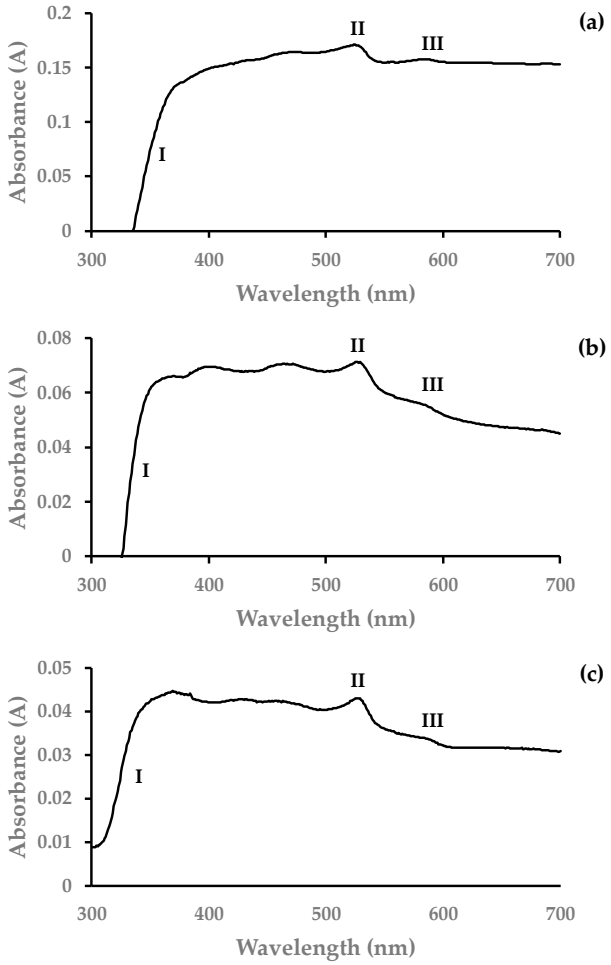

Figure S1. UV-visible spectra of $CH_3NH_3PbBr_3$ perovskite films deposited onto (**a**) TiO_2 scaffold, (**b**) CeO_2 scaffold, and (**c**) MnO_2 scaffold.

We have also run ATR to confirm the absence of organic residues on the sintered metal oxide scaffolds (please see Figure S2 below).

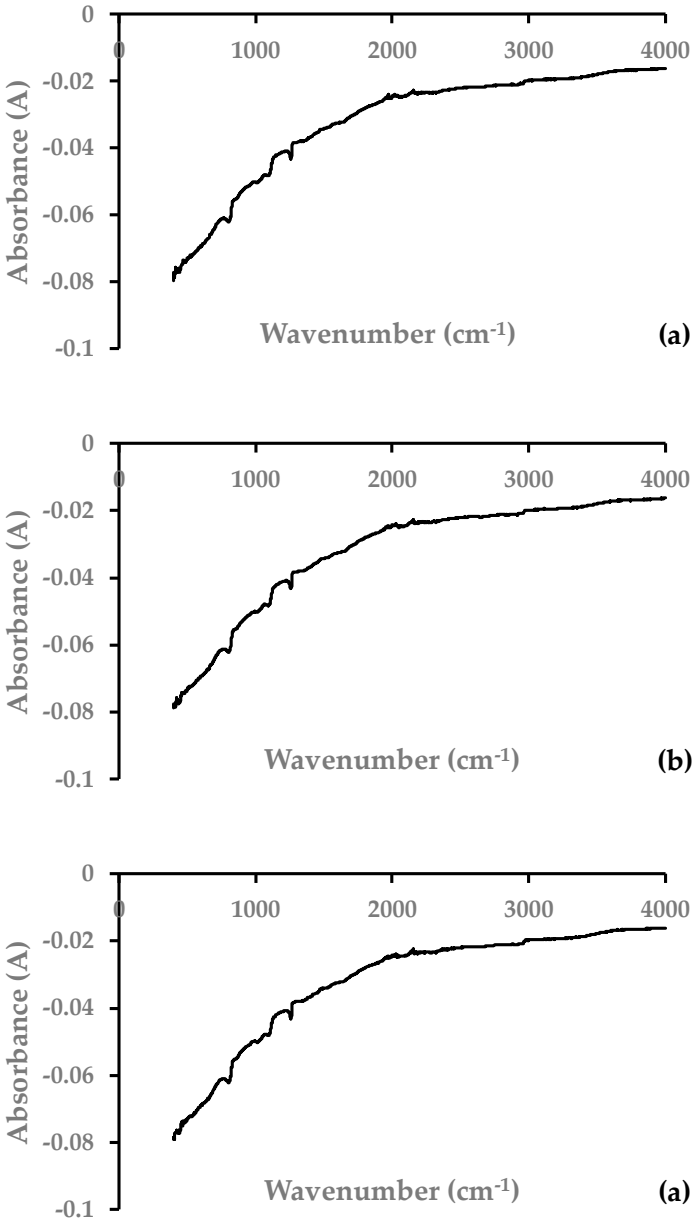

Figure S2. ATR-infrared spectra of 500 °C sintered films of (**a**) TiO_2 scaffold, (**b**) CeO_2 scaffold, and (**c**) MnO_2 scaffold.

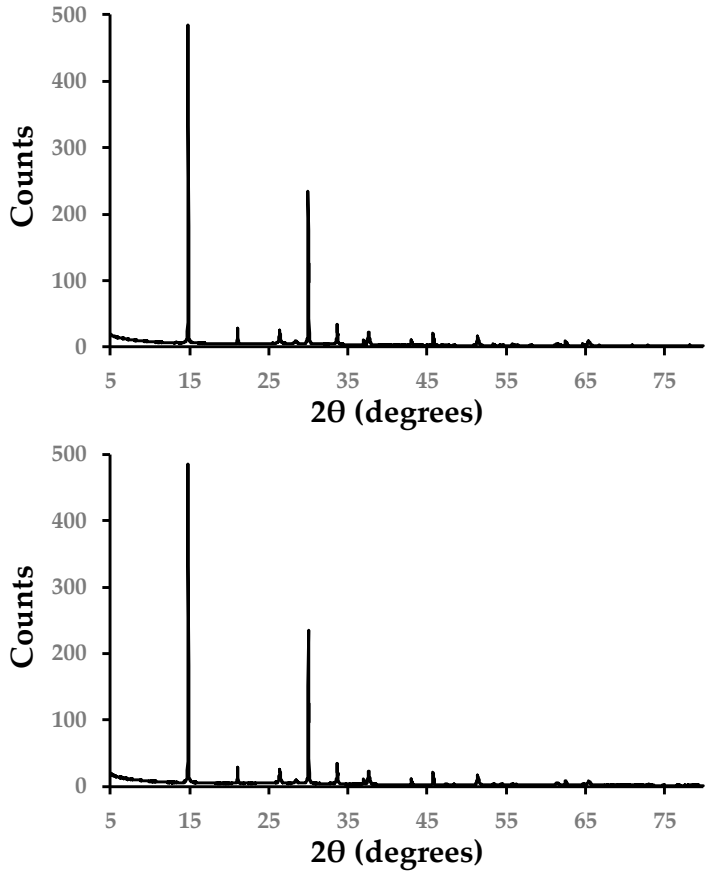

Figure S3. XRD data of $CH_3NH_3PbBr_3$ films deposited on CeO_2 scaffold; (top) as deposited and (bottom) after 24 h exposed to UV and 70% relative humidity.

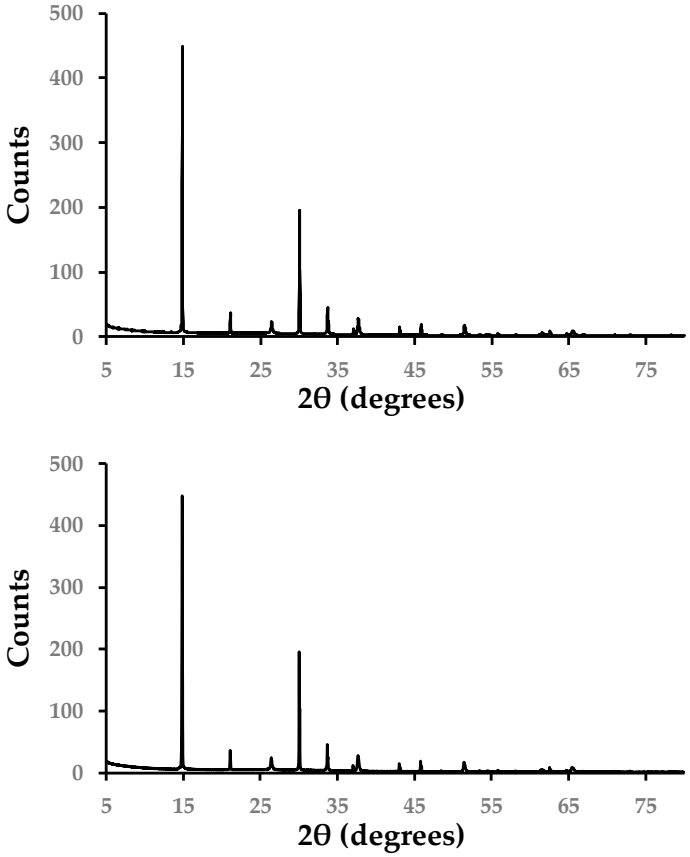

Figure S4. XRD data of $CH_3NH_3PbBr_3$ films deposited on MnO_2 scaffold; (top) as deposited and (bottom) after 24 h exposed to UV and 70% relative humidity.

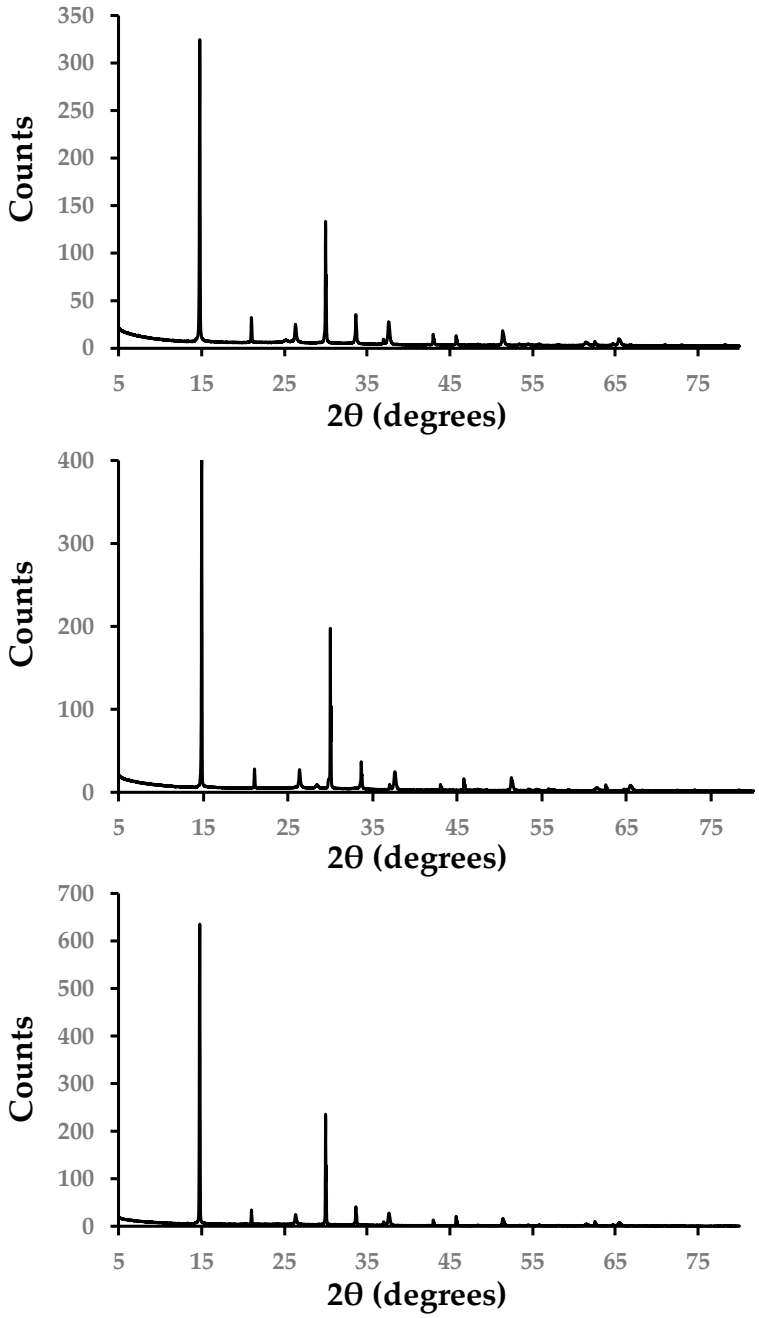

Figure S5. XRD data of $CH_3NH_3PbBr_3$ films deposited on (top) TiO_2 scaffold, (middle) CeO_2 scaffold, and (bottom) MnO_2 scaffold after exposure to ambient conditions for 1 week.