Green Anti−solvent Processed Efficient Flexible Perovskite Solar Cells

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Total number of pages: 11

Total number of figures: 10

Contents

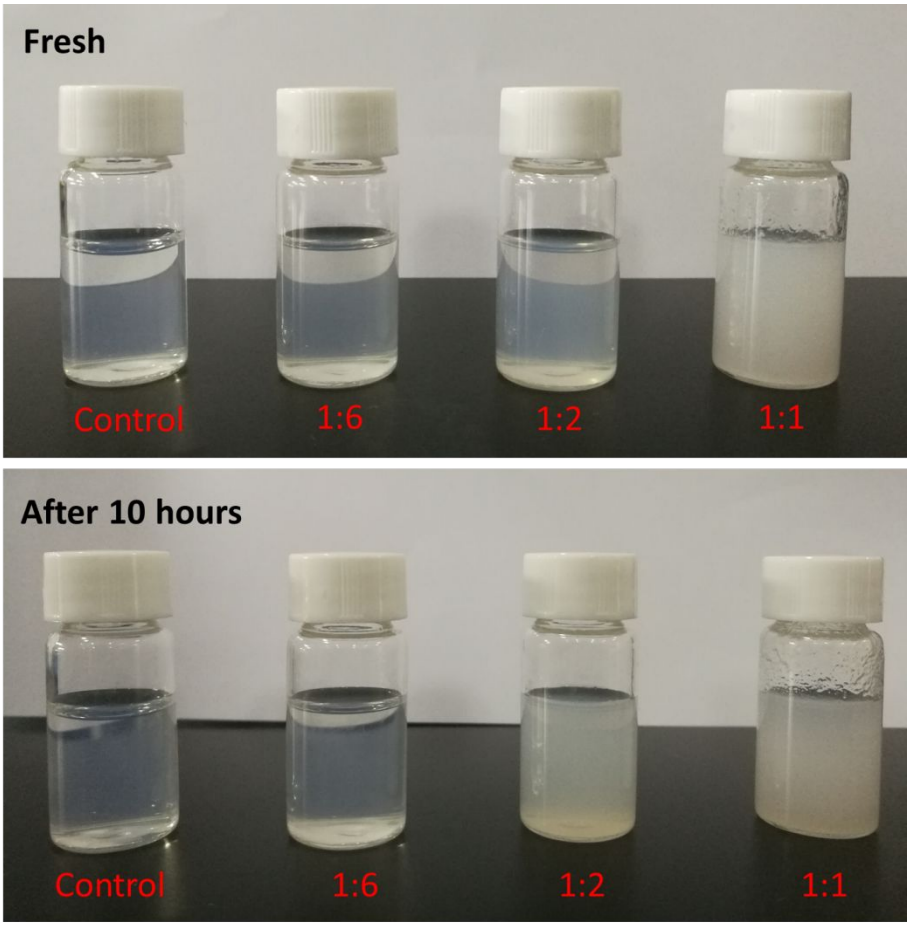

Figure S1. Photograph of SnO_2 solutions diluted by H_2O/TBA mixture with various volume ratios.

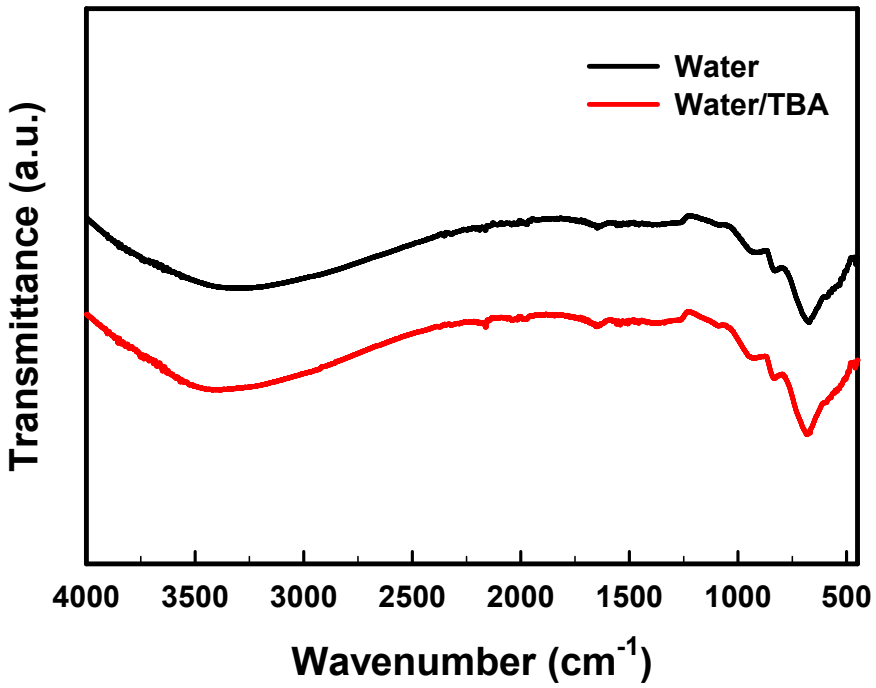

Figure S2. FTIR spectra of SnO_2 films prepared by SnO_2−colloid precursor diluted with water and water/TBA mixture.

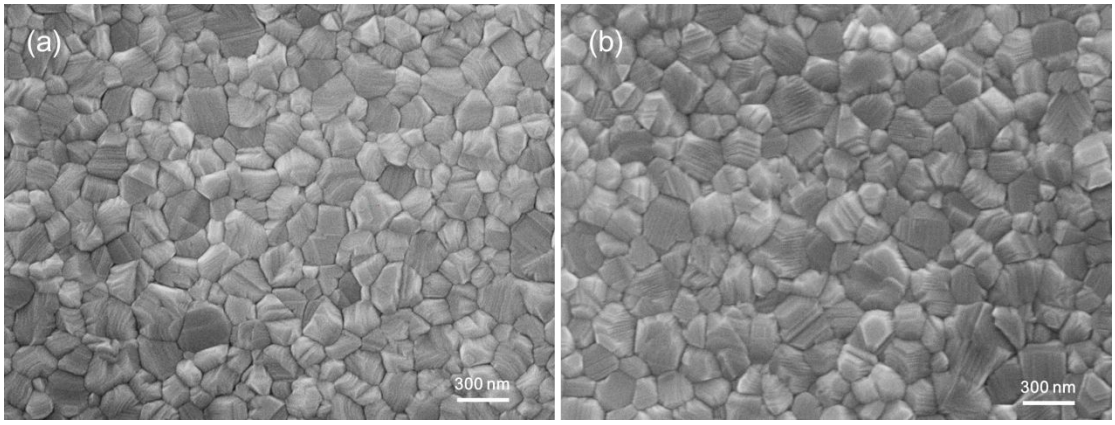

Figure S3. SEM images for perovskite films prepared on SnO_2 ETLs: (a) SnO_2-control and (b) SnO_2-TBA.

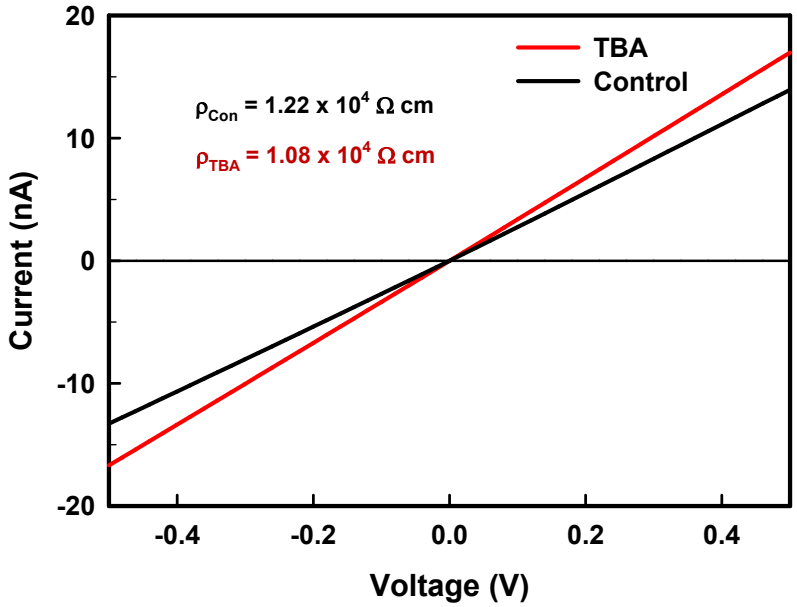

Figure S4. I-V characteristics and corresponding resistivity for SnO_2 ETLs.

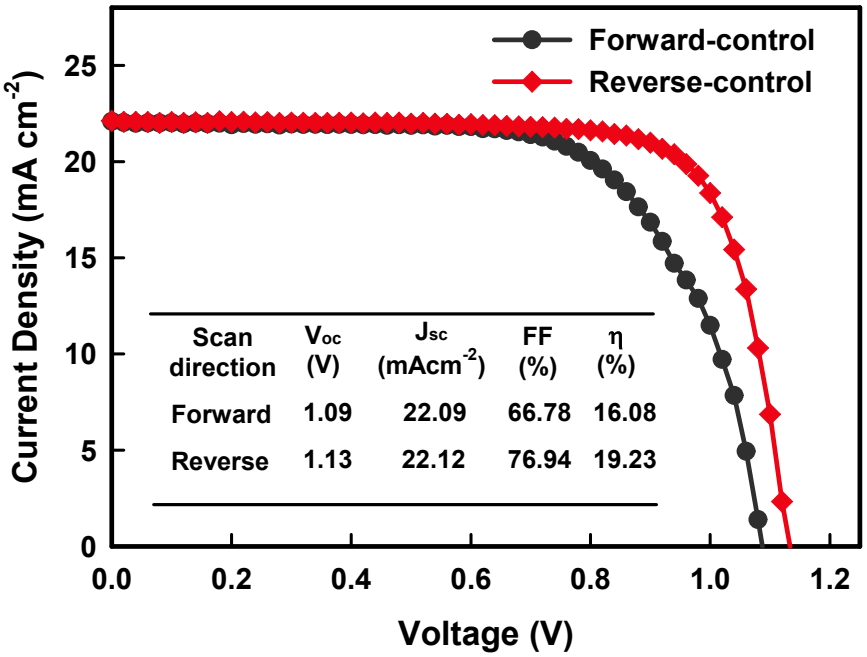

Figure S5. J−V curves for PSC on glass/ ITO based on SnO_2-control under different scan directions. PSCs were fabricated by PhOMe green anti-solvent.

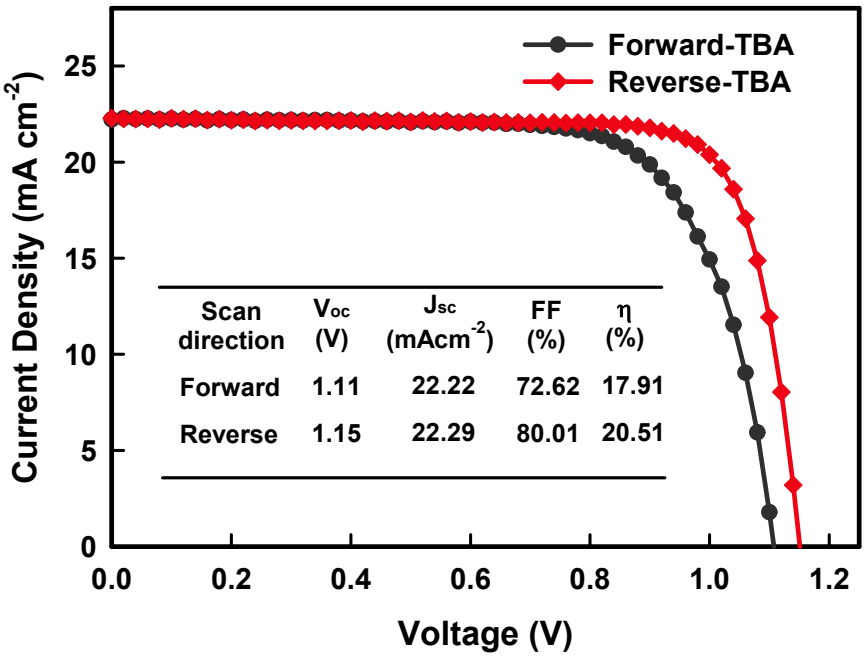

Figure S6. J–V curves for PSC on glass/ ITO based on SnO_2-TBA under different scan directions. PSCs were fabricated by PhOMe green anti-solvent.

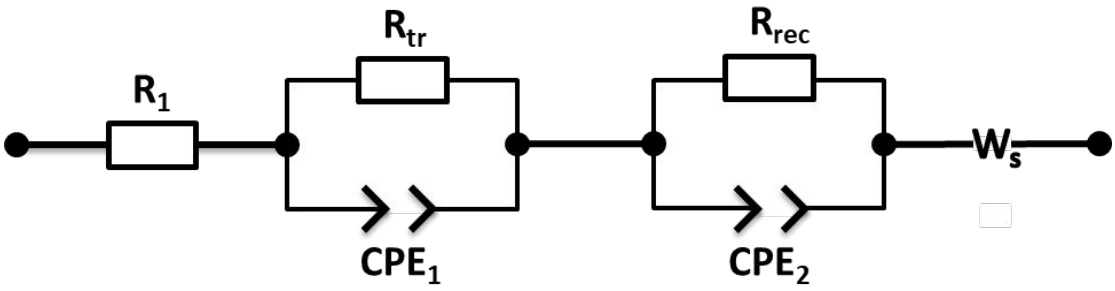

Figure S7. Equivalent circuit diagram used to fit the Nyquist plots.

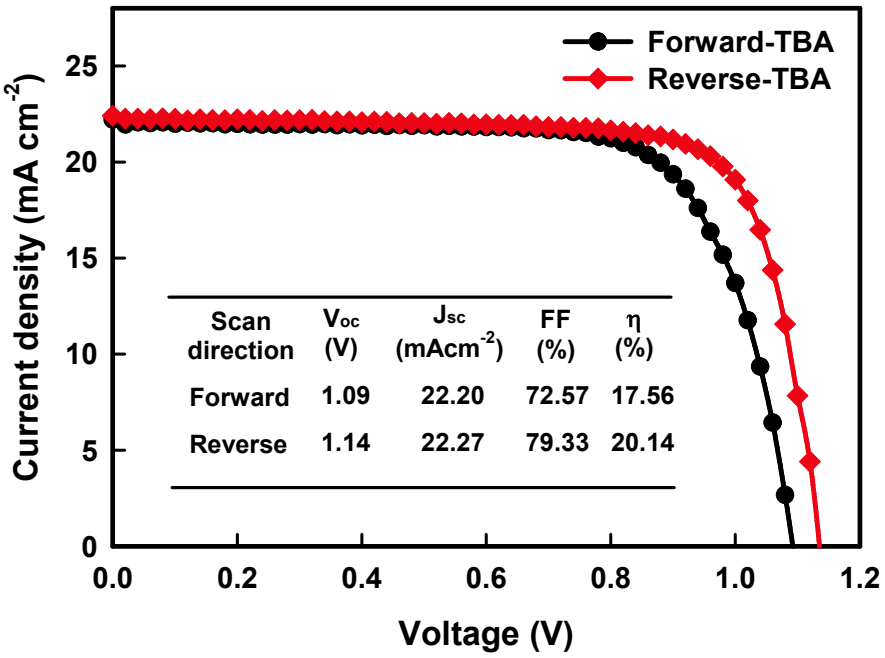

Figure S8. J−V curves for PSC on glass/ ITO based on SnO_2-TBA under different scan directions. PSCs were fabricated by CB anti-solvent.

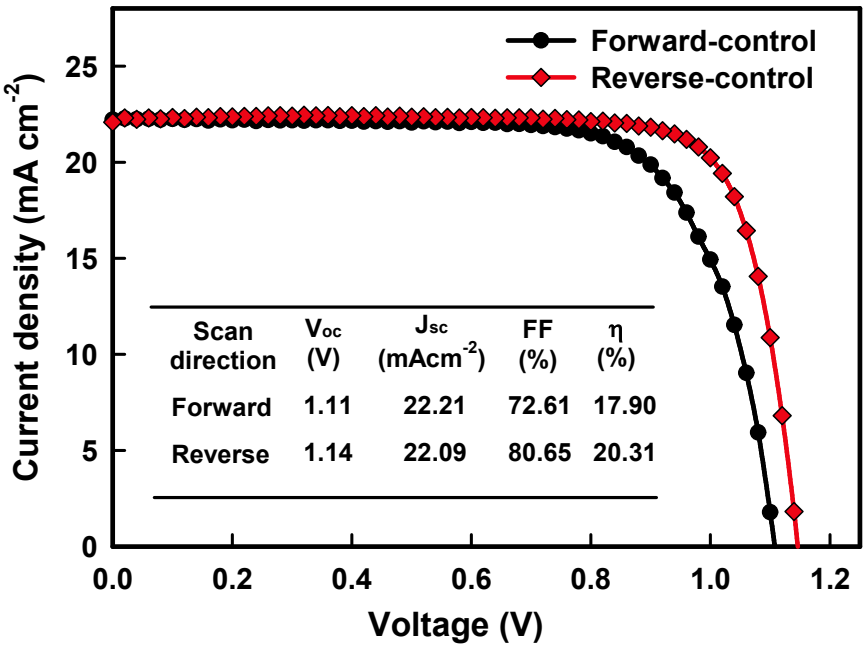

Figure S9. J−V curves for PSC on glass/ ITO based on SnO_2-control under different scan directions. The glass/ ITO substrate was treated by UVO for 15 min just before the deposition of SnO_2 ETL. PSCs were fabricated by PhOMe green anti-solvent.

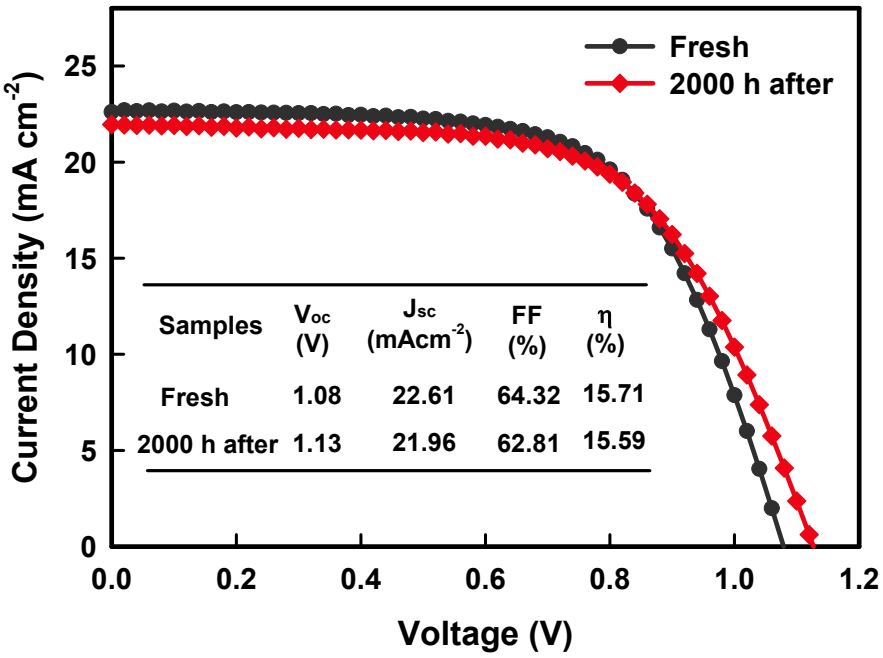

Figure S10. J−V curves of the flexible PSC for fresh device and PSC after 2000 h dark storage in ambient air (~20% RH) without encapsulation.