EMIMBF₄ Assisted SnO₂-Based Planer Perovskite Films for Label-Free Photoelectrochemical Sensing

Jianying Pei¹, Yiping Wu^{*, 1}, Xiaoyu Guo¹, Ye Ying¹, Ying Wen¹, Haifeng Yang^{*, 1}

1. Department of Chemistry, Key Laboratory of Resource Chemistry of Ministry of Education, Shanghai Key Laboratory of Rare Earth Functional Materials, Shanghai Normal University, 100 Guilin Road, Shanghai 200234, China

E-mail address: https://

^{*} Corresponding author

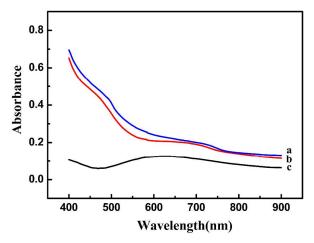


Figure S1.The absorption spectra recorded from (a) freshly prepared perovskite films, (b) the perovskite films stored under ambient condition for 10 days, (c) only SnO_2 layer.

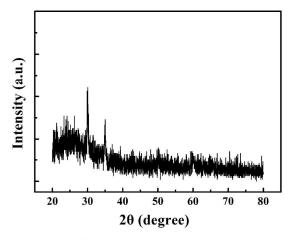


Figure S2. X-ray diffraction spectra of SnO₂ nanoparticles layer

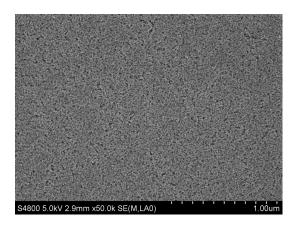


Figure S3. SEM image of SnO₂ nanoparticles layer spin-coated on bare ITO

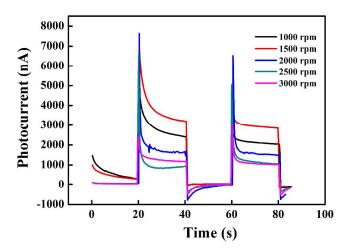


Figure S4. The photocurrent response of different thickness of the perovskite films. Measurement was performed in EMIMBF₄ solution.