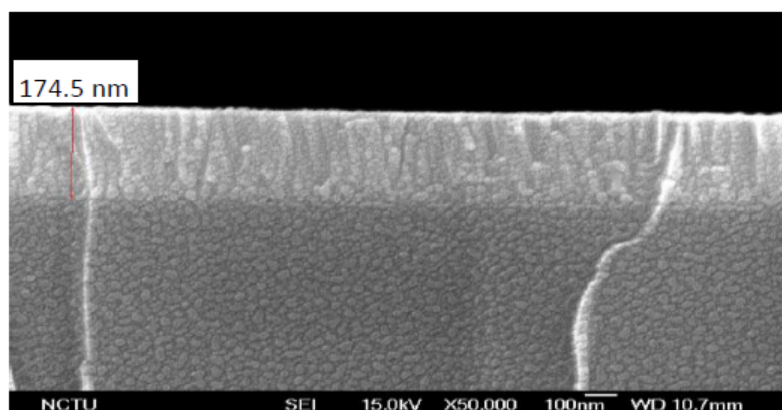


Supporting Information

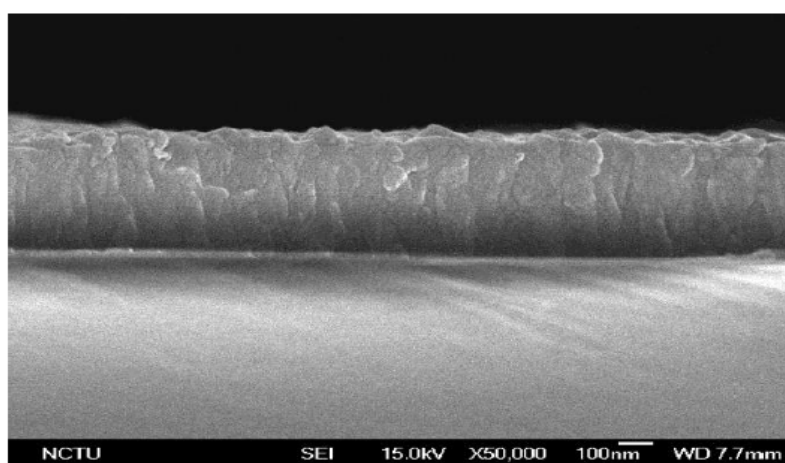
Mechanism of a AZO-coated FTO Film in Improving the Hydrogen Plasma Durability of Transparent Conducting Oxide Thin Film for Amorphous-Silicon Based Tandem Solar Cells

N. Chantarat, Shu-Han Hsu, Chin-Ching Lin, Mei-Ching Chiang, and San-Yuan Chen*

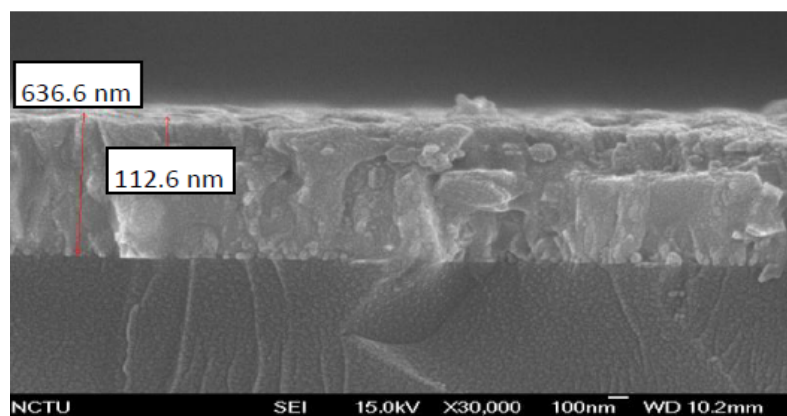
*Emails: sanyuanchen@mail.nctu.edu.tw



SEM cross-section of AZO

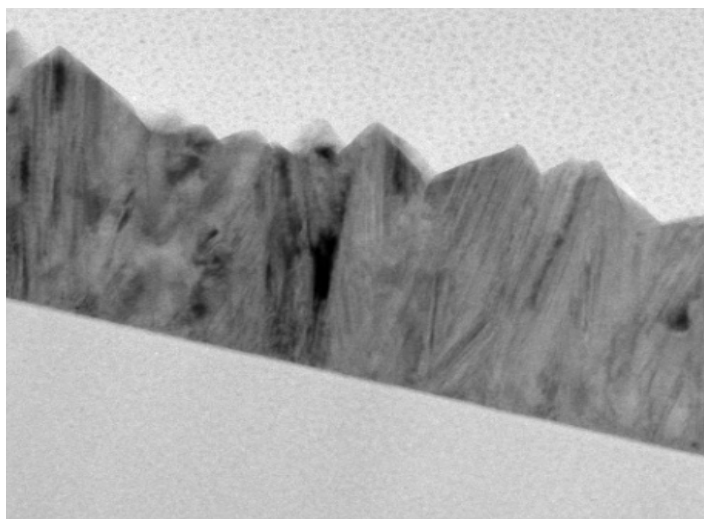


SEM cross-section of FTO

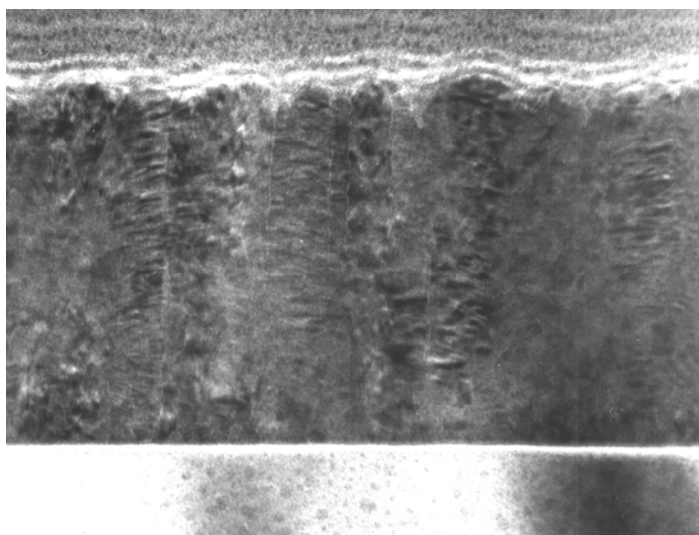


SEM cross-section of Double AZO/FTO

Figure S1 SEM cross-sectional image of AZO, FTO and Double AZO/FTO films.



TEM Cross-sectional image of FTO film



TEM Cross-sectional image of AZO film

Figure S2 TEM cross-section image of FTO and AZO films.

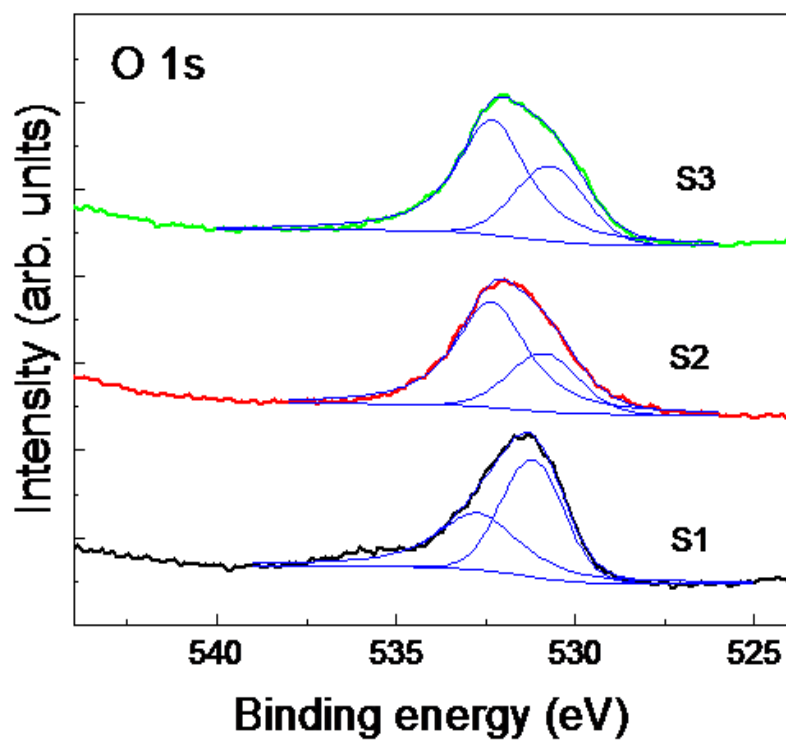


Figure S3 O1s spectra of FTO film for as-deposited films (S1), H-plasma exposed films (S2), and subsequently annealed films (S3).

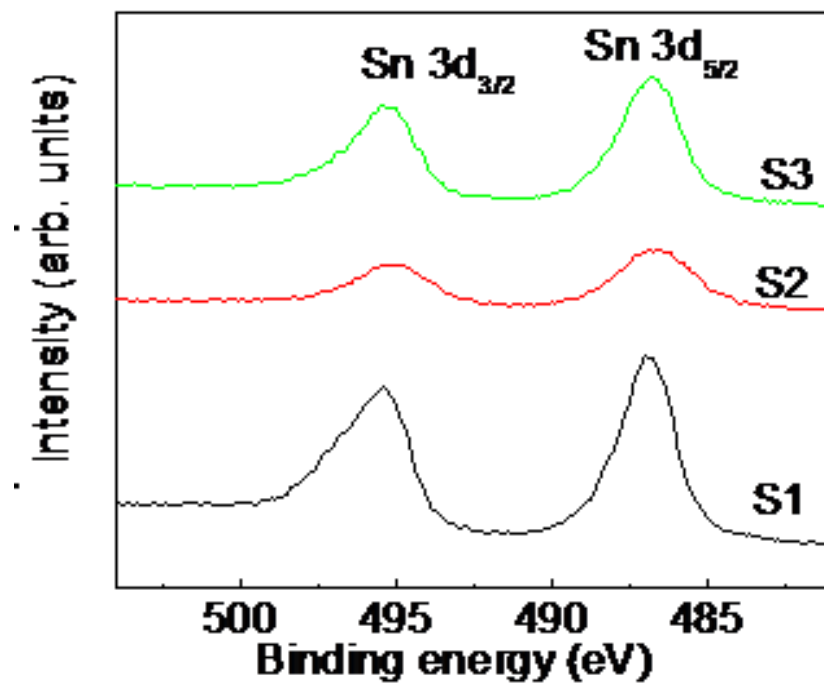


Figure S4 The relative Sn (3d_{3/2}) and Sn (3d_{5/2}) core level spectra of the FTO films corresponding to the surface of as-deposited films (S1), the surface of H-plasma exposed films (S2), and the surface of subsequently annealed films (S3).