

Depth Concentration Profile Analysis of Organic and Inorganic solar cells using X-ray Photoelectron Spectroscopy (XPS)

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XPS analysis can uniquely provide both quantitative elemental and chemical state information from multilayered samples with unparalleled depth resolution. Recent advances in the development of gas cluster ion beams for sample cleaning and depth profiling have allowed XPS to be applied not only to hard inorganic solar cells but also softer organic devices. With typical sampling depths on the nanometre scale XPS is unique in providing valuable information about compound formation at interfaces between the functional layers of the device. In this talk we will introduce XPS and explore depth profile results from both organic and inorganic devices.

Fig. 1 Depth Profile of a CIGS Solar Cell by XPS.

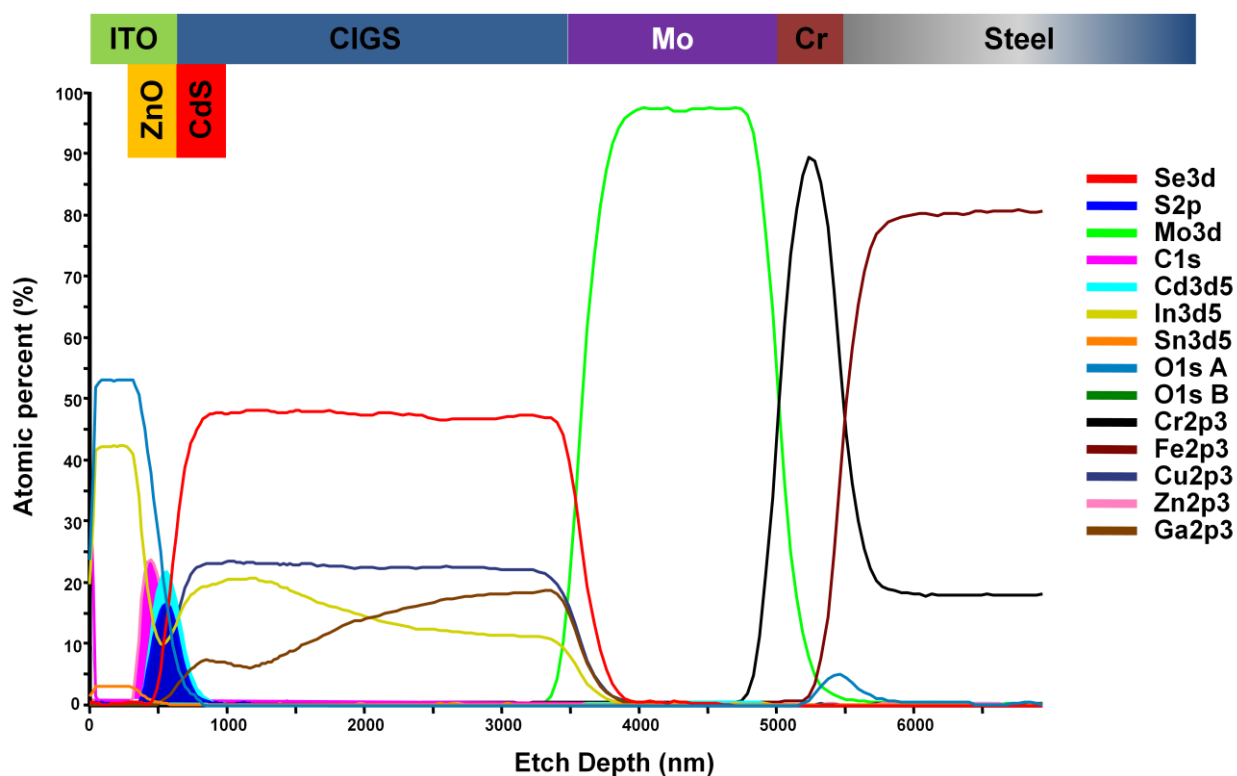


Fig. 2 Depth Profile of Organic PV material by XPS.

