Microstructural properties of CVD-grown $CuGaSe_2$ based thin film solar cells

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Abstract

Microstructural aspects of interfaces involved in $CuGaSe_2$ (CGSe) based thin film solar cells have been investigated. High resolution transmission electron microscopy and scanning energy dispersive X-ray techniques have been employed for the analysis of complete solar cell cross-sections, revealing details at nanometer scale of the soda lime glass/Mo/$MoSe_2$/CGSe/CdS/i:ZnO/Ga:ZnO heterostructure making up the complete devices.