

Abstract Submitted
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Photocurrent spectroscopy and structural studies of polymer solar cells ZANE COHICK, CHRISTOPHER GREEN, MARIAN TZOLOV, Lock Haven University — Polymer solar cells devices of the polymer mixture PCPDTBT:PCBM and 1,8-dioctadecane were created employing varied annealing temperatures and drying times. We used SEM and EDX to image the cross-section of the active layers and to identify separate phases. The short circuit photocurrent spectrum of the devices was measured and compared with the absorption spectrum of composite films and individual polymer films. The thicknesses of the solar cells were measured with a profilometer. Studies of the internal electric fields were performed using electroabsorption.

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