

The main advantage of CdTe and CdZnTe materials is the fact that the involving elements have big atomic numbers and density, this is reflected in a high absorption coefficient, which is a very preferred feature. It enables to detect low energy photons and means high quantum efficiency. Mentioned features can be managed at room temperature, therefore these materials are very perspective for gamma-ray detection. For the detector sensitivity is important to have low dark current, and to have big fold of carrier lifetime and mobility. These properties can be reached in some parts of the materials. Finding the causes of these quality degradation and the signal loss are the main priorities of the exploration. The main

problem is the quality of these materials, the inhomogeneities are decreasing the detection capability. In this work we will study lux-amper characteristics and analyze photoconductivity maps to better our understanding how inhomogeneities influence these parameters. Two main methods will be used, contactless and contact methods with Au applied as contact metal. These maps will be compared. Photoconductivity maps can increase our understanding of charge transport inside the material.