

Abstract: The main aim of this bachelor thesis was to investigate whether it is possible to use a new method based on the electro-optical Pockels effect, to study the internal electric field in the coplanar grid detector. The Pockels coefficient for CdZnTe was determined by measuring the detector with trivial contact geometry. Subsequently, the found Pockels coefficient was used for evaluation of 2D vector field for samples with non-trivial contact geometry. This method was successful to evaluate the electric field in almost entire volume in coplanar grid detectors.