

## **Novel view on extraction of charge carrier transport parameters from classical TCT**

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The main experimental instrument for study of the field distribution in irradiated silicon detectors is a transient current technique (TCT). It is shown in this study that even in the case of significant contribution of carrier trapping to the shape of current response, the raw data of regular TCT (shape of current response in pad detector) allow to derive the electric field distribution with accuracy better than 5%. The new approach was applied for treatment of experimental double peak responses obtained for irradiated detectors and demonstrated specific of  $E(x)$  evolution with the bias voltage.

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