Contribution ID: **29** Type: **not specified**

The peculiarities of photoconductivity in the irradiated Si.

Monday 21 November 2011 15:30 (20 minutes)

The irradiated Si pad structures were investigated. The details of conductivity and photoconductivity mechanisms are analyzed by investigation of free carrier concentration and mobility temperature dependence, and by thermally stimulated current using different excitation by light conditions. The effects of microinhomogeneities were observed by an existence of the persistent current and by the dependence of TSC activavtion energy on the applied bias. The analyze of photoconductivity decay in a presence of a few levels was analyzed and discussed in a frame of earlier proposed model of clusters.

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Session Classification: Defect/Material characterisation