

## Response of the Killed Electrode in STJ X-ray Detectors

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**Abstract** - The signals of STJ detectors Ti/Nb/Al,AlO<sub>x</sub>/Al/Nb/NbN with killed Ti/Nb electrode were studied as a function of the bias voltage, the energy of the absorbed quanta and the thickness of the electrodes. The nonlinearity of the energy calibration for the killed electrode signal had a positive curvature due to the quasiparticles self-recombination losses and  $2\Delta$ -phonon exchange. Suppression of residual signals of the killed electrode was achieved by increasing the thickness of this electrode.

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