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Fluence profiling at JSI TRIGA reactor irradiation facility

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In this contribution, we present an analysis of the flunece profile at the JSI TRIGA neutron reactor facility in Ljubljana.

For the study, 5×5 array LGAD sensors are used, with 1.3×1.3 mm^2 pad area. The gain layer active doping has been extracted via C-V measurements for each pad before and after irradiation at $1.5 \cdot 10^{15}$ n$_{eq}$/cm^2, providing a precise measurement of fluence distribution.

Experimental results are compared to neutron fluence expectations calculated with Monte Carlo techniques.

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