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Two Photon Absorption Technique of Transient Current vs Femtosecond Laser based TCT -Single Photon Absorption in the context of the study of LGAD's processing parameters: Casee study of segmented LGADs

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Due to 3D microscopic resolution of Two Phpoton Absorption - TCT technique this method is often favorized in study of the surface structures of LGAD and in study of charge transport because it generates charge in very small macroscopic volume. However, excellent optics of TCT-SPA set up at the ELI Beamlines and excellent focus of beam, makes SPA method also as a very powerful tool for resolving LGAD's structures and observing field changes in LGAD, with a resolution at the microscopic level. Results obtained from implementation of both methods are compared on segmented LGADs with different design.

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