

Impact Ioniation in Silicon Detectors

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Charge multiplication by impact ionisation is a well known effect in semiconductors. It is used for signal amplification in devices like APD (Avalanche photodiodes) and SiPMs (Silicon Photomultipliers). Such devices are developed and produced in the MPI Semiconductor lab. Based on this experience we can calculate and simulate impact ionisation effects in planar tracking detectors. The results will be compared with measurements.

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