

Timing resolution simulation of 2D and 3D SiC devices

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SiC devices can work at high irradiation fluence and temperature environment, and 3D-SiC devices can achieve good time resolution and high charge collection, which makes it have broad application prospects. This report contains the time resolution simulation of 2D SiC devices and the comparison between measurement data and 2D simulation. The understanding of time resolution simulation of SiC devices is deepened through comparing. Based on 2D simulation, we simulate the 3D SiC devices and predict the time resolution of 3D-SiC devices in a certain structure. This can be used as a reference to the tape out of our future 3D SiC devices.

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