

Irradiation effect on trapping time of silicon carbide detector

Tuesday 20 June 2023 12:00 (20 minutes)

Top-TCT is carried out on non-irradiated and irradiated SiC detectors to study the charge collection, from which the trapping time can be estimated. Electrical characteristic with irradiation up to $7.8 \times 10^{14} \text{ neq/cm}^2$ has been studied and predicted. Thus, simulation of carriers in RASER has been optimized based on the contribution from trapping time. The electric read-out in RASER is proceed by NGSpice, resulting in good agreement.

Author: Dr XIAO, Suyu (Shandong Institute of Advanced Technology, Jinan, China)

Presenter: Dr XIAO, Suyu (Shandong Institute of Advanced Technology, Jinan, China)

Session Classification: Defects