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Diffusion studies of Xenon and Krypton implanted in CVD-SiC

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Abstract :

The diffusion behaviour of implanted xenon and Krypton in CVD-SiC has been investigated using Rutherford backscattering spectroscopy (RBS) and Scanning electron microscopy (SEM) techniques. Xenon (Xe⁺) and Krypton ions with an energy of 360 KeV were implanted in SiC to a fluence of $2 \times 10^{16} \text{ cm}^{-2}$ at room temperature (23°C), 350°C and 600°C. Sequential annealing was performed from 1000°C to 1500°C in 100°C. By comparing the widths of the as implanted profiles to the after annealing profiles the diffusion coefficients was determined while the changes in samples surfaces were monitored by SEM.

Award :

no

Level :

na

Supervisor :

no

Paper :

no

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