

MECHANISMS OF SILICON AMORPHIZATION
AT THE ULTRASOUND ACTION
DURING ION IMPLANTATION

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The present study aims to investigate the ultrasound-dependent silicon amorphization during ion irradiation to determine the effect of point defect out-diffusion on the kinetics of the amorphization process in more detail. We show that the defect density in the surface layer and the thickness of an amorphous layer increase by the in situ US treatment. We discuss the results in frames of the point defect separation and out-diffusion model.