PHOTOTHERMOACOUSTIC EFFECT IN ION-BEAM IMPLANTED Si-BASED STRUCTURES

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S u m m a r y

We present the results of investigations of the photothermoacoustic (PTA) effect in ion-beam implanted silicon-based structures. The factors, which influence the PTA-transformation and, hence, the image contrast formation in the PTA-microscopic studies of these structures, are established. The conclusion is drawn that significant changes of the PTA contrast are related to the spatial distribution of elastic stresses arising during implantation.