

RESEARCH OF THE INFLUENCE
OF HIGH-TEMPERATURE PROCESSING
ON THE MAGNETIC AND STRUCTURAL
CHARACTERISTICS OF SILICON CRYSTALS

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S u m m a r y

The work presents the results of studying the effect of high-temperature treatment (HTT) in a temperature range 650 – 1100 °C on the magnetic and electric properties of *n*-Cz-Si monocrystals and structures poly–mono–*n*-Si based on the material. It is found that HTT leads to the formation of the system of interacting paramagnetic centers which is appeared most clearly at 900 °C. Analysis of the current-voltage characteristics (IVC) of the poly–mono–*n*-Si structures based on the original samples and on the samples undergone HTT-900 has demonstrated that HTT-900 decreases non-linearity of IVC, makes them symmetric, and lowers the leakage current by one order of magnitude.