

# INFLUENCE OF ATOMIC HYDROGEN ON THE SURFACE AND THE NEAR-SURFACE LAYERS OF GERMANIUM CRYSTALS

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## S u m m a r y

Influence of atomic hydrogen on single crystals of germanium at temperatures of 300–310 K, the pressure of 20 Pa in the working chamber, and the concentration of atomic hydrogen of about  $10^{19} \text{ m}^{-3}$  has been investigated. The specimens of *n*-Ge with a specific resistance  $\rho = 15 \Omega \cdot \text{cm}$  underwent a treatment for 100–300 s. To study the influence of atomic hydrogen on crystals, we measured the current-voltage characteristics (CVCs), specimen resistances, and the work function by the dynamic capacitor method. The influence of atomic hydrogen has been shown to change the electrophysical parameters of crystals, including the modification of a charge state of near-surface layers. A physical mechanism which explains the results of researches has been proposed.