# ELECTROPHYSICAL CHARACTERISTICS OF NEAR-SURFACE LAYERS IN $p$-Si CRYSTALS WITH SPUTTERED AL FILMS AND SUBJECTED TO ELASTIC DEFORMATION

*B.V. Pavlyk*[1], *M.O. Kushlyk*[1], *R.I. Didyk*[1], *Y.A. Shykorjak*[1], *D.P. Slobodzyan*[1], *B.Y. Kulyk*[2]

[1]Ivan Franko National University of Lviv, Department of Electronics (*107, Tarnawsky Str., Lviv 79017, Ukraine; e-mail: pavlyk@electronics.wups.lviv.ua*),
[2]Ivan Franko National University of Lviv, Scientific-Technical and Educational Center of Low Temperature Studies (*50, Drahomanov Str., Lviv 79005, Ukraine*)

S u m m a r y

The deposition of Al film onto the (111) surface of a $p$-Si crystal was shown to induce a deformation in the near-surface layer of the latter. Provided that the crystal strain is elastic and uniaxial, the gettering of defects in the near-surface layer is observed, which is confirmed by a change in the dependence of the specimen resistance on the elastic strain magnitude. The maximum depth of the defect capture has been calculated on the basis of the energy of interaction between the deformed layer and dislocations.