

INFLUENCE OF THE MAGNETIC FIELD
ON THE PHOTOCURRENT THROUGH
SILICON–POROUS SILICON
HETEROSTRUCTURES

*A. V. Kozinets, O. I. Nichiporuk, N. N. Momot,
V. V. Kislyuk, V. A. Skryshevsky*

Taras Shevchenko Kyiv National University,
Faculty of Radiophysics
(64, Volodymyrska Str., Kyiv 01033, Ukraine)

S u m m a r y

The influence of the magnetic field on the photocurrent through heterostructures with thin layers of porous silicon (PS) has been studied. A reduction of the photocurrent, which accompanies the deflection of charge carriers by a magnetic field towards the illuminated surface, is associated with the charge recombination at the interface between porous silicon and the crystalline silicon substrate. It has been shown that such heterostructures can be useful in fabricating the magnetic field sensors.