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Abstracts

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**STABILITY OF THE SOLAR CELLS WITH THE POROUS SILICON
DOPED WITH PHOSPHORUS**

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ABSTRACT

In this paper the experimental processes of thermal diffusion regimes in porous silicon, determining the depth of penetration of phosphorus in silicon and to build concentration depth profile p-n- transition as phosphorus diffusion of impurities through the porous silicon oxide film. Also in this paper we consider the possibility of increasing short-circuit current of the solar cell by optimizing the doping level and the reduction of dark current saturation p-n- junction. In this connection, the behavior were investigated reverse dark saturation current I_0 of the applied voltage, depending dopant oxide removal without it.

KEYWORDS— *silicon solar cells, porous silicon, thermal diffusion, p-n-junction, etching*