

## **RADIATION-TECHNOLOGICAL PROCESSES IN MOSFETS PRODUCTION**

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Soft X-ray ( $< 20$  keV) and ultra-violet radiation based technique for precise adjustment of MOSFETs thresholds has been developed. The possibility of the processes is based on the radiation-controlled formation of the thermally-and-field stable charge in the phosphorus impurity contained gate oxides. Modeling of the technological processes has been successfully performed. Results of implementation of the ionizing radiation based technique in the full-scale production of commercial MOS VLSI circuits are summarized.