

## **VUV detector based on SiC**

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Sensitive and stable semiconductor VUV detectors are needed for the synchrotron radiation monitoring. These detectors should have the following features: dark current less than 1 nA, active area more than 6x6 mm, response uniformity of active area about 1%, degradation less than 1% after VUV radiation dose about tens J/cm<sup>2</sup>, the rise and fall time of this detector must be less than the tenth part of a second. It is also necessary to take into account the ability to withstand the ozone cleaning of active area and minimize the native oxide forming probability during the detector storage. Silicon detectors are used a long time in synchrotron radiation monitoring. The silicon carbide SiC, which is considered to be more resistant material, is one of the alternatives for this application. In this work we presented the results of sensitivity measurements of the VUV detector prototype based on SiC in 240-400 nm and 112-175 nm ranges.