

188. Title: Imagistic and spectral observation of the hidden objects with terahertz radiation

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Abstract: This paper presents an experiment with use THz radiation for detection and identification of the metallic objects and illegal substances inserted in nonmetallic boxes. Using THz imagistic technique was obtained 20 images of the metallic objects hidden, and with THz spectroscopy was identified the substances from paper box. In this experiment was used the Terahertz Time - Domain Spectroscopy kit from EKSPLA with frequency domain 0.1-5THz, and 50GHz precision.