

# Abstracts

## **Spatial resolution of microwave tomography for detection of myocardial ischemia and infarction-experimental study on two-dimensional models**

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An experimental study of spatial resolution of microwave tomography was performed. Our microwave tomographic system with operational frequencies of 0.9 and 2.36 GHz and with signal-to-noise ratio of 30 dB allowed us to achieve a spatial resolution between 7.3-9.5 mm and 6.3-7.8 mm at the former and latter frequencies, respectively. It was shown in experiments, with structurally complicated objects, that spatial resolutions of about the same distances can be expected in a practical application of microwave tomography to detect areas of myocardial ischemia and infarction.

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