AIP Conference Proceedings *Open Access* Volume 22038 January 2020 Article number 020012 2nd International Conference on Applied Photonics and Electronics 2019, InCape 2019 Putrajaya 22 August 2019 Code 156512

Review article of microwave imaging techniques and dielectric properties for lung tumor detection

Abstract

This article presents the microwave imaging techniques in order to detect early lung cancer with dielectric properties of normal and cancerous tissues which affect the propagation of the microwave signal. Identifying the contrast of dielectric properties of normal and cancerous lung tissues is significant in microwave imaging because it is used in reconstructing the image either in radar-based or tomographic imaging techniques. In microwave imaging measurement from past researchers are highlighted in order to identify the optimum distance of the antenna from the human thorax and the significant size of the tumour that can be detectable.