

**ipen** **Identification of BCC skin cancer using Fourier Transform Infrared Spectroscopy and Machine Learning**

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**INTRODUCTION**  
 Incidence according gender in Brazil - 2022

• Most of all cases of malignant neoplasms of the skin are NMSC.  
 • Basal cell carcinoma (BCC) is the most common (70%) type of NMSC.

**ATR-FTIR Spectroscopy**  
 Minimal sample preparation

**OBJECTIVES**

**CONCLUSION**  
 In a computational approach based on 3D-PCA-QDA of ATR-FTIR spectra, we were able to distinguish between healthy and unhealthy human tissue. We demonstrated that the computational model achieved 90% and 80% accuracy in identifying BCC and healthy cells, respectively.

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Frequency Selection Techniques in Terahertz Spectroscopy and Power Estimation

**Abstract of the**

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