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## **ACCEPTED MANUSCRIPT**

The classification of lung cancers and their degree of malignancy by FTIR, PCA-LDA analysis, and a physics-based computational model

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#### **ABSTRACT**

Lung cancer has the highest mortality rate of all malignant tumours. The current effects of cancer treatment, as well as its diagnostics, are unsatisfactory. Therefore it is very important to introduce modern diagnostic tools, which will allow for rapid classification of

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