A Novel Methods of Investigation on Bio-Medical Cancer Tissues using Advanced Clustering Techniques

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 129
Number 12

Year of Publication: 2015

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10.5120/ijca2015907059

Abstract

The paper investigates the performance of three often used clustering techniques, namely hierarchical cluster analysis, k-means and fuzzy c-means algorithms, in infrared analysis on seven oral cancerous FTIR datasets. The diagnostic results from clinical study are considered as the 'gold standard' in this paper the proposed system evaluates the clustering results from these three techniques. Corresponding experiments were carried out and the results showed that fuzzy c-means is the most suitable clustering method in this context.

References

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**Index Terms**

Computer Science  
Biomedical

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**Keywords**

clustering, FTIR, bio-medical.