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

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

Biophysica Acta (BBA) - Molecular Basis of Disease, vol. 1688, no. 2, pp. 176-186.


**Index Terms**

Computer Science  
Biomedical

**Keywords**

clustering, FTIR, bio-medical.