

Two-Dimensional Infrared Correlation Spectroscopy, Linear Two-Dimensional Infrared Spectroscopy and Non-Linear Two-Dimensional Infrared Spectroscopy Comparative Study on Malignant and Benign Human Cancer Cells and Tissues under Synchrotron Radiation with the Passage of Time

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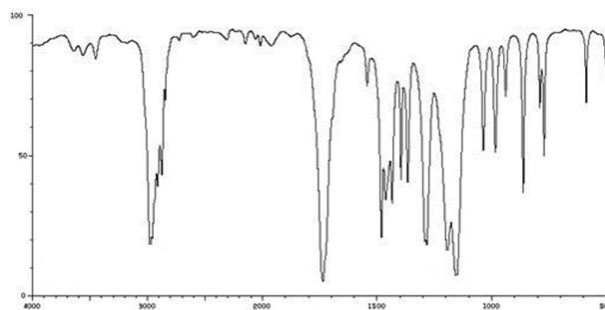
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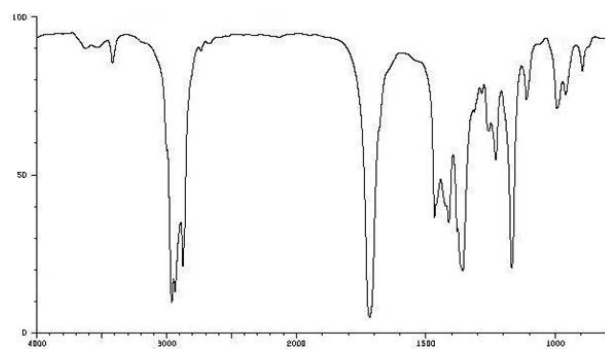
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Image Article

In the current study, we have experimentally and comparatively investigated and compared malignant human cancer cells and tissues before and after irradiating of synchrotron radiation using Two-Dimensional Infrared Correlation Spectroscopy, Linear Two-Dimensional Infrared Spectroscopy and Non-Linear Two-Dimensional Infrared Spectroscopy. It is clear that malignant human cancer cells and tissues have gradually transformed to benign human cancer cells and tissues under synchrotron radiation with the passage of time (Figures 1-3) [1-90].

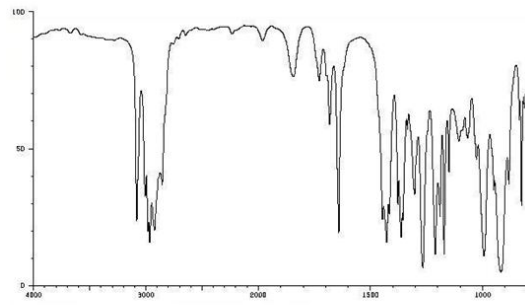


(a)

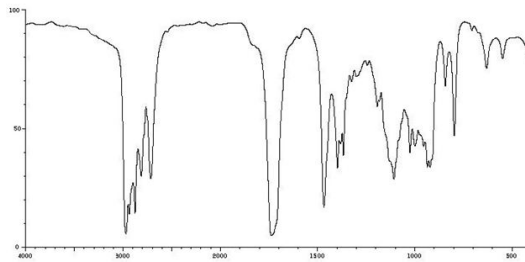


(b)

Figure 1: Two-Dimensional Infrared Correlation Spectroscopy analysis of malignant cancer cells and tissues (a) before and (b) after irradiating of synchrotron radiation in transformation process to benign human cancer cells and tissues with the passage of time [1-90]

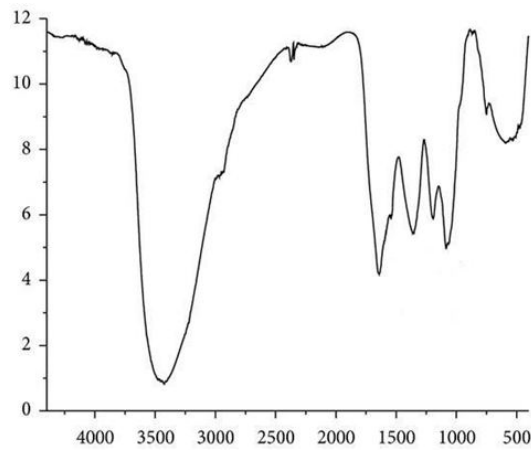


(a)

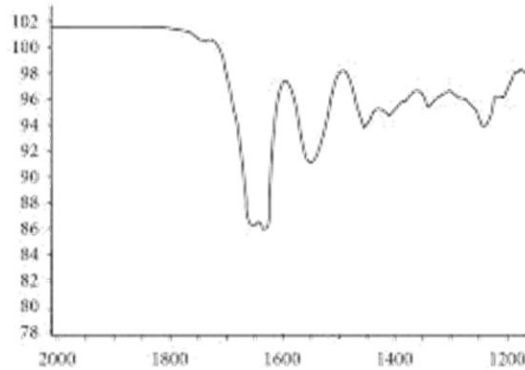


(b)

Figure 2: Linear Two-Dimensional Infrared Spectroscopy analysis of malignant cancer cells and tissues (a) before and (b) after irradiating of synchrotron radiation in transformation process to benign human cancer cells and tissues with the passage of time [1-90]



(a)



(b)

Figure 3: Non-Linear Two-Dimensional Infrared Spectroscopy analysis of malignant cancer cells and tissues (a) before and (b) after irradiating of synchrotron radiation in transformation process to benign human cancer cells and tissues with the passage of time [1-90]

It can be concluded that malignant human cancer cells and tissues have gradually transformed to benign human cancer cells and tissues under synchrotron radiation with the passage of time (Figures 1-3) [1-90].

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