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Image Article

Laser Spectroscopy, Laser-Induced Breakdown Spectroscopy and Laser-Induced Plasma Spectroscopy Comparative Study on Malignant and Benign Human Cancer Cells and Tissues with the Passage of Time under Synchrotron Radiation -

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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 Laser Spectroscopy, Laser-Induced Breakdown Spectroscopy (LIBS) and Laser-Induced Plasma Spectroscopy (LIPS). 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) [1-102].

FIGURE 1

Laser 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. As shown, malignant human cancer cells and tissues have gradually transformed to benign human cancer cells and tissues under synchrotron radiation with the passage of time [1-102].

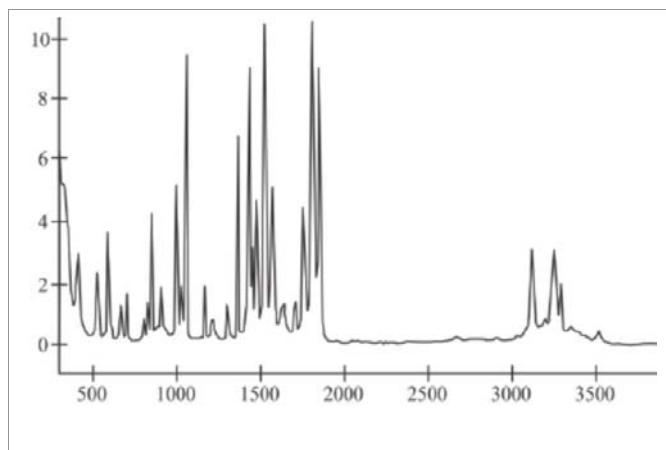


Figure 1a:

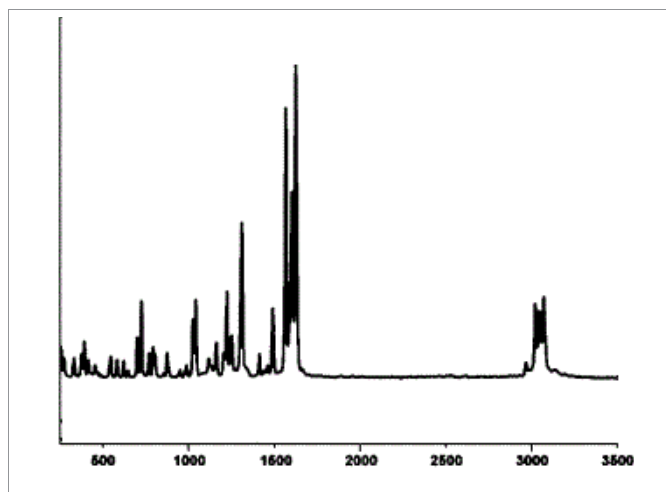


Figure 1b:

FIGURE 2

Laser-Induced Breakdown Spectroscopy (LIBS) 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. As shown, malignant human cancer cells and tissues have gradually transformed to benign human cancer cells and tissues under synchrotron radiation with the passage of time [1-102].

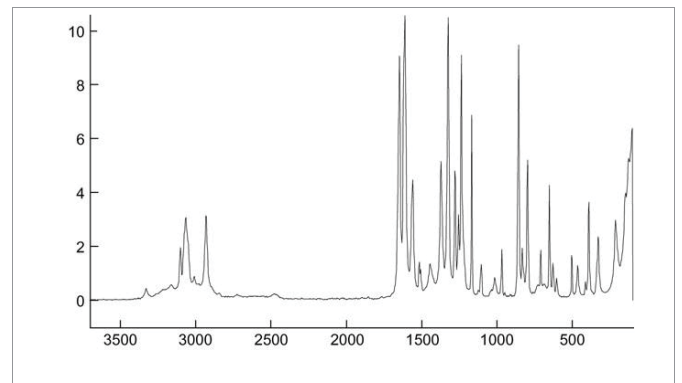


Figure 2a:

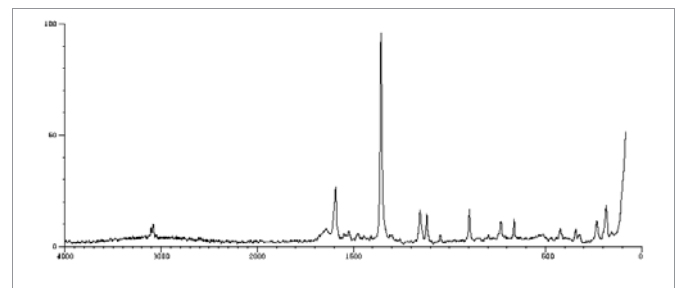


Figure 2b:

FIGURE 3

Laser-Induced Plasma Spectroscopy (LIPS) 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. As shown, malignant human cancer cells and tissues have gradually transformed to benign human cancer cells and tissues under synchrotron radiation with the passage of time [1-102]. 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) [1-102].

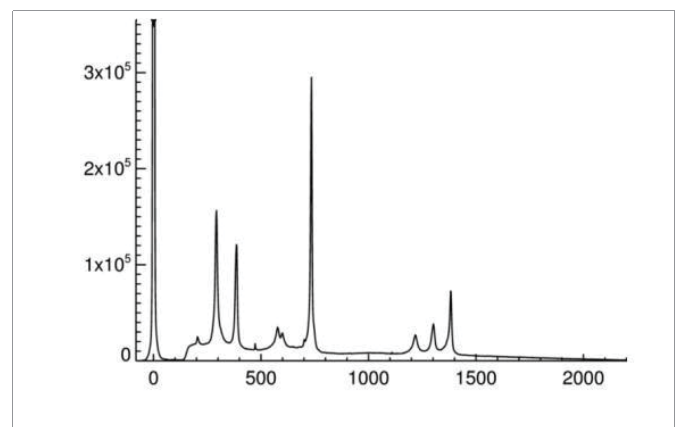


Figure 3a:

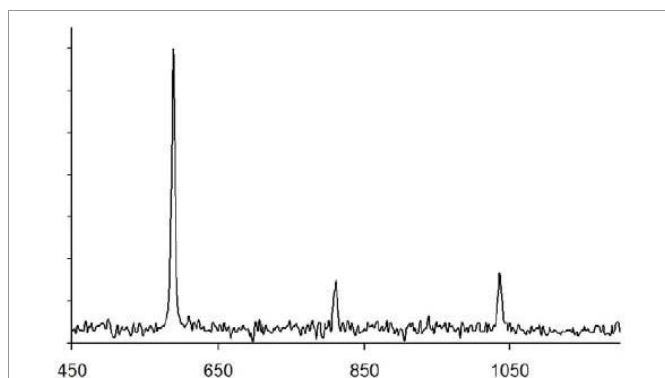


Figure 3b:

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