

PHOTOTHERMAL THERAPY OF CANCER BY LASER LIGHT WITH NANOPARTICLES INDUCTION: SIMULATION AND PREDICATIONS

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ABSTRACT

Accurate simulation of temperature distribution in tumors induced by gold nanoparticles during laser photothermal therapy relies on precise measurements of thermal distribution of temperature on the tumor region. We find that there is effect of laser intensity on the changing the temperature .This behavior is predicated to control on the temperature distribution in at the tumor. The simulation of the photothermal treatment processes is achieved by using mat-lab program with using the numerical method is called as(Finite difference method).

KEYWORDS: Photothermal Therapy, Gold Nanoparticles, Modeling of Bioheattransfer, Finite Difference Method