

## Novel nanophotolysis technique for breast cancer therapy

### Abstract :

The aim of this study is to investigate the effects of gold nanoparticles on breast cancer tumor. A theoretical approach has been adopted to probe the nanophotolysis technique using short pulse laser. The influences of various parameters including number of ions, shock front, energy distribution function, laser fluence are discussed in detail. Computational results suggest that spherical gold nanoparticles provides a promising platform for selective killing of abnormal cells in breast cancer tumor.