عنوان مقاله:

Terahertz Radiation Effect Modeling on Human Body Tissues

محل انتشار:

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خلاصه مقاله:

In this article, we model the influence of terahertz radiation (T-ray) on human body tissues including body skin and tissue water based on solving the Kirchhoff heat equation. A generalized model is developed which can be consequently applied on other tissues. The maximum temperature increase as a function of beam radius for skin is 3 K/mW and this shows the minimum demolition in the tissue due to the low temperature increase. It can be seen the similar answer for water and skin in the following diagrams. Since human organs contains different tissues, currentmodel motivates future detailed studies for more exact influence of T-ray on body

کلمات کلیدی:

Human tissue, T-ray, absorption coefficient