

## عنوان مقاله:

Chaotic Ikeda map can model heat transfer in laser-soft matter interaction

## محل انتشار:

کنفرانس بین المللی بیو فوتونیک و اپتیک زیست پزشکی (سال: 1400)

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## خلاصه مقاله:

We develop a model for simulating the heat transfer phenomena within a biological soft material using the Ikeda chaotic map. Our approach is implemented by sampling the optical intensity via the Ikeda map to investigate the influence on the heat distribution on the tissue. Our method has many potential advantages including the possibility of investigating the nonlinear optical effects resulting from the intense beam-induced feedback mechanism. This in turn, leads to the flexibility and controllability in comparison to the Monte-Carlo method. The proposed approach is .thus appropriate for the applications in the light beam-guided nanodrug injection and microsurgery

## کلمات کلیدی:

Laser-tissue interaction, soft matter, Ikeda map, Chaos, Nonlinearity, Drug delivery

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1378028>

