

عنوان مقاله:

Efficient laser induced breakdown in water by double pulses

محل انتشار:

سيزدهمين كنفرانس مهندسي پزشكي ايران (سال: 1385)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

It is shown experimentally and by simulation that, the induced breakdown threshold in water by double laser pulses requires less energy than a single pulse, and the delay time between two pulses is the key factor. In this study first, parameters of the simulation are chosen by comparing the predictions with the experimental results, then by applying the same pulse generation method and photon matter interaction mechanisms, the double pulse laser induced breakdown (LIB) threshold is simulated and the optimized delay time between two pulses is predicted. Finally, by using a Q-switched Nd-YAG Laser, the optimized delay time for a 10 nanosecond (ns) pulse has been investigated .experimentally

كلمات كليدي:

لینک ثابت مقاله در پایگاه سیویلیکا:

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