

عنوان مقاله:

The Effect of Fluid Properties on the Operation of Thermal Bubble jet

محل انتشار:

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خلاصه مقاله:

Over the last two decades, since explosive boiling has been widely used in industry, research on it has been increased. Thermal bubble jet printer, micro injectors and using in micro medicine for injection are some possible applications. The operation of thermal bubble jets consist of three stages: 1- Heat transfer process, 2- Bubble formation and growth in the microchannel, and 3-Drop ejection. The effect of fluid properties on the operation of thermal bubble jet is investigated in this paper. Thus the effect of fluid properties is investigated in each above mentioned processes. Eventually, comparing experimental results of drop ejection with the results from simulations, drop properties such as volume and velocity are given

کلمات کلیدی:

.Explosive Boiling, Thermal Bubble jet, Micro-injector, Micro Fluidics

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