

An Experimental Study to Control Single Droplet by Actuating Waveform with Preliminary and Suppressing Vibration

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Abstract : <p style="margin-left:-.3pt;">For advancing the experiment system standard of Inkjet printer that is being developed, the actual natural period, fire limitation number in droplet weight measurement and observation distance in droplet velocity measurement was investigated. In another side, the study to control the droplet volume in inkjet printer with negative actuating waveform method is still limited. Therefore, the effect of negative waveform with preliminary and suppressing vibration addition on the droplet formation process, droplet shape, volume and velocity were evaluated. The different voltage and print-head temperature were exerted to obtain the optimum preliminary and suppressing vibration. The mechanism of different phenomenon from each waveform was also discussed.

Keywords : inkjet printer, DoD, waveform, preliminary and suppressing vibration

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