

## Supporting Information

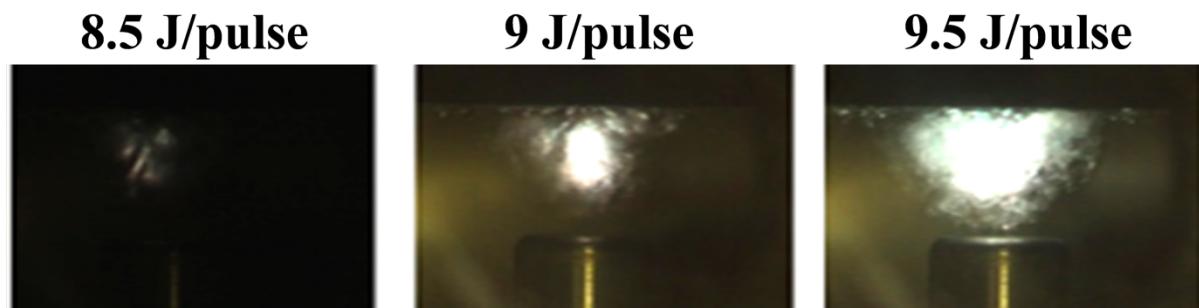


Fig. S1 Discharge photographs for capacitor energy of <10 J.

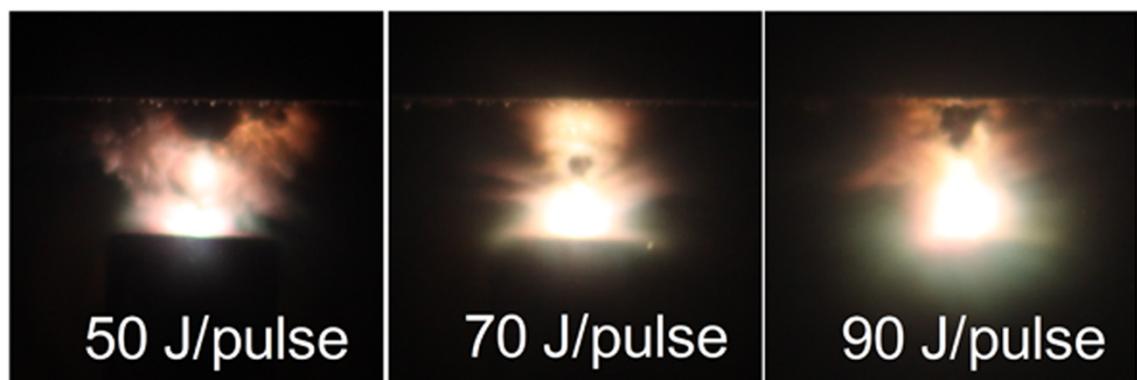


Fig. S2 Discharge photographs for capacitor energy of 50, 70 and 90 J.

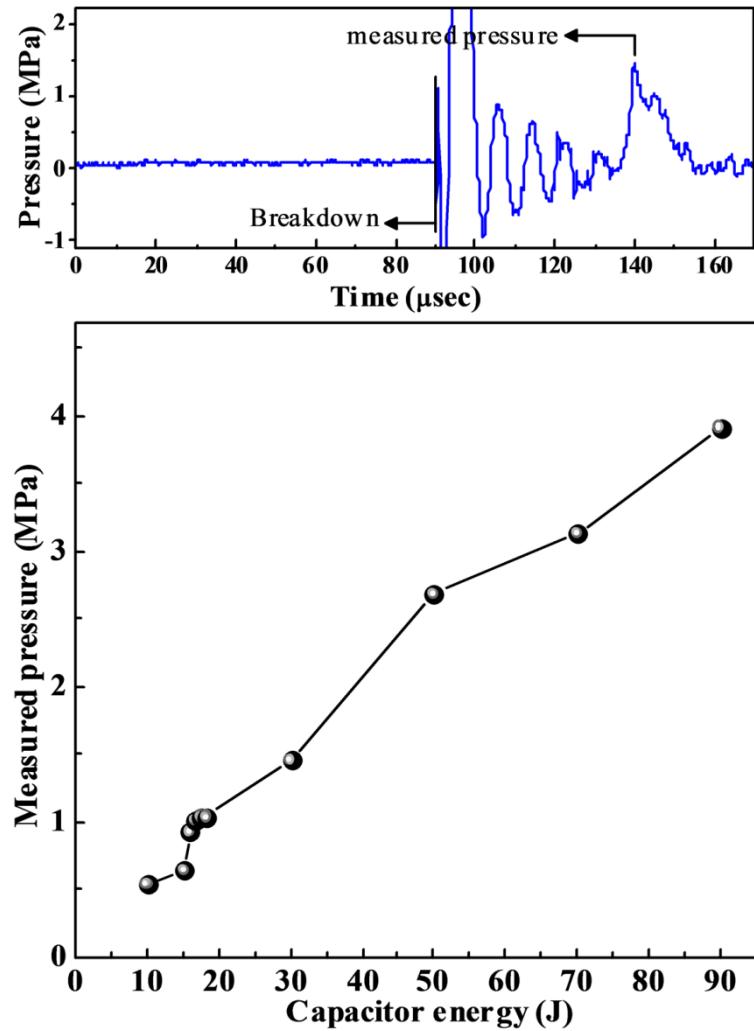


Fig. S3 (a) Pressure waveforms of arc discharge for capacitor energy of 30 J. The pressure peak of shock wave appears  $\sim$ 48  $\mu$ sec after breakdown considering the sound velocity (1.144  $\text{mm } \mu\text{sec}^{-1}$ ) and the distance (55 mm) from the center of discharge chamber. (b) Pressure of shock wave as a function of capacitor energy.