

Supplementary Figures

Microelectrofluidic Probe for Sequential Cell Separation and Patterning

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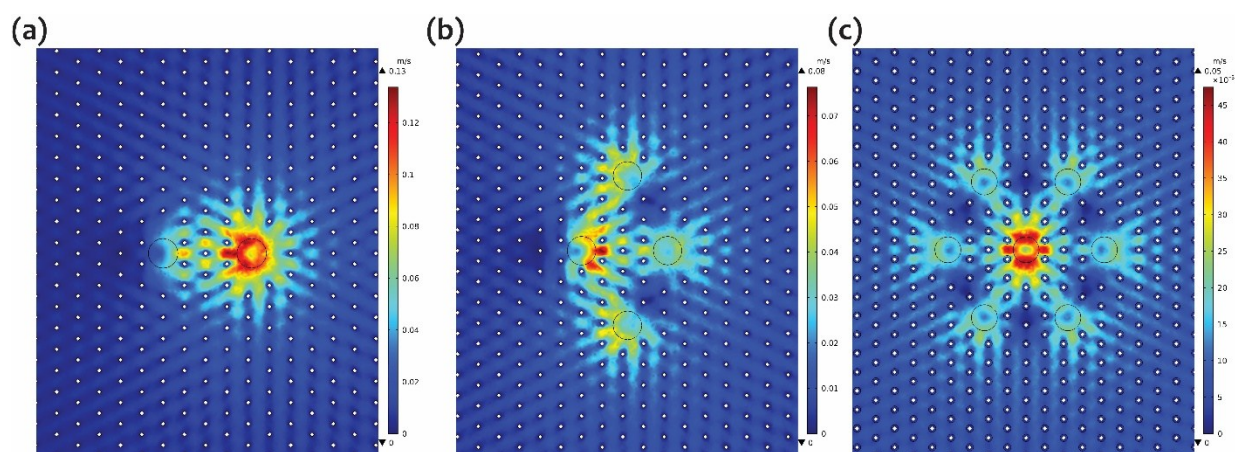


Fig. S1. Velocity profile at capture plane with 20 $\mu\text{l}/\text{min}$ inlet flow rate. (a) Dipole Microfluidic configuration. (b) Quadrupole Microfluidic configuration. (c) Heptapole Microfluidic configuration.

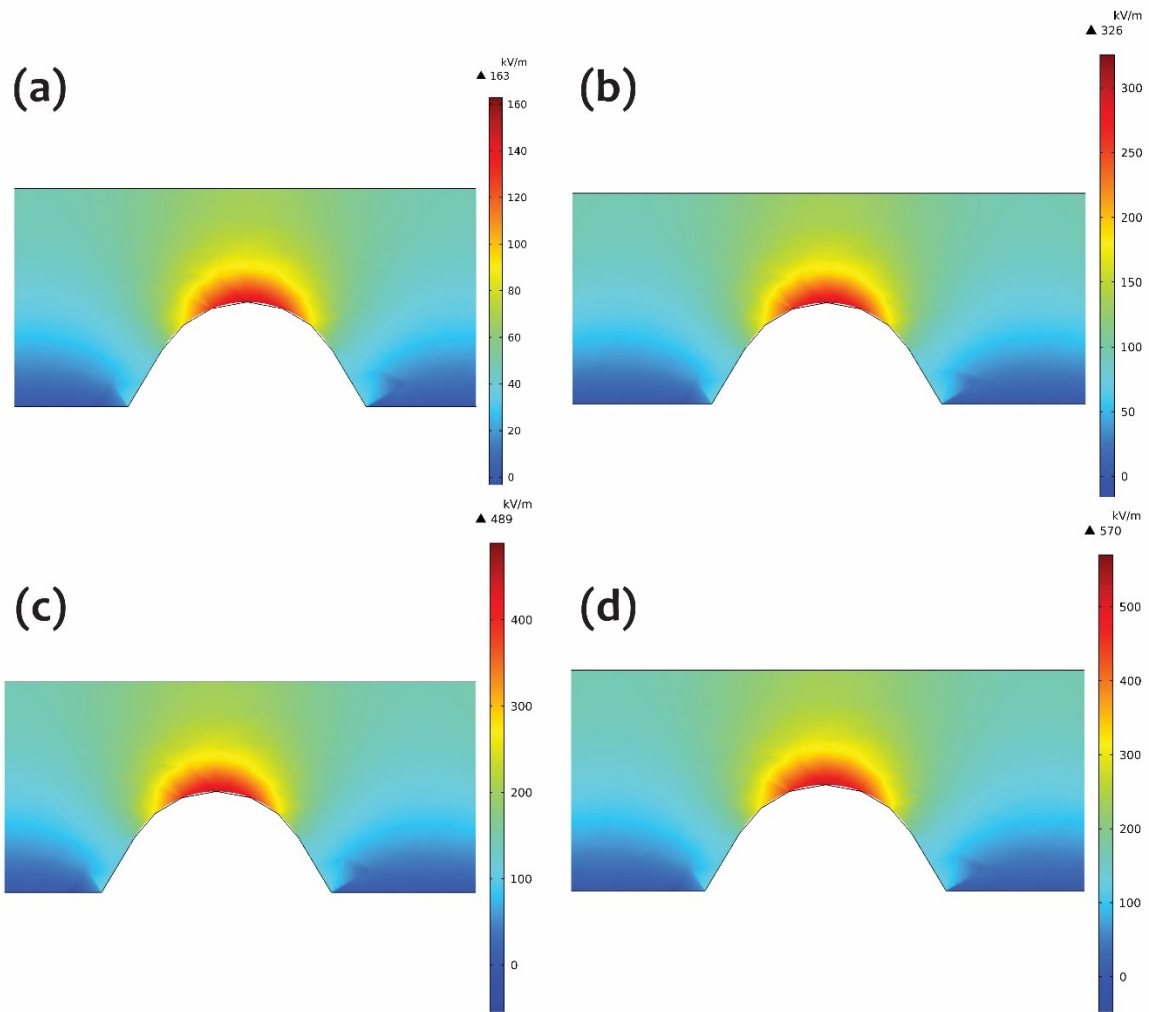


Fig. S2. Electric field strength as a function applied voltage. (a) 10 Vpk-pk. (b) 20 Vpk-pk. (c) 30V pk-pk. (d) 40 Vpk-pk.

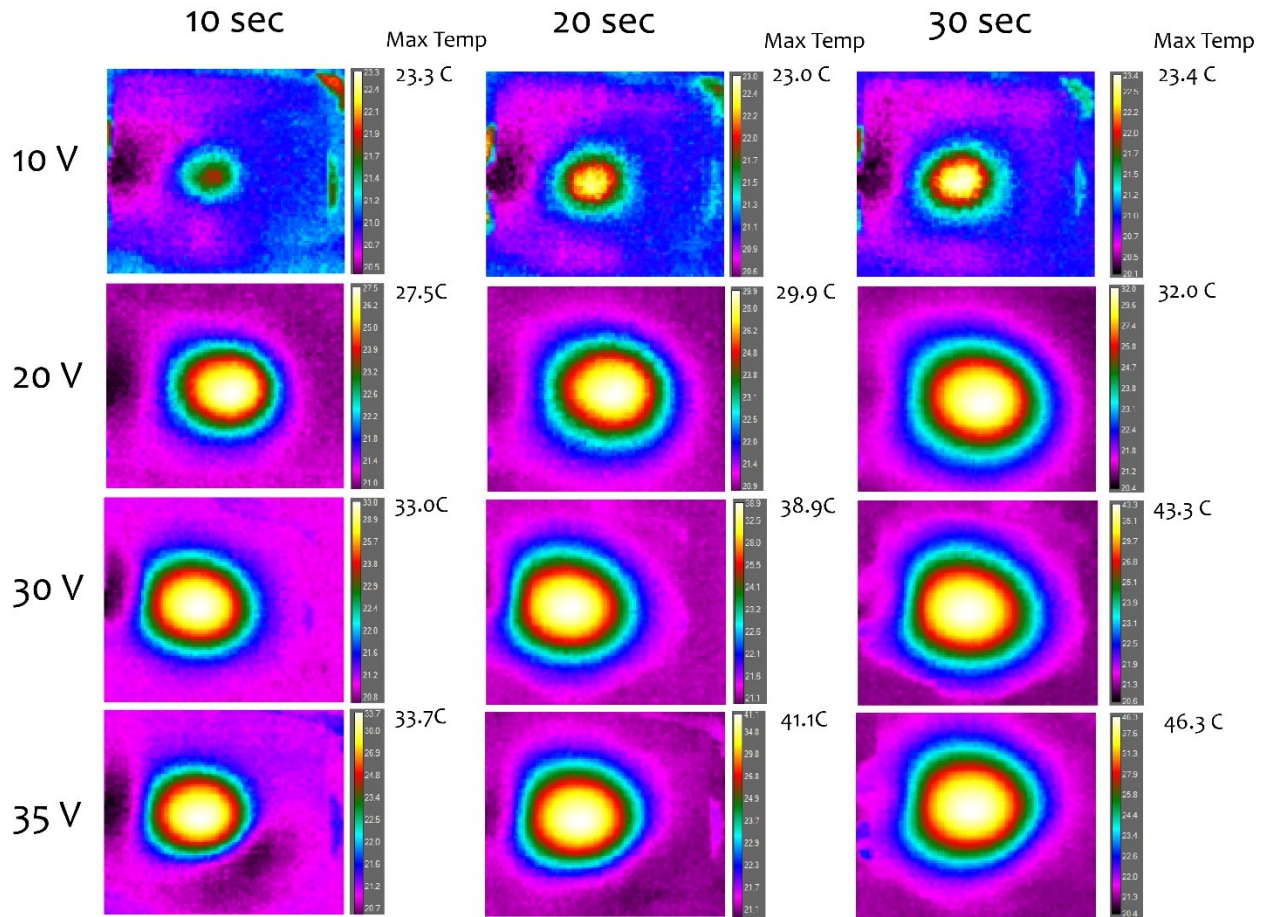


Fig. S3. Temperature measurements as a function of applied voltage and exposure time. Transient Infrared images as a function of applied voltage showed that the maximum temperature cells were exposed to at 35 V is 46.3 C

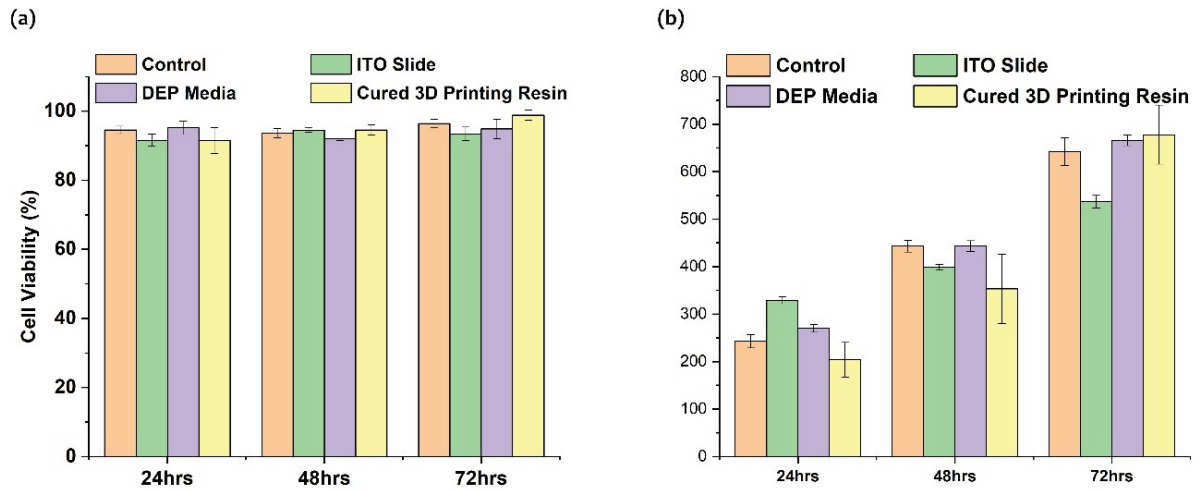


Fig. S4. Impact of materials on cell viability and growth density. (a) Cell viability as a function of time for different materials used in the study. (b) Cell density as a function of time for different materials used in the study. Error bars denote standard error.

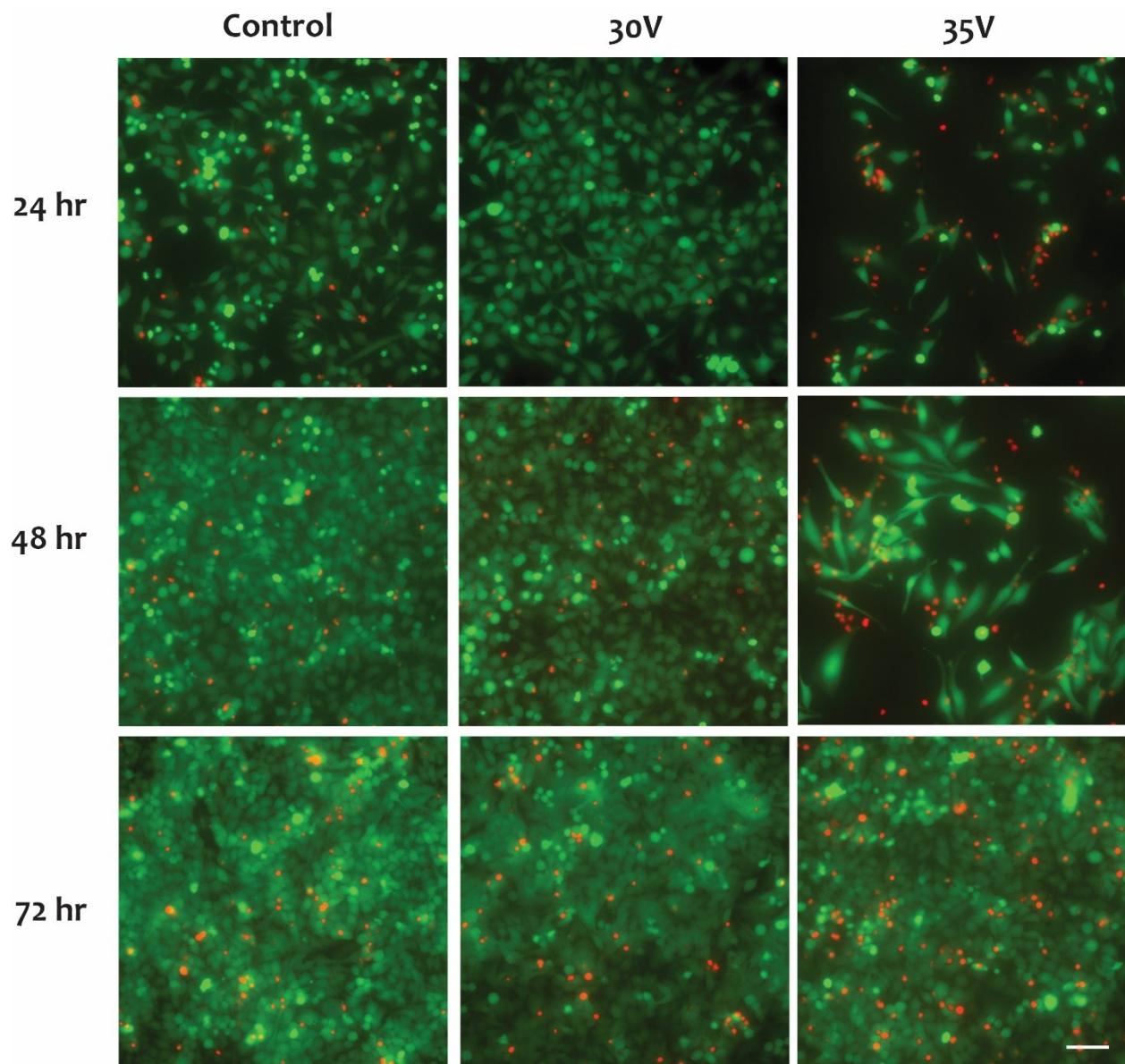


Fig. S5. Fluorescent image for live/dead viability study. Green denotes live cells and red denotes dead cells. Scale bar is 100 μm .

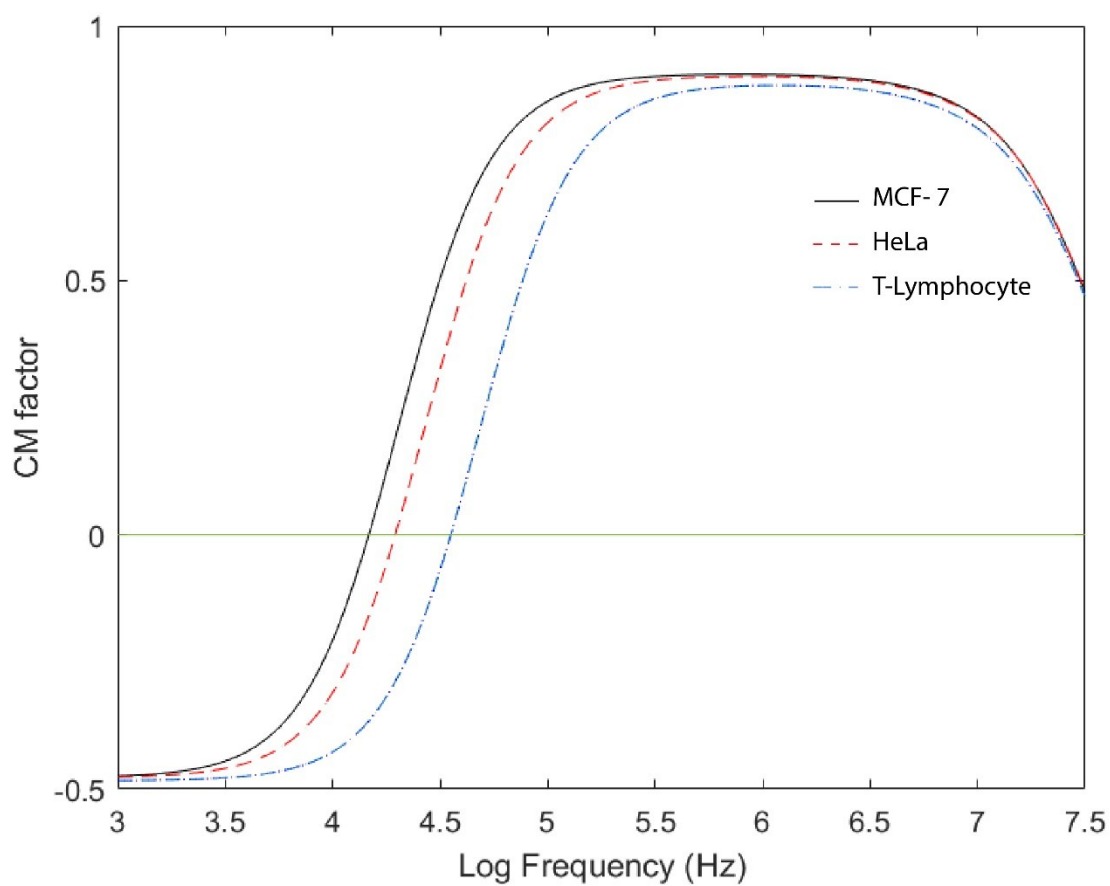


Fig. S6. Calculated CM function of MCF 7, HeLa, and T-lymphocytes. Frequency dependent CM-function calculated using the two-shelled model