

The effect of latex particles at the edge of the microelectrode in lab on a chip system

ABSTRACT

The behavior of latex particles at the edges of microelectrode has been studied. The latex particles at the edge of microelectrode tend to possess greater variation in dielectrophoresis compare to the middle part of the microelectrode, which cause the particles to travel further distance. The particles effects near the edges at lower and higher frequencies were being observed and presented as an equivalent electric circuit.

Keyword: Edge effect; Electroosmotic flow; Dielectrophoresis; Particle image velocimetry; Lab-on-a-chip