In this paper we investigate a microfluidic device designed for separation of particles having different densities. Separating mechanism employs Standing Surface Acoustic Waves (SSAWs). Simulation studies have shown that Polyethylene microspheres with diameter of 10µm, having a density of 1200 kg/m³, can easily be detected from the same sized Melamine microspheres having a density equal to 1710 kg/m³.

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Index Terms

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Keywords

SSAW, IDT, density-based.