

Abstract Submitted  
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**Microfluidic high-throughput nanoparticle counter** JEAN-LUC FRAIKIN, University of California Santa Barbara, ANDREW CLELAND, UCSB Physics — We have developed a high-throughput sensor for the all-electronic sizing of synthetic and biological nanoparticles suspended in a fluid. We have demonstrated detection of unlabeled particles with diameters ranging from 50 nanometers to 1 micron, and the rapid response time of the sensor permits detection of particles at rates greater than 200000 particles per second. Our current efforts focus on developing the sensor to detect single virus particles suspended in complex cytoplasmic fractions.

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