Abstract Submitted
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Vesicles sensing using resistive-pulse method[1] YAUHENI RUDZEVICH, YUQING LIN, LEE CHOW, University of Central Florida — Here we present a "resistive-pulse" method that allows translocations, counting and measuring size distribution liposomes with radii from 25 nm to 125 nm. This technique is based on using two chambers filled with electrolyte solution and separated by a partition with a nanopore between electrodes. It was found that ionic current drops when nanoparticle entering sensing nanopore of a pulled glass micropipette, producing a clear translocation signal. Pulled borosilicate micropipette with opening 50 $\sim$ 150 nm was used as a sensing instrument. This method provides a direct, fast and inexpensive way to characterize inorganic and organic nanoparticles in a solution.

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