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A Revised Paper Submitted to

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Review and Perspectives on Microfluidic Flow Cytometers

by

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Highlights

- Microflow cytometers are one of the most powerful approaches for cells / particles analysis.
- The review focuses on proposals for microfluidic focusing techniques and detection / analysis methods.
- A comprehensive review of the main applications of microflow cytometers over the past ten years.

ABSTRACT

Modern microflow cytometers are sophisticated instruments capable of measuring multiple physical characteristics of a single cell simultaneously as the cells flow in suspension through a measuring device. Cytometers are the tool of choice for the high-speed acquisition and analysis of large single cell populations. However, traditional devices lack the ability to provide intracellular spatial information. In the past few decades, various flow cytometer systems with the ability to combine cell /

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