

9<sup>th</sup> World Congress on

# BIOSENSORS AND BIOELECTRONICS

August 29-30, 2018 Tokyo, Japan

## Developments of microfluidic sensors for single-cell and small population analysis

Jian Chen

Chinese Academy of Sciences, China

Tumor heterogeneity refers to biophysical and biochemical differences among individual tumor cells even from the same tumor portions. Currently, the bottlenecks for studying tumor heterogeneity are lack of effective tools for single-cell and small-population analysis. work on developing microfluidic platforms targeting tumor heterogeneity. Microfluidic platforms capable of high-throughput characterizing electrical, mechanical, proteomic and comprehensive properties of single tumor cells. Secondly, enabling high-throughput analysis of migration and invasion capabilities of small-population cells. Hopefully, the microfluidic tools developed in my group can contribute to our studies of tumor heterogeneity in the near future.

chenjian@mail.ie.ac.cn