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Development of Point-of-Care Diagnostic Tools and New Bioassays

Guest Editors:

Dr. Ning Yang

School of Electrical and Information Engineering, Jiangsu University, Zhenjiang 212013, China

Dr. Yanwei Jia

State Key Laboratory of Analog and Mixed-Signal VLSI, Institute of Microelectronics, University of Macau, Macau SAR, China

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Message from the Guest Editors

Microfluidic technology has become a very important biological and chemical analysis tool because of its advantages, such as low cost of samples and reagents, in situ real-time analysis, etc.; thus, microfluidics has been applied in many studies at the molecular and cellular levels. For cell research, because the dimension of the microchannel is greatly compatible with the magnitude (size) of the cells and can perfectly simulate the real in vivo environment of cells in vitro, it has become a new platform for the real-time detection and research of cells and single cells.

This Special Issue aims to collect the latest technological progress in microfluidic technology in the field of cell detection and research. We particularly encourage research in the following areas: (1) cancer cell capture and recognition; (2) cancer cell drug screening; (3) cell viability detection; (4) cell vitality evaluation; (5) optical and electrochemical cell detection; (6) electrical-impedance-based cell detection; (6) hematology analysis (red blood cells, platelets, white blood cells, clotting, etc.); and (7) rapid detection of sperm viability.













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Editor-in-Chief

Prof. Dr. Giovanna Marrazza

Department of Chemistry "Ugo Schiff", University of Florence, Via della Lastruccia 3, 50019 Sesto Fiorentino, Italy

Message from the Editor-in-Chief

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