



Point-of-Care Diagnostic Devices for Single-Cell Analysis and Biomarker Detection

Guest Editors:

Dr. Lawrence Kulinsky

Department of Mechanical and
Aerospace Engineering,
University of California, 4200
Engineering Gateway, Irvine, CA
92697-3975, USA

Dr. Snehan Peshin

Department of Bioengineering,
University of Washington, Seattle,
WA 98195, USA

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Message from the Guest Editors

Dear Colleagues,

The Special Issue "Point-of-Care Diagnostic Devices for Single-Cell Analysis and Biomarker Detection" presents a comprehensive collection of cutting-edge research at the intersection of biomedical engineering, nanotechnology, and clinical diagnostics. This issue highlights the latest advancements in the development and application of innovative point-of-care (POC) devices tailored for single-cell analysis and rapid biomarker detection. The topic includes but is not limited to the following:

Microfluidic Platforms: Highlighting advancements in microfluidic technologies for single-cell manipulation, sorting, and analysis, with a focus on miniaturization, integration, and automation.

Biosensing Strategies: Exploring novel biosensing approaches such as surface plasmon resonance, electrochemical, and optical sensors that enable the rapid and sensitive detection of biomarkers at the single-cell level.

Nanotechnology Applications: Showcasing the use of nanomaterials, nanoparticles, and nanoscale structures for enhancing signal amplification, target recognition, and multiplexed analysis in POC diagnostic devices.





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Editor-in-Chief

Prof. Dr. Ai-Qun Liu

1. Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China
2. School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 639798, Singapore

Message from the Editor-in-Chief

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Micromachines Editorial Office
MDPI, Grosspeteranlage 5
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