

## Special Issue

# Human-Centred Intelligent Wearable Devices

### Message from the Guest Editors

The development of wearable devices is accelerating through advances in micro/nanofabrication, flexible/stretchable materials, multimodal integration, and foreground algorithms. This Special Issue of *Micromachines* solicits original research articles, system papers, and perspectives on the design, fabrication, modeling, and characterization of wearable devices, textile-embedded sensors, and haptic interfaces, spanning MEMS/NEMS transducers and actuators (vibrotactile, electrotactile/electrostatic, microfluidic/pneumatic, thermoelectric, and olfactory). We particularly welcome end-to-end contributions that bridge wearable devices with human-in-the-loop validation, emphasizing intelligence, context-awareness, human-computer interaction, and real-world deployment. Submissions should report clear performance metrics, provide device- and system-level comparisons or user testing, and discuss trade-offs among performance, functionality, wearability, and usability. By synthesizing contributions across engineering and design, this Special Issue aims to accelerate translation from benchtop prototypes to robust, human-centric wearable systems with measurable real-world impact.

### Guest Editors

Dr. Shaoyu Cai  
Dr. Yushan Pan  
Dr. Yuki Ban

### Deadline for manuscript submissions

30 April 2026



## Micromachines

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## About the Journal

### Message from the Editor-in-Chief

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### Editor-in-Chief

Prof. Dr. Ai-Qun Liu

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