

Mawatari Laboratory (馬渡研究室)

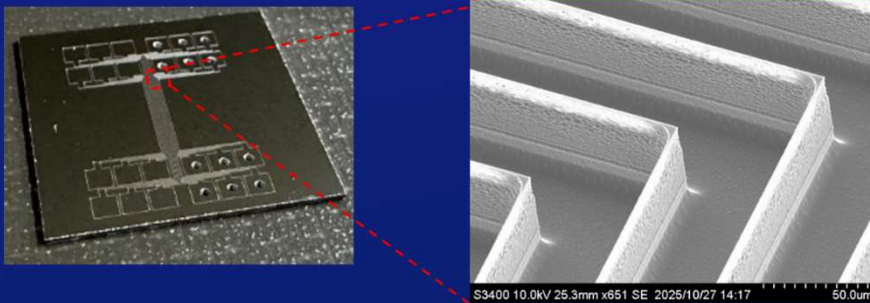
Micro- and Nano-fluidic information devices

<https://mawatari-lab.w.waseda.jp/>



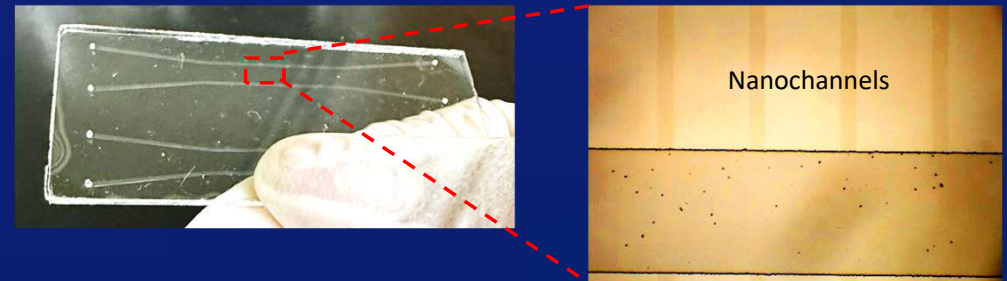
Waseda University
Graduate School of Information,
Production and Systems

Microfluidic cutting device for tissue analysis



Knife-shaped microfluidic channels on Si

Fluidic science in nanospace



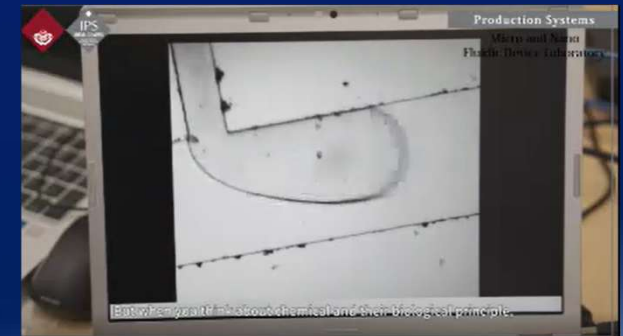
4-25 nm ultrasmall nanochannels on glass

Single cell and single exosome analytical devices



Microchannel/single cell chamber/nanofluidic channels on glass

Movie (example)



References

- (1) *Lab on a Chip*, **26**, 3493–3507 (2026)
- (2) *IEEJ Transactions on Sensors and Micromachines*, **9**, 184-188 (2025)
- (3) *Analytical Chemistry* **96**(28), 11430-11438 (2024)
- (4) *Journal of Molecular Liquids*, **350**, 118567 (2022)