



**Showcasing research from Professor Yamada's laboratory,
Graduate School of Engineering, Chiba University,
Chiba, Japan.**

**Enhancing cancer cell immunocapture on
orientation-controlled nanoimprinted microcone arrays in
microgap channels**

The orientation-controlled microcone structure enables efficient antibody immobilization without requiring chemical crosslinking protocols. Owing to its three-dimensional architecture, the microgap channel formed between the microcones and a flat substrate allows for effective immunocapture and detection of rare cells simply by introducing a cell suspension into the device. This approach is particularly effective for isolating circulating tumor cells from blood samples.

Image reproduced by permission of Masumi Yamada from *Lab Chip*, 2025, **25**, 3617.

As featured in:



See Masumi Yamada *et al.*,
Lab Chip, 2025, **25**, 3617.