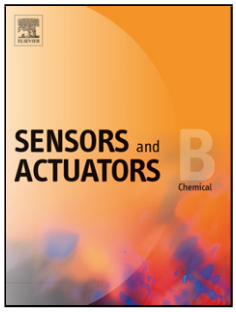

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Three-dimensional Printed Microfluidic Modules for Design Changeable Coaxial Microfluidic Devices

Yuya Morimoto[a], **Mahiro Kiyosawa**[a], **and Shoji Takeuchi**[a, b*]

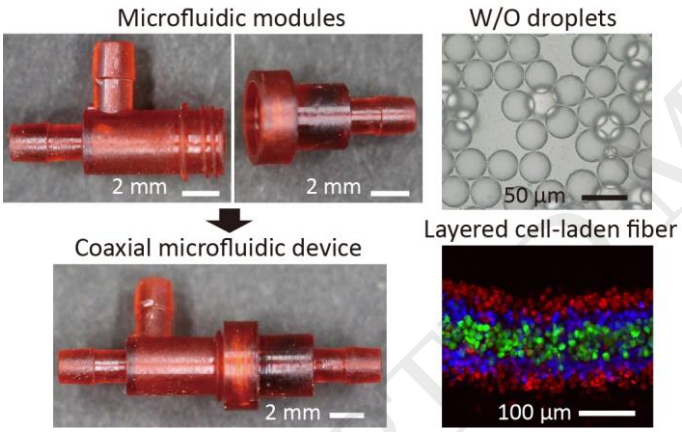
[a] Center for International Research on Integrative Biomedical Systems (CIBiS), Institute of Industrial Science (IIS), the University of Tokyo, 4-6-1 Komaba, Meguro-ku, Tokyo, 153-8505, Japan

[b] International Research Center for Neurointelligence (WPI-IRCN), the University of Tokyo Institutes for Advanced Study (UTIAS), the University of Tokyo, Tokyo, 153-8505, Japan

***Corresponding author:** Shoji Takeuchi

E-mail: takeuchi@iis.u-tokyo.ac.jp Tel: +81-3-5452-6650 Fax: +81-3-5452-6649

Graphical abstract



Highlights

- The developed microfluidic modules allow preparation of coaxial microfluidic devices.
- Monodisperse droplets and hydrogel fibers were produced using a device composed of these modules.
- Fiber-shaped tissues were formed by cell culture in a collagen layer.

Abstract: Coaxial microfluidic devices have been widely used for the preparation of monodisperse droplets and multi-layered hydrogel fibers. However, in the formation of the coaxial microfluidic