

# Lab on a Chip

Devices and applications at the micro- and nanoscale  
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## IN THIS ISSUE

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### Cover

See Gianni Ciofani *et al.*,  
pp. 5085–5100.

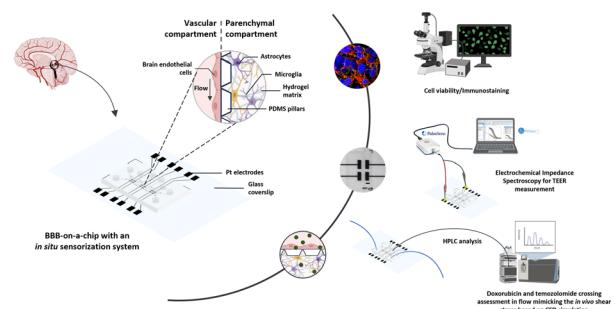
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*Lab Chip*, 2024, 24, 5085.

## PAPERS

5085

### Real-time monitoring of a 3D blood–brain barrier model maturation and integrity with a sensorized microfluidic device

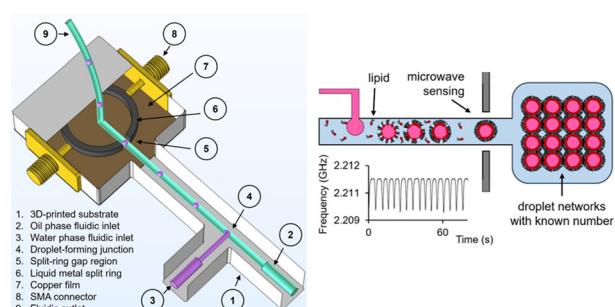
Maria Cristina Ceccarelli,\* Marie Celine Lefevre, Attilio Marino, Francesca Pignatelli, Katarzyna Kruckiewicz, Matteo Battaglini and Gianni Ciofani\*



5101

### 3D-printed microfluidic–microwave device for droplet network formation and characterisation

Kai Silver, Jin Li,\* Adrian Porch, William David Jamieson, Oliver Castell, Pantelitsa Dimitriou, Colin Kallnik and David Barrow



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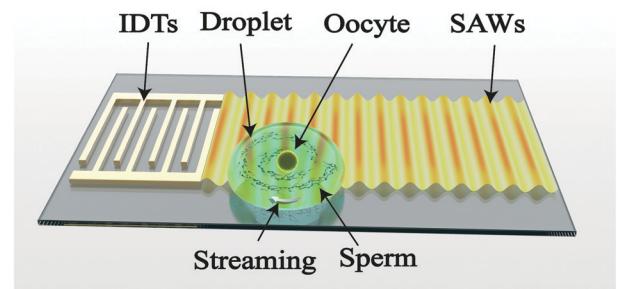
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## PAPERS

5113

**Acoustic enrichment of sperm for *in vitro* fertilization**

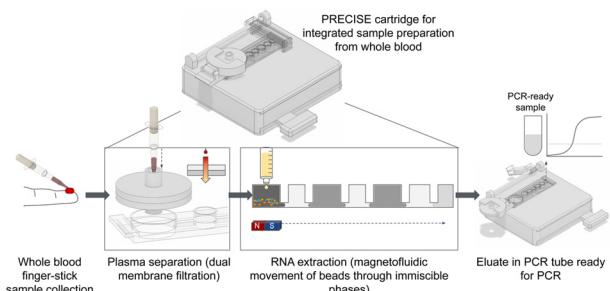
Chunqiu Zhang, Ning Rong, Ziyi Lin, Peng-Qi Li, Jingyao Shi, Wei Zhou, Lili Niu, Fei Li, Rongxin Tang,\* Lei Li\* and Long Meng\*



5124

**Integrated device for plasma separation and nucleic acid extraction from whole blood toward point-of-care detection of bloodborne pathogens**

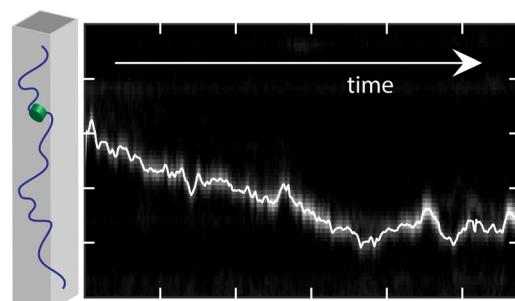
Abigail G. Ayers, Christia M. Victoriano and Samuel K. Sia\*



5137

**Effect of base methylation on binding and mobility of bacterial protein Hfq on double-stranded DNA**

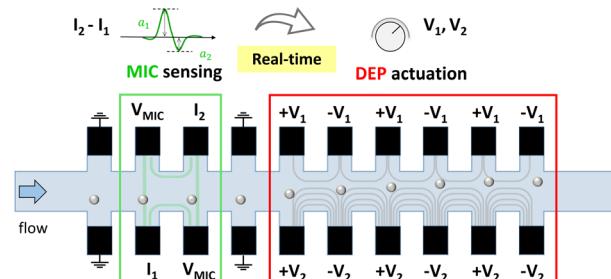
Jijo Easo George, Rajib Basak, Indresh Yadav, Chuan Jie Tan, Jeroen A. van Kan, Frank Wien, Véronique Arluisson and Johan R. C. van der Maarel\*



5145

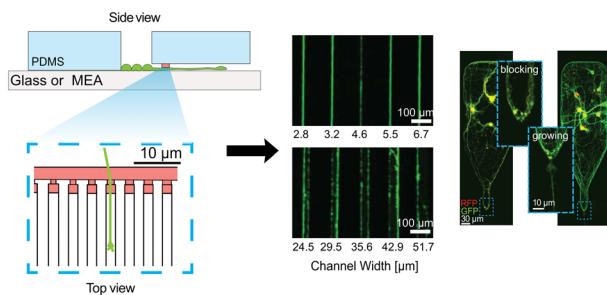
**Real-time impedance-activated dielectrophoretic actuation for reconfigurable manipulation of single flowing particles**

Alexis Lefevre, Cristian Brandi, Adele De Ninno, Filippo Ruggiero, Enrico Verona, Michaël Gauthier, Paolo Bisegna, Aude Bolopion and Federica Caselli\*



## PAPERS

5155

**Impact of microchannel width on axons for brain-on-chip applications**

Katarina Vulić, Giulia Amos, Tobias Ruff, Revan Kasm, Stephan J. Ihle, Joël Küchler, János Vörös\* and Sean Weaver\*

